Our Ref: DOC21/411289
Your Ref: SSD-8744305

Department of Planning Industry and Environment
Infrastructure Assessments
Locked Bag 5022
Parramatta NSW 2124

Attention: Mr Tuong Vi Doan

Dear Mr Doan

RE: Kingscliff High School Upgrade (SSD-8744305)

Thank you for your notification dated 20 May 2021 about the proposed High School Upgrades at Kingscliff seeking comments from the Biodiversity and Conservation Division (BCD) of the Biodiversity, Conservation and Science Directorate in the Environment, Energy and Science Group of the Department of Planning, Industry and Environment. I appreciate the opportunity to provide input.

We have reviewed the information supplied for biodiversity and flooding and provide a summary of our recommendations below which are discussed in detail in **Attachment 1** to this letter.

In summary, the BCD recommends that:

1. The recommended mitigation and management measures specified in Table 6 of the Biodiversity Development Assessment Report, should be included in the conditions of consent.

2. The recommended floor levels, as detailed in the flood assessment, should be used to minimise potential damage to the building and harm to school users.

If you have any questions about this advice, please do not hesitate to contact Mr Krister Waern, Senior Operations Officer, at krister.waern@environment.nsw.gov.au or 6640 2503.

Yours sincerely

Dimitri Young

23 June 2021

DIMITRI YOUNG
Senior Team Leader Planning, North East Branch
Biodiversity and Conservation

Enclosure: Detailed BCD Comments – Kingscliff High School Upgrade

Attachment 1: Detailed BCD Comments – Kingscliff High School Upgrade

Biodiversity Matters

The Biodiversity and Conservation Division (BCD) has reviewed the Biodiversity Development Assessment Report (BDAR) prepared by Kleinfelder dated 15 April 2021.

The BDAR has been prepared in accordance with Appendix D of the Biodiversity Assessment Method (BAM). This streamlined assessment module is for planted native vegetation. Accordingly, the BDAR does not require any biodiversity credits to be retired as part of the proposed development.

If consent is intended to be granted to the proposal, we note that the recommended mitigation and management measures specified in Table 6 of the BDAR, must be included in the conditions of consent.

BCD Recommendation

1. The recommended mitigation and management measures specified in Table 6 of the BDAR, must be included in the conditions of consent

Flooding Matters

Information on flooding for the project was taken from the 'Kingscliff High School, 33 Oxford Street, Kingscliff, Environmental Impact Statement for State Significant Development (SSD-8744305) May 2021, SJB Planning' and Attachment 7 NSW Department of Education, SINSW01427-20 Kingscliff High School, Flooding Assessment Phase 2, April 2021, GHD.

Flooding assessment was undertaken for the development site considering two different types of flooding that may occur on the site. The two different modes assessed were regional flooding from Cudgen Creek and local overland flow from the small local catchment.

Regional flooding

The nature and extent of flooding in Cudgen Creek has been defined in the 'Tweed - Byron Coastal Creeks Flood Study, November 2009, BMT'. From the study, the 100-year ARI flood event only just affects the lower south-eastern corner of the school site and is well below the existing and proposed building in the school complex.

The Probable Maximum Flood Level (PMF) extends up to the edge of the building footprints. Most buildings, existing and proposed, are beyond the PMF extent. Access to the school is above the PMF flood level.

The proposed works are well above the 100-year ARI flood extents and have very minimal impact in the PMF flood, thus there are no regional (Cudgen Creek) flood issues for the proposal.

The map below shows the 100-year ARI flood extents in dark blue, just impacting the south-eastern boundary of the school and the PMF flood extents in light blue, just impacting the building footprint.

Local Overland Flow

The local overland flooding mode of flooding was also assessed. In heavy local rainfall there are shallow overland flow paths through the school. Hazard assessment was undertaken, and it was generally found to be a low hazard over the site and that the works did not increase the risk of danger.

To the mitigate the potential flood risk to the proposed building and future occupants caused by overland flows, the flood assessment recommends that the finished floor level of the proposed developments be set above the following levels: -

– Building O: 5.85m AHD;
– Library Building: 5.85m AHD;
– Building C: 5.63m AHD;
– Building A: 7.94m AHD.

In summary, the development experiences minimal potential impact from flooding of Cudgen Creek, causing no issues.

Local overland flow does have some impact on site and as such the BCD supports the recommended floor levels, as per the flood assessment, to minimise potential damage to the building and harm to school users.

BCD Recommendation

2. The recommended floor levels, as detailed in the flood assessment, should be used to minimise potential damage to the building and harm to school users.