

Environmental Statement: Volume 2

Appendix 6-11: TN-02 Landscape and Visual Implications of Revised Layout

May 2025

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Planning Act 2008; and Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations Regulation 5(2)(a)

Frodsham Solar

Environmental Statement



Appendix 6-11

Technical Note 02 Landscape and Visual Implications of Revised Layout

Prepared for: Frodsham Solar Ltd

May 2025

EN010153/DR/6.2

INTRODUCTION

1.1 The Revised Layout

- 1.1.1 This Appendix of the Environmental Statement ('ES') comprises a Technical Note prepared in order to discuss the landscape and visual implications of the modifications proposed Frodsham Solar Farm (the Proposed Development) following the Statutory Pre-Application Consultation (SPAC) process with Cheshire West and Chester Council ('CWaCC').
- 1.1.2 The SPAC process for the Proposed Development ran from 7th November 2024 until 19th December 2024. This included the submission to PINS of the Preliminary Environmental Information Report ('PEIR'). The PEIR was prepared to provide information to consultees enabling them to understand the likely environmental effects of the Proposed Development and to assist in informing their responses as part of the statutory consultation process.
- 1.1.3 The consultee response received from the Environment Agency requested that the most conservative design flood event should be used to determine the base level of proposed panels and essential electrical equipment.
- 1.1.4 As a result of this, the design of the Proposed Development has been revised to raise the base level of the proposed Solar PV Modules and associated Power Conversion Units located within Flood Zone 3 (the central and eastern part of the Solar Array Development Area, to the east of Brook Furlong) from 6.34m AOD to 6.52m AOD. In respect of the Solar PV Modules, the approach taken is that the

maximum height of these would increase from 3.5m above ground level to 4m above ground level.

1.1.5 All infrastructure within the western part of the Solar Array Development Area is located outside of Flood Zone 3, and the levels of this infrastructure remain as per the PEIR layout.

