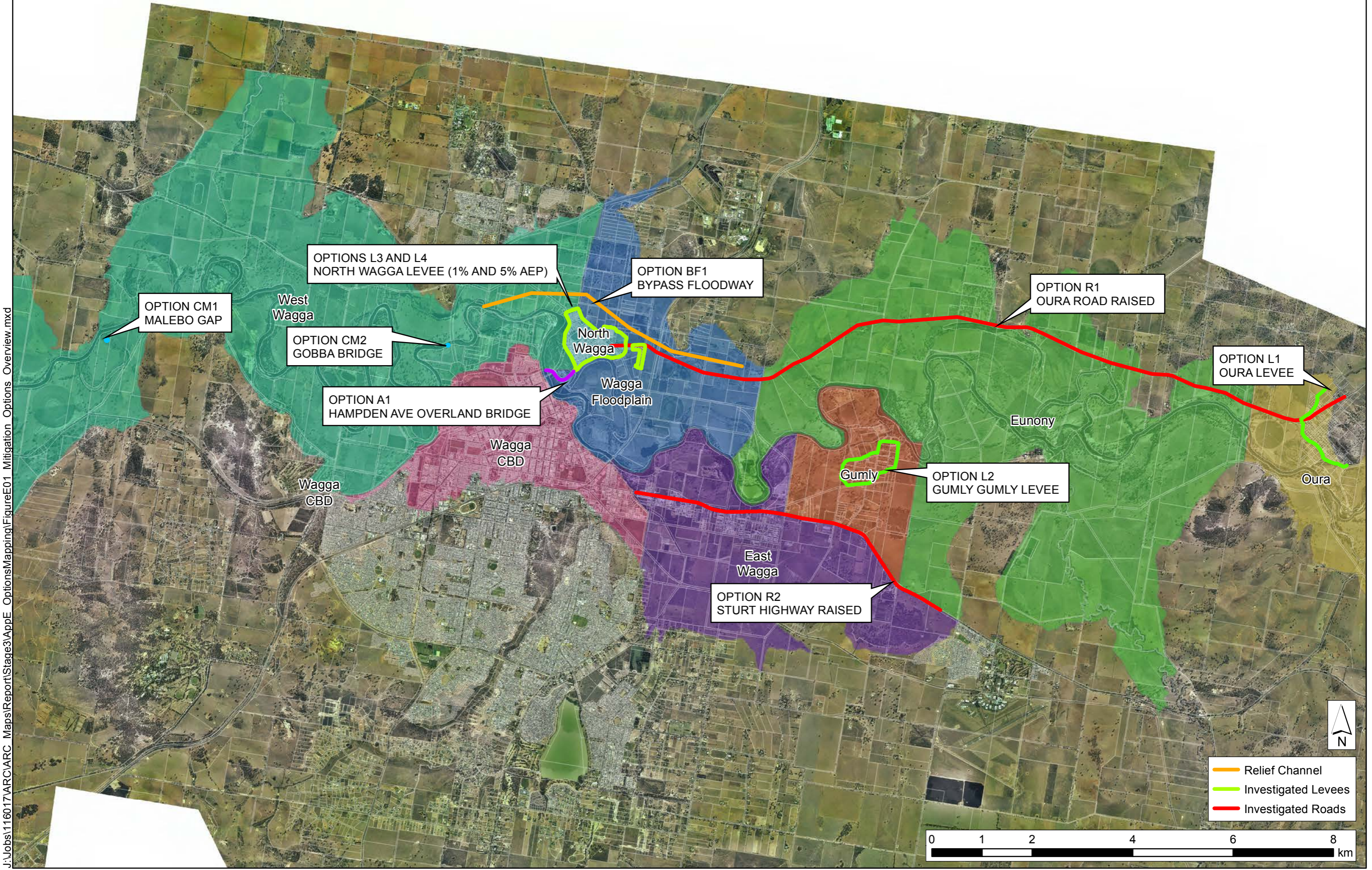


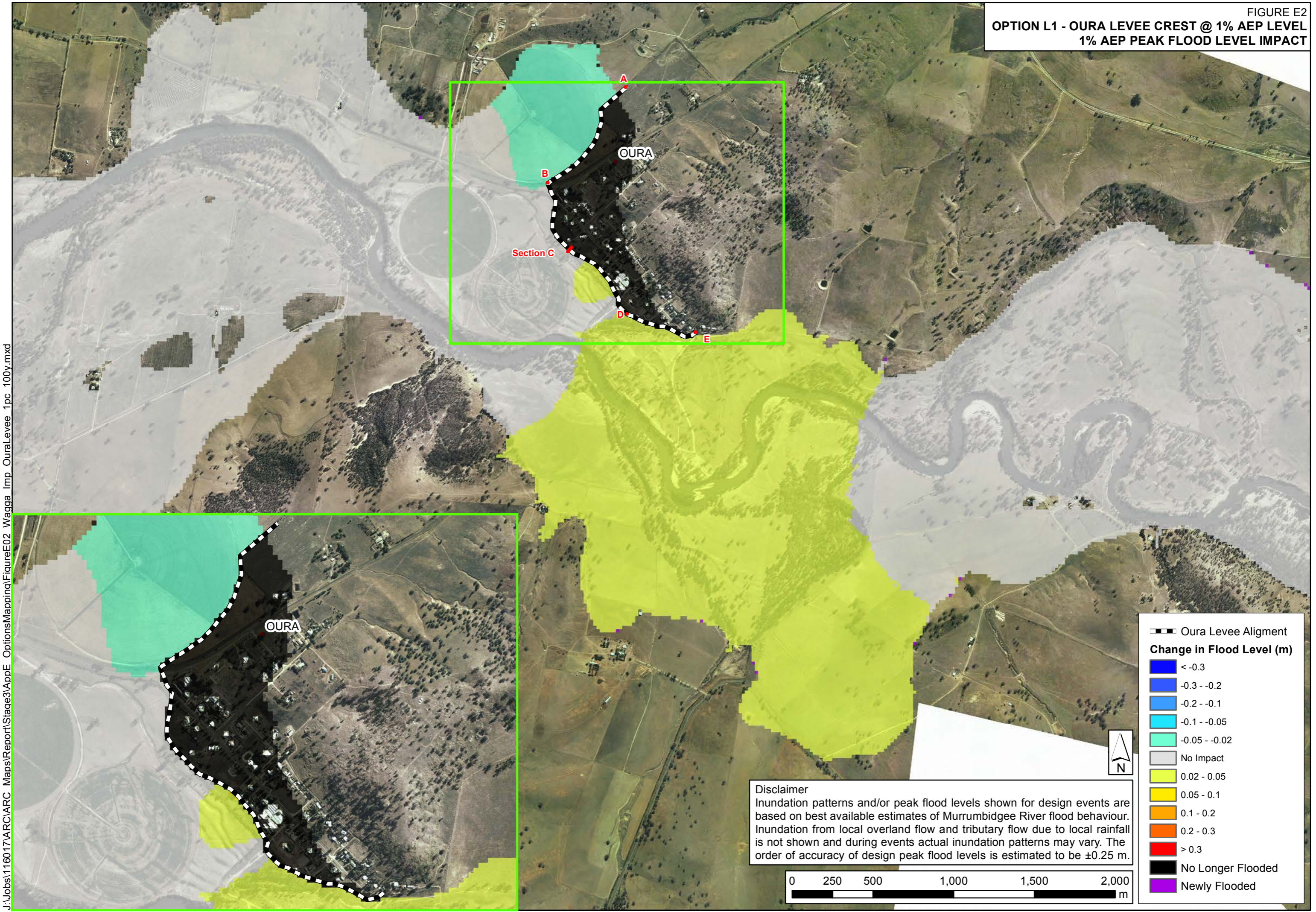


FIGURE E1
MITIGATIONS OPTIONS OVERVIEW



J:\Jobs\116017\ARC_Maps\Report\Stage3\AppE_OptionsMapping\FigureE01_Mitigation_Options_Overview.mxd

FIGURE E2
OPTION L1 - OURA LEVELLE CREST @ 1% AEP LEVEL
1% AEP PEAK FLOOD LEVEL IMPACT



J:\Jobs\1160\17\ARC Maps\Report\Stage3\AppE_Options\Mapping\FigureE02_Wagga_Imp_OuraLevee_1pc_100y.mxd

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

	Oura Levee Alignment
Change in Flood Level (m)	
	< -0.3
	-0.3 - -0.2
	-0.2 - -0.1
	-0.1 - -0.05
	-0.05 - -0.02
	No Impact
	0.02 - 0.05
	0.05 - 0.1
	0.1 - 0.2
	0.2 - 0.3
	> 0.3
	No Longer Flooded
	Newly Flooded

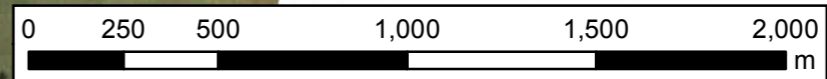
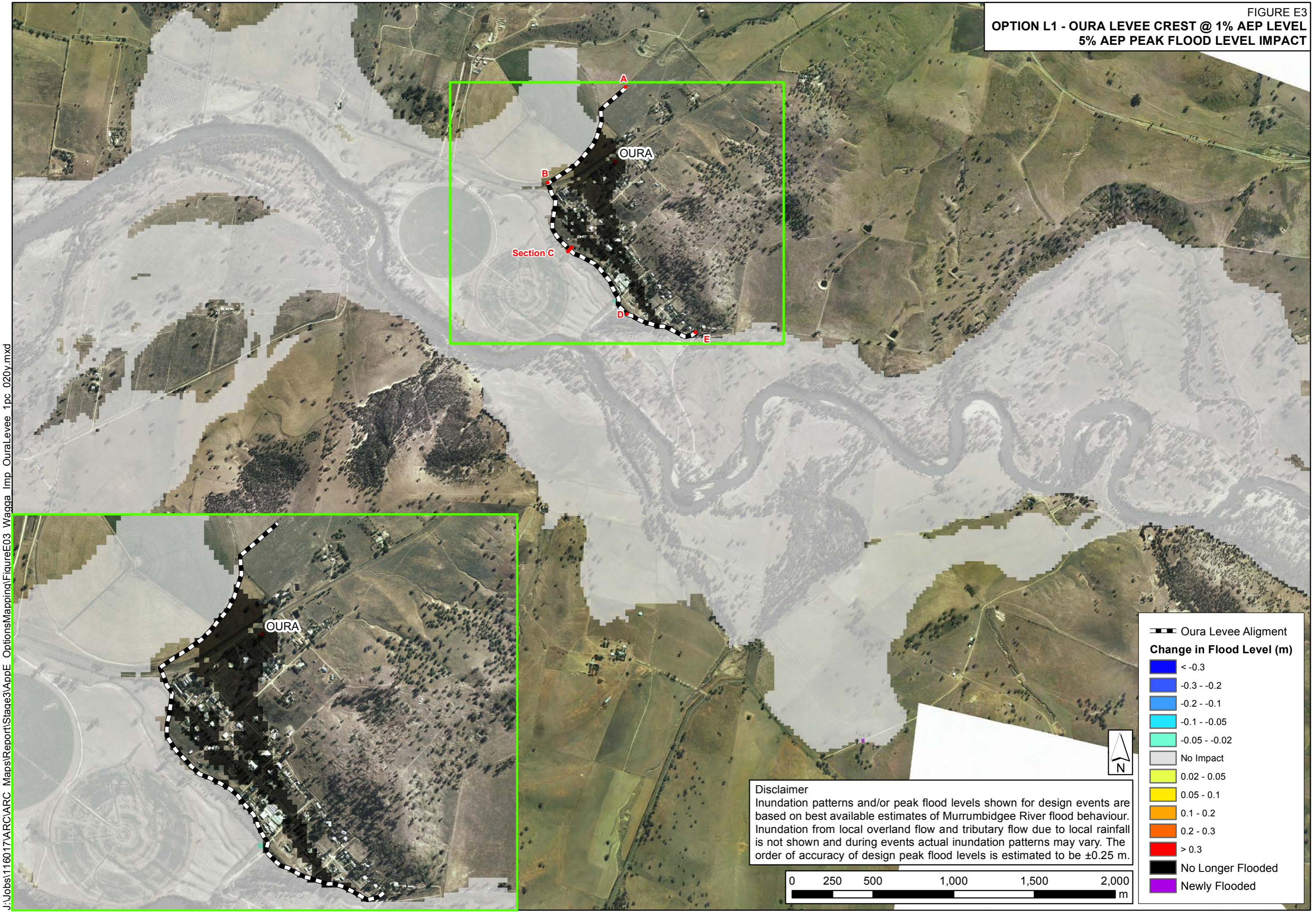


FIGURE E3
OPTION L1 - OURA LEVELLE CREST @ 1% AEP LEVEL
5% AEP PEAK FLOOD LEVEL IMPACT



J:\Jobs\1160\17\ARC Maps\Report\Stage3\AppE_Options\Mapping\FigureE03_Wagga_Imp_OuraLevee_1pc_020y.mxd

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

Oura Levee Alignment
Change in Flood Level (m)
 < -0.3
 -0.3 - -0.2
 -0.2 - -0.1
 -0.1 - -0.05
 -0.05 - -0.02
 No Impact
 0.02 - 0.05
 0.05 - 0.1
 0.1 - 0.2
 0.2 - 0.3
 > 0.3
 No Longer Flooded
 Newly Flooded

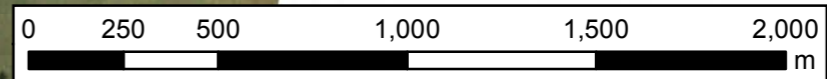
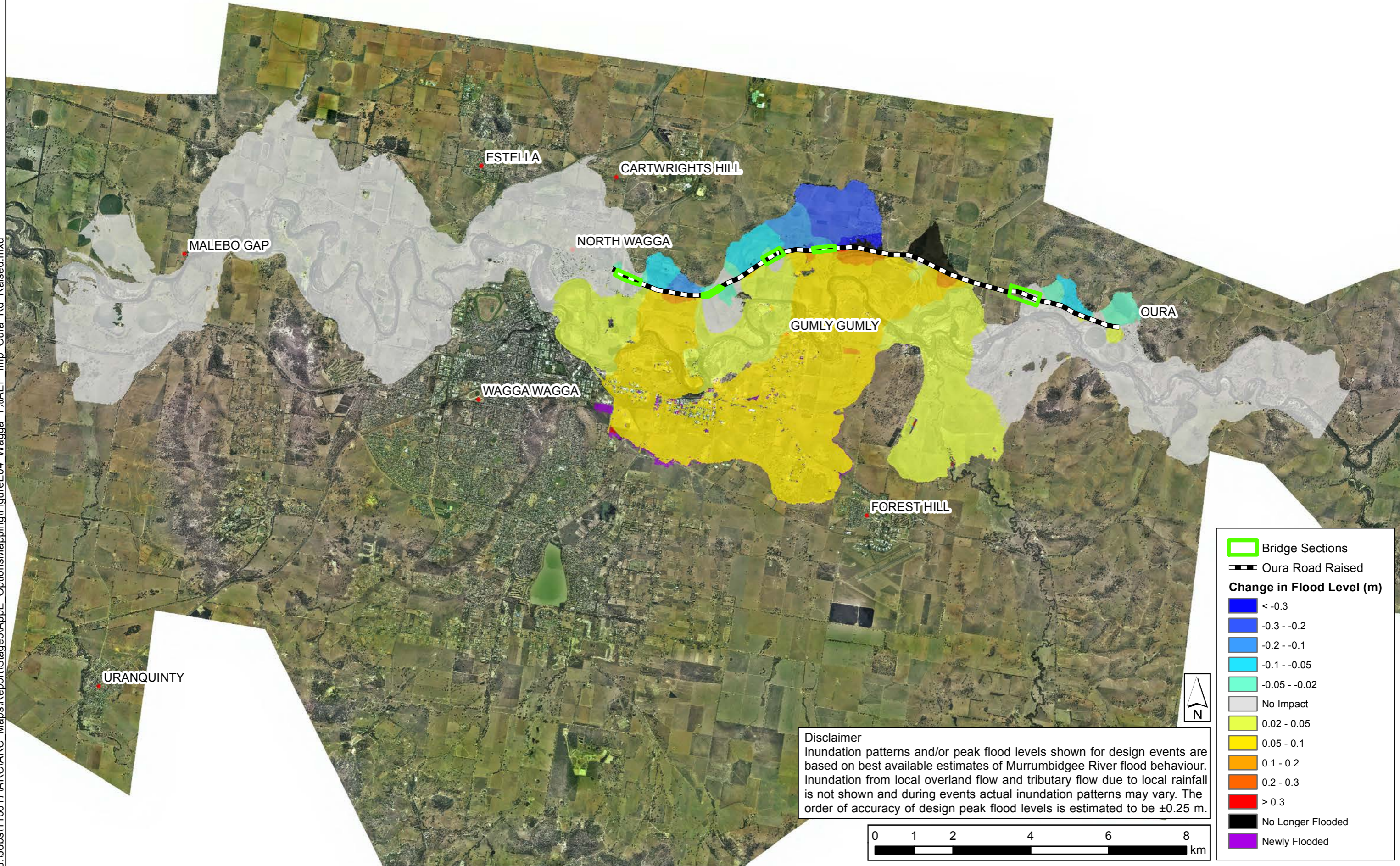


FIGURE E4
OPTION R1- OURA ROAD RAISED
1% AEP PEAK FLOOD LEVEL IMPACT

J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\AppE_OptionsMapping\FigureE04_Wagga_1%AEF_Imp_Oura_Rd_Raised.mxd

