

# **Supplementary View Impact Study — Alexander Apartments building**

APPENDIX G



## Sydney Metro City & South West

Victoria Cross Over Station Development:

Supplementary Visual Impact Study –

Alexander Apartments building (former Beau Monde Apartments)

Applicable to:	Sydney Metro City & Southwest
Author:	Grant Kolln
Owner	Transport for NSW
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# 1. Victoria Cross Over Station Development – Visual Impact Analysis from Alexander Apartments

## 1.1. Purpose of this report

This Supplementary Visual Impact Study has been prepared to respond to a request from the Department of Planning and Environment (DPE) to provide a further analysis of view impacts to west-facing apartments within the Alexander Apartments (former Beau Monde Apartments building). Specifically, DPE has requested that the view impact analysis focus on apartments with living spaces and private open space at the outer edge of the building and are located above Level 22 or have existing views above 65 Berry Street.

This report should be read in conjunction with Chapter 8.2 of the Victoria Cross Over Station Development Submissions Report (August 2018) and the following reports appended to the Environmental Impact Statement (EIS) in respect to the concept State Significant Development Application for the Victoria Cross Over Station Development:

- 'View and Visual Impact Assessment Report' prepared by Ethos Urban (Appendix AA)
- 'View Impact Study- Beau Monde apartments' prepared by Virtual Ideas (Appendix Z)

The photographs relied on for the purposes of this assessment have been provided by DPE.

## 2. Visual Impact Study – Victoria Cross OSD concept state significant development application

### 2.1. Background

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

Virtual Ideas is an architectural visualisation company that is highly experienced at preparing visual impact assessment media to a level of expertise that is suitable for both council submission and use in court.

Virtual Ideas is familiar with the court requirements to provide 3D visualisation media that will accurately communicate a proposed developments' design and visual impact.

These 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.

### 2.2 Overview

The general process in creating accurate photomontage renderings involves the creation of an accurate, real world scale digital 3D model. We then take site photographs and place cameras in the 3D model that match the real-world position that the photographs were taken on site.

The camera positions are then surveyed to identify the Map Grid of Australia (MGA) coordinates at each position.

By matching the real-world camera lens properties to the camera properties in our software and rotating the camera so that surveyed points in 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.

## 23. 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) 3D model of proposed Victoria Cross OSD building envelope

Supplied by: Bates Smart  
Format: Sketchup model

2) 3D model of proposed building heights in North Sydney Council's North Sydney Centre Planning Proposal

Supplied by: Bates Smart  
Format: Sketchup model

3) Site photography

Created by: Planning NSW  
Format: JPEG file

4) Surveyed 2015 3D North Sydney context model

Created by: AAM  
Format: 3DS Studio Max file

## 24. Methodology

### Site Photography

Site photography from Apartments 2105, 2501, 3102 and 3302 were taken by DPE and supplied to Virtual Ideas by Sydney Metro.

These photos were taken on a Samsung Galaxy Note 8 with a focal length of 4.3mm and an equivalent focal length in 35mm film of 26mm. This lens matched to a 37mm camera lens in 3DS Studio Max.

### 3D Model

Using the imported surveyed data into our 3D software (3DS Max), we then imported the supplied 3D model of the proposed Victoria Cross OSD building envelope and relevant DA approved building massings.

### 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 the position from which the photographs were taken from. They were then aligned in rotation so that the points of the 3D model aligned with their corresponding objects that are visible in the photograph.

Renderings of the building envelope massing 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 building envelope with respect to the existing surroundings.

The new building envelope is shown in 'blue' in the following photomontages, with the indicative building forms for 100 Mount Street and 1 Denison St developments shown in 'white'.

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.

Yours sincerely,

Grant Kolln

A handwritten signature in black ink, appearing to read 'G. Kolln'.

## 25. CV of Grant Kolln, Director of Virtual Ideas

### Personal Details

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

### Relevant Experience

2003 - Present 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.

