



SUNNICA ENERGY FARM DCO EXAMINATION

WRITTEN REPRESENTATION

ANNEX A - LANDSCAPE AND VISUAL IMPACT

SAY NO TO SUNNICA ACTION GROUP LTD

11 NOVEMBER 2022



MICHELLE BOLGER
Expert Landscape Consultancy

Landscape and Visual Issues

Relating to the
Sunnica Energy Farm

Prepared for
Say No to Sunnica

LPA's
**West Suffolk Council &
East Cambridgeshire District Council**

PINS Reference
EN010106

November 2022



MICHELLE BOLGER
Expert Landscape Consultancy

Company Registration No. 09809868
Registered Office: 35 Pickford Road Bexleyheath DA7 4AG

Prepared by:	John Jeffcock
Position	Associate Landscape Architect
Qualifications:	CMLI, Reg. NZILA, MLA, BA (Hons) LA
Reviewed by:	Michelle Bolger
Position:	Director
Qualifications:	FLI Dip. LA, BA (Hons) LA, PGCE, BA (Hons) Eng
File name:	1186 R01 Sunnica PVD Landscape Review.docx
Date issued:	8 th November 2022
Status:	Final
Revision:	-

CONTENTS

I	Executive Summary	I
2	Introduction	12
3	Landscape Planning Policy Context	14
4	Proposed Development	19
5	Proposed Outline Landscape and Ecology Management Plan	23
6	Published Landscape Character Assessments	28
7	Local Landscape Context	37
8	Applicant's Site Selection Process	47
9	Landscape Effects	50
10	Visual Effects	63
11	Submitted Landscape and Visual Impact Assessment	68
12	Compliance with Landscape Related Planning Policy	75

APPENDICES

Appendix 1: Figures

Appendix 2: Methodology

Appendix 3: Applicant's Landscape Masterplan Figures from Annex A to the OLEMP

Appendix 4: Comparison of Conclusions about Landscape Effects in MBELC Review and LVIA



1 Executive Summary

Introduction

- 1.1 Say No to Sunnica have commissioned Michelle Bolger Expert Landscape Consultancy (MBELC) to review the landscape and visual impacts of an application by Sunnica Ltd for an Order Granting Development Consent (DCO) for the Sunnica Energy Farm (the development). The development is described in detail in chapter 4 of this review. In summary it comprises the construction, operation, and decommissioning of a series of solar photovoltaic (PV) developments, and a series of Battery Energy Storage Systems (BESS) to control the release of energy to the national electricity transmission system (NETS). Associated infrastructure may include a new connection and extension to the National Grid substation at Burwell. Although Burwell has been included on the figures which accompany this review, it has not included in the assessment within this review, which is focused on the proposed development outlined below.

Proposed Development (see Figures 1 & 2)

- 1.2 The order limits cover 981 hectares (**Figure 1**). Within the order limits are four key development sites, which will include a mixture of solar PV development and BESS development. The maximum total developable area for the solar PV development is 621 ha. This development would be split across the following four sites, identified on **Figure 2**, as:
- Sunnica East Site A - 115 ha
 - Sunnica East Site B - 227 ha
 - Sunnica West Site A - 256 ha
 - Sunnica West Site B - 23 ha
- 1.3 The maximum total developable area for the BESS development is 31.1 ha. This development would be split across three compounds, identified on **Figure 2**, at:
- Sunnica East Site A - 6.6 ha
 - Sunnica East Site B - 16.2 ha
 - Sunnica West Site A - 8.3 ha

Proposed Outline Landscape and Ecology Management Plan (see Appendix 3)

- 1.4 An Outline Landscape and Ecology Management Plan (OLEMP) has been submitted as part of the ES (Volume 6.2 Appendix 10I, APP-108). The OLEMP includes information relating to impacts avoidance and specific information regarding proposed design principles and green infrastructure which have been considered in the applicant's landscape and visual impact assessment (ES Chapter 10, APP-042) and have been considered in this review.
- 1.5 Section 1.6 of the OLEMP lists the key 'impact avoidance measures' that have been incorporated into the proposals. Aspects most relevant to the assessment of landscape and visual effects can be summarised as follows:
- Creating undeveloped buffers throughout the development of at least 5m from existing boundary features and which would consist of new planting.
 - Ensuring designated sites within the order limits are retained.
 - Existing woodland, treelines and the majority of hedgerows are retained and will be protected during construction of the development.
 - Retaining and managing existing grassland habitats.
 - Affected hedgerow sections will be re-instated in full and native species of local provenance will be used to improve their biodiversity value.
 - Trees within the development footprint that cannot be retained will be replaced with native species within the order limits.
 - Materials used, where reasonably practicable, to minimise reflection and glare and to assist with breaking up the massing and scale of the panels, solar-stations and associated structures.
 - Selection of finishes for the infrastructure to be informed by the tonal colours of the landscape to minimise the visual impact of the scheme.
 - Visual clutter would be minimised, where possible, through careful siting and design.
 - Trees are proposed as visual screening to mitigate the visual impacts of the scheme.

Published Landscape Character Assessments (see Figures 6, 7 & 8)

- 1.6 The landscape covered by the order limits is extensive and complex. The majority of the landscape within the order limits is within a chalkland landscape type, described at the county level as the Rolling Estate Chalklands LCT. However, the order limits also include a

sandland landscape type, and a fenland landscape type; a large part of Sunnica East Site B is within the sandland landscape type. These landscape types are mapped and described at a national, regional, and county level and shown on **Figures 6, 7 and 8**.

- 1.7 All three landscape types are predominately arable and have few urban influences. They are characterised by a relatively flat topography and limited vegetation which allows for long open views, particularly in the chalklands and fenlands. In combination, long open views across an inherently agricultural landscape results in a strong sense of tranquillity.
- 1.8 The chalkland and sandland types share a number of similar characteristics, including an underlying chalk geology. A key distinction between the chalkland and sandland types is the increased frequency of conifer plantations and pine lines within the sandlands, which results in a greater sense of ‘confinement’ / enclosure.
- 1.9 The world-famous racecourse and studs at Newmarket are a distinctive land use within the chalklands. Newmarket is specifically identified for its horse racing heritage at a national level, signifying the importance of this land use to the landscape character and its value beyond the local level.
- 1.10 Development guidance for both the chalkland and sandland types explain that developments that could be accommodated in visual terms can still have a profound effect on landscape character due to the deeply rural nature of these landscapes.

Local Landscape Context (see Figures 3, 4, & 5)

- 1.11 Each of the four key development sites has its own character and aspects of value. These can be summarised as:
- 1.12 **Sunnica East Site A** covers approximately 223 hectares of land at Lee Farm, east of Isleham. The local landscape is very representative of the landscape character described in the published landscape character assessments. The western parts of the site have very high visual sensitivity due to their openness. There are long open views across a flat arable landscape without any major conurbations or urban fringe influences. The result is a strong sense of a quiet, remote, and strongly rural landscape. This character is critical to local identity and sense of place, in particular for the village of Isleham, where the fields west of Lee Farm form part of its wider rural setting and approach. The value of the local landscape in which the site is located is **medium/high**.
- 1.13 **Sunnica East Site B** covers approximately 319 hectares of land immediately south of Worlington and north of Badlingham. The site forms part of a wider area of countryside surrounded by the settlements of Worlington, Badlingham, Red Lodge, and Freckenham. In

this regard the site contributes to the maintenance of settlements separated by open countryside. In particular, fields within this site contribute to the rural character of the setting and approach into Worlington from the south. Views across open countryside within the site are experienced from all the approaches into the settlement from the south, comprising three roads and a public right of way (PRoW). Similarly, fields within the southern part of the site form part of the wider countryside setting to the rural hamlet of Badlingham, and the line of dwellings west of the A11, at Red Lodge. The value of the local landscape in which the site is located is **medium**.

- 1.14 **Sunnica West Site A.** covers approximately 373 hectares of land south of Chippenham Park, a Grade II listed Registered Park and Garden (RPG) (**Figure 3**). The historic avenue approach into Chippenham Park, listed as part of the RPG, runs through the middle of the site and is a distinctive feature within the local landscape. Woodland blocks within the site together with woodland along the southern edge of Chippenham Park contribute to a strongly wooded character which is in sharp contrast to the more manicured landscapes associated with horse racing activities nearby. South of the site, land rises towards Warren Hill (**Figure 5**). On the northern slopes of this hill, overlooking the site, are the Limekilns Gallops, a non-designated heritage asset due to their 300-year association with the horse racing industry in Newmarket. The Limekilns occupy a triangle of land to the south of the A14 between the A1304 and the B1508 and spread over 200 acres. Adjacent to the east are the Waterhall Gallops also part of the Jockey Club Estate which are grass gallops comprising 270 acres of turf (**Figure 4**). The site is part of the agricultural landscape which is seen in views looking north from the Limekilns and provides an essential rural setting for the Limekilns and Waterhall Gallops. This rural setting has been celebrated in numerous works of art (**Figure 12**). The views from the Limekilns and Waterhall Gallops have considerable scenic qualities due to the elevation, the extensive views across a rural agricultural landscape with views towards Chippenham Park, and Ely Cathedral (in good light conditions) (**Figure 15**). The value of the local landscape in which the site is located is **high and should be considered as a valued landscape for the purposes of NPPF para 174**.
- 1.15 **Sunnica West Site B** covers approximately 66 hectares of land adjoining Chippenham Fen National Nature Reserve (NNR). The site provides an area of open countryside between designated sites at Chippenham Fen and Snailwell Meadows and is a buffer between built developments south of Snailwell Road and the NNR at Chippenham Fen. Visibility of open fields within the site from PRoW 204/1 (**Figure 4**), Chippenham Road, and Snailwell Road contributes to the wider rural setting to Snailwell village, and the rural character of the approach into this village from all routes from the north and east. The value of the local landscape in which the site is located is **medium/high**.

Site Selection Process

- 1.16 The site selection process undertaken by the applicant was flawed because environmental constraints and potential alternative sites were not properly considered. The applicant ignored their own findings relating to the identification of ‘unconstrained land’ (ES 6.2 Appendix 4A Figure 5, APP-054). Consequently, Sunnica Site East A, the eastern part of Sunnica East Site B, and Sunnica West Site A are all located within constrained land as illustrated on **Figure 1.1**.
- 1.17 Alternative Potential Development Areas’ (PDAs) were identified within the unconstrained land identified by the applicant and used to inform an assessment of alternative sites. At this point however, the order limits had already been identified, and therefore the consideration of alternatives was in name only.
- 1.18 The Red Amber Green (RAG) Assessment used to discount other PDAs was flawed and should not have been relied upon to inform the site selection process because:
- The landscape and visual criteria were inadequate.
 - Aspects such as Green Infrastructure were ignored.
 - Key viewpoints, such as those at Limekilns Gallops were ignored.
 - Despite the fragmented and dispersed nature of the development and the extensive area that it covers (981 ha), it was assessed as a single site.
 - There was no consideration of the cumulative impacts of the development, which is a uniquely harmful aspect of this proposal compared to other PDAs considered.
 - There is a general lack of transparency.

Landscape Effects

- 1.19 Due to the flawed site selection process, the development includes areas which are unsuitable on landscape and visual grounds because of the resulting significant, long term adverse effects. The key impacts at each location are summarised below.
- 1.20 **Sunnica East Site A - Land at Lee Farm East of Isleham.** This site is located in a landscape which has very high visual sensitivity due to its openness and strongly rural character. The developments would result in the loss of open views and the sense of remoteness and rural tranquillity for which it is valued. The overall effect upon the character of the local landscape would be **moderate/major adverse**, which is significant, and this effect would not reduce in the long term.

- 1.21 **Sunnica East Site B - Land South of Worlington and North of Badlingham.** This site is located in the countryside between the settlements of Badlingham, Red Lodge and Worlington. The rural setting and identity of Worlington, in particular, would be harmed, as all approaches into the settlement from the south would be impacted. Away from the settlements, the development would fundamentally alter the character of the countryside. Development would be located along both sides of Elms Road, and this would include 678 to 1,277 containers as part of the BESS development. This would exacerbate the industrial characteristics of the development and add further clutter to a landscape that is currently free from urbanising features, and which has a prevailing rural character. The overall effect upon the character of the local landscape would be **moderate/major adverse**. This effect is expected to reduce to **moderate adverse** with the proposed mitigation planting.
- 1.22 **Sunnica West Site A - Land South of Chippenham Park & North of Limekilns Gallops.** This site is part of the landscape setting to Chippenham Park RPG and the Limekilns and Waterhall Gallops. The development will be prominent in views across both of the Gallops, eroding the much celebrated and prevailing rural character of its setting. It will be replaced by a setting defined by industrial development (**Figures 13-19**). Due to local topography, this development would not be screened by mitigation planting. The relationship between the horse racing industry and its rural setting would be diminished elsewhere, including around the Godolphin Gallops where views across open fields from PRoW 204/5 would be lost, initially to be replaced by temporary fencing and later by filtered views of solar PV modules. Visibility of the modules would also impact on the scenic qualities of the Limekilns by detracting from the view of Ely Cathedral, which is currently seen on the horizon above fields within the site (**Figure 15**). The coherent rural setting to the southern parts of Chippenham Park would also be replaced by an extensive area of electrical development, which would include a BESS development. The BESS development would not be screened by planting in views from La Hogue Road and farm. The overall effect upon the character of this highly valued landscape would be **major adverse**, which is significant, and this effect would not reduce in the long term.
- 1.23 **Sunnica West Site B - Land South of Chippenham Fen.** This site is located away from the rest of the development in an isolated location within a strongly rural part of the countryside. It will be experienced as an isolated and incongruous addition within a quiet part of the countryside, including from PRoW 204/1, Chippenham Road, and Snailwell Road, which comprises all of the approaches into Snailwell from the north and east. As such the development would harm the character of these approaches and the village's rural setting more generally. The area of open countryside between designated sites at Chippenham Fen and Snailwell Meadows would be severely diminished and the open buffer between built developments south of Snailwell Road and the NNR at Chippenham Fen would be lost. The

overall effect upon the character of the local landscape would be **moderate/major adverse**, which is significant. This effect is expected to reduce to **moderate adverse** with the proposed mitigation planting and the conversion of parts of the site to wetland.

1.24 **Cumulative Impacts.** Due to the commercial decision by the applicant that 1,000ha of land is required, the development will be fragmented and dispersed across several discrete areas. Cumulative impacts arising from the overall scale and dispersed form of development, include:

- The combined development footprint of the solar PV developments and the BESS developments would be 652.1 hectares. This would dwarf all of the surrounding settlements. Most of which are rural villages whose identities are intrinsically linked to the productive countryside.
- The landscape in which Freckenham, Badlingham and Chippenham are located would be surrounded on three sides by electrical development. Other settlements such as Worlington and Snailwell would also be partially enclosed by the developments. Consequently, there would be a constant awareness of solar PV development and BESS development when travelling into and between these settlements.
- There would also be a constant awareness of electrical infrastructure throughout the western part of the Estate Sandlands and Rolling Estate Chalklands LCTs. In total more than 450ha of the Rolling Estate Chalklands LCTs would be converted from productive farmland to electrical development.

1.25 For ease of reference **Appendix 4 Comparison of Conclusions about Landscape Effects in MBELC Review and LVIA**, has been prepared along with a series of Figures that compare the assessments made in the LVIA with the MBELC assessments. The figures are as follows:

- **Figures 20 & 20.1** compare the assessments of sensitivity
- **Figures 21 & 21.1** compare the assessments of landscape effects at Year 1; and
- **Figures 22 & 22.1** compare the assessments of landscape effects at Year 15.

1.26 **Figures 23 & 24** show the MBELC assessment for cumulative effects (at Year 1 and Year 15 respectively).

Visual Effects

- 1.27 Visual effects are a result of the sensitivity of visual receptors (people) to the proposed development and the magnitude of changes to existing views.
- 1.28 The proposal would result in up to **major adverse** effects on the visual amenity of the following users. This harm would be due to the loss of valued open views of the countryside as well as the introduction of large-scale industrial development.
- **Sunnica East Site A** - For people using the local PRoW network at LVIA¹ Vp 11 (APP-216) (PRoW 257/007/0) and for users of the local road network, including on Beck Road at LVIA Vps 5 & 11, Sheldrick's Road at LVIA Vp 5 (APP-215), and the unnamed road leading to West Row at LVIA Vp 12 (APP-216).
 - **Sunnica East Site B** - For people using the local PRoW network at LVIA Vps 15-16 (APP-216) (PRoW U6006) & LVIA Vp 20 (APP-216) (PRoW 257/003/0) and for users of Elms Road at LVIA Vp 18 (APP-216).
 - **Sunnica West Site A** - For people within the Limekilns and Waterhall Gallops, including at LVIA Vp 38 (APP-218) and for users of La Hogue Road (including visitors to La Hogue Farm) at LVIA Vp 33 (APP-217), and Norwich Rd (LVIA Vp 37).
- 1.29 The proposal would result in up to **moderate to moderate/major adverse** effects on the visual amenity of the following users.
- **Sunnica East Site B** - For people using Freckenham Road at LVIA Vp 14 (APP-216), Worlington Road at LVIA VPs 22 & 23 (APP-217), and Golf Links Road at LVIA VPs 24 & 25 (217).
 - **Sunnica West Site A** - For people using PRoW 204/5, users of the A11/A14/A1304 junction and section of A11 immediately north of this junction, visitors to the Railway Field (LVIA Vp 39), and La Hogue Road at LVIA Vp 32 (APP-217).
 - **Sunnica West Site B** - For people using PRoW 204/1, including at LVIA Vp 45 (APP-219), and users of Snailwell Road and Chippenham Road.
- 1.30 Proposed mitigation planting will, after a period of 15 years, lessen the views of the infrastructure to varying degrees (from a negligible degree to a more substantial degree at e.g., LVIA Vp 46), but it will not restore the current visual amenity and in places the mitigation planting in itself will restrict open views (e.g., LVIA Vp 11). In some cases, such

¹ Landscape and Visual Impact Assessment which forms Chapter 10 of the submitted Environmental Impact Assessment (APP-042)

as at the Limekilns, where elevated views across the site are possible, it will not be possible to screen the development with mitigation planting (e.g., LVIA Vp 38). **Figures 25 & 26** illustrate the visual assessment at Year 1 and Year 15.

Submitted Landscape & Visual Impact Assessment (see Figures 20-24)

- 1.31 The DCO application is supported by an Environment Statement (ES) which includes a Landscape and Visual Impact Assessment in Chapter 10 (APP-042). The process orientated nature of the LVIA creates complexity, length and a level of repetition which buries key judgements. For example, across all judgements, there are 22 occurrences of a major adverse effect versus 282 occurrences of effects that are deemed to be either negligible or neutral², and therefore unimportant.
- 1.32 Notwithstanding the above, the LVIA finds that the local landscape in which Sunnica East Site B is located (LLCA 13) and in which Sunnica East Site A & Sunnica East Site B are located (LLCA 24) would experience a **major adverse** landscape effect at Year 1 (**Figure 21**). This is the highest level of effect.
- 1.33 Elsewhere the LVIA has underestimated the level of effects and overestimated the effectiveness of mitigation planting e.g., in the finding that the landscape in which Sunnica East Site A is located (LLCA 11) would only experience a **minor adverse** effect at Year 1.
- 1.34 The underestimation of effects in the LVIA is due to:
- Methodological issues with the LVIA, including a failure to follow best practice guidance.
 - Failure to identify the most valuable aspects of the landscape, and therefore to adequately assess the impact on these aspects.
 - No consideration of the landscape impacts in wintertime.
 - Failure to properly consider the cumulative (or ‘combined’) impacts of the development overall.
 - Insufficient information regarding the BESS infrastructure, which has meant that the assessment of effects in the LVIA of this component is inadequate.

² ES Chapter 10 LVIA Appendix 10G (APP-106)

1.35 The photomontages submitted with the ES (APP-220 to SPP-232) underrepresent the impact of the development. This is due to:

- The scale of the development is underestimated when the photomontages are printed at the intended paper size (A1).
- Inappropriate selection of the location and viewing direction of photomontages.
- Insufficient number of photomontage locations leading to the omission of key views.
- Inappropriate depiction of the BESS infrastructure.
- The awkward presentation of the images which makes it difficult to make a direct comparison between the baseline images and the different stages of the development.
- The failure to present photomontages consistently on a single page and with easily comparable baseline views.
- The optimistic growth rates used for the mitigation planting shown.
- Absence of photomontages which show the impact of the development when the mitigation planting is not in leaf.

Compliance with Landscape Related Planning Policy

1.36 **Overarching National Policy Statement for Energy (EN-1).** The development is not ‘sensitive to place’³ and the mitigation measures proposed in the OLEMP (APP-108) will do little to improve this because the fundamental issue relates to the location of the key development sites. The site selection process was flawed and failed to take into account the high value aspects of the landscape, the strong sense of place and local distinctiveness. The development does not show ‘good design in terms of siting relative to existing landscape character, landform and vegetation.’⁴

1.37 **NPPF.** The proposals should be considered to be inconsistent with the NPPF, because:

- They fail to recognise the intrinsic character and beauty of the countryside; and
- Development in Sunnica West Site A would not protect nor enhance the valued landscape, which includes the Limekilns and the Chippenham Park RPG.

³ EN-I 4.5.1

⁴ EN-I 4.5.2

- 1.38 **Development Plan - West Suffolk Council.** Due to its location and scale, the development would result in significant, long-term harm to the character of the landscape, including the setting of settlements. It would fail to protect or enhance this character and is therefore not consistent with Policy DM13.
- 1.39 **Development Plan - East Cambridgeshire District Council.** The development is not consistent with Policy ENV1 as, due to its location and scale, it would fail to protect, conserve, or enhance:
- *Space between settlements, and their wider landscape setting*
 - *Key views into and out of settlements*
 - *The unspoilt nature and tranquility of the area*
- 1.40 Overall, the proposals are considered to conflict with the relevant national policy statements and national and local landscape policies.

2 Introduction

- 2.1 Say No to Sunnica have commissioned Michelle Bolger Expert Landscape Consultancy (MBELC) to review the landscape and visual impacts of an application by Sunnica Ltd for an Order Granting Development Consent (DCO) for the Sunnica Energy Farm (the development). The development is described in detail in chapter 4 of this review. In summary it comprises the construction, operation and decommissioning of a solar photovoltaic (PV) development, associated infrastructure including connections to the National Grid substation via substations, transformers and a shunt reactor, and a Battery Energy Storage System (BESS) to control the release of energy to the national electricity transmission system (NETS).
- 2.2 This review covers:
- The relevant landscape policy considerations.
 - A summary of the proposed development.
 - A summary of the proposed outline landscape and ecology management plan.
 - A summary of the published landscape character assessments.
 - A description of the local landscape character context.
 - Comments on the applicant's site selection process.
 - The key landscape effects that would result from the development.
 - The key visual effects that would result from the development.
 - A summary of the key findings within the applicant's submitted Landscape and Visual Impact Assessment (LVIA) which forms Chapter 10 of the submitted Environmental Impact Assessment (APP-042) and any issues with the LVIA and the submitted photomontages.
 - Consideration as to whether the proposals comply with landscape policy.
- 2.3 The authors of this review have visited the site and the surrounding landscape on six occasions during 2022. This includes attendance by John Jeffcock at the Accompanied Site Inspections on Thursday 29th September, Wednesday 2nd November, and Thursday 3rd November.
- 2.4 This review of the DCO application has been undertaken in accordance with the principles set out by the Landscape Institute (LI) and Institute of Environmental Management Assessment (IEMA) in the *Guidelines for Landscape and Visual Assessment* 2013 (GLVIA3),

and guidance from Natural England in *An Approach to Landscape Character Assessment 2014*. This review has also been prepared with reference to Technical Guidance Notes (TGN) prepared by the Landscape Institute, specifically TGN 06/19 *Visual Representation of Development Proposals*, and TGN 02/21 *Assessing landscape value outside national designations*. **Appendix 2** provides the MBELC methodology for undertaking landscape and visual assessment.

3 Landscape Planning Policy Context

National Policy Statements

- 3.1 Government policy for the delivery of energy infrastructure is set out in the energy National Policy Statements (NPS). These were first designated and published in 2011.

Overarching National Policy Statement for Energy (EN-1) (July 2011)

- 3.2 National policy for energy infrastructure is set out in the Government's Overarching National Policy Statement (NPS) for Energy (EN-1). Section 4.5 of EN-1 sets out the principles for good design that should be applied to all energy infrastructure, and states:

4.5.1 'The visual appearance of a building is sometimes considered to be the most important factor in good design. But high quality and inclusive design goes far beyond aesthetic considerations. The functionality of an object — be it a building or other type of infrastructure — including fitness for purpose and sustainability, is equally important.

Applying "good design" to energy projects should produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible. It is acknowledged, however that the nature of much energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area.

4.5.2 Good design is also a means by which many policy objectives in the NPS can be met, for example the impact sections show how good design, in terms of siting and use of appropriate technologies can help mitigate adverse impacts such as noise.

...

Whilst the applicant may not have any or very limited choice in the physical appearance of some energy infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting relative to existing landscape character, landform and vegetation. Furthermore, the design and sensitive use of materials in any associated development such as electricity substations will assist in ensuring that such development contributes to the quality of the area.

For the IPC to consider the proposal for a project, applicants should be able to demonstrate in their application documents how the design process was conducted and how the proposed design evolved. Where a number of different designs were considered, applicants should set out the reasons why the favoured choice has been selected'.⁵ (Emphasis added)

- 3.3 Section 5.9 of EN-1 sets out the assessment principles relevant to landscape and visual considerations and highlights the need for projects *'to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate'*.⁶
- 3.4 Regarding the potential mitigation of landscape and visual effects EN-1 states that *'Reducing the scale of a project can help to mitigate the visual and landscape effects of a proposed project'*.⁷ It goes on to state that *'within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site'*⁸ and *'depending on the topography of the surrounding terrain and areas of population it may be appropriate to undertake landscaping off site'*.⁹

National Policy Statement for Renewable Energy Infrastructure (EN-3) (July 2011)

- 3.5 NPS EN-3 sets out technical considerations for the IPC when determining consent applications for renewable energy infrastructure. Although EN-3 does not directly address solar or battery storage developments, it reinforces the importance of good design across all energy infrastructure and states that *'Proposals for renewable energy infrastructure should demonstrate good design in respect of landscape and visual amenity'*.¹⁰

National Policy Statement for Electricity Networks Infrastructure (EN-5) (July 2011)

- 3.6 NPS EN-5 includes additional technology-specific considerations to the generic principles identified in EN-1. Section 2.2 is factors influencing site selection by applicants. It states that *'There will usually be some flexibility around the location of the associated substations and applicants will give consideration to how they are placed in the local*

⁵ Overarching National Policy Statement for Energy (EN-1) Section 4.5

⁶ Overarching National Policy Statement for Energy (EN-1) Paragraph 5.9.8

⁷ Overarching National Policy Statement for Energy (EN-1) Paragraph 5.9.21

⁸ Overarching National Policy Statement for Energy (EN-1) Paragraph 5.9.22

⁹ Overarching National Policy Statement for Energy (EN-1) Paragraph 5.9.23

¹⁰ National Policy Statement for Renewable Energy Infrastructure (EN-3) Paragraph 2.4.2

*landscape taking account of such things as local topography and the possibility of screening.*¹¹

- 3.7 As with EN-1 and EN-3 above, the emphasis for a need for good design in relation to new infrastructure is repeated *‘Proposals for electricity networks infrastructure should demonstrate good design in their approach to mitigating the potential adverse impacts which can be associated with overhead lines’*.¹²

Draft Revised Energy NPS (September 2021)

- 3.8 Following the Energy White Paper (December 2020) the Government published and consulted on revised energy NPS. The consultation ended in November 2021. Of particular relevance to this application is the inclusion of solar photovoltaic development within draft EN-3 (September 2021). The specific considerations regarding the landscape and visual impacts of solar photovoltaic development state that *‘Applicants ... will be expected to direct considerable effort towards minimising the landscape/visual impact of solar PV arrays. Whilst there is an acknowledged need to ensure solar PV installations are adequately secured, required security measures such as fencing should consider the need to minimise the impact on the landscape and visual impact’*.¹³
- 3.9 It continues, *‘The applicant should have regard in both the design layout of the solar farm, and future maintenance plans, to the retention of growth of vegetation on boundaries, including the opportunity for individual trees within the boundaries to grow on to maturity. The landscape and visual impact should be considered carefully at the pre-application stage’*.¹⁴
- 3.10 The draft revised NPS do not address battery storage developments, such as that which is included as part of this proposal.

National Planning Policy Framework (July 2021)

- 3.11 National Planning Policy is set out in the National Planning Policy Framework (Revised July 2021) (NPPF). To satisfy national policy objectives the proposed development and planning decisions should:
- Contribute to protecting and enhancing our natural, built and historic environment (Paragraph 8)

¹¹ National Policy Statement for Electricity Networks Infrastructure (EN-5) Paragraph 2.2.5

¹² National Policy Statement for Electricity Networks Infrastructure (EN-5) Paragraph 2.5.2

¹³ Draft Revised National Policy Statement for Renewable Energy Infrastructure (EN-3) Paragraph 2.51.4

¹⁴ Draft Revised National Policy Statement for Renewable Energy Infrastructure (EN-3) Paragraph 2.51.5

- Protect and enhance Public Rights of Way and access (Paragraph 100)
- Be visually attractive and sympathetic to local character and history, including the surrounding built environment and landscape setting (Paragraph 130)
- Establish or maintain a strong sense of place (Paragraph 130)
- Protect and enhance valued landscapes (Paragraph 174)
- Recognise the intrinsic character and beauty of the countryside (Paragraph 174)
- Recognise the wider benefits of trees and woodland (Paragraph 174)

Development Plan - West Suffolk Council

3.12 Sunnica East Site B and the majority of Sunnica East Site A are within West Suffolk, formerly Forest Heath District. The Development Plan for West Suffolk Council includes:

- Forest Heath District Council Core Strategy (CS) (Adopted 2010).
- Forest Heath and St Edmundsbury Local Plan: Joint Development Management Policies Document (updated 2015).
- Forest Heath Local Plan Policies Map (Adopted 2015).
- Forest Heath Area of West Suffolk Council Site Allocations Local Plan (Adopted 2019).

3.13 Policies within the Development Plan are not considered in detail in preparing this report since they are likely to be addressed by the authority in its Local Impact Reports. However, it is noted that Policy DM13 of the Forest Heath and St Edmundsbury Local Plan deals with landscape character and requires all development proposals to *‘demonstrate that their location, scale, design and materials will protect, and where possible enhance the character of the landscape, including the setting of settlements, the significance of gaps between them and the nocturnal character of the landscape’*.

3.14 Whether the development will comply with this policy is considered in chapter 12.

Development Plan - East Cambridgeshire District Council

3.15 Sunnica West Sites A and B and a part of Sunnica East Site A are within East Cambridgeshire. The Development Plan for East Cambridgeshire District Council consists of:

- East Cambridgeshire District Council Local Plan (Adopted 2015)

3.16 Policies within the Development Plan are not considered in detail in preparing this report since they are likely to be addressed by the authority in its Local Impact Reports. However, it is noted that Policy ENV1 deals with landscape and settlement character and requires all

development proposals to *‘demonstrate that their location, scale, form, design, materials, colour, edge treatment and structural landscaping will create positive, complementary relationships with existing development and will protect, conserve, and where possible enhance:*

- *The pattern of distinctive historic and traditional landscape features, such as watercourses, characteristic vegetation, individual and woodland trees, field patterns, hedgerows and walls, and their function as ecological corridors for wildlife dispersal.*
- *The settlement edge, space between settlements, and their wider landscape setting.*
- *Visually sensitive natural and man-made skylines, hillsides and geological features.*
- *Key views into and out of settlements; this includes quintessential views of Ely Cathedral and the setting of the City as a historic ‘isle’ settlement close to the fen edge and the valley of the River Great Ouse.*
- *The unspoilt nature and tranquility of the area.*
- *Public amenity and access;*
- *Nocturnal character of rural areas free from light pollution’.*

3.17 Whether the development will comply with this policy is considered in chapter 12.

4 Proposed Development

Introduction

- 4.1 Set out below are the components of the DCO application most relevant to the assessment of landscape and visual effects. A ‘Rochdale Envelope’ approach has been used for the DCO applications. This approach uses a series of parameters for the assessment of environmental effects. Within those parameters the detailed project design can occur without rendering the ES inadequate.¹⁵ This approach is supported by the Government’s National Policy Statements for energy infrastructure, which recognise that not all details of a proposal will be finalised at the application stage.

Order Limits

- 4.2 The order limits cover 981 hectares and are shown on **Figure 1**.

Solar PV Development

- 4.3 The maximum total developable area for the solar PV development is 621 ha. This development would be split across four sites, identified on **Figure 2**, as:
- Sunnica East Site A - 115 ha
 - Sunnica East Site B - 227 ha
 - Sunnica West Site A - 256 ha
 - Sunnica West Site B - 23 ha
- 4.4 Infrastructure at each solar PV development site would include:
- Solar PV modules. The highest part of each module would be up to 2.5m above ground level. The modules would be mounted in rows 2-11m apart.
 - Solar stations. Each station would feature an inverter, transformer, and the switchgear. These would be located either outside or housed within a container. The maximum footprint of each station would be 17m (L) x 6.5m (W) x 3.5m (H). Up to 136 stations would be located across the four PV development sites.

¹⁵ Overarching National Policy Statement for Energy (EN-I), Department of Energy and Climate Change, July 2011

- Solar PV control room or container with a maximum footprint of 7.5m (L) x 3.5m (W) x 3.5m (H). Up to 17 control buildings would be located across the four PV development sites.
- Other structures including weather stations up to 6m in height, CCTV poles up to 5m in height, and perimeter deer fencing up to 2.5m in height.

4.5 2 permanent compounds which would each feature an office & warehouse building would be located at:

- Sunnica East Site A - maximum footprint of compound 1.2ha with a building up to 31m (L) x 13m (W) x 5m (H) and up to 20 car parking spaces
- Sunnica East Site B - maximum footprint of compound 0.8ha with a building up to 35.5m (L) x 25m (W) x 8m (H) and up to 20 car parking spaces

Battery Energy Storage System (BESS) Development

4.6 The maximum total developable area for the BESS development is 31.1 ha. This development would be split across three compounds, identified on **Figure 2**, at:

- Sunnica East Site A - 6.6 ha
- Sunnica East Site B - 16.2 ha
- Sunnica West Site A - 8.3 ha

4.7 Infrastructure at each BESS compound would include:

- Battery storage containers. Each container would be up to 17m (L) x 5m (W) x 6m (H). The maximum number of battery storage containers has not been specified (see below).
- Battery stations. Each station would feature an inverter, transformer, and the switchgear. These would be located either outside or housed within a container. The applicant has only provided a maximum height for the container (6m). No other parameters are provided for the stations and the maximum number of battery stations has not been specified.
- Substation. The maximum parameters for the substation at Sunnica East Site A are 85m (L) x 55m (W) x 10m (H). The maximum parameters for the substations at Sunnica East Site B & Sunnica West Site A are 85m (L) x 130m (W) x 10m (H). Each substation site may include a control building up to 25m (L) x 8m (W) x 7m (H) and a welfare building up to 6m (L) x 3m (W) x 3.5m (H). Up to 20 car parking places will be provided within the Sunnica West Site A substation

compound. The drawings depicting the proposed 400kV solution for the substations show the addition of a substantial (10m high) wall between the transformers / shunt reactor within the West Site A and East Site B 400kv Substations. It is not clear what the purpose of this wall is. Neither the wall nor the shunt reactor was included in the original 132kV proposals.

- A monitoring and control building or container up to 6m in height.
- 1 or 2 firefighting water tanks providing a total water storage capacity of 242.5m³ at each compound.
- Perimeter palisade fencing up to 2.5m in height.

4.8 Given the absence of information regarding the number of containers that could be accommodated within the BESS sites, Munro Consultants were instructed by Say No to Sunnica to provide an estimate. Their estimate is set out below. It includes a lower and higher number. The lower number is based on the containers being separated according to FM Global distances. The higher number is based on the containers being located directly next to each other.

- Sunnica East Site A - 277 to 521 containers
- Sunnica East Site B - 678 to 1,277 containers
- Sunnica West Site A - 348 to 655 containers

Connection to National Grid

4.9 Subsequent to the submission of the DCO, revised proposals for the connection to the National Grid have been submitted:

- Option 1 An extension to the existing Burwell Substation has been withdrawn.
- Option 2 is to the north of the existing substation at Burwell approximately 450m from Burwell, on the opposite side of Newnham Drove.
- Option 3: the current preferred option involves amended substation and transformer arrangements at Sunnica West Site A, Sunnica East Site A and Sunnica East Site B alongside a shunt reactor at Sunnica East Site B.

4.10 The maximum parameters for Option 2 are 76m (L) x 43m (W) x 12m (H).

4.11 No detailed information has been provided about Option 3. The *Sunnica Energy Farm Consultation on proposed changes* states that the maximum footprint of each of the BESS, Substations and Compound will not change.

Internal access roads

4.12 A network of internal access roads will be constructed of compacted stone:

- Primary and crane access points will be a minimum of 6m wide.
- Secondary accesses will be a minimum of 3.5m wide.

Cabling

4.13 Cabling would include:

- Cable corridors connecting sites to Burwell National Grid Substation Extension (If option 2 were adopted). Corridors will be up to 3.5m wide and include trenches housing two circuits. Each circuit will consist of up to 3 sets of cables.
- Onsite cabling between PV modules and inverters and from inverters to transformers.
- Onsite cabling between transformers and the switchgears and from switchgears to the onsite substation.
- Onsite cabling between battery containers and inverters and from inverters to transformers.

5 Proposed Outline Landscape and Ecology Management Plan

Introduction

- 5.1 An Outline Landscape and Ecology Management Plan (OLEMP) has been submitted as part of the ES (Volume 6.2 Appendix 10I, APP-108). The applicant states that the purpose of the OLEMP is to *‘set out the measures proposed to mitigate the effects of the Scheme on landscape and biodiversity features, and to enhance the biodiversity, landscape and green infrastructure value of the Order limits, to secure compliance with relevant national and local planning policies’*.¹⁶
- 5.2 The OLEMP includes a ‘vision’ for the landscape, which is depicted on the applicant’s Landscape Masterplan Figures 1 to 6, in Annex A to the OLEMP (attached as **Appendix 3** to this report). These figures identify the broad areas for the grassland planting, proposed hedgerows, and proposed woodlands described below. It is understood that these figures will form the basis for detailed landscape and ecology management plans to be approved by the relevant local planning authority post-consent in order to discharge the relevant DCO requirements, namely the DCO Requirement for the ‘provision of landscaping’.

