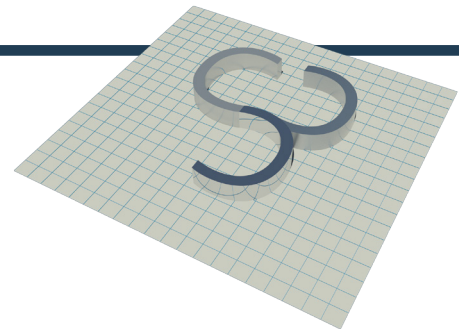


Photomontages

LANDS AT CAPDOO & ABBEYLANDS, CLANE, CO. KILDARE



Chris Shackleton Consulting
19 Waterside Crescent
Swords Road, Malahide, Co. Dublin, K36 DF74

email: chris@shackleton.ie
Tel: +353-1-5653289
Mob: +353-86-8206374

Photomontage Views

- PM01 From the front of 91 Brooklands looking to entrance East
- Existing
 - Proposed



- PM02 From the rear of 34 Brooklands looking South East
- Existing
 - Proposed



- PM03 From park in front of 114 Brooklands looking North East
- Existing
 - Proposed



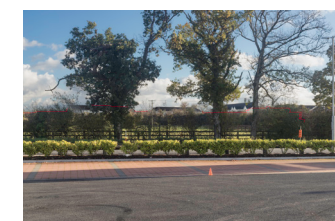
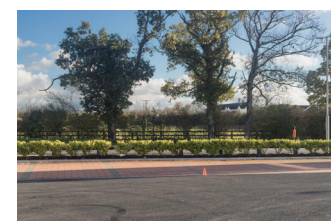
- PM04 From park in front of 131 Brooklands looking North
- Existing
 - Proposed



- PM05 From park in front of 107 Alexandra Walk looking North
- Existing
 - Proposed



- PM06 From Lidl Carpark looking South East
- Existing
 - Proposed



Photomontage Views

Rev: 0

- PM07 Local road East across Liffey looking West
- Existing
 - Proposed



- PM08 On R403 looking South
- Existing
 - Proposed

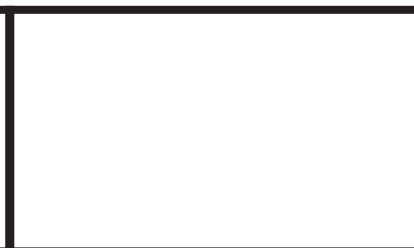




Extracted from Google Earth
 Imagery (c)2019 Google, Map data (c)2019 Google
 OSi overlay from Client see original drawings for licenece information.

Name	Camera Locations
Status	Photomontage View Locationsi
Scale	Not to Scale
Lands at Capdoo & Abbeylands, Clane, Co. Kildare	
Rev:	0

**Westar
 Investments
 Limited**





Name PM01
 Status Existing
 Reference: From the front of 91 Brooklands
 looking to entrance East

**Lands at Capdoo & Abbeylands,
 Clane, Co. Kildare**

Rev:
 0

**Westar
 Investments
 Limited**

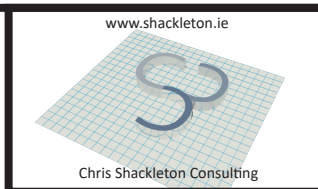
Camera location
 688144, 727929, 67.1

Target Direction
 688294, 727930, 67.2


Camera Canon 6D Mk 2
 Lens Canon EF 50mm
 HView Angle Nominal 40 degrees

Date/Time: 01/11/2018 13:31

Recommended viewing distance with both eyes is 500mm.





