

## **Appendix N      Consultation document and banners**



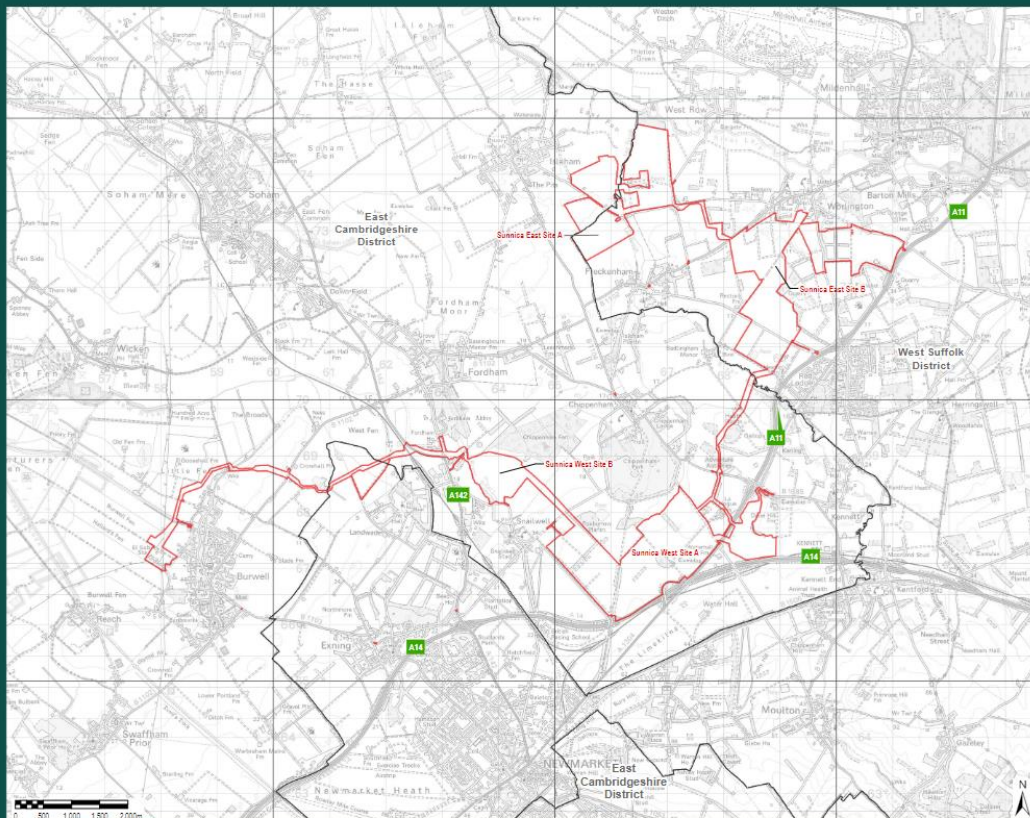
## Introduction

In November 2021, Sunnica Ltd applied for development consent to build Sunnica Energy Farm ('the Scheme'). We are now seeking to make some changes to the proposals for connecting to the national electricity transmission system included in our application for a Development Consent Order (DCO).

Since submitting our DCO application, we have received updated information from National Grid Electricity Transmission (NGET) about connecting the Scheme to the national electricity transmission system at the Burwell National Grid Substation.

We are therefore proposing to change the technical options for our grid connection included in our DCO application to take account of this new information. Before we submit our application to the Planning Inspectorate to make these changes, we are consulting on the changes between 6 June 2022 and 6 July 2022.

This document sets out further information about the changes and how to take part in the consultation.



## Sunnica Energy Farm

The proposed Scheme would include both solar photovoltaic (PV) and battery energy storage (BESS) infrastructure. The Scheme is located on land spanning the border between Suffolk and Cambridgeshire shown on the plan on the previous page.

The four sites would be connected to each other and the Burwell National Grid Substation by an underground cable. The Scheme would allow for the generation, storage, import, and export of electricity.

To facilitate the grid connection at Burwell, we need to provide a substation or transformer capable of upgrading the voltage of the electricity generated by the Scheme to 400 kilovolts (kV). Within our application, we included two options for extending the Burwell National Grid Substation to do this. Within the application, we call these Option 1 and Option 2.

Further information on the Scheme as submitted can be found on the Planning Inspectorate's National Infrastructure Planning website: <https://infrastructure.planninginspectorate.gov.uk/projects/eastern/sunnica-energy-farm/?ipcsection=docs>

### The planning process

As the Scheme would have a generating capacity in excess of 50 megawatts (MW) of electricity, it is classified as a Nationally Significant Infrastructure Project (NSIP) by the Planning Act 2008. We are therefore applying for a Development Consent Order (DCO) to build and operate the proposed Scheme, as required by the Planning Act 2008.

The Scheme would be located across four sites:

**Sunnica East Site A, near Isleham**  
**Sunnica East Site B, near Freckenham and Worlington**  
**Sunnica West Site A, near Chippenham and Kennett**  
**Sunnica West Site B, near Snailwell**

DCO applications are decided nationally by the relevant Secretary of State. In this case, the relevant Secretary of State is the Secretary of State for Business, Energy and Industrial Strategy.

In making their decision, the Secretary of State will receive a recommendation from their appointed Examining Authority as to whether or not the application should be approved. The Examining Authority will undertake an Examination of the application prior to giving its recommendation to the Secretary of State. During this time, anyone who has made a relevant representation is able to take part and submit their views for consideration by the Examining Authority.

## Background to the consultation

### Where we are now

We submitted our DCO application in November 2021. The application was accepted by the Planning Inspectorate on behalf of the Secretary of State for Business, Energy and Industrial Strategy on 18 December 2021.

Following this, we publicised the acceptance of the application and the Planning Inspectorate accepted relevant representations between 3 February and 17 March 2022. As we identified updated contact details for some consultees, these consultees only were additionally given until 1 April 2022 to make a relevant representation.

The application is currently at the pre-examination stage. The Examining Authority will soon provide a date for the Preliminary Meeting which will determine how the application is examined.

### Why we need to change our DCO application

Through the relevant representations process, we were made aware of the representation made by National Grid Electricity Transmission (NGET). This representation stated that one of our two grid connection options, Option 1, is 'not technically feasible'.

We had undertaken extensive engagement with NGET prior to submitting our DCO application, this included discussions relating to Option 1. As such, we had confidence in Option 1 at the time of submission.

Following NGET's representation, we have looked afresh at the technical solutions to connect Sunnica Energy Farm into the NGET infrastructure at Burwell to seek to minimise compulsory acquisition requirements

and environmental effects. This is particularly appropriate given that Option 2 would require the compulsory acquisition of land.

This design work has resulted in the identification of an additional option for the grid connection, 'Option 3'. In taking Option 3 forward and discounting Option 1, we need to make changes to our application documentation to reflect the updated position. The acceptance of such into the Examination requires agreement from the Examining Authority.

Further detail of each of these options, and the changes required to our DCO application, are included in the next section.

## Our grid connection options

The Scheme would connect to the National Electricity Transmission System at Burwell National Grid Substation.

In our DCO application, we stated that this would require an extension to the Substation. This would have a maximum footprint of 43m by 76m in plan and will be up to 12m in height, with an associated laydown area of up to 43m by 30m.

The extension would house a new 132kV to 400kV transformer, a 132kV busbar to connect the two 132kV circuits from the Scheme sites with associated equipment and protections, including circuit breakers and voltage suppressors.

Our DCO application included two potential locations for the extension, both adjacent to the existing Substation. This was because at the time that we submitted our DCO application, NGET had indicated that Option 1 was feasible in the context of its own plans to extend the existing National Grid Substation although it had not been able to confirm this in writing.

NGET has subsequently stated that our Option 1 substation extension is: "not

technically feasible given the amount of land now required by the Promoter, the planned extension of the substation and [National Grid Electricity Transmission] NGET's license obligations". As such, the representation suggested that we should take forward Option 2.

