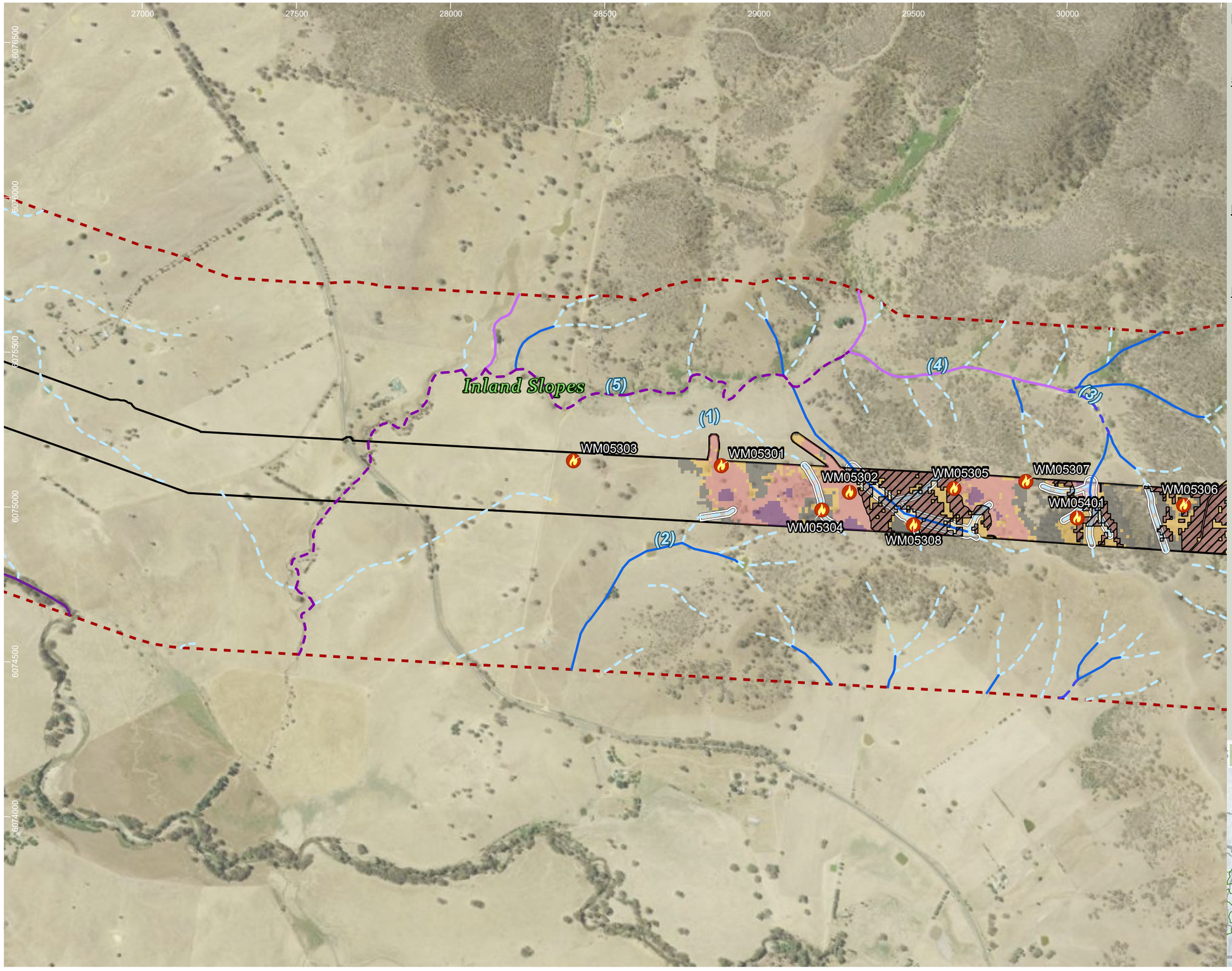


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

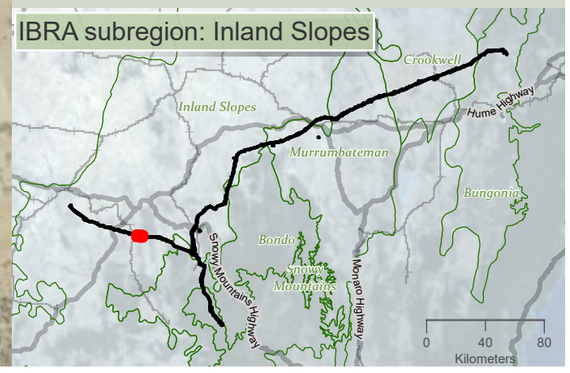
- 1
- 2
- 3
- 4
- 5
- 6

Burnt areas assessment

- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

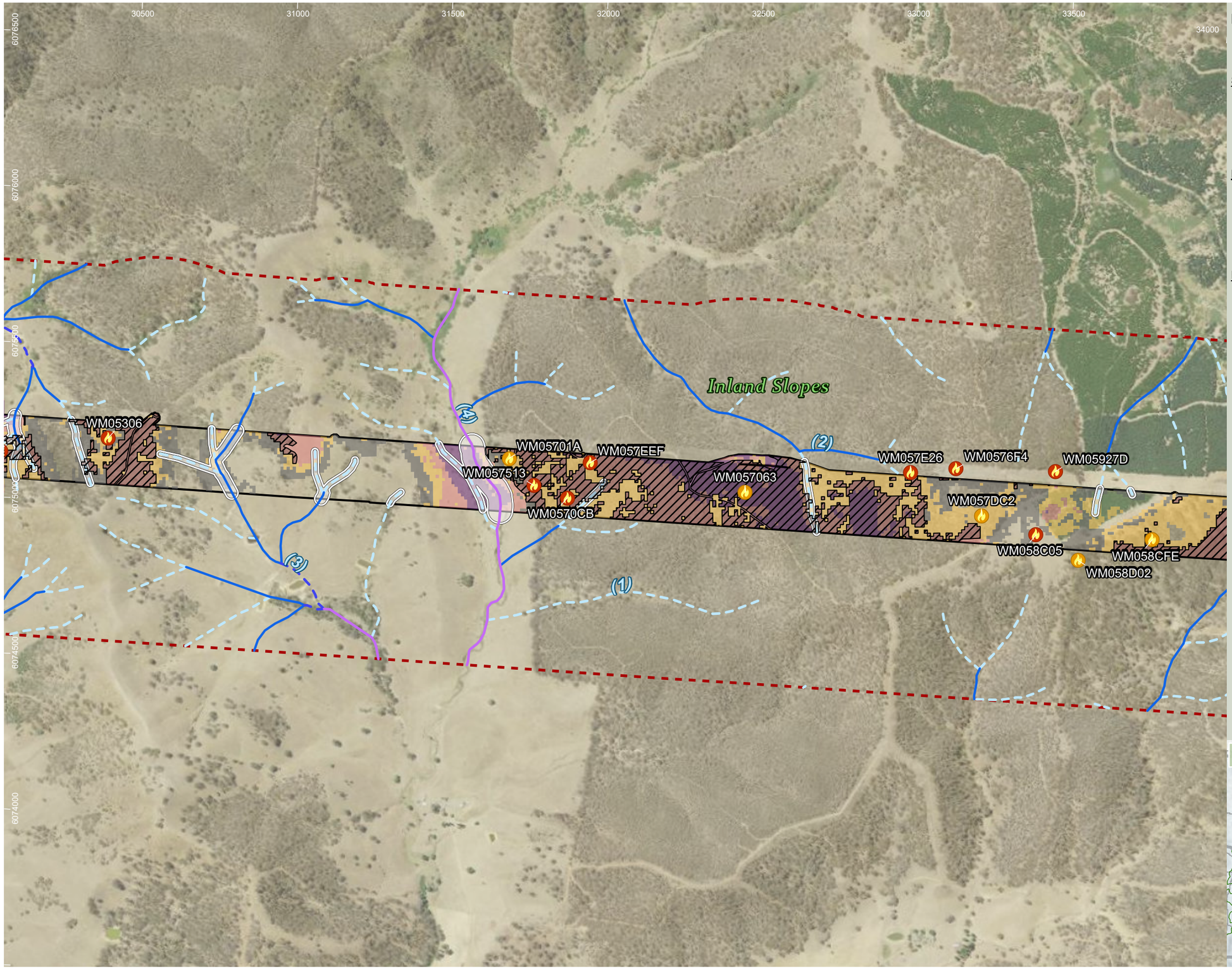
Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 13

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

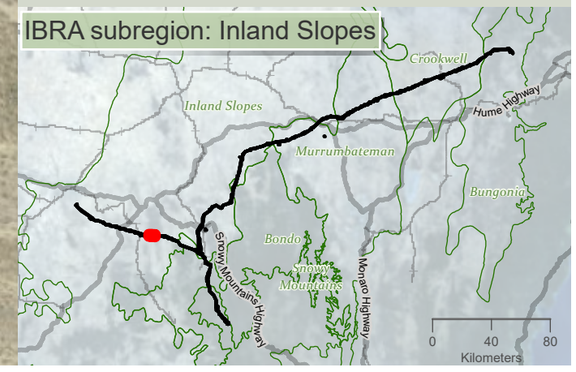
- 1
- 2
- 3
- 4

Burnt areas assessment

- ELA - October 2020 – February 2021
- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

Environment and Heritage

0 350
m

WGS 1984 Web Mercator

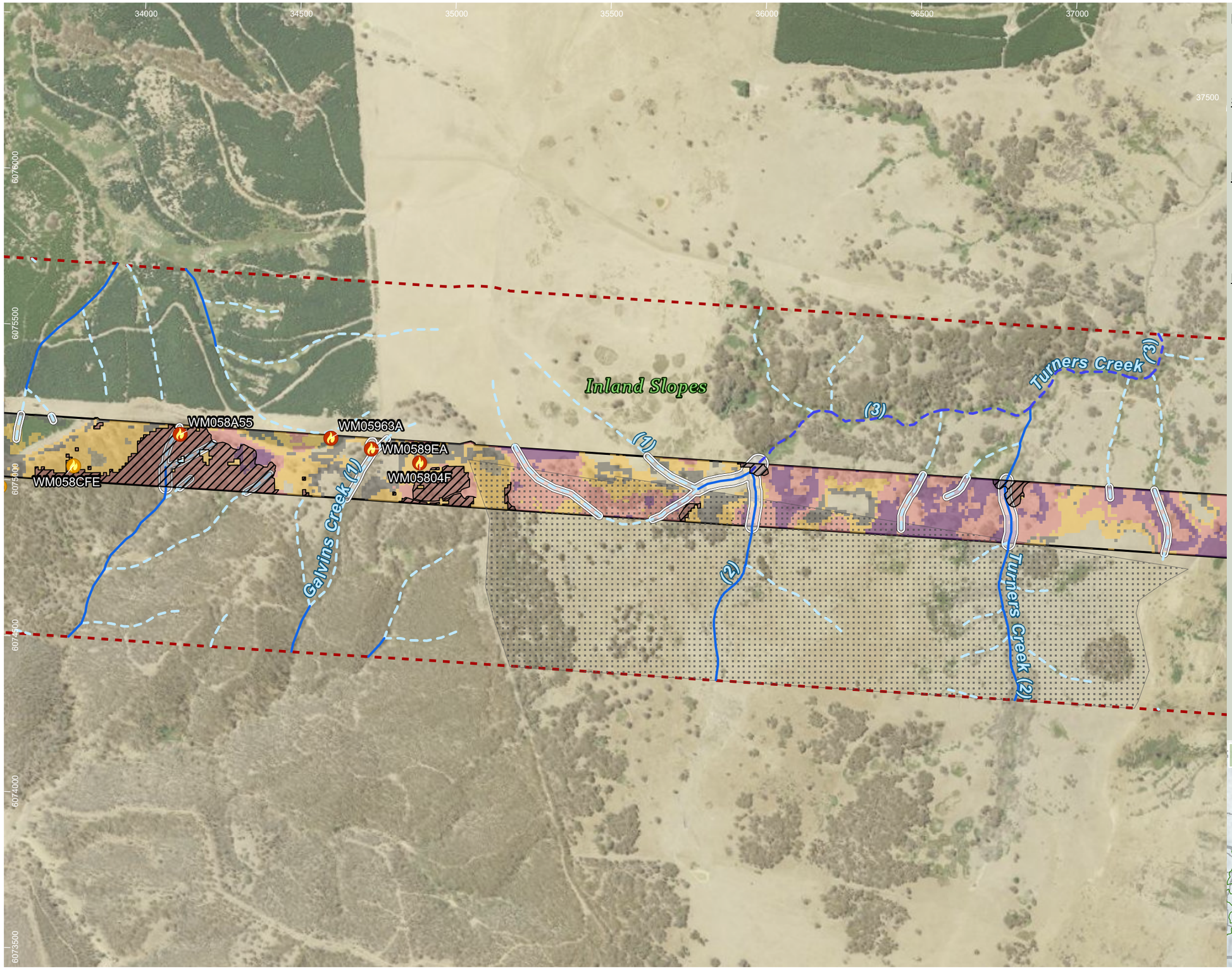
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 14

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Strahler stream order

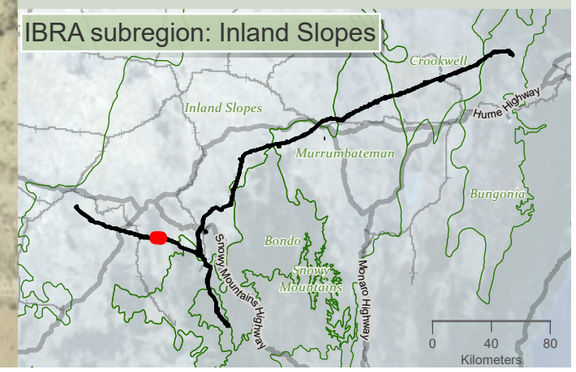
- 1
- 2
- 3

Burnt areas assessment

- ELA - October 2020 – February 2021
- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDrive\SyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 15

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

50000 50500 51000 51500 52000 52500 53000 53500

6070500 6070000 6069500 6069000 6068500 6068000

MA0141C2
MA014B10
MA014308
(2)
Uncles Creek (3)
Bondo
Sharps Creek (3)
(1)
Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

- 1
- 2
- 3
- 4

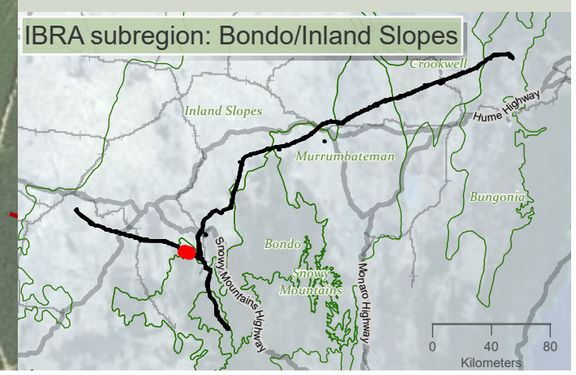
Burnt areas assessment

- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption

IBRA subregion: Bondo/Inland Slopes



niche Environment and Heritage

0 400
m
N
WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

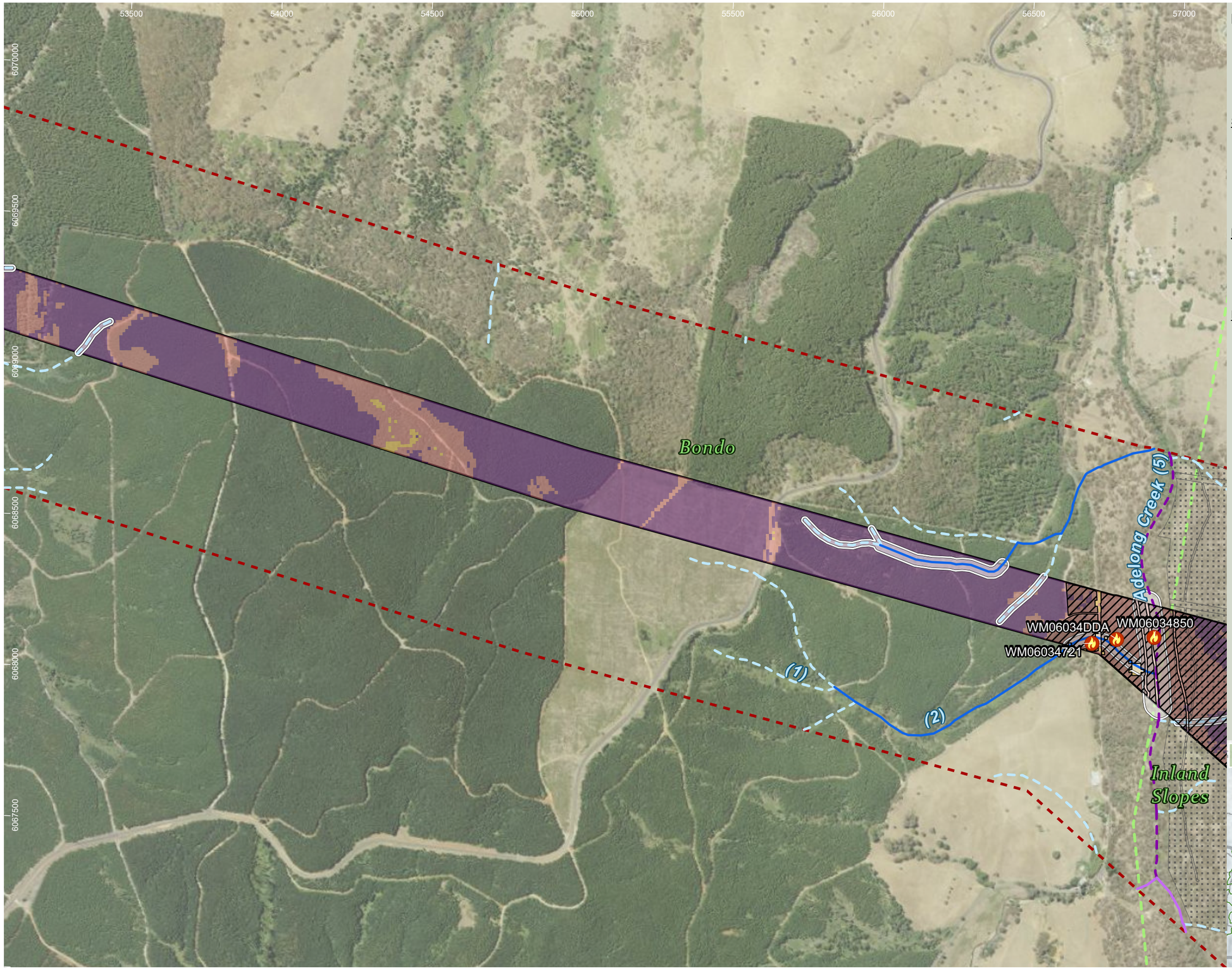
Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 20

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Strahler stream order

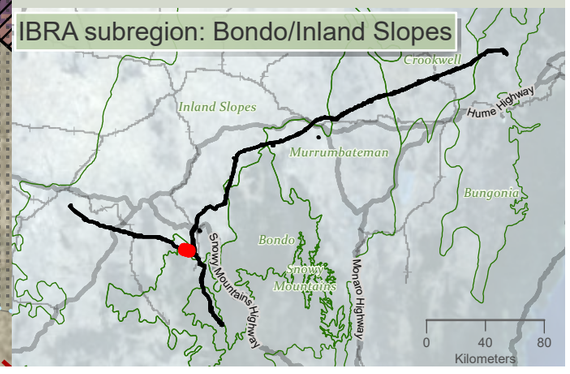
- 0
- 1
- 2
- 4
- 5

Burnt areas assessment

- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

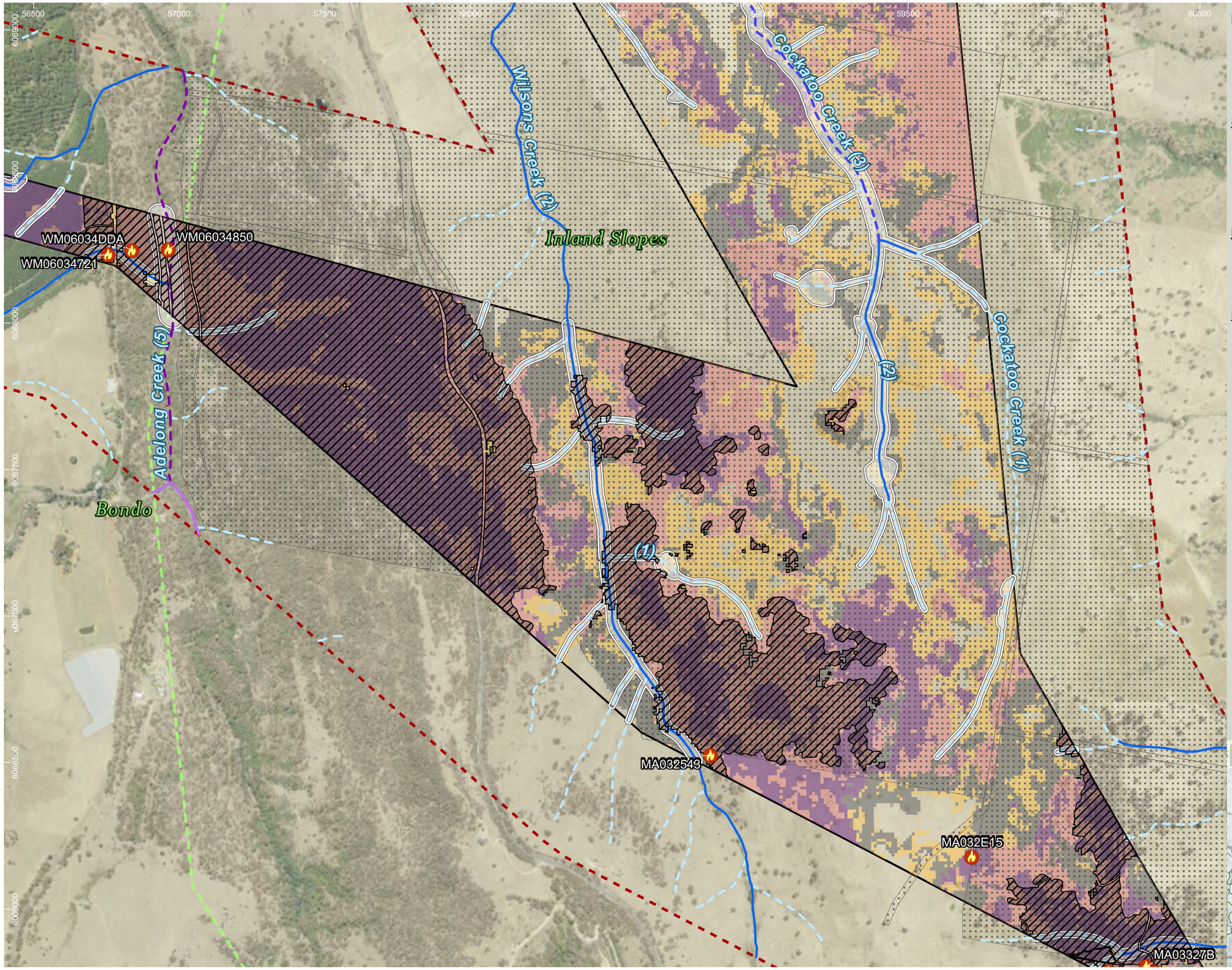
Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 21

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSync\Folden\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Strahler stream order

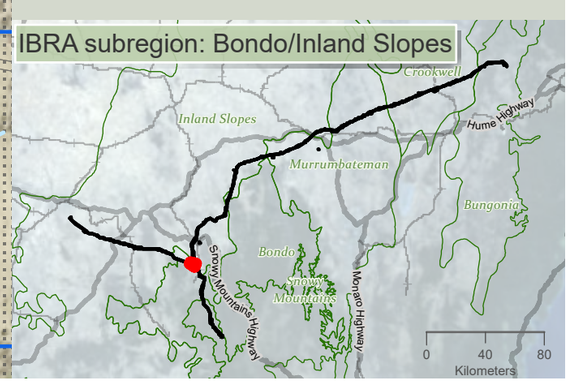
- 1
- 2
- 3
- 4
- 5

Burnt areas assessment

- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

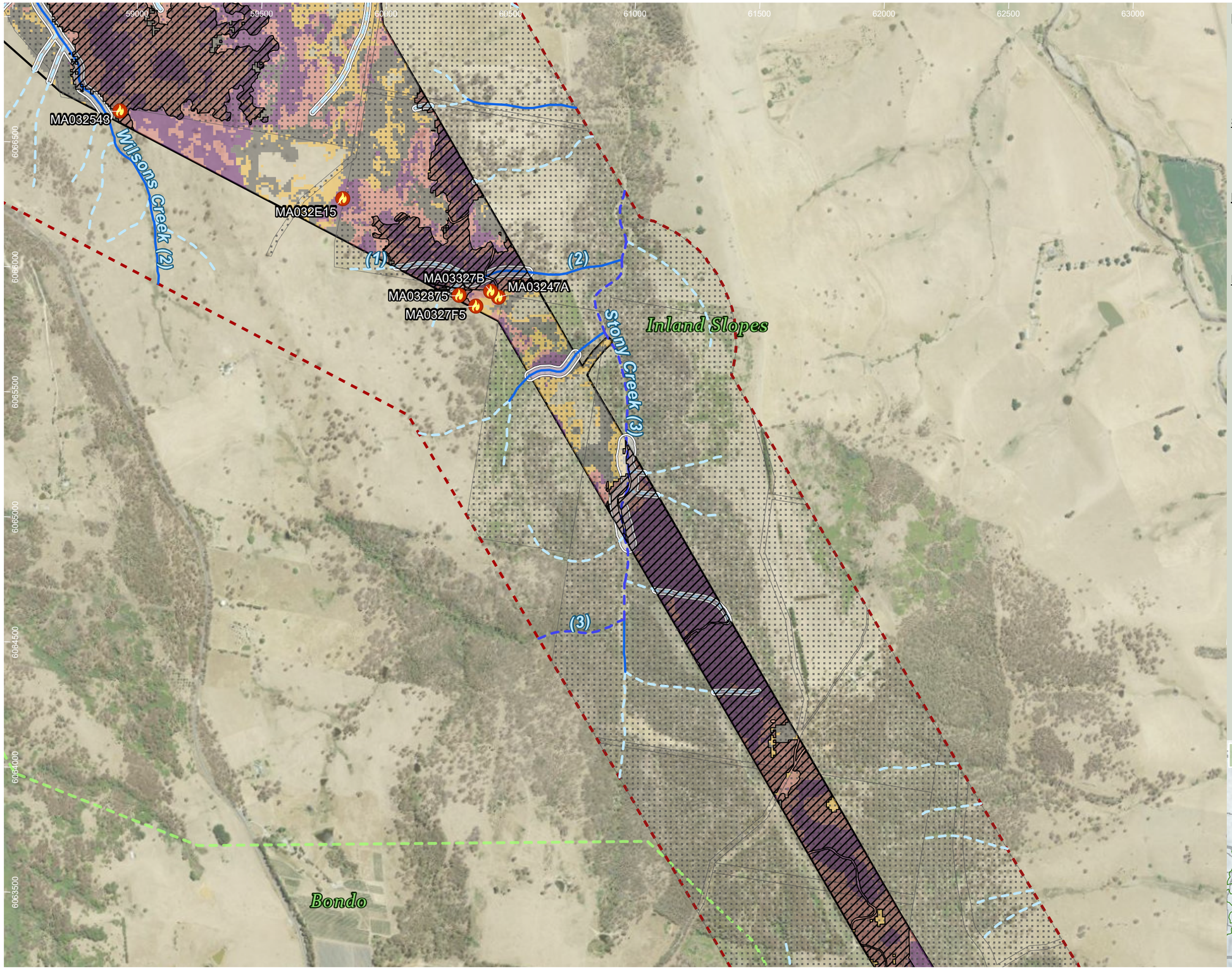
Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 22

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Strahler stream order

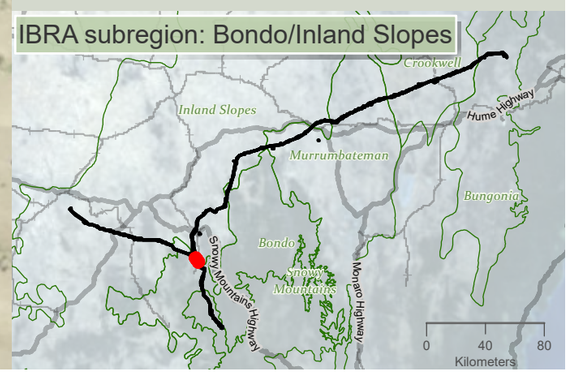
- 1
- 2
- 3

Burnt areas assessment

- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



Drawn by: MatthewZajaczkowski; Last updated: 28/07/2023; File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

Environment and Heritage

0 450
m

WGS 1984 Web Mercator

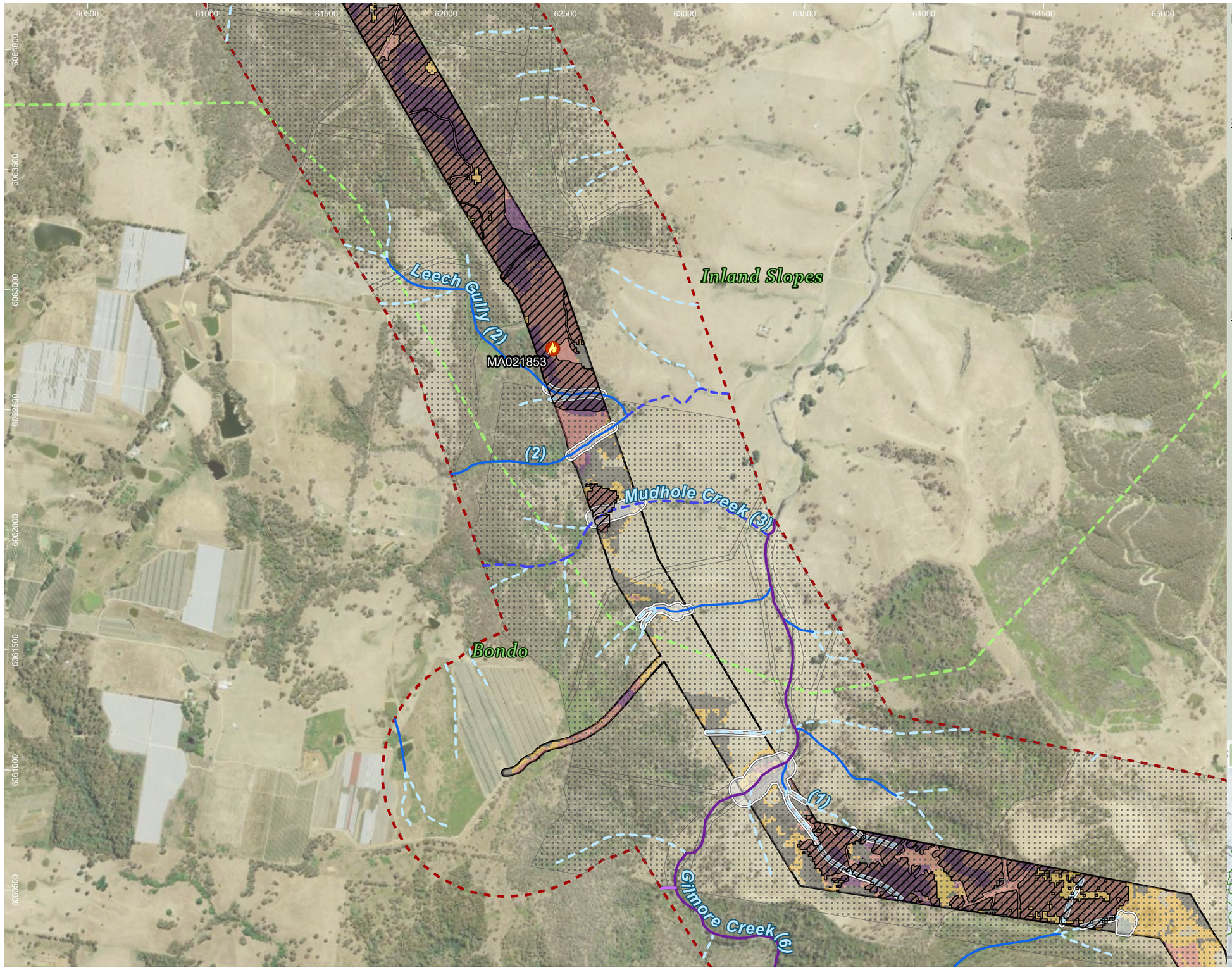
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 23

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Strahler stream order

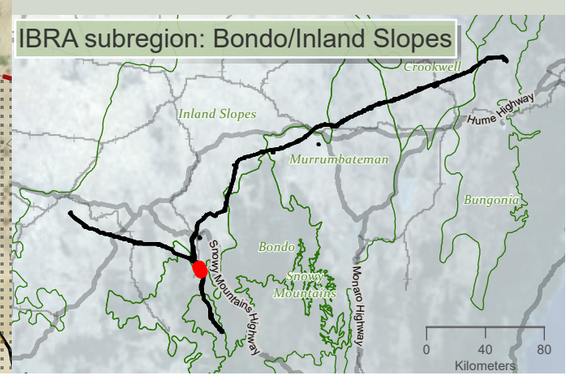
- 1
- 2
- 3
- 4
- 6

Burnt areas assessment

- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 24

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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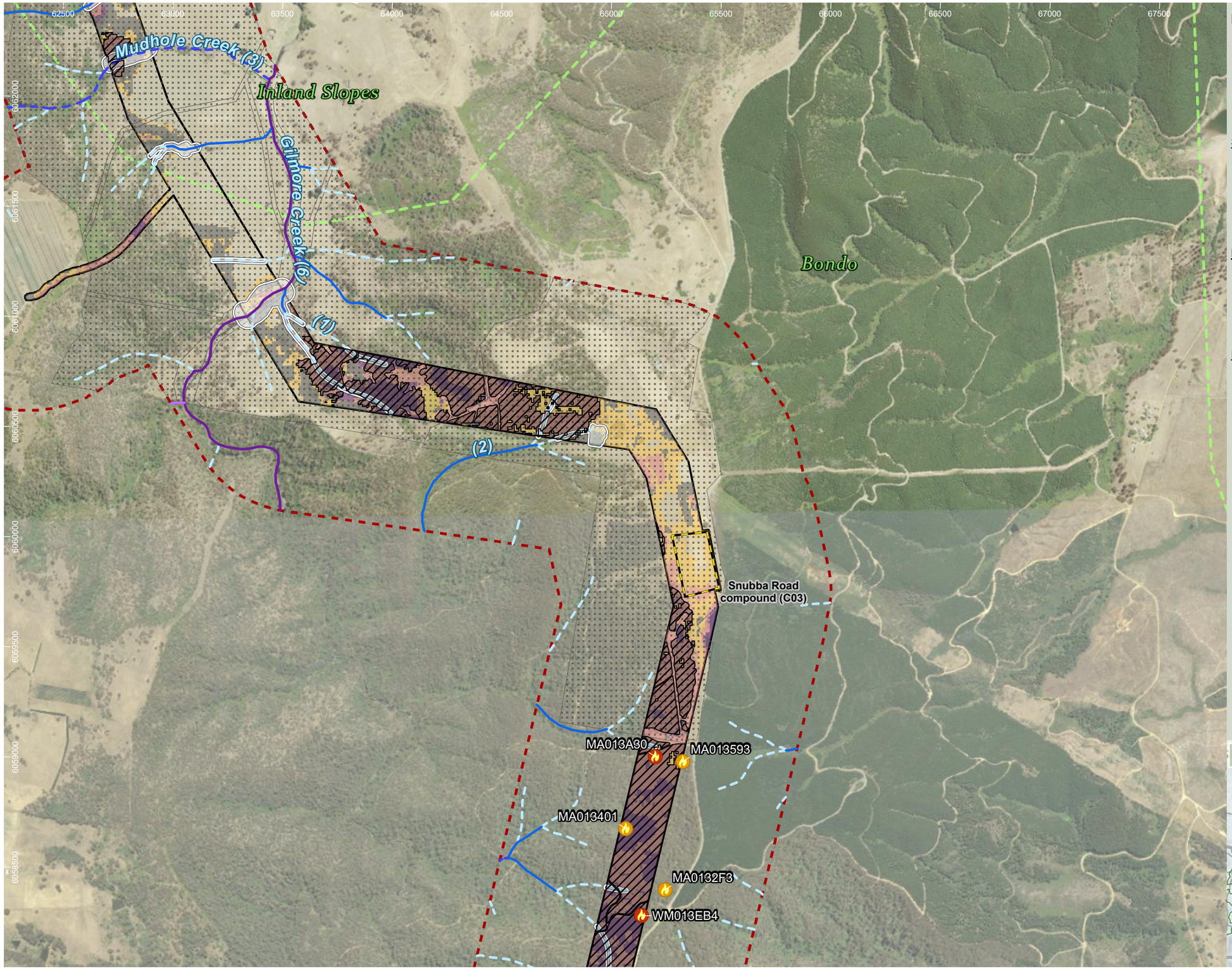


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access
- IBRA subregion

Strahler stream order

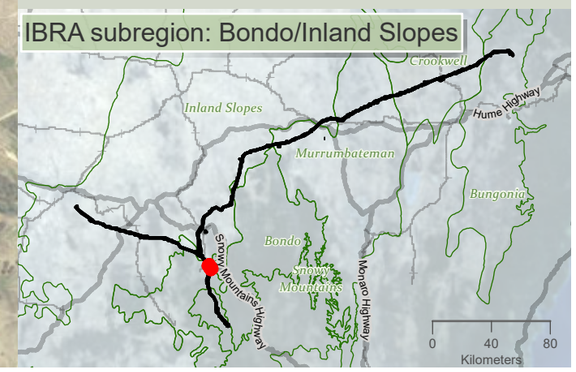
- 1
- 2
- 3
- 4
- 6

Burnt areas assessment

- ELA - October 2020 – February 2021
- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 25

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

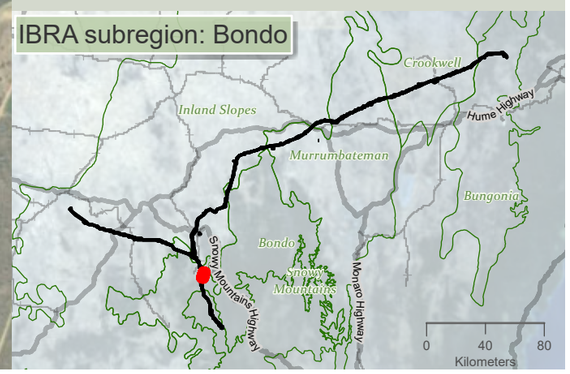
- 1
- 2
- 3

Burnt areas assessment

- ELA - October 2020 – February 2021
- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

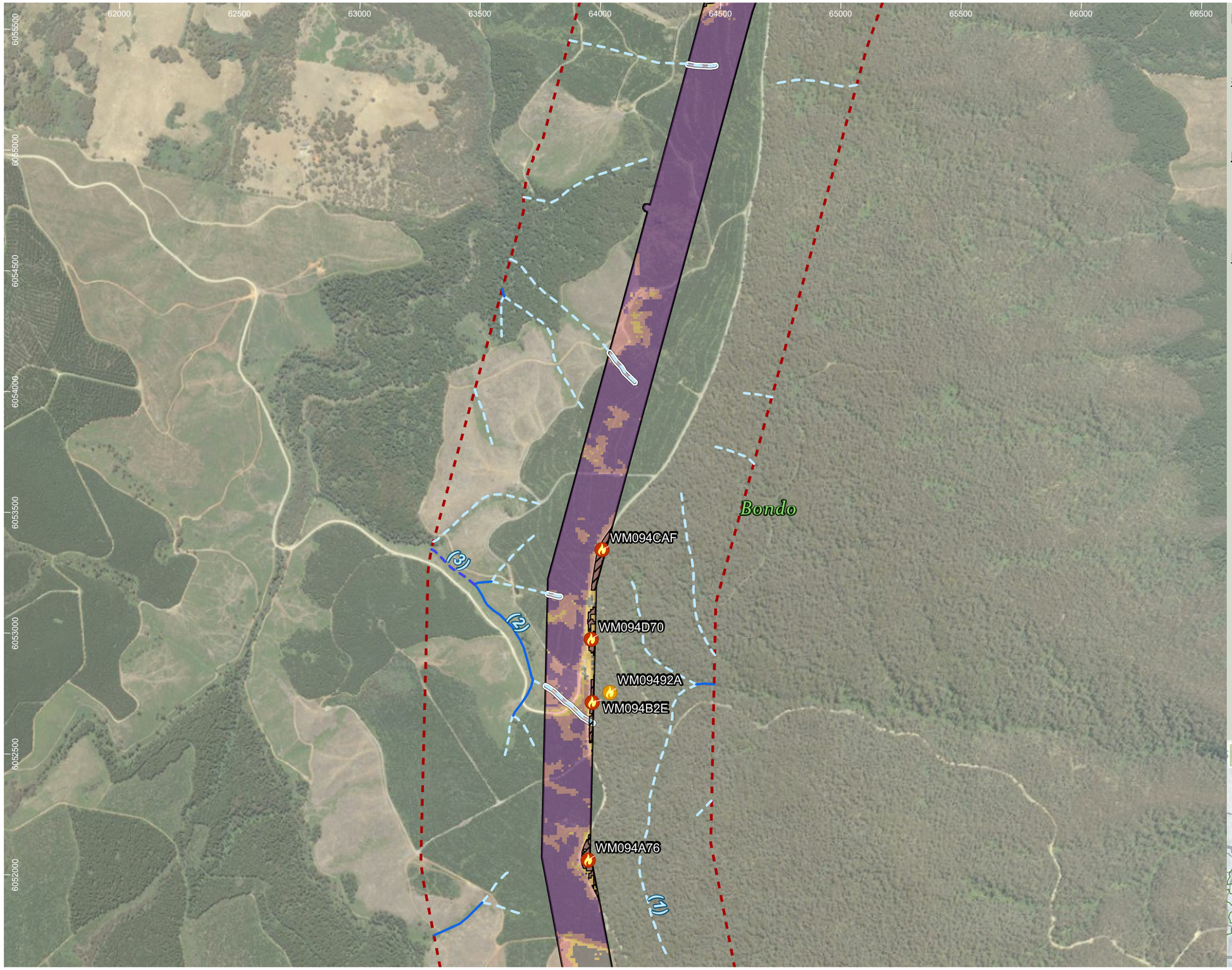
Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 28

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699_Humelink_BDAR_v2_figures Part 2.aprx Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

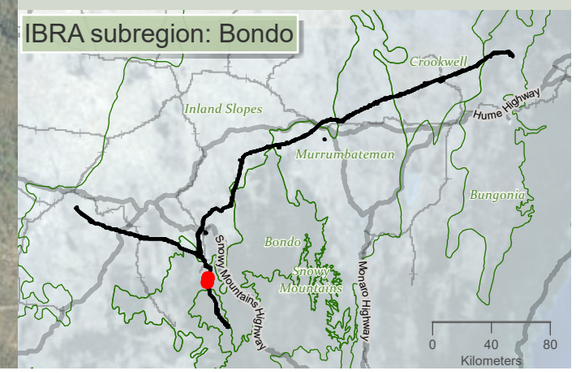
- 1
- 2
- 3

Burnt areas assessment

- ELA - October 2020 – February 2021
- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



Drawn by MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

niche Environment and Heritage

0 500
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 29

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

61500 62000 62500 63000 63500 64000 64500 65000 65500 66000

6052000 6051500 6051000 6050500 6050000 6049500 6049000 6048500 6048000

WM094A76

Snubba Creek (4)

WM0940C2

Bondo

Ridings Creek (2)

Snubba Road compound (C16)

(1)

(2)

(3)

Snubba Creek (3)

Snowy Mountains

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

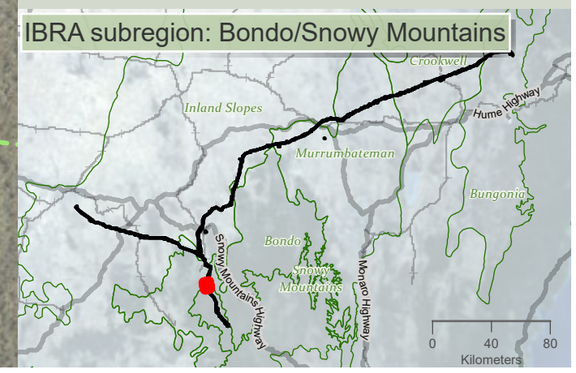
- 1
- 2
- 3
- 4
- 5

Burnt areas assessment

- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



niche Environment and Heritage

0 N 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 30

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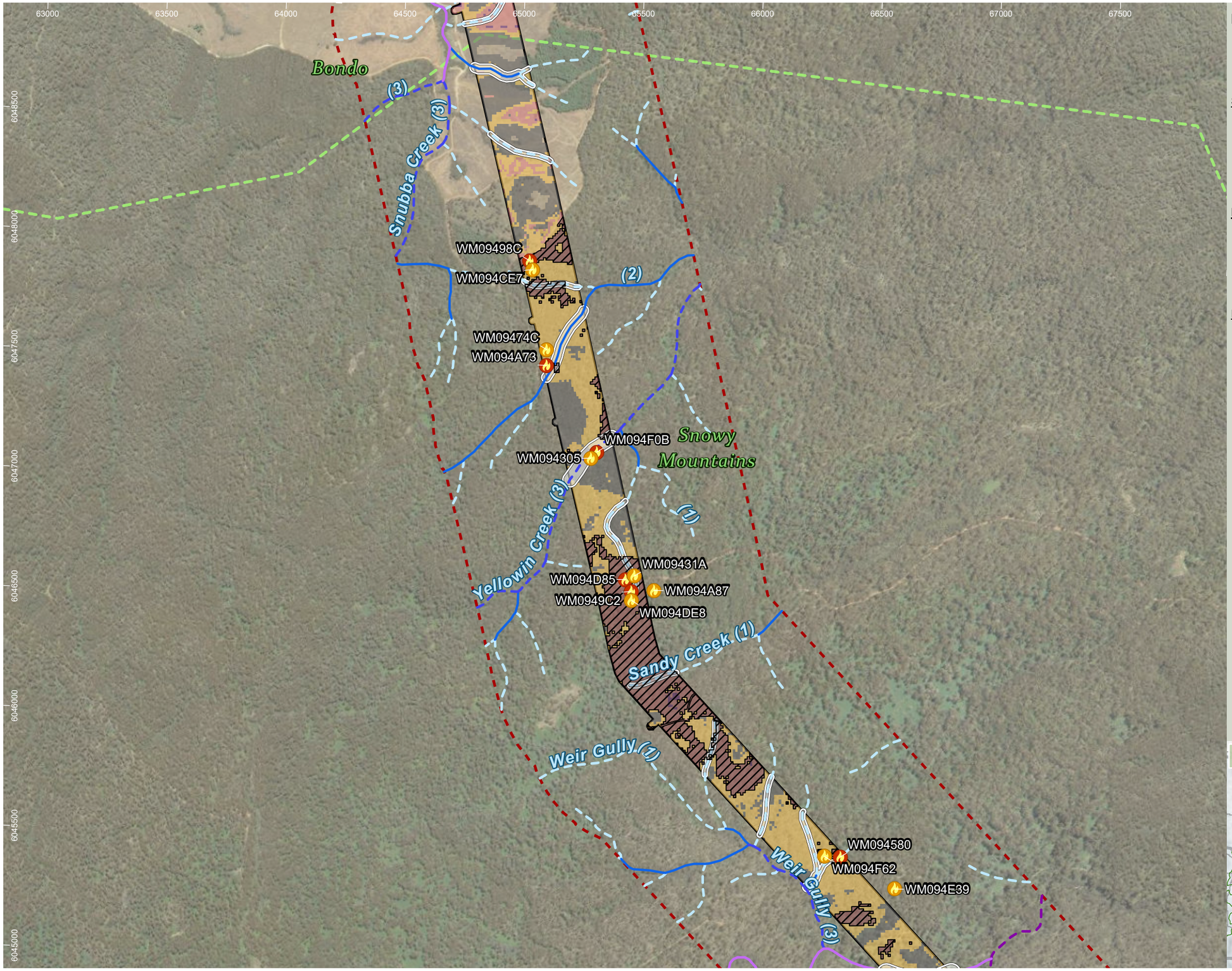


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

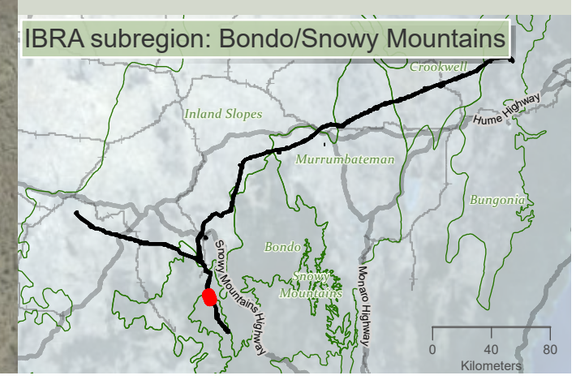
- 1
- 2
- 3
- 4
- 5

Burnt areas assessment

- ELA - October 2020 – February 2021
- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



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niche Environment and Heritage

0 500
m
WGS 1984 Web Mercator

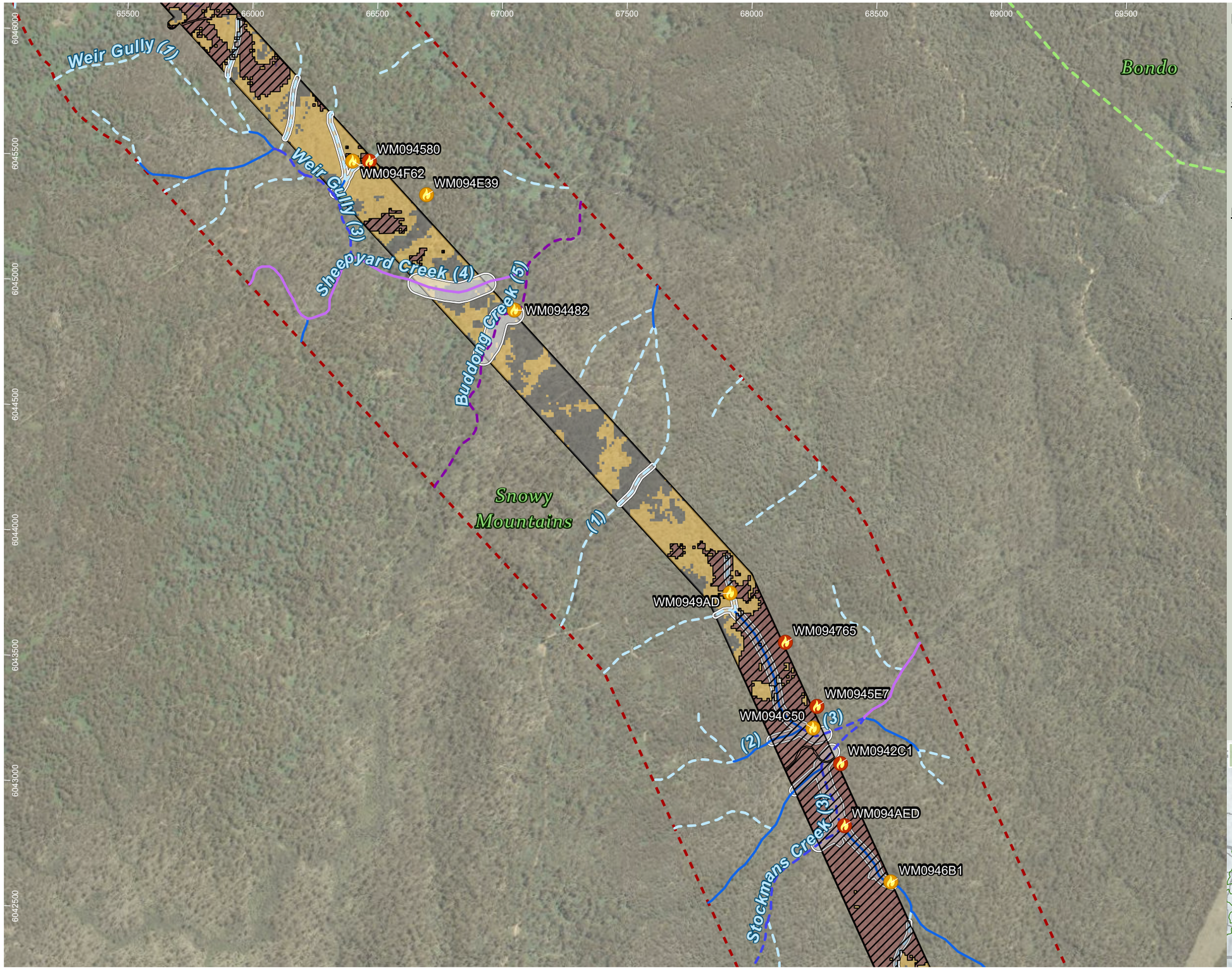
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 31

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

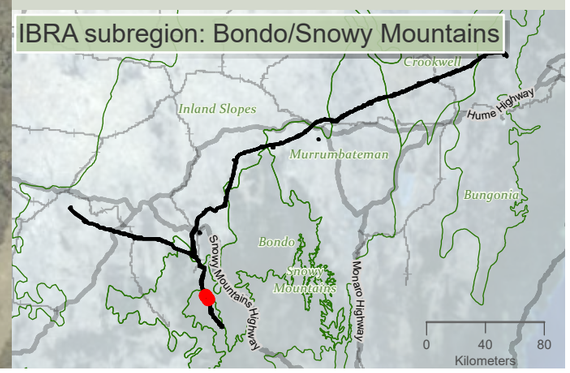
- 1
- 2
- 3
- 4
- 5

Burnt areas assessment

- ELA - October 2020 – February 2021
- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 32

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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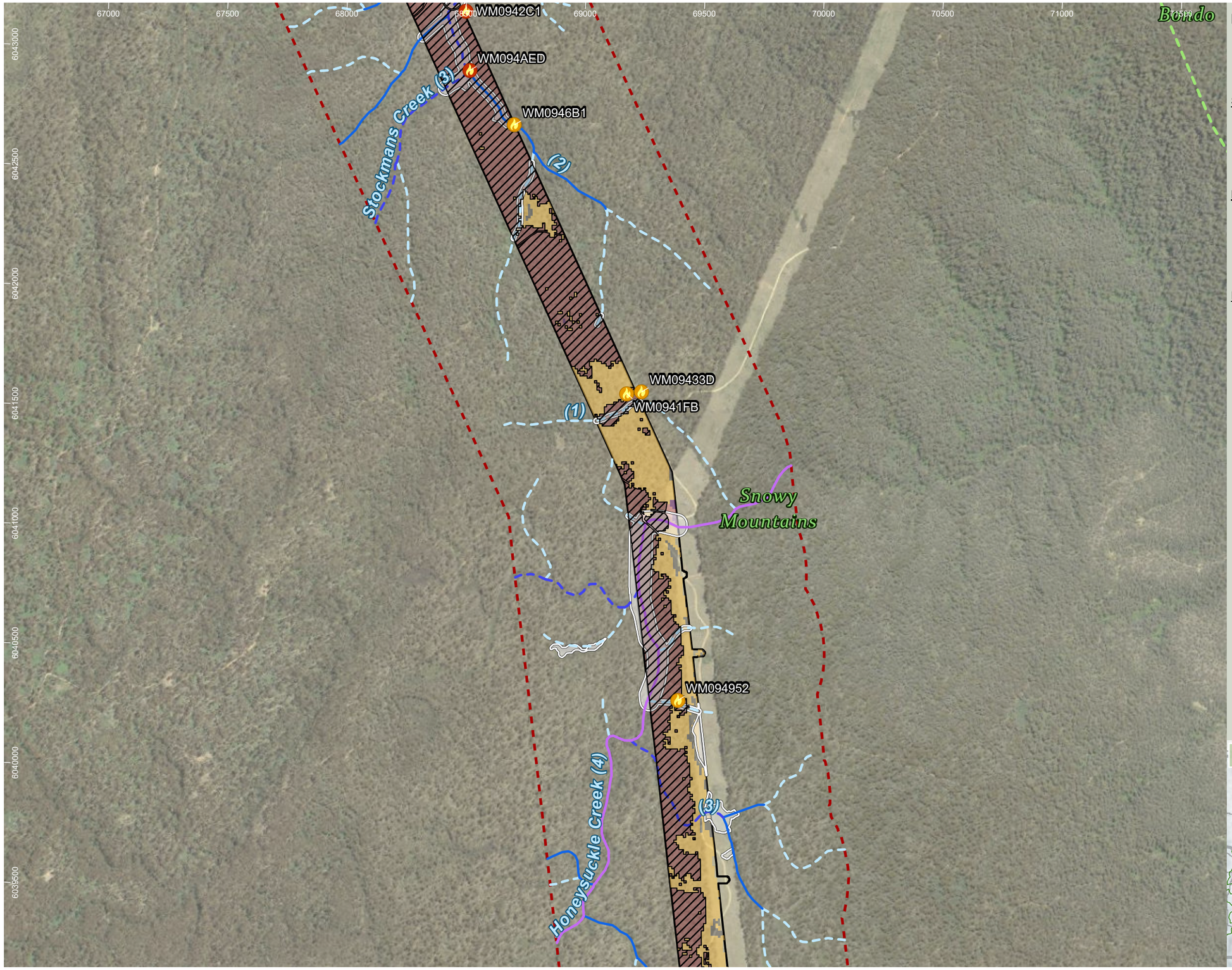


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

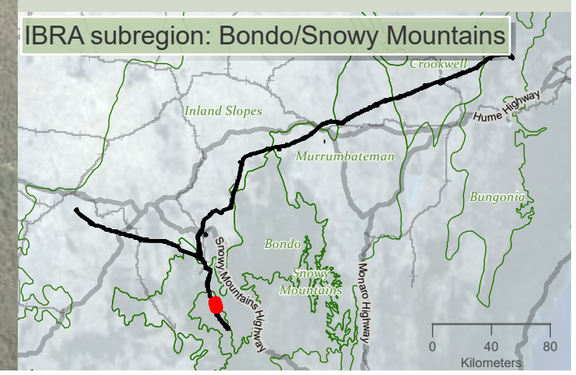
- 1
- 2
- 3
- 4

Burnt areas assessment

- ELA - October 2020 – February 2021
- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 33

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

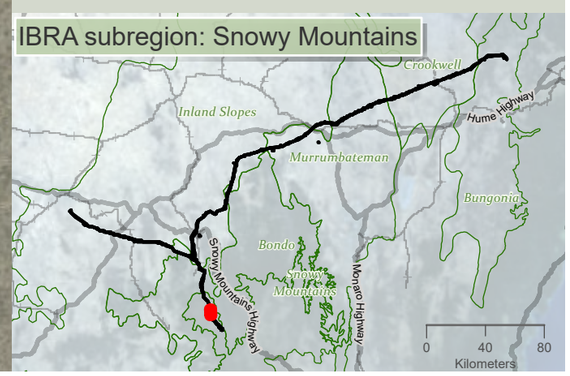
- 1
- 2
- 3
- 4

Burnt areas assessment

- ELA - October 2020 – February 2021
- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 34

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HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Strahler stream order

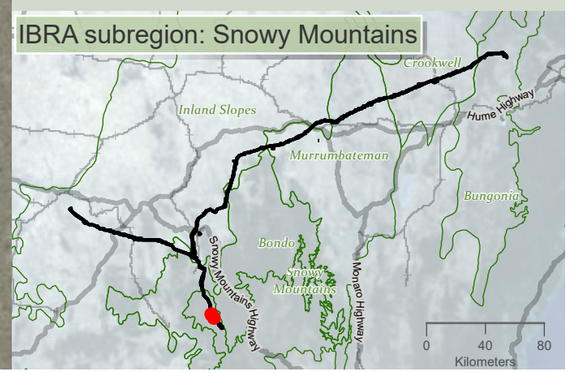
- 1
- 2
- 3
- 4

Burnt areas assessment

- ELA - October 2020 – February 2021
- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



Drawn by: MatthewZajaczkowski; Last updated: 28/07/2023; File: C:\OneDriveSync\Folder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

niche Environment and Heritage

0 450
m
WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 36

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71000 71500 72000 72500 73000 73500 74000 74500 75000 75500

6033500 6033000 6032500 6032000 6031500 6031000 6030500

(3)

Bondo

Snowy Mountains

(2)

Plain Creek (3)

MA0018FD

MA001762

WM1140F0

(1)

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Strahler stream order

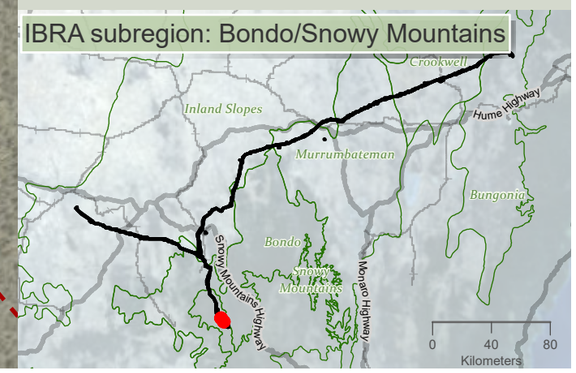
- 1
- 2
- 3

Burnt areas assessment

- ELA - October 2020 – February 2021
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 37

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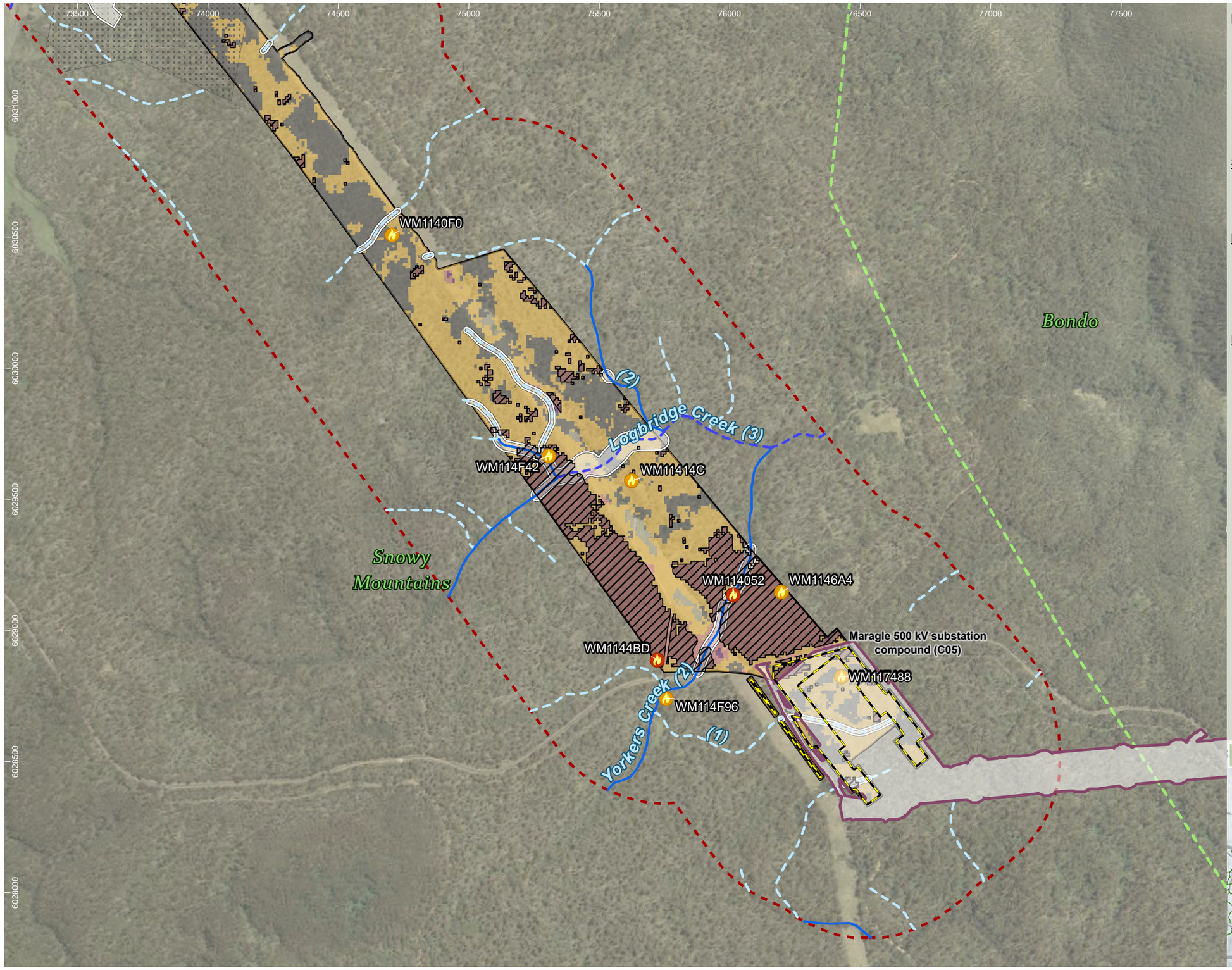

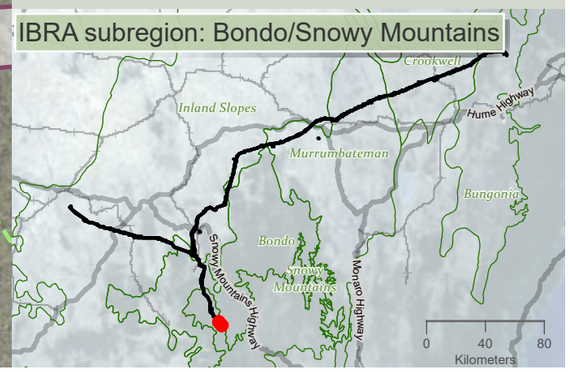

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- Snowy 2.0 Transmission Connection project
- No land access
- IBRA subregion

Strahler stream order

- 1
- 2
- 3

Burnt areas assessment

- ELA - October 2020 – February 2021
- Niche May- September 2022
- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption

niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 38

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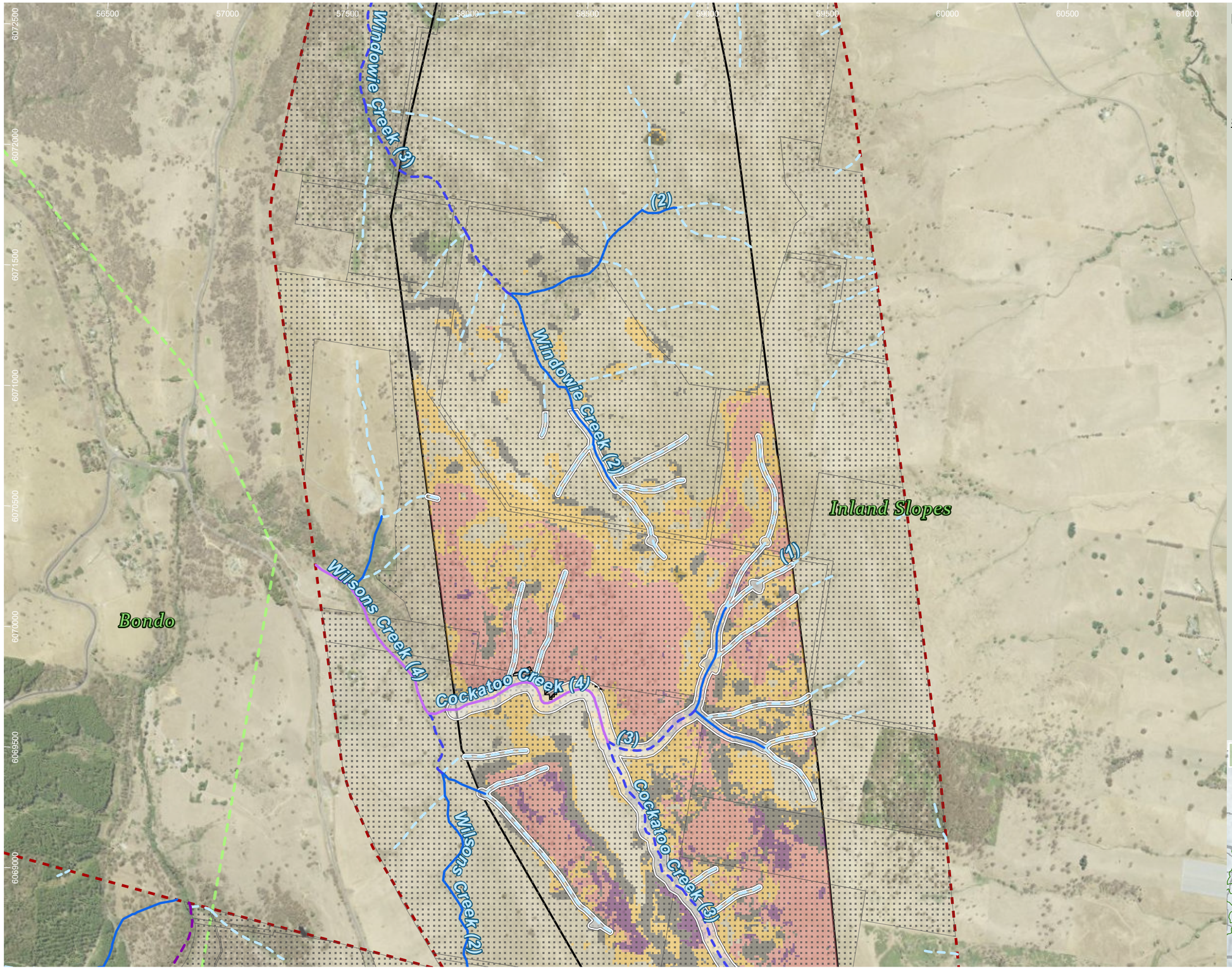


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

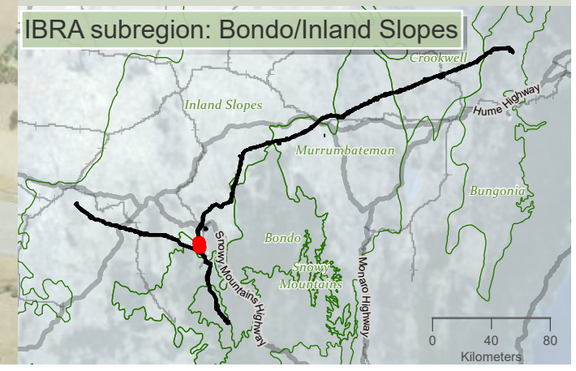
Strahler stream order

- 1
- 2
- 3
- 4
- 5

- Severely burnt native woody vegetation
- Resource flows and sinks

Fire Extent and Severity Mapping (FESM)

- Low - Burnt surface with unburnt canopy
- Moderate - Partial canopy scorch
- High - Full canopy scorch (+/- partial canopy consumption)
- Extreme - Full canopy consumption



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bushfire extent and severely burnt vegetation

HumeLink BDAR

Figure 9-1 map reference 39

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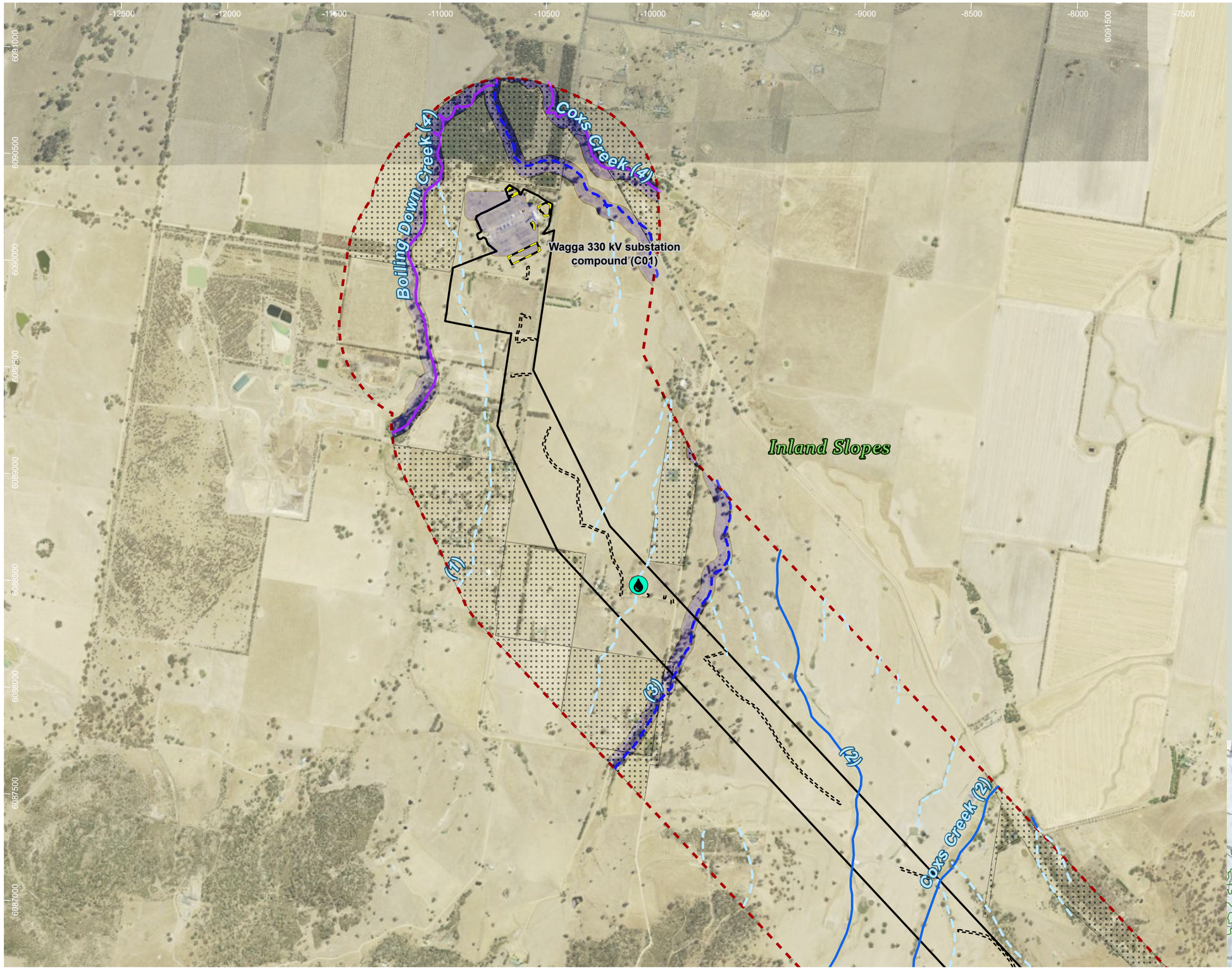


HumeLink project areas

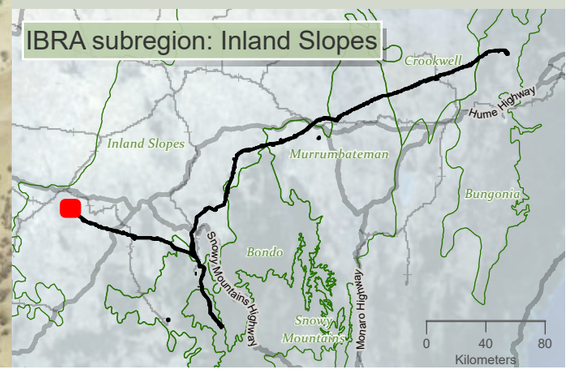
- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 1

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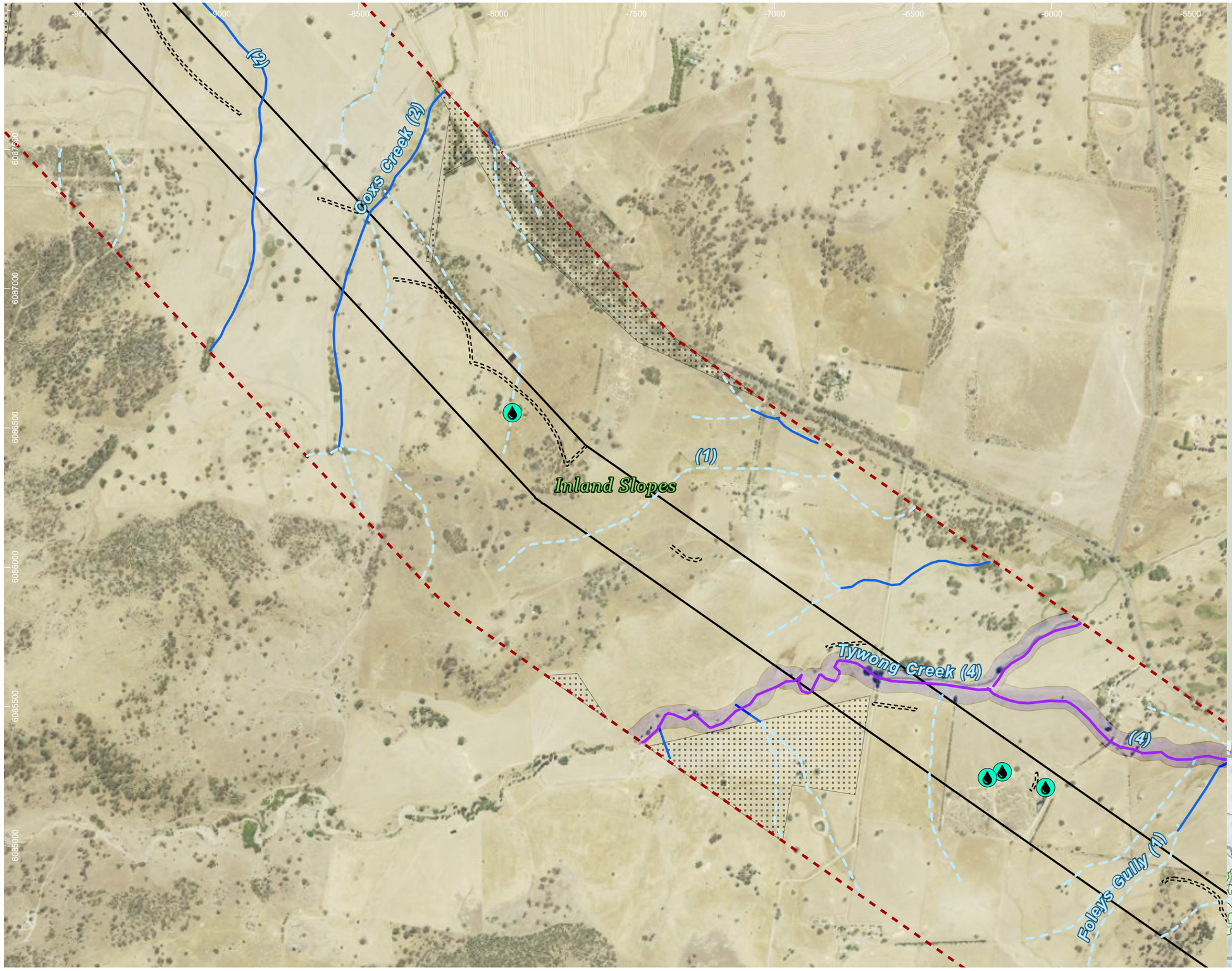


HumeLink project areas

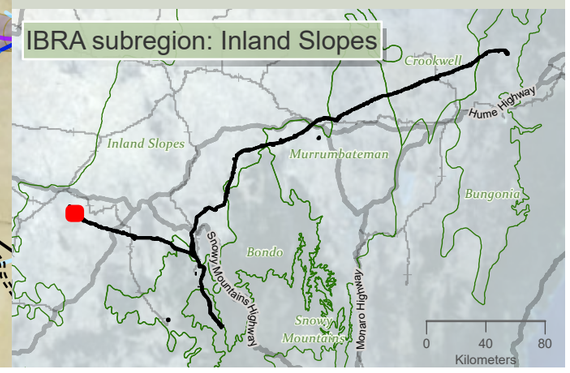
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (4)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 4



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 2

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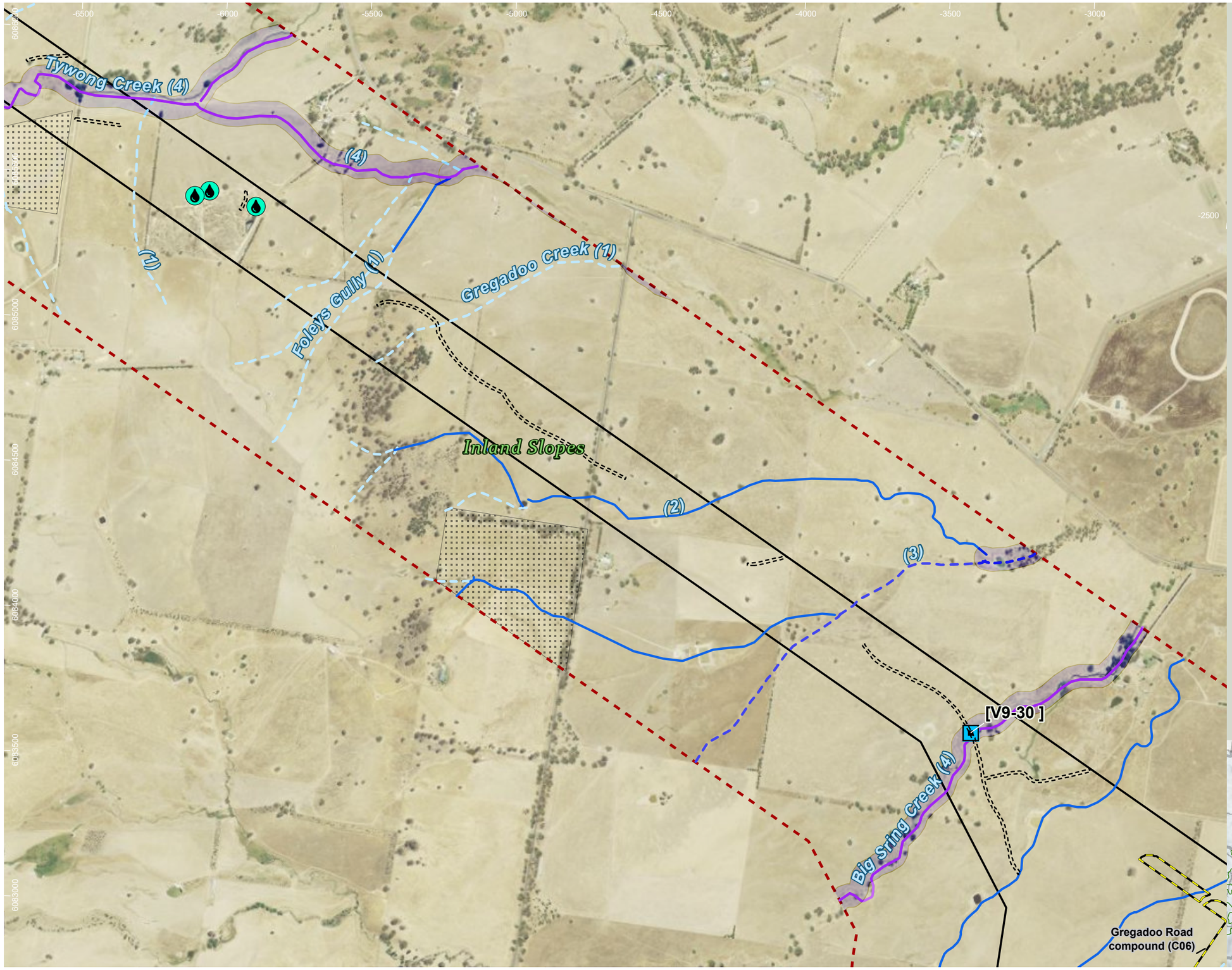


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

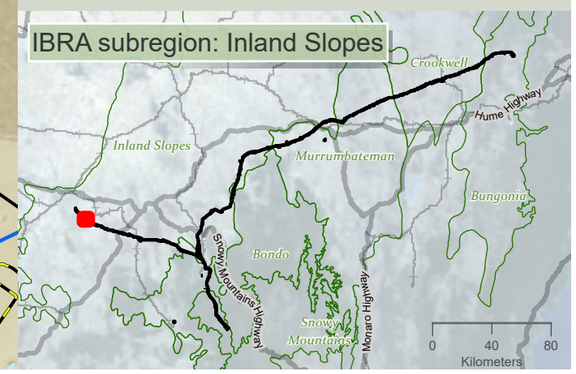
- Aquatic habitat assessment - Niche, 2022 (3)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 3

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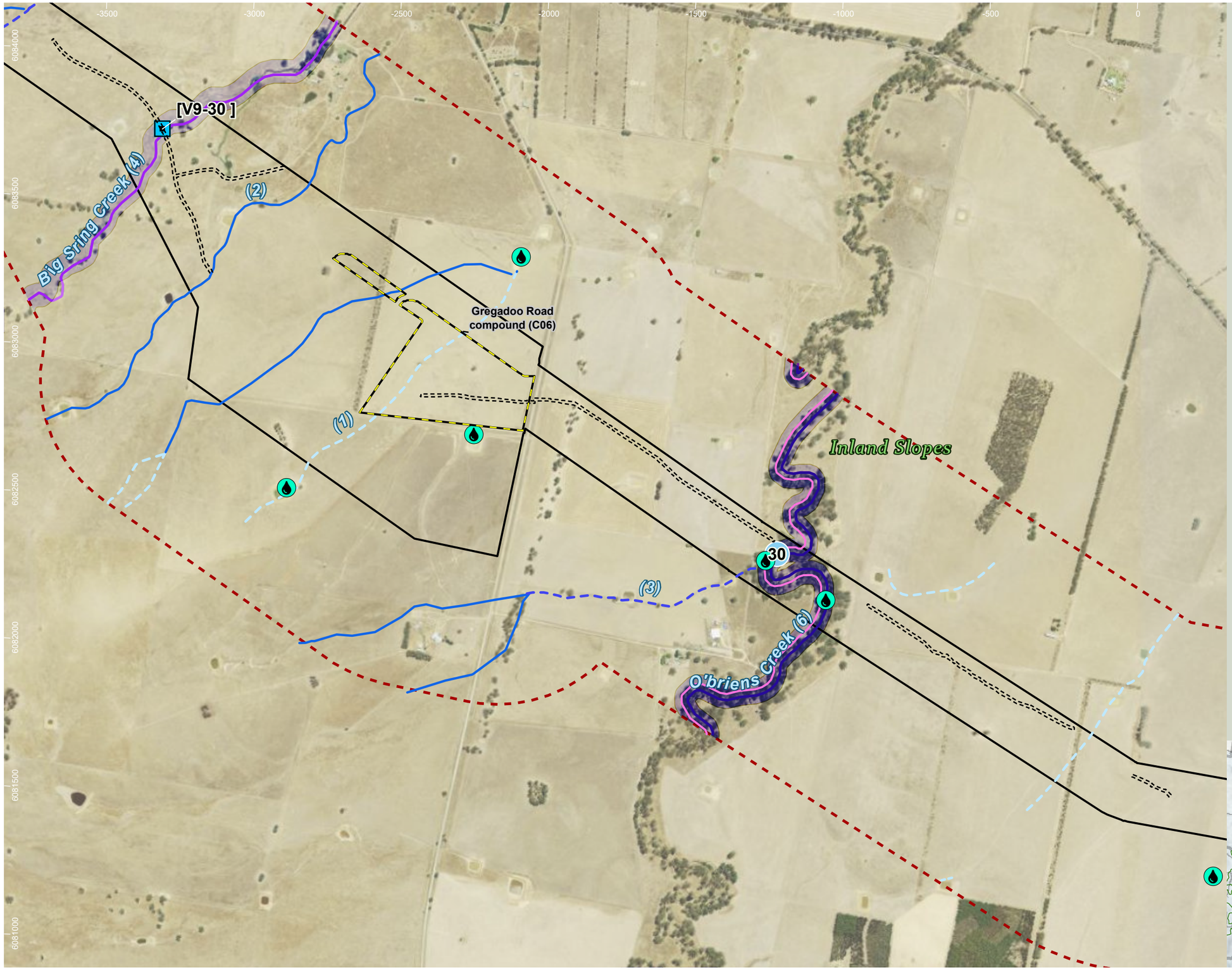

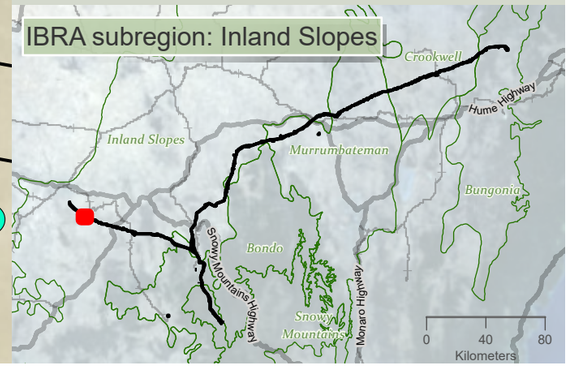

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (6)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites

Threatened aquatic species desktop assessment points

- Threatened aquatic species desktop assessment points (1)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Flathead Galaxias

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 6

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 4

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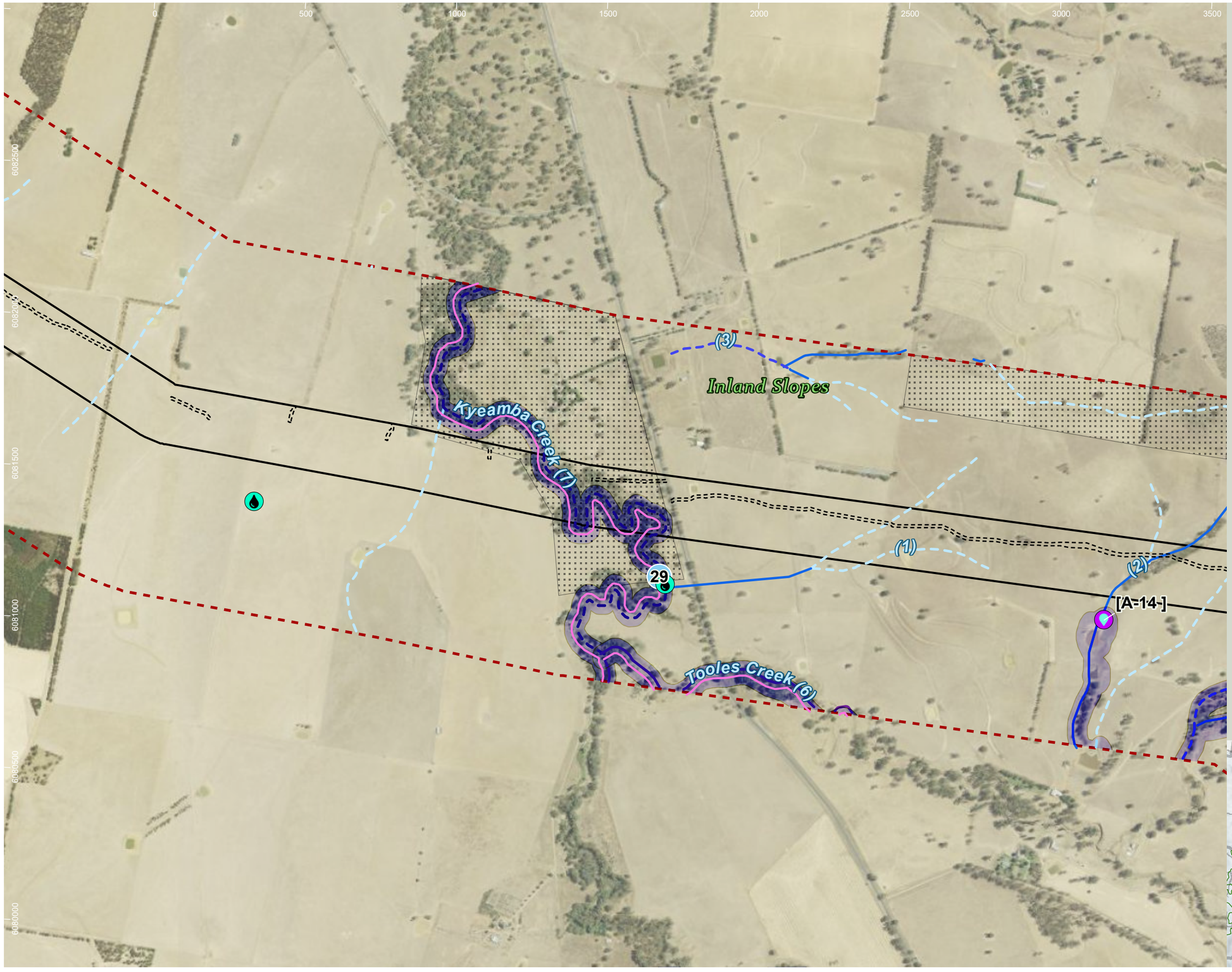


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (2)
- Additional aquatic desktop assessment sites

Threatened aquatic species desktop assessment points

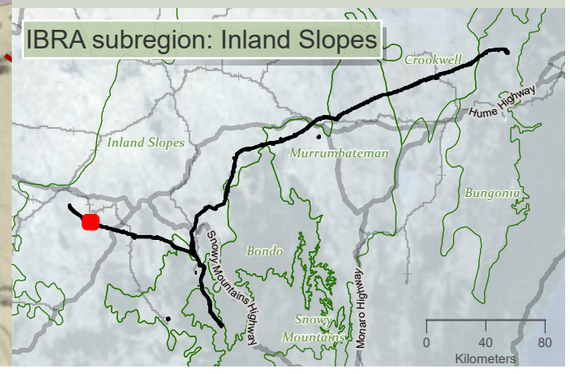
- Threatened aquatic species desktop assessment points (1)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Flathead Galaxias

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 6
- 7



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 5

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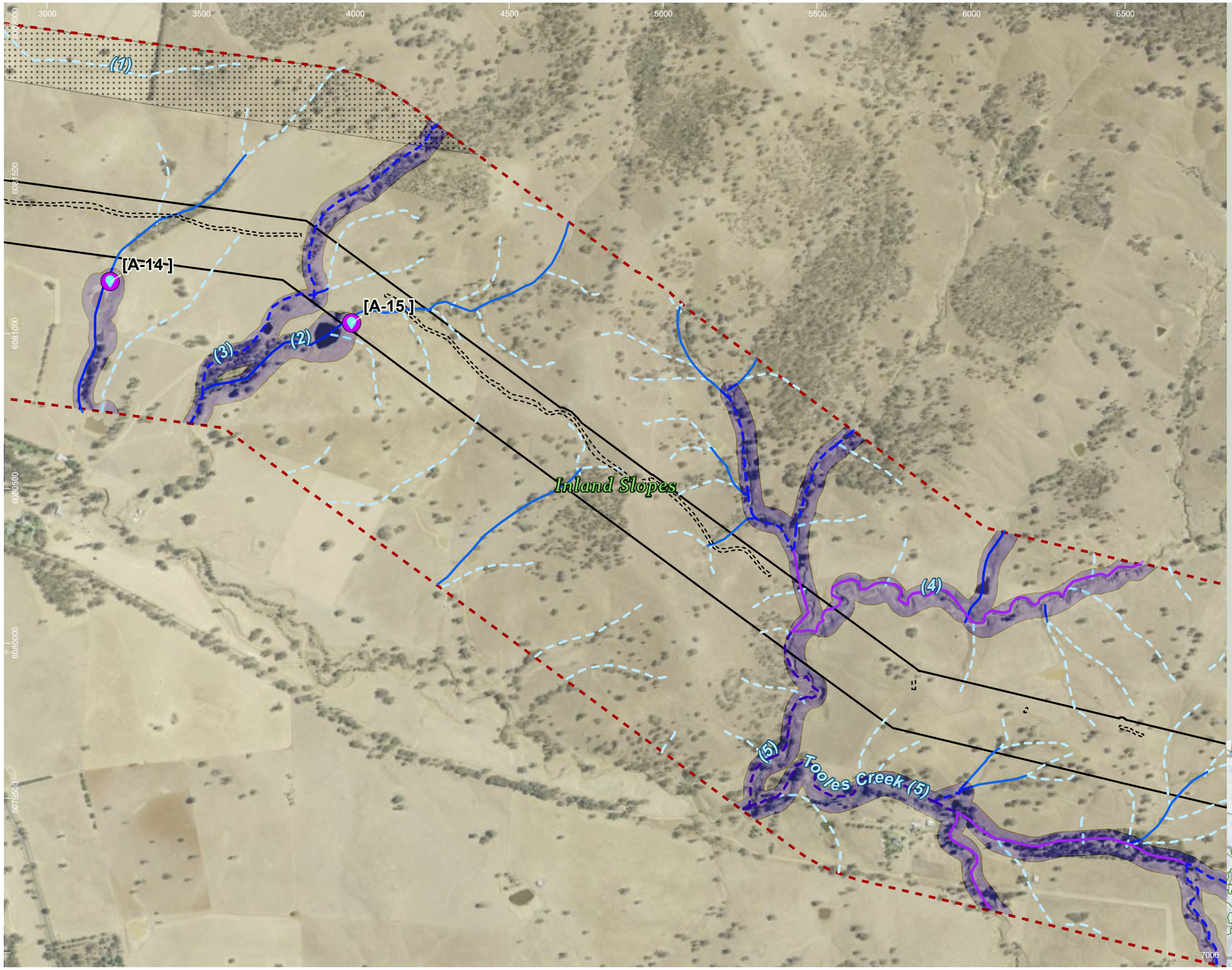
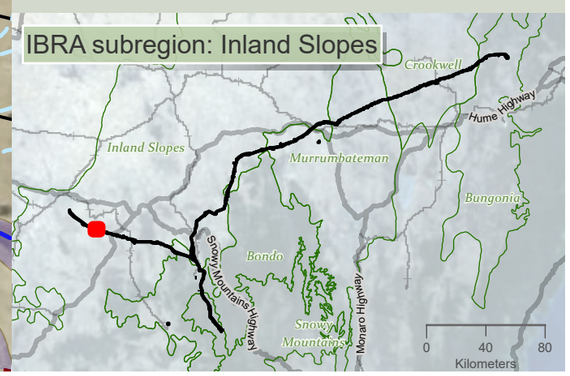


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track
- Additional aquatic desktop assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5
- 6



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 6

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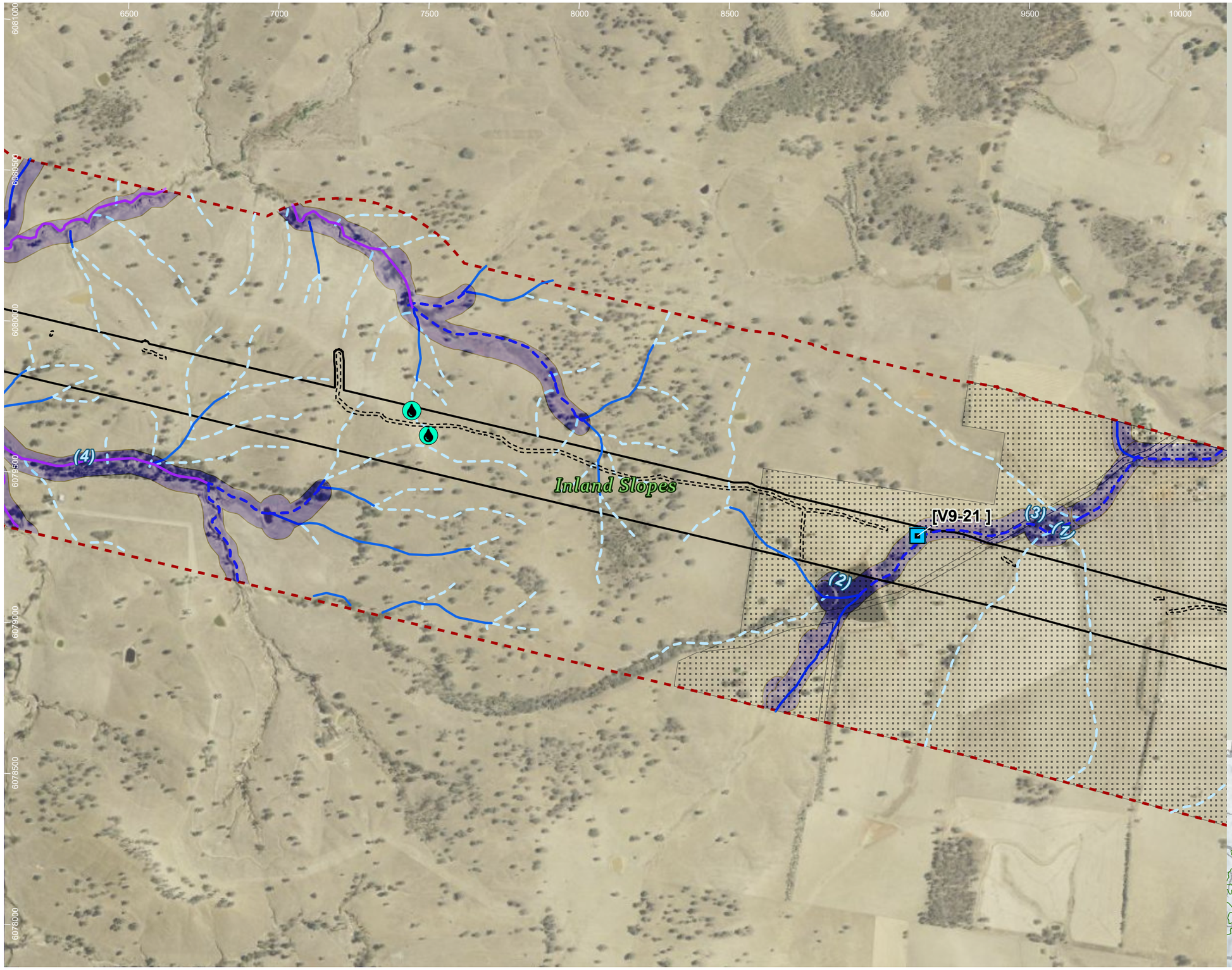


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

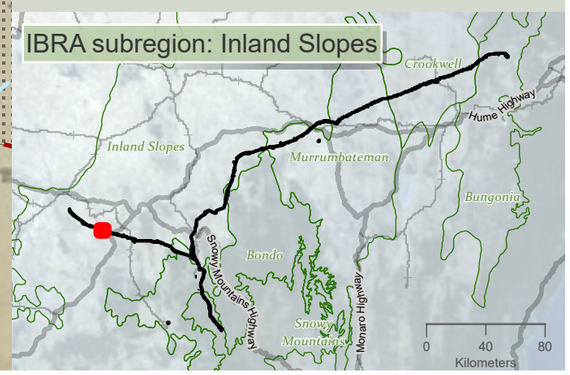
- Aquatic habitat assessment - Niche, 2022 (2)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 7

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10000 10500 11000 11500 6080500 12000 12500 13000 13500

6080000 6079500 6079000 6078500 6078000 6077500

(3) (1) (2) (4) (6)

[V9-22]

Inland Slopes

Keajura Creek

HumeLink project areas

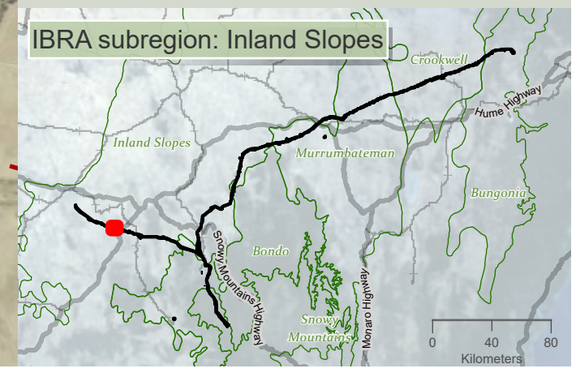
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 6



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 8

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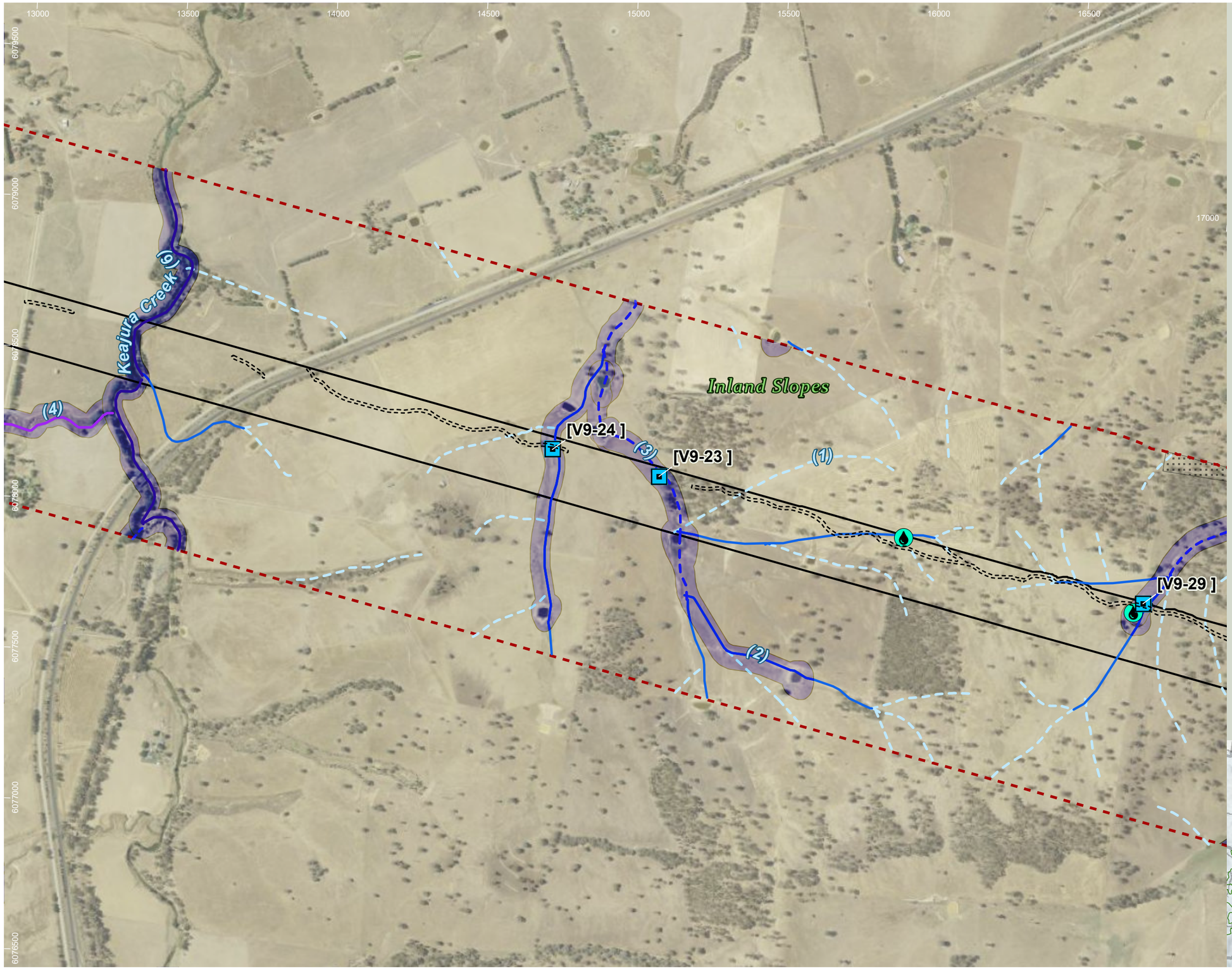


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

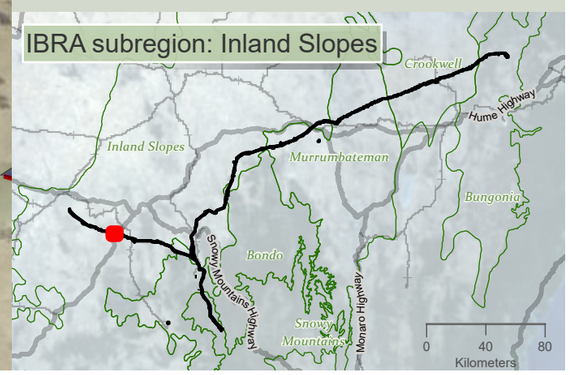
- Aquatic habitat assessment - Niche, 2022 (2)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 0
- 1
- 2
- 3
- 4
- 6



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

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Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 9

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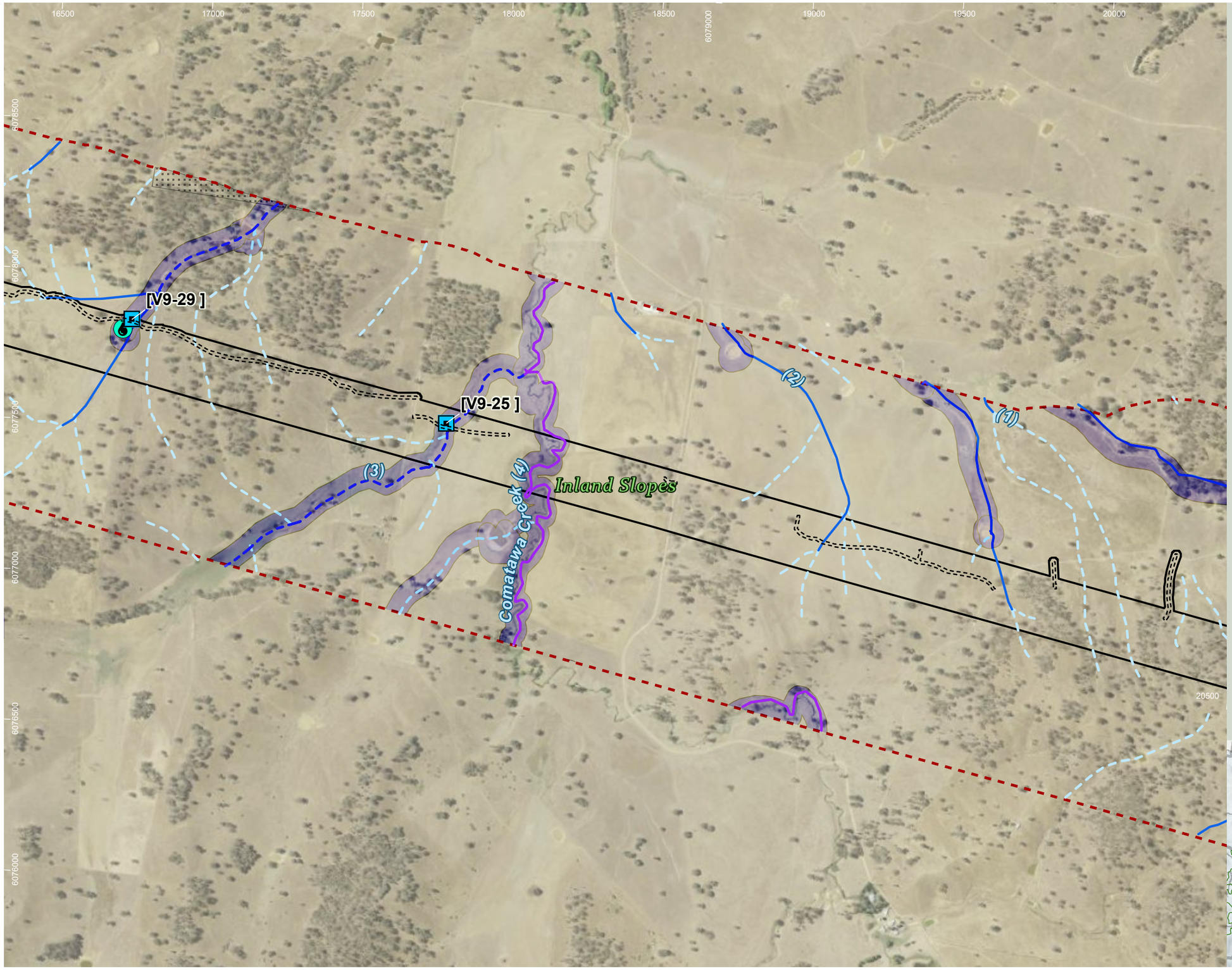


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

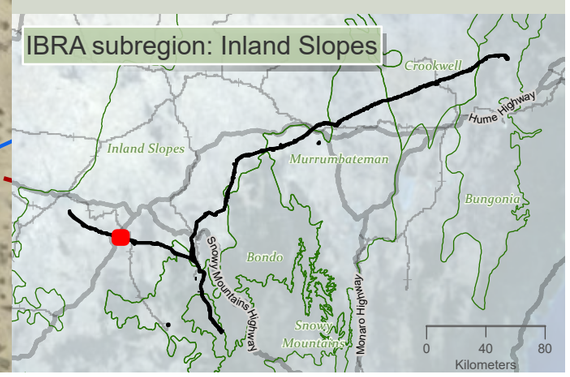
- Aquatic habitat assessment - Niche, 2022 (1)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

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Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 10

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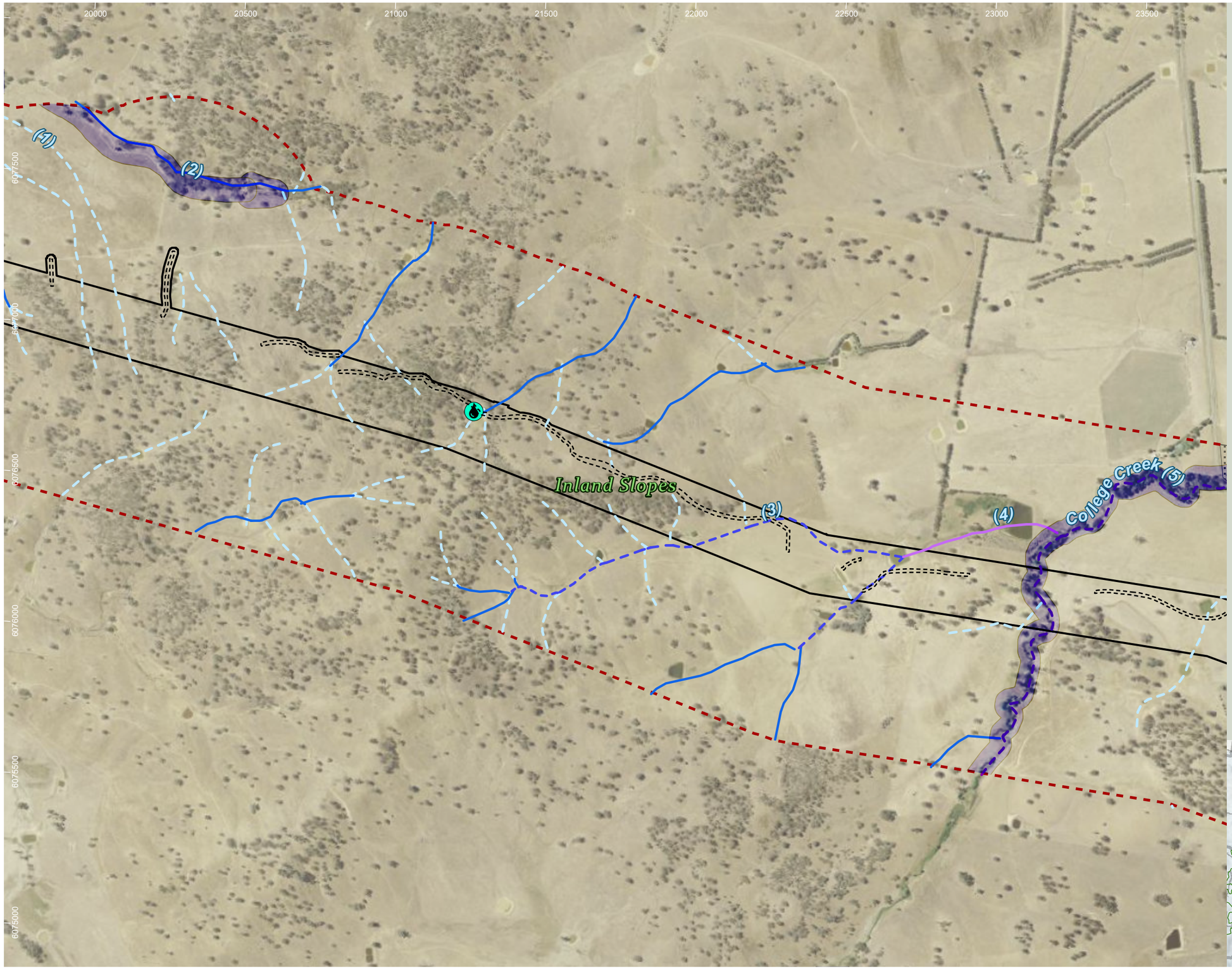


HumeLink project areas

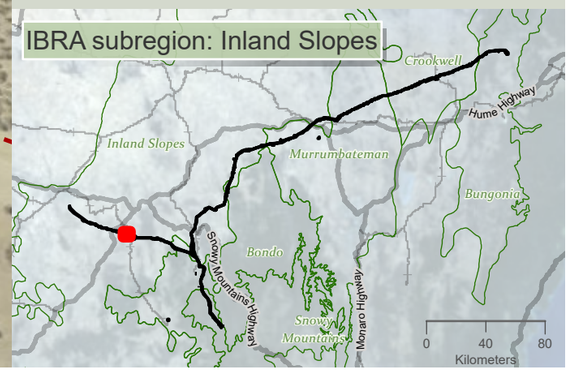
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

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Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 11

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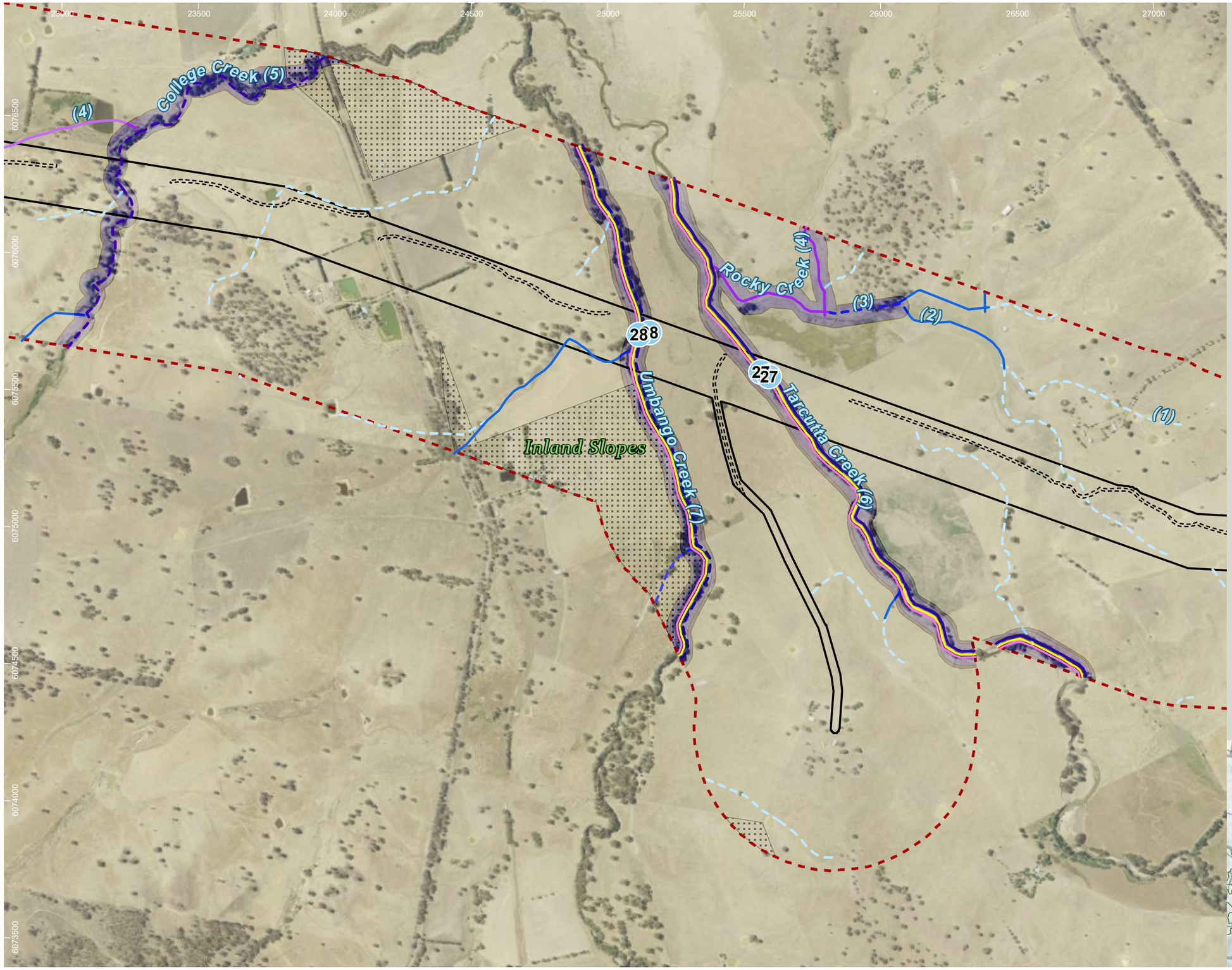


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Threatened aquatic species desktop assessment points

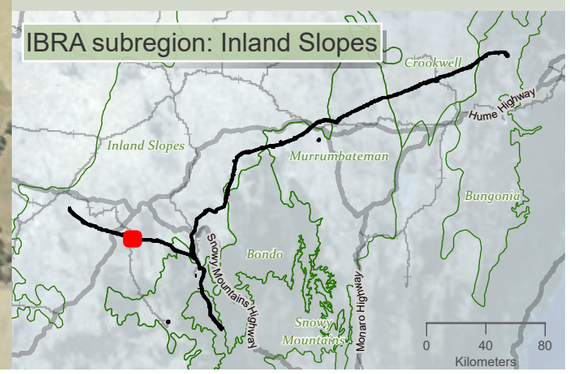
- Threatened aquatic species desktop assessment points (4)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Flathead Galaxias
- Murray Crayfish

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5
- 6
- 7



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 12

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27000 27500 28000 28500 29000 29500 30000

6076500 6075000 6075500 6075000 6074500 6074000

(1) (2) (3) (4) (5)

Inland Slopes

HumeLink project areas

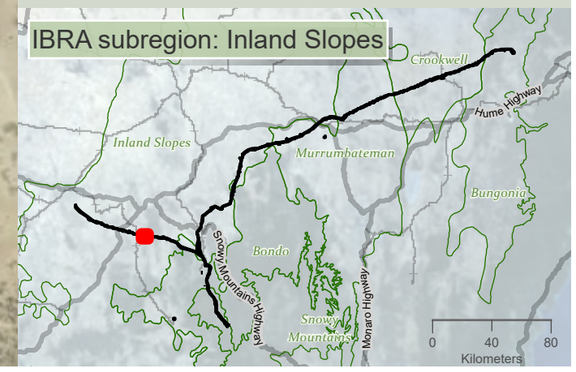
- Project footprint
- Landscape assessment area
- Potential indicative access track
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Flathead Galaxias
- Murray Crayfish

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5
- 6



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 13

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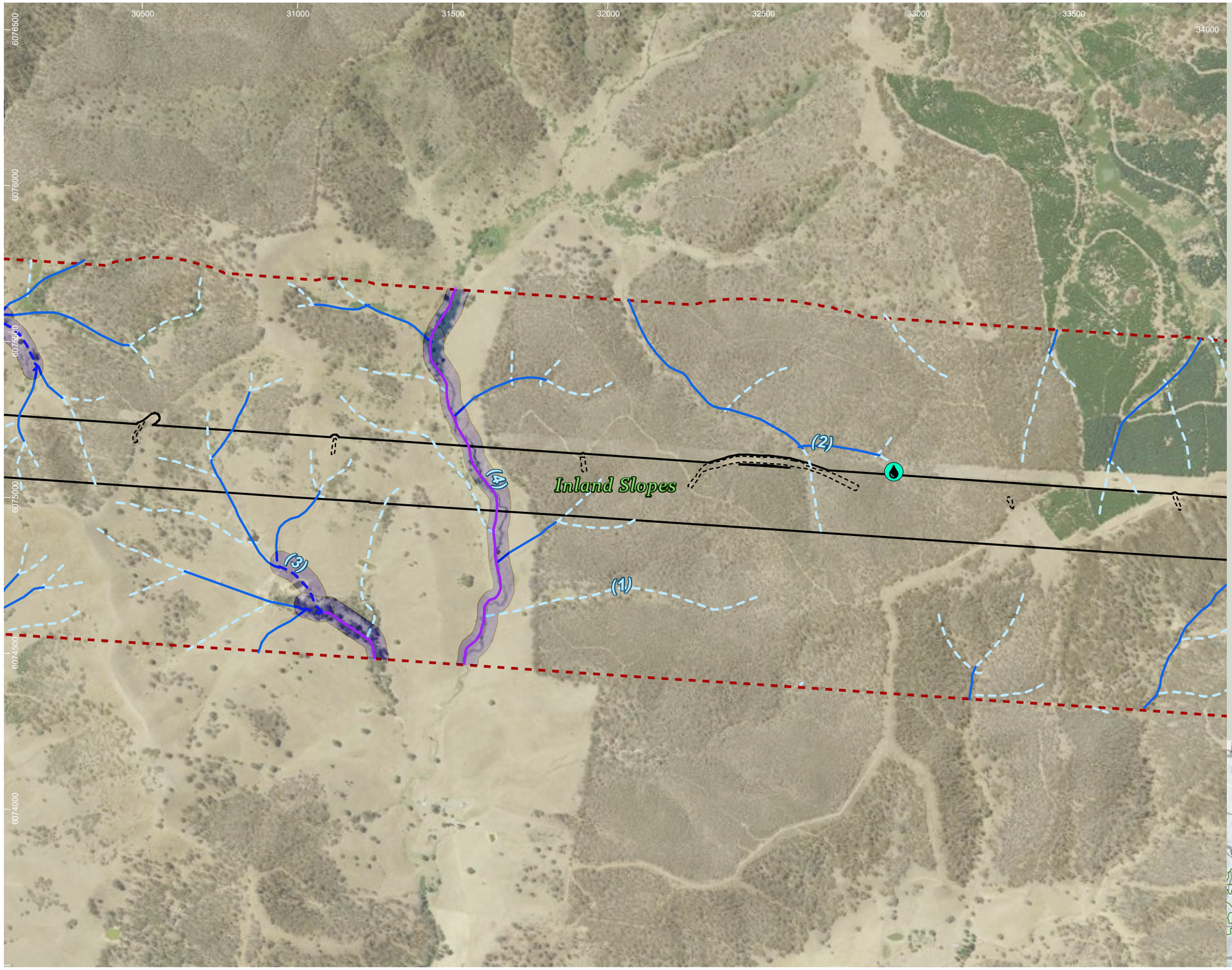


HumeLink project areas

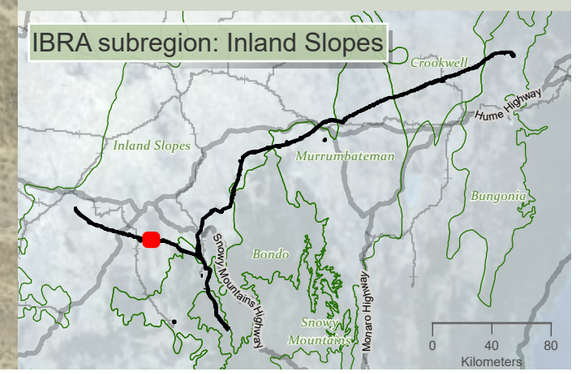
- Project footprint
- Landscape assessment area
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 14

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34000 34500 35000 35500 36000 36500 37000 37500

6076000 6075500 6075000 6074500 6074000 6073500

Calvins Creek (1)

(1)

Inland Slopes

(2)

(3)

Turners Creek (3)

Turners Creek (2)

HumeLink project areas

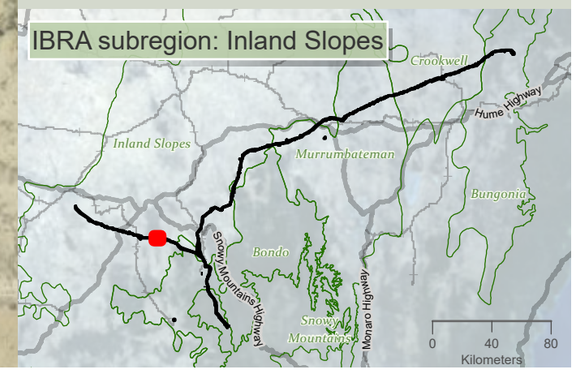
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 15

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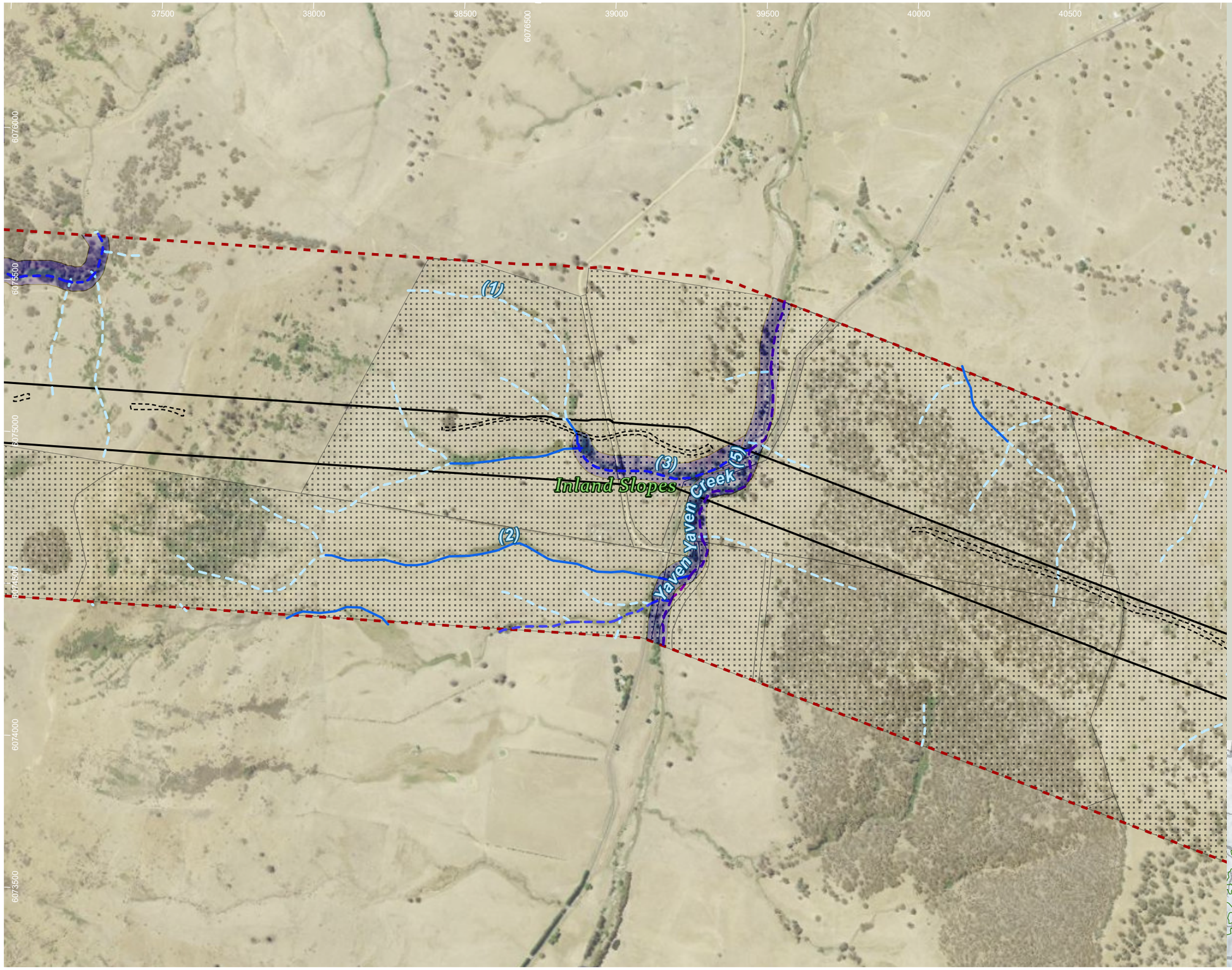
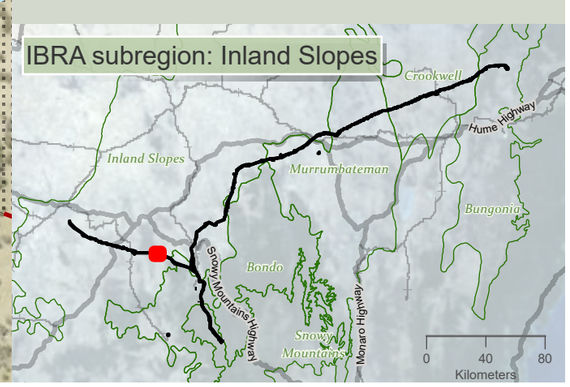


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 5



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niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 16

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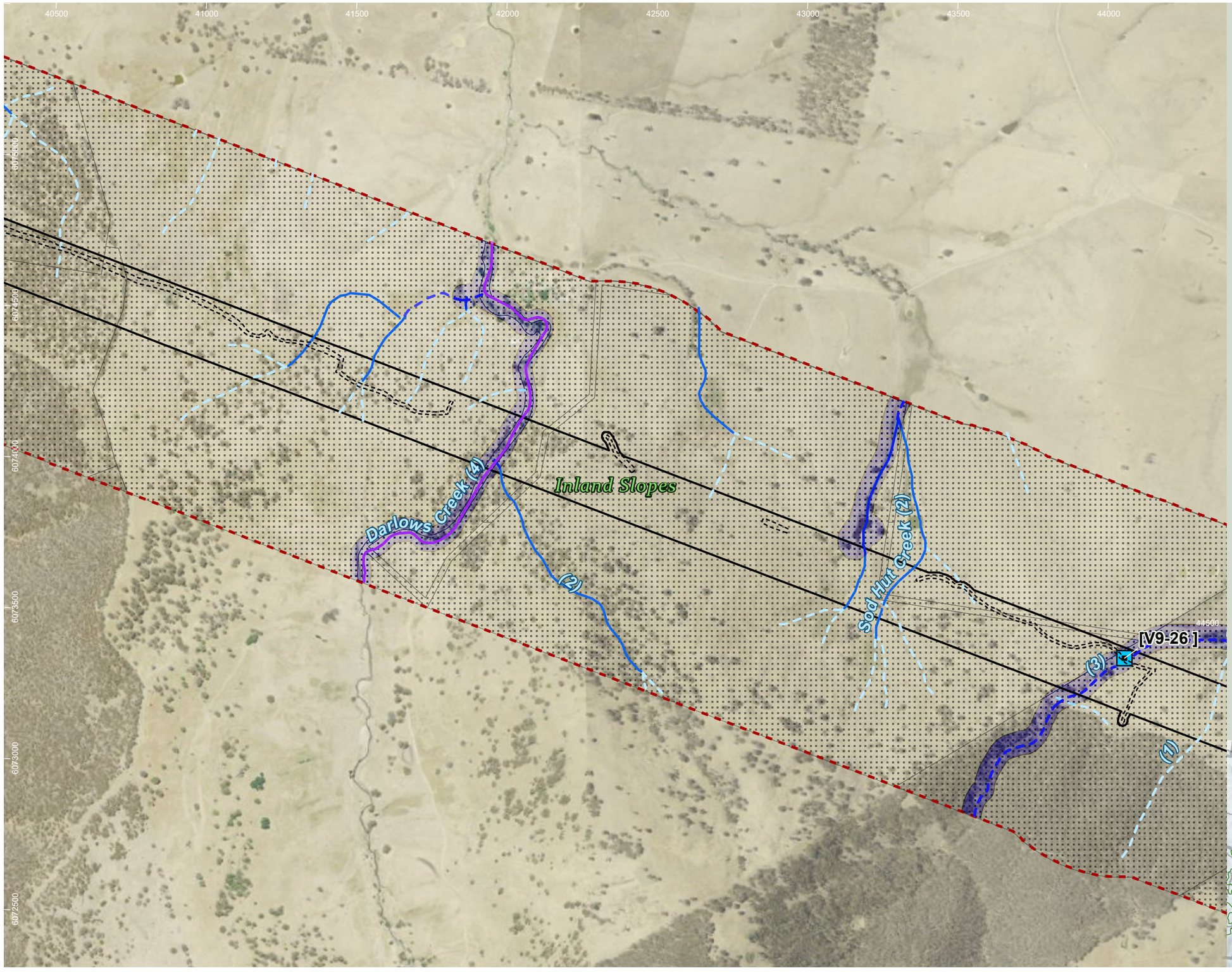


HumeLink project areas

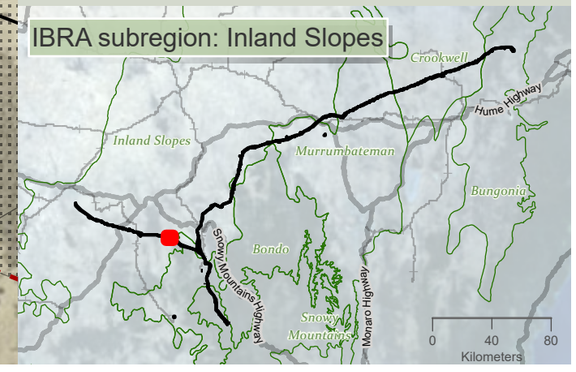
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 17

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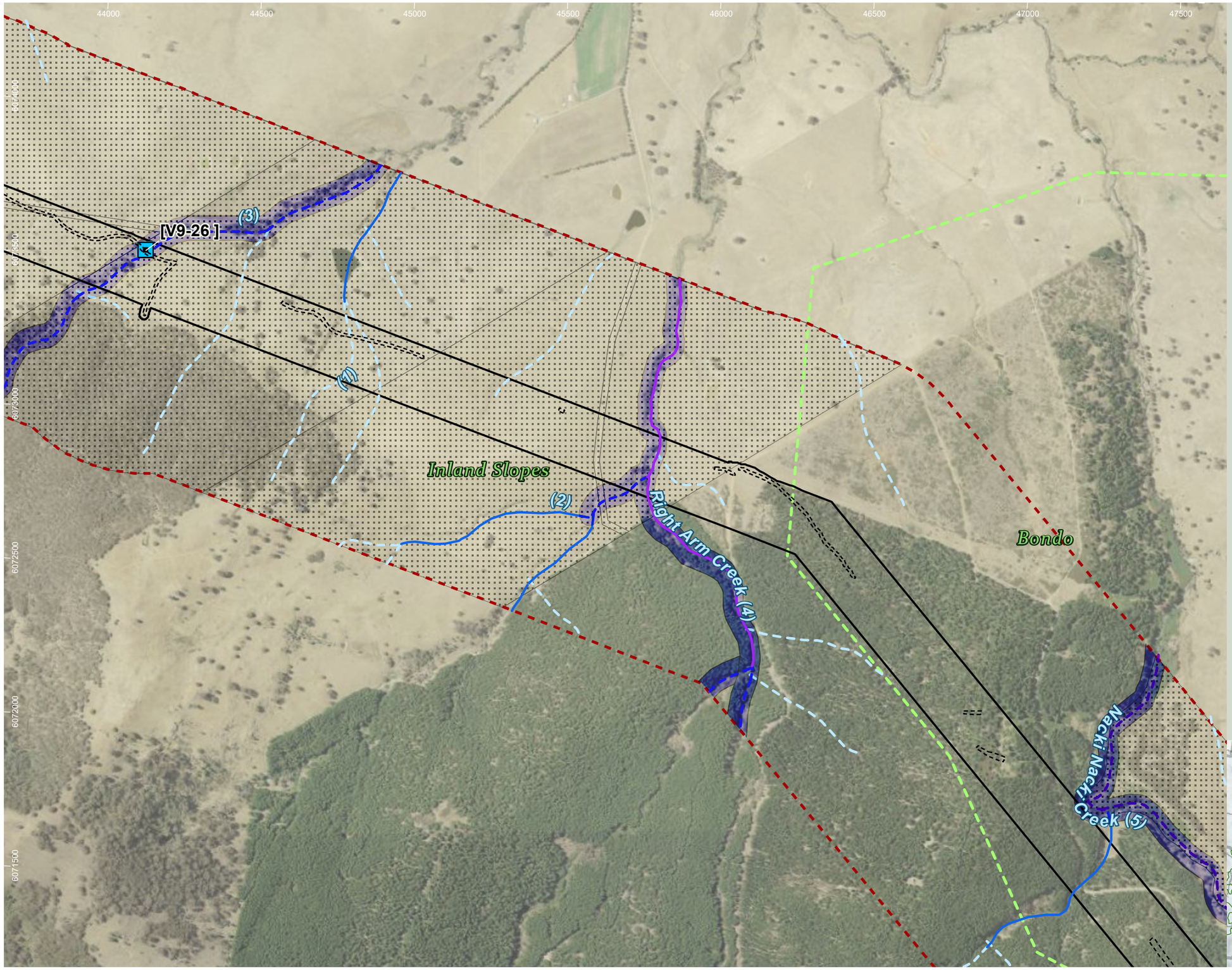


HumeLink project areas

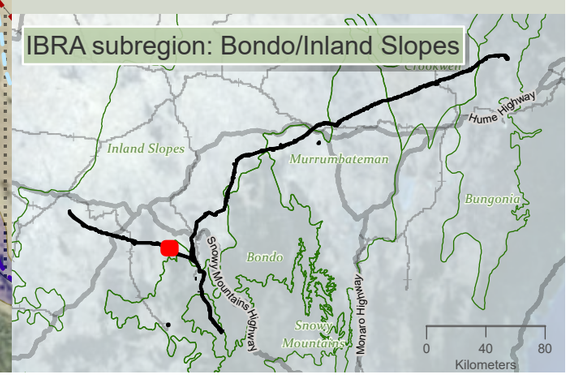
- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 18

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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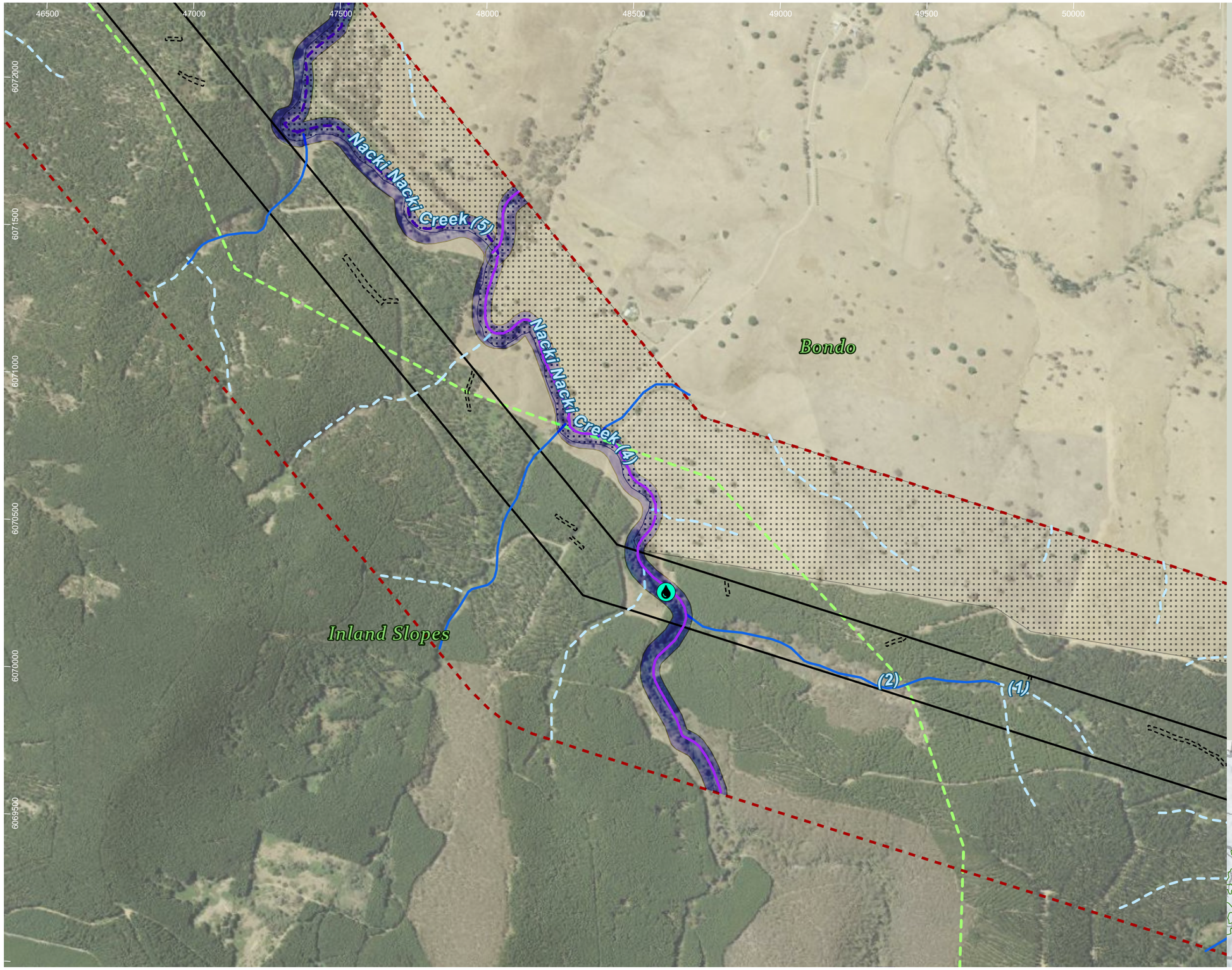


HumeLink project areas

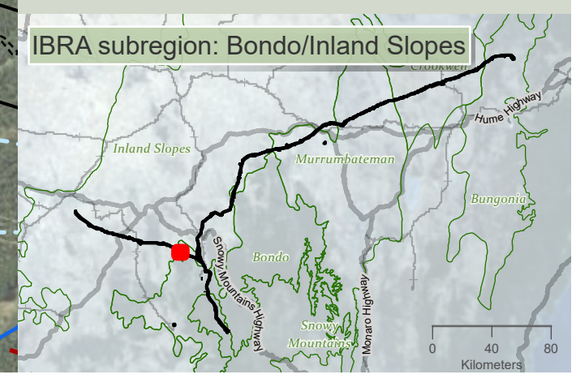
- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 4
- 5



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 19

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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50000 50500 51000 51500 52000 52500 53000 53500

6070000 6069500 6069000 6068500 6068000

Uncles Creek (3)

Sharps Creek (3)

Bondo

(2)

(1)

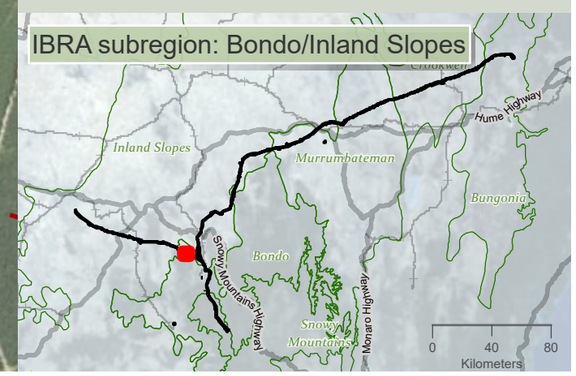
Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 20

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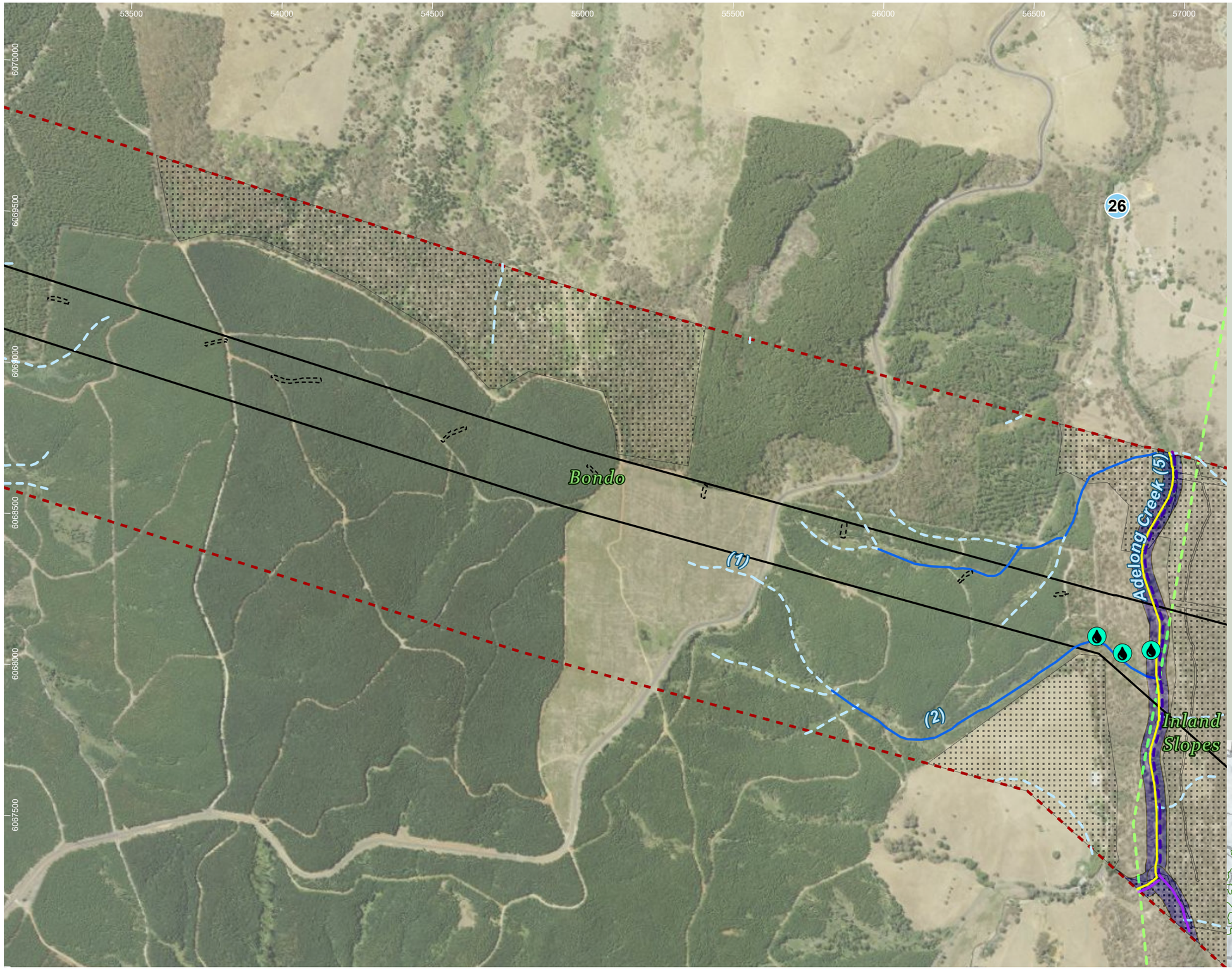


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (3)

Threatened aquatic species desktop assessment points

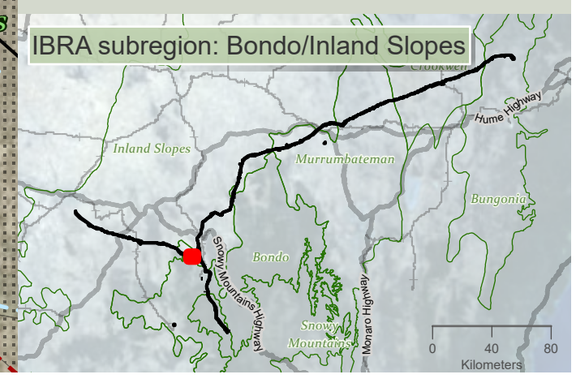
- Threatened aquatic species desktop assessment points (1)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Murray Crayfish

Strahler stream order (offset from centreline)

- 0
- 1
- 2
- 4
- 5



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 21

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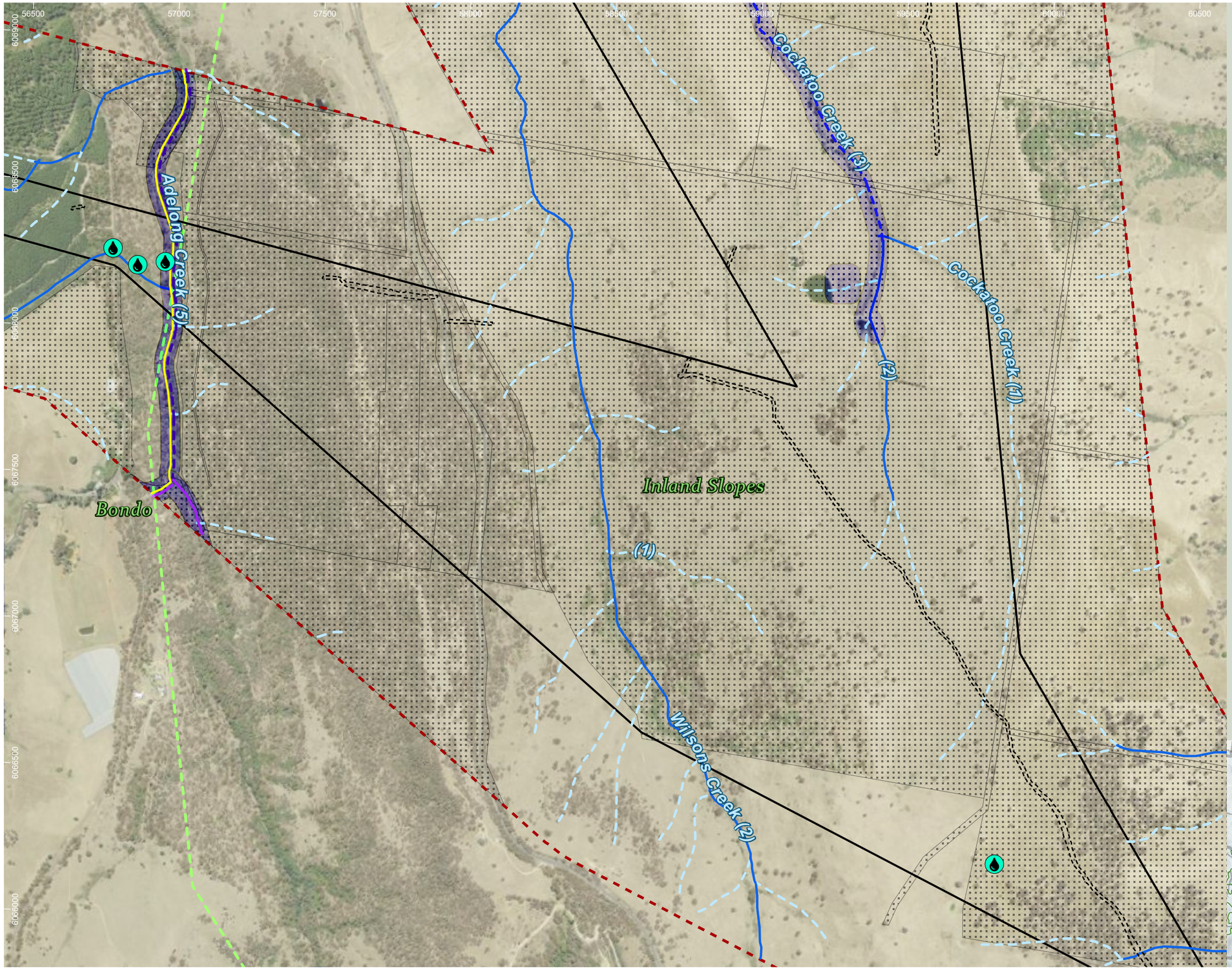

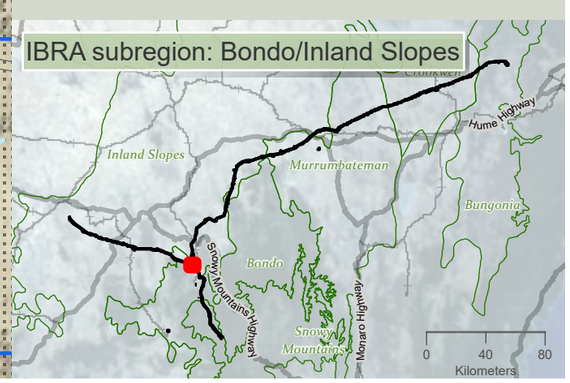

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (4)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Murray Crayfish

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 22

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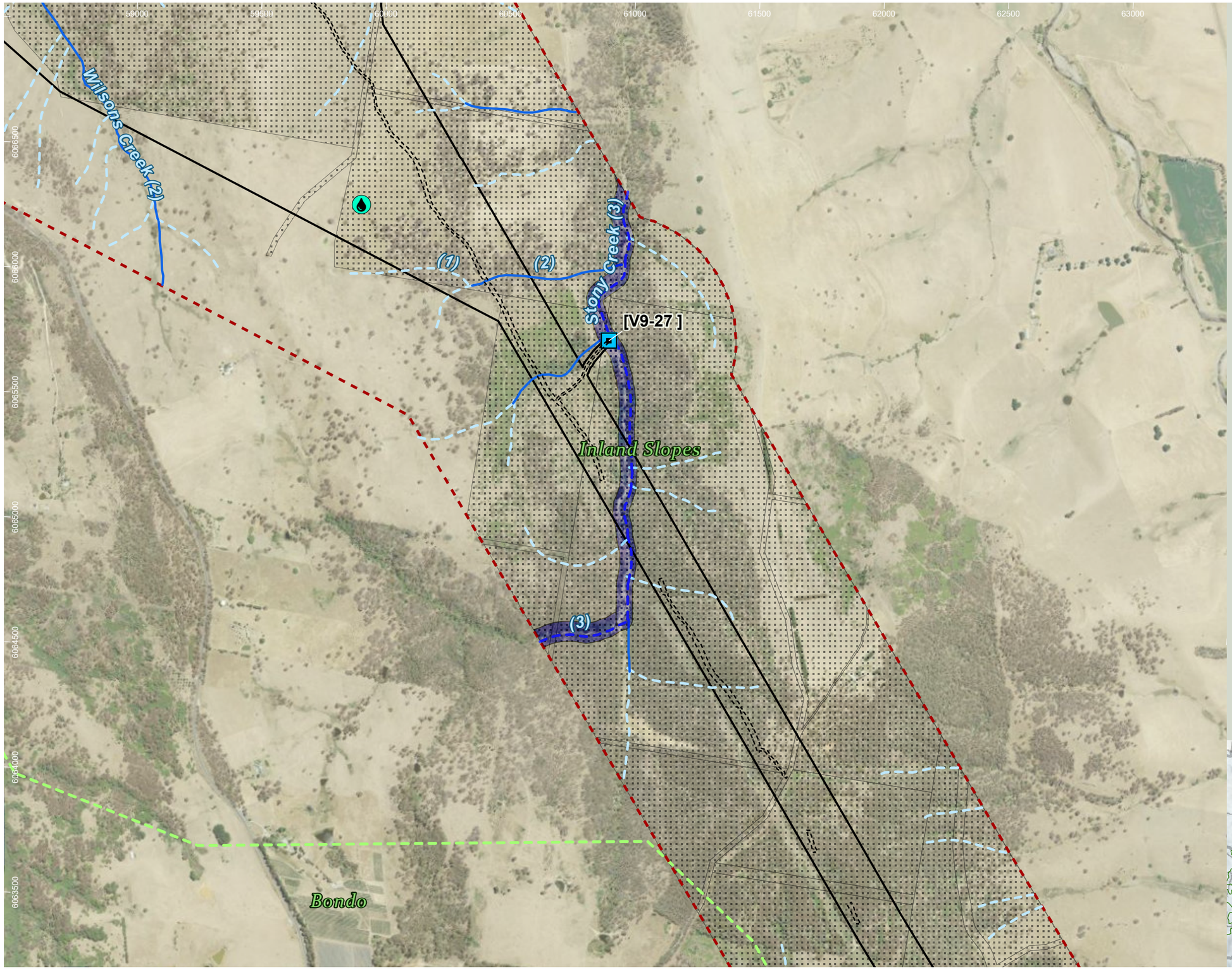


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

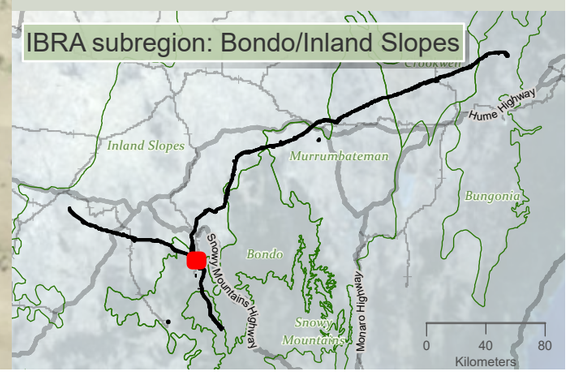
- Aquatic habitat assessment - Niche, 2022 (1)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 23

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MathewZajaczkowski; Last updated: 28/07/2023; File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

60500 61000 61500 62000 62500 63000 63500 64000 64500 65000

6064000 6063500 6063000 6062500 6062000 6061500 6061000 6060500

Inland Slopes

Leech Gully (2)

(2)

Mudhole Creek (3)

[V9-31]

Bondo

[V9-28]

(1)

Gilmore Creek (6)

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

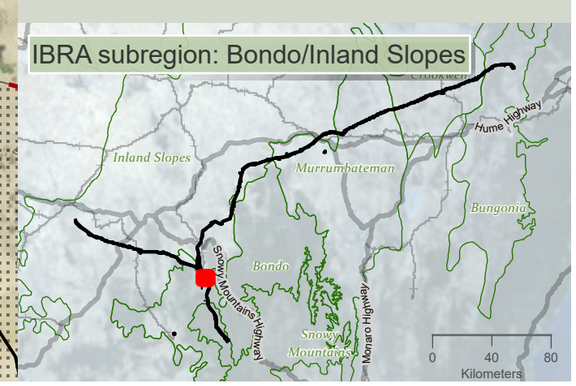
Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 6

IBRA subregion: Bondo/Inland Slopes



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699_Humelink_BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx
Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 24

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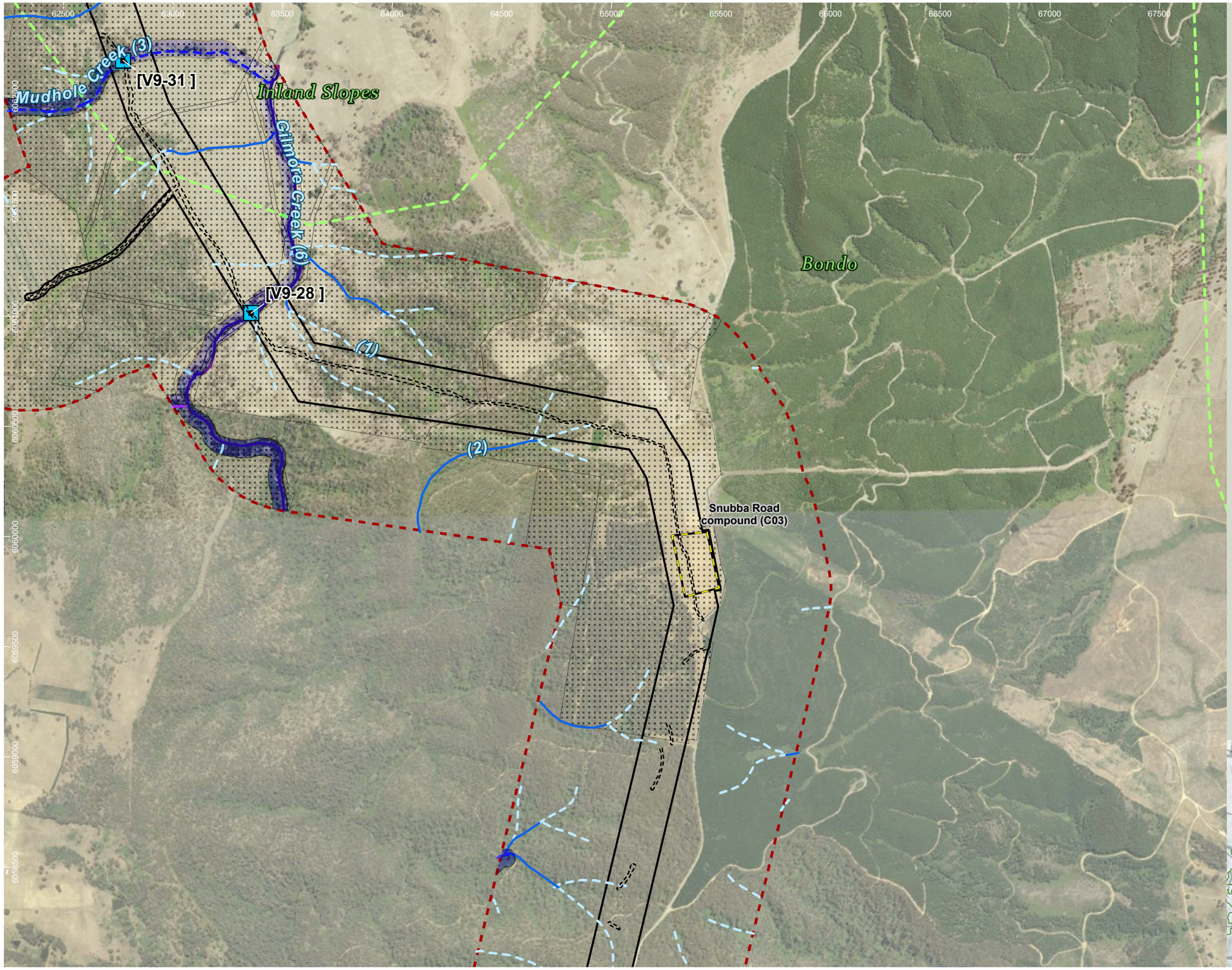


HumeLink project areas

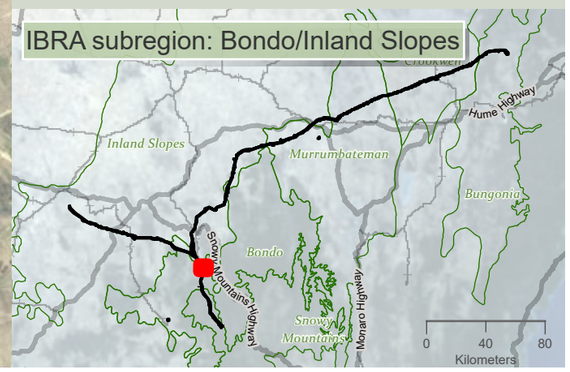
- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion
- No land access
- Potential indicative access track

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 6



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

niche Environment and Heritage

0 550
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 25

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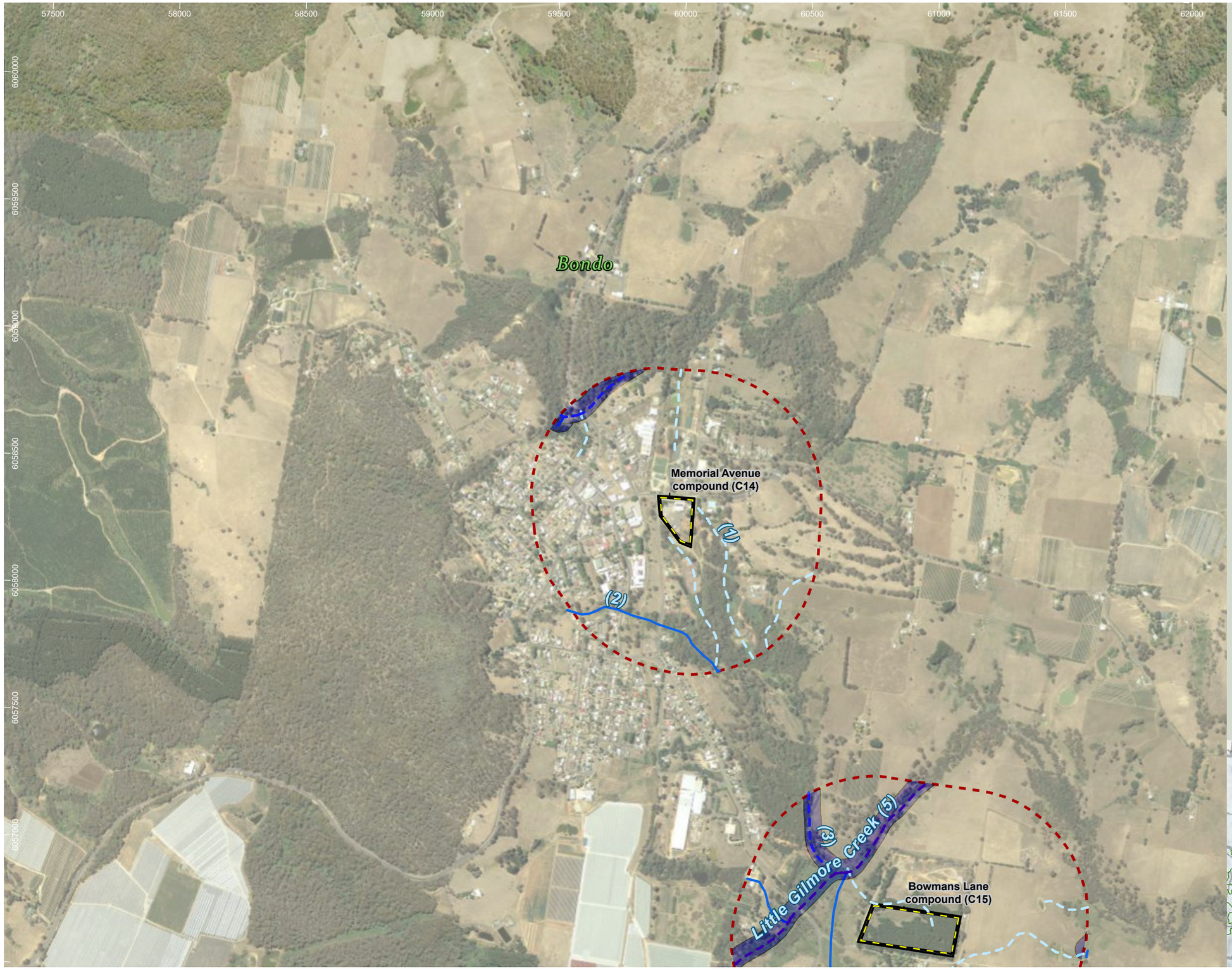
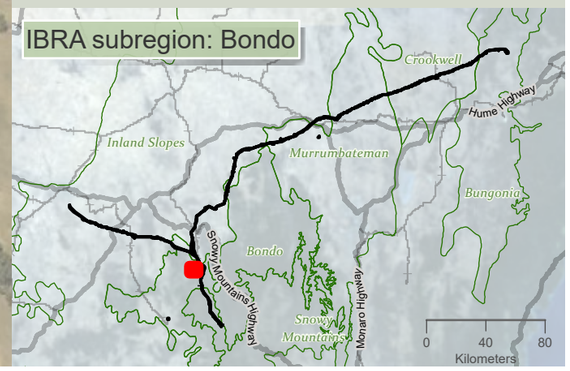


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 5



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 26

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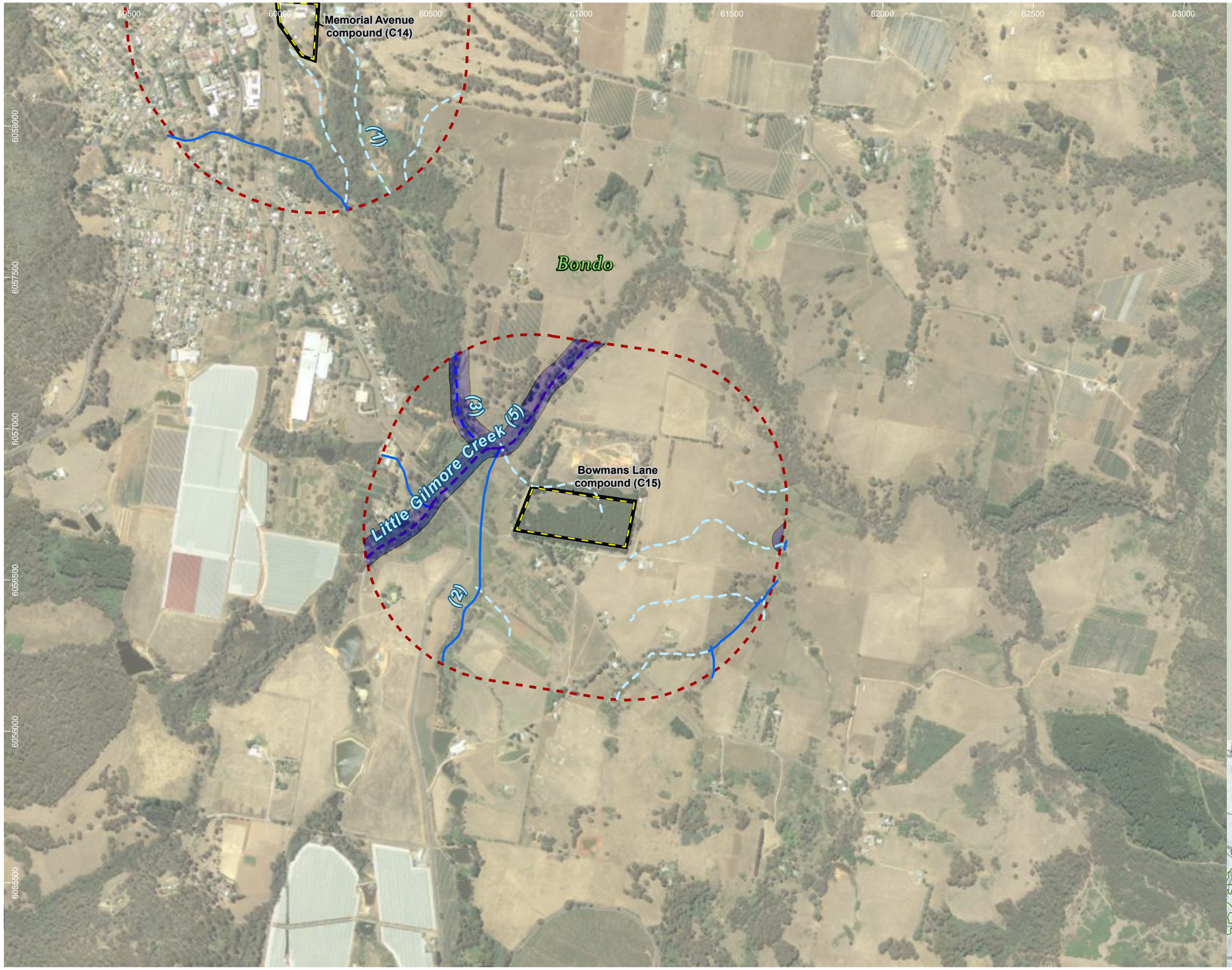
Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential\Impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

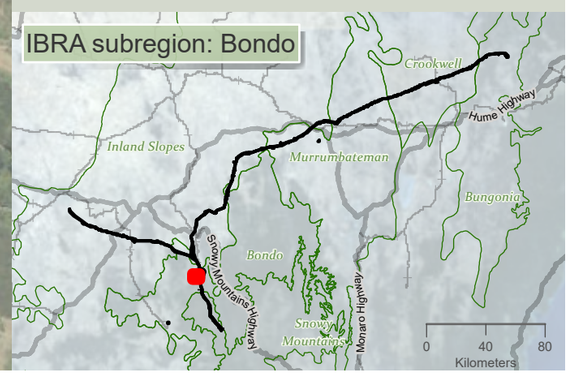


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 5



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 27

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62500 63000 63500 64000 64500 65000 65500 66000 66500 67000

6058500 6058000 6057500 6057000 6056500 6056000 6055500

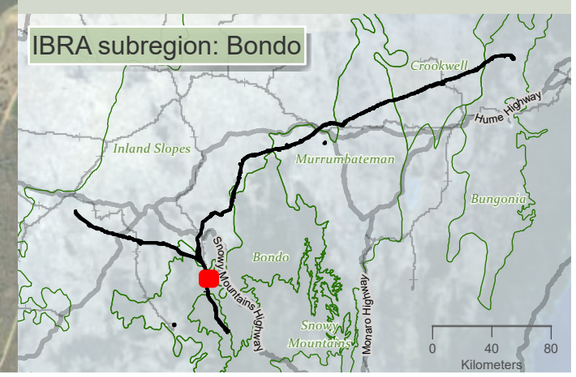
(2) (1) Sheep Station Gully (1) Bondo

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 28

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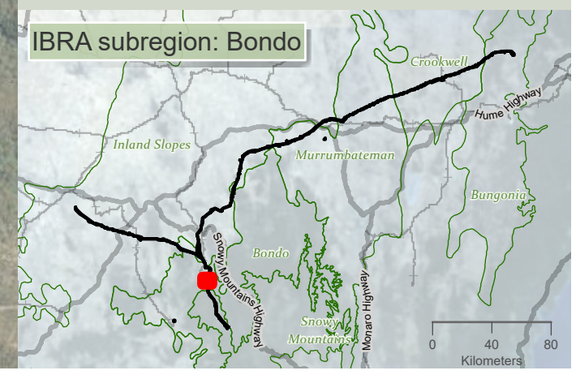
HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 29

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61500 62000 62500 63000 63500 64000 64500 65000 65500 66000

6052000 6051500 6051000 6050500 6050000 6049500 6049000 6048500 6048000

Snubba Creek (4)

Ridings Creek (2)

Bondo

Snubba Road compound (C16)

(1)

(2)

(3)

Snubba Creek (3)

Snowy Mountains

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion
- Potential indicative access track

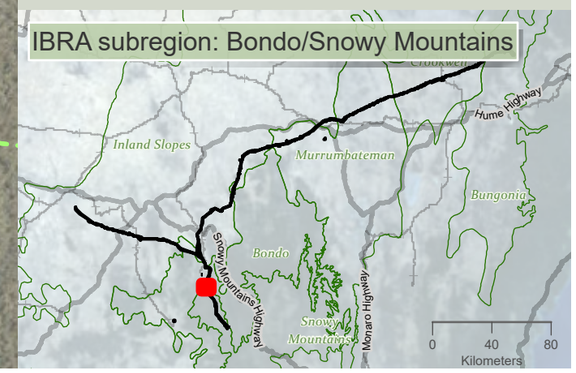
Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5

IBRA subregion: Bondo/Snowy Mountains



niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 30

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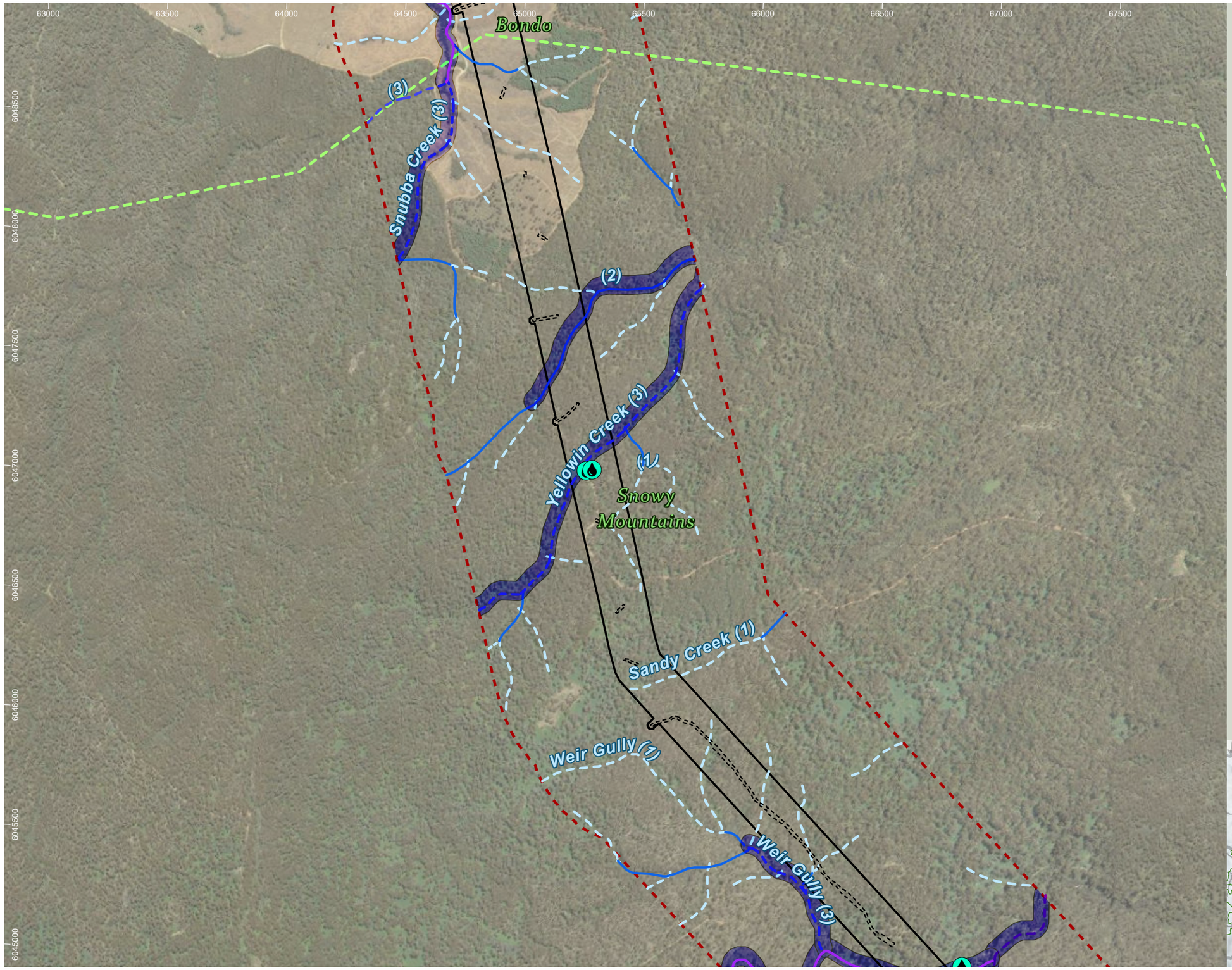


HumeLink project areas

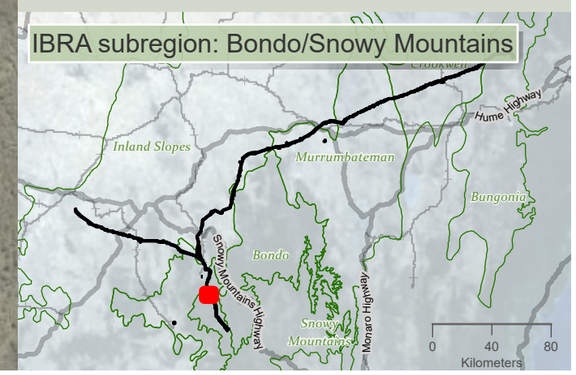
- Project footprint
- Landscape assessment area
- IBRA subregion
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (3)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 31

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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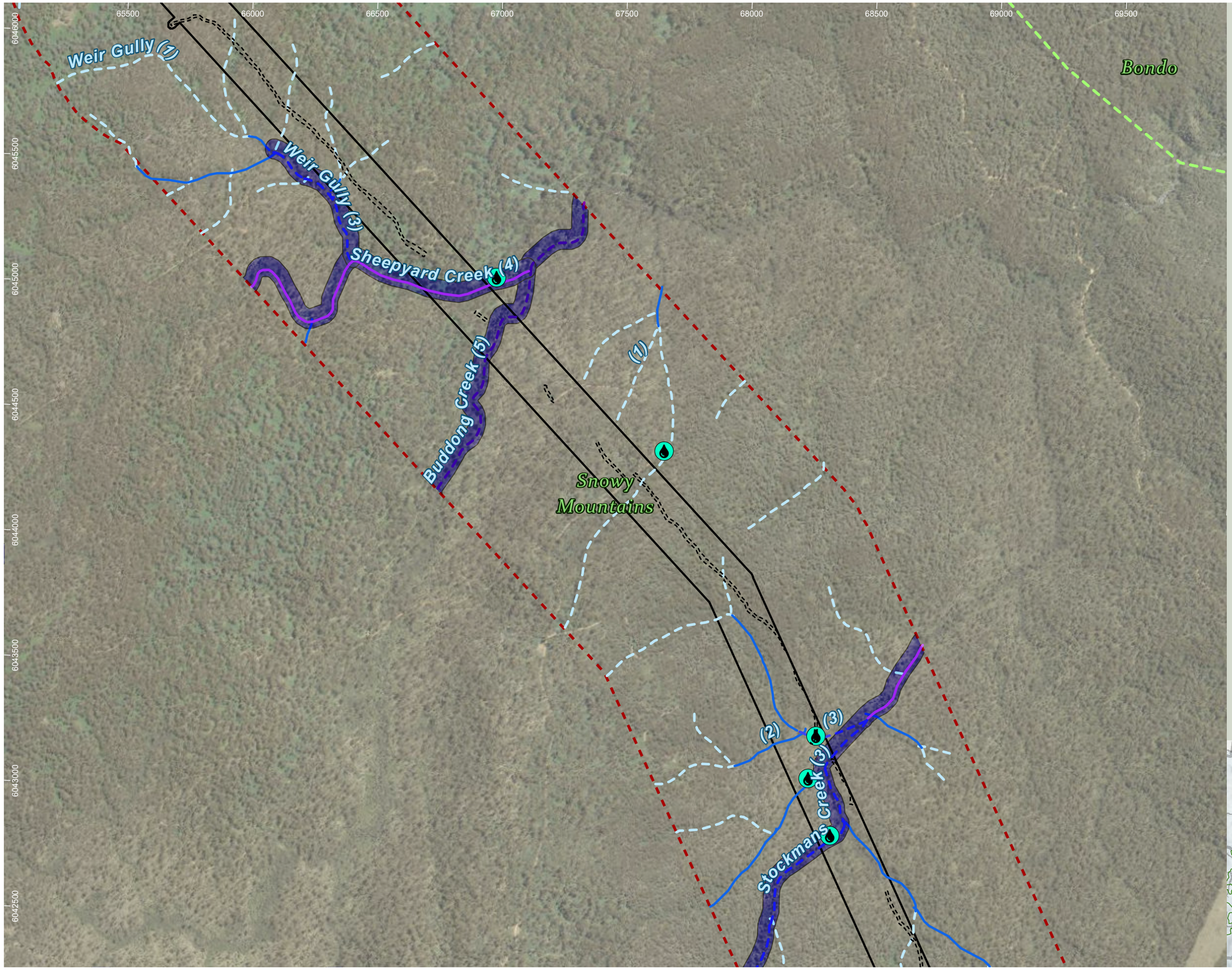


HumeLink project areas

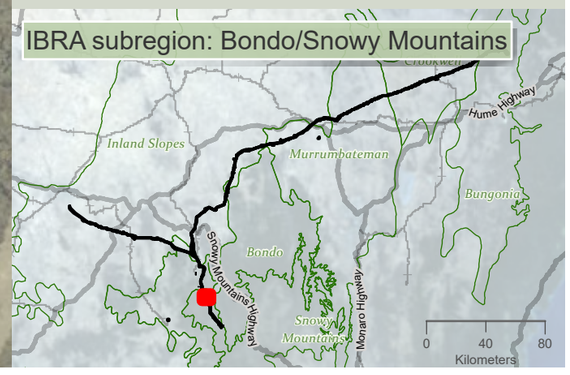
- Project footprint
- Landscape assessment area
- IBRA subregion
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (5)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 32

