

TYPE 3 PHOTOWIRE / PHOTOMONTAGE REPRESENTATIONS

NICHOLAS & HARRIS BAKERY, CHURCHFIELDS, SALISBURY

for
NICHOLAS AND HARRIS LIMITED.

January 2026 - Revision A
Ref: I324-PM-01 2026-01-22

In the interest of sustainability, this document is intended
to be printed double sided on A3 paper.

PROJECT NO.	I 324	REVISION A				
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AUTHOR(S)	Will Dew and Mary Lister	-	2026-01-16	WD	ML	First draft issue
STATUS	PLANNING	A	2026-01-22	ML	MG	Minor amendments. Issued for planning

EXECUTIVE SUMMARY

This document has been prepared to provide additional information to Wiltshire Council on the proposed replacement of the flour silos at Nicholas & Harris Bakery in Churchfields, Salisbury (Planning Application no. PL/2025/08421).

The following comments were received from the Conservation Officer in response to the application:

“I have some concerns regarding the visibility of these silos from further afield towards Salisbury and the cathedral in particular, primarily from the watermeadows to the west (several footpaths from Bemerton and St Anthony’s Cross) and even potentially from Netherhampton Rd. Given the grade I listing of the cathedral and its widely understood historic and landscape significance, along with the expectations of section 16 of the PLBCA Act 1990 and the efforts within the city to maintain a consistent roofscape at a relatively low level, I would like to see a LVIA or similar verified demonstration of the visibility of the silos. The site lies outside of the central area covered by the 12.2m height limit, however the character of the surrounding area is very much of the same scale of buildings (mostly 9-12m) and these could appear above the tree line from the important water meadow landscape to the west, thereby having an impact on the setting of the cathedral”.

Following these comments, Indigo Landscape Architects were approached by Nicholas and Harris Limited and asked to prepare a series of photomontages to demonstrate the visibility of the silos from the wider landscape, focusing on the water meadow landscape to the west from where there would be the most potential for combined views of both the silos and the Cathedral.

Indigo agreed to prepare a series of ‘Type 3 photowire / photomontage representations’ in order to show the proposals in their context, and specifically in relation to the views of the Cathedral spire (prepared in accordance with the ‘Guidelines for Landscape and Visual Impact Assessment’ (GLVIA3)¹ and the Landscape Institutes’s guidance on the ‘Visual Representation of Development Proposals’²).

This involved a site visit to assess the visibility of the proposed silos from the surrounding Public Rights of Way (undertaken on the 5th of January 2026); and the selection of six viewpoints which were chosen to be representative³ of the effects experienced from the landscape to the west of the Cathedral.

A second site visit was then undertaken on the 6th January, photographs were taken using a tripod with a specialist photomontage mount; and their locations recorded (refer to Sections 1.2 - 1.3 in Appendix A at the end of this document for detailed methodology).

The Viewpoint locations are shown on the drawing overleaf (ref: 1324-A-01). They focus on the water meadows to the west of the Cathedral (as highlighted by the Council’s Conservation Officer), but also cover the high ground to the southwest; and a representative viewpoint has also been presented from the Town Path (Footpath / Cycleway SALS21) which crosses the water meadows between the Application Site and the Cathedral.

The photowire / photomontage technical methodology is also set out within Appendix A. Essentially, the photomontage prepared are based upon LIDAR data (with a minimum of three surveyed reference points visible in each viewpoint photograph) into which a 3D model of the proposed flour silos have been inserted. This model was prepared using SketchUp software and is based upon the architect and manufacturer’s drawings; and includes all the railings and other structures on the top of the Silos. In order to represent the worst-case scenario, the air intake filter assembly on the top of the silos has been modelled with the hatch open, when in reality this would be closed during normal operation. The silos have also been modelled without finished materials applied (they are shown as solid white forms), when in reality they would be a shade of grey.

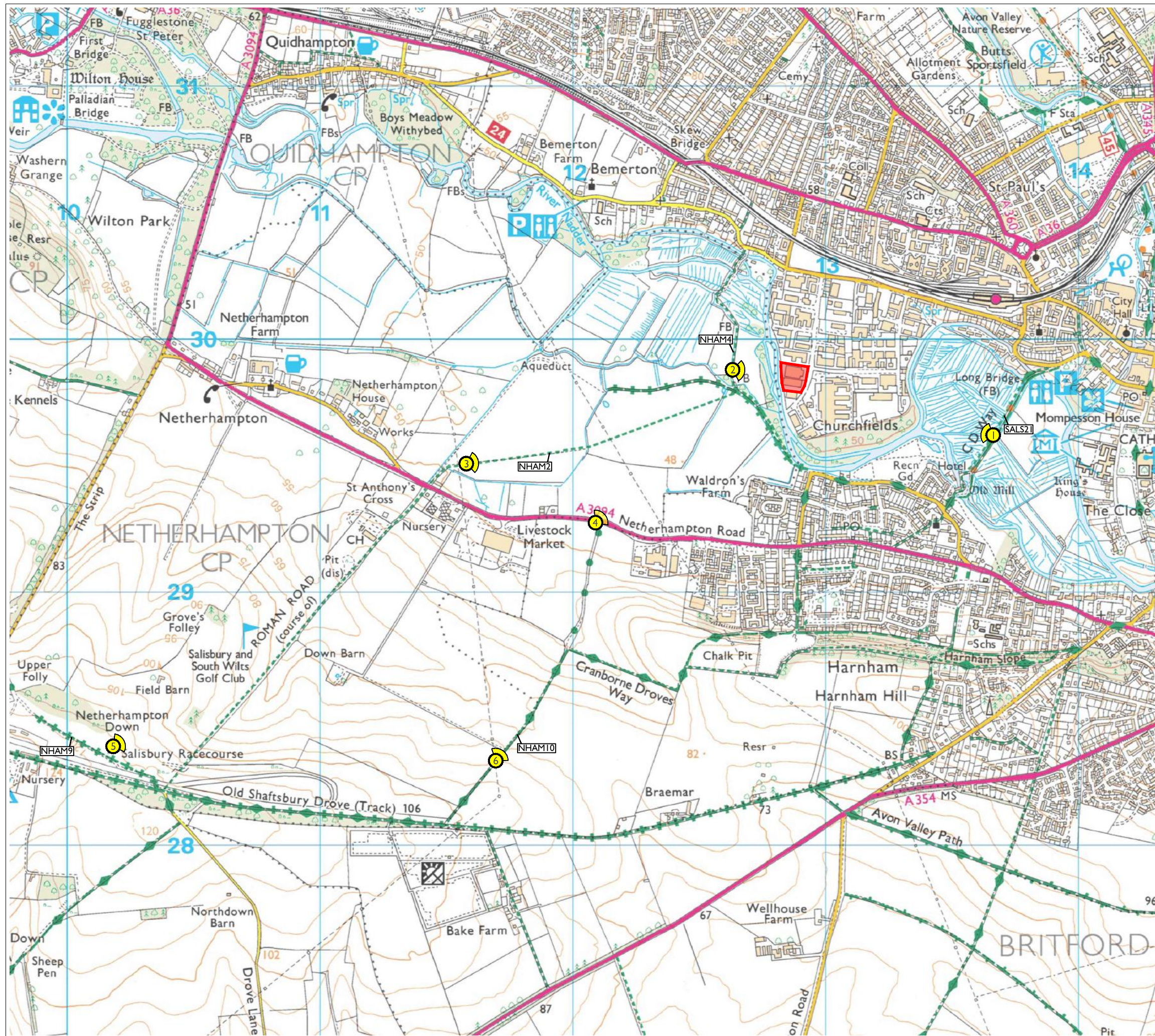
For each Viewpoint the images shown on the following pages comprise both a ‘photowire representation’ (with a red dashed line indicating the outline of the proposals overlaid on top of the viewpoint photograph); and a ‘photomontage 3D massing representation’ (where the images have been edited to remove those elements of the model that would be hidden by existing foreground features (such as vegetation), thereby presenting a realistic view of the proposals (albeit taking into account the points note in the paragraph above)). To allow direct comparison with the existing view (and in accordance with the Landscape Institutes’s guidance), the images have also been shown alongside non-edited (‘existing view’) photographs.