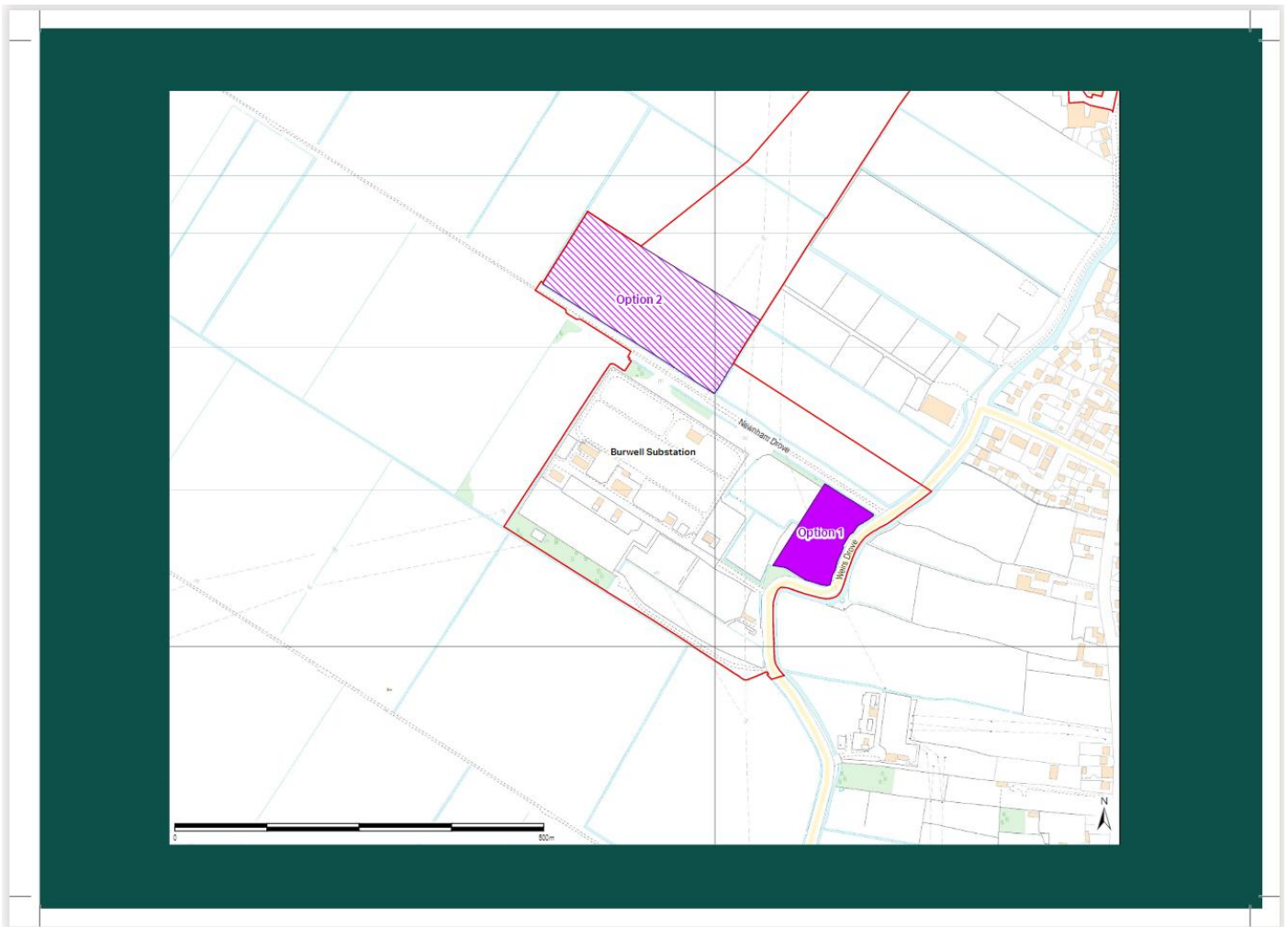
We have reviewed different possible design solutions to facilitate the grid connection to ensure our solution minimises environmental impacts and third party land acquisition. At present, Option 2 would likely require the compulsory acquisition of land from a third party.

This review has led us to explore a different option - Option 3. This option would require 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. This revised arrangement would convert the power from the Scheme to 400kV and allow for a connection to be made to the Burwell National Grid Substation using a 400kV underground cable. This option would not require any extension at the Burwell National Grid Substation.

We have undertaken initial discussions with NGET which have indicated that Option 3 is feasible and we will continue to progress these discussions with a view to confirming that Option 3 is technically feasible.

It is likely that we would need to submit a modification application to the connection agreement that we have with NGET. For this reason, we are retaining Option 2 within our application in the event that NGET does not agree to the required changes to the connection agreement, or if Option 3 proves not to be technically feasible.

Subject to receiving confirmation in writing from NGET as to why Option 1 is not technically feasible, we will remove Option 1 from the Scheme as part of our change application. Subject to agreeing the modification agreement with NGET, which is likely to be post commencement of the Examination, we would remove Option 2 from the Application. Accordingly, it is anticipated at this stage that the changes application will retain Option 2, but remove Option 1



The table below summarises in further detail the different substation extension options that we have considered using within the Scheme.

Substation extension option	Description	Reason for inclusion within the DCO
<b>Option 1:</b> Burwell National Grid Substation to be extended to the east, adjacent to Weirs Drove	<p>The Option 1 extension was proposed to be located on land that is in National Grid's ownership adjacent to Weirs Drove to the immediate east of the existing National Grid Substation and approximately 200m west of Burwell. Option 1 is marked on the plan on the previous page.</p> <p>This extension option would have a maximum footprint of 43m by 76m in plan and will be up to 12m in height, with an associated laydown area of up to 43m by 30m.</p> <p>This extension option would house a 132kV to 400kV transformer, a 132kV busbar to connect the two 132kV circuits from the Scheme sites with associated equipment and protections, including circuit breakers and voltage suppressors.</p> <p>Whilst we would not seek to acquire the freehold of the Option 1 land we may still seek cable rights across it.</p>	<p>This was our preferred option at the time of submitting our DCO application.</p> <p>Subject to NGET substantiating its claim in its relevant representation which stated that Option 1 is 'not technically feasible', <b>we would propose to remove Option 1 from the Scheme and would therefore no longer seek powers for the works or land associated with Option 1.</b></p>
<b>Option 2:</b> Burwell National Grid Substation to be extended to the north of the existing substation, on land outside of NGET ownership	<p>Option 2 would be located to the north of the existing substation, approximately 450m from Burwell. This is also shown on the plan on the opposite page. Option 2 is larger than Option 1 because of the need for flexibility in design and to account for environmental constraints. Regardless of which of these two options we took forward, the footprint of the extension would have been the same size.</p> <p>This extension option would have a maximum footprint of 43m by 76m in plan and will be up to 12m in height, with an associated laydown area of up to 43m by 30m.</p> <p>The extension will house a new 132kV to 400kV transformer, a 132kV busbar to connect the two 132kV circuits from the Scheme sites with associated equipment and protections, including circuit breakers and voltage suppressors.</p>	<p>Option 2 was included within our DCO application because at the time we submitted our DCO application, Sunnica had not yet finalised a property agreement for the Option 1 land.</p> <p>Negotiation with the landowner for Option 2 has indicated that a voluntary agreement for the land required to pursue this option is unlikely. Option 2 would therefore likely require Sunnica Ltd to exercise compulsory acquisition powers.</p>
<b>Option 3:</b> Substation arrangements to change at Sunnica West Site A, Sunnica East Site A and Sunnica East Site B, and 400kV cabling arrangement to be used, no extension required to the Burwell National Grid Substation	<p>Option 3 would use 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 to convert the power from the Scheme to 400kV and allow for a connection to be made to the Burwell National Grid Substation using a 400kV underground cable.</p> <p>This would not require an extension to the Burwell National Grid Substation but would require changes to the previously proposed configuration of the substations and transformers at Sunnica West Site A, Sunnica East Site A and Sunnica East Site B to allow for the use of a 400kV/33kV transformer in the place of the 132kV/33kV transformers that would be required under options 1 and 2.</p> <p>A shunt reactor would need to be introduced at Sunnica East Site B. The construction methodology required for these substations would differ to those outlined in the existing DCO application as explained in this document.</p> <p>The potential environmental effects of the revised substation arrangements are considered in the following sections of this document.</p>	<p><b>Option 3 is new and was not included in our original DCO application.</b></p> <p>At present, Option 2 would likely require the compulsory acquisition of land from a third party. As we are trying to minimise the compulsory acquisition of land, we once again reviewed the different design options for facilitating the Scheme's connection to the national electricity grid.</p> <p>This review has led us to pursue Option 3 as one of our options. This would involve a change to the design to the underground cables to accommodate a single 400kV circuit (one set of three cables) and a change to the configuration of the substation at Sunnica West Site A. This would also require a change in the type of transformers at Sunnica East Site A and Sunnica East Site B. Further details are available on page 10. This would not change the developable area of the transformers at each location.</p> <p><b>Option 3 is being added to the Scheme and we therefore need to make an application for the proposed changes set out on the following pages.</b></p>

## Summary of the changes

The main change that we are proposing to make (subject to NGET confirming that they consider that it is not technically feasible) is to remove Option 1 for the Burwell National Grid Substation Extension from the Scheme. This is described below as Change 1. The remaining two changes that we are proposing to make, Change 2 and Change 3, are required to facilitate Option 3 and are a consequence of Change 1.