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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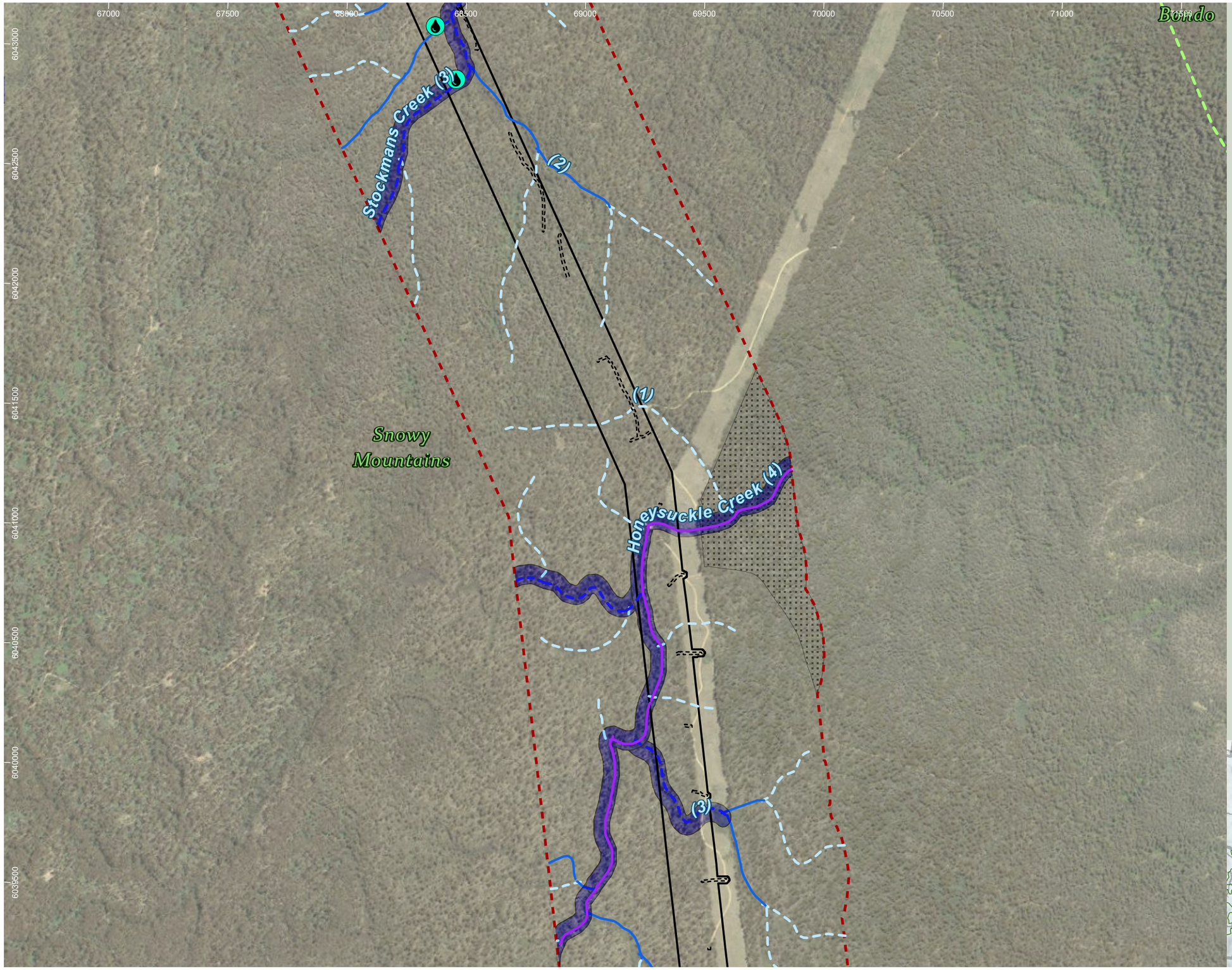


HumeLink project areas

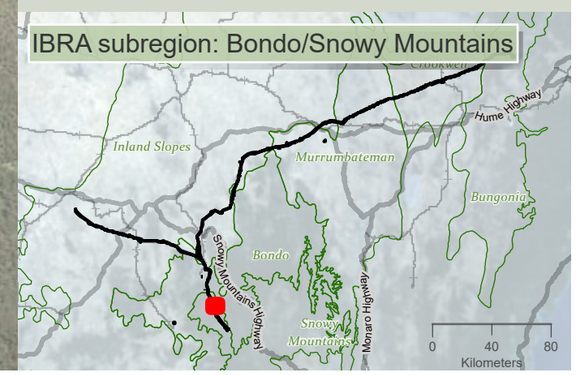
- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (2)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 33

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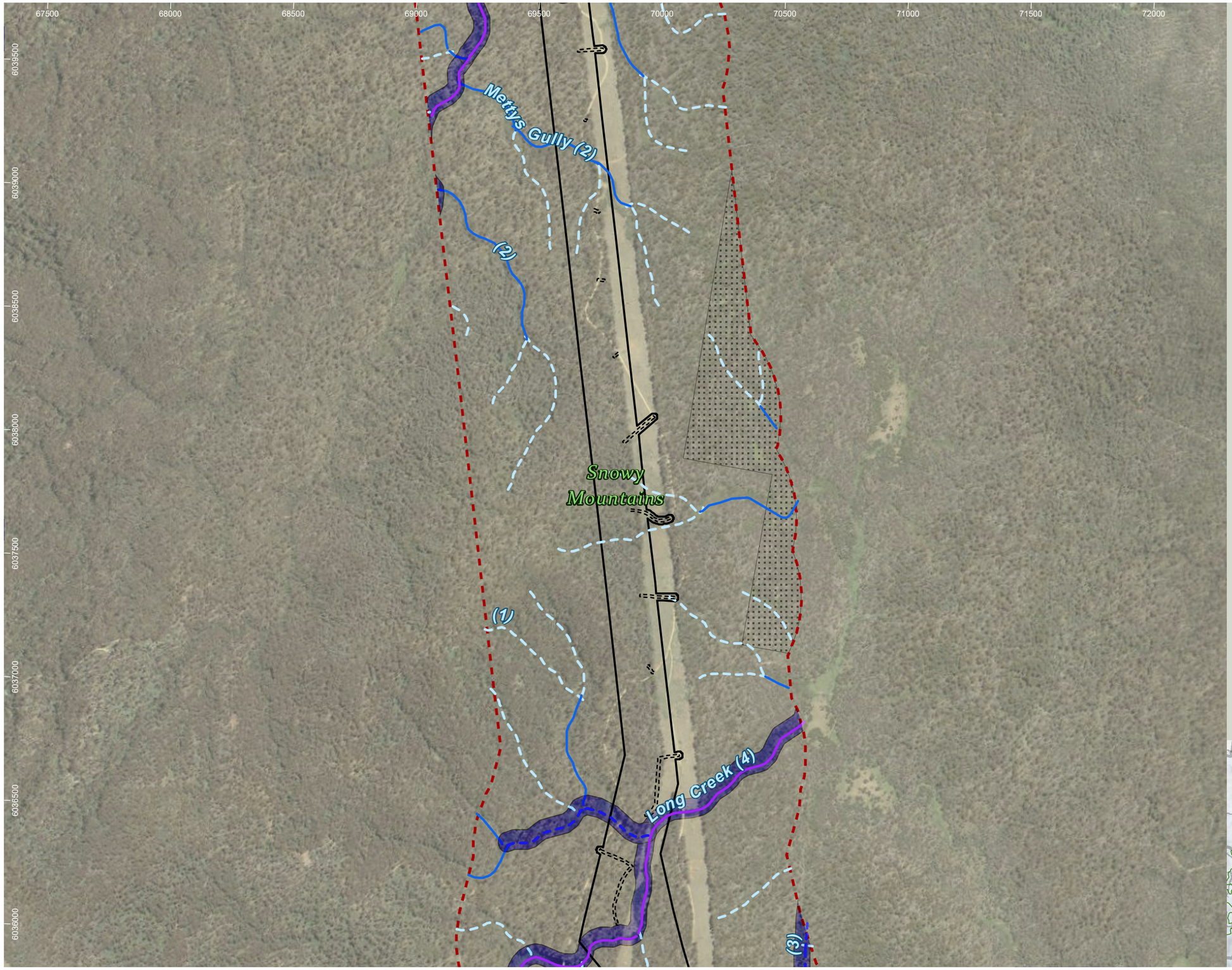
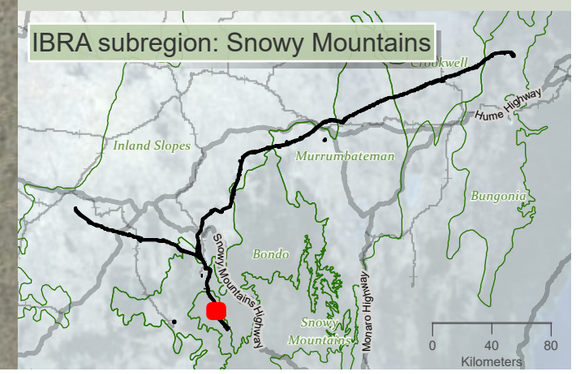


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 34

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45000 45500 46000 46500 47000 47500 48000 48500

6032500 6032000 6031500 6031000 6030500 6030000 6029500

Bondo

(1) (2) (3)

Tumbarumba Accommodation Facility (AC1)

49000

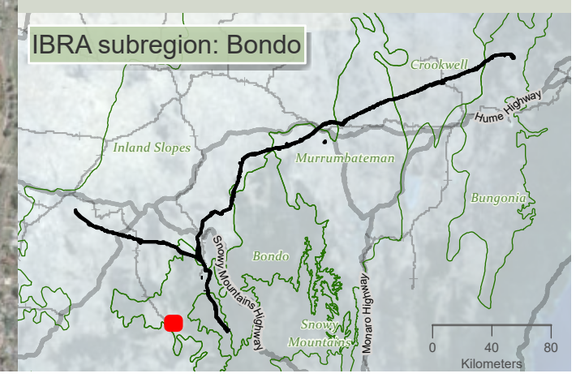
HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3

IBRA subregion: Bondo



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 35

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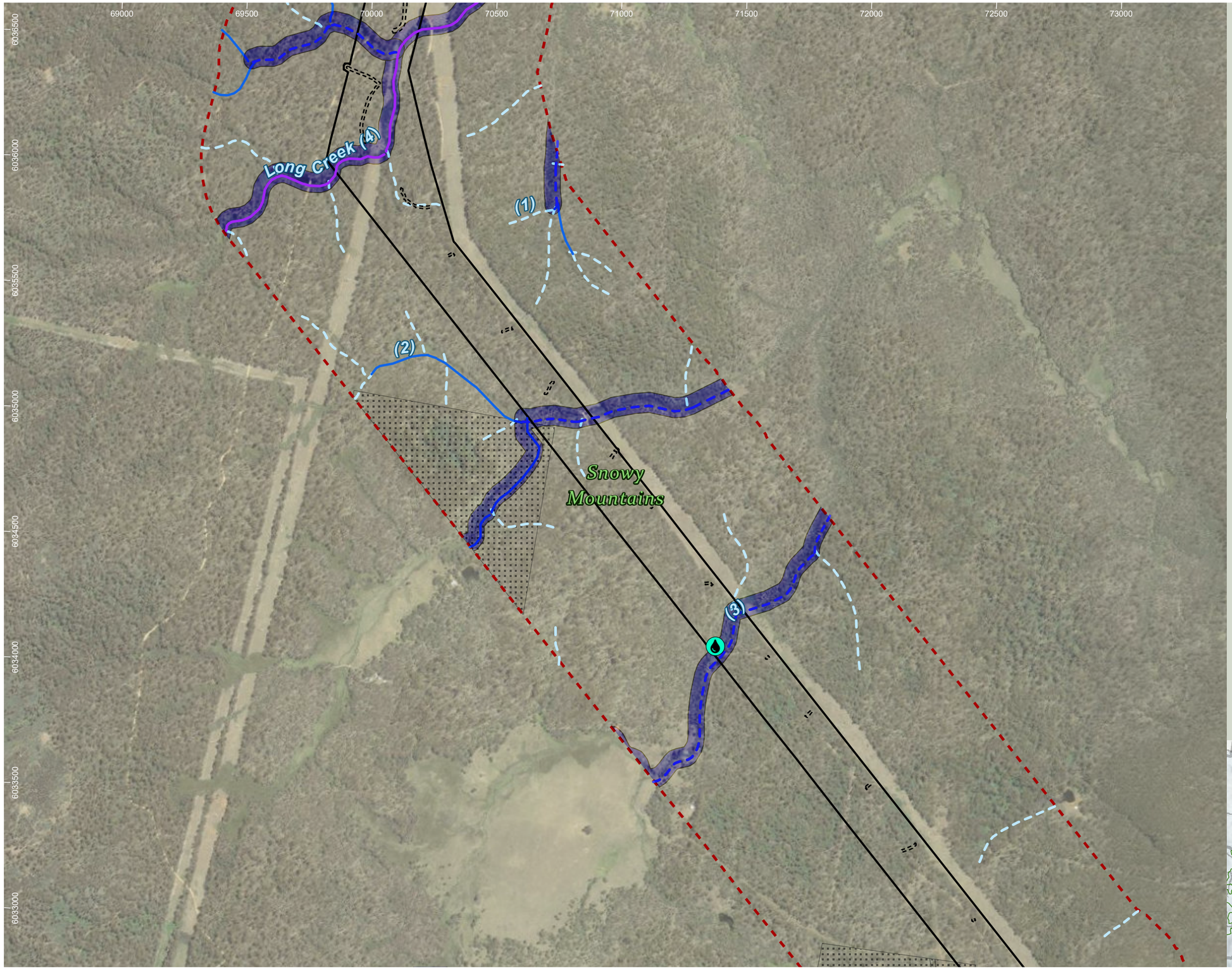


HumeLink project areas

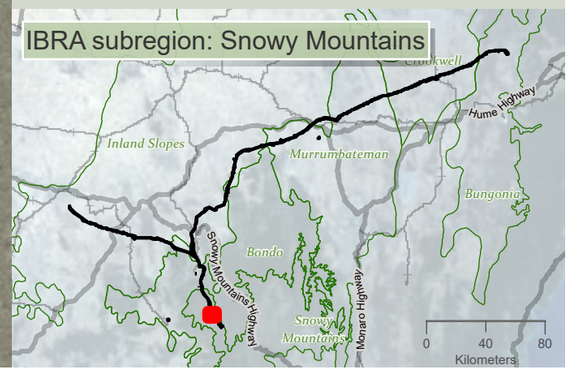
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 36

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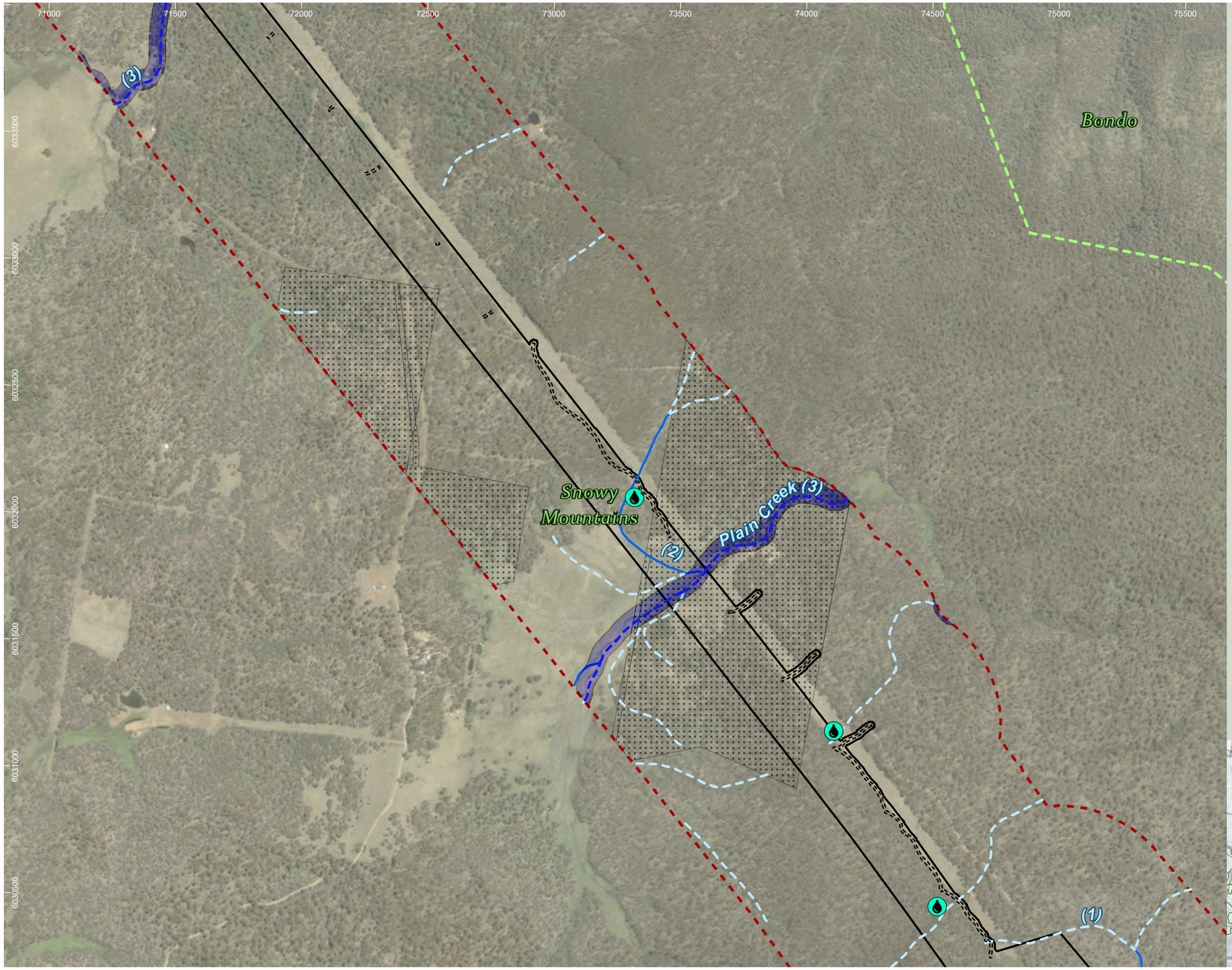


HumeLink project areas

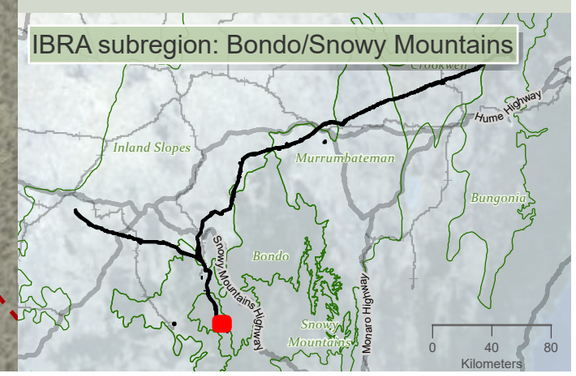
- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (4)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 37

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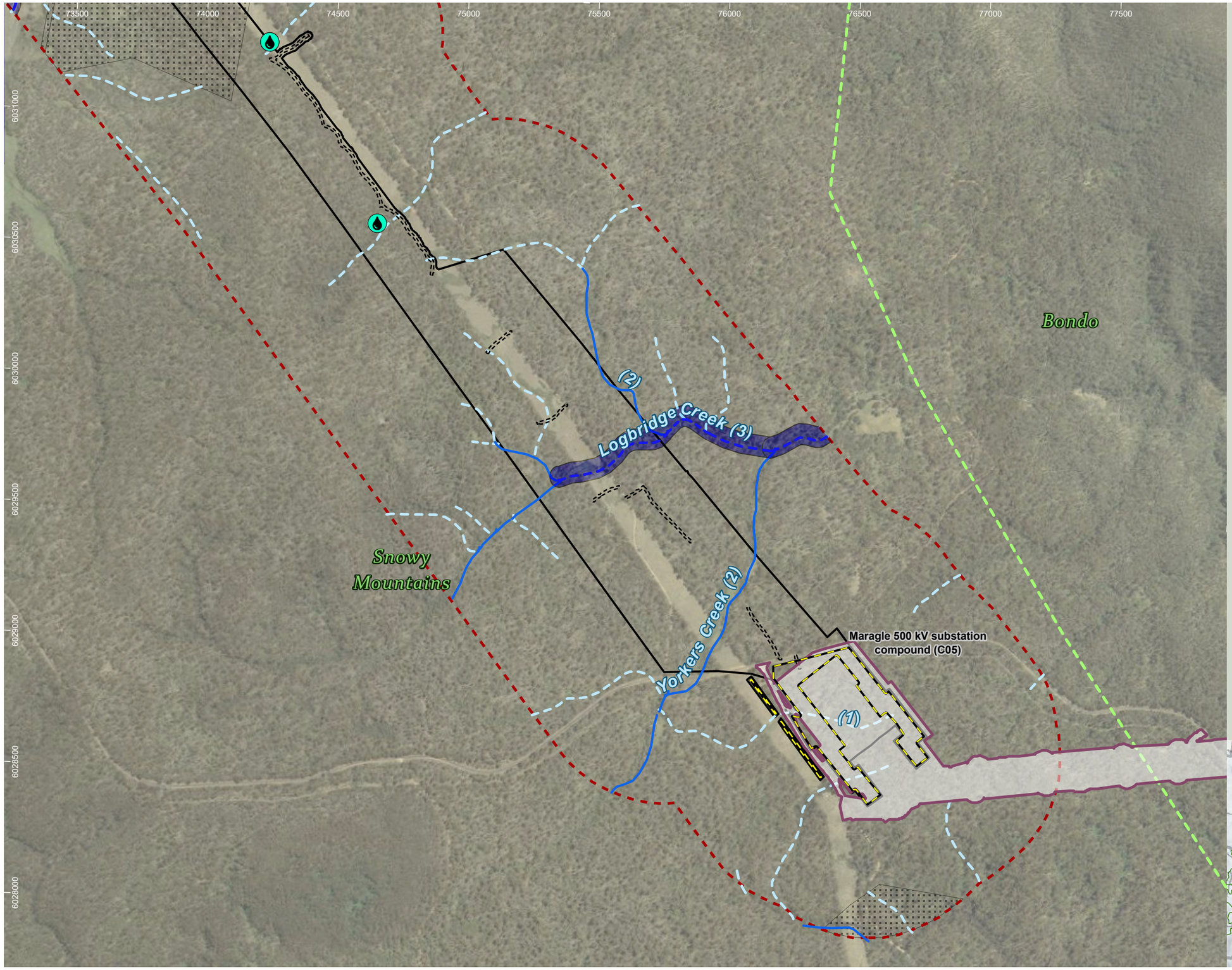


HumeLink project areas

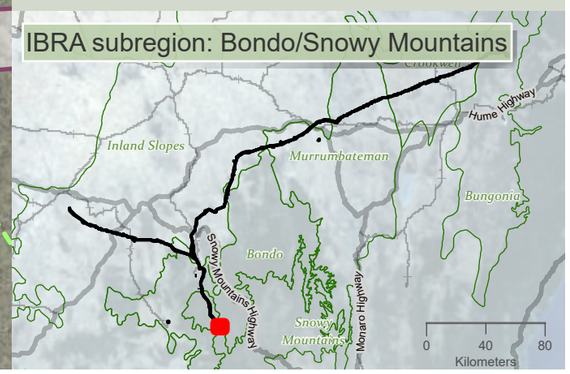
- Project footprint
- Landscape assessment area
- Proposed construction compounds
- Snowy 2.0 Transmission Connection project
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (3)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 38

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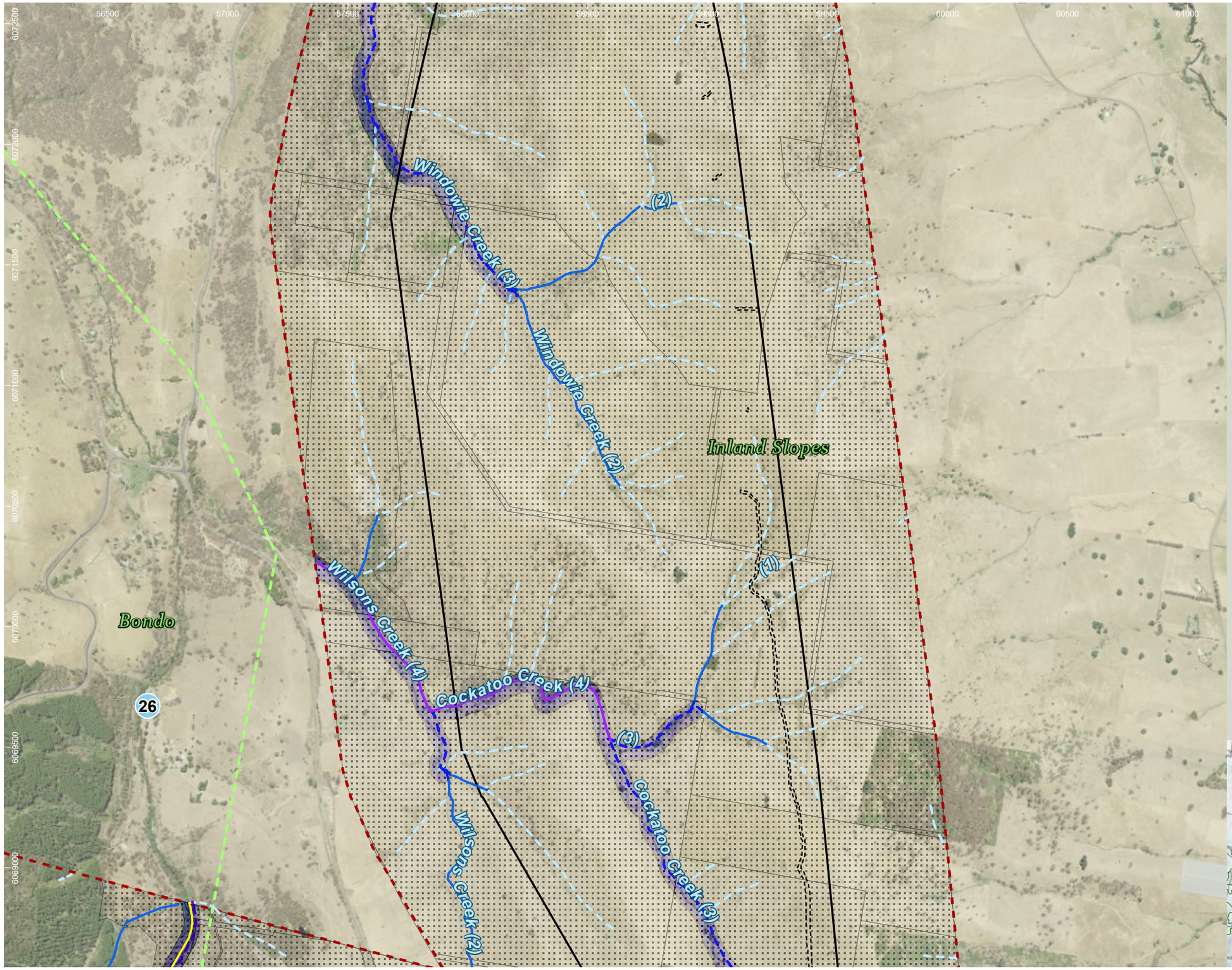


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Threatened aquatic species desktop assessment points

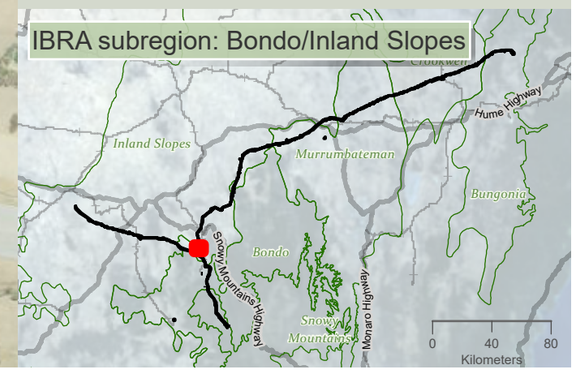
- Threatened aquatic species desktop assessment points (1)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Murray Crayfish

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 39

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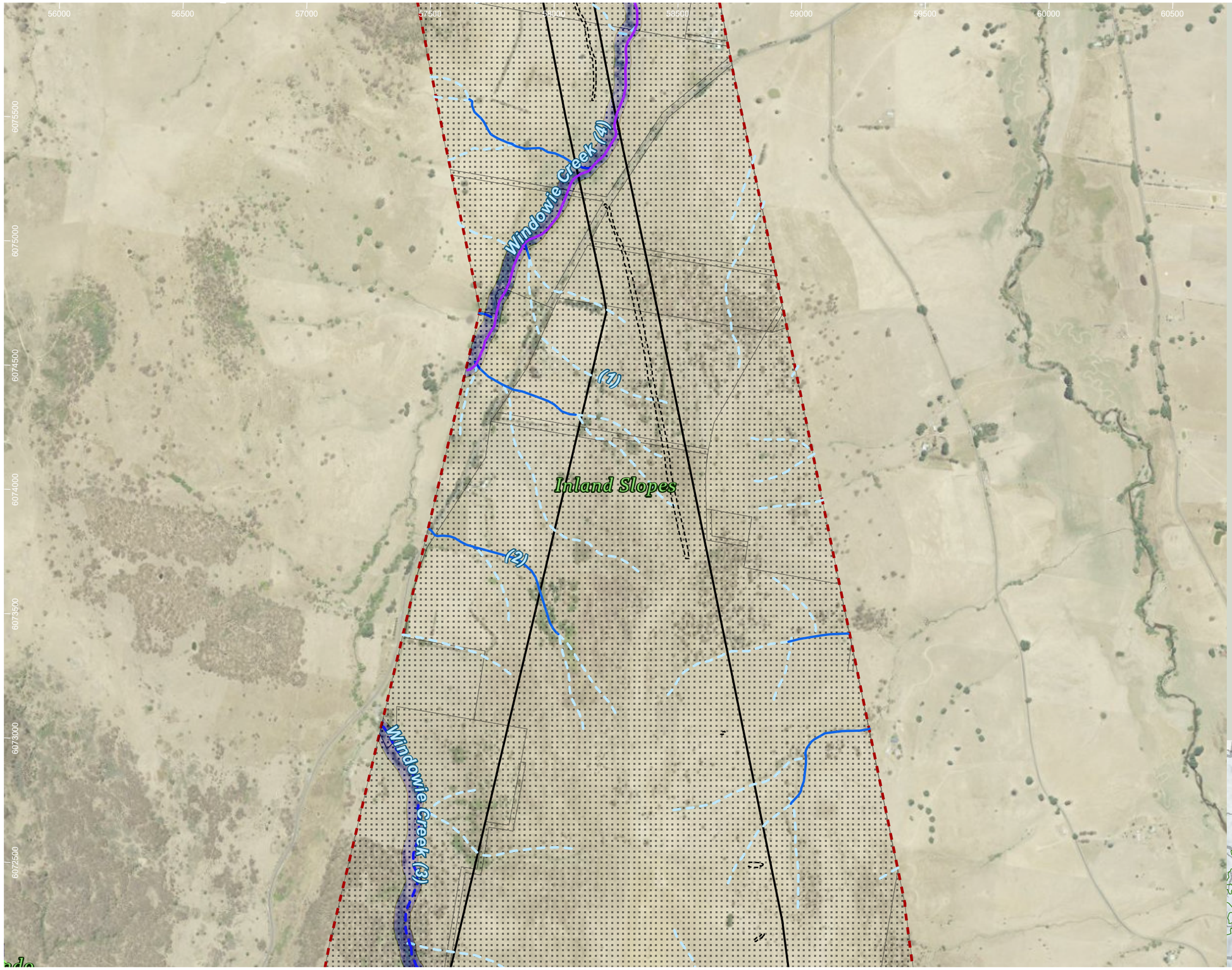
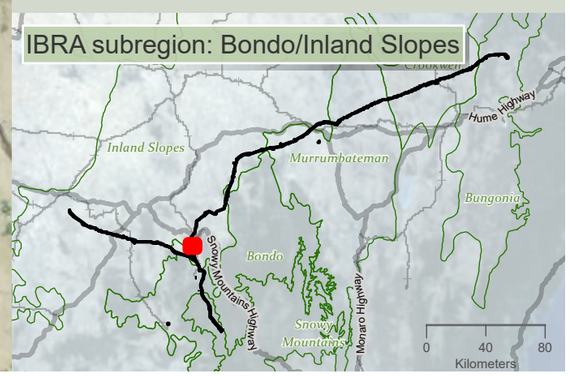


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



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niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 40

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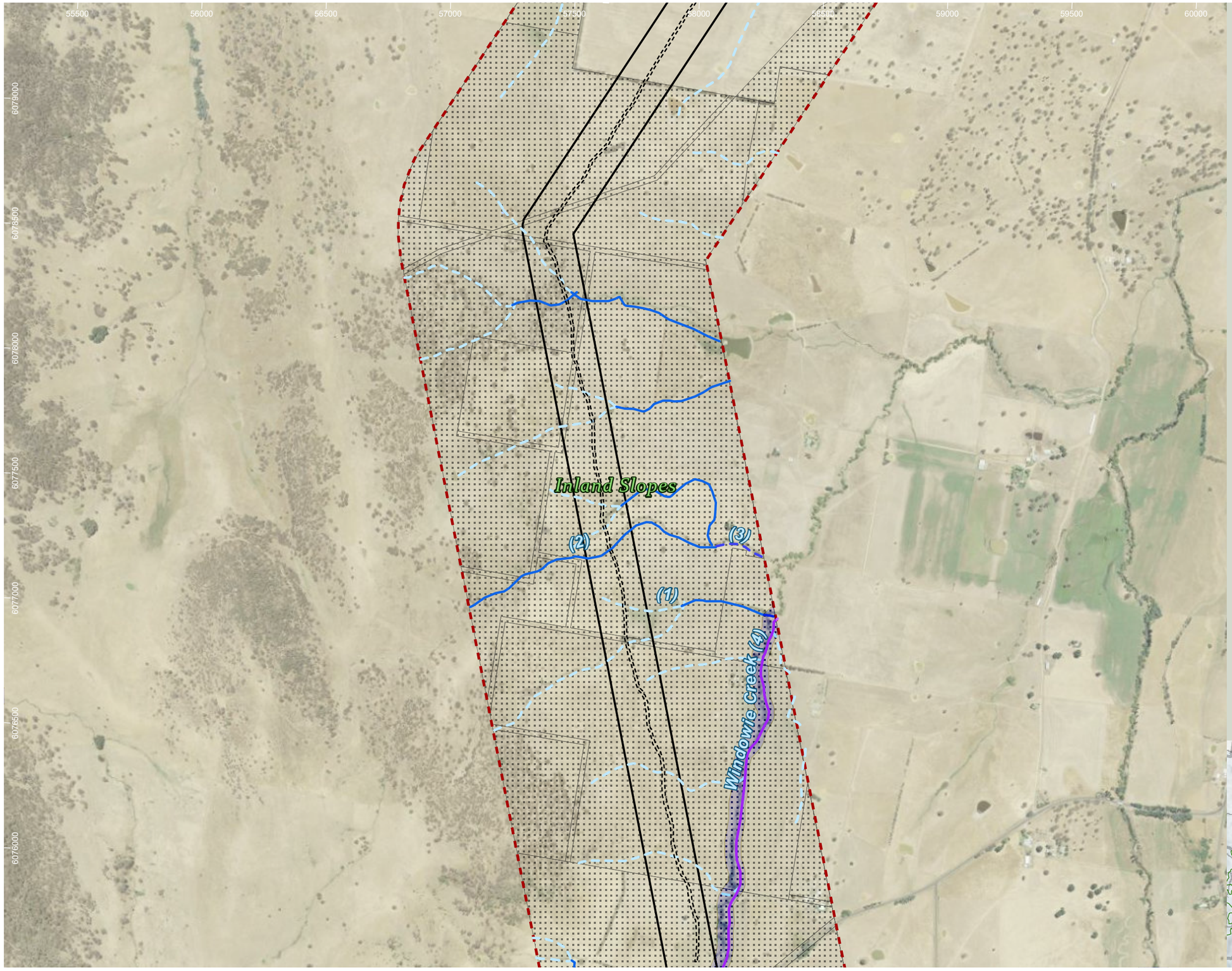
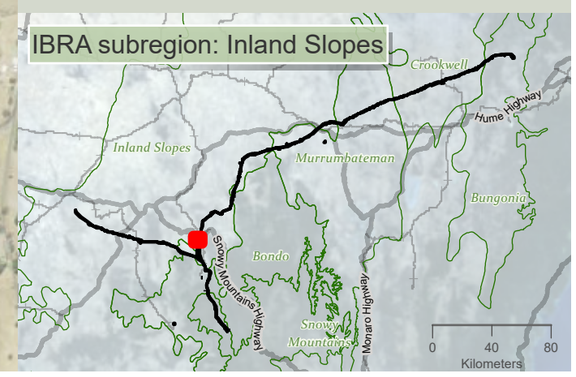


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 0
- 1
- 2
- 3
- 4



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 41

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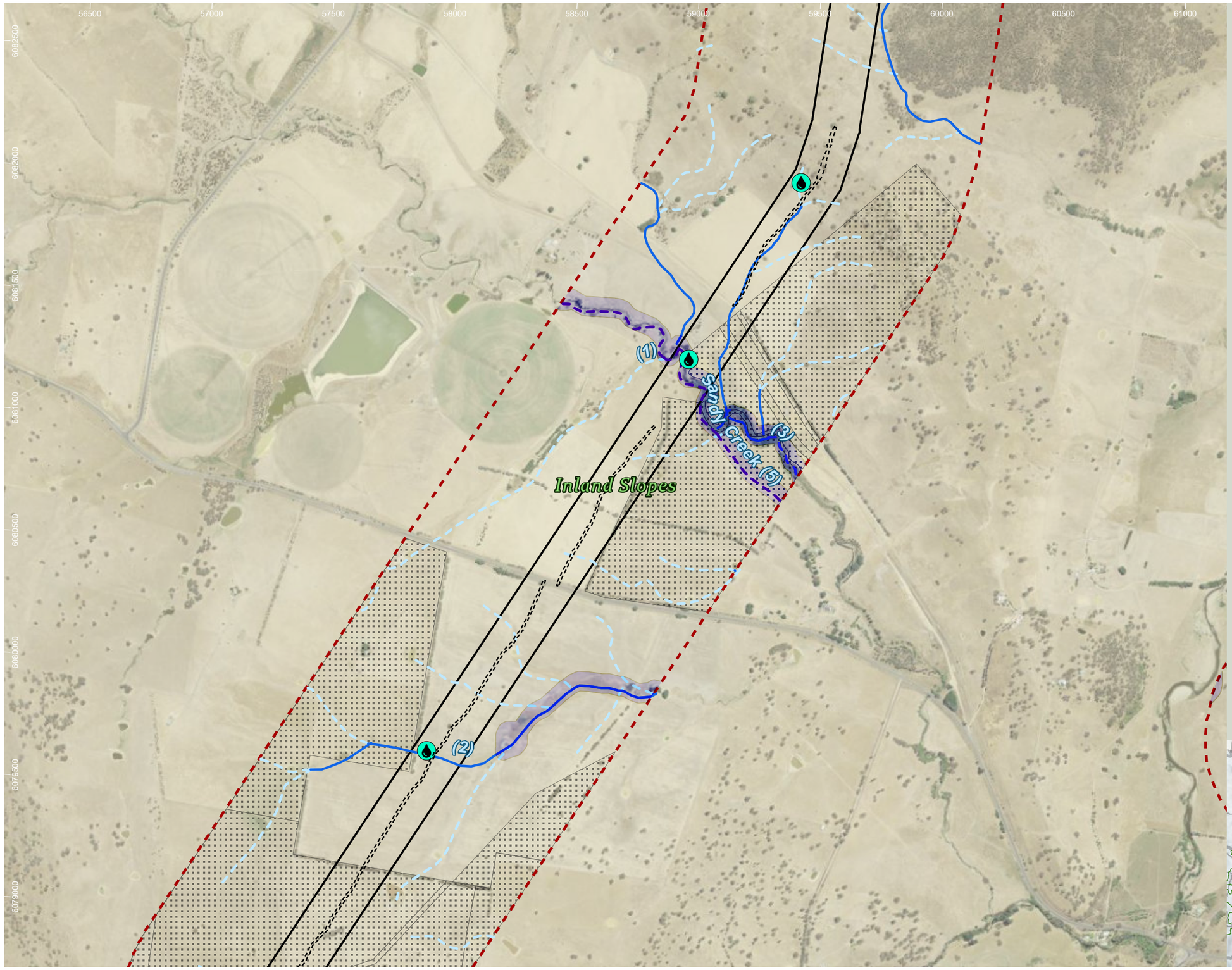


HumeLink project areas

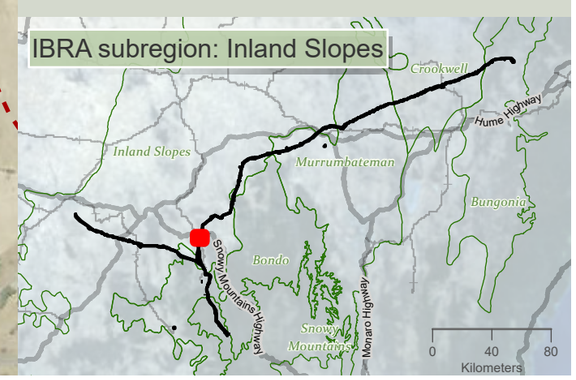
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (3)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 5



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 42

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60000 60500 61000 61500 62000 62500 63000 63500

6081000 6080500 6080000 6079500 6079000 6078500

Inland Slopes

Snowy Mountains Highway compound (C02)

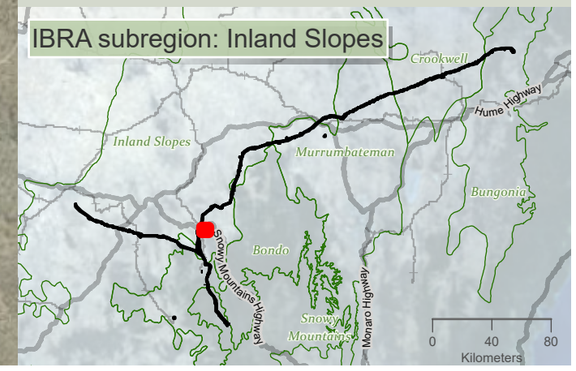
(1) (2) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 43

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HumeLink project areas

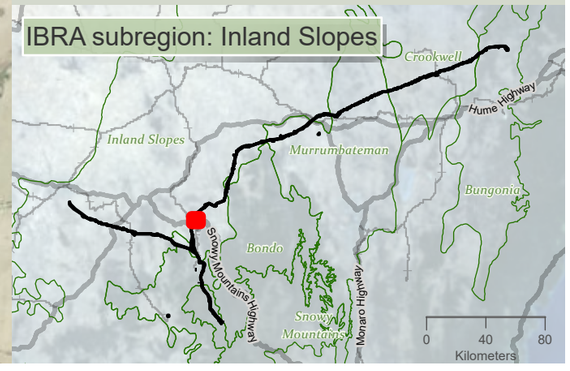
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)

Strahler stream order (offset from centreline)

- 1
- 2



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 44

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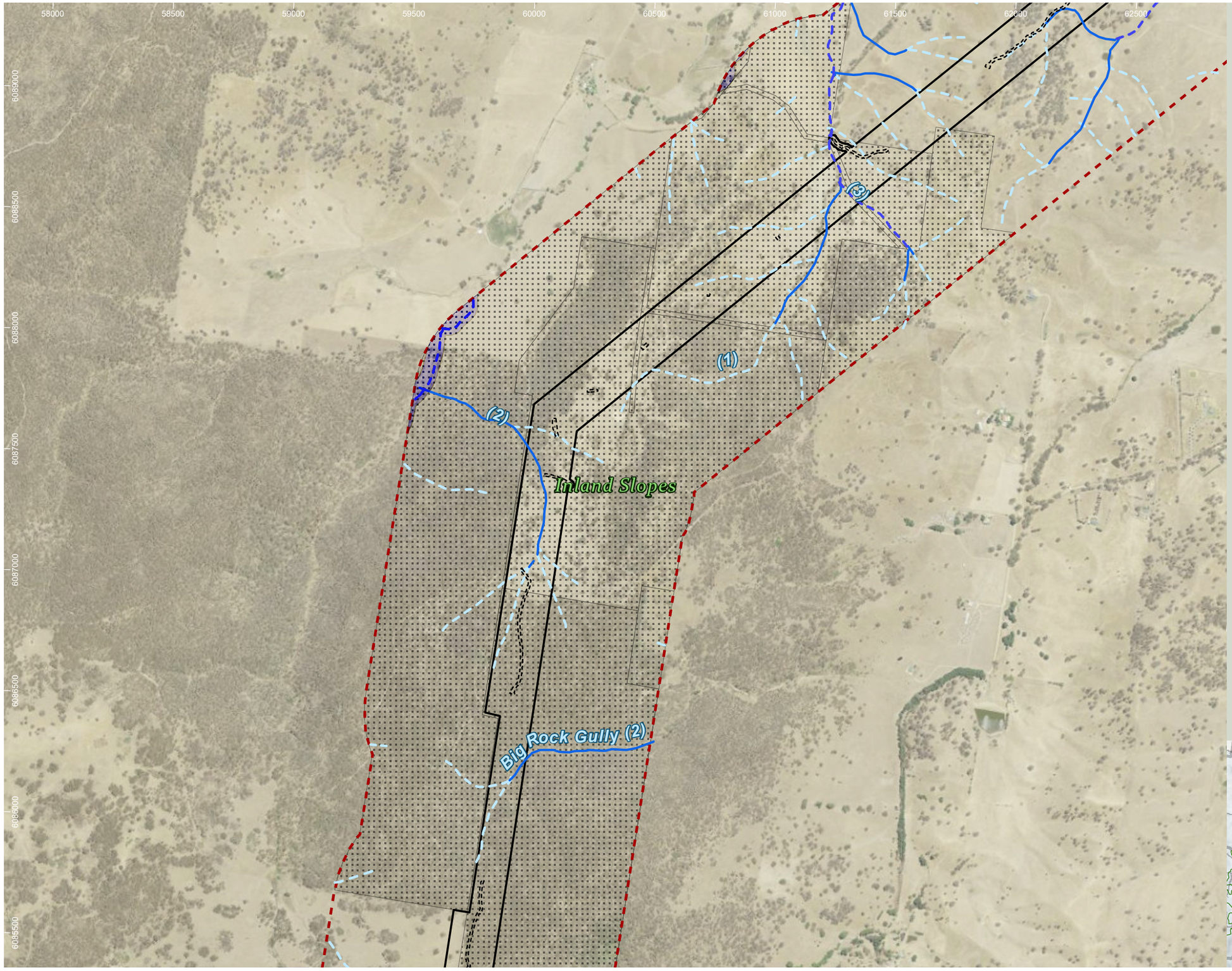
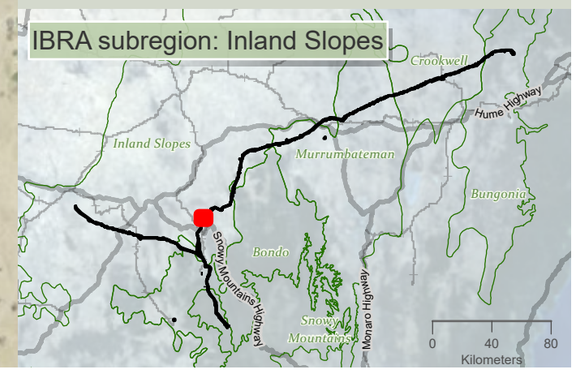


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 45

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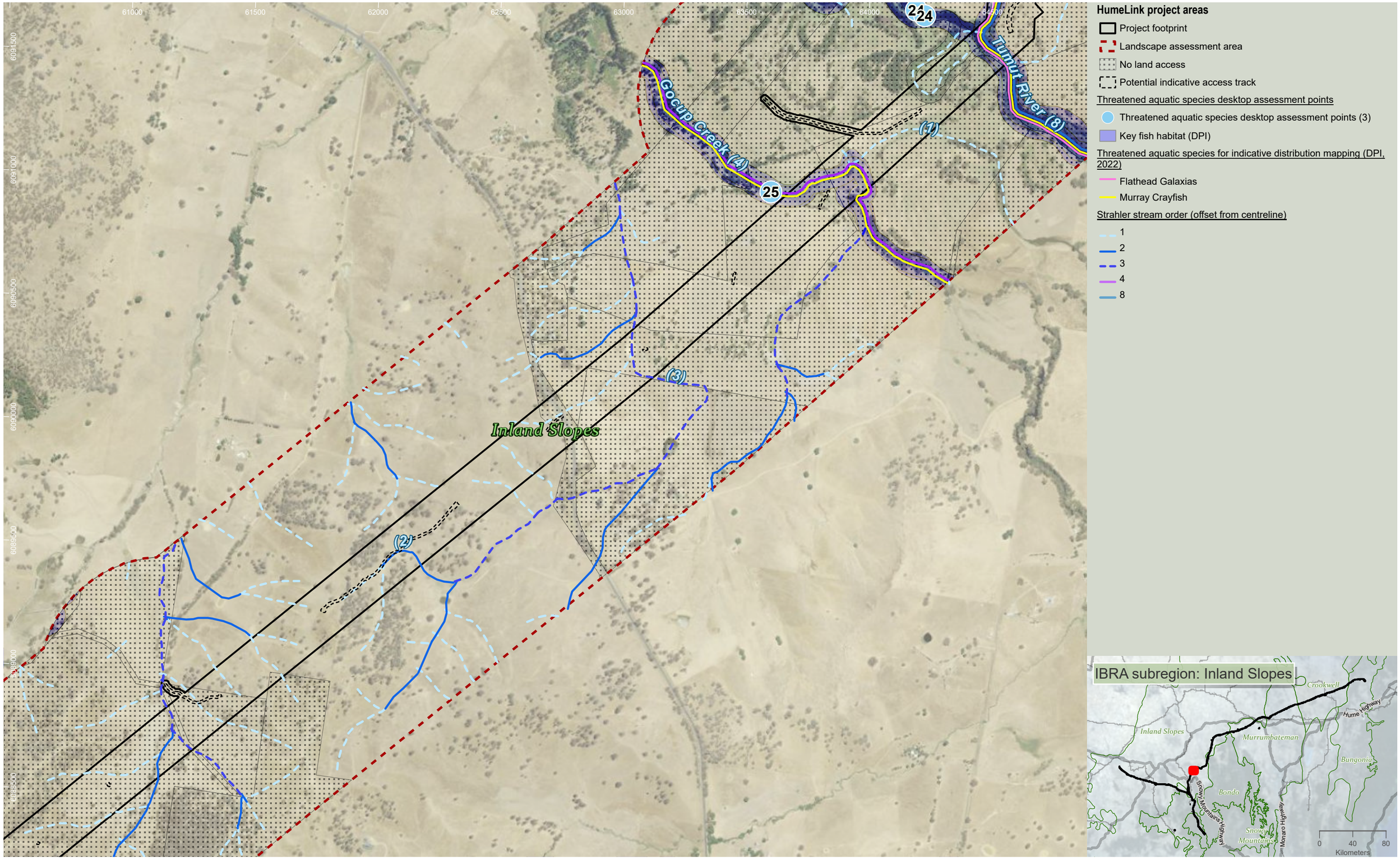

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 46

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63500 64000 64500 65000 65500 66000 66500 67000

6094000 6093500 6093000 6092500 6092000

(4) (3) (2) (1)

Inland Slopes

23 24 25

Tumut River (8)

Cocup Creek (4)

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Threatened aquatic species desktop assessment points

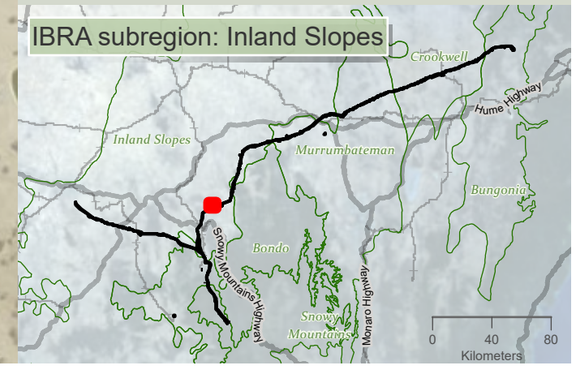
- Threatened aquatic species desktop assessment points (5)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Flathead Galaxias
- Murray Crayfish

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5
- 8



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 47

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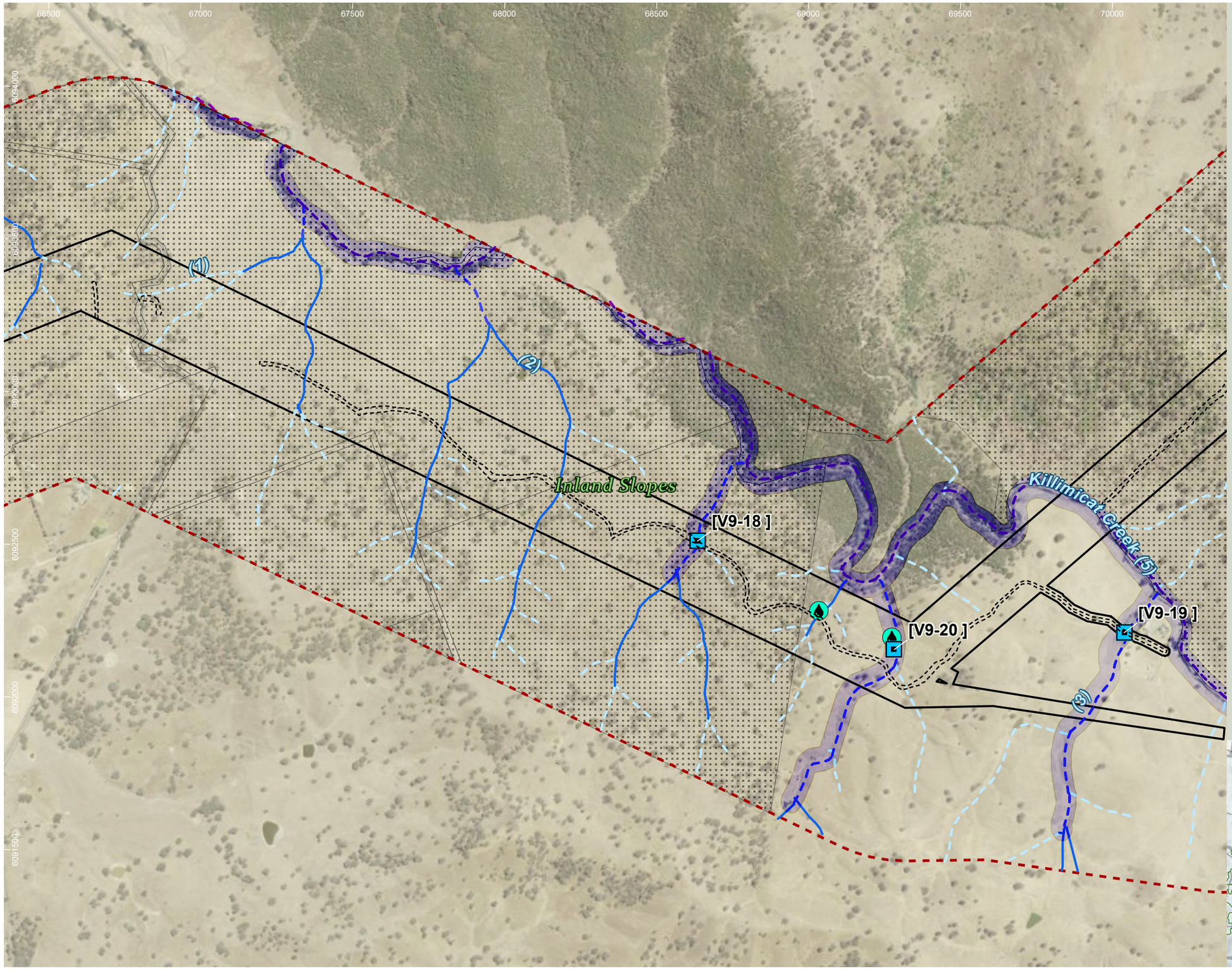


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

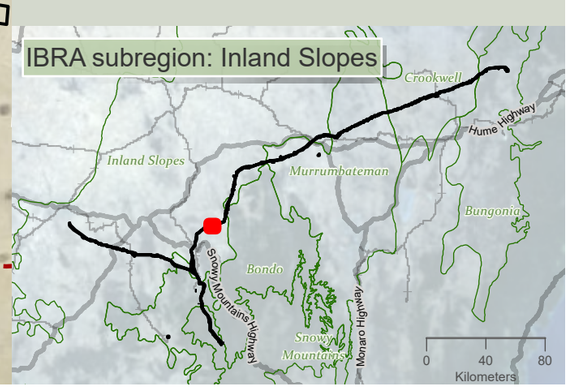
- Aquatic habitat assessment - Niche, 2022 (2)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 5



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 48

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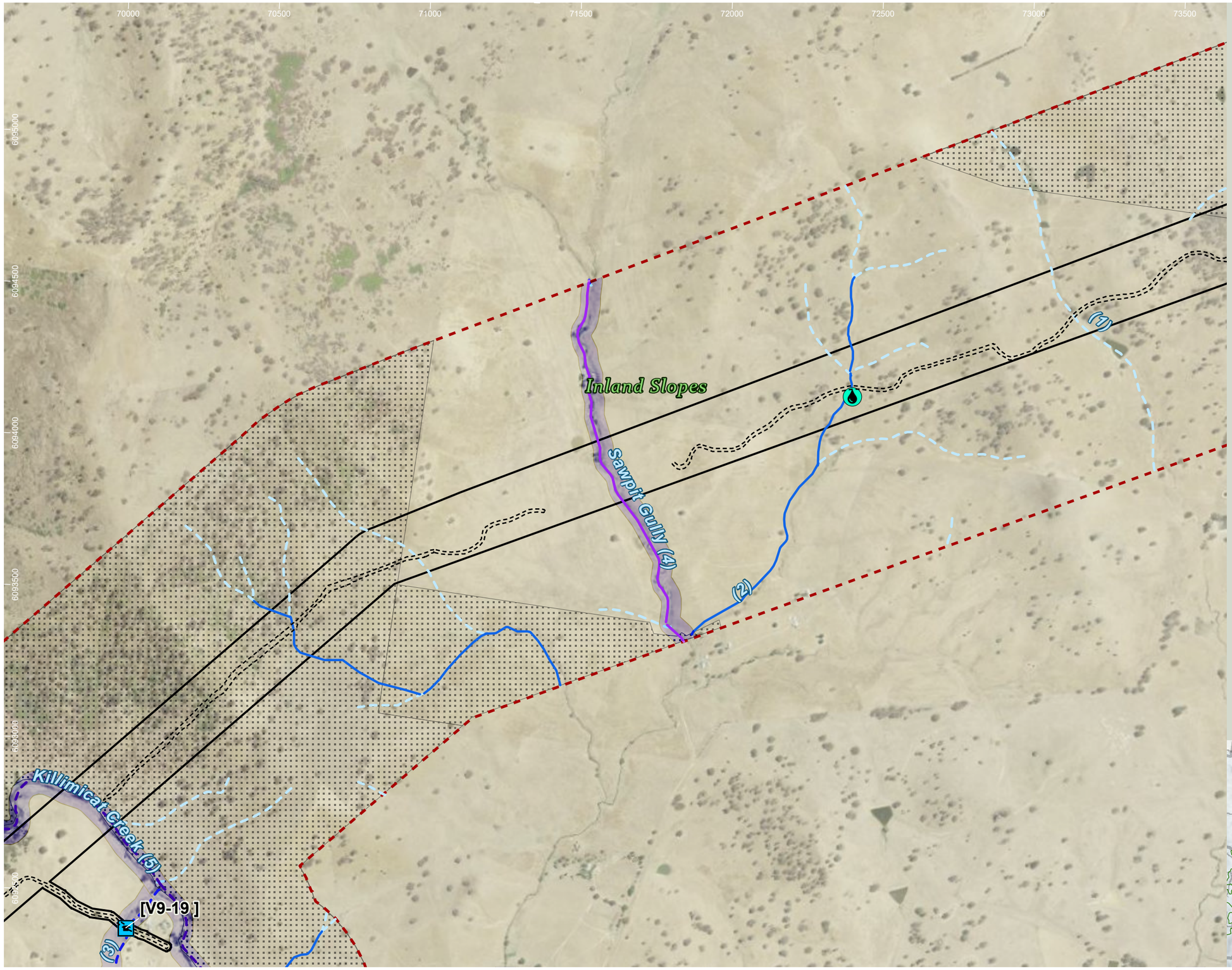


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

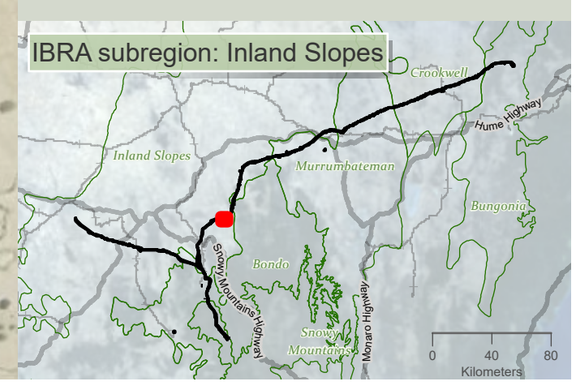
- Aquatic habitat assessment - Niche, 2022 (1)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 49

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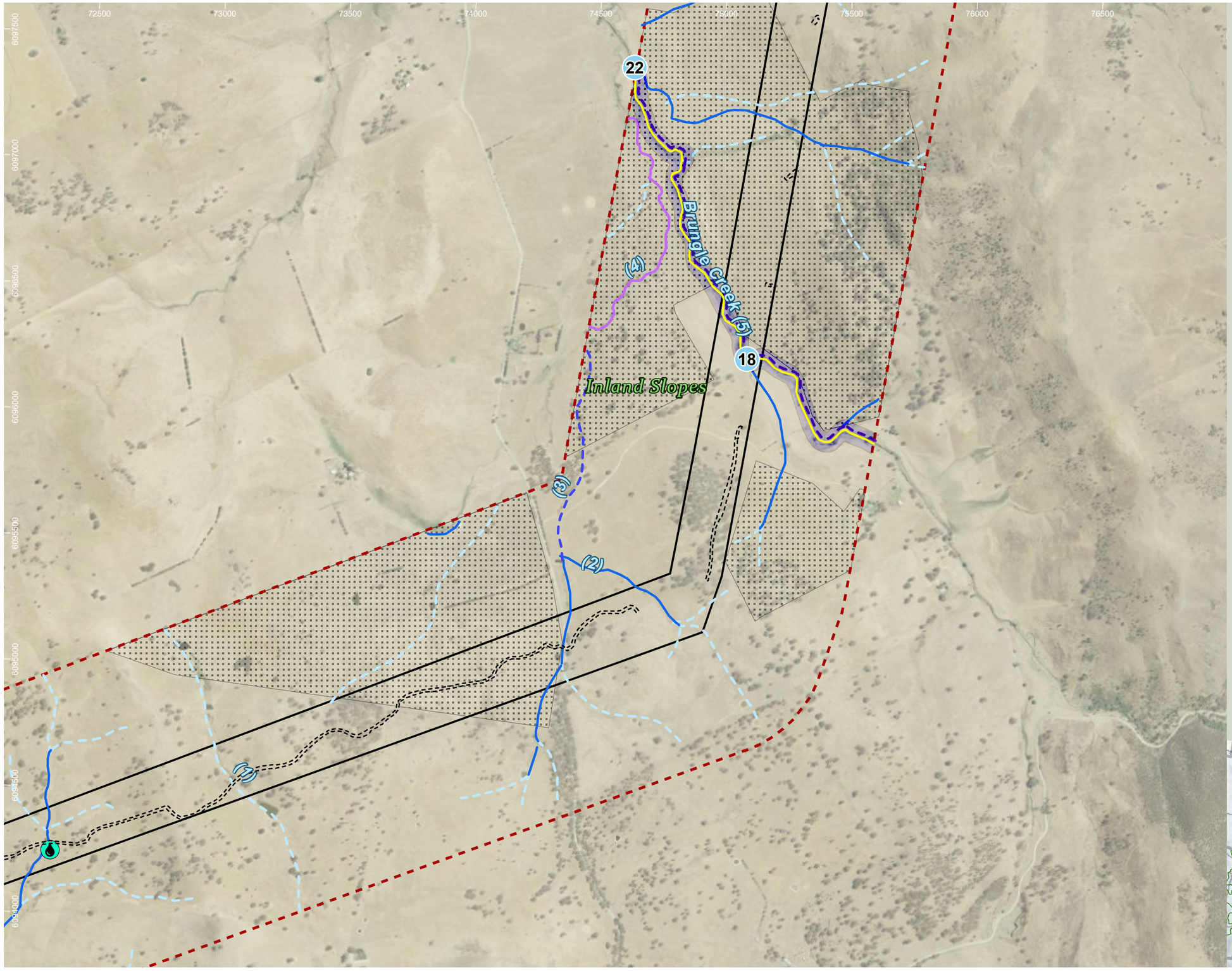


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)

Threatened aquatic species desktop assessment points

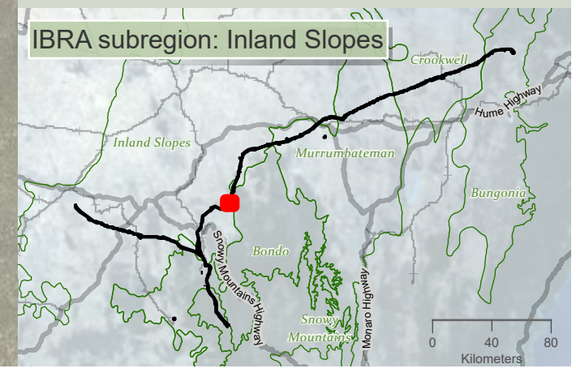
- Threatened aquatic species desktop assessment points (2)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Murray Crayfish

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 50

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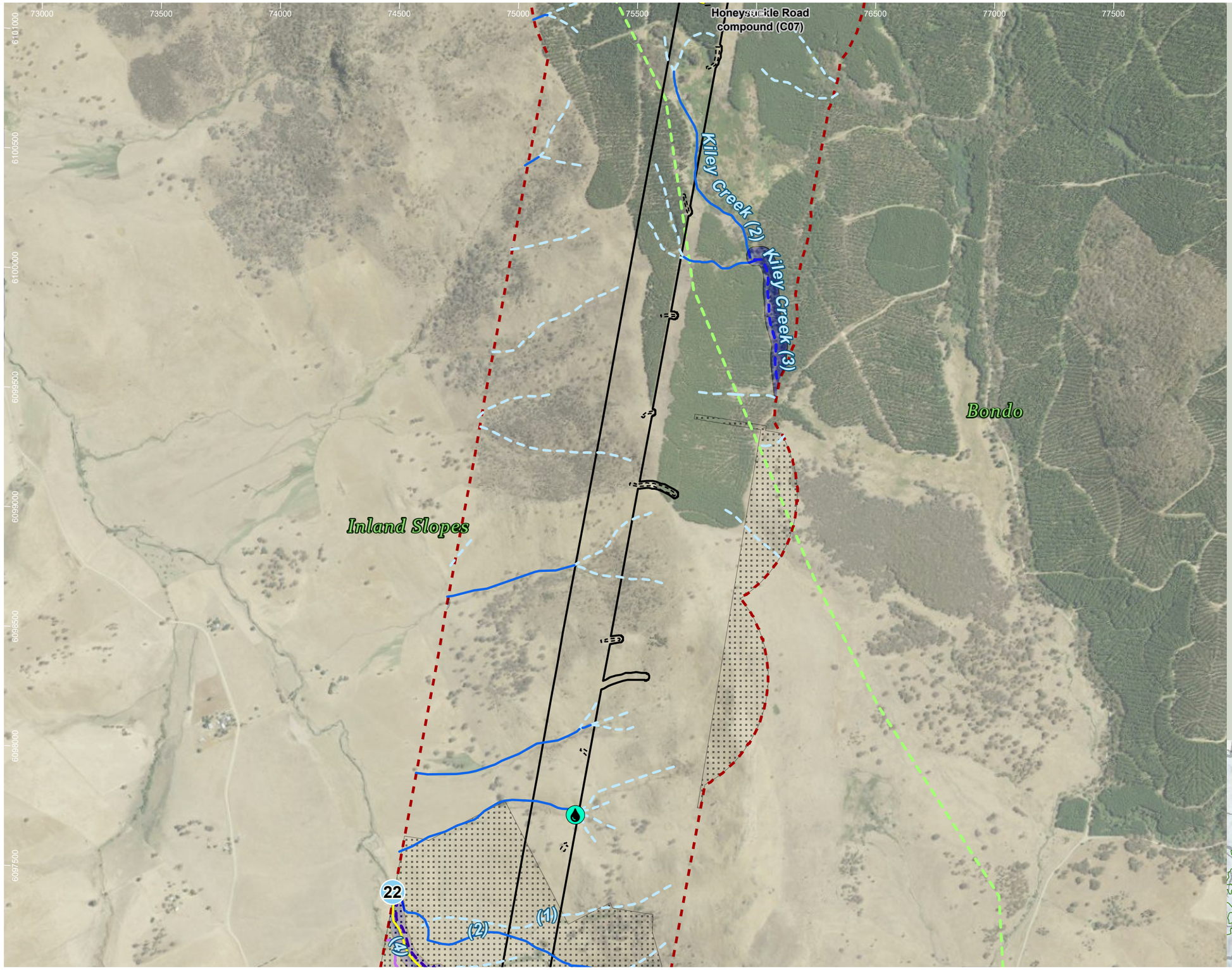


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)

Threatened aquatic species desktop assessment points

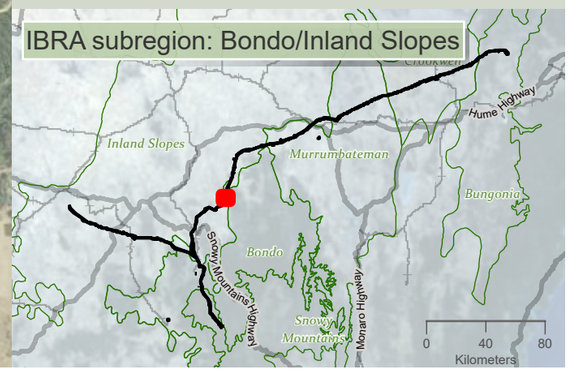
- Threatened aquatic species desktop assessment points (1)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Murray Crayfish

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

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Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 51

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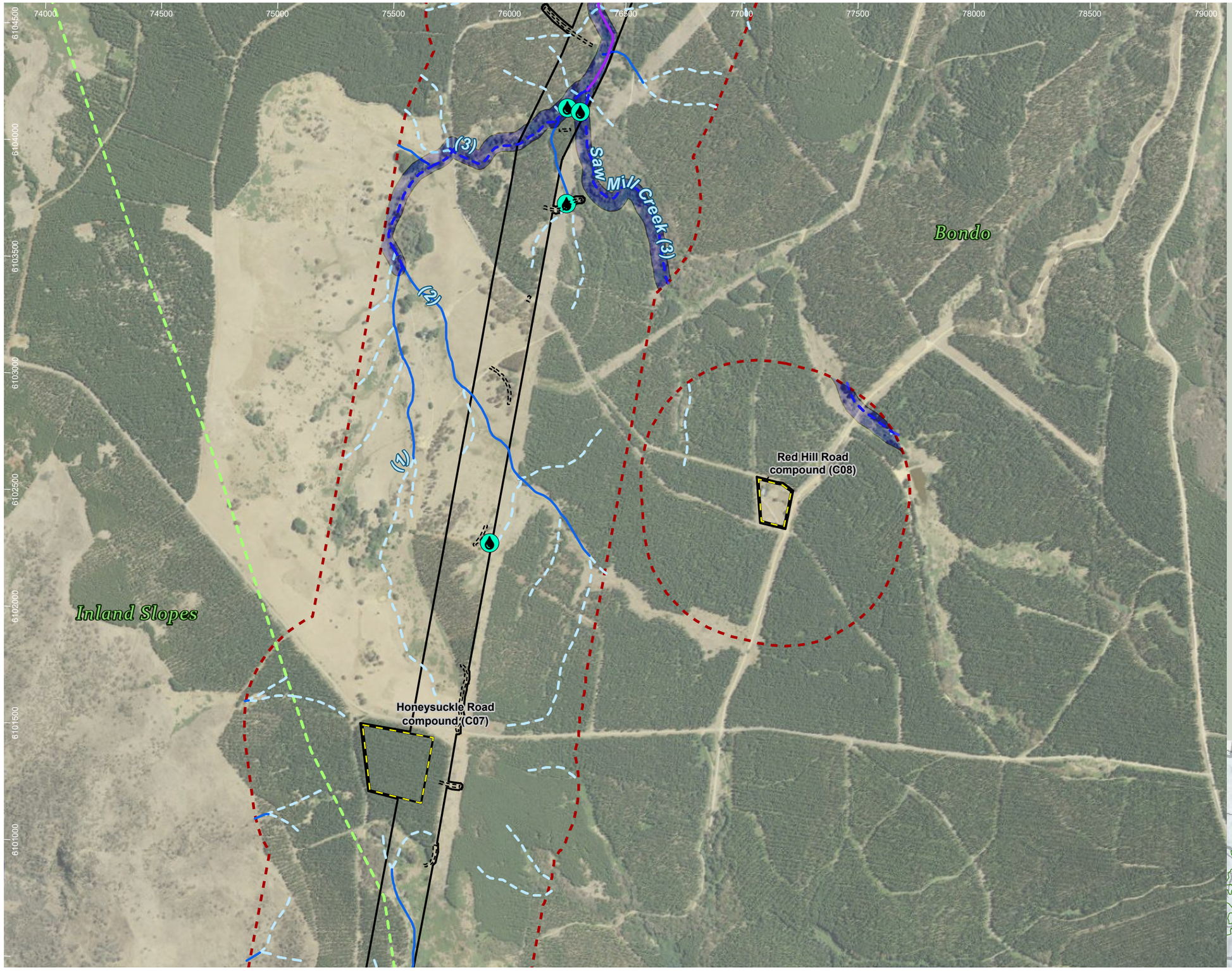


HumeLink project areas

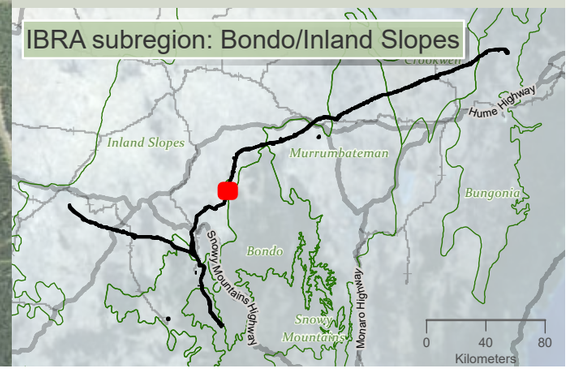
- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (4)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

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Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 52

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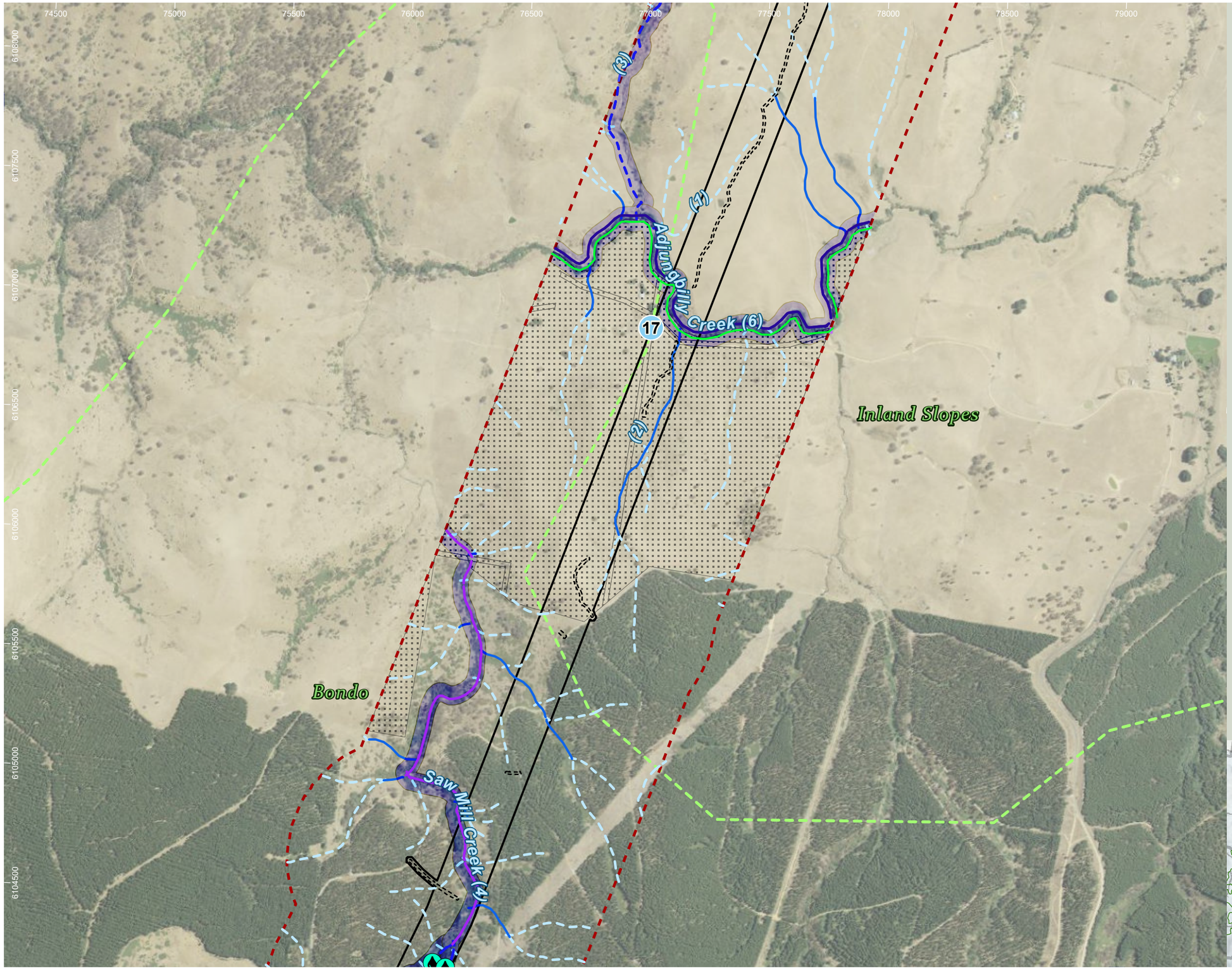


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (2)

Threatened aquatic species desktop assessment points

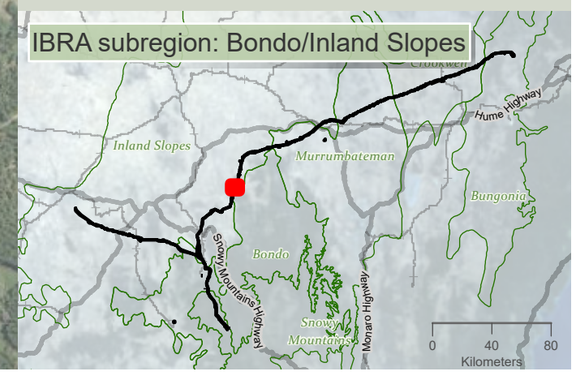
- Threatened aquatic species desktop assessment points (1)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Macquarie Perch

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 6



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0 500 m

WGS 1984 Web Mercator

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Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 53

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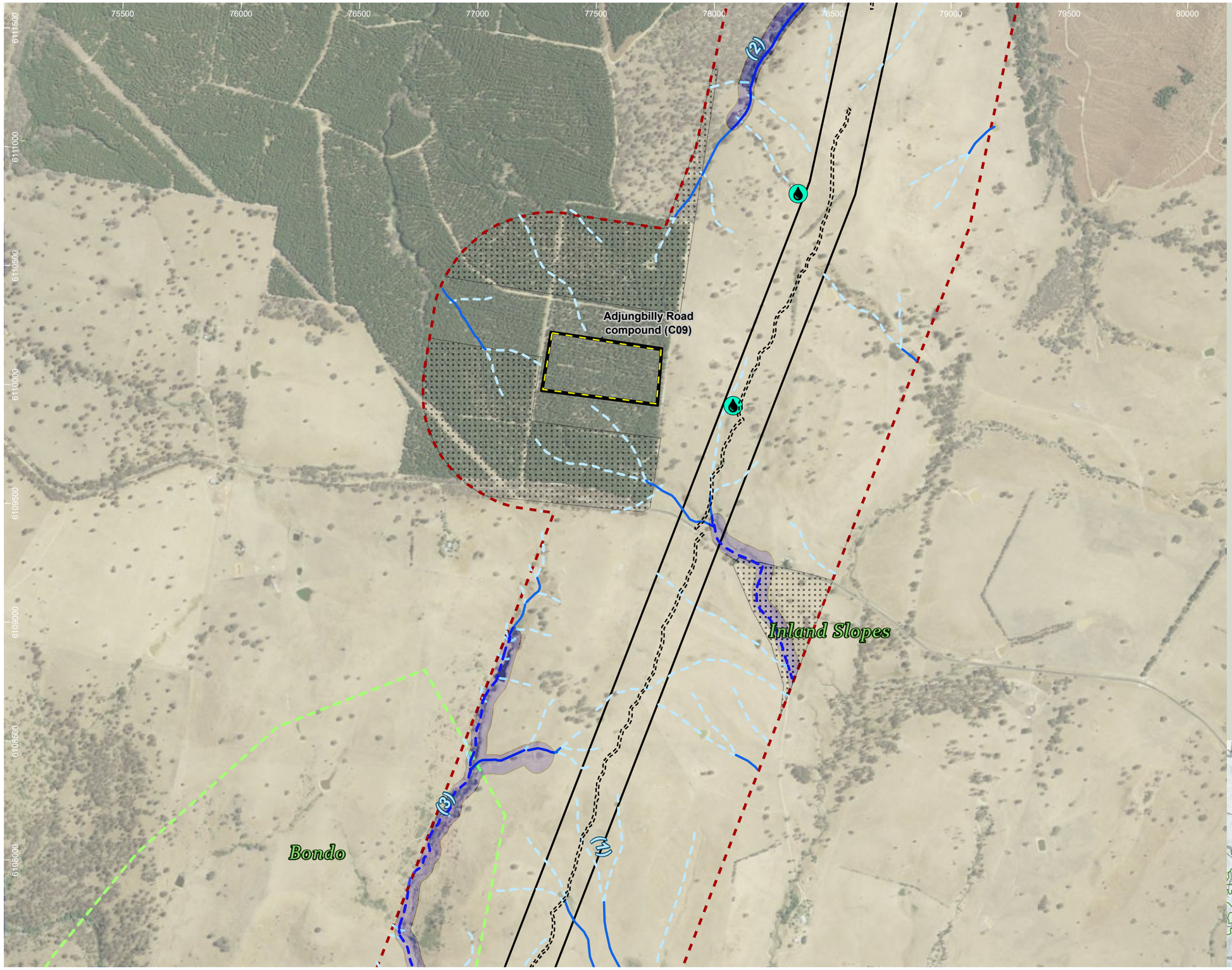


HumeLink project areas

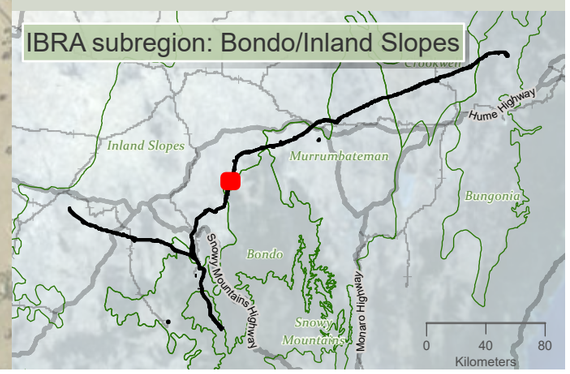
- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (2)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 54

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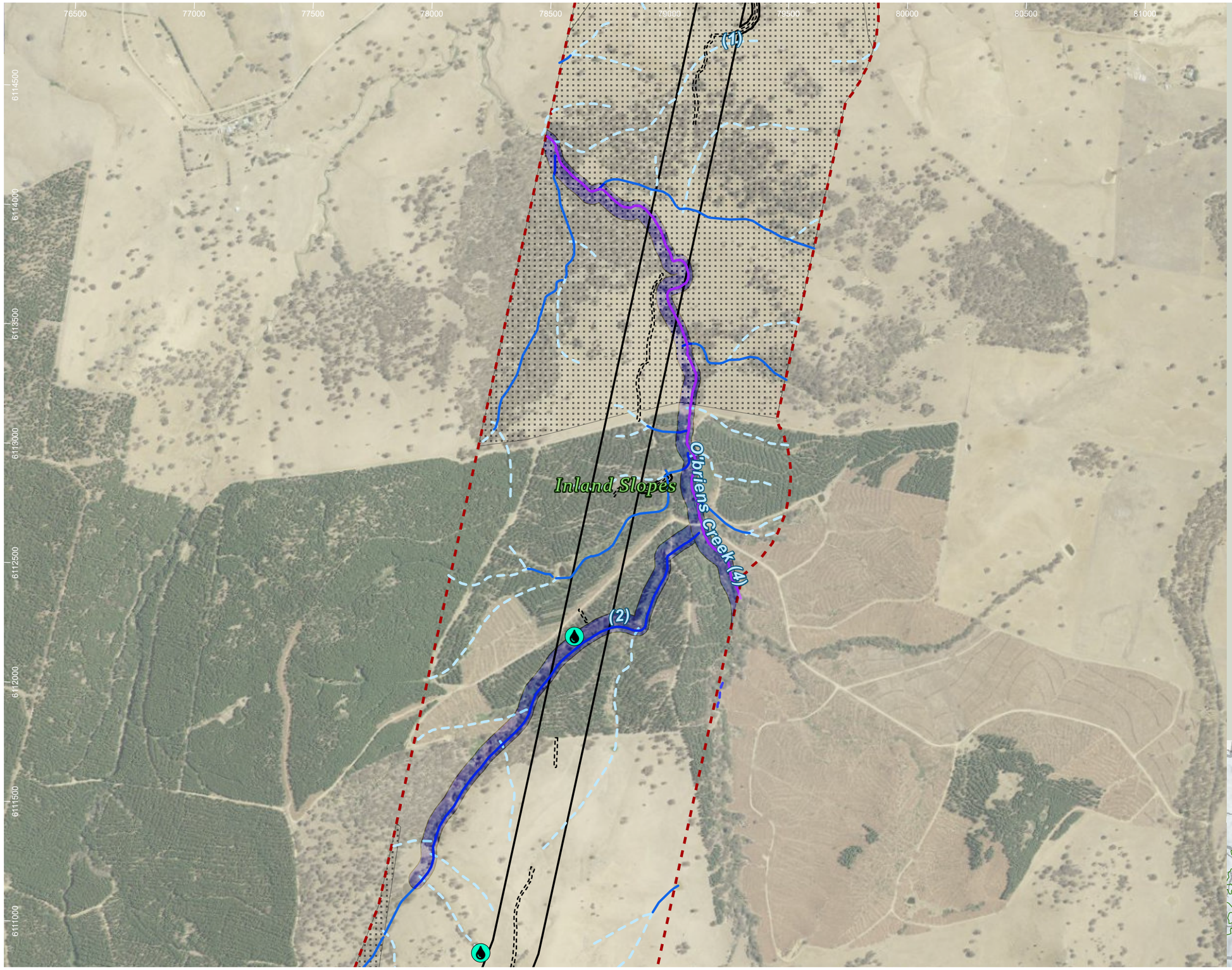


HumeLink project areas

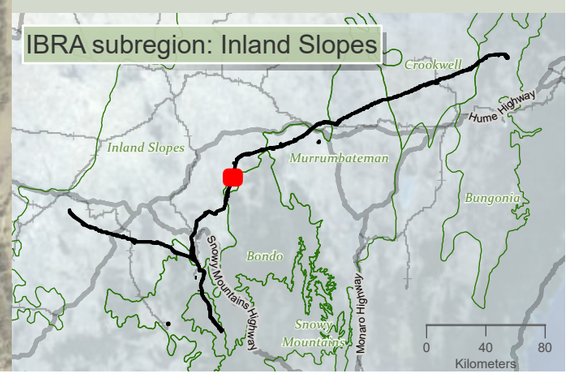
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (2)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 55

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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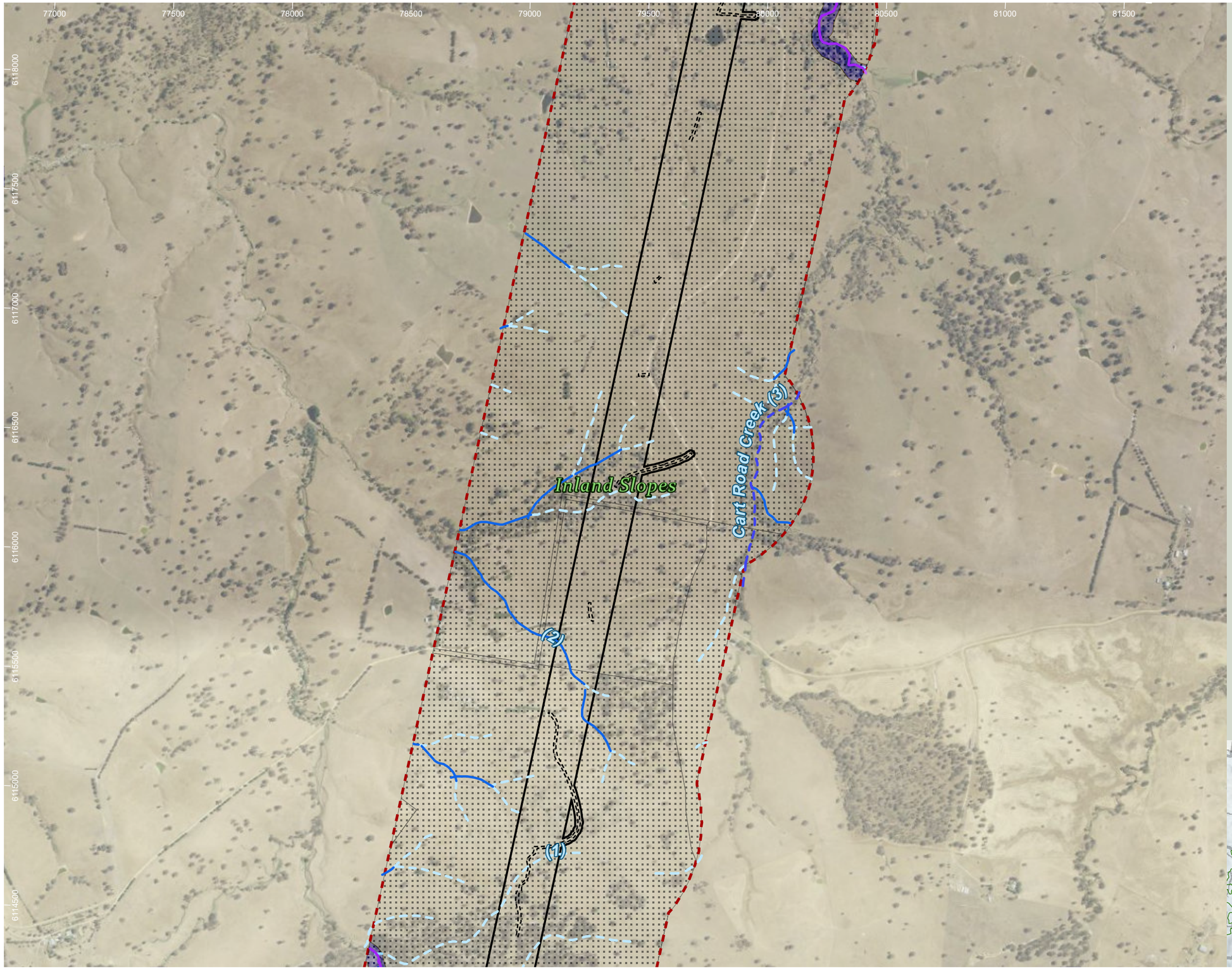
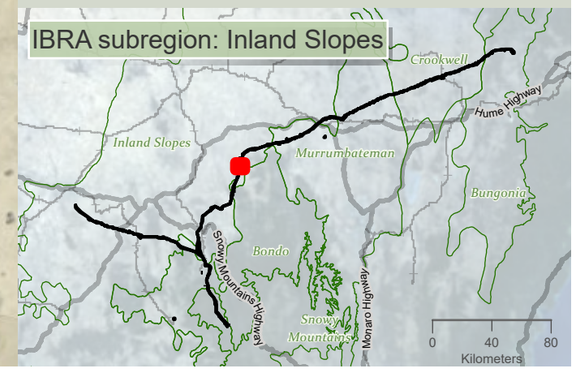


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



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niche Environment and Heritage

0 500
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 56

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

77500 78000 78500 79000 79500 80000 80500 81000 81500 82000

6121500 6121000 6120500 6120000 6119500 6119000 6118500 6118000

(1)

Oak Creek (5)

16

Inland Slopes

Cart Road Creek (5)

[V9-17]

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites

Threatened aquatic species desktop assessment points

- Threatened aquatic species desktop assessment points (1)
- Key fish habitat (DPI)

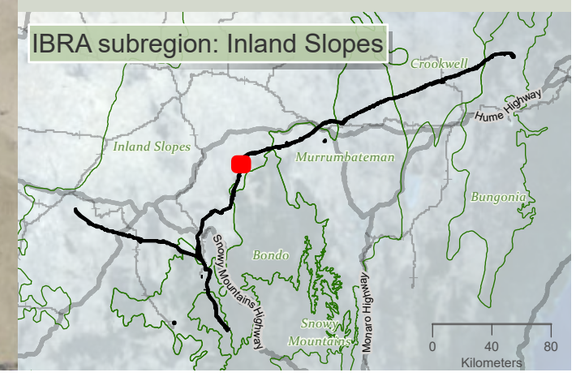
Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Murray Crayfish

Strahler stream order (offset from centreline)

- 1
- 3
- 4
- 5

IBRA subregion: Inland Slopes



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDrive\Sync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

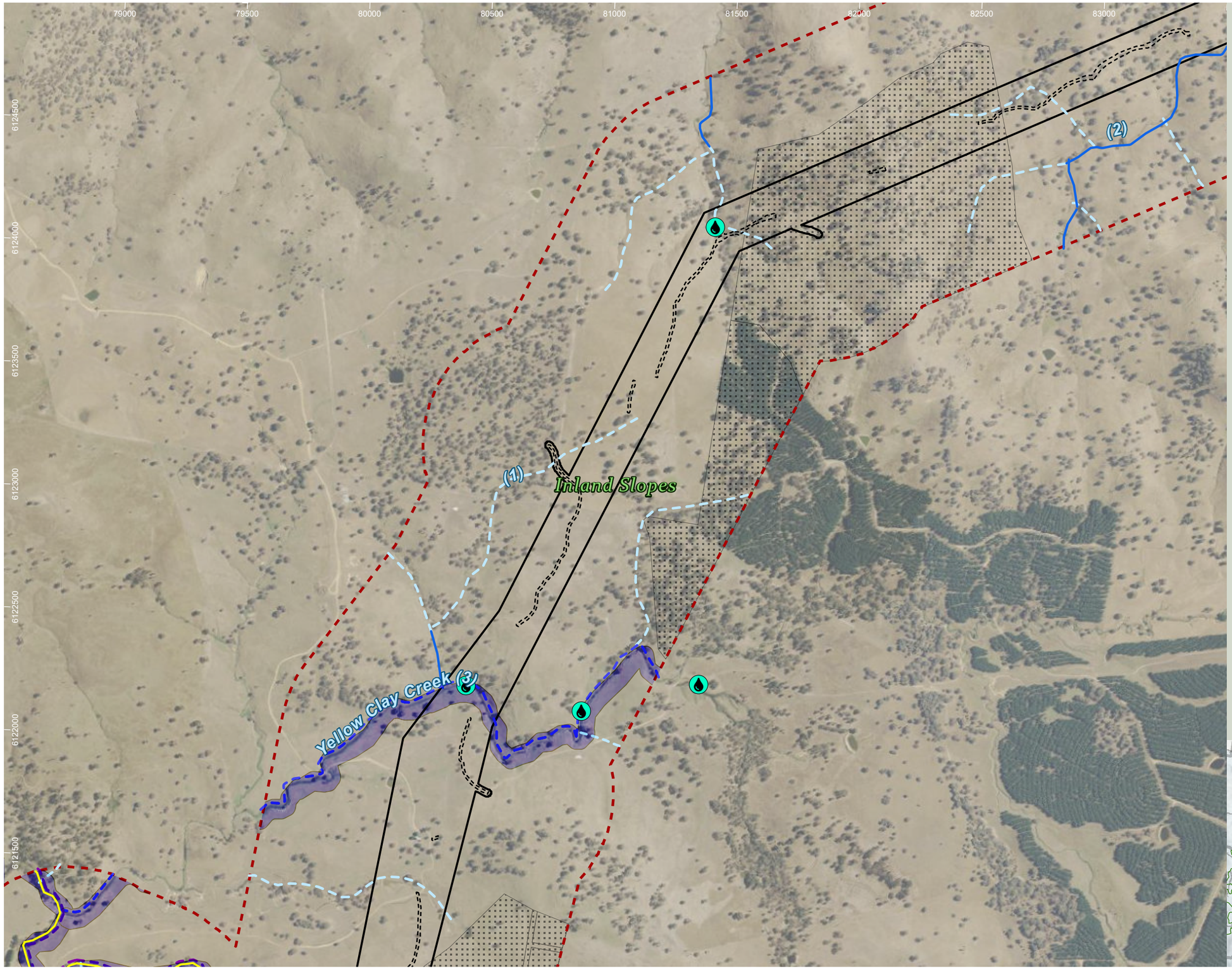
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 57

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

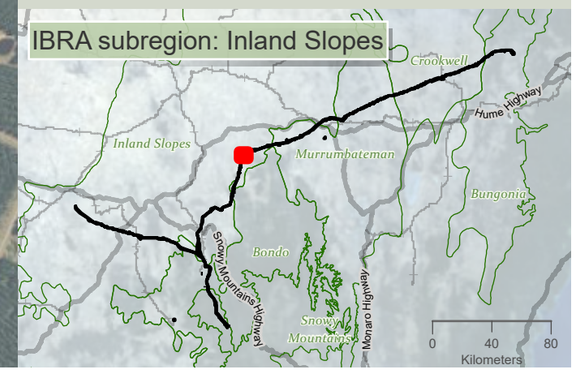
- Aquatic habitat assessment - Niche, 2022 (4)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Murray Crayfish

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 5



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 58

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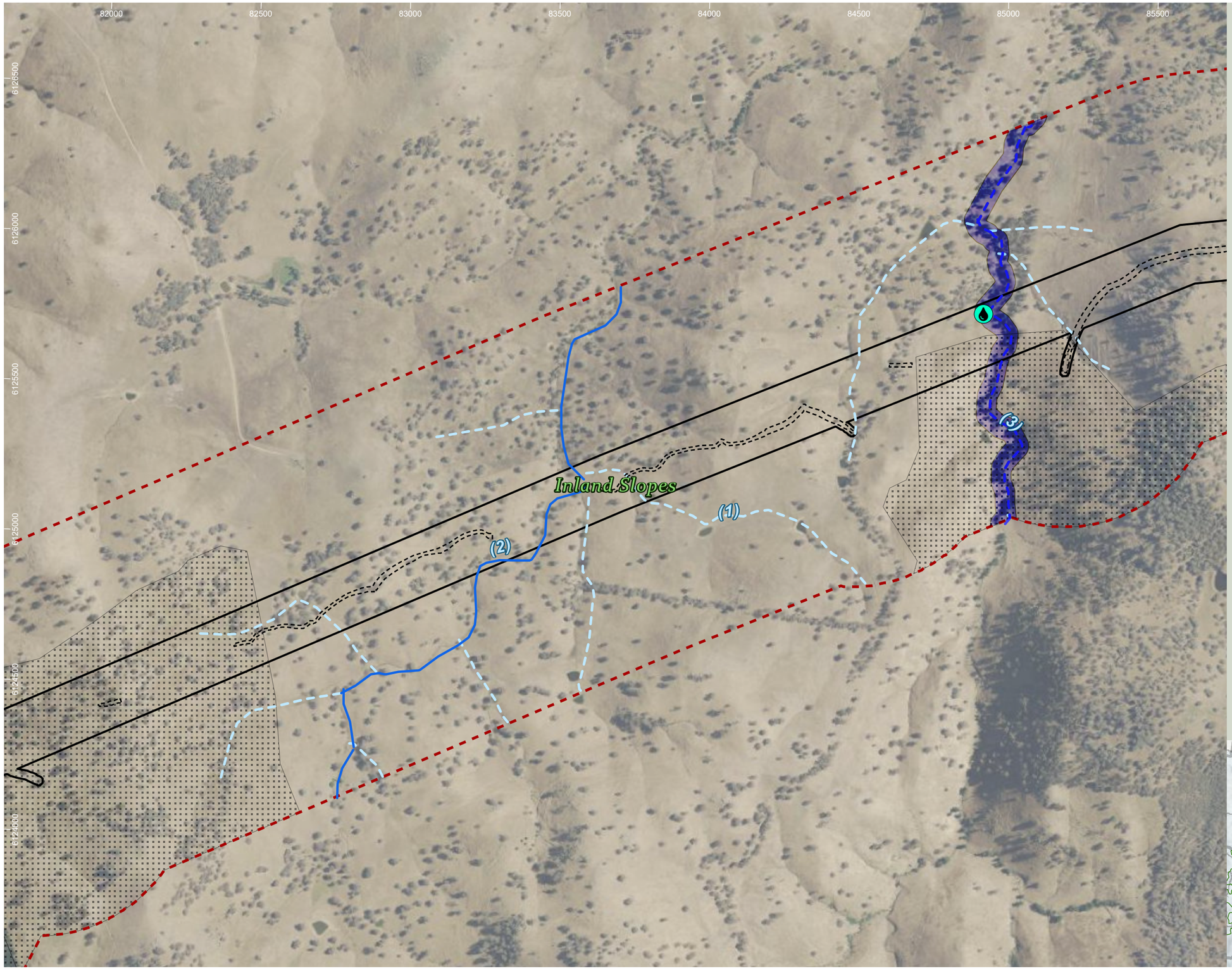


HumeLink project areas

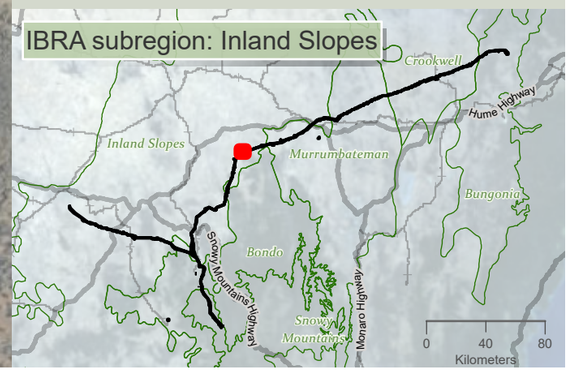
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 59

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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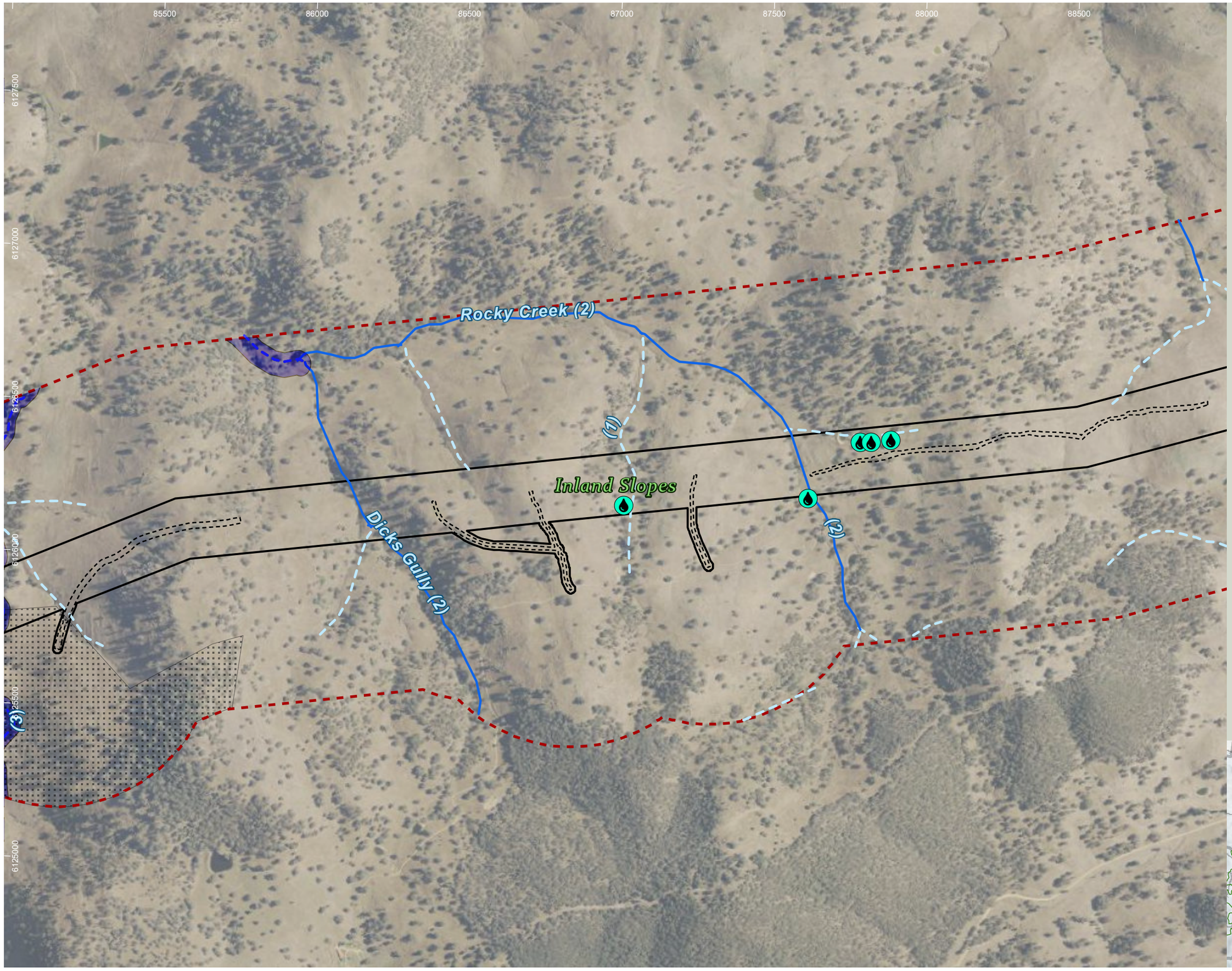


HumeLink project areas

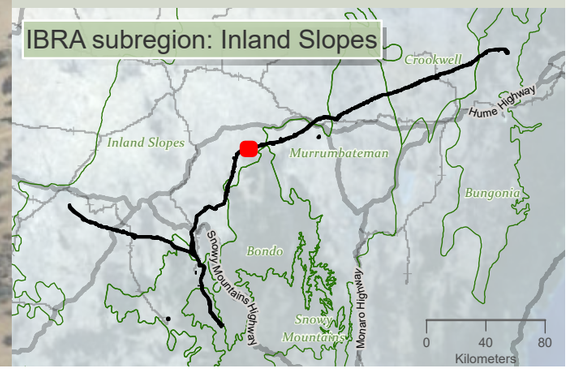
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (5)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 60

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88500 89000 89500 90000 90500 91000 91500 92000

6128500 6128000 6127500 6127000 6126500 6126000 6125500

(2) (1) Inland Slopes 15 15 15 Oaky Creek (3)

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)

Threatened aquatic species desktop assessment points

- Threatened aquatic species desktop assessment points (3)
- Key fish habitat (DPI)

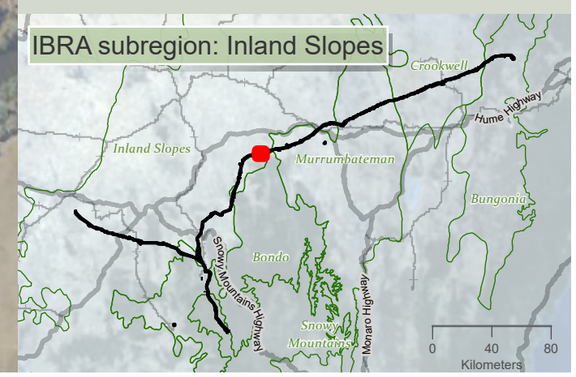
Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Murray Crayfish
- Silver Perch
- Trout Cod

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 9

IBRA subregion: Inland Slopes



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 61

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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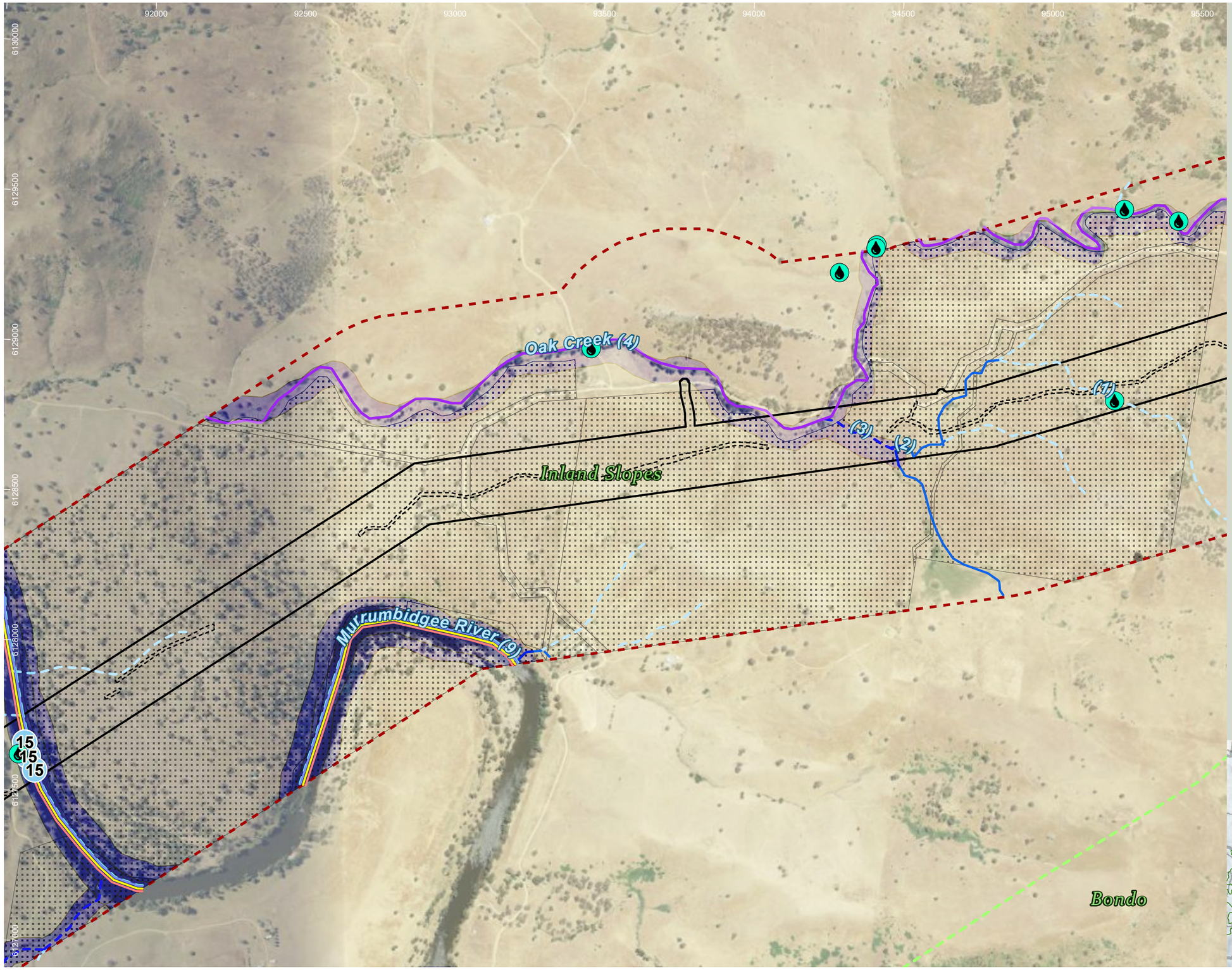


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (8)

Threatened aquatic species desktop assessment points

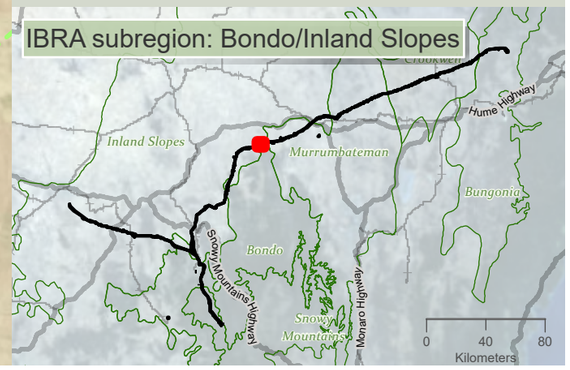
- Threatened aquatic species desktop assessment points (3)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Murray Crayfish
- Silver Perch
- Trout Cod

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 9



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 62

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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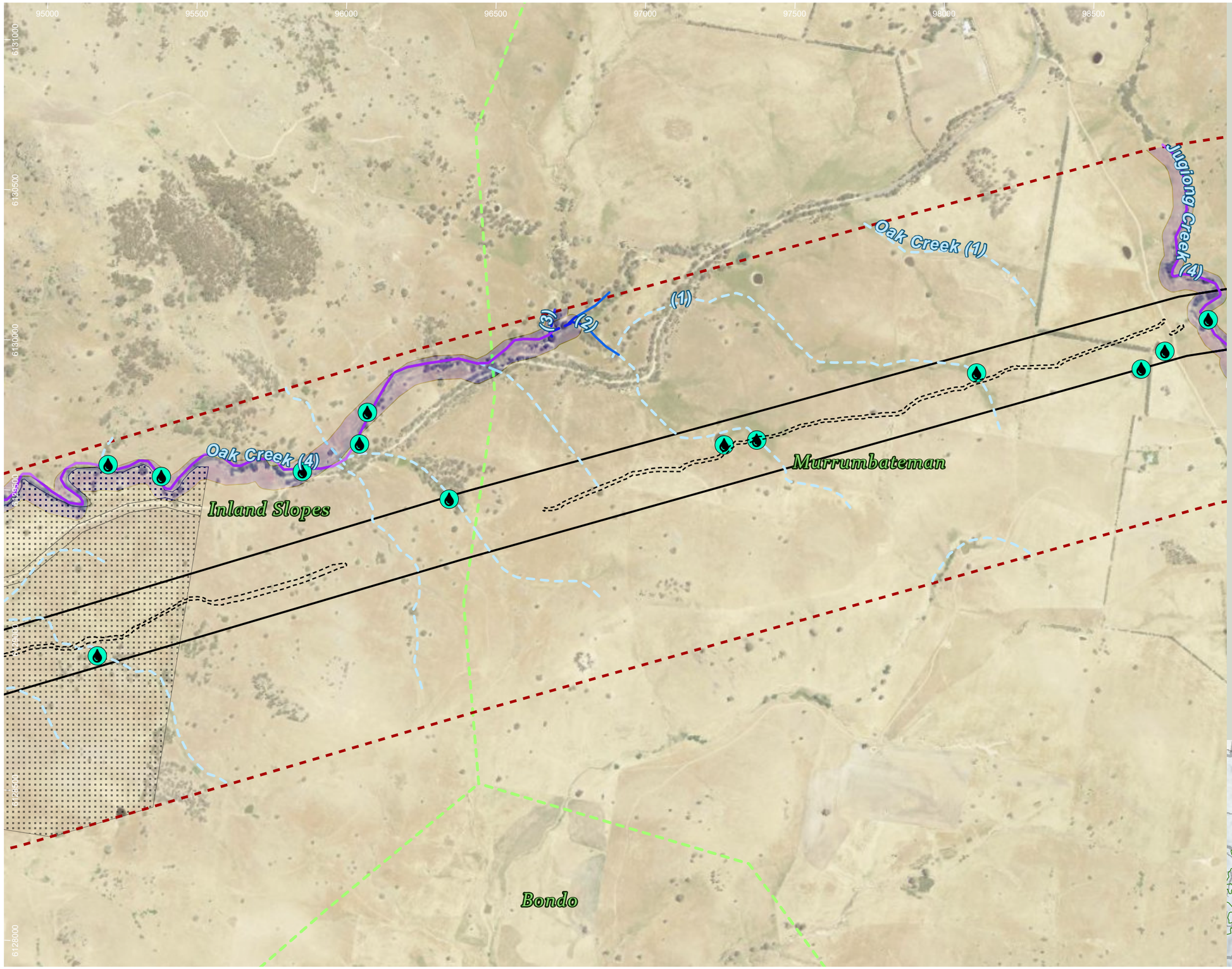


HumeLink project areas

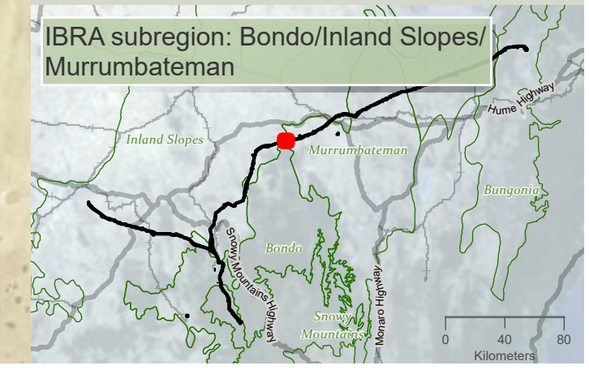
- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (13)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 63

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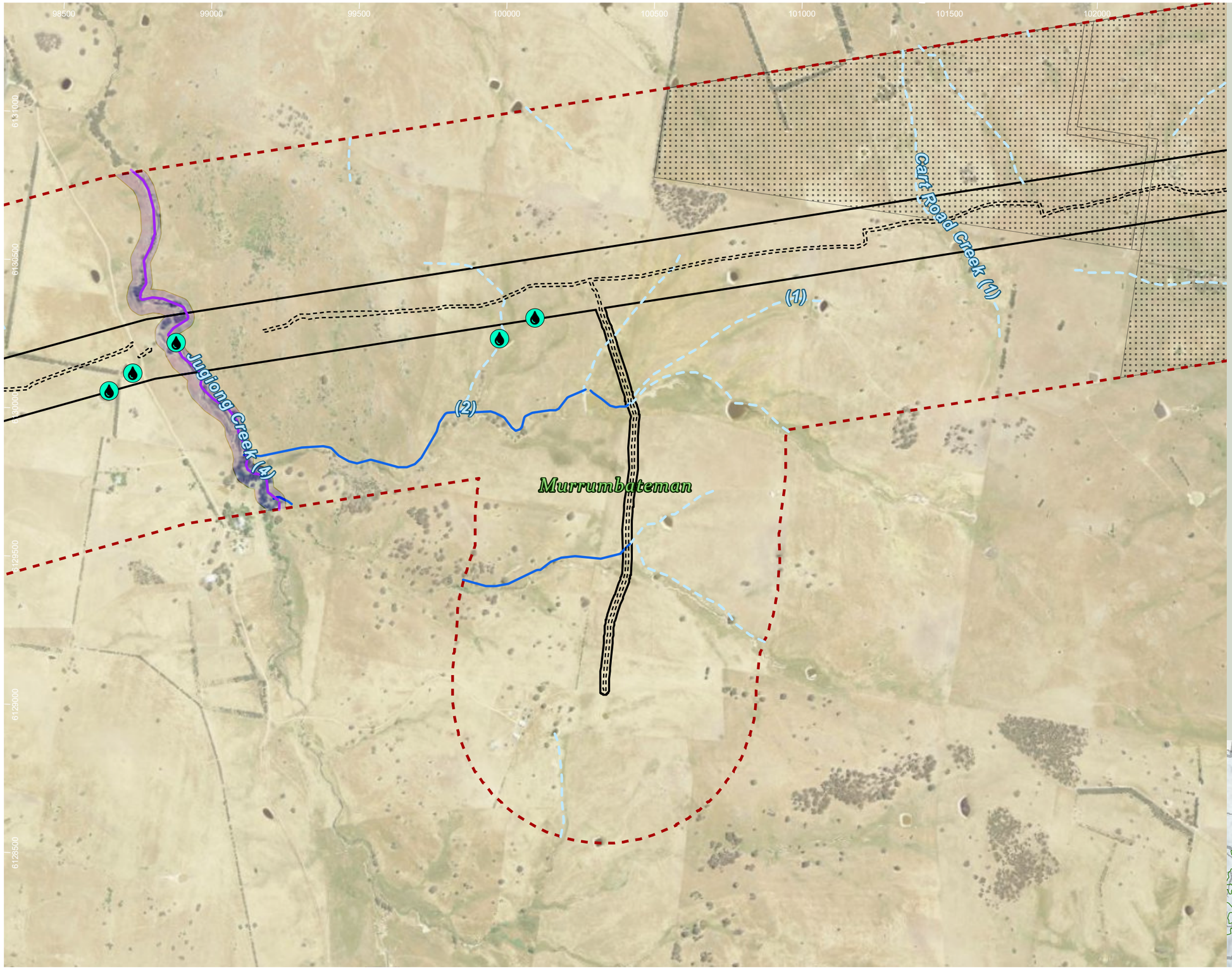


HumeLink project areas

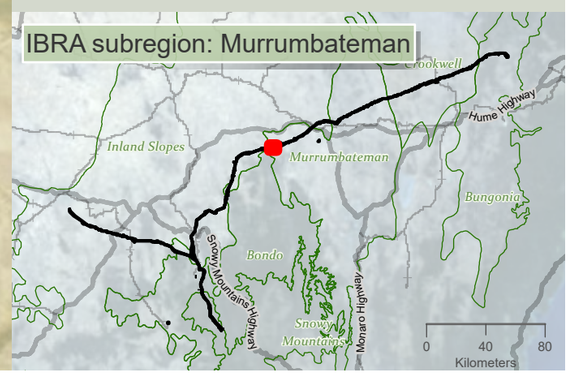
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (5)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 4



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDrive\Sync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 64

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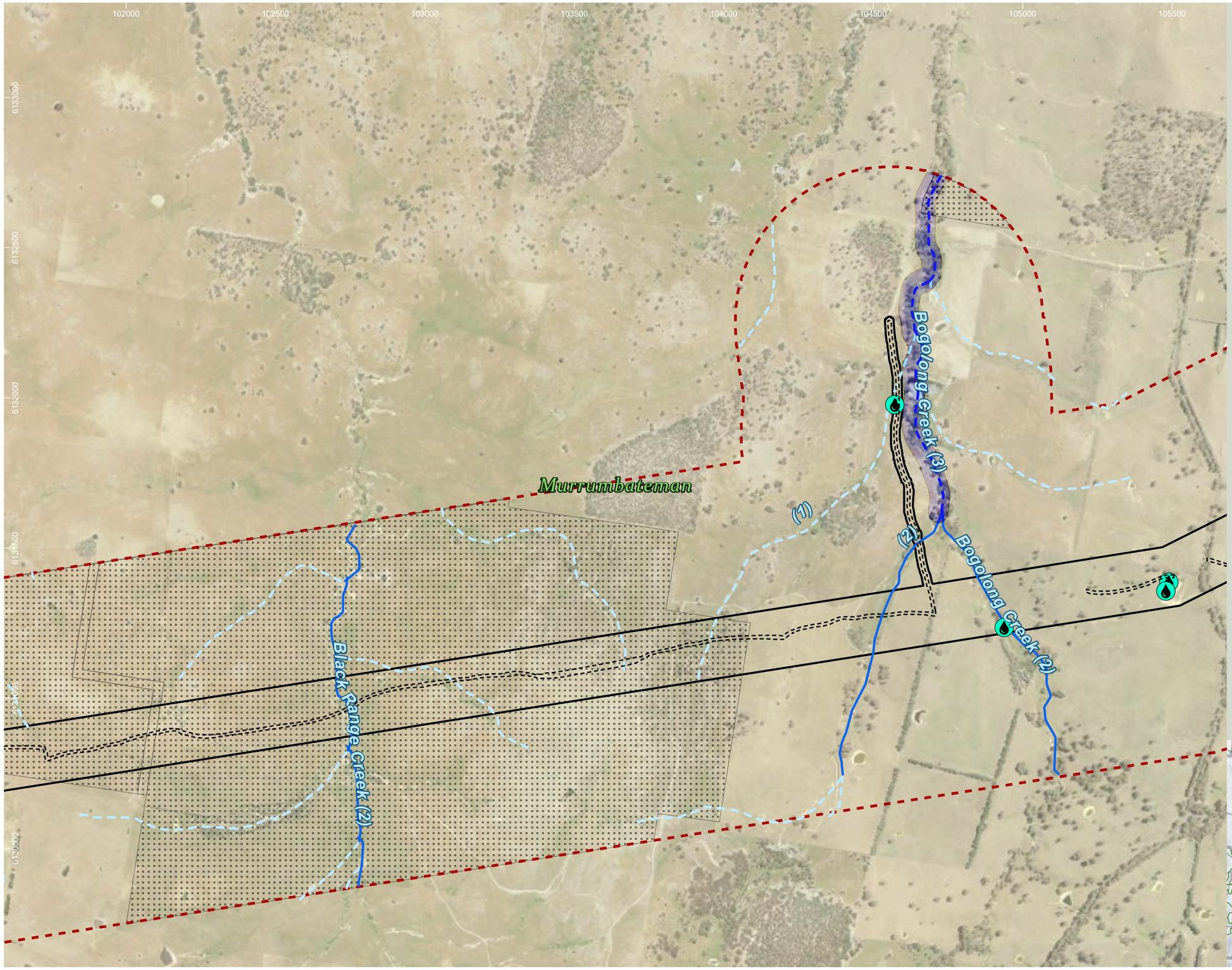


HumeLink project areas

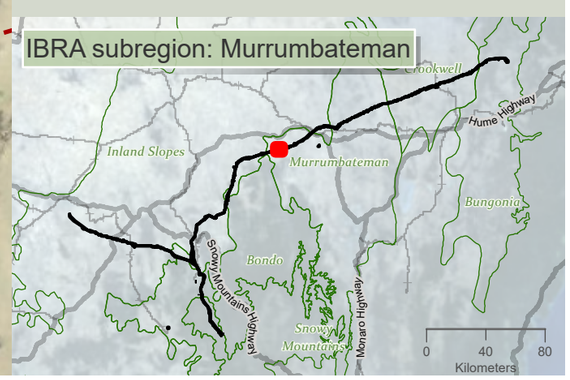
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (4)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 65

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105000 105500 106000 106500 107000 107500 108000 108500

6133500 6133000 6132500 6132000 6131500 6131000

Woolgarlo Creek (3)

[V9-15]

[V9-16]

(2)

Murrumbateman

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

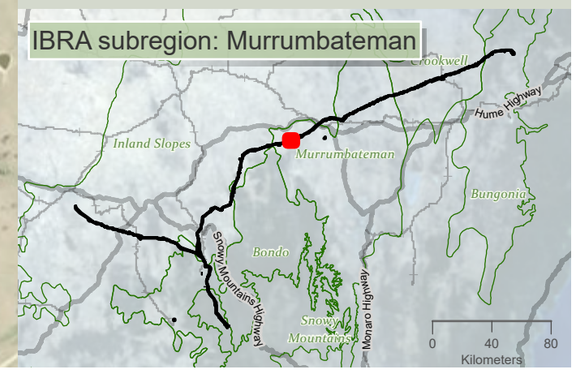
- Aquatic habitat assessment - Niche, 2022 (8)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 66

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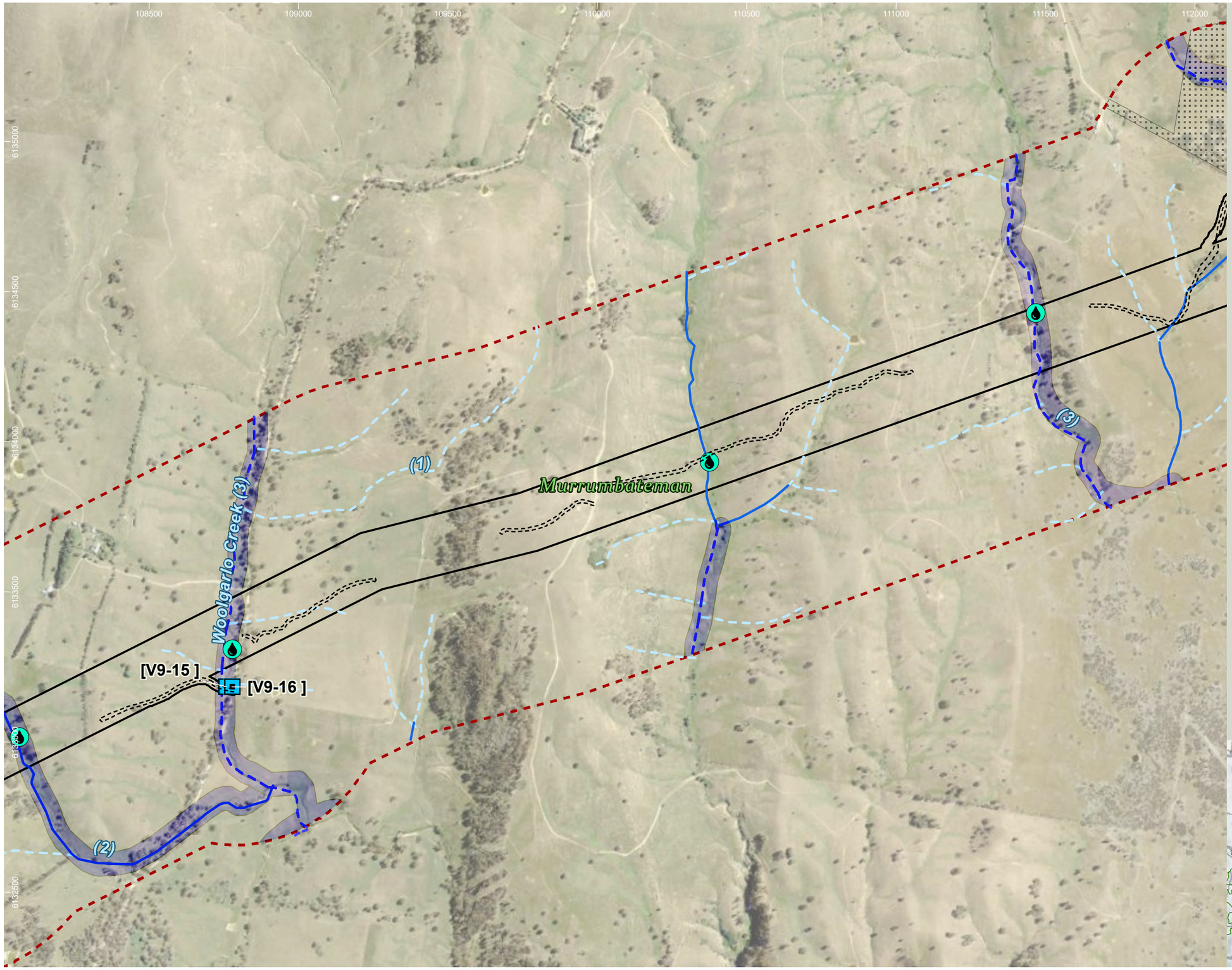


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

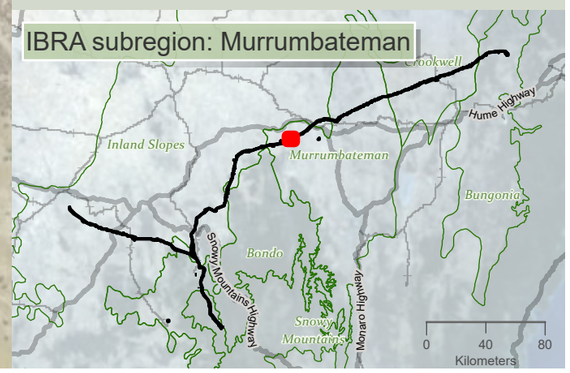
- Aquatic habitat assessment - Niche, 2022 (4)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 67

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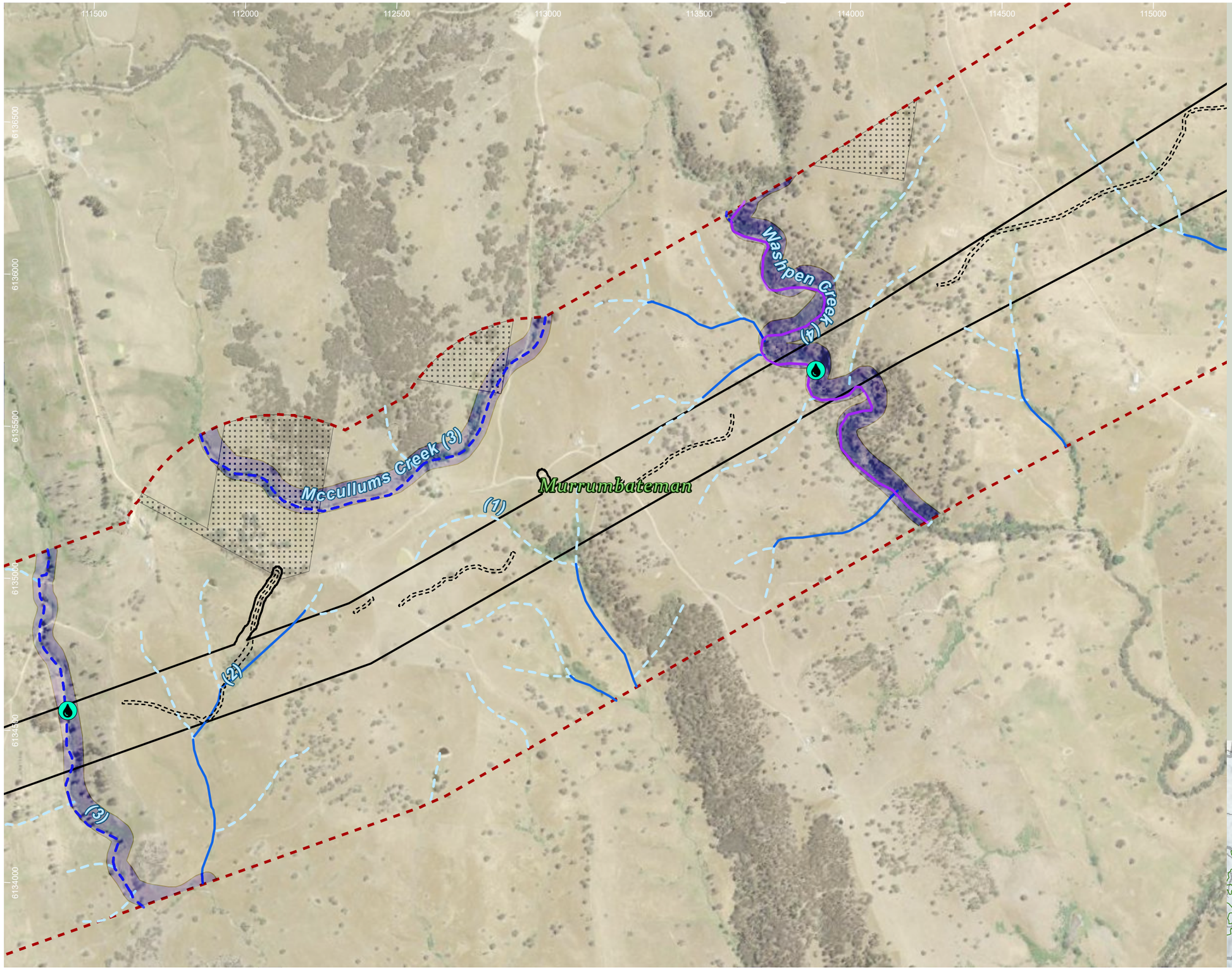


HumeLink project areas

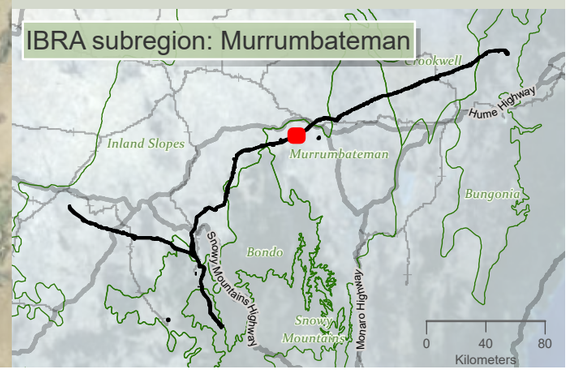
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (2)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDrive\SyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

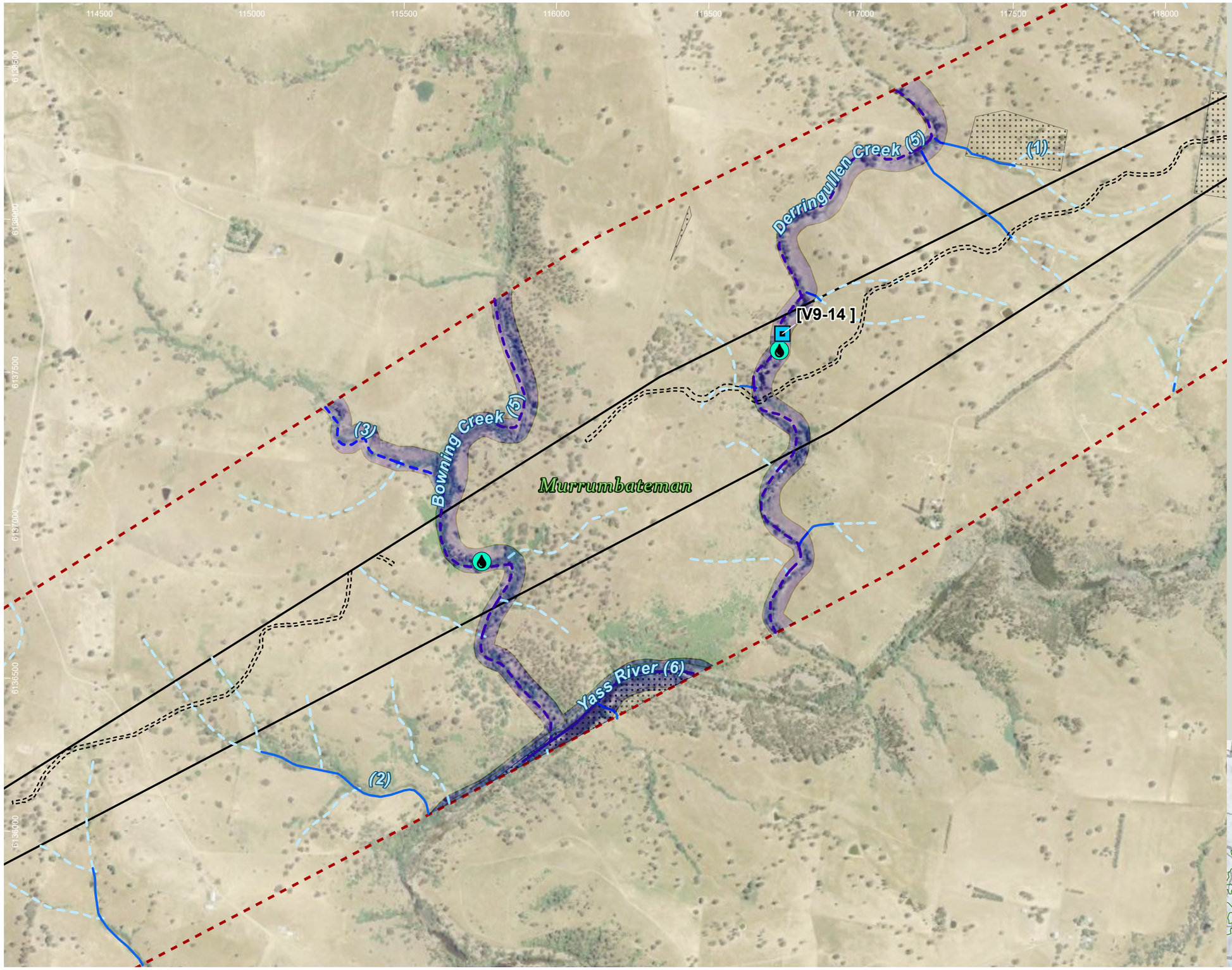
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 68

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

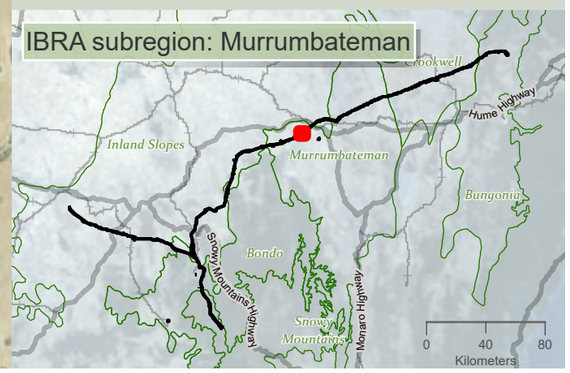
- Aquatic habitat assessment - Niche, 2022 (2)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 5
- 6



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 69

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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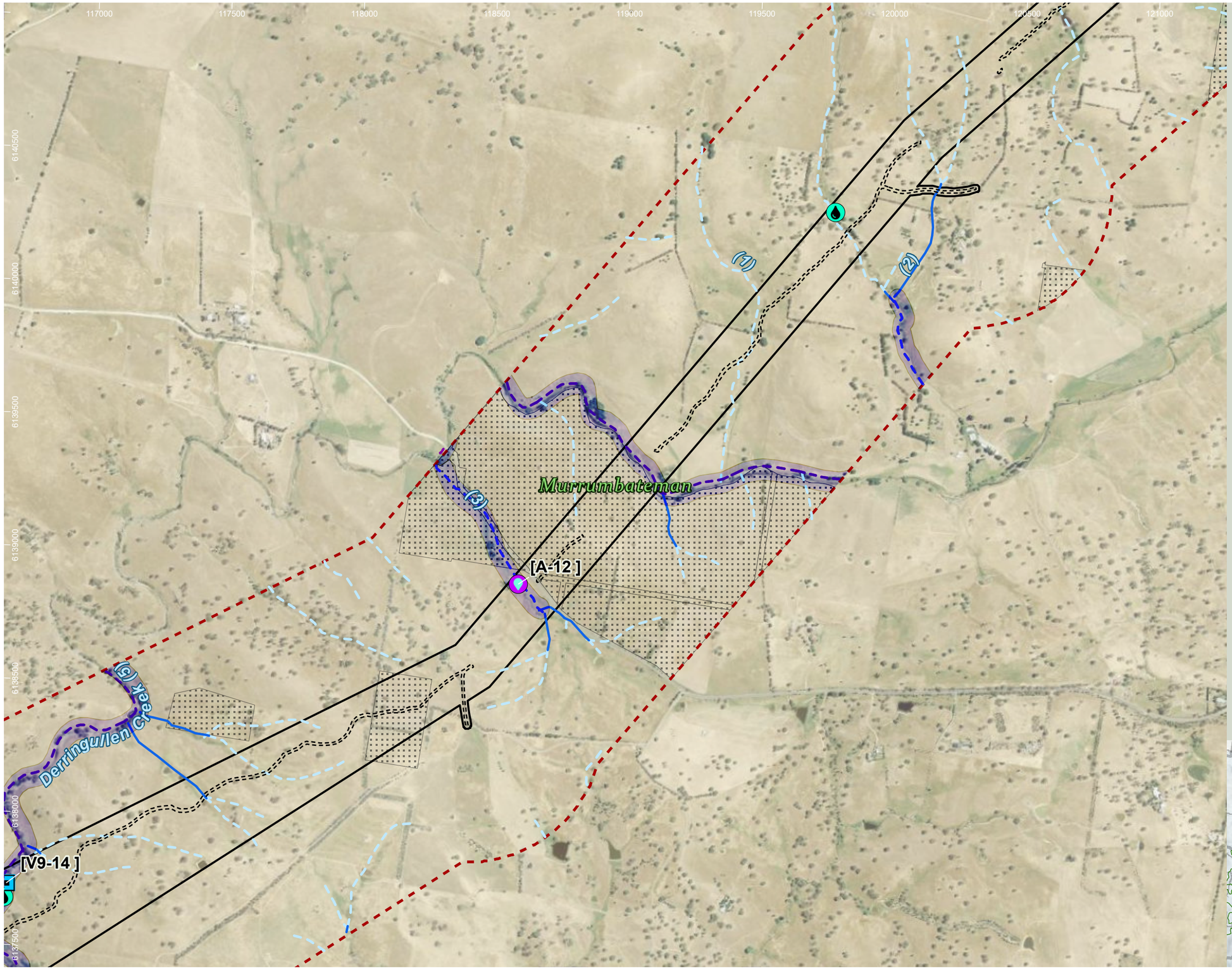


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

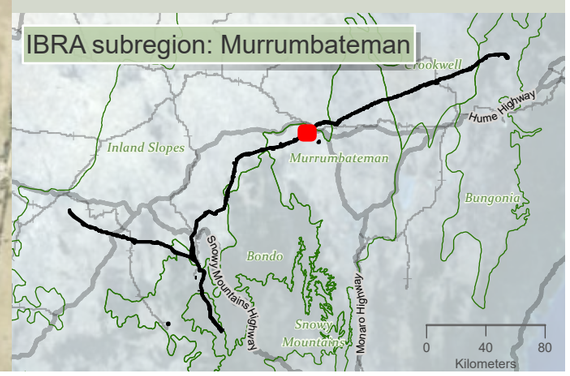
- Aquatic habitat assessment - Niche, 2022 (2)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Additional aquatic desktop assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 5



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 70

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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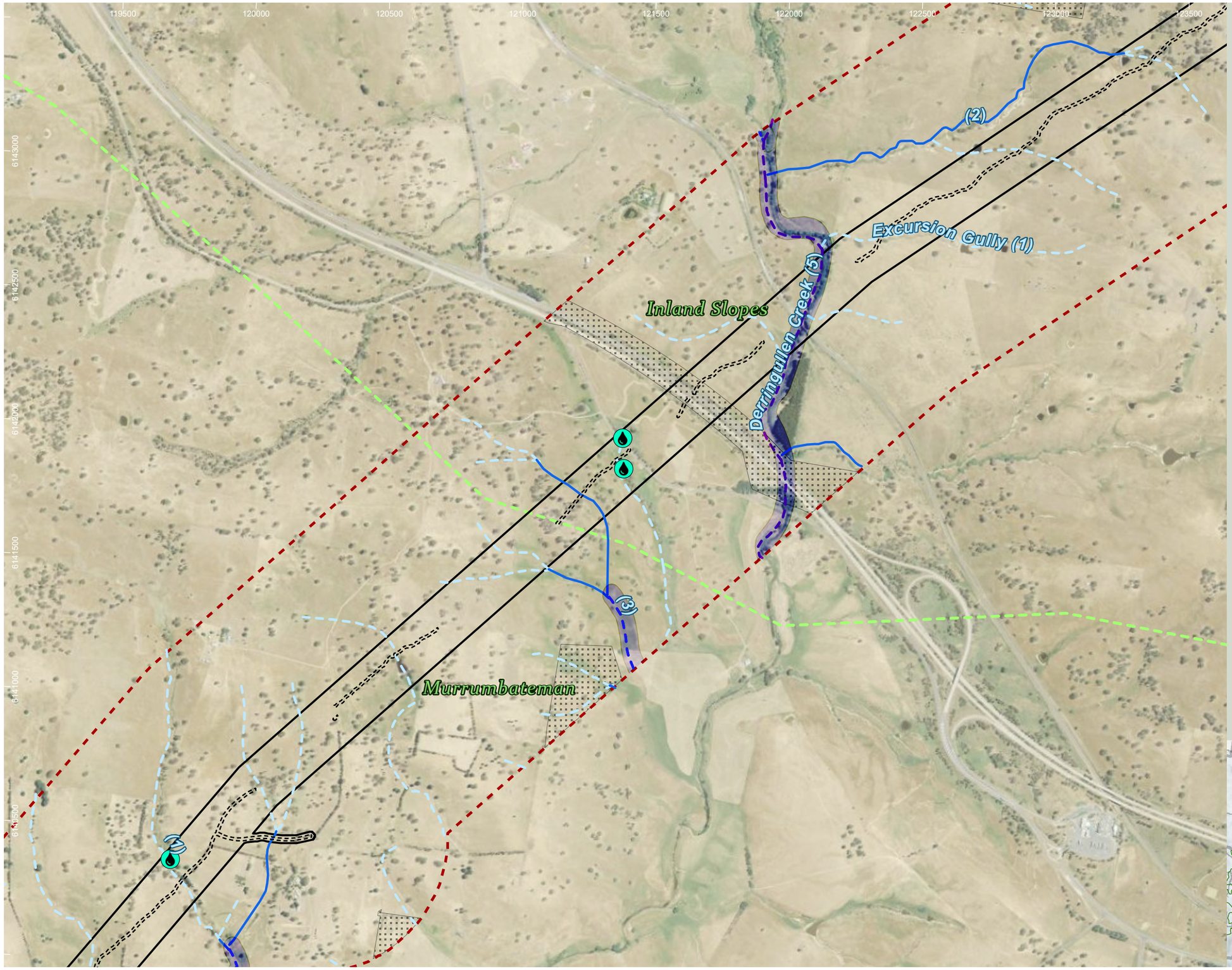


HumeLink project areas

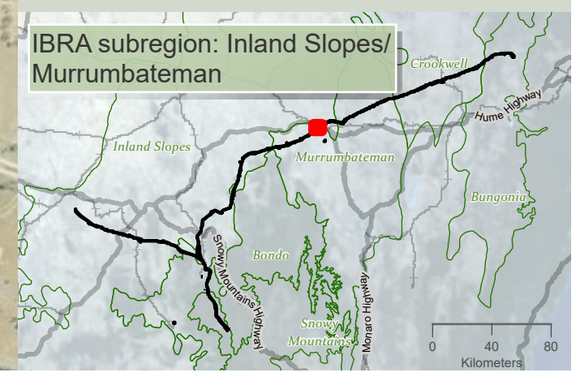
- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (3)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 5



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 71

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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123500 124000 124500 125000 125500 126000 126500 127000

6136000 6135500 6135000 6134500 6134000 6133500

Murrumbateman

(2)

Yass substation compound (C10)

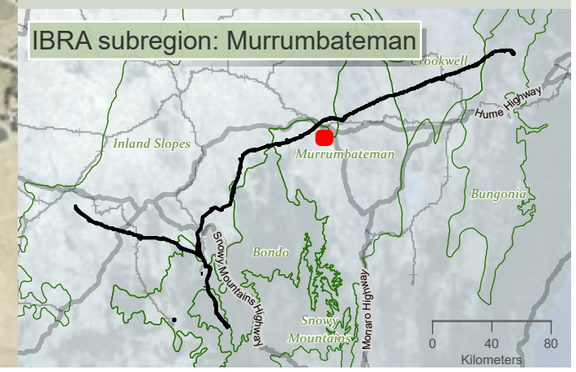
(1)

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order (offset from centreline)

- 1
- 2



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 72

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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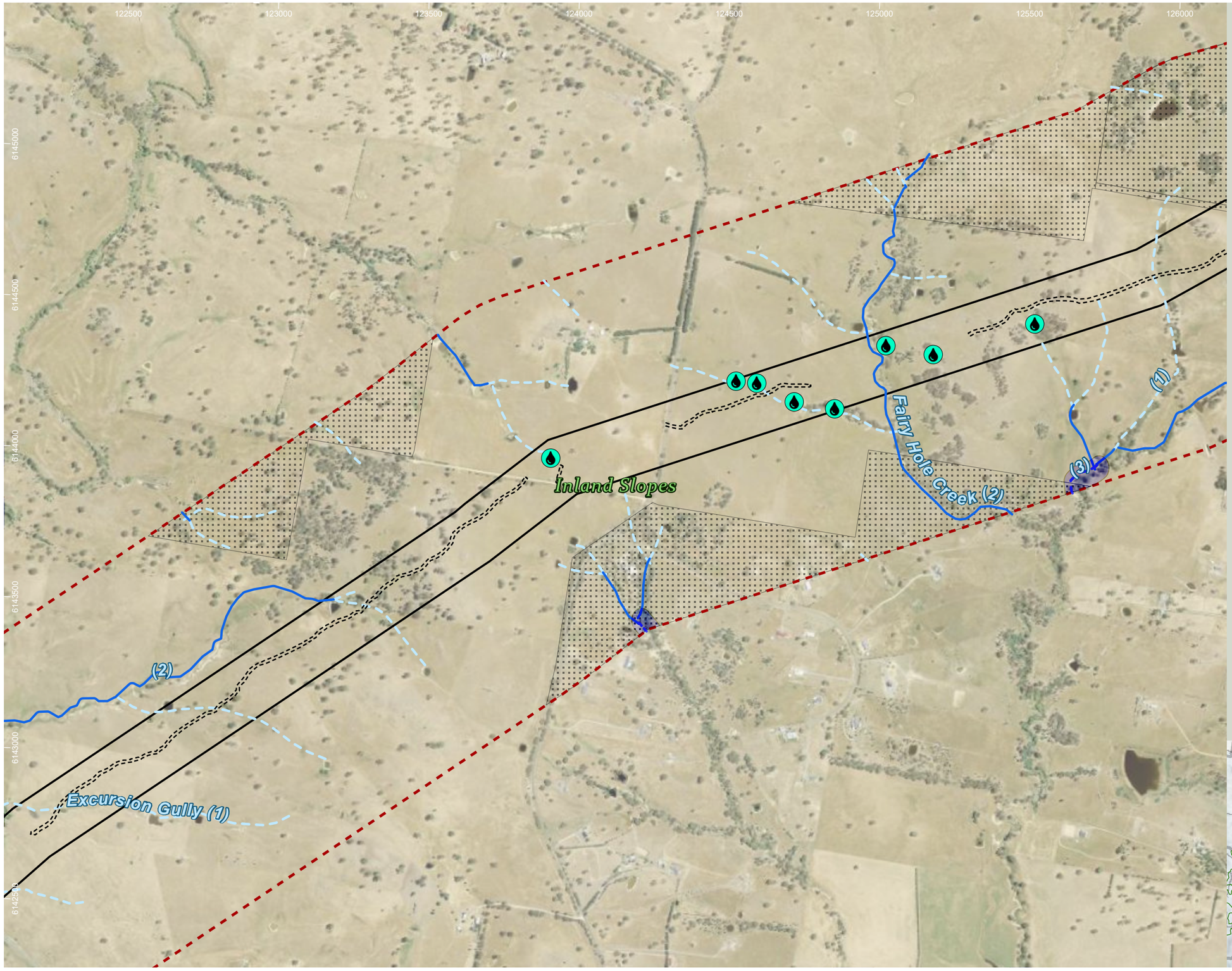


HumeLink project areas

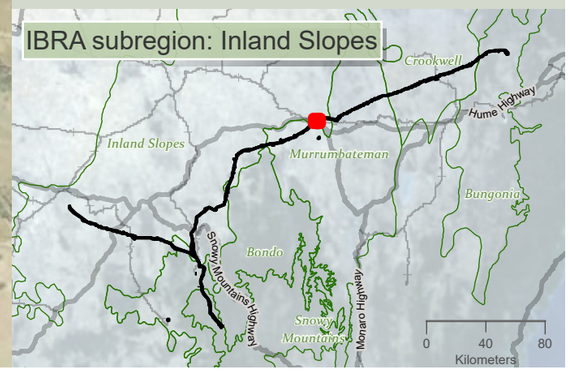
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (8)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 73

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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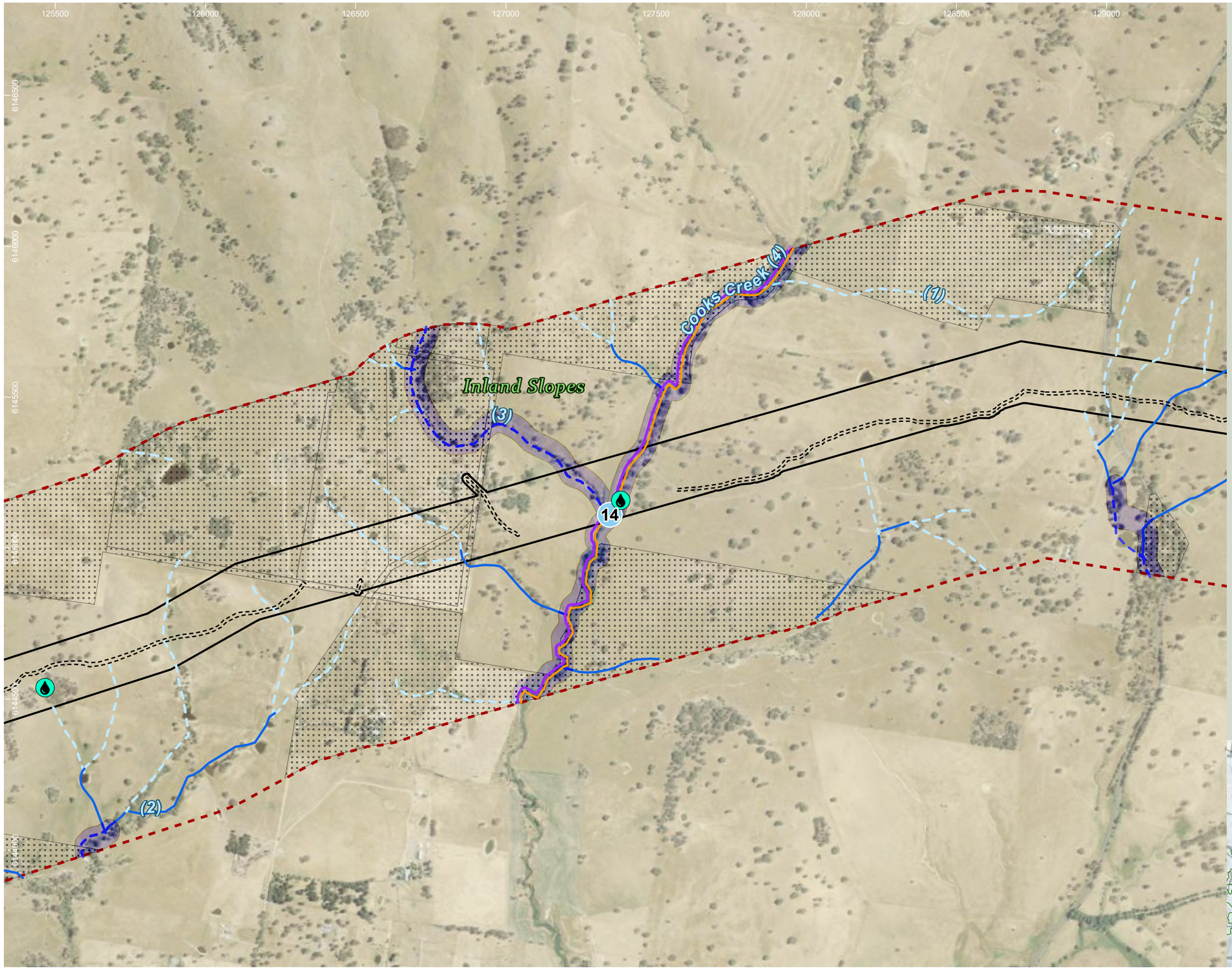


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (2)

Threatened aquatic species desktop assessment points

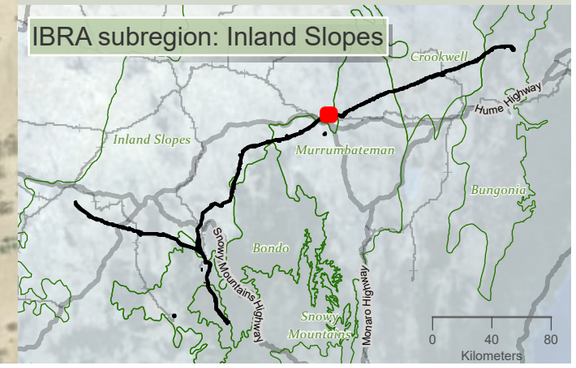
- Threatened aquatic species desktop assessment points (1)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Southern Pygmy Perch

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 74

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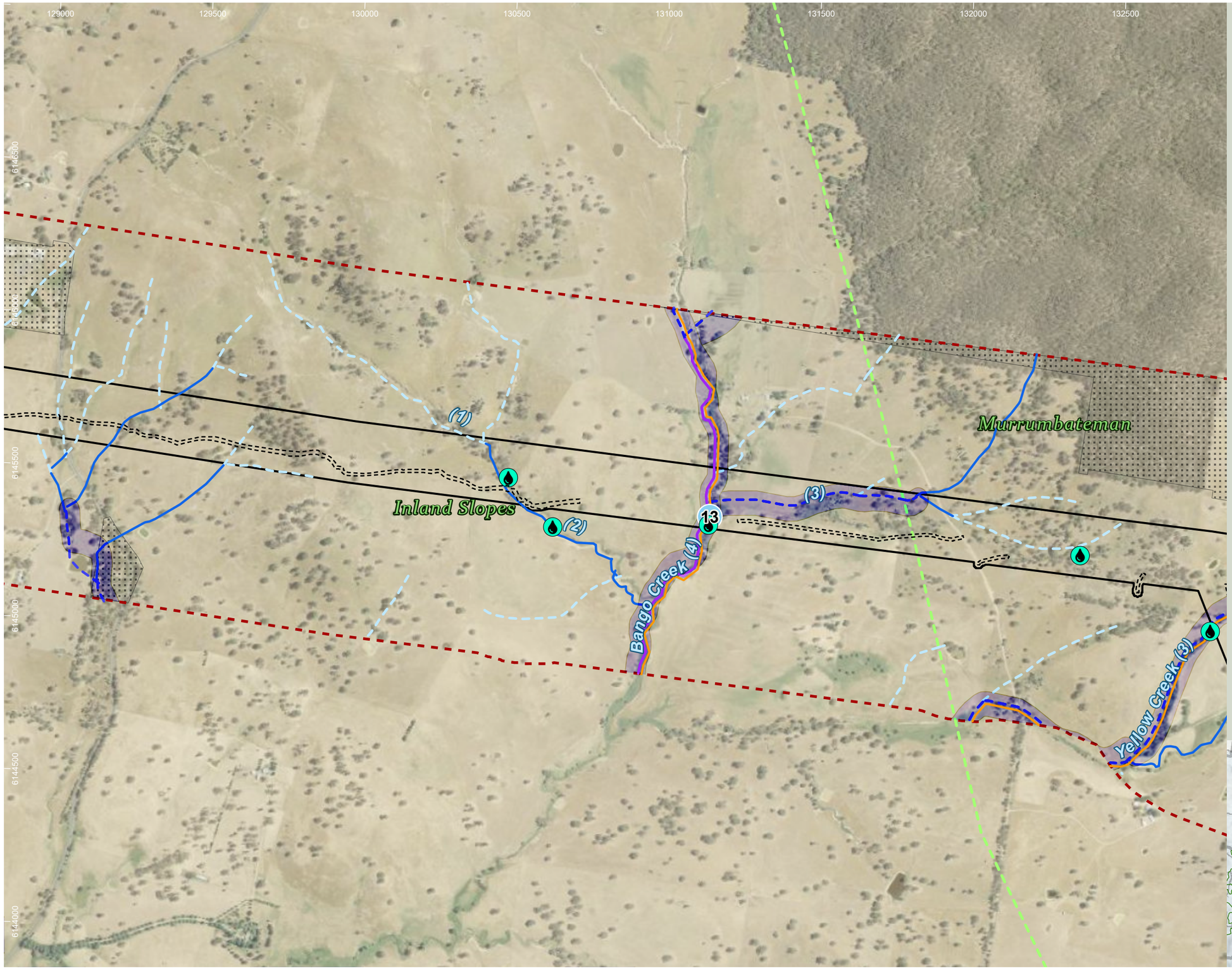


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (5)

Threatened aquatic species desktop assessment points

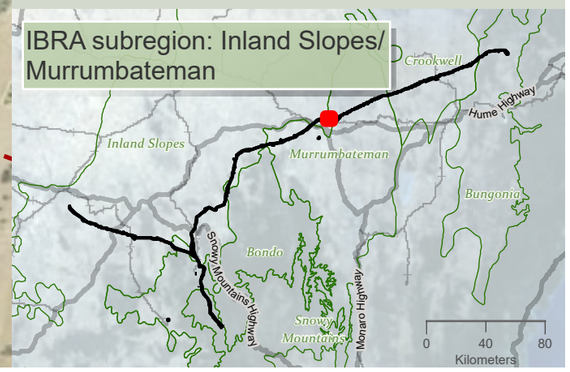
- Threatened aquatic species desktop assessment points (1)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Southern Pygmy Perch

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 75

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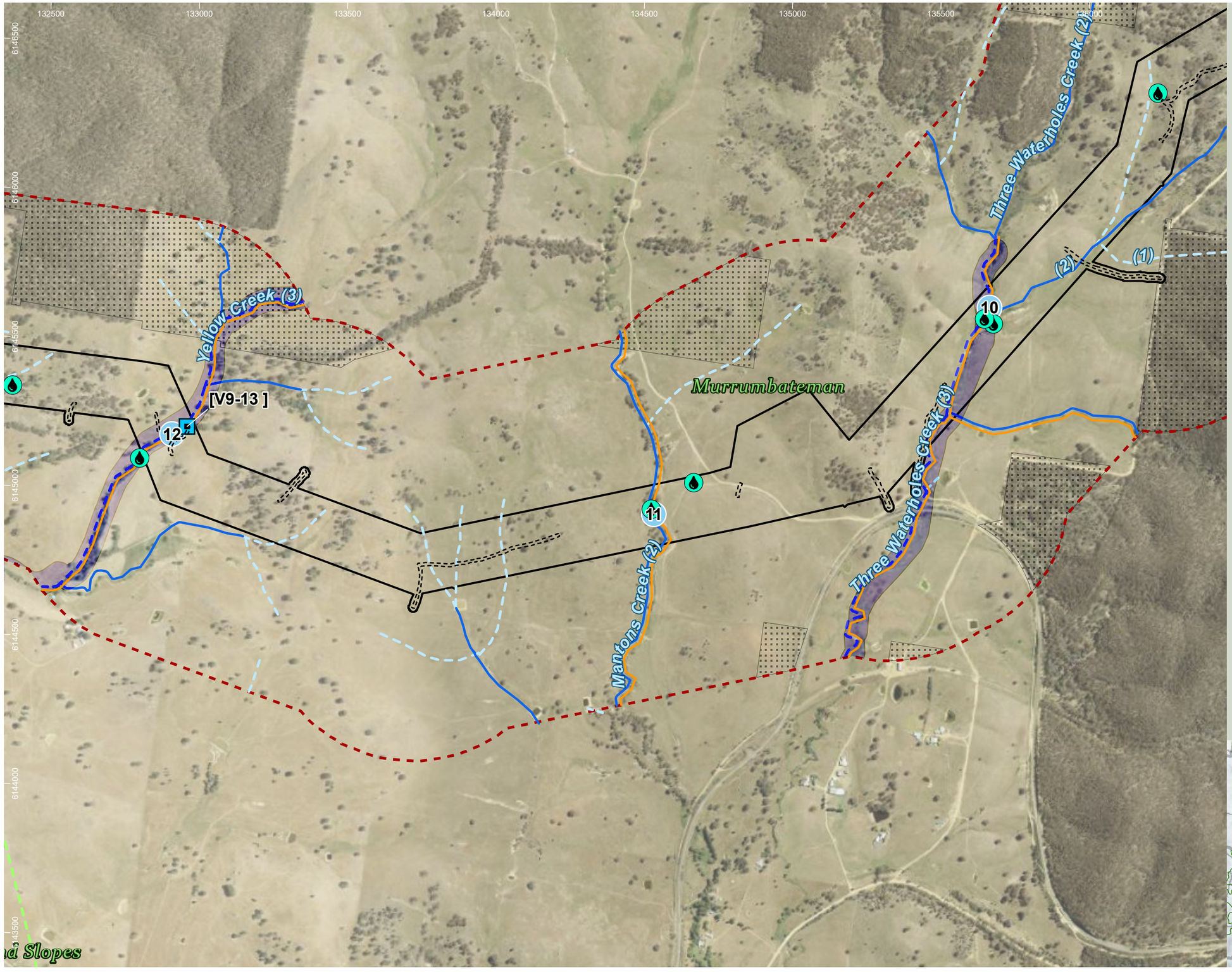


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (7)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites

Threatened aquatic species desktop assessment points

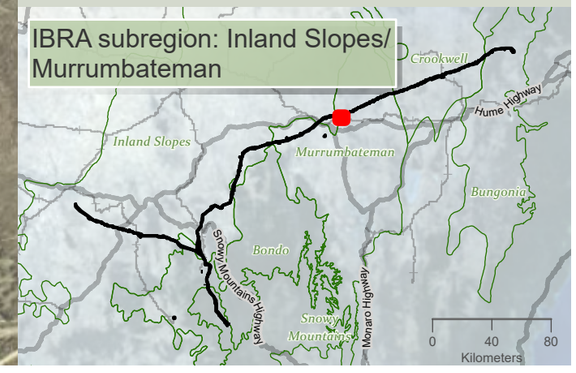
- Threatened aquatic species desktop assessment points (3)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Southern Pygmy Perch

Strahler stream order (offset from centreline)

- 1
- 2
- 3



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 76

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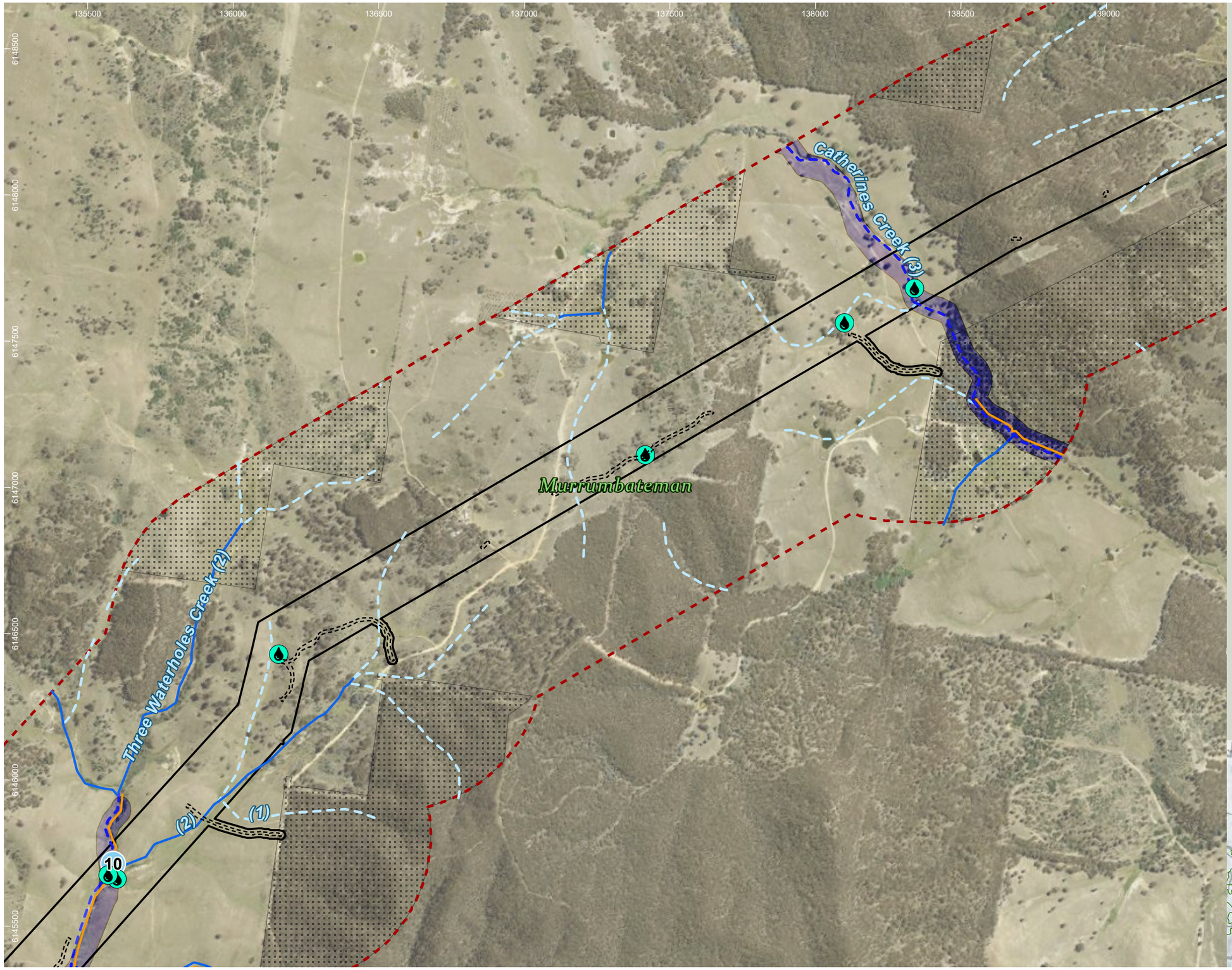


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (6)

Threatened aquatic species desktop assessment points

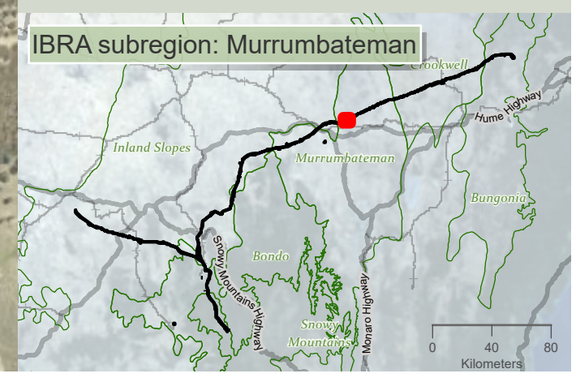
- Threatened aquatic species desktop assessment points (1)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Southern Pygmy Perch

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 77

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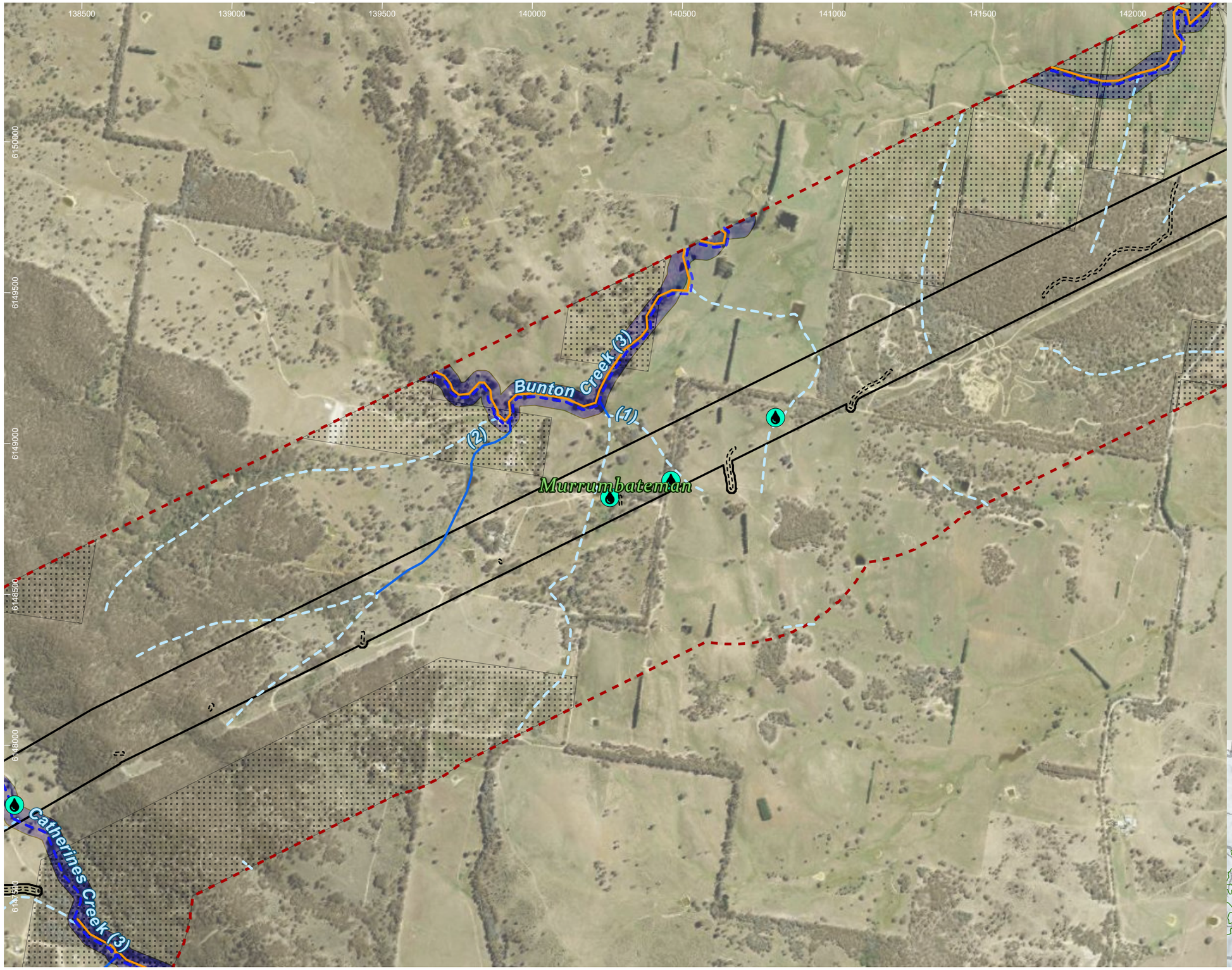


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

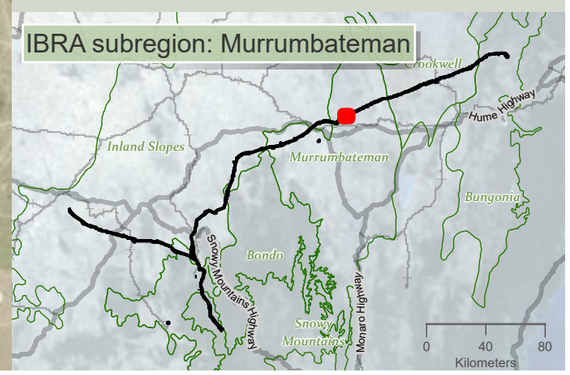
- Aquatic habitat assessment - Niche, 2022 (4)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Southern Pygmy Perch

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 78

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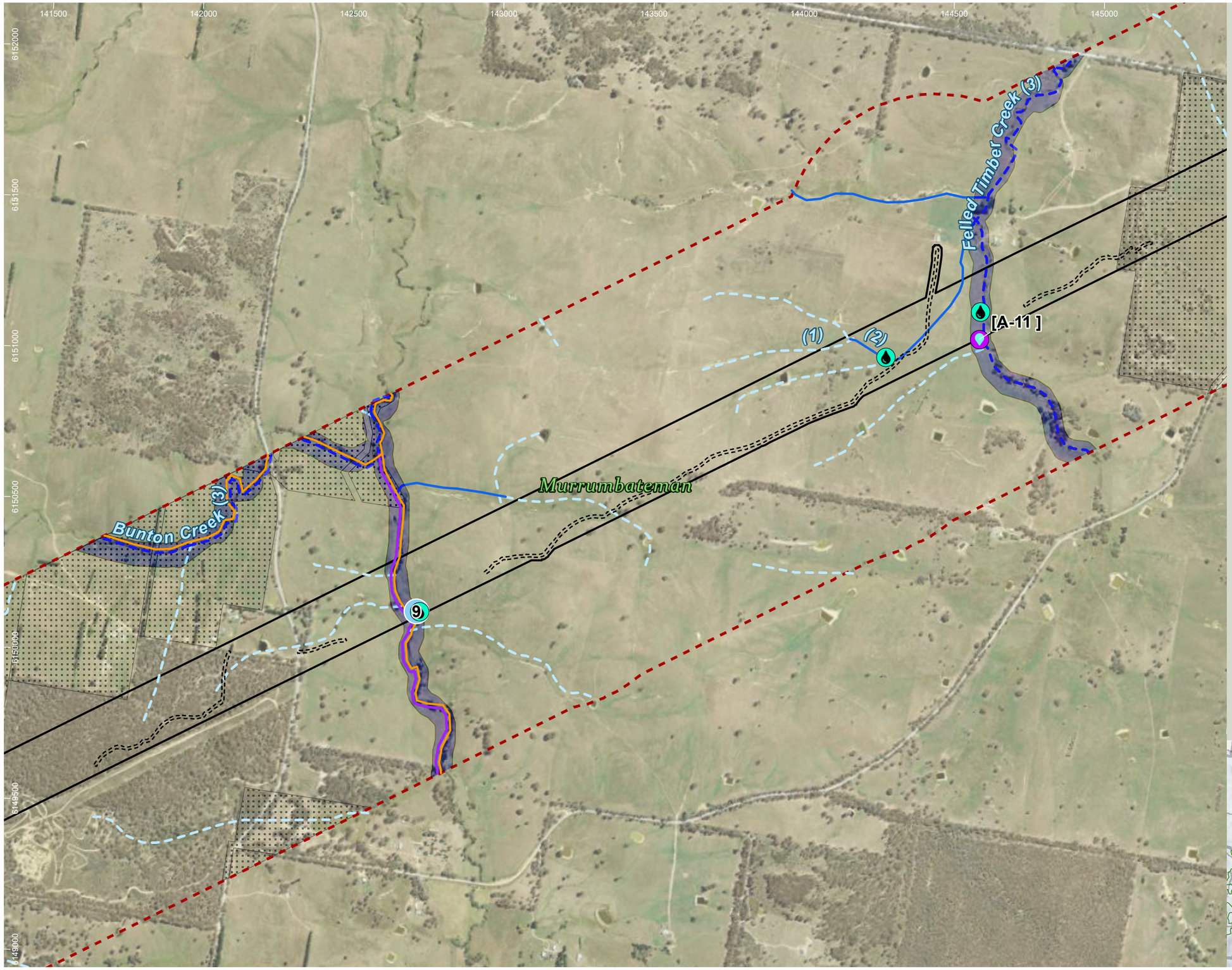


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (3)
- Additional aquatic desktop assessment sites

Threatened aquatic species desktop assessment points

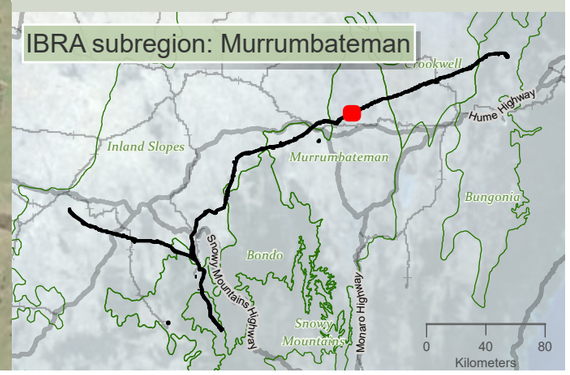
- Threatened aquatic species desktop assessment points (1)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Southern Pygmy Perch

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 79

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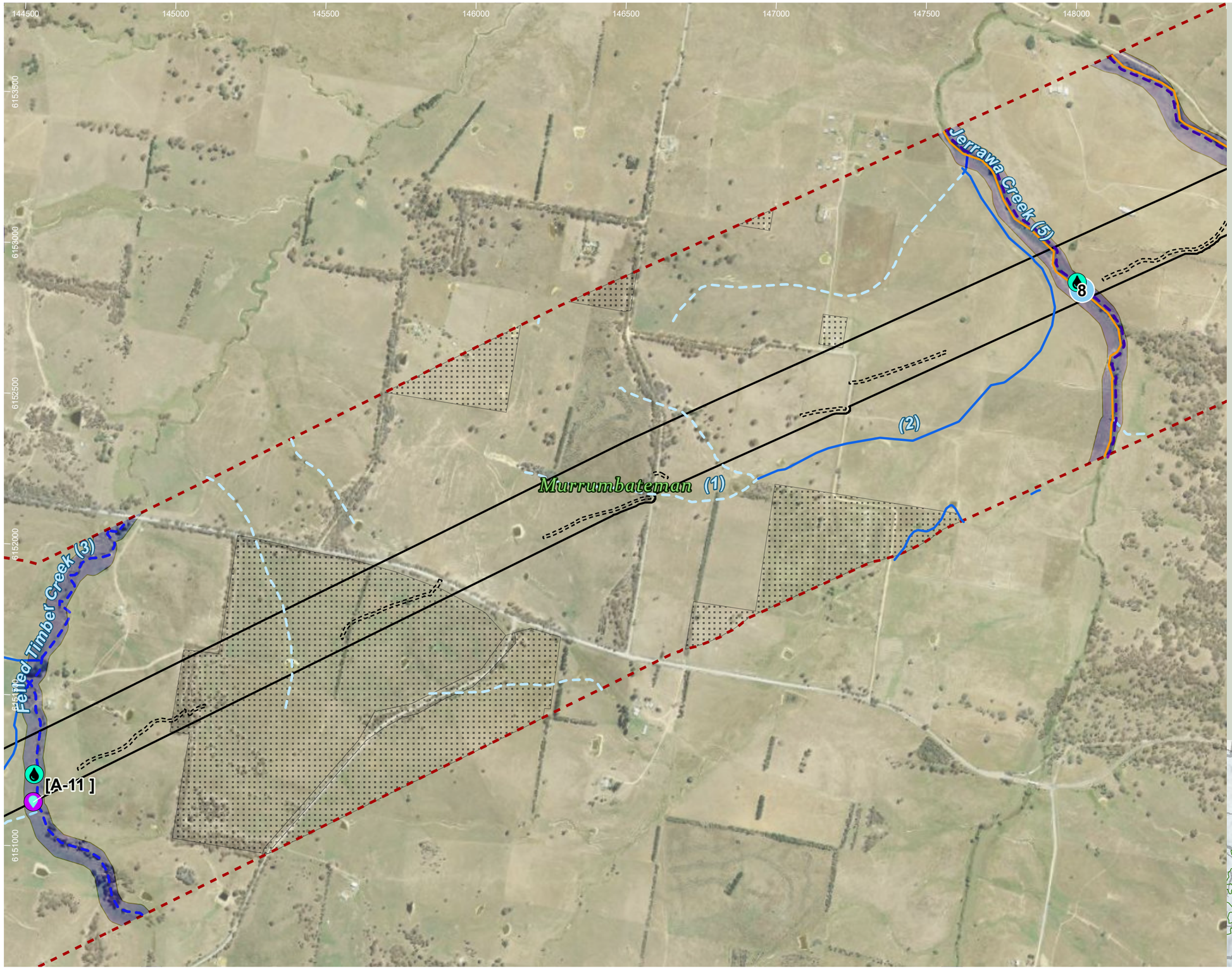


