EAST STOUR SOLAR FARM

SEI Volume 3 - SEI Figures

PREPARED ON BEHALF OF



January 2024



EAST STOUR SOLAR FARM - SEI VOLUME 3 - SEI FIGURES

PREFACE

This Supplementary Environmental Information (SEI) Figures Volume forms the third part of a four volume SEI which provides additional information addressing points raised by consultees subsequent to the submission of 1.1 - Cumulative Developments the East Stour Solar Farm planning application (Ashford Borough Council reference 22/00668/AS). This information supplements the findings of the Environmental Impact Assessment (EIA), the ES of which accompanied the planning application. The volumes of the complete SEI document are:

Document	Title	Contents
SEI Volume 1	SEI Non- Technical Summary	Summarises the key contents of the SEI for the non-technical reader
SEI Volume 2A	SEI Written Statement	Presents the full SEI text
SEI Volume 2B	SEI Appendices	Presents the appendices referred to in the SEI Written Statement
SEI Volume 3	SEI Figures	Presents updated and additional figures referred to in the SEI Written Statement
SEI Volume 4	Visualisations	Presents additional visualisations referred to within the SEI Written Statement

A complete set of application and SEI documents can be downloaded from the project website, as detailed in the box below.

Printed SEI copies can be purchased at a cost of £200+VAT or digital versions, either as a download or on CD-ROM free of charge.

To order copies, please contact Engena Limited at:

The Old Stables, Bosmere Hall, Creeting St Mary, IP6 8LL.

info@engena.co.uk

or download from:

https://www.edf-re.uk/renewables/east-stour

The Developer may also be contacted at:

east.stour@edf-re.uk or 0800 0194 576

SEI FIGURE LIST

Introduction

- 1.2 Proposed Site Layout (North) REV M [replaces ES Figure 1.2 north]
- 1.2 Proposed Site Layout (South) REV M [replaces ES Figure 1.2 south]
- 1.3 Proposed Site Layout (Aerial Image Underlay North) [replaces ES

Figure 1.3 north]

1.3 - Proposed Site Layout (Aerial Image Underlay - South) [replaces ES

Figure 1.3 south]

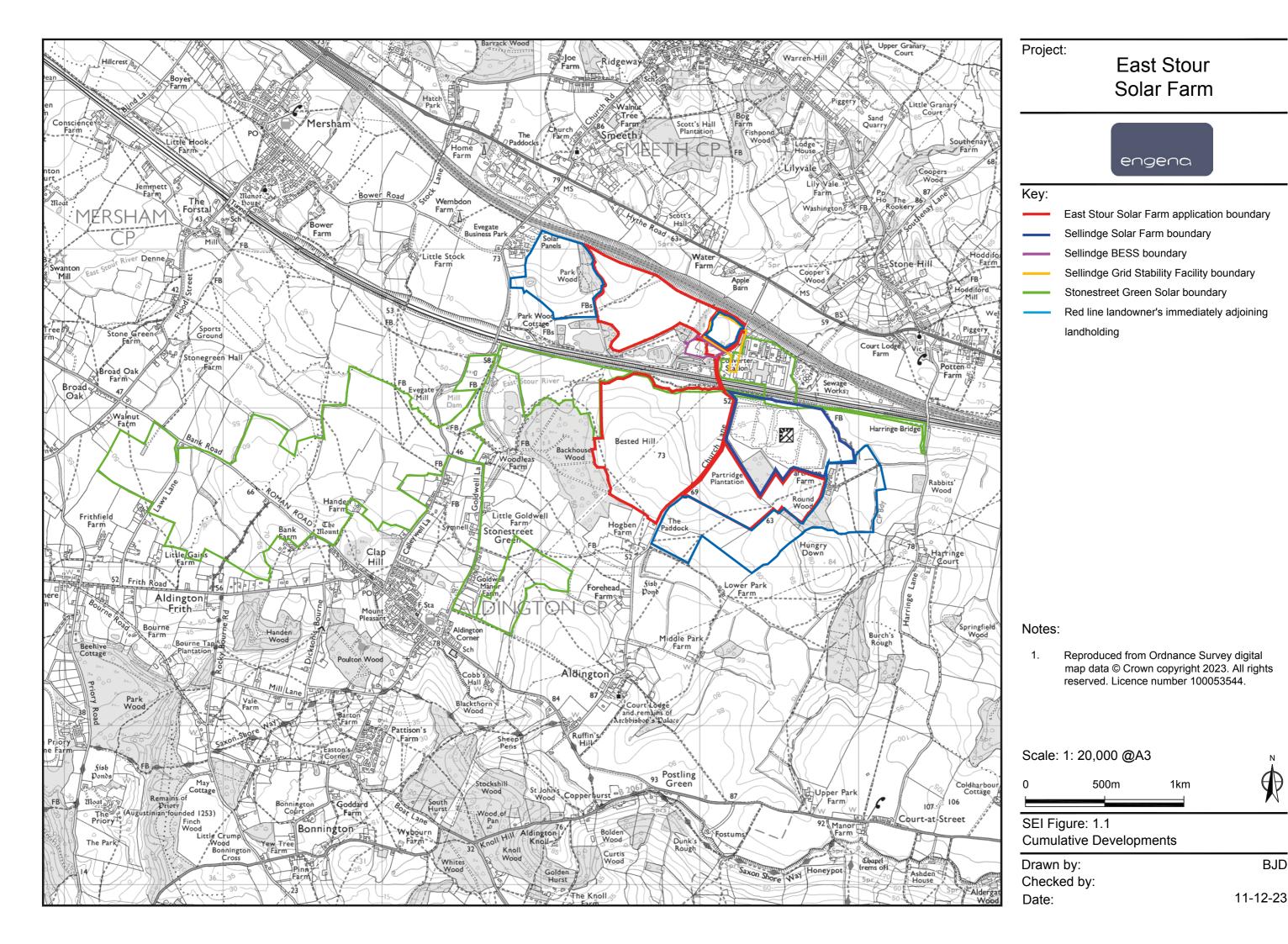
- 11.19 Cross Section E
- 11.20 Cross Section F
- 11.21 Cross Section G
- 11.22 Cross Section H
- 11.23 Cross Section I
- 11.24 Cross Section J
- 11.25 East Stour SEI CZTV Development Scenario 2
- 11.26 East Stour SEI CZTV Development Scenario 3

