Appendix C

ArcMedia Photography and Visualisation Methodology

C.1 Appended below is the methodology for production of the visualisations.

PHOTOMONTAGE VISUALS

STANDARD METHODOLOGY

29/09/22

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PHOTOMONTAGE VISUALS

METHODOLOGY

2.0

2.1 INTRODUCTION

This document outlines the methodology employed by ArcMedia Limited to produce photomontage visuals of a proposed development within an existing environment.

All of the methods employed are carried out to the highest level of accuracy achievable with the current technology and are based on the guidelines set out in the Visual Representation of Development Proposals - Technical Guidance Note 06/19 (17th September 2019) from the Landscape Institute.

2.2 VIEWPOINT SELECTION

Specific viewpoint locations are agreed with the relevant authorities, planning and landscape consultants. These locations are then specified via OS location data and/or reference photography.

2.3 VISUALISATION TYPE

The visualisation type is selected in consultation with the planning and landscape consultants in order to provide the required level of detail for the planning submission or visual impact assessment. There are four types of visualisation specified by the Landscape Institute:

Type 1 - Annotated Photograph

Type 2 - 3D Wireline / Model

Type 3 - Photomontage / Photowire

Type 4 - Photomontage / Photowire (Survey Verified)

2.4 PHOTOGRAPHY

For each viewpoint, a high resolution, digital backplate photograph is captured with a full frame sensor camera using a 50mm lens.

For each viewpoint the camera is positioned at 1.50m above ground level to represent human eye level. A point, vertically below the centre of the camera is marked on the ground as a survey reference point. Both the date and time of the photography capture is then recorded by the camera. (See fig. 01)

When the proximity of a viewpoint and / or the scale of a development prevents the practical use of 50mm lens, a 24mm focal length is preferred. This allows for a more suitable number of target markers to be captured in a single photograph, allowing greater accuracy in the camera match over that of multiple 50mm shots stitched together, as a panoramic image. (See fig. 02)

fig. 01

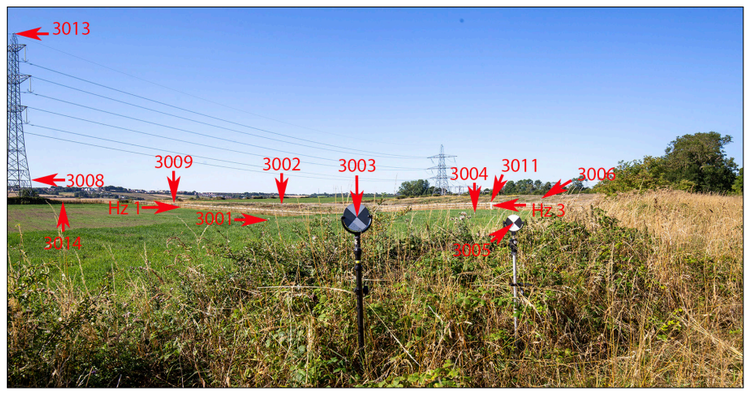

fig. 02

2.5 SURVEY

When producing Type 4 visualisations, a GPS survey of each viewpoint is carried out by a specialist survey team.

The location of each viewpoint is marked on the ground with a nail or spray in order to allow positioning of the survey equipment and camera in precisely the same locations.

The target data of local structures is then captured and their positions recorded and noted on the associated photographs. (See fig. 03)

The camera location, reference/target point data is then recorded in CAD format and co-ordinated with the Ordnance Survey National Grid. Allowing the survey data to be incorporated with the local topographical survey and other OS data.

