

SUNNICA ENERGY FARM DCO EXAMINATION

WRITTEN REPRESENTATION

ANNEX B - HERITAGE IMPACT

SAY NO TO SUNNICA ACTION GROUP LTD

11 NOVEMBER 2022

Heritage Assessment Sunnica Energy Farm



DCO Application EN010106

prepared for Say No To Sunnica

November 2022

Date	Version	Comment
30/06/2022	1	Report issued to Say No To Sunnica.
11/10/2022	2	Report amended to address proposed changes to the scheme and incorporate additional information about the Limekilns Gallops.
08/11/2022	3 (Final)	Report amended to incorporate additional information about the Isleham crash site.

Richard Hoggett Heritage

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Executive Summary

This Heritage Assessment has been prepared on behalf of Say No To Sunnica, an action group representing communities in West Suffolk and East Cambridgeshire. It provides a critical review of the of the archaeological and cultural heritage elements of the active DCO Application for the Sunnica Energy Farm (DCO Application Ref. EN010106). It is clear from the Applicant's assessments of cultural heritage impact in the Environmental Statement that the proposed development will have a negative impact upon a number of designated and non-designated heritage assets.

Scheduled Monuments

The Sunnica Energy Farm will impact upon a number of Scheduled Monuments which lie within and immediately adjacent to the proposed development area and their significance will be adversely affected by the dramatic change in landscape character which will occur within their settings. Specifically, one Scheduled Monument, comprising a group of four Bronze Age barrows, is located entirely within the development boundary of the Sunnica West Site A (NHLE Entry Number 1015246). These barrows form part of the wider Chippenham Barrow cemetery, which also includes associated scheduled Bronze Age barrows located to its south and east (NHLE Entry Number 1015243, 1015244 and 1015245) and a fourth barrow located 2km to the north-east (NHLE Entry Number 1015011). A further scheduled barrow is located immediately to the south of the Sunnica East Site B site (NHLE Entry Number 1018097) and another barrow is located c.1km to its south (NHLE Entry Number 1020395). Other affected Scheduled Monuments include a Roman villa located immediately to the west of the Sunnica West Site B development boundary (NHLE Entry Number 1006868).

As Scheduled Monuments, individually each of these barrows is of the highest heritage value, and the fact that so many individual elements of the barrow cemetery survive gives the group a high collective value, too. Although there will be no direct physical impact on the scheduled barrows which lie within the Sunnica West Site A area, the development of the scheme will result in significant changes to the setting of these barrows (NHLE Entry Number 1015246). The Applicant considers that this will cause a low magnitude of change, which on assets of high value results in a 'moderate adverse' significance of effect. The Applicant acknowledges that this is a significant detrimental effect, even under this rather lenient interpretation of the impact. I disagree with this assessment, and consider that the Applicant understates the impact which the development of the scheme will have. I conclude that the development will result in a medium magnitude impact, which equates to a 'major adverse' significance of effect. In planning terms, this represents 'less than substantial harm' at the upper end of the scale.

Regarding the three additional scheduled barrows which lie immediately outside the proposed Sunnica West Site A development area (NHLE Entry Numbers 1015243, 1015244 and 1015245), the Applicant concludes that the magnitude of impact will to be very low, resulting in a minor adverse significance of effect. Again, I disagree with this assessment and conclude that development will cause a low magnitude impact, which

on assets of high value results in a 'moderate adverse' significance of effect. The identified harm represents 'less than substantial harm' and lies in the middle of the 'less than substantial' scale.

Regarding the impact on the setting of the barrow 2km to the north-east (NHLE 1015011), the Applicant concludes that the impact will be low, resulting in a minor adverse significance of effect. This conclusion is inconsistent with the assessment presented for other barrows, in which a 'low' impact on an asset of high value equated to a 'moderate adverse' significance of effect. I conclude that this 'moderate adverse' effect would be the correct, equating to 'less than substantial harm' in the middle of the scale. Regarding the barrow located immediately to the south of the Sunnica East Site B development boundary (NHLE Entry Number 1018097), the Applicant concludes that the magnitude of impact will be low, resulting in a moderate adverse significance of effect. This is a significant effect, and I agree with this assessment. This equates to 'less than substantial harm' in the middle of the scale. Indeed, it is notable that the level of impact identified by the Applicant is higher in this instance than that which they offer for some of the barrows referred to above. The final scheduled barrow is located c.1km to the south of the Sunnica East Site B (NHLE Entry Number 1020395). The Applicant identifies a very low magnitude of impact, resulting in a minor adverse significance of effect, which is appropriate in this instance.

A further Scheduled Monument, comprising the site of a Roman villa, lies immediately to the west of the Sunnica West Site B area, with which it shares a contiguous boundary (NHLE Entry Number 1006868). The proposed development will cause a fundamental change in the landscape character of its setting, transforming it from the current agricultural landscape to the semi-industrialised landscape of the solar farm. The Applicant concludes that the magnitude of this impact is very low, resulting in a minor adverse significance of effect. I consider this to be understated and conclude that development would result in a 'low' impact on an asset of high value, resulting in a 'moderate adverse' significance of effect. This equates to 'less than substantial harm' in the middle of the scale.

Registered Parks and Gardens

In addition, the proposed development will have a detrimental impact upon the Chippenham Hall Registered Park and Garden (NHLE Entry Number 1000615). The majority of the site lies immediately to the north of the Sunnica West Site A, which surrounds its eastern, southern and western sides. A 3km avenue extends southwards from the main body of the RPG and is traversed by the Sunnica West Site A development area. The Chippenham Hall RPG is listed at Grade II, so is considered to be a designated heritage asset of 'medium' value. The proposed development would not have a direct physical impact upon this designated heritage asset, but will have a significant impact upon the landscape character of the surrounding landscape which forms the setting of the RPG. The Applicant concludes that, even after the implementation of mitigation, the construction of the Sunnica West Site A will have a

medium magnitude of impact, resulting in a moderate adverse effect on this asset of medium value. This is a significant effect, but I consider that the impact is understated. I conclude that the development will result in an adverse change of a high magnitude, which on assets of medium heritage value equates to a 'major adverse' significance of effect. This constitutes 'less than substantial harm' at the upper end of the scale.

Listed Buildings

The development of the Sunnica Energy Farm will have a detrimental impact upon a number of listed buildings. The Grade II listed Grange Farmhouse (NHLE 1037602) and Grade II listed The Manor (NHLE 1037604) are both situated *c.*500m to the northeast of the Sunnica East Site B area. The Applicant concludes that the magnitude of impact on these buildings will be very low, resulting in a negligible effect on the significance of these assets of medium value. I agree with this assessment, which equates to 'less than substantial harm' at the lowest end of the spectrum.

Located 400m from the south-western corner of the Sunnica East Site B development area are the Grade II listed Badlingham Manor (NHLE 1126373) and the Grade II listed The Cottage (NHLE 1126374). The Applicant identifies that for the former the scheme will cause a low impact resulting in a minor adverse effect, and for the latter the scheme will cause a very low impact resulting in a negligible effect. I agree with both of these assessments, which in planning terms equate to 'less than substantial harm' at the lower end of the spectrum.

Located 100m south-east of the Sunnica West Site A is the Grade II listed Waterhall Farmhouse (NHLE 1126383). The Applicant indicates that the development will have a low magnitude of impact upon the significance of the building, resulting in a negligible effect on this asset. I disagree strongly with this assessment and conclude that the development of Sunnica West Site A will result in a medium magnitude of impact, resulting in a moderate adverse effect. This constitutes a significant effect and equates to 'less than substantial harm' in the middle of the scale.

A further two isolated Grade II listed buildings stand *c*.800m north of the Sunnica West Site A area and *c*.1km east of the Sunnica Site B area. These are Park Farmhouse (NHLE 1162059) and Phantom Cottage (NHLE 1126385). The Applicant concludes that the development of Sunnica West A in isolation is unlikely to have an adverse effect on these buildings, but that in combination with Sunnica West Site B there is likely to be a low magnitude of impact, resulting in a minor adverse effect. I agree with this assessment, which equates to 'less than substantial harm' towards the lower end of the scale.

In addition to the impact on the Chippenham Park RPG, there are also a number of listed buildings which stand within the park. It is accepted that there will be no impact on the setting of the Grade II listed Hall (NHLE 1331778) and dovecote (NHLE 1309915) and the Grade II* listed stable block (NHLE 1126375), but the Applicant

concludes that the development will have a very low impact on the setting of the Grade II* listed southern entrance lodges and triumphal arch (NHLE 1126376), resulting in a minor adverse effect on this asset of high value. I disagree with this assessment and conclude that the development of the scheme will result in an adverse change of a medium magnitude, which on assets of high heritage value equates to a 'major adverse' significance of effect. In planning terms, the identified harm to the Grade II* listed lodges and triumphal arch represents 'less than substantial harm' at the upper end of the scale.

Conservation Areas

As might be expected, given the large area which the proposed Sunnica Energy Farm covers, the scheme lies in the vicinity of a number of Conservation Areas, although these are located around the periphery of the proposed development area. The scheme will not have a direct physical impact upon any of these Conservation Areas, but the dramatic transformation of the existing agricultural landscape into a semi-industrialised landscape will have a detrimental impact upon the setting of some of these Conservation Areas.

The Isleham Conservation Area is situated c.750m west of the Sunnica East Site A area, and the Applicant identifies that impact of the scheme will be low, resulting in a minor adverse effect on the significance of this asset of medium value. I agree with this assessment, and in planning terms equates to 'less than substantial harm' at the lower end of the scale.

The Freckenham Conservation Area is situated *c.*700m south of the Sunnica East Site A area and *c.*1.5km to the west of the Sunnica East Site B area. The Applicant considers that the magnitude of impact caused by Sunnica East Site A is expected to be very low, resulting in a negligible effect on the significance of the Conservation Area. The Applicant also concludes that the development of Sunnica East Site B will have a low magnitude of impact resulting in a minor adverse effect. I agree with these assessments, which equate to 'less than substantial harm' at the lower end of the scale.

The Snailwell Conservation Area is situated *c.*250m west of the Sunnica West Site A area and *c.*400m south of the Sunnica West Site B area. The Applicant concludes that the development of Sunnica West Site A and B will have a low impact resulting in a minor adverse effect. I consider that this assessment understates the likely impact of the scheme and conclude that the scheme will have a medium impact on the significance of the Conservation Area, which as an asset of medium value results in a moderate adverse effect. This constitutes a significant effect and in equates to 'less than substantial harm' in the middle of the scale.

Non-Designated Heritage Assets

In addition to the designated heritage assets considered above, there is also a significant number of non-designated heritage assets which have the potential to be affected by the proposed Sunnica Energy Farm. The vast majority of these are part of the rich and

extensive array of archaeological features and deposits which lie within the proposed development area. Some of these were known prior to the commencement of the scheme, while others have come to light as a result of new fieldwork conducted by the Applicant. In order to mitigate the impact of the development upon archaeological nondesignated heritage assets, the proposed scheme incorporates a number of 'archaeological mitigation areas' which will result in the most significant archaeological deposits being preserved in situ. This is by far the most preferable mitigation method and its widespread use is welcomed and encouraged. Where preservation in situ is not necessary or achievable, a programme of archaeological works will be undertaken to reduce the impacts and effects that construction of the scheme is likely to have. A Detailed Archaeological Mitigation Strategy (DAMS) will be produced following the completion of a Mitigation Design Brief to be specified by the Planning Archaeologists for Suffolk and Cambridgeshire County Councils. Again, this approach is welcomed and Historic England, Suffolk and Cambridgeshire County Councils should be supported in determining and enforcing the implementation of an appropriate scheme of archaeological mitigation.

It is apparent that both the applicant and the Cambridgeshire County Council Historic Environment Team were until recently unaware of the site where a military aircraft crashed on 13 October 1949, killing all 12 of the aircrew. The site is located to the southeast of the village of Isleham, within the proposed Sunnica East Site A, and is very well known locally. It has recently been added to the Cambridgeshire Historic Environment Record. The crash site was subject to geophysical survey as a part of wider survey of the proposed development, during which its location was identified but not recognised for what it is, and the site was not subsequently trenched. While it is noted that the official account of the recovery states that the bodies of all 12 of the crew were recovered, given the intensity of the explosion and fire it is considered that this may not, in reality, have been possible and that there is a high likelihood that human remains still lie on the site. The site falls under the aegis of the Protection of Military Remains Act 1986 and it is understood that the applicant is currently researching the crash site in greater depth and is liaising with the Cambridgeshire Historic Environment Team, the Ministry of Defence and the landowner concerning the future investigation and management of the crash site. The development proposals for this part of the site should be amended to remove solar panels from the area of the crash and its environs. Given the sensitive nature of the site, it would be appropriate for a memorial to be erected and the removal of the field from agricultural cultivation should also be considered. The applicant is due to submit more material, including appropriate management options, to the examining authority at the next deadline. This material will be commented on in due course and it is to be hoped that a suitable outcome is achieved for the crash site, irrespective of whether or not the DCO Application is granted.

Finally, almost entirely absent from the submitted cultural heritage assessment is an appreciation of the extent and historical significance of the racing landscape which surrounds Newmarket. Of greatest significance to the cultural heritage impact of the

proposed Sunnica Energy Farm is the close proximity of the southern boundary of the Sunnica West Site A to the Limekilns Gallops. The Limekilns have been actively used as gallops since at least the early 19th century and probably longer. The deliberate creation and management of the gallops, the longevity of their use and the fact that generations of horses have continued to be trained in much the same fashion and same location for centuries gives the feature considerable significance in cultural heritage terms. It is considered that the Limekilns gallops constitute significant features of the historic environment and they should be considered to be non-designated heritage assets. Given the regional and national significance of the Limekilns gallops, it is concluded that they should be considered to be of medium heritage value, akin to that of the neighbouring Chippenham Hall and the surrounding Grade II listed buildings. The construction of the Sunnica West Site A will have a detrimental impact upon the setting of the gallops by transforming what is currently an open agricultural landscape to its north into the semi-industrialised landscape of the solar farm, and this will in turn harm the significance of the non-designated heritage asset. Using the Applicant's assessment matrix, I conclude that this will result in an adverse effect of medium magnitude, which on an asset of medium heritage value will result in a moderate adverse impact. This is a significant impact, and is one which by the Applicant's own admission cannot be mitigated by the proposed landscape management strategy.

Summary

In conclusion, it is clear that the construction of the Sunnica Energy Farm will have a negative impact upon the significance of a number of designated and non-designated heritage assets, either directly or via changes to their settings. The Applicant's own assessment identifies that several of these impacts are of sufficient magnitude to be considered 'significant' and, as set out above, in many cases it is apparent that the Applicant's assessments understate the full extent of the impact. It is also apparent from the submitted documents that the Applicant does not consider their proposed landscape mitigation scheme will reduce the scale of this impact further. For ease of reference, the table below summarises the impacts upon designated heritage assets identified by the Applicant, together with my own reassessments of these impacts presented in this report.

The identified cultural heritage impacts affect numerous Scheduled Monuments, a Registered Park and Garden, several listed buildings, surrounding Conservation Areas and the historic Limekilns Gallops. The scheme will also have a considerable impact upon the extensive archaeological deposits which survive within the proposed development area. The identified heritage impacts range from negligible to major, with particularly significant adverse impacts identified on the scheduled Chippenham Barrow Cemetery, the Grade II registered Chippenham Hall Park, and the Grade II* listed southern lodges and triumphal arches at the southern entrance to the park. In every case, these impacts constitute 'less than substantial harm' to the significance of each heritage asset, with the instances singled out here sitting at the top of the 'less than substantial' scale. As is set out in Section 2 of this report, under the existing suite of

planning legislation and policy it is required that this 'less than substantial harm' be weighed against the wider benefits of the DCO application. In doing so, 'great weight' should be given to the conservation of the heritage assets concerned, and the more important the assets, the greater that weight should be. Both the Applicant's own assessment presented in the Environmental Statement and my assessment presented here conclude that the development of the Sunnica Energy Farm will result in multiple instances of adverse heritage impact, which cannot be mitigated. As such, considerable benefits will need to be demonstrated in order to justify the approval of a DCO Application which will result in such high levels of harm to so many designated and non-designated heritage assets.

Heritage Asset	NHLE	Heritage	Applicant's Assessment		My Assessment		
	Entry Number	Value	Magnitude of Impact	Significance of Effect	Magnitude of Impact	Significance of Effect	
Scheduled Monur	Scheduled Monuments						
Roman Villa	1006868	High (SM)	Very Low	Minor	Low	Moderate	
Barrow	1015243	High (SM)	Very Low	Minor	Low	Moderate	
Barrow	1015244	High (SM)	Very Low	Minor	Low	Moderate	
Barrow	1015245	High (SM)	Very Low	Minor	Low	Moderate	
Barrow Group	1015246	High (SM)	Low	Moderate	Medium	Major	
Barrow	1015011	High (SM)	Low	Minor	Low	Moderate	
Barrow	1018097	High (SM)	Low	Moderate	Low	Moderate	
Barrow	1020395	High (SM)	Very Low	Minor	Very Low	Minor	
Registered Parks	and Garde	ens					
Chippenham Hall	1000615	Medium (G2)	Medium	Moderate	High	Major	
Listed Buildings							
Grange Farmhouse	1037602	Medium (G2)	Very Low	Negligible	Very Low	Negligible	
The Manor	1037604	Medium (G2)	Very Low	Negligible	Very Low	Negligible	
Badlingham Manor	1126373	Medium (G2)	Low	Minor	Low	Minor	
The Cottage	1126374	Medium (G2)	Very Low	Negligible	Very Low	Negligible	
Waterhall Farm	1126383	Medium (G2)	Very Low	Negligible	Medium	Moderate	
Park Farmhouse	1162059	Medium (G2)	Low	Minor	Low	Minor	
Phantom Cottage	1126385	Medium (G2)	Low	Minor	Low	Minor	
Entrance Lodges & Triumphal Arch	1126376	High (G2*)	Very Low	Minor	Medium	Major	
Conservation Area	Conservation Areas						
Isleham CA	N/A	Medium	Low	Minor	Low	Minor	
Freckenham CA	N/A	Medium	Low	Minor	Low	Minor	
Snailwell CA	N/A	Medium	Low	Minor	Medium	Moderate	



1. Introduction

- This Heritage Assessment has been prepared by Dr Richard Hoggett FSA 1.1 MCIFA on behalf of Say No To Sunnica, an action group representing communities in West Suffolk and East Cambridgeshire. Say No To Sunnica has commissioned me to review and critique the archaeological and cultural heritage elements of the active Development Consent Order (DCO) Application made by Sunnica LTD ('the Applicant') for the construction, operation and decommissioning of a photovoltaic development, Battery Energy Storage Systems (BESS), associated infrastructure and a new connection to the existing National Grid substation at Burwell (DCO Application Ref. EN010106). In August 2022, the Applicant proposed changes to the scheme, although these did not affect the heritage-related conclusions of the submitted Environmental Statement.² Collectively the development is referred to as the 'Sunnica Energy Farm' and covers an area of 981 hectares spread across land within West Suffolk and East Cambridgeshire districts (Figures 1 and 2).
- The Applicant's assessment of the potential impact which the construction, operation and decommissioning of the proposed scheme will have upon the cultural heritage of the DCO Application area and its environs is set out in Chapter 7 of the submitted Environmental Statement and is supported by a number of technical appendices.³
- 1.3 In preparing this report, I have reviewed all of the relevant submitted documents, with a particular emphasis on the following documents and their supporting technical appendices:
 - Environmental Statement: Chapter 1 Introduction
 - Environmental Statement: Chapter 2 Scheme Location
 - Environmental Statement: Chapter 3 Scheme Description
 - Environmental Statement: Chapter 7 Cultural Heritage
 - Environmental Statement: Chapter 10 Landscape and Visual Amenity
 - Environmental Statement: Appendices 7A 7I
- I also undertook an accompanied site visit with members of Say No To Sunnica in late April 2022 and have familiarised myself with the historic landscape of the proposed development area and its surroundings, and the heritage assets contained within and adjacent to them. In doing so, I have

¹ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001795-SEF_ES_6.1_Chapter_1_Introduction.pdf

 $^{^2 \ \}underline{\text{https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-002801-SEF_8.2_Change%20Application.pdf}$

³ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001782-SEF_ES_6.1_Chapter_7_Cultural%20Heritage.pdf

paid particular attention to the contribution which the proposed development sites make to the setting of those heritage assets. In order to assist the Examination, I also attended the first Accompanied Site Inspection on Thursday 29th September 2022.

This report begins by reviewing the relevant policy framework under which the DCO Application will be determined, with a particular emphasis on those aspects of legislation, planning policy and guidance which relate to archaeological and cultural heritage matters (Section 2). This is followed by a brief summary of the extent and character of the proposed development, together with the timeframe for its implementation should consent be granted (Section 3). Section 4 critically reviews the submitted impact assessments made of each of the designated heritage assets and non-designated heritage assets which will be affected by the construction, operation and decommissioning of the Sunnica Energy Farm. Section 5 presents a summary of the conclusions of this report.