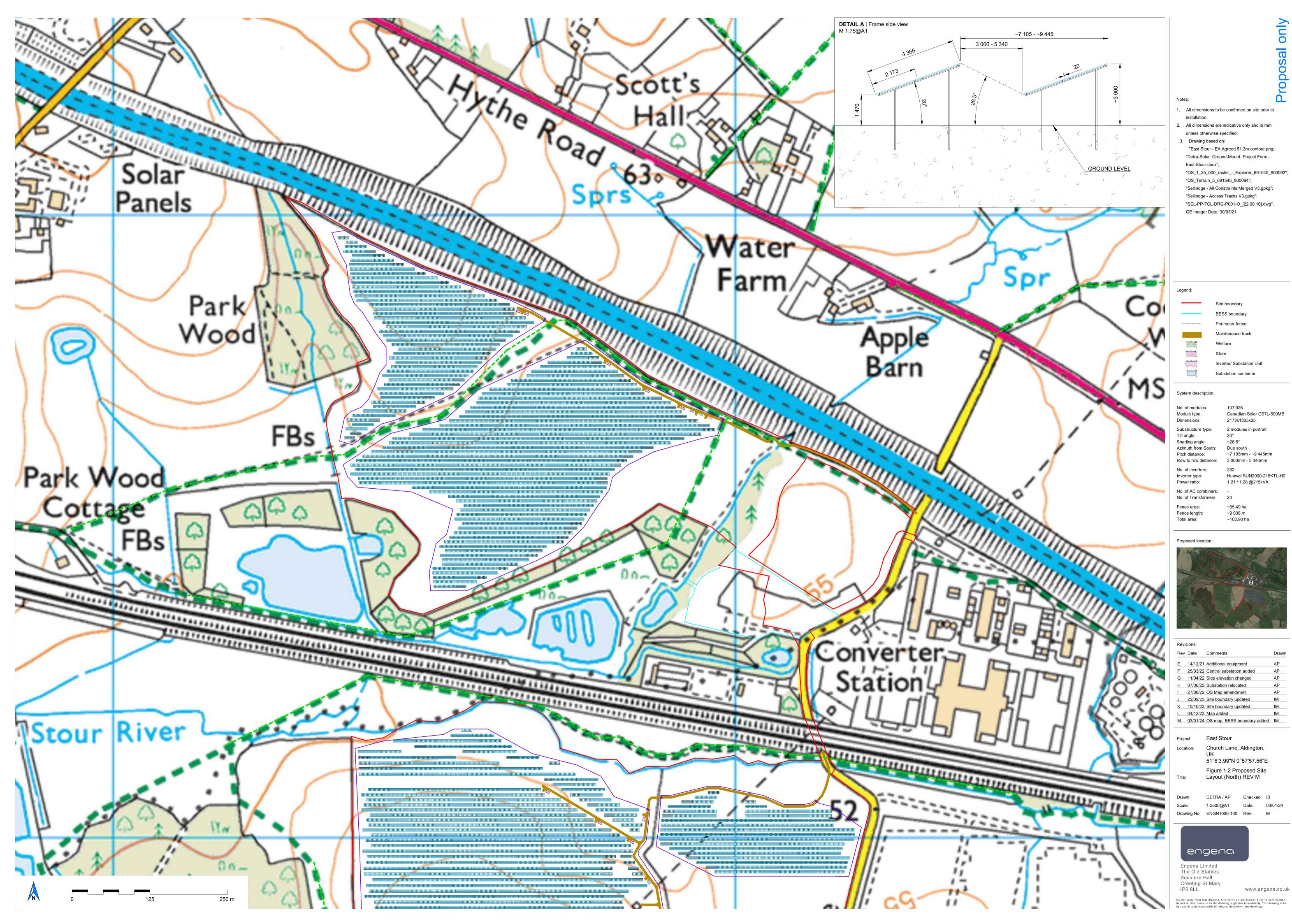
Landscape and Visual Impact Assessment

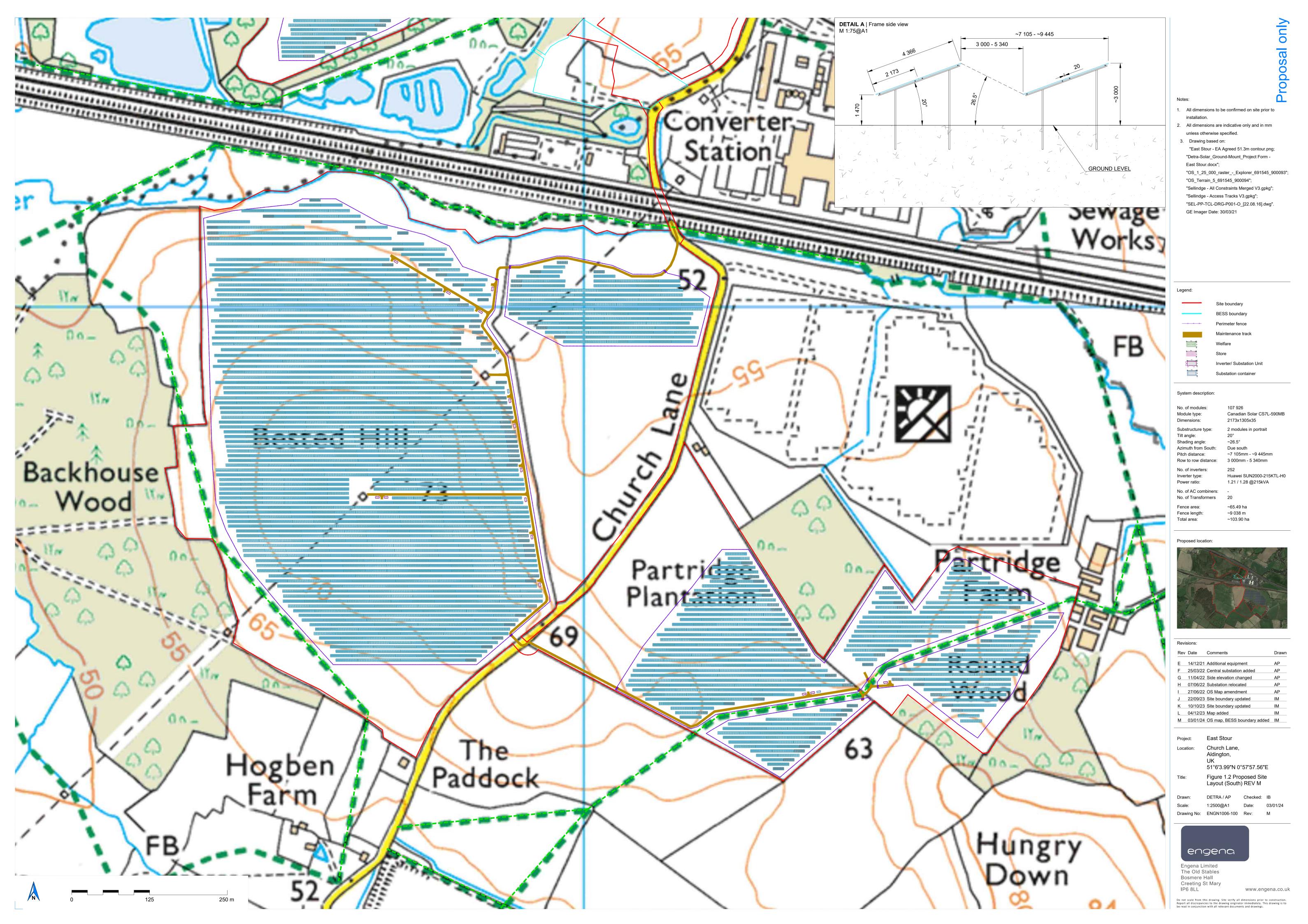
ES Figures referred to in the SEI LVIA Chapter have been updated to include for the amended red line boundary. These are provided as updates rather than new information and presented maintaining the ES Figure numbers as SEI Figures 11.1 to 11.9 'Rev A'. Additional SEI LVIA figures then follow on the numbering nomenclature.

- 11.1 Rev A 5km ZTV
- 11.2 Rev A Landscape Character Plan Kent County LCAs
- 11.3 Rev A Landscape Character Plan Ashford
- 11.4 Rev A Landscape Character within Kent Downs AONB
- 11.5 Rev A Landscape Designations
- 11.6 Rev A Recreation Routes and Visitor Attractions
- 11.7 Rev A- Public Rights of Way
- 11.8 Rev A Cumulative ZTV with Sellindge Solar Farm
- 11.9 Rev A Mitigation Proposals Plan
- 11.10 Layout Progression
- 11.11 Viewpoint 6 (Layout Refinement)
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- 11.13 Viewpoint 8 (Layout Refinement)
- 11.14 Cross Section Locations
- 11.15 Cross Section A
- 11.16 Cross Section B
- 11.17 Cross Section C
- 11.18 Cross Section D









- 1. All dimensions to be confirmed on site prior to installation.
- 2. All dimensions are indicative only and in mm
- unless otherwise specified. 3. Drawing based on:
- "East Stour EA Agreed 51.3m contour.png; "Detra-Solar_Ground-Mount_Project Form -East Stour.docx"; "OS_1_25_000_raster_-_Explorer_691545_900093";
- "OS_Terrain_5_691545_900094"; "Sellindge - All Constraints Merged V3.gpkg"; "Sellindge - Access Tracks V3.gpkg"; "SEL-PP-TCL-DRG-P001-O_[22.08.16].dwg". GE Imager Date: 30/03/21

BESS boundary Perimeter fence

Inverter/ Substation Unit Substation container

System description:

No. of modules: Canadian Solar CS7L-590MB 2173x1305x35 Substructure type: 2 modules in portrait

Shading angle: Azimuth from South: Due south Pitch distance: ~7 105mm - ~9 445mm 3 000mm - 5 340mm Row to row distance: No. of inverters: Huawei SUN2000-215KTL-H0

1.21 / 1.28 @215kVA No. of AC combiners: No. of Transformers 20

Fence area: Fence length: ~103.90 ha Total area:

Proposed location:



Rev	Date	Comments	Drawn
E	14/12/21	Additional equipment	AP
F	25/03/22	Central substation added	AP
G	11/04/22	Side elevation changed	AP
Н	07/06/22	Substation relocated	AP
l	27/06/22	OS Map amendment	AP
J	22/09/23	Site boundary updated	IM
K	10/10/23	Site boundary updated	IM
L	04/12/23	Map added	IM
М	03/01/24	OS map, BESS boundary added	IM

East Stour Church Lane, Aldington,

51°6'3.99"N 0°57'57.56"E SEI Figure 1.3 Proposed Site Layout (Aerial Image) - North

Drawing No: ENGN1006-100 Rev:

engena

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Do not scale from this drawing. Site verify all dimensions prior to construction. Report all discrepancies to the drawing originator immediately. This drawing is to be read in conjunction with all relevant documents and drawings.

- 1. All dimensions to be confirmed on site prior to installation.
- 2. All dimensions are indicative only and in mm
- unless otherwise specified. 3. Drawing based on: "East Stour - EA Agreed 51.3m contour.png;
- "Detra-Solar_Ground-Mount_Project Form -"OS_1_25_000_raster_-_Explorer_691545_900093"; "OS_Terrain_5_691545_900094"; "Sellindge - All Constraints Merged V3.gpkg"; "Sellindge - Access Tracks V3.gpkg"; "SEL-PP-TCL-DRG-P001-O_[22.08.16].dwg".

Em A Inverter/ Substation Unit

System description:

No. of modules: Canadian Solar CS7L-590MB 2173x1305x35 Substructure type: 2 modules in portrait

Shading angle: ~26.5° Azimuth from South: Due south Pitch distance: ~7 105mm - ~9 445mm 3 000mm - 5 340mm Row to row distance: No. of inverters: Huawei SUN2000-215KTL-H0

1.21 / 1.28 @215kVA No. of AC combiners: No. of Transformers 20

~103.90 ha

Proposed location:



Rev	Date	Comments	Drawn
E	14/12/21	Additional equipment	AP
F	25/03/22	Central substation added	AP
G	11/04/22	Side elevation changed	AP
Н	07/06/22	Substation relocated	AP
	27/06/22	OS Map amendment	AP
J	22/09/23	Site boundary updated	IM
K	10/10/23	Site boundary updated	IM
L	04/12/23	Map added	IM
М	03/01/24	OS map, BESS boundary added	IM

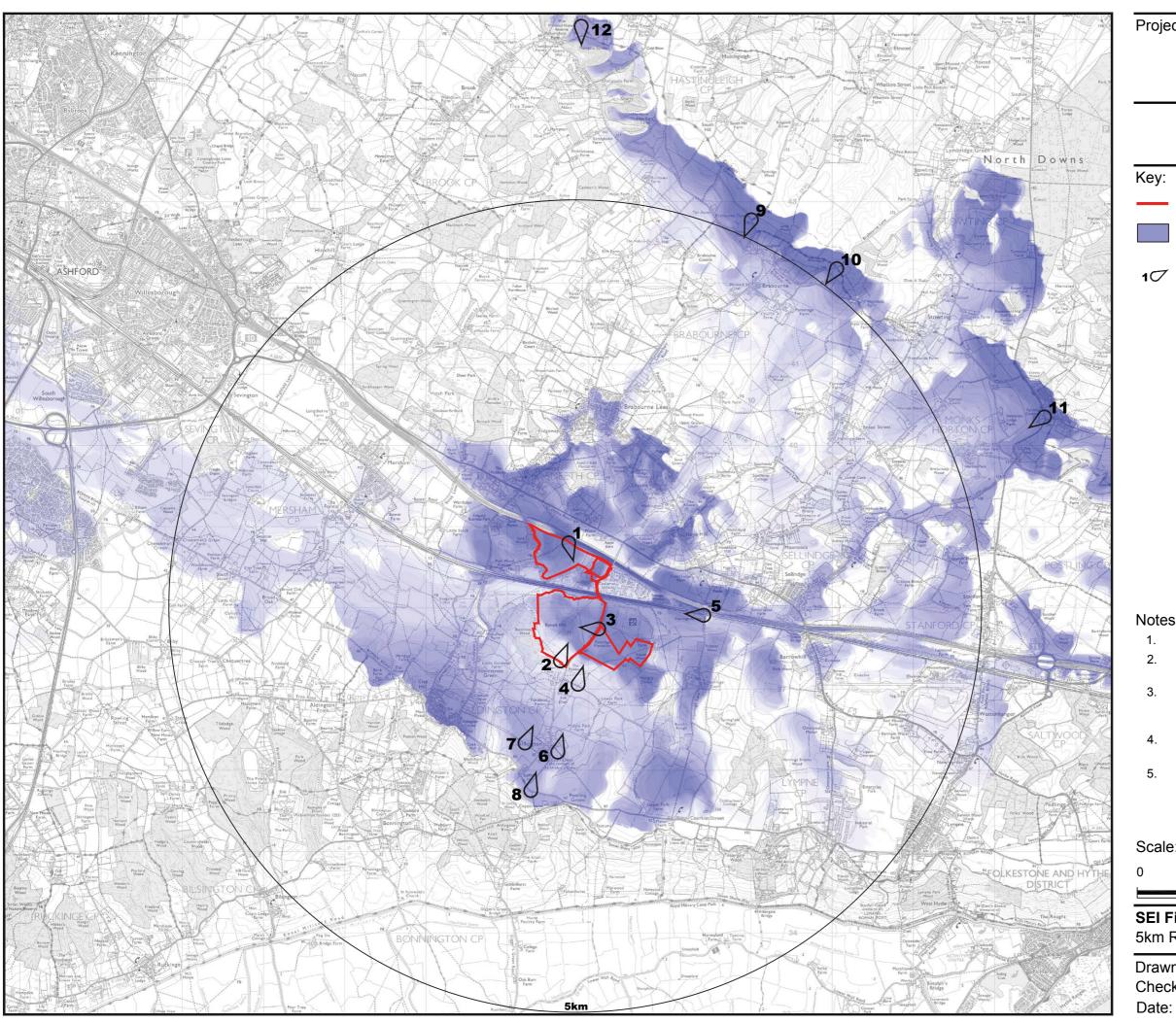
East Stour Church Lane, Aldington, 51°6'3.99"N 0°57'57.56"E SEI Figure 1.3 Proposed Site Layout (Aerial Image) - South