Conclusions of the study:

The final ‘photomontages’ show that from the majority of the surrounding landscape the silos would be well screened by existing vegetation and would not break the skyline (even in winter).

- From the Town Path (Viewpoint 1), the proposals would be completely screened in all seasons.
- From the water meadows on the lower ground to the west (Viewpoints 2 and 3) and from Netherhampton Road (Viewpoint 4) the silos would, at worst, only be glimpsed through or over the top of tree canopies in winter. In the context of the views, the silos would be scarcely appreciated, and the views of the Cathedral spire would not be affected. In summer from these viewpoints the silos would be completely screened.
- From the rising ground to the south (Viewpoints 5 and 6), more elevated views would allow the tops of the silos to just be seen (bearing in mind the worst-case scenario mentioned above), however from this distance, the change would be barely discernible in the overall view. In the context of the Cathedral, the change would be scarcely appreciated.

1 Guidelines for Landscape and Visual Impact Assessment - Third Addition - 2013 (GLVIA3)
2 Landscape Institute Technical Guidance Note 06/19 ‘Visual Representation of Development Proposals’ (and Appendices) - 17th September 2019..
3 Defined in GLVIA3 as follows: “**Representative viewpoints**, selected to represent the experience of different types of visual receptor, where larger numbers of viewpoints cannot all be included individually and where the significant effects are unlikely to differ — for example, certain points may be chosen to represent the views of users of particular public footpaths and bridleways).”



NOTES:
This drawing is subject to copyright.

INDIGO



KEY:



The Application Site



Public Viewpoint Location



Public Right of Way
reference number

0 200m 500m 1km
Metres Scale 1:15,000
Ordnance Survey © Crown Copyright 2025. All rights reserved.
Licence number AC0000807948

NORTH



- rev	First issue description	2026-01-15 date	WD by	ML chk
project NICHOLAS & HARRIS BAKERY, CHURCHFIELDS				
client NICHOLAS AND HARRIS LIMITED				
drawing title PHOTOWIRE VIEWPOINT LOCATION PLAN				
drawing number 1324-A-01	revision -	status PLANNING	scale 1:15k@A3	

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INDIGO LANDSCAPE ARCHITECTS LIMITED

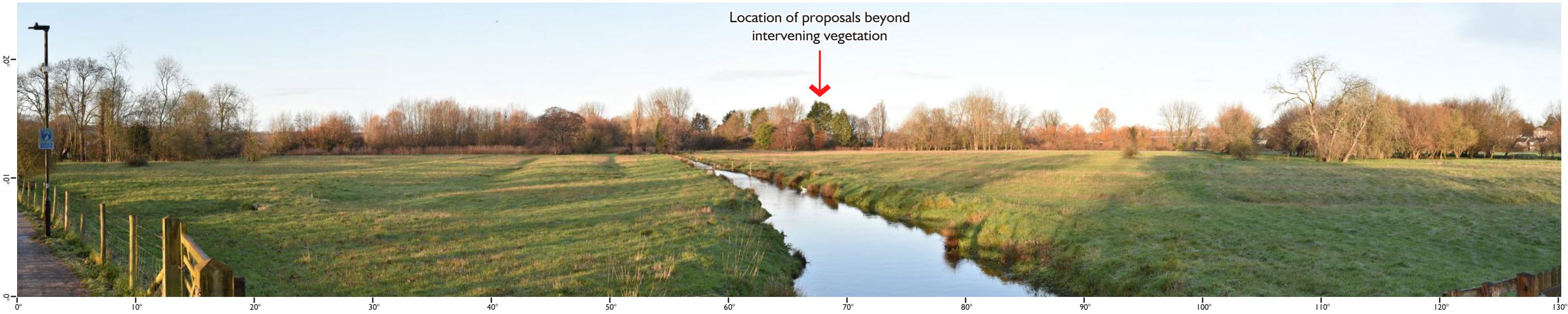
VIEWPOINT I - ‘Type 3’ photowire representation

130.53 degree Horizontal Field of View and 24.89 degree Vertical Field of View.

To be viewed **digitally at 125% enlargement** - see notes below.



Existing view - Winter - 7th January 2026, 8:47



Photowire - Winter representation

Panoramic view looking west-northwest from the footpath/cycleway SALS21 ‘Town Path’.

OS Coordinates (east/north)	413665 / 129609
Elevation	46.35m AOD
Approximate distance to closest edge of Site	770m to the eastern boundary of the Site.

