



E. MAPPING - FLOOD MITIGATION OPTIONS NOT RECOMMENDED

Figure E 1: Peak Flood Level Impact – Option B1: Improvement to Pump Capacity – 5-year ARI event

Figure E 2: Peak Flood Level Impact – Option B1: Improvement to Pump Capacity – 1% AEP event

Figure E 3: Peak Flood Level Impact – Option B2: Lower Pump Cut In Levels – 5-year ARI event

Figure E 4: Peak Flood Level Impact – Option B2: Lower Pump Cut In Levels – 1% AEP event

Figure E 5: Peak Flood Level Impact – Option A1: Removal of the Pinch and Campvale Drain Improvements – 2-year ARI event

Figure E 6: Peak Flood Level Impact – Option A1: Removal of the Pinch and Campvale Drain Improvements – 10% AEP event

Figure E 7: Peak Flood Level Impact – Option A1: Removal of the Pinch and Campvale Drain Improvements – 1% AEP-year ARI event

Figure E 8: Peak Flood Level Impact – Option I1: Increased Number of Culverts at Ferodale Road – 2-year ARI and 5-year ARI events

Figure E 9: Peak Flood Level Impact – Option I1: Increased Number of Culverts at Ferodale Road – 10% AEP and 1% AEP events

Figure E 10: Peak Flood Level Impact – Option I2: Increased Number of Culverts at Ferodale Road and Concrete Lining of Upstream Channel – 10% AEP and 1% AEP events

Figure E 11: Peak Flood Level Impact – Option N1: Improved Culverts around Wellard Close and Wilga Road an Open Drain Improvements – 5-year ARI events

Figure E 12: Peak Flood Level Impact – Option N1: Improved Culverts around Wellard Close and Wilga Road an Open Drain Improvements – 1% AEP events

Figure E 13: Peak Flood Level Impact – Option P: Upgrade Drainage at County Close – 5-year ARI event

Figure E 14: Peak Flood Level Impact – Option P: Upgrade Drainage at County Close – 1% AEP event

Figure E 15: Peak Flood Level Impact – Option S: Drainage Upgrade at James Road – 5-year ARI and 1% AEP events

Figure E 16: Peak Flood Level Impact – Option K: Increased Volume at Evans Road Retention Basin – 5-year ARI event

Figure E 17: Peak Flood Level Impact – Option K: Increased Volume at Evans Road Retention Basin – 1% AEP event

Figure E 18: Peak Flood Level Impact – Option J: Retarding Basin at Area Near Kirrang Drive and Kula Road – 5-year ARI event

Figure E 19: Peak Flood Level Impact – Option J: Retarding Basin at Area Near Kirrang Drive and Kula Road – 1% AEP event

Figure E 20: Peak Flood Level Impact – Option L: Levee at Lower End of Abundance Road – 5-year ARI event

Figure E 21: Peak Flood Level Impact – Option L: Levee at Lower End of Abundance Road – 1% AEP event

Figure E 22: Peak Flood Level Impact – Option M: Levee at Kula Road and Kirrang Drive – 5-year ARI and 1% AEP events

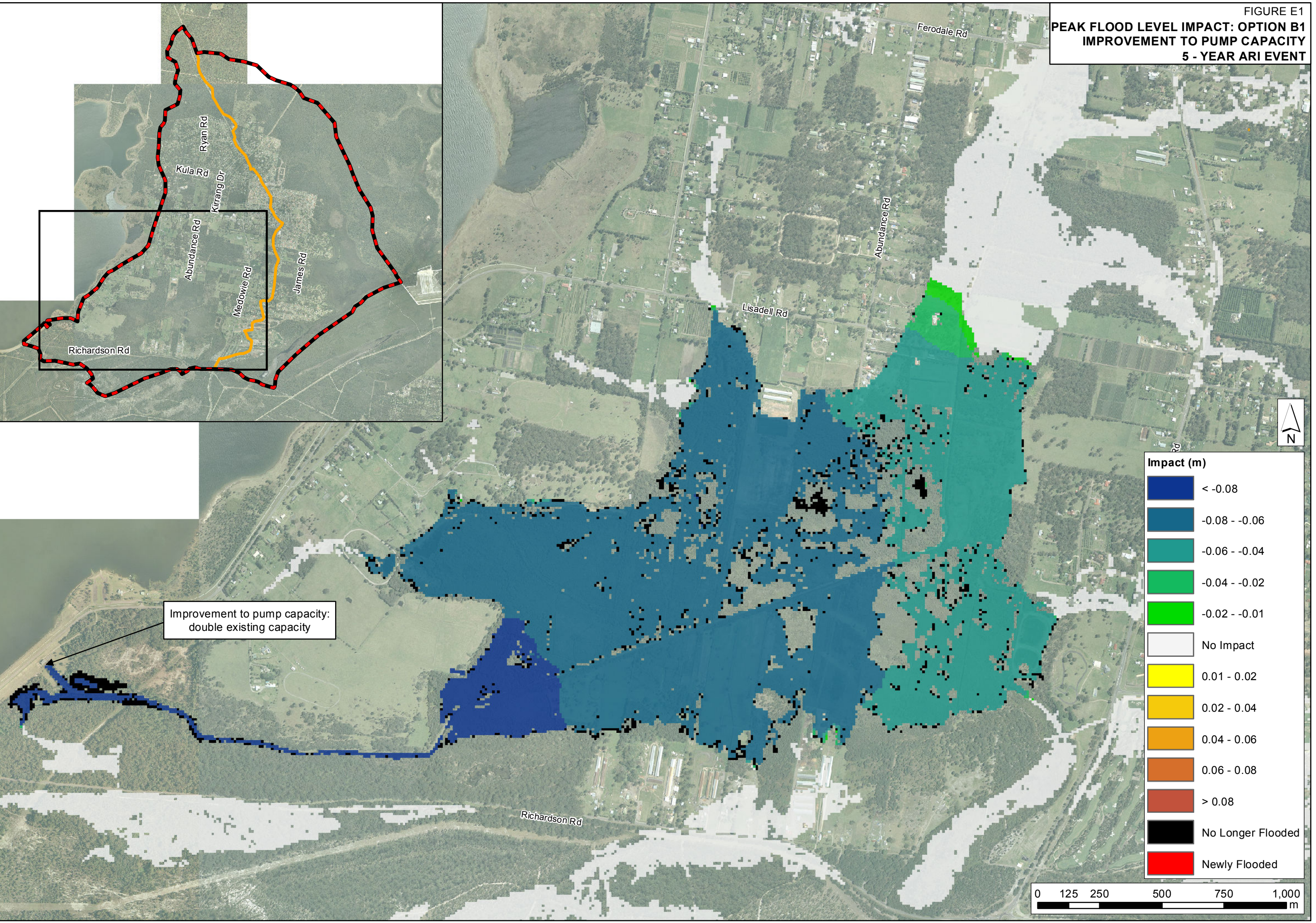
Figure E 23: Peak Flood Level Impact – Option D: Diversion of Upper Catchment Flows – 5-year ARI event

Figure E 24: Peak Flood Level Impact – Option D: Diversion of Upper Catchment Flows – 1% AEP event

Figure E 25: Peak Flood Level Impact – Option O: Improved Outlets from Moffats Swamp – 5-year ARI event

Figure E 26: Peak Flood Level Impact – Option O: Improved Outlets from Moffats Swamp – 1%-year ARI event

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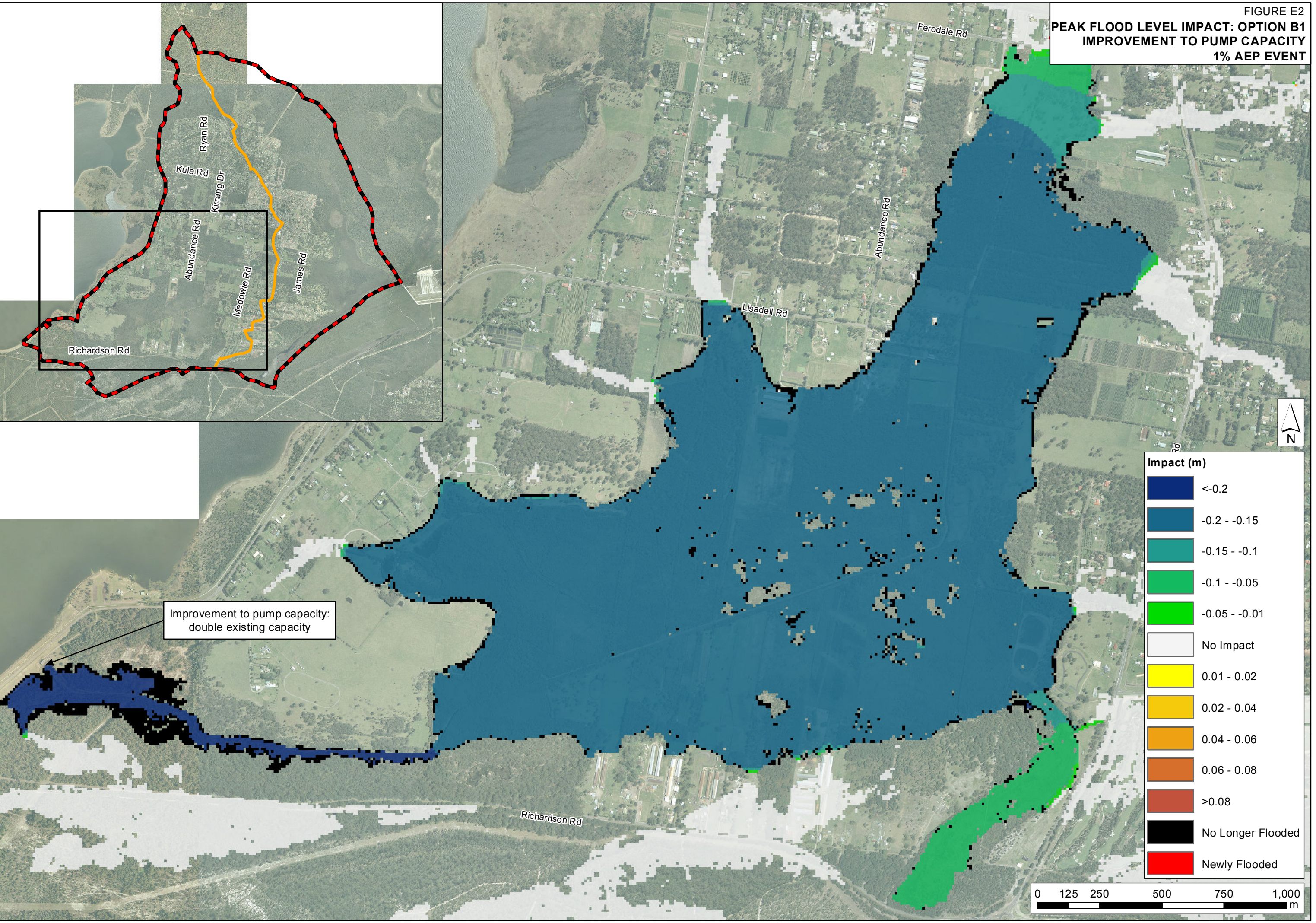


