

Date: 25/08/2023

Our Ref: STM2023/0543

Contact: Rabi Pokharel

Ned Harper

ned.harper@facs.nsw.gov.au

Dear Sir/Madam.

Flood Advice Letter for Address **14 Munmurra Road, RIVERWOOD NSW 2210**

WHEN LODGING A DEVELOPMENT APPLICATION, YOU MUST ENCLOSE A COPY OF THIS LETTER.

FLOOD NOTATION

Council has notated this property as **NOT** being affected by the 1% Annual Exceedance Probability (AEP) Flood. The 1% AEP Flood means there is a 1% (i.e., a 1 in 100) chance of a flood of this height, or higher occurring in any one year.

Council has notated this property as being affected by a Probable Maximum Flood (PMF) flood. The PMF is the largest flood that could conceivably occur at a particular location.

FLOOD STUDY

The Council Flood Study applicable to the property is:

- Draft Overland Flow Risk Management Study and Plan for Hurstville, Mortdale and Peakhurst Wards (2023), Prepared by WMA water.

FLOOD LEVELS

All flood levels are shown in Australian Height Datum (m AHD)

Location/Event	PMF Level
PMF	28.895

FLOOD RISK EXPOSUE

The Flood Risk Exposure of the site in PMF Flood Event has been assessed as

Overland Flooding

Life Hazard: H1 during PMF event.

HAZARD CATEGORY DETAILS

H1 - Generally safe for vehicles, people, and buildings.

H2 - Unsafe for small vehicles.

H3 - Unsafe for vehicles, children, and the elderly.

H4 - Unsafe for vehicles and people

H5 - Unsafe for vehicles and people. All building types vulnerable to structural damage.
Some less robust building types vulnerable to failure

H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

Flood Planning Constraint Criteria (FPCC): 3

Table 14: Flood Planning Constraint Categories for the Study Area

	Constraints ¹	Implications	Considerations
FPCC 1	Floodway and flood storage areas in the 1% AEP event.	Any development is likely to affect flood behaviour in the 1% AEP event and cause impacts elsewhere.	Majority of developments and uses have adverse impacts on flood behaviour or are vulnerable. Consider limiting uses and developments to those that are compatible with flood function and hazard.
	H6 hazard in the 1% AEP event	Hazardous conditions considered unsafe for vehicles and people, all types of buildings considered vulnerable to structural failure.	
FPCC 2	Floodway in the 0.2% AEP event	People and buildings in these areas may be affected by dangerous floodwaters in rarer events.	Many uses and developments will be more vulnerable in these areas. Consider limiting new uses to those compatible with flood function and hazard (including rarer flood flows) or consider treatments to reduce the hazard (such as filling). Consider the need for additional development control conditions to reduce the effect of flooding on the development and its occupants.
	H5 flood hazard in the 1% AEP event	Hazardous conditions considered unsafe for vehicles and people, and all buildings vulnerable to structural damage.	
	H6 flood hazard in the 0.2% AEP event	Hazardous conditions develop in rare events which may have implications for the development and its occupants.	
	Areas of FPCC 3 surrounded by FPCC 2 or FPCC 1	Hazardous conditions arise due to isolation (see below)	

FPCC 3	Within the FPA (1% + 0.5m)	Hazardous conditions may exist creating issues for vehicles and people. Structural damage to buildings is unlikely.	Standard land use and development controls aimed at reducing damage and the exposure of the development to flooding are likely to be suitable. Consider additional conditions for critical utilities, vulnerable facilities and key community infrastructure.
	Note: Areas classified as FPCC 3 that are surrounded by FPCC2 and/or FPCC1 have been reclassified as FPCC2.	Even if elevated, hazard may arise from the area being isolated and cut off by deep or fast flowing water. Without a safe evacuation route, risk to life exists even if the building itself is not threatened. Such areas are reclassified as FPCC2 (see above)	See FPCC 2
FPCC 4	Within the PMF extent	Emergency response may rely on key community facilities such as emergency hospitals, emergency management headquarters and evacuation centres operating during an event. Recovery may rely on key utility services being able to be readily re-established after an event.	Consider the need for conditions for emergency response facilities, key community infrastructure and land uses with vulnerable users.
	Note: Areas classified as FPCC 4 that are surrounded by FPCC2 and/or FPCC1 have been reclassified as FPCC2.	Even if elevated, hazard may arise from the area being isolated and cut off by deep or fast flowing water. Without a safe evacuation route, risk to life exists even if the building itself is not threatened. Such areas are reclassified as FPCC2 (see above)	See FPCC 2

Flood Risk Precinct:

Low Flood Risk, outside 1% AEP extent but within PMF extent

FLOOD PLANNING LEVEL (FPL)

Refer to the Georges River Council Flood Control Matrices specified in the Stormwater Management Policy to determine the minimum floor level for the proposed development.

