

Original photograph



Photomontage of proposed reference scheme



Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di
VC USD G2 AO32N

Focal length
35mm in 35mm Film

Original photo indicating surveyed reference points



Photomontage of previous proposed reference scheme



Original photograph with 50mm crop



Photomontage of proposed reference scheme with 50mm crop



Photograph details

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22nd June 2020

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Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di
VC USD G2 AO32N

Focal length
50mm equivalent

Photomontage of previous proposed reference scheme with 50mm crop





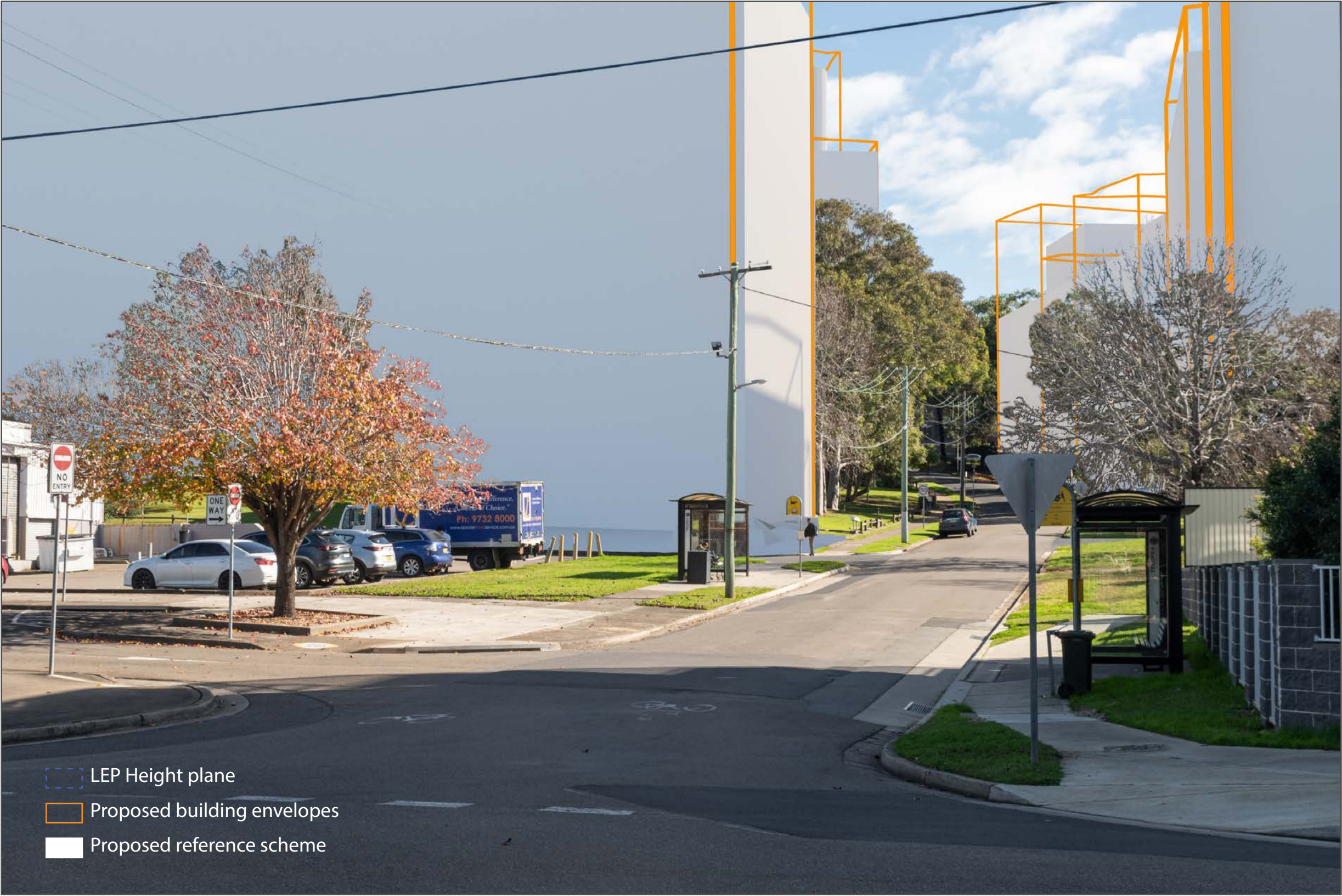












Original photograph



Photomontage of proposed reference scheme



Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di
VC USD G2 AO32N

Focal length
24mm in 35mm Film

Original photo indicating surveyed reference points



Photomontage of previous proposed reference scheme



Original photograph with 50mm crop



Photomontage of proposed reference scheme with 50mm crop



Photograph details

Photo Date
22nd June 2020

Camera Used
Nikon D810

Camera Lens
Tamron SP 24-70mm F/2.8 Di
VC USD G2 A032N

Focal length
