Image showing massing of the Approved Concept Plan

Image showing massing of the Proposed Concept Plan Amendment (Mod 4)

Image showing massing of the Proposed Concept Plan Amendment (Mod 4) with indicative design.

Original photo with crop marks to identify the field of view of longer lens sizes.

Image showing alignment of 3D model to photograph with the 3D model shown over in red.

Photographic data

Location:	BLUES POINT
Camera R.L.	14.5m
MGA coords:	X: 333783.957, Y: 6253021.351
Lens:	21mm
Dimensions:	4368 x 2912
Date:	2/06/2010 3:58 PM
Camera:	Canon EOS 5D

Rationale for lens selection

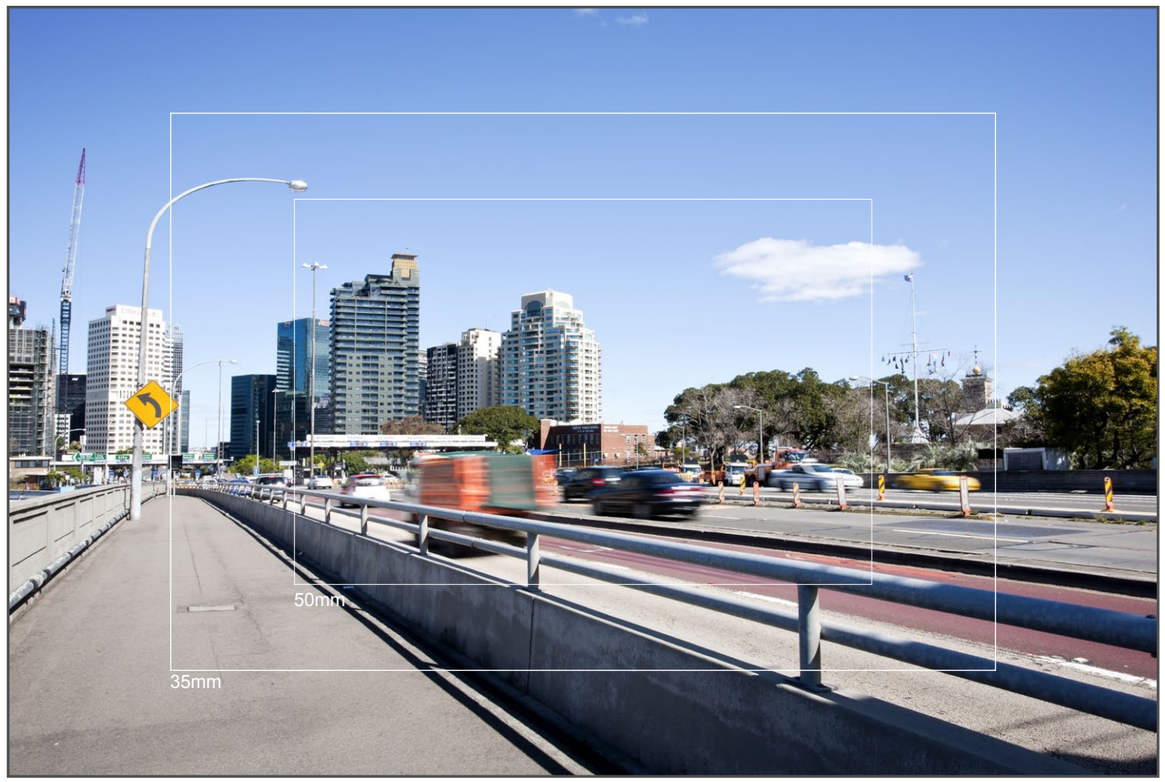
The rationale for using a 21mm lens was to capture as much of the city buildings as possible from the selected position. We also wanted to show some of the foreground elements so the viewer knows where they are standing.

Overlays showing longer lenses have been included to illustrate the effect of a longer lens. Note that using a longer lens from the same location will have the same effect as cropping the wider image.

