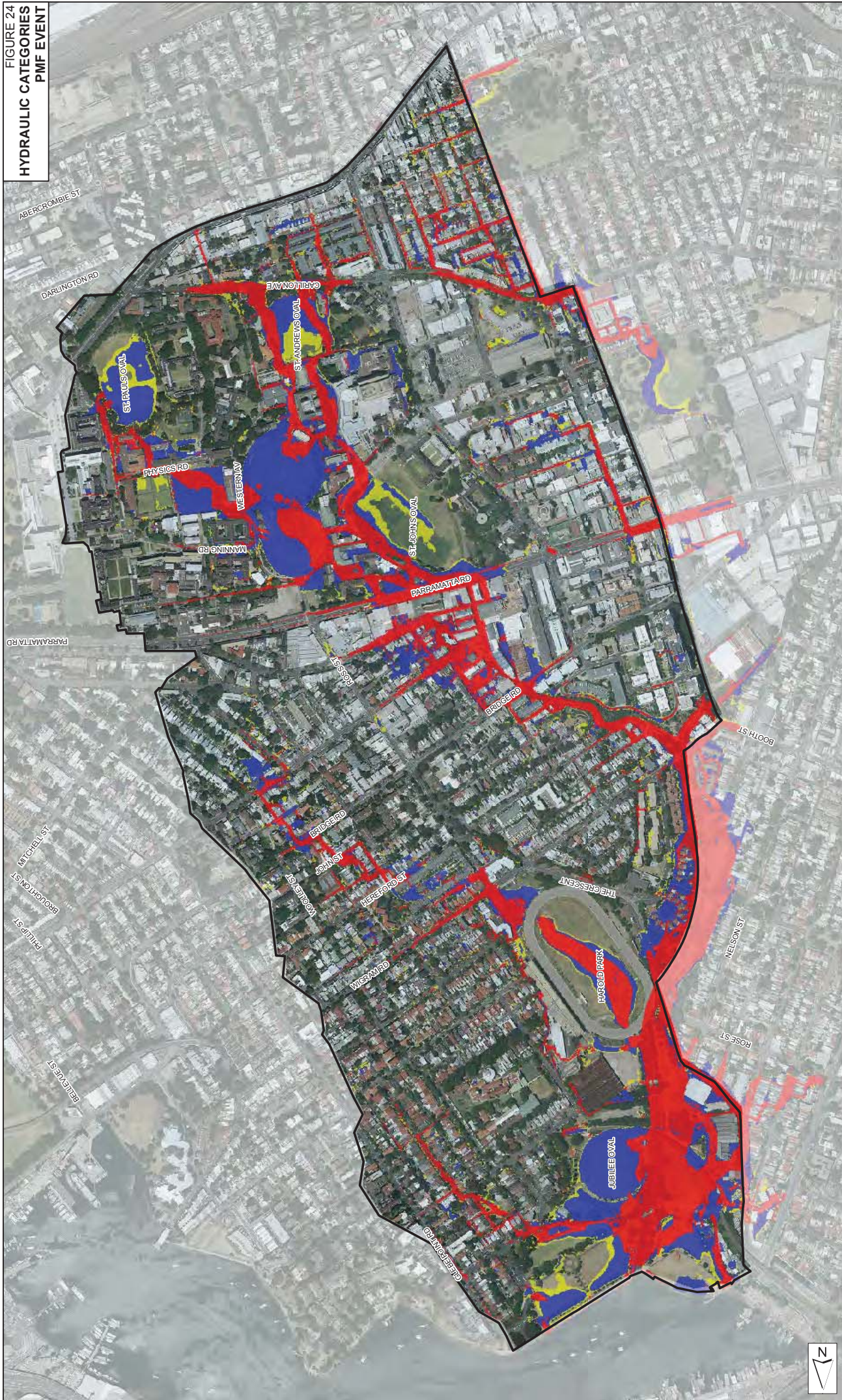
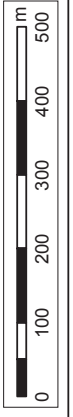