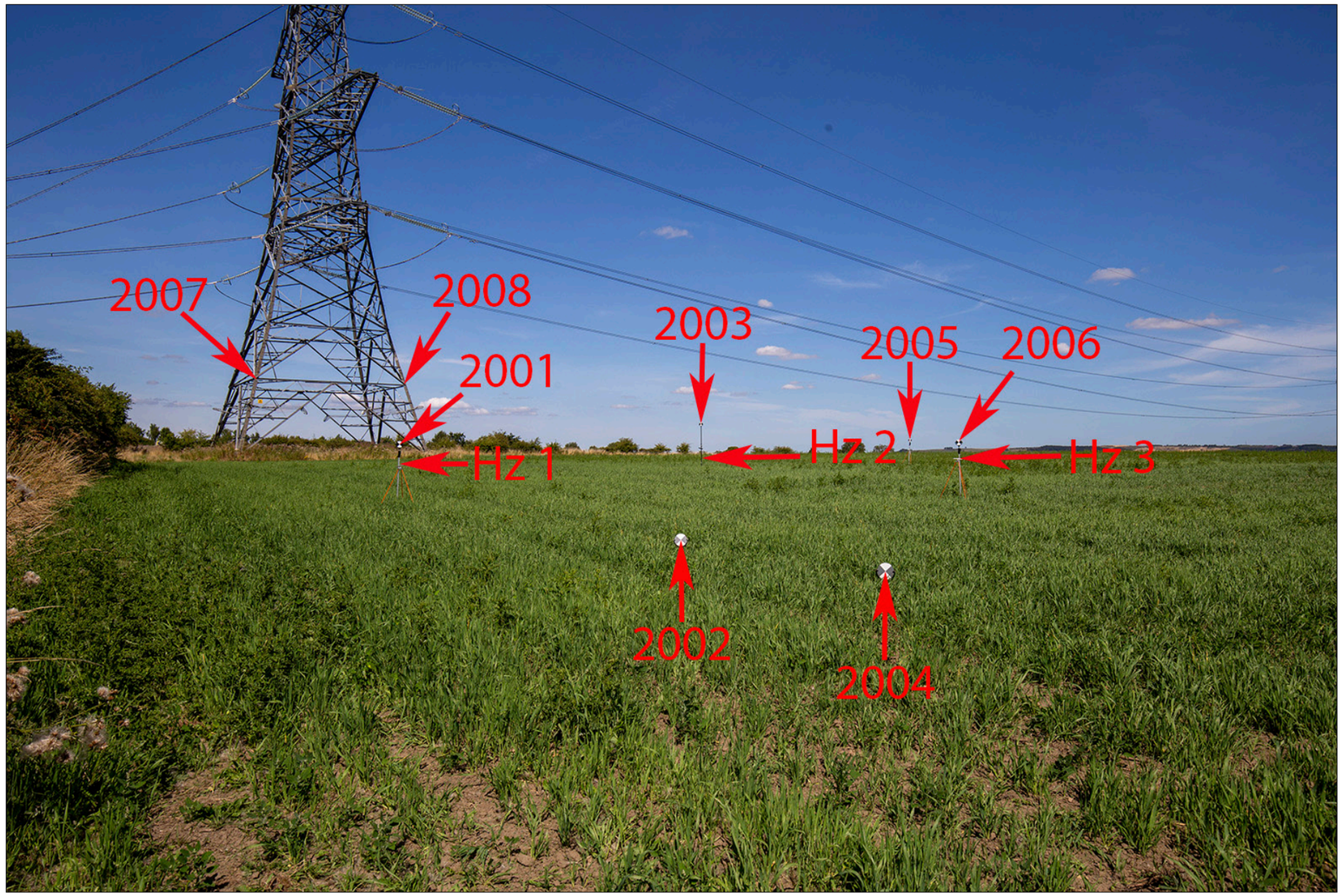

fig. 03

2.6 3D MODELLING

A detailed 3D model of the proposed development is built in Autodesk 3DS Max, an industry standard 3D modelling and rendering package, using the supplied architectural CAD drawings. This includes all the proposed buildings and structures, hard and soft landscaping elements, set to the proposed levels.

2.7 CAMERA MATCHING

The 3D model of the development is then precisely aligned to a CAD OS plan and local topographical CAD survey in Autodesk 3DS Max. Once this is completed the 3D viewpoint survey data is also aligned. This provides accurate positions for the virtual camera and target points, in relation to the development.

