REDSTART

Tylorstown Landslide

Environmental Impact Assessment
Volume 3 - Appendices

Series 8 Landscape and Visual Effects

December 2021

REDSTART

Appendix 8.1

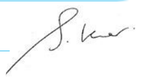
Volume of Visualisations

Tylorstown Landslip Phase 4

Appendix 8.1 Volume of Visualisations

September 2021

Quality Management

Job No	GC003613		
Project	Tylorstown Landslip Phase 4		
Location	Tylorstown, Rhondda Cynon Taff, South Wales		
Title	Water Framework Directive Compliance Assessment Appendix 10.1 Volume of Visualisations		
		Issue / Revision	**S2 Issued for PAC P02**
File Reference	GC3614-RED-0074-XX-RP-L-0017		
Date	September 2021		
Prepared by	Paul O'Byrne *Principal Environmental Mitigation Consultant*	**Signature (for file)**	
Checked by	Rosie Place *Principal Landscape Architect*	**Signature (for file)**	
Authorised by	Sue Kaner *Technical Director*	**Signature (for file)**	

Revision Status / History

Rev	Date		Prepared	Checked	Authorised
P01	20/05/2021	Issued for PAC	PO'B	RP	NH
P02	21/09/2021	Issued for PAC	PO'B	RP	NH

CAPITA

Contents

Volume 5:
A3 Volume of Visualisations

Visual Impact Assessment
Scheme Alignment Zones of Theoretical Visibility
(Bare Earth) showing viewpoints

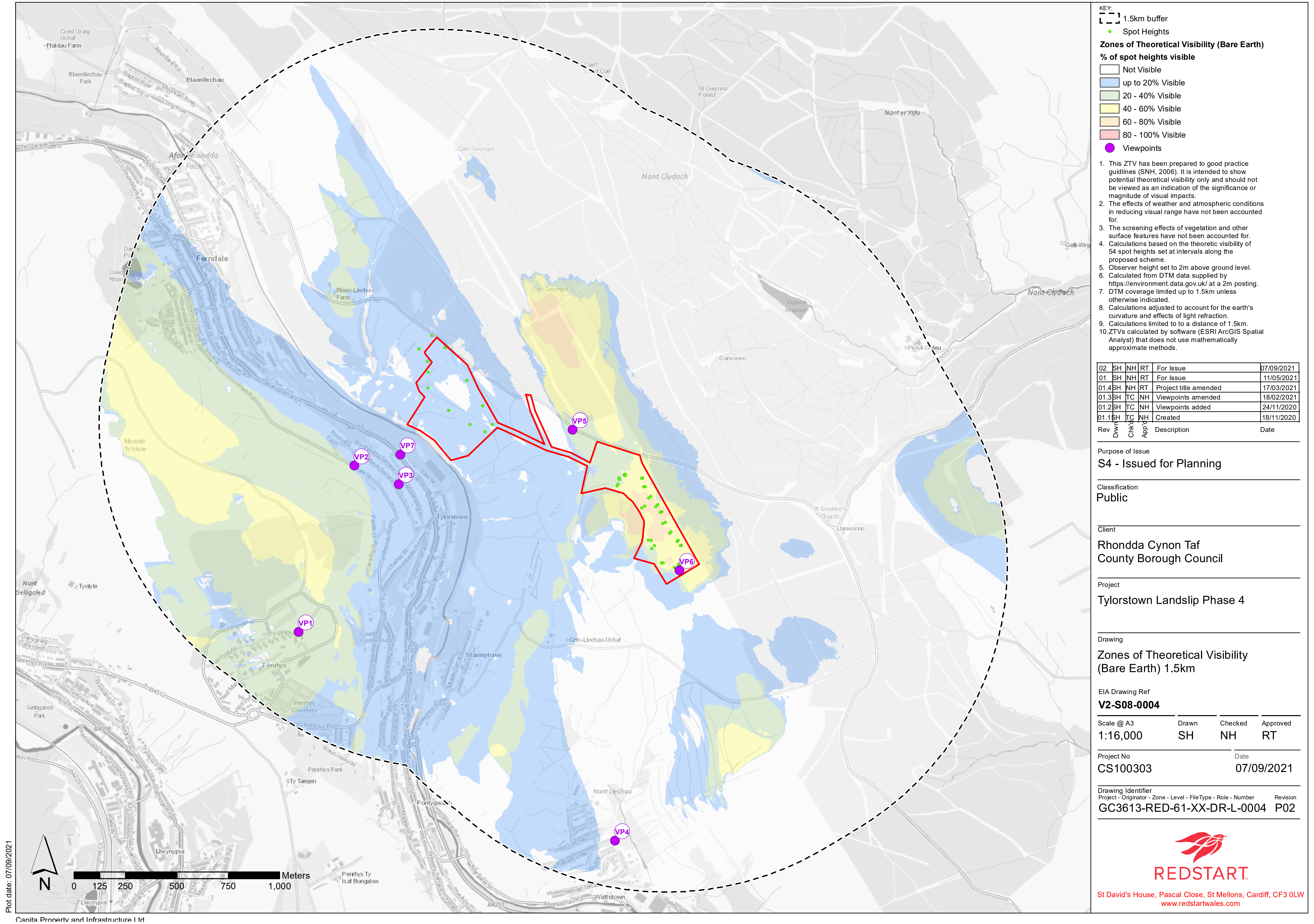
A3 Size Viewpoint Visuals:
Detailed Field of View Plans.
Viewpoint Single Frame Image Photographs
Viewpoint Panoramic Photographs
Viewpoint Panoramic Wireframe Models