FIGURE E2

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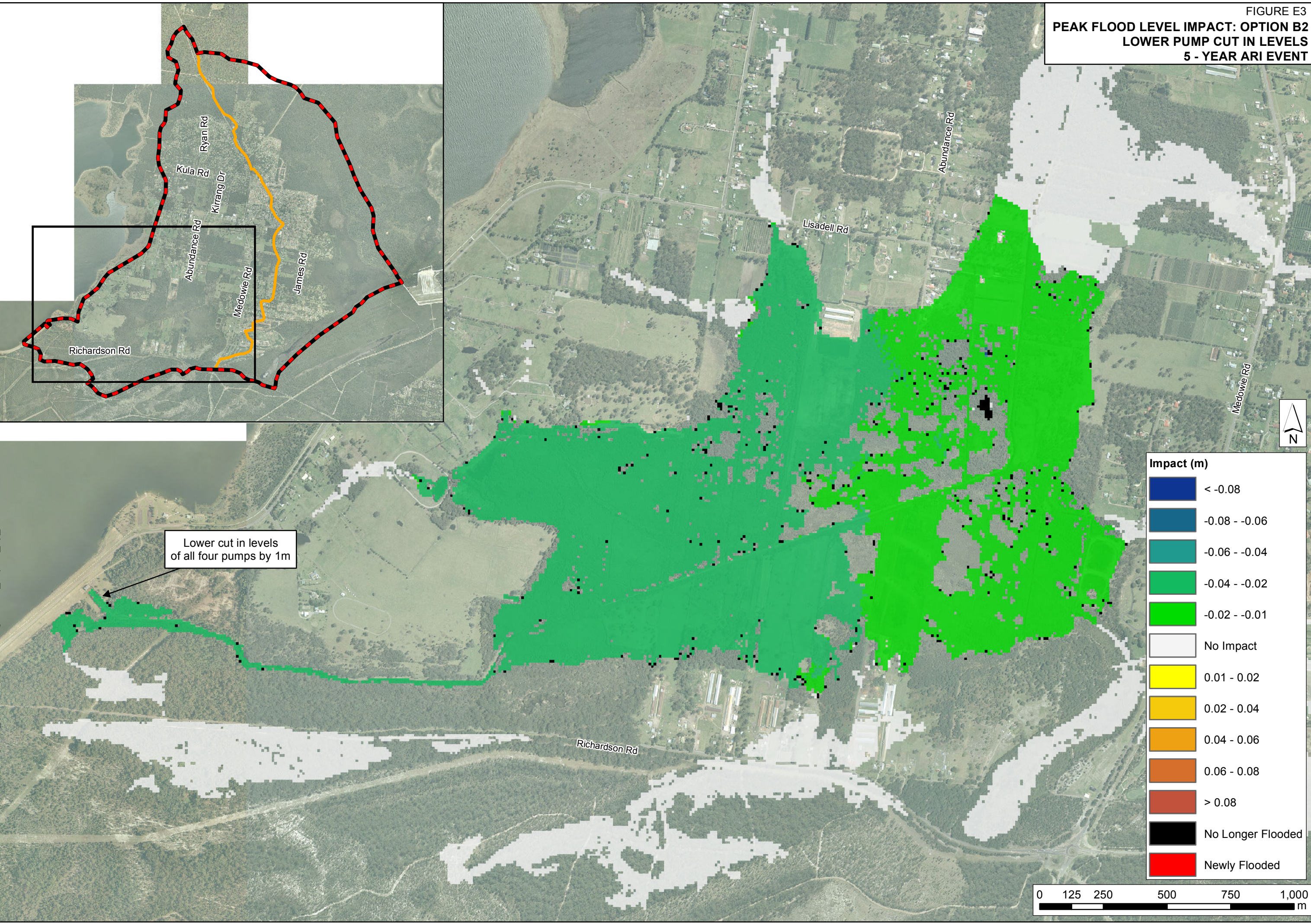
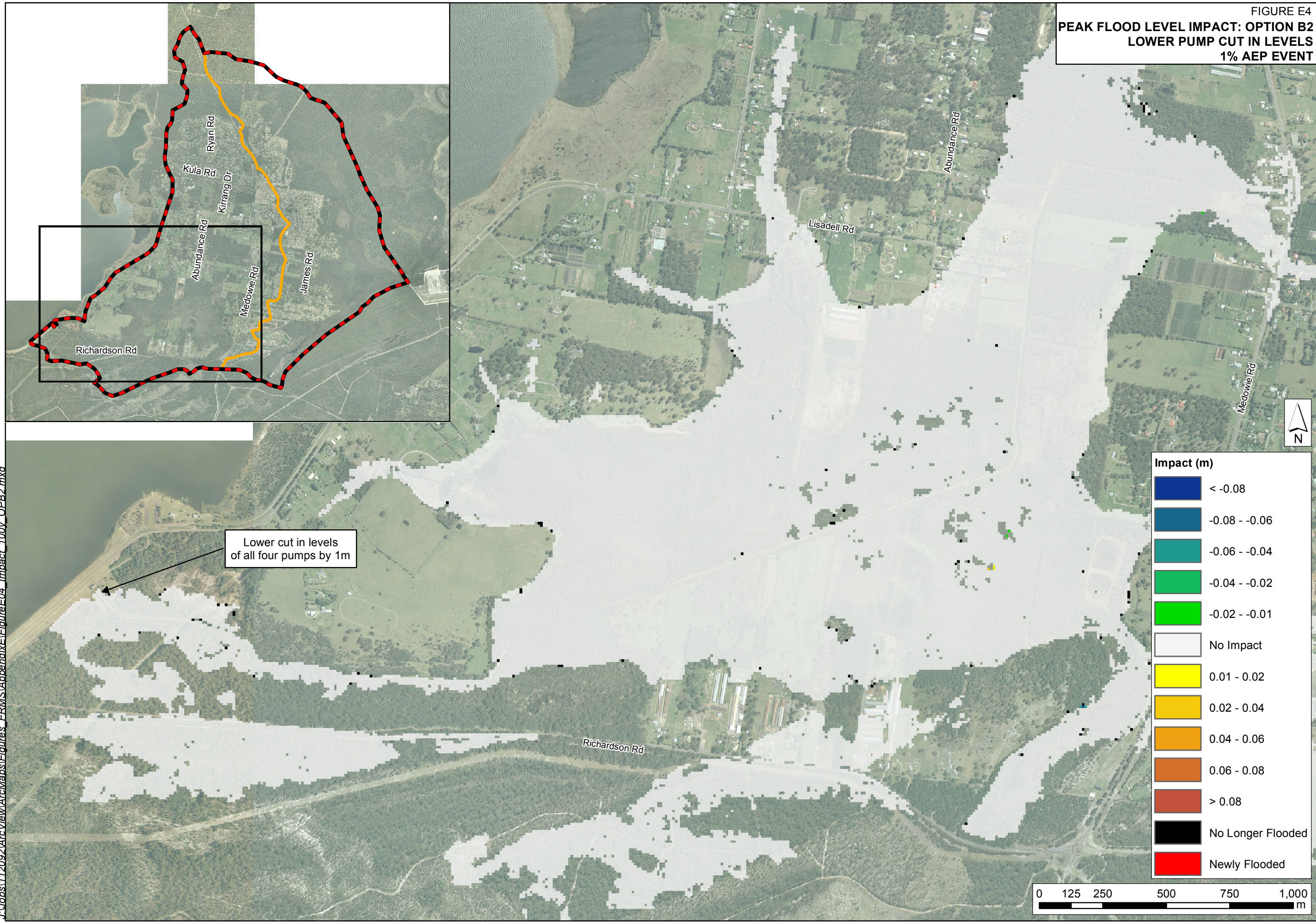
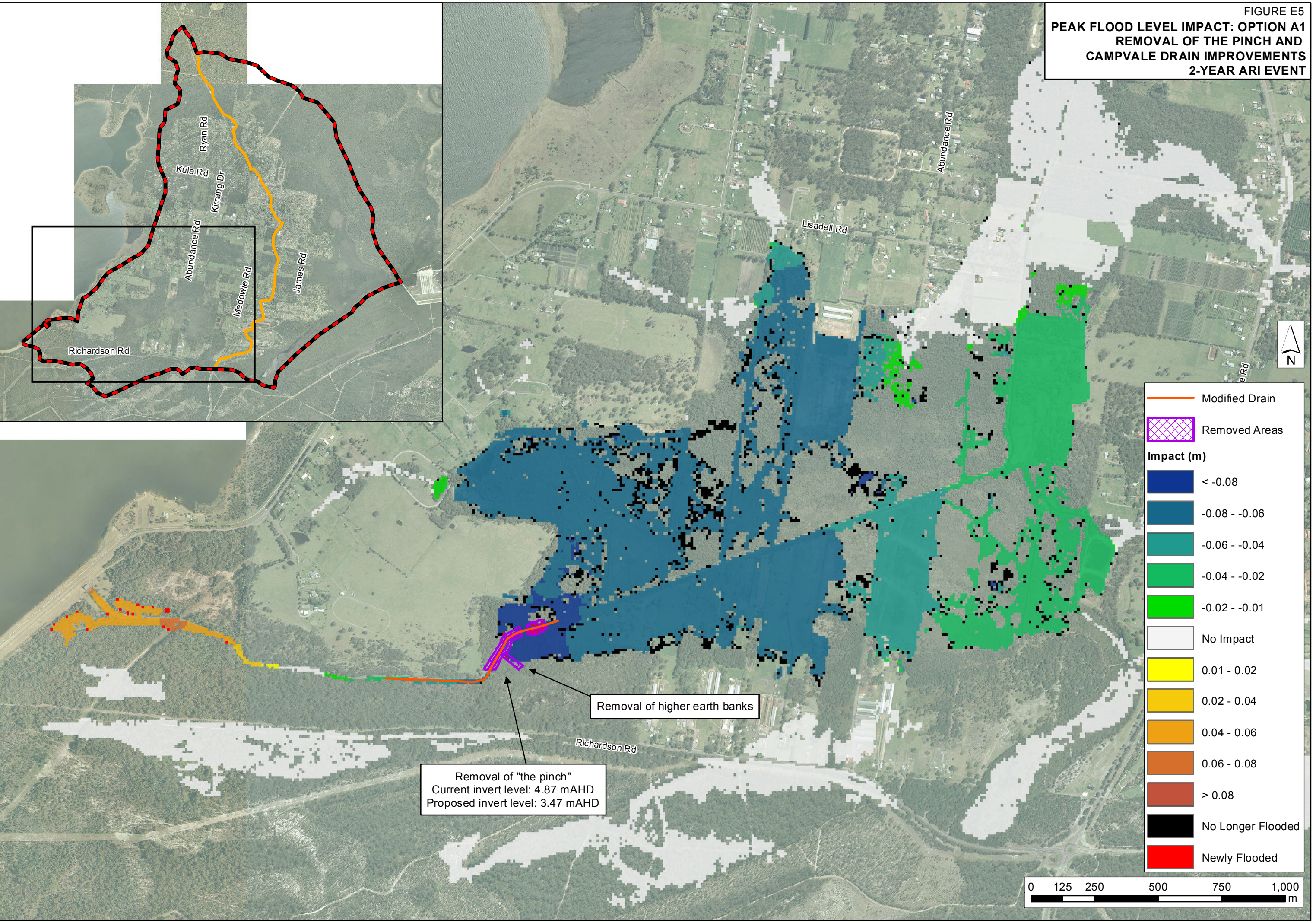


FIGURE E4
PEAK FLOOD LEVEL IMPACT: OPTION B2
LOWER PUMP CUT IN LEVELS
1% AEP EVENT

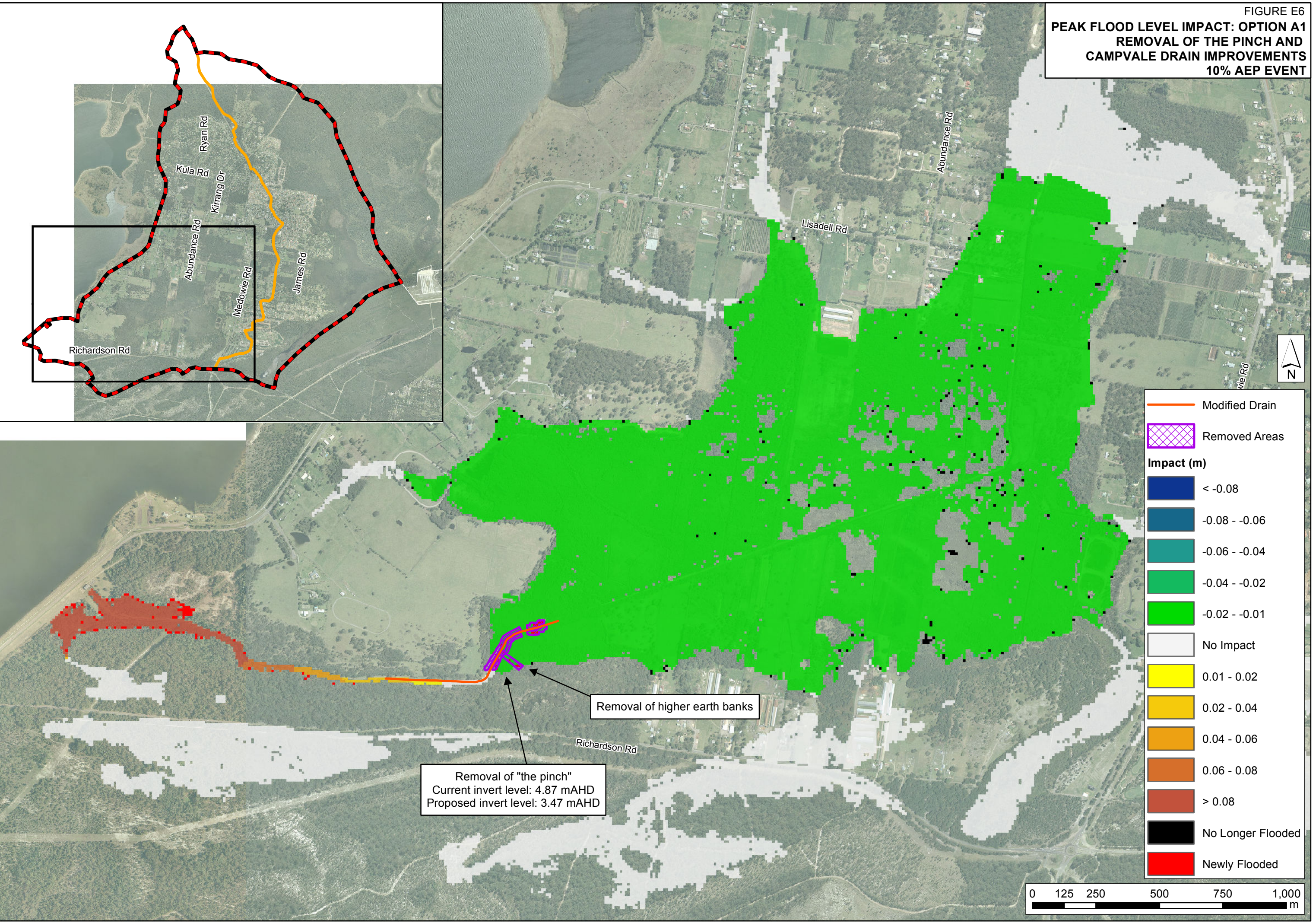


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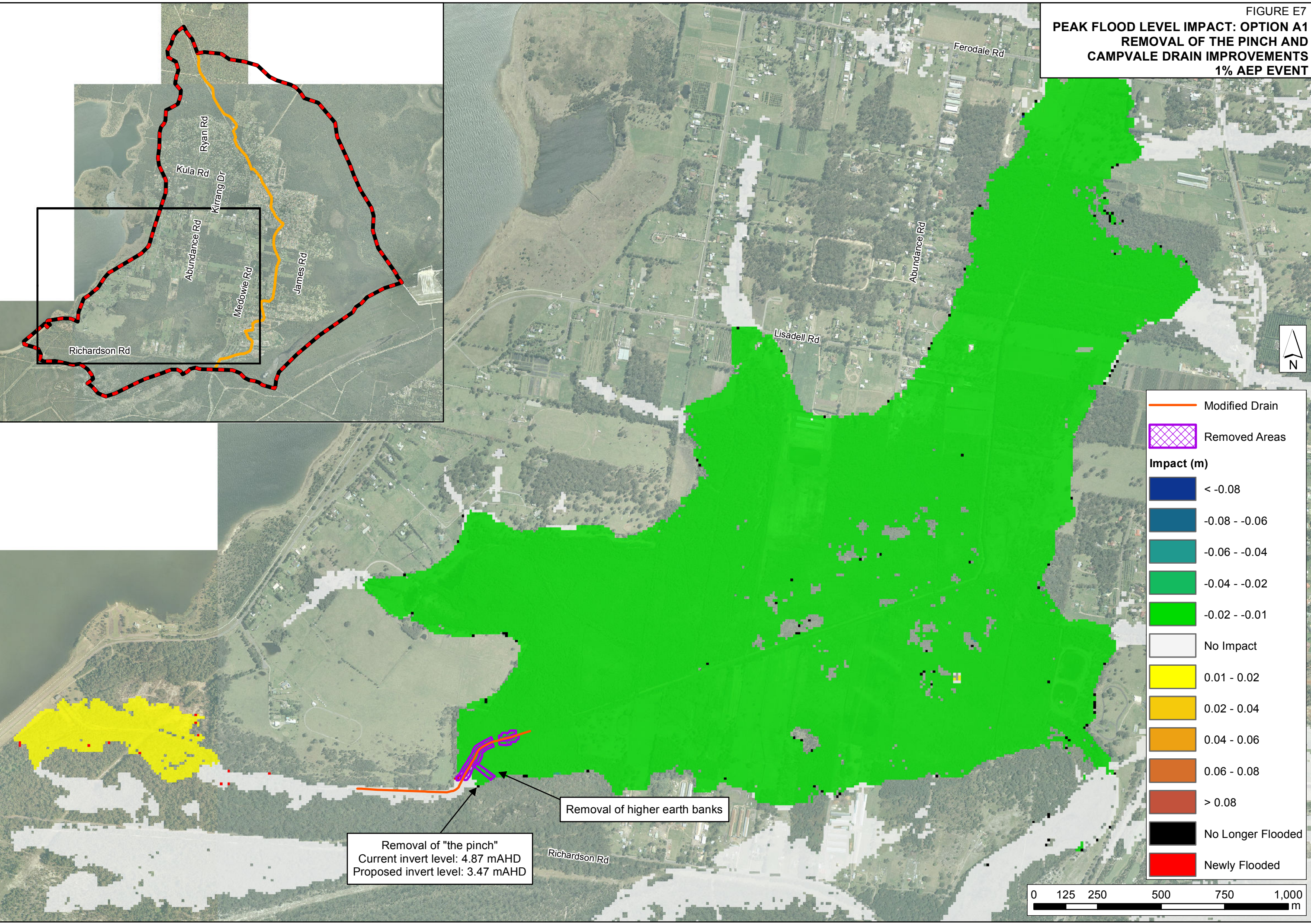
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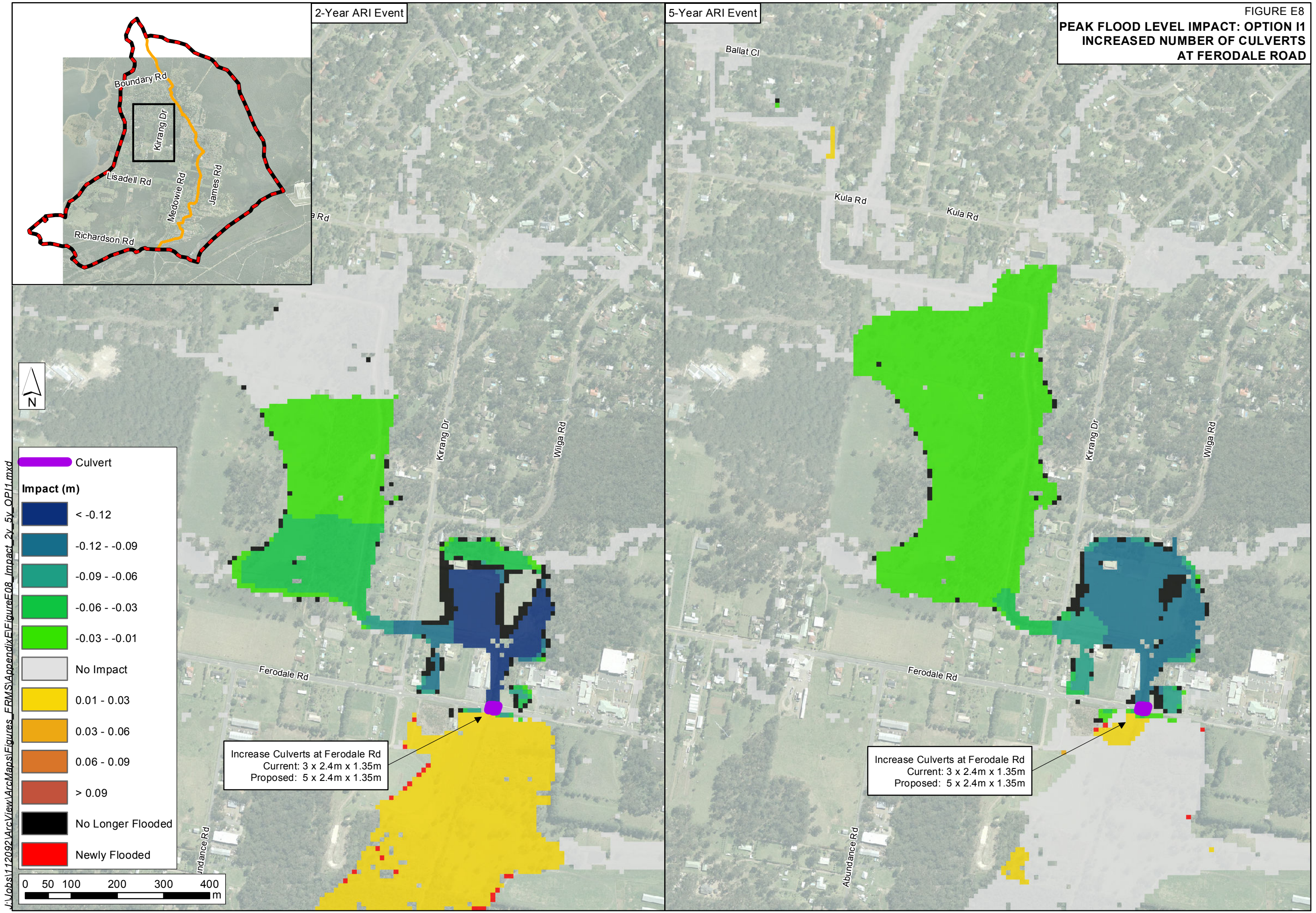