At each of the viewpoint locations within the 3D model scene, a virtual camera is positioned using the corresponding lens data. The virtual camera is then rotated to align the surveyed CAD reference data and target points with the corresponding targets in the photographic backplate (original photograph). These positions are indicated on the survey reference photographs. (See fig. 05)

Once this is complete, the position of the proposed development can be viewed in relation to the existing context, completing the camera matching process.

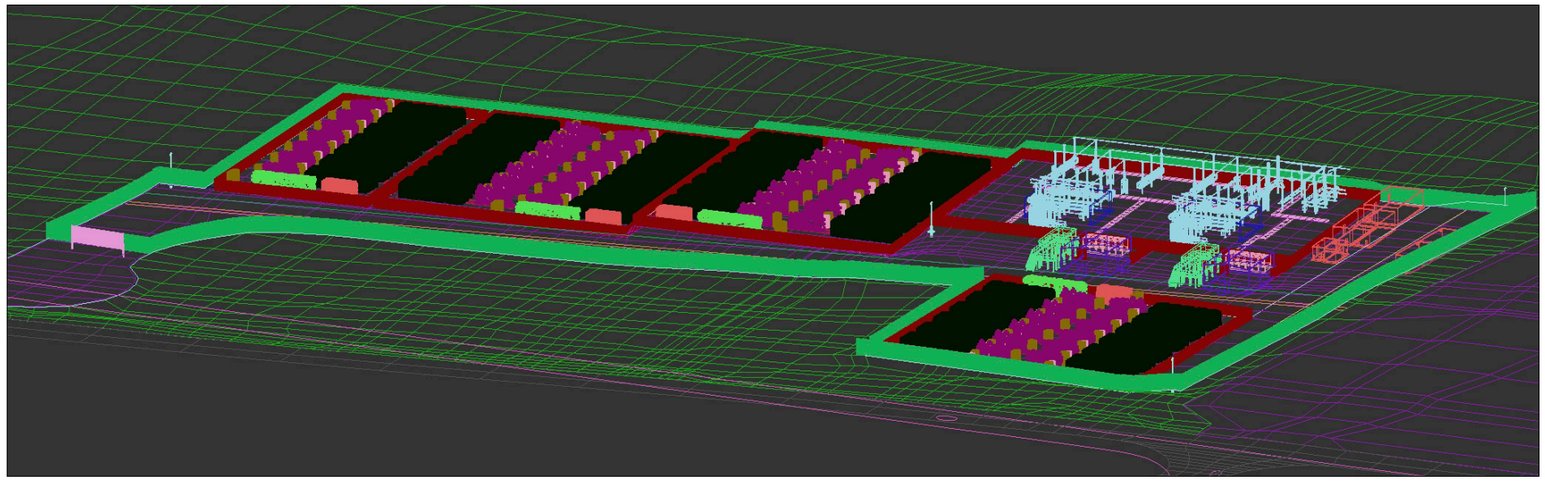

fig. 04

fig. 05

2.8 RENDERING

A 3D model scene is then set up in Autodesk 3DS Max to replicte the sun position and atmospherics of the backplate photography, along with the specified materiality of the proposed development.

A render (CGI) of the 3D model scene is then output at precisely the same resolution, scale and proportion as the original photograph. (See fig. 06)

fig. 06

2.9 POST PRODUCTION

The render (CGI) is then composited over the original backplate photograph in Adobe Photoshop image editing software and the relevant foreground elements masked out. (See fig. 07)

Once complete, this allows the proposed development to be seen in context. Allowing for a direct comparison of the existing view with and without the proposed development. (See fig. 08)

fig. 07

fig. 08

ARC/MEDIA

COMPUTER GENERATED IMAGERY

New Media House,
8 Hardhorn Rd,
Poulton-le-Fylde
FY6 7SR

Telephone 01253 896616

Email: info@arc-media.co.uk
Website: www.arc-media.co.uk