

FIGURE 5
RAINFALL BURST AND FREQUENCY
ANNANDALE GAUGE

J:\Jobs\11021\Hydrology\IFD_Bursts_ANNANDALE.xlsm

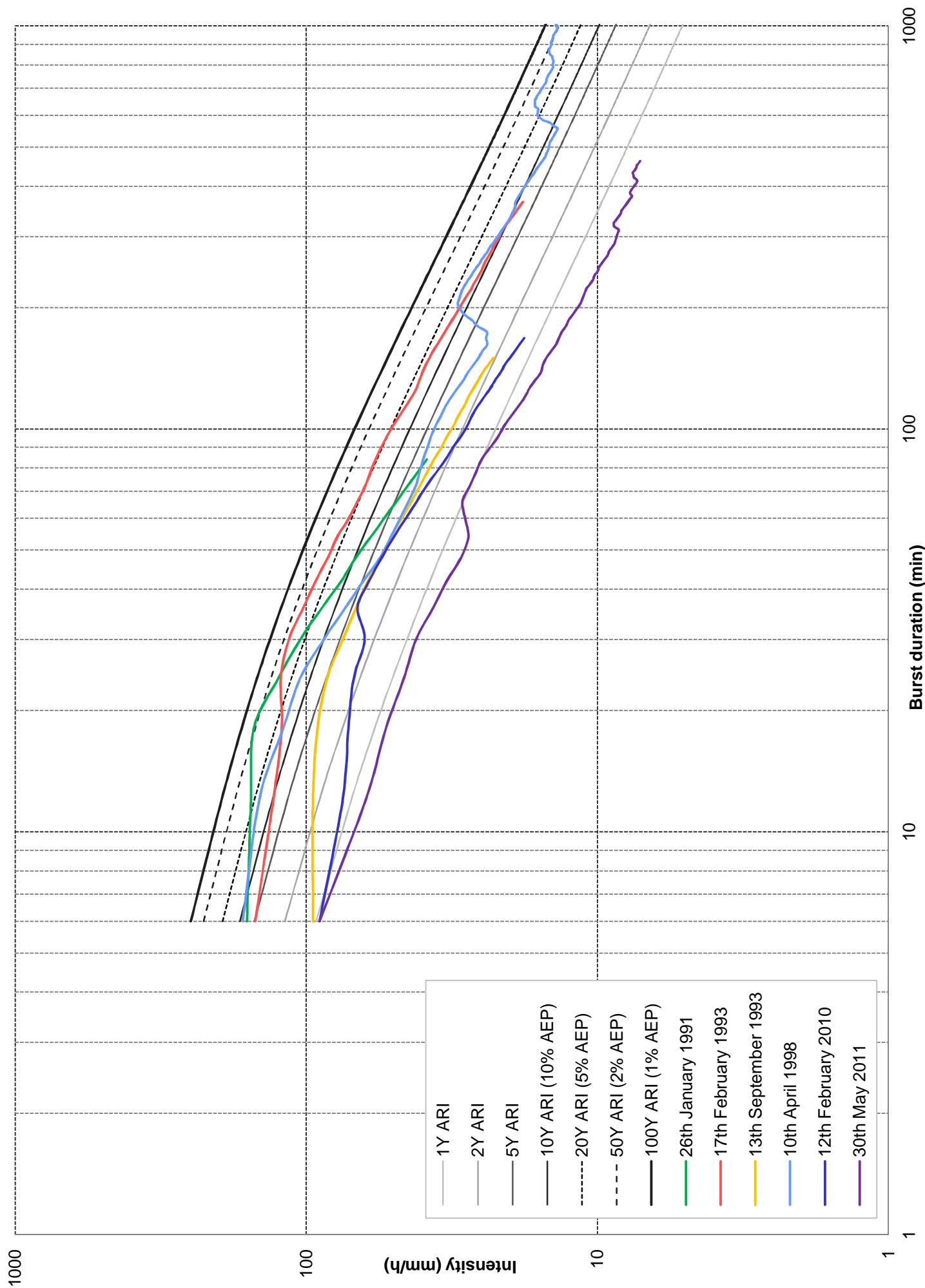


FIGURE 6
RAINFALL BURST AND FREQUENCY
SYDNEY OBSERVATORY HILL GAUGE

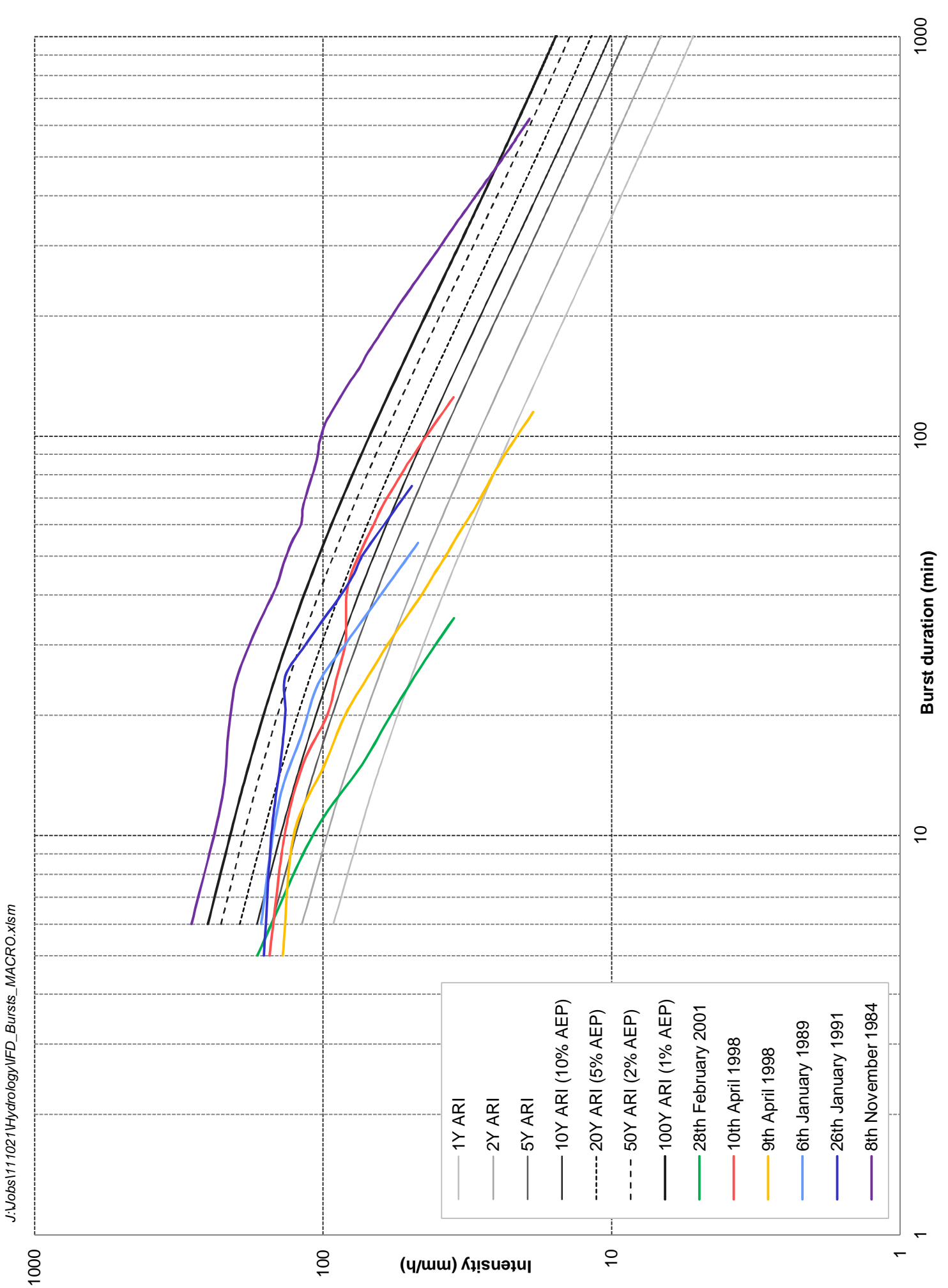
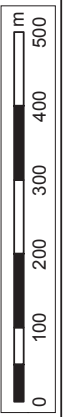


FIGURE 7
COMMUNITY CONSULTATION
RESPONDENTS: JOHNSTONS CREEK

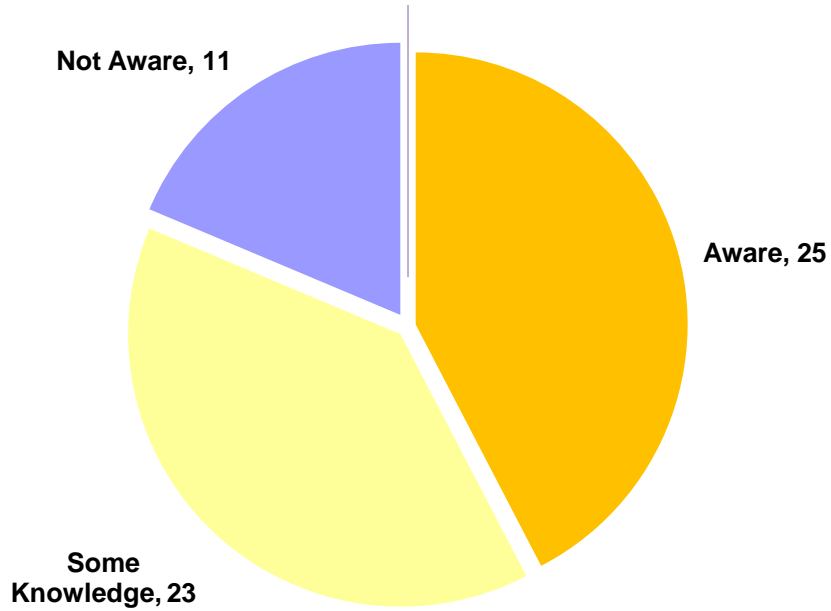


- Questionnaire Respondents
- Respondent Identified Flood Area
- Study Area

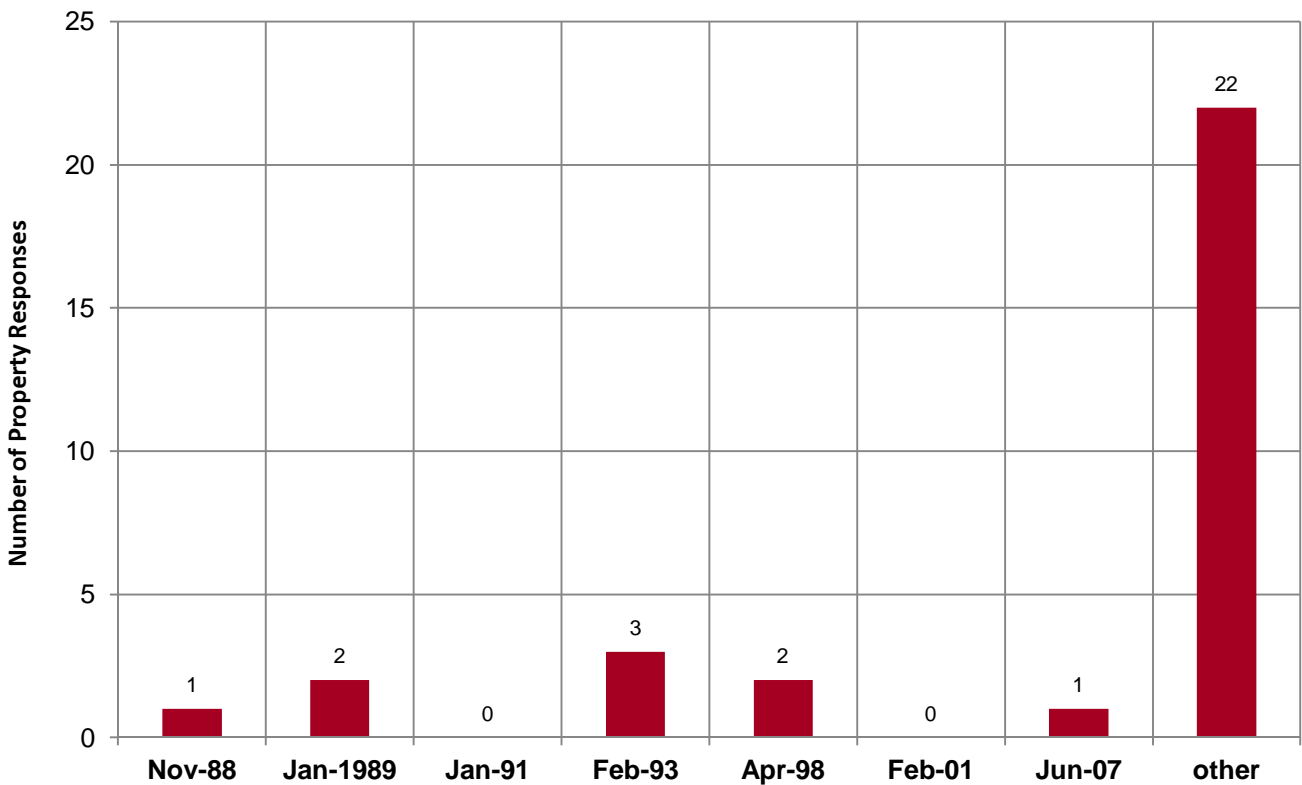


**COMMUNITY CONSULTATION RESULTS
JOHNSTON CREEK**

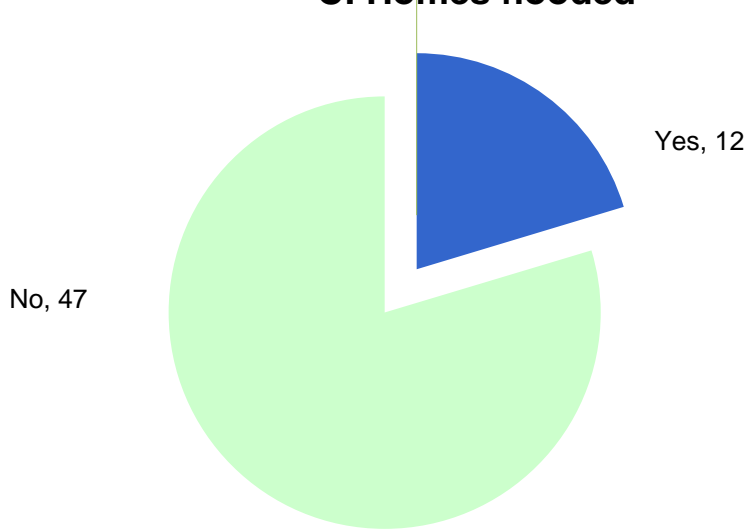
A: Aware of Stormwater flooding from streets or channels



