



Viewpoint 05. NoR 3:

NoR 3: Looking east along Alfriston Road towards from outside the entrance to Gallaher Park.



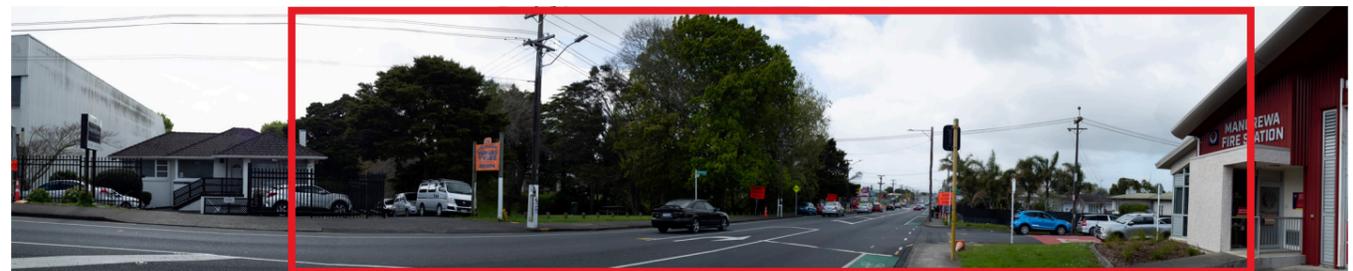


Original Photo MJ | 50mm | DSLR Canon D810 | 12:29hrs 03 October 2023 | 1769161E 5900934N NZTM | Elevation approximately 32m
Reading distance for correct scale: 400mm
Field of View Approximately 110° horizontal (across 2 x A3 pages) & 34° vertical



Viewpoint 06. NoR 3:

NoR 3: Looking southwest along Great South Road towards Tadmore Park from outside the Manurewa Fire Station.





Original Photo MJ | 50mm | DSLR Canon D810 | 10:33hrs 03 October 2023 | 1769003E 5900720N NZTM | Elevation approximately 27m

Reading distance for correct scale: 400mm

Field of View Approximately 110° horizontal (across 2 x A3 pages) & 34° vertical



Viewpoint 07. NoR 3:

NoR 3: Looking west along Alfriston Road toward the State Highway 1 overbridge from the intersection of Alfriston Road and Magic Way.





Original Photo MJ | 50mm | DSLR Canon D810 | 10:41hrs 03 October 2023 | 1770143E 5901342N NZTM | Elevation approximately 35m

Reading distance for correct scale: 400mm

Field of View Approximately 110° horizontal (across 2 x A3 pages) & 34° vertical



Viewpoint 08. NoR 4:

NoR 4: View from opposite 456 Porchester Road looking south.





Original Photo MJ | 50mm | DSLR Canon D810 | 13:42hrs 22 September 2023 | 1771134E 5900630N NZTM | Elevation approximately 19m
Reading distance for correct scale: 400mm
Field of View Approximately 110° horizontal (across 2 x A3 pages) & 34° vertical

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Panoramic Photography Methodology Statement

- Photos were taken with a fixed lens on DSLR camera. Locations were fixed using a handheld GPS unit with accuracy of 5m. Reference points in the landscape were also located to assist referencing of photo.
- A sequence of photos was taken from each viewpoint and stitched to form panoramas. Photos were overlapped by approximately 30% and edges cropped prior to stitching to eliminate edge distortion.
- The completed panoramic photography is presented over two pages:
 - The photos are produced to replicate correct scale at the nominated reading distance (in this case 400mm).
 - Each panoramic photo is printed across two facing pages to illustrate a field of view of approximately 110° at a reading distance of 400mm. This approximates the field of human binocular vision. (but not peripheral vision which extends to approximately 200°)

Notes on use of Panoramic Photography:

- They are a useful tool but they cannot not precisely reproduce real life for the following reasons:
 - 2D Photography flattens an image compared to binocular vision.
 - Photography is static, whereas the human vision can scan and remember information.
 - Photographs are passive, whereas the eye seeks out detail.
 - The human eye can see more contrast than can be reproduced through photography.
 - Physical resolution of photography and printing is less than that of the human eye.