FIGURE 24
HYDRAULIC CATEGORIES
PMF EVENT

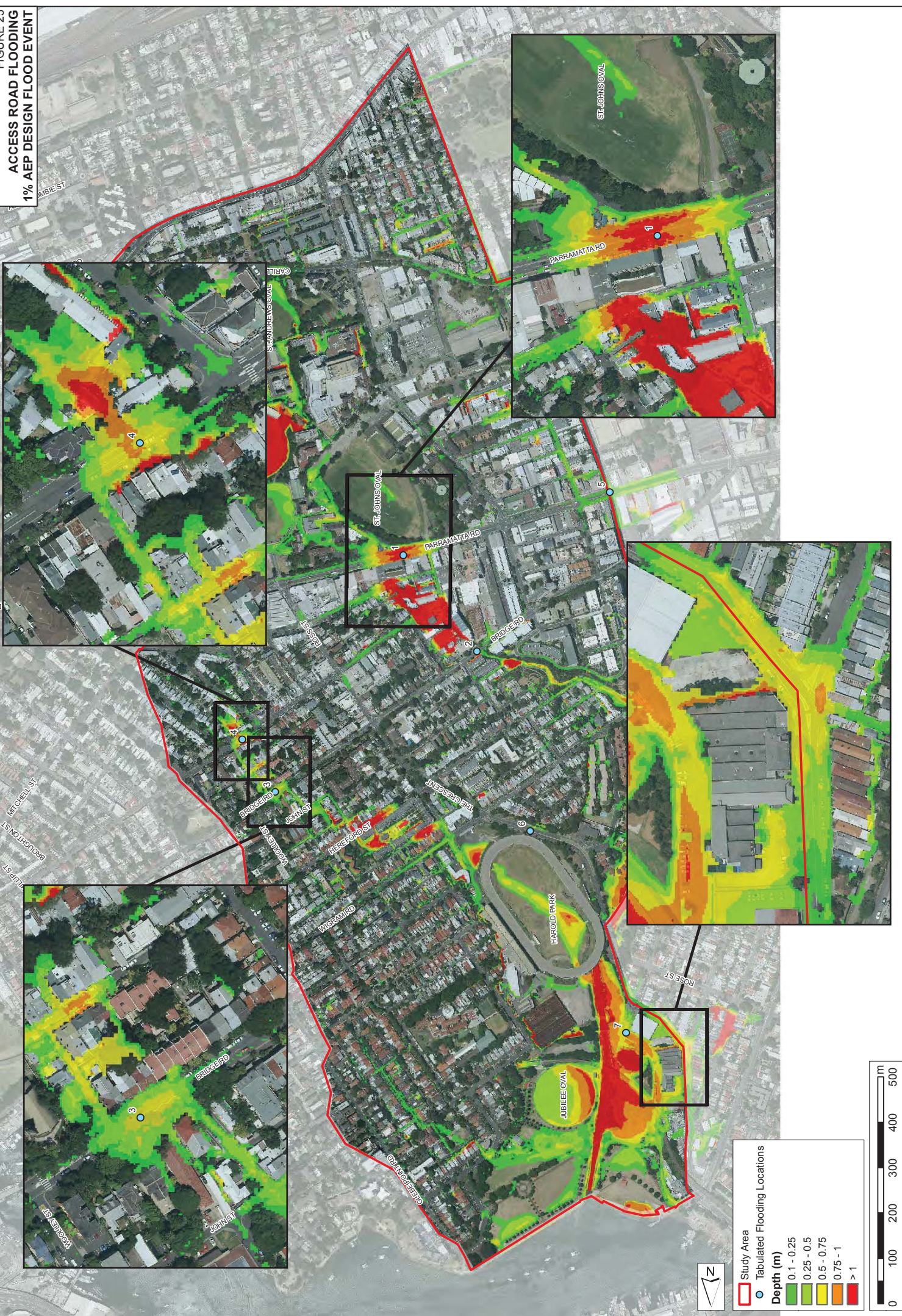


 Study Area
Hydraulic Categorisation
 Floodway
 Flood Storage
 Flood Fringe



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.

