

TECHNICAL PAPER

04

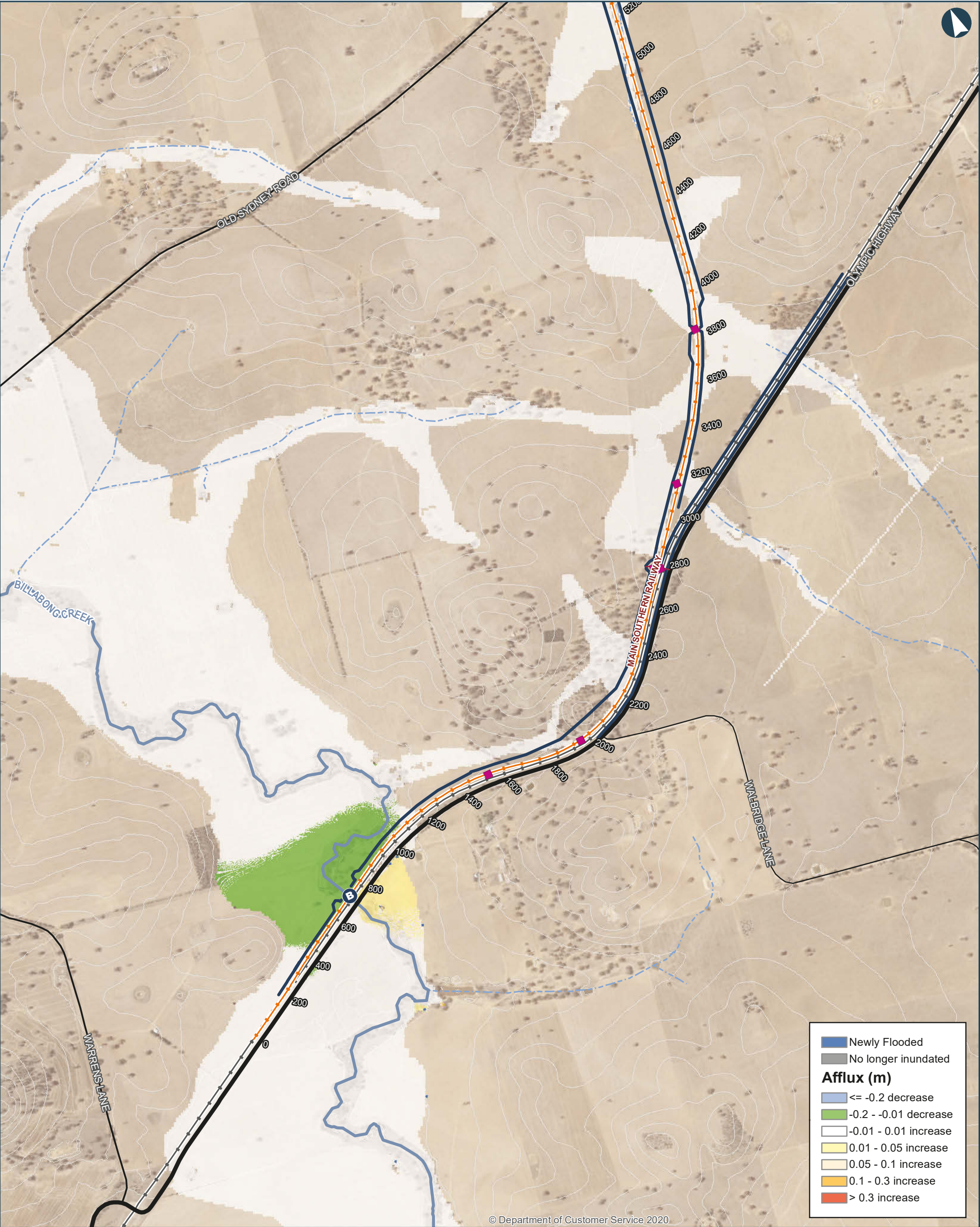
Hydrology and Flooding Impact Assessment

Appendix D Flood maps— design conditions

Appendix D5 Blockage sensitivity

ILLABO TO STOCKINBINGAL ENVIRONMENTAL IMPACT STATEMENT





ILLABO TO STOCKINBINGAL Change in Peak Water level for no culvert blockage Map 1 of 9

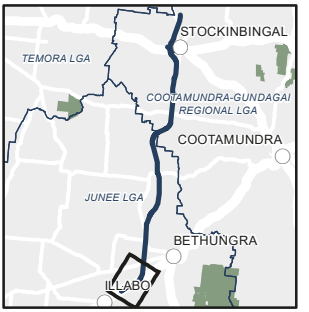
0 200 400 Metres

Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

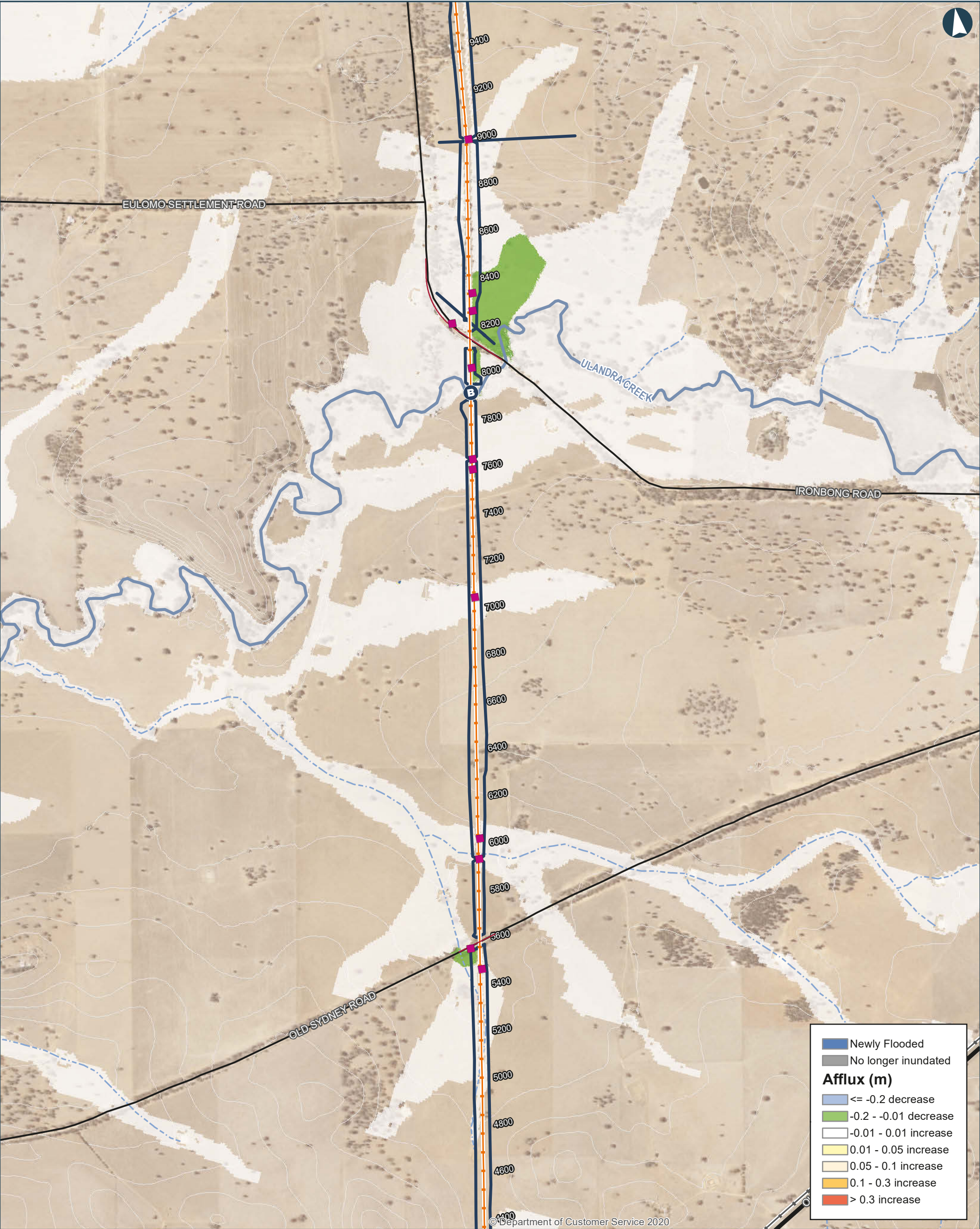
Date: 8/4/2022 Paper: A3
Author: IRDJV Scale: 1:15,000
Data Sources: IRDJV, ARTC, LPI

