Ford Oaks Solar Farm

Photomontages

19th May 2022

rbmp

Manchester 0161 706 0158
London 020 3488 0657
studio@rbmp.co.uk
www.rbmp.co.uk / www.verifiedviews.co.uk

Must be read alongside LVIA Appendix C

HFOV - 90°

Rockbeare Lane/Bridge over A30

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 08.38am	**Viewpoint height (AOD)**	- 68m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303678.774,94086.04	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP01 - Existing View

HFOV - 90°

Rockbeare Lane/Bridge over A30

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 08.38am	**Viewpoint height (AOD)**	- 68m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303678.774,94086.04	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP01 - At Completion

HFOV - 39.6°

Rockbeare Lane

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 08.53am	**Viewpoint height (AOD)**	- 63m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 304028.47,93646.52	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP02 - Existing View

HFOV - 39.6°

Rockbeare Lane

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 08.53am	**Viewpoint height (AOD)**	- 63m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 304028.47,93646.52	**Height of camera AGL**	- 1.6m

VP02 - At Completion

Must be read alongside LVIA Appendix C

HFOV - 39.6°

Rockbeare Lane

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 08.53am	**Viewpoint height (AOD)**	- 63m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 304028.47,93646.52	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP02 - Year 2/3

HFOV - 39.6°

Rockbeare Lane

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 08.53am	**Viewpoint height (AOD)**	- 63m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 304028.47,93646.52	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP02 - Year 5

HFOV - 90°

Quarter Mile Lane and Westcott Lane (looking South-West)

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 10.40am	**Viewpoint height (AOD)**	- 64.68m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303969.99,93221.04	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP05 - Existing View

HFOV - 90°

Quarter Mile Lane and Westcott Lane (looking South-West)

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 10.40am	**Viewpoint height (AOD)**	- 64.68m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303969.99,93221.04	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP05 - At Completion

HFOV - 90°

Quarter Mile Lane and Westcott Lane (looking South-West)

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 10.40am	**Viewpoint height (AOD)**	- 64.68m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303969.99,93221.04	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP05 - Year 2/3

HFOV - 90°

Westcott Lane - Looking North to North-East

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 12.26pm	**Viewpoint height (AOD)**	- 56.33m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303404.23,93300.4	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP08A - Existing View

HFOV - 90°

Westcott Lane - Looking North to North-East

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 12.26pm	**Viewpoint height (AOD)**	- 56.33m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303404.23,93300.4	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP08A - At Completion

HFOV - 90°

Westcott Lane - Looking North to North-East

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 12.26pm	**Viewpoint height (AOD)**	- 56.33m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303404.23,93300.4	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP08A - Year 2/3

HFOV - 90˚

Westcott Lane - Looking North to North-East

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 12.26pm	**Viewpoint height (AOD)**	- 56.33m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303404.23,93300.4	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP08A - Year 5

HFOV - 70°

Westcott Lane - Looking North-East to East

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 12.26pm	**Viewpoint height (AOD)**	- 56.33m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303404.23,93300.4	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP08B - Existing View

HFOV - 70°

Westcott Lane - Looking North-East to East

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 12.26pm	**Viewpoint height (AOD)**	- 56.33m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303404.23,93300.4	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP08B - At Completion

HFOV - 70°

Westcott Lane - Looking North-East to East

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 12.26pm	**Viewpoint height (AOD)**	- 56.33m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303404.23,93300.4	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP08B - Year 2/3

rbmp.2147 Ford Oaks, Solar Farm, Photomontages

HFOV - 70°

Westcott Lane - Looking North-East to East

NO VIEW - PROPOSED PANELS OUTLINED IN BLUE

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 12.26pm	**Viewpoint height (AOD)**	- 56.33m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303404.23,93300.4	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP08B - Year 5

HFOV - 65°

PRoW - Looking North-East

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 11.50am	**Viewpoint height (AOD)**	- 60.55m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303020.28,92569.39	**Height of camera AGL**	- 1.6m

VP09 - Existing View

Must be read alongside LVIA Appendix C

HFOV - 65°

PRoW - Looking North-East

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 11.50am	**Viewpoint height (AOD)**	- 60.55m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303020.28,92569.39	**Height of camera AGL**	- 1.6m

VP09 - At Completion

Must be read alongside LVIA Appendix C

HFOV - 65°

PRoW - Looking North-East

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 11.50am	**Viewpoint height (AOD)**	- 60.55m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303020.28,92569.39	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP09 - Year 2/3

HFOV - 65°

PRoW - Looking North-East

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 11.50am	**Viewpoint height (AOD)**	- 60.55m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303020.28,92569.39	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP09 - Year 10

HFOV - 39.6°

Withybed Lane - Looking North

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 10.03am	**Viewpoint height (AOD)**	- 94.03m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303859.5,92804.49	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP11 - Existing View

HFOV - 39.6°

Withybed Lane - Looking North

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 10.03am	**Viewpoint height (AOD)**	- 94.03m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303859.5,92804.49	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP11 - At Completion

rbmp.2147 Ford Oaks, Solar Farm, Photomontages

HFOV - 39.6°

Withybed Lane - Looking North

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 10.03am	**Viewpoint height (AOD)**	- 94.03m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303859.5,92804.49	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP11 - Year 2/3

rbmp.2147 Ford Oaks, Solar Farm, Photomontages

HFOV - 39.6°

Withybed Lane - Looking North

Visualisation Extents

rbmp

Camera make & model	- Nikon D600	**Date & time of photograph**	- 29/03/2022 @ 10.03am	**Viewpoint height (AOD)**	- 94.03m
Lens make & focal length	- Nikon 50mm f/1.8	**OS grid reference**	- 303859.5,92804.49	**Height of camera AGL**	- 1.6m

Must be read alongside LVIA Appendix C

VP11 - Year 15

Ford Oaks Solar Farm

Photomontage Methodology Statement

OVERVIEW

These photomontages have been prepared by RBMP Ltd.

