



11 January 2022

Contact Amanda Herringe
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General Manager
Northern Beaches Council
PO Box 82
Manly NSW 1655

Our ref IDAS1142600
Our file A-39077
Your ref DA2021/2362

Dear Sir/Madam,

**Re: Request for Further Information of Proposed Development DA2021/2362
Lot 1-5 SP87024 & Lot 1-3 SP87022, 1105-1107 Barrenjoey Road, Palm Beach NSW 2108**

Reference is made to A-39077

WaterNSW has reviewed the information provided with the development application related to water supply works.

WaterNSW requests that the consent authority stop-the-clock for this development and arrange for the applicant to provide the following information to enable assessment of the application:

1. Confirmation that the structures below the predicted highest groundwater table are waterproof (tanked basement) and dewatering management program is designed considering the Minimum requirements for building site groundwater investigations and reporting. Note: Department of Planning, Industry & Environment (DPIE) require the perimeter walls and floor of the basement being constructed using a 'tanked' (waterproof) construction method.https://www.industry.nsw.gov.au/_data/assets/pdf_file/0004/343291/minimum-requirements.pdf
2. Volume of water to be extracted annually
3. Duration of the water take for dewatering
4. Method of measuring the water take and recording
5. Provide documents updated with the above information
6. If a tanked basement design is not possible, DPIE will require additional modelled data to support a hydro-geological review and assessment of the alternative drained basement design. The Geotech report will need to be updated accordingly. For details of the additional data requirements for DPIE to assess

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drained basement scenarios , please refer to **Table 1 Modelling Inputs in the attachment.**

Please arrange to provide this information within 28 days from the date of this document. Should there be any further enquiry in this matter, please email Amanda.herringe@waterNSW.com.au

Yours sincerely

Amanda Herringe

Amanda Herringe
Water Regulation Officer
Water Regulatory Operations
WaterNSW

Table 1 Modelling inputs

WaterNSW and DPIE do not support the drained basement option for basements. However if the proponent is insistent on a drained basement alternative for the design of the basement, they will need to provide all the following additional data and modelling inputs to enable DPIE to undertake the necessary hydrogeological assessment.

#	Assessment Item
1	The estimate volume of water take has been specified in the documentation supplied with the application (in megalitres).
2	Detailed explanation and supporting evidence have been provided to demonstrate the suitability of the volume estimation method (either description of numerical model used or analytical solution and source document).
3	The ground elevation across the site has been provided on an architectural plan or section or detailed in other supporting documents in a manner acceptable to WaterNSW and DPIE-Water.
4	A report outlining the geotechnical characterisation of the ground conditions, based on site-specific intrusive investigations that fully penetrate to a deep geological unit beneath the property that is identified in the geotechnical report as being consolidated or hard.
5	Frequently repeated water level measurements illustrating the natural range over at least three months (in metres below ground level)
6	The magnitude of required drawdown in water level to achieve dry conditions in the excavation has been identified (in metres).
7	The works proposed to be used for dewatering have been described in detail (number, spacing, depth, individual discharge rates, cumulative discharge rate) and illustrated on specific plan and section diagrams.
8	The base level of the aquifer has been identified or can it be determined from supplied bore logs (in metres below ground level).
9	Accurate excavation footprint dimensions (length, width, bulk excavation level) have been specified (in metres).
10	Field test results to determine the hydraulic conductivity of lithological units present beneath the site have been reported (in metres per day).
11	The anticipated duration of dewatering pumping has been specified (days or weeks or months).
12	The depth of piling embedment beneath the bulk excavation level has been specified (in metres).

In the case of a drained basement, we request that the geotechnical report be updated accordingly and uploaded to the planning portal. Further information can also be found at <https://www.industry.nsw.gov.au/water/science/groundwater/aquifer-interference-activities>