Image showing massing of the Approved Concept Plan

Image showing massing of the Proposed Concept Plan Amendment (Mod 4)

Image showing massing of the Proposed Concept Plan Amendment (Mod 4) with indicative design.



Original photo with crop marks to identify the field of view of longer lens sizes.

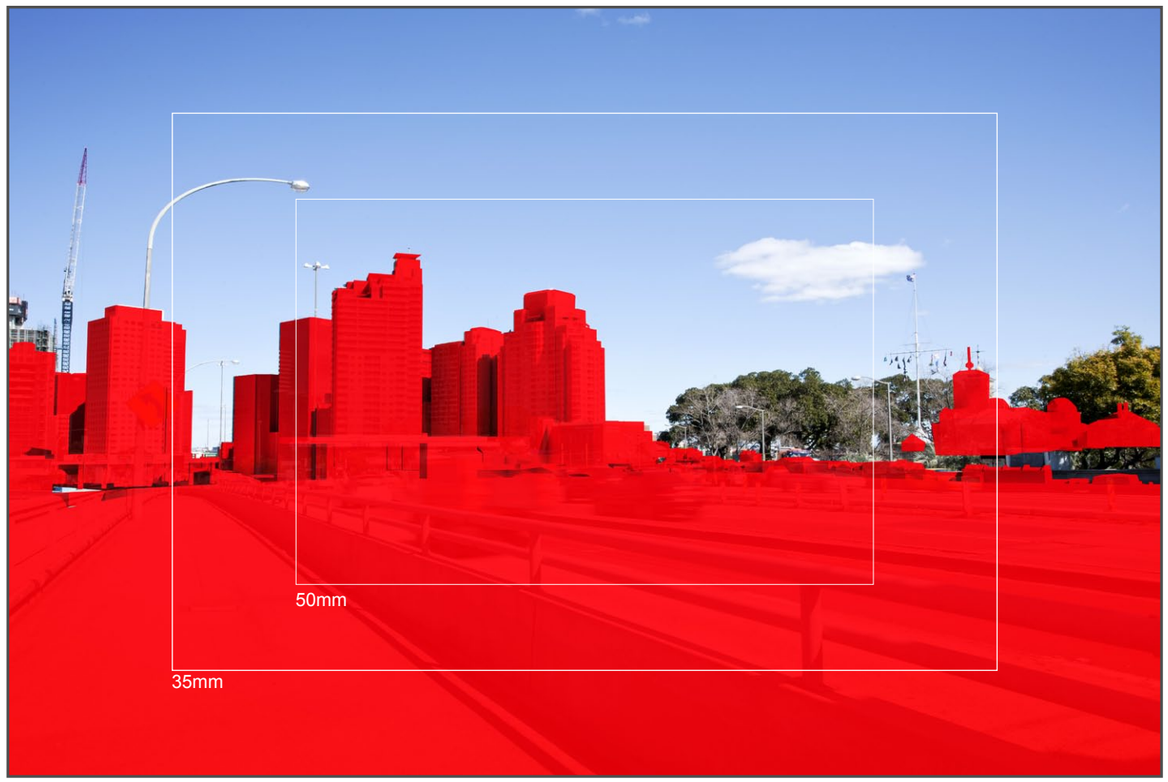


Image showing alignment of 3D model to photograph with the 3D model shown over in red.

Photographic data

Location:	HARBOUR BRIDGE WALKWAY
Camera R.L.	44.1m
MGA coords:	X: 334105.1955, Y: 6252019.695
Lens:	25mm
Dimensions:	4368 x 2912
Date:	2/06/2010 4:55 PM
Camera:	Canon EOS 5D

Rationale for lens selection

The rationale for using a 25mm lens was to capture a selection of city buildings to compare to the Barangaroo built form.