1.2 Landscape and Visual Implications

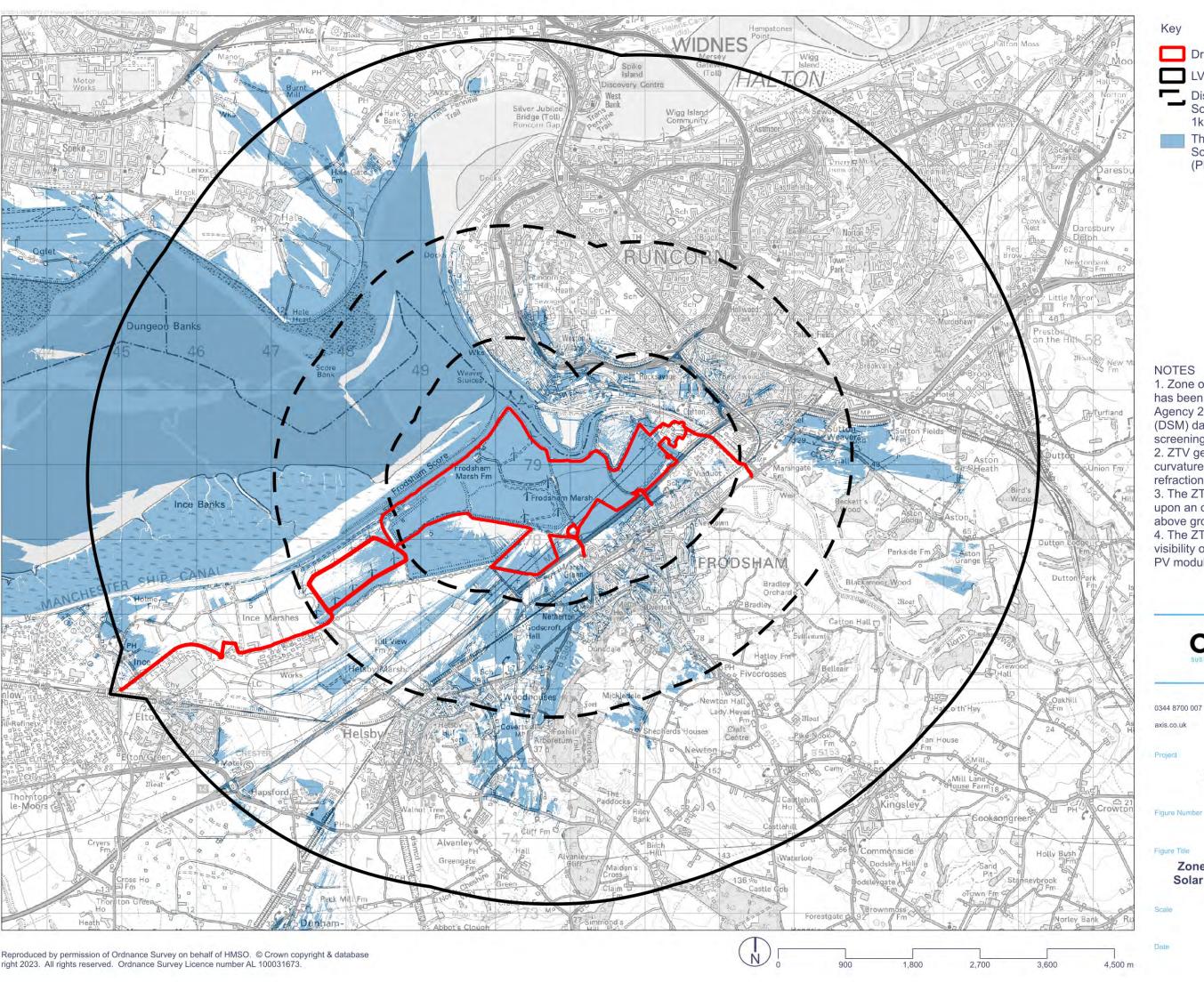
Visualisation Material

- 1.2.1 ZTVs and photomontages comparing the PEIR Layout and the Revised Layout have been prepared and are presented on Figures 1a-1b. The methodology followed in preparing this material is that set out in Appendix 6-2 of the ES.
- 1.2.2 The ZTVs illustrate that there would be no difference in the extent of the predicted visibility of the PEIR Layout and the Revised Layout. The most visible Solar PV Modules would be those located in the western part of the Solar Array Development Area, whose height would remain at 3.5m above ground level. This area is set at between 9.5m AOD and 12.5m AOD.
- 1.2.3 The eastern and central parts of the Solar Array Development Area, where the height of the Solar PV Modules would be increased by 0.5m is set at approximately 6m AOD.
- 1.2.4 As such, the relatively modest increase in the maximum height of the central and eastern Solar PV Modules, would have no influence upon the overall extent of theoretical visibility.
- 1.2.5 Comparative photomontages have been prepared from ES Viewpoints 9, 17 and 25, and presented on Figures 2a-2c. These are based on the layout in Year 0, and do not show the longer-term screening provided by any proposed landscape treatments. As such, they illustrate a worst-case scenario of visibility.
- 1.2.6 Viewpoint 9 is located at Frodsham War Memorial, which is a sensitive elevated location approximately 1.25km south of the Solar Array Development Area.

- 1.2.7 Viewpoints 17 and 25 are located on the public footpath network than runs around the edges of the Solar Array Development Area, to the north and east respectively.
- 1.2.8 The photomontages demonstrate that there would be little appreciable difference in the appearance of the Proposed Development should the height of the central and eastern panels be increased by 0.5m. The way that the Proposed Development would change the view from each Viewpoint, and the way it would influence the visual amenity of people at each Viewpoint would not change materially should the Revised Layout be brought forward instead of the PEIR Layout.

Conclusion

1.2.9 There would be no material difference in the landscape and visual effects of the PEIR Layout and those of the Revised Layout. All formal and informal consultation held by the Applicant with CWaCC and with other consultees, including local communities, regarding landscape and visual matters would remain wholly valid and applicable to the Revised Layout. The conclusions set out in the PEIR in respect of landscape and visual effects also remain wholly valid in relation to the Revised Layout, notwithstanding that the Applicant may review/revise these when preparing the ES.



Draft Order Limits (the Site)

LVIA Study Area

Distance from proposed Solar PV modules at 1km and 2.5km intervals

Theoretical visibility of Solar Array Development Area (PEIR layout)

- 1. Zone of Theoretical Visibility (ZTV) has been generated using Environment Agency 2m LIDAR digital surface model (DSM) data, which takes account of screening features in the landscape.
- 2. ZTV generation has allowed for curvature of the earth and light refraction.
- 3. The ZTV has been generated based upon an observer eye height of 1.7m above ground level
 4. The ZTV reflects the theoretical
- visibility of proposed 3.5m high Solar PV modules