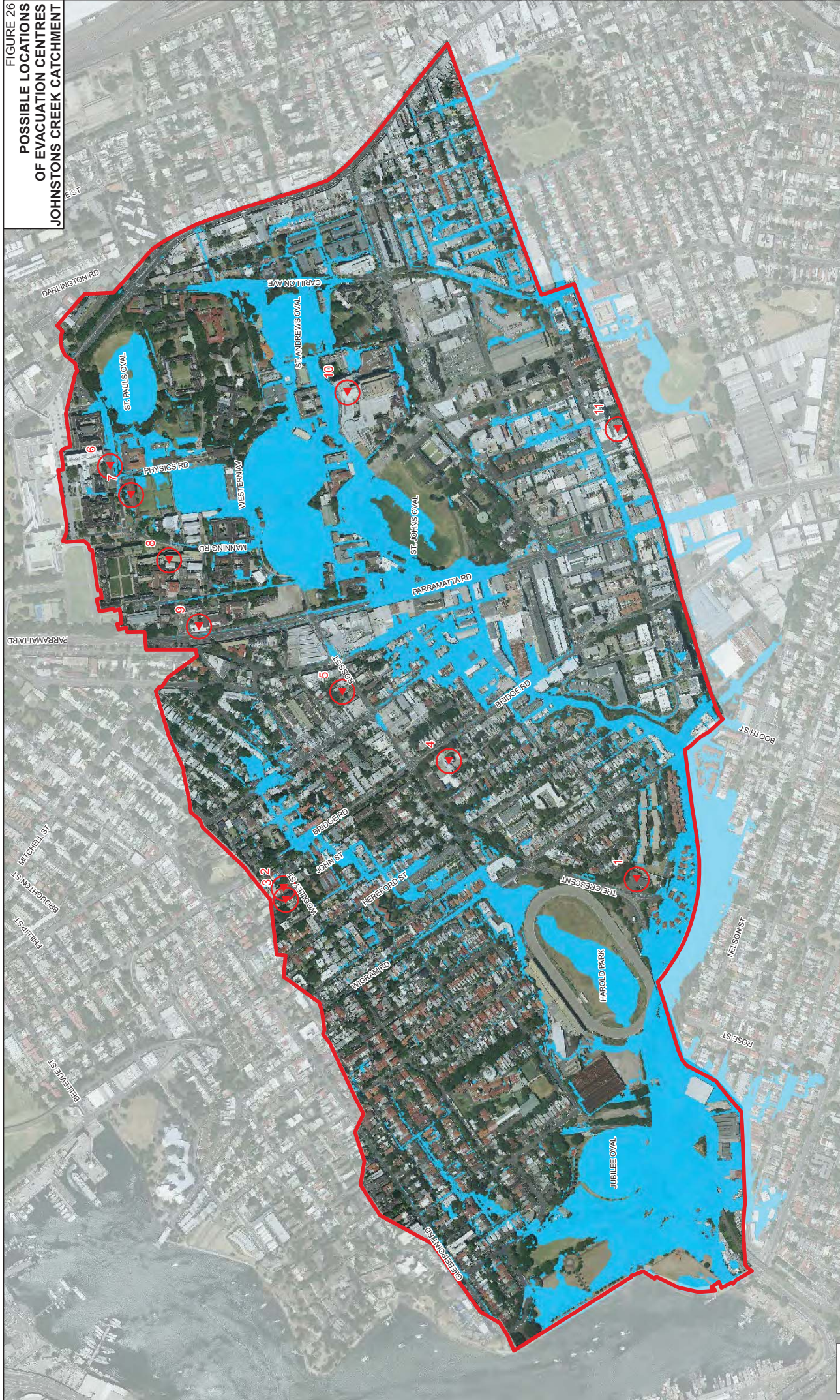
FIGURE 25
ACCESS ROAD FLOODING
1% AEP DESIGN FLOOD EVENT



▭ Study Area
● Tabulated Flooding Locations
Depth (m)
■ 0.1 - 0.25
■ 0.25 - 0.5
■ 0.5 - 0.75
■ 0.75 - 1
■ > 1