Overlays showing longer lenses have been included to illustrate the effect of a longer lens. Note that using a longer lens from the same location will have the same effect as cropping the wider image.

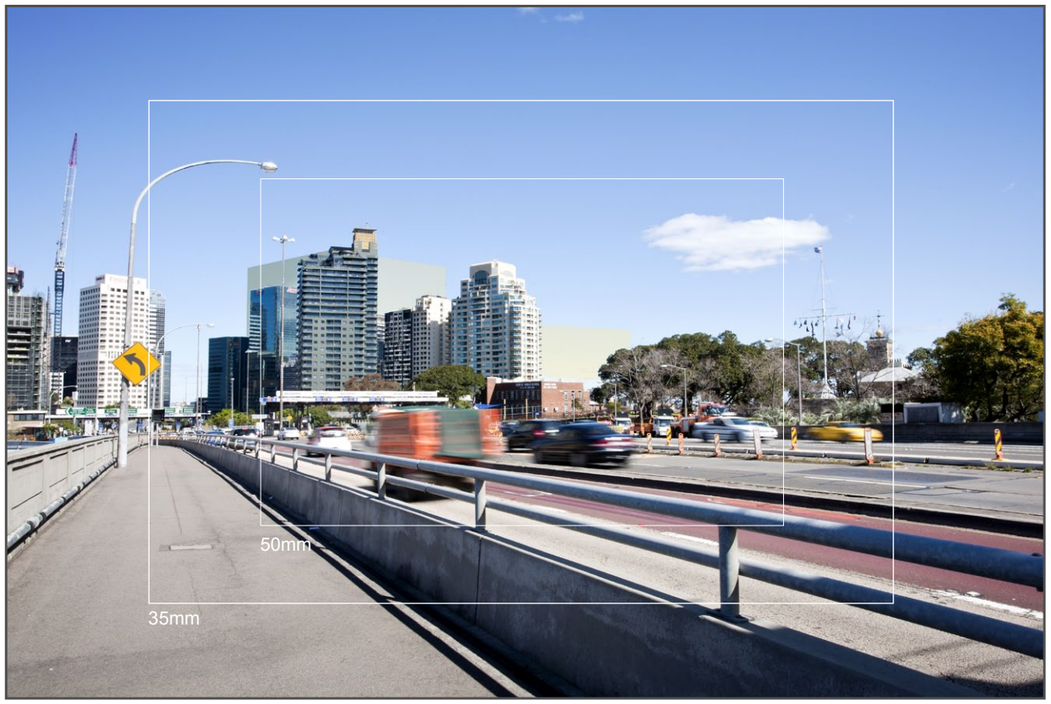


Image showing massing of the Approved Concept Plan