OLEMP - Impacts Avoidance

- 5.3 The OLEMP includes information relating to impacts avoidance and specific information regarding proposed design principles and green infrastructure which have been considered in the applicant’s landscape and visual impact assessment (ES Chapter 10, APP-042)) and have been taken into account in this review.
- 5.4 Section 1.6 of the OLEMP lists the key ‘impact avoidance measures’ that have been incorporated into the proposals. Aspects most relevant to the assessment of landscape and visual effects can be summarised as follows:
- Creating undeveloped buffers throughout the development of at least 5m from existing boundary features and which would consist of new planting.
 - Ensuring designated sites within the order limits are retained.
 - Existing woodland, treelines and the majority of hedgerows are retained and will be protected during construction of the development.

¹⁶ Environmental Statement Appendix 10I: Landscape and Ecology Management Plan (APP-108) Paragraph 1.2.1

- Retaining and managing existing grassland habitats.
- Affected hedgerow sections will be re-instated in full and native species of local provenance will be used to improve their biodiversity value.
- Trees within the development footprint that cannot be retained will be replaced with native species within the order limits.
- Materials used, where reasonably practicable, to minimise reflection and glare and to assist with breaking up the massing and scale of the panels, solar-stations and associated structures.
- Selection of finishes for the infrastructure to be informed by the tonal colours of the landscape to minimise the visual impact of the development.
- Visual clutter would be minimised, where possible, through careful siting and design.
- Trees are proposed as visual screening to mitigate the visual impacts of the development.

OLEMP - Design Principles and Proposed Green Infrastructure

5.5 Section 1.7 of the OLEMP (APP-108) include overarching proposals as well as a number of specific site principles, as summarised below. In describing the proposals, the applicant refers to parcel (field) numbers within the order limits. For simplicity, these parcel numbers have also been used to describe the proposals in this review. For the location of these parcels, see the applicant's Landscape Masterplan Figures 1 to 6 which are attached to this review as **Appendix 3**. Quotations below are from Section 1.7 of the OLEMP.

5.6 Overarching proposals include:

- A total of 293 ha of land is allocated for the 'creation of biodiverse habitats' to include the conversion of 31ha of arable land to dry acid grassland and the conversion of 26.5ha of arable farmland to marshy grassland. The remaining areas, which are understood to be mostly arable will also be converted and managed as 'biodiverse grassland' suitable for pollinators and breeding farmland birds.
- Implementing new woodland and hedgerows to assist in screening the development and improving landscape structure, including 51ha of tree planting with the use of native species, including Pedunculate Oak, English Elm, Field Maple, Birch and Scots Pine. 7.4km of hedgerow infill planting and creation, including species such as Blackthorn, Hazel and Hawthorn.

- New native grassland mixes beneath the solar panels to improve the range of fauna and increase the biodiversity across the site in comparison to intensive agriculture, including pig farming.
- Conserving field boundaries and the vegetation patterns by offsetting the solar panels from the field edges and offsetting them from the existing hedgerows and trees.
- New permissive routes a. adjacent to Beck Road; b. along the southern edge of Sunnica East Site B and adjacent to Elms Road; to connect existing routes from Red Lodge; and c. along the north part of Sunnica East Site B.

5.7 Sunnica East Site A. Specific principles include:

- Siting the BESS and substation in E33 adjacent to reservoirs and Lee Farm, *‘so that their massing and land uses are perceived in the context of existing infrastructure features and built structures in the landscape’*.
- Parcel E01 -solar panels offset from woodland to the north and the Lee Brook to the west.
- Parcel E02 - woodland planting along the eastern edge of the parcel, *‘to reinforce the vegetation structure adjacent to Ferry Lane and screen the panels in longer distance views from the east’*.
- Parcel E03 - woodland planting to the north and south of the parcel, *‘to screen views from the wider landscape to the north and from Lee Farm’*.
- Parcel E04 - as per E03, additional woodland along the northern edge and the eastern edge, adjacent to Ferry Lane.
- Parcel E05 - solar panels sited back from Beck Road *‘via a landscape buffer of native grassland, to reduce the proximity of the panels to road users, retain views along the road corridor of the churches in Isleham and Freckenham and to retain a perception of travelling through the landscape that separates the settlements’*.
- Parcels E08, E09 and E10 enclosed by new hedgerows *‘to screen views of the panels and reinforce existing hedgerow patterns’*.
- Parcel ECO1 - an area of native chalk grassland implemented via non-invasive methods, as a response to the below ground archaeology.
- Parcel ECO2 - native chalk grassland and stone curlew plots.

5.8 Sunnica East Site B. Specific principles include:

- Siting the BESS and substation in E18 *‘so that it is enclosed and screened by existing woodland along its northern edges and in part by roadside vegetation adjacent to Elms Road to its south-east’*.
- Parcel E12 - solar panels *‘sited to the south of Worlington and offset from the residential land uses by native chalk grassland’*.
- Parcels E12 to E17 - solar panels offset from the intervening pine lines, *‘so as to retain the field pattern and vegetation cover’*.
- Parcels E19 to E22 - New perimeter woodland to *‘reduce the visibility from residents adjacent to Bridge End Road and local PRow, as well as screen the structures and reduce the perception of the Scheme from Badlingham’*.
- Parcels E24 and E25 - new woodland planting to the north, east and south of these parcels *‘to screen the structures and reduce the perception of the Scheme when travelling along Worlington Road’*.
- Parcels E26 to E29 - solar panels offset from the boundary vegetation *‘to retain the landscape pattern and screen the panels from wider views’*.
- Parcels E30 to E32 - woodland around the parcels retained for visual screening. Additional hedgerow and woodland planting proposed adjacent to Golf Links Road *‘to screen views for motorists and from views from the wider landscape to the north, as well as reduce the perception of the Scheme in relation to Worlington’*.
- Parcel ECO3 offset of native chalk grassland from Freckenham Road *‘to reduce the perception of the solar panels and proximity to residents’*.

5.9 Sunnica West Site A. Specific principles include:

- Siting BESS and substation within W17, *‘so that it is in part adjacent to existing barns and bordered by the mature woodland of Sounds Plantation which aids in screening the structures from the west and in views from the east’*.
- Parcel W03 - siting solar panels between woodland blocks and Foxburrow Plantation *‘and reinforcing the vegetation patterns with new woodland planting to aid in screening this part of the Scheme from the wider landscape and retaining a physical separation from Chippenham Road and Snailwell’*.
- Parcel W04 - solar panels sited away from the avenue in Chippenham Park and new woodland planting implemented. A temporary fence will be implemented in

relation to views from Godolphin Gallops, until the establishment of the proposed planting.

- Parcel W05 - siting solar panels away from the avenue in Chippenham Park so that new woodland can be implemented along the southern edges of the parcel. Woodland planting along the southern edge of the parcel which would include *‘a higher percentage of evergreen species and a temporary fence, rendered in a suitable colour, to screen views from motorists on the A14’*.
- Parcels W06 and W07 - woodland planting to the west of the parcels, *‘to reduce their visibility in longer distance views from The Limekilns, as well as provide new vegetation links across the landscape’*.
- Parcels W08 and W09 - limiting the extent of the solar panels across these fields, *‘so as to respond positively to below ground archaeology’*. New native grassland across the archaeological areas.
- Parcels W10, W11 and W12 - solar panels located away from the boundary wall of Chippenham Park. New hedgerow and woodland planting along the northern edge of these parcels *‘to provide visual screening from La Hogue Road’*.
- Parcel W15- solar panels offset from the watercourse. New woodland is proposed around the perimeter *‘to screen the Scheme, as well as to soften views of the A11 from Kennett and increase the vegetation’*.
- Parcel ECO 5 - native chalk grassland in response to below ground archaeology.

5.10 Sunnica West Site B. Specific principles include:

- Parcels W01 and W02 - siting solar panels away from Chippenham Fen, the River Snail and Snailwell Road *‘so as to reduce the visibility of the Scheme from motorists and conserve the landscape features of woodland and the river’*.
- Parcel ECO 4 - new native wetland grassland as a response to Chippenham Fen NNR and in response to below ground archaeology.

6 Published Landscape Character Assessments

Introduction

- 6.1 The landscape covered by the order limits is extensive and complex and includes four key development sites. Unhelpfully, the applicant has described the northern part of the order limits as Sunnica East and the southern part as Sunnica West. These areas are located north and south of each other, not east and west. However, to avoid further confusion, the applicant's names have been used to structure the remainder of this report.
- 6.2 This review considers the key information in the landscape character assessments which cover the landscape within the order limits. These studies include national, regional, and county assessments. The local level character assessment for Freckenham is considered in the following chapter. Table 1 below sets out the various studies and identifies the landscape character type/ landscape character area in which each of the four key sites are located.

Table 1: Landscape Character Areas and Types

Key Sunnica Development Sites	National Character Area (NCA)	East of England Landscape Framework	Suffolk Landscape Character Assessment
Sunnica East Site A	NCA 87: East Anglian Chalk & NCA 46: The Fens	Lowland Village Chalklands & Planned Peat Fen	Rolling Estate Chalklands & Settled Fenlands
Sunnica East Site B	NCA 85: The Brecks	Forested Estate Sandlands & Lowland Village Chalklands	Estate Sandlands & Rolling Estate Chalklands
Sunnica West Site A	NCA 87: East Anglian Chalk	Lowland Village Chalklands	Rolling Estate Chalklands
Sunnica West Site B	NCA 87: East Anglian Chalk	Lowland Village Chalklands	Rolling Estate Chalklands

National Character Areas

- 6.3 National Character Areas (NCAs) are areas that *‘share similar landscape characteristics, and which follow natural lines in the landscape rather than administrative boundaries’*¹⁷. NCAs are important for:
- Providing the overall understanding of the landscape context in which the site is located.
 - Identifying features that have a value beyond the local scale.
 - Understanding the strategic aspirations for the landscape.
- 6.4 The order limits are located within three NCAs. The entirety of Sunnica West and Burwell, and part of Sunnica East Site A are within NCA 87: East Anglian Chalk. The remainder of Sunnica East Site A is within NCA 46: The Fens. All of Sunnica East Site B is within NCA 85: The Brecks. These NCAs are mapped on **Figure 6** and summarised below.
- 6.5 The East Anglian Chalk is described as *‘a visually simple and uninterrupted landscape of smooth, rolling chalkland hills with large regular fields enclosed by low hawthorn hedges, with few trees, straight roads and expansive views to the north’*.¹⁸ The vast majority of the landscape is open countryside and cereal production dominates the predominantly agricultural landscape. However, *‘a significant influence around Newmarket has historically been horse-racing and stud farms, which have brought a manicured appearance to the landscape’*¹⁹ immediately around Newmarket.
- 6.6 The Brecks also have an underlying chalk geology and this *‘has produced a low, gently undulating plateau, largely covered with sandy soils of glacial origin’*²⁰. Free-draining soils and a relatively warm and dry climate have *‘greatly influenced the landscape character and led to the development of dry heath and grassland communities’*.²¹ Another key characteristic which sets The Brecks apart from other surrounding landscapes is the *‘regular geometric shape and form and the repeated occurrence of plantations and shelterbelts’* which *‘unify the land cover pattern, forming wooded horizons and framing views into adjacent landscapes’*²². Outdoor pigs and intensive indoor and outdoor poultry-rearing units are also noted as being characteristic.²³

¹⁷ NCA Profile Introduction

¹⁸ NCA 87: East Anglian Chalk Page 3

¹⁹ NCA 87: East Anglian Chalk Page 3

²⁰ NCA 85: The Brecks Page 3

²¹ NCA 85: The Brecks Page 3

²² NCA 85: The Brecks Page 6

²³ NCA 85: The Brecks Page 6

- 6.7 The Fens are characterised by a *'large-scale, flat, open landscape with extensive vistas to level horizons. The level, open topography shapes the impression of huge skies which convey a strong sense of place, tranquillity and inspiration.'*²⁴ Overall tree cover within the Fens is sparse. Where tree cover is found, it typically consists of *'small woodland blocks, occasional avenues alongside roads, isolated field trees and shelterbelts of poplar, willow and occasionally leylandii hedges around farmsteads'*²⁵.

East of England Landscape Framework

- 6.8 A regional landscape assessment was undertaken by Landscape East and is called the East of England Landscape Framework. The Framework, which is an online resource, maps and describes landscape character types (LCT) at a scale of 1:100,000.
- 6.9 Within the Framework, the order limits are located across three LCTs. Most of the order limits are within the Lowland Village Chalklands LCT. Including all of Sunnica West, the majority of Sunnica East Site A, and part of Sunnica East Site B. The remainder of Sunnica East Site A and Burwell are within the Planned Peat Fen LCT, and the remainder of Sunnica East Site B is within the Forested Estate Sandlands LCT. These LCTs are mapped on **Figure 7** and are summarised below.
- 6.10 The Lowland Village Chalklands LCT is described as a *'low lying, but gently rolling arable landscape, dissected by small streams, with a distinctive pattern of nucleated villages and a patchwork of woodlands and shelterbelts'*.²⁶ The predominant land use is arable and the enclosure pattern consists of *'Medium to large sized fields enclosed by hawthorn hedges. Field structure is a mix of rectilinear & sinuous patterns, reflecting the process of planned surveyor enclosure from common fields'*²⁷. This is *'an open landscape with long distance views'* where perceptions of tranquillity *'can readily be perceived'*.²⁸ Notwithstanding this, larger towns, such as Newmarket are said to *'contribute to an urbanising influence'*.²⁹
- 6.11 The Forested Estate Sandlands LCT is described as a *'relatively simple landscape comprising extensive areas of conifer plantations, arable land and some remnant heaths, reflecting the underlying sandy soils'*³⁰. Scots Pine shelterbelts and 'pine lines' are described as being *'defining characteristics'*³¹. The predominant land use is arable, and enclosure consists of 'A

²⁴ NCA 46: The Fens Page 3

²⁵ NCA 46: The Fens Page 7

²⁶ East of England Landscape Framework Lowland Village Chalklands Summary

²⁷ East of England Landscape Framework Lowland Village Chalklands Cultural Pattern

²⁸ East of England Landscape Framework Lowland Village Chalklands Perceptions

²⁹ East of England Landscape Framework Lowland Village Chalklands Settlement Pattern

³⁰ East of England Landscape Framework Forested Estate Sandlands Summary

³¹ East of England Landscape Framework Forested Estate Sandlands Summary

*medium to large scale field pattern. Field systems are mostly rectilinear with some earlier sinuous elements, reflecting a process of planned 'surveyor' enclosure from common fields and heaths*³². The Sandlands are describes as having a 'blocky' structure' which results from a 'mix of conifer plantations and open land, which creates a strong visual contrast between confinement in the forested areas and open space in the wide expanses of arable farmland'³³. There is a 'sense of relative isolation'³⁴ without any 'major conurbations or urban fringe influences'³⁵.

- 6.12 A small part of the order limits is within the Planned Peat Fen LCT. This LCT is described as a 'flat, low lying and sparsely populated landscape characterised by dark peaty soils, a grid like pattern of large arable fields bounded by drainage ditches and wide views to distant, often dramatic skies'.³⁶ There is 'almost no tree cover' in an otherwise 'intensely farmed arable landscape'.³⁷ Despite the predominance of agriculture, the Fens support 'a mosaic of wetland habitats including fens, reedbed, wet woodland and patches of grazing marsh'. Overall, this is a 'quiet, remote landscape' where flat topography can 'give vertical features unusual prominence'³⁸.

Suffolk Landscape Character Assessment (Updated and Revised 2011)

- 6.13 The Suffolk Landscape Character Assessment (Suffolk Landscape Assessment) was undertaken by Suffolk County Council in partnership with the Living Landscapes Project and all District and Borough Councils in Suffolk. It maps and describes LCTs across the county, at a scale of 1:50,000.
- 6.14 Within the Suffolk Landscape Assessment, the order limits are located across three LCTs. Most of the order limits are within the Rolling Estate Chalklands LCT. Including all of Sunnica West, the majority of Sunnica East Site A, and part of Sunnica East Site B. The remainder of Sunnica East Site A and Burwell are within the Settled Fenlands LCT, and the remainder of Sunnica East Site B is within the Estate Sandlands LCT. These LCTs are mapped on **Figure 8** and are summarised below.
- 6.15 The Rolling Estate Chalklands LCT is found on the western fringe of Suffolk. It has the following key characteristics:
- 'Very gently rolling or flat landscape of chalky free draining loam

³² East of England Landscape Framework Forested Estate Sandlands Cultural Pattern

³³ East of England Landscape Framework Forested Estate Sandlands Perceptions

³⁴ East of England Landscape Framework Forested Estate Sandlands Perceptions

³⁵ East of England Landscape Framework Forested Estate Sandlands Settlement Pattern

³⁶ East of England Landscape Framework Planned Peat Fen Summary

³⁷ East of England Landscape Framework Planned Peat Fen Vegetation and Land Use

³⁸ East of England Landscape Framework Planned Peat Fen Perceptions

- *Dominated by large scale arable production*
- *"Studscape" of small paddocks and shelterbelts*
- *Large uniform fields enclosed by low hawthorn hedges*
- *Shelter belt planting, often ornamental species*
- *A "well kept" and tidy landscape*
- *Open views*
- *Clustered villages with flint and thatch vernacular houses*
- *Many new large "prestige" homes in villages'.³⁹*

6.16 Newmarket is referenced specifically in the description of the LCT in relation to the '*world-famous racecourse and racehorse studs*'⁴⁰. These areas are distinctive being characterised by smaller enclosures of rectangular paddocks with linear plantations and shelterbelts.

6.17 The Guidance Note for the Rolling Estate Chalklands LCT explains that '*unless there is a "studscape" of tree belts and small enclosures, much of this landscape has long open views*'.⁴¹ A key force for change is the '*creation of new settlement patterns and clusters associated with infrastructure development*' however there is no specific development guidance for infrastructure development such as solar PV or BESS.

6.18 Guidance for new agricultural buildings in the open countryside is broadly applicable to the proposals. This states that '*the siting of buildings should relate to an existing cluster of buildings whenever possible*' and that '*the correct orientation of the building can also significantly change the visual impact of the development, and this consideration should always be explored*'.⁴² It goes on to state that the location of development '*in relation to existing trees that act either as screening or as a backdrop should be carefully considered*' and these trees should be retained for the lifetime of the development.

6.19 Guidance relating to caravan sites is also relevant, particularly to the BESS development. The guidance states that:

'The regular and recent nature of this landscape means that it does have more potential capacity, in respect of visual impact, to accept these developments but effective design and mitigation measures will be vital.

³⁹ Suffolk Landscape Character Assessment Rolling Estate Chalklands

⁴⁰ Suffolk Landscape Character Assessment Rolling Estate Chalklands

⁴¹ Suffolk Landscape Character Assessment 13 Guidance Note Rolling Estate Chalklands

⁴² Suffolk Landscape Character Assessment 13 Guidance Note Rolling Estate Chalklands

However, the impact on the character of the landscape both directly and indirectly may be highly significant and it may not be possible to effectively mitigate these impacts. Therefore such developments would constitute a profound and undesirable change to landscape character'⁴³.

6.20 The general land management guidelines for the Rolling Estate Chalklands LCT are:

- *'Reinforce the historic pattern of regular boundaries.*
- *Restore, maintain and enhance the network of tree belts and pattern of small plantations found across much of this landscape type.*
- *Restore, maintain and enhance the historic parklands and the elements within them.*
- *Maintain and expand the area of chalk grasslands in this landscape'⁴⁴.*

6.21 The Estate Sandlands LCT relates to two discrete areas within the county, covering the Brecks and the coastal area known as the Sandlings. The Brecks is the area affected by the order limits. Key characteristics include:

- *'Flat or very gently rolling plateaux of free-draining sandy soils, overlying drift deposits of either glacial or fluvial origin*
- *Chalky in parts of the Brecks, but uniformly acid and sandy in the south-east*
- *Absence of watercourses*
- *Extensive areas of heathland or acid grassland*
- *Strongly geometric structure of fields enclosed in the 18th & 19th century.*
- *Large continuous blocks of commercial forestry*
- *Characteristic 'pine lines' especially, but not solely, in the Brecks*
- *Widespread planting of tree belts and rectilinear plantations*
- *Generally a landscape without ancient woodland, but there are some isolated and very significant exceptions'⁴⁵*

6.22 The Guidance Note for the Estate Sandlands LCT explains how *'the sparse settlement means that this is a deeply rural landscape so some developments that could be accommodated in visual terms in these areas can still have a profound effect on the character of this*

⁴³ Suffolk Landscape Character Assessment 13 Guidance Note Rolling Estate Chalklands

⁴⁴ Suffolk Landscape Character Assessment 13 Guidance Note Rolling Estate Chalklands

⁴⁵ Suffolk Landscape Character Assessment Estate Sandlands

landscape type'.⁴⁶ The Estate Sandlands LCT has similar forces for change and guidelines to those outlined above for the Rolling Estate Chalklands LCT.

6.23 The general land management guidelines for the Estate Sandlands LCT are:

- *'Reinforce the historic pattern of regular boundaries.*
- *Restore, maintain and enhance the pattern of locally distinctive "pine lines".*
- *Restore, maintain and enhance the network of tree belts and pattern of small plantations found across much of this landscape type.*
- *Extend the cover of heathland paying particular attention to areas of commercial forestry as these have lower nutrients and a residual seed bank.*
- *Develop opportunities for locally distinctive species such as the rare Brecks plants.*
- *Protect distinctive geomorphology such as patterned ground'*⁴⁷.

6.24 The Settled Fenlands LCT is found in north-west Suffolk. It has the following key characteristics:

- *'Flat landscape of peaty soils*
- *Land at sea level, but small sandy islands and ridges up to 4m*
- *Piecemeal enclosure of open common fen*
- *Small, narrow fields that are divided by straight, water-filled drains*
- *Small poplar plantations and occasional Scots Pine belts*
- *Smaller scale farming than in the Planned Fenlands*
- *Comprehensively settled with farmsteads often forming clusters'*⁴⁸

6.25 The Guidance Note for the Settled Fenlands LCT does not identify any forces for change or development guidance relating to Solar PV or BESS development.

6.26 The general land management guidelines for the Settled Fenlands LCT are:

- *'Restore and maintain the historic pattern of the regular dyke network.*
- *Restore and maintain the pattern of shelterbelts and tree lines found in this landscape.*
- *Maintain the distinctive character of drove-ways enclosed by planting.*

⁴⁶ Suffolk Landscape Character Assessment 7 Guidance Note Estate Sandlands

⁴⁷ Suffolk Landscape Character Assessment 7 Guidance Note Estate Sandlands

⁴⁸ Suffolk Landscape Character Assessment Settled Fenlands

- *Maintain condition and habitat diversity of the dyke network with sympathetic management.*
- *Safeguard the widespread archaeological remains relating to early settlement found in this landscape*⁴⁹.

- 6.27 The LVIA (APP-042) has defined a series of Local Landscape Character Areas (LLCAs) on which to base its assessment of effects. The reasoning behind some of the choices made for the LLCAs is not clear, especially the decision to create separate LLCAs for the villages. The villages are inextricably linked to their surrounding landscapes. For ease of comparison, reference to the LLCAs is made in the assessment of the Local landscape Context (Section 7 of this report).
- 6.28 When assessing Landscape Sensitivity and Landscape Effects in this review (Section 9 of this report) the village LLCAs have been considered as part of the wider landscapes to which they belong. This review has assessed for sensitivity and landscape effects only those LLCAs assessed for landscape effects in the LVIA. **MB Appendix 4** includes a table that compares conclusions (Section 9 of this report) with the conclusions of the LVIA which are considered in Section 11 of this report.

Conclusions

- 6.29 The landscape covered by the order limits is extensive and complex. The majority of the landscape within the order limits is within a chalkland landscape type, described at the county level as the Rolling Estate Chalklands LCT. However, the order limits also include a sandland landscape type, and a fenland landscape type; a large part of Sunnica East Site B is within the sandland landscape type. These landscape types are mapped and described at a national, regional, and county level and shown on **Figures 6, 7 and 8**.
- 6.30 All three landscape types are predominately arable and have few urban influences. They are characterised by a relatively flat topography and limited vegetation which allows for long open views, particularly in the chalklands and fenlands. In combination, long open views across an inherently agricultural landscape results in a strong sense of tranquillity.
- 6.31 The chalkland and sandland types share a number of similar characteristics, including an underlying chalk geology. A key distinction between the chalkland and sandland types is the increased frequency of conifer plantations and pine lines within the sandlands, which results in a greater sense of ‘confinement’ / enclosure.

⁴⁹ Suffolk Landscape Character Assessment 22 Guidance Note Settled Fenlands

- 6.32 The world-famous racecourse and studs at Newmarket are a distinctive land use within the chalklands. Newmarket is specifically identified for its horse racing heritage at a national level, signifying the importance of this land use to the landscape character and its value beyond the local level.
- 6.33 Development guidance for both the chalkland and sandland types explain that developments that could be accommodated in visual terms can still have a profound effect on landscape character due to the deeply rural nature of these landscapes.

7 Local Landscape Context

Introduction

- 7.1 This section describes the local landscape context at each of the four key development sites within the order limits. The applicant's site names have been used to structure the descriptions of the local landscape and its value.

Sunnica East Site A - Land at Lee Farm East of Isleham

- 7.2 Sunnica East Site A covers approximately 223 hectares of land north and south of Beck Road. The site north of Beck Road is divided into two parts, east and west of Lee Brook/Lee Farm. Land east of Lee Farm is currently used for outdoor pig rearing. Land west of Lee Farm is used for arable production. Land south of Beck Road, which is proposed as part of the development's green infrastructure proposals, is also used for arable production.
- 7.3 This site includes land within both the Rolling Estate Chalklands LCT and the Settled Fenlands LCT. All of Sunnica East Site A is included within the LVIA's LLCA 11 which is described as East Fen Chalklands. The site represents the flat and open character for which these LCTs are known. In particular, when driving along Beck Road, the openness of the arable landscape north and south of the road and west of Lee Farm is striking. There are long distance views across the chalklands and the Eastern Fen, and towards Isleham village in the distance. The level, open topography shapes the impression of huge skies. This openness contrasts with the landscape outside of the site to the south east, which is within the Brecks/sandland type, where there is more vegetation and a greater sense of enclosure. The sense of openness and agricultural land use contribute to the sense of a rural identity for nearby villages, in particular the village of Isleham, where the fields west of Lee Farm form part of its wider rural setting and approach.
- 7.4 East of Lee Farm, the site includes land between Beck Road and an area labelled 'The Fen' on OS mapping, which is south of the River Lark. These fields are currently used for outdoor pig rearing. This activity, for which the wider landscape of the Brecks is known, is distinguishable by numerous pig sheds. It is understood that this activity is temporary as the pig rearing operation circulates to different fields after a period of time. Within these fields there is little to no field boundary vegetation. This has resulted in unbroken views across the extensive pig farming operations, which is characterised by areas of distributed ground

and numerous sheds. The sheds in particular are a detractor. Views across this part of the site are possible from the unnamed road which leads north towards West Row. There are long distance views across this part of the site from the elevated junction at Fourways Farm (Fourways Junction). Although seemingly out of place in this flat landscape, the elevation of this junction relates to its previous function as a bridge over the former Cambridge to Mildenhall railway line, which is now without trace on the ground.

- 7.5 The southern and eastern parts of the site are located within Freckenham Parish and are described in the Freckenham Neighbourhood Plan Parish Landscape Study Character and Sensitivity Appraisal, September 2020 (Freckenham Landscape Study). Within the Freckenham Landscape Study the eastern part of the site is within Rural Character Area (RCA) R2 - North (**Figure 10**). This area is described as a transitional zone where the *'wide open farms of the fenland edge merge into to the more regularly wooded Breckland landscapes to the east'*⁵⁰. The description explains that land is farmed for both arable and pig rearing and *'can be under plastic and irrigation rigs which provides common sights and sounds at certain times of year'*. Overall, the landscape is described as being very open with long views.
- 7.6 The southern part of the site is within RCA R1 - West which is described as the *'southern edge of a very expansive landscape stretching north and west into the Fens with very infrequent boundary vegetation to add texture or hinder views'* and where *'Big skies dominate overhead'*. The landscape character is described as being *'strongly rural'* and *'the sense of openness and the long views are highly valued by the residents of Freckenham'*.⁵¹
- 7.7 Judgements relating to the value and visual sensitivity of each RCA were included as part of the Freckenham Landscape Study. RCA 1 was assessed as being of *'modest value'* and having *'very high visual sensitivity'* (**Figure 11**). RCA 2 was assessed as having a *'moderate value'* and *'high visual sensitivity'*. Although the western part of the site is outside of the parish, and therefore was not included in the Freckenham Landscape Study, it is considered to share similarly open characteristics with RCA R1 and is part of the expansive landscape which is described. It also has a very high visual sensitivity.
- 7.8 The local landscape surrounding and including Sunnica East Site A has no landscape designation. However, that does not mean that it does not have any value. When considered against the range of factors that help to identify landscape value outside of national

⁵⁰ Freckenham Neighbourhood Plan Parish Landscape Study Character and Sensitivity Appraisal, September 2020 Page 19

⁵¹ Freckenham Neighbourhood Plan Parish Landscape Study Character and Sensitivity Appraisal, September 2020 Page 16

designations⁵² the overall value of the landscape in which the site is located is **medium/high**. This is due to the following factors:

- **Distinctiveness:** The site and surrounding landscape are very representative of the landscape character described in published landscape character assessments from a national to parish level. This character is critical to local identity and sense of place, in particular for the village of Isleham.
- **Perceptual (scenic):** The western parts of the site have very high visual sensitivity due to their openness. Views across the fields west of Lee Farm are particularly attractive and are strongly rural in character.
- **Perceptual (Wildness and tranquillity):** Long open views across a flat arable landscape without any urban fringe influences contribute to the strong sense of a quiet, remote landscape.

Sunnica East Site B - Land South of Worlington and North of Badlingham

- 7.9 Sunnica East Site B covers approximately 319 hectares of land immediately south of Worlington and north of Badlingham. The site boundaries are complex. The northern parts of the site adjoin Golf Links Road and Freckenham Road. A small part of the north eastern boundary adjoins the A11. The southern part of the site is located between PRoW 257/003/0 and the settlements of Badlingham (west) and Red Lodge (east). The southern part of the site is dissected by Elms Road. Newmarket Road dissects the north eastern part of the site. PRoW U6006 dissects the middle part of the site and elsewhere forms its boundary. Other site boundaries are within the open countryside.
- 7.10 This majority of the site is located within the Estate Sandlands LCT and consists of agricultural fields used mostly for arable farming but with some pig rearing. All Sunnica East Site B is in the LVIA's LLCA 13. However, LLCA 13 excludes the villages which are key features within the landscape. Equestrian uses are found close to the southern part of the site, along Badlingham Road. Pig rearing, which is common within the sandlands, is found on the fields south of Freckenham Road.
- 7.11 The site is representative of the sandlands landscape type. In contrast with the more open chalklands and fenlands, this landscape features a more regular structure of small plantations and tree/ shelter belts. The latter include pine lines which are a defining characteristic of the Brecks/sandlands. Tree belts within the site and its context provide structure and break up visibility across the otherwise flat landscape. West of PRoW U6006

⁵² Technical Guidance Note 02/21 Assessing landscape value outside national designations, Landscape Institute

the landscape is more open and longer views across the fields between the PRoW and the southern edge of Worlington contrast with the greater sense of enclosure found elsewhere.

- 7.12 The north eastern part of the site is within the Rolling Estate Chalklands LCT. The fields south of Golf Links Road are flat and open. Chalk Hill is an exception and provides an attractive backdrop to views across the fields within site from the road.
- 7.13 The site provides an area of open countryside between the settlements of Badlingham, Red Lodge and Worlington, and contributes positively to their settings. Fields within the site contribute to the rural character of the setting and approach into Worlington from the south. Views across open countryside within the site are experienced from all approaches into the settlement from the south, comprising three roads and a PRoW. Similarly, fields within the southern part of the site form part of the wider countryside setting to the rural hamlet of Badlingham, and the line of dwellings west of the A11, at Red Lodge.
- 7.14 There are few detractors within the site itself. This is in contrast with the landscape alongside the A11, east of the site where there is a cluster of developments which detract from the area's rural character. In addition to the A11 itself, these developments include an existing solar PV development at Bay Farm, a construction depot, and a quarry.
- 7.15 Within the Freckenham Landscape Study, the southern part of the site, close to Badlingham, is within RCA R3 - East (**Figure 10**). The description of RCA R3 states that *'apart from the southeast corner, where the influence of the nearby built up area of Red Lodge and the A11 is felt, the area has a rural and distinctively 'Breckland' feel'*. It explains that the land use is *'almost entirely farmland - crops grown are potatoes and vegetables, sugar beet and outdoor pigs, and cereals used as break crops. There is a block of equine land use south of Elms Road'*. Field patterns are regular and geometric but do *'not feel as expansive as in character areas R1 and R2 owing to the regular vegetated boundaries'* and *'woodland is regularly seen in strip plantations, shelter belts and pine lines, dividing up the farmland'*⁵³. Overall, RCA R3 was assessed as having a 'moderate value' and 'moderate visual sensitivity' (**Figure 11**).
- 7.16 The local landscape surrounding and including Sunnica East Site B has no landscape designation. When considered against the range of factors that help to identify landscape value outside of national designations⁵⁴ the overall value of the landscape in which the site is located is **medium**. This value is due to the following factors:

⁵³ Freckenham Neighbourhood Plan Parish Landscape Study Character and Sensitivity Appraisal, September 2020 Page 22

⁵⁴ Technical Guidance Note 02/21 Assessing landscape value outside national designations, Landscape Institute

- **Distinctiveness:** The site and surrounding landscape are representative of the landscape character described in the published landscape character assessments. In particular, the site's contribution to the rural character of the setting and approaches into local settlements, especially Worlington, is valued.
- **Recreational:** PRoW U6006 runs along the spine of the site and is one of the only PRoWs south of Worlington and is therefore likely to be well used.
- **Functional:** Forms part of a wider area of countryside between the settlements of Worlington, Badlingham, Red Lodge, and Freckenham. In this regard the site contributes to the maintenance of settlements separated by countryside.

Sunnica West Site A - Land South of Chippenham Park & North of Limekilns Gallops

- 7.17 Sunnica West Site A covers approximately 373 hectares of land to the south of Chippenham Park, a Grade II listed Registered Park and Garden (RPG) (**Figure 3**). The south western boundary is formed by Godolphin Gallops. PRoW 204/5 runs alongside this boundary. The north eastern site boundary is La Hogue Rd. The south eastern boundary is formed by the A14 and the A11. The A11 splits the site into two and a smaller part of the site is located between the A11 and the A14. All other boundaries are marked by open countryside. The closest settlement is the village of Snailwell, approximately 200m from Parcel W03.
- 7.18 Sunnica West Site A is entirely located within the Rolling Estate Chalklands LCT. Fields are medium to large in scale and typically used for arable farming. The fields have a geometric pattern and are predominately aligned northeast-southwest. Linear woodland blocks within the site and in the landscape to the north reinforce this pattern. These woodlands together with woodland along the southern edge of Chippenham Park give the impression of a strongly wooded landscape, which is in sharp contrast to the more manicured open landscapes associated with horse racing activities nearby as described below.
- 7.19 The historic avenue approach into Chippenham Park, listed as part of the RPG, is a particularly distinctive feature within the local landscape. The approach aligns through the middle of the site and is distinctive because it runs at an angle to the surrounding field boundaries and woodland blocks. Part of the approach is lined with trees. PRoW 204/5 runs along the initial section of the historic approach, starting at the A1304, before crossing the A14 and joining the section of path alongside the Godolphin Gallops. Views north from this path are across fields and woodland within the site and provide a connection to the wider rural landscape north of Newmarket. The LVIA (APP-042) divides this area into two LCAs, LLCA 24 Lowland Estate Chalkland and LLCA 23b Chippenham Park.

- 7.20 South of the A1304, land rises towards Warren Hill (**Figure 5**). On the northern slopes of this hill, overlooking the site, are the Limekilns Gallops, a non-designated heritage asset due to their 300-year association with the horse racing industry in Newmarket. The Limekilns occupy a triangle of land to the south of the A14 between the A1304 and the B1508 and spread over 200 acres (**Figure 4**). They include *‘the Golden Mile and the Round, both of which are peat moss, and .. can lay claim to being among the best set of grass gallops in the world’*⁵⁵. Adjoining the Limekilns to the east are the Waterhall Gallops which are grass gallops comprising 270 acres of turf. The LVIA includes the Limekilns within LLCA 26 The Limekilns and Gallops.
- 7.21 There is permissive access to the Limekilns and Waterhall Gallops throughout the winter and after midday in the summer. In an area that is not well served by PRoW and where there are limited opportunities for extensive views from elevated locations it is likely to be highly valued. The views from the Limekilns and Waterhall Gallops have considerable scenic qualities due to the elevation, the extensive views across a rural agricultural landscape with views towards Chippenham Park, and Ely Cathedral (in good light conditions). Detractors are principally the A14 and A11 which can be seen to the north, and distant views of hangers at Mildenhall.
- 7.22 The site is part of the agricultural landscape which is seen in the views looking north from the Gallops and provides an essential rural setting for the Limekilns. This setting has been included in many of the paintings and prints that depict both individual horses on the Limekilns and horse racing activities taking place on the Limekilns. The rural setting is an integral part of the overall experience of the Limekilns. Some of the paintings which depict the rural setting to the Limekilns, and in which the site is visible, are presented in **Figure 12**.
- 7.23 Almost the entire site is within the Chippenham Fen Strategic Green Infrastructure (GI) Area where one of the four opportunities for future project development is to contribute to landscape character through improving and maintaining the fen landscape⁵⁶ (**Figure 9**).
- 7.24 The local landscape surrounding and including Sunnica West Site A has no landscape designation. When considered against the range of factors that help to identify landscape value outside of national designations⁵⁷ the overall value of the landscape in which the site is located is **high and it should be considered as a valued landscape for the purposes of NPPF para 174**. This value is due to the following factors:

⁵⁵ <https://jockeyclubestates.co.uk/newmarket/principal-gallops>

⁵⁶ Cambridgeshire Green Infrastructure Strategy, 2011 Page 111

⁵⁷ Technical Guidance Note 02/21 Assessing landscape value outside national designations, Landscape Institute

- **Cultural Heritage:** The Limekilns have been identified as a nationally significant⁵⁸ non-designated heritage asset due to their 300-year association with the horse racing industry in Newmarket. The historic approach to the Chippenham Park, a designated heritage asset, extends from the A1304 close to the Limekilns. The Limekilns were part of the Chippenham Park Estate until 1932⁵⁹. Cultural and historical value of the Limekilns has been assessed in Heritage Assessment prepared for Say No to Sunnica by Richard Hoggett Heritage, 2022.
- **Landscape Condition:** The condition of the Limekilns and Waterhall Gallops is intact. Wooded features associated with the historic park are still present. There has been some loss of historic field boundaries in the wider landscape, but many remain.
- **Associative:** There are strong historic and contemporary associations with the Limekilns as evidenced by the range of paintings and prints that depict both individual horses on the Limekilns and horse racing activities taking place on the Limekilns. In many of these pictures the setting is provided by the agricultural landscape to the north. Currently watching horses on the gallops is a much-prized early morning activity for local people and visitors and has become part of the Newmarket experience. It is also where prospective purchasers view horses.
- **Recreational:** There is permissive access to the Limekilns and Waterhall Gallops throughout the winter and after midday in the summer. In an area that is not well served by PRoW and where there are limited opportunities for extensive views from elevated locations it is likely to be highly valued.
- **Perceptual (Scenic).** The views from the Limekilns and Waterhall Gallops have considerable scenic qualities due to the elevation, the extensive views across a rural agricultural landscape with views in good light conditions of Ely Cathedral on the horizon.
- **Functional:** The Limekilns and Waterhall Gallops have both a historic and contemporary function as gallops for the horse racing industry at Newmarket. They include *'the Golden Mile and the Round, both of which are peat moss, and it can lay claim to being among the best set of grass gallops in the world'*. The agricultural landscape to the north provides an essential rural setting for the gallops.