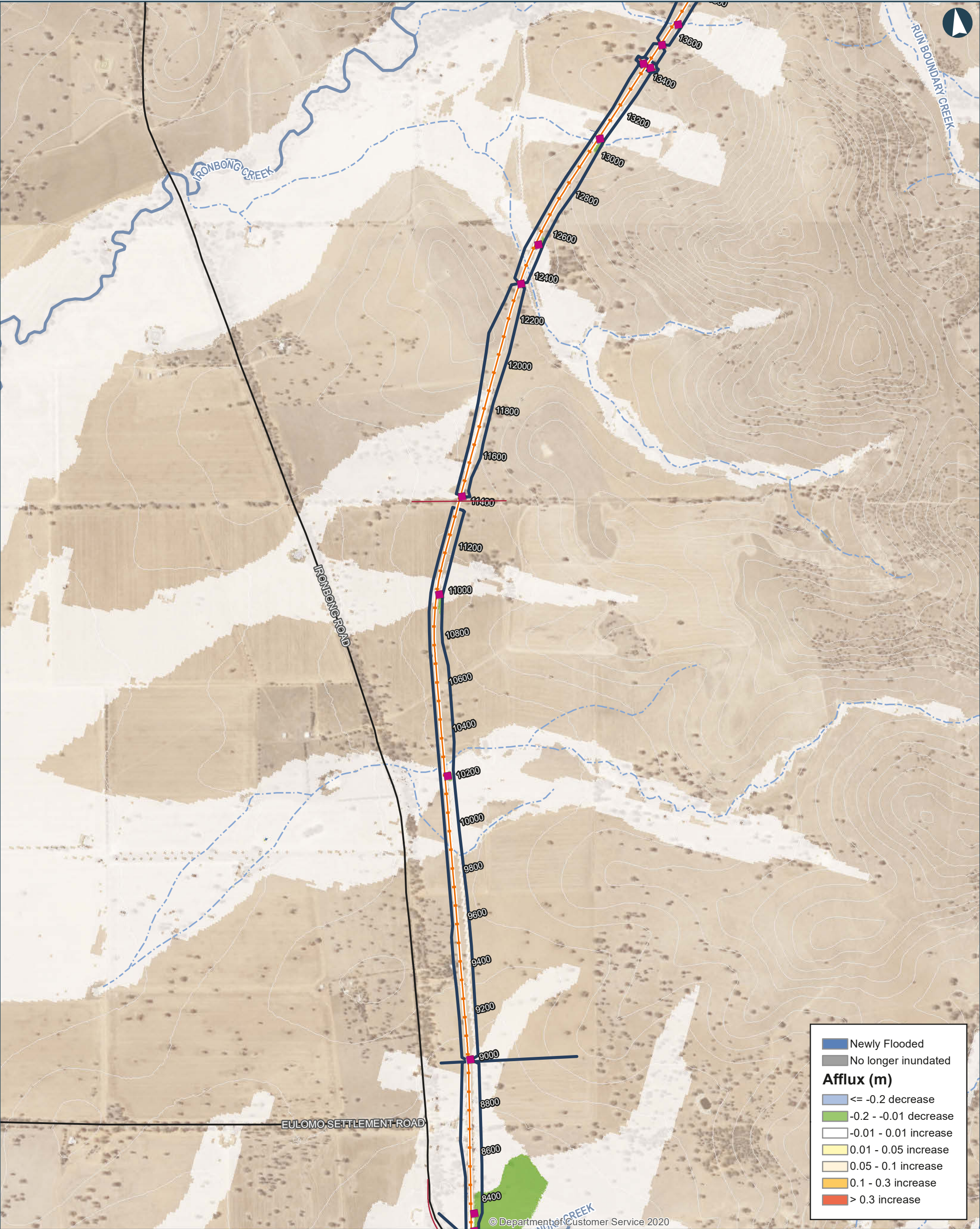
- Proposal site
- Chainage (distance in metres from southern limit of the proposal)
- New track/track upgrade
- Overbridge
- Underbridge
- Culvert
- 5m Contours
- Existing Rail
- Minor watercourse (Strahler SO 1-3)
- Major watercourse (Strahler SO 4-6)
- Local road
- Sub-arterial road
- Arterial road



INLAND RAIL **ARTC**

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





ILLABO TO STOCKINBINGAL Change in Peak Water level for no culvert blockage

0 200 400 Metres

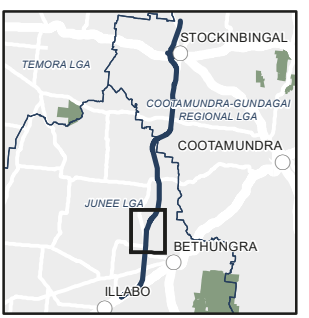
Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

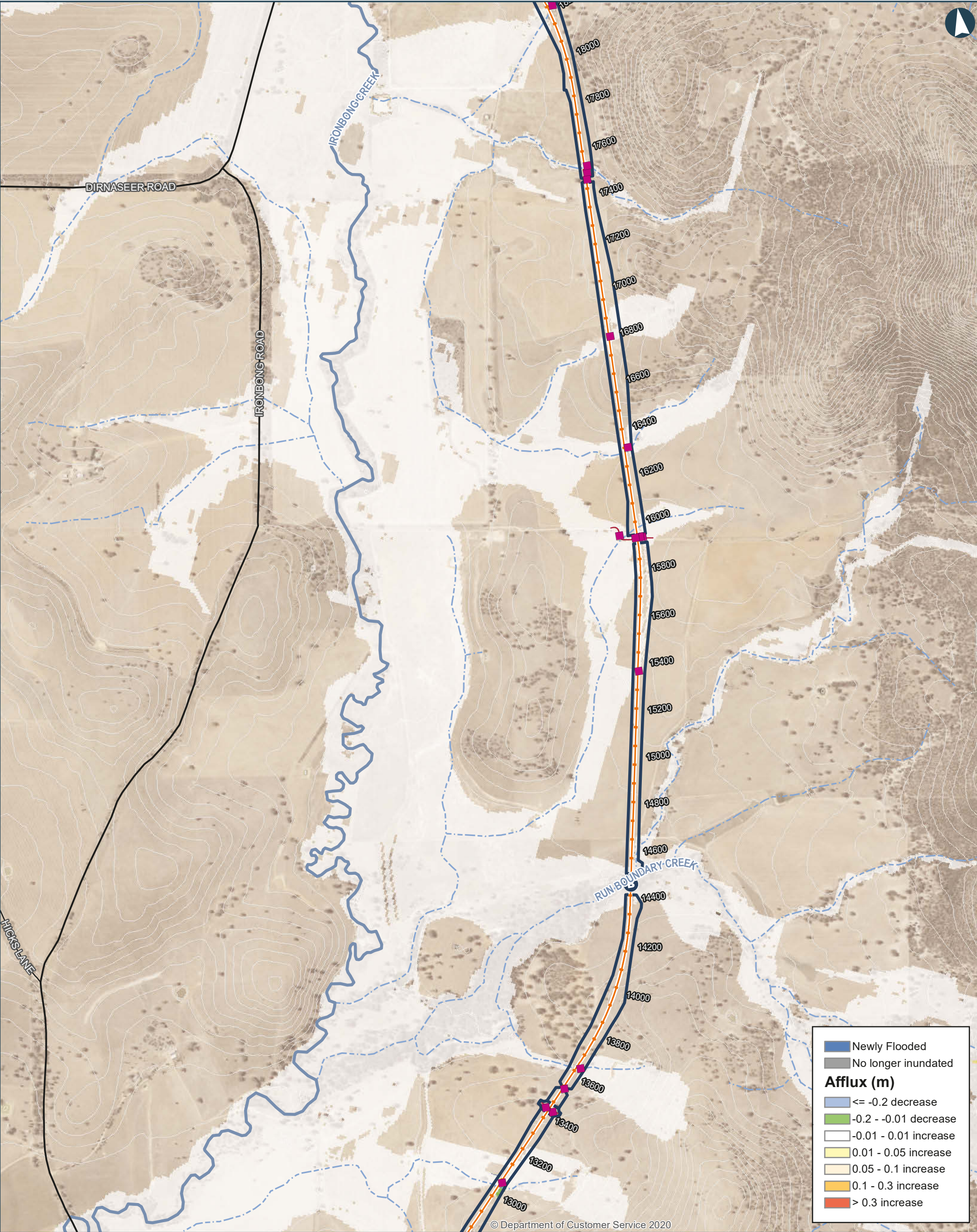
Paper: A3
Scale: 1:15,000

- Proposal site
- Chainage (distance in metres from southern limit of the proposal)
- New track/track upgrade
- Overbridge
- Underbridge
- Culvert
- 5m Contours
- Existing Rail
- Minor watercourse (Strahler SO 1-3)
- Major watercourse (Strahler SO 4-6)
- Local road
- Sub-arterial road
- Arterial road



INLAND RAIL **ARTC**

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for no culvert blockage

0 200 400 Metres

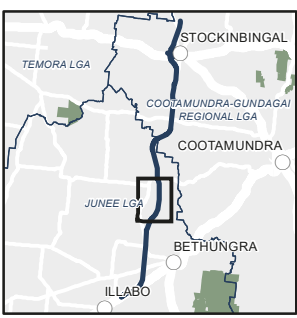
Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