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (2)
- Additional aquatic desktop assessment sites

Threatened aquatic species desktop assessment points

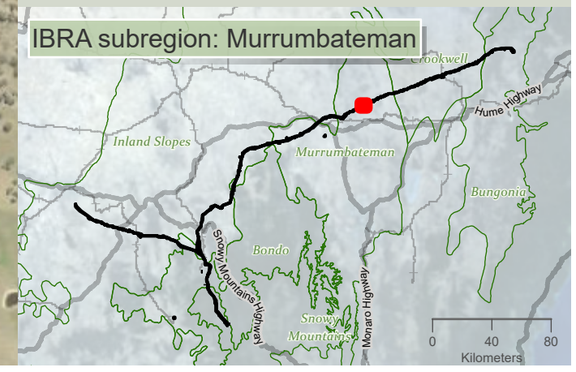
- Threatened aquatic species desktop assessment points (1)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Southern Pygmy Perch

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 5



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 80

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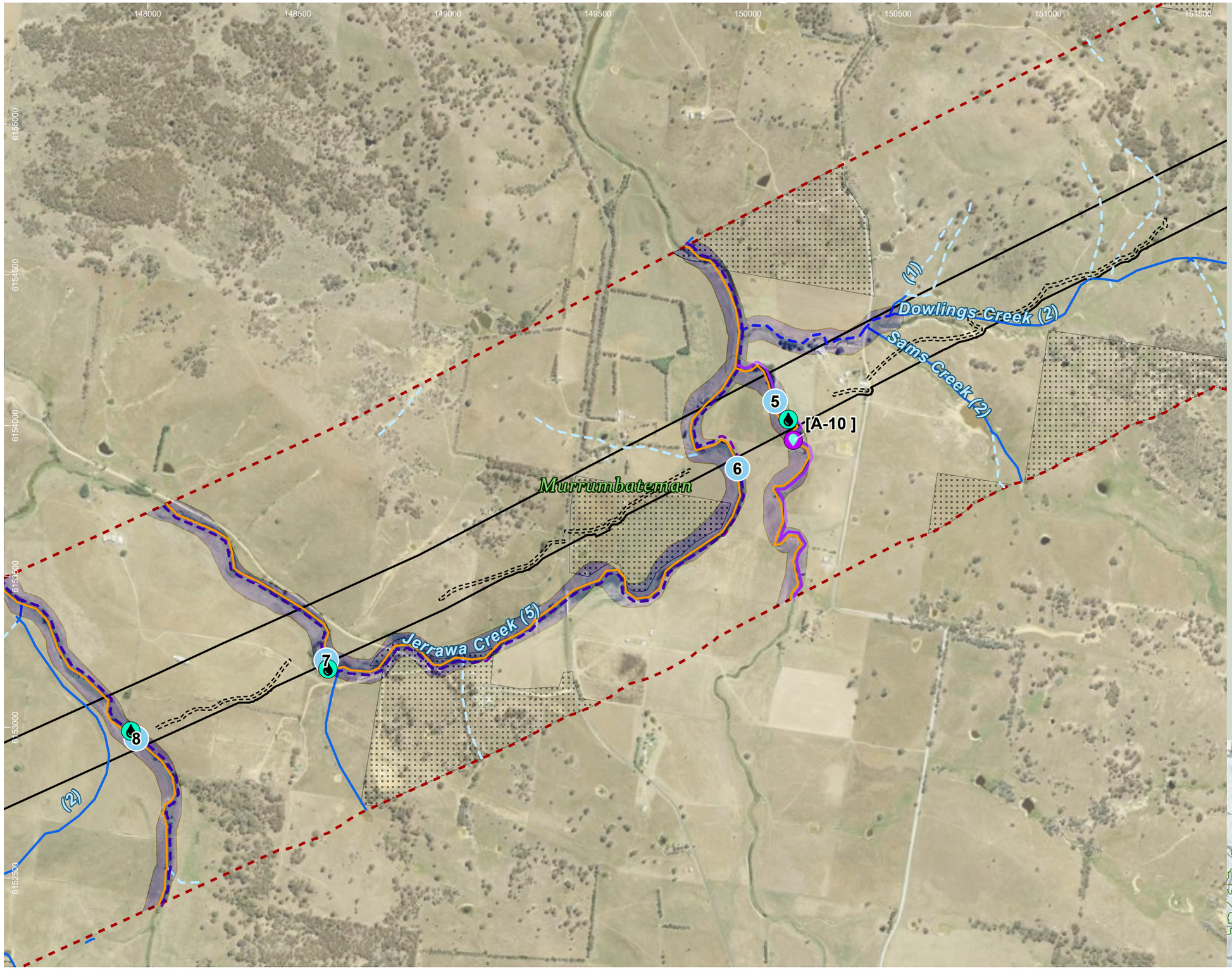


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (3)
- Additional aquatic desktop assessment sites

Threatened aquatic species desktop assessment points

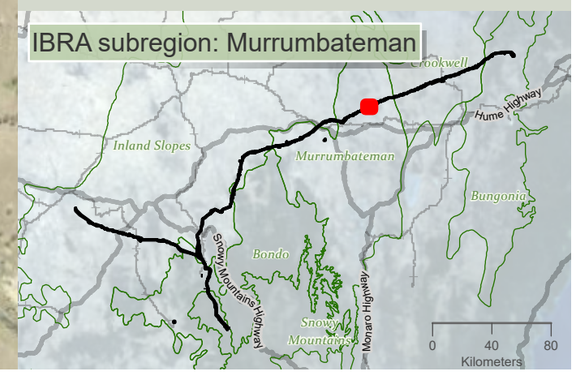
- Threatened aquatic species desktop assessment points (4)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Southern Pygmy Perch

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 81

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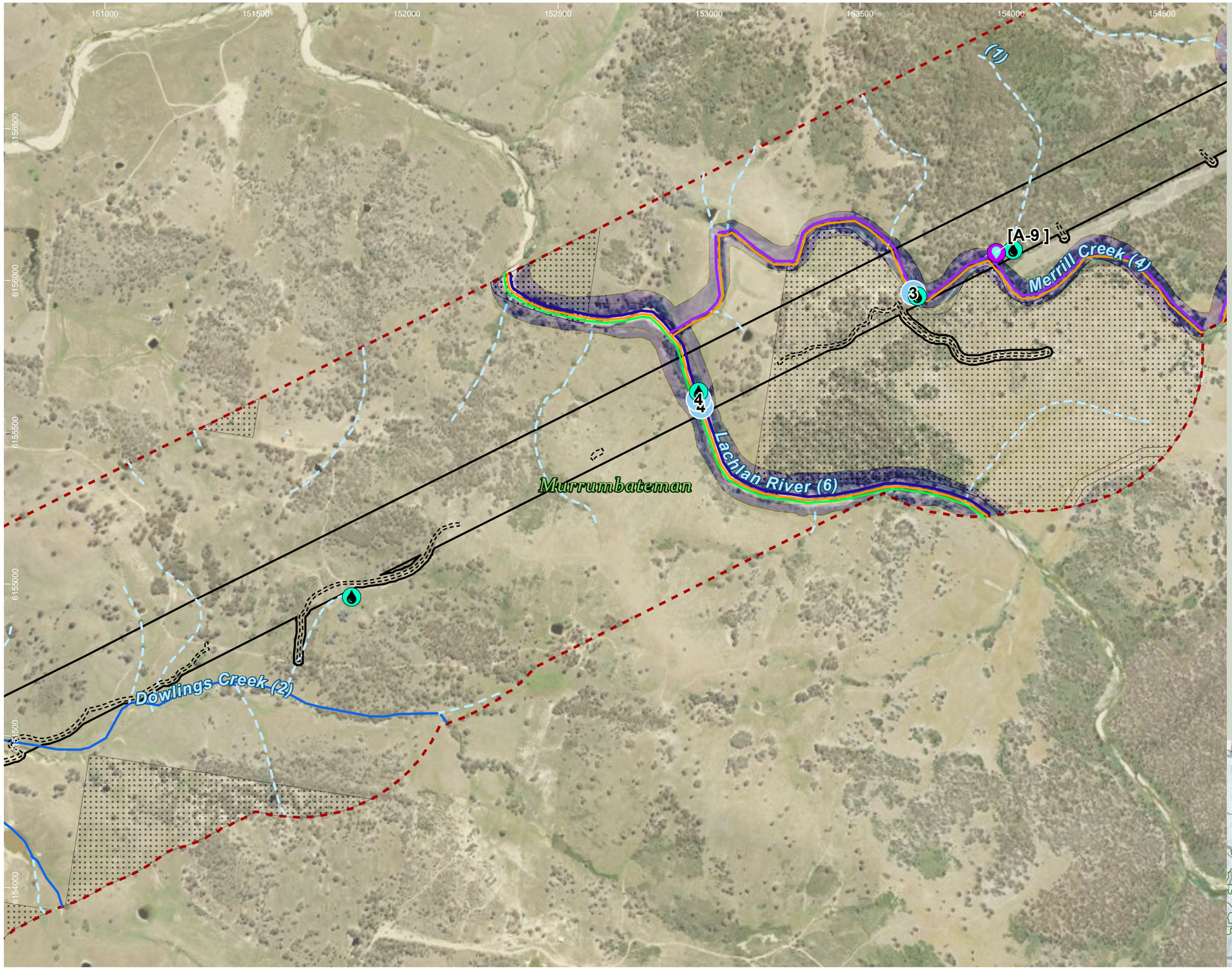


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (4)
- Additional aquatic desktop assessment sites

Threatened aquatic species desktop assessment points

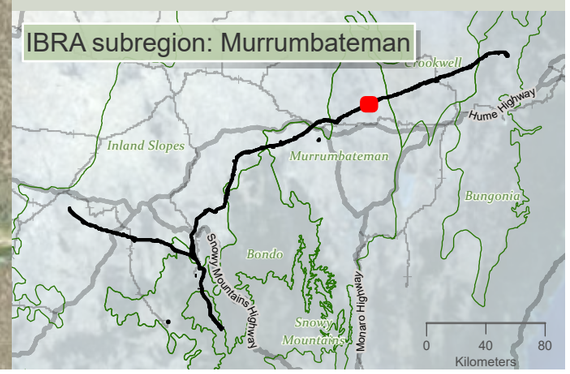
- Threatened aquatic species desktop assessment points (3)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Macquarie Perch
- Southern Pygmy Perch

Strahler stream order (offset from centreline)

- 1
- 2
- 4
- 6



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 82

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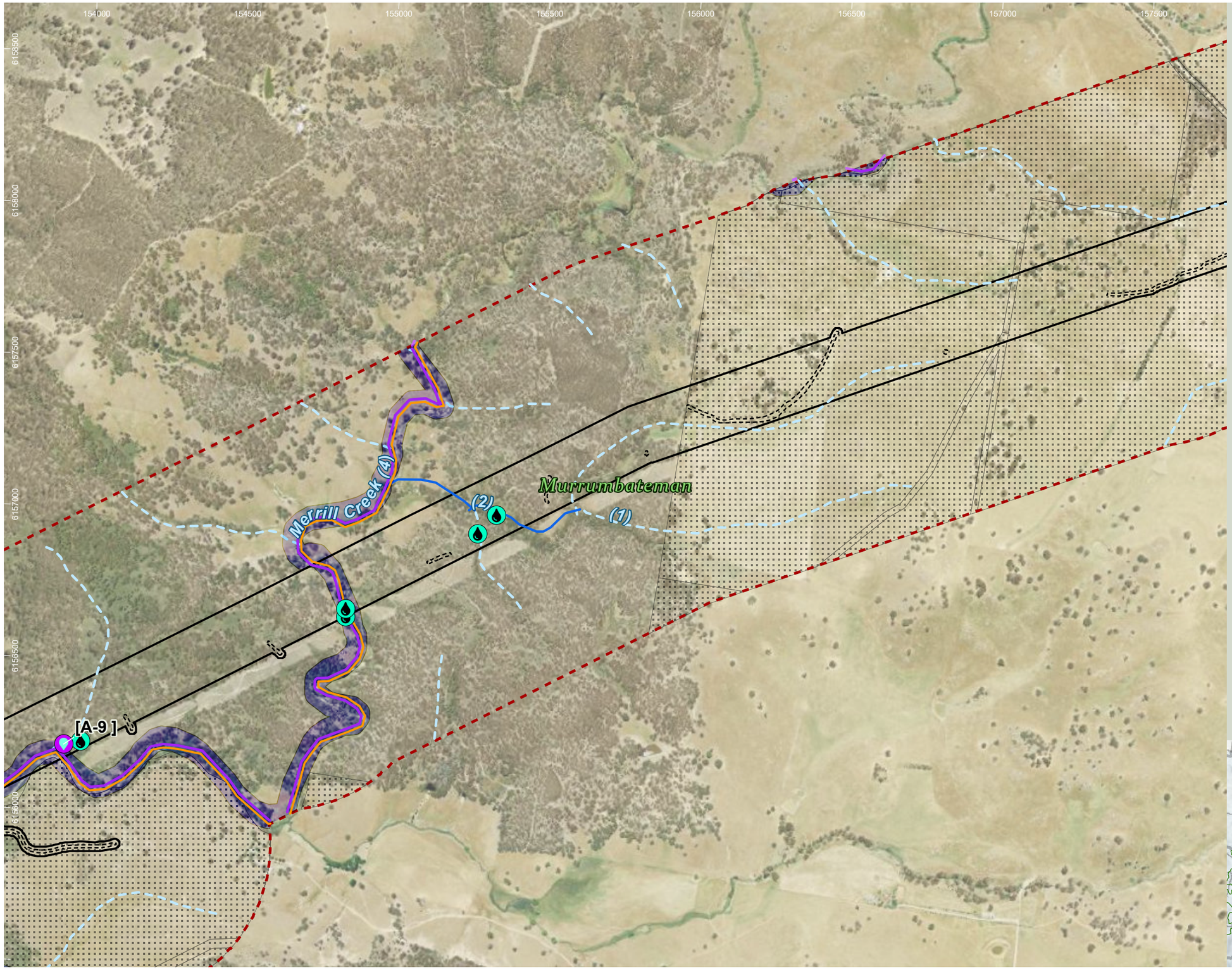


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

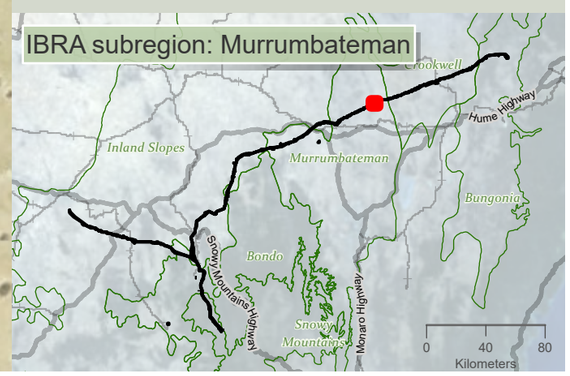
- Aquatic habitat assessment - Niche, 2022 (5)
- Additional aquatic desktop assessment sites
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Southern Pygmy Perch

Strahler stream order (offset from centreline)

- 1
- 2
- 4



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 83

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Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx - Confidential

157000
157500
158000
158500
159000
159500
160000
160500
6159500
6159000
6158500
6158000
6157500
6157000

Murrumbateman
Middle Creek (1)
(2)
(1)
Middle Creek (2)

HumeLink project areas

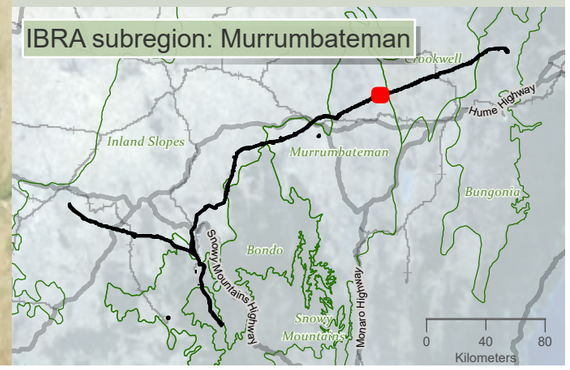
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (4)

Strahler stream order (offset from centreline)

- 1
- 2



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 84

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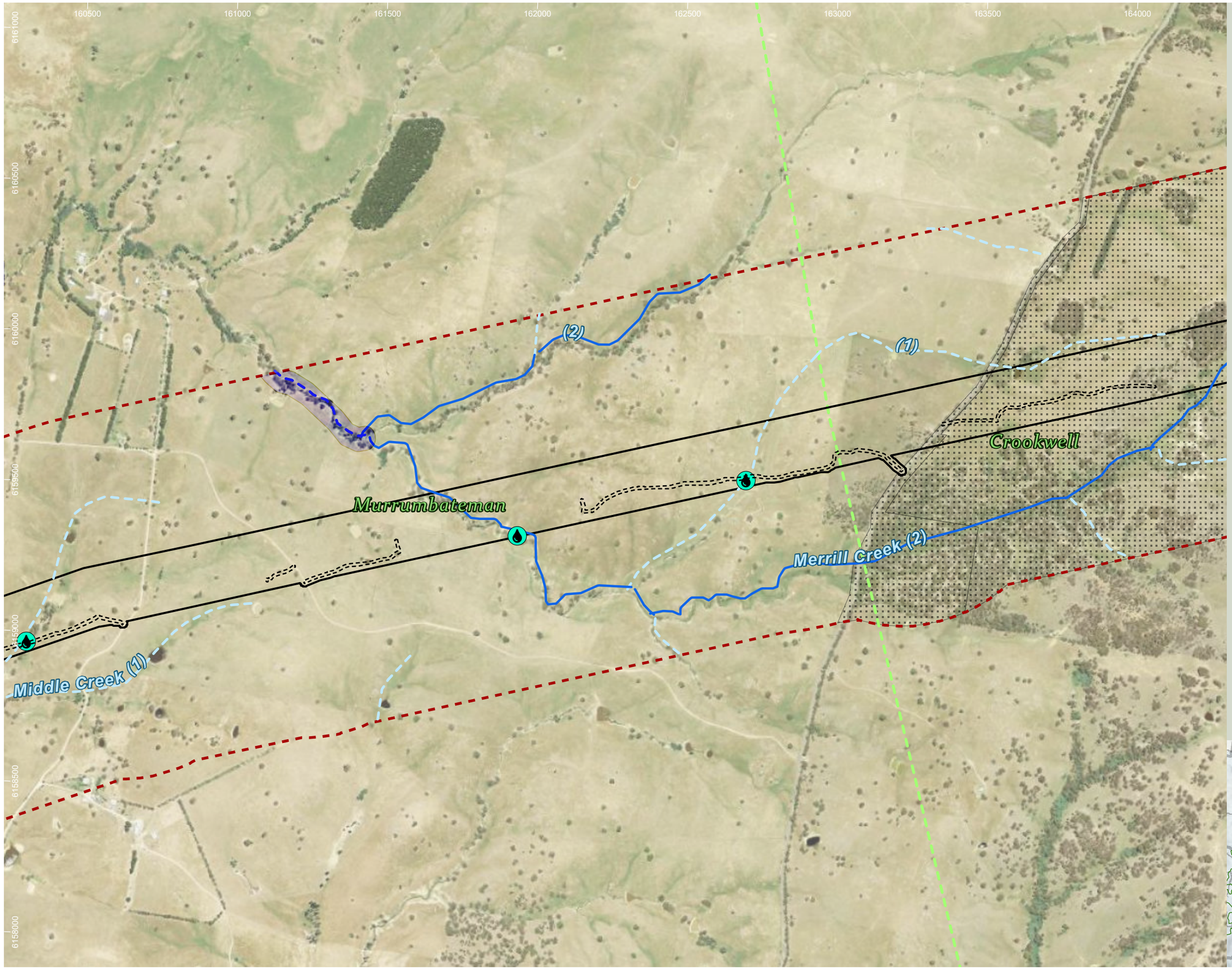


HumeLink project areas

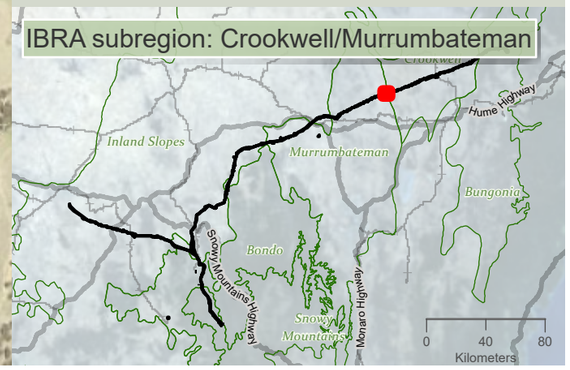
- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (3)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 85

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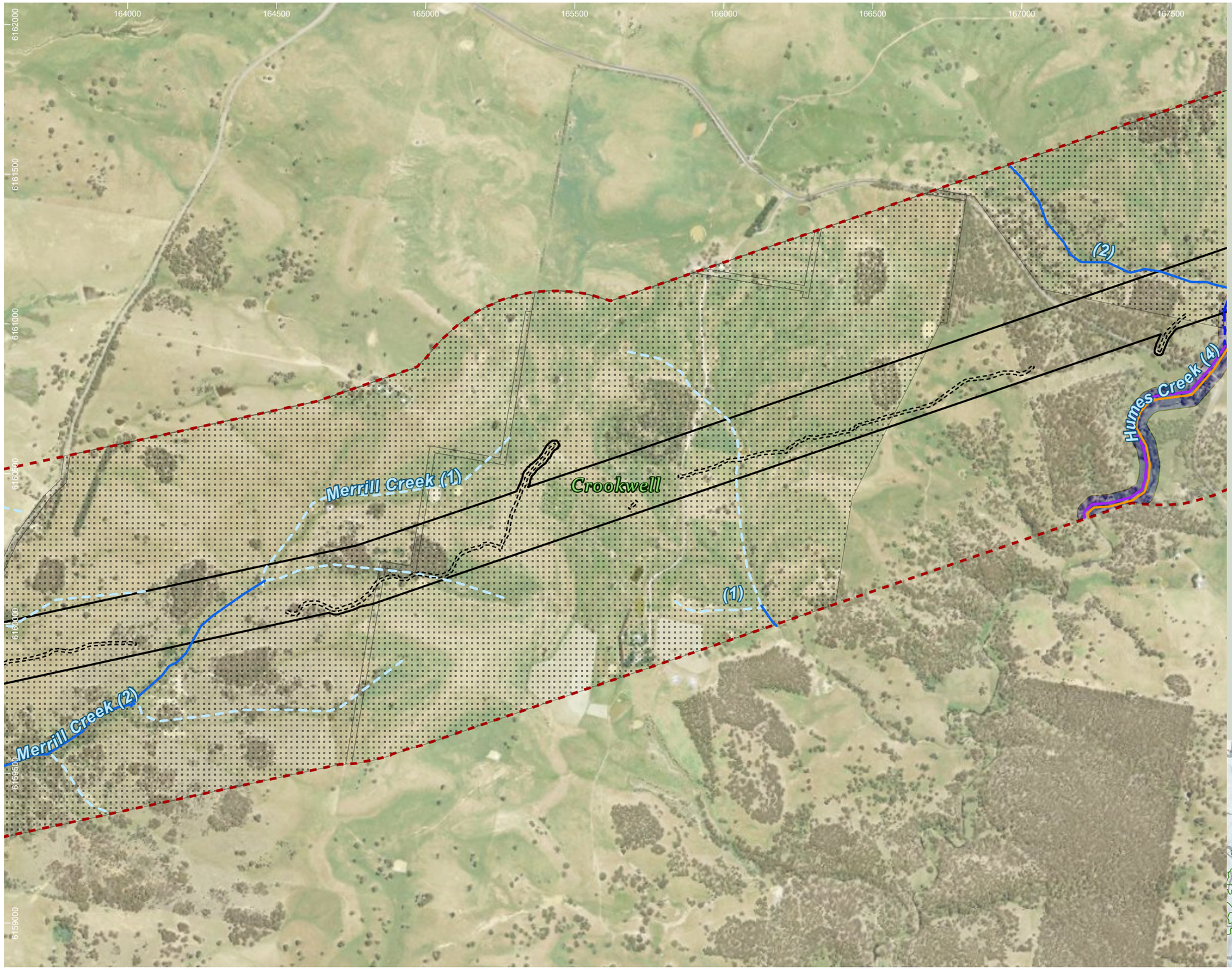


HumeLink project areas

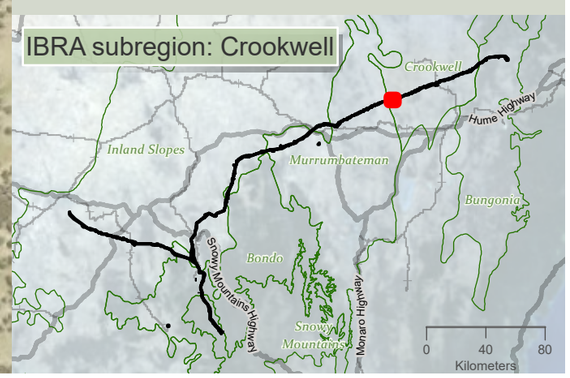
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Southern Pygmy Perch

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

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Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 86

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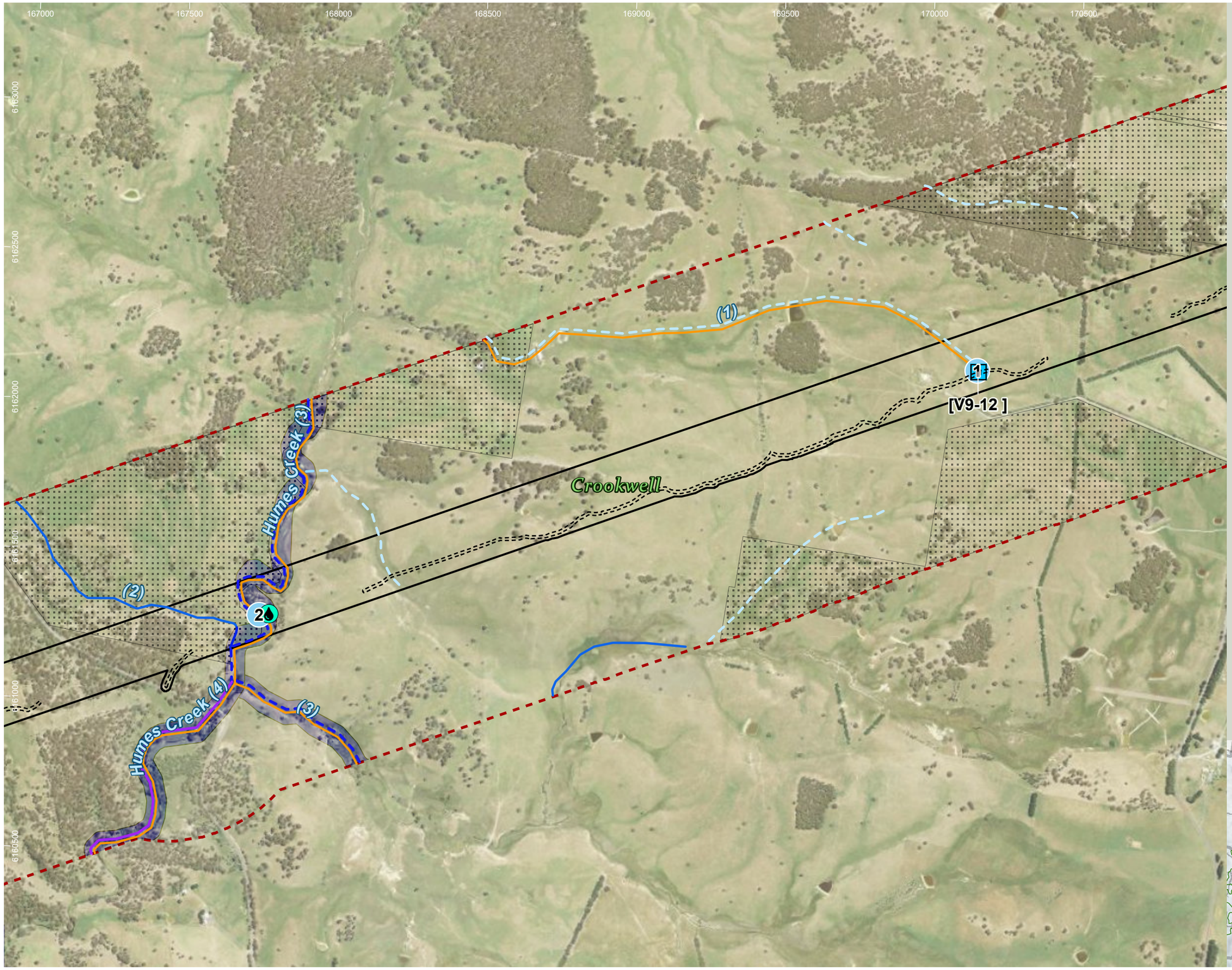


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites

Threatened aquatic species desktop assessment points

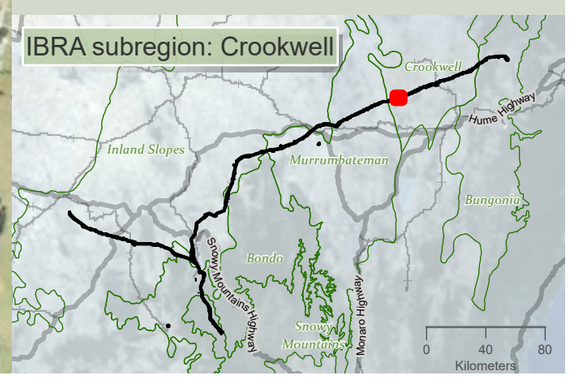
- Threatened aquatic species desktop assessment points (2)
- Key fish habitat (DPI)

Threatened aquatic species for indicative distribution mapping (DPI, 2022)

- Southern Pygmy Perch

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

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Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 87

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6164500 6164000 6163500 6163000 6162500 6162000 6161500

Crookwell

(1)

Gurrundah Creek (2)

HumeLink project areas

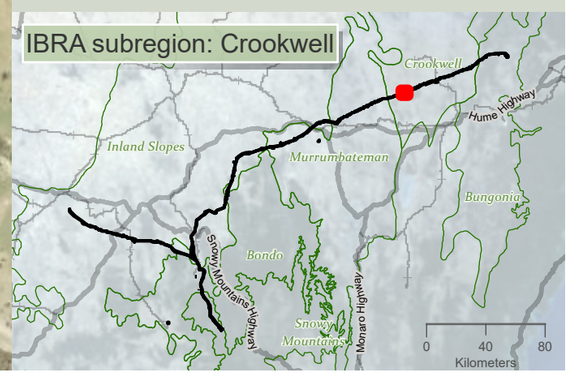
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (3)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

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Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 88

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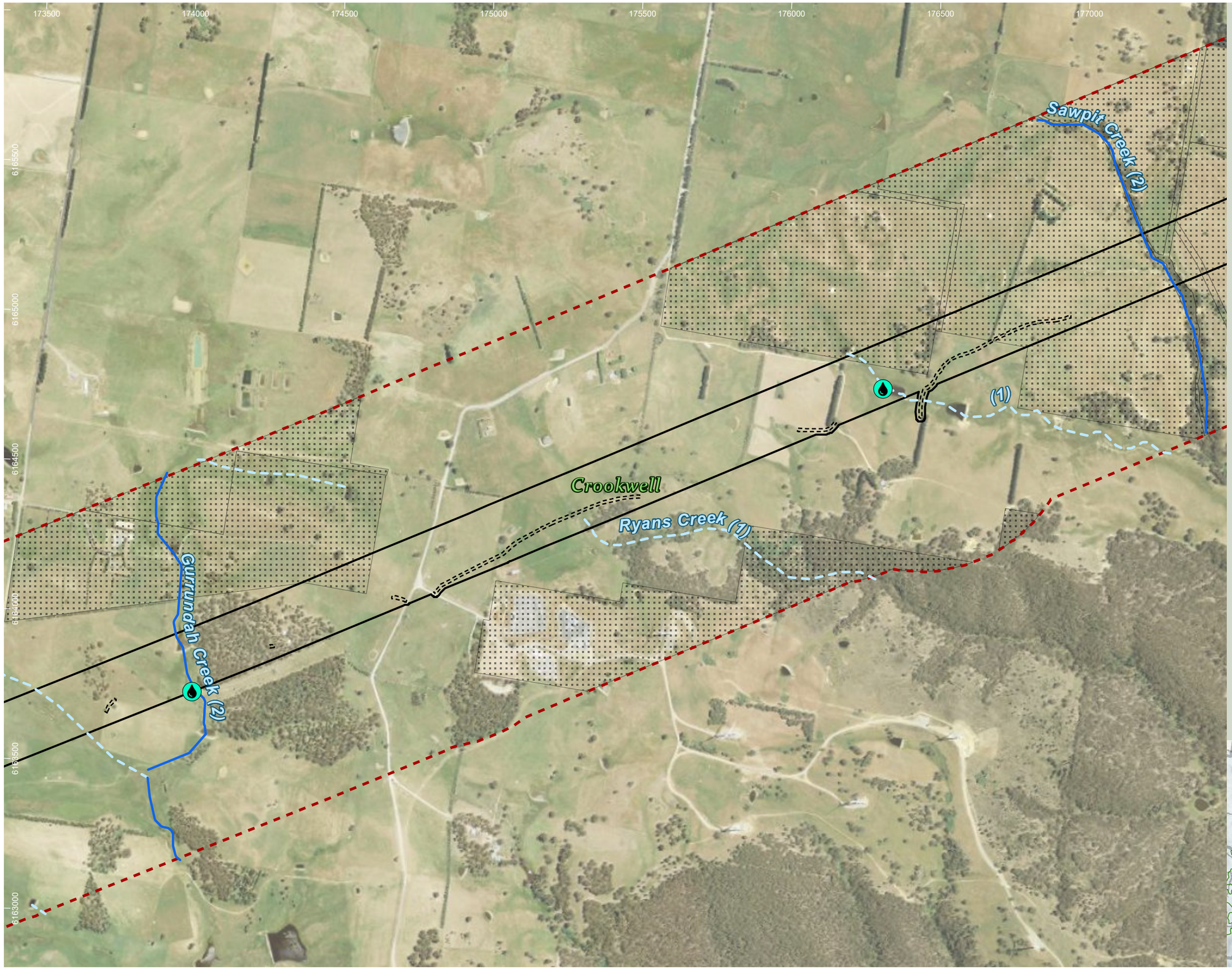


HumeLink project areas

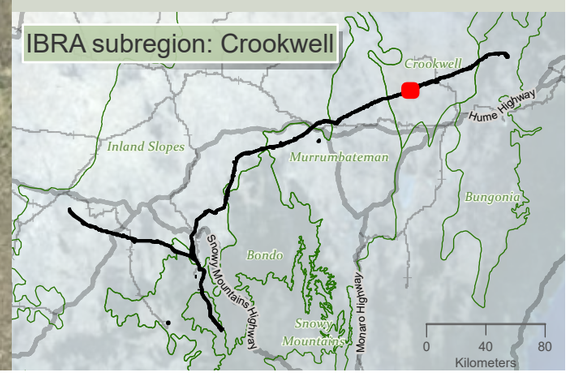
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (2)

Strahler stream order (offset from centreline)

- 1
- 2



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 89

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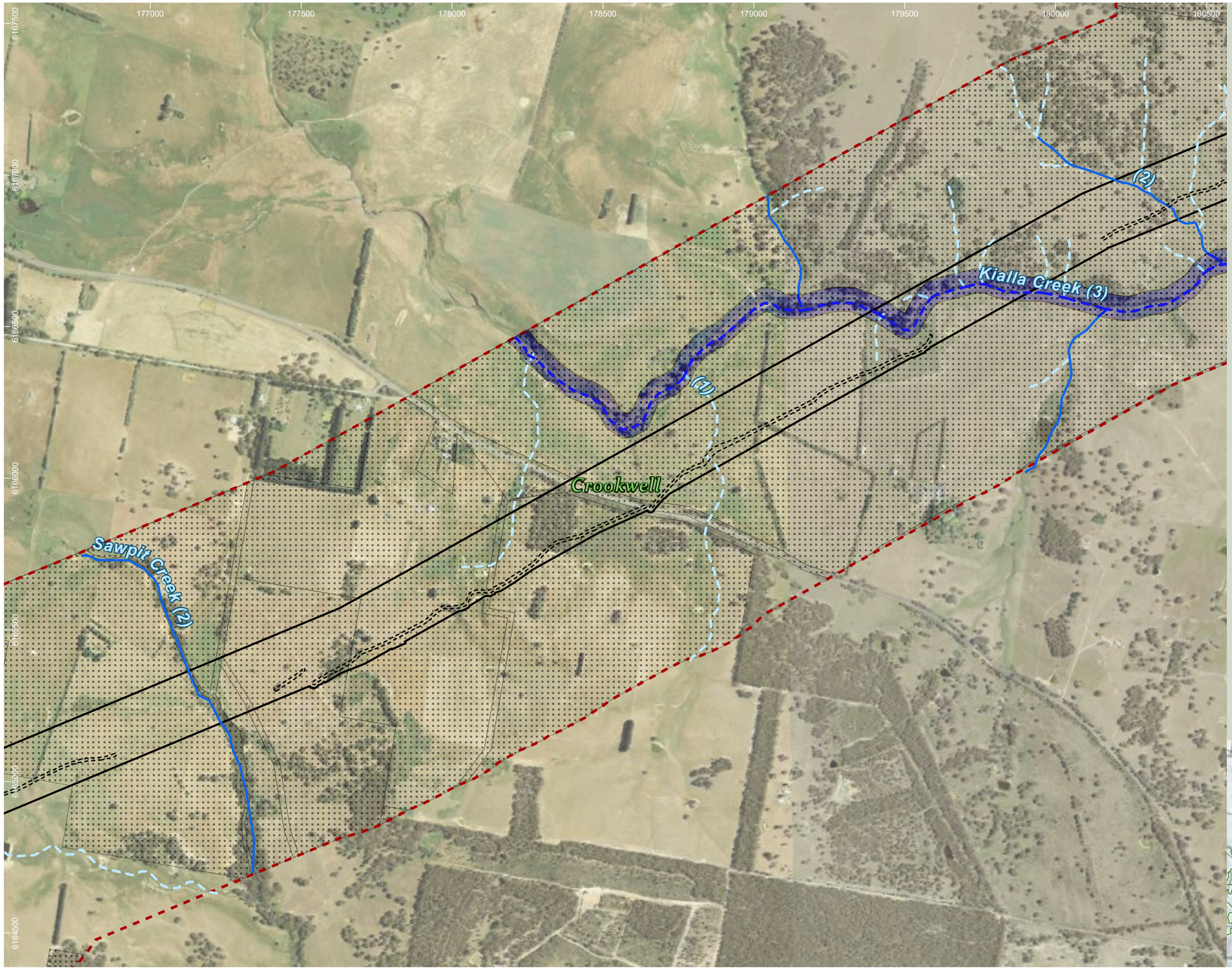
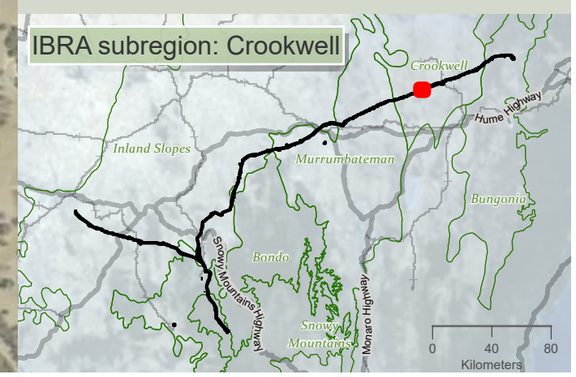


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

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Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 90

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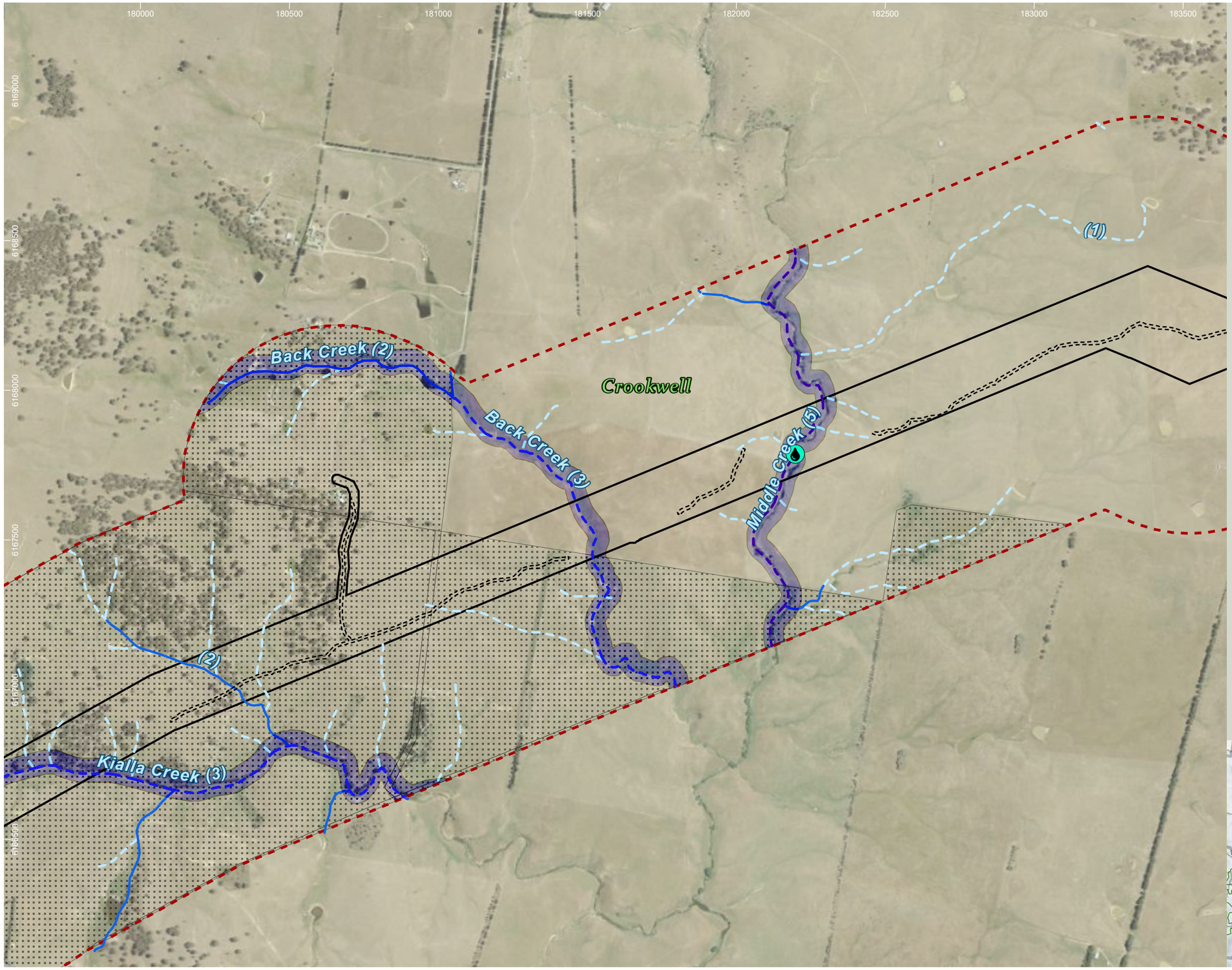


HumeLink project areas

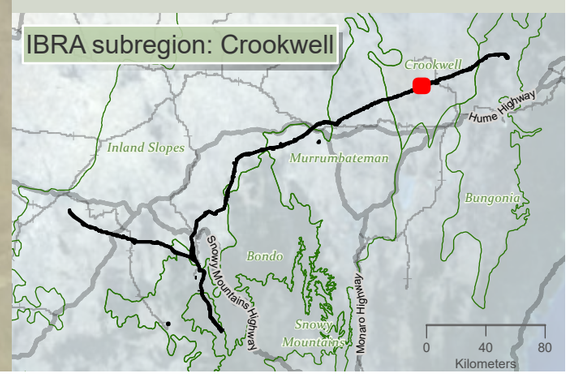
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (1)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 5



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 91

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183000 183500 184000 184500 185000 185500 186000 186500

6170000 6169500 6169000 6168500 6168000 6167500

Crookwell

First Creek (3)

Wollondilly River (5)

(1)

(2)

HumeLink project areas

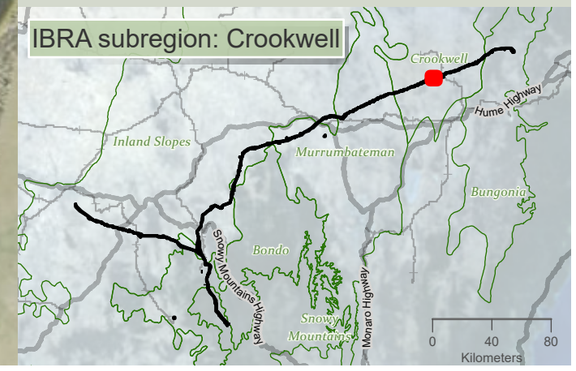
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (6)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 5



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 92

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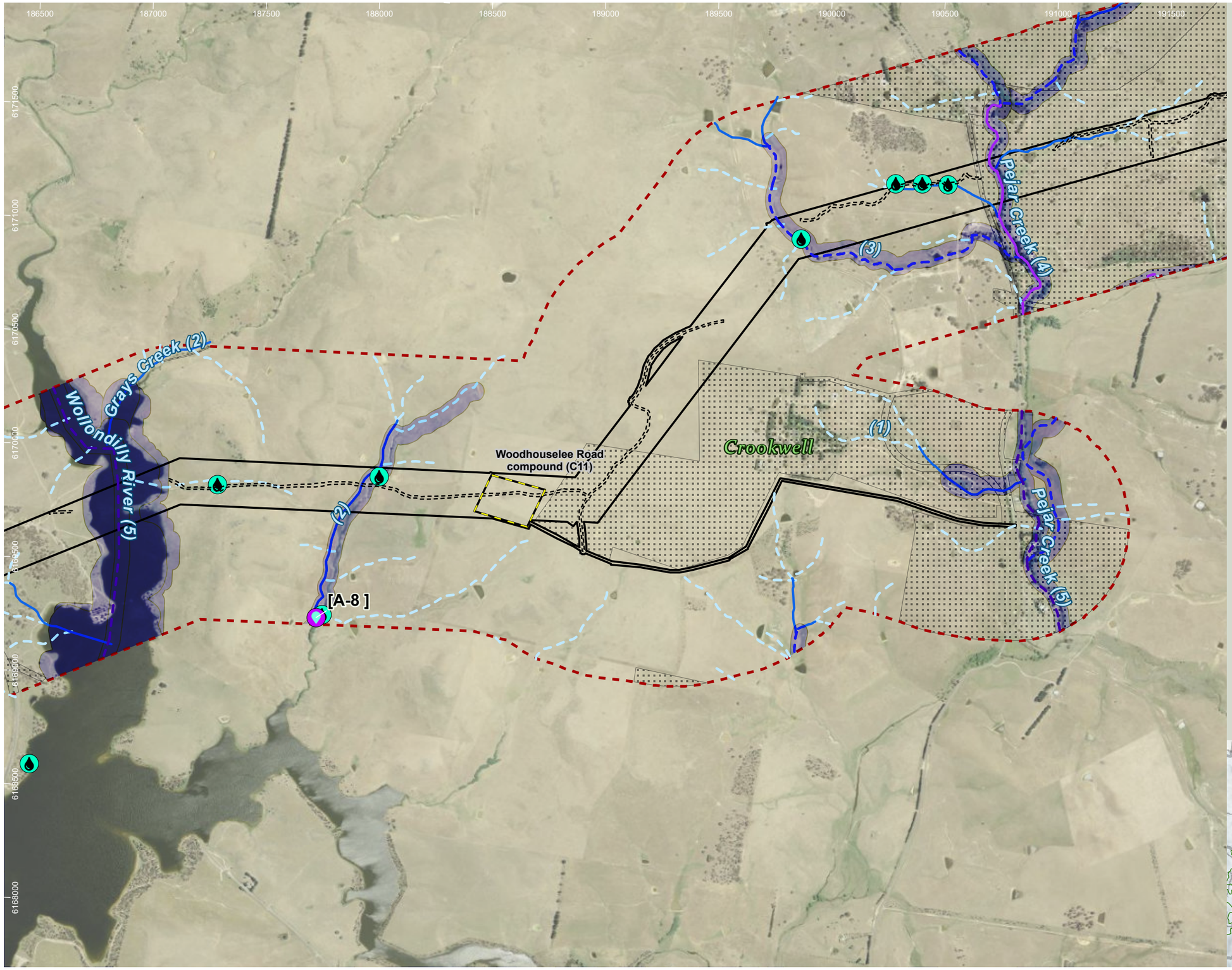


HumeLink project areas

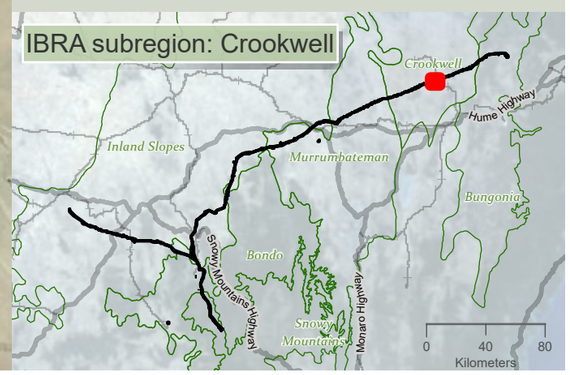
- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (8)
- Additional aquatic desktop assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 93

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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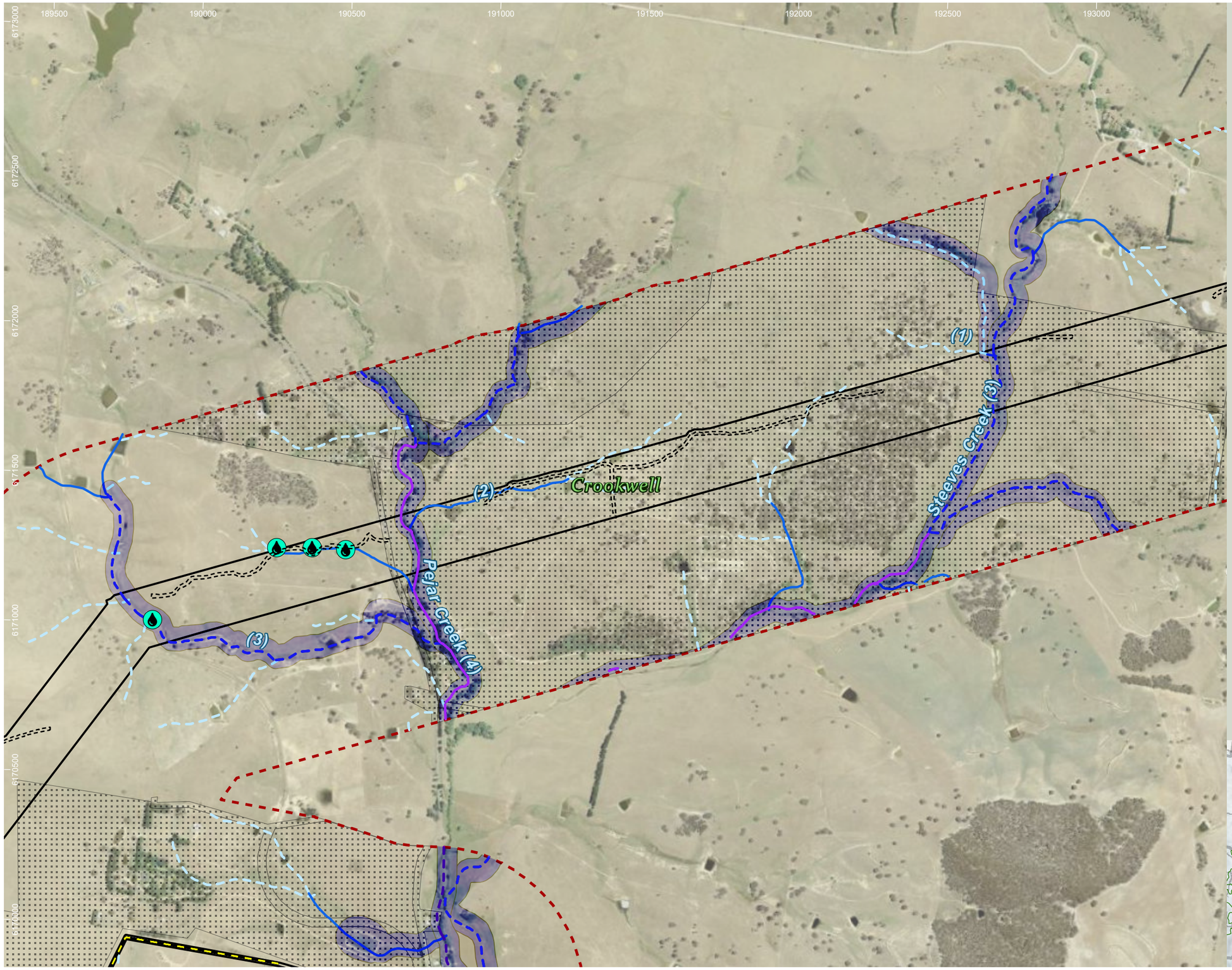


HumeLink project areas

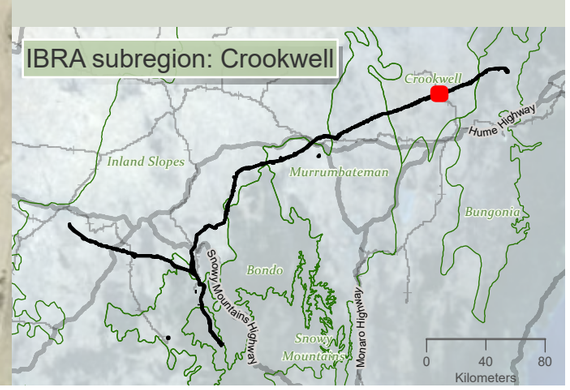
- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (4)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 94

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193000 193500 194000 194600 195000 195500 196000 196500

6174000 6173500 6173000 6172500 6172000 6171500 6171000

[V9-11-1]

Melamalong Creek (1)

Crookwell

Melamalong Creek (4)

(1) (2) (3) (4)

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

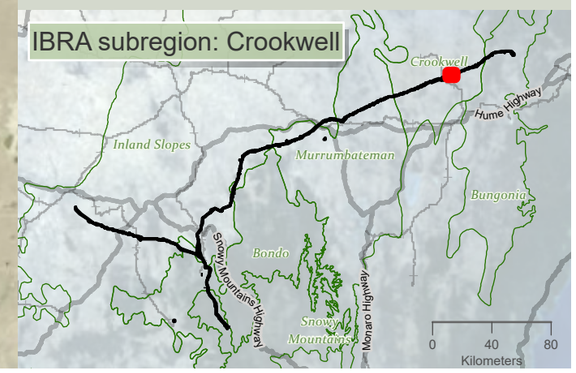
- Aquatic habitat assessment - Niche, 2022 (4)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 95

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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196000 196500 197000 197500 198000 198500 199000 199500

6175000 6174500 6174000 6173500 6173000 6172500

Tarlo River (5)

Sawpit Gully (3)

(2)

(3)

Crookwell

HumeLink project areas

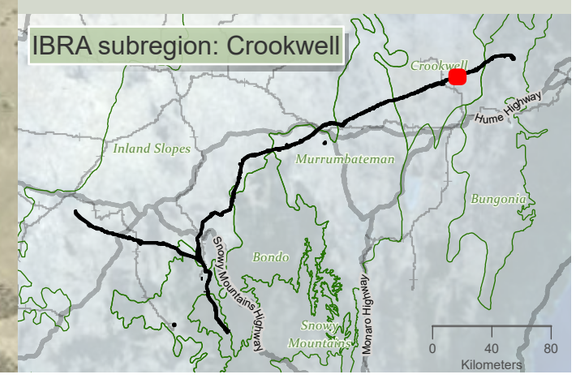
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (4)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 5



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 96

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199500 200000 200500 201000 201500 202000 202500 203000

6176500 6176000 6175500 6175000 6174500 6174000

Crookwell

Turrallo Creek (5)

Tarlo River (5)

(1) (2) (3) (4)

[V9-10]

[A-6]

[A-4]

[A-3]

[A-2]

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

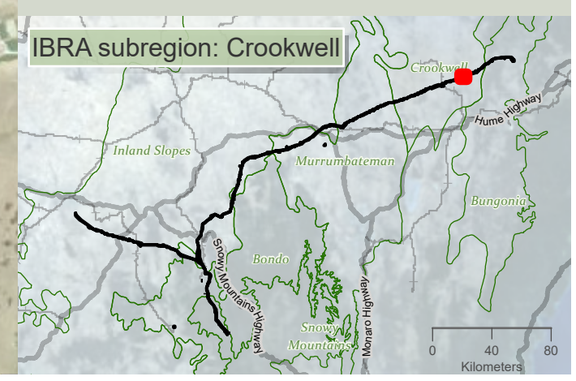
- Aquatic habitat assessment - Niche, 2022 (4)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Additional aquatic desktop assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4
- 5



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 97

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202500 203000 203500 204000 204500 205000 205500 206000

6178000 6177500 6177000 6176500 6176000 6175500

[V9-9]

(1)

Crookwell

(2)

(3)

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

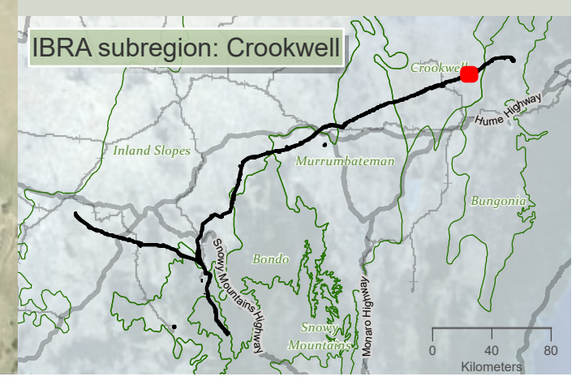
- Aquatic habitat assessment - Niche, 2022 (5)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 98

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206000 206500 207000 207500 208000 208500 209000 209500

6179000 6178500 6178000 6177500 6177000 6176500

Myrtle Creek (4)

Cowpers Creek (3)

Cowpers Creek (4)

(2)

(1)

Crookwell

[A-5]

[V9-8]

[V9-9]

[A-7]

(3)

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (10)

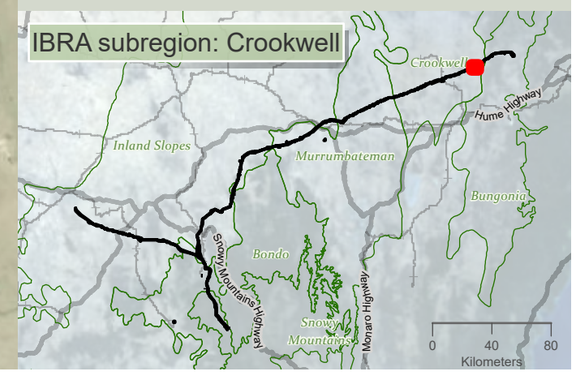
Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Additional aquatic desktop assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4

IBRA subregion: Crookwell



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 99

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208500 209000 209500 210000 210500 211000 211500 212000 212500

6181000 6180500 6180000 6179500 6179000 6178500

Crookwell

Bungonia

Myrtle Creek (4)

(1) (2) (3) (4)

HumeLink project areas

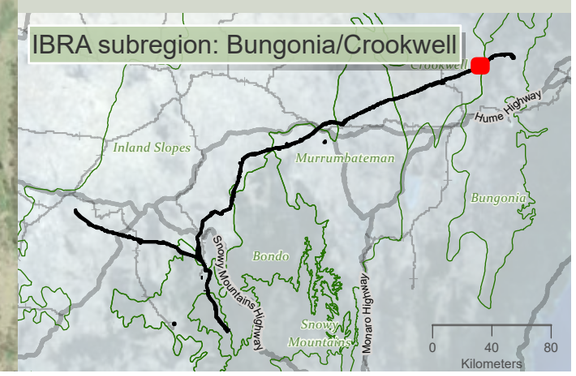
- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (3)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 100

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211500 212000 212500 213000 213500 214000 214500 215000

6183500 6183000 6182500 6182000 6181500 6181000 6180500

Crookwell

Bungonia

(2)

(1)

HumeLink project areas

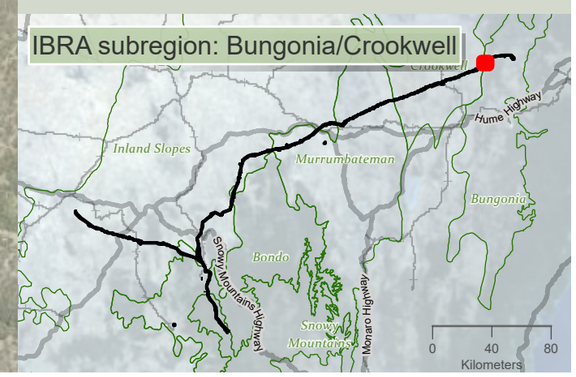
- Project footprint
- Landscape assessment area
- IBRA subregion
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (4)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 101

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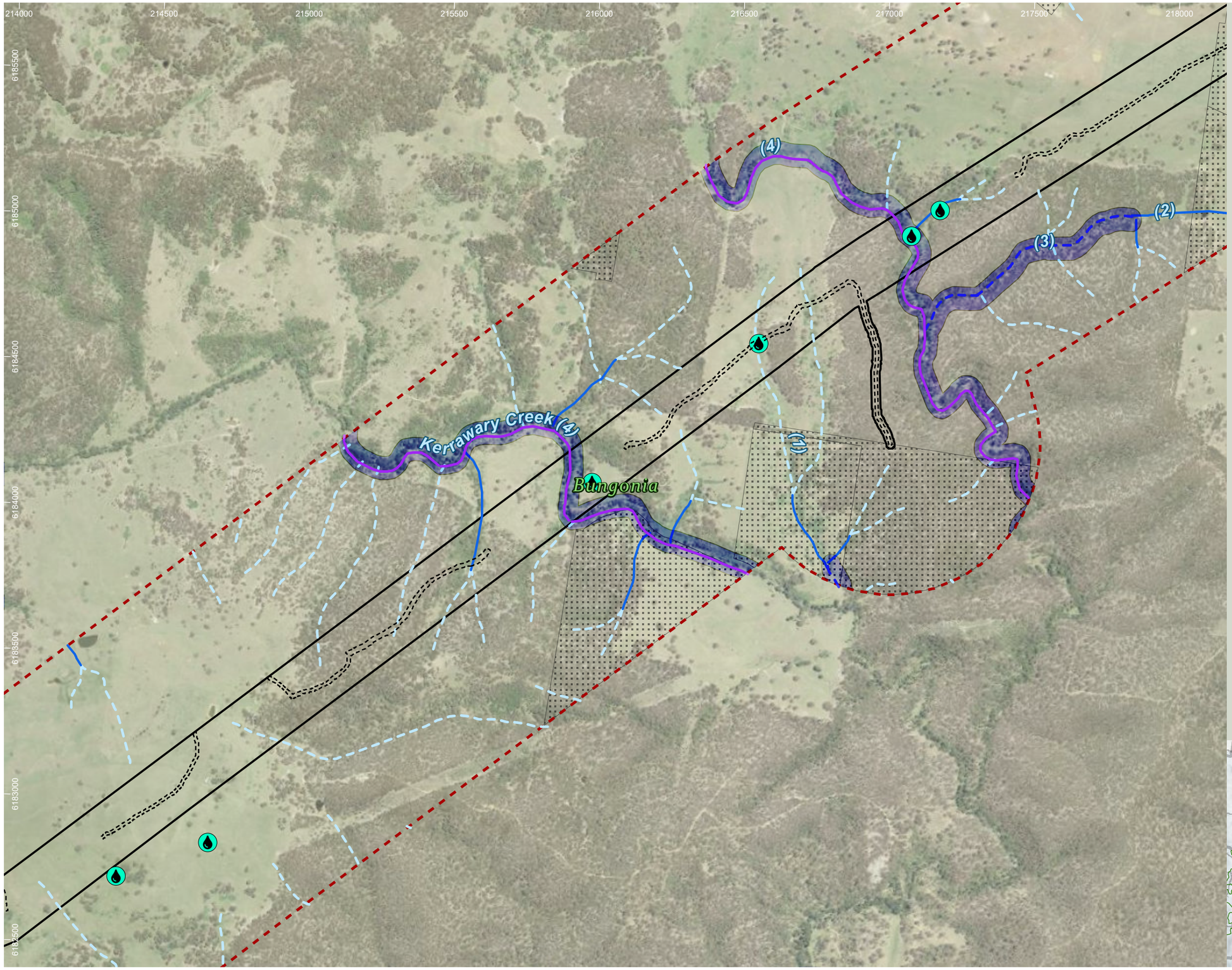


HumeLink project areas

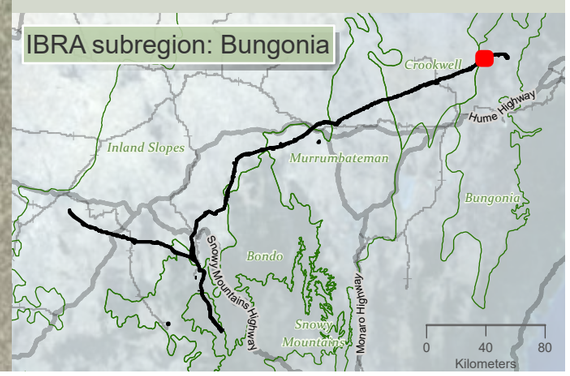
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (6)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 102

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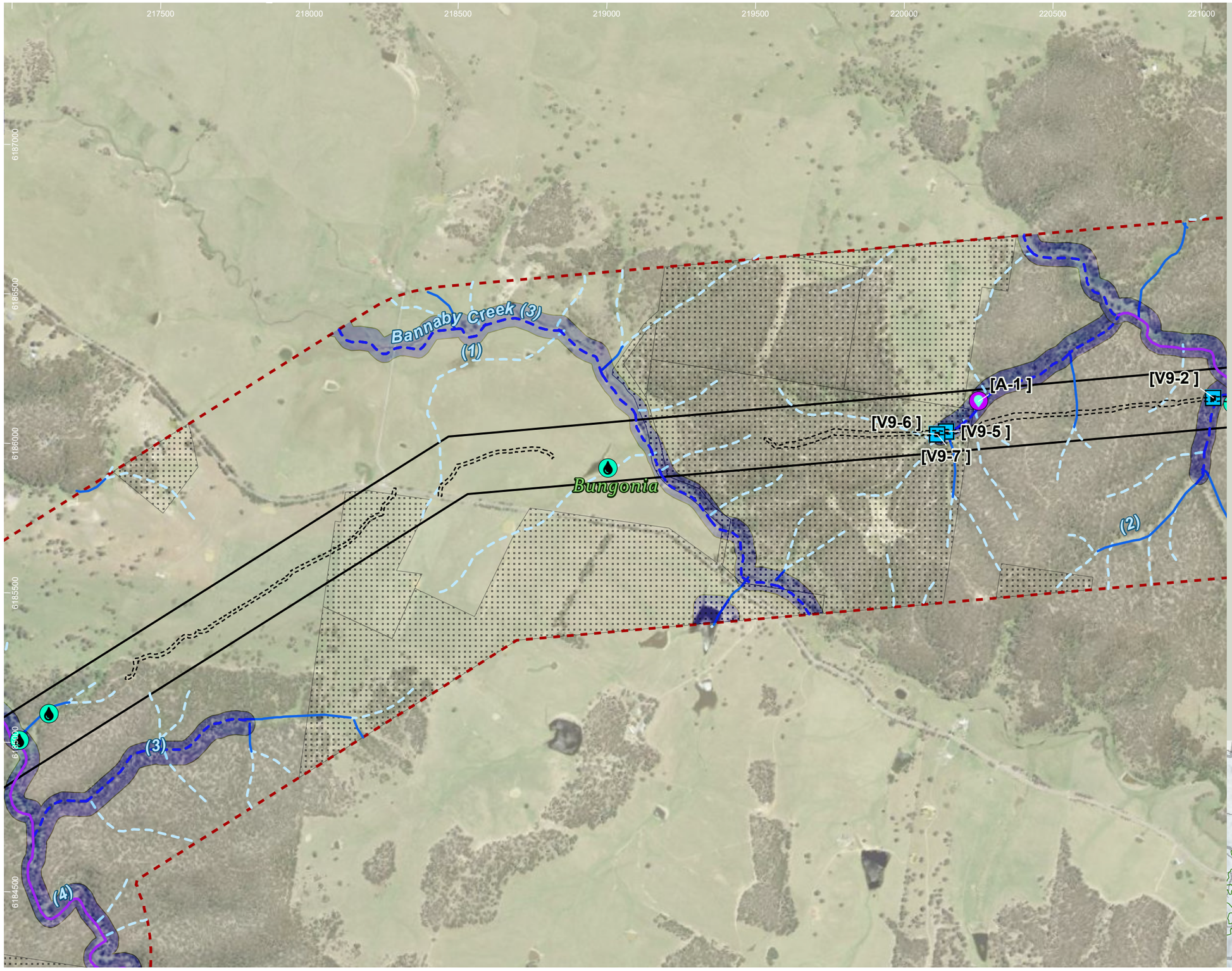


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

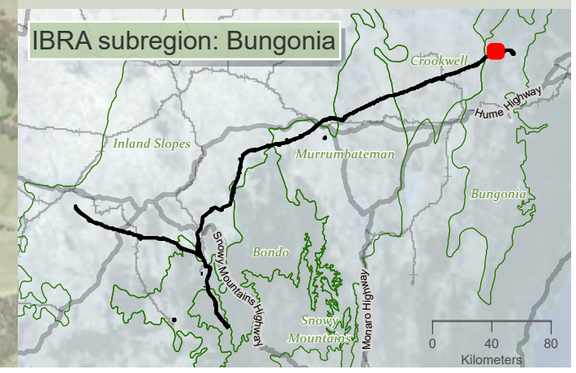
- Aquatic habitat assessment - Niche, 2022 (5)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Additional aquatic desktop assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 103

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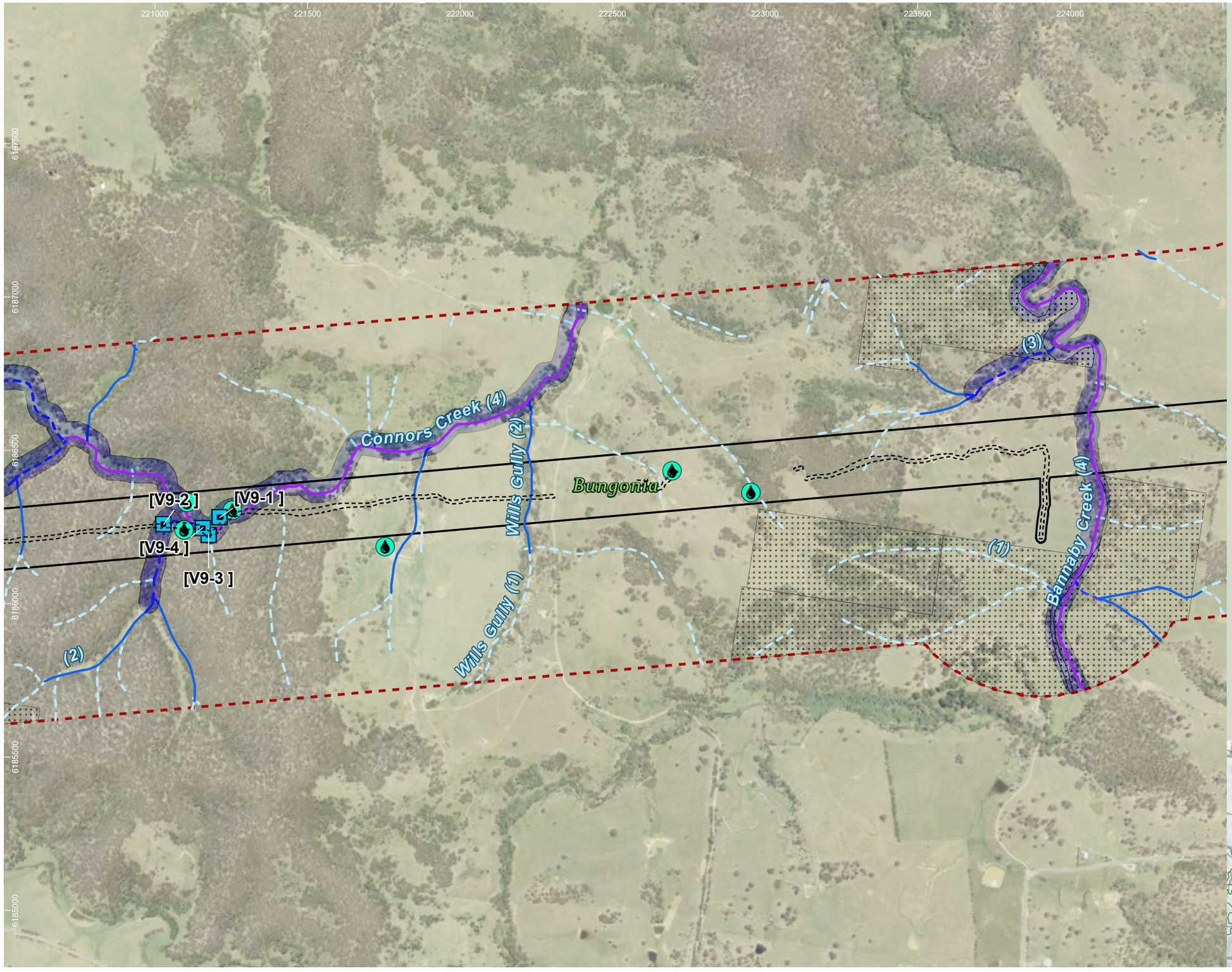


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

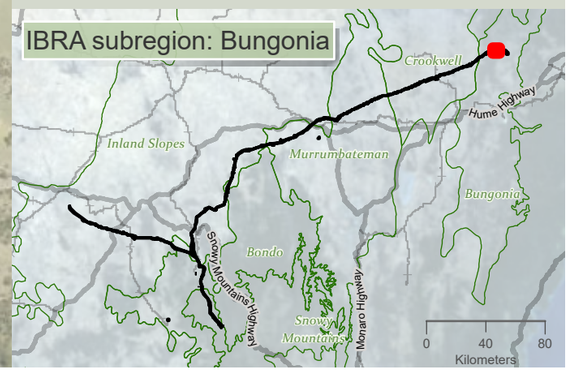
- Aquatic habitat assessment - Niche, 2022 (6)

Desktop aquatic assessment sites

- Desktop aquatic assessment sites
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 104

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

224500 225000 225500 226000 226500 227000 227500

6188000 6187500 6187000 6186500 6186000 6185500

Bannaby Creek

(1) (2) (3) (4) (4)

Bungonia

HumeLink project areas

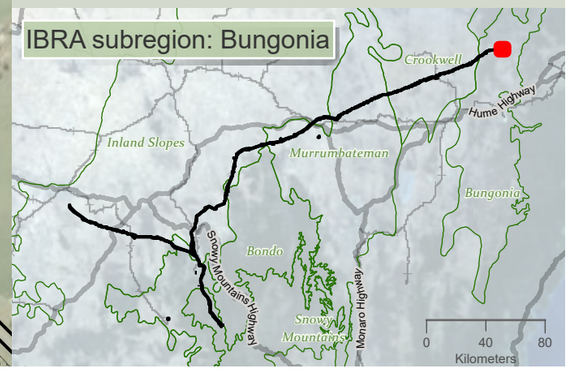
- Project footprint
- Landscape assessment area
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (3)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3
- 4



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

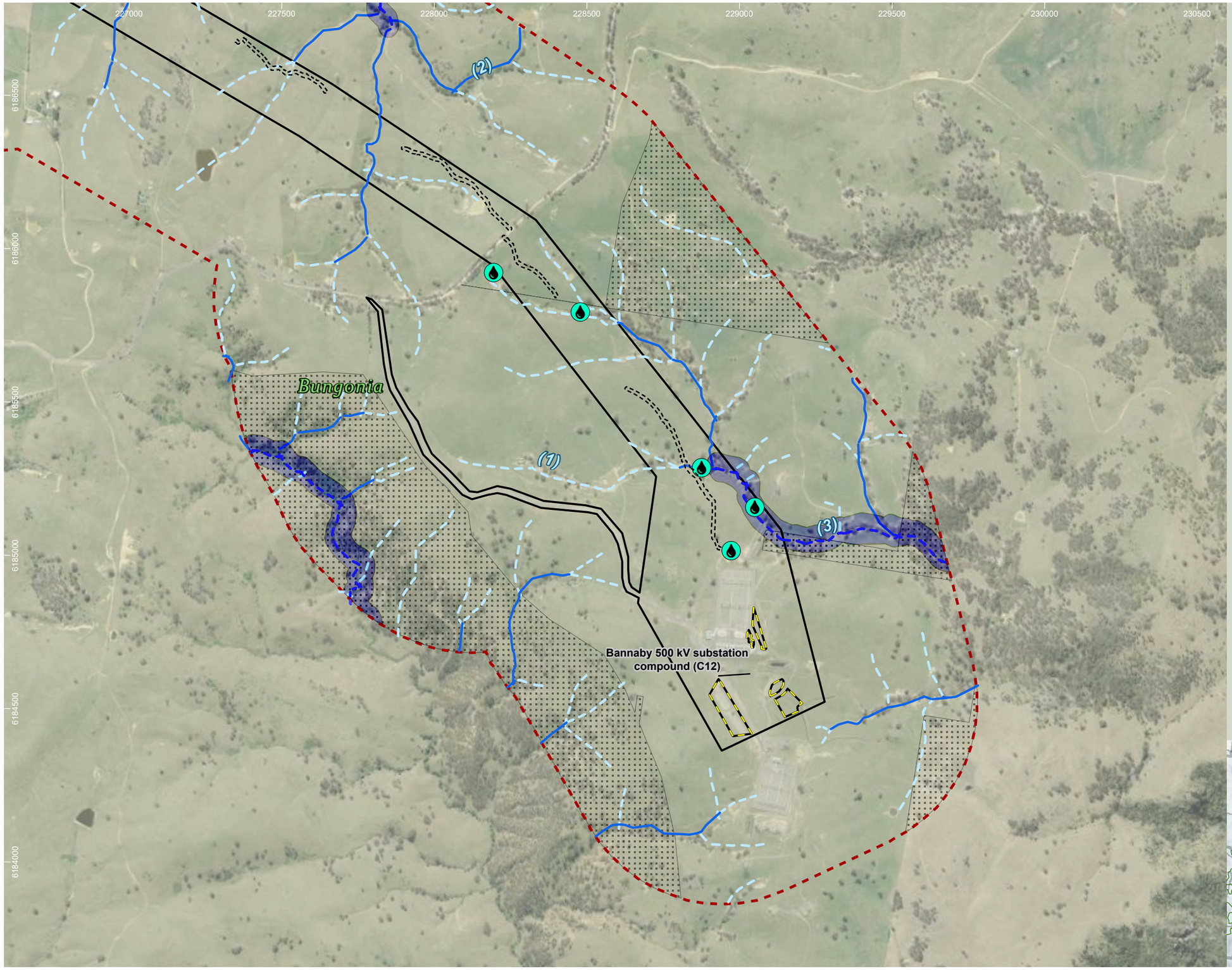
Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 105

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MathewZajeczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx



HumeLink project areas

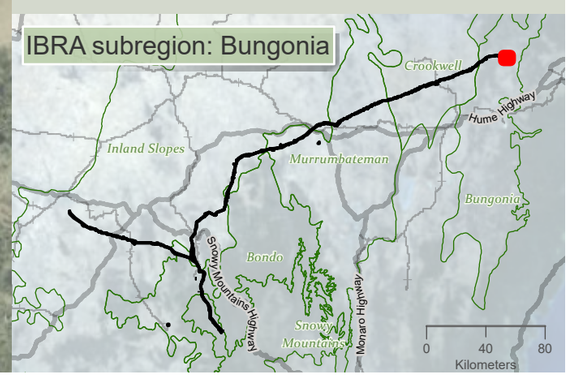
- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access
- Potential indicative access track

Aquatic habitat assessment - Niche, 2022

- Aquatic habitat assessment - Niche, 2022 (5)
- Key fish habitat (DPI)

Strahler stream order (offset from centreline)

- 1
- 2
- 3



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Aquatic habitats

HumeLink BDAR

Figure 10-1 map reference 106

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski; Last updated: 28/07/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_v2_figures Part 2.aprx

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

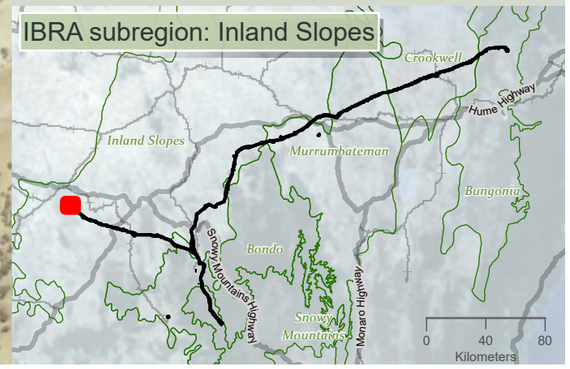
Hydrography

- Waterbody

Transport

Road

- Minor road



0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 1

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Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

-9500 -9000 -8500 -8000 -7500 -7000 -6500 -6000 -5500

6087500 6087000 6086500 6086000 6085500 6085000

Gregadoo East Road

Elizabeth Avenue

Angels Lane

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

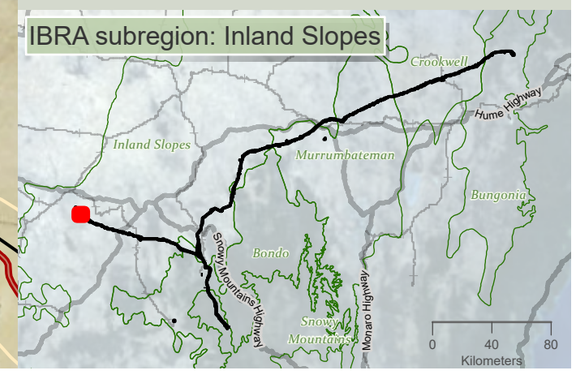
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

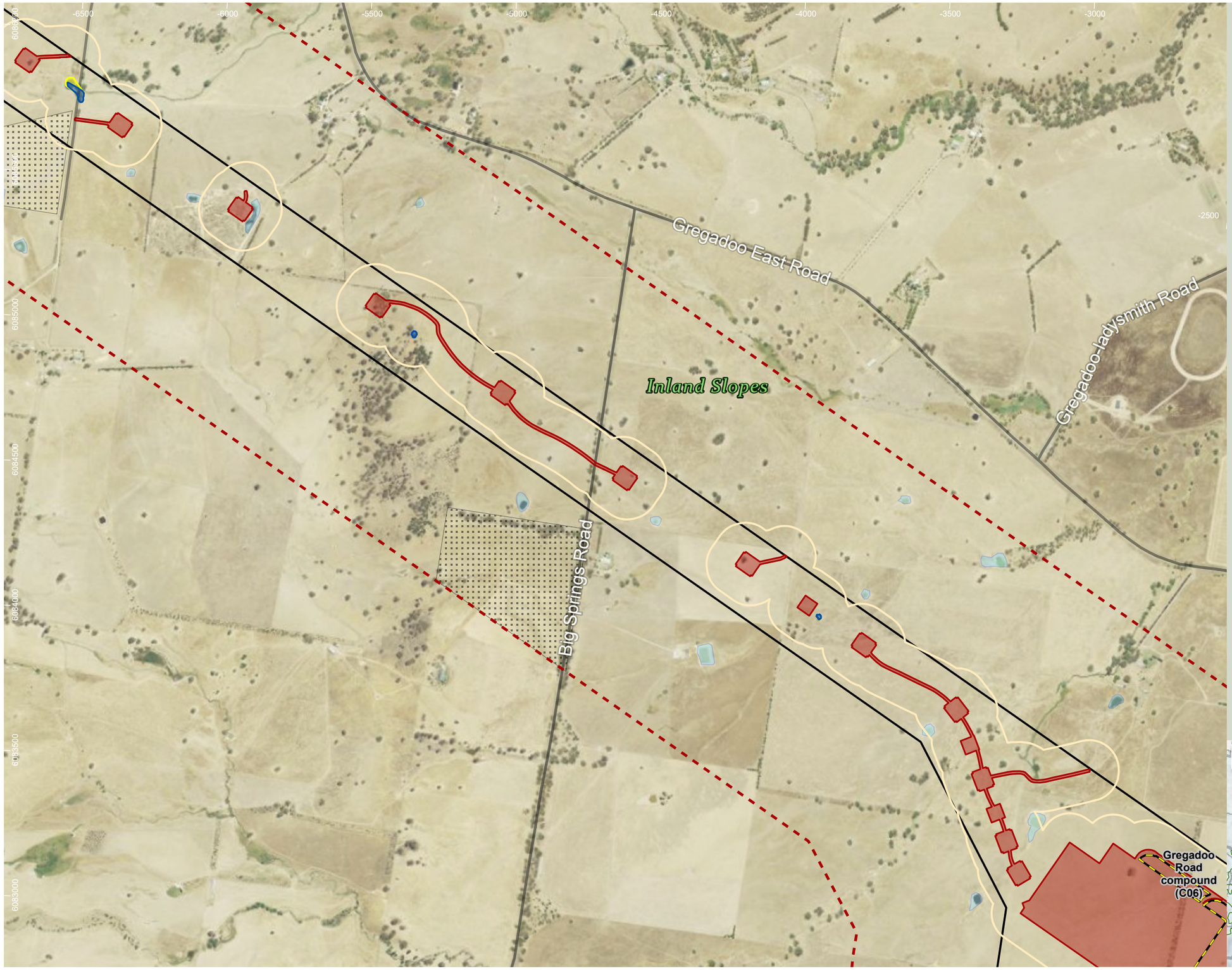
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 2

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDrive\Sync\FoldenNiche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

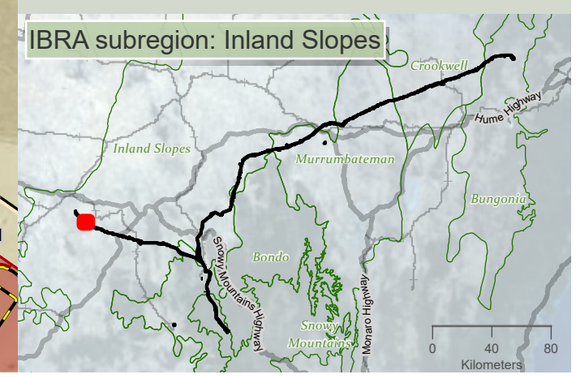
Hydrography

- Waterbody

Transport

Road

- Minor road



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

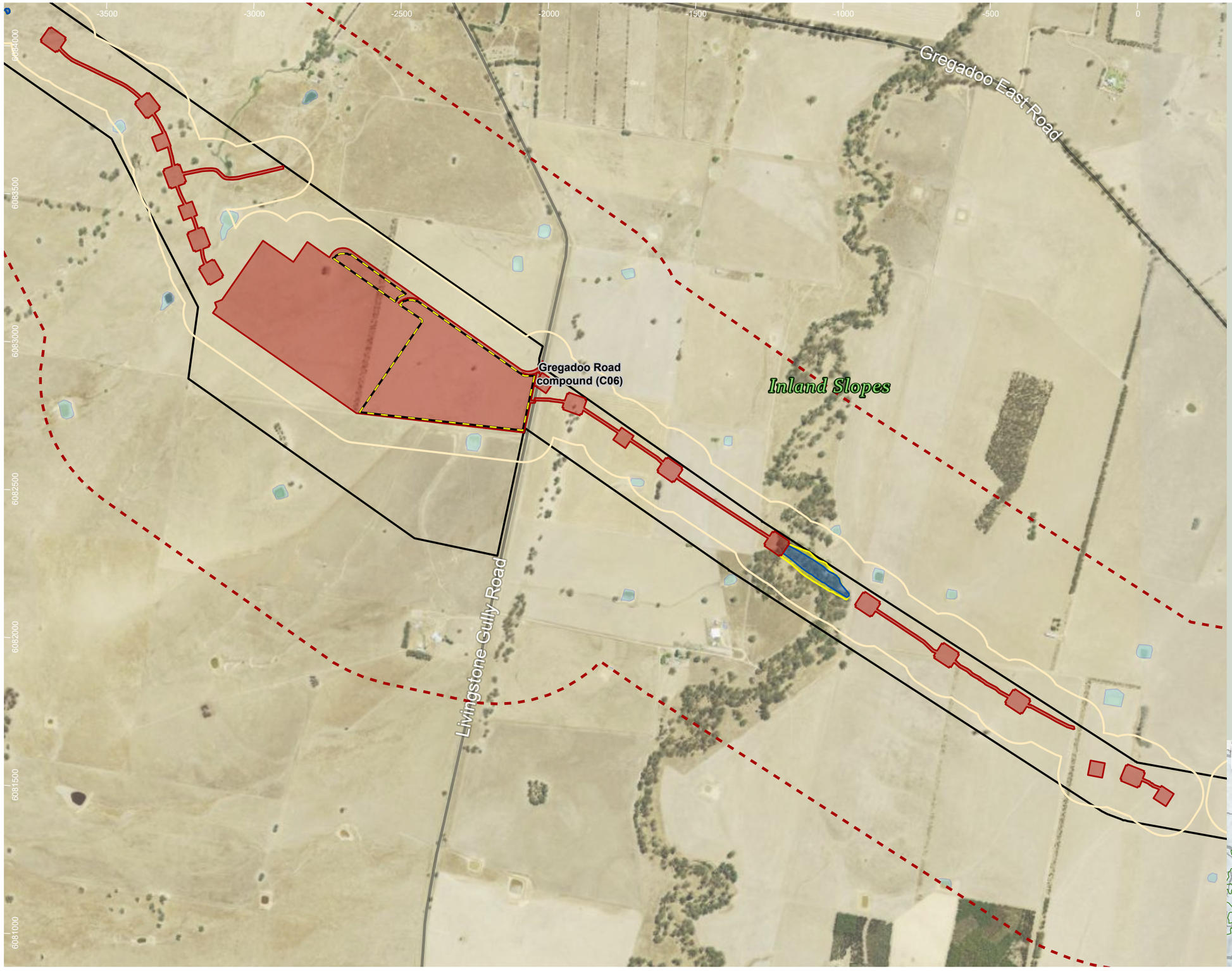
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 3

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

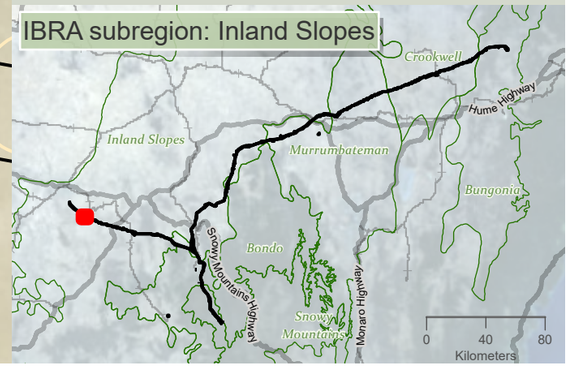
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

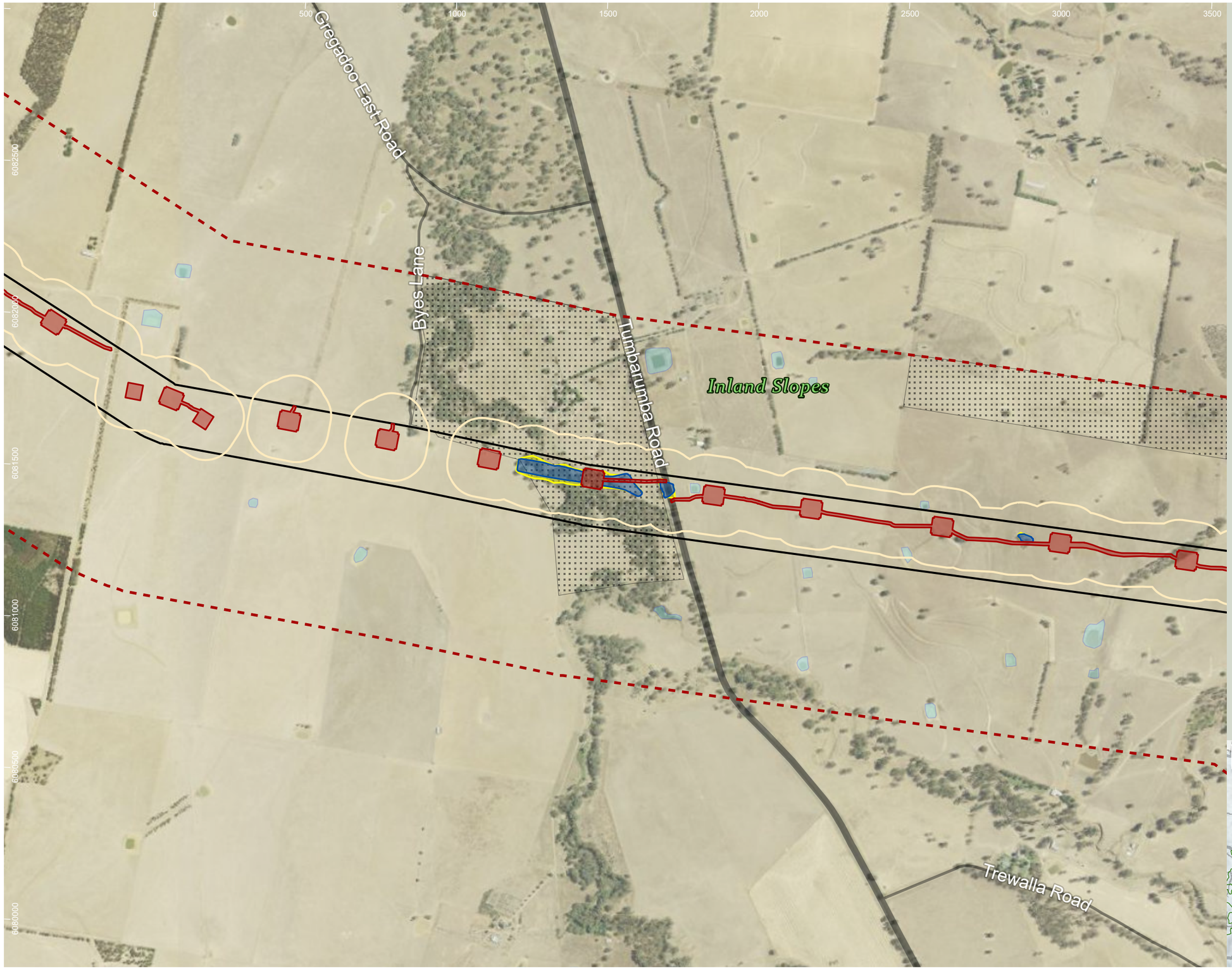
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 4

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

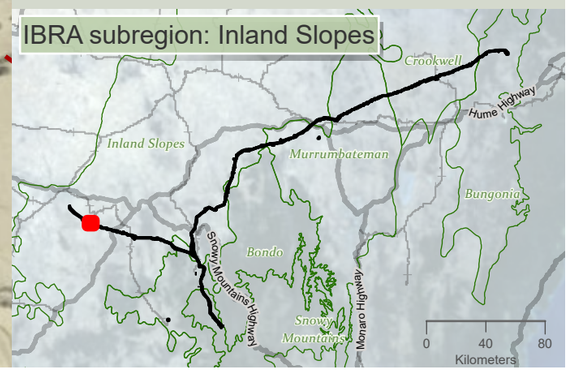
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

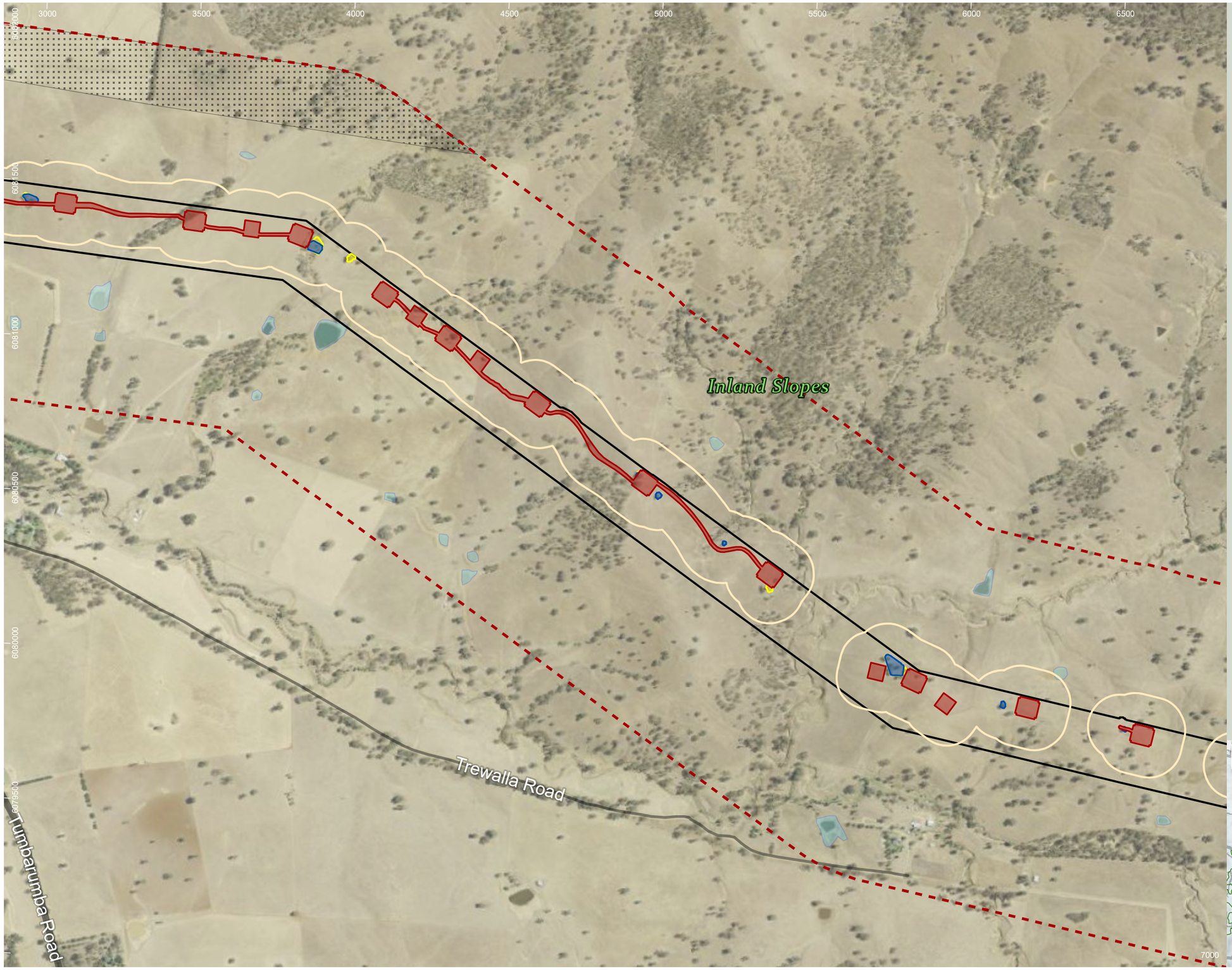
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 5

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

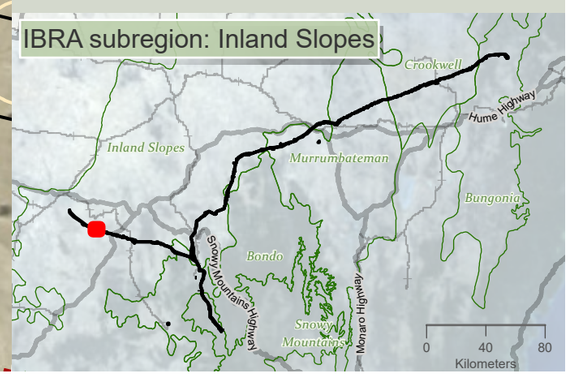
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 6

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSync\Folder\Niche\6699_Humelink_BDAR_Stage 2 Part A.aprx
Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx - Confidential

6500 7000 7500 8000 8500 9000 9500 10000

6081000 6080500 6080000 6079500 6079000 6078500 6078000

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

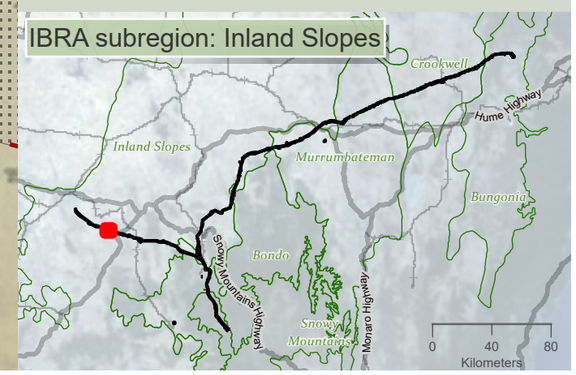
- Waterbody

Transport

Road

- Minor road

IBRA subregion: Inland Slopes



0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

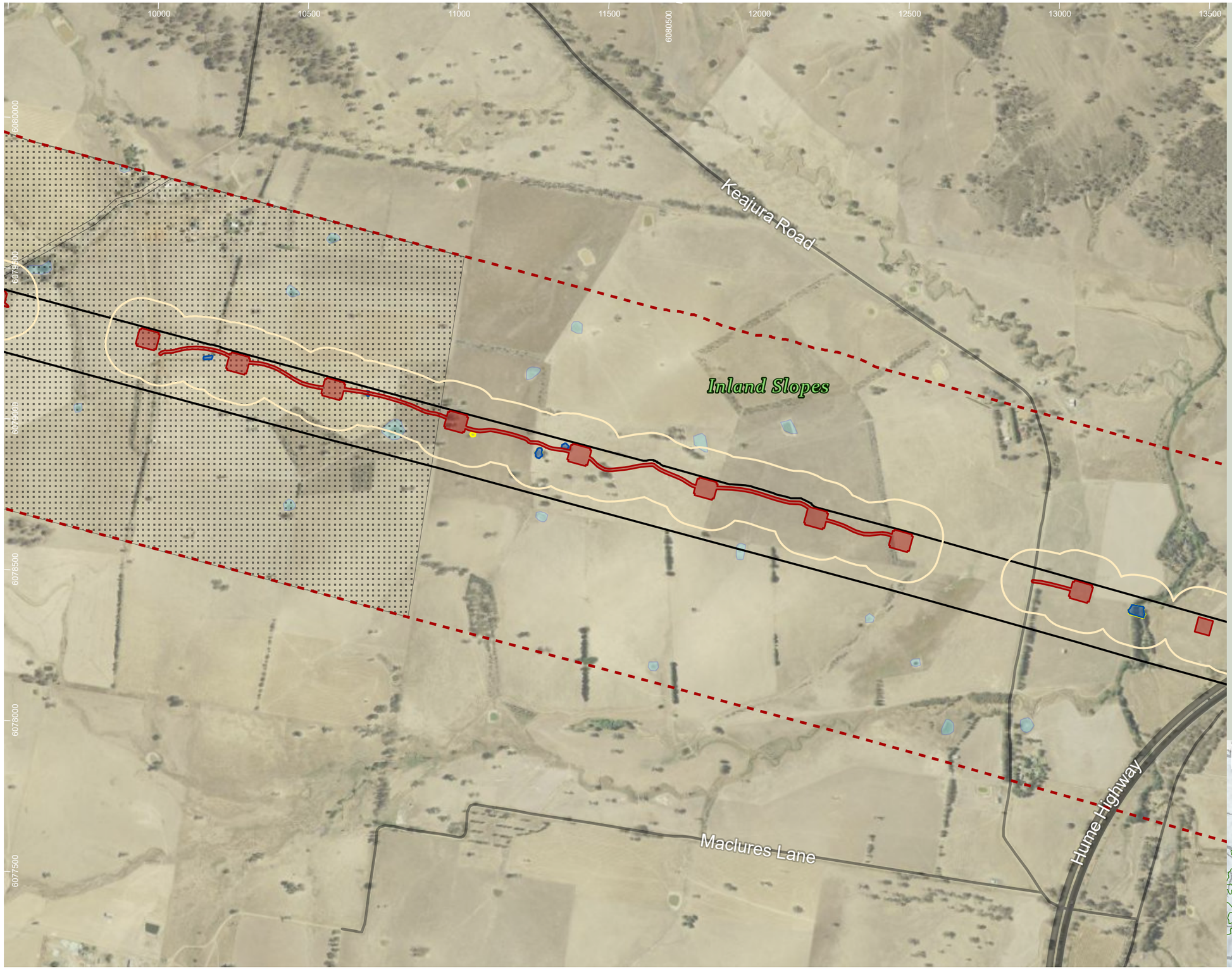
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 7

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

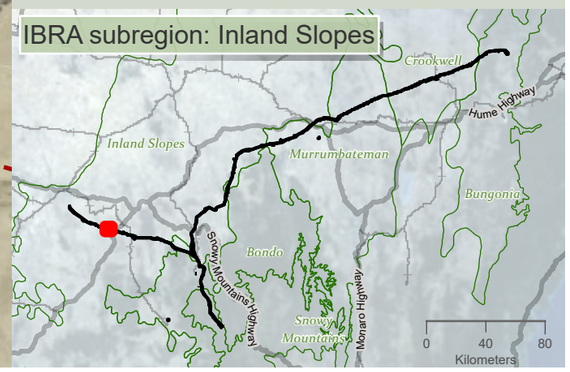
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 8

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Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6899 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

13000 13500 14000 14500 15000 15500 16000 16500 17000

6079500 6079000 6078500 6078000 6077500 6077000 6076500

Keajura Road

Hume Highway

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

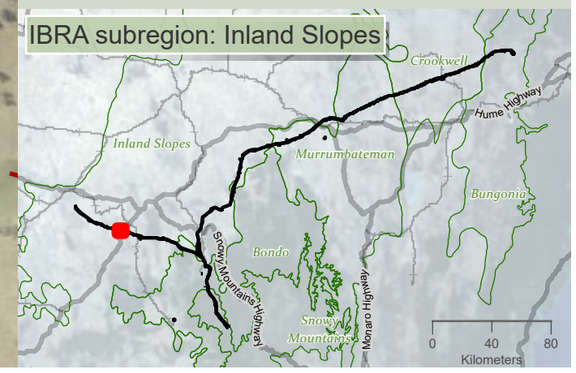
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 9

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16500 17000 17500 18000 18500 6079000 19000 19500 20000

6078500 6078000 6077500 6077000 6076500 6076000

Wilds Road

Comaum Road

Inland Slopes

20500

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

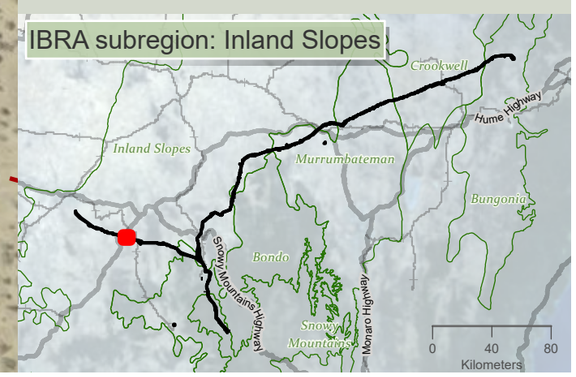
- Waterbody

Transport

Road

- Minor road

IBRA subregion: Inland Slopes



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

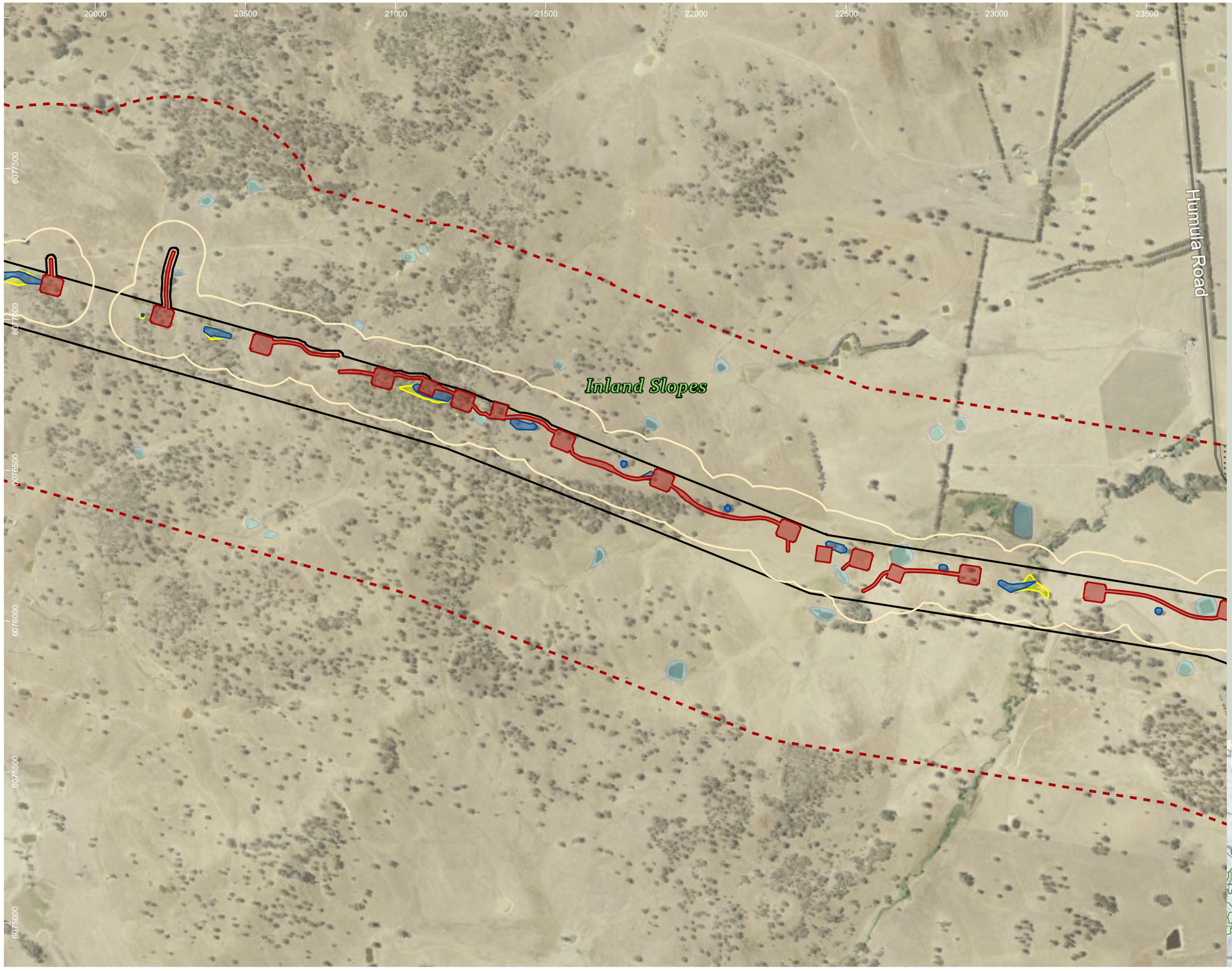
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 10

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

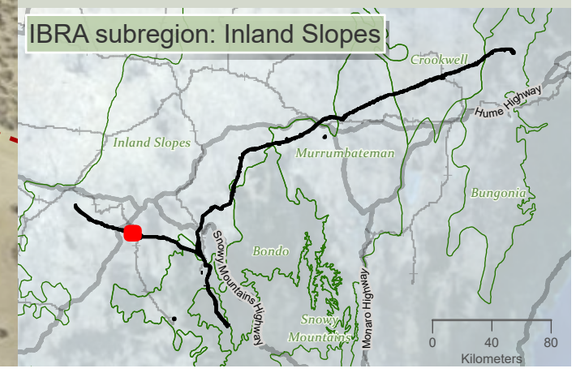
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 11

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23000 23500 24000 24500 25000 25500 26000 26500 27000

6076500 6076000 6075500 6075000 6074500 6074000 6073500

Westbrook Road

Humula Road

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

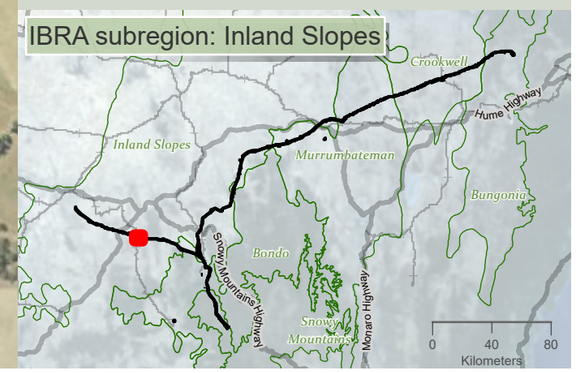
Hydrography

- Waterbody

Transport

Road

- Minor road
- Rail



0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 12

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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27000
27500
28000
28500
29000
29500
30000
6076500
6075000
6075500
6075000
6074500
6074000
Westbrook Road
Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

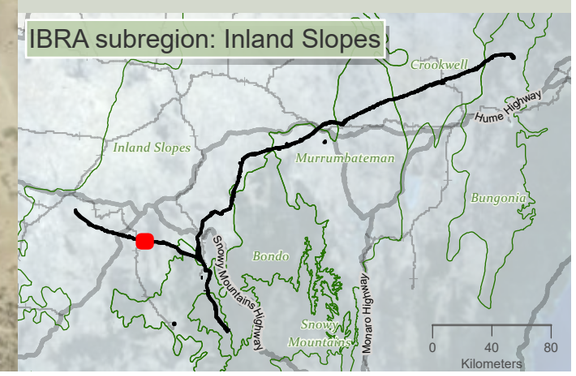
Hydrography

- Waterbody

Transport

Road

- Minor road



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 13

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

30500 31000 31500 32000 32500 33000 33500 34000

6076500 6076000 6075500 6075000 6074500 6074000

Inland Slopes

HumeLink project areas

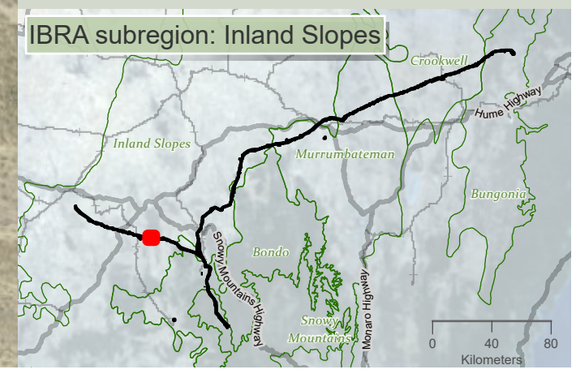
- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

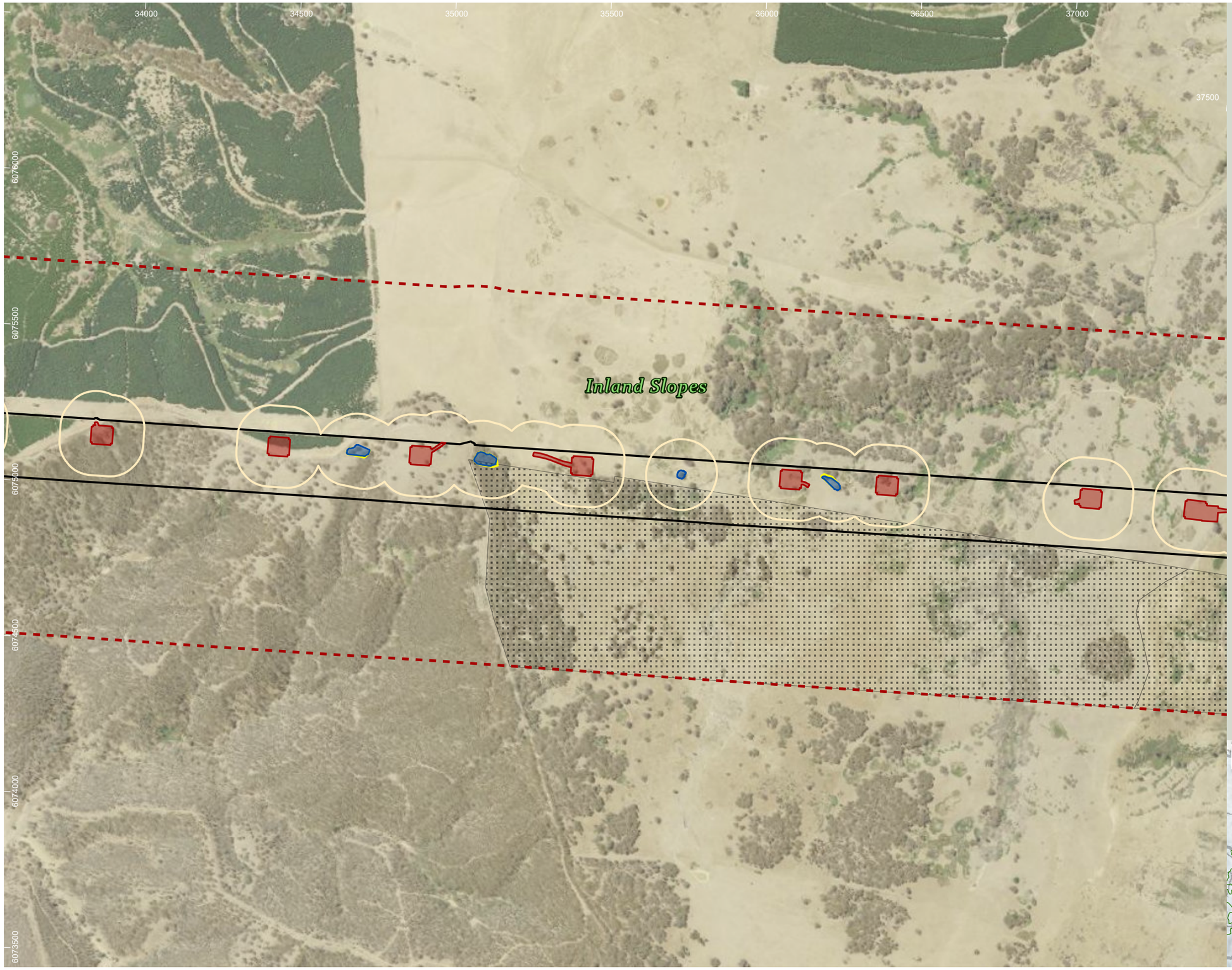
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 14

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

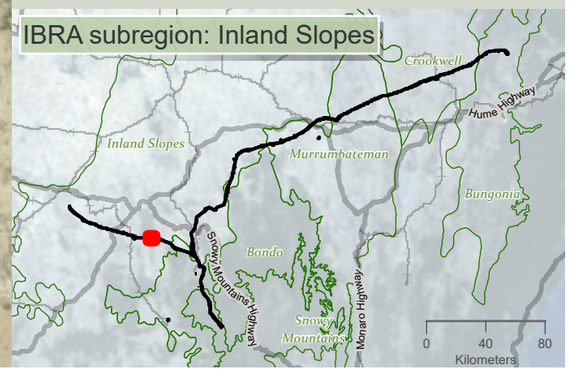


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDrive\SyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 15

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

37500
38000
38500
39000
39500
40000
40500
6076500
6076000
6075500
6075000
6074500
6074000
6073500
Lyerslie Road
Yaven Creek Road
Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

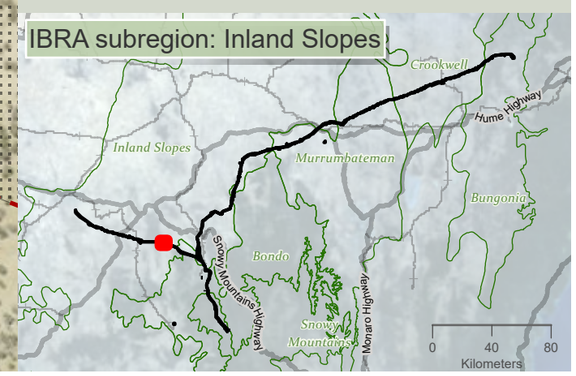
- Waterbody

Transport

Road

- Minor road

IBRA subregion: Inland Slopes



niche
Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

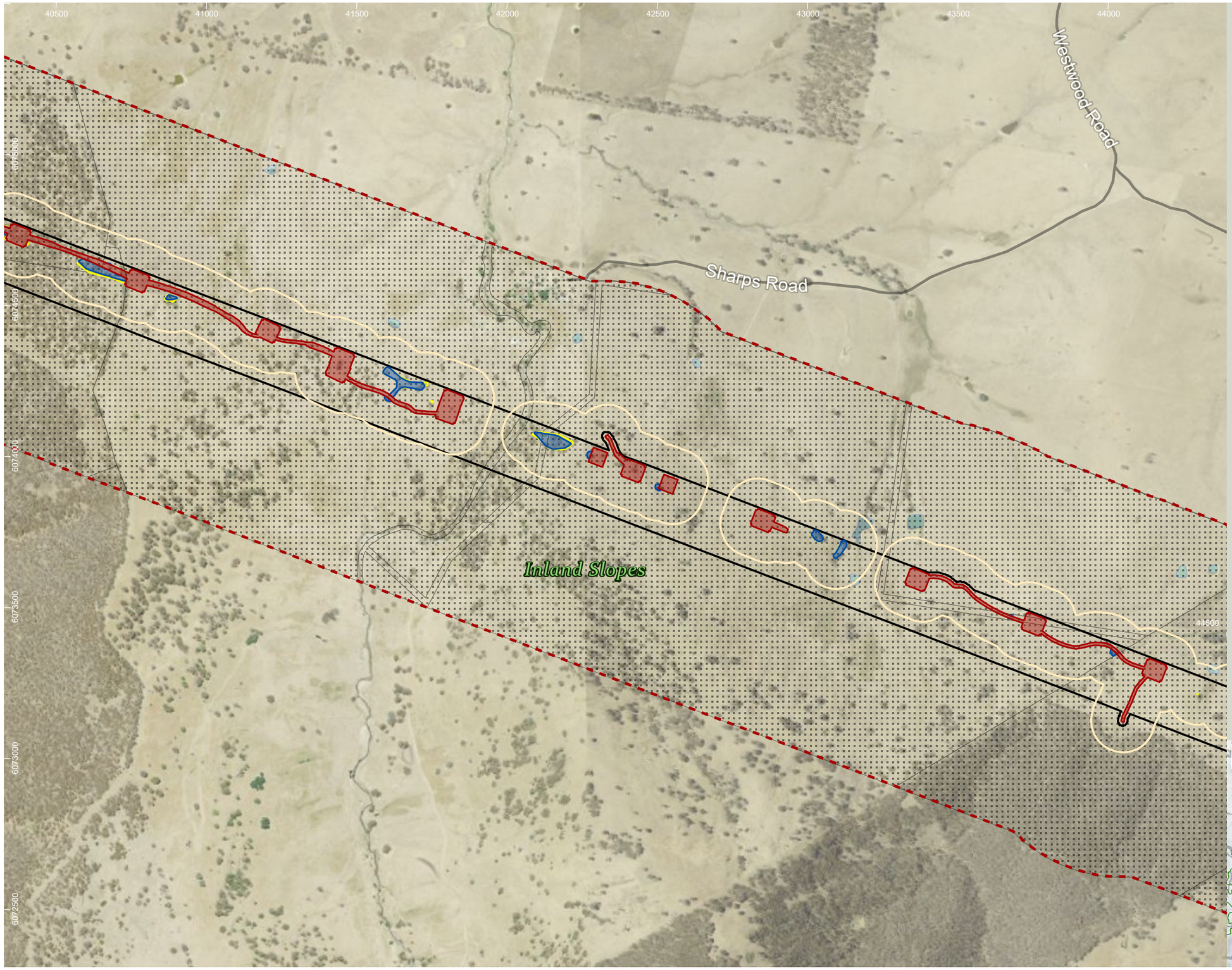
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 16

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MathewZajaczkowski; Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

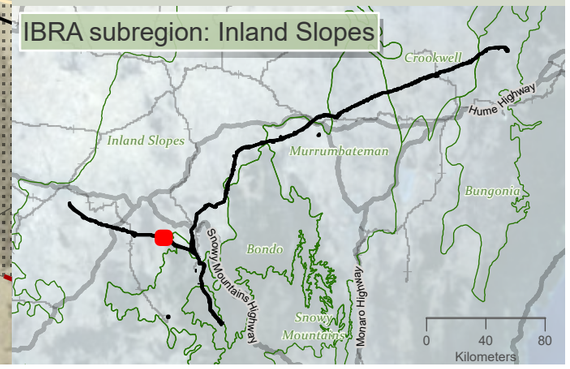
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 17

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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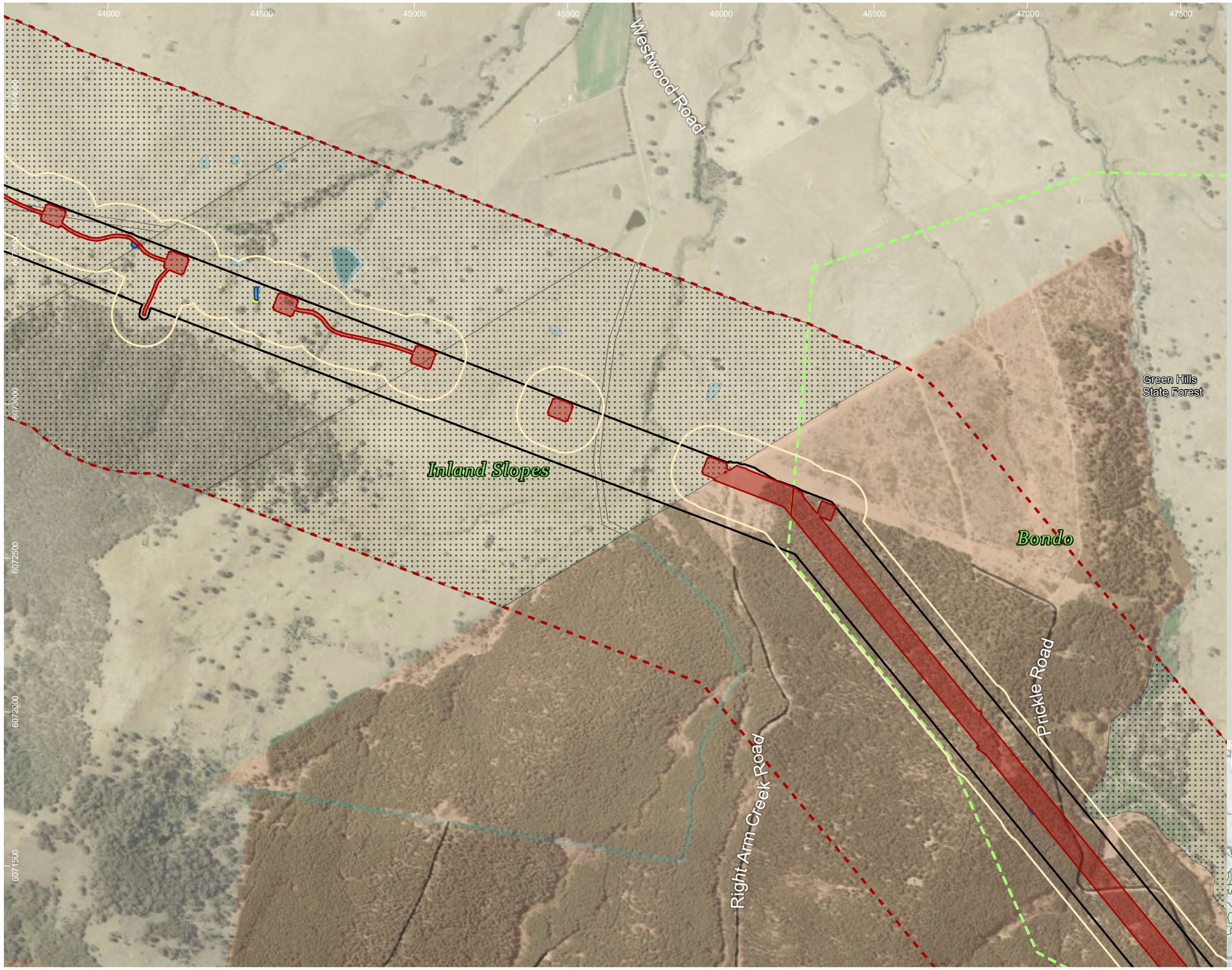


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

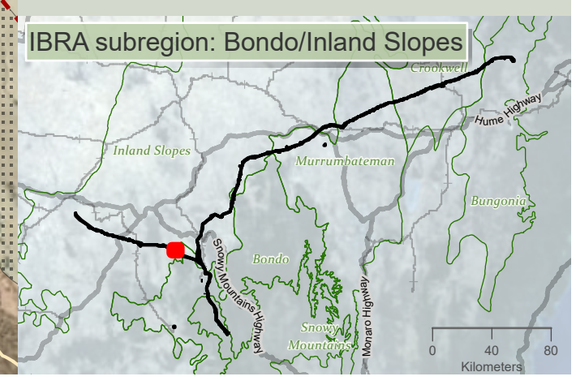
Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 18

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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46500 47000 47500 48000 48500 49000 49500 50000

6072000 6071500 6071000 6070500 6070000 6069500

Bondo

Back Nackil Creek Road

Prickle Road

Inland Slopes

Green Hills State Forest

Sharps Creek Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

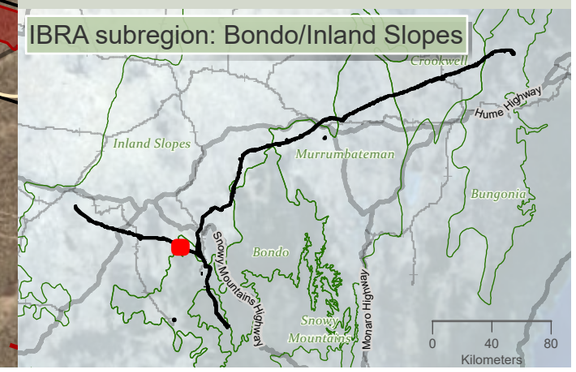
Road

- Minor road

Administrative and Property Boundaries

- State Forest

IBRA subregion: Bondo/Inland Slopes



Niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 19

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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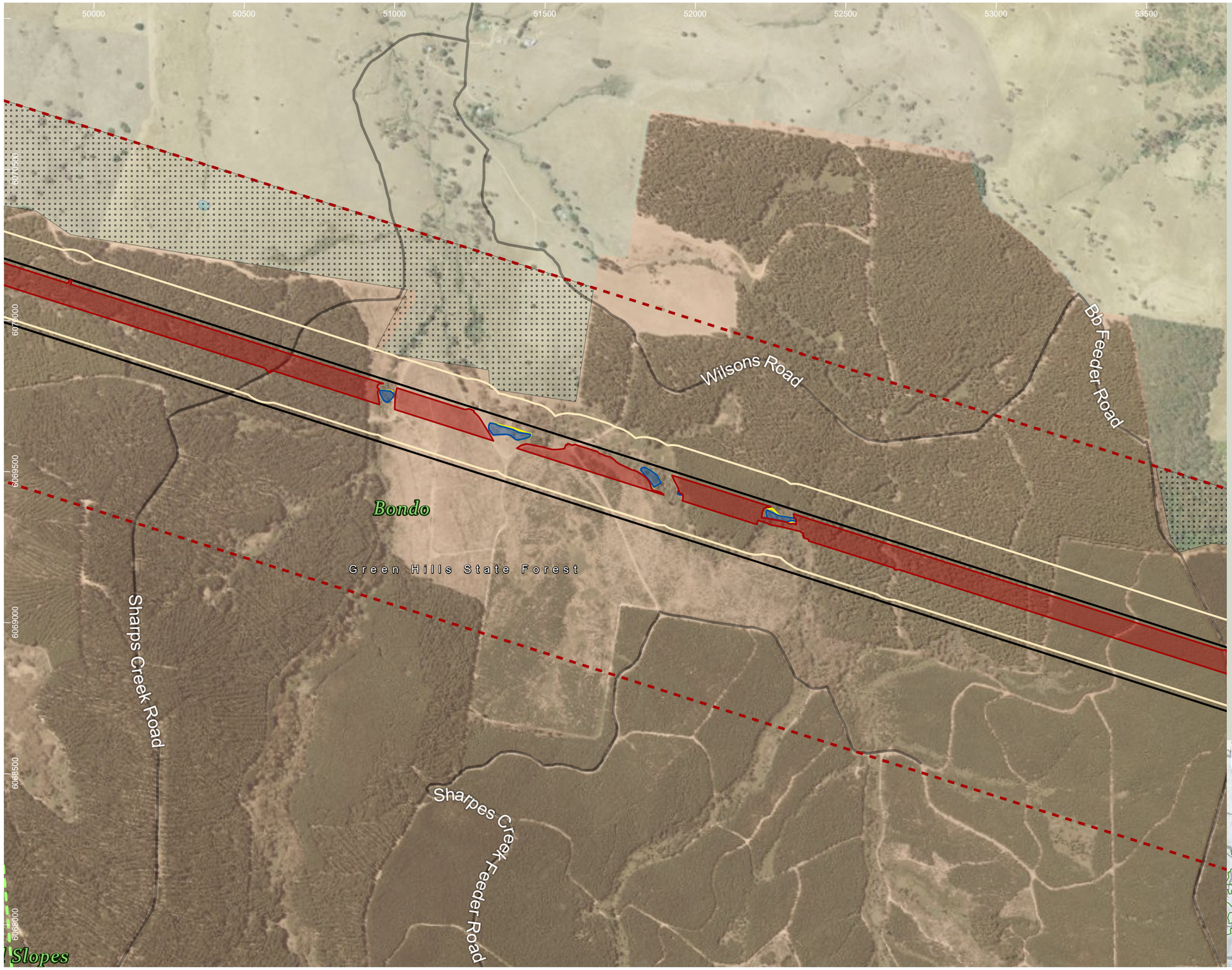


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

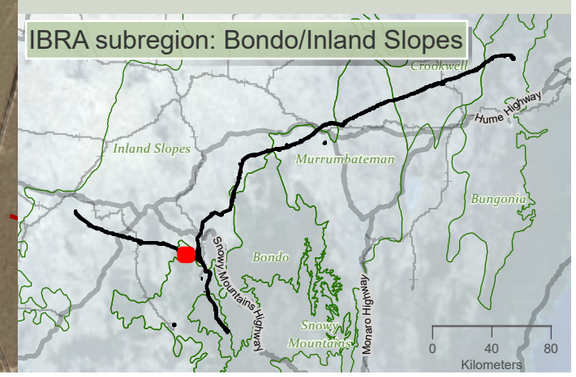
Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 20

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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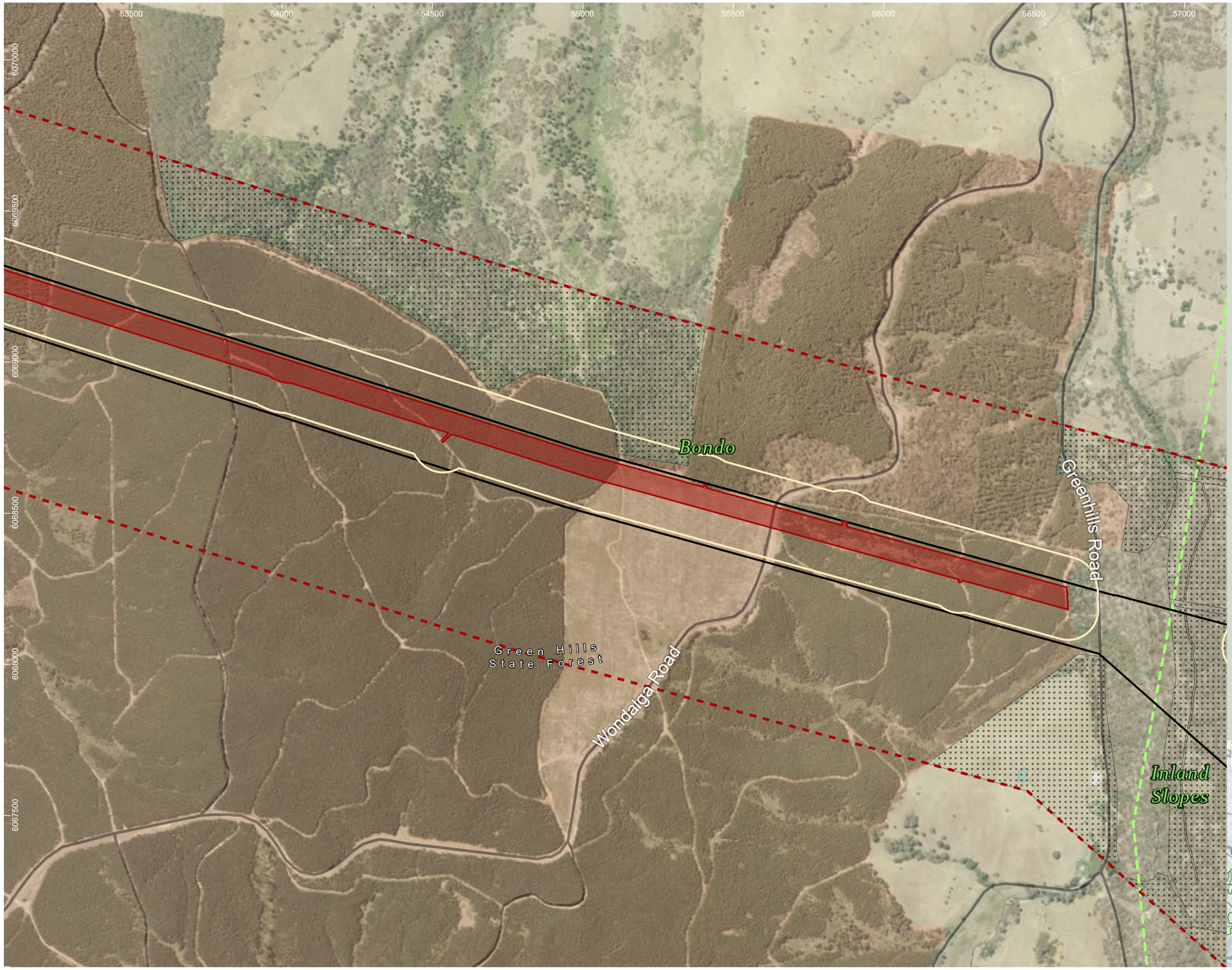


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Indirect impacts

Hydrography

- Waterbody

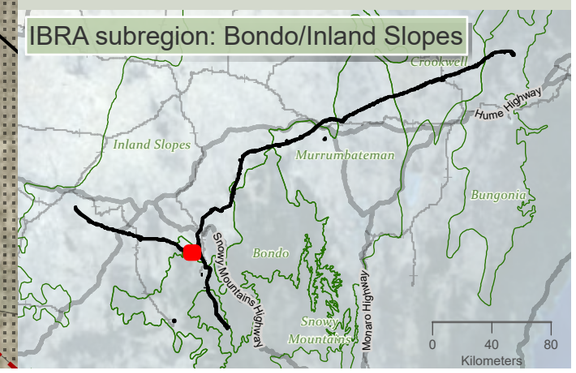
Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 21

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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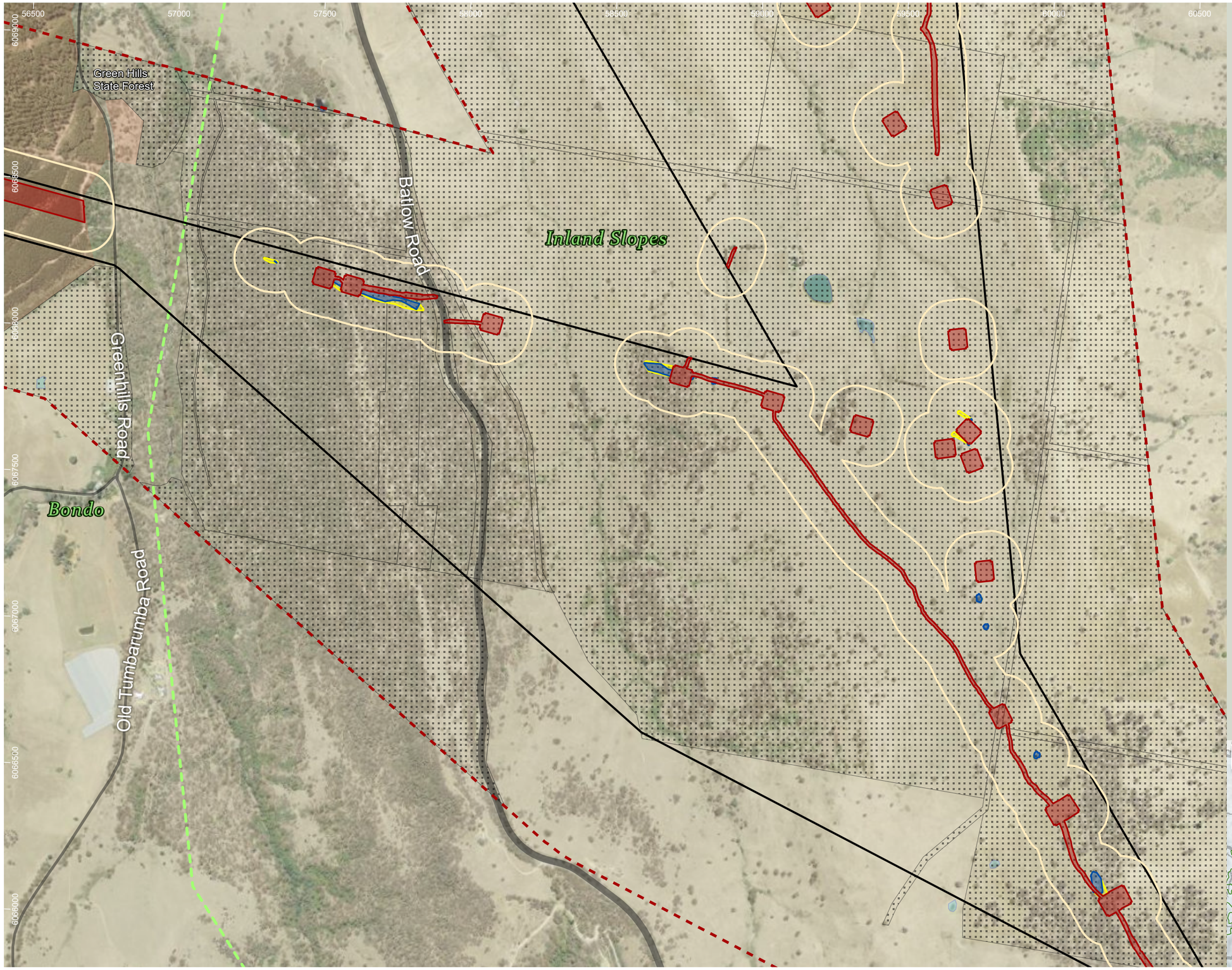


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

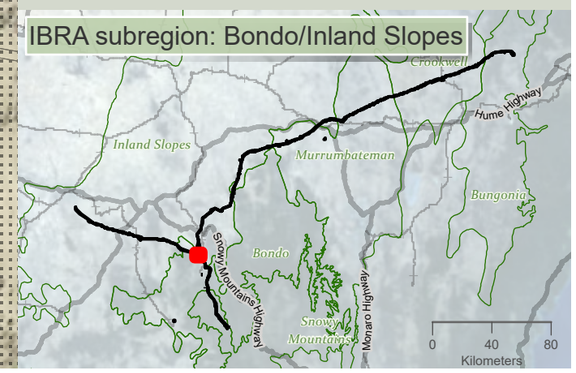
Transport

Road

- Major road
- Minor road

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

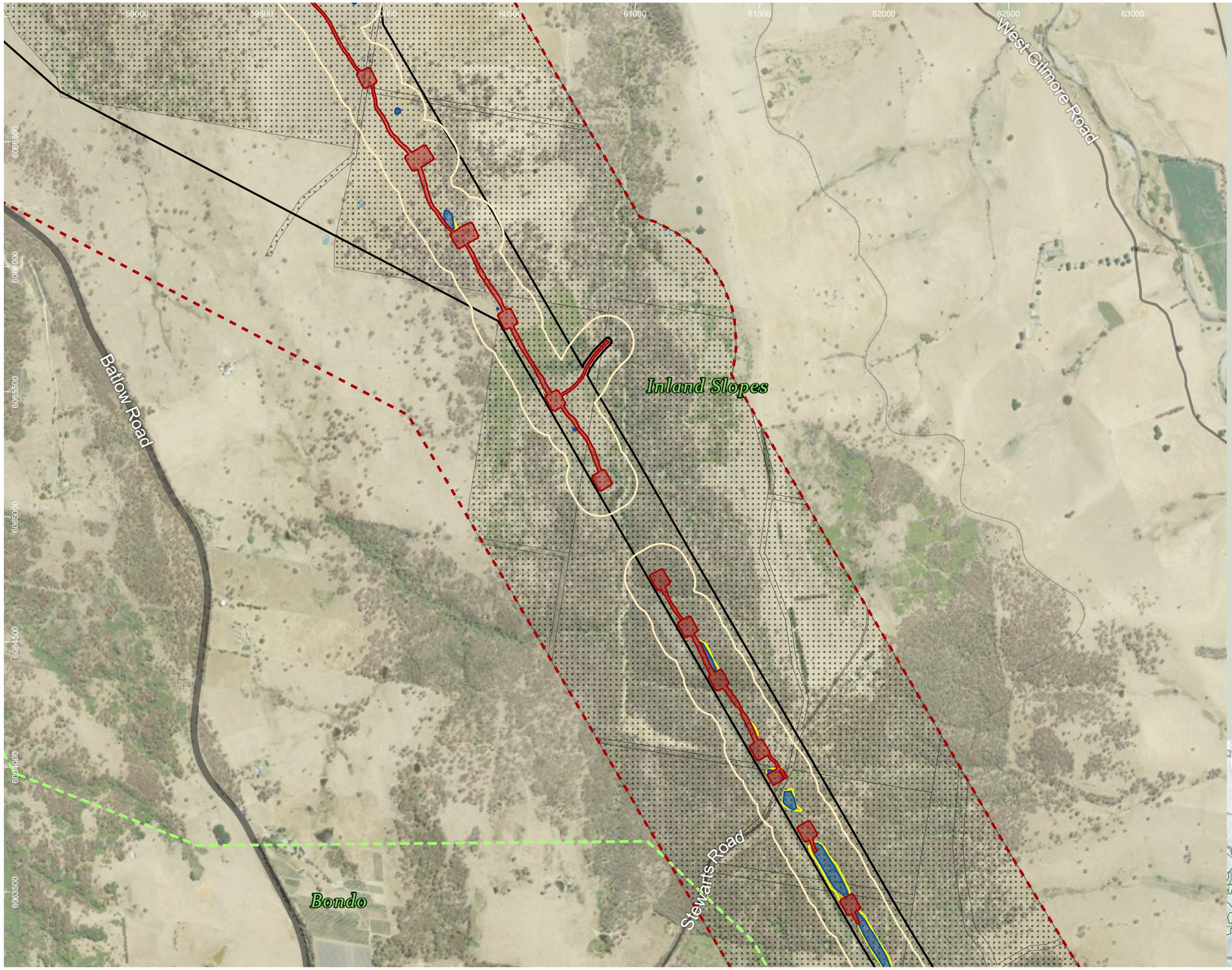
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 22

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

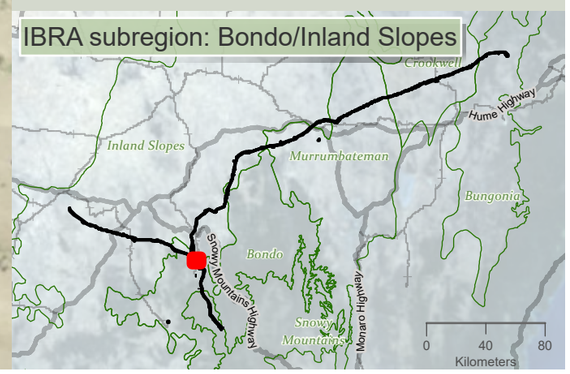
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road
- Rail



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

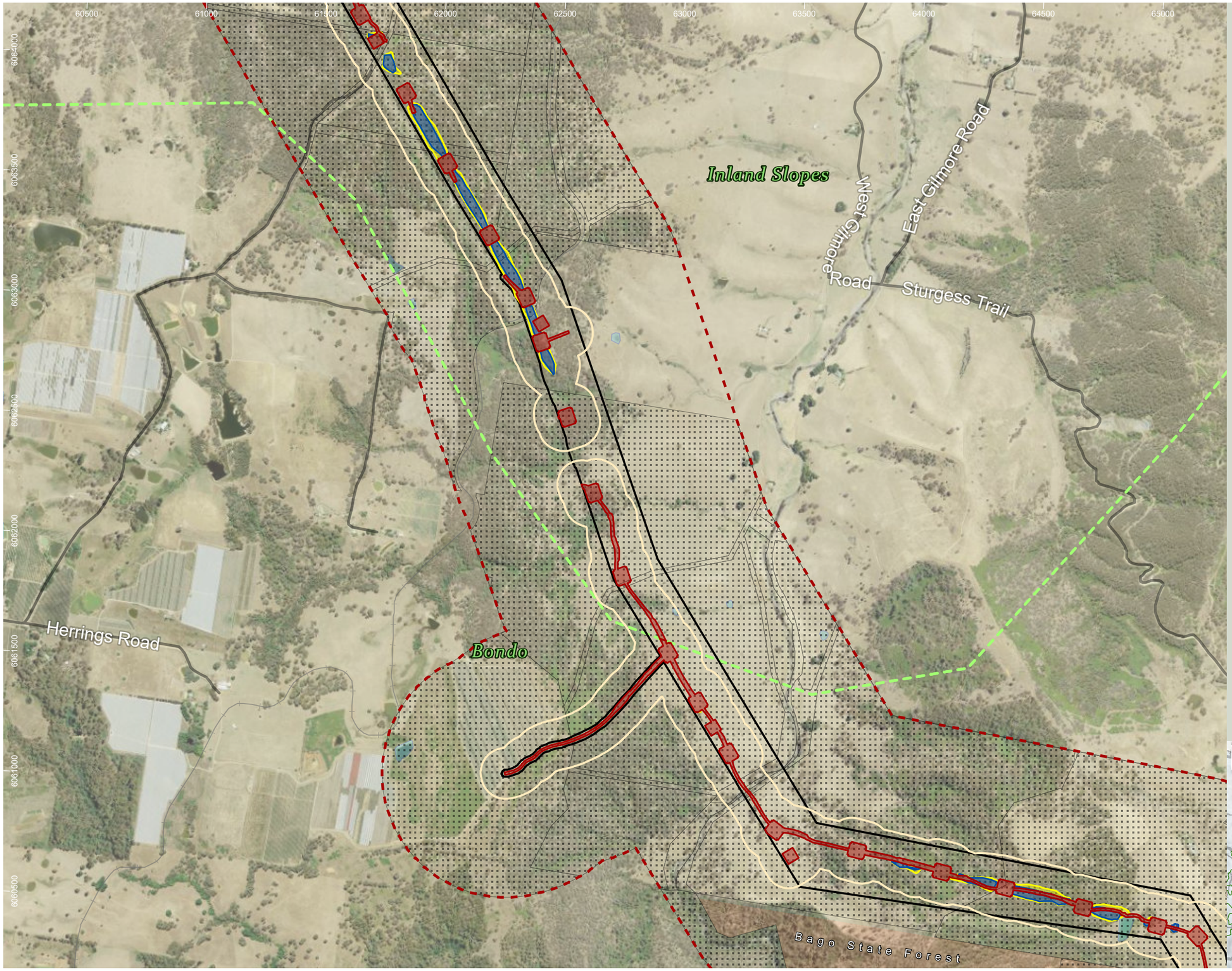
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 23

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski; Last updated: 28/07/2023; File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

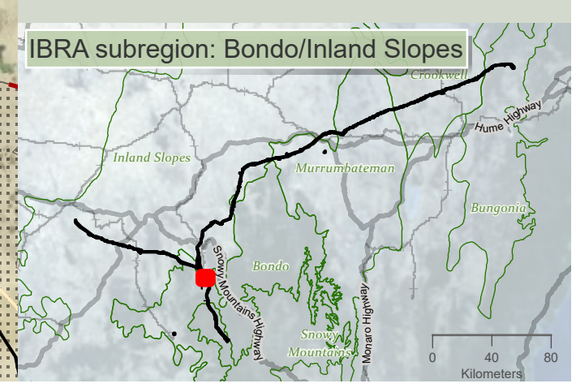
Transport

Road

- Minor road
- Rail

Administrative and Property Boundaries

- State Forest



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assess...\Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

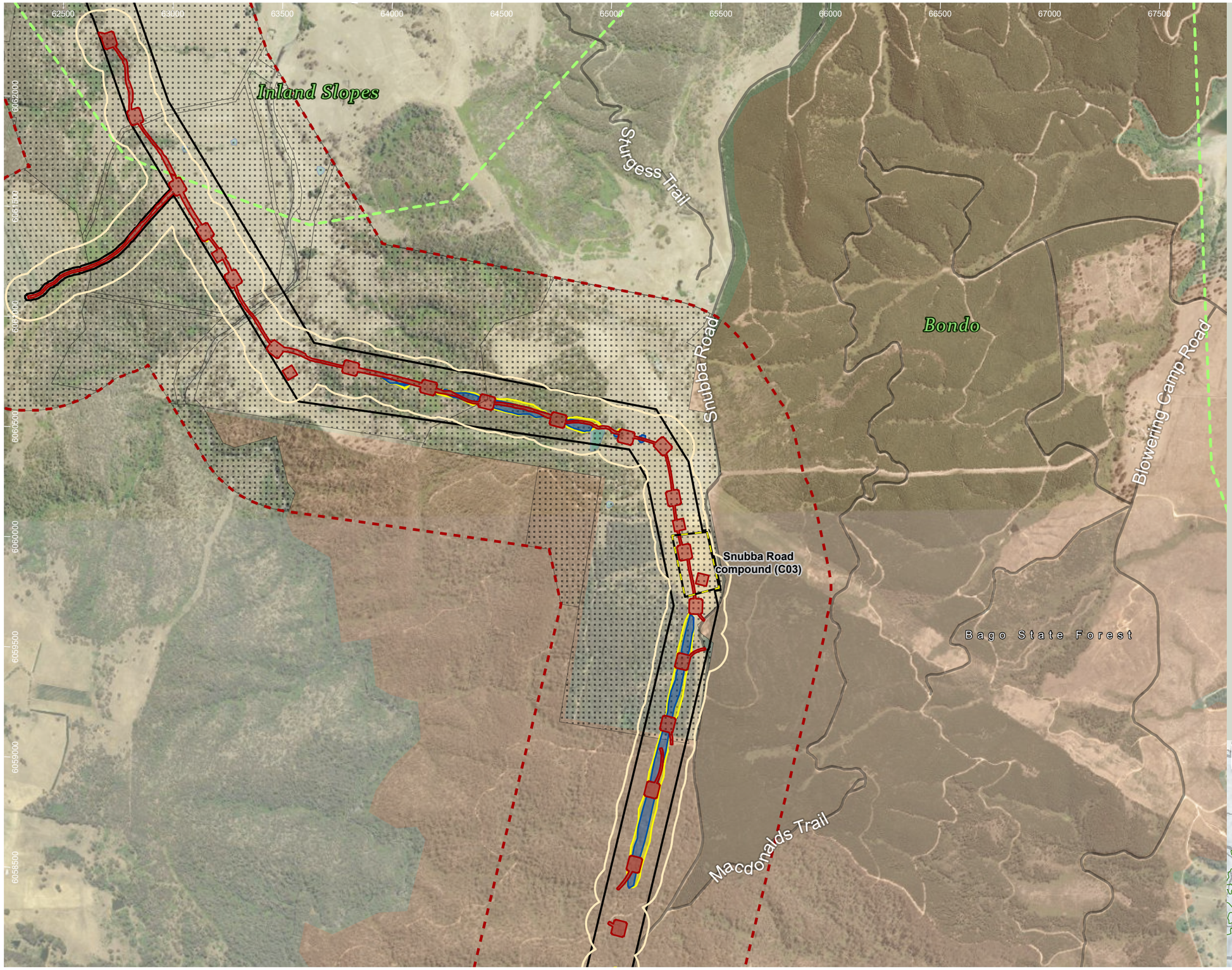
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 24

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

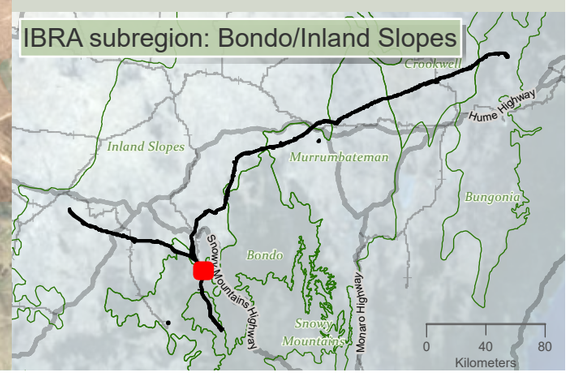
Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 25

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Hydrography

- Waterbody

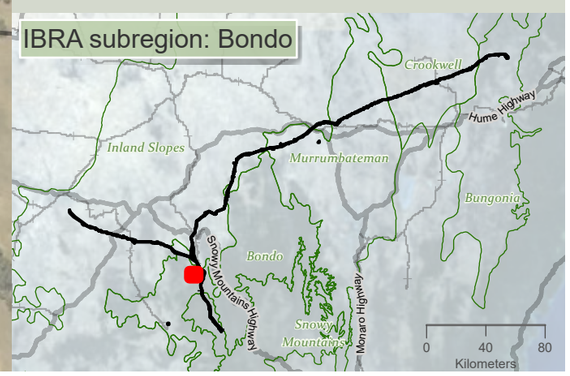
Transport

Road

- Major road
- Minor road
- Rail

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

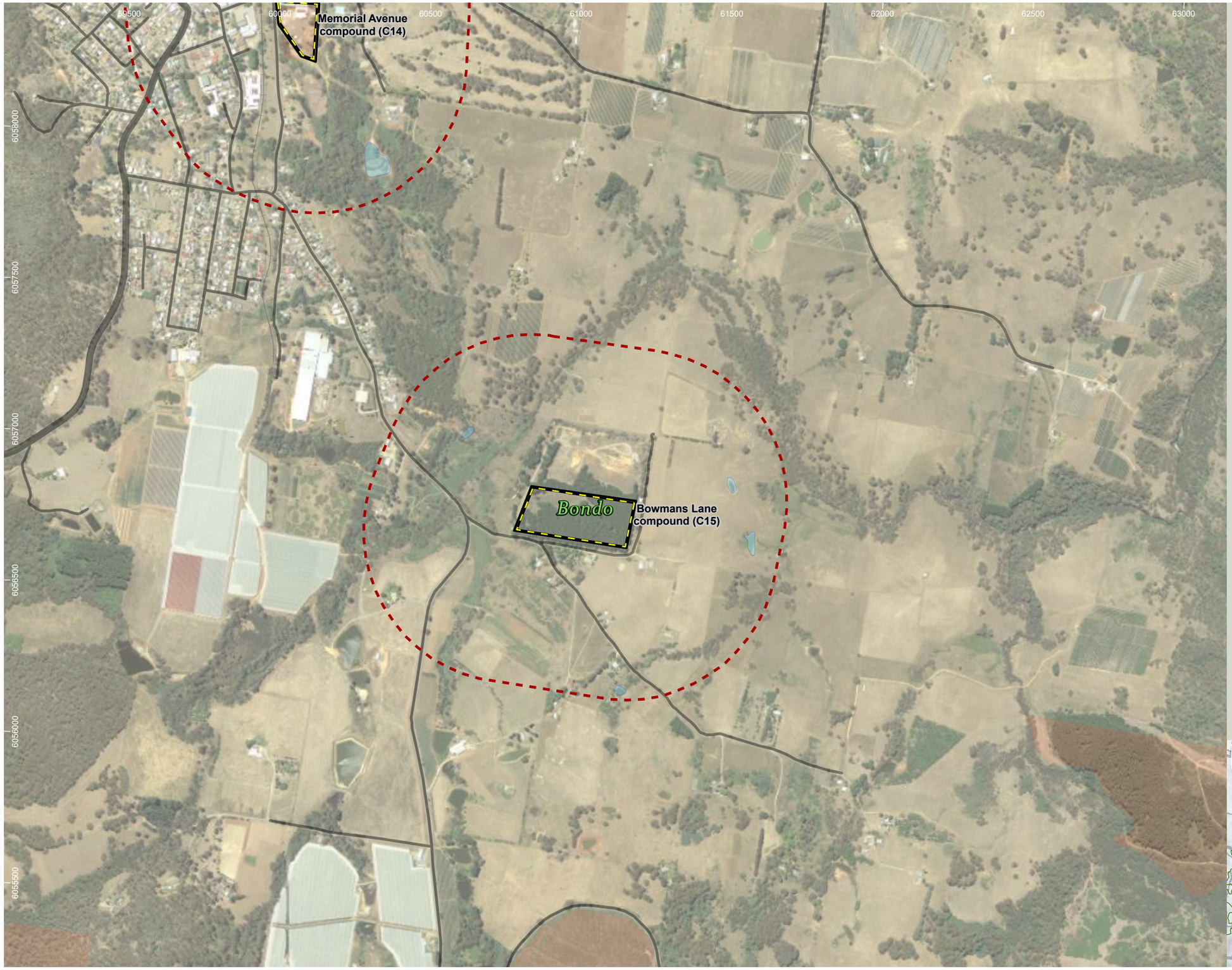
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 26

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 26/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Hydrography

- Waterbody

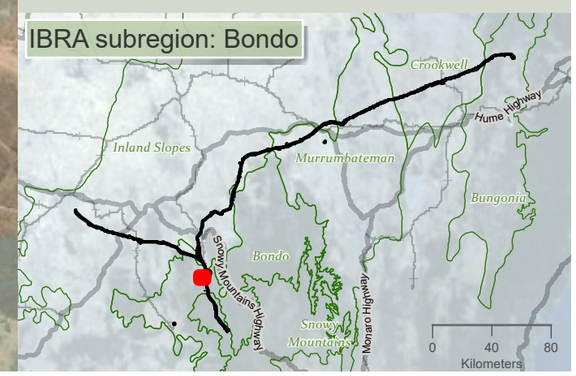
Transport

Road

- Major road
- Minor road
- Rail

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

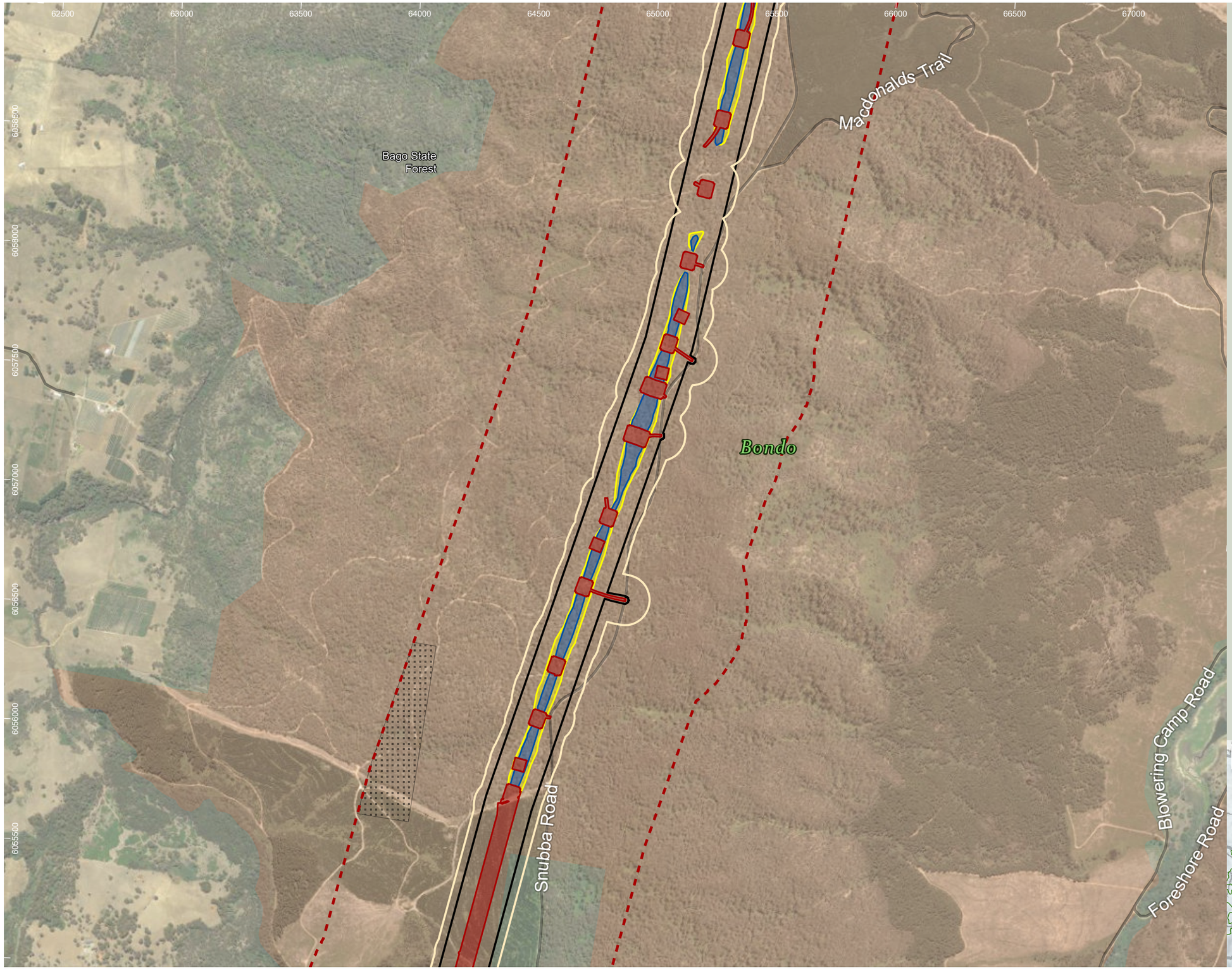
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 27

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

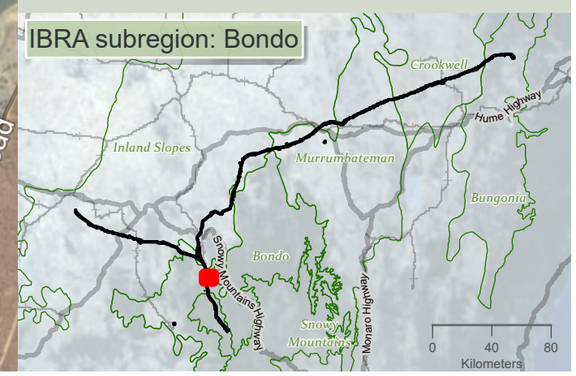
Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

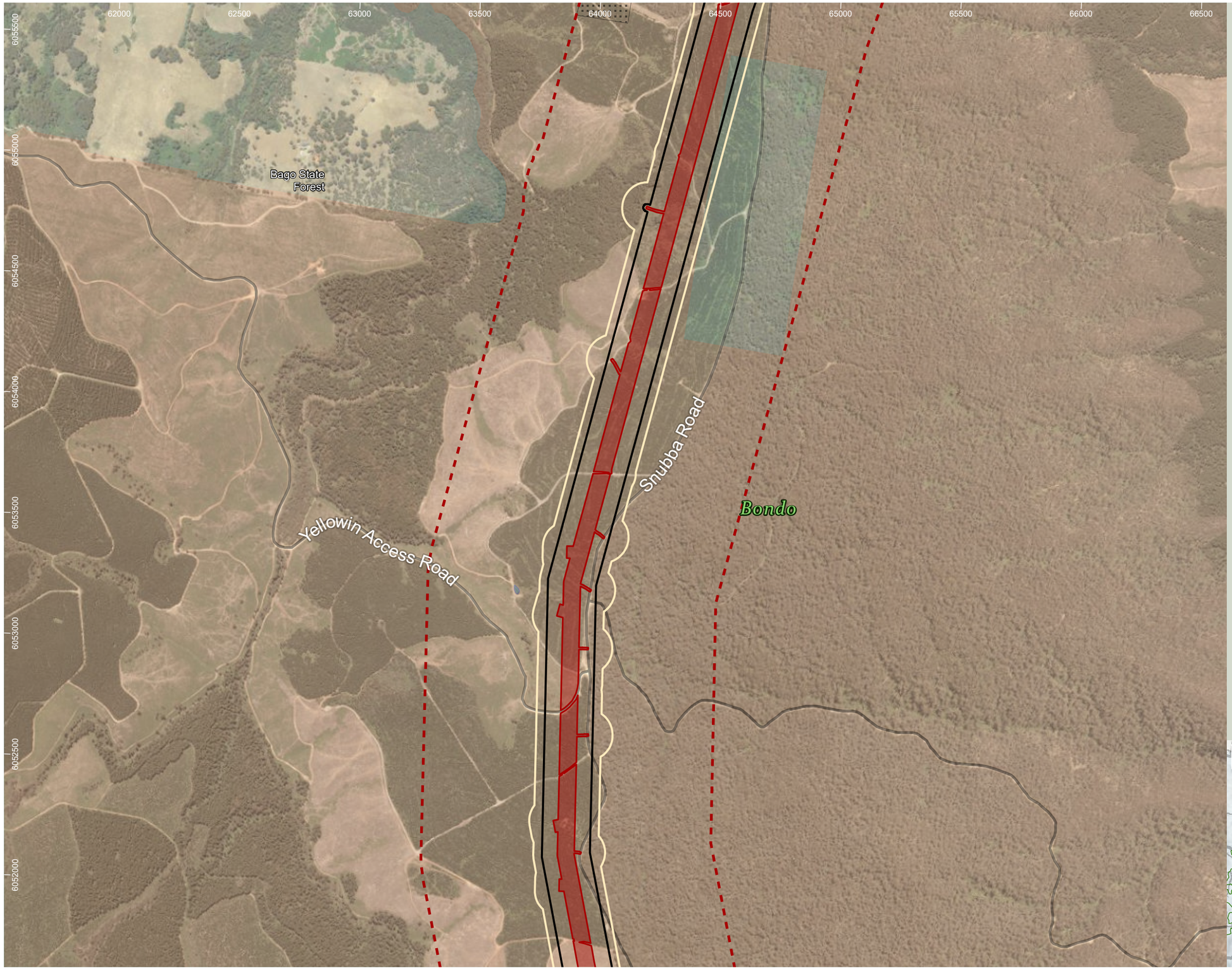
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 28

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

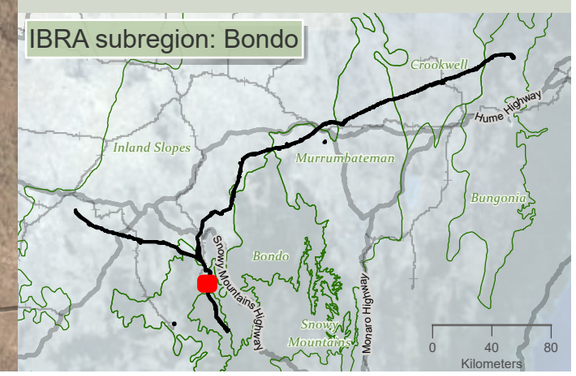
Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

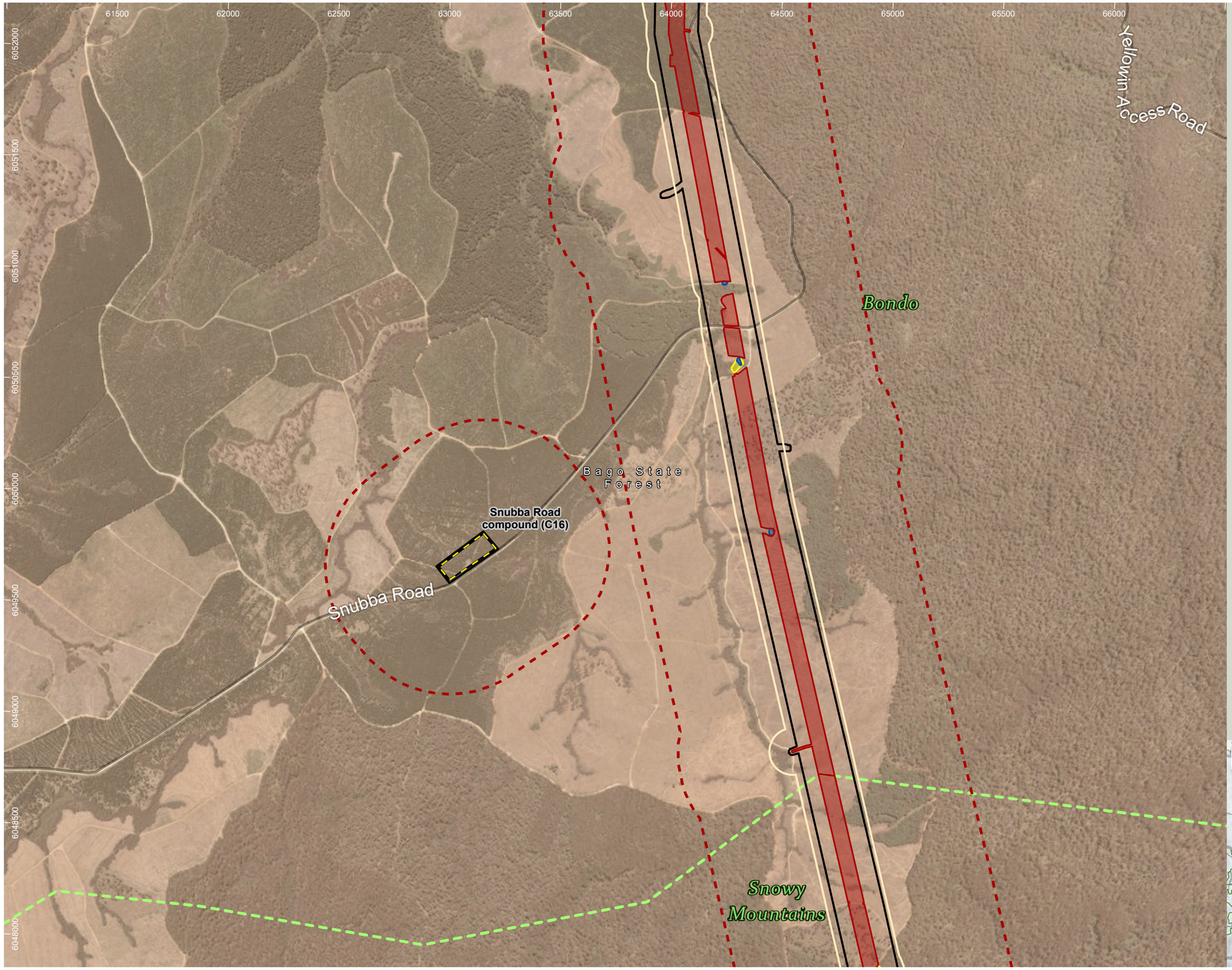
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 29

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

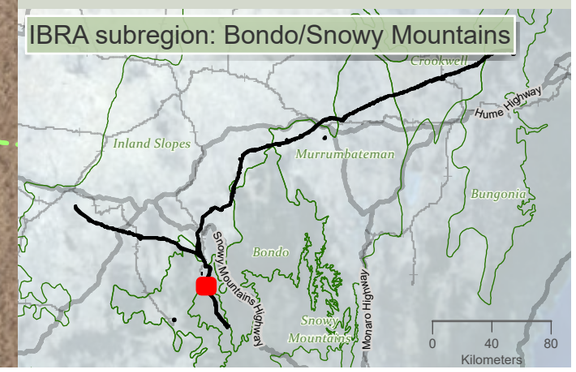
Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 30

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

63000 63500 64000 64500 65000 65500 66000 66500 67000 67500

6048500 6048000 6047500 6047000 6046500 6046000 6045500 6045000

Bondo

Snowy Mountains

HumeLink project areas

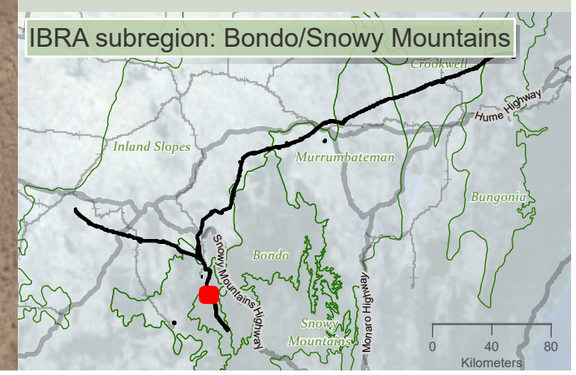
- Project footprint
- Landscape assessment area
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 500 m

N

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 31

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

65500 66000 66500 67000 67500 68000 68500 69000 69500

6046000 6045500 6045000 6044500 6044000 6043500 6043000 6042500

Bondo

Bago State Forest

Kosciuszko National Park

Snowy Mountains

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Administrative and Property Boundaries

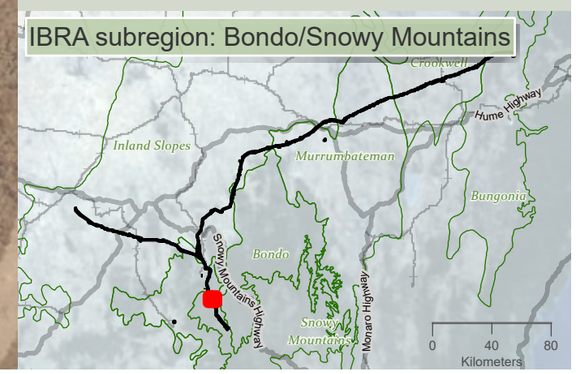
- State Forest

Protected Areas of NSW

NPWS Reserve

- National Park

IBRA subregion: Bondo/Snowy Mountains



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 32

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 26/07/2023 File: C:\OneDriveSync\FoldenNiche\6699_Humelink_BDAR_Stage 2 Part A.aprx

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Transport

Road

- Minor road

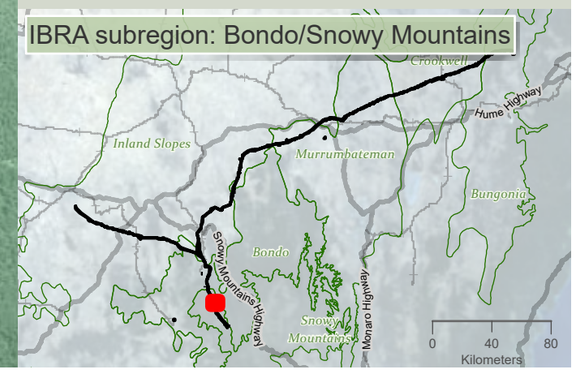
Administrative and Property Boundaries

- State Forest

Protected Areas of NSW

NPWS Reserve

- National Park



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 33

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6899 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

Road

- Minor road

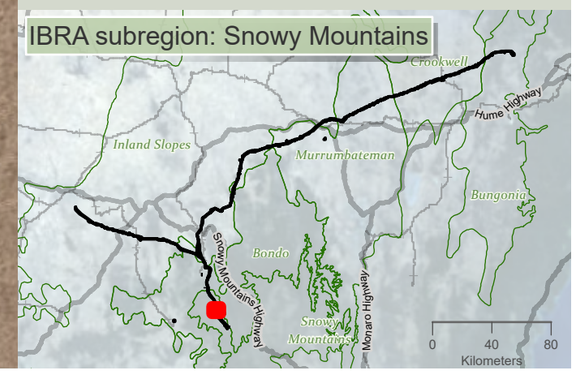
Administrative and Property Boundaries

- State Forest

Protected Areas of NSW

NPWS Reserve

- National Park



niche Environment and Heritage

0 450
m
WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

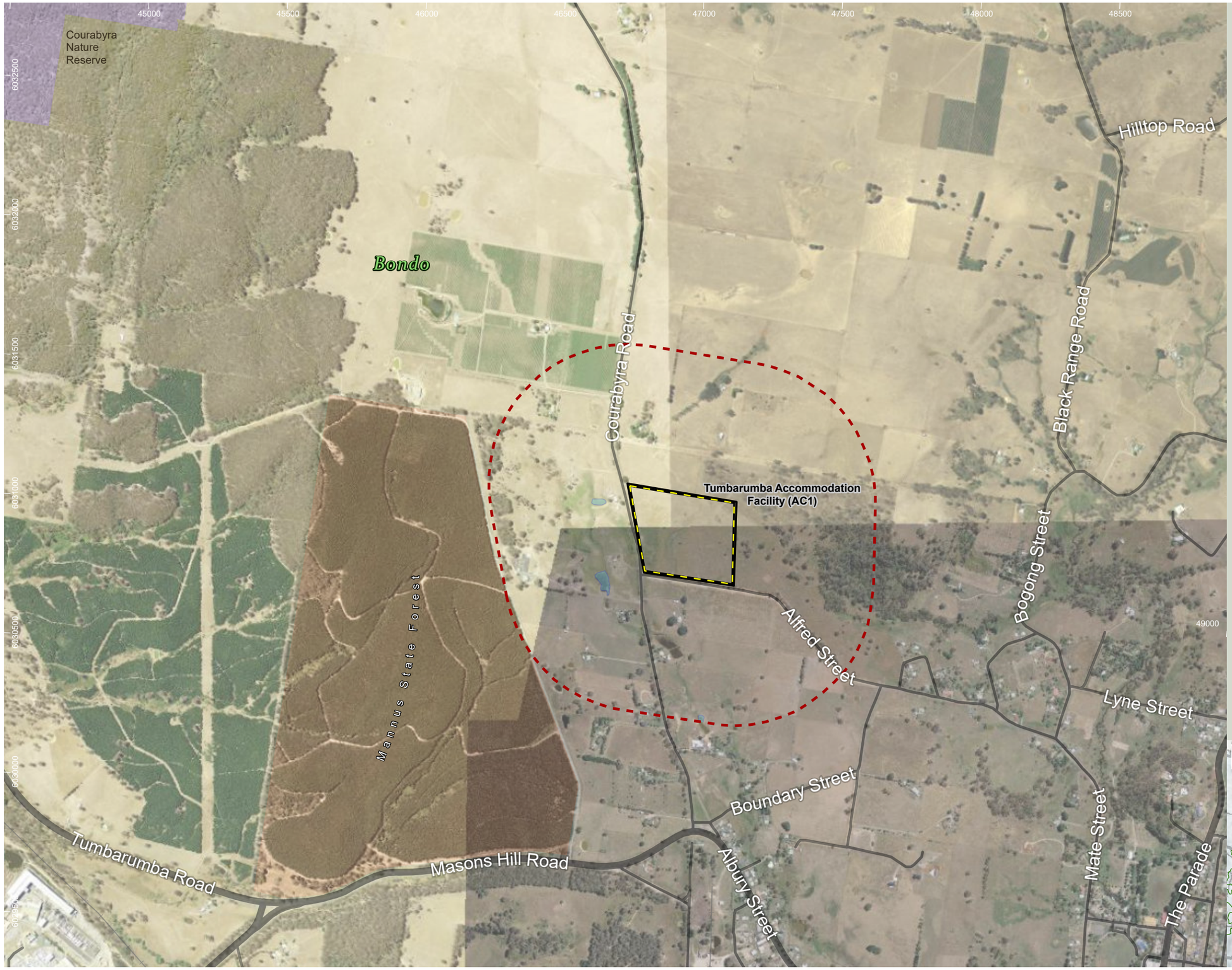
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 34