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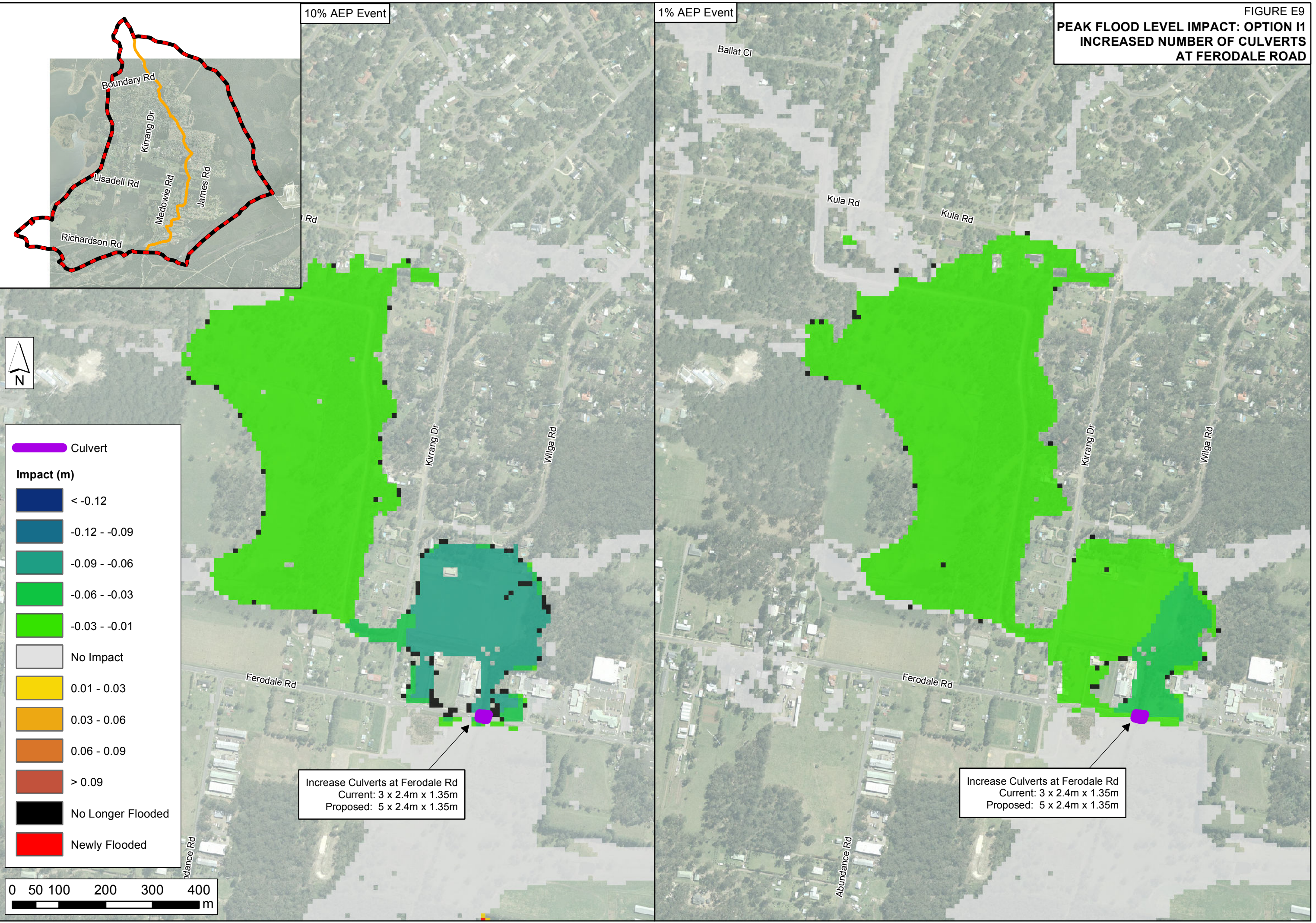
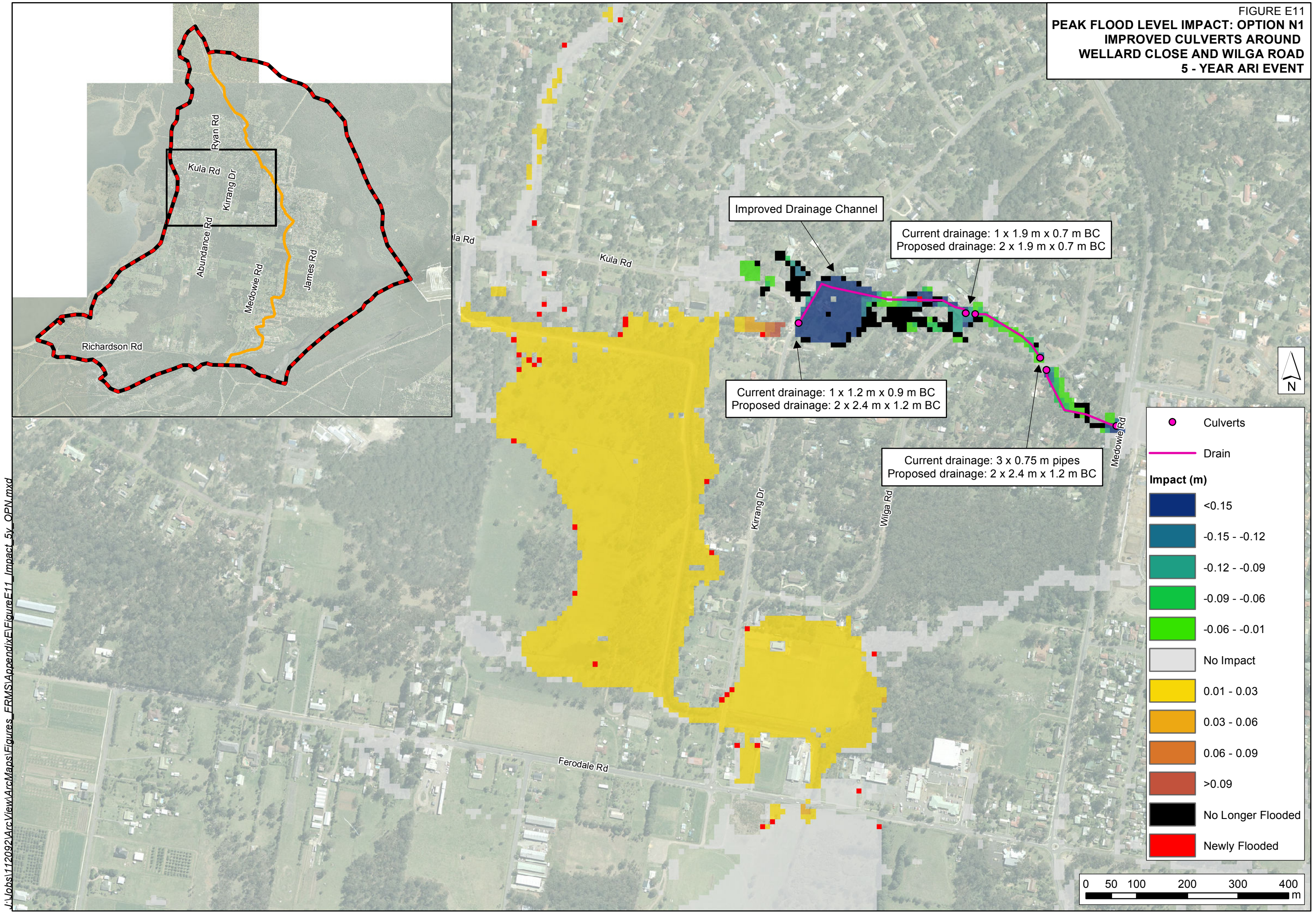




FIGURE E11
PEAK FLOOD LEVEL IMPACT: OPTION N1
IMPROVED CULVERTS AROUND
WELLARD CLOSE AND WILGA ROAD
5 - YEAR ARI EVENT



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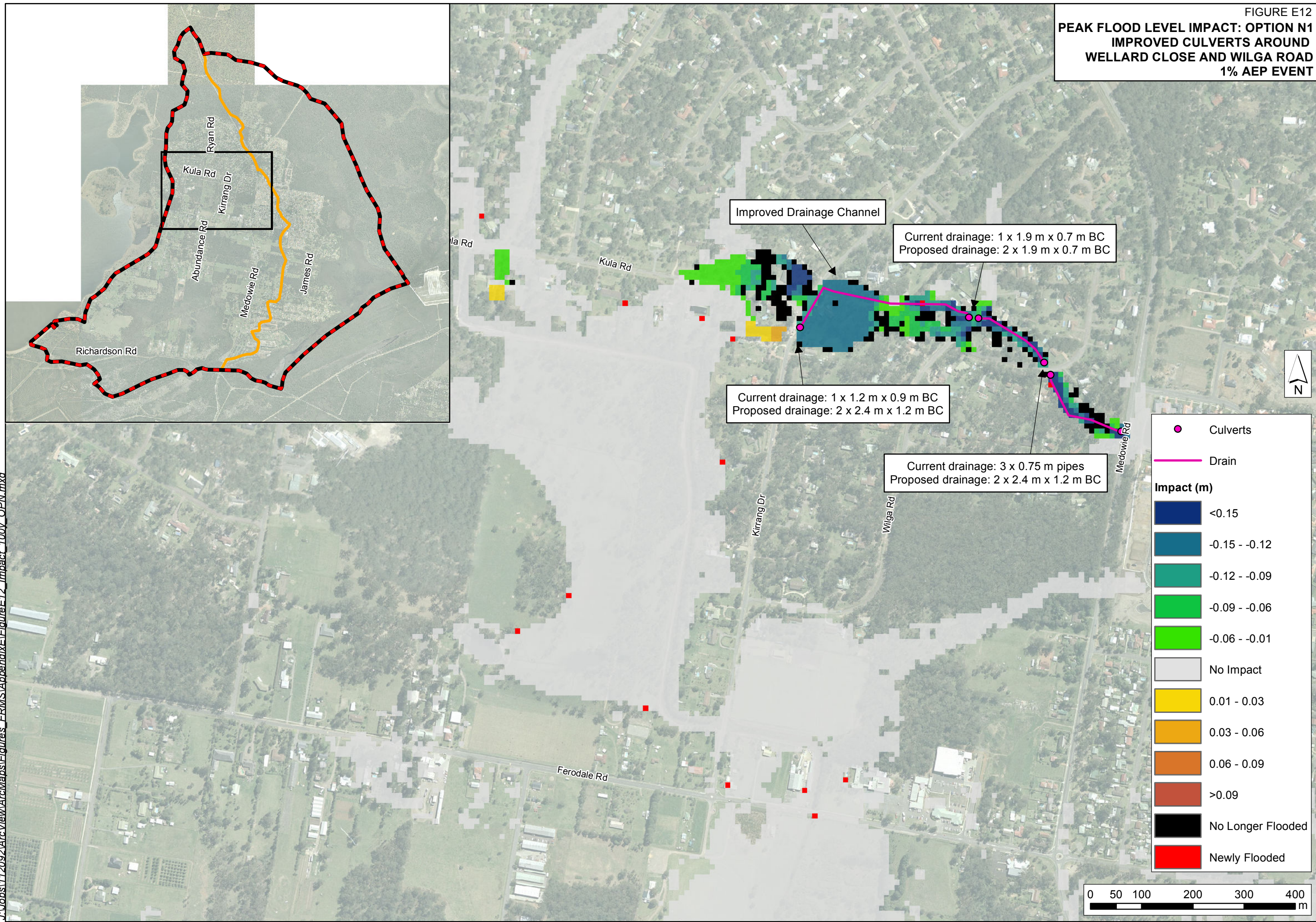