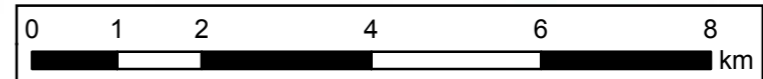


Bridge Sections
 - - - - - Oura Road Raised

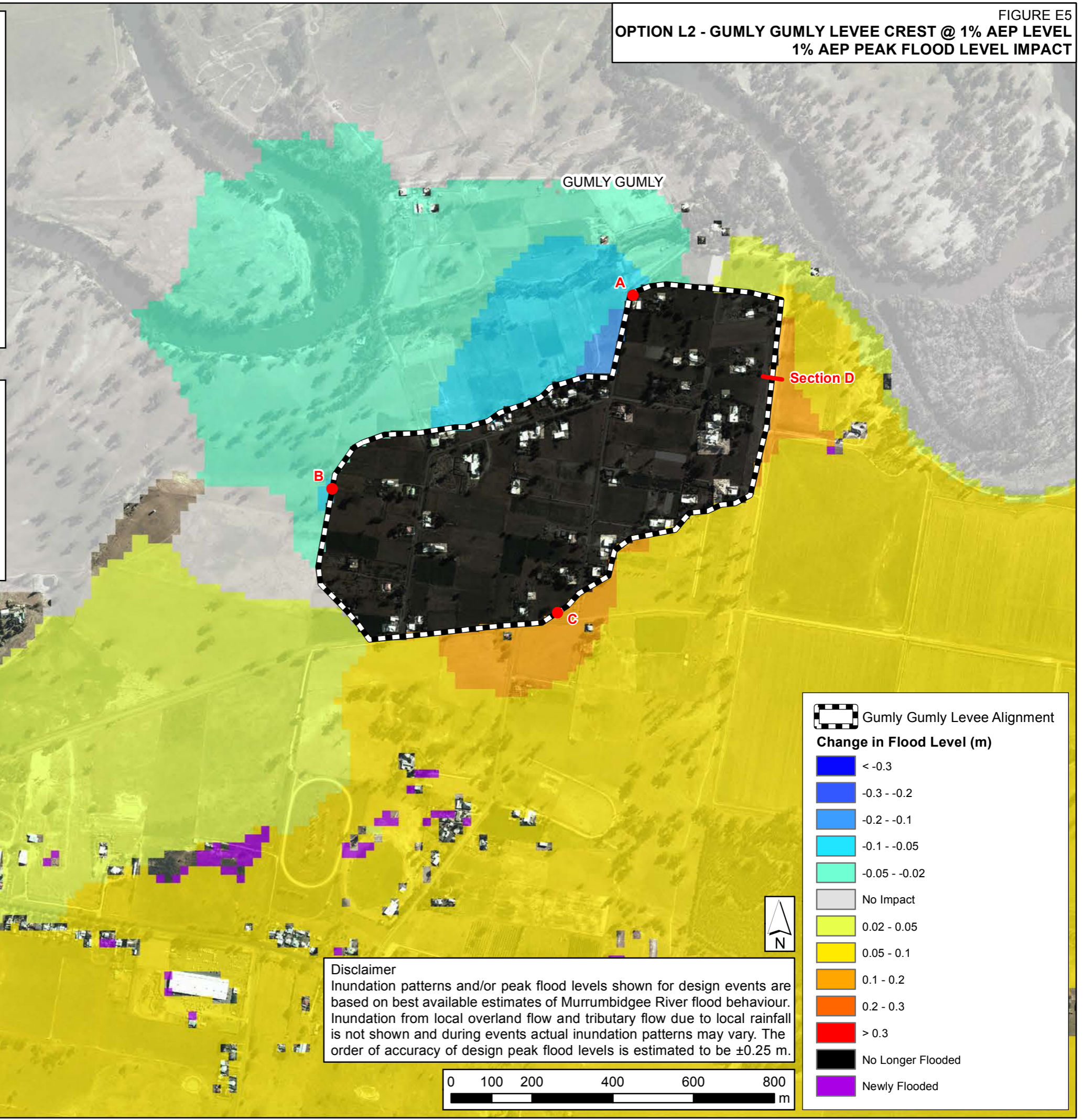
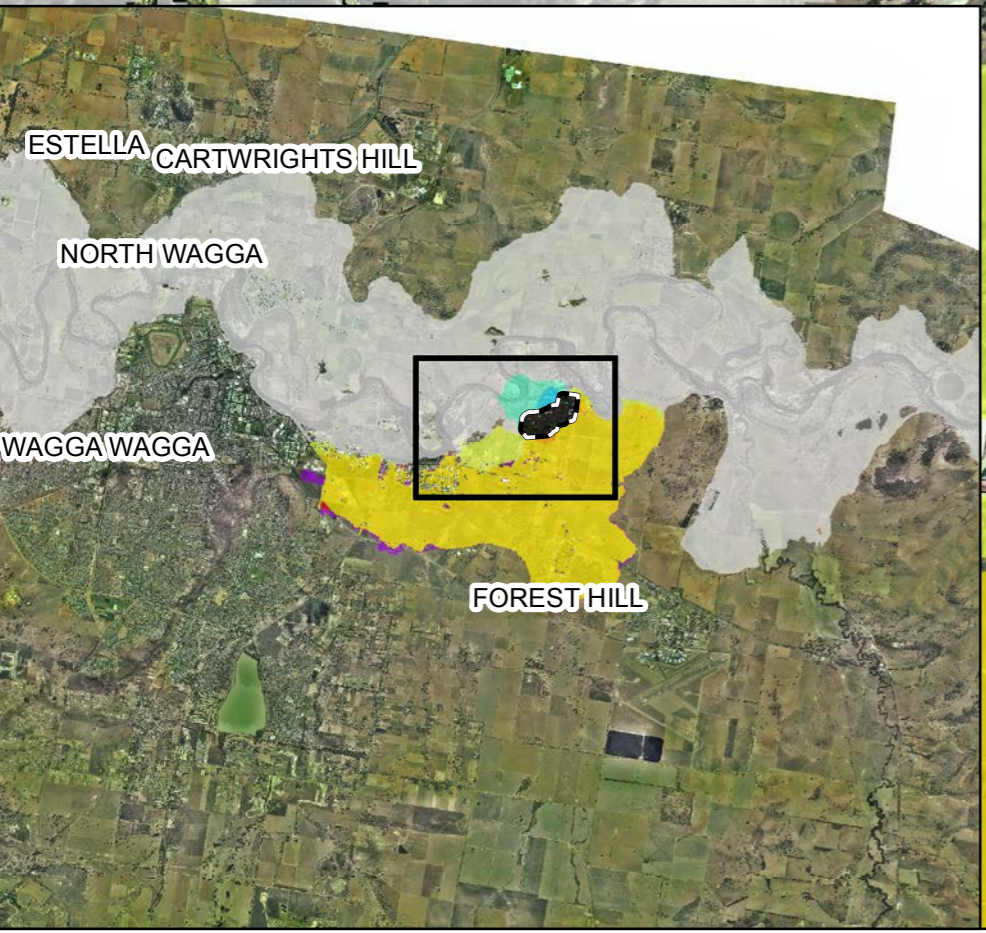
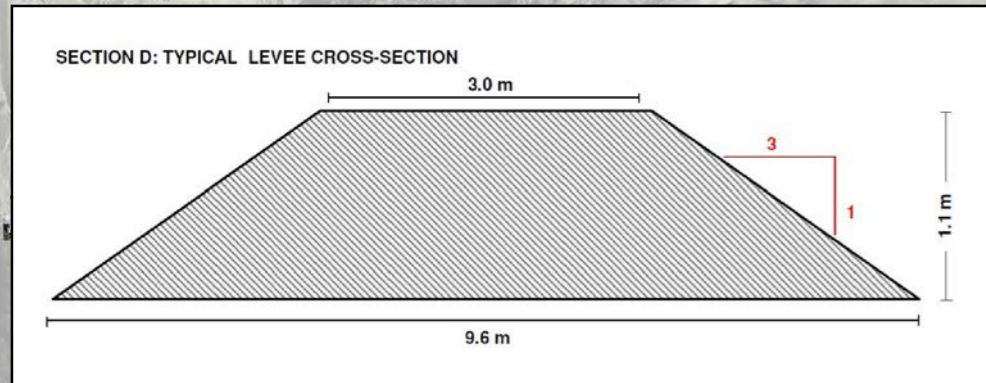
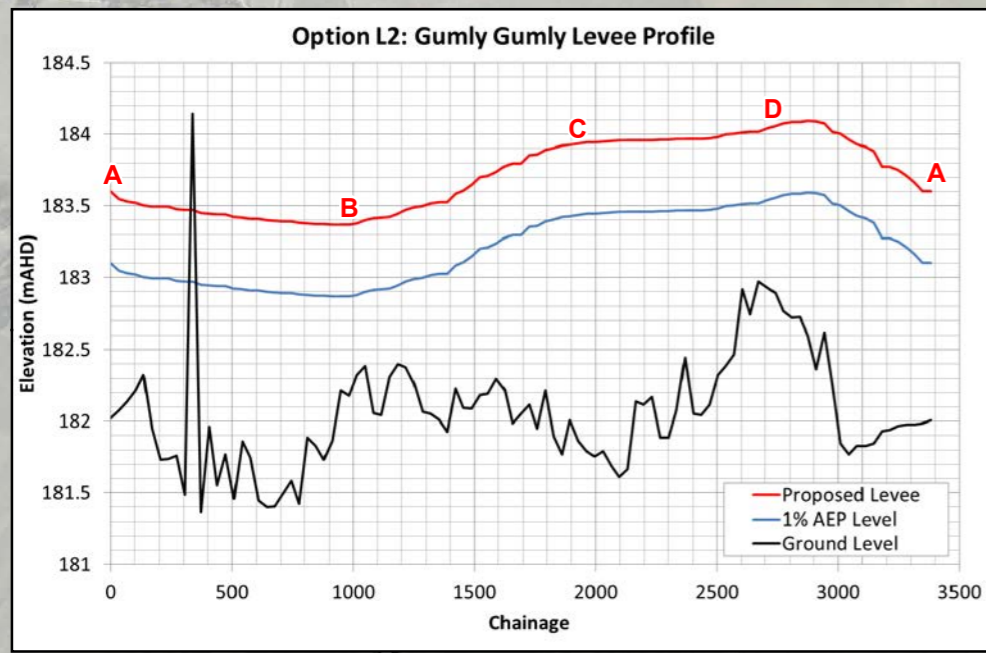
Change in Flood Level (m)

- < -0.3
- 0.3 - -0.2
- 0.2 - -0.1
- 0.1 - -0.05
- 0.05 - -0.02
- No Impact
- 0.02 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- > 0.3
- No Longer Flooded
- Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.



**OPTION L2 - GUMLY GUMLY LEVEE CREST @ 1% AEP LEVEL
1% AEP PEAK FLOOD LEVEL IMPACT**

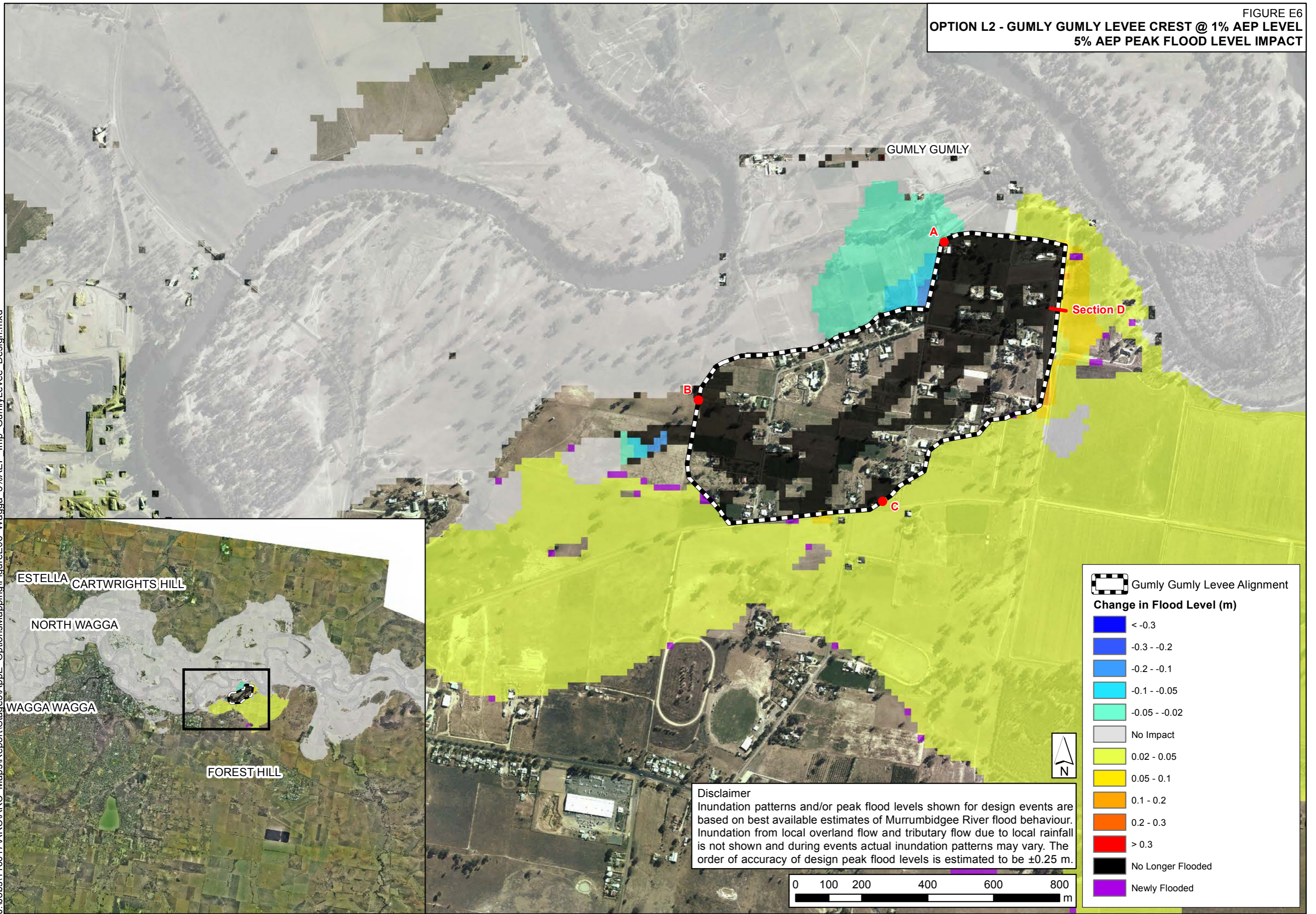


Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\AppE_Options\Mapping\FigureE05_Wagga_1%AEP_Imp_GumlyLevee_Design.mxd

OPTION L2 - GUMLY GUMLY LEVEE CREST @ 1% AEP LEVEL
5% AEP PEAK FLOOD LEVEL IMPACT

J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\AppE_OptionsMapping\FigureE06_Wagga_5%AEP_Imp_GumlyLevee_Design.mxd



GUMLY GUMLY

A

B

C

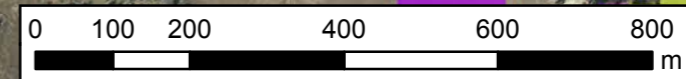
Section D

ESTELLA CARTWRIGHTS HILL

NORTH WAGGA

WAGGA WAGGA

FOREST HILL

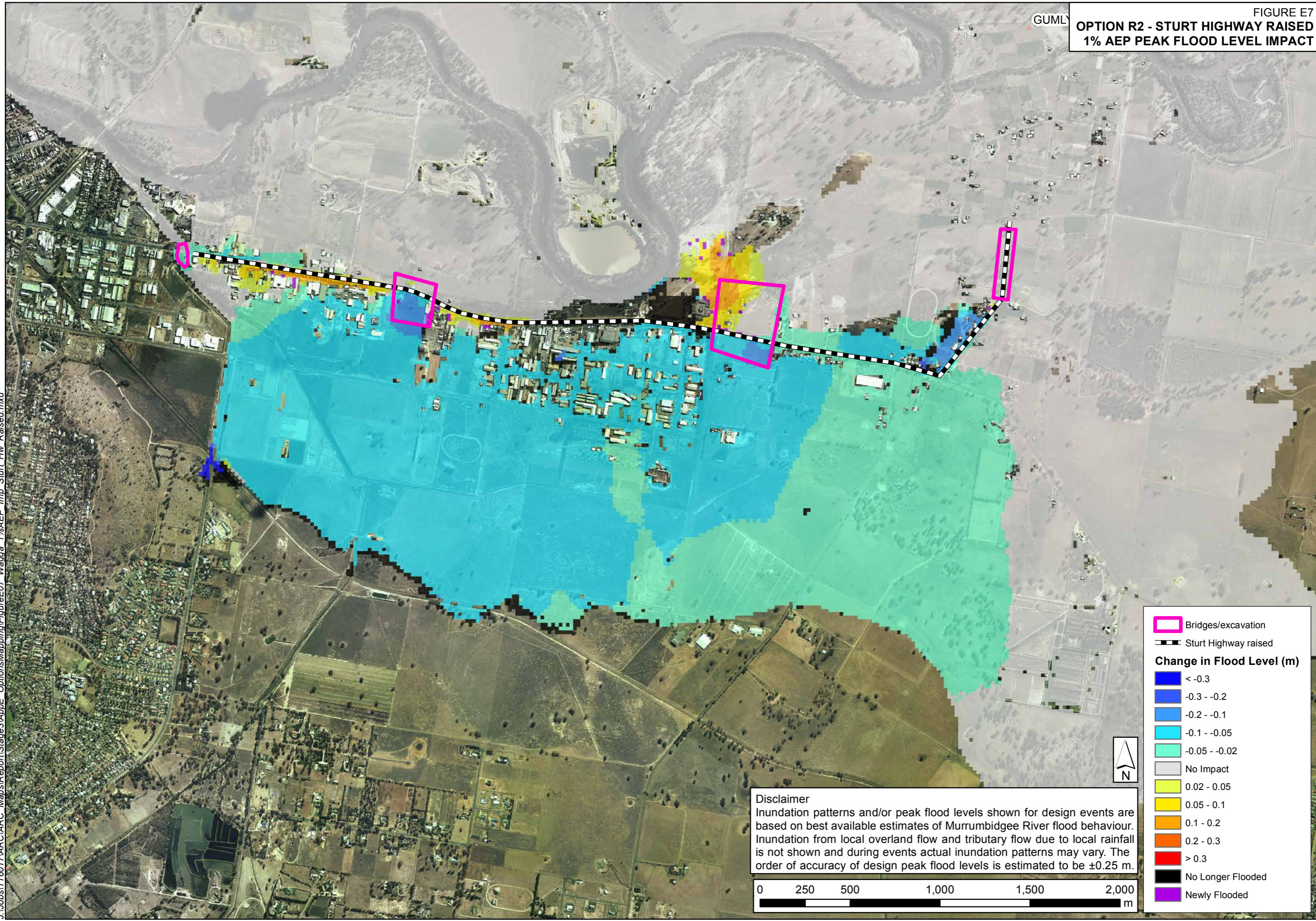


GUMLY

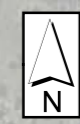
FIGURE E7

**OPTION R2 - STURT HIGHWAY RAISED
1% AEP PEAK FLOOD LEVEL IMPACT**

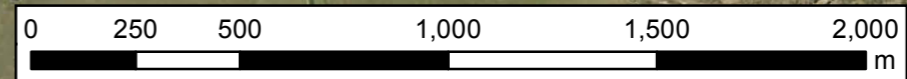
J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\AppE_Options\Mapping\FigureE07_Wagga_1%AEF_Imp_Sturt_Hw_Raised.mxd



