

8 June 2016

CPP Project 8253

Lend Lease

30 The Bond, 30 Hickson Rd

Millers Point

NSW 2000

Attn: Ms. Jessica Paterson

Project: DHL SE Podium and Boulevard

Dear Ms. Paterson,

In response to the Department of Planning and Environment's letter dated 11/5/16 regarding *mitigation measures to improve the wind environment at podium level and at Boulevard ground floor level* please find herein a brief review of the expected wind conditions at the South East Plot Podium and Boulevard and the proposed mitigation measures.

Podium

Wind tunnel test results reported in 'CPP8253_Darling Harbour Live Reduced Scheme_REP_PW_R01' showed wind conditions at podium level generally classified for pedestrian walking activities, under the Lawson comfort criteria; with most locations passing the Lawson distress criteria.

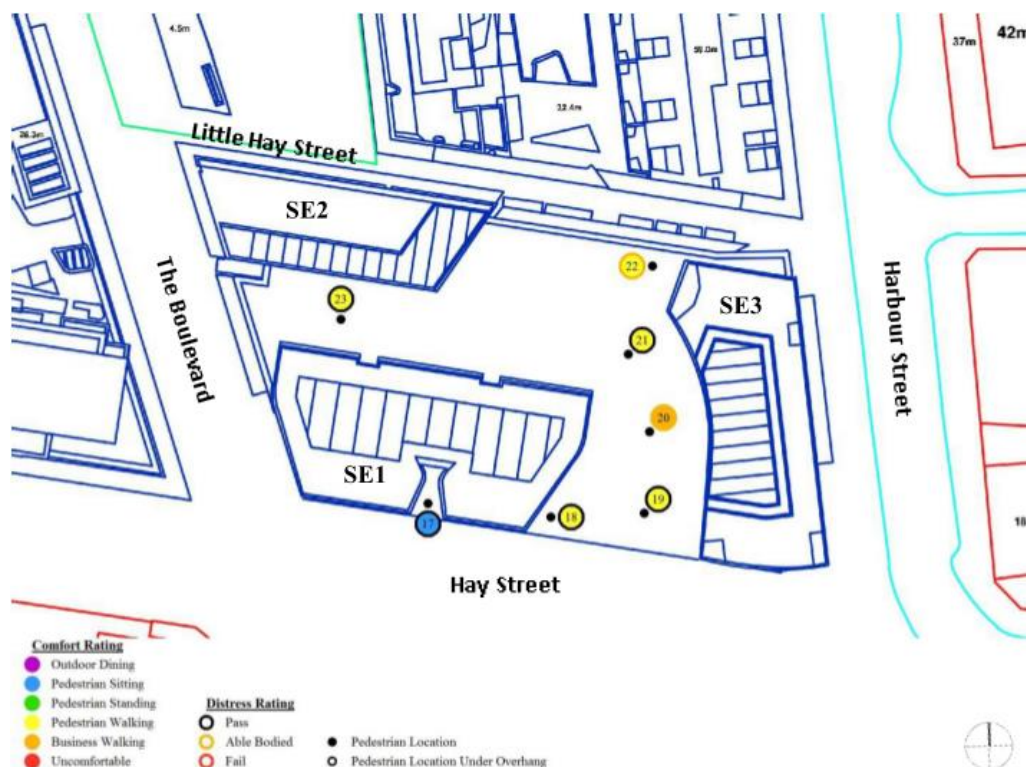


Figure 1: Pedestrian wind speed measurement locations with comfort/distress ratings

Podium

It is understood that Lend Lease together with Turf Studio are proposing the following mitigation measures (Figure 2) to the podium that were not included in the original modelling. This includes:

- the addition of a shade structure next to the pool and bbq area (Figure 3 + A on Figure 2)
- to increase the north pool fence height to 1.8m (Figure 4 + B on Figure 2)
- the addition of a screen to the planter between the SE1 and SE3 towers (Figure 5 + C on Figure 2)
- perimeter fencing, 1.8 m high, on the south and west ends of the podium (Figure 6 + D on Figure 2)

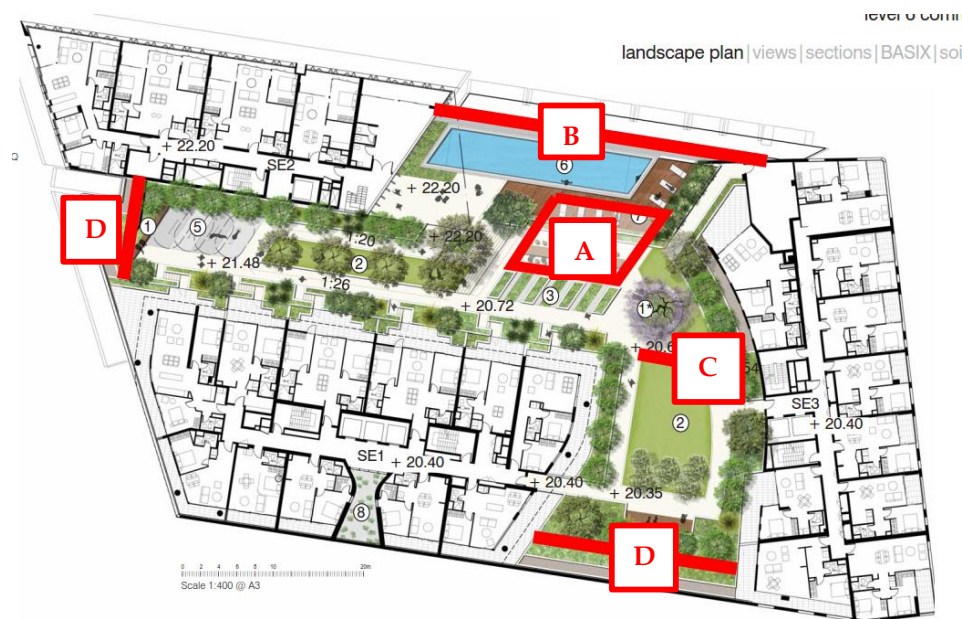


Figure 2: Proposed mitigation measures in red (turf,2016)