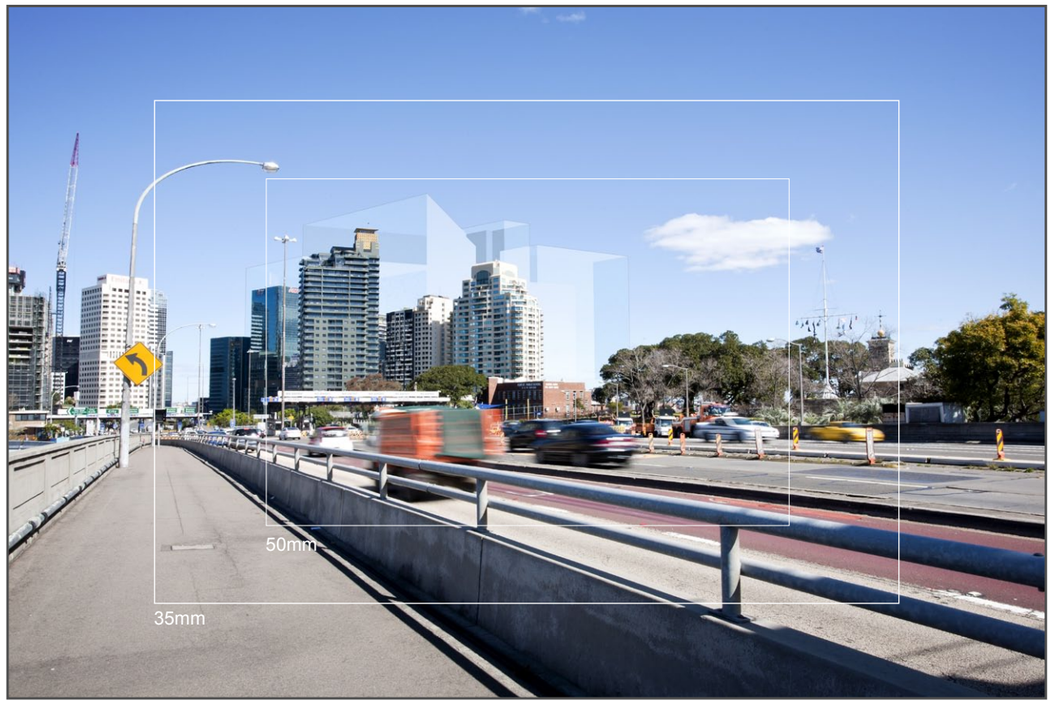


Image showing massing of the Proposed Concept Plan Amendment (Mod 4)

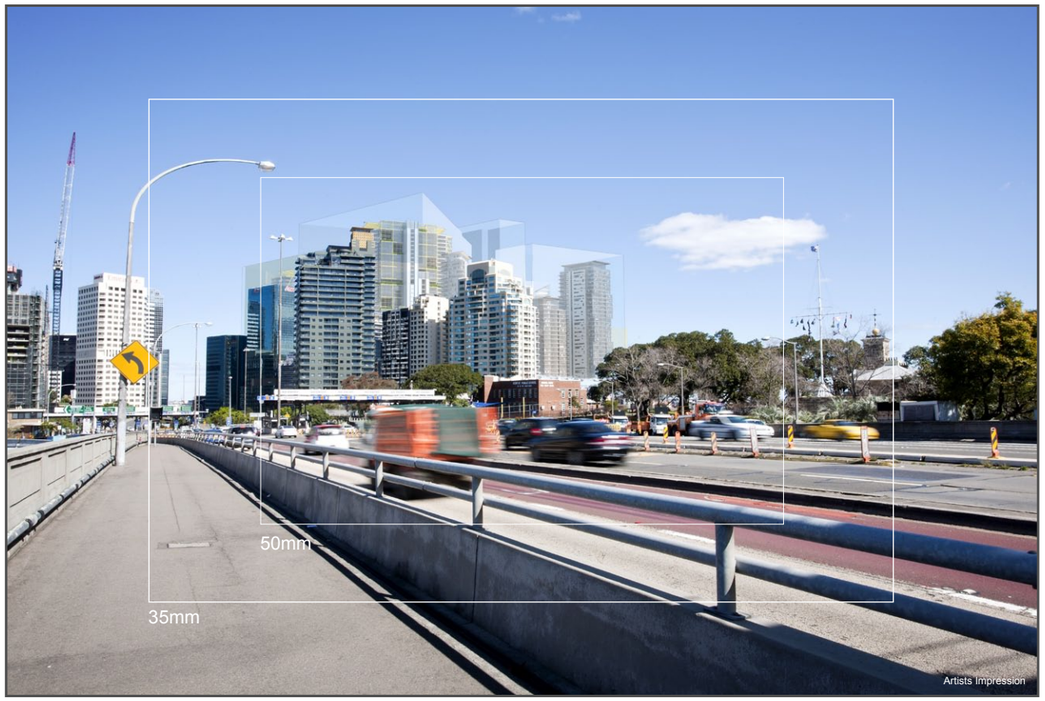


Image showing massing of the Proposed Concept Plan Amendment (Mod 4) with indicative design.