FIGURE E13
PEAK FLOOD LEVEL IMPACT: OPTION P
UPGRADE DRAINAGE AT COUNTY CLOSE
5 - YEAR ARI EVENT

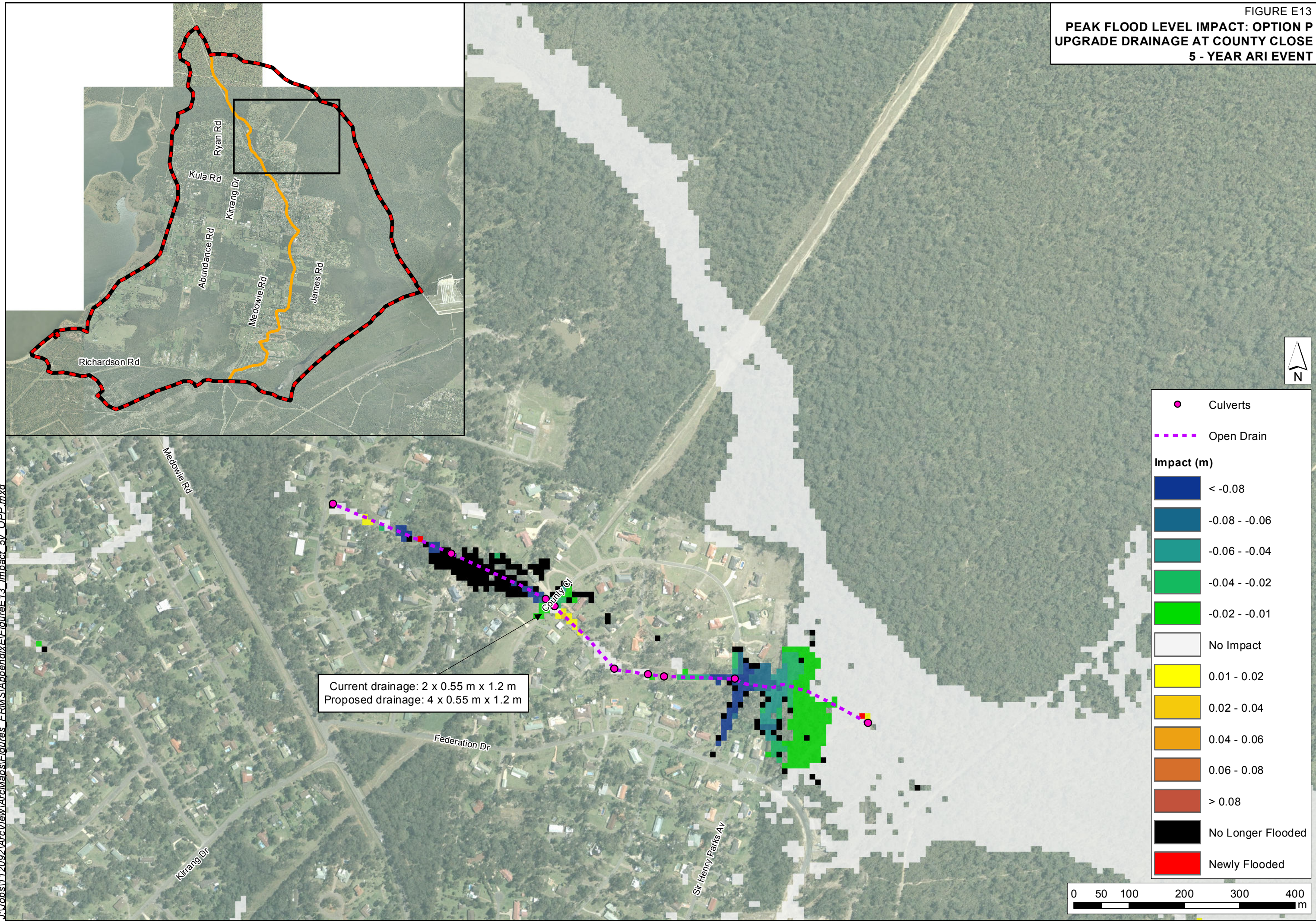
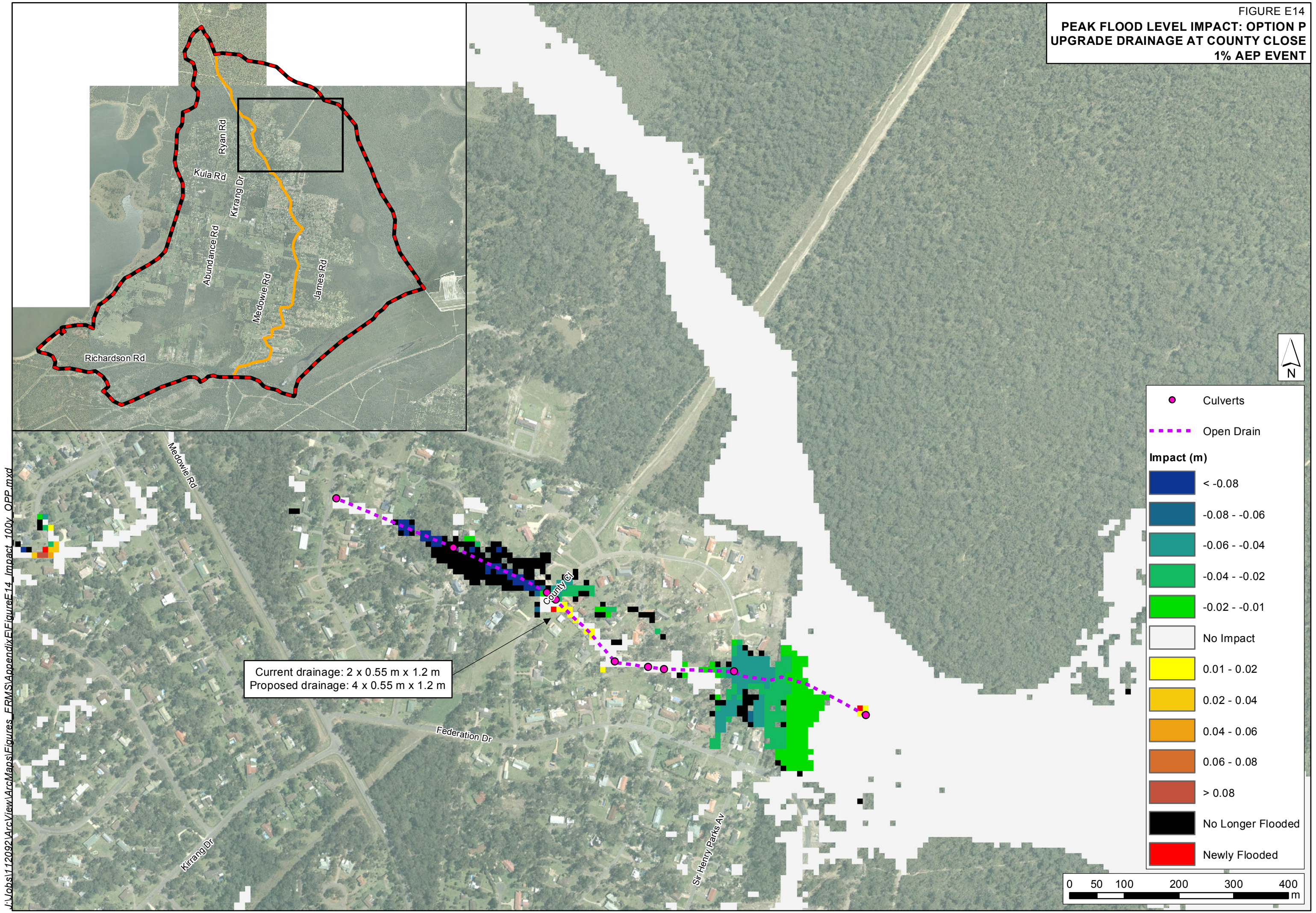


FIGURE E14
PEAK FLOOD LEVEL IMPACT: OPTION P
UPGRADE DRAINAGE AT COUNTY CLOSE
1% AEP EVENT



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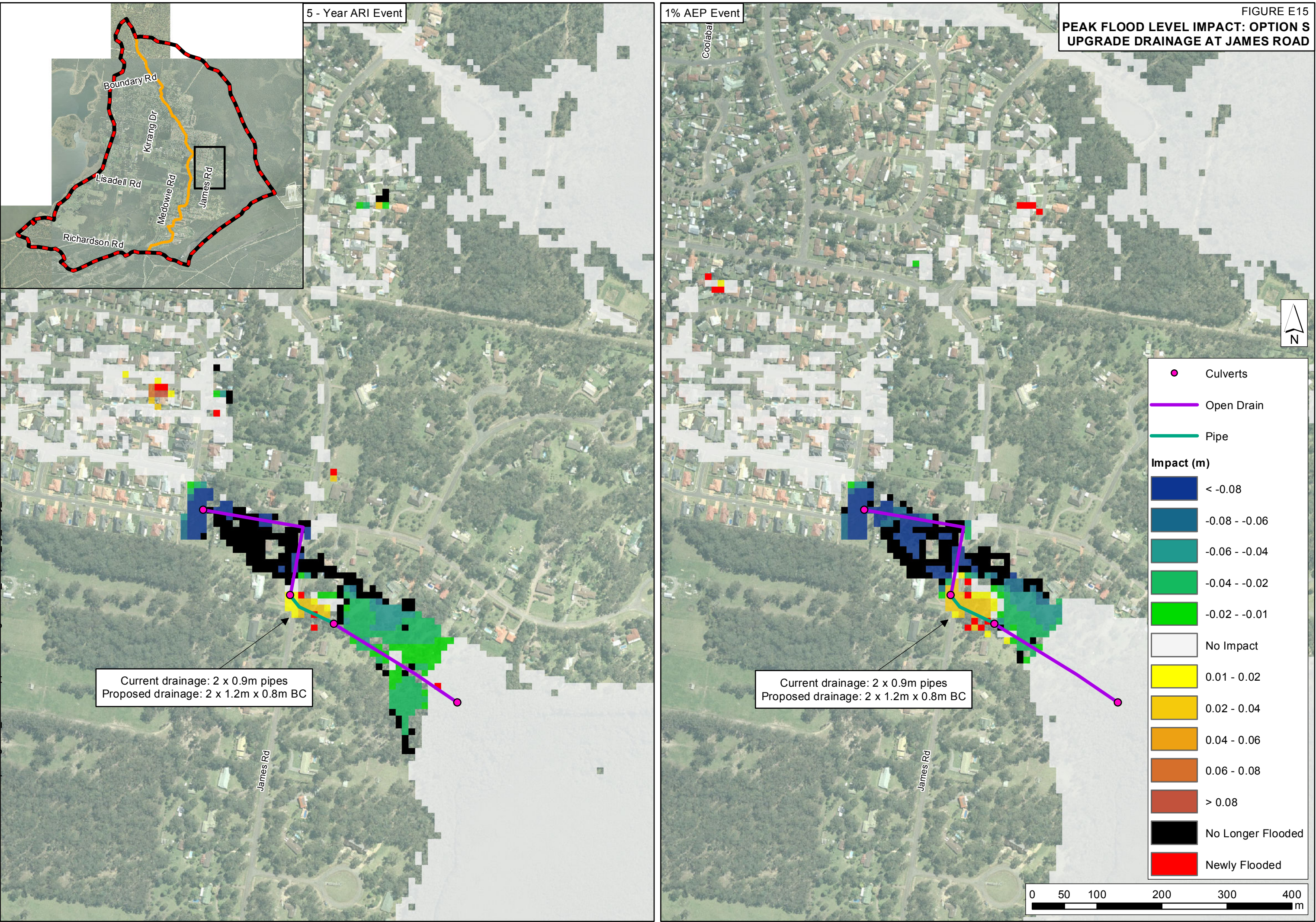
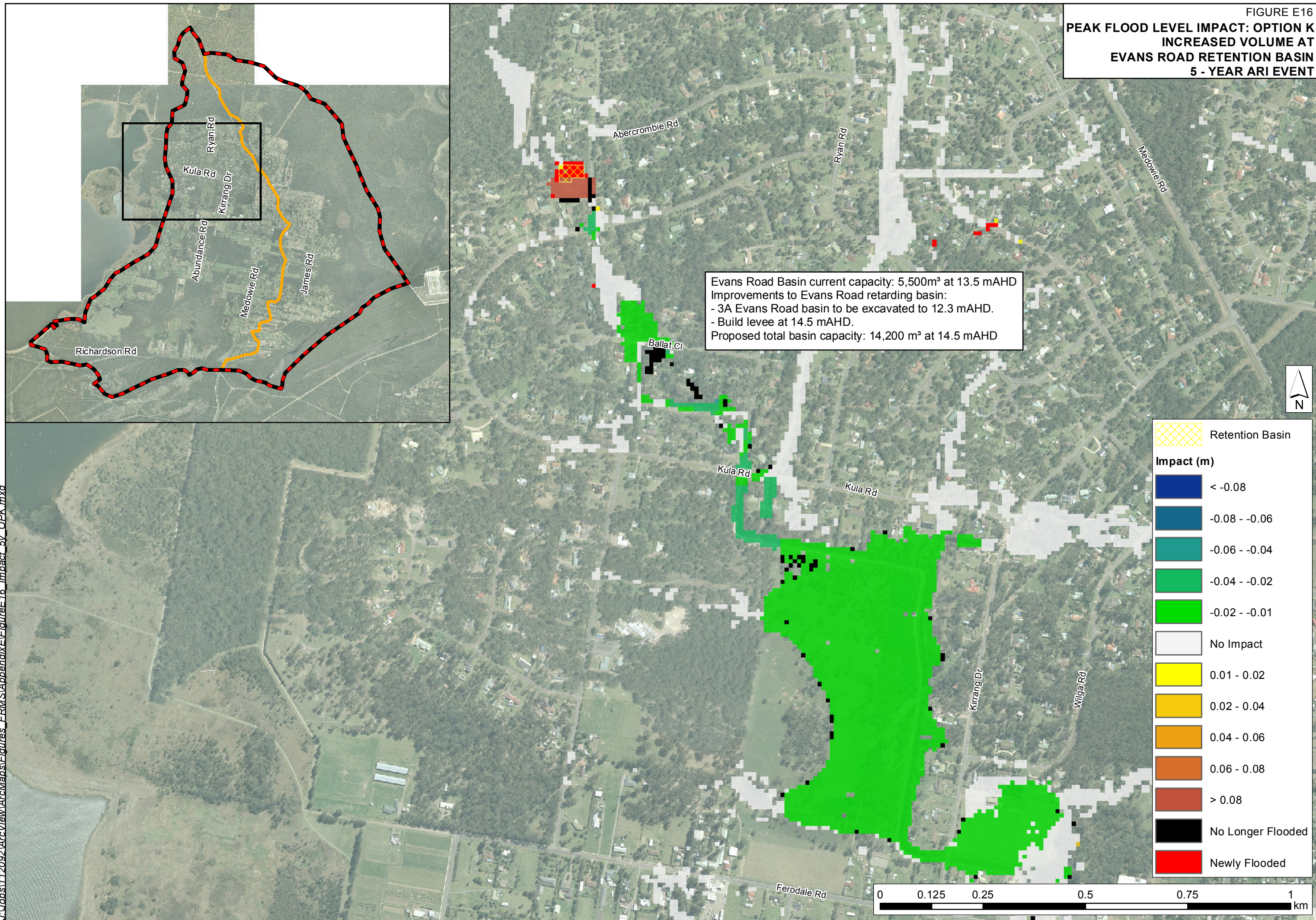
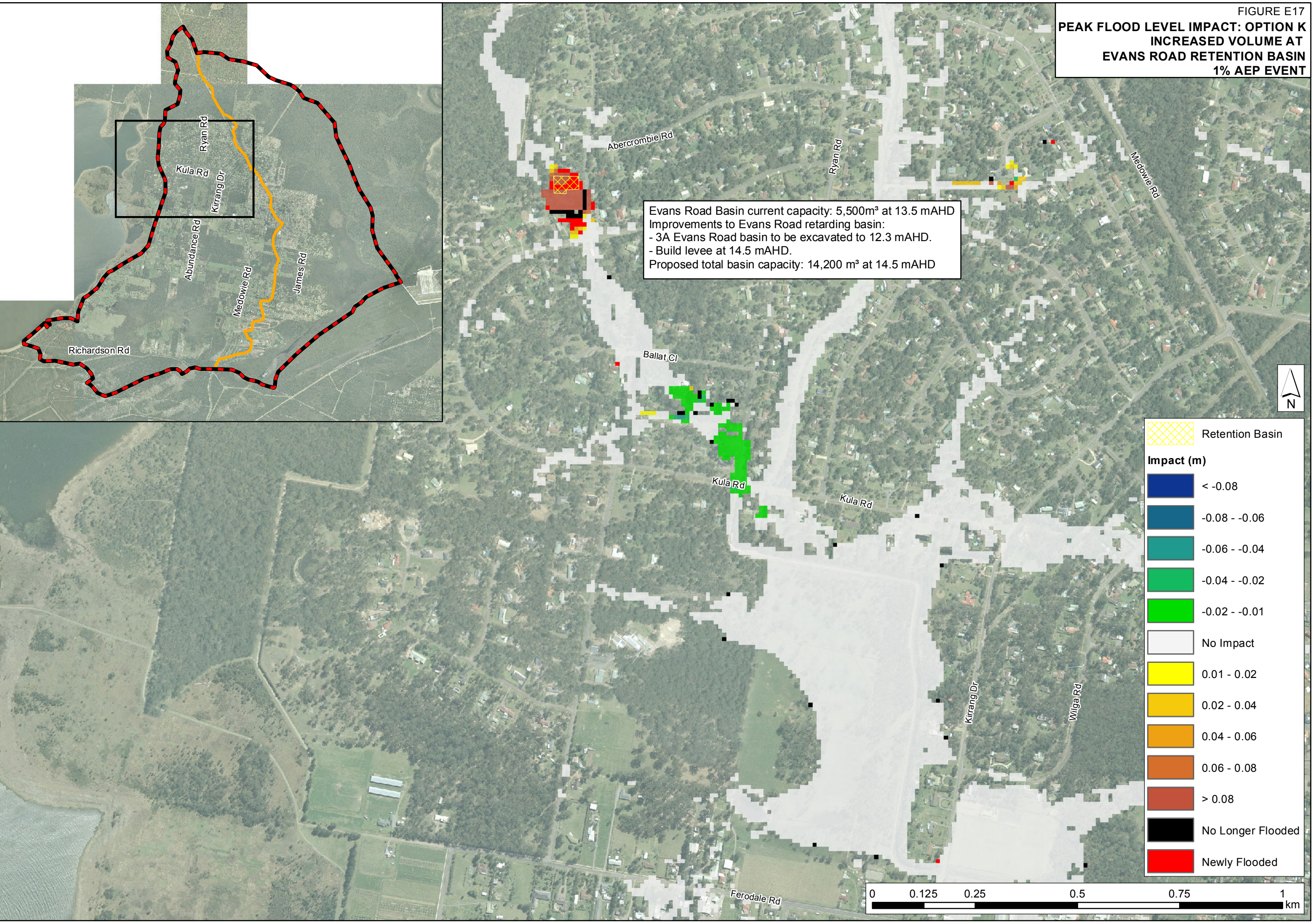


