

2021-10-22

NSW Department of Education  
C/o- Tarini Pathak  
Project Manager  
Turner & Townsend  
One Warf Lane, Level 19, 171 Sussex St  
Sydney NSW 2000

Dear Tarini

### **North Sydney Public School SSDA Submission – Response to Edward Precinct Objections Stormwater and Drainage/Flooding**

As the Civil and Structural Engineering team on the North Sydney Public school we provide the following responses to the concerns raised during the SSDA consultation process.

The Edward Precinct identified the following within their objections:

*“The Precinct Committee is aware that flooding has occurred in the area where the new buildings are proposed to be located. Substantial overtopping to the sandstone wall has also occurred. The overland flow path referred to in the EIS should be examined for a flood event of this nature.”*

## **1 Aurecon Response to SSDA Objection**

### **1.1 Historic Flooding in Area of Proposed New Buildings.**

Currently, there is no detention for the area highlighted in red (refer to Figure 1 below) which can result in an uncontrolled stormwater discharge into the stormwater network or flood public spaces.

**Figure 1 – Site Plan**



As part of the new building works, we have included detention to control the discharge to meet Council requirements as noted in the Stormwater Management Plan;

*"North Sydney Council has informed Aurecon that maximum discharge from an on-site detention (OSD) tank must not exceed the peak discharge that occurs during a 1 in 5-year storm event under existing conditions. The OSD must also retain stormwater runoff for all storm events up to a 1 in 100-year storm and facilitate the slow release into the external drainage network."*

Council's requirements have been achieved, and the modelling is noted in the Storm Water Management Plan.

### **1.2 Overtopping of the sandstone wall**

There is an overland flow path through the school (refer to area clouded in yellow in Figure 1) which would be considered nuisance flow and may result in the anecdotal overtopping of the sandstone wall. North Sydney council requires the project to address overland flows directly impacted by this project; the area of nuisance flow is not impacted by this development.

### **1.3 Review of overland flow path for large storm event**

The Stormwater in this project has considered a 1 in 100-year storm event. Overland flow paths have been considered and will occur post a 1 in 100-year storm when the capacity of the internal network is full.

Yours faithfully



Siobhan Tapia-Smith  
Principal, Built Environment