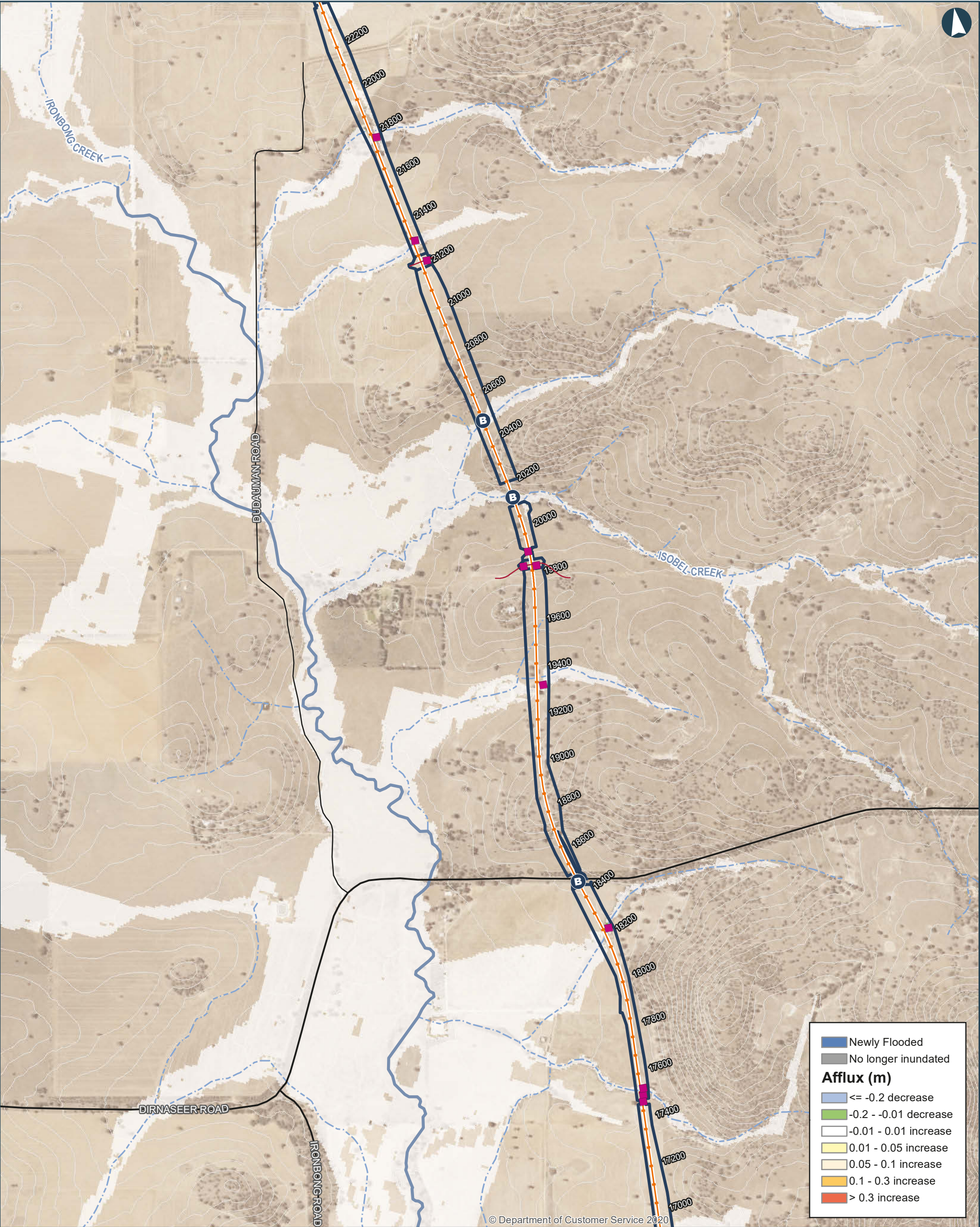
Paper: A3
Scale: 1:15,000

- Proposal site
- Chainage (distance in metres from southern limit of the proposal)
- New track/track upgrade
- Overbridge
- Underbridge
- Culvert
- 5m Contours
- Existing Rail
- Minor watercourse (Strahler SO 1-3)
- Major watercourse (Strahler SO 4-6)
- Local road
- Sub-arterial road
- Arterial road



INLAND RAIL ARTC

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for no culvert blockage

Map 5 of 9

0 200 400 Metres

Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

Paper: A3
Scale: 1:15,000

— Proposal site

— Chainage (distance in metres from southern limit of the proposal)

— New track/track upgrade

— Overbridge

— Underbridge

— Culvert

— 5m Contours

— Existing Rail

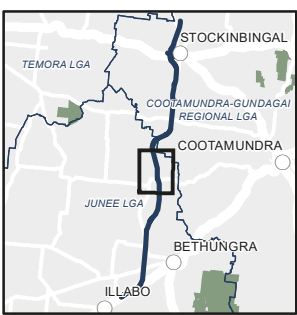
— Minor watercourse (Strahler SO 1-3)

— Major watercourse (Strahler SO 4-6)

— Local road

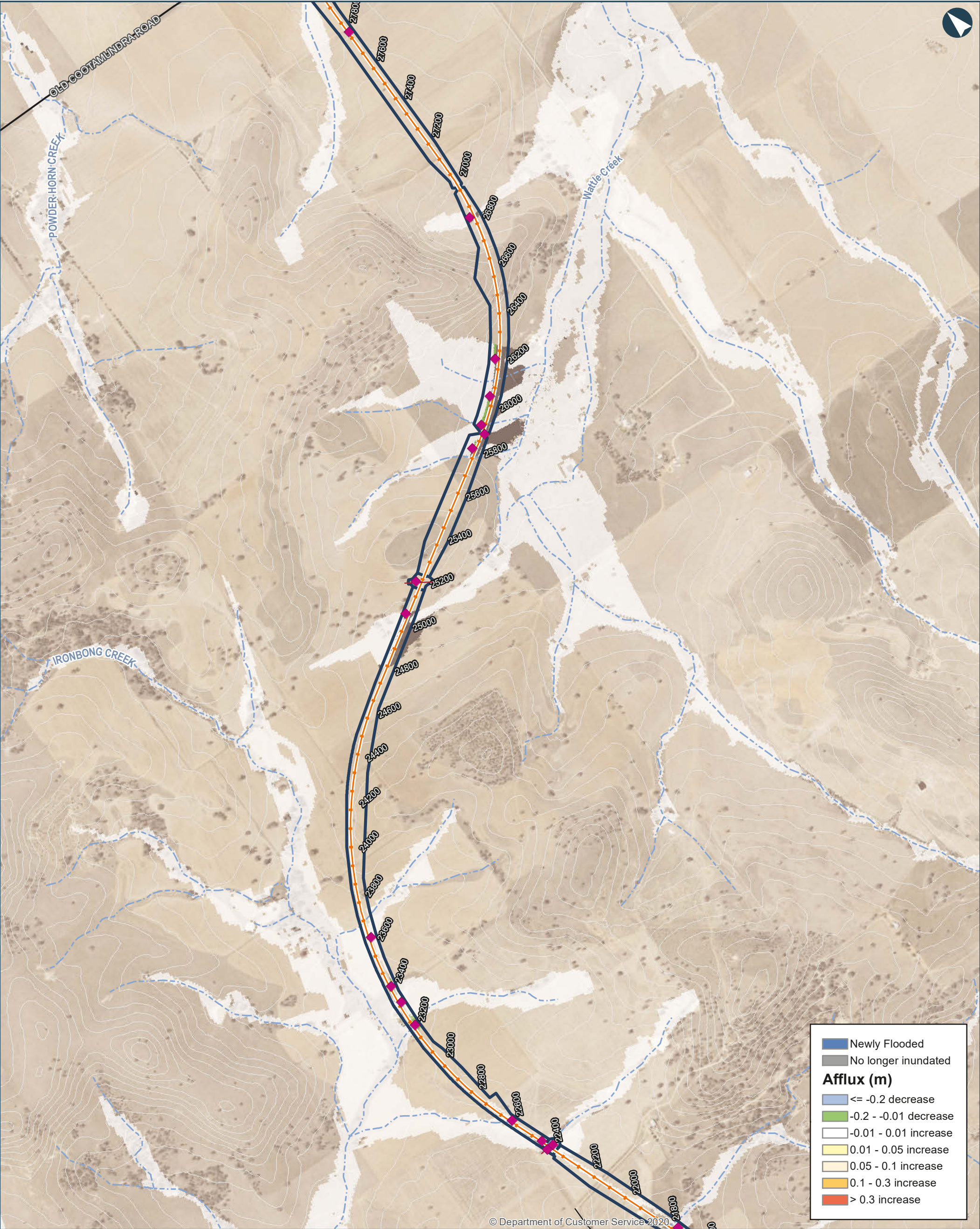
— Sub-arterial road

— Arterial road



INLAND RAIL **ARTC**

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for no culvert blockage

0 200 400 Metres

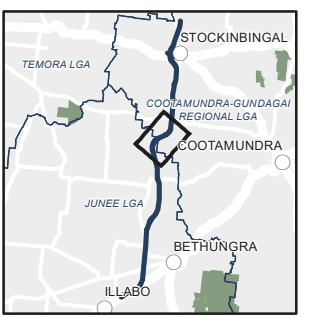
Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