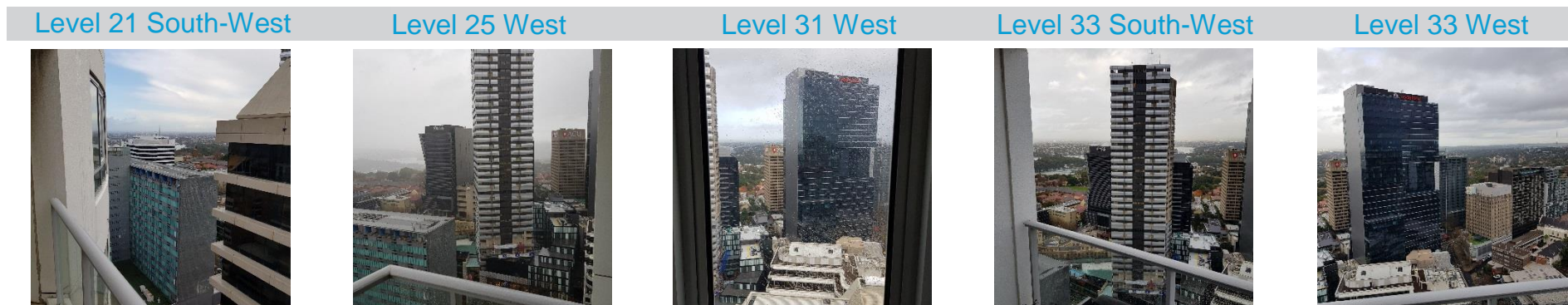
### Relevant Education / Qualifications

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

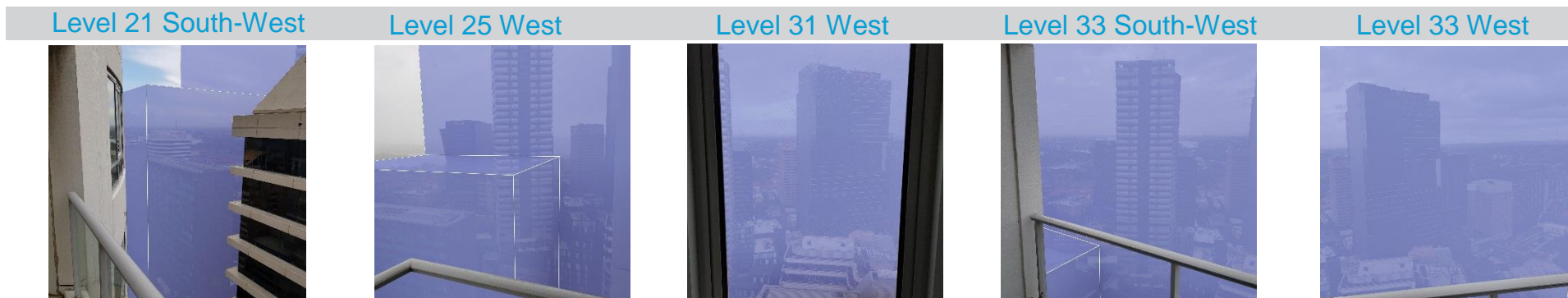


## 26. Additional views - Overview

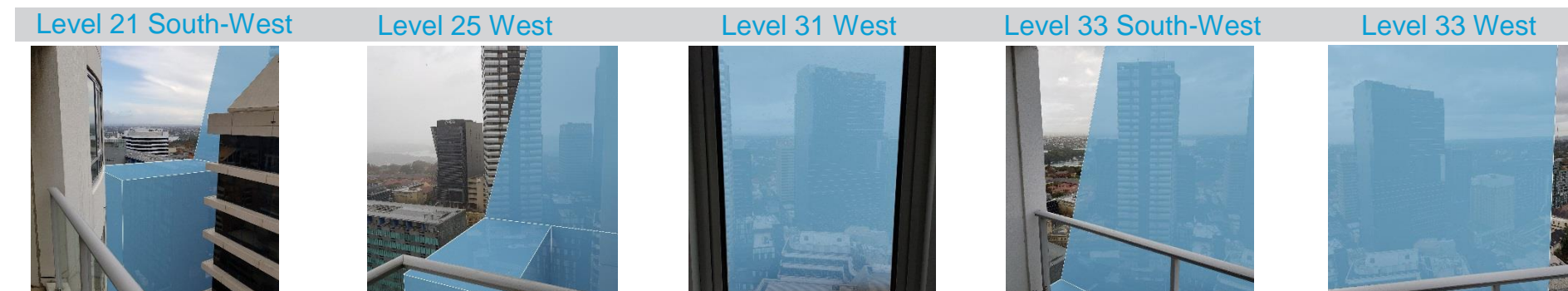
Original Photograph (Camera Lens 37mm)



Proposed building heights in North Sydney Council's North Sydney Centre Planning Proposal (Camera Lens 37mm)



Proposed Victoria Cross OSD Building Envelope (Camera Lens 37mm)