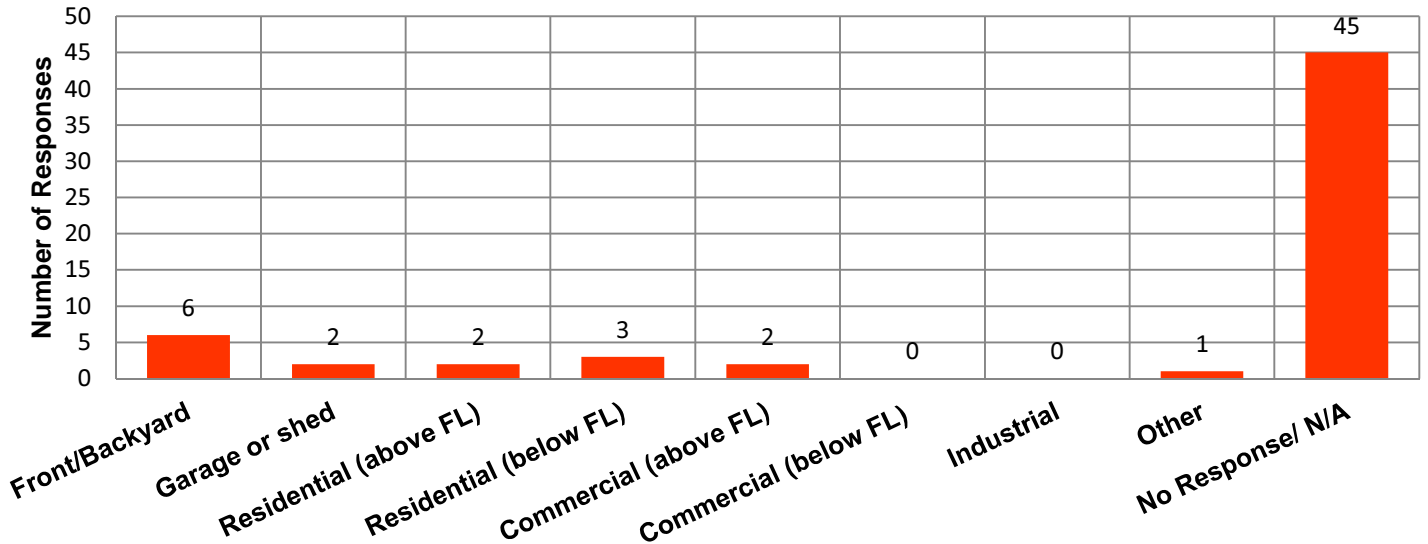
B: Experience of Previous Floods



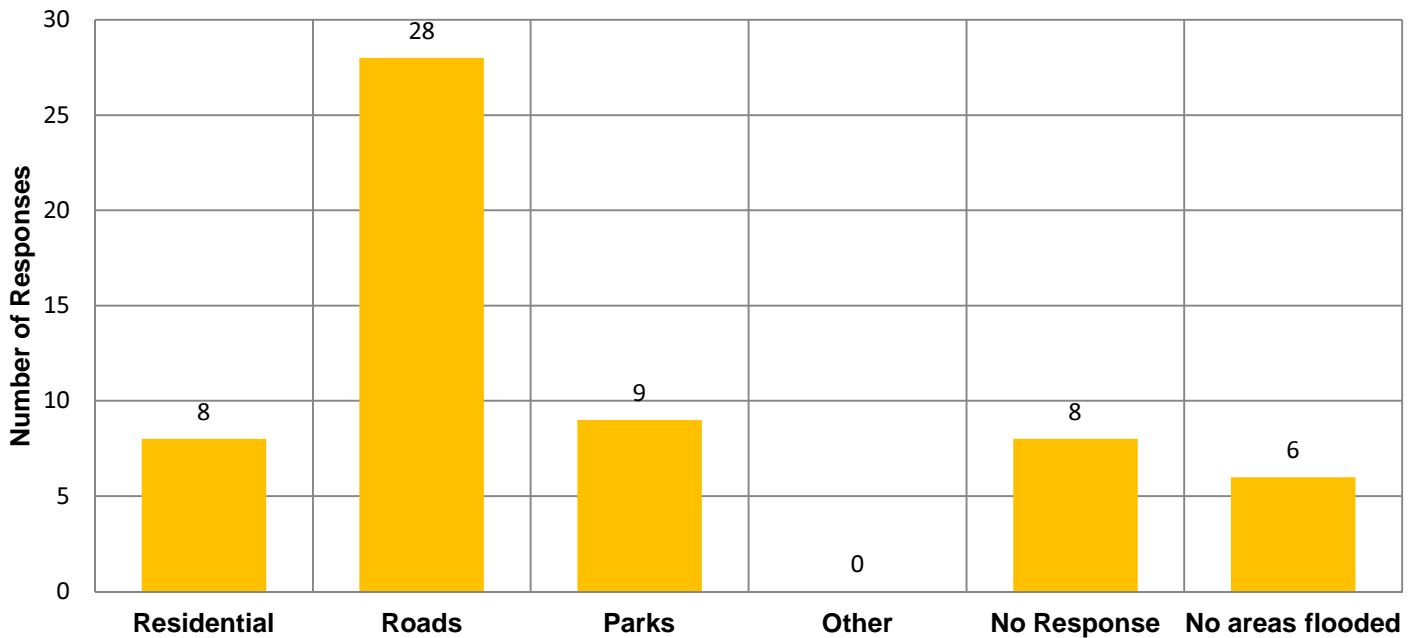
C: Homes flooded



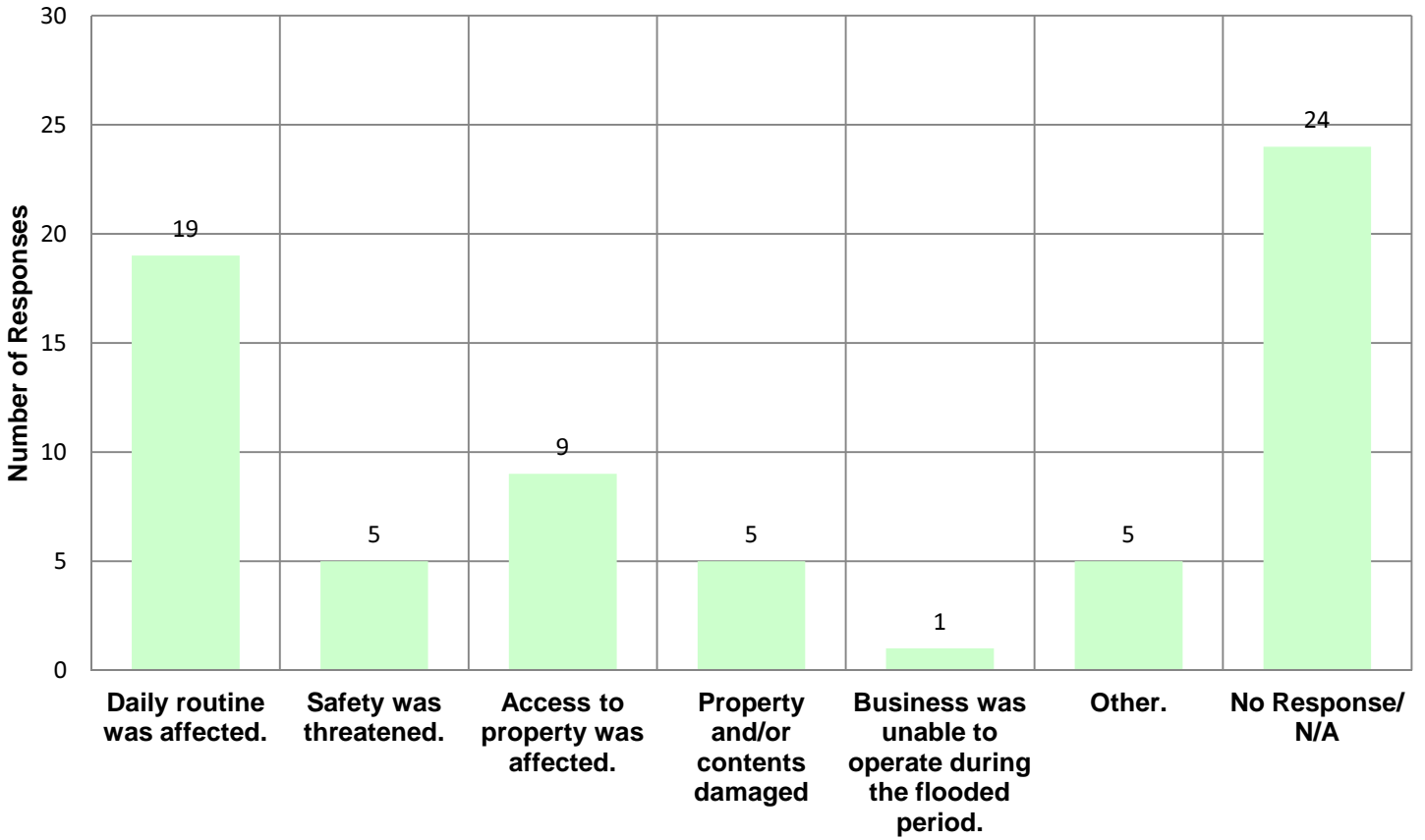
D: What part of the property was flooded



E: Other areas flooded



F: Number of Responders that were Inconvenienced by Floodwater



G: Noticed any Bridges/Drains blocked

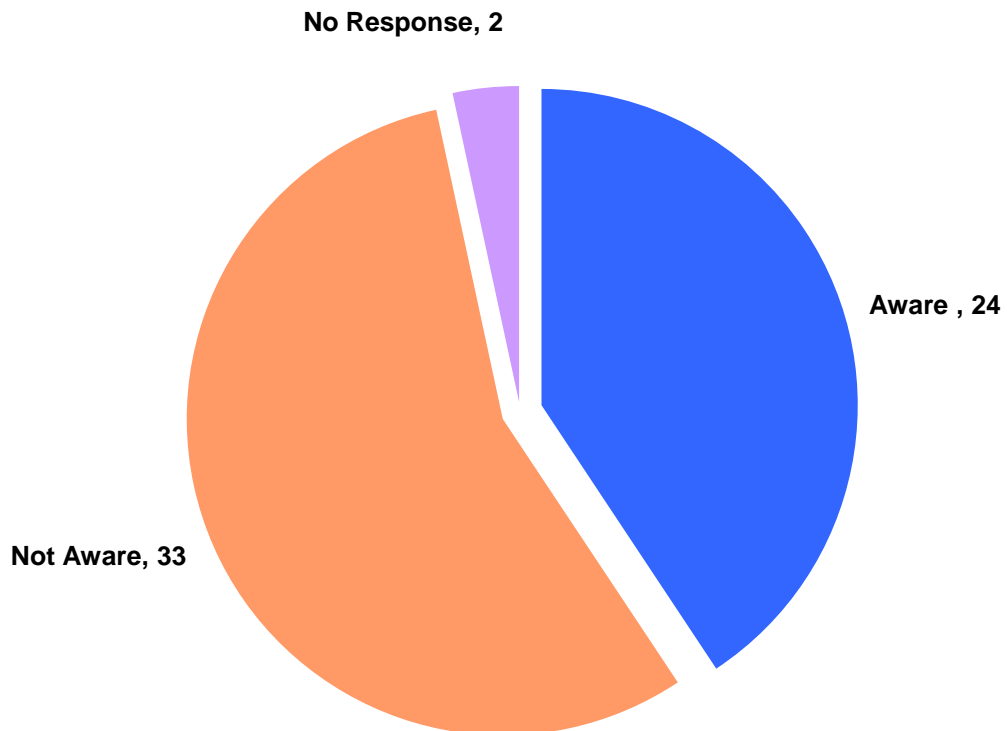
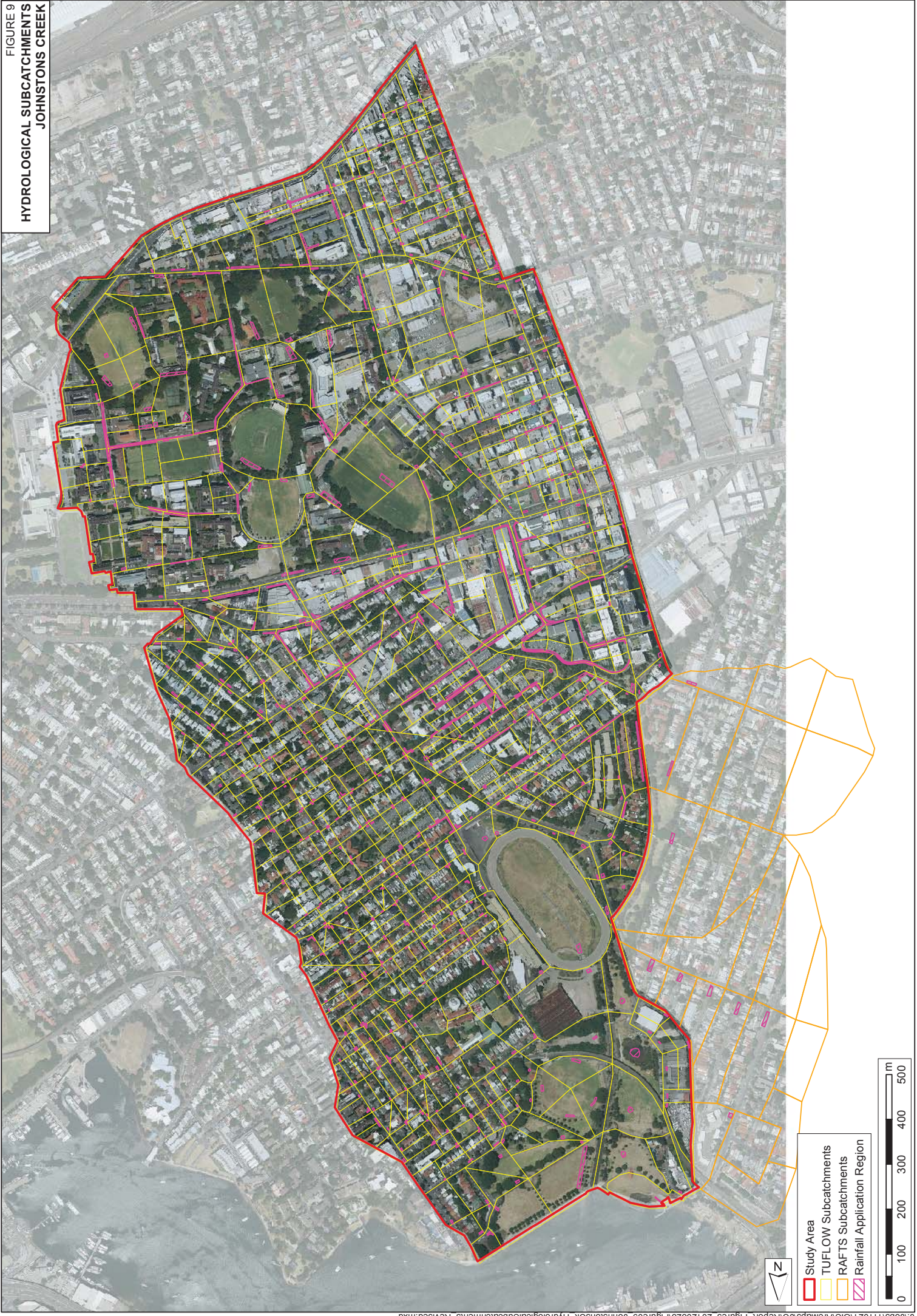