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road
- Rail

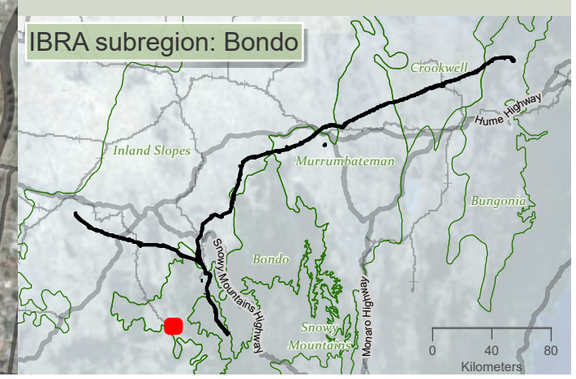
Administrative and Property Boundaries

- State Forest

Protected Areas of NSW

NPWS Reserve

- Nature Reserve



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 35

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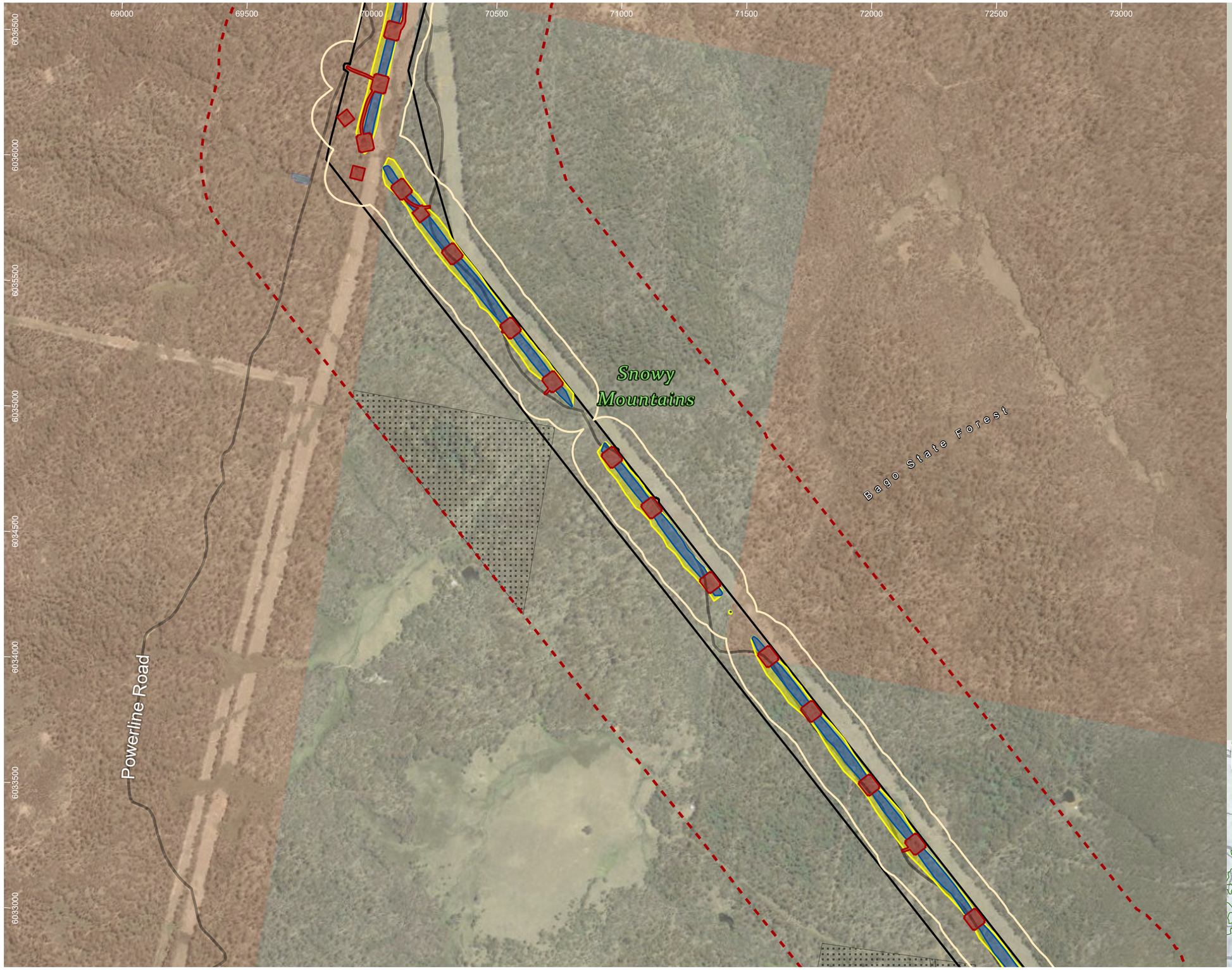
Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

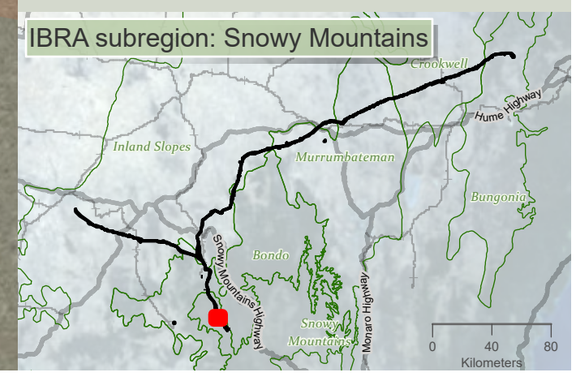
Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

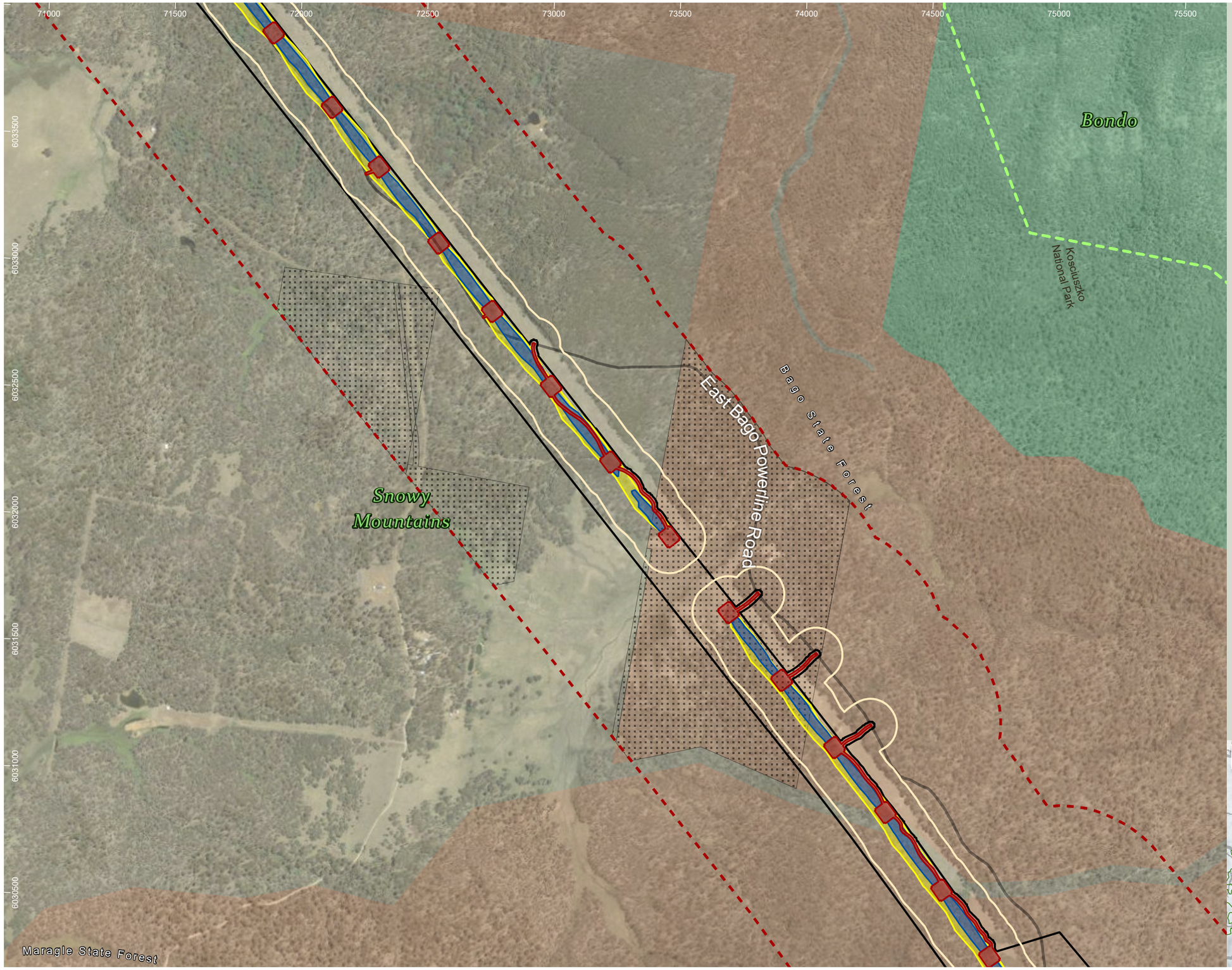
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 36

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MathewZajeczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6899 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Transport

Road

- Minor road

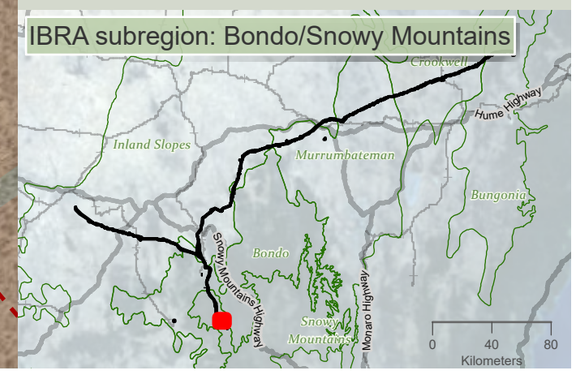
Administrative and Property Boundaries

- State Forest

Protected Areas of NSW

NPWS Reserve

- National Park



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 37

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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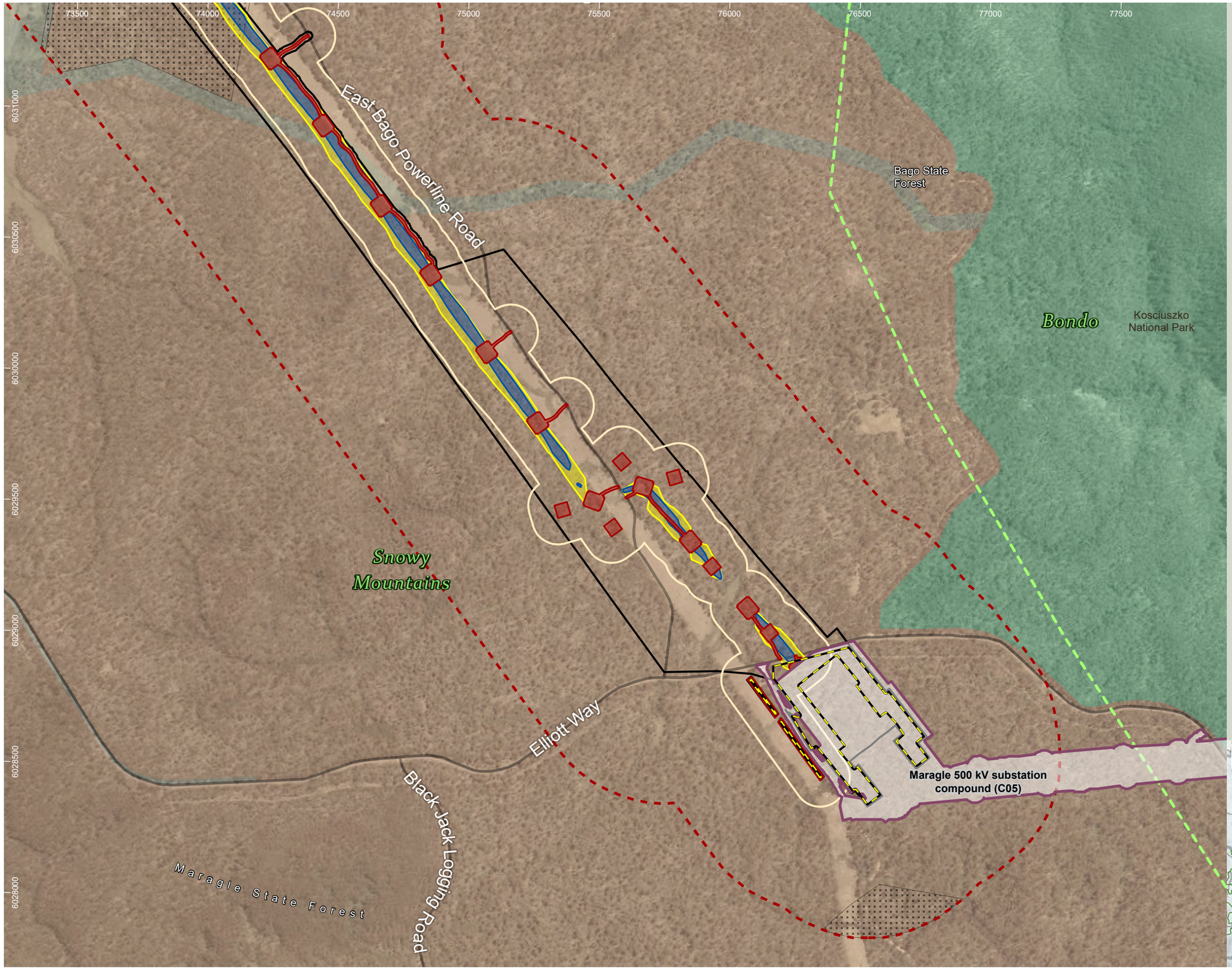


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- Snowy 2.0 Transmission Connection project
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Transport

Road

- Minor road

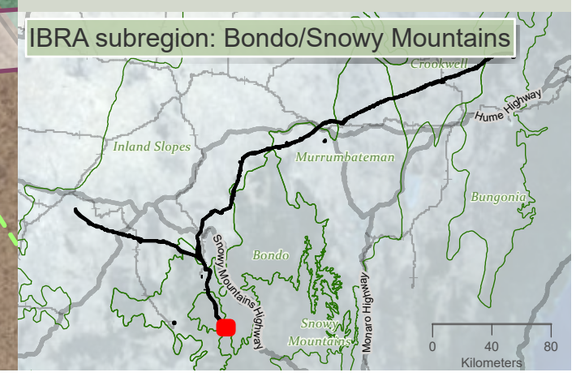
Administrative and Property Boundaries

- State Forest

Protected Areas of NSW

NPWS Reserve

- National Park



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 38

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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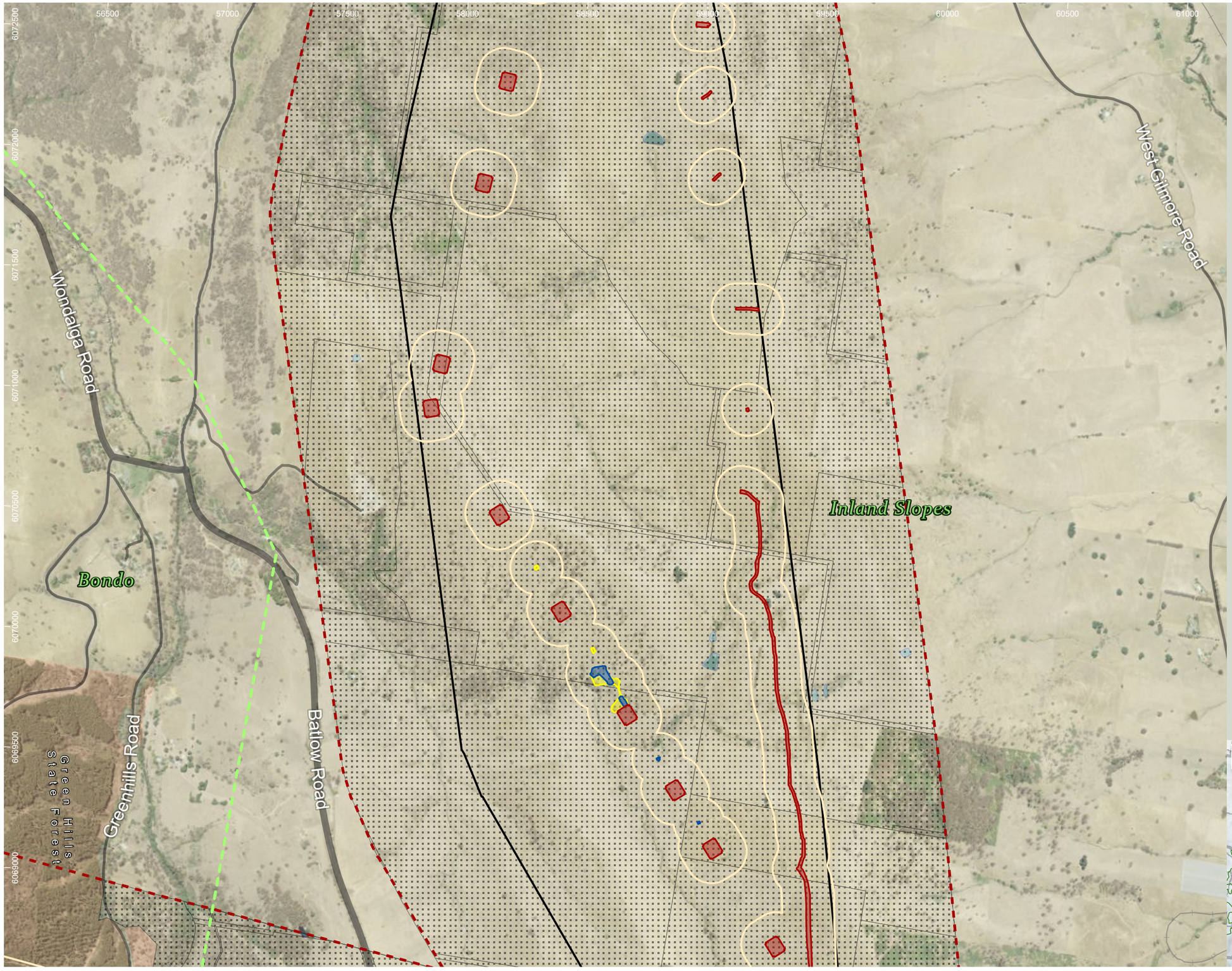


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

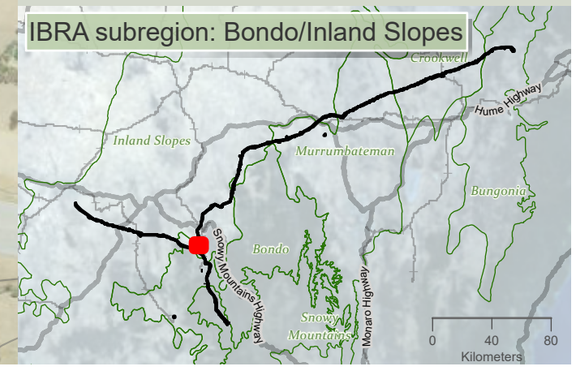
Transport

Road

- Major road
- Minor road
- Rail

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 39

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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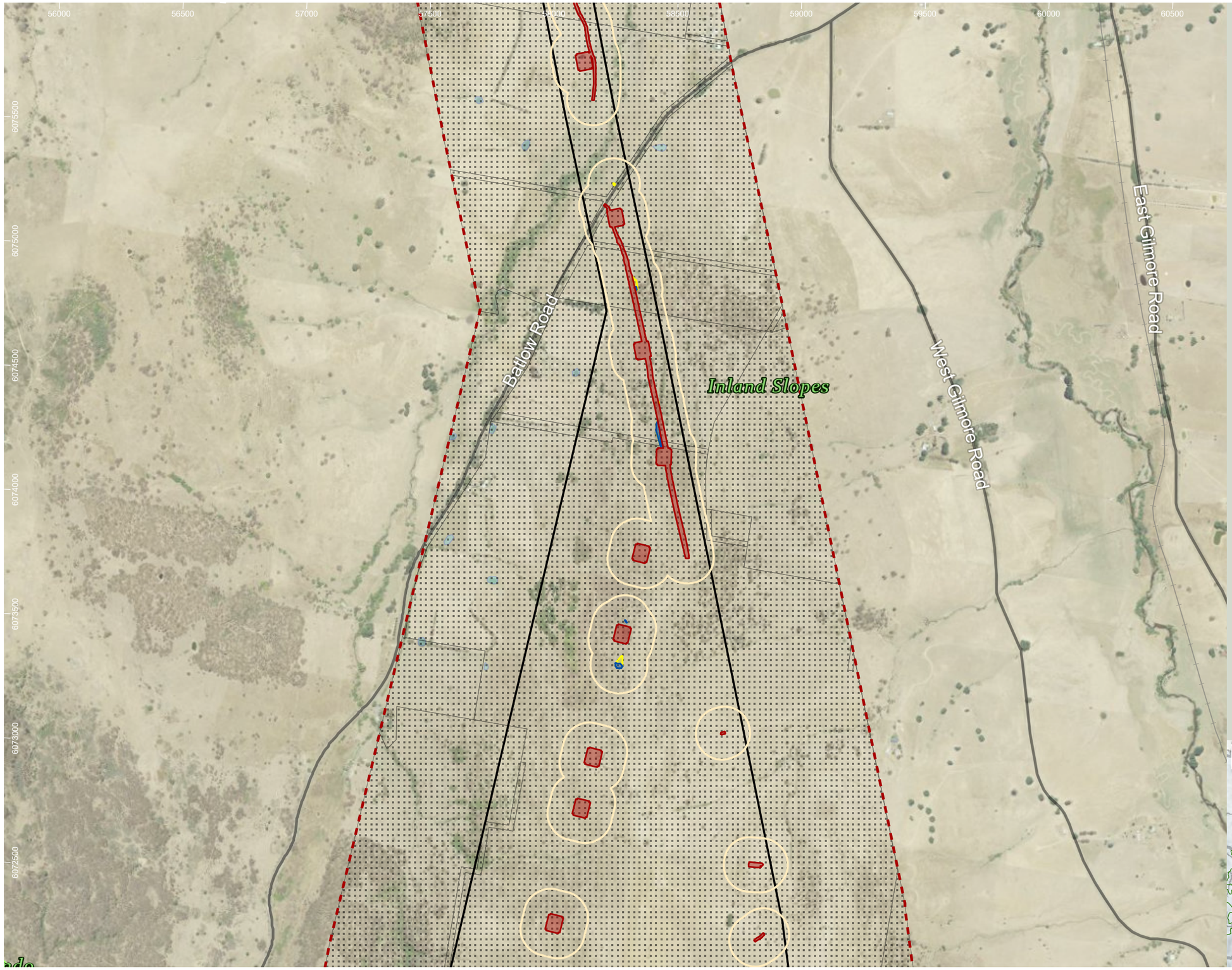


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

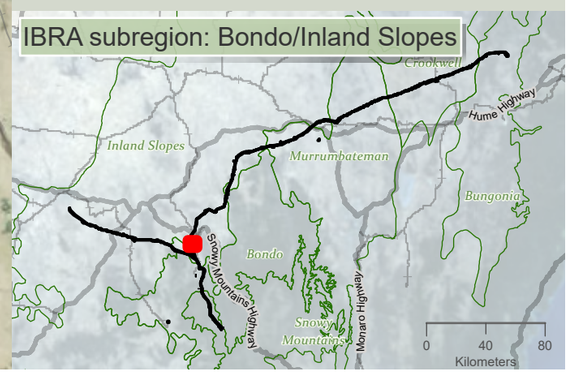
Hydrography

- Waterbody

Transport

Road

- Minor road
- Rail



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 40

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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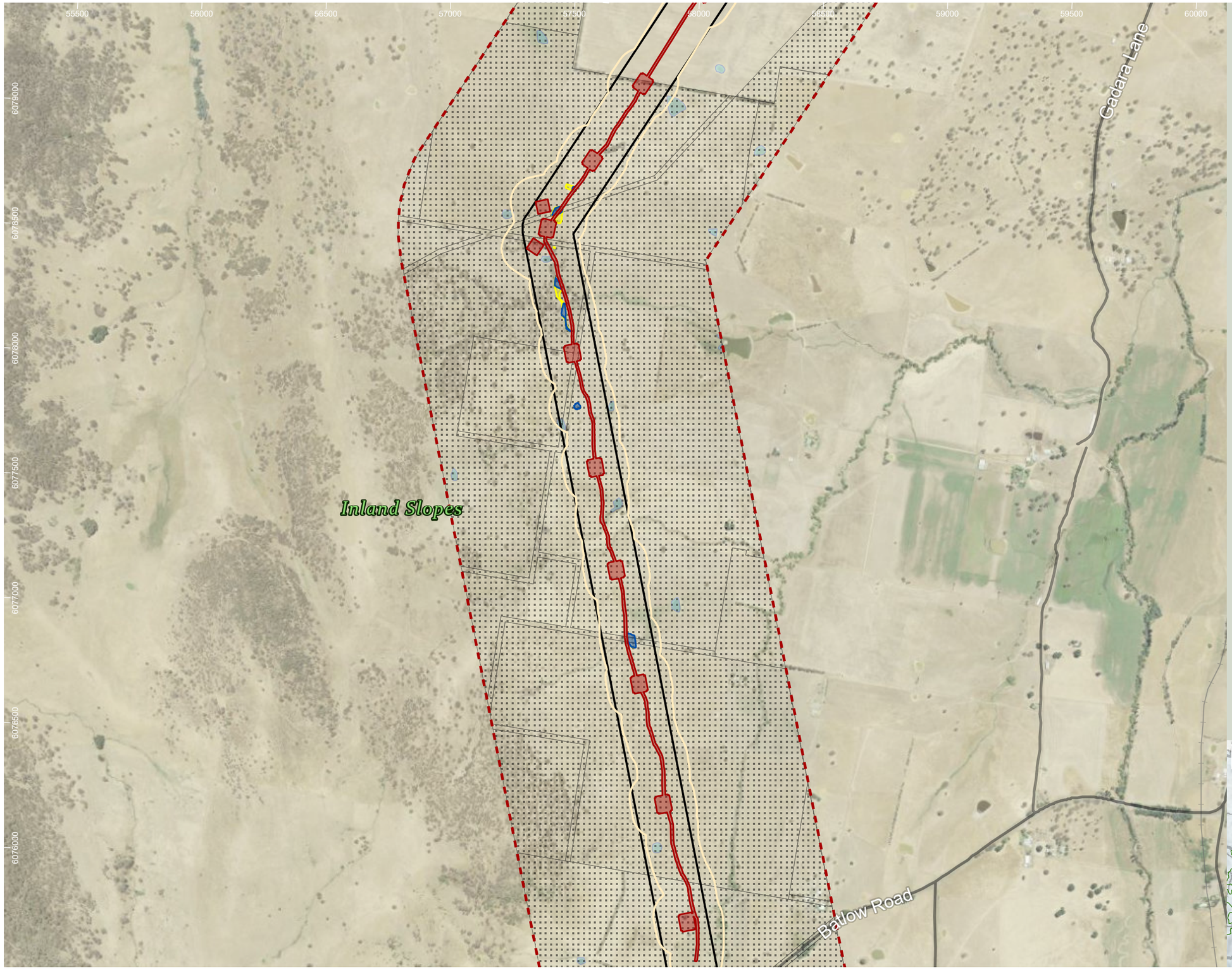


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

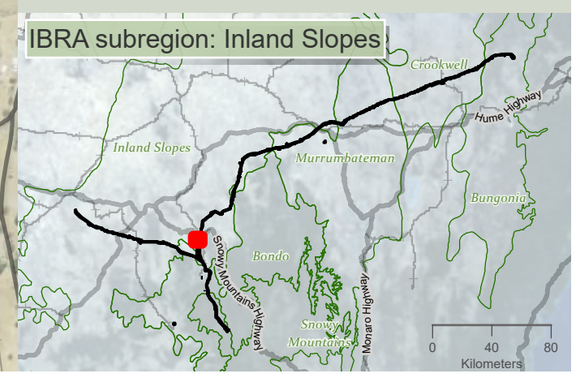
Hydrography

- Waterbody

Transport

Road

- Minor road
- Rail



niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 41

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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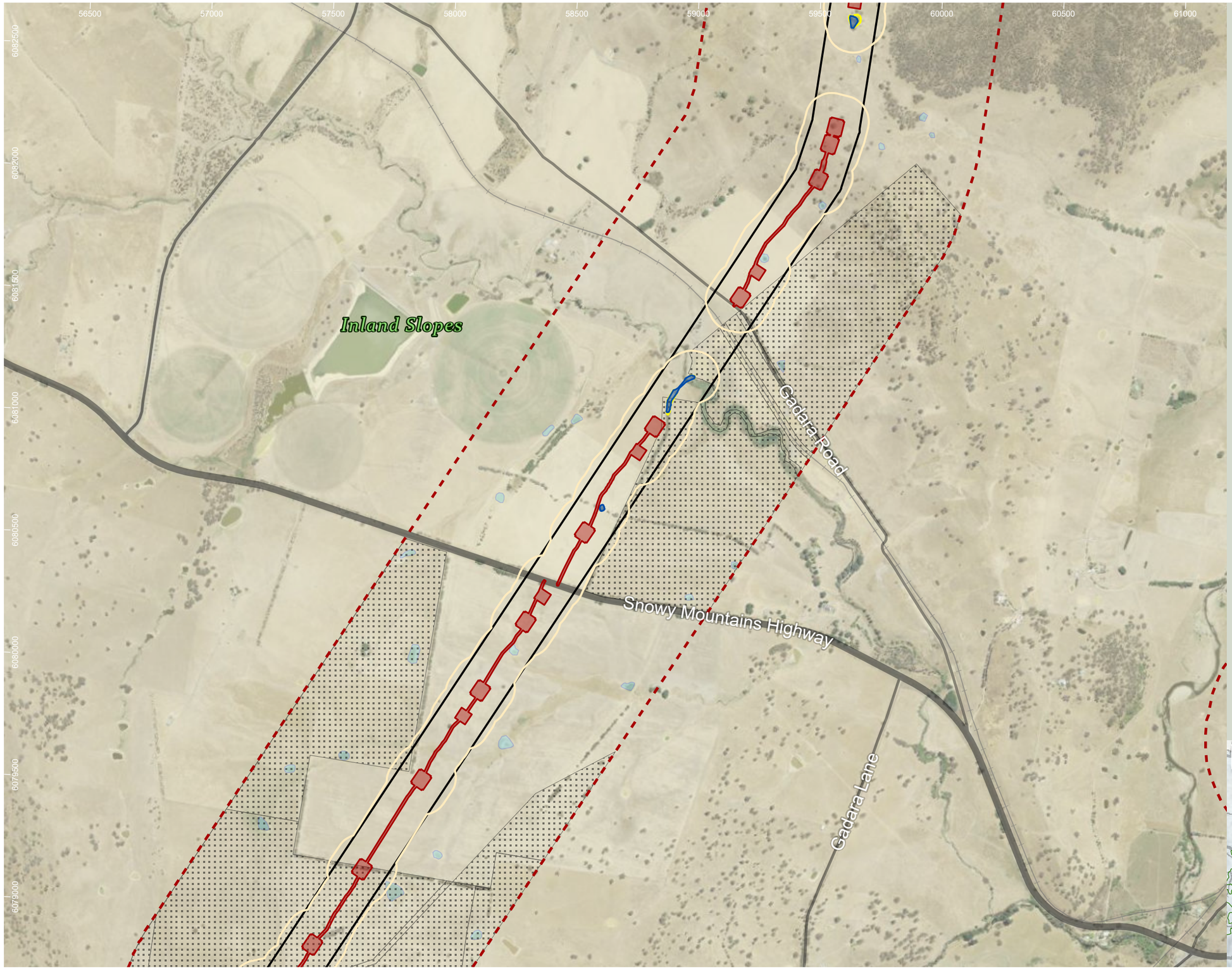


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

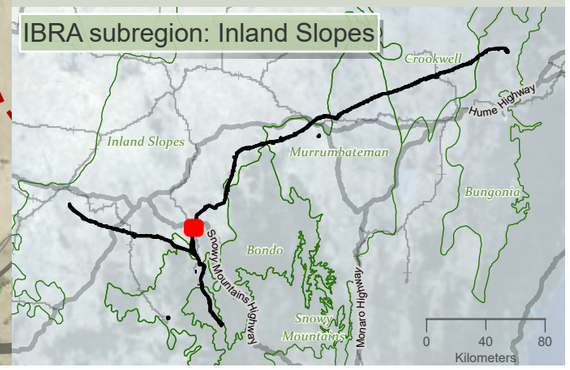
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road
- Rail



niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

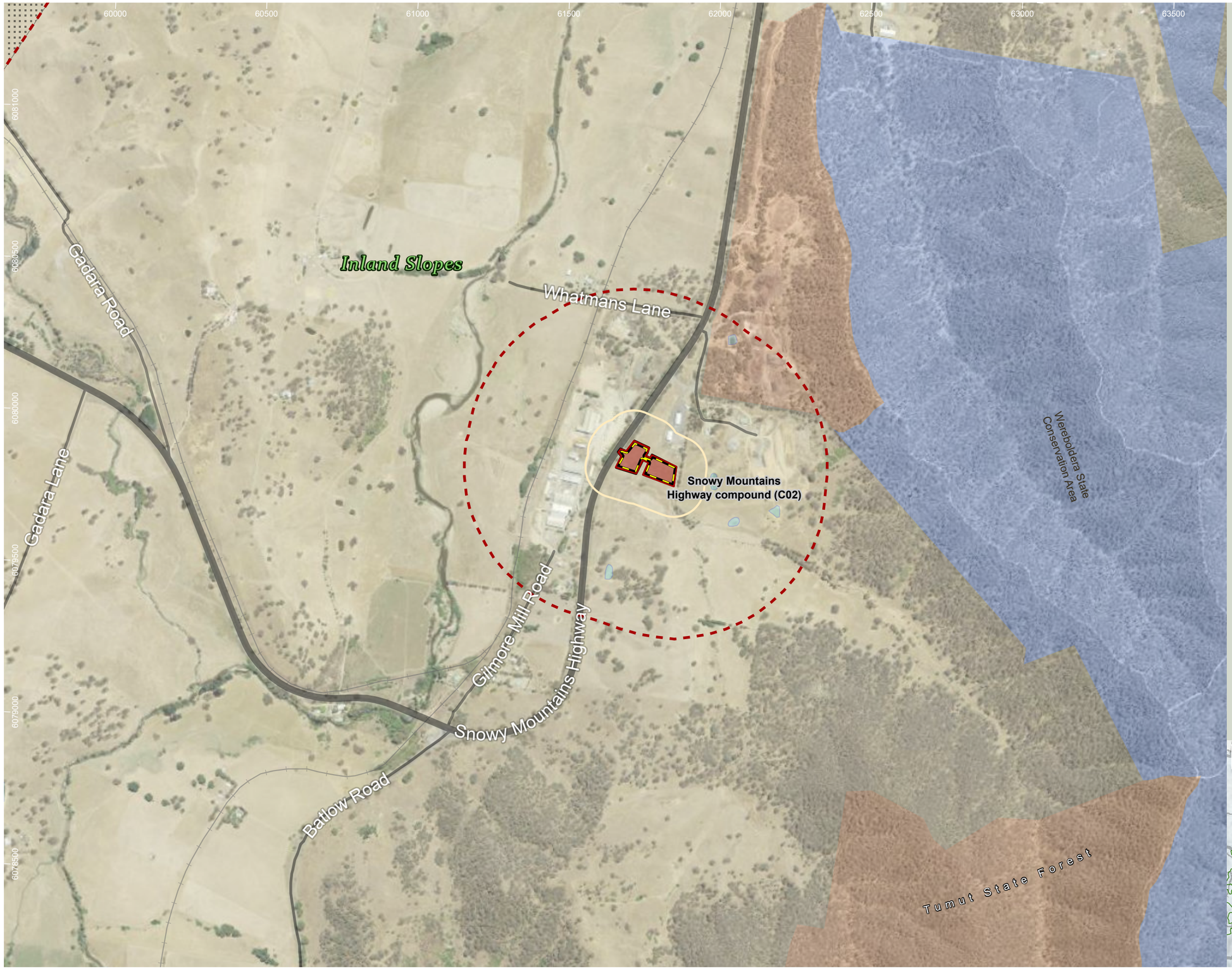
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 42

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road
- Rail

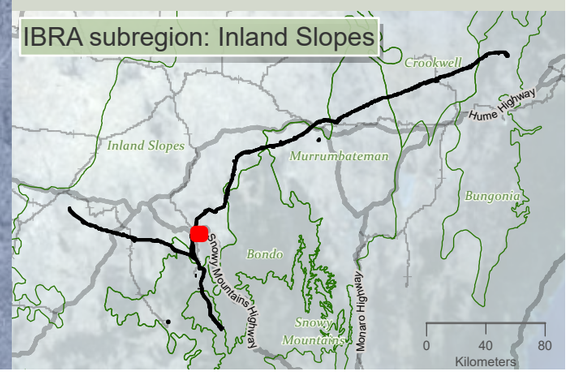
Administrative and Property Boundaries

- State Forest

Protected Areas of NSW

NPWS Reserve

- State Conservation Area



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 43

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

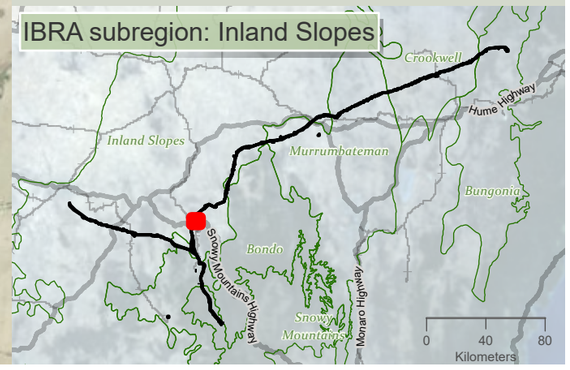
Road

- Minor road
- Rail

Protected Areas of NSW

NPWS Reserve

- National Park



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 44

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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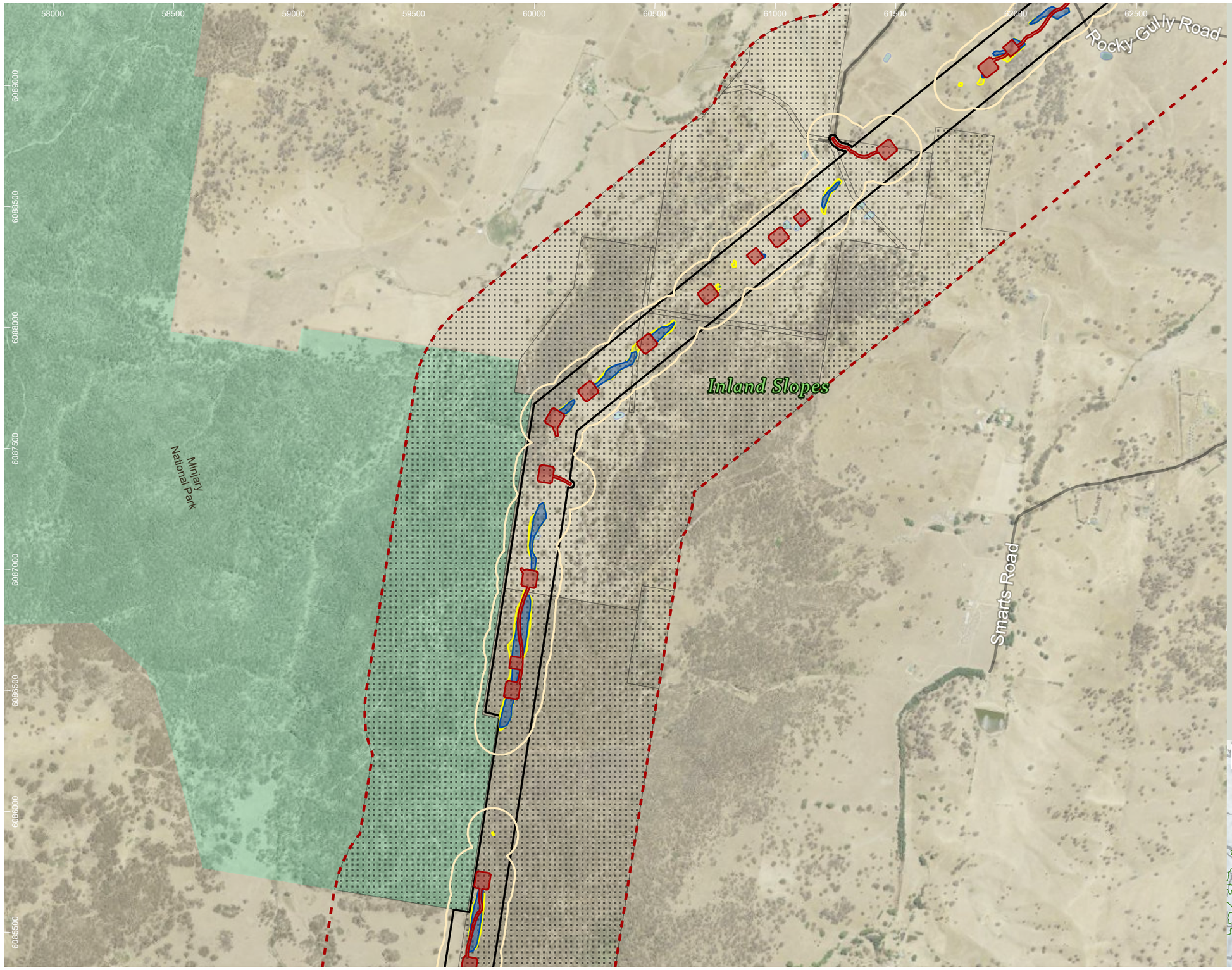


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

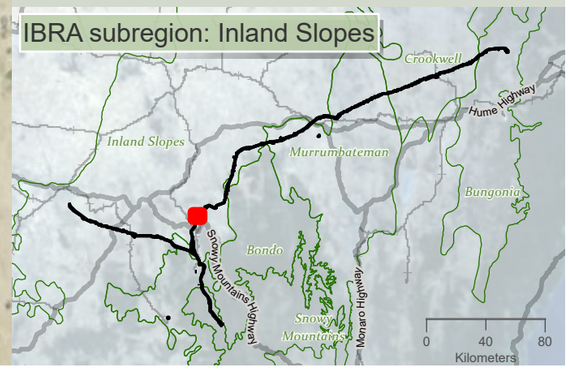
Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- National Park



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 45

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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61000 61500 62000 62500 63000 63500 64000 64500

6091500 6091000 6090500 6090000 6089500 6089000 6088500

Inland Slopes

Meadow Creek Road

Gocup Road

Rocky Gully Road

Gocup Farms Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

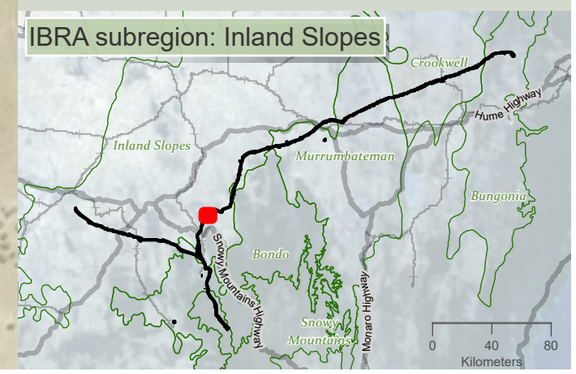
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 46

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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63500 64000 64500 65000 65500 66000 66500 67000

6094000 6093500 6093000 6092500 6092000 6091500 6091000

Mudjarn Nature Reserve

Brungle Road

Cockatoo Road

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

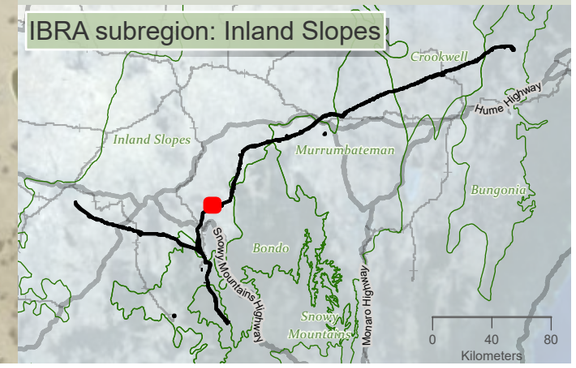
Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- Nature Reserve



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 47

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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66500 67000 67500 68000 68500 69000 69500 70000

6094000 6093500 6093000 6092500 6092000 6091500

Mudjarn Nature Reserve

Inland Slopes

Brungle Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

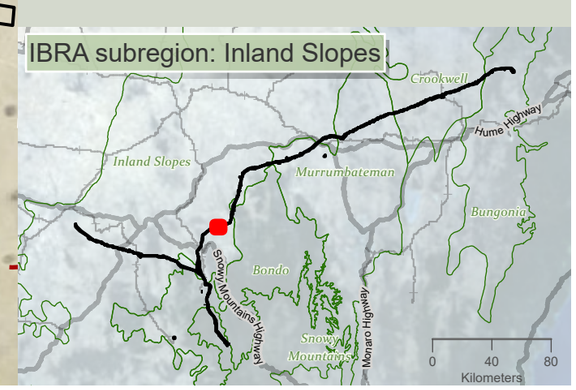
Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- Nature Reserve



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 48

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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70000 70500 71000 71500 72000 72500 73000 73500

6095000 6094500 6094000 6093500 6093000 6092500

Inland Slopes

Webbs Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

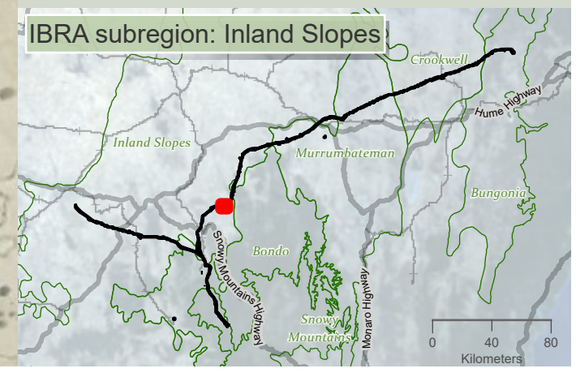
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

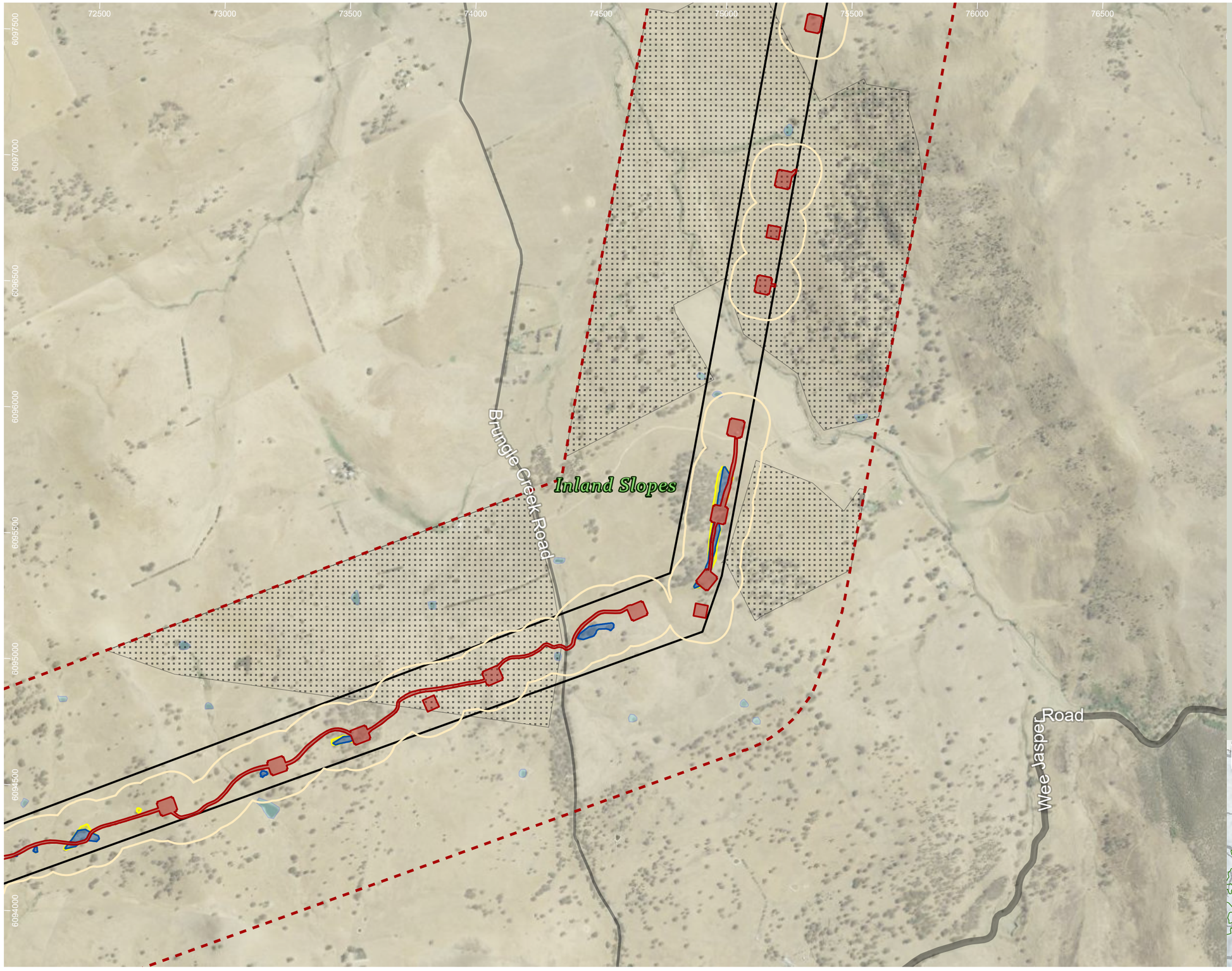
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 49

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

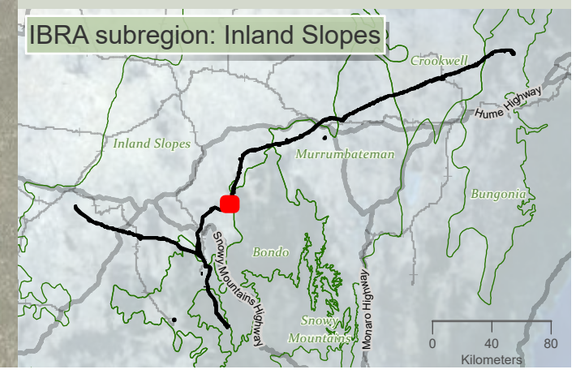
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 50

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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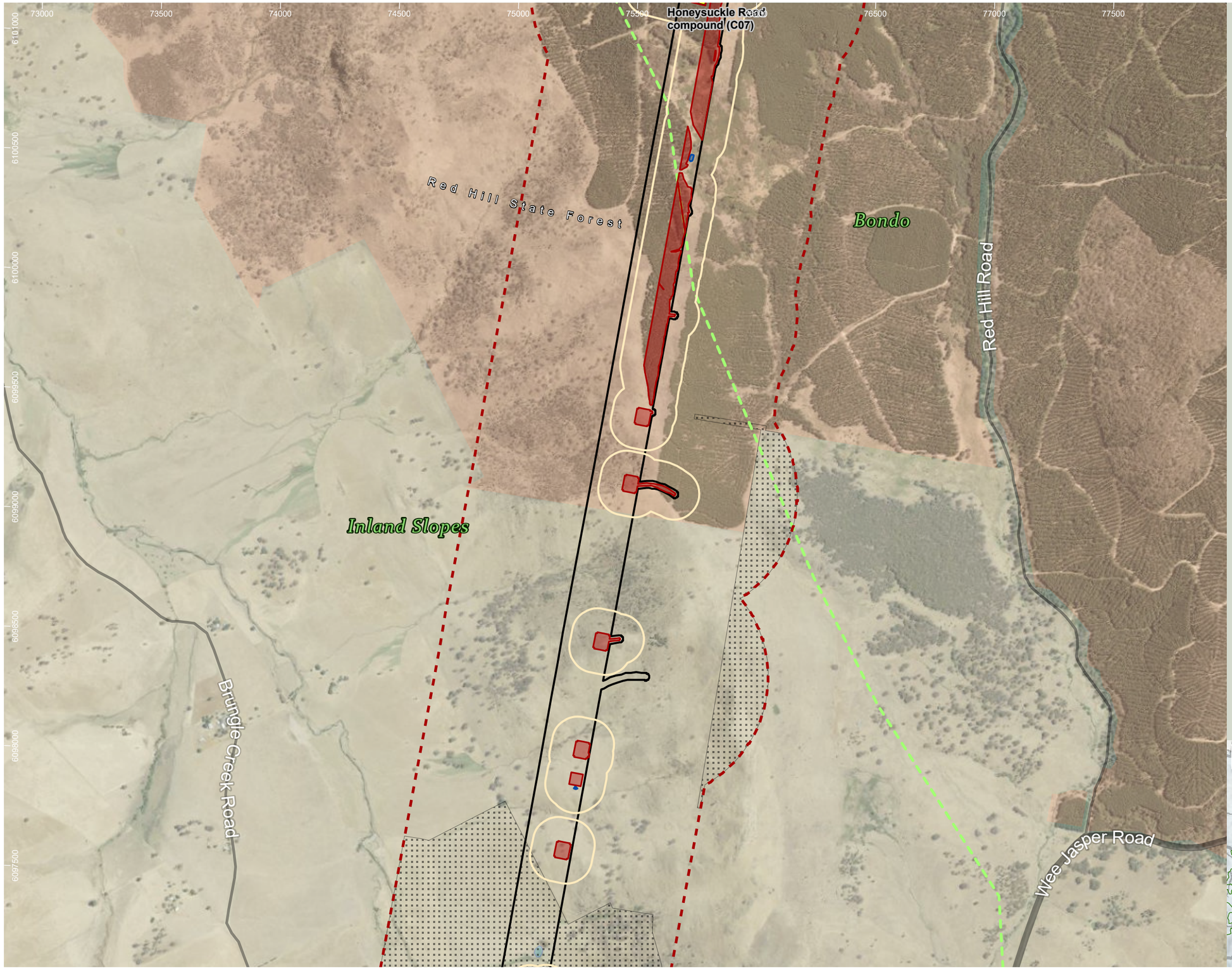


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

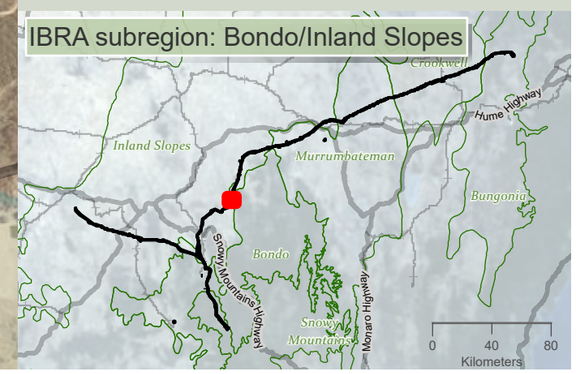
Transport

Road

- Major road
- Minor road

Administrative and Property Boundaries

- State Forest



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

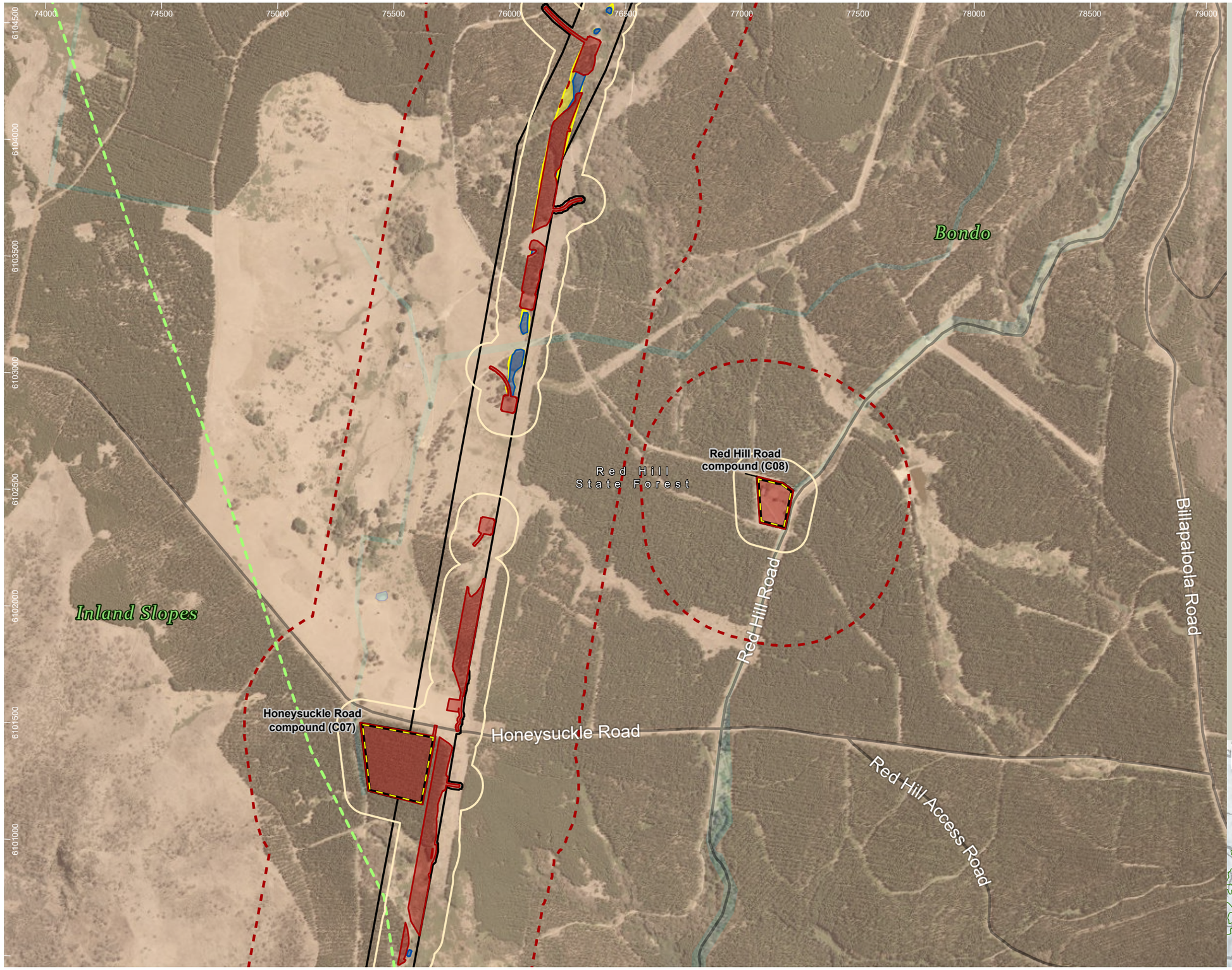
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 51

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

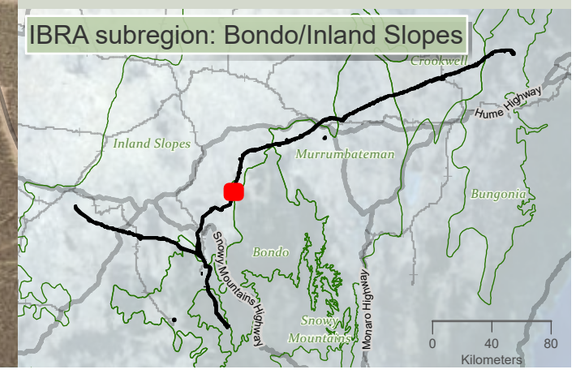
Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 52

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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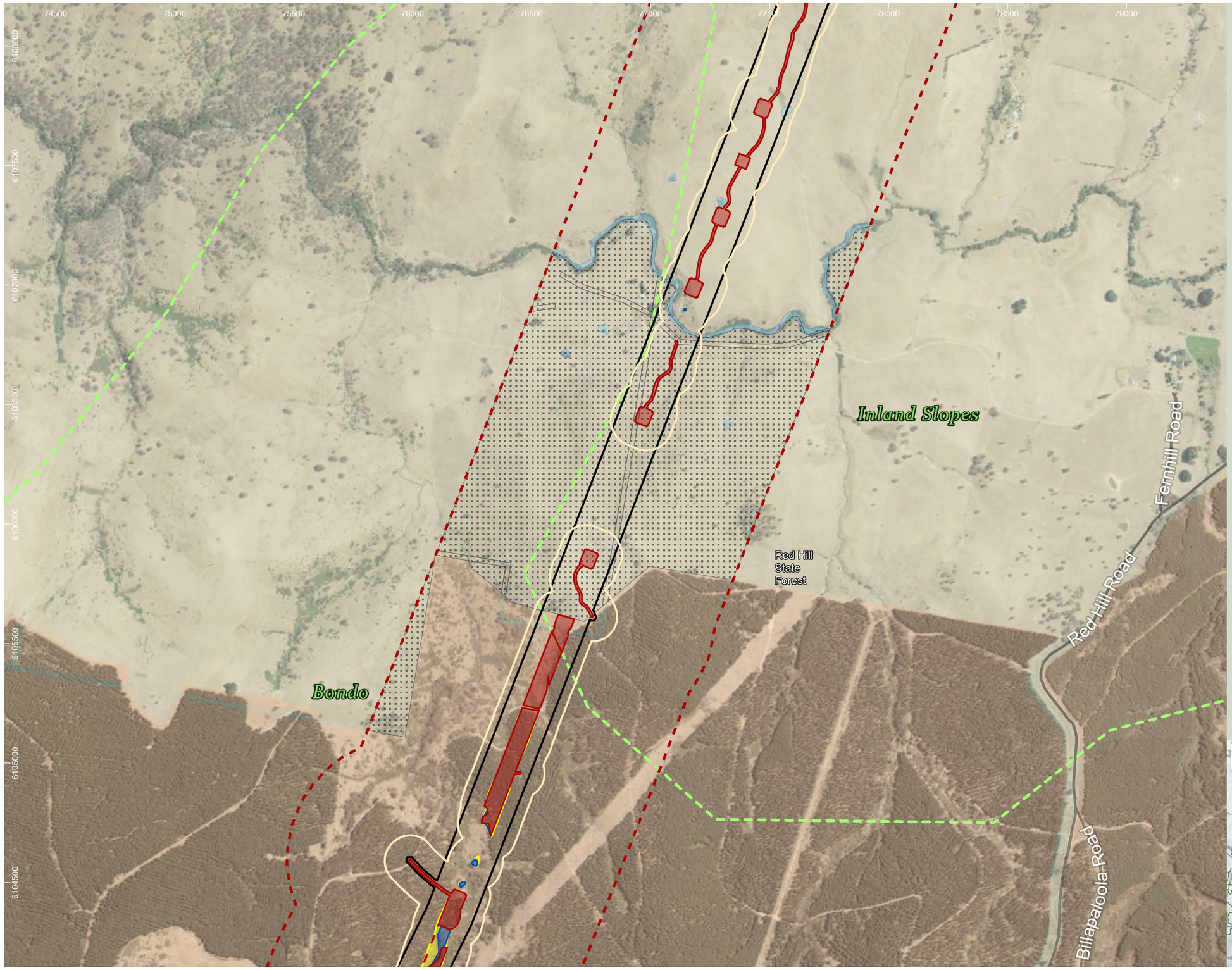

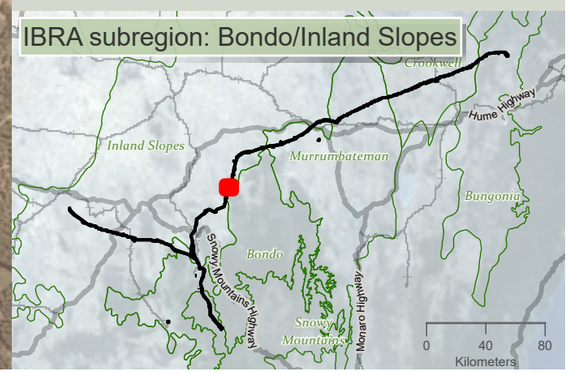

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest

niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 53

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

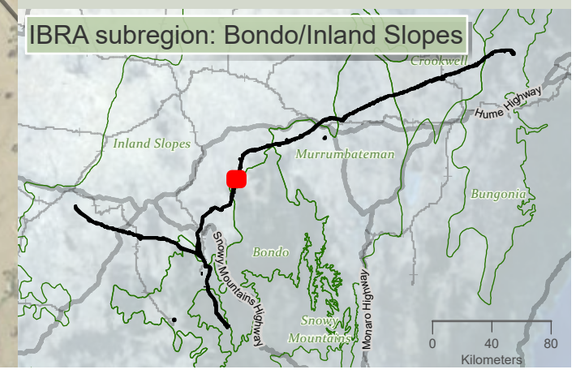
Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 54

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

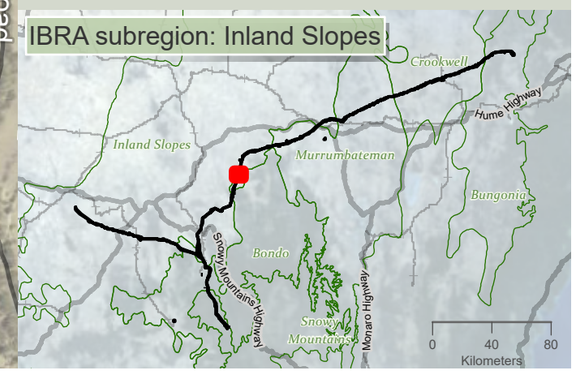
Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 55

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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77000 77500 78000 78500 79000 79500 80000 80500 81000 81500

6118000 6117500 6117000 6116500 6116000 6115500 6115000 6114500

Inland Slopes

Parsons Creek Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

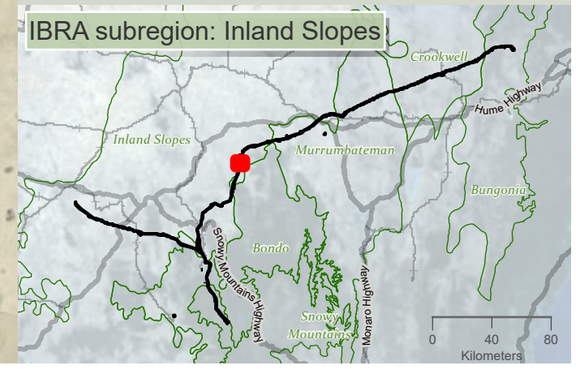
Hydrography

- Waterbody

Transport

Road

- Minor road



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 500
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 56

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

77500 78000 78500 79000 79500 80000 80500 81000 81500 82000

6121500 6121000 6120500 6120000 6119500 6119000 6118500 6118000

Inland Slopes

HumeLink project areas

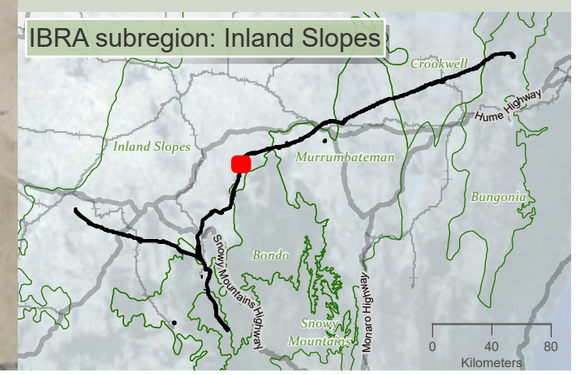
- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 57

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

79000 79500 80000 80500 81000 81500 82000 82500 83000

6124500 6124000 6123500 6123000 6122500 6122000 6121500

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

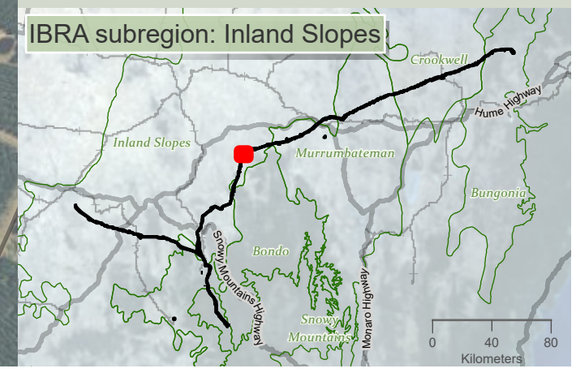
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

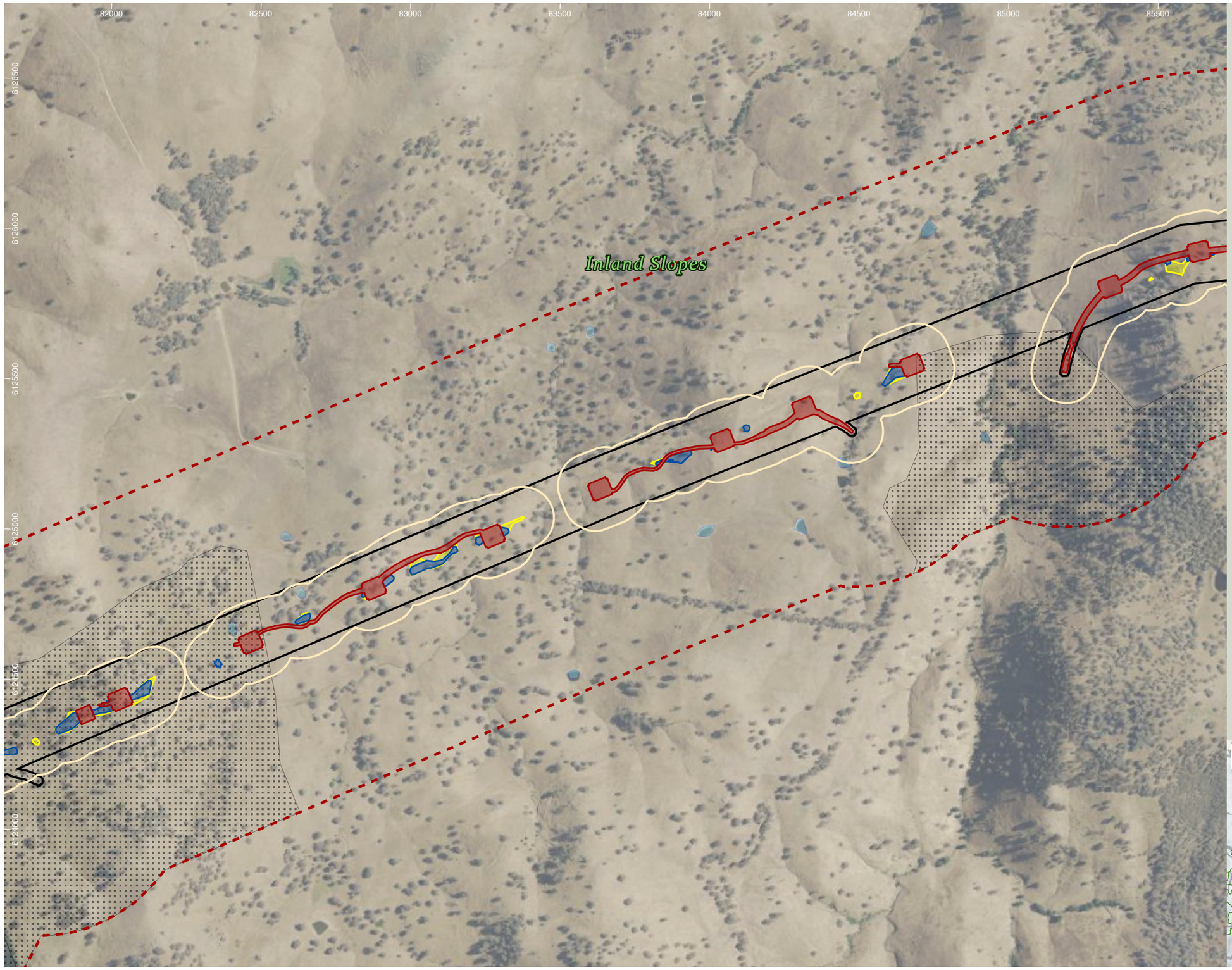
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 58

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential\Impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

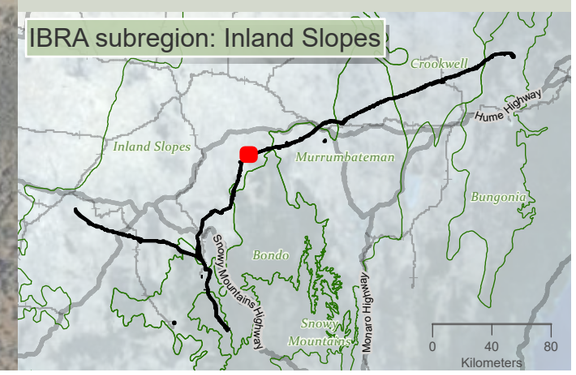
- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 59

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSync\FolderNiche\6699_Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

85500 86000 86500 87000 87500 88000 88500

6127500 6127000 6126500 6126000 6125500 6125000

Inland Slopes

Nanangroe Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

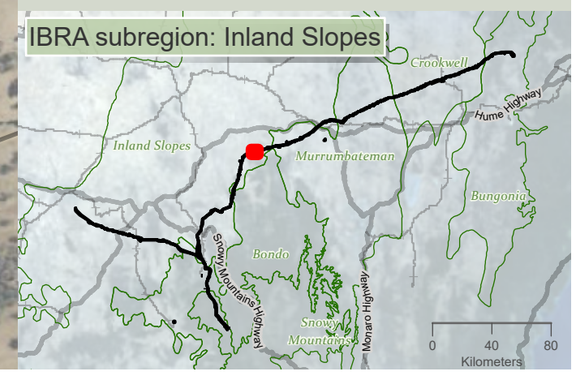
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 60

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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88500 89000 89500 90000 90500 91000 91500 92000

6128500 6128000 6127500 6127000 6126500 6126000 6125500

Bundarbo Road

Inland Slopes

Nanangroe Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

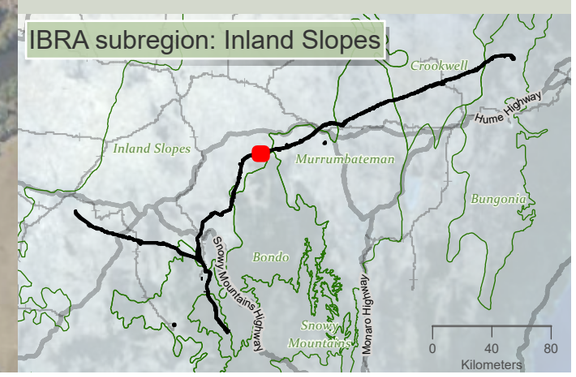
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 61

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski; Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

92000
92500
93000
93500
94000
94500
95000
95500

6130000
6129500
6129000
6128500
6128000
6127500
6127000

Nanangroe Road
Childowla Road
Bundarboo Road
Inland Slopes
Bondo

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

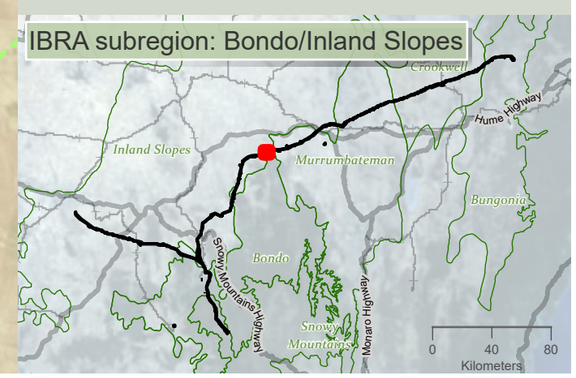
- Waterbody

Transport

Road

- Minor road

IBRA subregion: Bondo/Inland Slopes



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

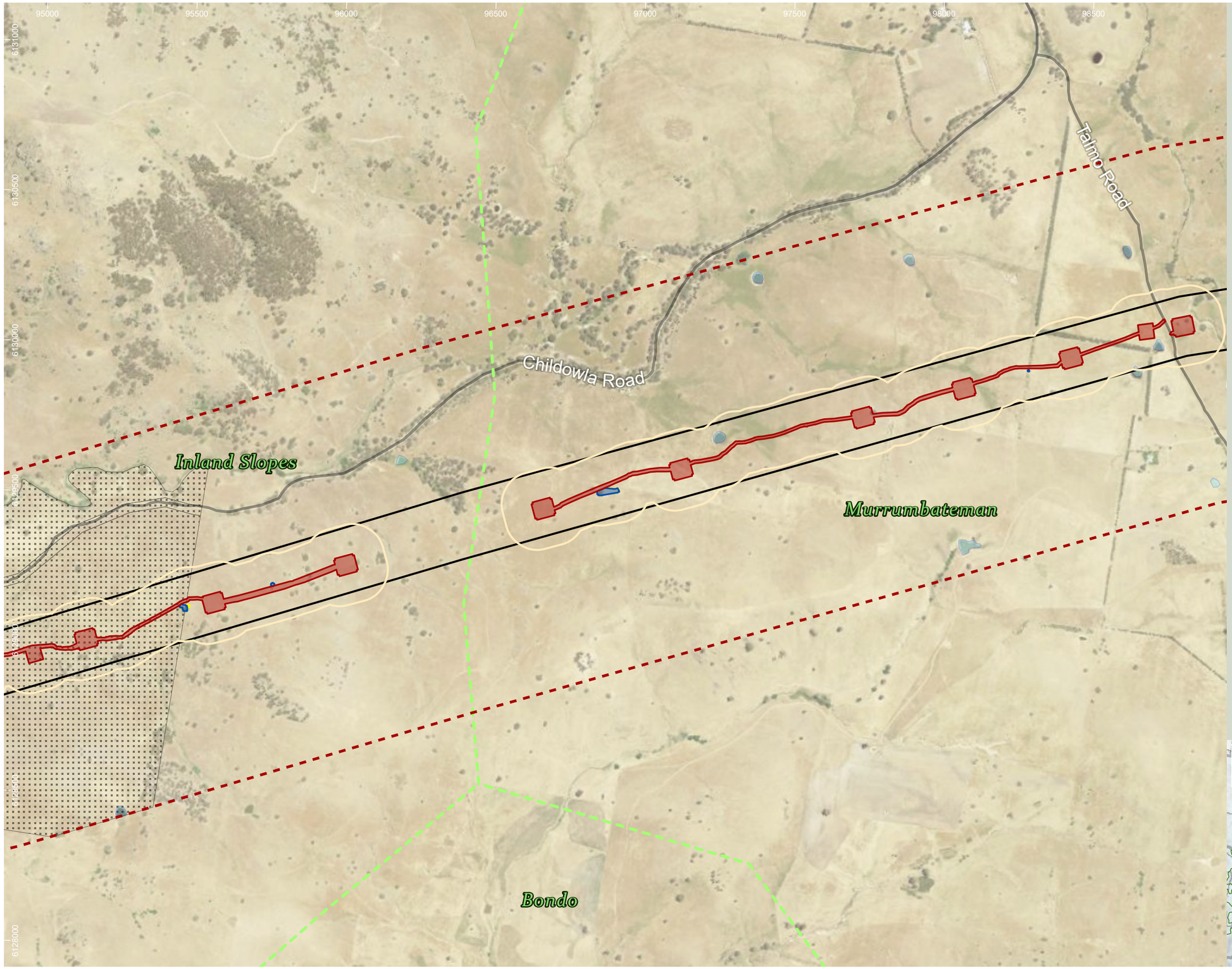
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 62

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

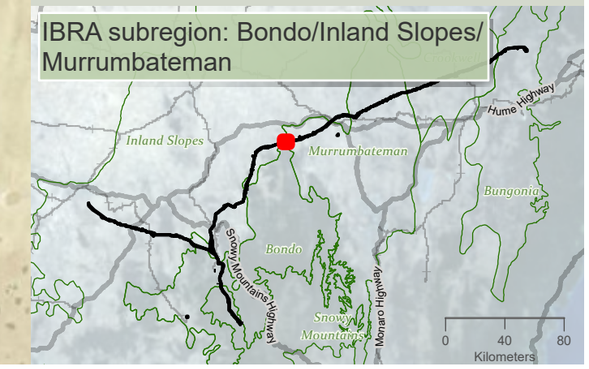
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

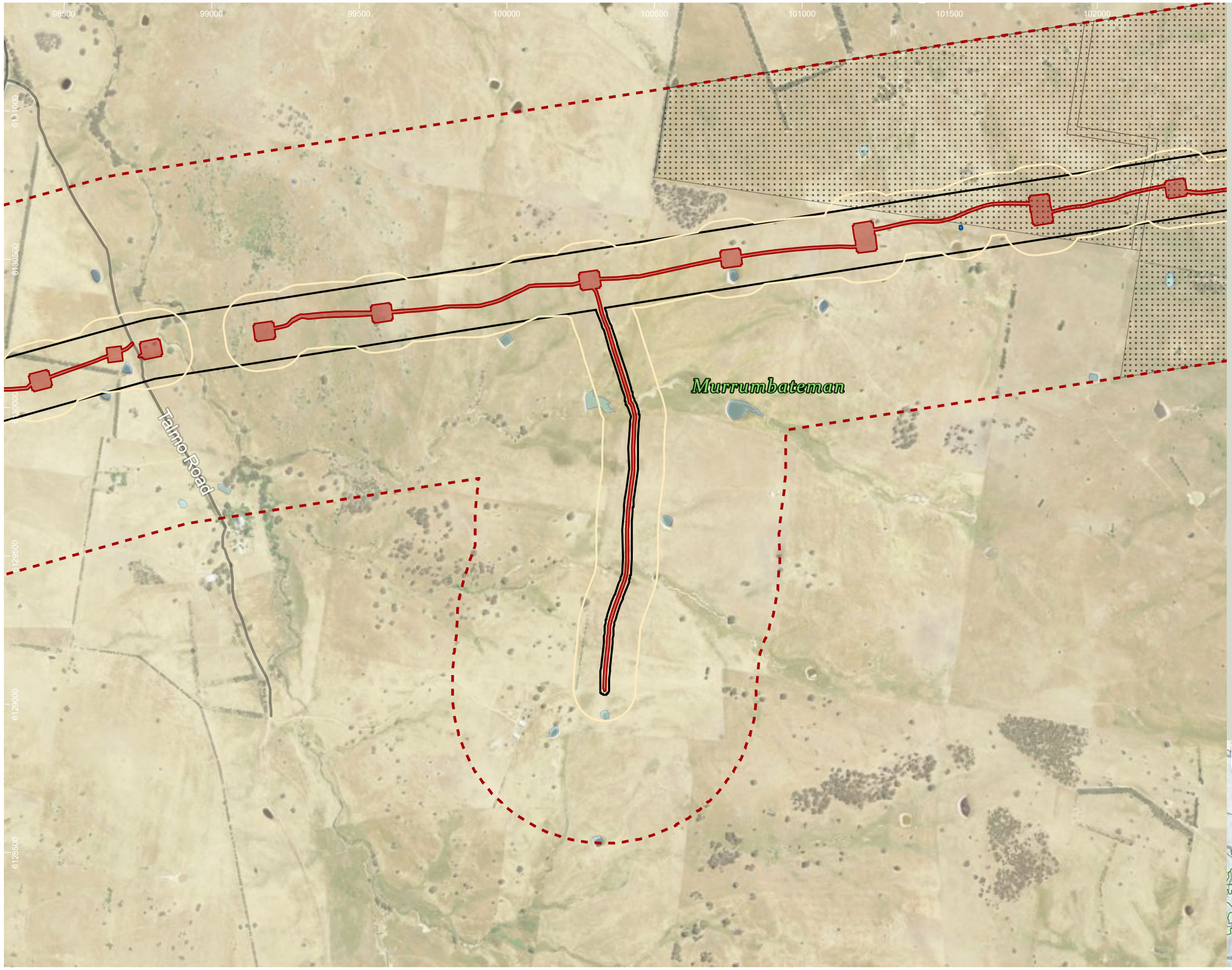
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 63

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

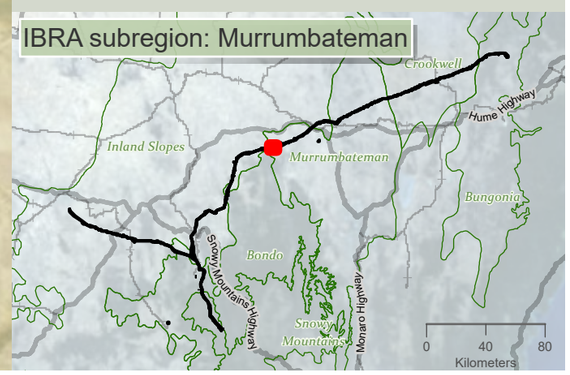
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

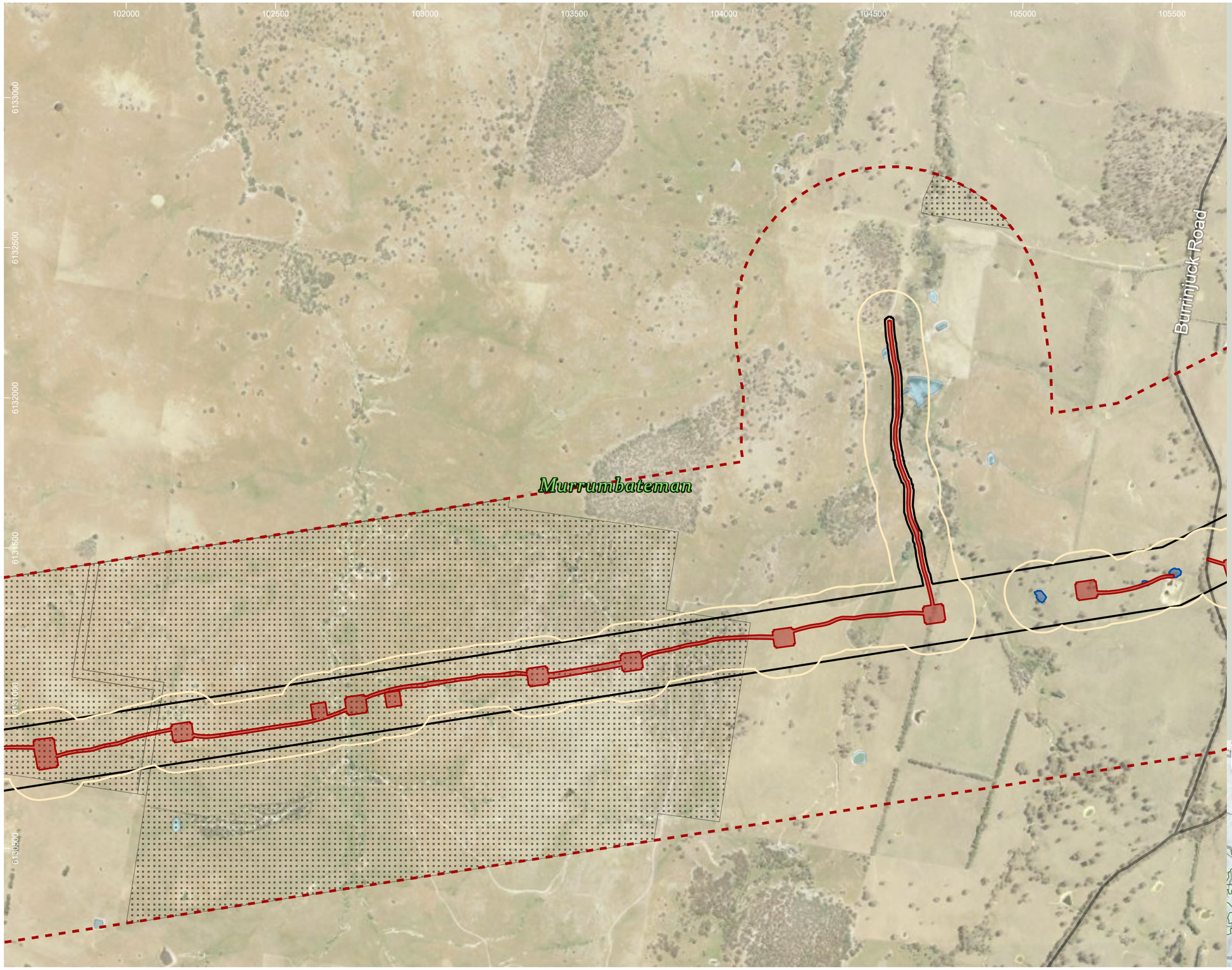
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 64

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699_Humelink_BDAR_Stage 2 Part A.aprx
Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx - Confidential



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

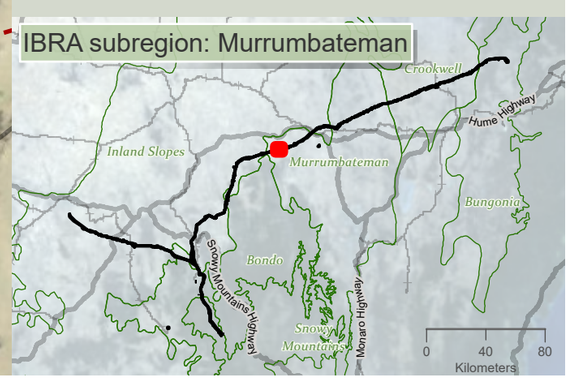
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 65

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

105000 105500 106000 106500 107000 107500 108000 108500

6133500 6133000 6132500 6132000 6131500 6131000

Sutton Grange Road

Burrinjuck Road

Murrumbateman

Black Range Road

Woolgarlo Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

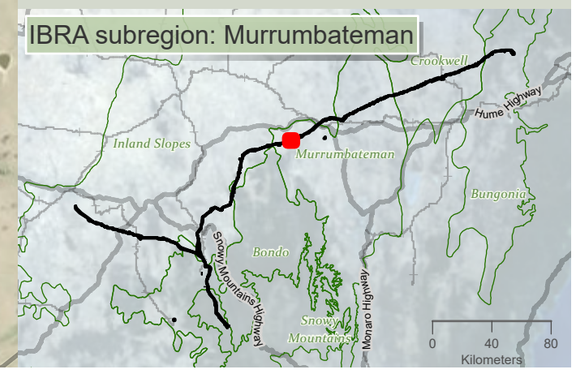
- Waterbody

Transport

Road

- Minor road

IBRA subregion: Murrumbateman



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

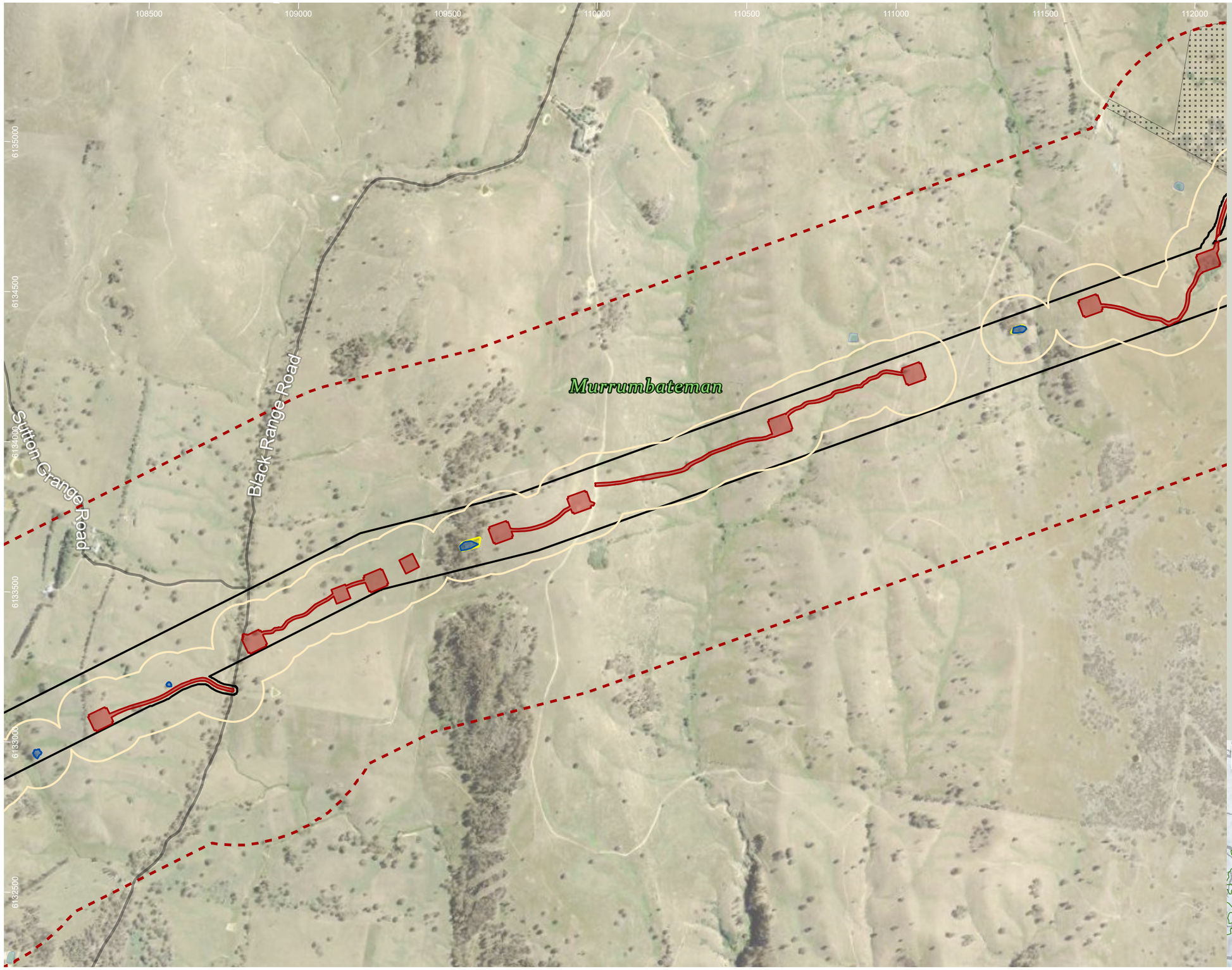
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 66

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

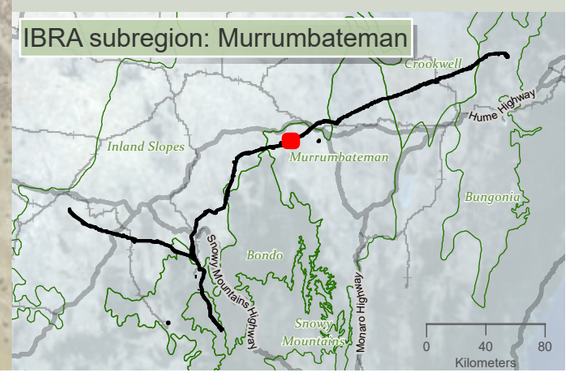
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 67

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MathewZajeczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

111500 112000 112500 113000 113500 114000 114500 115000

6136500 6136000 6135500 6135000 6134500 6134000

Black Range Road

Turtons Road

Murrumbateman

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

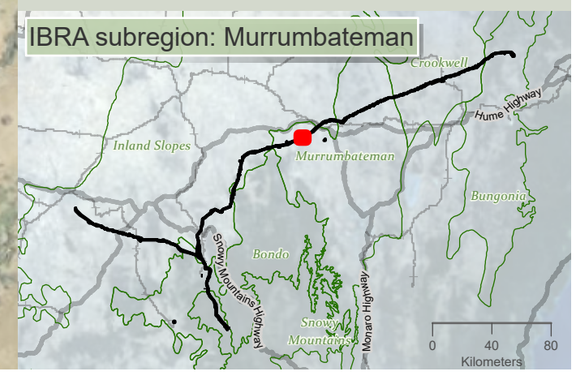
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 68

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

114500 115000 115500 116000 116500 117000 117500 118000

6138500 6138000 6137500 6137000 6136500 6136000

Murrumbateman

HumeLink project areas

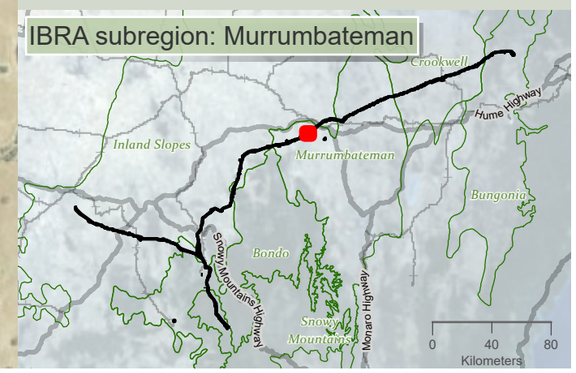
- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody



niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

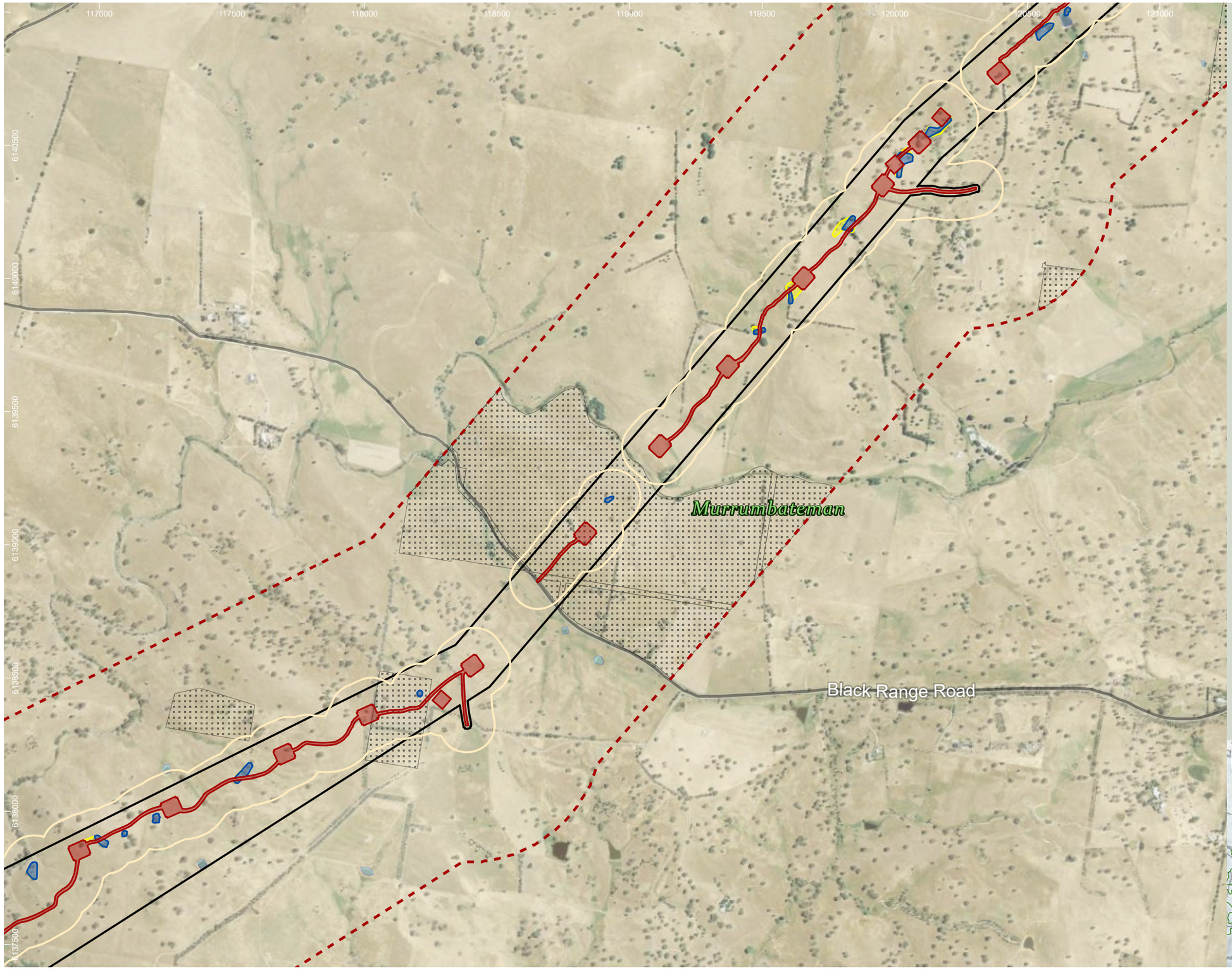
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 69

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

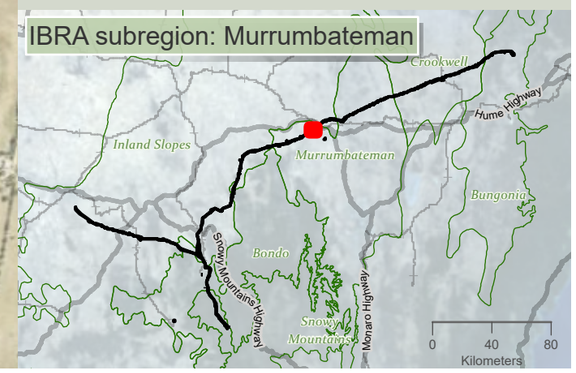
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

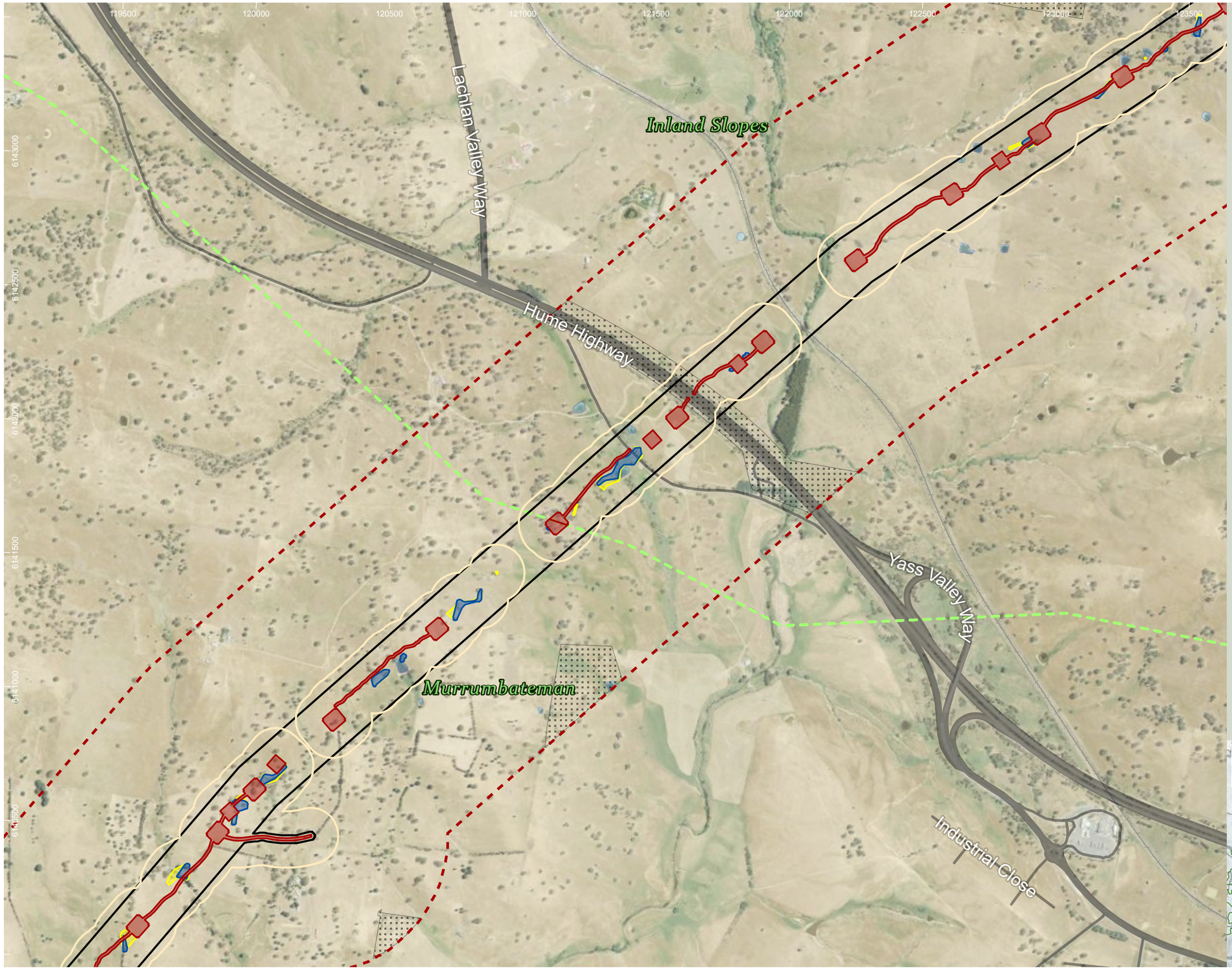
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 70

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSync\FolderNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

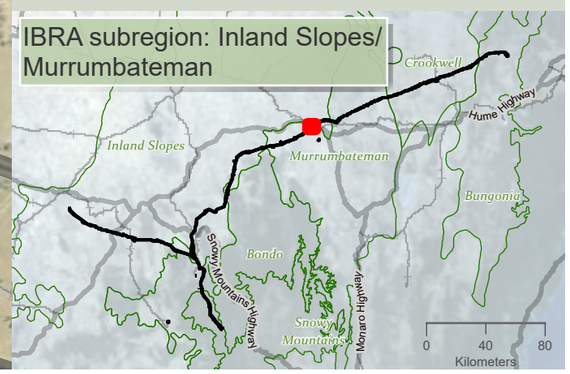
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road
- Rail



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 71

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

123500 124000 124500 125000 125500 126000 126500 127000

6136000 6135500 6135000 6134500 6134000 6133500

Murrumbateman

Yass substation compound (C10)

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

Road

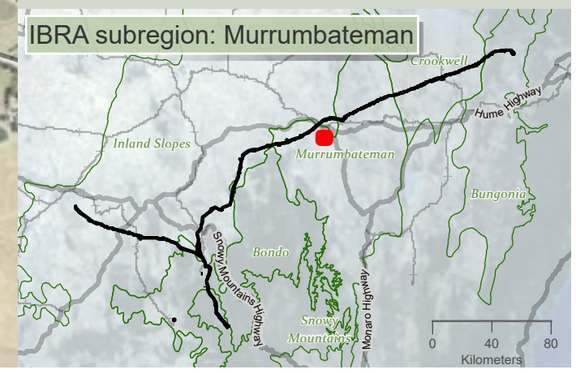
- Major road
- Minor road

Protected Areas of NSW

NPWS Reserve

- Nature Reserve

IBRA subregion: Murrumbateman



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

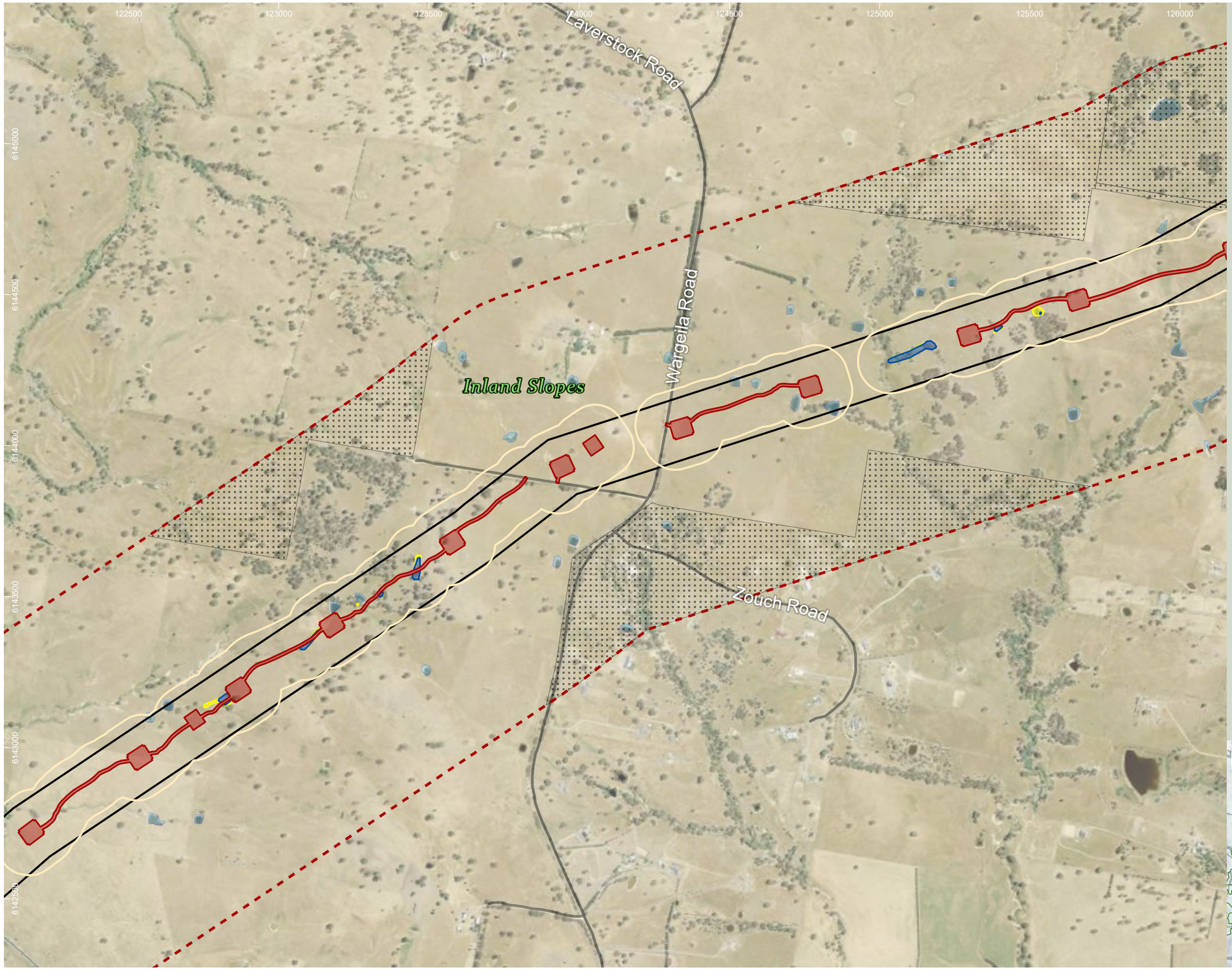
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 72

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

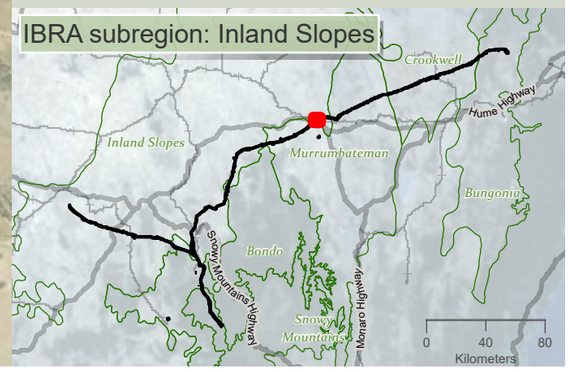
Hydrography

- Waterbody

Transport

Road

- Minor road
- Rail



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

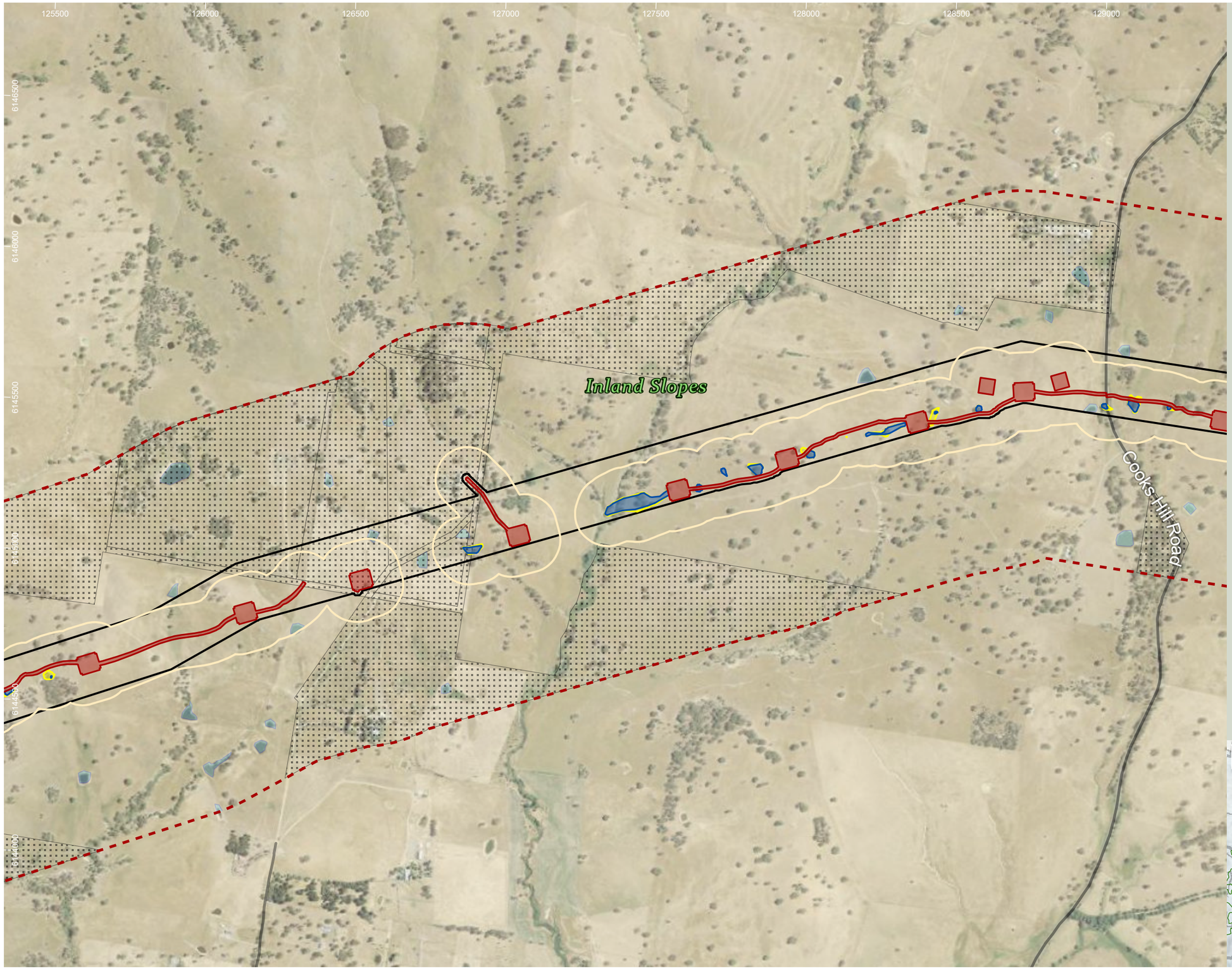
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 73

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

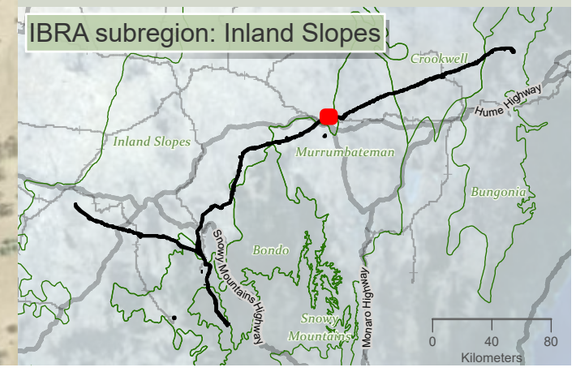
Hydrography

- Waterbody

Transport

Road

- Minor road



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 74

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

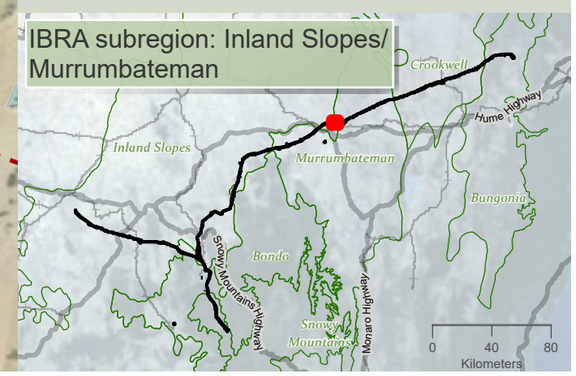
Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- Nature Reserve



niche Environment and Heritage

0 N 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 75

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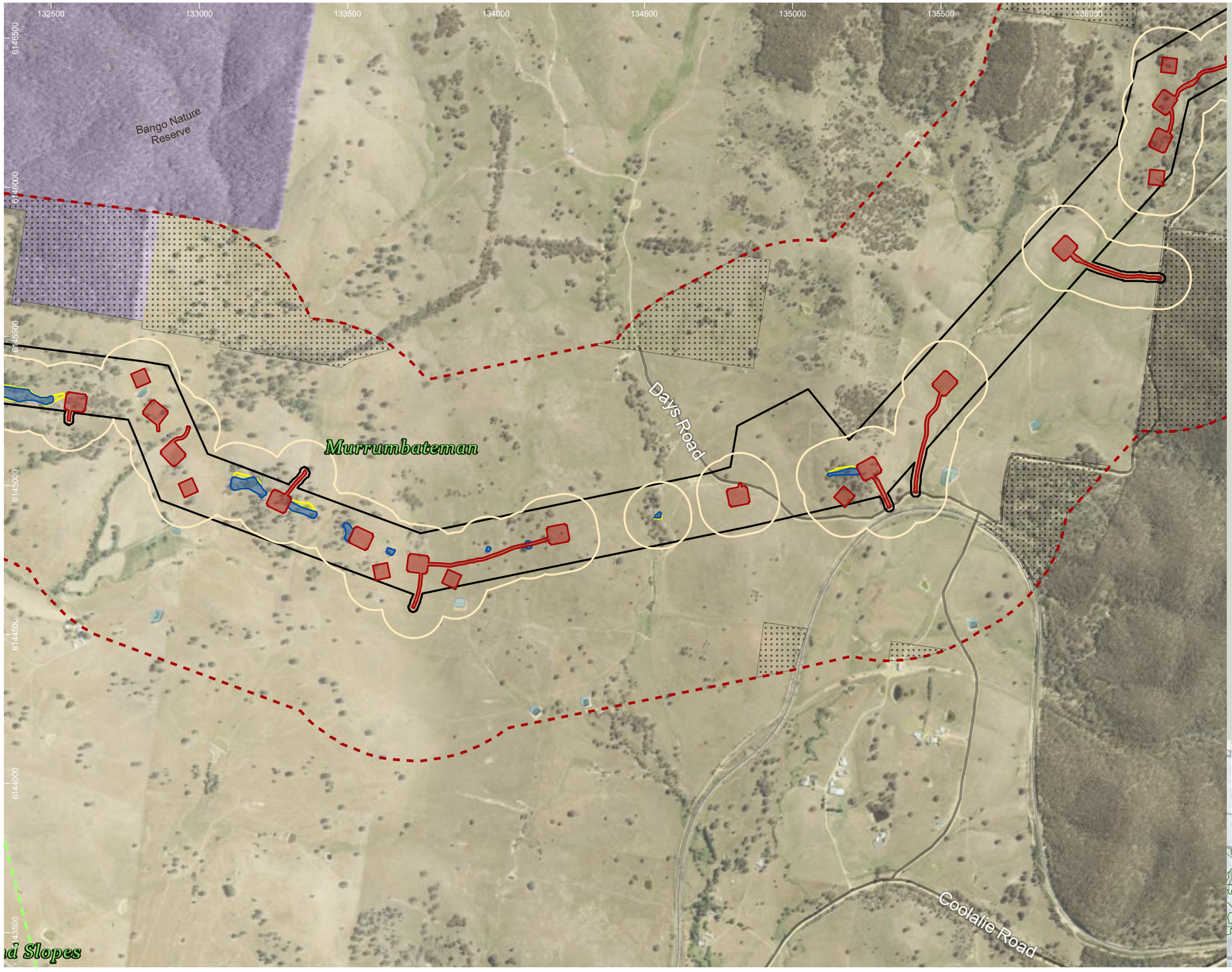


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

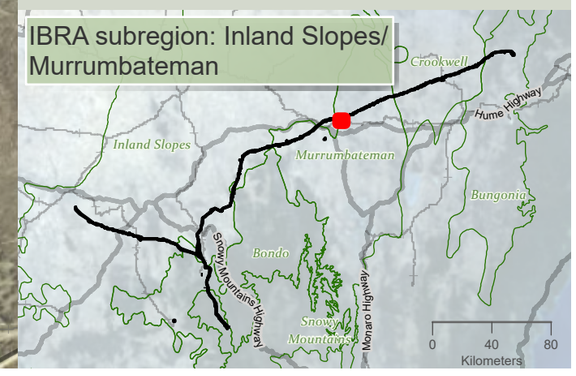
Road

- Minor road
- Rail

Protected Areas of NSW

NPWS Reserve

- Nature Reserve



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 76

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135500 136000 136500 137000 137500 138000 138500 139000

6148500 6148000 6147500 6147000 6146500 6146000 6145500

Murrumbateman

Bushs Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

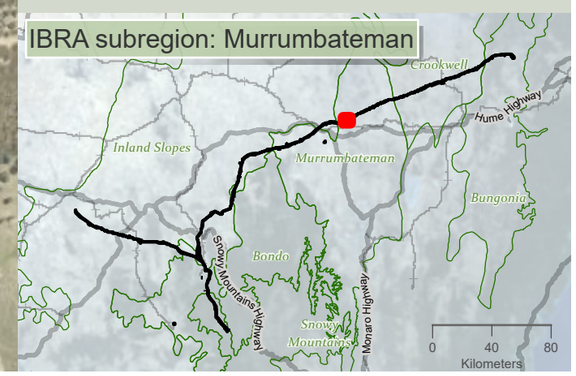
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 77

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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138500 139000 139500 140000 140500 141000 141500 142000

6150000 6149500 6149000 6148500 6148000 6147500

Murrumbateman

Stink Pot Road

Flacknell Creek Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

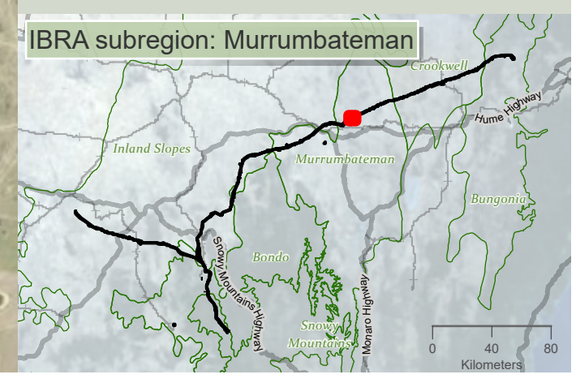
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 78

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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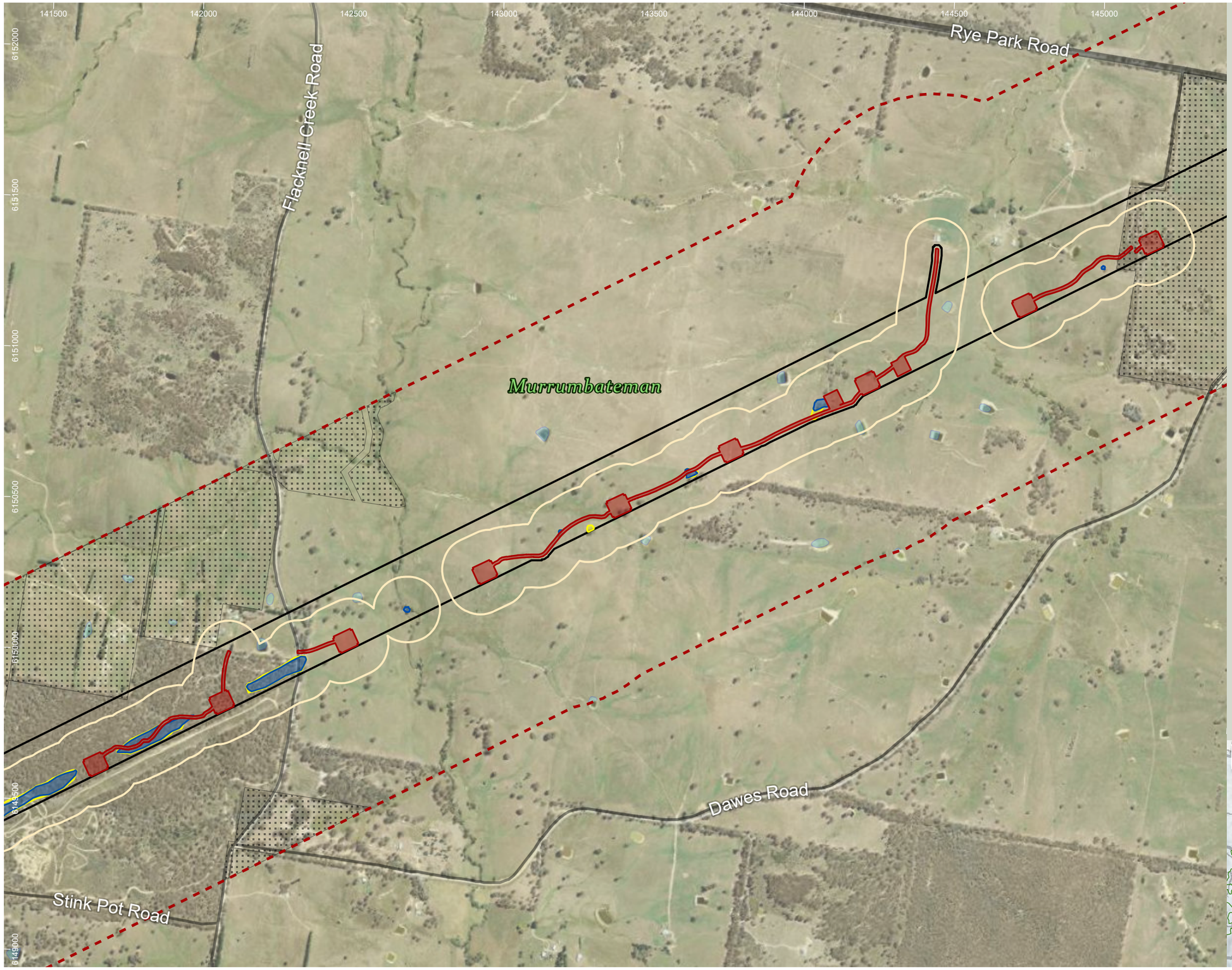


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

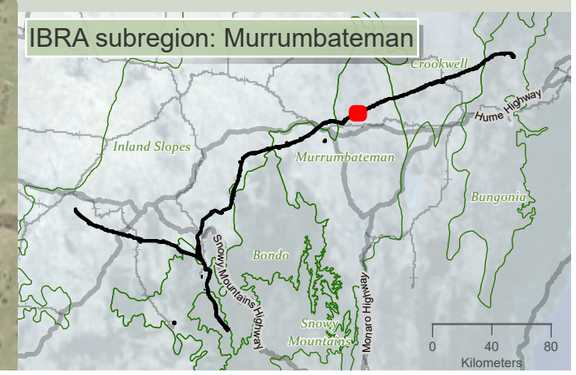
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 79

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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144500 145000 145500 146000 146500 147000 147500 148000

6153500 6153000 6152500 6152000 6151500 6151000

Felled Timber Road
Greendale Road
Offleys Lane
Murrumbateman
Rye Park Road
Dawes Road
Carnells Lane

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

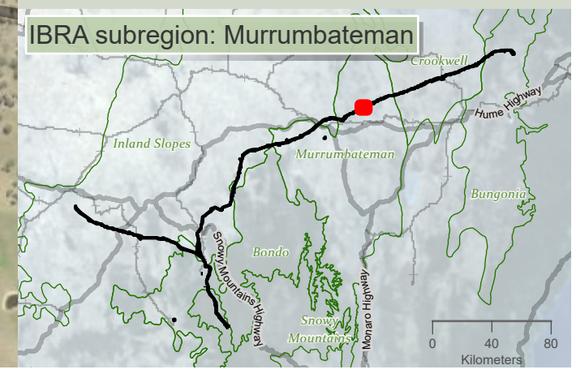
- Waterbody

Transport

Road

- Major road
- Minor road

IBRA subregion: Murrumbateman



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 80

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148000 148500 149000 149500 150000 150500 151000 151500

6155000 6154500 6154000 6153500 6153000 6152500

Murrumbateman

Felled Timber Road

Rugby Road

Walshs Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

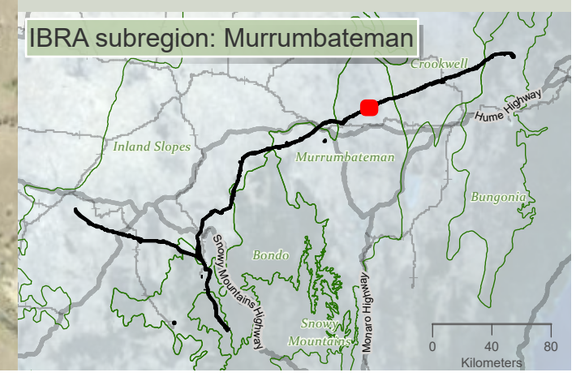
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 81

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Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

151000 151500 152000 152500 153000 153500 154000 154500

6156500 6156000 6155500 6155000 6154500 6154000

Murrumbateman

HumeLink project areas

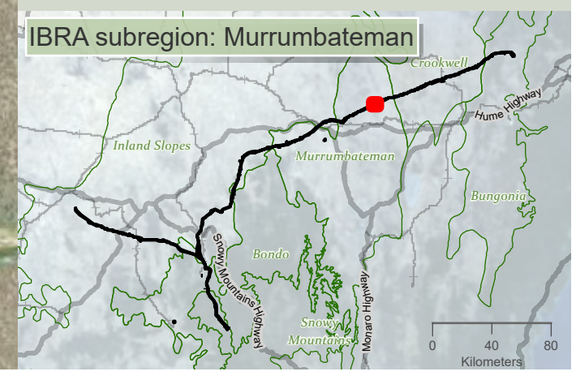
- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

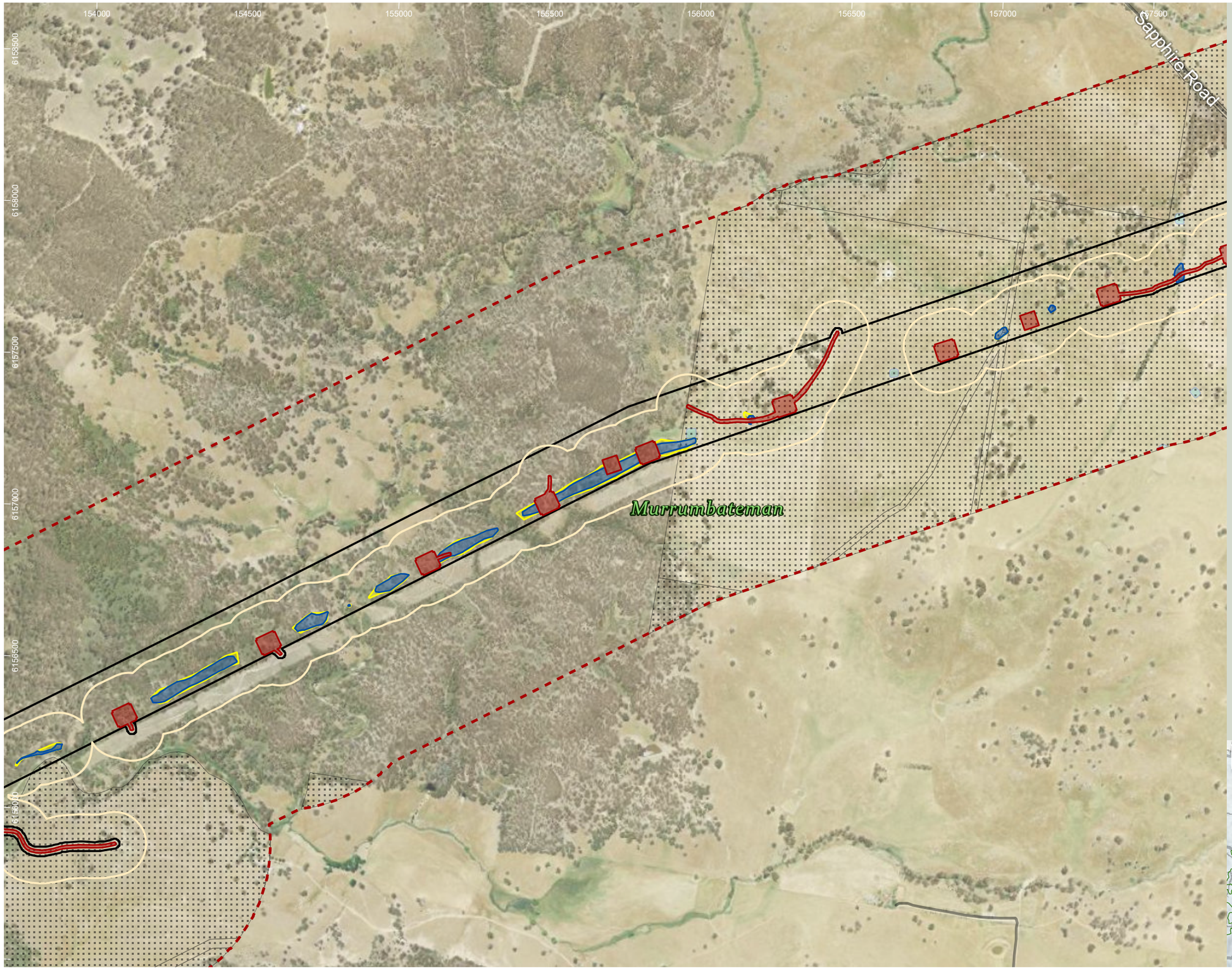
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 82

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

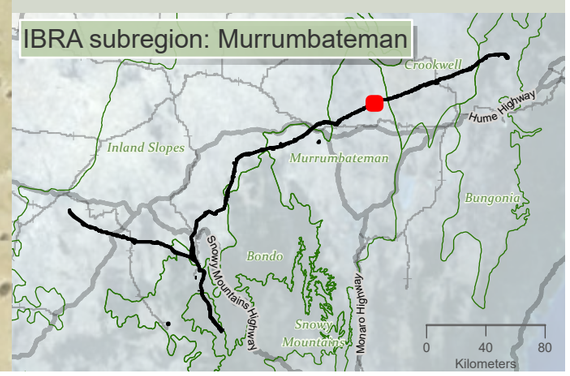
Hydrography

- Waterbody

Transport

Road

- Minor road



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 N 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 83

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

157000 157500 158000 158500 159000 159500 160000 160500

6159500 6159000 6158500 6158000 6157500 6157000

Murrumbateman

Sapphire Road

Clancys Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

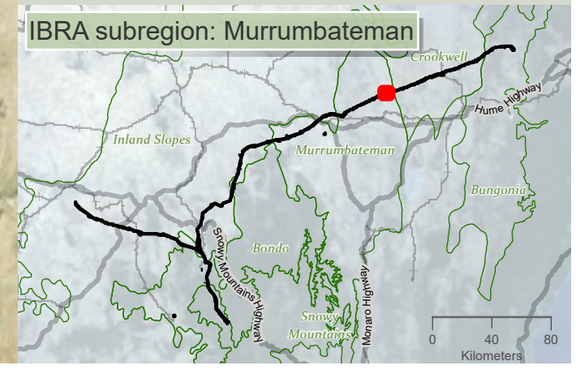
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 84

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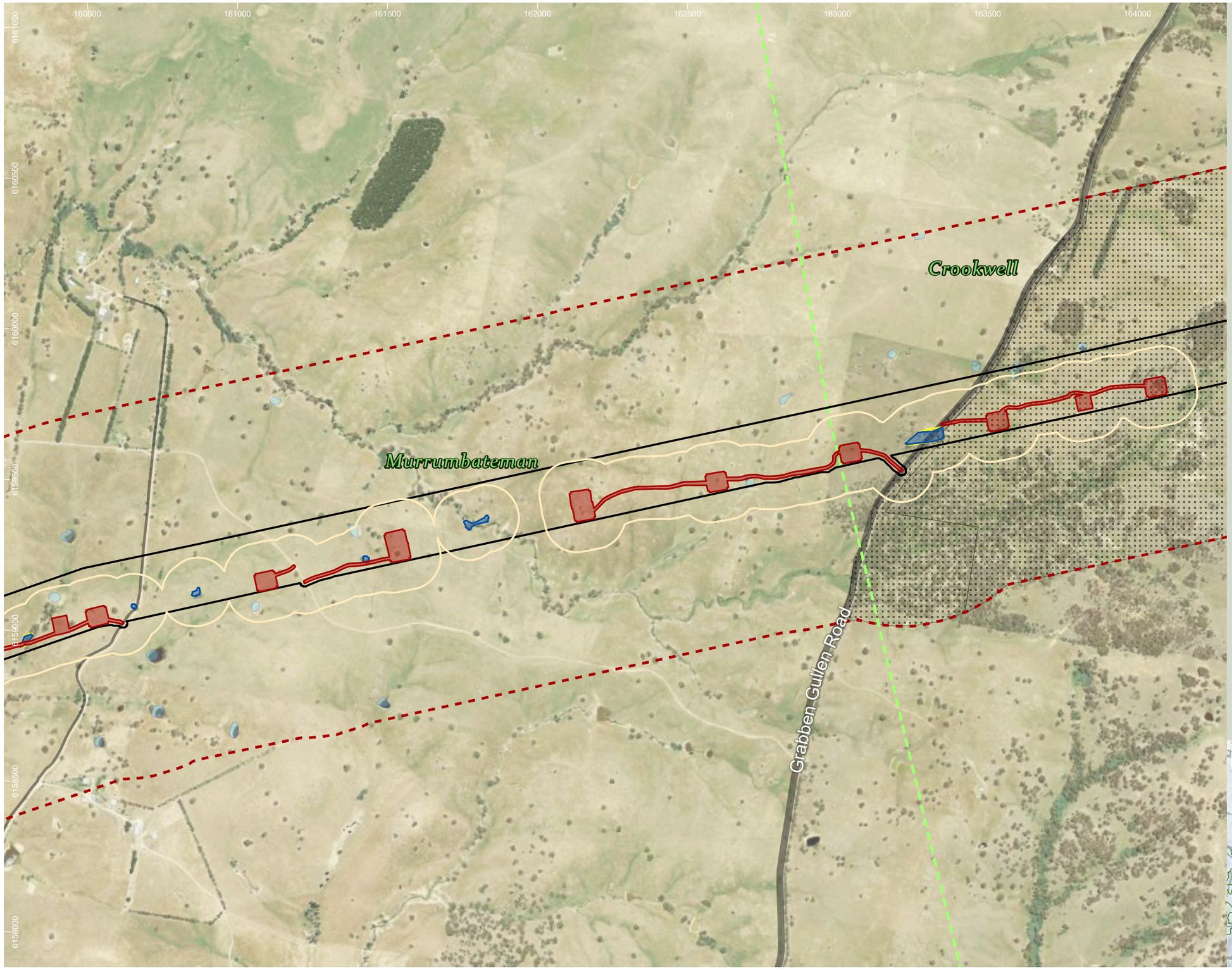


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

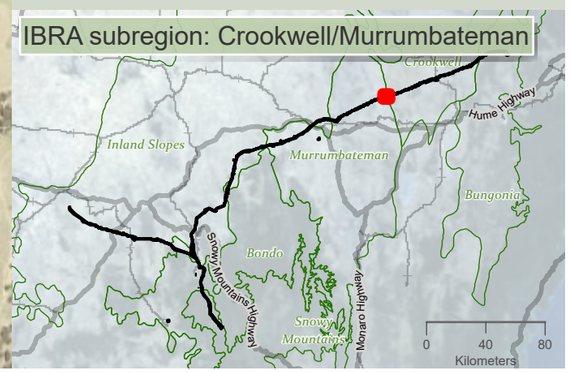
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road



Drawn by: MatthewZajaczkowski; Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 85

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164000 164500 165000 165500 166000 166500 167000 167500

6162000 6161500 6161000 6160500 6160000 6159500 6159000

Grabben Gullen Road

Gurrundah Road

Crookwell

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

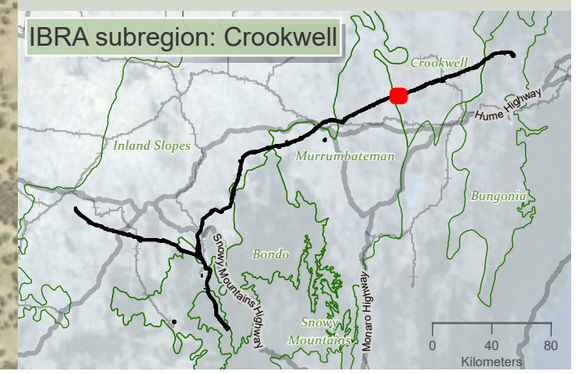
- Waterbody

Transport

Road

- Major road
- Minor road

IBRA subregion: Crookwell



0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 86

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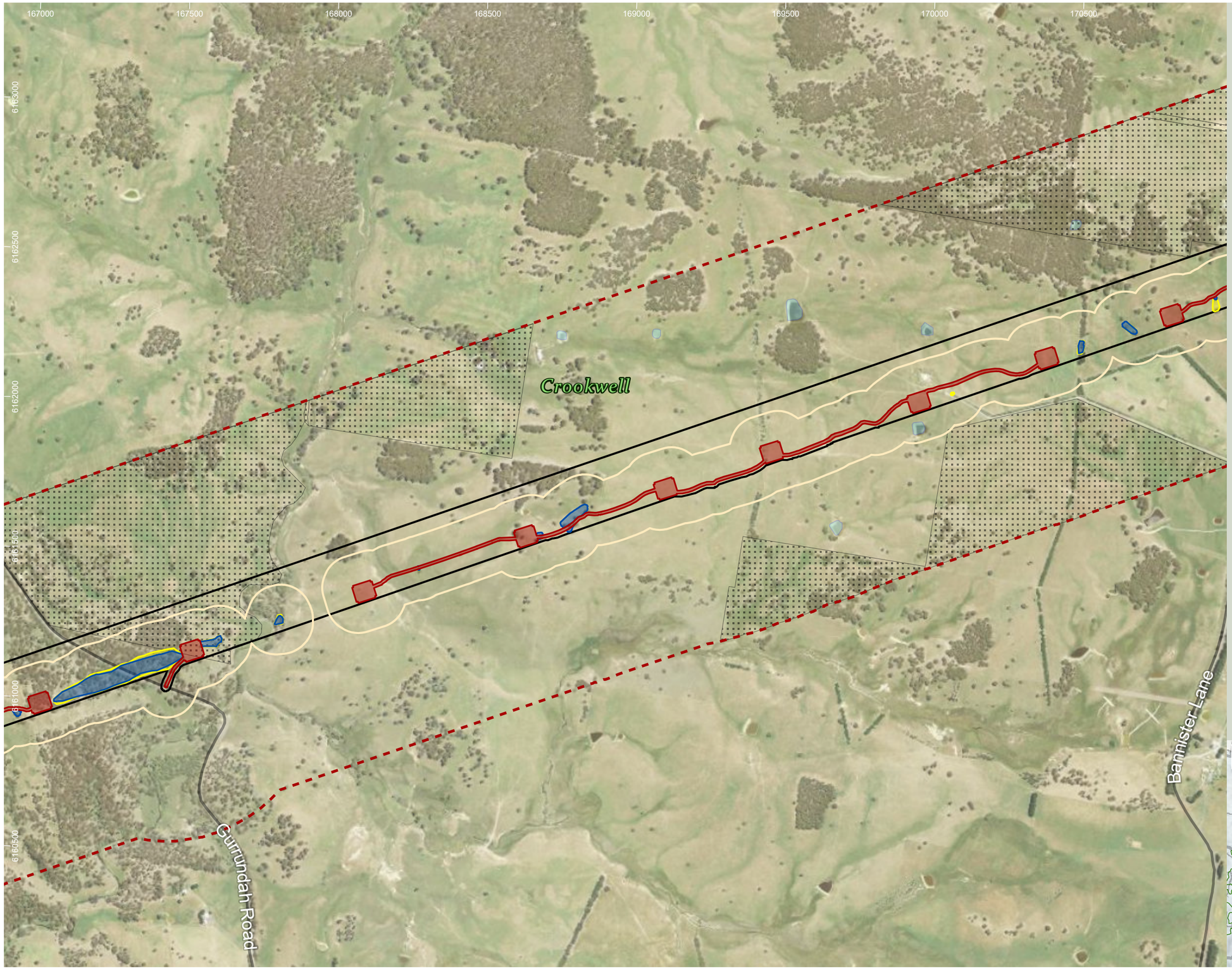
Drawn by: MatthewZajaczkowski; Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

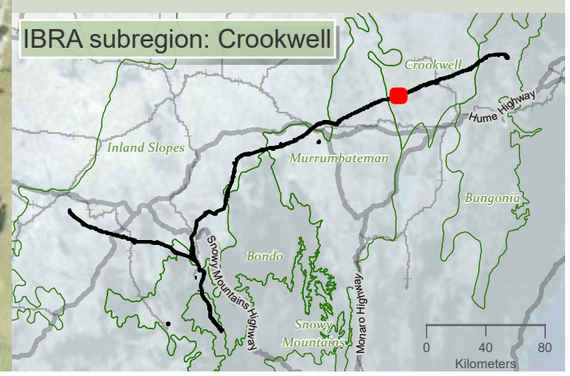
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 87

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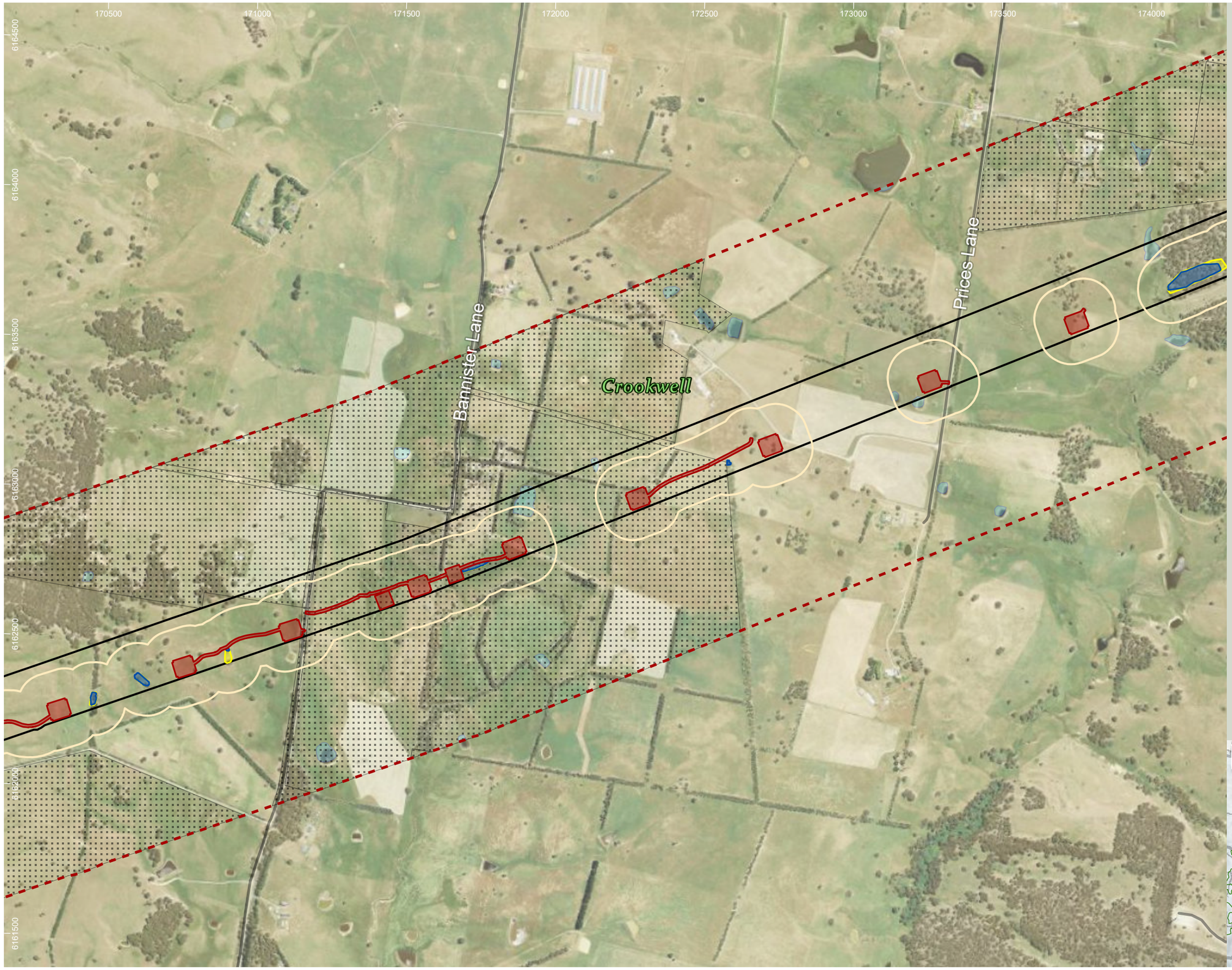


HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

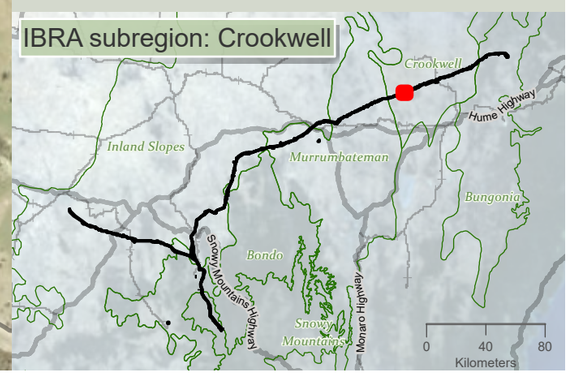
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

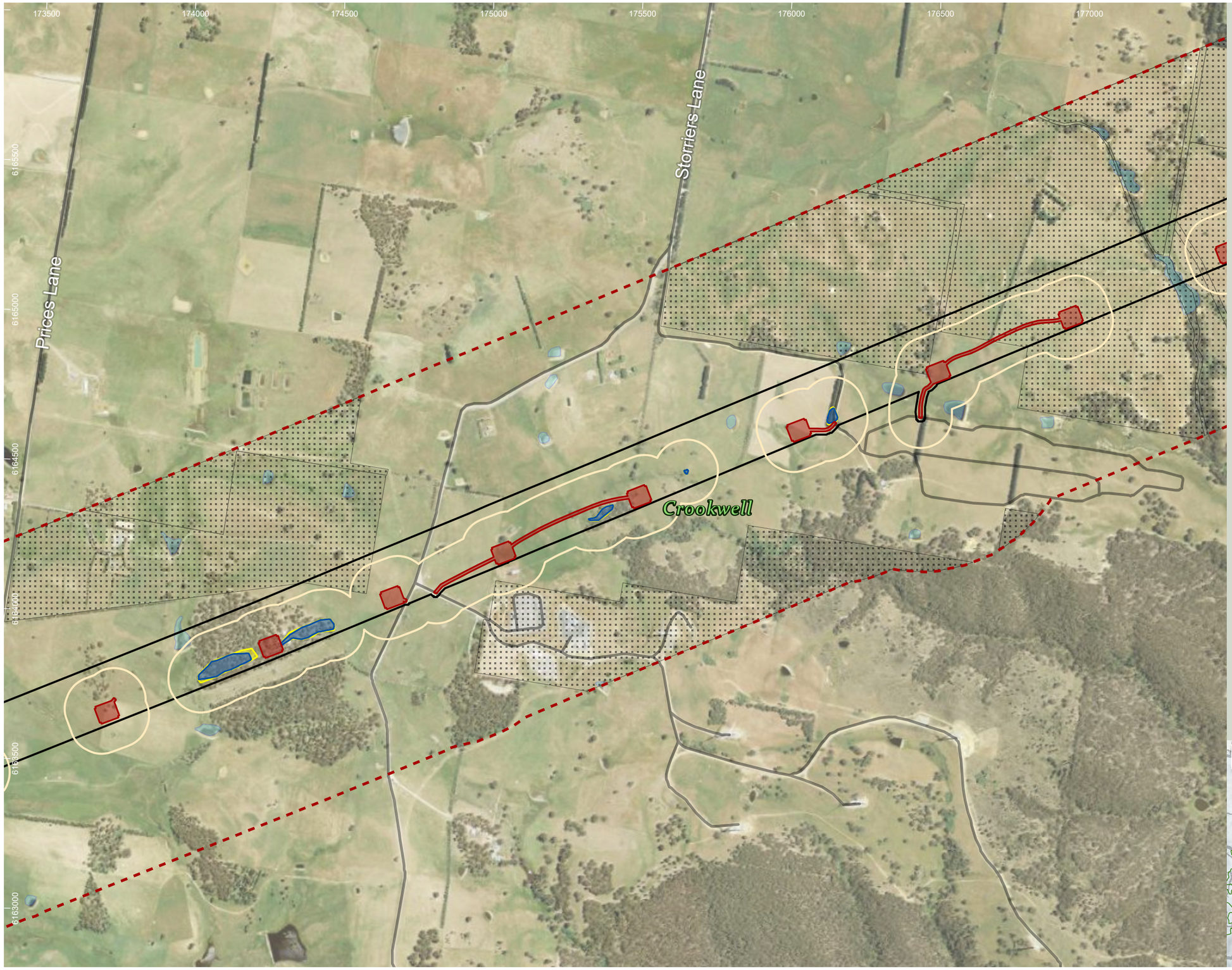
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 88

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 26/07/2023 File: C:\OneDriveSync\FolderNiche\6699 - Confidential impact assessment SEC-EXT\nt SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

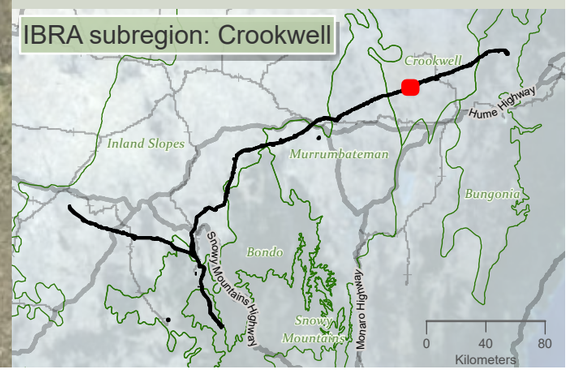
Hydrography

- Waterbody

Transport

Road

- Minor road



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDrive\Sync Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 89

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

177000 177500 178000 178500 179000 179500 180000 180500

6167500 6167000 6166500 6166000 6165500 6165000 6164500

Walkoms Lane

Crookwell

Range Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

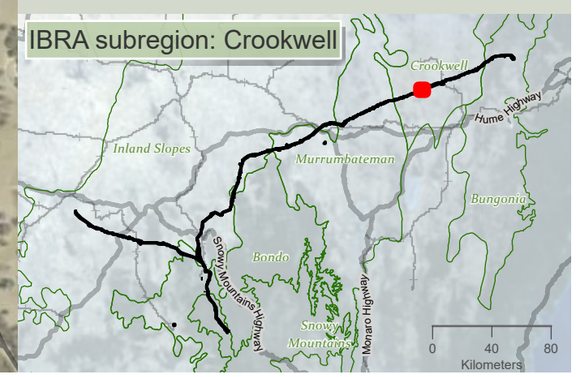
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

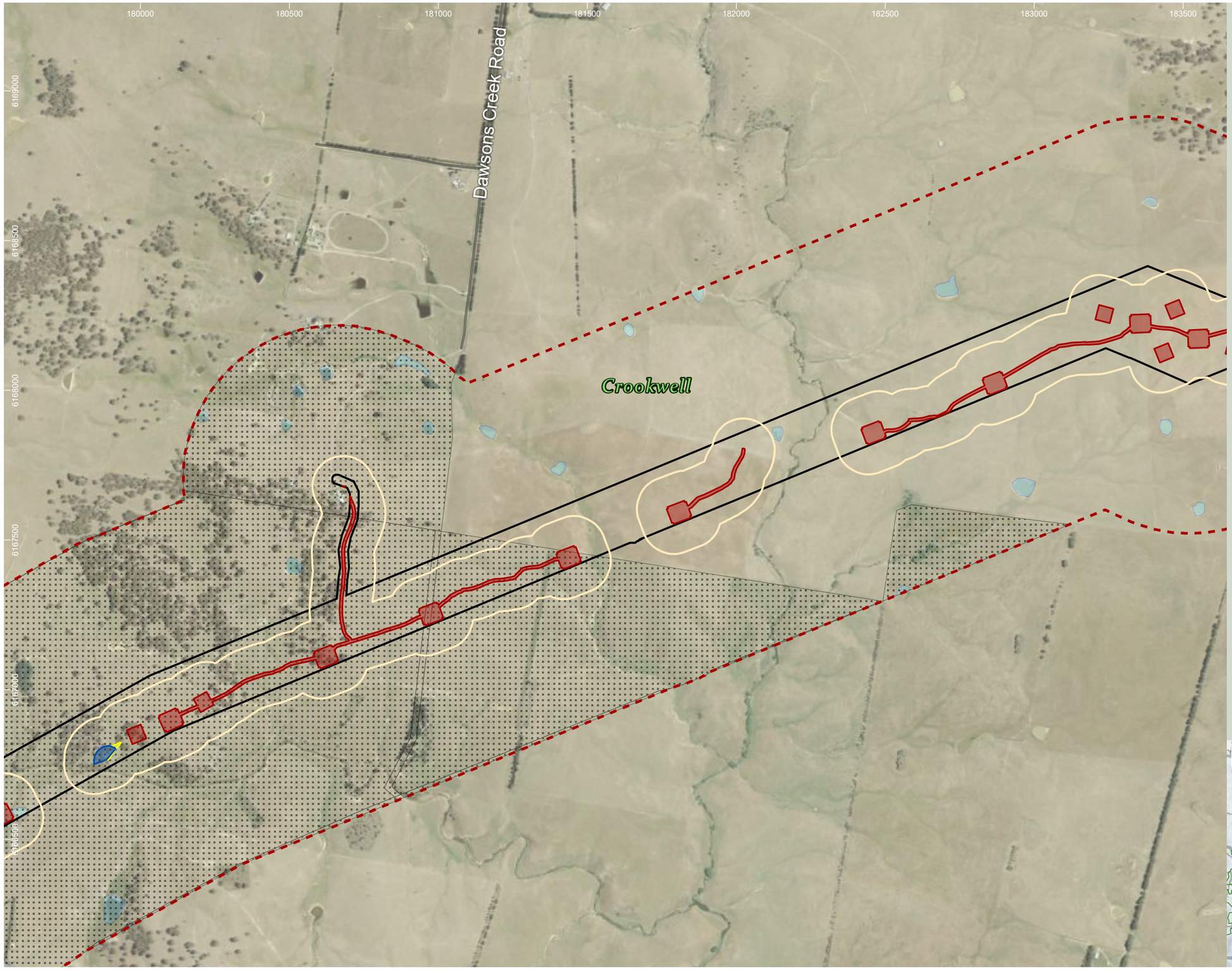
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 90

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6999 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

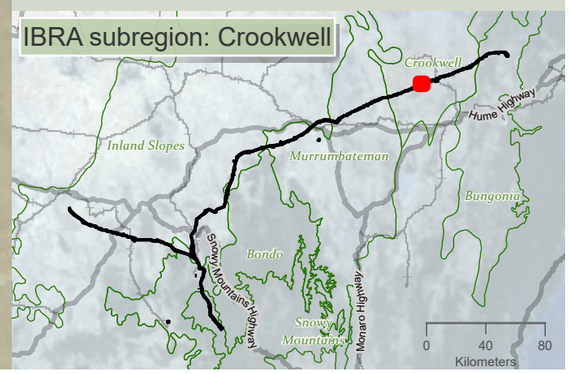
Hydrography

- Waterbody

Transport

Road

- Minor road



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 91

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

183000 183500 184000 184500 185000 185500 186000 186500

6170000 6169500 6169000 6168500 6168000 6167500

Goulburn Road

Crookwell

Crookwell Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

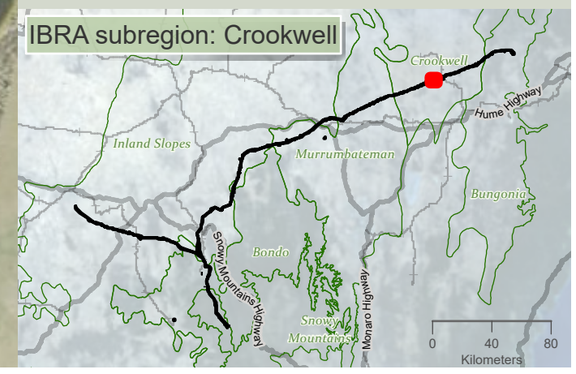
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

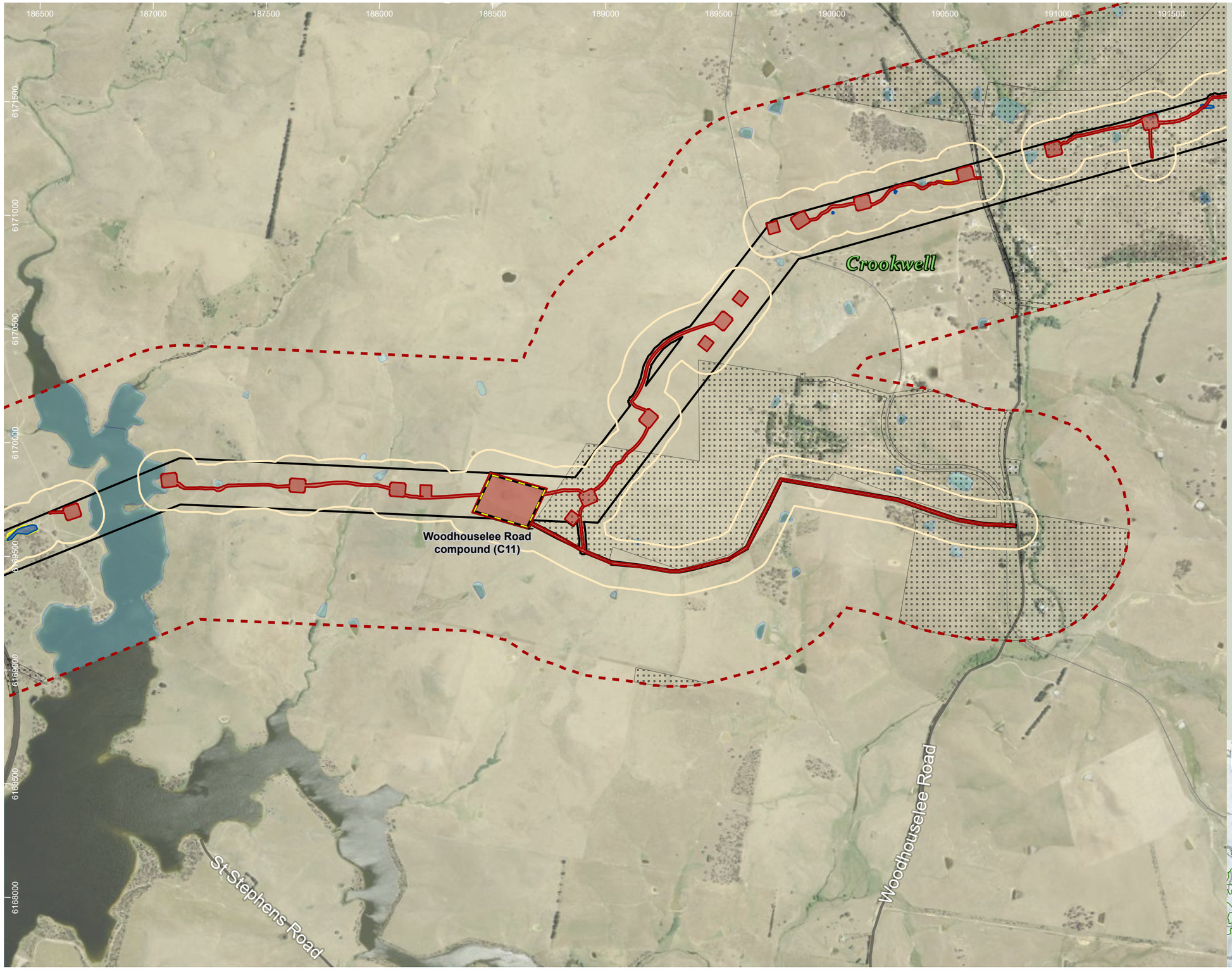
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 92

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajeczkowski | Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

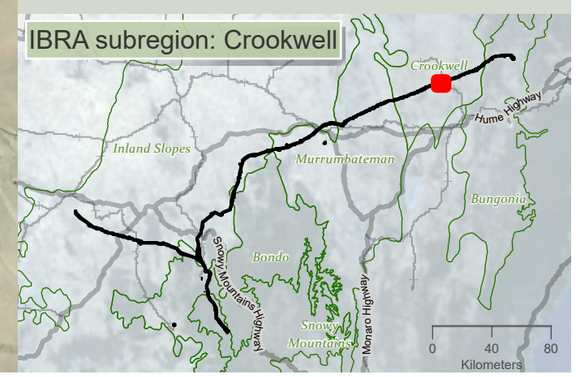
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road
- Rail



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 93

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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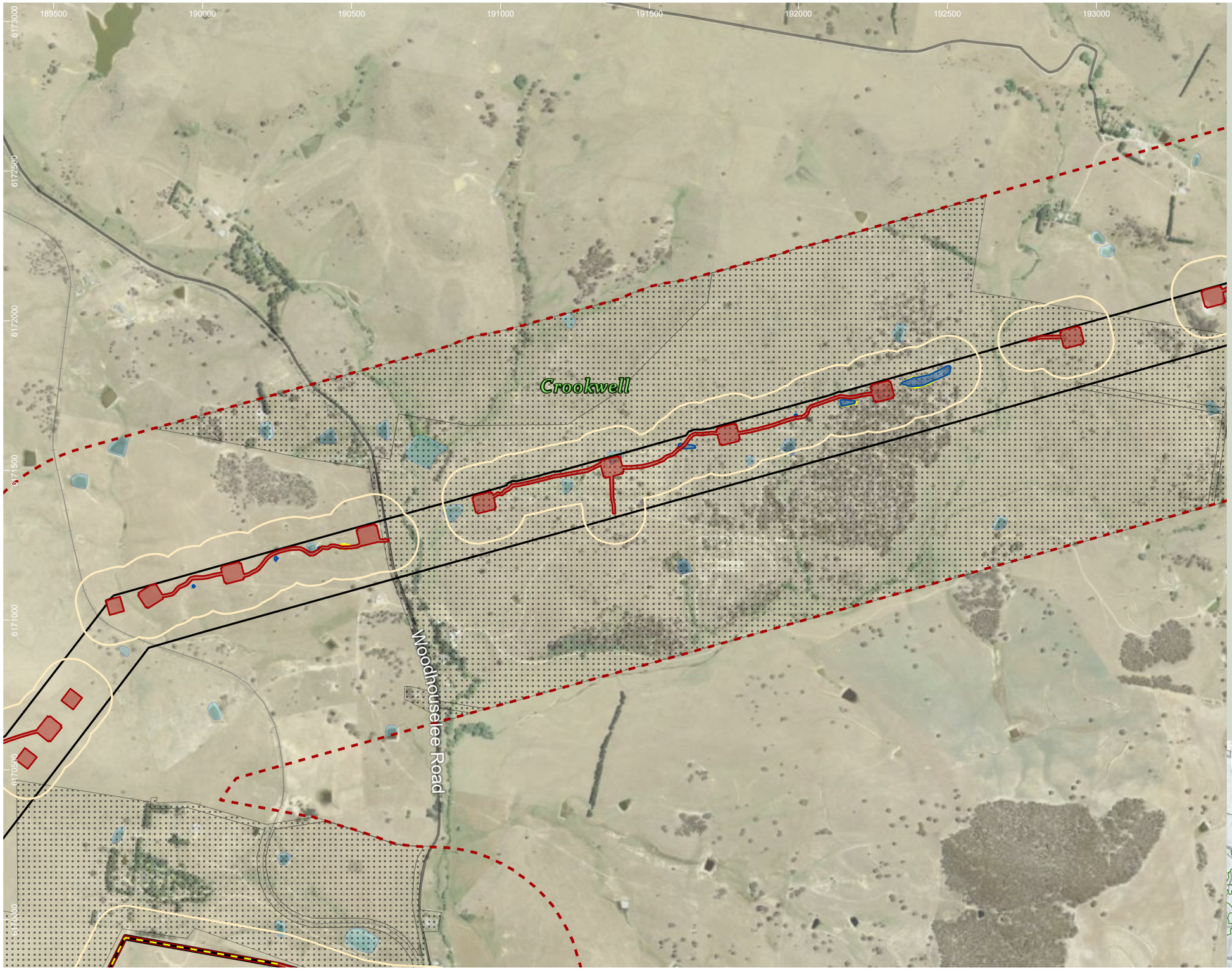


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

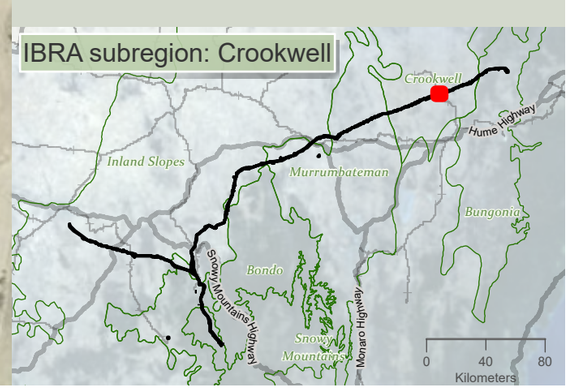
Hydrography

- Waterbody

Transport

Road

- Minor road
- Rail



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 94

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential\impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

193000 193500 194000 194500 195000 195500 196000 196500

6174000 6173500 6173000 6172500 6172000 6171500 6171000

Crookwell

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

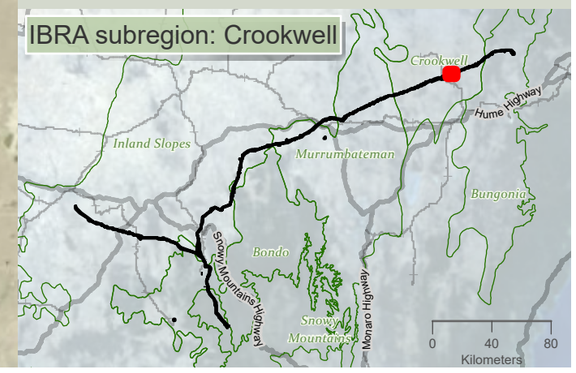
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 95

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

196000
196500
197000
197500
198000
198500
199000
199500
6175000
6174500
6174000
6173500
6173000
6172500
Middle Arm Road
Back Arm Nature Reserve
Crookwell

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

Road

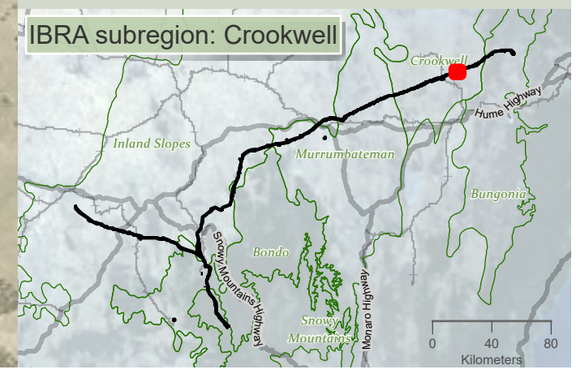
- Minor road

Protected Areas of NSW

NPWS Reserve

- Nature Reserve

IBRA subregion: Crookwell



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 96

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

199500 200000 200500 201000 201500 202000 202500 203000

6176500 6176000 6175500 6175000 6174500 6174000

Back Arm Nature Reserve

Crookwell

Rhyanna Road

Back Arm Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

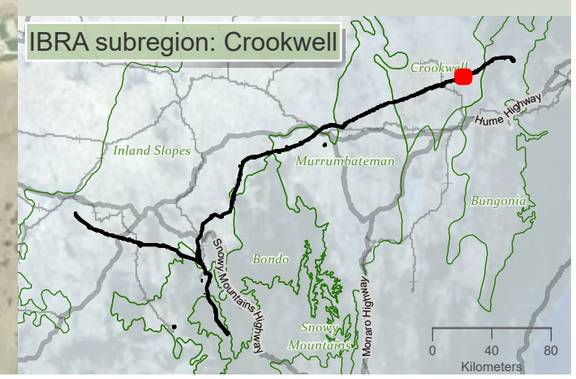
Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- Nature Reserve



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 97

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

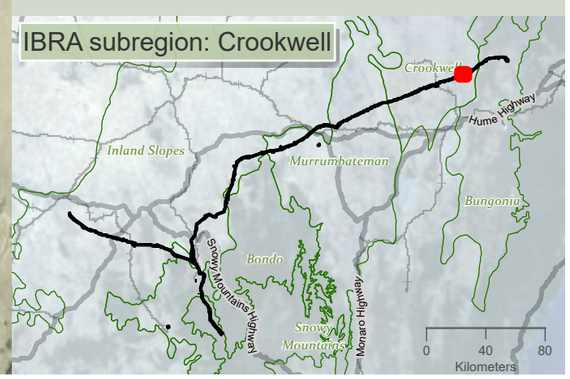
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 98

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Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

206000 206500 207000 207500 208000 208500 209000 209500

6179000 6178500 6178000 6177500 6177000 6176500

Cowpers Lane

Taralga Road

Crookwell

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

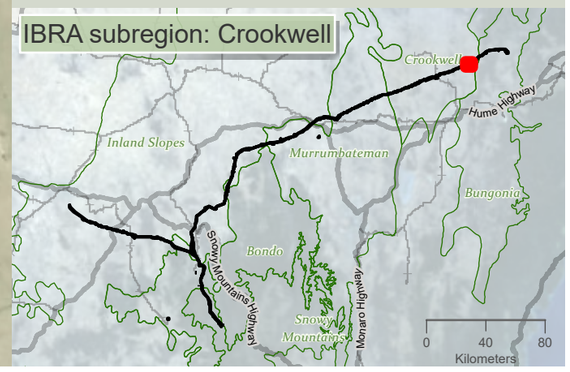
Hydrography

- Waterbody

Transport

Road

- Major road
- Minor road



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

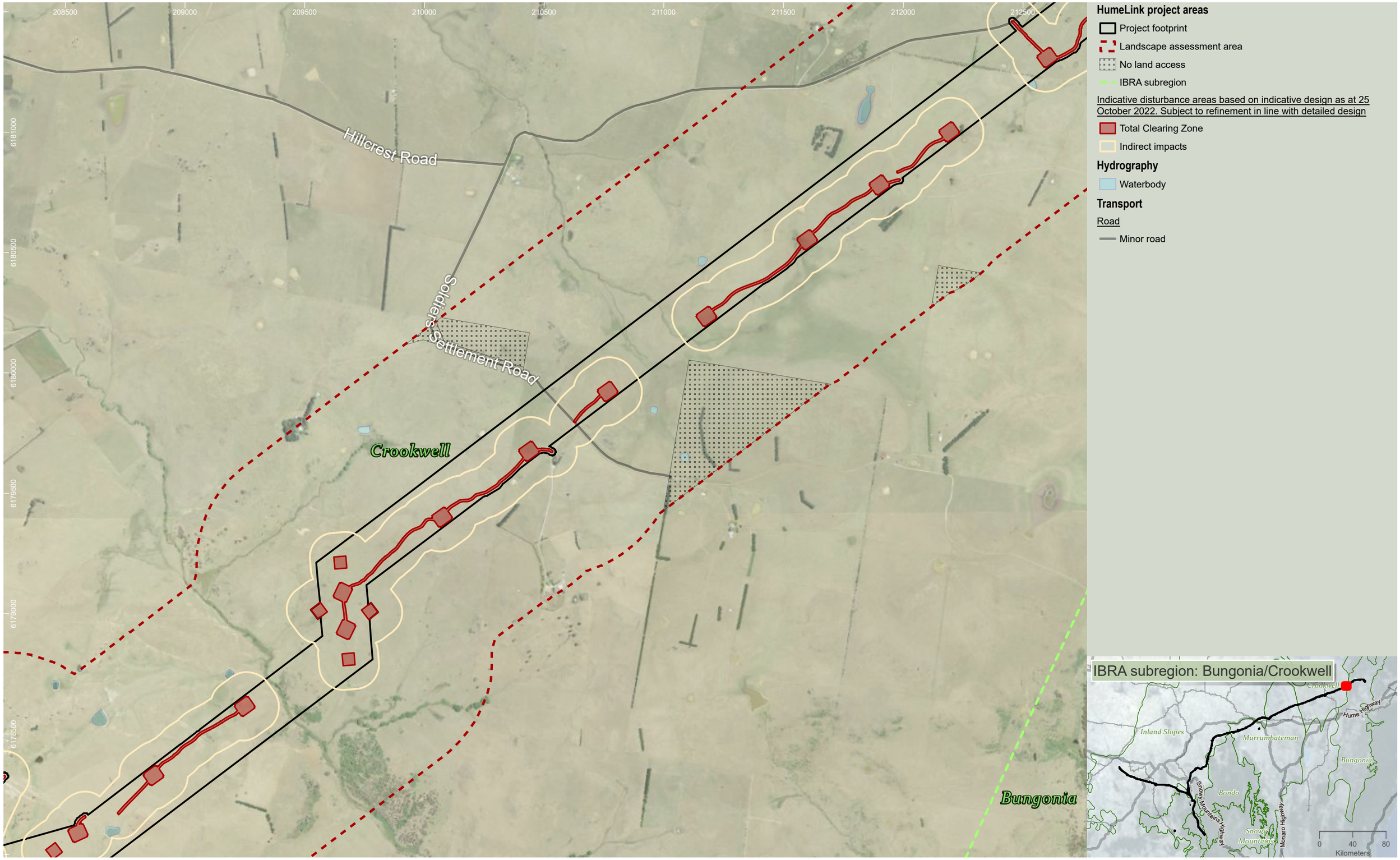
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 99

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



niche Environment and Heritage

0 400
m
WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 100

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

211500 212000 212500 213000 213500 214000 214500 215000

6183500 6183000 6182500 6182000 6181500 6181000 6180500

Crookwell

Bungonia

Hillcrest Road

Tarlo River National Park

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access
- IBRA subregion

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

Road

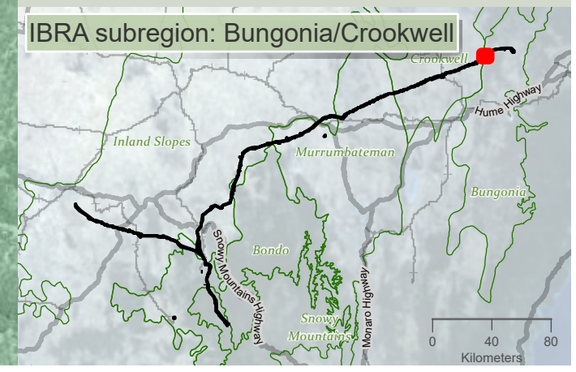
- Minor road

Protected Areas of NSW

NPWS Reserve

- National Park

IBRA subregion: Bungonia/Crookwell



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 101

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214000 214500 215000 215500 216000 216500 217000 217500 218000

6185500 6185000 6184500 6184000 6183500 6183000 6182500

Bungonia

Tarlo River National Park

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

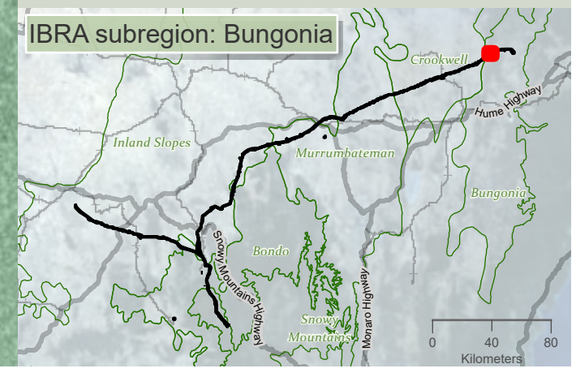
Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- National Park



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 102

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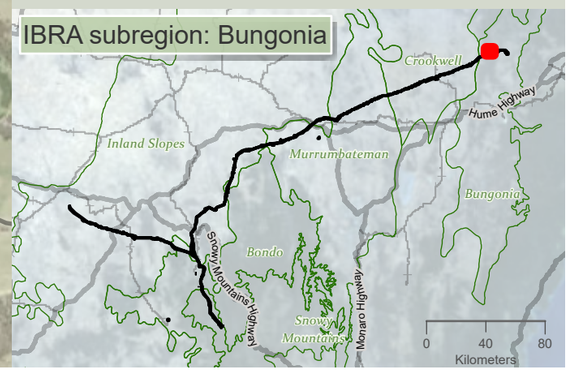
Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

Hydrography

- Waterbody

Transport

Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- National Park

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 103

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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221000 221500 222000 222500 223000 223500 224000

6187500 6187000 6186500 6186000 6185500 6185000

Bungonia

Adavale Road

Hanworth Road

HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

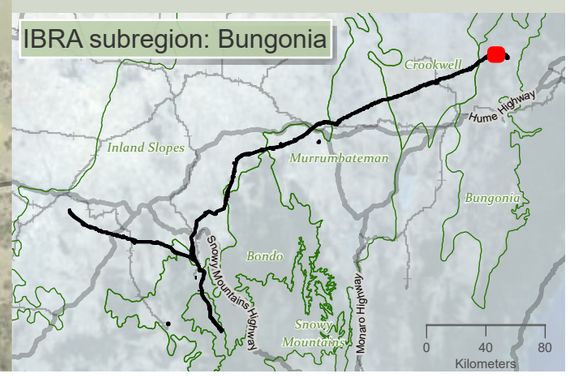
Hydrography

- Waterbody

Transport

Road

- Minor road



0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

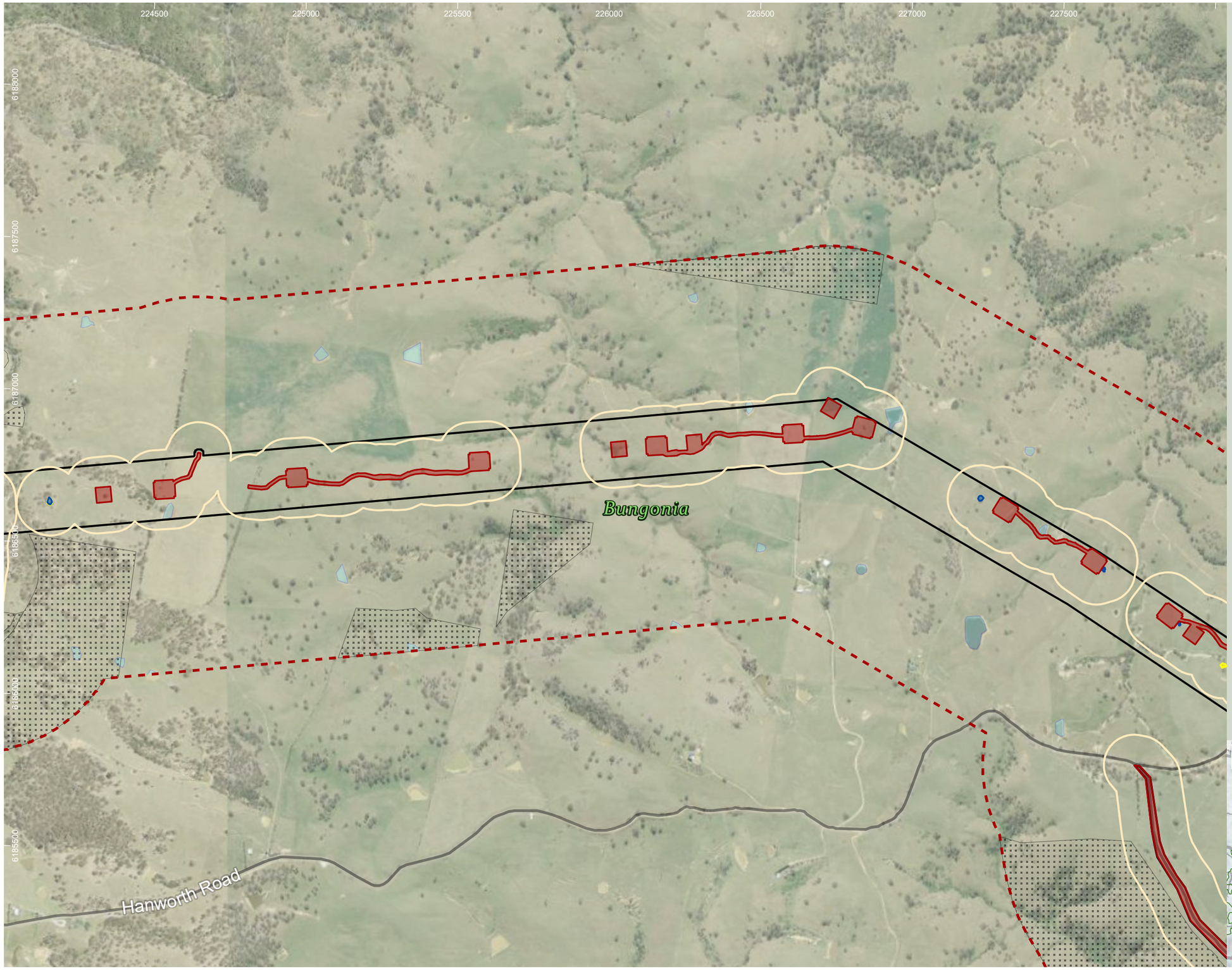
Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 104

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MathewZajaczkowski; Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment\EC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

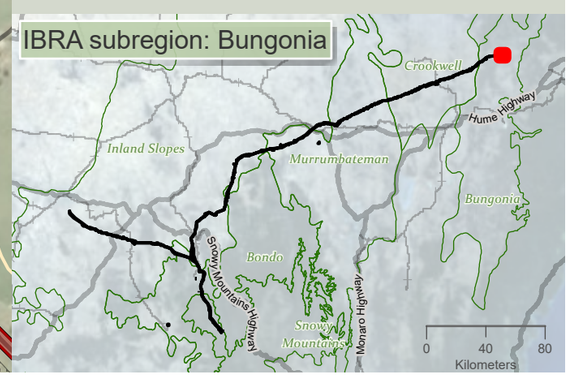
Hydrography

- Waterbody

Transport

Road

- Minor road



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 105

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- No land access

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- Indirect impacts

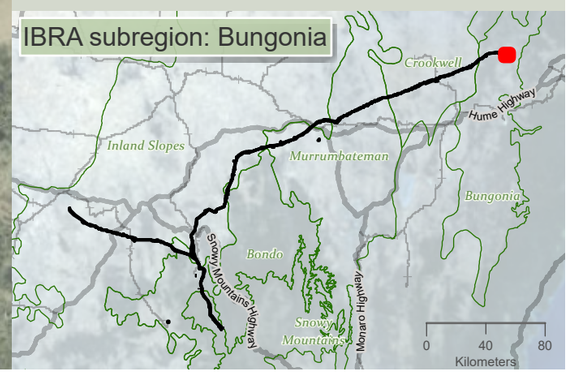
Hydrography

- Waterbody

Transport

Road

- Minor road



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\EC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