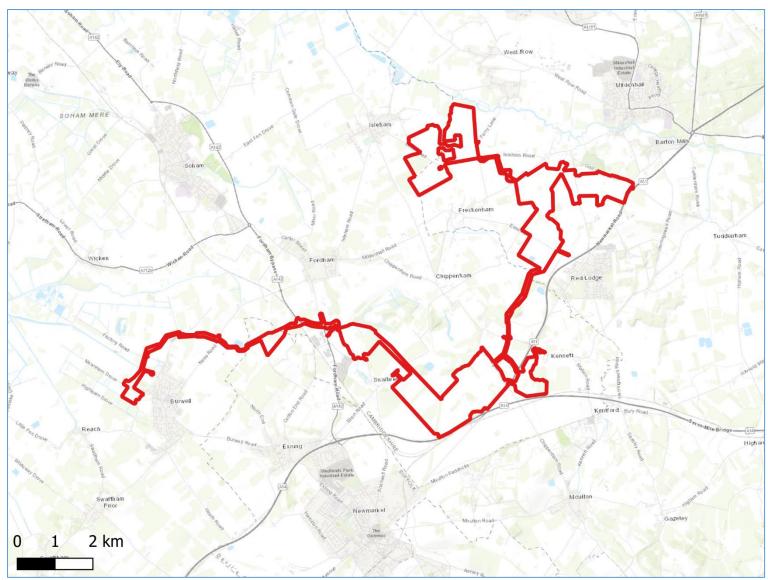


Figure 1. The location of the Sunnica Energy Farm in west Suffolk and east Cambridgeshire at 1:100,000. (Contains ESRI World Topo data:

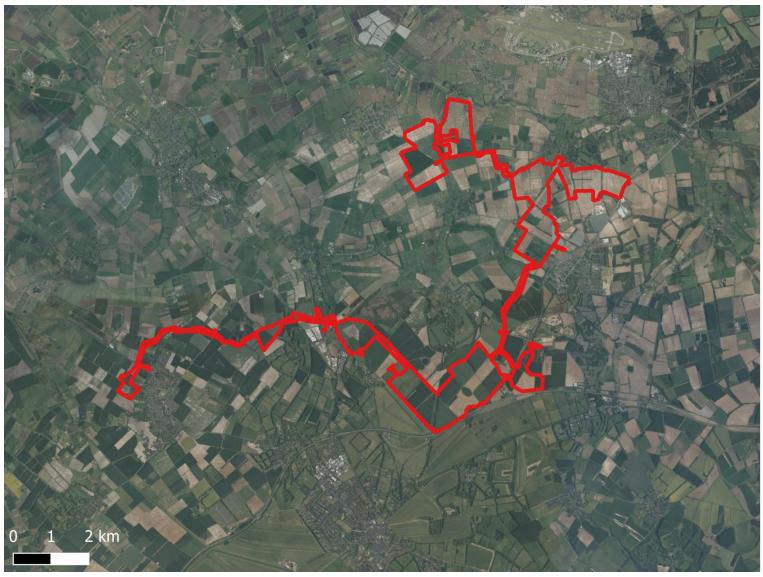


Figure 2. The location of the Sunnica Energy Farm in west Suffolk and east Cambridgeshire at 1:100,000. (Microsoft product screen shot reprinted with permission from Microsoft Corporation)

2. Relevant Legislation, Planning Policy and Guidance

- 2.0.1 As an onshore generating station exceeding 50 megawatts, under the terms of the Planning Act 2008 the proposed Sunnica Energy Farm constitutes a Nationally Significant Infrastructure Project (NSIP) and its DCO Application will therefore be determined at a national level by the Secretary of State for Business, Energy and Industrial Strategy, following examination and recommendations by the Planning Inspectorate.
- 2.0.2 Under the terms of Section 104 of the Planning Act 2008, where applicable DCO applications are determined within the context of the relevant National Policy Statements (NPSs), with the primary policy basis for renewable energy projects being informed by the Overarching National Policy Statement for Energy (EN-1),4 the National Policy Statement for Renewable Energy Infrastructure (EN-3),5 and the National Policy Statement for Electricity Networks Infrastructure (EN-5).6 However, photovoltaic generation was not included within the scope of these NPSs,7 which reflects the nascent nature of the technology at the time when these NPSs were drafted, so the DCO Application will instead be determined in accordance with Section 105 of the Planning Act 2008. As is set out further below, it is considered that the content of EN-1, EN-3 and EN-5 and the draft updated versions of them which were published in 2021 are a material consideration in determining the DCO Application, and this is acknowledged by the Applicant.8
- 2.0.3 With specific regard to legislation pertaining to designated heritage assets, reference also needs to be made to the Ancient Monuments and Archaeological Areas Act 1979, the Planning (Listed Buildings and Conservation Areas) Act 1990 and the Infrastructure Planning (Decisions) Regulations 2010.
- 2.0.4 With regard to national planning policy, in addition to the NPSs discussed above, the revised National Planning Policy Framework (NPPF; July 2021)⁹ is also deemed to be a material consideration in determining the DCO Application. This is acknowledged by the Applicant,¹⁰ and the full extent to which the NPPF is engaged is a matter for the examining authority and the Secretary of State.
- 2.0.5 With regard to local planning policy, the DCO Application area lies within two county councils Suffolk County Council (SCC) and Cambridgeshire County

⁴ DECC 2011a

⁵ DECC 2011b

⁶ DECC 2011C

⁷ See EN-1, para. 1.4.5; EN-3, para. 1.8.2;

⁸ Sunnica Energy Farm Environmental Statement: Chapter 1, paras 1.3.10-11.

⁹ https://www.gov.uk/government/publications/national-planning-policy-framework-2

¹⁰ Sunnica Energy Farm Environmental Statement: Chapter 1, para. 1.3.12.

Council (CCC) – and two district councils – West Suffolk Council (WSC) and East Cambridgeshire District Council (ECDC). The policies contained within the districts' Local Plans and adopted Neighbourhood Plans are also considered to be a material consideration in determining the DCO Application. This is also acknowledged by the applicant.¹¹

2.0.6 The following sections set out the details of the relevant legislation and policies as they pertain to the issues considered here, and in particular with regard to their application in assessing the impact of development proposals affecting heritage assets.

2.1 Legislation

2.1.1 Planning Act 2008

2.1.1.1 Section 104 of the Planning Act 2008 concerns decisions in cases where one or more National Policy Statement has effect.¹² Of particular relevance to the current application, subsection 3 of Section 104 instructs that:

'the Secretary of State must decide the application in accordance with any relevant national policy statement, except to the extent that one or more of subsections (4) to (8) applies'.

In the list which follows, subsection 7 states that:

'this subsection applies if the Secretary of State is satisfied that the adverse impact of the proposed development would outweigh its benefits.'

2.1.1.2 The adverse heritage impact of any proposed scheme is therefore a material consideration in determining DCO applications under Section 104 of the Planning Act 2008. However, as set out above, the existing NPSs do not explicitly cover photovoltaic generation, so the DCO Application will instead need to be determined in accordance with Section 105 of the Planning Act 2008. Section 105 subsection 2 of the act states that:

'In deciding the application the Secretary of State must have regard to

(a) any local impact report (within the meaning given by section 60(3)) submitted to the Secretary of State before the deadline specified in a notice under section 60(2),

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

(c) any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State's decision.'

2.1.1.3 The adverse heritage impact of any proposed scheme is a matter of importance and relevance to the Secretary of State's decision and should

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¹¹ Sunnica Energy Farm Environmental Statement: Chapter 1, para. 1.3.13–19.

¹² https://www.legislation.gov.uk/ukpga/2008/29/section/104

therefore also be a material consideration in determining DCO applications under Section 105 of the Planning Act 2008.

2.1.2 Ancient Monuments and Archaeological Areas Act 1979

- 2.1.2.1 Under the terms of the Ancient Monuments and Archaeological Areas Act 1979, an archaeological site or historic building of national importance can be designated as a Scheduled Monument.¹³ Any works, including development, which might affect a Scheduled Monument are subject to the granting of Scheduled Monument Consent (SMC) alongside any planning permission which may be required.
- 2.1.2.2 Each Scheduled Monument has a setting which may contribute to its significance and this setting can also be affected positively or negatively by development.
- 2.1.3 Planning (Listed Buildings and Conservation Areas) Act 1990
- 2.1.3.1 Legislation pertaining to buildings and areas of special architectural and historic interest is contained within the Planning (Listed Buildings and Conservation Areas) Act 1990.
- 2.1.3.2 Section 66(1) of the 1990 Act states that:

'in considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State, shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.'

2.1.3.3 In the 2014 Court of Appeal judgement in relation to the Barnwell Manor Wind Energy Ltd v East Northants DC, English Heritage, National Trust and SSCLG,¹⁴ Lord Justice Sullivan held that:

[2014] EWCA Civ 137, Para. 24: 'Parliament in enacting section 66(1) did intend that the desirability of preserving the settings of listed buildings should not simply be given careful consideration by the decision-maker for the purpose of deciding whether there would be some harm, but should be given "considerable importance and weight" when the decision-maker carries out the balancing exercise.'

In a second 2014 Court of Appeal judgement in relation to Jones v Mordue, SOSCLG and South Northants Council, ¹⁵ Lord Justice Sales clarified that, with regards to the setting of Listed Buildings, where the principles of the NPPF are applied (in particular then paragraph 134, now paragraph 202 of the revised NPPF), this is in keeping with the requirements of the 1990 Act.

¹³ https://www.legislation.gov.uk/ukpga/1979/46/contents

^{14 [2014]} EWCA Civ 137:

¹⁵ [2015] EWCA Civ 1243:

2.1.3 Infrastructure Planning (Decisions) Regulations 2010

- 2.1.3.1 The requirements of Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 are echoed in the Infrastructure Planning (Decisions) Regulations 2010.¹⁶
- 2.1.3.2 With specific relevance to the issues addressed in this report, section 3 (1) of the 2010 Regulations states that:

'When deciding an application which affects a listed building or its setting, the decision-maker (i.e. 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.'

2.2 National Planning Policy

2.2.1 Although the energy-generation technology proposed for the Sunnica Energy Farm is not specifically covered by the existing National Policy Statements, largely due to the technology in question having been developed in the decade since the NPSs were published, it is considered prudent to set out here the policies contained within the existing NPS which pertain to the impact of proposed schemes upon the historic environment. As is set out above, these policies are considered to be a material consideration of importance and relevance to the Secretary of State's decision.

2.2.1 NPS EN-1: Overarching National Policy Statement for Energy (2011)

- 2.2.1.1 NPS EN-1 is the *Overarching National Policy Statement for Energy.*¹⁷ Policies pertaining to the historic environment are contained within Section 5.8 of NPS EN-1 and they mirror the then-current approach to heritage planning which was contained within Planning Policy Statement 5 (PPS5), published by the Department for Communities and Local Government in 2010. PPS5 has since been superseded by the National Planning Policy Framework, first published in 2012 and revised in 2018, 2019 and 2021.¹⁸ The relevant paragraphs of the current NPPF are also reproduced in Section 2.2.6.
- 2.2.1.2 The opening paragraph of Section 5.8 of NPS EN-1 recognises that 'the construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment' (Para. 5.8.1).
- 2.2.1.3 On the subject of what constitutes a heritage asset, NPS EN-1 states that:

 Para. 5.8.2: '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

¹⁶ https://www.legislation.gov.uk/uksi/2010/305/contents/made

 $[\]frac{17}{\text{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/37046/1938-overarching-nps-for-energy-en1.pdf}$

¹⁸ https://www.gov.uk/government/publications/national-planning-policy-framework--2

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.'

2.2.1.4 In recognising designated heritage assets, NPS EN-1 states that:

Para. 5.8.3: '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).'

2.2.1.5 NPS EN-1 also recognises that non-designated heritage assets may have equivalent significance in the decision-making process. This is set out in the following paragraphs.

Para. 5.8.4: 'There are heritage assets with archaeological interest that are not currently designated as Scheduled Monuments, but which are demonstrably of equivalent significance.'

Para. 5.8.5: 'The absence of designation for such heritage assets does not indicate lower significance. If the evidence before the Infrastructure Planning Commission (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.'

Para. 5.8.6: '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.'

2.2.1.6 Having established this baseline, NPS EN-1 then sets out the level of information required to be provided by the applicant in order to enable an informed decision to be made:

Para. 5.8.8: 'As part of the Environmental Statement 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.'

Para. 5.8.9: '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.'

Para. 5.8.10: '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.'

2.2.1.7 Finally, in considering applications, the IPC is directed to take the following factors into account before taking a decision:

Para. 5.8.11: 'In considering applications, the IPC should seek to identify and assess the particular significance of any heritage asset that may be affected by the proposed development, including by development affecting the setting of a heritage asset.'

Para. 5.8.12: '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 be used to avoid or minimise conflict between conservation of that significance and proposals for development.'

Para. 5.8.13: 'The IPC should take into account the desirability of sustaining and, where appropriate, enhancing the significance of heritage assets, the contribution of 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.'

Para. 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. ... 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.'

Para. 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.'

Para. 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.'

2.2.2 NPS EN-1: Draft Overarching NPS for Energy (2021)

- 2.2.2.1 The Government published its Energy White Paper in December 2020, following which the need to revise and update the existing NPSs was recognised. These drafts were laid before parliament in September 2021 and the public consultation closed in late November 2021. Parliamentary scrutiny was undertaken by the House of Commons Business, Energy and Industrial Strategy Committee, which published its conclusions on 22 February 2022. Although not yet officially designated, it is considered that the content of these drafts should be a material consideration in determining DCO applications made under Section 105 of the Planning Act 2008.
- 2.2.2.2 The draft NPS EN-1 sets out the *Overarching National Policy Statement for Energy*, and the relationship with the historic environment is set out in Section 5.9 of the draft.²⁰ The draft NPS retains much of the text and substance of the existing NPS, with the Secretary of State being identified as the decision-maker and the phrasing and structure of the text reflects the latest iteration of the NPPF.
- 2.2.2.3 Of particular significance to the current application is the inclusion of the following statements, which emphasise the need for great weight to be given to the conservation and preservation of designated heritage assets and their settings:

Para. 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.'

Para. 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.'

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¹⁹ https://committees.parliament.uk/publications/g002/documents/152669/default/

 $^{^{20} \ \}underline{\text{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1015233/en-1-draft-for-consultation.pdf}$

Para. 5.9.29: 'When considering applications for development affecting the setting of a designated heritage asset, the Secretary of State should give considerable importance and weight to the desirability of preserving the setting of 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 significant 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.'

NPS EN-3: Renewable Energy Infrastructure (2011) 2.2.3

NPS EN-1 is complemented by NPS EN-3, which pertains to Renewable 2.2.3.1 Energy Infrastructure, 21 but does not contain any further specific references to matters relating to the historic environment. Instead, the NPS clearly indicates that the statements contained within EN-1 are applicable:

> Para. 1.3.2: 'This NPS does not seek to repeat the material set out in EN-1, which applies to all applications covered by this NPS unless stated otherwise. The reasons for policy that is specific to the energy infrastructure covered by this NPS are given, but where EN-1 sets out the reasons for general policy these are not repeated.'

NPS EN-3: Draft NPS for Renewable Energy Infrastructure (2021) 2.2.4

- While the draft NPS EN-3 again complements the draft NPS EN-1, one new 2.2.4.1 feature of the technology-specific draft NPSs is the inclusion of an assessment of the impacts on heritage assets specific to different types of infrastructure.
- The draft NPS EN-3 sets out the *National Policy Statement for Renewable* 2.2.4.2 Energy Infrastructure, 22 and the potential impacts of solar photovoltaic generation schemes on cultural heritage are set out in Section 2.53. In particular, this section identifies the following potential impacts:

Para. 2.53.2: '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.'

nps-renewable-energy-en3.pdf

22 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1015236/en-3draft-for-consultation.pdf

²¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/37048/1940-

2.2.4.3 More specifically, on the potential impact of photovoltaic generation on the setting of heritage assets, the draft NPS EN-3 stipulates that:

Para. 2.53.5: '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.'

2.2.4.4 With specific regard to the decision to be made by the Secretary of State, draft NPS EN-3 indicates that:

Para. 2.53.7: 'Consistent with the generic policy on historic environmental impacts in EN1 (Section 5.9) the Secretary of State should be satisfied that solar farms and associated infrastructure have been designed sensitively taking into account known heritage assets and their status.'

Para. 2.53.8: '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.'

- 2.2.3 NPS EN-5: Electricity Networks Infrastructure (2011)
- 2.2.3.1 NPS EN-5 pertains to *Electricity Networks Infrastructure*.²³ As with EN-3, the NPS clearly indicates that the statements contained within EN-1 are applicable, with a duplicated paragraph 1.3.2 (see above). However, NPS EN-5 also makes additional specific references to heritage assets and archaeology.
- 2.2.3.2 The first reference is made in the context of the Appraisal of Sustainability applied to the NPSs, where is it stated that:

Para. 1.7.5: 'Assessment showed that alternative (b) [that is, the adoption of a presumption that electricity lines should be put underground] would have effects similar to those of EN-5 policies for climate change, but that it was likely to have negative effects on the security of supply and economic objectives. Effects on soil, water, ecology and archaeology are likely to be negative, at least in the short term, requiring significant mitigation, but there is uncertainty around long term effects depending on the specific location and the sensitivity of the receiving environment.'

 $^{^{23} \ \}underline{\text{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1015238/en-5-draft-for-consultation.pdf}$

2.2.3.3 The second reference occurs in the context of factors influencing site/route selection by applicants for electricity networks NSIPs. NPS EN-5 states that:

Para. 2.2.6: 'As well as having duties under section 9 of the Electricity Act 1989, (in relation to developing and maintaining an economical and efficient network), developers will be influenced by Schedule 9 to the Electricity Act 1989, which places a duty on all transmission and distribution licence holders, in formulating proposals for new electricity networks infrastructure, to "have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and ... do what [they] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects." Depending on the location of the proposed development, statutory duties under section 85 of the Countryside and Rights of Way Act 2000 and section 11A of the National Parks and Access to the Countryside Act 1949 may be relevant.'

2.2.3.4 The third reference again occurs in relation to undergrounding in the context of the potential Landscape and Visual impact of a proposed scheme. Here, it is stated that:

Para 2.8.9: 'The impacts and costs of both overhead and underground options vary considerably between individual projects (both in absolute and relative terms). Therefore, each project should be assessed individually on the basis of its specific circumstances and taking account of the fact that Government has not laid down any general rule about when an overhead line should be considered unacceptable. The IPC should, however only refuse consent for overhead line proposals in favour of an underground or sub-sea line if it is satisfied that the benefits from the non-overhead line alternative will clearly outweigh any extra economic, social and environmental impacts and the technical difficulties are surmountable. In this context it should consider: ... the environmental and archaeological consequences (undergrounding a 400kV line may mean disturbing a swathe of ground up to 40 metres across, which can disturb sensitive habitats, have an impact on soils and geology, and damage heritage assets, in many cases more than an overhead line would).'

2.2.5 NPS EN-5: Draft NPS for Electricity Networks Infrastructure (2021)

2.2.5.1 The draft NPS EN-5 sets out the *National Policy Statement for Electricity Networks Infrastructure*.²⁴ Again, it complements the draft NPS EN-1 and reiterates much of the material contained within the existing EN-5.

 $^{^{24} \} https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/37050/1942-national-policy-statement-electricity-networks.pdf$

2.2.5.2 The factors influencing site/route selection by applicants for electricity network NSIPs, as set out in Schedule 9 of the Electricity Act 1989 is reiterated, and complemented by a paragraph setting out the potential impact of installing underground cables which includes the statement that:

Para. 2.11.14: 'the potentially very disruptive effects of undergrounding on local communities, habitats, archaeological and heritage sites, soil, geology, and, for a substantial time after construction, landscape and visual amenity. (Undergrounding a 400kV line may mean digging a deep trench 40-110m wide along the length of the route, and so such works will often be considerably more disruptive – albeit temporarily – to the receptors listed above than would an overhead line of equivalent rating)'.

2.2.6 The National Planning Policy Framework

- 2.2.6.1 The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these are to be applied. It is a material consideration in planning decisions. The NPPF was originally published by the then Department for Communities and Local Government in 2012. A revised version of the NPPF was published by the Ministry of Housing, Communities and Local Government in July 2018, in which minor updates were made to the NPPF in February 2019. A second revised version of the NPPF was published in July 2021.
- 2.2.6.2 Paragraph 5 of the NPPF 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 Planning Act 2008 and relevant NPSs, as well as any other matters that are considered both important and relevant. However, paragraph 5 of the NPPF goes on to confirm that the NPPF may be a matter that is both important and relevant for the purposes of assessing DCO applications.
- 2.2.6.3 Designated and non-designated heritage assets are given protection under the NPPF. Provision for the historic environment is considered in Section 16, which directs Local Planning Authorities to set out 'a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats' (NPPF (2021), para. 190). The aim is to ensure that Local Planning Authorities, developers and owners of heritage assets adopt a consistent approach to their conservation and to reduce complexity in planning policy relating to proposals that affect them.
- 2.2.6.4 Paragraph 194 of the NPPF (2021) 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.'

- 2.2.6.5 Paragraph 195 of the NPPF (2021) instructs Local Planning Authorities to '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'.
- 2.2.6.6 Paragraph 199 of the NPPF (2021) states that 'when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance'.
- 2.2.6.7 Paragraph 200 of the NPPF (2021) explains that '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'. As a corollary, paragraph 201 states that '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'.
- 2.2.6.8 In addition to the effects on designated heritage assets, paragraph 203 of the NPPF (2021) 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'. A footnote to paragraph 200 of the NPPF makes it clear 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' (NPPF (2021) footnote 68).

2.3 Local Planning Policy

2.3.0.1 The Scheme lies within the administrative areas of two county councils – Suffolk County Council (SCC) and Cambridgeshire County Council (CCC) – and two district councils – West Suffolk Council (WSC) and East Cambridgeshire District Council (ECDC). Policies in Local Plans are frequently considered important and relevant matters which the Secretary of State must have regard to in its decision making in accordance with Section 105 of the Planning Act 2008.

2.3.1 West Suffolk Local Plan

- 2.3.1.1 The West Suffolk Local Plan (consisting of the former Forest Heath area (FHDC) and former St Edmundsbury area (SEBC) Local Plan documents) sets out the long-term planning and land use policies within West Suffolk.²⁵ Specific documents within the West Suffolk Local Plan of relevance to the current application are the Forest Heath District Core Strategy (2010) and the Joint Development Management Policies Document (2015).
- 2.3.1.2 The Forest Heath District Council Core Strategy, adopted in 2010, sets out the long-term vision for the District to 2026, looking ahead to 2031 for residential growth. On the subject of the Historic Environment, paragraph 3.2.5 of the Core Strategy states that:

The historic heritage of Forest Heath is also unique and diverse. There are many features of architectural, archaeological and historic interest which contribute considerably towards the distinctive character and cultural identity of the District's towns, villages and countryside. These features or historic assets include over 420 Listed Buildings and structures, 13 Conservation Areas and numerous buildings and structures of local interest, that contribute to both the rural and urban character of the District as a whole, 44 Scheduled Ancient Monuments and nearly 1,000 other archaeological sites identified in the Suffolk Historic Environment Record. These are all finite resources that can be easily damaged or destroyed when development takes place unless protected.'

2.3.1.3 Policy CS3 pertains to *Landscape Character and the Historic Environment* and states that:

The quality, character, diversity and local distinctiveness of the District's landscape and historic environment shall be protected, conserved and, where possible, enhanced.

Proposals for development will take into account the local distinctiveness and sensitivity to change of distinctive landscape character types, and historic assets and their settings. Landscape types are described in the Forest Heath Landscape Character Assessment (LCA).