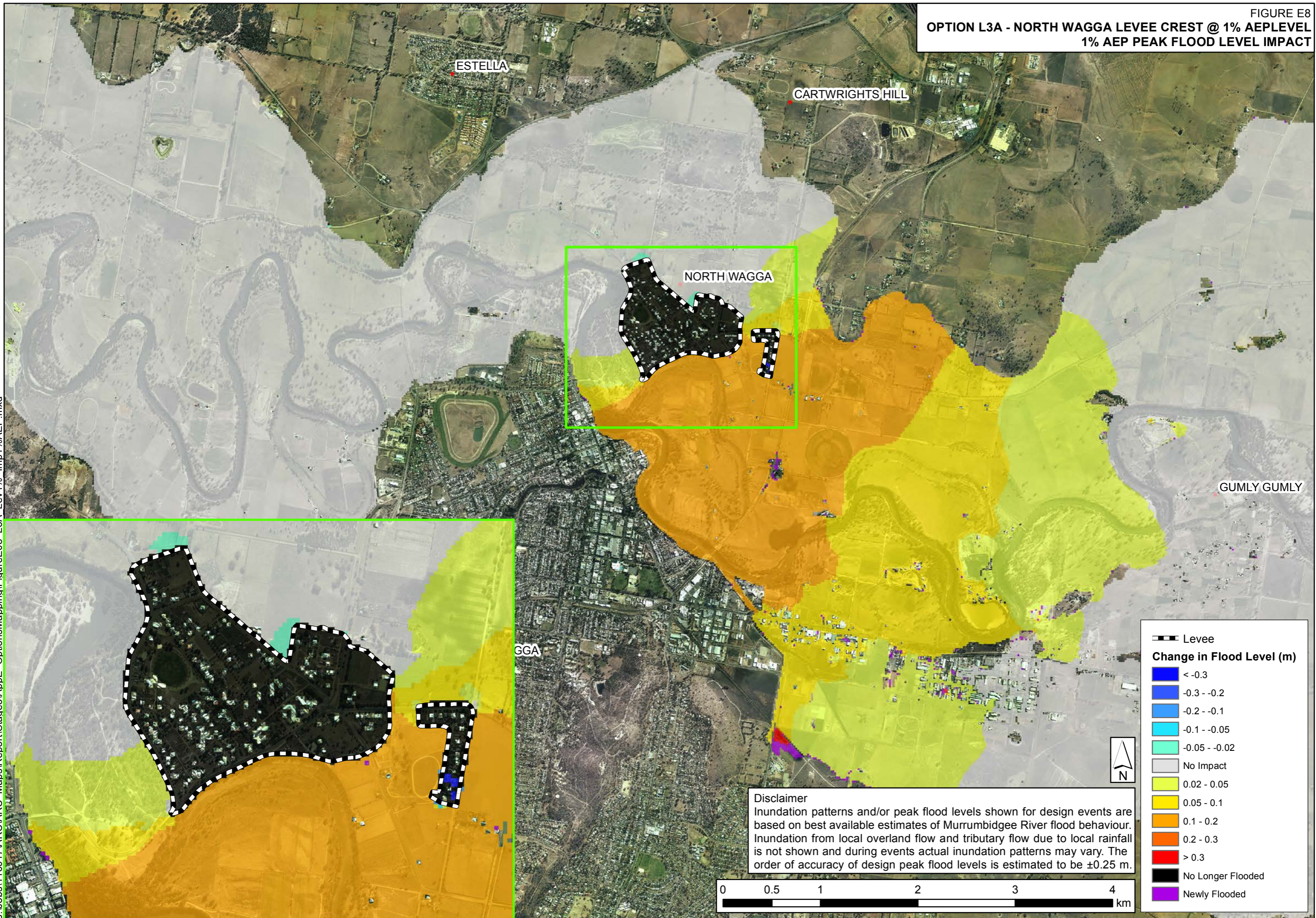
Bridges/excavation
 Sturt Highway raised
Change in Flood Level (m)
 < -0.3
 -0.3 - -0.2
 -0.2 - -0.1
 -0.1 - -0.05
 -0.05 - -0.02
 No Impact
 0.02 - 0.05
 0.05 - 0.1
 0.1 - 0.2
 0.2 - 0.3
 > 0.3
 No Longer Flooded
 Newly Flooded



Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

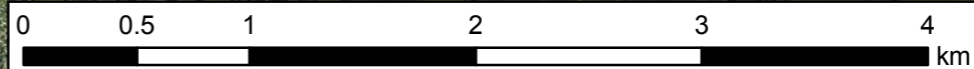


OPTION L3A - NORTH WAGGA LEVEE CREST @ 1% AEP LEVEL
1% AEP PEAK FLOOD LEVEL IMPACT



Levee
Change in Flood Level (m)
 < -0.3
 -0.3 - -0.2
 -0.2 - -0.1
 -0.1 - -0.05
 -0.05 - -0.02
 No Impact
 0.02 - 0.05
 0.05 - 0.1
 0.1 - 0.2
 0.2 - 0.3
 > 0.3
 No Longer Flooded
 Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.



OPTION L3A - NORH WAGGA LEVELLE CREST @ 1% AEP LEVEL
5% AEP PEAK FLOOD LEVEL IMPACT

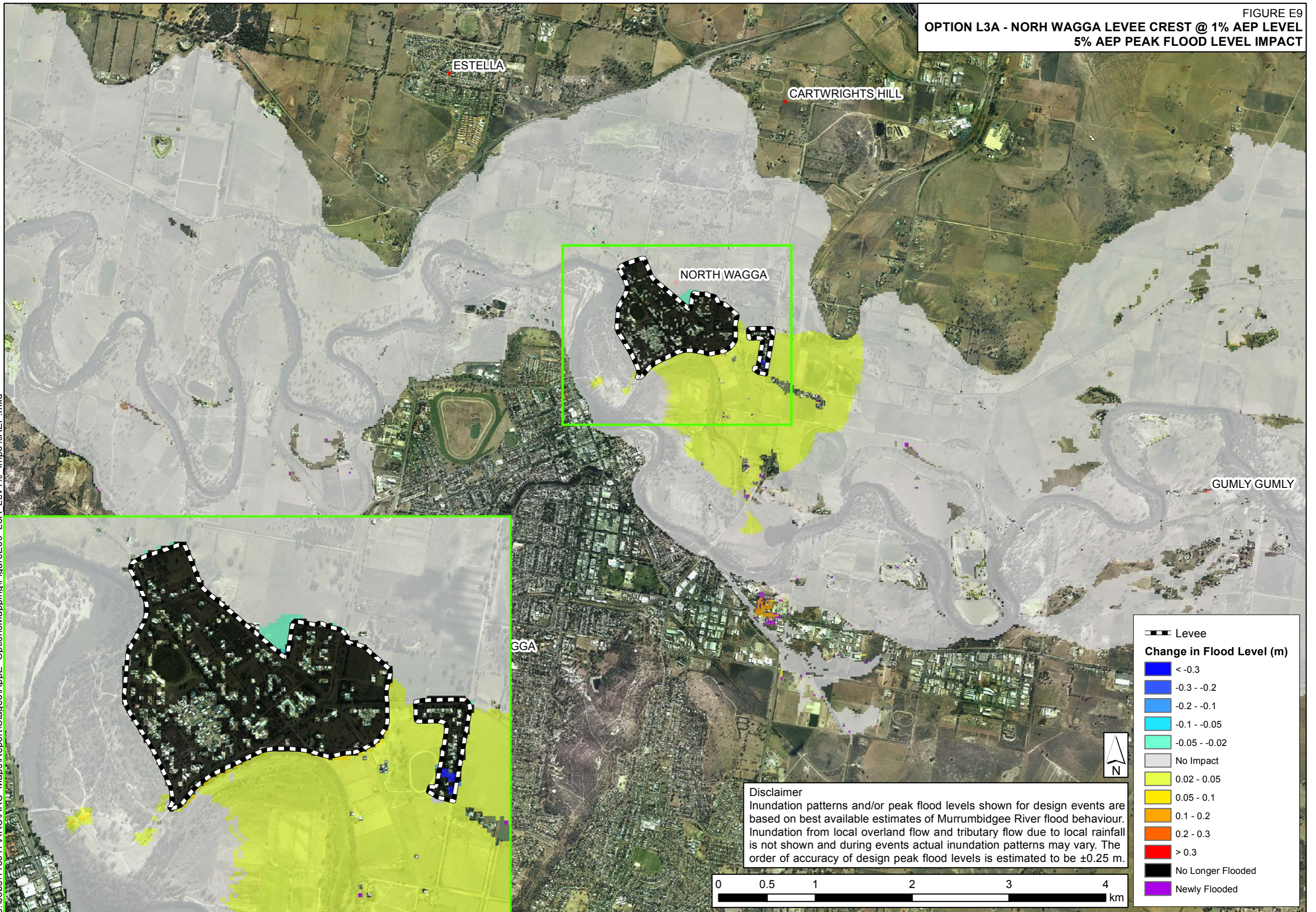
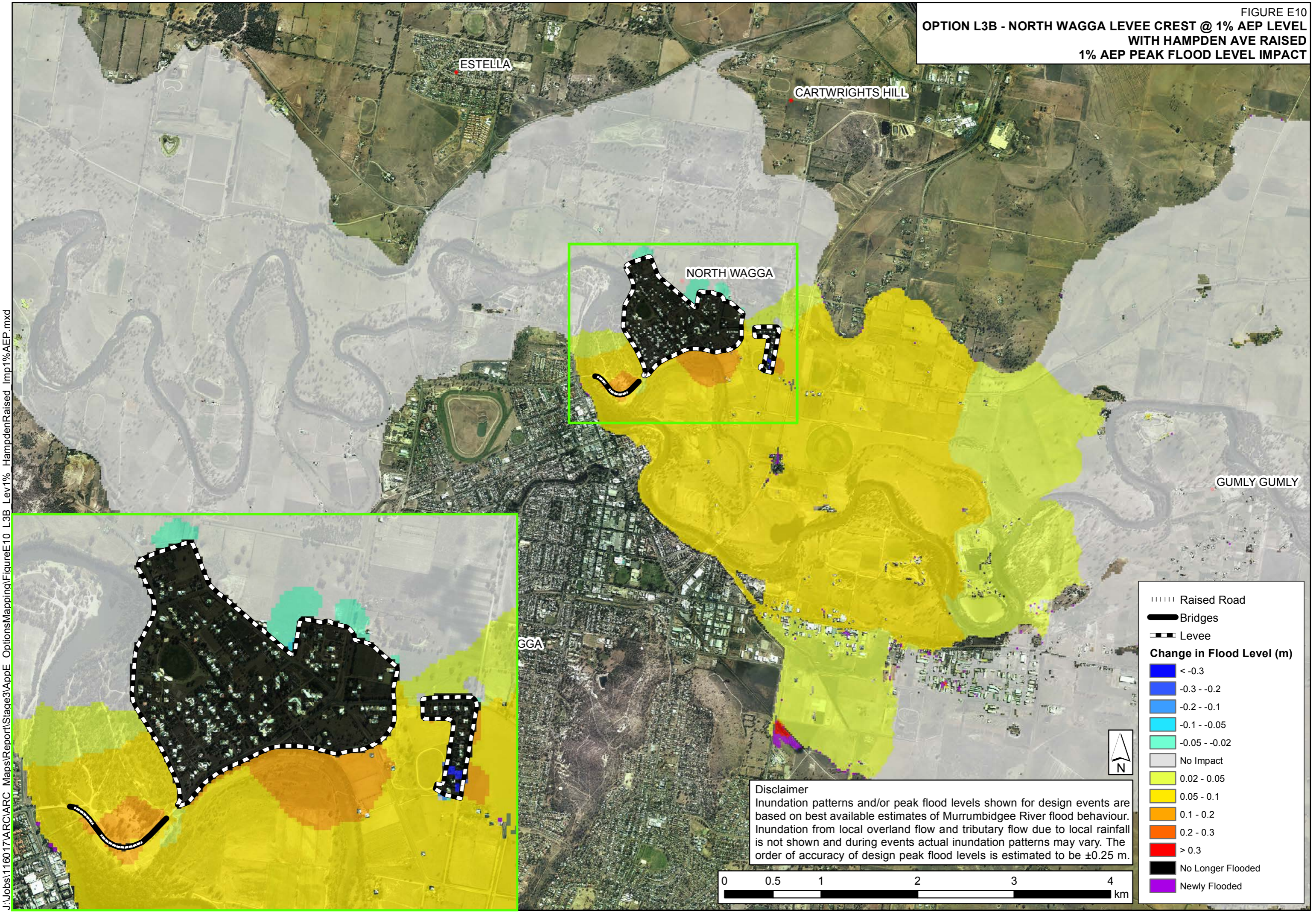


FIGURE E10
**OPTION L3B - NORTH WAGGA LEVEE CREST @ 1% AEP LEVEL
 WITH HAMPDEN AVE RAISED**
1% AEP PEAK FLOOD LEVEL IMPACT



J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\AppE_Options\Mapping\FigureE10_L3B_Lev1%_HampdenRaised_Imp1%_AEP.mxd

||||| Raised Road
 ——— Bridges
 - - - - - Levee

Change in Flood Level (m)

- < -0.3
- -0.3 - -0.2
- -0.2 - -0.1
- -0.1 - -0.05
- -0.05 - -0.02
- No Impact
- 0.02 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- > 0.3
- No Longer Flooded
- Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

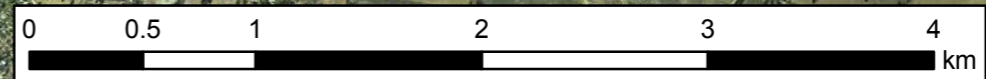
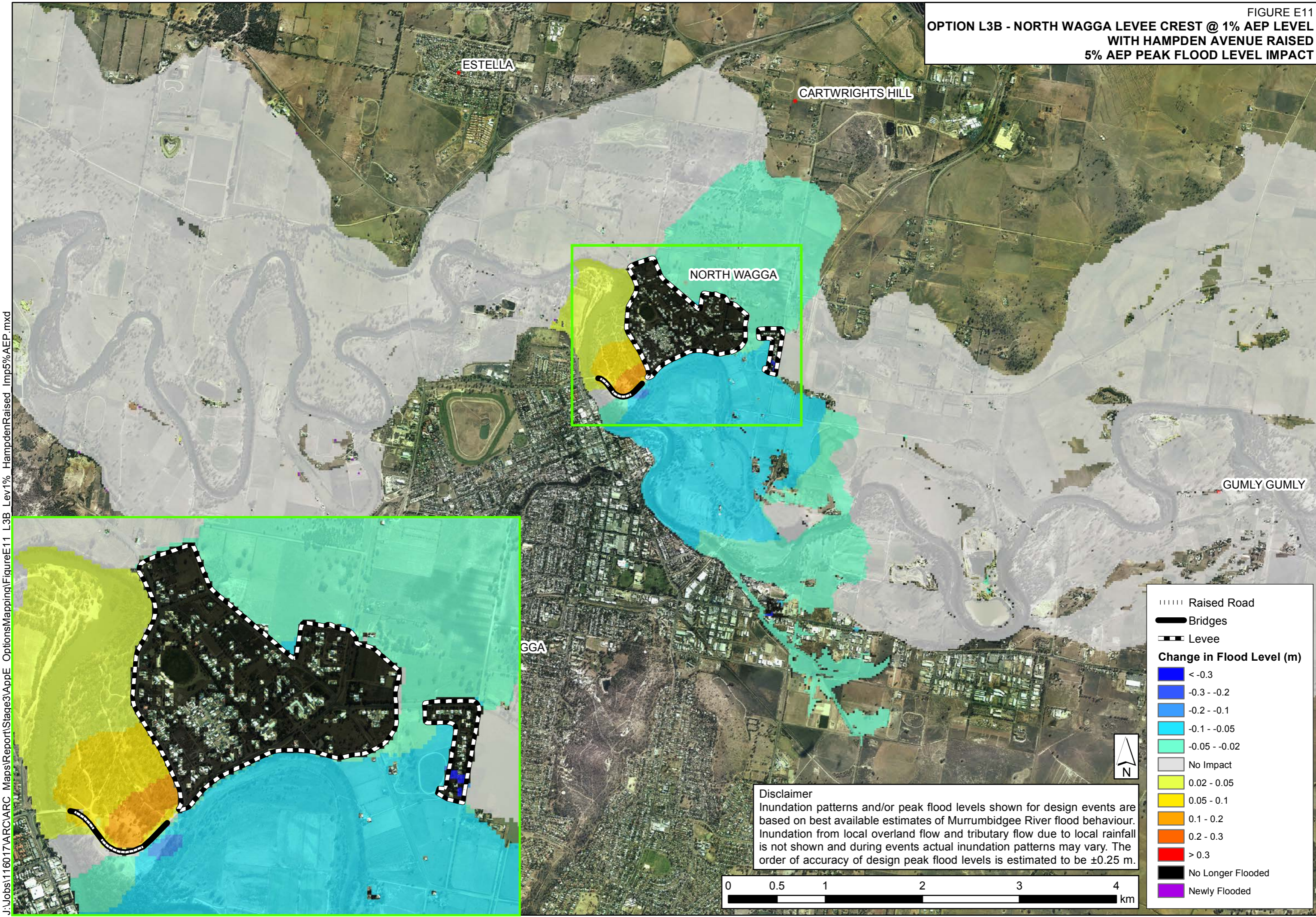


FIGURE E11
**OPTION L3B - NORTH WAGGA LEVELLE CREST @ 1% AEP LEVEL
 WITH HAMPDEN AVENUE RAISED
 5% AEP PEAK FLOOD LEVEL IMPACT**



J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\MapE_OptionsMapping\FigureE11_L3B_Lev1%_HampdenRaised_Imp5%AEP.mxd