FIGURE 9
HYDROLOGICAL SUBCATCHMENTS
JOHNSTONS CREEK



- Study Area
- TUFLOW Subcatchments
- RAFTS Subcatchments
- Rainfall Application Region



FIGURE 10
LAND USE MAP
JOHNSTONS CREEK

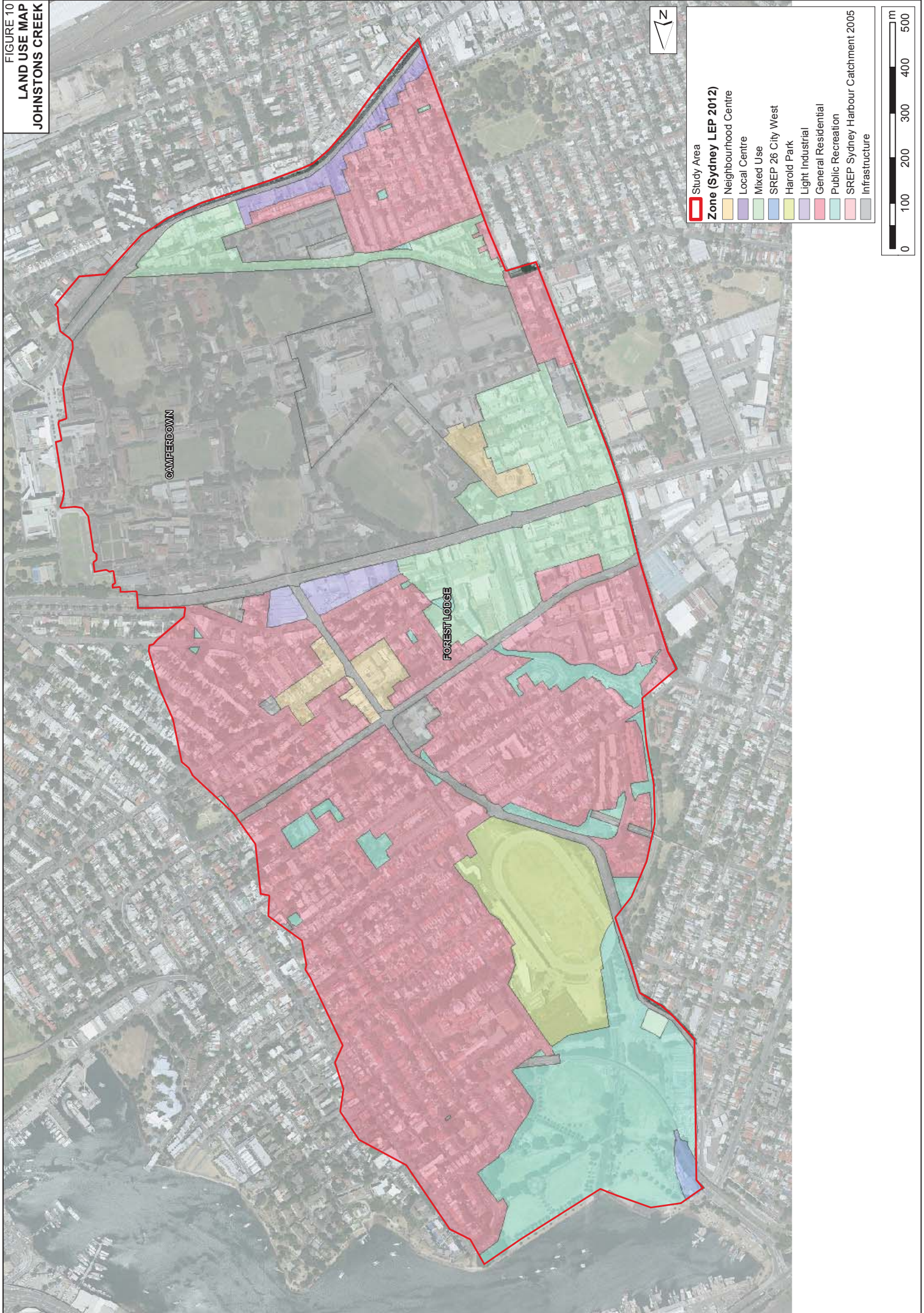
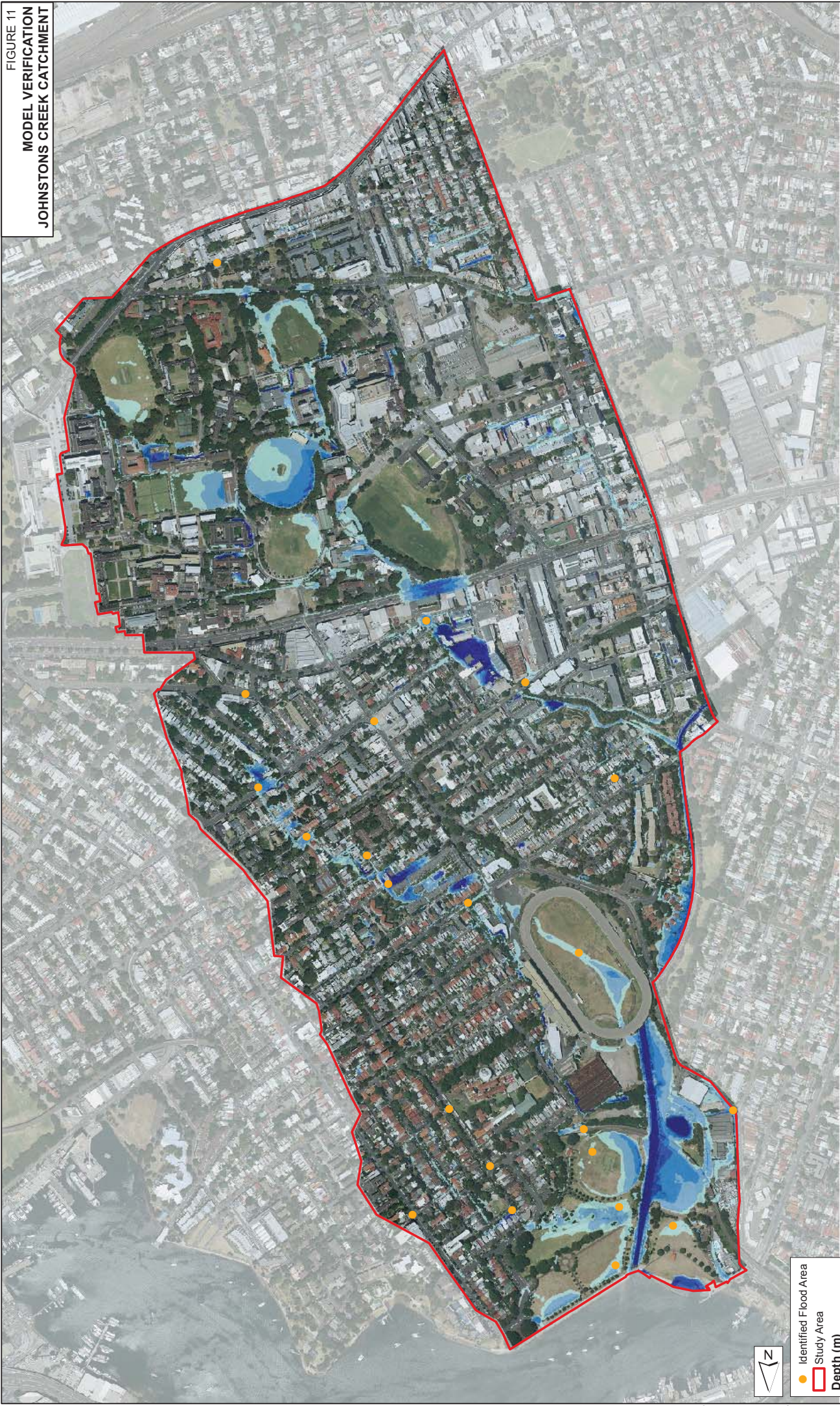










FIGURE 11
MODEL VERIFICATION
JOHNSTONS CREEK CATCHMENT





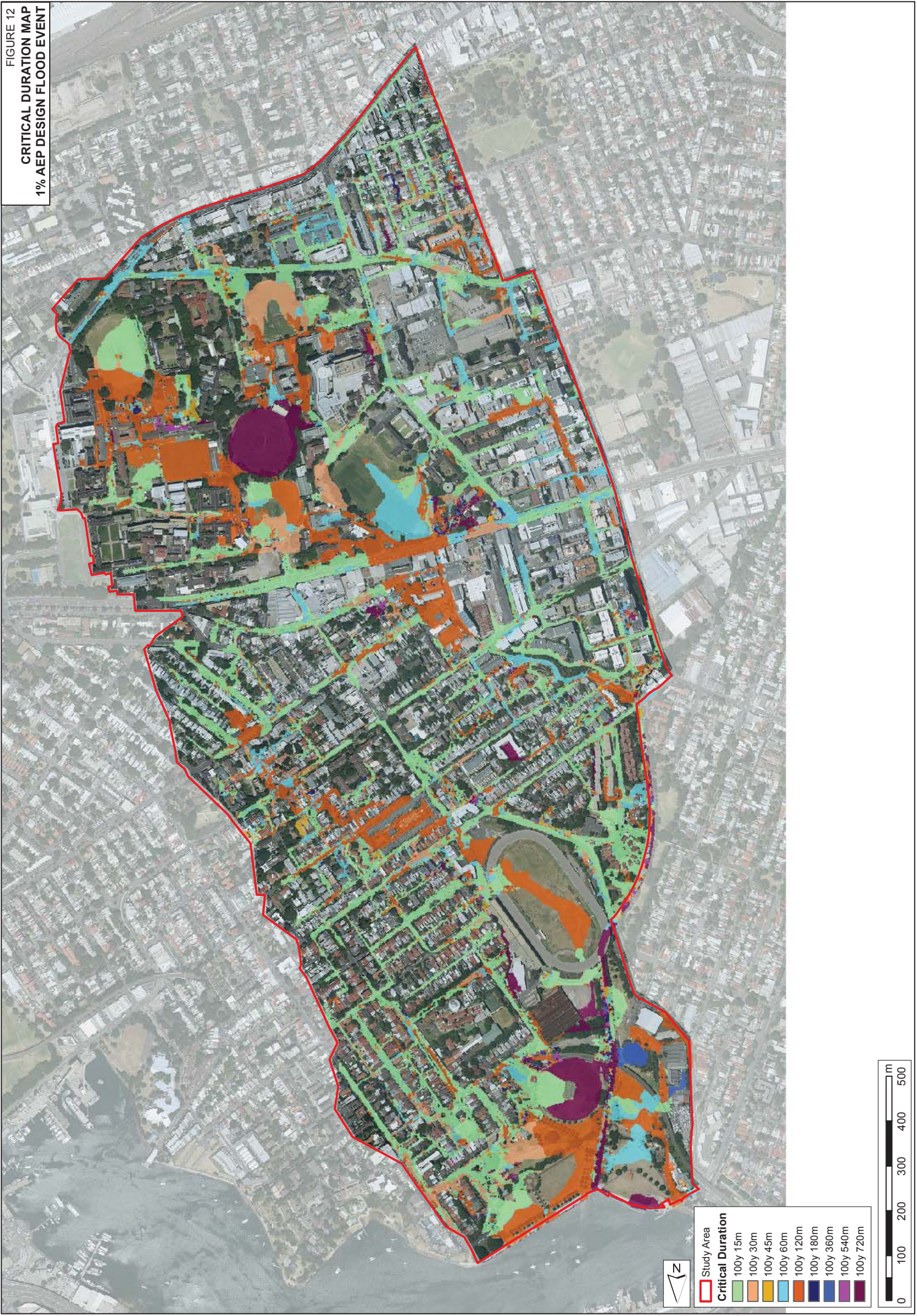
-  Identified Flood Area
-  Study Area
- Depth (m)**
-  0.1 - 0.25
-  0.25 - 0.5
-  0.5 - 0.75
-  0.75 - 1
-  > 1



Disclaimer:
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

Note: Flood depths modelled as less than 0.1m are not displayed

FIGURE 12
 CRITICAL DURATION MAP
 1% AEP DESIGN FLOOD EVENT



- Study Area
- Critical Duration
- 100y 15m
- 100y 30m
- 100y 45m
- 100y 60m
- 100y 120m
- 100y 180m
- 100y 360m
- 100y 540m
- 100y 720m