50mm equivalent

Photomontage of previous proposed reference scheme with 50mm crop

















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Original photograph with 50mm crop



Photomontage of proposed reference scheme with 50mm crop



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Original photograph with 50mm crop



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Original photo indicating surveyed reference points



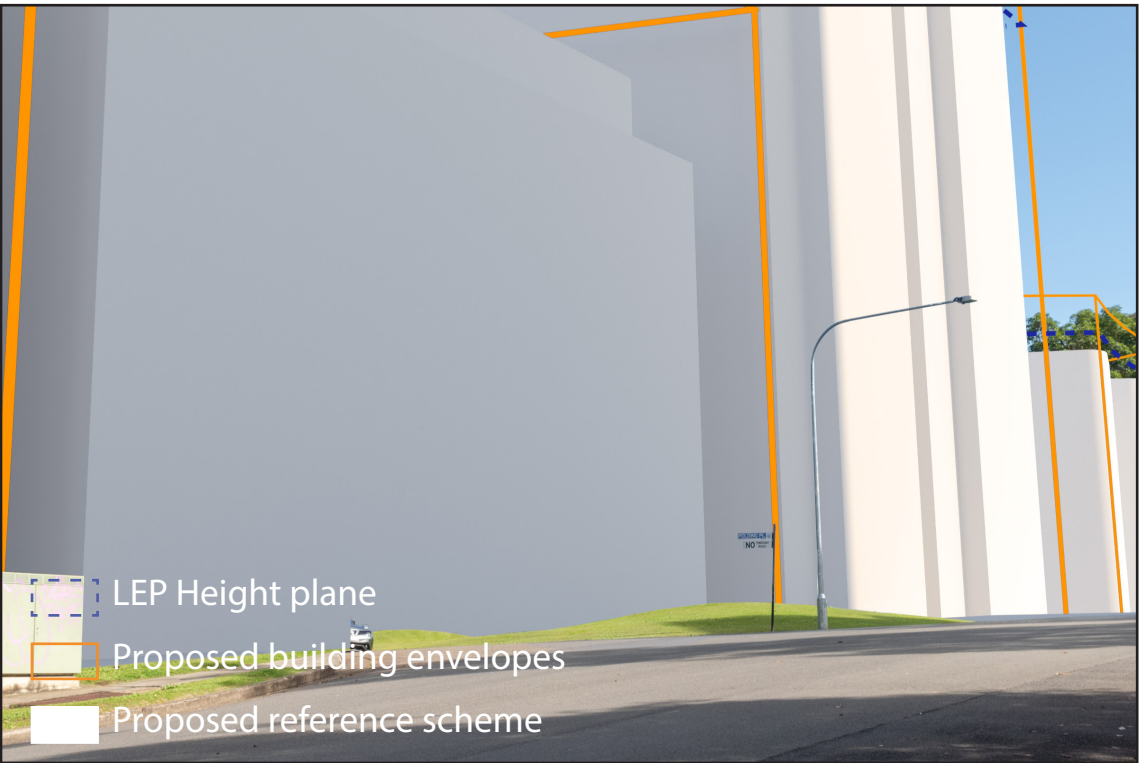
Photomontage of previous proposed reference scheme



Original photograph with 50mm crop



Photomontage of proposed reference scheme with 50mm crop



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Focal length
50mm equivalent

Photomontage of previous proposed reference scheme with 50mm crop

















CMS Surveyors Pty Limited

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LAND SURVEYING, PLANNING & DEVELOPMENT CONSULTANTS

Page 1 of 3

Date: 26-06-2020
Our Ref: 19451 Photo LocationsVirtual Ideas
Studio 71/61 Marlborough Street
Surry Hills
NSW 2010

RE: Photo Locations – 57 Adderton Road, Telopea

Dear Rick Mansfield

As requested, we have attended site and measured the Co-ordinates and Elevation of the photo locations for 57 Adderton Road, Telopea.