We are making the below changes because we want to minimise unacceptable impacts to the local community and environment as a result of the Scheme. The changes will not require that any additional land is added to the Order limits (the Scheme boundary). In fact, if we are to make use of Option 3, we would be in a position to reduce the extent of the land that we may need to compulsorily acquire.

We believe the changes are non-material and will reduce environmental effects from the scheme, however, this is ultimately for the Examining Authority to decide. The full set of changes that we are proposing to make through our change application are set out on the following pages.

**Change 1:** To remove the Burwell National Grid Substation Extension Option 1 (this is the option located immediately to the east of the existing Burwell National Grid Substation and the land borders Weirs Drove and Newham Drove) from the Scheme.

The Burwell Substation extension Option 1 is proposed to be removed from the Scheme, although rights through this land may still be required for underground cabling. The need for the transformer compound at this location would be removed by changing the electrical configuration of the Scheme (as set out in Change 2 and Change 3) or by proceeding with Option 2 for the substation extension.

If Option 3 is to proceed, works will still be required to connect the Scheme to the national electricity grid at Burwell and therefore access will be required for those works and for maintenance during operations. Option 3 would remove the need to deliver a large transformer to site, therefore removing the vehicle movements associated with this delivery. Cable Route Access A would be relocated to the existing Burwell National Grid main access to facilitate the required works to connect the Scheme to the national electricity grid.





**Change 2:** Option to be added to the Application to enable the use of 400kV cabling within the grid connection routes A and B.

Option 3 would require that the electrical configuration for the main import and export electrical cables that run within Grid Connection Route A and Grid Connection Route B be suitable for 400kV transmission as opposed to the 132kV cables that would be required for options 1 and 2. This would mean that only a single set of cables will require a trench, jointing bays, horizontal directional drills as opposed to four were the cables to be run at 132kV. This change is within the parameters assessed in the Environmental Statement submitted as part of the DCO application.

**Change 3:** Option to allow for additional electrical infrastructure to be added to the substations referred to in the Application at Sunnica West A, Sunnica East A and Sunnica East B. The change would not involve making the substations any larger than was included in the Application.

If Option 3 is to proceed, the substations at Sunnica West Site A, Sunnica East Site A and Sunnica East Site B will need to change in terms of their electrical configuration and therefore their general arrangement and layout would also be different but within the parameters assessed in the Environmental Statement submitted as part of the DCO application. This is owing to the introduction of a 400KV/ 33kV transformer in place of the 132kV/33kV transformers that would be required under Options 1 and 2. A shunt reactor would also need to be introduced at Sunnica East Site B.

The construction methodology and techniques used at each sites' substation will change slightly to accommodate the different technology but will remain within the parameters of the construction assessments carried out for the Environmental Statement. This change of technology eliminates the need for additional equipment to be installed at the National Grid Burwell Substation.

## Impacts anticipated

We are currently undertaking work to confirm that there are no additional negative environmental effects as a result of including Option 3 within our application. We will present updated environmental information that will form part of our change application.

At this time, we do not expect there to be any new adverse environmental effects arising as a result of the changes. The expected environmental impacts are set out in the table below.

Change	Anticipated Impact
<b>Change 1</b> To remove the Burwell National Grid Substation Extension Option 1.	The removal of Option 1 would remove the need for the 132/400kV transformer and substation to be located within 200m of the closest residential receptors within Burwell. This will result in the removal of landscape and visual construction, operational and decommissioning environmental effects associated with Option 1. In addition, it removes the requirement to divert the ditch, which is located within the centre of the Option 1 site; removes the requirement to relocate a badger sett; and would not require the removal of vegetation to facilitate the access into the Burwell National Grid Substation or vegetation within the previous Option 1 site area.
<b>Change 2</b> Option to be added to the Application to enable the use of 400kV cabling within the grid connection routes A and B.	The construction methodology and techniques will be the same for the 400kV cables as for the 132kV cables, except that fewer, but slightly larger cables are installed. The environmental effects associated with Change 2 are therefore considered to be similar to those currently reported with the Environmental Statement.
<b>Change 3</b> Option to allow for additional electrical infrastructure to be added to the substations referred to in the Application at Sunnica West A, Sunnica East A and Sunnica East B. The change would not involve making the substations any larger than was included in the Application.	The maximum height and footprint at all three substations will not change from the original height and footprint stated in the DCO Application. This is taking into account all changes, including the introduction of the 33/400kV transformers at all three substation locations and the shunt reactor at Sunnica East Site B, which will be a maximum of 10m.  The maximum footprint of each of the substation areas will therefore remain as per those stated below. <ul style="list-style-type: none"> <li>• Sunnica East Site A: 85m by 55m footprint, 10m in height.</li> <li>• Sunnica East Site B: 85m by 130m footprint, 10m in height.</li> <li>• Sunnica West Site A: 85m by 130m footprint, 10m in height.</li> </ul> The environmental effects associated with Change 3 are therefore considered to be similar to those currently reported with the Environmental Statement.

## Changes to Application Documents



The changes outlined in this document are expected to result in the following changes to the application documents:

### **Change 1**

To remove the Burwell National Grid Substation Extension Option 1 (this is the option located immediately to the east of the existing Burwell National Grid Substation and the land borders Weirs Drove and Newham Drove) from the Scheme.

This will require changes to the Works Plans [AS-004] to remove Work No. 5A and make consequential adjustments to the extent of Work No. 5C and changes to the Draft DCO [APP-019], Book of Reference [APP-024] and Land Plans [AS-002] to change the powers sought over plots 20-16 to 20-20 from compulsory acquisition of land to compulsory acquisition of rights over land.

### **Change 2**

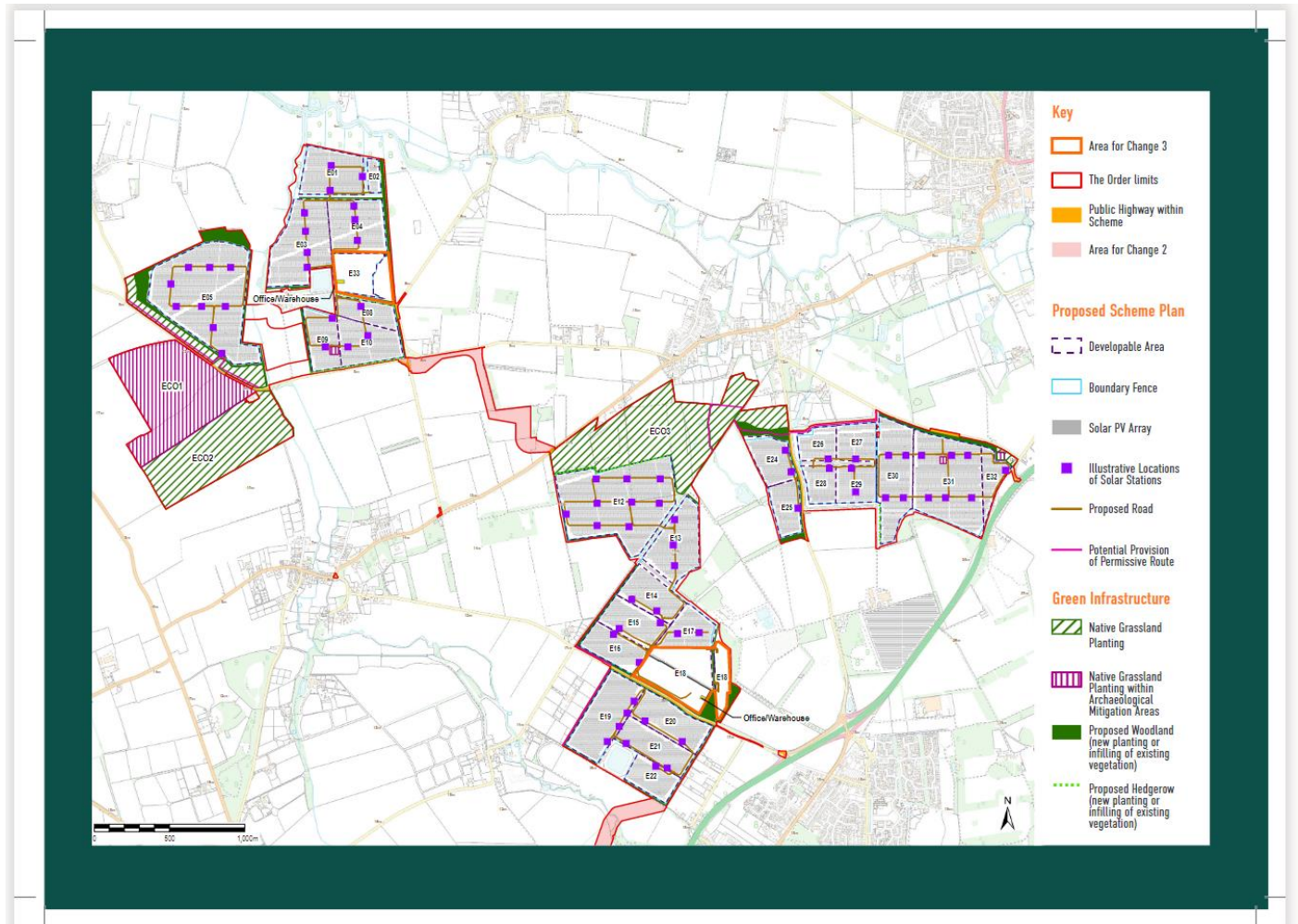
Option to be added to the Application to enable the use of 400kV cabling within the grid connection routes A and B.