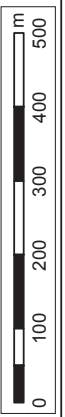
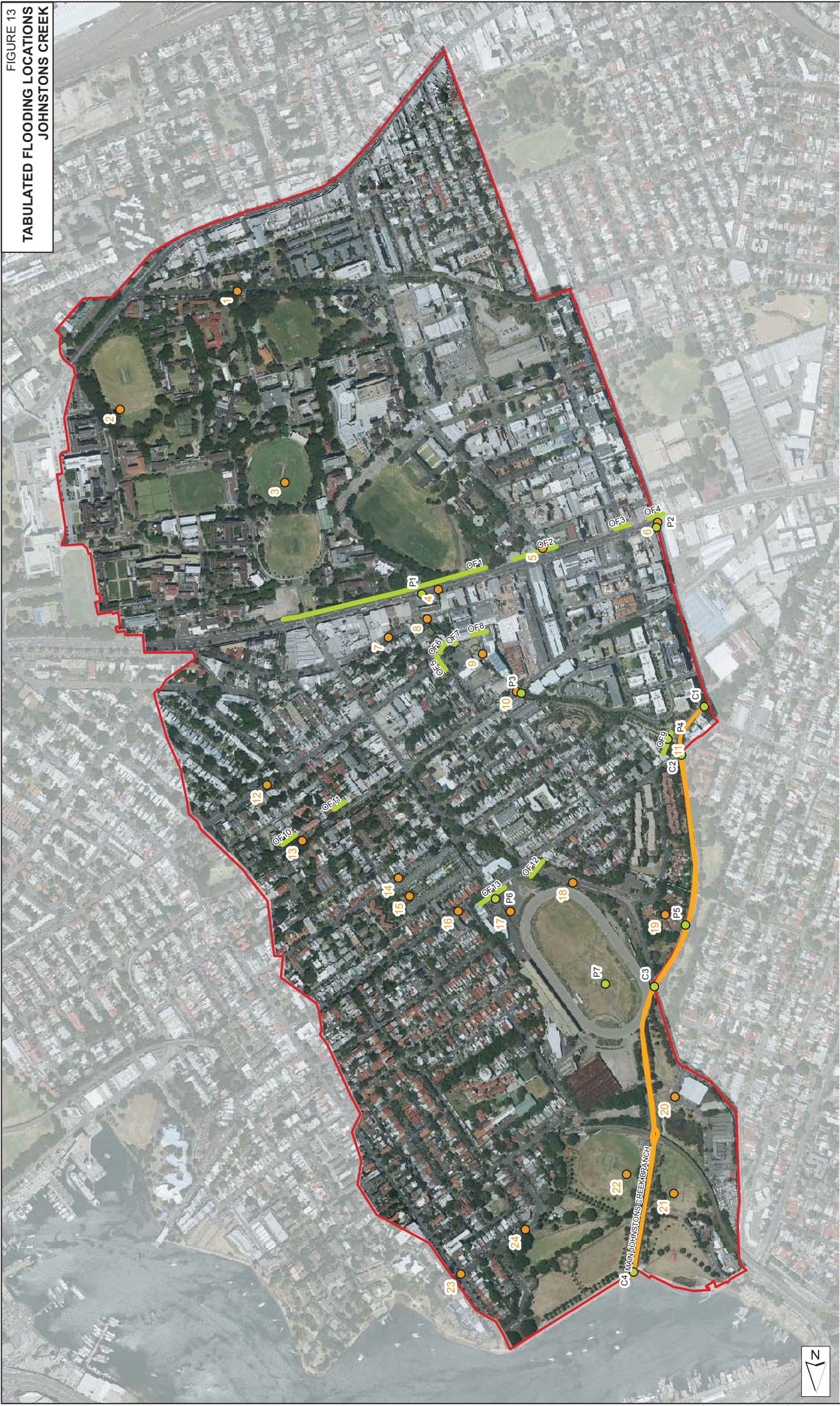


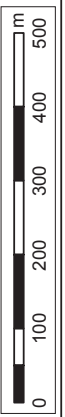
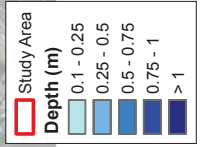
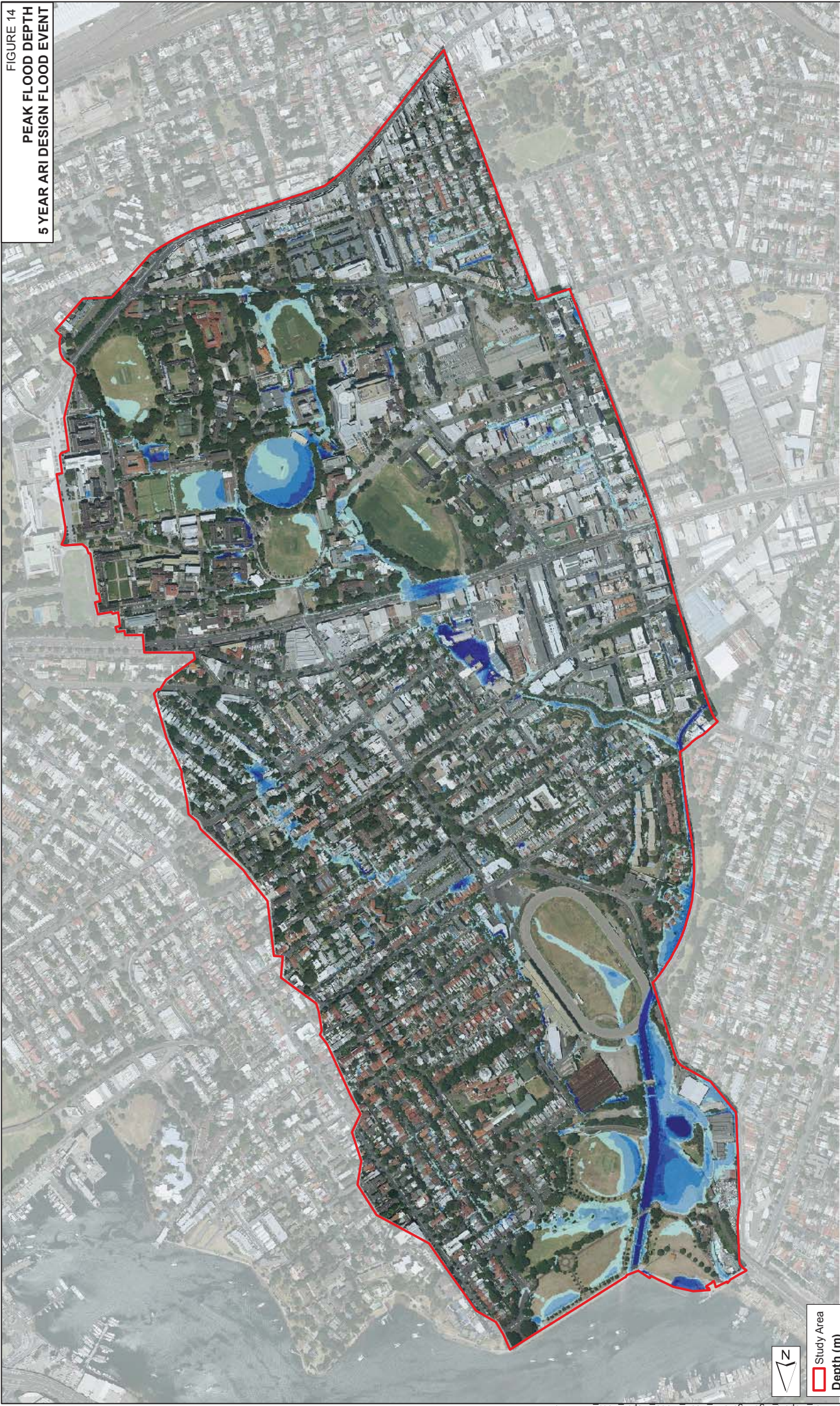
FIGURE 13
TABULATED FLOODING LOCATIONS
JOHNSTONS CREEK



- Channel & Pipe Flow Locations
- Overland Flow Locations
- Tabulated Flooding Locations
- Profile Location
- Study Area



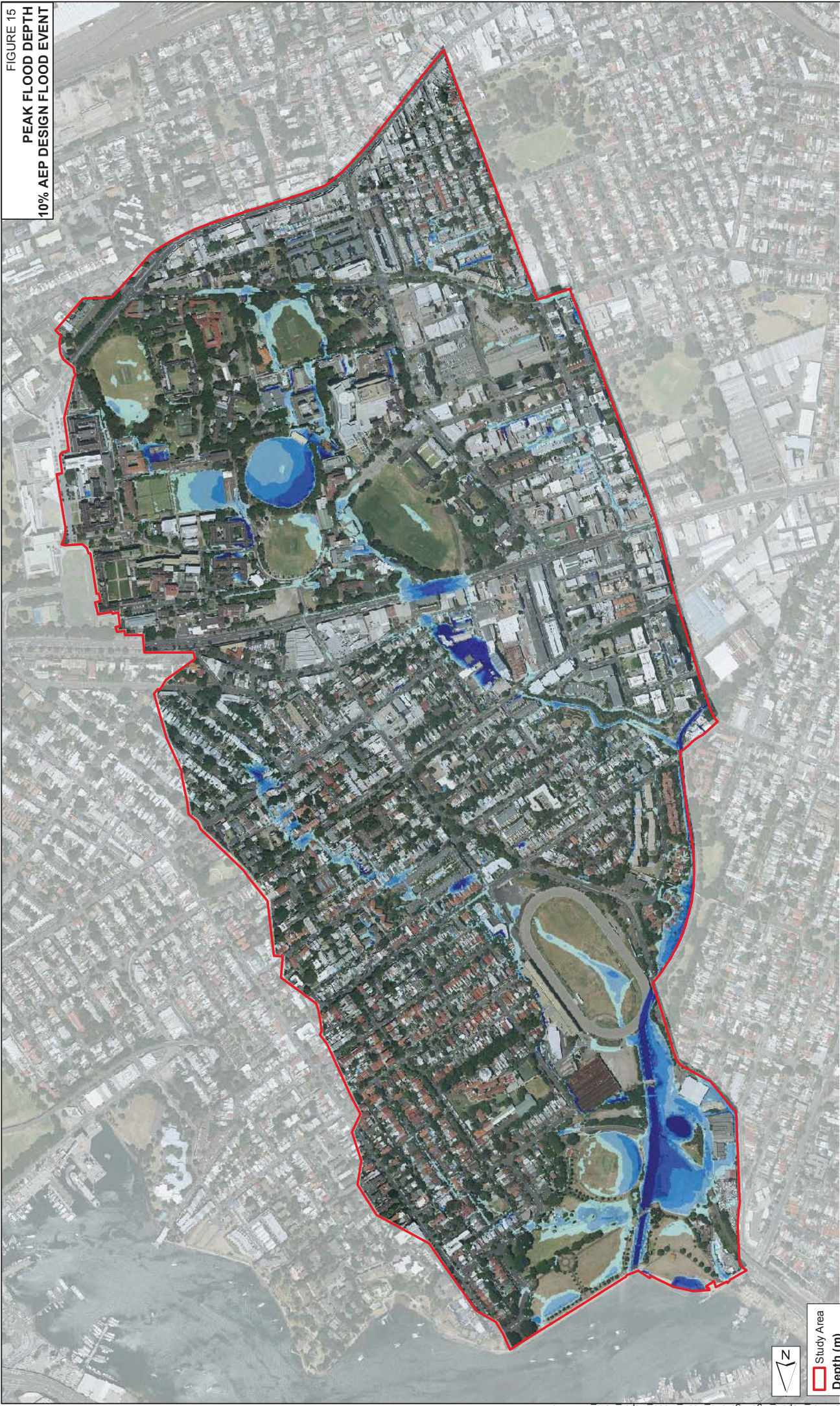
FIGURE 14
 PEAK FLOOD DEPTH
 5 YEAR ARI DESIGN FLOOD EVENT



Disclaimer:
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Note: Flood depths modelled as less than 0.1m are not displayed

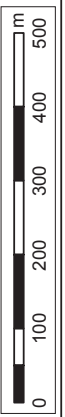
FIGURE 15
PEAK FLOOD DEPTH
10% AEP DESIGN FLOOD EVENT



Study Area
 Study Area

Depth (m)

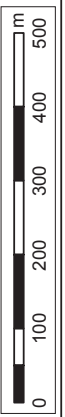
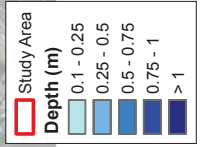
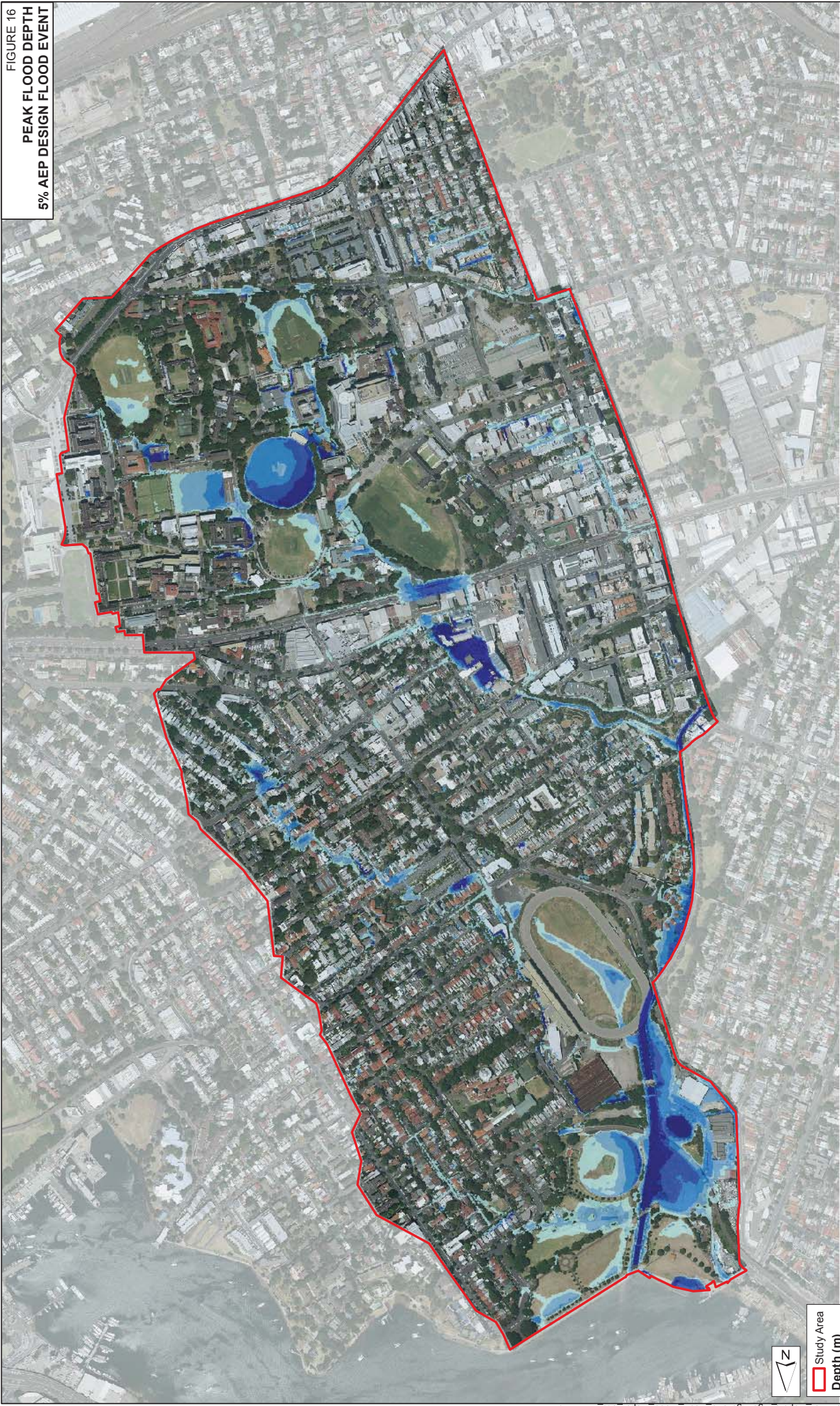
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
0.75 - 1
> 1