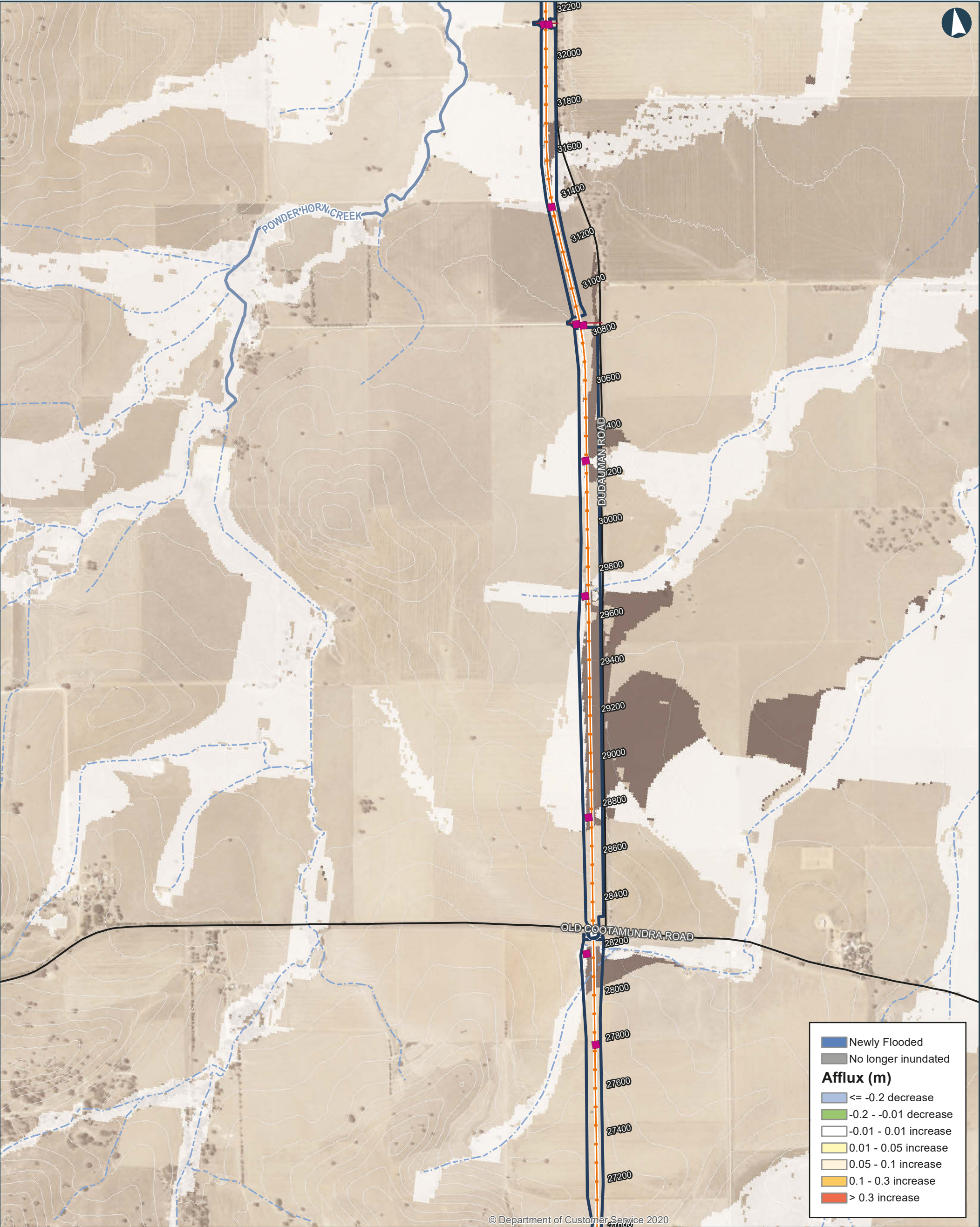
Paper: A3
Scale: 1:15,000

- Proposal site
- Chainage (distance in metres from southern limit of the proposal)
- New track/track upgrade
- Overbridge
- Underbridge
- Culvert
- 5m Contours
- Existing Rail
- Minor watercourse (Strahler SO 1-3)
- Major watercourse (Strahler SO 4-6)
- Local road
- Sub-arterial road
- Arterial road



INLAND RAIL ARTC

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for no culvert blockage

0 200 400 Metres

Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

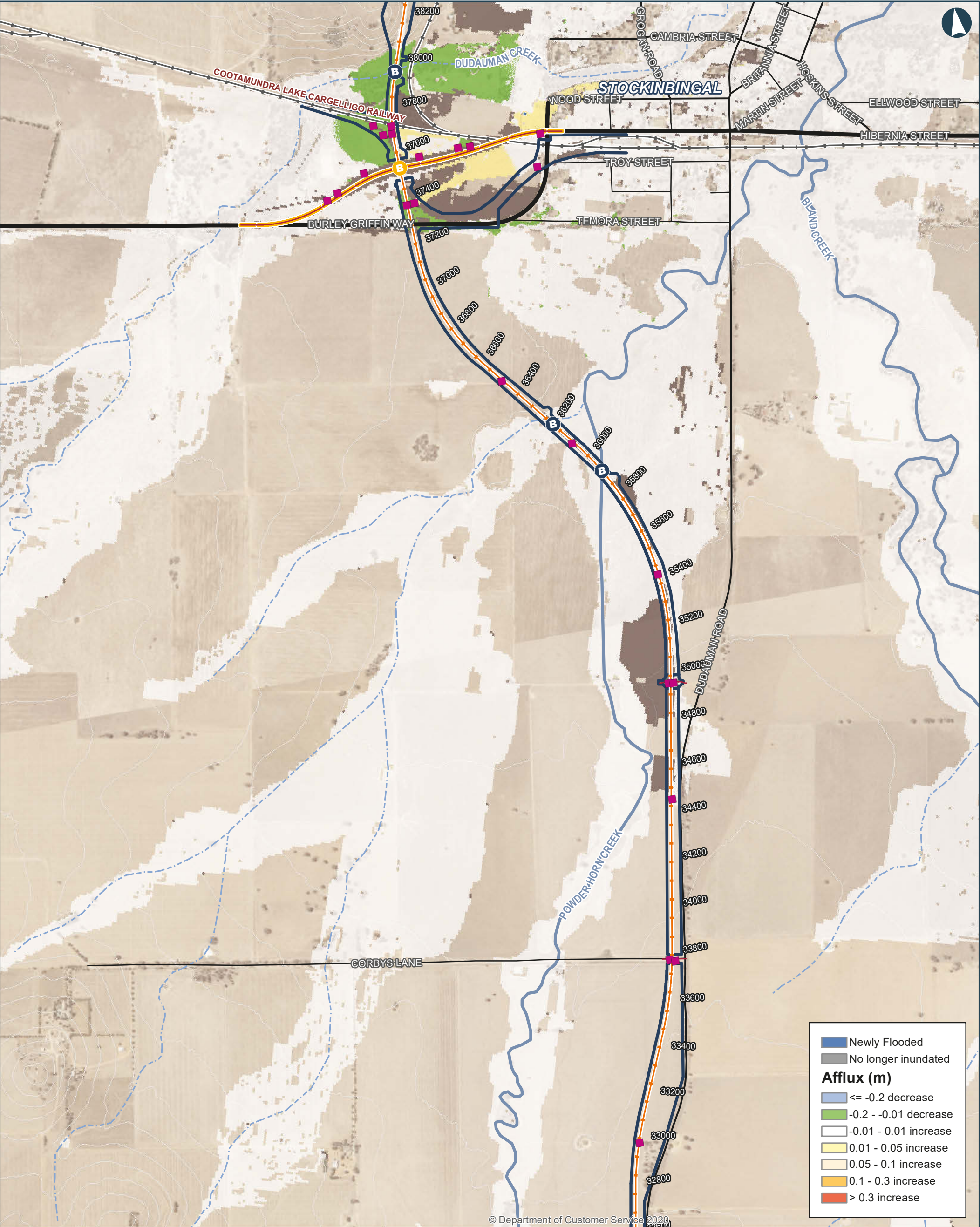
Paper: A3
Scale: 1:15,000

- Proposal site
- Chainage (distance in metres from southern limit of the proposal)
- New track/track upgrade
- Overbridge
- Underbridge
- Culvert
- 5m Contours
- Existing Rail
- Minor watercourse (Strahler SO 1-3)
- Major watercourse (Strahler SO 4-6)
- Local road
- Sub-arterial road
- Arterial road



INLAND RAIL ARTC

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for no culvert blockage

0 200 400 Metres

Coordinate System: GDA 1994 MGA Zone 55

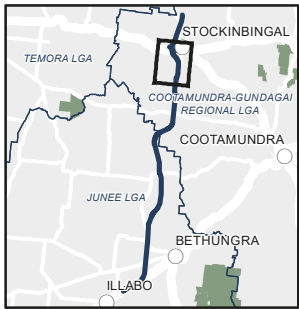
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022 Paper: A3
Author: IRDJV Scale: 1:15,000
Data Sources: IRDJV, ARTC, LPI

- Proposal site
- Chainage (distance in metres from southern limit of the proposal)
- New track/track upgrade
- Burley Griffin Way Realignment
- Overbridge

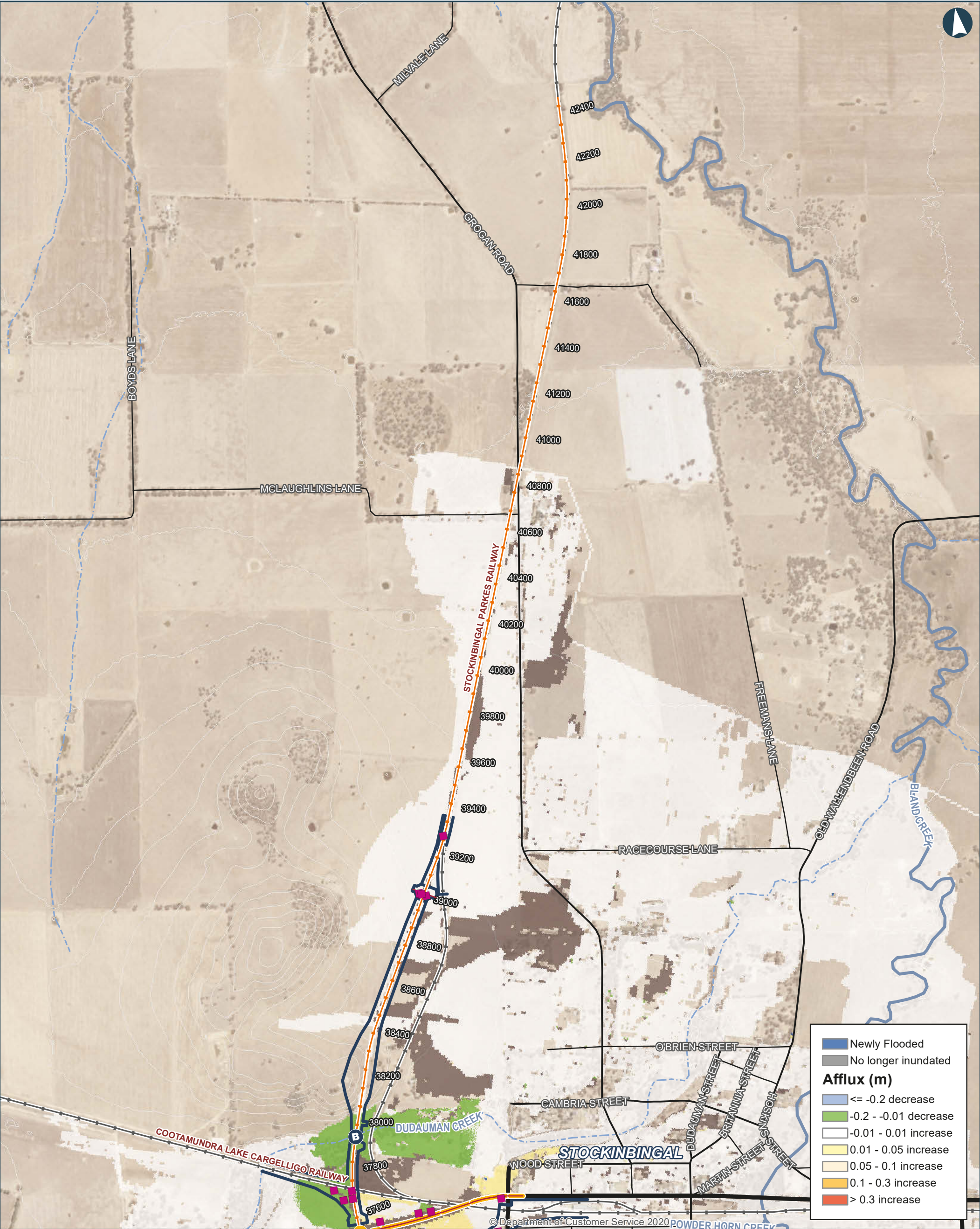
- Underbridge
- Culvert
- 5m Contours
- Existing Rail
- Minor watercourse (Strahler SO 1-3)
- Major watercourse (Strahler SO 4-6)
- Local road