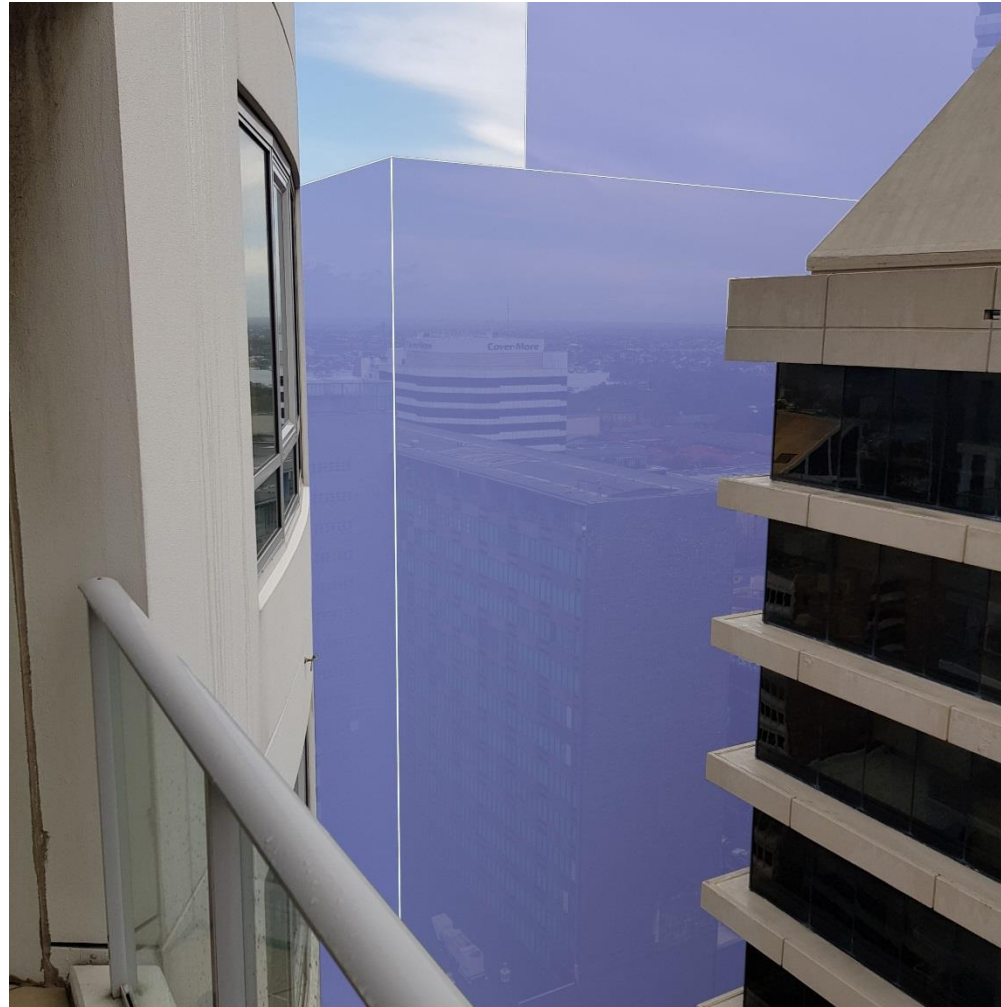
## 27. Apartment 2105 – South-West

Original Photograph



Camera Height - RL 128.8m  
Photo Date - 19th June 2018  
Photo Lens - 37mm

## Proposed building height in North Sydney Council's North Sydney Centre Planning Proposal



**Camera Height** - RL 128.8m  
**Photo Date** - 19th June 2018  
**Photo Lens** - 37mm



## Proposed Victoria Cross OSD Building Envelope



Camera Height - RL 128.8m  
Photo Date - 19th June 2018  
Photo Lens - 37mm

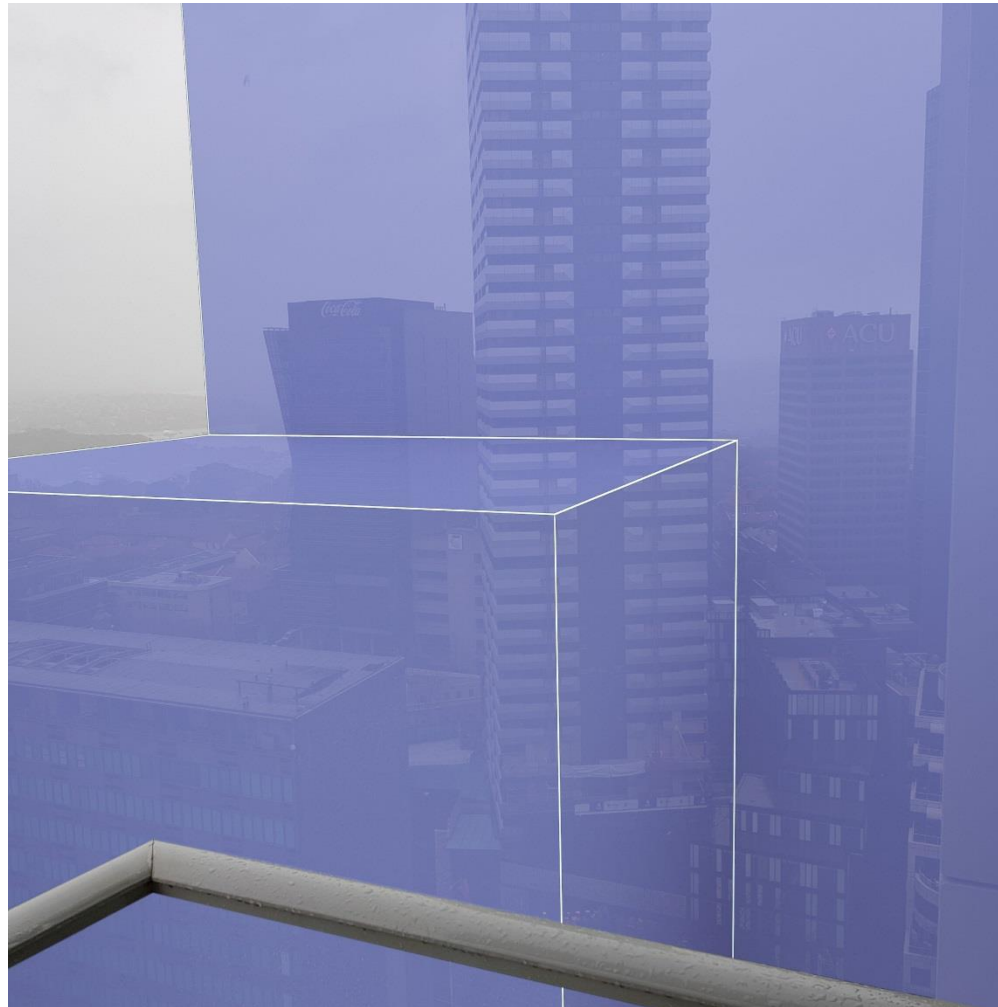
## 28. Apartment 2501 - West

Original Photograph



Camera Height - RL 139.5m  
Photo Date - 19th June 2018  
Photo Lens - 37mm

## Proposed building height in North Sydney Council's North Sydney Centre Planning Proposal



**Camera Height** – RL 139.5m  
**Photo Date** – 19<sup>th</sup> June 2018  
**Photo Lens** – 37mm

## Proposed Victoria Cross OSD Building Envelope



**Camera Height** – RL 139.5m  
**Photo Date** – 19<sup>th</sup> June 2018  
**Photo Lens** – 37mm



## 29. Apartment 3102 - West

Original Photograph



Camera Height - RL 155.4m

Photo Date - 19th 2018 June

Photo Lens - 37mm



## Proposed building height in North Sydney Council's North Sydney Centre Planning Proposal



Camera Height – RL 155.4m  
Photo Date – 19<sup>th</sup> June 2018  
Photo Lens – 37mm

## Proposed Victoria Cross OSD Building Envelope



Camera Height – RL 155.4m  
Photo Date – 19<sup>th</sup> June 2018  
Photo Lens – 37mm

