

APPENDIX

INLAND
RAIL 

N

Hydrology and Flooding Technical Report

PART 2 OF 3

Appendix C

CALVERT TO KAGARU ENVIRONMENTAL IMPACT STATEMENT

IR_1381

ARTC

The Australian Government is delivering
Inland Rail through the Australian
Rail Track Corporation (ARTC), in
partnership with the private sector.

APPENDIX

N

Hydrology and Flooding Technical Report

Appendix C Purga Creek Figures

CALVERT TO KAGARU ENVIRONMENTAL IMPACT STATEMENT

Appendix C

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Figure C9-A-2: 1 in 10,000 AEP event Existing Case inundation extent

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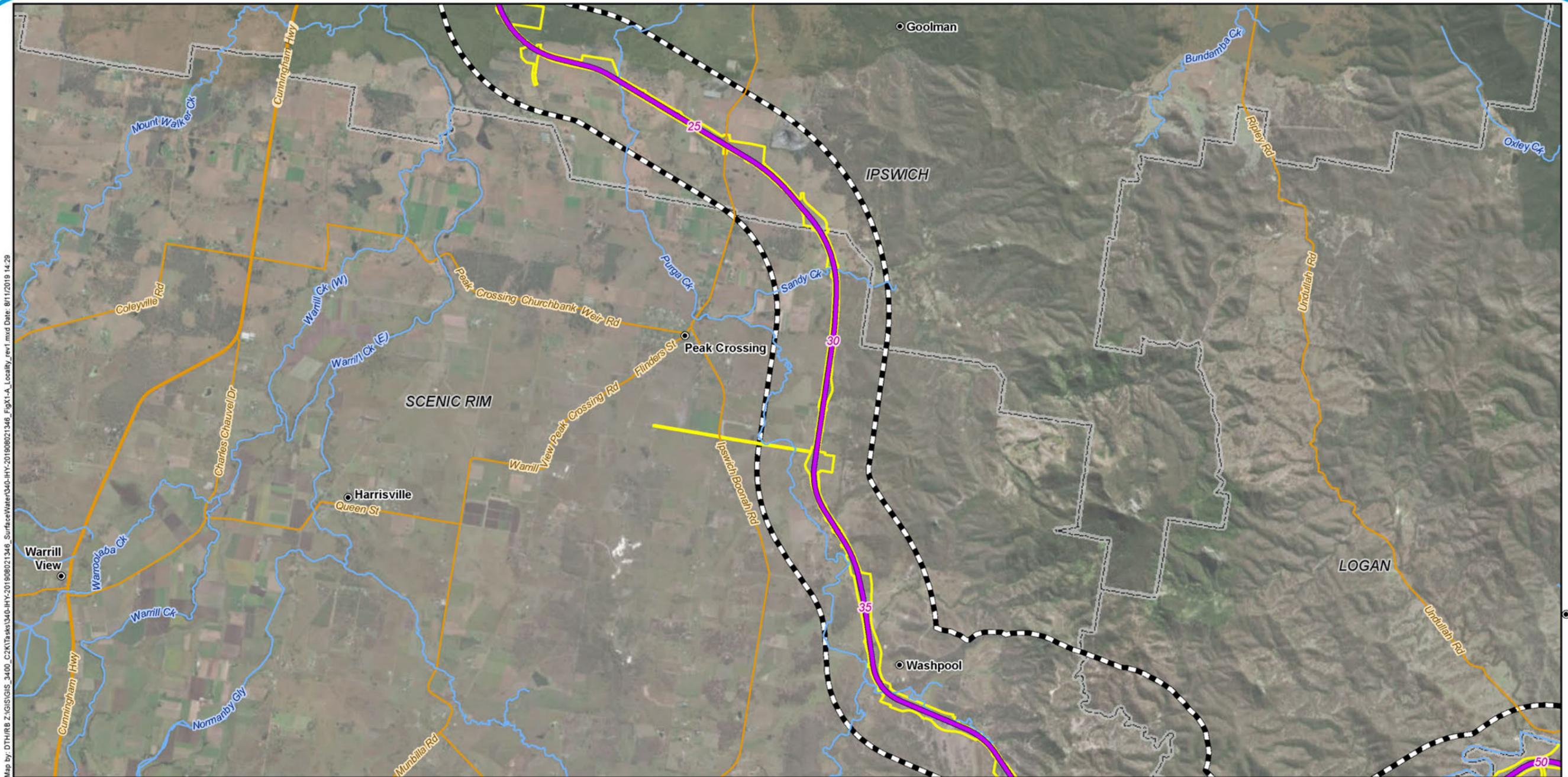
Figure C9-B-2: 1 in 10,000 AEP event Developed Case afflux

Figure C10-A-1: PMF event Existing Case inundation extent

Figure C10-A-2: PMF event Existing Case inundation extent

Figure C10-B-1: PMF event Developed Case afflux

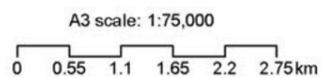
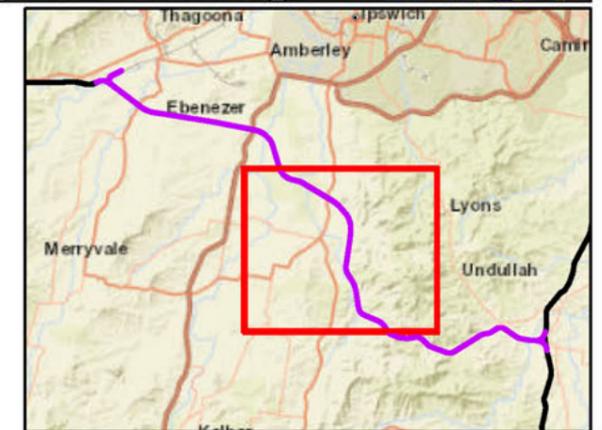
Figure C10-B-2: PMF event Developed Case afflux



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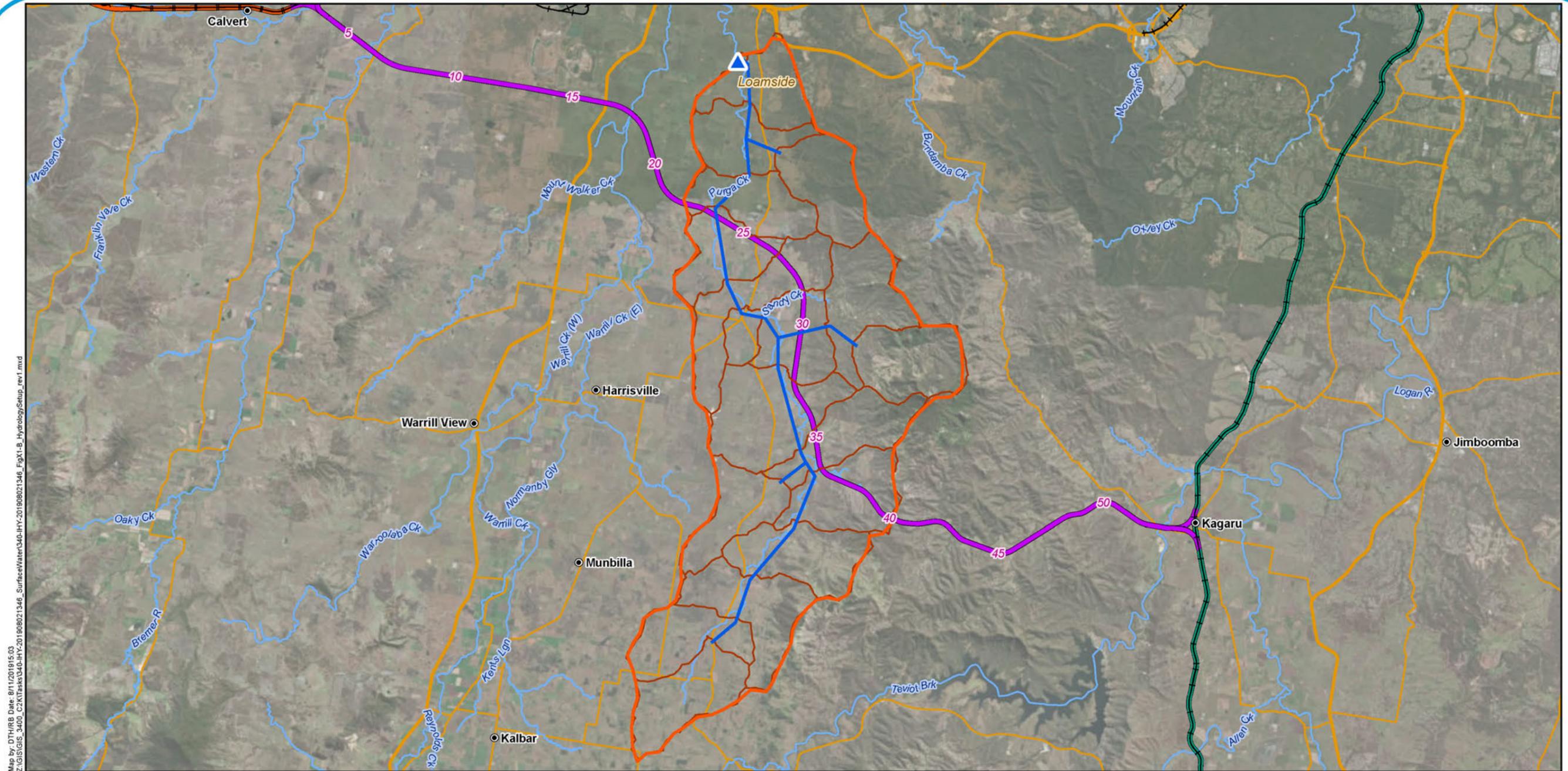
Legend

- 5 Chainage (km)
- Localities
- C2K project alignment
- Watercourses
- Major roads
- Minor roads
- EIS disturbance footprint
- EIS investigation corridor
- Local Government Areas



Issue date: 06/11/2019 Version: 1
 Coordinate System: GDA 1994 MGA Zone 56

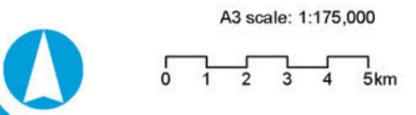
Calvert to Kagaru
Figure C1-A: Locality:
Purga Creek



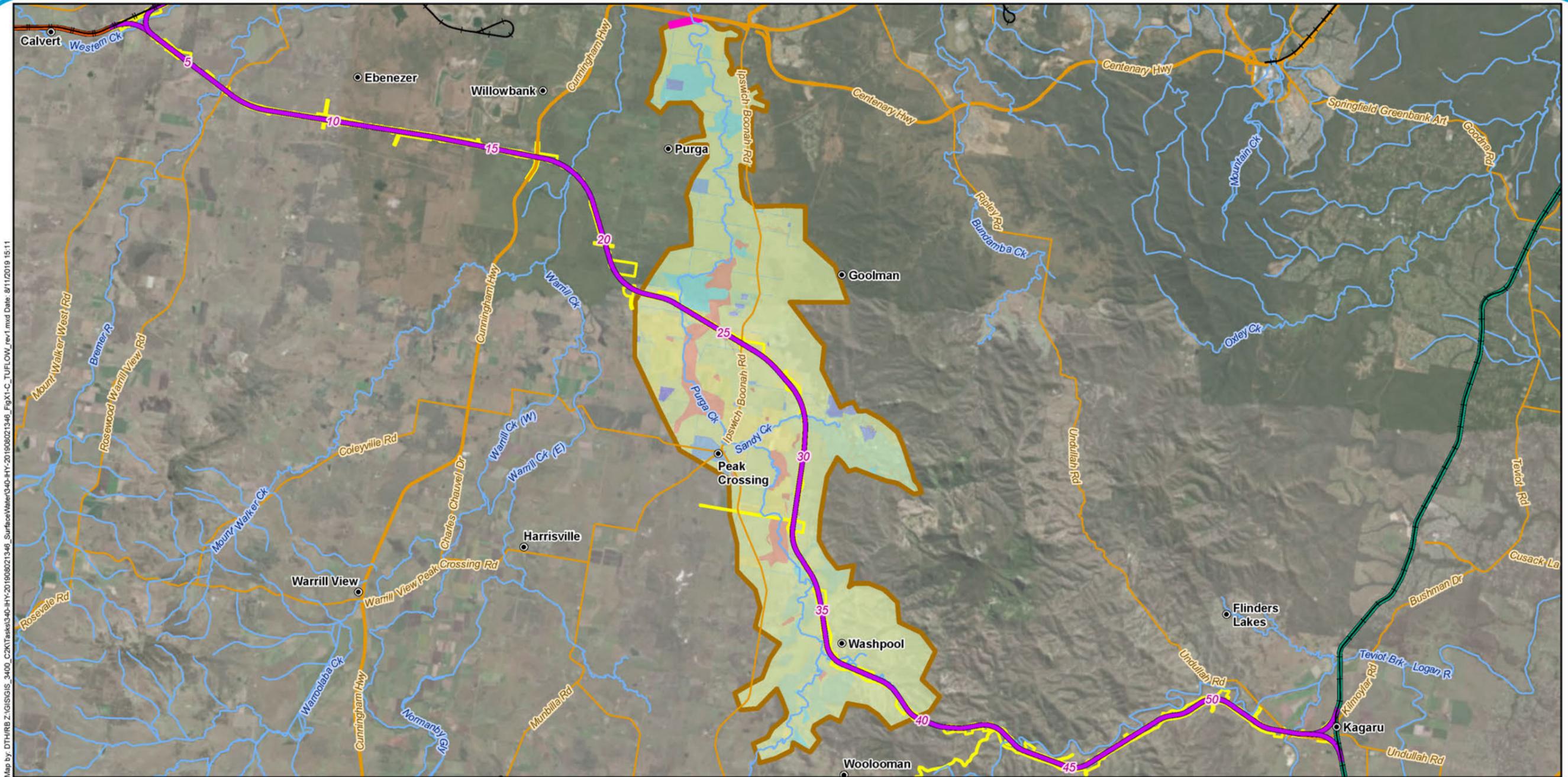
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Legend

- 5 Chainage (km)
- ▲ Stream gauge
- Localities
- Existing rail
- Purga Creek model subcatchments
- H2C project alignment
- Model subcatchments
- C2K project alignment
- Hydrologic model links
- K2ARB project alignment
- Watercourses
- Major roads
- Minor roads



Calvert to Kagaru
Figure C1-B: Hydrology setup: Purga Creek



Map by: D:\HRB\Z:\GIS\GIS_3400_C2K\Tasks\340-HY-201908021346_SurfaceWater\340-HY-201908021346_FigC1-C_TUFLOW_rev1.mxd Date: 8/11/2019 15:11

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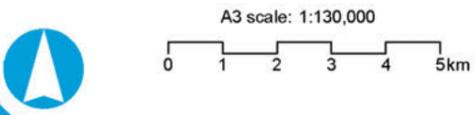
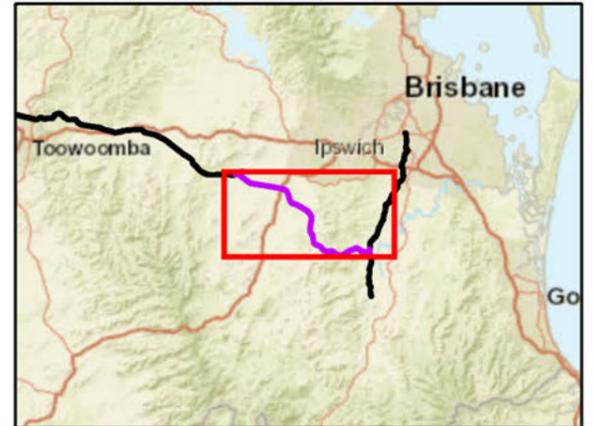
- 5 Chainage (km)
- Localities
- + Existing rail
- H2C project alignment
- C2K project alignment
- K2ARB project alignment
- Watercourses
- Major roads
- Minor roads

- EIS disturbance footprint
- Downstream boundary
- Code boundary

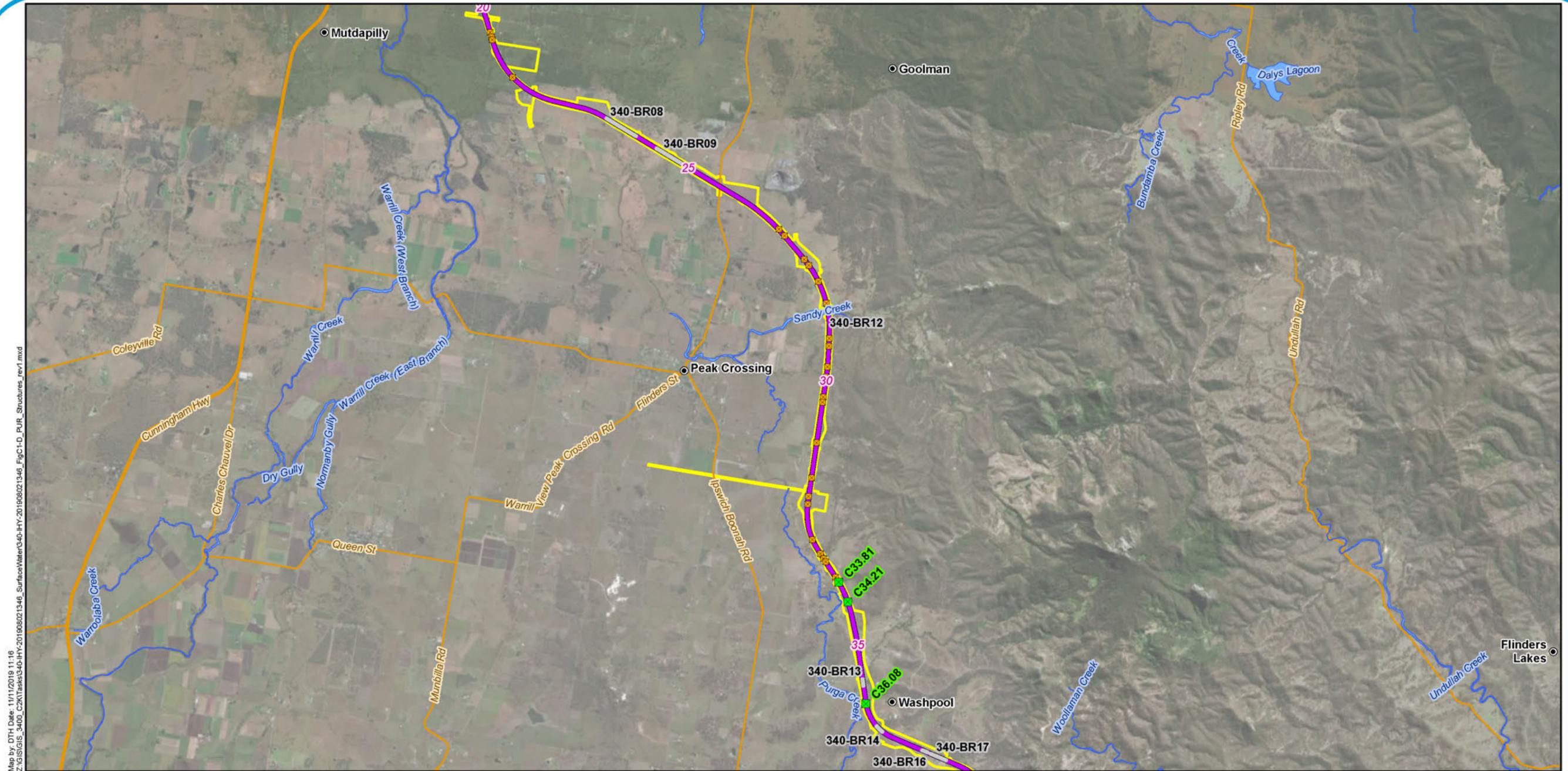
Materials

- Non Tidal Waterway
- Waterbodies
- Low Density Riverbank Vegetation
- Medium Density Riverbank Vegetation
- Grassland
- Light Vegetation

- Dense Vegetation
- Very Dense Vegetation
- Rough Pasture/ Light Brush
- Roads
- Medium Density Urban Block
- Commerical/ Industrial
- Mining



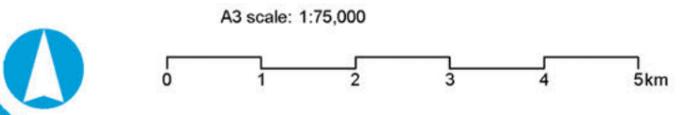
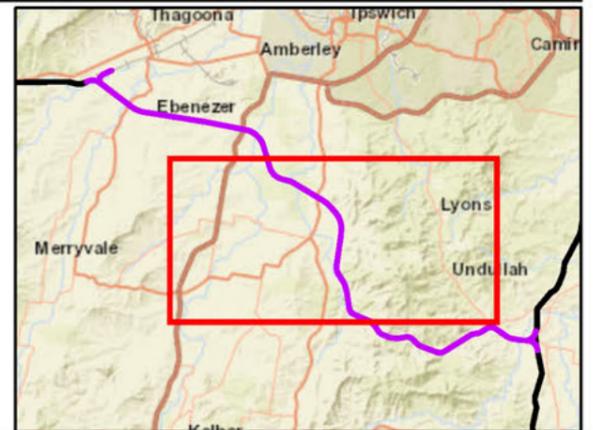
Calvert to Kagaru
Figure C1-C: TUFLOW model setup: Purga Creek



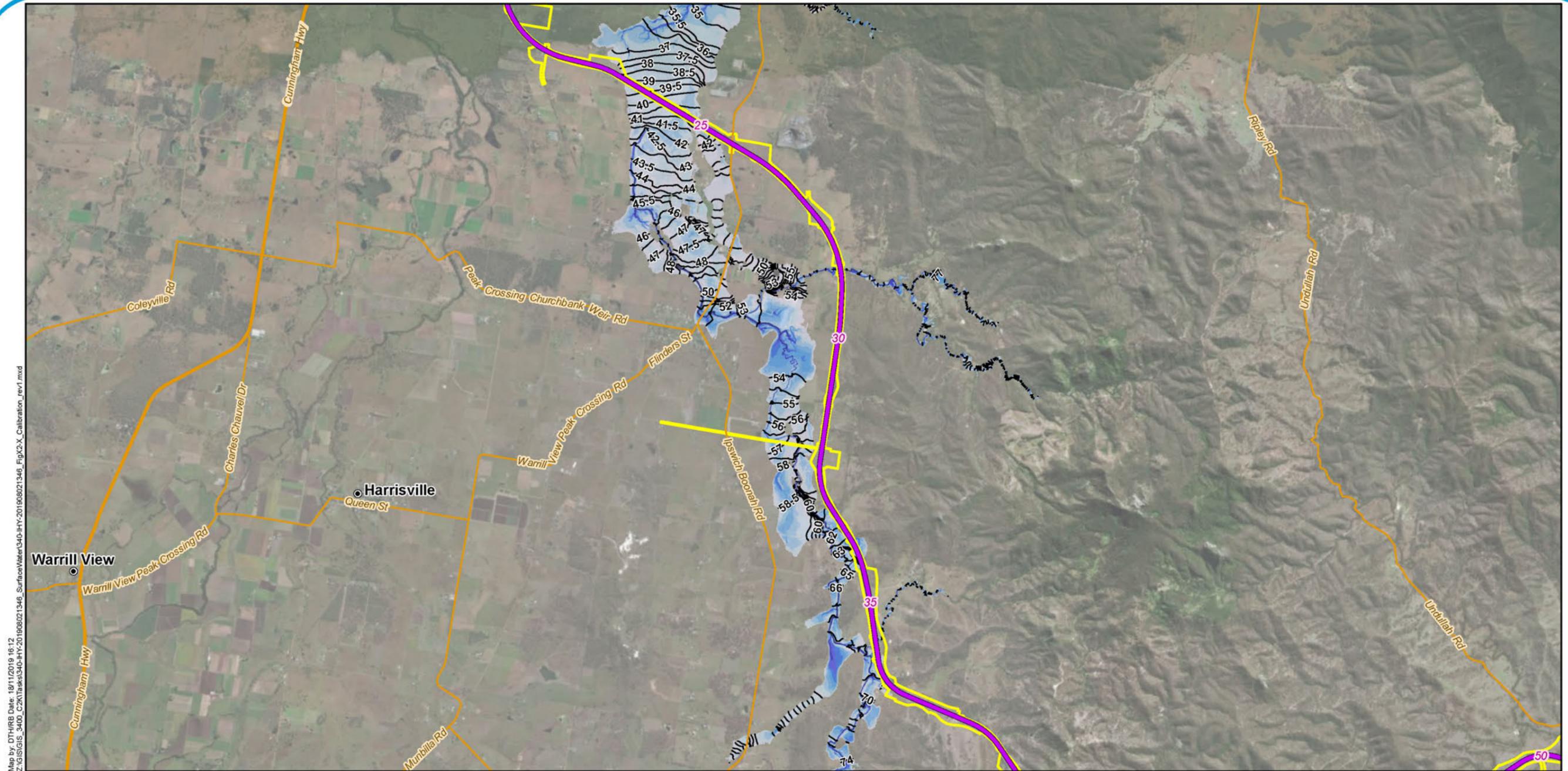
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Legend

- 5 Chainage (km)
 - Localities
 - C2K project alignment
 - Defined watercourses
 - Major roads
 - Minor roads
 - EIS disturbance footprint
- Drainage Structures**
 - Flood culvert
 - Local drainage culvert
 - Bridges



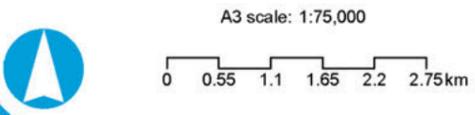
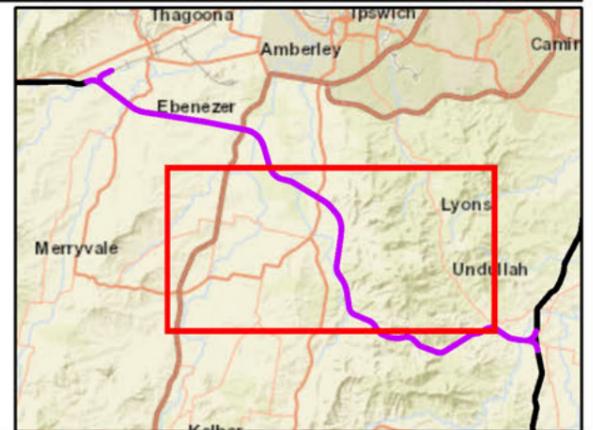
Calvert to Kagaru
Figure C1-D: Design structures:
Purga Creek



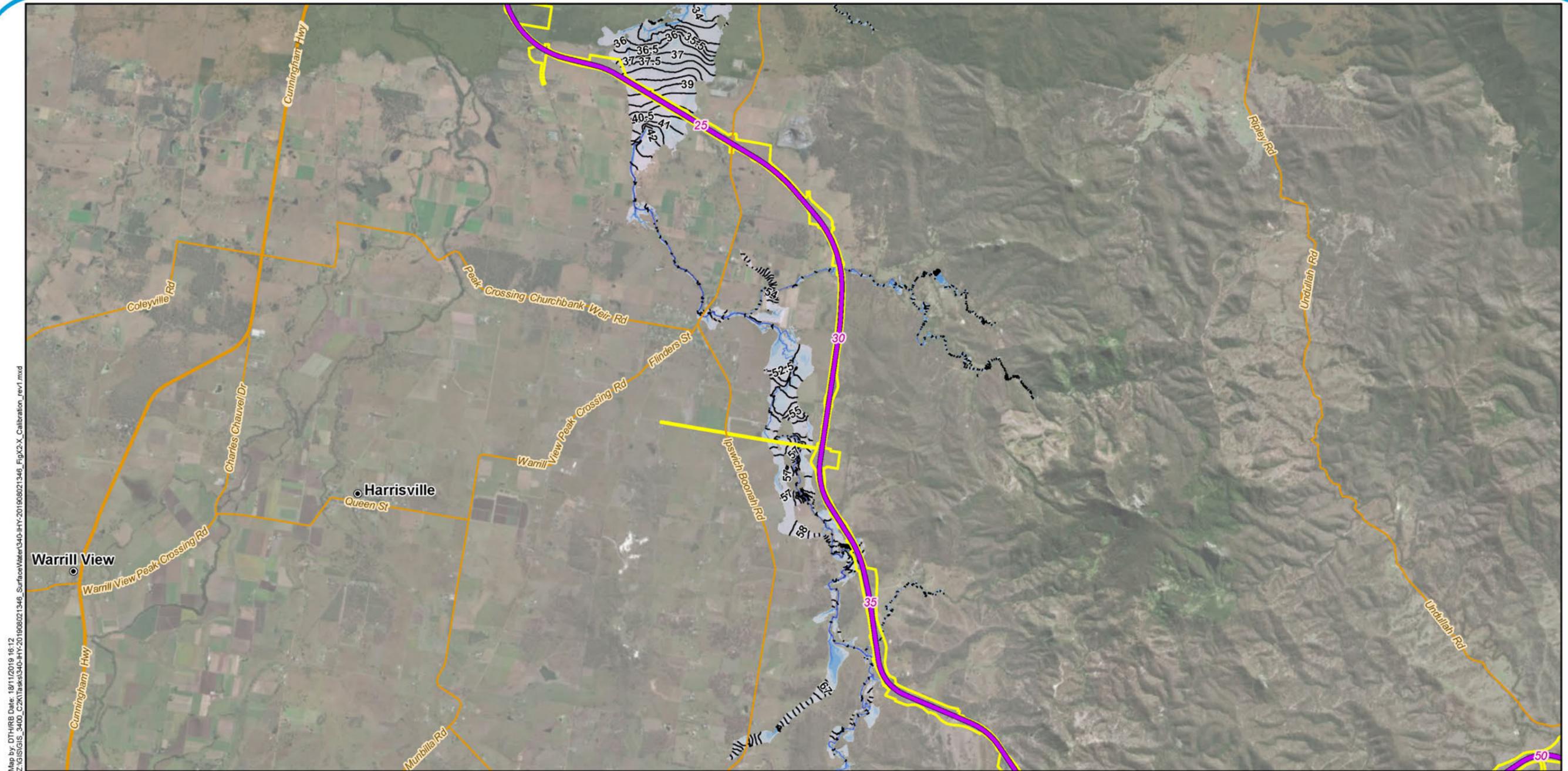
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Legend

- 5 Chainage (km)
 - Localities
 - C2K project alignment
 - Major roads
 - Minor roads
 - EIS disturbance footprint
 - 0.5m Contour mAHD
- | Depth (m) | |
|---|---|
| 0 - 0.5 | 3.5 - 4.0 |
| 0.5 - 1.0 | 4.0 - 4.5 |
| 1.0 - 1.5 | 4.5 - 5.0 |
| 2.0 - 2.5 | > 5.0 |
| 2.5 - 3.0 | |
| 3.0 - 3.5 | |



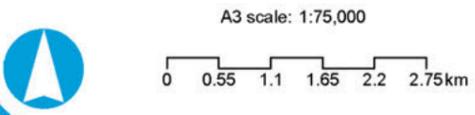
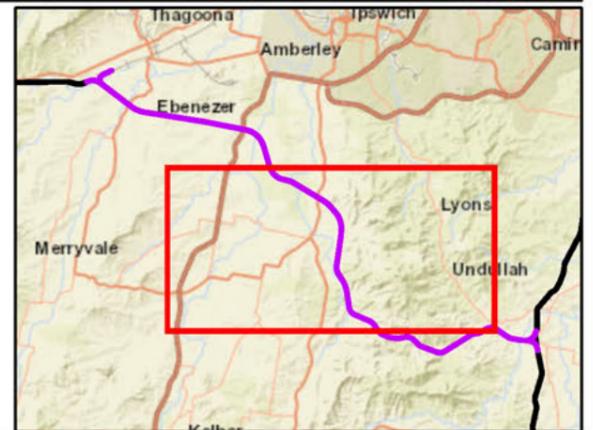
Calvert to Kagaru
Figure C2-A: 1974 Calibration event: Purga Creek



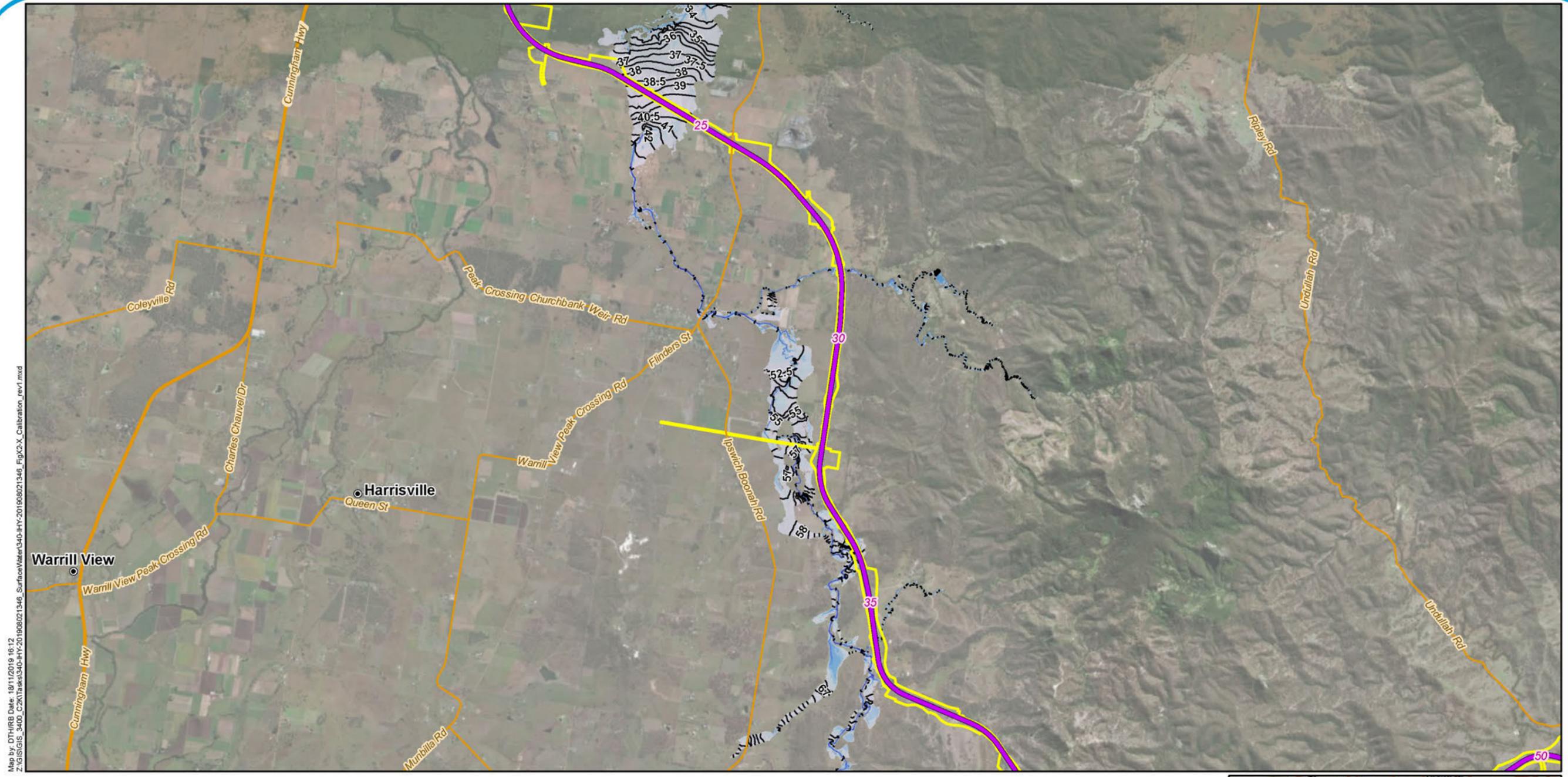
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Legend

- 5 Chainage (km)
 - EIS disturbance footprint
 - Localities
 - C2K project alignment
 - Major roads
 - Minor roads
 - 0.5m Contour mAHD
- | Depth (m) | |
|---|---|
| 0 - 0.5 | 3.5 - 4.0 |
| 0.5 - 1.0 | 4.0 - 4.5 |
| 1.0 - 1.5 | 4.5 - 5.0 |
| 1.5 - 2.0 | > 5.0 |
| 2.0 - 2.5 | |
| 2.5 - 3.0 | |
| 3.0 - 3.5 | |



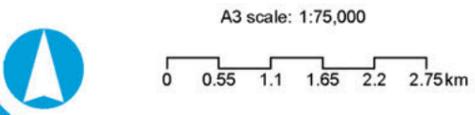
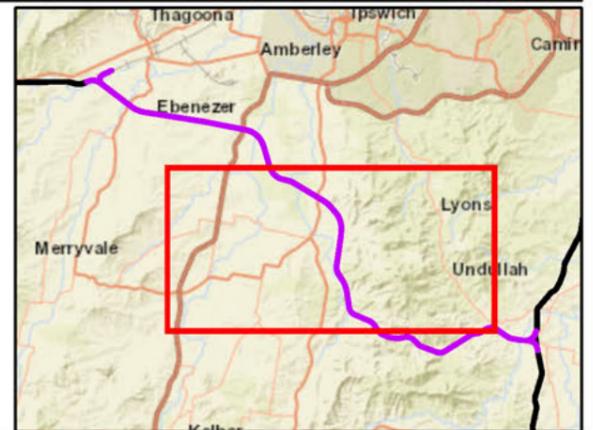
Calvert to Kagaru
Figure C2-B: 2011 Calibration event: Purga Creek