The Landscape Character Assessment will inform detailed assessment of individual proposals. All schemes should protect and seek to enhance overall landscape character, taking account of the key characteristics and distinctiveness of the landscape and the landscape setting of settlements.'

2.3.1.4 The Joint Development Management Policies Document, adopted in February 2015, sets out the polices which are used in day-to-day planning

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 $^{^{25} \ \}underline{\text{https://www.westsuffolk.gov.uk/planning_Policies/local_plans/west-suffolk-local-plan-former-forest-heath-and-st-edmundsbury-areas.cfm}$

decisions across the Council area.²⁶ It contains several policies which pertain to different elements of the historic environment which have the potential to be affected by the proposed development.

2.3.1.5 Policy DM15 sets out the Council's approach to applications affecting Listed Buildings thus:

'Proposals to alter, extend or change the use of a listed building, or development affecting its setting, will be permitted where they:

- a. demonstrate a clear understanding of the significance of the building and/or its setting, alongside an assessment of the potential impact of the proposal on that significance;
- b. contribute to the preservation of the building;
- c. are not detrimental to the building's character or any architectural, archaeological, artistic or historic features that contribute towards its special interest;
- d. are of an appropriate scale, form, height, massing, and design which respects the existing building and its setting;
- e. use appropriate materials and methods of construction which respect the character of the building;
- f. have regard to the historic internal layout and other internal features of importance;
- g. respect the setting of the listed building, including inward and outward views;
- h. respect the character or appearance of a park, garden or yard of historic or design interest, particularly where the grounds have been laid out to complement the design or function of the building. A curtilage and/or setting which is appropriate to the listed building, and which maintains its relationship with its surroundings should be retained; and
- i. have regard to the present and future economic viability or function of the listed building.

Proposals to demolish all or part of a listed building will only be permitted in very exceptional circumstances. Applicants must demonstrate that all reasonable efforts have been made to sustain existing uses or find viable new ones, and that they have addressed the considerations set out in national legislation and guidance. Where appropriate, the recording of the building to

²⁶ https://www.westsuffolk.gov.uk/planning/Planning_Policies/local_plans/upload/JDMPD-FINAL-for-website-error-amended.pdf

a specified standard will be required prior to the commencement of demolition.

All development proposals should provide a clear justification for the works, especially if these works would harm the listed building or its setting, so that the harm can be weighed against any public benefits.

The level of detail of any supporting information should be proportionate to the importance of the building, the works proposed and sufficient to understand the potential impact of the proposal on its significance and/or setting.'

2.3.1.6 Policy DM17 sets out the Council's approach to applications affecting Conservation Areas thus:

'Proposals for development within, adjacent to or visible from a Conservation Area should:

- a. preserve or enhance the character or appearance of the Conservation Area or its setting, and views into, through, and out of the area;
- b. be of an appropriate scale, form, height, massing, alignment and detailed design which respect the area's character and its setting;
- c. retain important natural features such as open spaces, plot divisions, boundary treatments, and trees and hedges, which contribute to the special character of the area;
- d. retain important traditional features that contribute to the area's character such as original doors, windows, shop fronts and flint or clunch walls;
- e. include fenestration which respects its setting;
- f. use materials and building techniques which complement or harmonise with the character of the area; and
- g. demonstrate a clear understanding of the significance of the Conservation Area and/or its setting, alongside an assessment of the potential impact of the proposal on that significance. The proposal should demonstrate how the key characteristics of the character area have been addressed.

New shop fronts, fascias, awnings, canopies, advertisements and other alterations to commercial premises must be of a high standard of design which respects the character of the Conservation Area and the building to which they relate. Standardised shop fronts, unsympathetic 'house' signs, projecting box signs, internally illuminated signs and externally lit signs will not normally be granted consent. Where it can be demonstrated that premises rely principally on trading after dark externally illuminated signs

sympathetic to the character of the building and the surrounding area may be permissible.

Proposals to demolish buildings or structures that make a positive contribution to the special architectural or historic interest of a Conservation Area will only be permitted in very exceptional circumstances. Applicants must demonstrate that they have addressed the considerations set out in national legislation and guidance for such proposals. In particular it should be demonstrated that:

i. the building or structure is structurally unsound and beyond reasonable repair, or the proper repair of the building would result in the loss of the qualities which give it architectural or historic interest; and/or

ii. all possible measures to sustain an existing use or find an alternative use have been explored and failed, and redevelopment would bring substantial public benefits, and in both cases

iii. planning permission has been granted for the redevelopment of the site and a contract for the carrying out of the works has been made.

All development proposals should provide a clear justification for the works, especially if these works would harm the significance of a Conservation Area or its setting, so that the harm can be weighed against any public benefits.

The level of detail of any supporting information should be proportionate to the importance of the area, the works proposed and sufficient to understand the potential impact of the proposal on its significance and/or setting.'

2.3.1.7 Policy DM19 sets out the Council's approach to applications affecting Development Affecting Parks and Gardens of Special Historic or Design Interest thus:

'Proposals for development which affect the character, setting, or views into and/or out of parks and gardens of special historic or design interest and their settings must not have a detrimental impact upon:

- a. the overall design and layout;
- b. features, both built and natural, which form an integral part of the design and layout; and
- c. views into, through, or out of the park or garden, particularly those which are an integral part of the design.'
- 2.3.1.8 Policy DM20 sets out the Council's approach to applications affecting Archaeology thus:

'Development will not be acceptable if it would have a material adverse effect on Scheduled Ancient Monuments or other sites of archaeological importance, or their settings.

On sites of archaeological interest, or of potential archaeological importance, provided there is no overriding case against development, planning permission will be granted subject to satisfactory prior arrangements being agreed.

This will include one or a combination of the following:

- a. an appropriate desk based assessment and/or field evaluation of the archaeological interest or significance prior to determination.
- b. the preservation of archaeological remains in situ;
- c. the adequate recording of the heritage asset by archaeological investigation before development commences (preservation by record).'

2.3.2 East Cambridgeshire District Council Local Plan

2.3.2.1 The East Cambridgeshire District Council Local Plan was adopted in April 2015 and sets out the vision, objectives, spatial strategy and policies for the future development of the district. On the Historic Environment, Section 6.12 of the plan states that:

'6.12.1 The role of the historic environment in achieving sustainable development is set out in national policy. All development should aim to conserve heritage assets in a manner appropriate to their significance and provide a positive response to the historic character and local distinctiveness of the district. The significance of heritage assets lies in how they are valued in terms of their special historic, archaeological, architectural or artistic qualities. The contribution of the setting of heritage assets to the appreciation of these qualities will be carefully considered, alongside other more direct impacts of development proposals.

6.12.2 The district contains a great wealth and variety of buildings and structures that are important to the character and appearance of towns and villages. Within the district, there are 26 designated Conservation Areas, approximately 930 Listed Buildings and 41 sites designated as Scheduled Ancient Monuments. Ely Cathedral is one of England's great monuments, and is of national and international significance, as well as having resonance as a local landmark and symbol of the fens.

6.12.3 The Council will pro-actively seek opportunities to enhance or better reveal the significance of heritage assets through all appropriate means, applying the historic environment evidence base as part of a strategy for achieving positive outcomes for the historic environment. This will apply to investigating how heritage assets at risk, or potentially at risk, can be restored and brought back into beneficial use.'

2.3.2.2 There is, however, no policy specifically pertaining to the historic environment contained within the Local Plan.

2.3.2.3 Policy ENV 12 pertains to *Listed Buildings* and states that:

'Proposals that affect a Listed Building will not be permitted where it would have a detrimental impact on the visual, architectural or historic significance of the asset.

Proposals to extend, alter or change the use of a Listed Building will only be permitted where they would:

Preserve or enhance the significance of the building and not involve substantial or total loss of historic fabric.

Be compatible with the character, architectural integrity and setting of the Listed Building; and

Facilitate the long-term preservation of the building.

Proposals that affect the setting of a Listed Building will only be permitted where they would:

Preserve or enhance those elements that make a positive contribution to or better reveal the significance of the heritage asset.

Not materially harm the immediate or wider setting of the Listed Building. This setting may extend well beyond the immediate building curtilage and may include an extensive street scene or a wider urban design context, especially when the proposal is within a Conservation Area; and

Facilitate the long-term preservation of the building.

Proposals to demolish all or part of a Listed Building will not be permitted other than in wholly exceptional cases where:

All possible measures to sustain the existing use or find an alternative use have been exhausted, including active and genuine marketing of the asset.

Reasonable endeavours have been taken to secure a public or charitable organisation to take on the asset and failed.

The building is structurally unsound (for reasons other than deliberate damage or neglect) beyond all reasonable repair and its redevelopment would bring wider public benefits; and in all cases

Comprehensive proposals for reconstruction or redevelopment have been submitted and have received planning permission.

The Council will monitor Heritage at Risk within the district and will proactively engage with key stakeholders in order to secure and improve those heritage assets deemed to be most at risk. The Council will use its statutory powers to enforce the repair of heritage assets where appropriate.'

2.3.2.4 Policy ENV 14 pertains to *Sites of Archaeological Interest* and states that:

'Development proposals at or affecting all sites of known or potential archaeological interest will:

Have regard to their impacts upon the historic environment and protect, enhance and where appropriate, conserve nationally designated and undesignated archaeological remains, heritage assets and their settings.

Require the submission of an appropriate archaeological evaluation/ assessment of significance by a suitably qualified person. This initial work may be required prior to the submission of a planning application; and

Not be permitted where the proposals would cause substantial harm to new or known nationally important sites, including Scheduled Ancient Monuments and their settings.'

2.3.2.5 Policy ENV 15 pertains to *Historic Parks and Gardens* and states that:

'Proposals that affect the significance of a Historic Park or Garden will not be permitted where they would have a detrimental impact on its character, amenity or setting.

As part of any permission, the Council may seek the agreement of a management plan to secure the long-term preservation of the asset promote good land management and encourage best use of resources.'

2.3.2.6 Also relevant is the District Council's Supplementary Planning Document (SPD) Renewable Energy Development (Commercial Scale) dated October 2014, Section 4 of which pertains to Heritage Assets. Paragraph 4.3 of the SPD sets out the following non-exhaustive list of potential impacts which may be caused by renewable energy development:

'The construction of renewable energy development in close proximity to Listed Buildings and Conservation Areas, where the development is visually dominant, may be inappropriate;

The construction of renewable energy development may have the potential to damage any underlying archaeological remains; and

Certain types of renewable energy development may have the potential to impair the setting of Listed Buildings, Scheduled Monuments and Historic Parks and Gardens due to the potential scale and character of the development.'

2.3.2.7 On Ancient Monuments and Historic Parks and Gardens, paragraph 4.4.4 of the SPD states that:

'Applicants should avoid locating commercial scale renewable energy proposals on or within these heritage assets. Care should also be taken to avoid negative impacts on their setting which could be extensive. The locating of renewable energy proposals on or near archaeological sites of

regional, local, national and international significance, as identified in the Cambridgeshire Historic Environment Record, should also be avoided where possible. Where a pre-submission evaluation identifies newly discovered significant archaeological evidence a mitigation strategy will be required to avoid these areas. The excavation of archaeological remains will be necessary where avoidance strategies cannot be implemented.'

2.3.2.8 On *Listed Buildings and Conservation Areas*, paragraph 4.4.5 of the SPD states that:

'Applicants will be expected to demonstrate that they have considered the potential for adverse impacts of renewable energy development on Listed Buildings and Conservation Areas within the district. Renewable energy schemes should avoid harming Listed Buildings and Conservation Areas and their settings. Applicants should also have regard to the adopted Conservation Areas Appraisals where relevant.'

2.4 Planning Guidance

2.4.1 National Planning Practice Guidance

- 2.4.1 The NPPF is complemented by a series of National Planning Practice Guidance documents, which includes specific guidance on the application of the NPPF to the historic environment, published in 2014 and updated in July 2019.²⁷ On the subject of how proposals can avoid or minimise harm to the significance of a heritage asset, paragraph 8 of the guidance states that 'analysis of relevant information can generate a clear understanding of the affected asset, the heritage interests represented in it, and their relative importance'.
- 2.4.2 Paragraph 9 of the guidance goes on to state that 'applicants should include analysis of the significance of the asset and its setting, and, where relevant, how this has informed the development of the proposals. The level of detail should be proportionate to the asset's importance and no more than is sufficient to understand the potential impact of the proposal on its significance'.

2.4.2 Historic England Guidance

2.4.2.1 Historic England's guidance on managing the significance of the historic environment in decision-taking (Historic England 2015), advises that significance should be assessed as part of the application process. It also advocates understanding the nature, extent, and level of significance of a heritage asset by considering the aesthetic, communal, historic and evidential values which a heritage asset may hold.

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²⁷ https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment

- 2.4.2.2 Historic England's most recent guidance on assessing heritage significance (Historic England 2019) advises using the terminology of the NPPF and Planning Practice Guidance, and indicates that significance should be considered to be derived from a heritage asset's archaeological, architectural, artistic and historic interest.
- 2.4.2.3 Historic England's Historic Environment Good Practice Advice in Planning 3 (GPA3), *The Setting of Heritage Assets*, the second edition of which was published in 2017. This document sets out a five-step process to the identification, assessment and mitigation of the impacts upon the significance of heritage assets through changes in their setting. Specifically, these steps are:
 - Step 1: Identify which heritage assets and their settings are affected.
 - Step 2: Assess the degree to which these settings make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated.
 - Step 3: Assess the effects of the proposed development, whether beneficial or harmful, on that significance or on the ability to appreciate it.
 - Step 4: Explore ways to maximise enhancement and avoid or minimise harm.
 - Step 5: Make and document the decision and monitor outcomes.
- 2.4.2.4 GPA3 acknowledges that 'the contribution of setting to the significance of a heritage asset is often expressed by reference to views, a purely visual impression of an asset or place which can be static or dynamic, long, short or of lateral spread, and include a variety of views of, from, across, or including that asset' (para. 10). However, GPA3 also includes a non-exhaustive checklist of potential attributes of a setting that may help to elucidate its contribution to significance (Assessment Step 2 Checklist, p. 11).
- 2.4.2.5 With regard to the elements of the heritage asset's physical surroundings which may contribute towards its significance, GPA3 lists the following:
 - Topography
 - Aspect
 - Other heritage assets (including buildings, structures, landscapes, areas or archaeological remains)
 - Definition, scale and 'grain' of surrounding streetscape, landscape and spaces
 - Formal design e.g. hierarchy, layout
 - Orientation and aspect

- Historic materials and surfaces
- Green space, trees and vegetation
- Openness, enclosure and boundaries
- Functional relationships and communications
- History and degree of change over time
- 2.4.2.6 With regard to the elements which might contribute towards or detract from the experience of a heritage asset, GPA3 lists the following:
 - Surrounding landscape or townscape character
 - Views from, towards, through, across and including the asset
 - Intentional intervisibility with other historic and natural features
 - Visual dominance, prominence or role as focal point
 - Noise, vibration and other nuisances
 - Tranquillity, remoteness, 'wildness'
 - Busyness, bustle, movement and activity
 - Scents and smells
 - Diurnal changes
 - Sense of enclosure, seclusion, intimacy or privacy
 - Land use
 - Accessibility, permeability and patterns of movement
 - Degree of interpretation or promotion to the public
 - Rarity of comparable survivals of setting
 - Cultural associations
 - Celebrated artistic representations
 - Traditions
- 2.4.2.7 Such is the framework of legislation, national and regional planning policy and guidance pertaining to heritage assets within which the Sunnica Energy Farm DCO Applications should to be determined. The following sections examine how these principles have been applied to the historic environment of the proposed development area and its environs in the submitted application documents.

3. The Scheme

- 3.0.1 The active Development Consent Order (DCO) Application made by Sunnica Ltd is for the construction, operation and decommissioning of a photovoltaic development, Battery Energy Storage Systems (BESS), associated infrastructure and a new connection to the existing National Grid substation at Burwell (DCO Application Ref. EN010106). Collectively the development is referred to as the 'Sunnica Energy Farm' and covers an area of 981 hectares spread across land within West Suffolk and East Cambridgeshire districts (Figures 1 and 2). Should the DCO be consented, construction is anticipated to commence at the earliest in Summer 2023 and to be completed ready for operation no earlier than Summer 2025, with decommissioning no later than 40 years after the commencement of operation.
- 3.0.2 The existing conditions within the DCO Application limits and the surrounding area are set out within Chapter 2 of the submitted Environmental Statement, together with the key receptors and constraints, such as designated heritage assets and buried archaeology,²⁸ which are assessed in more detail within the technical chapters of the Environmental Statement. In the case of Cultural Heritage, this is Chapter 7.²⁹ The design parameters and components of the scheme, together with details of the construction, operation, maintenance and decommissioning practices for each of the sites, are set out in Chapter 3 of the submitted Environmental Statement.³⁰
- 3.0.3 The proposed energy farm is situated across four sites with a combined area of 981 hectares. The four sites are referred to as Sunnica East Site A, Sunnica East Site B, Sunnica West Site A and Sunnica West Site B, each of which is discussed further below. In addition, the Scheme includes the associated electrical infrastructure for connection to the National Grid, comprising Grid Connection Route A, Grid Connection Route B and Burwell National Grid Substation Extension. A detailed map showing the full extent of the Order Limits and the surrounding heritage and ecological designations has been produced by Michelle Bolger Expert Landscape Consultancy as part of their assessment of the Landscape and Visual Issues relating to the scheme and is reproduced here as Appendix I. For the purposes of this Heritage Assessment, simplified and colour-coded maps depicting the extents of the main development areas are reproduced here as Figures 3–7.
- 3.0.4 All locations will comprise ground mounted solar PV panel arrays, supporting electrical infrastructure and, with the exception of Sunnica West Site B, a

²⁸ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001796-SEF_ES_6.1_Chapter_2_Scheme%20Location.pdf

 $[\]frac{^{29}}{\text{https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001782-SEF_ES_6.1_Chapter_7_Cultural\%20Heritage.pdf}$

 $^{^{30}}$ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001797-SEF_ES_6.1_Chapter_3_Scheme%20Description.pdf

BESS. The cable route for Grid Connection Route A is located between Sunnica East Site A and Sunnica East Site B and then between Sunnica East Site B to Sunnica West Site A. Grid Connection Route B is located between Sunnica West Site A and Sunnica West Site B and then between Sunnica West Site B and Burwell National Grid Substation Extension.

3.0.5 Following the submission of the DCO Application, in August 2022 the applicant set out changes to the application which have subsequently been accepted by the Examining Authority.³¹ Specifically, the Burwell National Grid Substation Extension Option 1 is to be removed from the scheme. The Applicant also wishes to include the option to use 400kV cabling in Grid Connection Routes A and B, and allow for additional electrical infrastructure to be added to the substations at Sunnica West A, Sunnica East A and Sunnica East B, although this would not result in the substations being any larger than originally proposed. The Applicant states that these changes do not materially affect the conclusions of the heritage impact assessments set out in the submitted Environmental Statement. I agree with this conclusion, although, as is set out in the rest of this report, I disagree with the conclusions of the submitted heritage impact assessments.

3.1 Sunnica East Site A

3.1.1 Sunnica East Site A encompasses an area of 223 hectares and is located approximately 3.5km east of Mildenhall, 0.5km south-east of Isleham and 0.6km south-west of West Row (Figure 4). It straddles the boundary between Cambridgeshire and Suffolk and lies within both the West Suffolk Council and the East Cambridgeshire District Council administrative areas. The landscape within Sunnica East Site A comprises agricultural fields interspersed with individual trees, hedgerows, linear tree belts, farm access tracks, and local roads. The developable area of the site, which will contain the solar photovoltaic panels, BESS and associated infrastructure, extends to 115 hectares with the remaining area set aside for environmental mitigation.

3.2 Sunnica East Site B

3.2.1 Sunnica East Site B encompasses an area of 319 hectares and is located approximately 1.5km south-east of Mildenhall, 1.5km east of Freckenham and immediately south of Worlington (Figure 5). It lies entirely within the West Suffolk Council administrative area. Like Sunnica East A, the landscape within Sunnica East Site B consists of agricultural fields interspersed with individual trees, hedgerow, linear tree belts, small woodland blocks, farm access tracks and local roads. The developable area of the site extends to 227 hectares, with the remainder set aside for environmental mitigation and enhancement.

 $^{^{31}}$ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-002801-SEF_8.2_Change%20Application.pdf

3.3 Sunnica West Site A

3.3.1 Sunnica West Site A encompasses an area of approximately 373ha and is located approximately 0.3km east of the village of Snailwell, 1km south of Chippenham and 1.5km west of Kennett (Figure 6). It is bounded by the A14 to the south and straddles the A11 to the east. Sunnica West Site A lies entirely within the East Cambridgeshire District Council administrative area. The landscape within Sunnica West Site A comprises agricultural fields bound by trees, managed hedgerows, linear tree shelter belts, small woodland and copses, and farm access tracks. The developable area comprises 256 hectares, with the remaining area set aside for environmental mitigation.

3.4 Sunnica West Site B

3.4.1 Sunnica West Site B encompasses an area of approximately 66 hectares and is located approximately 0.5km north-east of Snailwell, 1.4km south of the village of Fordham, 2km south west of the village of Chippenham and approximately 5.5km east of Burwell (Figure 7). Sunnica West Site A lies entirely within the East Cambridgeshire District Council administrative area. The River Snail adjoins Sunnica West Site B to the west. Avenue planting is a characteristic of the immediate area, with mature trees present within Sunnica West Site B and newer tree planting evident along the Chippenham Road. The developable area comprises approximately 23 hectares, with the remaining area set aside for environmental mitigation and enhancement.

3.5 Timeframe

- 3.5.1 The indicative timescale for the construction and operation of the scheme is set out in Chapter 3 of the Environmental Statement.³² It is anticipated that construction work would commence in Summer 2023 at the earliest and would run for 24 months if the scheme were built in a single continuous phase. The Applicant considers this to be the worst-case scenario in terms of environmental impact, as a large amount of work would be taking place over a short length of time. It is implied that a longer, less intensive construction phase would have a reduced environmental impact, although the rationale for this is not set out in the Environmental Statement.
- The operational life of the Scheme is to be 40 years and decommissioning is therefore estimated to be no earlier than 2065. Some parts of the Scheme may be decommissioned earlier if the landowner requires it.

 Decommissioning is expected to take between 12 and 24 months and will be undertaken in phases. As with construction, a 24-month decommissioning period has been assumed for the purposes of a worst-case assessment in the submitted Environmental Statement.

