

- Legend**
- Site Area
  - Proposed Substation
  - Panel Areas
  - Distance Radii from Substation (1, 2, 3, 4, 5km)
  - Viewpoints
  - Woodland (modelled at 15m)
  - Buildings (modelled at 7.5m)
- Zone of Theoretical Visibility**
- Substation may be visible

**Figure Data:**  
 This figure has been based on the following data:  
 Layout file: D007-obvs-substn-12m-LIDAR5m-5km.shp  
 Terrain data: LIDAR-2018-DSM-5m-allSites-screening.asc/viewer's eye height: 2m above ground level  
 Calculation grid size: 5m

**Notes:**  
 This drawing is based upon computer generated Zone of Theoretical Visibility (ZTV) studies produced using the Viewshed routine in the Visibility Analysis plugin for QGIS.

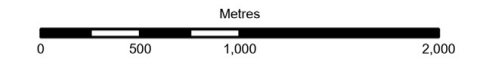
The areas shown are the maximum theoretical visibility, taking into account topography, principal woodlands and buildings.

A digital surface model (DSM) has been derived from DEFRA LIDAR 2m DTM height data with the locations of woodland and buildings taken from the OS Open Map Local dataset. Buildings have been modelled with an assumed height of 7.5m and woodland an assumed height of 10m, representing a conservative estimate of average heights within the study area.

The model does not take into account some localised features such as small copses, hedgerows or individual trees and therefore still gives an exaggerated impression of the extent of visibility. The actual extent of visibility on the ground will be less than that suggested by this plan.

The ZTV includes an adjustment that allows for Earth's curvature and light refraction. It is based on a derived DSM and has a 5m<sup>2</sup> resolution.

Coordinate System: British National Grid  
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Final	26/01/24	MP	MF	--	--
Rev	Date	By	Chkd	Appd	Authd



Project Name  
**Byers Gill Solar**

Drawing Title  
**Figure 7.8  
 Substation ZTV**

Scale at A3  
**1:38,000**

Role  
**Issue to client**

Suitability  
**Environmental  
 Impact Assessment**

Project Number <b>286386-00</b>	Rev <b>P01</b>
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Drawing Number  
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