[Dashed Line] Raised Road
 [Thick Black Line] Bridges
 [Dashed Black Line] Levee
Change in Flood Level (m)
 [Dark Blue] < -0.3
 [Blue] -0.3 - -0.2
 [Light Blue] -0.2 - -0.1
 [Cyan] -0.1 - -0.05
 [Light Green] -0.05 - -0.02
 [White] No Impact
 [Yellow-Green] 0.02 - 0.05
 [Yellow] 0.05 - 0.1
 [Orange] 0.1 - 0.2
 [Red-Orange] 0.2 - 0.3
 [Red] > 0.3
 [Black] No Longer Flooded
 [Purple] Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

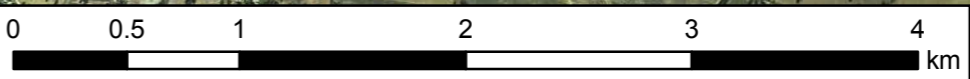
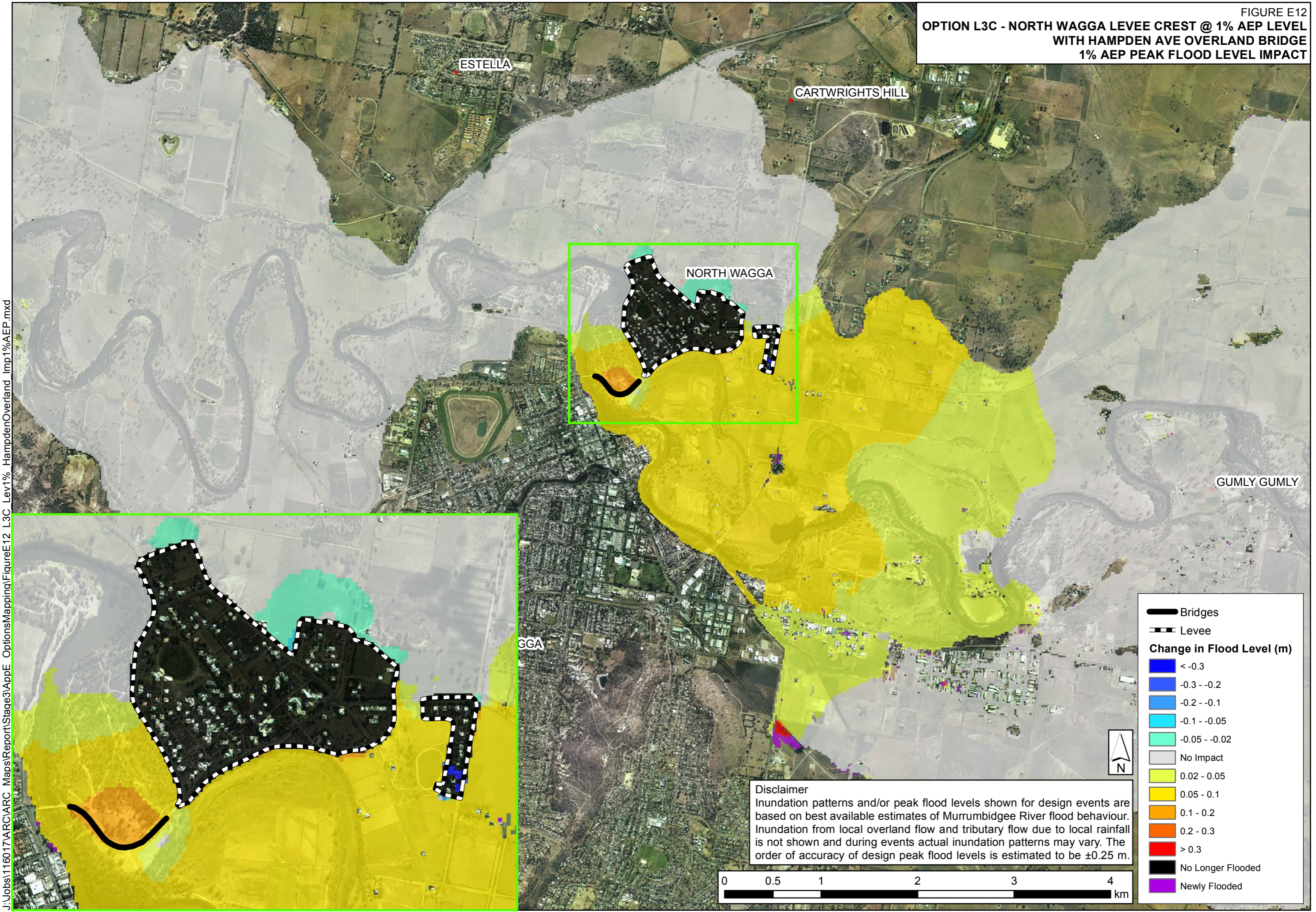


FIGURE E12
**OPTION L3C - NORTH WAGGA LEVEE CREST @ 1% AEP LEVEL
 WITH HAMPDEN AVE OVERLAND BRIDGE
 1% AEP PEAK FLOOD LEVEL IMPACT**



J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\AppE_Options\Mapping\FigureE12_L3C_Lev1%_HampdenOverland_Imp1%AEP.mxd

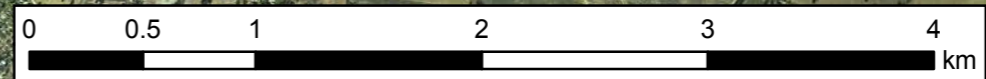
Legend

- Bridges
- Levee

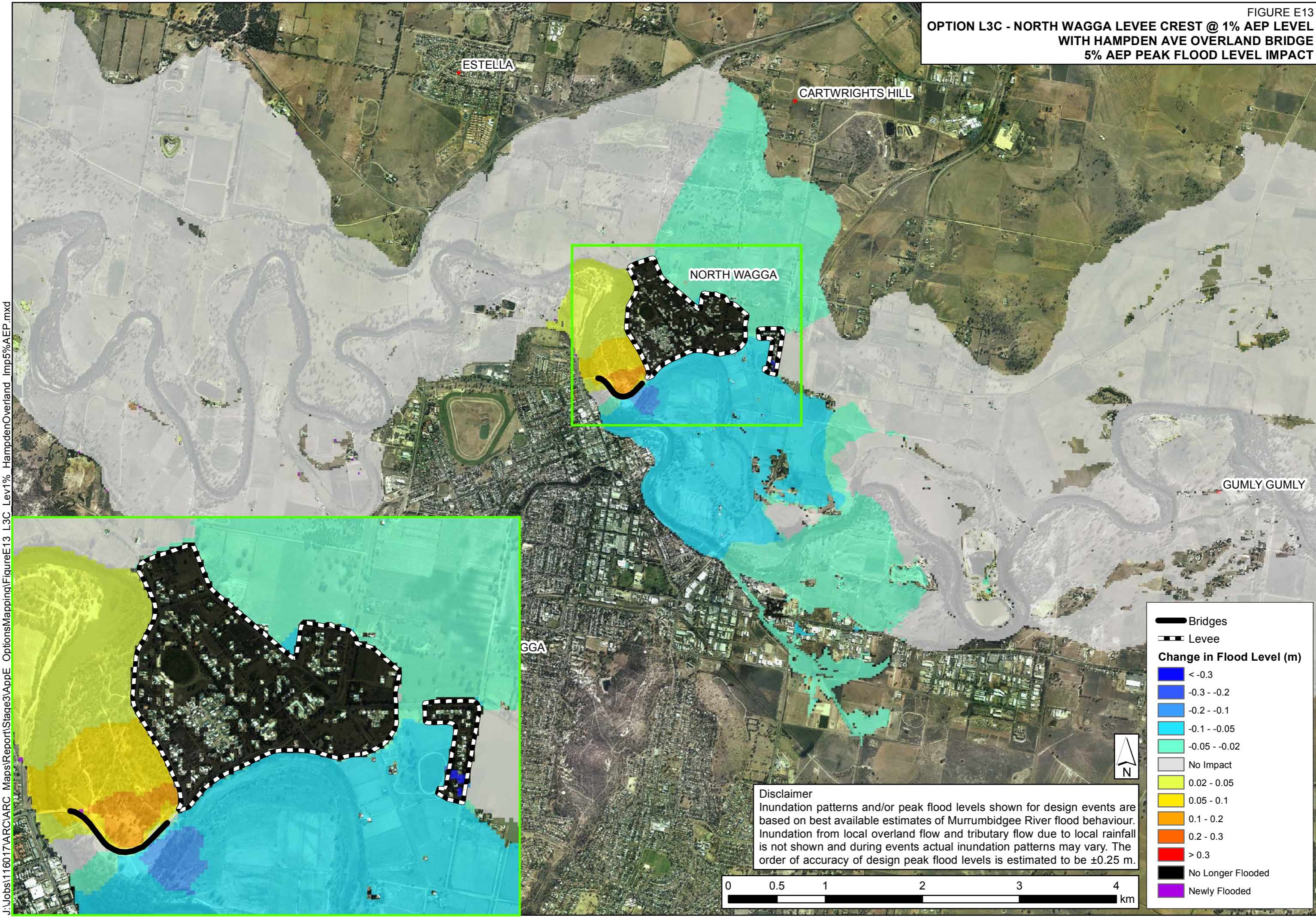
Change in Flood Level (m)

- < -0.3
- 0.3 - -0.2
- 0.2 - -0.1
- 0.1 - -0.05
- 0.05 - -0.02
- No Impact
- 0.02 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- > 0.3
- No Longer Flooded
- Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.



**OPTION L3C - NORTH WAGGA LEVEE CREST @ 1% AEP LEVEL
WITH HAMPDEN AVE OVERLAND BRIDGE
5% AEP PEAK FLOOD LEVEL IMPACT**



J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\AppE_Options\Mapping\FigureE13_L3C_Lev1%_HampdenOverland_Imp5%AEP.mxd

ESTELLA

CARTWRIGHTS HILL

NORTH WAGGA

GUMLY GUMLY

WAGGA

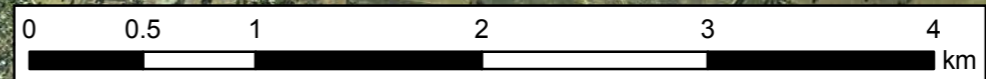
Legend

- Bridges
- Levee

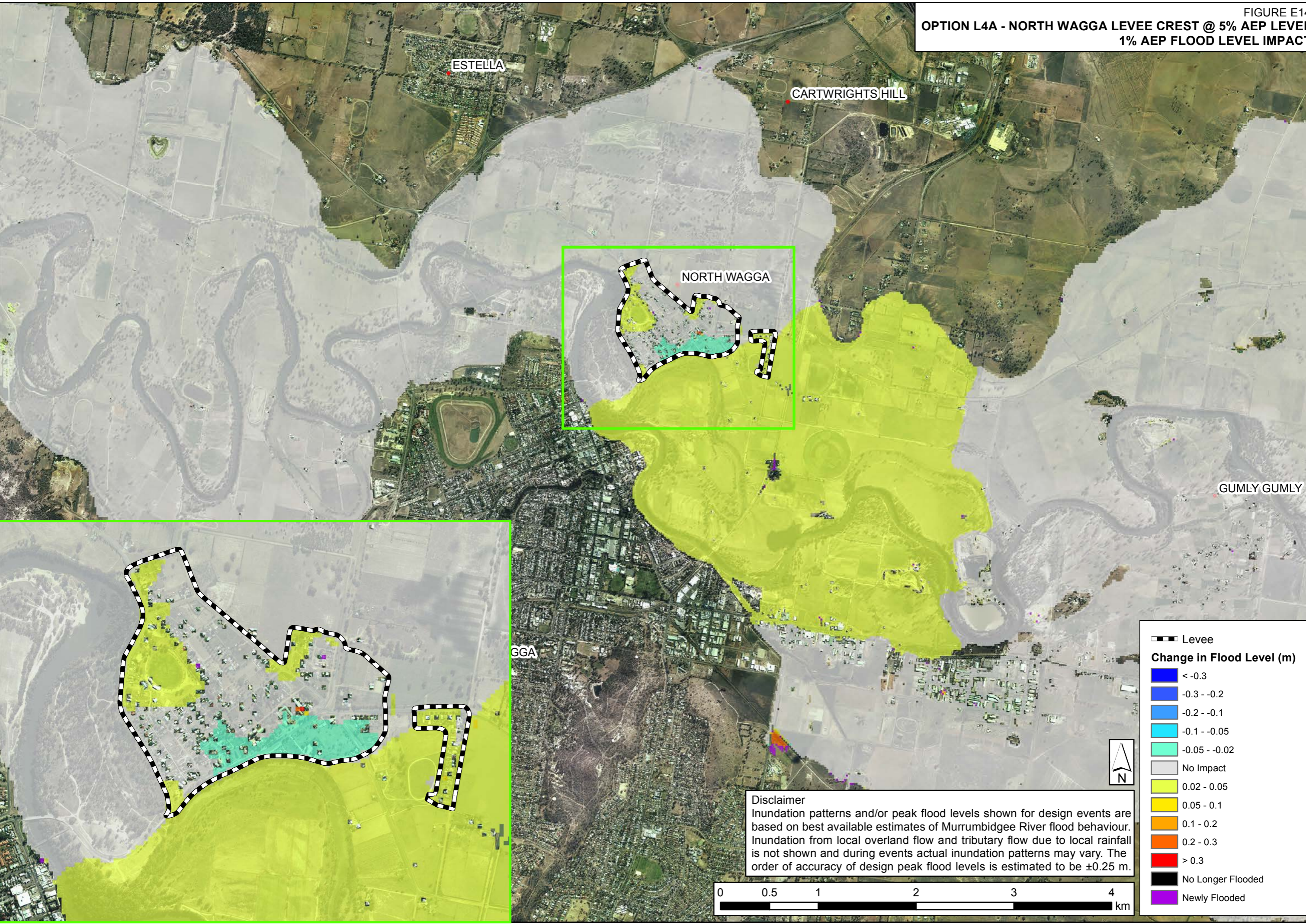
Change in Flood Level (m)

- < -0.3
- 0.3 - -0.2
- 0.2 - -0.1
- 0.1 - -0.05
- 0.05 - -0.02
- No Impact
- 0.02 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- > 0.3
- No Longer Flooded
- Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.



OPTION L4A - NORTH WAGGA LEVEE CREST @ 5% AEP LEVEL
1% AEP FLOOD LEVEL IMPACT



J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\MapE_OptionsMapping\FigureE14_L4A_Lev5%_Imp1%AEP.mxd

ESTELLA

CARTWRIGHTS HILL

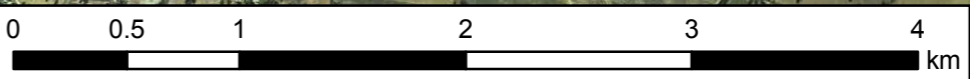
NORTH WAGGA

GUMLY GUMLY

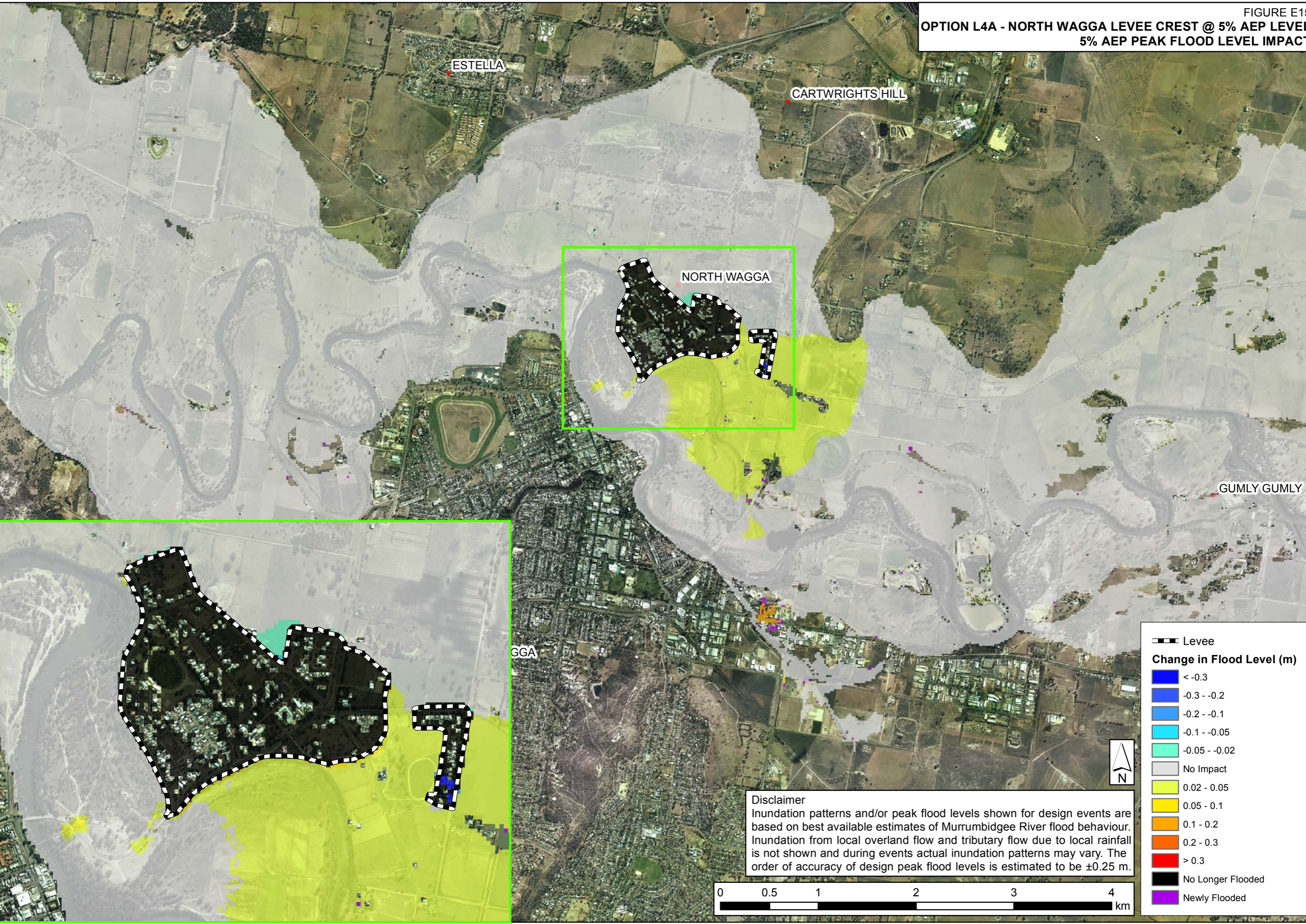
WAGGA

Levee
Change in Flood Level (m)
 < -0.3
 -0.3 - -0.2
 -0.2 - -0.1
 -0.1 - -0.05
 -0.05 - -0.02
 No Impact
 0.02 - 0.05
 0.05 - 0.1
 0.1 - 0.2
 0.2 - 0.3
 > 0.3
 No Longer Flooded
 Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.