Introduction

Background

The following photographic viewpoints support the Visual Impact Assessment for Tylorstown Landslip Phase 4

Viewpoint 1	Heol Tir Gwaidd, Penrhys
Viewpoint 2	PRoW TYL 2/1, Park Street
Viewpoint 3	Union Place at the junction with Arfryn Terrace
Viewpoint 4	Heol Llechau Wattstown
Viewpoint 5	PRoW TYL 9/1 Blaenllechau Rd
Viewpoint 6	PRoW TYL 9/1 south east of the Old Smokey
Viewpoint 7	The junction of East Road and East Street leading to the Rhondda Fach Leisure Centre



The photography and photomontage in this document follows the guidance set out in "Photography and photomontage in landscape and visual impact assessment, Landscape Institute; Advice Note 01/11; March 2011"

The following equipment was used on site to carry out the photography.

Camera setup

- Canon 6D
- Canon EF 50MM F1.4
- Remote Shutter release
- Panoramic Head Manfrotto 303SPH
- Leveller: Manfrotto 338 Leveling Base
- Tripod Manfrotto 190X3 & 496 RC2 Tripod

Other Equipment:

- GPS locator
- Digital compact camera
- Tape measure

At each receptor survey station, the following procedure was carried out in sequence, during suitable daylight hours of 08:00 and 17:00:

- Determine the best position for camera location in relation to the type of receptor (specific or representative).
- Determine the centre of the view using detailed scheme proposals overlaid on a detailed OS plan. Typically aligned to the proposed new roundabouts, new bridge spans or the centre of the proposed scheme in the view.
- Setup the tripod with a camera and measure the height of 1.5m above ground, using a tape measure. There will be minor variations in height due the height of the assessor.
- Level the camera on the horizontal plane using the tripod mounted levelling base and check level through 360 degrees.
- Set up first camera shot, centred on features (as above) and set the fixed increments on the panoramic head to 20 degrees.
- Set the Manual focus to infinity and retain the focus for all subsequent shots in the panoramic sequence.
- Take a full panoramic sequence of 18 shots (clockwise) at 20 degree fixed intervals, to give a full 360 degree sweep, using the remote shutter release to avoid accidental adjustment of the camera settings.
- Take a photo of the camera setup and location using a separate camera to allow for reproduction.

Image Processing

Images were downloaded from the camera memory card in Jpeg format.