Notes: Cylindrical panoramic image - **to be viewed digitally** (see instructions for viewing below). If printed on A3 paper this image is for context only.
Instructions for viewing digitally: All images must be viewed with the 100mm scale bar displayed at its true size (achieved by adjusting PDF zoom level). This represents a 125% enlargement (refer to the Technical Methodology at the end of this document). The images should then be viewed at comfortable arm’s length (exact mathematical reference point = 542mm from eye to image) by maintaining the head in a constant position (without turning) and panning the image from side to side - this maintains a constant viewing distance across the panorama and provides the best recommended representation of the view found on site.

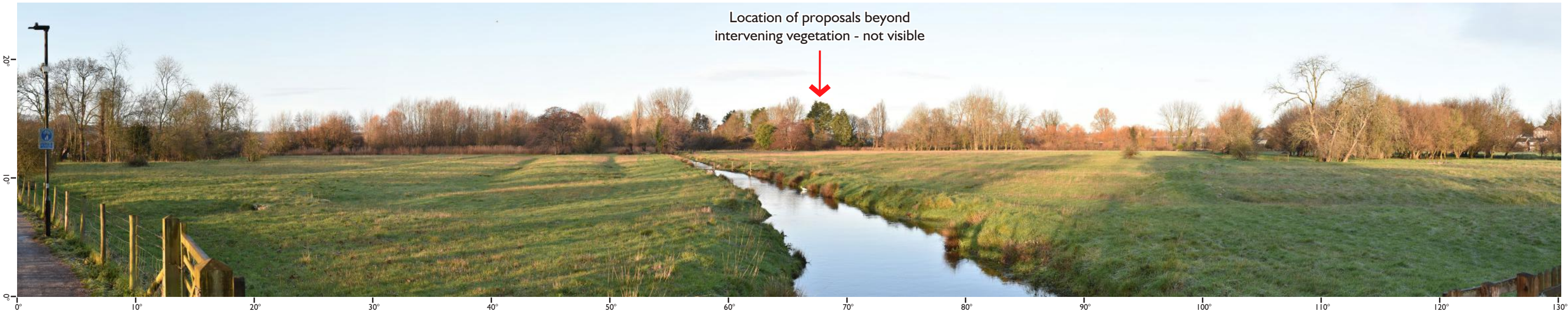
VIEWPOINT I - ‘Type 3’ photomontage 3D massing representation

130.53 degree Horizontal Field of View and 24.89 degree Vertical Field of View.

To be viewed **digitally at 125% enlargement** - see notes below.



Existing view - Winter - 7th January 2026, 8:47



Photomontage 3D massing - Winter representation

Panoramic view looking west-northwest from the footpath/cycleway SALS21 ‘Town Path’.

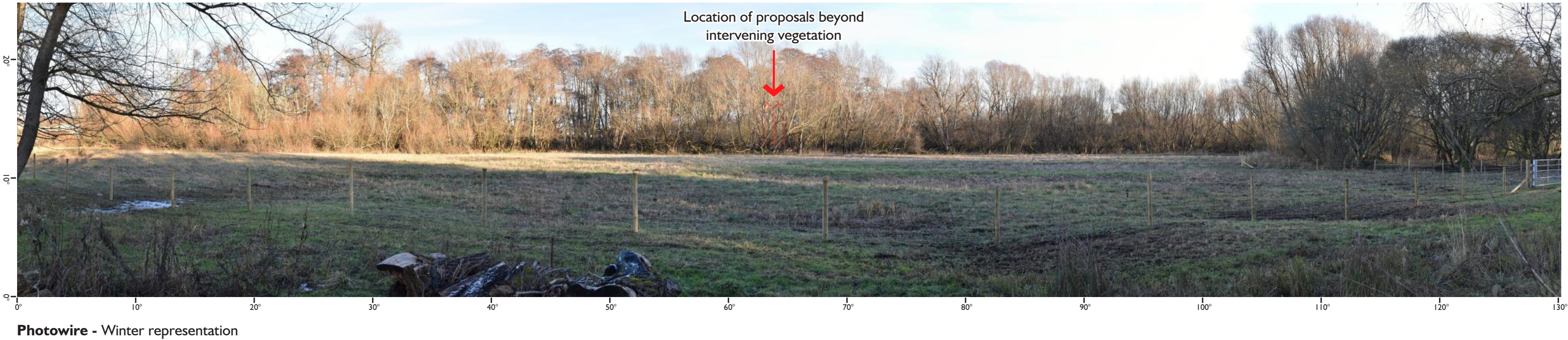
OS Coordinates (east/north)	413665 / 129609
Elevation	46.35m AOD
Approximate distance to closest edge of Site	770m to the eastern boundary of the Site.

Notes: Cylindrical panoramic image - **to be viewed digitally** (see instructions for viewing below). If printed on A3 paper this image is for context only.
Instructions for viewing digitally: All images must be viewed with the 100mm scale bar displayed at its true size (achieved by adjusting PDF zoom level). This represents a 125% enlargement (refer to the Technical Methodology at the end of this document). The images should then be viewed at comfortable arm’s length (exact mathematical reference point = 542mm from eye to image) by maintaining the head in a constant position (without turning) and panning the image from side to side - this maintains a constant viewing distance across the panorama and provides the best recommended representation of the view found on site.

VIEWPOINT 2 - ‘Type 3’ photowire representation

130.53 degree Horizontal Field of View and 24.89 degree Vertical Field of View.

To be viewed **digitally at 125% enlargement** - see notes below.



Panoramic view looking east from footpath NHAM4 ‘Broken Bridges’.

OS Coordinates (east/north)	412633 / 129877
Elevation	46.8m AOD
Approximate distance to closest edge of Site	190m to the western boundary of the Site.

Notes: Cylindrical panoramic image - **to be viewed digitally** (see instructions for viewing below). If printed on A3 paper this image is for context only.

Instructions for viewing digitally: All images must be viewed with the 100mm scale bar displayed at its true size (achieved by adjusting PDF zoom level). This represents a 125% enlargement (refer to the Technical Methodology at the end of this document). The images should then be viewed at comfortable arm’s length (exact mathematical reference point = 542mm from eye to image) by maintaining the head in a constant position (without turning) and panning the image from side to side - this maintains a constant viewing distance across the panorama and provides the best recommended representation of the view found on site.