Coordinates are MGA zone 56 (GDA 2020) and elevation to Australian Height datum (AHD).

Measurements were taken using GNSS and theodolite.

DWG of locations has also been supplied.

Point Number	Easting	Northing	Reduced Level Ground (RL)	Photo Point
1	319540.883	6258453.001	39.73	VIEW 18
2	319534.480	6258453.441	39.58	VIEW 18.2
8	318996.896	6258545.226	31.51	VIEW 38
15	319087.802	6258716.399	29.94	VIEW 40
21	318806.106	6259560.277	66.59	VIEW 22
28	318938.678	6259236.012	68.11	VIEW 25
34	318657.601	6258990.883	57.32	VIEW 27
42	318598.063	6258870.856	54.48	VIEW 47
47	318573.206	6258546.202	53.53	VIEW 44
53	318667.358	6258829.828	59.05	VIEW 45
59	318755.546	6258779.051	55.30	VIEW 46
66	319099.557	6258832.563	33.59	VIEW 41
72	318943.893	6259121.121	58.78	VIEW 43
78	319420.703	6258944.181	62.61	VIEW 4
4	319510.842	6258461.294	38.86	BOTTOM OF SIGN
5	319501.018	6258467.684	49.50	ANGLE ON LIGHT POLE
6	319509.924	6258486.724	48.73	TOP OF LIGHT POLE
7	319464.622	6258499.415	47.47	TOP OF LIGHT POLE
10	318983.961	6258570.827	33.38	TOP OF TAP
11	318970.109	6258565.741	33.35	BOTTOM OF TREE TRUNK

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Point Number	Easting	Northing	Reduced Level Ground (RL)	Photo Point
12	318975.135	6258574.301	33.35	BOTTOM OF TREE TRUNK
13	318977.970	6258597.518	32.73	BOTTOM OF POST
17	319033.856	6258724.014	34.59	TOP OF SIGN
18	319041.881	6258731.473	31.58	BOTTOM OF SIGN
19	319017.884	6258743.784	42.15	TOP OF POWER POLE
20	319058.786	6258734.203	30.85	BOTTOM OF POWER POLE
23	318837.151	6259503.914	65.37	BOTTOM OF LIGHT POLE
24	318768.058	6259508.322	65.53	BOTTOM OF LIGHT POLE
25	318816.213	6259504.246	69.60	TOP CORNER OF FENCE
26	318786.828	6259505.947	69.83	TOP CORNER OF FENCE
27	318797.783	6259508.548	65.90	TOP OF TRAFFIC CONE
30	318902.606	6259165.848	81.92	TOP OF POWER POLE
31	318902.558	6259191.837	75.11	TOP OF POWER POLE
32	318924.964	6259223.692	67.96	BOTTOM OF POWER POLE
33	318885.755	6259201.922	77.42	TOP OF POWER POLE
36	318668.529	6258970.132	57.84	BOTTOM OF SIGN
37	318663.110	6258960.159	61.84	TOP OF TRAFFIC LIGHT
38	318657.411	6258949.652	60.69	TOP OF TRAFFIC LIGHT
39	318720.089	6258924.959	87.33	CORNER OF ROOF
40	318696.371	6258829.932	86.11	CORNER OF ROOF
41	318650.267	6258935.901	68.81	TOP OF POWER POLE
44	318586.206	6258850.003	63.55	TOP OF POWER POLE
45	318585.156	6258820.279	53.11	BOTTOM OF TREE TRUNK
46	318602.987	6258852.688	56.93	TOP OF SIGN
49	318592.967	6258566.497	65.35	TOP OF POWER POLE
50	318599.730	6258576.439	57.56	TOP OF SIGN
51	318616.739	6258603.464	57.90	TOP OF SIGN
52	318592.447	6258580.711	55.00	BOTTOM OF SIGN
55	318670.038	6258811.429	61.88	TOP OF SIGN
56	318665.414	6258811.137	61.21	TOP OF SIGN
57	318656.415	6258808.325	62.43	TOP OF LIGHT POLE
58	318682.339	6258790.289	59.01	BOTTOM OF LIGHT POLE
61	318735.543	6258766.440	58.76	CORNER OF SUBSTATION
62	318710.250	6258759.163	60.93	TOP OF SIGN
63	318716.716	6258773.944	61.20	TOP OF SIGN
64	318688.251	6258774.297	63.75	TOP OF LIGHT POLE
65	318737.006	6258754.435	67.20	ROOF RIDGE
68	319085.008	6258840.028	36.15	TOP OF SIGN
69	319077.357	6258829.284	44.11	TOP OF POWER POLE
70	319050.629	6258848.726	43.78	TOP OF POWER POLE
71	319022.679	6258824.845	40.48	CORNER OF GUTTER
74	318919.653	6259095.655	63.32	TOP OF POWER POLE