- Sub-arterial road
- Arterial road



INLAND RAIL ARTC

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for no culvert blockage Map 9 of 9

0 200 400 Metres

Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

Paper: A3
Scale: 1:15,000

- Proposal site

Chainage (distance in metres from southern limit of the proposal)

New track/track upgrade

Burley Griffin Way Realignment

Overbridge
- Underbridge

Culvert

5m Contours

Existing Rail

Minor watercourse (Strahler SO 1-3)

Major watercourse (Strahler SO 4-6)

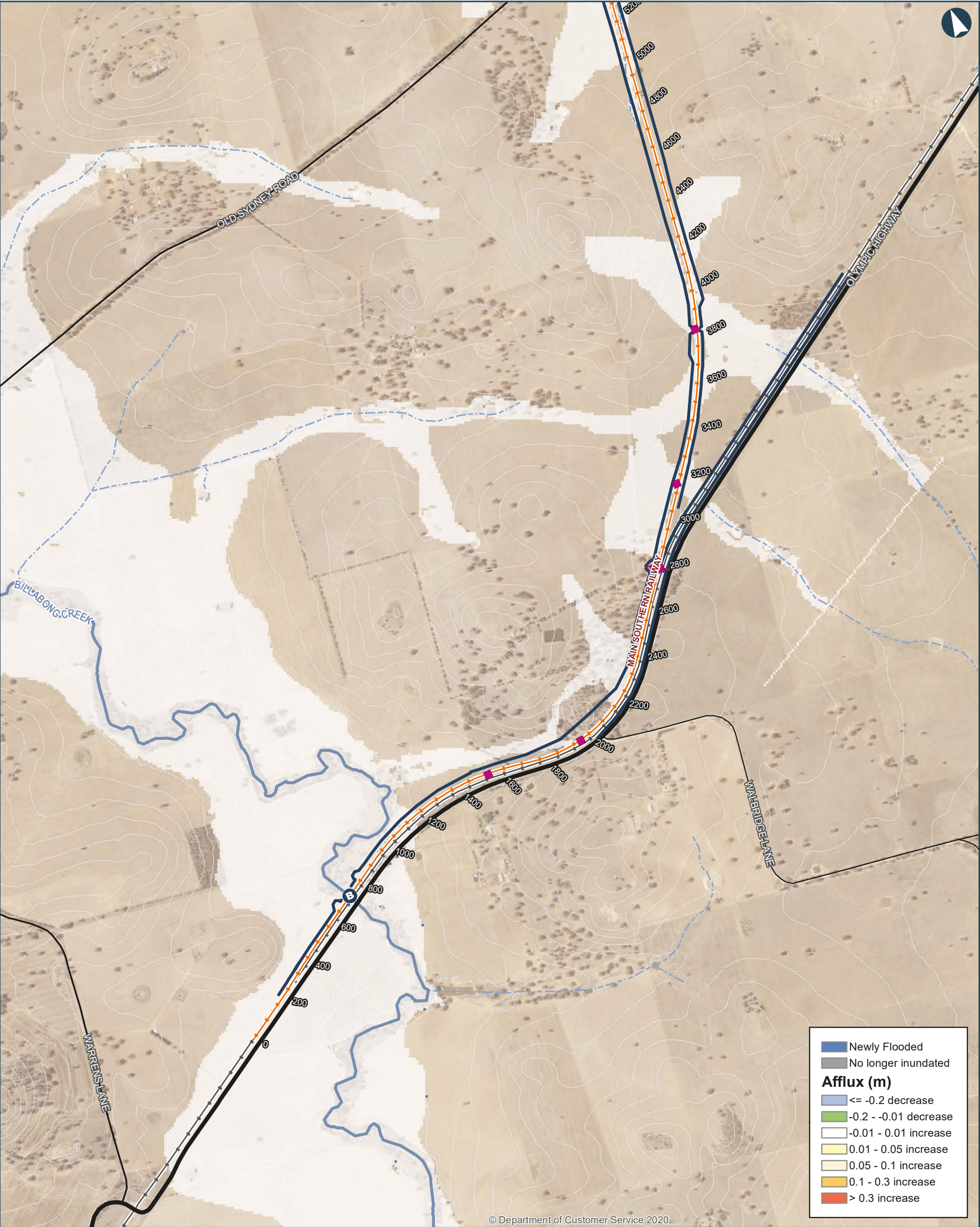
Local road
- Sub-arterial road

Arterial road



INLAND RAIL **ARTC**

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for 25% culvert blockage

0 200 400 Metres

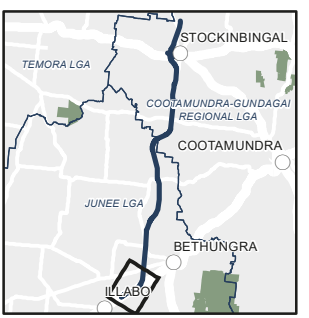
Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

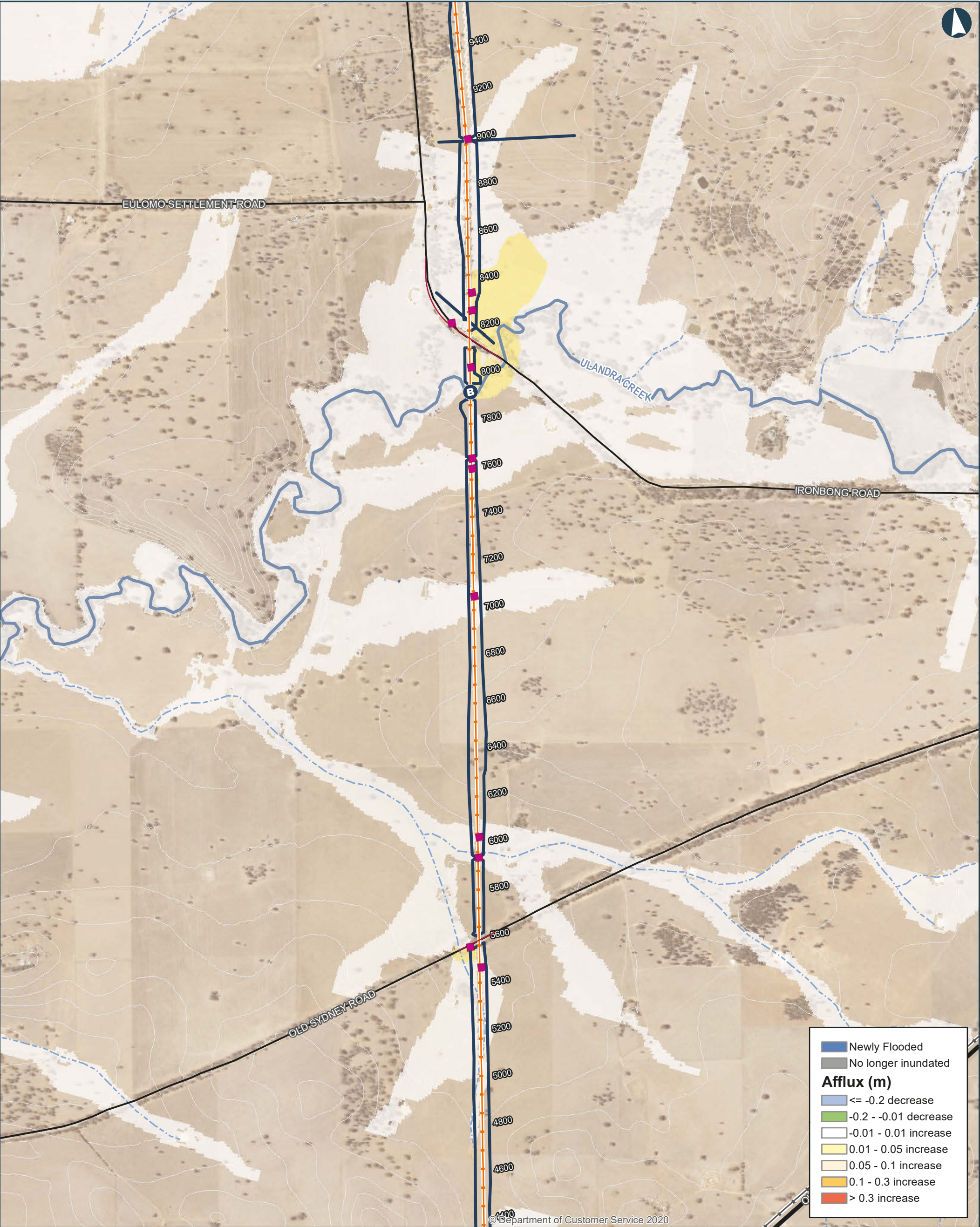
Paper: A3
Scale: 1:15,000

- Proposal site
- Chainage (distance in metres from southern limit of the proposal)
- New track/track upgrade
- Overbridge
- Underbridge
- Culvert
- 5m Contours
- Existing Rail
- Minor watercourse (Strahler SO 1-3)
- Major watercourse (Strahler SO 4-6)
- Local road
- Sub-arterial road
- Arterial road



