Australian
Consulting
Engineers Pty Ltd
ABN: 82 084 059 941 ACN: 084 059 941

General Manager
Hills Shire Council
PO BOX 7064
Baulkham Hills, BC2153

31ST January 2019

Our Reference: 180511

Site Sewage Management
RE: 1 Larapinta Place, Glenhaven
DA Application: 1867 / 2018 / JP

Dear Sir,

This correspondence is in support of a development application for an onsite aerated wastewater treatment system and underground effluent disposal (irrigation) for a construction of a mosque at the above address in compliance with Council's Local Approvals Policy (2016).

The development is to be constructed on a site area of 2.0261 Ha. A two level mosque shall be constructed with car parking facilities that are partially underground.

An expected maximum daily number of worshippers throughout the week would be 420 on a Friday.

The site soil texture description as outlined by Geotechnical Consultants Australia report dated 26.11.2018, page 8 describes the residual soils and fill as sandy loams to an average depth of 500 millimeters.

The expected (Friday) discharge would be 420 (worshippers) X 5 mm/day (design irrigation rate) equals 2,100 m^2 of underground effluent irrigation footprint.

As outlined in Council Policy 28, an underground onsite commercial aerated wastewater treatment system shall be installed with an underground drip irrigation system.

Sizing of the aerated wastewater treatment system is based on Council Policy, page 32 at an effluent storage rate of 12 litres/person/day.

The proposed aerated wastewater treatment system shall be of Ultra Clear manufacture, model CT20 having the capacity of 7,100 litres per day. The unit contains five (5) chambers with final chamber used for settling and disinfection prior to site disposal. (Data attached).

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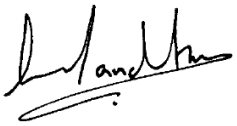
A primary effluent disposal area shall be provided throughout the existing site with turf and landscaping to the east and west over the underground drip irrigation system. This area would be provided with an underground "Toro" irrigation system at an average depth of 100mm.

This underground irrigation system which includes drippers on manifolded pipelines is to be designed and installed to comply with Council and system manufacturers requirements and specifications. (Toro data and effluent disposal area plan attached).

We trust this advice is of assistance.

Kind regards,

Signature: 

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