⁵⁸ Heritage Assessment Sunnica Energy Farm, prepared for Say No To Sunnica, June 2022, Richard Hoggett Heritage, Page 69

⁵⁹ Heritage Assessment Sunnica Energy Farm, prepared for Say No To Sunnica, June 2022, Richard Hoggett Heritage, Page 69

Sunnica West Site B - Land South of Chippenham Fen

- 7.25 Sunnica West Site B covers approximately 66 hectares of land in a mixture of arable production and pasture. The site adjoins Chippenham Fen National Nature Reserve (NNR) to the north. The western site boundary is the River Snail. The short southern boundary runs along Snailwell Road. All other site boundaries are with the countryside. The site itself is labelled as Snailwell Fen on OS maps. The LVIA (APP-042) includes it within LLCA 24, Lowland Estate Chalkland.
- 7.26 This site is within the Rolling Estate Chalklands LCT and provides an area of open countryside within the immediate setting of a number of national and international designations. Chippenham Fen has high ecological value, as evidenced in its designation as a NNR, Site of Special Scientific Interest (SSSI), a Special Area of Conservation (SAC), and Ramsar Site. Immediately south of the site beyond Snailwell Road is Snailwell Meadows which is also designated as a SSSI. Adjoining the south western boundary is the site of a former Roman villa which is a scheduled monument (**Figure 3**).
- 7.27 West of the site and the River Snail is the A142. Alongside this road are a number of substantial developments which include a laboratory and a large business park. Lighting from the latter is visible across parts of the wider landscape at night. The site provides a buffer of undeveloped land between Chippenham Fen and the development along the A142.
- 7.28 Despite the proximity of built development and activity nearby, Snailwell Rd, which is a narrow rural lane, and the landscape to its east, which includes the site, has retained a strongly rural character. Visibility of open fields within the site from PRoW 204/1, Chippenham Road, and Snailwell Road contributes to the wider rural setting to Snailwell village, and the rural character of the approach into this village from all routes from the north and east.
- 7.29 The local landscape surrounding and including Sunnica West Site B has no landscape designation. When considered against the range of factors that help to identify landscape value outside of national designations⁶⁰ the overall value of the landscape in which the site is located is **medium/high** due to the following factors:
- Natural heritage: Chippenham Fen is of the highest ecological value. As well as being a designated NNR, the Fen is designated as a Site of Special Scientific Interest (SSSI), a Special Area of Conservation (SAC), and is a Ramsar Site.

⁶⁰ Technical Guidance Note 02/21 Assessing landscape value outside national designations, Landscape Institute

- Cultural heritage: Adjoining the south western site boundary is the site of a former Roman villa which is a scheduled monument.
- Functional: The site provides an area of open countryside between designated sites at Chippenham Fen and Snailwell Meadows and is a buffer between built developments south of Snailwell Road and the NNR at Chippenham Fen.

Conclusions

- 7.30 The key sites which comprise the order limits have their own character and aspects of value. These are summarised below.
- 7.31 **Sunnica East Site A** covers approximately 223 hectares of land at Lee Farm, east of Isleham. The local landscape is very representative of the landscape character described in the published landscape character assessments. The western parts of the site have very high visual sensitivity due to their openness. There are long open views across a flat arable landscape without any major conurbations or urban fringe influences. The result is a strong sense of a quiet, remote, and strongly rural landscape. This character is critical to local identity and sense of place, in particular for the village of Isleham, where the fields west of Lee Farm form part of its wider rural setting and approach. The value of the local landscape in which the site is located is **medium/high**.
- 7.32 **Sunnica East Site B** covers approximately 319 hectares of land immediately south of Worlington and north of Badlingham. The site forms part of a wider area of countryside surrounded by the settlements of Worlington, Badlingham, Red Lodge, and Freckenham. In this regard the site contributes to the maintenance of settlements separated by open countryside. In particular, fields within this site contribute to the rural character of the setting and approach into Worlington from the south. Views across open countryside within the site are experienced from all the approaches into the settlement from the south, comprising three roads and a PRoW. Similarly, fields within the southern part of the site form part of the wider countryside setting to the rural hamlet of Badlingham, and the line of dwellings west of the A11, at Red Lodge. The value of the local landscape in which the site is located is **medium**.
- 7.33 **Sunnica West Site A**. covers approximately 373 hectares of land south of Chippenham Park, a Grade II listed Registered Park and Garden (RPG) (**Figure 3**). The historic avenue approach into Chippenham Park, listed as part of the RPG, runs through the middle of the site and is a distinctive feature within the local landscape. Woodland blocks within the site together with woodland along the southern edge of Chippenham Park contribute to a strongly wooded character which is in sharp contrast to the more manicured landscapes associated with

horse racing activities nearby. South of the site, land rises towards Warren Hill (**Figure 5**). On the northern slopes of this hill, overlooking the site, are the Limekilns and Waterhall Gallops (**Figure 4**). The Limekilns are a non-designated heritage asset due to their 300-year association with the horse racing industry in Newmarket. The site is part of the agricultural landscape which is seen in views looking north from the Limekilns and Waterhall Gallops and provides an essential rural setting. This rural setting has been celebrated in numerous works of art (**Figure 12**). The views from the Limekilns and Waterhall Gallops have considerable scenic qualities due to the elevation, the extensive views across a rural agricultural landscape with views towards Chippenham Park, and Ely Cathedral (in good light conditions). The value of the local landscape in which the site is located is **high and should be considered as a valued landscape for the purposes of NPPF para 174**.

- 7.34 **Sunnica West Site B** covers approximately 66 hectares of land adjoining Chippenham Fen National Nature Reserve (NNR). The site provides an area of open countryside between designated sites at Chippenham Fen and Snailwell Meadows and is a buffer between built developments south of Snailwell Road and the NNR at Chippenham Fen. Visibility of open land within the site from PRoW 204/1, Chippenham Road, and Snailwell Road contributes to the wider rural setting to Snailwell village, and the rural character of the approach into this village from all routes from the north and east. The value of the local landscape in which the site is located is **medium/high**.

8 Applicant's Site Selection Process

8.1 The site selection process undertaken by the applicant is outlined in ES Chapter 4: Alternatives and Design Evolution. It consisted of the following stages:

- Stage 1 - Identification of an area of search within East Anglia close to existing National Grid infrastructure for a point of connection. The result was the identification of a 15km radius around Burwell substation.
- Stage 2 - Identification of constrained areas within the area of search, based on planning, environmental and topographical constraints. The result was the identification of areas of unconstrained land within the 15km area of search.
- Stage 3 - Identification of potential alternative solar development sites. The criteria for the development consisted of site size and land assembly, previously development land, and topography. The criteria for 'site size and land assembly' required *'at least 38ha of contiguous land for an individual site'*. This being *'the minimum site size threshold considered by the Applicant to form part of a network of sites in close proximity covering an area of approximately 1000ha'*. The minimum individual site size and the overall requirement for 1,000ha of land was *'based upon the Applicant's economic analysis of the MW output per ha to be achieved'*⁶¹. The result of this stage was the identification of Potential Development Areas' (PDAs).
- Stage 4 - Evaluation of the PDAs. The result of this stage was a conclusion that *'there are no obviously more suitable locations within the area of search than the proposed Sites for the Sunnica Energy Farm'*.⁶²

⁶¹ ES Appendix 4A Alternative Sites Assessment Paragraph 2.4.4 (APP-054)

⁶² ES Appendix 4A Alternative Sites Assessment Paragraph 4.1.6 (APP-054)

- 8.2 The site selection process was flawed because environmental constraints and potential alternative sites were not properly considered. The applicant ignored their own findings relating to the identification of 'unconstrained land' (ES 6.2 Appendix 4A Figure 5, APP-054). **Figure 1.1** shows the amount of land within the Order Limits that was assessed as being constrained at Stage 2. Sunnica Site East A, the eastern part of Sunnica East Site B, and Sunnica West Site A are all located within land identified by the applicant as constrained land.
- 8.3 The criteria for site size and land assembly at Stage 3 to choose the PDAs ruled out several options namely:
- the selection of a smaller than 1000ha aggregate area;
 - sites of less than 38ha contiguous site size; and
 - sites not in close proximity to each other.
- 8.4 The subsequent evaluation at Stage 4 was confined to those PDAs which met these criteria. As a consequence, the choice of alternatives was materially diminished and this has in turn lead to a substantial increase in potential impacts on the landscape, including cumulative impact. This is particularly the case because the landscape to the north east of Newmarket includes interconnected historic villages within a landscape with varying topography and open views.
- 8.5 Alternative PDAs were identified within the unconstrained land previously identified by the applicant and were used in an assessment of alternative sites. At this point however, the order limits had already been identified based on the Stage 3 criteria, and therefore the consideration of alternatives was in name only.
- 8.6 The Red Amber Green (RAG) Assessment used to discount other PDAs was flawed and should not have been relied upon to inform the site selection process because:
- The landscape and visual criteria were inadequate. They were too coarse and failed to consider landscape character impacts. Consequently, all sites scored the same (amber).
 - Aspects such as Green Infrastructure were ignored. Had this been considered then the location of Sunnica West Site A within the Chippenham Fen GI Strategic Area would have been identified.
 - Key viewpoints, such as those at Limekilns Gallops were ignored. Due to this omission, the assessment failed to identify that it will not be possible to mitigate the impact on certain viewpoints due to topographical factors.

- Despite the fragmented and dispersed nature of the development and the extensive area that it covers (981 ha), it was assessed as a single site. Consequently, the assessment is too coarse to have considered the different issues that the geographically discrete sites raise, such as the potential impact on the Limekilns and Waterhall Gallops .
- There was no consideration of the cumulative impacts of the development, which is a uniquely harmful aspect of this proposal compared to other PDAs considered.
- There is a general lack of transparency. For example, two PDAs scored as being similarly constrained to the proposed development, but no reason is given as to why the current proposals were selected instead of these PDAs.

8.7 The flawed site selection process is at the heart of why the harmful landscape and visual impacts of the development are difficult, and in some cases impossible to mitigate, as set out in the following section.

9 Landscape Effects

Introduction

- 9.1 This section addresses the landscape effects which would result from the proposals at each of the key sites individually and the cumulative effects of the development overall. Landscape effects are effects on the fabric of the landscape and/or on landscape character. Effects on landscape character often extend beyond the site itself and are a consequence of visual changes which affect the pattern and character of the landscape. Visual amenity effects are considered separately in the next chapter, as the effects on people.
- 9.2 Reference is made in this chapter to the Type 4 Verifiable Photomontages (photomontages) which were submitted as part of the LVIA (ES Chapter 10 Figures 10-90 to 10-102, APP-220 to App-232). These are referred to where it is considered useful to demonstrate the impacts being described. However, several issues regarding the usefulness of the photomontages have been identified and these issues are addressed separately in chapter 11 of this report.
- 9.3 For ease of reference **Appendix 4 Comparison of Conclusions about Landscape Effects in MBELC Review and LVIA**, has been prepared along with a series of Figures that compare the assessments made in the LVIA with the MBELC assessments. The figures are as follows:
- **Figures 20 & 20.1** compare the assessments of sensitivity
 - **Figures 21 & 21.1** compare the assessments of landscape effects at Year 1; and
 - **Figures 22 & 22.1** compare the assessments of landscape effects at Year 15.
- 9.4 **Figures 23 & 24** show the MBELC assessment for cumulative effects (at Year 1 and Year 15 respectively). There are no figures for the LVIA assessment of cumulative effects (described in the LVIA as ‘combined effects’) as the LVIA (APP-042) only assesses three of the LLCAs for cumulative effects (See **Appendix 4**).

Sunnica East Site A - Land at Lee Farm East of Isleham

- 9.5 The proposals would replace 121.6 hectares of land used for agricultural purposes with a combination of 115 ha of solar PV development, 6.6 ha of BESS development, and a substation. In total, including the land which would be subject to biodiversity/green infrastructure works, the proposals would result in changes to the character of 223 hectares of land mostly within the Rolling Estate Chalklands LCT.

- 9.6 The footprint of the solar PV and BESS developments would dwarf those of nearby villages, including Isleham, Freckenham and Worlington (**Figure 2**). PV development within the western part of the site would erode the strongly rural setting and approach into Isleham along Beck Road. Long open views across arable fields would be replaced by rows of solar PV modules and ancillary structures. Although the modules would be set back from the road, the intrinsic openness of this landscape would be lost. The mitigation proposals to plant trees along the outer edge of the PV development, in an attempt to hide it, would exacerbate the harm to the openness of this landscape, and therefore one of its intrinsic characteristics. **See Photomontages Vps 5 & 11.**
- 9.7 Similar impacts would be experienced along the unnamed road which leads north towards West Row. In particular, views from Fourways Junction would include the entire eastern part of the development. Views would change from an inherently rural landscape to an industrial landscape, defined by rows of PV modules and ancillary structures such as the solar stations and control rooms. **See Photomontages Vp 12A.** The BESS and substation development would exacerbate the impact by adding between 277 to 521 containers, an office & warehouse building, and a large substation with dimensions of 85m (L) x 55m (W) x 10m (H) (see chapter 4). In combination, the BESS and substation development together with the PV modules and ancillary development would add considerable clutter to an otherwise simple landscape.
- 9.8 Lee Farm is an isolated farm in the countryside. Its buildings are typical of a rural farm, in both scale and number. The presence of these buildings does not justify or mitigate the scale of development that is proposed. The argument in the OLEMP (APP-108) that the massing of the BESS and substation would be *'perceived in the context of existing infrastructure features and built structures in the landscape'*⁶³ is flawed. The BESS and substation development is not located next to the farm buildings but is separated from them by reservoirs. Furthermore, the farm buildings would be lost in the expanse and clutter of the PV development which would dominate the foreground of the view. The BESS development would not be seen as a logical extension of the farm, but an incongruous development in the open countryside.
- 9.9 Overall, the combined impacts of the development, through its extent, clutter, and industrial characteristics would:
- Harm local distinctiveness through the loss of a substantial and representative part of the Rolling Estate Chalklands LCT.

⁶³ Environmental Statement Appendix 10I: Landscape and Ecology Management Plan (APP-108) Section 1.7

- Harm perceptual aspects by developing land which has very high visual sensitivity due to its openness and strong rural in character.
- Result in the loss of the sense of remoteness and rural tranquillity which is experienced as a result of the long open views. These views would no longer be across a flat arable landscape without any urban fringe influences but would instead be dominated by urban/ industrial uses.

- 9.10 The susceptibility of the local landscape, comprising the site and its context is considered to be **medium/high**. The openness of the land and its contribution to local identity and sense of place is a key factor increasing susceptibility. As outlined above, the local landscape in which the site is located has **medium/high** value and the overall sensitivity of the local landscape to the change proposed is **medium/high**.
- 9.11 The magnitude of change would be **medium/high**. Given the medium/high sensitivity the overall effect upon the character of the local landscape would be **moderate/major adverse**, which is significant.
- 9.12 Over time the mitigation planting would grow and begin to filter views of the PV development, particularly in views across the western part of this site from Beck Road. However, this planting would exacerbate the loss of openness which is fundamental to the character of this landscape and local identity. **See Photomontage Vp 11**. Therefore, the long-term effect on this landscape would remain **moderate/major adverse**.
- 9.13** The LVIA LLCAs affected by Sunnica East Site A are LLCA 10, 11 and 12. As previously noted, it is considered that the villages of Isleham and Freckenham should not have been identified separately from the surrounding landscape in which they are located.

Sunnica East Site B - Land South of Worlington and North of Badlingham

- 9.14 The proposals would replace 243.2 hectares of land used primarily for agricultural purposes with a combination of 227 ha of solar PV development, 16.2 ha of BESS development, and a substation. In total, including the land which would be subject to biodiversity/green infrastructure works, the proposals would result in changes to the character of 319 hectares of land within the Estate Sandlands LCT and the Rolling Estate Chalklands LCT.
- 9.15 The footprint of the solar PV and BESS developments would dwarf those of nearby villages, including Freckenham and Worlington, and the rural hamlet of Badlingham (**Figure 2**). Badlingham, Red Lodge and Worlington would no longer be separated by open countryside. Instead, these rural settlements would become connected by solar PV development. This change would be particularly noticeable when walking between Red Lodge and Badlingham

on PRoW 257/003/0, and between Badlingham and Worlington on PRoW U6006. **See Photomontages Vp 15A (APP-225).**

- 9.16 The rural setting and identity of Worlington, in particular, would be harmed. The development would be visible along all approaches into the settlement from the south, comprising three roads and a PRoW. Fields within the site currently contribute to the rural character of the setting and approach into Worlington from the south. Views across open countryside would be replaced by views across an extensive solar PV development. In views from Golf Links Road, the development would be immediate, and its extensive scale would be easily perceived. **See Photomontages Vp 25 (APP-227).** The PV modules would be set back from Freckenham Road behind an area which is proposed to be managed as grassland. Even with this set back the development would be visible as an extensive and incongruous feature. **See Photomontages Vp 14 (APP-224).**
- 9.17 Away from the settlements, the development would fundamentally alter the character of the countryside. PV development, and in particular, the BESS development, would be located and visible at locations which are otherwise free from urbanising features and which have a prevailing rural character. One such location is Elms Road where development would be located along both sides of the road. This would include the BESS development, which is proposed along the northern side of the road. The BESS development would include 678 to 1,277 containers, an office & warehouse building (35.5m (L) x 25m (W) x 8m (H)), a new substation with dimensions up to 85m (L) x 130m (W) x 10m (H), and additional buildings such as the substation control building and welfare building (see chapter 4). The latest drawings⁶⁴ which depict the proposed 400kV solution for this substation also include a shunt reactor and a substantial wall between the transformer and the shunt reactor. The wall and shunt reactor were not part of the original 132kV proposals. The wall would be 10m tall and it appears that it may be of brick/ block construction. It is expected that this wall and the shunt reactor would also be visible from Elms Road. The BESS development would be a substantial development in its own right. It would add a large number of structures to an extensive area which is otherwise strongly rural in character. This would exacerbate the industrial characteristics of the development and add further clutter to a landscape that is currently free from urbanising features. Unfortunately, this aspect, which will be particularly harmful, has not been captured in the photomontage from Elm Road. Unhelpfully, the photomontage is directed in the opposite direction. **See Photomontages Vp 18 (APP-226)** (see chapter 11 of this report for comments on this visualisation).

⁶⁴ Figure 3-30a Sunnica East Site B Substation Elevation - 400kV Solution (Illustrative) Rev I, and Figure 3-30b Sunnica East Site B Substation General Arrangement - 400kV Solution (Illustrative) Rev I

- 9.18 The susceptibility of the local landscape, comprising the site and its context is considered to be **medium**. The rural character of the site and its contribution to the setting of surrounding villages is a key factor increasing susceptibility but the role of vegetation in helping to contain views decreases susceptibility, particularly when compared with Sunnica East Site A. This reflects the findings of the Freckenham Landscape Study, which found that the southern parts of the site have a ‘moderate visual sensitivity’ (see chapter 7). As outlined above, the local landscape in which the site is located has **medium** value and therefore the overall sensitivity of the local landscape to the change proposed is **medium**.
- 9.19 The magnitude of change would be **medium/high**. The overall effect upon the character of the local landscape would be **moderate/major adverse**, which is significant.
- 9.20 Over time the mitigation planting would grow and begin to filter and then screen views of the PV development, particularly in views from Golf Links Road, Freckenham Road, and Elm Road. In some locations, such as along Freckenham Road, it should be possible to implement planting which is consistent with local landscape character (e.g., pine lines). In other locations, such as along Golf Links Road, the mitigation planting itself would exacerbate the loss of attractive and characterful views across open countryside. It is unlikely that structures within the BESS development, which include a substation up to 10m tall, would be screened by the mitigation planting. Overall, taking into consideration the scope for mitigation planting to be undertaken in a manner which is sympathetic to local character, and its establishment over time, the long-term effect on this landscape would reduce to **moderate adverse**.
- 9.21 The LVIA LLCAs affected by Sunnica East Site B are LLCA 8, 13 and 14. As previously noted, it is considered that the villages of Worlington and the hamlet of Badlington should not have been identified separately from the landscape in which they are located.

Sunnica West Site A - Land South of Chippenham Park & North of Limekilns Gallops

- 9.22 The proposals would replace 264.3 hectares of land used primarily for agricultural purposes with a combination of 256 ha of solar PV development, 8.3 ha of BESS development, and a substation. In total, including the land which would be subject to biodiversity/green infrastructure works, the proposals would result in changes to the character of 373 hectares of land within the Rolling Estate Chalklands LCT.
- 9.23 The development will be visible across the Limekilns which forms a major part of LLCA 26, changing the much celebrated and prevailing rural character of its landscape setting. It will be replaced by a setting dominated and defined by industrial development. Due to the elevated nature of the Limekilns and adjoining Waterhall Gallops, structures within the

development would be visible along the entire southern edge of the Gallops: from the north eastern end by Norwhich Road, to the south western end close to the B1506/A1304 junction. Within the Limekilns there would be a constant awareness that the wider rural setting to the Gallops had been replaced by an extensive solar PV development. At the most elevated parts of the Limekilns, the development would be visible across a wide field of view, such that one would have to turn one's head in order to take it all in. **Figures 13-19** comprise a sequence of single frame photographs taken from a single location within the Limekilns. The sequence is required due to the extensive field of view affected. Parcels within the site have been shaded and annotated. Reviewing the sequence of photographs, it is possible to see Parcels W03 W04, W05, W06, W07, W08, W09, W12 and W15. Solar PV development in all of these parcels will be visible. Also see **Photomontage Vp 38 (APP-230)**. The BESS development is not expected to be visible from the location of Photomontage Vp 38 within the Limekilns due to the screening function of trees alongside the A14/A11, and woodland in the northern corner of W07. However, it may be visible from more easterly parts of the Waterhall Gallops.

- 9.24 Development within the western parts of the site will be particularly noticeable from within the Limekilns and Waterhall Gallops (Parcels W05, W07, and W03, W04) (**Figures 15 & 17**). Despite W05 being amongst the most prominent part of the development in views from the Limekilns Gallops, there is no specific mention of this issue in the mitigation proposals outlined in the OLEMP (APP-108) for Parcel W05.
- 9.25 The PV modules in parcel W03 will be particularly prominent because W03 is located on the south east facing slope of a localized ridge, directly facing the Limekilns (**Figure 5**). Locating PV modules on this elevated part of the site appears to have been driven by the requirement for an archaeological mitigation area further down the slope in Parcel ECO5. Development in W03 is particularly harmful because:
- It is isolated from the rest of the development, there is an approximately 300m wide gap between development in parcels W03 and W04;
 - It is in an area that is widely visible; and
 - It extends the footprint of the development north-westwards.
- 9.26 Visibility of the modules would also impact on the scenic qualities of the Limekilns, including by detracting from the view of Ely Cathedral, which is currently seen on the horizon above fields within the site (in good light conditions) (**Figure 15**). The development would also harm the setting to Chippenham Park (LLCA 23b). Currently fields within the site provide a coherent rural setting to the RPG. Features associated with the Park are legible in

views from the Limekilns that once belonged to the Park⁶⁵. It is possible to see the late 19th C Bury Road Lodge (unlisted), and the 18th C drive which runs in a straight line for approximately 3.2km until it reaches the park wall. This feature is identifiable by the avenue of trees which line part of its route. These trees are currently seen in the context of open arable fields and other woodland blocks. The 18th C drive, which is listed as part of the RPG designation, intersects the site, and would be subsumed within it. PV modules in Parcels W04 and W05 would be seen flanking an approximately 900m long section of the drive. PV modules across the wider site would change the Park's rural setting to an industrial setting.

- 9.27 This change in the character of the landscape setting to Chippenham Park would also be experienced along La Hogue Road (LLCA 24). From this road development within Parcels W10, W11, and W12 would be clearly visible. **See Photomontage Vp 32 (APP-228)**. The development would be particularly intrusive for people visiting the popular La Hogue Farm Shop as it would be seen directly ahead when exiting the driveway to the shop. **See Photomontage Vp 33 (APP-229)**. In these views the BESS and substation development will also be clearly visible. This will be a particularly intrusive and incongruous feature due to its height, overall extent, the industrial character of the substation and the clutter that it would introduce. The latest drawings⁶⁶ which depict the proposed 400kV solution for this substation include a substantial wall between the transformers that was not part of the original 132kV proposals. The wall would be 10m tall and it appears that it may be of brick/block construction. It is expected that this wall would also be visible from La Hogue Rd.
- 9.28 South of the A11, Norwich Rd is a continuation of La Hogue Rd. Along Norwich Rd are open views across the entirety of W15 (See LVIA Vp 37). Development on this parcel, which, like W03, is physically detached / isolated from other parts of Sunnica West Site A, would be very apparent to people using Norwich Rd due to its scale and the openness of the landscape in this location. The replacement of agricultural fields with industrial development would harm the otherwise attractive composition of open fields combined with woodland blocks (The Willows, Halfmoon Plantation, La Hogue Farm Plantation), which is appreciable at this location. Proposals for security fencing will exacerbate this harm. The mitigation planting would not screen the development entirely, particularly in winter months when foliage is reduced. In itself this planting would restrict the ability to appreciate open views across the landscape.

⁶⁵ Heritage Assessment Sunnica Energy Farm, prepared for Say No to Sunnica, June 2022, Richard Hoggett Heritage, Page 69

⁶⁶ Figure 3-28a Sunnica West Site A Substation Elevation - 400kV Solution (Illustrative) Rev I, and Figure 3-28b Sunnica West Site A Substation General Arrangement - 400kV Solution (Illustrative) Rev I

- 9.29 The immediate setting to the Godolphin Gallops (LLCA 24) would also be harmed. These Gallops are experienced by people walking alongside them on PRoW 204/5. Currently this path is sandwiched between the gallops and agricultural fields. These fields, specifically Parcels W03 and W04 would be replaced with PV modules. Although temporary fencing is proposed along W04 until the mitigation planting has established, this fencing would result in the same outcome. By blocking views across the countryside, the visible connection to the wider countryside would be lost. The relationship between the horse racing industry and its rural setting would be diminished. The footpath, which is a popular exercising route for both people and dogs, would no longer have a rural setting but an industrial one.
- 9.30 From the Railway Field, which is located north of the Limekilns across the A1304, there are views towards parts of W05, W07, and W09. These views are dependent on your location within the Field and in some instances, are also dependant on the time of year and the amount of intervening foliage. LVIA Vp 39 is taken from a location where vegetation alongside the Field is more effective at screening the site. However, at other locations, south and east of LVIA Vp 39, a greater extent of the site is visible. At these locations, development on parcels W05, W07, and W09 would be most noticeable, and it would be apparent that the wider rural setting to the Field had become industrialised.
- 9.31 The susceptibility of the local landscape, comprising the site and its context is considered to be **high**. Local topography and its impact on the visibility of the development from the Limekilns and the role of the site in providing a rural setting to the Limekilns and Waterhall Gallops and Chippenham Park are key factors increasing susceptibility. As outlined above, the local landscape in which the site is located has **high** value and the overall sensitivity of the local landscape to the change proposed is **high**.
- 9.32 The magnitude of change would be **medium/high** and given the **high** sensitivity the overall effect upon the character of the local landscape would be **major adverse**, which is significant.
- 9.33 Mitigation planting will not screen the development from the Limekilns and Waterhall Gallops, nor will it screen development, which includes the BESS development, from locations along La Hogue Road, or Norwich Rd. The loss to the setting of Chippenham Park would remain. Overall, the long-term effect on this landscape (LLCAs 23b, 24 and 26) would remain **major adverse**.

Sunnica West Site B - Land South of Chippenham Fen

- 9.34 The proposals would replace 23 hectares of land used primarily for agricultural purposes with solar PV development. In total, including the land which would be subject to

biodiversity/green infrastructure works, the proposals would result in changes to the character of 66 hectares of land within the Rolling Estate Chalklands LCT.

- 9.35 This site is located away from the rest of the development and would not relate to it. It would not relate to any other urban features. The development would be isolated in a part of the countryside which has a strongly rural character. PV modules along the southern edge of the site would be visible from PRoW 204/1 where they will be seen as an isolated and incongruous addition within a quiet part of the countryside. Existing vegetation along this edge will filter views, but it will still be apparent that a substantial area of farmland had been replaced with industrial development. Similarly, people traveling along Chippenham Road would have views towards the southern edge of the development. Visibility of the PV modules from PRoW 204/1, Chippenham Road, and Snailwell Road would change the character of the approach into Snailwell from all routes into the village from the north and east, harming these approaches and the village's rural setting more generally. **See Photomontage Vp 46 (APP-232).**
- 9.36 This part of the countryside has an important role in providing a buffer of undeveloped land within the immediate context of Chippenham Fen NNR and Snailwell Meadows. Although it is proposed to convert some of the farmland within the site to wetland, the area of open countryside between designated sites at Chippenham Fen and Snailwell Meadows would be severely diminished and the open buffer between built developments south of Snailwell Road and the NNR at Chippenham Fen would be lost.
- 9.37 The susceptibility of the local landscape, comprising the site and its context is considered to be **medium/high**. The strongly rural location is a factor increasing susceptibility. As outlined above, the local landscape in which the site is located has **medium/high** value and the overall sensitivity of the local landscape is **medium/high**.
- 9.38 The magnitude of change would be **medium/high** and given the **medium/high** sensitivity, the overall effect upon the character of the local landscape would be **moderate/major adverse**, which is significant.
- 9.39 Over time the mitigation planting would assist in screening the development from PRoW 204/1, Chippenham Road, and Snailwell Road. Taking into consideration the potential for this planting to filter views of the development, and the gradual conversion of parts of the site to wetland, which will be more sympathetic in character to nearby designated sites, it is considered that the long-term effect on this landscape would reduce and would be **moderate adverse**.

- 9.40 The LVIA LLCAs affected by Sunnica West Site B are LLCA 21 and 24. As previously noted, it is considered that the village of Snailwell should not have been identified separately from the landscape in which it is located.

Cumulative Effects - Additional Impacts Resulting from Development of All Sites

- 9.41 GLVIA3 states that cumulative effects: *‘result from additional changes to the landscape or visual amenity caused by the proposed development in conjunction with other developments (associated with or separate to it), or actions that occurred in the past, present or are likely to occur in the foreseeable future’*.⁶⁷
- 9.42 Due to the commercial decision by the applicant that 1,000ha of land is required, the development will be fragmented and dispersed across several discrete areas. As outlined above, the proposals include four development sites for solar PV development and three of those sites will also include BESS development. Each site is geographically distinct and has its own unique considerations and issues.
- 9.43 Due to the fragmented and dispersed nature of the development, harmful impacts will be experienced over a much greater area than a similarly sized but more compact development. This will exacerbate a number of issues identified for each separate development site, and the combined impact of all four development sites together will also result in new issues.
- 9.44 Cumulative impacts that would be particularly harmful are:
- The combined development footprint of the solar PV developments and the BESS developments would be 652.1 hectares. This would dwarf all the surrounding settlements. Most of which are rural villages whose identities are intrinsically linked to the productive countryside.
 - The landscape in which Freckenham (LLCA 12), Badlingham (LLCA 14), and Chippenham (LLCA 123a), are located (LLCAs 11, 13 & 24) would be surrounded on three sides by electrical development. This would outweigh the reduction in landscape effects brought about by the mitigation planting with respect to the landscape most affected by Sunnica East Site B and the long term cumulative effect on the landscape (LLCAs 8,9 & 13) would be **major/moderate adverse**. Other settlements such as Worlington and Snailwell would also be partially enclosed by the developments. Consequently, there would be a constant

⁶⁷ GLVIA3 Paragraph 7.2 Page 120

awareness of solar PV development and BESS development when travelling into and between these settlements.

- There would also be a constant awareness of electrical infrastructure throughout the western part of the Estate Sandlands and Rolling Estate Chalklands LCTs. In total more than 450ha of land within the Rolling Estate Chalklands LCTs would be converted from farmland to electrical development.

Conclusions

- 9.45 Due to the flawed site selection process, the development will include areas which are considered unsuitable on landscape and visual grounds because of the significant, long term adverse effects, that would be caused. These effects are summarised below.
- 9.46 **Sunnica East Site A - Land at Lee Farm East of Isleham.** This site is located in a landscape which has very high visual sensitivity due to its openness and strongly rural character. The developments would result in the loss of open views and the sense of remoteness and rural tranquillity for which it is valued. The overall effect upon the character of the local landscape would be **moderate/major adverse**, which is significant, and this effect would not reduce in the long term.
- 9.47 **Sunnica East Site B - Land South of Worlington and North of Badlingham.** This site is located in the countryside between the settlements of Badlingham, Red Lodge and Worlington. The rural setting and identity of Worlington, in particular, would be harmed, as all approaches into the settlement from the south would be impacted. Away from the settlements, the development would fundamentally alter the character of the countryside. Development would be located along both sides of Elms Road, and this would include 678 to 1,277 containers as part of the BESS development. This would exacerbate the industrial characteristics of the development and add further clutter to a landscape that is currently free from urbanising features, and which has a prevailing rural character. The overall effect upon the character of the local landscape would be **moderate/major adverse**. This effect is expected to reduce to **moderate adverse** with the proposed mitigation planting.
- 9.48 **Sunnica West Site A - Land South of Chippenham Park & North of Limekilns Gallops.** This site is part of the landscape setting to Chippenham Park RPG, the Limekilns and Waterhall Gallops. The development will be prominent in views across the Gallops, eroding the much celebrated and prevailing rural character of its setting to a setting dominated and defined by industrial development (**Figures 13-19**). Due to local topography, this development would not be screened by mitigation planting. The relationship between the horse racing industry and its rural setting would be diminished elsewhere, including around the

Godolphin Gallops where views across open fields from PRoW would be replaced by temporary fencing and, later, filtered views of solar PV modules. Visibility of the modules would also impact on the scenic qualities of the Limekilns by detracting from the view of Ely Cathedral, which is currently seen on the horizon above fields within the site (**Figure 15**). The coherent rural setting to the southern parts of Chippenham Park would also be replaced by an extensive area of electrical development, which would include a BESS development. The BESS development would not be screened by planting in views from La Hogue Road and farm. The overall effect upon the character of this highly valued landscape would be **major adverse**, which is significant, and this effect would not reduce in the long term.

9.49 **Sunnica West Site B - Land South of Chippenham Fen.** This site is located away from the rest of the development in an isolated location within a strongly rural part of the countryside. It will be experienced as an isolated and incongruous addition within a quiet part of the countryside, including from PRoW 204/1, Chippenham Road, and Snailwell Road, which comprises all of the approaches into Snailwell from the north and east. As such the development would harm the character of these approaches and the village's rural setting more generally. Although it is proposed to convert some of the farmland within the site to wetland, the area of open countryside between designated sites at Chippenham Fen and Snailwell Meadows would be severely diminished and the open buffer between built developments south of Snailwell Road and the NNR at Chippenham Fen would be lost. The overall effect upon the character of the local landscape would be **moderate/major adverse**, which is significant. This effect is expected to reduce to **moderate adverse** with the proposed mitigation planting and conversion of parts of the site to wetland.

9.50 Due to the commercial decision by the applicant that 1,000ha of land is required, the development will be fragmented and dispersed across several discrete areas. Cumulative impacts arising from the overall scale and dispersed form of development, include:

- The combined development footprint of the solar PV developments and the BESS developments would be 652.1 hectares. This would dwarf all of the surrounding settlements. Most of which are rural villages whose identities are intrinsically linked to the productive countryside.
- The landscape in which Freckenham, Badlingham and Chippenham are located would be surrounded on three sides by electrical development. Other settlements such as Worlington and Snailwell would also be partially enclosed by the developments. Consequently, there would be a constant awareness of solar PV development and BESS development when travelling into and between these settlements.

- There would also be a constant awareness of electrical infrastructure throughout the western part of the Estate Sandlands and Rolling Estate Chalklands LCTs. In total more than 450ha of the Rolling Estate Chalklands LCTs would be converted from productive farmland to electrical development.

10 Visual Effects

10.1 This section is concerned with the visual receptors who would experience the changes in landscape character described above. Visual effects are a result of the sensitivity of visual receptors (people) to the proposed development and the magnitude of changes to existing views.

10.2 **Figures 25 & 26** illustrate the conclusions of the assessment below.

Sunnica East Site A - Land at Lee Farm East of Isleham

10.3 Two key public receptor groups would be affected by development at **Sunnica East Site A**:

- Users of PRoW 257/007/0 (Mortimer Lane) (**high sensitivity**); and
- Users of the road network (which includes cyclists and horse riders) (**medium/high sensitivity**).

10.4 Both receptor groups would experience a high magnitude of change, both during construction and the operation of the development. At the following locations the level of effects would be:

- **Major adverse** for people using the local PRoW network at **LVIA Vp 11 (APP-216)** (PRoW 257/007/0)
- **Major adverse** for users of the local road network, including on Beck Road at **LVIA Vps 5 & 11 APP-215 & APP-216**), Sheldrick's Road at **LVIA Vp 5 (APP-215)**, and the unnamed road leading to West Row at **LVIA Vp 12 (APP-216)**.

10.5 Mitigation planting is proposed along the outer edge of the development parallel to Beck Road, Sheldrick's Road and the unnamed road leading to West Row. The LVIA assumes that this vegetation will have established by Year 15 post completion. Even after 15 years establishment it is likely that there will be sufficient visibility, especially during the winter months, for the presence of the solar PV development and the BESS development to be evident. The photomontages at LVIA Vp 11 show that, even if the ambitious blanket screening that is depicted is achievable, the mitigation planting would replace an attractive view across an unspoilt, quiet, and essentially undeveloped rural landscape with no view.