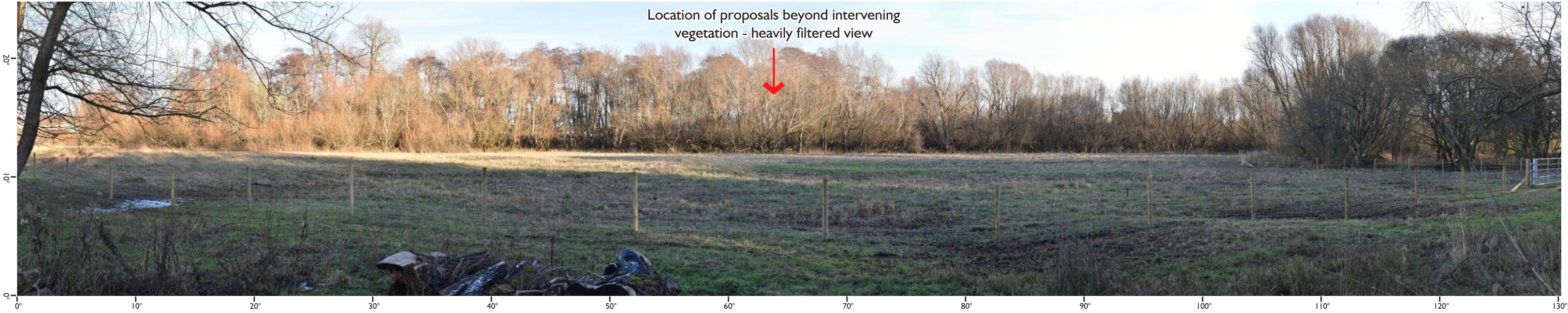
VIEWPOINT 2 - ‘Type 3’ photomontage 3D massing representation

130.53 degree Horizontal Field of View and 24.89 degree Vertical Field of View.

To be viewed **digitally at 125% enlargement** - see notes below.



Existing view - Winter - 6th January 2026, 15:08



Photomontage 3D massing - Winter representation

Panoramic view looking east from footpath NHAM4 ‘Broken Bridges’.

OS Coordinates (east/north)	412633 / 129877
Elevation	46.8m AOD
Approximate distance to closest edge of Site	190m to the western boundary of the Site.

Notes: Cylindrical panoramic image - **to be viewed digitally** (see instructions for viewing below). If printed on A3 paper this image is for context only.
Instructions for viewing digitally: All images must be viewed with the 100mm scale bar displayed at its true size (achieved by adjusting PDF zoom level). This represents a 125% enlargement (refer to the Technical Methodology at the end of this document). The images should then be viewed at comfortable arm’s length (exact mathematical reference point = 542mm from eye to image) by maintaining the head in a constant position (without turning) and panning the image from side to side - this maintains a constant viewing distance across the panorama and provides the best recommended representation of the view found on site.

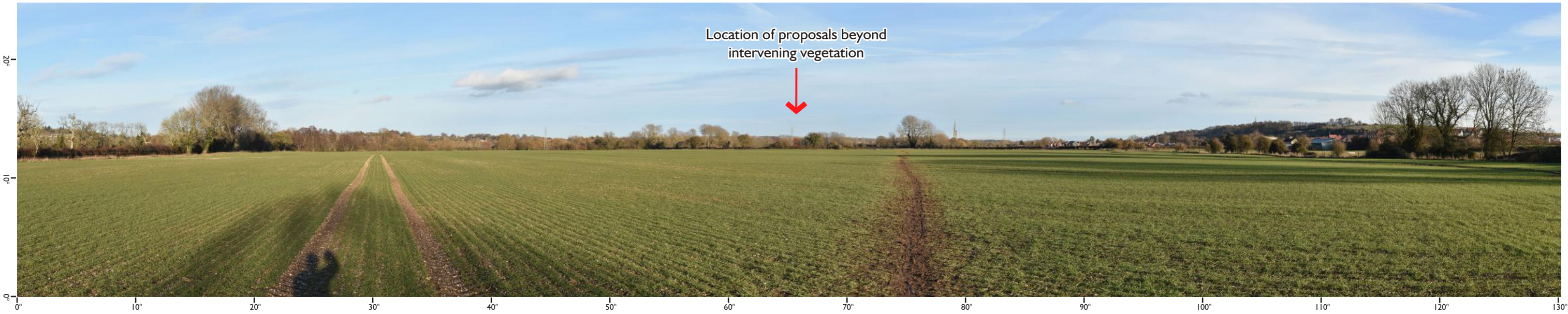
VIEWPOINT 3 - ‘Type 3’ photowire representation

130.53 degree Horizontal Field of View and 24.89 degree Vertical Field of View.

To be viewed **digitally at 125% enlargement** - see notes below.



Existing view - Winter - 6th January 2026, 14:49



Photowire - Winter representation

Panoramic view looking east from the footpath NHAM2.

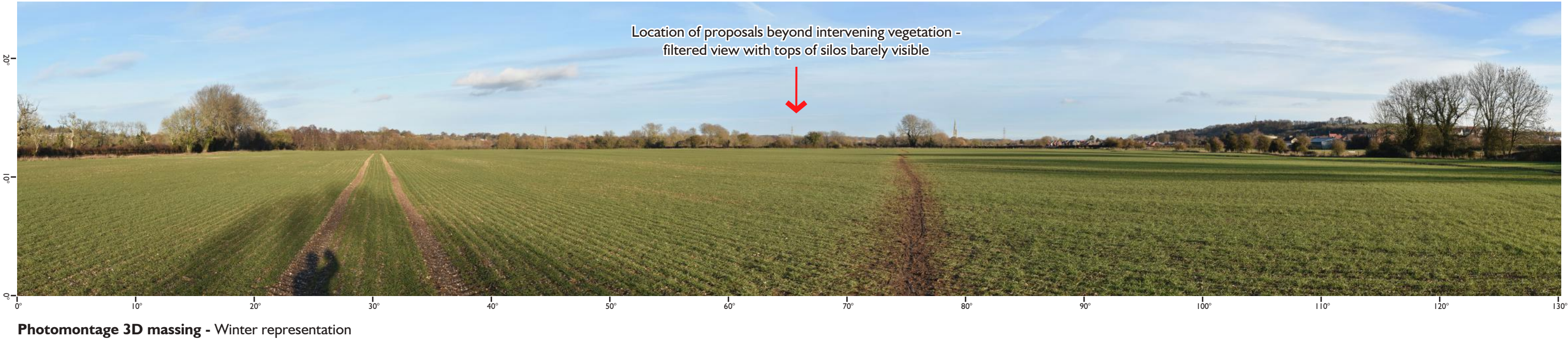
OS Coordinates (east/north)	411579 / 129507
Elevation	49m AOD
Approximate distance to closest edge of Site	1.29km to the western boundary of the Site.

