

Our Ref: 80818098:SGB
Contact: Scott Brisbin

13 December 2019

Billard Leece Partnership
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Attention: Kesley Godwin-Smith

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Dear Kesley,

**WARNERVALE PUBLIC SCHOOL
RESPONSE TO SSDA SUBMISSIONS**

We refer to the proposed Warnervale Public School and the recently received SSDA submission. We provide below a response to the submission items related to civil engineering and stormwater.

Comment:

The proposed roundabout will need to accommodate U-turns for buses.

Response:

We confirm that the proposed roundabout on Warnervale Road that will service the proposed school will be designed to accommodate U-turns for 12.5m long buses.

Comment:

The roundabout must be designed in accordance with the Austroads Guide to Road Design.

Response:

We confirm that the proposed roundabout on Warnervale Road that will service the proposed school will be designed in accordance with Austroads Guide to Road Design: Part 4B – Roundabouts, and relevant RMS supplements.

Comment:

Detailed signposting and line marking will be required for submission to the Local Traffic Committee.

Response:

A detailed signposting and line marking plan will be prepared for the proposed Warnervale Road works for submission to the local Traffic Committee. The requirement for this submission was confirmed at the meeting with Central Coast Council held 6 December 2019.

Comment:

The provision of buses on the northern side of Warnervale Road is a good outcome from a safety and congestion aspect.

Response:

Further details of the Warnervale Road works, including bus areas, will be prepared as part of the project's design development.

Comment:

The proposed emergency service route shown on the Site Context Plan shall comply with section 4.1.3 (3) of Planning for Bush Fire Protection 2006 at a minimum.

Response:

We confirm that the proposed emergency service route will comply with Section 4.1.3 (3) of the Planning for Bush Fire Protection 2006. This includes compliance with trail width, grade, construction materials etc.

Comment:

The Department of Education will need to be comfortable with their position discharging stormwater to the downstream property. There will be a significant increase in the hardstand area within the school site and also a significant increase in the area of road pavement draining through the adjoining site. Whilst OSD is proposed there will be an increase in the period of time that storm water will drain through the adjoining site.

Response:

Warnervale Road is being upgraded at the request of Council. On-site detention is not typically provided to public roads and thus a small increase in peak discharge from the upgraded public road could be experienced to the adjoining downstream site. The small increase in peak flow from the public road is not expected to adversely impact the downstream site.

On-site detention (OSD) is proposed to be provided on the school site to manage peak stormwater discharge from the school to the downstream property. The proposed OSD system will limit peak discharge from the school site to no greater than existing conditions for a range of design storm events. While the proposed school stormwater network will improve capture and conveyance of stormwater on the site, it is acknowledged that the period of time that stormwater drains from the school site over the downstream property may increase from the existing condition. Any increase in discharge period to the downstream site is expected to be small and not adversely impact the downstream site. It is noted that the proposed OSD system as described above meets the requirements of Council.

Comment:

Biodiversity Conservation Division recommends that the proponent demonstrates that the risks of isolation by floodwaters can be appropriately managed.

Response:

A review of Council's online mapping tool confirms that the school site is not inundated during a 1% AEP storm event. Council's mapping indicates that surrounding roads may be inundated during a 1% AEP storm event and thus the school may be isolated for a period of time. Further investigations into inundation depths, velocities, flood timing and behaviour may be required, subject to further discussions with Council.

Comment:

Biodiversity Conservation Division recommends that the proponent work with Central Coast Council to improve the flood immunity of Warnervale Road prior to the school opening.

Response:

A review of Council's online mapping tool confirms that Warnervale Road along the school frontage is not inundated during a 1% AEP storm event.

We confirm that we will work with Council to improve the flood immunity of Warnervale Road in the vicinity of the school for agreed storm events.

Should you require any additional information, please do not hesitate to contact the undersigned.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Scott Brisbin".

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