

6 Feb 2023

Emily Hill

52 Woodbine St.
North Balgowlah, NSW
(By Email)

**RE: PROPOSED DEVELOPMENT AT 52 WOODBINE STREET, NORTH BALGOWLAH, NSW
FLOOD IMPACT ASSESSMENT**

To whom it may concern,

- We have been engaged by the Client to undertake a Flood assessment of the above property as requested by Council.
- The flood impact assessment of the above project has been carried out using HEC-RAS engineering software, by appropriately qualified professional engineers, to comply with relevant State and Council planning controls, guidelines and Legislations, and to cater for expected conditions.
- However due to time constraints, we have not yet compiled the Final report. We anticipate that the report will be complete by sometime next week. This letter is to provide our preliminary results and obtain an extension for our report to be finalised.
- Our preliminary results indicate that the lot is subject to overland flow depths varying between 200mm at the rear of the lot and 400mm at the front of the lot, during the 1% AEP storm event.
- We have adopted very conservative assumptions in our assessment, including the following:
 - Assumed piped drainage systems are either blocked and/ or working at 100% capacity. Therefore the surface flow depths do not assume any piped drainage outflows.
 - A surface run-off coefficient of 1.0 has been used, i.e. no soil infiltration or ground storage/ absorption has been assumed.
- Based on the above results, we estimate the 1% AEP Top Water Level will be at approximately RL84.30 at the rear of the proposed dwelling, and approximately RL83.20 at the front of the proposed dwelling.

Given the above mentioned conservative assumptions in our assessment, we recommend that a Freeboard of 400mm may suffice. Bringing the FPL (Flood Planning Level) for habitable areas to be no lower than FFL 84.70 and 83.60 for the rear and front of the house, respectively.

The assessment is based on the development as represented on Frank Bortolotti Architectural Design Services drawing DA2301/01/01.

If any queries arise regarding this matter, please contact the undersigned on 0481 568 674.

Sincerely,



Navid Nikjoo, Director
BE, MIEAust CPEng, NER
Professional Hydraulic Engineer