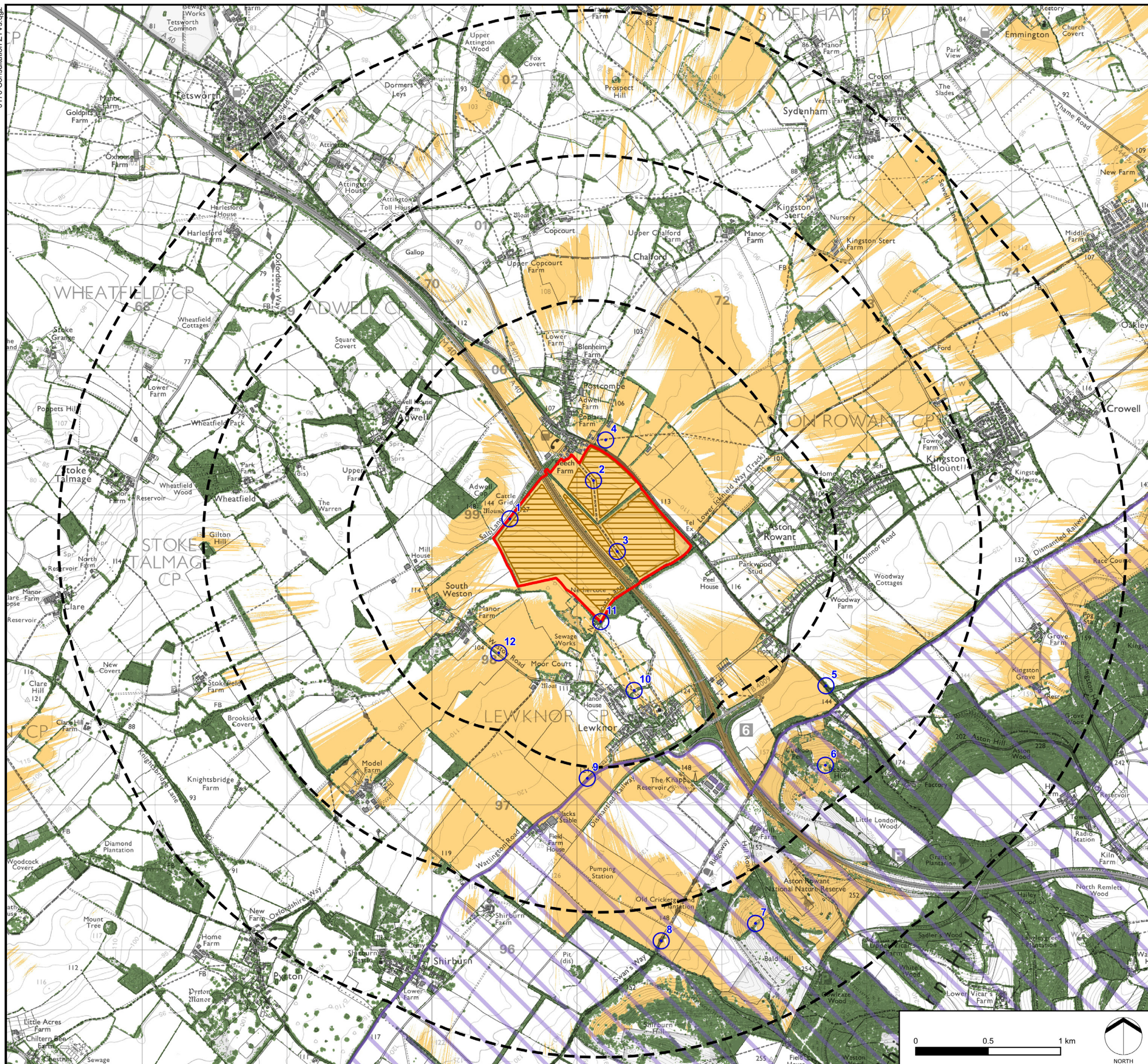# LEWKNOR SOLAR

CONSULTATION FIGURE 2a

Zone of Theoretical Visibility with Detailed Screening Effect of Woodland and Settlement

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KEY

- Site Boundary
- Proposed Panel Areas
- Distance Radii from site boundary (1, 2 and 3km)
- Viewpoints
- Existing Buildings
- Woodland and vegetation higher than 2.5m
- Chiltern Hills National Landscape

Zone of Theoretical Visibility (3.1m to tops of panels)
- Panels may be visible

FIGURE DATA:
This figure has been based on the following data:

Layout file: D003-obvs-panels-3_1m-LiDAR2m-3km.shp
Terrain data: LiDAR-DSM-VOM-2022-2m.asc
Viewer's eye height: 2m above ground level
Calculation grid size: 2m

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 National LiDAR Programme DTM height data. Locations buildings are taken from the OS Open Map Local dataset, and locations of woodland and vegetation higher than 2.5m are taken from the Environment Agency's Vegetation Object Model (VOM) dataset. Heights of buildings and woodland have been taken from DEFRA National LiDAR Programme DSM height data.

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 2m² resolution.

Projected Coordinate System: British National Grid

DATE	BY	PAPER	SCALE	QA	REV
JUN 2024	MP	A3	1:26,000	MT	-

0   0.5   1 km

NORTH