APPROVED
CONSULTING
ENGINEERS
ABN 90 645 409 801
ACN 645 409 801

25-06-2025
Northern Beaches Council
45A Riviera Avenue
Avalon Beach
ACE Ref No: 2025037

RE: PROPOSED STORMWATER SYSTEM AT 45A RIVIERA AVENUE AVALON BEACH (STORMWATER)

Approved Consulting Engineers P/L has prepared the stormwater drainage design for the above property (Job No: 2025037, Drawing Numbers: SW01 – SW06, dated: 25-06-2025, Revision C), based on architectural plans by JJ Drafting (DA.01 – DA.15, Revision B, dated: 30/05/2025, Job No: 1267/24).

This design is generally compliant with the National Plumbing and Drainage Code AS3500.3, the Northern Beaches Council (Region 1) DCP, and Condition 11 of Council's correspondence (DA2025/0167), dated 16/04/2025 and 24/06/2025.

In response to Council's comments, the proposed stormwater discharge methodology has been revised to incorporate a trench grated level spreader measuring 1.2 m in length. This replaces the previously proposed headwall structure.

Due to the site's topographic setting, the proposed stormwater discharge method has been revised to incorporate a 1.2m grated trench level spreader discharging within the subject site.

This decision is based on the following geological and environmental constraints:

- The site is located on a steep exposed sandstone outcrop, with the dwelling and infrastructure positioned approximately 6–9 m above street level.
- The slope between the site and the public street is highly constrained, with minimal soil cover and sheer natural rock faces dominating the terrain.
- Trenching through this rock to install a gravity-fed pipe to the street would require deep excavation, resulting in significant disturbance to the local geology, native vegetation, and drainage stability.
- The lower slope also includes areas of public land, and such excavation would encroach into ecologically sensitive and visually prominent zones contrary to Council's environmental policies.

Alternate options such as exposed pipework strapped to the rock face were also considered, but were dismissed on environmental grounds due to:

- Visual impact and conflict with streetscape character objectives
- Intrusion into the natural rock formation
- Increased long-term maintenance burden due to exposure and environmental degradation

The selected solution — a grated level spreader contained entirely within the subject site — provides an environmentally sensitive method for dispersing runoff. It minimises disturbance to the existing geological profile and avoids irreversible excavation or intervention in protected landforms.

We believe this design provides the most appropriate environmental and geological outcome for the site while fulfilling the stormwater management objectives of Council's DCP and applicable codes.

Should Council require further detail or clarification, please contact the undersigned.

Yours sincerely

Cameron Haack
BE Civil NER MIEAust Director