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Do not scale from this drawing. Site verify all dimensions prior to construction. Report all discrepancies to the drawing originator immediately. This drawing is to be read in conjunction with all relevant documents and drawings.



East Stour Solar Farm



Key:

Application boundary

Zone of Theoretical Visibility of proposed highest points of solar panels @ 3m above ground level

1 Viewpoint location

Notes:

- ZTV, generated 16th December 2021.
- Predicted visibility is for observer eye level 2m above ground level.
- The analysis does not take into account the screening effects of vegetation, buildings or other surface features.
- Created using Ordnance Survey digital 5m terrain data.
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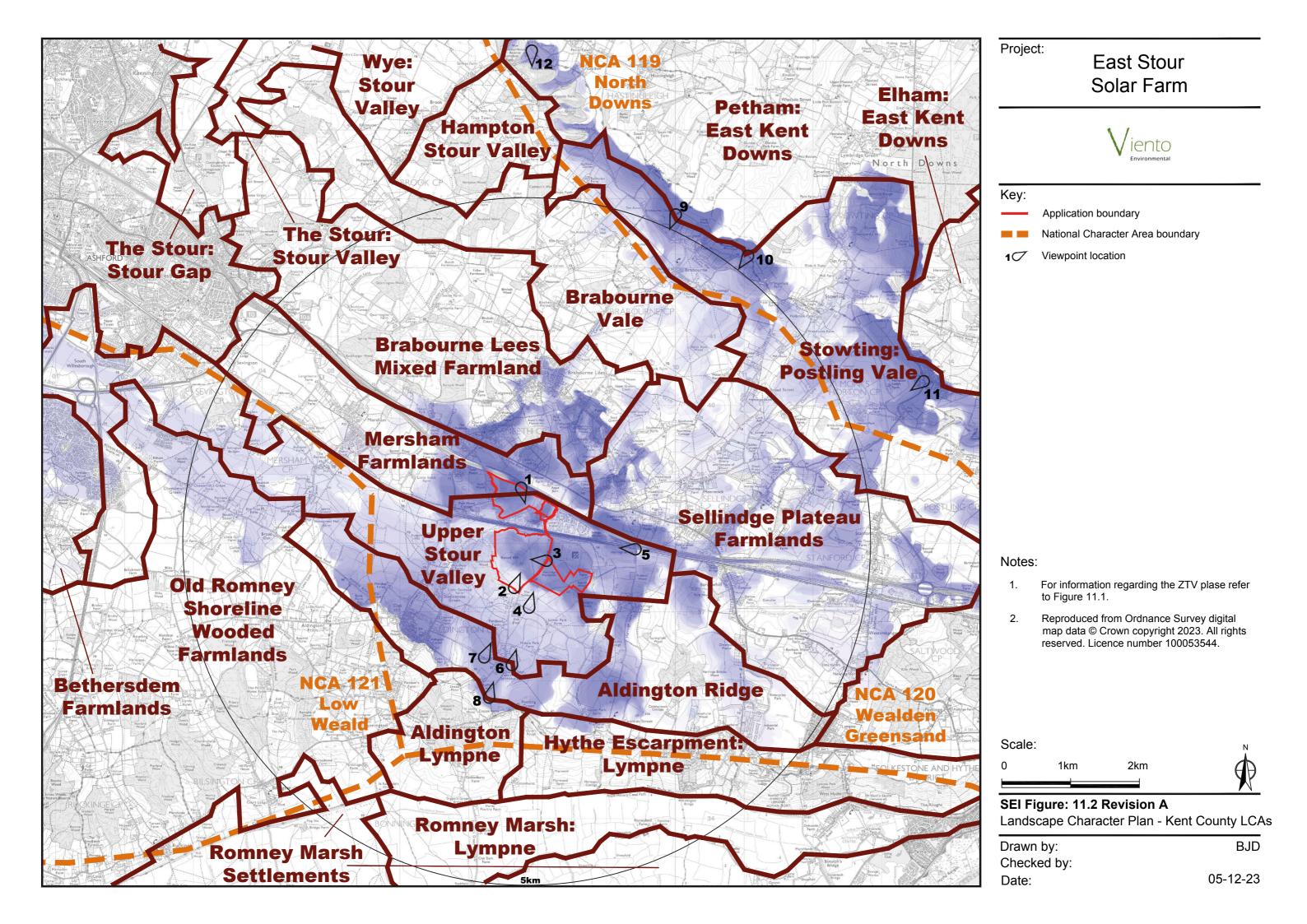
Scale: 1km 2km

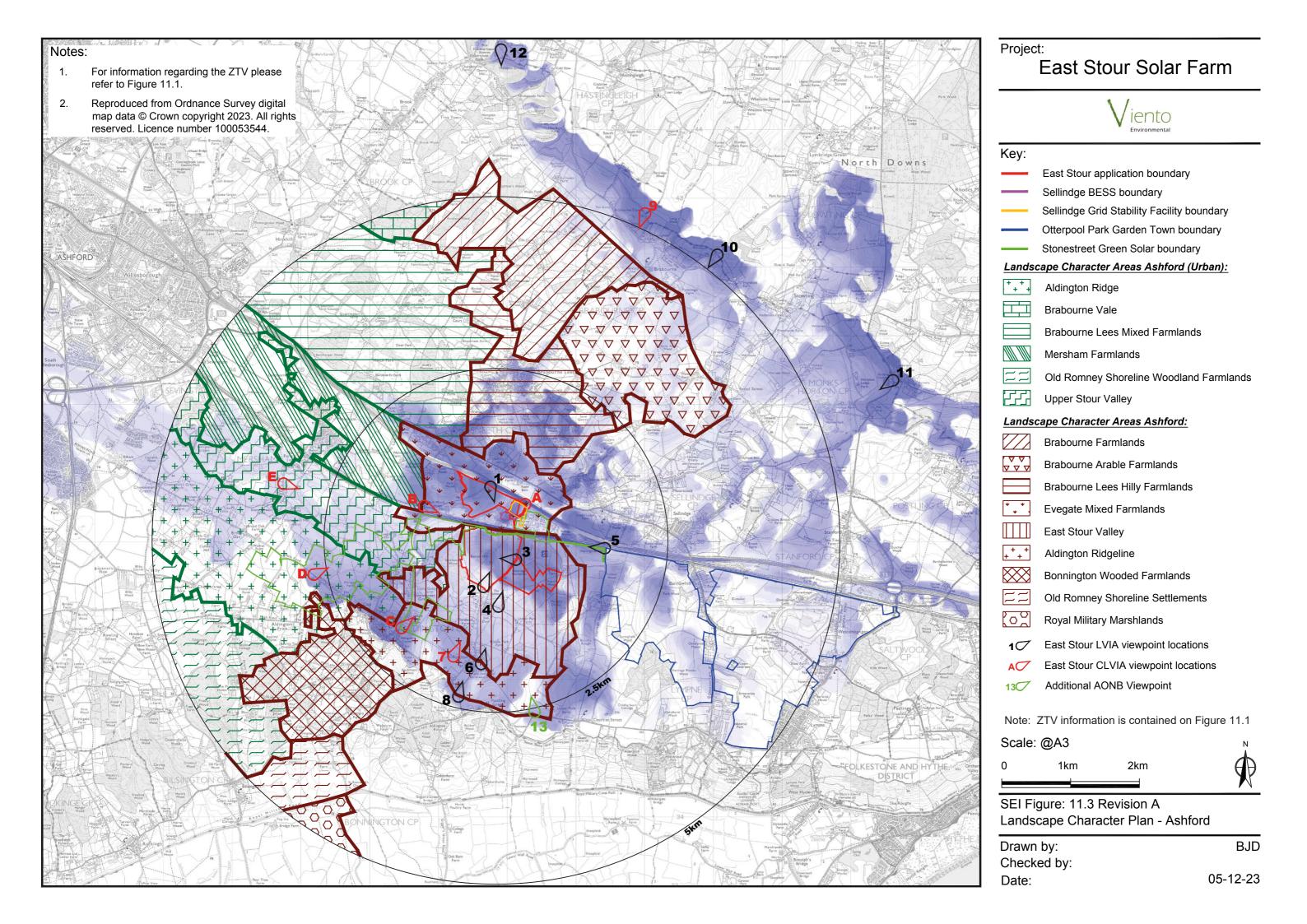
SEI Figure: 11.1 Revision A 5km Radius Zone of Theoretical Visibility