The image size are 5472 x 3648 for the Canon 6D photography

Panoramic Stitching

Composite panoramic images were created by stitching the images together using PTGUI Pro Software to a cylindrical projection. All the 18 images where stitched to obtain a 360 degree field of view.
Panoramic images were stitched with the photo centred on the central image taken in the field, Once stitched the panorama displays the true focal length of the image.

The image size was changed in Photoshop to 36,000 pixels to represent 360 degrees. The canvas size could then accurately be changed to the corresponding field of view in each panorama.

Model Panoramas

3DS Max was used in conjunction with V-Ray render engine to output 360 degree wire frame cylindrical renders from the 3D model. Cameras have been set up in the model for each viewpoint taken in the field. The image size was output to match the image size of the existing panoramas output from PTGUI Pro. The image size was then changed in Photoshop using the same process as for the existing panoramas.

Photowire

The model panoramas and the original panoramas taken in the field where overlaid in Photoshop to show how the scheme sits in the existing landscape.

Single Image Frame

A 50mm prime lens with a fixed focal length was used with the camera.

The original images have also been converted to a 75mm focal lengths by adjusting the canvas size.

75mm represents the average field of view of the human eye.

Viewpoint Locations
GPS coordinates were recorded on site for viewpoints 1 to 7.
Station photographs, taken of the camera setup with a compact camera, were used to locate the viewpoint locations precisely.

Viewing Height
The ground elevation for each viewpoint was obtained from the GPS data. The camera height was set up at 1.5m above ground level. There will be minor variations in height due the height of the assessor.

Detailed Viewpoint Plans

Detailed field of view plans were created to show the location, direction and field of view at each location. The coloured triangles represent the different field of view for each image. These are represented as follows.

Yellow band : Panoramic image field of view.

Blue band : 50mm lens single frame image field of view (39.6 degrees).

Purple band : 75mm lens single frame image field of view (27.0 degrees).

NOTE: THE IMAGE ON THIS PAGE ARE NOT REPRESENTATIVE OF SCALE AND DISTANCE FROM THE ACTUAL VIEWPOINT AND SHOW THE DEVELOPMENT IN ITS WIDER LANDSCAPE CONTEXT ONLY

Detailed Viewpoint Plan - Figure reference: VP 1 - Heol Tir Gwaidd, Penrhys
Location description:

Grid Reference: 300424,195064

Altitude: 178.7m AOD
Viewing Direction Angle: 180 Deg

EXISTING CENTRAL IMAGE.

VISUAL IMPACT ASSESSMENT PHOTOGRAPHY

Viewpoint number and location: VP 1 - Heol Tir Gwaidd, Penrhys
Figure Ref:

Focal Length: 50mm
Horizontal field of view: 39.6 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

VISUAL IMPACT ASSESSMENT PHOTOGRAPHY

Viewpoint number and location: VP 1 - Heol Tir Gwaidd, Penrhys
Figure Ref: VP1

Focal Length: 75mm
Horizontal field of view: 27 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

NOTE: THE IMAGE ON THIS PAGE ARE NOT REPRESENTATIVE OF SCALE AND DISTANCE FROM THE ACTUAL VIEWPOINT AND SHOW THE DEVELOPMENT IN ITS WIDER LANDSCAPE CONTEXT ONLY

Existing 180 Degree Stitched Panoramic Image

Viewpoint number and location: VP 1 - Heol Tir Gwaidd, Penrhys
Figure Ref:

Focal Length: 51mm
Horizontal field of view: 180 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

NOTE: THE IMAGE ON THIS PAGE ARE NOT REPRESENTATIVE OF SCALE AND DISTANCE FROM THE ACTUAL VIEWPOINT AND SHOW THE DEVELOPMENT IN ITS WIDER LANDSCAPE CONTEXT ONLY

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Viewpoint number and location: VP 1 - Heol Tir Gwaidd, Penrhys
Figure Ref: VP1

Focal Length: 51mm
Horizontal field of view: 180 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

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Detailed Viewpoint Plan - Figure reference: VP 2 - PRoW TYL 2/1, Park Street
Location description:

Grid Reference: 300695,195873

Altitude: 270.3m AOD
Viewing Direction Angle: 180 Deg

EXISTING CENTRAL IMAGE.