Sunnica East Site B - Land South of Worlington and North of Badlingham

- 10.6 Two key public receptor groups would be affected by development at **Sunnica East Site B**:
- Users of PRoWs U6006 & 257/003/0 (**high sensitivity**); and
 - Users of the road network (which includes cyclists and horse riders) (**medium/high sensitivity**).
- 10.7 Receptors along PRoWs U6006 & 257/003/0 and Elms Road would experience a high magnitude of change, both during construction and the operation of the development. At the following locations the level of effects would be:
- **Major adverse** for people using the local PRoW network at **LVIA Vps 15-16 (APP-216)** (PRoW U6006) & **LVIA Vp 20 (APP-216)** (PRoW 257/003/0).
 - **Major adverse** for users of Elms Road at **LVIA Vp 18 (APP-216)**. Views in the opposite direction (not included in LVIA photography) will feature the BESS development.
- 10.8 Receptors along Freckenham Road, Worlington Road, and Golf Links Road would experience a medium to medium/high magnitude of change, both during construction and the operation of the development. At the following locations the level of effects would be:
- **Moderate to moderate/major adverse** for users of Freckenham Road at **LVIA Vp 14 (APP216)**, Worlington Road at **LVIA VPs 22 & 23 (APP-217)**, and Golf Links Road at **LVIA VPs 24 & 25 (APP-217)**.
- 10.9 Mitigation planting is proposed between the development and the edges of Elms Road, Worlington Road, and Golf Links Road. The PV modules in Parcel E12 are set back from Freckenham Road by Parcel ECO3 and planting is proposed along the northern edge of E12.
- 10.10 Planting is proposed along PRoW 257/003/0, and along PRoW U6006 where it aligns alongside Parcels E14, 15 & 16. No mitigation planting is proposed along PRoW U6006 between Parcels E12 and E13 (see OLEMP Drawing Number 60589004_ES_LSP_030D) (**Appendix 3**).
- 10.11 The LVIA assumes that mitigation planting will have established by Year 15 post completion. After 15 years establishment, the planting will assist in lessening the impact on views from all locations, except along Parcels E12 and E13 where there would be ongoing visibility. Even where planting occurs, it is likely that there will be sufficient visibility, especially during the winter months, for the presence of the solar PV development and the BESS development to be evident.

Sunnica West Site A - Land South of Chippenham Park & North of Limekilns Gallops

- 10.12 Three key public receptor groups would be affected by development at **Sunnica West Site A**:
- Users of PRow 204/5 (**high sensitivity**);
 - Visitors to the Limekilns and Waterhall Gallops (**high sensitivity**); and
 - Visitors to the Railway Field (**medium/high sensitivity**).
 - Users of the road network (which includes cyclists and horse riders) (**medium/high sensitivity**).
- 10.13 Receptors within the Limekilns and Waterhall Gallops, La Hogue Road, and Norwich Road, would experience a high magnitude of change, both during construction and the operation of the development. At the following locations the level of effects would be:
- **Major adverse** for people within the Limekilns and Waterhall Gallops, including at LVIA Vp 38 (PP-218).
 - **Major adverse** for users of La Hogue Road (including visitors to La Hogue Farm) at LVIA Vp 33 (APP-217) and Norwich Road (LVIA Vp 37).
- 10.14 Receptors along PRow 204/5, the A11/A14/A1304, and La Hogue Road at LVIA Vp 32 would experience a medium/high magnitude of change, both during construction and the operation of the development. At the following locations the level of effects would be:
- **Moderate/major adverse** for users of PRow 204/5.
 - **Moderate/major adverse** for users of the A11/A14/A1304 junction and section of A11 immediately north of this junction, and La Hogue Road at LVIA Vp 32 (APP-217).
- 10.15 Receptors within the Railway Field (**LVIA Vp 39**) would experience a medium/low magnitude of change during construction and the initial operational phase of the development. This would result in a **Moderate adverse** effect upon the views and visual amenity of receptors within the Railway Field.
- 10.16 Due to the elevation of the Railway Field, it is expected that the proposed mitigation planting alongside the A14 and around W07 will be effective in reducing the magnitude of change to low in the longer term (beyond 15 years), when the effect would be **Moderate/minor adverse**. Similarly, after 15 years this planting would reduce the effect on receptors along the A11/A14/A1304 junction to **Moderate adverse (Figure 26)**. Receptors

along this junction are closer to the site than those in the Railway Field and in some cases have a more elevated vantage point to those in the Railway Field.

- 10.17 Mitigation planting is proposed along the southern edges of Parcels W05 and W07, which are widely visible from the Limekilns. However, due to the elevated topography of the Limekilns, this planting will not screen the development in view from the Limekilns nor Waterhall Gallops. **See Photomontage Vp 38 (APP-230)**. Similarly, even after 15 years of growth, mitigation planting will not screen the BESS development in views from La Hogue Rd. **See Photomontage Vp 33 (APP-229)**.
- 10.18 Elsewhere, mitigation measures include planting along the edge of parcels W03 and W04 which run parallel to PRow 204/5 (temporary fencing is proposed alongside W04 until planting has matured), and along the northern edge of Parcel W10 which would otherwise be visible from La Hogue Road at LVIA Vp 32. In time, it is expected that this planting will filter views of the development but there is likely to be sufficient visibility during winter months for the presence of the solar PV development to be noticeable.

Sunnica West Site B - Land South of Chippenham Fen

- 10.19 Two key public receptor groups would be affected by development at **Sunnica West Site B**:
- Users of PRow 204/1 (**high sensitivity**); and
 - Users of the road network (which includes cyclists and horse riders) (**medium/high sensitivity**).
- 10.20 Receptors using PRow 204/1, Snailwell Road, and Chippenham Road, would experience a medium magnitude of change, both during construction and the operation of the development. At the following locations the level of effects would be:
- **Moderate/major adverse** for people using PRow 204/1, including at **LVIA Vp 45 (APP-219)**.
 - **Moderate adverse** for users of Snailwell Road at **LVIA Vp 46 (APP-219)**, and Chippenham Road.
- 10.21 Mitigation planting (hedgerow planting/infilling) is proposed along the southern and eastern edges of Parcels W01 and W02, which are visible from the above locations. In time, it is expected that this planting will mostly screen the development, and due to the distance of the development from the viewing locations, it is unlikely that people at these locations would be aware of the presence of the solar PV development.

Conclusions

- 10.22 The proposal would result in up to **major adverse** effects on the visual amenity of the following users. This harm would be due to the loss of valued open views of the countryside as well as the introduction of large-scale industrial development.
- **Sunnica East Site A** - For people using the local PRoW network at **LVIA Vp 11** (PRoW 257/007/0) and for users of the local road network, including on Beck Road at **LVIA Vps 5 & 11**, Sheldrick's Road at **LVIA Vp 5**, and the unnamed road leading to West Row at **LVIA Vp 12**.
 - **Sunnica East Site B** - For people using the local PRoW network at **LVIA Vps 15-16** (PRoW U6006) & **LVIA Vp 20** (PRoW 257/003/0) and for users of Elms Road at **LVIA Vp 18**.
 - **Sunnica West Site A** - For people within the Limekilns and Waterhall Gallops, including at **LVIA Vp 38** and for users of La Hogue Road (including visitors to La Hogue Farm) at **LVIA Vp 33**, and Norwich Rd (**LVIA Vp 37**).
- 10.23 The proposal would result in up to **moderate to moderate/major adverse** effects on the visual amenity of the following users.
- **Sunnica East Site B** - For people using Freckenham Road at **LVIA Vp 14**, Worlington Road at **LVIA VPs 22 & 23**, and Golf Links Road at **LVIA VPs 24 & 25**.
 - **Sunnica West Site A** - For people using PRoW 204/5, users of the A11/A14/A1304 junction and section of A11 immediately north of this junction, visitors to the Railway Field (**LVIA Vp 39**), and La Hogue Road at **LVIA Vp 32**.
 - **Sunnica West Site B** - For people using PRoW 204/1, including at **LVIA Vp 45**, and users of Snailwell Road and Chippenham Road.
- 10.24 Proposed mitigation planting will, after a period of 15 years, lessen the views of the infrastructure to varying degrees (from a negligible degree to a more substantial degree at e.g., LVIA Vp 46), but it will not restore the current visual amenity and in places the mitigation planting in itself will restrict open views (e.g., LVIA Vp 11). In some cases, such as at the Limekilns, where elevated views across the site are possible, it will not be possible to screen the development with mitigation planting (e.g., LVIA Vp 38).

11 Submitted Landscape and Visual Impact Assessment

Introduction

- 11.1 The DCO application is supported by an Environment Statement (ES) which includes a Landscape and Visual Impact Assessment (LVIA) in Chapter 10 (APP-042).
- 11.2 The process orientated nature of the LVIA creates complexity, length and a level of repetition which buries key judgements. For example, across all judgements, including different stages of development for the same receptor, there are 22 occurrences of a major adverse effect versus 282 occurrences of effects that are deemed to be either negligible or neutral⁶⁸, and therefore unimportant. In the context of so many unimportant judgements, important judgements are diluted. The high number of unimportant judgements is due to the number of assessments undertaken. For example, the assessment of effects for Sunnica East Site A includes 12 different landscape receptors and 18 different visual receptors. For each receptor there is an assessment at construction, year 1, year 15, and decommissioning. In addition to this assessment, there are assessments for all other parts of the development (including Sunnica East Site B, Sunnica West A, Sunnica West B and Burwell). There is also a 'combined' assessment for the development overall.

Key Findings

- 11.3 In order to make the key findings of the LVIA more accessible, **Figures 20-24** have been prepared. These figures are colour coded to show judgements relating to the Local Landscape Character Areas (LLCA) which are identified and described in the LVIA and used as receptors in the assessment of landscape effects. The LLCAs are considered to be the most important/ relevant landscape receptors, as they include the site and its context, similar to the approach undertaken in this review.
- 11.4 The figures show the sensitivity judgements for each LLCA (**Figure 20**), and the landscape effects on the applicable LLCAs at Year 1 (**Figure 21**) and Year 15 (**Figure 22**). Figures 21 & 22 show the results of the assessments for each of the four key development sites (Sunnica East Sites A & B and Sunnica West Sites A & B). Some LLCAs were used as receptors in different assessments, e.g., LLCA 12 is a receptor in assessments for both Sunnica East Site A and Sunnica East Site B. Where there is a difference in the level of effect, the map has

⁶⁸ ES Chapter 10 LVIA Appendix 10G (APP-106)

been shaded to show the greatest level of effect, regardless of which site assessment it was from.

11.5 The most relevant LLCAs to the four key development sites considered in this review are:

- LLCA 11 (Includes Sunnica East Site A and context)
- LLCA 13 (Includes Sunnica East Site B and context)
- LLCA 24 (Includes Sunnica East Site A & Sunnica East Site B and context)
- LLCA 26 (Includes Limekilns and context)
- LLCA 23B (Includes Chippenham Park)

11.6 **Figure 20** shows that the LVIA concluded all of the above LLCAs, except LLCA 23B, have medium sensitivity to the changes being proposed. This is considered to be an underestimation. The LVIA has underestimated the sensitivity of the local landscape, in part due to an underestimation of landscape value. The LVIA has underestimated landscape value as it has not followed best practice guidance with regards to the assessment of landscape value as set out (previously) in GLVIA3 or in Technical Guidance Note 02/21 on Assessing landscape value outside national designations prepared by the Landscape Institute. In particular, the LVIA has not considered all of the factors that should be considered when identifying landscape value (example below).

11.7 Having departed from best practice, the value of key receptors has been underestimated. The value judgements for the above LLCAs are given in the LVIA as follows⁶⁹.

- LLCA 11 (Includes Sunnica East Site A and context) - Low Value
- LLCA 13 (Includes Sunnica East Site B and context) - Medium Value
- LLCA 24 (Includes Sunnica East Site A & Sunnica East Site B and context) - Low Value
- LLCA 26 (Includes Limekilns and context) - Medium Value
- LLCA 23B (Includes Chippenham Park) - High Value

11.8 The judgement that LLCA 26, which includes the Limekilns Gallops as well as other gallops (e.g., Waterhall Gallops, Godolphin Gallops), has medium value demonstrates a lack of consideration for the landscape factors which are valued. For example, there is no consideration of the rarity or the cultural importance of the Limekilns Gallops. As the LVIA has failed to accurately identify the value of key receptors, including the Limekilns Gallops, there is no consideration of potential impacts on that value.

⁶⁹ ES Appendix 10E: Local Landscape Character Areas (APP-104)

- 11.9 Despite underestimating the level of value and sensitivity of the LLCAs, the LVIA concludes that LLCA 13 (in which Sunnica East Site B is located) and LLCA 24 (in which Sunnica East Site A & Sunnica East Site B are located) would experience a **major adverse** landscape effect at Year 1 (**Figure 21**). This is the highest level of effect.
- 11.10 Whilst it is agreed that the landscape around Sunnica West Site A would experience a major adverse effect, it is unclear how the LVIA reached this conclusion as:
- It found that LLCA 24 has a medium sensitivity and medium magnitude of change, which would suggest that the effect should have been moderate adverse.
- 11.11 **Figure 21** shows that while the LVIA acknowledged that LLCA 13 and LLCA 24 would experience major adverse effects as a result of the development, it concluded that the landscape in which Sunnica East Site A is located (LLCA 11) would only experience a **minor adverse** effect at Year 1. This is despite:
- Having the same judgements of medium sensitivity and medium magnitude of change as LLCA 24 above, which resulted in major adverse effects.
 - Openness being an intrinsic characteristic of LLCA 11, and where that openness will be lost.
- 11.12 The finding that LLCA 11 would experience a minor adverse effect is illustrative of the LVIA's failure to identify the most valuable factors within the landscape, and therefore to adequately assess the impact on these factors. It also demonstrates a departure from its own methodology, without explanation.
- 11.13 **Figure 21** also shows that the LVIA concluded that the Limekilns (LLCA 26) and Chippenham Park (LLCA 23B) would only experience a minor adverse effect at Year 1, despite their settings being dominated by electrical development.
- 11.14 **Figure 22** shows the effects on LLCAs in Year 15. It shows that despite the mitigation proposals included in the OLEMP (APP-108), the effect on LLCA 26 (Limekilns) & LLCA 11 (Sunnica East Site A) would be unchanged and would remain at minor adverse. Whilst the level of effect is disputed, it is agreed that the proposals in the OLEMP will not mitigate the effects on either the Limekilns or the landscape around Isleham, even in the long term.

- 11.15 The LVIA considers that the effects would reduce from major adverse to moderate adverse, which is still significant, in LLCA 13 (Sunnica East Site B) and LLCA 24 (Sunnica East Site A & Sunnica East Site B) by Year 15. It is possible that one of the reasons why the LVIA has underestimated the level of effect at Year 15 and overestimated the effectiveness of the mitigation measures, is that all of the judgements for Year 15 effects were based on a summer and therefore best-case scenario in terms of the effectiveness of mitigation. The LVIA has not considered the landscape impacts in wintertime⁷⁰. This fundamental failure in approach is replicated in the approach to the photomontages, which, as detailed below, do not include any images showing the mitigation planting in winter, even when the baseline images were taken in winter.
- 11.16 The LVIA does contain a 'combined' assessment a summary of which can be found in Tables 10-21 and 10-26. This is the assessment of all aspects of the development. However, there is no difference between this assessment and the assessments of effects for the individual sites. This indicates that the LVIA has failed to properly understand the cumulative impacts of the development overall. LLCA 24 is a good example of this, as it includes two separate sites (Sunnica West Sites A and B). In addition, several receptors that were considered in the individual site assessments, and that would also be affected by the development overall, have been excluded from the combined assessment without explanation e.g., LLCA 13. This LLCA includes all of Sunnica East Site B and adjoins Sunnica East Site A, which will be visible from the edge of LLCA 13. The local landscape in LLCA 13 would experience the type of cumulative impacts described in chapter 9, including a constant awareness of solar PV development when travelling through the countryside. BESS development
- 11.17 There is insufficient information within the LVIA (APP-042) regarding the BESS development. This has meant that the assessment of effects in the LVIA of this component is inadequate. This has been compounded by the decision to include the substation equipment previously located at Burwell within the BESS, substation compounds. Insufficient detail regarding the BESS infrastructure includes:
- The number and layout of the battery storage units (containers) and battery stations (may also be containers). See chapter 4 of this report for this information.
 - Different design approaches e.g., how the containers / infrastructure might be laid out to minimise landscape and visual impacts. This is despite the applicant's stated ambition to minimise visual clutter (Section 1.6 of the OLEMP, APP-108) and the guidance in the Suffolk Landscape Assessment relating to the need to explore

⁷⁰ ES Chapter 10 LVIA Appendix 10G (APP-106)

the ‘correct orientation’ of buildings such to minimise their visual impacts (see Chapter 6).

- Any detailed information on the electrical structures within the new substations proposed to replace the extension at Burwell.

Photomontages (ES Chapter 10 Figures 10-90 to 10-102)

- 11.18 Photomontages have been prepared to illustrate what the development will look like at a number of key locations at Year 1 and Year 15. These are included as ES Chapter 10 Figures 10-90 to 10-102 (APP-220 to APP-232).
- 11.19 The photomontages submitted with the ES underrepresent the impact of the development, due to:
- The scale of the development is underestimated when the photomontages are printed at the intended paper size (A1). When comparing the printed visualisations with views on the ground, it is evident that the photomontages wrongly depict a smaller scale version of the landscape and the proposed development than what appears/ would appear in reality. This means that the photomontages cannot be relied upon to provide an accurate representation of the development proposals. This issue was highlighted during ASI 2.
 - Inappropriate selection of the location and viewing direction for some of the photomontages, key examples include:
 - Photomontage Vp 18 (APP-226). This Vp is directed away from the visually intrusive BESS development, which is located in the opposite direction on the other side of the road. In that direction, the BESS development would be visible.
 - Photomontage Vp 41 (APP-231). The development will not be visible from this location, but it will be visible from further along the PRoW. This Vp should therefore not have been included instead of a viewpoint further along the PRoW, from where the development would be visible.
 - Insufficient number of photomontages leading to omission of key views. While the inclusion of 12 photomontages might seem appropriate for a single development, the order limits cover almost 1,000ha, and consist of several substantial dispersed developments. There is only 1 photomontage for the entire Sunnica West Site B development (66ha), which will have impacts at more than one location, e.g., PRoW 204/1 and Chippenham Road.

- Inappropriate depiction of the BESS infrastructure as a solid green block e.g., Photomontage Vps 12A & 33 (APP-223 & APP-229). This misses one of the most harmful aspects of this development, which is the visual clutter that the BESS infrastructure would introduce.
- Awkward presentation of the images as long panoramas at A1. This makes it difficult to read them on screen and to get an accurate sense of scale.
- Compounding the point above is the presentation of panoramas across two separate pages, making it even more difficult to flick between the images and to understand the changes at different stages of the development. A consistent field of view presented on a single page should have been used for all viewpoints.
- Where panoramas have been included on a single page e.g., for Photomontage Vp 38 (APP-230), there are only images for Year 1 and Year 15. There is no baseline view for comparison.
- The heights and growth rates for planting within the photomontages is not specified in the LVIA. However, the height of planting depicted in some of the photomontages is considered to be optimistic, e.g., the proposed woodland planting along the northern edge of Parcel W03 which is shown as being established at Year 1 in Photomontage Vp 38 (APP-230).
- Absence of winter photomontages. There are no images which show the impact of the development when the mitigation planting is not in leaf. This is due to a lack of winter baseline photography (e.g., Photomontage Vps 5, 15A, 38; APP 220, APP-225, APP 230) and, where the baseline photograph was taken in winter, the proposed planting, which is primarily deciduous, is shown in full leaf (e.g., Photomontage Vps 11, 12A, 18).

Conclusions

11.20 The DCO application is supported by an Environment Statement (ES) which includes a Landscape and Visual Impact Assessment in Chapter 10 (APP-042). The process orientated nature of the LVIA creates complexity, length and a level of repetition which buries key judgements. For example, across all judgements, there are 22 occurrences of a major adverse effect versus 282 occurrences of effects that are deemed to be either negligible or neutral⁷¹, and therefore unimportant.

⁷¹ ES Chapter 10 LVIA Appendix 10G (APP-106)

- 11.21 Notwithstanding the above, the LVIA finds that the local landscape in which Sunnica East Site B is located (LLCA 13) and in which Sunnica East Site A & Sunnica East Site B are located (LLCA 24) would experience a **major adverse** landscape effect at Year 1 (**Figure 21**). This is the highest level of effect.
- 11.22 Elsewhere the LVIA has underestimated the level of effects and overestimated the effectiveness of mitigation planting e.g., in the finding that the landscape in which Sunnica East Site A is located (LLCA 11) would only experience a **minor adverse** effect at Year 1.
- 11.23 The underestimation of effects in the LVIA is due to:
- Methodological issues with the LVIA, including a failure to follow best practice guidance.
 - Failure to identify the most valuable aspects of the landscape, and therefore to adequately assess the impact on these aspects.
 - No consideration of the landscape impacts in wintertime.
 - Failure to properly consider the cumulative (or ‘combined’) impacts of the development overall.
 - Insufficient information regarding the BESS infrastructure, which has meant that the assessment of effects in the LVIA of this component is inadequate.
- 11.24 The photomontages submitted with the ES underrepresent the impact of the development. This is due to:
- The scale of the development is underestimated when the photomontages are printed at the intended paper size (A1).
 - Inappropriate selection of the location and viewing direction of photomontages.
 - Insufficient number of photomontages leading to omission of key views.
 - Inappropriate depiction of the BESS infrastructure.
 - The awkward presentation of the images which makes it difficult to make a direct comparison between the baseline images and the different stages of the development.
 - The failure to present photomontages consistently on a single page and with baseline views.
 - The optimistic growth rates used for the mitigation planting shown.
 - Absence of photomontages which show the impact of the development when the mitigation planting is not in leaf.

12 Compliance with Landscape Related Planning Policy

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

- 12.1 The development is not ‘*sensitive to place*⁷²’ and the mitigation measures proposed in the OLEMP (APP-108) will do little to improve this because the fundamental issue relates to the location of the key development sites. The site selection process was flawed and failed to take into account the high value aspects of the landscape, the strong sense of place and local distinctiveness. The development does not show ‘*good design in terms of siting relative to existing landscape character, landform and vegetation.*’⁷³

NPPF

- 12.2 The proposals should be considered to be inconsistent with the NPPF, because:
- They fail to recognise the intrinsic character and beauty of the countryside; and
 - Development in Sunnica West Site A would not protect nor enhance the valued landscape, which includes the Limekilns and Chippenham Park.

Development Plan - West Suffolk Council

- 12.3 Due to its location and scale, the development would result in significant, long-term harm to the character of the landscape, including the setting of settlements. It would fail to protect or enhance this character and is therefore not consistent with Policy DM13.

Development Plan - East Cambridgeshire District Council

- 12.4 The development is not consistent with Policy ENV1 as, due to its location and scale, it would fail to protect, conserve, or enhance:
- *Space between settlements, and their wider landscape setting*
 - *Key views into and out of settlements*
 - *The unspoilt nature and tranquility of the area*

⁷² EN-1 4.5.1

⁷³ EN-1 4.5.2

Conclusion

- 12.5 Overall, the proposals are considered to conflict with the relevant national policy statements and national and local landscape policies.

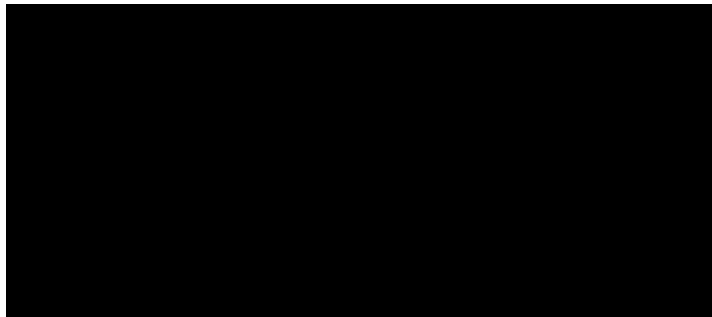


Michelle Bolger Expert Landscape Consultancy Ltd

Company Registration No. 09809868

VAT Registration No. 224 2598 12

Registered Office: 35 Pickford Road Bexleyheath DA7 4AG



Appendix 1 to
Landscape and Visual Issues

Relating to the
Sunnica Energy Farm

Prepared for
Say No to Sunnica

LPAs
**West Suffolk Council &
East Cambridgeshire District Council**

PINS Reference
EN010106

November 2022

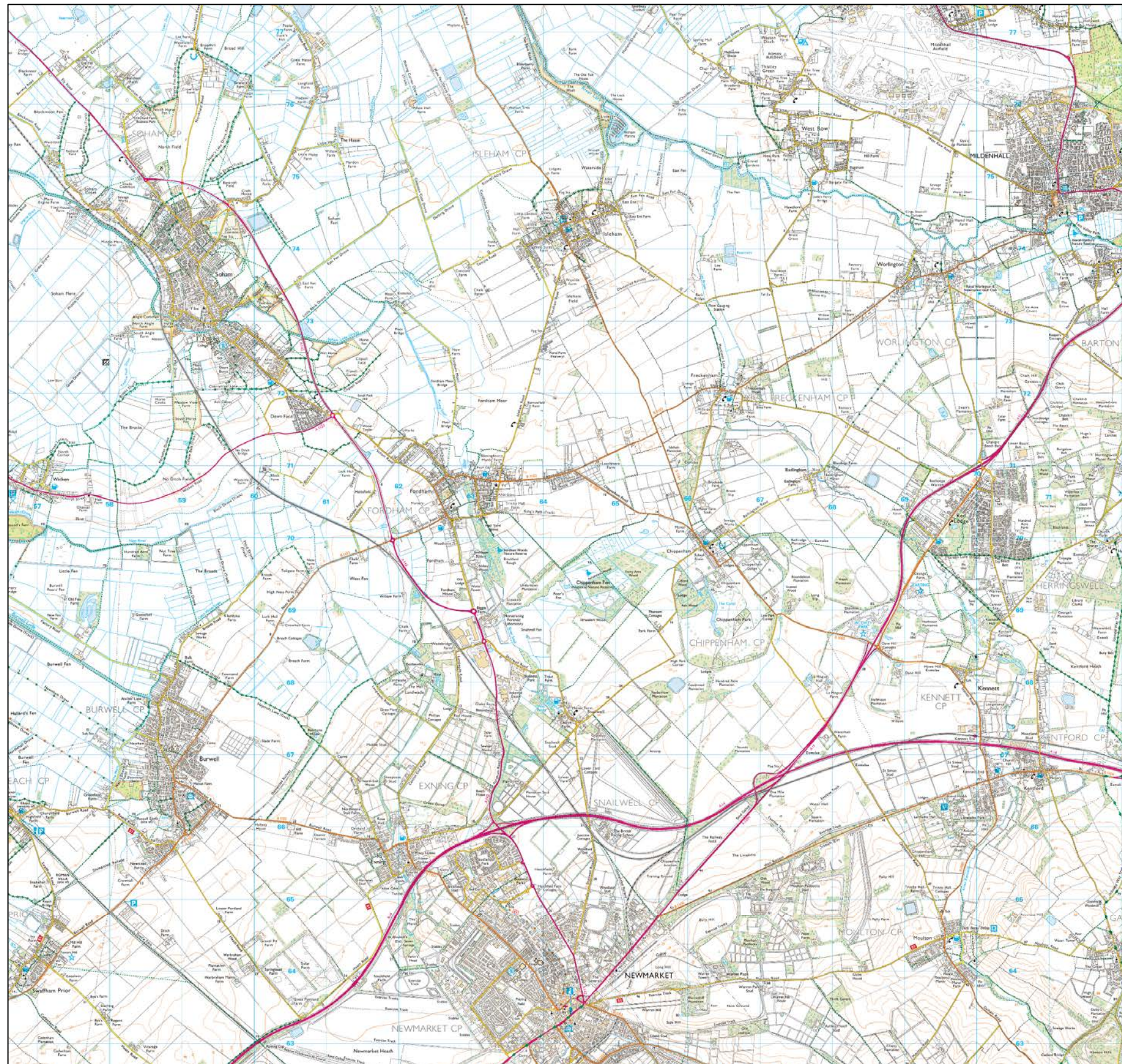


Figure 1	Order Limits
Figure 1.1	Unconstrained Land within Order Limits
Figure 2	Development Areas
Figure 3	Designations
Figure 4	Public Rights of Way
Figure 5	Topography
Figure 6	National Character Areas
Figure 7	East of England Landscape Framework
Figure 8	Suffolk Landscape Character Assessment
Figure 9	Cambridgeshire Green Infrastructure Strategy
Figure 10	Freckenham Neighbourhood Plan Landscape Character
Figure 11	Freckenham Neighbourhood Plan Visual Sensitivity
Figure 12	Paintings
Figure 13-19	View from Limekilns - Photographs
Figure 20	LVIA Landscape Sensitivity
Figure 20.1	MBELC Landscape Sensitivity
Figure 21	LVIA Effects Year 1
Figure 21.1	MBELC Effects Year 1
Figure 22	LVIA Landscape Effects Year 15
Figure 22.1	MBELC Landscape Effects Year 15
Figure 23	MBELC Combined Landscape Effects Year 1
Figure 24	MBELC Combined Landscape Effects Year 15
Figure 25	Roads and PRow significantly Affected by Development Year 1
Figure 26	Roads and PRow significantly Affected by Development Year 15

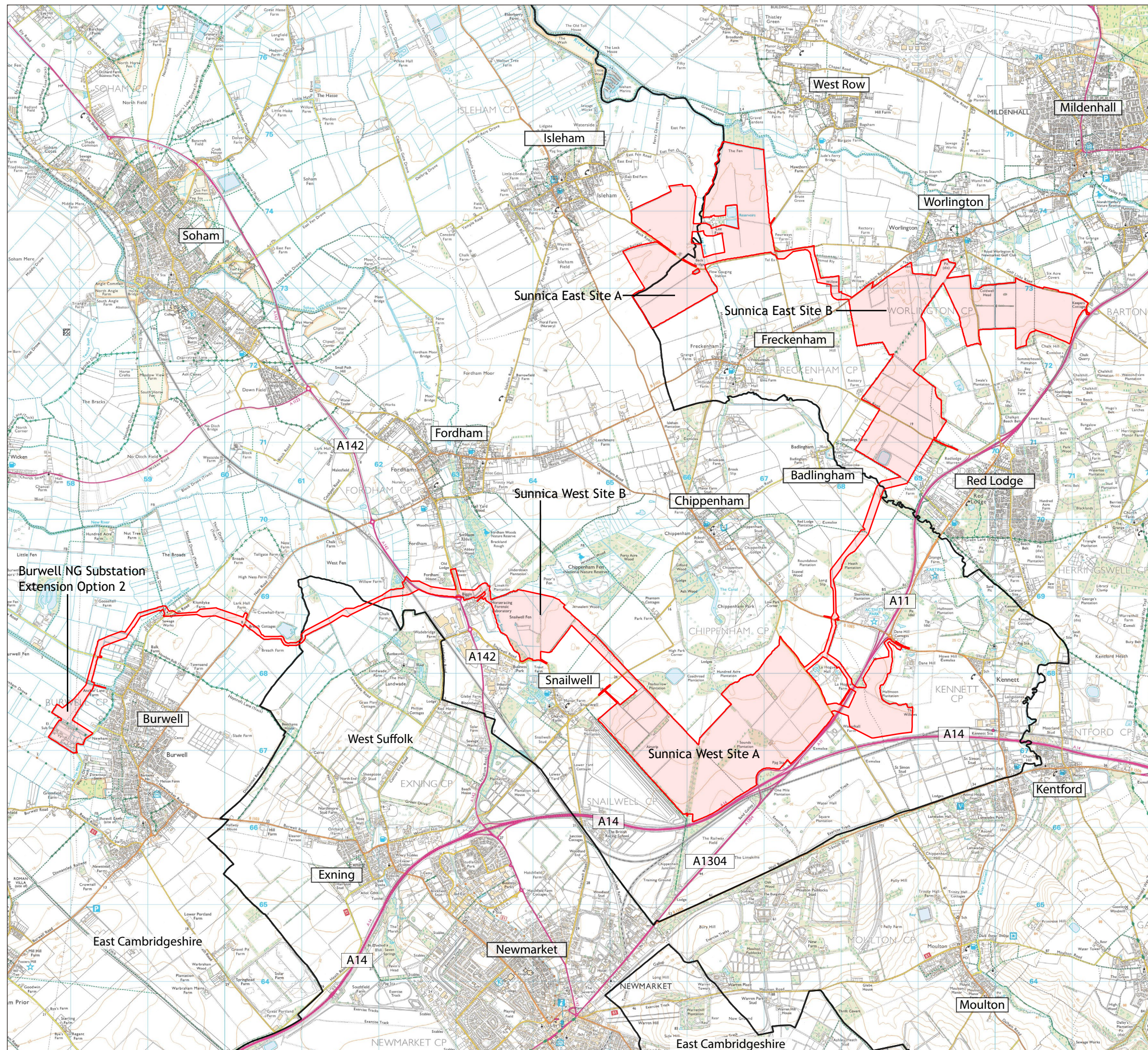


FIGURE 1
Order Limits



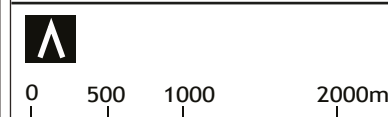
PROJECT
1186
Sunnica PVD

CLIENT
Say No To Sunnica

DATE
September 2022

Legend

- Order Limits
- County Boundary



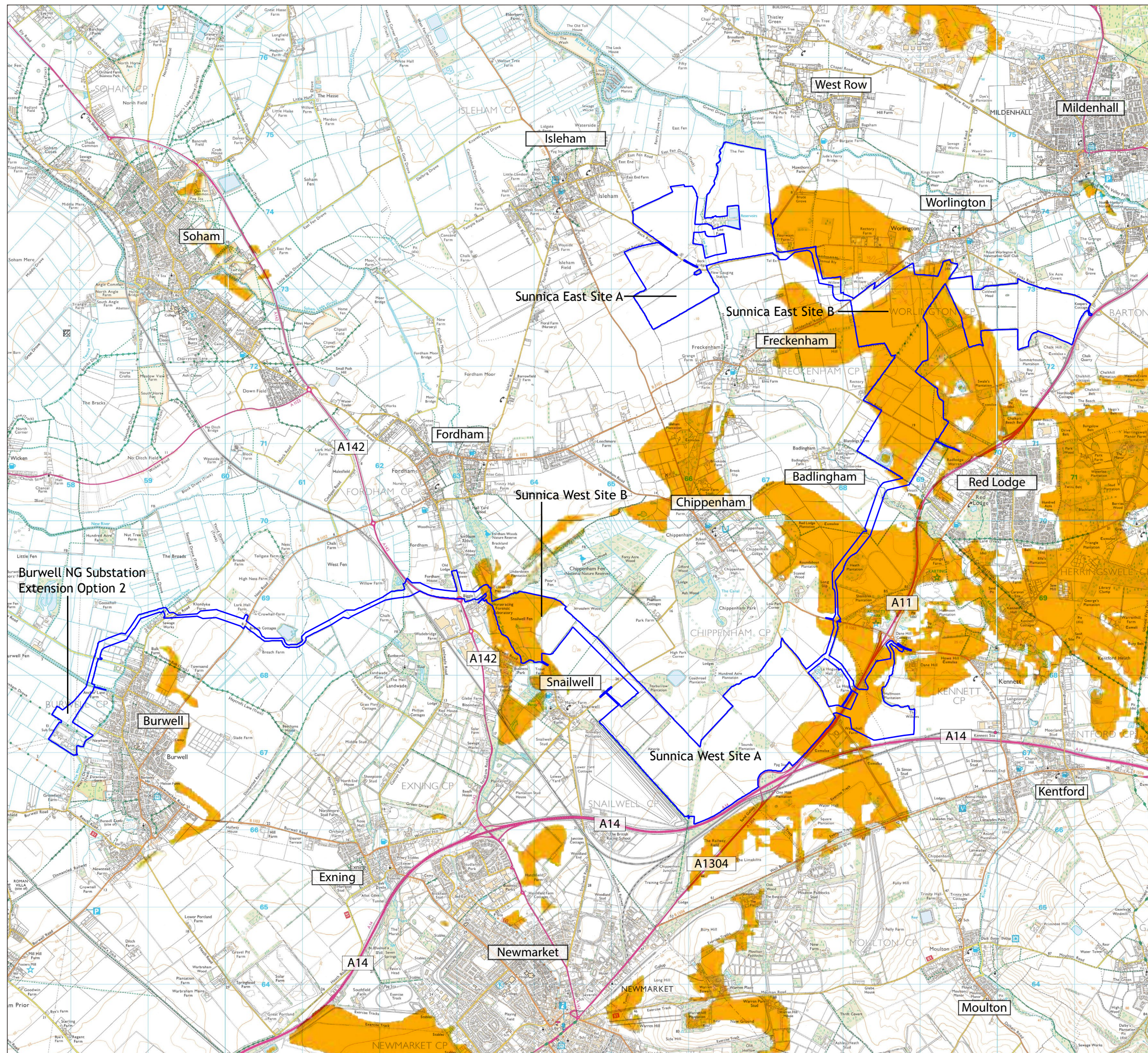


FIGURE 1.1
*Unconstrained Land within
Order Limits*



PROJECT
1186
Sunnica PVD


CLIENT
Say No To Sunnica

DATE
September 2022

Legend

 Order Limits

APP-054 6.2 Environmental Statement -
Appendix 4A - Alternative Sites Assessment
Figure 5 Unconstrained Land

 Unconstrained Land from Stage 2 Output
with $\leq 3\%$ Gradient Topography

APP-054 6.2 Environmental Statement - Appendix 4A -
Alternative Sites Assessment (ASA), Page-i describes
Unconstrained Land as:

*‘Stage 2 of the ASA has mapped planning and
environmental constraints within the
area of search using GIS. This has included the
identification of built up urban areas,
agricultural land classifications, designated Green
Belt land and designated international
and national ecological and geological sites. There
are no Areas of Outstanding Natural
Beauty or National Parks in the area of search.
Through GIS mapping, this stage has
identified the least constrained areas of land within
the area of search.’*



