



Our ref: DOC21/656792-3

Your ref: PP_2020_MUSWE_001_00

Sharon Pope

Executive Manager Environment and Planning
Muswellbrook Shire Council
Sharon.Pope@muswellbrook.nsw.gov.au

Dear Ms Pope

Request for advice – 3 Racecourse Road Planning Proposal – Muswellbrook LGA

I refer to your email, dated 23 July 2021 seeking input into the planning proposal regarding 3 Racecourse Road, Muswellbrook (Lot 41 DP 592207). This proposal directly relates to the amendment of the *Muswellbrook Local Environment Plan 2009* to allow for the addition of a dwelling house.

Biodiversity and Conservation Division's (BCD) recommendations are provided in **Attachment A** and detailed comments are provided in **Attachment B**. If you require any further information regarding this matter, please contact Jayme Lennon, Senior Conservation Planning Officer, on 02 9585 6935 or via email at huntercentralcoast@environment.nsw.gov.au

Yours sincerely

A handwritten signature in black ink, appearing to read 'S. Crick'.

STEVEN CRICK
Senior Team Leader Planning
Hunter Central Coast Branch
Biodiversity and Conservation Division
Date: 3 September 2021

Enclosure: Attachments A and B

BCD's recommendations

3 Racecourse Road, Muswellbrook Planning Proposal

1. The SES should be consulted and provided assistance to develop an evacuation strategy for this area linked to the Muswellbrook flood gauge. All residents, including existing large lot residents, should be made aware of the strategy and encouraged to evacuate early to reduce reliance on SES.
2. Future approval of a dwelling should ensure it meets flood planning requirements and is an elevated structure without imported fill. If located in flood storage area a flood impact assessment would be required in conjunction with any DA approval. Complying development should not be permitted on this site due to access issues.
3. Future design of any dwelling should consider flood forces and the potential need for a robust PMF refuge on site as an option of last resort.

BCD's detailed comments

3 Racecourse Road, Muswellbrook Planning Proposal

Flooding and flood risk

1. The subject site is a low flood island

BCD has reviewed the provided flood information and the Muswellbrook Floodplain Risk Management Study and Plan prepared by RHDHV in 2018. The subject site is entirely within the flood planning area and sections of the site are variously classified as flood fringe, flood storage and floodway dependent of flood depth and velocity in the 1% Annual Exceedance Probability (AEP) flood. The site is accessed via Racecourse Road and this is shown to be inundated to levels which are unsafe in floods of 5% AEP (approximately 20 year recurrence interval). For the 1% AEP flood the roadway is classified as H5 hazard which is considered unsafe for all peoples and cars, buildings require special engineering design and construction. For flood larger than the 1% AEP flood the site is completely inundated and for the Probable Maximum Flood (PMF), the site is inundated by more than 3 metres (m) of water. This means that the property evacuation route is cut well before the property experiences hazardous flooding, however; shelter in place is not an option. Flooding on the site is driven by Hunter River flooding which is served by a Bureau of Meteorology flood warning system. Development of an early evacuation strategy and update of the local flood plan with the State Emergency Service (SES) will be critical to support any residential use in this location.

Recommendation 1

The SES should be consulted and provided assistance to develop an evacuation strategy for this area linked to the Muswellbrook flood gauge. All residents, including existing large lot residents, should be made aware of the strategy and encouraged to evacuate early to reduce reliance on SES.

2. Change to LEP to permit a dwelling entitlement is best method for permitting the proposed land use

BCD has reviewed the options considered for permitting a dwelling on this site. The addition of a dwelling entitlement is considered to be the best option because it is less likely to set a precedent for increased occupation of the flood plain than the alternative measures. It is agreed that placing dwellings in this location is consistent with the adjacent large lot land use, however; the site does not contain the same degree of higher ground present on the adjacent large lots. Any dwelling subsequently approved should be located within the flood fringe portion of the site and be elevated to meet the required flood planning levels in order to minimise impact on the flood plain and provide some flood immunity. The incremental risk of permitting one additional dwelling in this location is not considered to be significant and may permit horses to be evacuated earlier reducing the risk that stable owners may try to access the site through flood water to facilitate horse evacuation.

Recommendation 2

Future approval of a dwelling should ensure it meets flood planning requirements and is an elevated structure without imported fill. If located in flood storage area a flood impact assessment would be required in conjunction with any DA approval. Complying development should not be permitted on this site due to access issues.

3 The entire site is classified as floodway in the PMF event

The Muswellbrook Floodplain Risk Management Study and Plan (RHDHV 2018) shows the entire site is floodway in the PMF event. It is understood that Muswellbrook Shire Council does not use the PMF for flood planning purposes, however; it is recommended that the hazard to dwellings and other structures on this site be recognised and considered. Structural engineering certification of foundation design should be required together with consideration of an emergency on site refuge designed to resist PMF forces due to the likelihood that access may be cut prior to evacuation taking place.

Recommendation 3

Future design of any dwelling should consider flood forces and the potential need for a robust PMF refuge on site as an option of last resort.