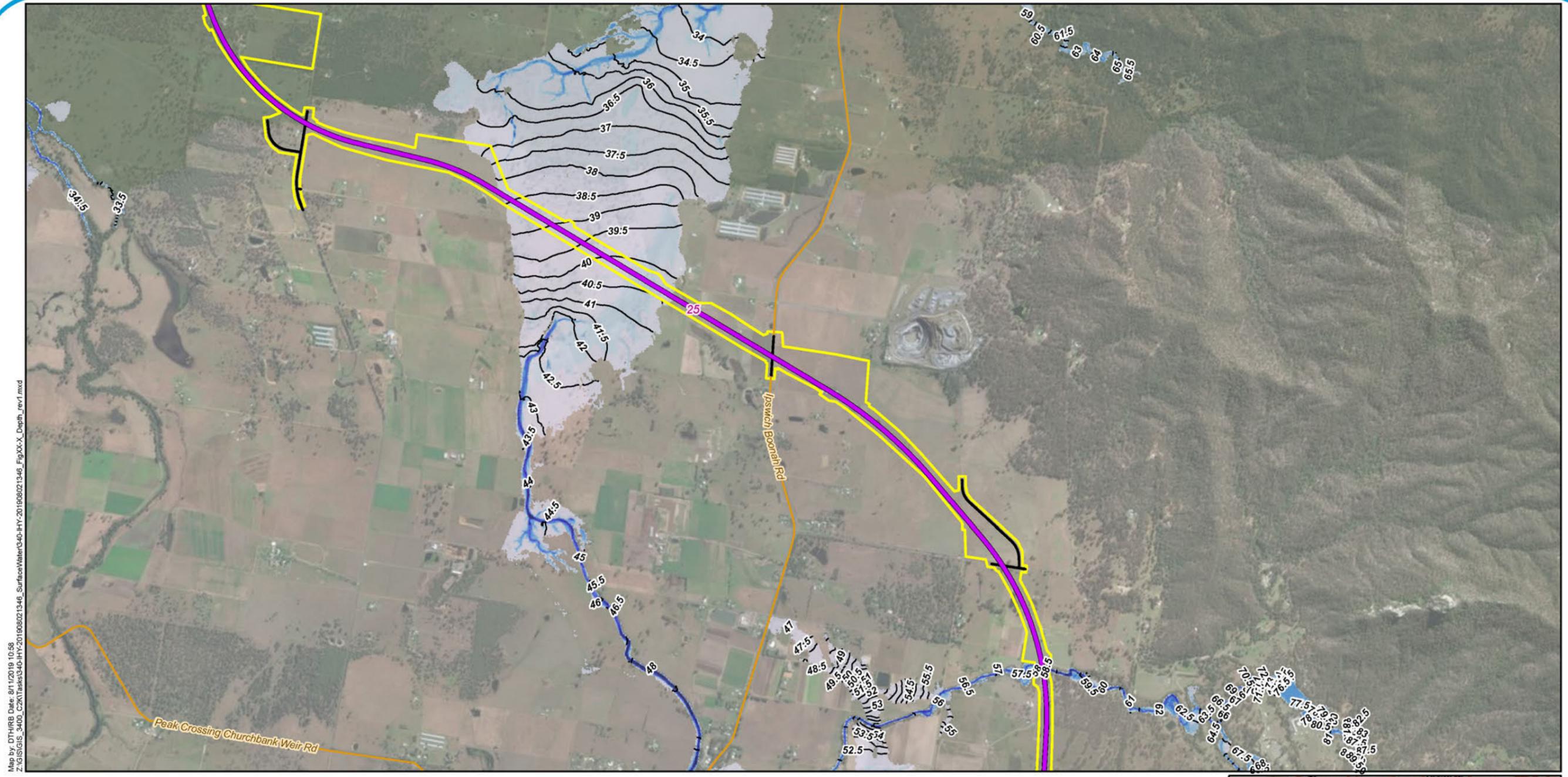


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Legend

- 5 Chainage (km)
 - EIS disturbance footprint
 - Localities
 - C2K project alignment
 - Major roads
 - Minor roads
 - 0.5m Contour mAHD
- | Depth (m) | |
|---|---|
| 0 - 0.5 | 1.5 - 2.0 |
| 0.5 - 1.0 | 2.0 - 2.5 |
| 1.0 - 1.5 | 2.5 - 3.0 |
| 3.0 - 3.5 | 3.5 - 4.0 |
| 4.0 - 4.5 | 4.5 - 5.0 |
| > 5.0 | |





Map by: DTH/RB Date: 8/11/2019 10:58
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Legend

- | | | | |
|---|---|---|---|
| 5 Chainage (km) | EIS disturbance footprint | Depth (m) | 2.5 - 3.0 |
| — C2K project alignment | 0.5m contour mAHD | 0 - 0.5 | 3.0 - 3.5 |
| — Proposed roadworks | | 0.5 - 1.0 | 3.5 - 4.0 |
| — Minor roads | | 1.0 - 1.5 | 4.0 - 4.5 |
| | | 1.5 - 2.0 | 4.5 - 5.0 |
| | | 2.0 - 2.5 | > 5.0 |

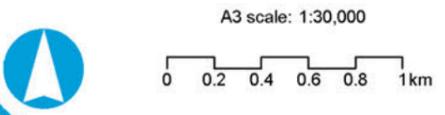
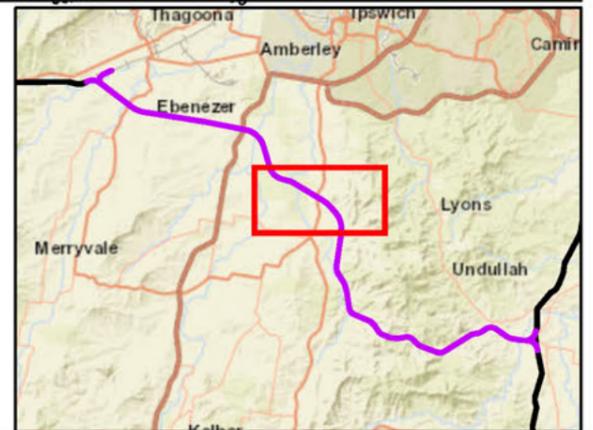
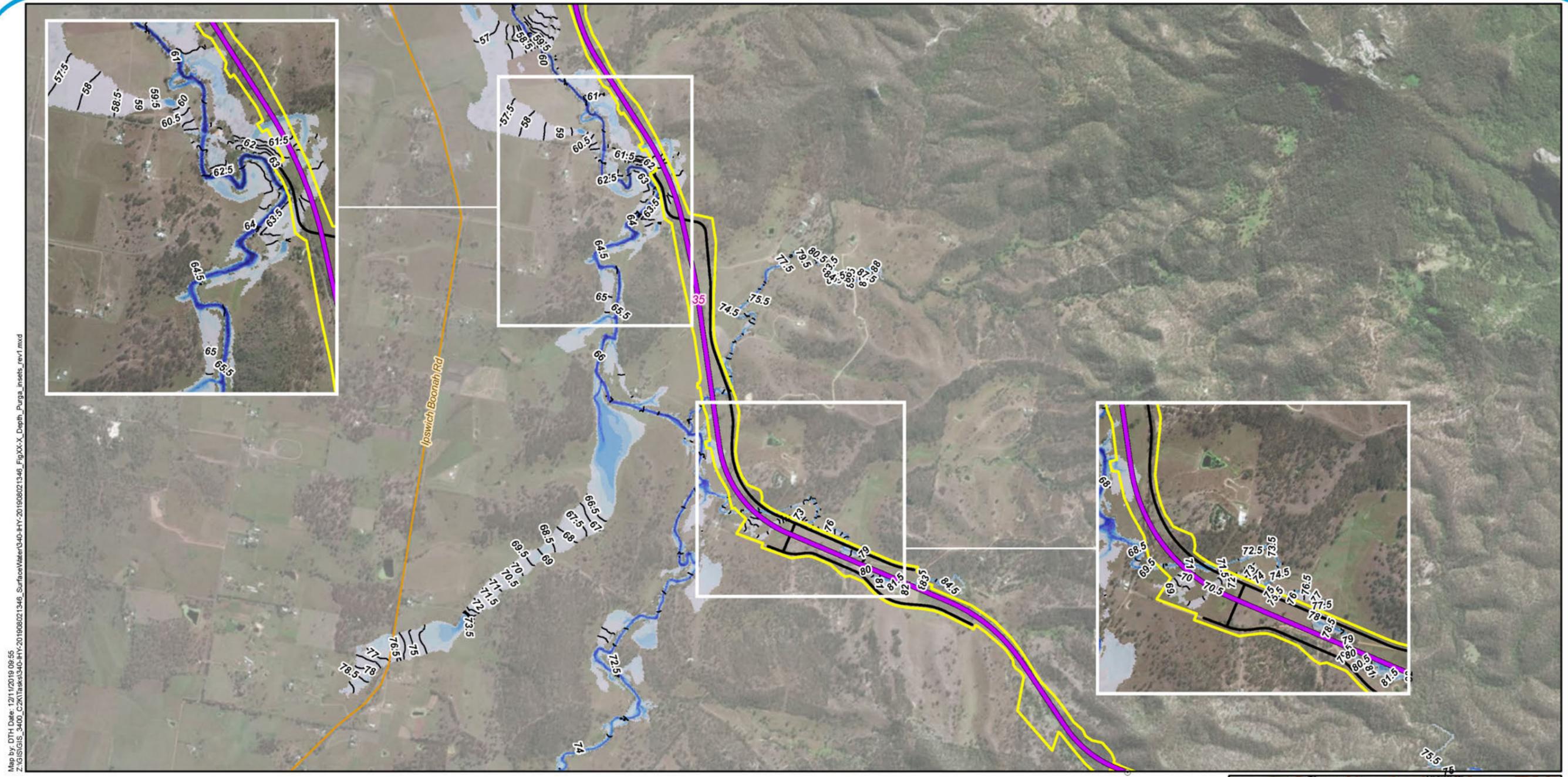


Figure C3-A-1: 20% AEP event Existing Case inundation extent: Purga Creek



Map by: DTH Date: 12/11/2019 08:55
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Legend

- 5 Chainage (km)
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- 0.5m contour mAHD

Depth (m)	
	0 - 0.5
	0.5 - 1.0
	1.0 - 1.5
	1.5 - 2.0
	2.0 - 2.5
	2.5 - 3.0
	3.0 - 3.5
	3.5 - 4.0
	4.0 - 4.5
	4.5 - 5.0
	> 5.0

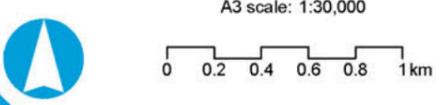
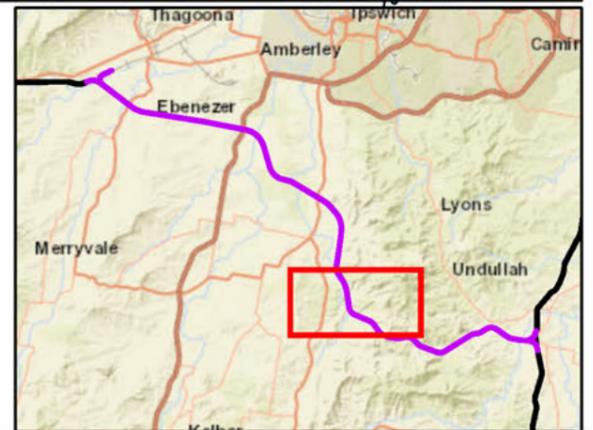


Figure C3-A-2: 20% AEP event Existing Case inundation extent: Purga Creek



Map by DTH/RB Date: 11/11/2019 21:22
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Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | |
|---|--|
| < -0.5 | -0.01 to 0.01 |
| -0.5 to -0.2 | 0.01 to 0.05 |
| -0.2 to -0.1 | 0.05 to 0.1 |
| -0.1 to -0.05 | 0.1 to 0.2 |
| -0.05 to -0.01 | 0.2 to 0.5 |
| | > 0.5 |

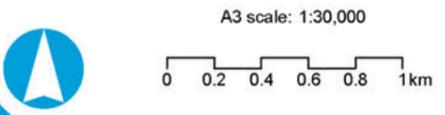
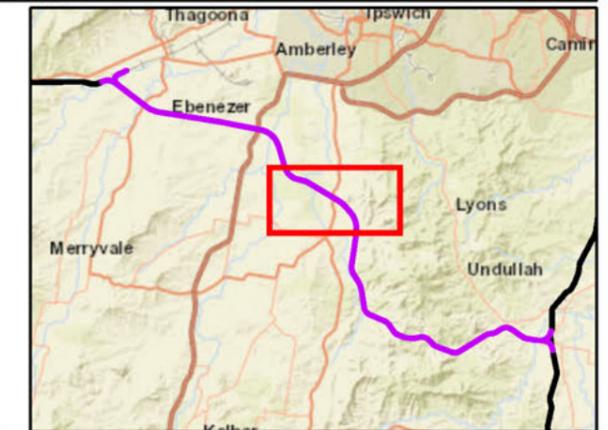
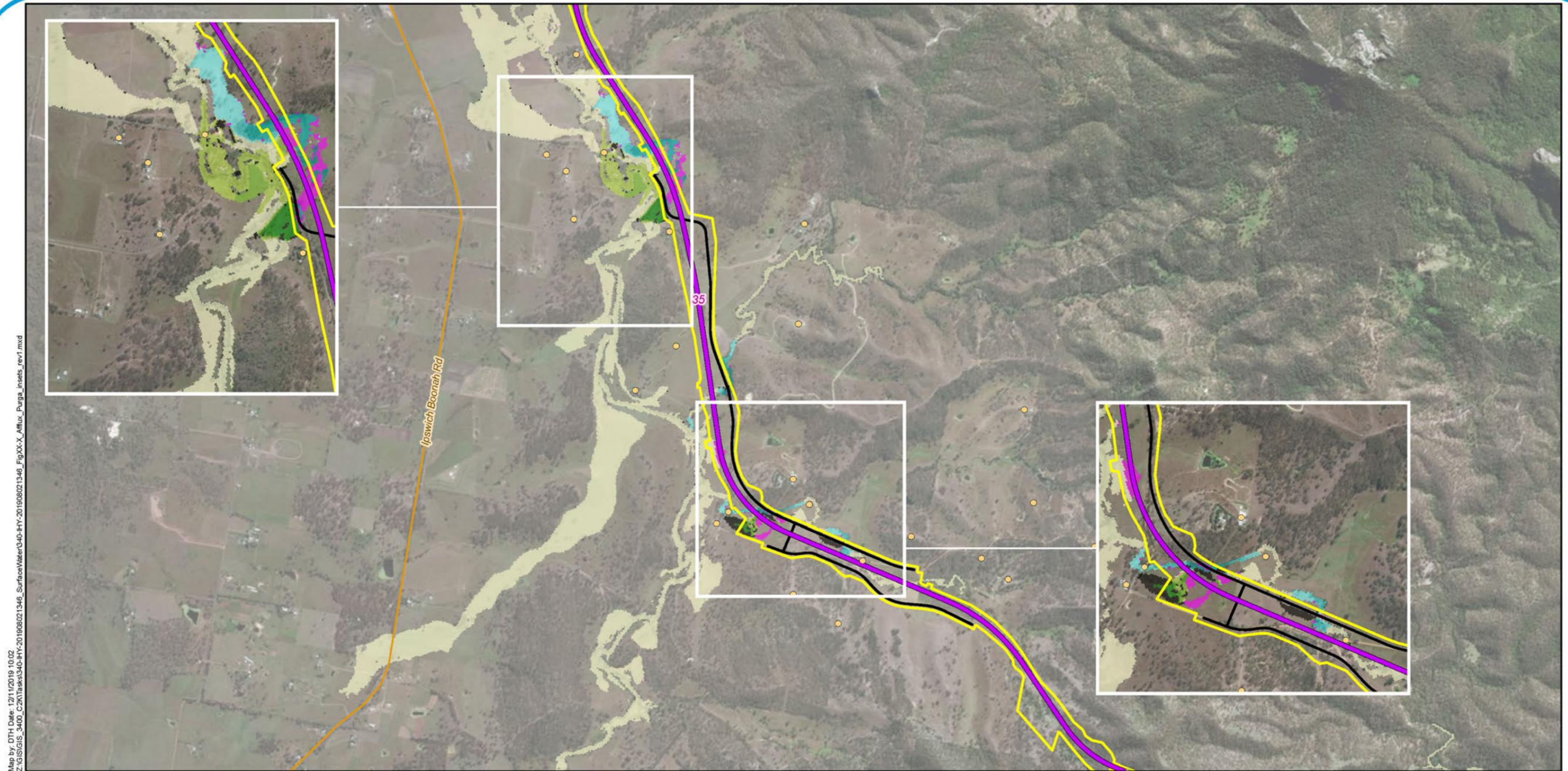


Figure C3-B-1: 20% AEP event Developed Case afflux: Purga Creek



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Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | |
|--|--|
| <ul style="list-style-type: none"> <math>< -0.5</math> -0.5 to -0.2 -0.2 to -0.1 -0.1 to -0.05 -0.05 to -0.01 | <ul style="list-style-type: none"> -0.01 to 0.01 0.01 to 0.05 0.05 to 0.1 0.1 to 0.2 0.2 to 0.5 > 0.5 |
|--|--|

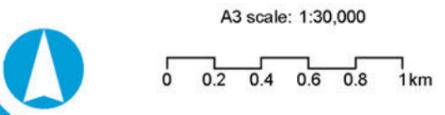
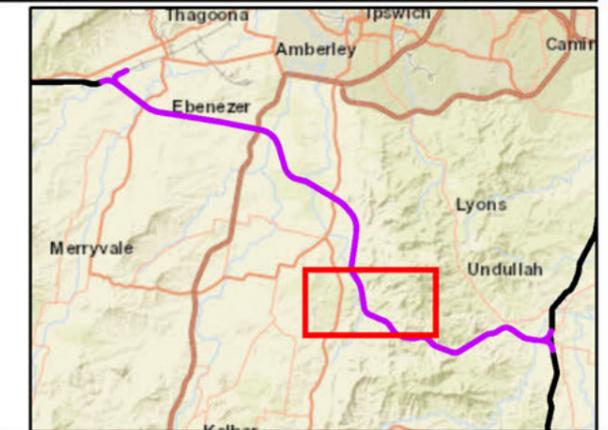
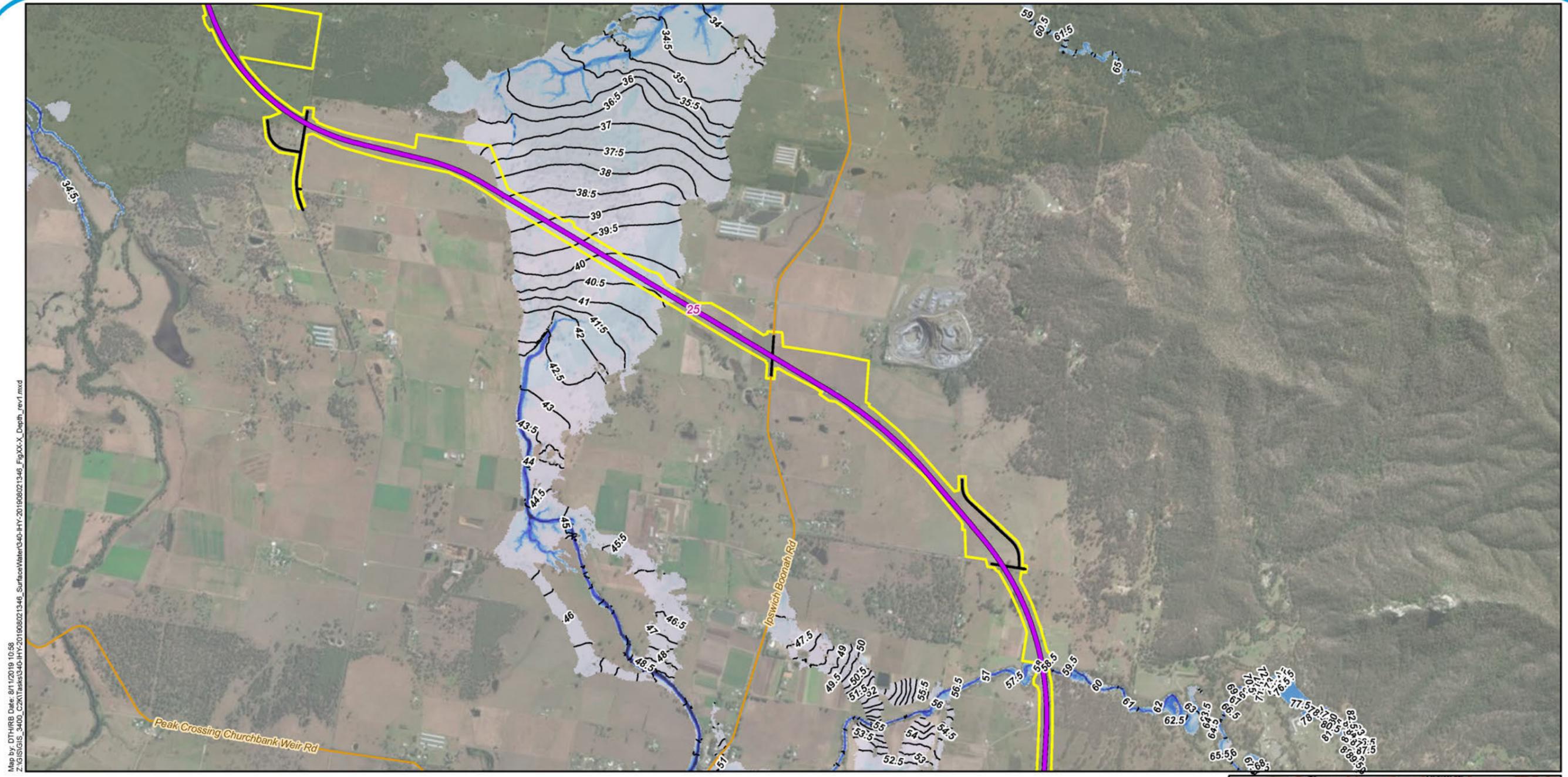


Figure C3-B-2: 20% AEP event Developed Case afflux: Purga Creek



Map by: DTH/RR Date: 8/11/2019 10:58
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Legend

- | | | | |
|-----------------------|---------------------------|------------------|-----------|
| 5 Chainage (km) | EIS disturbance footprint | Depth (m) | 2.5 - 3.0 |
| C2K project alignment | 0.5m contour mAHD | 0 - 0.5 | 3.0 - 3.5 |
| Proposed roadworks | | 0.5 - 1.0 | 3.5 - 4.0 |
| Minor roads | | 1.0 - 1.5 | 4.0 - 4.5 |
| | | 1.5 - 2.0 | 4.5 - 5.0 |
| | | 2.0 - 2.5 | > 5.0 |

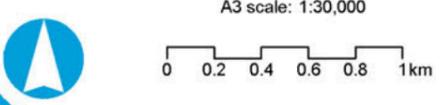
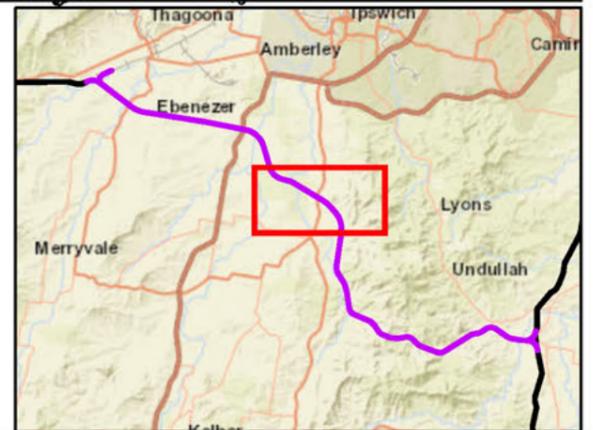
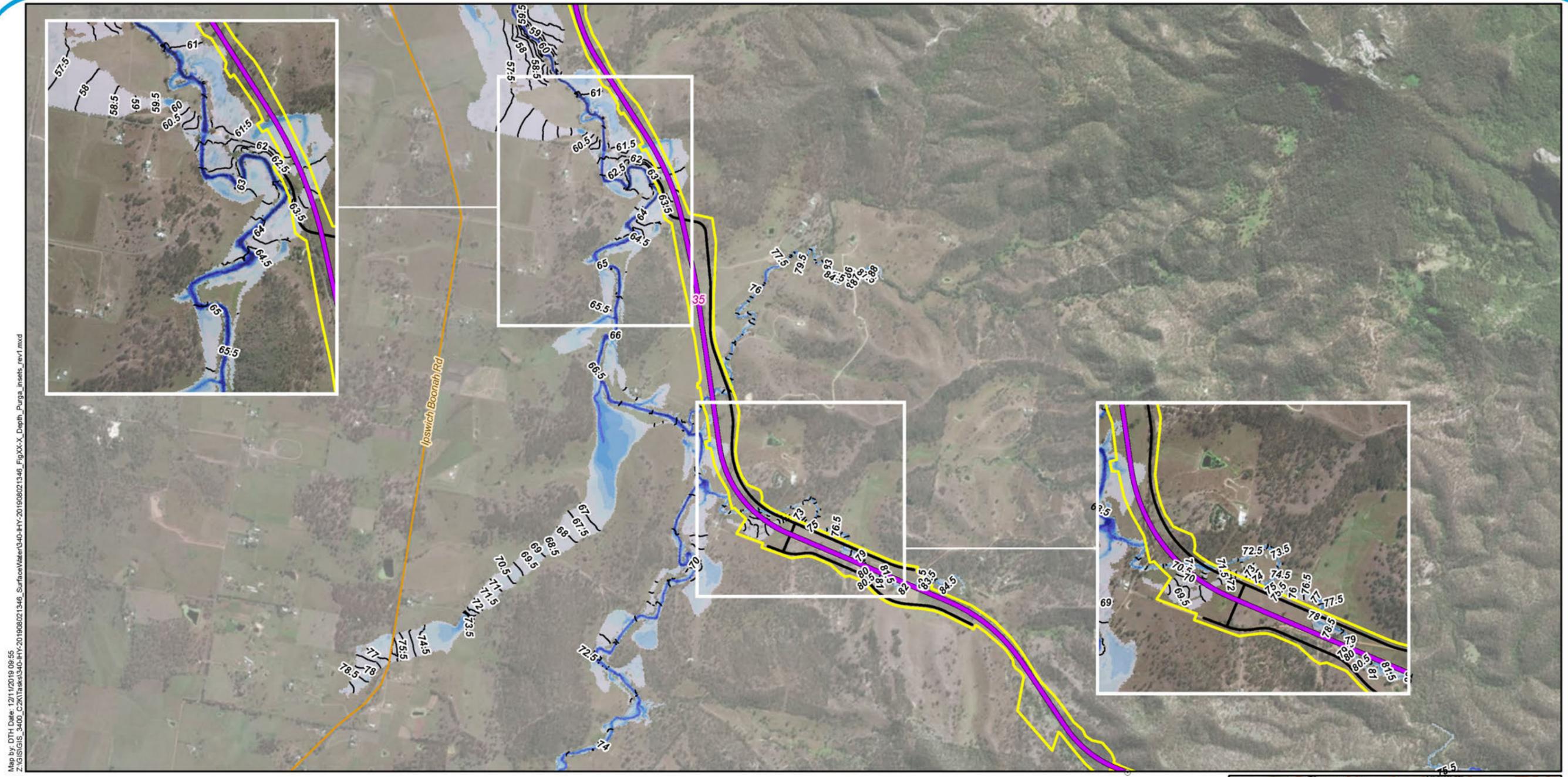


Figure C4-A-1: 10% AEP event Existing Case inundation extent: Purga Creek



Map by: DTH Date: 12/11/2019 08:55
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Legend

- | | | | |
|--|---|---|---|
| 5 Chainage (km) | EIS disturbance footprint | Depth (m) | 2.5 - 3.0 |
| C2K project alignment | 0.5m contour mAHD | 0 - 0.5 | 3.0 - 3.5 |
| Proposed roadworks | | 0.5 - 1.0 | 3.5 - 4.0 |
| Minor roads | | 1.0 - 1.5 | 4.0 - 4.5 |
| | | 1.5 - 2.0 | 4.5 - 5.0 |
| | | 2.0 - 2.5 | > 5.0 |

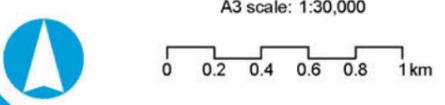
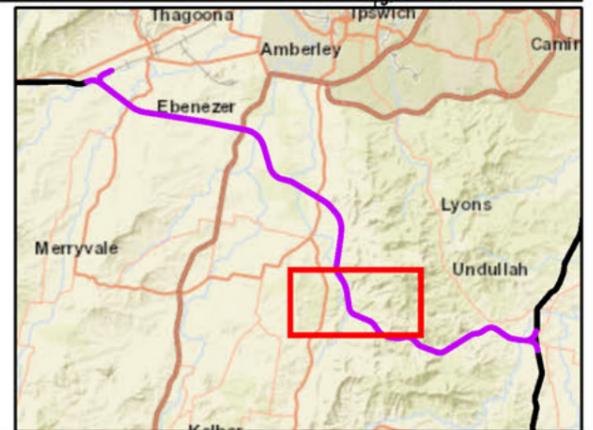
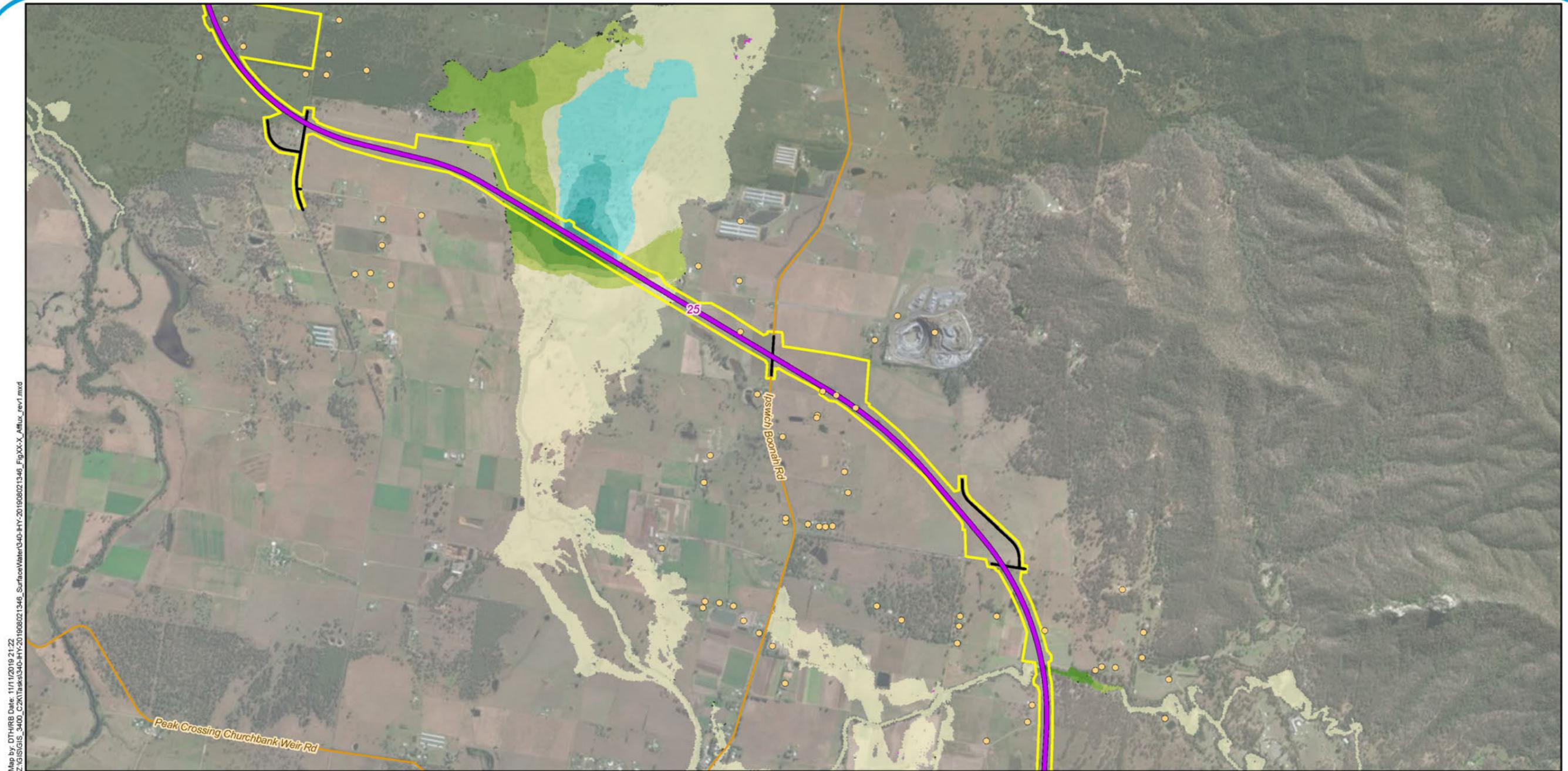


Figure C4-A-2: 10% AEP event Existing Case inundation extent: Purga Creek



Map by DTH/RB Date: 11/11/2019 21:22
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Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | |
|---|--|
| < -0.5 | -0.01 to 0.01 |
| -0.5 to -0.2 | 0.01 to 0.05 |
| -0.2 to -0.1 | 0.05 to 0.1 |
| -0.1 to -0.05 | 0.1 to 0.2 |
| -0.05 to -0.01 | 0.2 to 0.5 |
| | > 0.5 |

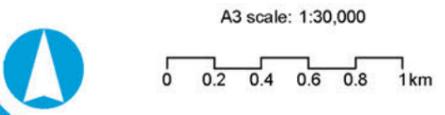
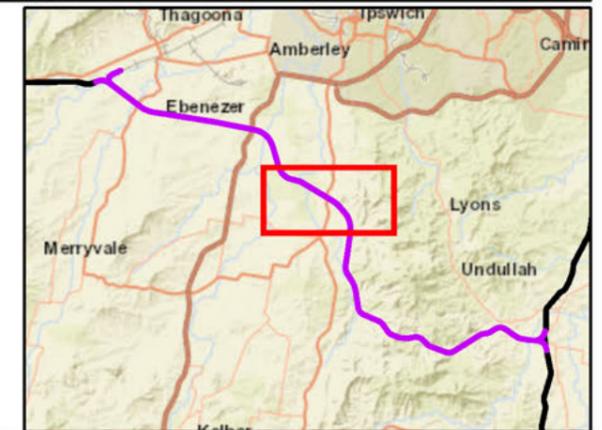
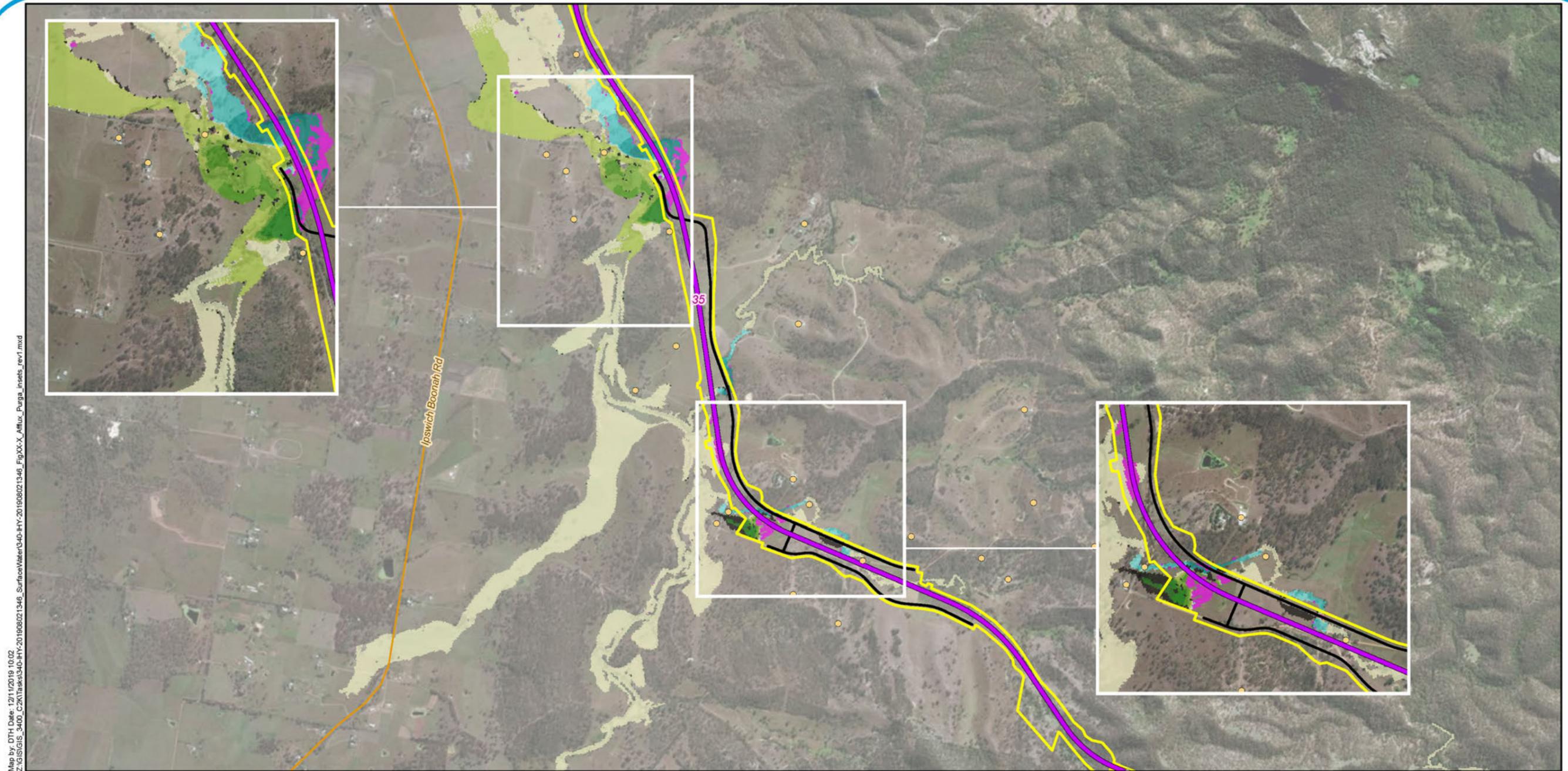