VISUAL IMPACT ASSESSMENT PHOTOGRAPHY

Viewpoint number and location: VP 2 - PRoW TYL 2/1, Park Street
Figure Ref:

Focal Length: 50mm
Horizontal field of view: 39.6 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

VISUAL IMPACT ASSESSMENT PHOTOGRAPHY

Viewpoint number and location: VP 2 - PRoW TYL 2/1, Park Street
Figure Ref: VP2

Focal Length: 75mm
Horizontal field of view: 27 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

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Existing 180 Degree Stitched Panoramic Image

Viewpoint number and location:	VP 2 - PRoW TYL 2/1, Park Street	**Focal Length:**	51mm	**Camera model:**	Canon 6D
Figure Ref:		**Horizontal field of view:**	180 Degrees	**Camera height:**	1.5m
		Date:	11/03/2020		

NOTE: THE IMAGE ON THIS PAGE ARE NOT REPRESENTATIVE OF SCALE AND DISTANCE FROM THE ACTUAL VIEWPOINT AND SHOW THE DEVELOPMENT IN ITS WIDER LANDSCAPE CONTEXT ONLY

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Viewpoint number and location:	VP 2 - PRoW TYL 2/1, Park Street	**Focal Length:**	51mm	**Camera model:**	Canon 6D
Figure Ref:	VP2	**Horizontal field of view:**	180 Degrees	**Camera height:**	1.5m
		Date:	11/03/2020		

NOTE: THE IMAGE ON THIS PAGE ARE NOT REPRESENTATIVE OF SCALE AND DISTANCE FROM THE ACTUAL VIEWPOINT AND SHOW THE DEVELOPMENT IN ITS WIDER LANDSCAPE CONTEXT ONLY

Detailed Viewpoint Plan - Figure reference: VP 3 - Union Place at the junction with Arfryn Terrace
Location description:

Grid Reference: 300911.7, 195783

Altitude: 239.6m AOD
Viewing Direction Angle: 180 Deg

EXISTING CENTRAL IMAGE.

VISUAL IMPACT ASSESSMENT PHOTOGRAPHY

Viewpoint number and location: VP 3 - Union Place at the junction with Arfryn Terrace
Figure Ref:

Focal Length: 50mm
Horizontal field of view: 39.6 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

Viewpoint number and location: VP 3 - Union Place at the junction with Arfryn Terrace
Figure Ref: VP3

Focal Length: 75mm
Horizontal field of view: 27 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

VISUAL IMPACT ASSESSMENT PHOTOGRAPHY

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Existing 180 Degree Stitched Panoramic Image

Viewpoint number and location: VP 3 - Union Place at the junction with Arfryn Terrace
Figure Ref:

Focal Length: 51mm
Horizontal field of view: 180 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

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Viewpoint number and location: VP 3 - Union Place at the junction with Arfryn Terrace
Figure Ref: VP3

Focal Length: 51mm
Horizontal field of view: 180 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