FRODSHAM SOLAR PEIR

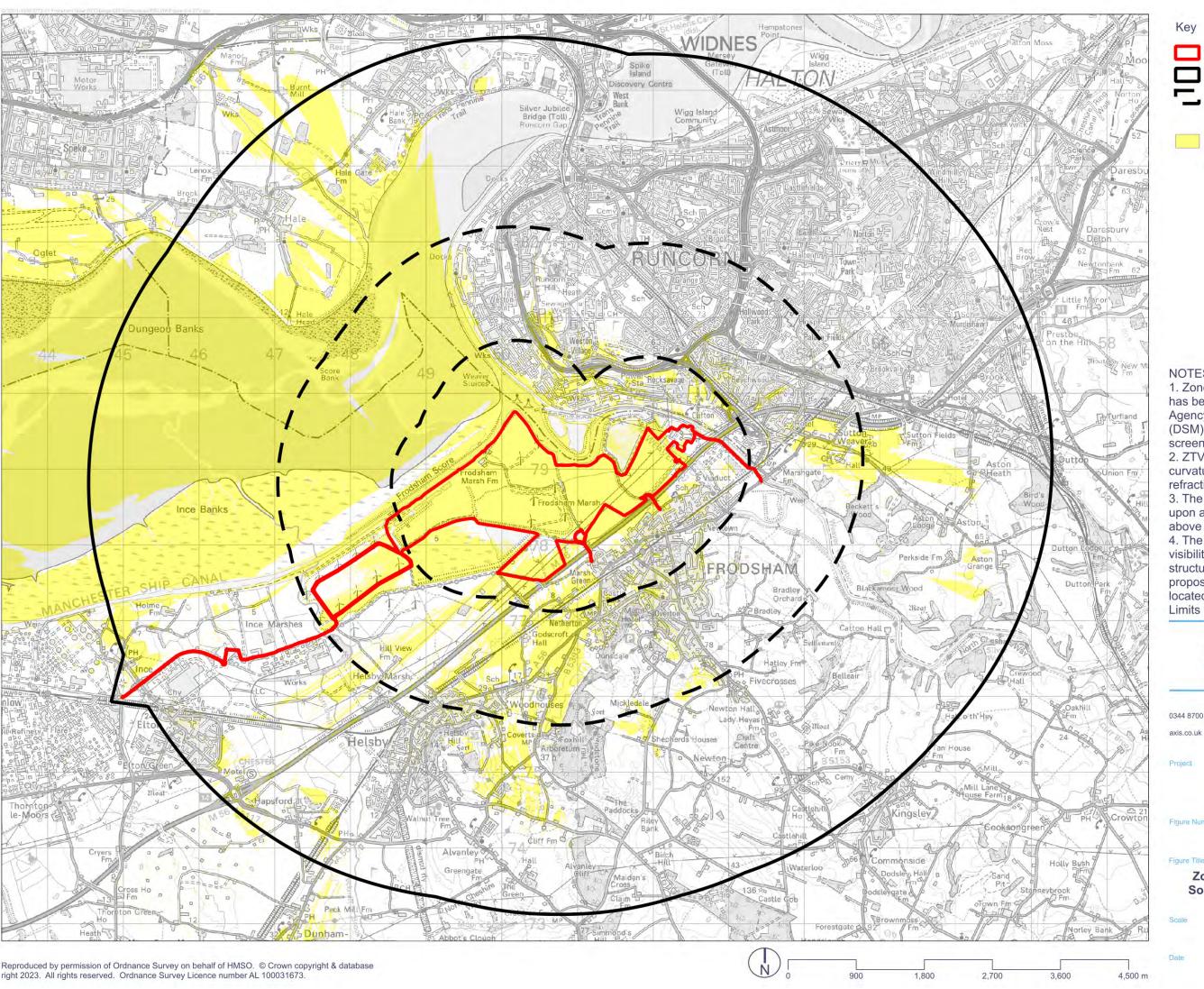
Figure Number

Figure 1a

Zone of Theoretical Visibility: Solar Array Development Area. **PEIR Layout**

1:45000@A3

February 2025



Draft Order Limits (the Site)

LVIA Study Area

Distance from proposed Solar PV modules at 1km and 2.5km intervals

Theoretical viibility of 3.5m high and 4m high Solar PV Modules (revised layout)

NOTES

- 1. Zone of Theoretical Visibility (ZTV) has been generated using Environment Agency 2m LIDAR digital surface model (DSM) data, which takes account of screening features in the landscape.
- 2. ZTV generation has allowed for curvature of the earth and light refraction.
- 3. The ZTV has been generated based upon an observer eye height of 1.7m above ground level
 4. The ZTV reflects the theoretical
- visibility of proposed 3.5m high structures, and the revised layout with proposed 4m high solar PV modules located within part of the draft Order



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FRODSHAM SOLAR PEIR

Figure Number

Figure 1b

Zone of Theoretical Visibility: Solar Array Development Area. **Revised Layout**

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February 2025





ritish National Grid Co-ordinates: 351372,379197 Distance from Site: At boundary of draft Order Limits



Date and Time of Photograph: 21/03/24 09:42 Lens: Canon EF 50mm 1:1.4

Direction of View: **S-e** Lens elevation (AOD):

British National Grid Co-ordinates: 352174,379271 Distance from Site: Within draft Order Limits



Cylindrical Date and Time of Photograph: 21/03/24 09:42 Lens: Canon EF 50mm 1:1.4





Date and Time of Photograph: 21/03/24 09:42 Lens: Canon EF 50mm 1:1.4

British National Grid Co-ordinates: 352174,379271 Distance from Site: Within draft Order Limits