Notes: Cylindrical panoramic image - **to be viewed digitally** (see instructions for viewing below). If printed on A3 paper this image is for context only.
Instructions for viewing digitally: All images must be viewed with the 100mm scale bar displayed at its true size (achieved by adjusting PDF zoom level). This represents a 125% enlargement (refer to the Technical Methodology at the end of this document). The images should then be viewed at comfortable arm's length (exact mathematical reference point = 542mm from eye to image) by maintaining the head in a constant position (without turning) and panning the image from side to side - this maintains a constant viewing distance across the panorama and provides the best recommended representation of the view found on site.

VIEWPOINT 3 - ‘Type 3’ photomontage 3D massing representation

130.53 degree Horizontal Field of View and 24.89 degree Vertical Field of View.

To be viewed **digitally at 125% enlargement** - see notes below.



Panoramic view looking east from the footpath NHAM2.

OS Coordinates (east/north)	411579 / 129507
Elevation	49m AOD
Approximate distance to closest edge of Site	1.29km to the western boundary of the Site.

Notes: Cylindrical panoramic image - **to be viewed digitally** (see instructions for viewing below). If printed on A3 paper this image is for context only.
Instructions for viewing digitally: All images must be viewed with the 100mm scale bar displayed at its true size (achieved by adjusting PDF zoom level). This represents a 125% enlargement (refer to the Technical Methodology at the end of this document). The images should then be viewed at comfortable arm's length (exact mathematical reference point = 542mm from eye to image) by maintaining the head in a constant position (without turning) and panning the image from side to side - this maintains a constant viewing distance across the panorama and provides the best recommended representation of the view found on site.

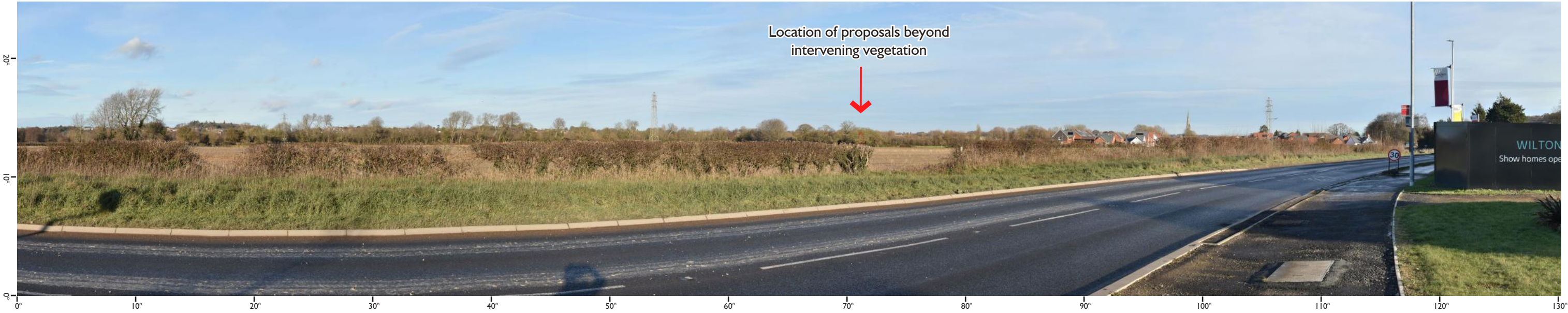
VIEWPOINT 4 - ‘Type 3’ photowire representation

130.53 degree Horizontal Field of View and 24.89 degree Vertical Field of View.

To be viewed **digitally at 125% enlargement** - see notes below.



Existing view - Winter - 6th January 2026, 14:29



Photowire - Winter representation

Panoramic view looking northeast from the pavement alongside A3094 Netherhampton Road.

OS Coordinates (east/north)	412090 / 129273
Elevation	49.06m AOD
Approximate distance to closest edge of Site	900m to the western boundary of the Site.

Notes: Cylindrical panoramic image - **to be viewed digitally** (see instructions for viewing below). If printed on A3 paper this image is for context only.
Instructions for viewing digitally: All images must be viewed with the 100mm scale bar displayed at its true size (achieved by adjusting PDF zoom level). This represents a 125% enlargement (refer to the Technical Methodology at the end of this document). The images should then be viewed at comfortable arm's length (exact mathematical reference point = 542mm from eye to image) by maintaining the head in a constant position (without turning) and panning the image from side to side - this maintains a constant viewing distance across the panorama and provides the best recommended representation of the view found on site.

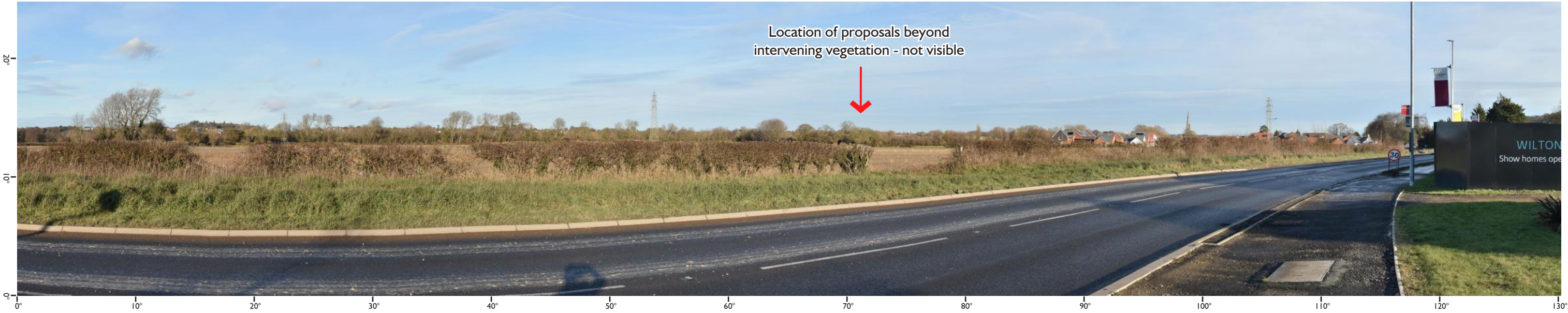
VIEWPOINT 4 - ‘Type 3’ photomontage 3D massing representation

130.53 degree Horizontal Field of View and 24.89 degree Vertical Field of View.

