

Natural Environment Referral Response - Flood

Application Number:	DA2019/1254
To:	Nick Keeler
Land to be developed (Address):	Lot 71 DP 6746 , 22 Ocean Road PALM BEACH NSW 2108

Reasons for referral

This application seeks consent for the following:

- All Development Applications on land below the 1 in100 year flood level;
- All Development Applications located on land below the Probable Maximum Flood levels.

And as such, Council's Natural Environment Unit officers are required to consider the likely impacts on drainage regimes.

Officer comments

The front yard of the subject property is a trapped low point. Ground levels are lower than the road area just outside the front fence, and there is photographic evidence to show that the front yards of the adjoining properties to the north and south have have been significantly raised at some time since 2005. As a result, the front yard is regularly inundated by overland flows. The proposed landscaping involves filling of the front yard with walls around the deck area and along the side boundaries.

In general, there are no flood related objections to the concept of filling in the front yard such that it is no longer a trapped low point, and can drain naturally towards the street, provided that it can be shown that there are no flood impacts on the existing house as well as no flood impacts on neighbouring properties.

The Flood Impact Assessment by Australian Consulting Engineers (Nov 2019) states that "The site has been modelled with flow paths located along the northern and southern boundary of the site next to the existing building boundary. The water approaching the subject site from upstream will find its path through these flowpaths then spread over in the proposed fronting courtyard to leave the site through the driveway. Retaining walls are provided along the northern and southern boundaries (with 300mm freeboard) to prevent minor, localised increases in flood levels in adjacent neighbouring properties (modelled with the proposed building layout with no mitigation measures). Additionally, retaining walls and stone steps near the proposed hardwood deck are provided with adequate freeboard (300mm) to protect the existing building from any water encroachment".

Overland flow is generally from the rear to the front, and the walls along the side boundaries are considered to be reasonable. The concept of the overland flow rising out of the side channels and across the front yard to flow out the driveway is also considered to be reasonable, provided that flood waters don't rise high enough to overflow any of the walls. The biggest potential increase in flood risk would occur if flood waters become trapped in the deck and terrace areas to the front and rear of the house, such that they ponded and then entered the house.

For this application to be further assessed, it needs to be amended such that:

- The walls are raised by 200mm, since the freeboard should be 500mm, not 300mm.

- It demonstrates how the ponding of water in the deck and terrace areas to the front and rear of the house is to be prevented.
- The ground floor levels of the existing house are provided.

Referral Body Recommendation

Recommended for refusal

Recommended Natural Environment Conditions:

Nil.