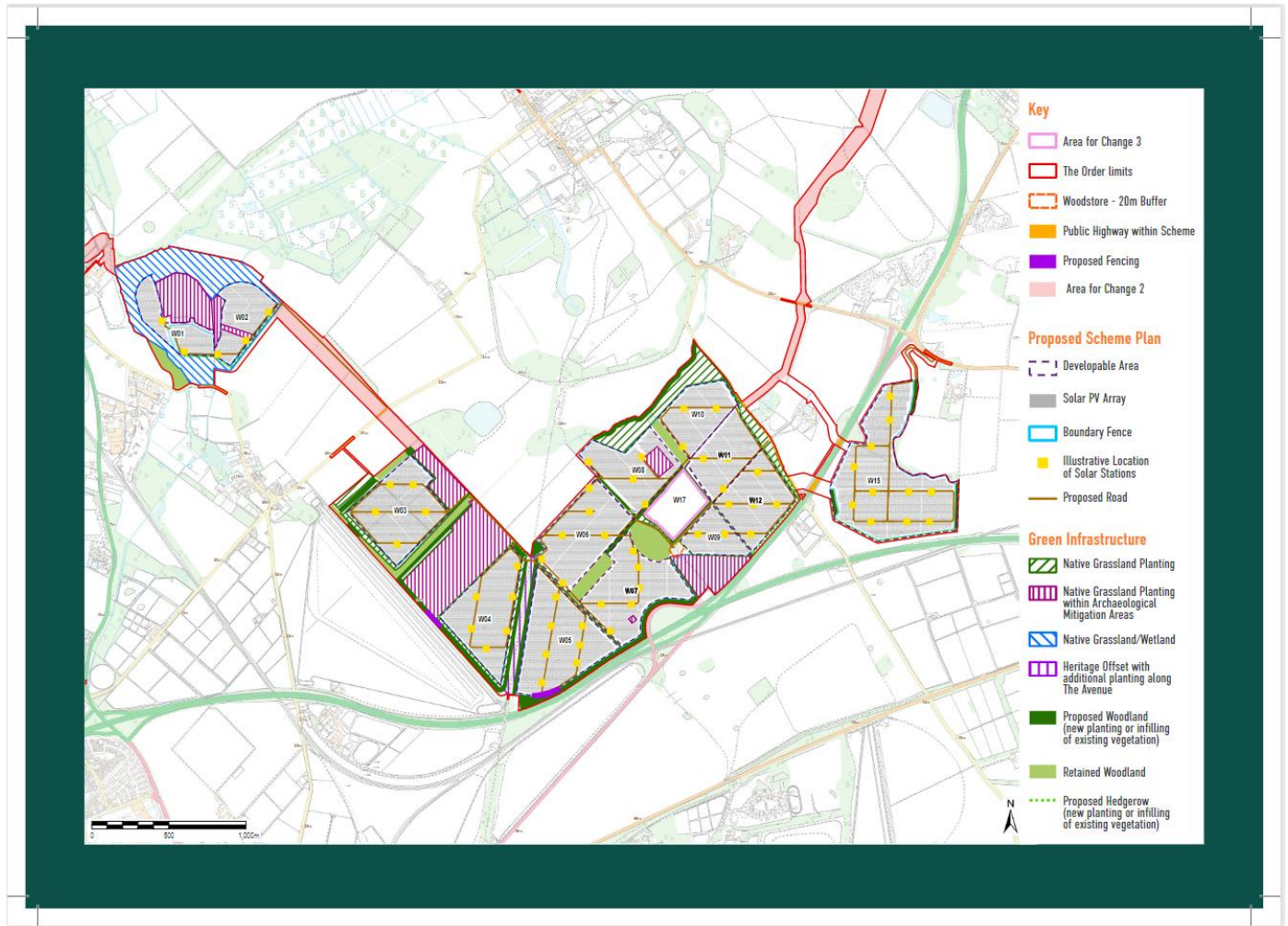
Amendments will be required to Schedule 1 of the Draft Development Consent Order [APP-019] to add 400kV cables to the definition of 'electrical cables' for Work No.4. No changes will be required to the Land and Crown Land Plans [APP-006] as the existing cable corridor width within the application would remain unchanged.

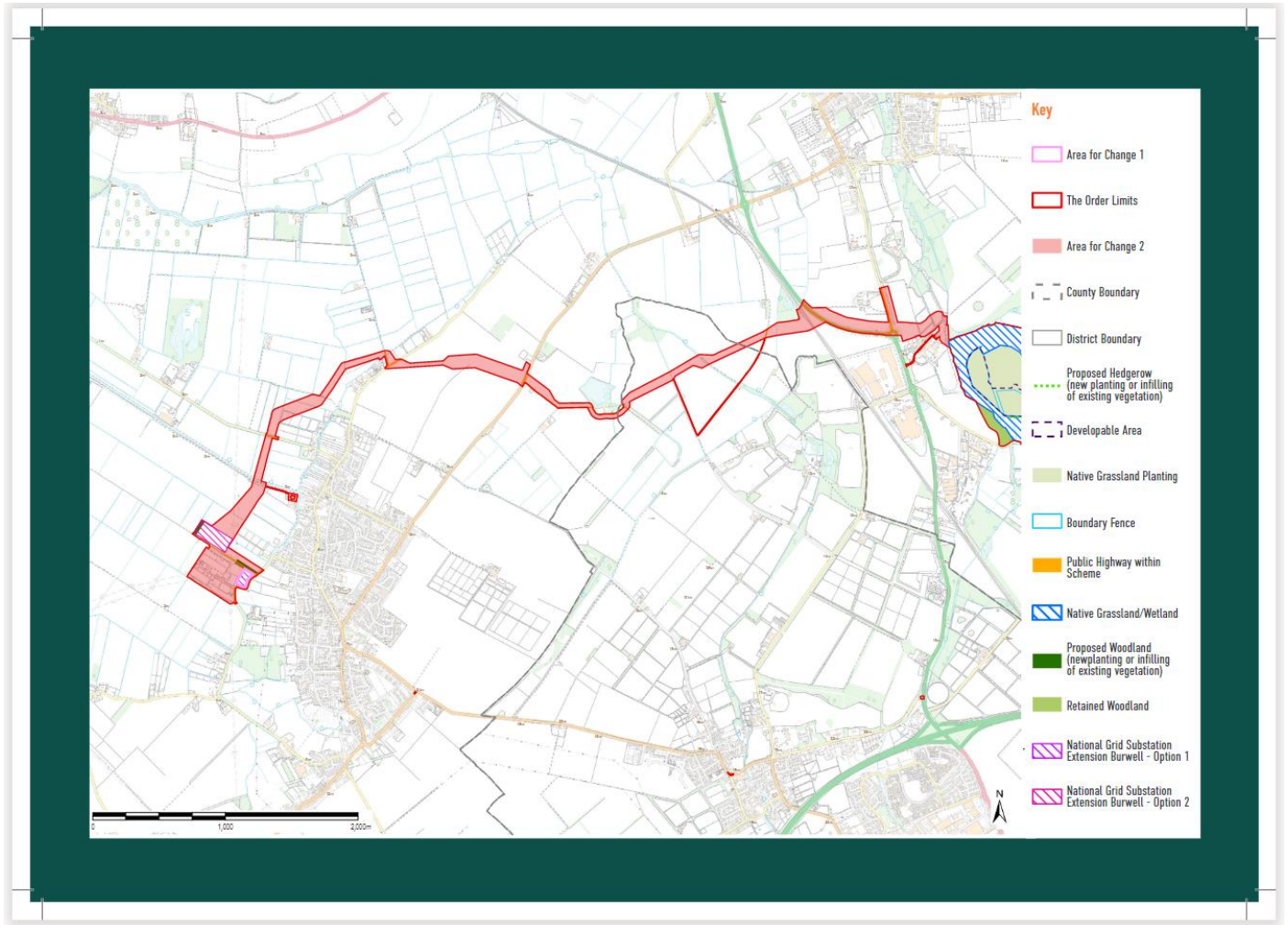
### **Change 3**

Option to allow for additional electrical infrastructure to be added to the substations referred to in the Application at Sunnica West A, Sunnica East A and Sunnica East B. The change would not involve making the substations any larger than was included in the Application.