0 500 1000 2000m

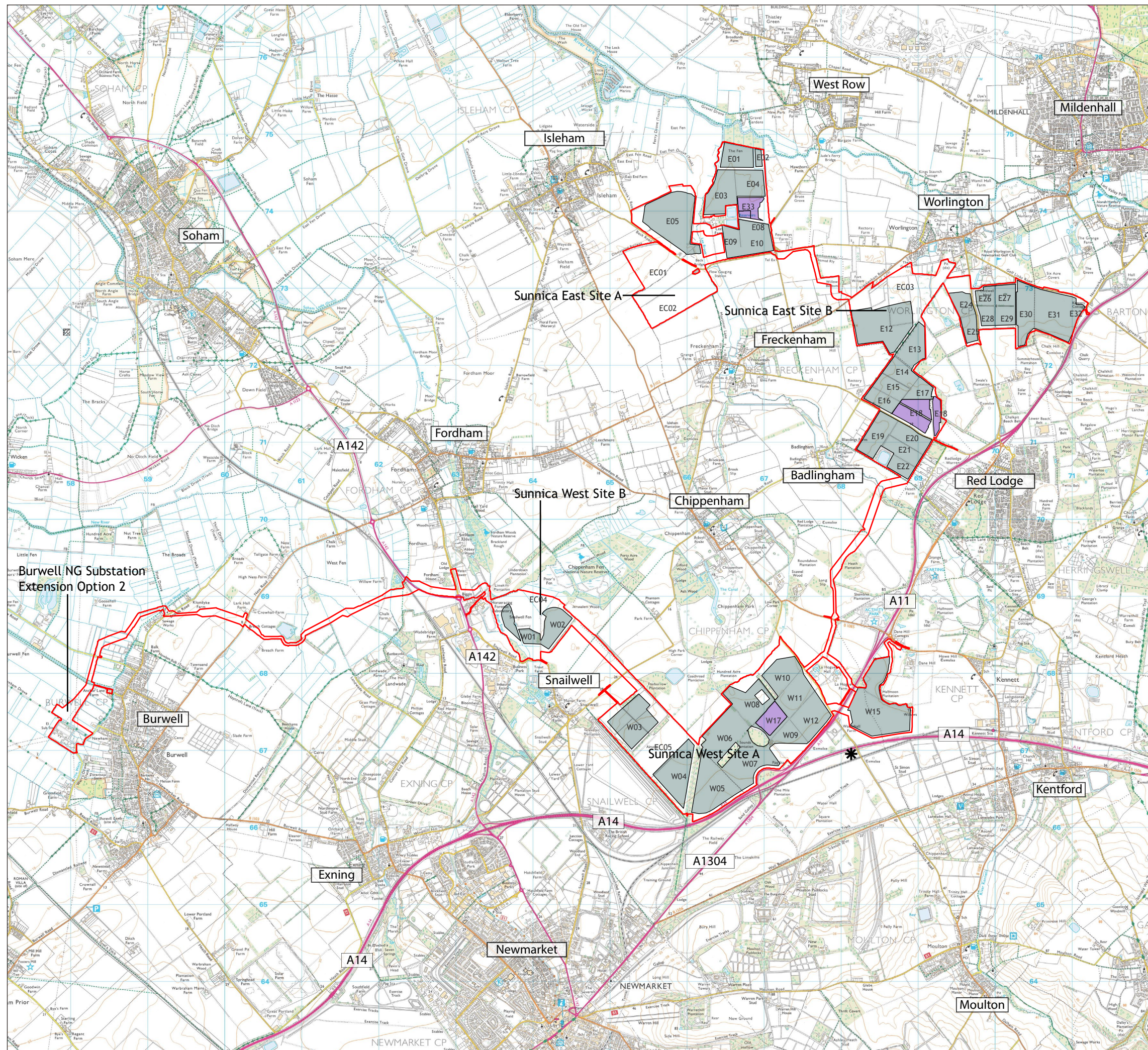


FIGURE 2
Development Areas



PROJECT
1186
Sunnica PVD

CLIENT
Say No To Sunnica

DATE
September 2022

Legend

- Order Limits
- Solar PV Arrays
- BESS, Substations, Compounds
- Barn next to Norwich Road
- E31 Development Parcel Numbers as shown on ES 6.3 Figure 3-1 Sunnica East Parameter Plan and ES 6.3 Figure 3-2 Sunnica West Parameter Plan

Solar PV Arrays, BESS, Substations, Compounds based on LVIA Figure 3-1 Sunnica East Parameter Plan and Figure 3-2 Sunnica West A & B Parameter Plan



0 500 1000 2000m

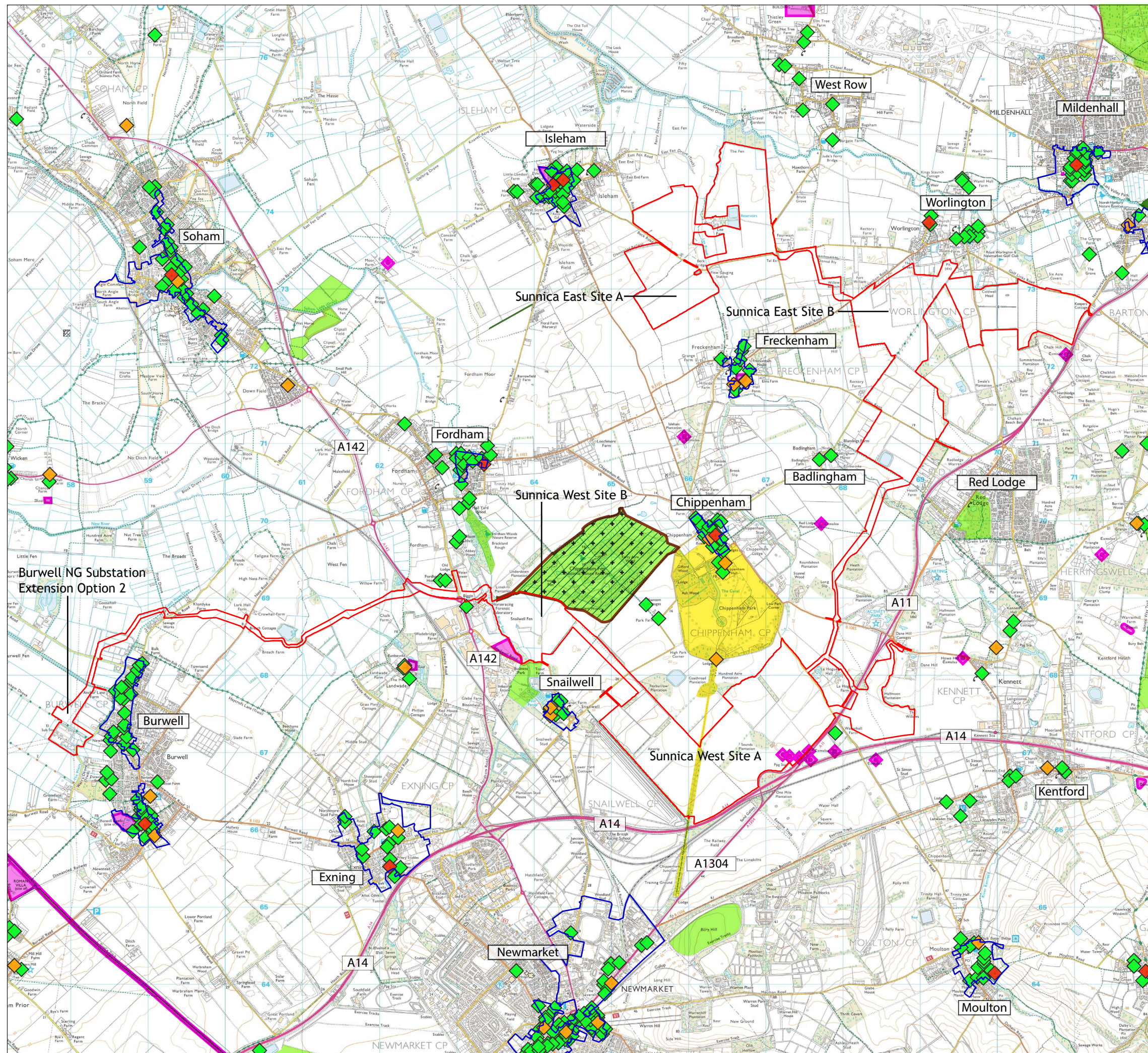


FIGURE 3
Designations



PROJECT
1186
Sunnica PVD

CLIENT
Say No To Sunnica

DATE
September 2022

Legend

- Order Limits
 - Registered Park and Garden (Chippenham)
 - Scheduled Monument
 - SSSI
 - Local Nature Reserve
 - Special Area of Conservation (Fenland)
 - Ramsar Wetland (Chippenham Fen)
 - National Nature Reserve (Chippenham Fen)
 - Conservation Area
- Listed Buildings
- Grade I
 - Grade II*
 - Grade II

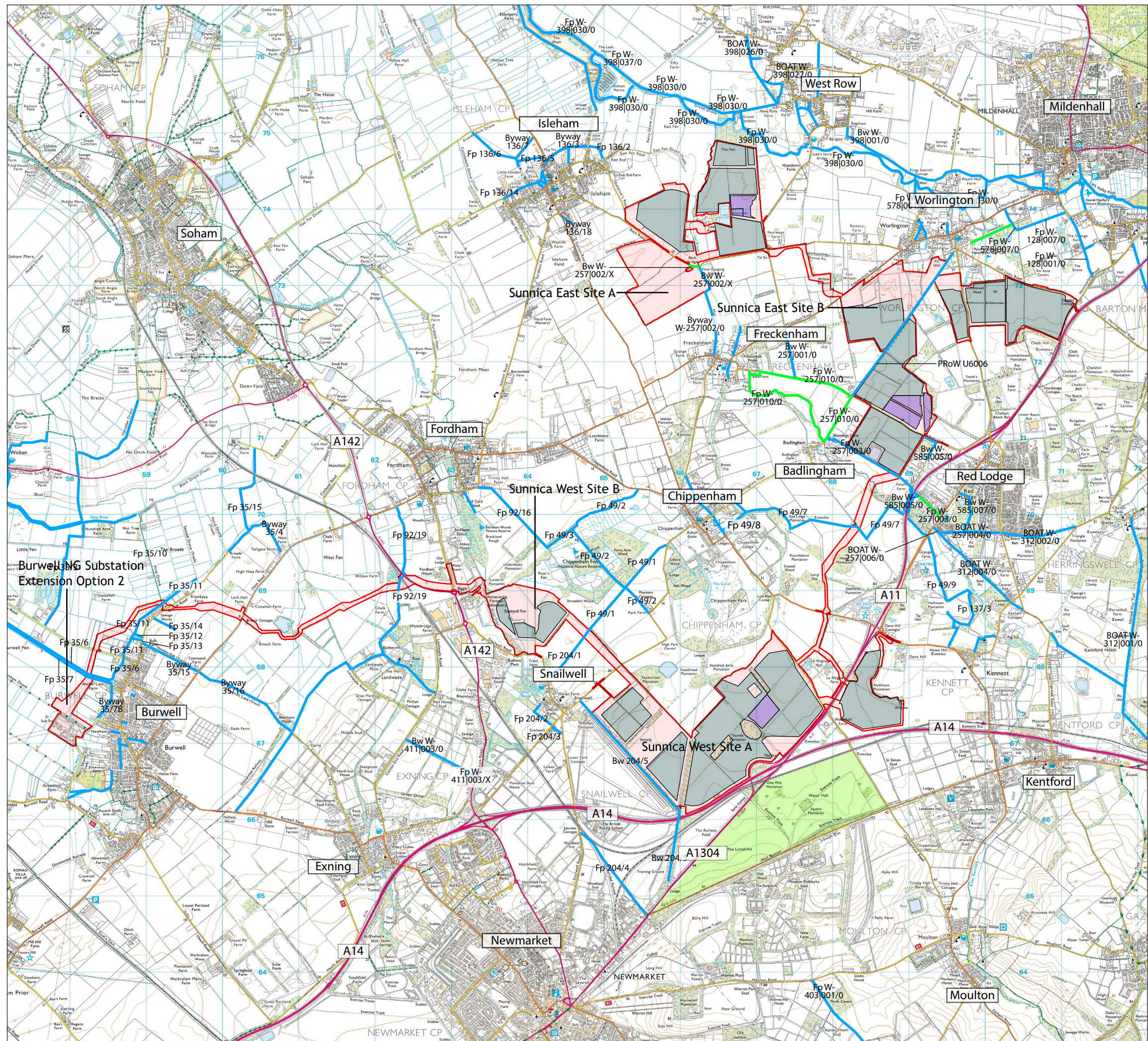


FIGURE 4
Public Rights of Way



PROJECT
1186
Sunnica PVD

CLIENT
Say No To Sunnica

DATE
September 2022

Legend

- Order Limits
- Solar PV Arrays
- BESS, Substations, Compounds
- Limekilns and Water Hall
- PRoW shown on OS mapping
- PRoW within West Suffolk shown on LVIA Figure 10-4 that are not currently shown on OS mapping. Those PRoW with a number are included in Suffolk County Council's GIS PRoW GIS dataset.
- E31 Development Parcel Numbers as shown on ES 6.3 Figure 3-1 Sunnica East Parameter Plan and ES 6.3 Figure 3-2 Sunnica West Parameter Plan

PRoW numbers in West Suffolk have been derived from a GIS dataset provided by Suffolk County Council under Open Government Licence v3.0. via www.rowmaps.com.

PRoW numbers in East Cambridgeshire have been obtained from Cambridgeshire County Council's online Definitive Map and Statement.



0 500 1000 2000m

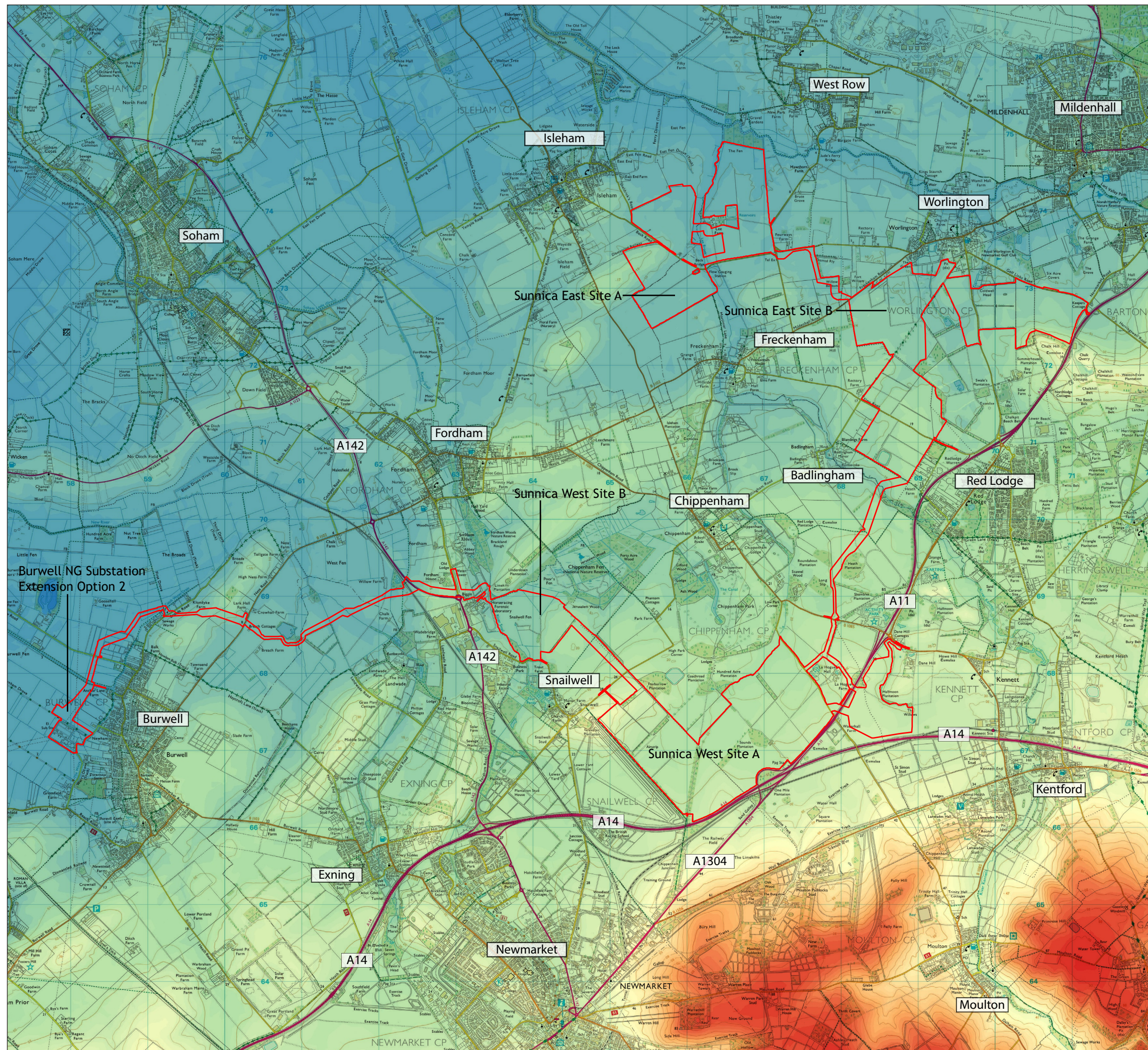


FIGURE 5
Topography



PROJECT
1186
Sunnica PVD

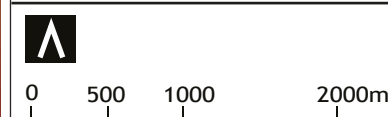
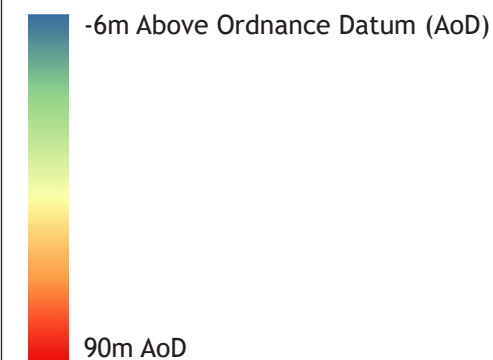
CLIENT
Say No To Sunnica

DATE
September 2022

Legend

 Order Limits

Topography
(Colour bands represent 2m contour intervals)



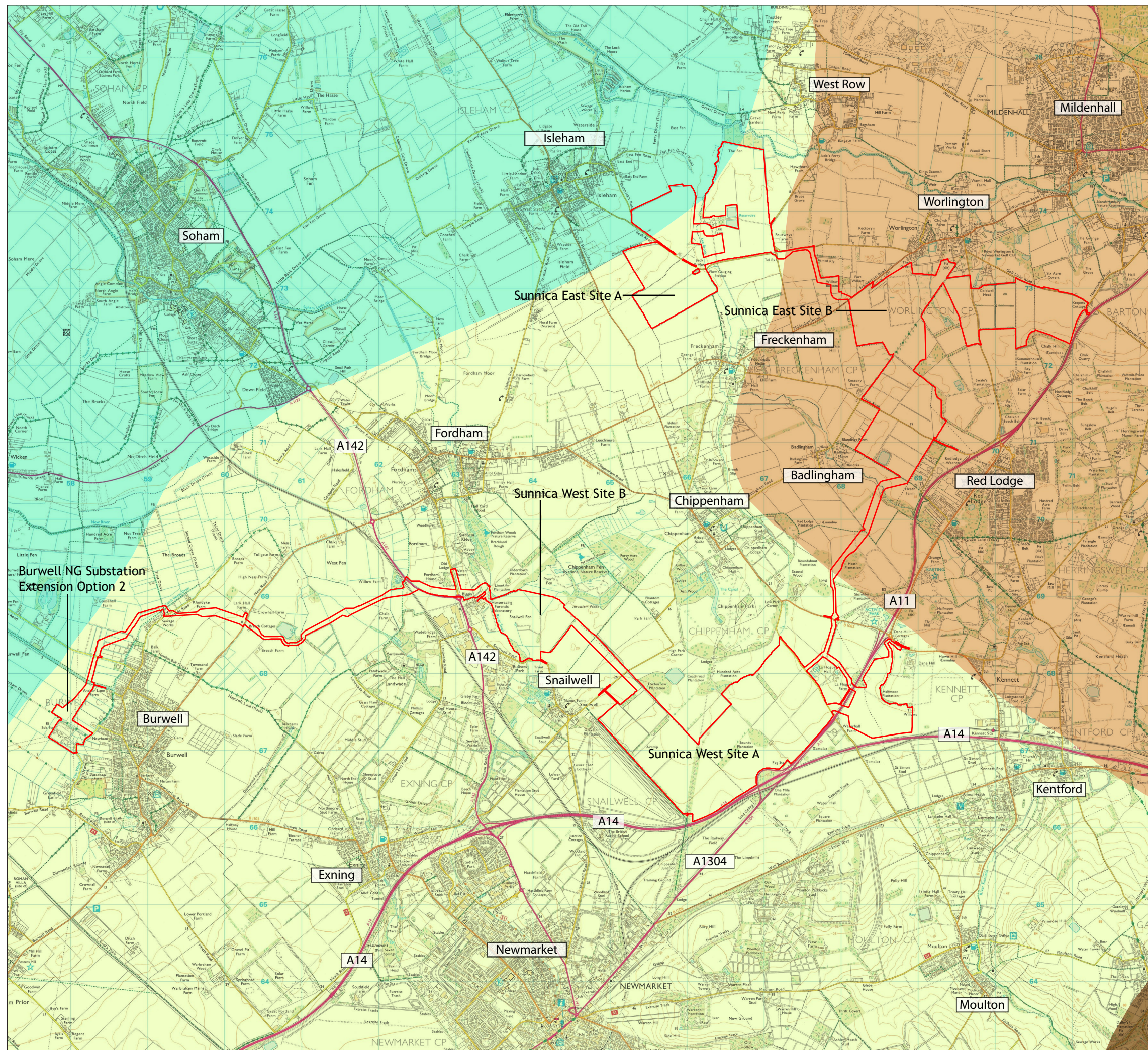


FIGURE 6
National Character Areas



PROJECT
1186
Sunnica PVD

CLIENT
Say No To Sunnica

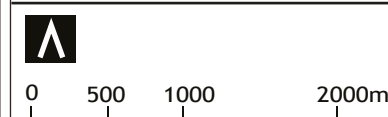
DATE
September 2022

Legend

Order Limits

National Character Areas (NCA)

- NCA 46: The Fens
- NCA 87: East Anglian Chalk
- NCA 85: The Brecks
- NCA 86: South Suffolk and North Essex Clayland



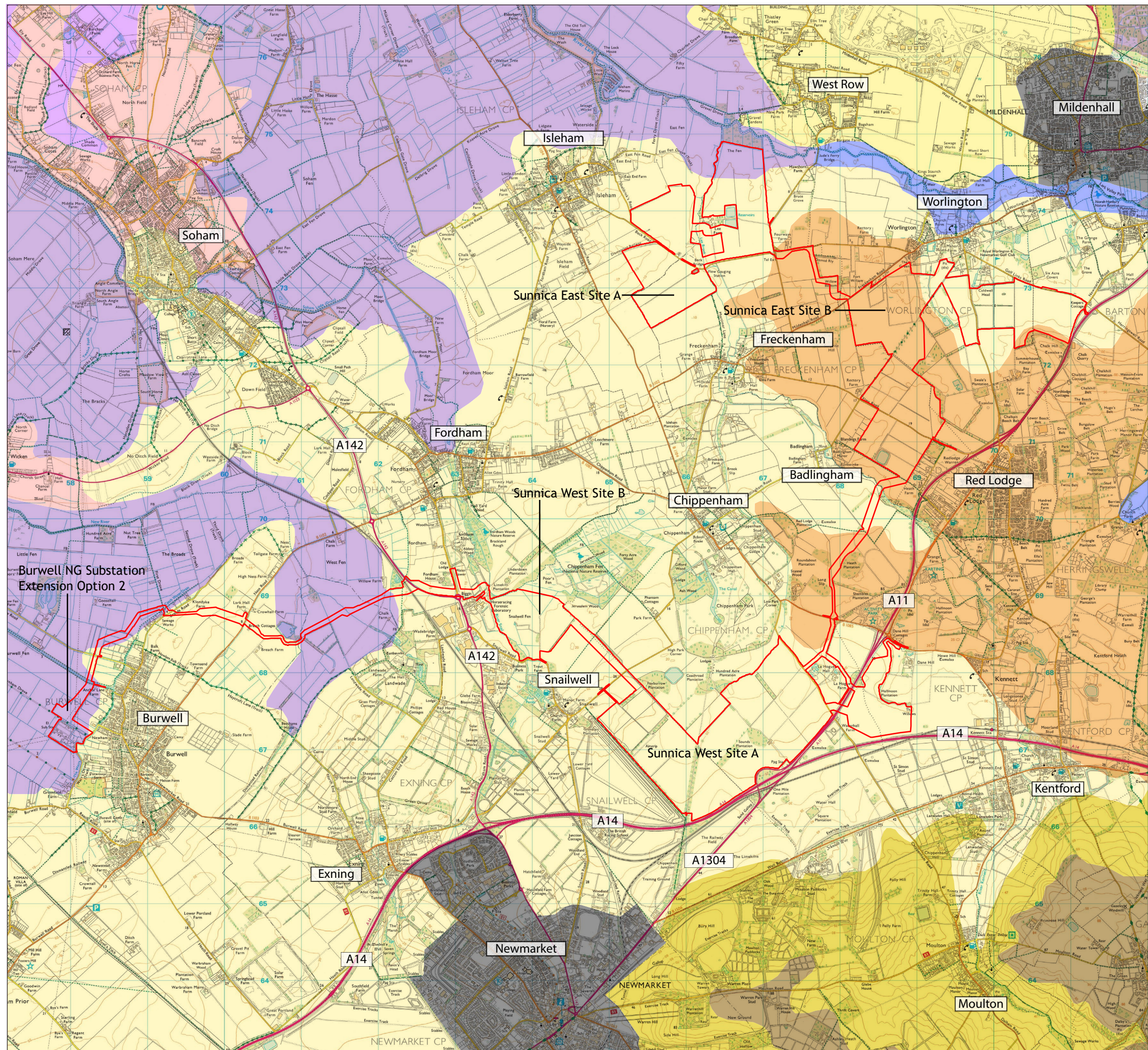


FIGURE 7
*East of England
Landscape Framework*

PROJECT
1186
Sunnica PVD

CLIENT
Say No To Sunnica

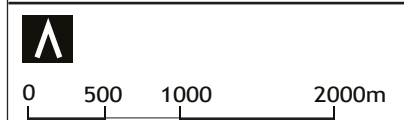
DATE
September 2022

Legend

 Order Limits

**East of England Landscape Framework, 2011
Landscape Character Types (LCT)**

-  Lowland Village Chalklands
-  Forested Estate Sandlands
-  Planned Peat Fen
-  Valley Meadowlands
-  Lowland Village Farmlands
-  Chalk Hills and Scarps
-  Wooded Village Farmlands
-  Urban



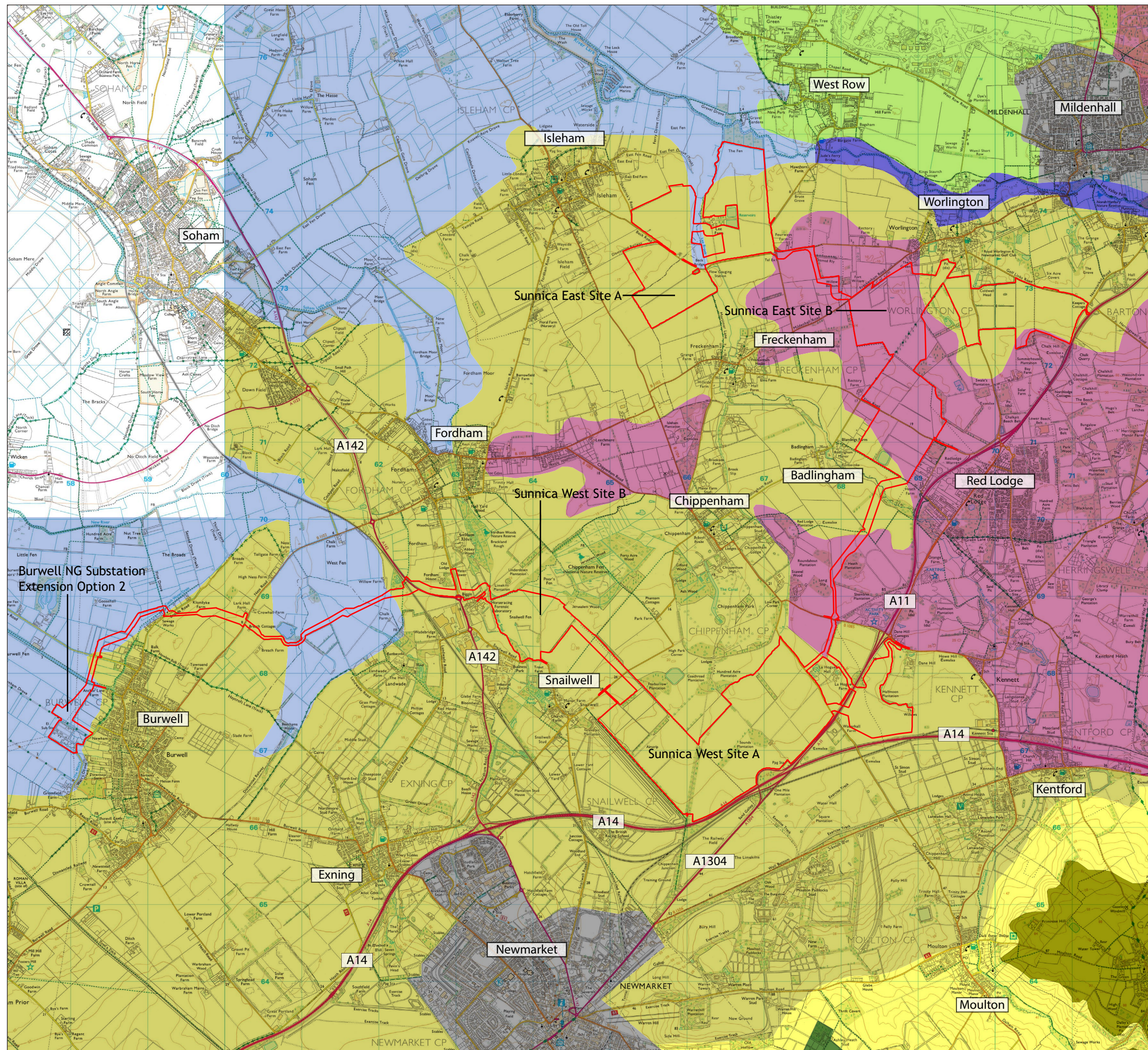


FIGURE 8
Suffolk Landscape Character Assessment



PROJECT
1186
Sunnica PVD
CLIENT
Say No To Sunnica

DATE
September 2022

Legend

Order Limits

Suffolk Landscape Character Assessment, 2008 Landscape Character Types (LCT)

- Rolling Estate Chalklands
- Estate Sandlands
- Wooded Chalk Slopes
- Plateau Estate Farmlands
- Undulating Estate Farmlands
- Settled Fenlands
- Settled Chalklands
- Valley Meadows & Fens
- Urban

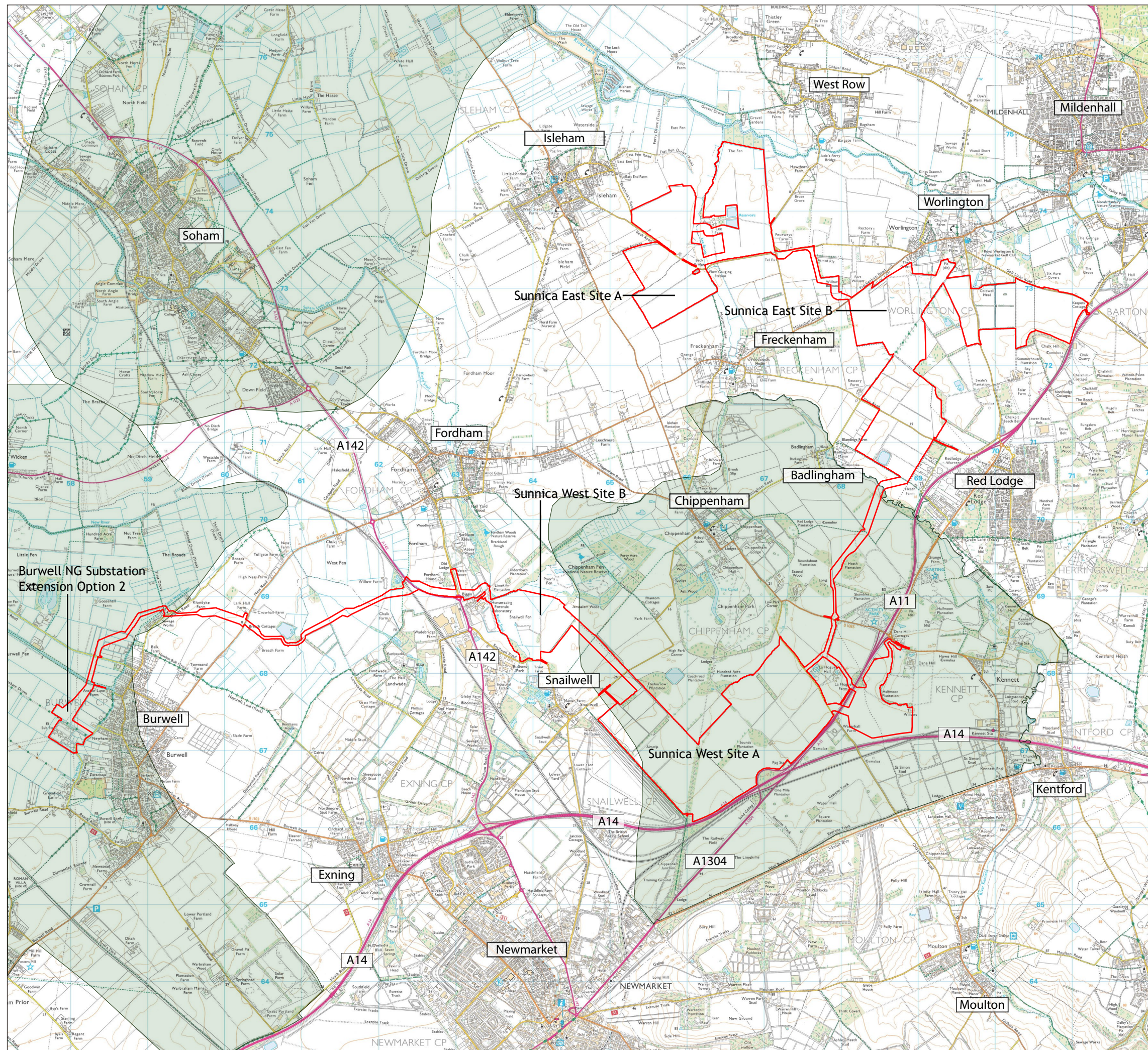


FIGURE 9
*Cambridgeshire
Green Infrastructure Strategy*



PROJECT
1186
Sunnica PVD

CLIENT
Say No To Sunnica

DATE
September 2022

Legend

 Order Limits

Cambridgeshire Green Infrastructure Strategy, 2011

 Strategic Areas

- ④ Eastern Fens and Towns
- ⑤ Chippenham Fen
- ⑥ Cambridge and Surrounding Areas



0 500 1000 2000m

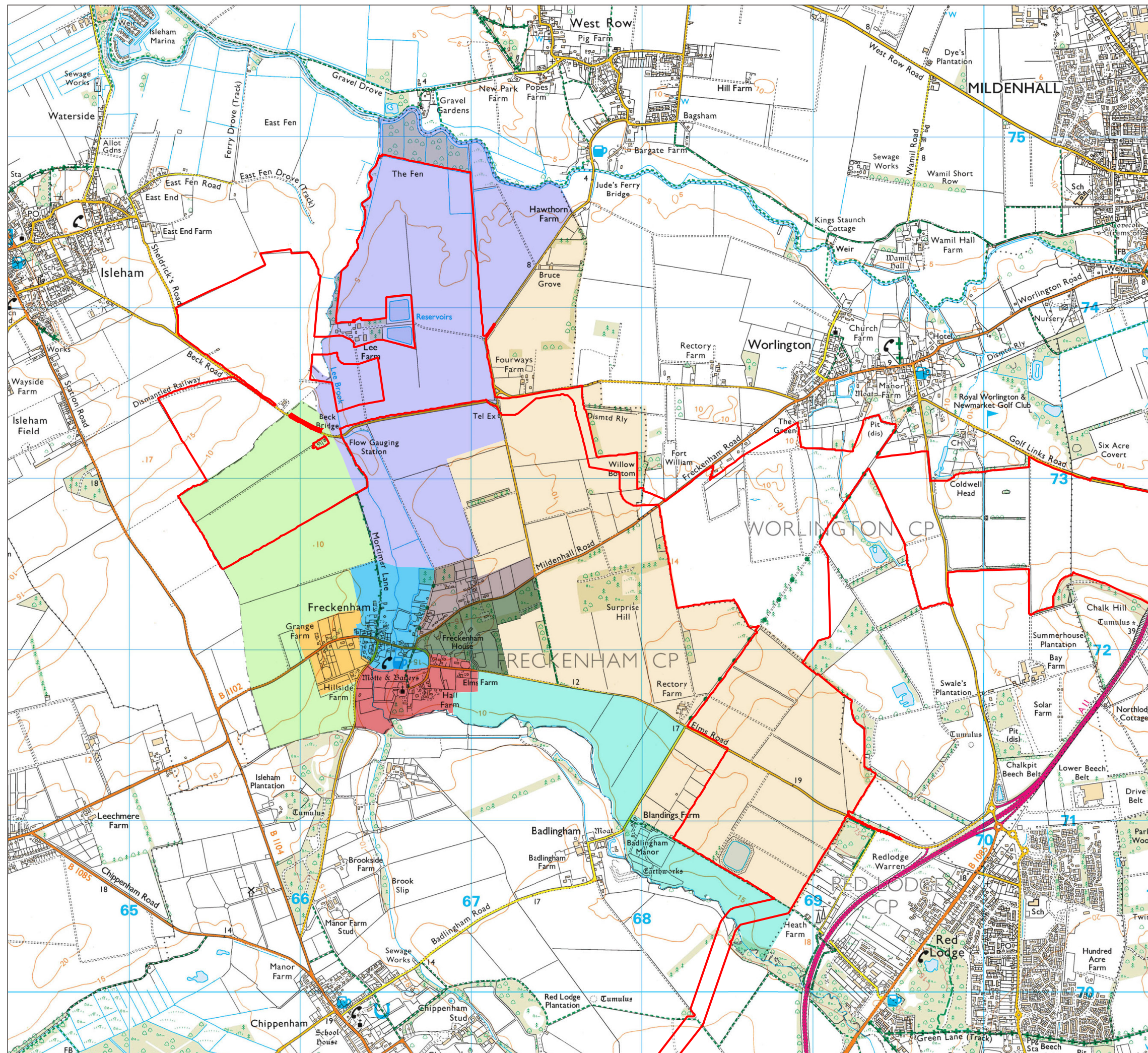


FIGURE 10
Freckenham Neighbourhood Plan
Landscape Character



PROJECT
1186
Sunnica PVD
CLIENT
Say No To Sunnica

DATE
September 2022

Legend

Order Limits

Freckenham Neighbourhood Plan Parish Landscape Study: Character and Sensitivity Appraisal, 2020

Rural Character Areas

- R1 - West
Landscape Value: Modest
Visual Sensitivity: Very High
- R2 - North
Landscape Value: Moderate
Visual Sensitivity: High
- R3 - East
Landscape Value: Moderate
Visual Sensitivity: Moderate
- R4 - South
Landscape Value: High
Visual Sensitivity: Moderate

Village Character Areas

- Area VA - Fordham Road
Landscape Value: Modest
Visual Sensitivity: High
- Area VB - Southern fringes
Landscape Value: High
Visual Sensitivity: Moderate
- Area VC - Heart of village
Landscape Value: High
Visual Sensitivity: Modest
- Area VD - Mildenhall Road
Landscape Value: Moderate
Visual Sensitivity: Low
- Area VE - Elms Road
Landscape Value: Moderate
Visual Sensitivity: Low



0 250 500 1000m

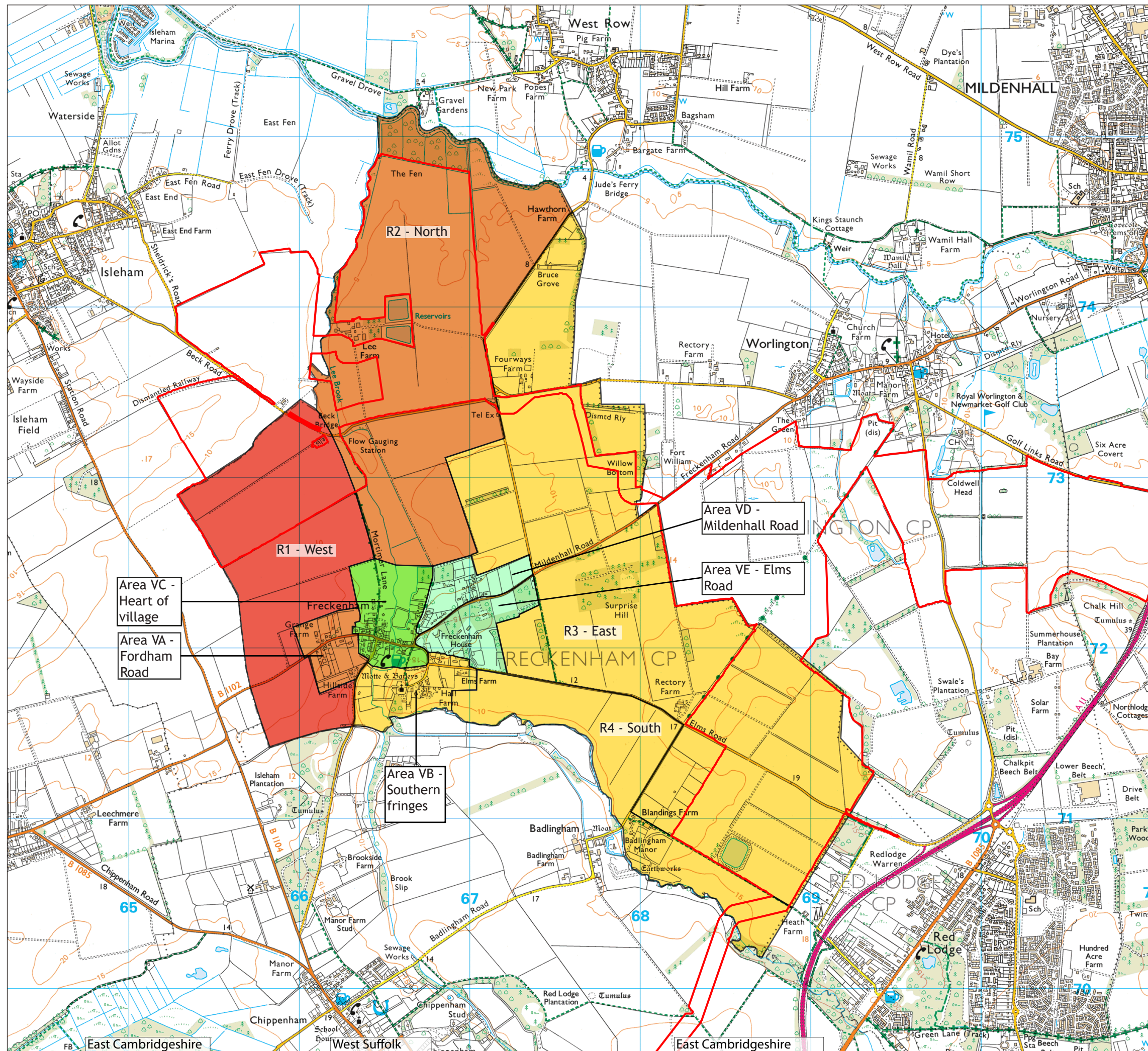


FIGURE 11
Freckenham Neighbourhood Plan
Visual Sensitivity



PROJECT
 1186
 Sunnica PVD
 CLIENT
 Say No To Sunnica

September 2022

Legend

Order Limits

Freckenham Neighbourhood Plan
Parish Landscape Study:
Character and Sensitivity Appraisal, 2020

Visual Sensitivity

- Low
- Modest
- Moderate
- High
- Very High



0 250 500 1000m



acing page 28. A TRIAL. THE LIME KILNS.