## 210. Apartment 3302 – South-West

Original Photograph



Camera Height - RL 160.6m  
Photo Date - 19th June 2018  
Photo Lens - 37mm

## Proposed building height in North Sydney Council's North Sydney Centre Planning Proposal



**Camera Height** – RL 160.6m  
**Photo Date** – 19<sup>th</sup> June 2018  
**Photo Lens** – 37mm



## Proposed Victoria Cross OSD Building Envelope



**Camera Height** – RL 160.6m  
**Photo Date** – 19<sup>th</sup> June 2018  
**Photo Lens** – 37mm

## 211. Apartment 3302 - West

Original Photograph



Camera Height – RL 160.6m  
Photo Date – 19<sup>th</sup> June 2018  
Photo Lens – 37mm

## Proposed building height in North Sydney Council's North Sydney Centre Planning Proposal



**Camera Height** – RL 160.6m  
**Photo Date** – 19<sup>th</sup> June 2018  
**Photo Lens** – 37mm

## Proposed Victoria Cross OSD Building Envelope



**Camera Height** – RL 160.6m  
**Photo Date** – 19<sup>th</sup> June 2018  
**Photo Lens** – 37mm



# Appendix A – Documentation of Proposed Building Envelope



## VICTORIA CROSS OSD BUILDING ENVELOPE

A01.001	Indicative Ground Floor Plan
A01.002	Miller Street Elevation
A01.003	East West Section
A01.004	North West Axonometric
A01.005	South West Axonometric

Check all dimensions and site conditions prior to commencement of any work. The purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and or the fabrication of any components.

Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the architect for clarification.