Figure 3: Proposed pool shade structure (turf,2016)

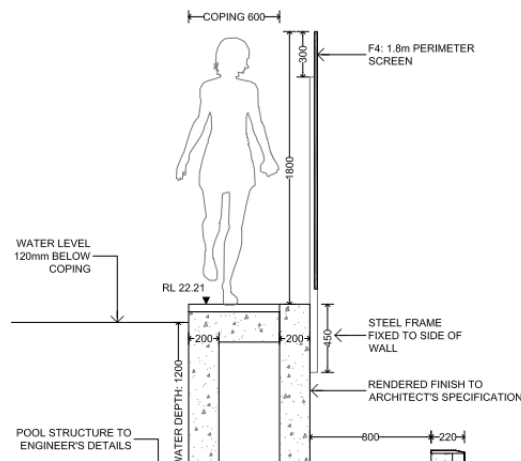


Figure 4: Proposed 1.8m screen to northern pool edge (turf, 2016)

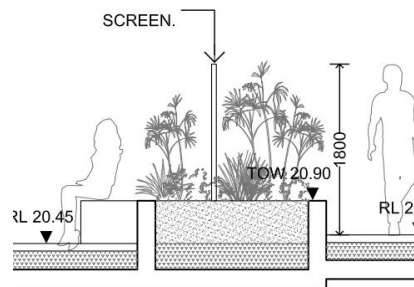


Figure 5: Proposed 1.8m screen to planter between SE1 and SE3 towers (turf, 2016)

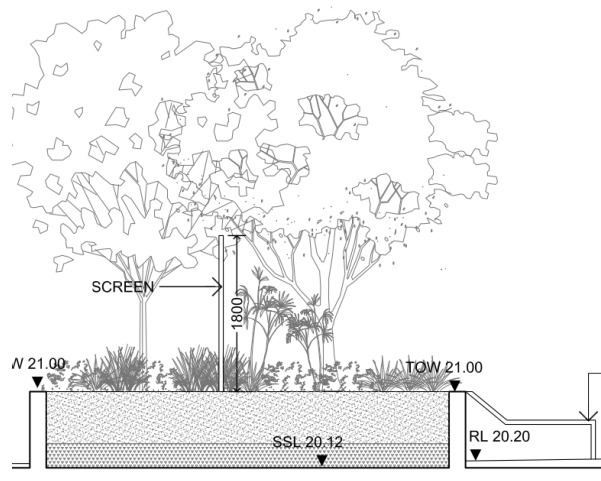


Figure 6: Proposed perimeter fencing to south and west end of podium (turf, 2016)

These measures, along with the proposed landscaping, are expected to help improve wind conditions on the podium and to provide protection from horizontal channelling winds.

Boulevard

Wind tunnel test results reported in 'CPP8253_Darling Harbour Live Reduced Scheme_REP_PW_R01' showed wind conditions along the Boulevard were found to be suitable for pedestrian standing and walking activities, with all locations passing the Lawson distress criteria, Figure 17.



Figure 7: Pedestrian wind speed measurement locations with comfort/distress ratings
Boulevard

Wind conditions on the Boulevard are relatively high due to the influence of the overall precinct building massing on channelling wind flows, especially on the south-west corner of the SE1 tower. Awnings have already been provided to the western boulevard edge in an attempt to mitigate adverse wind conditions (Figure 8 & 9).

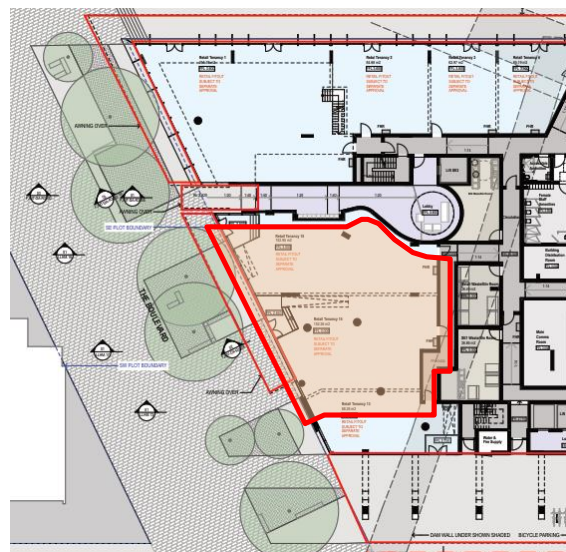


Figure 8: Awnings / colonnade in red outline



Figure 9: Awnings / colonnade

The awnings that have been provided to the western edge of the building will be primarily used for pedestrians walking and standing past the retail tenancies in this location. It is not intended that there will be retail seating directly outside on the Boulevard for these retail tenancies, as highlighted in orange in Figure 8. The tenancy on the south-western corner has been designed to have retail seating to the south, under the colonnade which provides adequate protection.

In conclusion CPP have been (and continue) to work closely with Lendlease to further mitigate wind conditions on the podium and boulevard. Further wind-tunnel testing would be required to quantify the proposed podium amelioration measures and qualitative advice in this letter.

I trust this is of assistance, please do not hesitate to contact me if you have any questions regarding any aspect of this report.

Yours sincerely,

Matt Glanville
Director

cc: Michelle Noguez Ceron, CPP