8 October 2019 CPP Project 11743

Frasers Property Ivanhoe
c/o Frasers Property Australia Pty Ltd
1 Homebush Bay Drive
Rhodes, NSW, 2138
Australia

Attn: Chris Koukoutaris
Project: Ivanhoe Estate Masterplan

Dear Mr. Koukoutaris,

Please find herein an addendum to the previously issued qualitative wind assessment report for the Ivanhoe Estate Masterplan (CPP, 2018). It is understood that the masterplan has been changed since the previous report. The impact of the proposed changes on the local wind environment from a wind engineering perspective is discussed in this letter. Both masterplans are shown in Figure 1, with building height increases highlighted in red. The changes are as follows:

1. Increase setback from the ecological area for buildings A3, D1, D2 & D3.
2. Increased heights on the following buildings:
    a. Building A3, 14 levels to 24 levels
    b. Building D1 (right hand side building), 14 levels to 16 levels
    c. Building C3 14 levels to 16 levels
    d. Building C4, 14 levels to 17
3. Reduced building footprint for building B1.1.
4. Replacement of the slip lane from Epping Road with landscaping and public accessway.

As noted in the previous report, the two prevailing wind directions were identified as west and south-east for the proposed development site. Based on the listed modifications to the masterplan, no notable changes to the local wind environment are expected for winds from the south-east, and the assessment and recommendation for wind mitigation as discussed in the previous report remain valid.

Primarily, the height increases for buildings along Epping Road are expected to increase the level of downwash experienced at ground level. As previously recommended, the inclusion of setbacks or awnings are advised to minimise the impact of the downwash on the ground level wind conditions within the site.

Figure 1 - Current Ivanhoe Estate masterplan (top), previous masterplan (bottom)

On the other hand, the conditions along Epping Road are expected to improve relative to the previous masterplan layout, with the increased setback containing the accelerated flow within the site boundary. Moreover, the modified shape of the west façade of building A3 would be expected to encourage the wind flow around the northern perimeter of the site rather than into the precinct.

The increased setback from the ecological area is expected to provide some additional shielding from the channelling winds highlighted in the submitted report. Furthermore, the replacement of the slip road from Epping Road with additional landscaping and public accessway will provide some protection from channelling flows between D3 and D4. Nonetheless, any areas along the roads or accessway intended for stationary use would require further mitigation strategies, such as local screening, to improve conditions. The minor changes in height for the remaining buildings are not expected to have a notable effect on the local wind conditions.

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

Yours sincerely,

Parsa Enshaei
Project Engineer

cc: Joe Paetzold, Engineering Manager

REFERENCES

CPP (2018), "Wind Assessment for Ivanhoe Estate", CPP Project 11743, September 2018.