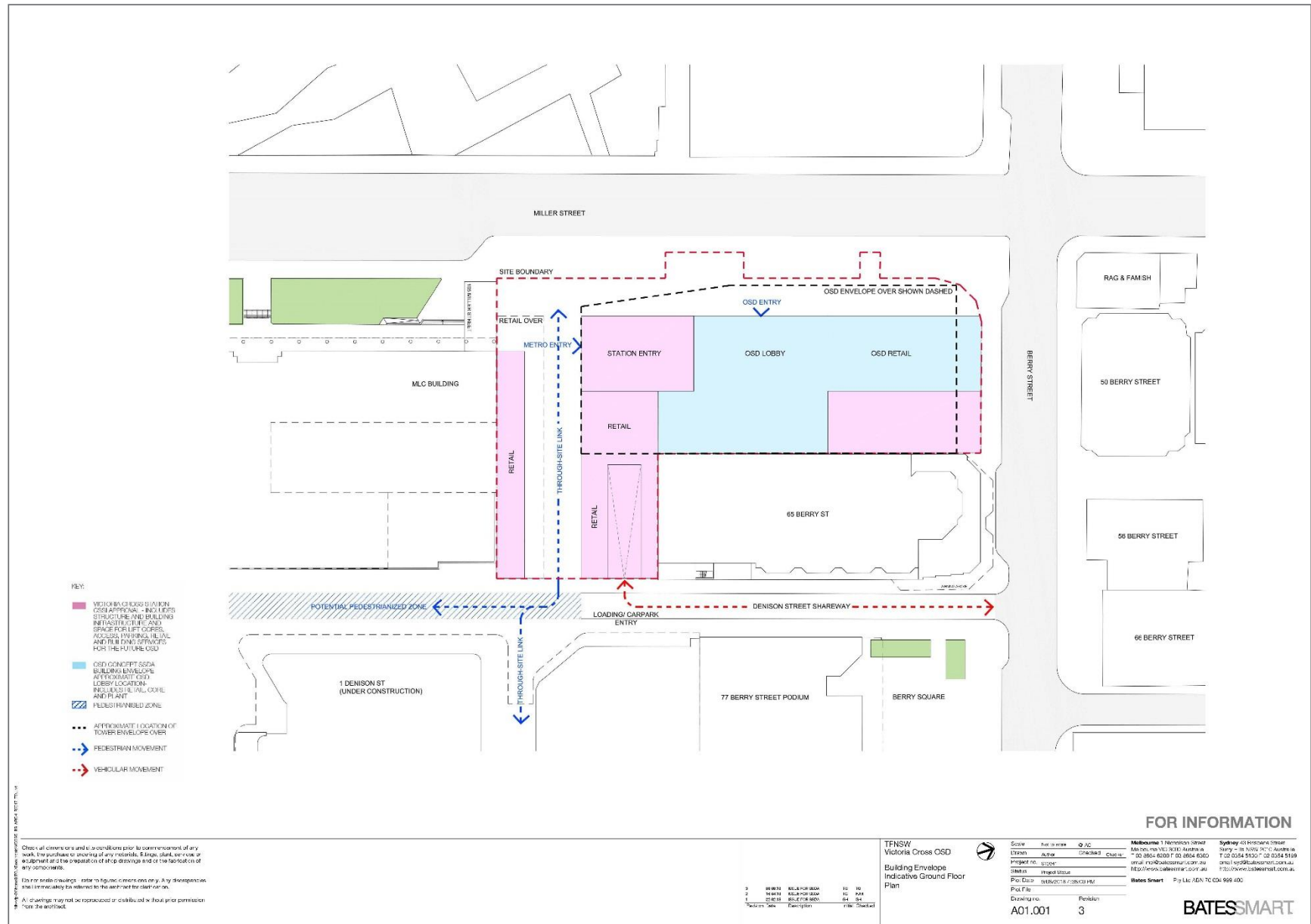
All drawings may not be reproduced or distributed without prior permission from the architect.

