

Shannon Technology and Energy Park (STEP) Power Plant

Appendix A10.1: Booklet of Photomontages

Shannon LNG Limited



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**Verified View Photomontages of
Proposed Shannon Power Plant
at Kilcolgan Lower, Co. Kerry**

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Document at A3 prepared by

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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 for night time views was carried out on the November 5th, 2020, using Canon EOS Rebel T5i camera and day time views on the February 7th, 2024, using Sony α7RIII full frame camera. Two lenses 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 above-mentioned 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 table to the right and viewpoint map on the page 3.

Modelling

Preparation of an accurate 3D model of the proposed Shannon Power Plant development and landscape, including some existing buildings and infrastructure as reference points.

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.

Information on the Viewpoints

| View No | Easting (m) | Northing (m) | Orthometric Height at Ground Level (m) | Distance to the centre of the site (m) | Camera | Camera Focal Length | Date of Photography | Time of Photography |
|-----------|-------------|--------------|--|--|-------------|---------------------|---------------------|---------------------|
| View 1 | 502960.062 | 647900.552 | 24.740 | 972 | Sony α7RIII | 50mm | 07/02/2024 | 12:43 |
| View 2 | 502193.737 | 647712.463 | 30.643 | 1,037 | Sony α7RIII | 24mm | 07/02/2024 | 12:56 |
| View 3 | 502729.334 | 646762.882 | 55.518 | 1,988 | Sony α7RIII | 50mm | 07/02/2024 | 13:05 |
| View 4 | 501270.637 | 648226.332 | 8.822 | 1,281 | Sony α7RIII | 24mm | 07/02/2024 | 13:19 |
| View 5 | 501137.330 | 646880.959 | 18.277 | 2,256 | Sony α7RIII | 50mm | 07/02/2024 | 13:37 |
| View 6 | 501466.450 | 647182.758 | 15.509 | 1,827 | Sony α7RIII | 50mm | 07/02/2024 | 13:31 |
| View 7 | 499510.390 | 645107.244 | 2.859 | 4,660 | Sony α7RIII | 50mm | 07/02/2024 | 13:39 |
| View 8 D | 498898.083 | 648133.325 | 2.731 | 3,418 | Sony α7RIII | 24mm | 07/02/2024 | 14:04 |
| View 8 N | 498897.074 | 648133.108 | 2.871 | 3,418 | Canon EOS | 18mm | 05/11/2020 | 18:49 |
| View 9 | 492915.884 | 648083.426 | 2.528 | 9,940 | Sony α7RIII | 50mm | 07/02/2024 | 14:25 |
| View 10 | 498524.521 | 654054.826 | 3.136 | 6,618 | Sony α7RIII | 50mm | 07/02/2024 | 16:38 |
| View 11 | 499977.158 | 652775.701 | 10.998 | 4,780 | Sony α7RIII | 50mm | 07/02/2024 | 16:30 |
| View 12 D | 501166.539 | 652926.155 | 26.019 | 4,409 | Sony α7RIII | 50mm | 07/02/2024 | 16:22 |
| View 12 N | 501165.250 | 652927.848 | 26.156 | 4,409 | Canon EOS | 35mm | 05/11/2020 | 17:37 |
| View 13 | 502402.518 | 652396.903 | 3.886 | 3,661 | Sony α7RIII | 50mm | 07/02/2024 | 16:13 |
| View 14 | 504491.652 | 652389.530 | 57.858 | 4,206 | Sony α7RIII | 50mm | 07/02/2024 | 11:14 |
| View 15 | 506620.609 | 652091.292 | 3.415 | 5,400 | Sony α7RIII | 50mm | 07/02/2024 | 12:12 |