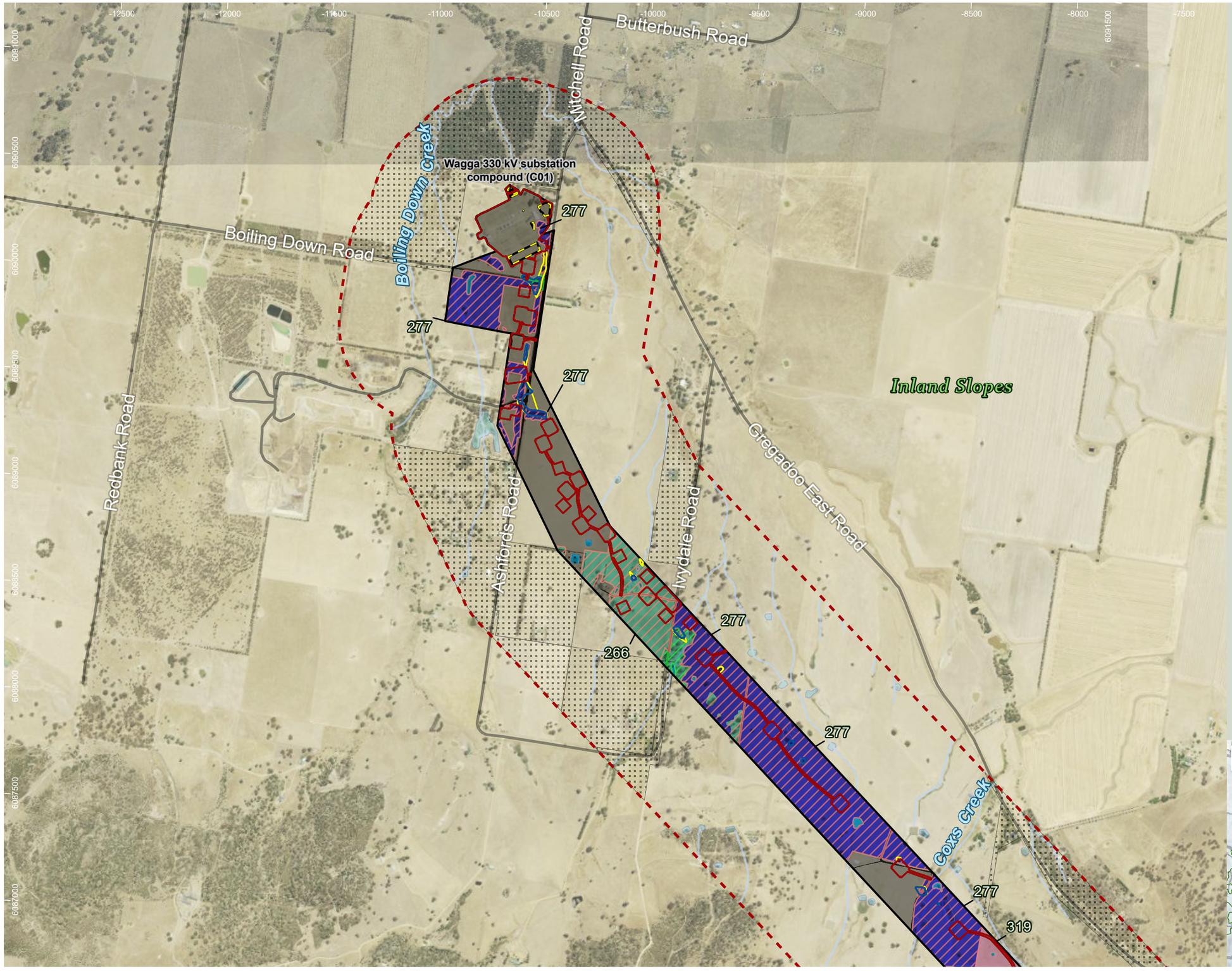
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Indicative disturbance area

HumeLink BDAR

Figure 13-1 map reference 106

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

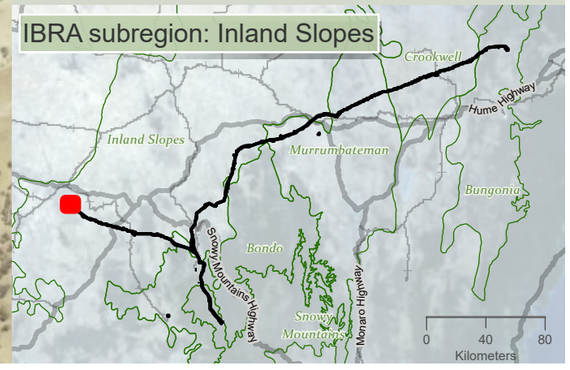
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 266: White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 319: Tumbledown Red Gum - White Cypress Pine hill woodland in the southern part of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 1

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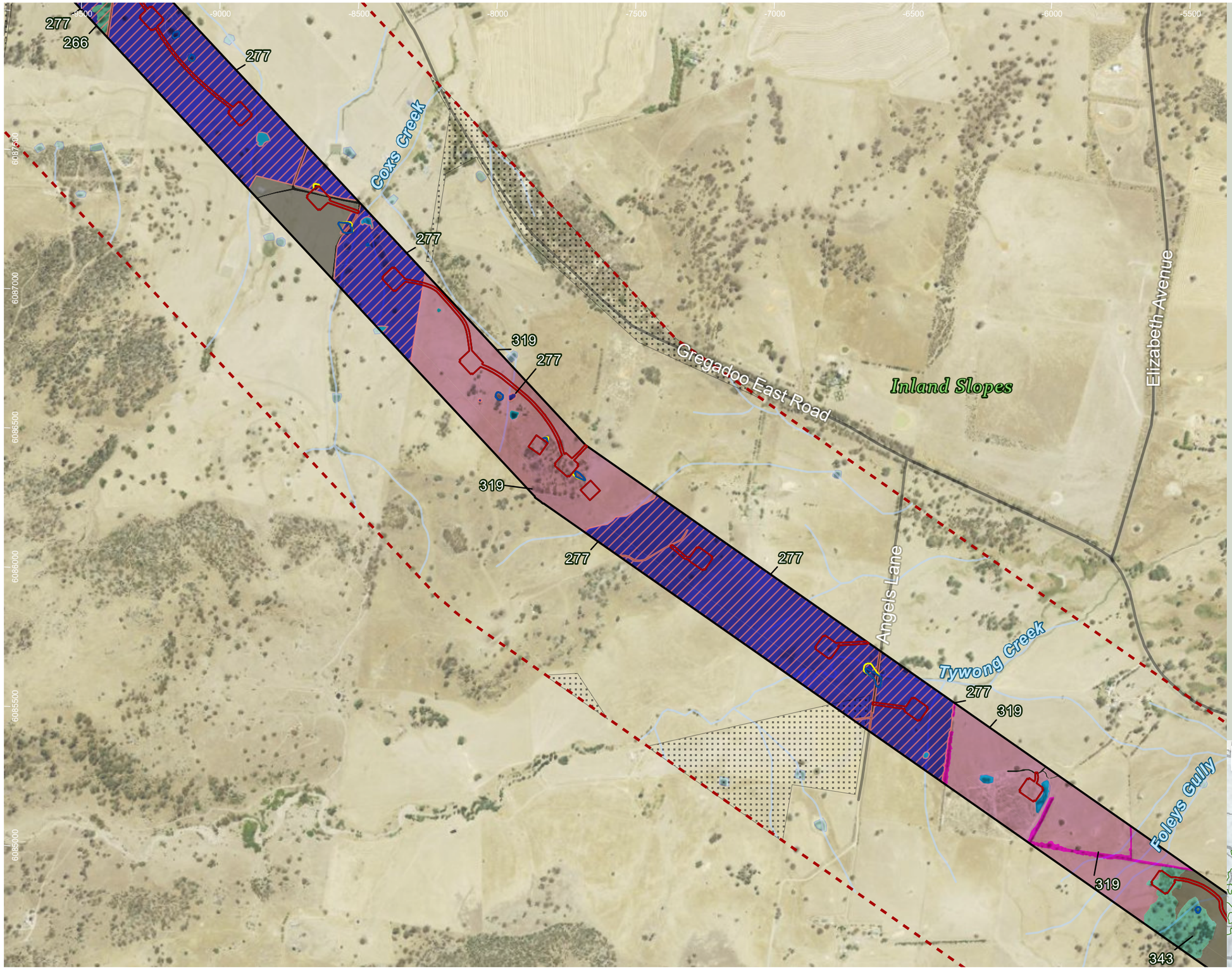


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

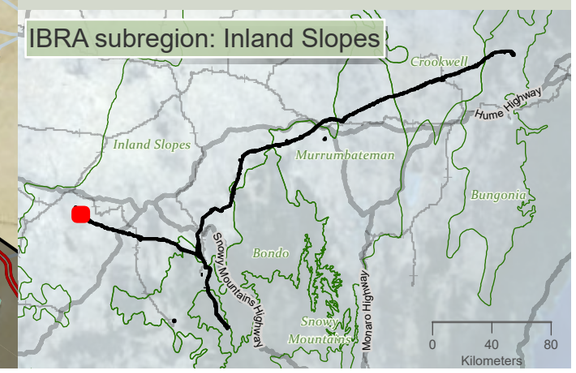
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 266: White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 319: Tumbledown Red Gum - White Cypress Pine hill woodland in the southern part of the NSW South Western Slopes Bioregion
- 343: Mugga Ironbark - Red Box - Red Stringybark - Western Grey Box grass/shrub woodland on metamophic substrates in the Tarcutta - Gundagai region, NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

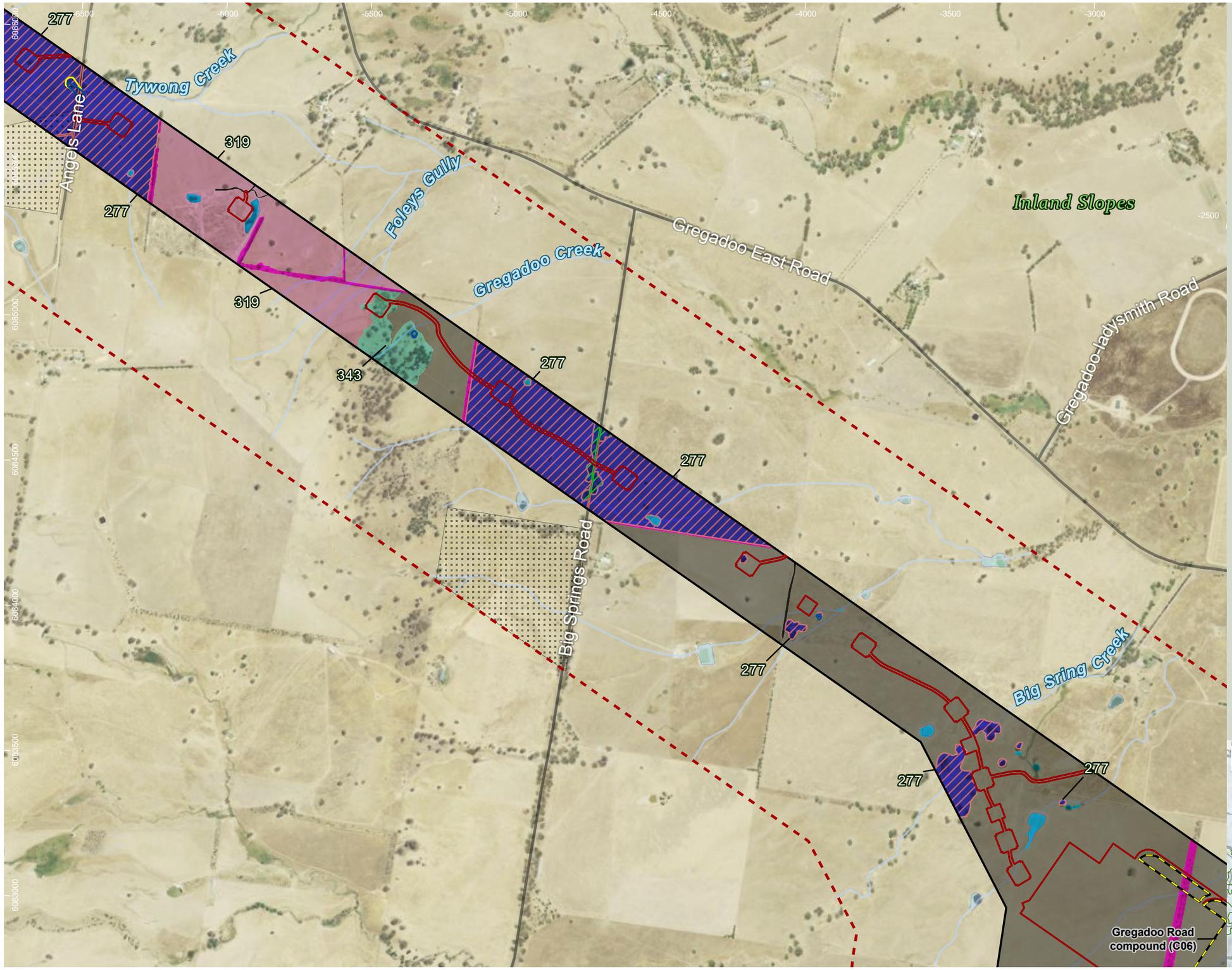
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 2

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

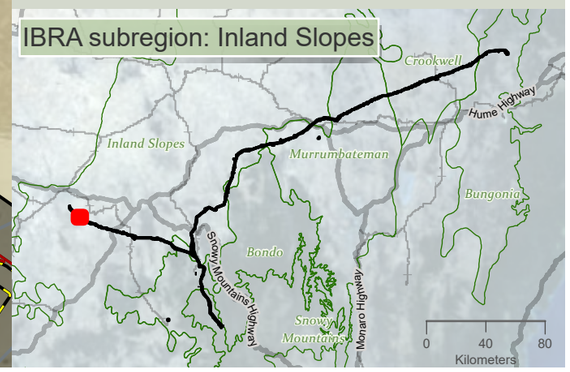
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 319: Tumbledown Red Gum - White Cypress Pine hill woodland in the southern part of the NSW South Western Slopes Bioregion
- 343: Mugga Ironbark - Red Box - Red Stringybark - Western Grey Box grass/shrub woodland on metamophic substrates in the Tarcutta - Gundagai region, NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 3

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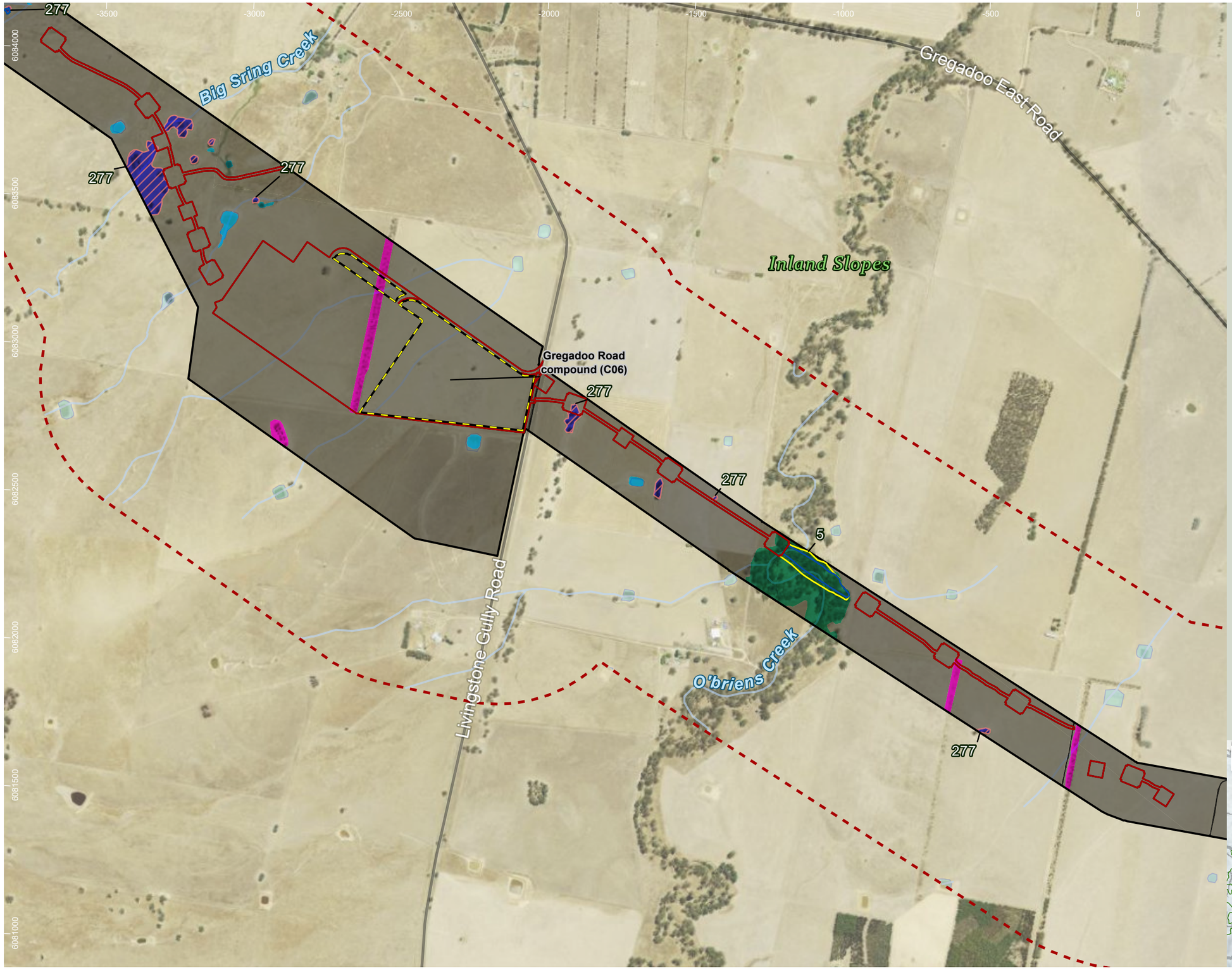


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

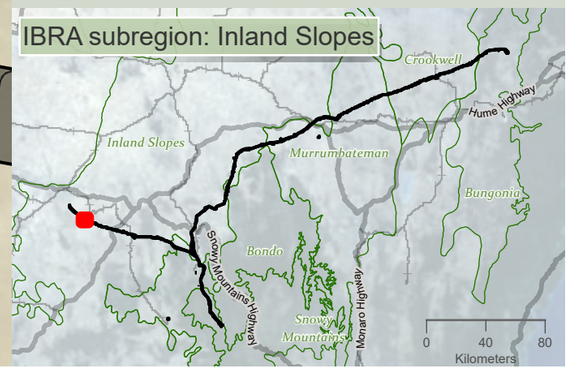
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 5: River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South Western Slopes Bioregion and the eastern Riverina Bioregion.
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 4

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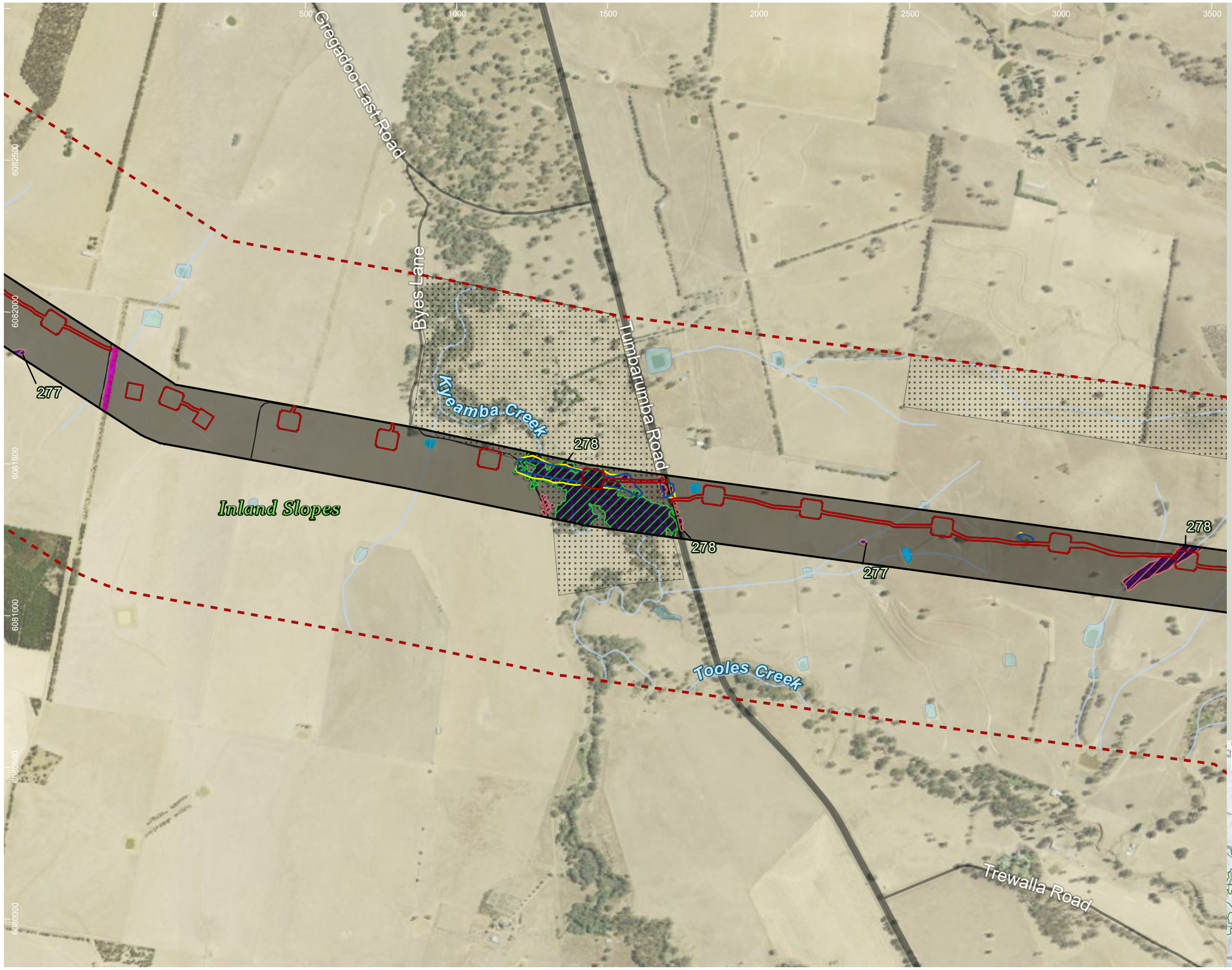
Drawn by: MathewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

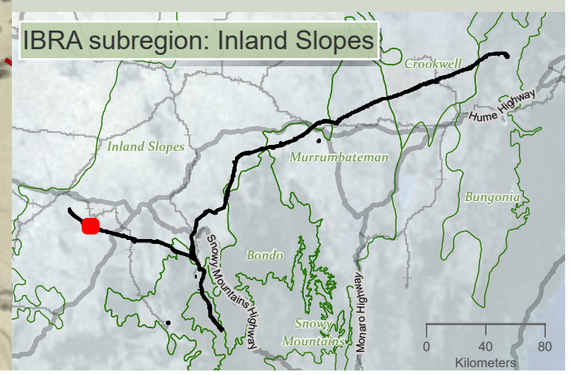
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 5

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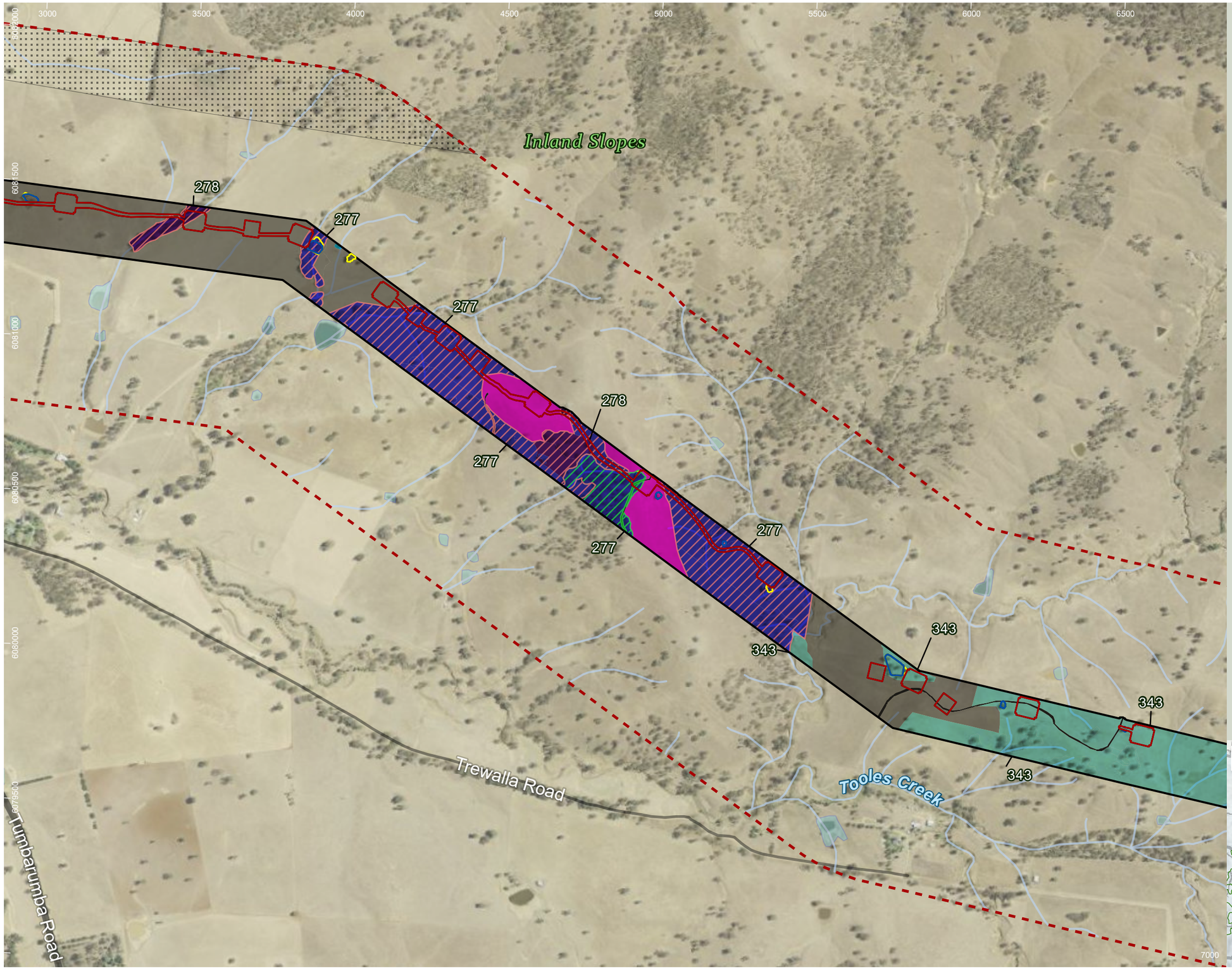


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

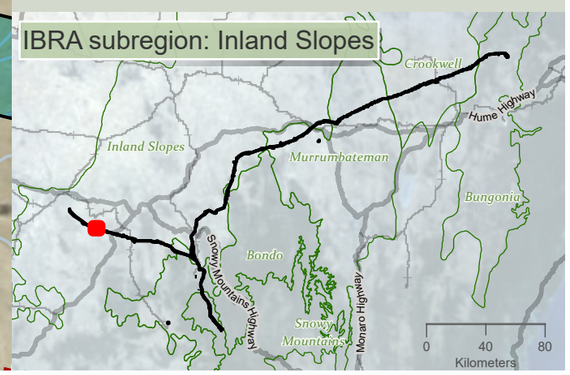
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 343: Mugga Ironbark - Red Box - Red Stringybark - Western Grey Box grass/shrub woodland on metamophic substrates in the Tarcutta - Gundagai region, NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 6

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6500 7000 7500 8000 8500 9000 9500 10000

6080000 6080500 6079500 6079000 6078500 6078000

Inland Slopes

343 343 343 343 343

HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

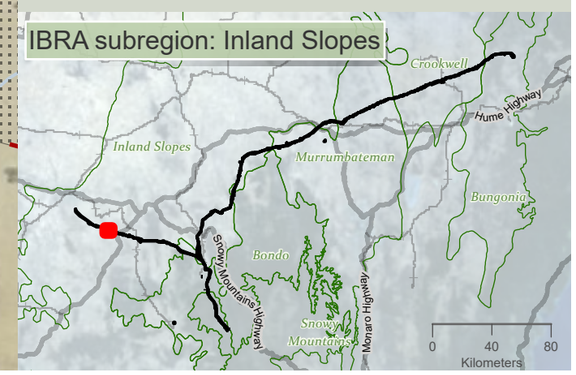
Road

- Minor road

Impacts to native vegetation and threatened ecological communities

PCTs

- 0: Not Native
- 343: Mugga Ironbark - Red Box - Red Stringybark - Western Grey Box grass/shrub woodland on metamophic substrates in the Tarcutta - Gundagai region, NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 7

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HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

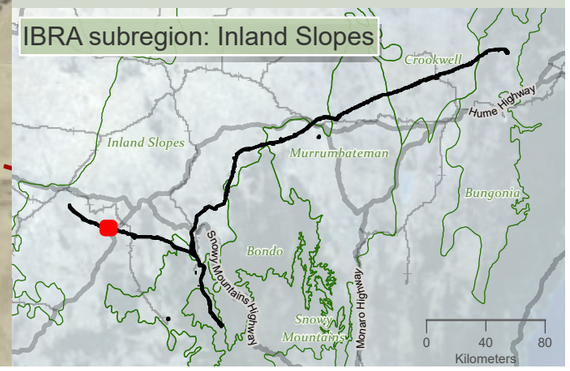
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 8

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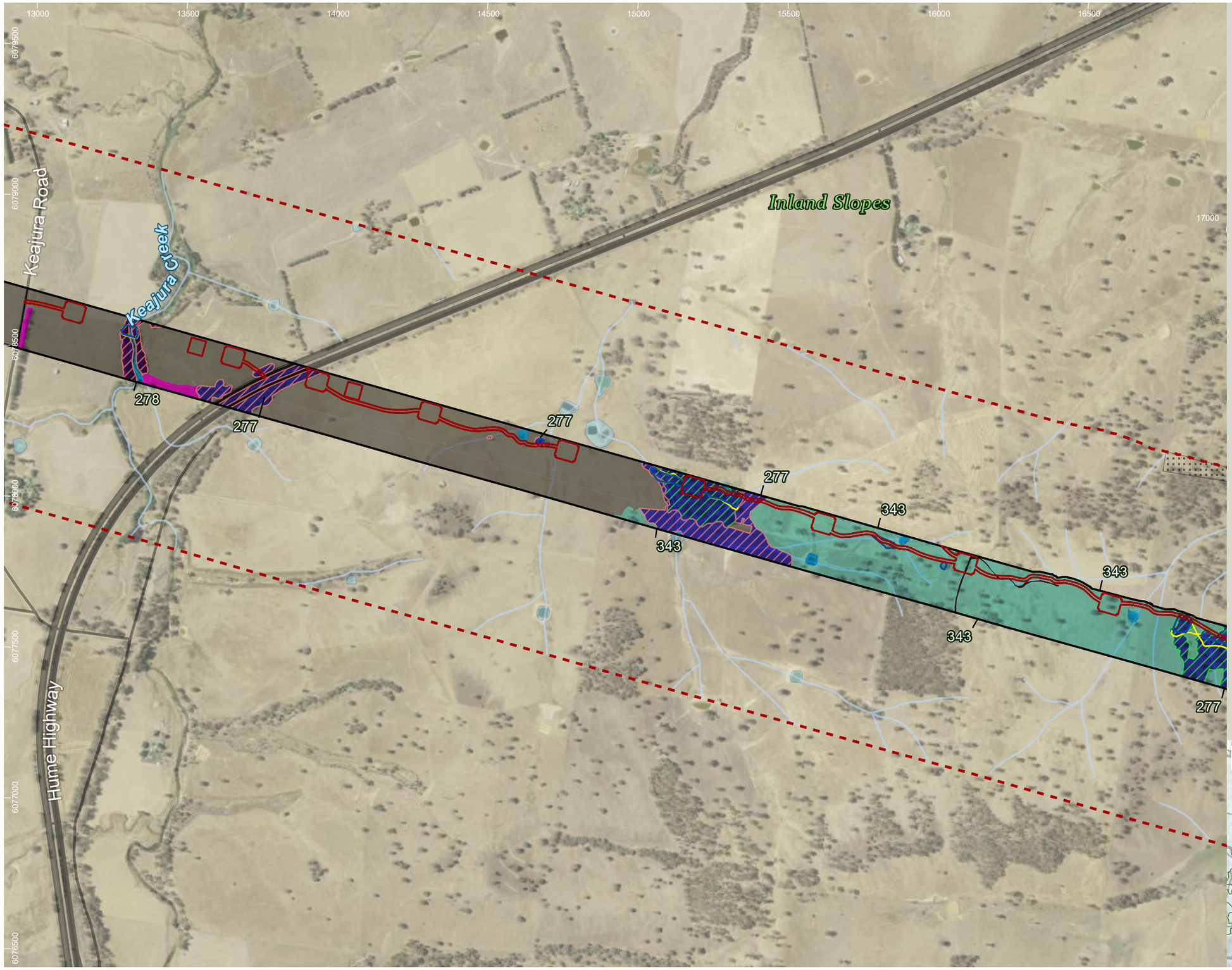


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

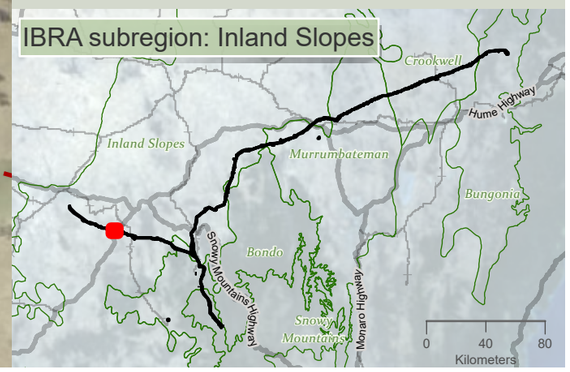
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 343: Mugga Ironbark - Red Box - Red Stringybark - Western Grey Box grass/shrub woodland on metamophic substrates in the Tarcutta - Gundagai region, NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 9

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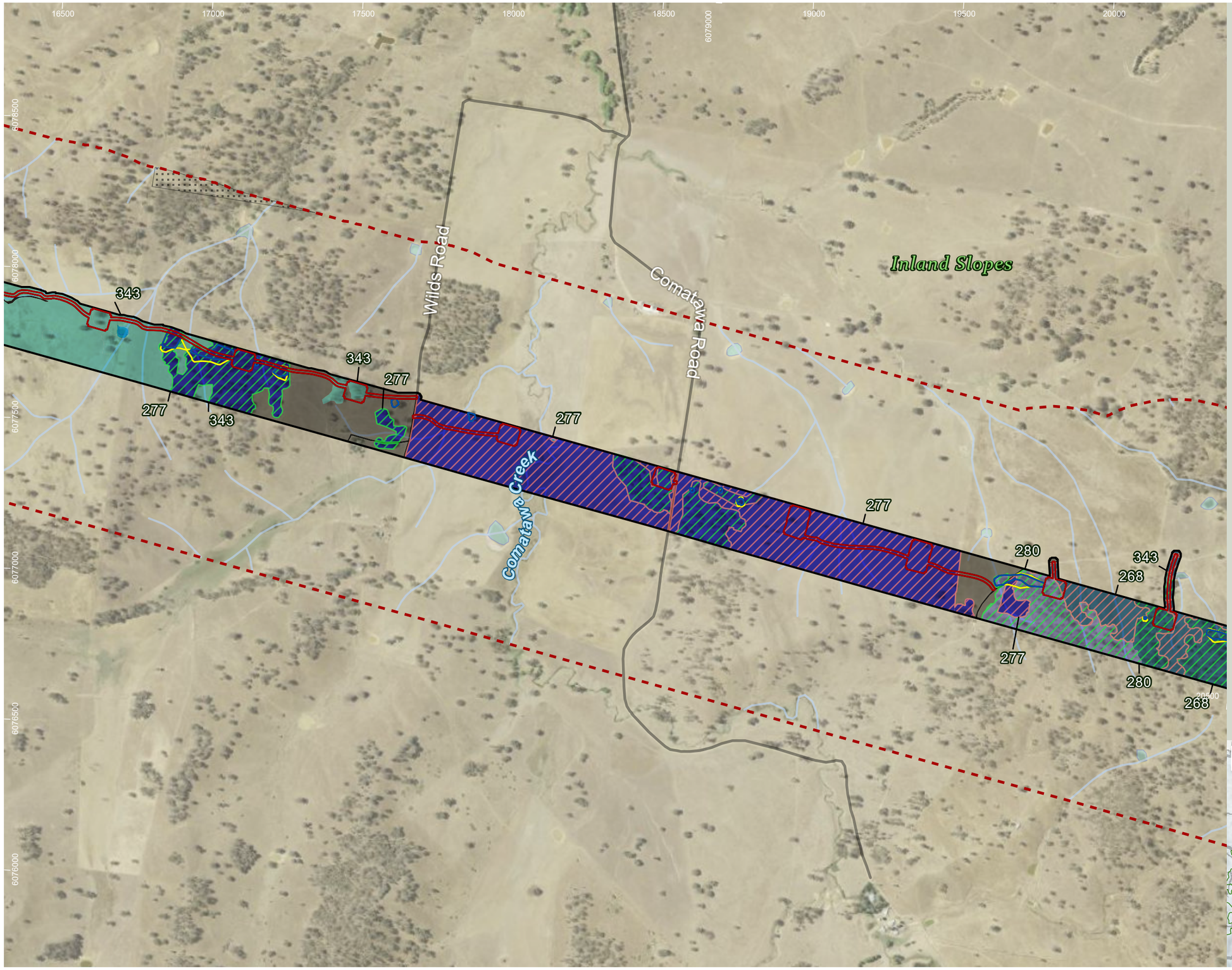


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

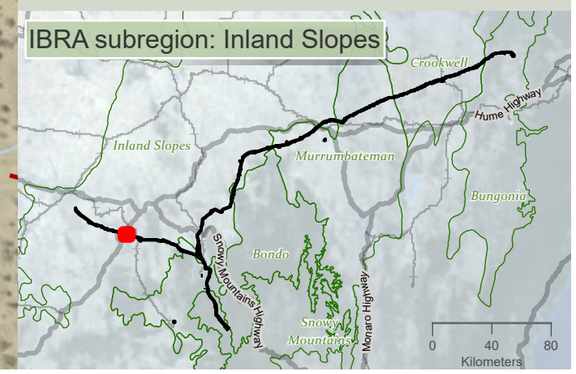
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 268: White Box - Blakelys Red Gum - Long-leaved Box - Nortons Box - Red Stringybark grass-shrub woodland on shallow soils on hills in the NSW South Western Slopes Bioregion
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 343: Mugga Ironbark - Red Box - Red Stringybark - Western Grey Box grass/shrub woodland on metamophic substrates in the Tarcutta - Gundagai region, NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 10

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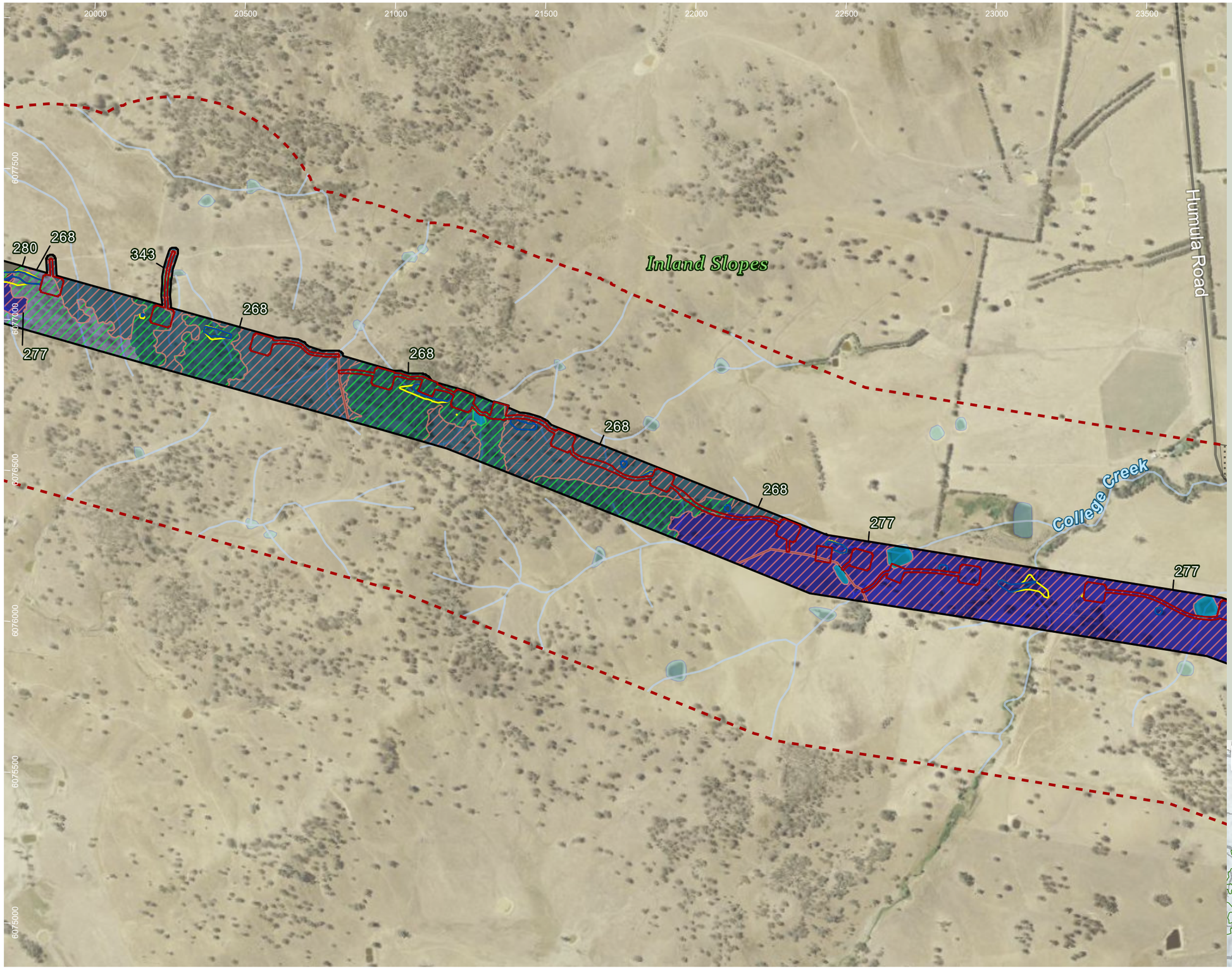


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

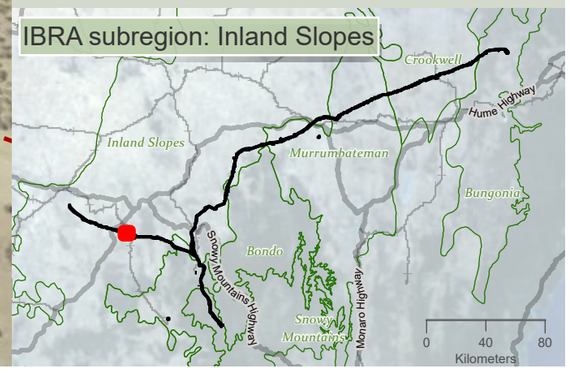
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 268: White Box - Blakelys Red Gum - Long-leaved Box - Nortons Box - Red Stringybark grass-shrub woodland on shallow soils on hills in the NSW South Western Slopes Bioregion
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 343: Mugga Ironbark - Red Box - Red Stringybark - Western Grey Box grass/shrub woodland on metamophic substrates in the Tarcutta - Gundagai region, NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 11

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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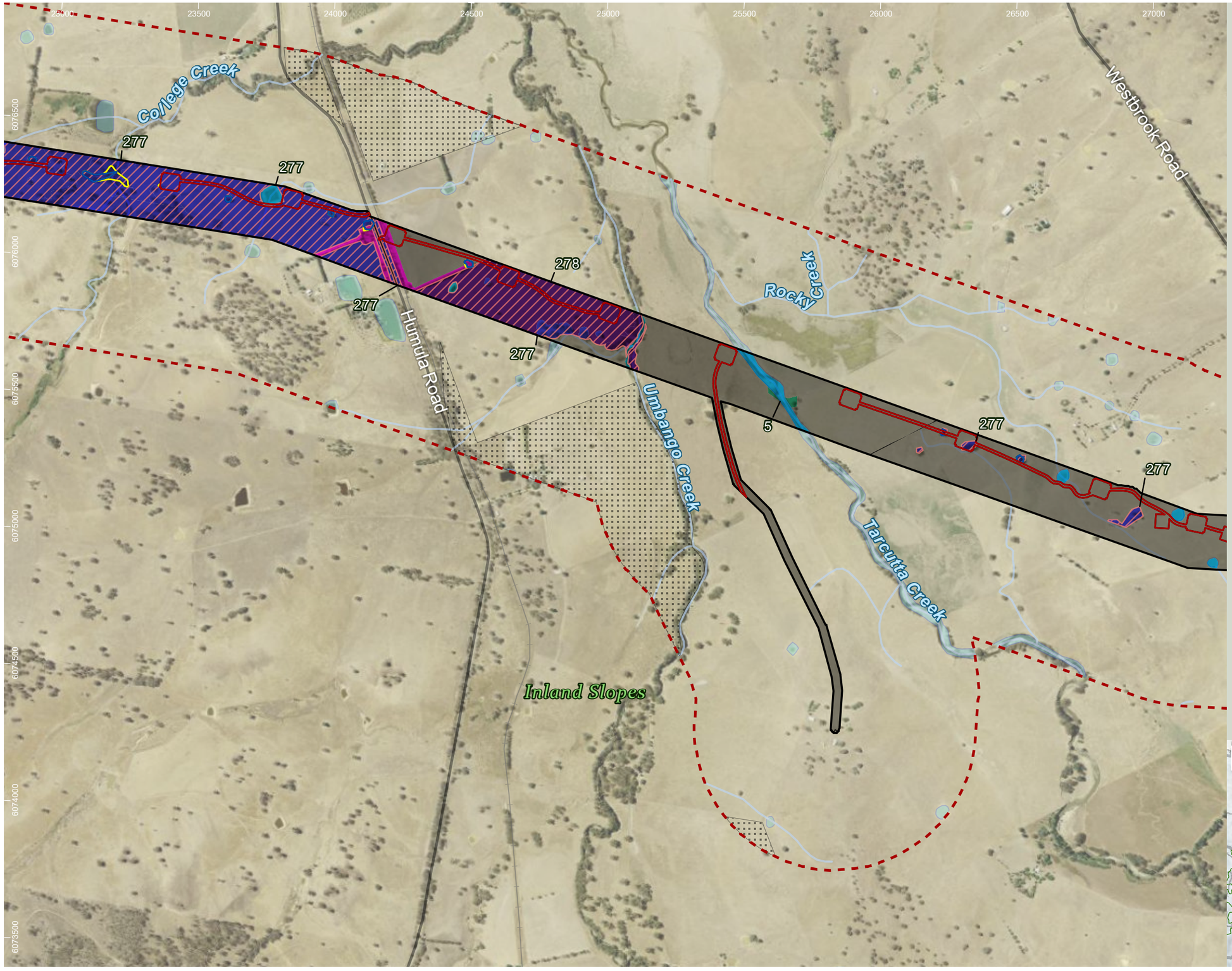


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Minor road

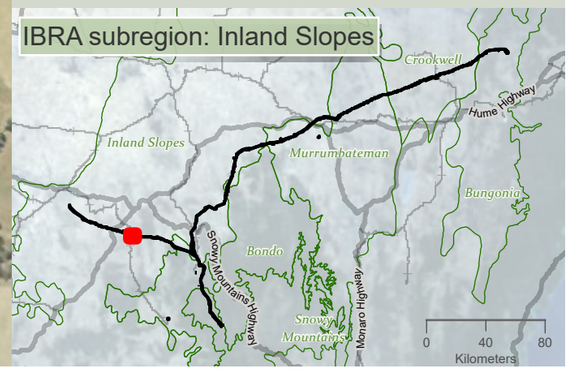
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 5: River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South Western Slopes Bioregion and the eastern Riverina Bioregion.
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 12

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27000 27500 28000 28500 29000 29500 30000

6076500 6075000 6075500 6075000 6074500 6074000

Inland Slopes

Westbrook Road

277 268 277 268 277 268 268 277 277 268

HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Impacts to native vegetation and threatened ecological communities

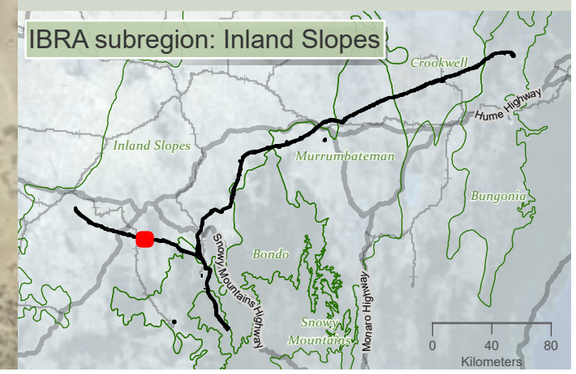
TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 268: White Box - Blakelys Red Gum - Long-leaved Box - Nortons Box - Red Stringybark grass-shrub woodland on shallow soils on hills in the NSW South Western Slopes Bioregion
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)

IBRA subregion: Inland Slopes



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niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 13

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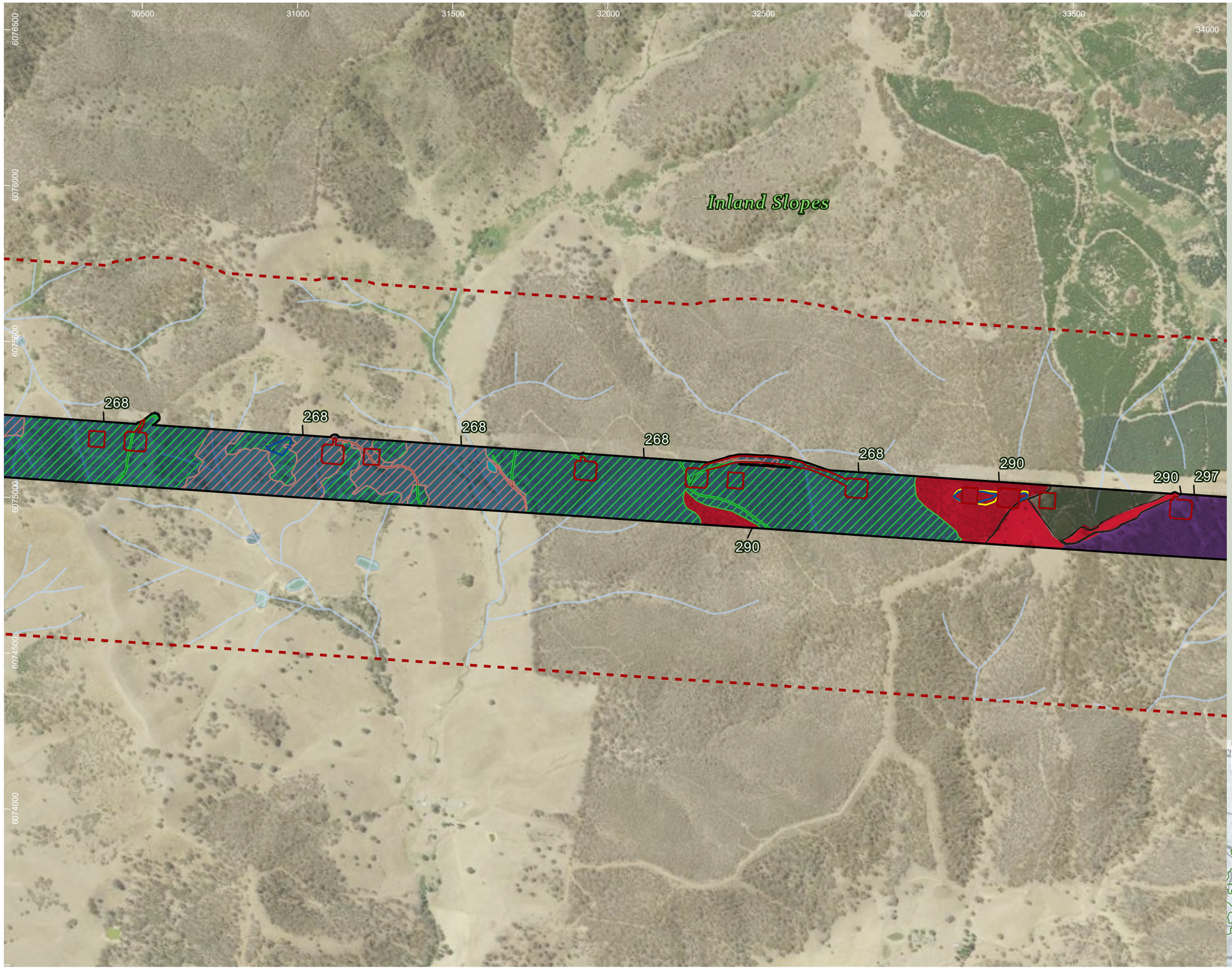


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Hydrography

- Waterway
- Waterbody

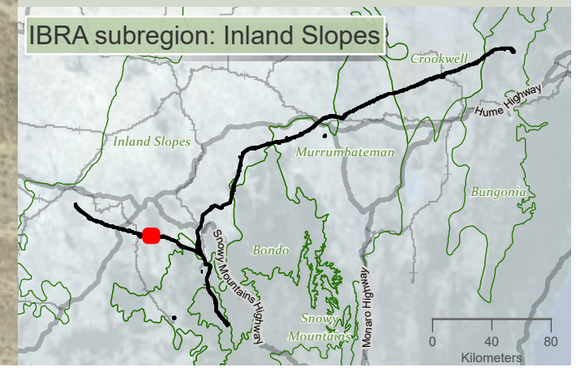
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 268: White Box - Blakelys Red Gum - Long-leaved Box - Nortons Box - Red Stringybark grass-shrub woodland on shallow soils on hills in the NSW South Western Slopes Bioregion
- 290: Red Stringybark - Red Box - Long-leaved Box - Inland Scribbly Gum tussock grass - shrub low open forest on hills in the southern part of the NSW South Western Slopes Bioregion
- 297: Broad-leaved Peppermint - Nortons Box - Red Stringybark tall open forest on red clay on hills in the southern part of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



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niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 14

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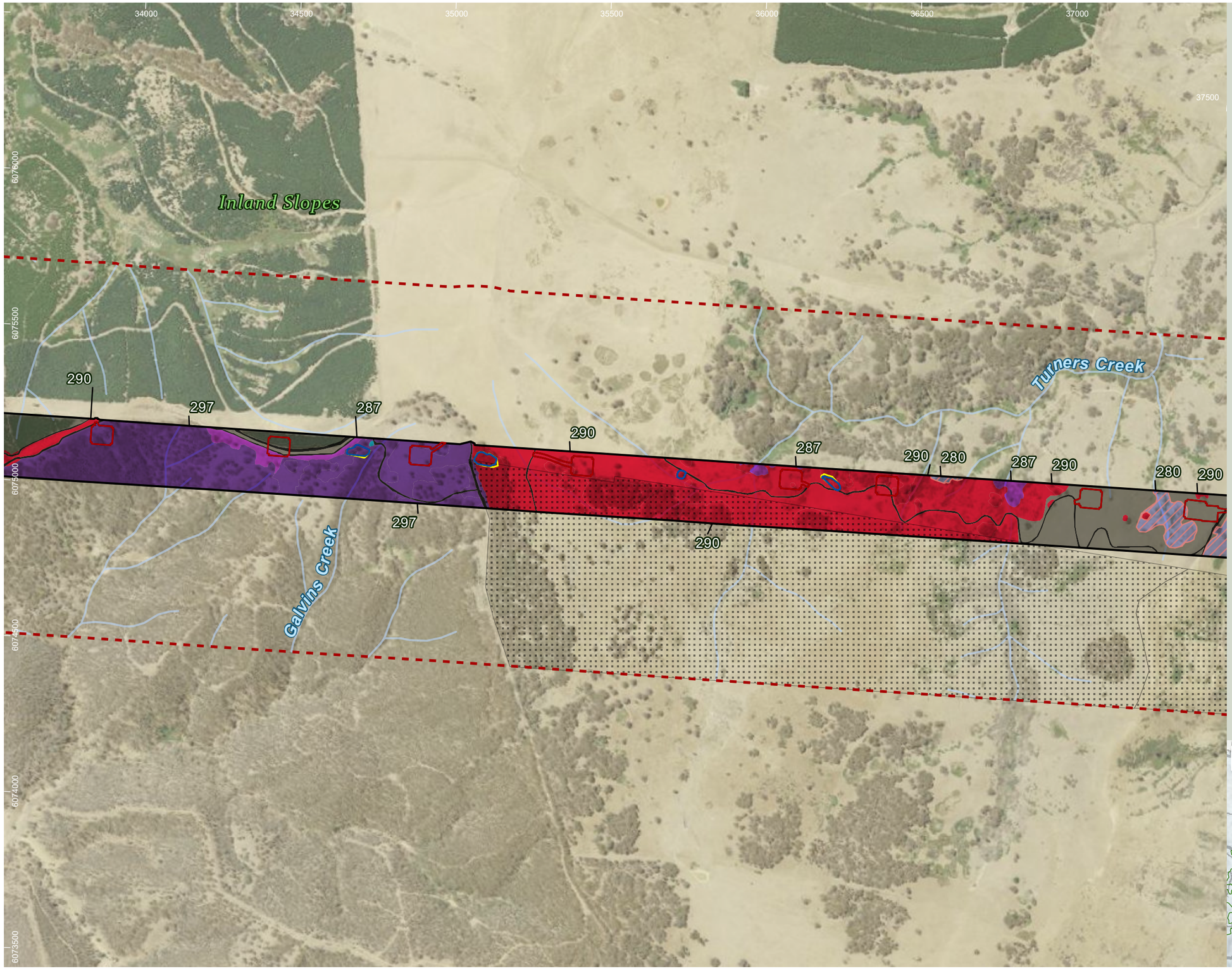


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway

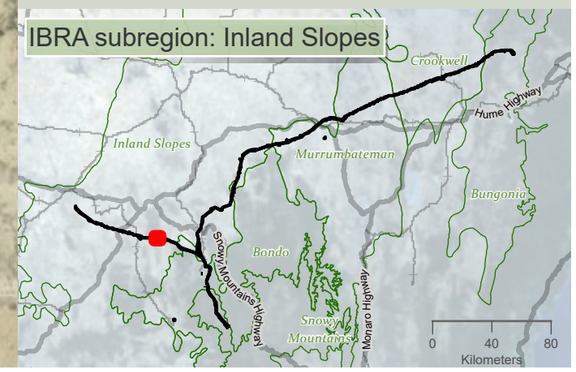
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 287: Long-leaved Box - Red Box - Red Stringybark mixed open forest on hills and hillslopes in the NSW South Western Slopes Bioregion
- 290: Red Stringybark - Red Box - Long-leaved Box - Inland Scribbly Gum tussock grass - shrub low open forest on hills in the southern part of the NSW South Western Slopes Bioregion
- 297: Broad-leaved Peppermint - Nortons Box - Red Stringybark tall open forest on red clay on hills in the southern part of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



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niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 15

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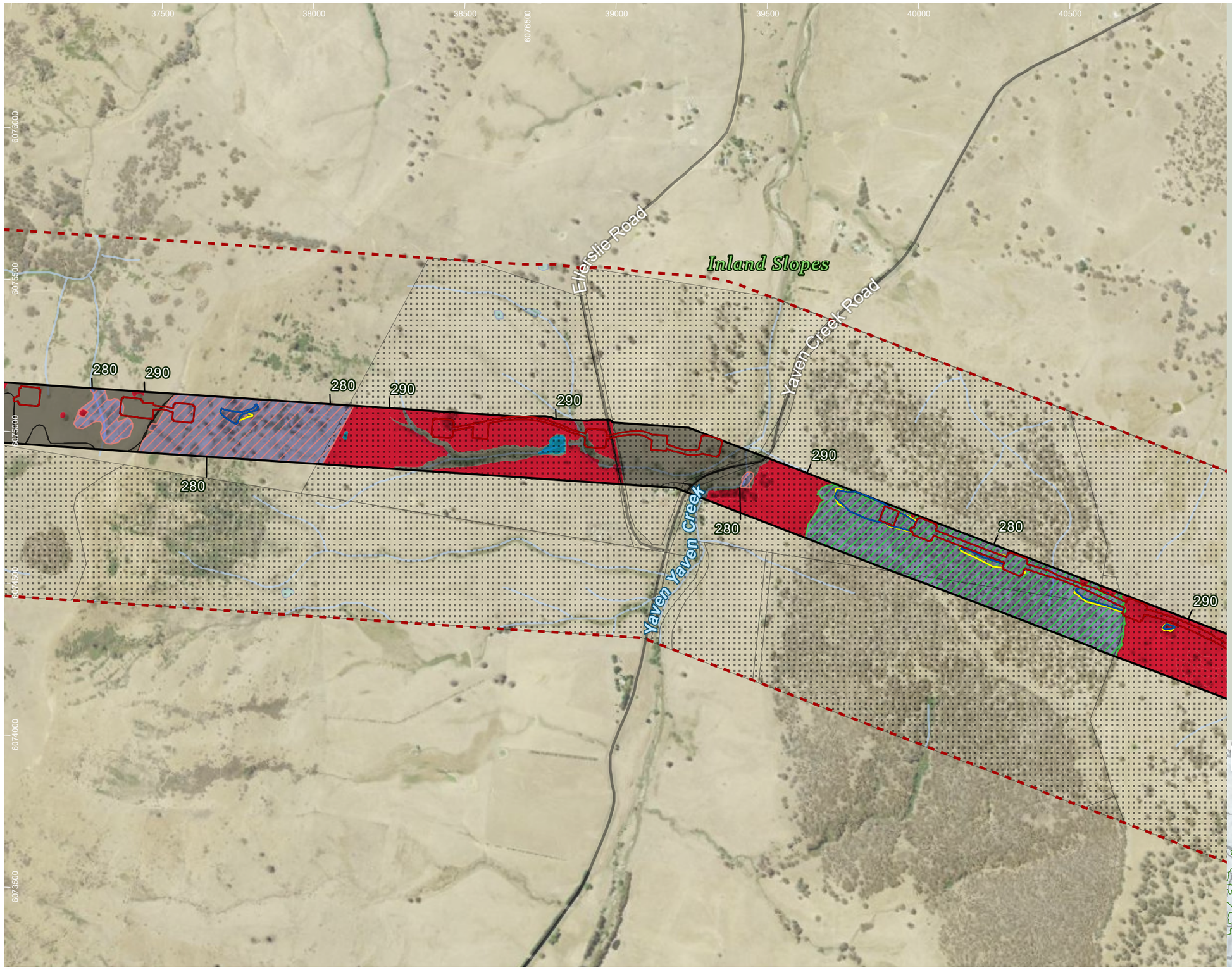


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

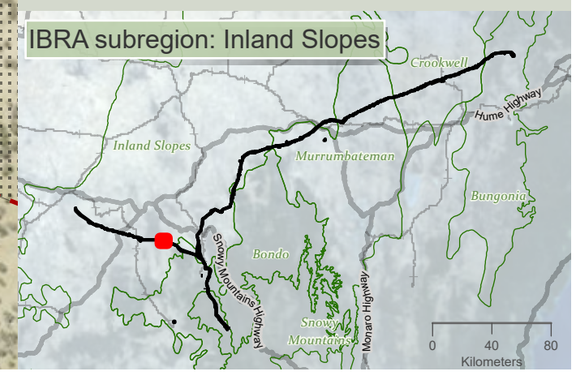
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 290: Red Stringybark - Red Box - Long-leaved Box - Inland Scribbly Gum tussock grass - shrub low open forest on hills in the southern part of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 16

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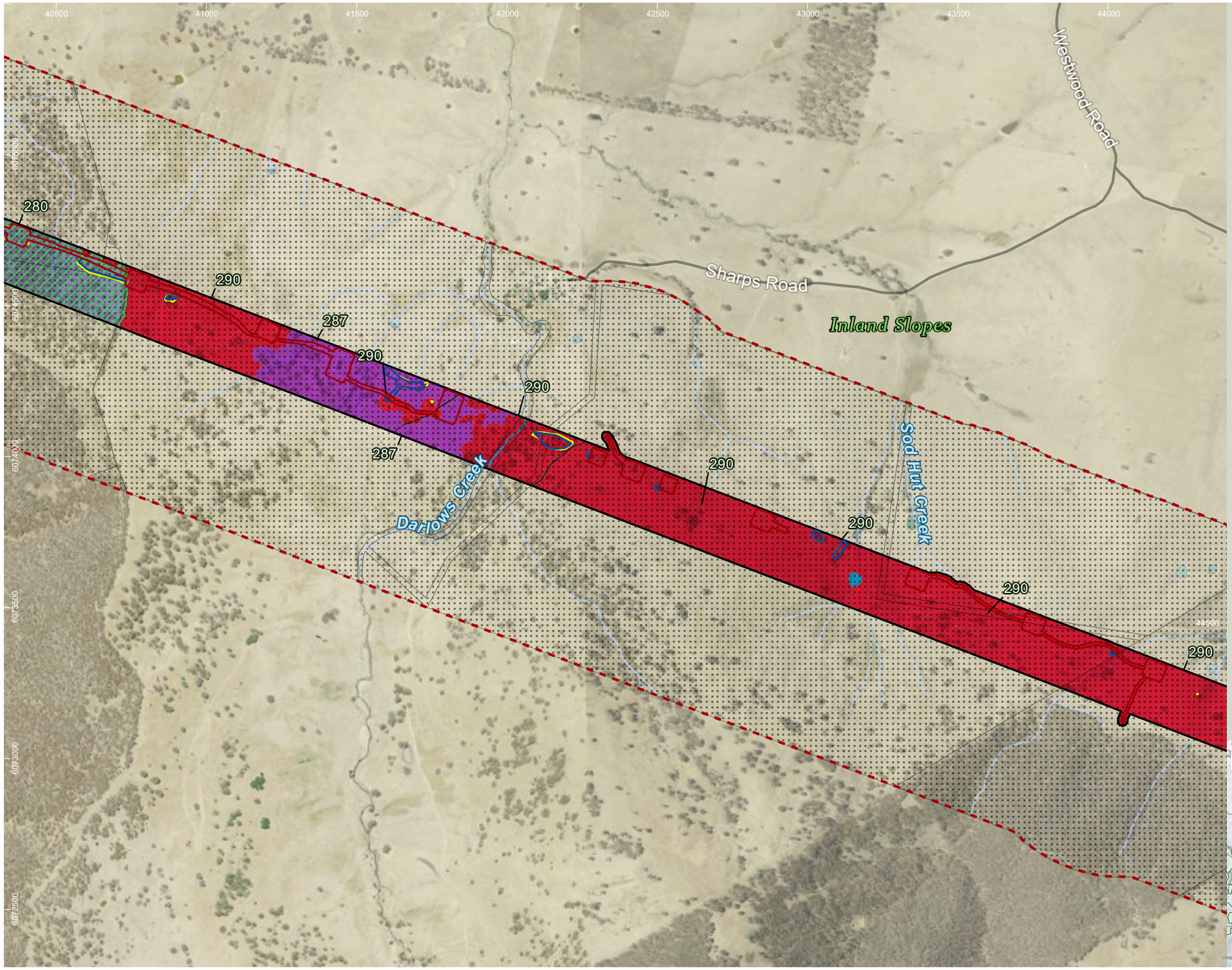


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

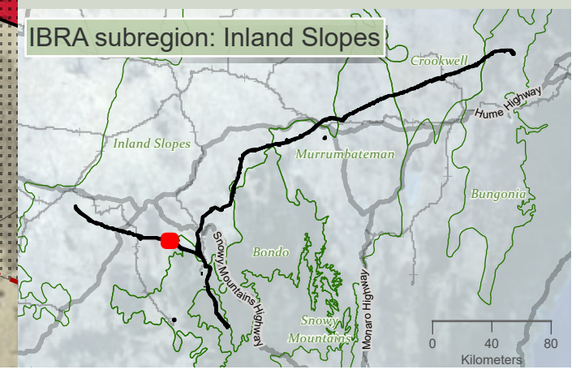
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)

PCTs

- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 287: Long-leaved Box - Red Box - Red Stringybark mixed open forest on hills and hillslopes in the NSW South Western Slopes Bioregion
- 290: Red Stringybark - Red Box - Long-leaved Box - Inland Scribbly Gum tussock grass - shrub low open forest on hills in the southern part of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 17

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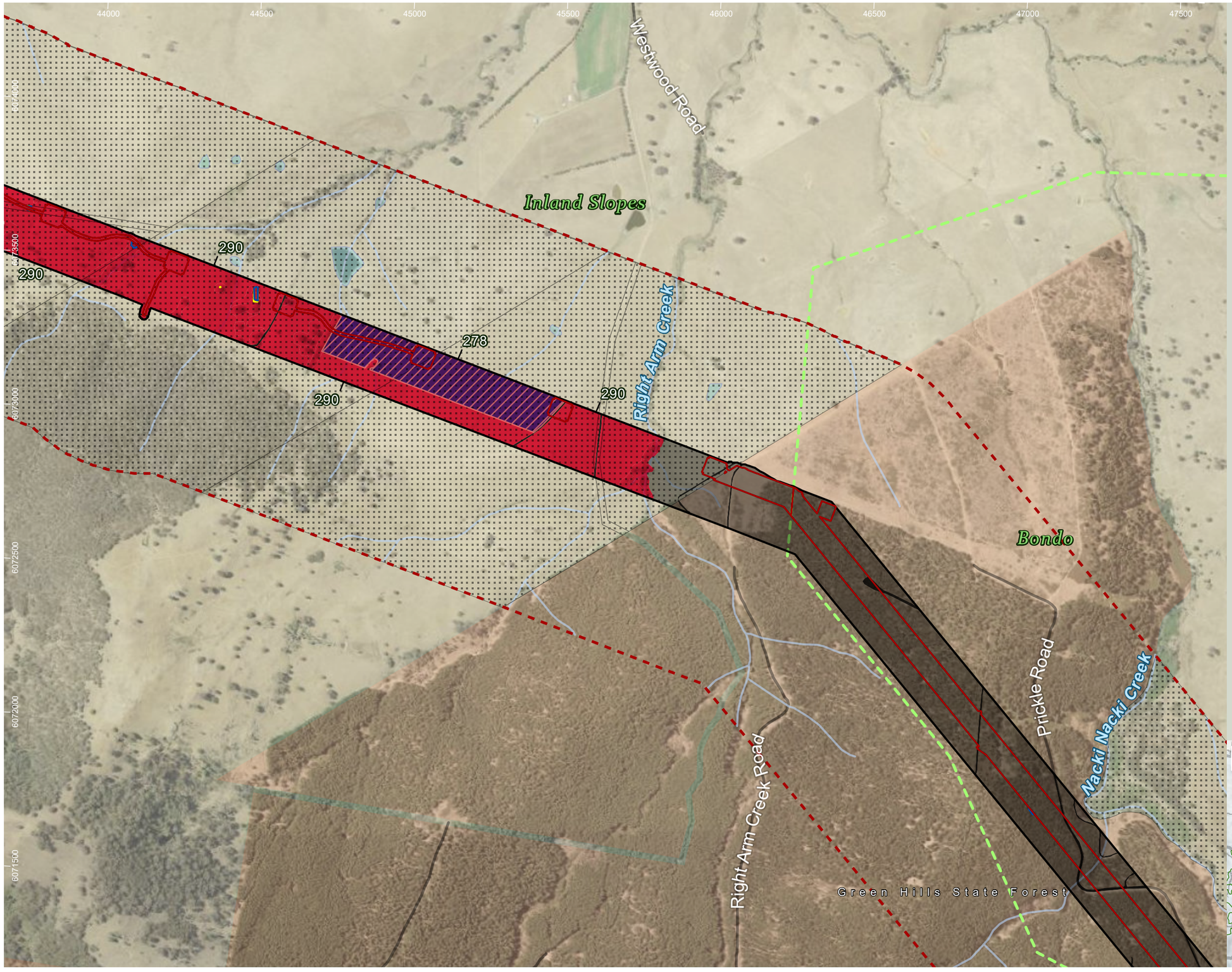


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest

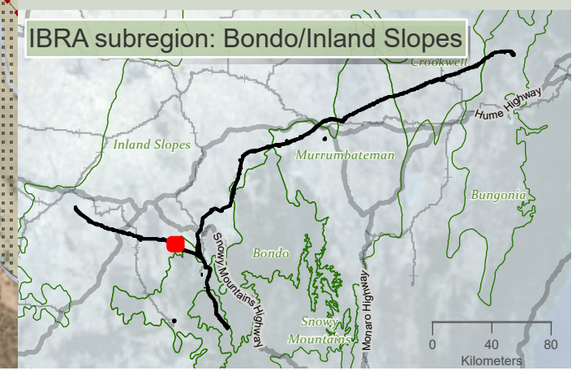
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 290: Red Stringybark - Red Box - Long-leaved Box - Inland Scribbly Gum tussock grass - shrub low open forest on hills in the southern part of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 18

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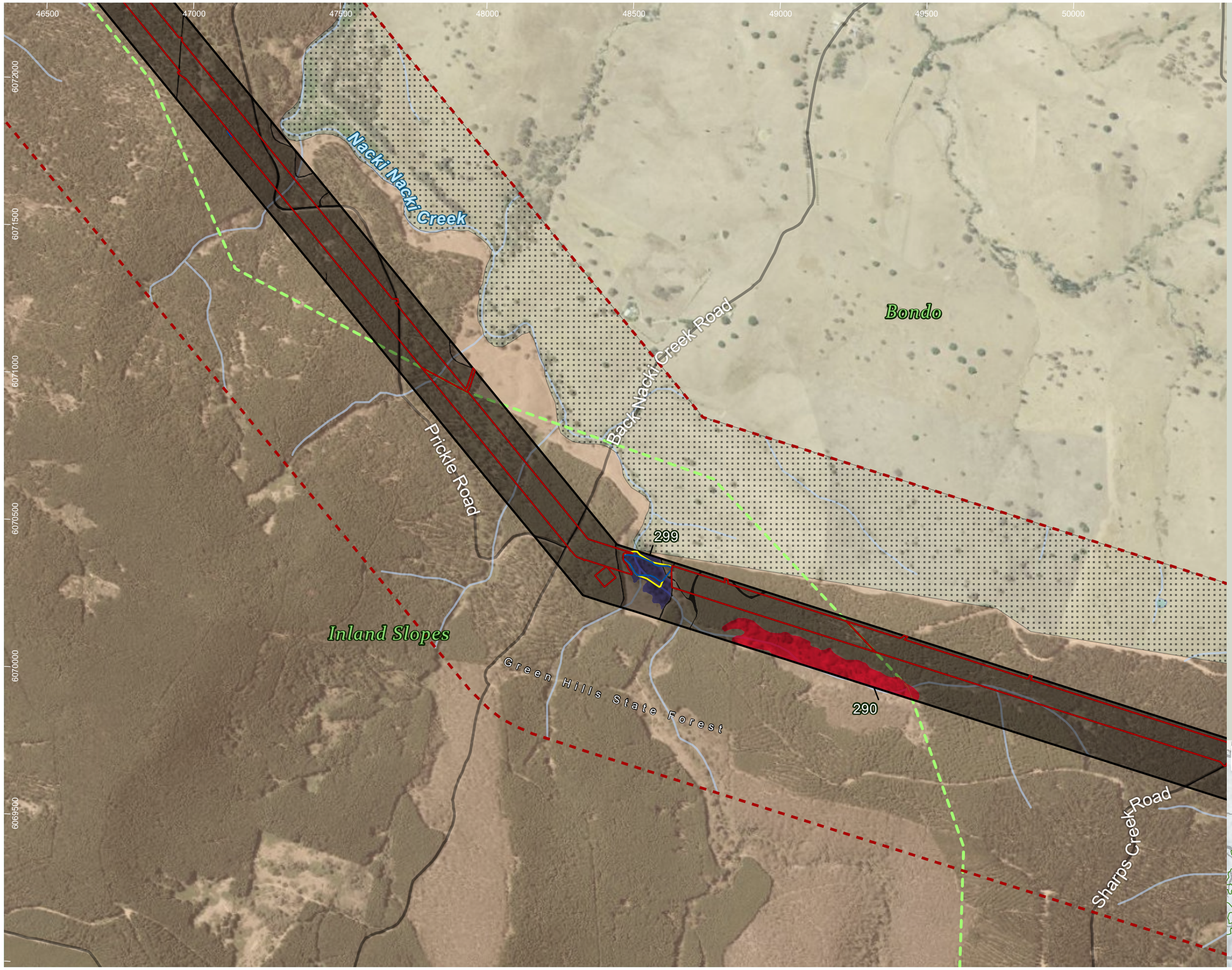


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

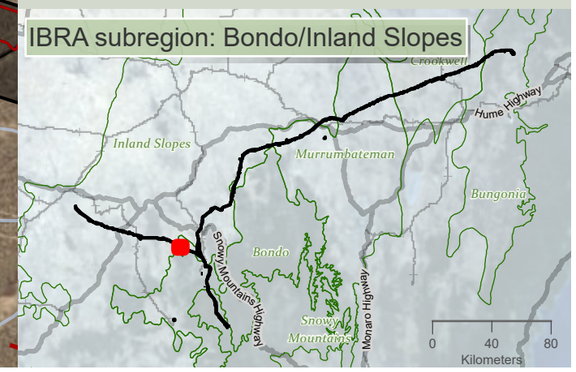
Administrative and Property Boundaries

- State Forest

Impacts to native vegetation and threatened ecological communities

PCTs

- 0: Not Native
- 290: Red Stringybark - Red Box - Long-leaved Box - Inland Scribbly Gum tussock grass - shrub low open forest on hills in the southern part of the NSW South Western Slopes Bioregion
- 299: Riparian Ribbon Gum - Robertsons Peppermint - Apple Box riverine very tall open forest of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 9996: Not Native (Road)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 19

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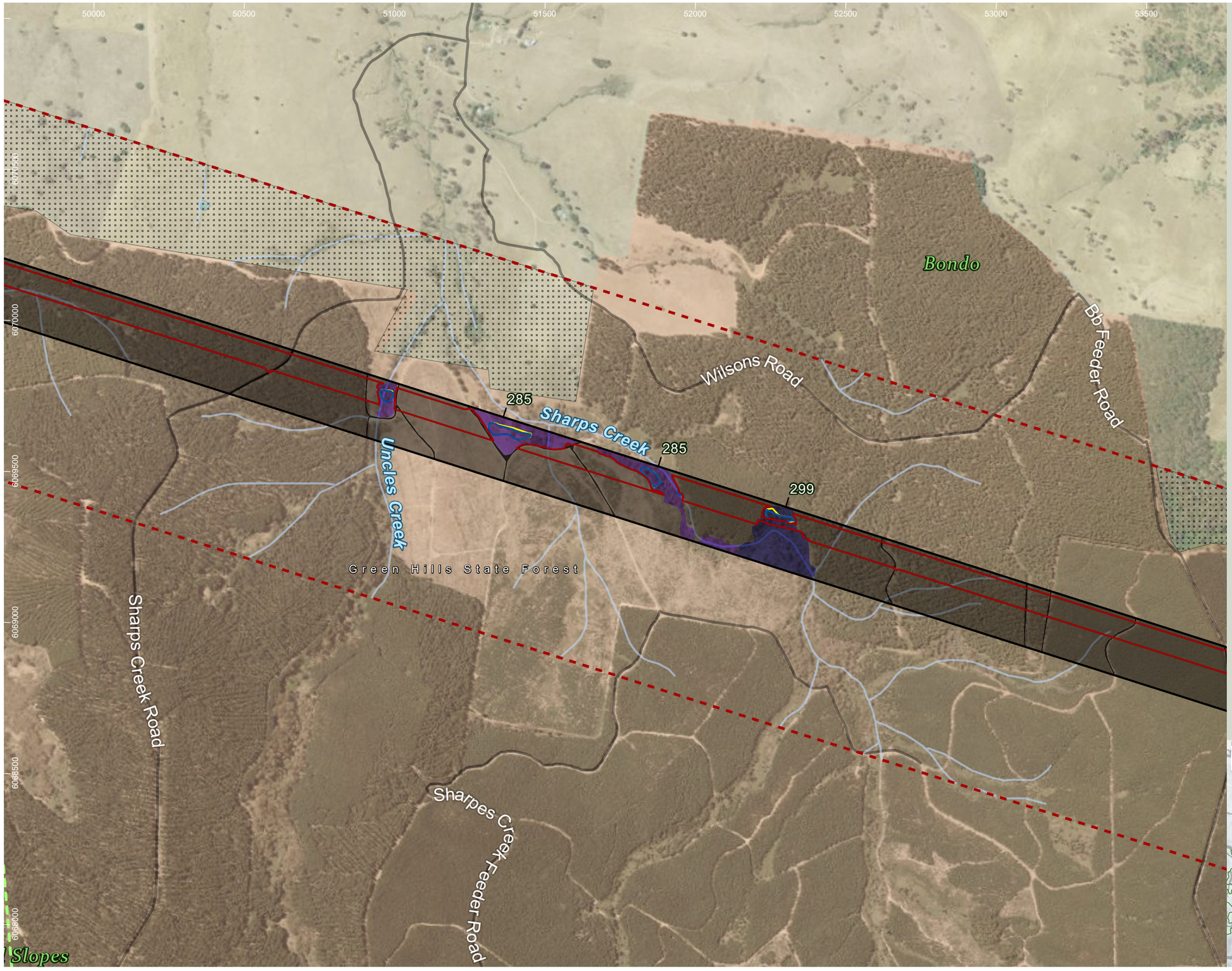


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

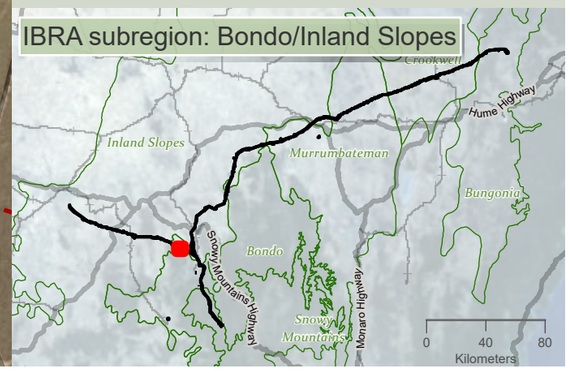
Administrative and Property Boundaries

- State Forest

Impacts to native vegetation and threatened ecological communities

PCTs

- 0: Not Native
- 285: Broad-leaved Sally grass - sedge woodland on valley flats and swamps in the NSW South Western Slopes Bioregion and adjoining South Eastern Highlands Bioregion
- 299: Riparian Ribbon Gum - Robertsons Peppermint - Apple Box riverine very tall open forest of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 9996: Not Native (Road)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 20

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53500 54000 54500 55000 55500 56000 56500 57000

6070000 6069500 6069000 6068500 6068000 6067500

295 299 306 314 299

Bb Feeder Road

Bondo

Green Hills State Forest

Wondalga Road

Greenhills Road

Adelong Creek

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Administrative and Property Boundaries

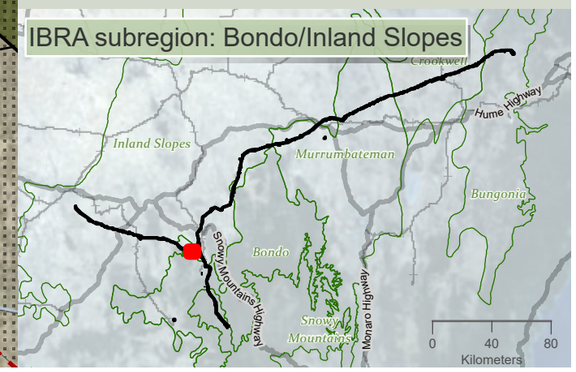
- State Forest

Impacts to native vegetation and threatened ecological communities

PCTs

- 0: Not Native
- 295: Robertsons Peppermint - Broad-leaved Peppermint - Nortons Box - stringybark shrub-fern open forest of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 299: Riparian Ribbon Gum - Robertsons Peppermint - Apple Box riverine very tall open forest of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 306: Red Box - Red Stringybark - Nortons Box hill heath shrub - tussock grass open forest of the Tumut region
- 314: Apple Box - Red Stringybark basalt scree open forest in the upper Murray River region
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)

IBRA subregion: Bondo/Inland Slopes



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 21

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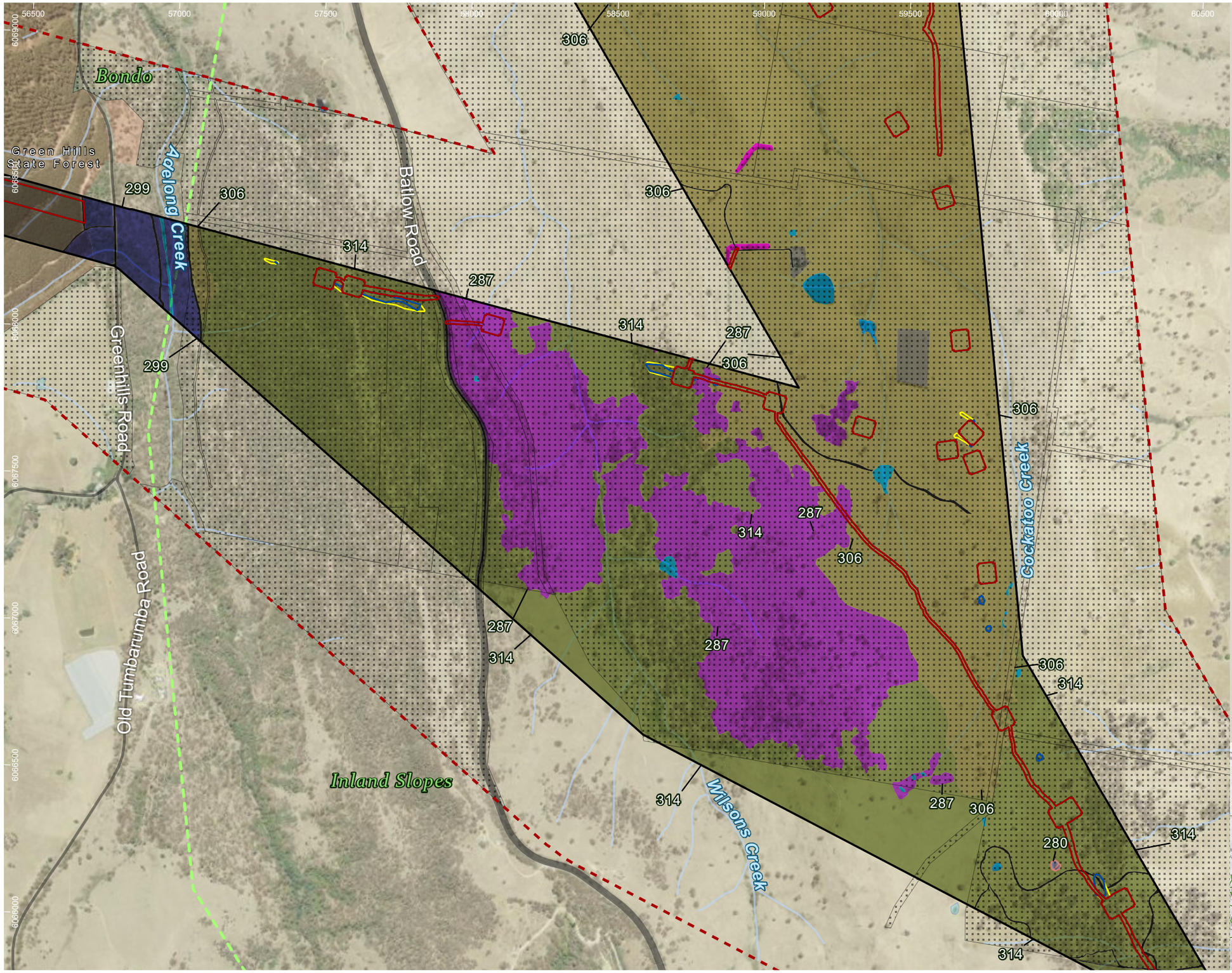


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

Administrative and Property Boundaries

- State Forest

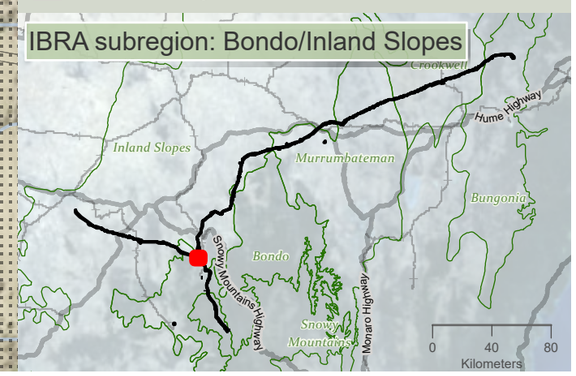
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 287: Long-leaved Box - Red Box - Red Stringybark mixed open forest on hills and hillslopes in the NSW South Western Slopes Bioregion
- 299: Riparian Ribbon Gum - Robertsons Peppermint - Apple Box riverine very tall open forest of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 306: Red Box - Red Stringybark - Nortons Box hill heath shrub - tussock grass open forest of the Tumut region
- 314: Apple Box - Red Stringybark basalt scree open forest in the upper Murray River region
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



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niche Environment and Heritage

0 400
m
WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 22

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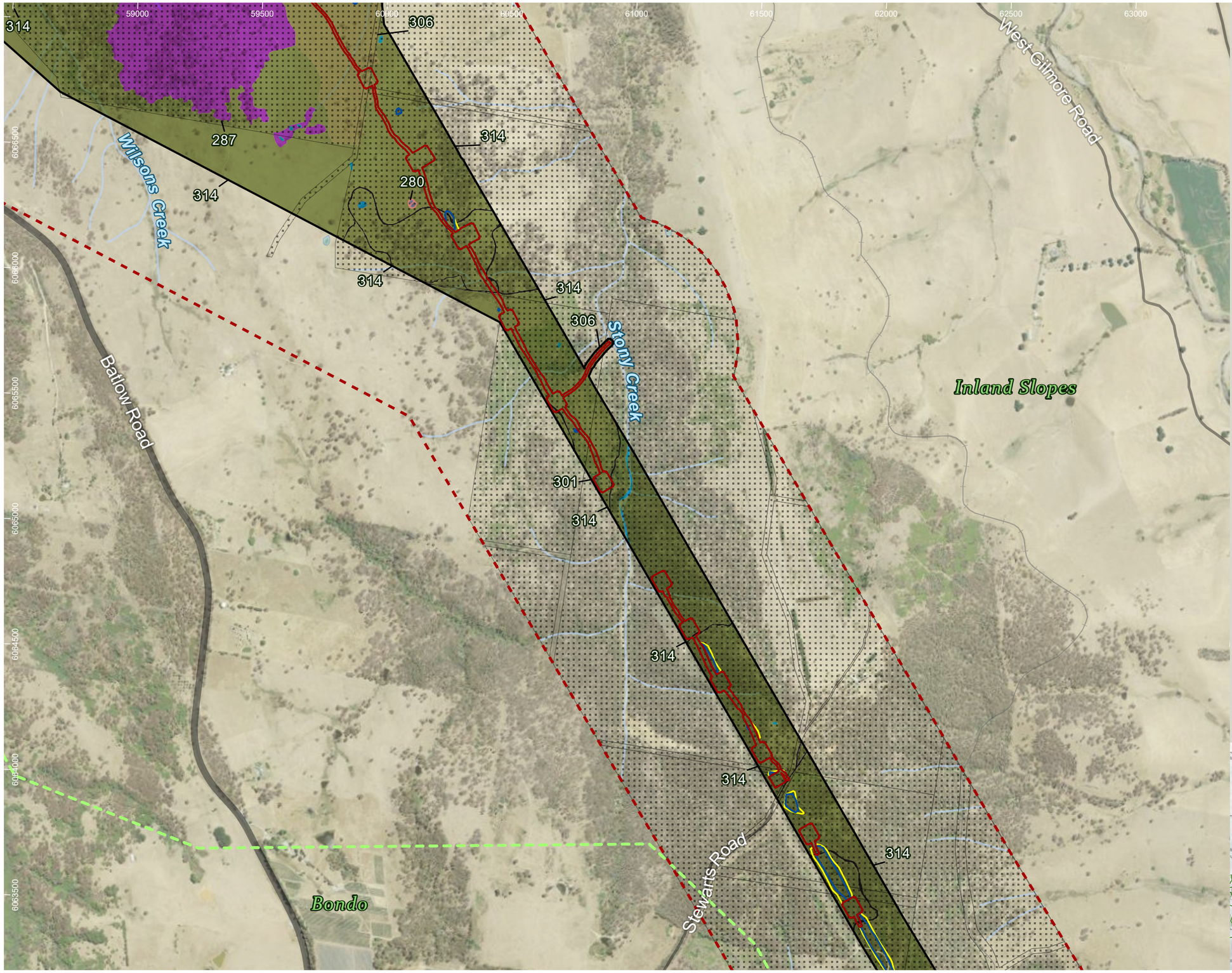


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Major road
- Minor road

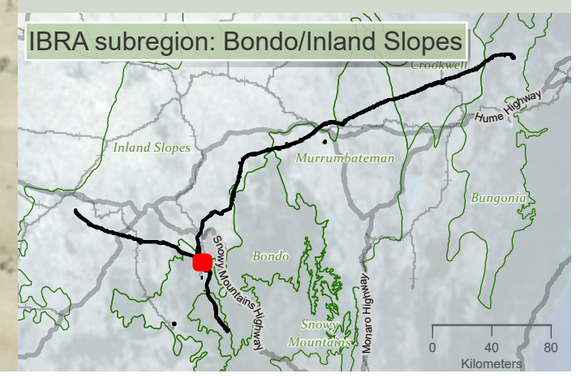
Impacts to native vegetation and threatened ecological communities

TECs

- Coolac-Tumut Serpentinite Shrubby Woodland in the NSW South Western Slopes and South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 287: Long-leaved Box - Red Box - Red Stringybark mixed open forest on hills and hillslopes in the NSW South Western Slopes Bioregion
- 301: Drooping Sheoke - Ricinocarpus bowmannii - grasstree tall open shrubland of the Coolac - Tumut Serpentinite Belt
- 306: Red Box - Red Stringybark - Nortons Box hill heath shrub - tussock grass open forest of the Tumut region
- 314: Apple Box - Red Stringybark basalt scree open forest in the upper Murray River region
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



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niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 23

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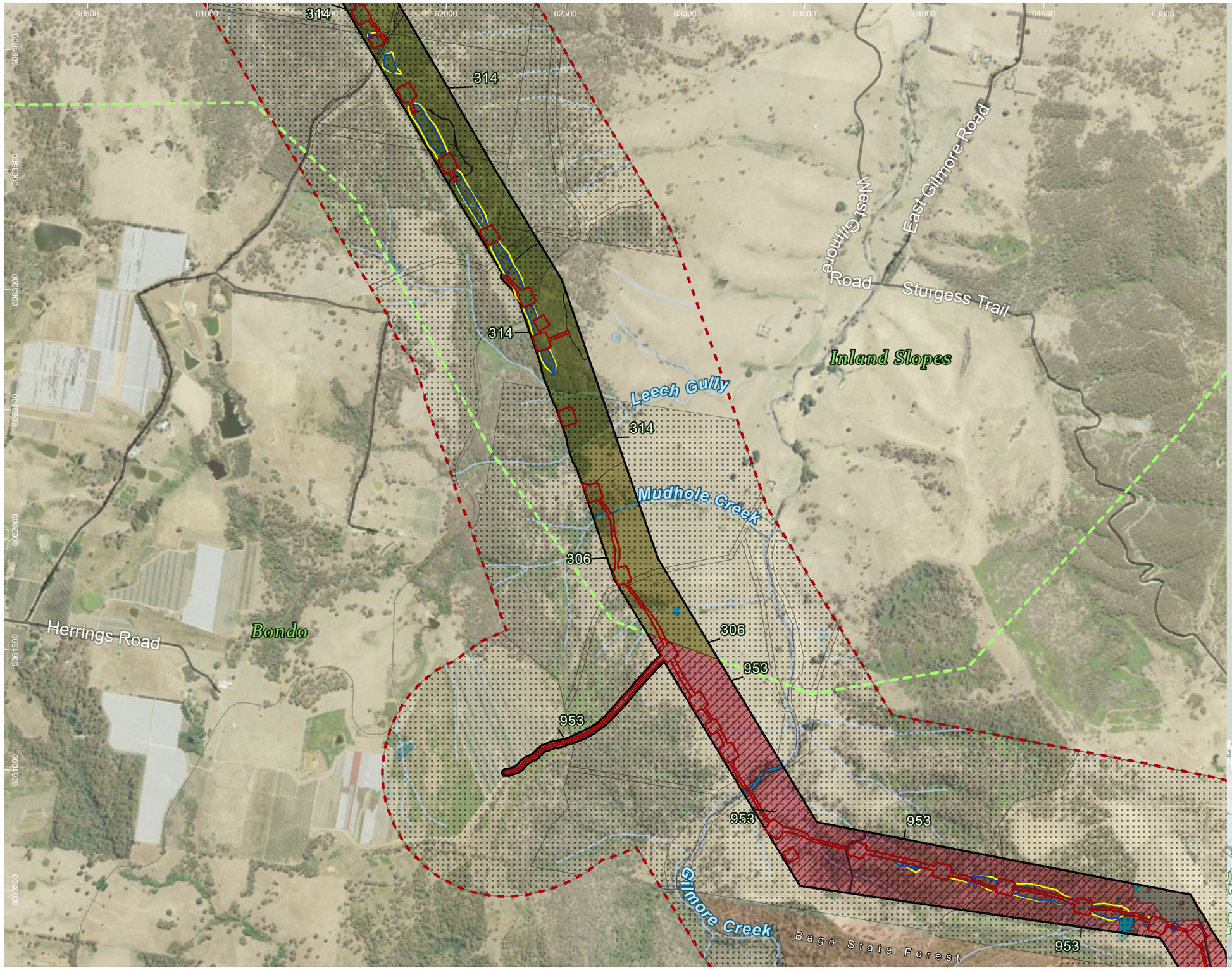


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Minor road

Administrative and Property Boundaries

- State Forest

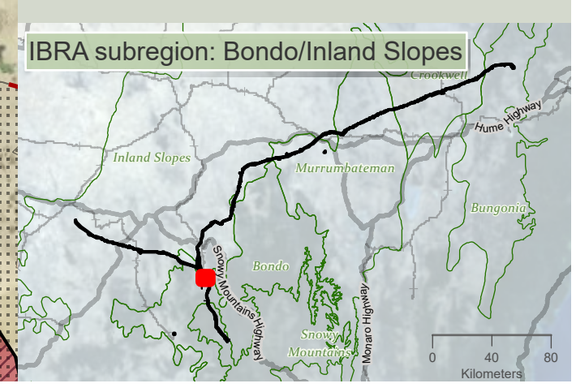
Impacts to native vegetation and threatened ecological communities

TECs

- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)

PCTs

- 0: Not Native
- 306: Red Box - Red Stringybark - Nortons Box hill heath shrub - tussock grass open forest of the Tumut region
- 314: Apple Box - Red Stringybark basalt scree open forest in the upper Murray River region
- 953: Mountain Gum - Snow Gum - Broad-leaved Peppermint shrubby open forest of montane ranges, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDrive\SyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 24

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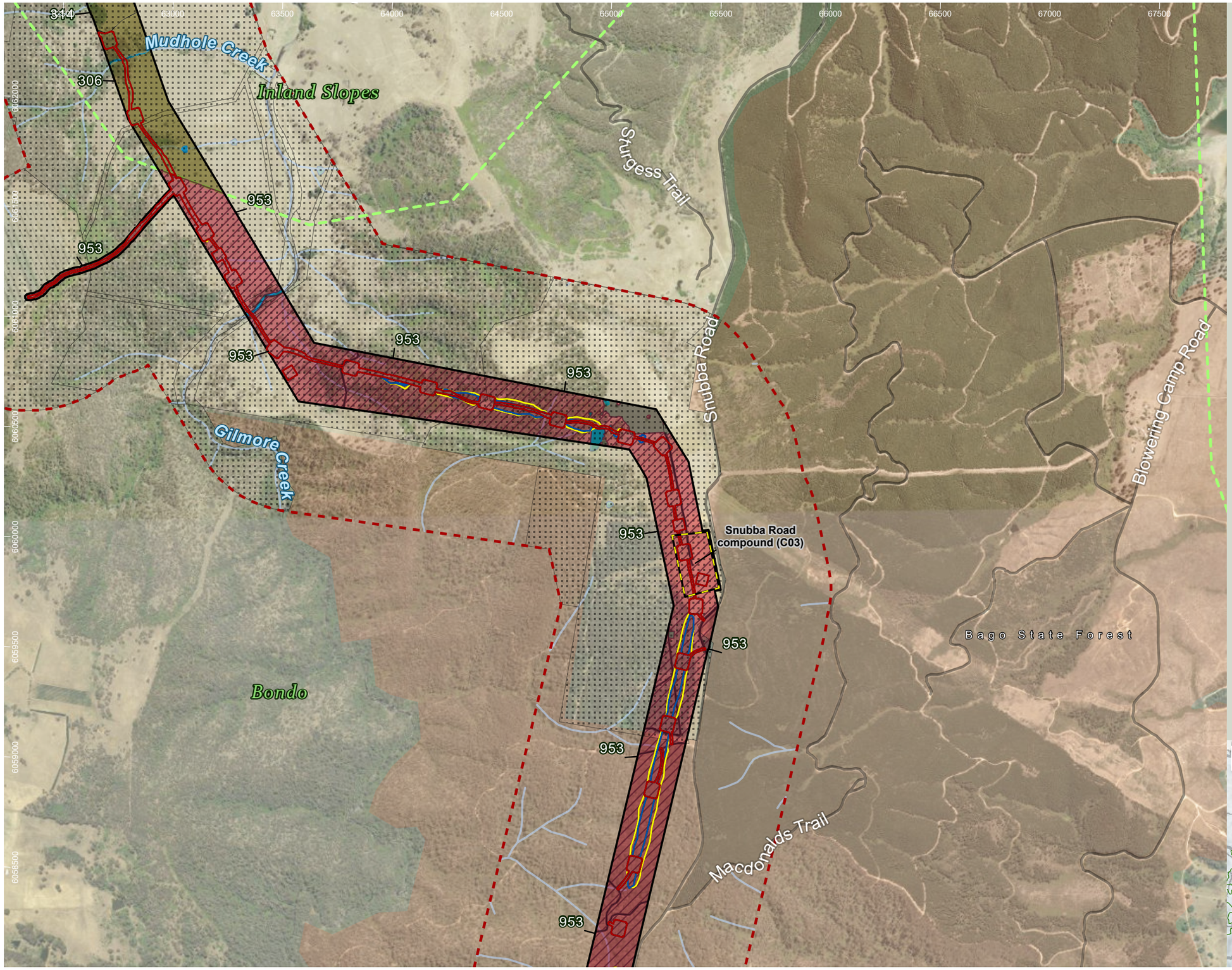


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest

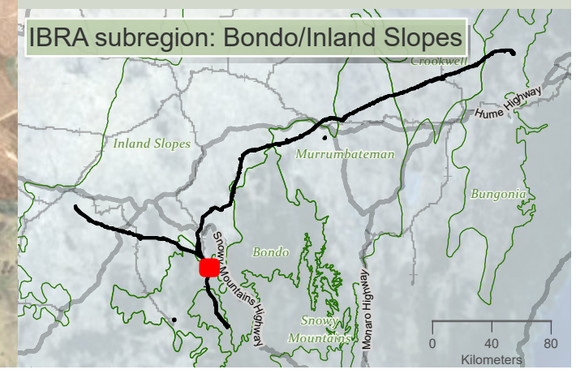
Impacts to native vegetation and threatened ecological communities

TECs

- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)

PCTs

- 0: Not Native
- 306: Red Box - Red Stringybark - Nortons Box hill heath shrub - tussock grass open forest of the Tumut region
- 314: Apple Box - Red Stringybark basalt scree open forest in the upper Murray River region
- 953: Mountain Gum - Snow Gum - Broad-leaved Peppermint shrubby open forest of montane ranges, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDrive\Sync\Folder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 25

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HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Major road
- Minor road

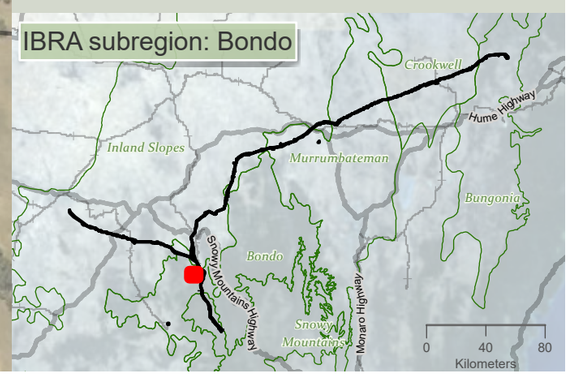
Administrative and Property Boundaries

- State Forest

Impacts to native vegetation and threatened ecological communities

PCTs

- 0: Not Native
- 300: Ribbon Gum - Narrow-leaved (Robertsons) Peppermint montane fern - grass tall open forest on deep clay loam soils in the upper NSW South Western Slopes Bioregion and western Kosciuszko escarpment



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 26

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Major road
- Minor road

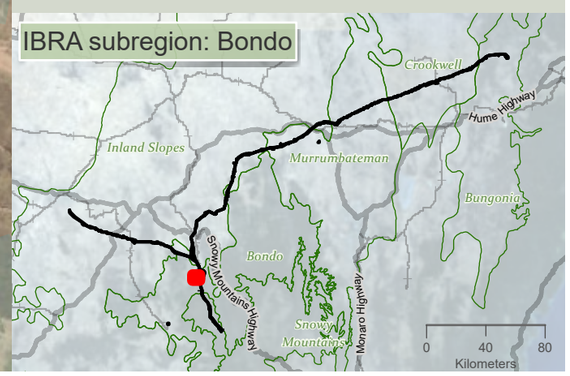
Administrative and Property Boundaries

- State Forest

Impacts to native vegetation and threatened ecological communities

PCTs

- 0: Not Native
- 300: Ribbon Gum - Narrow-leaved (Robertsons) Peppermint montane fern - grass tall open forest on deep clay loam soils in the upper NSW South Western Slopes Bioregion and western Kosciuszko escarpment



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 27

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HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway

Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest

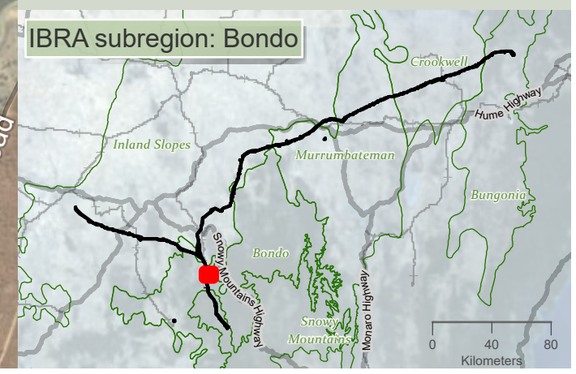
Impacts to native vegetation and threatened ecological communities

TECs

- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)

PCTs

- 0: Not Native
- 953: Mountain Gum - Snow Gum - Broad-leaved Peppermint shrubby open forest of montane ranges, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 9996: Not Native (Road)



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niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 28

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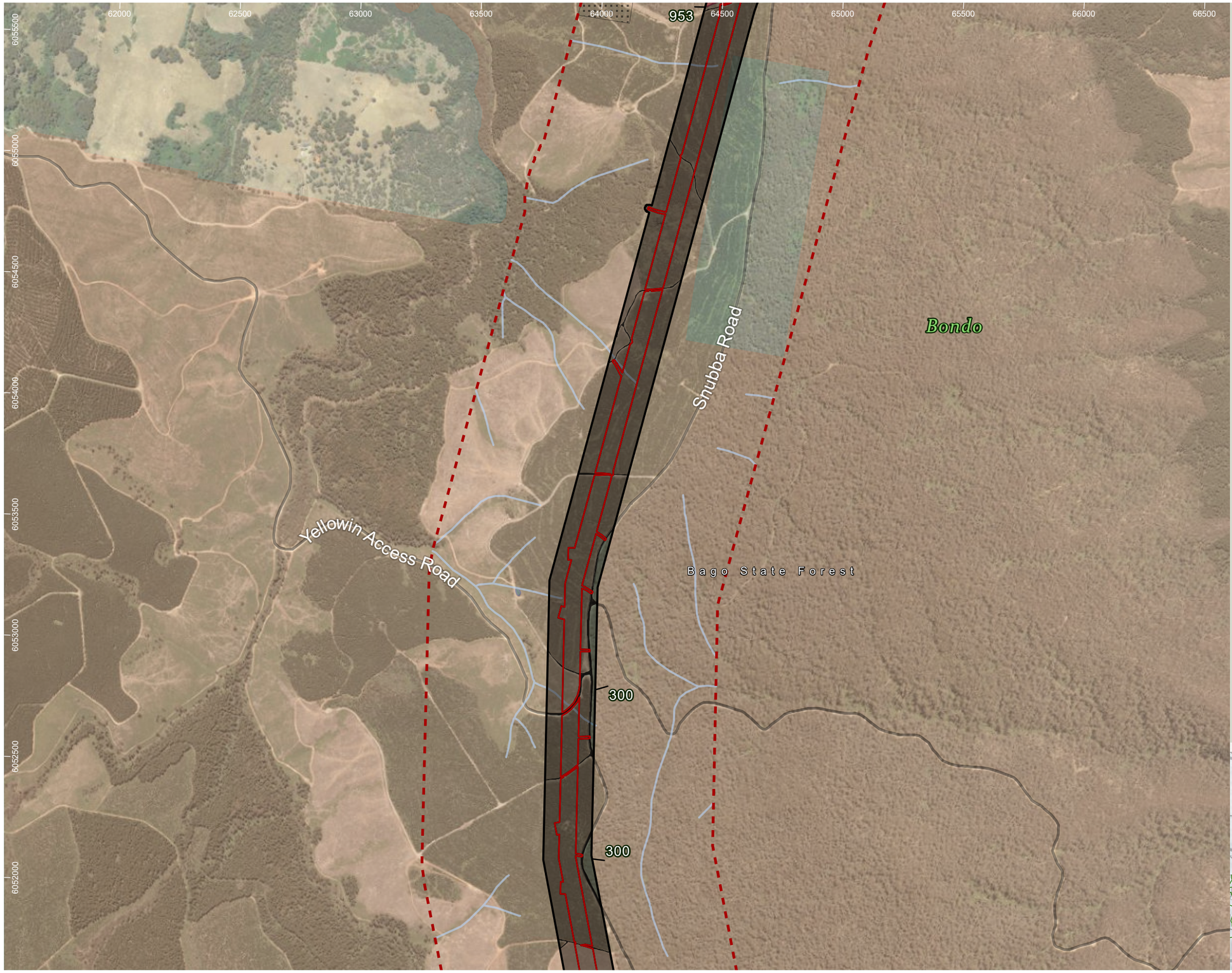


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest

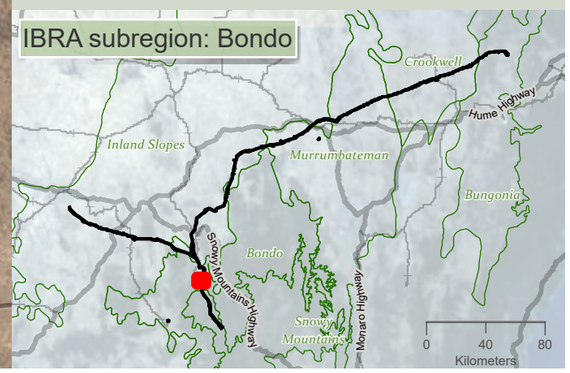
Impacts to native vegetation and threatened ecological communities

TECs

- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)

PCTs

- 0: Not Native
- 300: Ribbon Gum - Narrow-leaved (Robertsons) Peppermint montane fern - grass tall open forest on deep clay loam soils in the upper NSW South Western Slopes Bioregion and western Kosciuszko escarpment
- 953: Mountain Gum - Snow Gum - Broad-leaved Peppermint shrubby open forest of montane ranges, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 9996: Not Native (Road)



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 29

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- IBRA subregion

Hydrography

- Waterway

Transport

Road

- Minor road

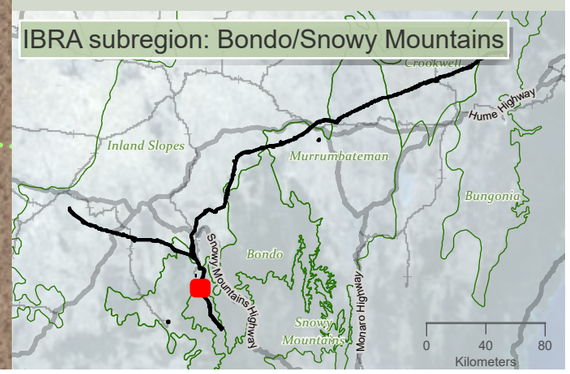
Administrative and Property Boundaries

- State Forest

Impacts to native vegetation and threatened ecological communities

PCTs

- 0: Not Native
- 299: Riparian Ribbon Gum - Robertsons Peppermint - Apple Box riverine very tall open forest of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 300: Ribbon Gum - Narrow-leaved (Robertsons) Peppermint montane fern - grass tall open forest on deep clay loam soils in the upper NSW South Western Slopes Bioregion and western Kosciuszko escarpment
- 638: Alpine Ash - Mountain Gum moist shrubby tall open forest of montane areas, southern South Eastern Highlands Bioregion and Australian Alps Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 550 m

N

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 30

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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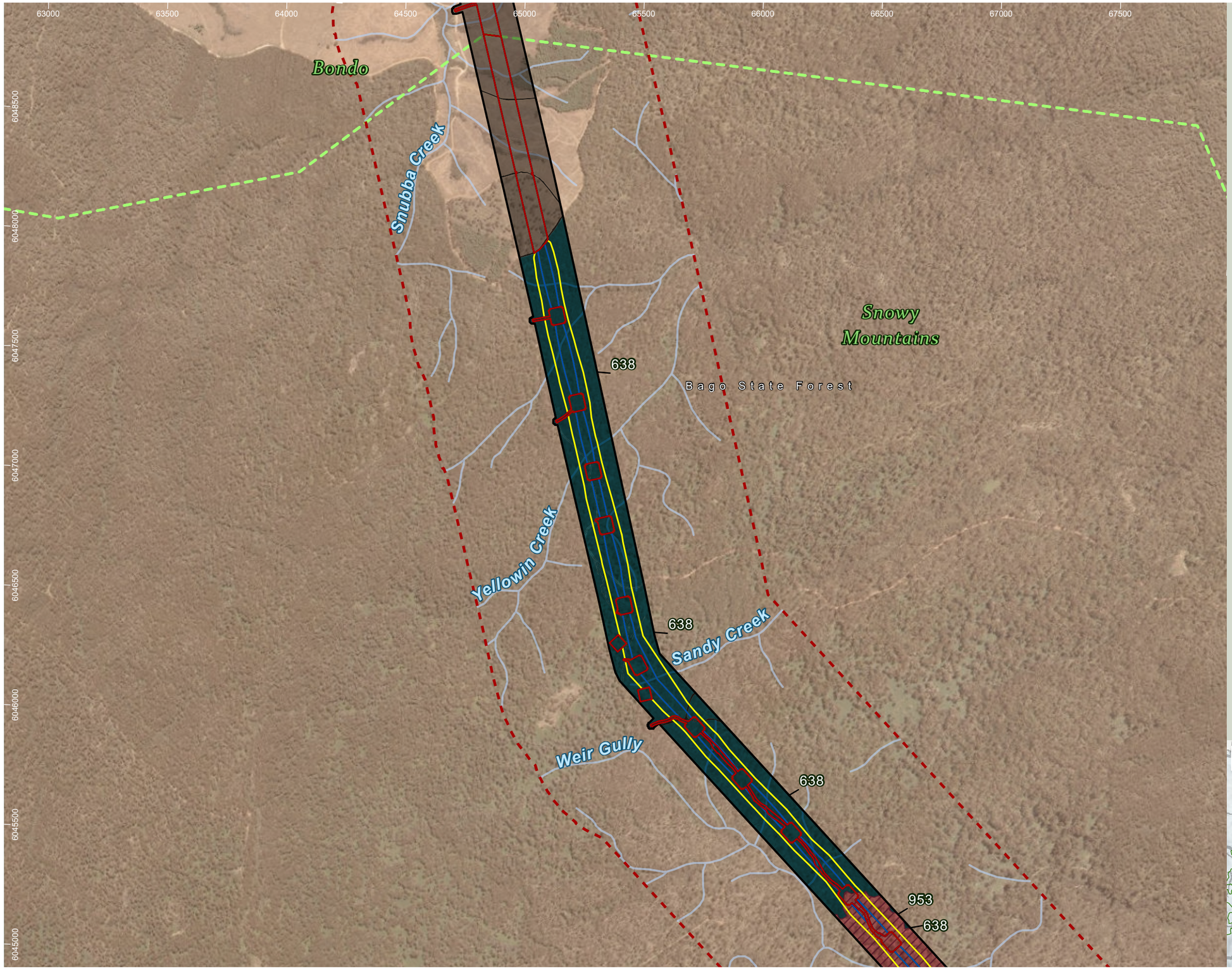


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- IBRA subregion

Hydrography

- Waterway

Administrative and Property Boundaries

- State Forest

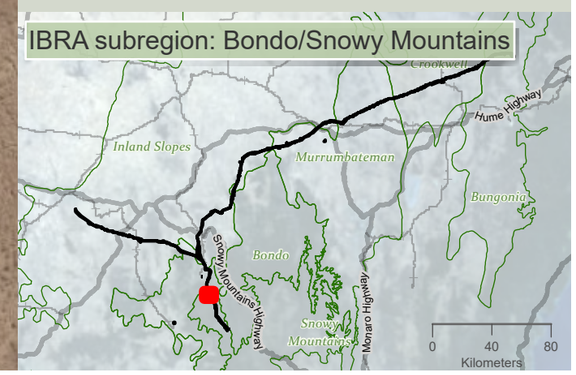
Impacts to native vegetation and threatened ecological communities

TECs

- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)

PCTs

- 0: Not Native
- 638: Alpine Ash - Mountain Gum moist shrubby tall open forest of montane areas, southern South Eastern Highlands Bioregion and Australian Alps Bioregion
- 953: Mountain Gum - Snow Gum - Broad-leaved Peppermint shrubby open forest of montane ranges, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 9996: Not Native (Road)



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 500
m
N
WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 31

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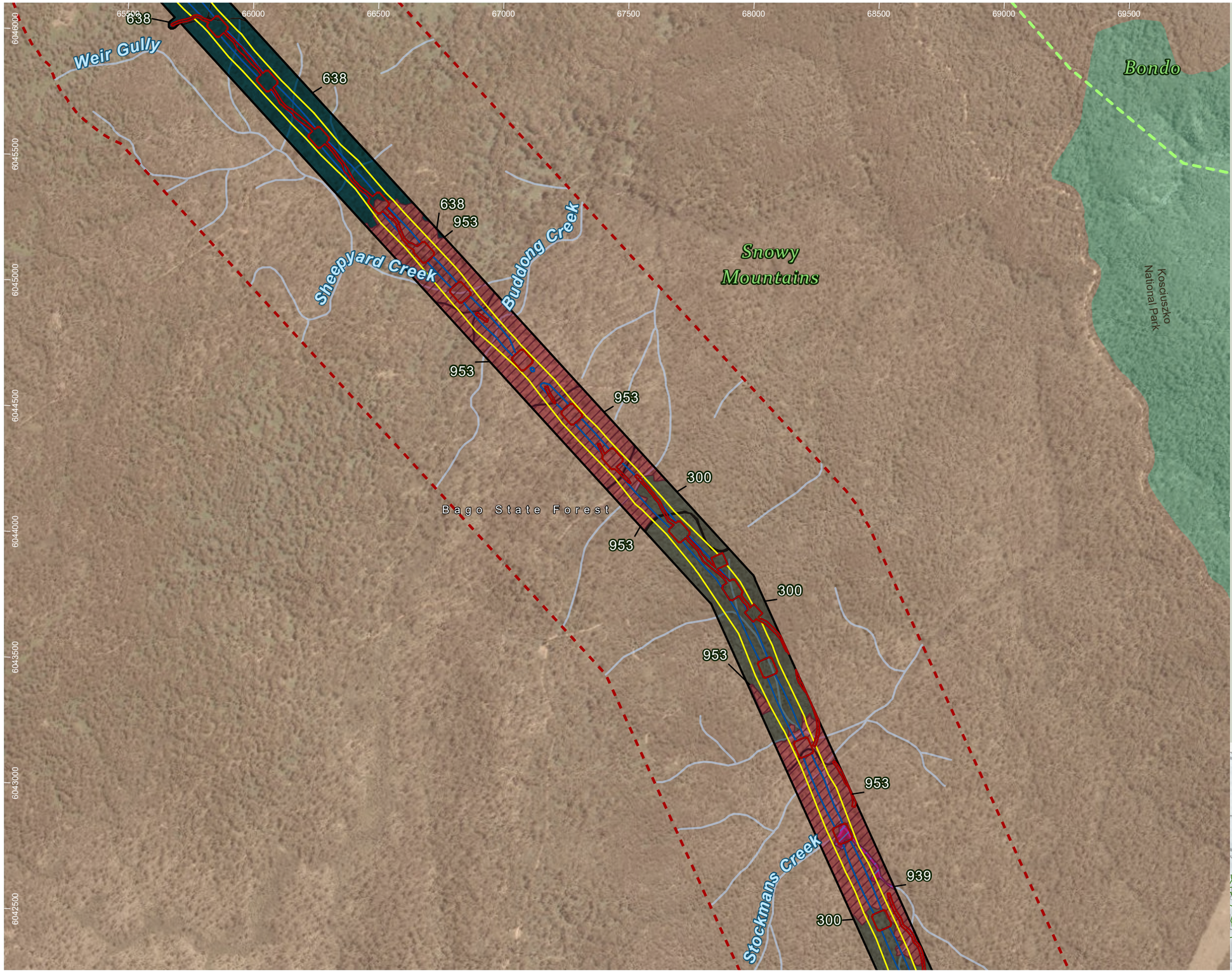


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- IBRA subregion

Hydrography

- Waterway

Administrative and Property Boundaries

- State Forest

Protected Areas of NSW

NPWS Reserve

- National Park

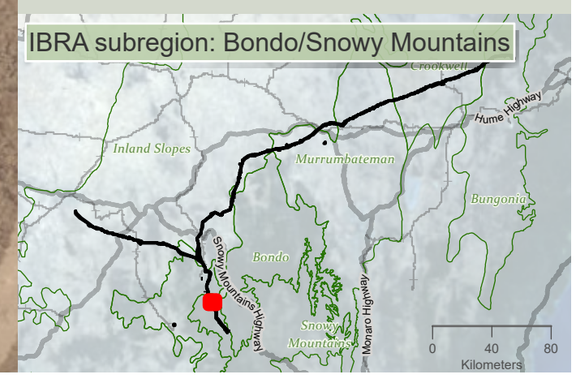
Impacts to native vegetation and threatened ecological communities

TECs

- Montane Peatlands and Swamps of the New England Tableland (BC Act), Alpine Sphagnum Bogs and Associated Fens (EPBC Act)
- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)

PCTs

- 300: Ribbon Gum - Narrow-leaved (Robertsons) Peppermint montane fern - grass tall open forest on deep clay loam soils in the upper NSW South Western Slopes Bioregion and western Kosciuszko escarpment
- 638: Alpine Ash - Mountain Gum moist shrubby tall open forest of montane areas, southern South Eastern Highlands Bioregion and Australian Alps Bioregion
- 939: Montane wet heath and bog of the eastern tablelands, South Eastern Highlands Bioregion
- 953: Mountain Gum - Snow Gum - Broad-leaved Peppermint shrubby open forest of montane ranges, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 9996: Not Native (Road)



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niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

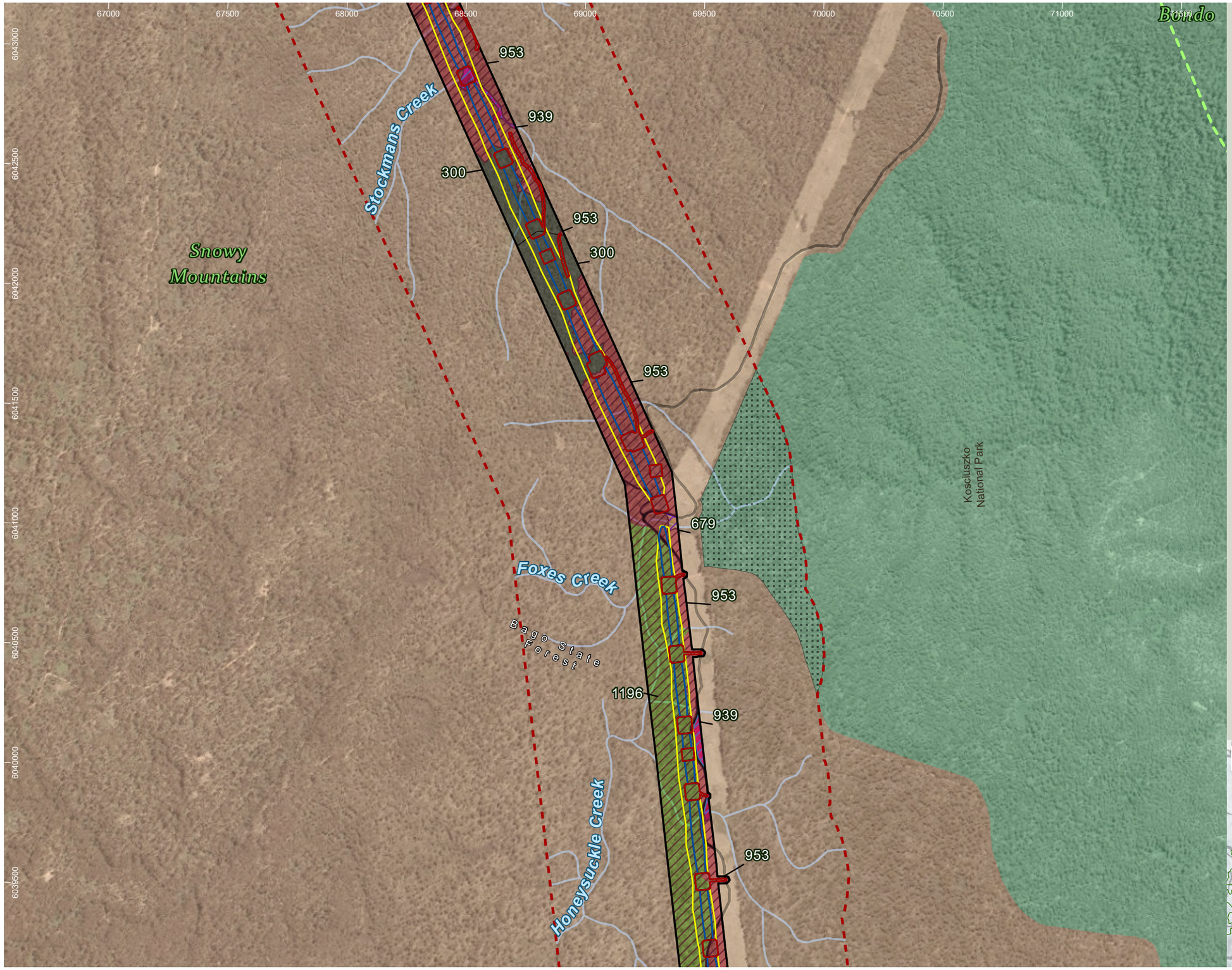
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 32

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway

Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest

Protected Areas of NSW

NPWS Reserve

- National Park

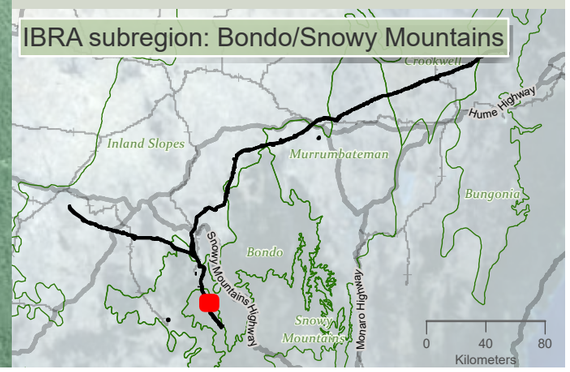
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- Montane Peatlands and Swamps of the New England Tableland (BC Act), Alpine Sphagnum Bogs and Associated Fens (EPBC Act)
- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)

PCTs

- 1196: Snow Gum - Mountain Gum shrubby open forest of montane areas, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 300: Ribbon Gum - Narrow-leaved (Robertsons) Peppermint montane fern - grass tall open forest on deep clay loam soils in the upper NSW South Western Slopes Bioregion and western Kosciuszko escarpment
- 679: Black Sallee - Snow Gum low woodland of montane valleys, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 939: Montane wet heath and bog of the eastern tablelands, South Eastern Highlands Bioregion
- 953: Mountain Gum - Snow Gum - Broad-leaved Peppermint shrubby open forest of montane ranges, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 9996: Not Native (Road)



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 33

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest

Protected Areas of NSW

NPWS Reserve

- National Park

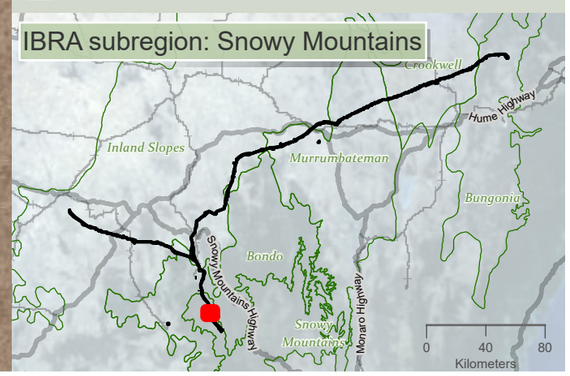
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- Montane Peatlands and Swamps of the New England Tableland (BC Act), Alpine Sphagnum Bogs and Associated Fens (EPBC Act)
- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)

PCTs

- 0: Not Native
- 1196: Snow Gum - Mountain Gum shrubby open forest of montane areas, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 300: Ribbon Gum - Narrow-leaved (Robertsons) Peppermint montane fern - grass tall open forest on deep clay loam soils in the upper NSW South Western Slopes Bioregion and western Kosciuszko escarpment
- 679: Black Sallee - Snow Gum low woodland of montane valleys, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 939: Montane wet heath and bog of the eastern tablelands, South Eastern Highlands Bioregion
- 953: Mountain Gum - Snow Gum - Broad-leaved Peppermint shrubby open forest of montane ranges, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 9996: Not Native (Road)



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 34

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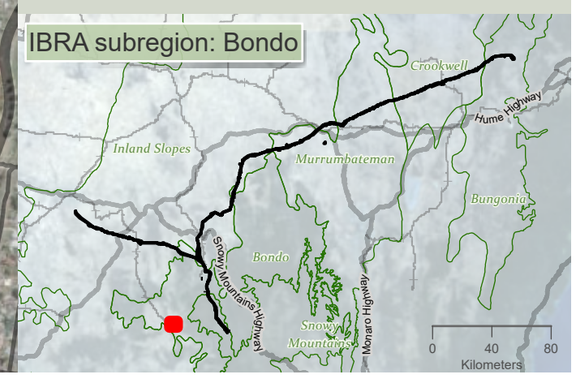

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Major road
- Minor road

Administrative and Property Boundaries

- State Forest

Protected Areas of NSW

NPWS Reserve

- Nature Reserve

Impacts to native vegetation and threatened ecological communities

PCTs

- 0: Not Native
- 285: Broad-leaved Sally grass - sedge woodland on valley flats and swamps in the NSW South Western Slopes Bioregion and adjoining South Eastern Highlands Bioregion

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 35

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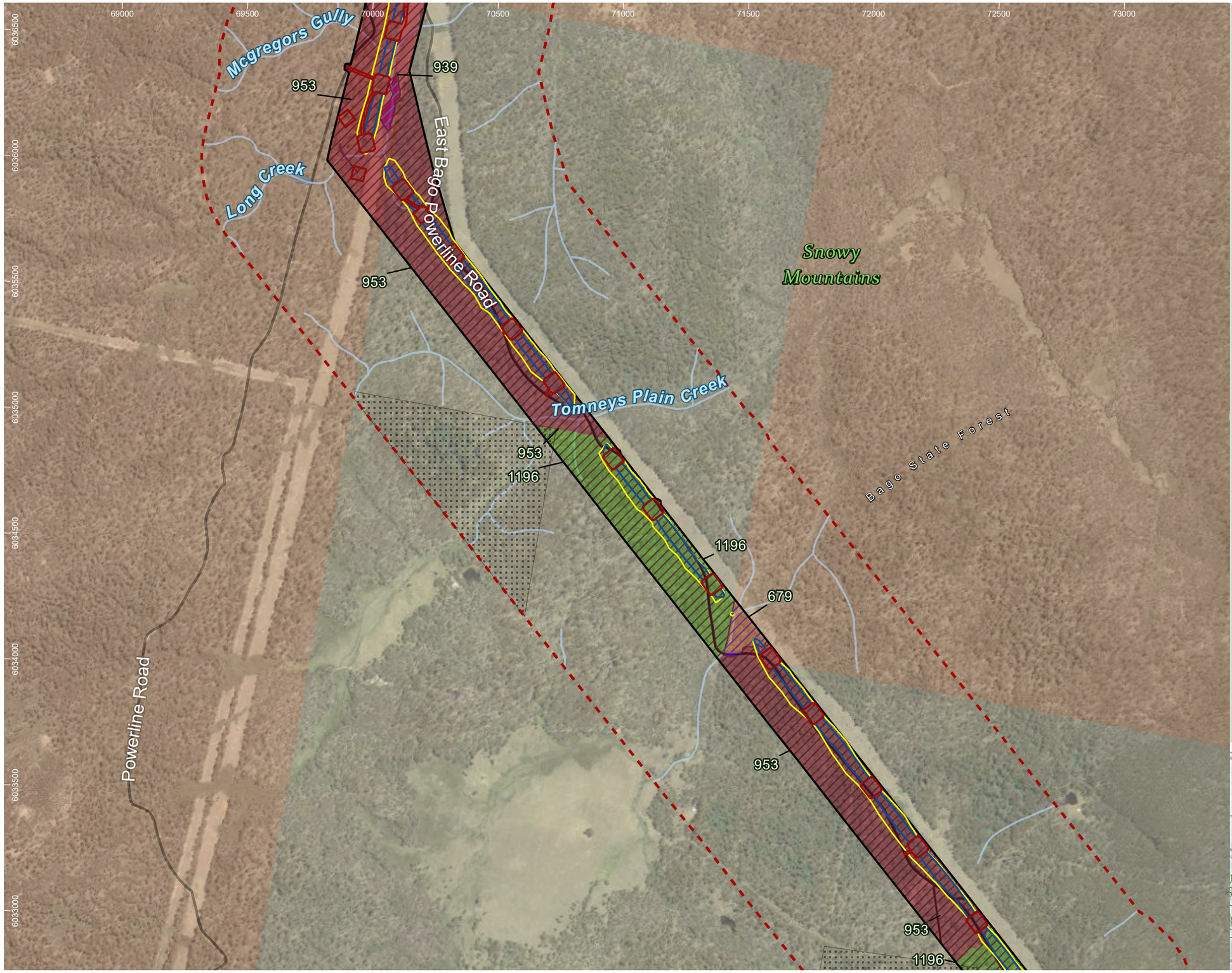
Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest

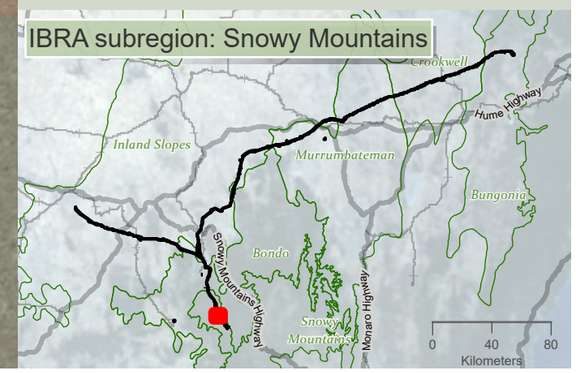
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- Montane Peatlands and Swamps of the New England Tableland (BC Act), Alpine Sphagnum Bogs and Associated Fens (EPBC Act)
- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)

PCTs

- 1196: Snow Gum - Mountain Gum shrubby open forest of montane areas, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 679: Black Sallee - Snow Gum low woodland of montane valleys, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 939: Montane wet heath and bog of the eastern tablelands, South Eastern Highlands Bioregion
- 953: Mountain Gum - Snow Gum - Broad-leaved Peppermint shrubby open forest of montane ranges, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 9996: Not Native (Road)



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6899 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

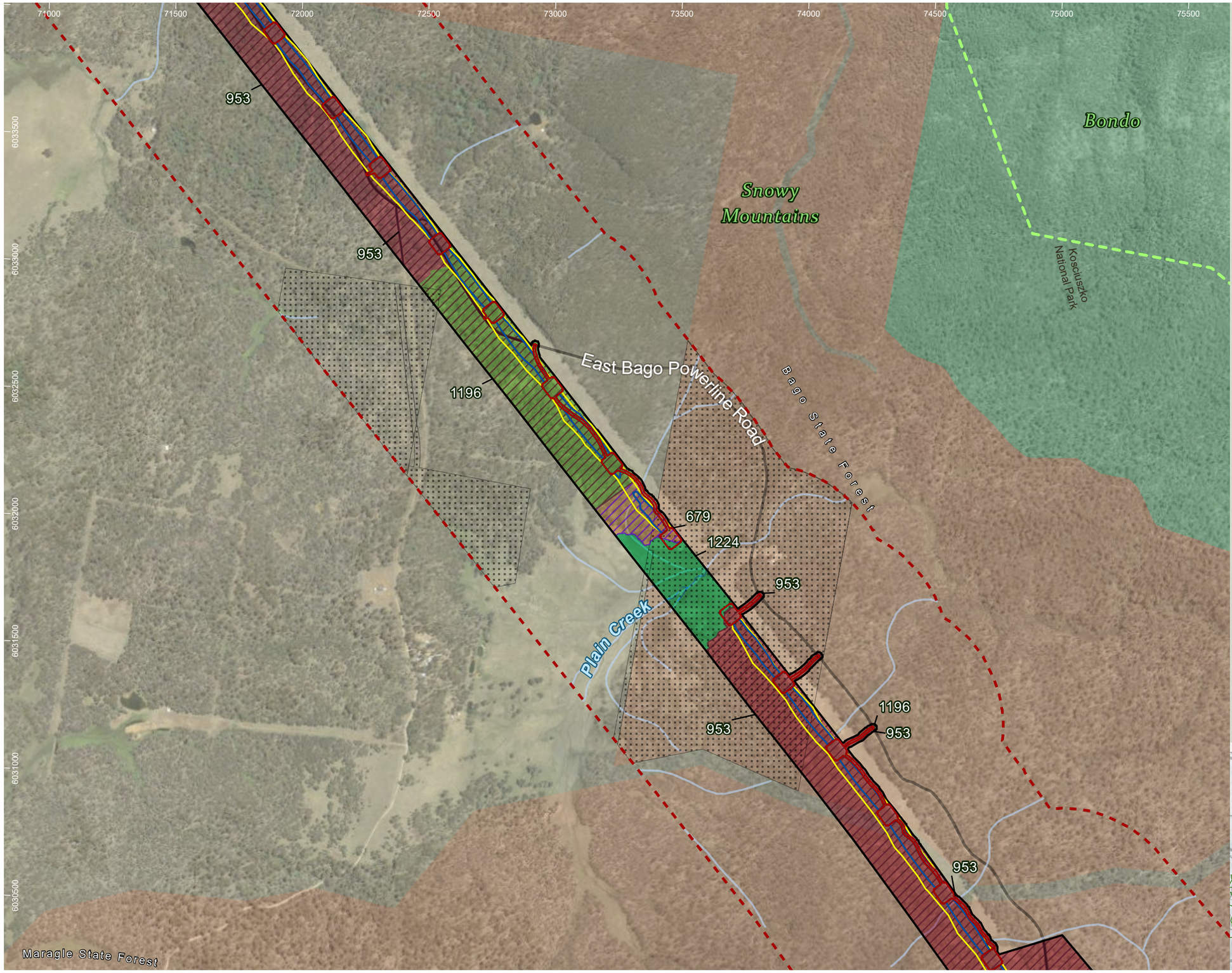
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 36

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway

Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest

Protected Areas of NSW

NPWS Reserve

- National Park

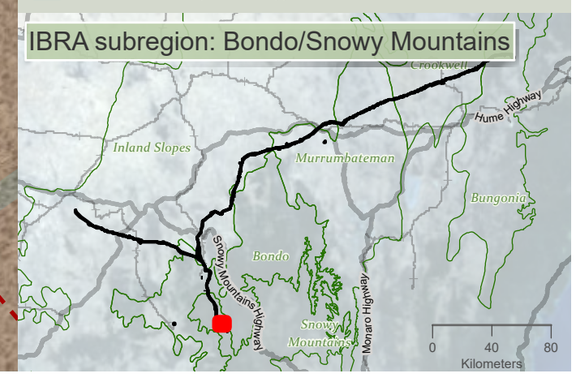
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)

PCTs

- 0: Not Native
- 1196: Snow Gum - Mountain Gum shrubby open forest of montane areas, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 1224: Sub-alpine dry grasslands and heathlands of valley slopes, southern South Eastern Highlands Bioregion and Australian Alps Bioregion
- 679: Black Sallee - Snow Gum low woodland of montane valleys, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 953: Mountain Gum - Snow Gum - Broad-leaved Peppermint shrubby open forest of montane ranges, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 37

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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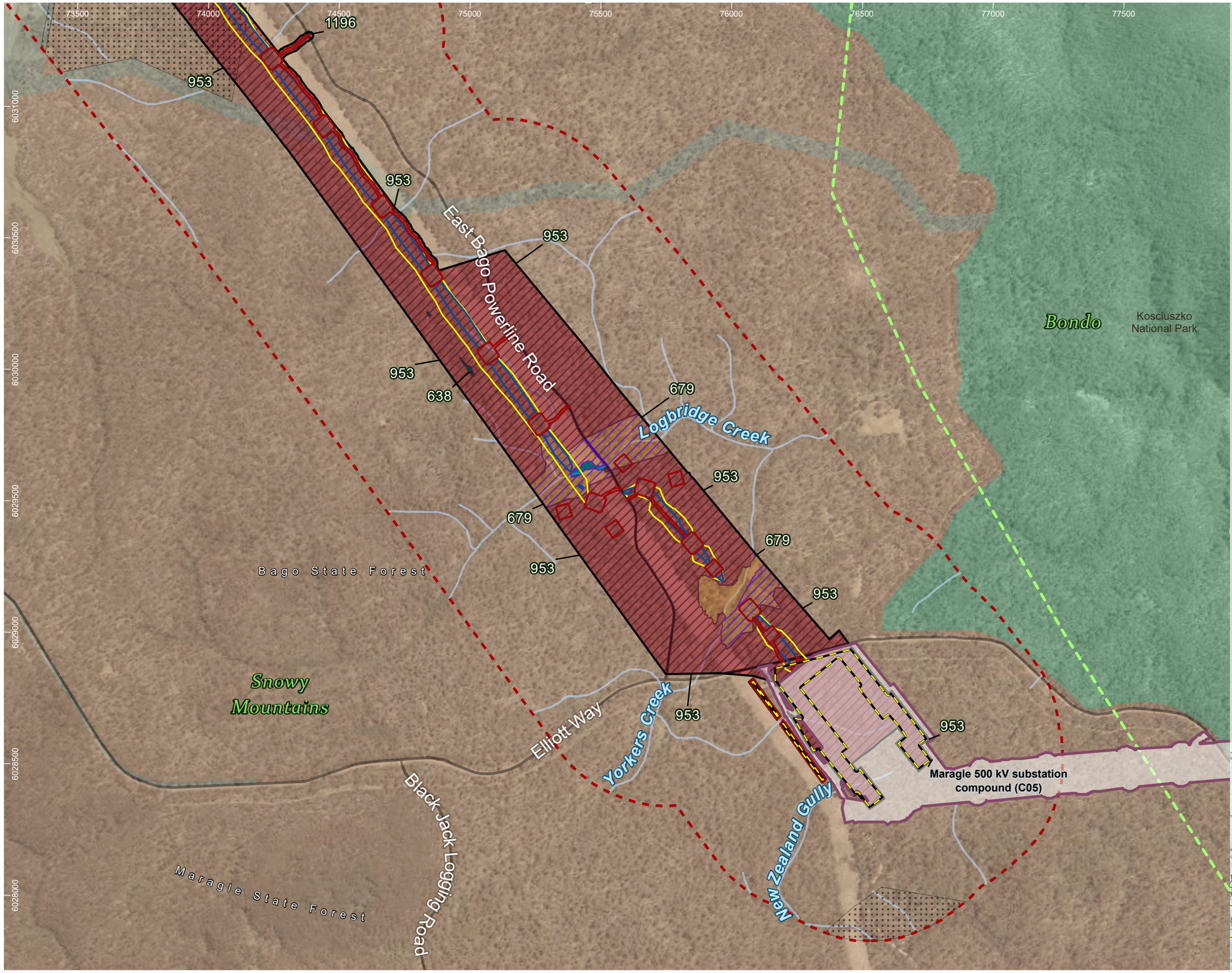


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- Snowy 2.0 Transmission Connection project

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway

Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest

Protected Areas of NSW

NPWS Reserve

- National Park

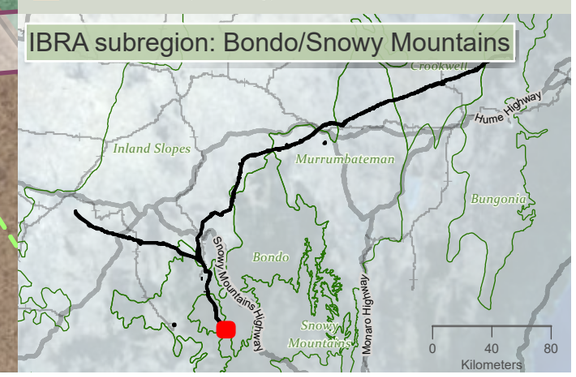
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)

PCTs

- 0: Not Native
- 1196: Snow Gum - Mountain Gum shrubby open forest of montane areas, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 638: Alpine Ash - Mountain Gum moist shrubby tall open forest of montane areas, southern South Eastern Highlands Bioregion and Australian Alps Bioregion
- 679: Black Sallee - Snow Gum low woodland of montane valleys, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 953: Mountain Gum - Snow Gum - Broad-leaved Peppermint shrubby open forest of montane ranges, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 38

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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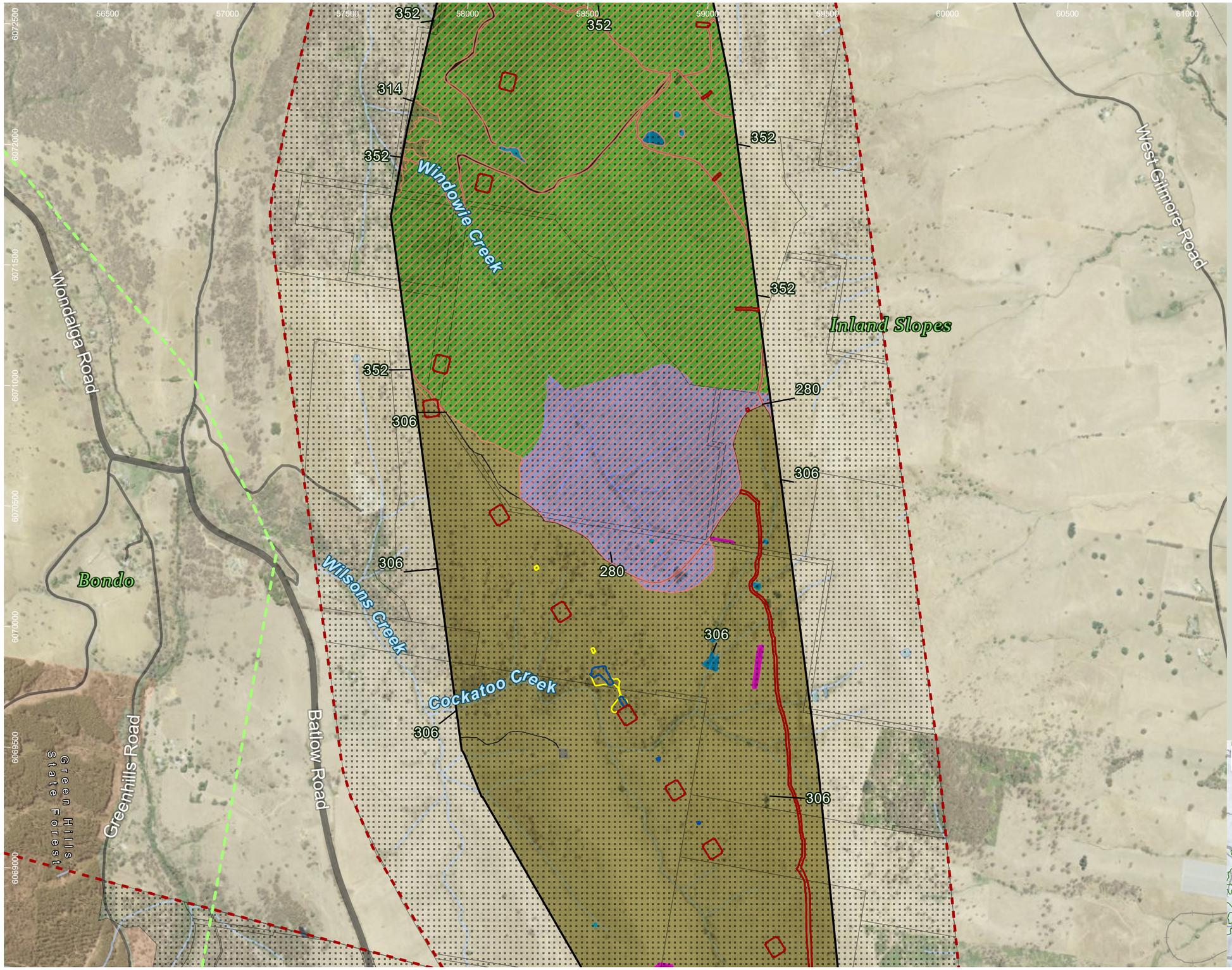


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Major road
- Minor road

Administrative and Property Boundaries

- State Forest

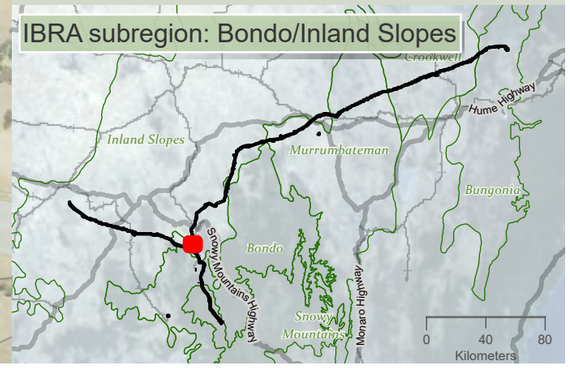
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 306: Red Box - Red Stringybark - Nortons Box hill heath shrub - tussock grass open forest of the Tumut region
- 314: Apple Box - Red Stringybark basalt scree open forest in the upper Murray River region
- 352: Red Stringybark - Blakelys Red Gum hillslope open forest on meta-sediments in the Yass - Boorowa - Crookwell region of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 39

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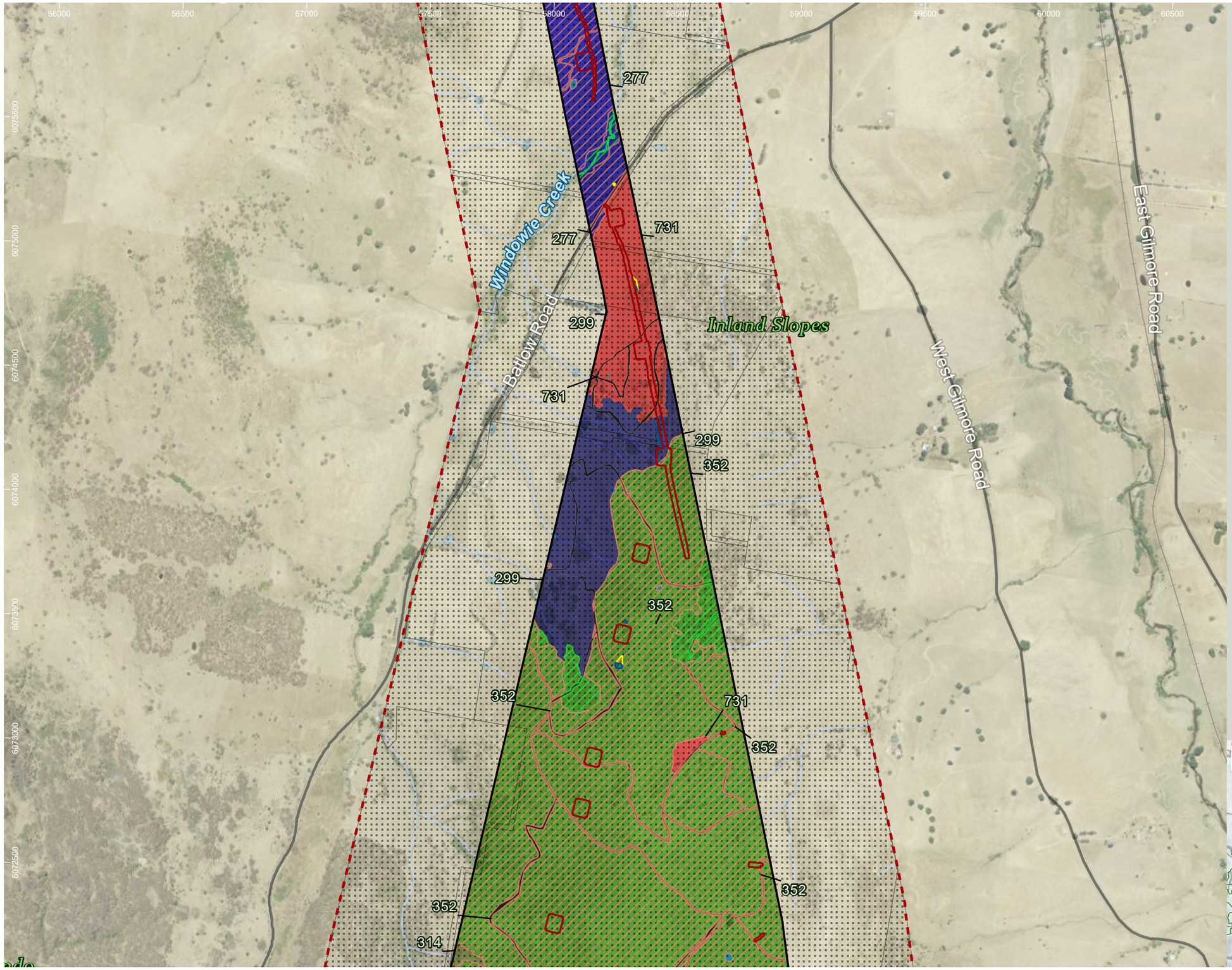


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Minor road

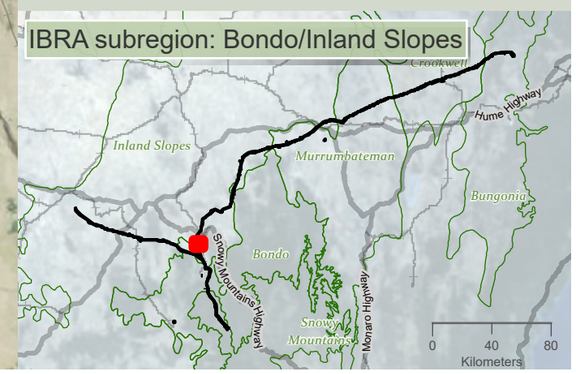
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 299: Riparian Ribbon Gum - Robertsons Peppermint - Apple Box riverine very tall open forest of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 314: Apple Box - Red Stringybark basalt scree open forest in the upper Murray River region
- 352: Red Stringybark - Blakelys Red Gum hillslope open forest on meta-sediments in the Yass - Boorowa - Crookwell region of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 731: Broad-leaved Peppermint - Red Stringybark grassy open forest on undulating hills, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



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niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

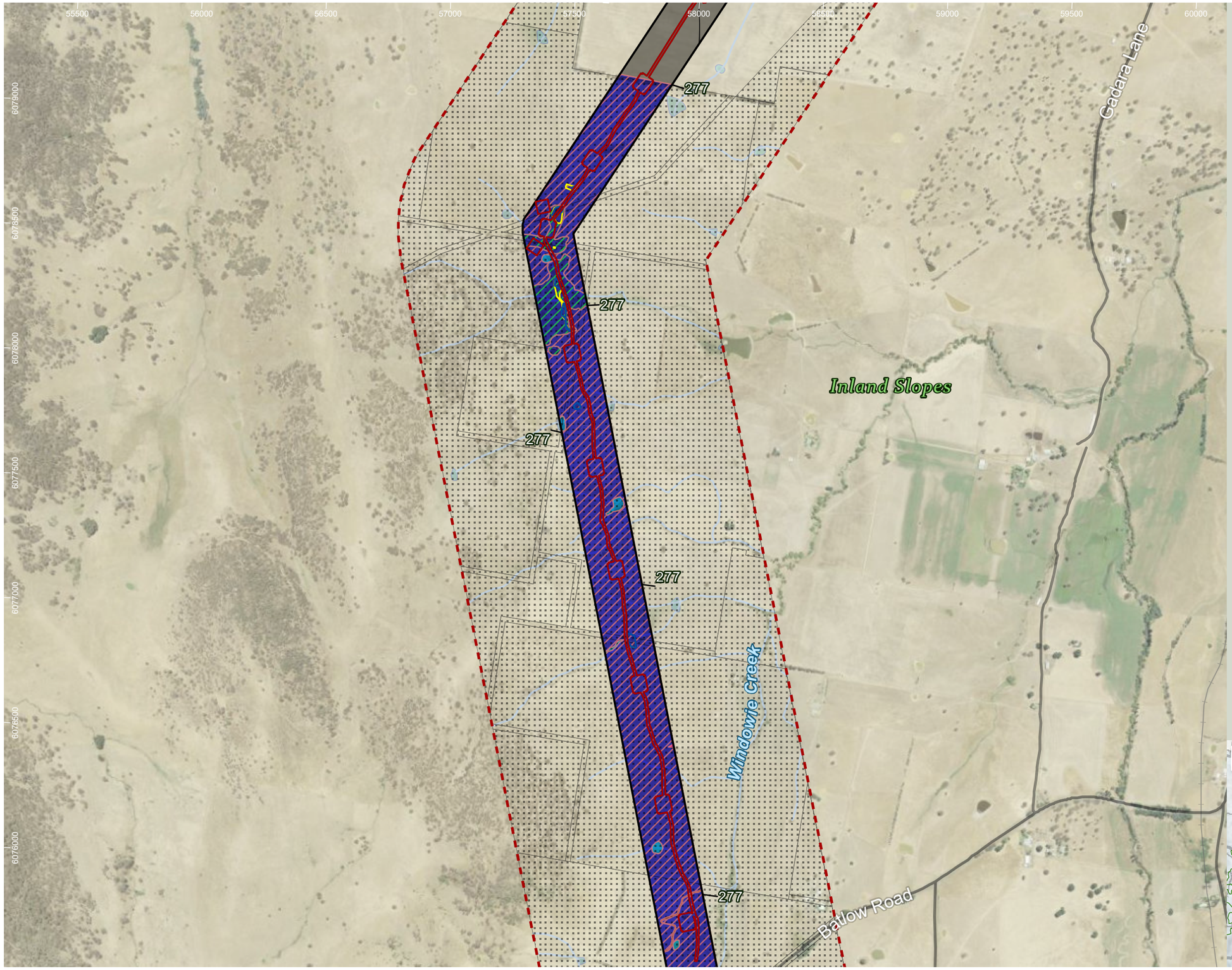
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 40

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Minor road

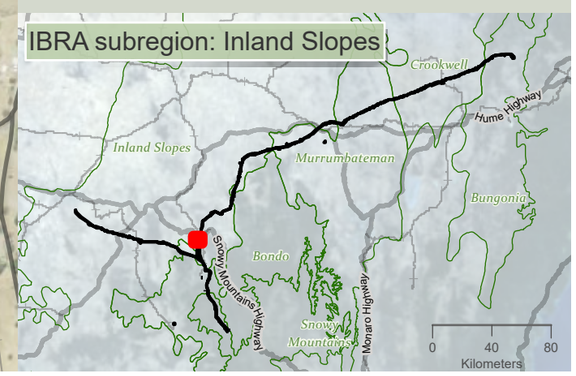
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 41

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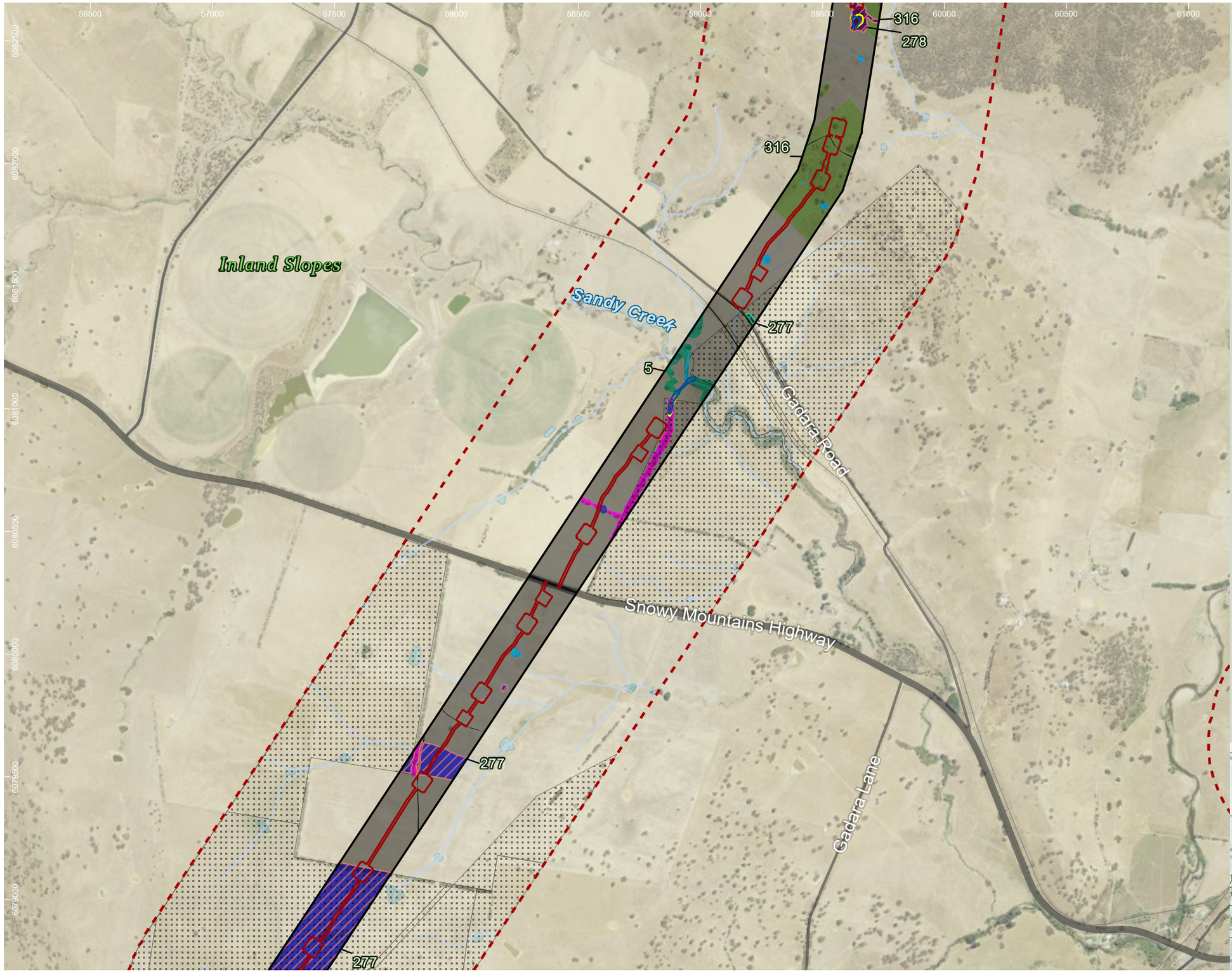


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Major road
- Minor road

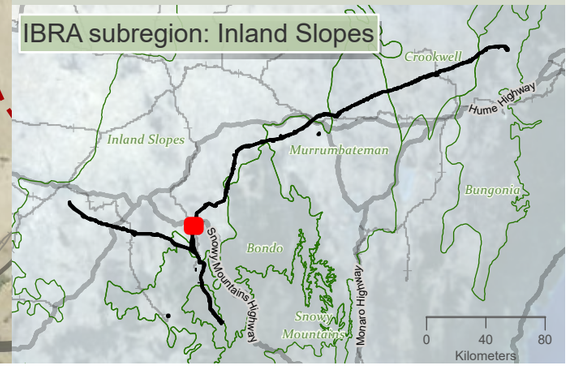
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 316: Nortons Box - Red Box - Red Stringybark +/- Nodding Flax Lily forb-grass open forest mainly on the Tumut region
- 5: River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South Western Slopes Bioregion and the eastern Riverina Bioregion.
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



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niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 42

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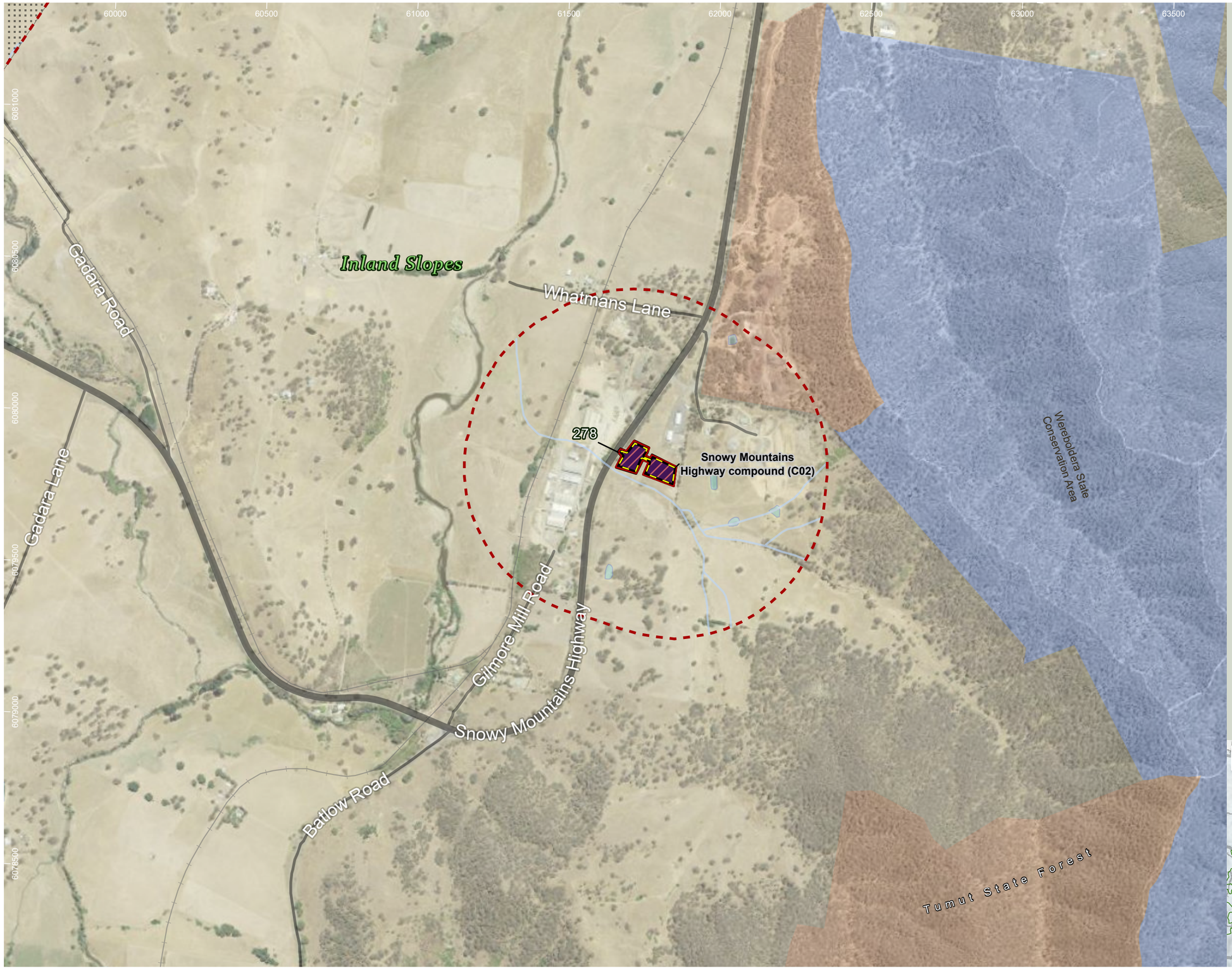


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Major road
- Minor road

Administrative and Property Boundaries

- State Forest

Protected Areas of NSW

NPWS Reserve

- State Conservation Area

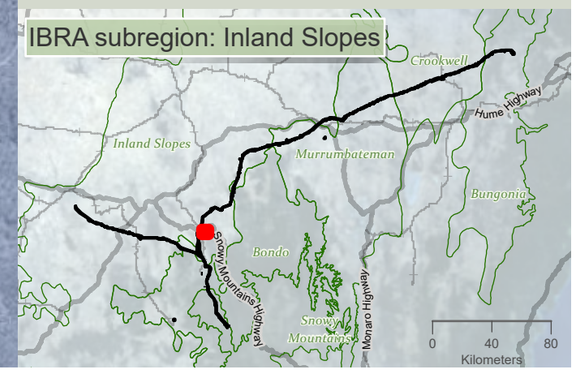
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 43

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HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- National Park

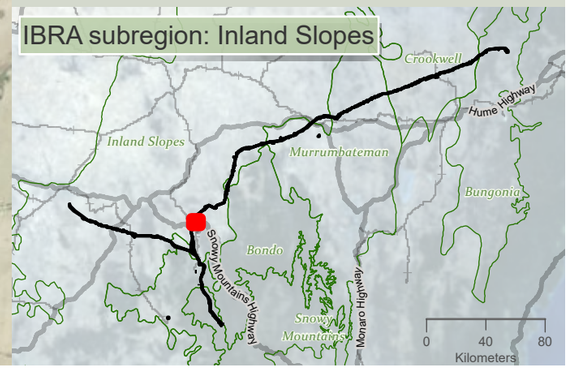
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 316: Nortons Box - Red Box - Red Stringybark +/- Nodding Flax Lily forb-grass open forest mainly on the Tumut region
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 44

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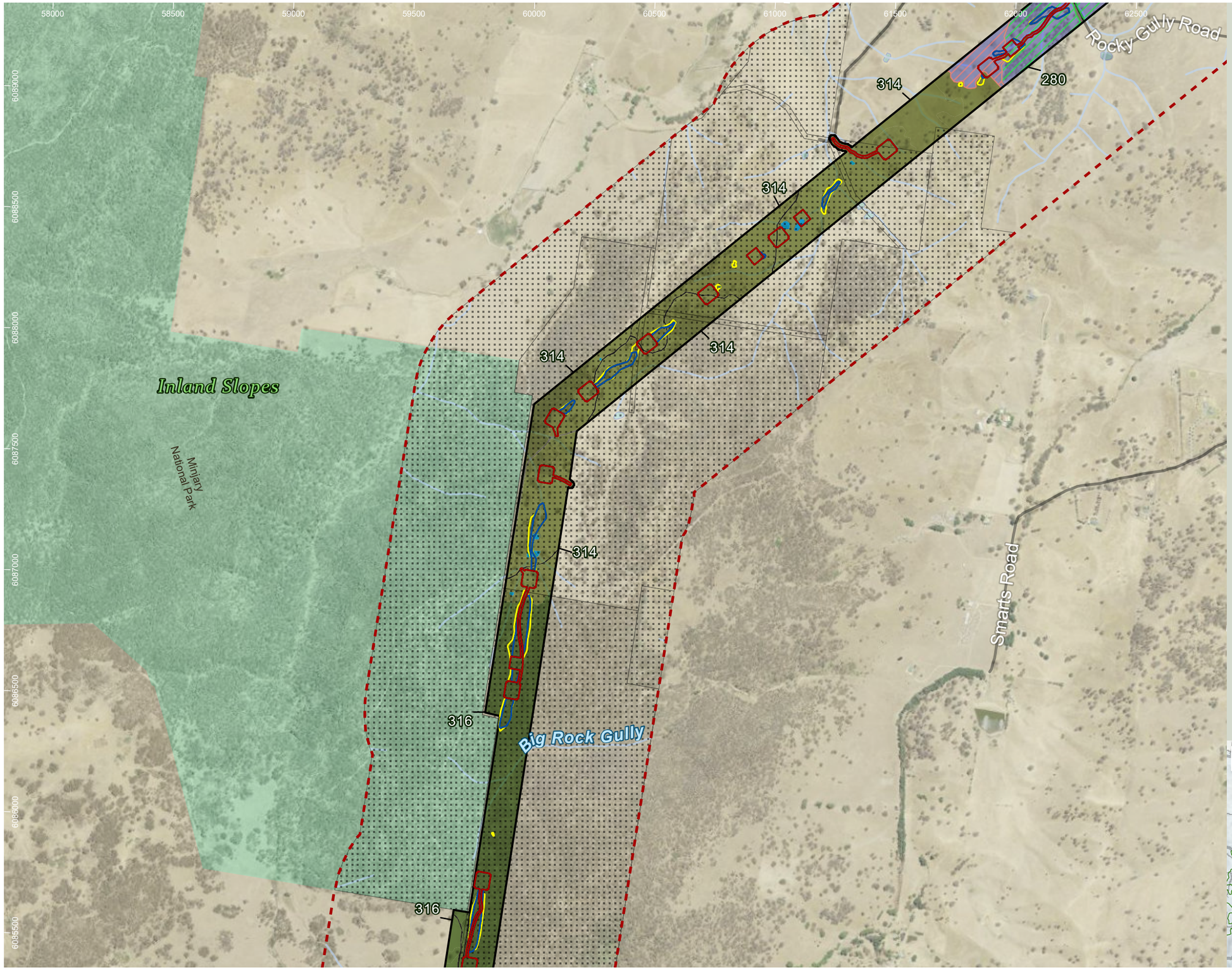


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- National Park

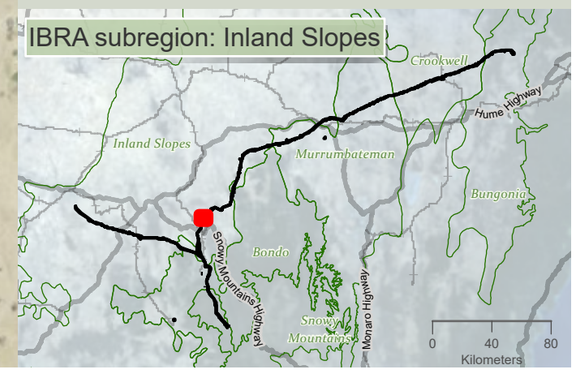
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 314: Apple Box - Red Stringybark basalt scree open forest in the upper Murray River region
- 316: Nortons Box - Red Box - Red Stringybark +/- Nodding Flax Lily forb-grass open forest mainly on the Tumut region
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 45

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Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

61000 61500 62000 62500 63000 63500 64000 64500

6095500 6091000 6086500 6082000 6077500

Inland Slopes

Meadow Creek Road

Gocup Road

Gocup Creek

Tumut River

Rocky Gully Road

Gocup Farms Road

280 278 280 278 280 278 280 314 314

HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

Impacts to native vegetation and threatened ecological communities

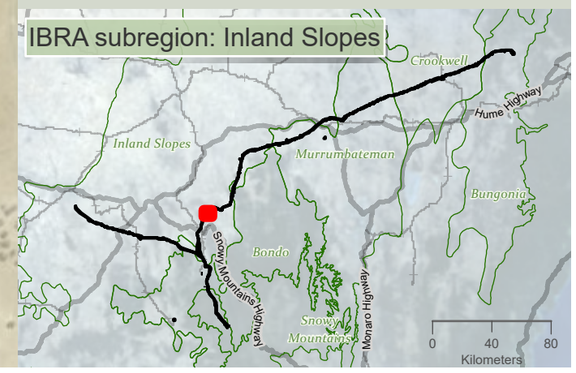
TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 314: Apple Box - Red Stringybark basalt scree open forest in the upper Murray River region
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)

IBRA subregion: Inland Slopes



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 46

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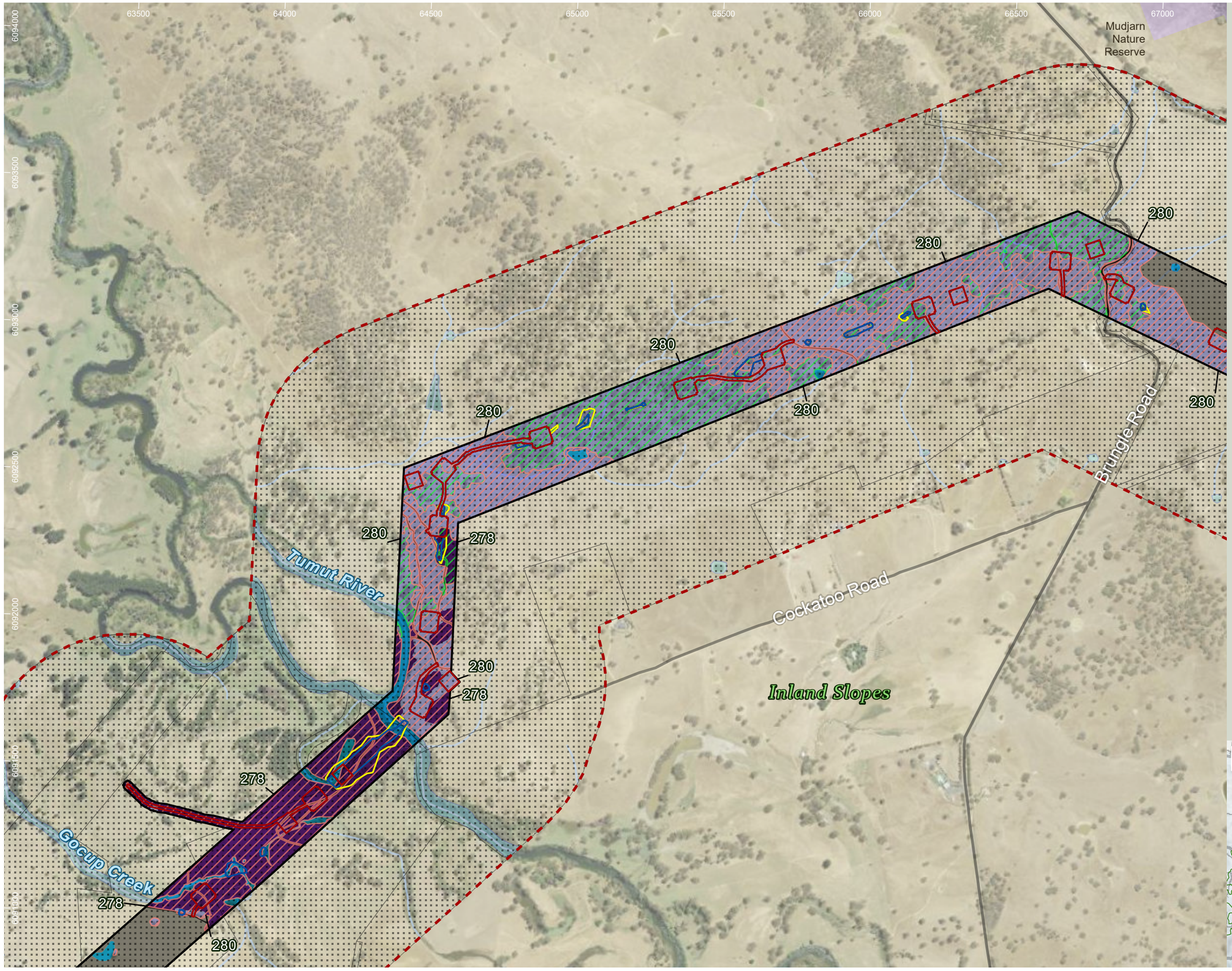


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- Nature Reserve

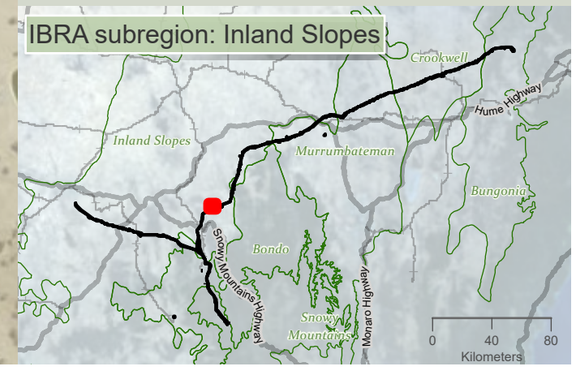
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 47

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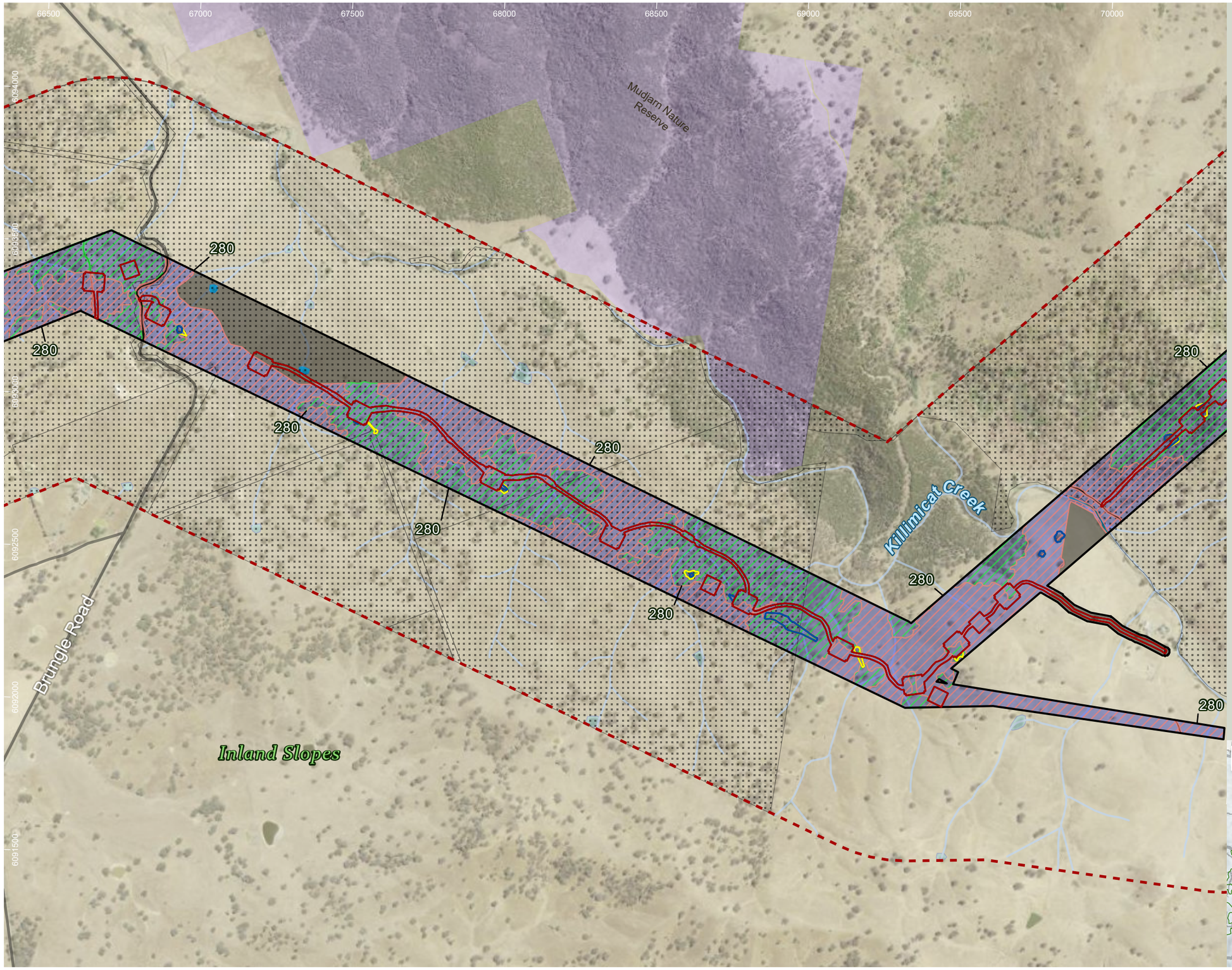


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- Nature Reserve

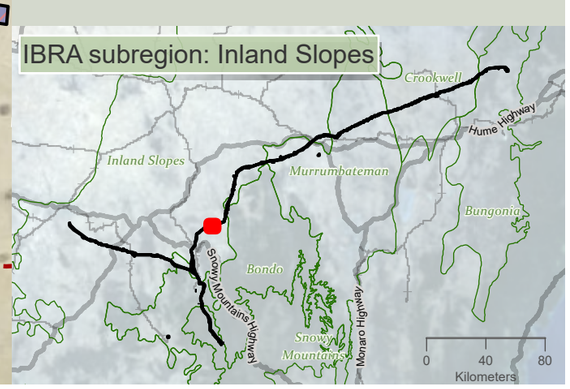
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 48