 32 https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001797-SEF_ES_6.1_Chapter_3_Scheme%20Description.pdf

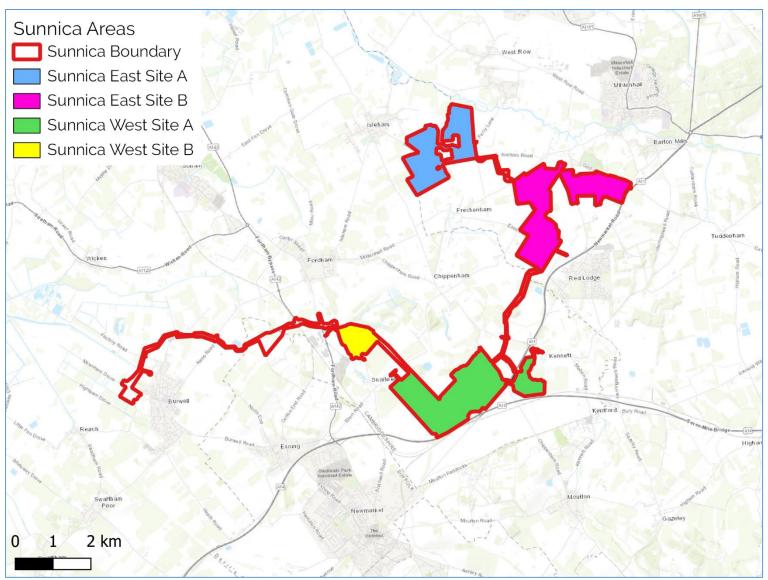


Figure 3. The location of the Sunnica Energy Farm in west Suffolk and east Cambridgeshire at 1:100,000, showing the four main development areas. (Contains ESRI World Topo data:

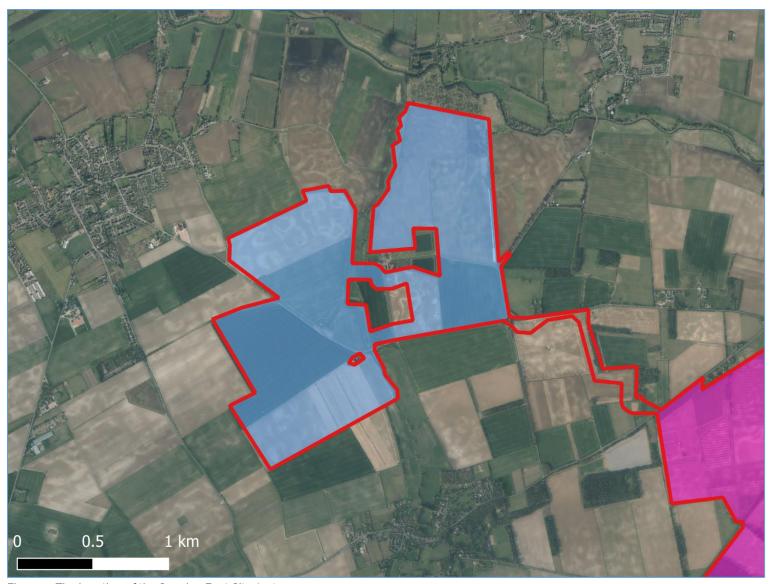


Figure 4. The location of the Sunnica East Site A at 1:25,000.

(Microsoft product screen shot reprinted with permission from Microsoft Corporation)

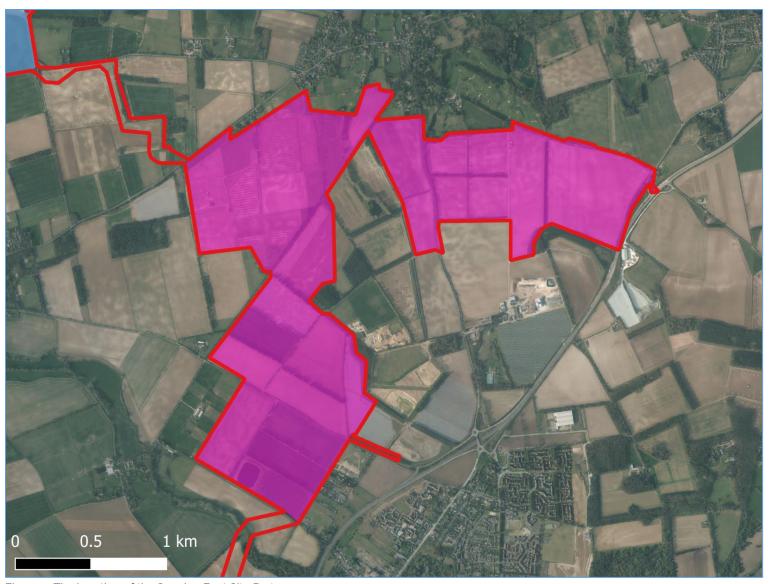


Figure 5. The location of the Sunnica East Site B at 1:25,000.

(Microsoft product screen shot reprinted with permission from Microsoft Corporation)



Figure 6. The location of the Sunnica West Site B at 1:25,000.

(Microsoft product screen shot reprinted with permission from Microsoft Corporation)



Figure 7. The location of the Sunnica East Site B at 1:25,000.

(Microsoft product screen shot reprinted with permission from Microsoft Corporation)

4. Cultural Heritage Impacts

The impact of the proposed scheme on cultural heritage – comprising
Designated and Non-Designated Heritage Assets – is assessed in Chapter 7
of the submitted Environmental Statement and supported by a number of
technical appendices. The definition of Cultural Heritage adopted in the
Environmental Statement, as set out in paragraph 7.1.2, is:

'Cultural heritage comprises all aspects of the environment resulting from the interaction and relationships between people and places through time. The above aspects are referred to as heritage assets, i.e. buildings, monuments, sites, places, areas, or landscapes identified as having a degree of significance due to their heritage interest that merit consideration in planning decisions. Cultural heritage influences how people relate to places and cultures and can provide a sense of place and stability to a community.'

- 4.0.2 The Applicant's methodology for assessing heritage impact rests upon evaluating the significance of the cultural heritage resources and the magnitude of impact upon that significance. By combining the value of the cultural heritage resource with the predicted magnitude of impact, the significance of the effect can be determined. The effect on significance can be beneficial or adverse.
- The value (also referred to as its 'heritage significance') of a heritage asset is 4.0.3 derived from its heritage interest, which may be archaeological, architectural, artistic, or historic. The significance of a place is defined by the sum of its heritage values. Taking these criteria into account, each identified heritage asset can be assigned a level of heritage value. In accordance with the criteria set out in Table 7-1 of the Environmental Statement, those sites of 'High' heritage value automatically include Scheduled Monuments, Grade I and II* Listed Buildings, Grade I and II* Registered Historic Parks and Gardens, and non-designated archaeological assets of schedulable quality and importance. 'Medium' heritage value is applied to Grade II Listed Building, Grade II Registered Historic Parks and Gardens, Conservation Areas, locally listed buildings within a Conservation Area, and non-designated heritage assets of a regional resource value. 'Low' heritage value is ascribed to nondesignated heritage assets of a local resource value, locally listed buildings, and non-designated heritage assets whose heritage values are compromised.
- The following sections of this report present a critical review of the cultural heritage impact assessment of the Sunnica scheme presented by the Applicant, focusing in particular on the impacts which the scheme would have on the designated and non-designated heritage assets within and around the proposed development area. This review includes an assessment

of the proposed mitigation strategies set out by the Applicant, with a particular emphasis on their likely efficacy in reducing heritage harm.

4.1 Baseline Assessment

- The baseline cultural heritage data presented for the Sunnica scheme is drawn from historic environment desk-based assessments undertaken in 2018 and updated in 2021. Copies of these are included at Appendices 7C, 7D and 7E of the Environmental Statement. As would be expected, this work draws upon a range of available data sources, although there are omissions which are acknowledged by the Applicant. In assessing the cultural heritage baseline, these studies have defined a study area within a 1km radius of the proposed development area and captured existing data for designated and non-designated heritage assets, including archaeological sites and monuments, Scheduled Monuments, Listed Buildings and other historic buildings, Conservation Areas and Registered Parks and Gardens, together with the relevant Historic Landscape Characterisation. New data has also been acquired via a programme of archaeological evaluation in the form of geophysical survey and trial trenching.
- Archaeological evaluation in the form of geophysical survey and trial 4.1.2 trenching has been undertaken to inform the understanding of the baseline conditions. Copies of the geophysical survey reports by Magnitude Surveys are included as appendices 7F and 7G of the Environmental Statement. The primary geophysical survey covered an area of approximately 1,150 hectares, of which it was possible for the contractor to survey 990 hectares, representing 86 per cent of the total area. The remaining 14 per cent of the site area was unable to be surveyed due to a variety of reasons relating to access and unsuitable ground conditions. The primary geophysical survey area was complemented by a survey of the cable route between the Sunnica site and the Burwell Substation. This extended to 138 hectares, of which 101 hectares was able to be surveyed, giving a 73% coverage.33 In order to compensate for these shortfalls, with the agreement of Cambridgeshire and Suffolk County Councils, additional trial-trenches were excavated in these areas.
- In consultation with Cambridgeshire and Suffolk County Councils, the proposed development area has been subject to a programme of archaeological trial-trenching with the dual aims of testing and ground-truthing some of the potentially archaeological features identified by the geophysical survey and evaluating those areas in which geophysical survey was not possible. The results of this fieldwork are included as appendices 7H and 7I of the Environmental Statement. While the Sunnica West sites have

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³³ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001821-SEF_ES_6.2_Appendix_7G_Cable%20Route%20Geophysical%20Survey%20Report.pdf

been fully evaluated and reported upon,³⁴ at the point of submission of the DCO Application 90% of the Sunnica East trial-trenching was complete and only an interim report had been produced.³⁵ It is stated in paragraph 7.2.7 of the Environmental Statement that 'the additional reporting will be made available prior to the examination stage' although at the time of writing such reports have yet to be submitted to the Planning Inspectorate.

In ascertaining the cultural heritage baseline, while it would be desirable for the full extent of the archaeological trial-trench evaluation to have been completed prior to the submission of the DCO Application, it is clear from the submitted reports that the geophysical surveys have successfully identified an extensive archaeological landscape buried beneath the proposed Sunnica sites. The surveys are robust and provide a detailed baseline assessment for understanding the buried archaeological resource. Likewise, the extensive archaeological trial-trenched evaluation of the proposed development areas have largely confirmed the results of the geophysical survey, as well as identifying additional features and areas of archaeological interest which were not identified during the survey. The results of the geophysical surveys and the trial-trenching have been incorporated into the assessment of cultural heritage impact presented in the Environmental Statement and the results of this assessment are considered further below.

4.2 Designated Heritage Assets

4.2.0.1 It is clear from the assessments of heritage impact contained within the Environmental Statement that the proposed construction and operation of the Sunnica Energy Farm will have a negative impact upon the significance of a number of Designated Heritage Assets, either directly or via changes to their settings.

4.2.1 Scheduled Monuments

4.2.1.0.1 Scheduled Monuments are heritage assets of the highest significance and this is recognised by the applicant in their cultural heritage impact assessment. The proposed development of the Sunnica Energy Farm will impact upon a number of Scheduled Monuments which lie within and immediately adjacent to the proposed development area and their significance will be adversely affected by the dramatic change in landscape character which will occur within their settings. Specifically, one Scheduled Monument, comprising a group of four Bronze Age barrows, is located entirely within the development boundary of the Sunnica West Site A, with

³⁴ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001824-SEF_ES_6.2_Appendix_7I_Sunnica%20West%20Sites%20A%20and%20B%20Archaeological%20Trial%20Trenching%20Report.pdf

³⁵ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001823-SEF_ES_6.2_Appendix_7H_Interim%20Sunnica%20East%20Sites%20A%20and%20B%20Archaeological%20Trial%20Trenching%20Report.pdf

further associated Bronze Age barrows, also Scheduled Monuments, located to its south and east. Other affected Scheduled Monuments include several other isolated barrows located to the south of the Sunnica East Site B development boundary, and a Roman villa located immediately to the west of the Sunnica West Site B development boundary. The potential impact of the development on each of these heritage assets is considered in turn below. In addition, there are a number of other Scheduled Monuments within the wider environs of the Sunnica scheme which are less affected by the proposed development, and the potential impact upon thee is set out fully in Chapter 7 of the submitted Environmental Statement.

4.2.1.1 Chippenham Barrow Cemetery

4.2.1.1.1 The Scheduled Monument comprising a group of four Bronze Age bowl barrows is located entirely within the south-eastern corner of the Sunnica West Site A. These barrows were included in the National Heritage List for England in January 1997 under entry number 1015246 with the record name of 'Four bowl barrows north of the A11/A14 junction, part of the Chippenham barrow cemetery'.36 The Scheduled Monument includes the visible and buried remains of four Bronze Age bowl barrows arranged in a broadly eastwest alignment across the chalk escarpment to the north of Newmarket and separated by intervals of between 70m and 100m. All four barrows remain unexcavated and ploughing has reduced the mounds to low earthworks in the otherwise level field. The westernmost barrow survives as a low circular mound c.22m in diameter and 0.5m high, principally visible as a slight rise in the surface of the farm track which crosses it. The second barrow lies some 70m to the east and measures 34m in diameter and c.o.4m high. The third barrow lies close to the south-western field boundary and the verge of the A11 and measures 45m in diameter and 0.4m high. The fourth barrow was partly destroyed during the construction of the A11 in 1973, although the north-western half of the mound survives adjacent to the field boundary and measures 40m across and 0.5m high.

The four scheduled barrows were first recorded in 1923 and form part of the larger Chippenham barrow cemetery, which included at least ten similar barrows, of which seven survive, spread over a distance of c.1.5km to the south of Chippenham Park.³⁷ As part of the wider cemetery, within the Sunnica West Site A boundary the Cambridgeshire Historic Environment Record includes details of an additional barrow located between two of the scheduled barrows which is not designated, but should be considered to be

³⁶ https://historicengland.org.uk/listing/the-list/list-entry/1015246; Cambridgeshire HER MCB8998, MCB8999, MCB9000 and MCB9001.

³⁷ See https://historicengland.org.uk/listing/the-list/list-entry/1015246?section-official-list-entry; Cambridgeshire HER MCB8995); Leaf 1936 and 1940; Martin 1977.

of equivalent archaeological significance to the scheduled examples.³⁸ The geophysical survey undertaken by the applicant has also identified a further two possible barrows in Fields Wo7 and Wo8, which survive as buried archaeological features and which extend the known extent of the cemetery further to the west and the north.

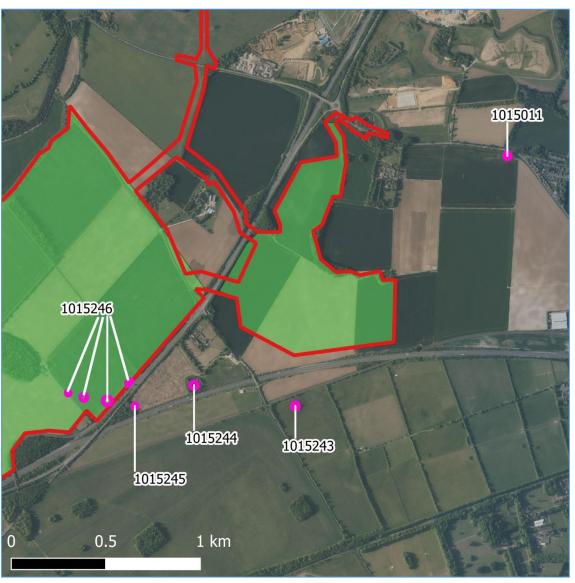


Figure 8. Scheduled Monuments, all of them Bronze Age barrows, within and surrounding Sunnica West Site A at 1:20,000. (SM data © Historic England 2022; Microsoft product screen shot reprinted with permission from Microsoft Corporation)

4.2.1.1.3 Two additional barrows belonging to the cemetery survive immediately to the south-east of the Sunnica West Site A, within the triangle of land between the A11 and the A14, and both are also Scheduled Monuments (Figure 8).

These are the Hilly Plantation bowl barrow (NHLE Entry Number 1015245), which measures c.25m in diameter and 1.4m high,³⁹ and the Rookery bowl

³⁸ Cambridgeshire HER MCB5260.

³⁹ https://historicengland.org.uk/listing/the-list/list-entry/1015245

barrow to its east (NHLE Entry Number 1015244), which measures c.35m in diameter and 1m high.⁴⁰ Neither barrow has apparently been excavated and, like the main barrow group, both were scheduled in January 1997. A third scheduled bowl barrow belonging to the Chippenham cemetery is located to the south of the A14 and has a surviving mound measuring c.34m in diameter and 0.7m high (NHLE Entry Number 1015243).⁴¹ Two immediately adjacent barrows were excavated in 1940 and are not included in the scheduled area. A fourth scheduled bowl barrow 31m in diameter and 3m high is located 2km to the north-east at Howe Hill (NHLE Entry Number 1015011) (Figure 8).⁴²

- As Scheduled Monuments, individually each of these barrows is of the 4.2.1.1.3 highest heritage value, and the fact that so many individual elements of the barrow cemetery survive gives the group a high collective value, too. Their setting makes a contribution towards their significance. In paragraph 7.7.69 of the submitted Environmental Statement the Applicant states that 'the barrows form part of a larger funerary landscape and were designed to be prominent within the landscape with intervisibility between contemporary monuments a key feature in their archaeological interest. While many of the barrows have been degraded through ploughing, they retain a presence in the landscape and can continue to be read as a linked group'. Likewise, the designation records in the National Heritage List for England conclude that: 'this [barrow] alignment, together with further outlying barrows near Newmarket and Barton Mills, broadly correlates with the course of the Roman road between Great Chesterford and Thetford. The barrows are indicative of a far earlier prehistoric trackway following the Icknield Way across the edge of the chalk escarpment.' The course of this route is thought to have run west to east across the area now occupied by the Limekilns gallops to the south of the A14 and is recorded as Road 333 in Margary's inventory of Roman roads in Britain.⁴³ It should be noted that the historic Icknield Way referred to here and the modern Icknield Way Path do not follow the same route, with the latter passing Newmarket much further to the south.
- 4.2.1.1.4 Regarding the heritage impact of the proposed Sunnica development, the submitted Environmental Statement indicates that there will be no direct physical impact on the scheduled barrows which lie within the Sunnica West Site A area, as they are included within an 'archaeological mitigation area' which is due to be planted with native grassland (ES para. 7.7.70). This approach is welcomed, but development of the scheme will result in significant changes to the setting of the scheduled barrows within the

⁴⁰ https://historicengland.org.uk/listing/the-list/list-entry/1015244

⁴¹ https://historicengland.org.uk/listing/the-list/list-entry/1015243

⁴² https://historicengland.org.uk/listing/the-list/list-entry/1020395

⁴³ http://www.twithr.co.uk/suffolk/icknield-way.htm

Sunnica West Site A area and the barrows which stand immediately to its south-east. In the submitted Environmental Statement, the Applicant clearly states that the development of the proposed scheme 'creates a move from a naturalistic landscape to one containing the solar arrays and associated infrastructure, which will have adverse effects on the setting of the assets. ... The Scheme will reduce the legibility of the funerary landscape by altering the experience of the assets, thus lessening the ability to appreciate their significance' (ES para. 7.7.70). The nature and extent of the significant change from a rural to a semi-industrial landscape character which will be brought about by the scheme is clearly illustrated in the Applicant's Viewpoint 9, included within the submitted Figures 7-4 A to L.

- The Applicant argues that although the impact of this change of character is 4.2.1.1.5 very great, it is reversible and would result in the scheduled barrows being taken out of cultivation. As a result, the Applicant considers that the identified changes to the setting of the assets will cause a low magnitude of change, which on assets of high value results in a 'moderate adverse' significance of effect. The Applicant acknowledges that this is a significant detrimental effect, even under this rather lenient interpretation of the impact. I disagree with this assessment, and consider that the Applicant understates the impact which the development of the scheme will have upon the scheduled barrows which lie within the proposed development area. While the proposed development is 'reversible' in the sense that the proposed solar farm has a limited operational lifespan and will ultimately be removed, it does not follow that this will result in the construction and operation of the solar farm having a reduced impact on the setting of these barrows. The DCO Application is for an operational period of 40 years, meaning that that this detrimental impact will be experienced for some two generations before any reversal is undertaken. Following the Applicant's assessment matrix, I conclude that the construction of the solar farm will result in an adverse change of medium magnitude, which on assets of high heritage value equates to a 'major adverse' significance of effect. In planning terms, the identified harm to the scheduled barrows represents 'less than substantial harm' caused by changes to the setting of the heritage asset. Given the national significance of the monuments, this harm would be at the upper end of the 'less than substantial' scale.
- 4.2.1.1.6 Regarding the three additional scheduled barrows which lie immediately outside the proposed Sunnica West Site A development area (NHLE Entry Numbers 1015243, 1015244 and 1015245) (Figure 8), the Applicant considers that although their setting contributes towards their significance, that setting is already compromised by the proximity of the A11 and A14. The Applicant concludes that the magnitude of impact upon these assets is considered to be very low, resulting in an overall significance of effect is therefore

considered to be minor adverse (ES para. 7.7.71). I disagree with this assessment. Even with the grassed 'archaeological mitigation area' surrounding the scheduled barrows within the development area, the construction and operation of the solar farm will result in a significant change in the landscape character of the surrounding area, resulting in the partial industrialisation of the existing agricultural landscape which forms the setting of these monuments. I conclude that the identified changes to the setting of the assets will cause a low magnitude of change, which on assets of high value results in a 'moderate adverse' significance of effect. In planning terms, the identified harm to these scheduled barrows represents 'less than substantial harm' caused by changes to the setting of the heritage asset and lies in the middle of the 'less than substantial' scale.