Figure C4-B-1: 10% AEP event Developed Case afflux: Purga Creek



Map by DTH Date: 12/11/2019 10:02
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_FigC4-B-2_Afflux_Purga_insets_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | |
|---|--|
| <ul style="list-style-type: none"> < -0.5 -0.5 to -0.2 -0.2 to -0.1 -0.1 to -0.05 -0.05 to -0.01 | <ul style="list-style-type: none"> -0.01 to 0.01 0.01 to 0.05 0.05 to 0.1 0.1 to 0.2 0.2 to 0.5 > 0.5 |
|---|--|

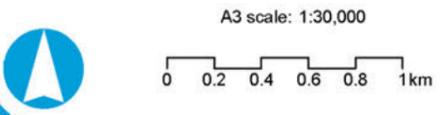
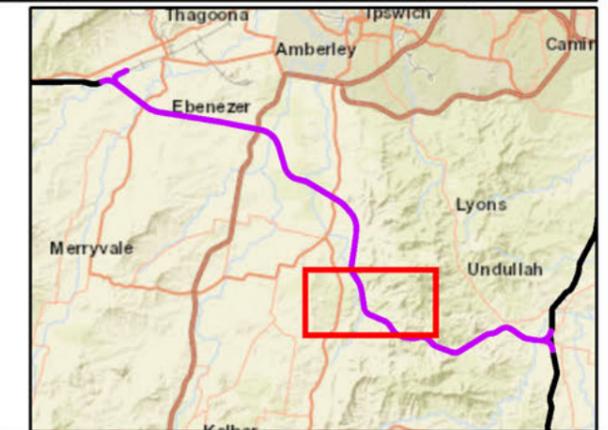
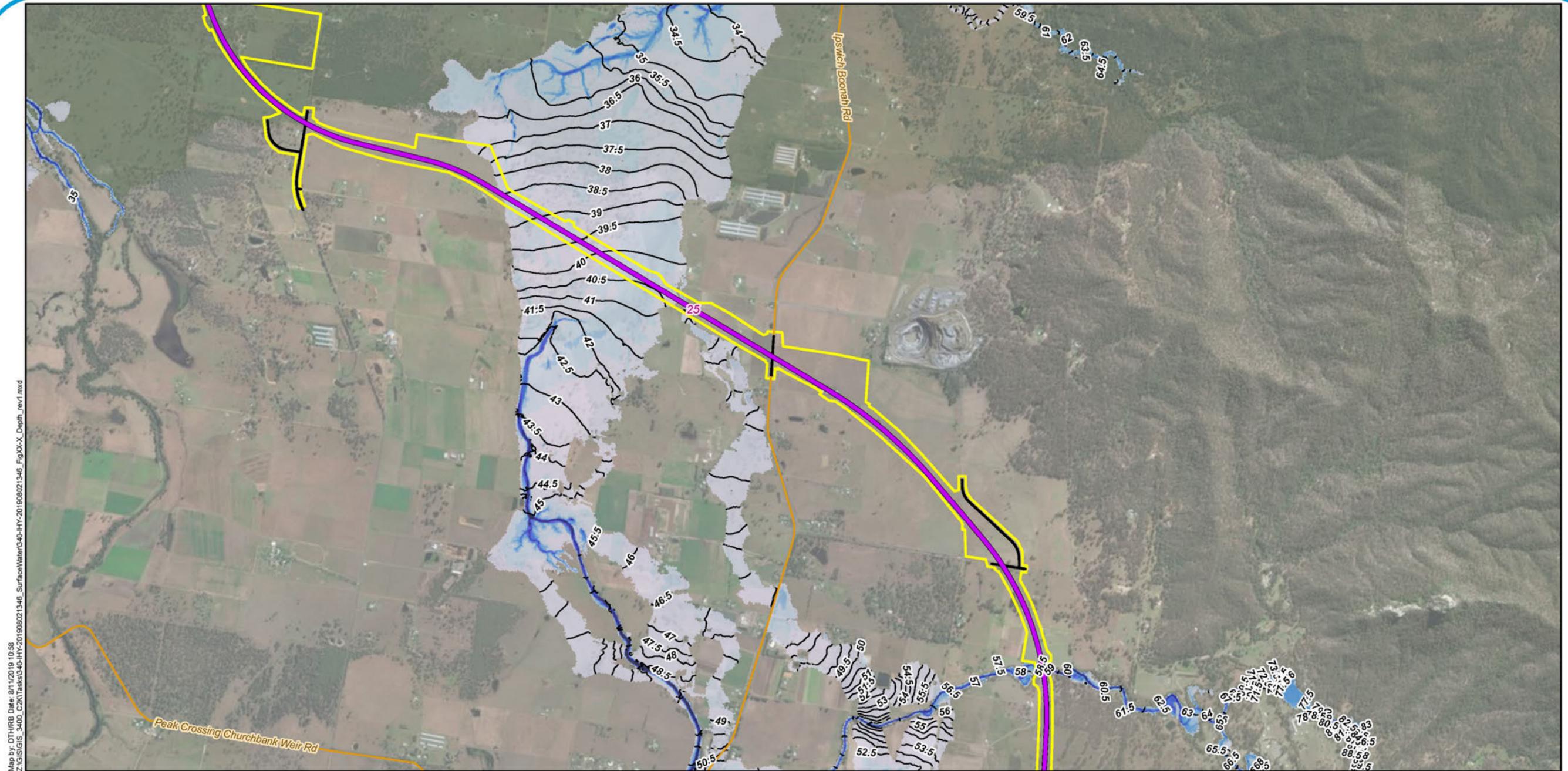


Figure C4-B-2: 10% AEP event Developed Case afflux: Purga Creek



Map by: DTH/RB Date: 8/11/2019 10:58
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_SurfaceWater\340-IHY-20190802\346_Fig\X-X_Depth_rev1.mxd

Legend

- | | | | |
|-----------------------|---------------------------|------------------|-----------|
| 5 Chainage (km) | EIS disturbance footprint | Depth (m) | 2.5 - 3.0 |
| C2K project alignment | 0.5m contour mAHD | 0 - 0.5 | 3.0 - 3.5 |
| Proposed roadworks | | 0.5 - 1.0 | 3.5 - 4.0 |
| Minor roads | | 1.0 - 1.5 | 4.0 - 4.5 |
| | | 1.5 - 2.0 | 4.5 - 5.0 |
| | | 2.0 - 2.5 | > 5.0 |

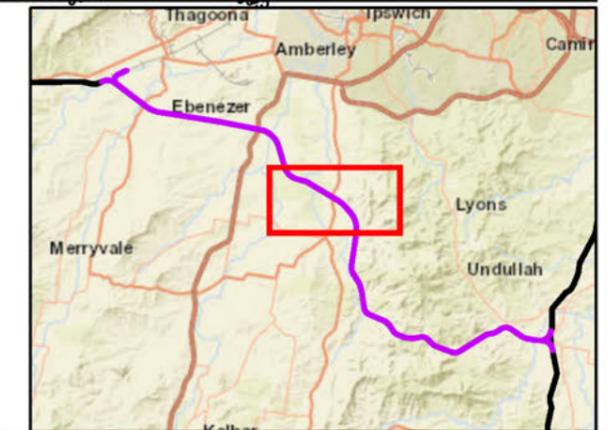
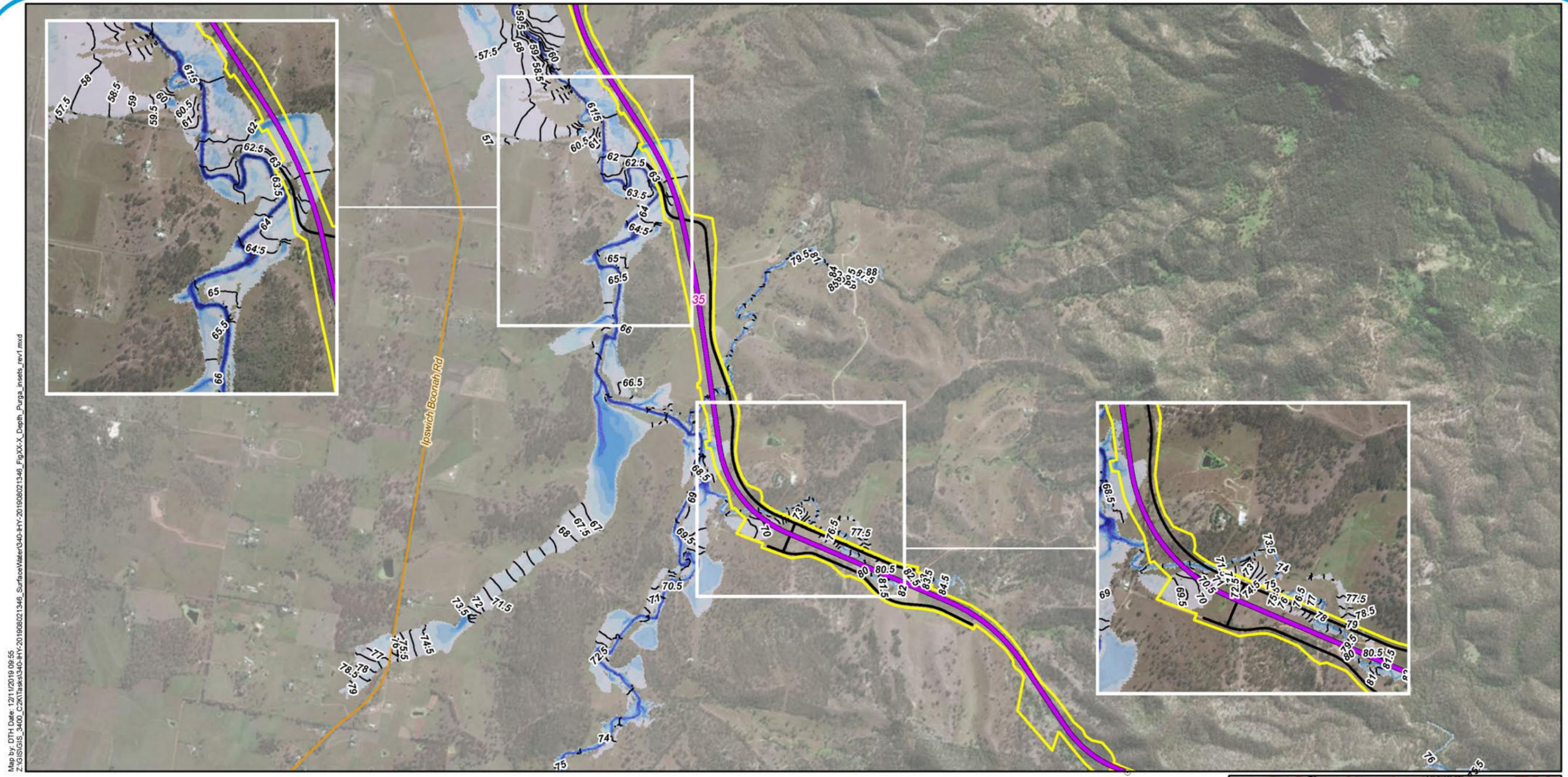


Figure C5-A-1: 5% AEP event Existing Case inundation extent: Purga Creek



Map by: DTH Date: 12/11/2019 08:55
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig\X-X_Depth_Purga_insets_rev1.mxd

Legend

- | | | | |
|--|---|---|---|
| 5 Chainage (km) | EIS disturbance footprint | Depth (m) | 2.5 - 3.0 |
| C2K project alignment | 0.5m contour mAHD | 0 - 0.5 | 3.0 - 3.5 |
| Proposed roadworks | | 0.5 - 1.0 | 3.5 - 4.0 |
| Minor roads | | 1.0 - 1.5 | 4.0 - 4.5 |
| | | 1.5 - 2.0 | 4.5 - 5.0 |
| | | 2.0 - 2.5 | > 5.0 |

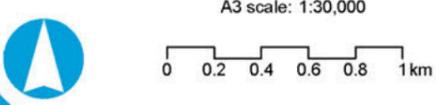
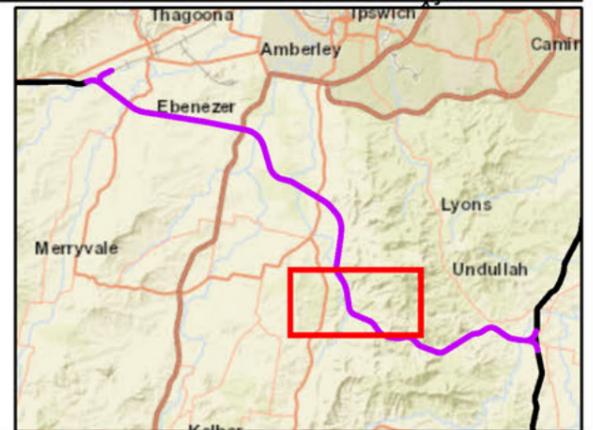
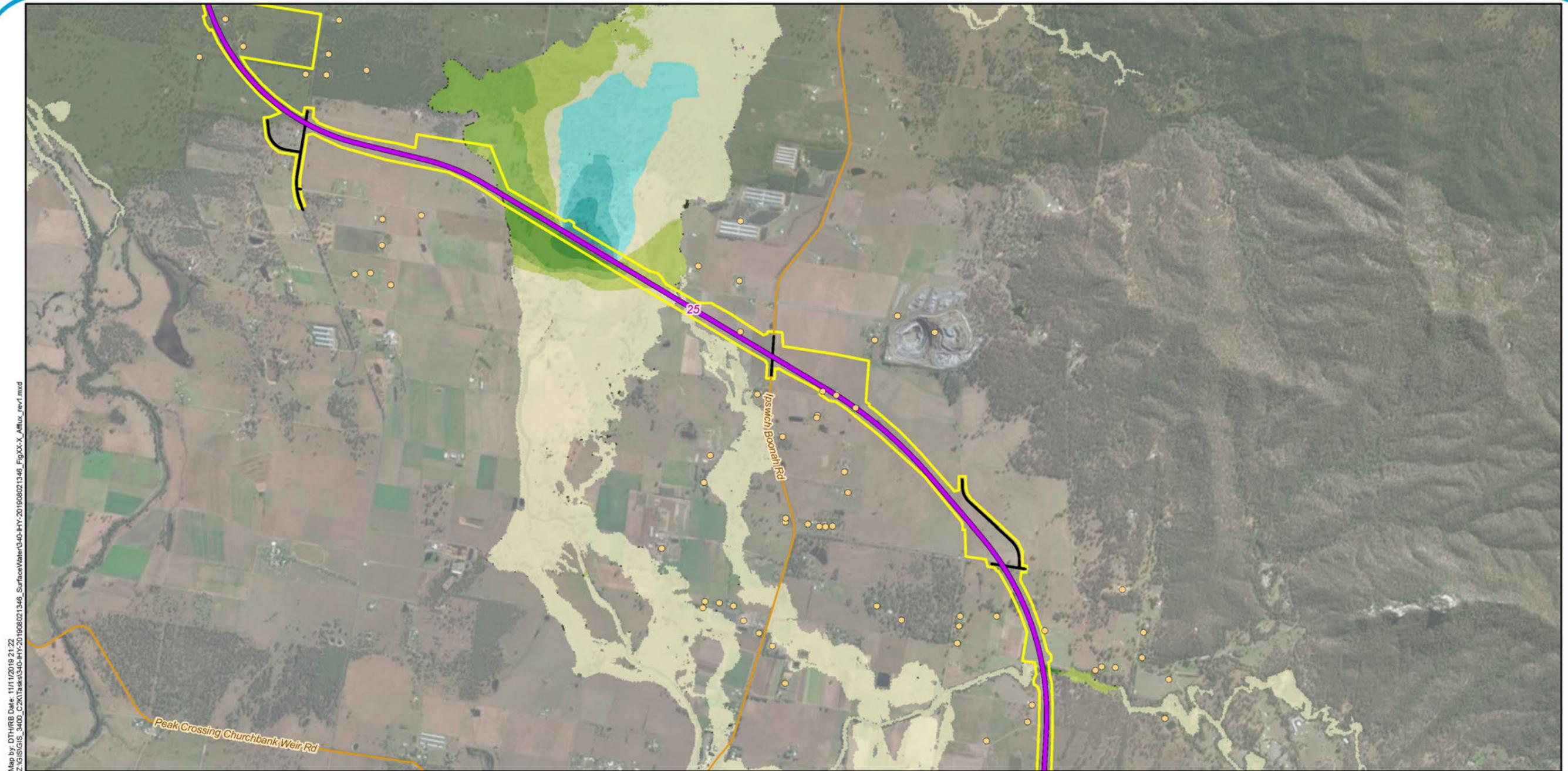


Figure C5-A-2: 5% AEP event Existing Case inundation extent: Purga Creek



Map by DTH/RB Date: 11/11/2019 21:22
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig\X-X_Afflux_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | |
|--|--|
| <math>< -0.5</math> | -0.01 to 0.01 |
| -0.5 to -0.2 | 0.01 to 0.05 |
| -0.2 to -0.1 | 0.05 to 0.1 |
| -0.1 to -0.05 | 0.1 to 0.2 |
| -0.05 to -0.01 | 0.2 to 0.5 |
| | > 0.5 |

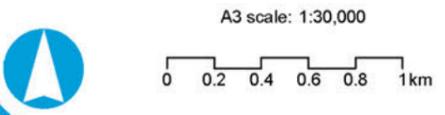
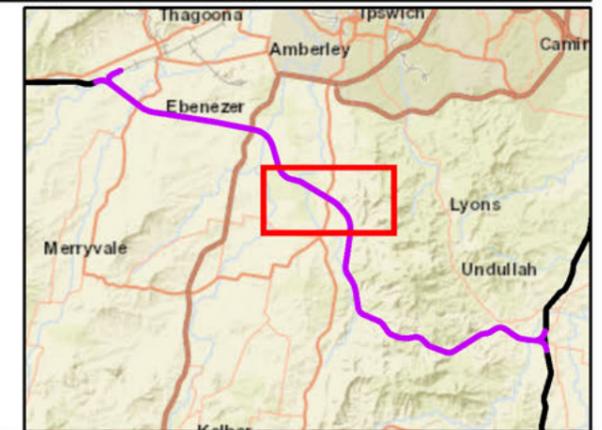
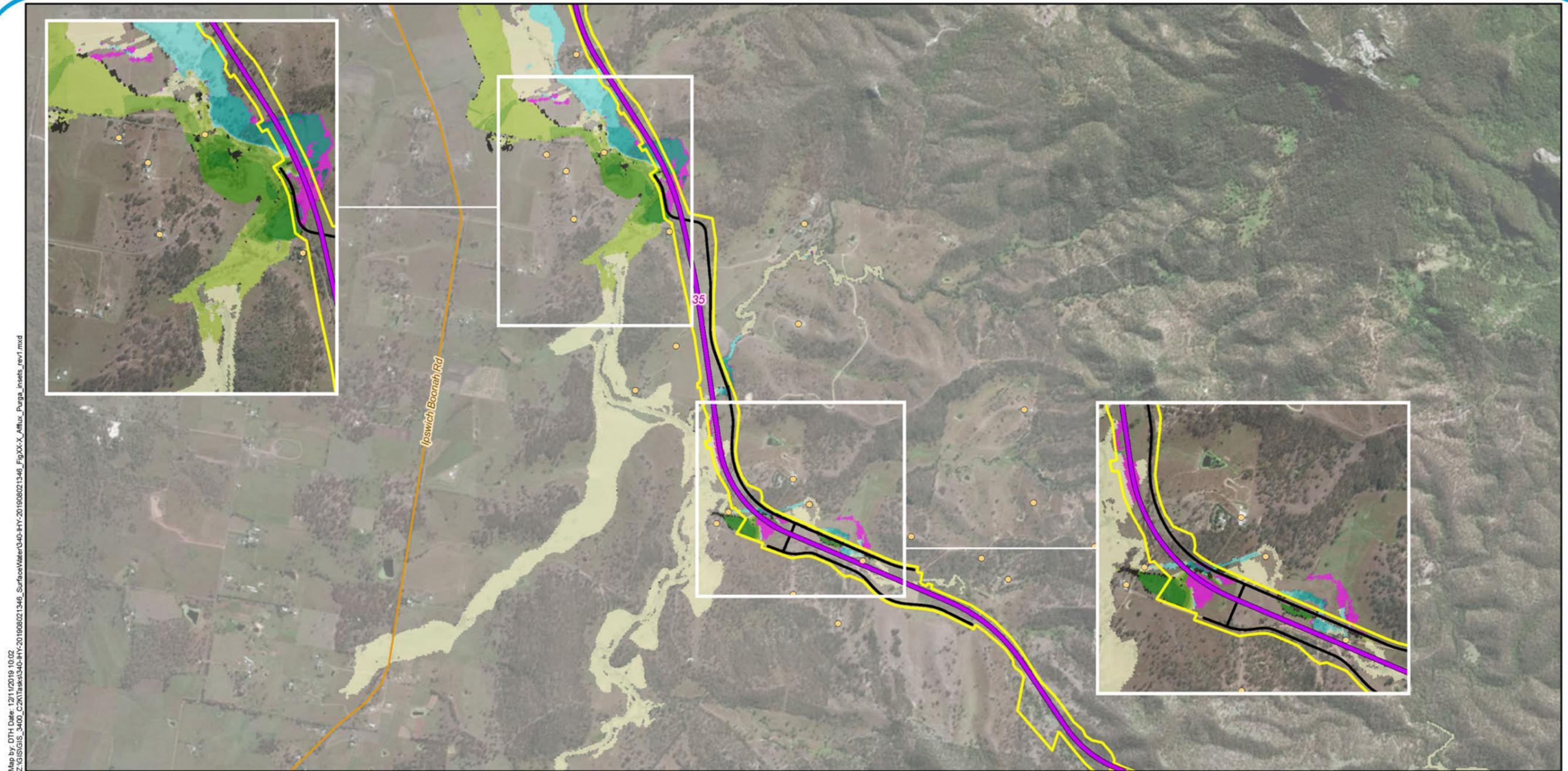


Figure C5-B-1: 5% AEP event Developed Case afflux: Purga Creek



Map by DTH Date: 12/11/2019 10:02
 Z:\GIS\GIS_3400_C2K\Tasks\3400-HY-20190802\346_Fig\X-X_Afflux_Purga_insets_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | |
|---|--|
| <ul style="list-style-type: none"> < -0.5 -0.5 to -0.2 -0.2 to -0.1 -0.1 to -0.05 -0.05 to -0.01 | <ul style="list-style-type: none"> -0.01 to 0.01 0.01 to 0.05 0.05 to 0.1 0.1 to 0.2 0.2 to 0.5 > 0.5 |
|---|--|

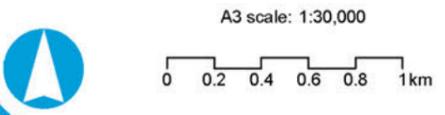
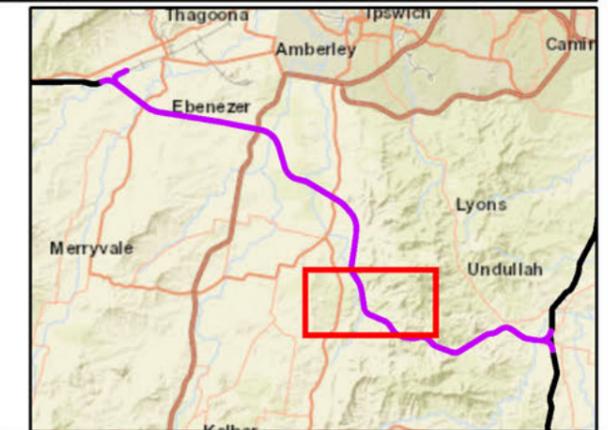
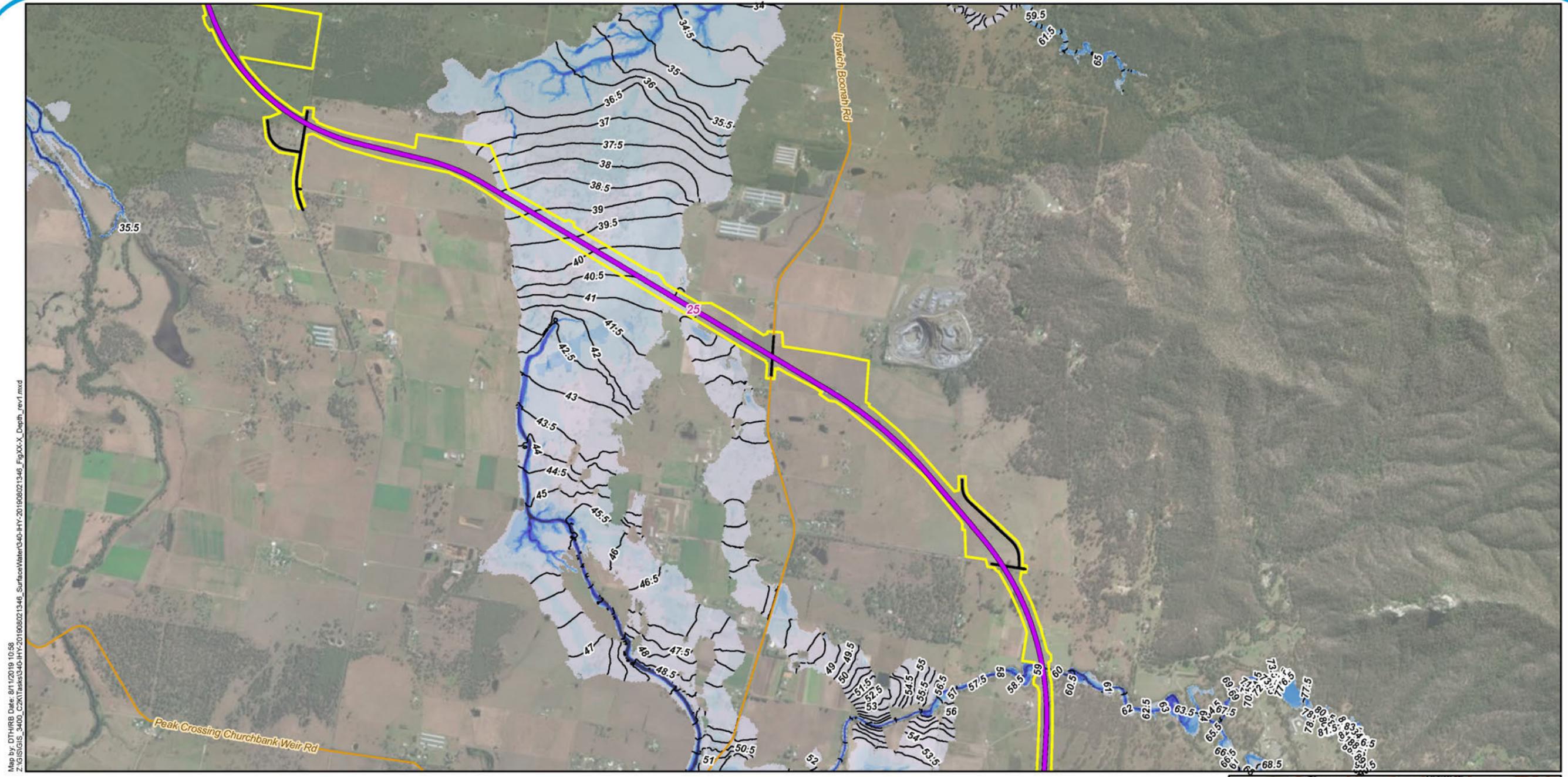


Figure C5-B-2: 5% AEP event Developed Case afflux: Purga Creek



Map by: D:\HRB Date: 8/11/2019 10:58
 Z:\GIS\GIS_3400_C2K\Tasks\3400-HY-20190802\346_Fig\X-X_Depth_rev1.mxd

Legend

- 5 Chainage (km)
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- 0.5m contour mAHd

Depth (m)	
	0 - 0.5
	0.5 - 1.0
	1.0 - 1.5
	1.5 - 2.0
	2.0 - 2.5
	2.5 - 3.0
	3.0 - 3.5
	3.5 - 4.0
	4.0 - 4.5
	4.5 - 5.0
	> 5.0

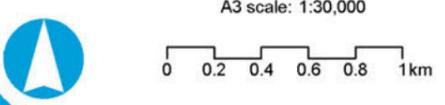
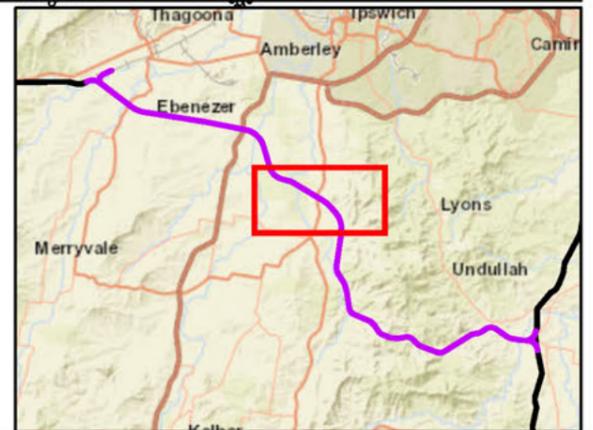
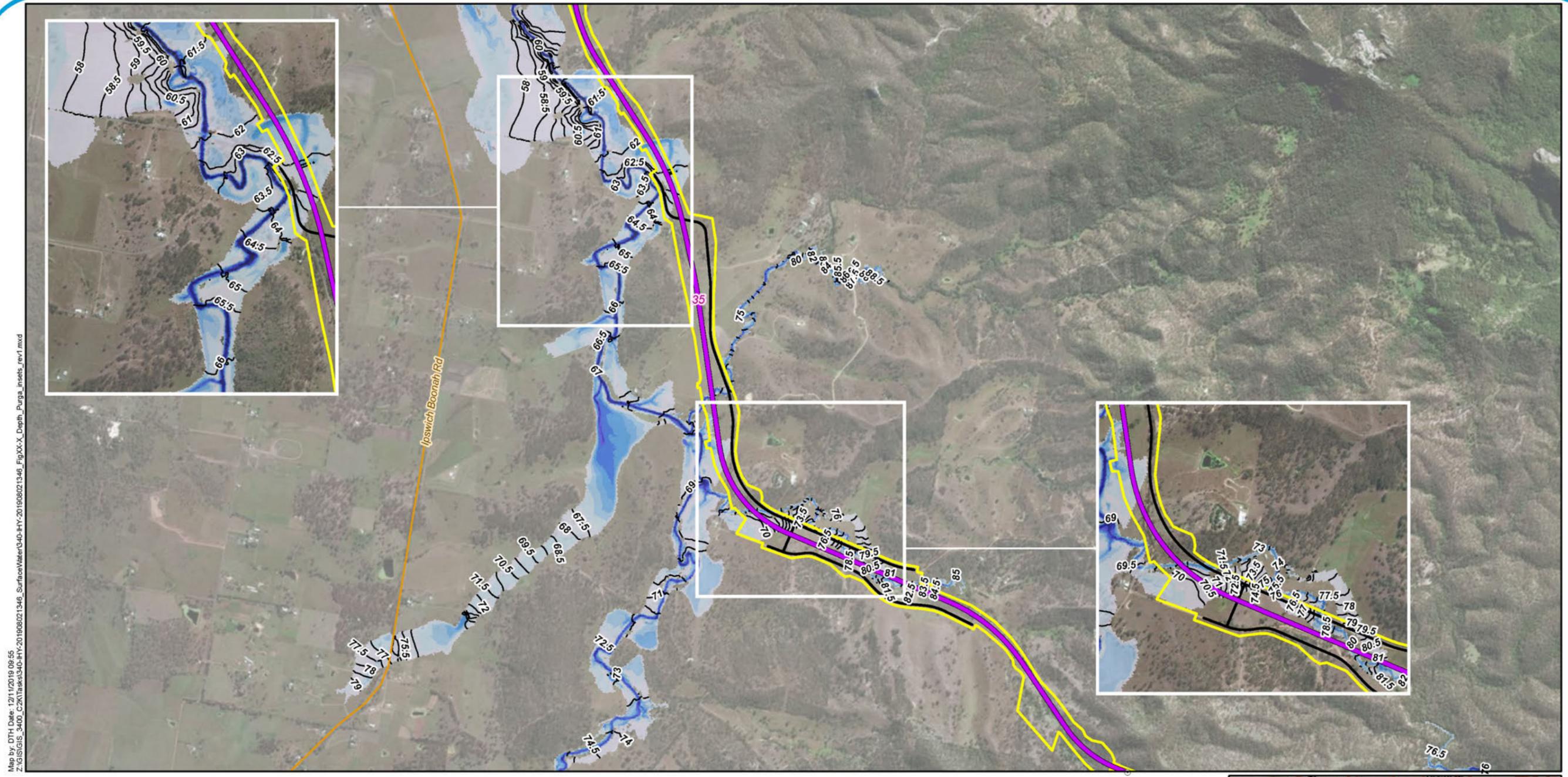


Figure C6-A-1: 2% AEP event Existing Case inundation extent: Purga Creek



Map by: DTH Date: 12/11/2019 08:55
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig\X-X_Depth_Purga_insets_rev1.mxd

Legend

- | | | | |
|--|---|---|---|
| 5 Chainage (km) | EIS disturbance footprint | Depth (m) | 2.5 - 3.0 |
| C2K project alignment | 0.5m contour mAHD | 0 - 0.5 | 3.0 - 3.5 |
| Proposed roadworks | | 0.5 - 1.0 | 3.5 - 4.0 |
| Minor roads | | 1.0 - 1.5 | 4.0 - 4.5 |
| | | 1.5 - 2.0 | 4.5 - 5.0 |
| | | 2.0 - 2.5 | > 5.0 |

