## SUTHERLAND SHIRE COUNCIL

File Note

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DATE:	12 May 2020
FILE REF:	MA19/0303 Panel Reference: PPSSSH - 10
SUBJECT:	Development Application No. MA19/0303 Description: S4.56 modification to DA18/0323 - changes to the apartment mix, internal layouts and external facade Property: 5 to 9 Ozone Street, Cronulla

Amendment to Sydney South Planning Panel Briefing Report – (Panel Reference PPSSSH - 10), regarding the basement design.

The applicant is requesting the condition *'Basement Design – Management of Groundwater'* on page 26 be deleted from the consent, as condition 4 of the GTA's issued by the Office of Water says that *"WaterNSW prefers 'tanking'*...". Tanking is not required by the GTA's.

This condition was created to address potential acid sulfate soils risk related to the proposed deep excavation of up to 9m bgl. There was no direct information provided via the original Geotechnical Reporting of the specific level of anticipated dewatering during construction and potential drawdown of surrounding groundwater.

This was raised as it was unclear to Council at the time of assessment if continual dewatering i.e. pump-out of the basement was required post construction and whether this action could impact the surrounding ground water levels in the areas mapped as class 2 and class 4 acid sulfate soils. Hence, the condition for "Basement Design- Management of Groundwater" was prepared.

The applicant has recently provided information from Van der Meer Consulting (engineers) in their correspondence dated 30 January 2020:

The geotechnical reports confirm that the ground water table is located 5.5m below ground and wholly within the dense sandstone layer. This transcends three things:

- a. Any impact of lowering the water table will not result in surrounding settlements as sandstone bedrock does not settle.
- b. The water ingress volume relates to the ground water flow rates which relates to the sandstone density. Geotechnical investigation confirms a rock density and associated predicted volumes of significantly less volumes than Sydney Water restrictions.
- c. The flow rates through the sandstone will be so slow that by draining what permeates into the basement will have negligible environmental impacts on the downstream ground water charge.

It is the opinion of our office that there is no good engineering reason to mandate a tanked basement. I confirm that we are an established engineering practice with significant experience in the design of basement construction in all ground typologies.

Based on this information provided, the "Basement Design- Management of Groundwater" condition can be removed subject to its replacement with a precautionary condition to manage the unexpected finds of acid sulfate soils during excavation and construction (see condition below).

The GTAs, provided by WaterNSW must be retained as they provide an option for the applicant to apply for a Water Access Licence in place of tanking the basement. As such, WaterNSW can take on the responsibility of addressing groundwater issues directly with applicant via their licencing requirements.

## **Required Condition of Consent**

Potential Acid Sulfate Soils - Unexpected Finds

## A. During Works

If acid sulfate soils are encountered during works; the situation is to be promptly evaluated by an appropriately qualified, experienced and certified environmental consultant. The acid sulfate soils must then be treated and/or managed under the supervision of the environmental consultant in accordance with the requirements of the NSW Acid Sulfate Soil Manual (ASSMAC 1998) and the National Acid Sulfate Soil Guidance (2018).

**Note:** An appropriately qualified and experienced environmental consultant must be certified by one of the following certification schemes:

- EIANZ 'Certified Environmental Practitioner' (CEnvP).
- Soil Science Australia 'Certified Professional Soil Scientist' (SSA CPSS)

## B. Prior to the recommencement of works

If unexpected acid sulfate soils are treated and/or managed onsite; the appropriately qualified environmental consultant must certify that the acid sulfate soils were appropriately managed in accordance with the requirements of the NSW Acid Sulfate Soil Manual (ASSMAC 1998) and the National Acid Sulfate Soil Guidance (2018) prior to works recommencing on site.

This certification must be provided to the satisfaction of the Principal Certifier and a copy supplied to Sutherland Shire Council, Manager Environmental Science, prior to the recommencement of works.