

20 June 2018

CPP Project 9020

Thelem Consulting Pty Ltd
Suite 3, Level 2, Plaza Building Australia Square
95 Pitt Street
Sydney NSW 2000

Attn: Mr Marc Yeo
Project: Cockle Bay

Dear Mr Yeo,

Please find herein an assessment regarding the applicability of the wind tunnel test results for the Cockle Bay Park Development for the currently proposed envelope.

A wind tunnel test has been conducted for the development on a previous architectural design, based on drawings provided in July 2017. The results are reported in Cermak Peterka Petersen (2017).

Comparative images of the tested design and the currently proposed envelope are presented in Figure 1. The main changes between the amended EIS (2017) envelope and the currently proposed envelope are a shift of the building location within the concept envelope to the south, a reduction in the height of the tower, and an increase in the tower width. The northern façade is moved south by 8 m while the southern façade is moved by 15 m, and the height is reduced by 12 m. The currently proposed envelope also foresees minor changes to the podium.

The change in the building massing would slightly change the wind conditions locally in some areas of the precinct. The total amount of downwash generated by the facades of the tower would be expected to remain similar to the tested design as reported in Cermak Peterka Petersen (2017). The wider west façade of the tower would be expected to cause a slight increase in downwash flows affecting ground level, while the reduction of the tower height would likely reduce downwash relative to the previous design. Note that although the envelope has increased in width, any building within the envelope would be limited to 60 m in width, which is consistent with that assessed in the 2017 assessment.

Overall, the wind conditions at ground level would be expected to remain similar to the conditions measured in the previous wind tunnel test. The changes to the building massing would be expected to mainly affect areas on the podium, which are subject to further design for the Stage 2 SSDA and as such will be refined during the design excellence process

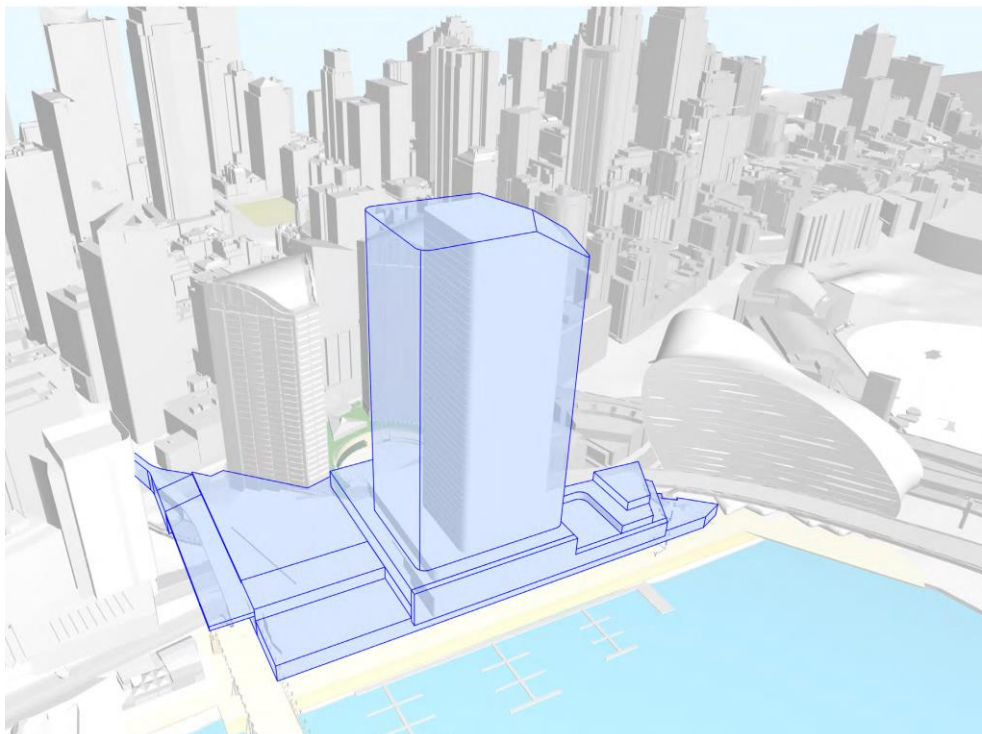
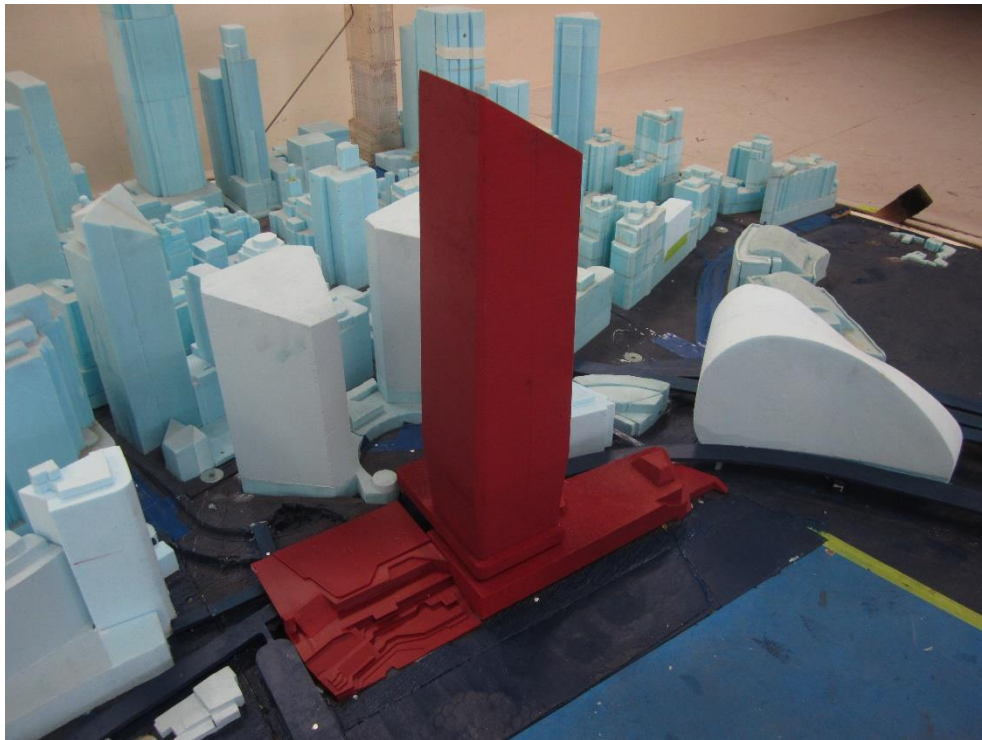


Figure 1: Wind tunnel model of the previous design (T), and currently proposed envelope (B) of the Cockle Bay Park Development viewed from the north-west.



Please do not hesitate to contact me if you have any questions regarding any aspect of this letter.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'J. Paetzold', is written over a faint, larger signature.

Joe Paetzold
Engineering Manager

cc: Andrew Nguyen, Project Engineer

REFERENCES

CPP (2017), Pedestrian Wind Environment Wind Tunnel Assessment for Cockle Bay Park Development, CPP9020_Cockle Bay_REP_PW_R02, 22nd September 2017.