

# Visual Impact Assessment

## Cockle Bay - Amended Concept Proposal

12th of June, 2018

### BACKGROUND

This document was prepared by Virtual Ideas to describe the processes used to create the visual impact photomontages and illustrate the accuracy of the results.

Virtual Ideas is a highly experienced architectural visualisation company, that regularly prepares 3D visualisation media for use in visual impact assessments and planning and development applications. Our approach to creating view and visual impact media follows the prescribed methodology as established by relevant government planning authorities and is focused on most accurately communicating the proposed design and visual impact of a development. Our methodologies and results have been inspected by various court appointed experts in a variety of cases and have always been found to be accurate and acceptable.

### OVERVIEW

The general process of creating accurate photomontage renderings begins with the creation of an accurate, real-world scale digital 3D model. Site photographs of the relevant view locations are then captured and these camera positions are then surveyed by a surveyor to determine the MGA coordinates. These coordinates are then matched in our 3D model and a virtual camera is set up to align with the real-world camera positions.

By matching the real-world camera lens properties to the camera properties in 3D software and rotating the camera so that surveyed points in the 3D space align with the corresponding points on the photograph, we can create a rendering that is correct in terms of position, scale, rotation, and perspective. The rendering can then be superimposed into the real photo to generate an image that represents accurate form and visual impact.

The following photomontages have been prepared in respect of Land and Environment Court proceeding no. 10884/14 in accordance with the Land and Environment Court's practice directions.

## METHODOLOGY

### Site Photography

Site photography was taken from predetermined positions as instructed by JBA Urban. All photographs were taken using a NIKON D810 and CANON 5DSR digital cameras, using a 24mm lenses. The positions of the photographs were surveyed (Appendix A) and then added into the existing site survey.

### 3D model

Using the imported surveyed data into our 3D software (3DS Max), we then imported a supplied 3D model of the proposed building.

### Alignment

The positions of the real world photography were located in the 3D scene. Cameras were then created in the 3D model to match the locations and height of where the photographs were taken from. These are then aligned in rotation so that the points of the 3D model align with their corresponding objects that are visible in the photograph.

Renderings of the building with realistic textures and lighting were then created from the aligned 3D cameras and montaged into the existing photography at the same location. This produces an accurate representation of the scale and position of the new design relative to the existing built form.

For the purpose of portraying the photographs in a more natural way, some of the images have had a lens correction applied to vertically correct the images. The cameras which have been modify are Cameras 03,04,05,06,07,07b,08,09,10,11,12,13A,13B.

In conclusion, it is my opinion as an experienced, professional 3D architectural and landscape renderer that the images provided accurately portray the level of visibility and impact of the built form.

Opinions expressed in this verification report are made with regard to Division 2 of Part 31 of the Uniform Civil Procedure Rules and the Expert Witness Codes of Conduct in Schedule 7 of the Uniform Civil Procedure Rules, which I have read and agree to be bound by.

Yours sincerely  
Grant Kolln



## CV OF GRANT KOLLN, DIRECTOR OF VIRTUAL IDEAS

### Personal Details

Name: Grant Kolln  
DOB: 07/09/1974  
Company Address: Studio 71, 61 Marlborough St, Surry Hills, NSW, 2010  
Phone Number: (02) 8399 0222

### Relevant Experience

2003 - 2016 Director of 3D visualisation studio Virtual Ideas. During this time I have worked on many visual impact studies for legal proceedings in various different types of industries including architectural, industrial, mining, landscaping, and several large public works projects. This experience has enables us to create highly accurate methodologies for the creation of our visual impact media and report creation.

1999 - 2001 Project manager for global SAP infrastructure implementation - Ericsson, Sweden

1999 - 1999 IT consultant - Sci-Fi Channel, London

1994 - 1999 Architectural Technician, Thomson Adsett Architect, Brisbane QLD.

### Relevant Education / Qualifications

1997 Advanced Diploma in Architectural Technology, Southbank TAFE, Brisbane, QLD

## DESCRIPTION OF COLLECTED DATA

To create the 3D model and establish accurate reference points for alignment to the photography, a variety of information was collected. This includes the following:

1) Architectural 3D model of proposed envelope and surrounding context buildings

- Created by: Francis-Jones Morehen Thorp (FJMT)  
Level 5/70 King St, Sydney NSW 2000
- Format: Din3D model