Original photo with crop marks to identify the field of view of longer lens sizes.

Image showing alignment of 3D model to photograph with the 3D model shown over in red.

Photographic data

Location:	OPERA HOUSE WESTERN FORECOURT
Camera R.L.	4.68m
MGA coords:	X: 334826.856, Y: 6252268.439
Lens:	25mm
Dimensions:	4368 x 2912
Date:	2/06/2010 4:55 PM
Camera:	Canon EOS 5D

Rationale for lens selection

The rationale for using a 25mm lens was to capture as much of the city skyline as possible from the selected position. We also wanted to show some of the bridge and also the foreground element so the viewer knows where they are standing.

Overlays showing longer lenses have been included to illustrate the effect of a longer lens. Note that using a longer lens from the same location will have the same effect as cropping the wider image.

Image showing massing of the Approved Concept Plan

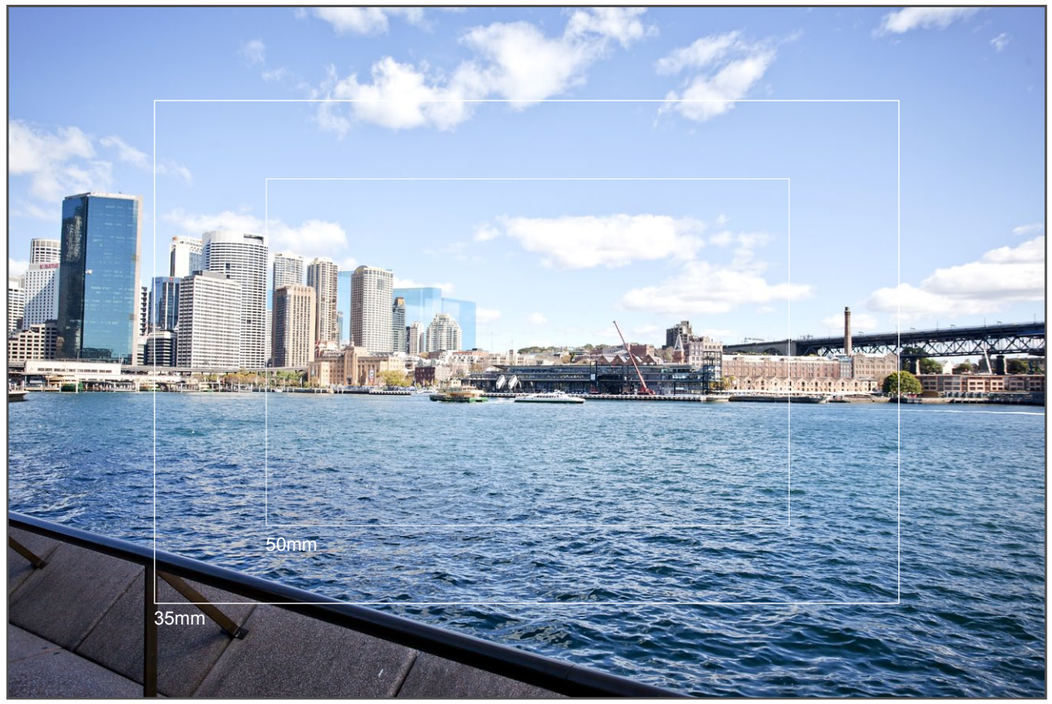


Image showing massing of the Proposed Concept Plan Amendment (Mod 4)