FIGURE 26
 POSSIBLE LOCATIONS
 OF EVACUATION CENTRES
 JOHNSTONS CREEK CATCHMENT

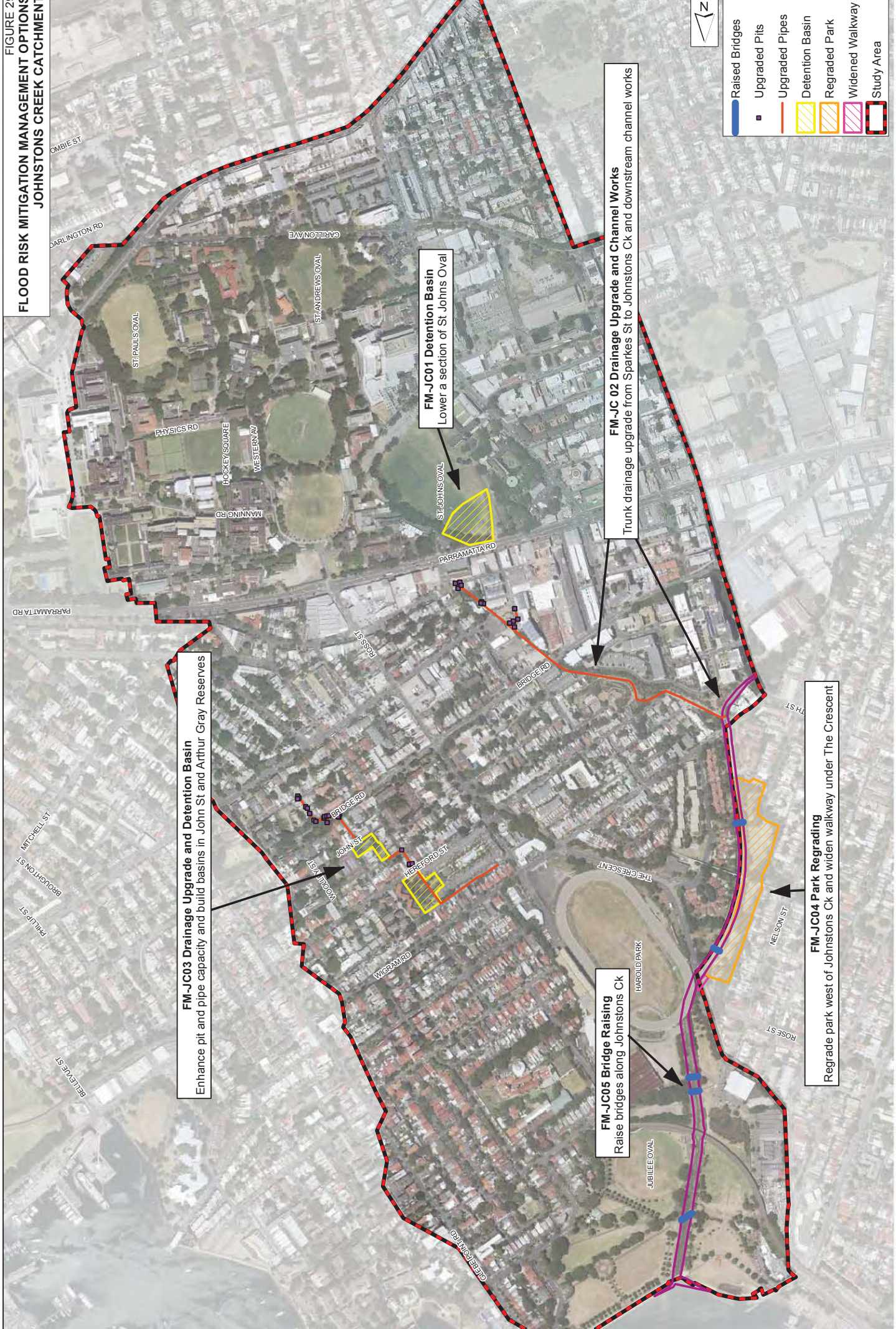


Study Area
▲ Possible Evacuation Centres
 PMF Extent

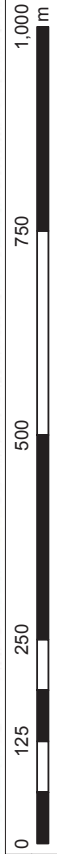
N

0 100 200 300 400 500
 m

FIGURE 29
FLOOD RISK MITIGATION MANAGEMENT OPTIONS
JOHNSTONS CREEK CATCHMENT



- Raised Bridges
- Upgraded Pits
- Upgraded Pipes
- Detention Basin
- Regraded Park
- Widened Walkway
- Study Area



FM-JC03 Drainage Upgrade and Detention Basin
 Enhance pit and pipe capacity and build basins in John St and Arthur Gray Reserves