INLAND RAIL ARTC

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for 25% culvert blockage

0 200 400 Metres

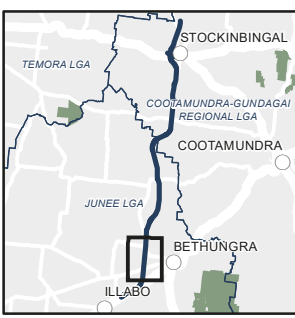
Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

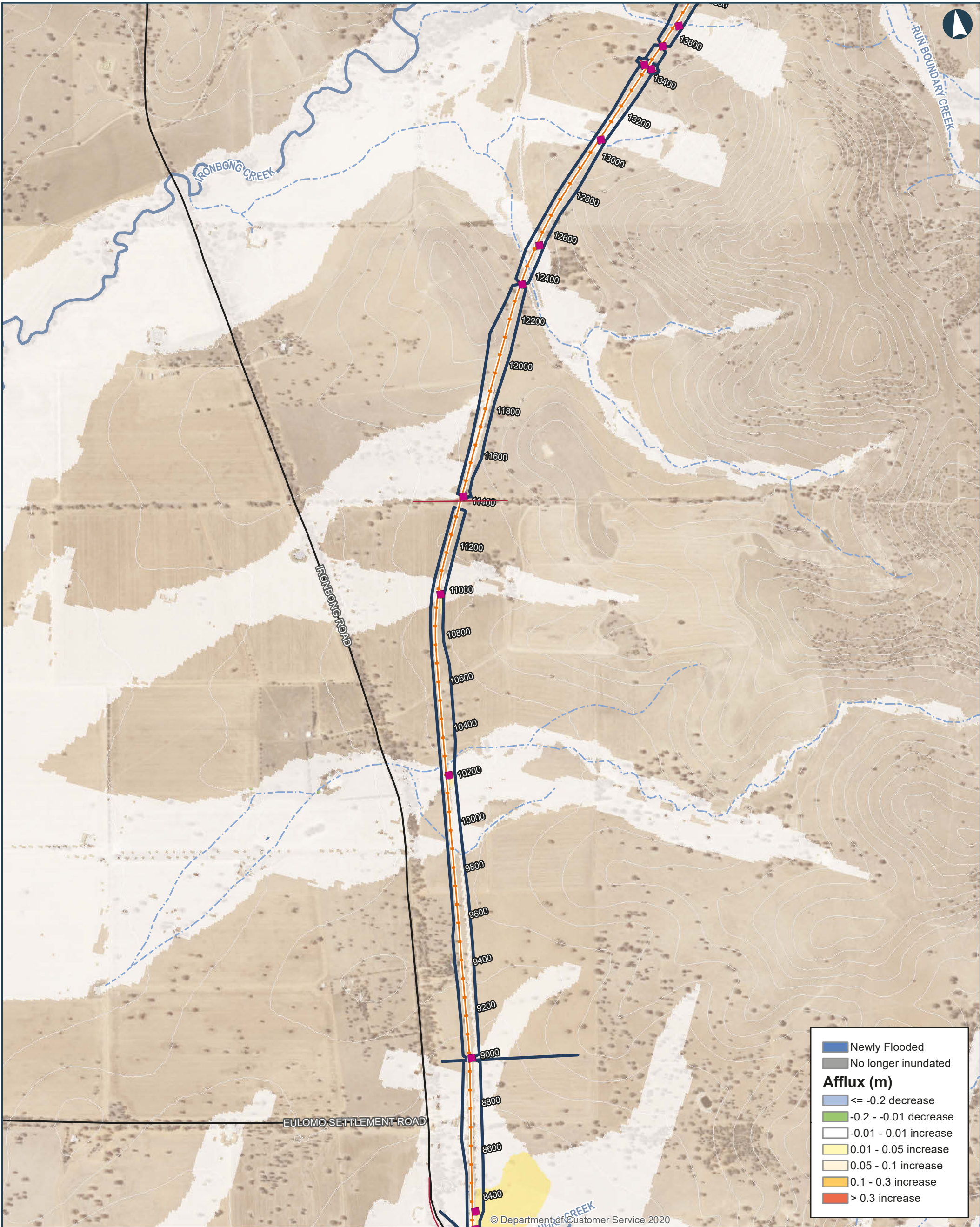
Paper: A3
Scale: 1:15,000

- Proposal site
- Chainage (distance in metres from southern limit of the proposal)
- New track/track upgrade
- Overbridge
- Underbridge
- Culvert
- 5m Contours
- Existing Rail
- Minor watercourse (Strahler SO 1-3)
- Major watercourse (Strahler SO 4-6)
- Local road
- Sub-arterial road
- Arterial road



INLAND RAIL ARTC

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for 25% culvert blockage

0 200 400 Metres

Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

40950

Proposal site

Chainage (distance in metres from southern limit of the proposal)

New track/track upgrade

Overbridge

Underbridge

Culvert

5m Contours

Existing Rail

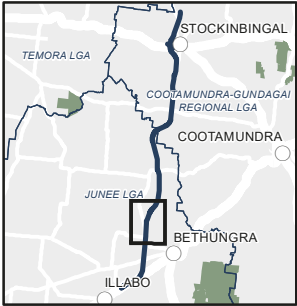
Minor watercourse (Strahler SO 1-3)

Major watercourse (Strahler SO 4-6)

Local road

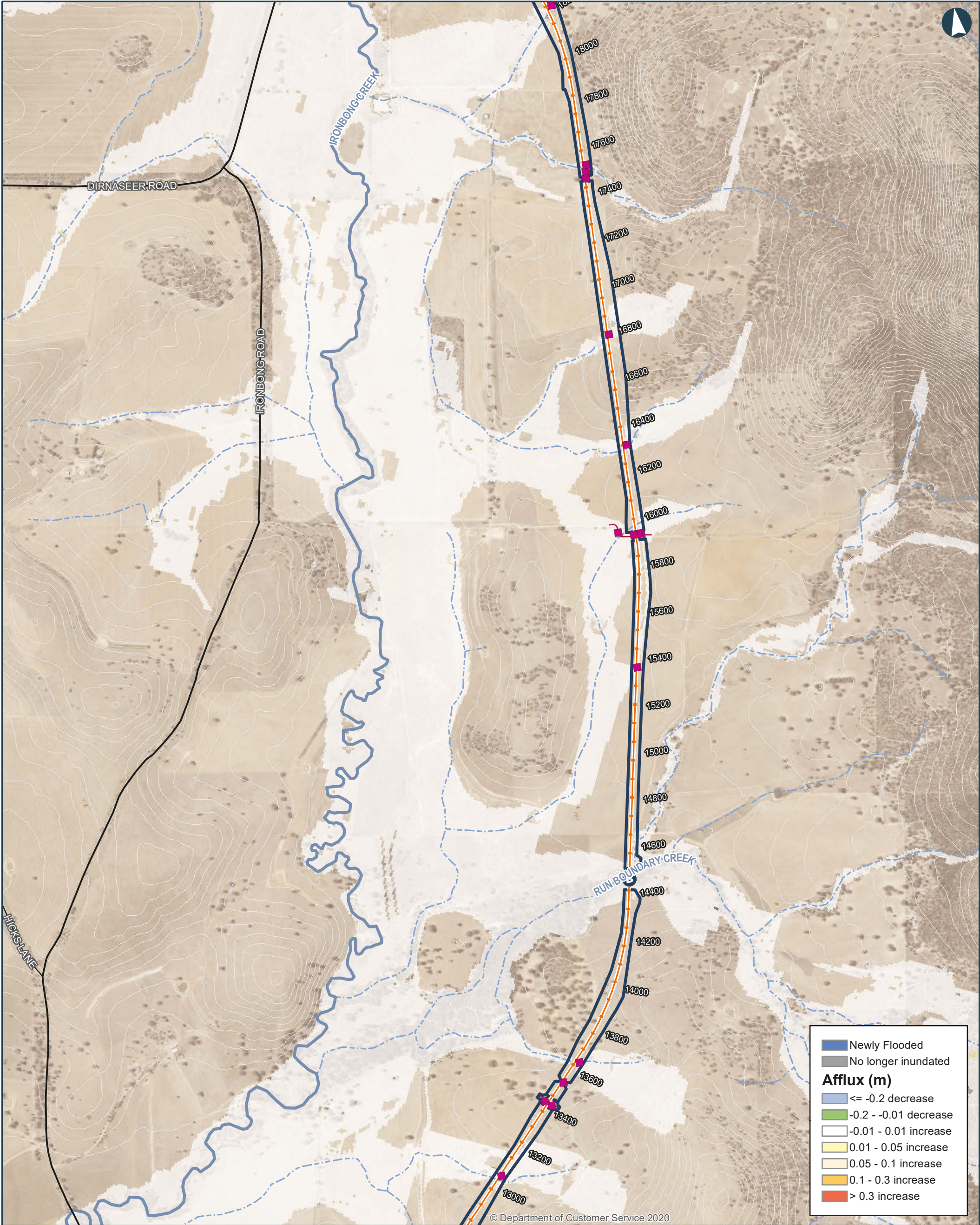
Sub-arterial road

Arterial road



INLAND RAIL **ARTC**

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for 25% culvert blockage

0 200 400 Metres

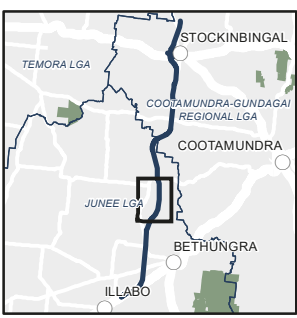
Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