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Point Number	Easting	Northing	Reduced Level Ground (RL)	Photo Point
75	318923.999	6259110.131	59.80	TOP OF SIGN
76	318892.750	6259099.481	66.29	PARAPET RIDGE
77	318935.056	6259103.136	58.28	TOP OF FENCE POST
80	319378.266	6258923.692	68.55	TOP OF POWER POLE
81	319337.529	6258930.768	62.97	TOP OF POWER POLE
82	319361.772	6258951.283	68.08	TOP OF POWER POLE
83	319338.051	6258970.389	63.26	ROOF RIDGE

Note: Ground level of camera positions are surveyed. Camera height of 1.65m to be added if required.



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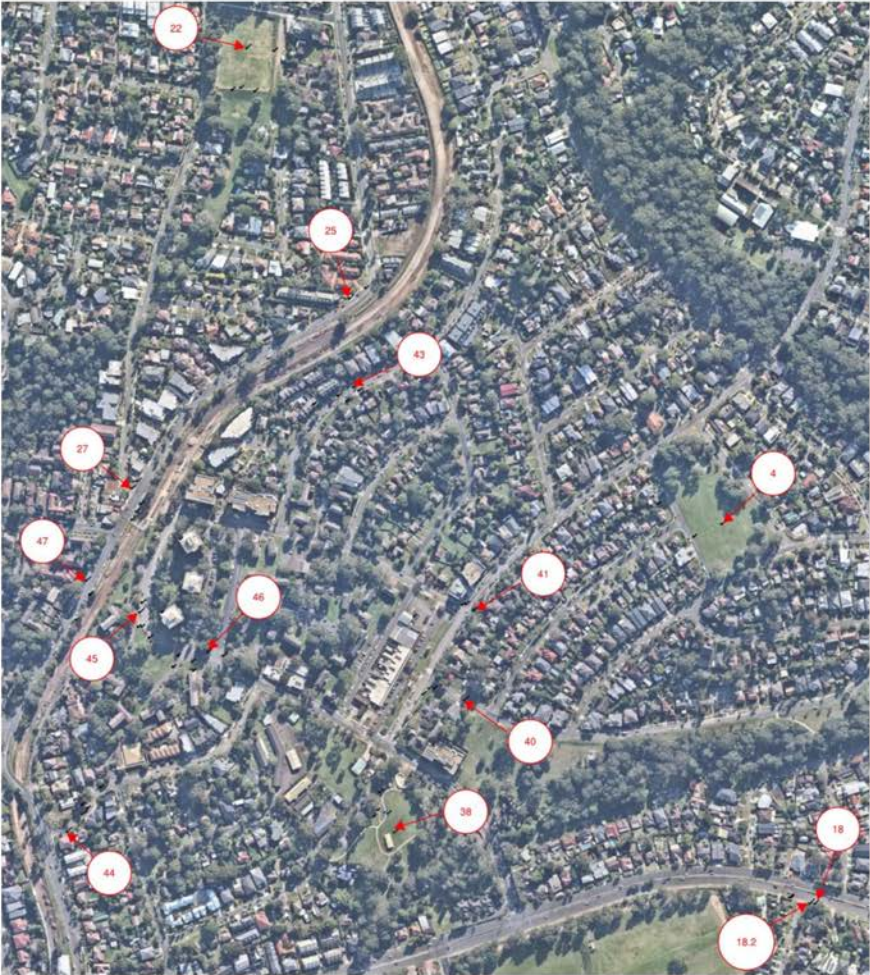
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Yours faithfully,
CMS Surveyors Pty Limited