To be viewed **digitally at 125% enlargement** - see notes below.



Existing view - Winter - 6th January 2026, 14:29



Photomontage 3D massing - Winter representation

Panoramic view looking northeast from the pavement alongside A3094 Netherhampton Road.

OS Coordinates (east/north)	412090 / 129273
Elevation	49.06m AOD
Approximate distance to closest edge of Site	900m to the western boundary of the Site.

Notes: Cylindrical panoramic image - **to be viewed digitally** (see instructions for viewing below). If printed on A3 paper this image is for context only.
Instructions for viewing digitally: All images must be viewed with the 100mm scale bar displayed at its true size (achieved by adjusting PDF zoom level). This represents a 125% enlargement (refer to the Technical Methodology at the end of this document). The images should then be viewed at comfortable arm's length (exact mathematical reference point = 542mm from eye to image) by maintaining the head in a constant position (without turning) and panning the image from side to side - this maintains a constant viewing distance across the panorama and provides the best recommended representation of the view found on site.

VIEWPOINT 5 - ‘Type 3’ photowire representation
130.53 degree Horizontal Field of View and 24.89 degree Vertical Field of View.
To be viewed **digitally at 125% enlargement** - see notes below.



Panoramic view looking northeast from the footpath NHAM9 within Salisbury and South Wilts Golf Club.

OS Coordinates (east/north)	410183 / 128389
Elevation	116.8m AOD
Approximate distance to closest edge of Site	2.99km to the western boundary of the Site.

Notes: Cylindrical panoramic image - **to be viewed digitally** (see instructions for viewing below). If printed on A3 paper this image is for context only.
Instructions for viewing digitally: All images must be viewed with the 100mm scale bar displayed at its true size (achieved by adjusting PDF zoom level). This represents a 125% enlargement (refer to the Technical Methodology at the end of this document). The images should then be viewed at comfortable arm's length (exact mathematical reference point = 542mm from eye to image) by maintaining the head in a constant position (without turning) and panning the image from side to side - this maintains a constant viewing distance across the panorama and provides the best recommended representation of the view found on site.



Panoramic view looking northeast from the footpath NHAM9 within Salisbury and South Wilts Golf Club.

OS Coordinates (east/north)	410183 / 128389
Elevation	116.8m AOD
Approximate distance to closest edge of Site	2.99km to the western boundary of the Site.

Notes: Cylindrical panoramic image - **to be viewed digitally** (see instructions for viewing below). If printed on A3 paper this image is for context only.

Instructions for viewing digitally: All images must be viewed with the 100mm scale bar displayed at its true size (achieved by adjusting PDF zoom level). This represents a 125% enlargement (refer to the Technical Methodology at the end of this document). The images should then be viewed at comfortable arm's length (exact mathematical reference point = 542mm from eye to image) by maintaining the head in a constant position (without turning) and panning the image from side to side - this maintains a constant viewing distance across the panorama and provides the best recommended representation of the view found on site.

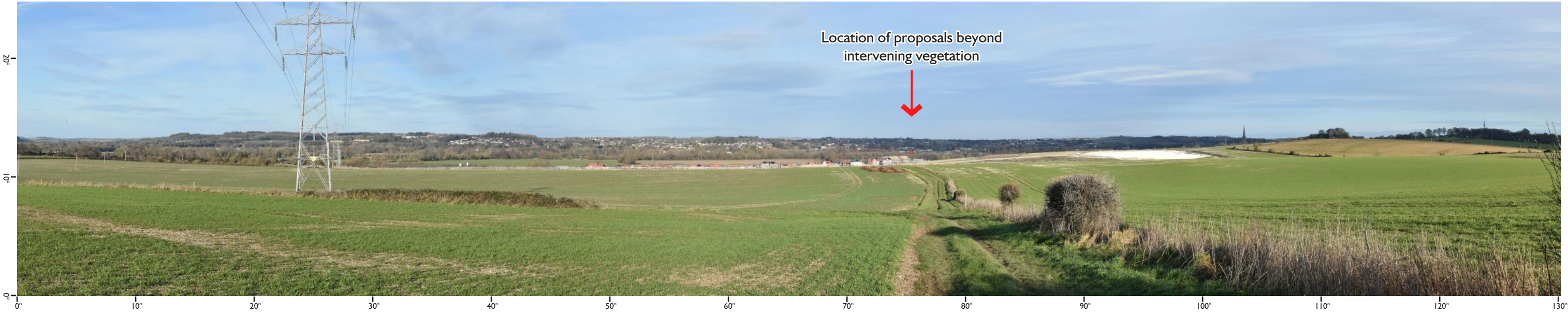
VIEWPOINT 6 - ‘Type 3’ photowire representation

130.53 degree Horizontal Field of View and 24.89 degree Vertical Field of View.

To be viewed **digitally at 125% enlargement** - see notes below.



Existing view - Winter - 6th January 2026, 13:45



Photowire - Winter representation

Panoramic view looking northeast from the bridleway NHAM10 Cranborne Drovers Way.

OS Coordinates (east/north)	411699 / 128334
Elevation	89m AOD
Approximate distance to closest edge of Site	1.8km to the southern boundary of the Site.

Notes: Cylindrical panoramic image - **to be viewed digitally** (see instructions for viewing below). If printed on A3 paper this image is for context only.
Instructions for viewing digitally: All images must be viewed with the 100mm scale bar displayed at its true size (achieved by adjusting PDF zoom level). This represents a 125% enlargement (refer to the Technical Methodology at the end of this document). The images should then be viewed at comfortable arm’s length (exact mathematical reference point = 542mm from eye to image) by maintaining the head in a constant position (without turning) and panning the image from side to side - this maintains a constant viewing distance across the panorama and provides the best recommended representation of the view found on site.

