

SDNP Viewshed Study

Addendum to Final Report dated 13/01/2016

Technical Specification for Panoramic Photography

Photographs were taken using a Nikon D7000 camera with a 16.2 megapixels CMOS sensor and a fixed 35mm lens (giving a 35mm film camera equivalent focal length of 52mm). Each image taken was 3696 pixels high by 2448 pixels wide (portrait format) and 300 DPI.

A tripod with vertical and horizontal spirit levels was used to ensure a level set of adjoining images (camera was held in portrait format). A panoramic head was used to ensure the camera lens was positioned and rotated on the no-parallax point in order to enable accurate stitching of the successive images. The camera was moved through increments of 15 degrees and rotated to provide a full 360 degree view.

Photo stitching software (PTGui) was used to piece together the adjoining frames to form panoramic images, using a cylindrical projection, resulting in images at 300 DPI.

The 360 degree panoramic images were imported into krpano Viewer¹. Krpano supports a tiled multi-resolution loading which means the large images are resampled to several resolution levels and each level is split up into many small tiles. These small tiles are loaded piece by piece only when needed and this makes it possible to view very large images quickly and with less memory.

¹ <http://krpano.com/>