<p>Name PM01 Status Proposed Reference: From the front of 91 Brooklands looking to entrance East</p>	<p>Westar Investments Limited</p>	<p>Camera location 688144, 727929, 67.1</p> <p>Target Direction 688294, 727930, 67.2</p>	<p>Camera Canon 6D Mk 2 Lens Canon EF 50mm HView Angle Nominal 40 degrees</p> <p>Date/Time: 01/11/2018 13:31</p> <p>Recommended viewing distance with both eyes is 500mm.</p>	<p>www.shackleton.ie</p>  <p>Chris Shackleton Consulting</p>
<p>Lands at Capdoo & Abbeylands, Clane, Co. Kildare</p>				



Name	PM02
Status	Existing
Reference:	From the rear of 34 Brooklands looking South East
Lands at Capdoo & Abbeylands, Clane, Co. Kildare	
Rev:	0

**Westar
Investments
Limited**

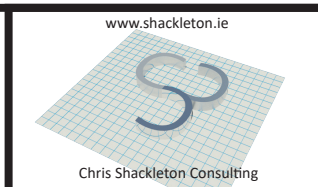
Camera location
688179, 728042, 67.3

Target Direction
688296, 727948, 67.9

Camera Canon 6D Mk 2
Lens Canon EF 50mm
HView Angle Nominal 40 degrees

Date/Time: 01/11/2018 13:52

Recommended viewing distance with both eyes is 500mm.





Name	PM02
Status	Proposed
Reference:	From the rear of 34 Brooklands looking South East
Lands at Capdoo & Abbeylands, Clane, Co. Kildare	
Rev:	0

**Westar
Investments
Limited**

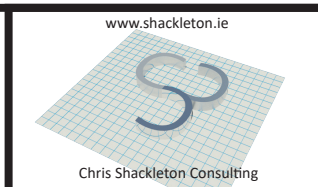
Camera location
688179, 728042, 67.3

Target Direction
688296, 727948, 67.9

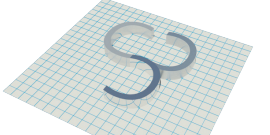
Camera Canon 6D Mk 2
Lens Canon EF 50mm
HView Angle Nominal 40 degrees

Date/Time: 01/11/2018 13:52

Recommended viewing distance with both eyes is 500mm.





<p>Name PM03 Status Existing Reference: From park in front of 114 Brooklands looking North East</p>	<p>Westar Investments Limited</p>	<p>Camera location 688255, 727827, 67.5</p> <p>Target Direction 688345, 727947, 67.1</p>	<p>Camera Canon 6D Mk 2 Lens Canon EF 50mm HView Angle Nominal 40 degrees</p> <p>Date/Time: 01/11/2018 14:02</p> <p>Recommended viewing distance with both eyes is 500mm.</p>	<p><small>www.shackleton.ie</small></p>  <p><small>Chris Shackleton Consulting</small></p>
<p>Lands at Capdoo & Abbeylands, Clane, Co. Kildare</p>				



Name PM03
 Status Proposed
 Reference: From park in front of 114 Brooklands
 looking North East

**Lands at Capdoo & Abbeylands,
 Clane, Co. Kildare**

Rev:
 0

**Westar
 Investments
 Limited**

Camera location
 688255, 727827, 67.5

Target Direction
 688345, 727947, 67.1


Camera Canon 6D Mk 2
 Lens Canon EF 50mm
 HView Angle Nominal 40 degrees

Date/Time: 01/11/2018 14:02


Recommended viewing distance with both eyes is 500mm.



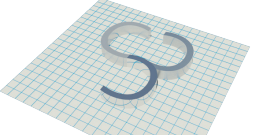


<p>Name PM04 Status Existing Reference: From park in front of 131 Brooklands looking North</p>	<p>Westar Investments Limited</p>	<p>Camera location 688324, 727759, 67.7</p> <p>Target Direction 688380, 727898, 68.3</p>	<p>Camera Canon 6D Mk 2 Lens Canon EF 50mm HView Angle Nominal 40 degrees</p> <p>Date/Time: 01/11/2018 14:17</p> <p>Recommended viewing distance with both eyes is 500mm.</p>	<p><small>www.shackleton.ie</small></p>  <p><small>Chris Shackleton Consulting</small></p>
<p>Lands at Capdoo & Abbeylands, Clane, Co. Kildare</p>				



<p>Name PM04 Status Proposed Reference: From park in front of 131 Brooklands looking North</p>	<p>Westar Investments Limited</p>	<p>Camera location 688324, 727759, 67.7</p> <p>Target Direction 688380, 727898, 68.3</p>	<p>Camera Canon 6D Mk 2 Lens Canon EF 50mm HView Angle Nominal 40 degrees</p> <p>Date/Time: 01/11/2018 14:17</p> <p>Recommended viewing distance with both eyes is 500mm.</p>	<p><small>www.shackleton.ie</small></p>  <p><small>Chris Shackleton Consulting</small></p>
<p>Lands at Capdoo & Abbeylands, Clane, Co. Kildare</p>				