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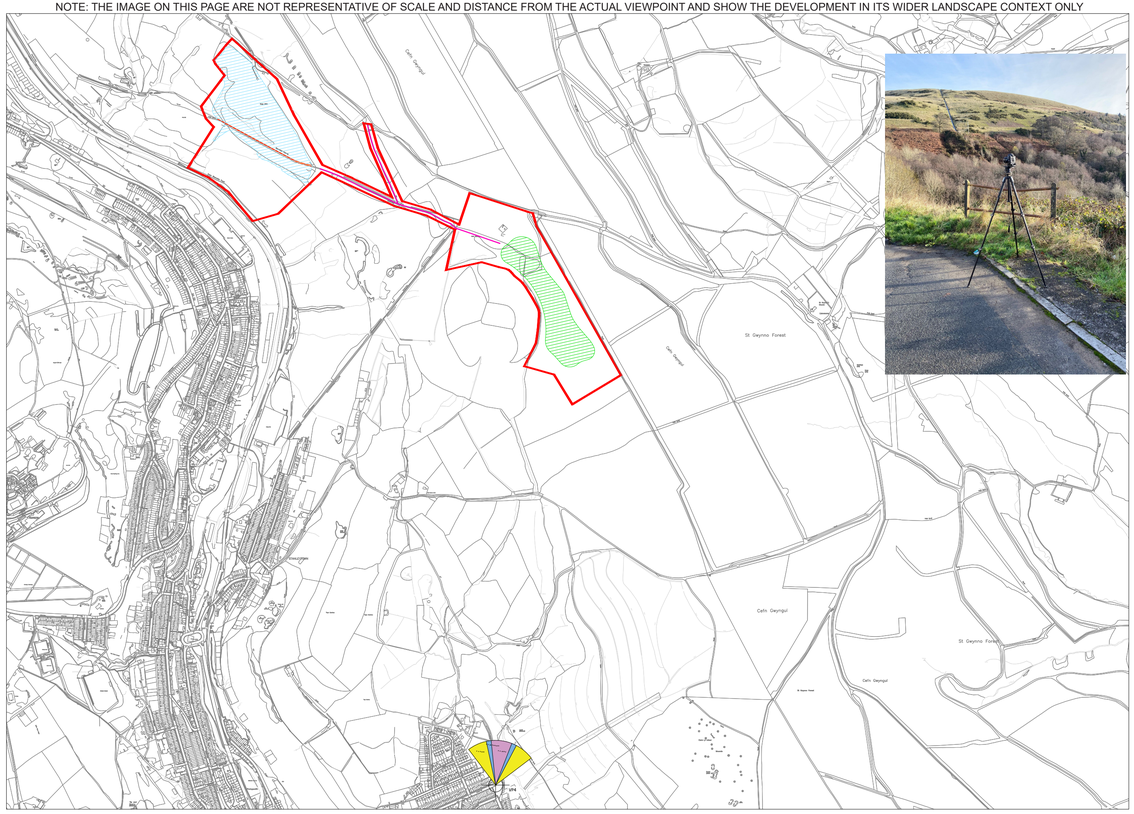

Detailed Viewpoint Plan - Figure reference: VP 4 - Heol Llechau, Wattstown
Location description:

Grid Reference: 301963.7,194048.3

Altitude: 182.7m AOD
Viewing Direction Angle: 180 Deg

EXISTING CENTRAL IMAGE.

VISUAL IMPACT ASSESSMENT PHOTOGRAPHY

Viewpoint number and location: VP 4 - Heol Llechau, Wattstown
Figure Ref:

Focal Length: 50mm
Horizontal field of view: 39.6 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

VISUAL IMPACT ASSESSMENT PHOTOGRAPHY

Viewpoint number and location: VP 4 - Heol Llechau, Wattstown
Figure Ref: VP4

Focal Length: 75mm
Horizontal field of view: 27 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

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Existing 180 Degree Stitched Panoramic Image

Viewpoint number and location: VP 4 - Heol Llechau, Wattstown
Figure Ref:

Focal Length: 51mm
Horizontal field of view: 180 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

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Viewpoint number and location: VP 4 - Heol Llechau, Wattstown
Figure Ref: VP4

Focal Length: 51mm
Horizontal field of view: 180 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

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Detailed Viewpoint Plan - Figure reference: VP 5 - PRoW TYL 9/1 Blaenllechau Rd
Location description:

Grid Reference: 301758, 196048

Altitude: 407.9m AOD
Viewing Direction Angle: 180 Deg

EXISTING CENTRAL IMAGE.