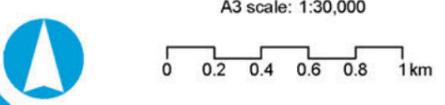
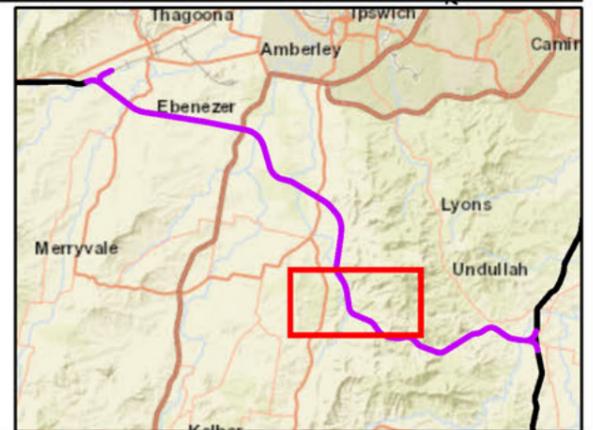
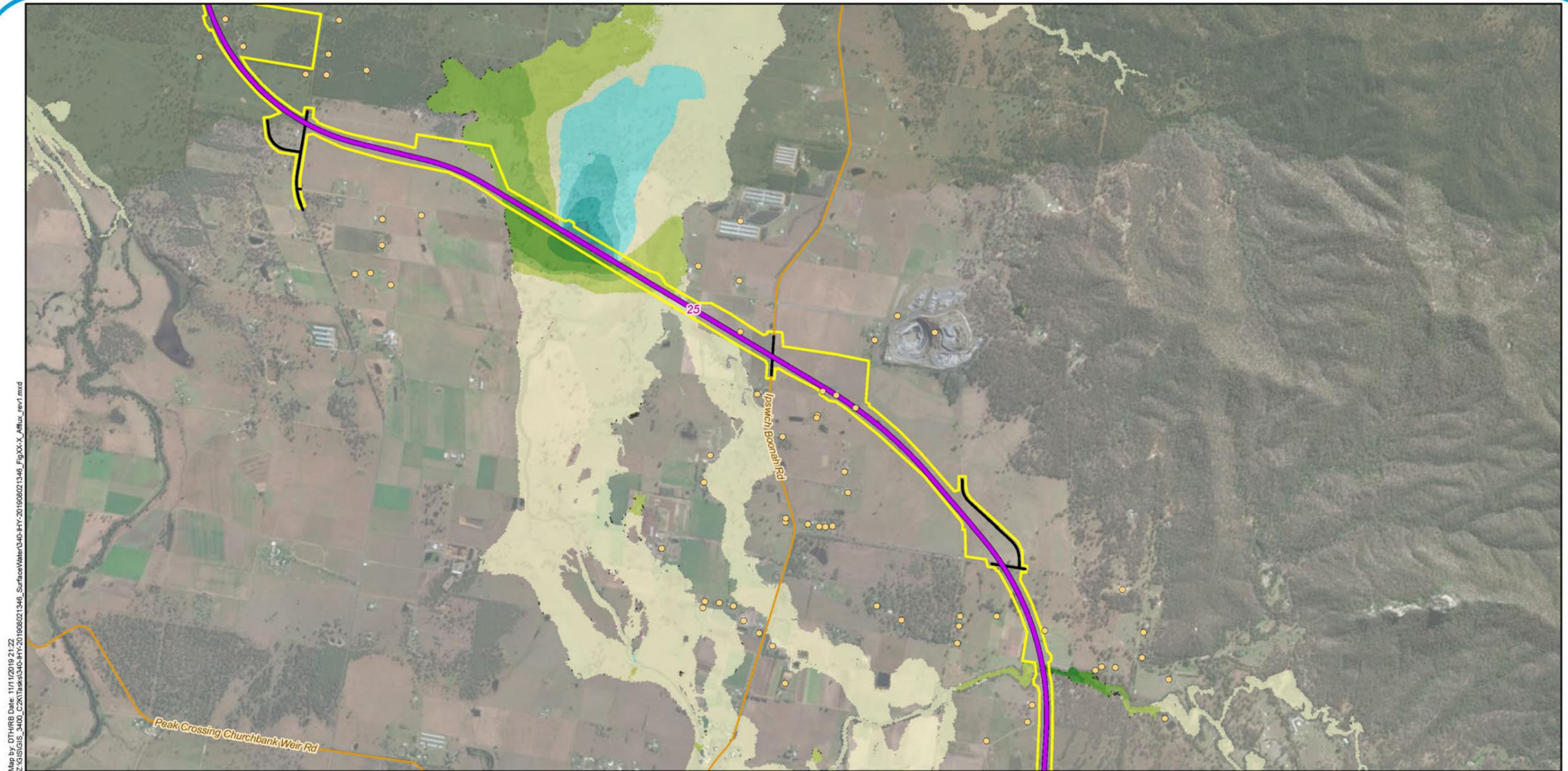


Figure C6-A-2: 2% AEP event Existing Case inundation extent: Purga Creek



Map by DTH/RB Date: 11/11/2019 21:22
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig\X-X_Afflux_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | | | |
|--|----------------|--|---------------|
| | < -0.5 | | -0.01 to 0.01 |
| | -0.5 to -0.2 | | 0.01 to 0.05 |
| | -0.2 to -0.1 | | 0.05 to 0.1 |
| | -0.1 to -0.05 | | 0.1 to 0.2 |
| | -0.05 to -0.01 | | 0.2 to 0.5 |
| | | | > 0.5 |

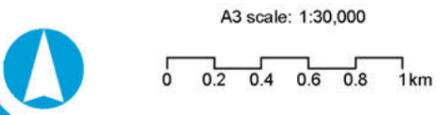
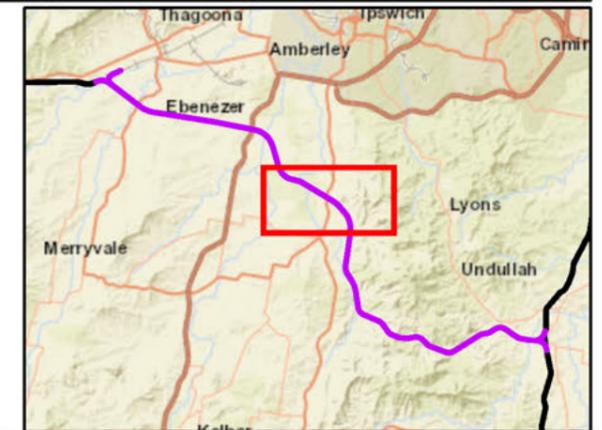
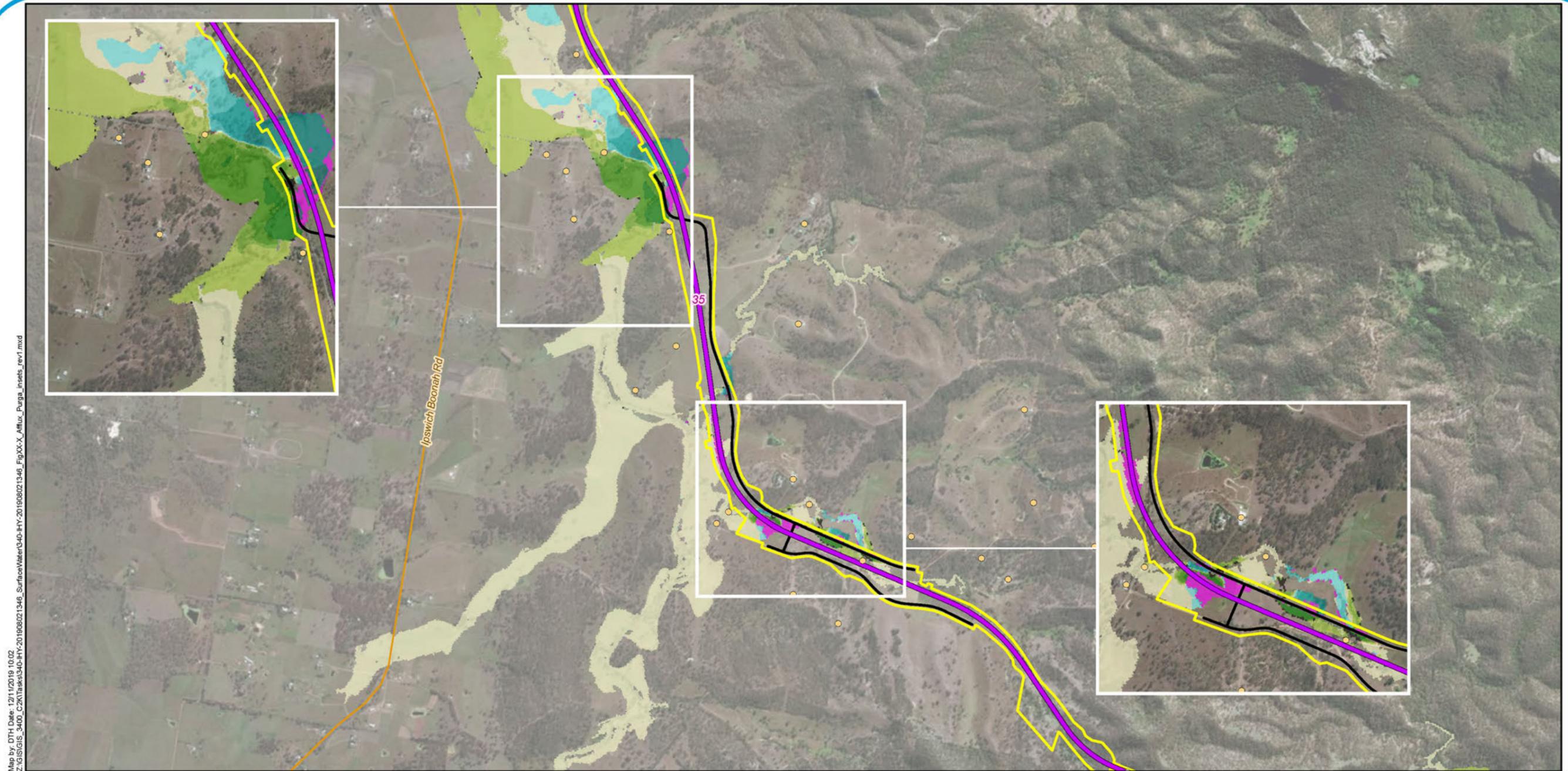


Figure C6-B-1: 2% AEP event Developed Case afflux: Purga Creek



Map by DTH Date: 12/11/2019 10:02
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig\X-X_Afflux_Purga_insets_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | | | |
|--|----------------|--|---------------|
| | < -0.5 | | -0.01 to 0.01 |
| | -0.5 to -0.2 | | 0.01 to 0.05 |
| | -0.2 to -0.1 | | 0.05 to 0.1 |
| | -0.1 to -0.05 | | 0.1 to 0.2 |
| | -0.05 to -0.01 | | 0.2 to 0.5 |
| | | | > 0.5 |

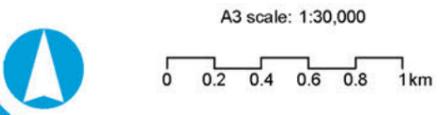
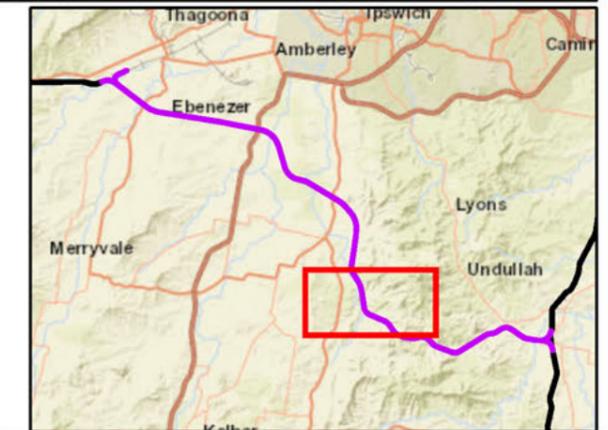
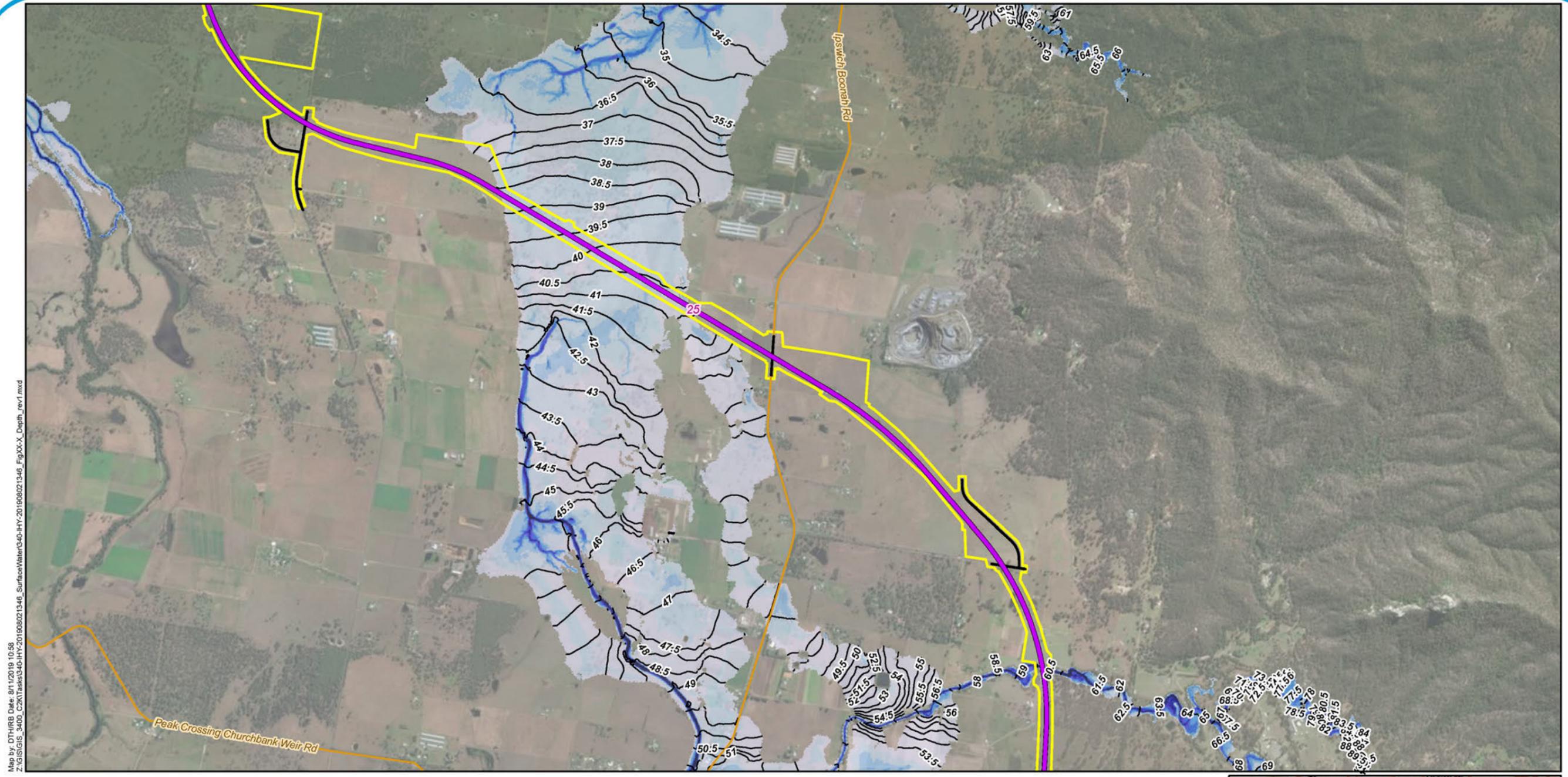


Figure C6-B-2: 2% AEP event Developed Case afflux: Purga Creek



Map by: DTH/RB Date: 8/11/2019 10:58
 Z:\GIS\GIS_3400_C2K\Tasks\3400-HY-20190802\346_SurfaceWater\340-HY-20190802\346_Fig\XX-X_Depth_rev1.mxd

Legend

- 5 Chainage (km)
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- 0.5m contour mAHD

Depth (m)	
	0 - 0.5
	0.5 - 1.0
	1.0 - 1.5
	1.5 - 2.0
	2.0 - 2.5
	2.5 - 3.0
	3.0 - 3.5
	3.5 - 4.0
	4.0 - 4.5
	4.5 - 5.0
	> 5.0

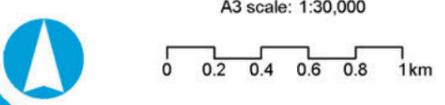
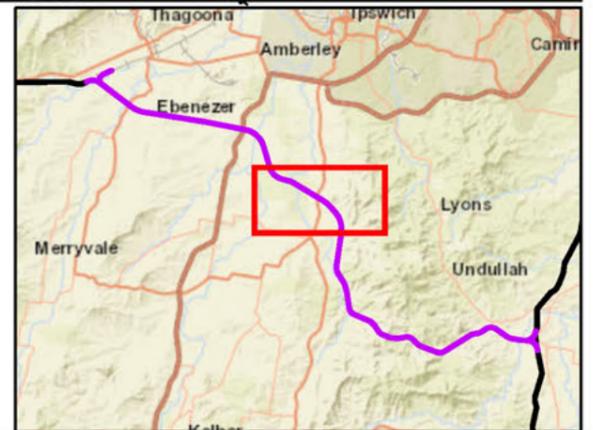
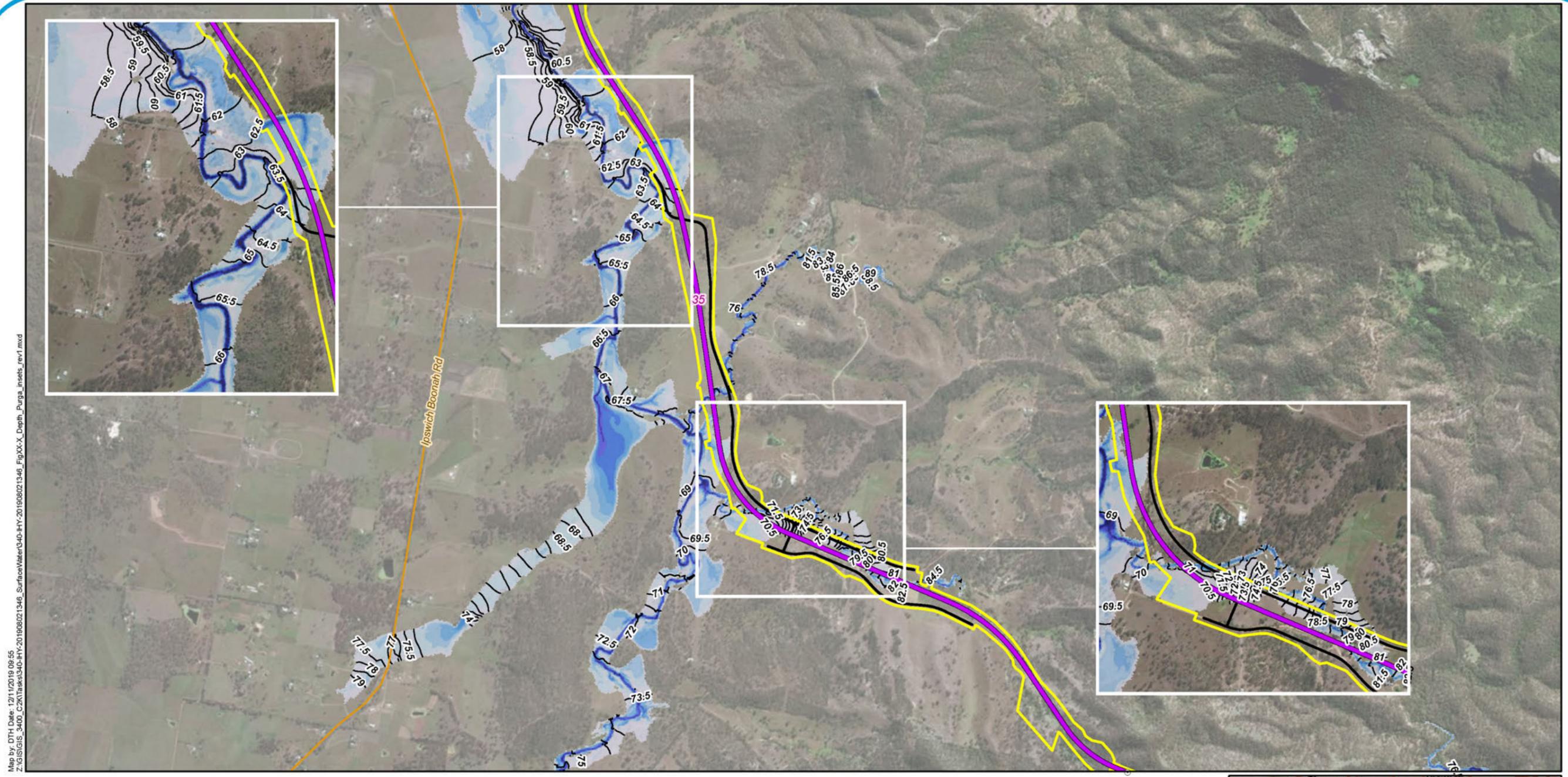


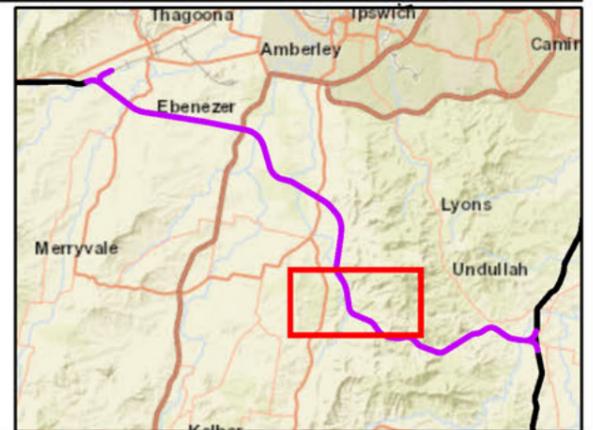
Figure C7-A-1: 1% AEP event Existing Case inundation extent: Purga Creek



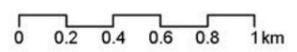
Map by: DTH Date: 12/11/2019 08:55
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Legend

- | | | | |
|--|---|---|---|
| 5 Chainage (km) | EIS disturbance footprint | Depth (m) | 2.5 - 3.0 |
| C2K project alignment | 0.5m contour mAHD | 0 - 0.5 | 3.0 - 3.5 |
| Proposed roadworks | | 0.5 - 1.0 | 3.5 - 4.0 |
| Minor roads | | 1.0 - 1.5 | 4.0 - 4.5 |
| | | 1.5 - 2.0 | 4.5 - 5.0 |
| | | 2.0 - 2.5 | > 5.0 |



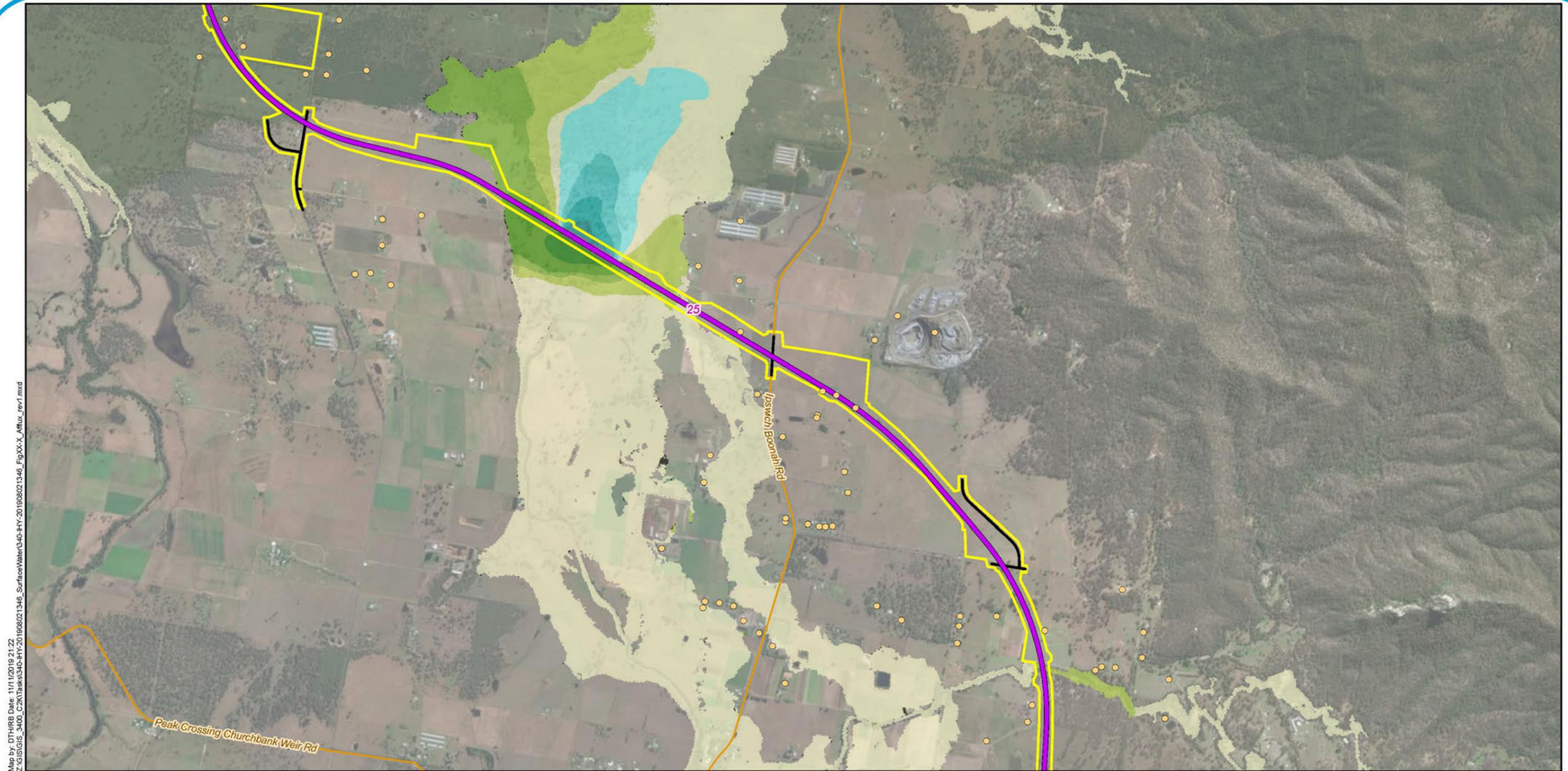
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Issue date: 11/11/2019 Version: 1
 Coordinate System: GDA 1994 MGA Zone 56

Calvert to Kagaru

Figure C7-A-2: 1% AEP event Existing Case inundation extent: Purga Creek



Map by DTH/RB Date: 11/11/2019 21:22
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig\X-X_Afflux_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | |
|---|--|
| <ul style="list-style-type: none"> < -0.5 -0.5 to -0.2 -0.2 to -0.1 -0.1 to -0.05 -0.05 to -0.01 | <ul style="list-style-type: none"> -0.01 to 0.01 0.01 to 0.05 0.05 to 0.1 0.1 to 0.2 0.2 to 0.5 > 0.5 |
|---|--|

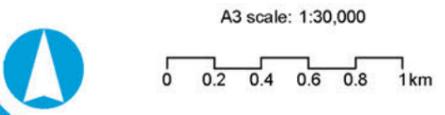
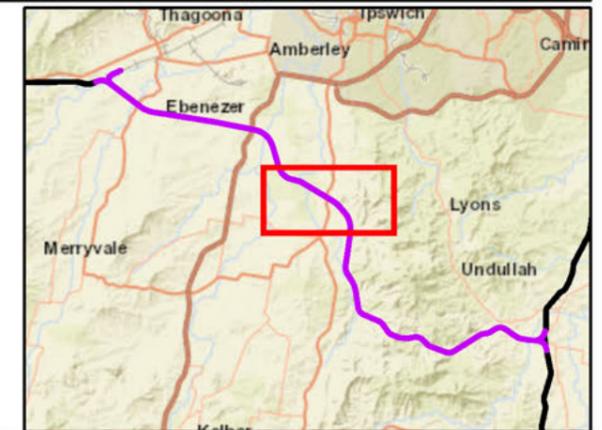
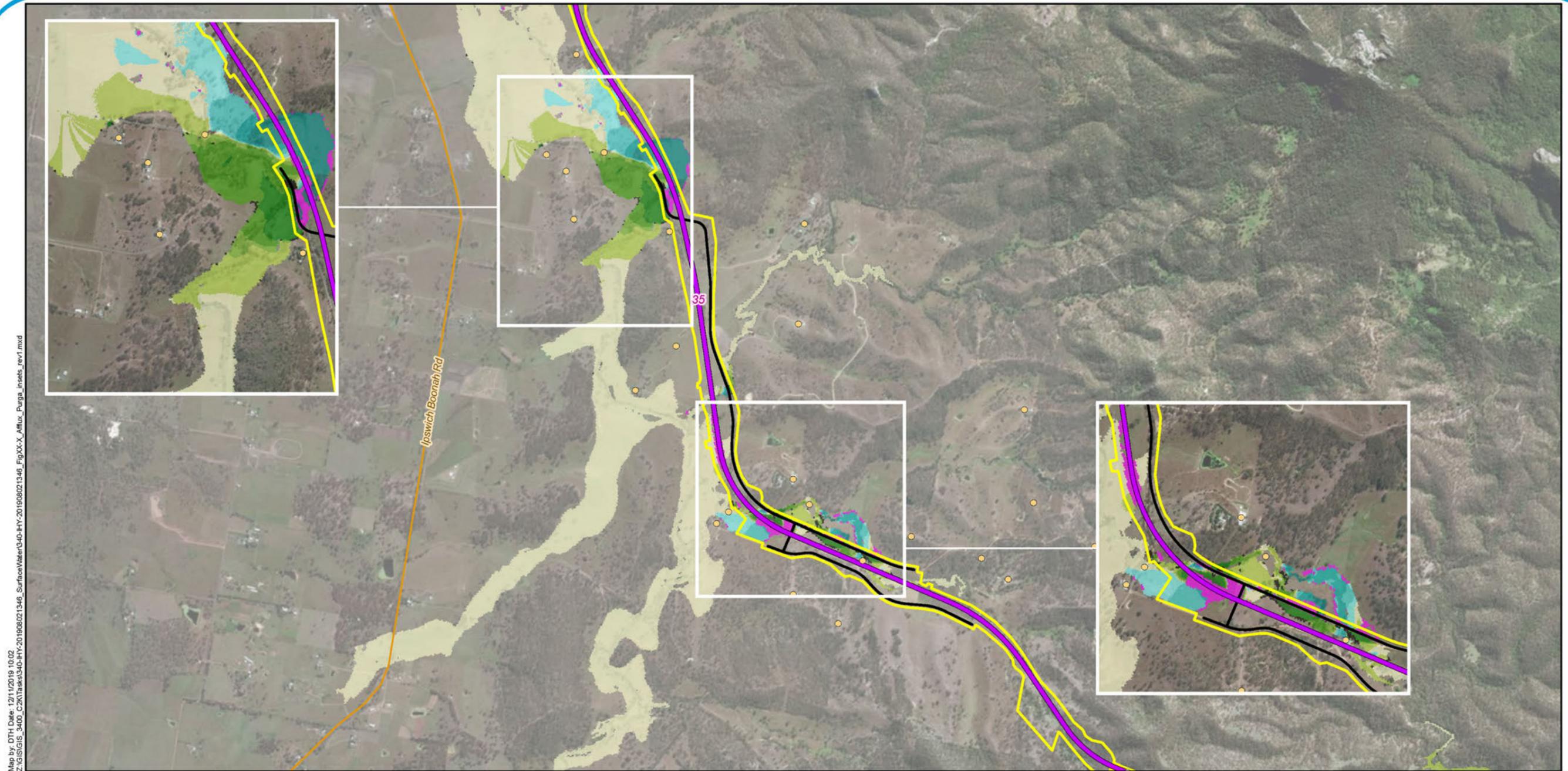


Figure C7-B-1: 1% AEP event Developed Case afflux: Purga Creek



Map by DTH Date: 12/11/2019 10:02
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Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | |
|---|--|
| <ul style="list-style-type: none"> < -0.5 -0.5 to -0.2 -0.2 to -0.1 -0.1 to -0.05 -0.05 to -0.01 | <ul style="list-style-type: none"> -0.01 to 0.01 0.01 to 0.05 0.05 to 0.1 0.1 to 0.2 0.2 to 0.5 > 0.5 |
|---|--|

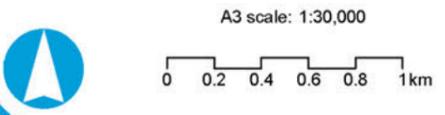
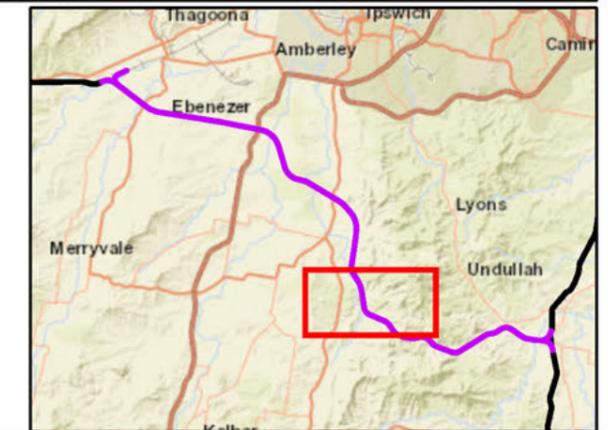
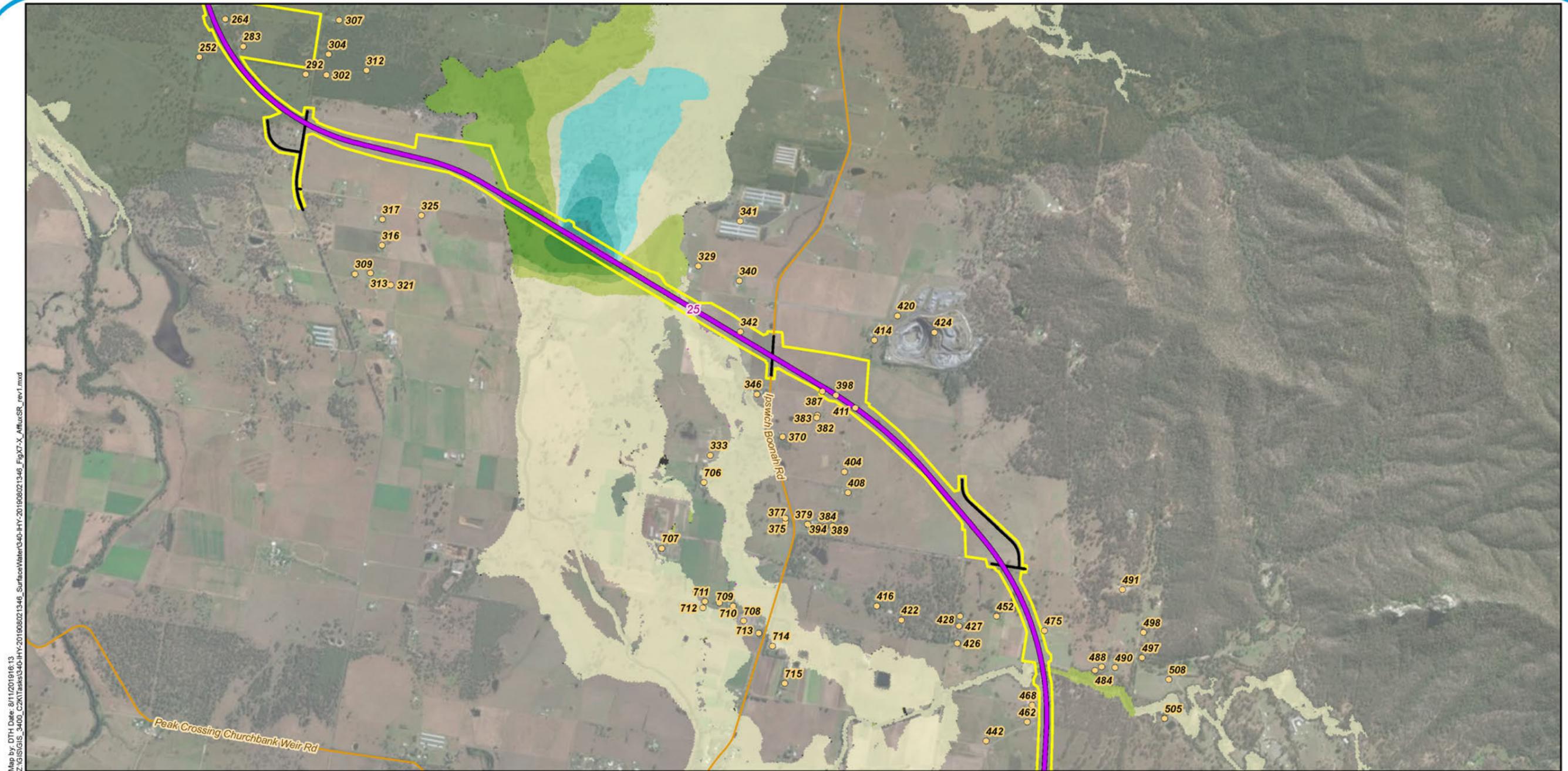


Figure C7-B-2: 1% AEP event Developed Case afflux: Purga Creek



Map by DTH Date: 8/11/2019 16:13
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Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | | | |
|--|----------------|--|---------------|
| | < -0.5 | | -0.01 to 0.01 |
| | -0.5 to -0.2 | | 0.01 to 0.05 |
| | -0.2 to -0.1 | | 0.05 to 0.1 |
| | -0.1 to -0.05 | | 0.1 to 0.2 |
| | -0.05 to -0.01 | | 0.2 to 0.5 |
| | | | > 0.5 |