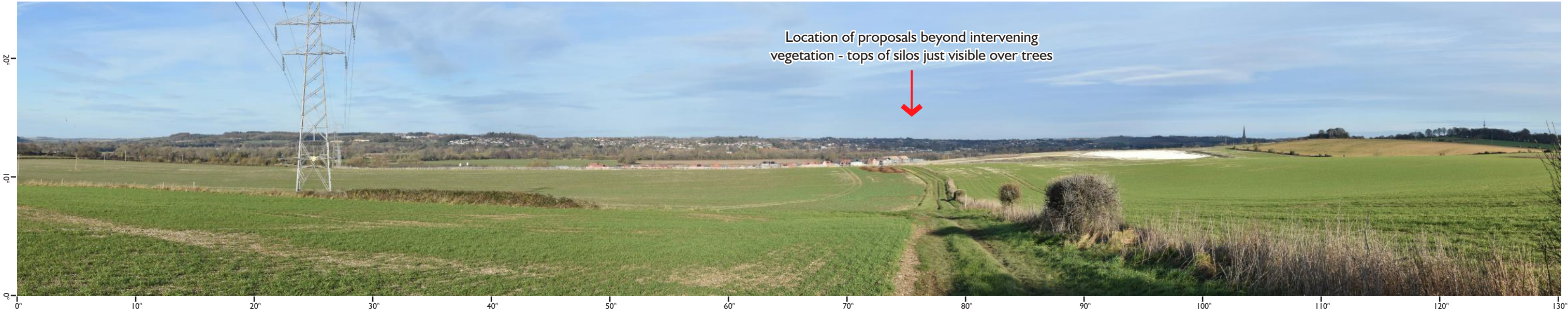
VIEWPOINT 6 - ‘Type 3’ photomontage 3D massing representation

130.53 degree Horizontal Field of View and 24.89 degree Vertical Field of View.

To be viewed **digitally at 125% enlargement** - see notes below.



Existing view - Winter - 6th January 2026, 13:45



Photomontage 3D massing - Winter representation

Panoramic view looking northeast from the bridleway NHAM10 Cranborne Drovers Way.

OS Coordinates (east/north)	411699 / 128334
Elevation	89m AOD
Approximate distance to closest edge of Site	1.8km to the southern boundary of the Site.

Notes: Cylindrical panoramic image - **to be viewed digitally** (see instructions for viewing below). If printed on A3 paper this image is for context only.
Instructions for viewing digitally: All images must be viewed with the 100mm scale bar displayed at its true size (achieved by adjusting PDF zoom level). This represents a 125% enlargement (refer to the Technical Methodology at the end of this document). The images should then be viewed at comfortable arm's length (exact mathematical reference point = 542mm from eye to image) by maintaining the head in a constant position (without turning) and panning the image from side to side - this maintains a constant viewing distance across the panorama and provides the best recommended representation of the view found on site.

APPENDIX A: Technical Methodology - Presentation of Photomontage

I.1. Introduction

- I.1.1. The images presented within this document are “Type 3” photowire / photomontage (displayed as a wireframe and massing model), which have been positioned using surveyed buildings, and are presented following the guidelines set out within the Landscape Institute Technical Guidance Note (TGN) 06/19.

I.2. Camera equipment used

- I.2.1. Photographs have been taken with a Nikon D3400 digital SLR camera (cropped frame sensor) with a 35mm prime lens with fixed focal length (Nikon Nikkor AF-S 35mm f1.8G DX lens). With this lens the camera produces an individual 6000 x 4000 pixel image which has a field of view of 36.79 x 24.53 degrees,¹ and the 35mm focal length together with the manufacturer’s stated sensor multiplication factor of 1.5 gives a focal length of 52.5mm. This type of lens has low distortion and a field of view close to that of a human eye.
- I.2.2. A Rollei C6i tripod has been used for optimal image quality and to ensure a level camera position throughout each panorama. On the tripod, a Nodal Ninja 3 Mk2 panoramic head was used to ensure the photographs are taken at regular intervals whilst panning across the scene. Intervals were set to 15 degrees with the camera in portrait orientation, providing approximately 39% overlap between adjacent frames.²
- I.2.3. All photographs have been taken at 1.65m above ground level to replicate normal eye level views. The time and date was recorded for each photograph.

I.3. Photostitching

- I.3.1. All photographs have been stitched together using Photomerge (‘reposition only’ layout) in Adobe Photoshop, with manual control over image alignment.

I.4. 3D modelling

- I.4.1. A 3D model was produced for the proposals using SketchUp 3D modelling software (see Figure 1). Relevant survey information from LIDAR 1m DSM (2022) was imported into the 3D model, e.g. existing ground levels, rooftops and visual references to aid the photomontage alignment.
- I.4.2. The proposed silos were accurately modelled according to the architect and manufacturer’s drawings, including the railings and air intake filter assembly on the top of the silos.
- I.4.3. For each viewpoint created, the virtual camera was positioned within the model and given the same field of view, orientation and elevation (taken from LIDAR data) as the real camera. Existing surveyed features such as rooftops were checked against the site photos and the virtual camera position was set when the model matched the photos with all the visual references aligned. The lighting of the proposal was then simulated within the model to match the date, time and conditions of the photographs taken at each viewpoint, and images of the model were exported to match the individual frames of the panoramic photograph.

I.5. Alignment with photographs

- I.5.1. The final images from the 3D model were then stitched together manually in Adobe Photoshop and the images were overlaid upon the pre-prepared photographic panoramas. A minimum of three surveyed reference

¹ Calculated by horizontally measuring a 360 degree, manually stitched panoramic photo (taken using the same Nikon D3400 camera and 35mm fixed focal length lens in landscape orientation) to establish the relationship between pixel dimensions and degrees of field of view, and then dividing the number of pixels per photograph width (or height) by the number of pixels per degree to give the Horizontal or Vertical Field of View. In this case a 360 degree montage measures 58,704 pixels, so the number of pixels per degree of field of view = $58,704 \div 360 = 163.06666$. The HFoV of a landscape image therefore measures $6000 \div 163.06666 = 36.79$ degrees; and the VFoV of a landscape image therefore measures $4000 \div 163.06666 = 24.53$ degrees.

² Exact percentage of overlap = 38.85038%.