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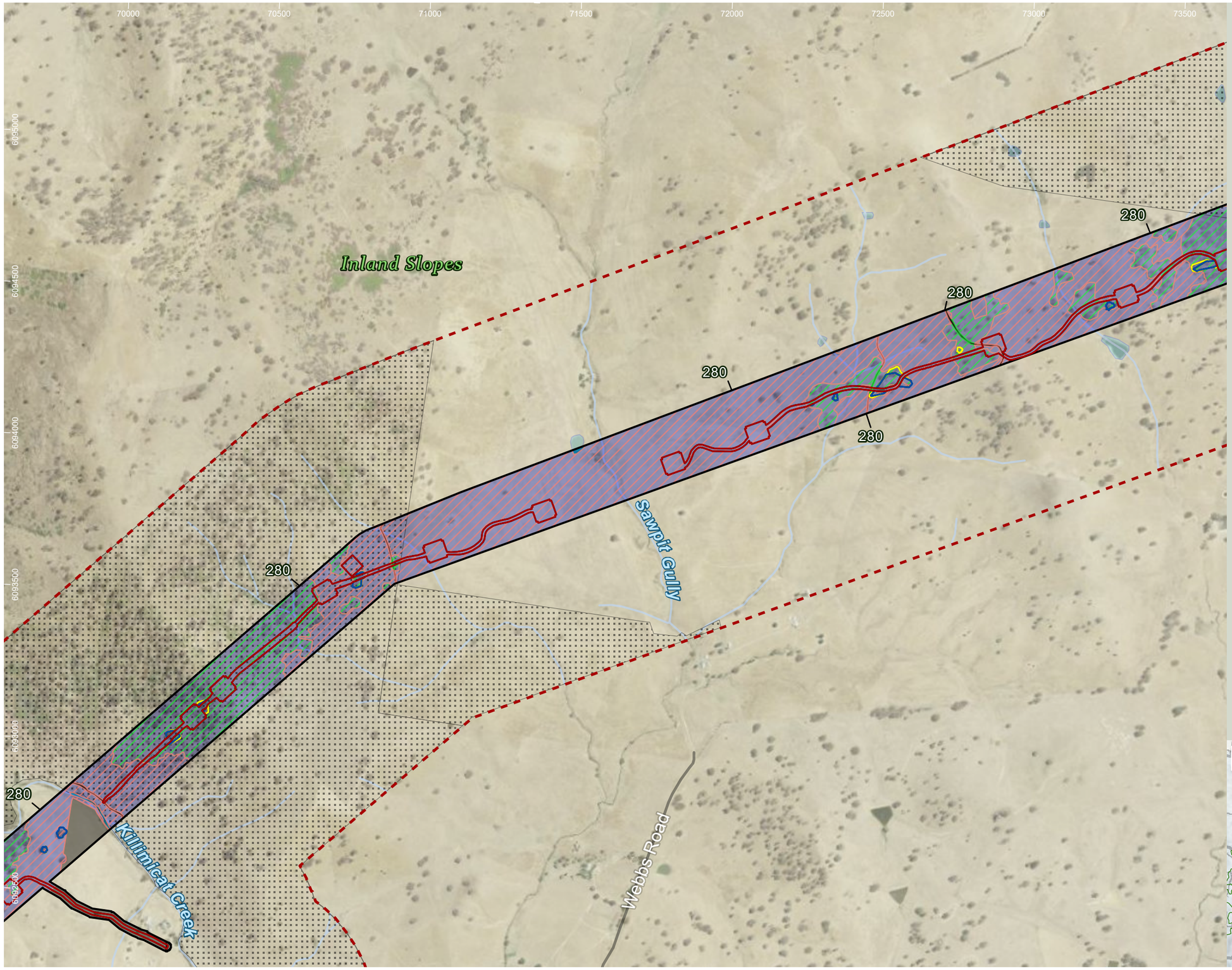


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

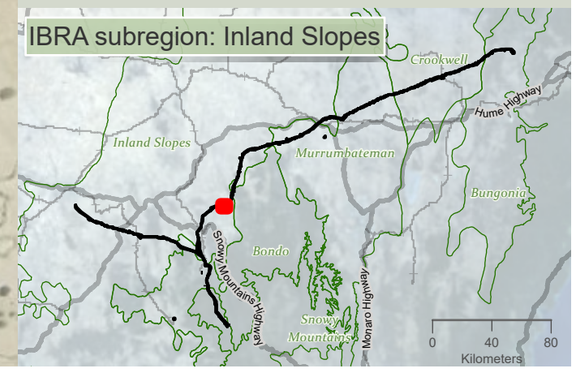
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 49

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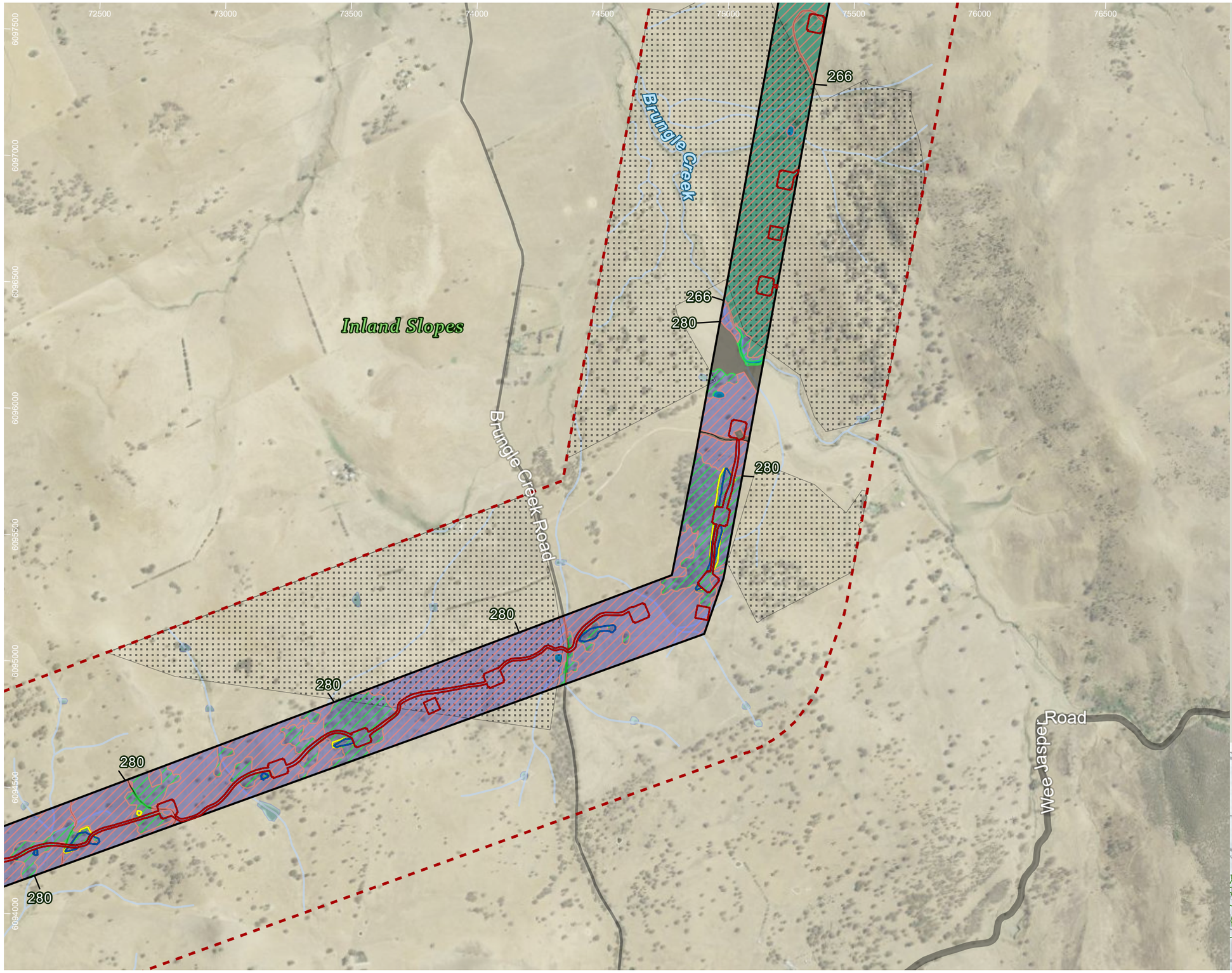


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

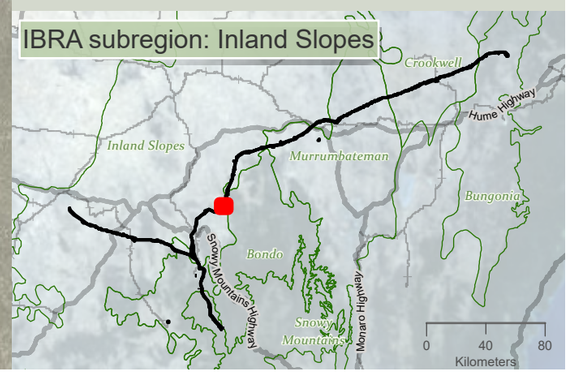
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 266: White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 50

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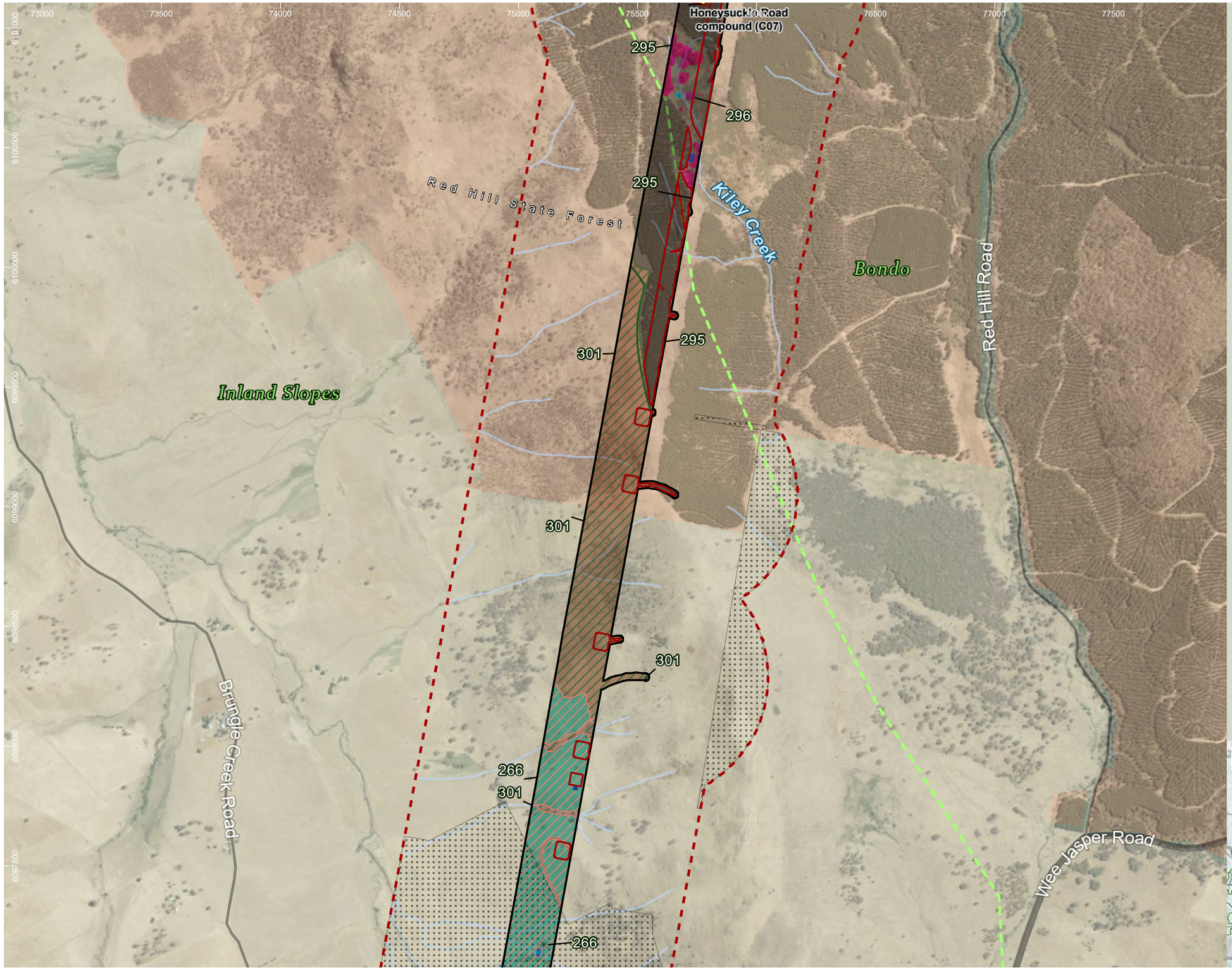


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

Administrative and Property Boundaries

- State Forest

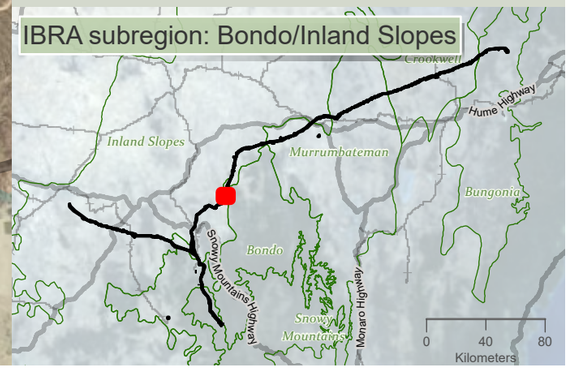
Impacts to native vegetation and threatened ecological communities

TECs

- Coolac-Tumut Serpentinite Shrubby Woodland in the NSW South Western Slopes and South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 266: White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 295: Robertsons Peppermint - Broad-leaved Peppermint - Nortons Box - stringybark shrub-fern open forest of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 296: Brittle Gum - peppermint open forest of the Woomargama to Tumut region, NSW South Western Slopes Bioregion
- 301: Drooping Sheoke - Ricinocarpus bowmannii - grasstree tall open shrubland of the Coolac - Tumut Serpentinite Belt
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



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niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 51

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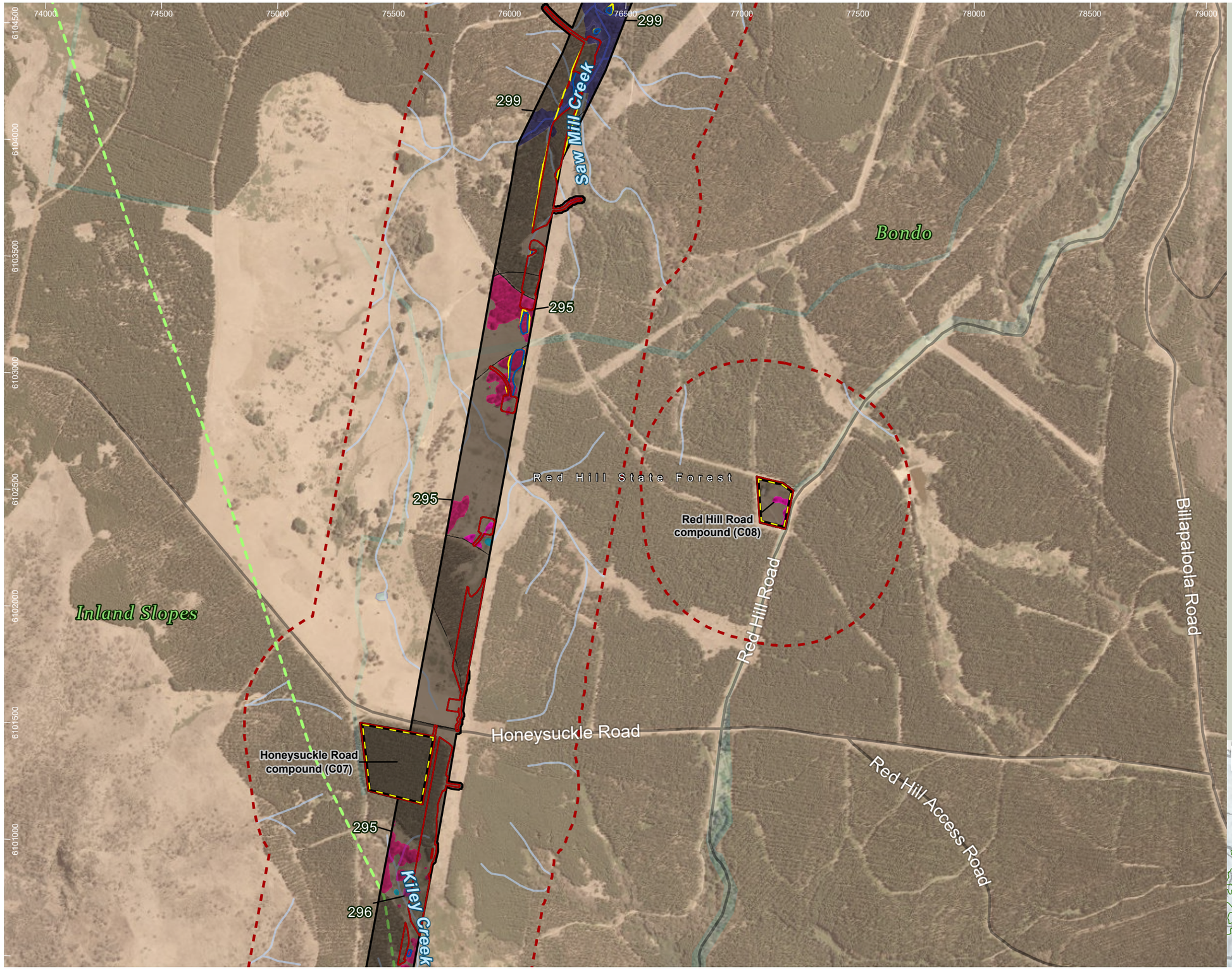


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

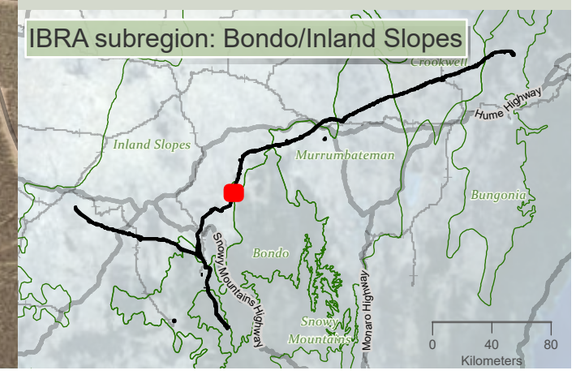
Administrative and Property Boundaries

- State Forest

Impacts to native vegetation and threatened ecological communities

PCTs

- 0: Not Native
- 295: Robertsons Peppermint - Broad-leaved Peppermint - Nortons Box - stringybark shrub-fern open forest of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 296: Brittle Gum - peppermint open forest of the Woomargama to Tumut region, NSW South Western Slopes Bioregion
- 299: Riparian Ribbon Gum - Robertsons Peppermint - Apple Box riverine very tall open forest of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 52

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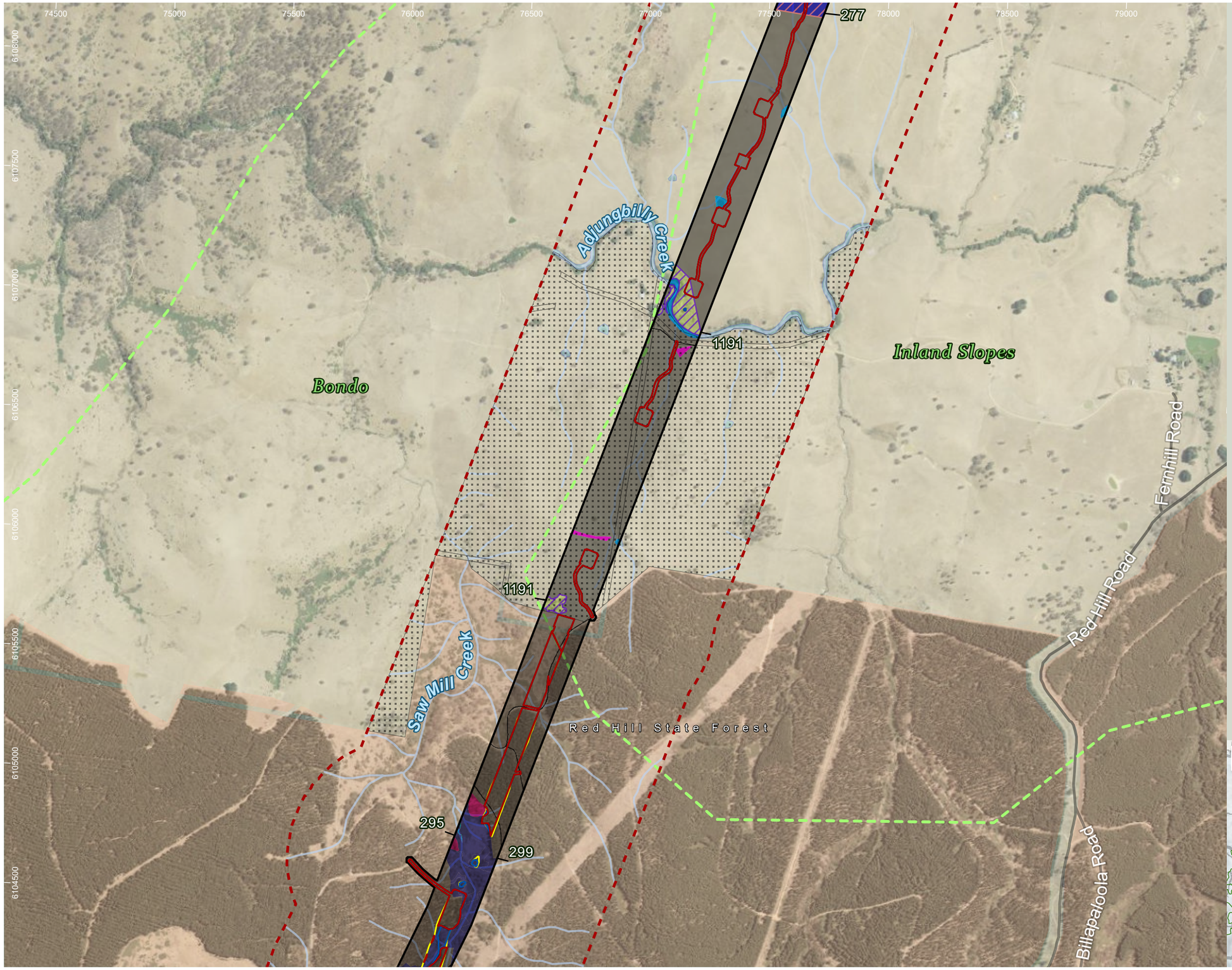


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest

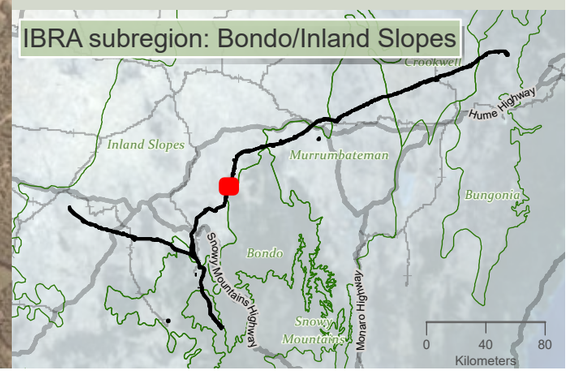
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1191: Snow Gum - Candle Bark woodland on broad valley flats of the tablelands and slopes, South Eastern Highlands Bioregion
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 295: Robertsons Peppermint - Broad-leaved Peppermint - Nortons Box - stringybark shrub-fern open forest of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 299: Riparian Ribbon Gum - Robertsons Peppermint - Apple Box riverine very tall open forest of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



Drawn by MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSync\FoldenNiche\6999 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 53

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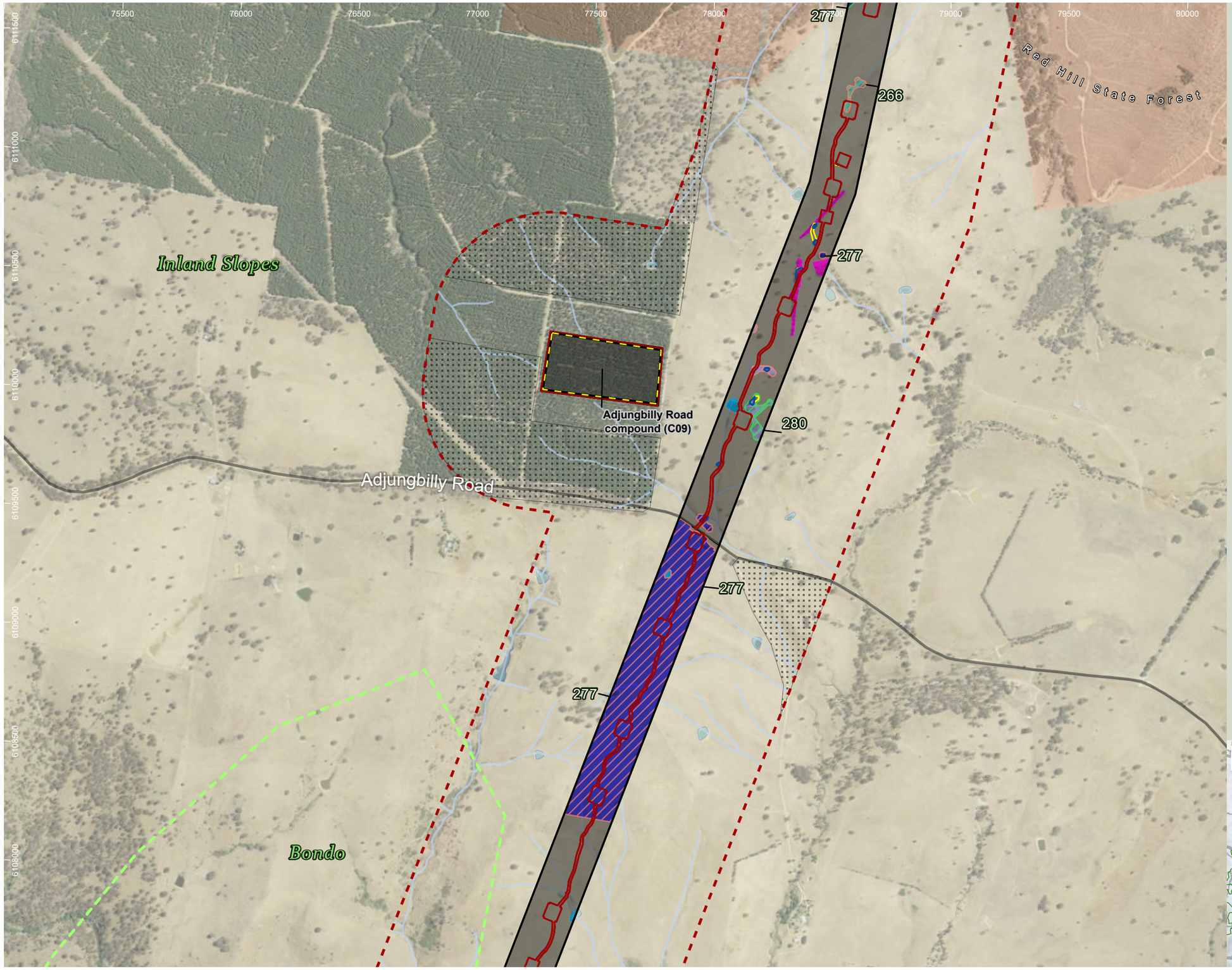


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest

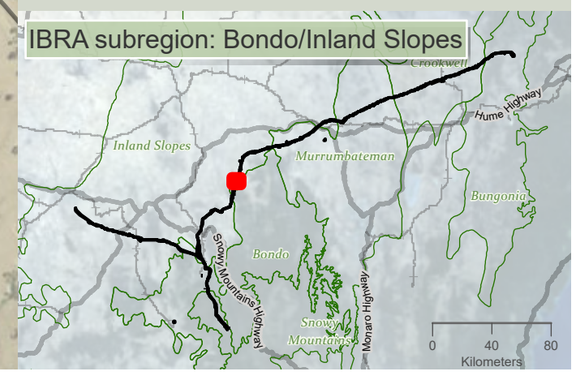
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 266: White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 54

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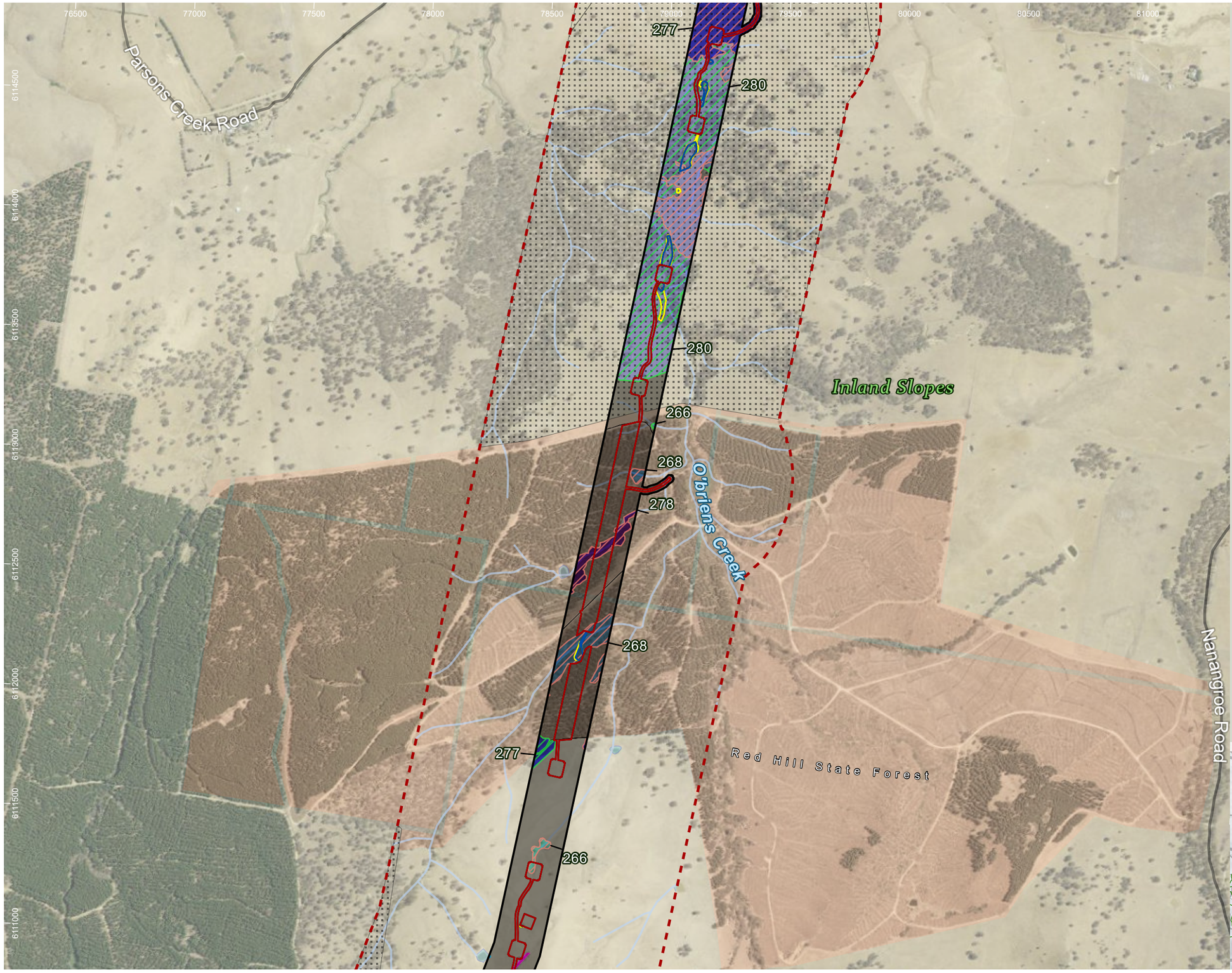


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Administrative and Property Boundaries

- State Forest

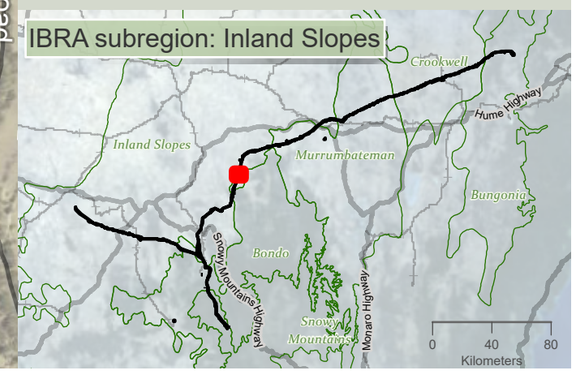
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 266: White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 268: White Box - Blakelys Red Gum - Long-leaved Box - Nortons Box - Red Stringybark grass-shrub woodland on shallow soils on hills in the NSW South Western Slopes Bioregion
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



Niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 55

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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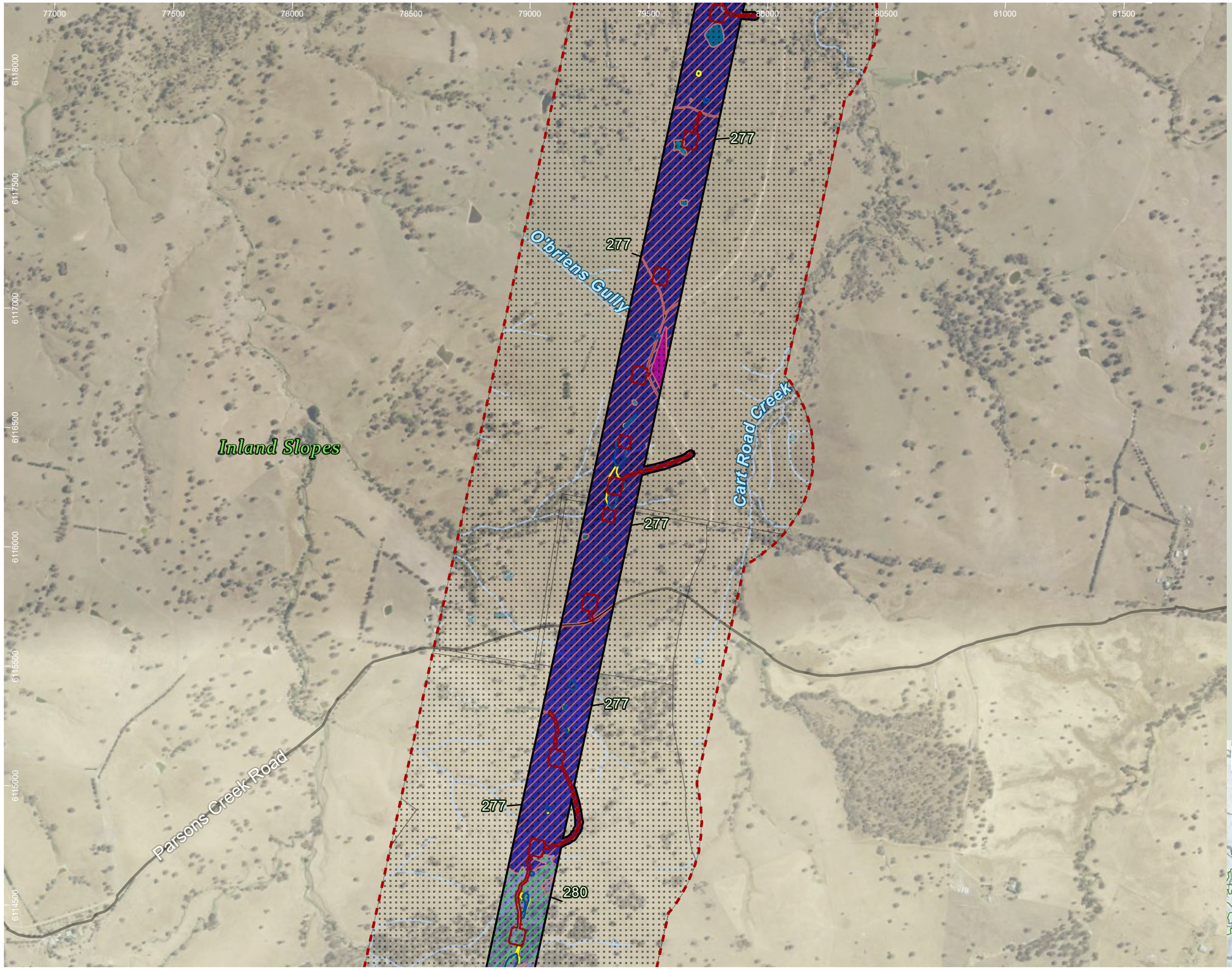


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

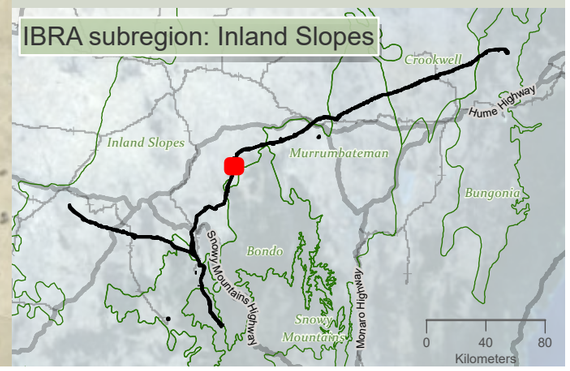
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6899 - Confidential impact assessment\EC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 56

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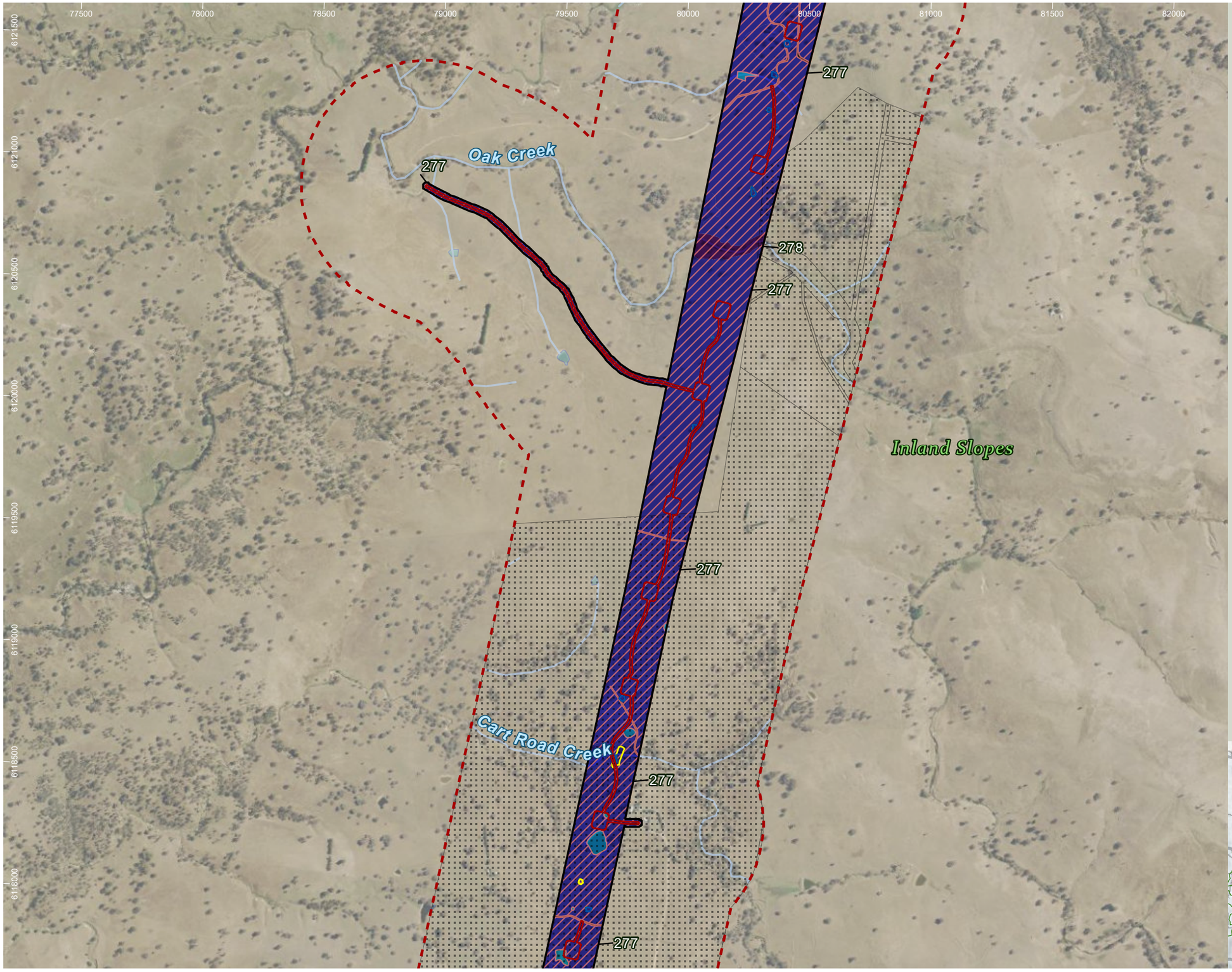


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

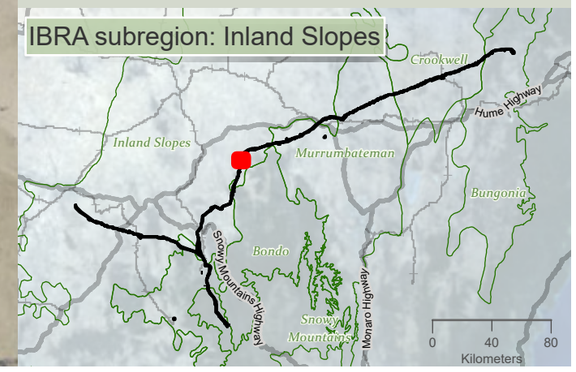
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

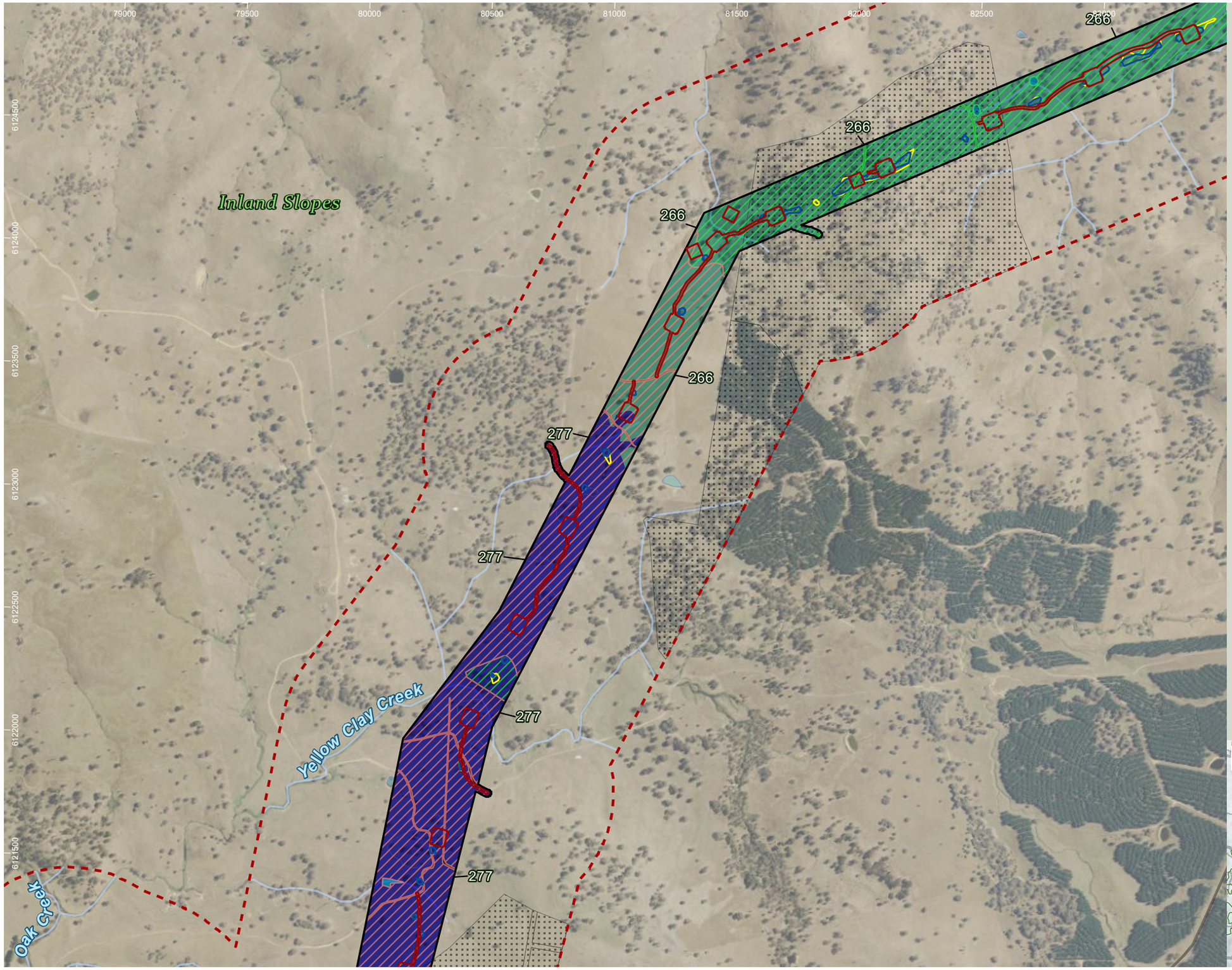
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 57

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

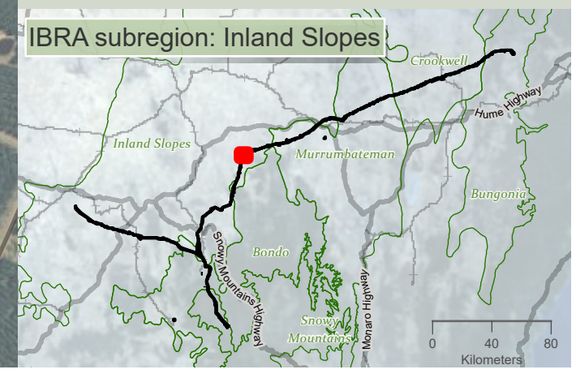
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 266: White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



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niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 58

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82000 82500 83000 83500 84000 84500 85000 85500

6126500 6126000 6125500 6125000 6124500 6124000

Inland Slopes

266 266 266 266 266

HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

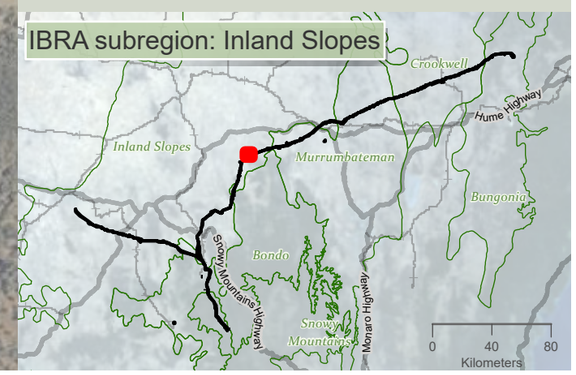
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 266: White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 59

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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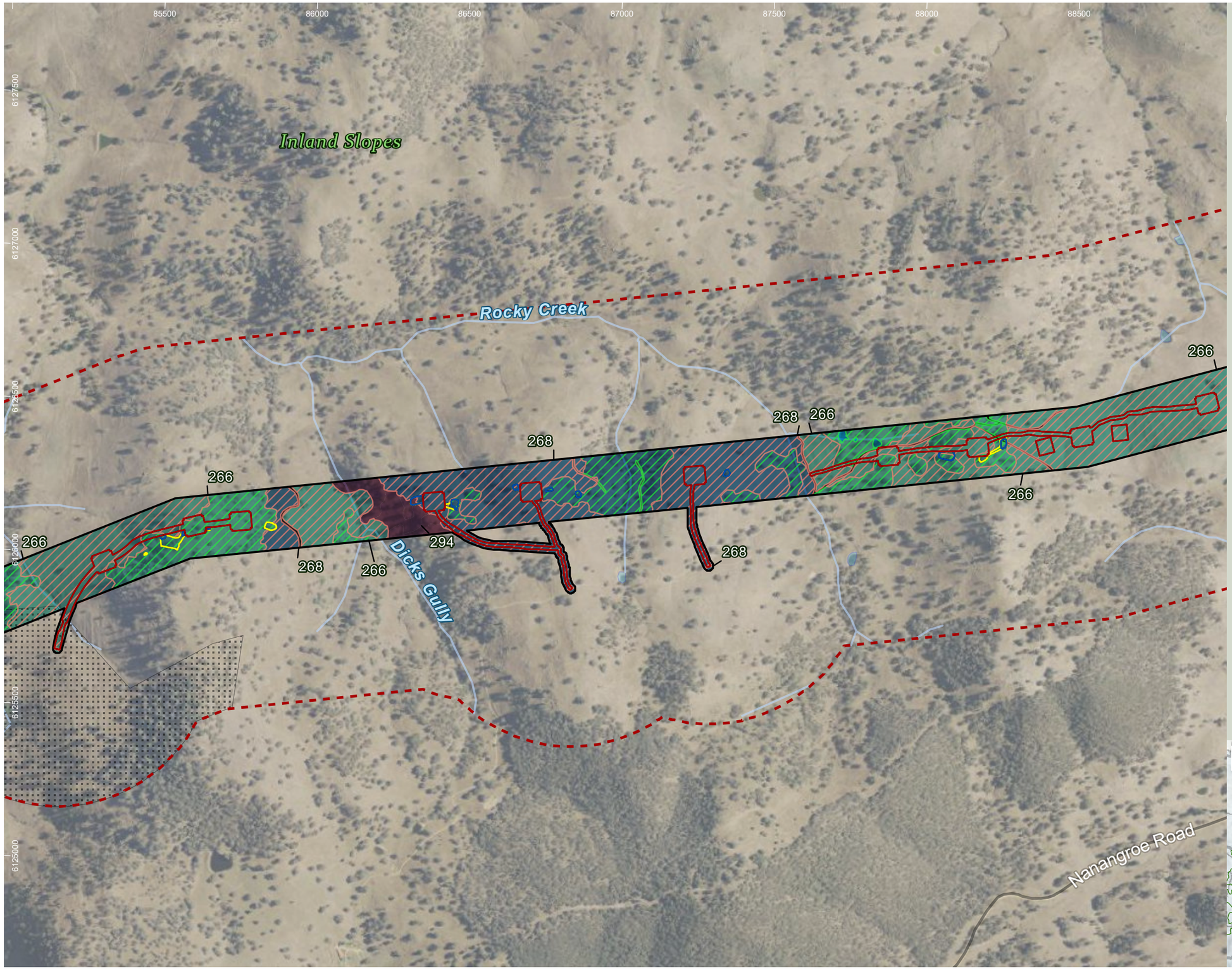


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

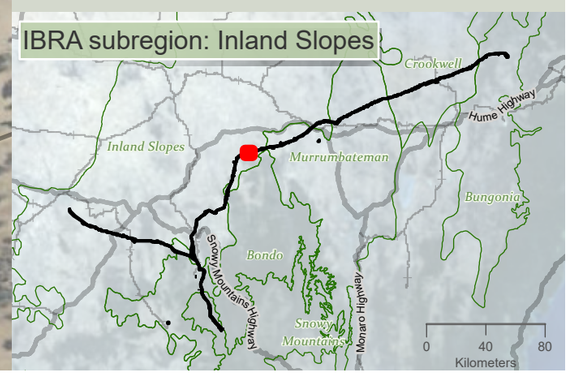
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 266: White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 268: White Box - Blakelys Red Gum - Long-leaved Box - Nortons Box - Red Stringybark grass-shrub woodland on shallow soils on hills in the NSW South Western Slopes Bioregion
- 294: Nortons Box - Red Box - White Box tussock grass open forest of the southern section of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 60

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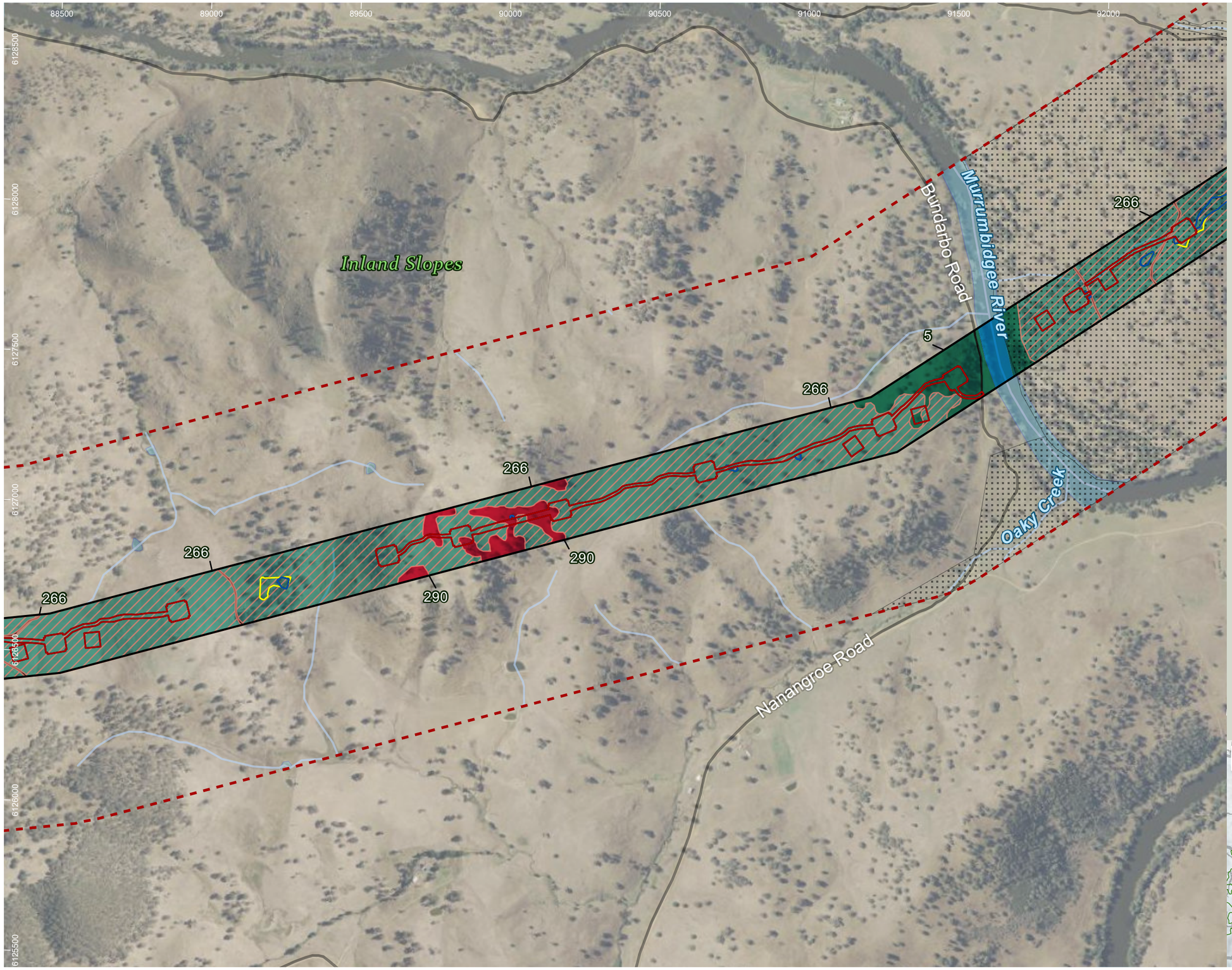


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

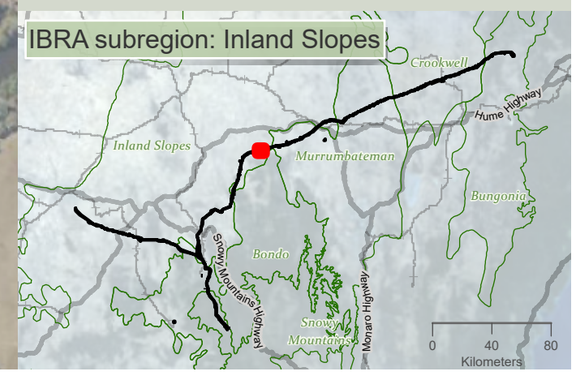
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 266: White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 290: Red Stringybark - Red Box - Long-leaved Box - Inland Scribbly Gum tussock grass - shrub low open forest on hills in the southern part of the NSW South Western Slopes Bioregion
- 5: River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South Western Slopes Bioregion and the eastern Riverina Bioregion.
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 61

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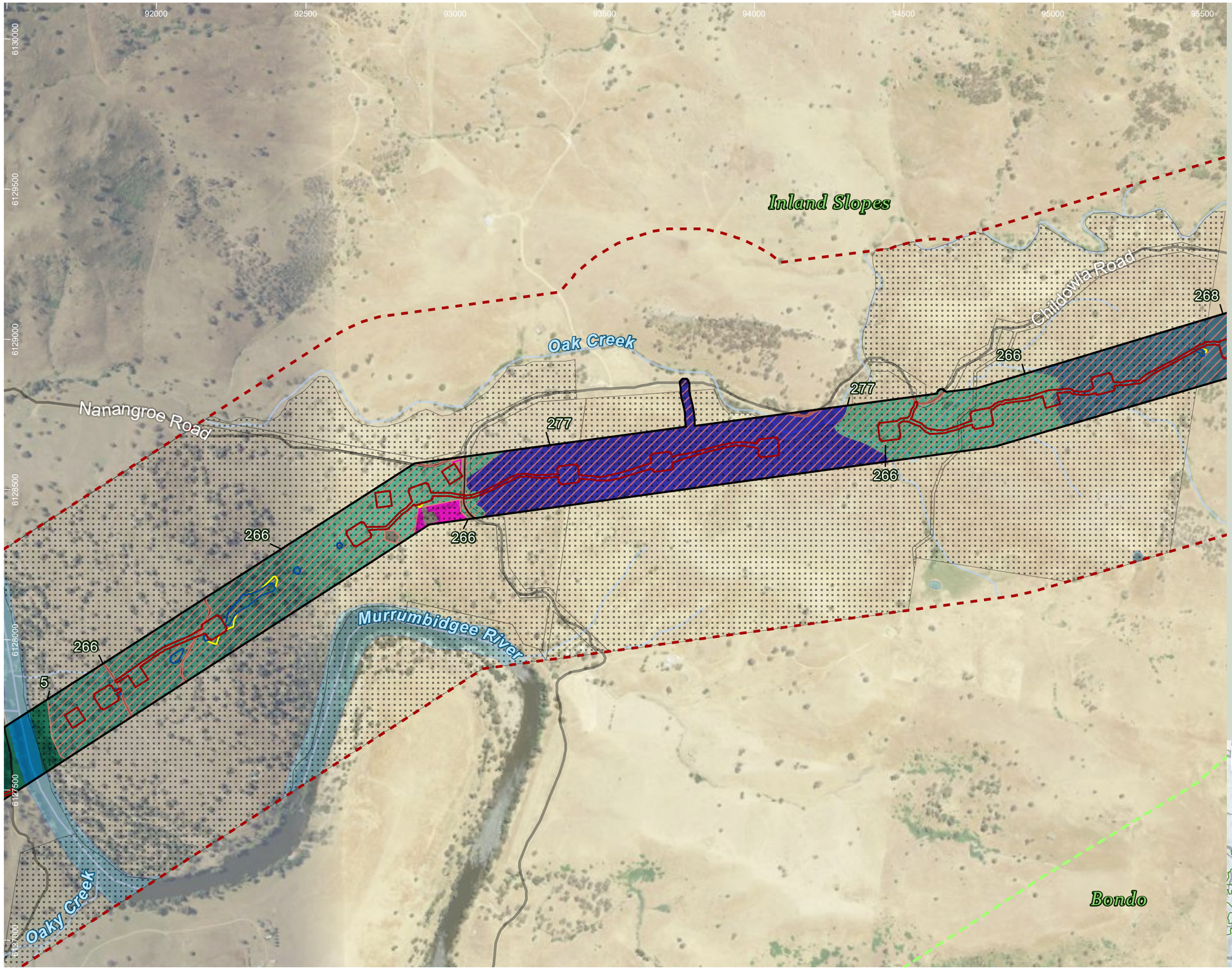


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

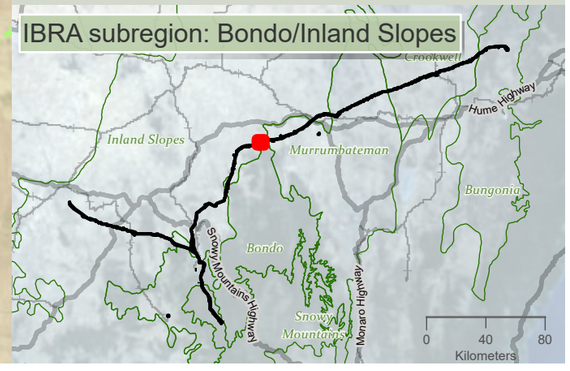
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 266: White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 268: White Box - Blakelys Red Gum - Long-leaved Box - Nortons Box - Red Stringybark grass-shrub woodland on shallow soils on hills in the NSW South Western Slopes Bioregion
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 5: River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South Western Slopes Bioregion and the eastern Riverina Bioregion.
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 62

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95000 95500 96000 96500 97000 97500 98000 98500

6131000 6130500 6130000 6129500 6129000 6128500

Inland Slopes

Childowla Road

Talmo Road

Jugiong Creek

Oak Creek

Murrumbateman

Bondo

5 266 1330 266 266 280 268 268 266

HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

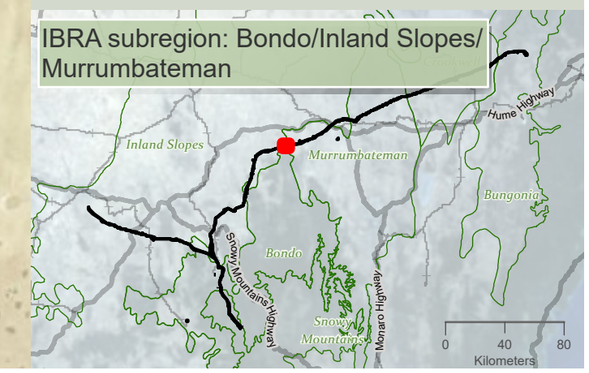
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 266: White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 268: White Box - Blakelys Red Gum - Long-leaved Box - Nortons Box - Red Stringybark grass-shrub woodland on shallow soils on hills in the NSW South Western Slopes Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 5: River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South Western Slopes Bioregion and the eastern Riverina Bioregion.
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



Drawn by: MathewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 63

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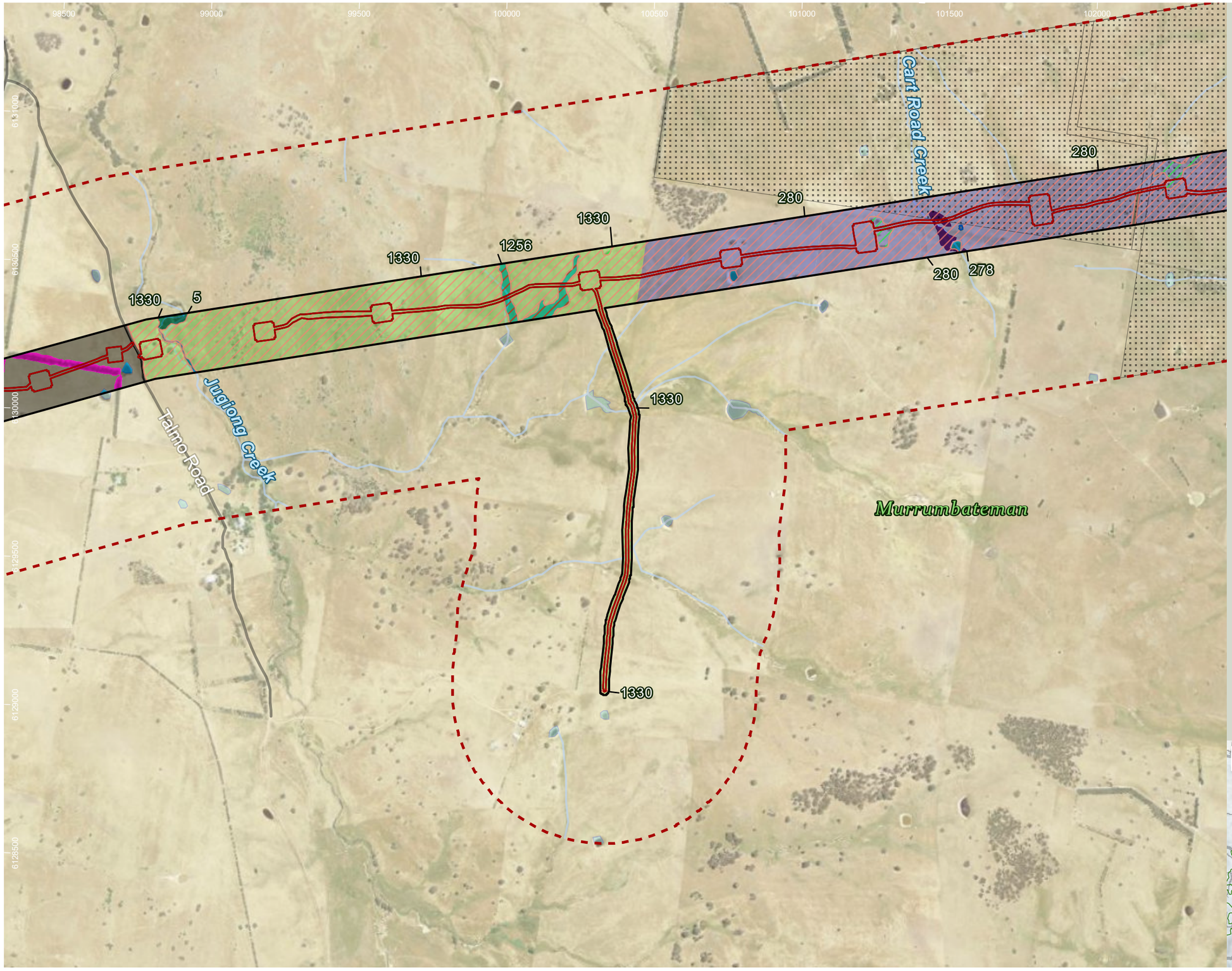


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

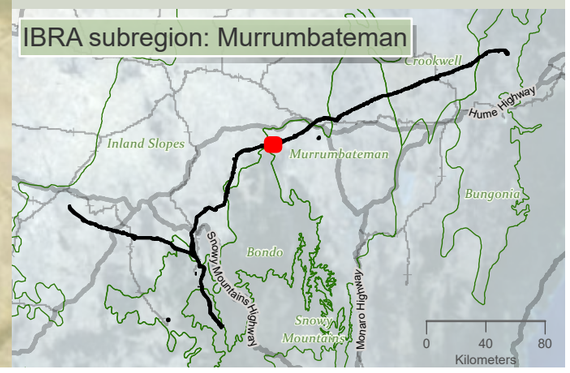
Impacts to native vegetation and threatened ecological communities

TECs

- Montane Peatlands and Swamps of the New England Tableland (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1256: Tableland swamp meadow on impeded drainage sites of the western Sydney Basin Bioregion and South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 5: River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South Western Slopes Bioregion and the eastern Riverina Bioregion.
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

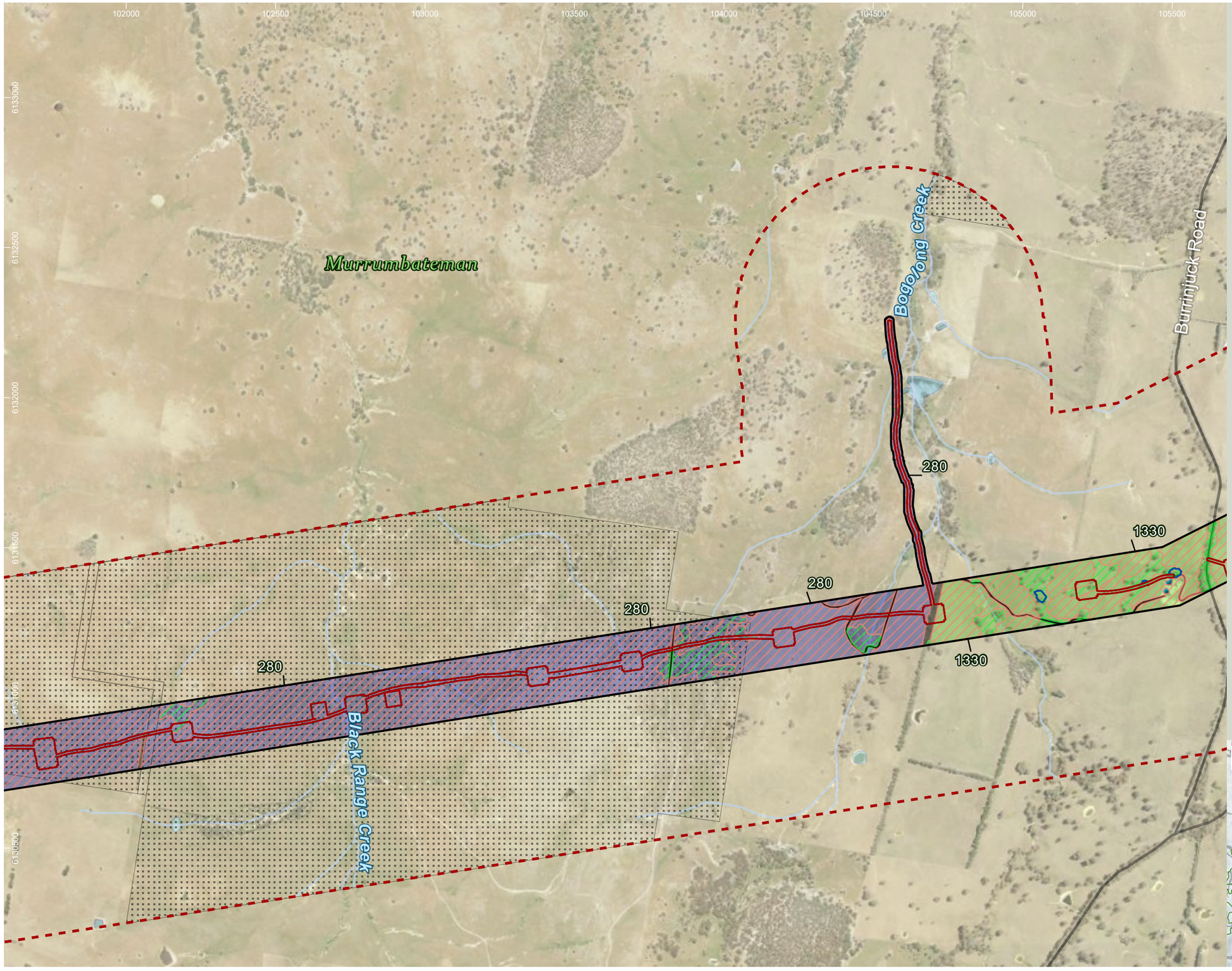
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 64

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

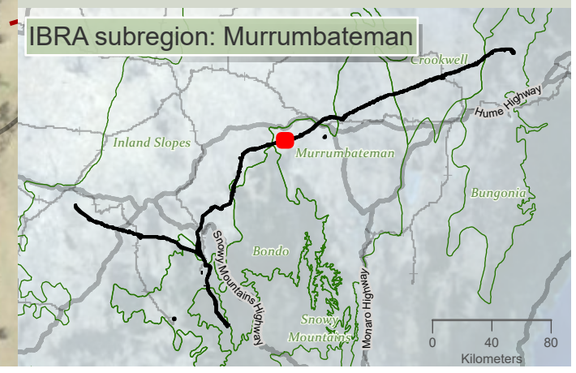
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 65

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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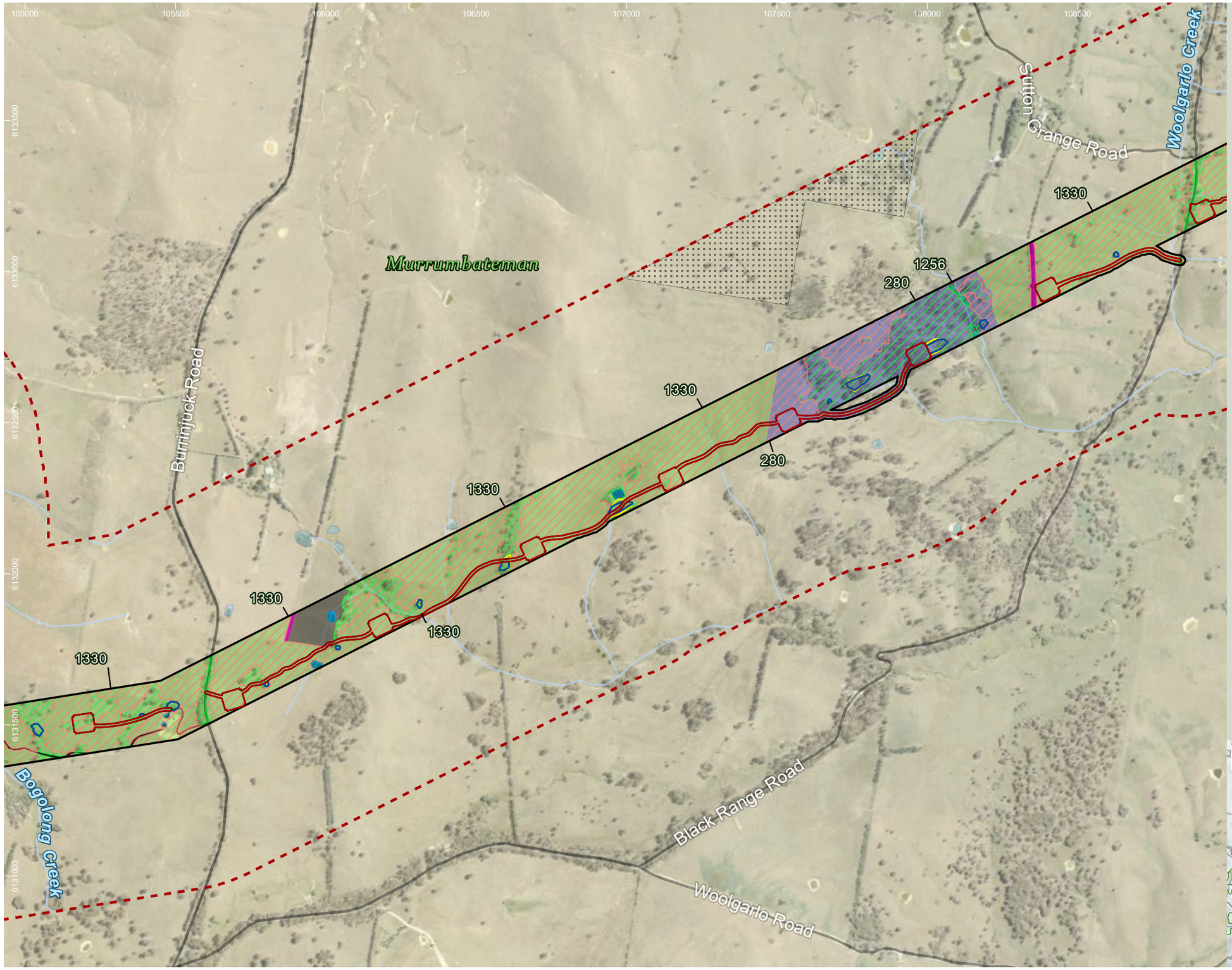


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

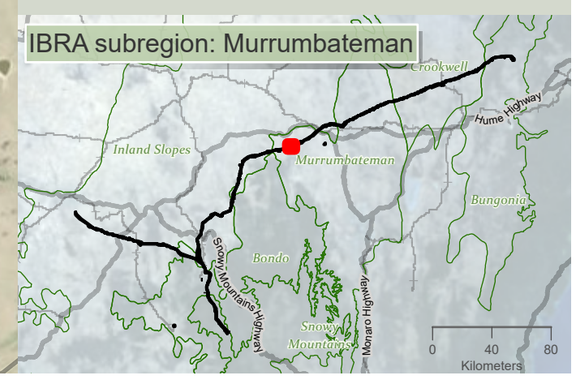
Impacts to native vegetation and threatened ecological communities

TECs

- Montane Peatlands and Swamps of the New England Tableland (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1256: Tableland swamp meadow on impeded drainage sites of the western Sydney Basin Bioregion and South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 66

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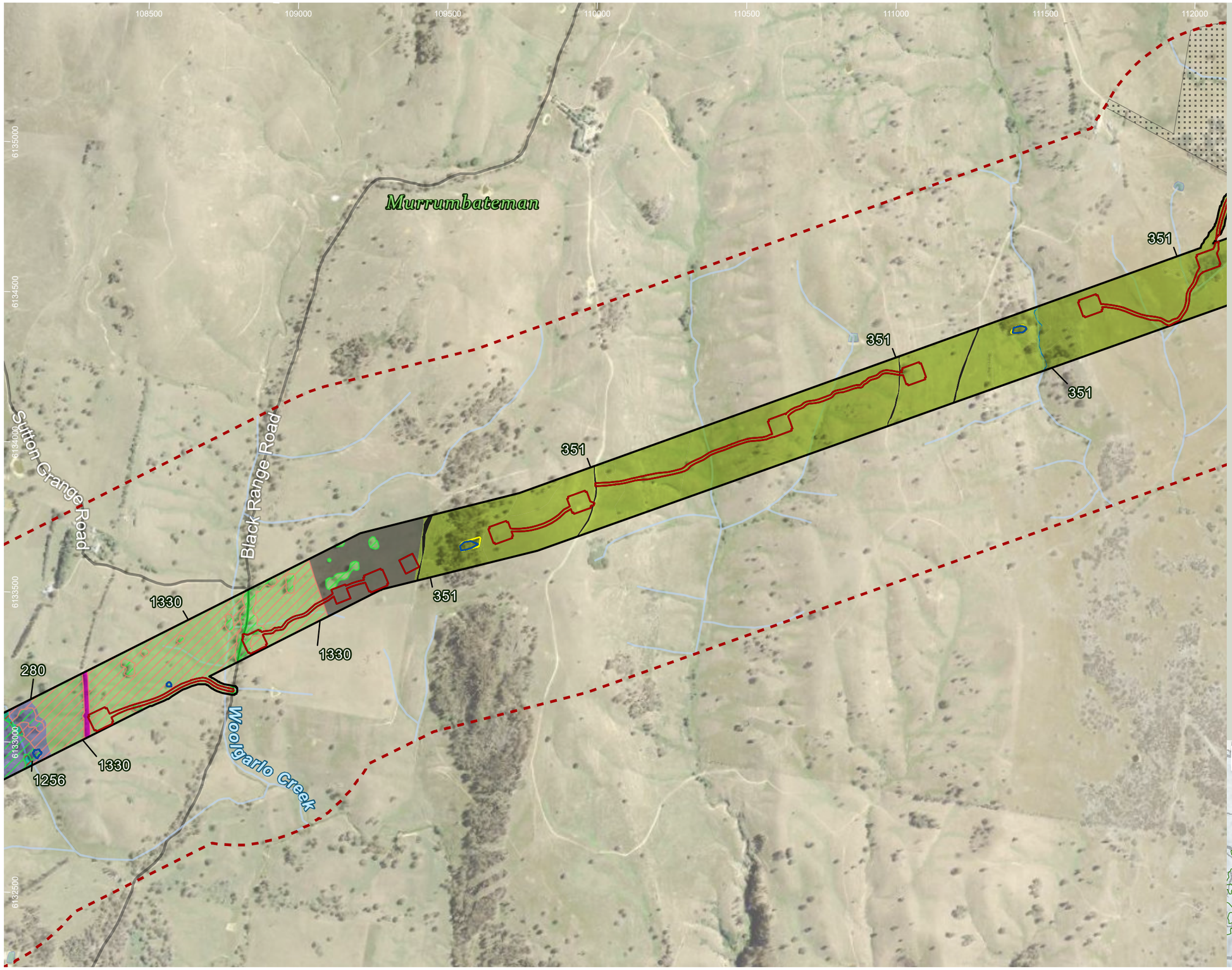


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

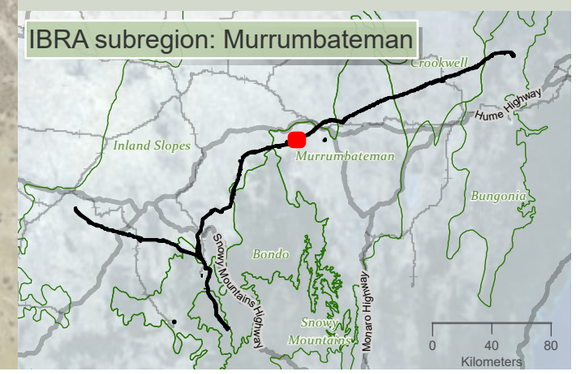
Impacts to native vegetation and threatened ecological communities

TECs

- Montane Peatlands and Swamps of the New England Tableland (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1256: Tableland swamp meadow on impeded drainage sites of the western Sydney Basin Bioregion and South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 351: Brittle Gum - Broad-leaved Peppermint - Red Stringybark open forest in the north-western part (Yass to Orange) of the South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

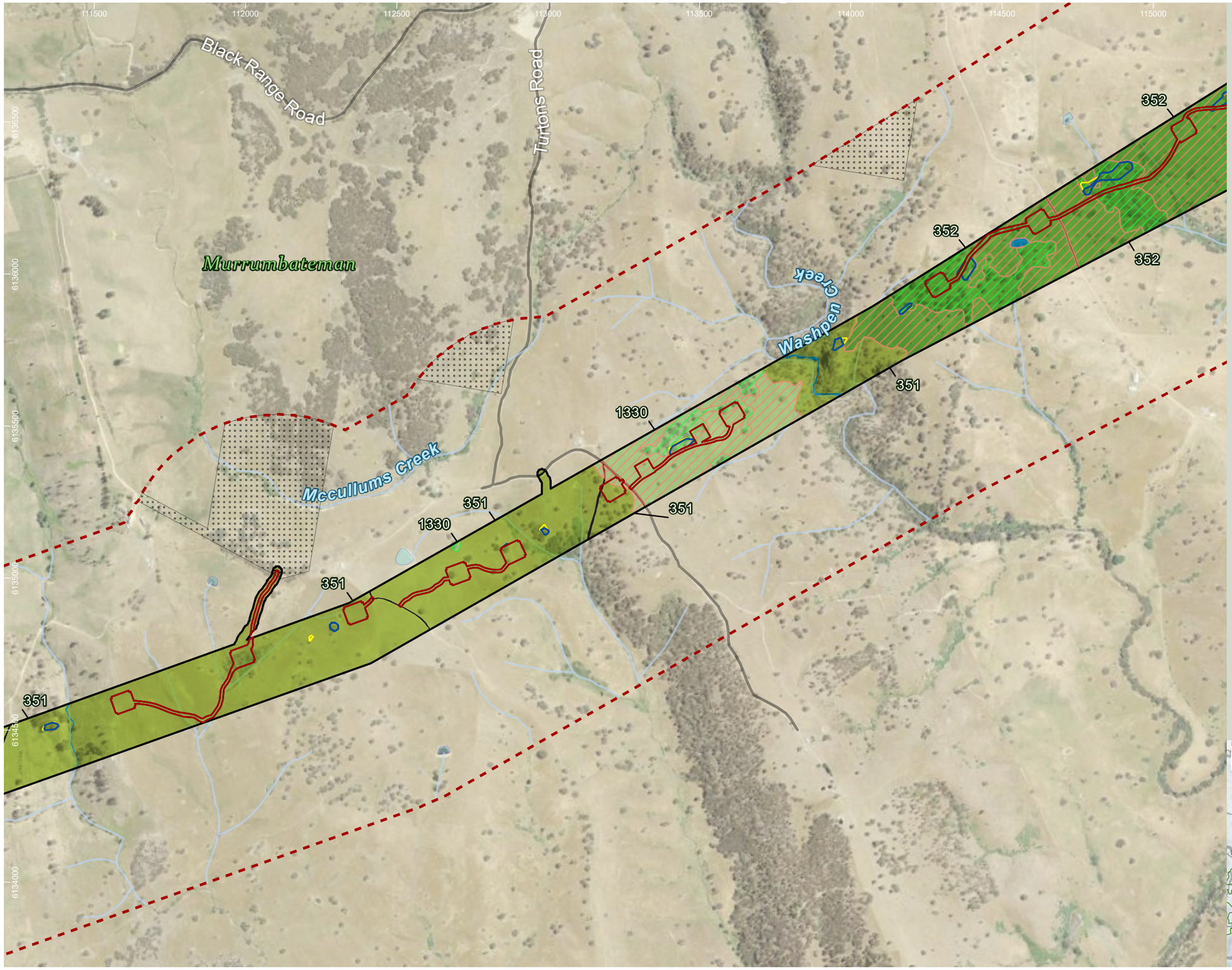
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 67

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

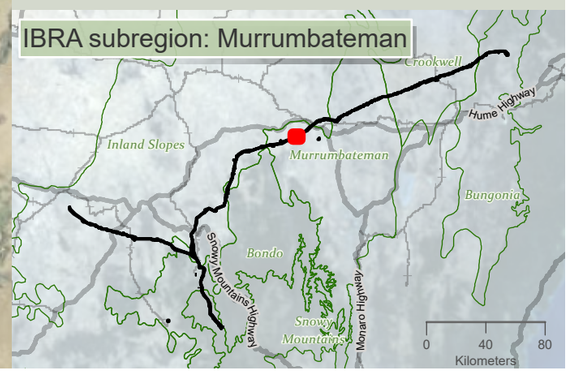
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 351: Brittle Gum - Broad-leaved Peppermint - Red Stringybark open forest in the north-western part (Yass to Orange) of the South Eastern Highlands Bioregion
- 352: Red Stringybark - Blakelys Red Gum hillslope open forest on meta-sediments in the Yass - Boorowa - Crookwell region of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 N 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 68

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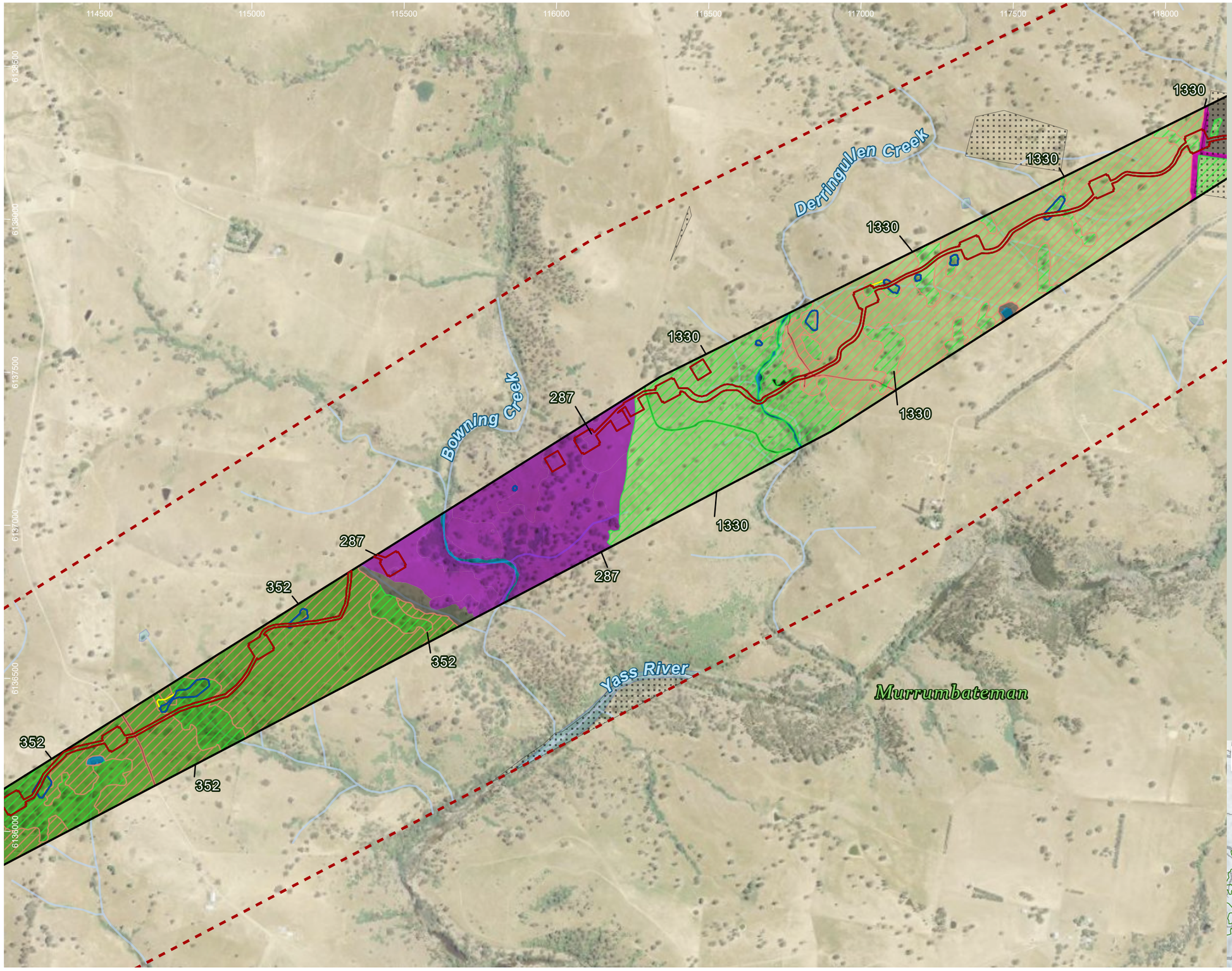


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

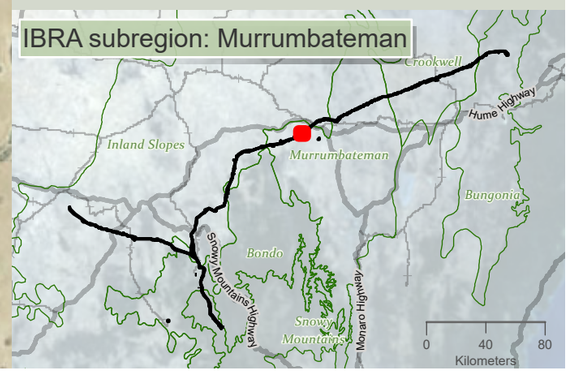
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 287: Long-leaved Box - Red Box - Red Stringybark mixed open forest on hills and hillslopes in the NSW South Western Slopes Bioregion
- 352: Red Stringybark - Blakelys Red Gum hillslope open forest on meta-sediments in the Yass - Boorowa - Crookwell region of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 69

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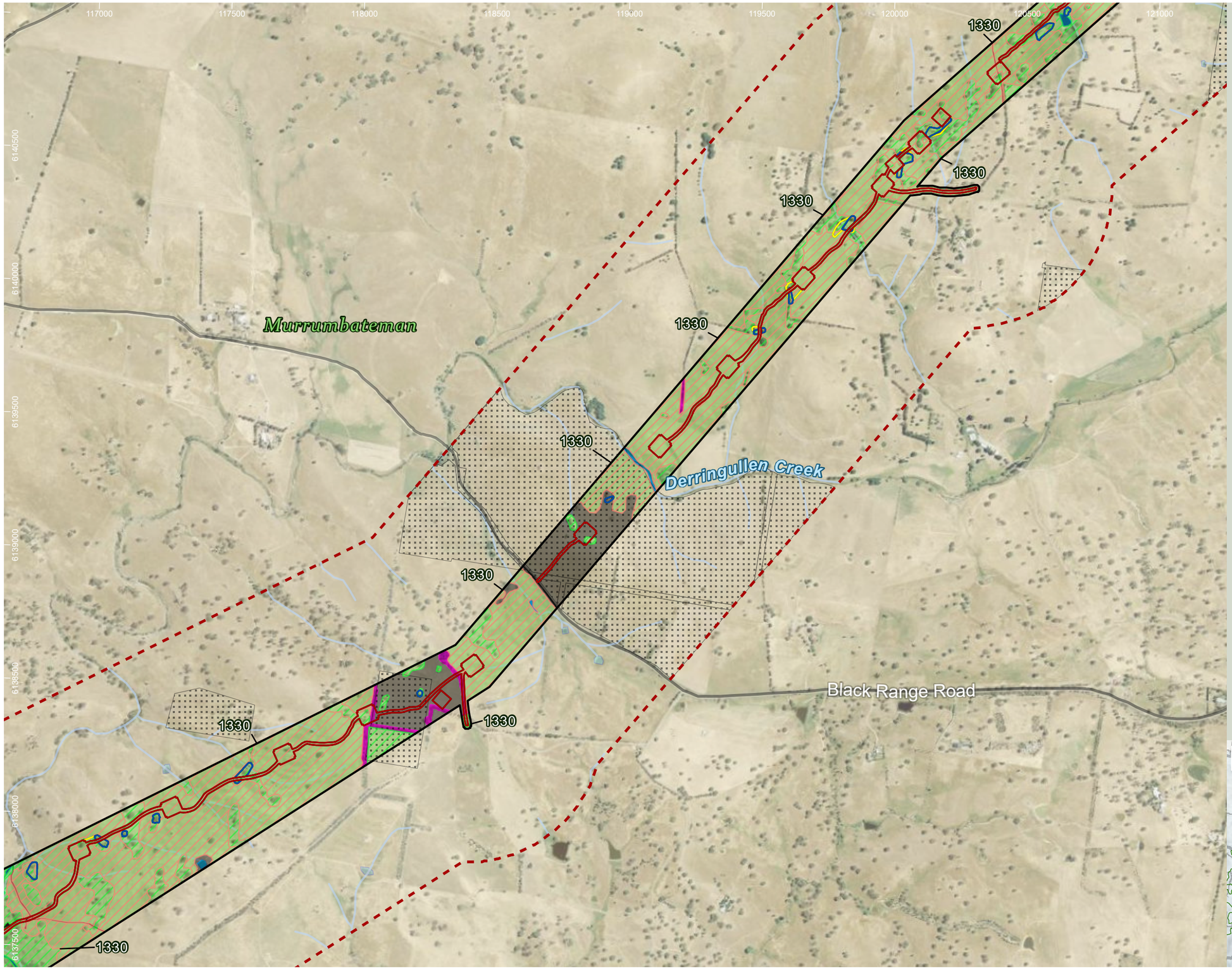


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

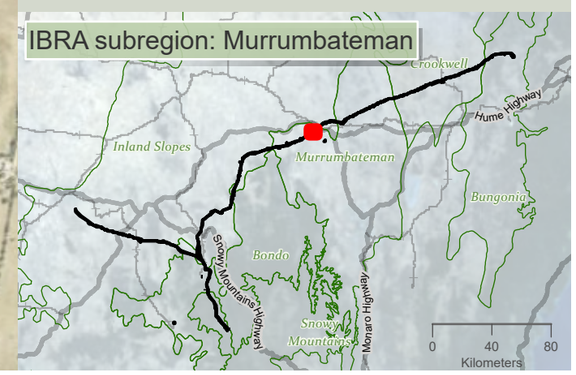
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 70

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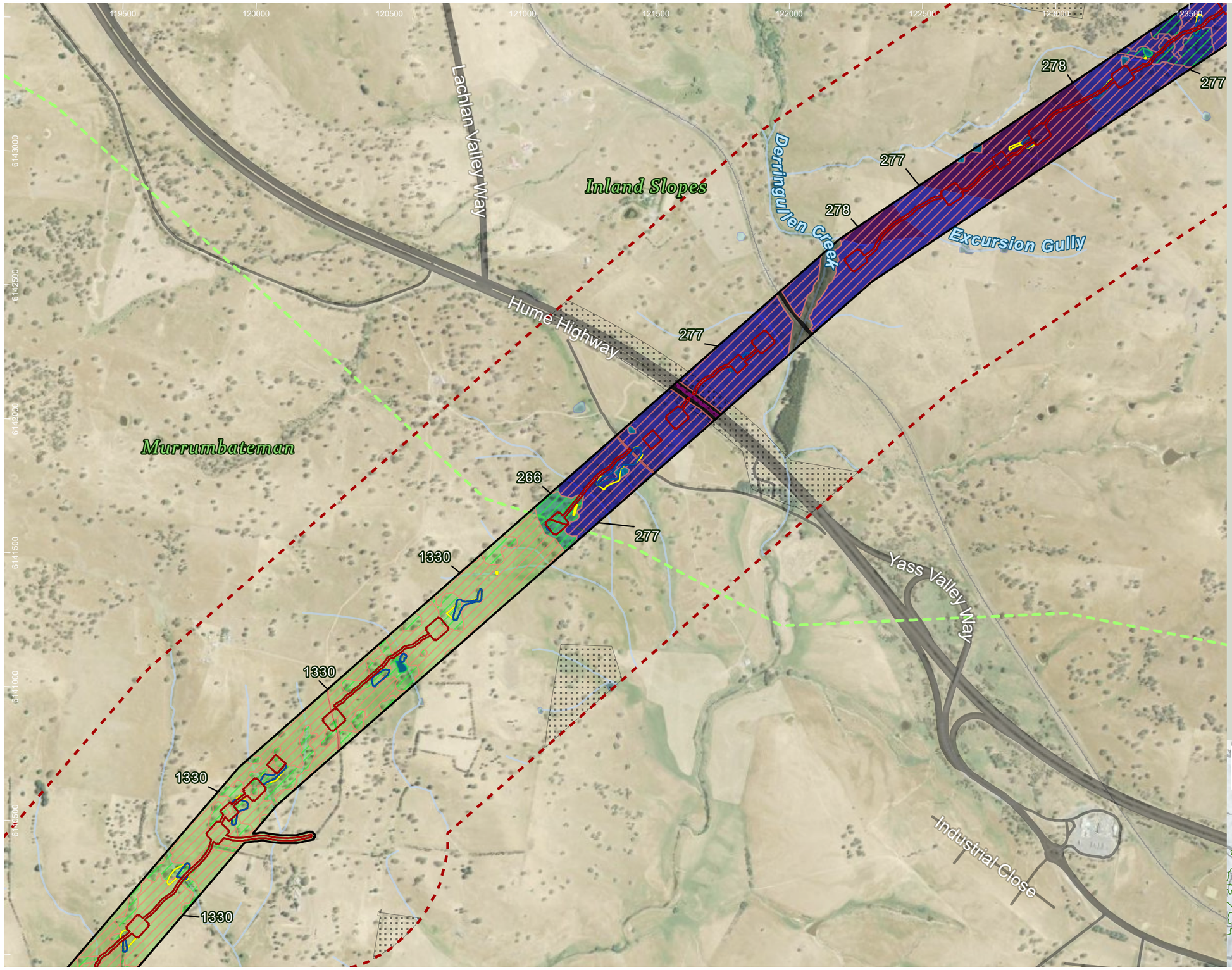


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Major road
- Minor road

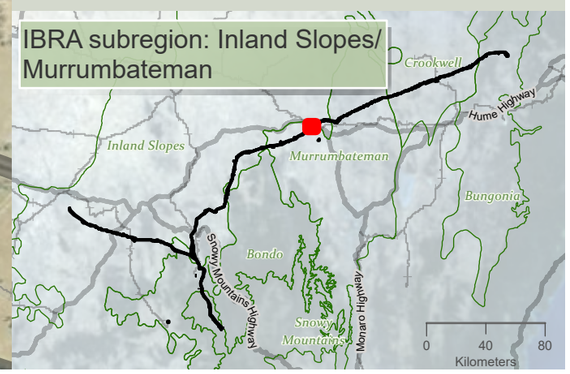
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 266: White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 71

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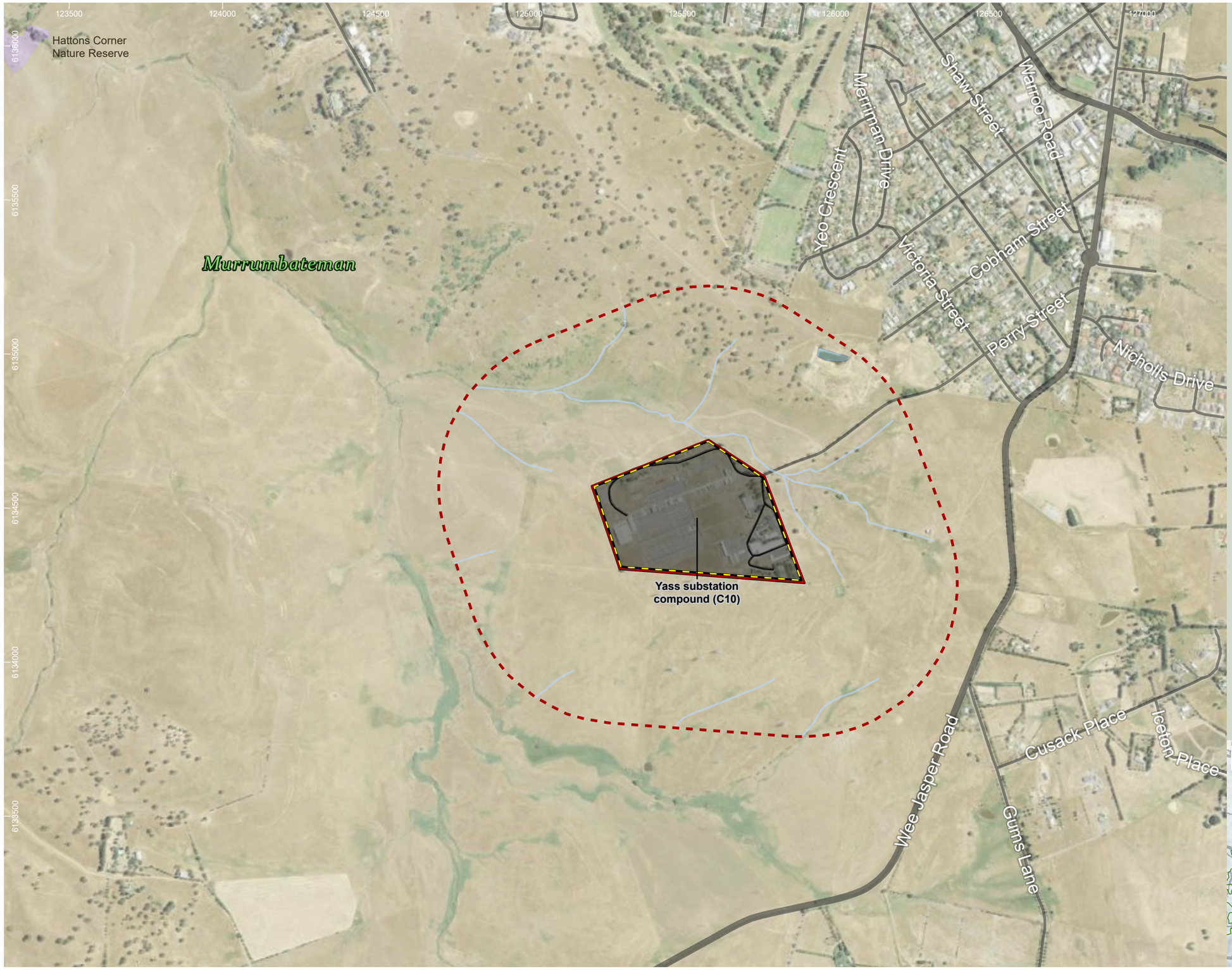


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

Protected Areas of NSW

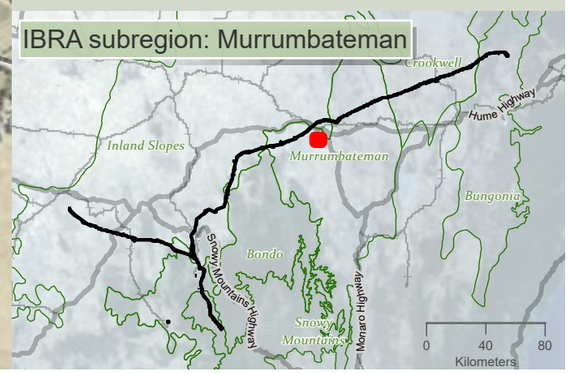
NPWS Reserve

- Nature Reserve

Impacts to native vegetation and threatened ecological communities

PCTs

- 0: Not Native
- 9996: Not Native (Road)



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 72

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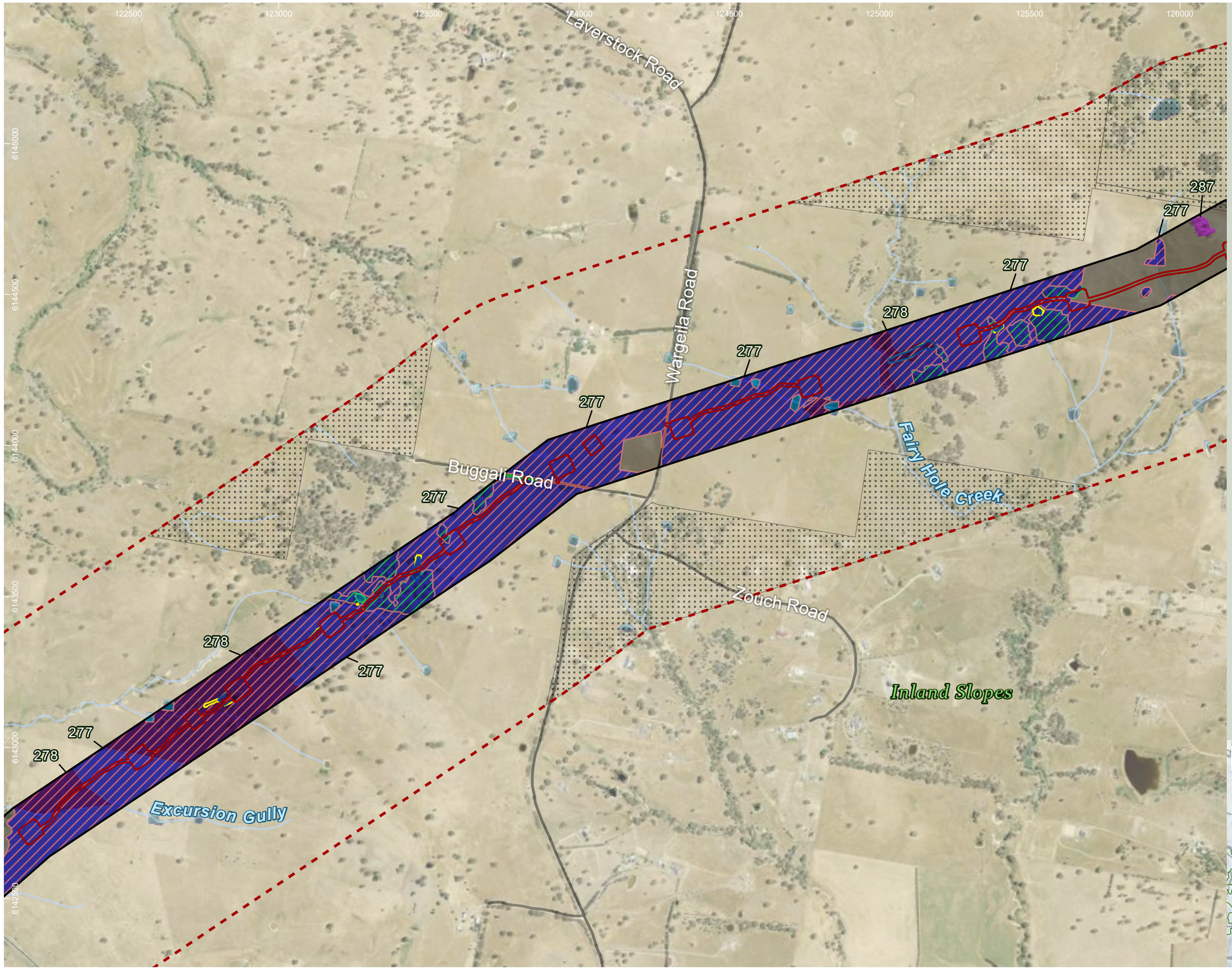


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Minor road

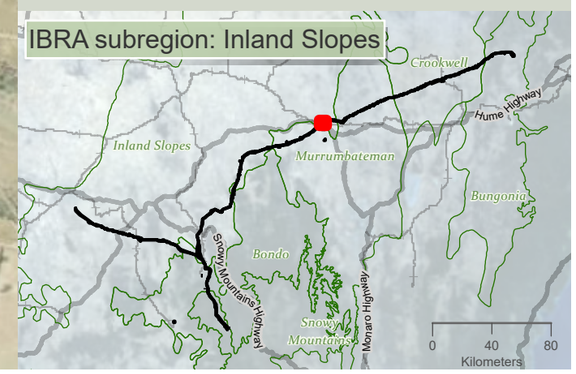
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 287: Long-leaved Box - Red Box - Red Stringybark mixed open forest on hills and hillslopes in the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 73

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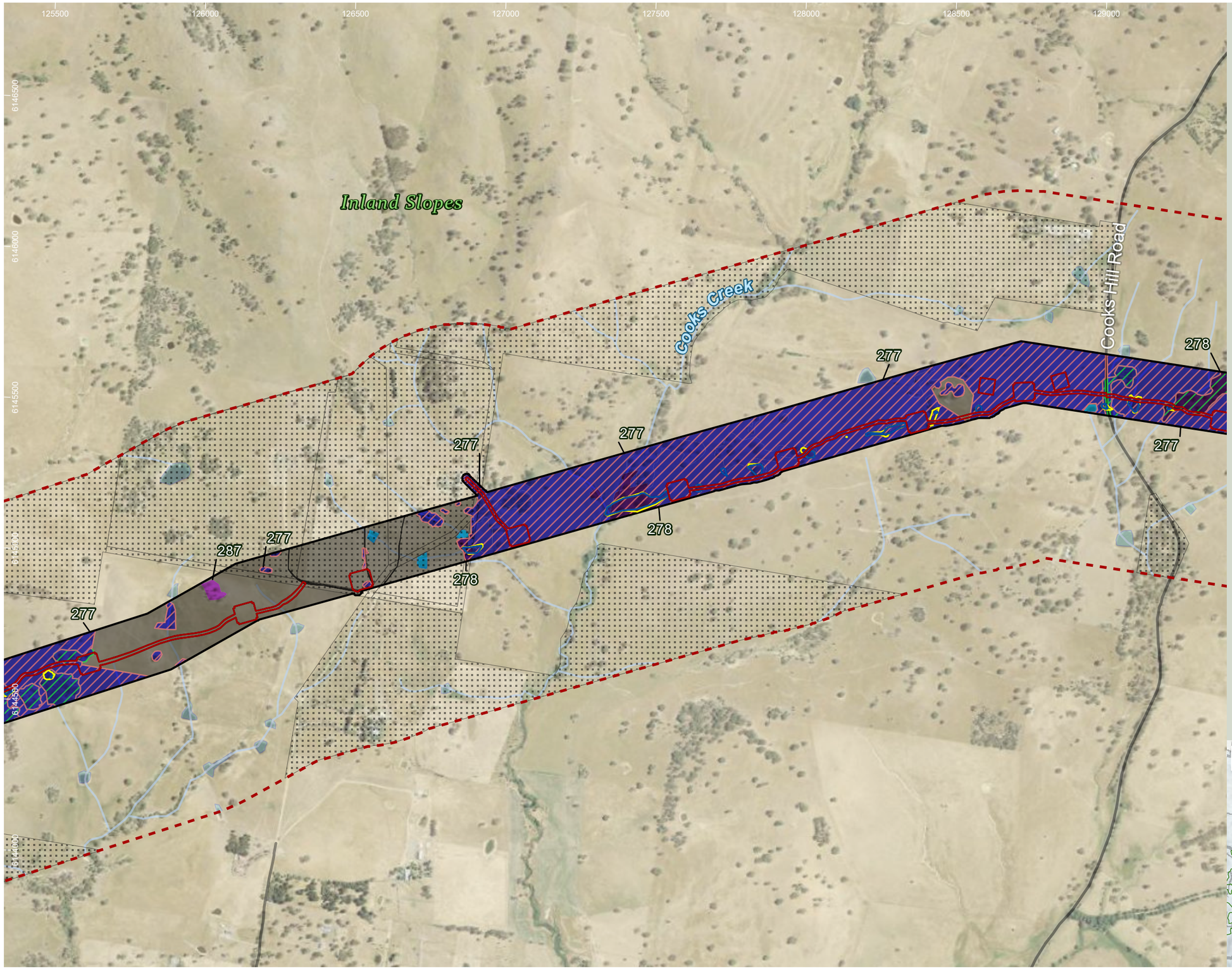


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

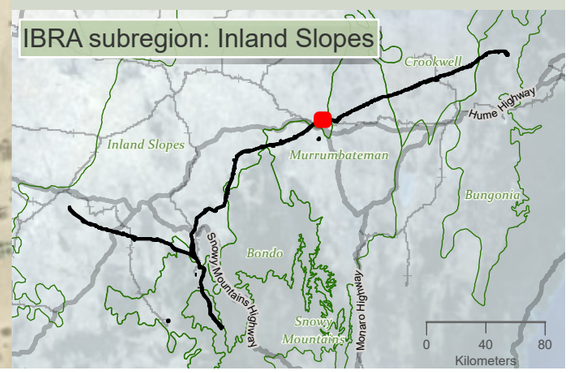
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 287: Long-leaved Box - Red Box - Red Stringybark mixed open forest on hills and hillslopes in the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 74

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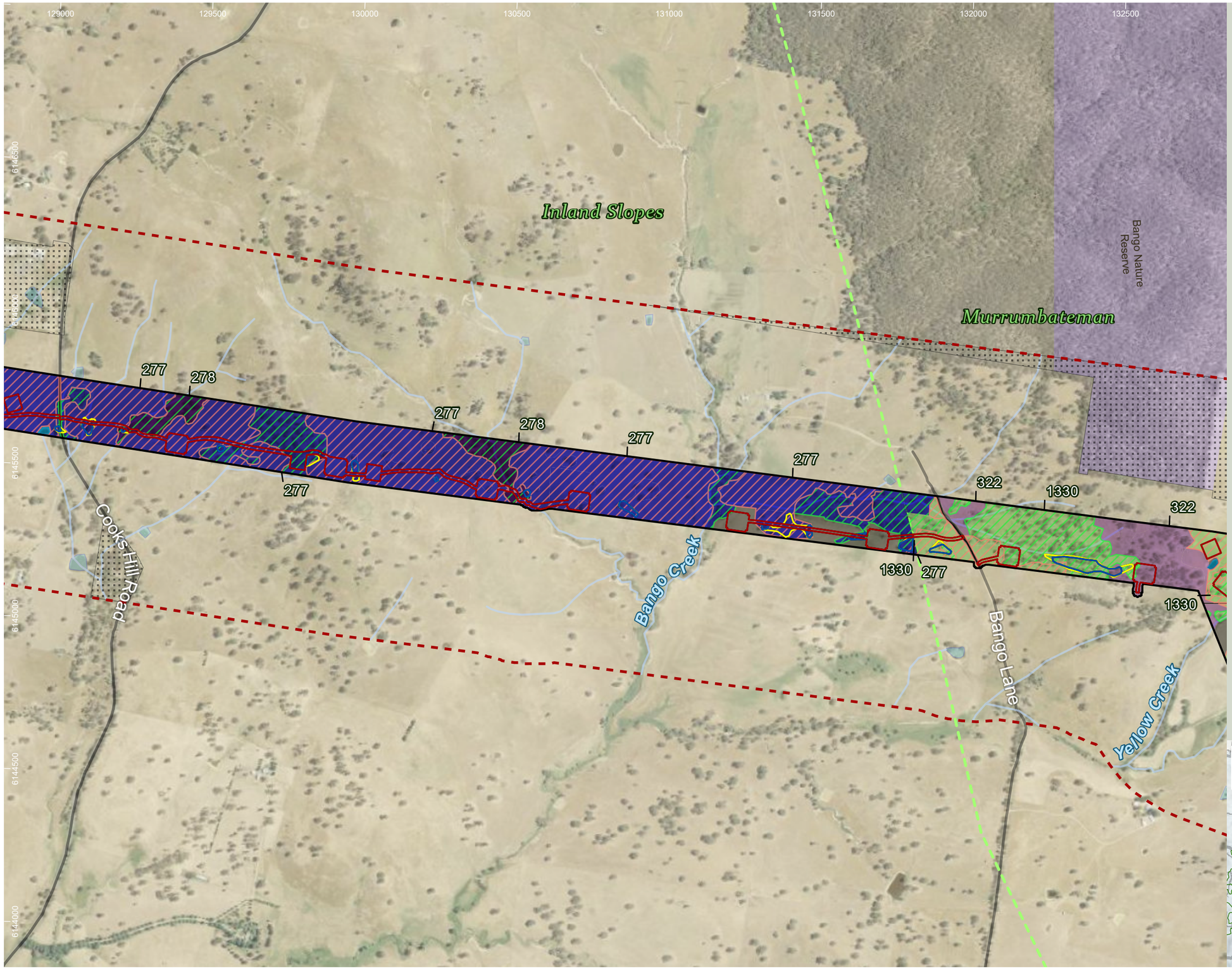


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- Nature Reserve

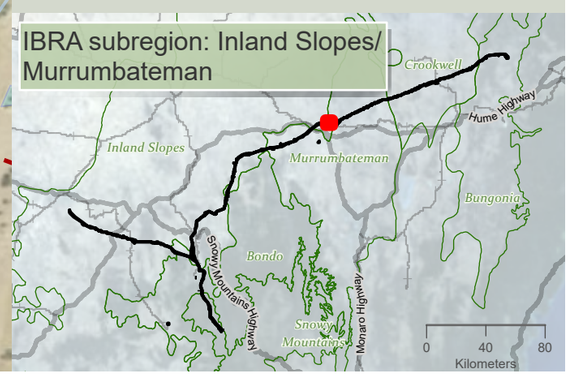
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 277: Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion
- 278: Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion
- 322: Inland Scribbly Gum - Red Stringybark - Black Cypress Pine hillslope shrub-tussock grass open forest on mainly sandstone ranges in the NSW central western slopes
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 75

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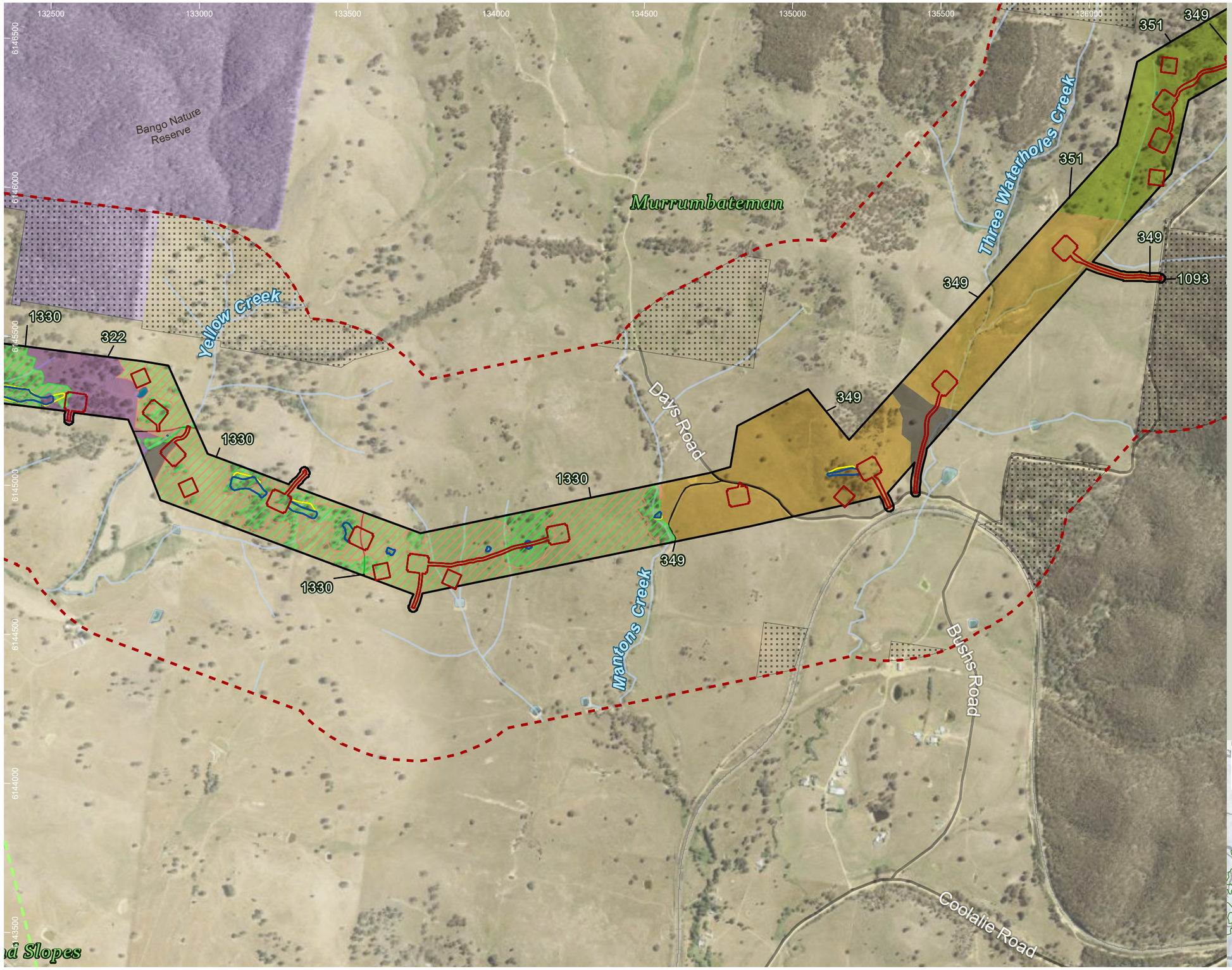


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- Nature Reserve

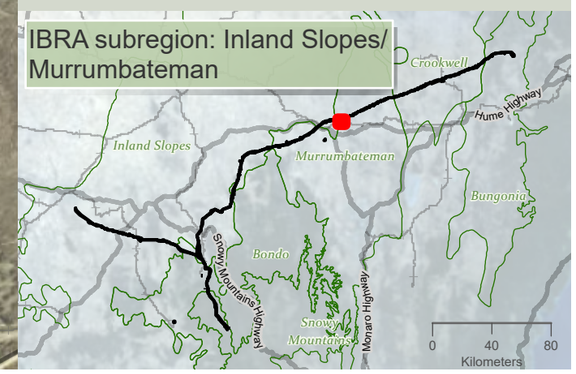
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 322: Inland Scribbly Gum - Red Stringybark - Black Cypress Pine hillslope shrub-tussock grass open forest on mainly sandstone ranges in the NSW central western slopes
- 349: Inland Scribbly Gum - Red Stringybark open forest on hills composed of silicous substrates in the mid-Murrumbidgee and upper Lachlan catchments mainly in the western South Eastern Highlands Bioregion
- 351: Brittle Gum - Broad-leaved Peppermint - Red Stringybark open forest in the north-western part (Yass to Orange) of the South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 76

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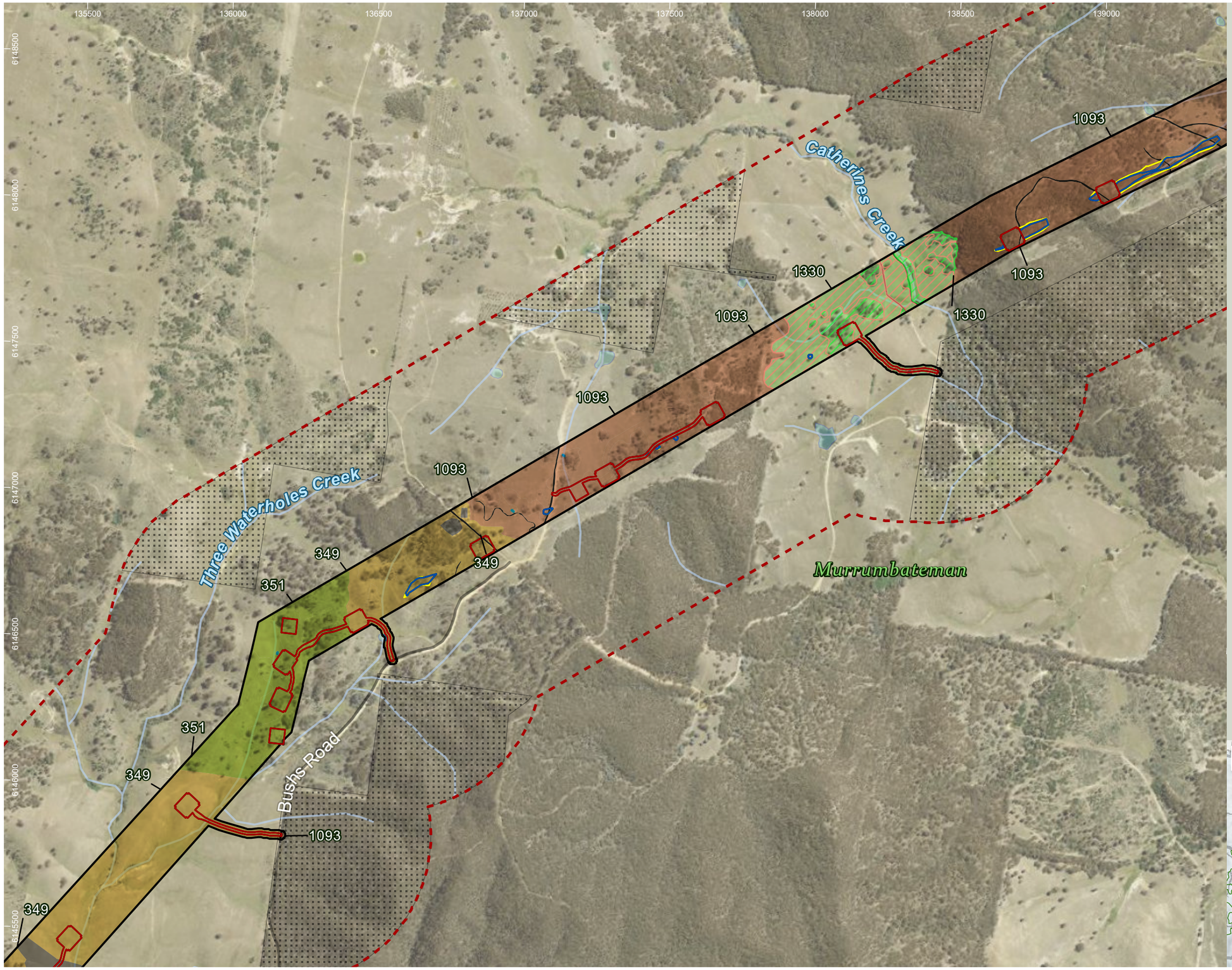


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

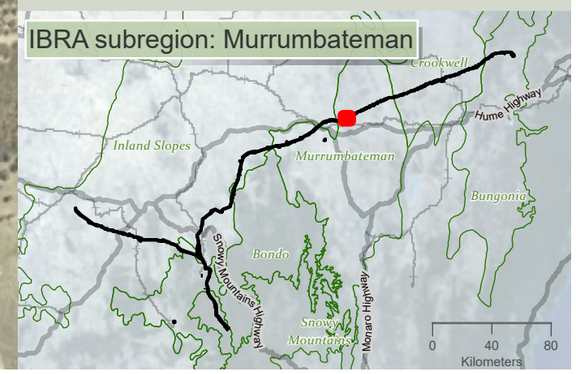
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 349: Inland Scribbly Gum - Red Stringybark open forest on hills composed of silicous substrates in the mid-Murrumbidgee and upper Lachlan catchments mainly in the western South Eastern Highlands Bioregion
- 351: Brittle Gum - Broad-leaved Peppermint - Red Stringybark open forest in the north-western part (Yass to Orange) of the South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 77

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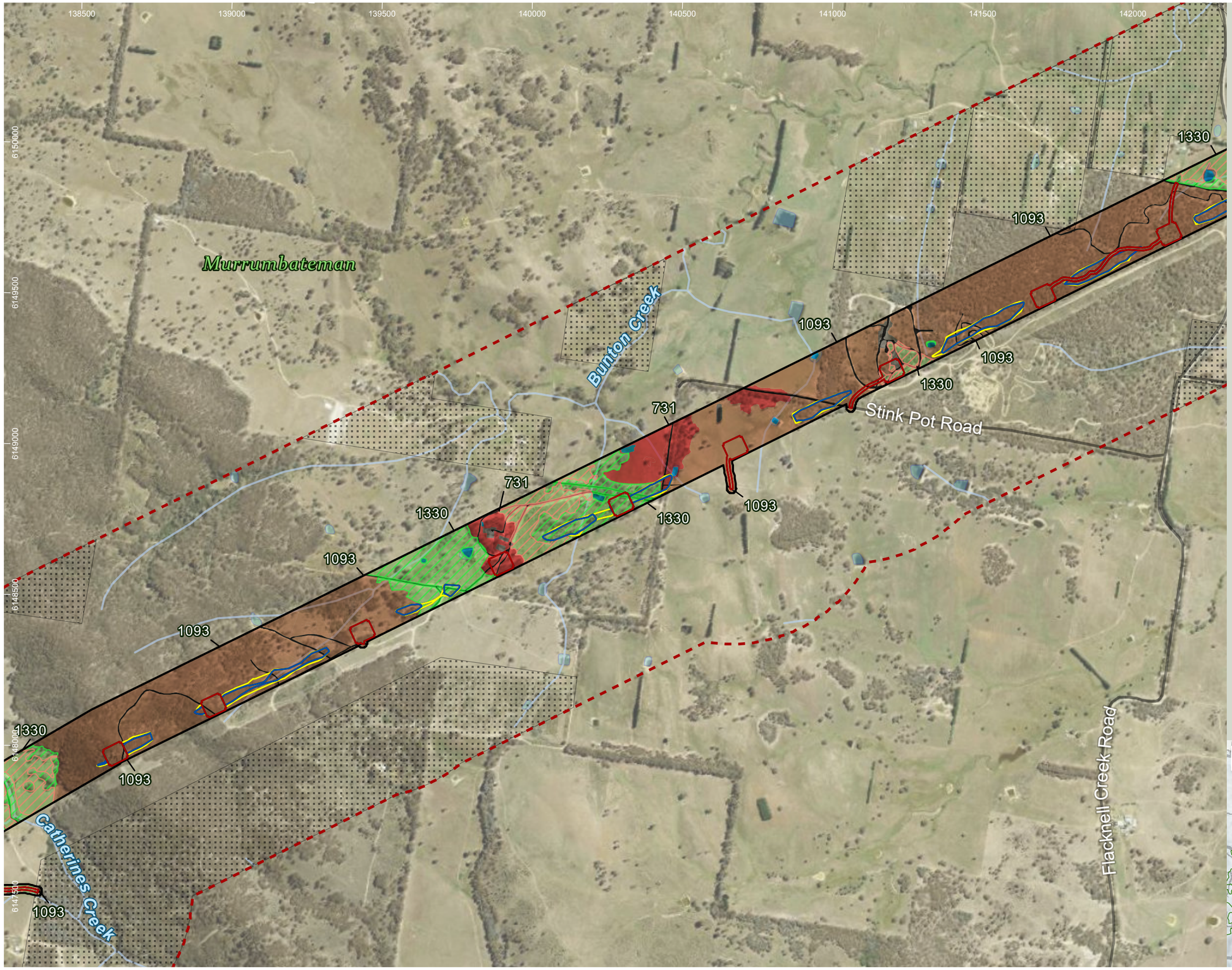


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

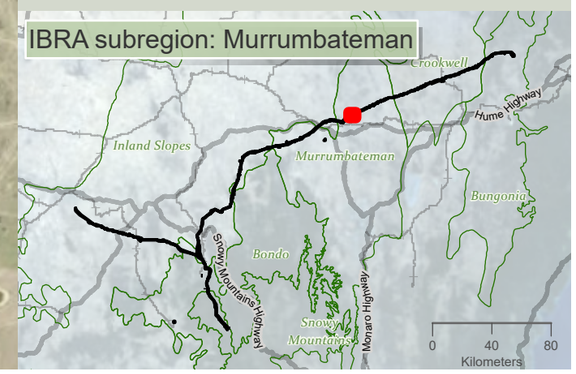
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 731: Broad-leaved Peppermint - Red Stringybark grassy open forest on undulating hills, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 78

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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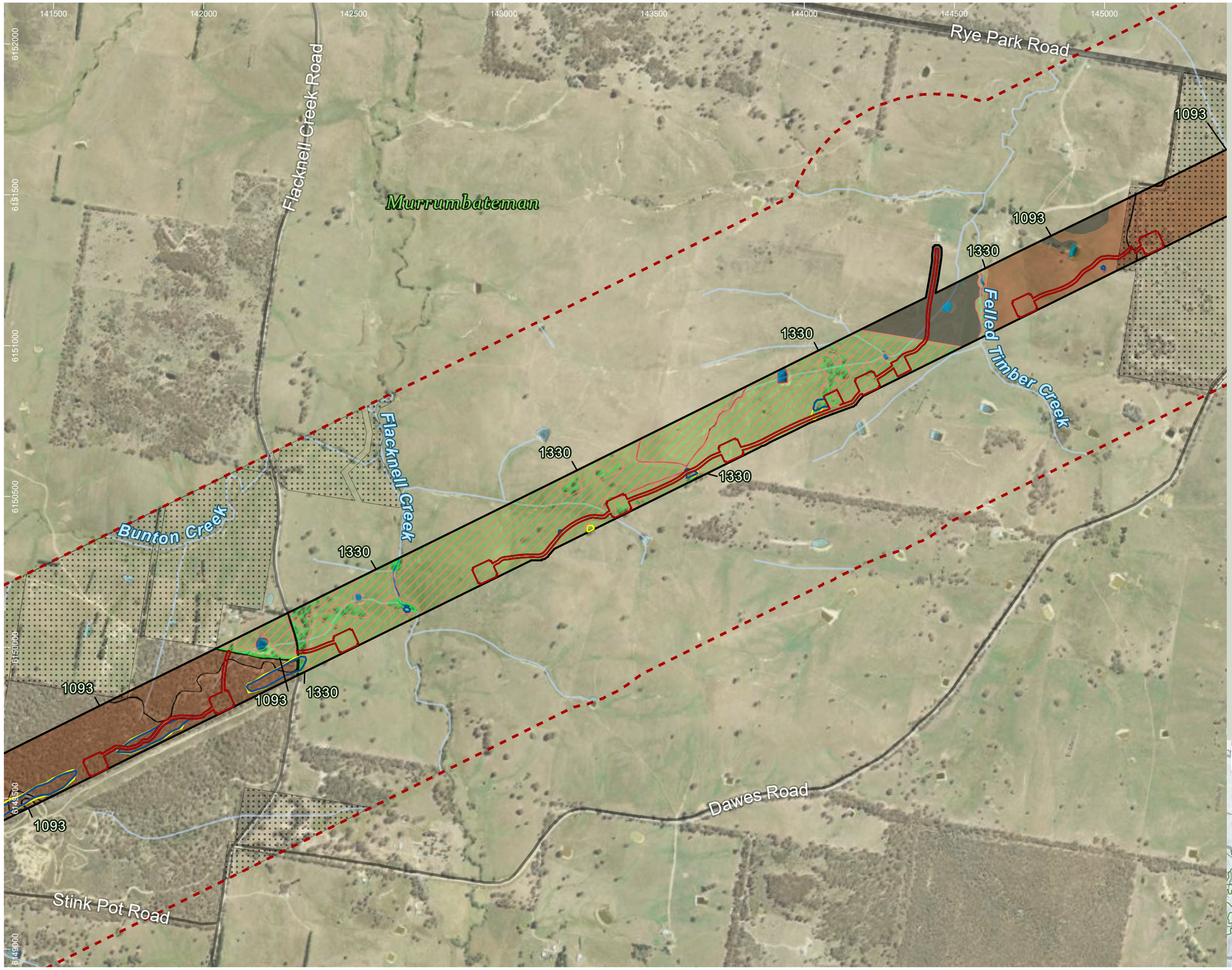


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

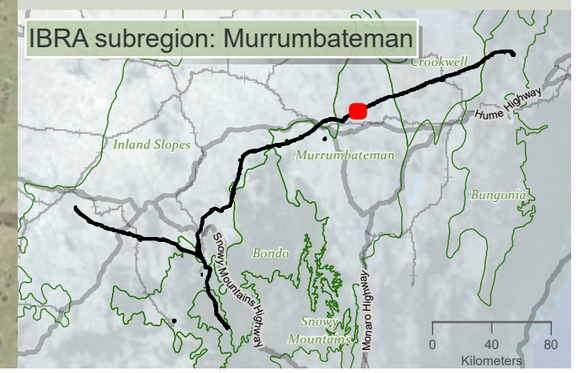
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 79

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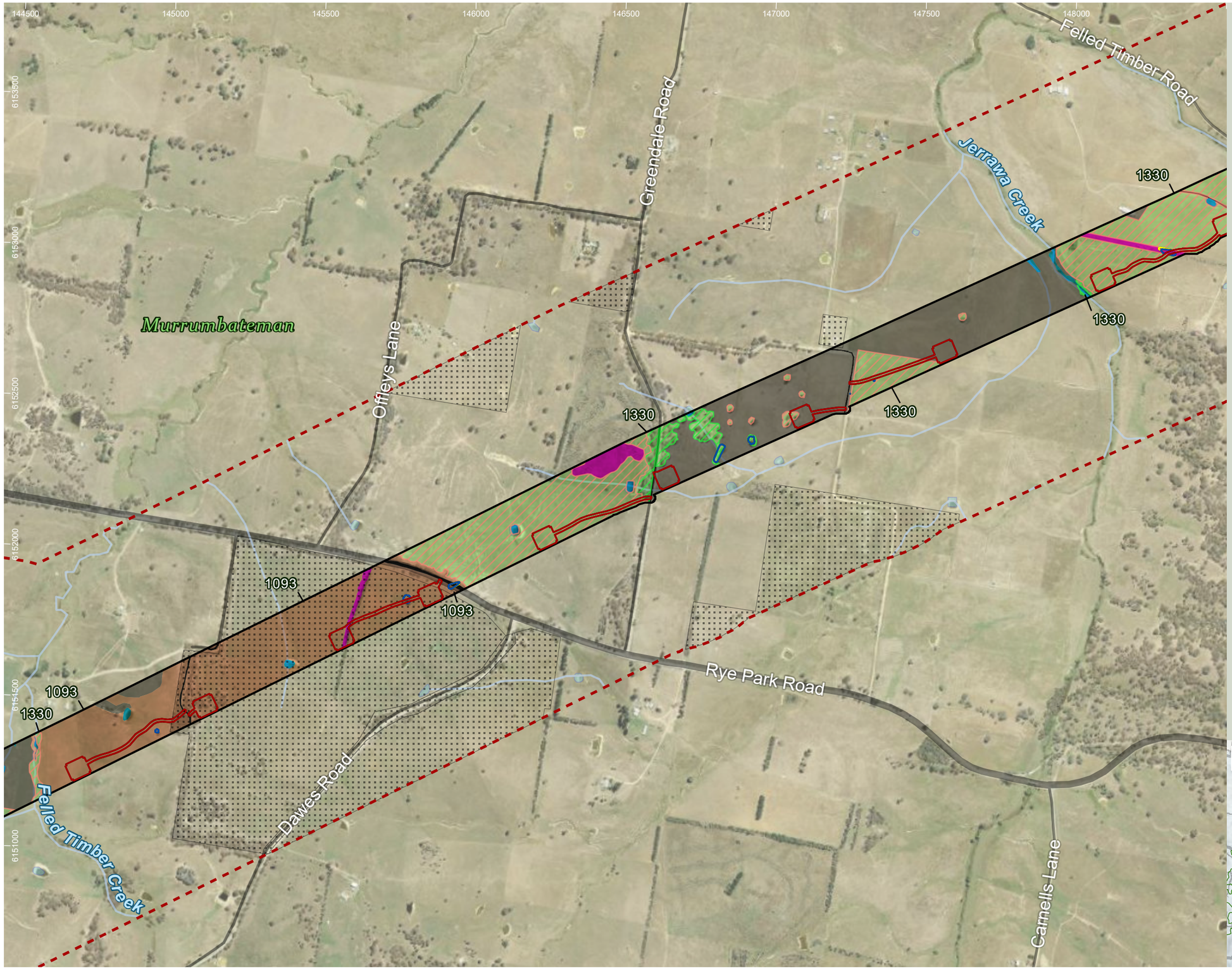


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

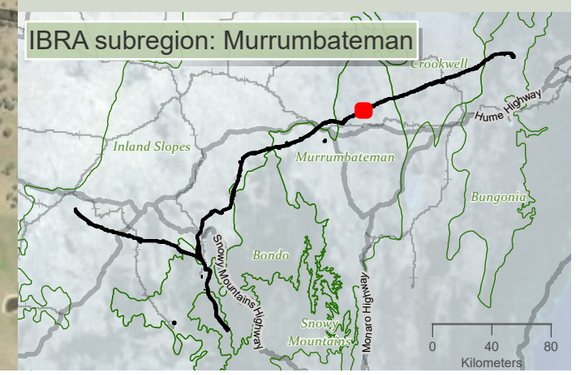
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 80

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148000 148500 149000 149500 150000 150500 151000 151500

6155000 6154500 6154000 6153500 6153000 6152500

Murrumbateman

Rugby Road

Dowlings Creek

Sams Creek

Walshs Road

Oolong Creek

Felled Timber Road

Jerrawa Creek

280 1330 1093 1330 280 1330 280 1330 1093 1330 280 1330

HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

Impacts to native vegetation and threatened ecological communities

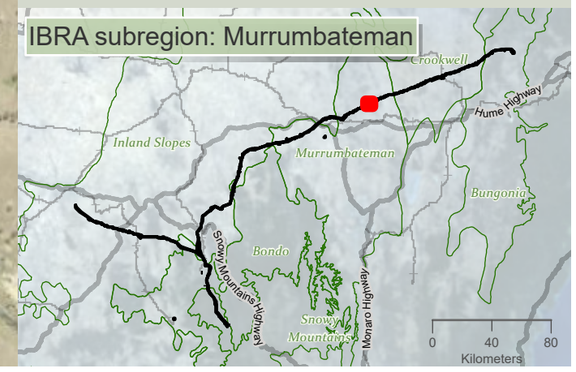
TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation

IBRA subregion: Murrumbateman



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 81

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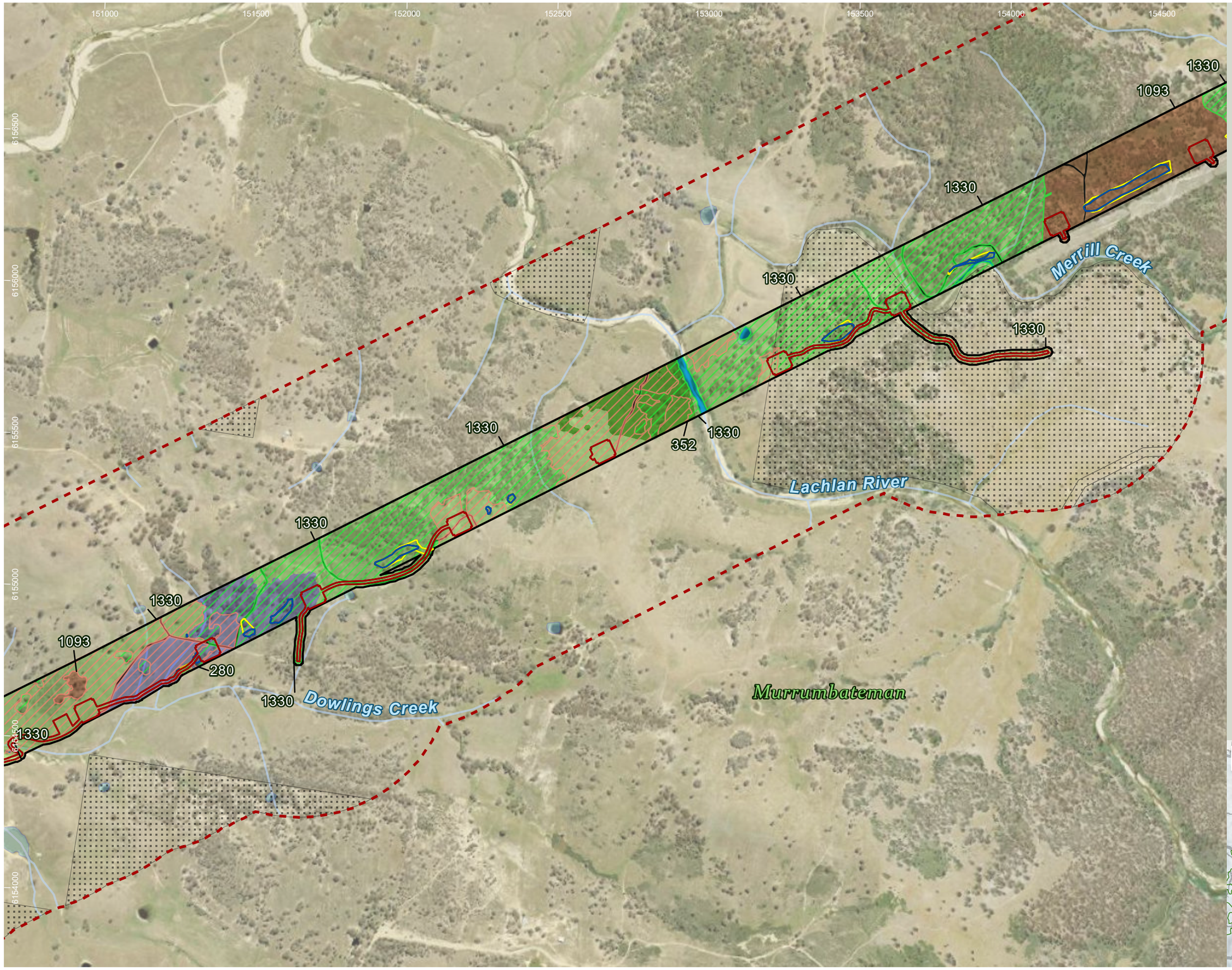


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

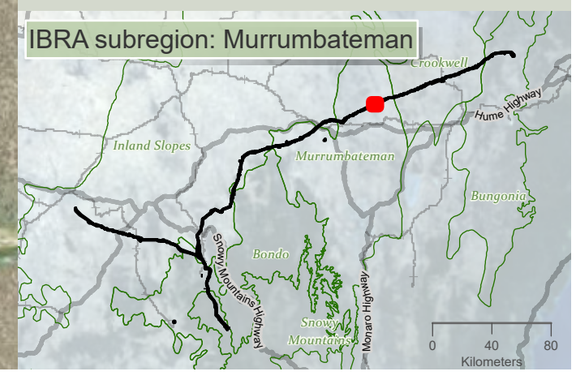
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 352: Red Stringybark - Blakelys Red Gum hillslope open forest on meta-sediments in the Yass - Boorowa - Crookwell region of the NSW South Western Slopes Bioregion and South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 N 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 82

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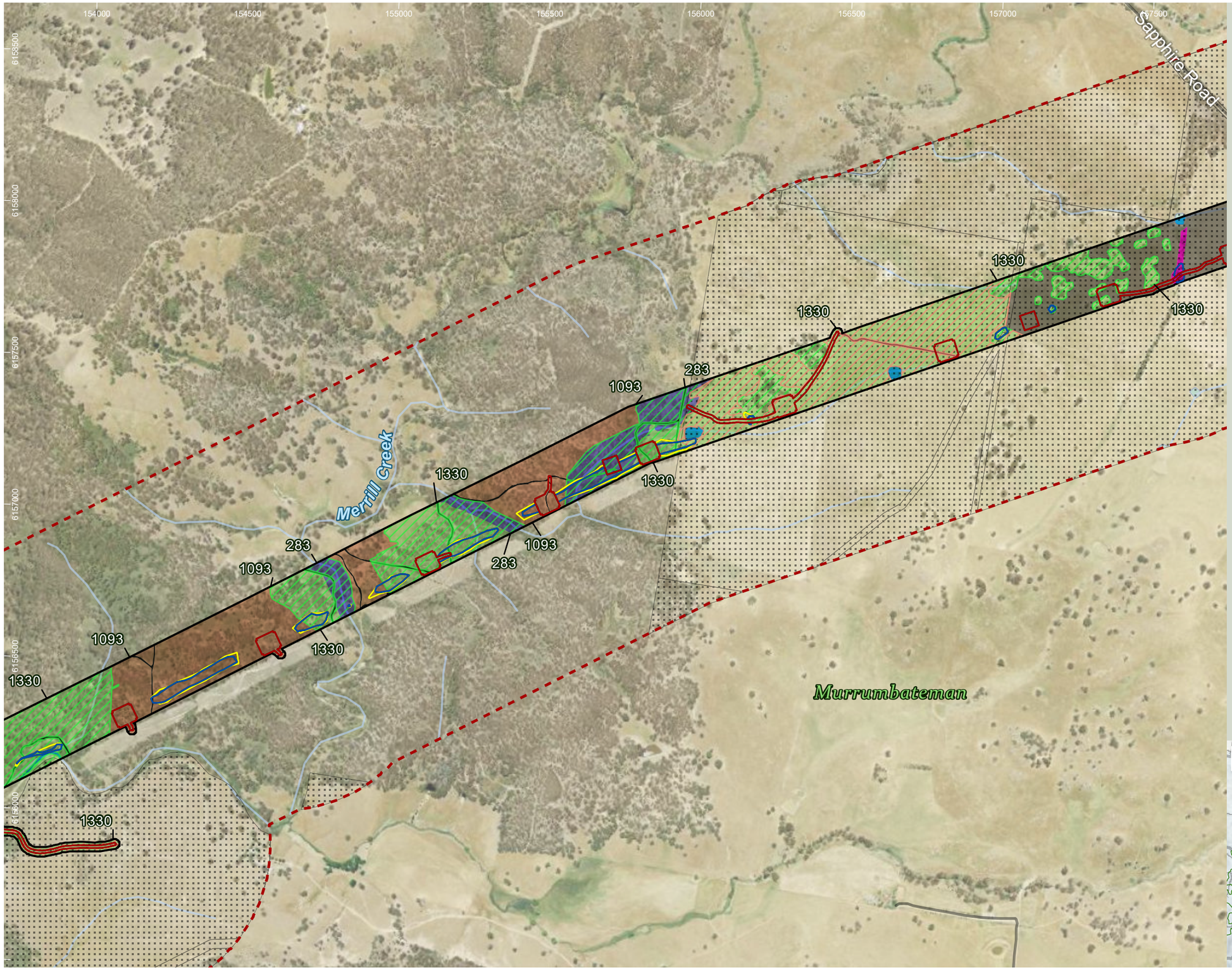


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

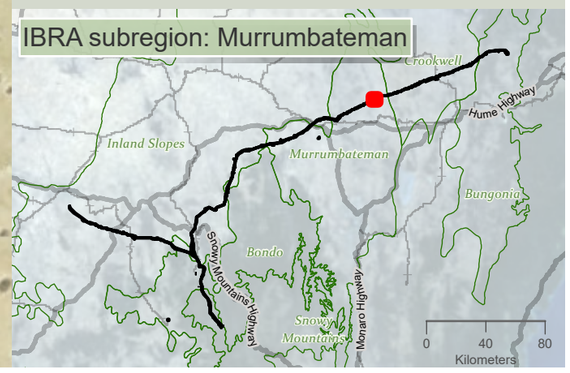
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 283: Apple Box - Blakelys Red Gum moist valley and footslopes grass-forb open forest of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



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niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 83

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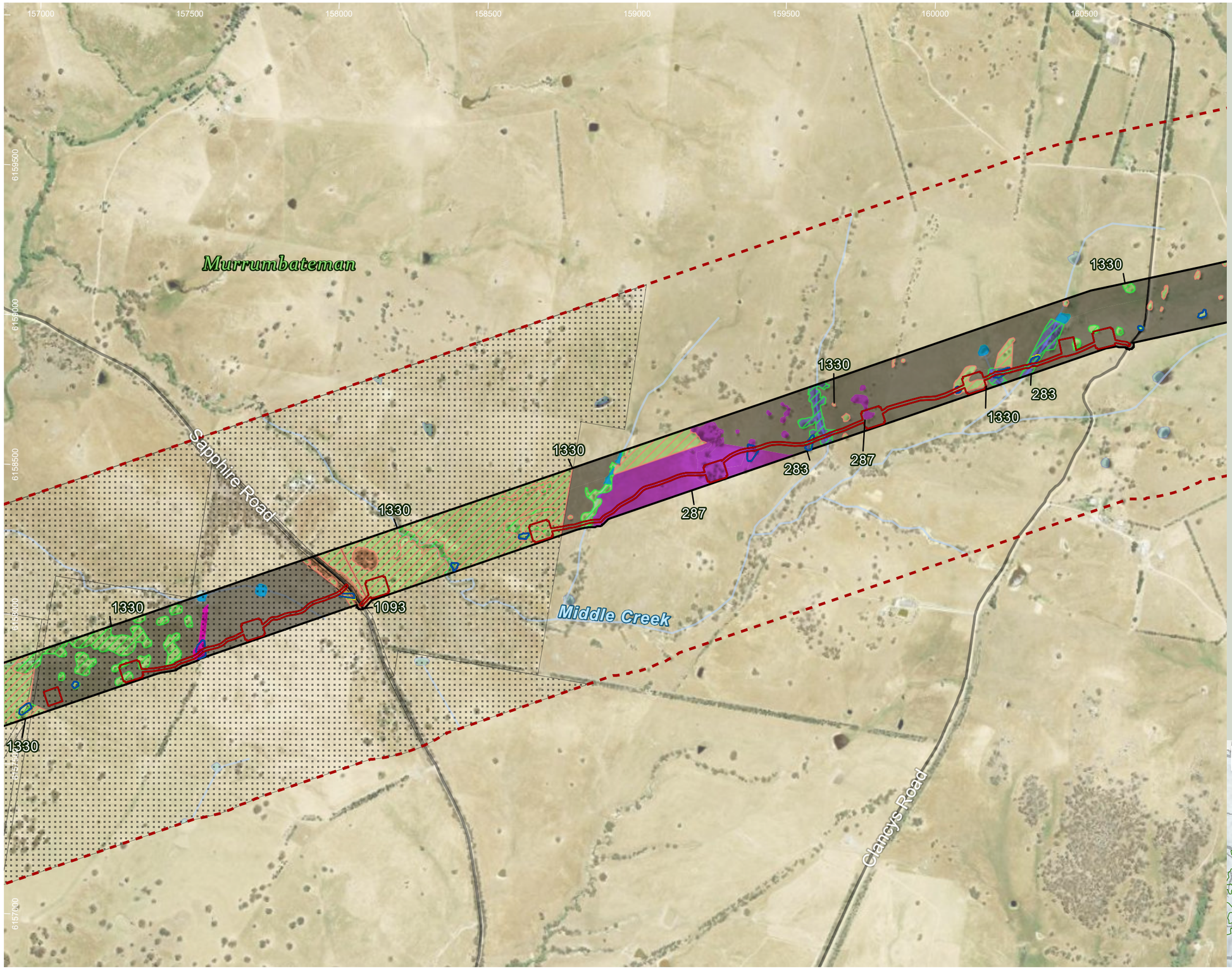


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

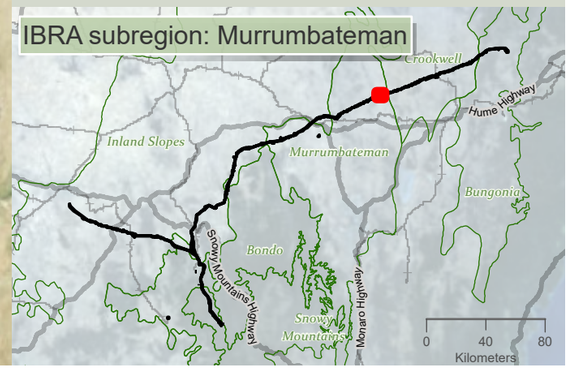
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 283: Apple Box - Blakelys Red Gum moist valley and footslopes grass-forb open forest of the NSW South Western Slopes Bioregion
- 287: Long-leaved Box - Red Box - Red Stringybark mixed open forest on hills and hillslopes in the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 84

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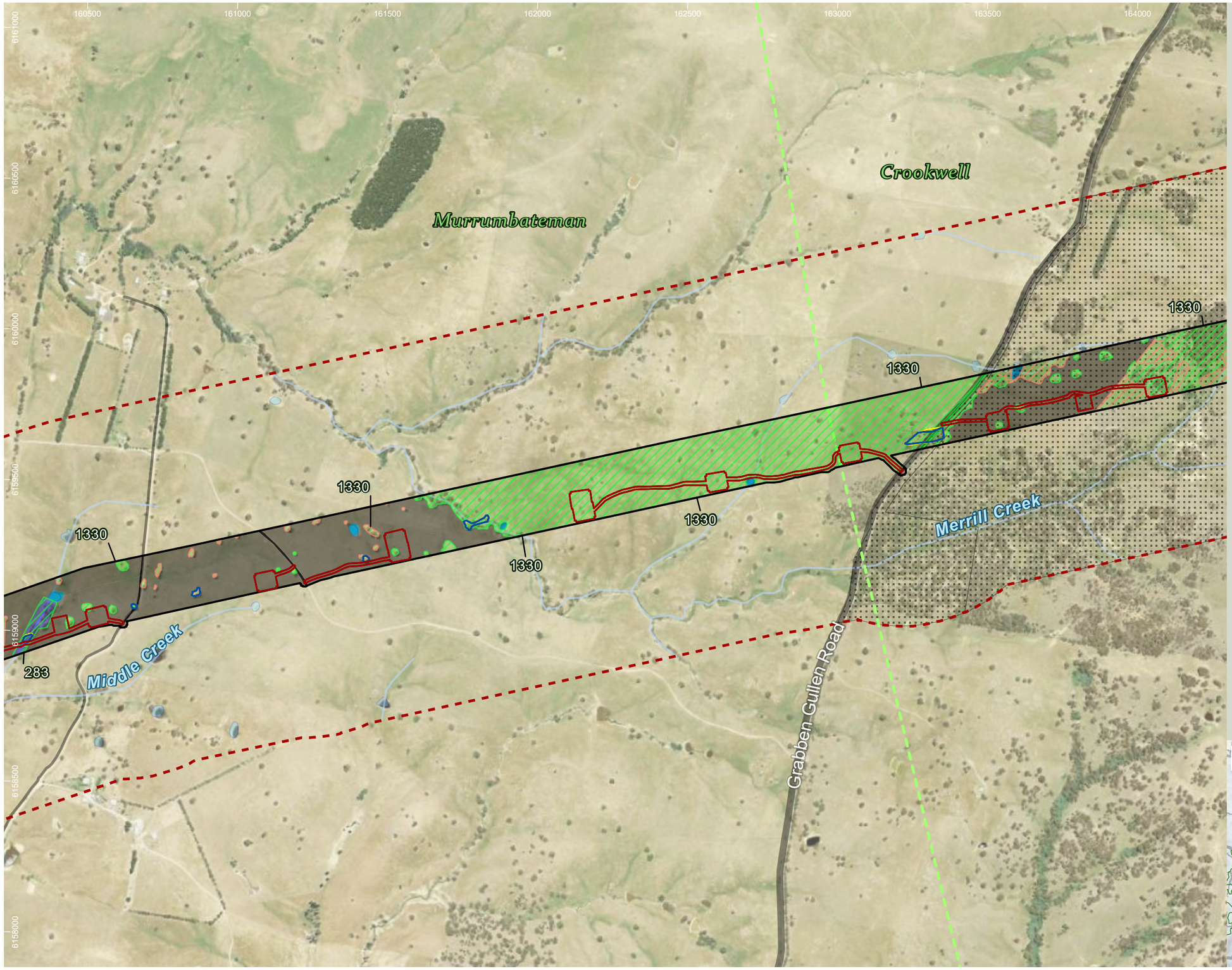


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

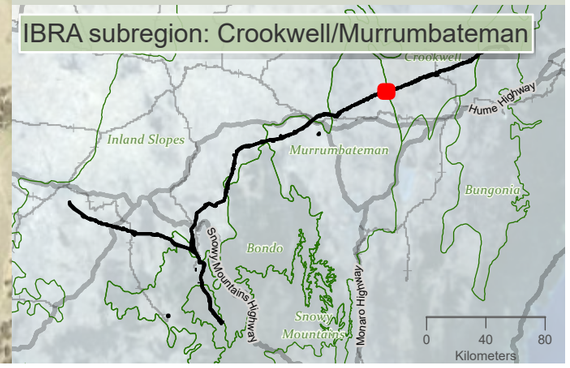
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 283: Apple Box - Blakelys Red Gum moist valley and footslopes grass-forb open forest of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 85

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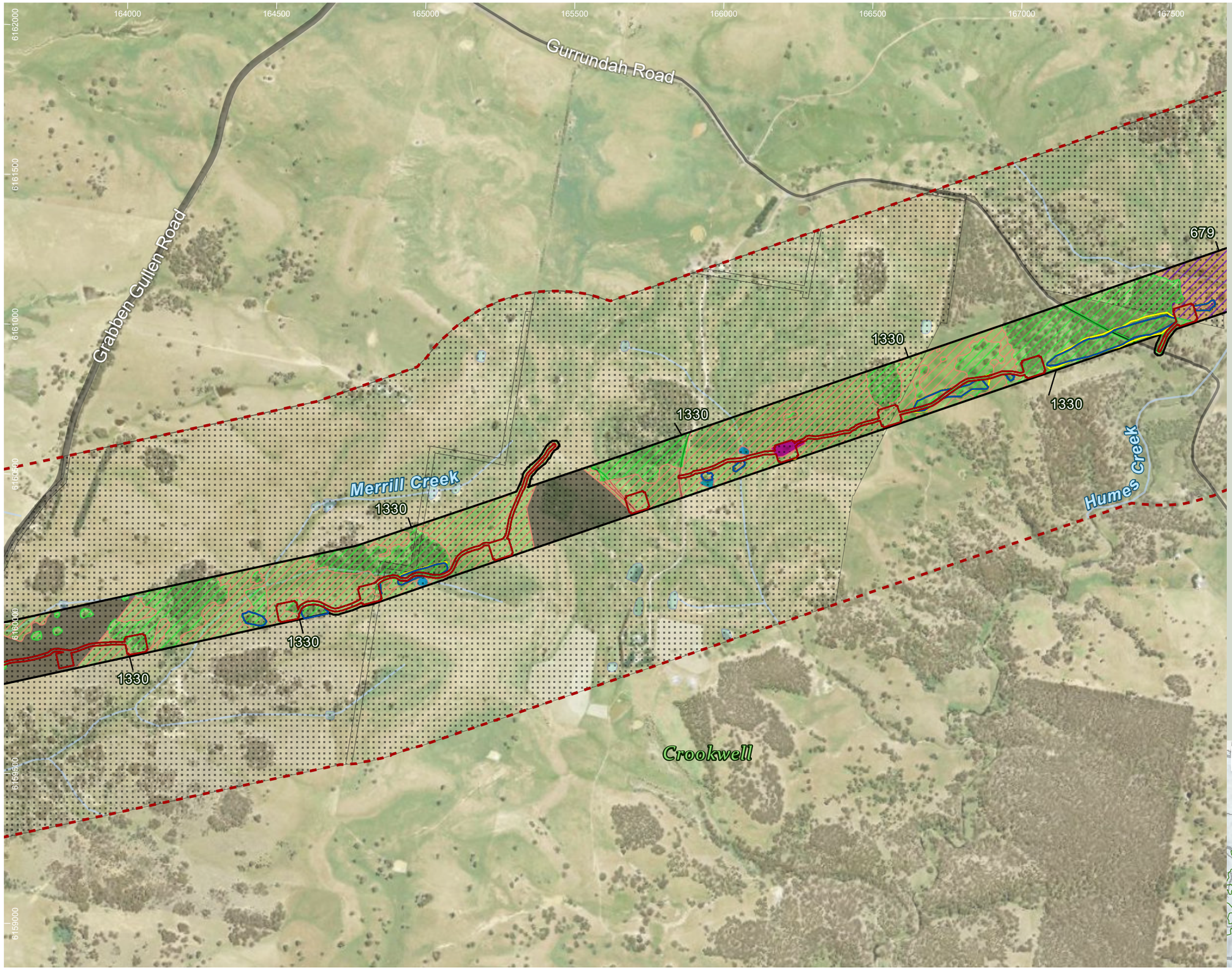


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

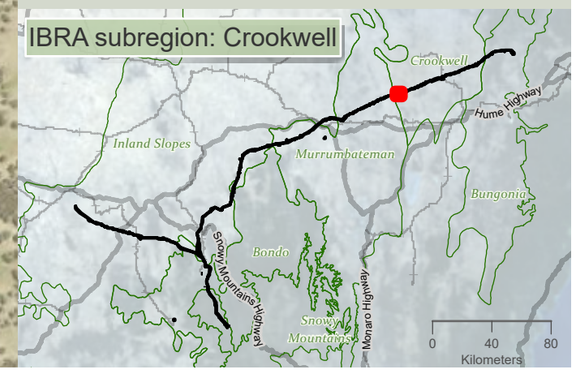
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 679: Black Sallee - Snow Gum low woodland of montane valleys, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 86

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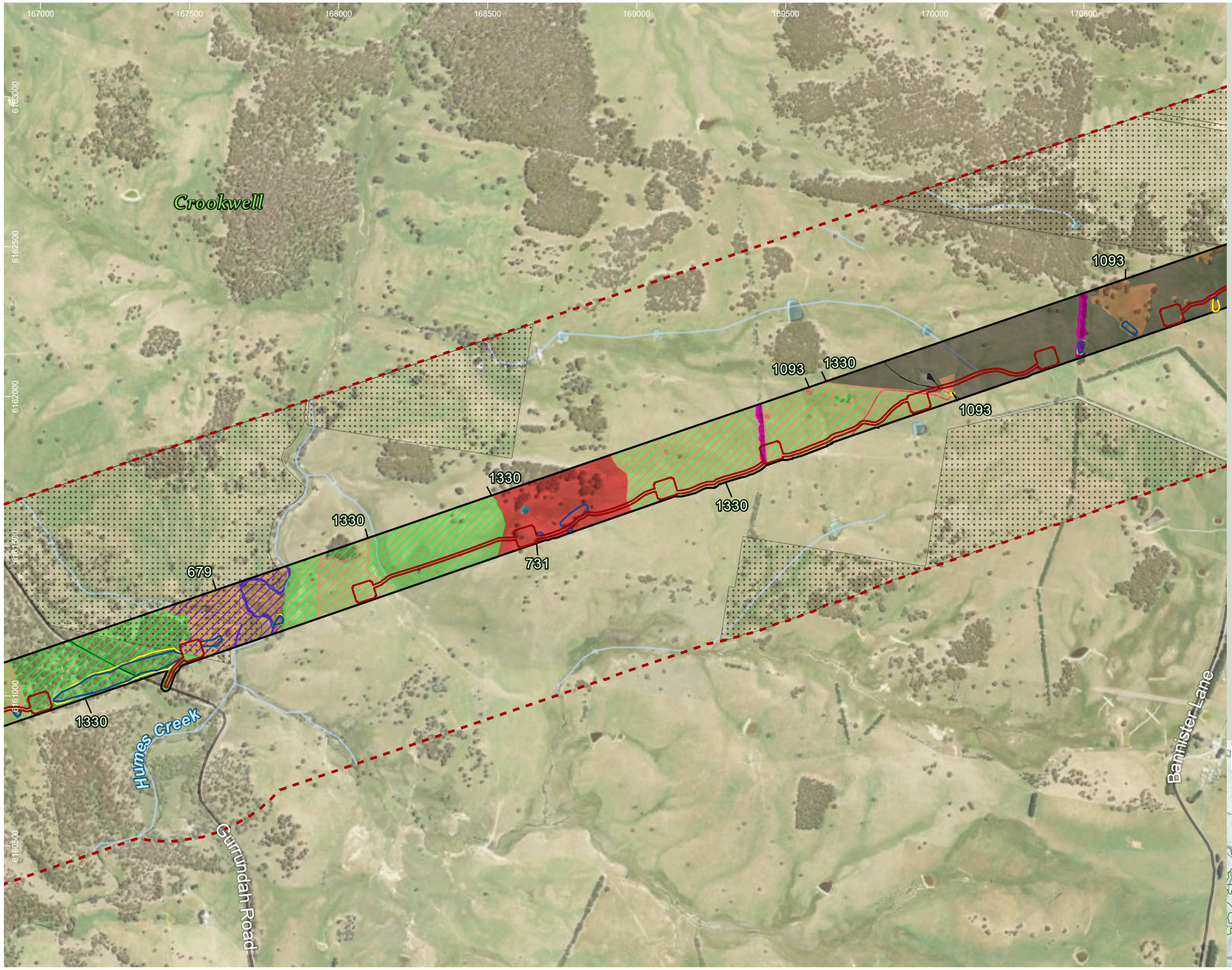


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

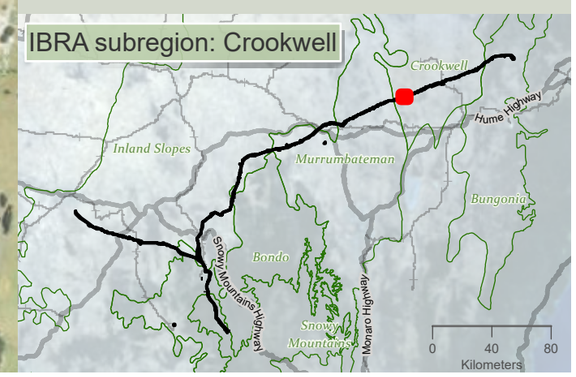
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 679: Black Sallee - Snow Gum low woodland of montane valleys, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 731: Broad-leaved Peppermint - Red Stringybark grassy open forest on undulating hills, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 87

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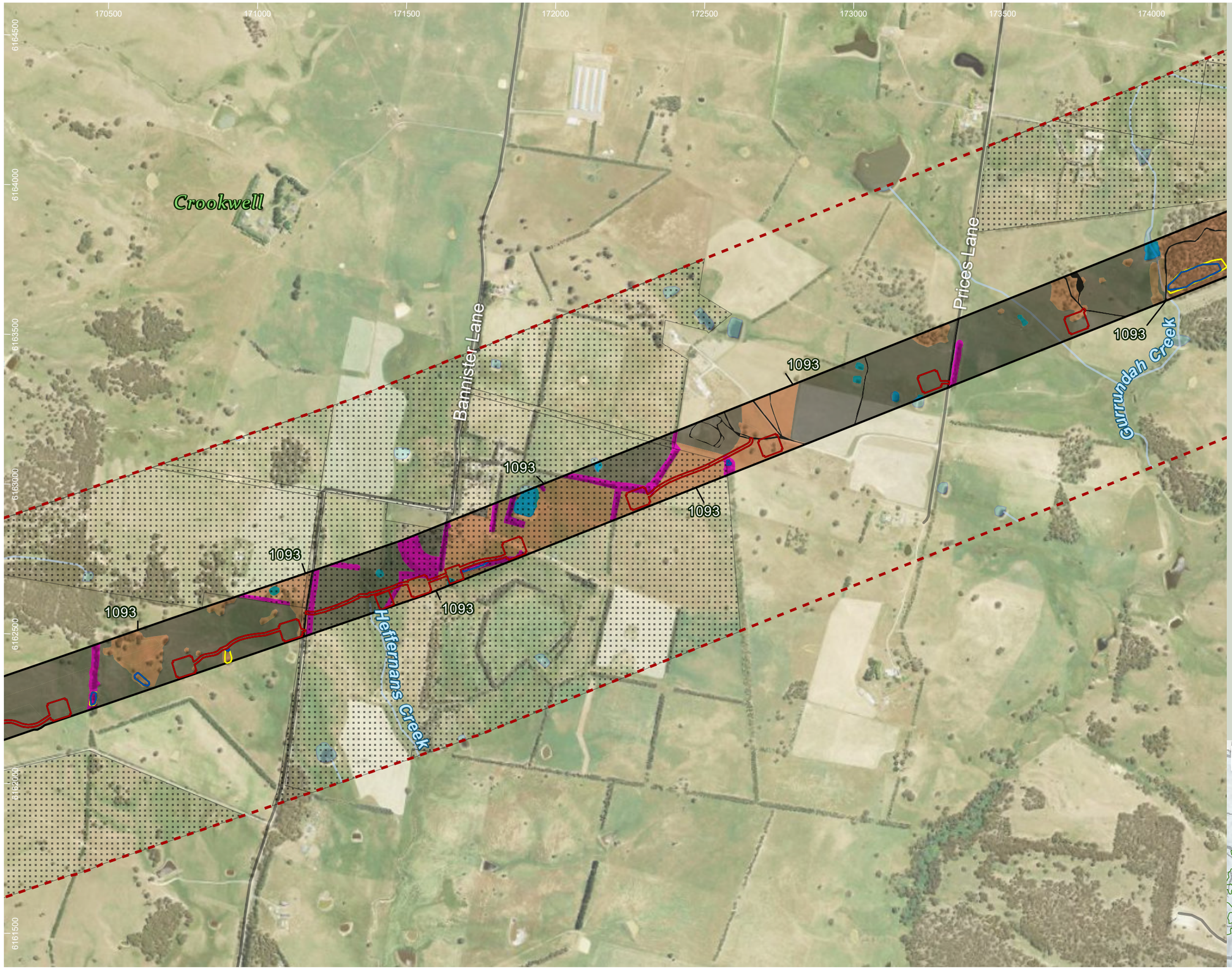


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

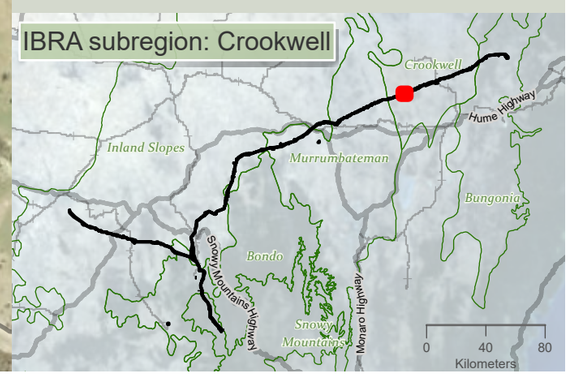
Road

- Minor road

Impacts to native vegetation and threatened ecological communities

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 88

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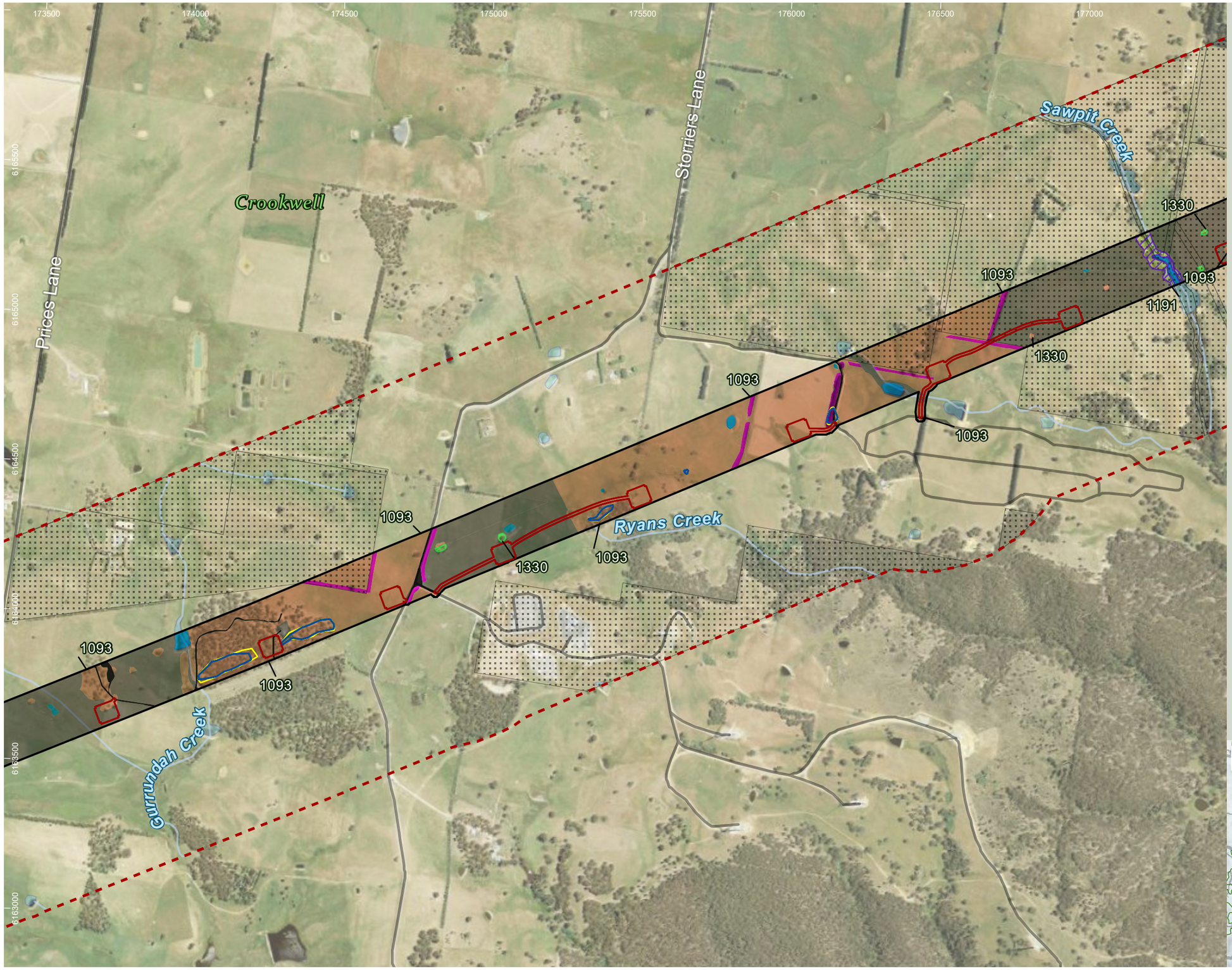


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

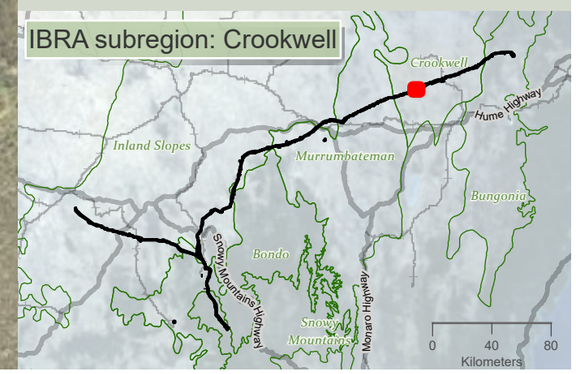
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1191: Snow Gum - Candle Bark woodland on broad valley flats of the tablelands and slopes, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 89

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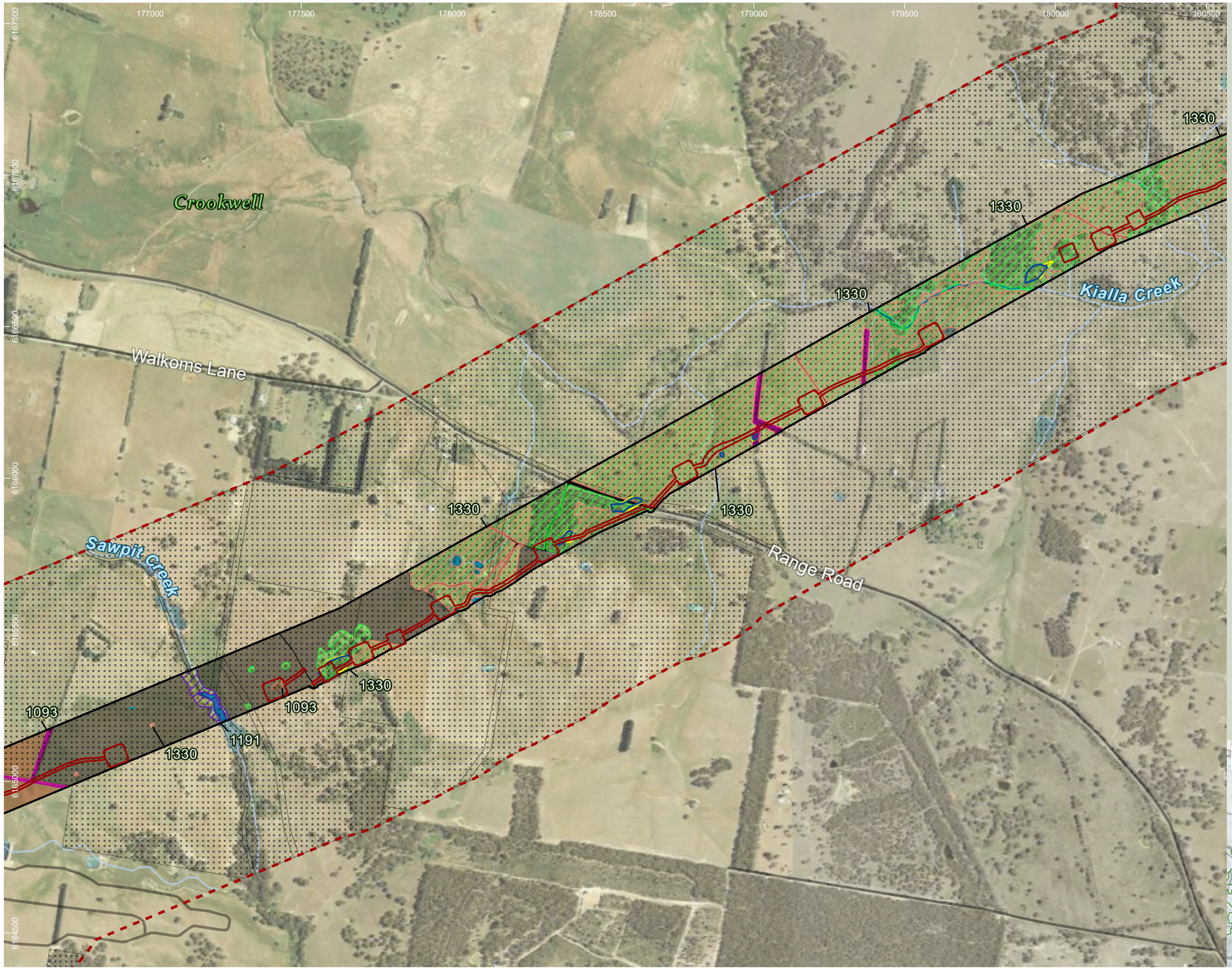


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

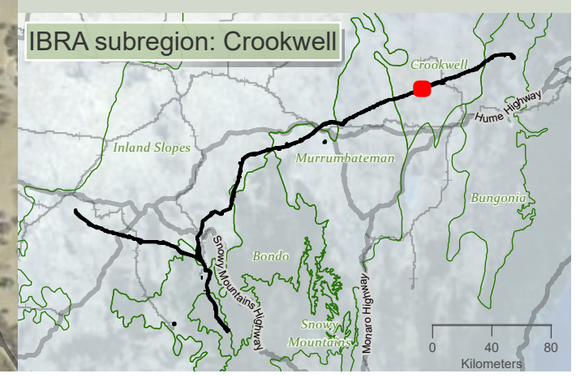
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1191: Snow Gum - Candle Bark woodland on broad valley flats of the tablelands and slopes, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



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niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 90

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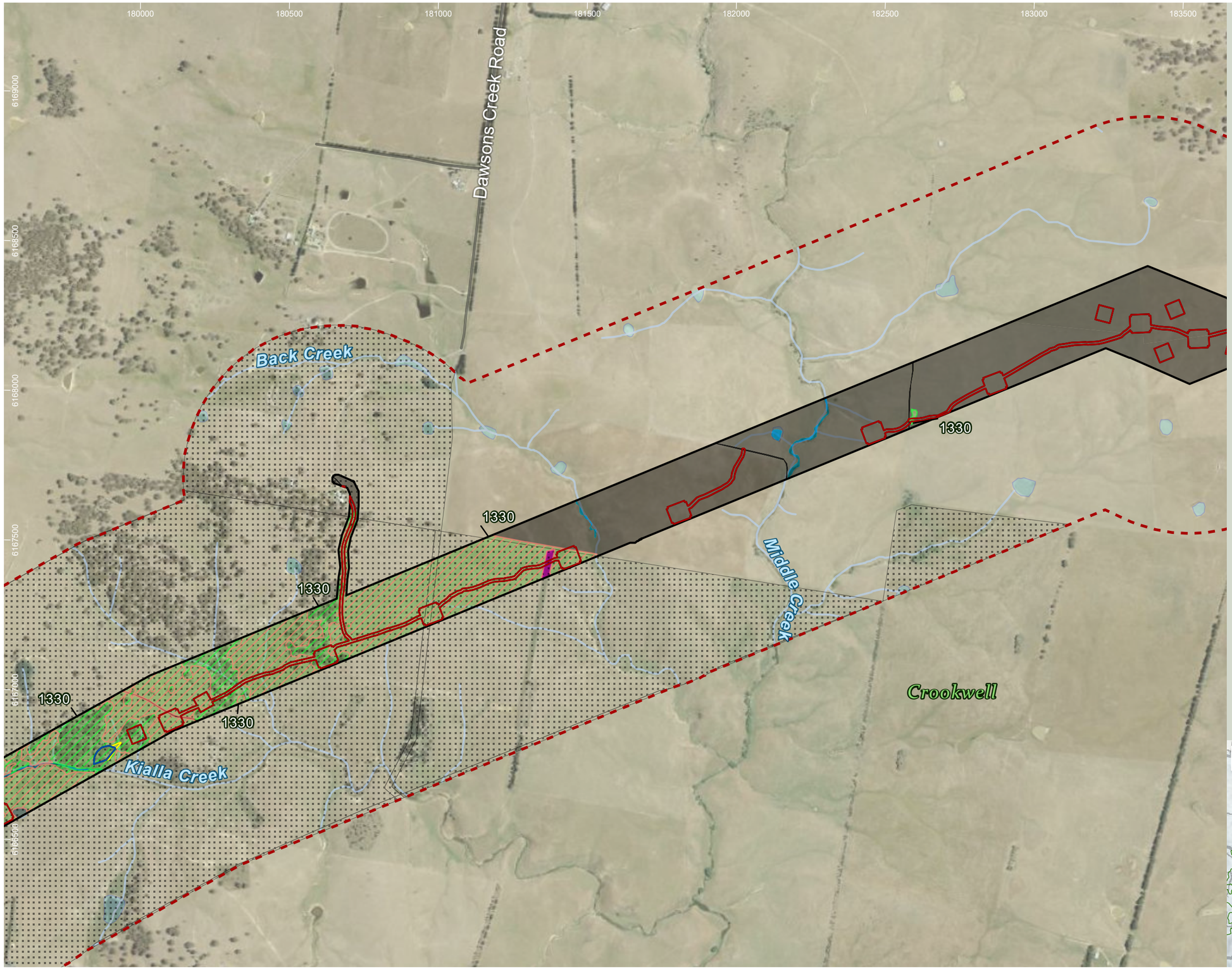


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

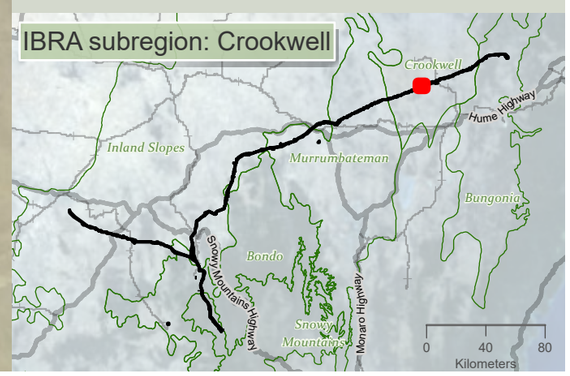
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 91