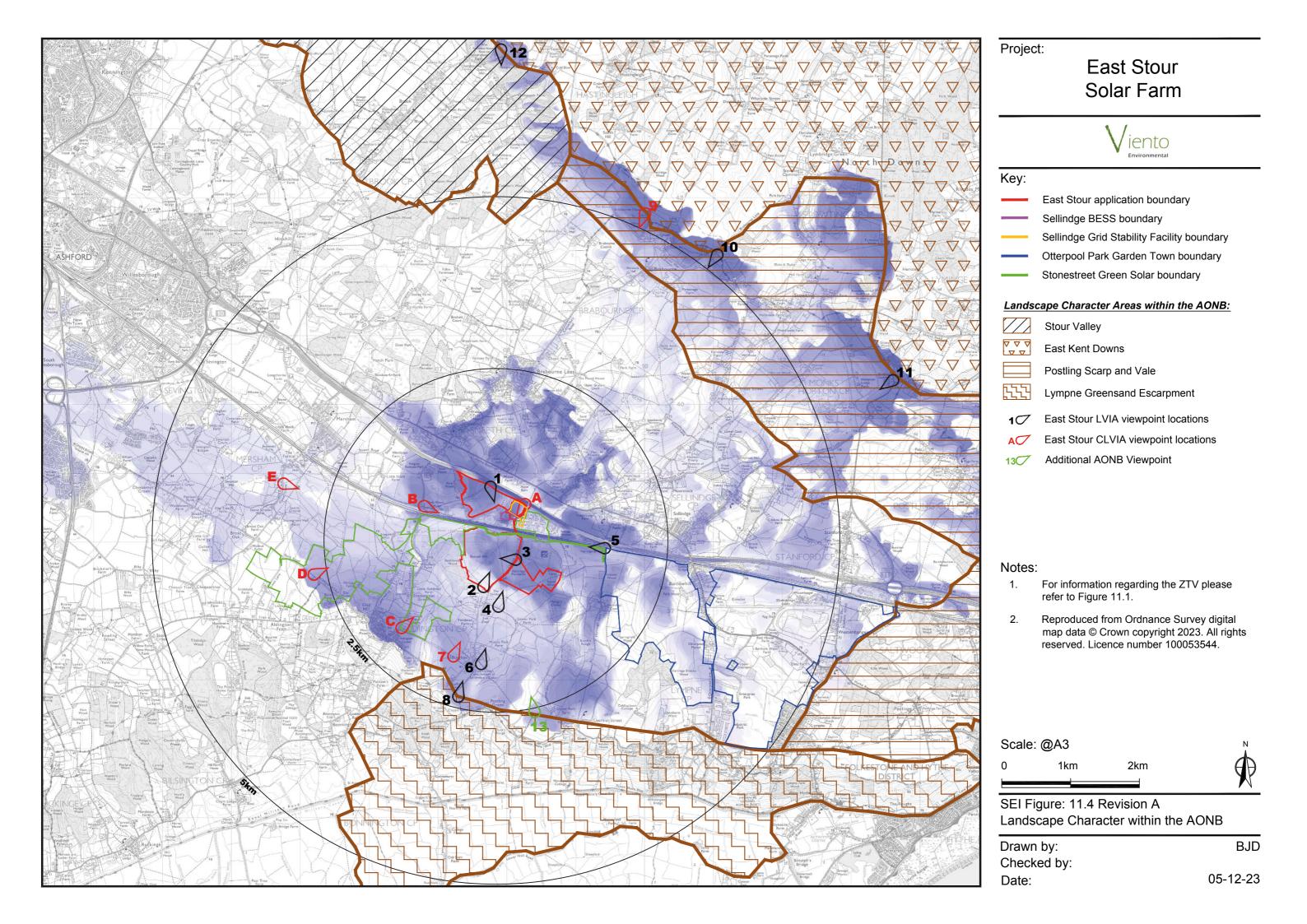
Drawn by: BJD

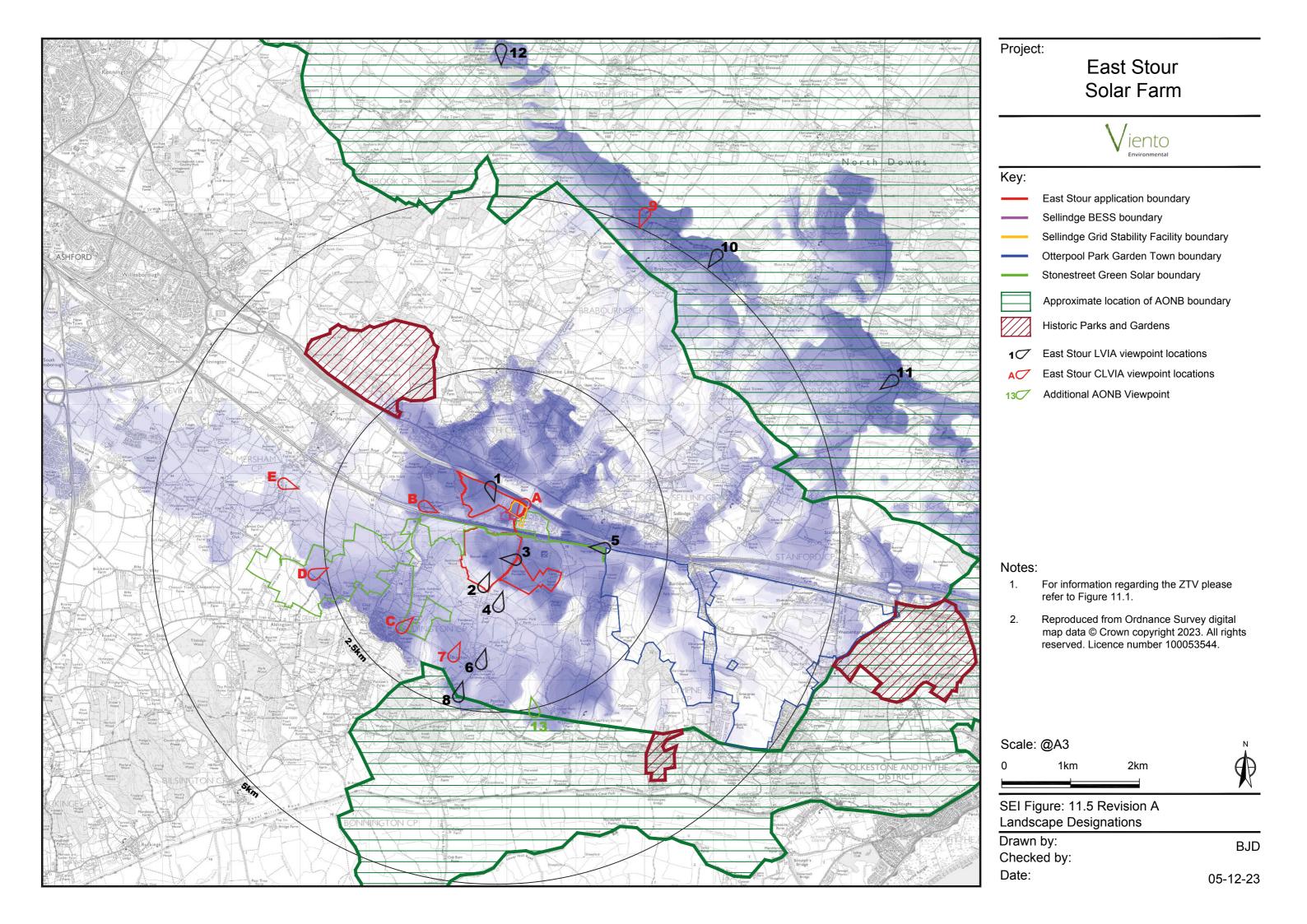
Checked by:

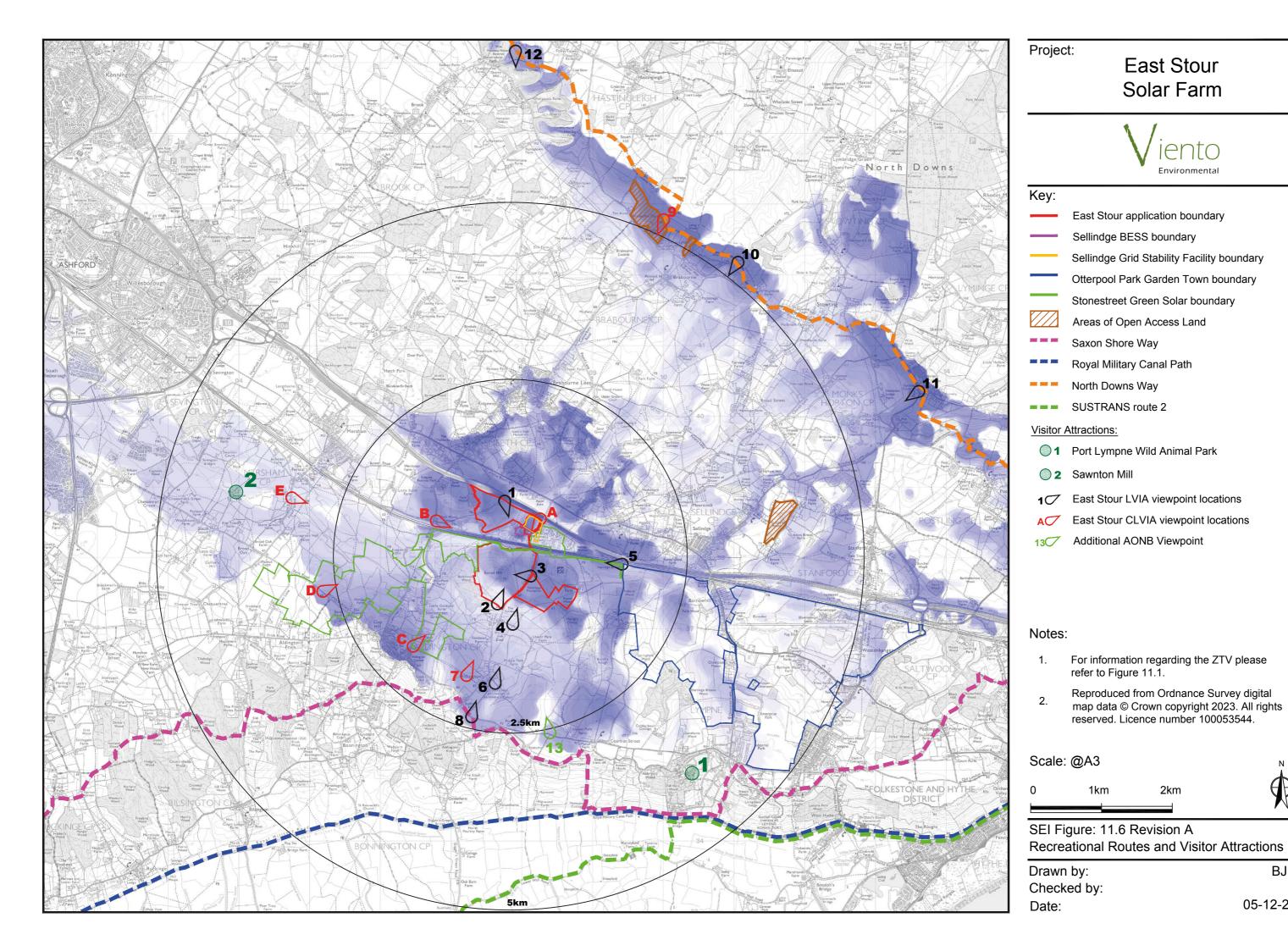
05-12-23





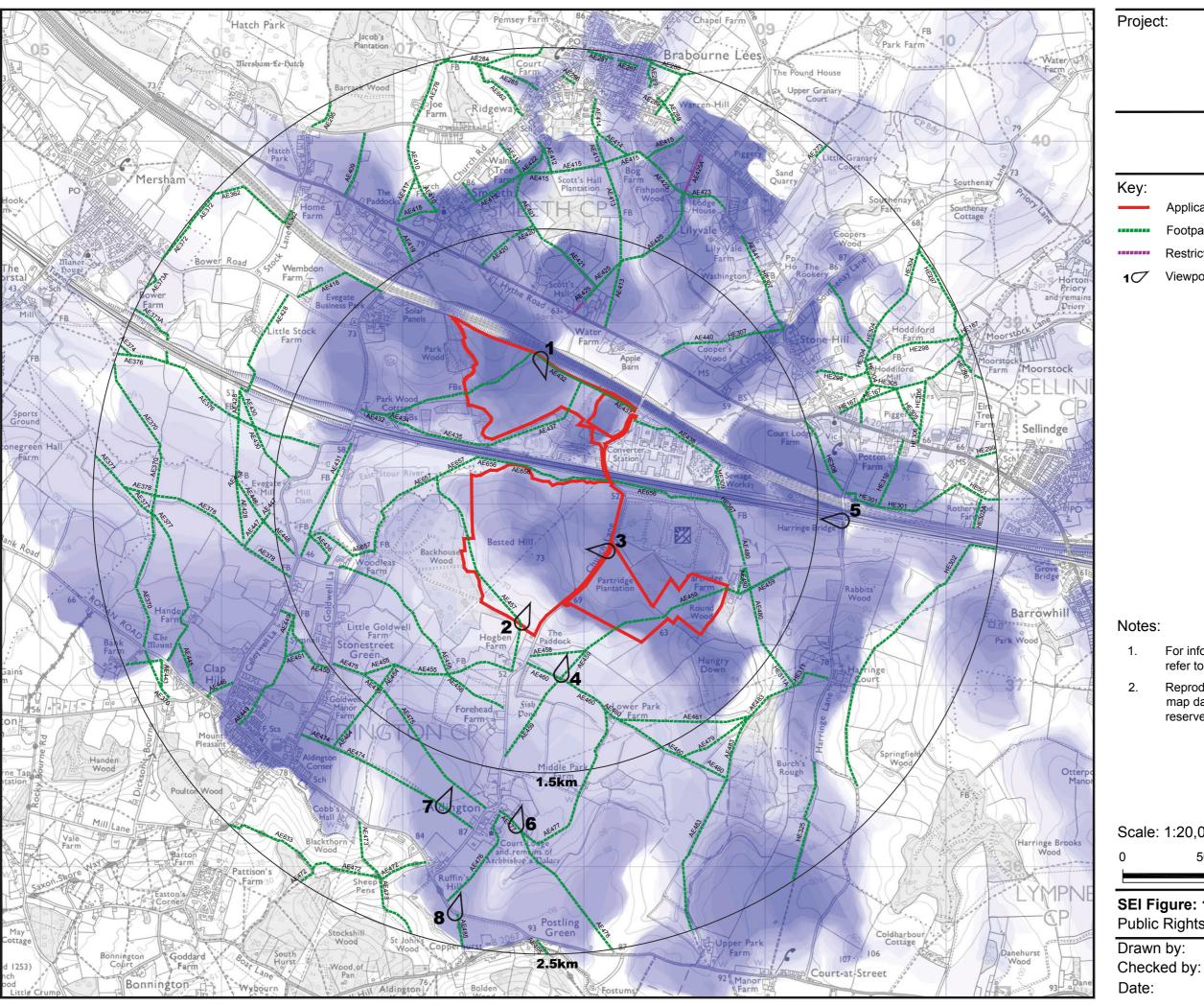






BJD

05-12-23



East Stour Solar Farm



Key:

Application boundary

Footpath

Restricted Byway

1 Viewpoint location

Notes:

- For information regarding the ZTV please refer to Figure 11.1.
- Reproduced from Ordnance Survey digital map data © Crown copyright 2023. All rights reserved. Licence number 100053544.

1km

Scale: 1:20,000 @A3 500m



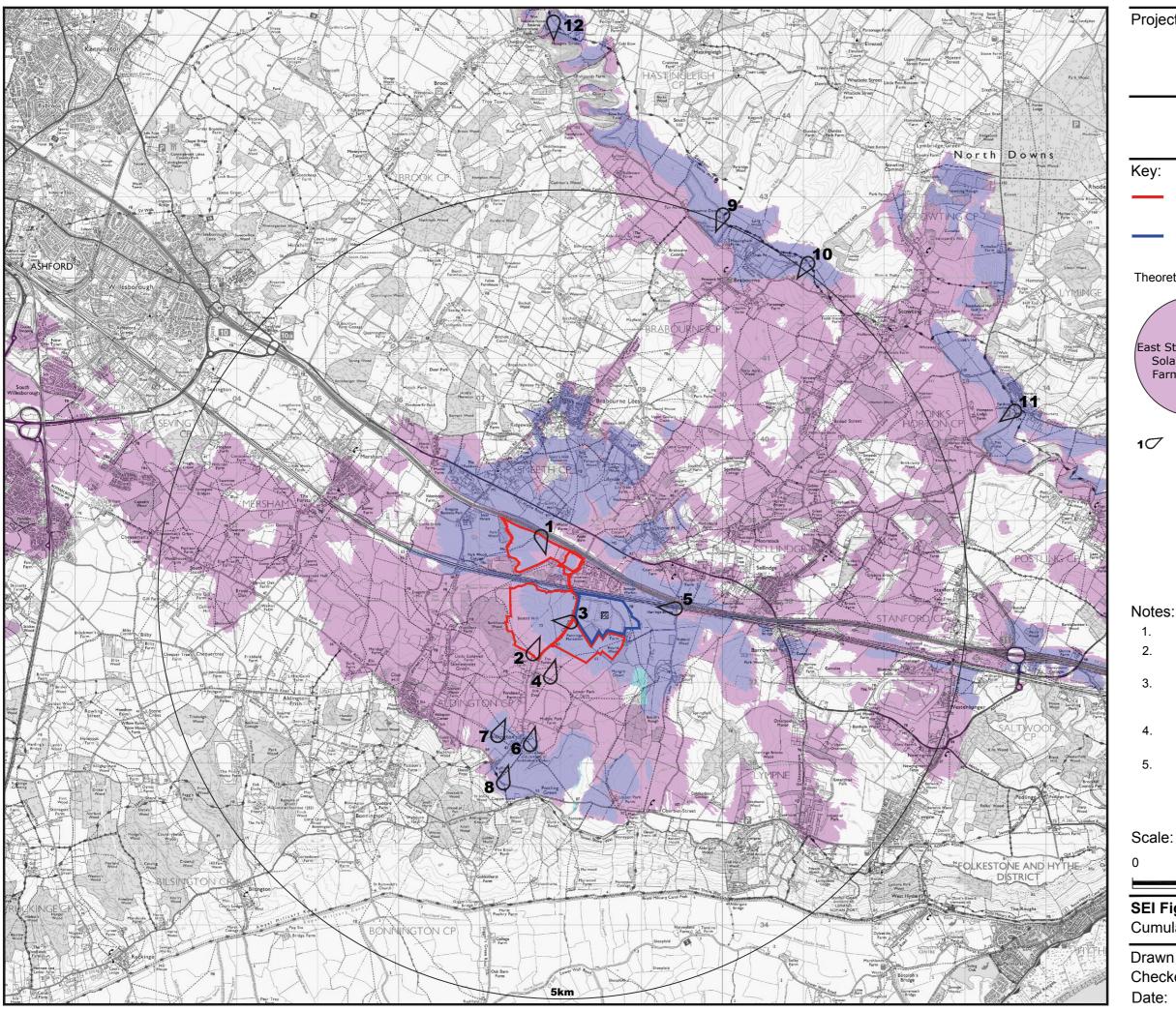
SEI Figure: 11.7 Revision A Public Rights of Way

Drawn by:

BJD

Date:

05-12-23



East Stour Solar Farm

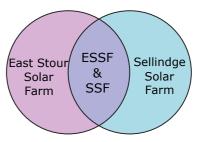


Key:

East Stour application boundary -(proposed) 3.0m solar panel height

Sellindge Solar Farm -(operational) 2.6m solar panel height

Theoretical visibility of:



1 Viewpoint location

Notes:

- CZTV, generated 17th December 2021.
- Predicted visibility is for observer eye level 2m above ground level.
- The analysis does not take into account the screening effects of vegetation, buildings or other surface features.
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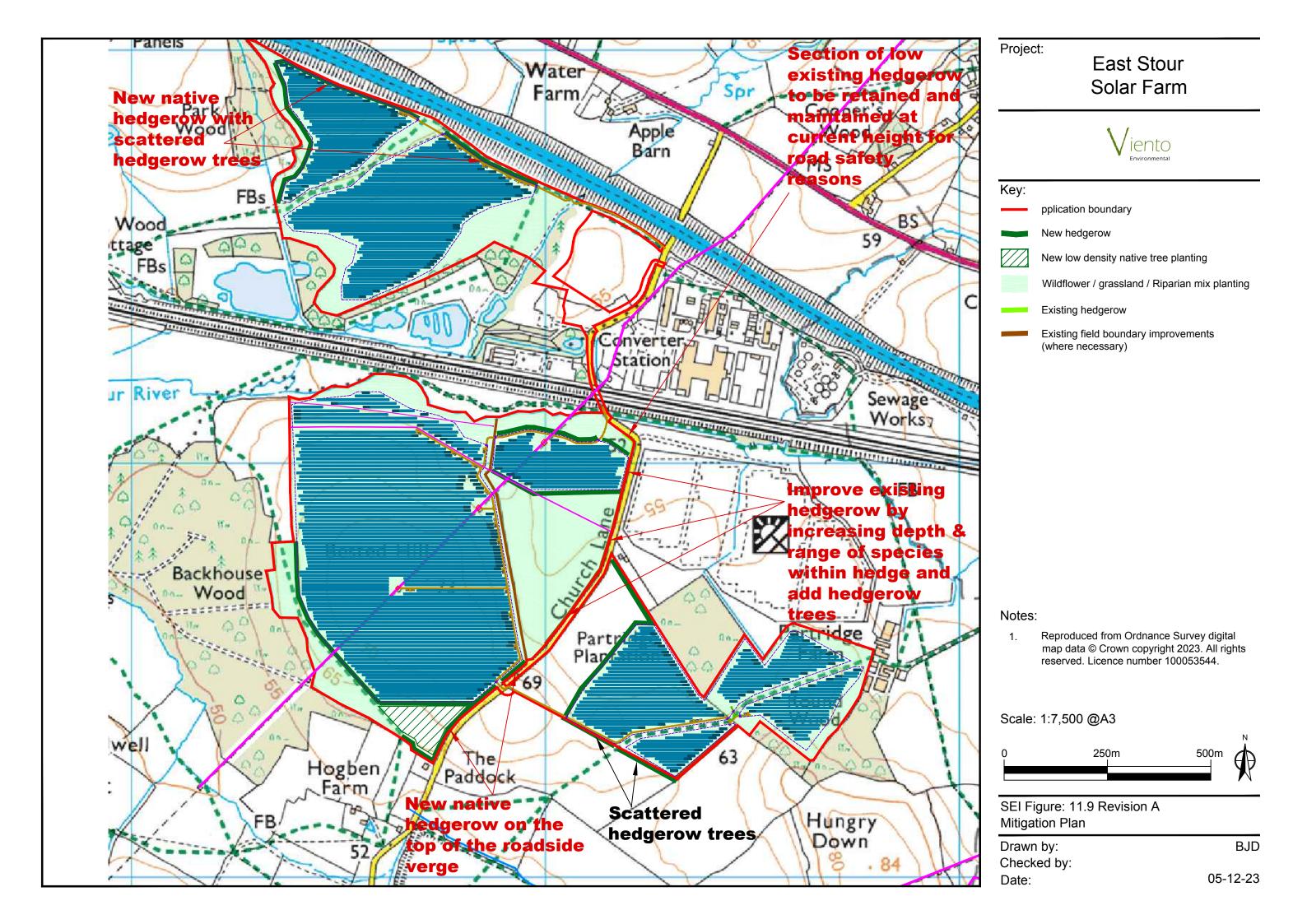
2km

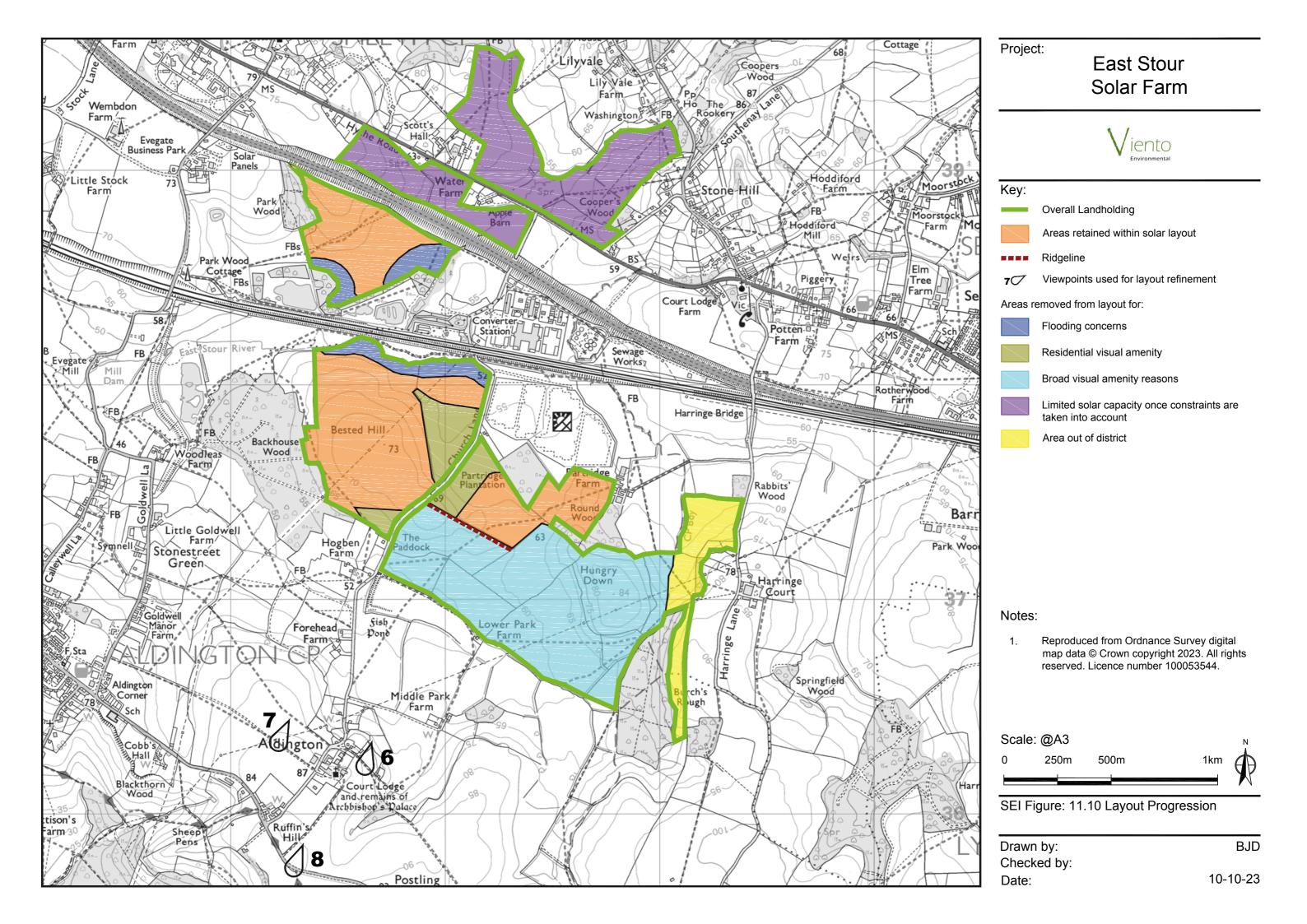
1km

SEI Figure 11.8: Revision A Cumulative ZTV with Sellindge Solar Farm

Drawn by: Checked by:

05-12-23 Date:







VIEWPOINT 6: Footpath AE477 near Grove Cottage, Aldington

SEI FIGURE 11.11 - VP6 (Layout Refinement), area shaded cyan represents area excluded for 'Broad visual amenity reasons' (as per SEI Figure 11.10)



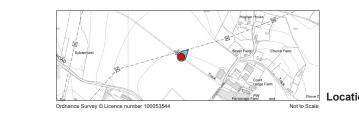
OS reference: AOD: Direction of view: Nearest solar panel:

Visualisation Type: Horizontal field of view: Vertical field of view: Enlargement factor:

Canon 6D Mk II Canon 50mm FFL 1.5m AGL 11/10/2021 10:37







Visualisation Type: Horizontal field of view: Vertical field of view: Enlargement factor:

Canon 6D Mk II Canon 50mm FFL 11/10/2021 10:37



VIEWPOINT 8: Footpath AE485 Saxon Shore Way by Roman Road near Postling Green

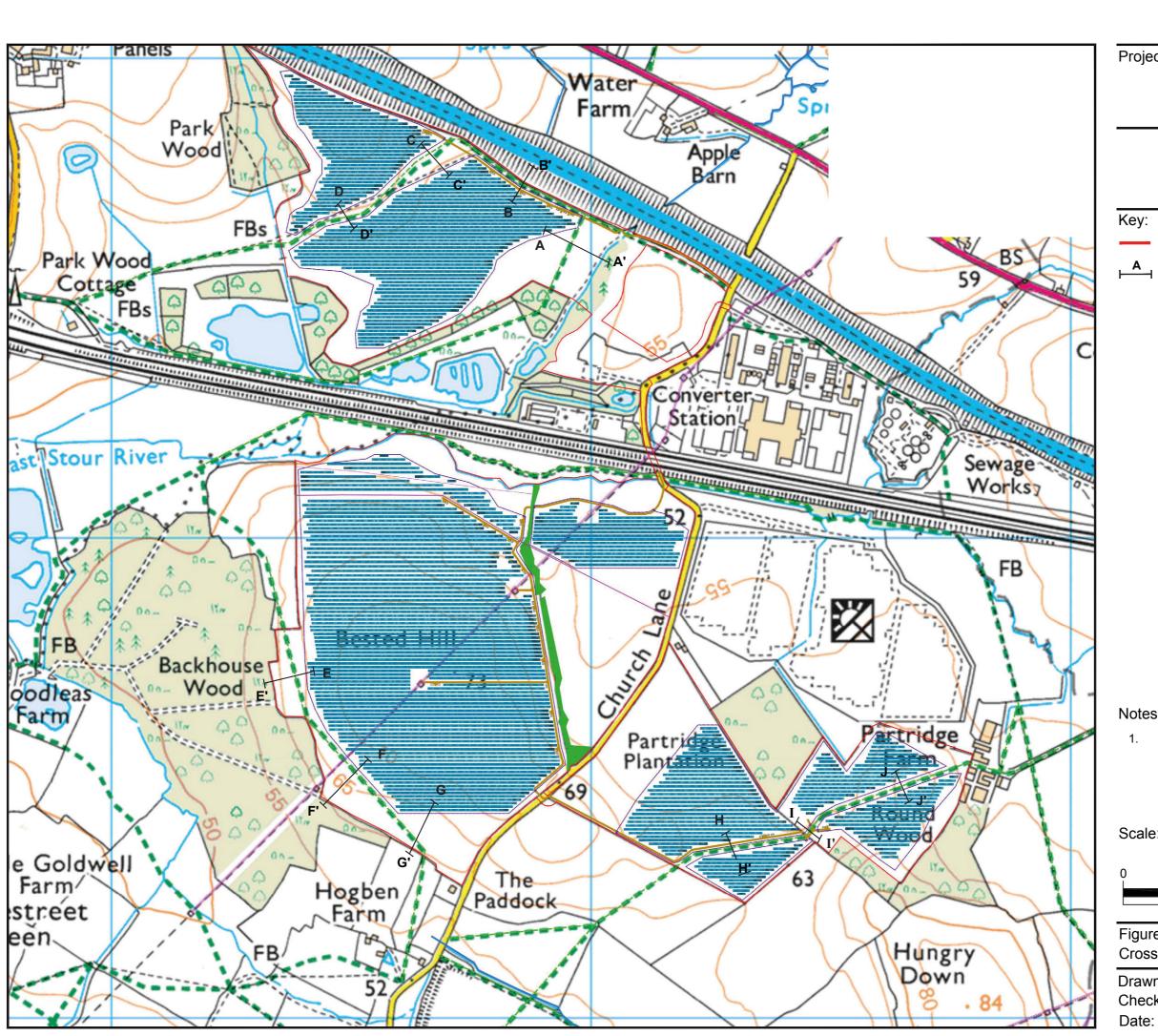
SEI FIGURE 11.13 - VP8 (Layout Refinement), area shaded cyan represents area excluded for 'Broad visual amenity reasons' (as per SEI Figure 11.10)