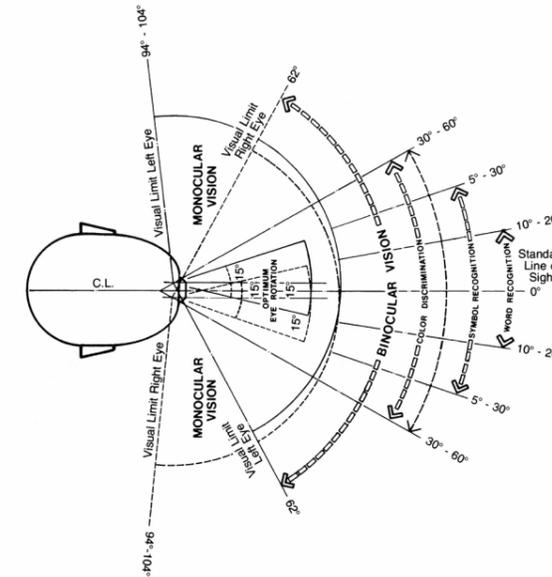


Figure 02: Binocular vision is approximately 124°. Field of view is approximately 110° across 2 x A3 pages at correct scale image for 400mm reading distance (vertical field of view is approximately 33°)

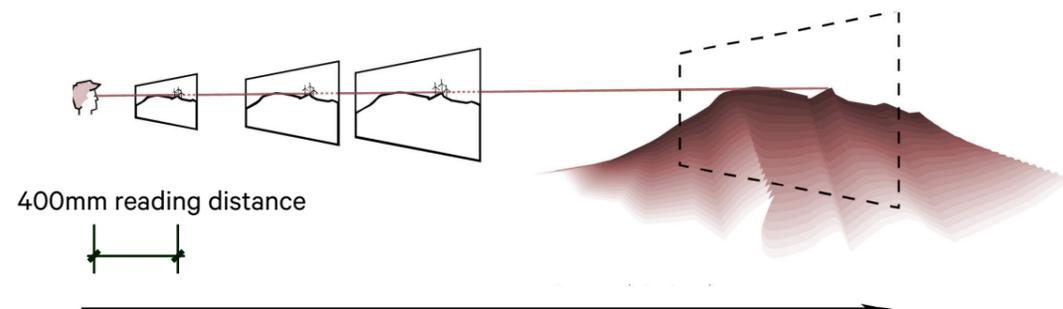


Figure 01: The relationship between reading distance and real life scale.

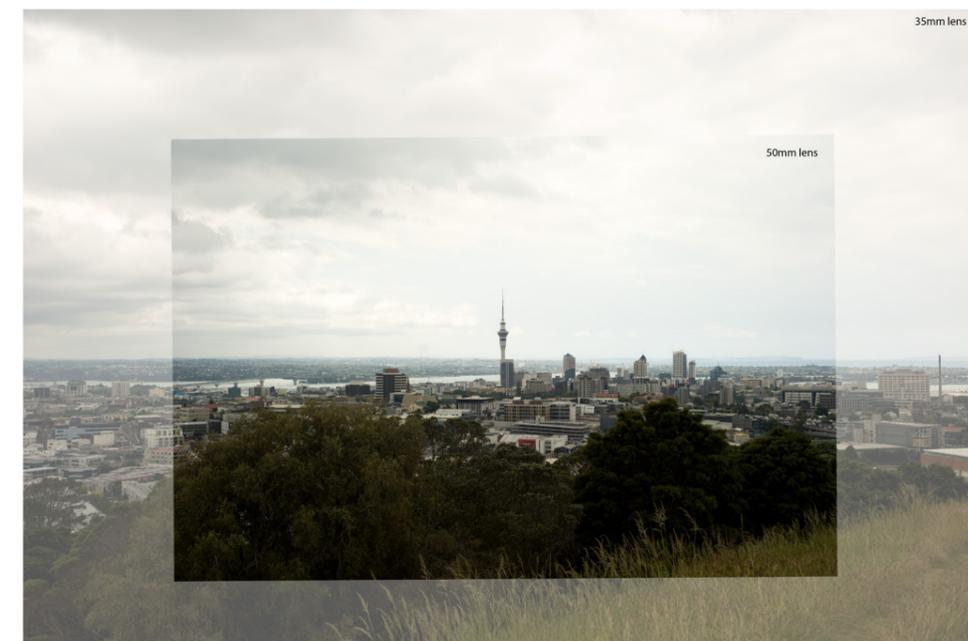


Figure 03: Comparison of 35mm lens and 50mm lens

Two images from the same location. With 35mm and 50mm lenses perspective is influenced by field of view, not by lens focal length. The overlaid portion is identical.

Methodology.