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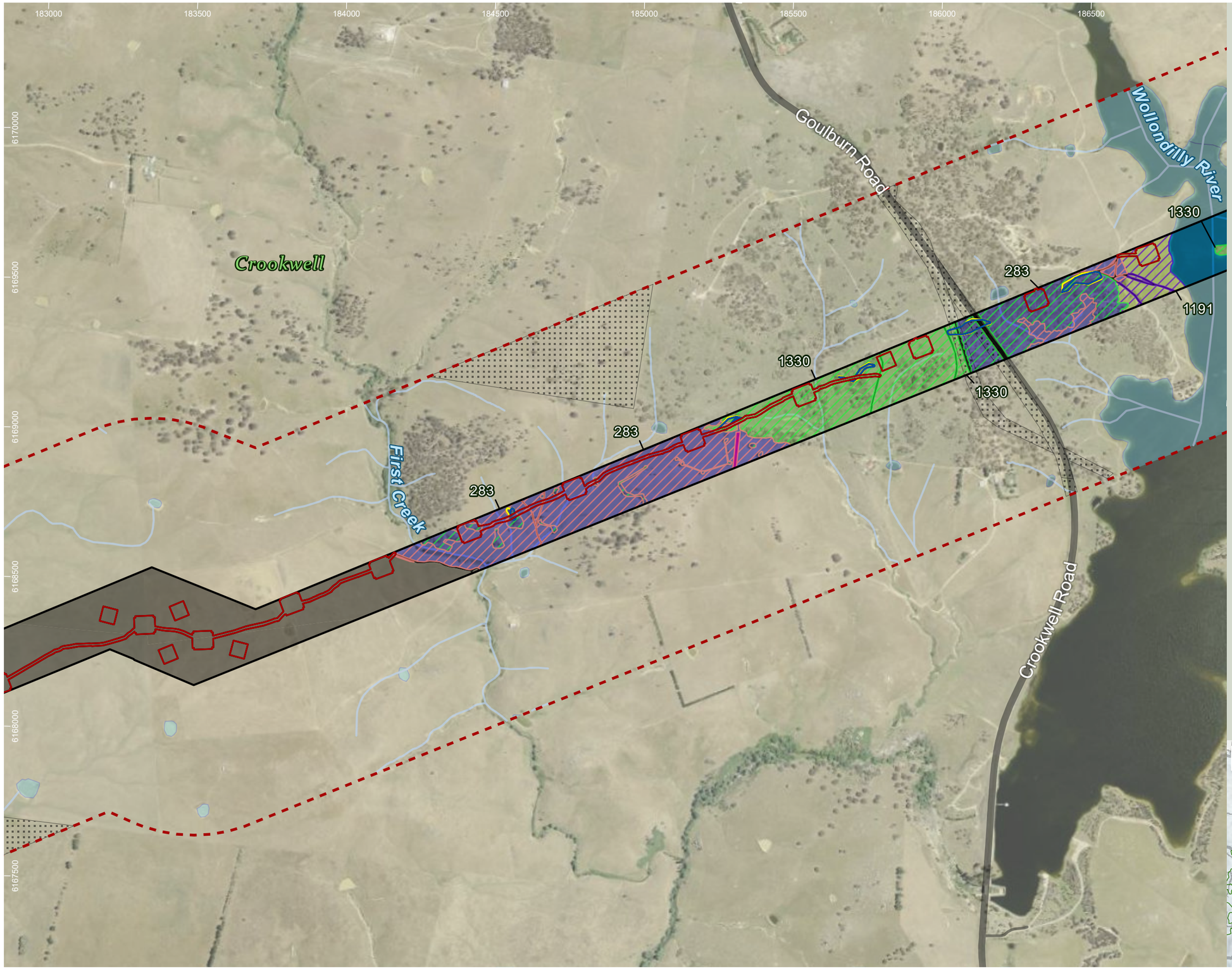


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

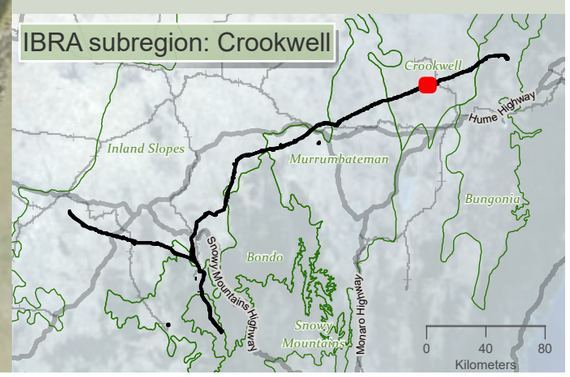
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1191: Snow Gum - Candle Bark woodland on broad valley flats of the tablelands and slopes, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 283: Apple Box - Blakelys Red Gum moist valley and footslopes grass-forb open forest of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 92

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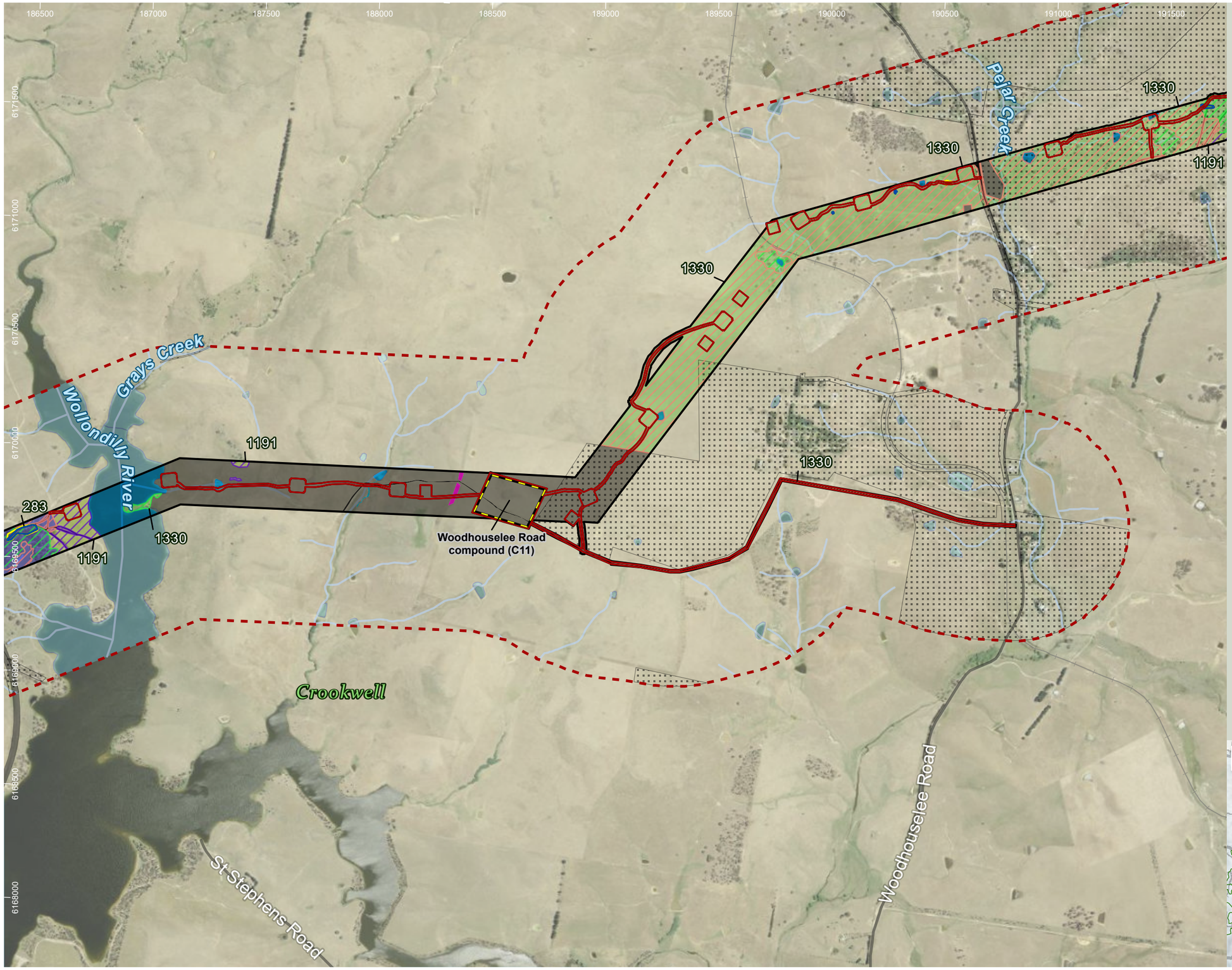


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Major road
- Minor road

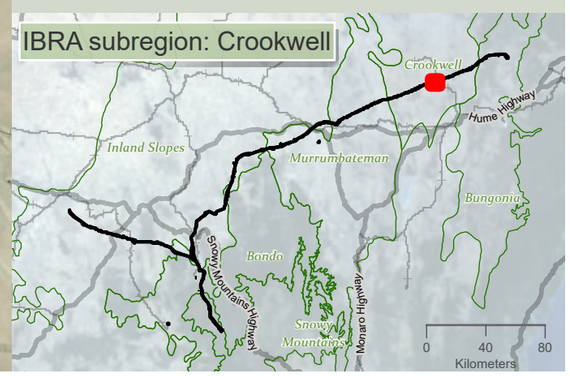
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1191: Snow Gum - Candle Bark woodland on broad valley flats of the tablelands and slopes, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 283: Apple Box - Blakelys Red Gum moist valley and footslopes grass-forb open forest of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 93

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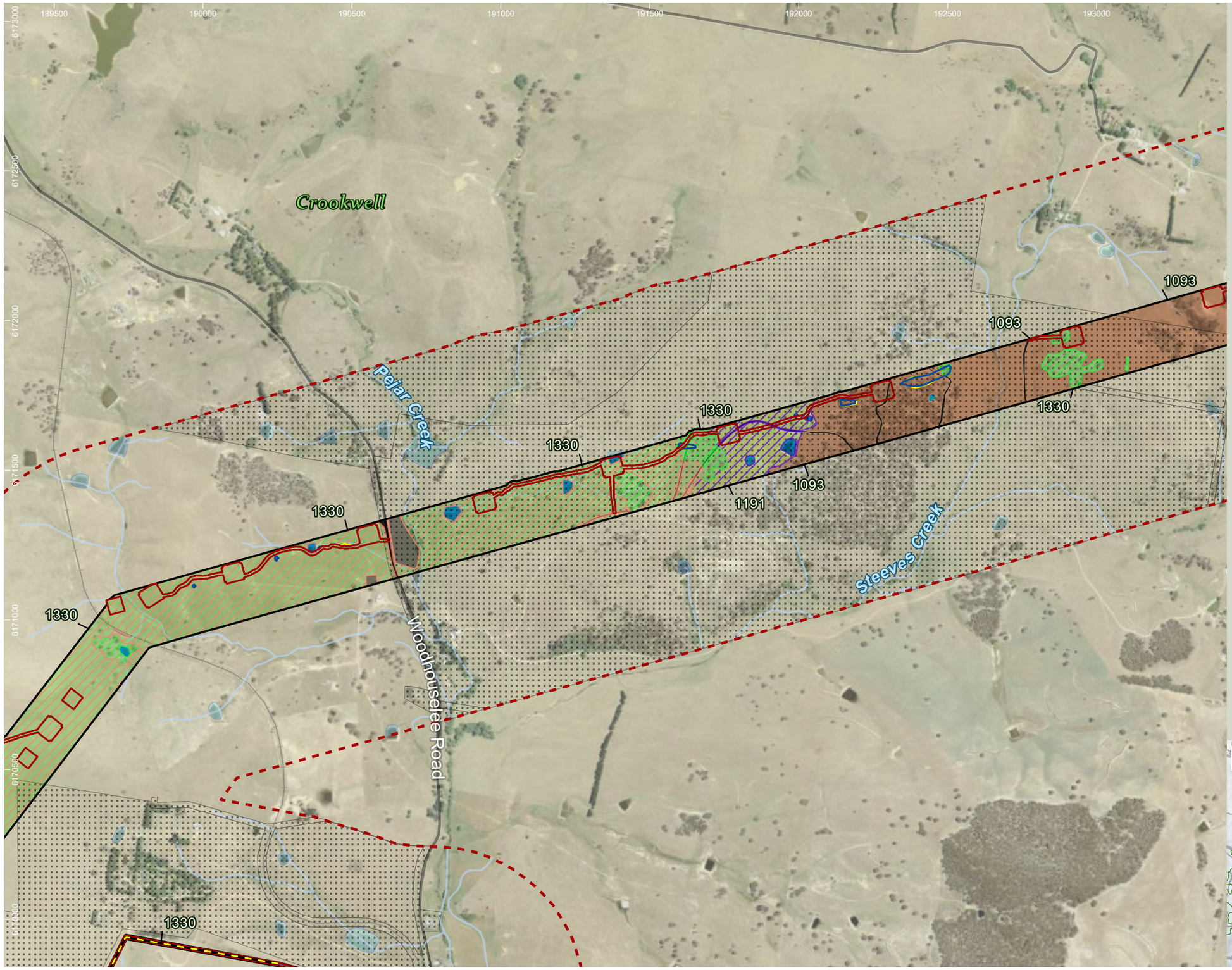


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

- Rail

Road

- Minor road

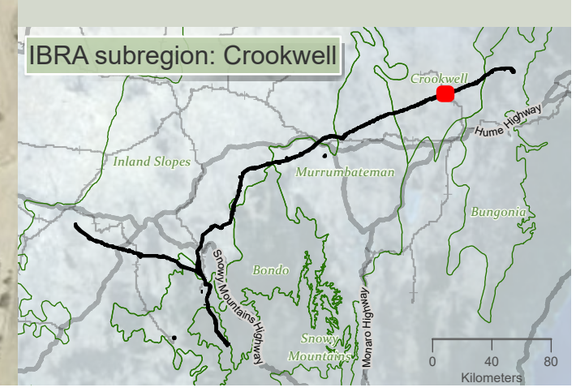
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1191: Snow Gum - Candle Bark woodland on broad valley flats of the tablelands and slopes, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 94

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193000 193500 194000 194600 195000 195500 196000 196500

6174000 6173500 6173000 6172500 6172000 6171500 6171000

Crookwell

Melamalong Creek

1151 1330 1256 1330 1151 1256 1330 1093 1093 1330 1093

HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

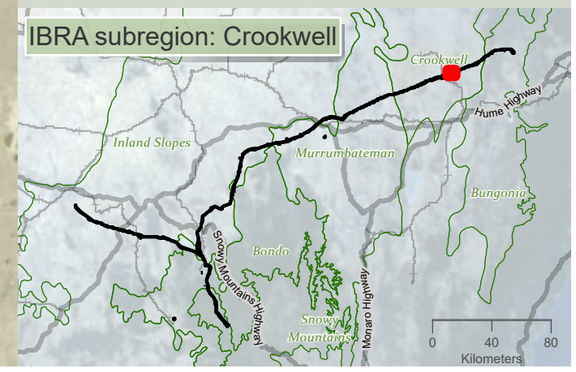
Impacts to native vegetation and threatened ecological communities

TECs

- Montane Peatlands and Swamps of the New England Tableland (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1151: Silvertop Ash - Broad-leaved Peppermint dry shrub forest of the South Eastern Highlands Bioregion
- 1256: Tableland swamp meadow on impeded drainage sites of the western Sydney Basin Bioregion and South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 95

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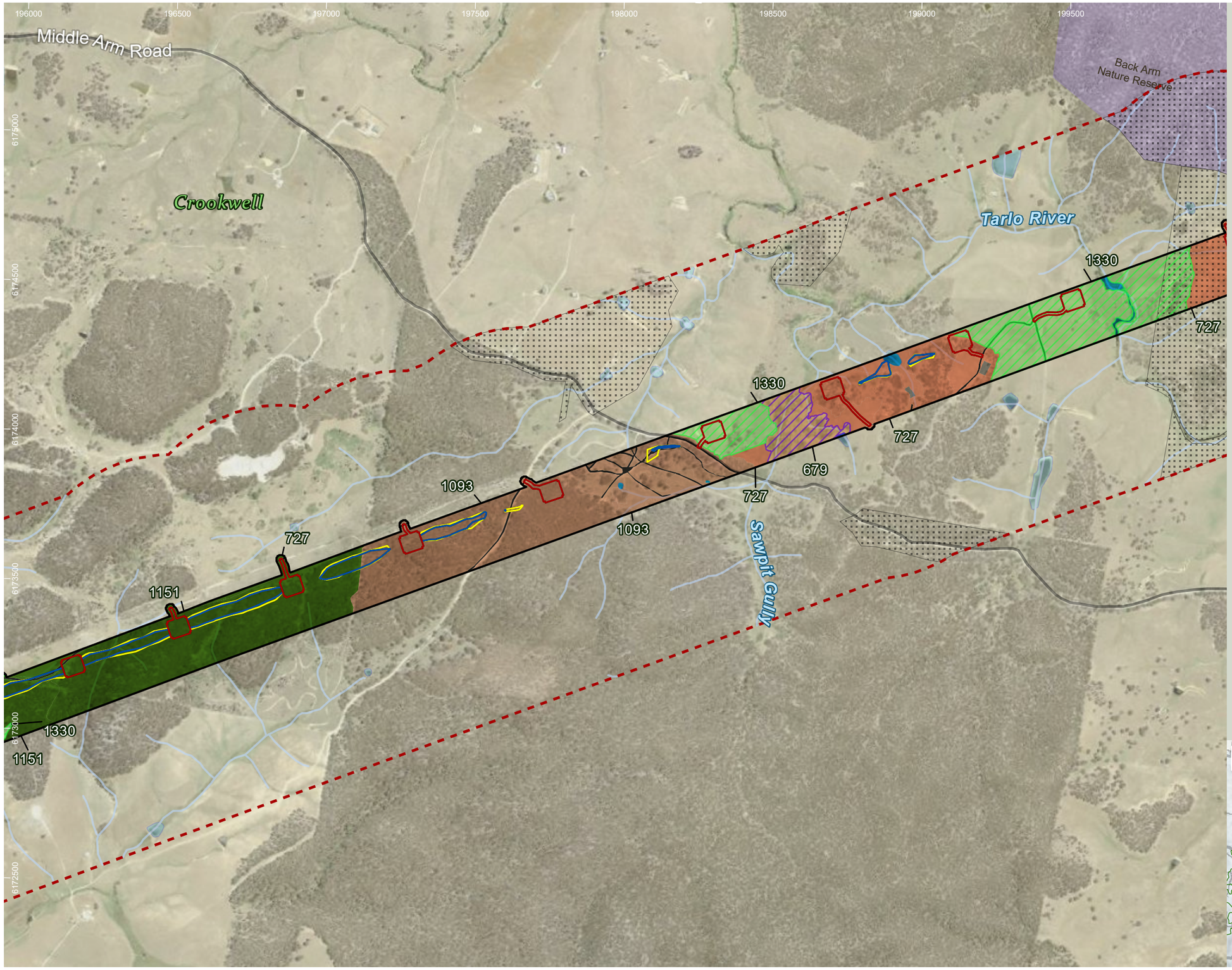


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- Nature Reserve

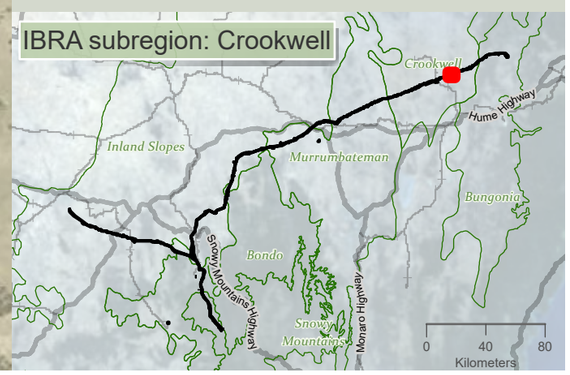
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1151: Silvertop Ash - Broad-leaved Peppermint dry shrub forest of the South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 679: Black Sallee - Snow Gum low woodland of montane valleys, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 727: Broad-leaved Peppermint - Brittle Gum - Red Stringybark dry open forest on the South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 96

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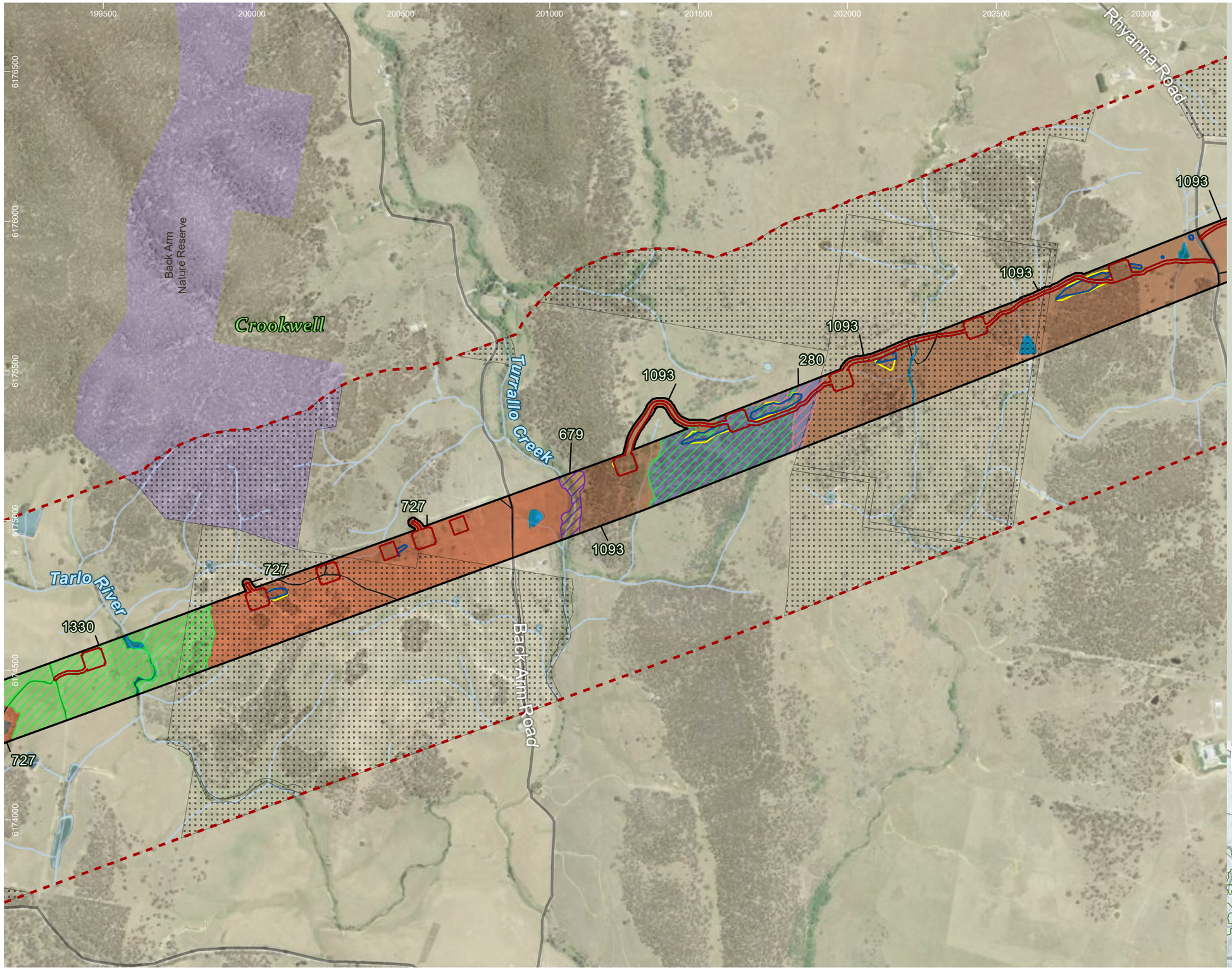


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- Nature Reserve

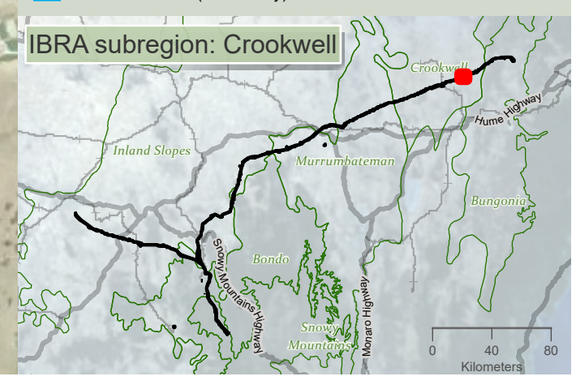
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 280: Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion
- 679: Black Sallee - Snow Gum low woodland of montane valleys, South Eastern Highlands Bioregion and Australian Alps Bioregion
- 727: Broad-leaved Peppermint - Brittle Gum - Red Stringybark dry open forest on the South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



Drawn by: MatthewZajaczkowski Last updated: 28/07/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 97

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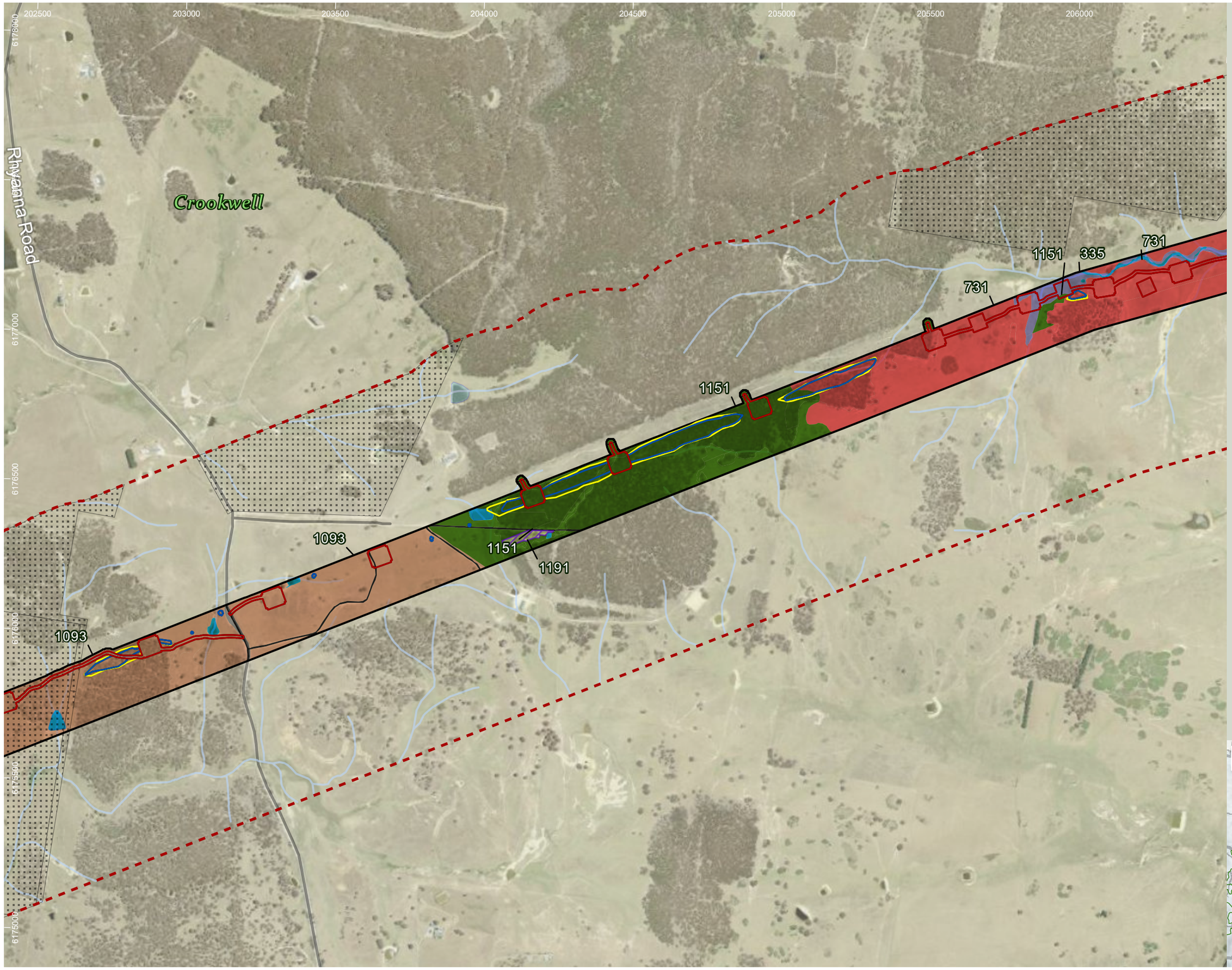


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

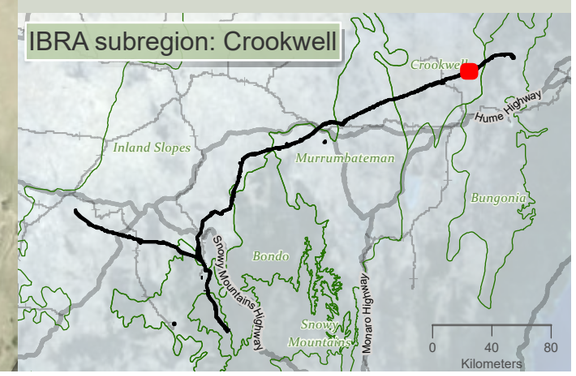
Impacts to native vegetation and threatened ecological communities

TECs

- Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands (BC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1151: Silvertop Ash - Broad-leaved Peppermint dry shrub forest of the South Eastern Highlands Bioregion
- 1191: Snow Gum - Candle Bark woodland on broad valley flats of the tablelands and slopes, South Eastern Highlands Bioregion
- 335: Tussock grass - sedgeland fen - rushland - reedland wetland in impeded creeks in valleys in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 731: Broad-leaved Peppermint - Red Stringybark grassy open forest on undulating hills, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 98

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206000 206500 207000 207500 208000 208500 209000 209500

6179000 6178500 6178000 6177500 6177000 6176500

Cowpers Lane

Crookwell

Myrtle Creek

Cowpers Creek

Taralga Road

952 952 952 952 952

731 335 1151 335 731 356 731

HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Major road
- Minor road

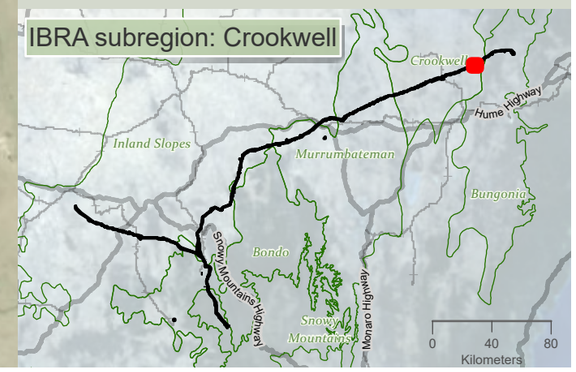
Impacts to native vegetation and threatened ecological communities

TECs

- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)

PCTs

- 0: Not Native
- 1151: Silvertop Ash - Broad-leaved Peppermint dry shrub forest of the South Eastern Highlands Bioregion
- 335: Tussock grass - sedgeland fen - rushland - reedland wetland in impeded creeks in valleys in the upper slopes sub-region of the NSW South Western Slopes Bioregion
- 356: Blakelys Red Gum x Dirty Gum - White Cypress Pine tall riparian woodland, NSW South Western Slopes Bioregion
- 731: Broad-leaved Peppermint - Red Stringybark grassy open forest on undulating hills, South Eastern Highlands Bioregion
- 952: Mountain Gum - Narrow-leaved Peppermint - Snow Gum dry shrubby open forest on undulating tablelands, southern South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 99

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208500 209000 209500 210000 210500 211000 211500 212000 212500

6181000 6180500 6180000 6179500 6179000 6178500

Hillcrest Road
Soldiers Settlement Road
Dawsons Flat Creek
Myrtle Creek
Crookwell
Bungonia
952
952
952

HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

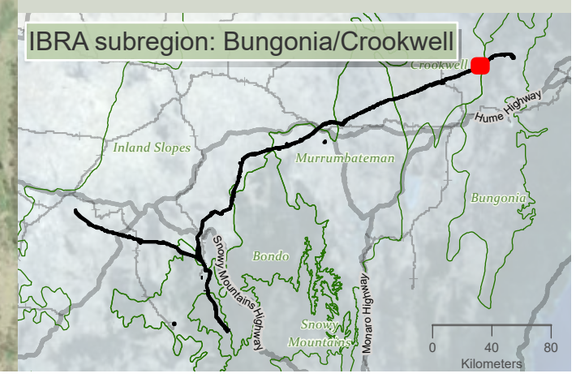
Impacts to native vegetation and threatened ecological communities

TECs

- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)

PCTs

- 0: Not Native
- 952: Mountain Gum - Narrow-leaved Peppermint - Snow Gum dry shrubby open forest on undulating tablelands, southern South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 400
m
N
WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 100

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211500 212000 212500 213000 213500 214000 214500 215000

6183500 6183000 6182500 6182000 6181500 6181000 6180500

1150 1097 1097 1097

Crookwell

Forest Creek

Hillcrest Road

Cow Horn Creek

Bungonia

Tarlo River National Park

HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access
- IBRA subregion

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- National Park

Impacts to native vegetation and threatened ecological communities

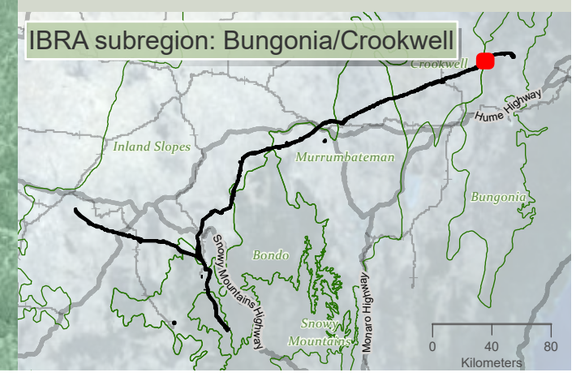
TECs

- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)

PCTs

- 0: Not Native
- 1097: Ribbon Gum - Narrow-leaved Peppermint grassy open forest on basalt plateaux, Sydney Basin Bioregion and South Eastern Highlands Bioregion
- 1150: Silvertop Ash - Blue-leaved Stringybark shrubby open forest on ridges, north east South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation

IBRA subregion: Bungonia/Crookwell



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 101

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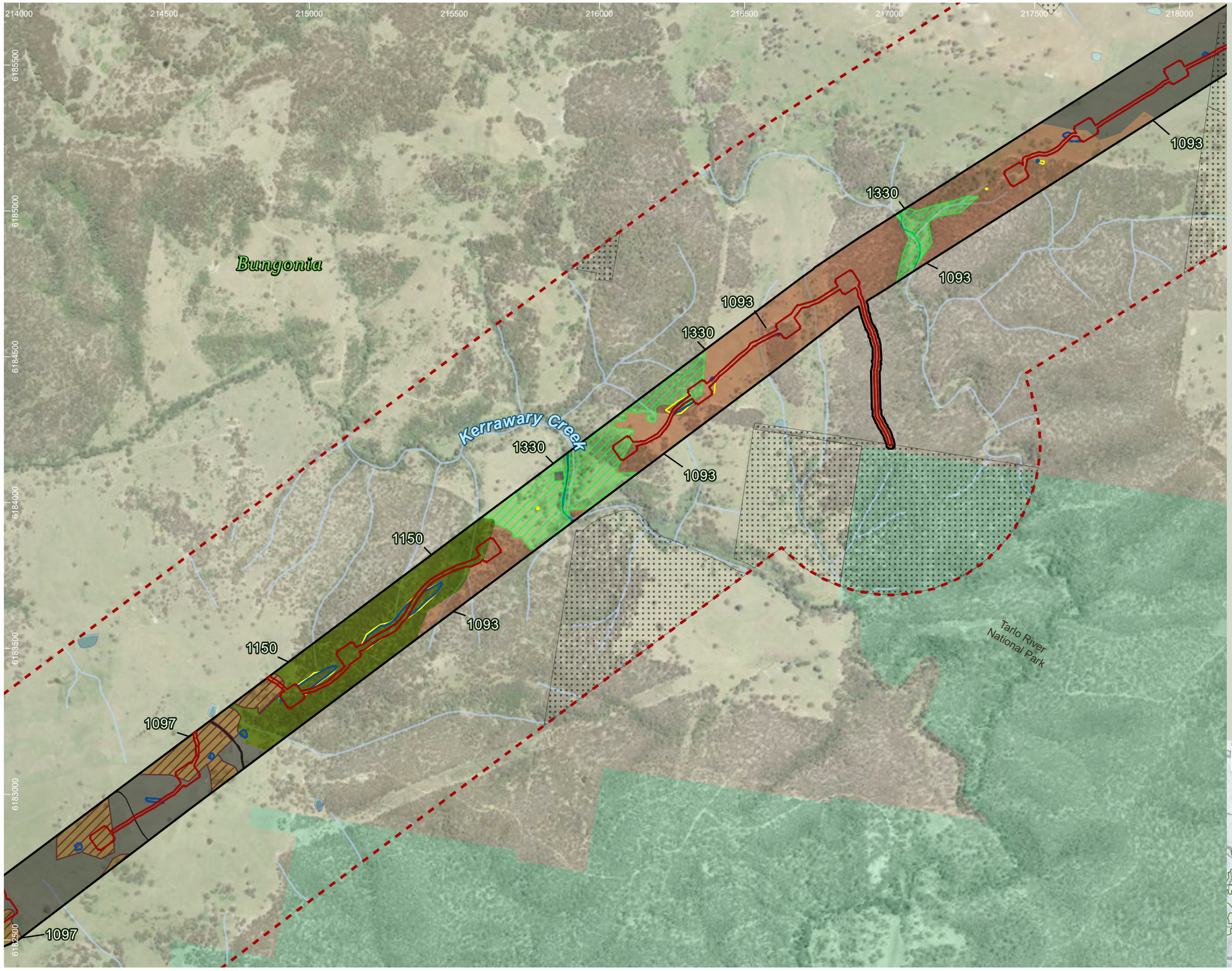


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- National Park

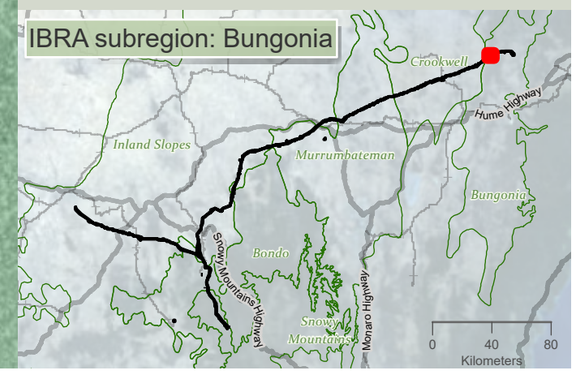
Impacts to native vegetation and threatened ecological communities

TECs

- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1097: Ribbon Gum - Narrow-leaved Peppermint grassy open forest on basalt plateaux, Sydney Basin Bioregion and South Eastern Highlands Bioregion
- 1150: Silvertop Ash - Blue-leaved Stringybark shrubby open forest on ridges, north east South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 102

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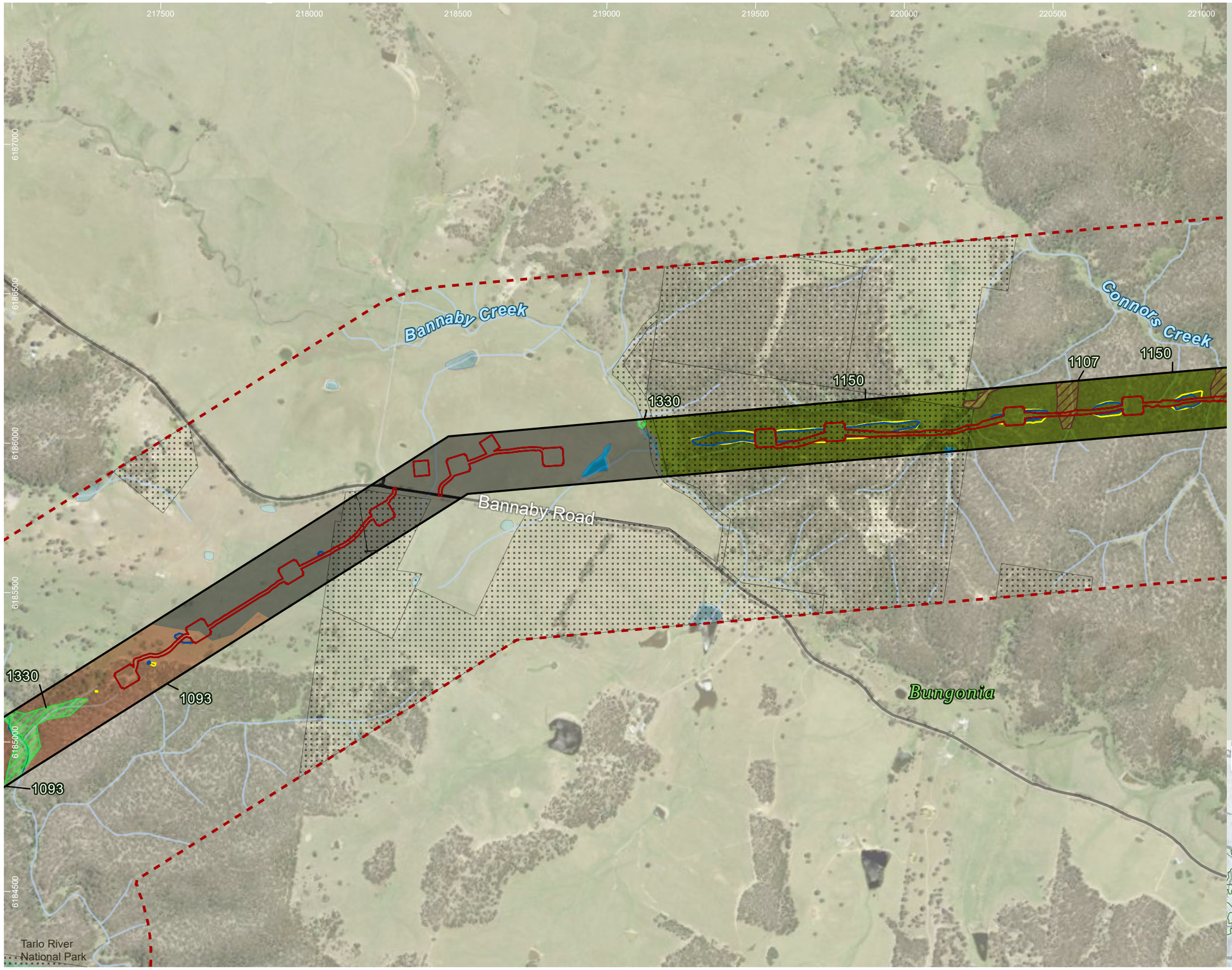
Drawn by: MatthewZajaczkowski | Last updated: 28/07/2023 | File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Protected Areas of NSW

NPWS Reserve

- National Park

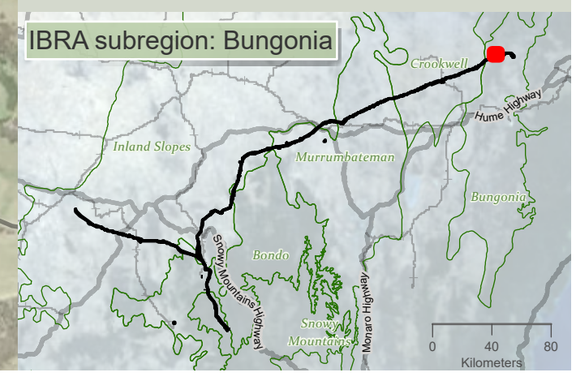
Impacts to native vegetation and threatened ecological communities

TECs

- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)

PCTs

- 0: Not Native
- 1093: Red Stringybark - Brittle Gum - Inland Scribbly Gum dry open forest of the tablelands, South Eastern Highlands Bioregion
- 1107: River Peppermint - Narrow-leaved Peppermint open forest on sheltered escarpment slopes, Sydney Basin Bioregion and South East Corner Bioregion
- 1150: Silvertop Ash - Blue-leaved Stringybark shrubby open forest on ridges, north east South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)



Drawn by: MathewZajaczkowski Last updated: 28/07/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 103

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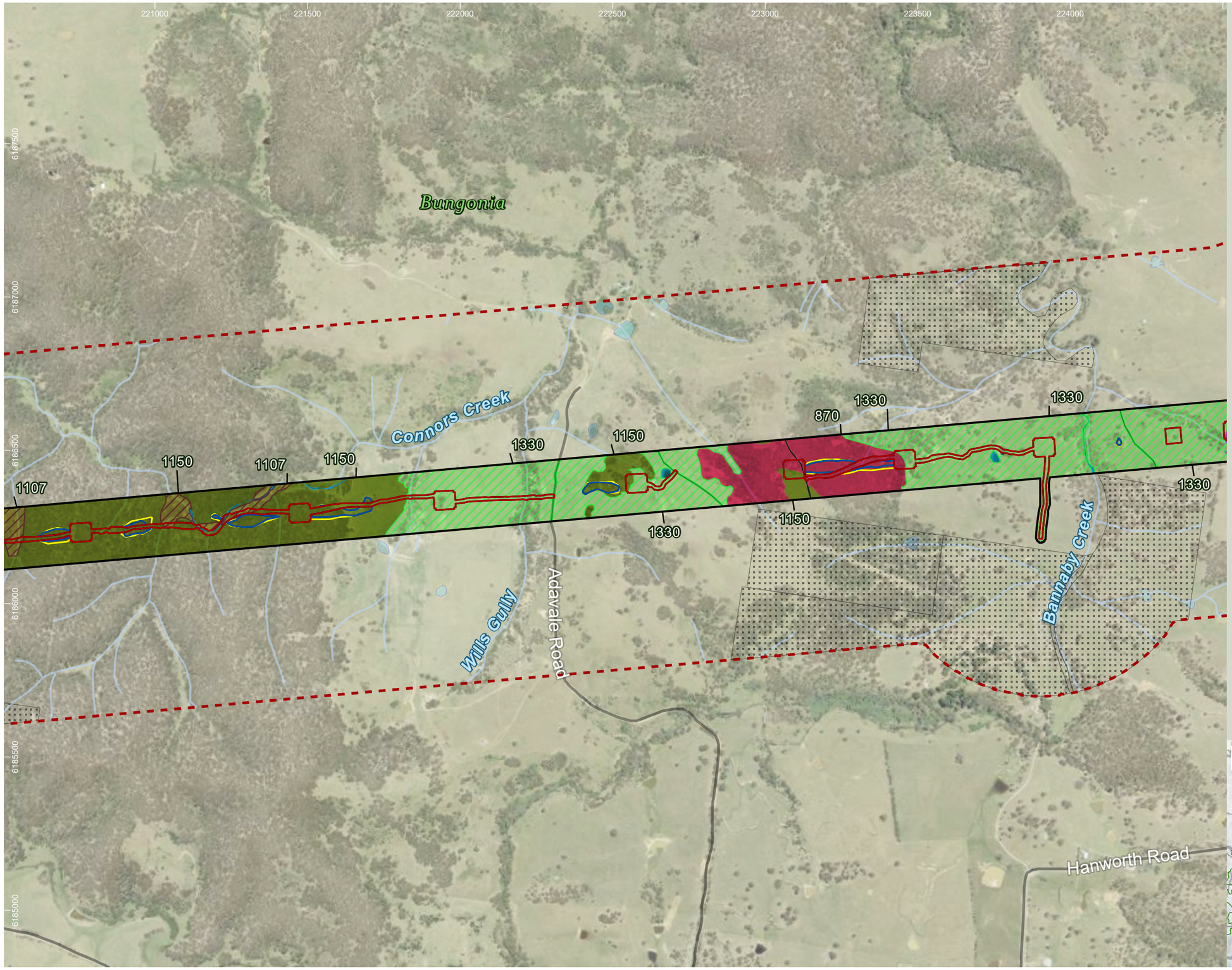


HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

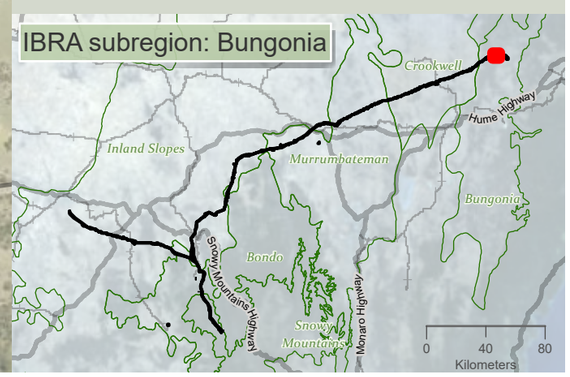
Impacts to native vegetation and threatened ecological communities

TECs

- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands (BC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)

PCTs

- 1107: River Peppermint - Narrow-leaved Peppermint open forest on sheltered escarpment slopes, Sydney Basin Bioregion and South East Corner Bioregion
- 1150: Silvertop Ash - Blue-leaved Stringybark shrubby open forest on ridges, north east South Eastern Highlands Bioregion
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 870: Grey Gum - Thin-leaved Stringybark grassy woodland of the southern Blue Mountains gorges, Sydney Basin Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 104

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Drawn by: MatthewZajaczkowski Last updated: 26/07/2023 File: C:\OneDriveSyncFolder\Niche\6999 - Confidential\impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

224500 225000 225500 226000 226500 227000 227500

6188000 6187500 6187000 6186500 6186000 6185500

Bungonia

Bannaby Creek

1330

1330

1330

1330

1330

Hanworth Road

HumeLink project areas

- Project footprint
- Landscape assessment area

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

Impacts to native vegetation and threatened ecological communities

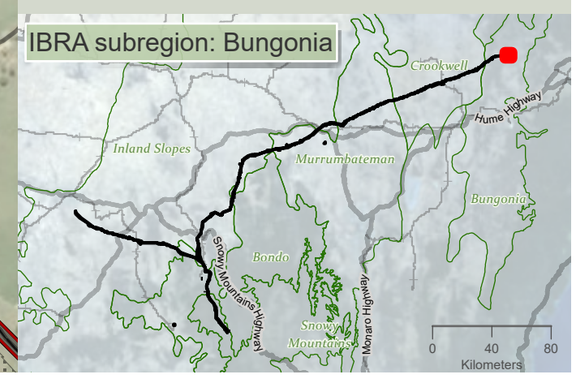
TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation

IBRA subregion: Bungonia



Drawn by: MatthewZajaczkowski; Last updated: 28/07/2023; File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part A.aprx

niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

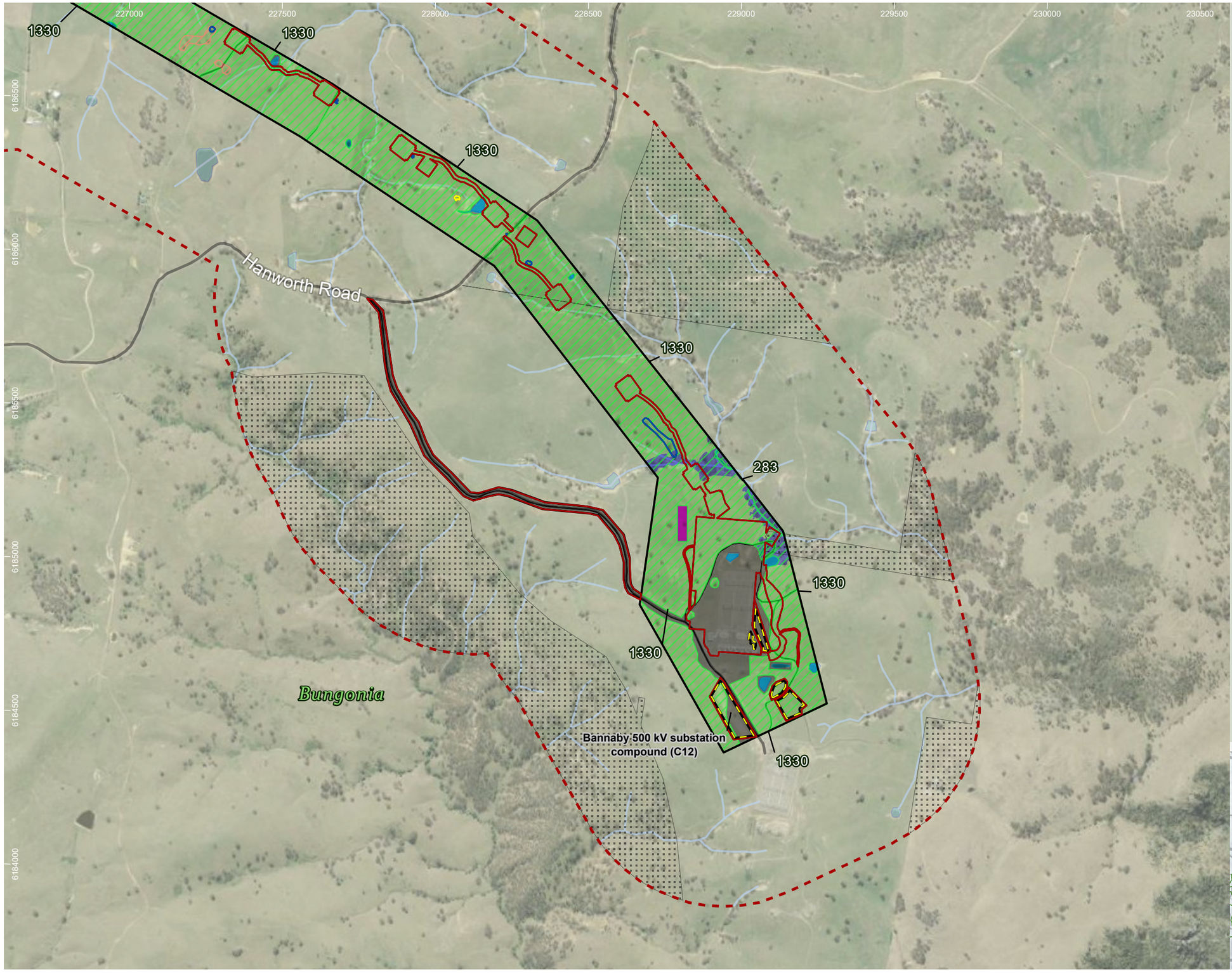
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 105

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone
- No land access

Hydrography

- Waterway
- Waterbody

Transport

Road

- Minor road

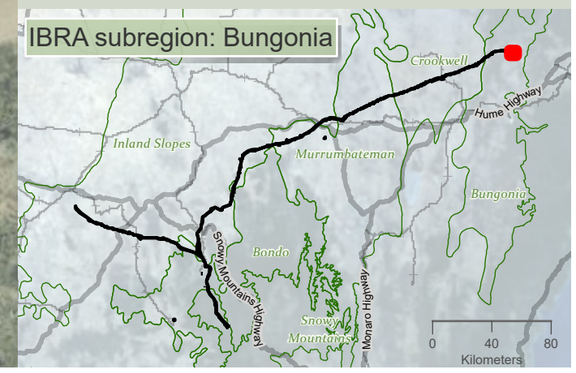
Impacts to native vegetation and threatened ecological communities

TECs

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act and EPBC Act)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (BC Act)

PCTs

- 0: Not Native
- 1330: Yellow Box - Blakelys Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion
- 283: Apple Box - Blakelys Red Gum moist valley and footslopes grass-forb open forest of the NSW South Western Slopes Bioregion
- 9996: Not Native (Road)
- 9997: Not Native (Waterbody)
- 9998: Planted Vegetation



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Impacts to native vegetation and threatened ecological communities

HumeLink BDAR

Figure 13-2 map reference 106

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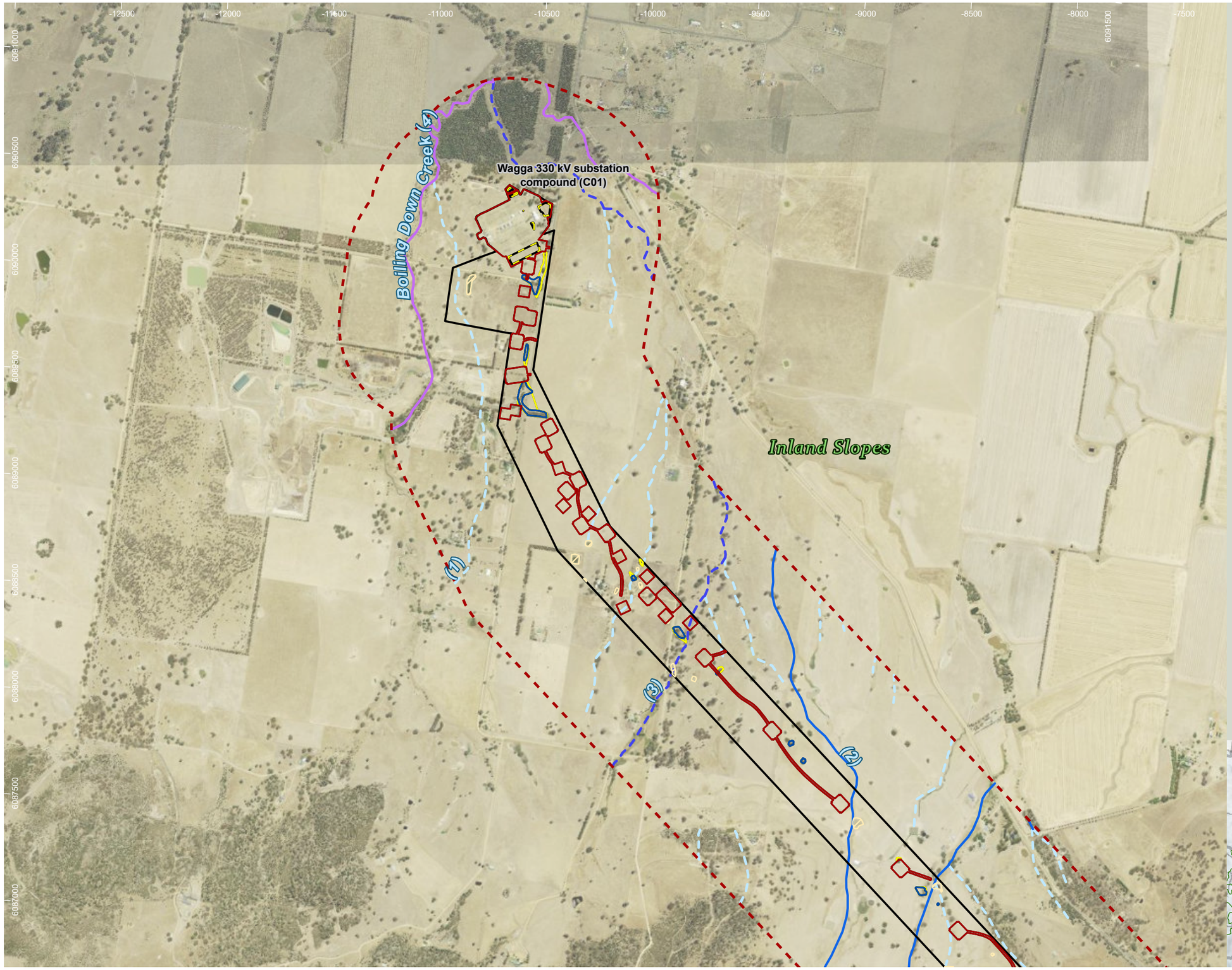


HumeLink project areas

- Project footprint
- Proposed construction compounds
- Landscape assessment area

Strahler stream order

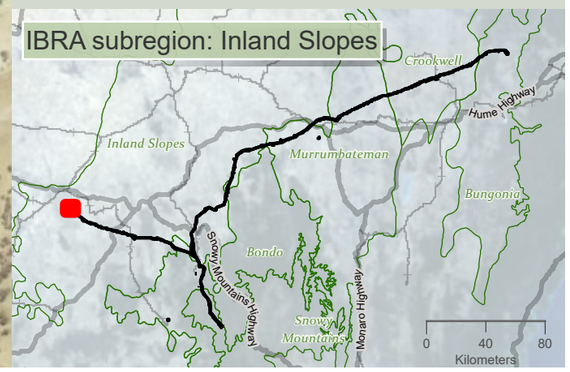
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 N 550
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 1

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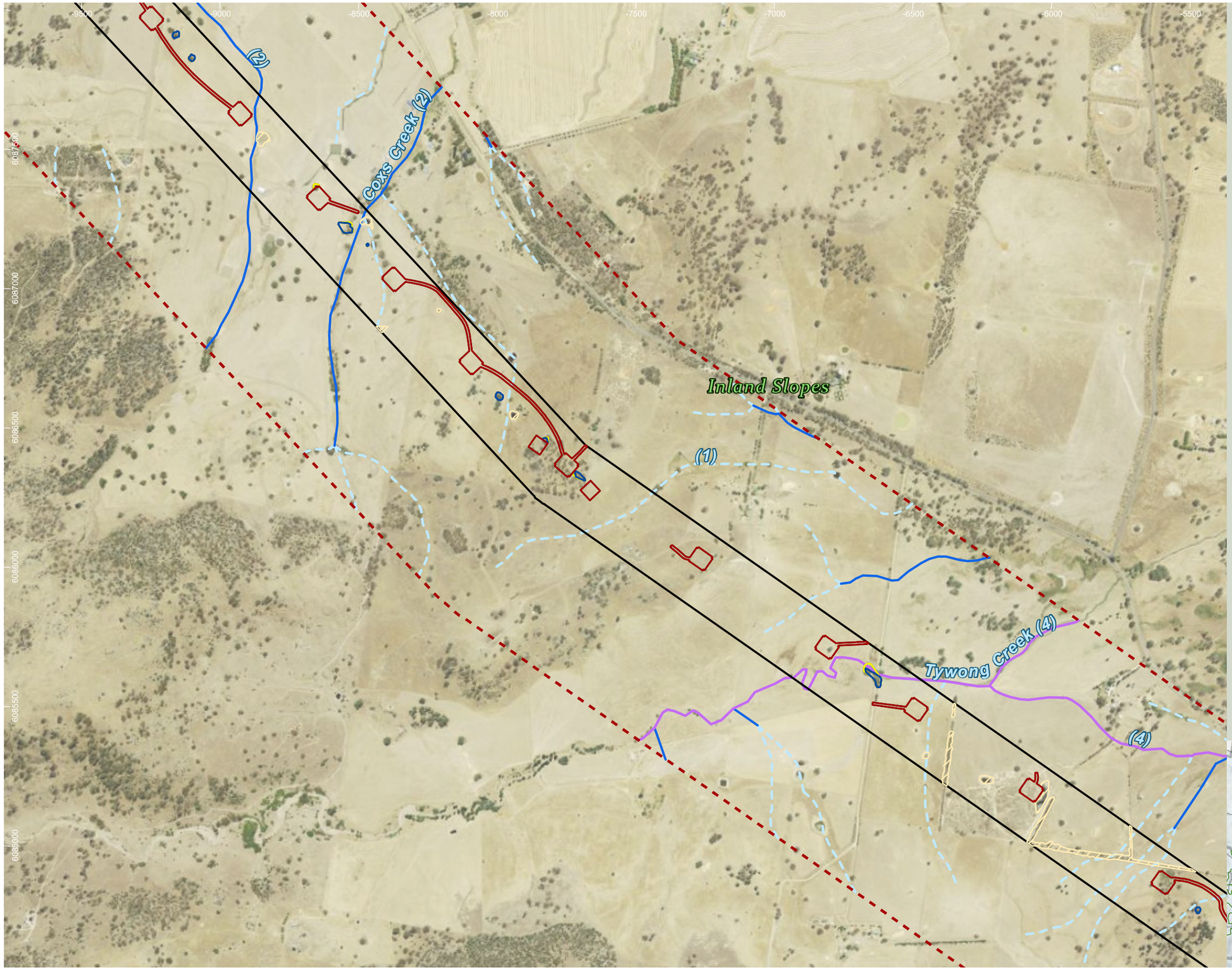


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

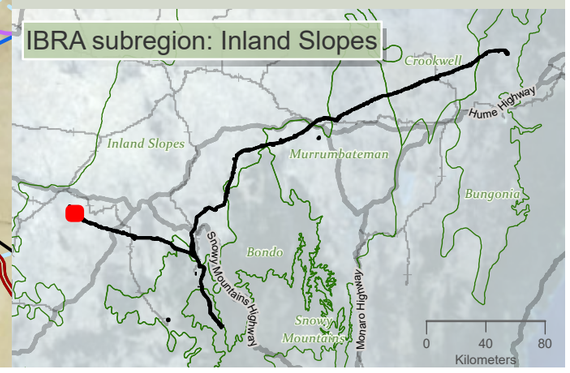
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 2

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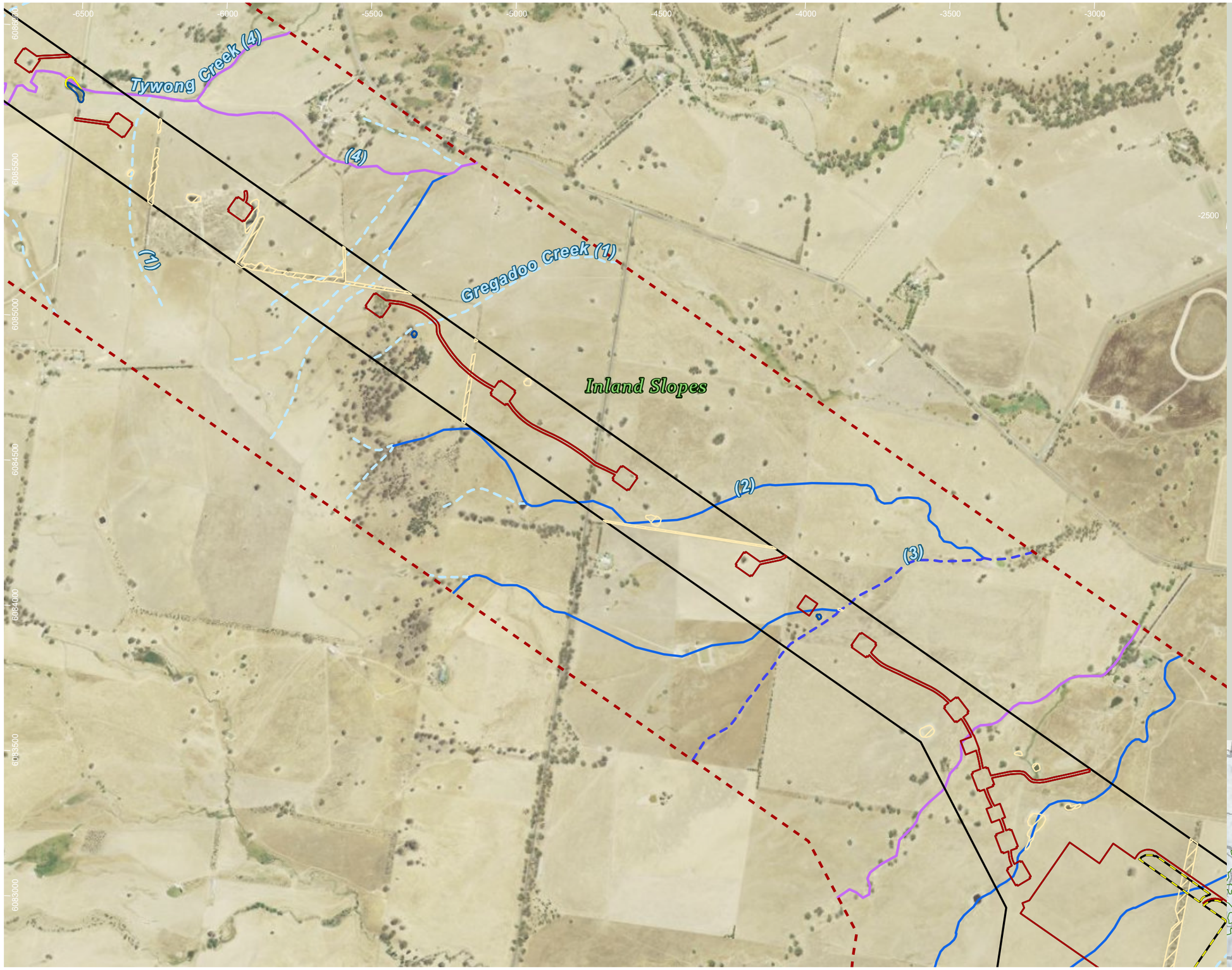
Drawn by: MathewZajeczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Proposed construction compounds
- Landscape assessment area

Strahler stream order

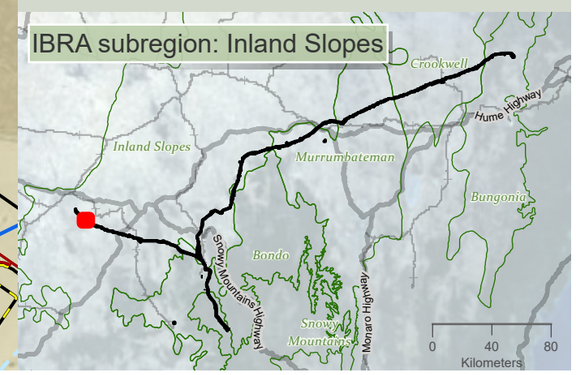
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 3

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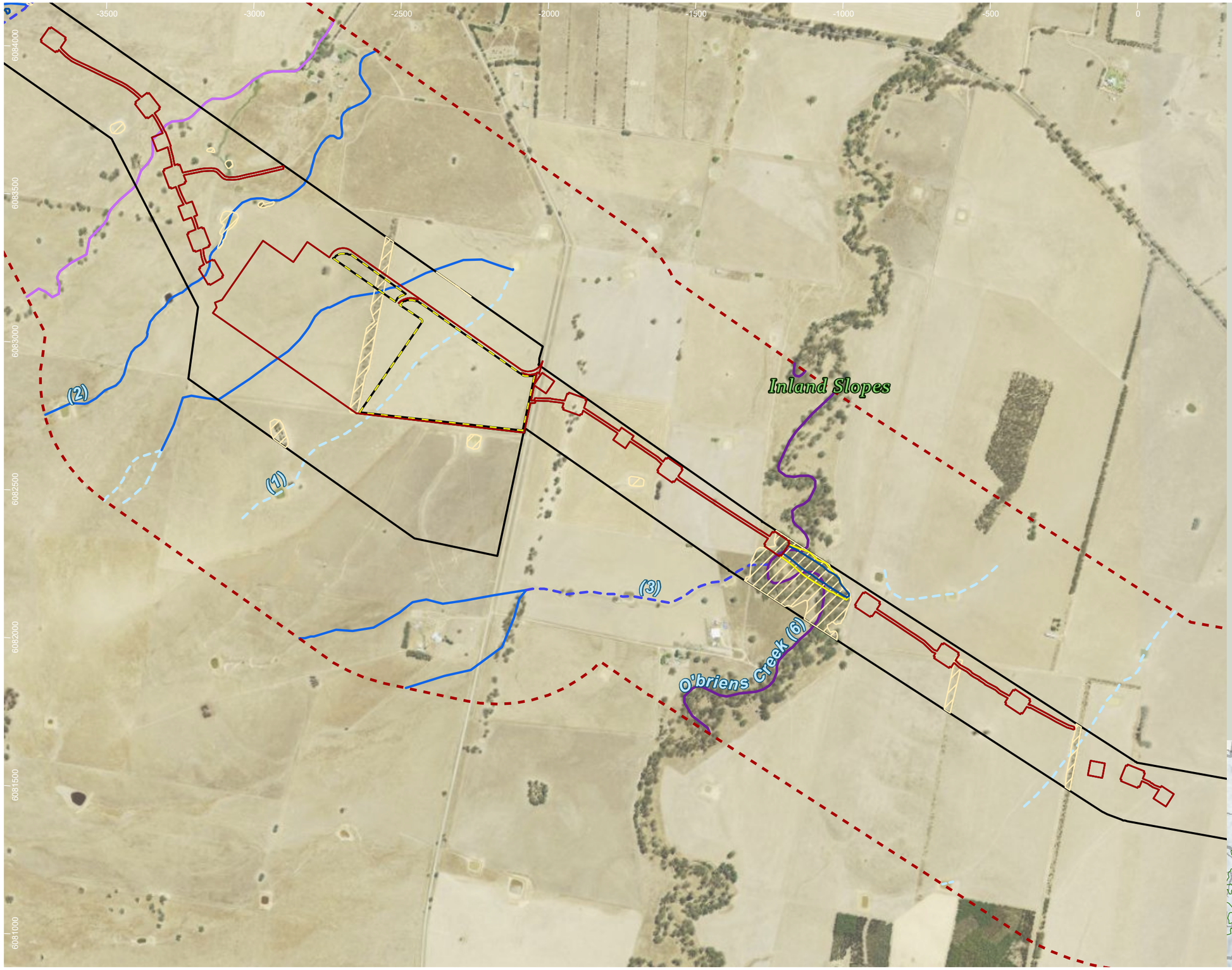


HumeLink project areas

- Project footprint
- Proposed construction compounds
- Landscape assessment area

Strahler stream order

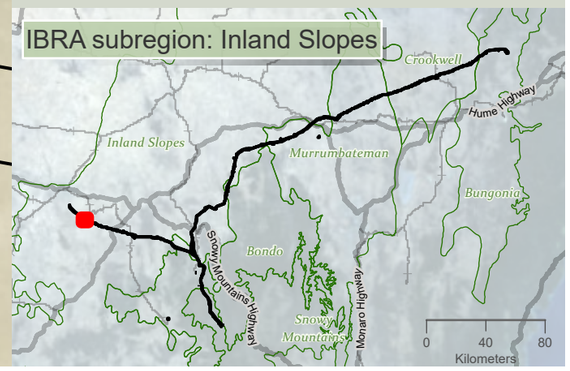
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 4

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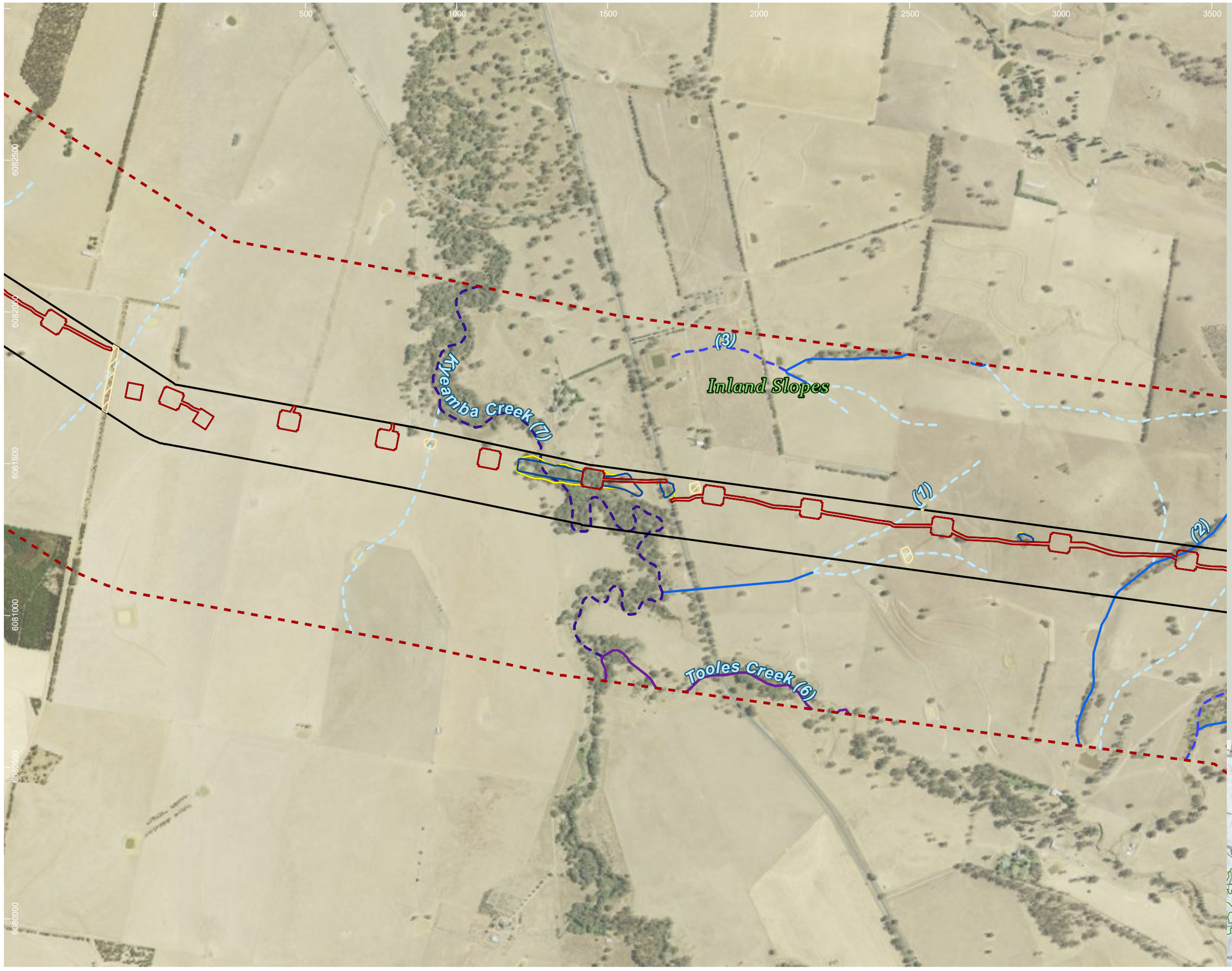


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

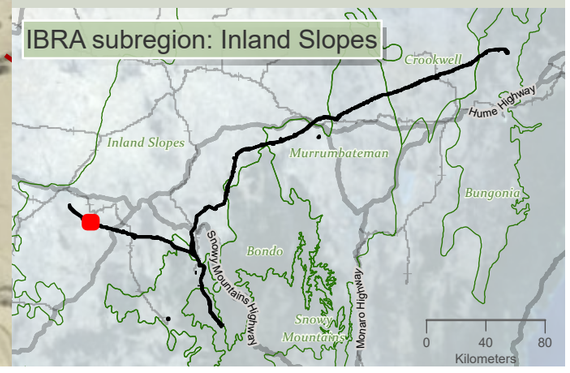
- 1
- 2
- 3
- 6
- 7

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 5

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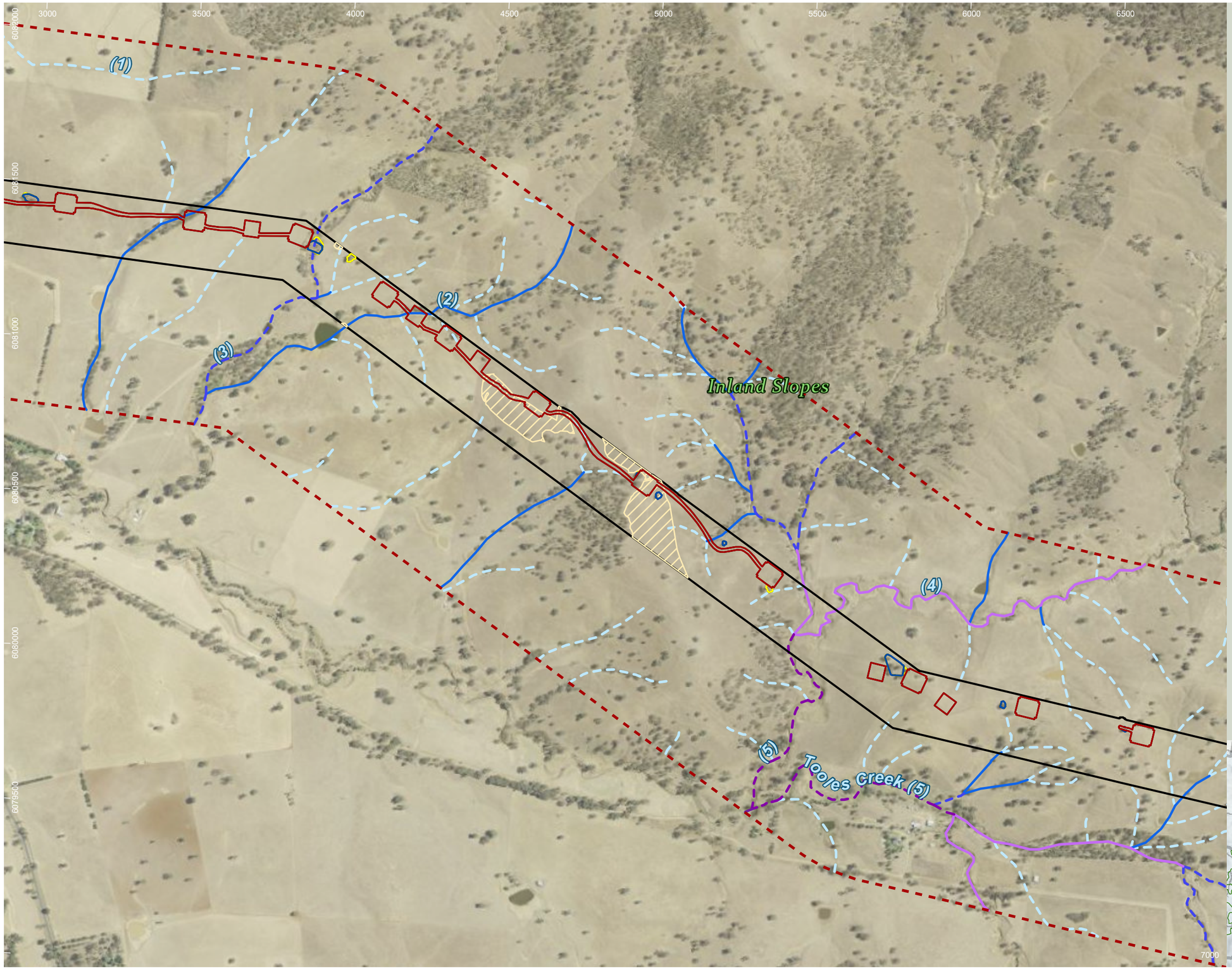


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

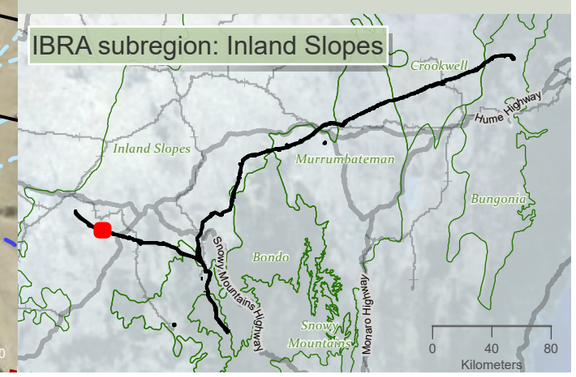
- 1
- 2
- 3
- 4
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 6

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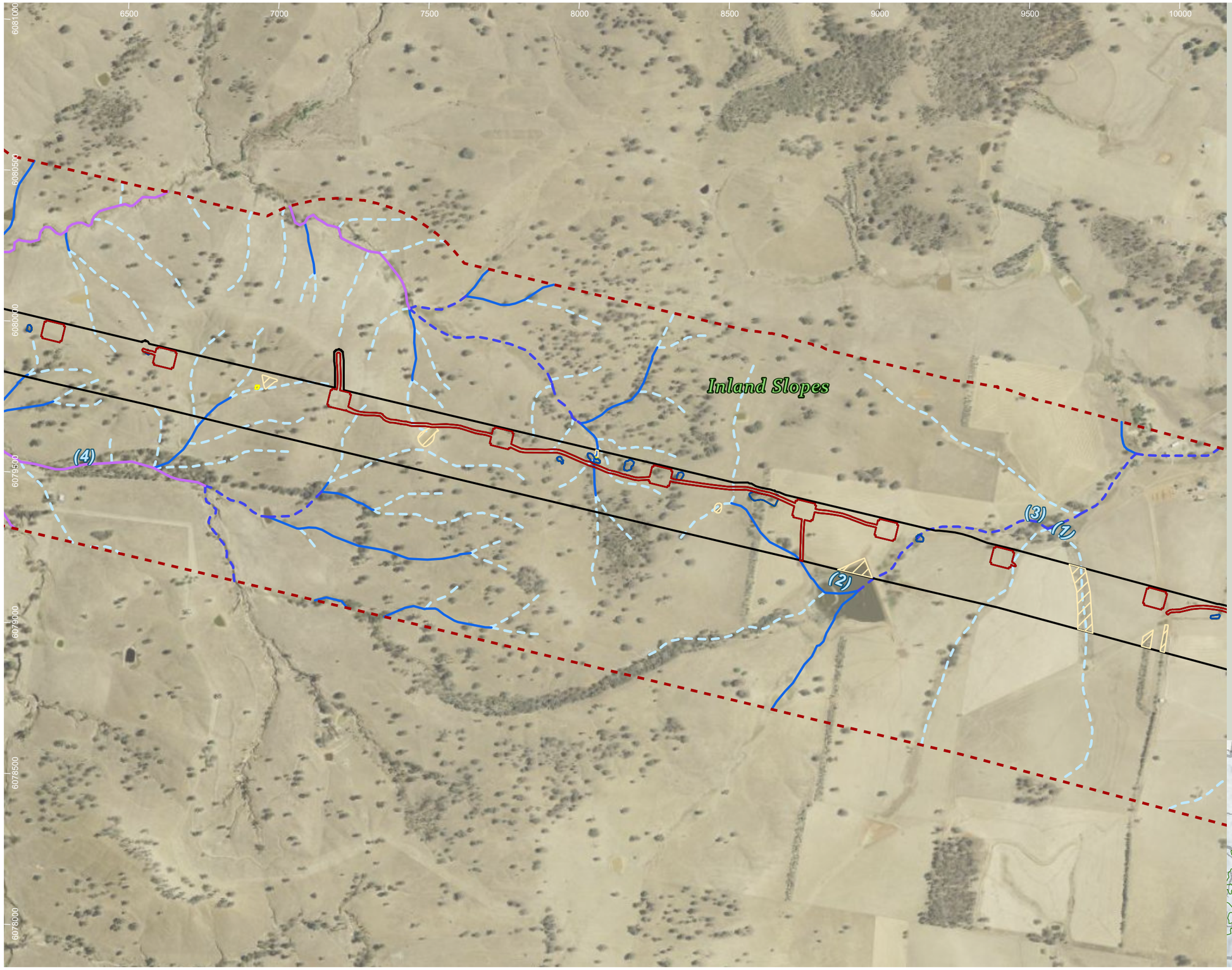


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

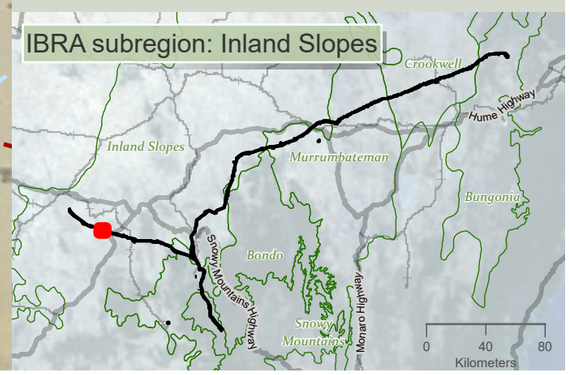
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 7

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10000 10500 11000 11500 6080500 12000 12500 13000 13500

6080000 6079500 6079000 6078500 6078000 6077500

(3) (1) (4) (2)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

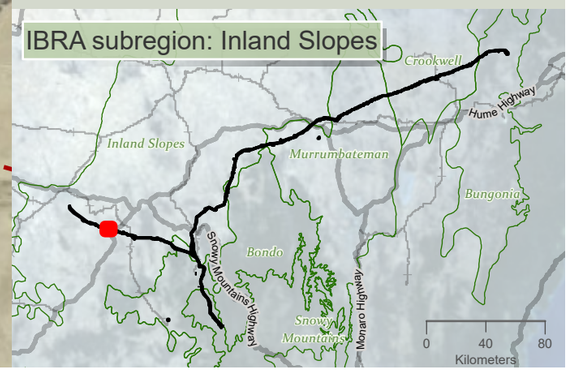
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 8

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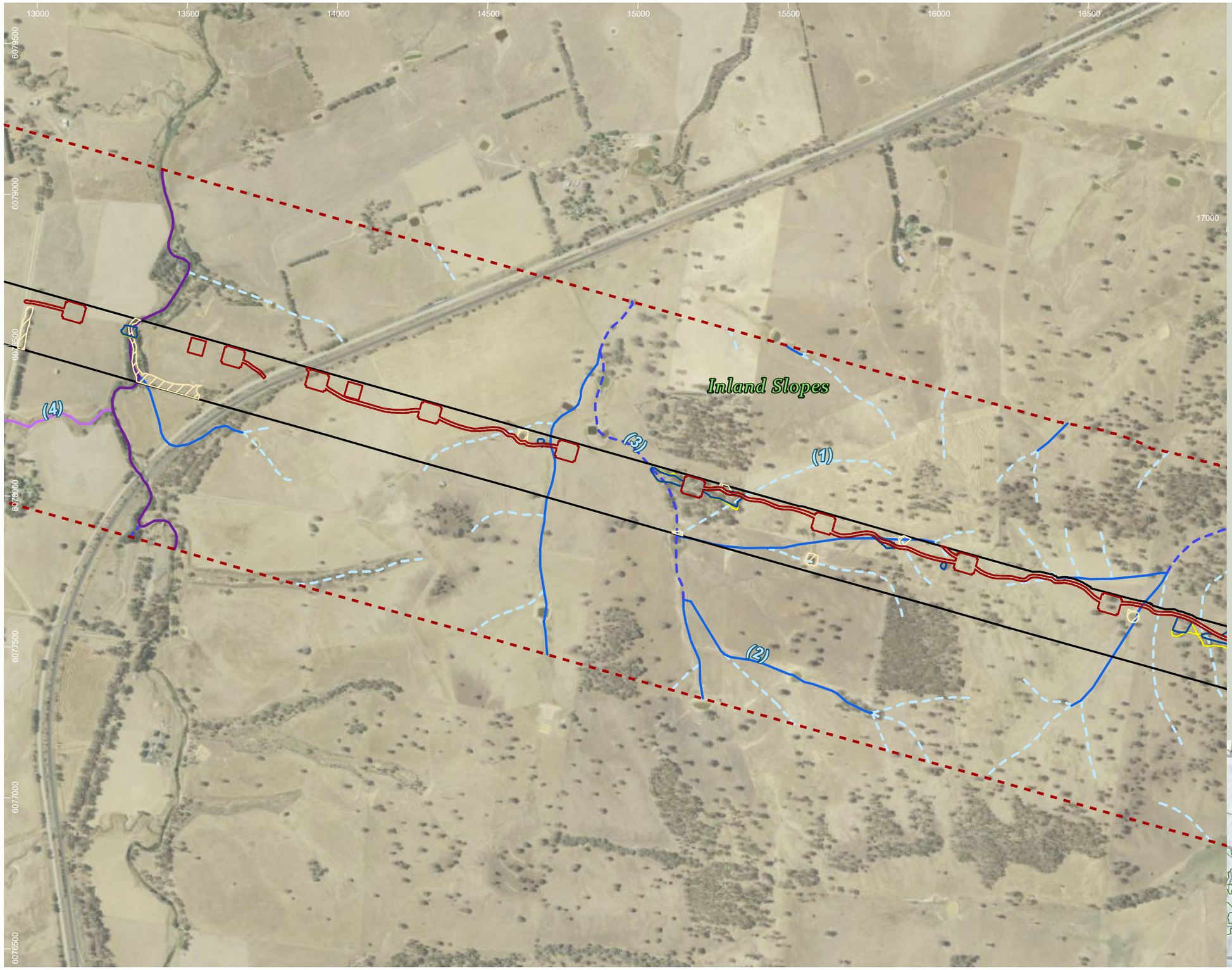


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

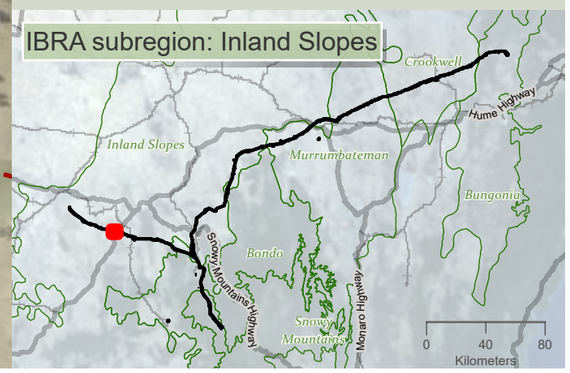
- 0
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 9

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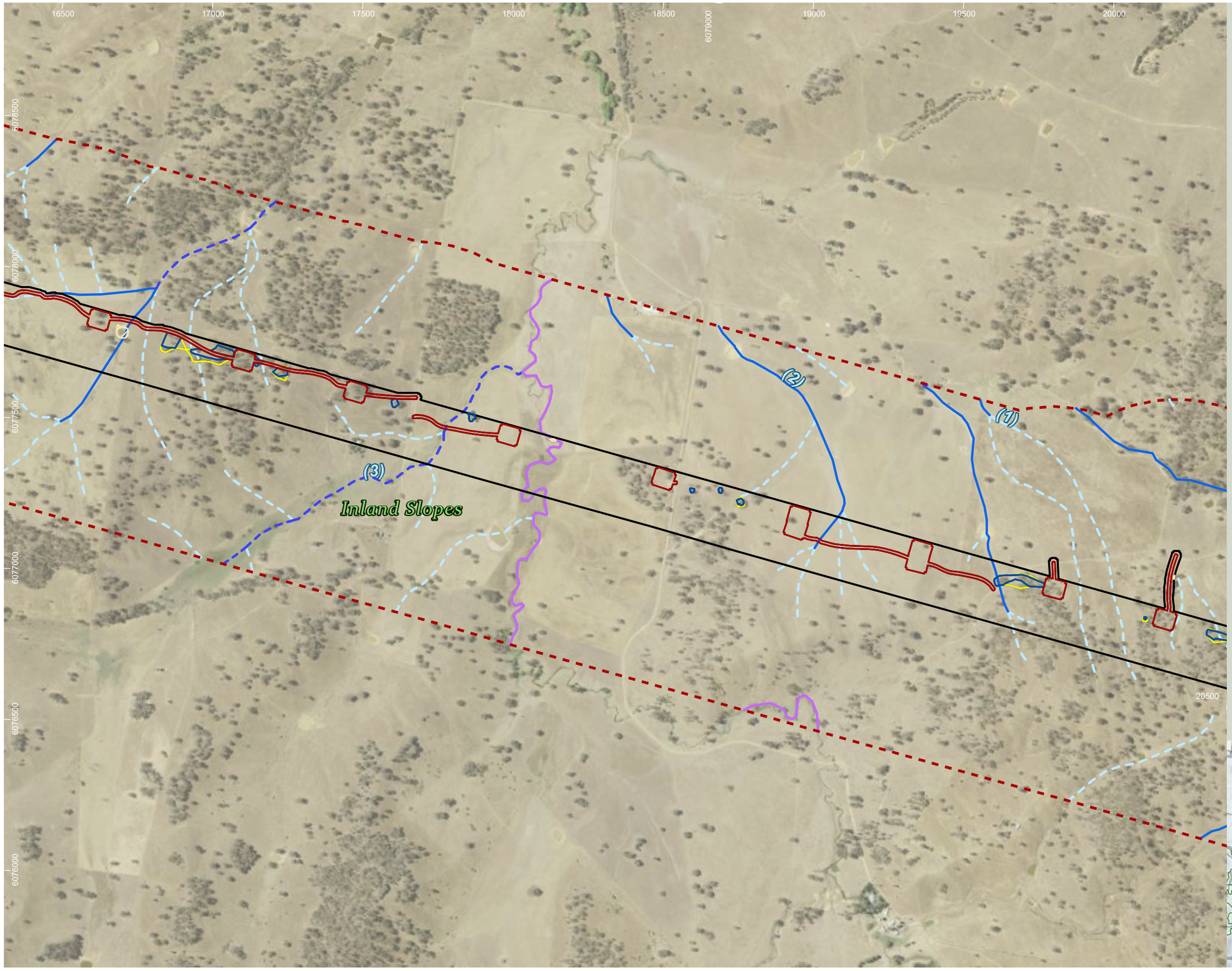


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

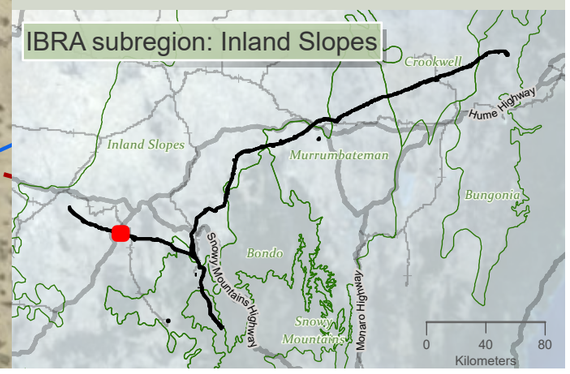
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 10

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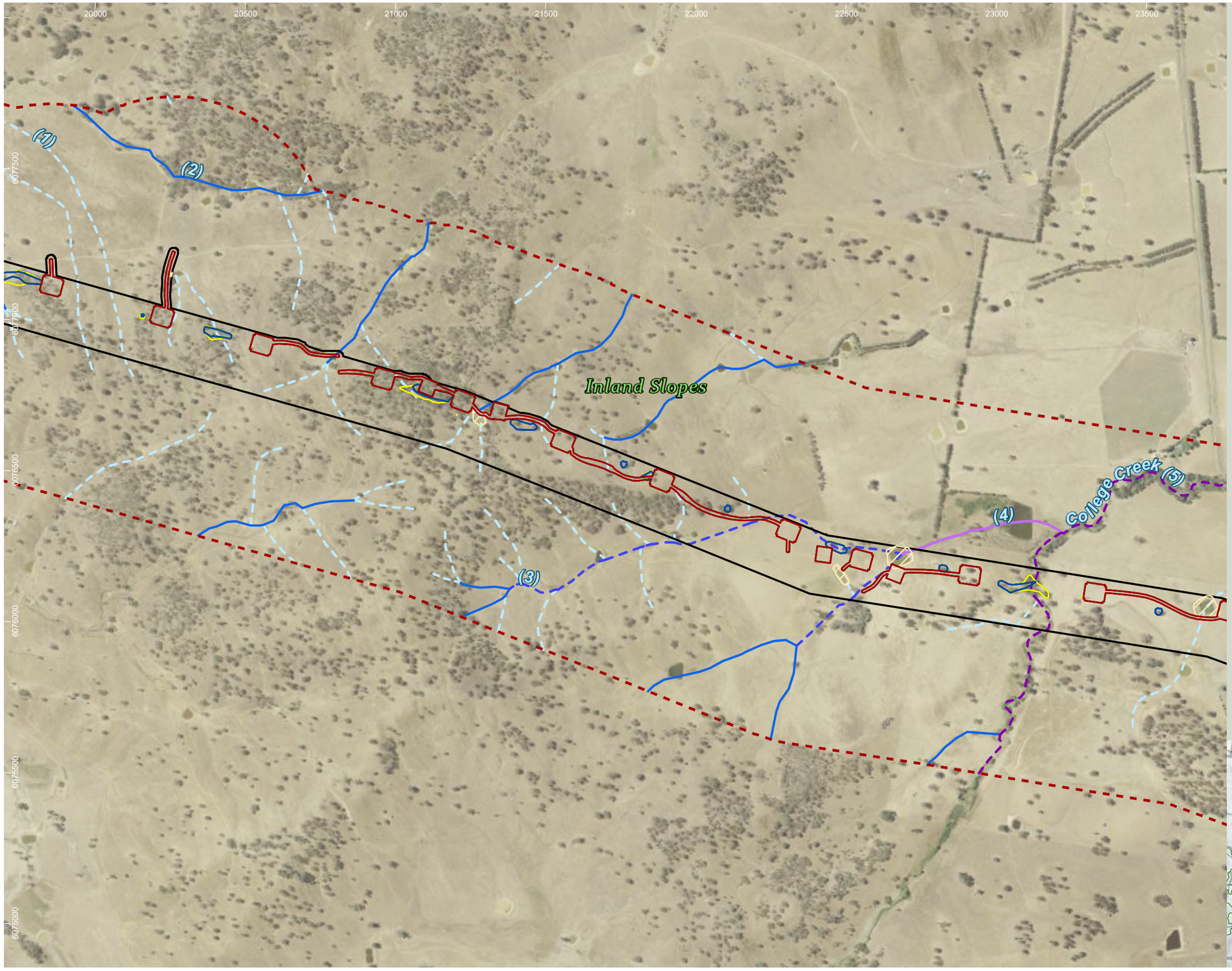


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

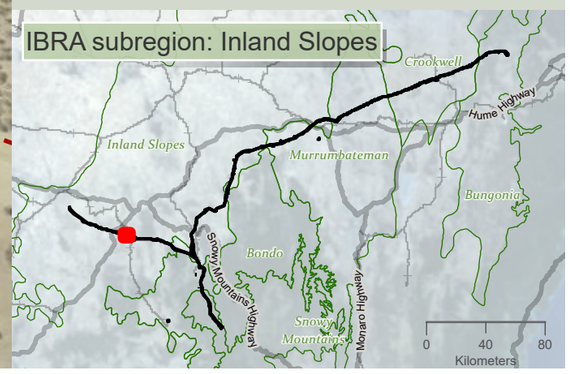
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 11

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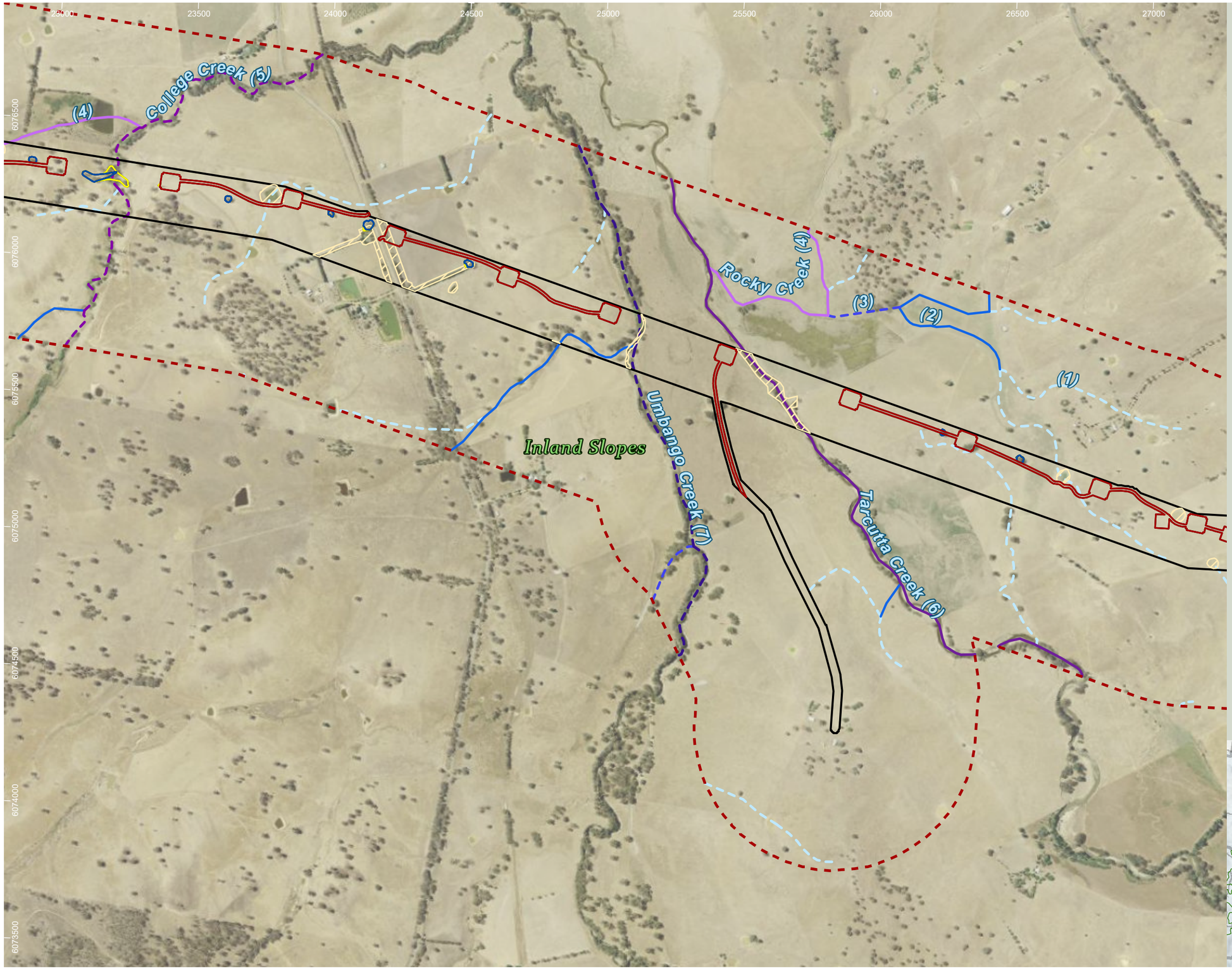


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

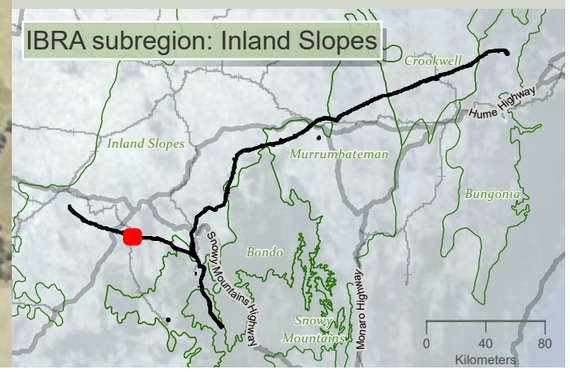
- 1
- 2
- 3
- 4
- 5
- 6
- 7

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 12

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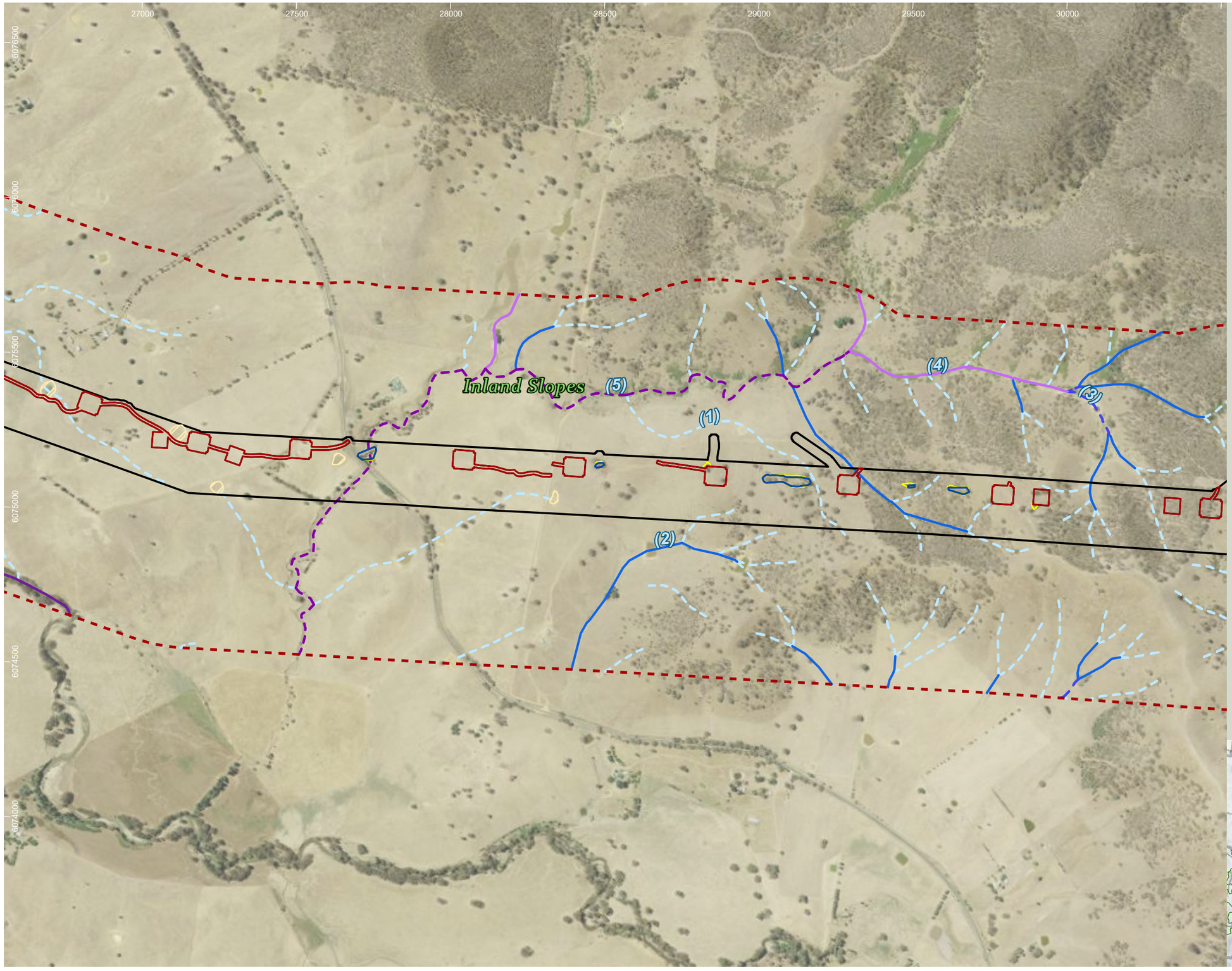


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

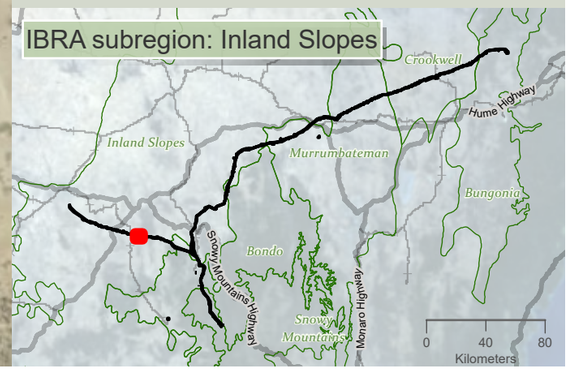
- 1
- 2
- 3
- 4
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 13

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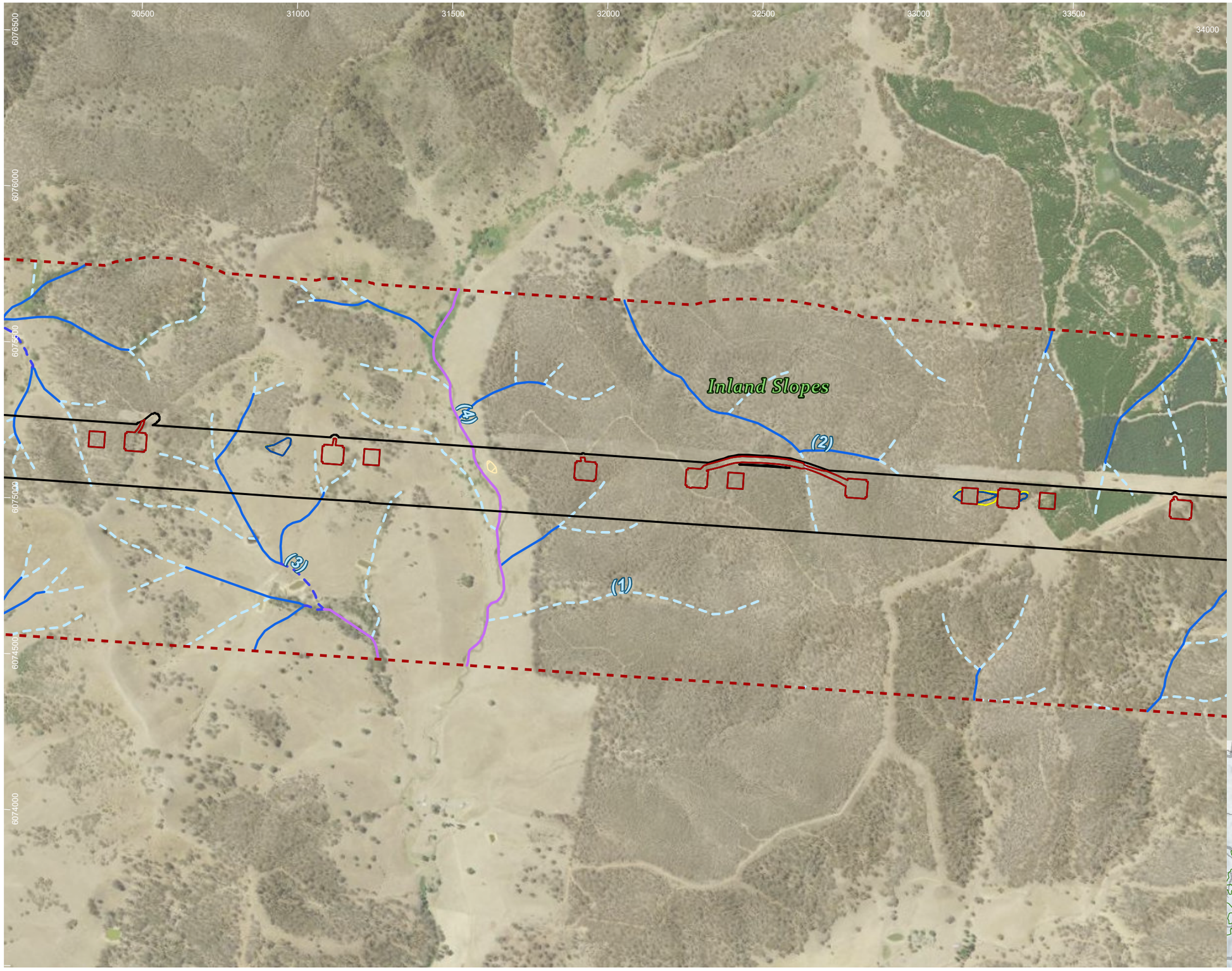


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

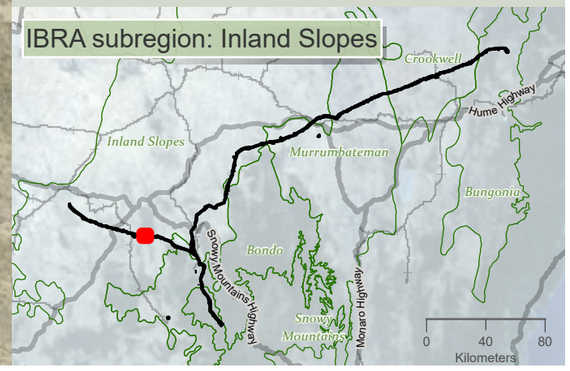
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



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niche Environment and Heritage

0 N 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 14

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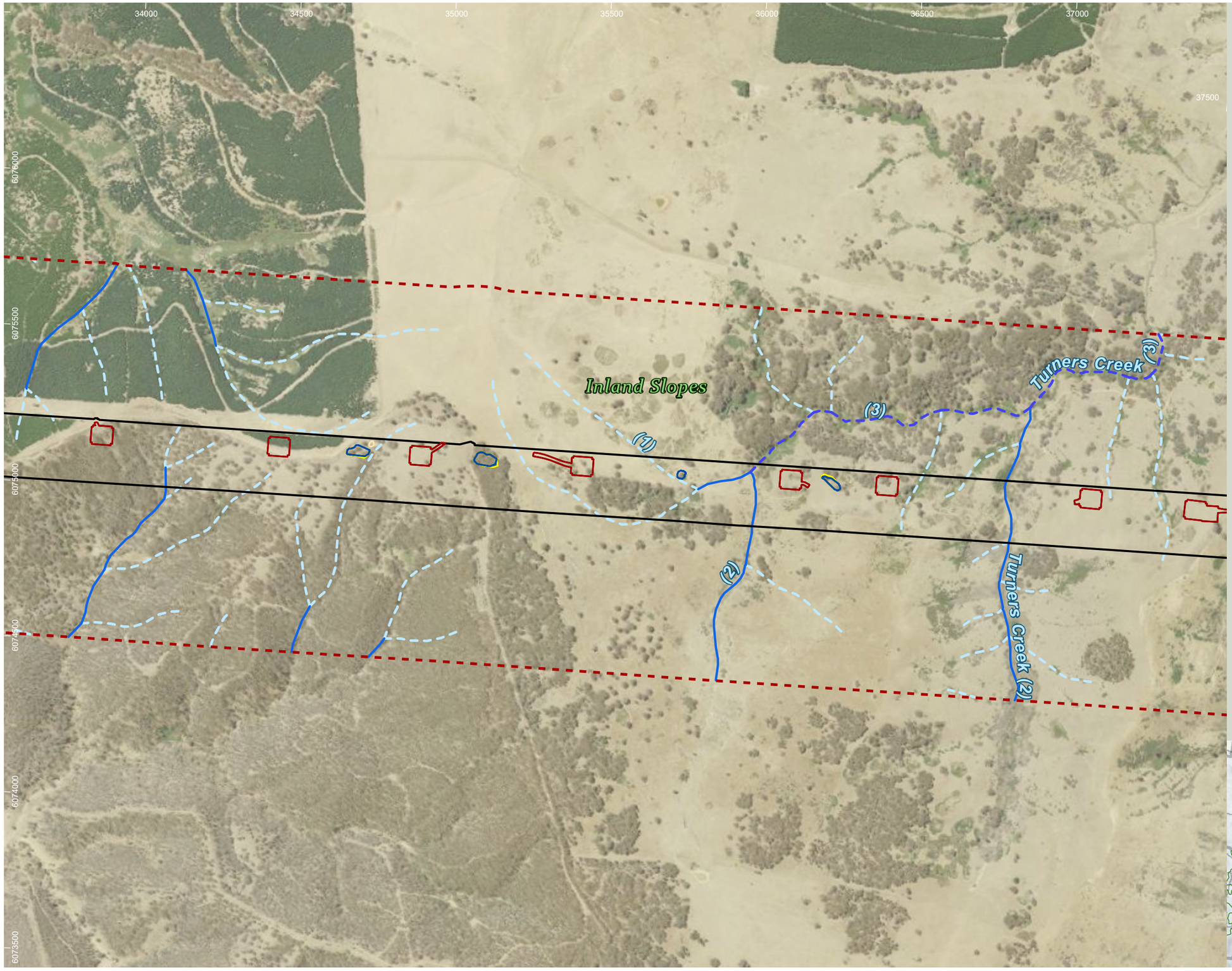


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

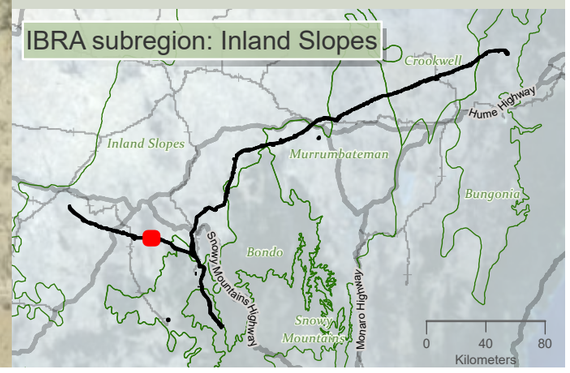
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 15

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37500
38000
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39000
39500
40000
40500
6075000
6074500
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6073500

(1)
(2)
(3)
Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

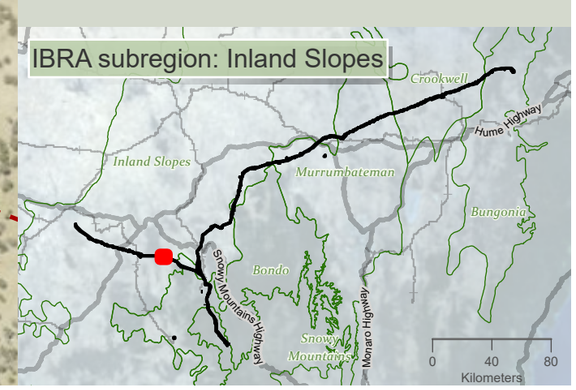
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei
- Litoria booroolongensis



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 16

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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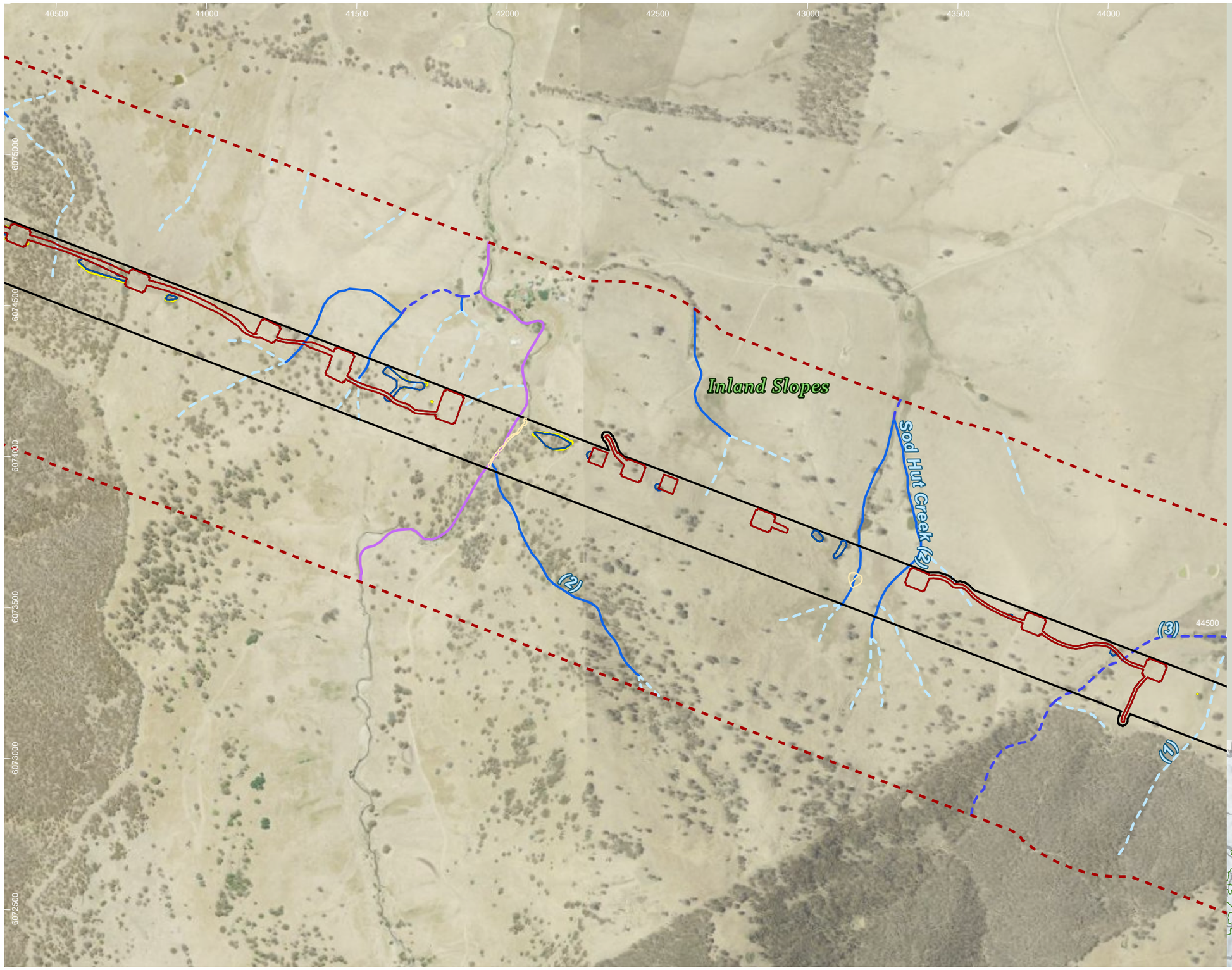


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

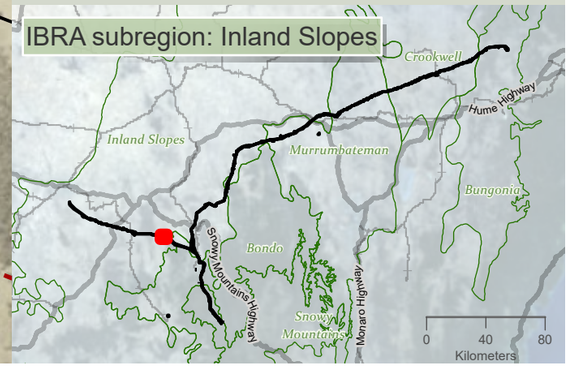
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 17

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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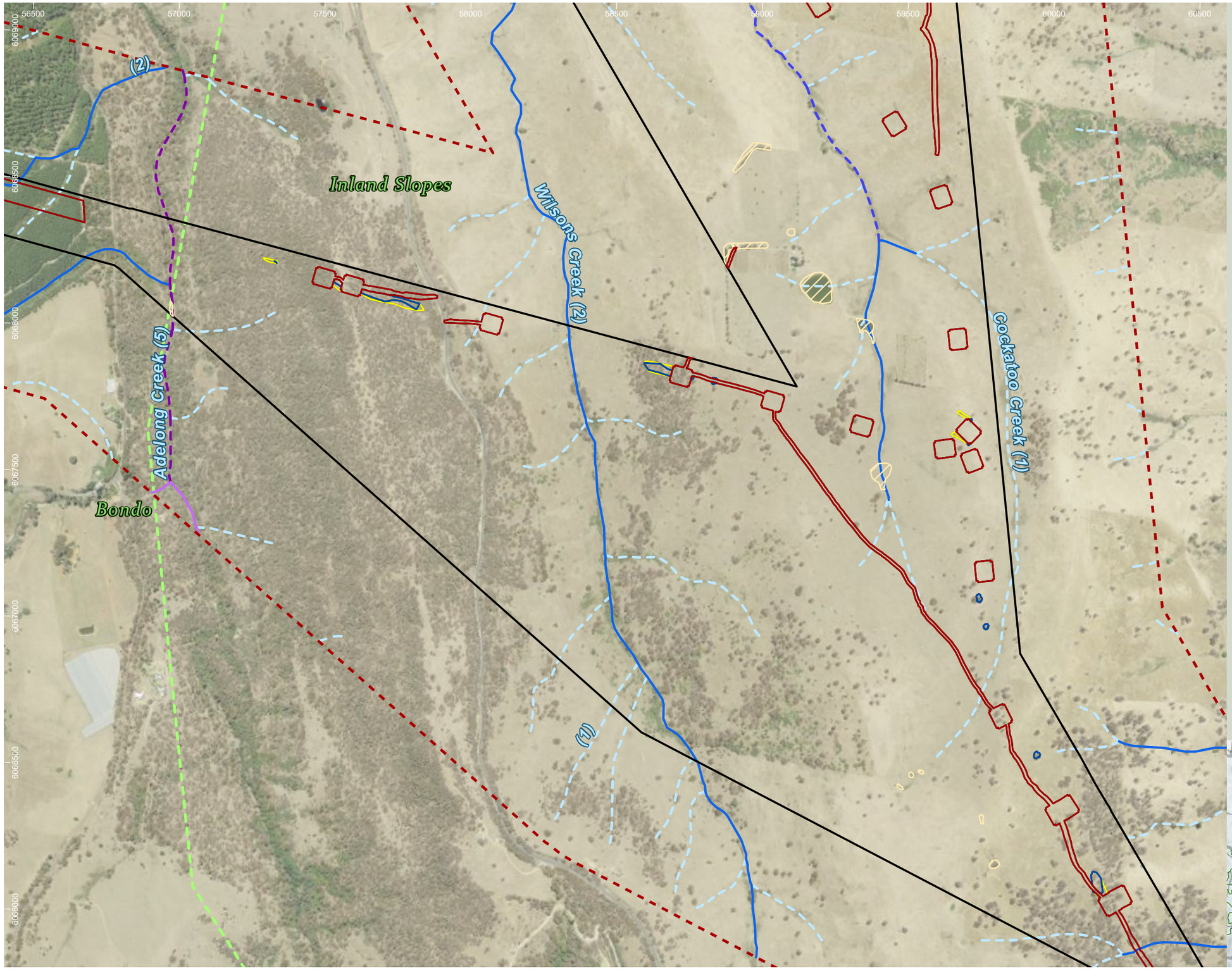


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

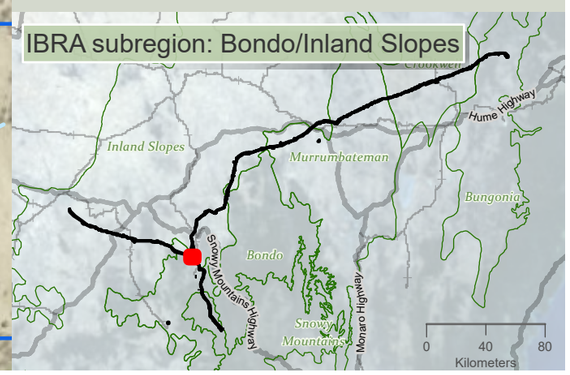
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 22

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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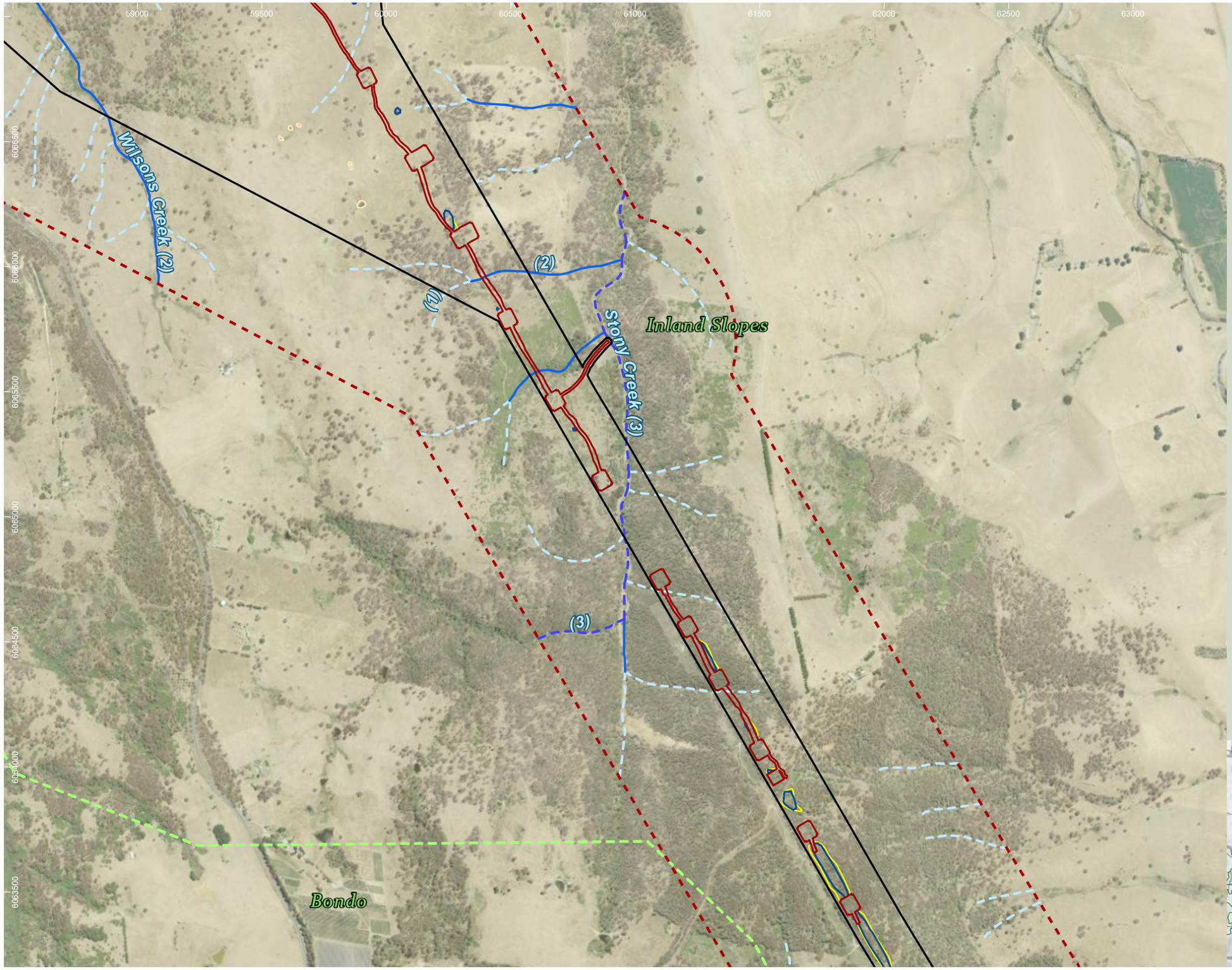


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

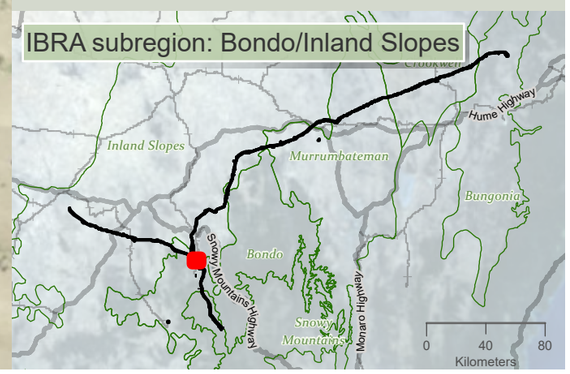
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 23

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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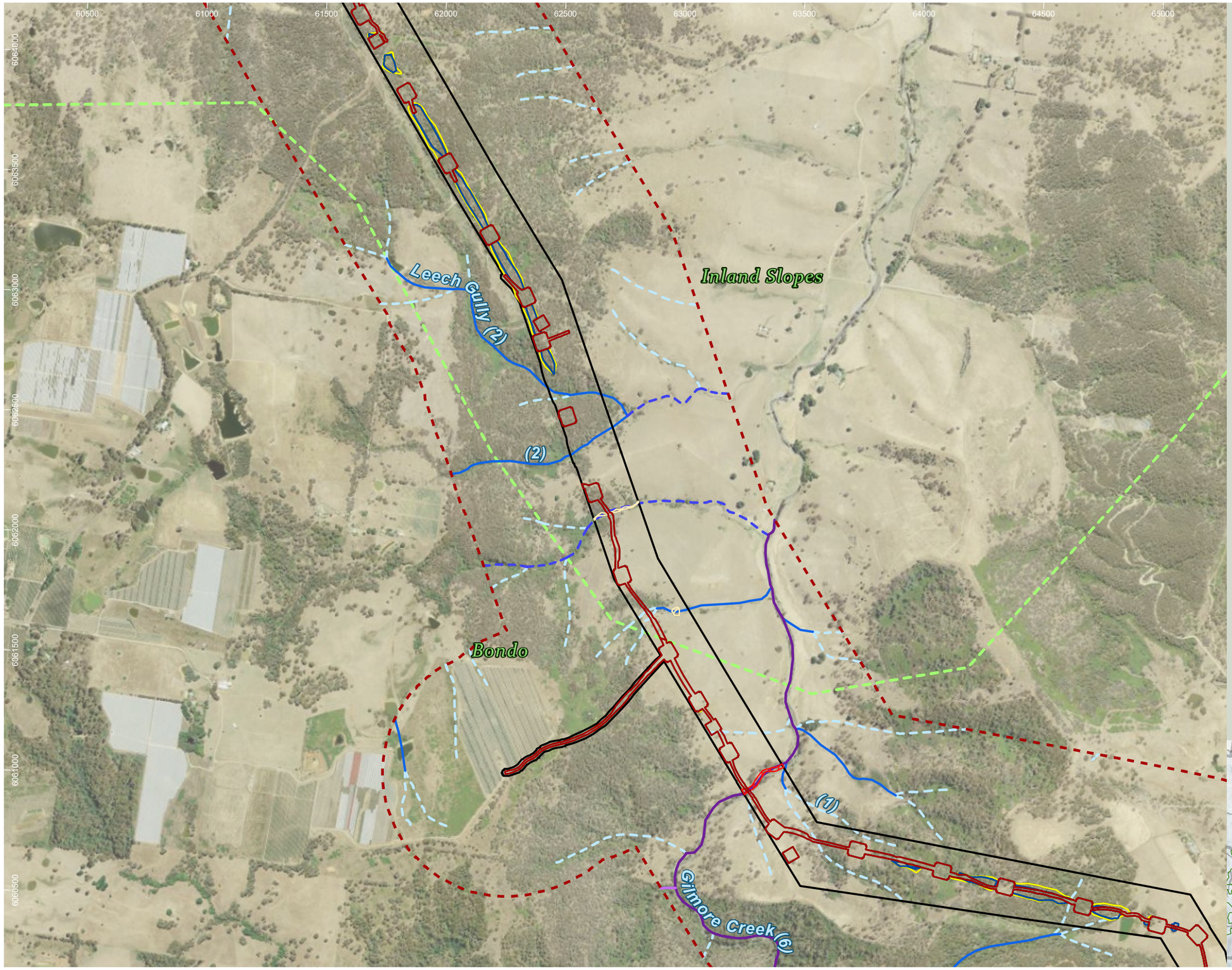


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

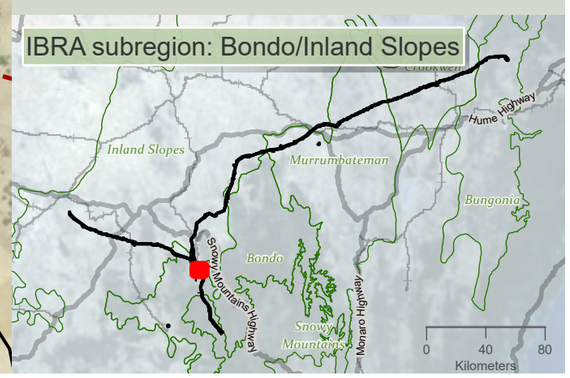
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei
- Litoria booroolongensis



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 24

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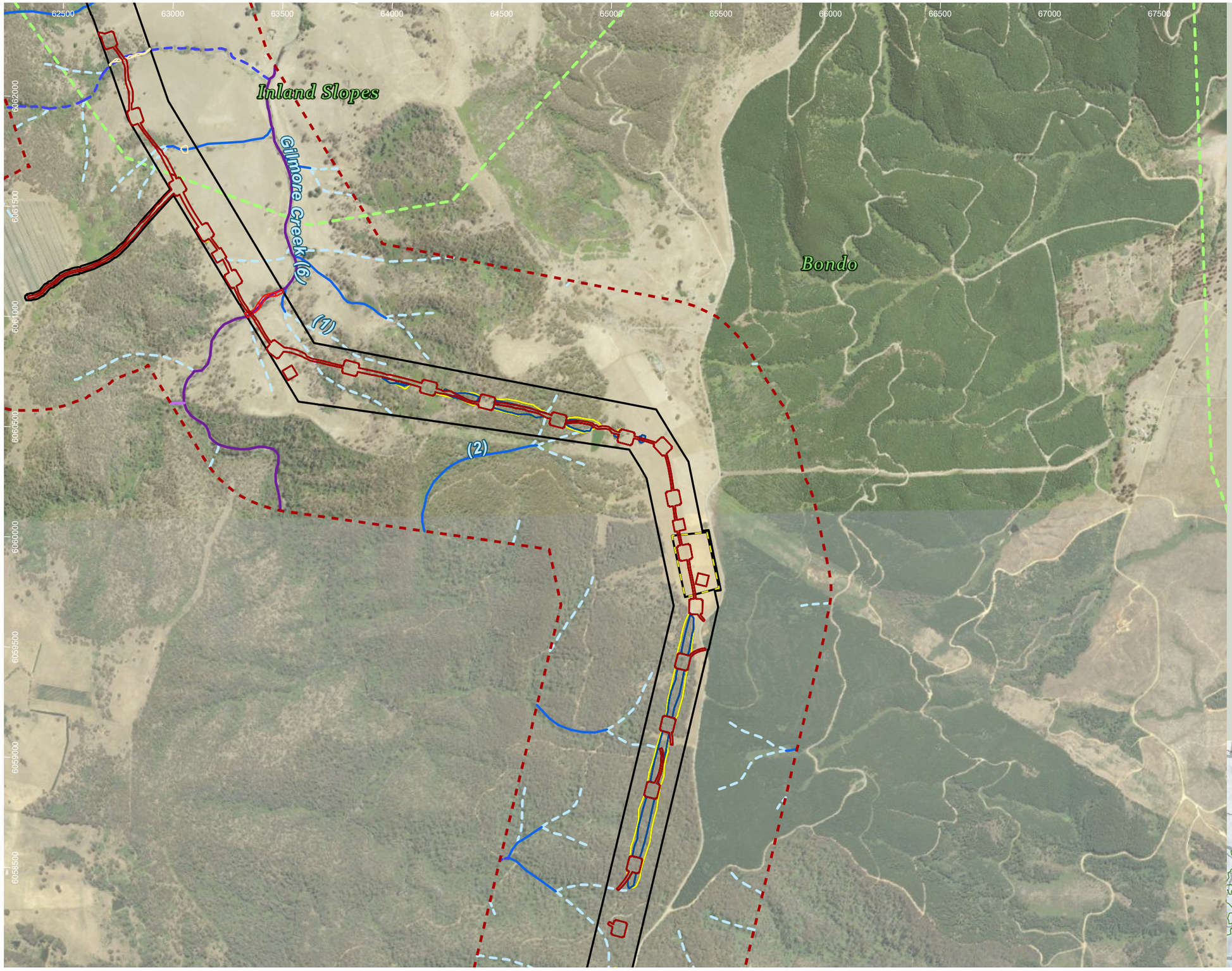


HumeLink project areas

- Project footprint
- Proposed construction compounds
- Landscape assessment area
- IBRA subregion

Strahler stream order

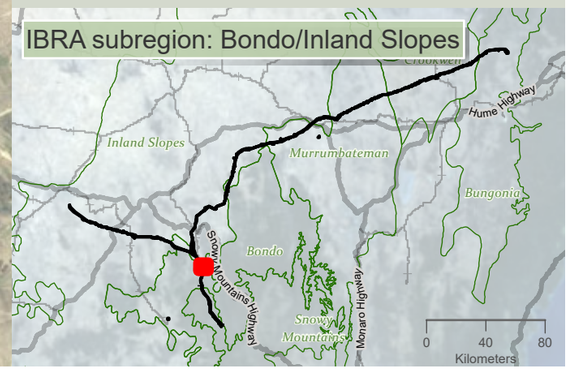
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei
- Litoria booroolongensis



niche Environment and Heritage

0 N 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 25

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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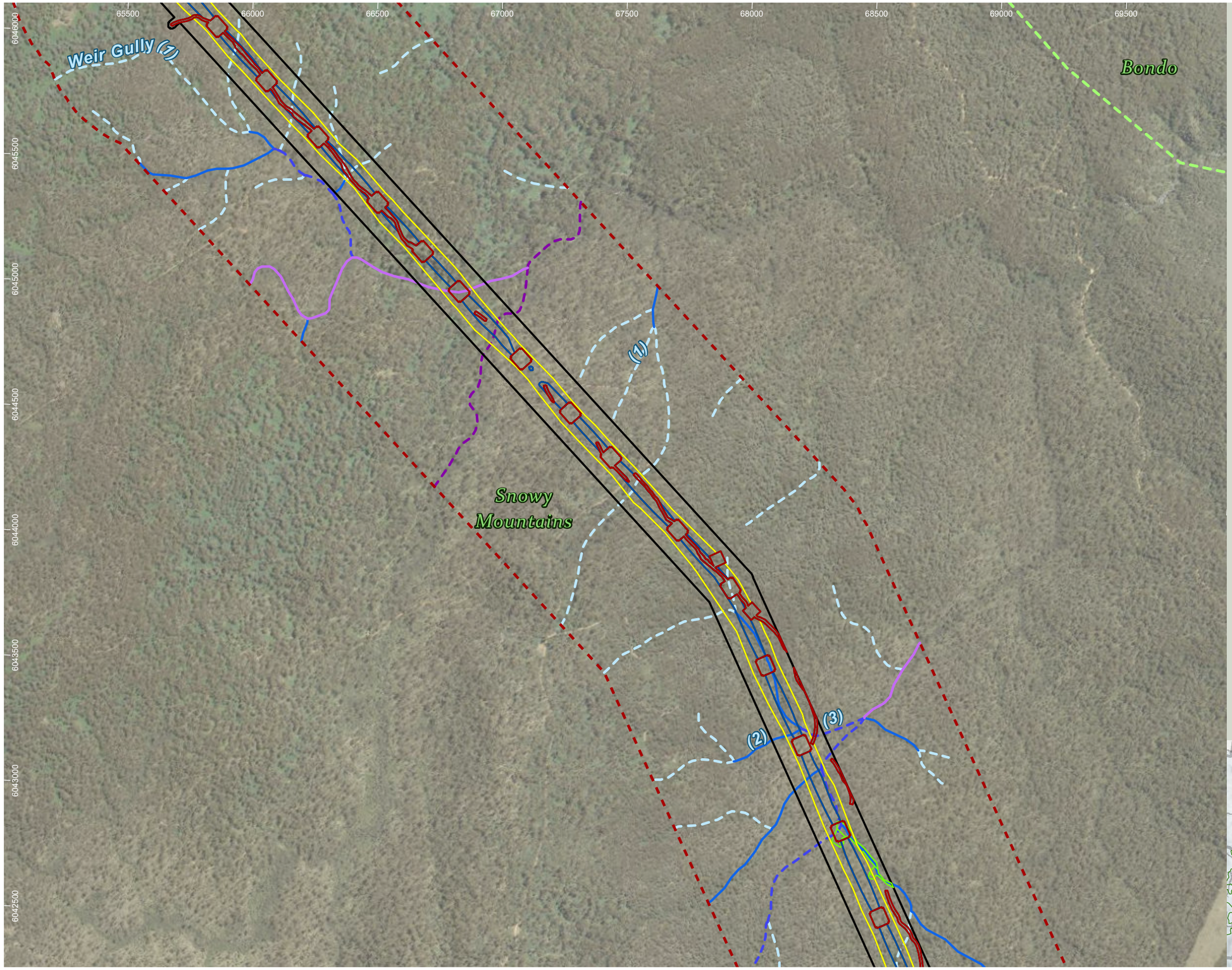


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

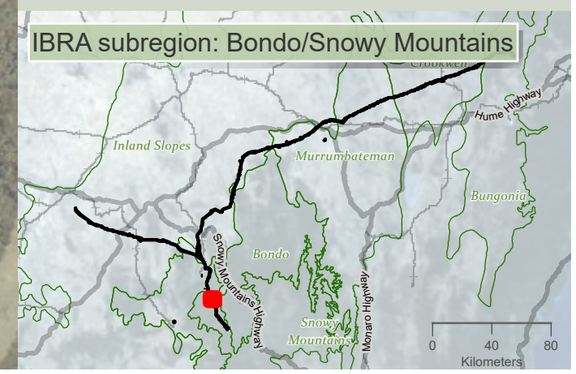
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 32

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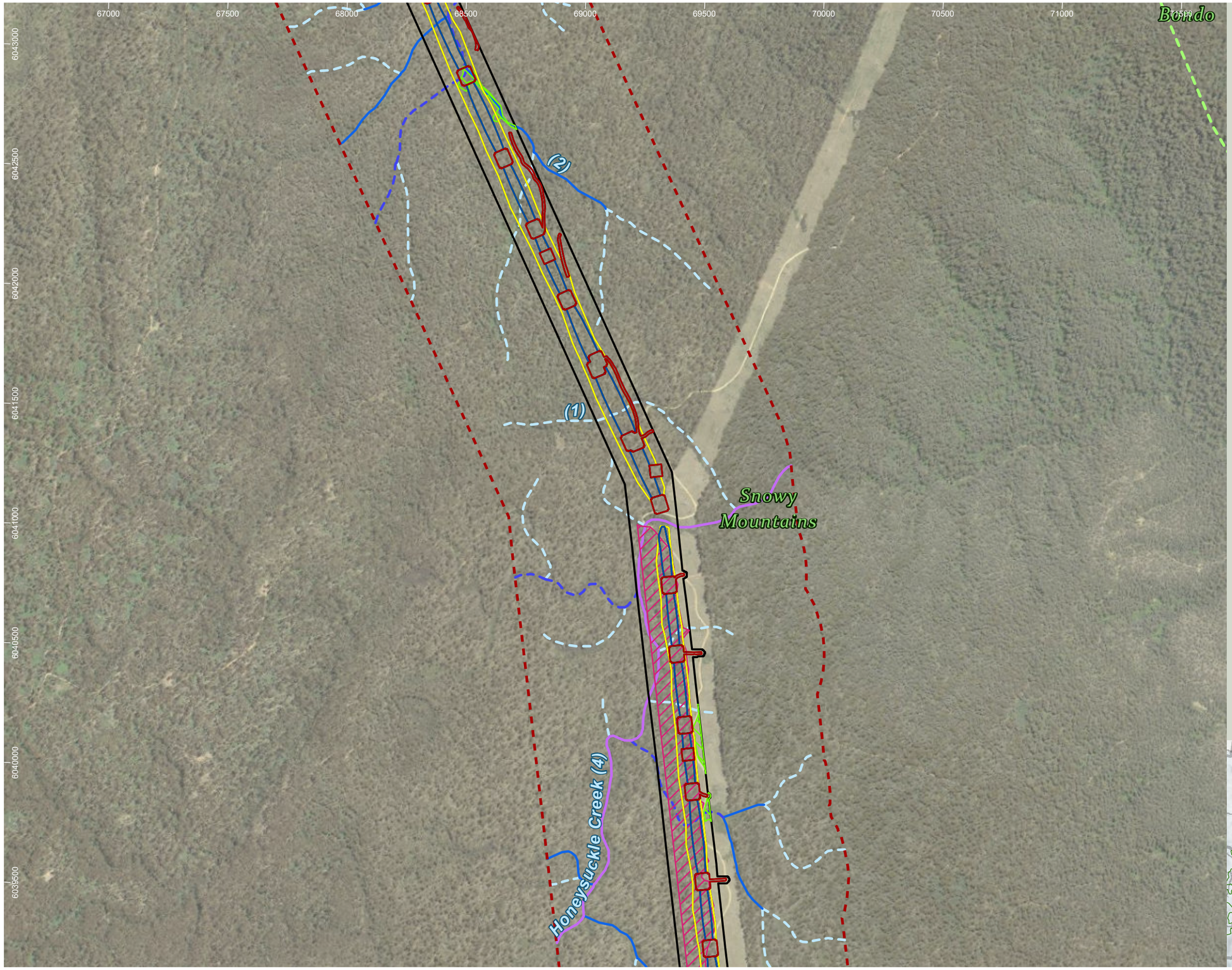


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

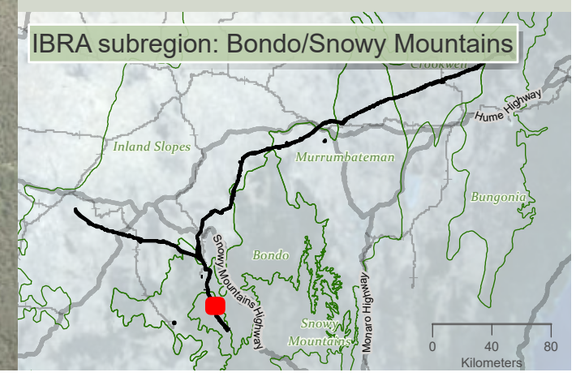
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea
- Pseudophryne corroboree



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 33

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

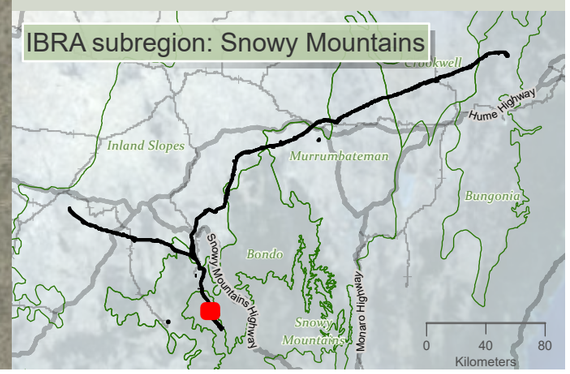
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea
- Pseudophryne corroboree



niche Environment and Heritage

0 450
m
WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 34

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HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

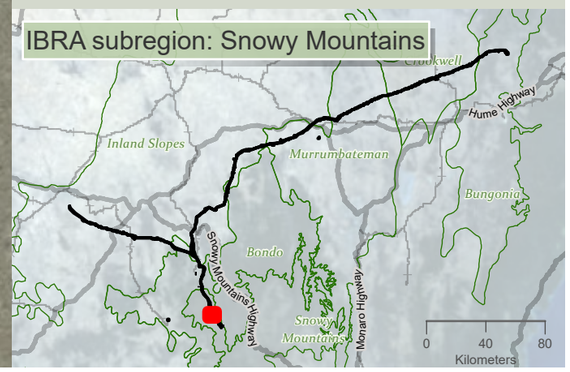
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 450
m
N
WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 36

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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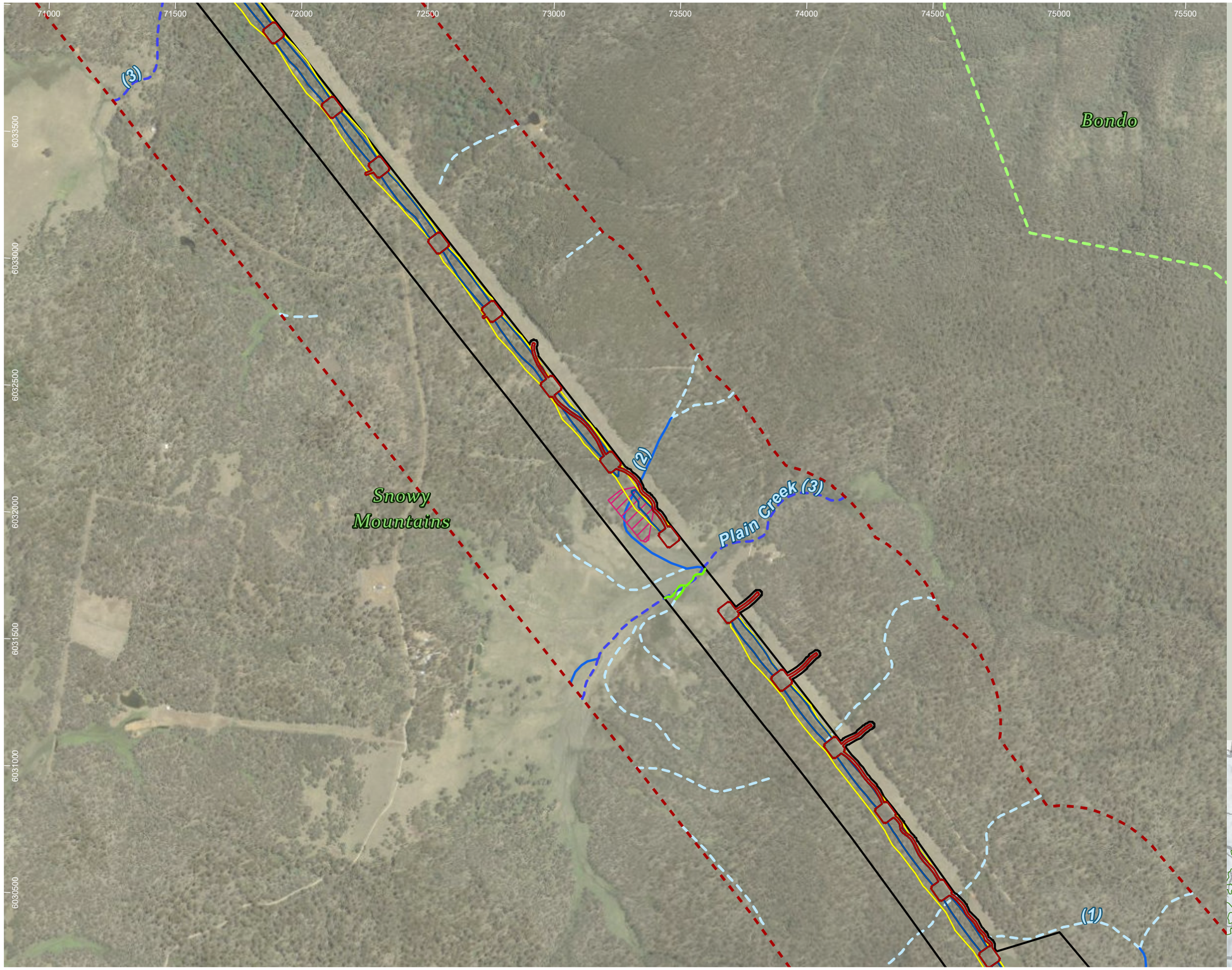


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

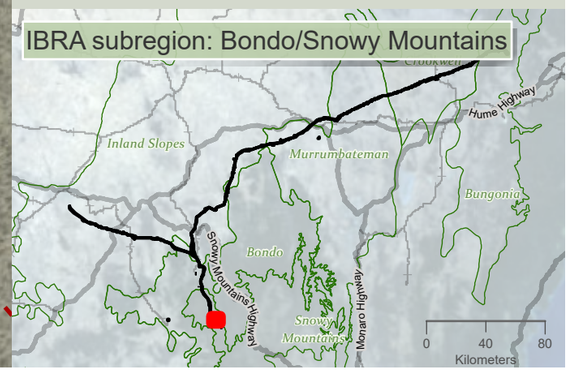
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea
- Pseudophryne corroboree



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niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 37

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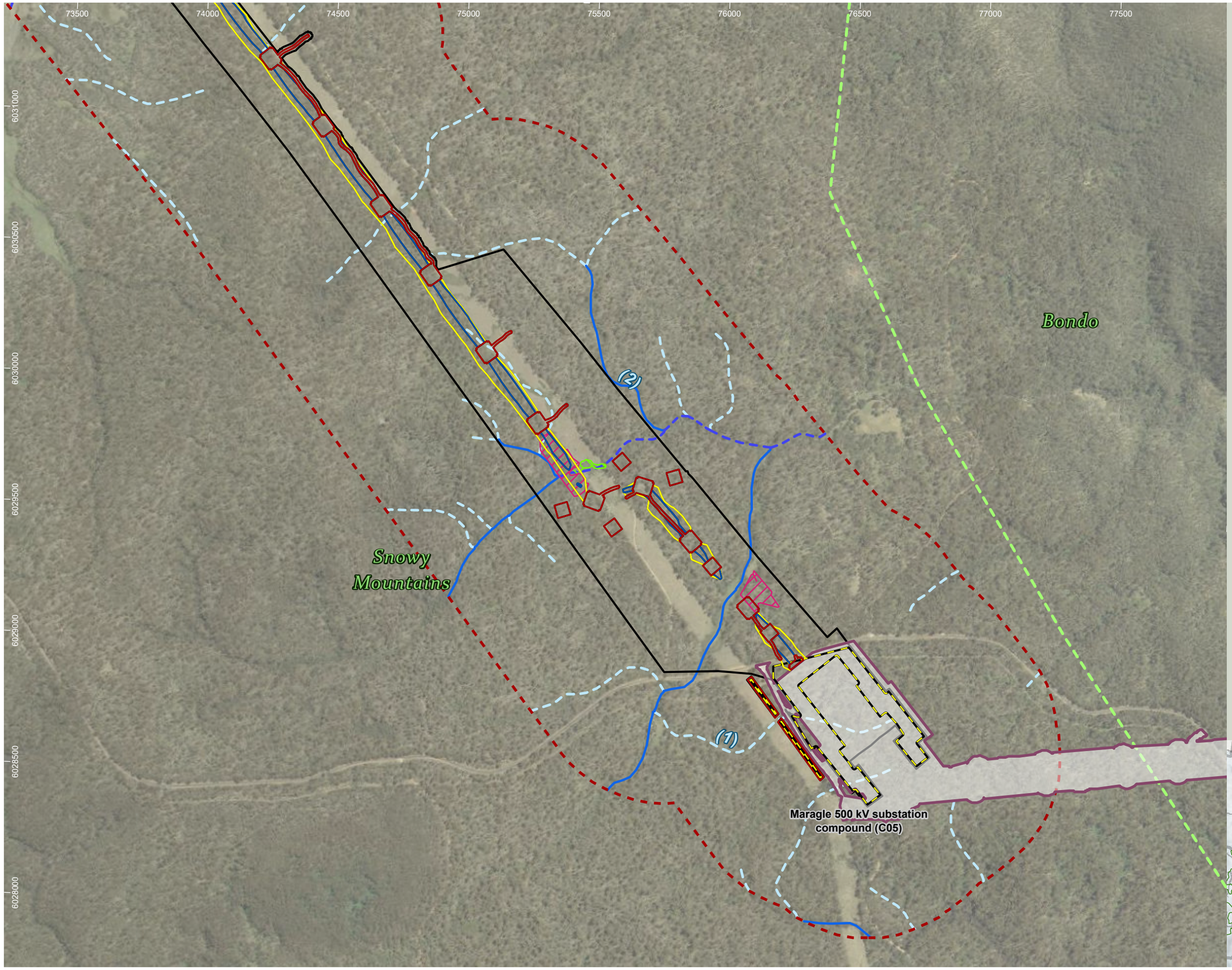


HumeLink project areas

- Project footprint
- Proposed construction compounds
- Landscape assessment area
- Snowy 2.0 Transmission Connection project
- IBRA subregion

Strahler stream order

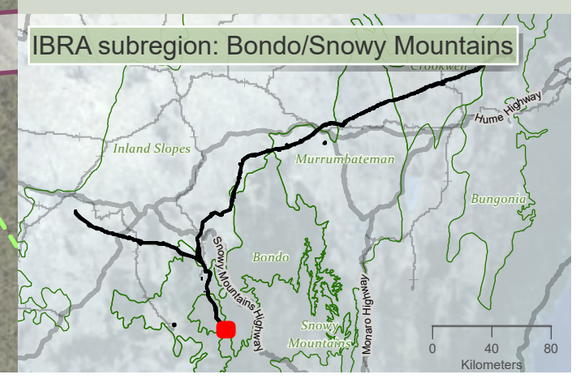
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea
- Pseudophryne corroboree



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 38

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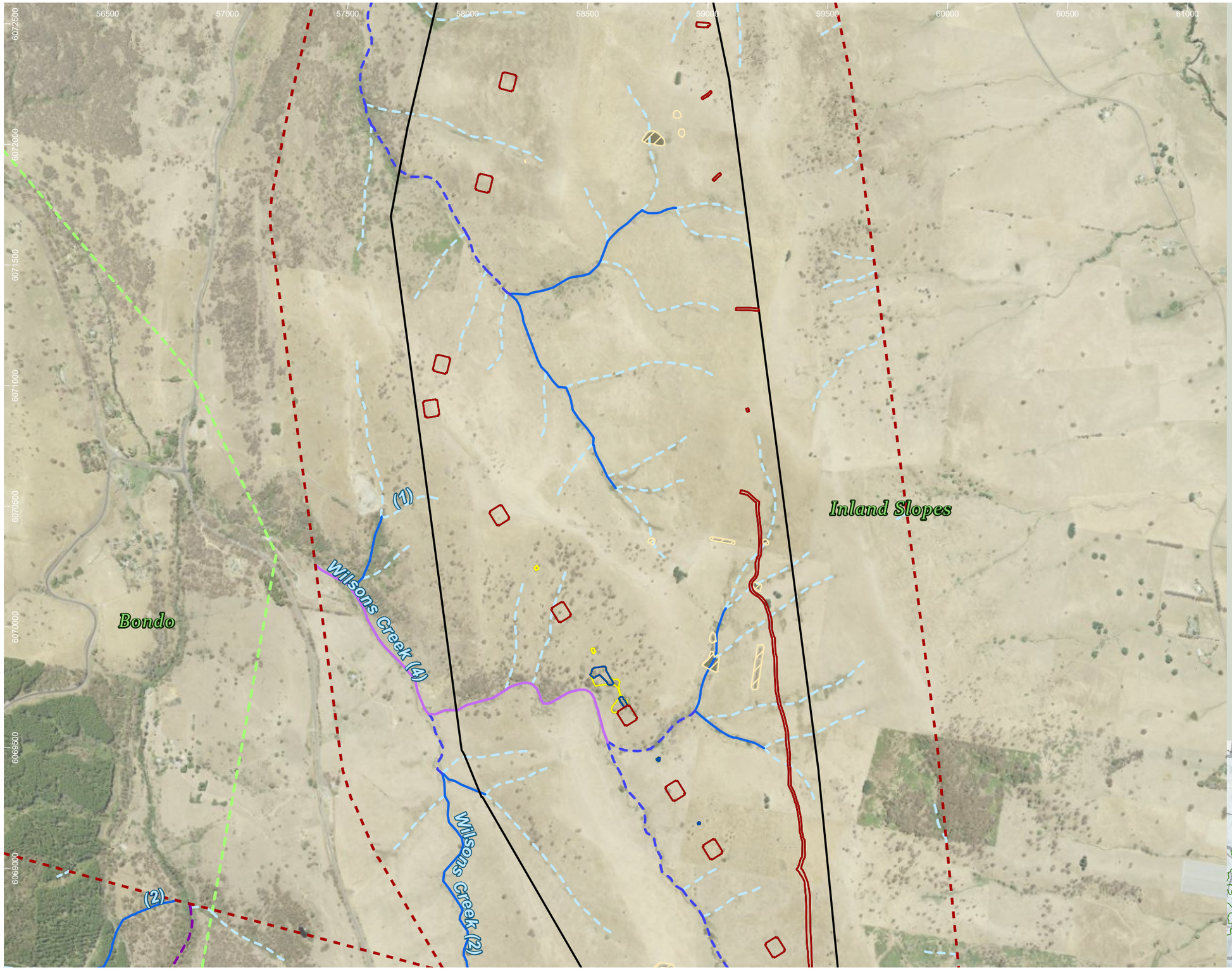
Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx - Confidential



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

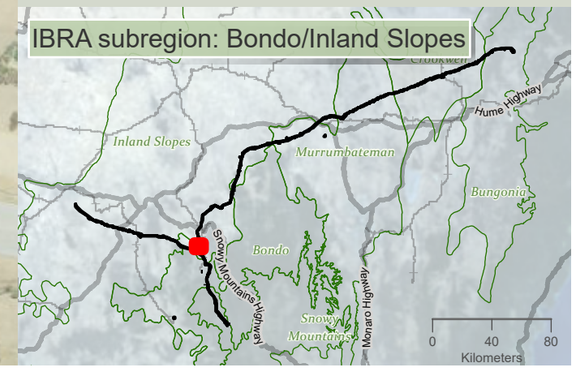
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 39

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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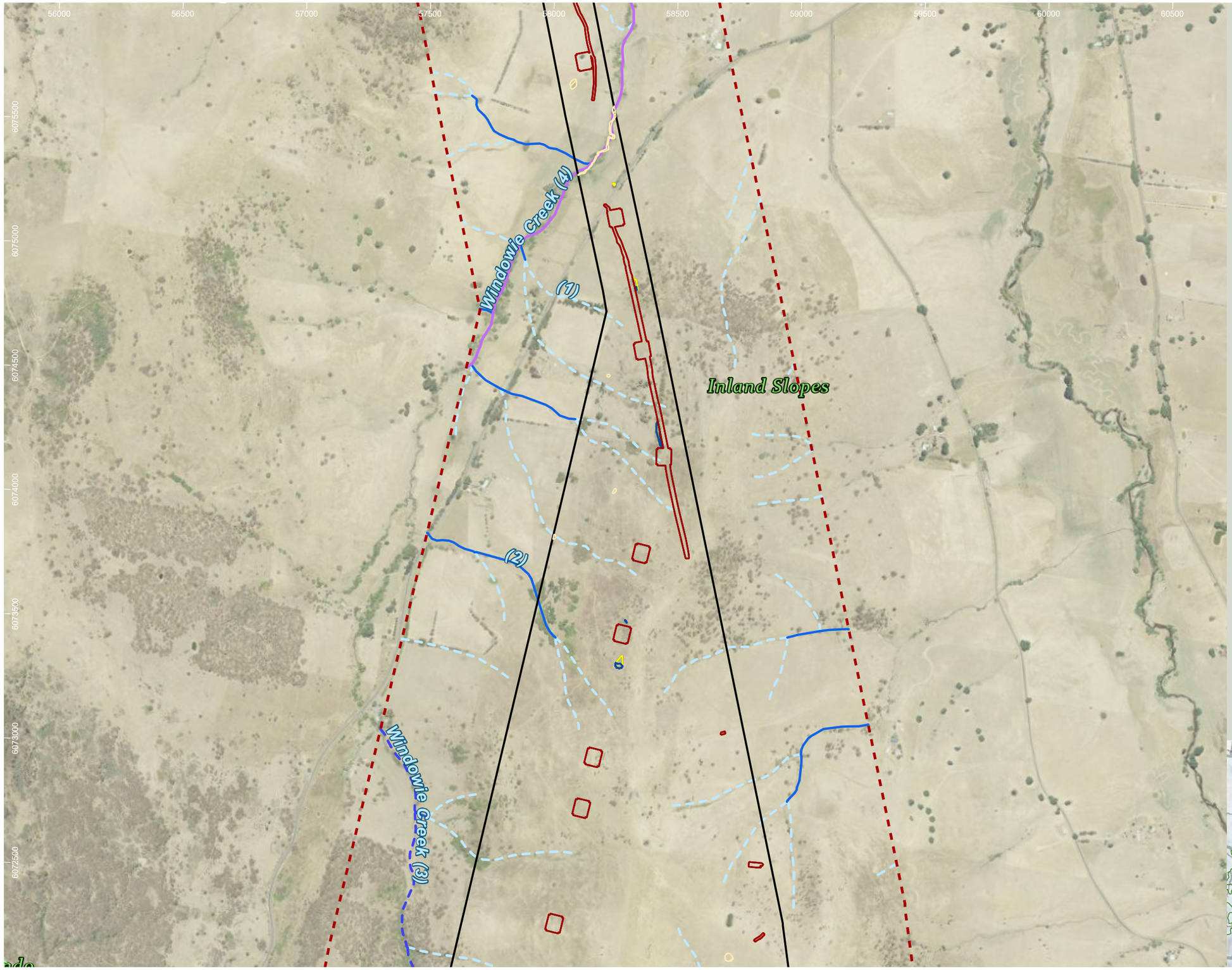


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

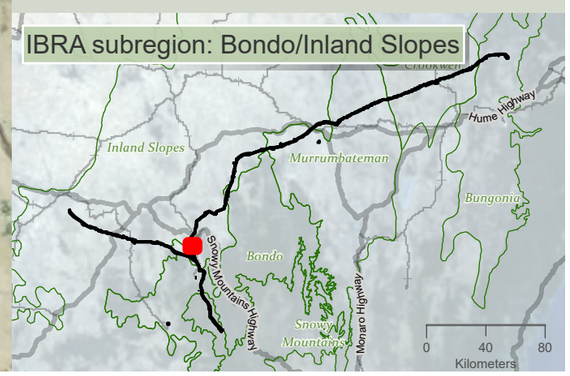
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 40

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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55500 56000 56500 57000 57500 58000 58500 59000 59500 60000

6079000 6078500 6078000 6077500 6077000 6076500 6076000

Inland Slopes

(1) (2) (3)

Windowie Creek (4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

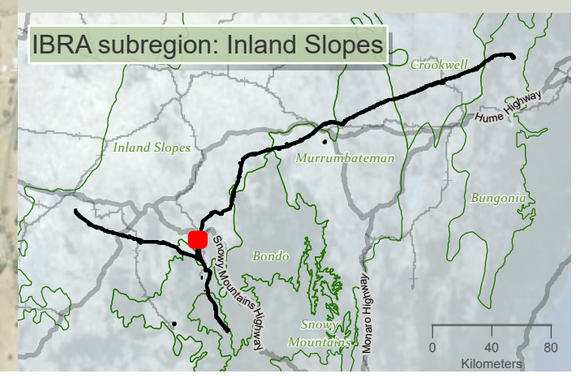
- 0
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

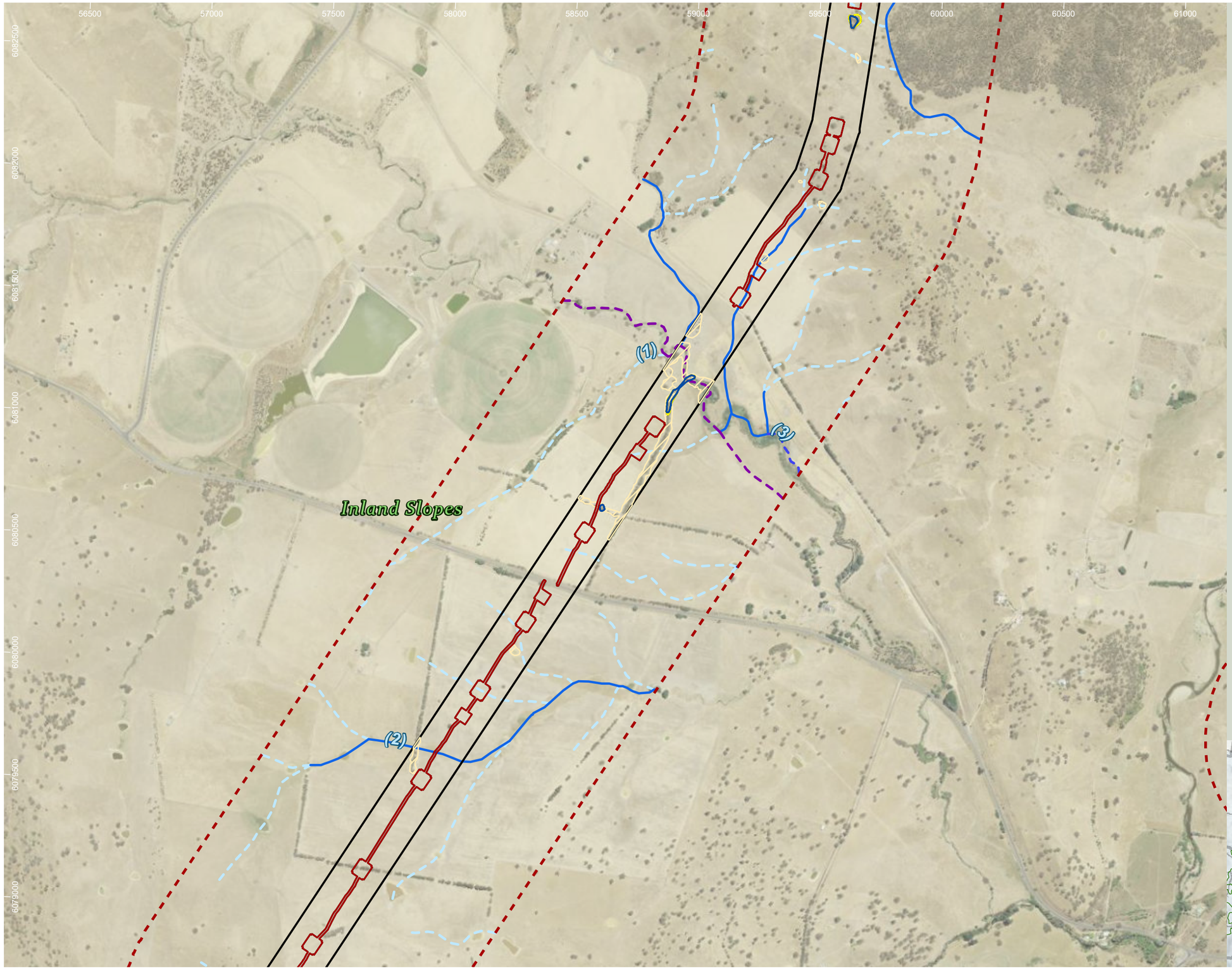
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 41

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

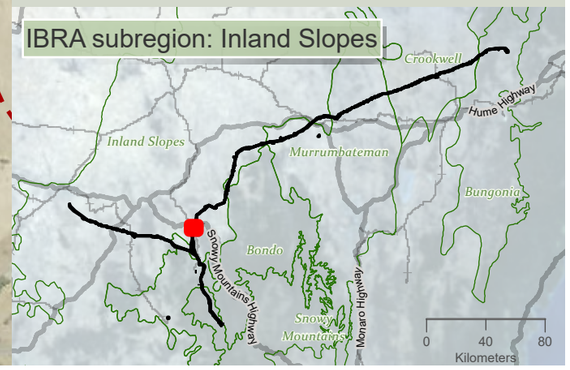
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



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niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

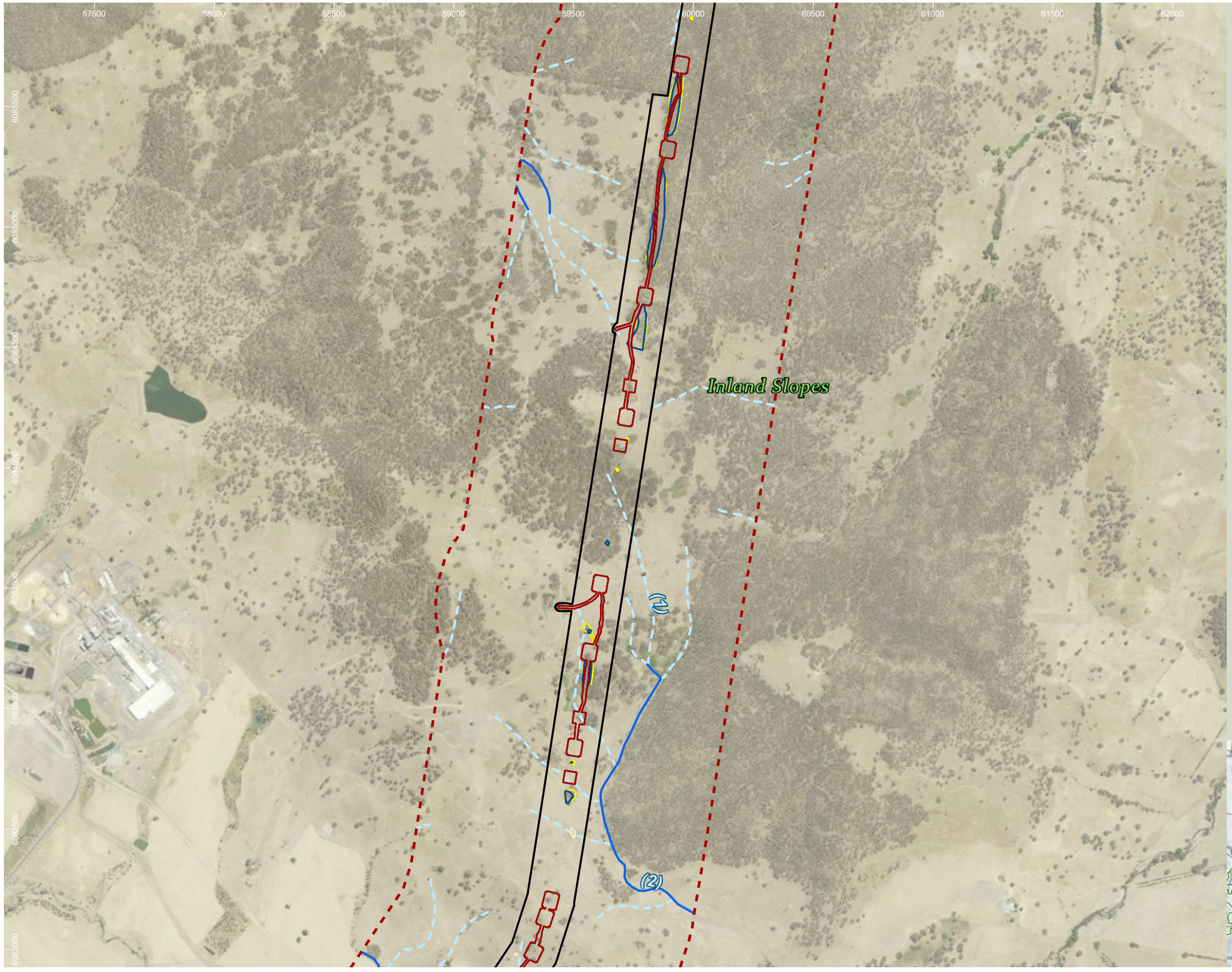
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 42

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

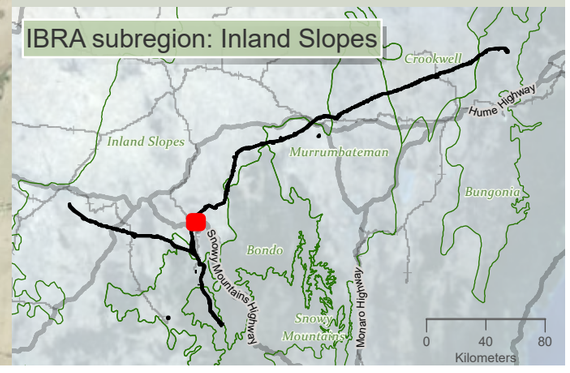
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 44

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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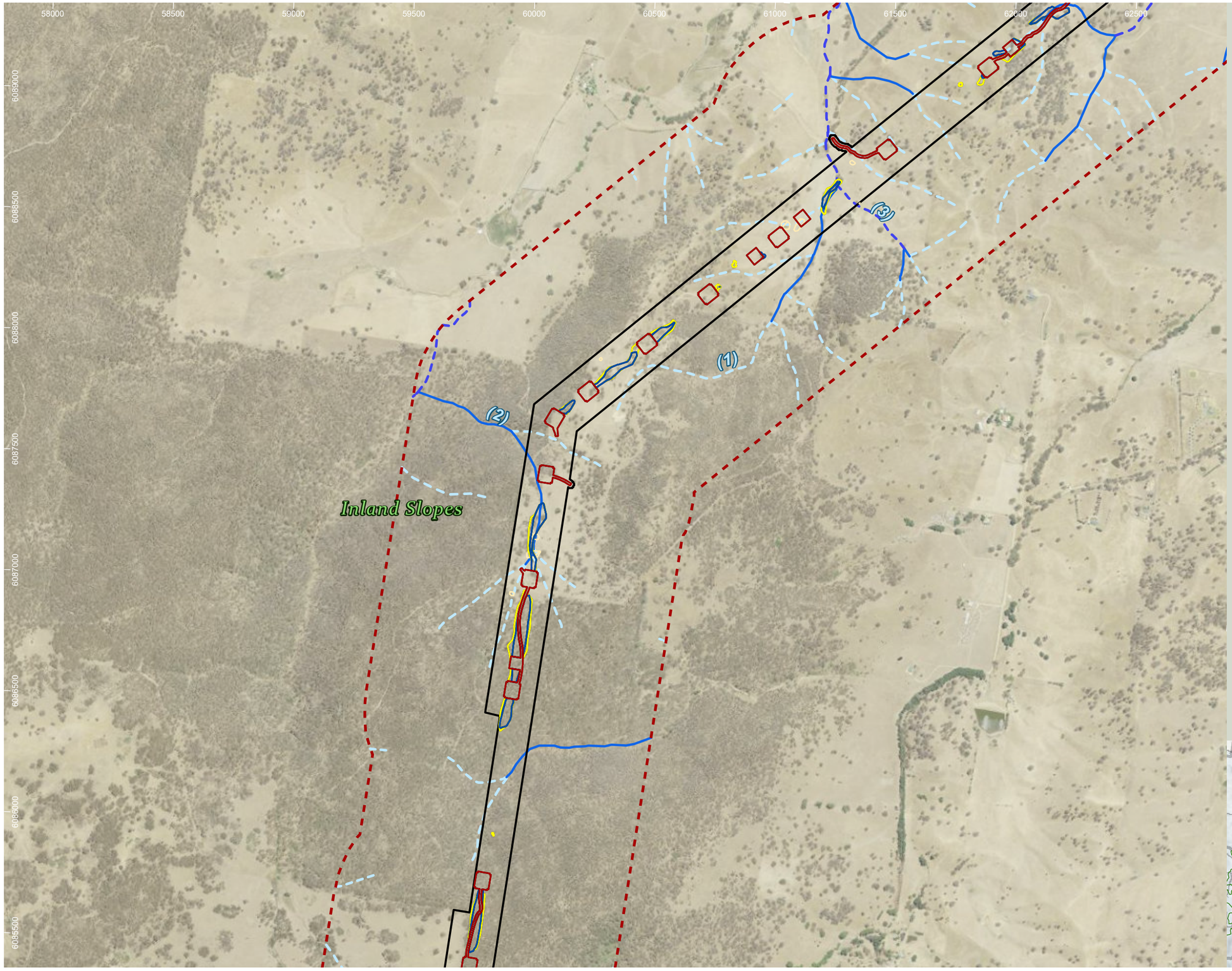


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

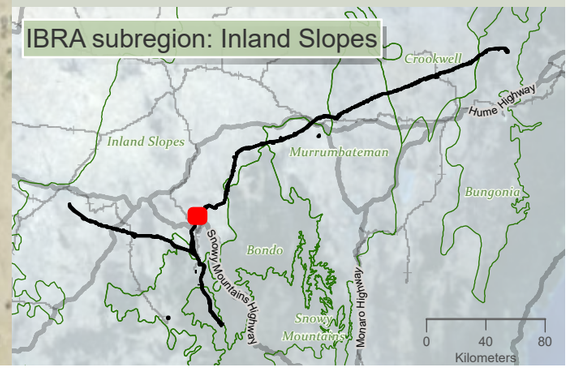
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 45

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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61000 61500 62000 62500 63000 63500 64000 64500

6095000 6094000 6093000 6092000 6091000

Gocup Creek (4)

(1)

(3)

(2)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

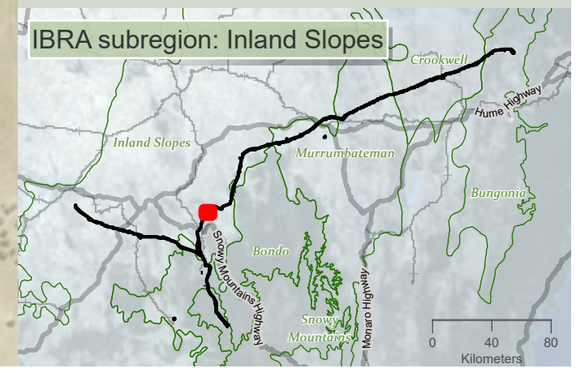
- 1
- 2
- 3
- 4
- 8

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 46

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

63500 64000 64500 65000 65500 66000 66500 67000

6094000 6093500 6093000 6092500 6092000 6091500 6091000

(1) (2) (3) (4)

Inland Slopes

Tumut River (8)

Gocup Creek (4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

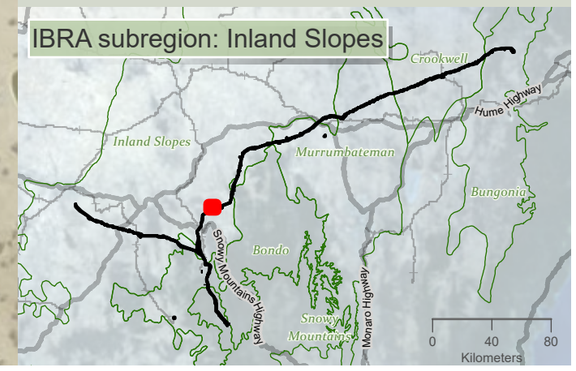
- 1
- 2
- 3
- 4
- 5
- 8

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 47

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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66500 67000 67500 68000 68500 69000 69500 70000