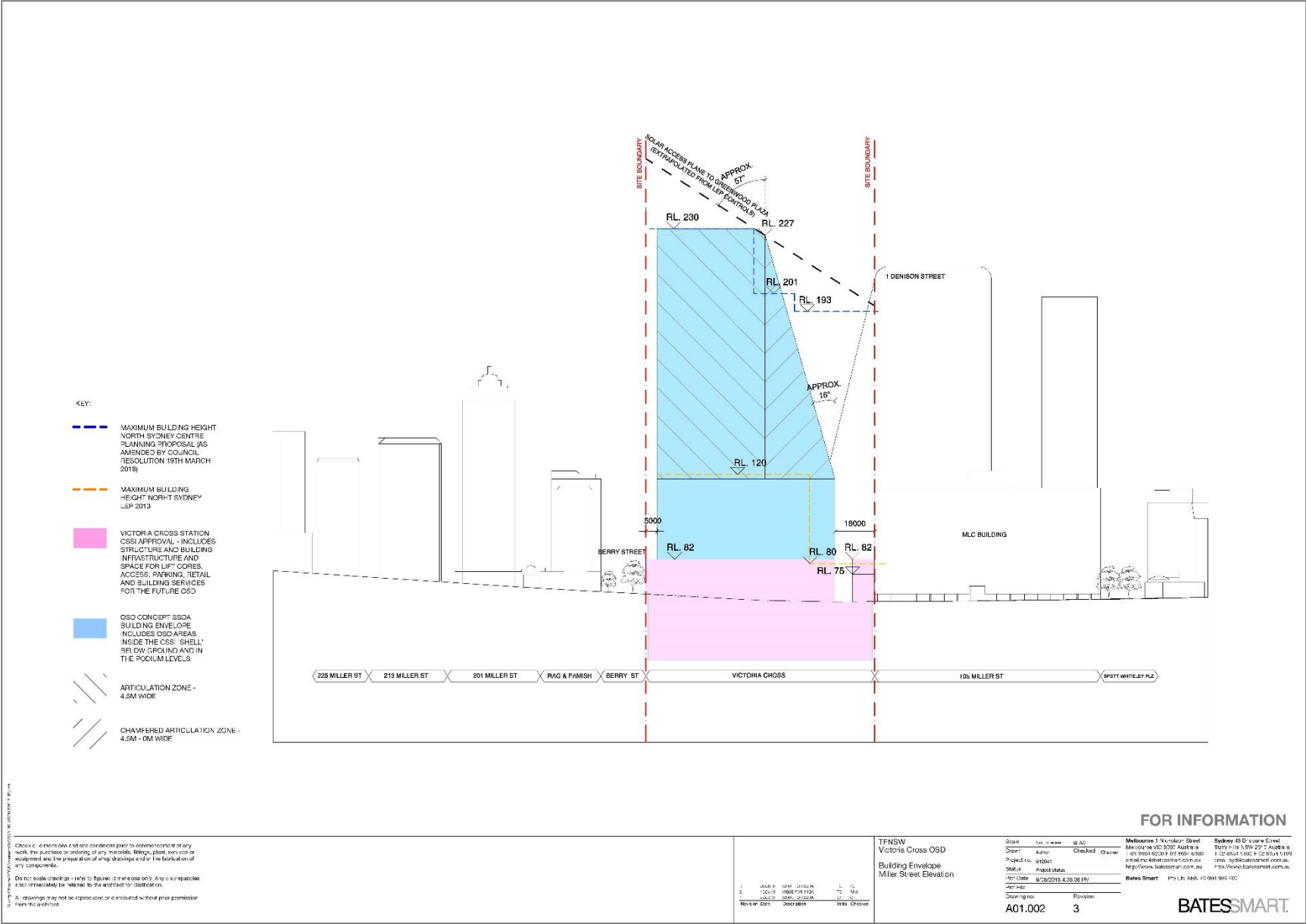
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1	16/04/2018	Issue for design		
2	20/01/18	Issue for design		
Revision	Date	Description	Initial	Checked

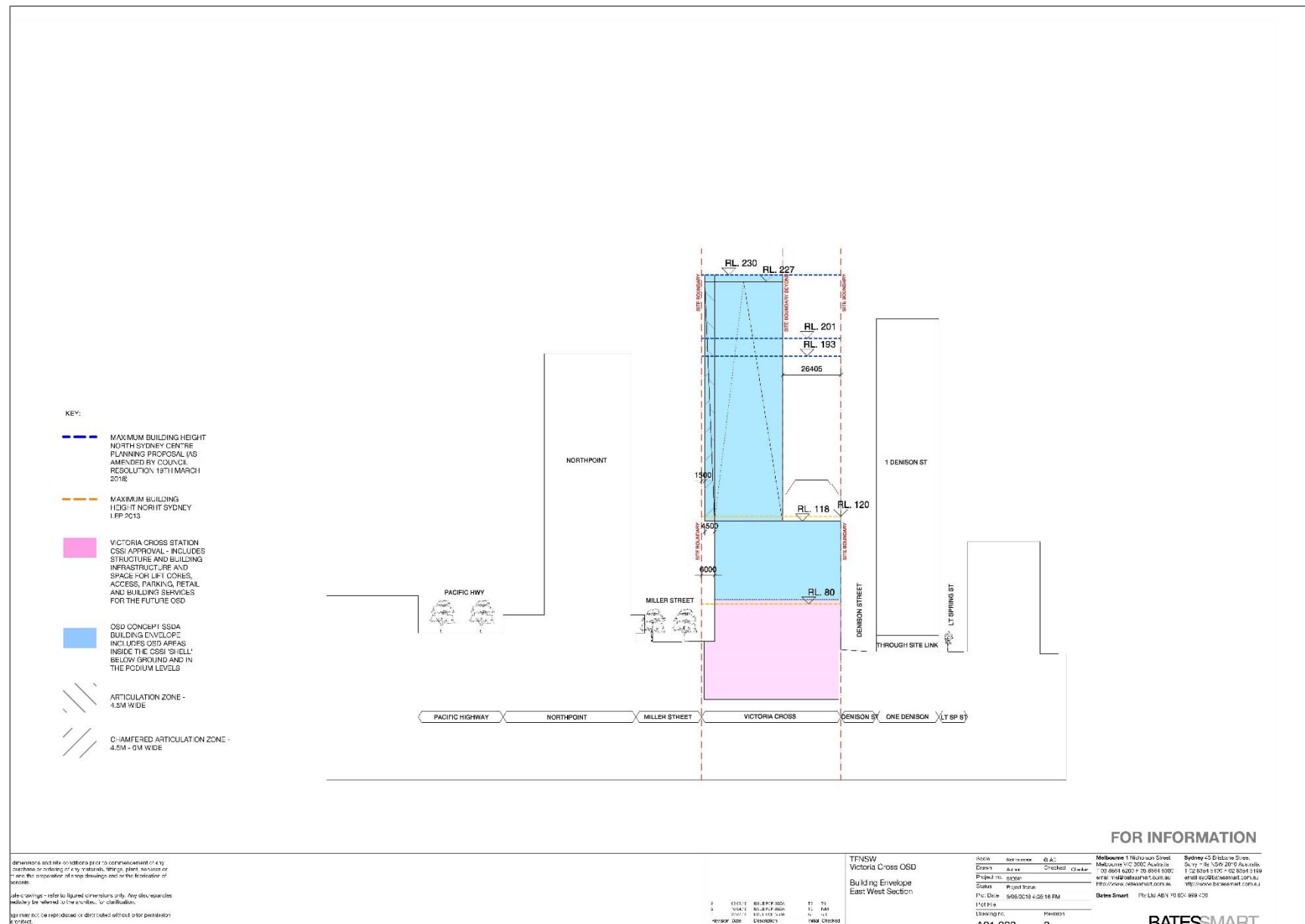
TFNSW  
Victoria Cross OSD  
Cover Page  
Drawing List