No amendments will be required as the developable area of, and works required at, each substation will remain the same. Amendments will be required to Schedule 1 of the Draft Development Consent Order [APP-019] to allow for the addition of shunt reactors within the substation areas.









## Find out more

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This document is also available  
to view on the Sunnica Energy  
Farm website: [www.sunnica.co.uk](http://www.sunnica.co.uk)

For further information, or to request  
a USB (memory stick) with the  
application documents posted to  
you free of charge\*, please use the  
following contact details:

**EMAIL:**  
[info@sunnica.co.uk](mailto:info@sunnica.co.uk)

**TELEPHONE:**  
0808 168 7925  
(9am to 5pm, Monday to Friday)

**POST:**  
Sunnica Energy Farm Project,  
Freepost SEC NEWGATE UK LOCAL

\*One USB per household

Hard copies will also be available to view in the following locations at the following times:

LOCATION	OPENING TIMES
Burwell Library, Village College, Burwell, Cambridgeshire CB25 0DU	<b>MONDAY</b> 2:00pm to 5:00pm <b>TUESDAY</b> 10:00am to 5:00pm <b>WEDNESDAY</b> CLOSED <b>THURSDAY</b> 12:00pm to 7:00pm <b>FRIDAY</b> 2:00pm to 5:00pm <b>SATURDAY</b> 10:00am to 1:00pm <b>SUNDAY</b> CLOSED
St Margaret's Church, High Street, Chippenham, Ely CB7 5PP	<b>MONDAY</b> 9:00am to 5:00pm <b>TUESDAY</b> 9:00am to 5:00pm <b>WEDNESDAY</b> 9:00am to 5:00pm <b>THURSDAY</b> 9:00am to 5:00pm <b>FRIDAY</b> 9:00am to 5:00pm <b>SATURDAY</b> 9:00am to 5:00pm <b>SUNDAY</b> 9:00am to 5:00pm

We are additionally organising an event where people will be able to ask questions about these changes, and will publicise further details in due course.



## Give your feedback

We are now seeking your views on these changes and are consulting on **these changes only** between 6 June 2022 and 6 July 2022. Responses to the consultation must be sent to Sunnica Ltd and not to the Planning Inspectorate.

If you want to submit your views to Sunnica Ltd, you must do so in writing by one of the following means:

**By email to:**  
[info@sunnica.co.uk](mailto:info@sunnica.co.uk)

**By post to:**  
FAO Sunnica Energy Farm  
Freepost SEC NEWGATE UK LOCAL

Your response must be received  
by **23:59** on **6 July 2022**.

**Any elements of responses that refer to aspects of the Scheme that are unrelated to the proposed changes will be disregarded by the project team.**

Our privacy policy: Your comments will be analysed by Sunnica Ltd and any of its appointed agents. Copies may be made available in due course to the Secretary of State, the Planning Inspectorate and other relevant statutory authorities so that your comments can be considered as part of the Development Consent Order (DCO) application process. We will request that your personal details are not placed on public record and will be held securely by Sunnica Ltd in accordance with the data protection law and will be used solely in connection with the consultation process and subsequent Examination and application process and, except as noted above, will not be passed to third parties.

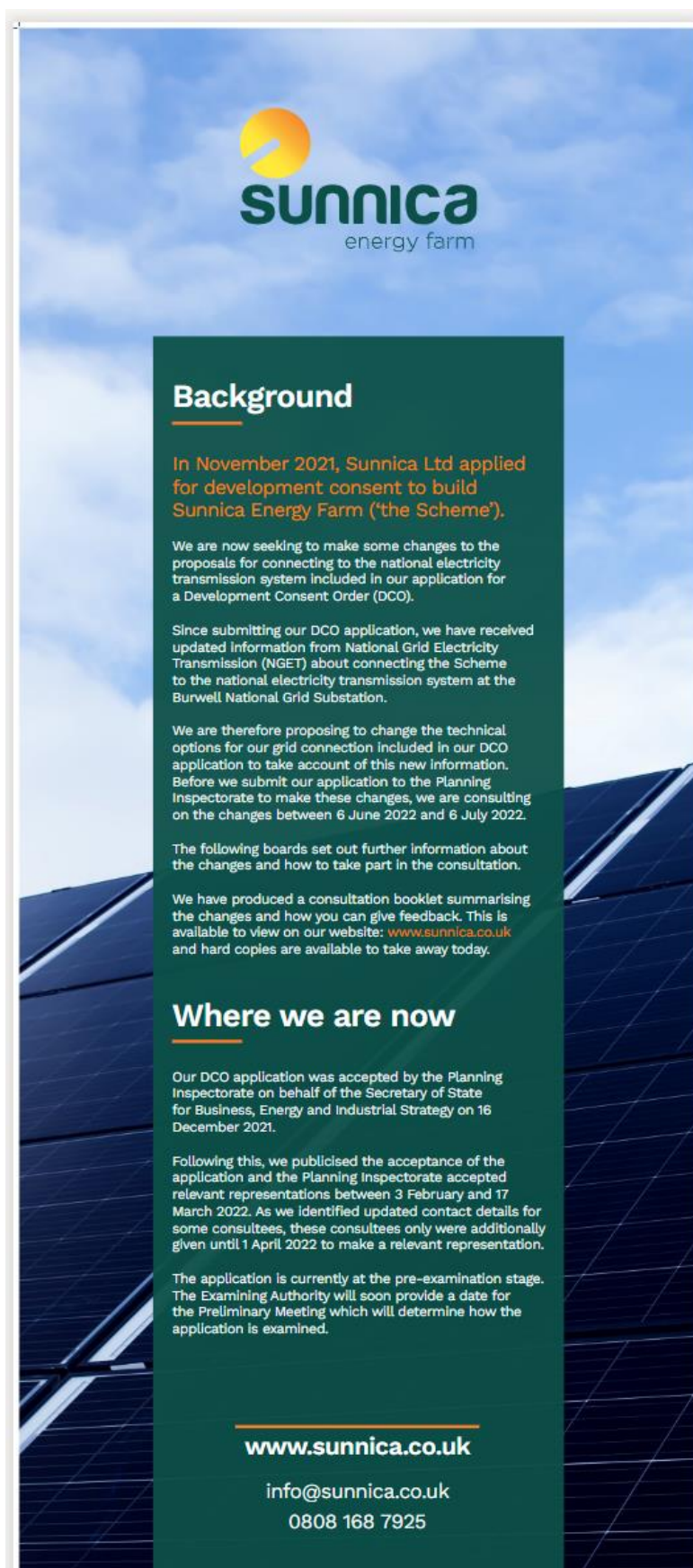





[www.sunnica.co.uk](http://www.sunnica.co.uk)  
[info@sunnica.co.uk](mailto:info@sunnica.co.uk)  
0808 168 7925



## Banners



  
**sunnica**  
energy farm

### Background

In November 2021, Sunnica Ltd applied for development consent to build Sunnica Energy Farm ('the Scheme').

We are now seeking to make some changes to the proposals for connecting to the national electricity transmission system included in our application for a Development Consent Order (DCO).

Since submitting our DCO application, we have received updated information from National Grid Electricity Transmission (NGET) about connecting the Scheme to the national electricity transmission system at the Burwell National Grid Substation.

We are therefore proposing to change the technical options for our grid connection included in our DCO application to take account of this new information. Before we submit our application to the Planning Inspectorate to make these changes, we are consulting on the changes between 6 June 2022 and 6 July 2022.

The following boards set out further information about the changes and how to take part in the consultation.

We have produced a consultation booklet summarising the changes and how you can give feedback. This is available to view on our website: [www.sunnica.co.uk](http://www.sunnica.co.uk) and hard copies are available to take away today.

### Where we are now

Our DCO application was accepted by the Planning Inspectorate on behalf of the Secretary of State for Business, Energy and Industrial Strategy on 16 December 2021.

Following this, we publicised the acceptance of the application and the Planning Inspectorate accepted relevant representations between 3 February and 17 March 2022. As we identified updated contact details for some consultees, these consultees only were additionally given until 1 April 2022 to make a relevant representation.

The application is currently at the pre-examination stage. The Examining Authority will soon provide a date for the Preliminary Meeting which will determine how the application is examined.

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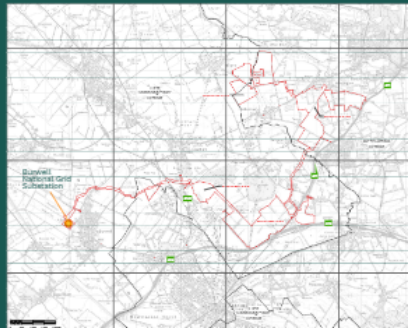


## Scheme overview

The proposed Scheme would include both solar photovoltaic (PV) and battery energy storage (BESS) infrastructure. The Scheme is located on land spanning the border between Suffolk and Cambridgeshire.