<p>Name PM05 Status Existing Reference: From park in front of 107 Alexandra Walk looking North</p>	<p>Westar Investments Limited</p>	<p>Camera location 688435, 727598, 67.6</p> <p>Target Direction 688427, 727752, 67.8</p>	<p>Camera Canon 6D Mk 2 Lens Canon EF 50mm HView Angle Nominal 40 degrees</p> <p>Date/Time: 21/10/2019 10:46</p> <p>Recommended viewing distance with both eyes is 500mm.</p>	<p><small>www.shackleton.ie</small></p>  <p><small>Chris Shackleton Consulting</small></p>
<p>Lands at Capdoo & Abbeylands, Clane, Co. Kildare</p>				



Name	PM05
Status	Proposed
Reference:	From park in front of 107 Alexandra Walk looking North
Lands at Capdoo & Abbeylands, Clane, Co. Kildare	
Rev:	0

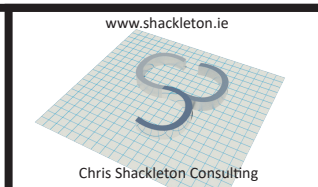
**Westar
Investments
Limited**

Camera location
688435, 727598, 67.6

Target Direction
688427, 727752, 67.8


Camera Canon 6D Mk 2
Lens Canon EF 50mm
HView Angle Nominal 40 degrees

Date/Time: 21/10/2019 10:46




Recommended viewing distance with both eyes is 500mm.



Name PM06 Status Existing Reference: From Lidl Carpark looking South East	Westar Investments Limited	Camera location 688109, 728293, 67.1 Target Direction 688180, 728161, 68.1	Camera Canon 6D Mk 2 Lens Canon EF 50mm HView Angle Nominal 40 degrees Date/Time: 01/11/2018 15:58 Recommended viewing distance with both eyes is 500mm.	 <p style="font-size: small;">www.shackleton.ie Chris Shackleton Consulting</p>
Lands at Capdoo & Abbeylands, Clane, Co. Kildare				



Name PM06 Status Proposed Reference: From Lidl Carpark looking South East	Westar Investments Limited	Camera location 688109, 728293, 67.1 Target Direction 688180, 728161, 68.1	Camera Canon 6D Mk 2 Lens Canon EF 50mm HView Angle Nominal 40 degrees Date/Time: 01/11/2018 15:58 Recommended viewing distance with both eyes is 500mm.	<small>www.shackleton.ie</small>  <small>Chris Shackleton Consulting</small>
Lands at Capdoo & Abbeylands, Clane, Co. Kildare				



Name PM07
 Status Existing
 Reference: Local road East across Liffey
 looking West

**Lands at Capdoo & Abbeylands,
 Clane, Co. Kildare**

Rev:
 0

**Westar
 Investments
 Limited**

Camera location
 688798, 727703, 67.1

Target Direction
 688283, 727794, 68.1


Camera Canon 6D Mk 2
 Lens Canon EF 50mm
 HView Angle Nominal 40 degrees

Date/Time: 11/10/2019 10:15


Recommended viewing distance with both eyes is 500mm.



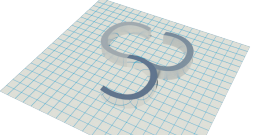


Name PM07 Status Proposed Reference: Local road East across Liffey looking West	Westar Investments Limited	Camera location 688798, 727703, 67.1	Camera Canon 6D Mk 2 Lens Canon EF 50mm HView Angle Nominal 40 degrees	 <p>www.shackleton.ie Chris Shackleton Consulting</p>
Lands at Capdoo & Abbeylands, Clane, Co. Kildare		Rev: 0	Target Direction 688283, 727794, 68.1	