OPTION L4A - NORTH WAGGA LEVELLE CREST @ 5% AEP LEVEL
5% AEP PEAK FLOOD LEVEL IMPACT



J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\MapE_Options\Mapping\FigureE15_L4A_Lev5%_Imp5%AEP.mxd

- - - - - Levee
Change in Flood Level (m)
 < -0.3
 -0.3 - -0.2
 -0.2 - -0.1
 -0.1 - -0.05
 -0.05 - -0.02
 No Impact
 0.02 - 0.05
 0.05 - 0.1
 0.1 - 0.2
 0.2 - 0.3
 > 0.3
 No Longer Flooded
 Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

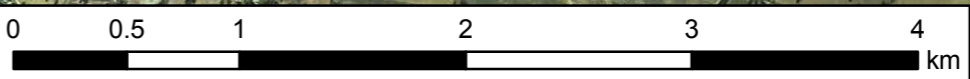
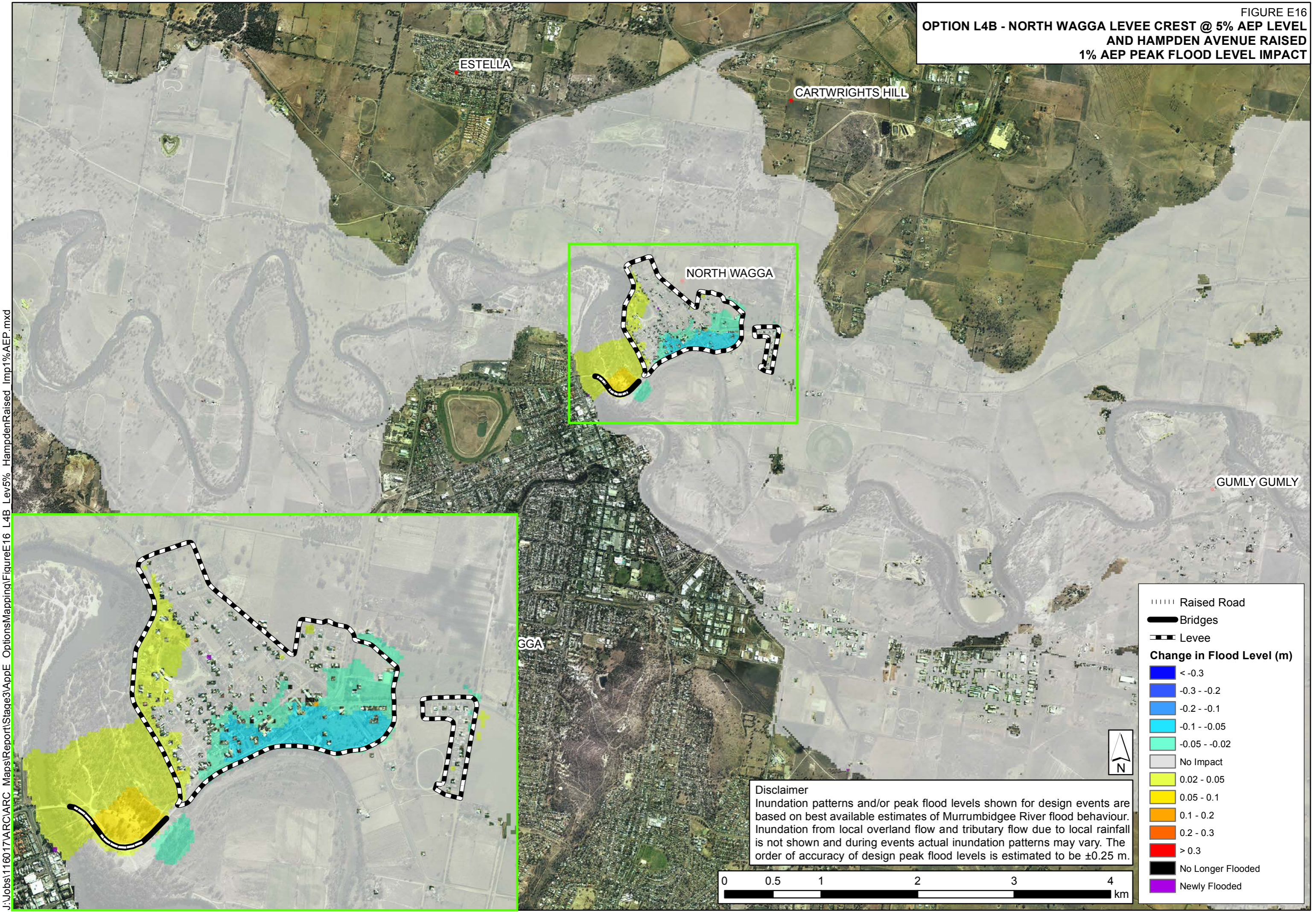


FIGURE E16
**OPTION L4B - NORTH WAGGA LEVEL CREST @ 5% AEP LEVEL
 AND HAMPDEN AVENUE RAISED
 1% AEP PEAK FLOOD LEVEL IMPACT**



J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\AppE_OptionsMapping\FigureE16_L4B_Lev5%_HampdenRaised_Imp1%AEP.mxd

- - - - - Raised Road
 ——— Bridges
 - - - - - Levee
Change in Flood Level (m)
 < -0.3
 -0.3 - -0.2
 -0.2 - -0.1
 -0.1 - -0.05
 -0.05 - -0.02
 No Impact
 0.02 - 0.05
 0.05 - 0.1
 0.1 - 0.2
 0.2 - 0.3
 > 0.3
 No Longer Flooded
 Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

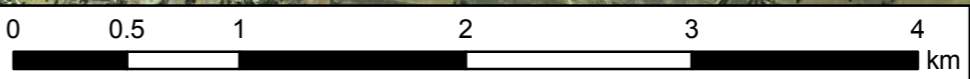
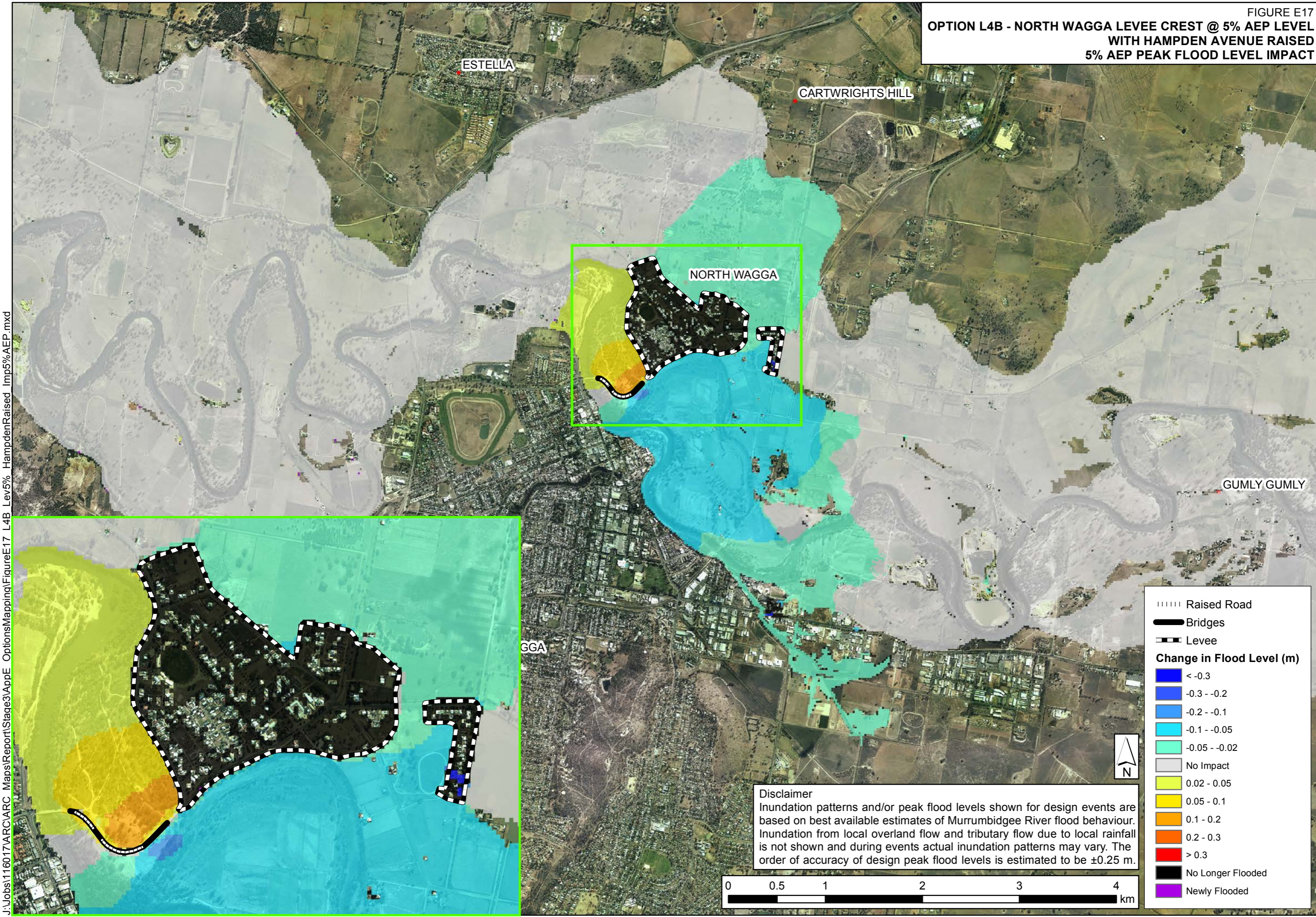


FIGURE E17
**OPTION L4B - NORTH WAGGA LEVEL CREST @ 5% AEP LEVEL
 WITH HAMPDEN AVENUE RAISED
 5% AEP PEAK FLOOD LEVEL IMPACT**



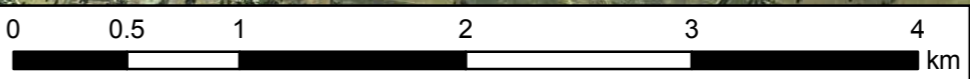
J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\MapE_OptionsMapping\FigureE17_L4B_Lev5%_HampdenRaised_Imp5%_AEP.mxd

||||| Raised Road
 ——— Bridges
 - - - Levee

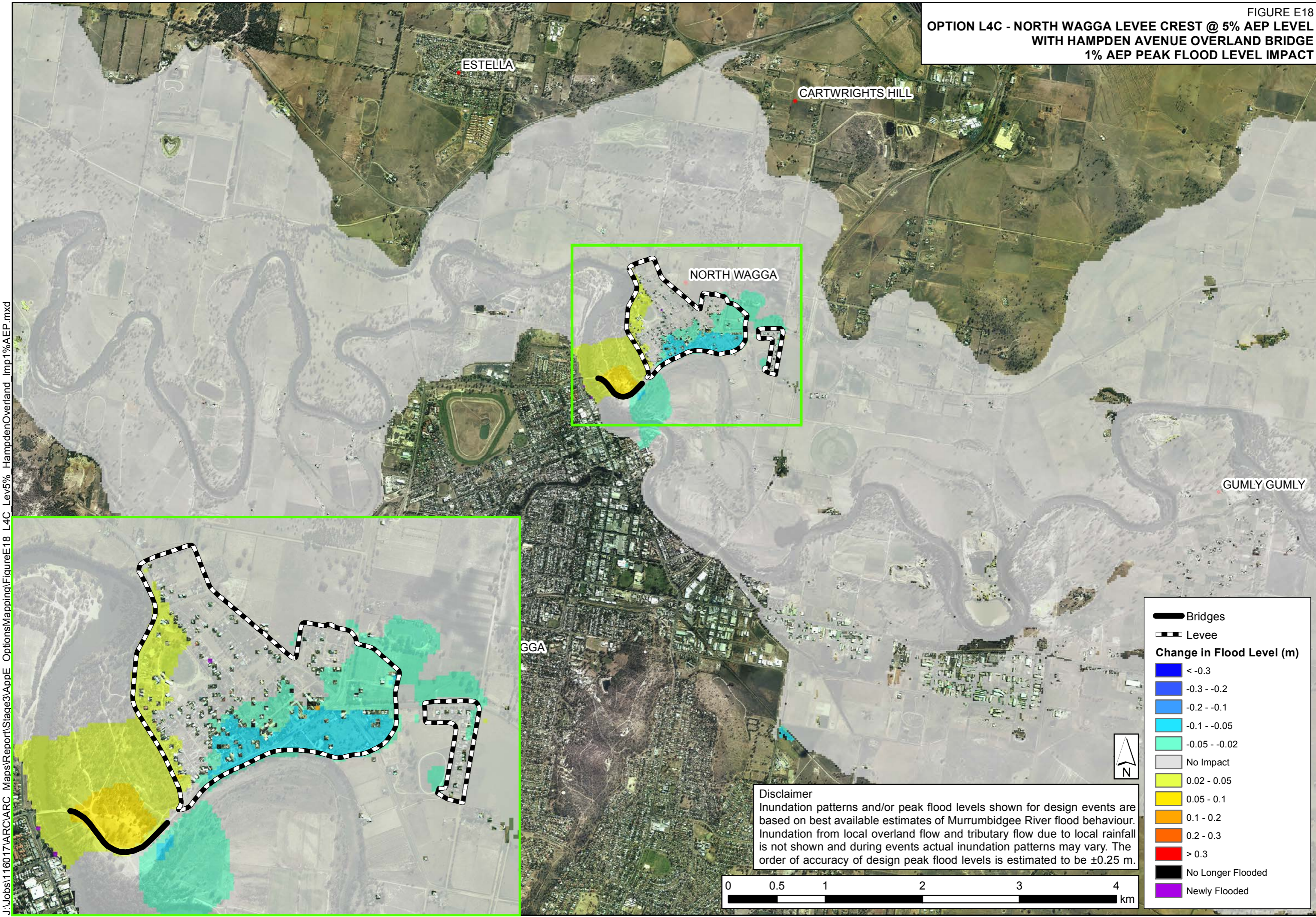
Change in Flood Level (m)

- <math>< -0.3</math>
- -0.3 - -0.2
- -0.2 - -0.1
- -0.1 - -0.05
- -0.05 - -0.02
- No Impact
- 0.02 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- > 0.3
- No Longer Flooded
- Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

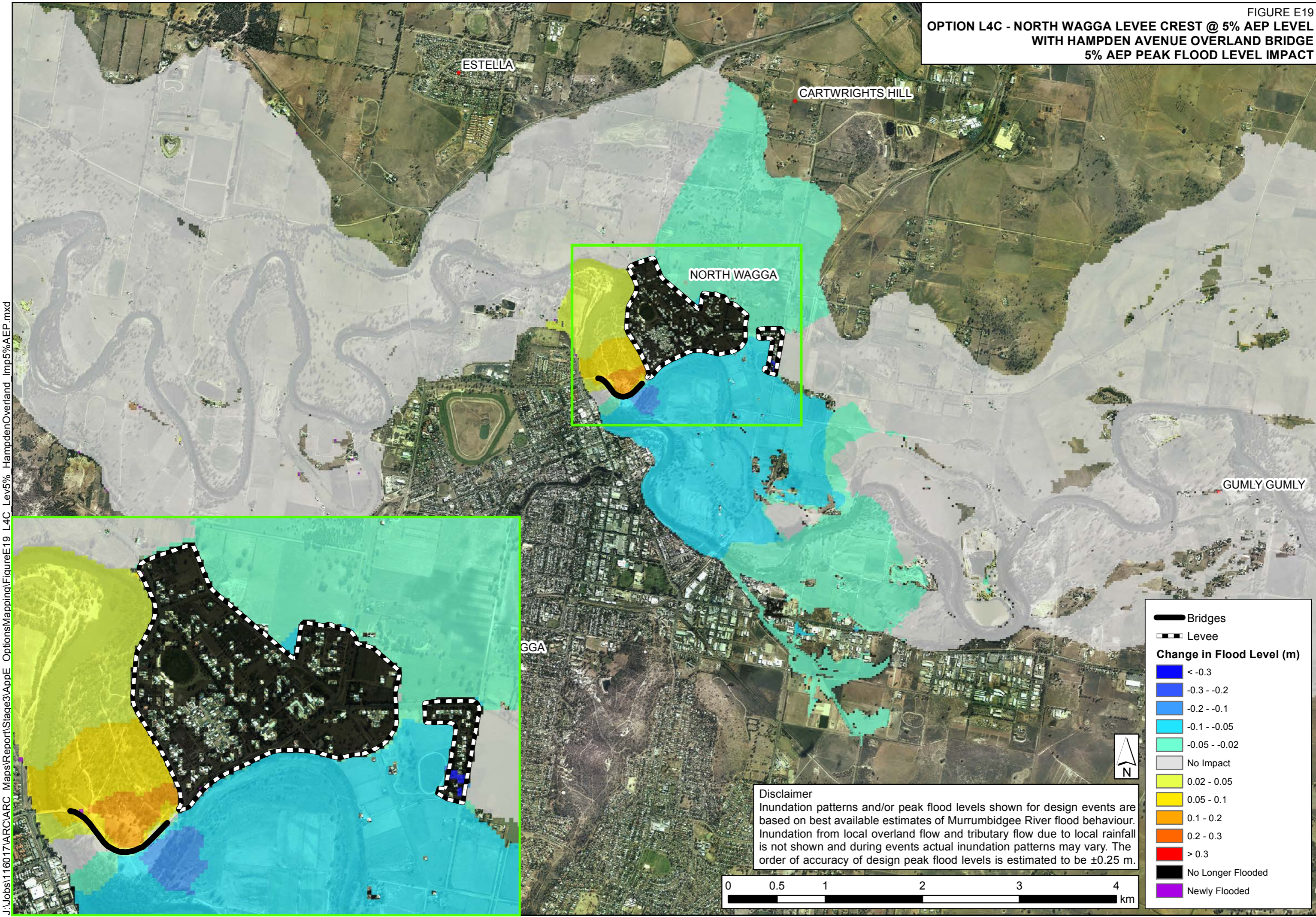


**OPTION L4C - NORTH WAGGA LEVEL CREST @ 5% AEP LEVEL
WITH HAMPDEN AVENUE OVERLAND BRIDGE
1% AEP PEAK FLOOD LEVEL IMPACT**



