

PHOTOMONTAGE CERTIFICATION

NUMBER: PMC175902
DATE: 04.02.21
PROJECT: The Boat House, Palm Beach NSW

Client Details:
 Blue Pacific Constructions and
 Canvas Architecture

CERTIFICATION FOR :			
DA <input checked="" type="checkbox"/> DA council application	L&E <input type="checkbox"/> All Other Planning Documentation	EXPERT <input type="checkbox"/> Expert Witness Review / Statement	CONSULTANT Primary <input checked="" type="checkbox"/> Other <input type="checkbox"/>
DOCUMENT CONTENTS:			
CERTIFICATE <input checked="" type="checkbox"/> This Page	Statement <input type="checkbox"/> ITEM 2	Process <input checked="" type="checkbox"/> ITEM 3	
DUAL PROCESS PERSPECTIVE:		<input checked="" type="checkbox"/> provides error checking and evaluation	

I hereby certify that the photomontage provided for this proposed design is accurate and in accordance with the following. This certification is applicable only to the architectural photomontage/s produced as listed below.

Version 2 – design changes implemented on design drawings issue JAN 2021 – adjustments to P03 photomontage only – reduction in ancillary building.

CERTIFICATION DETAILS FOR PHOTOMONTAGE		
Project Details	The Boat House, Palm Beach as documented in DA Plans provided by Canvas Architecture, Ref Canvas Architecture - 3D Model Oct Issue 2020 and ammendments issue JAN 2021	
Applicable for Photomontage Numbered	01 +	
Issue	Version 01 (Complete revision from earlier Photomontage work for this project – refer 1300 DENEb DESIGN - 2016) Version 02 – P03 updated from version 1	
Dated	04.02.21	
ACCURACY DETAILS	DATA	TOLERANCE
Existing Building	Survey – CMS Surveyors, REF 17534, 30/4/20 (Revised from original)	+/- 150mm Replication of Survey data. * Limited survey scope outside of site.
Neighbouring Buildings		
Topography and Site		
Proposed Design	Architectural Plans	+/- 150mm
RL critical heights	Architectural Plans & Survey	+/- 50mm
Camera Data – GPS & Laser Survey Position and camera data	GPS Survey Deneb Design	+/- 600mm
Photomatch - Computer mapped camera match using a min. of 5 reference points and camera data.	Reference Points	< 4 due to obstructions
	Perspective Error by computer simulation	NA

SIGNED:



Cameron McFadzean

Certifier:

Cameron McFadzean BA (Architecture) B Architecture, Assessor ABSA, AssocIES

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STATEMENT / PROCESS

ITEM 2. Statement – not required

the comfortable natural zoom of the human eye without excessive focus. ^{1 EYE}

ITEM 3. PHOTOMONTAGE – Process

1. 3D Model:

A combination of various data sources combine to create the 3D Digital model. The accuracy of this 3D model is cross checked against these sources to ensure tolerances as described in the certification (page1). The photomontage uses a digital image and an existing image, where the final accuracy of the photomontage is dependent upon two factors:

- 1.1 Accuracy of the digital image as determined by the accuracy of the 3D model.
- 1.2 Accuracy of the perspective and relative size of the digital image and the existing image.

2. Colour / Materials / Lighting

Colour and material of the proposed design are created to be representative of the specified design materials. Consideration to lighting, time of day, weathering and limitations in computer photo-realism should be assumed in the evaluation of the colour / material properties. The lighting in the photomontage is provided to respect and replicate the lighting during the existing conditions. A IES Daylight system is used to simulate sunlight with limitations arising in the accuracy and strength of the sky vault due to clouds, reflection/refraction. Where lighting has not been simulated to correlate with the existing photo conditions no light data will be provided and a best fit approach undertaken.

3. Perspective:

A Dual Process Perspective solution is provided. A DPP involves the creation of two separate perspectives which use the same core data however derive a solution using separate methods and pathways. Details Follow:
The perspective is determined by measuring the real life camera and plotting this against survey information to enable a virtual computer camera to be positioned in the 3D model. The camera data ensures the same field of view and lens are used. This data driven perspective is then checked by a camera-match software simulation. This simulation provides a camera based upon mapping known points to the existing photo. These two different methods are combined to produce a perspective solution that can be evaluated. The total difference in relative positions of the rendered digital existing structures and the photographed existing structures gives a total tolerance value for the solution.
In situations due to inadequate data or ambiguous results a final solution is determined in the following order. (In these conditions a certified photomontage cannot be produced)

- 3.1 Ensure Relative position is correct – ie width across the photo.
- 3.2 Ensure Relative Height is correct – ie height up the photo.
- 3.3 Adjust perspective to ensure depth of field of image is correct.

4. Photomontage:

The proposed design is composited into the existing photo to ensure foreground and background elements are correctly show using masking. Elements are added to increase realism such as landscape and people. These are only indicative and typically landscape and foreground foliage is reduced in order to capture the proposed design in clarity. Some omissions of the proposed design may occur for clarity of presentation and these are noted.

5. Limitations:

The photomontage is an artistic representation of the proposed design and has been produced with a number of checks and evaluative measures to ensure accurate presentation. Due to the complex nature of this presentation and the various sources of data, our certification does not include the absence of human error in data collection / translation or in the interpretation of design elements with insufficient detailing. As such the photomontage should be considered an artistic representation for indicative evaluation only, with reference to scaled architectural drawings and survey information considered in precedence.

6. View Analysis:

A view analysis study is a form of photomontage and is subject to the same processes, limitations and levels of accuracy.

7. Accuracy:

A typical photomontage will provide photo-realistic comparative views sufficient for evaluation of the proposed design in the context of streetscape, site placement, view implication, and design evaluation. A tolerance of a few percent in most cases represents a negligible and insignificant impact on the assessment of the photomontage. A certified photomontage captures the error variables and produces a report for the appreciation of the accuracy and limitation of the photomontage. Any further limitations to the accuracy and validity of the photomontage including landscape removal and foreground/background adjustments are listed on the relevant photomontage page under "notes".

^{1 EYE} It should be noted that the human eye is able to simultaneously scan , zoom and adjust dynamic range, and as such a photograph is only representing one frame of that scan process. FOV , Natural magnification zoom and exposure of the human eye are all static approximations, with no one absolute value considered to best represent the human eye.