VISUAL IMPACT ASSESSMENT PHOTOGRAPHY

Viewpoint number and location: VP 5 - PRoW TYL 9/1 Blaenllechau Rd
Figure Ref:

Focal Length: 50mm
Horizontal field of view: 39.6 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

VISUAL IMPACT ASSESSMENT PHOTOGRAPHY

Viewpoint number and location: VP 5 - PRoW TYL 9/1 Blaenllechau Rd
Figure Ref: VP5

Focal Length: 75mm
Horizontal field of view: 27 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

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Existing 180 Degree Stitched Panoramic Image

Viewpoint number and location: VP 5 - PRoW TYL 9/1 Blaenllechau Rd
Figure Ref:

Focal Length: 51mm
Horizontal field of view: 180 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

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Viewpoint number and location: VP 5 - PRoW TYL 9/1 Blaenllechau Rd
Figure Ref: VP5

Focal Length: 51mm
Horizontal field of view: 180 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

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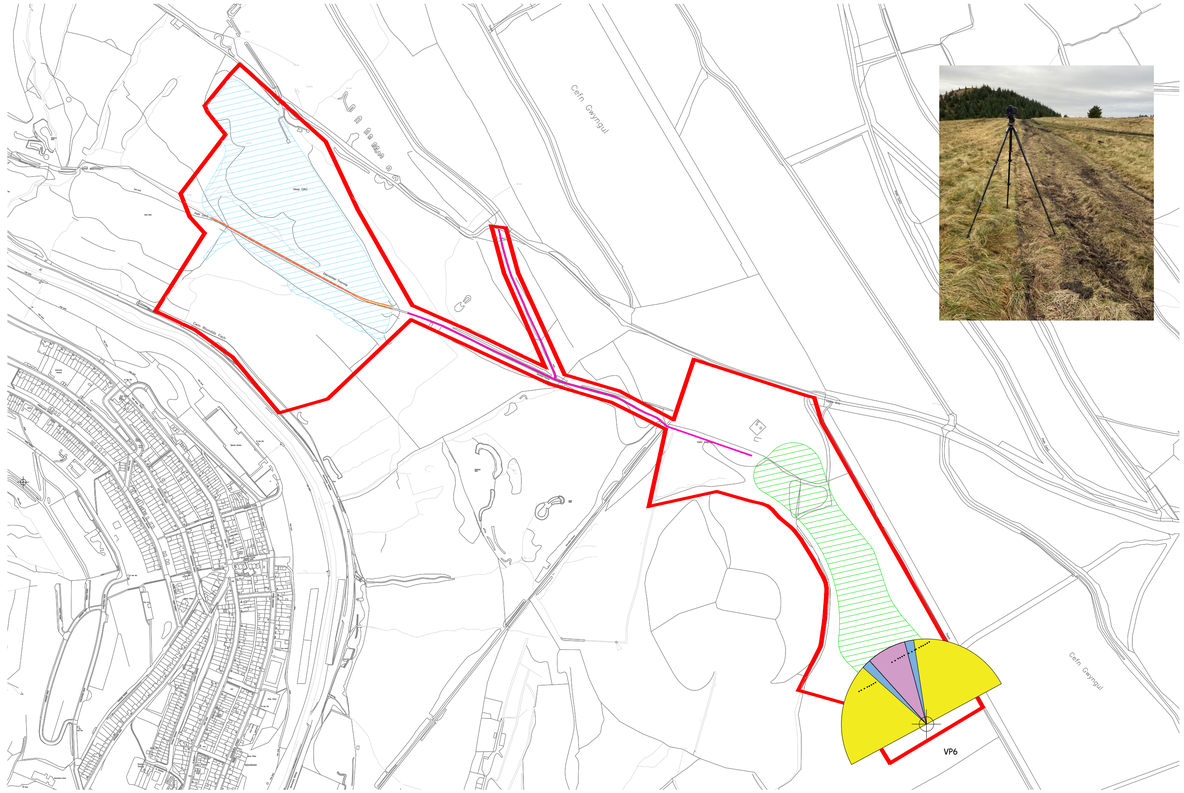

Detailed Viewpoint Plan - Figure reference: VP 6- PRoW TYL 9/1 south east of the Old Smokey
Location description:

Grid Reference: 302278, 195364

Altitude: 398.5m AOD
Viewing Direction Angle: 180 Deg

EXISTING CENTRAL IMAGE.