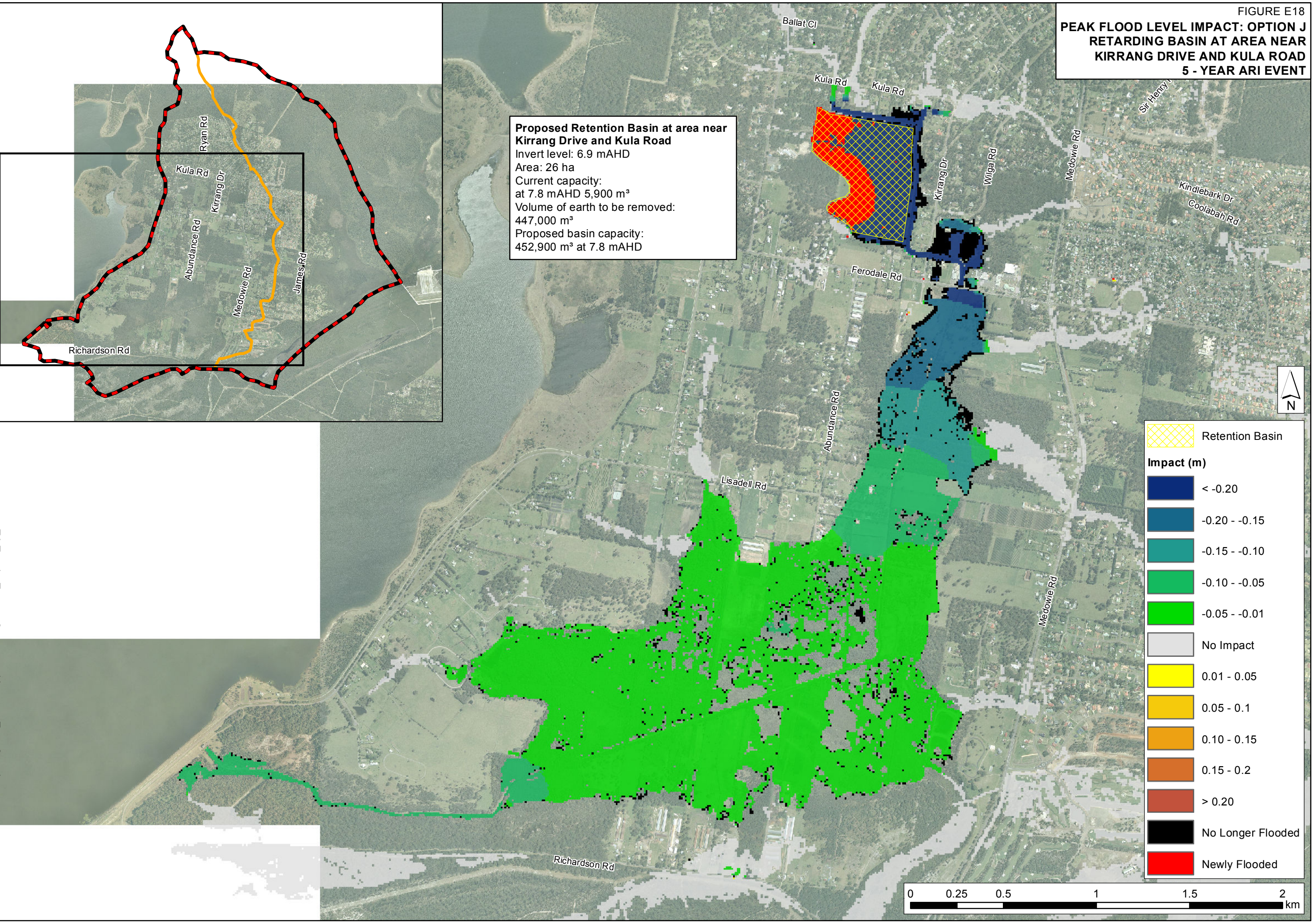
FIGURE E16
**PEAK FLOOD LEVEL IMPACT: OPTION K
 INCREASED VOLUME AT
 EVANS ROAD RETENTION BASIN
 5 - YEAR ARI EVENT**



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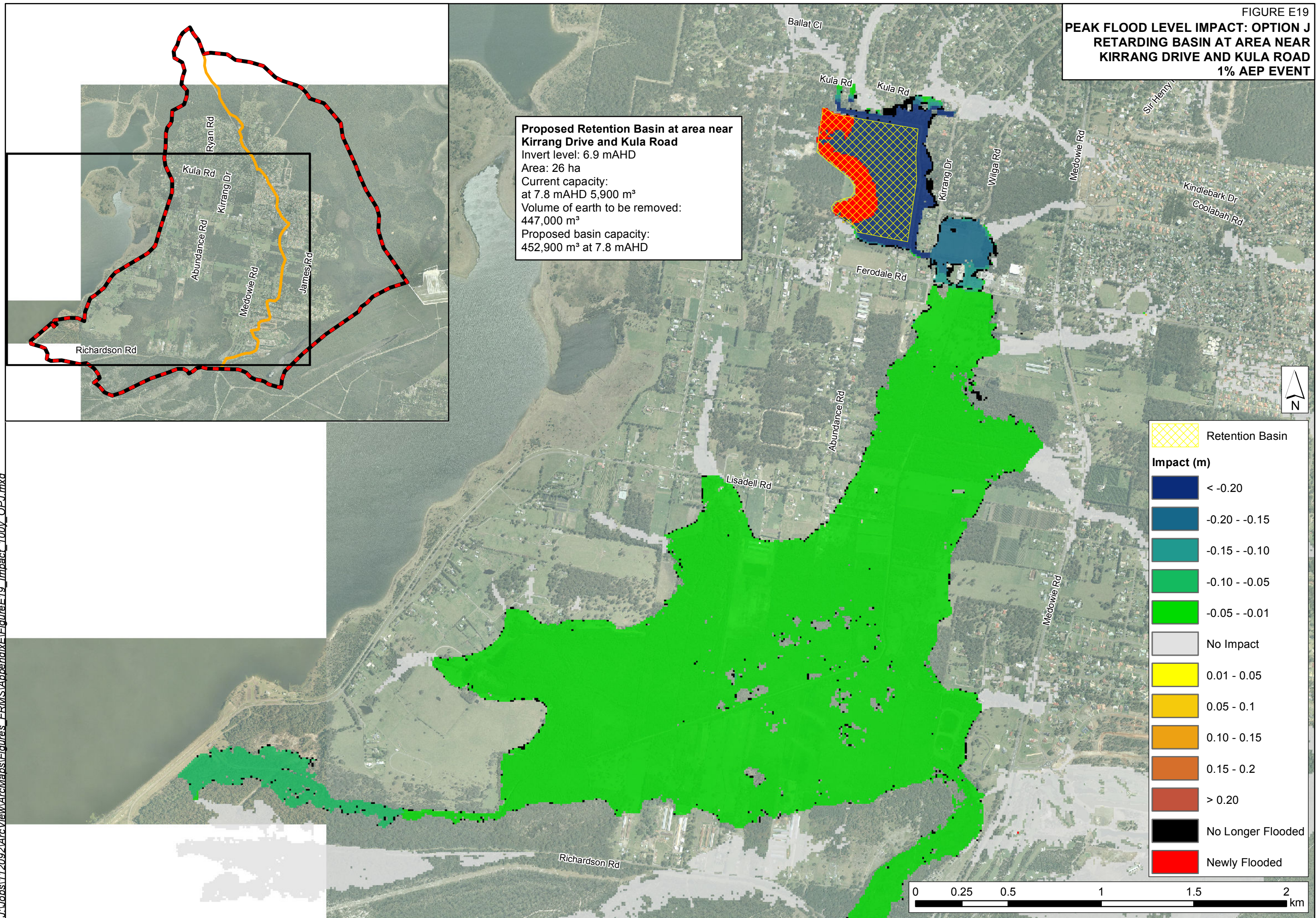