View 1. As Exists



<< 50mm 39.6°

39.6° 50mm >>

View 1. Proposed



<< 50mm 39.6°

39.6° 50mm >>

View 2. As Exists



< 24mm 73.7°

<<50 mm 39.6°

39.6° 50mm>>

73.7° 24mm >

View 2. Proposed



< 24mm 73.7°

<<50 mm 39.6°

39.6° 50mm>>

73.7° 24mm >

View 3. As Exists



<< 50mm 39.6°

39.6° 50mm >>

View 3. Proposed



<< 50mm 39.6°

39.6° 50mm >>



< 24mm 73.7°

<<50 mm 39.6°

39.6° 50mm>>

73.7° 24mm >

View 4. Proposed



< 24mm 73.7°

<<50 mm 39.6°

39.6° 50mm>>

73.7° 24mm >

View 5. As Exists



<< 50mm 39.6°

39.6° 50mm >>

View 5. Outline of Proposed



<< 50mm 39.6°

39.6° 50mm >>

View 6. As Exists



<< 50mm 39.6°

39.6° 50mm >>

View 6. Proposed



<< 50mm 39.6°

39.6° 50mm >>

View 7. As Exists



<< 50mm 39.6°

39.6° 50mm >>

View 7. Proposed



<< 50mm 39.6°

39.6° 50mm >>

View 8. As Exists



< 24mm 73.7°

<<50 mm 39.6°

39.6° 50mm>>

73.7° 24mm >

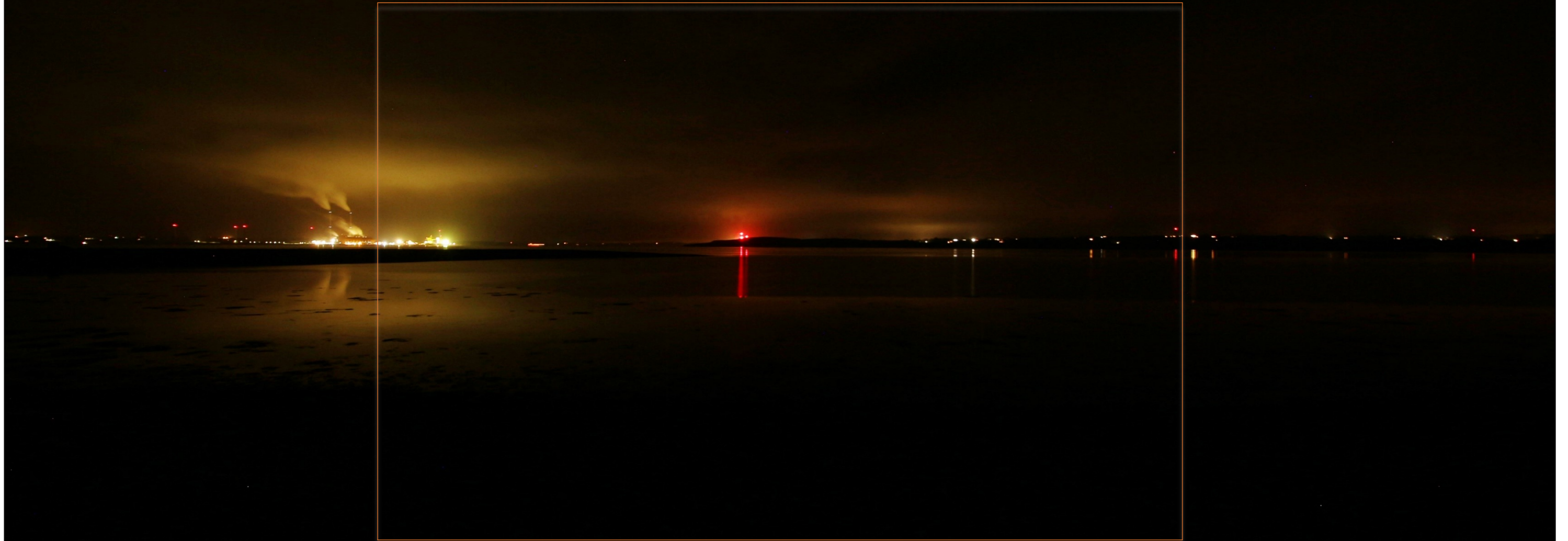