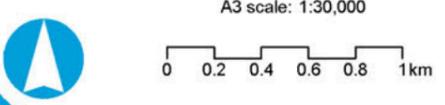
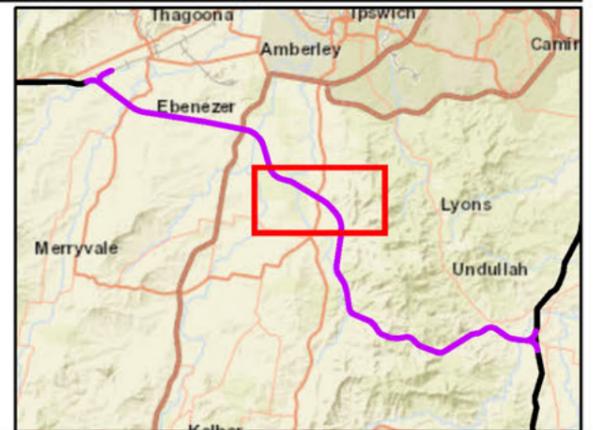
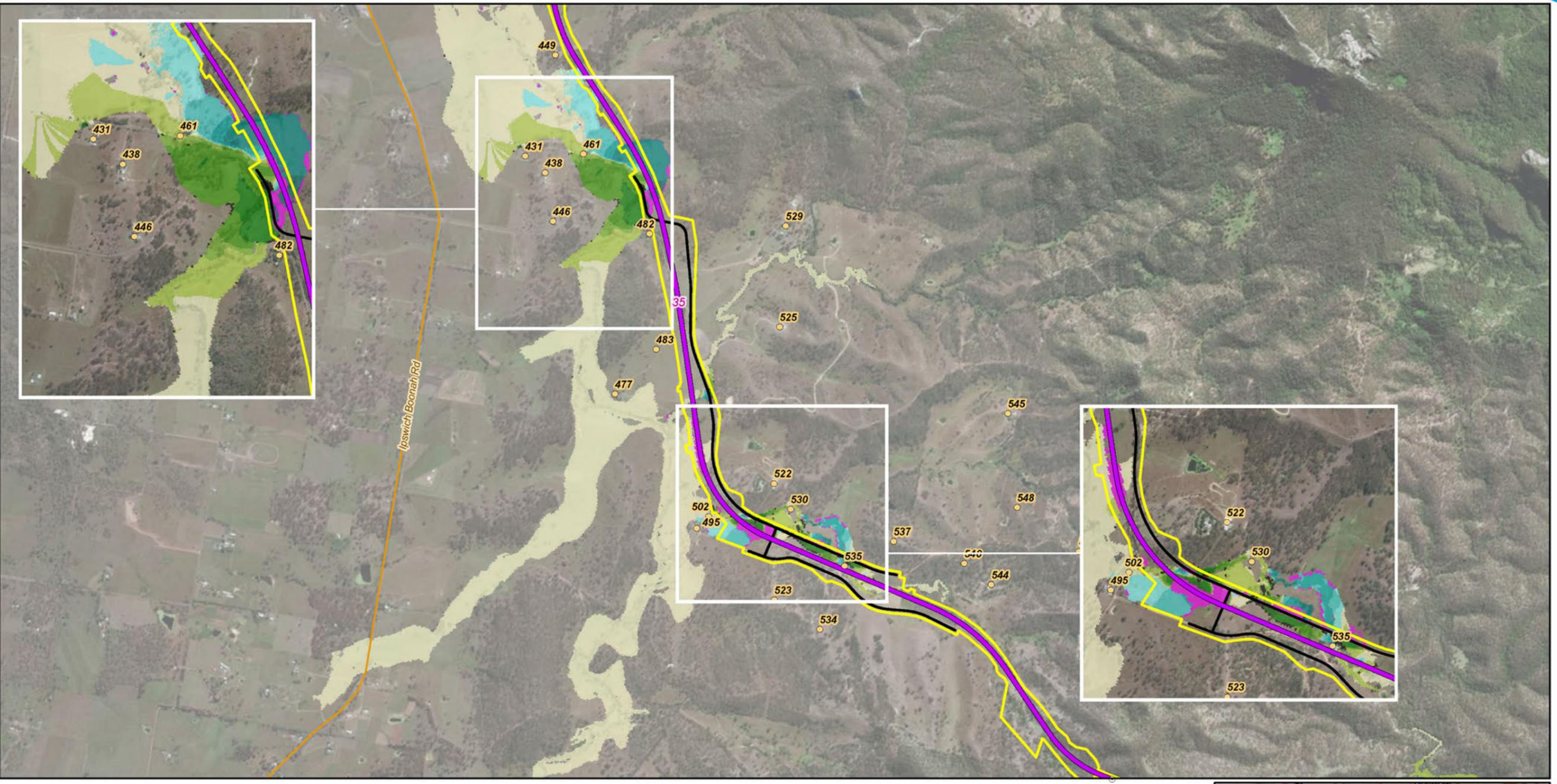


Figure C7-C-1: 1% AEP event Developed Case afflux with flood sensitive receptors: Purga Creek

Map by: DTH Date: 11/11/2019 17:15
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Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | | | |
|--|----------------|--|---------------|
| | < -0.5 | | -0.01 to 0.01 |
| | -0.5 to -0.2 | | 0.01 to 0.05 |
| | -0.2 to -0.1 | | 0.05 to 0.1 |
| | -0.1 to -0.05 | | 0.1 to 0.2 |
| | -0.05 to -0.01 | | 0.2 to 0.5 |
| | | | > 0.5 |

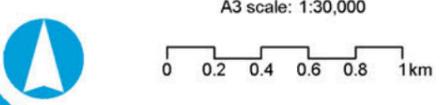
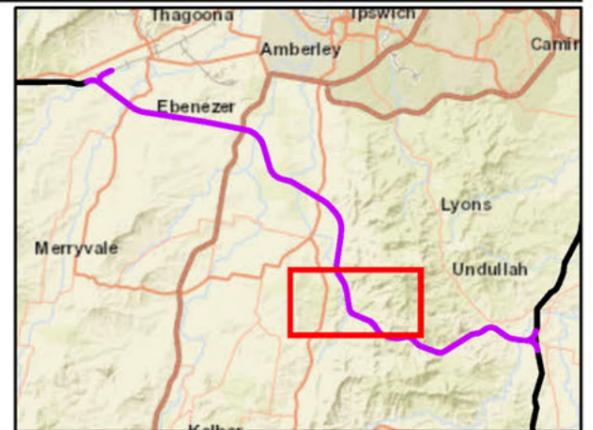
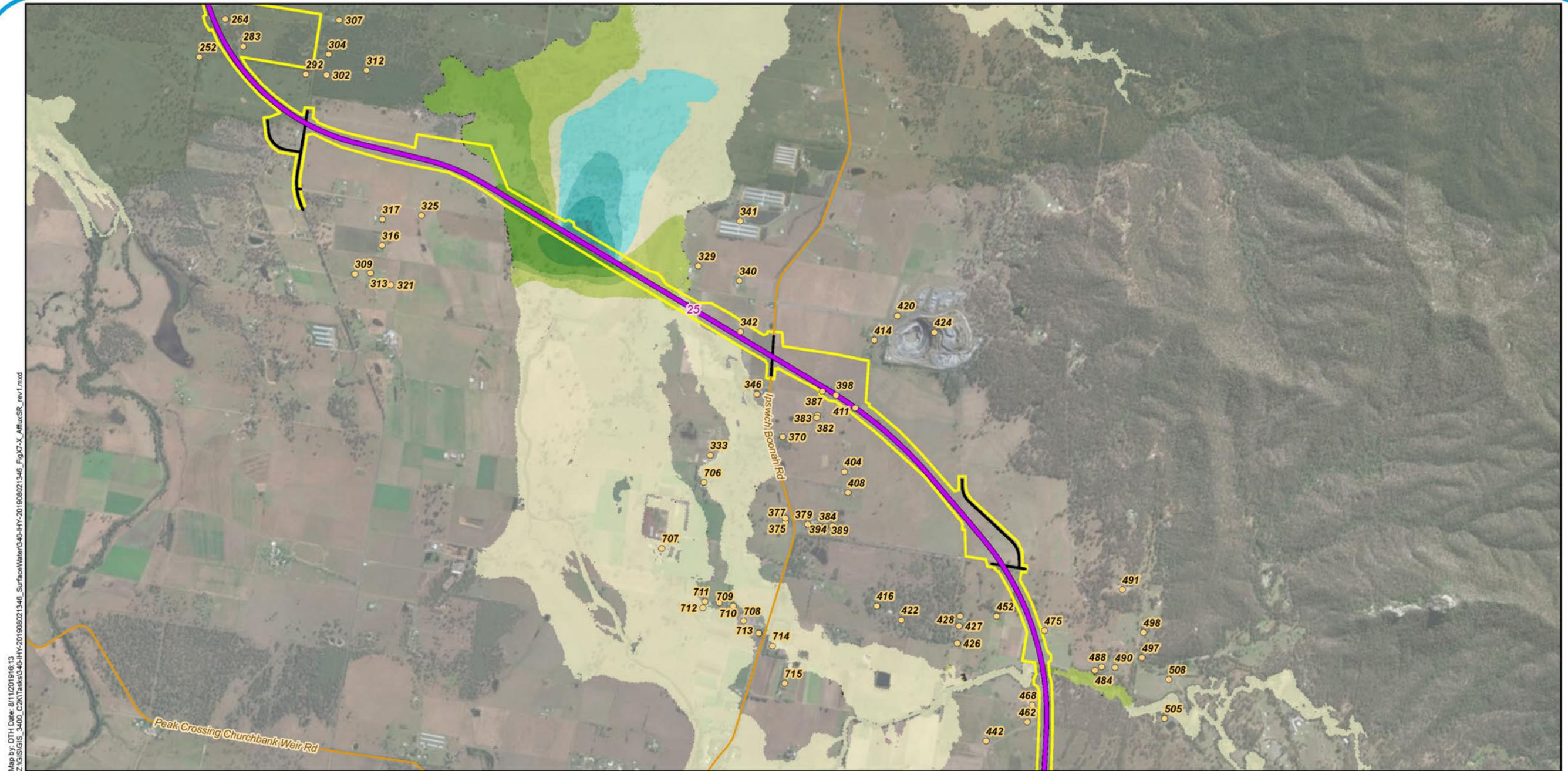


Figure C7-C-2: 1% AEP event Developed Case afflux with flood sensitive receptors: Purga Creek



Map by DTH Date: 8/11/2019 16:13
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_FigX7-X_AffluxSR_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | |
|---|--|
| <ul style="list-style-type: none"> < -0.5 -0.5 to -0.2 -0.2 to -0.1 -0.1 to -0.05 -0.05 to -0.01 | <ul style="list-style-type: none"> -0.01 to 0.01 0.01 to 0.05 0.05 to 0.1 0.1 to 0.2 0.2 to 0.5 > 0.5 |
|---|--|

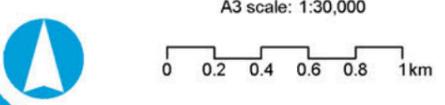
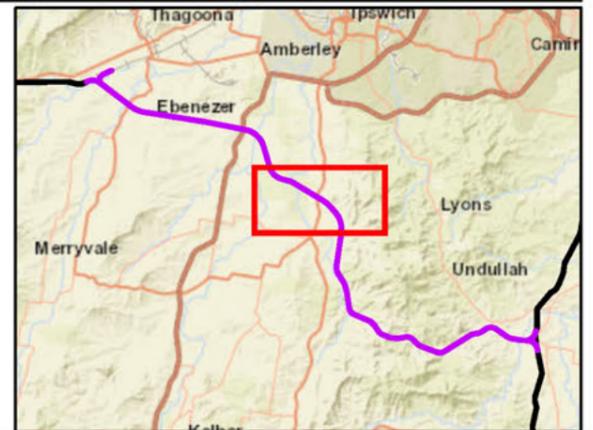
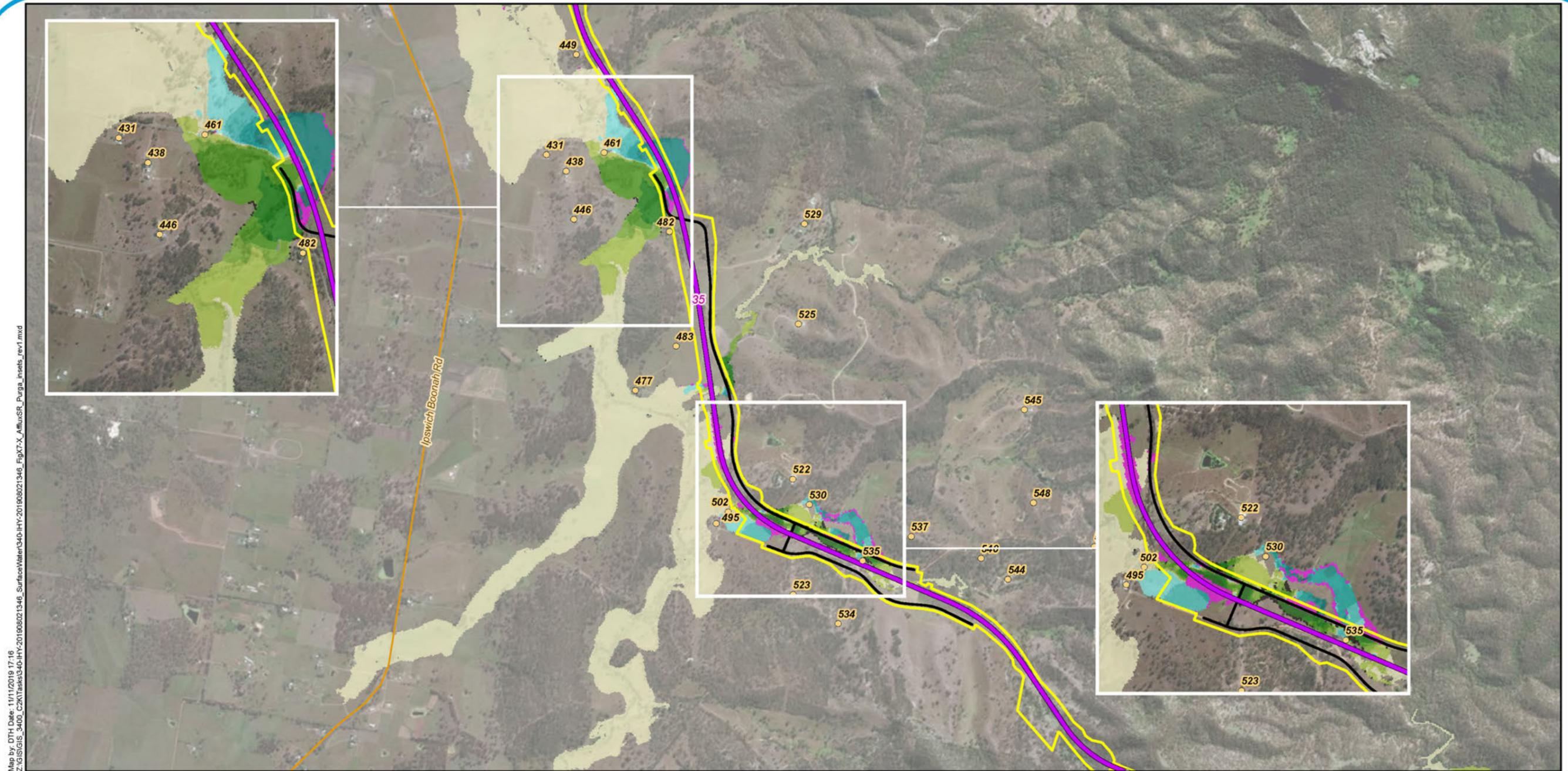


Figure C7-D-1: 1% AEP event with climate change afflux and flood sensitive receptors: Purga Creek



Map by DTH Date: 11/11/2019 17:16
 Z:\GIS\GIS_3400_C2K\Tasks\3400\HY-201908021346_SurfaceWater\3400\HY-201908021346_FigC7-D-2_AffluxSR_Purga_insets_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | | | |
|--|----------------|--|---------------|
| | < -0.5 | | -0.01 to 0.01 |
| | -0.5 to -0.2 | | 0.01 to 0.05 |
| | -0.2 to -0.1 | | 0.05 to 0.1 |
| | -0.1 to -0.05 | | 0.1 to 0.2 |
| | -0.05 to -0.01 | | 0.2 to 0.5 |
| | | | > 0.5 |

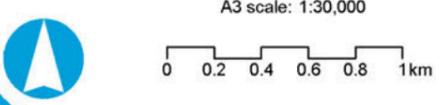
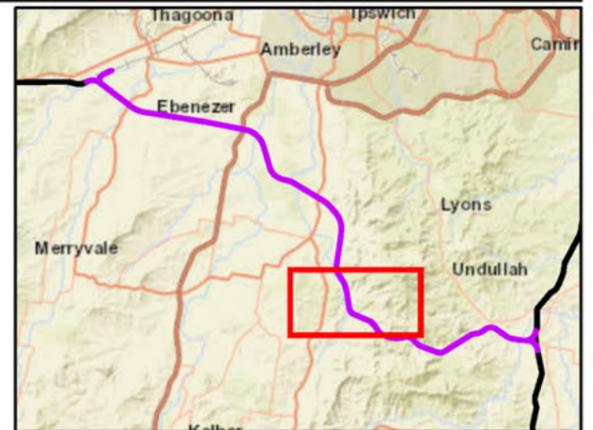
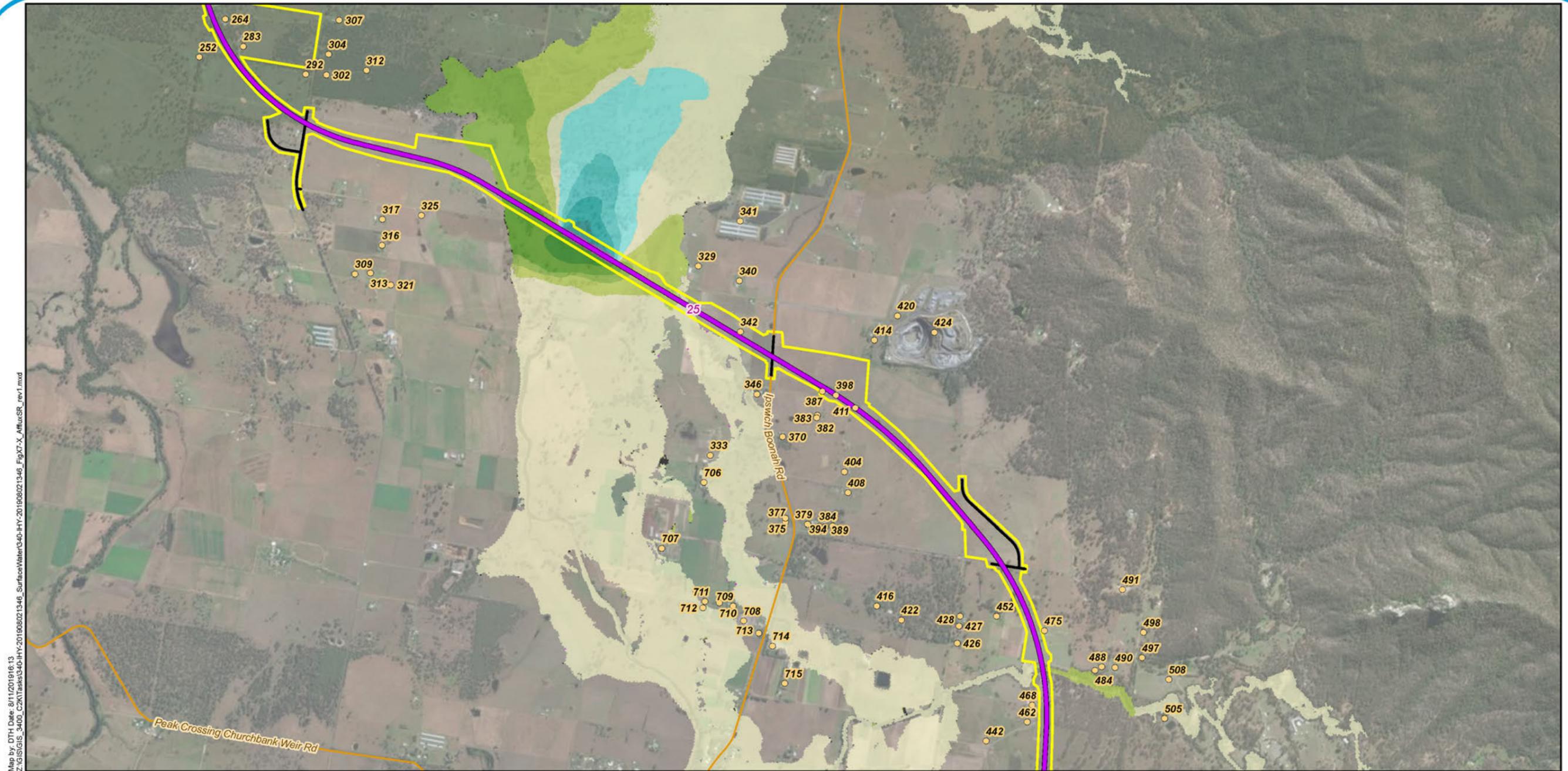


Figure C7-D-2: 1% AEP event with climate change afflux and flood sensitive receptors: Purga Creek



Map by DTH Date: 8/11/2019 16:13
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig7-X_AffluxSR_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | |
|---|--|
| < -0.5 | -0.01 to 0.01 |
| -0.5 to -0.2 | 0.01 to 0.05 |
| -0.2 to -0.1 | 0.05 to 0.1 |
| -0.1 to -0.05 | 0.1 to 0.2 |
| -0.05 to -0.01 | 0.2 to 0.5 |
| | > 0.5 |

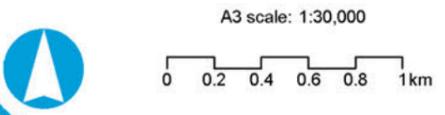
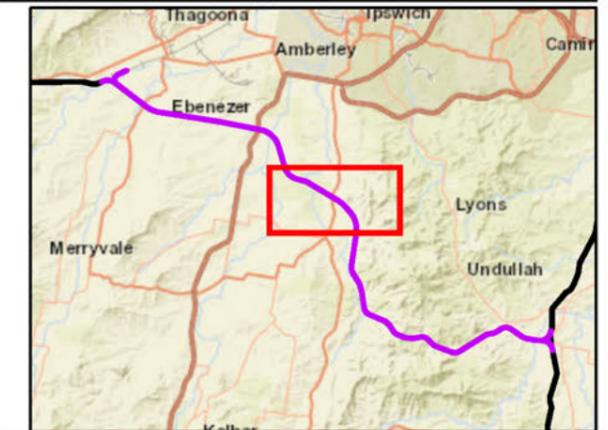
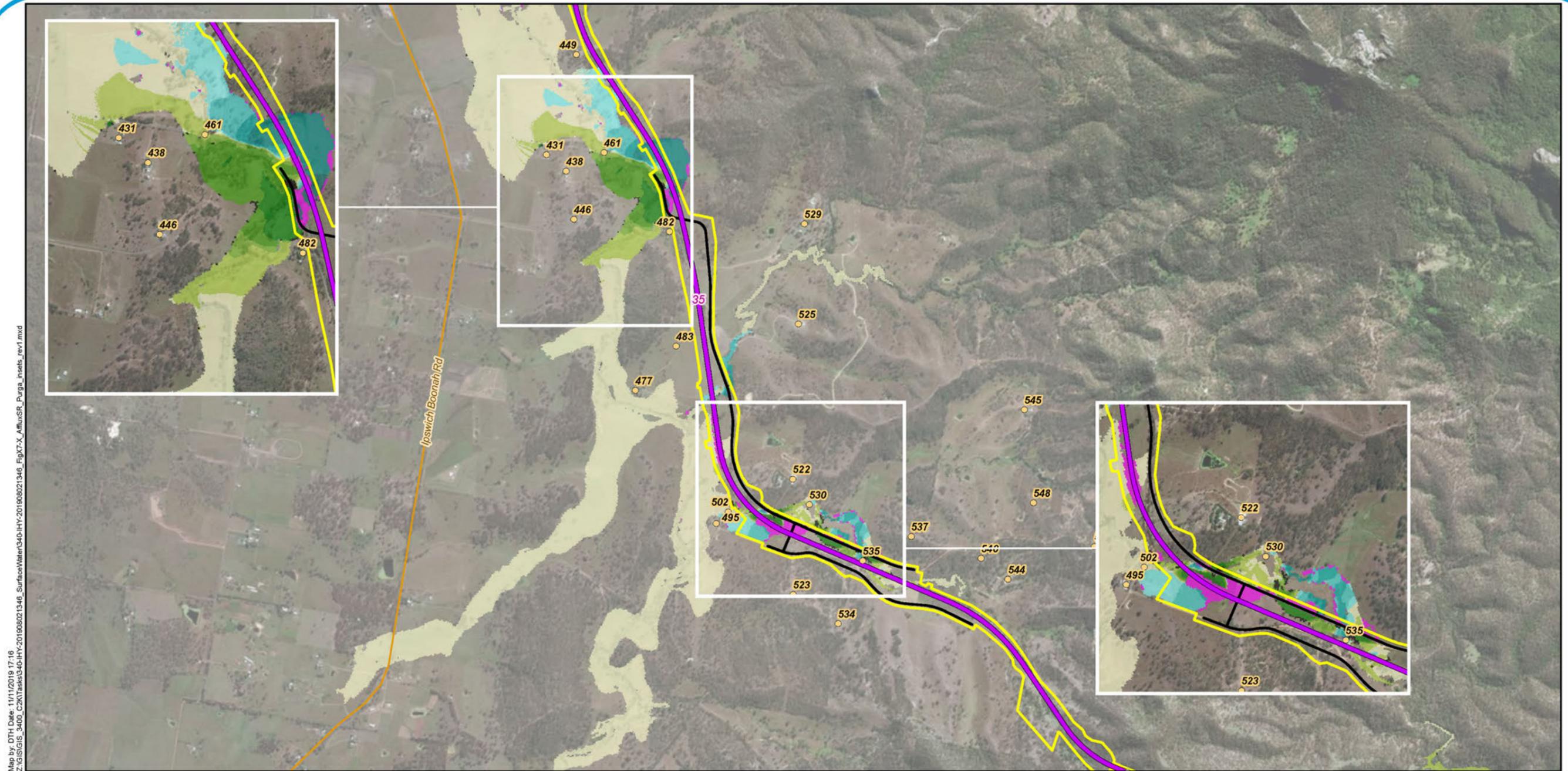


Figure C7-E-1: 1% AEP event with 0% blockage afflux and flood sensitive receptors: Purga Creek



Map by DTH Date: 11/11/2019 17:16
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Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | | | |
|--|----------------|--|---------------|
| | < -0.5 | | -0.01 to 0.01 |
| | -0.5 to -0.2 | | 0.01 to 0.05 |
| | -0.2 to -0.1 | | 0.05 to 0.1 |
| | -0.1 to -0.05 | | 0.1 to 0.2 |
| | -0.05 to -0.01 | | 0.2 to 0.5 |
| | | | > 0.5 |

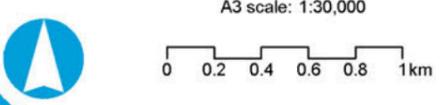
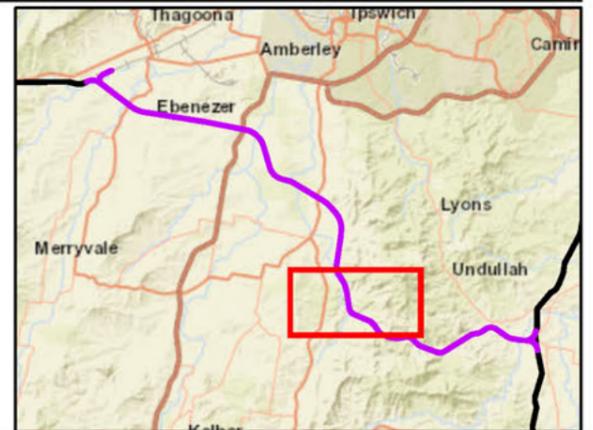
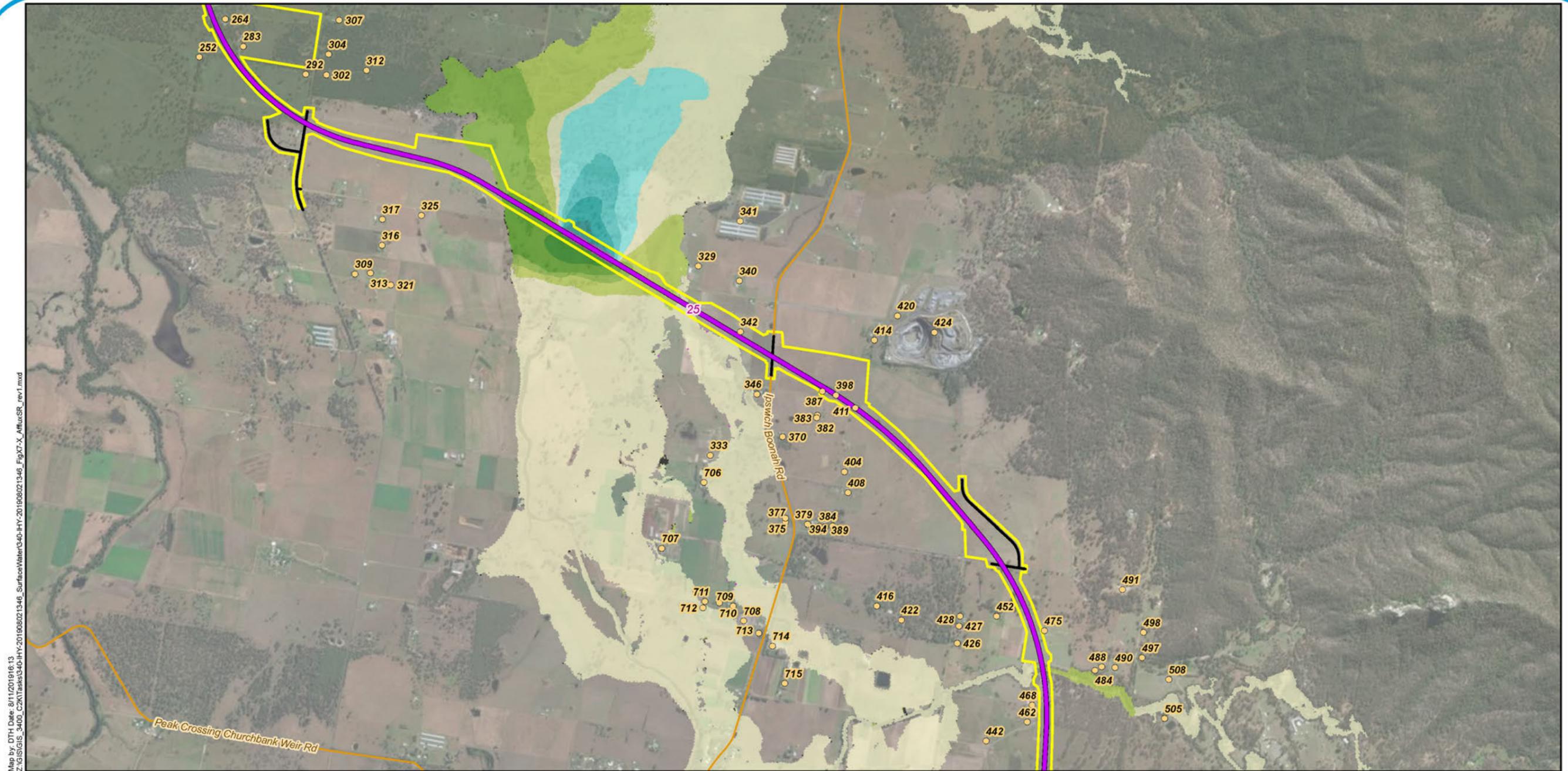


Figure C7-E-2: 1% AEP event with 0% blockage afflux and flood sensitive receptors: Purga Creek



Map by DTH Date: 8/11/2019 16:13
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_FigX7-X_AffluxSR_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

	< -0.5		-0.01 to 0.01
	-0.5 to -0.2		0.01 to 0.05
	-0.2 to -0.1		0.05 to 0.1
	-0.1 to -0.05		0.1 to 0.2
	-0.05 to -0.01		0.2 to 0.5
			> 0.5

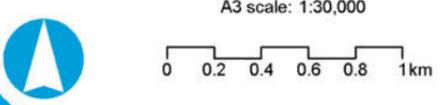
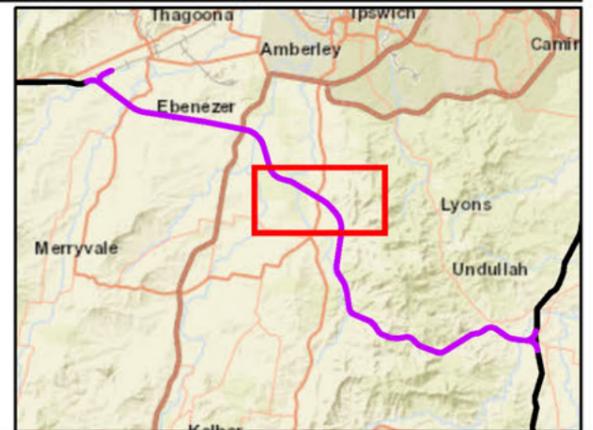
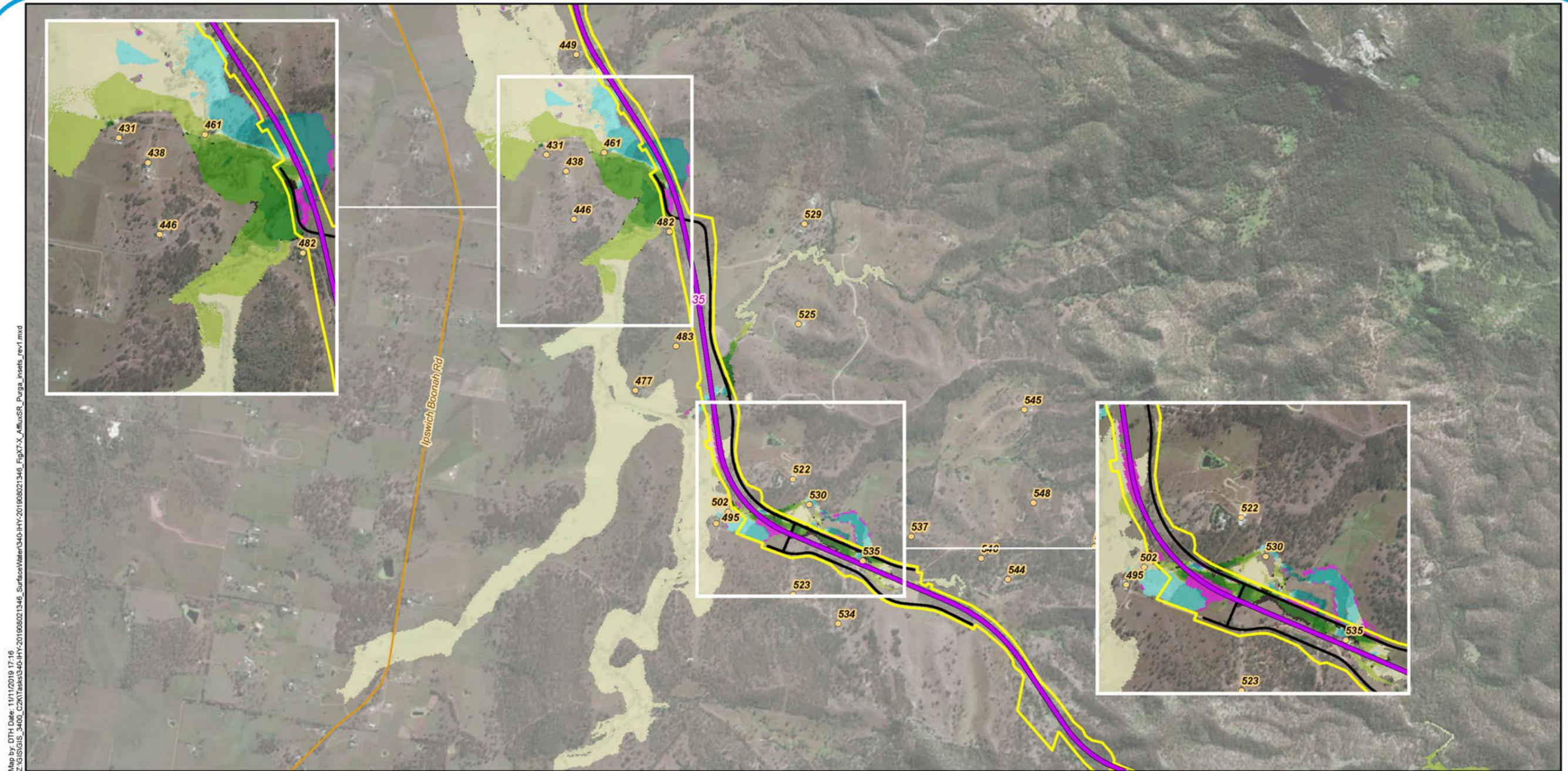


Figure C7-F-1: 1% AEP event with 50% blockage afflux and flood sensitive receptors: Purga Creek



Map by: DTH Date: 11/11/2019 17:16
 Z:\GIS\GIS_3400_C2K\Tasks\3400\HY-201908021346_SurfaceWater\3400\HY-201908021346_FigC7-F-2_AffluxSR_Purga_insets_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

	< -0.5		-0.01 to 0.01
	-0.5 to -0.2		0.01 to 0.05
	-0.2 to -0.1		0.05 to 0.1
	-0.1 to -0.05		0.1 to 0.2
	-0.05 to -0.01		0.2 to 0.5
			> 0.5