High quality/resolution photographs were taken from the agreed locations with an adequate number of visible features subsequently surveyed, including the precise location of the camera.

A development model was generated to correct geographical co-ordinates. With a known camera position and orientation, photographic and surveyed existing visible features, the development model was accurately aligned to the photograph.

SITE VISIT

RBMP Ltd. visited the site on 29th March 2022, to obtain viewpoint photography. The view positions were documented using photography of the exact positions (marked with a survey pin) with a surveyor present to record the precise co-ordinates.

PHOTOGRAPHY

For the agreed viewpoint location, high resolution RAW photographs were taken with a Digital SLR camera with a 35mm (full frame) sensor. The camera was levelled horizontally and laterally by means of a tripod mounted levelling base and two camera mounted spirit levels.

CAMERA & EQUIPMENT

- Nikon D600 digital SLR camera (35mm)
- Nikon 50mm f/1.8
- Nikon 28mm f/1.8
- Nikon 24mm tilt-shift f/3.5
- Manfrotto 190 tripod
- Tripod indexed pan head
- Levelling base with bubble level
- Digital Level
- Laser plumb bob

LENS SELECTION

In order to capture the full extent of the proposed development and an appropriate amount of context, a 28mm & 50mm lens in landscape orientation (effective 65.5° & 39.6° horizontal field of view) was used. For internal use/ reference a 180° panoramic for each viewpoint location was also captured using a 15° rotational index allowing a series of individual frames to be stitched together into a single image.

POST PRODUCTION

Each photoviewpoint photograph was processed using Adobe Photoshop® CC 2022 Camera RAW. Standard (digital) photographic post production techniques (profiles, curves and sharpening) were used to create a corrected final .psd file to be used as the basis for the photomontage.

SURVEY

For the agreed photoviewpoint location an instructional document was released to the survey subcontractor. The surveyor was instructed on site to record a range of contextual reference points.

SURVEY EQUIPMENT

- Leica GPS
- Leica Total station
- Precise level

FIELD SURVEY METHODOLOGY

Camera Locations - To establish the position of a viewpoint, the surveyor must set up a GPS on it and record enough points to ensure a high level of accuracy.

Reference points - To survey the various reference points, the surveyor should set up three temporary stations (TBMs) within view of each reference point and establish their location using the GPS. Once these co-ordinates have been established, the surveyor will set up a Total Station on the TBMs and take 3 reflectorless survey shots to the reference point in view.

Where GPS positioning was not possible near to the required survey point – due to poor signal, for instance – the surveyor will set up his TBMs at the nearest position possible and traverse traditionally to a position where he can survey the point.

DATA PROCESSING & DELIVERY

GPS data is processed through Leica Geo-Office to acquire the OSGB36 co-ordinate system information and then processed to produce co-ordinate information for the surveyed points.

PROPOSED DEVELOPMENT

rbmp created a 3D model of the proposed development working from supplied model and plans. The model was checked for accuracy and subsequently aligned to the OSGB36 coordinate system.

PHOTO ALIGNMENT PROCESS

The collected survey reference point data and camera location data was imported into the 3D model environment from the delimited text file (relative to the OSGB36 co-ordinate system) by means of a proprietary script.

At each photoviewpoint location a virtual camera was set up in the 3D software using the coordinates provided by the surveyor. The 3D coordinates of the survey reference points were used to create an accurate ‘point cloud’ model of the contextual surveyed parts of the scene.

To do this, for each photoviewpoint, two renders* were made from the 3D model from the same virtual camera: one render showed only the development (in the chosen method of presentation); the other showed only the survey reference point data.

Using a photo editing package [Adobe Photoshop® CC 2022.] the photography, survey reference point render and proposed development render were aligned.

With the rendered* proposals aligned to the photography, masks were applied to the image to hide extents of the proposals occluded by intervening vegetation and built form.

*Rendering is the process of generating an image from a model (or models in what collectively could be called the 3D environment), by means of computer programs - specifically, in this case Chaos Group V-Ray for Autodesk 3Ds Max 2022.

VIEWING DISTANCE

It is recommended that the photomontage images are viewed at an optimum viewing distance (in relation to the size of printed photomontage) to give a correct sense of scale. To achieve an accurate representation of the proposed development, it is recommended that images are printed to a size that creates a comfortable viewing distance between 300 to 500mm distance between eye and paper.

NOTES

- The model (Buildings/Wirelines/Landscape) is based on the supplied drawing Ford Oak Development Plan 04.05.22.dwg
- The model has been positioned and referenced to the OS Grid using the supplied topographic data contained within drawing Ford Oak Development Plan 04.05.22.dwg and RBMP’s collected survey data on-site.