

Memorandum

Project	003044		
From:	BMT		
Date:	31/10/2023	To:	West Yamba Landowners Consortium
Doc Ref:	M.003044.001.00		
Subject:	West Yamba Flood Evacuation Plan Addendum		

Introduction

This memorandum has been prepared in response to Clarence Valley Council's (Council) request for further information in relation to the 'West Yamba Flood Evacuation Plan' prepared by BMT for the West Yamba Landowners Consortium (report ref. 002855.01.02). The assessment was prepared for development proposal application number SUB2023/0001. The request for information in relation to flood evacuation is listed in Item 2 of Council's letter and is repeated below:

2. Flood Evacuation

Submit an addendum to the current West Yamba Evacuation Plan to assess the impacts on the 2022 Flood Model on evacuation and ensuring Council is satisfied that the proposal development will not conflict with Clause 5.21 (2) (c) and (d) of the LEP extracted below:

(c) will not adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood, and

(d) incorporates appropriate measures to manage risk to life in the event of a flood

To enable Council to be satisfied the proposal 'will not adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood'.

Note – *The response to Flooding and Flood Evacuation must consider and make recommendations to reduce flood affectation and comply with the requirements of Clause 5.21 of the LEP and the DCP to not result in detrimental increases to flood behaviour and affectation on other properties.*

This memo primarily addresses Item 2(c) and the subsequent notes.

BMT Response

The Lower Clarence Flood Model was recently updated for Council by BMT and the assessment was completed in 2023. BMT understands that the flood model was recently adopted for use by Council. The model updates the baseline conditions to those present in the year 2022 and includes recent

significant developments such as the Pacific Highway Upgrade. The model also revisited a number of modelling assumptions and updated these to accord with current guidelines and best practice. Full details are contained within the accompanying Lower Clarence Flood Model Update 2022 report.

The West Yamba Flood Evacuation Plan does not rely on flood model results to determine areas for evacuation. It conservatively assumed that all dwellings, excluding those on Yamba Hill, would require evacuation. As such, the calculated 'total time needed for evacuation' is unchanged due to the model update.

The West Yamba Flood Evacuation Plan also does not rely on model results to determine the 'actual available time (for riverine flooding)'. The actual available time is informed by the Bureau of Meteorology's *Service Level Specification for Flood Forecasting and Warning Services* which states a 'Target warning lead time' of 24 hours at the Maclean Gauge for a gauge level of 3.3m or greater. Therefore the actual available time for evacuation is unchanged as a result of the updated flood model.

Overall therefore, the original conclusions of the West Yamba Flood Evacuation Plan are unchanged and the plan demonstrates that the development proposal will not exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood.

Following the adoption of the updated Lower Clarence Flood Model by Council, BMT was requested to update the Flood Impact Assessment prepared for the West Yamba Landowners Consortium using the updated Council model. This has been undertaken and has been reported on separately. Overall it was found that the development proposal resulted in no significant changes in flow velocity, flood hazard category, duration and frequency of inundation within the area surrounding the proposed development. Minor instances of localised increases in flood levels were observed but these did not affect any residential properties and are not considered to affect the safe evacuation of the area.