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Thursday, 7 December 2017

The RtS identifies that the proposed flood planning protection measures for the school that involves the construction of diversion walls around the site that will have an impact on flood levels around the site. The impact has been estimated as:

- *raising of flood levels along the Chalmers Street frontage by up to 600mm,*
- *raising of flood levels by 85mm in Pembroke Street, and the*
- *raising of flood levels in Prince Alfred Park by 400mm in the 1% AEP storm event.*
- *The RtS identifies the need for further site specific flood studies to be undertaken with appropriate flood mitigation measures to be recommended to protect the proposed school as well as not having an adverse impact on the surrounding streets and the park. As such, the revised proposal currently fails to compliance with the City's Interim Floodplain Management Policy. The site specific flood study and flood mitigation options identified in the RtS needs to be prepared and submitted for consideration prior to any determination of the application.*

Response:

In order to address the above concerns, additional flood modelling has been undertaken by Northrop. Three meetings have been held with the City of Sydney Council to discuss the outcomes and to reach an agreed solution. We understand that City of Sydney Council are in support of the proposed solution.

Meetings:
22/11/17
Peter Garland CoS
Joel Johnson CoS
Rod Stanton DoE
Mat Richards Northrop
Will Vanderlouw Root Partnerships
Fiona Larkin Root Partnerships
Elizabeth Carpenter fjmt
06/12/17
Peter Garland CoS
Joel Johnson CoS
Mat Richards Northrop
Will Vanderlouw Root Partnerships
Fiona Larkin Root Partnerships
Elizabeth Carpenter fjmt
Katherine Tracey fjmt
07/12/17
Michael Soo CoS
Tony Smith CoS
Huan Wang CoS
James Phillips Weir Phillips
Will Vanderlouw Root Partnerships

Elizabeth Carpenter fjmt
Katherine Tracey fjmt

- raising of flood levels along the Chalmers Street frontage by up to 600mm,

The area of flood risk identified in the Flood Report (166175 - C03 - SSDA Civil Report) as submitted is along Chalmers Street.

Northrop have undertaken revised flood calculations based on more detailed survey data and 2D flood modelling using XP-Storm to confirm levels and to also understand any precinct implications.

The result of this new modelling confirms that the increase in 100-year ARI flood level in Chalmers Street is 130mm only as opposed to the previously noted 600mm.

In order to mitigate the flooding on Chalmers Street it is proposed to remove the sandstone plinth to the north of Building 3 (the northern most heritage building as identified on the attached drawings) up to the current pathway. This will result in a flood level approximately 20mm below the floor level of the most affected property to the east of Chalmers Street (184 Chalmers Street).

The removal of the plinth has been discussed with City of Sydney Council who are in support of this solution.

Please refer to the attached drawings.

- *raising of flood levels by 85mm in Pembroke Street, and the*

With the removal of the sandstone plinth as identified above the flood levels are raised in Pembroke Street by 35mm. City of Sydney (Peter Garland) noted that significant flooding was a pre existing condition and not due to the new development of the Inner Sydney high school, therefore it is assumed that for the purposes of the Inner Sydney high school, this increase was acceptable.

Please refer to the attached drawings.

- *raising of flood levels in Prince Alfred Park by 400mm in the 1% AEP storm event.*

With the removal of the sandstone plinth as identified above and more detailed survey data the flood levels lowered by 50mm.

Please refer to the attached drawings.