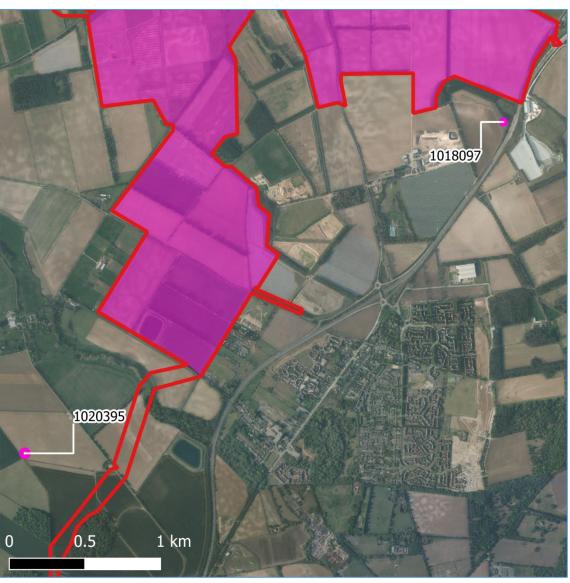


Figure 9. Scheduled Monuments, all of them Bronze Age barrows, surrounding Sunnica East Site B at 1:25,000. (SM data © Historic England 2022; Microsoft product screen shot reprinted with permission from Microsoft Corporation)

- Further to the east, regarding the impact on the setting of the Howe Hill bowl barrow (NHLE 1015011) (Figure 8), the Applicant concludes that, despite some intervening landscape features, 'the southern part of W15 will be visible, and this will intrude on its largely agricultural setting. This will interrupt some of the visual connections to the Chippenham Barrow Cemetery to the south, although it will still be possible to understand the asset and its context' (ES para. 7.7.72). The applicant considers the magnitude of this impact to be low, resulting in a minor adverse significance of effect. This conclusion is inconsistent with the assessment presented by the applicant for the barrows within the development area (ES para. 7.7.70), in which a 'low' impact on an asset of high value equated to a 'moderate adverse' significance of effect. I conclude that this 'moderate adverse' effect would be the correct assessment, equating in planning terms to 'less than substantial harm' in the middle of the scale.
- 4.2.1.1.8 A further scheduled bowl barrow is located immediately to the south of the Sunnica East Site B development boundary (Figure 9). This is known as the 'Bowl barrow on Chalk Hill' and is recorded in the National Heritage List for England under entry number 1018097.⁴⁴ The surviving barrow stands to a height of 1.8m and is approximately 24m in diameter and is the only survivor of a row of four barrows which stood either side of the main road. The barrow was excavated in 1923, resulting in the discovery of three inhumations and 11 cremations, several of which were accompanied by grave goods.⁴⁵ The ringditches of two further barrows were located approximately 600m to the north-west of the scheduled barrow during the geophysical survey of Sunnica East Site B.
- 4.2.1.1.9 Regarding the impact of the scheme on this scheduled barrow, the Applicant identifies that the proposed solar farm will be visible within its setting, but observes that the barrow is partially screened from the Sunnica East Site B by trees to the north and east. Although there may be an impact on long distance views to the west, the Applicant considers that given the extant screening to the north and east, the magnitude of impact will be low, resulting in a significance of effect of 'moderate adverse' (ES 7.7.42). This is a significant effect, and I agree with this assessment. In planning terms, this equates to 'less than substantial harm' in the middle of the scale. Indeed, it is notable that the level of impact identified by the Applicant is higher in this instance than that which they offer for the unscreened barrows which lie immediately outside the proposed Sunnica West Site A development area (see para. 4.2.1.1.6, above) and the more distant Howe Hill barrow (see para. 4.2.1.1.7, above). As discussed above, I consider that these instances

⁴⁴ https://historicengland.org.uk/listing/the-list/list-entry/1018097

⁴⁵ Cawdor and Fox 1923.

understate the impact which the development proposals will have upon the Scheduled Monuments.

4.2.1.1.10 A final scheduled barrow, known as the Lumber Hill bowl barrow, is located c.1km to the south of the Sunnica East Site B (NHLE Entry No. 1020395; Figure 9).⁴⁶ Its distance from the above-ground elements of the scheme and the intervening landscape features mean that the Applicant's identification of a very low magnitude of effect on an asset of high value, resulting in a minor adverse significance of effect, is appropriate in this instance (ES 7.7.44).

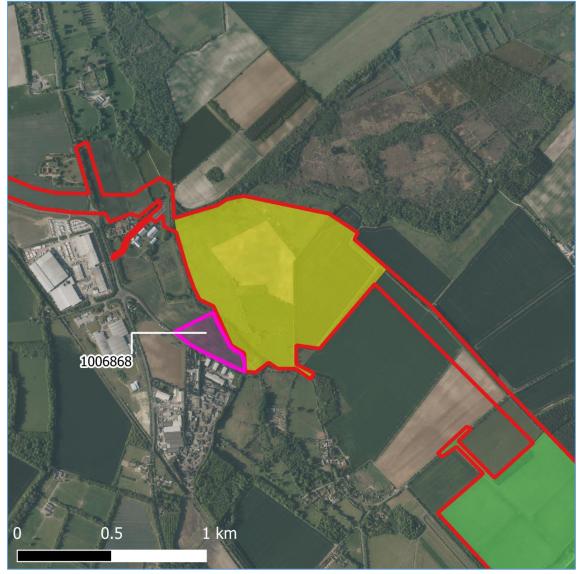


Figure 10. The Scheduled Monument, site of a Roman villa, adjacent to the Sunnica West Site B at 1:20,000. (SM data © Historic England 2022; Microsoft product screen shot reprinted with permission from Microsoft Corporation)

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⁴⁶ https://historicengland.org.uk/listing/the-list/list-entry/1020395

4.2.1.2 Roman Villa south of Snailwell Fen

- In addition to the scheduled barrows discussed above, a further Scheduled Monument, comprising the site of a Roman villa now preserved below farmland, lies immediately to the west of the Sunnica West Site B development area, with which it shares a contiguous boundary (Figure 10). The site is known as 'Roman villa south of Snailwell Fen' and is recorded in the National Heritage List for England under entry number 1006868.⁴⁷ The villa site was originally located during ploughing and then investigated by the owner, during the course of which part of a probable hypocaust was found, along with a considerable amount of building material, including painted wall plaster. Pottery indicates occupation in the 1st to 2nd centuries AD. As a Scheduled Monument, the villa is a heritage asset of the highest value.
- The proposed development will not have a direct effect upon the villa itself, but it will cause a fundamental change in the landscape character of its setting, transforming it from the current agricultural landscape to the semi-industrialised landscape of the solar farm. The Applicant suggests that 'setting was not a key factor in its location, other than in relation to the Roman road network and agricultural land which would have served it' (ES 7.7.109). This is a rather contradictory statement, and indicates that the setting of the villa does contribute towards its significance in terms of its fen-edge location, its immediate relationship with the line of the Roman road to its south and the control which the villa would have exercised over the surrounding Roman agricultural landscape.
- 4.2.1.2.3 The Applicant acknowledges that although the villa site is well screened by woodland to the east, the change in landscape character will be visible to the north and this will impact upon its setting. Given their relative downgrading of the significance of the setting, the Applicant concludes that the magnitude of this impact is very low, resulting in a minor adverse significance of effect (ED para. 7.7.110). Again, I consider this assessment to be understated and would instead conclude that the proposals would result in a 'low' impact on an asset of high value, resulting in a 'moderate adverse' significance of effect. In planning terms, this equates to 'less than substantial harm' in the middle of the scale.

4.2.2 Registered Parks and Gardens

4.2.2.1 As part of the National Heritage List for England, Historic England maintain a 'Register of Parks and Gardens of Special Historic Interest' with the aim of drawing attention to important historic parklands, pleasure grounds and gardens laid out before 1939, which are considered to be an essential part of the nation's heritage. Registered Parks and Gardens (RPGs) constitute designated heritage assets and can be listed at Grades I, II* or II. In

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⁴⁷ https://historicengland.org.uk/listing/the-list/list-entry/1006868

accordance with the criteria set out in Table 7-1 of the submitted Environmental Statement, Grade I and II* Registered Parks and Gardens are considered to be sites of 'High' heritage value, while 'Medium' heritage value is applied to Grade II Registered Parks and Gardens.



Figure 11. The location of the Chippenham Hall Registered Park and Garden in relation to Sunnica West Site A at 1:25,000. (RPG data © Historic England 2022; Microsoft product screen shot reprinted with permission from Microsoft Corporation)

- As is clearly acknowledged in the submitted Environmental Statement, and examined further here, the proposed development of the Sunnica Energy Farm will have a detrimental impact upon the extensive RPG recorded in the National Heritage List for England under entry number 1000615 and referred to as 'Chippenham Hall'. As can be seen in Figure 11, the Chippenham Hall RPG covers an area of 183 hectares and the majority of the site lies immediately to the north of the Sunnica West Site A development area, which surrounds is eastern, southern and western sides. A lengthy avenue, some 3km long, extends southwards from the main body of the Chippenham Hall RPG and is traversed by the Sunnica West Site A development area. The Chippenham Hall RPG is listed at Grade II, so is considered to be a designated heritage asset of 'medium' value for the purposes of this assessment.
- A detailed account of the history and development of the Chippenham Hall 4.2.2.3 RPG is included in the National Heritage List for England entry, 49 complemented by the history recorded on Chippenham Park's own website,⁵⁰ and the relevant volume of the Victoria County History,⁵¹ In 1688, the manor of Chippenham was purchased by Admiral Edward Russell, later to become Lord Orford and First Lord of the Admiralty, who in 1702 wrote to King William III seeking permission to make a park. Having been granted permission, he redirected the southern part of the main village street, rehousing villagers in a new model village, and completely rebuilt the hall, added a stable block and surrounded these buildings with an extensive park which was entirely enclosed within a continuous wall. He later planted large avenues in the Park, which are said to replicate the battle formations of La Hogue, site of his famous naval victory over the French in 1692, although the official list entry casts some doubt on this. The extent of these developments was recorded on an estate map dated 1712 which shows a number of formal avenues in the park, a large walled garden and a substantial T-shaped canal.
- In 1727, Lord Orford died and was succeeded by his niece Letitia, whose husband, Lord Sandys, built the southern lodges and triumphal arch. Following a number of rapid changes of ownership, during which time the Hall was mostly demolished, in 1791 the estate was purchased by John Tharp, the owner of a Jamaican sugar plantation. He extended the park by some 12.5 hectares and partly rebuilt the enclosing wall. Tharp also commissioned William Emes (1730–1803) to produce a plan for landscaping the park, James Wyatt (1747–1813) to design new lodges and Samuel Lapidge (1744–1806) to advise on a massive tree planting programme.

⁴⁸ https://historicengland.org.uk/listing/the-list/list-entry/1000615

⁴⁹ https://historicengland.org.uk/listing/the-list/list-entry/1000615

⁵⁰ https://www.chippenhamparkgardens.info/history/

⁵¹ https://www.british-history.ac.uk/vch/cambs/vol10/pp374-379

Since 1791, the Park has passed through several generations of the Tharp 4.2.2.5 family down to the present owners. During that time, the Hall has been extensively remodelled, being rebuilt in the Queen Anne revival style during the 1880s. Further alterations were made by Paul Phipps in 1933. The Hall itself is a Grade II listed building and is recorded in the National Heritage List for England under entry number 1331778.52 The Hall is surrounded to the east, south and west by 6 hectares of gardens and pleasure grounds enclosed by a ha-ha. To the west of the Hall is a sinuous canal created in the 1790s, beyond which stands the walled kitchen garden. Within the wider park, to the north of the hall are tennis courts, the village cricket pitch and paddocks, together with a Grade II listed 18th-century dovecote (NHLE Entry No. 1309915)53 and an ice house. The northern part of the park also contains earthwork remains of the village, depopulated in 1702 to make way for the creation of the park. To the south of the Hall, the majority of the park is under grass, with the south-western part of the park given over to arable cultivation, and the grounds are scattered with mature individual trees, blocks of younger trees and edged by deep plantations. Although considerable replanting has been carried out during the 20th century, the historic landscape character of the late 18th century park survives.

4.2.2.6 Today, the main entrance to Chippenham Park is from the village to the north and comprises a matching pair of Grade II listed neo-classical lodges, known as East and West Lodge, with flanking gateways by James Wyatt (NHLE Entry No. 1331779).54 The drive runs south-east with a wall to the west and a row of limes to the east, past the Grade II* listed late 17th-century stable block (NHLE Entry No. 1126375), and then turns south and west to arrive at the south-east front of the Hall. However, the principal 18th-century entrance drive, now disused but still legible in the landscape, enters the park c.4.3km south of the Hall. Here double red-brick gate piers surmounted by pineapple finials and linked by a wrought-iron screen wall stand beside a late 19thcentury red-brick lodge, known as the Bury Road Lodge. The drive, lined with beech, runs straight for c.3.2km until it reaches the park wall. Here the pair of Grade II* listed neo-classical ashlar limestone High Park Lodges, linked by a triumphal arch, were erected by Lord Sandys c.1745 to mark the entrance to the park (NHLE Entry No. 1126376). The drive, now reduced to a track, runs north through the park to join the north drive beside the stables. A third lodged entrance, beside Keeper's Cottage, breaks the park wall c.650m west of the Hall, its drive leading directly to the walled kitchen garden. A further lodge on the eastern boundary, the East Lodge, was demolished in the 1960s.

- As can be seen in Figure 11, the proposed Sunnica West Site A overlies the line of the historic avenue leading from the gates and Bury Road Lodge to the southern edge of the historic park. Although no longer used, this avenue dates from the 18th century and is still clearly legible as a significant landscape feature. Its truncation by the A14, over which it is now carried on a bridge, has done little to diminish its heritage significance and it is a distinctive feature of the park and the surrounding landscape and contributes to our understanding of the early history of the park. The rural setting, including the surrounding farmland and small settlements, further contributes to the character of the park and its significance, while the presence of the south drive reinforces its relationship with its rural surroundings and its prominence within the landscape.
- 4.2.2.8 Recognising the heritage significance of the Chippenham Hall RPG, and its avenue in particular, the Applicant is not seeking to develop the area of the avenue itself and so the proposed development would not have a direct physical impact upon this designated heritage asset. However, as is acknowledged by the Applicant, the development of the proposed scheme will have a significant and wide-scale impact upon the character of the surrounding landscape which forms the setting of the Chippenham Hall RPG and its avenue. In particular, to the east and the west, the existing rural agricultural landscape will be transformed into the semi-industrialised landscape of the solar farm. Something of the potential extent of this change of character is presented in the visualisations presented by the applicant as Viewpoints 11A and 11B in Figures 7–4 A to L. As the setting of the RPG contributes towards its significance, this development will result in a detrimental impact upon the significance of this designated heritage asset.
- 4.2.2.9 Specifically pertaining to the impact on the avenue, the Applicant's own assessment states that: 'With regard to the visibility from the avenue, while not forming designed views, the wider landscape was intended to be appreciated as a kinetic view when travelling along the drive, thus glimpsed views of the surrounding fields are important in appreciating the asset. In addition, the southern extent of the avenue occupies a raised position and there will be glimpsed views of the solar panels when looking over the surrounding landscape, although this view is somewhat diminished by the presence of the A14' (ES para. 7.7.77). It should be noted, though, that the A14 runs in a cutting at this point, so is a much less obtrusive landscape feature than it might otherwise be.
- 4.2.2.10 In an effort to mitigate the heritage impacts of the scheme, the Applicant has incorporated setbacks into the design, limiting visibility from key routes through the landscape, and including buffer areas around settlements to ensure that settlements remain isolated within the landscape. In response to consultee feedback, this approach has also been applied to the Chippenham

Hall RPG, with no development proposed immediately adjacent to the formal park boundary and a reduction of the DCO limits in the vicinity of the RPG within Sunnica West Site. New planting is also proposed along the avenue to reinstate a linear row of trees. The purpose of this is to recreate the physical structure of an avenue, whilst reinforcing other vegetation via positive management, in accordance with ecological requirements (ES para. 7.7.76).

- 4.2.2.11 However, despite the introduction of this mitigation, the Applicant concludes that: 'there remains an impact on the parkland 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 only be visible from within the designated area where it follows the avenue, the fields remain part of the setting of the asset as a whole and there will be intervisibility across the landscape' (ES para. 7.7.77). The implication of this statement is that the proposed mitigation is not sufficient to address the impact which the scheme will have upon the designated Chippenham Hall RPG.
- In assessing the impact of the proposed scheme on the Chippenham Hall RPG, the applicant concludes that, even after the implementation of mitigation, 'the scheme will have a medium magnitude of impact, resulting in a moderate adverse effect on this asset of medium value' (ES 7.7.77). This is identified by the Applicant as a 'significant effect', but, as with the impact assessments of the Scheduled Monuments discussed above, I consider that the impact is understated. Following the Applicant's assessment matrix, I conclude that the construction of the solar farm in the landscape abutting the Chippenham Park RPG and its avenue will result in an adverse change of a high magnitude, which on assets of medium heritage value equates to a 'major adverse' significance of effect. In planning terms, the identified harm to the Chippenham Park represents 'less than substantial harm' caused by changes to the setting of the heritage asset. Given the significance of the monuments, this harm is at the upper end of the 'less than substantial' scale.
- 4.2.2.13 Although the primary adverse heritage impact on the Chippenham Hall RPG will be caused by the development of the Sunnica West Area A site, the Applicant also identifies that the development of the Sunnica West Area B site will have an impact on the Chippenham Hall RPG (ES para. 7.7.111). Again, the construction of the scheme will introduce new industrialised elements into the setting of the Chippenham Park RPG, which the Applicant concludes will result in a very low magnitude of impact, resulting in a negligible adverse effect on this asset of medium value. This 'very low' magnitude of effect is attributed to the effects being 'temporary' and 'reversible', although given that the DCO Application is for an operational period of 40 years, it is more appropriate for these effects to be

considered to be 'long term' rather than 'temporary', given that the detrimental heritage impacts will be experienced for the next two generations. I conclude that this assessment also understates the impact which the development would cause, and given the distances and intervening landscape features, instead consider that the construction of the Sunnica West Site B area will result in a low magnitude of impact, resulting in a 'minor adverse effect' on this asset of medium value.

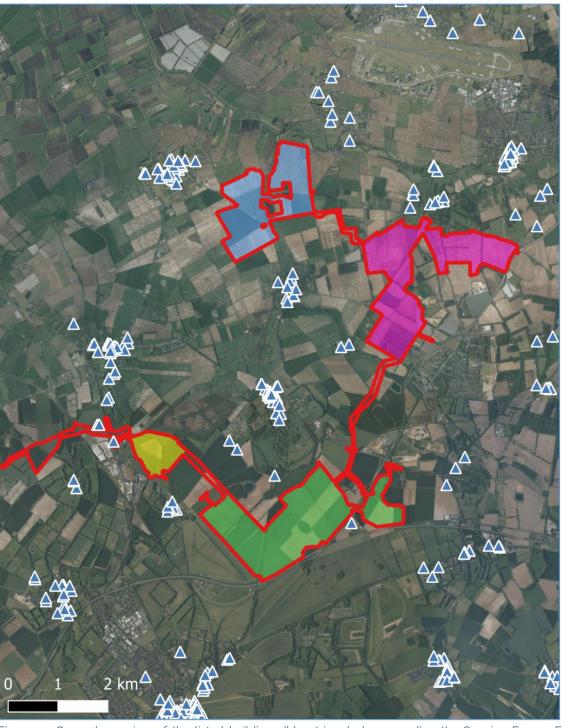


Figure 12. General overview of the listed buildings (blue triangles) surrounding the Sunnica Energy Farm at 1:75,000. (LB data © Historic England 2022; Microsoft product screen shot reprinted with permission from Microsoft Corporation)

4.2.3 Listed Buildings

- 4.2.3.1 Legislation pertaining to buildings and areas of special architectural and historic interest is contained within the Planning (Listed Buildings and Conservation Areas) Act 1990. Under the act, historic buildings and structures can be designated at one of three grades. These are:
 - Grade I Buildings of exceptional interest (2.5% nationally)
 - Grade II* Important buildings of more than special interest (5.8%)
 - Grade II Buildings of special interest (91.7%)

In accordance with the criteria set out in Table 7-1 of the Environmental Statement, Grade I and II* Listed Buildings are automatically considered to be of 'high' heritage value, while Grade II listed buildings are considered to be of 'medium' heritage value.

- Given that the four main proposed development areas of the Sunnica Energy Farm are situated in the open agricultural land between the surrounding settlements, the scheme has largely avoided any detrimental impacts upon many listed buildings. As can be seen in Figure 12, the majority of the surrounding listed buildings are located within the adjacent settlements, some of which are designated as Conservation Areas and are discussed further below, but there are still a significant number of isolated listed buildings within the surrounding landscape which will be affected by the proposed development
- 4.2.3.3 The listed buildings in question include the Grade II listed Grange Farmhouse (NHLE 1037602)⁵⁵ and Grade II listed The Manor (NHLE 1037604),⁵⁶ which are both situated c.500m to the north-east of the Sunnica East Site B development area (Figure 13). The Applicant identifies that the significance of these buildings lies in the historic interest of the farm buildings, which illustrate the agricultural history of the area, while their architectural interest derives from the appreciation of the vernacular style and materials. The surrounding agricultural landscape is largely open, and it is anticipated that these buildings are likely to experience some temporary visual intrusion due to the construction traffic and movement of construction equipment. Overall, the Applicant concludes that the magnitude of impact on these assets will be very low, resulting in a temporary negligible effect on the significance of these assets of medium value (ES 7.7.49). I agree with this assessment. In planning terms, this equates to 'less than substantial harm' at the lowest end of the spectrum.

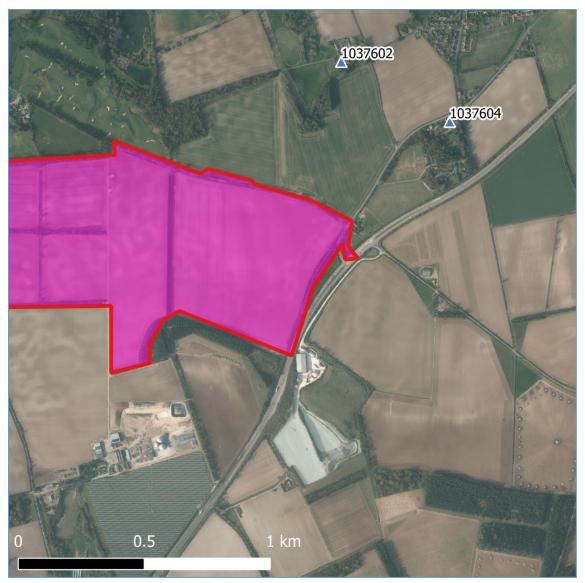


Figure 13. Listed buildings to the north-east of Sunnica East Site B at 1:15,000. (LB data © Historic England 2022; Microsoft product screen shot reprinted with permission from Microsoft Corporation)

Located about 400m from the south-western corner of the Sunnica East Site B development area, are the Grade II listed Badlingham Manor (NHLE 1126373)⁵⁷ and the Grade II listed The Cottage (NHLE 1126374)⁵⁸ (Figure 14). The Applicant identifies that the proposed scheme will come to these buildings and, while presently screened from the scheme and with proposed enhancement planting, the setting of Badlingham Manor house will nevertheless be impacted by the introduction of the solar panels. This will cause a low impact on an asset of medium value resulting in a minor adverse effect. The relationship of The Cottage to the agricultural landscape to the east is less marked, its setting being focussed on its immediate surroundings, and the Applicant identifies a very low impact on an asset of medium value

resulting in a negligible effect (ES 7.7.50). Again, I agree with both of these assessments, which in planning terms equate to 'less than substantial harm' at the lower end of the spectrum.