J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\MapE_OptionsMapping\FigureE18_L4C_Lev5%_HampdenOverland_Imp1%AEP.mxd

OPTION L4C - NORTH WAGGA LEVEL CREST @ 5% AEP LEVEL WITH HAMPDEN AVENUE OVERLAND BRIDGE
5% AEP PEAK FLOOD LEVEL IMPACT



J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\AppE_Options\Mapping\FigureE19_L4C_Lev5%_HampdenOverland_Imp5%AEP.mxd

Legend

- Bridges
- Levee

Change in Flood Level (m)

- < -0.3
- 0.3 - -0.2
- 0.2 - -0.1
- 0.1 - -0.05
- 0.05 - -0.02
- No Impact
- 0.02 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- > 0.3
- No Longer Flooded
- Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

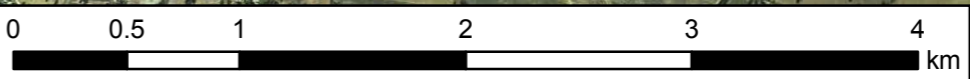
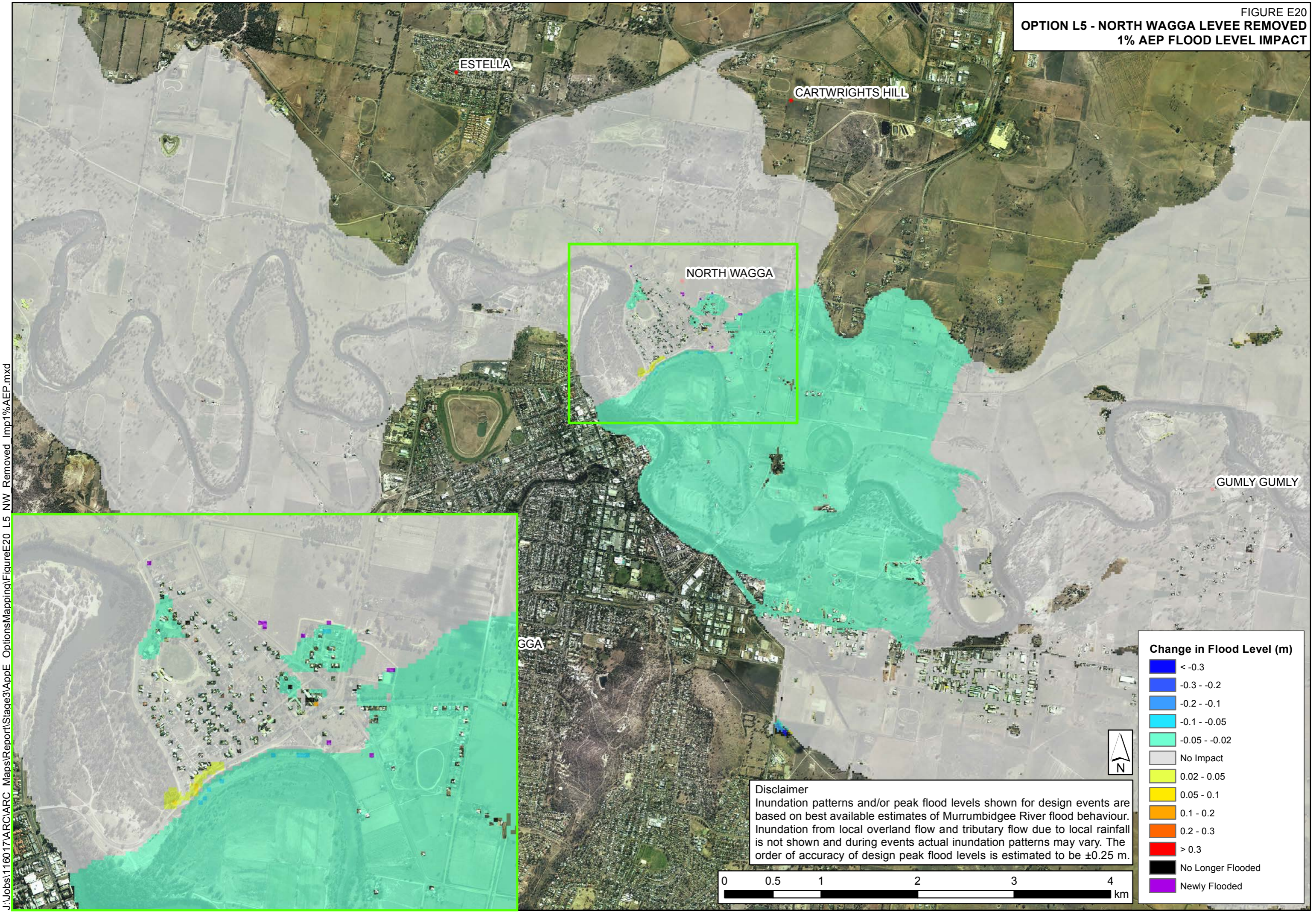


FIGURE E20
OPTION L5 - NORTH WAGGA LEVEE REMOVED
1% AEP FLOOD LEVEL IMPACT



J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\AppE_OptionsMapping\FigureE20_L5_NW_Removed_Imp1%AEF.mxd

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

Change in Flood Level (m)	
[Dark Blue]	< -0.3
[Blue]	-0.3 - -0.2
[Light Blue]	-0.2 - -0.1
[Cyan]	-0.1 - -0.05
[Teal]	-0.05 - -0.02
[Light Grey]	No Impact
[Yellow-Green]	0.02 - 0.05
[Yellow]	0.05 - 0.1
[Orange]	0.1 - 0.2
[Red-Orange]	0.2 - 0.3
[Red]	> 0.3
[Black]	No Longer Flooded
[Purple]	Newly Flooded

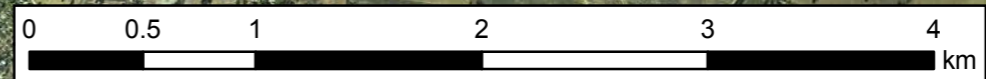
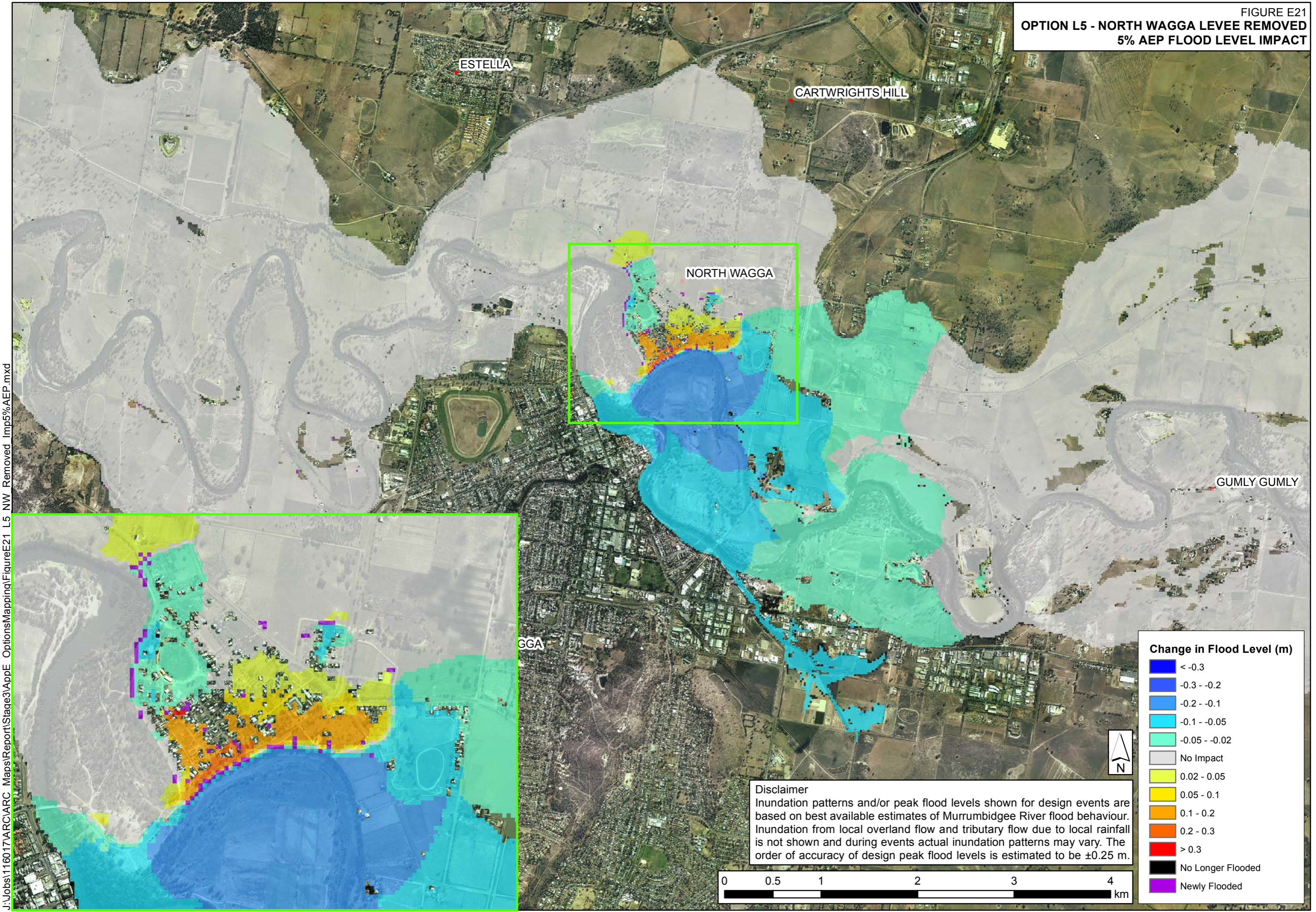


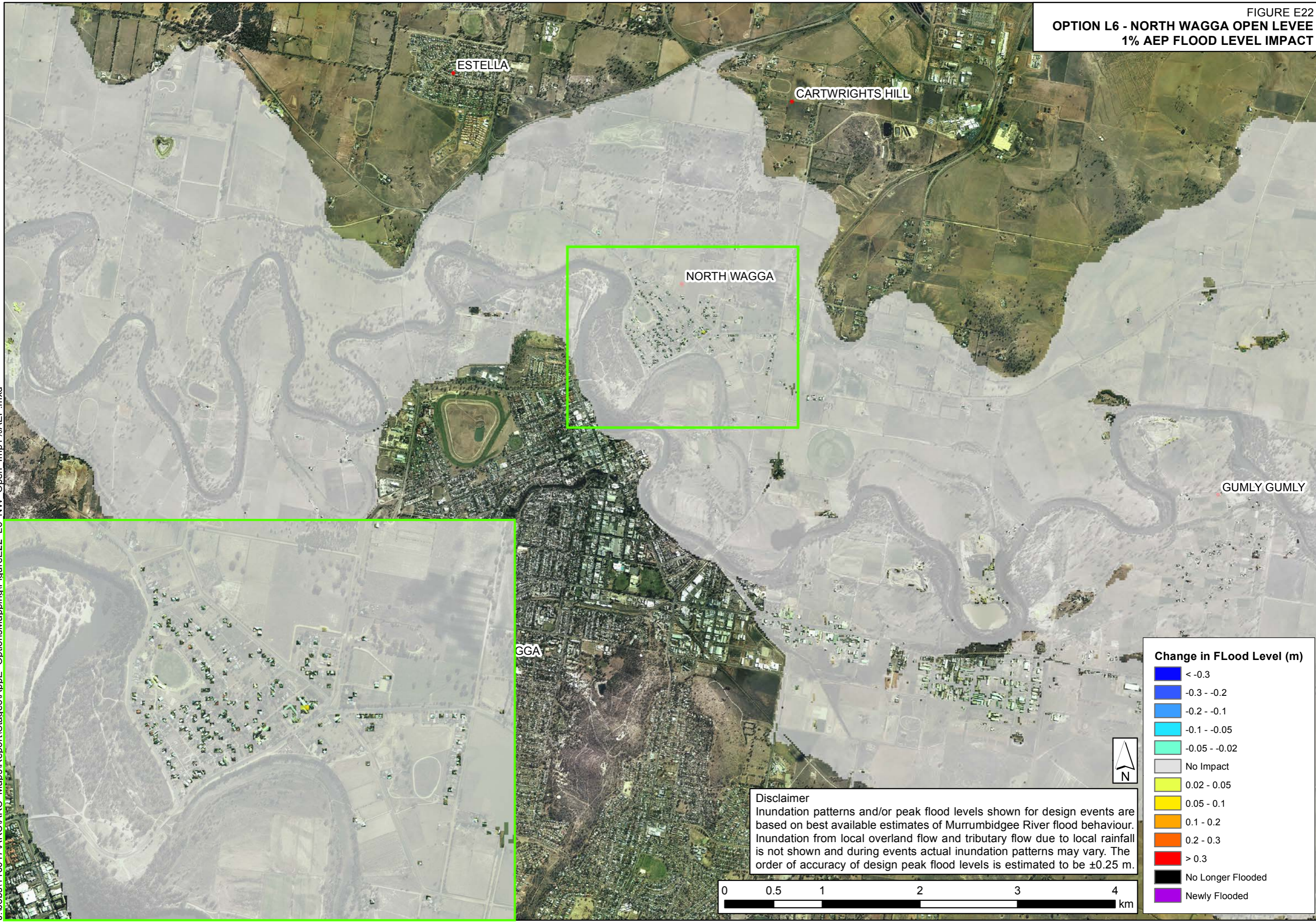
FIGURE E21
OPTION L5 - NORTH WAGGA LEVEE REMOVED
5% AEP FLOOD LEVEL IMPACT



Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

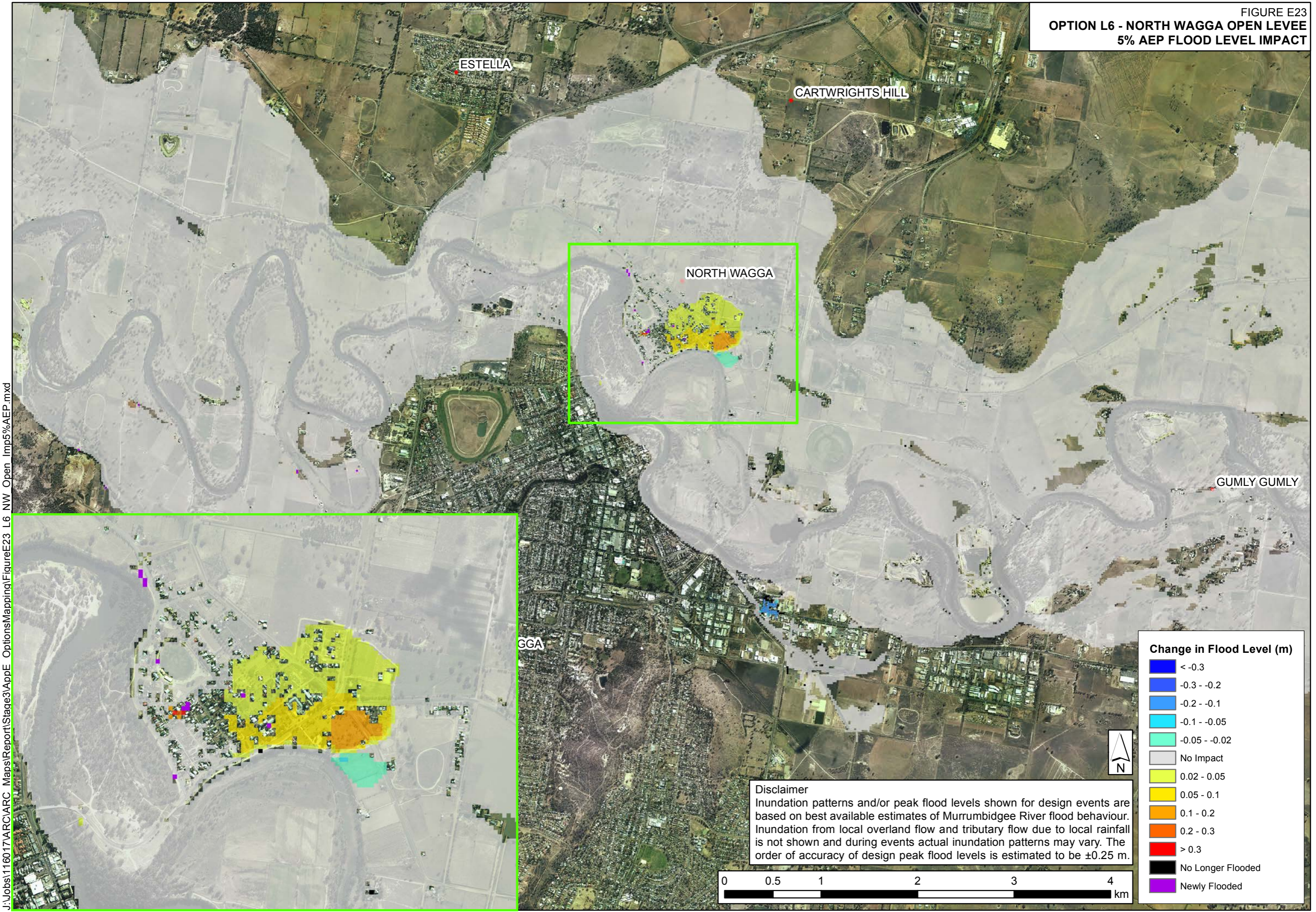
J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\AppE_Options\Mapping\FigureE21_L5_NW_Removed_Imp5%_AEP.mxd

FIGURE E22
OPTION L6 - NORTH WAGGA OPEN LEVEL
1% AEP FLOOD LEVEL IMPACT



Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

FIGURE E23
OPTION L6 - NORTH WAGGA OPEN LEVEL
5% AEP FLOOD LEVEL IMPACT



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WAGGA

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

Change in Flood Level (m)	
■	< -0.3
■	-0.3 - -0.2
■	-0.2 - -0.1
■	-0.1 - -0.05
■	-0.05 - -0.02
■	No Impact
■	0.02 - 0.05
■	0.05 - 0.1
■	0.1 - 0.2
■	0.2 - 0.3
■	> 0.3
■	No Longer Flooded
■	Newly Flooded