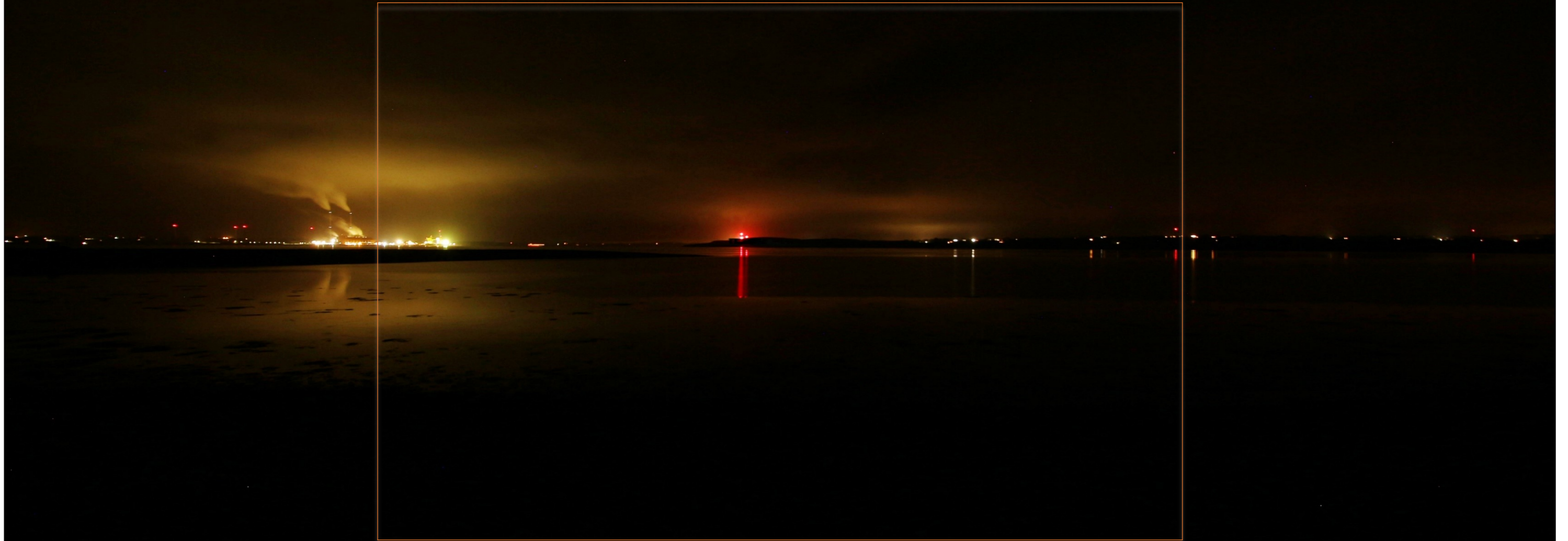
< 24mm 73.7°

<<50 mm 39.6°

39.6° 50mm>>

73.7° 24mm >





View 9. As Exists



<< 50mm 39.6°

39.6° 50mm >>

View 9. Proposed



<< 50mm 39.6°

39.6° 50mm >>

View 10. As Exists



<< 50mm 39.6°

39.6° 50mm >>

View 10. Proposed



<< 50mm 39.6°

39.6° 50mm >>

View 11. As Exists



<< 50mm 39.6°

39.6° 50mm >>

View 11. Proposed



<< 50mm 39.6°

39.6° 50mm >>

View 12. As Exists



<< 50mm 39.6°

39.6° 50mm >>

View 12. Proposed



<< 50mm 39.6°

39.6° 50mm >>

View 12. Existing



<< 35mm 40°

35mm 40°>>

View 12. Proposed



<< 35mm 40°

35mm 40°>>

View 12. Proposed with
lights on



<< 35mm 40°

35mm 40°>>

View 13. As Exists



<< 50mm 39.6°

39.6° 50mm >>

View 13. Proposed



<< 50mm 39.6°

39.6° 50mm >>

View 14. As Exists



<< 50mm 39.6°

39.6° 50mm >>



<< 50mm 39.6°

39.6° 50mm >>

View 15. As Exists



<< 50mm 39.6°

39.6° 50mm >>

View 15. Proposed



<< 50mm 39.6°

39.6° 50mm >>