

Verified View Photomontages and CGI's for Proposed Knocknacarra District Centre LRD at Gort na Bró, Rahoon, Galway

December 2022

Document at A3 prepared by G-Net 3D

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Photomontage Methodology

The methodology used to develop the photomontages is based on the "Visual Representation of Development Proposals" Guidance note by the Landscape Institute, 2019.

Photography

The photography was carried out on the September 19th, 2022, using Sony α 7RIII full frame camera. Two lenses were 24mm and 50mm prime lens were used for the photography.

A 24mm wide angle lens was selected for the photography to provide more information on the context around the proposed development. The horizontal field of view of these photographs is 74°. The abovementioned guidance suggests that 40° angle is the closest to human eye vision and is recommended for the verified photomontages. In the cases where the wide lens is used, there should be an indication of 40° field of view, which is shown on the bottom of all the views.

A recommended viewing distance of the photomontages taken using 50mm lens is around 500mm and 24mm lens - 300mm from eyes when printed on A3 paper.

Geomax Zenith 60 GPS Antennae was used to accurately record the viewpoint and reference markers' coordinates and height levels. Viewpoint locations are indicated in the viewpoint map to the right, viewpoint coordinates and information on photography is under each photo.

Modelling

Preparation of an accurate 3D model of the proposed mixed-use development, including landscape and infrastructure.

Setup

The following information is used to accurately position the model of the proposed development into the photographs:

- -Site survey,
- -Photographs,
- -Verified viewpoint coordinates and height levels are accurately marked on the location OSi map. To match the 3D camera view with the photograph we take the following steps:

The camera height is taken from information gathered on the levels from where the photos are taken (table below). The height levels of the proposed development are outlined on the site. Focal length is based on the photograph EXIF info.

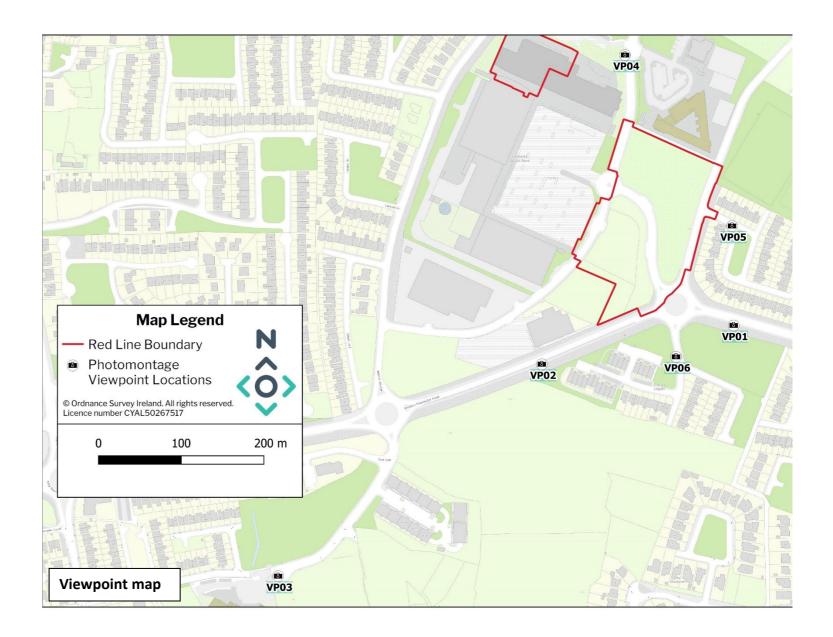
This data is imported into our 3D software and the 3D camera is matched with the selected photographs. To match the 3D camera accurately we use all the above data and the reference 3D models. The reference 3D models are existing structures i.e. buildings, roads, lamps, etc which are visible on the photographs. These items are modelled based on the survey information. After all the above conditions are fulfilled and we are satisfied that the camera matches correctly, we proceed to the next step.

Rendering

We apply the materials and textures prior to rendering the photomontage images. Light settings are adjusted to match the brightness of the photographs and sun is positioned according to the date and time the photo was taken.

Post processing

This process means incorporating a 3D image of the proposed development into the photograph to achieve the final result.





Viewpoint location (ITM): 526960.459;725068.628 Viewpoint Height:62.638m

Photo Date: 19.09.2022 Photo Time: 13:40 Camera: Sony a7RIII





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Viewpoint location (ITM): 526730.775;725020.289 Viewpoint Height: 25.539m

Photo Date: 19.09.2022 Photo Time: 14:05 Camera: Sony a7RIII



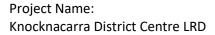


Viewpoint location (ITM): 526730.775;725020.289 Viewpoint Height: 25.539m

Photo Date: 19.09.2022 Photo Time: 14:05 Camera: Sony a7RIII





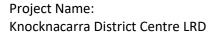


Viewpoint location (ITM): 526410.543;724760.219 Viewpoint Height: 20.260m

Photo Date: 19.09.2022 Photo Time: 14:48 Camera: Sony a7RIII





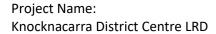


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Photo Date: 19.09.2022 Photo Time: 14:48 Camera: Sony a7RIII





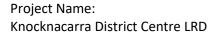


Viewpoint location (ITM): 526831.626;725398.185 Viewpoint Height: 30.711m

Photo Date: 19.09.2022 Photo Time: 15:40 Camera: Sony a7RIII







Viewpoint location (ITM): 526831.626;725398.185 Viewpoint Height: 30.711m

Photo Date: 19.09.2022 Photo Time: 15:40 Camera: Sony a7RIII





Viewpoint location (ITM): 526963.027;725190.534 Viewpoint Height: 29.230m

Photo Date: 19.09.2022 Photo Time: 13:21 Camera: Sony a7RIII



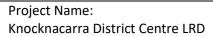


Viewpoint location (ITM): 526963.027;725190.534 Viewpoint Height: 29.230m

Photo Date: 19.09.2022 Photo Time: 13:21 Camera: Sony a7RIII





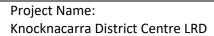


Viewpoint location (ITM): 526890.000;725021.677 Viewpoint Height: 29.808m

Photo Date: 19.09.2022 Photo Time: 13:59 Camera: Sony a7RIII







Viewpoint location (ITM): 526890.000;725021.677 Viewpoint Height: 29.808m

Photo Date: 19.09.2022 Photo Time: 13:59 Camera: Sony a7RIII