A - Artist: Lionel Edwards, Date: 1935



C - Artist: Unknown, Date: Unknown



B - Artist: Allen Sealy, Date: late 19th Century



D - Artist: John Wootton, Date: circa 1720

FIGURE 12 Paintings



PROJECT
1186
Sunnica PVD
CLIENT
Say No To Sunnica

DATE
September 2022

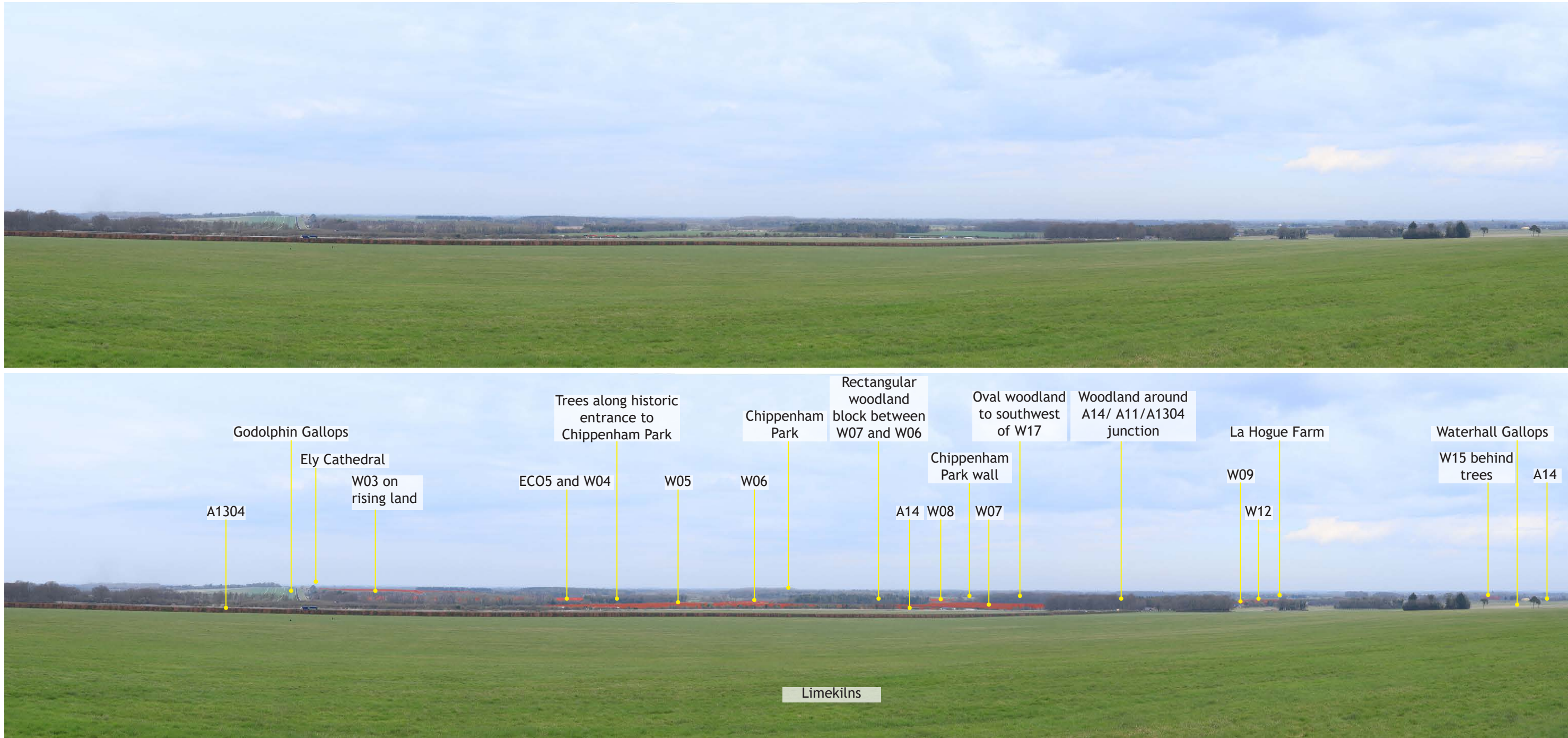
A - From the road to Kentford looking across the Limekilns with the wider countryside north of Newmarket, including fields within the site, visible in the background.

B - This painting is understood to be set within the Limekilns. The setting includes fields within the site. Telegraph poles are those along the old Norwich Road.

C - This painting is understood to be set within the Limekilns. The setting includes fields within the site and the edge of Chippenham Park.

D - The picture is understood to be set on Warren Hill. Like many other paintings from this location, it indicates the importance of the long views over countryside to the north from Newmarket.

FIGURE 13
View from Limekilns (Context Panorama & Info)



Fields visible within the site highlighted with red shading.

Photograph Information

Latitude: 52.260518,
Longitude: 0.440432
Camera: Canon EOS 6D (Mark II)
Camera Height: 1.8m
Date: 11 March 2022
Focal Length: Fixed 50mm Lens on Full Frame 35mm Sensor Camera
Single Frame Image - Horizontal Field of View: 40°

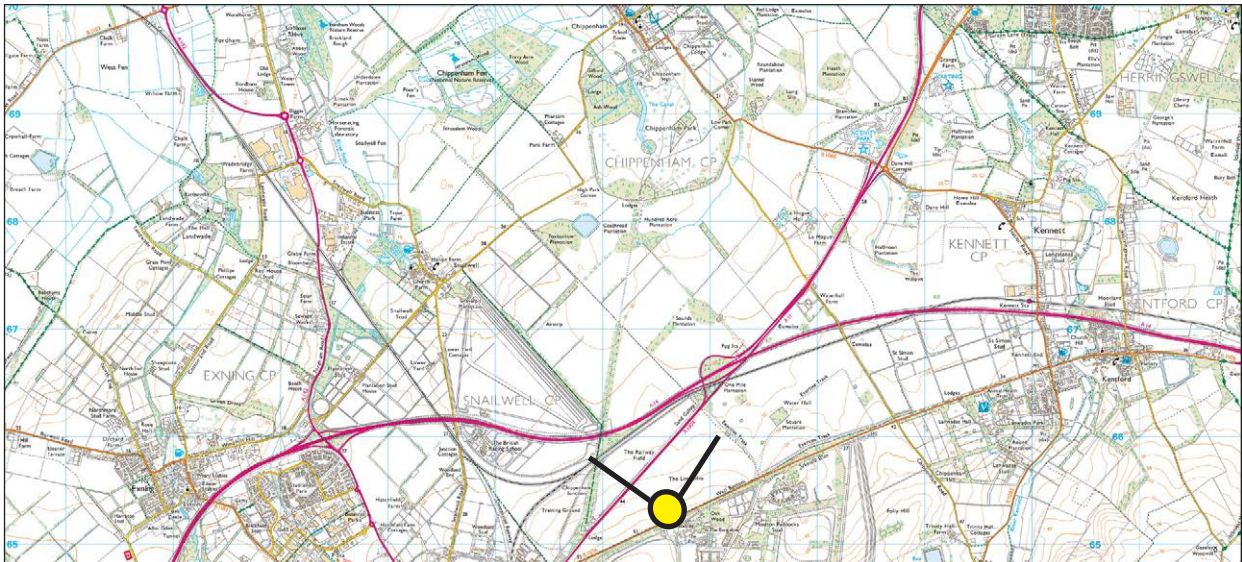


FIGURE 14
View from Limekilns (Single Frame)



FIGURE 15
View from Limekilns (Single Frame Annotated)

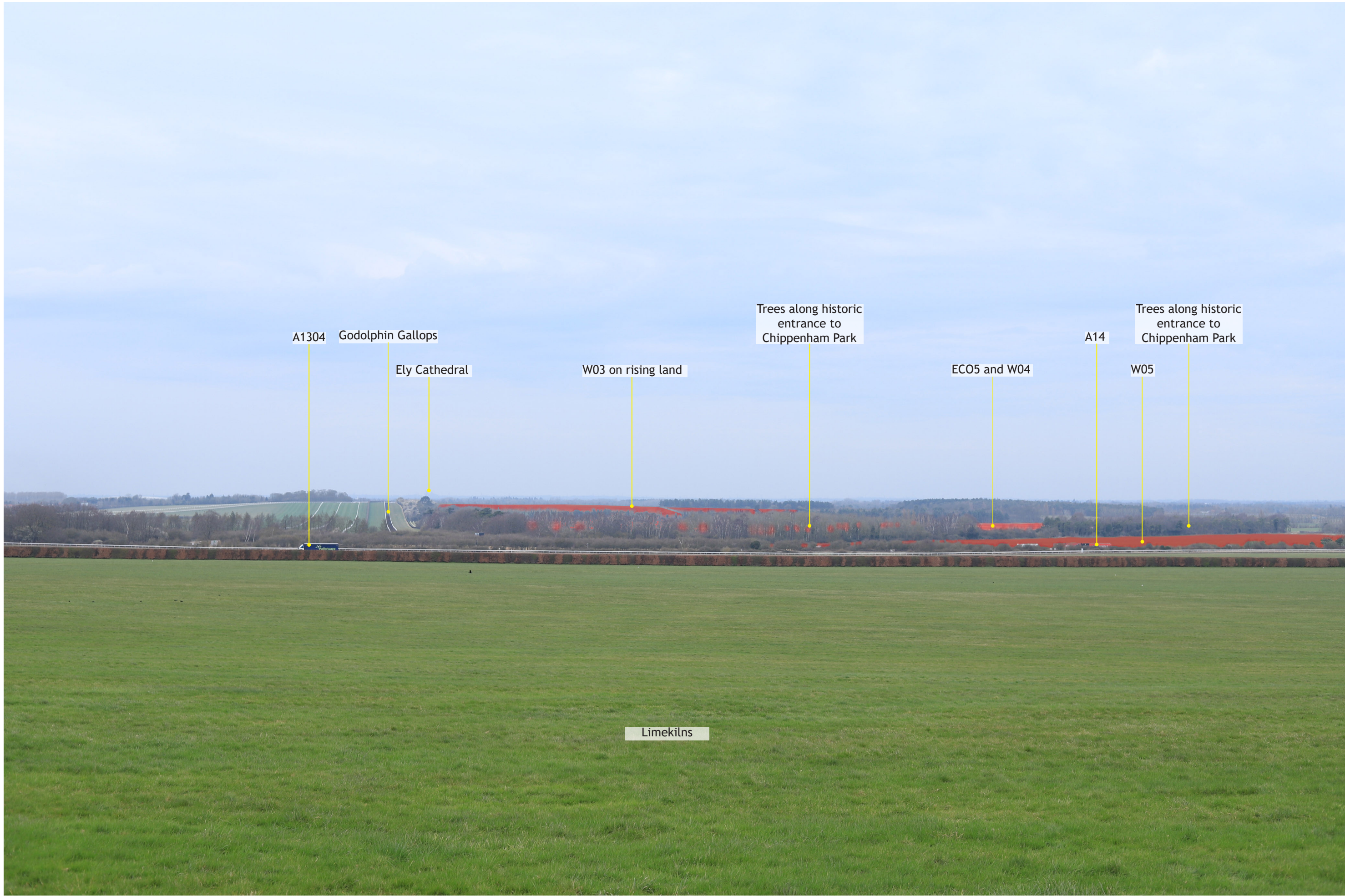


FIGURE 16
View from Limekilns (Single Frame)



FIGURE 17
View from Limekilns (Single Frame Annotated)



FIGURE 18
View from Limekilns (Single Frame)



FIGURE 19
View from Limekilns (Single Frame Annotated)



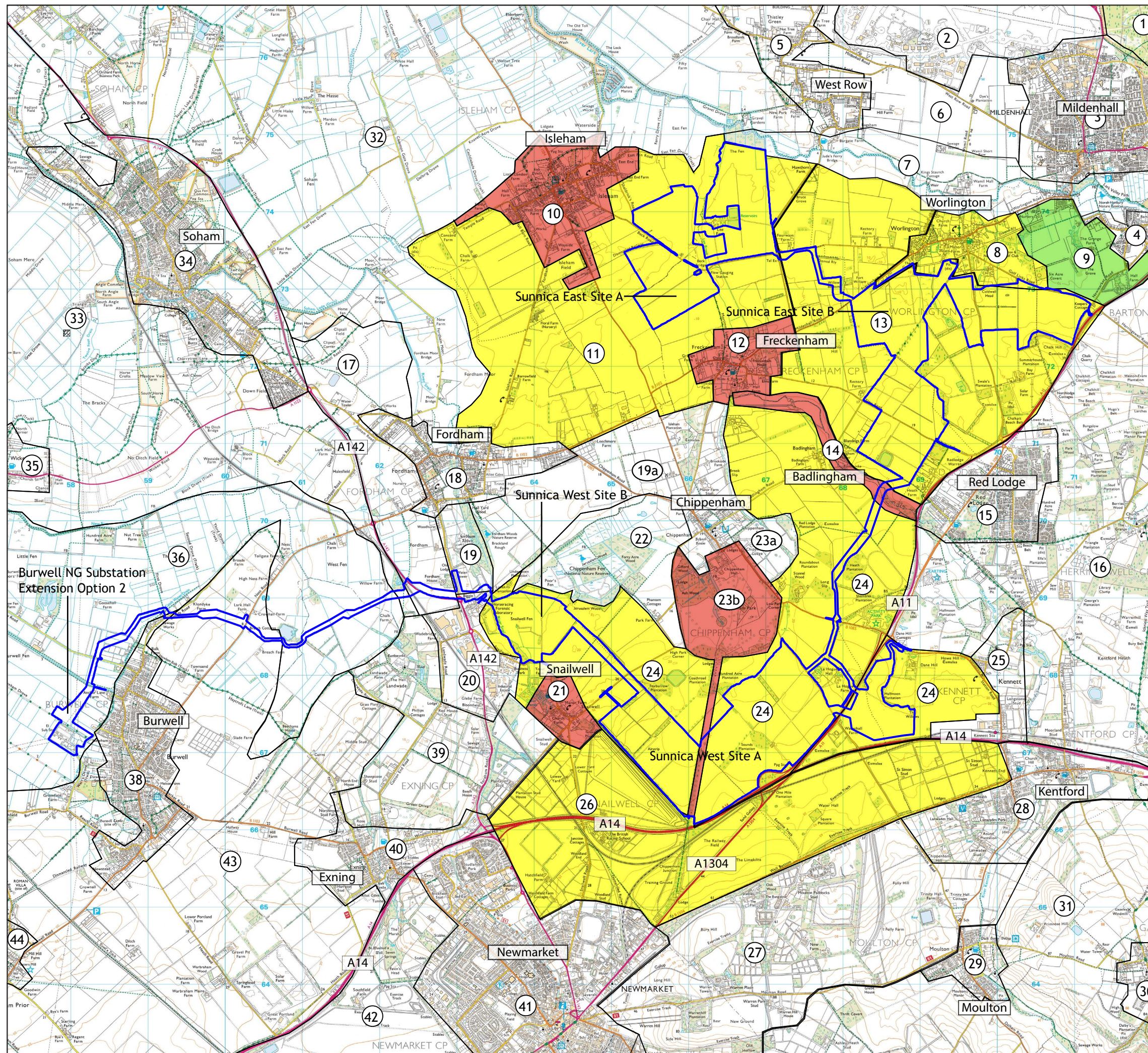


FIGURE 20
LVIA Landscape Sensitivity



PROJECT
1186
Sunnica PVD

CLIENT
Say No To Sunnica

DATE
September 2022


Legend


 Order Limits


Local Landscape Character Areas (LLCA)
(APP-042 Environmental Statement, 6.1 LVIA
Chapter 10: Landscape and Visual Amenity), 2021


 LLCA Number


Landscape Sensitivity

 Very Low

 Low

 Medium

 Medium/High

 High

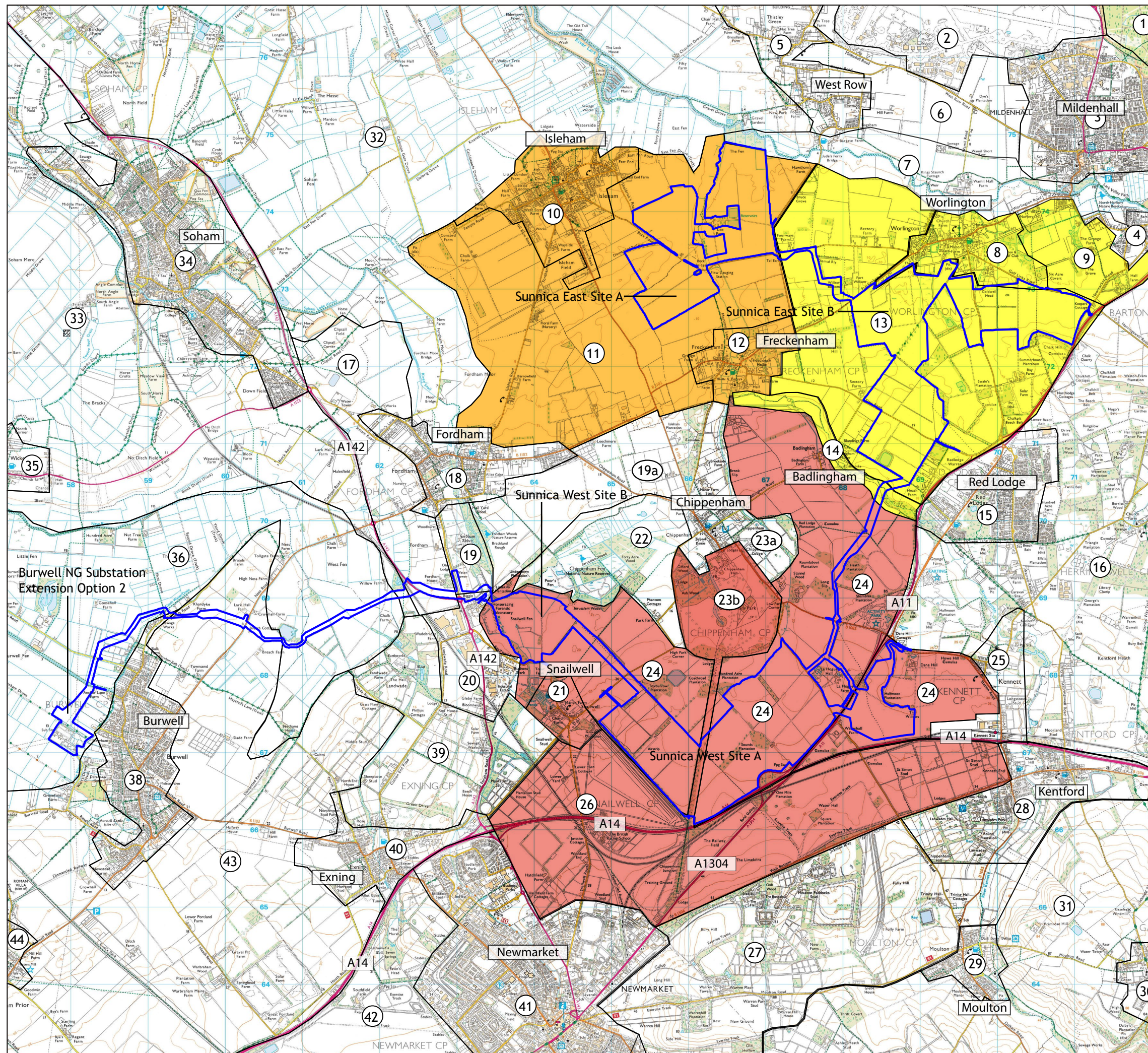


FIGURE 20.1
MBELC Landscape Sensitivity



PROJECT
1186
Sunnica PVD

CLIENT
Say No To Sunnica

DATE
September 2022

Legend

 Order Limits

Local Landscape Character Areas (LLCA)
(Environmental Statement, 6.1 LVIA Chapter 10:
Landscape and Visual Amenity), 2021

 LLCA Number

Landscape Sensitivity

 Very Low

 Low

 Medium

 Medium/High

 High

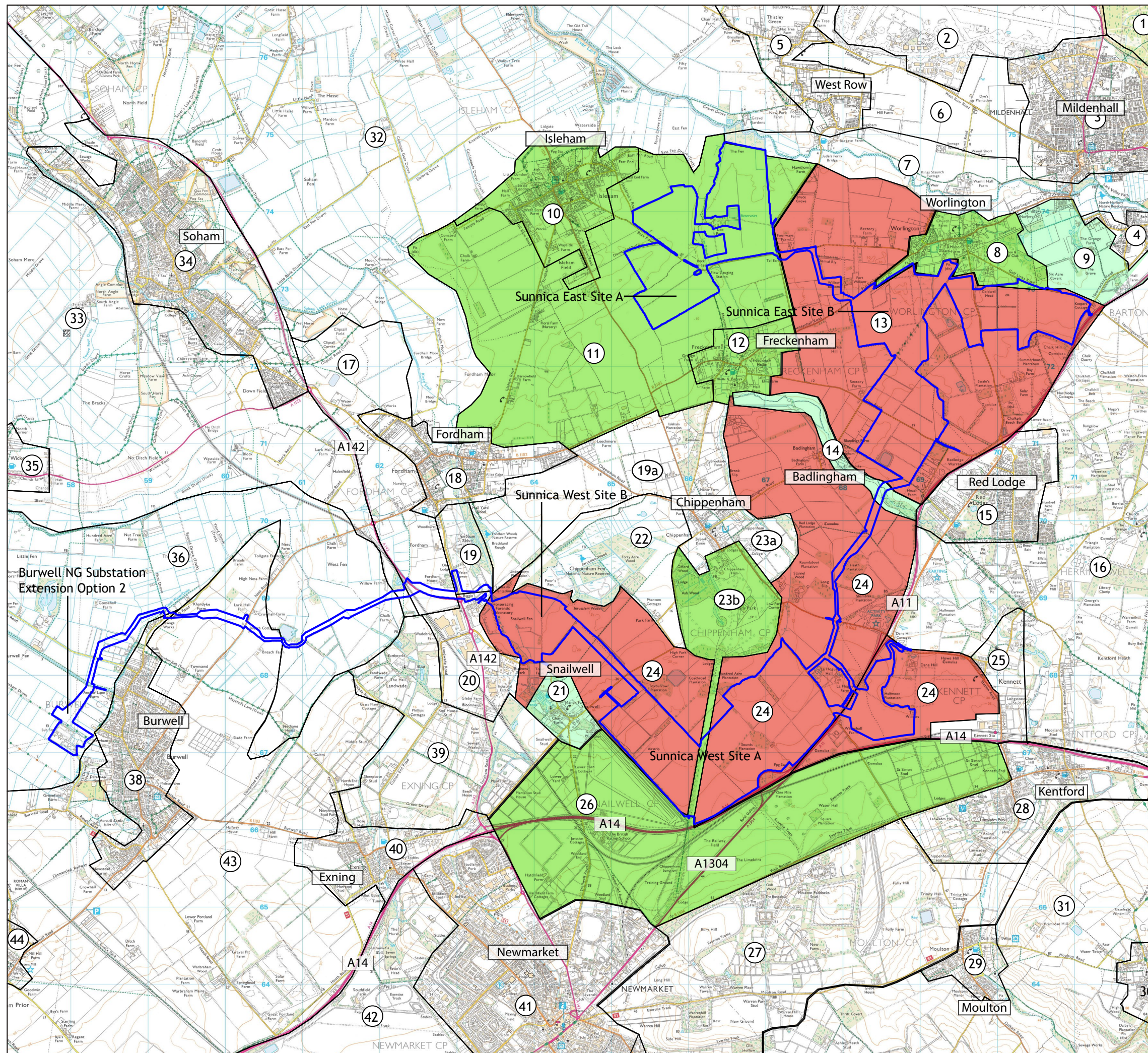


FIGURE 21
LVIA Effects Year 1



PROJECT
1186
Sunnica PVD

CLIENT
Say No To Sunnica

DATE
September 2022

Legend

Order Limits

Local Landscape Character Areas (LLCA)
(Environmental Statement, 6.1 LVIA Chapter 10:
Landscape and Visual Amenity), 2021

LLCA Number

Significance of Effect at Year 1

- Negligible Adverse
- Minor Adverse
- Moderate Adverse
- Moderate/Major Adverse
- Major Adverse

Local Landscape Character Areas (LLCA)
shown represent LLCAs affected by the proposals as
identified in APP-042 Environmental Statement, 6.1
Chapter 10: Landscape and Visual Amenity, 2021,
assessment tables 10-16 to 10-19.
The Significance of Effect shown represents the
greatest level of effect at Year 1 identified within the
respective LLCA.



0 500 1000 2000m

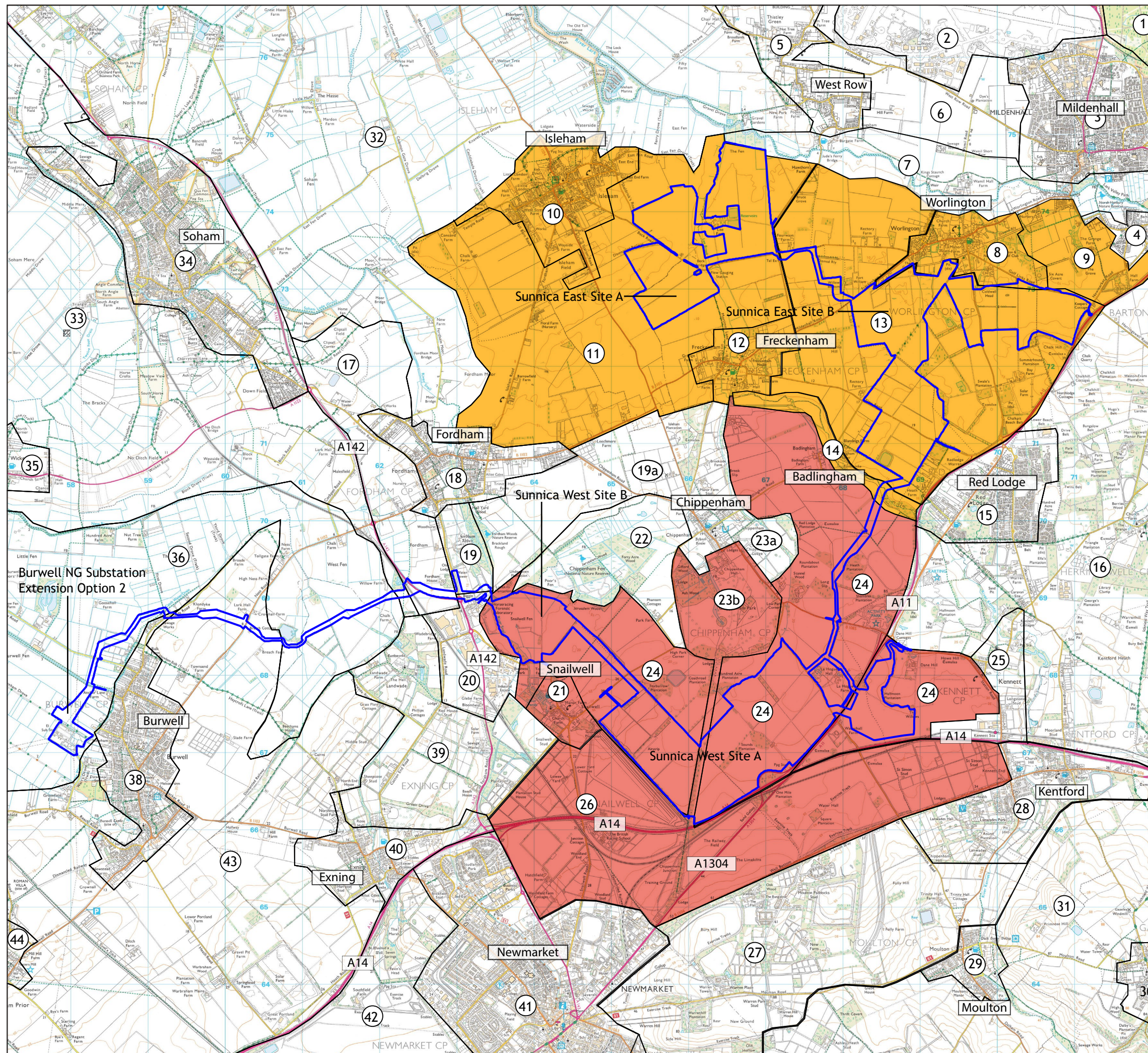


FIGURE 21.1
MBELC Effects Year 1



PROJECT
1186
Sunnica PVD

CLIENT
Say No To Sunnica

DATE
September 2022






Legend

 Order Limits

Local Landscape Character Areas (LLCA)
(APP-042 Environmental Statement, 6.1 LVIA
Chapter 10: Landscape and Visual Amenity), 2021

 LLCA Number

Significance of Effect at Year 1

-  Negligible Adverse
-  Minor Adverse
-  Moderate Adverse
-  Moderate/Major Adverse
-  Major Adverse

Local Landscape Character Areas (LLCA)
shown represent LLCAs affected by the proposals as
identified in APP-042 Environmental Statement, 6.1
Chapter 10: Landscape and Visual Amenity, 2021,
assessment tables 10-16 to 10-19.
The Significance of Effect shown represents the
greatest level of effect at Year 1 identified within the
respective LLCA.



0 500 1000 2000m

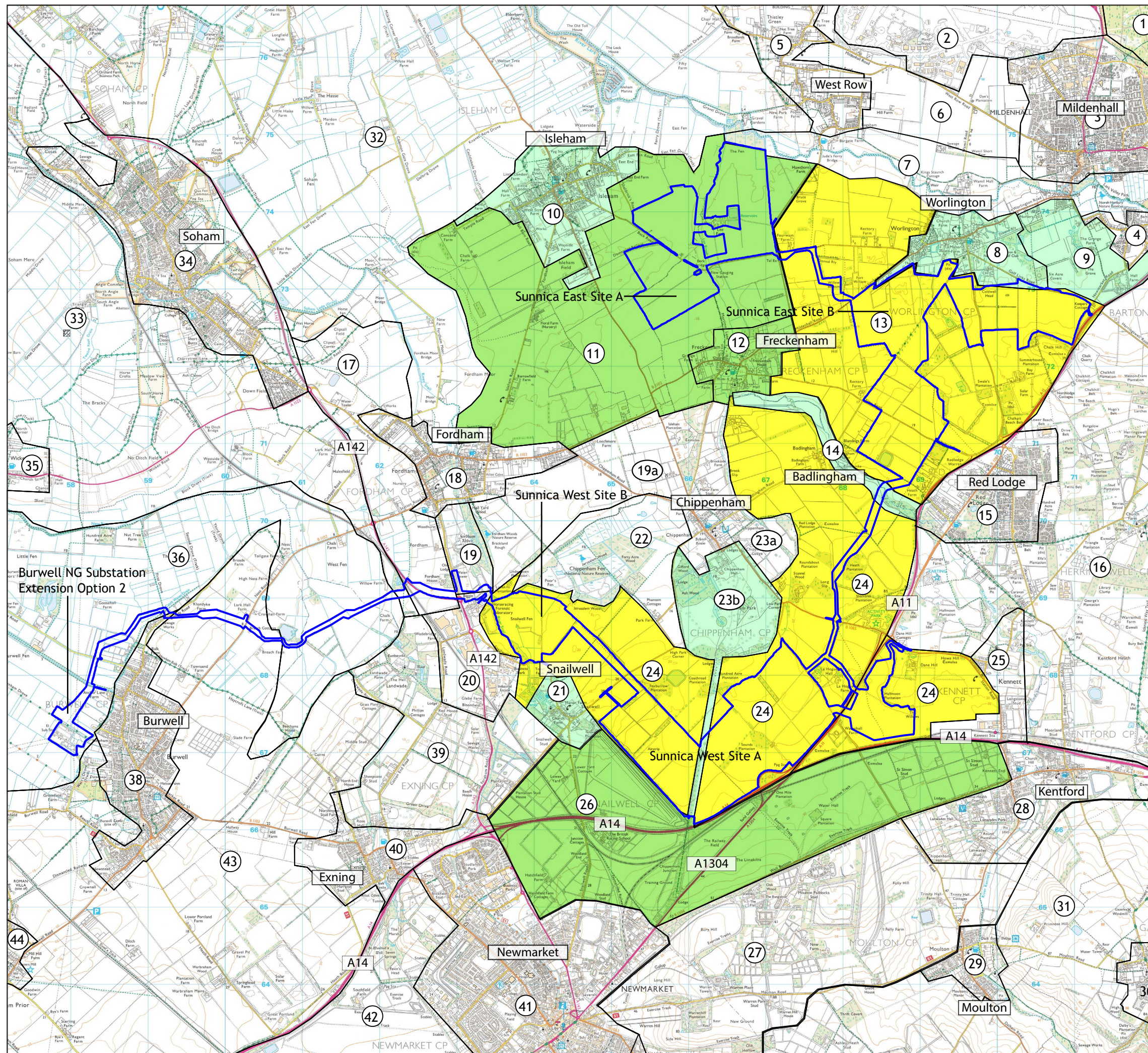


FIGURE 22
LVIA Landscape Effects Year 15



PROJECT
1186
Sunnica PVD

CLIENT
Say No To Sunnica

DATE
September 2022

Legend

Order Limits

Local Landscape Character Areas (LLCA)
(Environmental Statement, 6.1 LVIA Chapter 10:
Landscape and Visual Amenity), 2021

LLCA Number

Significance of Effect at Year 15

- Negligible Adverse
- Minor Adverse
- Moderate Adverse
- Moderate/Major Adverse
- Major Adverse

Local Landscape Character Areas (LLCA)
shown represent LLCAs affected by the proposals as
identified in APP-042 Environmental Statement, 6.1
Chapter 10: Landscape and Visual Amenity, 2021,
assessment tables 10-22 to 10-25.
The Significance of Effect shown represents the
greatest level of effect at Year 15 identified within the
respective LLCA.



0 500 1000 2000m



FIGURE 22.1
MBELC Landscape Effects
Year 15

PROJECT
1186
Sunnica PVD
CLIENT
Say No To Sunnica

DATE
September 2022

Legend

Order Limits

Local Landscape Character Areas (LLCA)
(Environmental Statement, 6.1 LVIA Chapter 10:
Landscape and Visual Amenity), 2021

LLCA Number

Significance of Effect at Year 15

Negligible Adverse

Minor Adverse

Moderate Adverse

Moderate/Major Adverse

Major Adverse

Local Landscape Character Areas (LLCA)
shown represent LLCAs affected by the proposals as
identified in APP-042 Environmental Statement, 6.1
Chapter 10: Landscape and Visual Amenity, 2021,
assessment tables 10-22 to 10-25.
The Significance of Effect shown represents the
greatest level of effect at Year 15 identified within the
respective LLCA.