FLOOD EFFECTS

The applicant is to demonstrate to Council (by way of an Overland Flow Path Assessment or Local Flood Study as per Section 6.11 of Stormwater management Policy) that the development will not increase flood affectation elsewhere having regard to:

- (i) Loss of flood storage.
- (ii) Changes in flood levels, flows and velocities caused by alterations to flood flows; and
- (iii) The cumulative impacts of multiple potential developments in the vicinity.

Refer to the section 6 of the Georges River Council Stormwater Management Policy for additional information. See below link for SWMP.

[Pol-073-01-01-Stormwater-Management-Policy-April-2021.pdf \(nsw.gov.au\)](#)

FLOOD COMMENTARY

- Refer to Figures 1 to 4 for Flood Maps.
- No accurate information is recorded regarding the impact of tsunamis in the Georges River Local Government Area.

Council considers that this is the best information currently available on flooding in the area, but Council cannot comment on the accuracy of the result.

Should you require any further information, please contact Council's Strategic Stormwater Assets Engineer, Rabi Pokharel on 02 9330 9475.

Yours faithfully

A handwritten signature in black ink, appearing to be 'P. Saha', written in a cursive style.

Pulak Saha
Senior Stormwater Asset Engineer

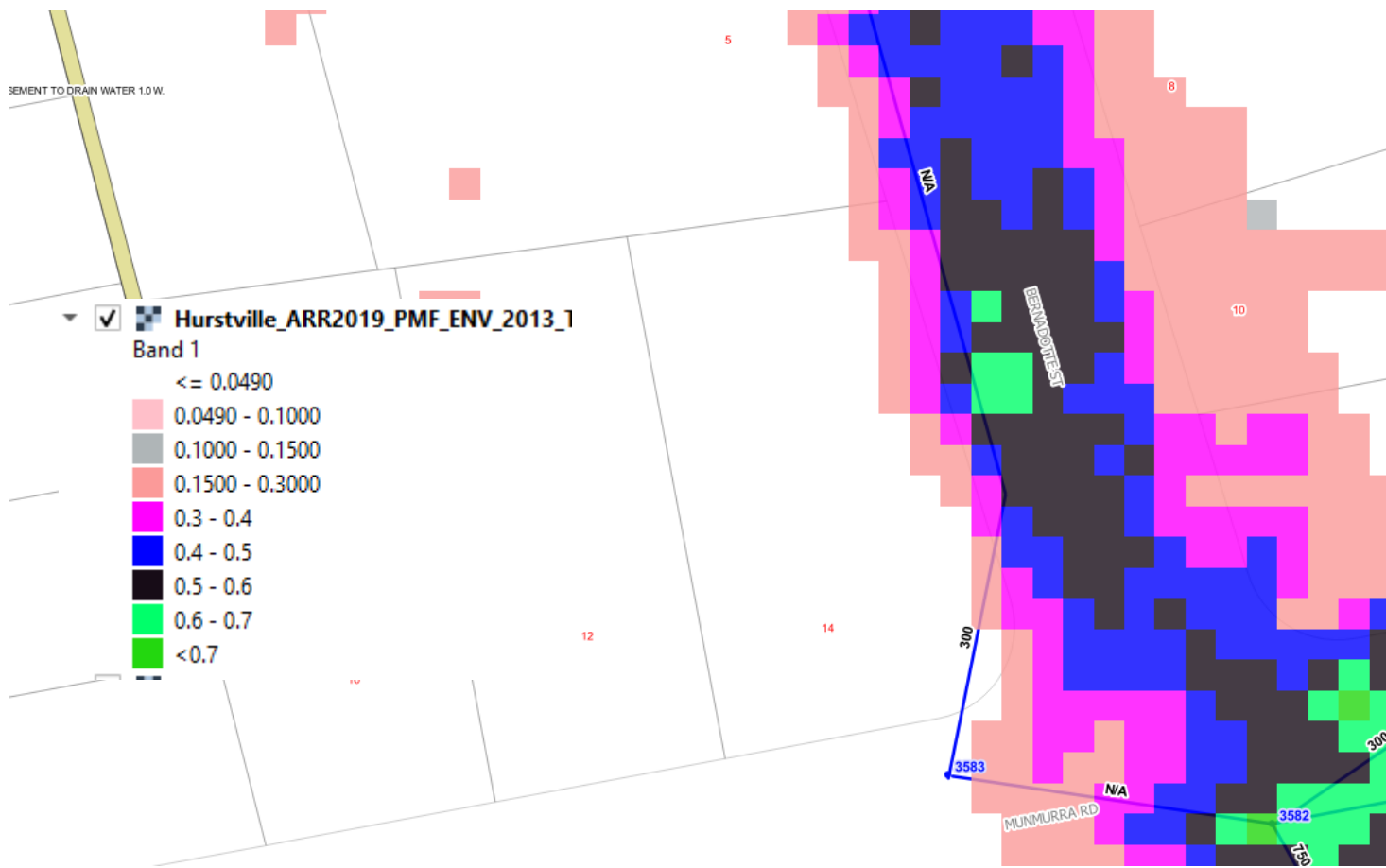


Figure 1: PMF flood depth

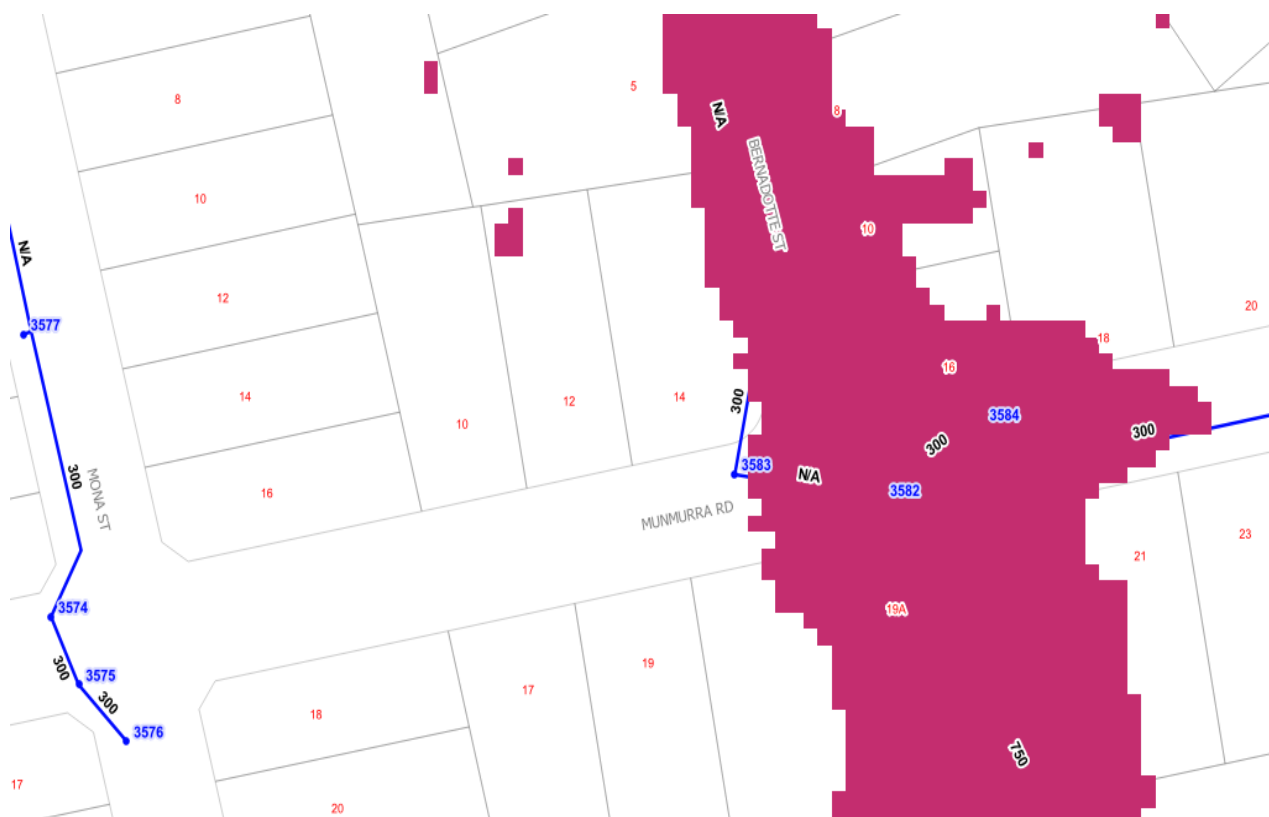


Figure 2: PMF Flood Extent Map

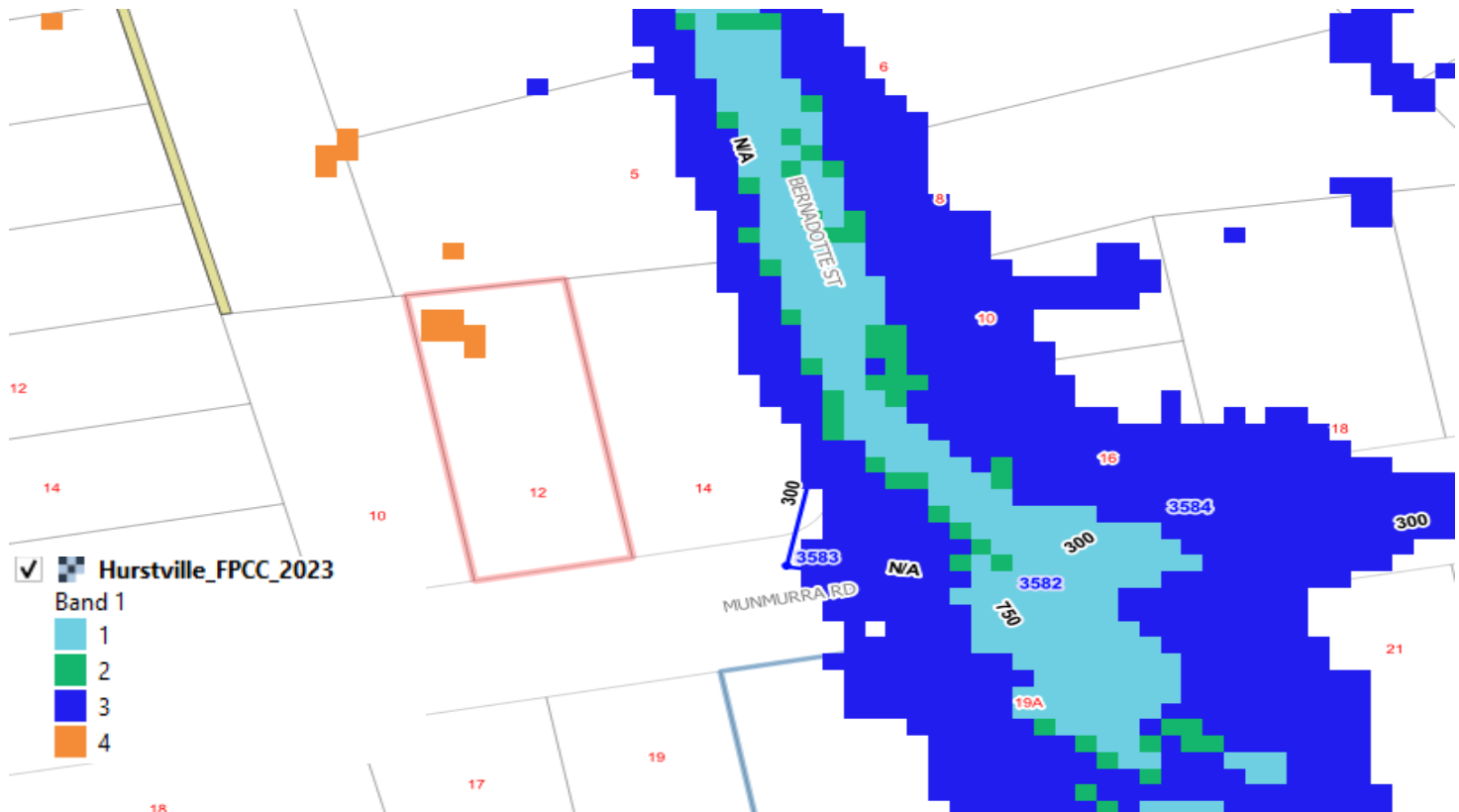


Fig 3: Flood Planning Constraints Category



Figure 4: Stormwater network map (indicative only)