From: "Rebecca Eveleigh" <reveleigh@kmc.nsw.gov.au>
To: "Mark Brown" <Mark.Brown@planning.nsw.gov.au>
CC: "Walter Gordon" <walterg@meriton.com.au>, "Kathy Hawken" <khawken@kmc.ns...
Date: 9:36 am 19/09/2011
Subject: MP 10_0057 MOD2 - amendment to Condition 35, 132-138 Killeaton Street, St Ives - Council submission

Dear Mark,

RE: Modification Application MP10_0057 MOD2 - Amendment to Condition 35 (de-watering requirements)

Modification application not supported

The applicant has requested that Condition C35 be amended, so that a fully tanked basement structure is no longer required and so that permanent dewatering of the basement can be implemented. This condition was imposed by the NSW Office of Water.

The documentation provided in support of the request is:

* Hayes Environmental Consulting Pump out Water Management Plan Report No. MP135AD, dated 22 August 2011;
* Jeffery and Katauskas Report on Hydrogeological Assessment Ref: 23765Z2rpt, dated 5 August 2011.

The Hayes report refers to a letter from Jeffery and Katauskas which has not been referred to Council or included in the submission to the Department, "Proposed amendment to DOP Condition C35(a)" Ref E23765KPletVI, dated 16 August 2011. This may possibly assist with the assessment.

A report by EIS "Report on Groundwater Screening for Temporary Dewatering during construction" Ref: E23765Krpt1.1, dated August 2011 is also referenced in the Hayes report, but is not with the submission to the Department. Council received a copy of this report from Meriton previously in relation to the temporary dewatering which is the subject of Condition C34.

The reports by Jeffery and Katauskas and EIS were considered in relation to construction stage dewatering and in Council's letter of 11 August 2011, the following information was requested:

1. Acceptable peak release rates based on the peak design capacity of the receiving stormwater network.

2. Requirements for field supervision and water quality monitoring/ reporting.

3. Frequency of testing (at least weekly) and turn-around times for laboratory analysis.

4. Triggers for ceasing to pump according to the results of the water quality monitoring and measures to be taken if unacceptable levels of contaminants do occur.

5. General erosion and sediment control requirements.

The Hayes report was submitted to Council under separate cover on 8 September in regard to the proposed temporary dewatering.

The application is not supported and the following issues are identified with the submission:

Summary

1. The management plan does not distinguish between permanent and temporary dewatering.

2. Responsibilities are not clearly identified.

3. The analytes identified by EIS ie pH and heavy metals are not identified in the management plan as targets for treatment.

4. Testing frequency is not weekly as required by Council.

5. Pumping into the interallotment drainage pipe during heavy rainfall events is likely to exceed the capacity of the pipe.

6. The rate of seepage may not decrease with time, and the Owners' Corporation would be burdened with expensive testing and treatment of groundwater as well as maintenance of pumps.

Discussion

The Hayes report does not distinguish between temporary and permanent dewatering. It does refer to "on-going management " so presumably it is intended to cover both. (Because of this uncertainty, it is considered that Council could not give concurrence to this plan for temporary dewatering).

In Section 4.4 and 4.8, sampling and testing is described as occurring "prior to building occupation", so this would appear to relate to a permanent dewatering proposal rather than construction-stage.

Responsibilities are not clearly distinguished, ie Section 4.2 states "Meriton and its licenced contractor(s) will be responsible to ensure that basement dewatering complies with the following conditions:" Then under Contingency measures, "It is understood that the contracted environmental consultant or the building manager/ caretakers shall be responsible for this monitoring and record keeping".

The EIS report states "Acidic pH conditions together with some heavy metals were encountered at concentrations above the SWAC. As a result, treatment of the groundwater would most likely be required prior to disposal into the stormwater system." The report goes on to recommend the addition of flocculants or coagulants, and the provision of a dosing unit.

The Hayes report does not specify any measures to treat either heavy metals or pH. The report states "all pump out water will be subjected to treatment (purification) prior to release. The treatment will involve gravity sedimentation, as well as oil-water separation".

Turbidity seems to have been left out of the criteria in Table 1.

Testing is specified at monthly frequency and no turnaround times are given. Council requires at least weekly testing for construction-stage dewatering.

Section 4.3 of the report by Hayes states "Plans for the proposed basement are presented in Appendix A". At A4 size, these plans are illegible. The last page seems to show a pump pit in the basement and an oil separator hand-drawn onto an architectural plan.

The size, capacity and model of the oil separator are not given and nor are details of how this will be maintained by the Owners' Corporation.

The report contains estimates of average discharge rates ie litres per day. No justification is given for the selection estimate of daily discharge at the low end of the range. The maximum discharge rate of the pumps should be given as well, as this will affect the downstream drainage network.

The interallotment drainage pipe through the downstream properties is already at capacity and additional flow should not be directed into it, particularly because the pipe is most likely to be running full at the same time as the most seepage into the basement is likely to occur.

The report by Jeffery and Katauskas states: "...it is possible that the rate of inflow will decrease once

the excavation has initially drained the local area".

In comparison, a residential flat building in Turramurra is still discharging seepage into the street gutter, some 10 months after completion of the building. The report prepared by Jeffery and Katauskas for that development application, also stated "...given the low permeability of the silty clay and shale, the rate of seepage is expected to decrease with time...". This has not happened.

If you have any further questions, please don't hesitate to contact myself or Council's Team Leader, Development Engineers Kathy Hawken on 9424 0000.

Regards

Rebecca Eveleigh | Executive Assessment Officer | Ku-ring-gai Council
P: 9424 0809 | F: 9424 0001
E: x@kmc.nsw.gov.au | www.kmc.nsw.gov.au <http://www.kmc.nsw.gov.au/>
Ku-ring-gai: Sydney's green heart