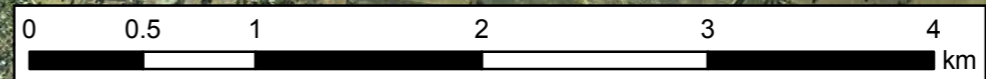
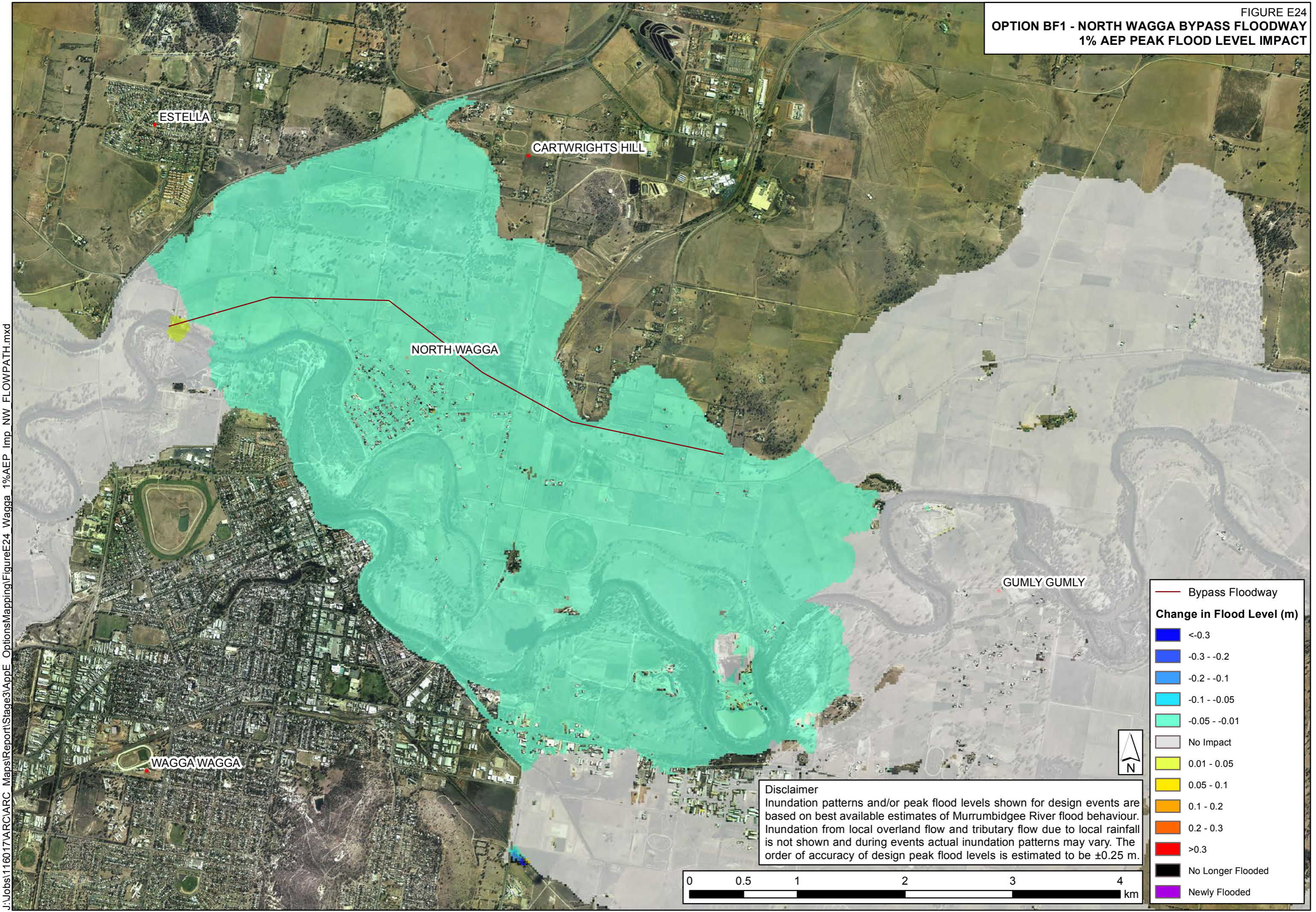


FIGURE E24
OPTION BF1 - NORTH WAGGA BYPASS FLOODWAY
1% AEP PEAK FLOOD LEVEL IMPACT



J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\AppE_OptionsMapping\FigureE24_Wagga_1%AEF_imp_NW_FLOWPATH.mxd

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

— Bypass Floodway

Change in Flood Level (m)

- <-0.3
- -0.3 - -0.2
- -0.2 - -0.1
- -0.1 - -0.05
- -0.05 - -0.01
- No Impact
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- >0.3
- No Longer Flooded
- Newly Flooded

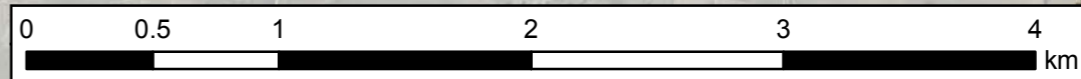
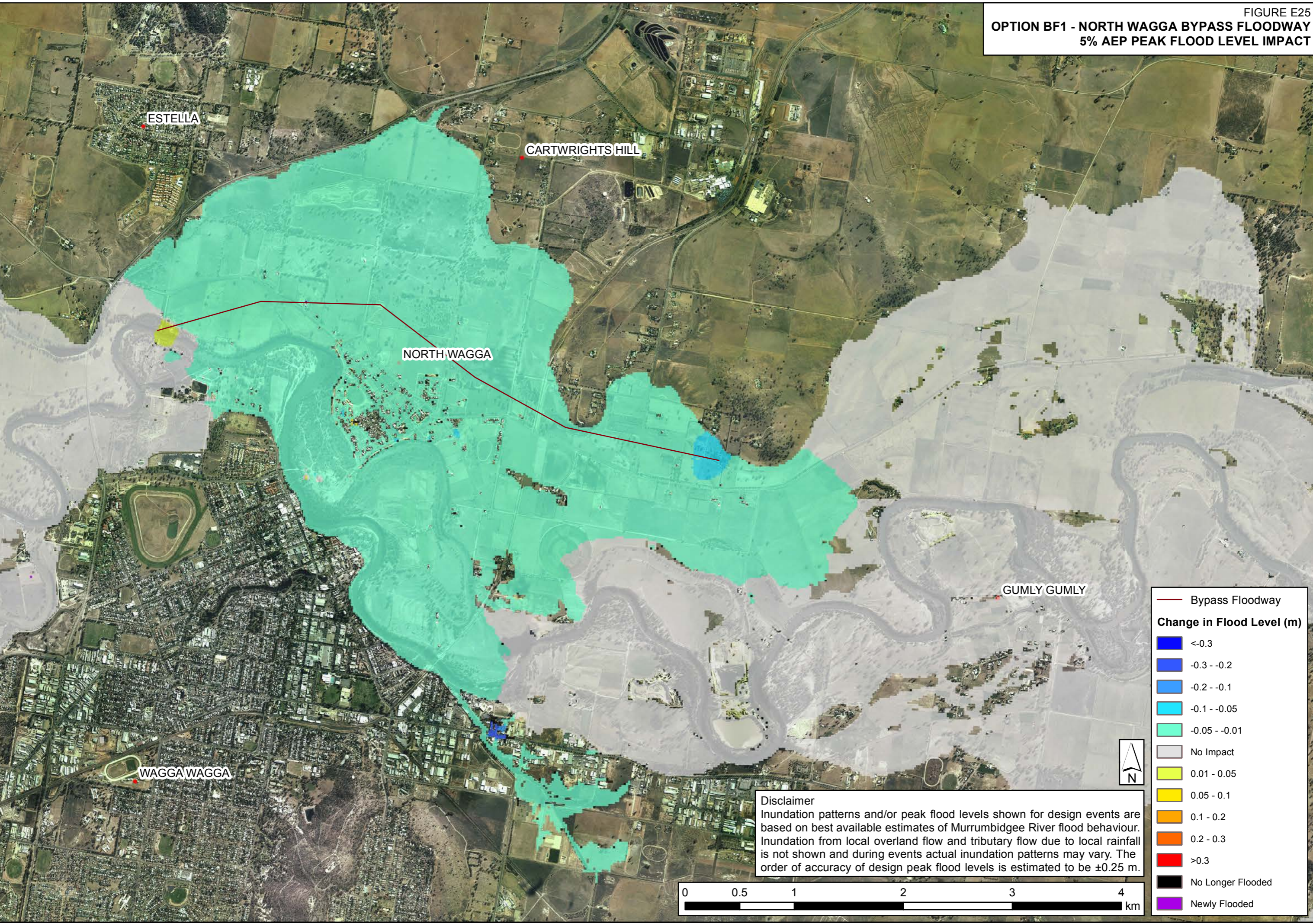


FIGURE E25
OPTION BF1 - NORTH WAGGA BYPASS FLOODWAY
5% AEP PEAK FLOOD LEVEL IMPACT

J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\AppE_OptionsMapping\FigureE25_Wagga_5%AEP_imp_NW_FLOWPATH.mxd

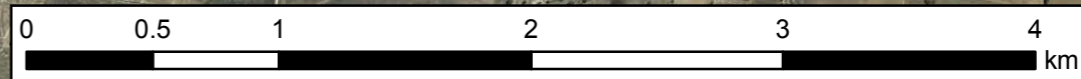


— Bypass Floodway

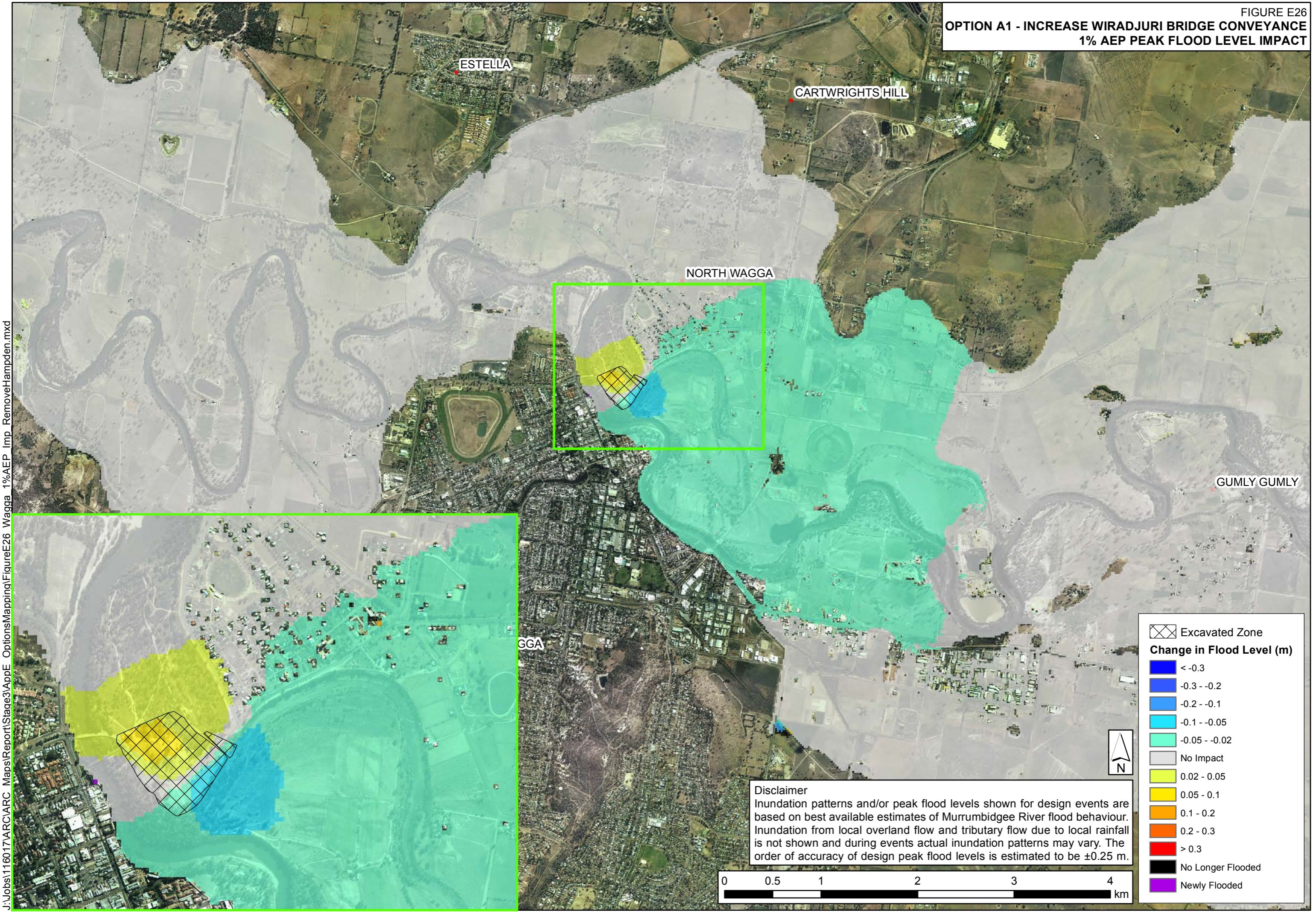
Change in Flood Level (m)

- <-0.3
- -0.3 - -0.2
- -0.2 - -0.1
- -0.1 - -0.05
- -0.05 - -0.01
- No Impact
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- >0.3
- No Longer Flooded
- Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.



**OPTION A1 - INCREASE WIRADJURI BRIDGE CONVEYANCE
1% AEP PEAK FLOOD LEVEL IMPACT**



ESTELLA

CARTWRIGHTS HILL

NORTH WAGGA

GUMLY GUMLY

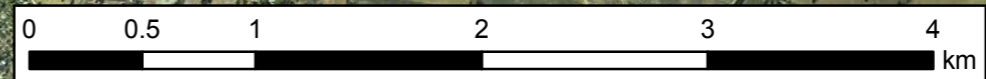
WAGGA

⊠ Excavated Zone

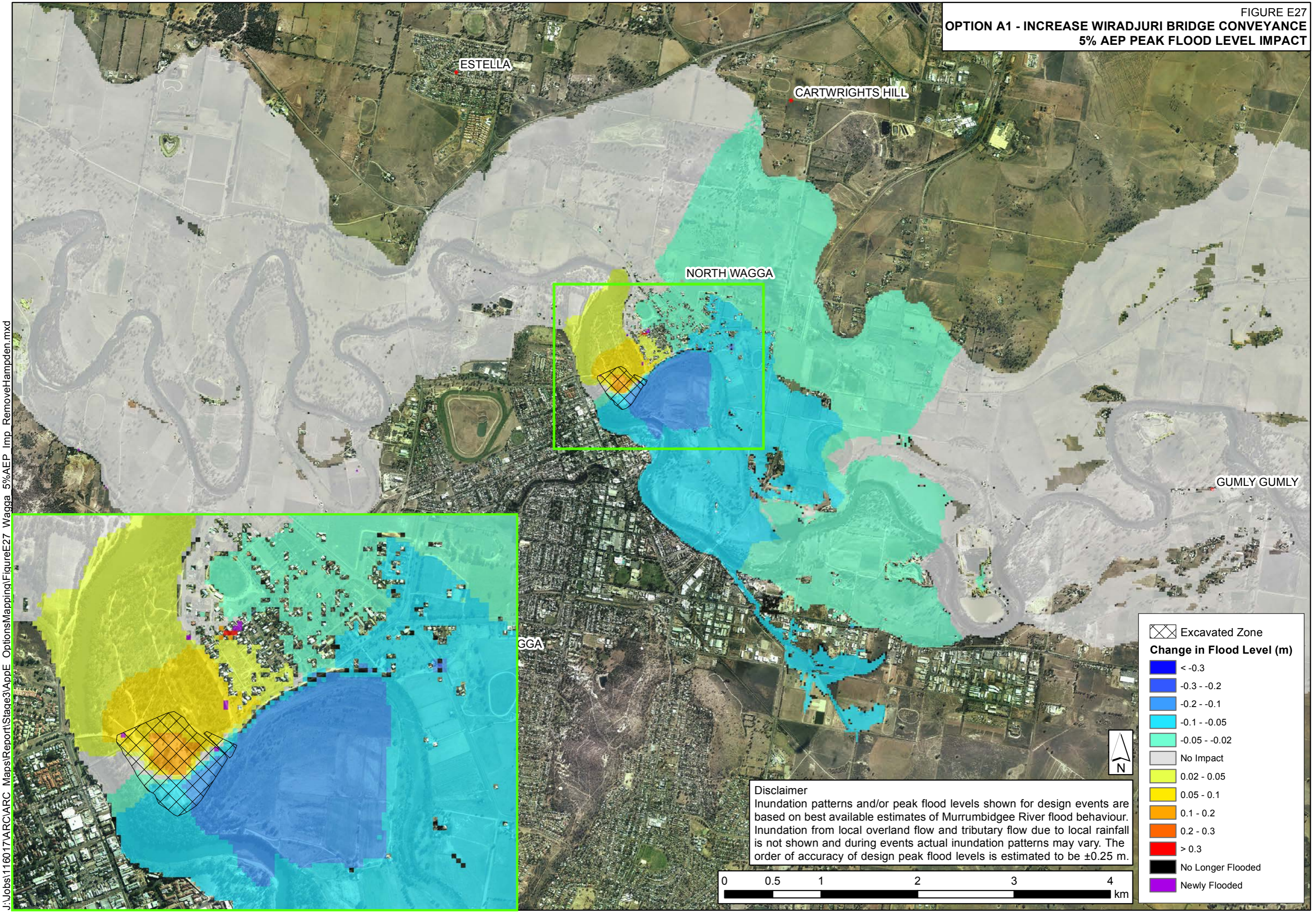
Change in Flood Level (m)

- < -0.3
- 0.3 - -0.2
- 0.2 - -0.1
- 0.1 - -0.05
- 0.05 - -0.02
- No Impact
- 0.02 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- > 0.3
- No Longer Flooded
- Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ±0.25 m.



**OPTION A1 - INCREASE WIRADJURI BRIDGE CONVEYANCE
5% AEP PEAK FLOOD LEVEL IMPACT**



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ESTELLA

CARTWRIGHTS HILL

NORTH WAGGA

GUMLY GUMLY

WAGGA

⊠ Excavated Zone

Change in Flood Level (m)

- < -0.3
- 0.3 - -0.2
- 0.2 - -0.1
- 0.1 - -0.05
- 0.05 - -0.02
- No Impact
- 0.02 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- > 0.3
- No Longer Flooded
- Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ±0.25 m.