FIGURE E20
**PEAK FLOOD LEVEL IMPACT: OPTION L
 LEVEE AT LOWER END OF
 ABUNDANCE ROAD
 5 - YEAR ARI EVENT**

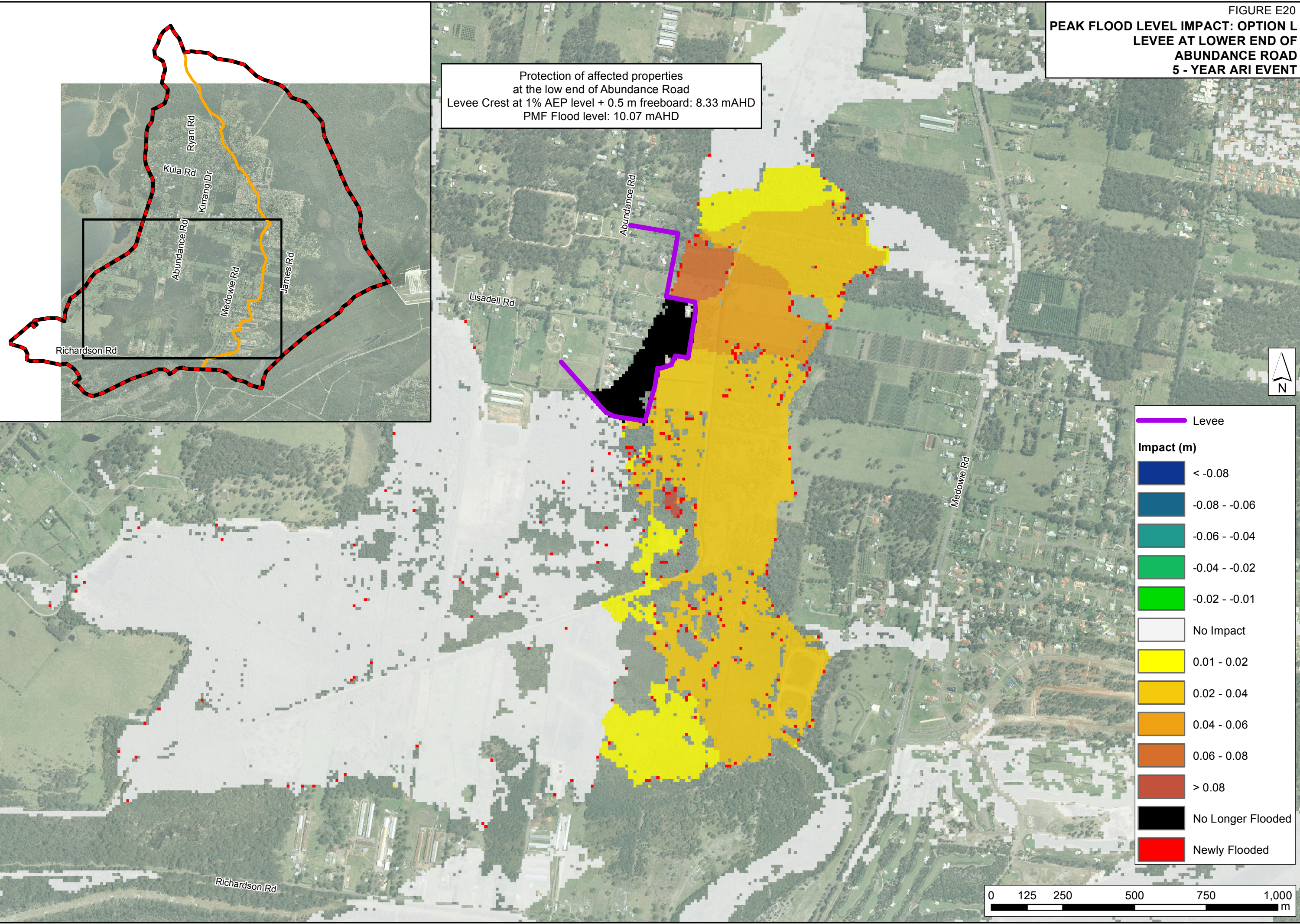
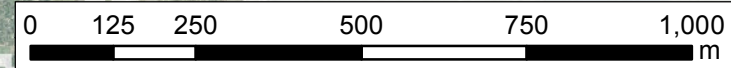
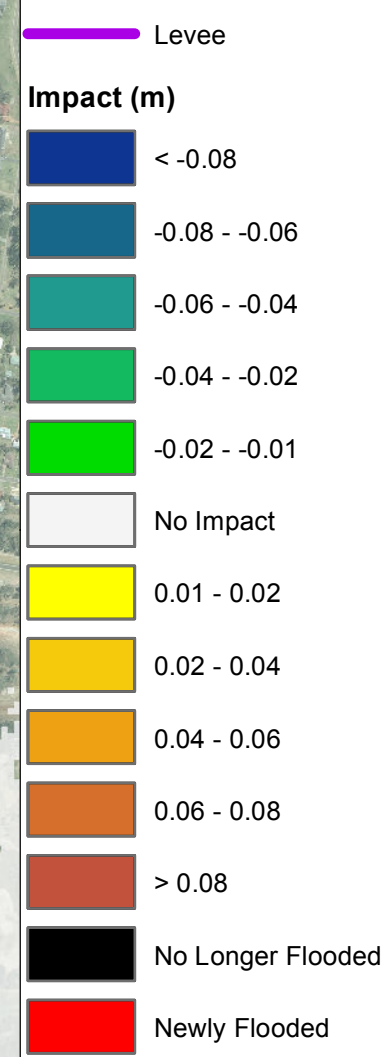
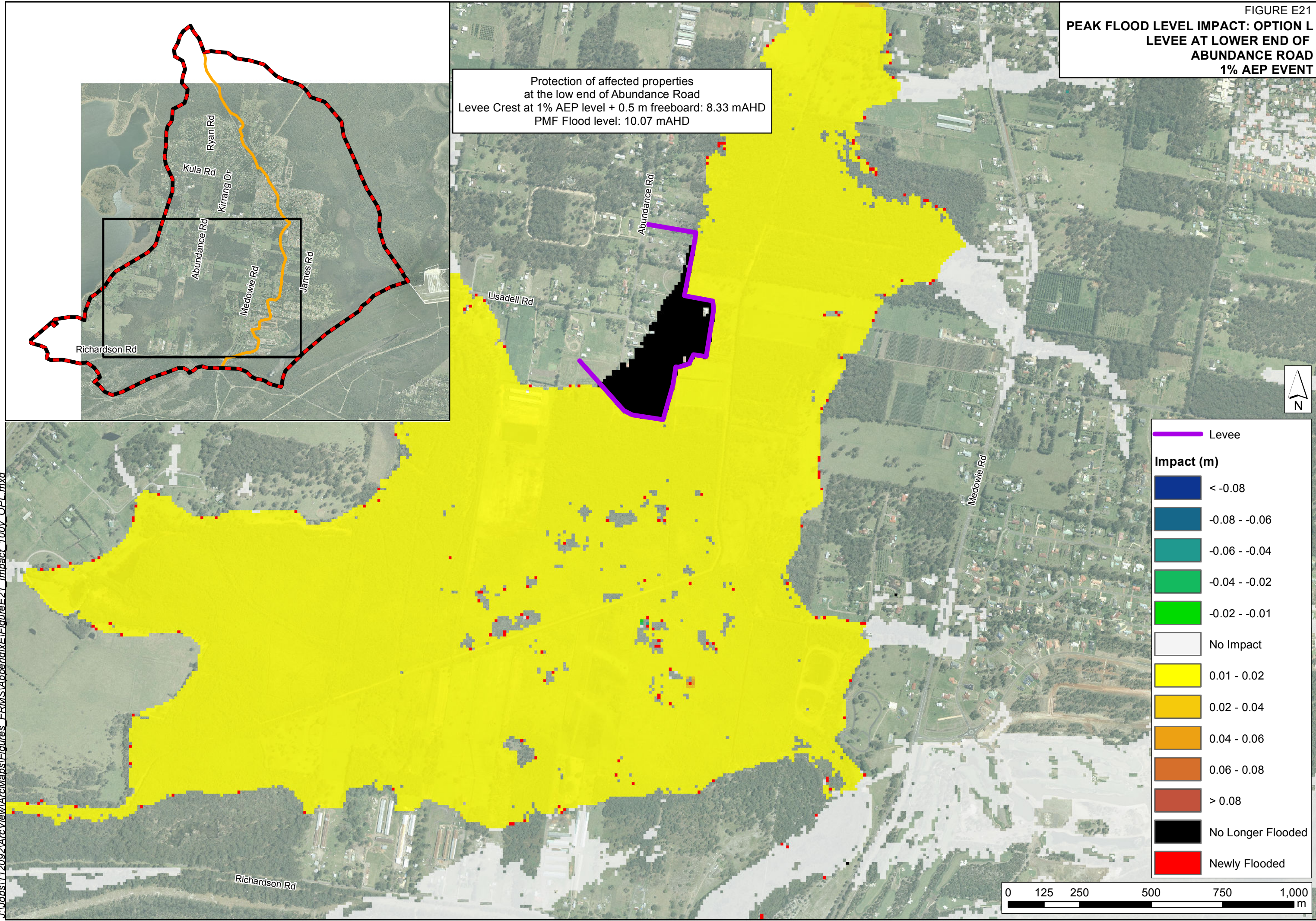
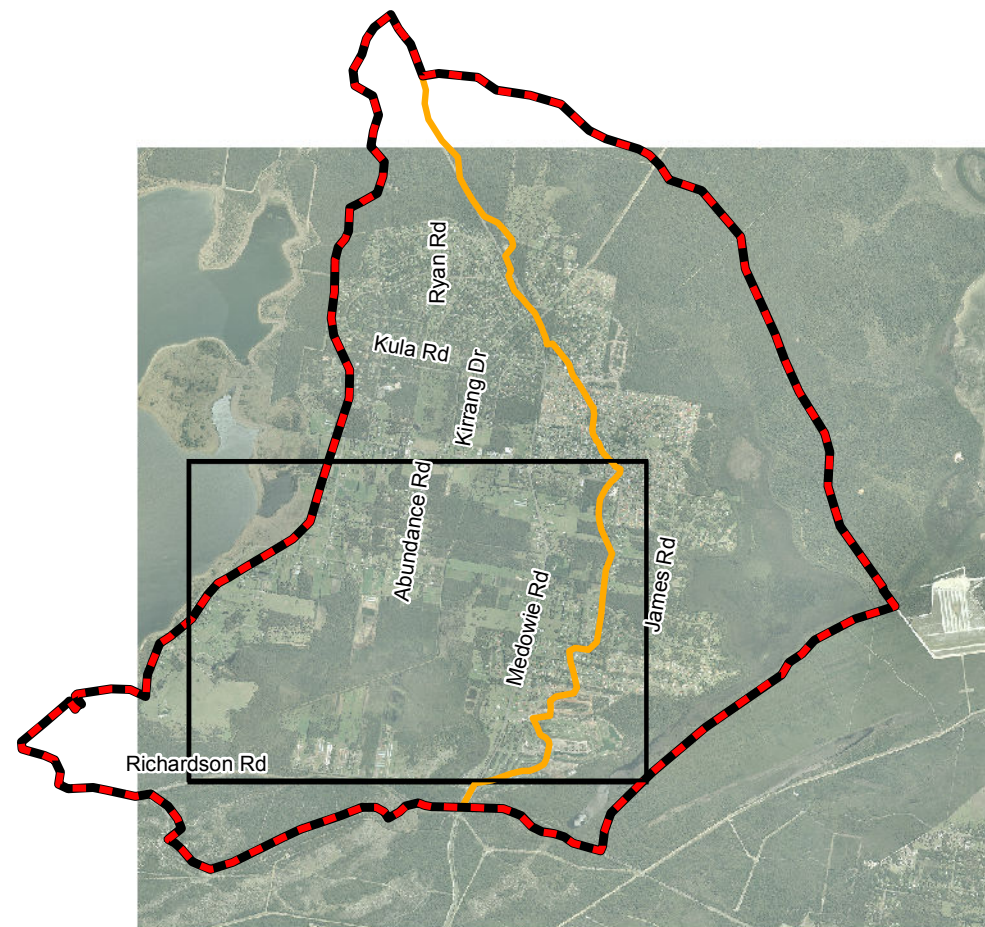


FIGURE E21
PEAK FLOOD LEVEL IMPACT: OPTION L
LEVEE AT LOWER END OF
ABUNDANCE ROAD
1% AEP EVENT

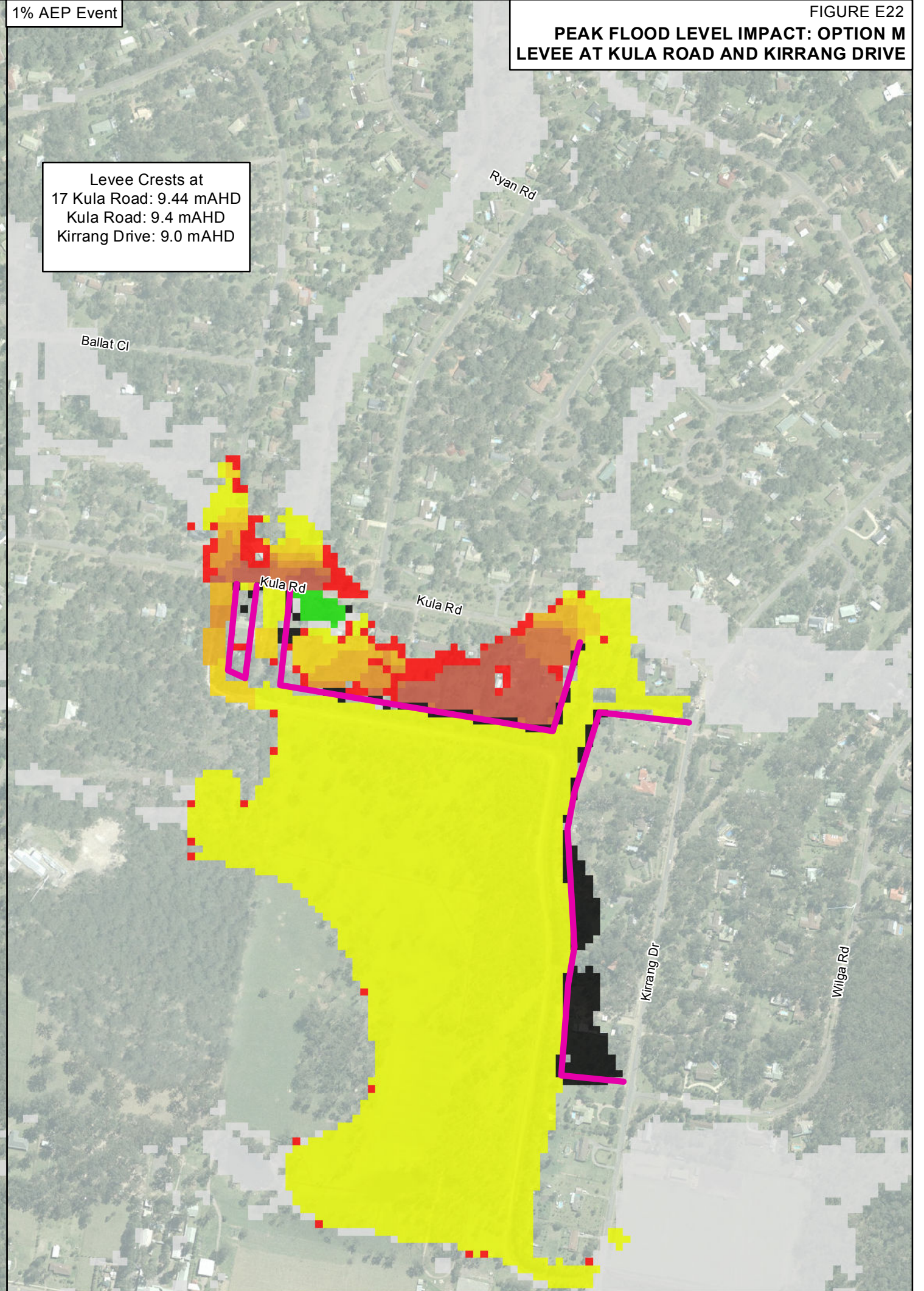
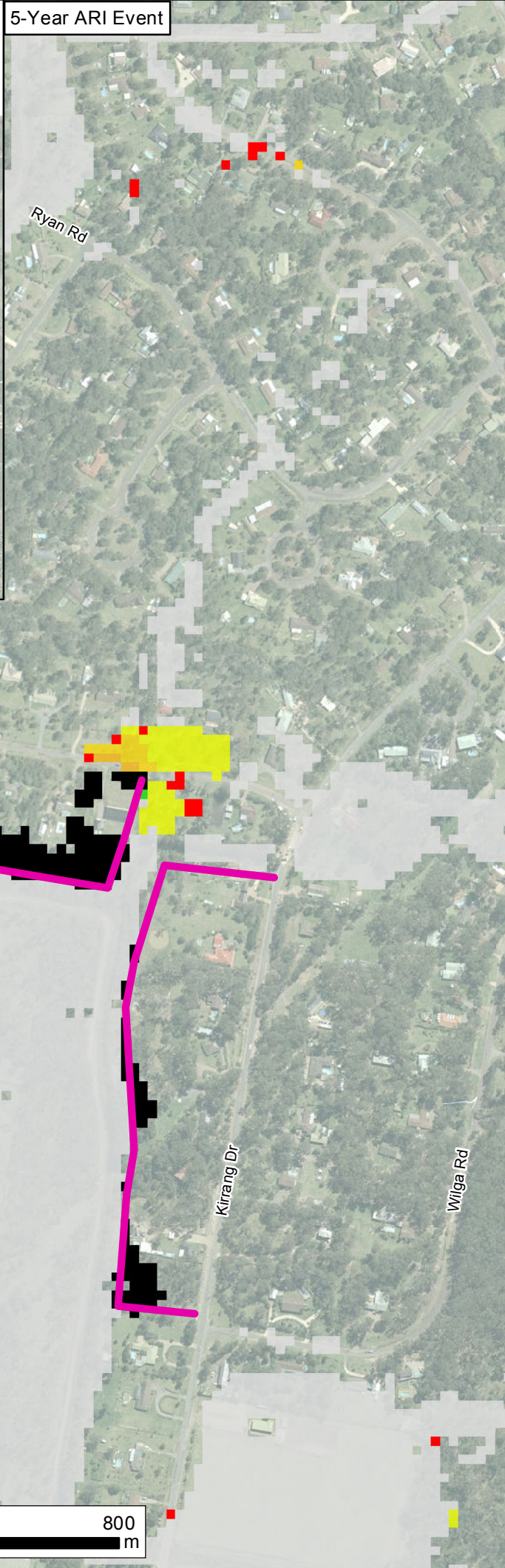
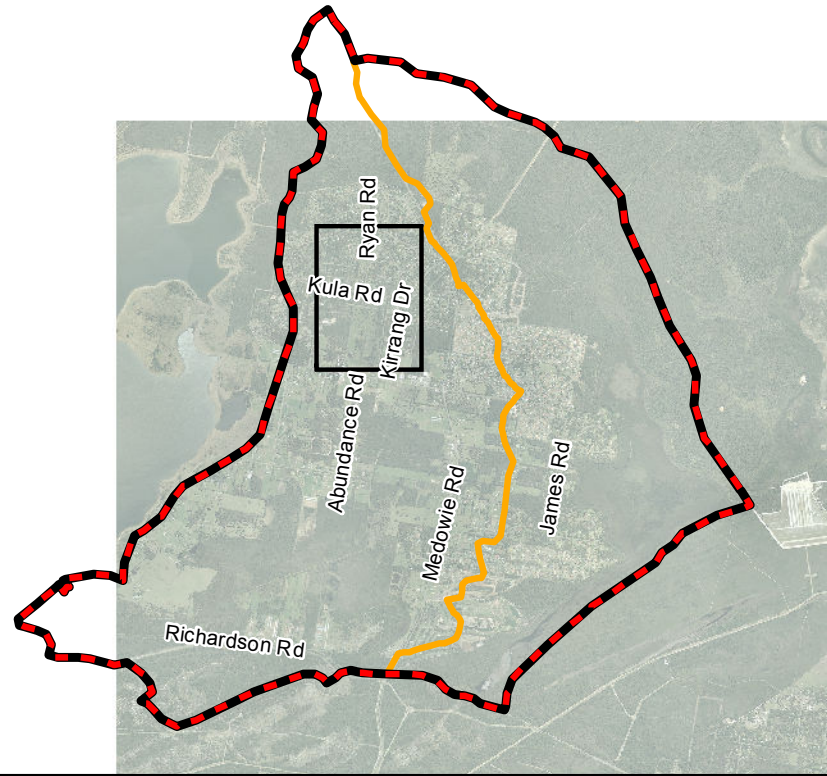
Protection of affected properties
at the low end of Abundance Road
Levee Crest at 1% AEP level + 0.5 m freeboard: 8.33 mAHD
PMF Flood level: 10.07 mAHD