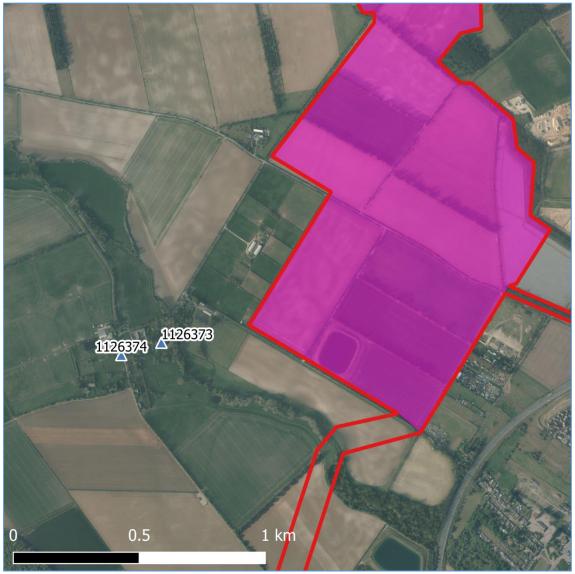


Figure 14. Listed buildings to the south-west of Sunnica East Site B at 1:15,000. (LB data © Historic England 2022; Microsoft product screen shot reprinted with permission from Microsoft Corporation)

Located approximately 100m south-east of the Sunnica West Site A boundary, from which it is separated by the A11, stands the Grade II listed Waterhall Farmhouse (NHLE 1126383) (Figure 15).⁵⁹ The building has historic interest as an 18th-century farmhouse and architectural interest that derives from the appreciation of its style. As a farmhouse, it also has historical associations with the surrounding agricultural landscape. The Applicant states that, because the asset is surrounded by trees which screen views towards the proposed development area and because the A11 runs between the part of the Sunnica West Site A area and the building, the impact of the

development on the building's setting is not expected to be any more than very low magnitude of impact, resulting in a negligible effect on this asset of medium value (ES para. 7.7.73). I disagree with this assessment. Despite the presence of the A11, the fact that the boundary of the proposed development area will come within 100m of the north-west of the building means that the construction and operation of the solar farm will have a significant detrimental effect upon the setting of this building. In particular this impact will be brought about by a fundamental change in the landscape character of the agricultural landscape which surrounds the building, so that it becomes instead a semi-industrialised landscape and introduces new structures to the agricultural land historically associated with the asset.



Figure 15. Listed buildings to the south of Sunnica West Site A at 1:15,000. (LB data © Historic England 2022; Microsoft product screen shot reprinted with permission from Microsoft Corporation)

4.2.3.6 It is also not the case that development is only proposed on the opposite side of the A11 from the building and a significant element of the proposed Sunnica West Site A occupies the adjacent agricultural fields to the east,

which also lie to the south of the A11. Here, the proposed development comes within 250m of the building and will again have a significant detrimental effect upon the setting of the listed building. I conclude that the Applicant's assessment understates the impact which the development would cause on the setting of Waterhall Farmhouse, and instead consider that the construction of the Sunnica West Site A will result in a medium magnitude of impact, resulting in a moderate adverse effect on this asset of medium value. Under the Applicant's scoring matrix, this constitutes a significant effect, and in planning terms equates to 'less than substantial harm' in the middle of the scale.

- A further two isolated Grade II listed buildings stand c.800m north of the Sunnica West Site A area and c.1km east of the Sunnica Site B area. These are Park Farmhouse (NHLE 1162059)⁶⁰ and Phantom Cottage (NHLE 1126385),⁶¹ which stand to the west of Chippenham Park (Figure 16). The Applicant concludes that the proposed development of these sites is likely to change the rural setting of these assets, but consider that the scale of the development and extensive grassland planting will result in no real change in our ability to understand and appreciate these buildings. The Applicant concludes that the development of Sunnica West A in isolation is unlikely to have an adverse effect on these buildings, but that in combination with Sunnica West Site B there is likely to be a low magnitude of impact, resulting in a minor adverse effect on the significance of these assets of medium value (ES 7.7.130). I agree with this assessment, which in planning terms equates to 'less than substantial harm' towards the lower end of the scale.
- Finally, the impact of the proposed Sunnica West Site A on the Chippenham Hall RPG, and in particular its avenue, was discussed in the previous section. In addition to the impact on the RPG itself, consideration also needs to be given to the listed buildings which stand within the park. While it is accepted that the immediate setting of the Grade II listed Hall (NHLE 1331778)⁶² and dovecote (NHLE 1309915)⁶³ and the Grade II* listed stable block (NHLE 1126375)⁶⁴ comprises the park itself, and its northern extent in particular, the Applicant concludes that the setting of the Grade II* listed southern entrance lodges and triumphal arch (NHLE 1126376)⁶⁵ will be affected by the proposed development (Figure 16). Being located at the southern end of the park and marking its original entrance, the lodges and gate overlook the surrounding countryside and reinforce the relationship of the park with its surroundings.

Although the Applicant claims that the solar panels and associated infrastructure will not be visible from the lodges and gateway and that the appreciation of the asset as a gateway will be retained, they concede that the proximity of development to the avenue which forms a key feature of their setting will, in turn, affect the setting of these highly graded buildings. The Applicant concludes that the scheme is likely to have a very low magnitude of impact, resulting in a minor adverse effect on this asset of high value. I disagree with this assessment and conclude that the development of the scheme will result in an adverse change of a medium magnitude, which on assets of high heritage value equates to a 'major adverse' significance of effect. In planning terms, the identified harm to the Grade II* listed lodges and triumphal arch represents 'less than substantial harm' caused by changes to the setting of the heritage asset. Given the significance of the monument, this harm would be at the upper end of the 'less than substantial' scale.



Figure 16. Listed buildings to the north of Sunnica West Site A at 1:15,000. (LB data © Historic England 2022; Microsoft product screen shot reprinted with permission from Microsoft Corporation)

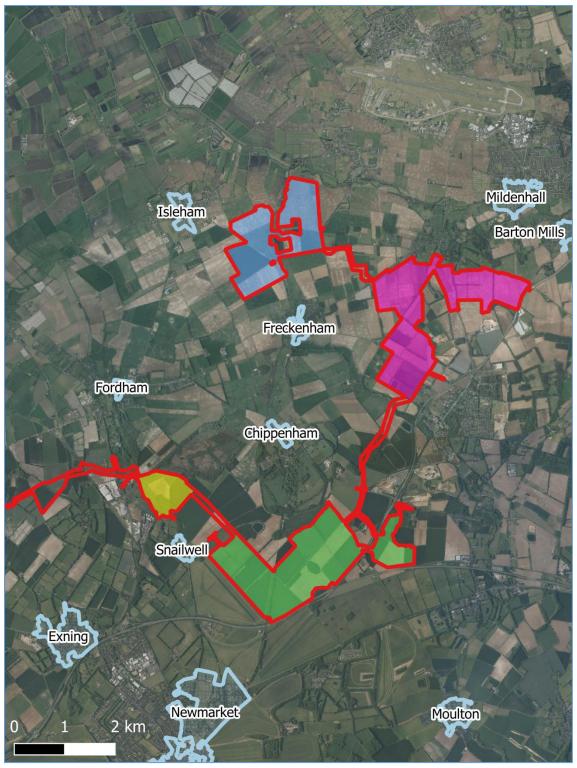


Figure 17. General overview of the Conservation Areas surrounding the Sunnica Energy Farm at 1:75,000. (Microsoft product screen shot reprinted with permission from Microsoft Corporation)

4.2.4 Conservation Areas

4.2.4.1 As might be expected, given the large area which the proposed Sunnica
Energy Farm covers, the scheme lies in the vicinity of a number of
Conservation Areas. However, given that the proposed scheme occupies the
agricultural land between settlements, these Conservation Areas are located
around the periphery of the proposed development area. The scheme will

not, therefore, have a direct physical impact upon any of these Conservation Areas, but the dramatic transformation of the existing agricultural landscape into a semi-industrialised landscape does have the potential to have a detrimental impact upon the setting of these Conservation Areas.

- 4.2.4.2 Situated c.1km to the north-east of the Sunnica East Site B area, the Mildenhall and Barton Mills Conservation Areas are both separated from the scheme by the built form of Worlington and the south-western suburbs of Mildenhall and Barton Mills themselves (Figure 17). Likewise, the Fordham Conservation Area is situated c.1.5km to the north of the Sunnica West Site B area, but is separated from the scheme by the built form of the southern edge of Fordham itself (Figure 17). Consequently, the proposed scheme will have no impact upon these Conservation Areas and they are not considered further.
- The north-eastern extent of the Newmarket Conservation Area is situated 4.2.4.3 c.1.2km to the south-west of the Sunnica West Site A area, from which it is separated by the line of the A14 (Figure 17). The special historic and architectural interest of the Conservation Area derives from a number of features, the most important being the medieval layout of the town, the buildings and areas associated with the long history of horseracing in Newmarket, and the 19th-century Regency, Victorian and Edwardian buildings. The Applicant concludes that the development of the scheme will not have a direct effect upon the setting of the Newmarket Conservation Area, resulting in no change to an asset of medium value, and I agree with this conclusion (ES para. 7.7.80). However, the impact which the proposed scheme will have upon landscape features associated with Newmarket's long history of horseracing, which are considered to constitute nondesignated heritage assets, are considered in more detail in section 4.3.2, below.
- The Isleham Conservation Area is situated *c.*750m west of the Sunnica East Site A area, is centred on Church Street, Pound Lane and Mill Street and includes more than 30 listed buildings (Figure 17). The Applicant identifies that although there is the potential for the Conservation Area to be impacted due to its proximity to the scheme, the scheme design includes a significant amount of landscape mitigation within its northern parts, limiting the potential for visual impacts. As such, the long-term impact on the heritage value of the Isleham Conservation Area is considered to be low, resulting in a minor adverse effect on the significance of this asset of medium value (ES para. 7.7.20 and 7.7.128). I agree with this assessment, and in planning terms equates to 'less than substantial harm' at the lower end of the scale.
- 4.2.4.5 The Freckenham Conservation Area is situated *c.*700m south of the Sunnica East Site A area and *c.*1.5km to the west of the Sunnica East Site B area

(Figure 17). The Conservation Area encompasses an important group of historic buildings, including the Manor House, the Old Rectory, the Church of St Andrew, and the remains of Freckenham Castle. The setting of the Conservation Area is defined by its location at the edge of the valley and includes the surrounding countryside, which is a feature of many key views into and out of the Conservation Area. The Applicant identifies that the Freckenham Conservation Area is expected to experience some short- and long-term adverse effects during the construction of the scheme. Although the individual buildings are unlikely to experience an effect, as their settings are focussed on the settlement, detrimental effects are anticipated on the Conservation Area as a whole. The scheme will be visible in views to the north of the settlement, which will impact on the appreciation of the settlement within its rural landscape. With mitigation planting, the Applicant considers that the magnitude of impact on the designated area caused by Sunnica East A is expected to be very low affecting the appreciation of the asset from the north, resulting in a negligible effect on the significance of this asset of medium value (ES para. 7.7.19). The setting of the conservation area will also be affected by the proposed development of Sunnica East Site B, and the Applicant concludes that this magnitude of impact is expected to be low resulting in a minor adverse effect on the significance of this asset of medium value (ES para. 7.7.46 and 7.7.128). I agree with this assessment, and in planning terms equates to 'less than substantial harm' at the lower end of the scale.

The Snailwell Conservation Area is situated c.250m west of the Sunnica West 4.2.4.6 Site A area and c.400m south of the Sunnica West Site B area (Figure 17). The Conservation Area is concentrated on the main historic core of the village, developed around the church, with farm buildings dating from the 16th to the 19th centuries and the Old Rectory contributing to the character and appearance of the area and illustrating its agricultural history. The setting of the village is predominantly rural, surrounded by woodland, agricultural fields and paddocks. The Applicant identifies that the Snailwell Conservation Area will be impacted by the development of both Sunnica West Sites A and B, which will introduce infrastructure elements in the setting of the Conservation Area that are likely to erode the Conservation Area's agricultural setting and affect the ability to understand and appreciate the asset as a rural settlement. Upon maturation of the proposed landscaping, the Applicant concludes that there will be a low impact on the significance of the Snailwell Conservation Area, which as an asset of medium value results in a minor adverse effect (ES para. 7.7.79 and 7.7.129). Given the close proximity of, particularly, the Sunnica West Site A development to the Conservation Area, I consider that this assessment understates the likely impact of the scheme and conclude that the scheme will have a medium impact on the significance of the Conservation Area, which, as an asset of medium value, results in a moderate

adverse effect. Under the Applicant's scoring matrix, this constitutes a significant effect, and in planning terms equates to 'less than substantial harm' in the middle of the scale.

4.3 Non-Designated Heritage Assets

- 4.3.0.1 In addition to the designated heritage assets considered above, there is also a significant number of non-designated heritage assets which have the potential to be affected by the proposed Sunnica Energy Farm. Non-designated heritage assets are defined in the National Planning Practice Guidance as 'buildings, monuments, sites, places, areas or landscapes identified by plan-making bodies as having a degree of heritage significance meriting consideration in planning decisions, but which do not meet the criteria for designated heritage assets'.⁶⁶
- 4.3.0.2. With regard to identifying non-designated heritage assets, the Guidance sets out that there are a number of processes through which non-designated heritage assets may be identified, including the local and neighbourhood plan-making processes and Conservation Area appraisals and reviews. In some cases, local planning authorities may also identify non-designated heritage assets as part of the decision-making process on planning applications, for example, following archaeological investigations. It is, therefore, helpful if plans note areas with potential for the discovery of non-designated heritage assets with archaeological interest and the local Historic Environment Record will be a useful indicator of archaeological potential in the area. Irrespective of how they are identified, it is important that the decisions to identify them as non-designated heritage assets are based on sound evidence.
- In the case of the proposed Sunnica Energy Farm, the vast majority of the non-designated heritage assets affected are derived from the rich and extensive array of archaeological features and deposits which lie within the proposed development area. Some of these were known prior to the commencement of the scheme, while others have come to light as a result of new fieldwork conducted by the Applicant, and they all require an extensive programme of mitigation. This is considered in the following section. In addition to the archaeological non-designated heritage assets, due consideration also needs to be given to the historical significance of those elements of Newmarket's historic racing landscape which lie in the vicinity of the proposed development, in particular the Limekilns Gallops, which will also be affected by the proposed development of the Sunnica Energy Farm. This is considered in the final part of this section.

⁶⁶ https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment#non-designated

4.3.1 Archaeological Features

- As an extensive area of landscape situated on the Fen Edge, the proposed development area has been a prime location for human occupation and exploitation for millennia. Prior to the commencement of the current DCO Application, the area's rich archaeological heritage was already recognised and well understood, with significant features identified and protected as Scheduled Monuments and additional archaeological sites and monuments recorded in the Cambridgeshire and Suffolk Historic Environment Records. This prior knowledge has been greatly enhanced as a result of the archaeological fieldwork undertaken by the Applicant during the preparation of the current DCO Application. This has taken the form of an archaeological desk-based assessment, complemented by a geophysical survey and an extensive campaign of archaeological trial trenching.
- 4.3.1.2 Within the four main Sunnica site areas, the geophysical survey identified extensive areas of archaeological activity. This comprised at least seven distinct settlement areas covering in total approximately 23 hectares, multiple potential new Bronze Age barrows, a possible prehistoric henge, and former field systems which pre-date any recorded on available historic maps. The settlements have suggested dates from later prehistory into the medieval period, and notably include a 6 hectare suspected Romano-British productive complex. Features were also identified relating to the historical agricultural use of the landscape, including recorded medieval furlong boundaries, ridge-and-furrow ploughing regimes, more recent historic field boundaries recorded on historic maps, and field drains. The modern use of the landscape has also impacted the data with features including a section of Second World War airfield and the former route of the Cambridge and Mildenhall Branch railway.
- This geophysical survey was complemented by a further survey of the cable route between the Sunnica site and the Burwell Substation. This extended to 138 hectares, of which 101 hectares was able to be surveyed, giving a 73% coverage. This survey identified probable and possible archaeological activity in at least four distinct areas covering in total approximately 8.4 hectares in the form of possible trackways, former field systems which appear to pre-date any recorded on available historical maps, and multiple linear ditch-like features. In one area, distinct rectilinear anomalies allowed a tentative dating to the late prehistoric to Romano-British periods. Again, features related to the historical agricultural use of the landscape were detected, including anomalies relating to ridge and furrow ploughing

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⁶⁷ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001815-SEF_ES_6.2_Appendix_7F_Sunnica%20East%20and%20West%20Sites%20Geophysics%20Survey%20Report.pdf
68 https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001821-SEF_ES_6.2_Appendix_7G_Cable%20Route%20Geophysical%20Survey%20Report.pdf

regimes, more recent historical field boundaries corresponding with historical maps, and field drains. The former route of the Cambridge and Mildenhall Branch railway was again detected.

- 4.3.1.4 From these results, it is clear that the geophysical surveys have successfully identified an extensive archaeological landscape buried beneath the proposed Sunnica site, and provide a detailed baseline assessment for understanding the buried archaeological resource on the site. The results of the surveys have been incorporated into the assessment of cultural heritage impact presented in the Environmental Statement and have informed the development of an extensive archaeological mitigation strategy.
- 4.3.1.5 It is widely recognised that geophysical survey alone does not offer a sufficiently detailed set of results to enable the full and confident characterisation of buried archaeological features. Indeed, many classes of archaeological feature and deposit, including human burials, are not readily identifiable in this fashion. As a consequence, in consultation with Cambridgeshire and Suffolk County Councils, the proposed development area has been subject to a programme of archaeological trial-trenching with the dual aims of testing and ground-truthing some of the potentially archaeological features identified by the geophysical survey and evaluating those areas in which geophysical survey was not possible. The partial results of this fieldwork are included as appendices 7H and 7I of the Environmental Statement.
- 4.3.1.6 While the Sunnica West sites have been fully evaluated and reported upon, ⁶⁹ at the point of submission of the DCO Application 90% of this trial-trenching was complete and only an interim report had been produced. ⁷⁰ It is stated in paragraph 7.2.7 of the Environmental Statement that 'the additional reporting will be made available prior to the examination stage' although at the time of writing such reports have yet to be submitted to the Planning Inspectorate.
- 4.3.1.7 Archaeological trial-trenching within the Sunnica West sites revealed palaeochannels and alluvial deposits in the flood plain of the River Snail containing finds ranging from the Mesolithic to the Roman period. An Early Neolithic pit was encountered, the earliest feature excavated on the scheme, and extensive Iron Age and Roman features were also excavated, including pits and track-side ditches around the periphery of a settlement identified by the geophysical survey. Further enclosure ditches of a probable Middle Iron Age and certainly Late Iron Age/Early Roman date were found which

⁶⁹ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001824-SEF_ES_6.2_Appendix_7l_Sunnica%20West%20Sites%20A%20and%20B%20Archaeological%20Trial%20Trenching%20Report.pdf

⁷⁰ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001823-SEF_ES_6.2_Appendix_7H_Interim%20Sunnica%20East%20Sites%20A%20and%20B%20Archaeological%20Trial%20Trenching%20Report.pdf

represent part of a previously evaluated settlement extending to the northeast. Among the later features were three rectangular pits filled with charcoal-rich silt and burnt flints, which may represent remains of Anglo-Saxon settlement activity.⁷¹

- To date, the archaeological trial trenching of the Sunnica East sites has 4.3.1.8 revealed that archaeological remains are present in low densities across the site, with only a few notable concentrations. For the most part, the spread of archaeological features corresponded to the results of the geophysical survey, with additional features identified by the evaluation. Across the site these deposits produced only small or moderate quantities of artefacts or ecofacts. The fen edge, a significant landscape feature in its own right, was discernible as peat deposits across the trenches in the north-western corner of the development area. The identification of possible Bronze Age barrows or other ring-ditches in the geophysical survey highlights the presence of activity (including burials) of this date within the development area, complimenting and contextualising the surviving scheduled barrows discussed above. Separate areas of Romano-British activity were identified in the geophysical survey, in which the extensive layout of a possible Roman villa or farmstead was revealed. Again, this contextualises the known Roman villa at Snailwell and provides an indication of the character and extent of the Roman exploitation of the fen edge. The periphery of this area of Roman settlement was evaluated, but the centre was left untouched and is due to be preserved in situ. Later features identified on the site included the line of the former Cambridge to Mildenhall railway, which was known from historical sources.72
- 4.3.1.9 While the solar arrays are above-ground features, the submitted assessment of the physical impacts upon the below-ground archaeological resource are based on the ground impacts of the piles on which the solar panels are mounted (which may be up to 3.5m deep), cable trench depths, construction groundworks methodology and the foundation footprint or piling of substations and other related infrastructure. An additional concern is the potential compaction of archaeological deposits by construction traffic and structures. These factors may result in the partial or total destruction of any underlying archaeological heritage assets.
- 4.3.1.10 In order to mitigate the impact of the development upon archaeological nondesignated heritage assets, the proposed layout of the Sunnica scheme has

 $[\]frac{71}{\text{https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001824-SEF_ES_6.2_Appendix_7I_Sunnica%20West%20Sites%20A%20and%20B%20Archaeological%20Trial%20Trenching%20Report.pdf}$

⁷² https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001823-SEF_ES_6.2_Appendix_7H_Interim%20Sunnica%20East%20Sites%20A%20and%20B%20Archaeological%20Trial%20Trenching%20Report.pdf

incorporated a large number of 'archaeological mitigation areas' which are located in archaeologically sensitive areas and will result in the most significant archaeological deposits being preserved *in situ*. This is by far the most preferable mitigation method and its widespread use is welcomed and encouraged.