Disclaimer:
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

Note: Flood depths modelled as less than 0.1m are not displayed

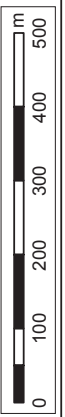
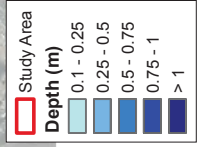
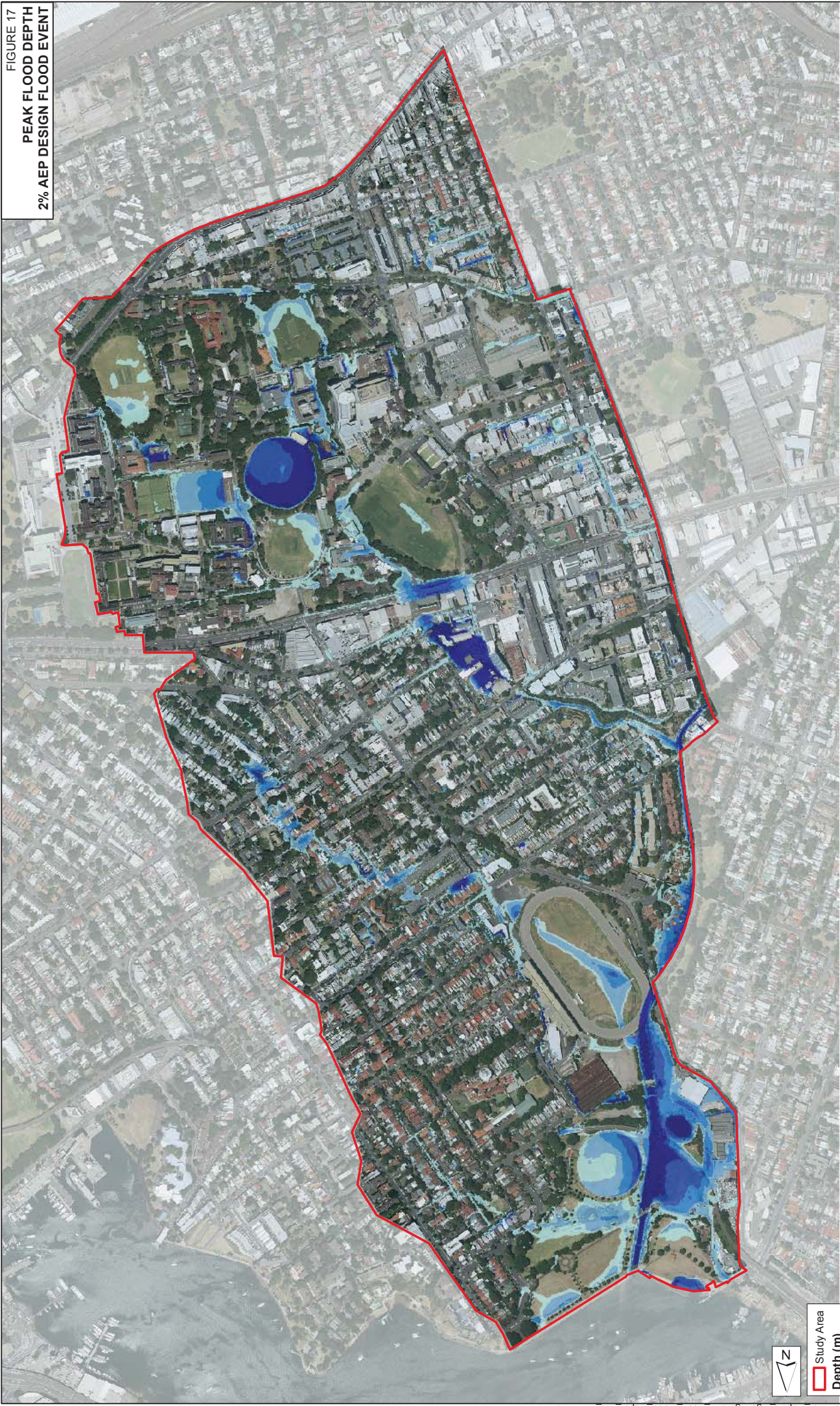
FIGURE 16
PEAK FLOOD DEPTH
5% AEP DESIGN FLOOD EVENT



Disclaimer:
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

Note: Flood depths modelled as less than 0.1m are not displayed

FIGURE 17
PEAK FLOOD DEPTH
2% AEP DESIGN FLOOD EVENT



Disclaimer:
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

Note: Flood depths modelled as less than 0.1m are not displayed

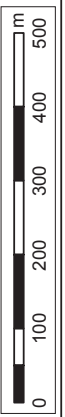
FIGURE 18
PEAK FLOOD DEPTH
1% AEP DESIGN FLOOD EVENT



Study Area
 Study Area

Depth (m)

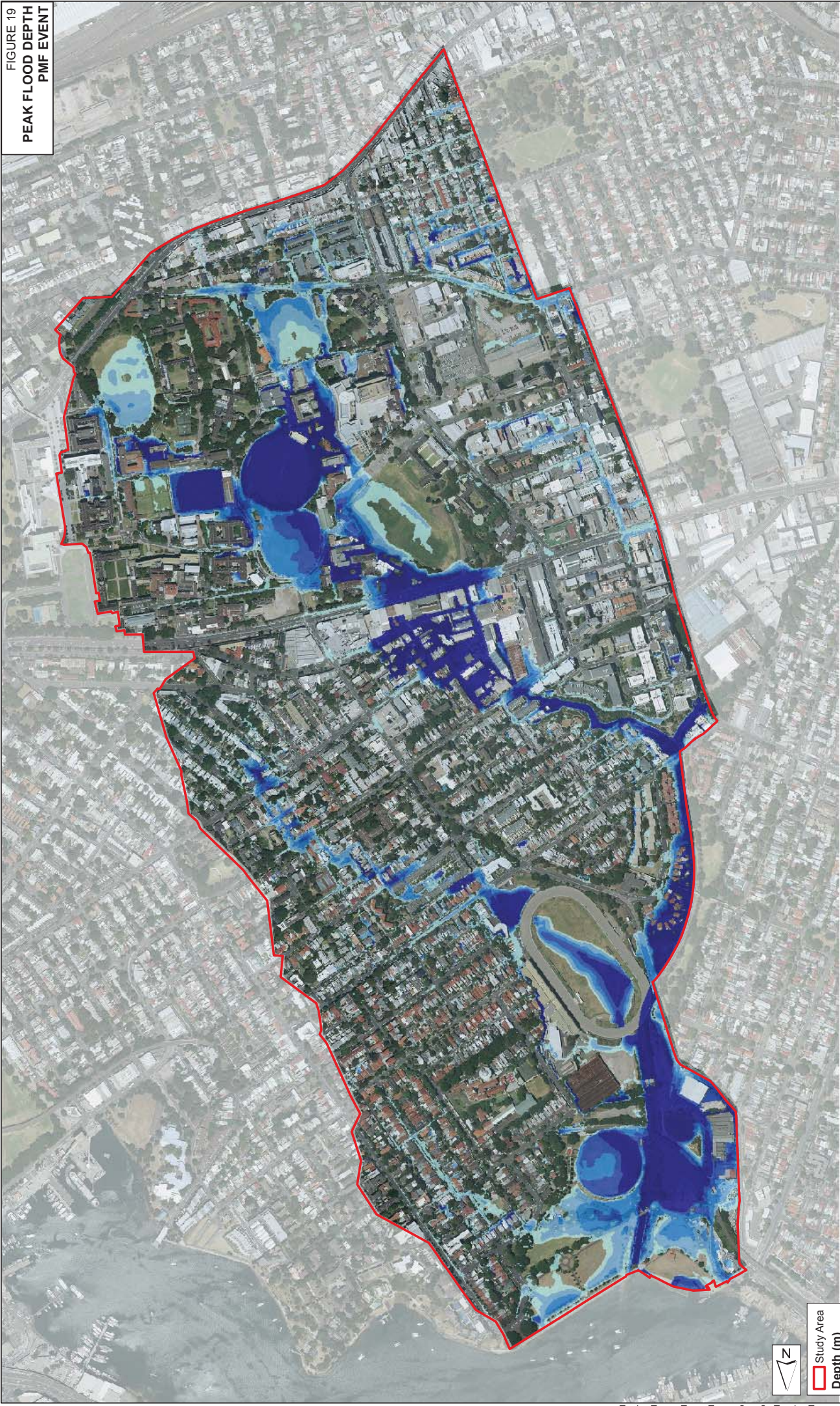
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
0.75 - 1
> 1



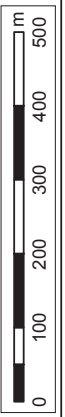
Disclaimer:
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

Note: Flood depths modelled as less than 0.1m are not displayed

FIGURE 19
PEAK FLOOD DEPTH
PMF EVENT



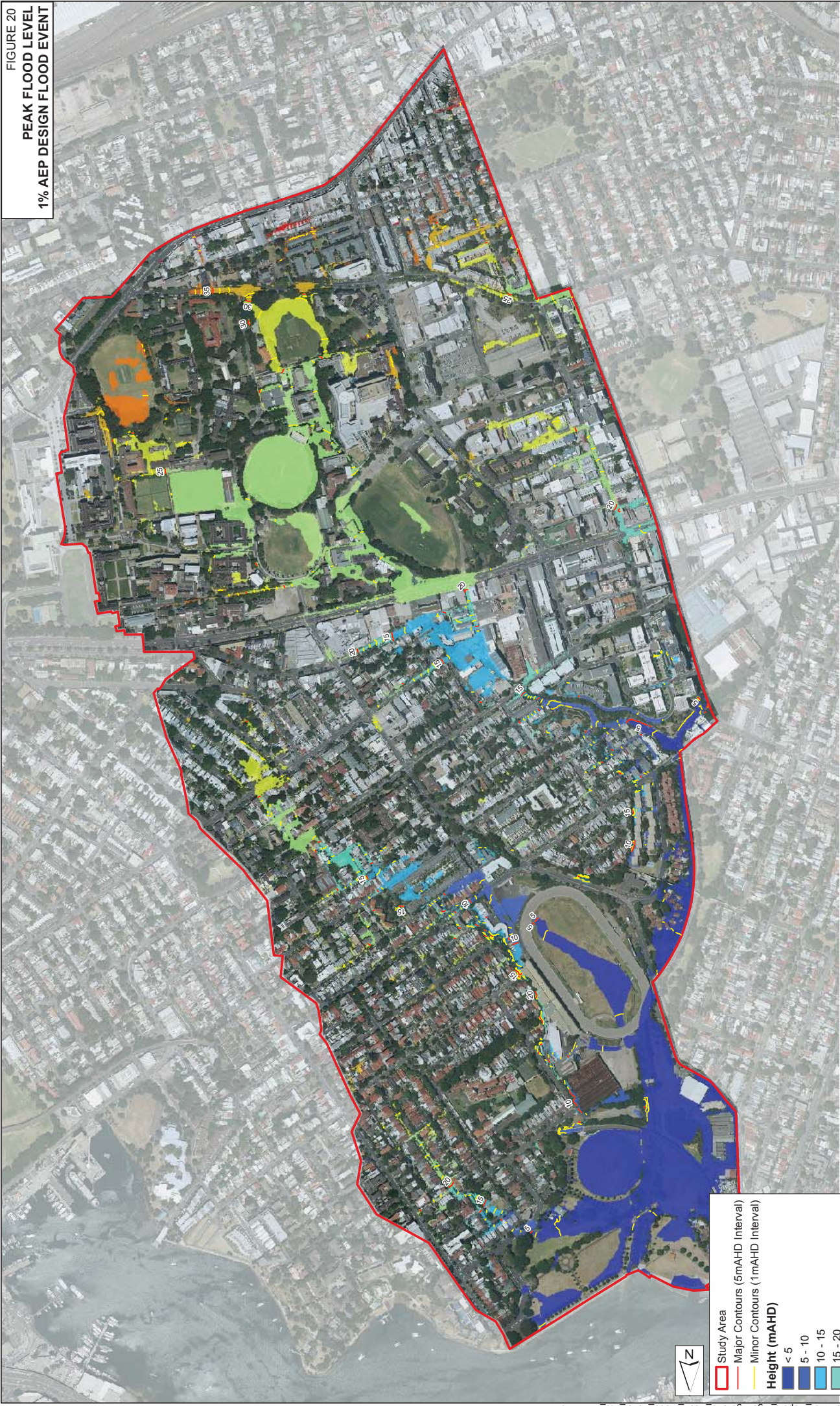
Study Area
Depth (m)
 0.1 - 0.25
 0.25 - 0.5
 0.5 - 0.75
 0.75 - 1
 > 1



Disclaimer:
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood effectation at individual allotments.