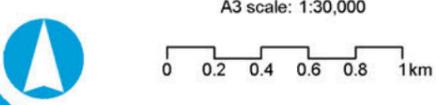
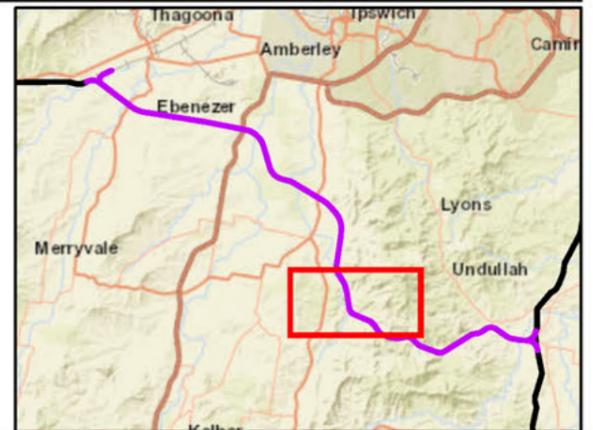
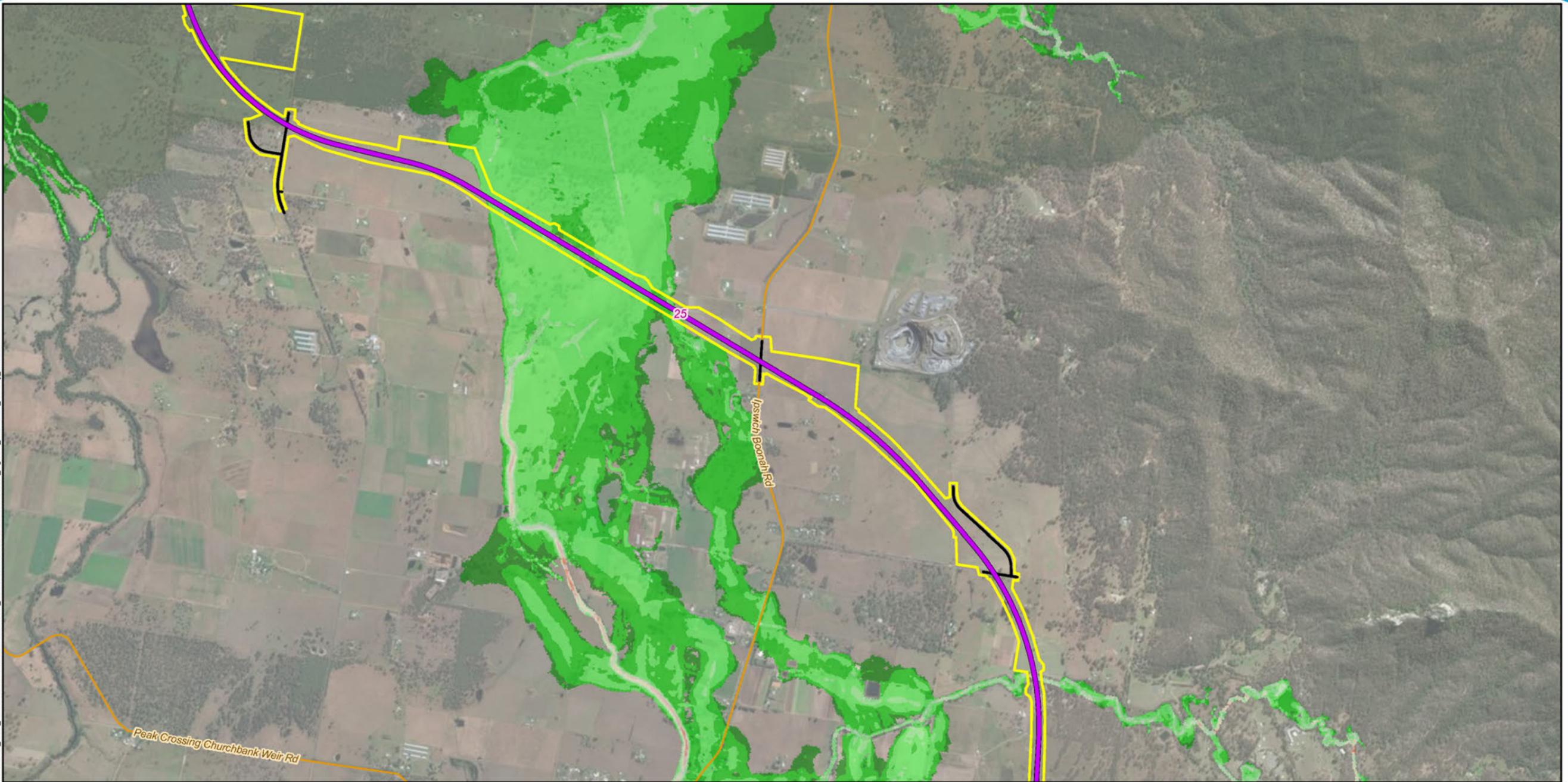


Figure C7-F-2: 1% AEP event with 50% blockage afflux and flood sensitive receptors: Purga Creek

Map by DTH/RB Date: 18/11/2019 16:22
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig\X-X_00100AEP_Velocity_rev1.mxd



Legend

- 5 Chainage (km)
- C2K project alignment
- Minor roads
- Proposed roadworks
- EIS disturbance footprint

Peak velocity (m/s)

	0.0		2.5
	0.5		3.0
	1.0		3.5
	1.5		4.0
	2.0		4.5
			5.0

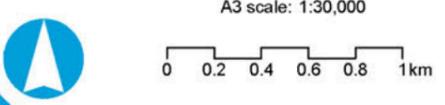
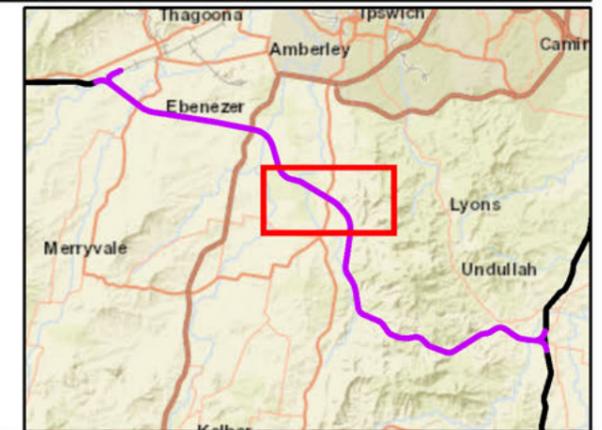
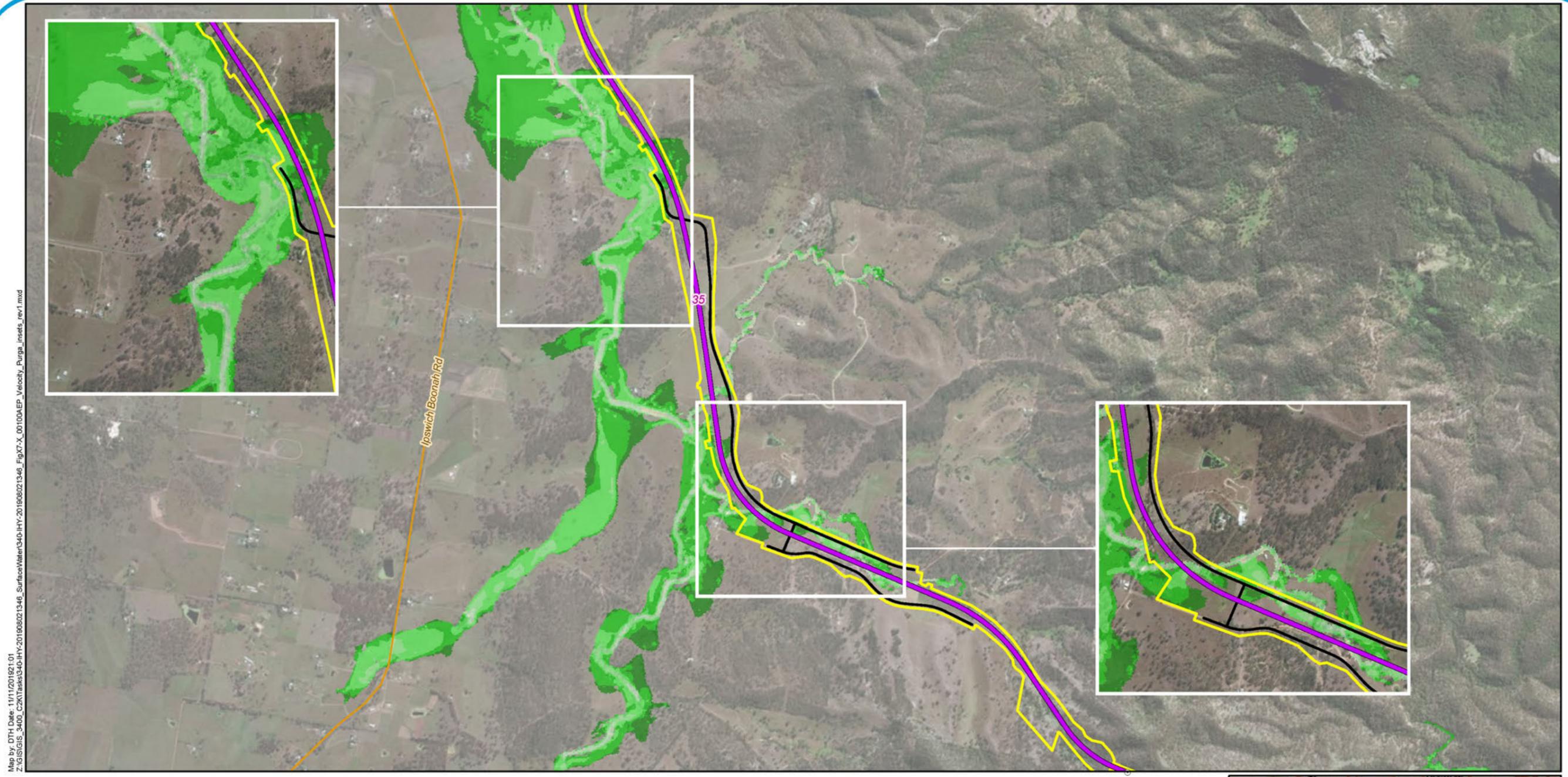


Figure C7-G-1: 1% AEP event Developed Case velocity: Purga Creek



Map by DTH Date: 11/11/2019 12:01:01
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig7-X_00100AEP_Velocity_Purga_insets_rev1.mxd

Legend

- 5 Chainage (km)
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint

Peak velocity (m/s)	
■	0.0
■	0.5
■	1.0
■	1.5
■	2.0
■	2.5
■	3.0
■	3.5
■	4.0
■	4.5
■	5.0

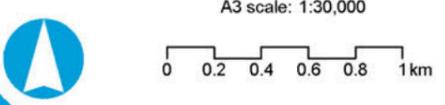
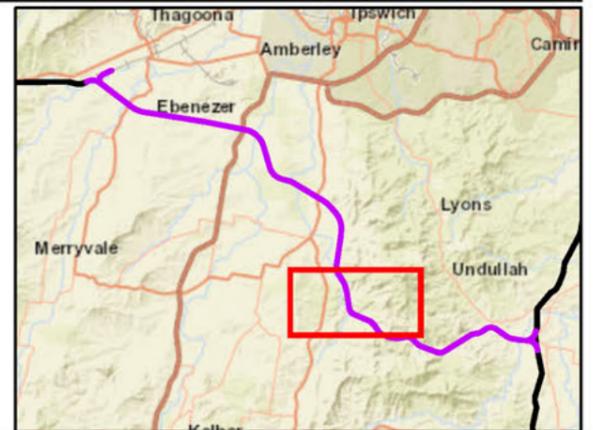
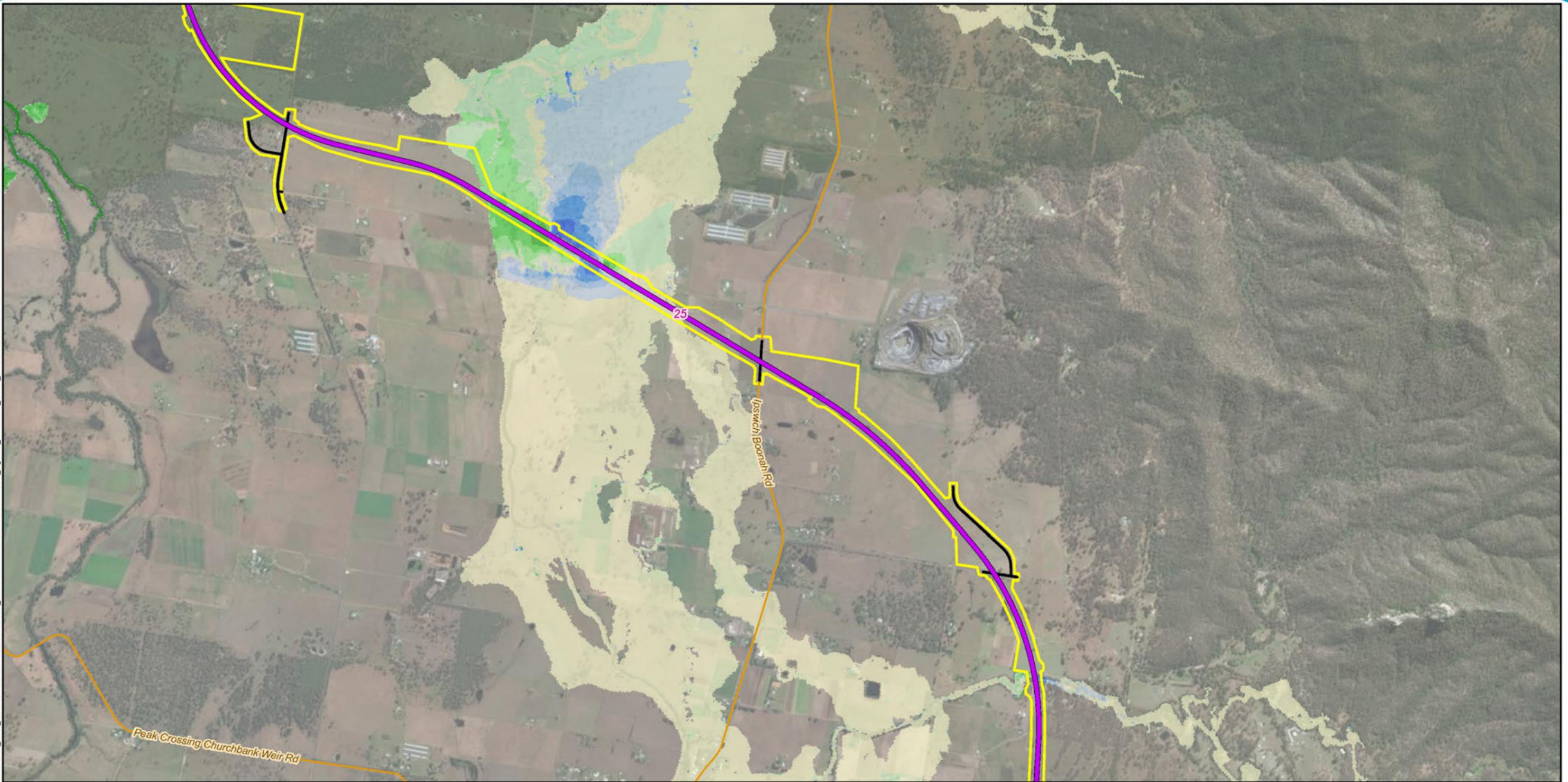


Figure C7-G-2: 1% AEP event Developed Case velocity: Purga Creek

Map by DTH Date: 8/11/2019 16:20
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig\X-X_00100AEP_deltaV_rev1.mxd



Legend

- | | | |
|---|--|---|
| 5 Chainage (km) | Change in peak velocity (m/s) | -0.01 to 0.01 |
| — C2K project alignment | < -0.50 | 0.01 to 0.05 |
| — Proposed roadworks | -0.50 to -0.20 | 0.05 to 0.10 |
| — Minor roads | -0.20 to -0.10 | 0.10 to 0.20 |
| — EIS disturbance footprint | -0.10 to -0.05 | 0.20 to 0.50 |
| | -0.05 to -0.01 | > 0.50 |

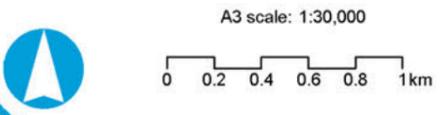
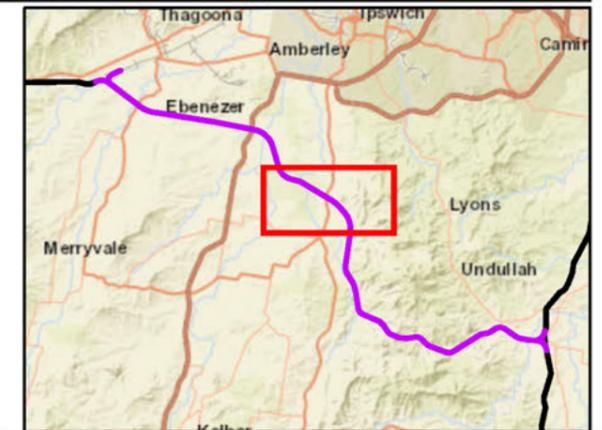
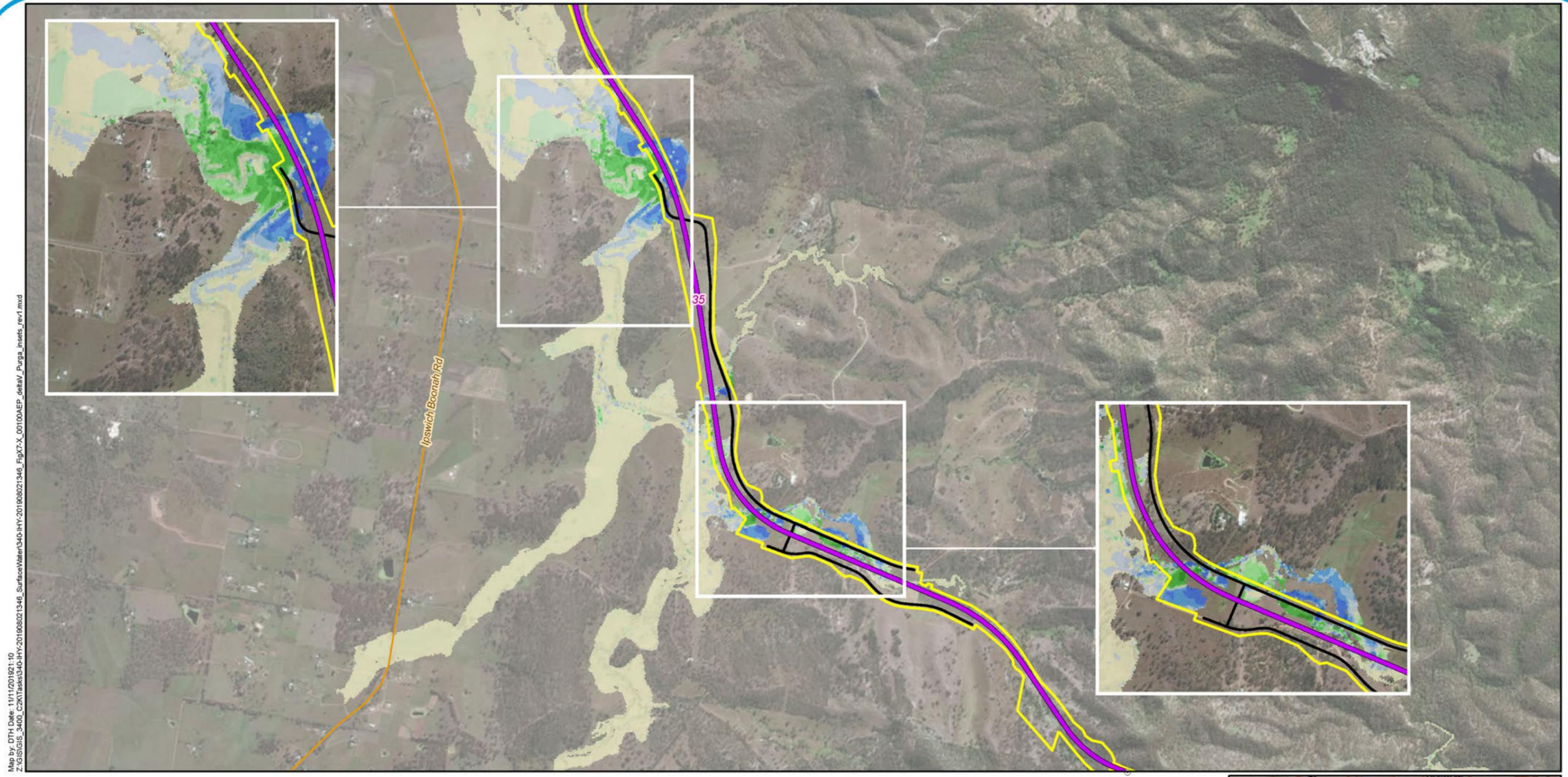


Figure C7-H-1: 1% AEP event Developed Case difference in velocity: Purga Creek



Map by DTH Date: 11/11/2019 12:10
 Z:\GIS\GIS_3400_C2K\Tasks\340-HY-20190802\346_Fig\X-X_00100AEP_deltaV_Purga_insets_rev1.mxd

Legend

- | | | |
|---------------------------|--------------------------------------|---------------|
| 5 Chainage (km) | Change in peak velocity (m/s) | -0.01 to 0.01 |
| C2K project alignment | < -0.50 | 0.01 to 0.05 |
| Proposed roadworks | -0.50 to -0.20 | 0.05 to 0.10 |
| Minor roads | -0.20 to -0.10 | 0.10 to 0.20 |
| EIS disturbance footprint | -0.10 to -0.05 | 0.20 to 0.50 |
| | -0.05 to -0.01 | > 0.50 |

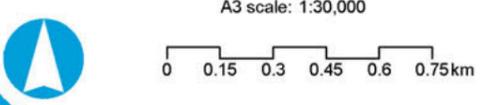
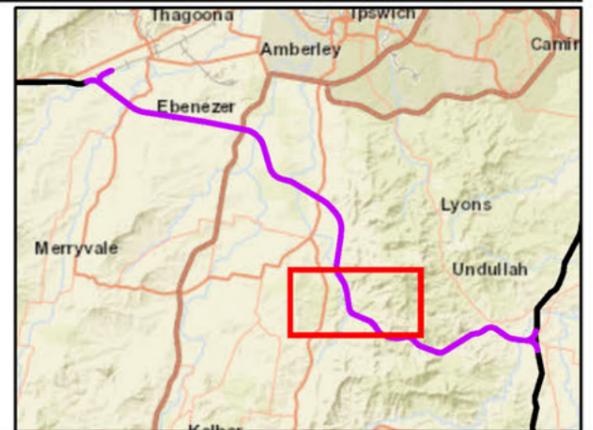
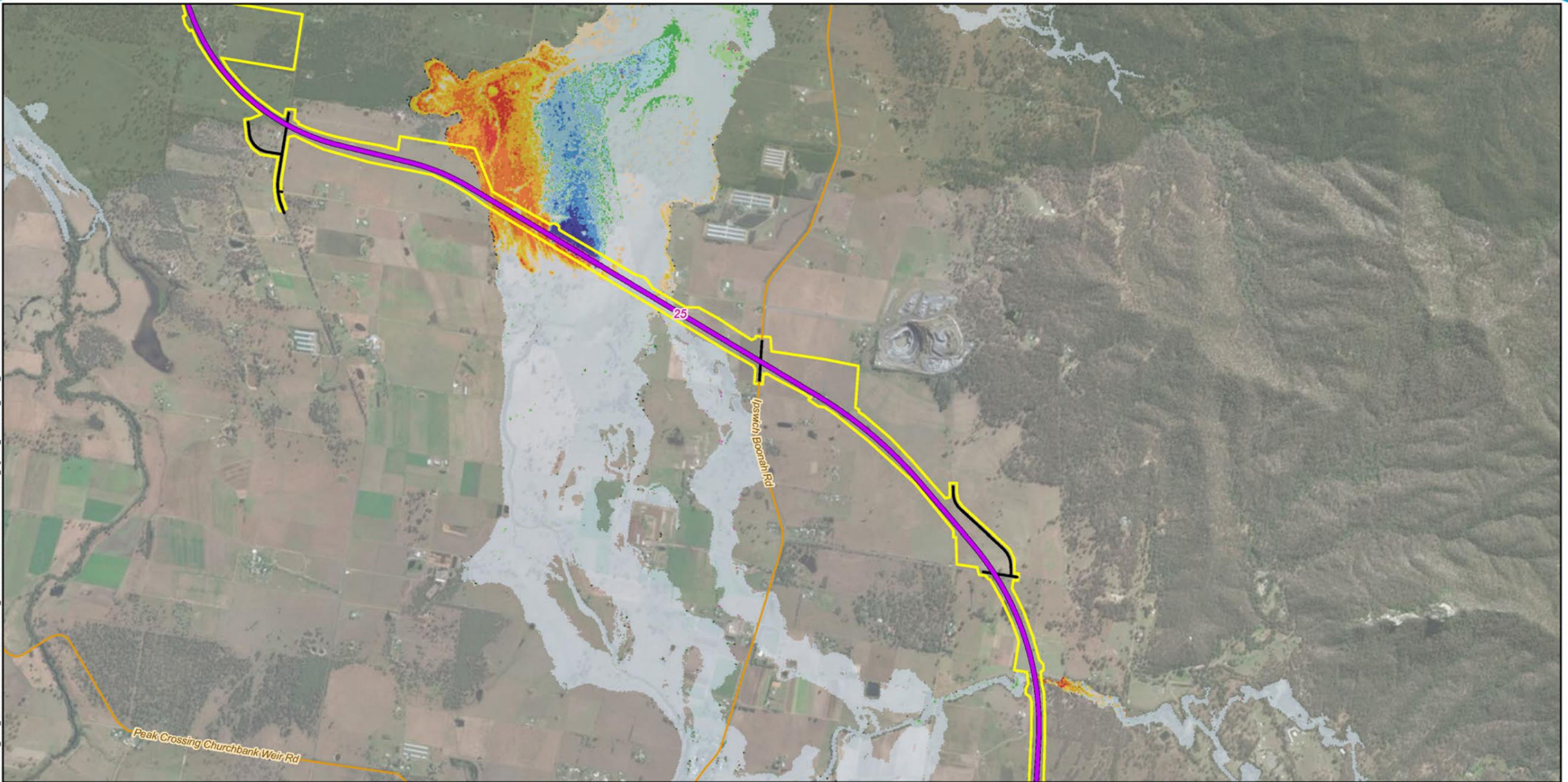


Figure C7-H-2: 1% AEP event Developed Case difference in velocity: Purga Creek

Map by DTH Date: 8/11/2019 15:15
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Legend

- | | | | | | |
|---|---------------------------|--|--|--|-------------------------|
| 5 | Chainage (km) | | Difference in Time of Submergence | | Within 15 minutes |
| | C2K project alignment | | Over 10 hour decrease | | Up to 0.5 hour increase |
| | Proposed roadworks | | Up to 10 hour decrease | | Up to 1 hour increase |
| | Minor roads | | Up to 5 hour decrease | | Up to 2 hour increase |
| | EIS disturbance footprint | | Up to 2 hour decrease | | Up to 5 hour increase |
| | Was Wet Now Dry | | Up to 1 hour decrease | | Over 10 hour increase |
| | Was Dry Now Wet | | Up to 0.5 hour decrease | | |

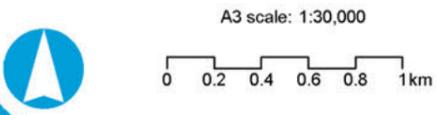
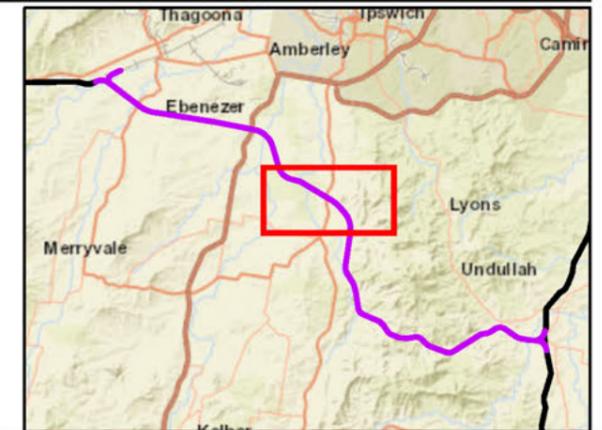
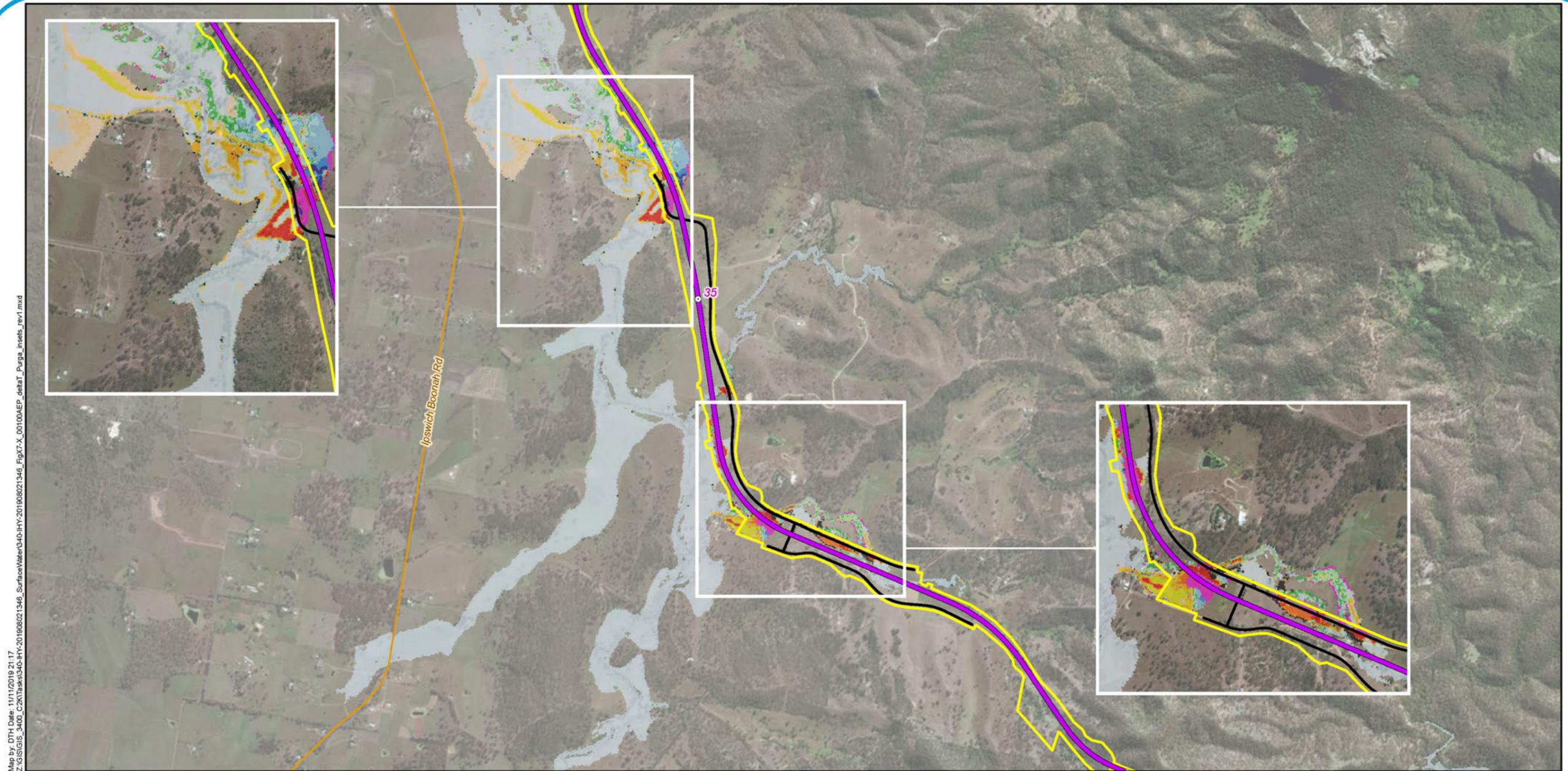


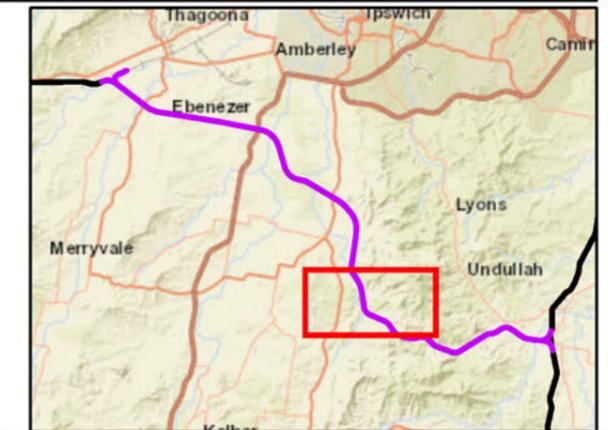
Figure C7-I-1: 1% AEP event Developed Case difference in time of submergence: Purga Creek



Map by DTH Date: 11/11/2019 21:17
 Z:\GIS\GIS_3400_C2K\Task\3400-IHY-201908021346_FigC7-2_00100AEP_detail_Purga_insets_rev1.mxd

Legend

- | | | |
|---------------------------|--|-------------------------|
| 5 Chainage (km) | Difference in Time of Submergence | Within 15 minutes |
| C2K project alignment | Over 10 hour decrease | Up to 0.5 hour increase |
| Proposed roadworks | Up to 10 hour decrease | Up to 1 hour increase |
| Minor roads | Up to 5 hour decrease | Up to 2 hour increase |
| EIS disturbance footprint | Up to 2 hour decrease | Up to 5 hour increase |
| Was Wet Now Dry | Up to 1 hour decrease | Up to 10 hour increase |
| Was Dry Now Wet | Up to 0.5 hour decrease | Over 10 hour increase |



A3 scale: 1:30,000

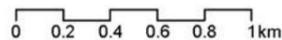
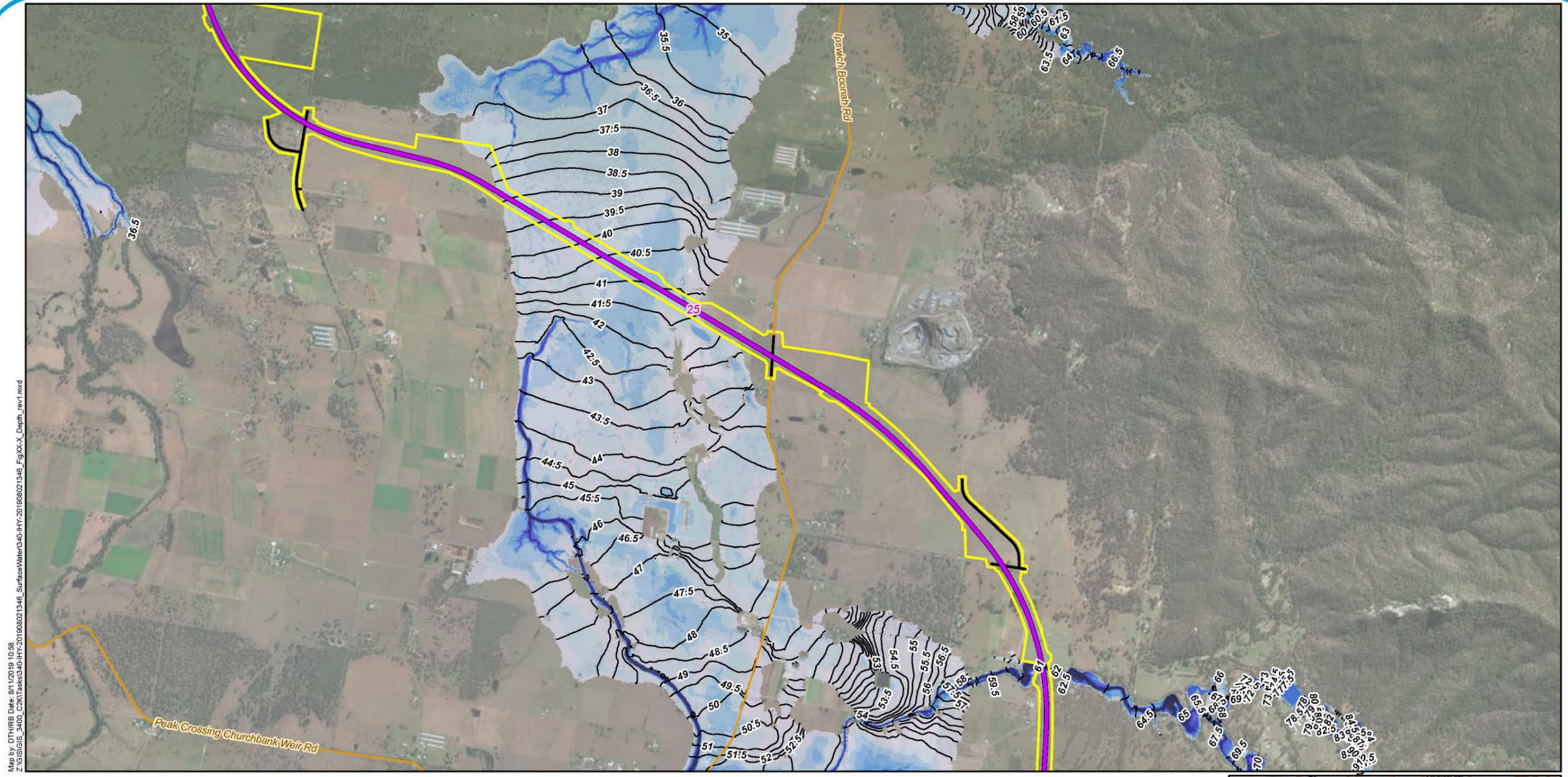


Figure C7-I-2: 1% AEP event Developed Case difference in time of submergence: Purga Creek