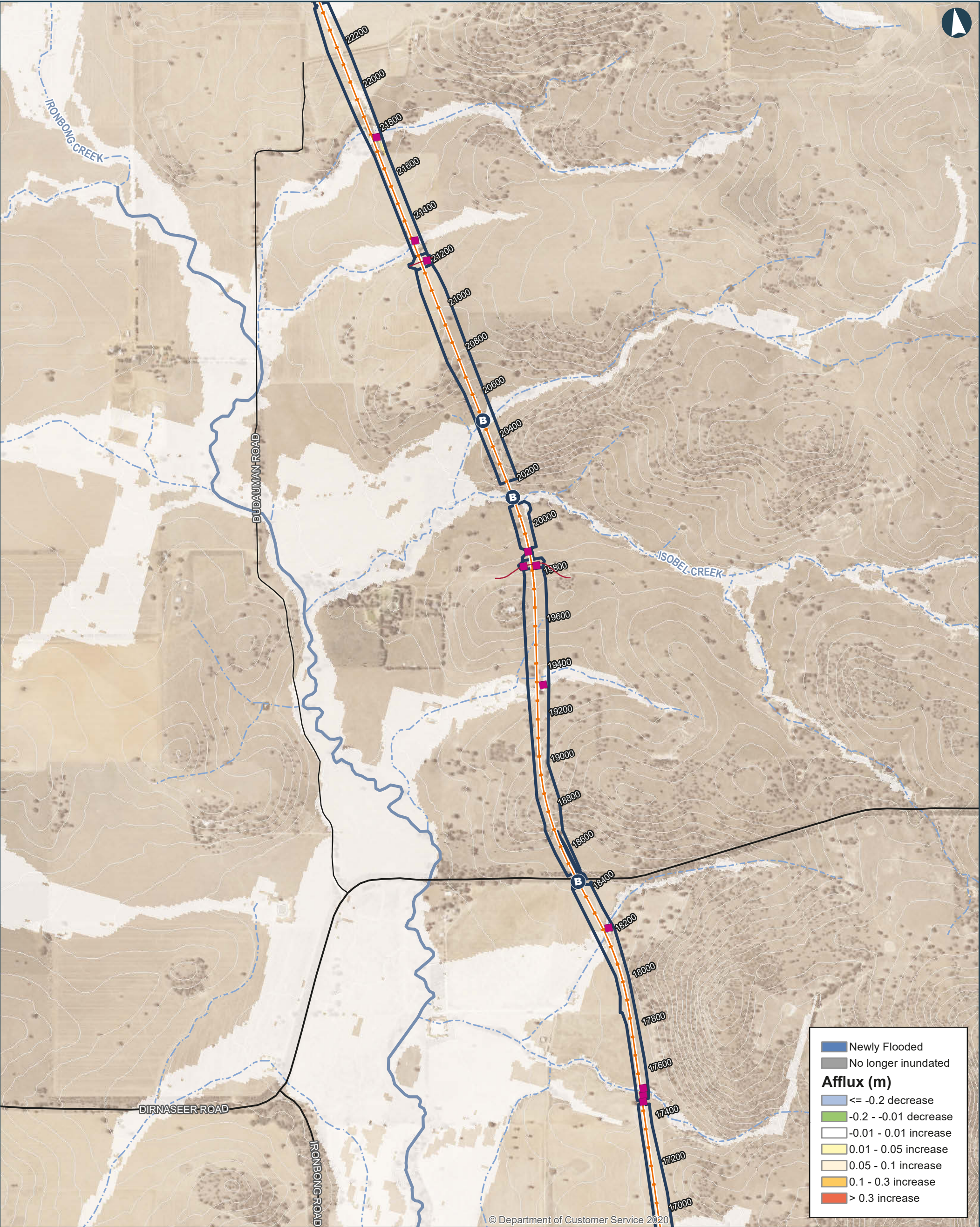
Paper: A3
Scale: 1:15,000

- Proposal site
- Chainage (distance in metres from southern limit of the proposal)
- New track/track upgrade
- Overbridge
- Underbridge
- Culvert
- 5m Contours
- Existing Rail
- Minor watercourse (Strahler SO 1-3)
- Major watercourse (Strahler SO 4-6)
- Local road
- Sub-arterial road
- Arterial road



INLAND RAIL ARTC

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for 25% culvert blockage

0 200 400 Metres

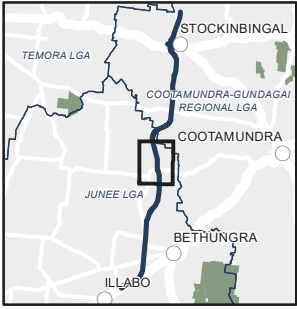
Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

Paper: A3
Scale: 1:15,000

- Proposal site
- Chainage (distance in metres from southern limit of the proposal)
- New track/track upgrade
- Overbridge
- Underbridge
- Culvert
- 5m Contours
- Existing Rail
- Minor watercourse (Strahler SO 1-3)
- Major watercourse (Strahler SO 4-6)
- Local road
- Sub-arterial road
- Arterial road



INLAND RAIL ARTC

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for 25% culvert blockage

0 200 400 Metres

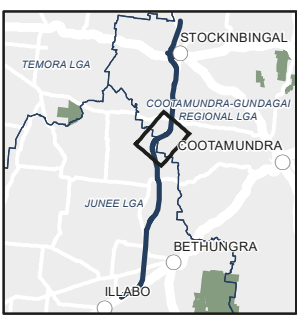
Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

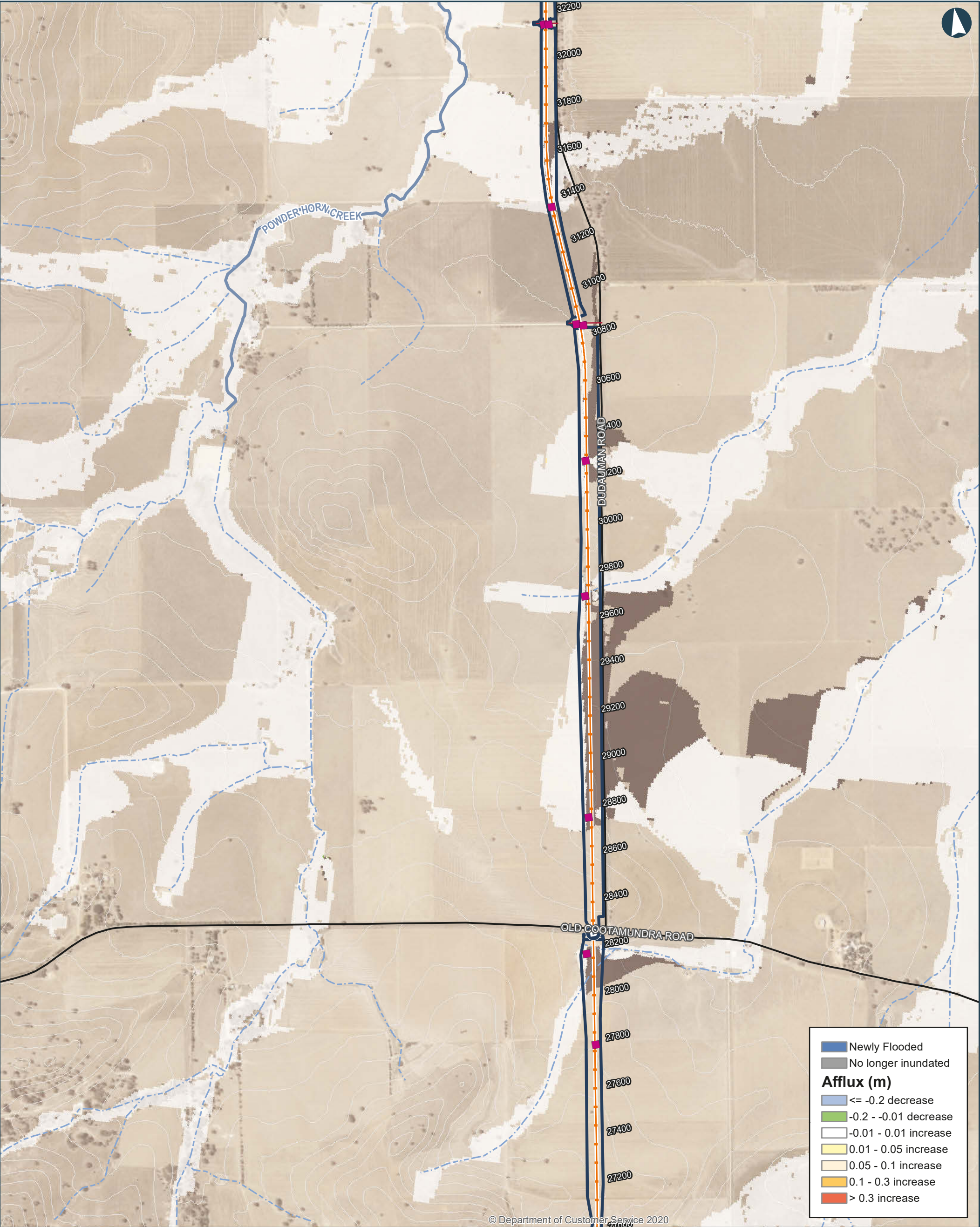
Paper: A3
Scale: 1:15,000

- Proposal site
- Chainage (distance in metres from southern limit of the proposal)
- New track/track upgrade
- Overbridge
- Underbridge
- Culvert
- 5m Contours
- Existing Rail
- Minor watercourse (Strahler SO 1-3)
- Major watercourse (Strahler SO 4-6)
- Local road
- Sub-arterial road
- Arterial road