2) 3D models of Barangaroo and Darling Harbour context buildings

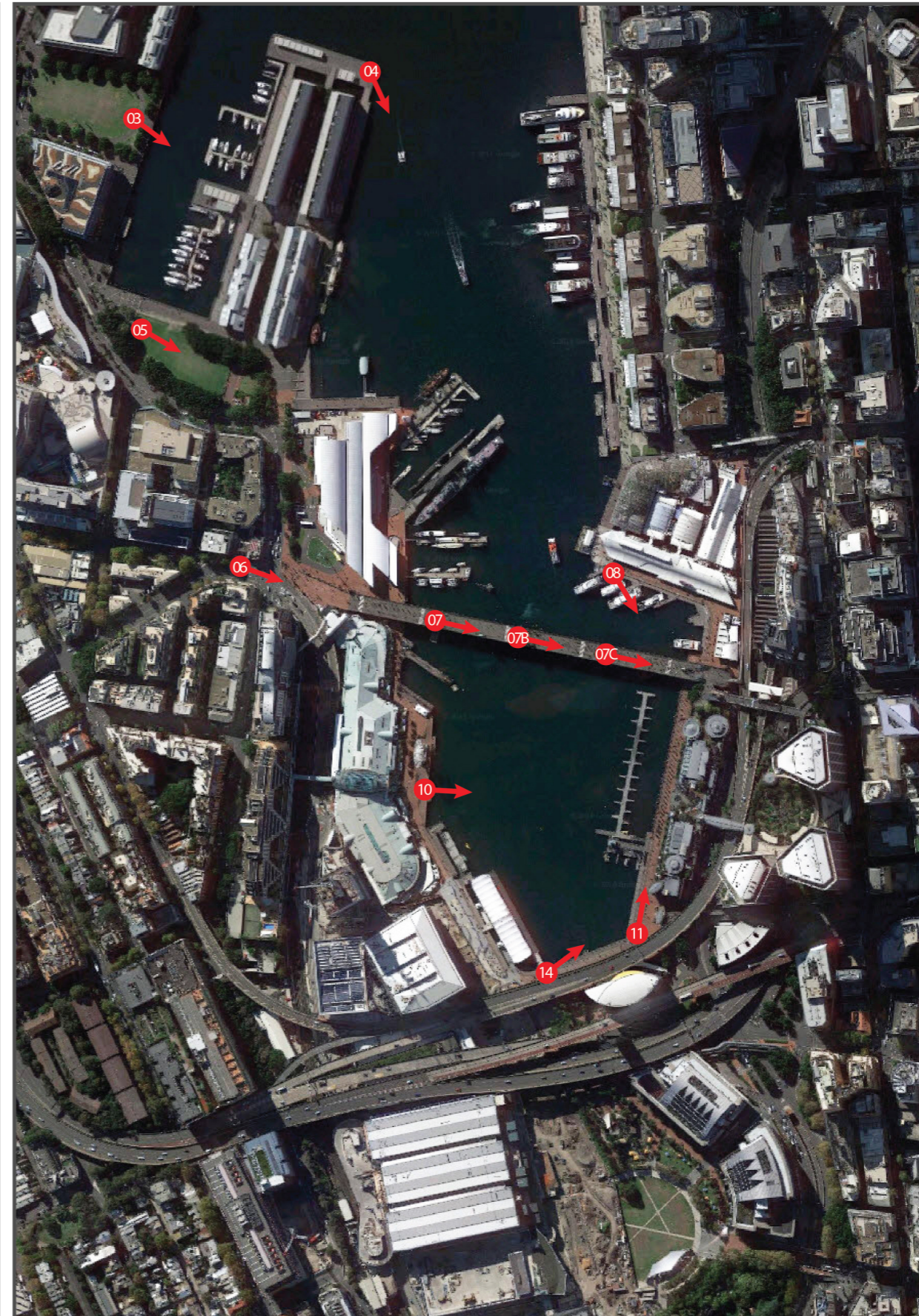
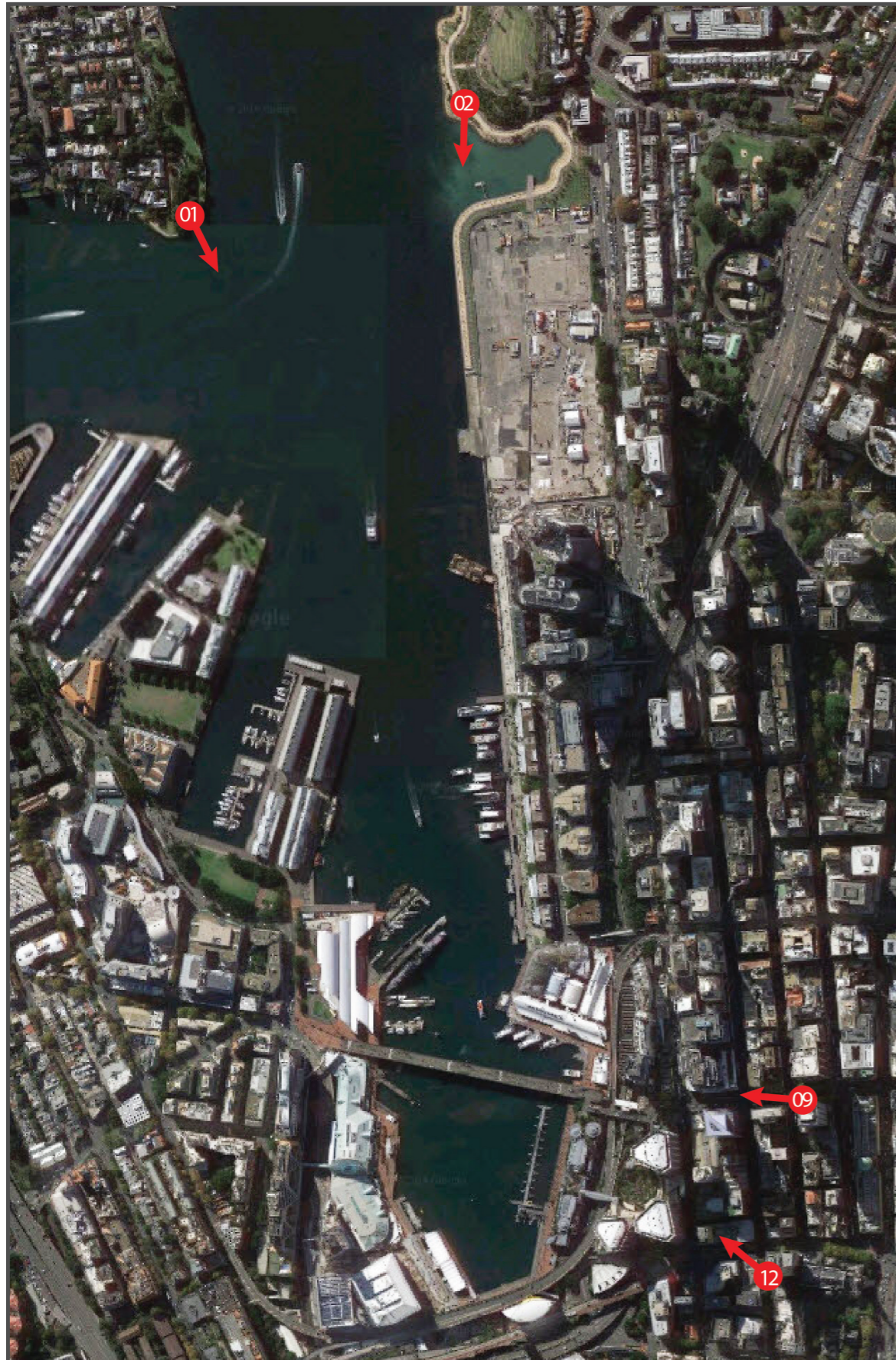
- Created by: Francis-Jones Morehen Thorp (FJMT)  
Level 5/70 King St, Sydney NSW 2000
- Format: Din3D model

3) Surveyed data (Appendix A)

- Created by: CMS Surveyor Pty. Ltd.  
PO Box 463 Dee Why, NSW 2099  
1/32 Campbell Ave, Dee Why NSW 2099
- Format: DWG and PDF files

3) Site photography

- Created by: Virtual Ideas Pty Ltd  
Studio 71, 61 Marlborough St, Surry Hills, NSW 2010
- Format: JPEG file



- 1 - Peacock Point, Balmain East
- 2 - Barangaroo Headland Park
- 3 - Metcalfe Park, Pyrmont
- 4 - Wharf 7, Pyrmont Bay
- 5 - Pyrmont Bay Park
- 6 - Murray St & Union St cnr, Pyrmont
- 7A - Pyrmont Bridge (West)
- 7B - Pyrmont Bridge (Mid)
- 7C - Pyrmont Bridge (East)
- 8 - Darling Harbour Pier 26
- 9 - Market Street
- 10 - Harbourside Promenade
- 11 - Cockle Bay Promenade
- 12 - Kent St & Druitt St cnr
- 13A - Tumbalong Park (South)
- 13B - Tumbalong Park (Centre)
- 14 - Darling Harbour South



24mm - Original Image



24mm



50mm - Original Image



50mm