Map by: DTH/HRB Date: 8/11/2019 10:58
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_SurfaceWater\340-IHY-20190802\346_Fig\XX-X_Depth_rev1.mxd

Legend

- | | | | | | | | |
|---|-----------------------|--|---------------------------|------------------|-----------|-----------|-----------|
| 5 | Chainage (km) | | EIS disturbance footprint | Depth (m) | | 2.5 - 3.0 | |
| | C2K project alignment | | 0.5m contour mAHD | | 0 - 0.5 | | 3.0 - 3.5 |
| | Proposed roadworks | | | | 0.5 - 1.0 | | 3.5 - 4.0 |
| | Minor roads | | | | 1.0 - 1.5 | | 4.0 - 4.5 |
| | | | | | 1.5 - 2.0 | | 4.5 - 5.0 |
| | | | | | 2.0 - 2.5 | | > 5.0 |

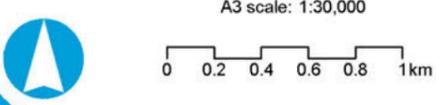
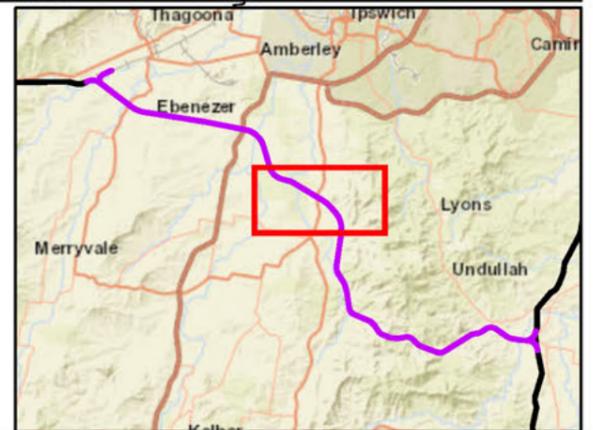
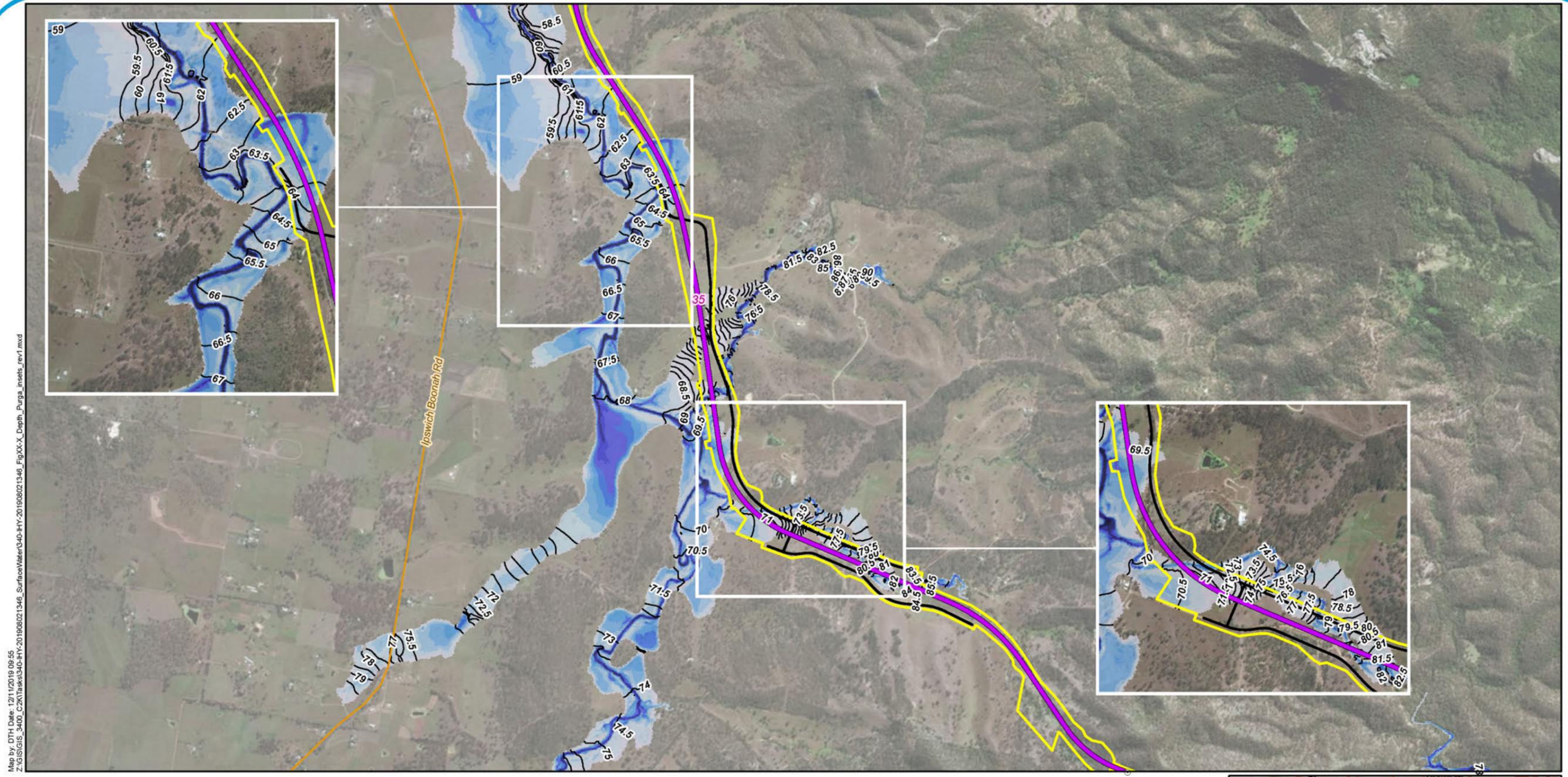


Figure C8-A-1: 1 in 2,000 AEP event Existing Case inundation extent: Purga Creek



Map by: DTH Date: 12/11/2019 08:55
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Legend

- 5 Chainage (km)
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- 0.5m contour mAHD

Depth (m)	
	0 - 0.5
	0.5 - 1.0
	1.0 - 1.5
	1.5 - 2.0
	2.0 - 2.5
	2.5 - 3.0
	3.0 - 3.5
	3.5 - 4.0
	4.0 - 4.5
	4.5 - 5.0
	> 5.0

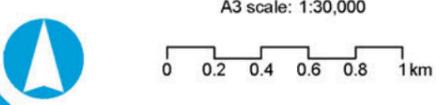
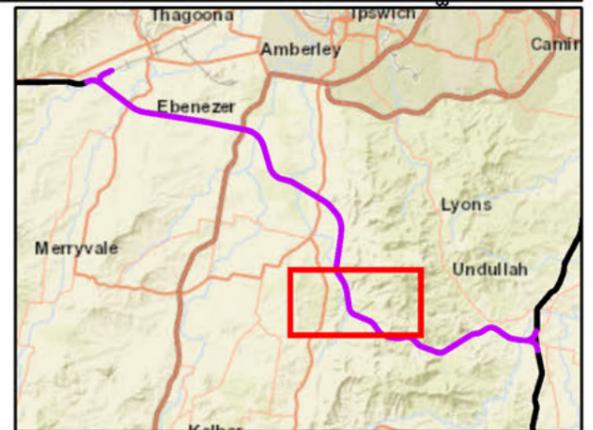
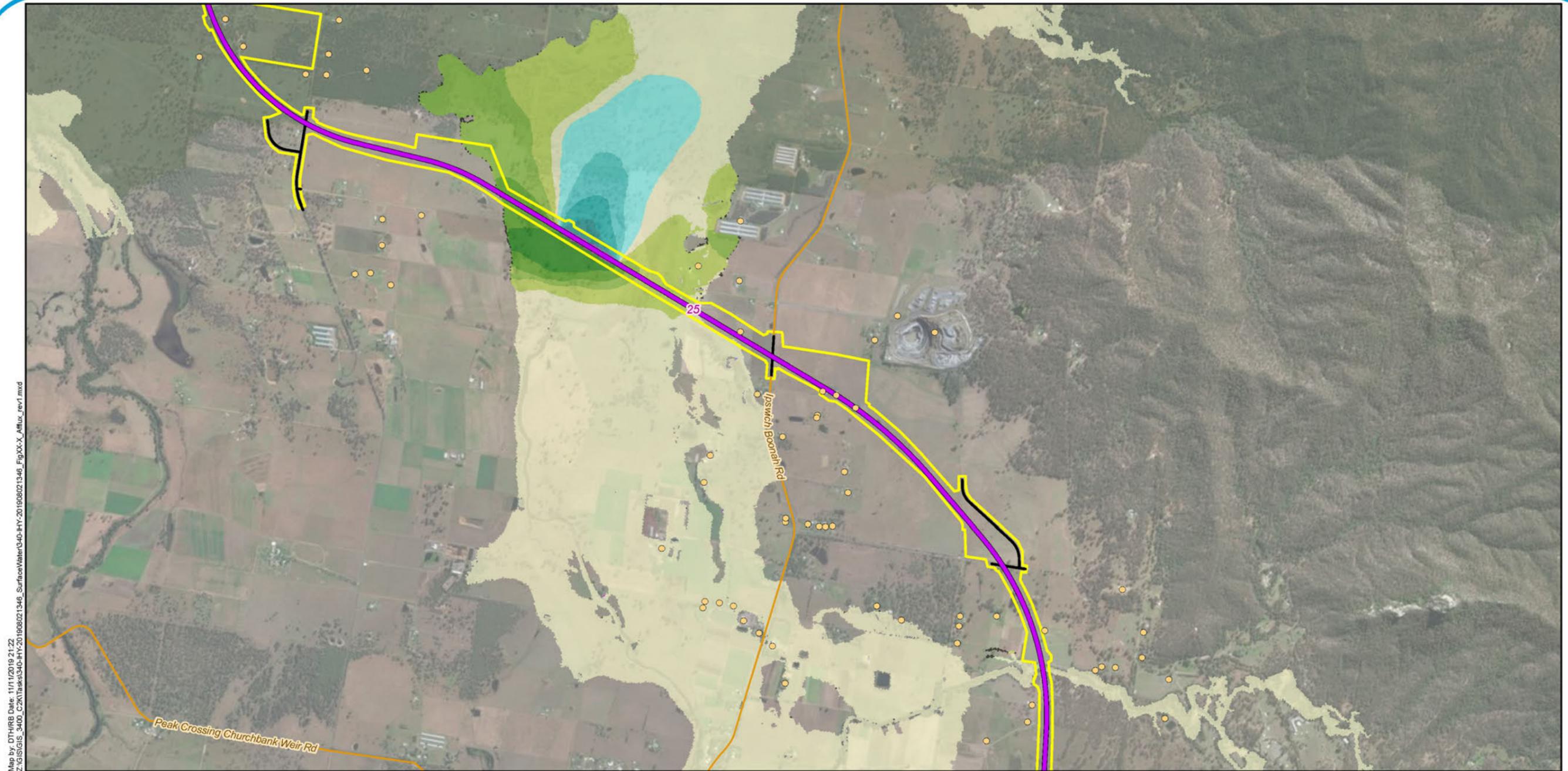


Figure C8-A-2: 1 in 2,000 AEP event Existing Case inundation extent: Purga Creek



Map by DTH/RB Date: 11/11/2019 21:22
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig\X-X_Afflux_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | |
|---|--|
| <ul style="list-style-type: none"> < -0.5 -0.5 to -0.2 -0.2 to -0.1 -0.1 to -0.05 -0.05 to -0.01 | <ul style="list-style-type: none"> -0.01 to 0.01 0.01 to 0.05 0.05 to 0.1 0.1 to 0.2 0.2 to 0.5 > 0.5 |
|---|--|

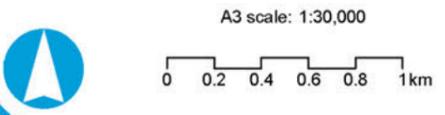
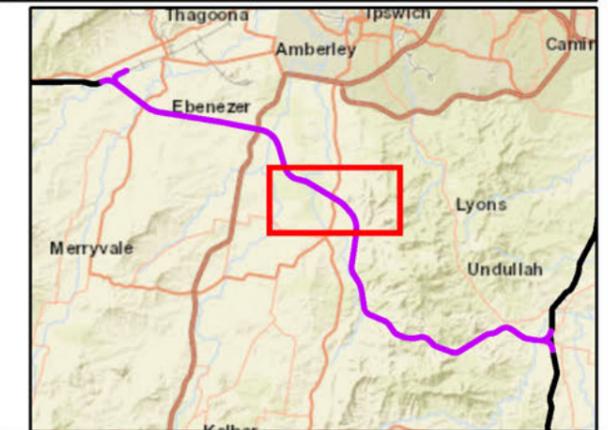
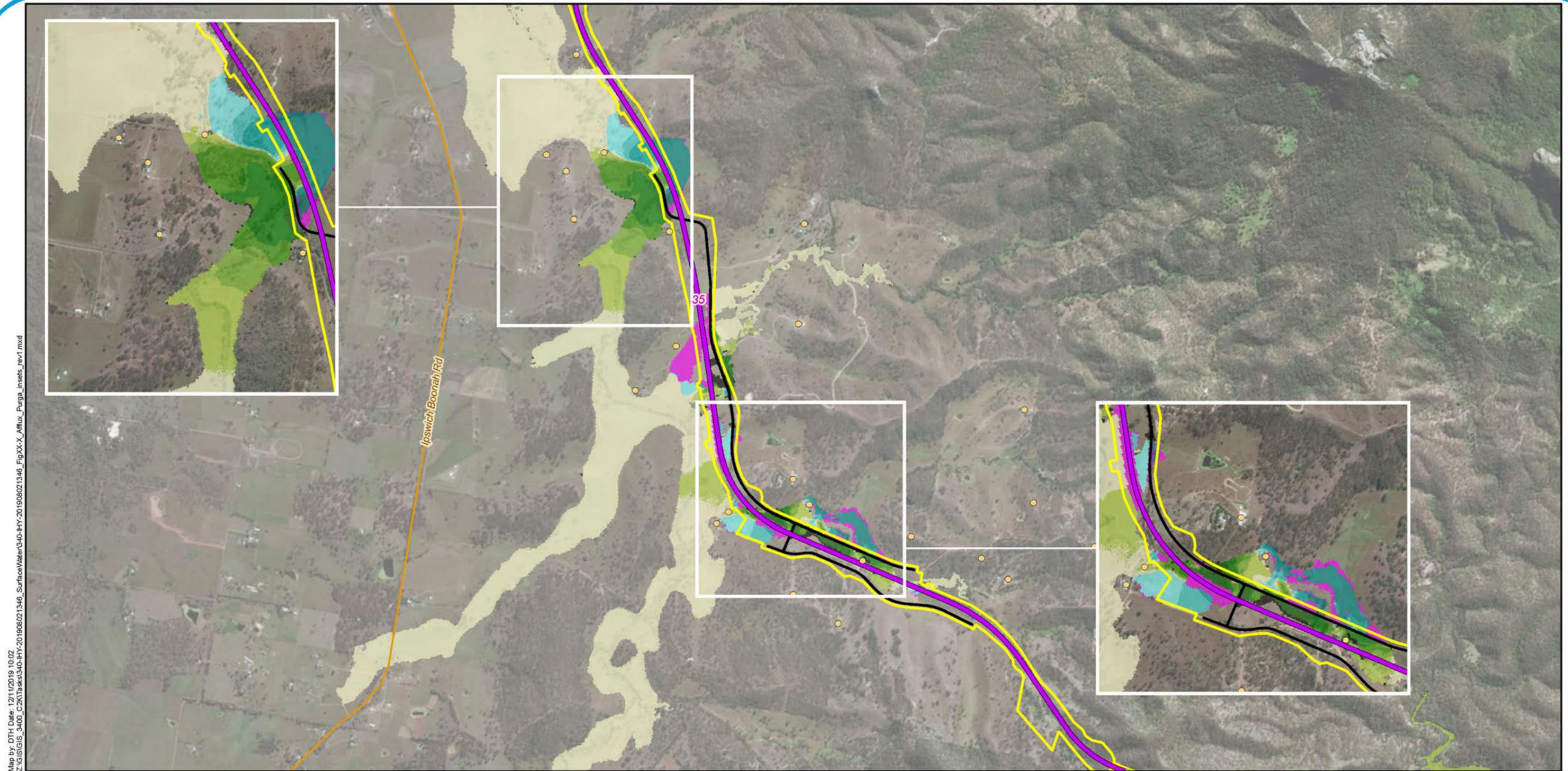


Figure C8-B-1: 1 in 2,000 AEP event Developed Case afflux: Purga Creek



Map by DTH Date: 12/11/2019 10:02
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig\X-X_Afflux_Purga_insets_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | |
|---|--|
| <ul style="list-style-type: none"> < -0.5 -0.5 to -0.2 -0.2 to -0.1 -0.1 to -0.05 -0.05 to -0.01 | <ul style="list-style-type: none"> -0.01 to 0.01 0.01 to 0.05 0.05 to 0.1 0.1 to 0.2 0.2 to 0.5 > 0.5 |
|---|--|

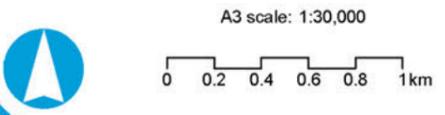
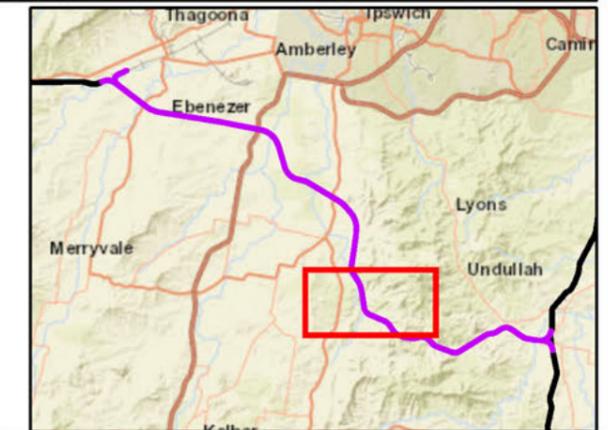
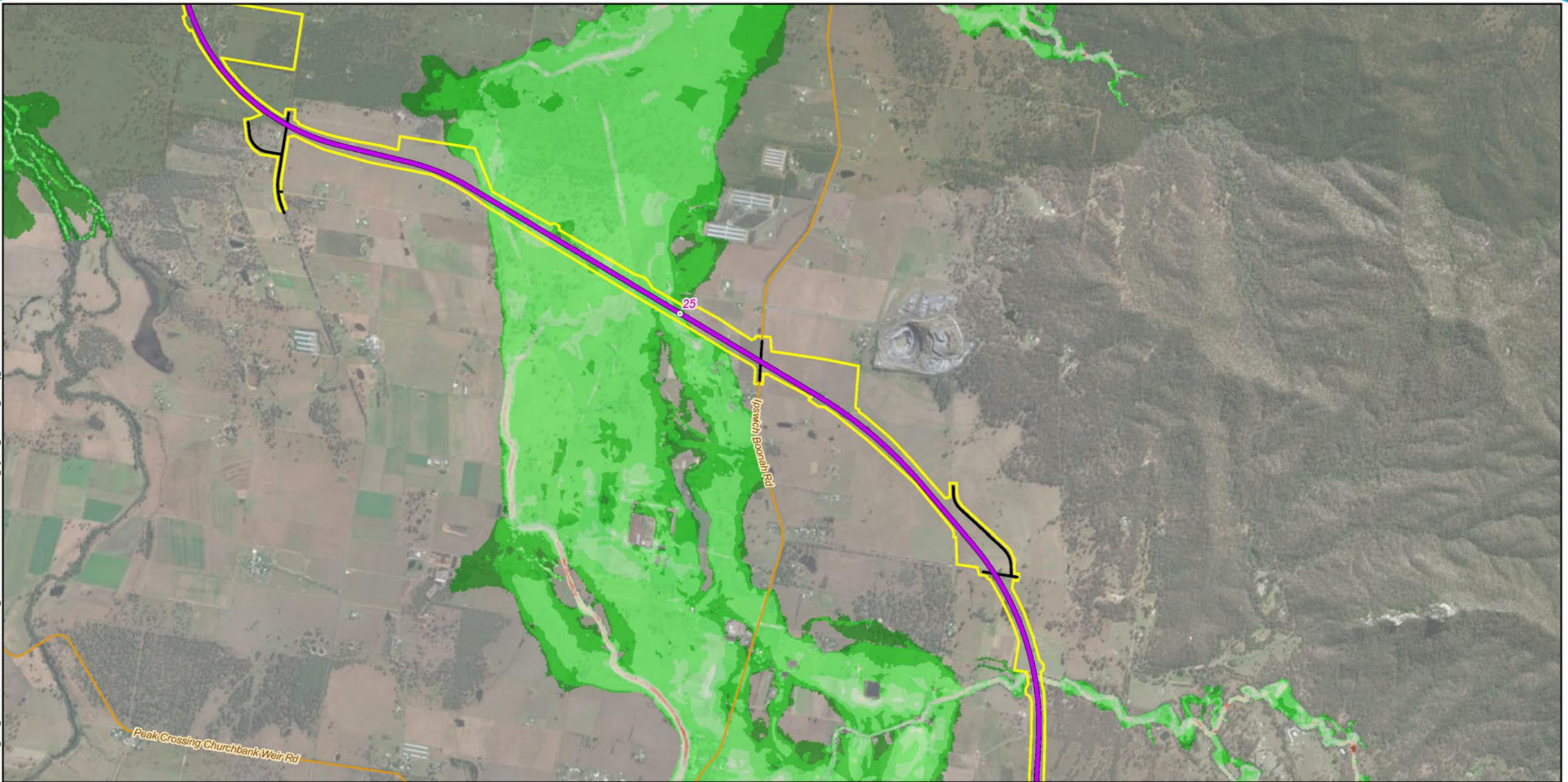


Figure C8-B-2: 1 in 2,000 AEP event Developed Case afflux: Purga Creek

Map by DTH Date: 12/11/2019 10:38
 Z:\GIS\GIS_3400_C2K\Task\3400-IHY-20190802\346_Fig\X-X_02000AEP_Velocity_rev1.mxd



Legend

- | | | |
|---------------------------|---------------------|-----|
| Chainage (km) | Peak velocity (m/s) | 2.5 |
| Proposed roadworks | 0.5 | 3.0 |
| Major roads | 1.0 | 3.5 |
| Minor roads | 1.5 | 4.0 |
| EIS disturbance footprint | 2.0 | 4.5 |
| | | 5.0 |

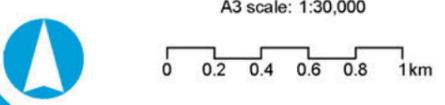
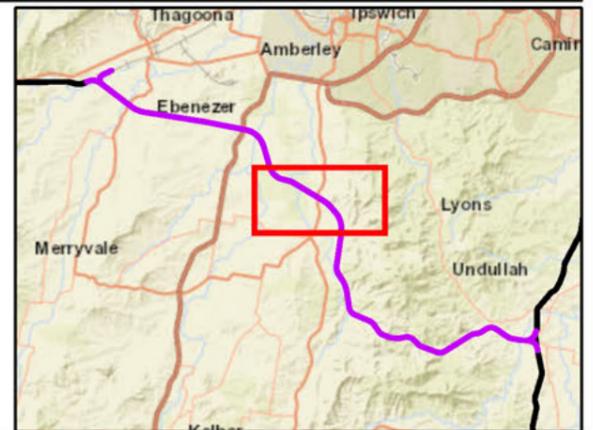
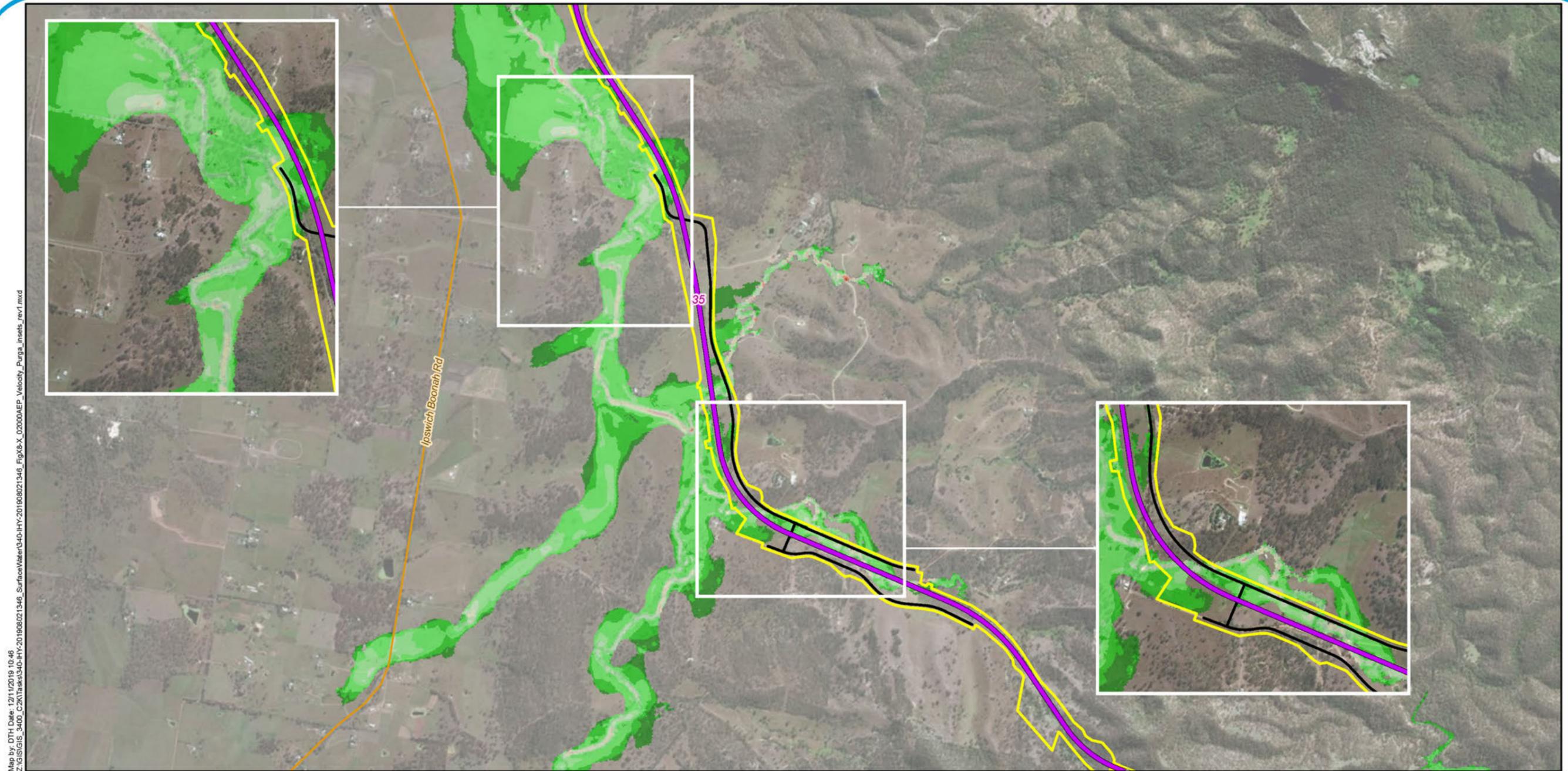


Figure C8-C-1: 1 in 200 AEP event Developed Case velocity: Purga Creek



Map by: DTH Date: 12/11/2019 10:46
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-201908021346_FigX8-X_02000AEP_Velocity_Purga_insets_rev1.mxd

Legend

- 5 Chainage (km)
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint

Peak velocity (m/s)

	0.0		2.5
	0.5		3.0
	1.0		3.5
	1.5		4.0
	2.0		4.5
			5.0

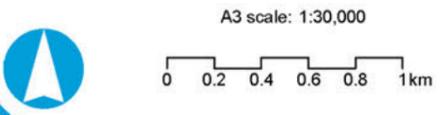
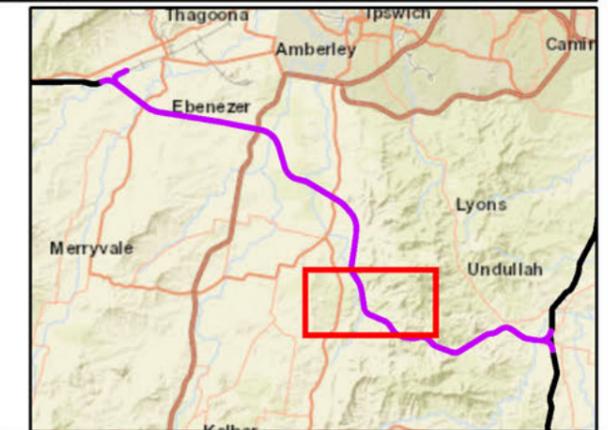
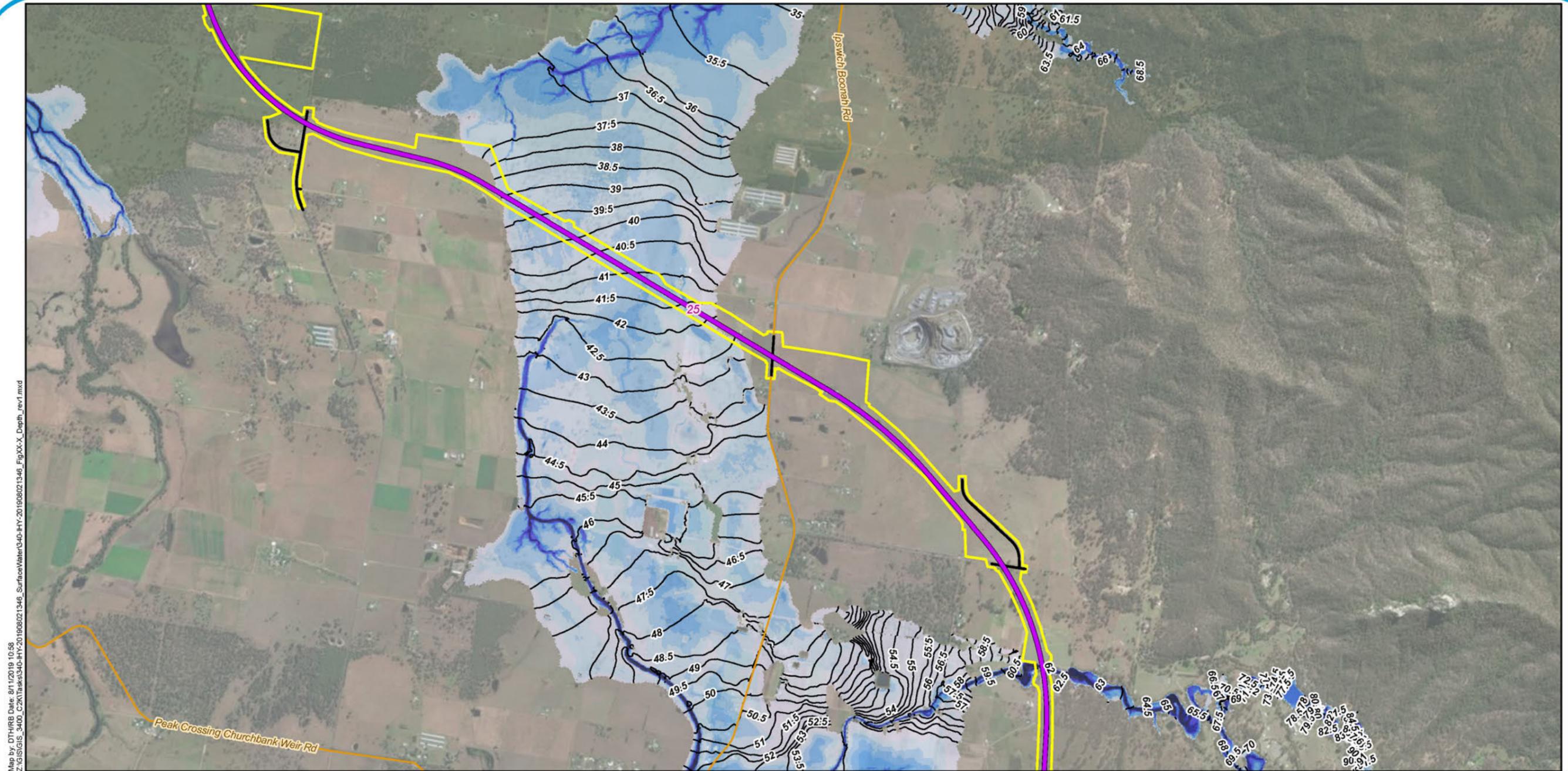


Figure C8-C-2: 1 in 200 AEP event Developed Case velocity: Purga Creek



Map by DTH/RB Date: 8/11/2019 10:58
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig\X-X_Depth_rev1.mxd

Legend

- 5 Chainage (km)
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- 0.5m contour mAHD

Depth (m)	
	0 - 0.5
	0.5 - 1.0
	1.0 - 1.5
	1.5 - 2.0
	2.0 - 2.5
	2.5 - 3.0
	3.0 - 3.5
	3.5 - 4.0
	4.0 - 4.5
	4.5 - 5.0
	> 5.0

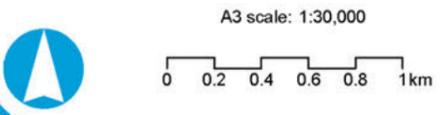
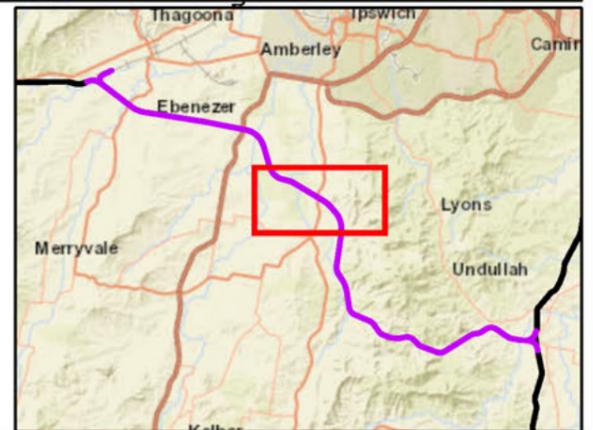
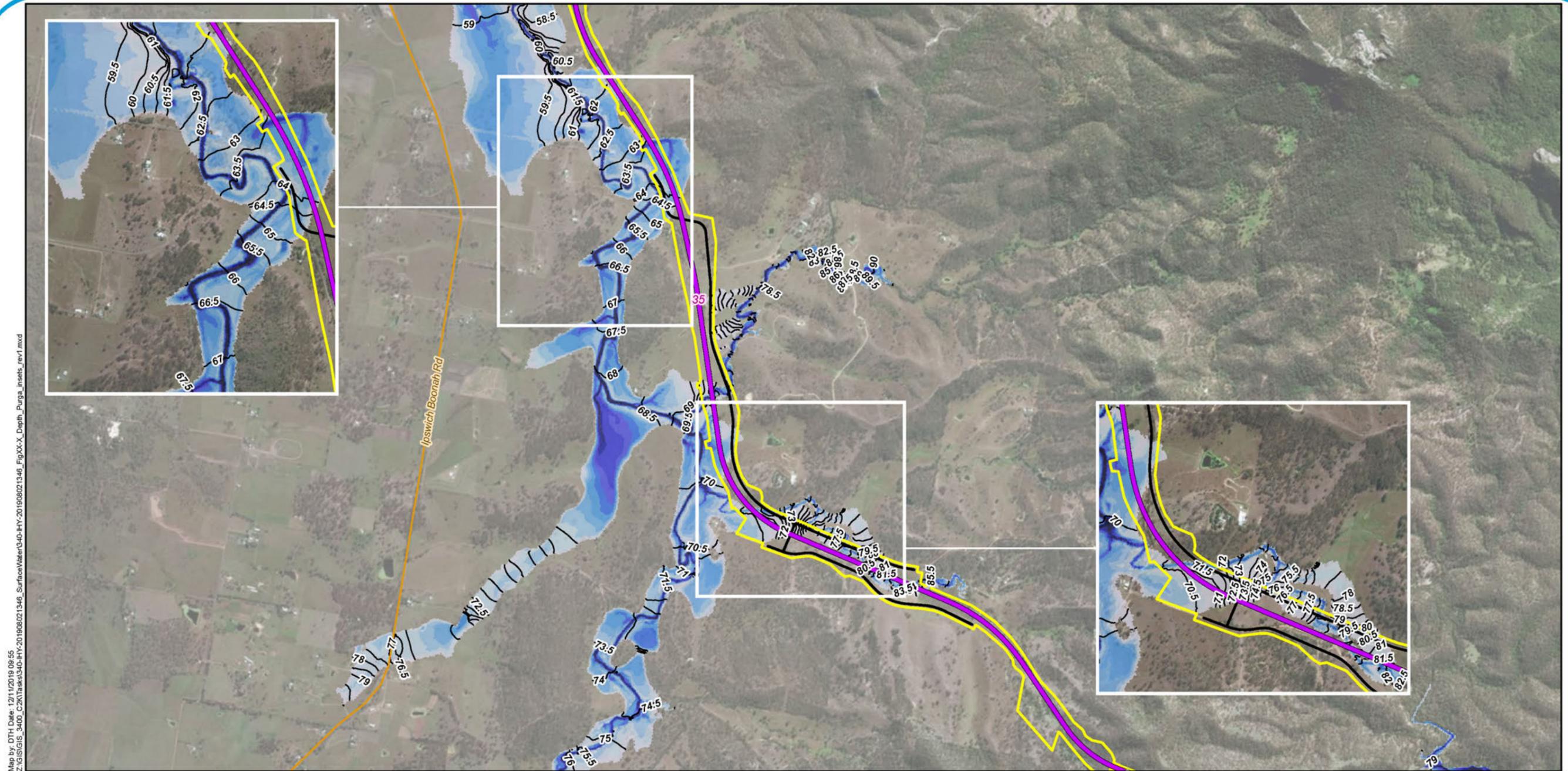