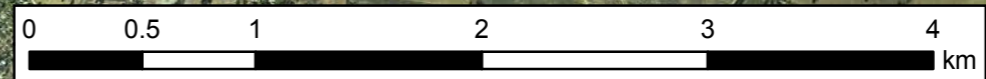
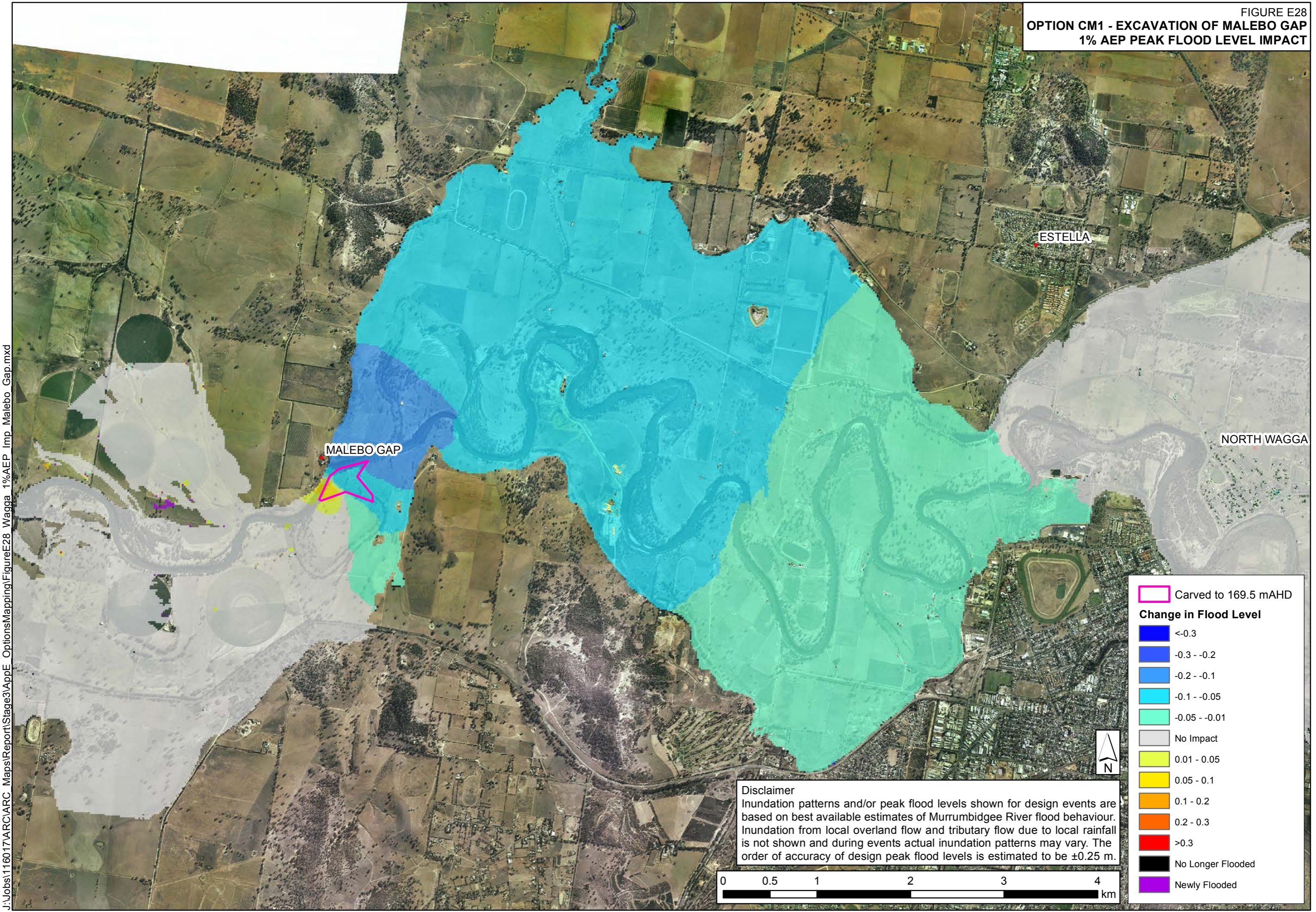


FIGURE E28
OPTION CM1 - EXCAVATION OF MALEBO GAP
1% AEP PEAK FLOOD LEVEL IMPACT



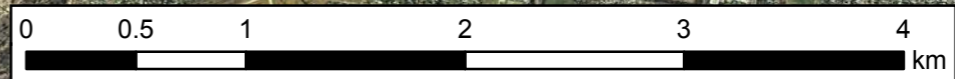
J:\Jobs\116017\ARC\ARC_Maps\Report\Stage3\AppE_Options\Mapping\FigureE28_Wagga_1%AEF_Imp_Malebo_Gap.mxd

MALEBO GAP

ESTELLA

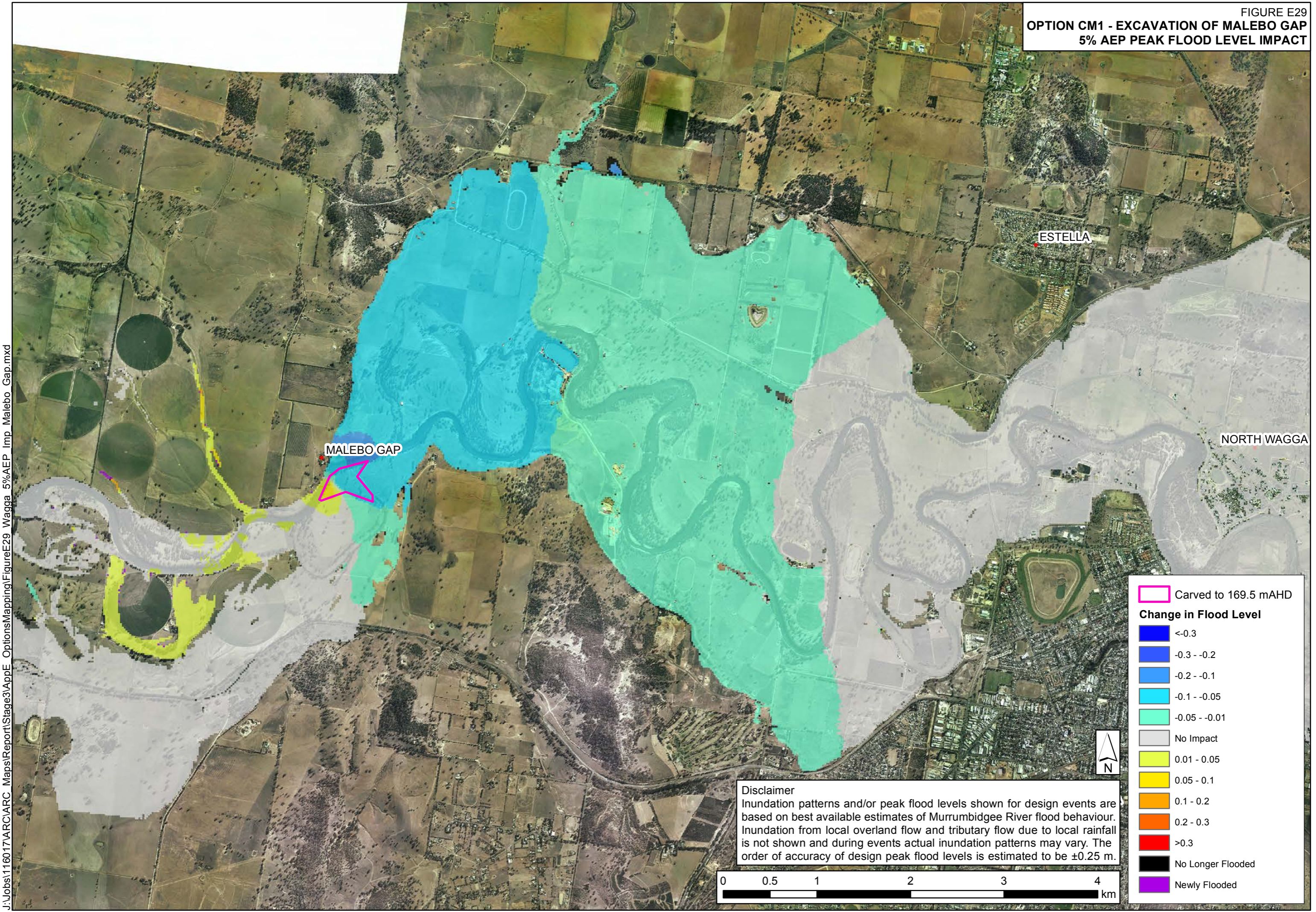
NORTH WAGGA

Disclaimer
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	Carved to 169.5 mAHD
Change in Flood Level	
	<-0.3
	-0.3 - -0.2
	-0.2 - -0.1
	-0.1 - -0.05
	-0.05 - -0.01
	No Impact
	0.01 - 0.05
	0.05 - 0.1
	0.1 - 0.2
	0.2 - 0.3
	>0.3
	No Longer Flooded
	Newly Flooded

FIGURE E29
OPTION CM1 - EXCAVATION OF MALEBO GAP
5% AEP PEAK FLOOD LEVEL IMPACT



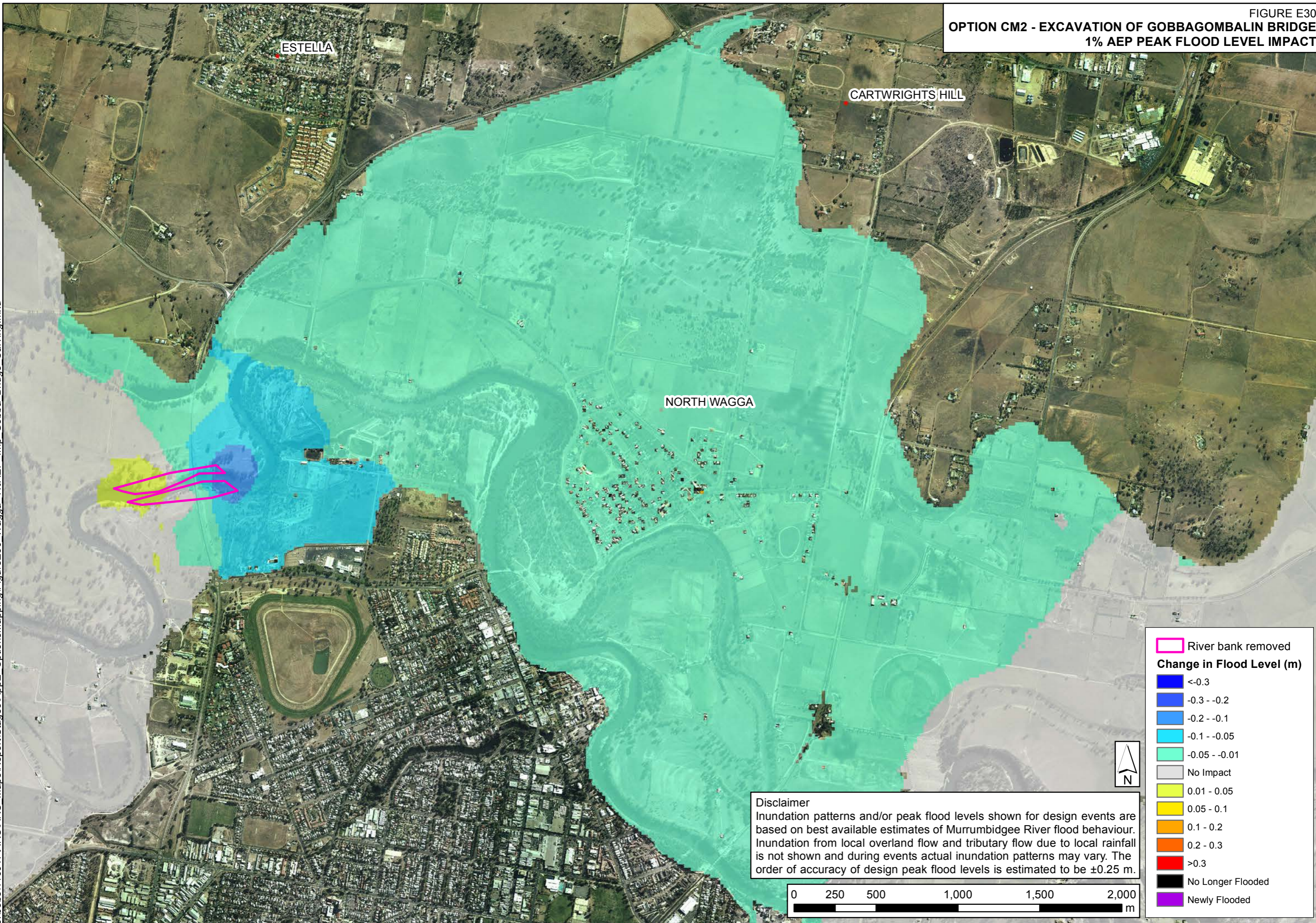
J:\Jobs\116017\ARC\Map\OptionsMapping\FigureE29_Wagga_5%AEP_Imp_Malebo_Gap.mxd

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

	Carved to 169.5 mAHD
Change in Flood Level	
	<-0.3
	-0.3 - -0.2
	-0.2 - -0.1
	-0.1 - -0.05
	-0.05 - -0.01
	No Impact
	0.01 - 0.05
	0.05 - 0.1
	0.1 - 0.2
	0.2 - 0.3
	>0.3
	No Longer Flooded
	Newly Flooded

OPTION CM2 - EXCAVATION OF GOBBAGOMBALIN BRIDGE
1% AEP PEAK FLOOD LEVEL IMPACT

J:\Jobs\116017\ARC_Maps\Report\Stage3\AppE_OptionsMapping\FigureE30_Wagga_1%AEP_Imp_Gobba_Bridge_Carving.mxd



ESTELLA

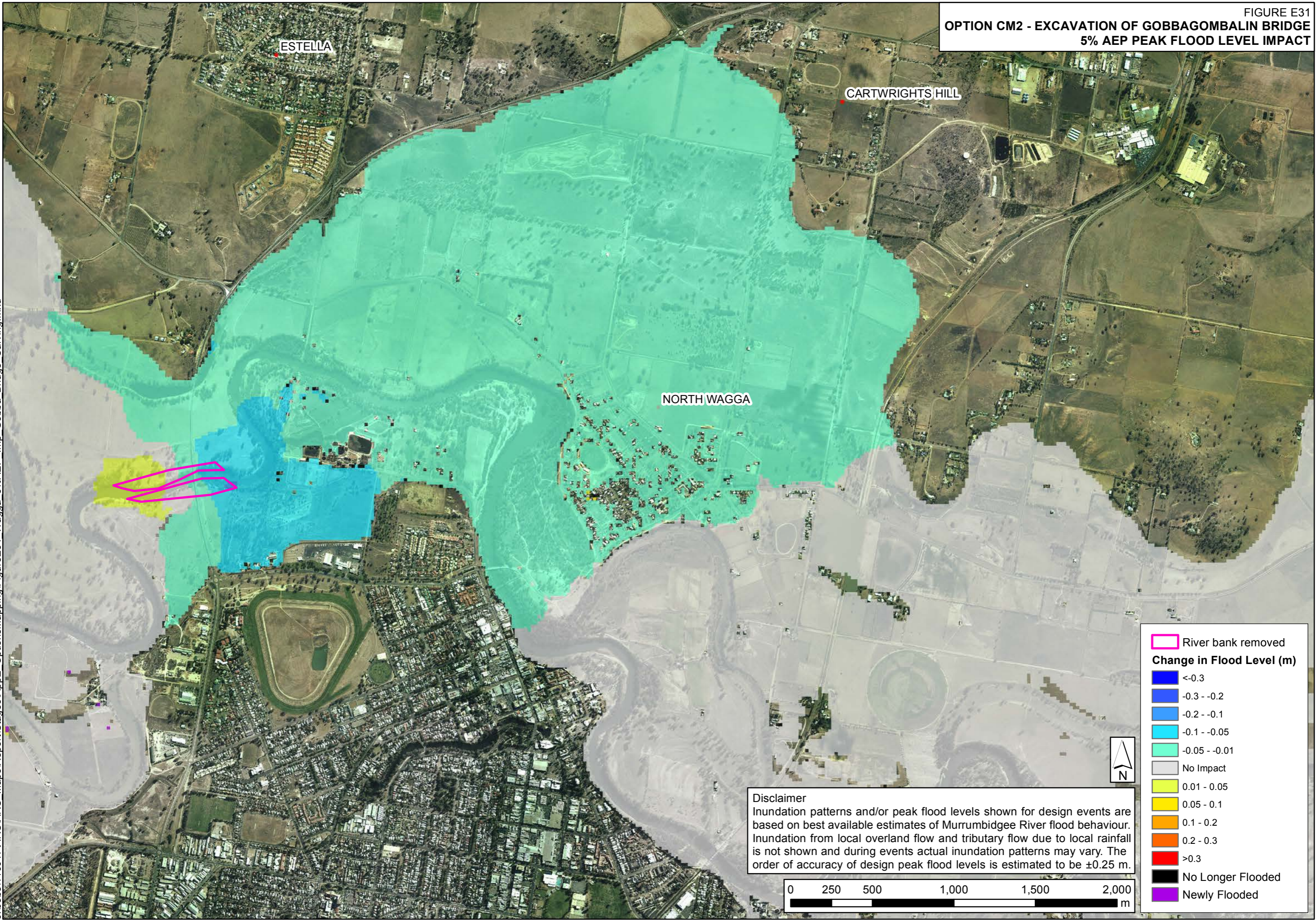
CARTWRIGHTS HILL

NORTH WAGGA



OPTION CM2 - EXCAVATION OF GOBBAGOMBALIN BRIDGE
5% AEP PEAK FLOOD LEVEL IMPACT

J:\Jobs\116017\ARC Maps\Report\Stage3\AppE_OptionsMapping\FigureE31_Wagga_5%AEP_Imp_Gobba_Bridge_Carving.mxd



ESTELLA

CARTWRIGHTS HILL

NORTH WAGGA

- River bank removed
- Change in Flood Level (m)**
- <-0.3
- 0.3 - -0.2
- 0.2 - -0.1
- 0.1 - -0.05
- 0.05 - -0.01
- No Impact
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- >0.3
- No Longer Flooded
- Newly Flooded

Disclaimer
 Inundation patterns and/or peak flood levels shown for design events are based on best available estimates of Murrumbidgee River flood behaviour. Inundation from local overland flow and tributary flow due to local rainfall is not shown and during events actual inundation patterns may vary. The order of accuracy of design peak flood levels is estimated to be ± 0.25 m.