OS reference: AOD: Direction of view: Nearest solar panel:

Visualisation Type: Horizontal field of view: Vertical field of view: Enlargement factor:

Canon 6D Mk II Canon 50mm FFL 11/10/2021 11:11



East Stour Solar Farm



Key:

Approximate application boundary

A Cross section locations

Notes:

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Scale: 1:7,500 @A3

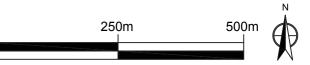
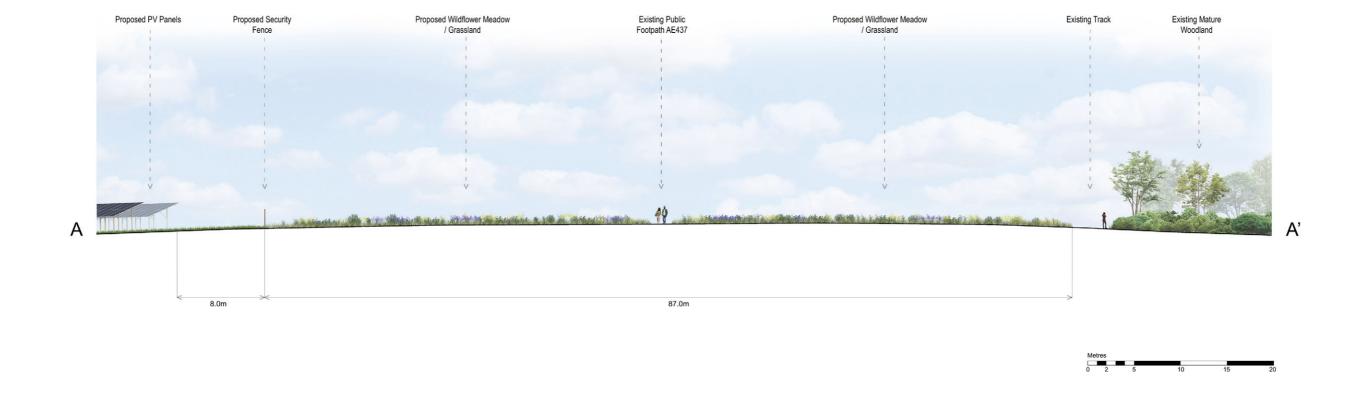


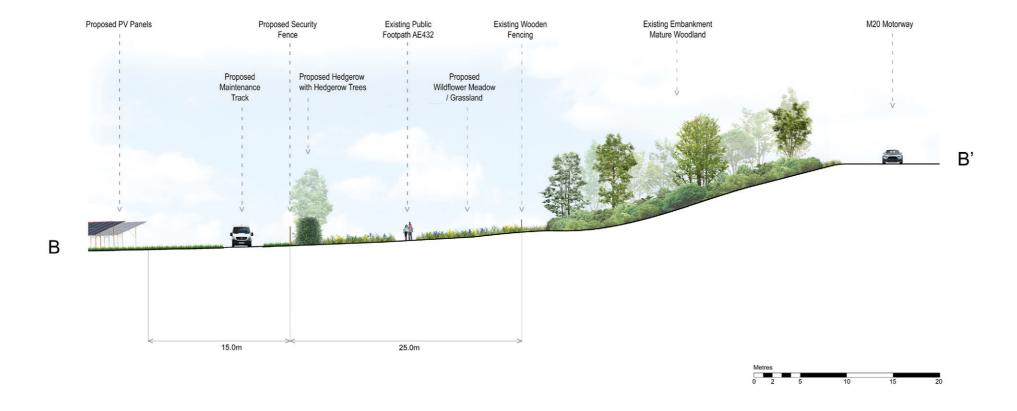
Figure: 11.14

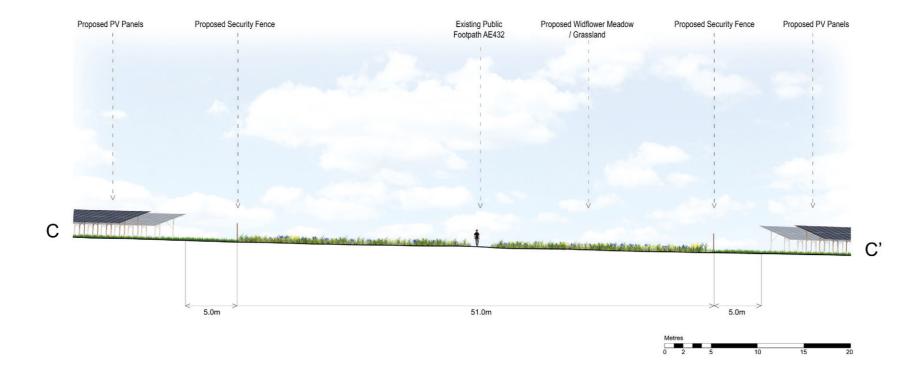
Cross Section Locations

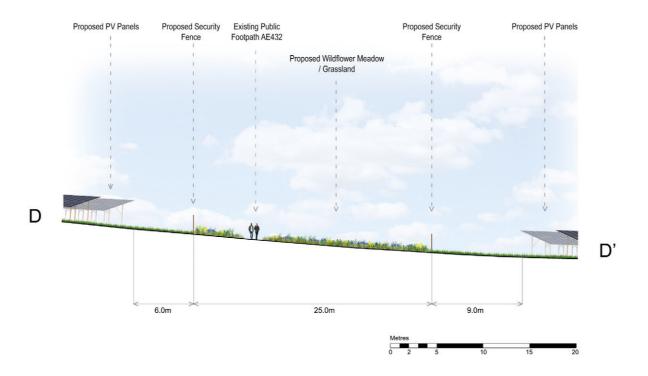
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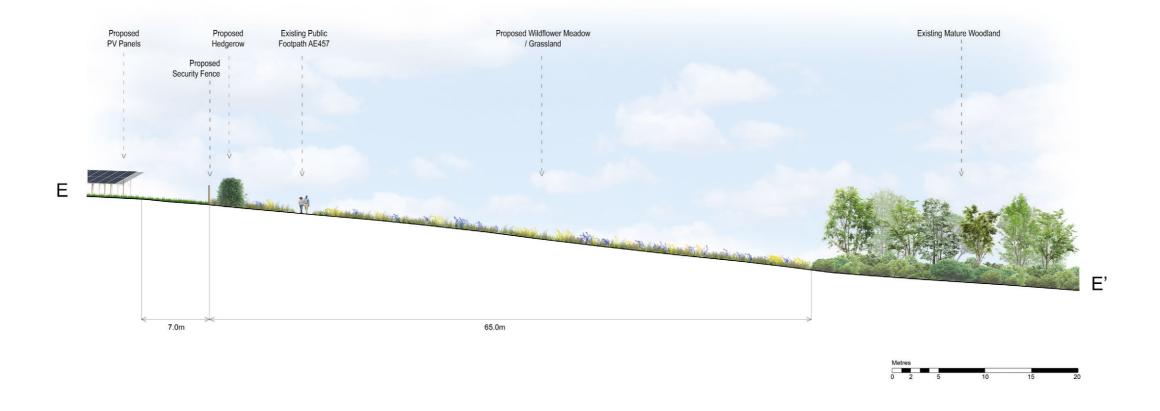
26-09-23