The Scheme would be located across four sites:

- Sunnica East Site A, near Isleham
- Sunnica East Site B, near Freckenham and Worlington
- Sunnica West Site A, near Chippenham and Kennett
- Sunnica West Site B, near Snailwell



The four sites would be connected to each other and the Burwell National Grid Substation by an underground cable. To facilitate the grid connection at Burwell, we need to provide a substation with transformer capable of upgrading the voltage of the electricity generated by the Scheme to 400 kilovolts (kV).

Within our application, we included two options for extending the Burwell National Grid Substation to do this. Within the application, we call these Option 1 and Option 2.

### The planning process

As the Scheme would have a generating capacity in excess of 50 megawatts (MW) of electricity, it is classified as a Nationally Significant Infrastructure Project (NSIP) by the Planning Act 2008.

We are therefore applying for a Development Consent Order (DCO) to build and operate the proposed Scheme, as required by the Planning Act 2008. DCO applications are decided nationally by the relevant Secretary of State. In this case, the relevant Secretary of State is the Secretary of State for Business, Energy and Industrial Strategy.

In making their decision, the Secretary of State will receive a recommendation from their appointed Examining Authority as to whether the application should be approved.

The Examining Authority will undertake an Examination of the application prior to giving its recommendation to the Secretary of State. During this time, anyone who has made a relevant representation is able to take part and submit their views for consideration by the Examining Authority.

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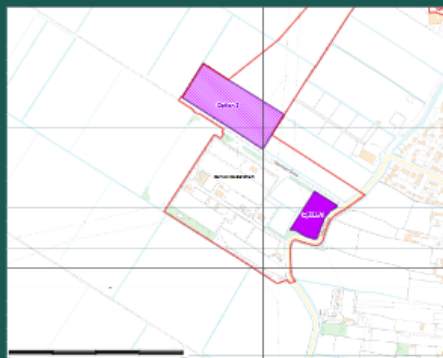


## Why we need to change our DCO application

Through the relevant representations process\*, we were made aware of the representation made by National Grid Electricity Transmission (NGET). This representation stated that one of our two grid connection options, Option 1, is 'not technically feasible'.

We had undertaken extensive engagement with NGET prior to submitting our DCO application, this included discussions relating to Option 1. As such, we had confidence in Option 1 at the time of submission.

Following NGET's representation, we have looked afresh at the technical solutions to connect Sunnica Energy Farm into the NGET infrastructure at Burwell to seek to minimise compulsory acquisition requirements and environmental effects.



This is particularly appropriate given that Option 2 would require the compulsory acquisition of land.

This design work has resulted in the identification of an additional option for the grid connection, 'Option 3'. In taking Option 3 forward and discounting Option 1, we need to make changes to our application documentation to reflect the updated position.

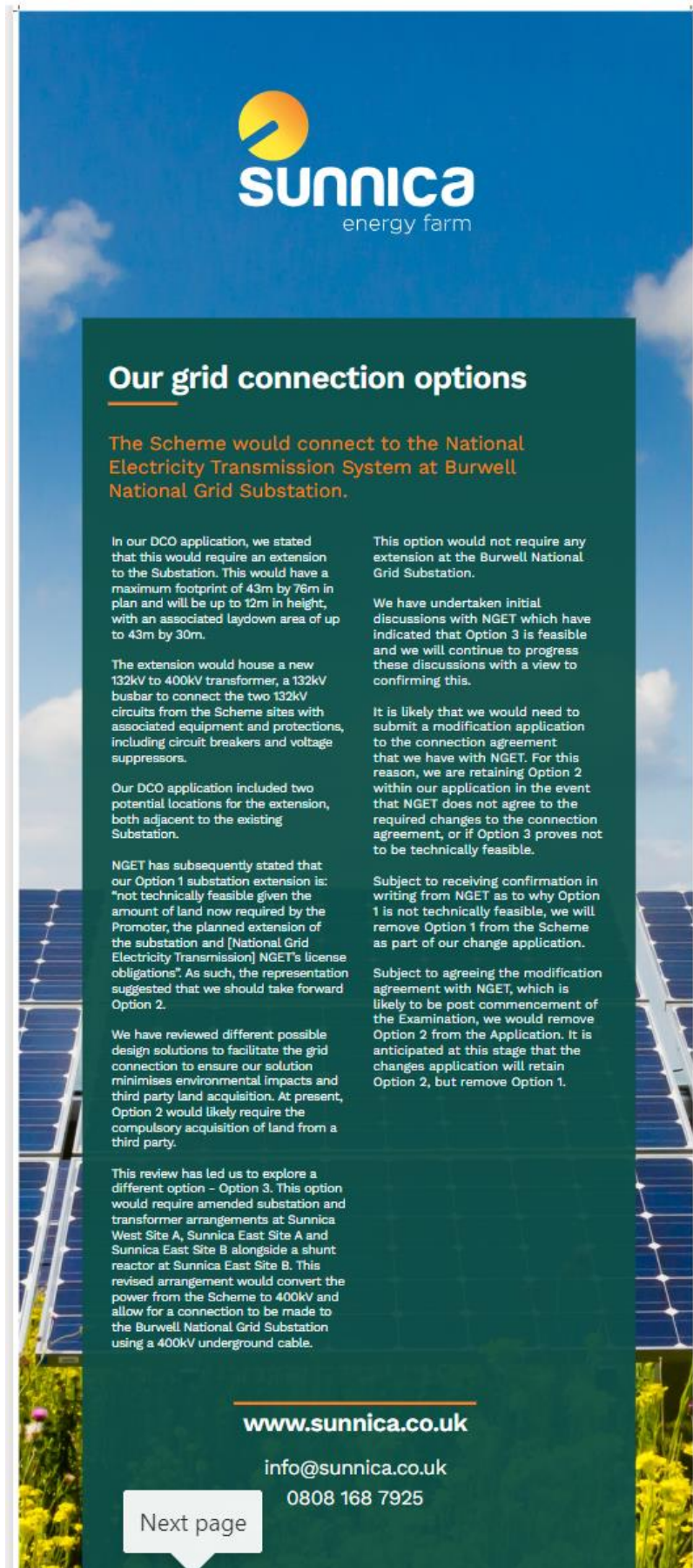
The acceptance of such into the Examination requires agreement from the Examining Authority.


Further detail of each of these options, and the changes required to our DCO application, are outlined on the following boards.

\*A Relevant Representation is a summary of a person or organisation's views on an application, submitted to the Planning Inspectorate. Anyone who makes a Relevant Representation is an Interested Party and is able to take part in the Examination of an application.

[www.sunnica.co.uk](http://www.sunnica.co.uk)

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# sunnica

energy farm

## Our grid connection options

**The Scheme would connect to the National Electricity Transmission System at Burwell National Grid Substation.**

In our DCO application, we stated that this would require an extension to the Substation. This would have a maximum footprint of 43m by 76m in plan and will be up to 12m in height, with an associated laydown area of up to 43m by 30m.

The extension would house a new 132kV to 400kV transformer, a 132kV busbar to connect the two 132kV circuits from the Scheme sites with associated equipment and protections, including circuit breakers and voltage suppressors.

Our DCO application included two potential locations for the extension, both adjacent to the existing Substation.

NGET has subsequently stated that our Option 1 substation extension is: "not technically feasible given the amount of land now required by the Promoter, the planned extension of the substation and [National Grid Electricity Transmission] NGET's license obligations". As such, the representation suggested that we should take forward Option 2.

We have reviewed different possible design solutions to facilitate the grid connection to ensure our solution minimises environmental impacts and third party land acquisition. At present, Option 2 would likely require the compulsory acquisition of land from a third party.

This review has led us to explore a different option - Option 3. This option would require 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. This revised arrangement would convert the power from the Scheme to 400kV and allow for a connection to be made to the Burwell National Grid Substation using a 400kV underground cable.

This option would not require any extension at the Burwell National Grid Substation.

We have undertaken initial discussions with NGET which have indicated that Option 3 is feasible and we will continue to progress these discussions with a view to confirming this.

It is likely that we would need to submit a modification application to the connection agreement that we have with NGET. For this reason, we are retaining Option 2 within our application in the event that NGET does not agree to the required changes to the connection agreement, or if Option 3 proves not to be technically feasible.

Subject to receiving confirmation in writing from NGET as to why Option 1 is not technically feasible, we will remove Option 1 from the Scheme as part of our change application.

