



Existing View



Proposed View



Existing View



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Existing View



Proposed View

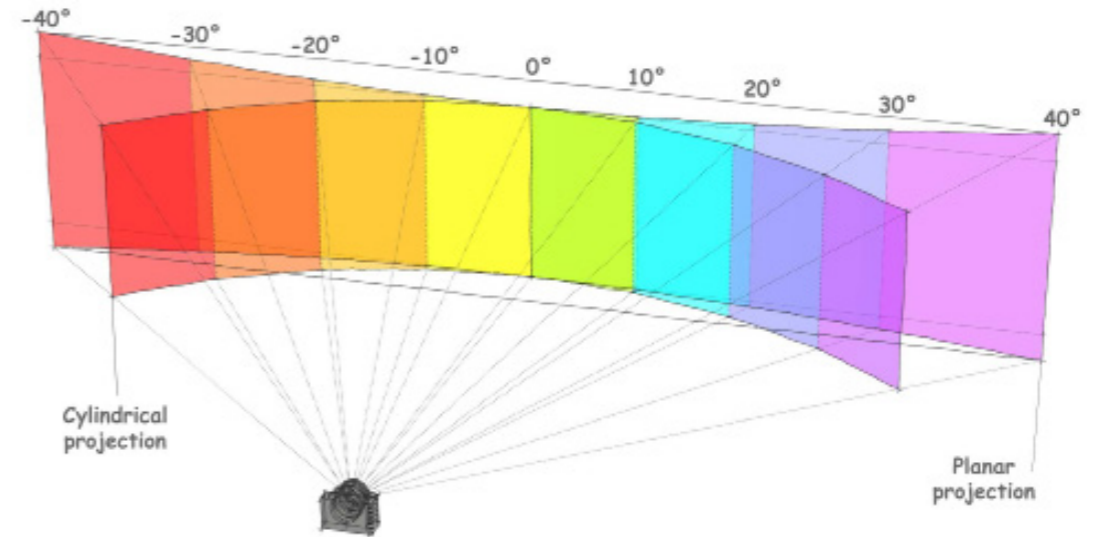
# METHODOLOGY

## HANDHELD PHOTOGRAPHY AND VISUAL SIMULATIONS

### SITE VISIT & PHOTOGRAPHY

Site photographs were taken with a Canon EOS SLR camera. This was fitted with either a 24mm, 35mm or 50mm focal length lens. A series of handheld photos were taken at predetermined viewpoints, situated on either public or private land depending on the client's requirements.

Positions were recorded using the internal GPS on the camera. The achievable accuracy for these is 2-5 metres.



### 3D MODELLING

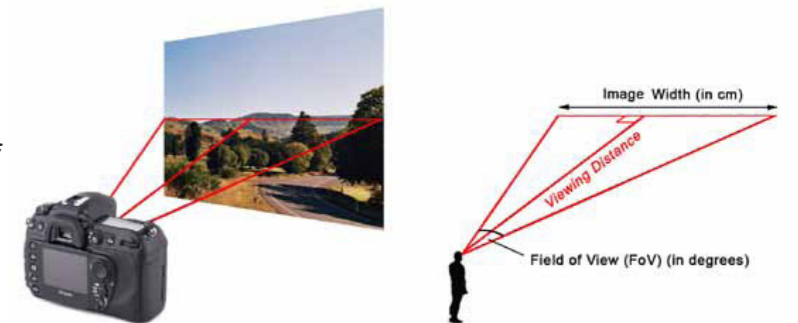
Diagram courtesy of UK Landscape Institute Technical Guidance Note 06/19

Virtual Cameras were created in 3DSMax software (1). LINZ point cloud (LIDAR) data was registered to match the panorama (2). A 3D model from the project architects was then imported from either 3DSMax, REVIT, FBX or SKP format (3). A rendering of this model was generated and superimposed over the panorama using Photoshop. The graphics were then assembled using graphic design software.



### IMAGE READING DISTANCE

Image Reading Distance is the distance at which a print should be held from the eye to emulate a true relationship with the real world (refer to Section 7 of the NZILA BPG).



Note that opening a digital (PDF) version on a computer and using the zoom tool allows closer inspection of the image, but is no longer representative of the view as it would appear in the "real world".

### PRIVACY AND AI

Faces, house numbers and vehicle licence plates have been blurred or removed from images wherever practical. This is in accordance with the Privacy Act 2020.

AI enhancement tools may have been used to reinstate missing areas of sky or ground in the images. No other manipulation using AI has been used in the preparation of these images.



### NZILA GUIDELINES AND FOCAL LENGTH

The visual simulations have been produced in accordance with the Tuia Pito Ora New Zealand Institute of Landscape Architects (NZILA) Best Practice Guide - Visual Simulations BPG 10.2 (published in 2010).

As stated in the BPG, the choice of lens makes no difference other than in the field of view and the resolution of the image. For instance, a photo taken with a 28mm lens provides a horizontal field of view (HFoV) of 65° in landscape mode, while a photo taken with a 50mm lens has a HFoV of 40°. It is essentially a cropped version of the same image.