VISUAL IMPACT ASSESSMENT PHOTOGRAPHY

Viewpoint number and location: VP 6- PRoW TYL 9/1 south east of the Old Smokey
Figure Ref:

Focal Length: 50mm
Horizontal field of view: 39.6 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

VISUAL IMPACT ASSESSMENT PHOTOGRAPHY

Viewpoint number and location: VP 6- PRoW TYL 9/1 south east of the Old Smokey
Figure Ref: VP6

Focal Length: 75mm
Horizontal field of view: 27 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

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Existing 180 Degree Stitched Panoramic Image

Viewpoint number and location: VP 6- PRoW TYL 9/1 south east of the Old Smokey
Figure Ref:

Focal Length: 51mm
Horizontal field of view: 180 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

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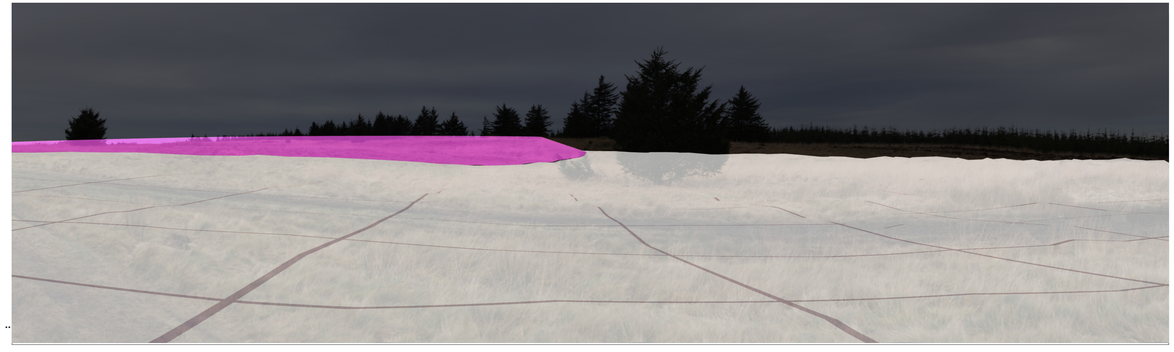

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Viewpoint number and location: VP 6- PRoW TYL 9/1 south east of the Old Smokey
Figure Ref: VP6

Focal Length: 51mm
Horizontal field of view: 180 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

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Detailed Viewpoint Plan - Figure reference: VP 7 - The junction of East Road and East Street leading to the
Location description: Rhondda Fach Leisure Centre

Grid Reference: 300920, 195927

Altitude: 216.6m AOD
Viewing Direction Angle: 180 Deg

EXISTING CENTRAL IMAGE.

VISUAL IMPACT ASSESSMENT PHOTOGRAPHY

Viewpoint number and location: VP 7 - The junction of East Road and East Street
Figure Ref: leading to the Rhondda Fach Leisure Centre

Focal Length: 50mm
Horizontal field of view: 39.6 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

VISUAL IMPACT ASSESSMENT PHOTOGRAPHY

Viewpoint number and location: VP7 - The junction of East Road and East Street
Figure Ref: leading to the Rhondda Fach Leisure Centre
VP7

Focal Length: 75mm
Horizontal field of view: 27 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

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Existing 180 Degree Stitched Panoramic Image

Viewpoint number and location: VP 7 - The junction of East Road and East Street leading to the Rhondda Fach Leisure Centre
Figure Ref:

Focal Length: 51mm
Horizontal field of view: 180 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m

NOTE: THE IMAGE ON THIS PAGE ARE NOT REPRESENTATIVE OF SCALE AND DISTANCE FROM THE ACTUAL VIEWPOINT AND SHOW THE DEVELOPMENT IN ITS WIDER LANDSCAPE CONTEXT ONLY

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Viewpoint number and location: VP 7 - The junction of East Road and East Street leading to the Rhondda Fach Leisure Centre
Figure Ref: VP7

Focal Length: 51mm
Horizontal field of view: 180 Degrees
Date: 11/03/2020

Camera model: Canon 6D
Camera height: 1.5m