

Civil / Stormwater Response

MIXED USE DEVELOPMENT

BOARDING HOUSE / CHURCH / COMMUNITY FACILITIES

28 FISHER RD / 9 FRANCIS ST, DEE WHY, NSW

MARCH, 2023



architecture

modularisation

project management

interior design

procurement

1300 799 986


335 MONA VALE ROAD

TERREY HILLS NSW

AUSTRALIA 2084

www.georgegroup.com.au



COUNCIL DEVELOPMENT ENGINEERS COMMENTS	RESPONSE TO DEVELOPMENT ENGINEERS COMMENTS
<p>Development Engineers</p> <p>The Development Engineering Section advises as follows:</p> <p><i>The stormwater concept plan by the Mesh Group has been reviewed and not supported for the following reasons:</i></p>	<p>Noted, and these items are addressed with updated drawings</p>
<p>1. <i>The stormwater design engineer needs to be registered in accordance with the NSW Design and Building regulation for the building type. Evidence of the engineers registration is to be provided to Council.</i></p>	<p>Attached is the registration for the engineer that we understand meets your requirements. Snippet below...</p>  <p>The image shows a registration document from NSW Fair Trading. It includes the registration number DEP0002294, issued to James Gorringer on 06 Dec 2021, with an expiry date of 05 Dec 2024. It also contains terms and conditions regarding the registration and a disclaimer.</p>
<p>2. <i>In accordance with Councils Water Management Policy for Development a “DRAINS Model” is to be submitted for review, noting the post development flows up and including the 1/100AEP are to be limited to state of nature flows.</i></p>	<p>A “Drains Model” has previously been submitted for this project and was approved at the time. An update will be forwarded to the council officers direct (as it cannot be forwarded through the Planning Portal).</p>

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<p>3. <i>In accordance with section 9.7.2 of Councils Water Management Policy for Development the minimum information as listed is to be included on amended stormwater drainage plans. The design engineer is to provide a cross check in tabulated form to council that this information has been provided. The following information must be included on amended plans.</i></p> <p>a) <i>Dimensions (mm) and volume(s) (m3) of the proposed OSD system(s),</i></p> <p>b) <i>Size (mm) and shape of the orifice and outlet device at the control pit. The discharge control pit is to feature an overflow escape route in the case of the orifice plate blockage.</i></p> <p>c) <i>Finished floor levels of all existing and proposed structures and existing surface levels to Australian Height Datum (AHD) are to be shown on the drainage plan(s).</i></p> <p>d) <i>Plans, elevations and sections of the OSD system(s) in relation to all existing and proposed buildings and site conditions, finished surface levels and invert levels of all stormwater drainage pipes and structures, centre line level of the outlet pipe and orifice, the maximum design water level in the OSD system. Please note that all habitable floors areas are to have a minimum 300mm free board above the OSD top water level.</i></p> <p>e) <i>Longitudinal section of all pipe(s) from the OSD basin to the discharge point showing calculated flows, velocities, pipe sizes, type and class, grades, and invert levels of all pipes. The stormwater plans are to demonstrate that if the OSD outlet is fixed to a basement ceiling there is adequate vehicular head height.</i></p> <p>d) <i>In relation to the proposed new inlet pit and the 300mm stormwater outlet in Fisher Road all utility services crossings and a hydraulic grade line are to be detailed on a suitable scaled long section. The design invert levels of the new inlet pit are also to be detailed.</i></p> <p>NB all stormwater discharge from the development site is to be conveyed to Fisher Road as discharge to Francis street is against the grade and not permitted.</p>	<p>Documents are complete to include requirements of 9.7.2 of Council's Water management Policy. The engineer advises he has completed a cross-check table</p> <p>Response to items is:</p> <p>a) Dimensions, volumes of the OSD system are nominated on the documents.</p> <p>b) Orifice and outlet device are shown on the drawings and sizing</p> <p>c) FFL for the proposed structure are indicated on the Architectural drawings</p> <p>d) Plans and Sections of the OSD system are indicated</p> <p>e) Longitudinal section is included</p> <p>d) Details are indicated on the drawings</p>
<p>4. <i>The location of the on-site stormwater detention tank is not permitted under habitable floor areas and is to be in a communal area where the tank can be accessed for maintenance operations. It also appears that a maintenance grate has a wall located over it. The designer engineer is to confirm these requirements have been achieved and there are no obstructions to maintenance grates.</i></p>	<p>The OSD tank has been relocated at the Fisher Rd frontage. This is under the open, communal entry terrace area and hence is accessible for maintenance operations if required</p>
<p>5. <i>The submitted geotechnical report indicated the presence of groundwater during the excavation to the lower basement level as such it would be required that the basement be tanked to prevent the egress of groundwater and continuous discharge of groundwater to Councils stormwater drainage system.</i></p>	<p>Noted. The design has been addressed as a tanked basement.</p>