Note: Flood depths modelled as less than 0.1m are not displayed

FIGURE 20
PEAK FLOOD LEVEL
1% AEP DESIGN FLOOD EVENT

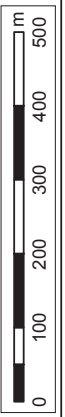


Study Area

- Major Contours (5m AHD Interval)
- Minor Contours (1m AHD Interval)

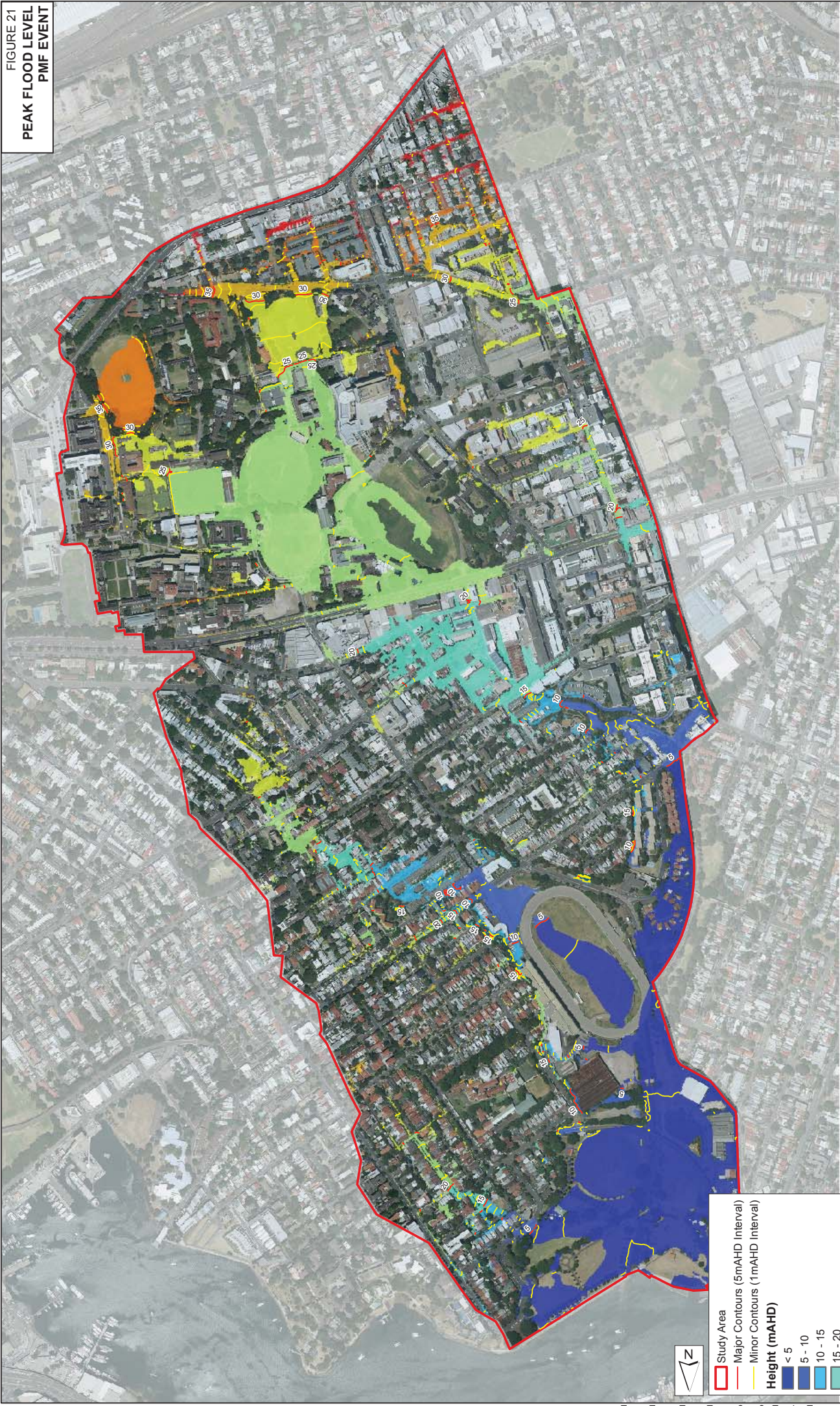
Height (mAHD)

< 5
5 - 10
10 - 15
15 - 20
20 - 25
25 - 30
30 - 35
35 - 40
> 40



Disclaimer:
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

FIGURE 21
PEAK FLOOD LEVEL
PMF EVENT



Disclaimer:
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Study Area
 Major Contours (5m AHD Interval)
 Minor Contours (1m AHD Interval)

Height (mAHD)

	< 5
	5 - 10
	10 - 15
	15 - 20
	20 - 25
	25 - 30
	30 - 35
	35 - 40
	> 40

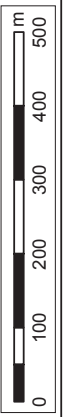
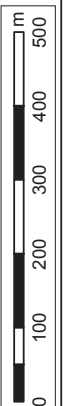


FIGURE 22
PEAK FLOOD VELOCITIES
1% AEP DESIGN FLOOD EVENT

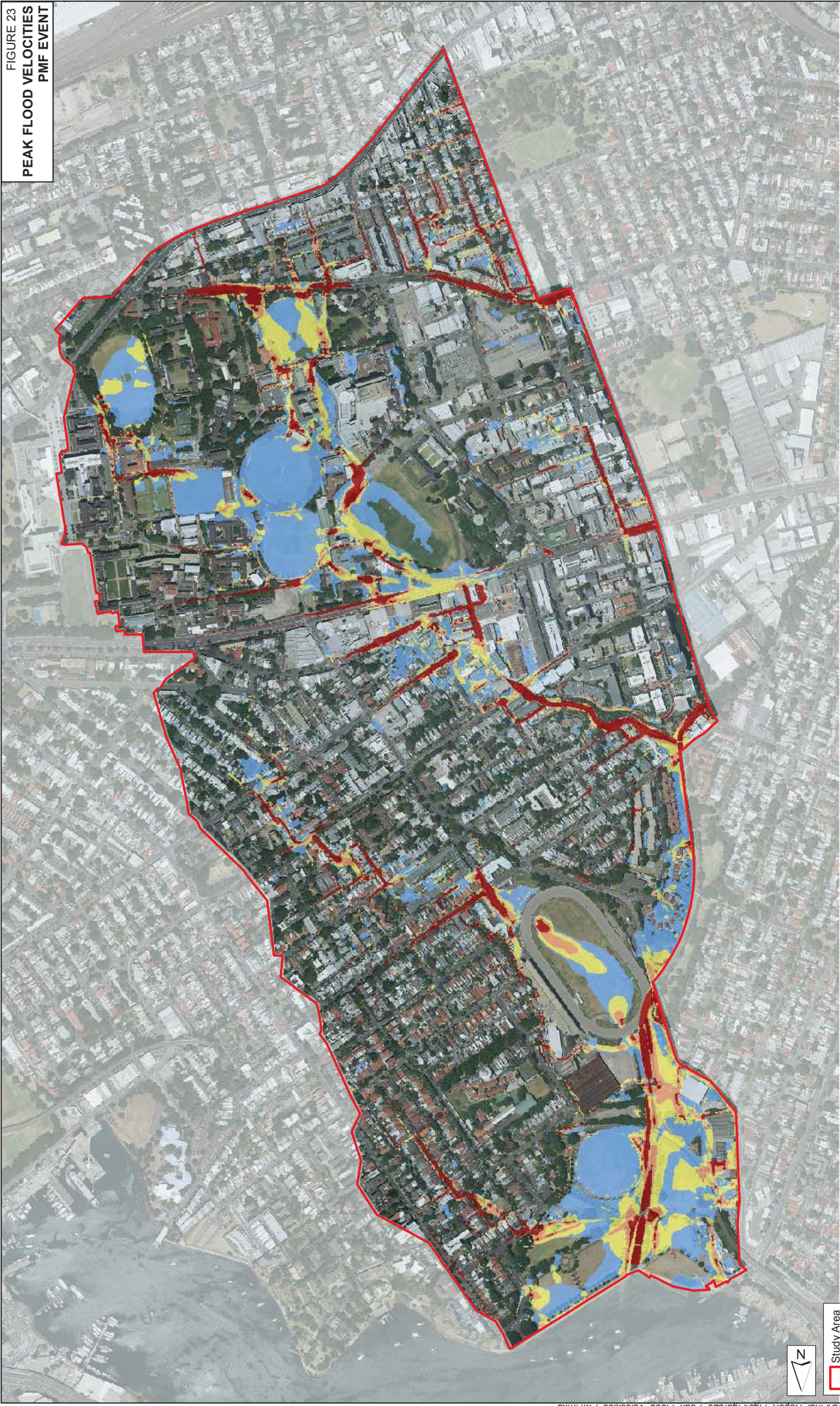


Study Area
Velocity (m/s)
 0 - 0.5
 0.5 - 1
 1 - 1.5
 > 1.5

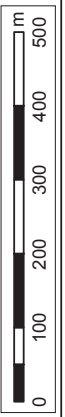


Disclaimer:
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood effectation at individual allotments.

FIGURE 23
**PEAK FLOOD VELOCITIES
 PMF EVENT**

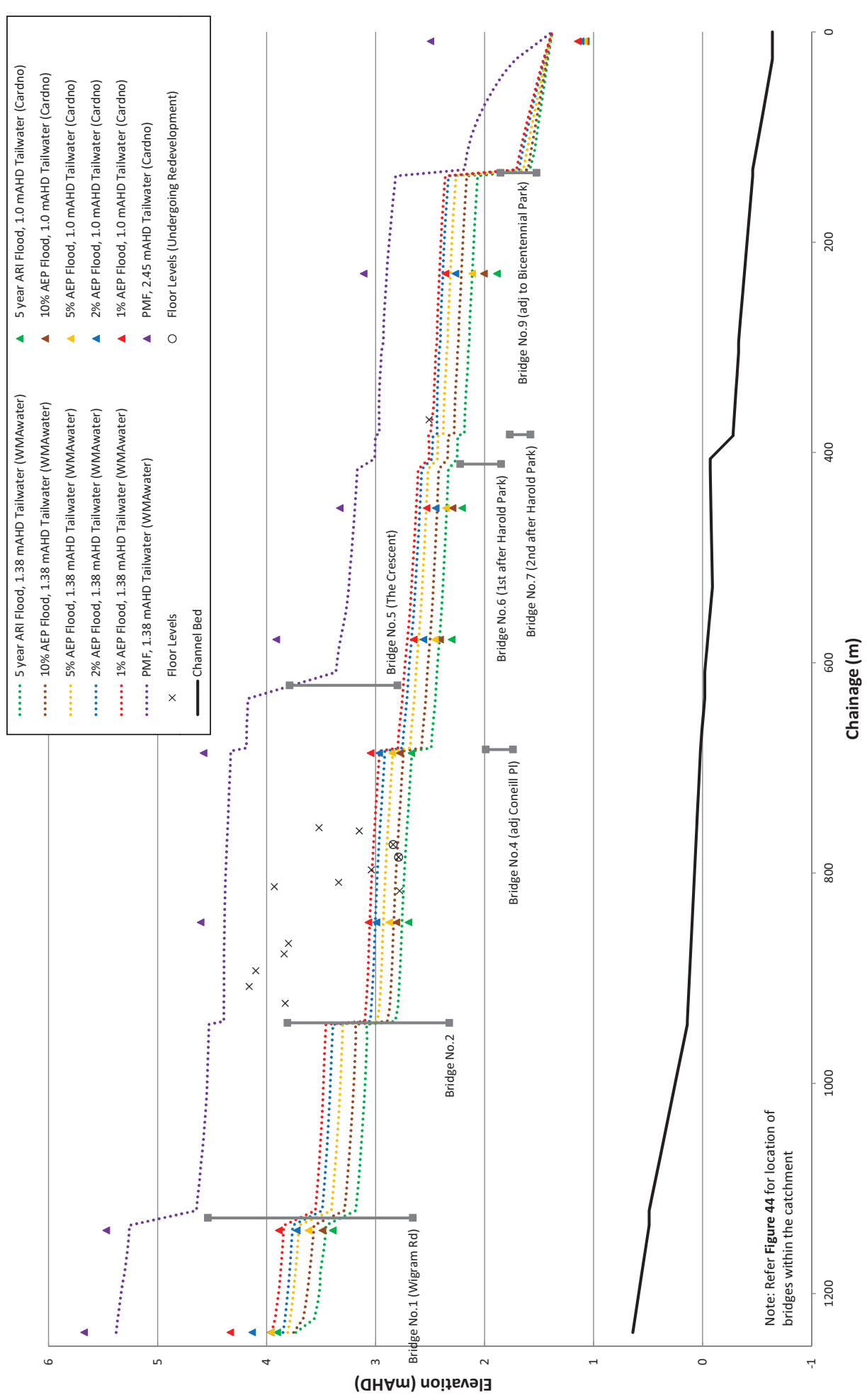


Study Area
Velocity (m/s)
 0 - 0.5
 0.5 - 1
 1 - 1.5
 > 1.5



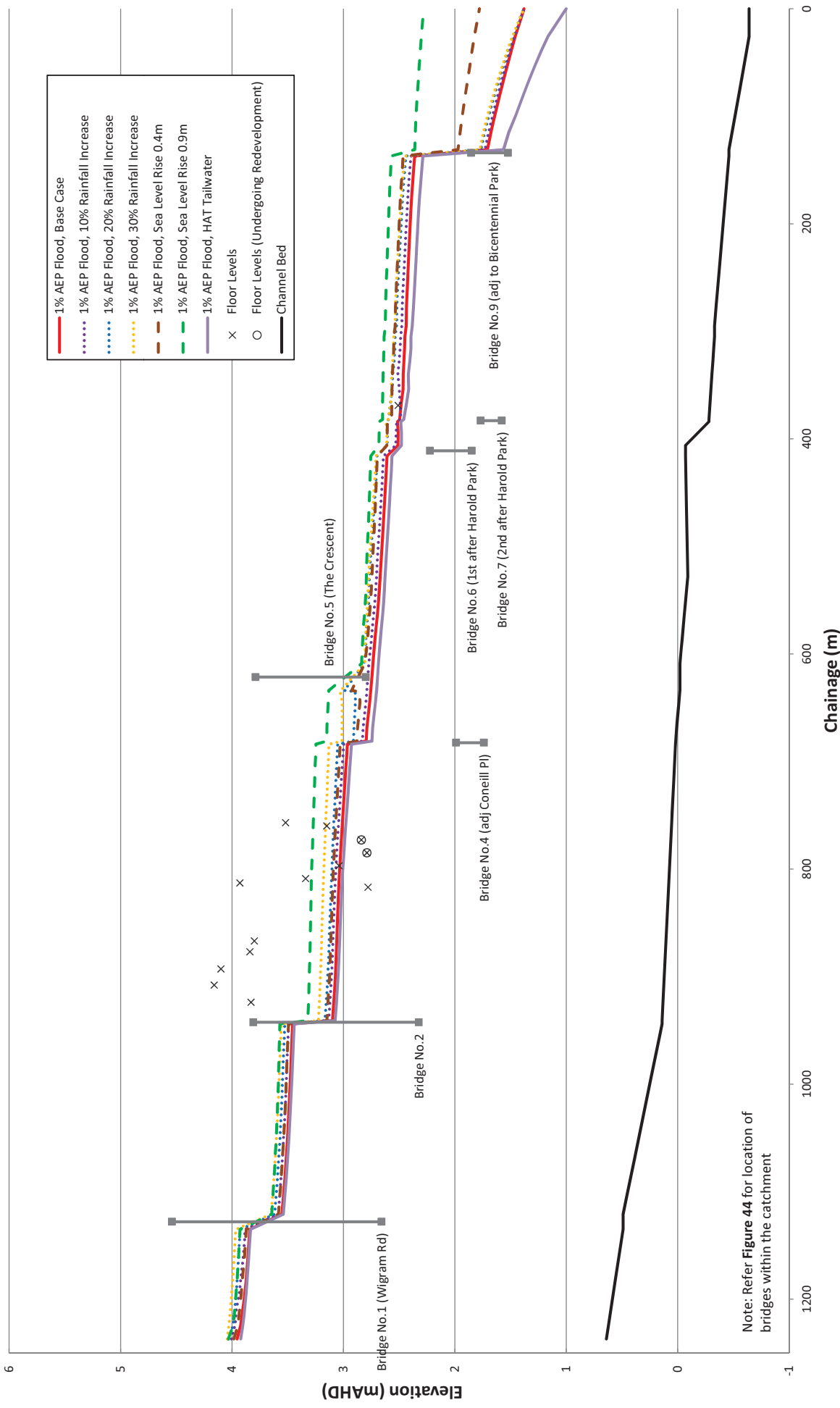
Disclaimer:
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood affectation at individual allotments.

