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Frasers Property Australia

Level 2, 1C Homebush Bay Drive
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Attn: Angela Wang

Subject: Eastern Creek Retail Outlet Centre (ECQ Stage 3) SSD 10457; Response to Blacktown City Council submission 3 September 2021 with regard to flooding.

Dear Angela,

We have reviewed the recommended conditions of consent provided by Blacktown City Council (BCC) on 3 September 2021 related to the State Significant Development (SSD) application 10457 for the Eastern Creek Quarter (ECQ) Stage 3 development at Eastern Creek Business Hub, with a focus on any flood and flood evacuation related conditions.

The Department of Planning, Industry and Environment has requested a response to the BCC submission in their letter 23 September 2021 with regard to the following:

- Council's advice and recommendations for revised flood modelling and a revised flood evacuation strategy.
- Detail flood mitigation measures to protect the proposed basement car park from flood hazard and water ingress.
- Confirm if the existing bridge over Lot 1 drainage channel is rated for a PMF flood event.

Council's proposed conditions of consent with regard to flooding have been addressed in the *Eastern Creek Quarter Stage 3 Flood Assessment* which was prepared by J. Wyndham Prince in December 2020 (JWP, Dec. 2020) to support the concept design phase of the project. This comprehensive flood report describes the existing and developed conditions flood behaviour and hazard at the site and surrounding areas for the 5%, 1% AEP and Probable Maximum Flood Events. The report considers the flood hazard on and external to the site and provides details of the flood evacuation strategy. The report will be further refined as part of the detailed design phase to address Council recommendations.

It is important to note that at the time of the concept design phase flood assessment (JWP, Dec. 2020), the Church Street or ECQ Stage 3 carpark drainage information was not available. Therefore, stormwater runoff from the upper-level carpark travelled overland via the access ramp into the basement carpark. The inclusion of the Church Street drainage information in the flood model will likely reduce the PMF flood hazard and support the consideration of alternate flood evacuation routes to the north of the site, and the carpark drainage information will reduce the amount of overland flow entering the basement in larger storm events.

The concept phase Stage 3 flood assessment (JWP, Dec. 2020) indicates that the open sided (east) nature of the ECQ Stage 3 basement carpark supports a safe H1 flood hazard category in the PMF event, and provided that the flow is safely managed down the access ramp, water ingress in an extreme event such as the PMF can be catered for. Potential mitigation measures as part of the detailed design that will be considered are:

- Inclusion of the Stage 3 carpark stormwater drainage network and confirming that any resultant overland flow down the basement ramp is within a safe flood hazard category for pedestrians and vehicles in all storm events up to the PMF;
- Ensuring that the eastern side of the basement carpark remains open to allow any floodwater to escape safely and confirming that the flood hazard category in the basement carpark is still safe for pedestrians and vehicles in the PMF event.

The structural adequacy of the existing pedestrian bridge over the Lot 1 drainage channel will also be investigated as part of the detail design process. If it is found to be unsuitable, potential solutions include:

- Inclusion of the piped Church Street drainage system and confirming the viability of safe flood evacuation routes to the north of the site in accordance with Council's recommendations.
- Consideration of shelter on site within the buildings, which is also supported by Council recommendations.

The proposed flood and flood evacuation conditions of consent are appropriate and can be adequately addressed as part of the detailed design phase of the project.

If you have any further queries, please do not hesitate to contact us.

Yours faithfully

FRANCIS LANE

Senior Water Resources Engineer