

4 October 2010

Thakral Holdings Limited
Level 12
301 George Street
SYDNEY NSW 2000

Attention Mr D Hogendijk

Dear Sir,

**CITY ONE, Sydney
Environmental Wind Assessment**

With reference to your email of 27 September, 2010, and attached drawings of revised proposals defining the possible envelope for the CITY ONE Development, we can advise with respect to associated environmental wind conditions as follows:

1. Wind climate and shielding

The strongest winds in the Sydney CBD region come from the west and south-east sectors with secondary strong winds, with respect to environmental wind conditions, coming from the north-east sea breeze. The CITY ONE would be quite well shielded for all wind directions to approximately two thirds the envelope height. Above that there would be some exposure to the west but the shielding to the south, east and north generally, from many city buildings, extends to full height.

2. West side

The west side could potentially be a flat face over Carrington Street. However, the shielding buildings to the west are on the escarpment and would provide effective shielding to about 2/3 the height of the highest possible height of CITY ONE. This would be sufficient to ensure that the amount of wind flow induced downwards into Carrington Street would be relatively small, and would not cause wind conditions in the adjacent streetscapes to exceed the criterion for walking comfort.

3. North, east and south sides

These three sides would have little exposure to direct wind flow and as such little wind flow would be induced downwards. There are also roofs of buildings on both the north and south sides to deflect any flows induced down the north and south sides above street level.

The location and envelope height of the proposed CITY ONE Development is favourable with respect to environmental wind flows and would not cause any significant amount of additional wind flow to be induced to ground level. Consequently wind conditions in surrounding streetscapes would be maintained within the criterion for walking comfort. During design development a full environmental wind tunnel model study, using the proposed building shape, would be recommended to check wind flows in adjacent streets, Wynyard Park and Station entries. To realise significant cost savings, due to shielding effects, wind tunnel model tests would also be required to measure structural wind loads and wind pressures on the facades. The structural load measurements may show that seismic loading would control design over wind loading.

Yours faithfully,



W. H. Melbourne
MEL Consultants Pty Ltd