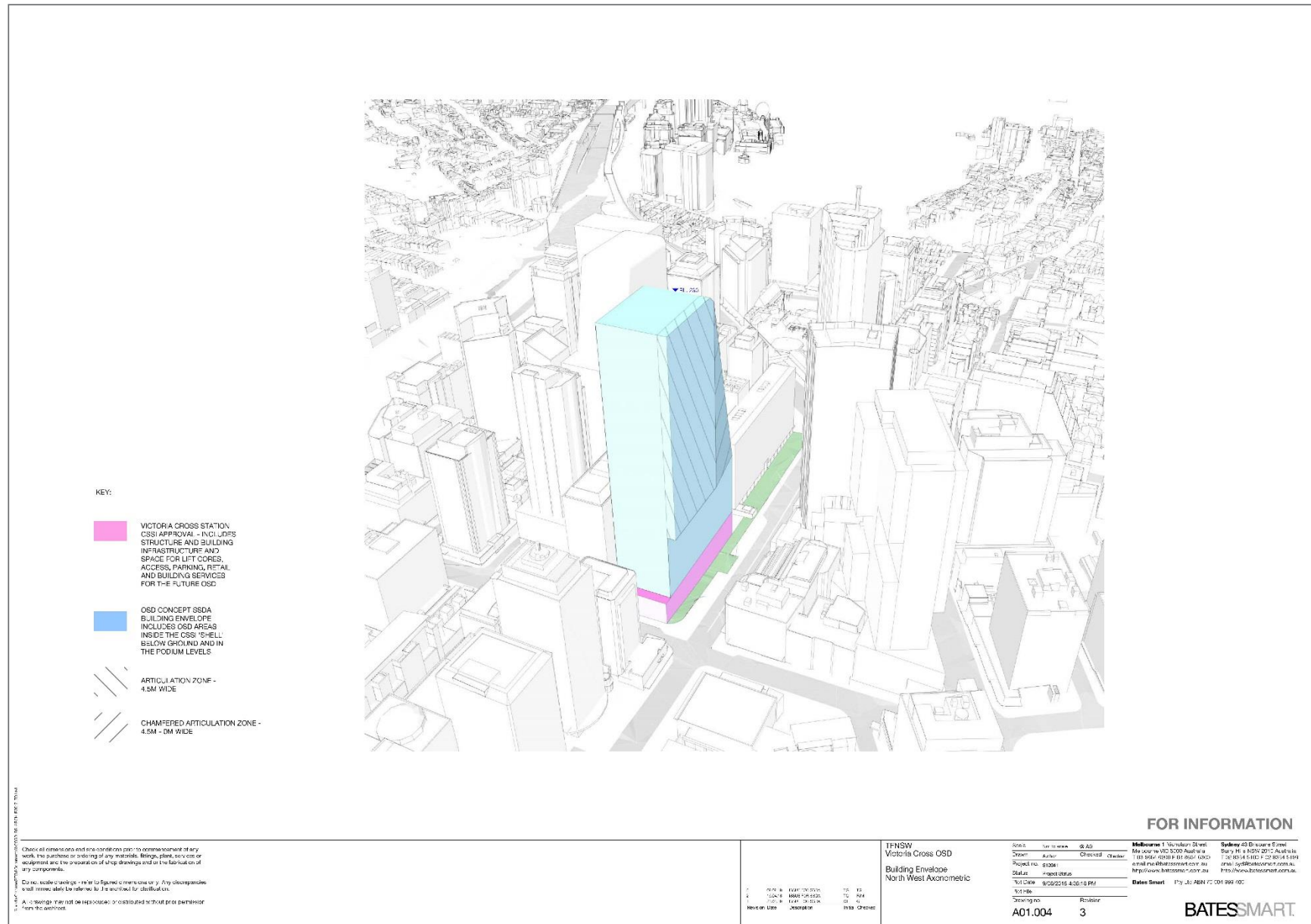
Scale	Not to scale	@ A3	Melbourne 1 Nicholson Street Melbourne VIC 3000 Australia T 03 9554 4300 F 03 9554 4300 email mel@batesmart.com.au	Sydney 43 Brisbane Street Sydney NSW 2010 Australia T 02 9554 4300 F 02 9554 4300 email syd@batesmart.com.au http://www.batesmart.com.au
Drawn	Author	Checked	Checker	
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Sheet	Project Status			
Plot Date	16/04/2018 2:55:17 PM			
Plot File				
Drawing no.	Revision			
A01.000	2			