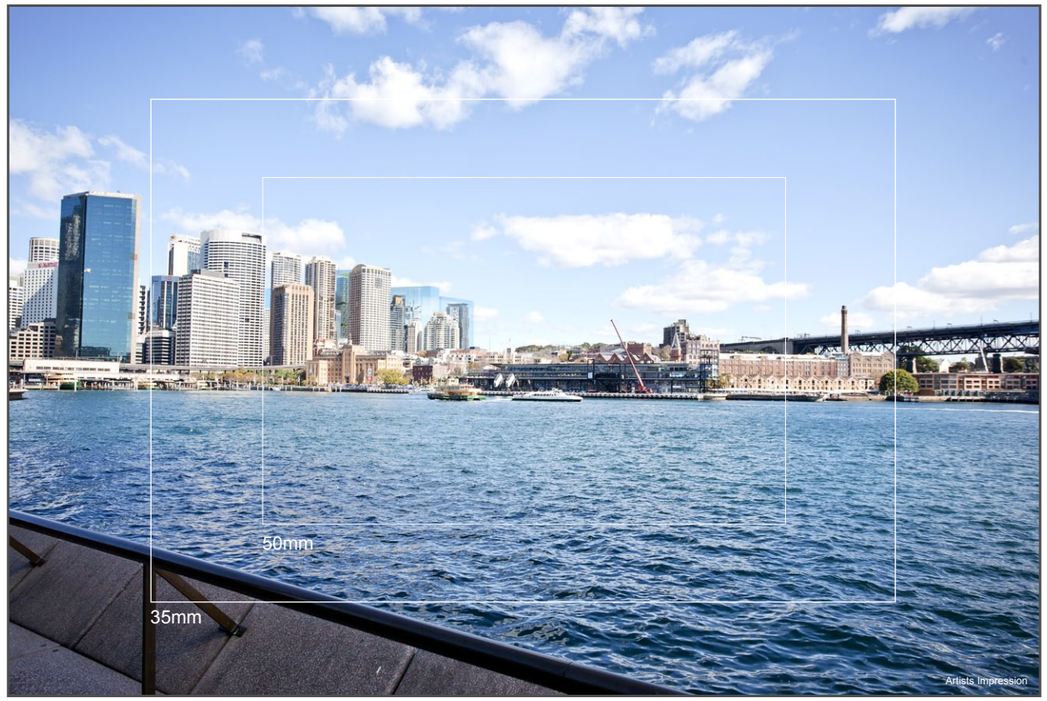


Image showing massing of the Proposed Concept Plan Amendment (Mod 4) with indicative design.

APPENDIX A - 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 accurately 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

This 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 sources of information on the web say that it is more like 22-24mm. Whichever the case it is clear that the human eye has quite a wide field of view and when we stand close to a subject (say a building) we have quite allot of vision towards the top, sides and bottom. In addition to this the human eye can change focus and target direction extremely quickly allowing us to view a large structure in a very short period of time, effectively making our 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. As the back of the human eye is curved and the sensors on cameras are flat the perspective of a photograph can look quite different to how we see things in the real world, especially with a larger field of view, or wider lens.
In digital photography circles it is commonly stated that using a longer lens (approx 50mm) reduces the amount of perspective in an image and therefore looks more like the human eye would see reality, but this is talking about perspective only, and does not consider the field of view of the eye. If you take a photo using a 50mm lens, print the photo, and hold the print out against the actual view in the same location the photo was taken from, it becomes very clear that the human eye can see much more of the surrounding information than what is shown on the print out.

Changing the FOV 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 FOV 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 images.

What all of this means for visual assessment is that there is no one fits all solution for lens selection. If we follow the opinion that a longer lens produces images that are closer to the perspective of the human eye, we will inevitably be in the situation where we cannot show the entirety of our subject and enough of the surrounds that it resides in. Also if we strictly stick to a 17mm lens we will have situations where the subject is far away and looks very small in the image, again making it difficult to assess visual impact. For these reasons we have taken the view that we can never totally represent what the human eye will see on a piece of paper, and for visual impact photomontages we should select lenses that strike a balance between the two and can accurately display the built for in its surroundings.

The most effective way to accurately gauge visual impact and get a real world feeling for scale would be to take prints of the photomontages to the exact site photography locations and compare the prints with the scale of the existing built form.