Subject to agreeing the modification agreement with NGET, which is likely to be post commencement of the Examination, we would remove Option 2 from the Application. It is anticipated at this stage that the changes application will retain Option 2, but remove Option 1.

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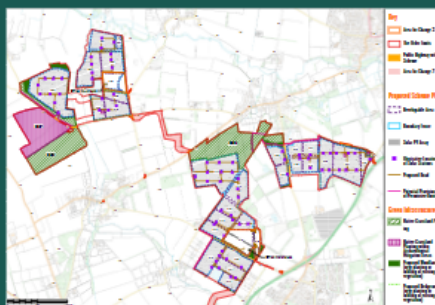
Next page



## Summary of the changes (Part 1)

The main change that we are proposing to make (subject to NGET confirming that they consider that it is not technically feasible) is to remove Option 1 for the Burwell National Grid Substation Extension from the Scheme. This is described below as Change 1. The remaining two changes that we are proposing to make, Change 2 and Change 3, are required to facilitate Option 3 and are a consequence of Change 1.

We are making these changes because we want to minimise unacceptable impacts to the local community and environment as a result of the Scheme. The changes will not require that any additional land is added to the Order limits (the Scheme boundary). In fact, if we are to make use of Option 3, we would be in a position to reduce the extent of the land that we may need to compulsorily acquire.



We believe the changes are non-material and will reduce environmental effects from the scheme, however, this is ultimately for the Examining Authority to decide.

**Change 1: To remove the Burwell National Grid Substation Extension Option 1 (this is the option located immediately to the east of the existing Burwell National Grid Substation and the land borders Weirs Drove and Newham Drove) from the Scheme.**

The Burwell Substation extension Option 1 is proposed to be removed from the Scheme, although rights through this land may still be required for underground cabling. The need for the transformer compound at this location would be removed by changing the electrical configuration of the Scheme (as set out in Change 2 and Change 3) or by proceeding with Option 2 for the substation extension.

If Option 3 is to proceed, works will still be required to connect the Scheme to the national electricity grid at Burwell and therefore access will be required for those works and for maintenance during operations. Option 3 would remove the need to deliver a large transformer to site, therefore removing the vehicle movements associated with this delivery at Burwell.

Cable Route Access A would be relocated to the existing Burwell National Grid main access to facilitate the required works to connect the Scheme to the national electricity grid.

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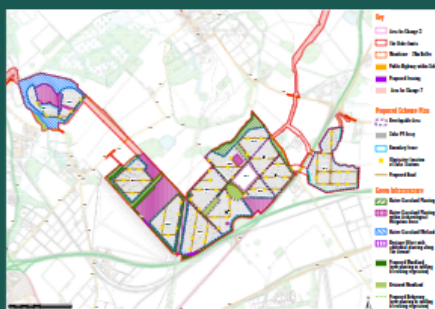
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## Summary of the changes (Part 2)

**Change 2: Option to be added to the Application to enable the use of 400kV cabling within the grid connection routes A and B.**

Option 3 would require that the electrical configuration for the main import and export electrical cables that run within Grid Connection Route A and Grid Connection Route B be suitable for 400kV transmission as opposed to the 132kV cables that would be required for options 1 and 2.



This would mean that only a single set of cables will require a trench, jointing bays, horizontal directional drills as opposed to four were the cables to be run at 132kV. This change is within the parameters assessed in the Environmental Statement submitted as part of the DCO application.

**Change 3: Option to allow for additional electrical infrastructure to be added to the substations referred to in the Application at Sunnica West Site A, Sunnica East Site A and Sunnica East Site B. The change would not involve making the substations any larger than was included in the Application.**

If Option 3 is to proceed, the substations at Sunnica West Site A, Sunnica East Site A and Sunnica East Site B will need to change in terms of their electrical configuration and therefore their general arrangement and layout would also be different but within the

parameters assessed in the Environmental Statement submitted as part of the DCO application. This is owing to the introduction of a 400kV/ 33kV transformer in place of the 132kV/33kV transformers that would be required under options 1 and 2. A shunt reactor would also need to be introduced at Sunnica East Site B.

The construction methodology and techniques used at each sites' substation will change slightly to accommodate the different technology but will remain within the parameters of the construction assessments carried out for the Environmental Statement. This change of technology eliminates the need for a transformer to be installed at the National Grid Burwell Substation.

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## Impacts anticipated

We are currently carrying out work to confirm that there are no additional negative environmental effects as a result of including Option 3 within our application. We will present updated environmental information that will form part of our change application.

At this time, we do not expect there to be any new adverse environmental effects arising as a result of the changes. The expected environmental impacts are set out in the table below.

Change	Anticipated Impact
<b>Change 1</b> To remove the Burwell National Grid Substation Extension Option 1.	The removal of Option 1 would remove the need for the 33/100kV transformer and substation to be located within 200m of the closest residential receptors within Burwell. This will result in the removal of landscape and visual construction, operational and decommissioning environmental effects associated with Option 1. In addition, it removes the requirement to divert the ditch, which is located within the centre of the Option 1 site, remove the requirement to relocate a badger sett, and would not require the removal of vegetation to facilitate the access into the Burwell National Grid Substation or vegetation within the previous Option 1 site area.
<b>Change 2</b> Option to be added to the Application to enable the use of 400kV cabling within the grid connection routes A and B.	The construction methodology and techniques will be the same for the 400kV cables as for the 100kV cables, except that fewer, but slightly larger cables are installed. The environmental effects associated with Change 2 are therefore considered to be similar to those currently reported with the Environmental Statement.
<b>Change 3</b> Option to allow for additional electrical infrastructure to be added to the Application at Sunnica West A, Sunnica East A and Sunnica East B. The change would not involve making the substations any larger than was included in the Application.	The maximum height and footprint at all three substations will not change from the original height and footprint stated in the DCO Application. This is taking into account all changes, including the introduction of the 33/100kV transformers at all three substation locations and the shunt reactor at Sunnica East Site B, which will be a maximum of 10m in height. The maximum footprint of each of the substation areas will therefore remain as per those stated below: <ul style="list-style-type: none"> <li>Sunnica East Site A: 60m by 60m footprint, 10m in height.</li> <li>Sunnica East Site B: 60m by 100m footprint, 10m in height.</li> <li>Sunnica West Site A: 60m by 100m footprint, 10m in height.</li> </ul> The environmental effects associated with Change 3 are therefore considered to be similar to those currently reported with the Environmental Statement.

## Changes to the application documents

We expect the changes that we are setting out here to result in the following changes to the DCO application documents:

**Change 1: To remove the Burwell National Grid Substation Extension Option 1 (this is the option located immediately to the east of the existing Burwell National Grid Substation and the land borders Weirs Drove and Newham Drove) from the Scheme.**

This will require changes to the Works Plans [AS-004] to remove Work No. 5A and make consequential adjustments to the extent of Work No. 5C and changes to the Draft DCO [APP-019], Book of Reference [APP-024] and Land Plans [AS-002] to change the powers sought over plots 20-16 to 20-20 from compulsory acquisition of land to compulsory acquisition of rights over land.

**Change 2: Option to be added to the Application to enable the use of 400kV cabling within the grid connection routes A and B.**

Amendments will be required to Schedule 1 of the Draft Development Consent Order [APP-019] to add 400kV cables to the definition of 'electrical cables' for Work No.4. No changes will be required to the Land and Crown Land Plans [APP-006] as the existing cable corridor width within the application would remain unchanged.

**Change 3: Option to allow for additional electrical infrastructure to be added to the substations referred to in the Application at Sunnica West A, Sunnica East A and Sunnica East B.**

The change would not involve making the substations any larger than was included in the Application. No amendments will be required as the developable area of, and works required at, each substation will remain the same. Amendments will be required to Schedule 1 of the Draft Development Consent Order [APP-019] to allow for the addition of shunt reactors within the substation areas.

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## Give your feedback

We are now seeking your views on our proposed changes only and are consulting on these changes until 6 July 2022.

Responses to the consultation must be sent to Sunnica Ltd and not to the Planning Inspectorate.

If you want to submit your views to Sunnica Ltd, you must do so in writing by one of the following means:

**By email to:**  
info@sunnica.co.uk

**By post to:**  
FAO Sunnica Energy Farm  
Freepost SEC NEWGATE UK LOCAL

Your response must be received by **23:59 on 6 July 2022.**

Any elements of responses that refer to aspects of the Scheme that are unrelated to the proposed changes will be disregarded by the project team.