Figure C9-A-1: 1 in 10,000 AEP event Existing Case inundation extent: Purga Creek



Map by DTH Date: 12/11/2019 08:55
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig\X-X_Depth_Purga_insets_rev1.mxd

Legend

- | | | | |
|--|---|---|---|
| 5 Chainage (km) | EIS disturbance footprint | Depth (m) | 2.5 - 3.0 |
| C2K project alignment | 0.5m contour mAHD | 0 - 0.5 | 3.0 - 3.5 |
| Proposed roadworks | | 0.5 - 1.0 | 3.5 - 4.0 |
| Minor roads | | 1.0 - 1.5 | 4.0 - 4.5 |
| | | 1.5 - 2.0 | 4.5 - 5.0 |
| | | 2.0 - 2.5 | > 5.0 |

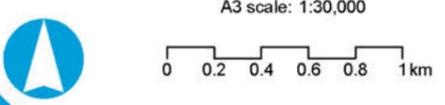
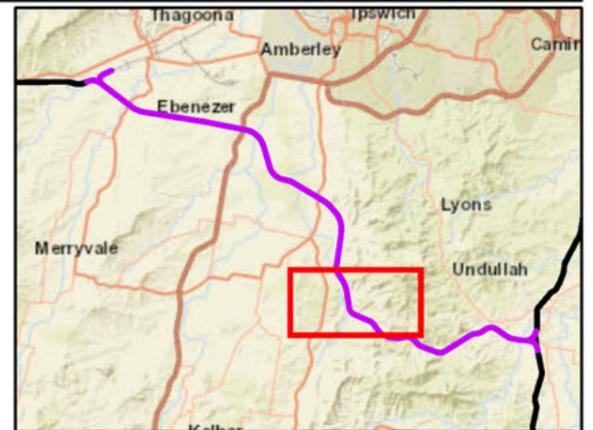
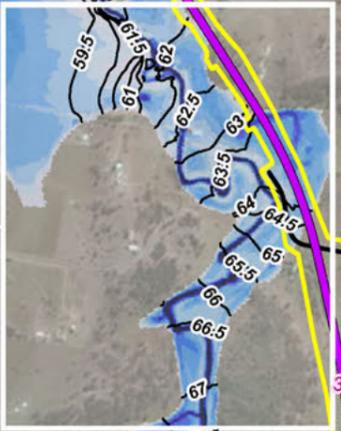
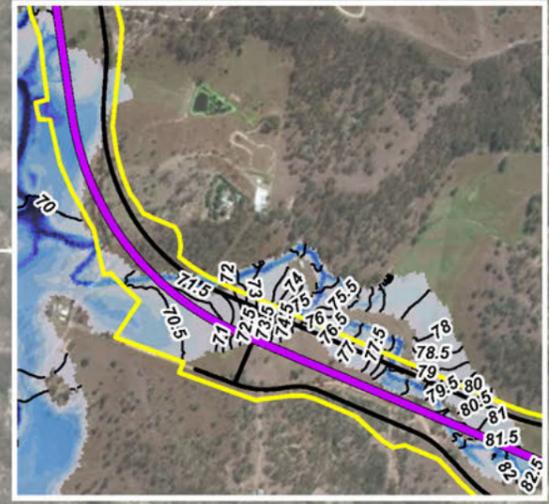
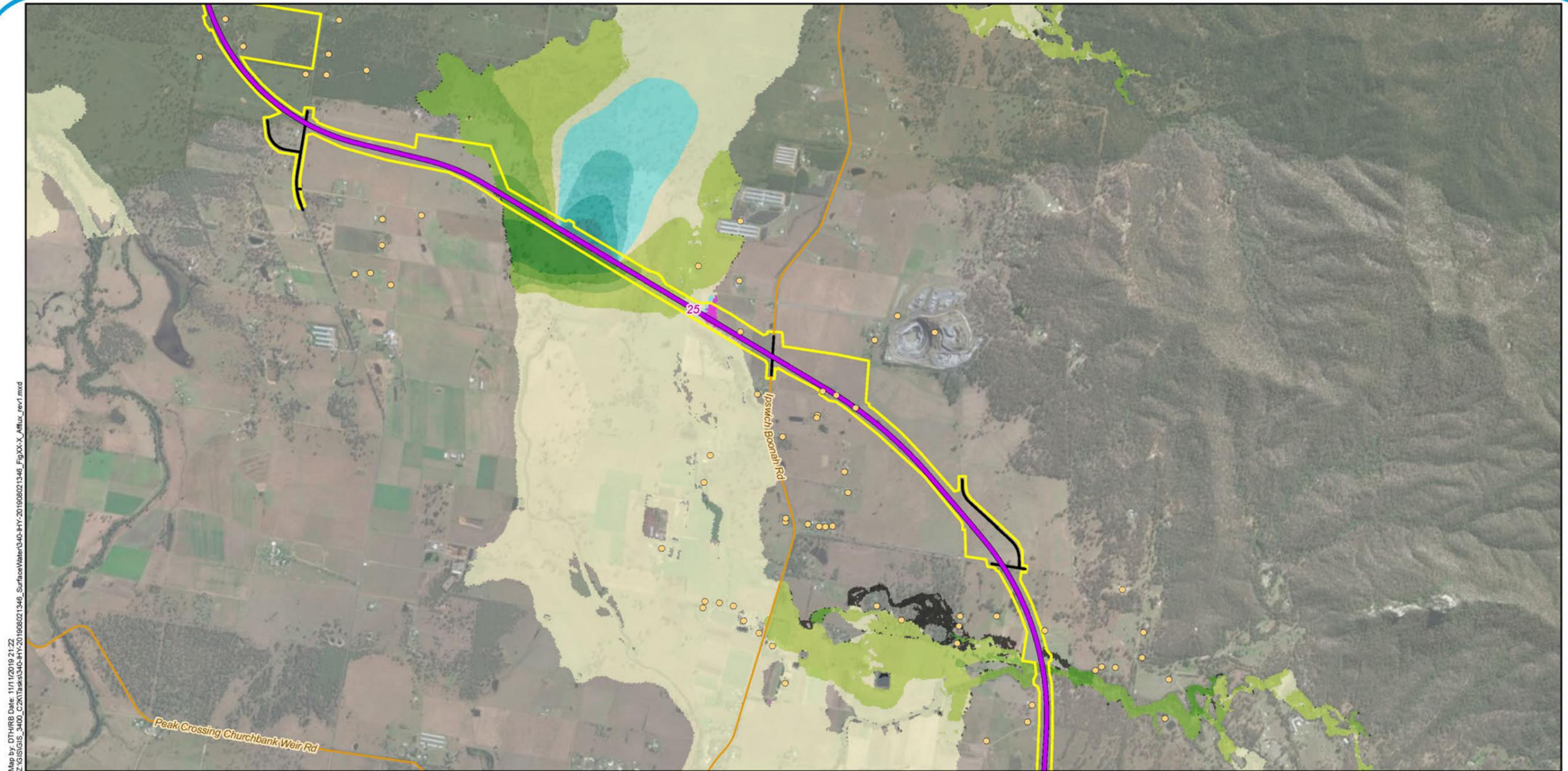


Figure C9-A-2: 1 in 10,000 AEP event Existing Case inundation extent: Purga Creek



Map by DTH/RB Date: 11/11/2019 21:22
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Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | |
|---|--|
| < -0.5 | -0.01 to 0.01 |
| -0.5 to -0.2 | 0.01 to 0.05 |
| -0.2 to -0.1 | 0.05 to 0.1 |
| -0.1 to -0.05 | 0.1 to 0.2 |
| -0.05 to -0.01 | 0.2 to 0.5 |
| | > 0.5 |

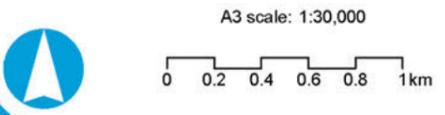
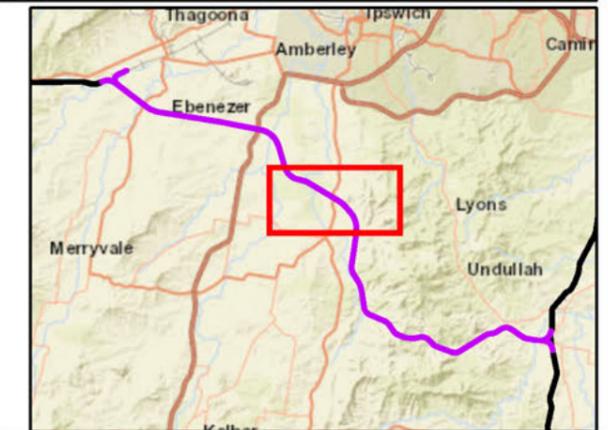
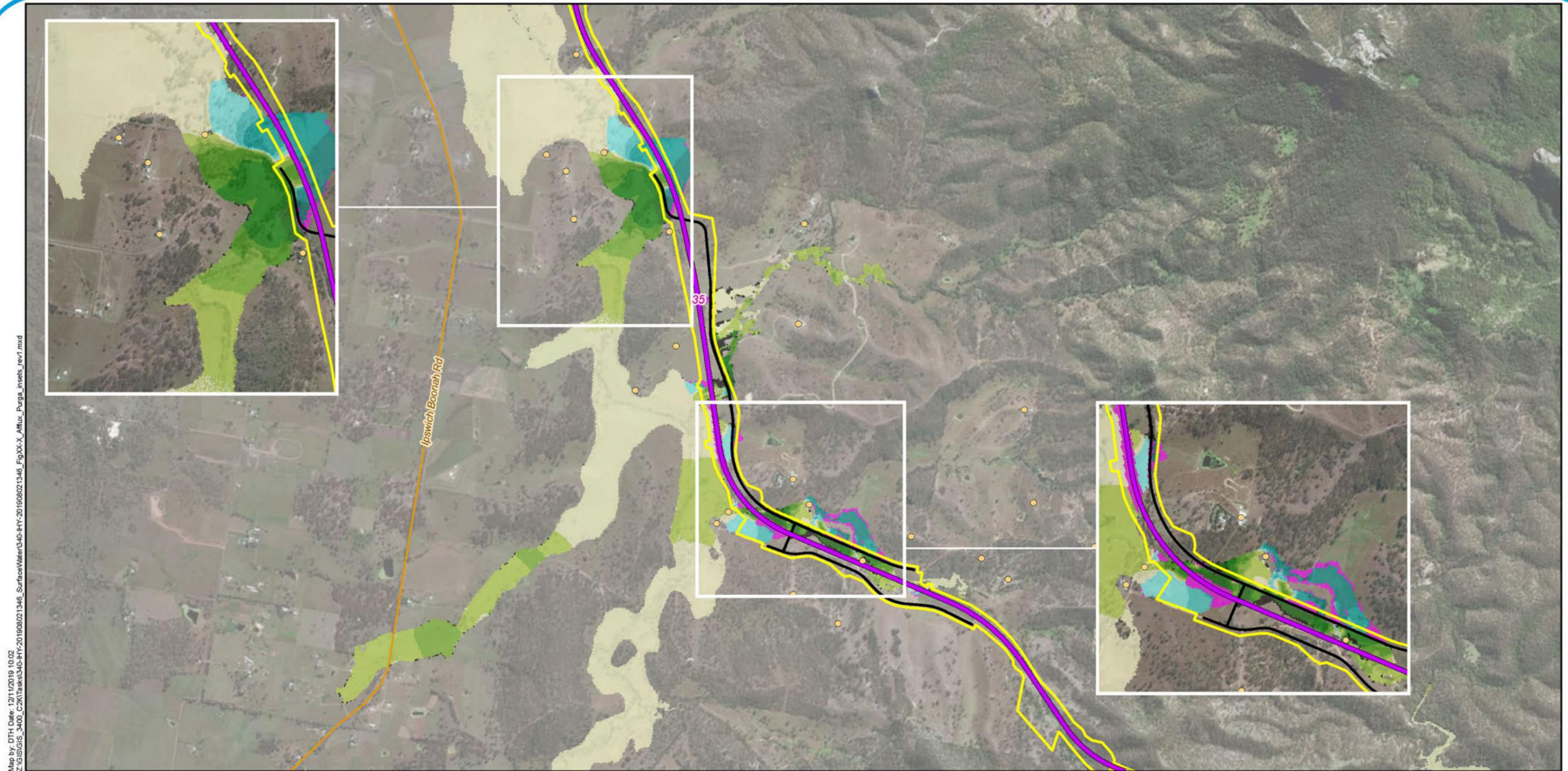


Figure C9-B-1: 1 in 10,000 AEP event Developed Case afflux: Purga Creek



Map by DTH Date: 12/11/2019 10:02
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig\X-X_Afflux_Purga_insets_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | | | |
|--|----------------|--|---------------|
| | < -0.5 | | -0.01 to 0.01 |
| | -0.5 to -0.2 | | 0.01 to 0.05 |
| | -0.2 to -0.1 | | 0.05 to 0.1 |
| | -0.1 to -0.05 | | 0.1 to 0.2 |
| | -0.05 to -0.01 | | 0.2 to 0.5 |
| | | | > 0.5 |

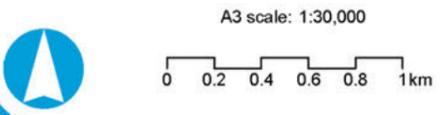
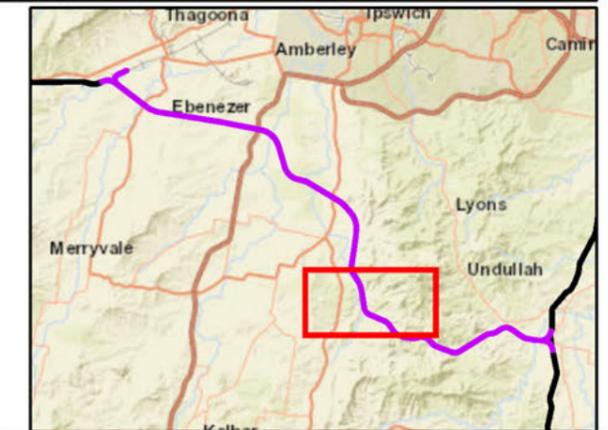
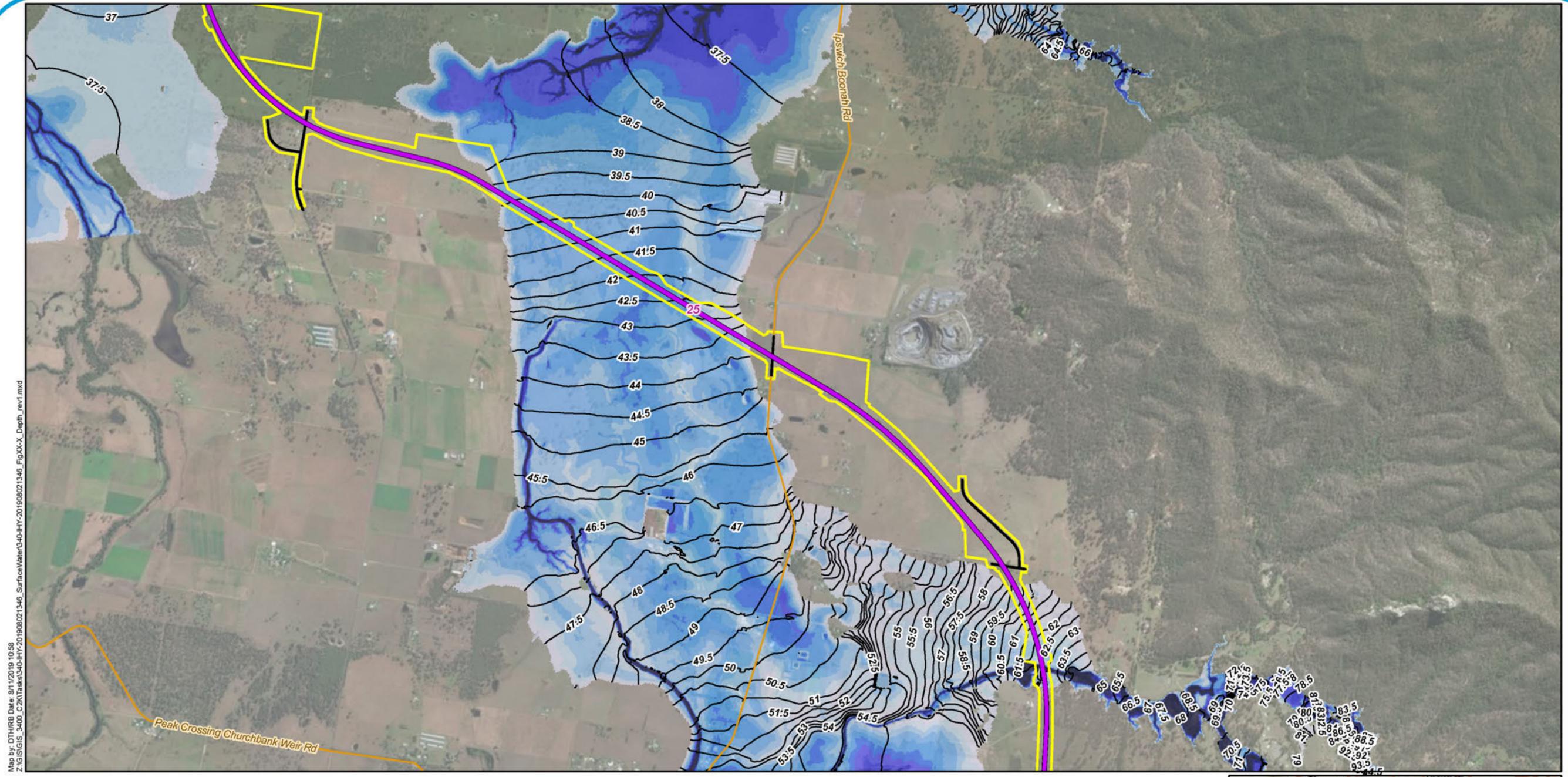


Figure C9-B-2: 1 in 10,000 AEP event Developed Case afflux: Purga Creek



Map by DTH/RB Date: 8/11/2019 10:58
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_SurfaceWater\340-IHY-20190802\346_Fig\XX-X_Depth_rev1.mxd

Legend

- | | | | | | | | |
|---|-----------------------|--|---------------------------|------------------|-----------|-----------|-----------|
| 5 | Chainage (km) | | EIS disturbance footprint | Depth (m) | | 2.5 - 3.0 | |
| | C2K project alignment | | 0.5m contour mAHD | | 0 - 0.5 | | 3.0 - 3.5 |
| | Proposed roadworks | | | | 0.5 - 1.0 | | 3.5 - 4.0 |
| | Minor roads | | | | 1.0 - 1.5 | | 4.0 - 4.5 |
| | | | | | 1.5 - 2.0 | | 4.5 - 5.0 |
| | | | | | 2.0 - 2.5 | | > 5.0 |

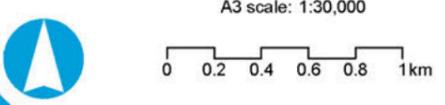
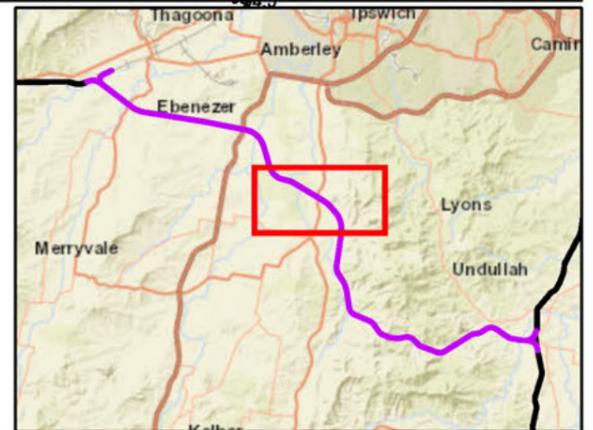
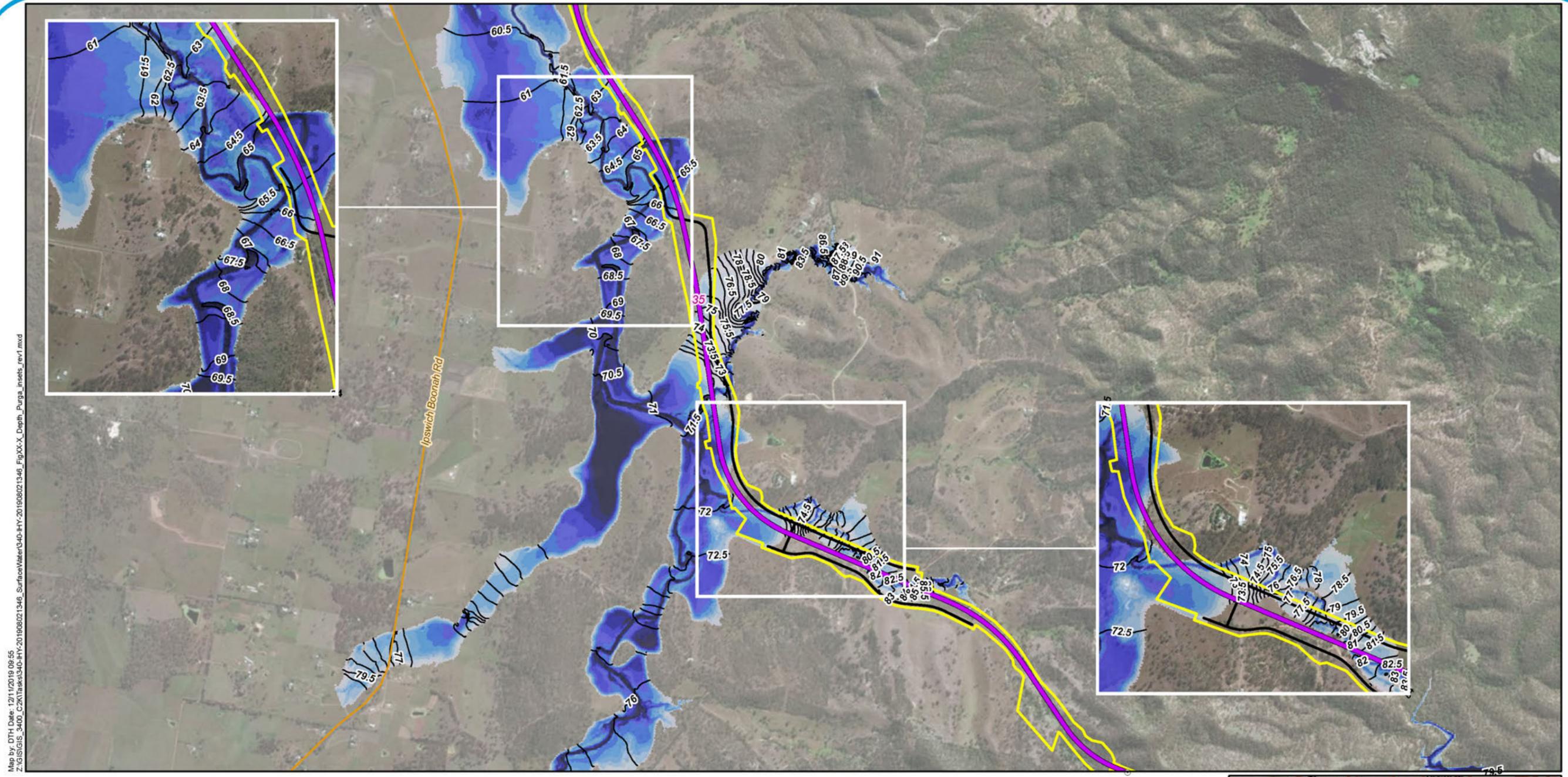


Figure C10-A-1: PMF event Existing Case inundation extent: Purga Creek



Map by: DTH Date: 12/11/2019 08:55
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Legend

- 5 Chainage (km)
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- 0.5m contour mAHd

Depth (m)	
	0 - 0.5
	0.5 - 1.0
	1.0 - 1.5
	1.5 - 2.0
	2.0 - 2.5
	2.5 - 3.0
	3.0 - 3.5
	3.5 - 4.0
	4.0 - 4.5
	4.5 - 5.0
	> 5.0

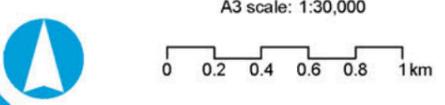
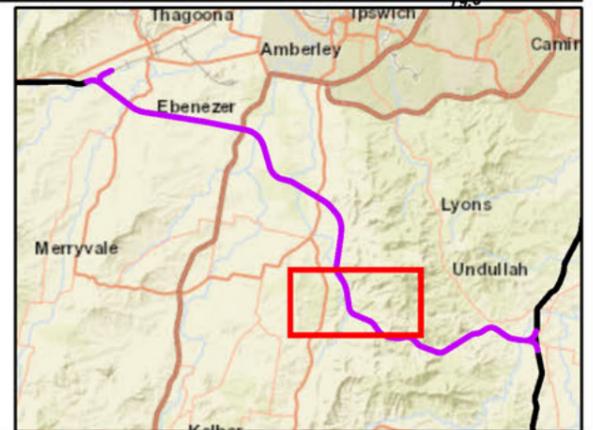
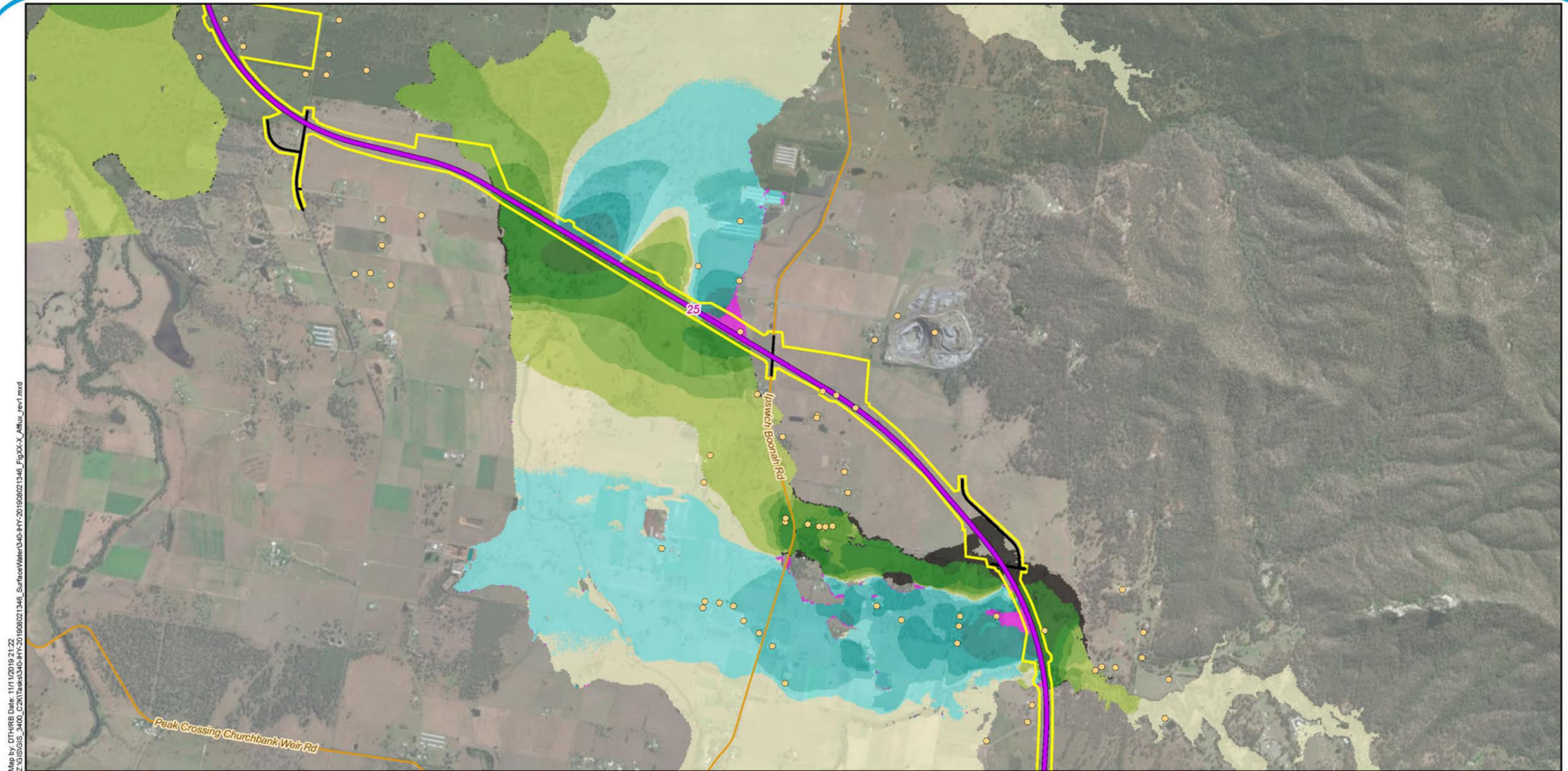


Figure C10-A-2: PMF event Existing Case inundation extent: Purga Creek



Map by DTH/RB Date: 11/11/2019 21:22
 Z:\GIS\GIS_3400_C2K\Tasks\3400-HY-20190802\346_Fig\X-X_Afflux_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | | | |
|--|----------------|--|---------------|
| | < -0.5 | | -0.01 to 0.01 |
| | -0.5 to -0.2 | | 0.01 to 0.05 |
| | -0.2 to -0.1 | | 0.05 to 0.1 |
| | -0.1 to -0.05 | | 0.1 to 0.2 |
| | -0.05 to -0.01 | | 0.2 to 0.5 |
| | | | > 0.5 |

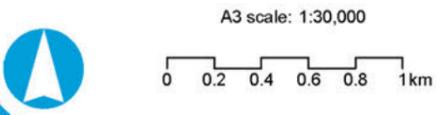
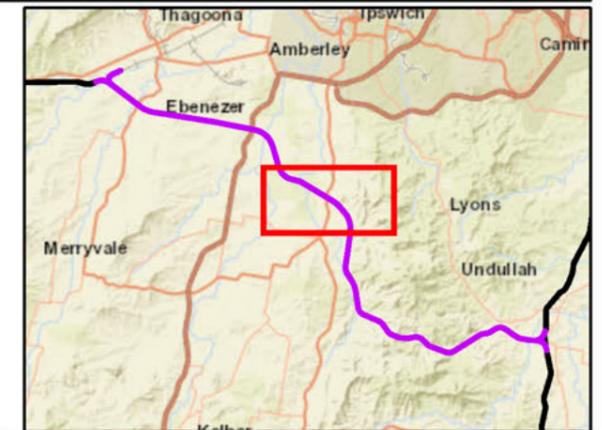
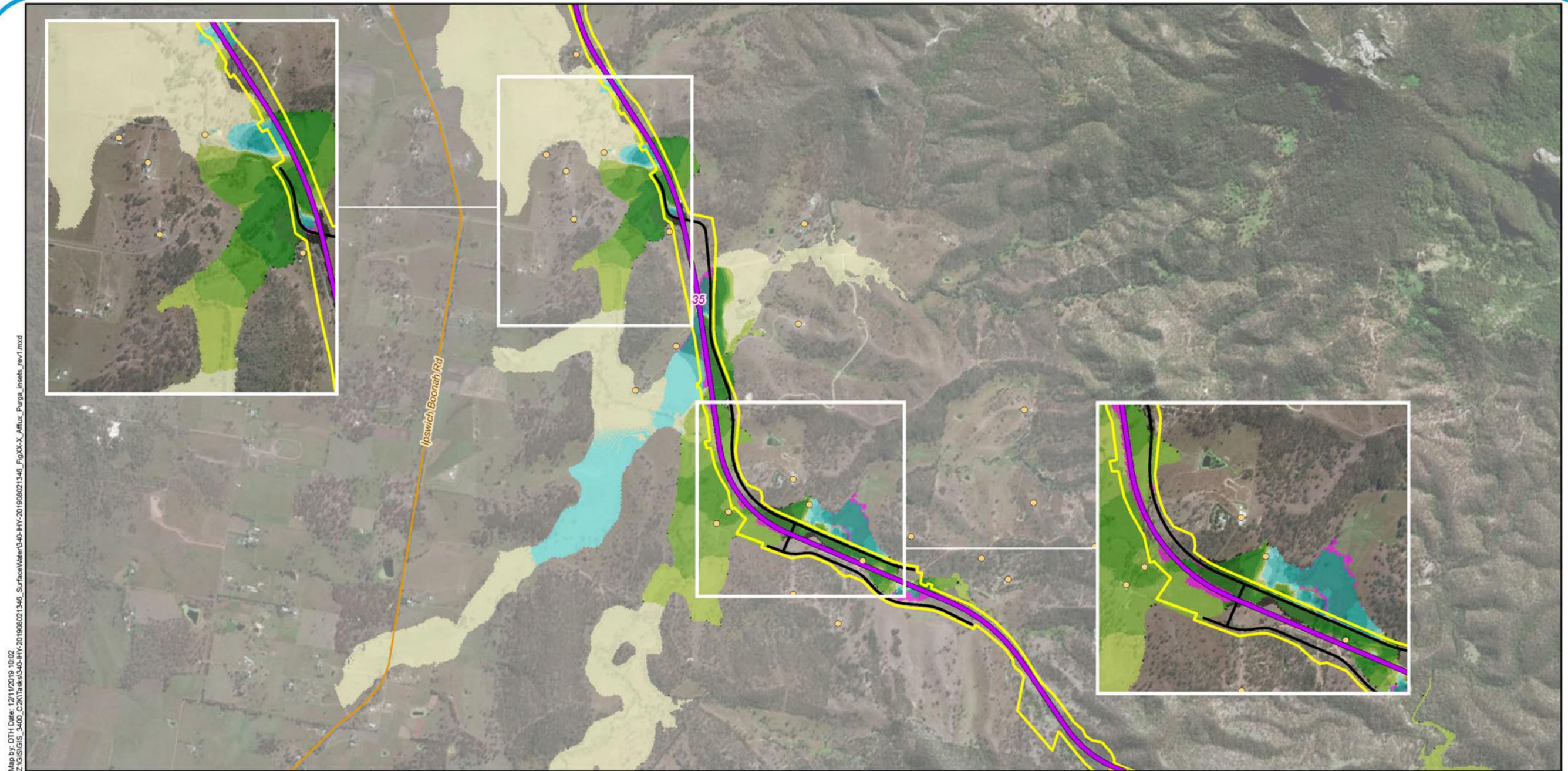


Figure C10-B-1: PMF event Developed Case afflux: Purga Creek



Map by: DTH Date: 12/11/2019 10:02
 Z:\GIS\GIS_3400_C2K\Tasks\3400-IHY-20190802\346_Fig\X-X_Afflux_Purga_insets_rev1.mxd

Legend

- 5 Chainage (km)
- Flood sensitive receptors
- C2K project alignment
- Proposed roadworks
- Minor roads
- EIS disturbance footprint
- Was Wet Now Dry
- Was Dry Now Wet

Change in peak water levels (m)

- | | | | |
|--|----------------|--|---------------|
| | < -0.5 | | -0.01 to 0.01 |
| | -0.5 to -0.2 | | 0.01 to 0.05 |
| | -0.2 to -0.1 | | 0.05 to 0.1 |
| | -0.1 to -0.05 | | 0.1 to 0.2 |
| | -0.05 to -0.01 | | 0.2 to 0.5 |
| | | | > 0.5 |

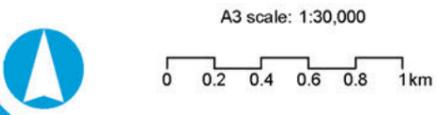
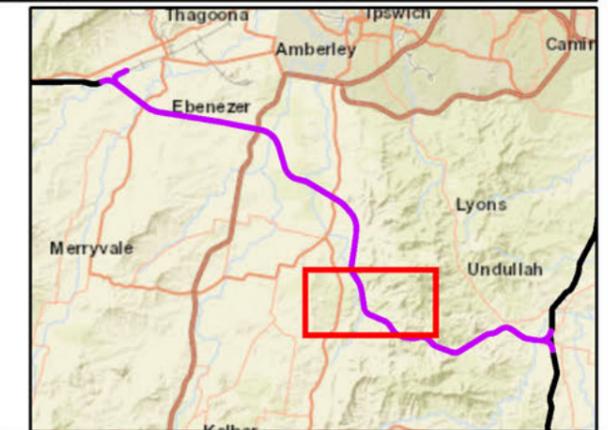


Figure C10-B-2: PMF event Developed Case afflux: Purga Creek