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Ref: CPP Project 18496

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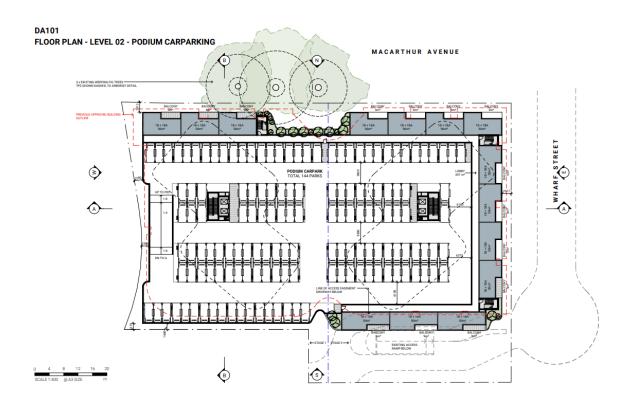
## Portside Build to Rent wind assessment following proposed changes

CPP have previously completed a qualitative assessment for the Portside Build to Rent development in Hamilton, Brisbane [1]. This letter addresses the applicability of these results following proposed changes to the development outlined in the set of drawings received by CPP on 25<sup>th</sup> July 2025, shown in Figure 1.

The qualitative assessment from 2023 [1] found that on average, for the majority of locations in the vicinity of the development, the pedestrian-level wind environment is expected to remain similar to existing conditions. The 2025 proposed changes to the development are not expected to significantly alter this assessment. Changing the south-west corner of the podium from a rounded corner to a sharp, square corner may cause a small, localised increase in the peak wind speed. However, in Brisbane, the south-easterly winds which would contribute to this effect are less prevalent than those from the north-east or south-west. Additionally, this area does not appear to be intended for long-term stationary activities and should therefore remain suitable for its intended purpose.

The proposed design changes, Figure 2, remove the external doors which were previously present in the crosswalk link area on the ground level (underneath the podium) and also introduce openings on the east and west side of the ground level. These changes are expected to cause increased wind speeds for the northern portion of the arcade during prevailing winds from the north to north-east due to pressure-driven flow. As this area may be used for outdoor dining (depending on the tenants), mitigation measures would be recommended. For winds from the north to north-east, positive pressures on the north side of the development would effectively be connected by these openings to negative pressures on the south, and particularly the east and west side of the development. While not as prevalent as south-westerly winds, winds from the north-north-east occur regularly in Brisbane. Higher wind speeds are relatively frequent from this direction, along with the west.





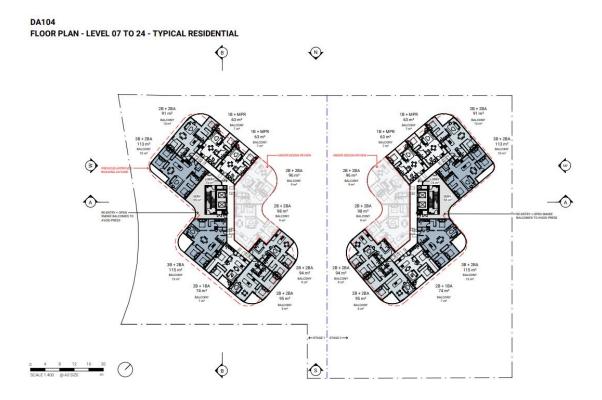


Figure 1: Proposed changes to the development (5-point Projects, 2025)





Figure 2: Proposed ground-level floor plan (5-point Projects, 2025)

This wind-induced pressure distribution around the building, combined with the chamfered north corridor is likely to generate a strong breeze through the north opening which is then channelled out through the east and west openings. Wind conditions in this area are expected be consistent with a Pedestrian Walking comfort rating based on the Lawson wind comfort criteria. For longer-term stationary activities, a milder rating (Pedestrian Sitting or Outdoor Dining) would generally be preferable. However, for warmer climates, it can sometimes be desirable to have higher wind speeds to provide relief from the heat. For Brisbane specifically, north to north-easterly winds which drive the increased wind speeds are more prevalent during the summer months than winter. While this may assist with the comfort level experienced by pedestrians to an extent, mitigation measures would still be recommended for longer term stationary activities. These can be achieved by positioning outdoor dining areas to the north of the retail spaces, where milder wind conditions would be available, away from the northern opening. The rest of the ground level area, which encompasses the majority of the space, appears to be dedicated to transit. The wind conditions in this area are generally expected to be suitable for the intended purpose of this space.

The proposed changes result in podium balconies which are inset from the podium façade. This is a positive design feature and will reduce the exposure of these balconies to windy conditions.

The proposed changes appear to remove the residence lounge connecting the two towers on the podium rooftop including the awnings extending from the lounge to the north along both buildings. This will increase the susceptibility of parts of the podium between the two towers to flow channelling between the two towers, leading to increased wind speeds for this location. An updated landscaping plan received by CPP (04 August 2025) indicates that much of the



podium terrace between the buildings is dedicated to pedestrian transit and landscaping. Additional dense landscaping is also planned for the southern portion of the terrace which will assist in limiting the effects of flow channelling between the buildings. The resulting conditions are expected to be consistent with the intended use of these areas for walking and other non-stationary activities. Wind conditions in the remaining areas such as the meditation lawn and dog lawn can be managed using localised mitigation measures such as vertical screens, dense landscaping or raised planters, which 5Point indicates are planned for the podium.

The proposed changes to the planform of the towers are minor and the tower balcony positions and sizing remain similar to the original design. Therefore, the original qualitative assessment is applicable for these locations.

5Point has communicated that plantings are planned for the roof terrace along with raised pools for the south portion of the terraces. Additionally, tall (1.8 m) balustrades are planned for the edges of the terrace adjacent to the pool. The latter in particular is a positive design feature which will allow for mild wind conditions within the central recreational areas. While the raised pool areas maintain some exposure to wind from the southern quadrant, given the intended design and use of the pool, access to these areas are expected to be limited during windy conditions.

Overall, the proposed changes to the design of the development will have negligible effect on the applicability of CPP's original qualitative assessment with respect to the site surroundings and tower balconies. However, stronger wind conditions as a result of the changes are expected for the ground-level pedestrian areas underneath the podium, as well as the podium terrace between the towers. Conditions at the latter location are generally expected to remain consistent with the intended use of the space. This also applies to the ground-level areas, provided outdoor dining locations (if present) are suitably selected.

Please contact the undersigned should you have any questions regarding the above.

Yours Sincerely

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CC:

Jordan Black Project Engineer

Joe Paetzold, PhD Engineering Manager

## References:

[1] Cermak Peterka Petersen (2023) Qualitative Wind Assessment for Portside Build to Rent, CPP Project 18496, Revision 01, dated 25<sup>th</sup> July 2023.