Where preservation in situ is not necessary or achievable, a programme of 4.3.1.11 archaeological mitigation, likely to comprise strip, map and sample and/or targeted excavation, will be undertaken to reduce the impacts and effects that construction of the scheme is likely to have. In relation to buried archaeological remains, the scope of mitigation required to record and evaluate known archaeological assets during construction has been informed by the results of the geophysical surveys and trial trenching. In order to ensure that these archaeological mitigation works are designed and implemented appropriately, a Detailed Archaeological Mitigation Strategy (DAMS) will be produced following the completion of a Mitigation Design Brief to be specified by the Planning Archaeologists for Suffolk and Cambridgeshire County Councils. The full DAMS detailing proposed mitigation works will be submitted for review to Historic England, Suffolk and Cambridgeshire County Councils. Again, this approach to archaeological mitigation is welcomed and Historic England, Suffolk and Cambridgeshire County Councils should be supported in determining and enforcing the implementation of an appropriate scheme of archaeological mitigation.

4.3.2 The Isleham Aircraft Crash Site

- 4.3.2.1 Entirely absent from the heritage documents submitted by the applicant to date is any awareness or consideration of the site where a military aircraft crashed on 13 October 1949, killing all 12 of the aircrew. The site is located to the south-east of the village of Isleham, within the proposed Sunnica East Site A, and is very well known locally (Figure 18). The site was recently added to the Cambridgeshire Historic Environment Record, where it is recorded under entry number MCB31260. Several local residents still remember the crash and its aftermath and there is a plaque commemorating the aircrew who died in the accident at The Beeches Community Centre in Isleham.
- 4.3.2.2 Both the applicant and the Cambridgeshire County Council Historic Environment Team were apparently unaware of the existence or location of this crash site during the course of the archaeological evaluation of the proposed development area. Therefore, the crash site was subject to geophysical survey as a part of wider survey of the proposed development area and is reported on in Appendix 7F of the submitted environmental

statement, where it lies within 'Reporting Zone A - Area 7 West'.⁷³ In submitted Figure A32, the site of the impact is clearly visible in the results of the survey, where its epicentre is identified as an area of 'magnetic disturbance' surrounded by a 'ferrous/debris spread' (reproduced here as Figure 19).⁷⁴ Without the appropriate context, the site was not interpreted as a crash site and was instead assumed to be an area of contaminated ground resulting from agricultural activity. Fortuitously, the site was excluded from the area of the trenched archaeological evaluation and remains undisturbed.

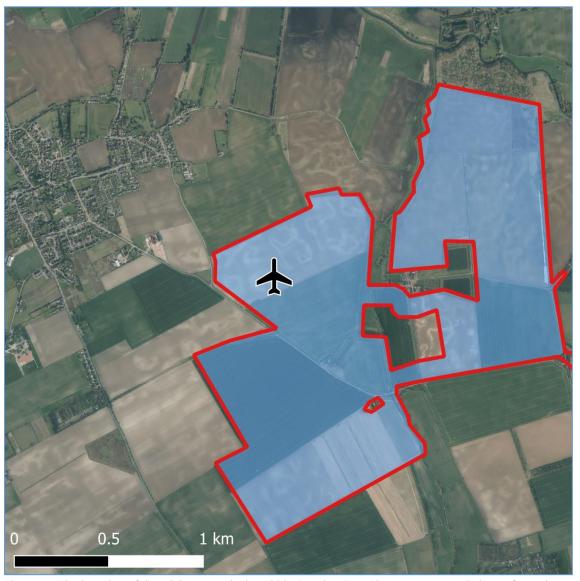


Figure 18. The location of the Isleham crash site within Sunnica East Site A at 1:20,000. (Microsoft product screen shot reprinted with permission from Microsoft Corporation)

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⁷³ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001815-SEF_ES_6.2_Appendix_7F_Sunnica%20East%20and%20West%20Sites%20Geophysics%20Survey%20Report .pdf

⁷⁴ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001816-SEF_ES_6.2_Appendix_7F_Sunnica%20East%20and%20West%20Sites%20Geophysics%20Report%20Map%2 0Book%20Zone%20A.pdf

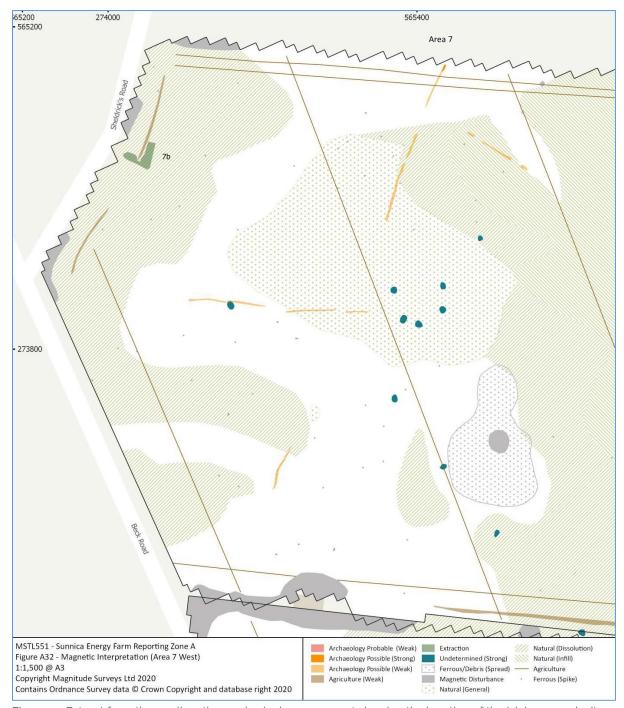


Figure 19. Extract from the applicant's geophysical survey report showing the location of the Isleham crash site visible as an area of 'magnetic disturbance' and 'ferrous/debris spread'.

The crashed aircraft was a United States Air Force Boeing B-50 bomber (registration 46-060), which was one of several on a routine training flight out of RAF Lakenheath with a payload of 16 500lb high-explosive bombs to be dropped on a range at Heligoland. The aircraft took off at 9:25am in overcast conditions and the pilot, Major George H. Ingham, initially reported that everything was proceeding according to plan. Within minutes, however, radio transmissions indicated that something had gone wrong with the aircraft and shortly afterwards several eyewitnesses saw the plane on fire as it nosedived out of the clouds and crashed straight into the ground. The impact

resulted in a massive explosion, which was followed by several smaller explosions as the bombs in the payload and other ammunition detonated and the fuel ignited.⁷⁵

- 4.3.2.4 All 12 members of the crew, 11 of them American and one British, were killed in the crash, the debris from which covered an area of some 5 acres. The fires on the site were quickly extinguished by personnel from nearby airbases and official reports indicate that the impact resulted in a crater measuring 30 feet long, 20 feet wide and 10 feet deep. These same reports also indicate that all of the debris and 12 bodies were recovered from the site. The crash was widely reported, an account appearing in *The Times* the following day, and aerial photographs showing the aftermath of the crash were published (Figure 20).
- 4.3.2.5 Under the terms of the Protection of Military Remains Act 1986, the remains of all aircraft which crashed whilst in military service are considered controlled sites. It is an offence under this act to tamper with, damage, move or unearth any items at such sites, unless the Ministry of Defence has issued a licence authorising such activity. Government guidance states that in order to minimise the potential risks to excavators and fulfil the moral obligation to the families of dead servicemen to protect their relatives' remains from disturbance, hence applications for a licence to excavate will be refused where there is a risk such operations may disturb ordnance or human remains.⁷⁶
- While it is noted that the official account of the recovery states the bodies of all 12 of the crew were recovered, given the intensity of the explosion and fire it is considered that this may not, in reality, have been possible and that there is a high likelihood that human remains still lie on the site. Aerial photographs taken during the aftermath of the crash clearly show a row of nine stretchers covered which white sheets, and other excavations undertaken on similar sites have indicated that it was not always possible to fully recover the bodies of the crew. Locally, the recent excavation of a spitfire which crashed at Holme Fen in Cambridgeshire in 1940 revealed that the body of the pilot had not been able to be fully retrieved during the initial recovery effort.⁷⁷ It should be presumed that human remains are present on the site of the crash.
- 4.3.2.7 It is concluded that the proposals for the development of this part of the site should be amended to remove solar panels from the area of the crash and its environs. Given the sensitive nature of the site, it would be appropriate for a memorial to be erected and the removal of the field from agricultural cultivation should also be considered. Having now been made aware of this

⁷⁵ Evans 2011.

⁷⁶ https://www.gov.uk/guidance/aviation-archaeology

⁷⁷ https://www.greatfen.org.uk/memorial

site, it is understood that the applicant is currently researching the crash site in greater depth and is liaising with the Cambridgeshire Historic Environment Team, the Ministry of Defence and the landowner concerning the future investigation and management of the crash site. The applicant is due to submit more material, including appropriate management options, to the examining authority at the next deadline. This material will be commented on in due course and it is to be hoped that a suitable outcome is achieved for the crash site, irrespective of whether or not the DCO Application is granted.



Figure 20. Aerial photograph showing the immediate aftermath of the crash, published in The Sphere for 22 October 1949, p. 117.

4.3.3 The Newmarket Racing Landscape

4.3.3.1 Almost entirely absent from the submitted cultural heritage assessment is an appreciation of the extent and historical significance of the racing landscape which surrounds Newmarket. Important elements of this landscape lie immediately adjacent to the proposed Sunnica Energy Farm, falling within the Environmental Statement's 1km study area, and will be affected by the change in landscape character brought about by the proposed scheme.

- The significance of Newmarket to English horseracing cannot be overstated, and the connection between Newmarket and horseracing dates from the reign of James I (r. 1603–25), who made regular visits to Newmarket to engage in hawking, hunting and riding. This tradition continued under his son, Charles I (r. 1625–49), and after a decline during the period of the Commonwealth, enjoyed fresh royal patronage under Charles II (r. 1660–85). So significant was Charles II's passion for Newmarket that in 1671 he built a palace and stables in the town, which survive in part as Palace House and the King's Yard.⁷⁸
- Although not a typical racing town, the significance of Newmarket to 4.3.3.3 horseracing is derived from it being the place in which horseracing was codified in the 18th century and its becoming the favoured location of the most powerful decision-makers in horseracing society at that time. The Jockey Club began as a London-based social club in the early 18th century, but leased a plot of land in Newmarket in 1752, on which the Jockey Club Rooms were subsequently developed, and the town became its focus of operations.⁷⁹ In addition to regulating racing, the Jockey Club is the major landowner in Newmarket, with the Jockey Club Estates extending to some 4,500 acres, which includes the two racecourses (the Rowley Mile and the July Course), 2,800 acres of training grounds, three stud farms, an agricultural farm, 75 residential properties, 20 commercial properties and the Jockey Club Rooms.80 This concentration of power has resulted in the identification of the town with the racing industry, which dominates its landscape and daily routines as much today as it has for the last 200 years.81
- Today, the town is home to some eighty racing stables, housing more than 2,500 horses in training who make use of some 1,200 hectares (3,000 acres) of exercise grounds. In addition to the racecourses, the town also houses Tattersall's (Europe's leading bloodstock auctioneers), the National Stud, three equine hospitals, 100 vets, and the National Horse Racing Museum. 82 As a consequence, Newmarket is recognised as being of considerable significance to the British horseracing industry, which plays a major economic and cultural role in the town. The scale of this significance was captured in a pair of reports prepared for the then Forest Heath District Council (now West Suffolk Council), which concluded that Newmarket is a unique training centre with nowhere else in the world having such an economic importance or having such a significant location to the sport.83

⁷⁸ Thompson 2000, 17–54.

⁷⁹ Cassidy 2002, 1-3; Oldrey 2018, 9-11.

⁸⁰ Cassidy 2002, 4.

⁸¹ Huggins 2000; Huggins 2018.

⁸² Magee 2016, 4-5.

⁸³ SQW 2014; Deloitte 2015.



Figure 21. The spatial relationship between the Limekilns Gallops and Sunnica West Site A at 1:25,000. (Microsoft product screen shot reprinted with permission from Microsoft Corporation)

A.3.3.5 The key to the success of Newmarket is the character of the surrounding landscape, which initially made the town an enticing location for royal hunting parties, and which later became a crucial part of the horse-training regime within the town. The town itself lies in a shallow depression surrounded by a gently undulating chalk grassland and woodland landscape. Outside the town, the land is occupied by racehorse studs, with pastures set among woodland belts often enclosed by post and rail fences. The training establishments are concentrated in the north and south-western edges of the town, close to the gallops on the wide-open grassland heaths which they adjoin. As well as the two racecourses – the Rowley Mile and the July Course – there are 2,800 acres of training grounds on Newmarket Heath. These are split into two 'sides' – the Racecourse Side and the Bury Side. The landscape of the Racecourse Side is flat and open and runs alongside the Cambridge Road. By contrast, the landscape of the Bury Side is more undulating and

wooded and includes Warren Hill, Side Hill, Long Hill and Bury Hill. In the words of trainer Sir Mark Prescott, 'during the last five centuries, the Heath and not the racecourse has been the single most important factor in the town's development – after all, there are over 50 towns that boast a racecourse, but none that has the Heath or anything to compare with it.'84

Of greatest significance to the cultural heritage impact of the proposed 4.3.3.6 Sunnica Energy Farm is the close proximity of the southern boundary of the Sunnica West Site A to the Limekilns Gallops, which occupy a triangle of land to the south of the A14 between the A1304 and the B1508 (Figure 21). Spread over 200 acres, the Limekilns gallops are described by the Jockey Club as being among the best set of grass gallops in the world. The grassland of the Limekilns is centuries old and considered perfect for turf training. For at least the last century, peat moss has been actively worked into the surface of the gallops, so that the subsoil now contains a considerable quantity of moss, too. As a consequence, the Limekilns are considered to be the best gallops on the Heath for fast work and perfectly suited for use in dry weather (Figures 22 and 23).85 The gallops are withdrawn from use if the ground gets soft in order to avoid damage. The Limekilns include the Long Straight and the Golden Mile, as well as the Round, a curve around which horses can be worked in reverse, that is, left handed, in preparation for the Epsom Derby.86

It seems that the Limekilns have been actively used as gallops since at least 4.3.3.7 the early 19th century and probably longer. From its beginning in 1780, Newmarket trainers dominated the winning of the Derby, the most important race in the English racing calendar. When horses from Stockbridge and Malton won the Derby in 1833 and 1835, concerns began to be expressed about the suitability of Newmarket as a training centre for high-class horses. The Jockey Club decided that there was a need for better training gallops at Newmarket, particularly when the ground becomes hard in dry summers because of the fast-draining ground. As a consequence, by 1840 the Jockey Club had begun leasing the area of the Limekilns, together with the adjacent Railway Field to the north and Water Hall to the east from the Tharp family of Chippenham Park. This former ownership is still legible in the landscape, as the main entrance to the Chippenham Park avenue is located at the western tip of the Limekilns. The name Limekilns derives from the original use of the area for pits in which to burn chalk to produce lime, and the Jockey Club Minutes of 18th February 1840 record that the then foreman for the eastern side of the gallops, Mr Pettit, was allowed £55 to pay for the filling of these pits.87 The leased land, when eventually properly developed, played a large

⁸⁴ Quoted in Oldrey *et al.* 2016, viii.

⁸⁶ Oldrey et al. 2016, 244.

⁸⁷ Oldrey *et al.* 2016, 244.

part in restoring the town's reputation as the home of Derby winners, for, having won no Derbys between 1844 and 1863, the town has since provided no fewer than 70 winners of the subsequent 159 races.

- 4.3.3.8 The history of the Limekilns also includes an episode involving one of racing's more controversial figures, George Baird (1861–93). Baird was a wealthy British racehorse owner, breeder and the most successful amateur jockey of his day, who rode under the assumed name of Mr Abington. In 1882, he was 'warned off' (i.e. banned) by the Jockey Club for aggressive riding and during the two years of his exile tried to buy the Limekilns Gallops, which were being sold out of private ownership. Reportedly, Baird tried to do so not because he wanted them, but because he thought it would annoy the Jockey Club, although in the end the Jockey Club secured the leasehold for the land.⁸⁸
- The Jockey Club continued to use the gallops, and it was not until 1932 that they bought the Limekilns, Railway Field and Water Hall gallops from Colonel Gerald Tharp, the owner of the Chippenham estate, for the sum of £75,000.89 An additional £6,500 was included for the 2 ½ years left on the lease and the transaction recorded in the Jockey Club Minutes for 15th April 1932.
- The deliberate creation and management of the gallops surrounding 4.3.3.10 Newmarket, the longevity of their use and the fact that generations of horses have continued to be trained in much the same fashion and same locations for centuries gives the landscape considerable significance in cultural heritage terms. Views of horses training on the Limekilns have been captured in multiple media throughout their use, with examples including Allen Culpepper Sealy's (1850–1927) late 19th-century oil painting Railway Field (Figure 22) and Lionel Edwards (1878–1966) watercolours Newmarket - A Trial on the Lime Kilns (Figure 23) and A Trial – The Lime Kilns (Figure 24) and his oil painting Newmarket, the Lime Kilns (Figure 25). Such images can be compared with modern photographs depicting similar scenes in the present day and illustrating the longevity of use of the Limekilns (Figures 26 and 27). In capturing this sense of history, one recent study of the historical development of the Newmarket Heath describes the racing landscape surrounding Newmarket as 'near a sporting 'Valley of the Kings' as can be found, and one that is still in full working order. It is a truly unique place. '90
- 4.3.3.11 Indeed, so valuable and important are the gallops surrounding Newmarket considered to be, and the Limekilns foremost amongst them, that there is a long history of infrastructure projects being modified in order to preserve them and their setting. When the railway was constructed to the north of the town in 1851, a half-mile long tunnel was constructed in order to prevent the

⁸⁸ Thompson 2000, 194-5.

⁸⁹ Oldrey et al. 2016, 315.

⁹⁰ Oldrey *et al.* 2016, 11.

new track from damaging Newmarket heath. Likewise, the railway was routed to the north of the Limekilns gallops in order to ensure their preservation, too. Similarly, during the world wars not a single acre of the principal gallops was ploughed for the war effort, and when the A11 Newmarket bypass was planned around the town in the mid-1970s, its route was deliberately lengthened in order to avoid crossing the heathland.⁹¹

- 4.3.3.12 Although not formally recognised through heritage designations, it is considered that these gallops do constitute significant features of the historic environment and that for the purposes of assessing the cultural heritage impact of the proposed Sunnica scheme they should be considered to be non-designated heritage assets in their own right. Given the regional and national significance of the Limekilns gallops, discussed above, it is concluded to be of medium heritage value, akin to that of the neighbouring Chippenham Hall and the surrounding Grade II listed buildings.
- 4.3.3.13 Recognising that the Limekilns gallops constitute a non-designated heritage asset, it remains to offer an assessment of the likely impact of the proposed scheme upon its significance. This is an issue largely omitted from the Applicant's submitted assessment. While the Cultural Heritage chapter of the Environmental Statement identifies that 'The Limekilns form an important part of this equestrian history, being in use as gallops since at least the 19th century' (ES para. 7.7.80), the Limekilns are not specifically identified as a non-designated heritage asset and no further assessment of the potential impact upon the cultural heritage of the site is presented.
- 4.3.3.14 The proposed Sunnica development will not result in any direct physical impact upon the Limekilns, but the construction of the Sunnica West Site A will have a detrimental impact upon the setting of the gallops by transforming what is currently an open agricultural landscape to its north into the semi-industrialised landscape of the solar farm. However, although not assessed for cultural heritage impact, the views towards the Sunnica site from the Limekilns are considered in the chapter of the Environmental Statement concerning Landscape and Visual Amenity (ES Chapter 10).92 This chapter identifies that 'most of the Sunnica West Site A, Wo5 to W12, is visible from the Limekilns, part of the Jockey Club training grounds. This part of the land within the Order limits is seen in the context of A14 and the Newmarket railway which cross the valley floor and the mature vegetation along The Avenue.' (ES para. 10.6.342). An indicative view across the Limekilns towards the Sunnica site is included in the ES as Figures 10-62A and 10-62B.93

⁹¹ Oldrey *et al.* 2016, viii.

⁹² https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001785-SEF_ES_6.1_Chapter_10_Landscape%20and%20Visual%20Amenity.pdf

 $^{^{93}}$ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-001980-SEF_ES_6.3_Figures%2010-58C%20to%2010-68B%20Type%201%20Annotated%20Viewpoint%20Photographs.pdf



Figure 22. Allen Culpepper Sealy's 'Railway Field'.



Figure 23. Lionel Edward's 'Newmarket – A Trial on the Lime Kilns'.



Figure 24. Lionel Edward's 'A Trial – The Lime Kilns'.



Figure 25. Lionel Edward's 'Newmarket, the Lime Kilns'.

- The Applicant's assessment of the visual impact on the Limekiln gallops 4.3.3.15 which will be caused by the development of the Sunnica West Site A is considered to be 'minor adverse', which the Applicant justifies on the basis there would be no physical change to the site and that the existing tranquillity, aesthetic and perceptual aspects are already impacted upon by the A14, railway lines and A1304 (ES para. 10.8.255). The Applicant's own assessment of the efficacy of their proposed mitigation planting scheme concludes that the elevated position of the Limekilns will render mitigation ineffective, and that the development will remain visible from the Limekilns throughout the duration of the scheme (ES para. 10.8.395 and 10.8.400). This conclusion is challenged in the assessment of landscape and visual issues which has been prepared for Say No to Sunnica by Michelle Bolger Expert Landscape Consultancy, which should be read in conjunction with this report. This re-assessment identifies the Limekilns and the landscape to its north as a 'valued landscape' and concludes that the overall effect upon the character of this valued landscape would be major adverse, which is significant, and this effect would not reduce in the long term (Jeffcock 2022, para. 1.22).
- Finally, regarding the potential heritage impact on the Limekilns, it is 4.3.3.16 considered that these views northwards and the open agricultural landscape within which the Limekilns gallops are currently experienced are an important part of the setting of this non-designated heritage asset. The Limekilns gallops are an important element of the historic racing landscape which surrounds Newmarket, and the historical relationship between the gallops and the adjacent estate of Chippenham Park to the north adds to this significance. The construction of the Sunnica West Site A will have a detrimental impact upon the setting of the gallops by transforming what is currently an open agricultural landscape to its north into the semiindustrialised landscape of the solar farm, and this will in turn harm the significance of the non-designated heritage asset. Using the Applicant's assessment matrix, I conclude that this will result in an adverse effect of medium magnitude, which on an asset of medium heritage value will result in a moderate adverse impact. This is a significant impact, and is one which by the Applicant's own admission cannot be mitigated by the proposed landscape management strategy.