PEAK FLOOD LEVEL IMPACT: OPTION M
LEVEE AT KULA ROAD AND KIRRANG DRIVE

5-Year ARI Event

1% AEP Event



Levee Crests at
17 Kula Road: 9.44 mAH
Kula Road: 9.4 mAH
Kirrang Drive: 9.0 mAH

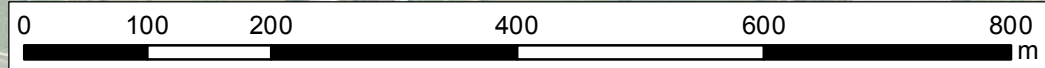
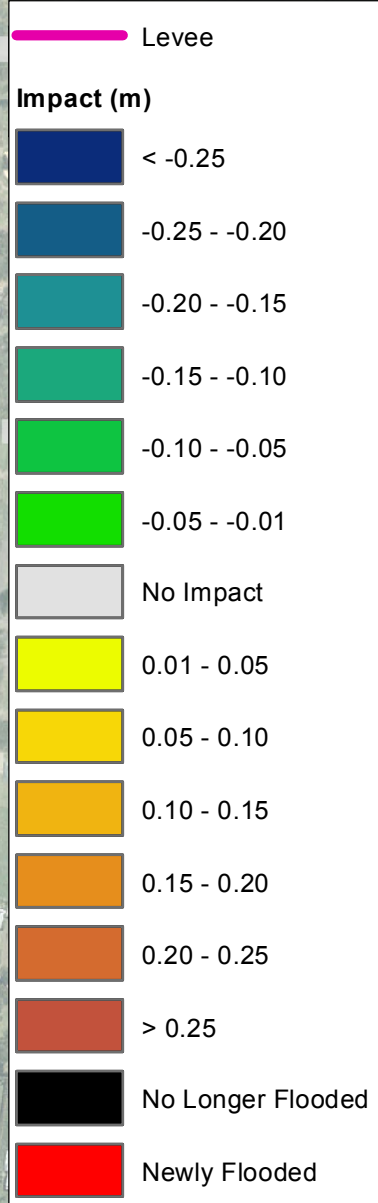


FIGURE E23
PEAK FLOOD LEVEL IMPACT: OPTION D
DIVERSION OF UPPER CATCHMENT FLOWS
WITHIN THE CAMPVALE SWAMP CATCHMENT
5 - YEAR ARI EVENT

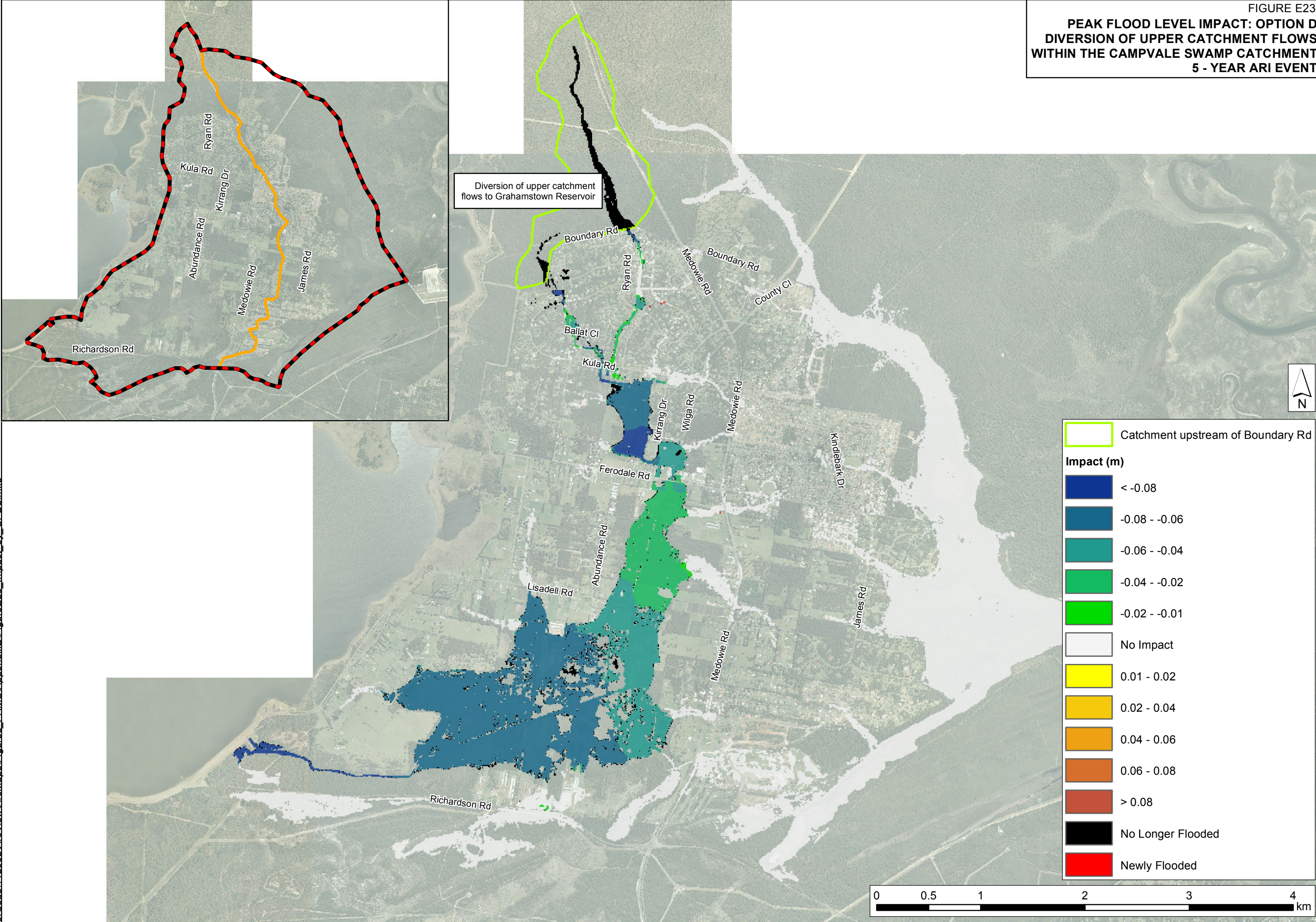


FIGURE E24
PEAK FLOOD LEVEL IMPACT: OPTION D
DIVERSION OF UPPER CATCHMENT FLOWS
WITHIN THE CAMPVALE SWAMP CATCHMENT
1% AEP EVENT