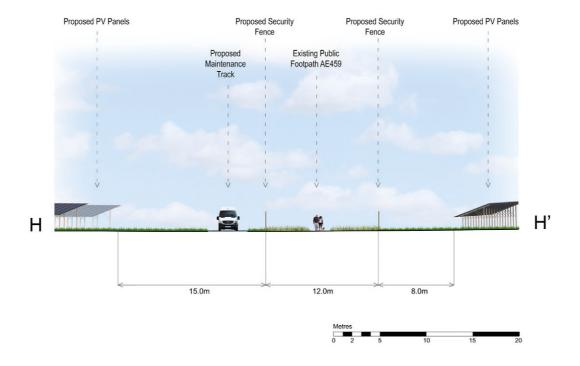


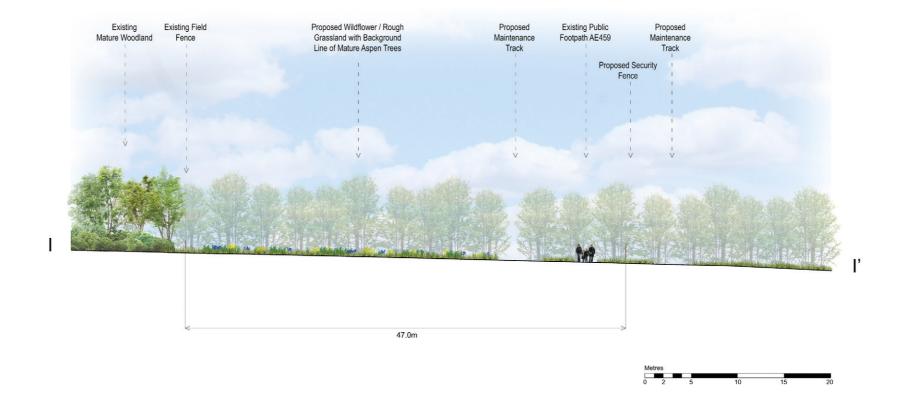


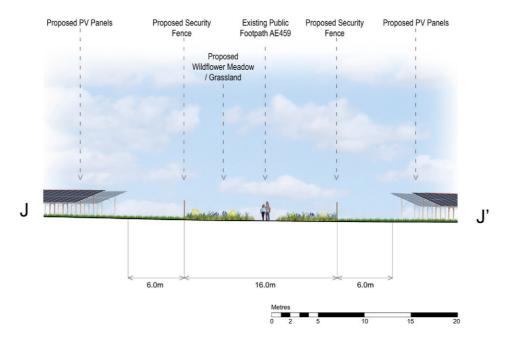


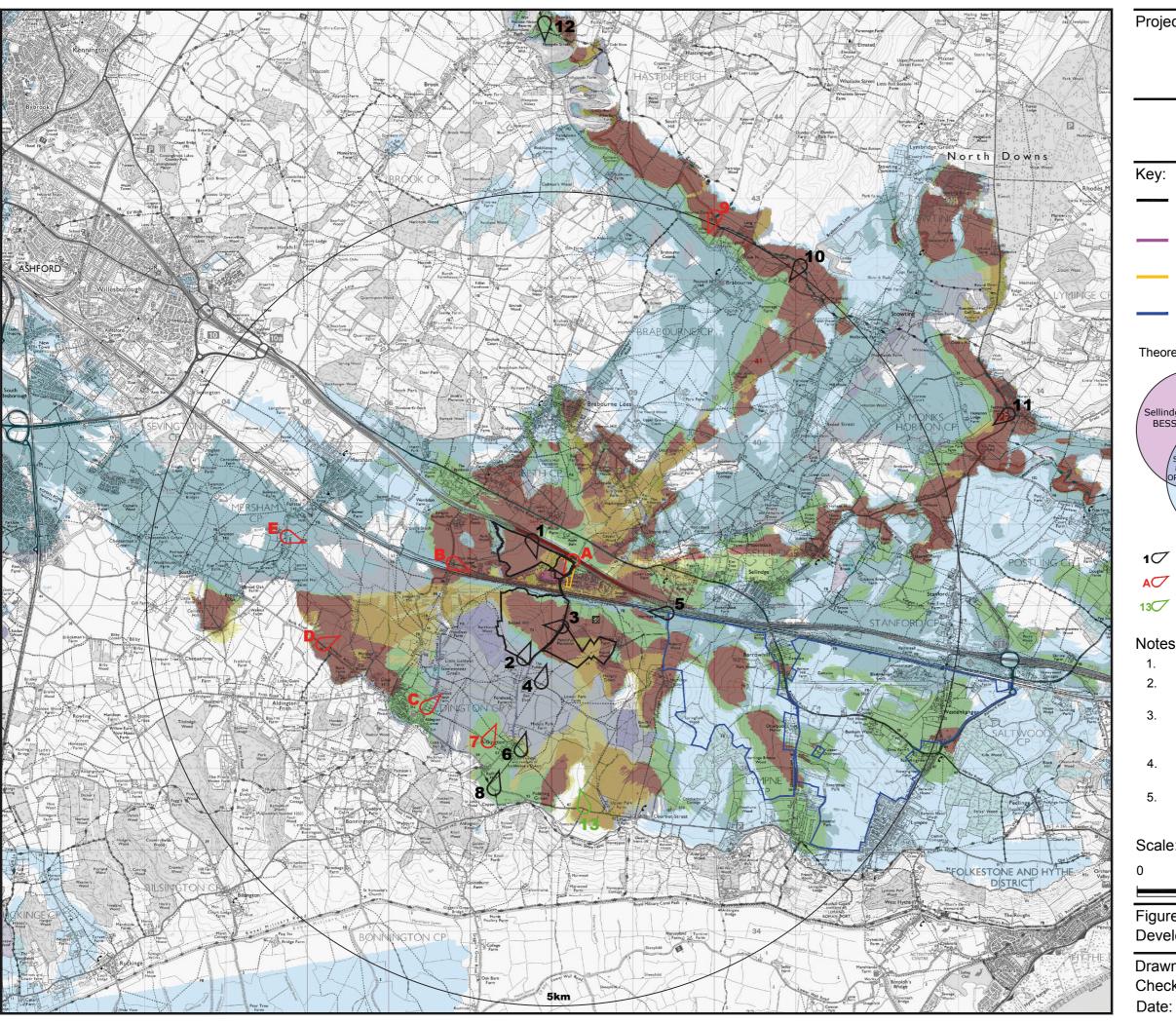












East Stour Solar Farm



Key:

- East Stour approximate application boundary -(proposed) 3.0m AGL
- Sellindge BESS -(consented) 2.76m AGL
- Sellindge Grid Stability Facility (consented) 12.0m AGL
- Otterpool Park Garden Town -(proposed) 12.0m, 15.0m & 18.0m AGL

Theoretical visibility of:



East Stour LVIA viewpoint locations

East Stour CLVIA viewpoint locations

Additional AONB Viewpoint

Notes:

- CZTV, generated 16th October 2023.
- Predicted visibility is for observer eye level 2m above ground level.
- The analysis does not take into account the screening effects of vegetation, buildings or other surface features.
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Scale:

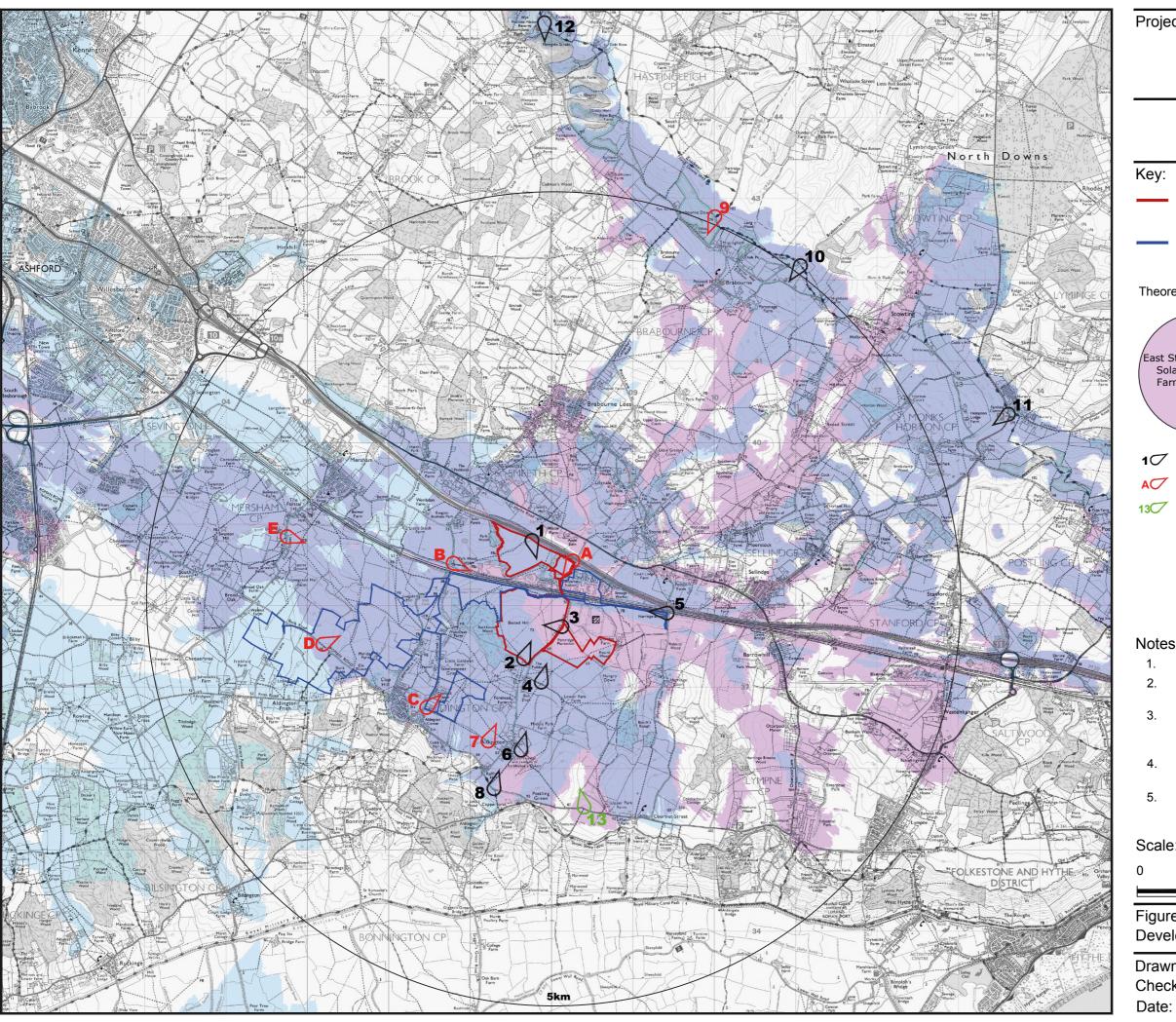
1km 2km



Development Scenario 2

Drawn by: Checked by:

05-12-23



East Stour Solar Farm

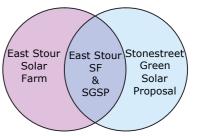


Key:

East Stour approximate application boundary -(proposed) 3.0m AGL

Stonestreet Green Solar Proposal - (proposed) 3.2m AGL

Theoretical visibility of:



10 East Stour LVIA viewpoint locations

East Stour CLVIA viewpoint locations

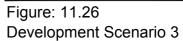
Additional AONB Viewpoint

Notes:

- CZTV, generated 16th October 2023.
- Predicted visibility is for observer eye level 2m above ground level.
- The analysis does not take into account the screening effects of vegetation, buildings or other surface features.
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Scale:

1km 2km



Drawn by:

Checked by:

05-12-23