**BATESSMART**

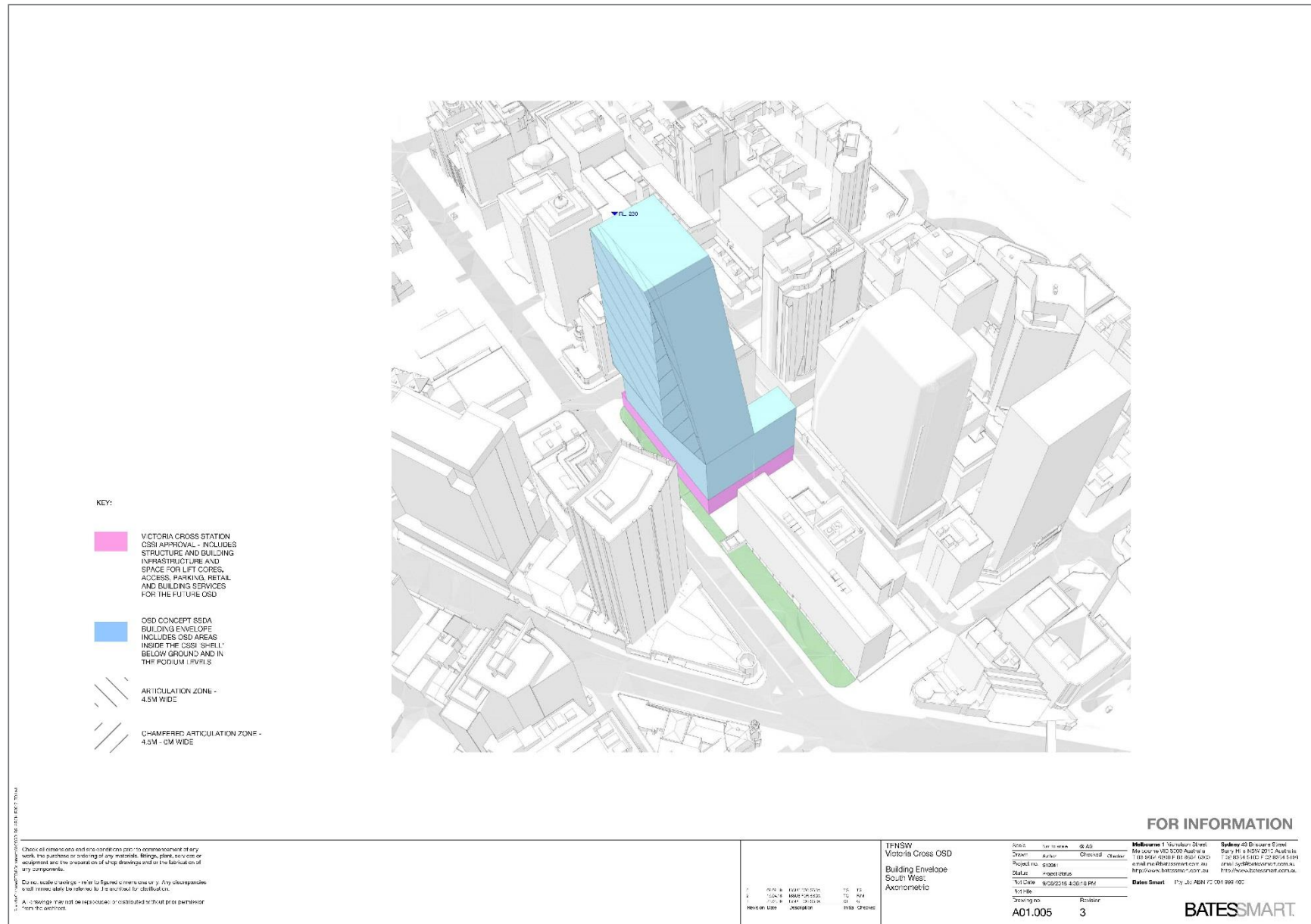












## Appendix B – Camera Lenses for Photomontages

### 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

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.

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