Figure 26. The view looking north-east across the Limekilns Gallops, with horses exercising in the morning mist. (Photograph: Jason Bax)



Figure 27. The view looking north across the Limekilns Gallops, showing horses in full gallop. (Photograph: Dominic James)

5. Conclusions

- 5.0.1 This Heritage Assessment has been prepared on behalf of Say No To Sunnica, an action group representing communities in West Suffolk and East Cambridgeshire. It provides a critical review of the of the archaeological and cultural heritage elements of the active DCO Application for the construction, operation and decommissioning of the Sunnica Energy Farm and associated infrastructure on an area of 981 hectares spread across land within West Suffolk and East Cambridgeshire districts and a new connection to the existing National Grid substation at Burwell (DCO Application Ref. EN010106).
- The Applicant's assessment of the potential impact which the construction, operation and decommissioning of the proposed scheme will have upon the cultural heritage of the DCO Application area and its environs is set out in Chapter 7 of the submitted Environmental Statement and is supported by a number of technical appendices. It is clear from the assessments of heritage impact contained within the Environmental Statement that the proposed construction and operation of the Sunnica Energy Farm will have a negative impact upon the significance of a number of Designated Heritage Assets, either directly or via changes to their settings.

5.1 Scheduled Monuments

5.1.1

The Sunnica Energy Farm will impact upon a number of Scheduled Monuments which lie within and immediately adjacent to the proposed development area and their significance will be adversely affected by the dramatic change in landscape character which will occur within their settings. Specifically, one Scheduled Monument, comprising a group of four Bronze Age barrows, is located entirely within the development boundary of the Sunnica West Site A (NHLE Entry Number 1015246). These barrows form part of the wider Chippenham Barrow cemetery, which also includes associated scheduled Bronze Age barrows located to its south and east. Two additional barrows belonging to the cemetery survive immediately to the south-east of the Sunnica West Site A, within the triangle of land between the A11 and the A14 (NHLE Entry Number 1015244 and 1015245). A third scheduled bowl barrow belonging to the Chippenham cemetery is located to the south of the A14 (NHLE Entry Number 1015243) and a fourth scheduled bowl barrow is located some 2km to the north-east at Howe Hill (NHLE Entry Number 1015011). A scheduled bowl barrow is located immediately to the south of the Sunnica East Site B development boundary (NHLE Entry Number 1018097) and a final barrow is located c.1km to the south of the Sunnica East Site B (NHLE Entry Number 1020395). Other affected Scheduled Monuments include a Roman villa located immediately to the west of the Sunnica West Site B development boundary (NHLE Entry Number 1006868).

- As Scheduled Monuments, individually each of these barrows is of the 5.1.2 highest heritage value, and the fact that so many individual elements of the barrow cemetery survive gives the group a high collective value, too. Their setting makes a contribution towards their significance. Although there will be no direct physical impact on the scheduled barrows which lie within the Sunnica West Site A area, as they are included within an 'archaeological mitigation area', the development of the scheme will result in significant changes to the setting of these barrows (NHLE Entry Number 1015246). The Applicant considers that the identified changes will cause a low magnitude of change, which on assets of high value results in a 'moderate adverse' significance of effect. The Applicant acknowledges that this is a significant detrimental effect, even under this rather lenient interpretation of the impact. I disagree with this assessment, and consider that the Applicant understates the impact which the development of the scheme will have upon the scheduled barrows which lie within the proposed development area. I conclude that the construction of the solar farm will result in an adverse change of medium magnitude, which on assets of high heritage value equates to a 'major adverse' significance of effect. In planning terms, the identified harm to the scheduled barrows represents 'less than substantial harm' caused by changes to the setting of the heritage asset. Given the national significance of the monuments, this harm would be at the upper end of the 'less than substantial' scale.
- Regarding the three additional scheduled barrows which lie immediately outside the proposed Sunnica West Site A development area (NHLE Entry Numbers 1015243, 1015244 and 1015245), the Applicant concludes that the magnitude of impact upon these assets to be very low, resulting in an overall significance of effect that is therefore considered to be minor adverse. Again, I disagree with this assessment and conclude that the identified changes to the setting of the assets will cause a low magnitude of change, which on assets of high value results in a 'moderate adverse' significance of effect. In planning terms, the identified harm to these scheduled barrows represents 'less than substantial harm' caused by changes to the setting of the heritage asset and lies in the middle of the 'less than substantial' scale.
- Regarding the impact on the setting of the Howe Hill bowl barrow (NHLE 1015011), the Applicant concludes the magnitude of this impact to be low, resulting in a minor adverse significance of effect. This conclusion is inconsistent with the assessment presented by the applicant for the barrows within the development area, in which a 'low' impact on an asset of high value equated to a 'moderate adverse' significance of effect. I conclude that this 'moderate adverse' effect would be correct, equating in planning terms to 'less than substantial harm' in the middle of the scale.

- Site B development boundary (NHLE Entry Number 1018097), the Applicant concludes that, given the extant screening to the north and east, the magnitude of impact will be low, resulting in a significance of effect of moderate adverse. This is a significant effect, and I agree with this assessment. In planning terms, this equates to 'less than substantial harm' in the middle of the scale. Indeed, it is notable that the level of impact identified by the Applicant is higher in this instance than that which they offer for the unscreened barrows which lie immediately outside the proposed Sunnica West Site A development area and the more distant Howe Hill barrow. As discussed above, I consider that these instances understate the impact which the development proposals will have upon the Scheduled Monuments.
- 5.1.6 The final scheduled barrow is located *c*.1km to the south of the Sunnica East Site B (NHLE Entry Number 1020395), and its distance from the above-ground elements of the scheme and the intervening landscape features mean that the Applicant's identification of a very low magnitude of effect on an asset of high value, resulting in a minor adverse significance of effect, is appropriate in this instance.
- A further Scheduled Monument, comprising the site of a Roman villa now preserved below farmland, lies immediately to the west of the Sunnica West Site B development area, with which it shares a contiguous boundary (NHLE Entry Number 1006868). The proposed development will not have a direct effect upon the villa itself, but it will cause a fundamental change in the landscape character of its setting, transforming it from the current agricultural landscape to the semi-industrialised landscape of the solar farm. The Applicant concludes that the magnitude of this impact is very low, resulting in a minor adverse significance of effect. Again, I consider this assessment to be understated and would instead conclude that the proposals would result in a 'low' impact on an asset of high value, resulting in a 'moderate adverse' significance of effect. In planning terms, this equates to 'less than substantial harm' in the middle of the scale.

5.2 Registered Parks and Gardens

In addition to the adverse impacts on the Scheduled Monuments set out above, the proposed development of the Sunnica Energy Farm will also have a detrimental impact upon the Chippenham Hall Registered Park and Garden (NHLE Entry Number 1000615). The Chippenham Hall RPG covers an area of 183 hectares and the majority of the site lies immediately to the north of the Sunnica West Site A development area, which surrounds its eastern, southern and western sides. A lengthy avenue, some 3km long, extends southwards from the main body of the Chippenham Hall RPG and is traversed by the Sunnica West Site A development area. The Chippenham Hall RPG is listed at Grade II, so is considered to be a designated heritage asset of 'medium' value.

- The Applicant is not seeking to develop the area of the avenue itself and so 5.2.2 the proposed development would not have a direct physical impact upon this designated heritage asset. However, as is acknowledged by the Applicant, the development of the proposed scheme will have a significant and wide-scale impact upon the landscape character of the surrounding landscape which forms the setting of the Chippenham Hall RPG and its avenue. The applicant concludes that, even after the implementation of mitigation, the construction of the Sunnica West Site A will have a medium magnitude of impact, resulting in a moderate adverse effect on this asset of medium value. This is a significant effect, but I consider that the impact is understated. Following the Applicant's assessment matrix, I conclude that the construction of the solar farm in the landscape abutting the Chippenham Park RPG and its avenue will result in an adverse change of a high magnitude, which on assets of medium heritage value equates to a 'major adverse' significance of effect. In planning terms, the identified harm to the Chippenham Park represents 'less than substantial harm' caused by changes to the setting of the heritage asset. Given the significance of the monuments, this harm would be at the upper end of the 'less than substantial' scale.
- Although the primary adverse heritage impact on the Chippenham Hall RPG will be caused by the development of the Sunnica West Area A site, the development of the Sunnica West Area B site will also have an impact on the Chippenham Hall RPG, which the Applicant concludes will be of very low magnitude, resulting in a negligible adverse effect on this asset of medium value. I conclude that this assessment also understates the impact which the development would cause, and given the distances and intervening landscape features, instead consider that the construction of the Sunnica West Site B area will result in a low magnitude of impact, resulting in a minor adverse effect on this asset of medium value.

5.3 Listed Buildings

- The proposed development of the Sunnica Energy Farm will also have a detrimental impact upon a number of surrounding listed buildings. The Grade II listed Grange Farmhouse (NHLE 1037602) and Grade II listed The Manor (NHLE 1037604) are both situated c.500m to the north-east of the Sunnica East Site B development area. The Applicant concludes that the magnitude of impact on these assets will be very low, resulting in a negligible effect on the significance of these assets of medium value. I agree with this assessment. In planning terms, this equates to 'less than substantial harm' at the lowest end of the spectrum.
- 5.3.2 Located about 400m from the south-western corner of the Sunnica East Site B development area, are the Grade II listed Badlingham Manor (NHLE 1126373) and the Grade II listed The Cottage (NHLE 1126374). The Applicant

identifies that in the case of the former the scheme will cause a low impact on an asset of medium value resulting in a minor adverse effect, and in the case of the latter the scheme will cause a very low impact on an asset of medium value resulting in a negligible effect. Again, I agree with both of these assessments, which in planning terms equate to 'less than substantial harm' at the lower end of the spectrum.

- 5.3.3 Located approximately 100m south-east of the Sunnica West Site A boundary, from which it is separated by the A11, stands the Grade II listed Waterhall Farmhouse (NHLE 1126383). The Applicant states that the impact of the development on the building's setting is not expected to be any more than very low magnitude of impact, resulting in a negligible effect on this asset of medium value. I disagree strongly with this assessment and conclude that the construction of the Sunnica West Site A will result in a medium magnitude of impact, resulting in a moderate adverse effect on this asset of medium value. Under the Applicant's scoring matrix, this constitutes a significant effect, and in planning terms equates to 'less than substantial harm' in the middle of the scale.
- A further two isolated Grade II listed buildings stand c.800m north of the Sunnica West Site A area and c.1km east of the Sunnica Site B area. These are Park Farmhouse (NHLE 1162059) and Phantom Cottage (NHLE 1126385). The Applicant concludes that the development of Sunnica West A in isolation is unlikely to have an adverse effect on these buildings, but that in combination with Sunnica West Site B there is likely to be a low magnitude of impact, resulting in a minor adverse effect on the significance of these assets of medium value. I agree with this assessment, which in planning terms equates to 'less than substantial harm' towards the lower end of the scale.
- In addition to the impact on the Chippenham Park RPG, there are also a 5.3.5 number of listed buildings which stand within the park. While it is accepted that the immediate setting of the Grade II listed Hall (NHLE 1331778) and dovecote (NHLE 1309915) and the Grade II* listed stable block (NHLE 1126375) comprises the park itself, and its northern extent in particular, the Applicant concludes that the setting of the Grade II* listed southern entrance lodges and triumphal arch (NHLE 1126376) will be affected by the proposed development. The Applicant identifies that the scheme is likely to have a very low magnitude of impact, resulting in a minor adverse effect on this asset of high value. Again, I disagree with this assessment and conclude that the development of the scheme will result in an adverse change of a medium magnitude, which on assets of high heritage value equates to a 'major adverse' significance of effect. In planning terms, the identified harm to the Grade II* listed lodges and triumphal arch represents 'less than substantial harm' caused by changes to the setting of the heritage asset. Given the

significance of the monument, this harm would be at the upper end of the scale.

5.4 Conservation Areas

- As might be expected, given the large area which the proposed Sunnica Energy Farm covers, the scheme lies in the vicinity of a number of Conservation Areas. However, given that the proposed scheme occupies the agricultural land between settlements, these Conservation Areas are located around the periphery of the proposed development area. There scheme will not, therefore, have a direct physical impact upon any of these Conservation Areas, but the dramatic transformation of the existing agricultural landscape into a semi-industrialised landscape does have the potential to have a detrimental impact upon the setting of these Conservation Areas.
- I agree with the Applicant that the Mildenhall, Barton Mills and Newmarket Conservation Areas will not be affected by the scheme. The Isleham Conservation Area is situated c.750m west of the Sunnica East Site A area, and the Applicant identifies that impact of the scheme will be low, resulting in a minor adverse effect on the significance of this asset of medium value. I agree with this assessment, and in planning terms this equates to 'less than substantial harm' at the lower end of the scale.
- The Freckenham Conservation Area is situated *c.*700m south of the Sunnica East Site A area and *c.*1.5km to the west of the Sunnica East Site B area. The Applicant considers that the magnitude of impact caused by Sunnica East Site A is expected to be very low, resulting in a negligible effect on the significance of this asset of medium value. The setting of the Conservation Area will also be affected by the development of Sunnica East Site B, and the Applicant concludes that this magnitude of impact is expected to be low resulting in a minor adverse effect on the significance of this asset of medium value. I agree with this assessment, which in planning terms equates to 'less than substantial harm' at the lower end of the scale.
- 5.4.4 The Snailwell Conservation Area is situated *c.*250m west of the Sunnica West Site A area and *c.*400m south of the Sunnica West Site B area. The Applicant concludes that the development of Sunnica West Site A and B will have a low impact resulting in a minor adverse effect. I consider that this assessment understates the likely impact of the scheme and conclude that the scheme will have a medium impact on the significance of the Conservation Area, which as an asset of medium value results in a moderate adverse effect. This constitutes a significant effect and in equates to 'less than substantial harm' in the middle of the scale.

5.5 Non-Designated Heritage Assets

5.5.1

In addition to the designated heritage assets considered above, there is also a significant number of non-designated heritage assets which have the potential to be affected by the proposed Sunnica Energy Farm. In the case of the proposed Sunnica Energy Farm, the vast majority of the non-designated heritage assets affected are derived from the rich and extensive array of archaeological features and deposits which lie within the proposed development area. Some of these were known prior to the commencement of the scheme, while others have come to light as a result of new fieldwork conducted by the Applicant, and they all require an extensive programme of mitigation. In order to mitigate the impact of the development upon archaeological non-designated heritage assets, the proposed layout of the Sunnica scheme has incorporated a large number of 'archaeological mitigation areas' which are located in archaeologically sensitive areas and will result in the most significant archaeological deposits being preserved in situ. This is by far the most preferable mitigation method and its widespread use is welcomed and encouraged. Where preservation in situ is not necessary or achievable, a programme of archaeological mitigation, likely to comprise strip, map and sample and/or targeted excavation, will be undertaken to reduce the impacts and effects that construction of the scheme is likely to have. In order to ensure that these archaeological mitigation works are designed and implemented appropriately, a Detailed Archaeological Mitigation Strategy (DAMS) will be produced following the completion of a Mitigation Design Brief to be specified by the Planning Archaeologists for Suffolk and Cambridgeshire County Councils. Again, this approach to archaeological mitigation is welcomed and Historic England, Suffolk and Cambridgeshire County Councils should be supported in determining and enforcing the implementation of an appropriate scheme of archaeological mitigation.

It is apparent that both the applicant and the Cambridgeshire County Council Historic Environment Team were until recently unaware of the site where a military aircraft crashed on 13 October 1949, killing all 12 of the aircrew. The site is located to the south-east of the village of Isleham, within the proposed Sunnica East Site A, and is very well known locally. It has recently been added to the Cambridgeshire Historic Environment Record. The crash site was subject to geophysical survey as part of a wider survey of the proposed development, during which its location was identified but not recognised for what it is, and the site was not subsequently trenched. While it is noted that the official account of the recovery states that the bodies of all 12 of the crew were recovered, given the intensity of the explosion and fire it is considered that this may not, in reality, have been possible and that there is a high likelihood that human remains still lie on the site. The site falls under the

aegis of the Protection of Military Remains Act 1986 and it is understood that the applicant is currently researching the crash site in greater depth and is liaising with the Cambridgeshire Historic Environment Team, the Ministry of Defence and the landowner concerning the future investigation and management of the crash site. The development proposals for this part of the site should be amended to remove solar panels from the area of the crash and its environs. Given the sensitive nature of the site, it would be appropriate for a memorial to be erected and the removal of the field from agricultural cultivation should also be considered. The applicant is due to submit more material, including appropriate management options, to the examining authority at the next deadline. This material will be commented on in due course and it is to be hoped that a suitable outcome is achieved for the crash site, irrespective of whether or not the DCO Application is granted.

Finally, almost entirely absent from the submitted cultural heritage 5.5.3 assessment is an appreciation of the extent and historical significance of the racing landscape which surrounds Newmarket. Important elements of this landscape lie immediately adjacent to the proposed Sunnica Energy Farm, falling within the Environmental Statement's 1km study area, and will be affected by the change in landscape character brought about by the proposed scheme. Of greatest significance to the cultural heritage impact of the proposed Sunnica Energy Farm is the close proximity of the southern boundary of the Sunnica West Site A to the Limekilns Gallops. The Limekilns have been actively used as gallops since at least the early 19th century and probably longer. The deliberate creation and management of the gallops surrounding Newmarket, the longevity of their use and the fact that generations of horses have continued to be trained in much the same fashion and same locations for centuries gives the landscape considerable significance in cultural heritage terms. It is considered that these gallops do constitute significant features of the historic environment and that for the purposes of assessing the cultural heritage impact of the proposed Sunnica scheme they should be considered to be non-designated heritage assets in their own right. Given the regional and national significance of the Limekiln gallops, discussed above, it is concluded that this should be considered to be of medium heritage value, akin to that of the neighbouring Chippenham Hall and the surrounding Grade II listed buildings. The construction of the Sunnica West Site A will have a detrimental impact upon the setting of the gallops by transforming what is currently an open agricultural landscape to its north into the semi-industrialised landscape of the solar farm, and this will in turn harm the significance of the non-designated heritage asset. Using the Applicant's assessment matrix, I conclude that this will result in an adverse effect of medium magnitude, which on an asset of medium heritage value will result in a moderate adverse impact. This is a significant impact, and is one which by

the Applicant's own admission cannot be mitigated by the proposed landscape management strategy.

5.6 Heritage Impact

- In conclusion, it is clear that the construction of the Sunnica Energy Farm will have a negative impact upon the significance of a number of designated and non-designated heritage assets, either directly or via changes to their settings. The Applicant's own assessment identifies that several of these impacts are of sufficient magnitude to be considered 'significant' and, as set out above, in many cases it is apparent that the Applicant's assessments understate the full extent of the impact. It is also apparent from the submitted documents that the Applicant does not consider their proposed landscape mitigation scheme will reduce the scale of this impact further. For ease of reference, the table below summarises the impacts upon designated heritage assets identified by the Applicant, together with my own reassessments of these impacts presented in this report.
- 5.6.2 The identified cultural heritage impacts affect numerous Scheduled Monuments, a Registered Park and Garden, several listed buildings, surrounding Conservation Areas and the historic Limekilns Gallops. The scheme will also have a considerable impact upon the extensive archaeological deposits which survive within the proposed development area. The identified heritage impacts range from negligible to major, with particularly significant adverse impacts identified on the scheduled Chippenham Barrow Cemetery, the Grade II registered Chippenham Hall Park, and the Grade II* listed southern lodges and triumphal arches at the southern entrance to the park. In every case, these impacts constitute 'less than substantial harm' to the significance of each heritage asset, with the instances singled out here sitting at the top of the 'less than substantial' scale. As was set out in Section 2 of this report, under the existing suite of planning legislation and policy it is required that this 'less than substantial harm' be weighed against the wider benefits of the DCO application. In doing so, 'great weight' should be given to the conservation of the heritage assets concerned, and the more important the assets, the greater that weight should be. Both the Applicant's own assessment presented in the Environmental Statement and my assessment presented here conclude that the development of the Sunnica Energy Farm will result in multiple instances of adverse heritage impact, which cannot be mitigated. As such, considerable benefits will need to be demonstrated in order to justify the approval of a DCO Application which will result in such high levels of harm to so many designated and non-designated heritage assets.

Heritage Asset	NHLE Entry Number	Heritage Value	Applicant's Assessment		My Assessment	
			Magnitude of Impact	Significance of Effect	Magnitude of Impact	Significance of Effect
Scheduled Monuments						
Roman Villa	1006868	High (SM)	Very Low	Minor	Low	Moderate
Barrow	1015243	High (SM)	Very Low	Minor	Low	Moderate
Barrow	1015244	High (SM)	Very Low	Minor	Low	Moderate
Barrow	1015245	High (SM)	Very Low	Minor	Low	Moderate
Barrow Group	1015246	High (SM)	Low	Moderate	Medium	Major
Barrow	1015011	High (SM)	Low	Minor	Low	Moderate
Barrow	1018097	High (SM)	Low	Moderate	Low	Moderate
Barrow	1020395	High (SM)	Very Low	Minor	Very Low	Minor
Registered Parks and Gardens						
Chippenham Hall	1000615	Medium (G2)	Medium	Moderate	High	Major
Listed Buildings						
Grange Farmhouse	1037602	Medium (G2)	Very Low	Negligible	Very Low	Negligible
The Manor	1037604	Medium (G2)	Very Low	Negligible	Very Low	Negligible
Badlingham Manor	1126373	Medium (G2)	Low	Minor	Low	Minor
The Cottage	1126374	Medium (G2)	Very Low	Negligible	Very Low	Negligible
Waterhall Farm	1126383	Medium (G2)	Very Low	Negligible	Medium	Moderate
Park Farmhouse	1162059	Medium (G2)	Low	Minor	Low	Minor
Phantom Cottage	1126385	Medium (G2)	Low	Minor	Low	Minor
Entrance Lodges & Triumphal Arch	1126376	High (G2*)	Very Low	Minor	Medium	Major
Conservation Area	as					
Isleham CA	N/A	Medium	Low	Minor	Low	Minor
Freckenham CA	N/A	Medium	Low	Minor	Low	Minor
Snailwell CA	N/A	Medium	Low	Minor	Medium	Moderate

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Appendix 1: Sunnica Order Limits and Designations Map

Map produced by Michelle Bolger Expert Landscape Consultancy, October 2022.