FIGURE 1 - 3D model of the proposals and LIDAR surveyed context

points visible from each viewpoint were used to confirm this alignment and to verify that the process had been successful.

- I.5.2. For the photowire representations the wireframes generated were simply placed over the photographic panoramas to show the location of the silos relative to foreground features (topography, vegetation etc).
- I.5.3. For the photomontage 3D massing representations, the images were edited to remove those elements of the model that would be hidden by existing foreground features. The silos have been modelled as solid white forms, with the shadows created in the model appearing as tones of grey. Some adjustment was made to the model’s brightness to ensure it matched the ambient light conditions. Finished materials and colours have not been applied.
- I.5.4. It is important to note that the silos have been modelled to the worst-case scenario, shown as solid white forms (when in reality they would be shades of grey), with the air intake filter assembly lid on the top of the silo shown open (during normal operation this would be closed).

I.6. Presentation of the final images

Panoramic images:

- I.6.1. Cylindrical panoramic images have been presented throughout, as humans typically have wider peripheral vision than the 39.6 degree Horizontal Field of View (HFoV) captured in a single photograph taken with a ‘full frame’ 50mm focal length SLR camera (or equivalent). Furthermore humans are not static, and when taking in a view we generally move our heads from side to side and therefore experience a wider field of view.

Image scaling and viewing distance:

- I.6.2. Landscape Institute Technical Guidance Note (TGN) 06/19 (paragraph 3.8.3) recommends viewing images at “comfortable arm’s length” of between 500 and 550mm, and paragraph 3.8.4 sets out the ‘mathematically

- I.6.3. correct' viewing distance of 542mm for a monocular view 100% reference³ 50mm focal length image presented at 390mm x 260mm on an A3 sheet.
- I.6.4. Using this viewing distance, the size at which the images must be presented (in both digital versions and as printed images) can be found by plotting a horizontal distance of 542mm from the theoretical centre of the viewers eye (the 'eye co-ordinate') to the centre of a vertical line which represents the photograph, in elevation (see Figure 2). The camera's Vertical Field of View (24.53 degrees for a landscape image) is then plotted as a widening 'cone' from the eye co-ordinate towards the vertical line, and the distance between the points where this cone intersects the vertical line is the appropriate image height dimension for presentation of the 4000 pixel height (landscape) image created by the camera at a 542mm viewing distance – this gives a dimension of 235.66mm though this is for a monocular view using the camera's focal length of 52.5mm. The image is then scaled according to the enlargement details below to take account of both the 'binocular' nature of human vision and to correct the focal length to 50mm equivalent.

Image enlargement:

- I.6.5. The photographs are presented as enlarged images, with enlargement factors stated on individual photosheets. This is to account for the difference between the camera's 52.5mm focal length and the mathematically correct 50mm focal length for a 100% reference image (a difference of 5%); and the fact that humans generally have 'binocular' vision (whilst cameras are 'monocular' in nature) and that a degree of image enlargement provides a better impression of scale for most viewers using two eyes (refer to Landscape Institute Technical Guidance Note 06/19, Section 3.8). Our approach is therefore to use **150% enlargement** for viewpoints in expansive / open landscapes or seascapes, where components are more distant (in accordance with TGN 06/19, paragraph 3.8.8); and **125% enlargement** in mid to smaller scale landscapes / townscape (refer to TGN 06/19, paragraph 3.8.10).

Calculating the field of view presented:

- I.6.6. The images presented have been cropped both horizontally and vertically for presentation purposes, and both the Horizontal Field of View and the Vertical Field of View has been indicated on the images presented.
- I.6.7. To do this the field of view of the photographs presented has been calculated by horizontally measuring a 360 degree manually stitched panoramic photo and determining the number of pixels in one degree of the field of view (1 degree = 163.06666 pixels as set out in footnote 1 above); and then, by counting the pixels presented on both the digital and printed images, both the Horizontal Field of View and the Vertical Field of View has been calculated.

Final images:

- I.6.8. For the **digitally presented images** the final images are 'Type 3' photowire / photomontage images with a Horizontal Field of View of 130.53 and a Vertical Field of View of 24.89. These have been presented at minimum 300dpi in PDF versions of the document and are **intended to be viewed digitally**.
- I.6.9. Instructions for viewing all images are given on the individual photosheets.

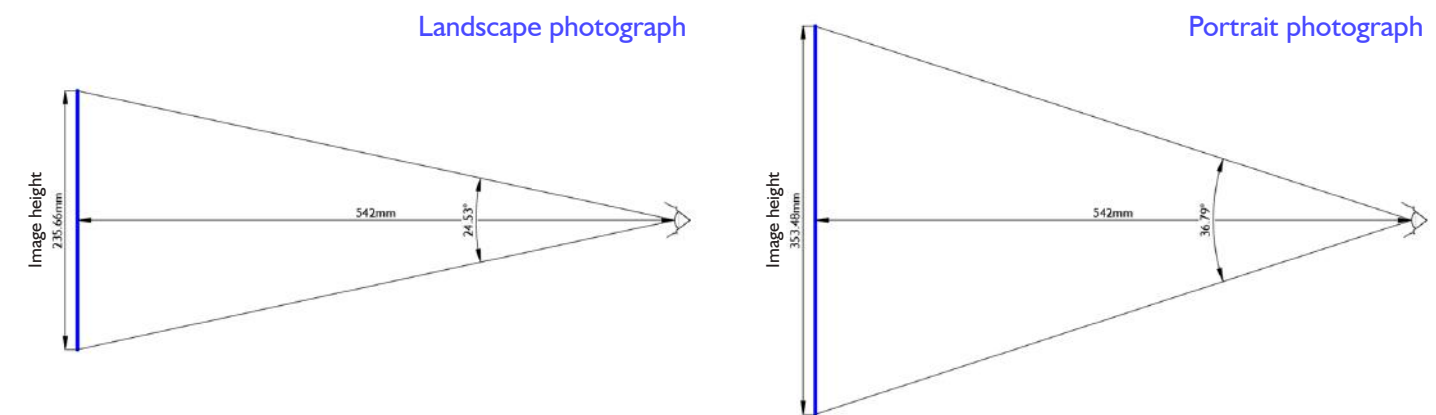


FIGURE 2 - Image geometry of the camera equipment used

³ A 100% reference image = without enlargement.