Damon Roach



Consulting Surveyors
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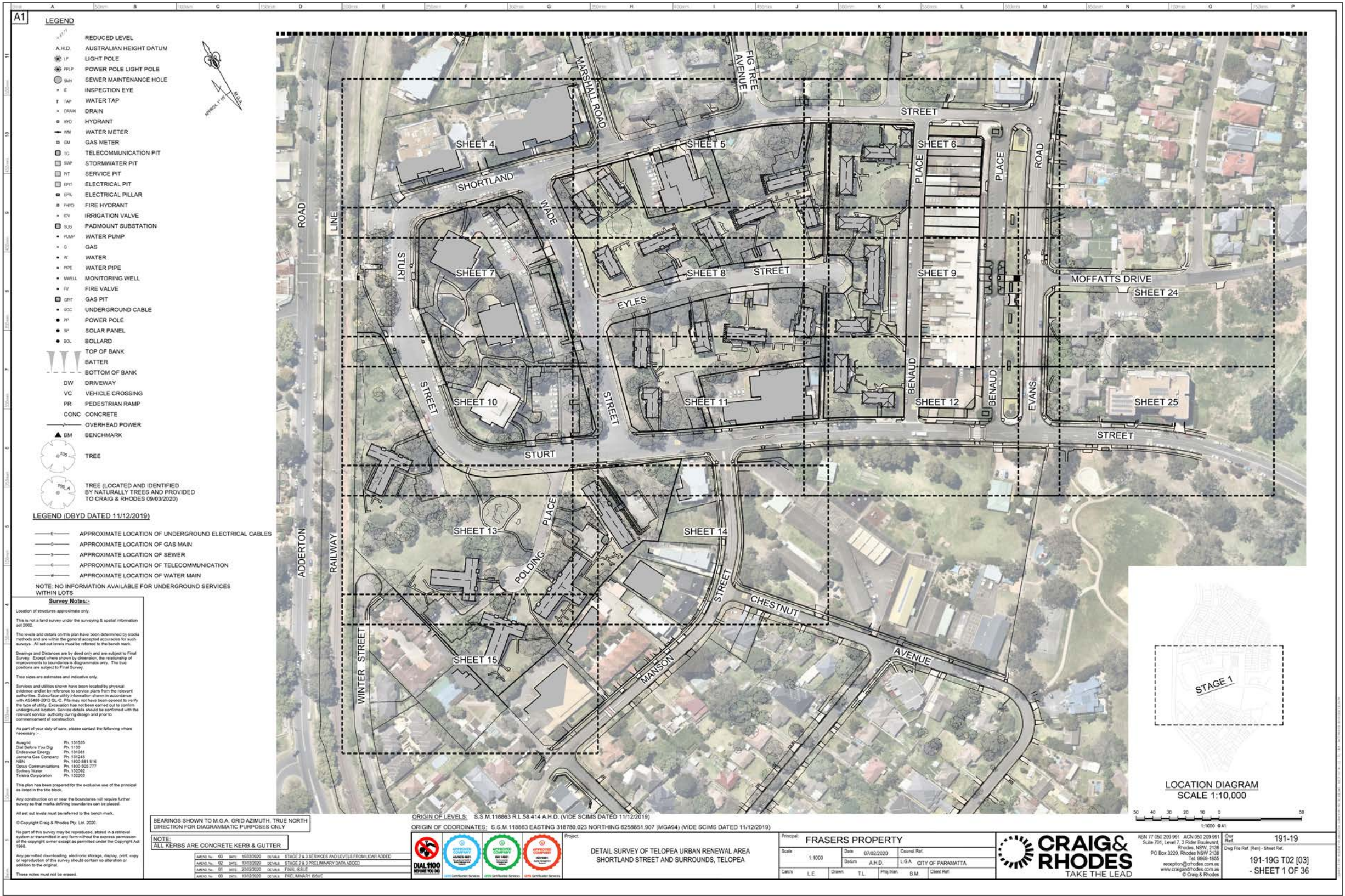
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Visual Impact Report - Telopea, NSW