INLAND RAIL ARTC

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for 25% culvert blockage

Map 7 of 9

0 200 400 Metres

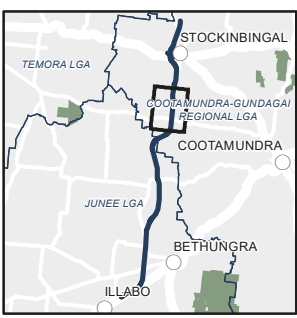
Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

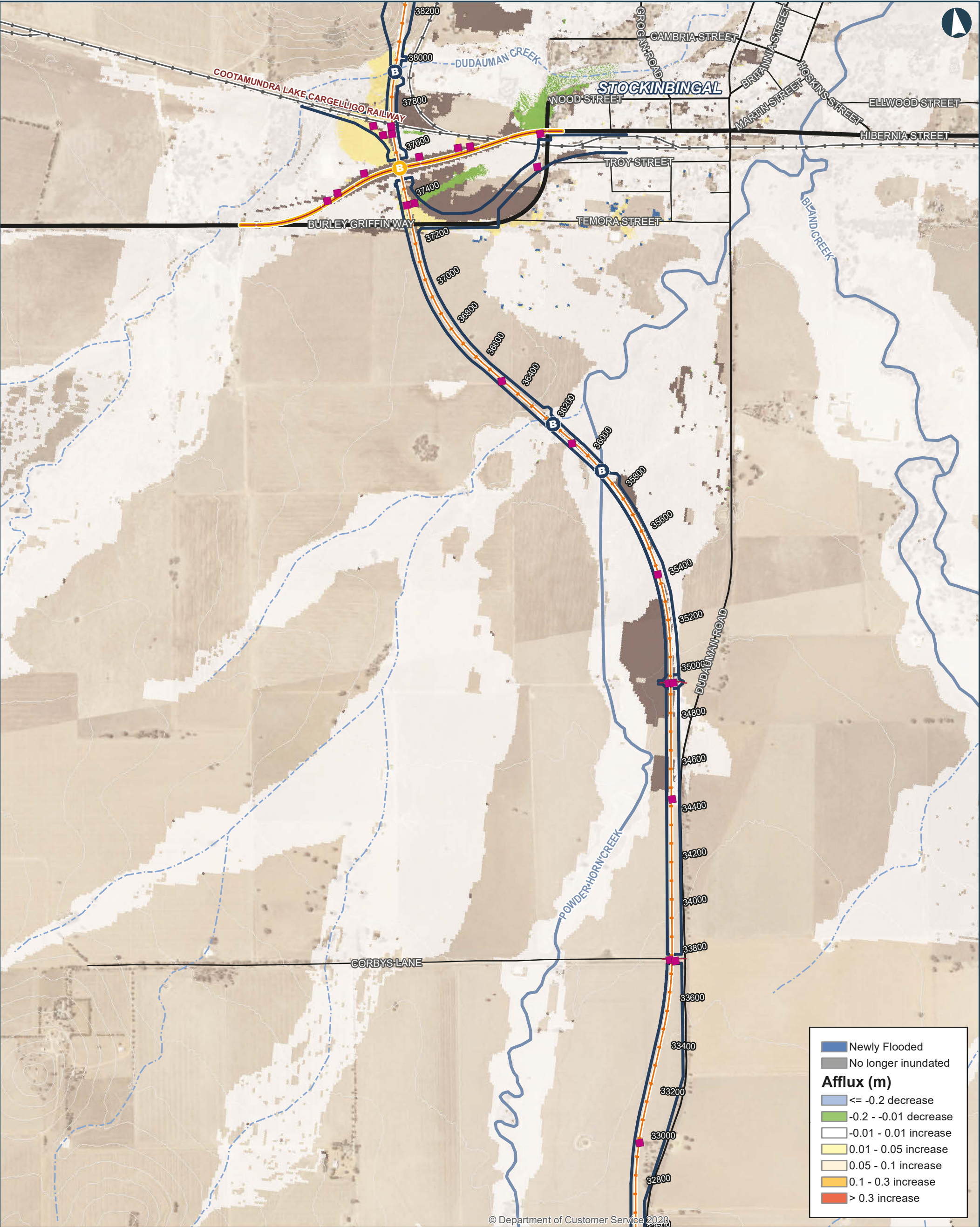
Paper: A3
Scale: 1:15,000

- Proposal site
- Chainage (distance in metres from southern limit of the proposal)
- New track/track upgrade
- Overbridge
- Underbridge
- Culvert
- 5m Contours
- Existing Rail
- Minor watercourse (Strahler SO 1-3)
- Major watercourse (Strahler SO 4-6)
- Local road
- Sub-arterial road
- Arterial road



INLAND RAIL ARTC

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for 25% culvert blockage

0 200 400 Metres

Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

40950

Proposal site

Chainage (distance in metres from southern limit of the proposal)

New track/track upgrade

Burley Griffin Way Realignment

Overbridge

B Underbridge

Culvert

5m Contours

Existing Rail

Minor watercourse (Strahler SO 1-3)

Major watercourse (Strahler SO 4-6)

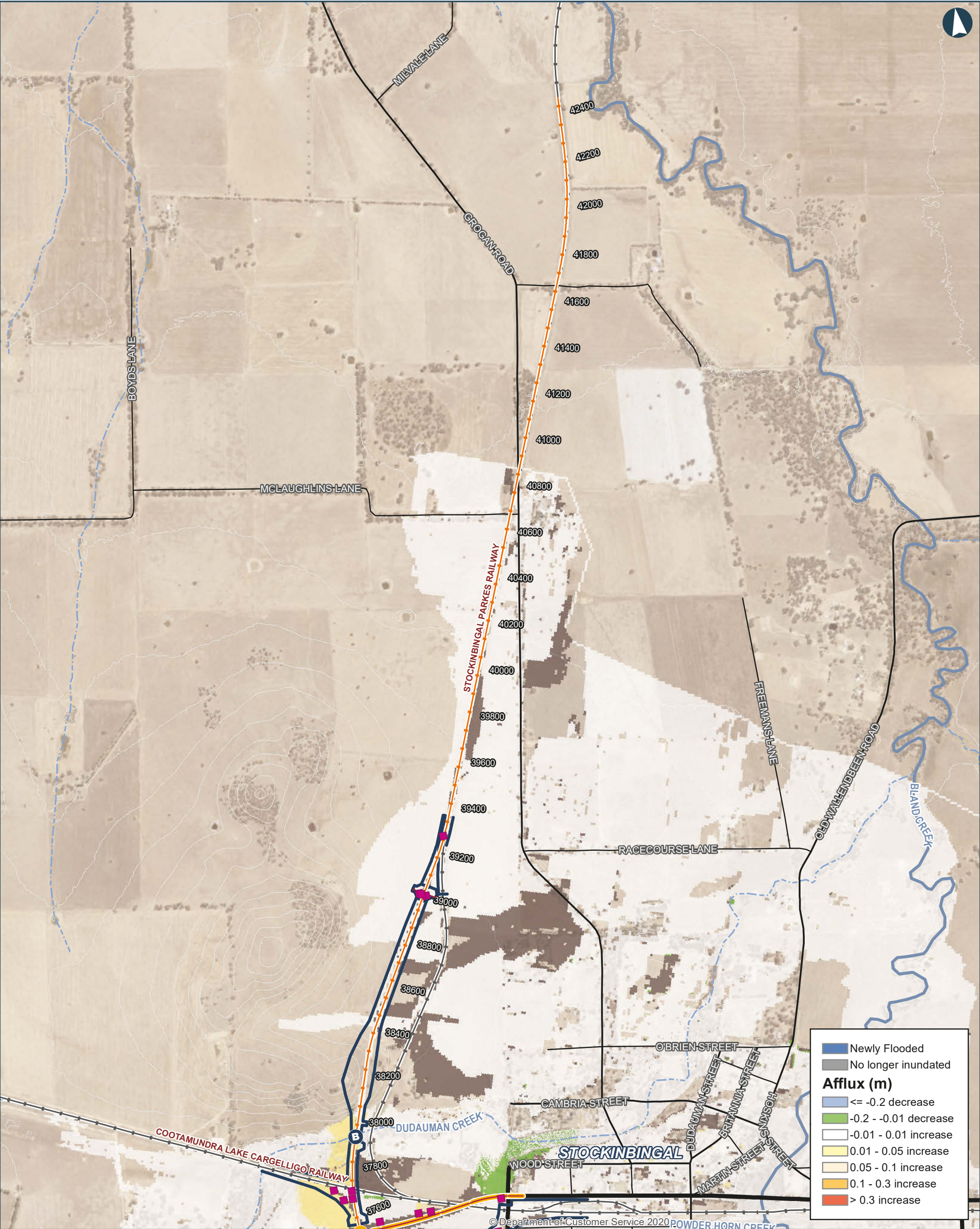
Local road

Sub-arterial road

Arterial road

INLAND RAIL ARTC

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



ILLABO TO STOCKINBINGAL Change in Peak Water level for 25% culvert blockage

0 200 400 Metres

Coordinate System: GDA 1994 MGA Zone 55

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 8/4/2022
Author: IRDJV
Data Sources: IRDJV, ARTC, LPI

Proposal site

Chainage (distance in metres from southern limit of the proposal)

New track/track upgrade

Burley Griffin Way Realignment

Overbridge

Underbridge

Culvert

5m Contours

Existing Rail

Minor watercourse (Strahler SO 1-3)

Major watercourse (Strahler SO 4-6)

Local road

Sub-arterial road

Arterial road

INLAND RAIL **ARTC**

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