Project:	*Brisbane Grove Road, Goulburn (PP-2024-291 & PP-2024-295) – IPC Questions on Notice – Applicant Response*
Project ID:	*230048*
Date:	*31 March 2025*
To:	*NSW Independent Planning Commission, Jane Anderson*
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Authorised by:	*Zac Richards*

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Dear Jane,

RE: 'Allfarthing' 2 Brisbane Grove Road Planning Proposal (PP-2024-295) and 137 Brisbane Grove Road Planning Proposal (PP-2024-291) Gateway Determination Reviews
Questions on Notice

The NSW Independent Planning Commission have requested (as per the above referenced communications dated 27 March 2025) a response to queries following the meeting dated 25 March 2025. The queries and response from the Applicants are detailed below.

Commission Query 1

'Have the Applicants discussed with the relevant agencies the maximum flood depth at which safe emergency vehicle access to the sites would remain possible during flood events? If so, what is the maximum flood depth at which safe emergency vehicle access would remain possible to the sites? '

Query 1 Applicants Response

1. Flood Attachment B, 'Minutes from Goulburn planning proposals - Emergency services meeting' - notes that:
    - Ambulance NSW stated that *'Standard ambulance vehicles (Mercedes type) are not recommended for traversing flood depths greater than 20 cm in flowing water, due to risk of engine becoming flooded, or potential for vehicle to start floating'.*
    - However, Ambulance NSW then goes on to state that, *'to service areas where access roads are flooded, NSW Ambulance would . . . Request access using NSW RFS trucks'* (amongst other alternative measures).

2. Sowdes Pty Ltd contacted the NSW RFS (face-to-face conversation on 26/3) to discuss their requirements in relation to fire truck trafficability through flood waters, and was advised that there is no policy in place in relation to the maximum trafficable depth of flood waters for their fire trucks. See specifications for the two types of firefighting appliances used in the local area in Image 1 (source: NSW Fire Trail Standards – NSW Rural Fire Service November 2023).

Image 1: NSW Fire Trail Standards – NSW Rural Fire Service November 2023

Category 1 Firefighting appliance specifications

Table A.1: Category 1 Firefighting appliance specifications

Unit	Measurement
Length	8,000mm
Width	2,450mm
Mirror length	450mm
Height	3,900mm (including 600mm for aerials)
Ground clearance	380mm
Approach angle	25°
Departure angle	28°
Wheelbase	4,250mm
Turning circle – wall to wall	18m diameter
Weight	14,200kg
Maximum axle loading	9,000kg

Category 7 Firefighting appliance specifications

Table A.2: Category 7 Firefighting appliance specifications

Unit	Measurement
Length	6,250mm
Width	2,230mm
Mirror length	450mm
Height	3,350mm (including 600mm for aerials)
Ground clearance	380mm
Approach angle	25°
Departure angle	28°
Wheelbase	3,395mm
Turning circle – wall to wall	14m diameter
Weight	7,500kg
Maximum axle loading	5,600kg

3. Based on Flood Risk Management Guide FB03, Flood Hazard (Department of Planning and Environment, 2022), Large Vehicles (defined as Large 4WD: L > 4.5 m, W > 2000 kg, GC > 0.22 m, see ARR Book 6, Chapter 7, Figure 6.7.6) have a threshold stability depth of 0.5 m. The NSW RFS fire trucks described in Image 1 (L > 6 to 8 m, W > 7,000 to 14,000 kg, GC = 0.38 m) far exceed the threshold for 'Large Vehicles' and would therefore be expected to traverse floodwaters of depths exceeding 0.5 m without stability issues.

4. In consideration of the above, it is expected that the site can be accessed by NSW Ambulance personnel being assisted by the NSW RFS through existing arrangements for flood depths exceeding 0.5 m. Ambulance NSW also noted other alternative existing arrangements to service areas impacted by isolation which would not be constrained by flooding (boat and helicopter).

5. It is also of note that a new purpose-built NSW SES Unit and Emergency Operations Centre has just been completed & handed over to the SES on Crundwell Street in Goulburn, and will accommodate rescue vehicles and specialist equipment, along with a shared emergency operations centre for all emergency services.

6. The SES announced in 2023 that it had received funding for 200 new emergency vehicles for NSW, which included "high-clearance trucks that can drive through floodwaters & light flood rescue vehicles" & these would be prioritised for areas most at risk of flooding.

7. The SES also verbally advised Sowdes (phone conversation of 27/3) that in times of expected major flooding they actively mobilised resources from other areas to those at risk.

Commission Query 2

'Please provide the source of data used to inform the probability assessment (as referred to in the Applicant's presentation to the Commission on 25 March 2025)'.

Query 2 Applicants Response

The joint probability analysis and source data is detailed in Section 3.6.3 of the Brisbane Grove Road Planning Proposal – Flood Assessment (GRC Hydro, December 2023). A summary is provided below:

- The estimated Daily Exceedance Probability of a fire emergency occurring on a given day was estimated from:
    - 'Average annual number of NSW house fires' (obtained from https://www.fire.nsw.gov.au/page.php?id=9216);
    - 'Number of NSW dwellings' (obtained from Census 2023).
- The estimated Daily Exceedance Probability of a medical emergency occurring on a given day was estimated from:
    - 'Average daily number of emergency department presentation at Goulburn Hospital' (obtained from The Australian Institute of Health and Welfare, for Goulburn Base Hospital - https://www.aihw.gov.au/reports-data/myhospitals/hospital/h0142); and
    - The population of Goulburn Mulwaree LGA (obtained from Census 2023).
- The analysis assumes independence of the variables (no information to the contrary was provided by NSW SES or EHG), however, is still expected to be conservative due to the assumption that isolation of the site occurs for 24 hours during a 5% AEP event (see Table 6, Section 3.6.3 of Flood Assessment Report, GRC Hydro 2023). Adoption of the NSW SES position that the site is isolated for 23 hours in a 1% AEP event (which assumes that any water on the road will result in isolation which is not consistent with FB03 Flood Hazard guidelines), would reduce the likelihood of a secondary risk to ~1 in 5,000 AEP.

Applicants Summary Statement

It is the Applicants position that, given:

- All future development will be situated outside of the PMF extent,
- The likelihood of a secondary risk occurring whilst the site is isolated is approximately 1 in 1,000 AEP (Flood Assessment Report, Section 3.6.3, GRC Hydro 2023),
- Council have agreed to implement proposed risk management measures for future development, and
- Emergency management personnel have access to the site through implementation of various existing arrangements,

The proposal is consistent with the Local Planning Directions, 4.1 Flooding, as future development of the site:

- Is not likely to affect the safe occupation of and efficient evacuation of the lot; and

- Is not likely to result in a significantly increased requirement for government spending on emergency management services, and flood mitigation and emergency response measures.

Yours Sincerely,

Zac Richards
Director

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