FIGURE 24
JOHNSTONS CREEK FLOOD PROFILES
ALL DESIGN FLOOD EVENTS



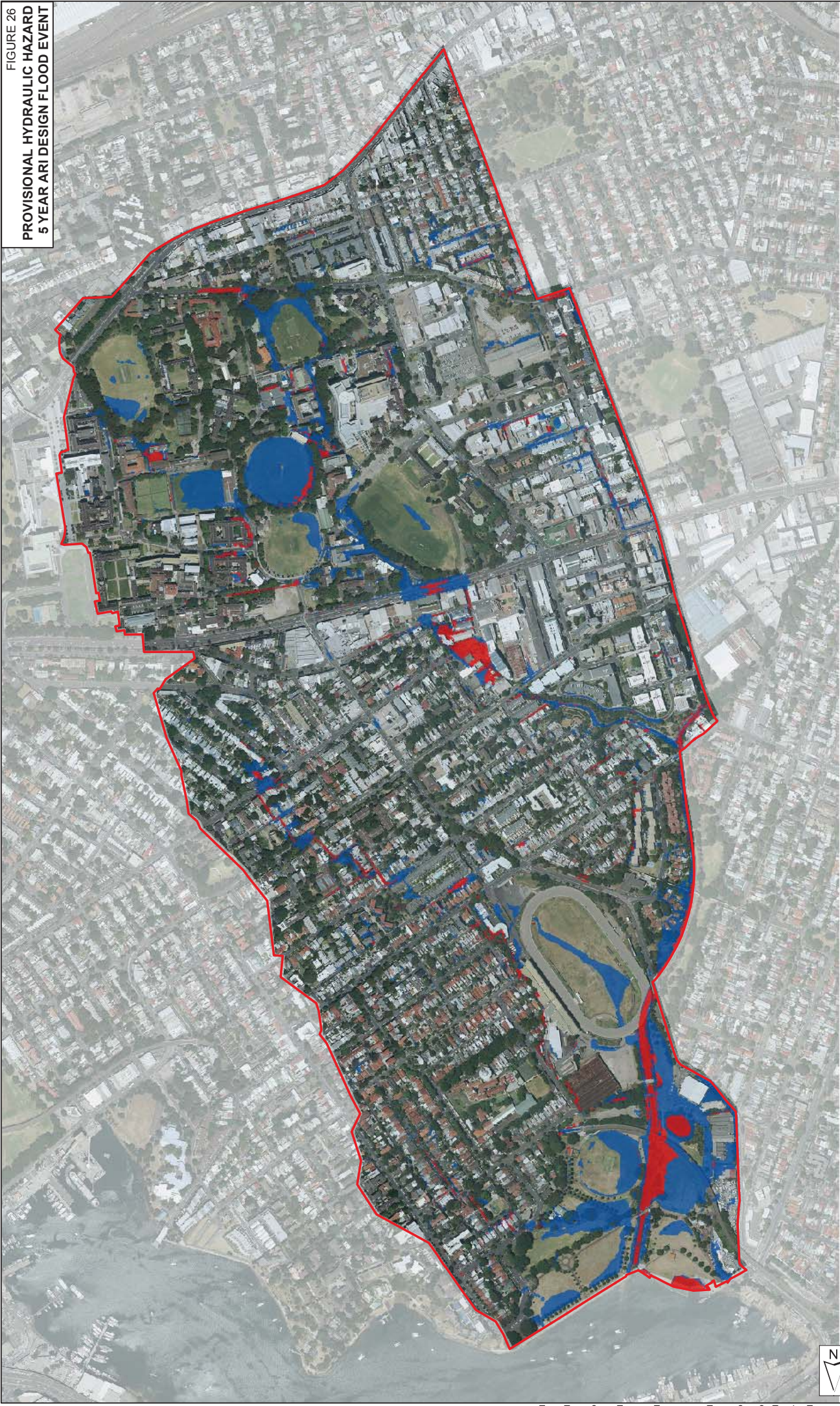
Note: Refer Figure 44 for location of bridges within the catchment

FIGURE 25
JOHNSTONS CREEK FLOOD PROFILES
CLIMATE CHANGE SCENARIOS

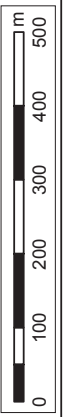


Note: Refer Figure 44 for location of bridges within the catchment

FIGURE 26
**PROVISIONAL HYDRAULIC HAZARD
 5 YEAR ARI DESIGN FLOOD EVENT**

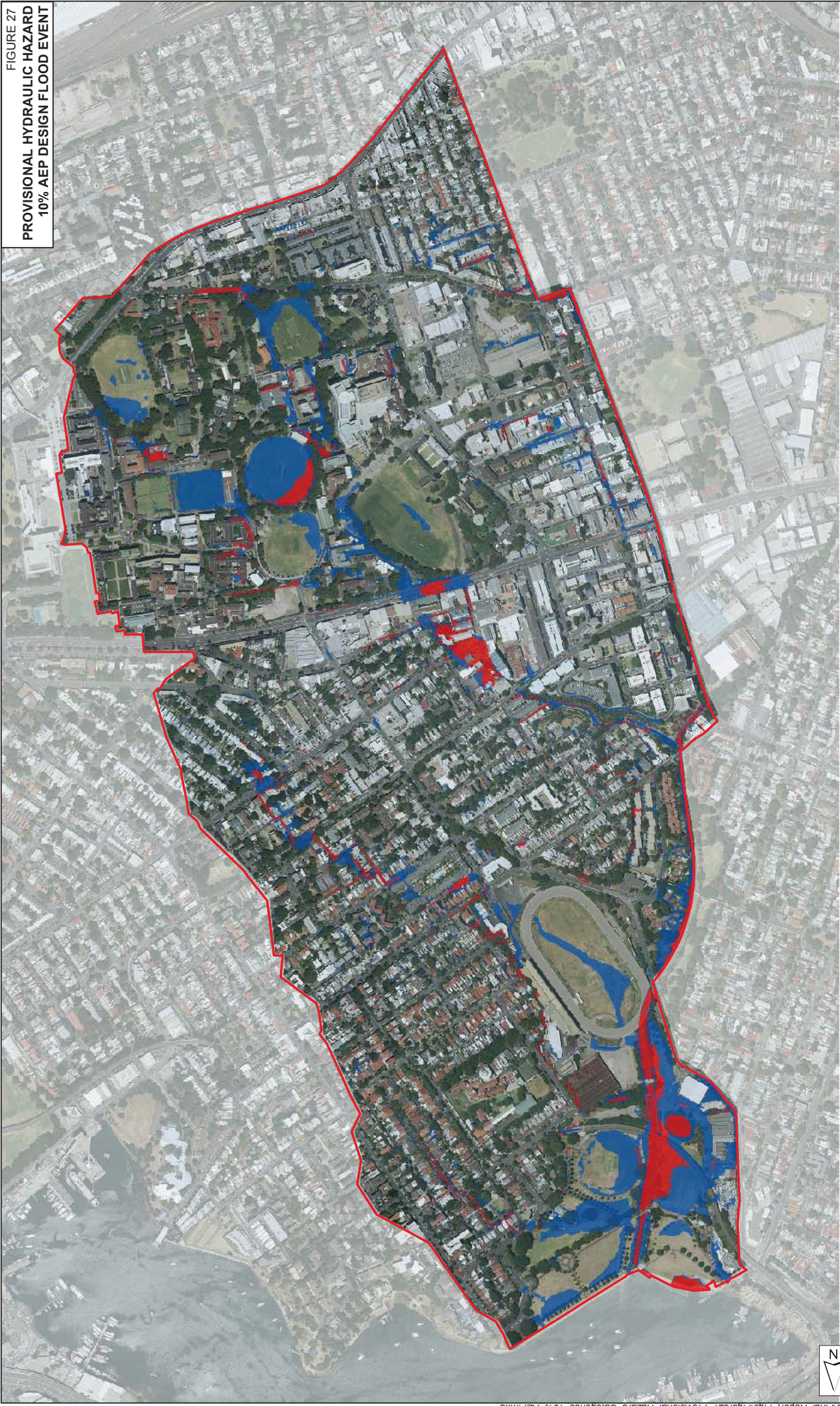


- Study Area
- Low Hazard
- High Hazard

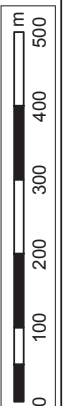


Disclaimer:
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FIGURE 27
**PROVISIONAL HYDRAULIC HAZARD
 10% AEP DESIGN FLOOD EVENT**

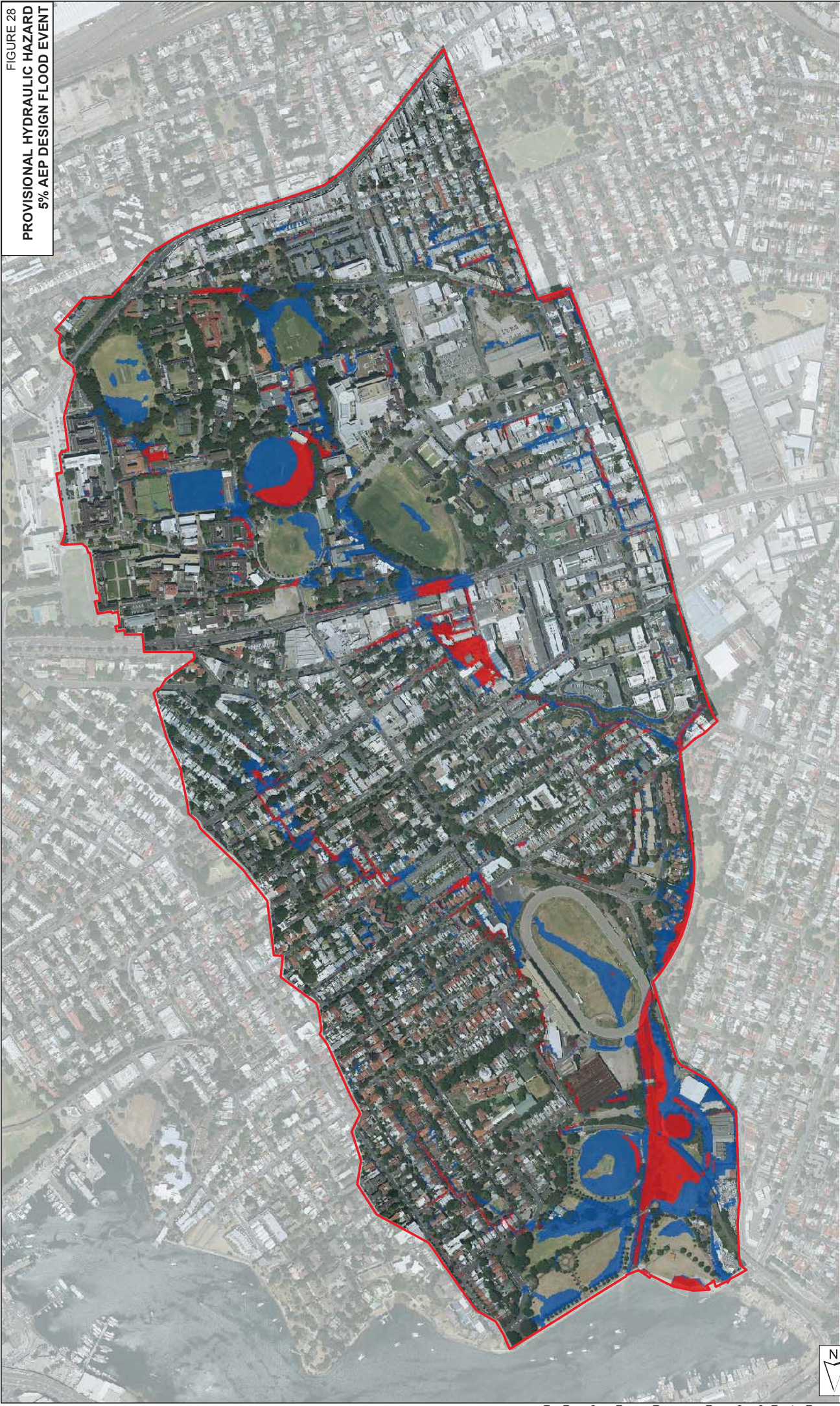


- Study Area
- Hydraulic Hazard
- Low Hazard
- High Hazard

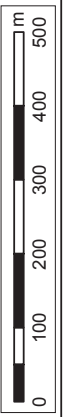


Disclaimer:
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of flood behaviour within the Catchment. Inundation from local overland flow may vary slightly to the displayed design rainfall inundation patterns. Council should be consulted to confirm flood effectation at individual allotments.