FM-JC01 Detention Basin
 Lower a section of St Johns Oval

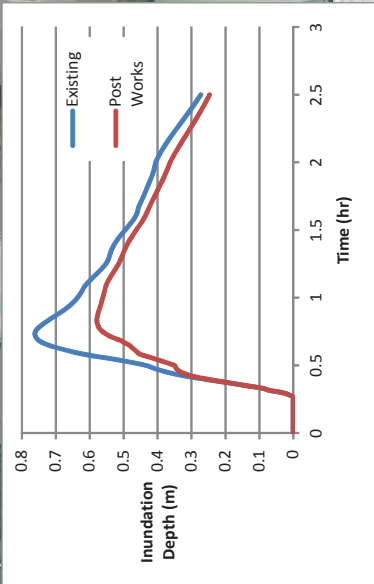
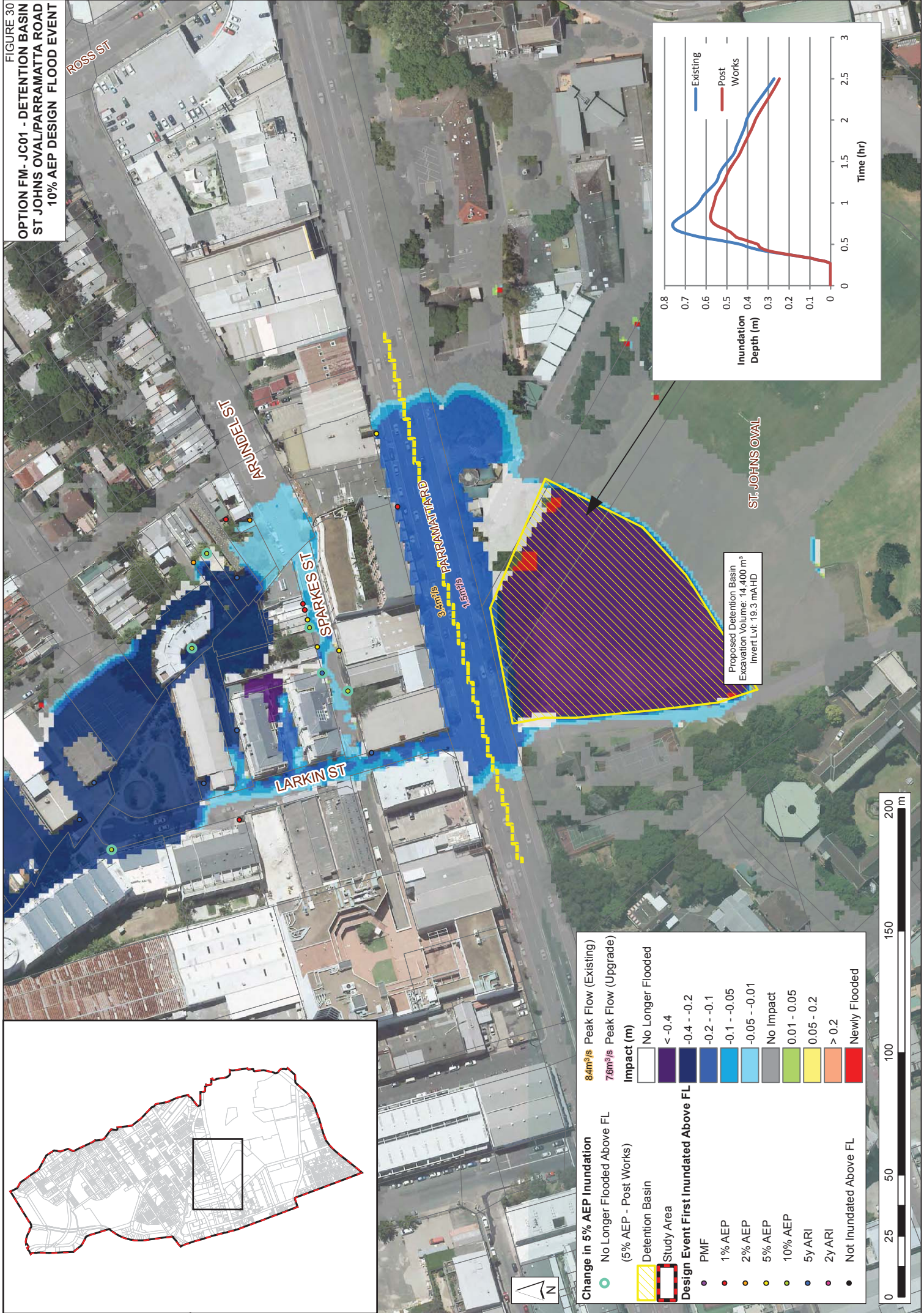
FM-JC02 Drainage Upgrade and Channel Works
 Trunk drainage upgrade from Sparkes St to Johnstons Ck and downstream channel works

FM-JC05 Bridge Raising
 Raise bridges along Johnstons Ck

FM-JC04 Park Regrading
 Regrade park west of Johnstons Ck and widen walkway under The Crescent

