

Our ref: L.00745.001.01.docx

28 February 2024

Allens  
480 Queen Street  
Brisbane QLD 4000

Attention: Rebecca Fleming

Dear Rebecca

**RE: CLIFTON YAMBA LAND PTY LTD ATF YAMBA LAND TRUST V CLARENCE VALLEY**

I understand that Clarence Valley Council has requested a statement commenting on the consistency of two flood models recently prepared in support of separate flood impact assessments for proposed development at West Yamba. The flood impact assessments and associated flood models are referred to as the West Yamba Urban Release Area (WYURA) Model (BMT, 2023) and the 120 Carrs Drive model (BMT, 2024).

The statement was requested to be from the author of the two models. These models were developed by different modellers at BMT although both models are based off the flood study model prepared by myself on behalf of BMT for Clarence Valley Council. This model is documented in the report '*Lower Clarence Flood Model Update 2022*'. Given my knowledge of Council's flood model I have therefore reviewed the two flood impact assessment models against each other and against Council's flood model.

The following points are summarised:

- The model setup of the pre-development scenario in the WYURA model and 120 Carrs Drive model is identical.
- The WYURA and 120 Carrs Drive pre-development scenario matches closely with the model set up in Council's flood model. The main difference from Council's model involves changes in model resolution. Specifically, the WYURA and 120 Carrs Drive models have reduced the resolution in upstream urban areas such as Grafton in order to reduce model simulation times. This is considered appropriate as high resolution output in areas located far upstream of Yamba is not required for the flood impact assessments. The model resolution has also been refined across West Yamba in the flood impact assessment models to better represent the geometry of overland flow paths such as Carrs Drive.
- There are localised differences in the post-development scenario between the WYURA model and the 120 Carrs Drive model. These differences relate primarily to assumptions made about the development at 120 Carrs Drive. In the WYURA model, assumptions were made about the development fill extents and heights at 120 Carrs Drive whereas in the 120 Carrs Drive model, these assumptions were replaced with a landform design. The differences extend to Carrs Drive and its connection to 120 Carrs Drive.

In summary, the two respective flood impact assessment models and Councils flood model all use the same broad assumptions, inputs and parameters. Differences in the model setup for the post-development between the WYURA model and 120 Carrs Drive model are considered to be relatively minor and would not be expected to result in any notable change to regional flood extents.

Yours Sincerely,

**BMT**



**Barry Rodgers**  
Principal Consultant