0 500 1000 2000m

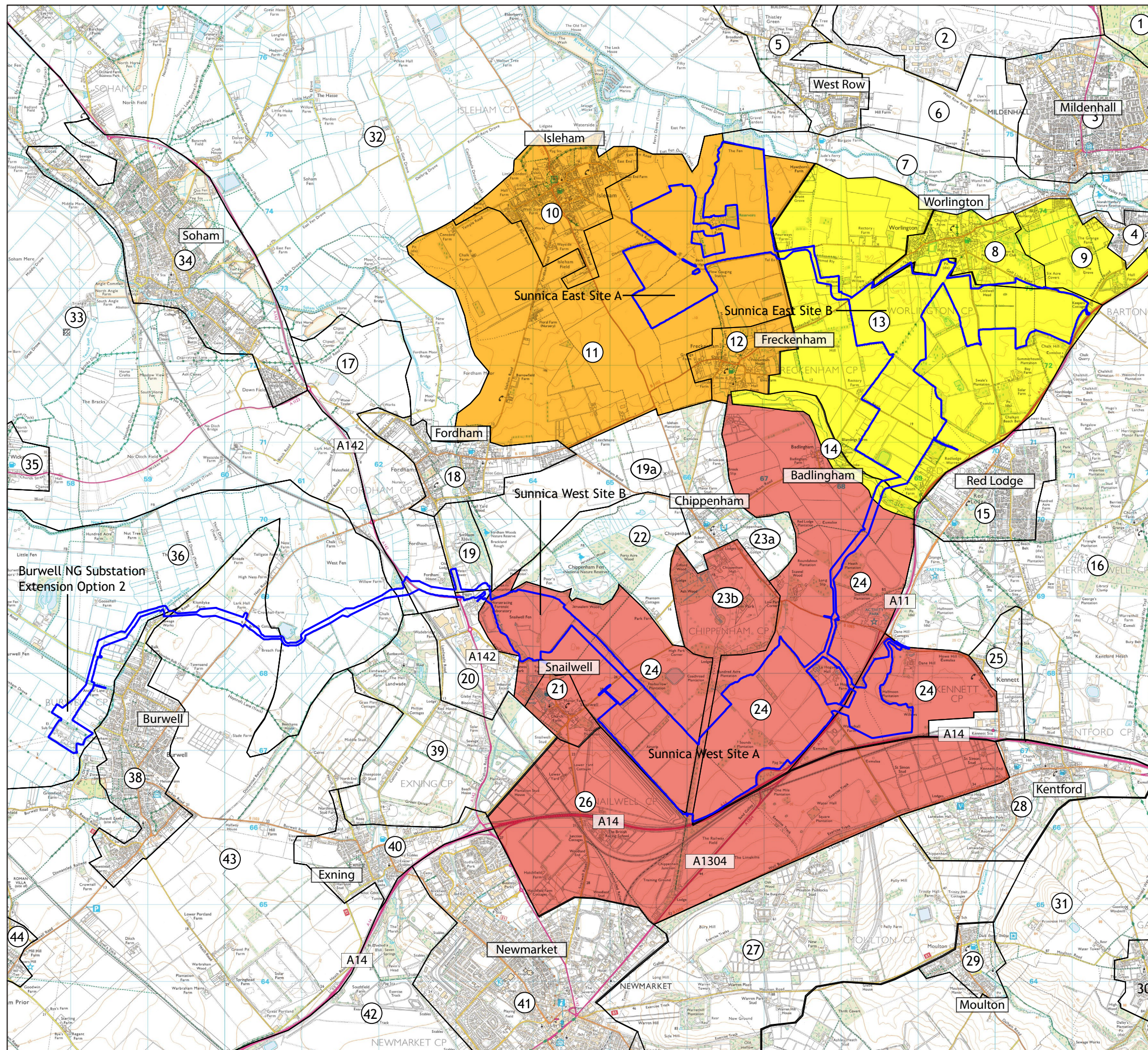




FIGURE 23
MBELC Combined Landscape Effects Year 1

PROJECT
1186
Sunnica PVD
CLIENT
Say No To Sunnica

DATE
September 2022

Legend

Order Limits

Local Landscape Character Areas (LLCA)
(Environmental Statement, 6.1 LVIA Chapter 10: Landscape and Visual Amenity), 2021

LLCA Number

Significance of Effect at Year 1

Negligible Adverse

Minor Adverse

Moderate Adverse

Moderate/Major Adverse

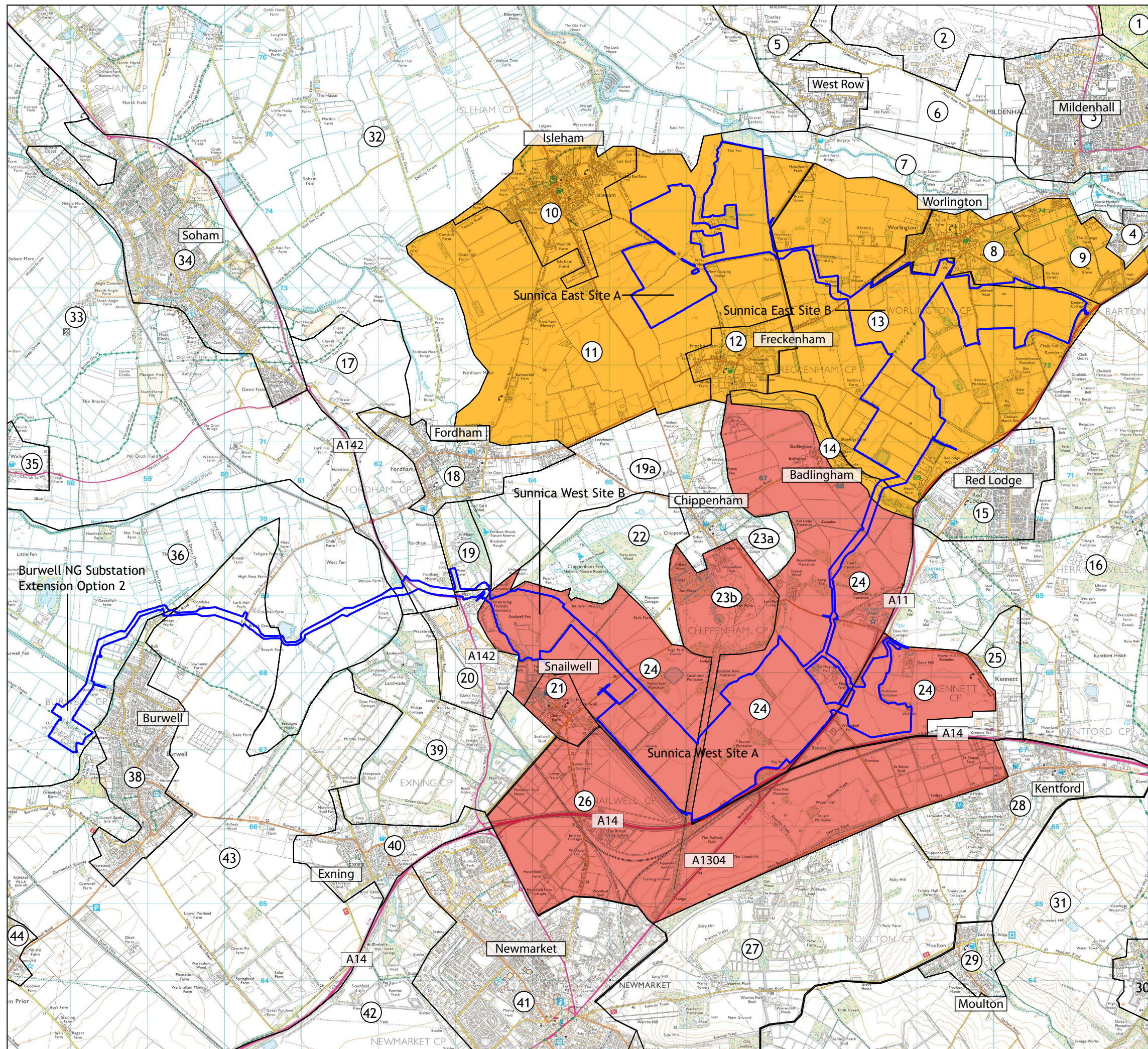
Major Adverse

Local Landscape Character Areas (LLCA) shown represent LLCAs affected by the proposals as identified in APP-042 Environmental Statement, 6.1 Chapter 10: Landscape and Visual Amenity, 2021 (LVIA).

Table 10-21: Summary of Combined Year 1 Opening Landscape and Visual Effects, Page 10-172, considers LLCA 12, 21, and 24 only.



0 500 1000 2000m



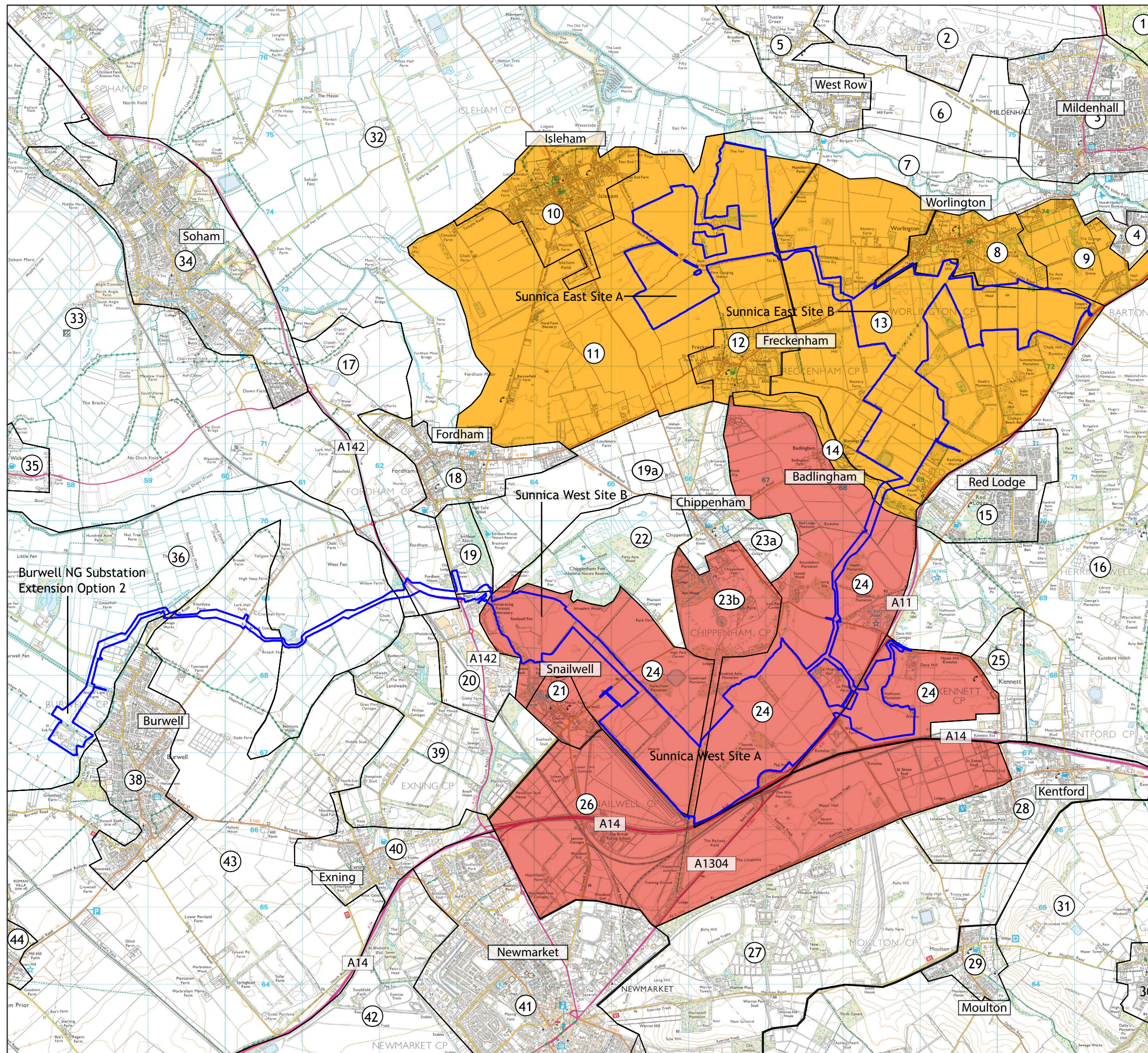


FIGURE 24
MBELC Combined Landscape Effects Year 15



PROJECT
1186
Sunnica PVD
CLIENT
Say No To Sunnica

DATE
September 2022






Legend

 Order Limits

Local Landscape Character Areas (LLCA)
(Environmental Statement, 6.1 LVIA Chapter 10:
Landscape and Visual Amenity), 2021

 LLCA Number

Significance of Effect at Year 15

-  Negligible Adverse
-  Minor Adverse
-  Moderate Adverse
-  Moderate/Major Adverse
-  Major Adverse

Local Landscape Character Areas (LLCA)
shown represent LLCAs affected by the proposals as
identified in APP-042 Environmental Statement, 6.1
Chapter 10: Landscape and Visual Amenity, 2021
(LVIA).

Table 10-26: Summary of Combined Year 15 Opening
Landscape and Visual Effects, Page 10-197, considers
LLCA 12, 21, and 24 only.



0 500 1000 2000m

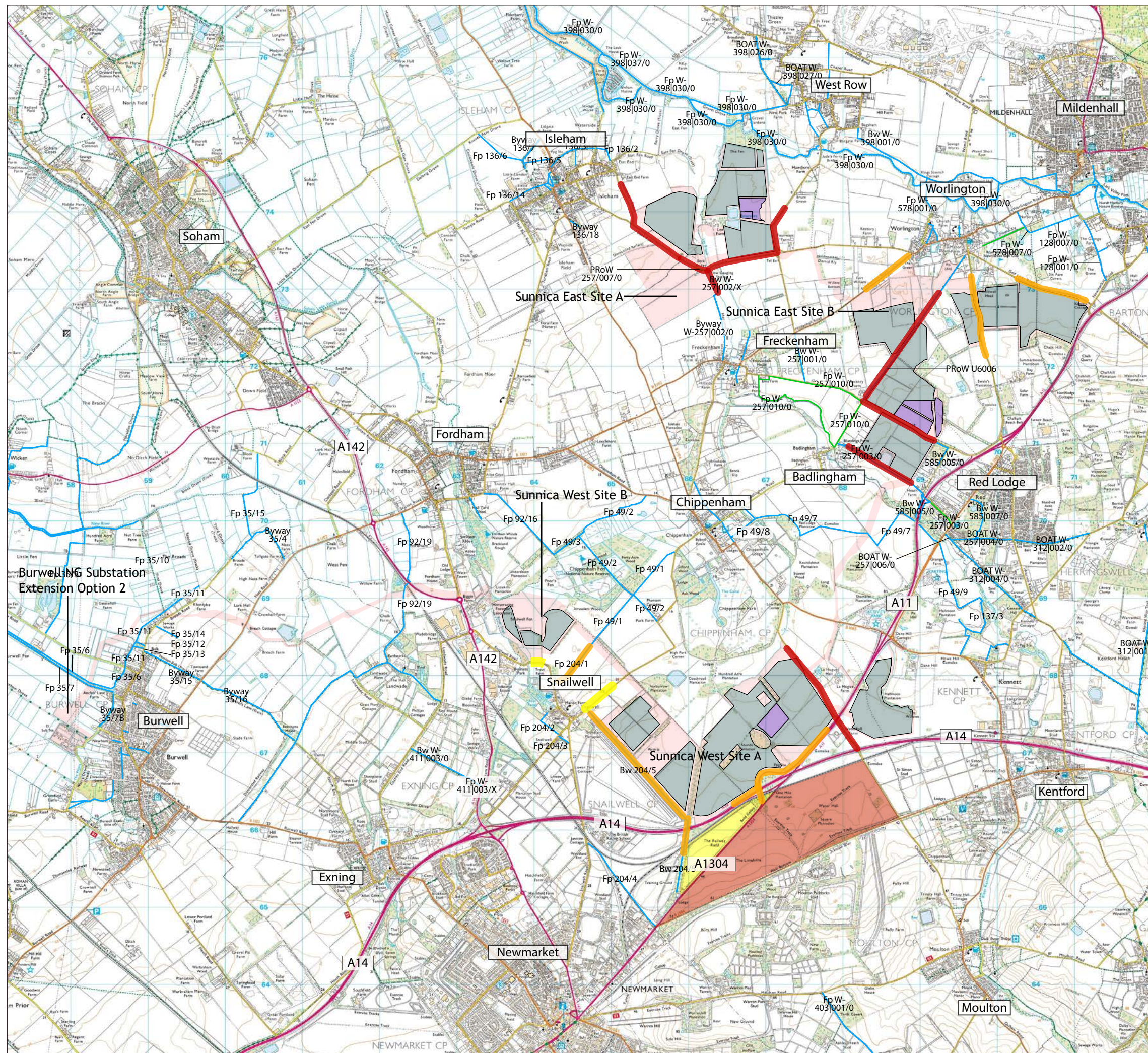


FIGURE 25
*Roads and PRoW significantly
Affected by Development
Year 1*



PROJECT
1186
Sunnica PVD
CLIENT
Say No To Sunnica

DATE
November 2022

Legend

- Order Limits
- Solar PV Arrays
- BESS, Substations, Compounds
- Limekilns and Waterhall Gallops - Major adverse effect
- Railway Field - Moderate adverse effect
- Roads and PRoWs with Major adverse effect
- Roads and PRoWs with Moderate/Major adverse effect
- Roads and PRoWs with Moderate adverse effect
- PRoW shown on OS mapping
- PRoW within West Suffolk shown on LVIA Figure 10-4 that are not currently shown on OS mapping. Those PRoW with a number are included in Suffolk County Council's GIS PRoW GIS dataset.
- E31 Development Parcel Numbers as shown on ES 6.3 Figure 3-1 Sunnica East Parameter Plan and ES 6.3 Figure 3-2 Sunnica West Parameter Plan

PRoW numbers in West Suffolk have been derived from a GIS dataset provided by Suffolk County Council under Open Government Licence v3.0. via www.rowmaps.com.

PRoW numbers in East Cambridgeshire have been obtained from Cambridgeshire County Council's online Definitive Map and Statement.



0 500 1000 2000m

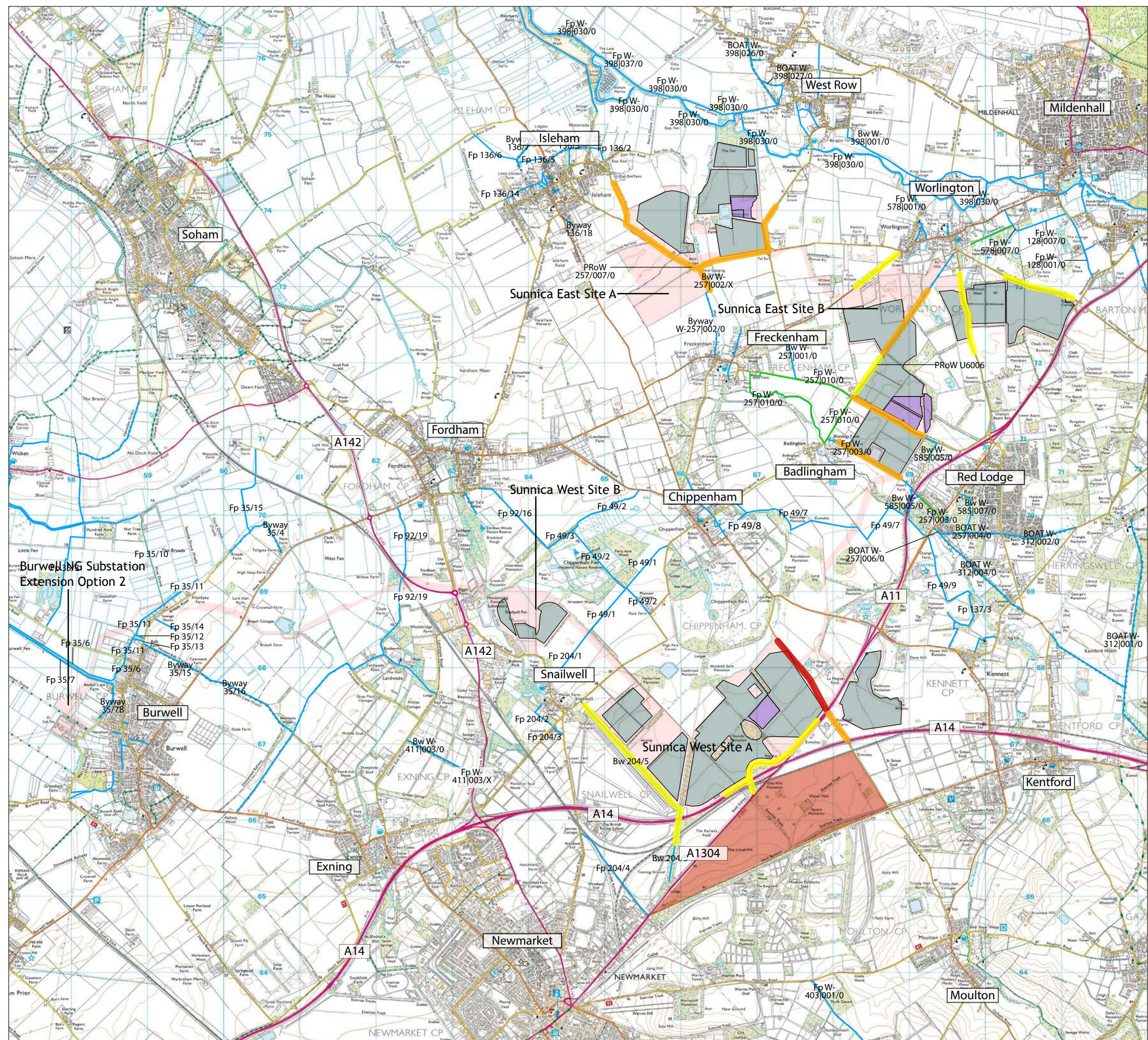











FIGURE 26
Roads and PRow significantly Affected by Development Year 15

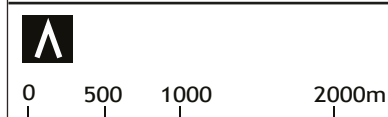


Legend

-  Order Limits
 -  Solar PV Arrays
 -  BESS, Substations, Compounds
 -  Limekilns and Waterhall Gallops -
Major adverse effect
 -  Roads and PRoWs with Major adverse effect
 -  Roads and PRoWs with Moderate/Major
adverse effect
 -  Roads and PRoWs with Moderate adverse
effect
 -  PRoW shown on OS mapping
 -  PRoW within West Suffolk shown on LVIA Figure
10-4 that are not currently shown on OS
mapping. Those PRoW with a number are
included in Suffolk County Council's GIS PRoW
GIS dataset.
- E31 Development Parcel Numbers as shown on ES
6.3 Figure 3-1 Sunnica East Parameter Plan
and ES 6.3 Figure 3-2 Sunnica West Parameter
Plan

PRoW numbers in West Suffolk have been derived from a GIS dataset provided by Suffolk County Council under Open Government Licence v3.0. via www.rowmaps.com.

PRoW numbers in East Cambridgeshire have been obtained from Cambridgeshire County Council's online Definitive Map and Statement.



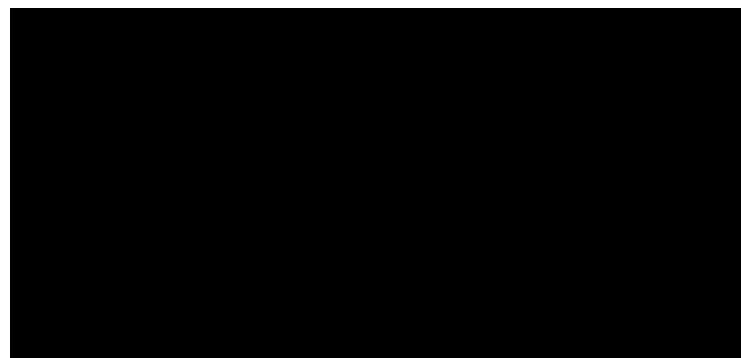


Michelle Bolger Expert Landscape Consultancy Ltd

Company Registration No. 09809868

VAT Registration No. 224 2598 12

Registered Office: 35 Pickford Road Bexleyheath DA7 4AG





MICHELLE BOLGER
Expert Landscape Consultancy

Appendices 2 – 4 to
Landscape and Visual Issues

Relating to the
Sunnica Energy Farm

Prepared for
Say No to Sunnica

LPA's
**West Suffolk Council &
East Cambridgeshire District Council**

PINS Reference
EN010106

November 2022



MICHELLE BOLGER
Expert Landscape Consultancy

Company Registration No. 09809868
Registered Office: 35 Pickford Road Bexleyheath DA7 4AG

Appendix 1 Figures is provided as a separate A3 Document

Appendices (2 - 4)

Appendix 2 Methodology

Appendix 3 Applicant's Landscape Masterplan Figures from Annex A to OLEMP

Appendix 4 Comparison of Conclusions about Landscape Effects in MBELC Review
and LVIA

APPENDIX 2

Methodology



Methodological Approach for Landscape and Visual Assessment

Introduction

1. The methodology used by Michelle Bolger Expert Landscape Consultancy (MBELC) when preparing evidence on landscape and visual issues is based on *Guidelines for Landscape and Visual Impact Assessment*, Third Edition 2013 (GLVIA3) prepared by the Landscape Institute/Institute of Environmental Management and Assessment. The methodology also identifies where the approach adopted has been informed by the consideration of specific landscape or visual issues by the courts or by inspectors at public inquiry.
2. Landscape/ townscape effects are effects on the fabric and character of the landscape/ townscape. Visual effects are effects on people and are concerned with the impact of the proposals on the amenity of those people who will experience visual changes as a result of the proposals.
3. GLVIA3 sets out the processes that should be followed in the preparation of a Landscape and Visual Impact Assessment (LVIA), required for development that is the subject of an Environmental Impact Assessment (EIA), and for a Landscape and Visual Appraisal (LVA) required for development that is not the subject of an EIA. With regard to the differences between a LVIA and a LVA, GLVIA3 states that '*the overall principles and the core steps in the process are the same*'¹ and sets out the differences in defined procedures as follow:

'As a 'standalone' appraisal the process is informal and there is more flexibility, but the essence of the approach - specifying the nature of the proposed change or development; describing the existing landscape and the views and visual amenity in the area that may be affected; predicting the effects, although not their likely significance; and considering how those effects might be mitigated - still applies'.²

¹ Guidelines for Landscape and Visual Impact Assessment, 2013 Page 26 Paragraph 3.2

² Guidelines for Landscape and Visual Impact Assessment, 2013 Page 26 Paragraph 3.2

Baseline Assessment

4. GLVIA3 sets out the factors that should be considered in establishing a study area and determining the baseline conditions. (GLVIA3 Page 32 Paragraphs 3.15-3.17) *‘For the landscape baseline the aim is to provide an understanding of the landscape in the area that may be affected - its constituent elements, its character and the way this varies spatially, its geographic extent, its history (which may require its own specialist study), its condition, the way the landscape is experienced, and the value attached to it.’*³
5. The **value** of a landscape is: *‘the relative value that is attached to different landscapes by society, bearing in mind that a landscape may be valued by different stakeholders for a variety of reasons...A review of existing landscape designations is usually the starting point in understanding landscape value but the value attached to undesignated landscapes also needs to be carefully considered’.*⁴
6. The National Planning Policy Framework (NPPF) (revised 20 July 2021) in paragraph 174 states that:
‘Planning policies and decisions should contribute to and enhance the natural and local environment by: (inter alia)
a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
7. Valued landscapes include nationally and internationally designated landscapes. The statutory status of nationally designated landscapes is set out in the National Parks and Access to the Countryside Act 1949 and the CROW Act 2000. This status is reflected in NPPF Paragraph 176 and local planning policies.
8. NPPF 174 Valued Landscapes are not restricted to designated landscapes. GLVIA3 on page 84 in Box 5.1 provides a list of factors that are useful in indicating landscape value *‘in cases where there is not existing evidence to indicate landscape value’*. This list of factors has been considered useful by Inspectors in their appeal decisions.
9. The Landscape Institute has recently issued a Technical Guidance Note (TGN) with regard to *Assessing landscape value outside national designations* which is useful in

³ Guidelines for Landscape and Visual Impact Assessment, Third Edition, 2013, Page 32, Paragraph 3.15

⁴ Guidelines for Landscape and Visual Impact Assessment, Third Edition, 2013, Page 80, Paragraph 5.19

determining which aspects of a site /landscape are important to protect or enhance. This builds on the assessment of value as set out in GLVIA3 Box 5.1. It confirms that:

*‘When assessing landscape value of a site as part of a planning application or appeal it is important to consider not only the site itself and its features/ elements/characteristics/qualities, but also their relationship with, and the role they play within, the site’s context. Value is best appreciated at the scale at which a landscape is perceived - rarely is this on a field-by-field basis’.*⁵

10. Judgements about the value of a landscape are recorded on a verbal scale of high, medium and low with an overall conclusion that if the landscape in which a site is located has ‘high’ value this is likely to equate to a NPPF paragraph 174 ‘Valued Landscape’.

Landscape Effects

11. Landscape effects can be effects on the fabric of the landscape or on landscape character. Effects on landscape character often extend beyond the site itself and are a consequence of visual changes which affect the pattern and character of the landscape.
12. The assessment of the **sensitivity** of the landscape is directly related to the type of development proposed. Landscape Sensitivity is derived from: *‘combining judgements of their [the landscape receptors] susceptibility to the type of change or development proposed and the value attached to the landscape’*⁶. As identified above, the value of the landscape is assessed as part of the baseline, whereas the assessment of the susceptibility to change of a landscape must be tailored to individual projects and *‘should not be recorded as part of the landscape baseline but should be considered as part of the assessment of effects’*.⁷
13. The **susceptibility to change** of a landscape is: *‘the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular landscape type or areas, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies’*.⁸ Judgements about the **susceptibility** of

⁵ Assessing landscape value outside national designations TGN 02/21 Paragraph 2.4.5 Bullet Point 5

⁶ Guidelines for Landscape and Visual Impact Assessment, 2013 Page 88 Paragraph 5.39

⁷ Guidelines for Landscape and Visual Impact Assessment, 2013 Page 89 Paragraph 5.42

⁸ Guidelines for Landscape and Visual Impact Assessment, 2013 Page 88 Paragraph 5.40

the landscape are recorded on a verbal scale of high, medium and low and the basis for the judgements is made clear and linked back to evidence from the baseline study as required by GLVIA Para 5.43.

14. Judgements about **sensitivity** of the landscape are a result of combining judgments regarding value and susceptibility. This is recorded on a verbal scale of high, medium and low and the basis for the judgements is made clear.
15. Judgements about the **magnitude of change** for landscape effects are recorded on a verbal scale of high, medium, low and negligible, based on the principles set out in GLVIA3 paragraphs 5.48-5.52 which includes a consideration of scale, geographical extent and the duration and reversibility of the landscape effects.
16. Judgements about the overall significance⁹/ importance of landscape effects, are recorded on a verbal scale of major, moderate, minor and negligible, based on the principles set out in GLVIA3 paragraphs 5.53-5.57. The underlying principles are summarised in GLVIA Figure 5.10 (Page 92) which has been adapted below.

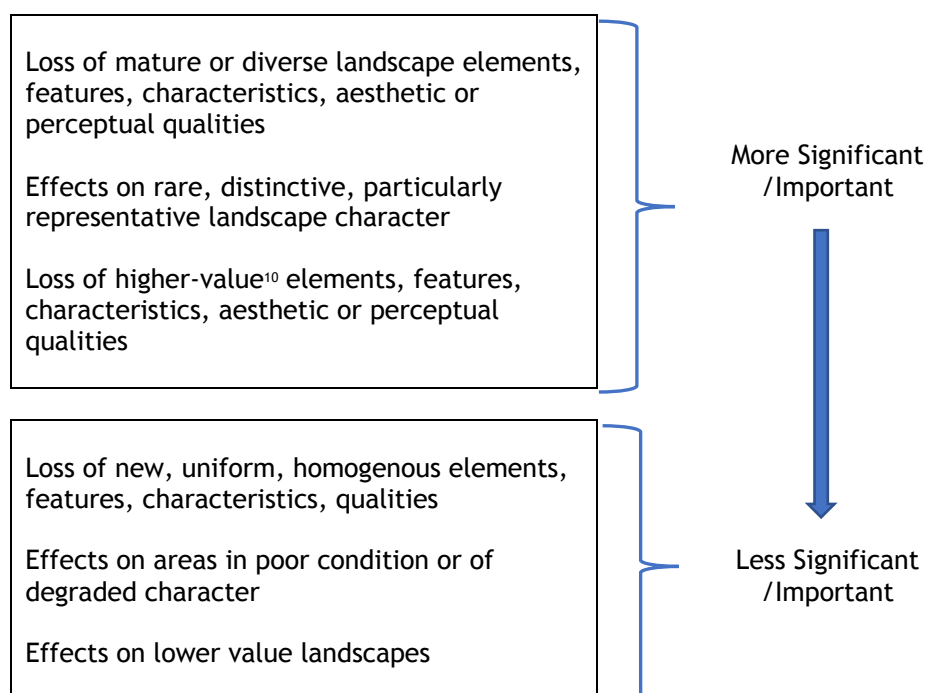


Figure 1 - Scale of Significance/Importance
(Derived from GLVIA3 Figure 5.10 Page 92 Scale of Significance)

⁹ Significance of effect is the term used when undertaking an LVIA as part of an EIA.

¹⁰ The Figure on Page 92 says 'loss of lower-value elements', but this is an error in the text identified in GLVIA3 Statement of Clarification 2/13 8-07-13. It should read 'Loss of higher-value elements'.

17. The reasons for reaching the final judgments on landscape effects are always made clear in the text. However, the following diagram in Figure 2 can assist in understanding the way in which the judgments regarding landscape sensitivity and magnitude of change are combined to reach a final judgment on the significance/importance of the landscape effects.

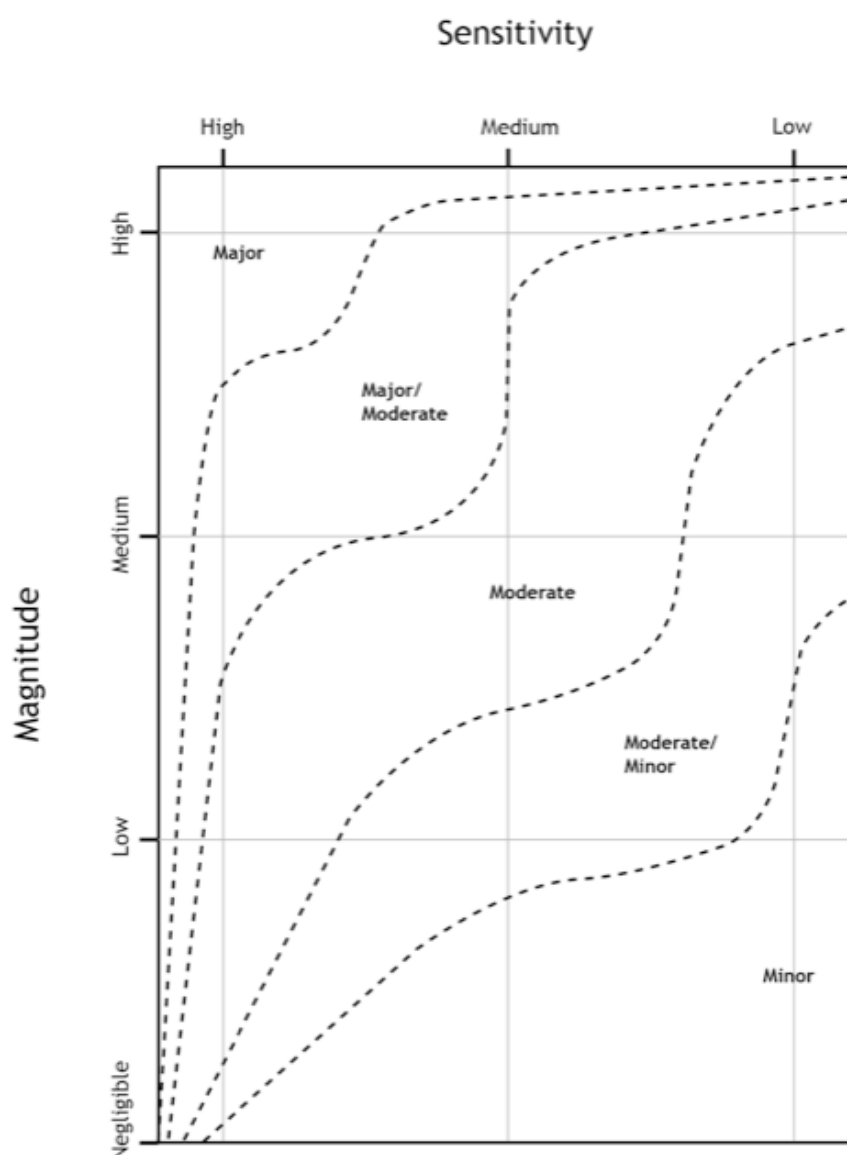


Figure 2 (MBELC) - Significance / Importance of Effects

Visual Effects

18. Judgments about visual effects are derived from a consideration of the sensitivity of visual receptors to the proposed development, and the magnitude of change to their existing visual amenity. Changes in landscape character may also be a result of visual changes but these are considered under landscape effects.
19. GLVIA3 provides guidance on the relative sensitivity of different visual receptors (GLVIA3 paragraphs 6.31-6.37). In summary, the most sensitive receptors are:
 - Residents at home;
 - People engaged in outdoor activities whose attention is focused on the landscape and view; and
 - Visitors to locations where views are an important part of the experience.
20. The least sensitive receptors are:
 - People engaged in outdoor sports or activities which do not depend on an appreciation of views; and
 - People at their place of work (although this can vary).
21. The sensitivity of road users varies. People on busy or main routes are considered to have medium or low sensitivity, whilst users of rural roads or scenic routes will have medium or even high sensitivity.
22. Judgments are recorded on a verbal scale of high, medium and low. Visual receptors who would be affected by the development are identified in groups and their sensitivity assessed combining issues relating to their susceptibility and the value attached to the views affected.
23. Judgments about the **magnitude of change** for visual effects are recorded on a verbal scale of high, medium, low and negligible based on the principles set out in GLVIA3 paragraphs 6.38-6.41 which includes a consideration of scale, geographical extent and the duration and reversibility of the visual effects.