October 26th 2022

Page: 117



DIGITAL CAMERA LENSES FOR PHOTOMONTAGES AND VISUAL IMPACT ASSESSMENTS

The intention of a photomontage rendering is to visually communicate how proposed built form sits in respect to its surroundings. To achieve this, a digitally rendered image from a digital 3D model is superimposed into a digital photograph to provide an accurate representation in terms of light, material, scale, and form.

Camera lens selection also plays an important part in creating a photomontage that communicates visual impact. There are several things to consider with respect to lens selection.

Field of View of the Human Eye

The field of view of the human eye is a topic that varies depending on the source of information. In many cases, the field of view of the eye is stated to be 17mm. Other opinions claim a smaller field of view of around 22-24mm.

Whichever the case, it is accepted that the human eye has a wide field of view. When a person stands close to a subject - for instance a building - their field of vision can potentially read all of the top, sides and bottom of the building simultaneously in a single glance.

In addition to this, the human eye can change focus and target direction extremely rapidly, allowing a person to view a large structure in a very short period of time, effectively making the perceived field of view even larger.

The Perspective of the human eye

It is difficult to accurately reproduce what the human eye sees by the means of a printed image. The eye's image sensor - the retina - is curved along the back surface of the eyeball, whereas the sensor on a camera is flat. Consequently, the perspective of a photograph can look quite different to how a person views a scene in the real world, especially when comparing to a photo captured with a wide camera lens.

In digital photography circles, it is widely accepted that using a longer lens (approximately 50mm) reduces the amount of perspective in an image and therefore more closely replicates what the human eye would see in reality. This, however, only addresses how the eye perceives perspective and does not consider the field of view of the eye.

If a photo is taken of a scene using a 50mm camera lens, printed out and then held up in front of the viewer against the actual view at the same location as the photo was taken, it is unmistakable that the human eye can see much more of the surrounding context than is captured within the photo.

DIGITAL CAMERA LENSES FOR PHOTOMONTAGES AND VISUAL IMPACT ASSESSMENTS

Changing the field of view on a digital camera

The main difference in using a longer lens vs a wider lens is the amount of information that is displayed at the edges of the subject. Changing the lens to a smaller FOV produces the same result as cropping in on the wide angle image, providing that the position and the angle of the camera remains constant while taking the photographs.

In short, a lens with a wider field of view does not create an image that has incorrect perspective, it simply means that the perspective is extended at the edges of the image showing more of the surrounds in the image.

Summary

With regards to visual assessment, there is no definitive solution for camera lens selection.

Longer lenses produce images that are more faithful to the perspective of the human eye, though the field of view is more limited, making it difficult to capture the entirety of a subject or enough of the surrounding context in which the subject resides.

Conversely, the perspective of wider camera lenses can make subjects appear further away than they would appear through the perspective of the human eye. This also limits a persons ability to accurately assess visual impact.

For these reasons, Virtual Ideas has taken the view that it is not possible to exactly replicate the real world view of the human eye in an image created with a camera and for visual impact photomontages, camera lenses are selected that strike a balance between these two considerations and can accurately display the built form in its surroundings.

The most effective way to accurately gauge visual impact and achieve a real world understanding of scale, is to take prints of the photomontages to the exact site photography locations and compare the prints with the scale of the existing built form.