
Sent: 12/06/2020 10:56:22 AM
Subject: DA/ 2019/0887 2 Macpherson Street
Attachments: DA 2019 0887 Submission.pdf;

Please see the attached letter raising issues related to this development proposal.

Lindsay Dyce

Lindsay Dyce
8 Mahogany Boulevard
Warriewood
NSW 2102

The CEO
Northern Beaches Council.

CC Warriewood Residents Association / Councillors Amon and De Luca

RE: DA 2019/0887 2 Macpherson Street, Warriewood.

Grave concerns are held in relation to this development in particular the future impact on the proposed development itself which will place residences in an active floodplain, and the impact the development might have on upstream properties by way of increased flooding.

The flood modelling provided with the application appears to rely on an engineering design for the Macpherson Street bridge located downstream of the development rather than an actual survey of the bridge and upstream and downstream sections of Narrabeen Creek as they currently exist and as the bridge and upstream and downstream filling of the creek bed with rocks has actually been constructed.

Given the sensitivity of the flood characteristics upstream of the bridge it is essential that any flood modelling takes into account the actual hydraulic characteristics NOT an assumed scenario.

It is noted that there is an existing backwater effect causing an upstream dam effect above the bridges and that the channel both upstream and downstream of the bridge seems constricted to a level above the culvert invert. This is causing a backup of creek water extending about 100 metres upstream in low flow periods significantly widening the creek water surface area causing increased breeding facility for disease carrying mosquitoes and sand-flies (note the recent detection of Ross River and Barma Forest Fevers in local mosquito populations).

This back up of creek water (a virtual lake) seems to be caused by the weir effect of rocks placed in the creek bed upstream, within and downstream of the bridge culvert. I note that I observed machines associated with development works adjacent to the creek near the culvert pushing rocks into this area.



Upstream obstruction causing creek to back up



Downstream obstruction



Obstruction in the culvert



Whether or not this obstruction of the creek bed is a result of bridgeworks or other causes is not known but must be addressed prior to this development being considered for approval.

Additionally, drainage structures associated with the development across the creek are located immediately adjacent to the bridge potentially impacting the hydraulic efficiency of the culvert in sever runoff events as shown in the following photo.



During the recent rainfall events the culvert approached capacity and there was significant backwater impact above the bridge in what was seemingly less than a 1% flood event. (See attached photos taken after rain had ceased). What would have occurred had a further 2 hours of intense rainfall occurred.

Council should ensure that a detailed review of the application is carried out to the extent where it is certain that the proposed development will not adversely impact on upstream properties or cause unacceptable risk to persons and property in the future, or cause creation of a stagnant backwater in the creek line.

Yours Sincerely,

Lindsay Dyce



Downstream Horse paddock



Upstream



Downstream