Labels on the map include: OMBIE ST, DARLINGTON RD, ST PAULS OVAL, CARLTON AVE, ST ANDREWS OVAL, PHYSICS RD, HOCKEY SQUARE, WESTERN AV, MANNING RD, PARRAMATTA RD, ST JOHNSTONS OVAL, BRIDGE RD, ROSE ST, THE CRESCENT, HAROLD PARK, JUBILEE OVAL, WERAM RD, JOHN ST, HERFORD ST, WOOD ST, BRIDGE RD, MITCHELL ST, BROUGHTON ST, PHILLIP ST, BELLEFLEUR ST, PARRAMATTA RD, ROSE ST, NELSON ST, JOHN ST, THE CRESCENT, HAROLD PARK, JUBILEE OVAL, WERAM RD, JOHN ST, HERFORD ST, WOOD ST, BRIDGE RD, MITCHELL ST, BROUGHTON ST, PHILLIP ST, BELLEFLEUR ST, PARRAMATTA RD, OMBIE ST, DARLINGTON RD, ST PAULS OVAL, CARLTON AVE, ST ANDREWS OVAL, PHYSICS RD, HOCKEY SQUARE, WESTERN AV, MANNING RD, PARRAMATTA RD, ST JOHNSTONS OVAL, BRIDGE RD, ROSE ST, THE CRESCENT, HAROLD PARK, JUBILEE OVAL, WERAM RD, JOHN ST, HERFORD ST, WOOD ST, BRIDGE RD, MITCHELL ST, BROUGHTON ST, PHILLIP ST, BELLEFLEUR ST, PARRAMATTA RD.

FIGURE 30
 OPTION FM-JC01 - DETENTION BASIN
 ST JOHNS OVAL/PARRAMATTA ROAD
 10% AEP DESIGN FLOOD EVENT



Proposed Detention Basin
 Excavation Volume: 14,400 m³
 Invert Lvl: 19.3 mAHD

Change in 5% AEP Inundation

- No Longer Flooded Above FL
- (5% AEP - Post Works)
- Detention Basin
- Study Area

Design Event First Inundated Above FL

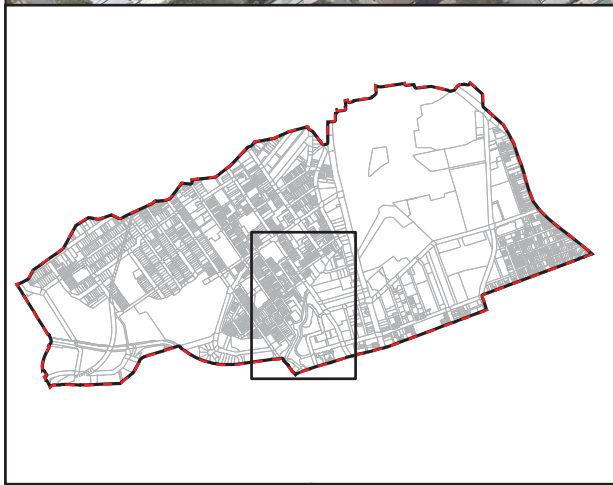
- PMF
- 1% AEP
- 2% AEP
- 5% AEP
- 10% AEP
- 5y ARI
- 2y ARI
- Not Inundated Above FL

Impact (m)

- No Longer Flooded
- < -0.4
- -0.4 - -0.2
- -0.2 - -0.1
- -0.1 - -0.05
- -0.05 - -0.01
- No Impact
- 0.01 - 0.05
- 0.05 - 0.2
- > 0.2
- Newly Flooded



FIGURE 31
 OPTION FM - JC02
 DRAINAGE UPGRADE AND CHANNEL WORKS
 SPARKES STREET/JOHNSTONS CREEK
 FLOOD IMPACT MAP
 5% AEP DESIGN FLOOD EVENT



Legend

- Upgraded Pits (invert shown)
- Upgraded Pipes
- Channel Works
- Study Area

Design Event First Inundated Above FL

- PMF
- 1% AEP
- 2% AEP
- 5% AEP
- 10% AEP
- 5y ARI
- 2y ARI
- Not Inundated Above FL
- No Longer Flooded Above FL
- (5% AEP - Post Works)

Impact (m)

- No Longer Flooded
- < -2.5
- 2.5 - -2
- 2 - -1.5
- 1.5 - -1
- 1 - -0.5
- 0.05 - -0.01
- No Impact
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.15
- 0.15 - 0.2
- > 0.2
- Newly Flooded

Flow Rates:

- 84m³/s Peak Flow (Existing)
- 76m³/s Peak Flow (Upgrade)

The drainage upgrade shown above has a grade of between 1.5% and 5.5%