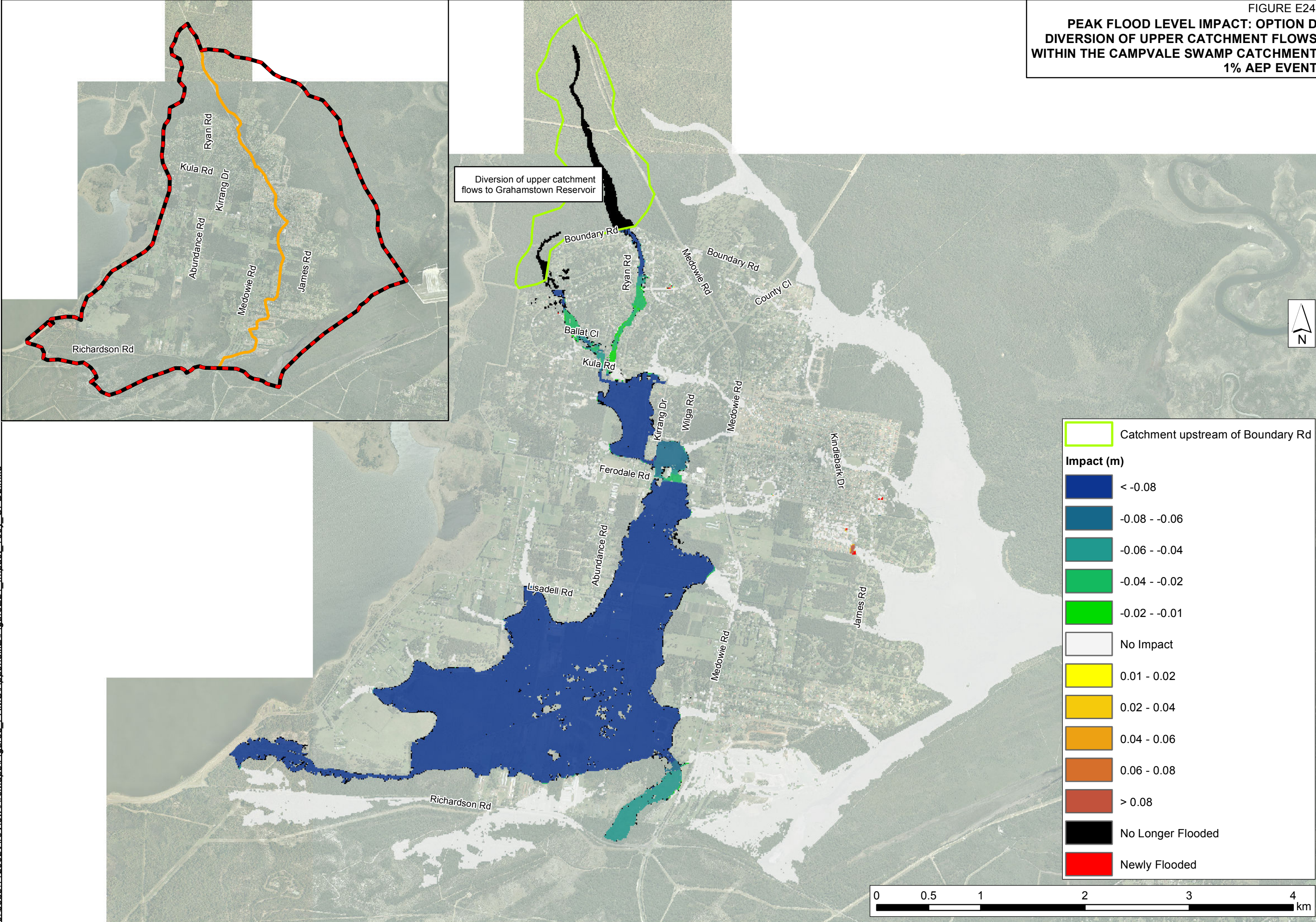


FIGURE E25
PEAK FLOOD LEVEL IMPACT: OPTION O
IMPROVED OUTLETS FROM
MOFFATS SWAMP
5 - YEAR ARI EVENT

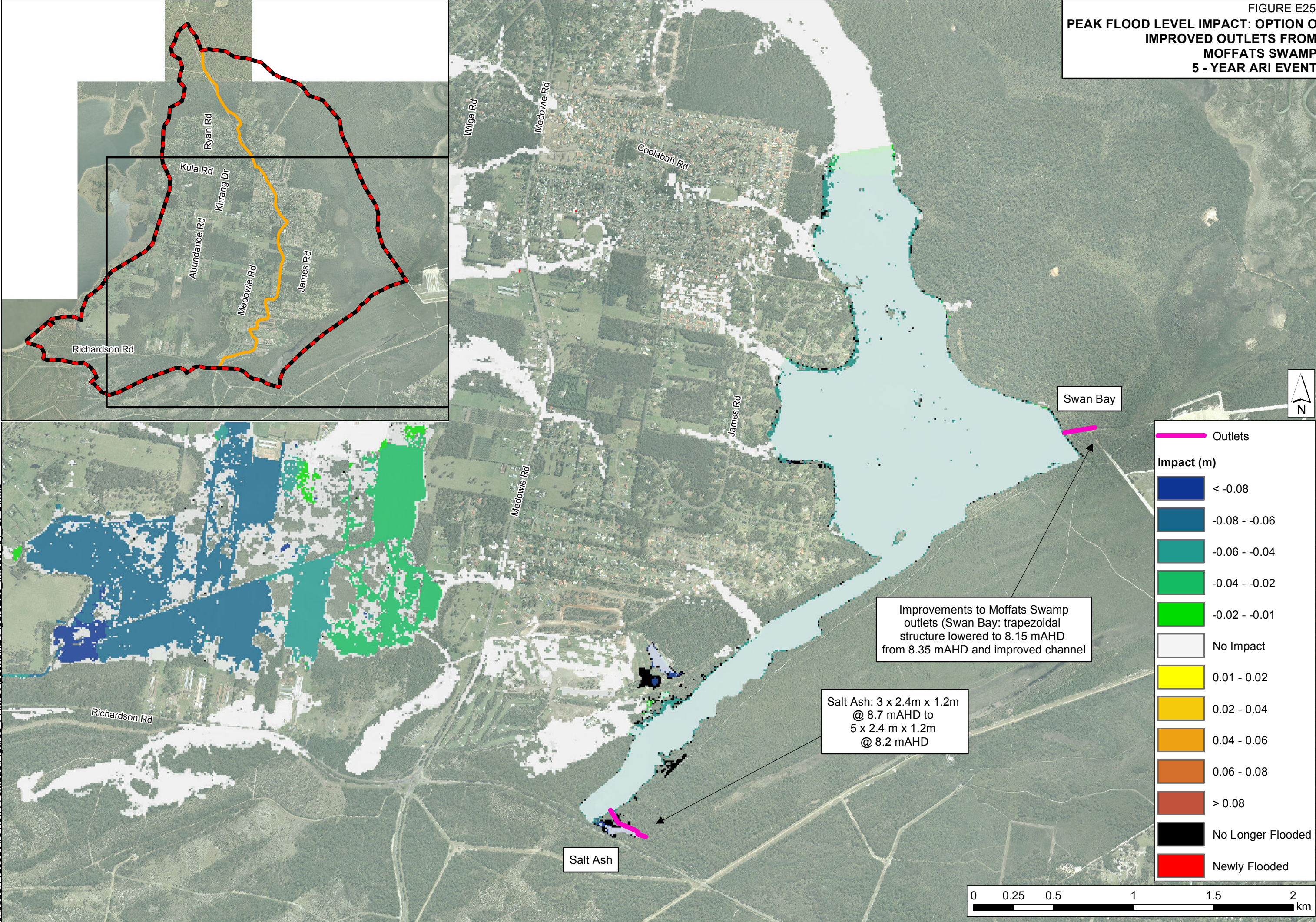


FIGURE E26
PEAK FLOOD LEVEL IMPACT: OPTION O
IMPROVED OUTLETS FROM
MOFFATS SWAMP
1% AEP EVENT

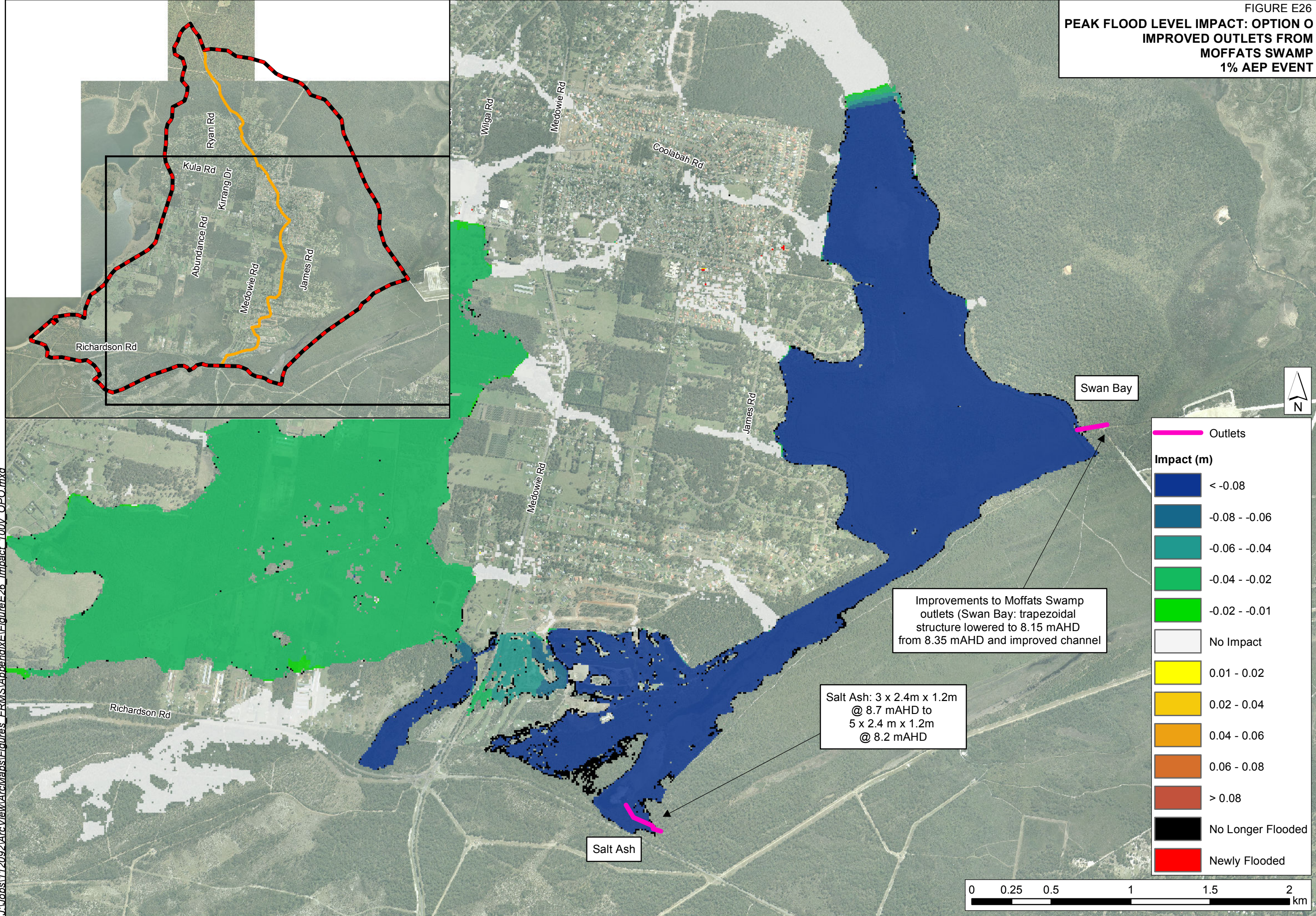
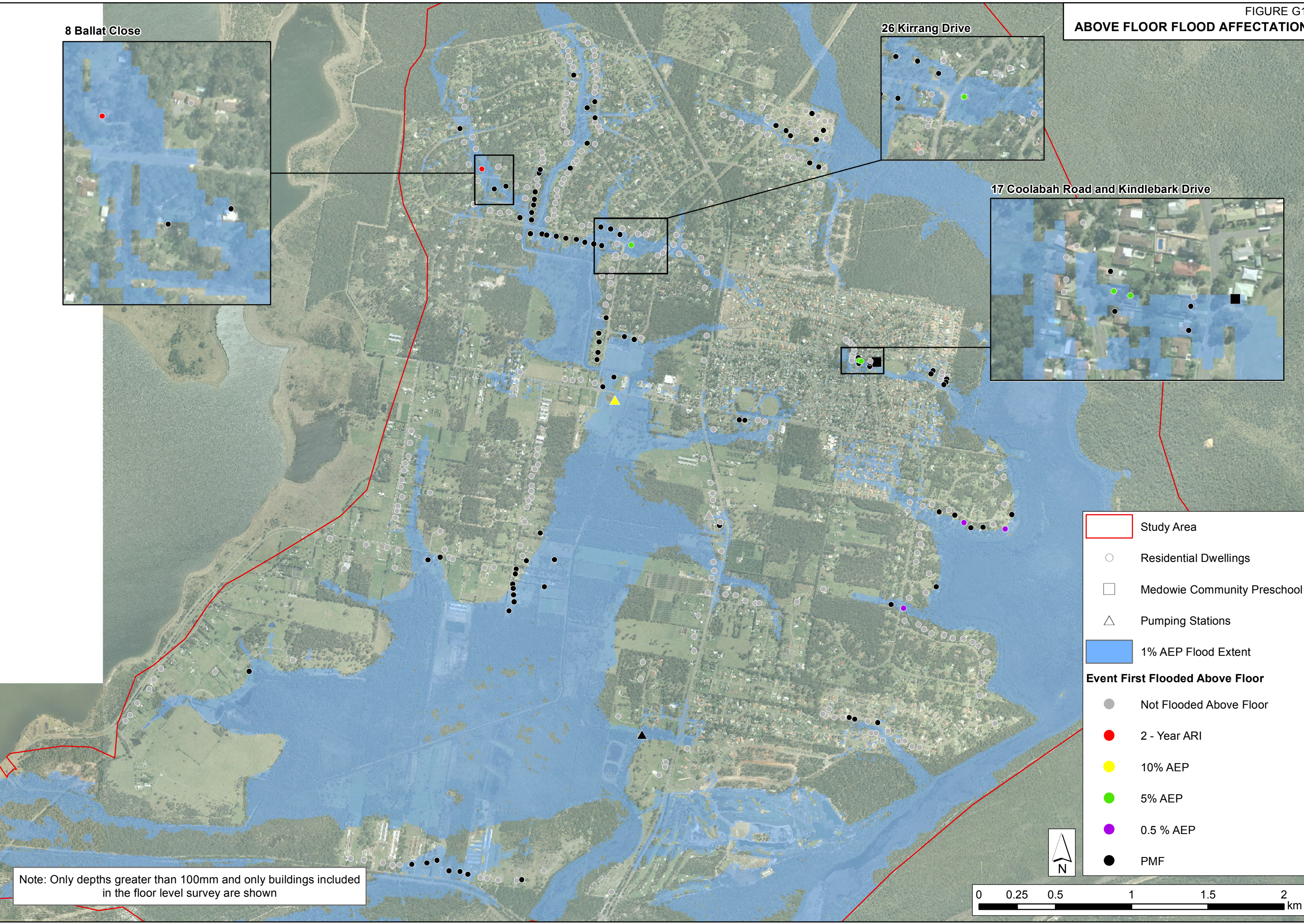
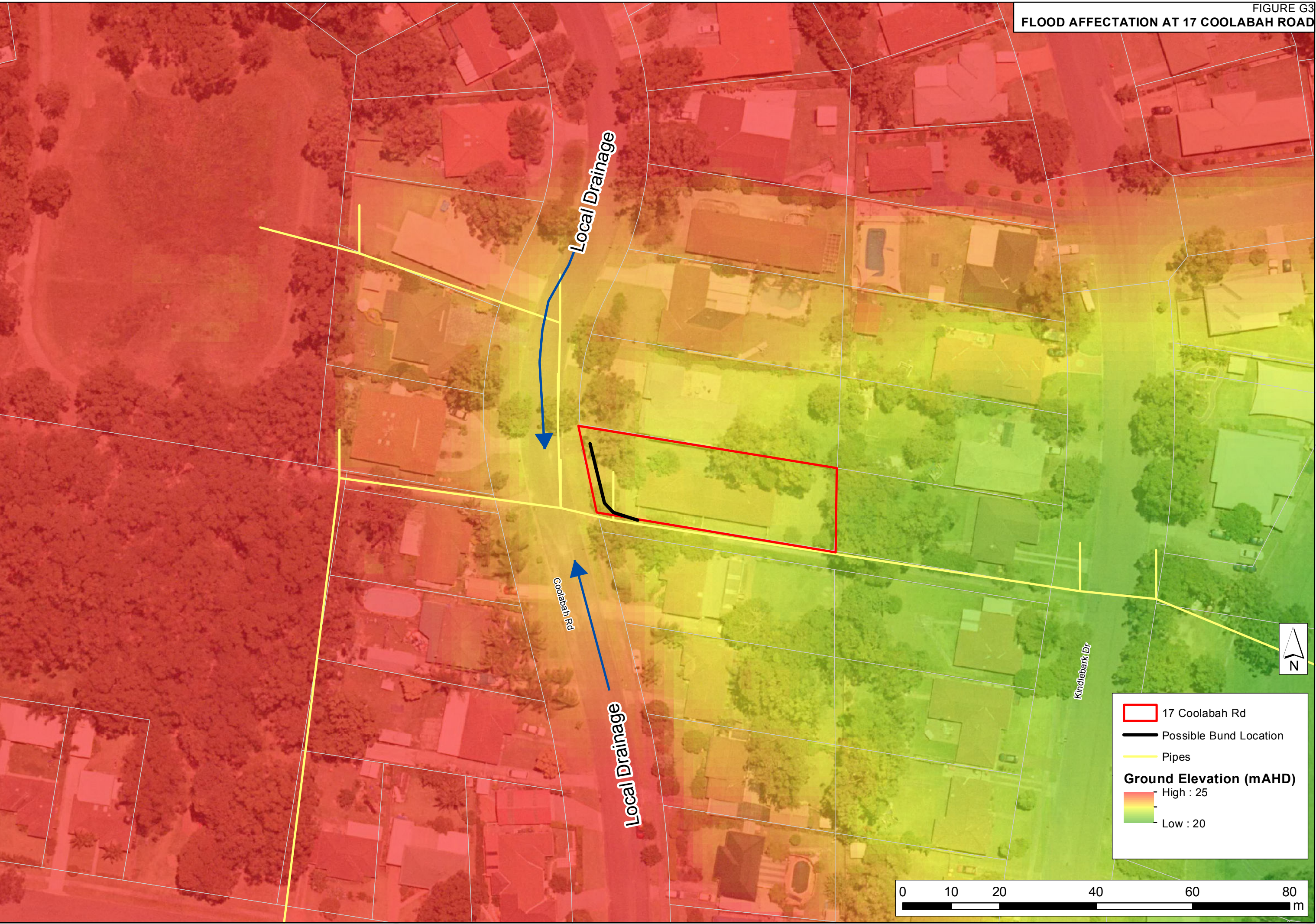
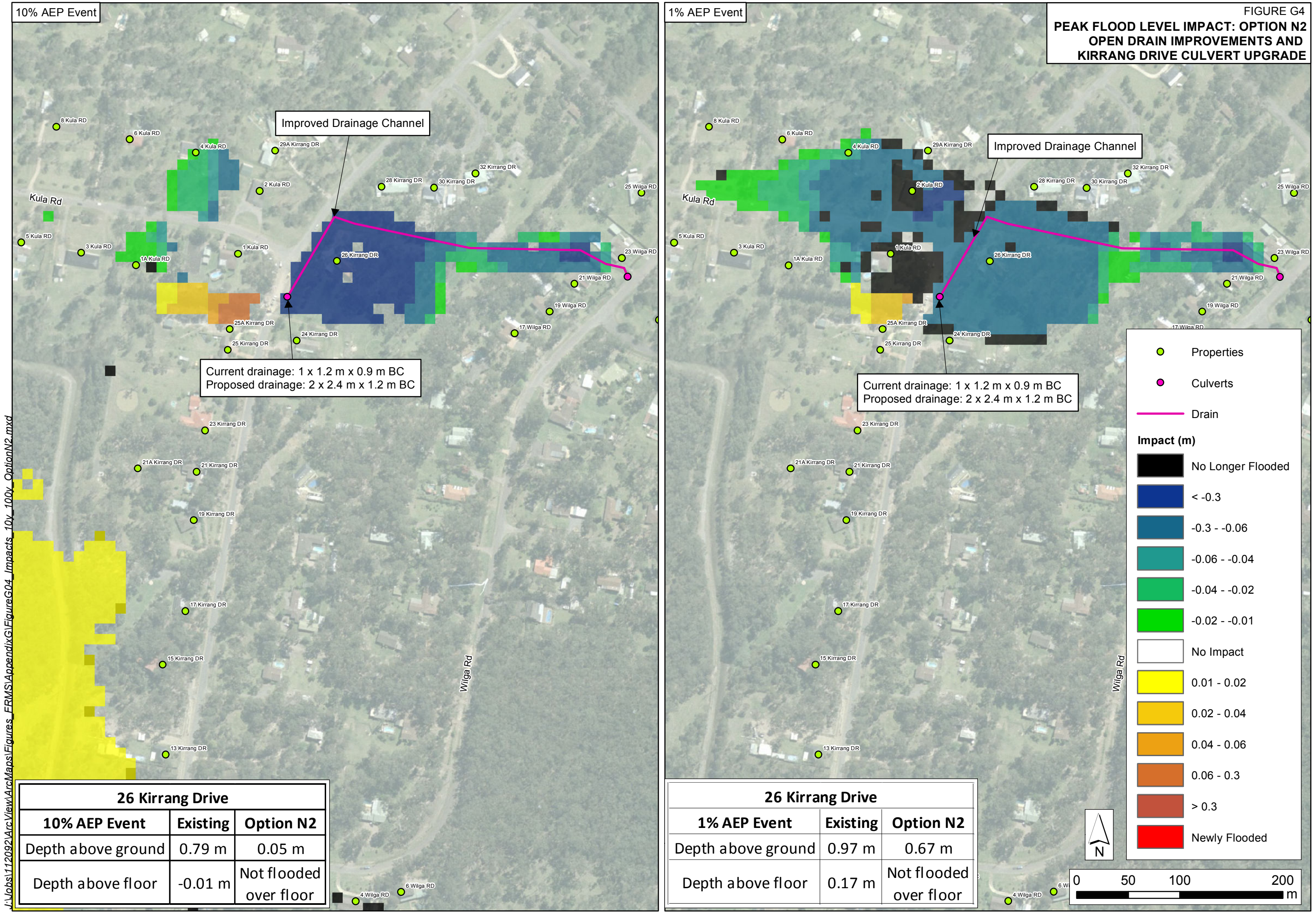


FIGURE G1

ABOVE FLOOR FLOOD AFFECTATION







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5Y ARI EVENT

Coolabah Rd

Kindlebark Dr

1% AEP EVENT

Coorabehn Rd

Kindlebark Dr

0

FIGURE G5
PEAK FLOOD LEVEL IMPACT: OPTION W
REMOVAL OF EARTH BUND ON KINDLEBARK DRIVE

Removal of earth bund

Impact (m)

Dark Blue	No Longer Flooded
Blue	< -0.08
Teal	-0.08 - -0.06
Green	-0.06 - -0.04
Light Green	-0.04 - -0.02
Yellow-Green	-0.02 - -0.01
White	No Impact
Yellow	0.01 - 0.02
Orange	0.02 - 0.04
Light Orange	0.04 - 0.06
Dark Orange	0.06 - 0.08
Red-Orange	> 0.08
Red	Newly Flooded

0 50 100 200 300 m

