



20 April 2026

Logan City Council
150 Wembley Road,
Logan Central,
QLD 4114

Attention: Tonnia Plail

Dear Tonnia,

RE: INFORMAITON REQUEST RESPONSE
APPLICATION NO: MCUI/20/2026

Please find enclosed response to stormwater management items as noted in the Information Request letter dated 14 April 2026.

Item 1

Stormwater Management

Stormwater Quality

- 1.1 *Confirm that all proprietary stormwater treatment products modelled in MUSIC followed the verified methods specified within the Stormwater Quality Improvement Device Evaluation Protocol (SQIDEP) verification certificates.*
- 1.2 *Provide a copy of the MUSIC model used to assess the effectiveness of the proposed treatment train.*

Stormwater Quantity

- 1.3 *Provide justification for the above ground detention; or*
- 1.4 *Provide an alternative stormwater detention solution, such as an underground detention infrastructure (tank).*



MPN Response

Stormwater Quality

All proprietary stormwater treatment products included in the MUSIC model have been modelled in accordance with the verified methods specified within their respective Stormwater Quality Improvement Device Evaluation Protocol (SQIDEP) verification certificates.

A copy of the MUSIC model 'Teys Beenleigh – Issue C' used to assess the effectiveness of the proposed stormwater treatment train is provided with this submission for council's review.

Stormwater Quantity

Justification for Above Ground Detention and Constraints on Underground Detention mentioned below,

Hydraulic and Level Constraints Precluding Underground Detention:

The primary constraint preventing the adoption of an underground detention tank at the proposed location relates to the available hydraulic head between the finished surface level and the invert level of the downstream receiving pit.

The IL of the existing downstream pit is located approximately 1.3 m below the finished surface level at the discharge point. For an underground detention tank to achieve operational gravity discharge to the downstream system, the following minimum construction depths must be accommodated within that available cover:

- Minimum cover over tank: 300 mm
- Tank roof slab thickness: 200 mm (nominal precast slab)

The cumulative minimum construction depth required above the tank's obvert (top of tank) amounts to approximately 500 mm, leaving only approximately 800 mm of available depth for the tank barrel and its outlet connection. This residual depth is insufficient to accommodate a detention tank of the required storage volume while maintaining an operational gravity outlet invert that can freely discharge to the receiving pit.

Accordingly, the installation of an underground detention tank at this location is not hydraulically feasible without either significantly raising the finished surface levels, which would conflict with the established site and building design.

Existing high voltage inground infrastructure:

The site has existing high voltage infrastructure to the north of the proposed building. The intent is to limit excavation within the vicinity of the existing high voltage infrastructure as a safety in design consideration. This therefore limits the available in ground space for detention.



For the reasons noted above, we request that council accept above ground detention this case, due to the available depth, connections to the existing infrastructure and limits around existing high voltage infrastructure.

Yours faithfully

Sam Rowen

for and on behalf of

MPN CONSULTING PTY LIMITED