Name PM08 Status Existing Reference: On R403 looking South	Westar Investments Limited	Camera location 688409, 728547, 66.1	Camera Canon 6D Mk 2 Lens Canon EF 50mm HView Angle Nominal 40 degrees	 <p style="font-size: small;">www.shackleton.ie Chris Shackleton Consulting</p>
Lands at Capdoo & Abbeylands, Clane, Co. Kildare		Rev: 0	Target Direction 688481, 728164, 67.0	



Name PM08 Status Proposed Reference: On R403 looking South	Westar Investments Limited	Camera location 688409, 728547, 66.1 Target Direction 688481, 728164, 67.0	Camera Canon 6D Mk 2 Lens Canon EF 50mm HView Angle Nominal 40 degrees Date/Time: 11/10/2019 10:41 Recommended viewing distance with both eyes is 500mm.	<small>www.shackleton.ie</small>  <small>Chris Shackleton Consulting</small>
Lands at Capdoo & Abbeylands, Clane, Co. Kildare				

Photomontage Methodology / Method Statement

Work has been completed in accordance with best practice guidelines a summary of which are provided below.

Preparation

Prior to site visit camera locations were identified and located on digital map to enable GPS routing to the correct locations. The site was “scouted” for access using Google Streetview (c) Google.

Photography

- Photographs were taken on site at locations specified using a high-resolution professional digital camera. The Camera a Canon 6D is a full frame format (which corresponds to a traditional 35mm film format) as recommended by best practice guidelines.
- Images will be taken in RAW format which provides the maximum flexibility in adjustment along with the best quality available, and with bracketed exposure. The images were stored with embedded camera/photo exif data.
- The camera was tripod mounted, spirit leveled and set at a nominal 1.6m above ground level
- The lens used as a Canon prime (fixed) 50mm or normal lens. The 50mm lens provides a similar magnification to the human eye and will provide an image which is accepted.

Control

A series of survey points were captured on site for each photograph using Trimble R8 survey grade RTK-GPS. The following were measured:

- The camera position, plan and height
- Measured points of detail visible when the photograph was taken. On streetscape scenes points of detail (corners of buildings, poles, sign, white lines, structures, etc) are surveyed to provide an accurate orientation base where insufficient existing detail is available we supplement with either with red/white ranging rods or smaller orange cones placed in the camera’s field of view while taking the photograph.
- Regardless of the type of control the configuration shall be non-collinear with a good photogrammetric geometry. This ensures that computational analysis is convergent.

Setting up AVR Images

- Survey and OS mapping is imported into 3D software
- A calibrated virtual 50mm camera is created to match the physical one used to capture the image. These are snapped to the surveyed locations. The individual photograph frames are loaded into the viewport.
- Using in-built software algorithms the virtual camera is adjusted so the points of detail on the photograph and the surveyed points in real-life coalesce in the camera viewport. Once complete the virtual camera will be orientated so that it is identical to the physical camera that took the base photograph.
- Checks are made using the surveyed information and project mapping and cross referenced with the photographs to ensure they align.
- A Daylight system is then accurately introduced into the scene at it correct geo-referenced coordinates. Once the time/date and time zone is set the digital sky will match the position of the sun and shadows created by the same in the base photograph.

Verifiable Photomontage & Proposed development modelling

- The proposed development, structure, road works and earthworks is modeled up in 3D from the drawings provided by the Client / Design Team.
- The building is located in accordance with surveyed location and at the correct FFL.
- True life digital materials are designed and assigned to the 3D model elements using reference imagery provided by the client. Sophisticated real world rendering shaders are used in conjunction with the daylight system to produce final renders which will react in a verifiable manner to match the reference photographic base images.
- Finally, the new development image and the existing original photograph are merged with due care for any demolitions/removals, foreground / background existing objects, landscaping, lighting, shadows, etc. to produce a single believable and verifiable composite image.

Viewing instructions

These images are designed to be printed at A3 and taken to site to evaluate the impact of the development.

Images should be viewed with both eyes open from the locations indicated and held 500mm from the viewers eyes. (Arms length). When held at arms length the viewer should be able to effectively focus not only on the photomontage in hand but also on the surrounding landscape which will give them a much wider field of view.

When used in this fashion the existing landscape will line-up and the photomontage will provide similar perspective and thus enable the viewer to visually evaluate the proposal.

