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Job No: 190372 **9th March 2021**

Dear Sir/Madam;

RE: RESPONSE TO SUBMISSIONS TO SSD-10468

Inner West Council

Comment	Response
Flooding The Flood Management Report has determined that the 1 in 100-year flood level applicable to the site is 4.81m AHD. As the flood depths post development are below/ less than 300mm in accordance with Council's Flood Management DCP Cl. 2.22.5, 300mm of freeboard is required. Therefore, the plans should be amended to increase the minimum floor levels of the proposed development to 5.11m AHD;	Flood study has been updated to incorporate the culvert diversion requested by Sydney Water. Refer Section 8 of updated flood report for details regarding compliance with 300mm freeboard.
The improvement post development in flood depths is achieved by collecting the flood waters by large pit inlets and diverting them to an underground flood detention of 1200m3 volume equal to the existing site's above ground 1% AEP flood storage. No information has been provided on the design of these inlet structures or if any blockage factors have been applied to the modelling. It is Council's experience that "grate only" inlet structures block readily and do not achieve their design capacity. The inlet structures should incorporate kerb inlet, or "letter box" type inlet structures that are less prone to blockage with best practice blockage factors applied. Details of an overland flow path should also be provided in case of failure of the system.	Refer updated flood study. Inlet pit is a standard kerb inlet pit with a 2.4m lintel to reduce the impact of debris blockage. 100% blockage factor modelled for the site outlet as a proxy to blockage of the inlet pits. Refer updated flood study.

Comment	Response
To better understand the potential consequence of failure, and to better inform the amount of blockage factors to apply, and verify the acceptance of a reduced freeboard (of 300mm) the Flood Management Report should also include a post development flood scenario (change in flood depth map) with total blockage of the inlet structures.	Refer updated flood study for 100% site outlet blockage scenario modelling. Refer Fig 33 and Fig 43 in flood study for blockage scenario results.
A post development PMF change in flood depth map should also be provided as adjacent redevelopment sites (for example Marrickville Metro) have produced Flood Emergency Response Plans based on existing PMF levels and an assessment needs to be made if the change in PMF levels post development is of any consequence.	Refer updated flood study for PMF change in flood levels. Refer Fig 44 and Fig 45 in the flood study for PMF change in flood depths.
Stormwater A Council Stormwater pipe drains through the site to the existing Sydney Water Channel. This pipe has not been detailed on any of the submitted plans and it appears that it will be built over which is not acceptable and contrary to Councils DCP 2.25 (Control C31). Council's stormwater asset shall not be built out but be suitably relocated away from the proposed building;	Refer updated civil drawings. It is proposed to terminate the council owned stormwater pipe at the location of the realigned culvert and discharge into the culvert.
Similarly, Sydney Water's stormwater infrastructure is also proposed to be built over, contrary to their guidelines. The stormwater plans even detail columns within the location of the stormwater channel. It is recommended that the applicant approach Sydney Water regarding their requirements with regard to the stormwater Channel.	Sydney water requested that the culvert be realigned to the site boundary. Refer updated civil drawing C20 for the realigned culvert location.

Environment, Energy and Science Group

Comment	Response
Flooding The development site has flood affectation under baseline conditions under a 50% AEP Event. The modelling results from the flood management plan report (Appendix W of the Environment Impact Statement (EIS)) have been compared with the Council's flood study and floodplain risk management study and plan. The assessment is found to be satisfactory since the models of the previous studies have been adopted as the base models for the flood management plan report. The evacuation plan proposed in the Marrickville Valley Floodplain Risk Management Study and Plan would be suitable for the development site as indicated in the flood management plan report (Appendix W of the EIS). The proponent will need to prepare a comprehensive emergency response management plan for the development site in consultation with the NSW SES and Council to protect workers and visitors at the site from being exposed to flooding hazards during major and rarer flood events. Please note from 1 July 2020 Aboriginal cultural heritage regulation, including advice regarding SSIs and SSDs, is now managed Heritage NSW. The new contact for the ACH regulation team is heritagemailbox@environment.nsw.gov.au.	Richmond and Ross contacted NSW state emergency services to discuss the flood study and the proposed evacuation strategy. Refer Appendix D for response letter from NSW SES. Discussions were held with Inner West council during the planning stage. Responses to Inner West Council's comments have been provided in the updated flood study.