**Contact information**  
www.sunnica.co.uk  
info@sunnica.co.uk  
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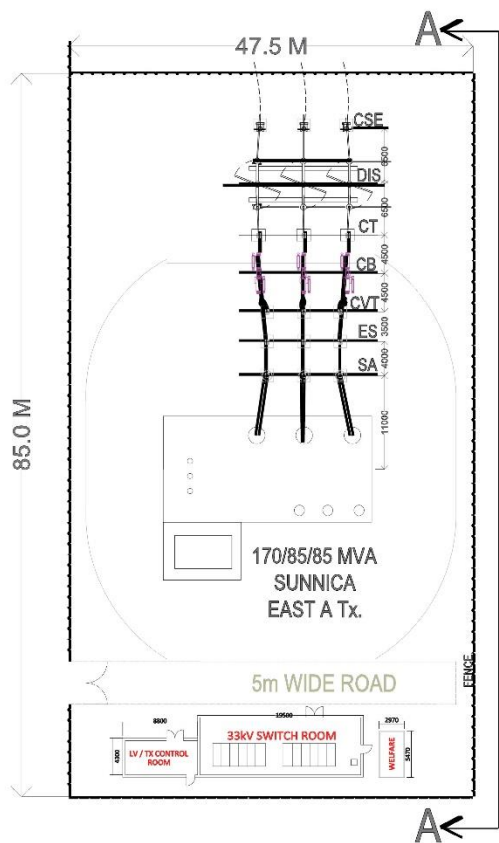
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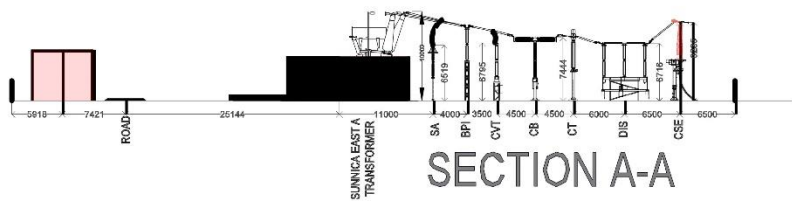
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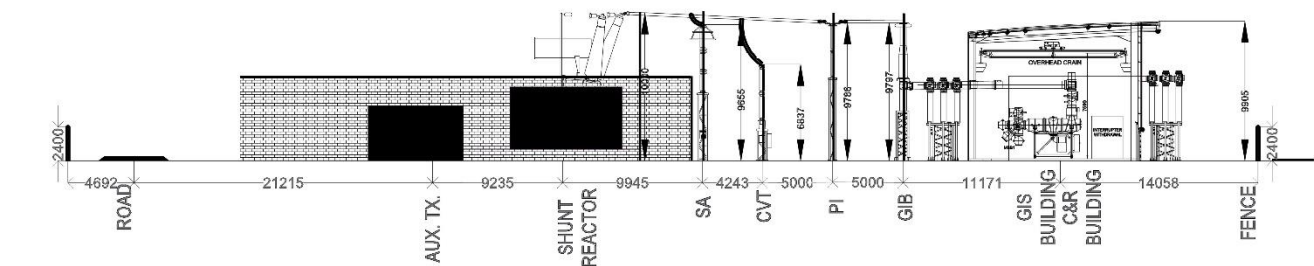
Indicative drawings presented at exhibitions and uploaded to the Applicant’s website



SUBSTATION MINIMUM ELECTRICAL CLEARANCES IN ACCORDANCE WITH TS 2.1

NOMINAL SYSTEM VOLTAGE (rms)	400kV
PHASE TO EARTH CLEARANCE (PE)	2.8m
PHASE TO PHASE CLEARANCE (PP)	3.6m
HORIZONTAL DESIGN CLEARANCE FOR SAFETY (HSC)	4.6m
VERTICAL DESIGN CLEARANCE FOR SAFETY (VSC)	5.5m
INSULATION HEIGHT CLEARANCE (IHC)	2.4m
SAFETY DISTANCE (SD)	3.1m

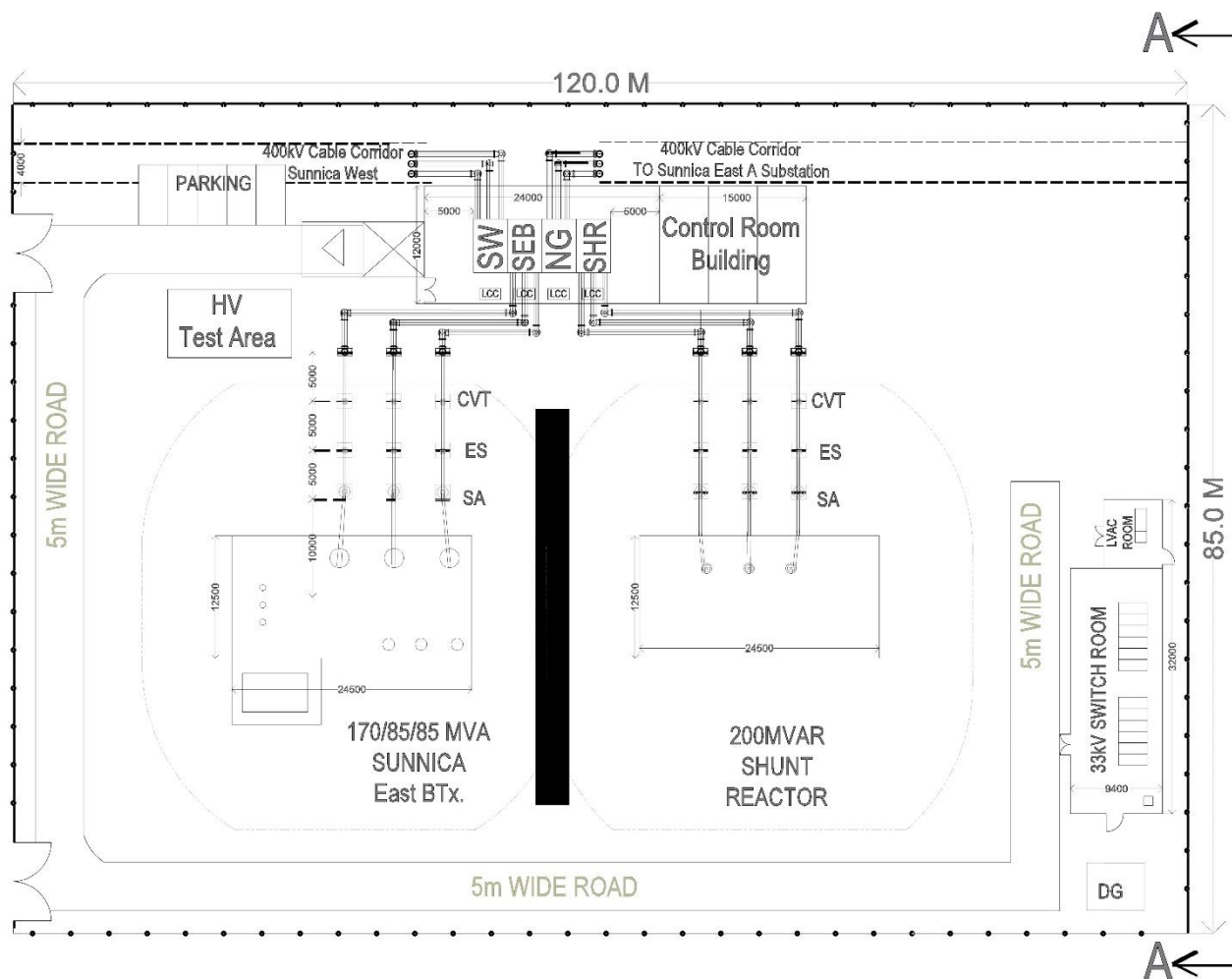


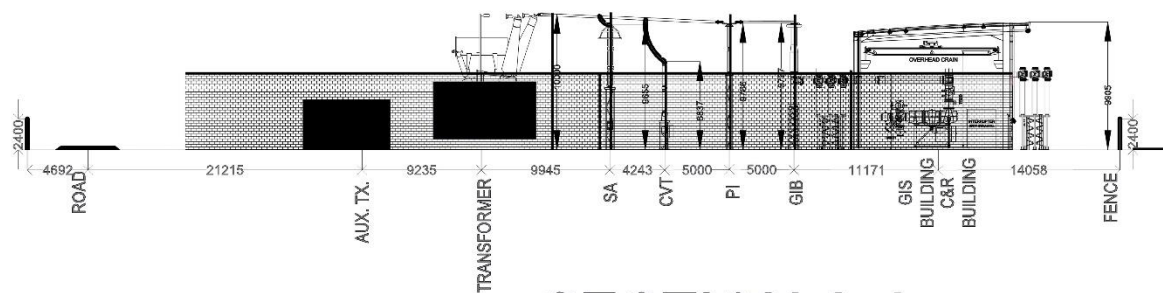


SECTION A-A

SUBSTATION MINIMUM ELECTRICAL CLEARANCES IN ACCORDANCE WITH TS 2.1

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## SECTION A-A

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