FIGURE 28
**PROVISIONAL HYDRAULIC HAZARD
 5% AEP DESIGN FLOOD EVENT**

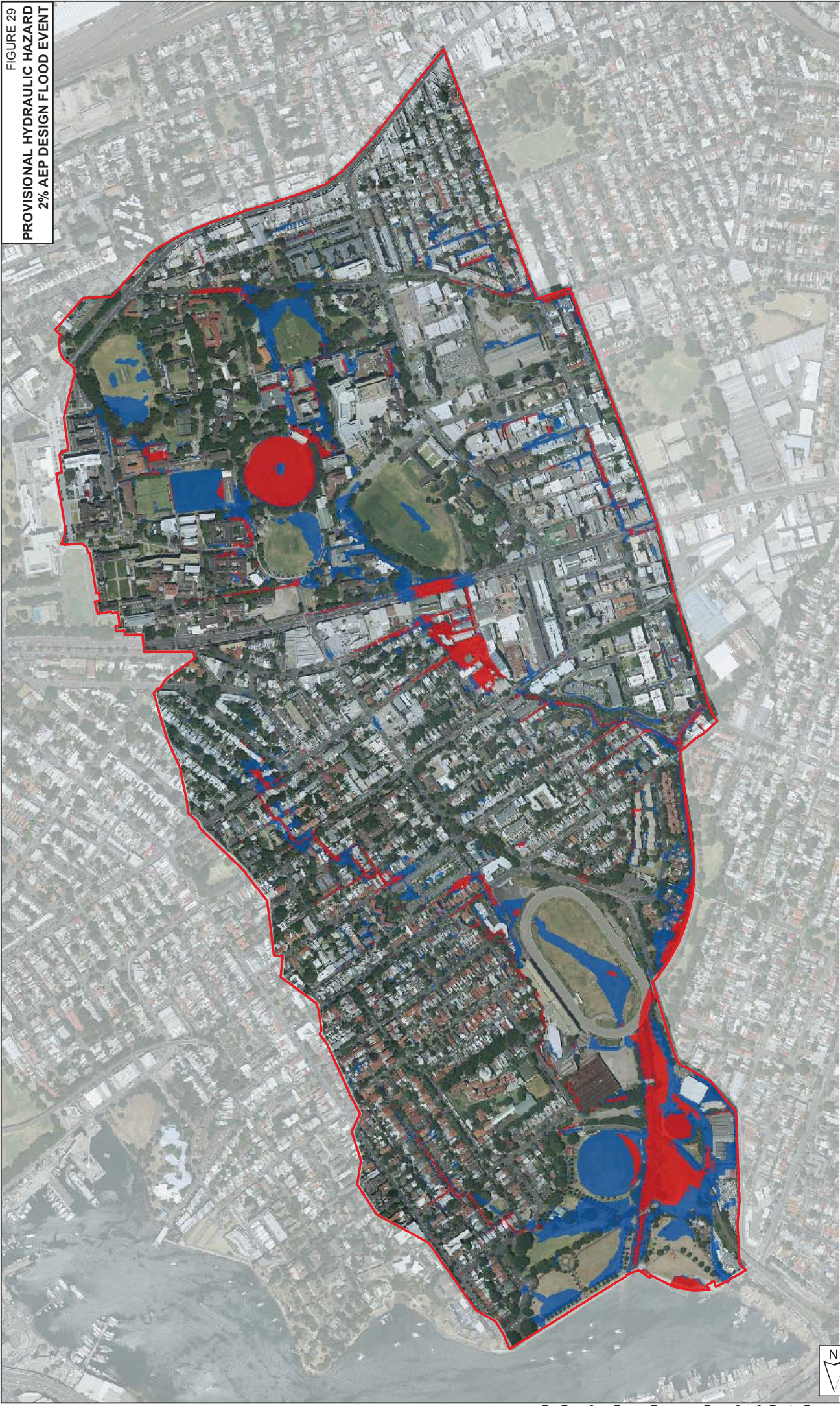


- Study Area
- Hydraulic Hazard
- Low Hazard
- High Hazard

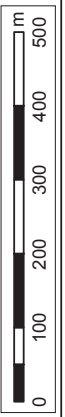


Disclaimer:
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FIGURE 29
**PROVISIONAL HYDRAULIC HAZARD
 2% AEP DESIGN FLOOD EVENT**

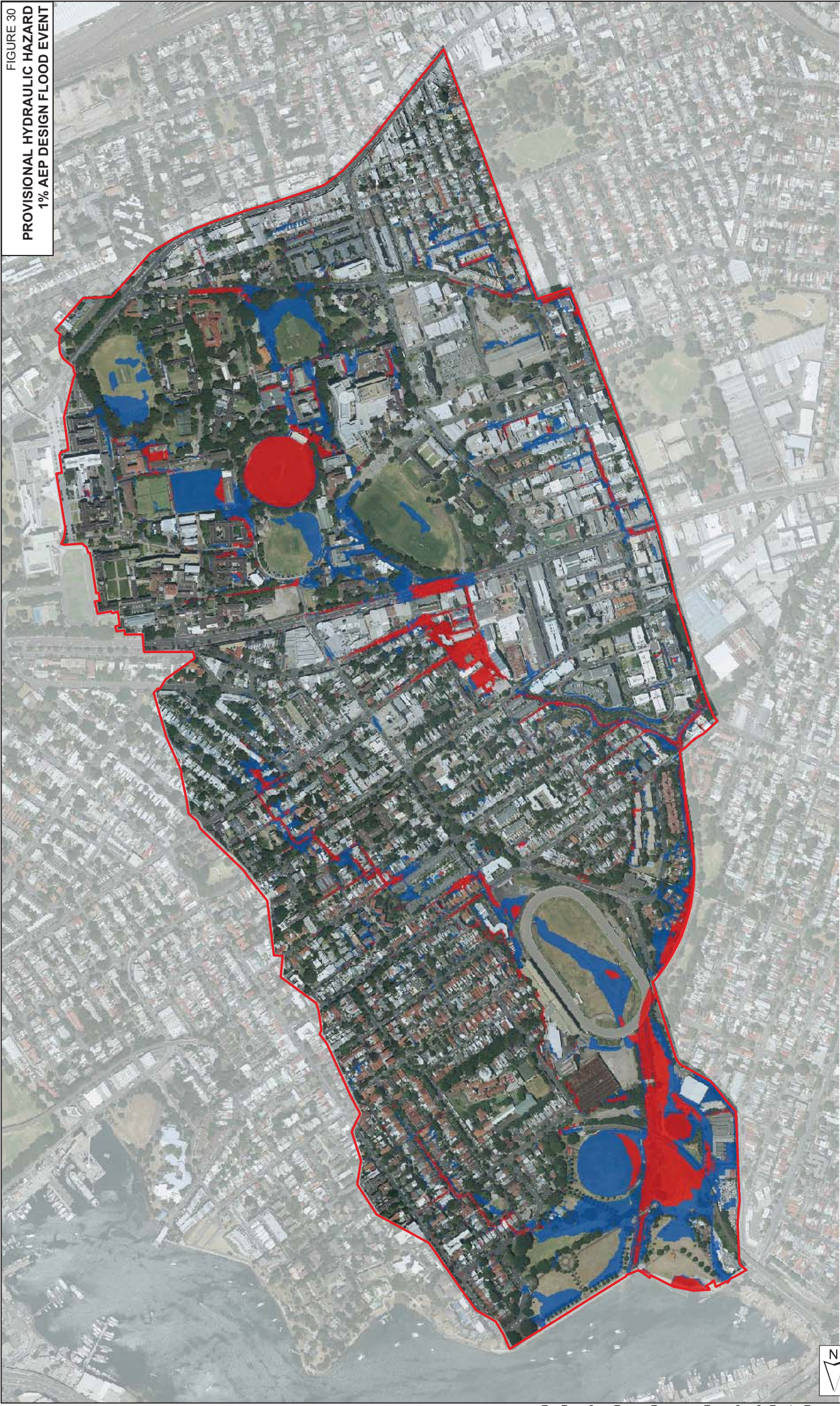


-  Study Area
-  Hydraulic Hazard
-  Low Hazard
-  High Hazard

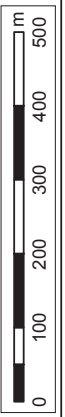


Disclaimer:
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FIGURE 30
**PROVISIONAL HYDRAULIC HAZARD
 1% AEP DESIGN FLOOD EVENT**

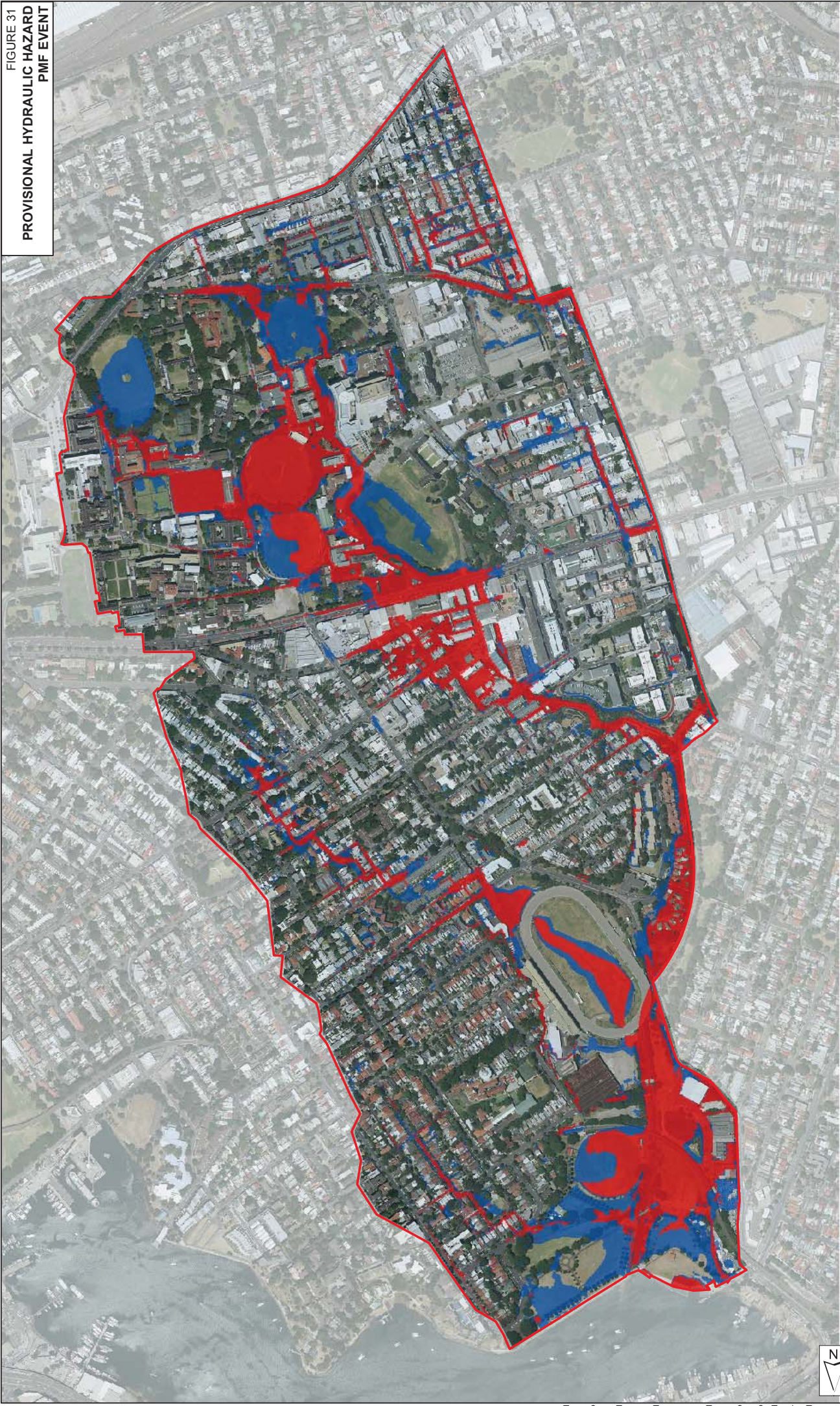


 Study Area
 Hydraulic Hazard
 Low Hazard
 High Hazard

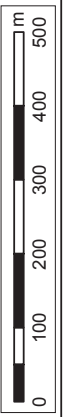


Disclaimer:
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FIGURE 31
**PROVISIONAL HYDRAULIC HAZARD
 PMF EVENT**

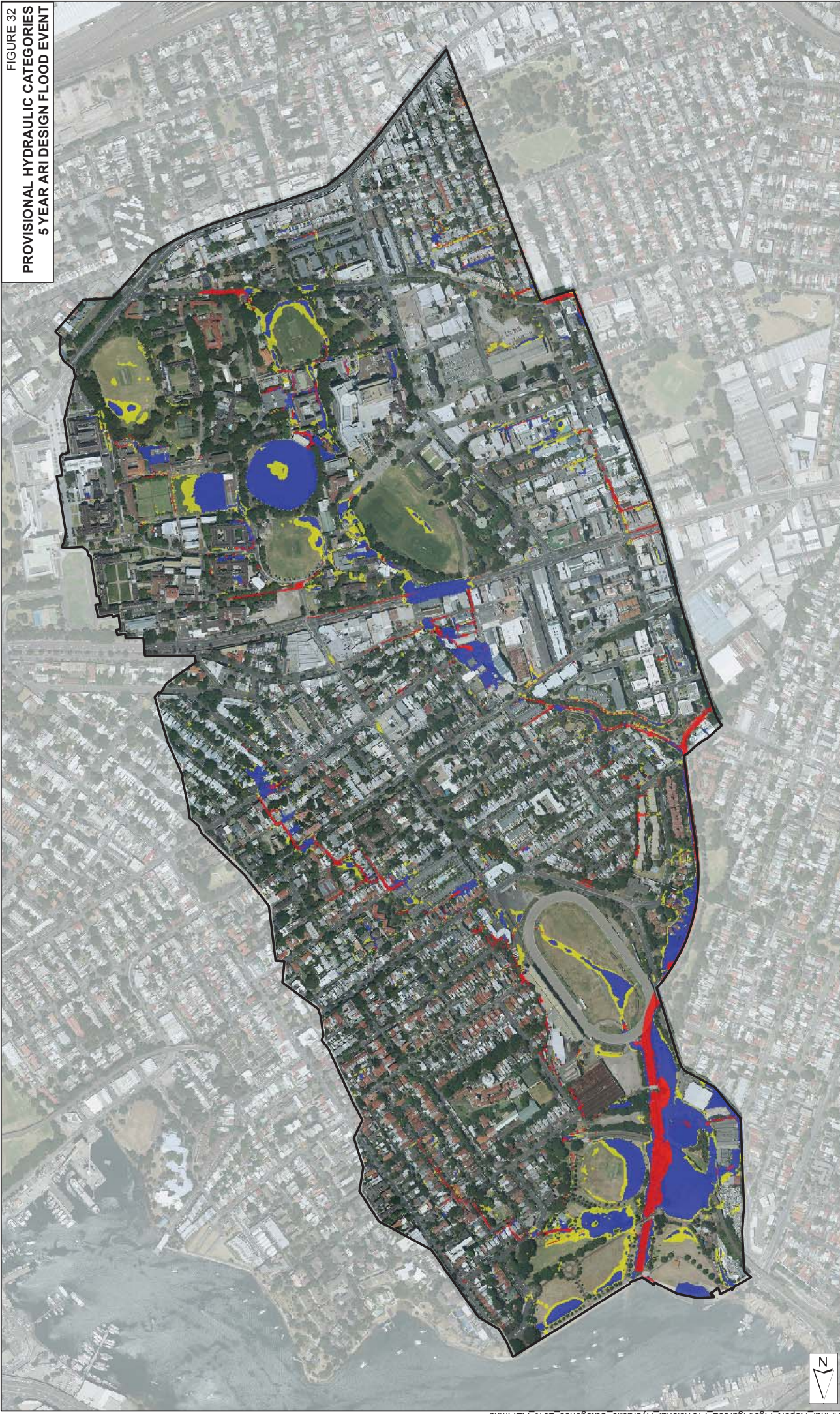


- Study Area
- Hydraulic Hazard
- Low Hazard
- High Hazard

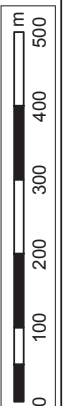


Disclaimer:
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FIGURE 32
**PROVISIONAL HYDRAULIC CATEGORIES
 5 YEAR ARI DESIGN FLOOD EVENT**



-  Study Area
- Hydraulic Categorisation**
-  Floodway
-  Flood Storage
-  Flood Fringe



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