24. *‘Significance of visual effects is not absolute and can only be defined in relation to each development and its specific location’¹¹. Judgments about the overall importance of visual effects are recorded on a verbal scale of major, moderate, minor and negligible, based on the principles set out in GLVIA3 paragraphs 6.42-6.45. The underlying principles are summarised in Paragraph 6.44:*

‘There are no hard and fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances varied the location and context and with the type of proposal. In making a judgement about significance of visual effects the following points should be noted:

- Effects on people who are particularly sensitive to changes in views and visual amenity are more likely to be significant.*
- Effects on people at recognised and important viewpoints or from recognised scenic routes are more likely to be significant.*
- Large-scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view are more likely to be significant than small changes or changes involving features already present within the view.’¹²*

25. The reasons for reaching the final judgments on visual effects are always made clear in the text. However, Figure 2 above can assist in understanding the way in which the judgments regarding visual receptor sensitivity and magnitude of change are combined to reach a final judgment on the significance / importance of the visual effects.

Final Note

26. Intermediate judgements such as medium/high or minor/moderate are also used in the assessments where the judgment falls between two levels. Where such a judgement is reached there is no intended difference to be derived from which judgment comes first - so medium/high is the same as high/medium and moderate/major the same as major /moderate.

Last Updated October 2021

¹¹ Guidelines for Landscape and Visual Impact Assessment, 2013 Page 115 Paragraph 6.42

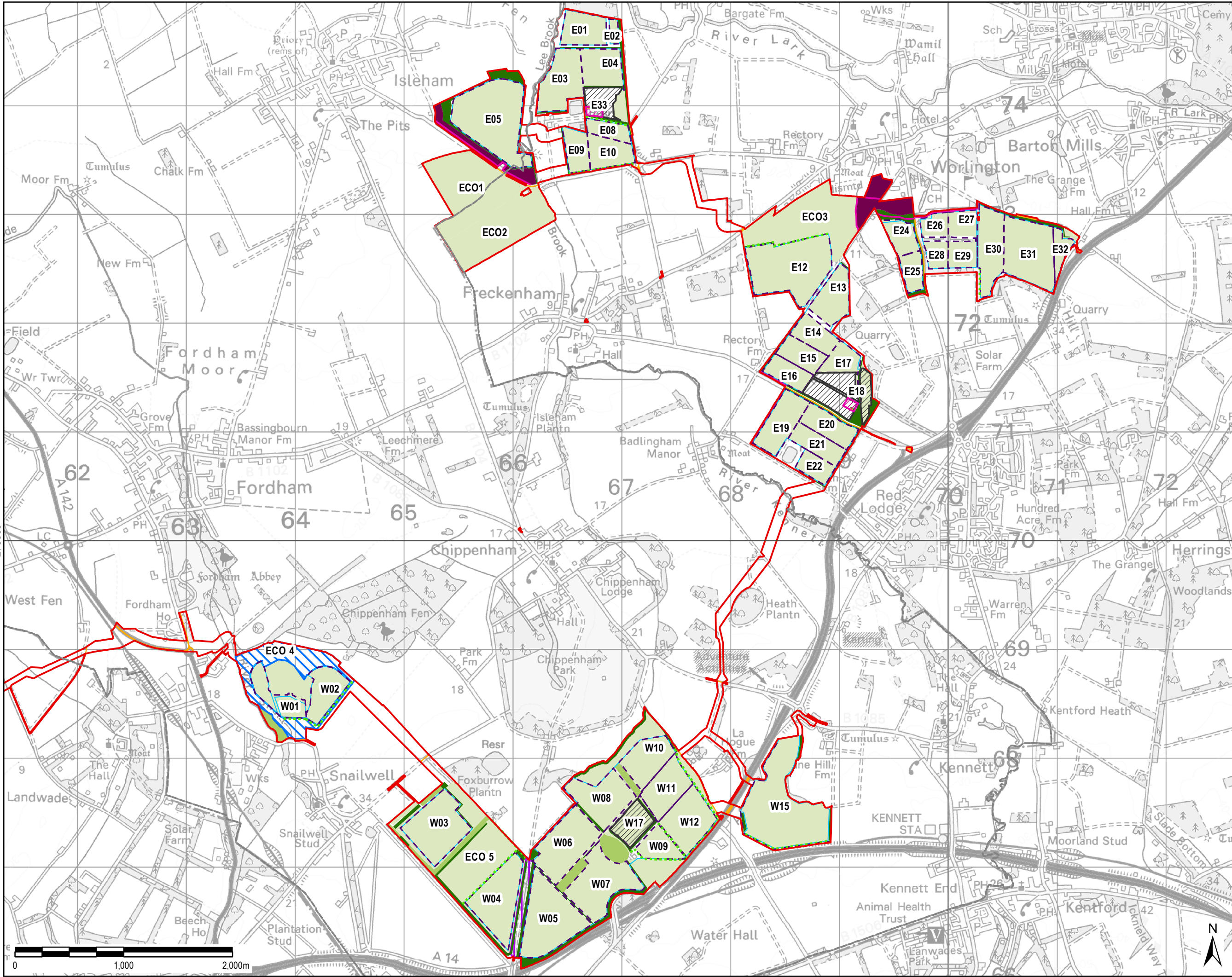
¹² Guidelines for Landscape and Visual Impact Assessment, 2013 Page 116 Paragraph 6.44

APPENDIX 3

Applicant's Landscape Masterplan Figures from Annex A to OLEMP

File Name: \\eu.aecomnet.com\UK\CBG1\Ubs\PR-334327_Sunnica_Energy_Farm\400_Technical\Disciplines\17_GIS\Layout\OLEMP21111_SunnicaEnergyFarm_Figure1_LandscapeMasterplan_SunnicaEastWest.mxd

270000



THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

LEGEND

- The Order Limits
- County Boundary
- District Boundary
- Potential Provision of Permissive Route
- Proposed Hedgerow (new planting or infilling of existing vegetation)
- BESS and Substation
- Developable Area
- Native Grassland Planting
- Office/Warehouse
- Boundary Fence
- Public Highway within Scheme
- Compound Area (Permanent)
- Landscape Offset with Chalk Grassland
- Native Grassland/Wetland
- Heritage Offset with additional planting along The Avenue
- Proposed Woodland (new planting or infilling of existing vegetation)
- Retained Woodland

Copyright:
Contains OS data © Crown copyright and database right 2018
Contains public sector information licensed under the Open Government Licence v3.0

NOTE:
Document Reference: EN010106/APP/6.3
AFPP Regulation: 5(2)(a)

Existing vegetation along the Cable Route alignment which is required to be removed during the construction phase would be replaced with the same species to recreate the vegetation cover

Purpose of Issue
FOR DCO SUBMISSION

Client
SUNNICA LTD

Project Title


Drawing Title
**FIGURE 1
LANDSCAPE MASTERPLAN
SUNNICA EAST SITE
AND WEST SITE**

Drawn LL	Checked DW	Approved NC	Date 11/11/2021
AECOM Internal Project No. 60589004		Scale @ A3 1:32,000	

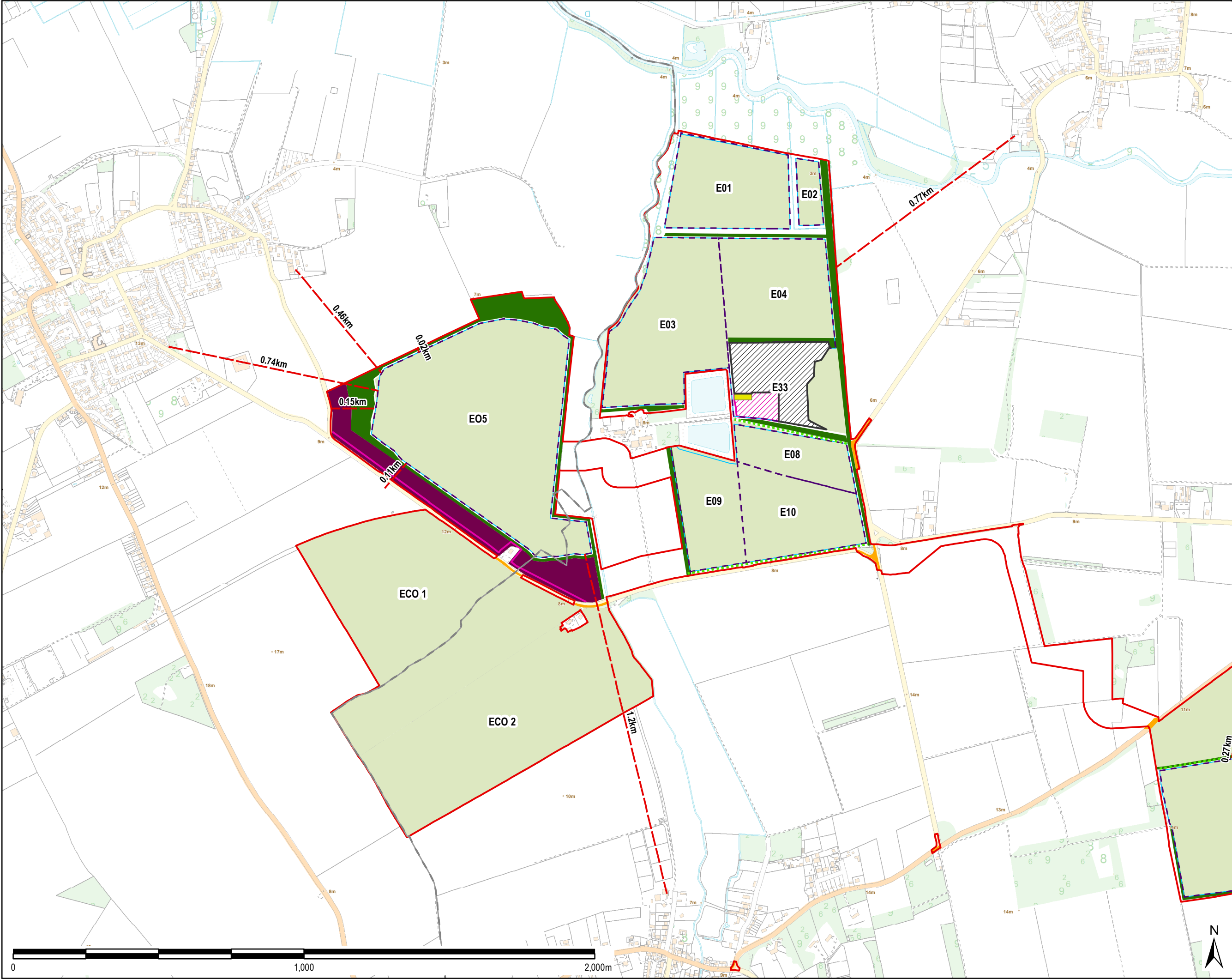
THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND IS SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

AECOM
Unit 1 Wellbrook Court,
Girton,
Cambridge, CB3 0NA
United Kingdom
Telephone (01223) 488000
www.aecom.com

AECOM

Drawing Number 60589004_ES_OLEMP_001	Rev 0
--	-----------------

File Name: \\eu.aecomnet.com\UK\KCBG1\Uobs\PR-334327_Sunnica_Energy_Farm\400_Technical\Disciplines\17_GIS\Layout\OLEMP2\1111_SunnicaEnergyFam_Figure2_LandscapeMasterplan_SunnicaEastA.mxd



THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

- LEGEND**
- The Order Limits
 - County Boundary
 - District Boundary
 - Potential Provision of Permissive Route
 - Proposed Hedgerow (new planting or infilling of existing vegetation)
 - BESS and Substation
 - Developable Area
 - Native Grassland Planting
 - Office/Warehouse
 - Boundary Fence
 - Public Highway within Scheme
 - Compound Area (Permanent)
 - Landscape Offset with Chalk Grassland
 - Proposed Woodland (new planting or infilling of existing vegetation)

Copyright:
Contains OS data © Crown copyright and database right 2018
Contains public sector information licensed under the Open Government Licence v3.0

NOTE:
Document Reference: EN010106/APP/6.3
APPF Regulation: 5(2)(a)

Existing vegetation along the Cable Route alignment which is required to be removed during the construction phase would be replaced with the same species to recreate the vegetation cover

Purpose of Issue
FOR DCO SUBMISSION

Client
SUNNICA LTD

Project Title

Drawing Title
**FIGURE 2
LANDSCAPE MASTERPLAN
SUNNICA EAST SITE A**

Drawn LL	Checked DW	Approved NC	Date 11/11/2021
AECOM Internal Project No. 60589004		Scale @ A3 1:12,000	

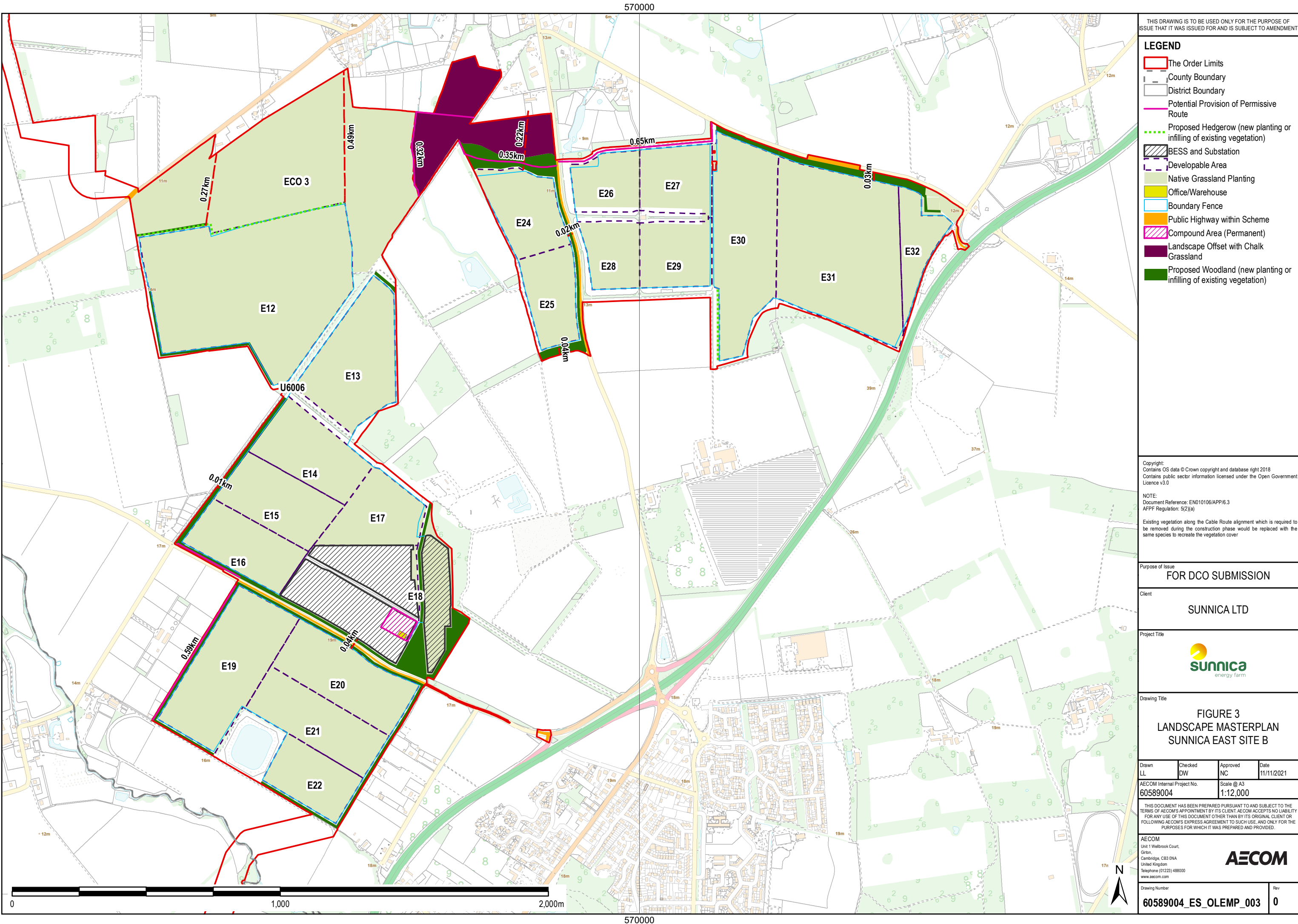
THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

AECOM
Unit 1 Wellbrook Court,
Girton,
Cambridge, CB3 0NA
United Kingdom
Telephone (01223) 488000
www.aecom.com

AECOM

Drawing Number 60589004_ES_OLEMP_002	Rev 0
--	-----------------

File Name: \\eu.aecomnet.com\UK\CBG1\Ubs\PR-334327_Sunnica_Energy_Farm\400_Technical\Disciplines\17_GIS\Layout\OLEMP21111_SunnicaEnergyFam_Figure3_LandscapeMasterplan_SunnicaEastB.mxd



THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

LEGEND

- The Order Limits
- County Boundary
- District Boundary
- Potential Provision of Permissive Route
- Proposed Hedgerow (new planting or infilling of existing vegetation)
- BESS and Substation
- Developable Area
- Native Grassland Planting
- Office/Warehouse
- Boundary Fence
- Public Highway within Scheme
- Compound Area (Permanent)
- Landscape Offset with Chalk Grassland
- Proposed Woodland (new planting or infilling of existing vegetation)


Copyright:
Contains OS data © Crown copyright and database right 2018
Contains public sector information licensed under the Open Government Licence v3.0

NOTE:
Document Reference: EN010106/APP/6.3
AEPF Regulation: 5(2)(a)

Existing vegetation along the Cable Route alignment which is required to be removed during the construction phase would be replaced with the same species to recreate the vegetation cover

Purpose of Issue
FOR DCO SUBMISSION

Client
SUNNICA LTD

Project Title


Drawing Title
**FIGURE 3
LANDSCAPE MASTERPLAN
SUNNICA EAST SITE B**

Drawn
LL

Checked
DW

Approved
NC

Date
11/11/2021

AECOM Internal Project No.
60589004

Scale @ A3
1:12,000

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND IS SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

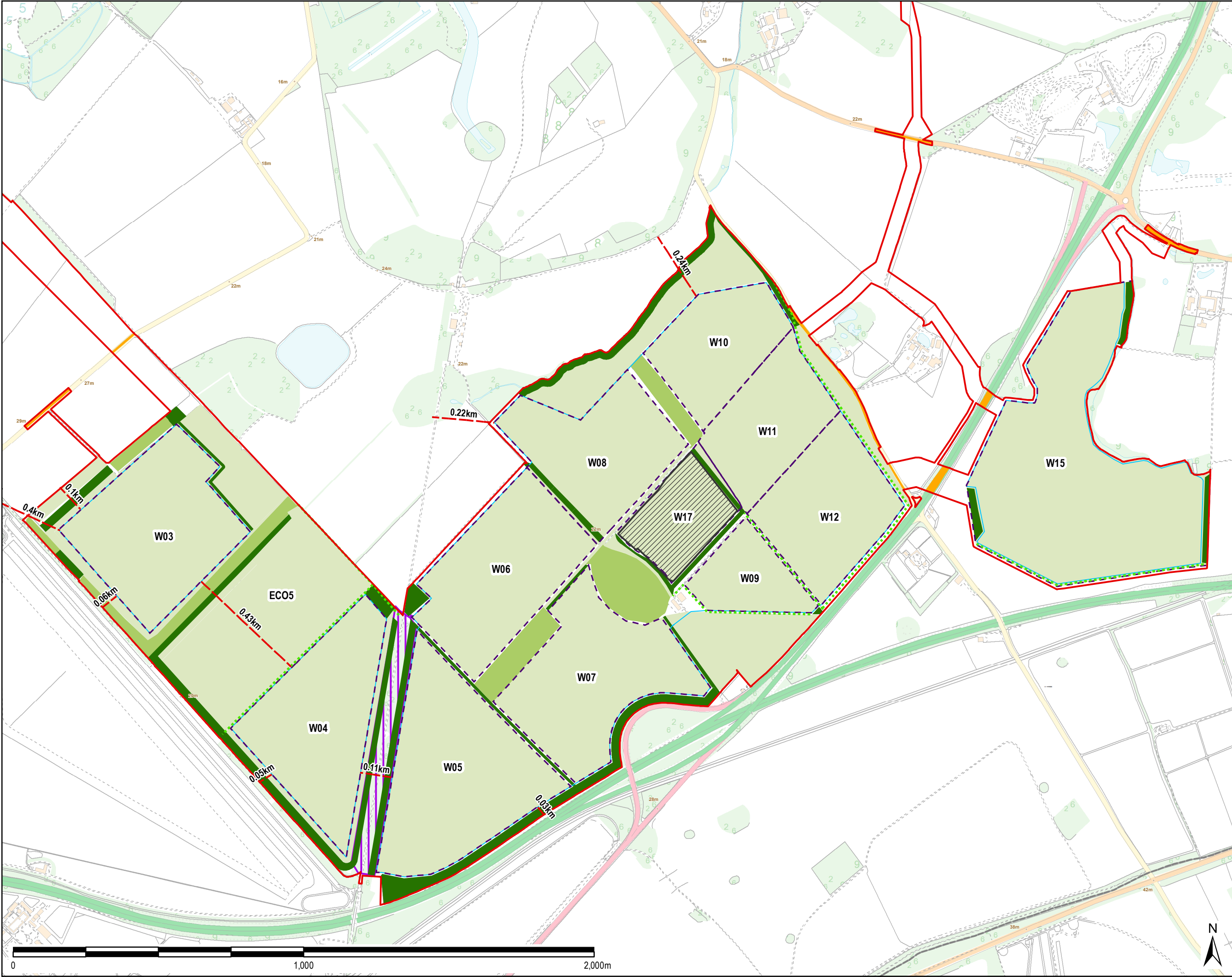
AECOM
Unit 1 Wellbrook Court,
Girton,
Cambridge, CB3 0NA
United Kingdom
Telephone (01223) 488000
www.aecom.com

Drawing Number
60589004_ES_OLEMP_003

Rev
0

AECOM

File Name: \\eu.aecomnet.com\UK\UKCBG1\ubs\PR-334327_Sunnica_Energy_Farm\400_Technical\Disciplines\17_GIS\Layout\OLEMP2\1111_SunnicaEnergyFarm_Figure4_LandscapeMasterplan_SunnicaWestA.mxd



THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

LEGEND

- The Order Limits
- County Boundary
- District Boundary
- Proposed Hedgerow (new planting or infilling of existing vegetation)
- BESS and Substation
- Developable Area
- Native Grassland Planting
- Boundary Fence
- Public Highway within Scheme
- Heritage Offset with additional planting along The Avenue
- Proposed Woodland (new planting or infilling of existing vegetation)
- Retained Woodland


Copyright:
Contains OS data © Crown copyright and database right 2018
Contains public sector information licensed under the Open Government Licence v3.0

NOTE:
Document Reference: EN010106/APP/6.3
AEPF Regulation: 5(2)(a)

Existing vegetation along the Cable Route alignment which is required to be removed during the construction phase would be replaced with the same species to recreate the vegetation cover

Purpose of Issue
FOR DCO SUBMISSION

Client
SUNNICA LTD

Project Title


Drawing Title
**FIGURE 4
LANDSCAPE MASTERPLAN
SUNNICA WEST SITE A**

Drawn LL	Checked DW	Approved NC	Date 11/11/2021
AECOM Internal Project No. 60589004		Scale @ A3 1:12,000	

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND IS SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

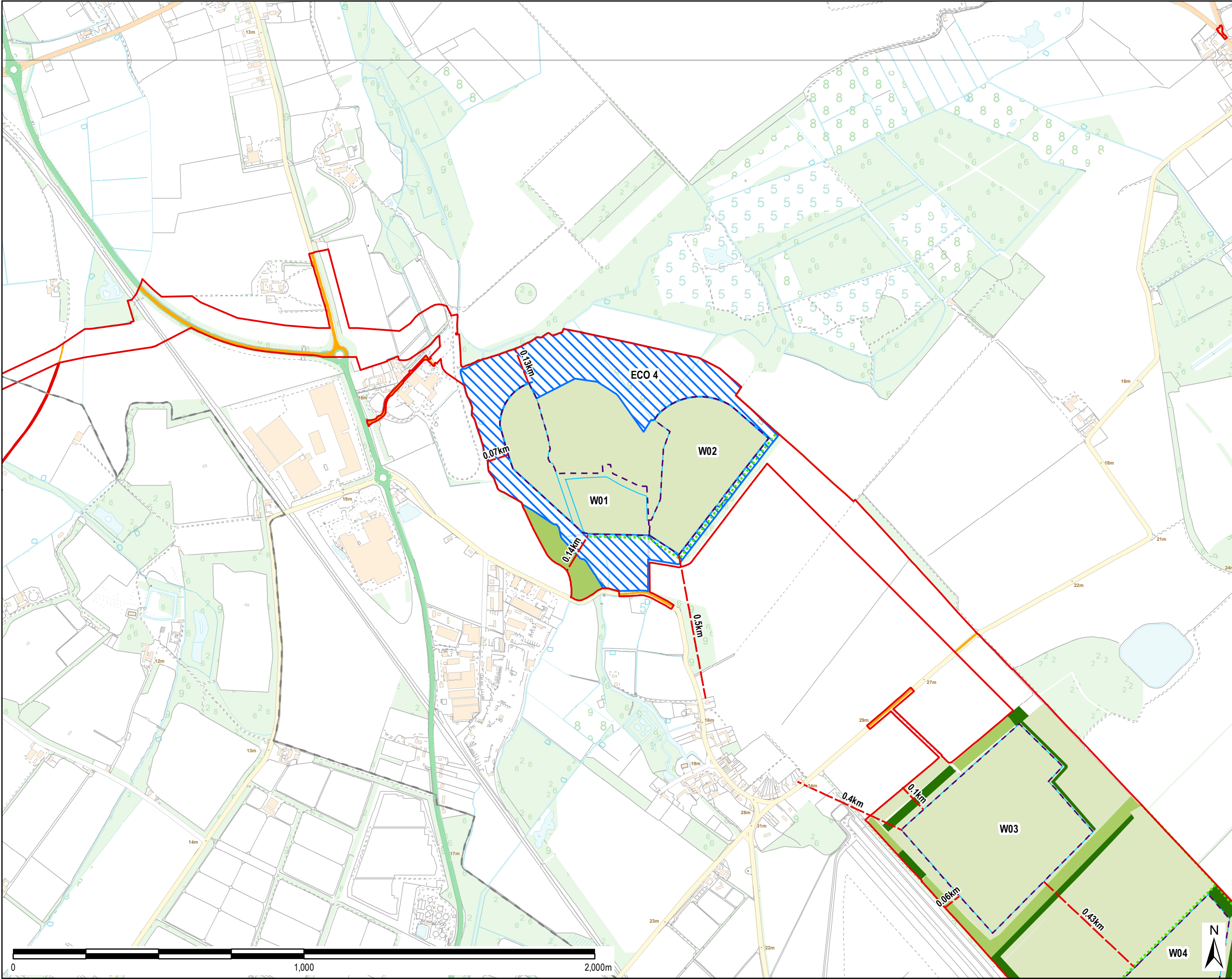
AECOM
Unit 1 Wellbrook Court,
Gilton,
Cambridge, CB3 0NA
United Kingdom
Telephone (01223) 488000
www.aecom.com

AECOM

Drawing Number 60589004_ES_OLEMP_004	Rev 0
--	-----------------

File Name: \\eu.aecomnet.com\UK\UKCBG1\ubbs\PR-334327_Sunnica_Energy_Farm\400_Technical\Disciplines\17_GIS\Layout\OLEMP21111_SunnicaEnergyFam_Figure5_LandscapeMasterplan_SunnicaWestB.mxd

270000



THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

LEGEND

- The Order Limits
- County Boundary
- District Boundary
- Proposed Hedgerow (new planting or infilling of existing vegetation)
- Developable Area
- Native Grassland Planting
- Boundary Fence
- Public Highway within Scheme
- Native Grassland/Wetland
- Heritage Offset with additional planting along The Avenue
- Proposed Woodland (new planting or infilling of existing vegetation)
- Retained Woodland


Copyright:
Contains OS data © Crown copyright and database right 2018
Contains public sector information licensed under the Open Government Licence v3.0

NOTE:
Document Reference: EN010106/APP/6.3
AEPF Regulation: 5(2)(a)

Existing vegetation along the Cable Route alignment which is required to be removed during the construction phase would be replaced with the same species to recreate the vegetation cover

Purpose of Issue
FOR DCO SUBMISSION

Client
SUNNICA LTD

Project Title


Drawing Title
**FIGURE 5
LANDSCAPE MASTERPLAN
SUNNICA WEST SITE B**

Drawn LL	Checked DW	Approved NC	Date 11/11/2021
AECOM Internal Project No. 60589004		Scale @ A3 1:12,000	

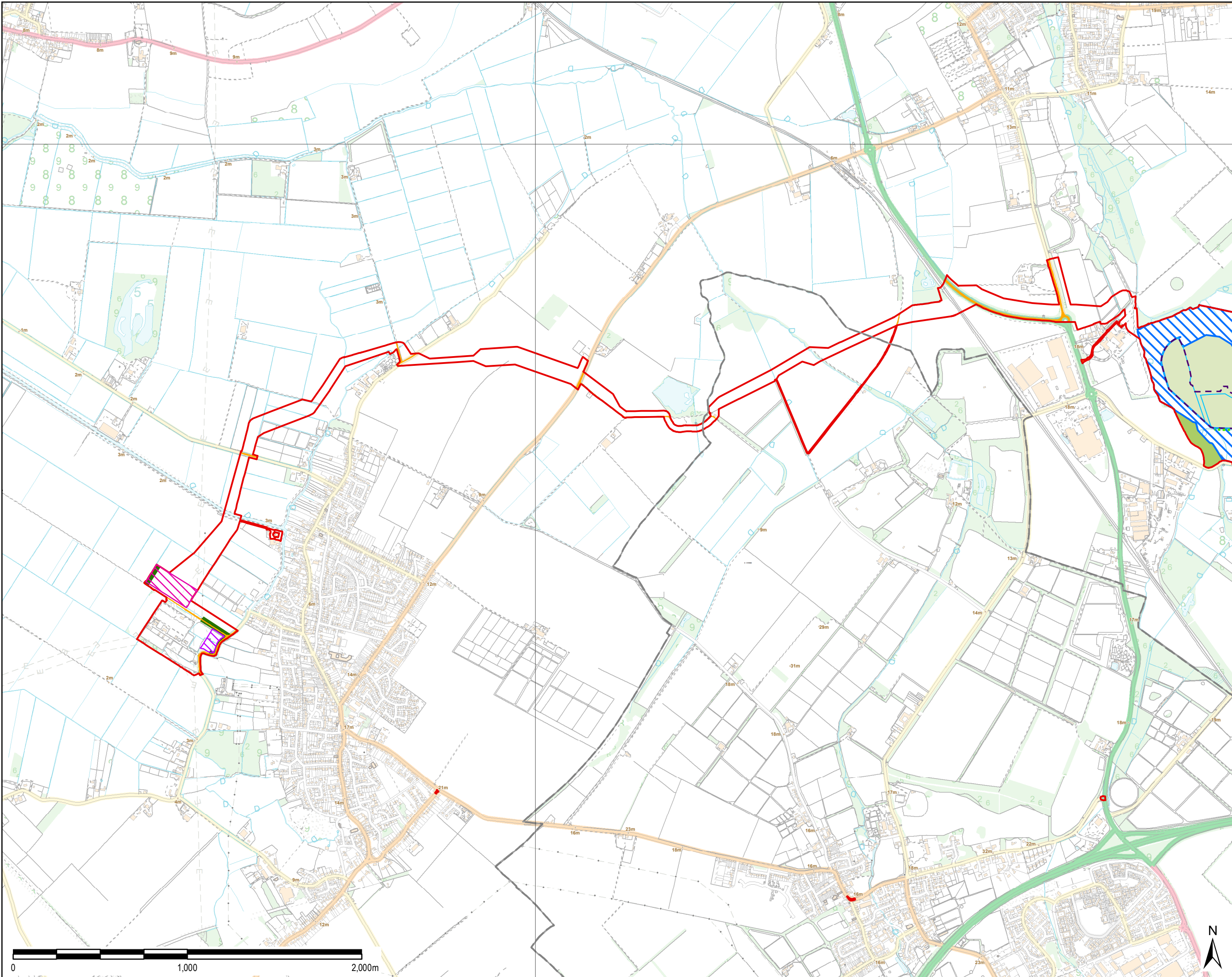
THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

AECOM
Unit 1 Wellbrook Court,
Gilton,
Cambridge, CB3 0NA
United Kingdom
Telephone (01223) 488000
www.aecom.com

AECOM

Drawing Number 60589004_ES_OLEMP_005	Rev 0
--	-----------------

File Name: \\eu.aecomnet.com\UK\CBG1\ubs\PR-334327_Sunnica_Energy_Farm\400_Technical\Disciplines\17_GIS\Layout\OLEMP21111_SunnicaEnergyFam_Figure6_LandscapeMasterplan_CableRouteBurwellSubstation.mxd



THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

LEGEND

- The Order Limits
- County Boundary
- District Boundary
- Proposed Hedgerow (new planting or infilling of existing vegetation)
- Developable Area
- Native Grassland Planting
- Boundary Fence
- Public Highway within Scheme
- Native Grassland/Wetland
- Proposed Woodland (new planting or infilling of existing vegetation)
- Retained Woodland
- National Grid Substation Extension Burwell - Option 1
- National Grid Substation Extension Burwell - Option 2

Copyright:
Contains OS data © Crown copyright and database right 2018
Contains public sector information licensed under the Open Government Licence v3.0

NOTE:
Document Reference: EN010106/APP/6.3
APPF Regulation: 5(2)(a)

Purpose of Issue
FOR DCO SUBMISSION

Client
SUNNICA LTD

Project Title

Drawing Title
**FIGURE 6
LANDSCAPE MASTERPLAN
CABLE ROUTE
TO BURWELL SUBSTATION**

Drawn LL	Checked DW	Approved NC	Date 11/11/2021
AECOM Internal Project No. 60589004		Scale @ A3 1:20,000	

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND IS SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

AECOM
Unit 1 Wellbrook Court,
Gilton,
Cambridge, CB3 0NA
United Kingdom
Telephone (01223) 488000
www.aecom.com

AECOM

Drawing Number 60589004_ES_OLEMP_006	Rev 0
--	-----------------

APPENDIX 4

Comparison of Conclusions about Landscape Effects in MBELC Review and LVIA

Comparison of Conclusions about Landscape Effects in MBELC Review and LVIA

Table 1 below contains a comparison of conclusions reached in Section 9 of MBELC 1186 R01 Sunnica PVD Landscape Review (MBELC Review) with the conclusions of ES 6.1 Chapter 10 Landscape and Visual Amenity (LVIA) (APP-042) which are considered in Section 11 of MBELC Review. The tables only consider the Local Landscape Character Areas (LLCA) that were assessed for effects in the LVIA.

In the MBELC Review we have considered the villages as an integral part of the LLCAs in which they are located, and this is reflected in Table 1.

The LVIA sets out the assessment of effects for individual site areas (Sunnica East Sites A & B, Sunnica West Sites A & B). However, some of the LLCA are affected by more than one of the sites and where this is the case only the most significant LVIA assessment is shown.

For ease of reference Table 2 provides information on where the individual assessments can be found in the LVIA. Multiple references indicate where there are multiple assessments because an LLCA is affected by more than one of the Sunnica Sites.

Appendix 4

MBELC Appendix 3 Table 1: Comparison of Conclusions in MBELC Review and LVIA

	LVIA			MBELC Review		
LLCA	SENSITIVITY Figure 20	EFFECT Yr 1 Figure 21	EFFECT Yr 15 Figure 22	SENSITIVITY Figure 20.1	EFFECT Yr 1 Figure 21.1	EFFECT Yr 15 Figure 22.1
LLCA 8: Worlington	Medium	Minor Adverse	Negligible Adverse	Medium (Included with LLCA 13 below)	Moderate/major (Included with LLCA 13 below)	Moderate (Included with LLCA 13 below)
LLCA 9: Six Acre Chalk Farmland	Low	Negligible Adverse	Negligible Adverse			
LCA 10: Isleham	High	Minor Adverse	Negligible Adverse	Medium/high	Moderate/major	Moderate/major
LLCA 11: East Fen Chalklands	Medium	Minor Adverse	Minor Adverse			
LLCA 12: Freckenham	High	Minor Adverse	Minor Adverse			
LLCA 13: Estate Sandlands Mosaic	Medium	Major Adverse	Moderate Adverse	Medium	Moderate/major	Moderate
LLCA 14: River Kennett (Badlingham)	High	Negligible Adverse	Neutral ¹			
LLCA 21: Snailwell	High	Negligible Adverse	Negligible Adverse	High	Major adverse	Major adverse
LLCA 23B: Chippenham Park	High	Minor Adverse	Negligible Adverse			
LLCA 24: Lowland Estate Chalkland	Medium	Major Adverse	Moderate Adverse			
LLCA 26: The Limekilns and Gallops	Medium	Minor Adverse	Minor Adverse	High	Major adverse	Major adverse

¹ Assessment for LLCA 14: River Kennett Year 15 is not included in the LVIA but it is included in Appendix 10G: Landscape Effects, Page 10G-30

Appendix 4

MBELC Appendix 3 Table 2: References to the assessment of sensitivity and effect in LVIA

LLCA	Sensitivity	Year 1	Year 15	Combined	
				Year 1	Year 15
LLCA 8: Worlington	Table 10-5	Table 10-17	Table 10-23	Not assessed	Not assessed
LLCA 9: Six Acre Chalk Farmland	Table 10-5	Table 10-17	Table 10-23	Not assessed	Not assessed
LCA 10: Isleham	Table 10-5	Table 10-16	Table 10-22	Not assessed	Not assessed
LLCA 11: East Fen Chalklands	Table 10-5	Table 10-16	Table 10-22	Not assessed	Not assessed
LLCA 12: Freckenham	Table 10-5	Table 10-16 Table 10-17	Table 10-22 Table 10-23	Table 10-21	Table 10-26
LLCA 13: Estate Sandlands Mosaic	Table 10-5	Table 10-17	Table 10-23	Not assessed	Not assessed
LLCA 14: River Kennett (Badlingham)	Table 10-5	Table 10-17	Appendix 10G to LVIA, page 10G-30	Not assessed	Not assessed
LLCA 21: Snailwell	Table 10-5	Table 10-18	Table 10-24	Table 10-21	Table 10-26
LLCA 23B: Chippenham Park	Table 10-5	Table 10-18	Table 10-24	Not assessed	Not assessed
LLCA 24: Lowland Estate Chalkland	Table 10-5	Table 10-18 Table 10-19	Table 10-24 Table 10-25	Table 10-21	Table 10-26
LLCA 26: The Limekilns and Gallops	Table 10-5	Table 10-18	Table 10-24	Not assessed	Not assessed



Michelle Bolger Expert Landscape Consultancy Ltd

Company Registration No. 09809868

VAT Registration No. 224 2598 12

Registered Office: 35 Pickford Road Bexleyheath DA7 4AG

