

**Date:** 26 February 2025 **No. Pages:** 2 **Project No.:** 2024-193

## Response to WaterNSW Request for Further Information at 154 Pacific Parade, Dee Why, NSW.

We understand that WaterNSW has requested clarification regarding water uptake volume associated with the construction works proposed at 154 Pacific Parade, Dee Why (Northern Beaches DA reference: D2025/0024).

Within a formal letter provided by WaterNSW (Reference IDAS1159660, Dated 6 February 2025) the following queries have been requested (by Platform Architects) to be addressed:

- 2. If a tanked basement design is proposed, the following information is requested.
  - (i) Volume of water to be extracted annually if available.
  - (ii) Duration of the water take for dewatering if available.
  - (iii) Method of measuring the water take and recording.

In response, please note the following:

(i) Volume of water to be extracted annually if available.

Whilst the volume of water to be extracted annually cannot be determined at this stage and will be subject to the structural design, founding depth and strata, it is considered that a proposed tanked basement will require minimal dewatering following construction providing appropriate tanking methods (i.e. Waterproofing) is undertaken.

(ii) Duration of the water take for dewatering if available.

It is envisaged the only element of dewatering will be prior to the casting and waterproofing of the basement walls and floor. The length of time required will need to be determined within the Construction Plan at CC stage. However, as a secant wall to a low permeability stratum/geological horizon is proposed, it is envisaged inflow will be minimal and predominately required to allow 'dry' casting of the basement floor slab to form the tanked basement.

(iii) Method of measuring the water take and recording.

The method of measuring the volume of water to be extracted following excavation of the basement and prior to construction of the floor slab and full waterproofing will need to be provided by the successful builder undertaking the development (should the DA be approved). However, based on the ground conditions encountered it is envisaged either of the two methods outlined below could be adopted:

- Construction of sump wells within the base of the excavation with pumping as required to a tank within the site prior to treatment and disposal into the Councils drainage system.
- Installation of a series of spear point dewatering wells similarly discharging to on site tanks prior to treatment and disposal.

Whichever method is adopted it will be necessary to measure water uptake on a daily basis to ensure the volumes are within acceptable limits, which is anticipated to be the case.



Where additional clarification of the water uptake is required, it would be necessary to employ the services of a groundwater specialist to model sub surface flows prior to full tanking however it is not envisaged the groundwater uptake volumes will exceed WaterNSW permissible limits.

Hope the above comments meet WaterNSW requirements, if we can be of further assistance in regard to this matter please don't hesitate to contact the undersigned.

Yours faithfully,

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