6094000 6093500 6093000 6092500 6092000 6091500

(1) (2) Inland Slopes Killimicat Creek (5)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

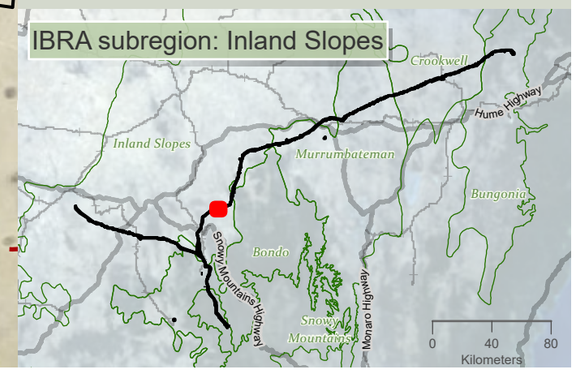
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 48

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70000 70500 71000 71500 72000 72500 73000 73500

6095000 6094500 6094000 6093500 6093000 6092500

Inland Slopes

Sawpit Gully (4)

(2)

(1)

(3)

Killimicat Creek (5)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

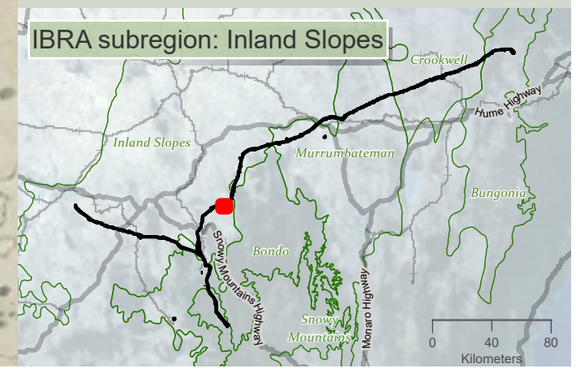
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 49

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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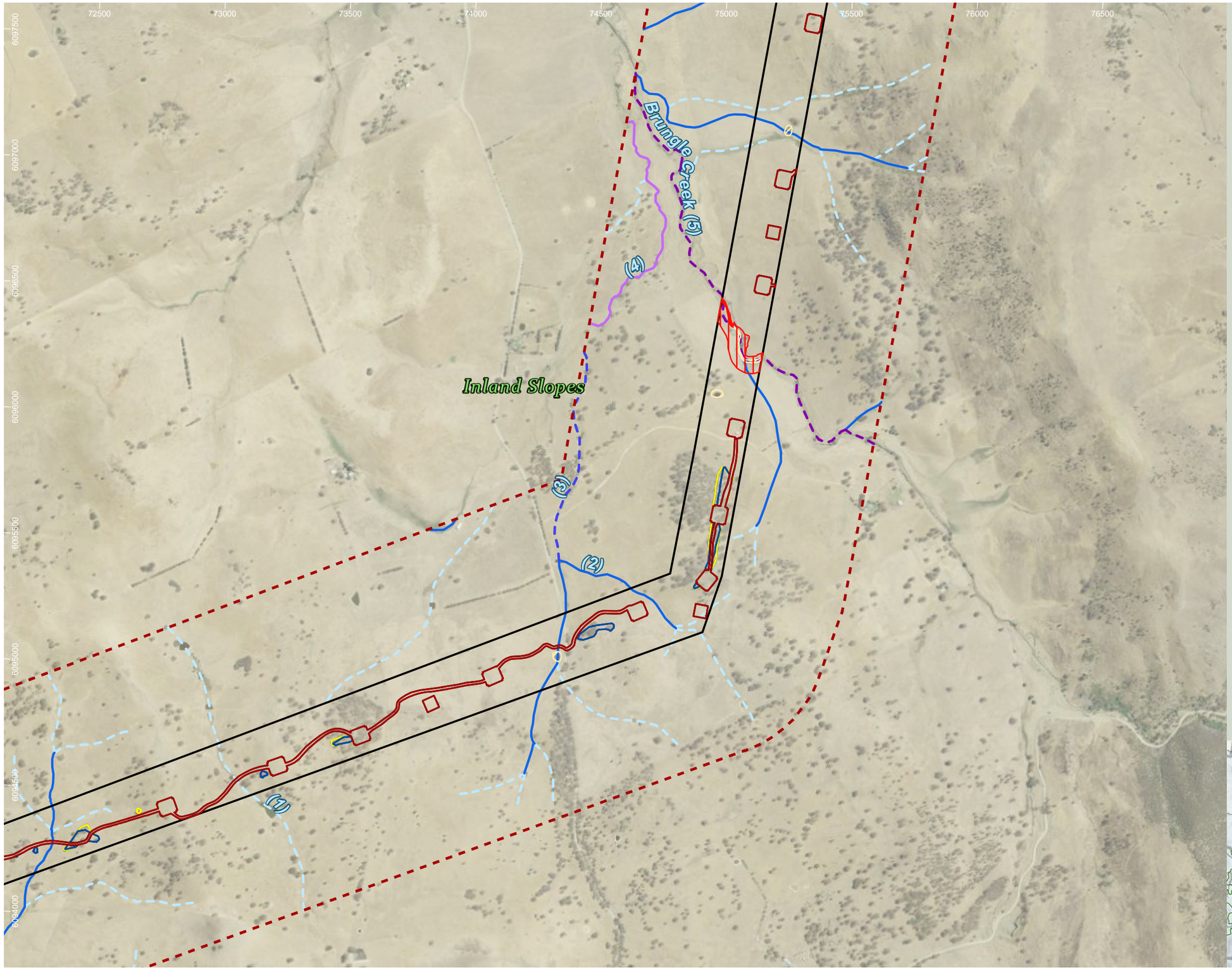


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

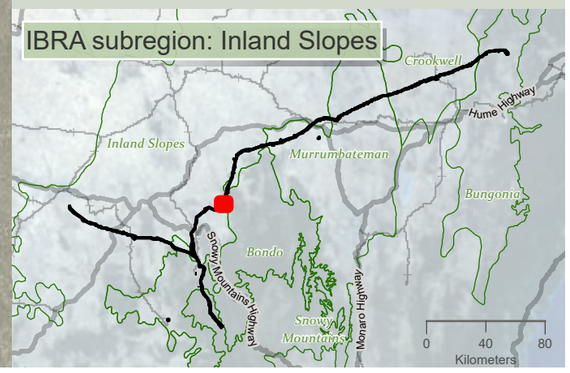
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei
- Litoria booroolongensis



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niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

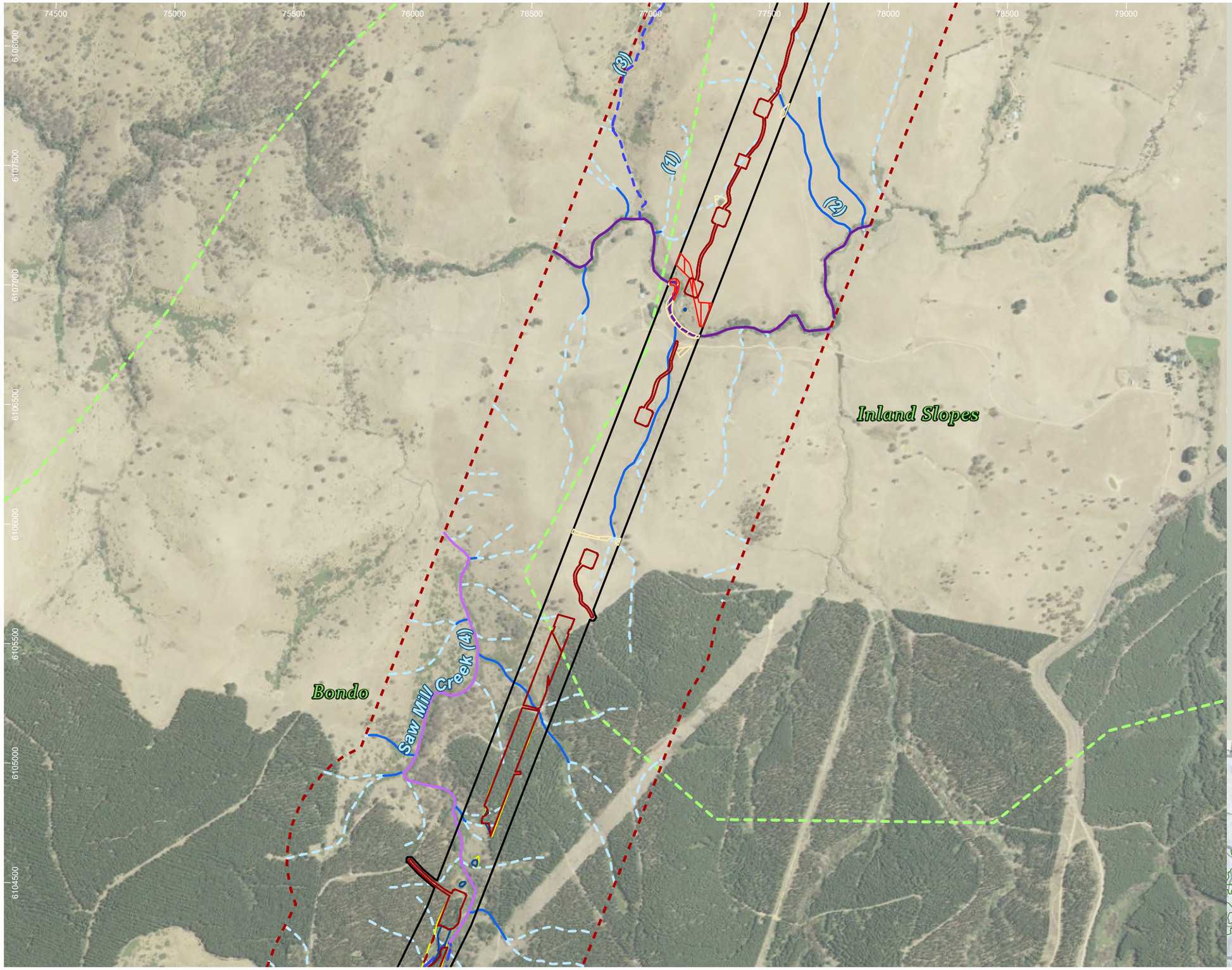
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 50

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

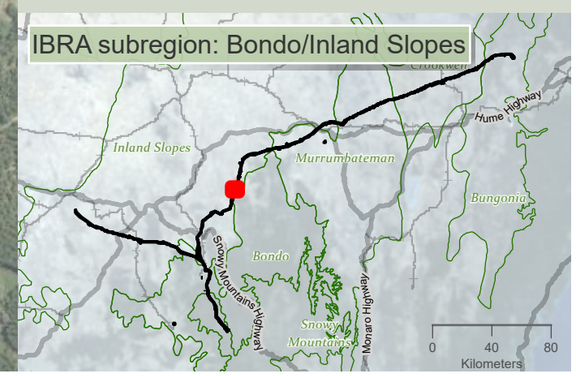
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei
- Litoria booroolongensis



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 53

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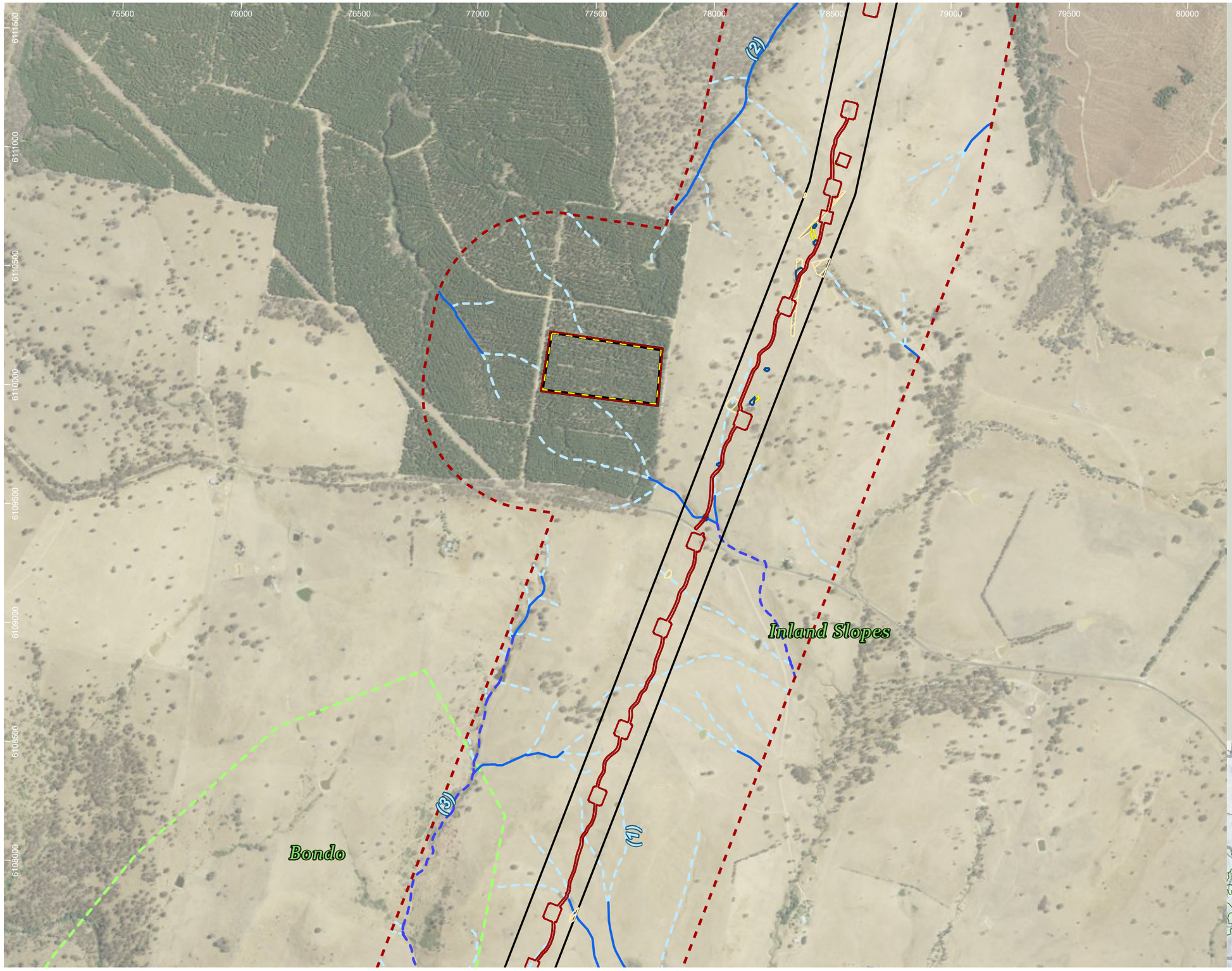


HumeLink project areas

- Project footprint
- Proposed construction compounds
- Landscape assessment area
- IBRA subregion

Strahler stream order

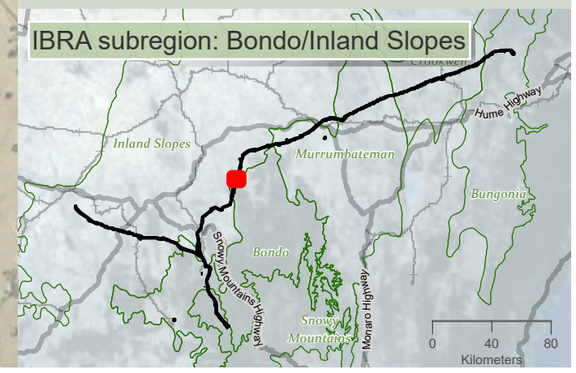
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 54

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77000 77500 78000 78500 79000 79500 80000 80500 81000 81500

6118000 6117500 6117000 6116500 6116000 6115500 6115000 6114500

Inland Slopes

Cart Road Creek (3)

(2)

(1)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

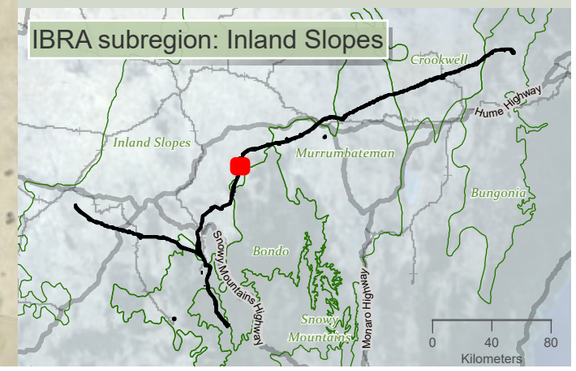
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 500
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 56

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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77500 78000 78500 79000 79500 80000 80500 81000 81500 82000

6121500 6121000 6120500 6120000 6119500 6119000 6118500 6118000

(1)

Oak Creek (5)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

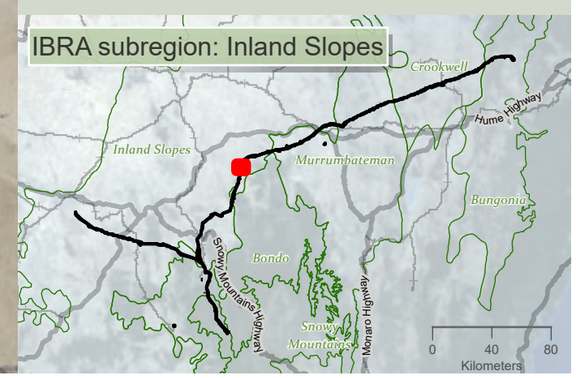
- 1
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

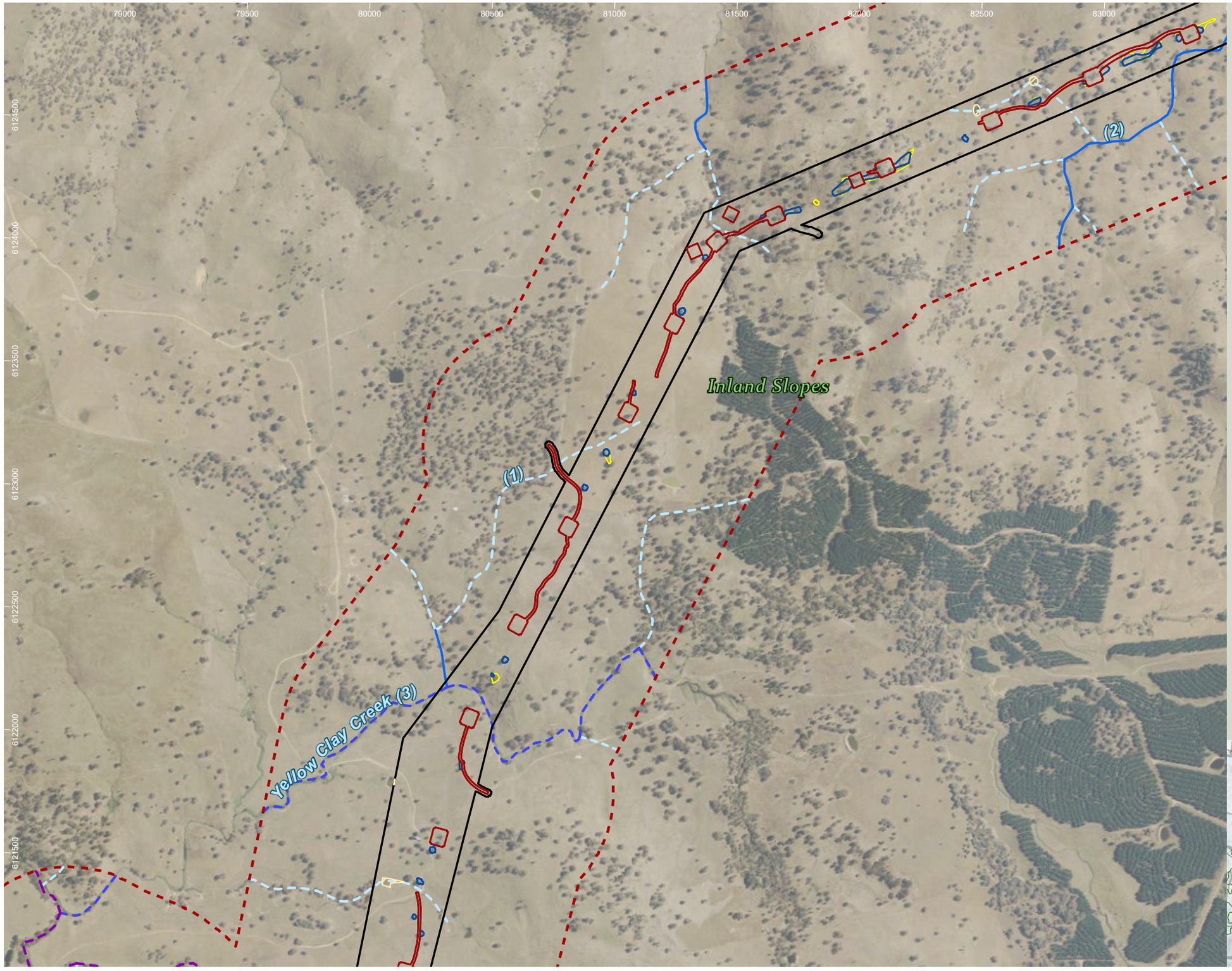
Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 57

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6899 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

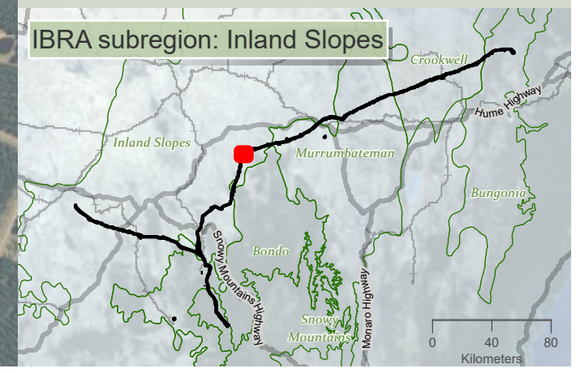
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

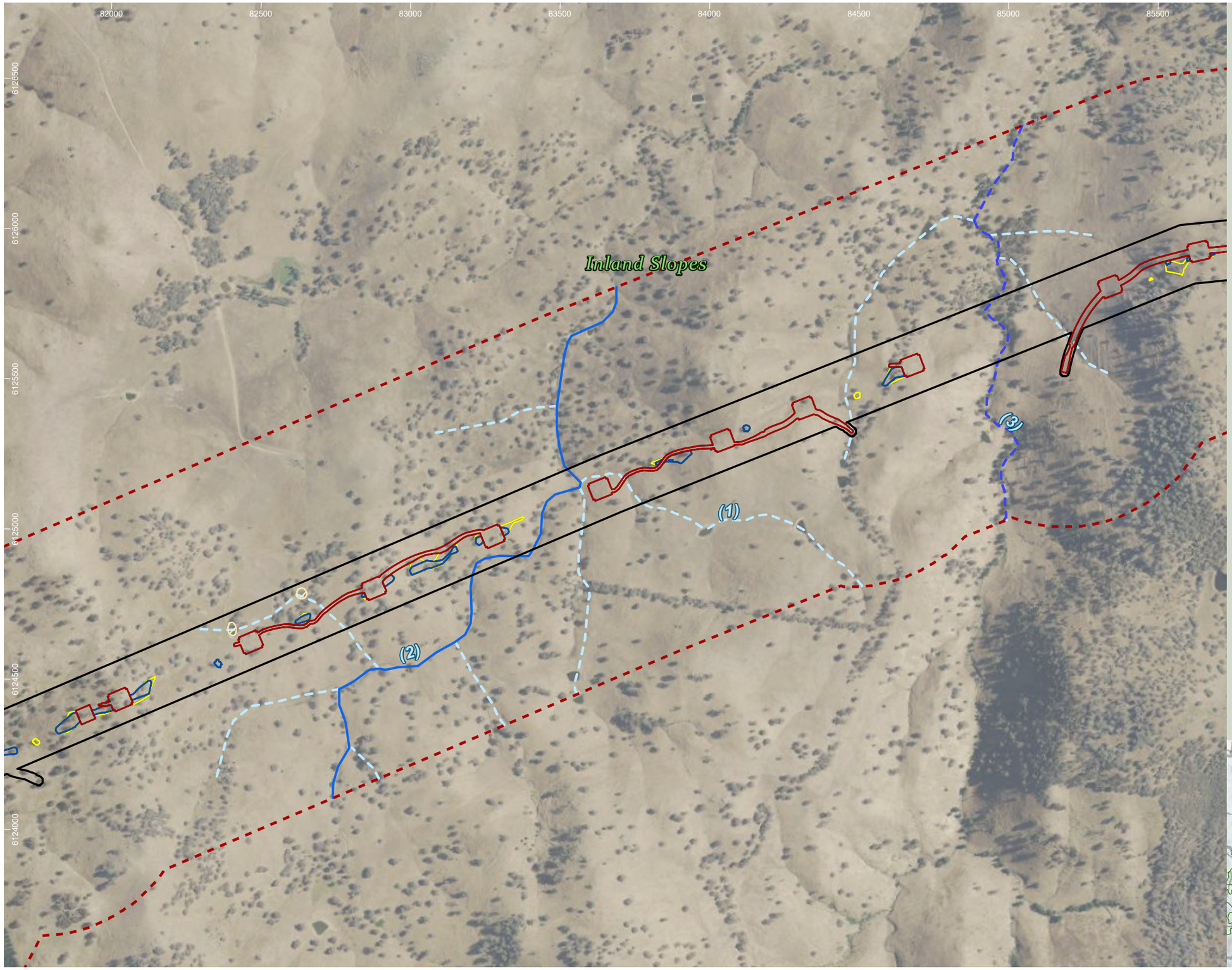
Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 58

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

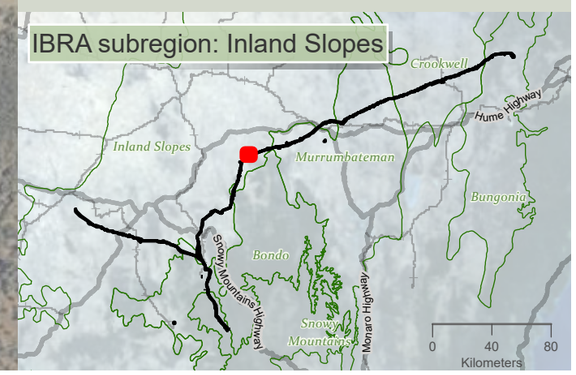
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 59

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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85500 86000 86500 87000 87500 88000 88500

6127500 6127000 6126500 6126000 6125500 6125000

Rocky Creek (2)

Inland Slopes

Dicks Gully (2)

(1) (2) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

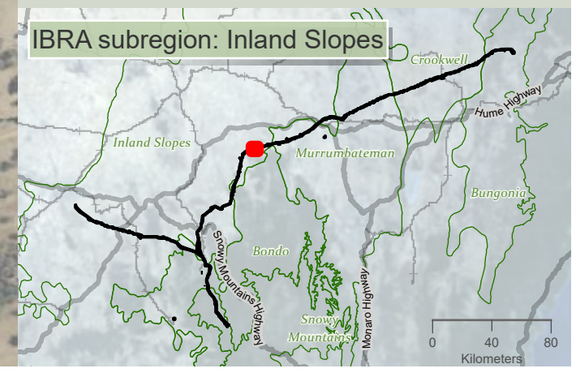
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

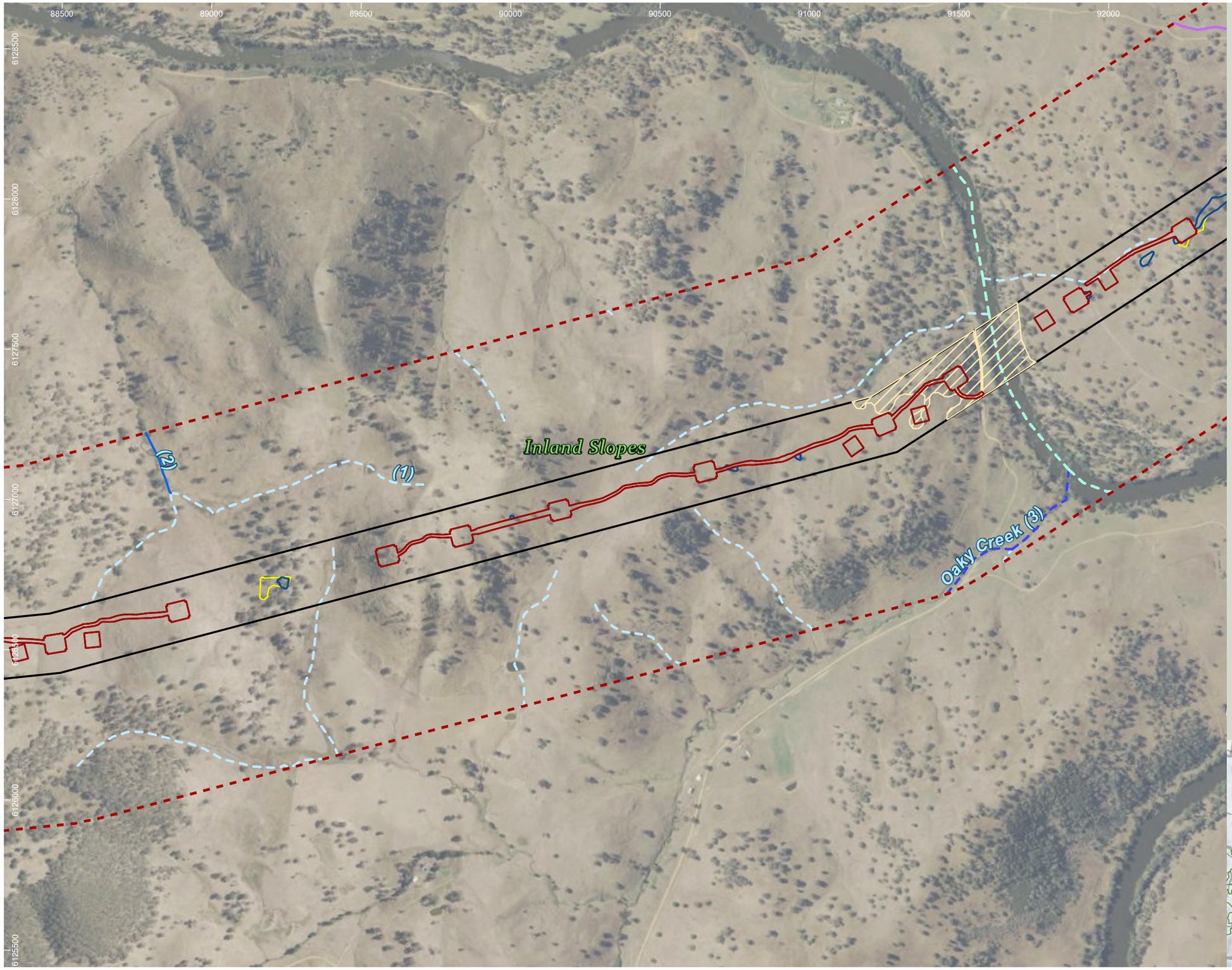
Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 60

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

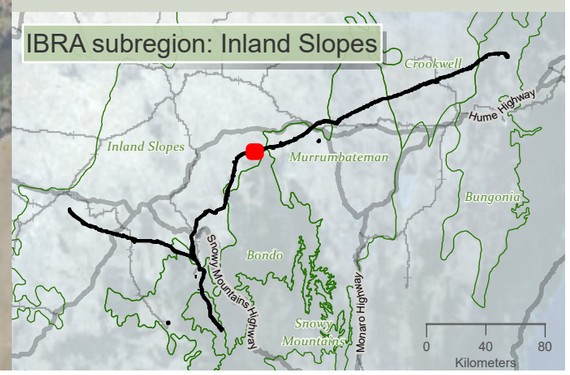
- 1
- 2
- 3
- 4
- 9

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6899 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 61

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

92000 92500 93000 93500 94000 94500 95000 95500

6130000 6129500 6129000 6128500 6128000 6127500 6127000

Oak Creek (4)

Murrumbidgee River (9)

(1)

(2)

Inland Slopes

Bondo

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

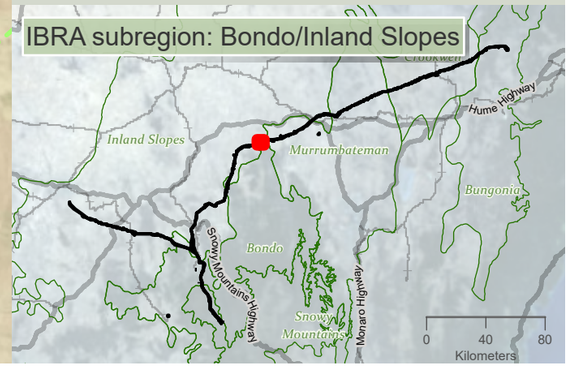
- 1
- 2
- 3
- 4
- 9

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

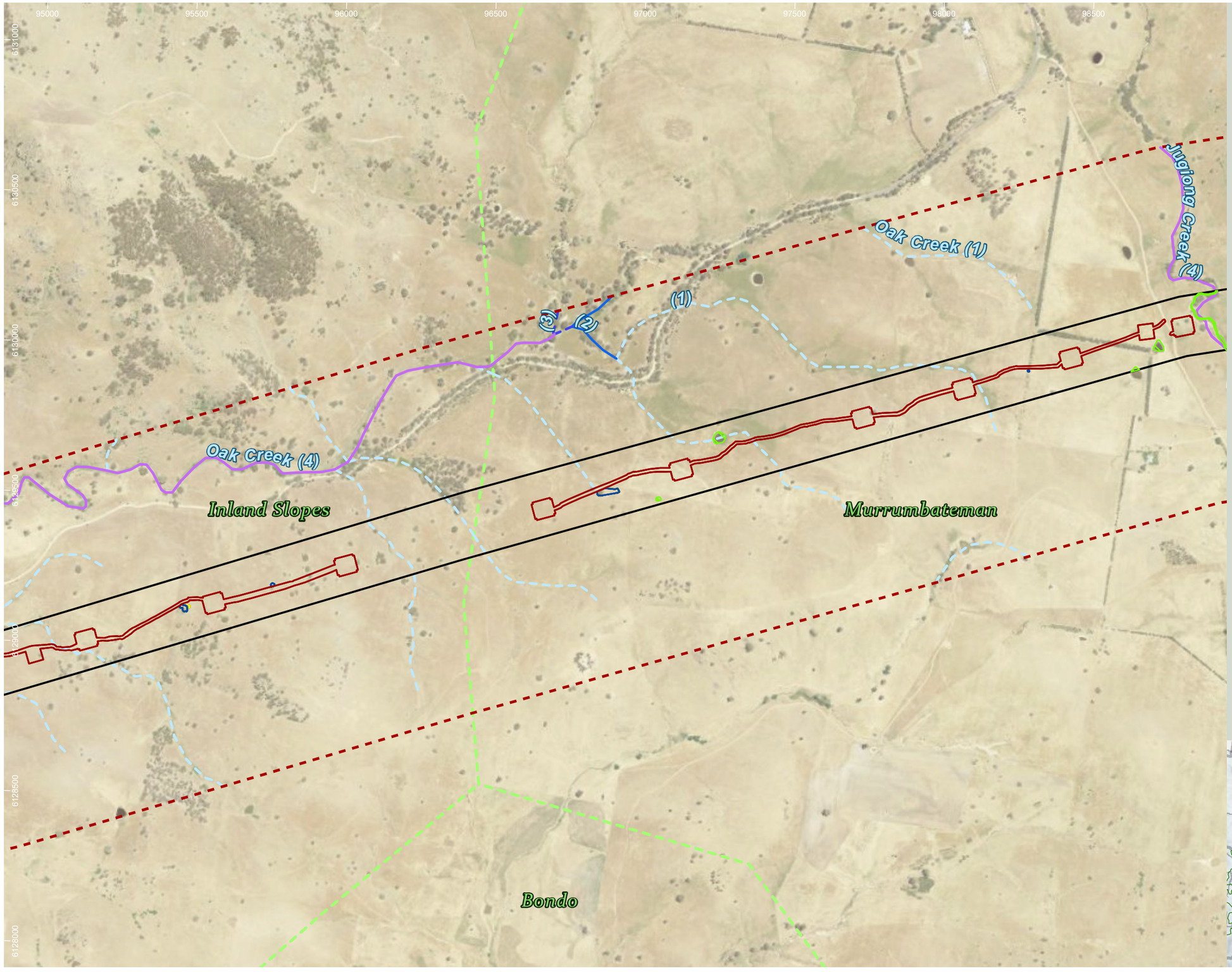
Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 62

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

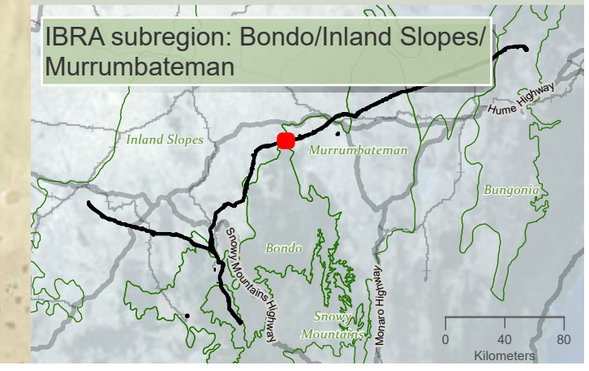
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 63

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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98500 99000 99500 100000 100500 101000 101500 102000

6131000 6130500 6130000 6129500 6129000 6128500

(1)

(2)

Murrumbateman

Jugiong Creek (4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

- 1
- 2
- 4

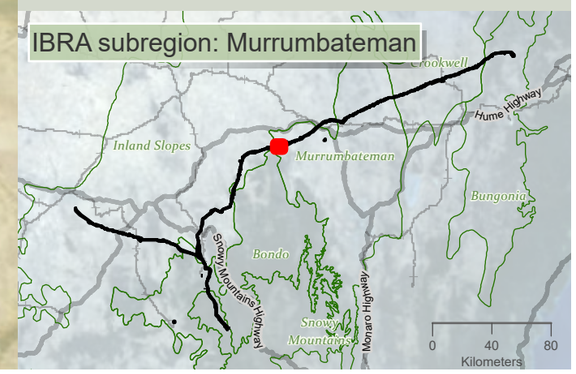
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea

IBRA subregion: Murrumbateman



0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 64

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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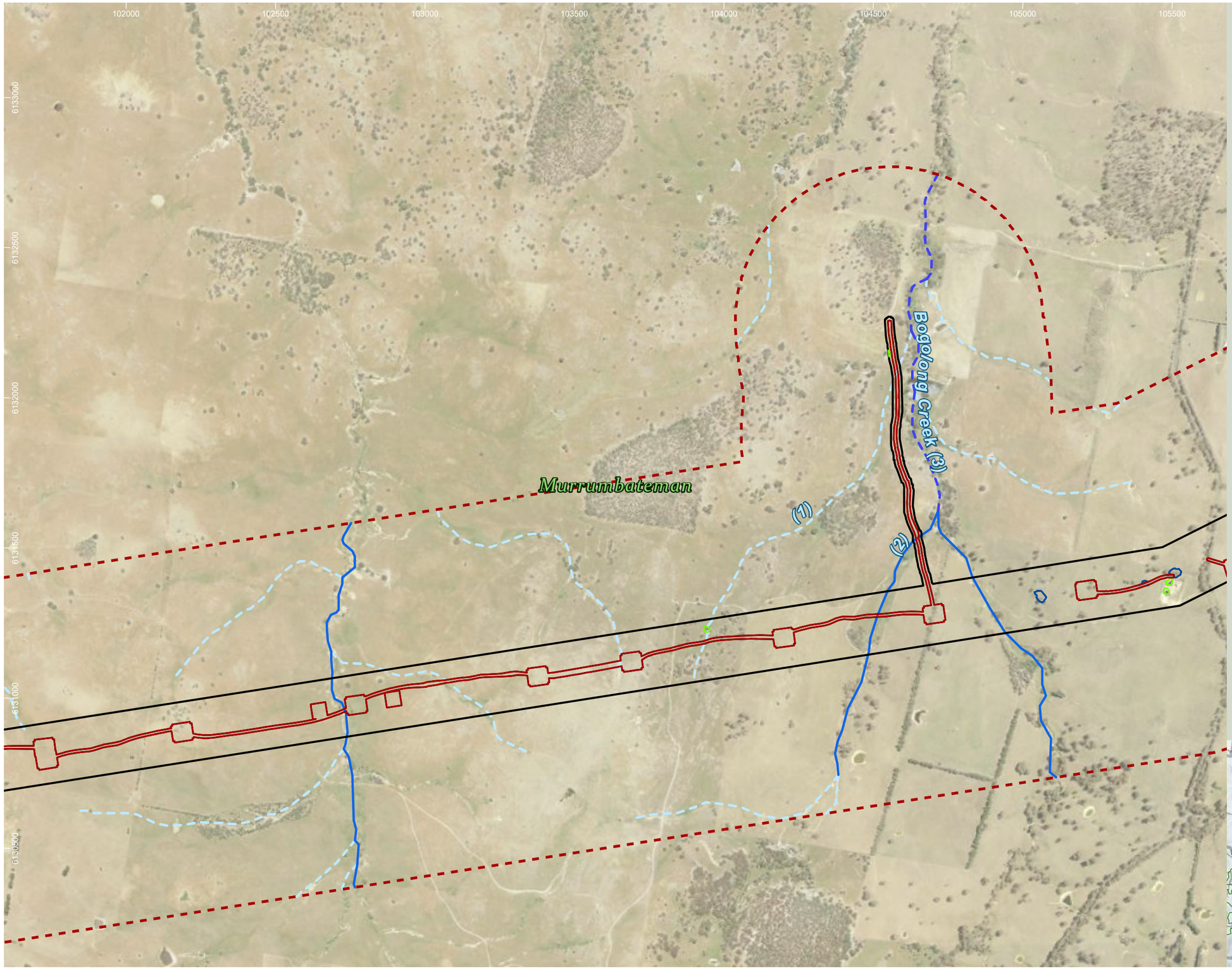


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

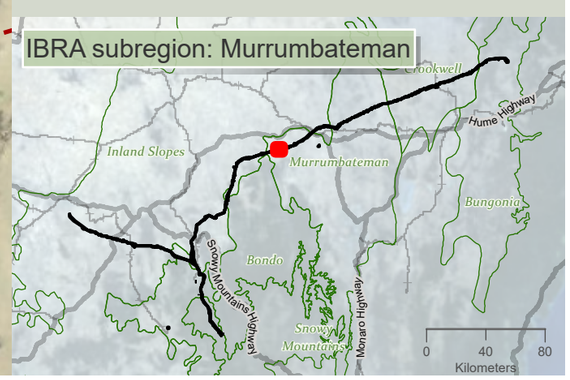
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 65

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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105000 105500 106000 106500 107000 107500 108000 108500

6133500 6133000 6132500 6132000 6131500 6131000

Murrumbateman

(2)

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

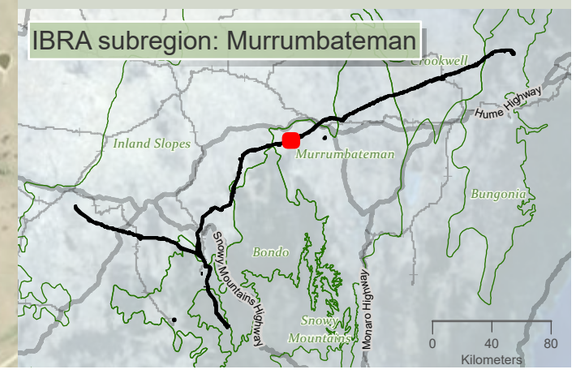
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 66

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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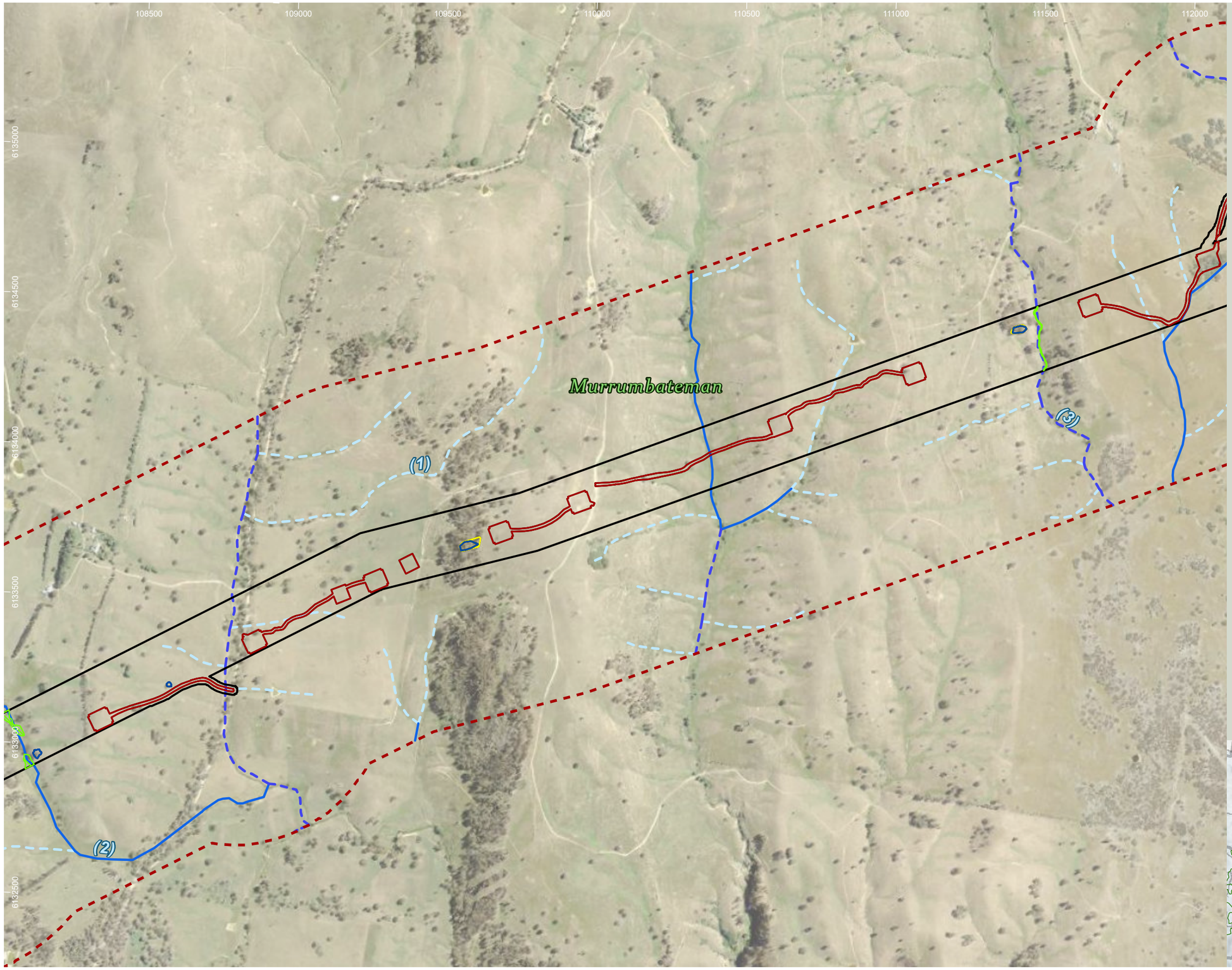


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

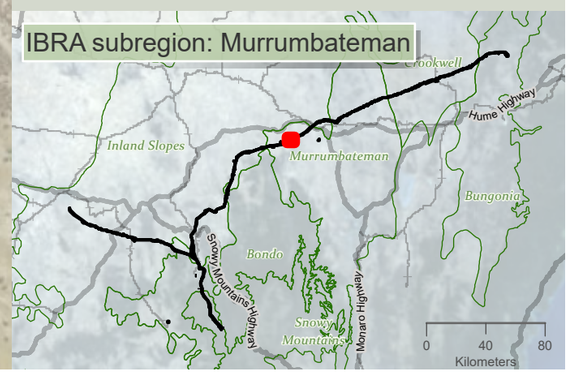
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 67

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

111500 112000 112500 113000 113500 114000 114500 115000

6136500 6136000 6135500 6135000 6134500 6134000

Murrumbateman

Mccullums Creek (3)

(1)

(2)

(3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

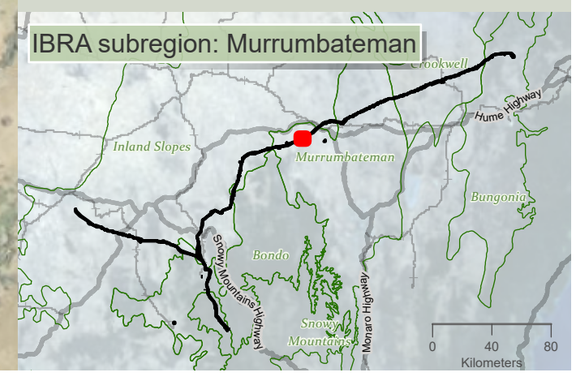
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 68

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

114500 115000 115500 116000 116500 117000 117500 118000

6138500 6138000 6137500 6137000 6136500 6136000

Murrumbateman

Derringullen Creek (5)

(1)

Bowning Creek (5)

(3)

Yass River (6)

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

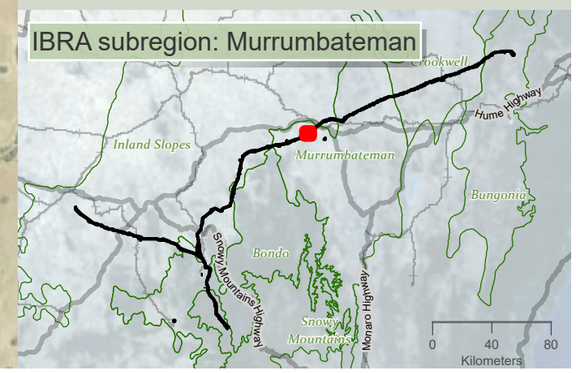
- 1
- 2
- 3
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche 6699 - Confidential Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 N 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 69

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

117000 117500 118000 118500 119000 119500 120000 120500 121000

6140500 6140000 6139500 6139000 6138500 6138000 6137500

(1) (2) (3)

Murrumbateman

Derringullen Creek

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

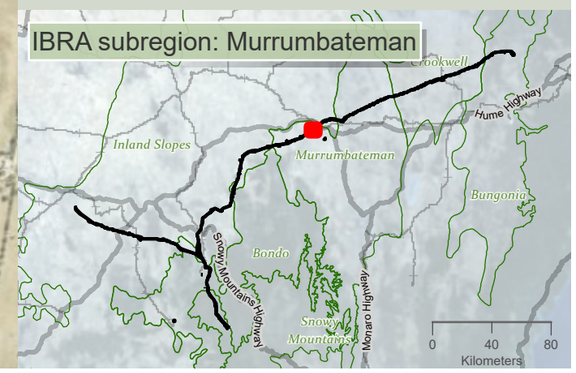
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

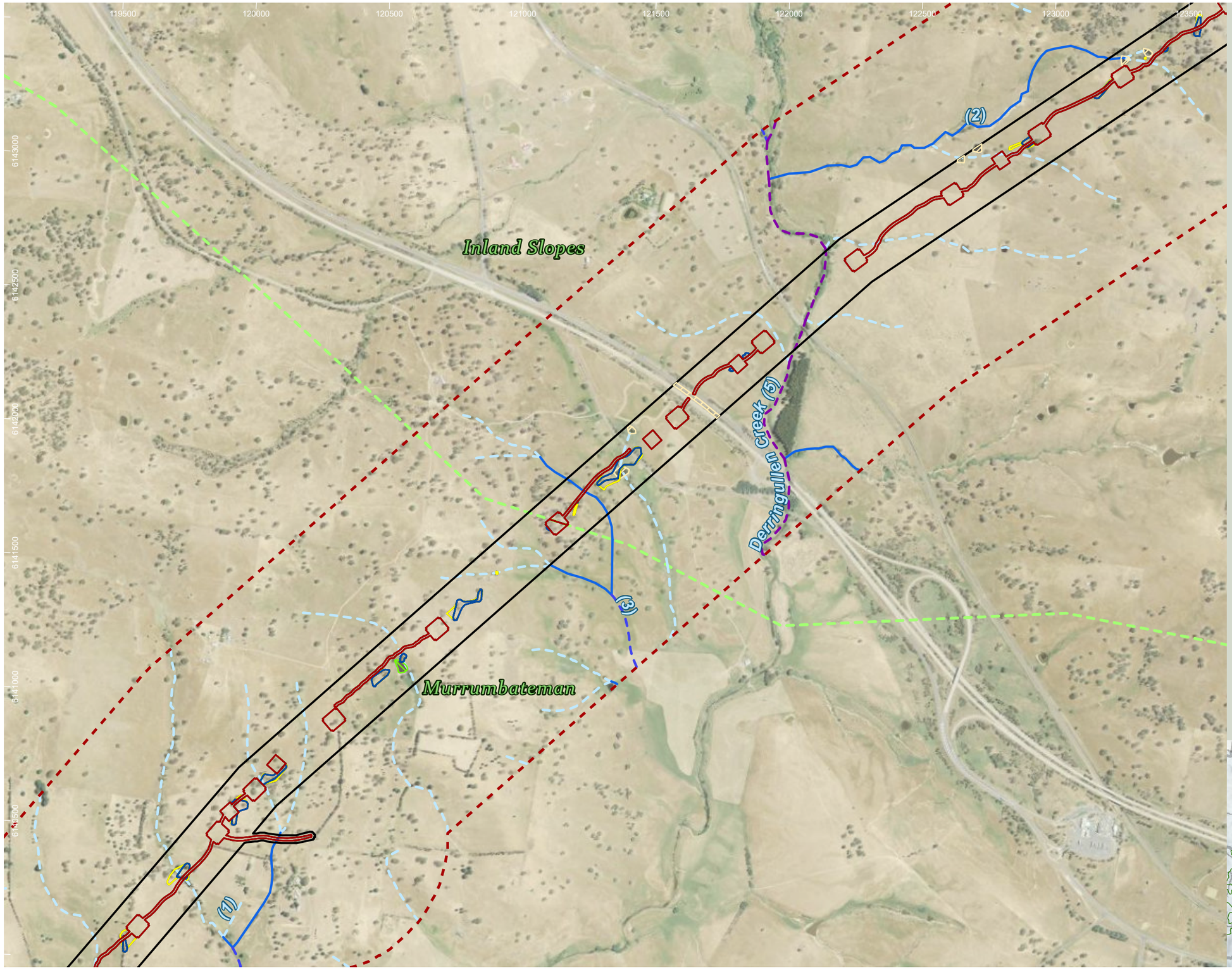
Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 70

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential\Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

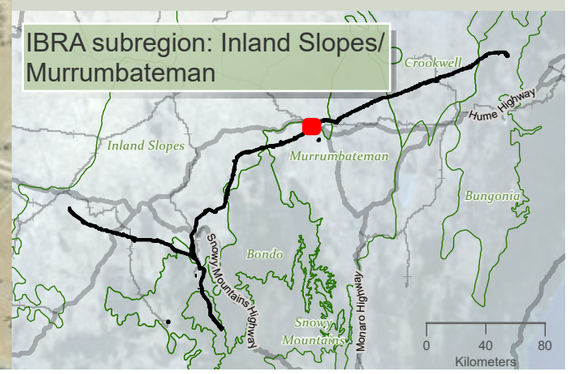
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei
- Litoria castanea



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

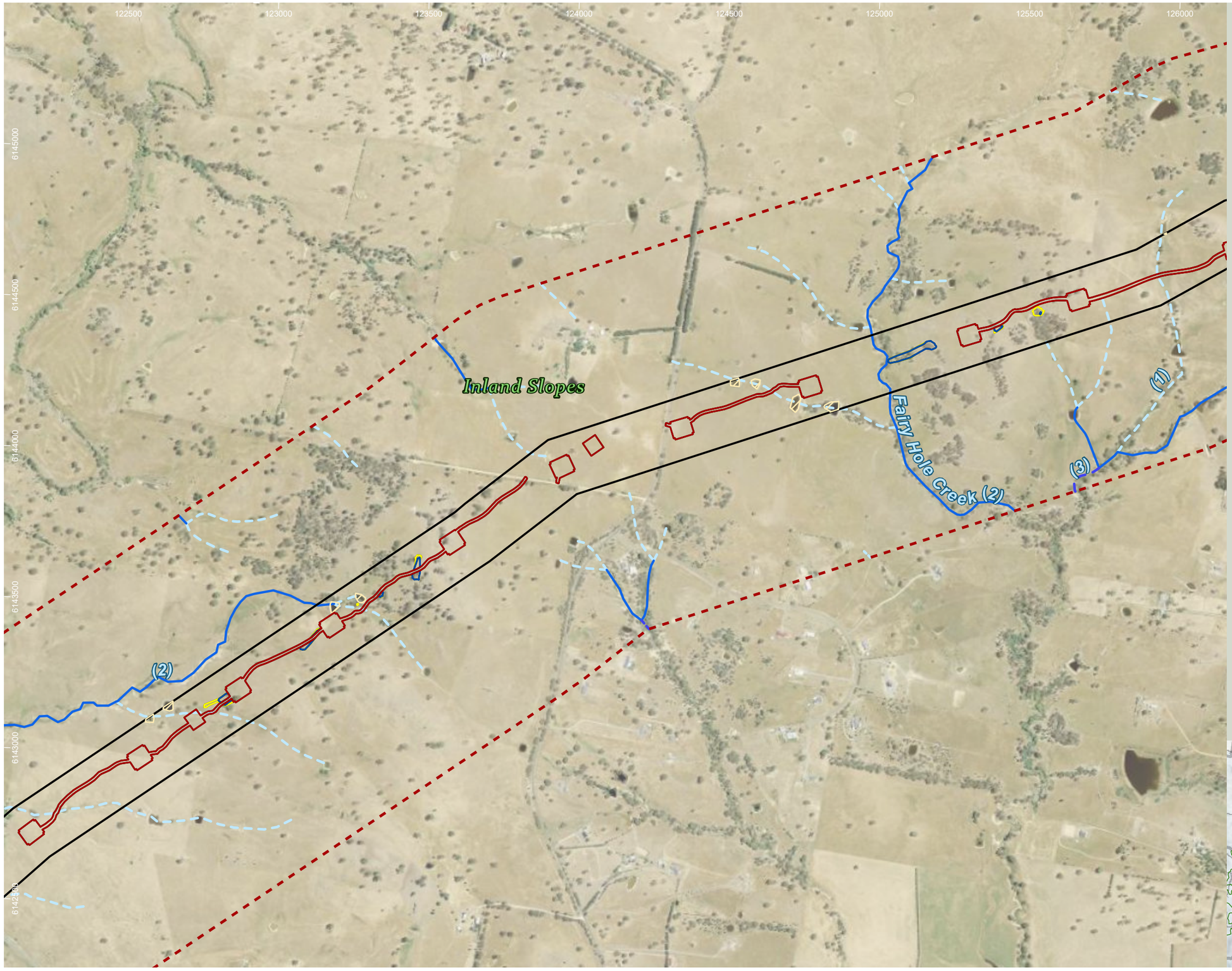
Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 71

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

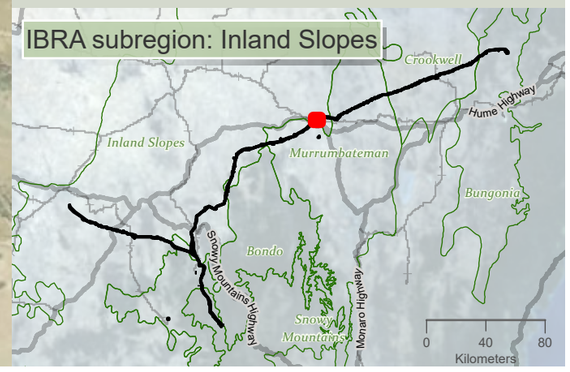
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 73

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

125500 126000 126500 127000 127500 128000 128500 129000

6146500 6146000 6145500 6145000 6144500 6144000

Cooks Creek (4)

(7)

Inland Slopes

(3)

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

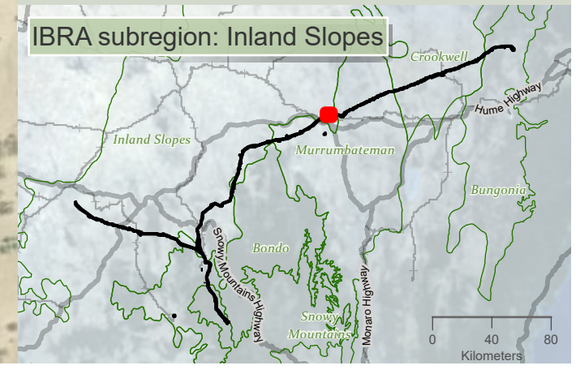
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Crinia sloanei



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

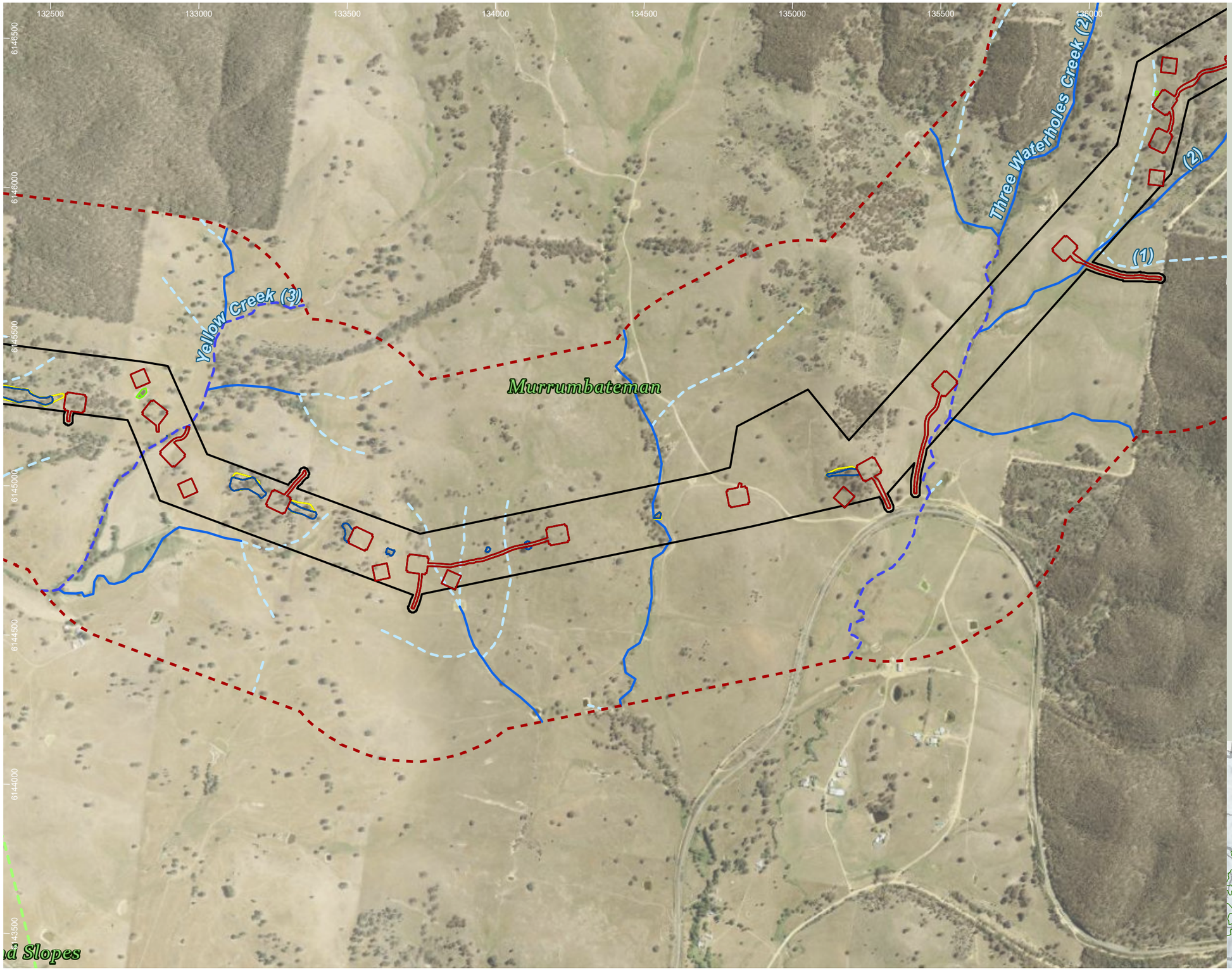
Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 74

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

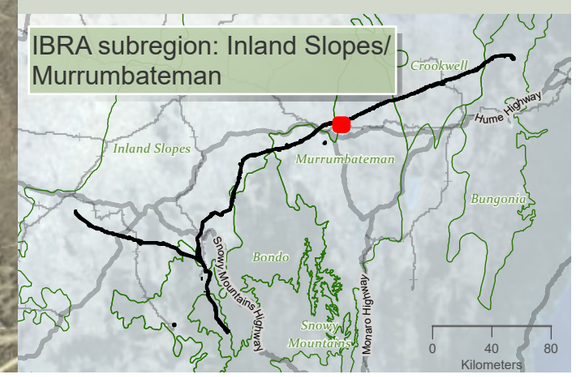
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400
m
N

WGS 1984 Web Mercator

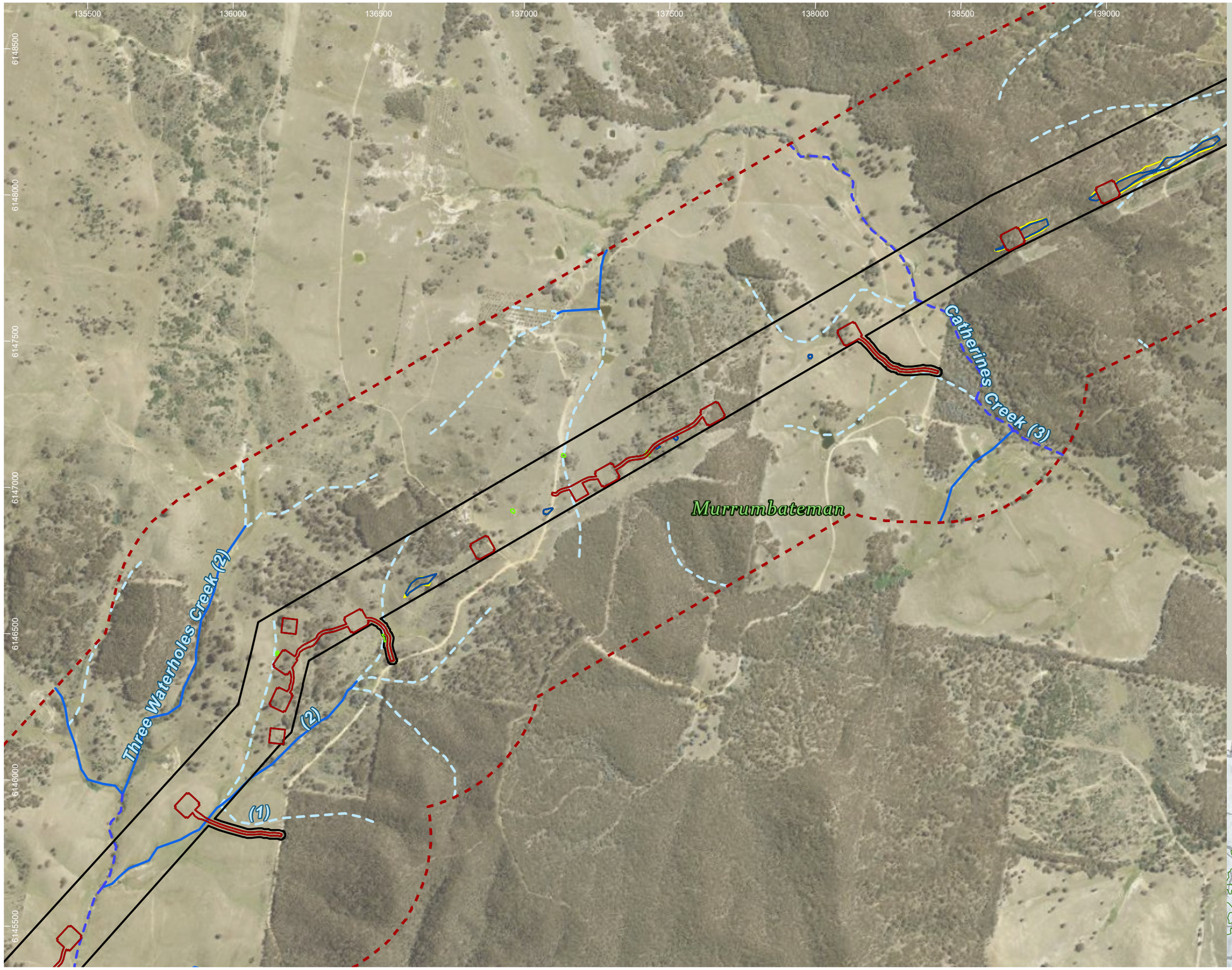
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 76

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

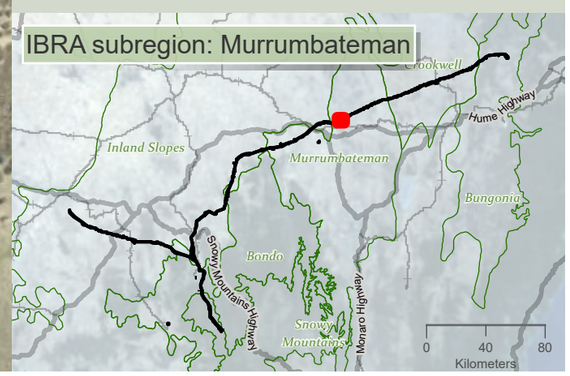
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

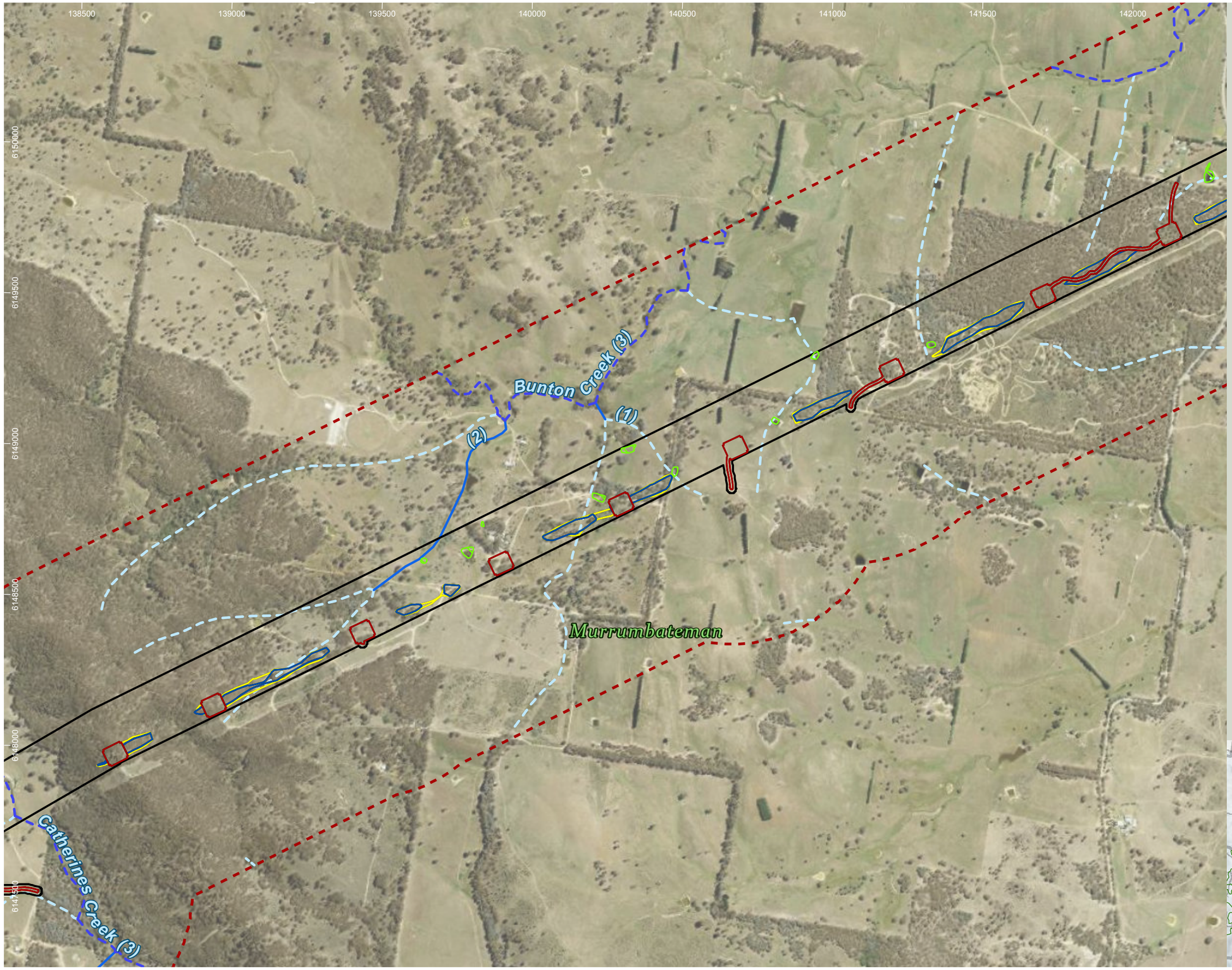
Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 77

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

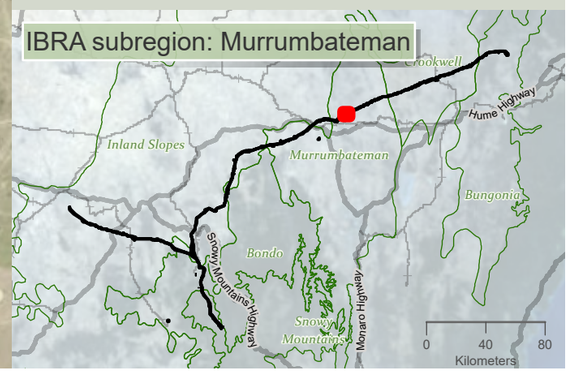
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 78

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699_Humelink_BDAR_Stage 2 Part B.aprx
Landscape assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx - Confidential impact assessment

141500 142000 142500 143000 143500 144000 144500 145000

6152000 6151500 6151000 6150500 6150000

Murrumbateman

Bunton Creek (3)

Felled Timber Creek (3)

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

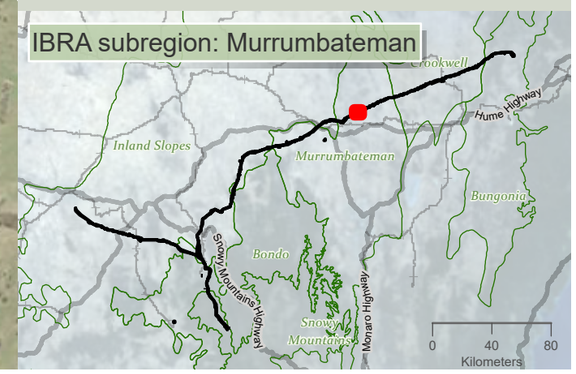
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 79

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Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\FoldenNiche\6699_Humelink_BDAR_Stage 2 Part B.aprx Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

144500 145000 145500 146000 146500 147000 147500 148000

6153500 6153000 6152500 6152000 6151000

Murrumbateman

Jerrawa Creek (5)

Felled Timber Creek (3)

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

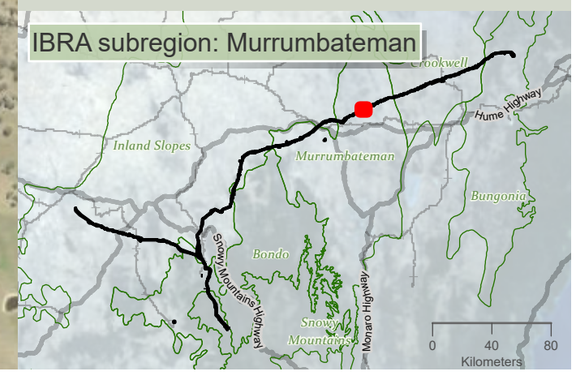
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 80

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Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

148000 148500 149000 149500 150000 150500 151000 151500

6155000 6154500 6154000 6153500 6153000 6152500

Murrumbateman

Sams Creek (2)

Jerrawa Creek (5)

(1)

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

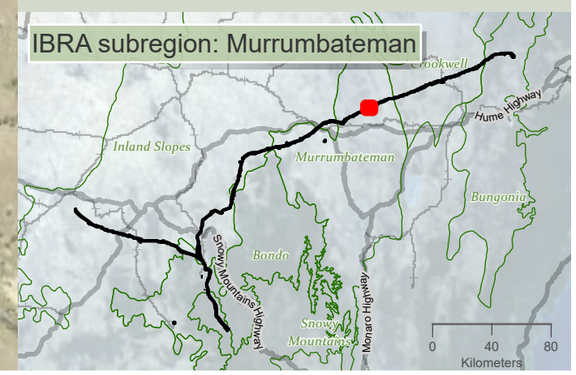
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 81

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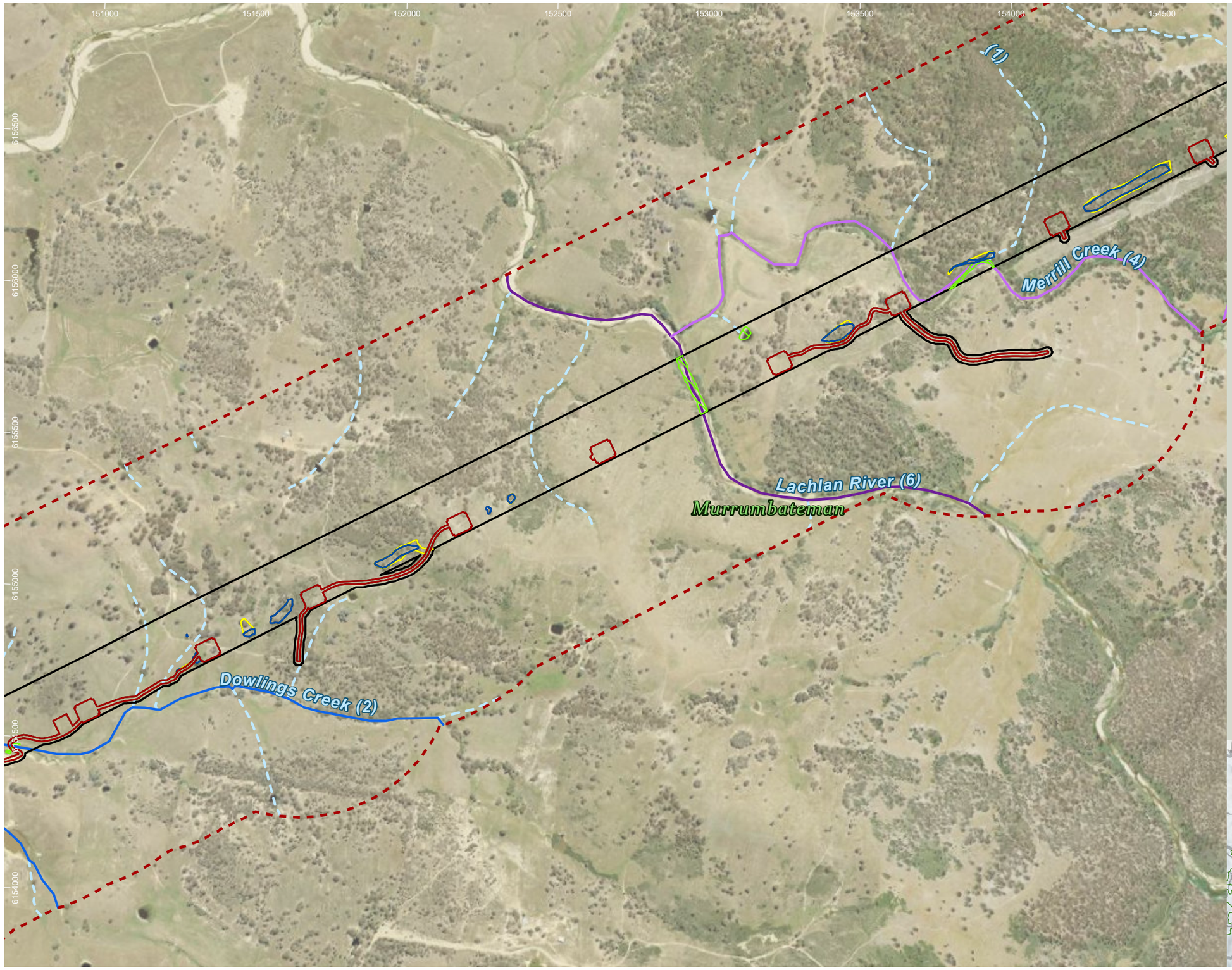


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

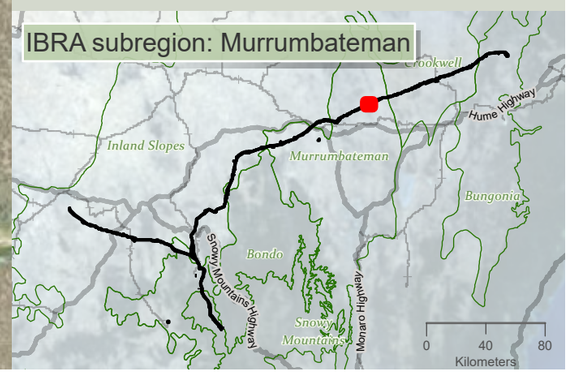
- 1
- 2
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

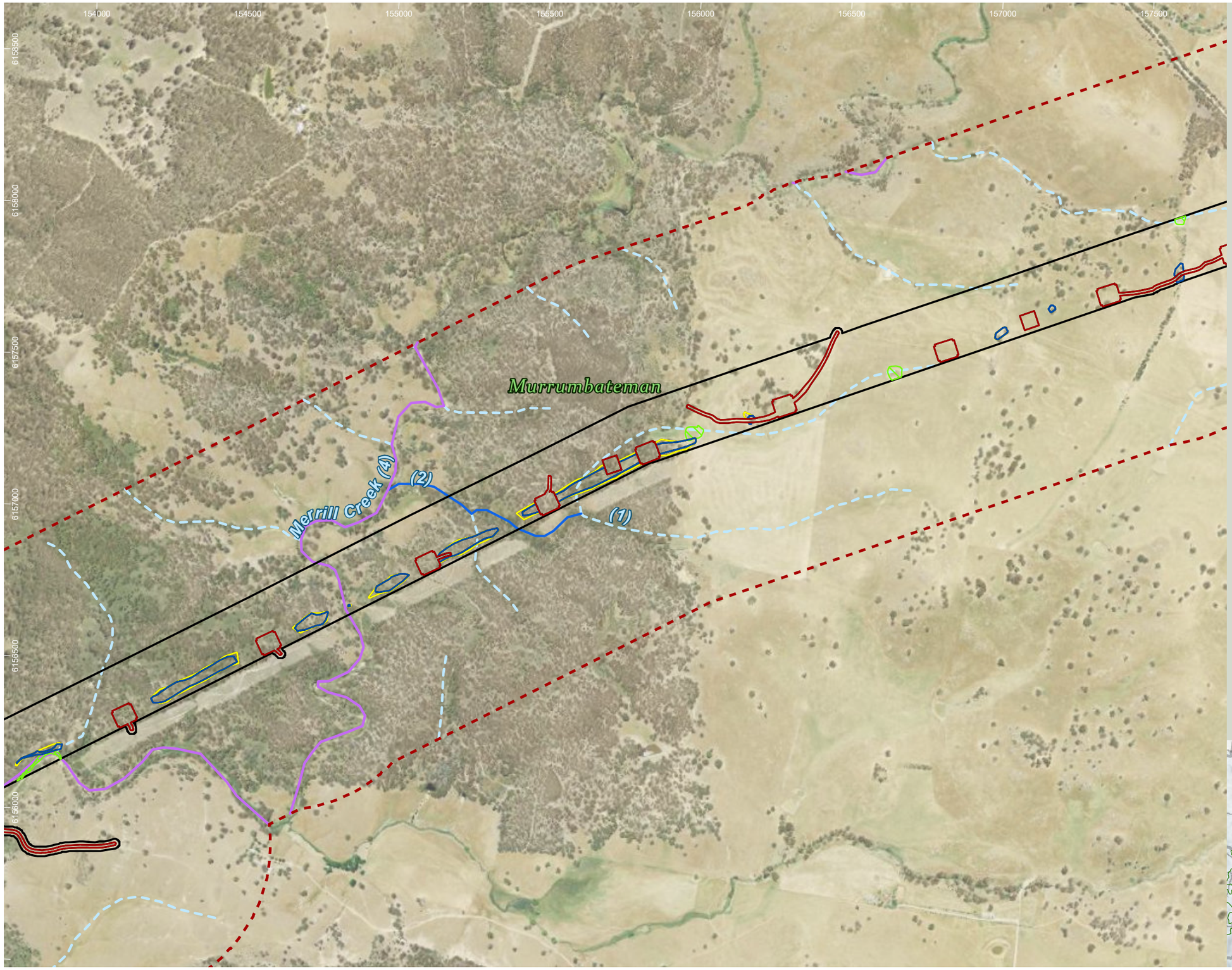
Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 82

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\ai6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

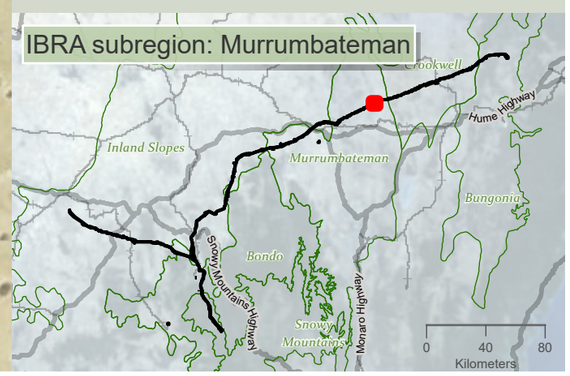
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 N 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 83

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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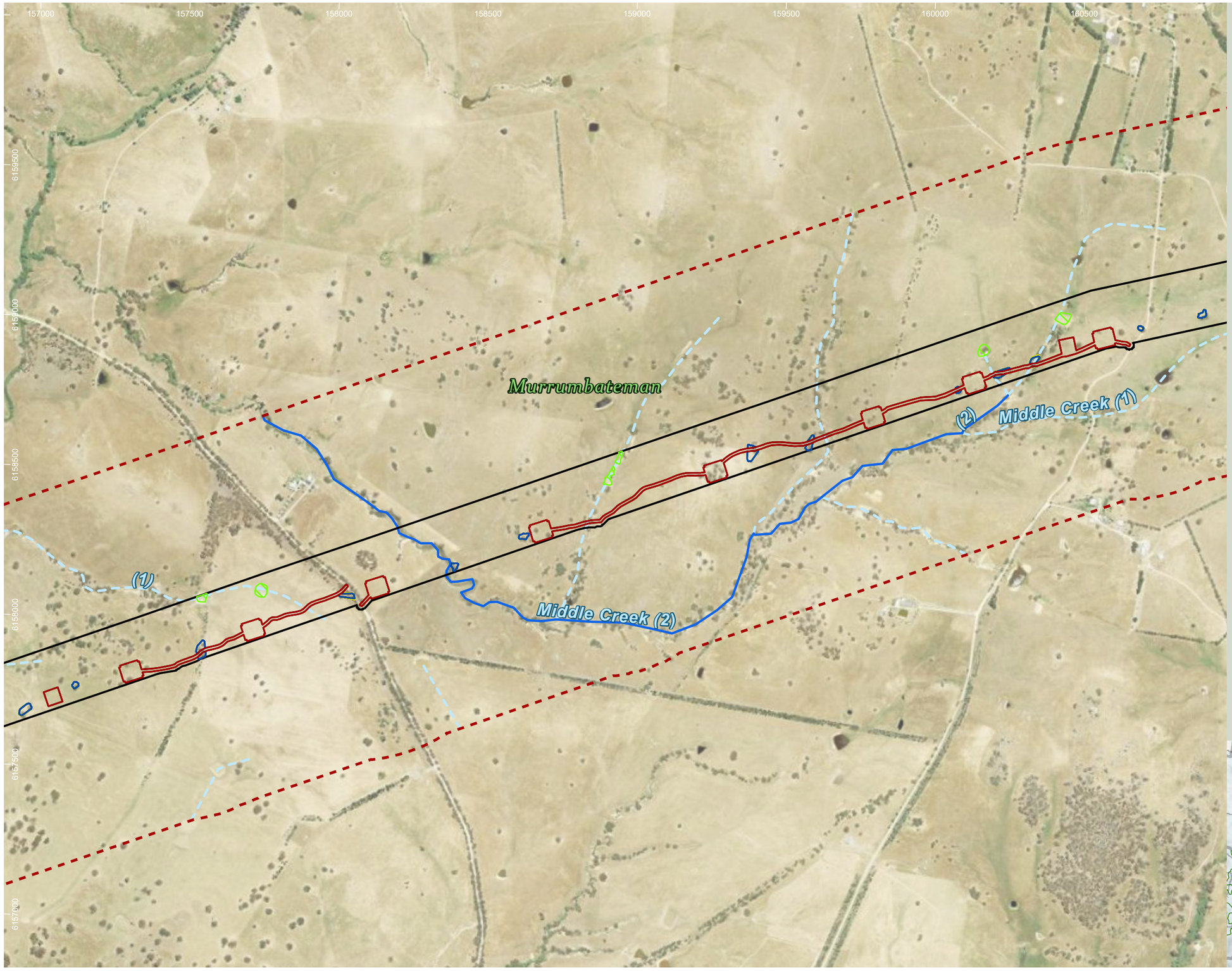


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

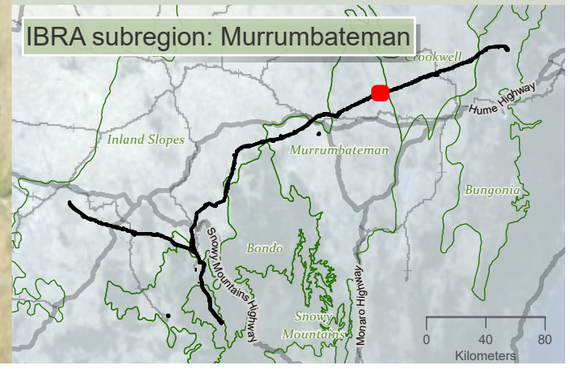
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 84

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160500 161000 161500 162000 162500 163000 163500 164000

6161000 6160500 6160000 6159500 6159000 6158500 6158000

Crookwell

(2)

(1)

Murrumbateman

Merrill Creek (2)

Middle Creek (1)

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

- 1
- 2
- 3

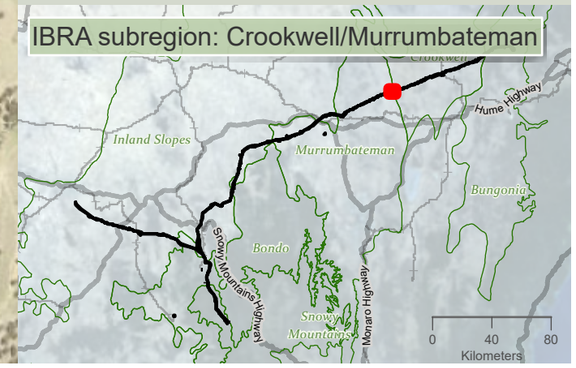
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea

IBRA subregion: Crookwell/Murrumbateman



0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 85

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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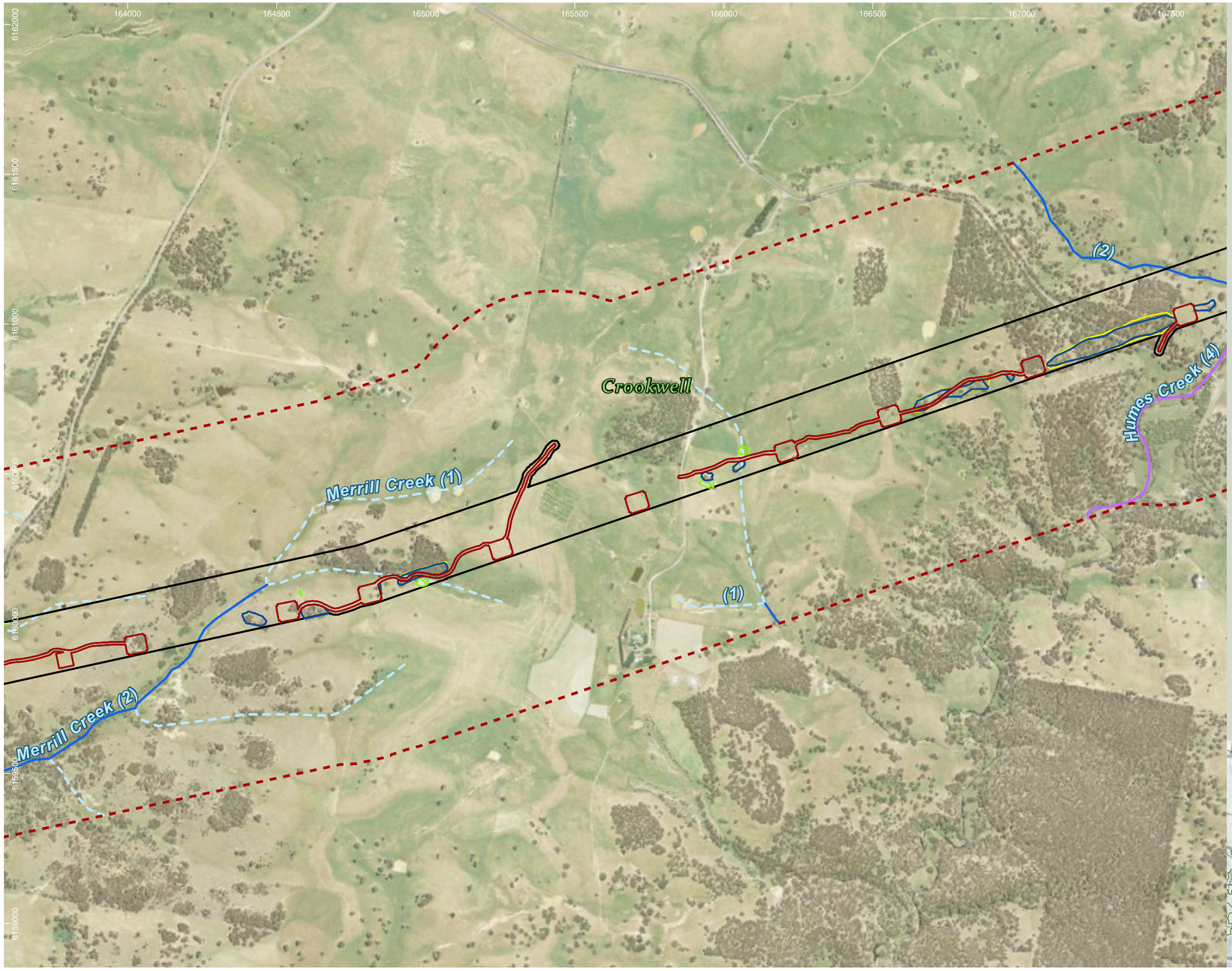


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

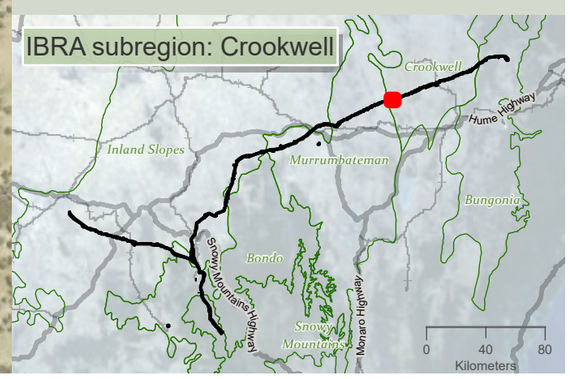
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 86

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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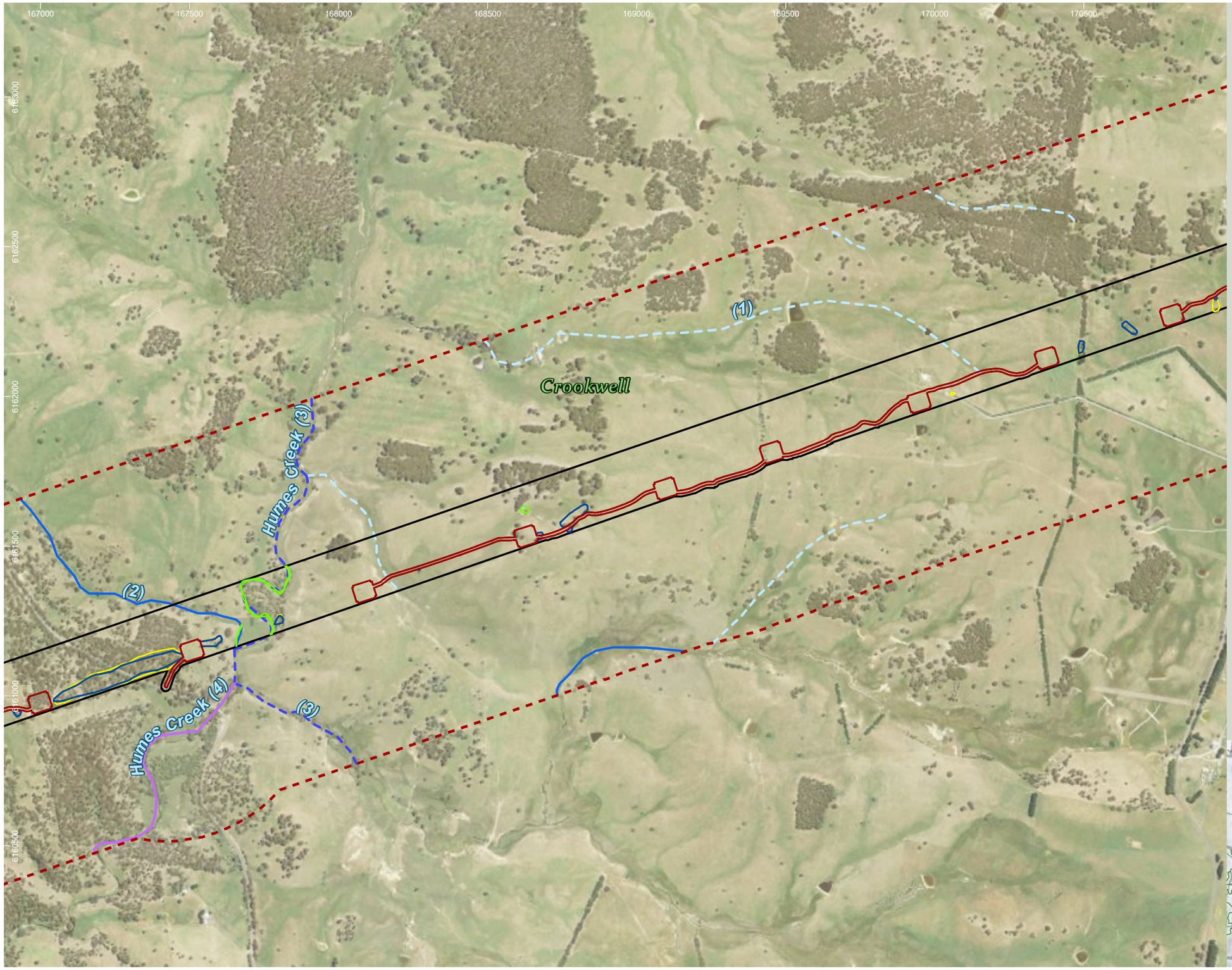


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

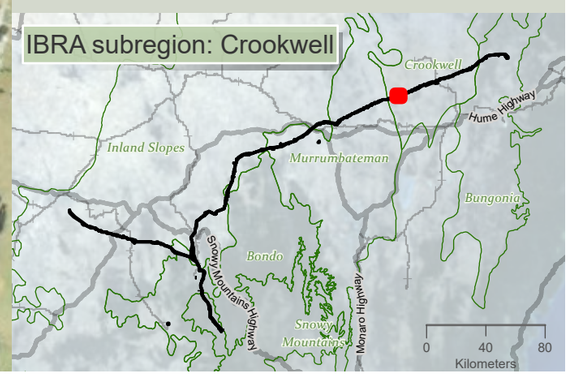
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 87

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski; Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

170500 171000 171500 172000 172500 173000 173500 174000

6164500 6164000 6163500 6163000 6162500 6162000 6161500

Crookwell

(1)

Gurrundah Creek (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

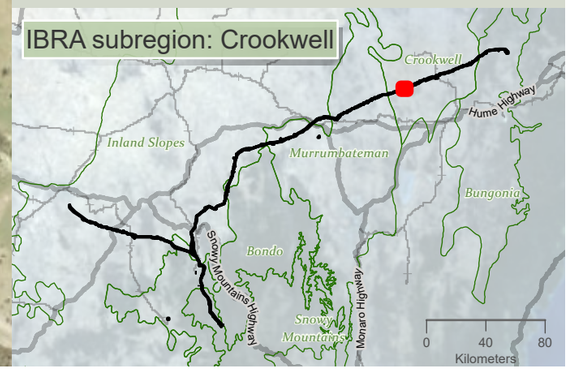
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

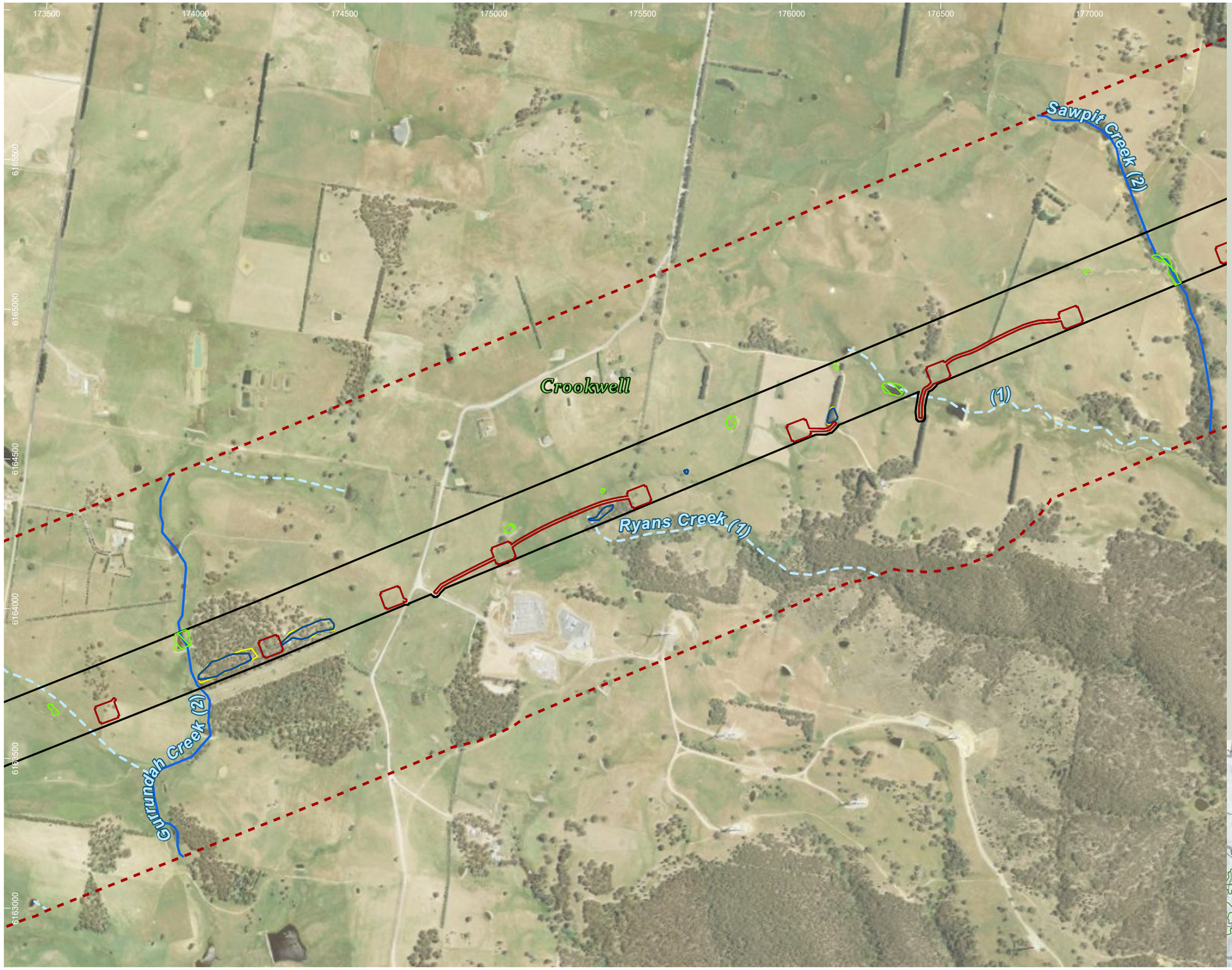
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 88

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

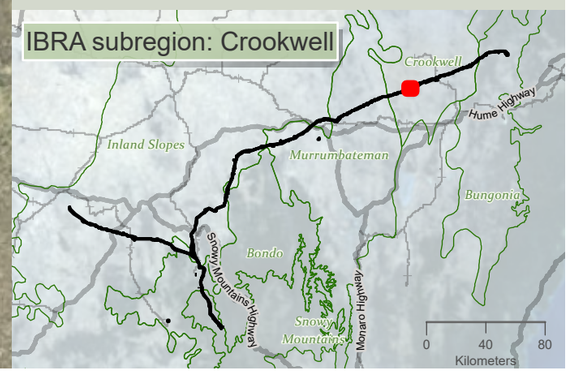
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 89

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

177000 177500 178000 178500 179000 179500 180000 180500

6167500 6167000 6166500 6166000 6165500 6165000 6164500

Crookwell

(1)

(2)

Kialla Creek (3)

Sawpit Creek (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

- 1
- 2
- 3

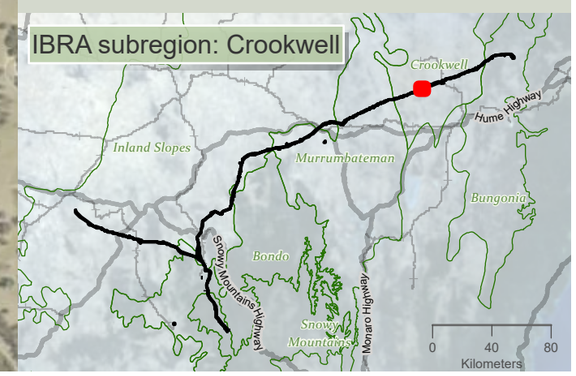
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea

IBRA subregion: Crookwell



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niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 90

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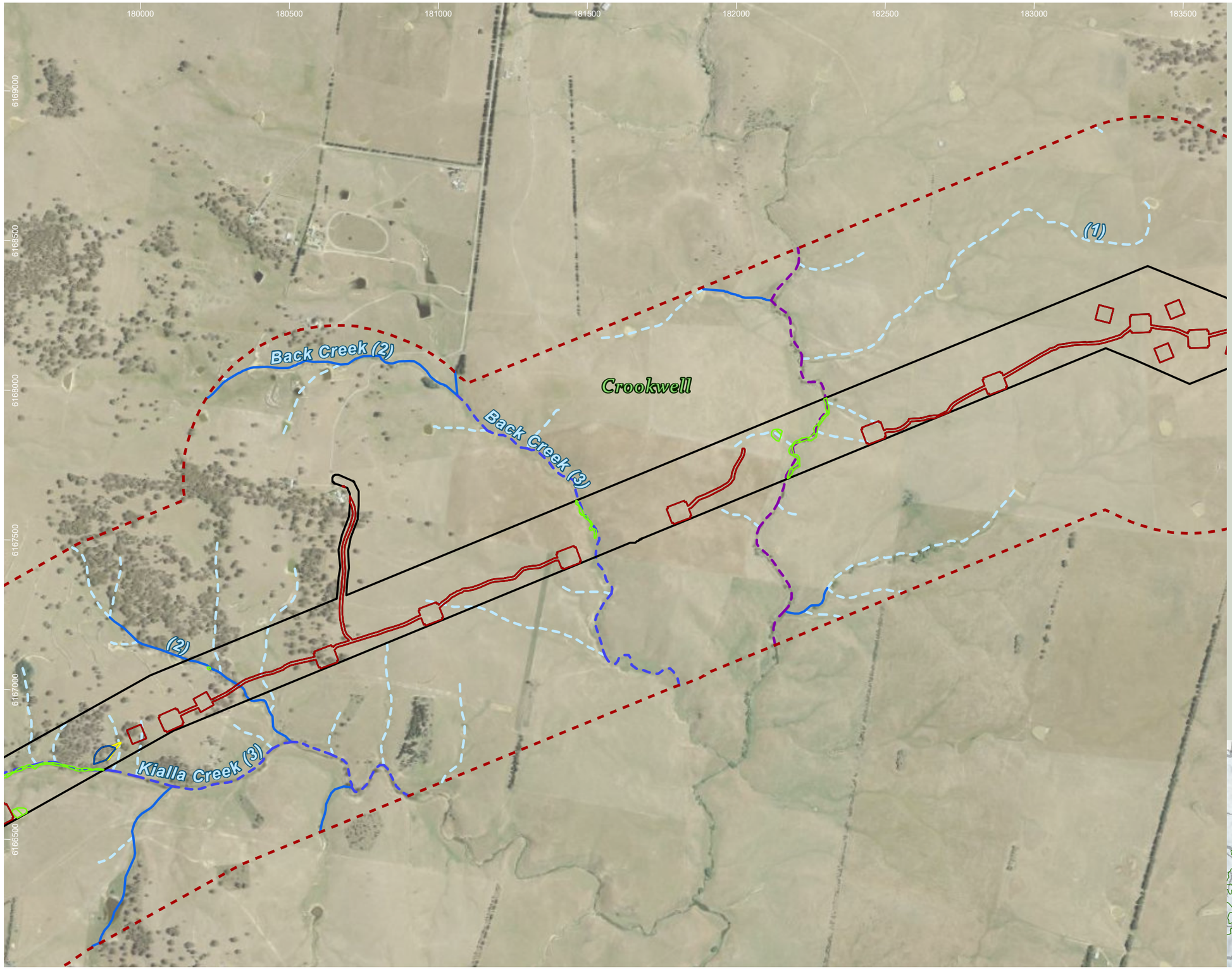


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

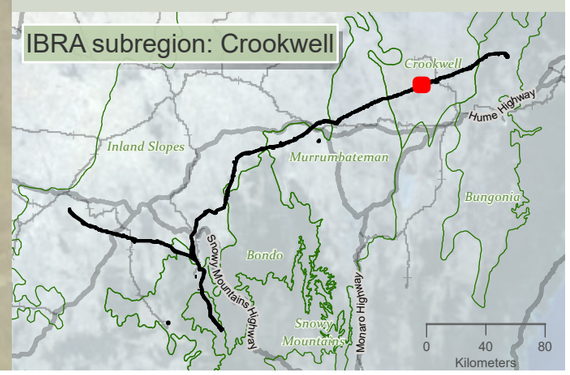
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 91

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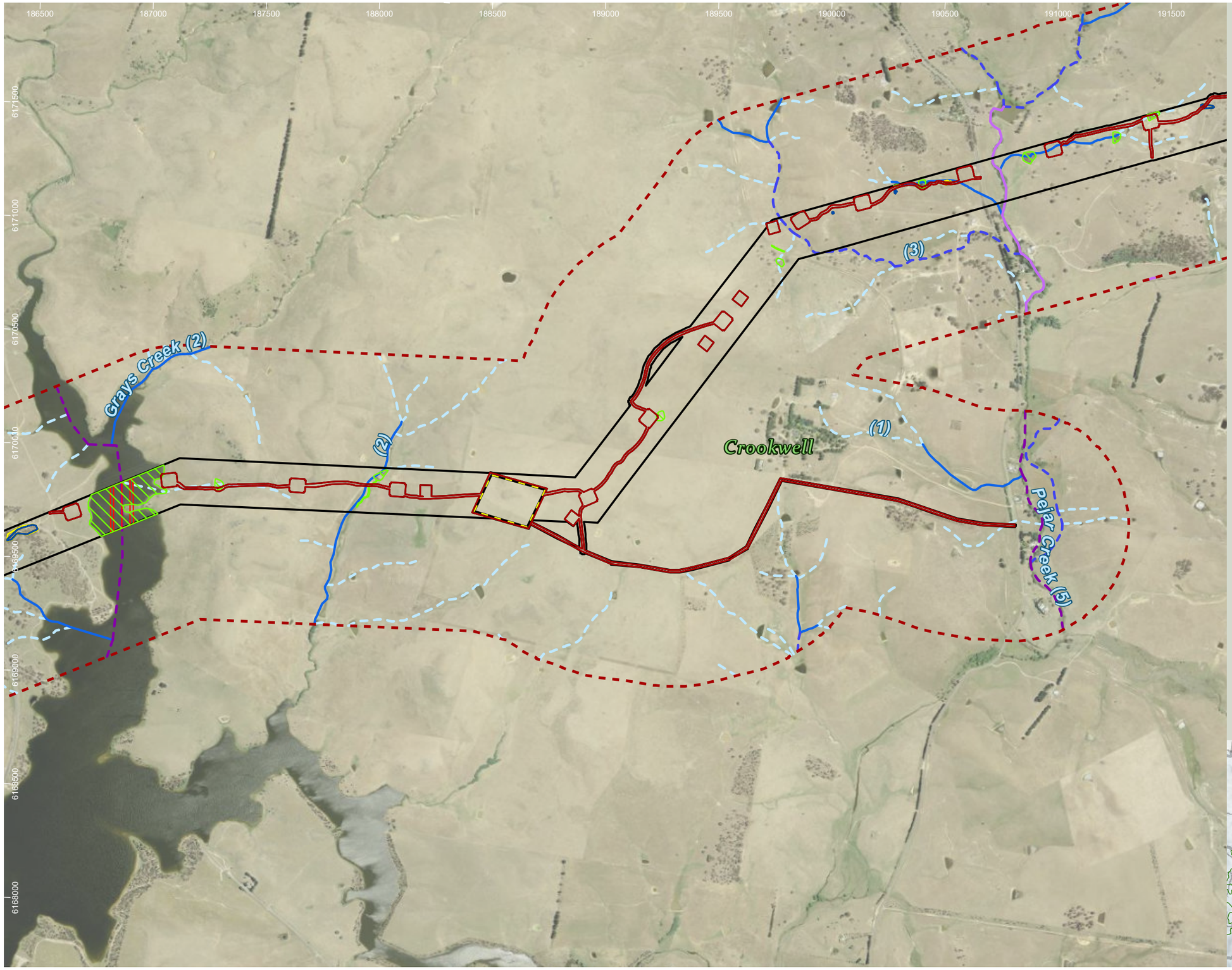


HumeLink project areas

- Project footprint
- Proposed construction compounds
- Landscape assessment area

Strahler stream order

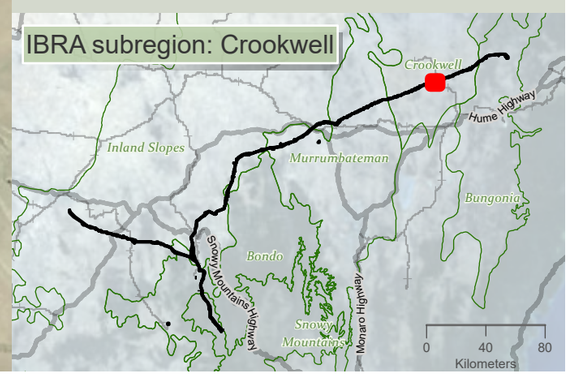
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria booroolongensis
- Litoria castanea



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 500
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 93

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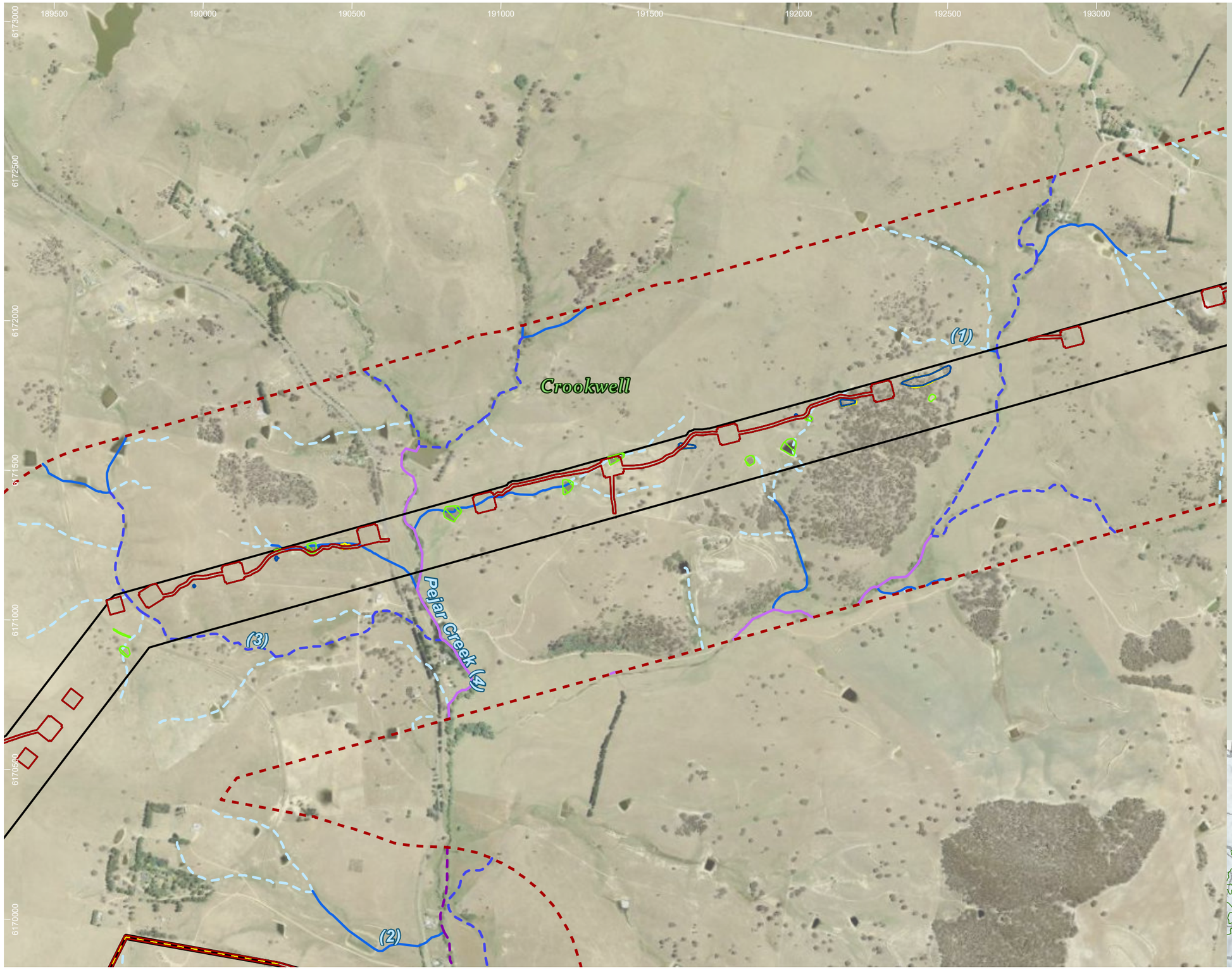


HumeLink project areas

- Project footprint
- Proposed construction compounds
- Landscape assessment area

Strahler stream order

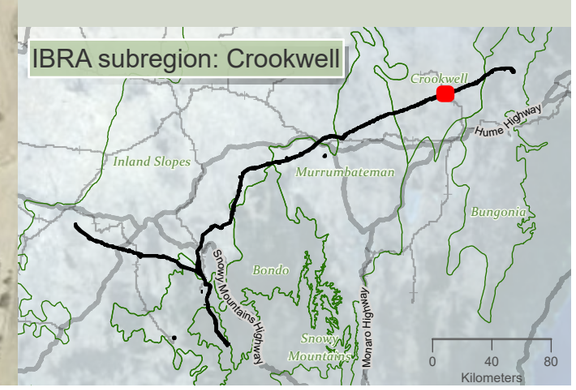
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 94

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193000 193500 194000 194600 195000 195500 196000 196500

6174000 6173500 6173000 6172500 6172000 6171500 6171000

(3) (2) (1)

Melamalong Creek (7)

Crookwell

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

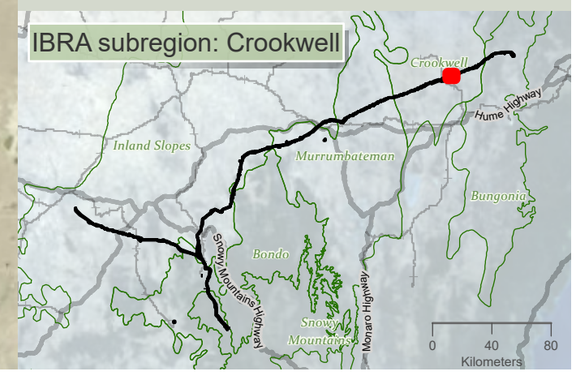
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 95

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Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

196000 196500 197000 197500 198000 198500 199000 199500

6175000 6174500 6174000 6173500 6173000 6172500

Crookwell

Tarlo River (5)

Sawpit Gully (3)

(1) (2) (3) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

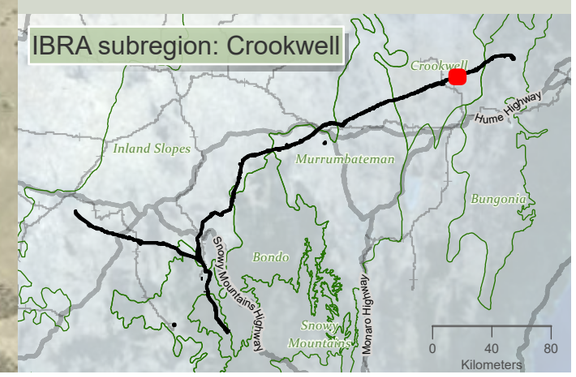
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria booroolongensis
- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

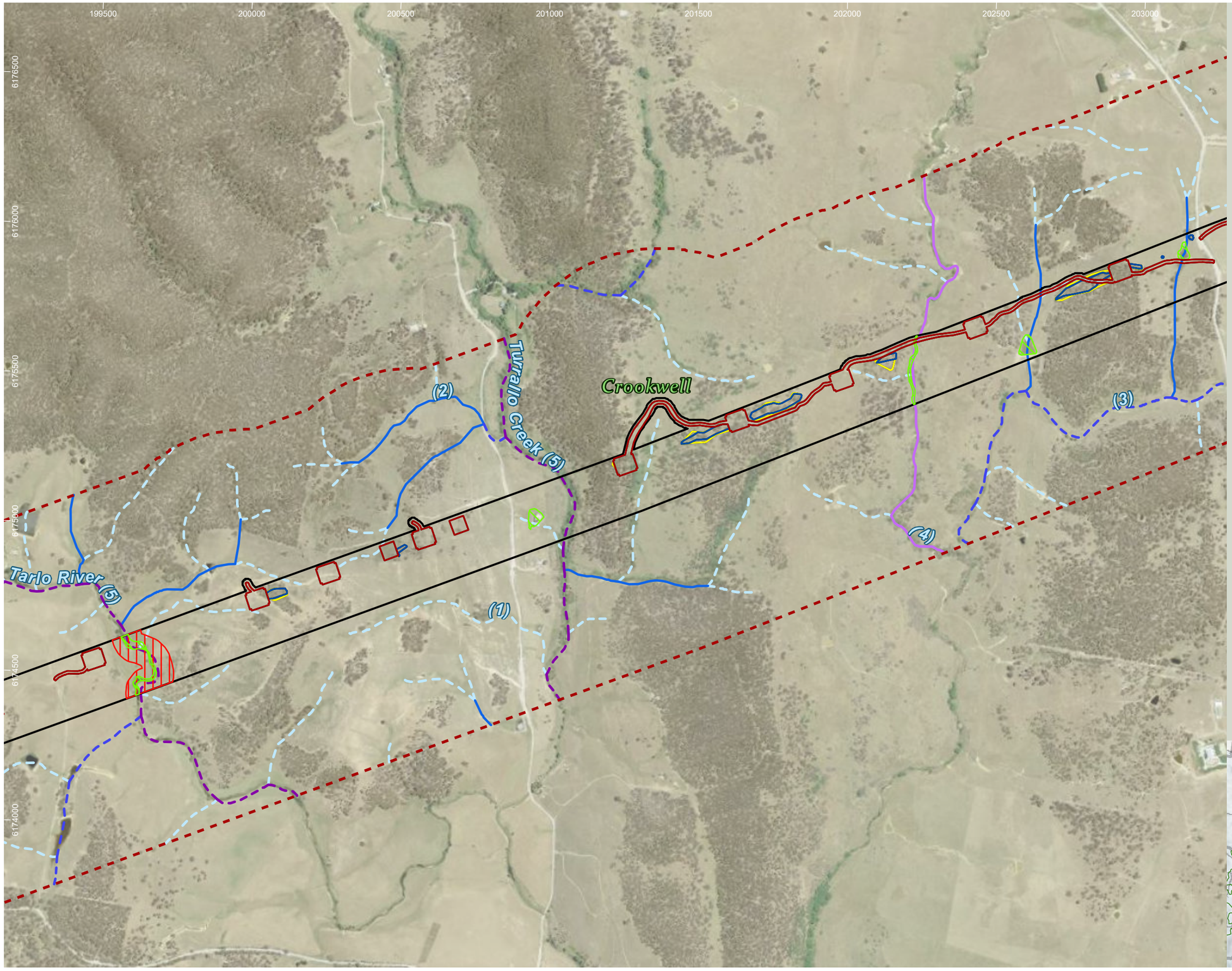
Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 96

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

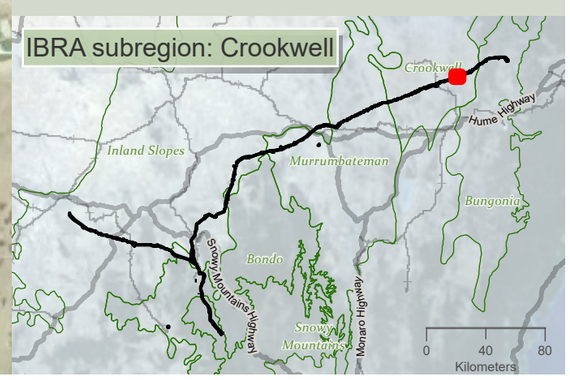
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria booroolongensis
- Litoria castanea



niche Environment and Heritage

0 400
m
WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 97

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6899 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

202500 203000 203500 204000 204500 205000 205500 206000

6178000 6177500 6177000 6176500 6176000 6175500 6175000

Crookwell

(1) (2) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

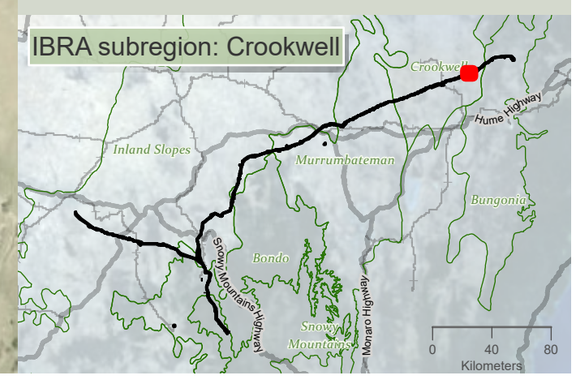
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 98

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

206000 206500 207000 207500 208000 208500 209000 209500

6179000 6178500 6178000 6177500 6177000 6176500

Myrtle Creek (4)

(3)

Cowpers Creek (3)

Crookwell

(2)

(1)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

- 1
- 2
- 3
- 4

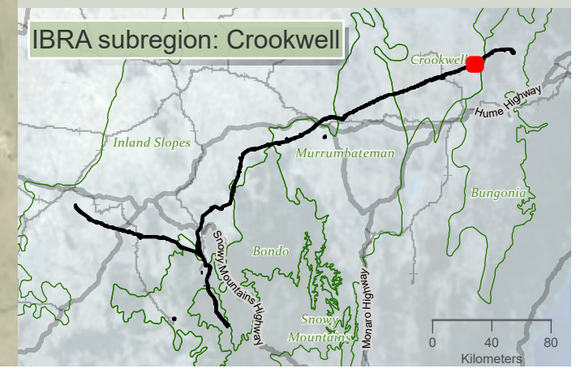
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea

IBRA subregion: Crookwell



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 99

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

208500 209000 209500 210000 210500 211000 211500 212000 212500

6181000 6180500 6180000 6179500 6179000 6178500

Crookwell

(1) (2) (3)

Bungonia

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

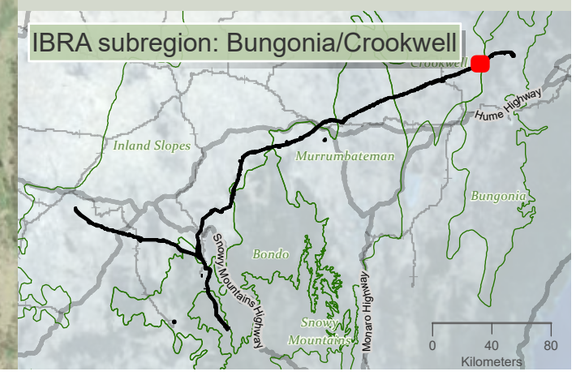
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone

Amphibian species habitat

- Litoria castanea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 100

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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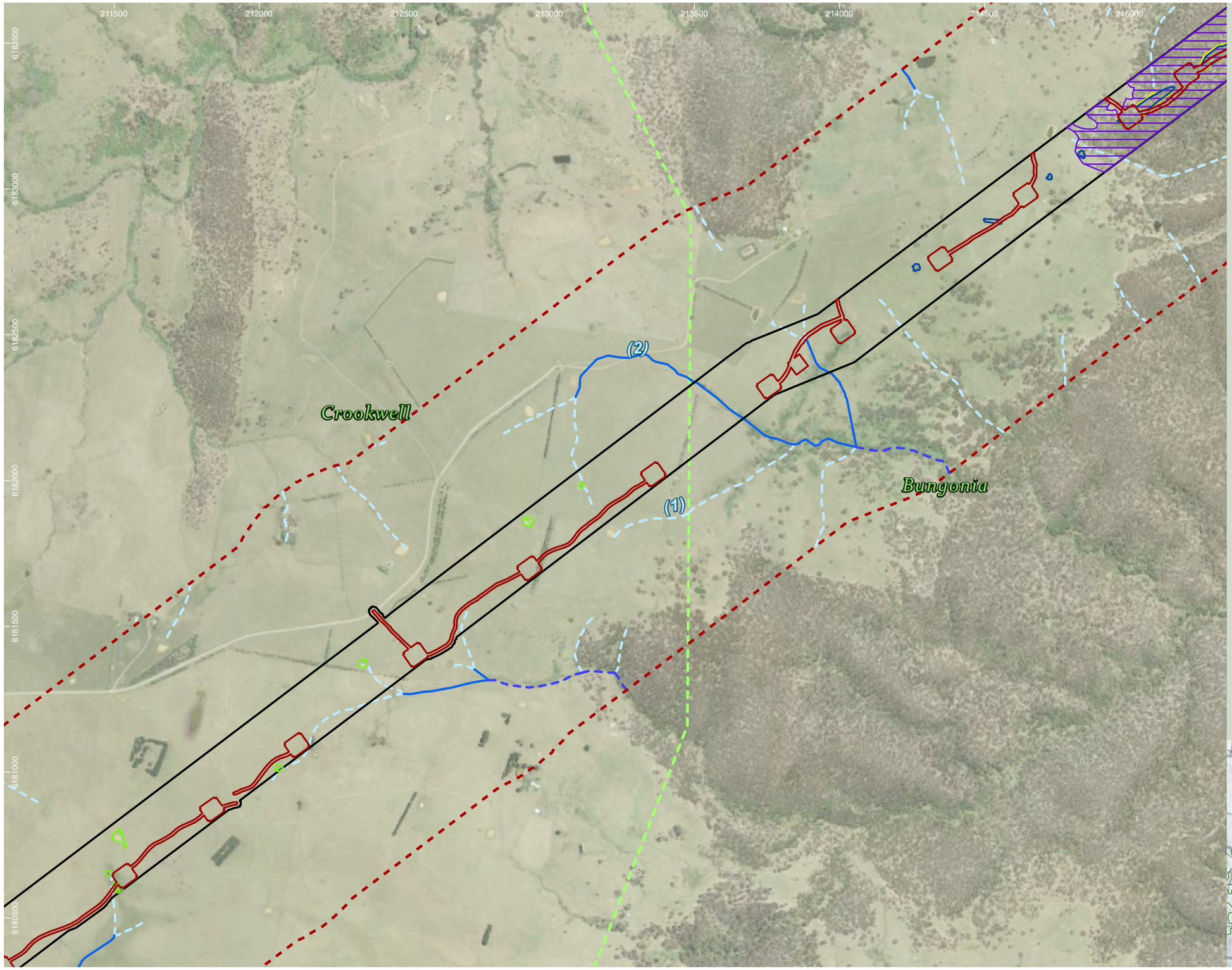


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

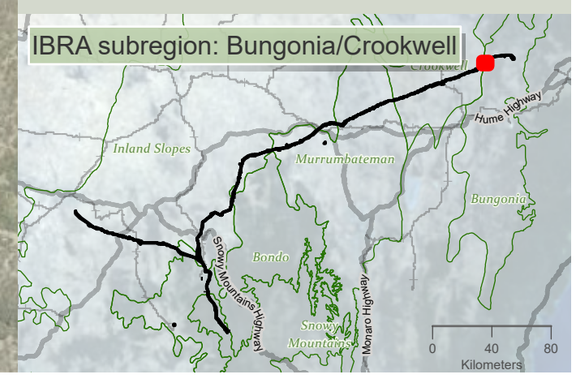
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Litoria castanea
- Mixophyes balbus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

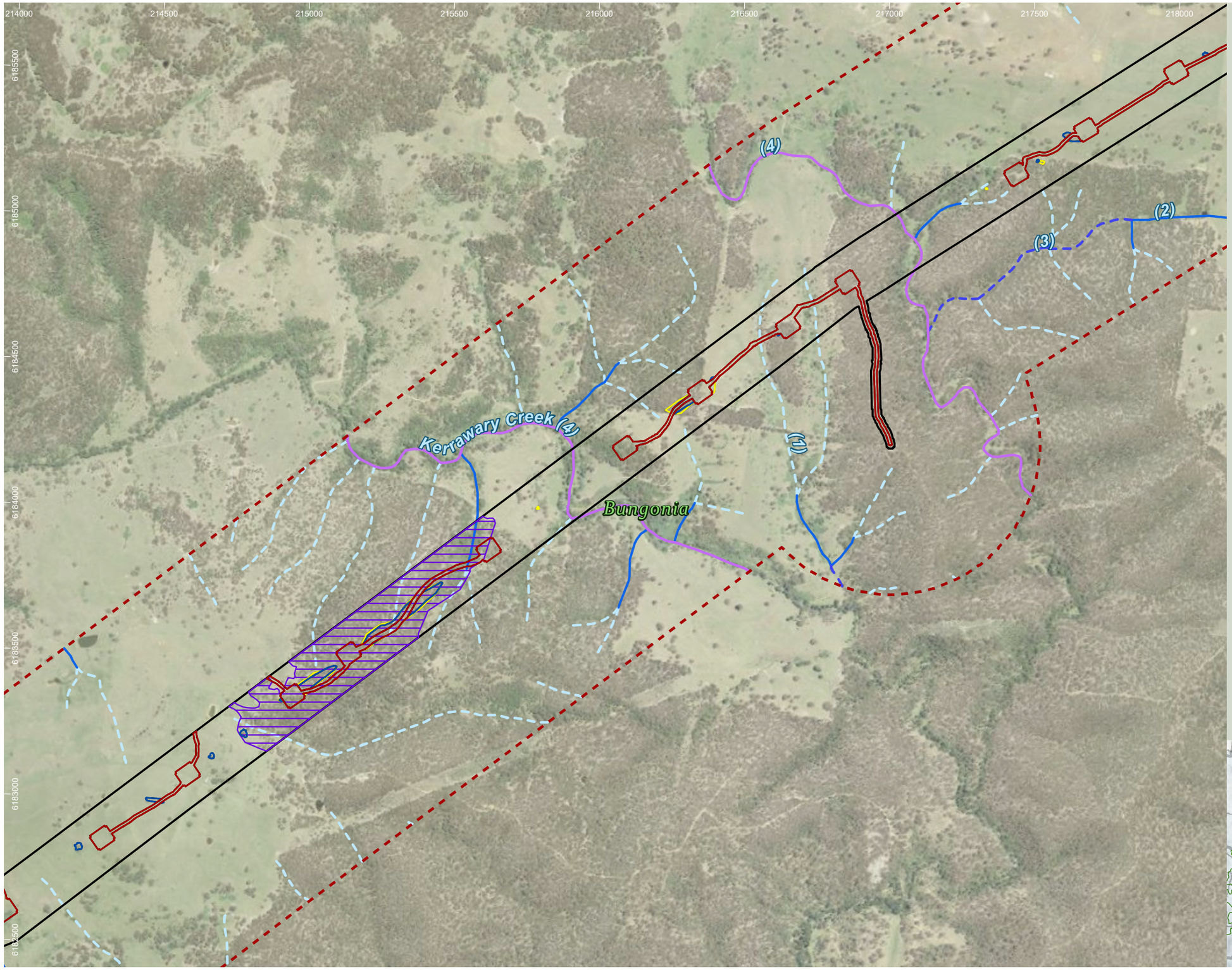
Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 101

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski; Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

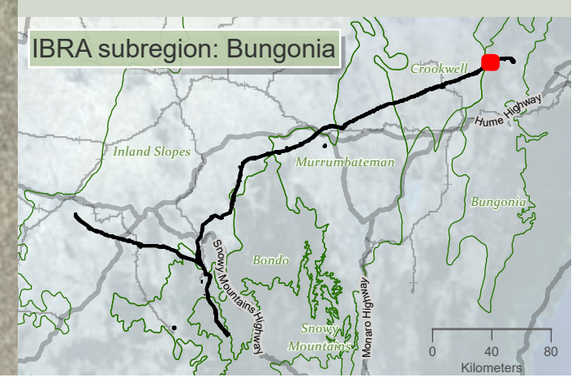
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Mixophyes balbus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 102

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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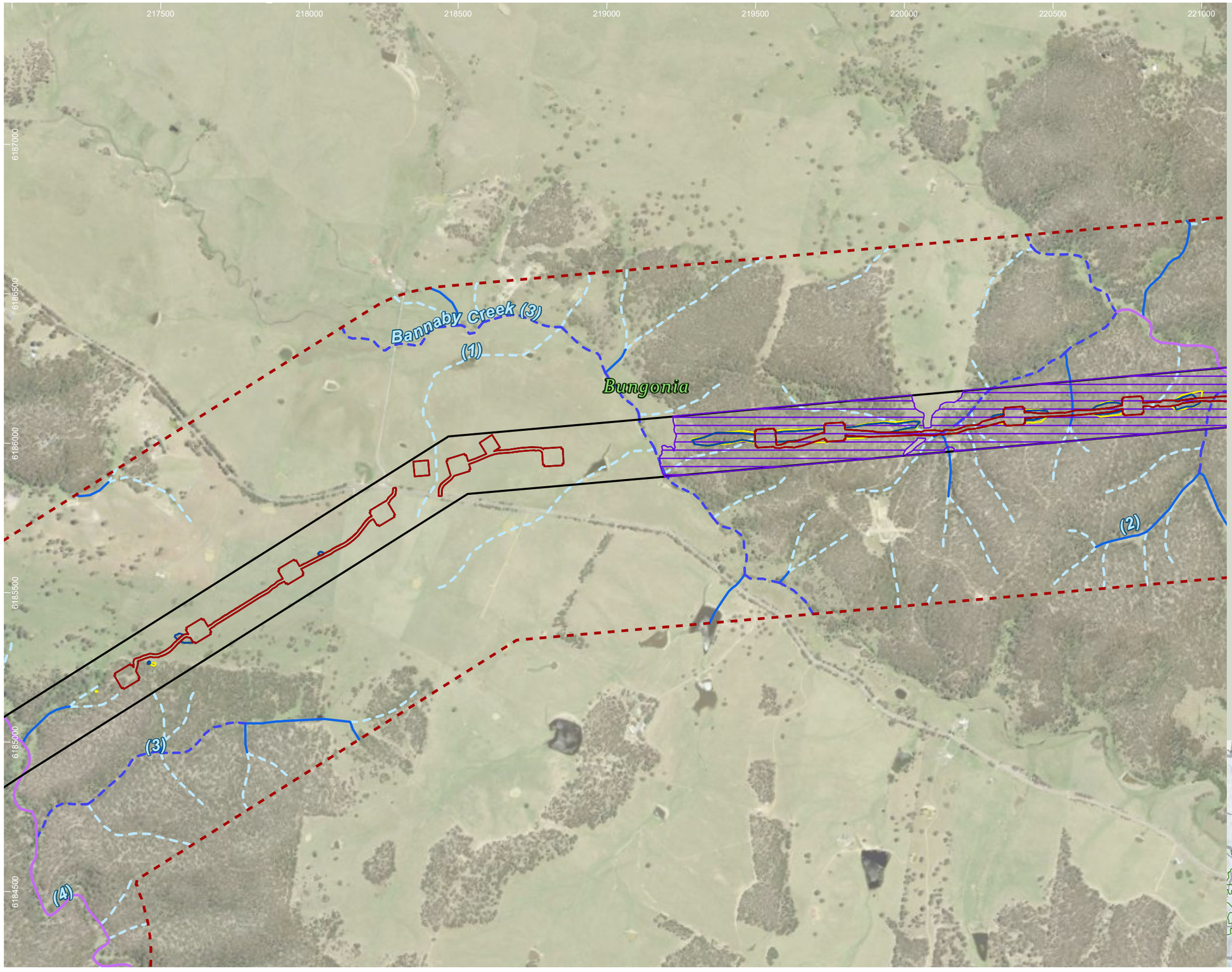


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

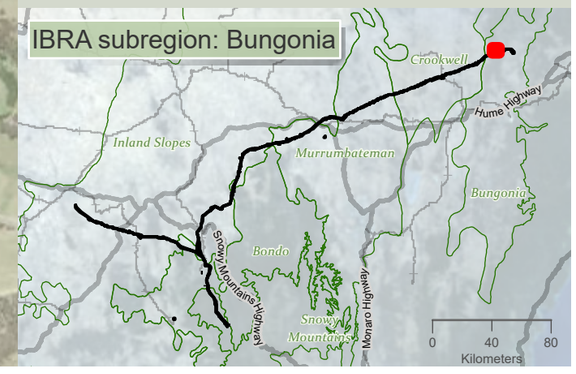
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Mixophyes balbus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 103

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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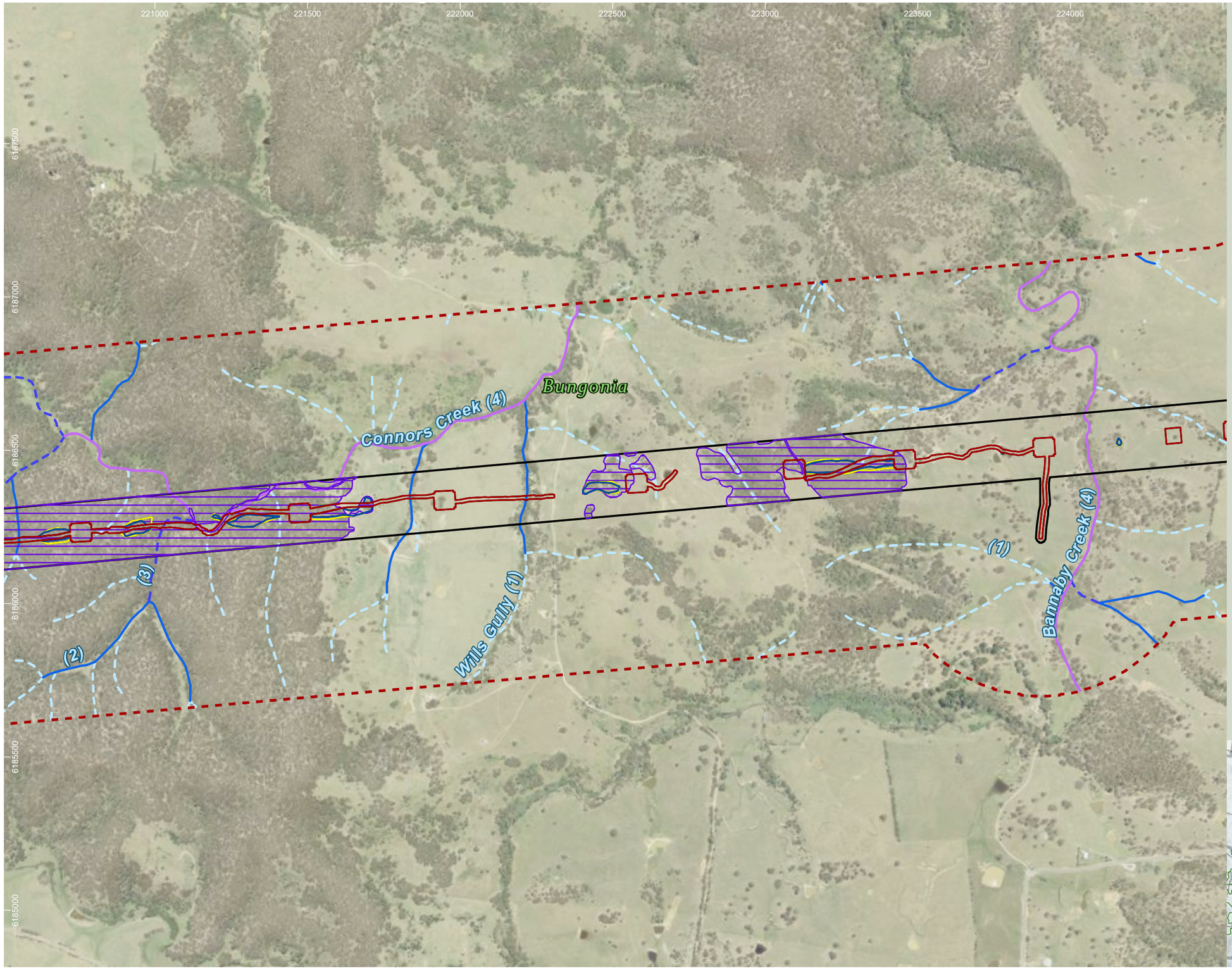


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

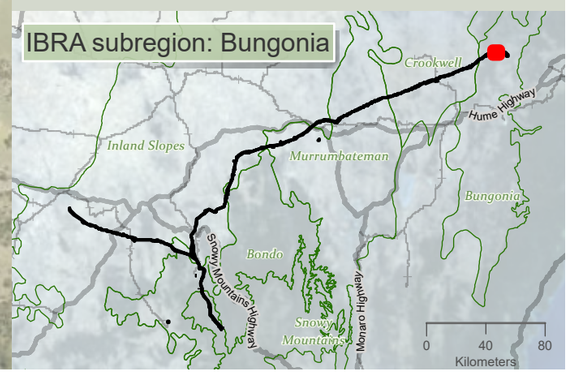
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Amphibian species habitat

- Mixophyes balbus



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

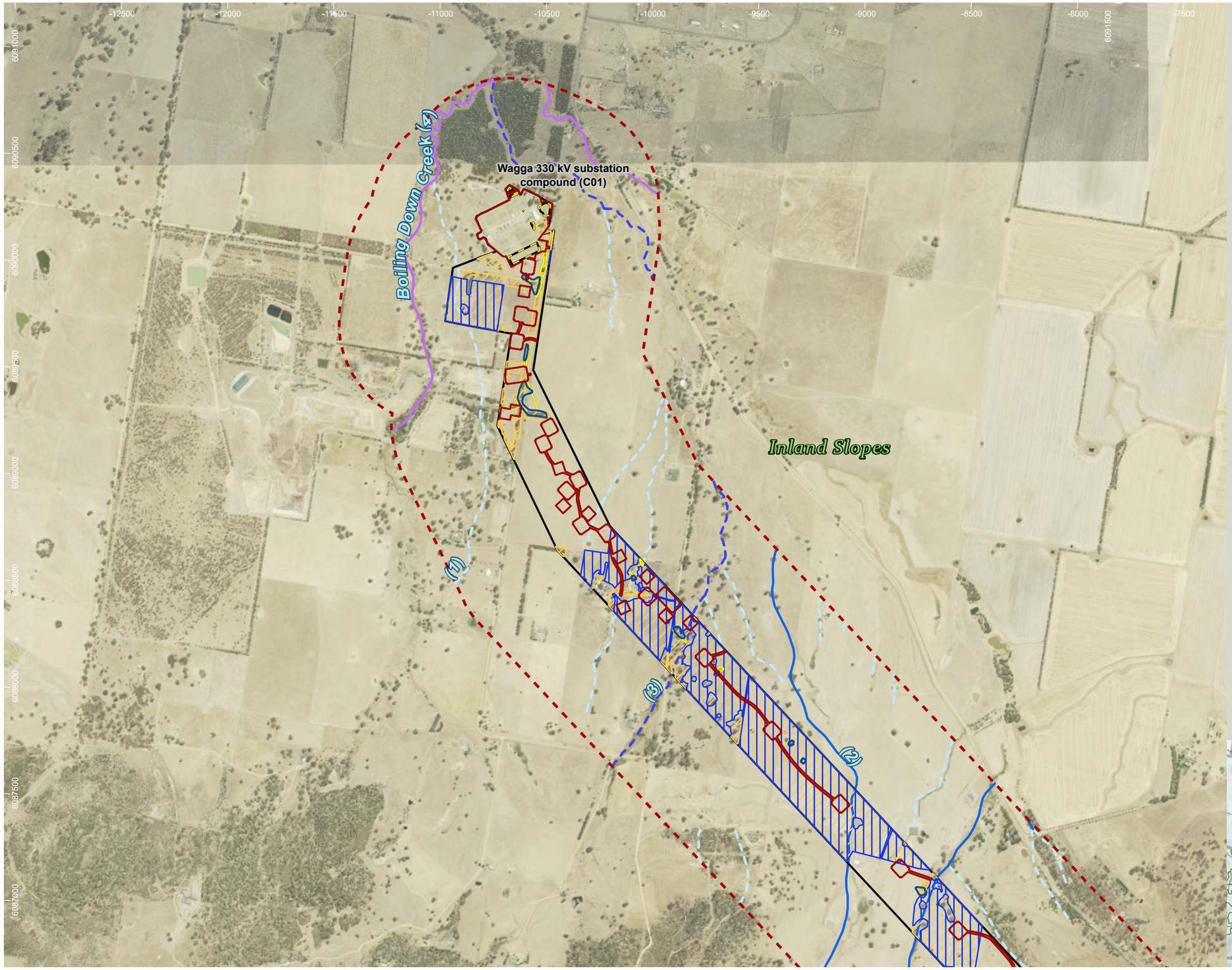
Amphibian species habitat

HumeLink BDAR

Figure 13-3 map reference 104

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

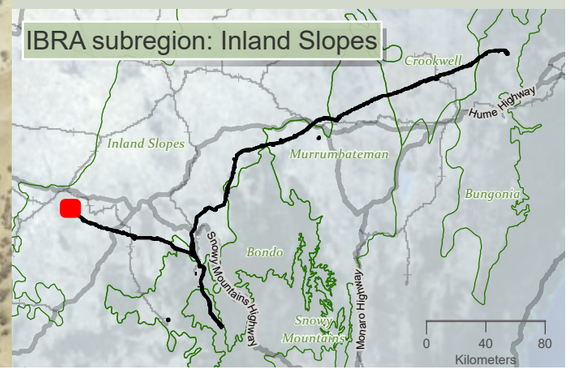
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

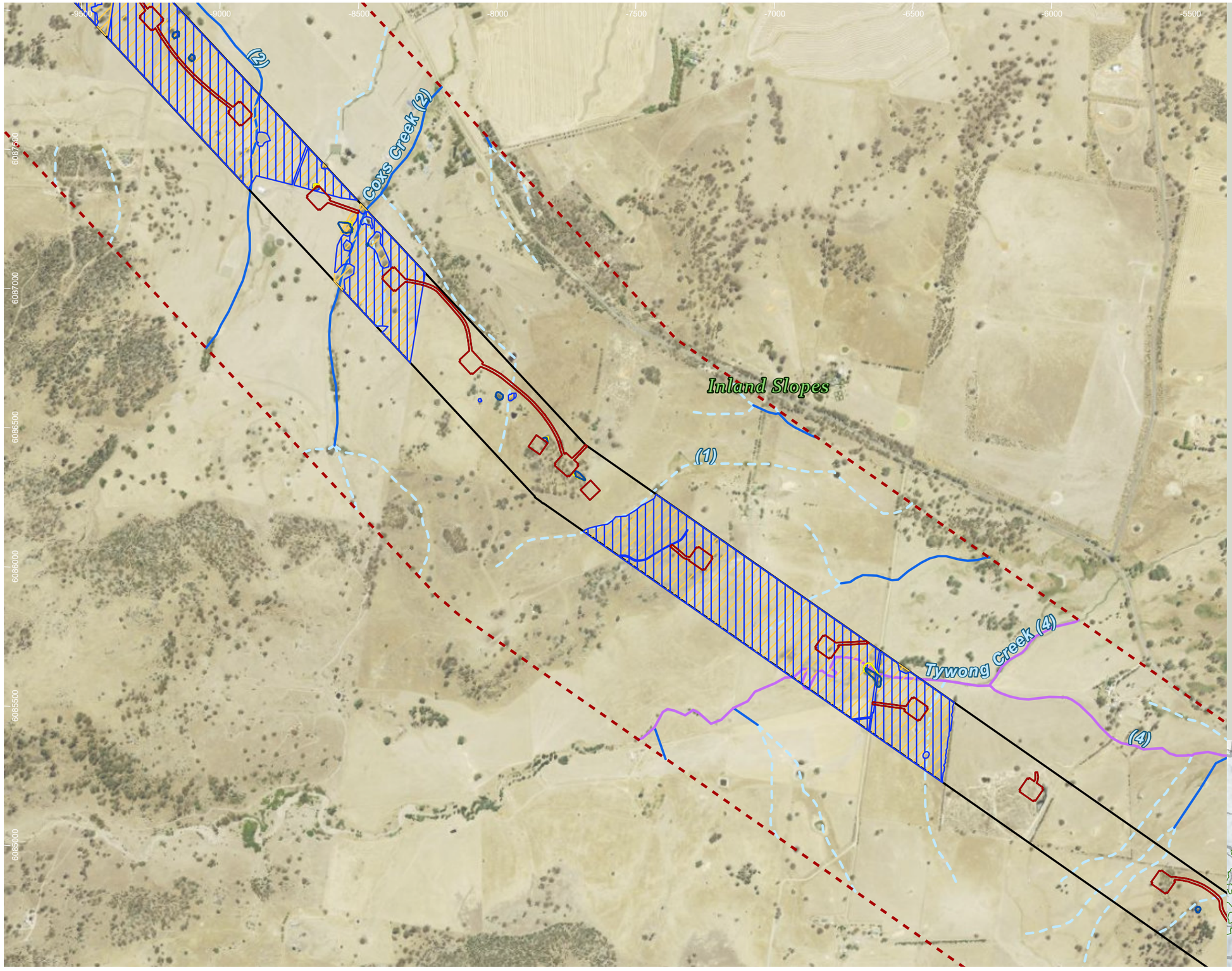
Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 1

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

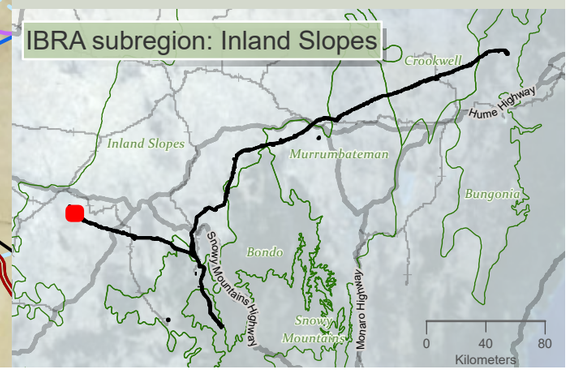
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



Drawn by: MathewZajeczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

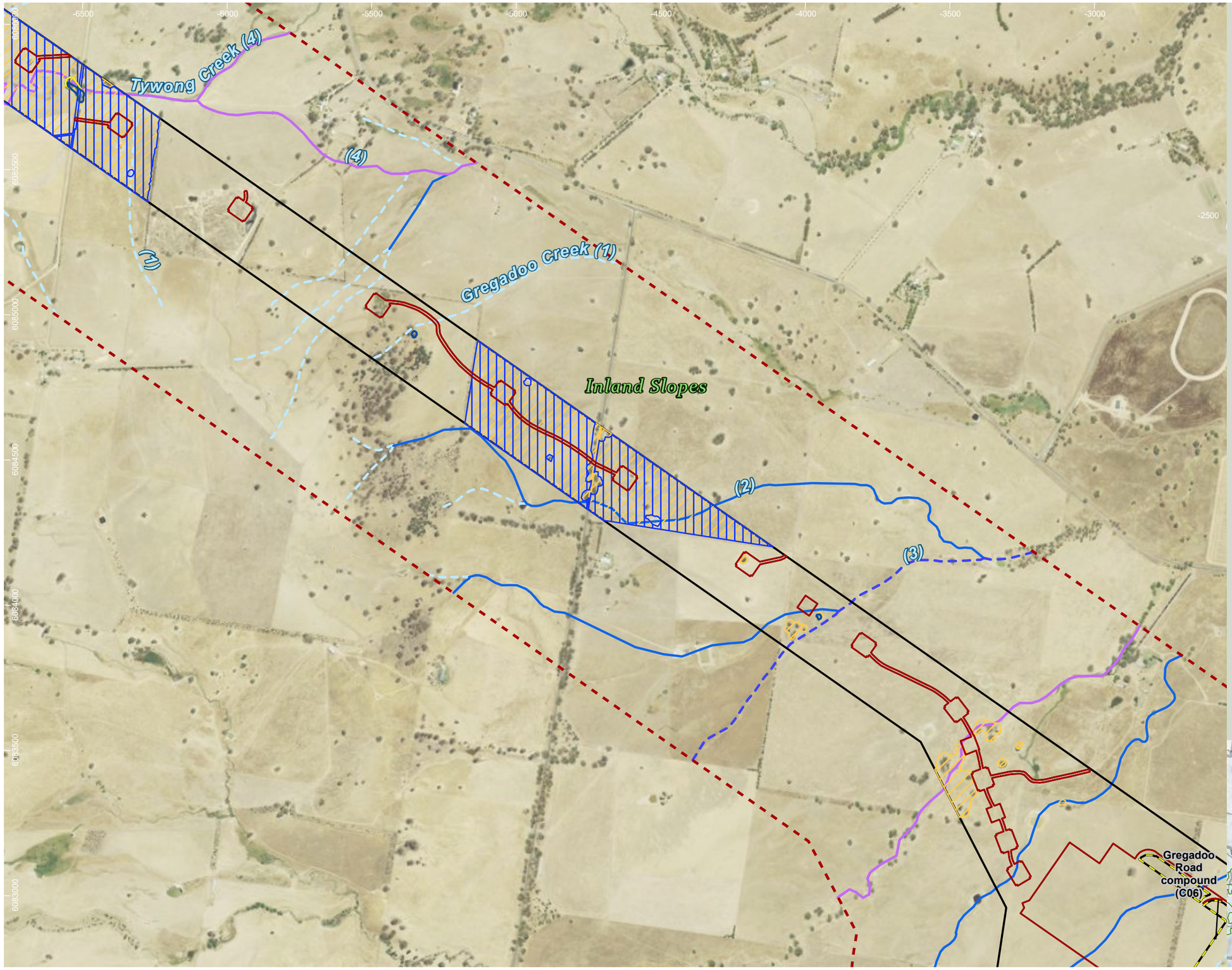
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 2

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

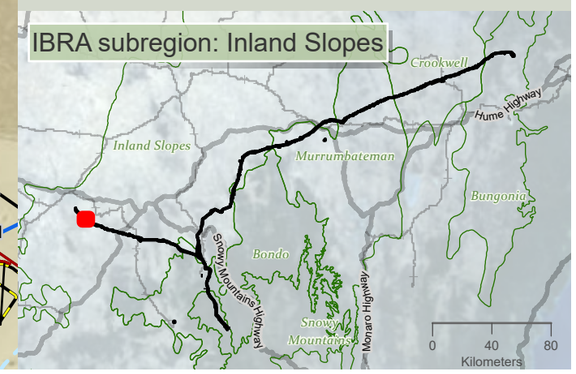
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 1

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

-3500 -3000 -2500 -2000 -1500 -1000 -500 0

6084000 6083500 6083000 6082500 6082000 6081500 6081000

Gregadoo Road compound (C06)

Inland Slopes

(1) (2) (3)

O'briens Creek (6)

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

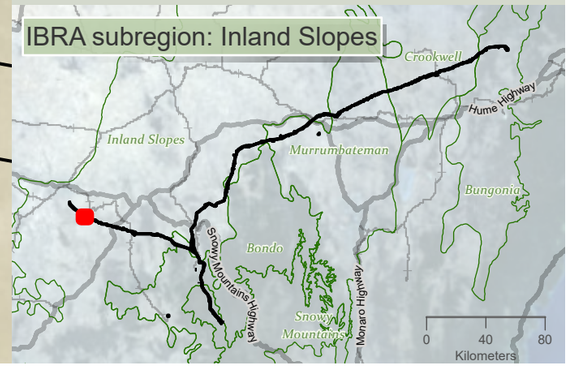
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 4

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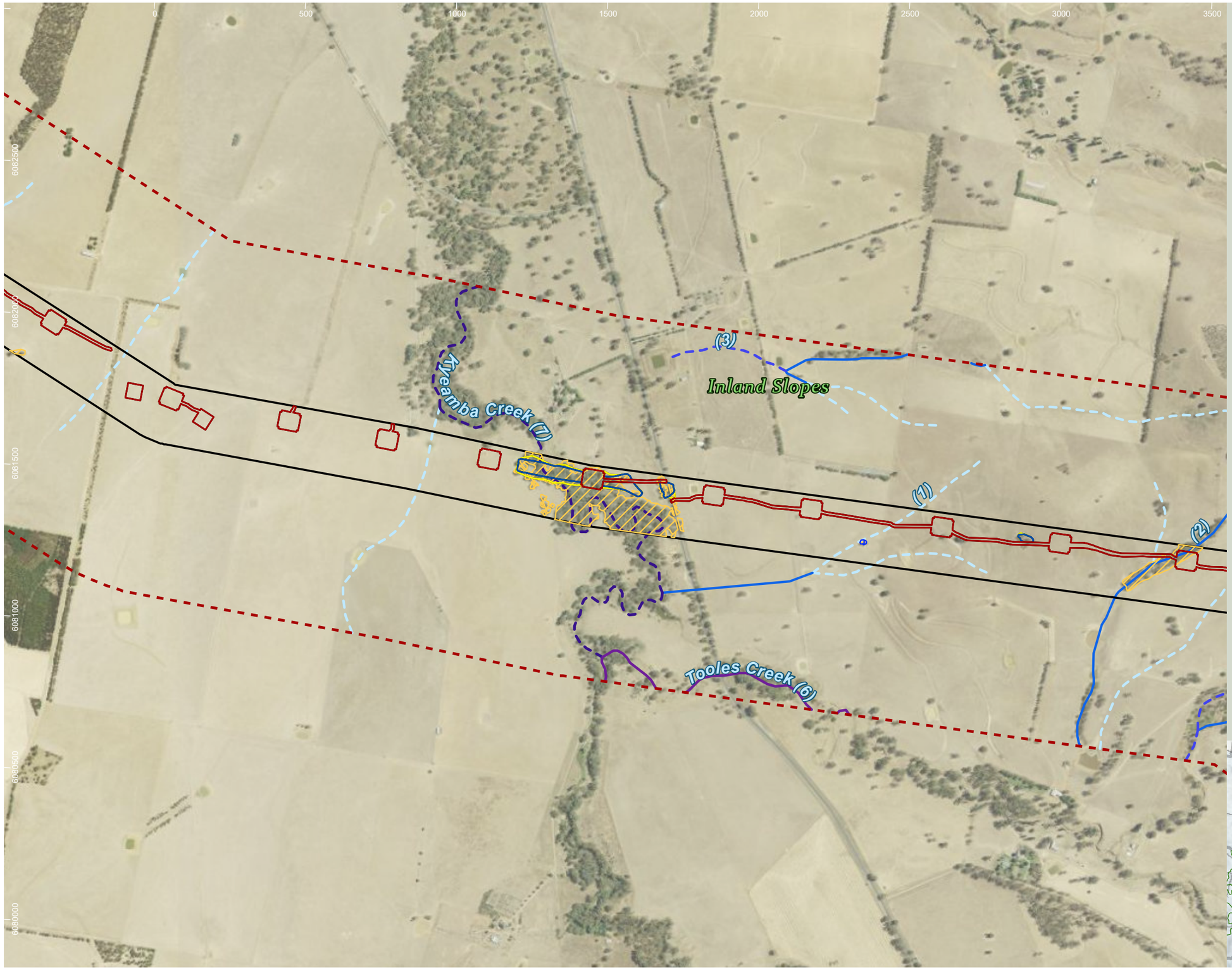
Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

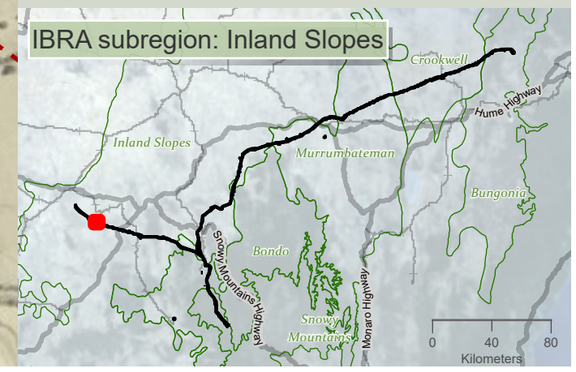
- 1
- 2
- 3
- 6
- 7

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

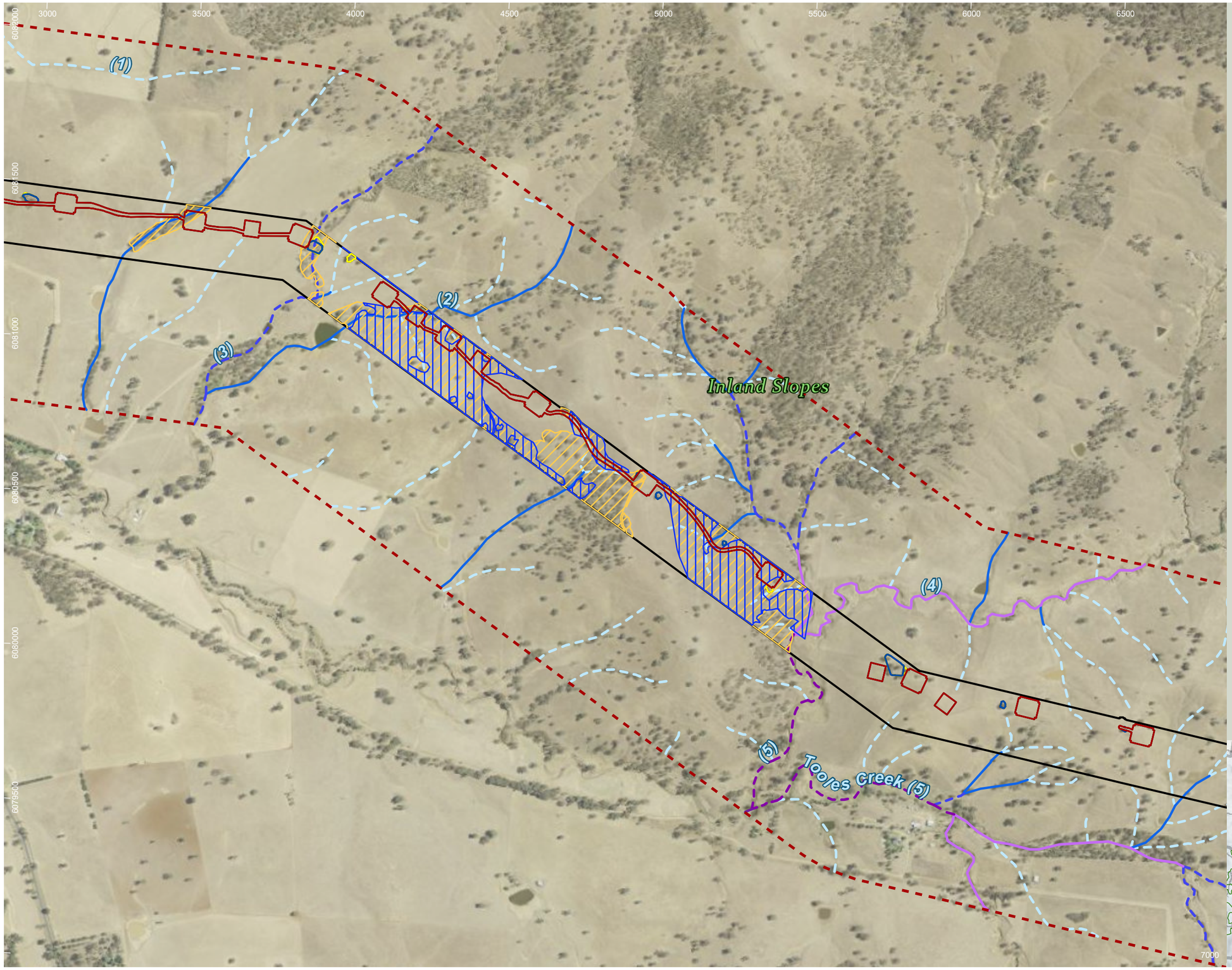
Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 5

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDrive\Sync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

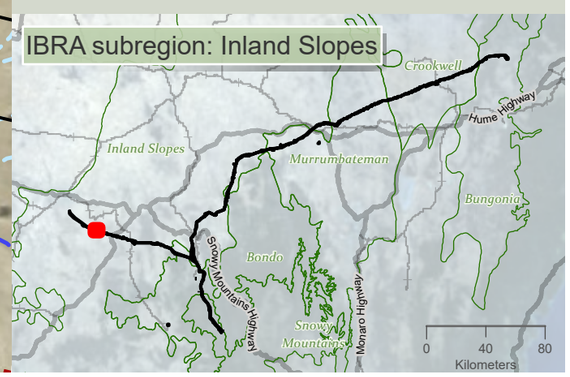
- 1
- 2
- 3
- 4
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 6

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski | Last updated: 18/08/2023 | File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

10000 10500 11000 11500 6080500 12000 12500 13000 13500

6080000
6079500
6079000
6078500
6078000
6077500

(1) (2) (3) (4)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

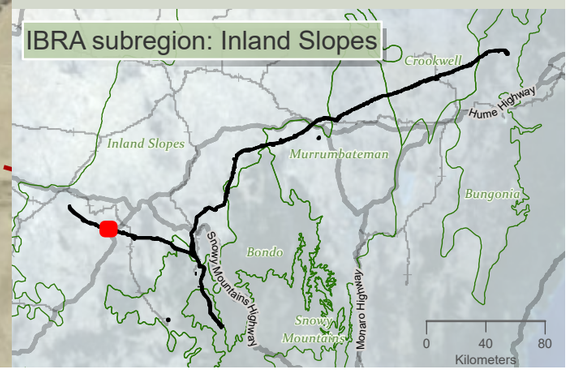
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

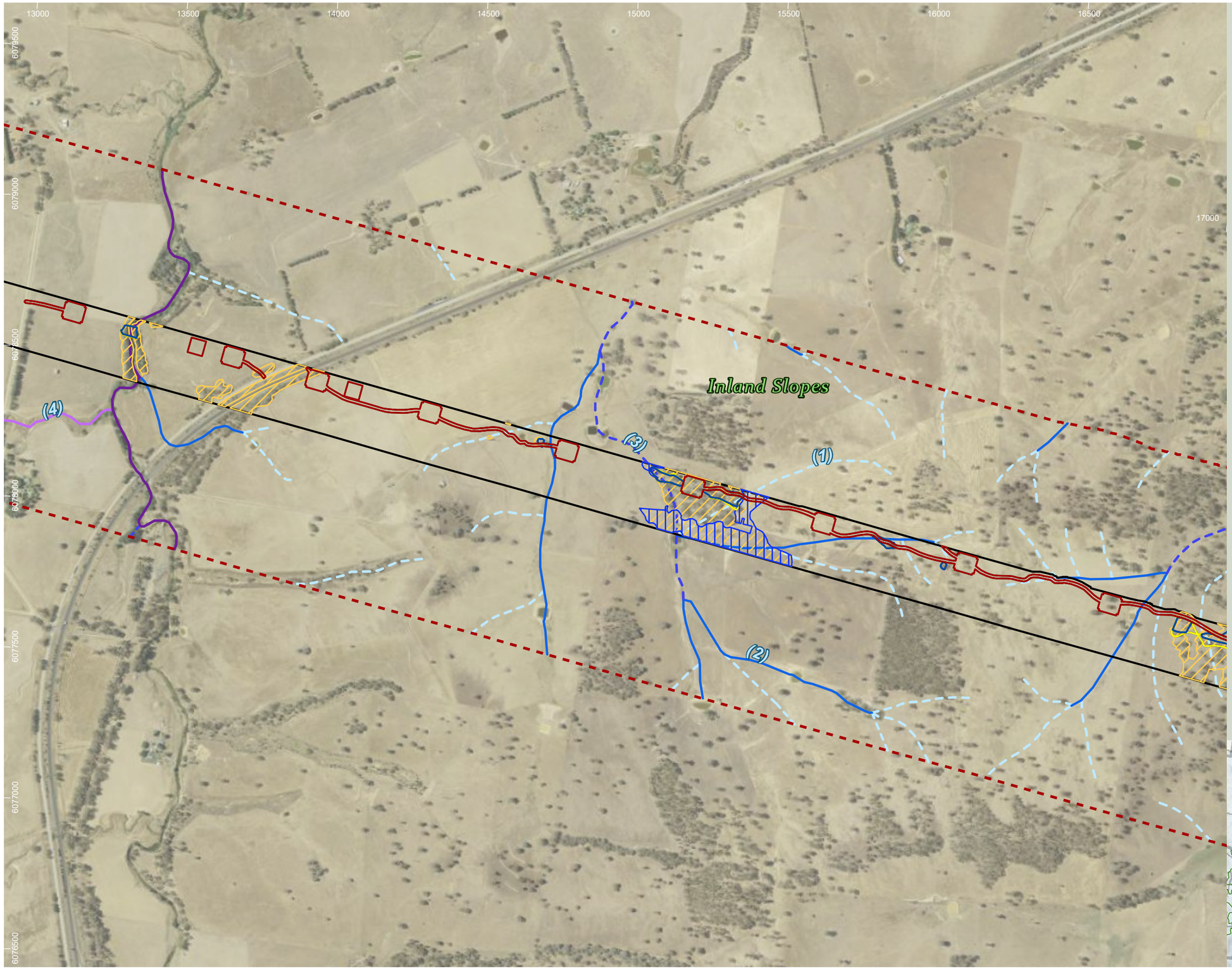
Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 8

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

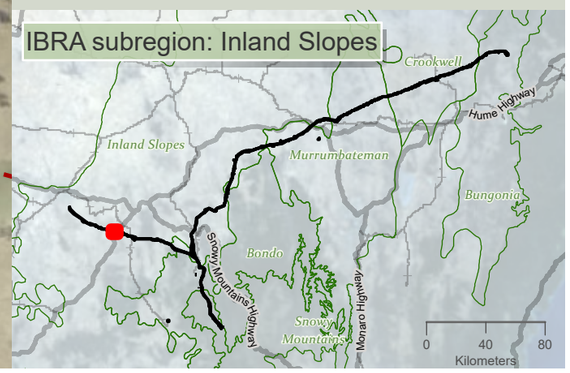
- 0
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 9

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699_Humelink_BDAR_Stage 2 Part B.aprx Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

16500 17000 17500 18000 18500 6079000 19000 19500 20000

6078500 6078000 6077500 6077000 6076500 6076000

(1) (2) (3)

Inland Slopes

20500

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

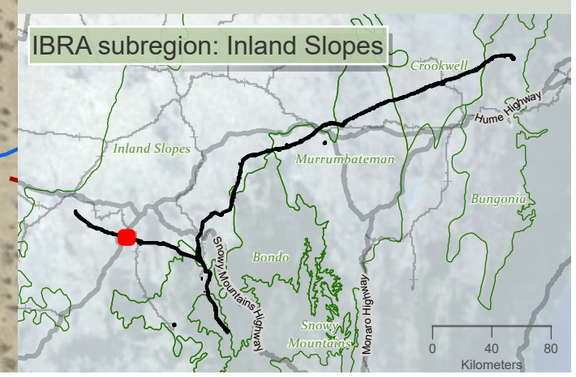
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

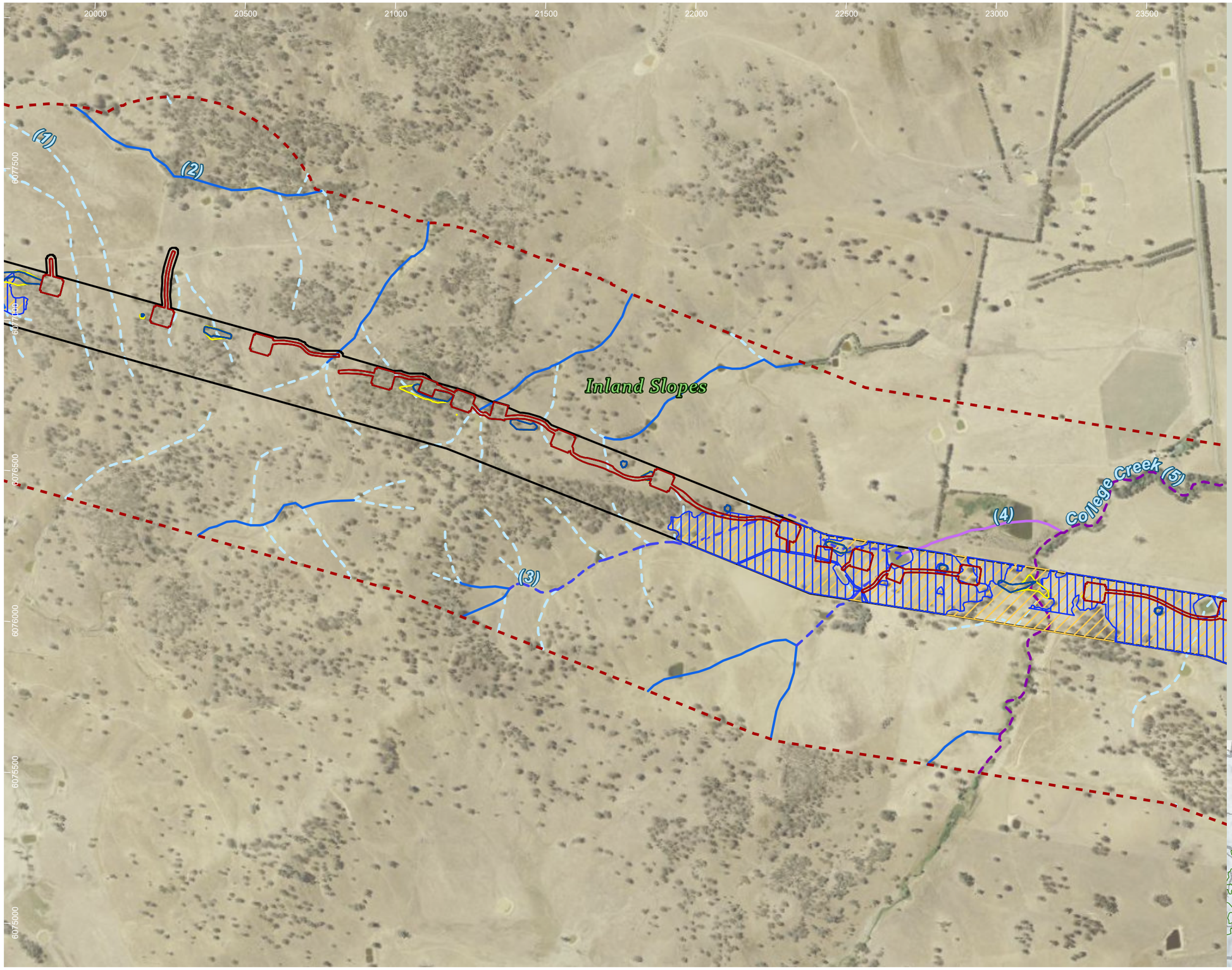
Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 10

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

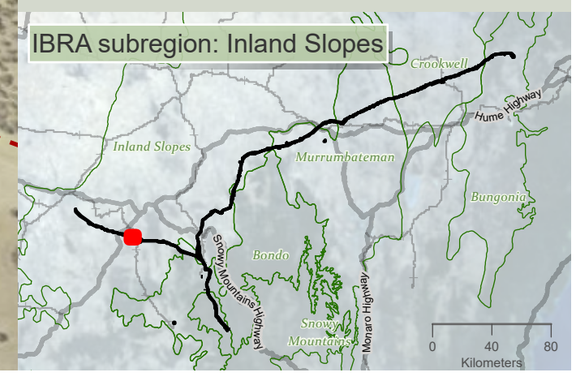
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

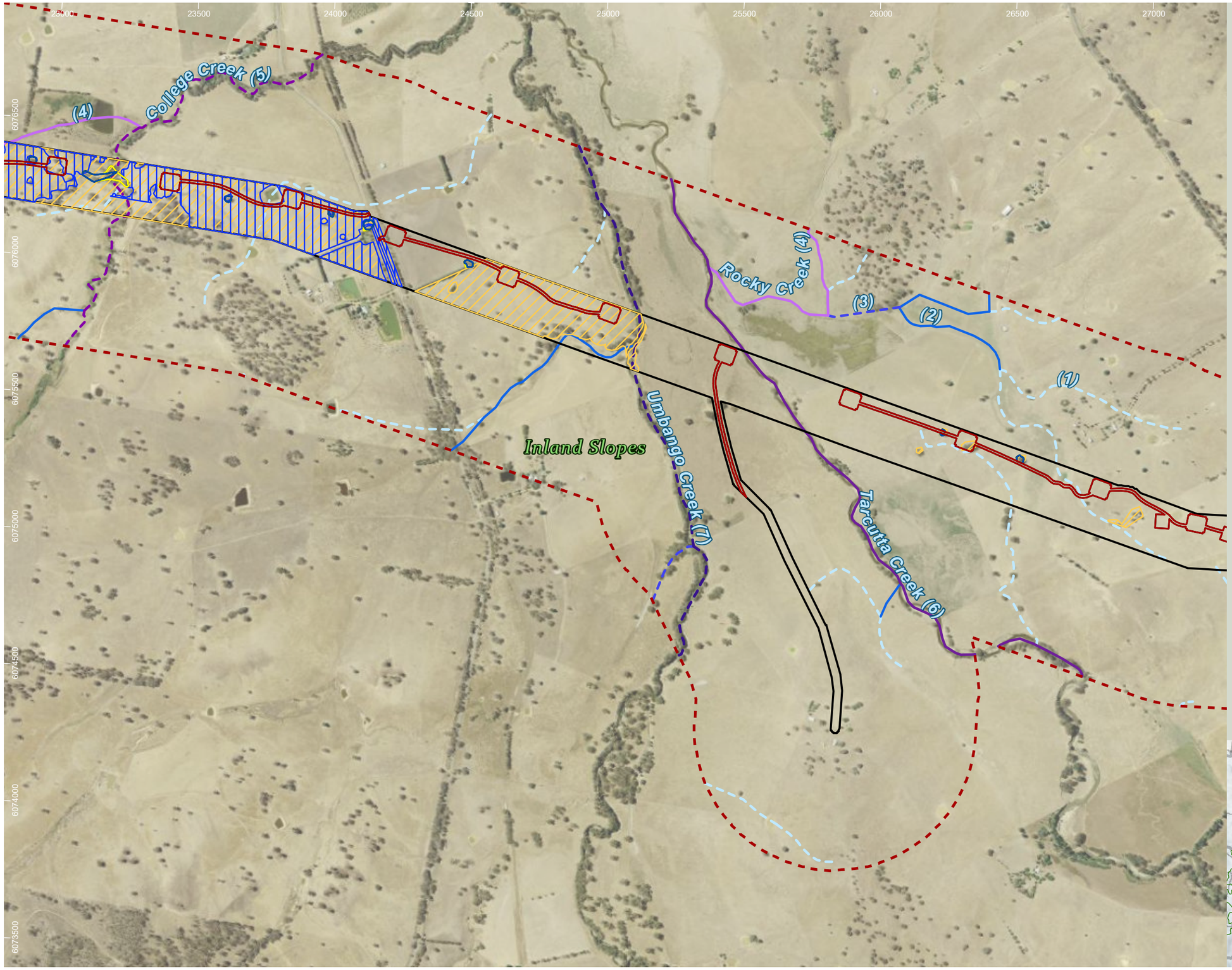
Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 11

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

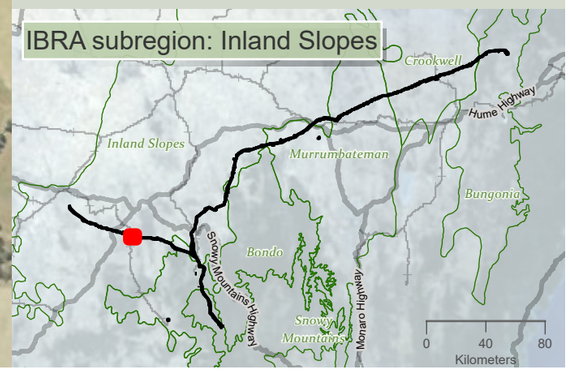
- 1
- 2
- 3
- 4
- 5
- 6
- 7

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 12

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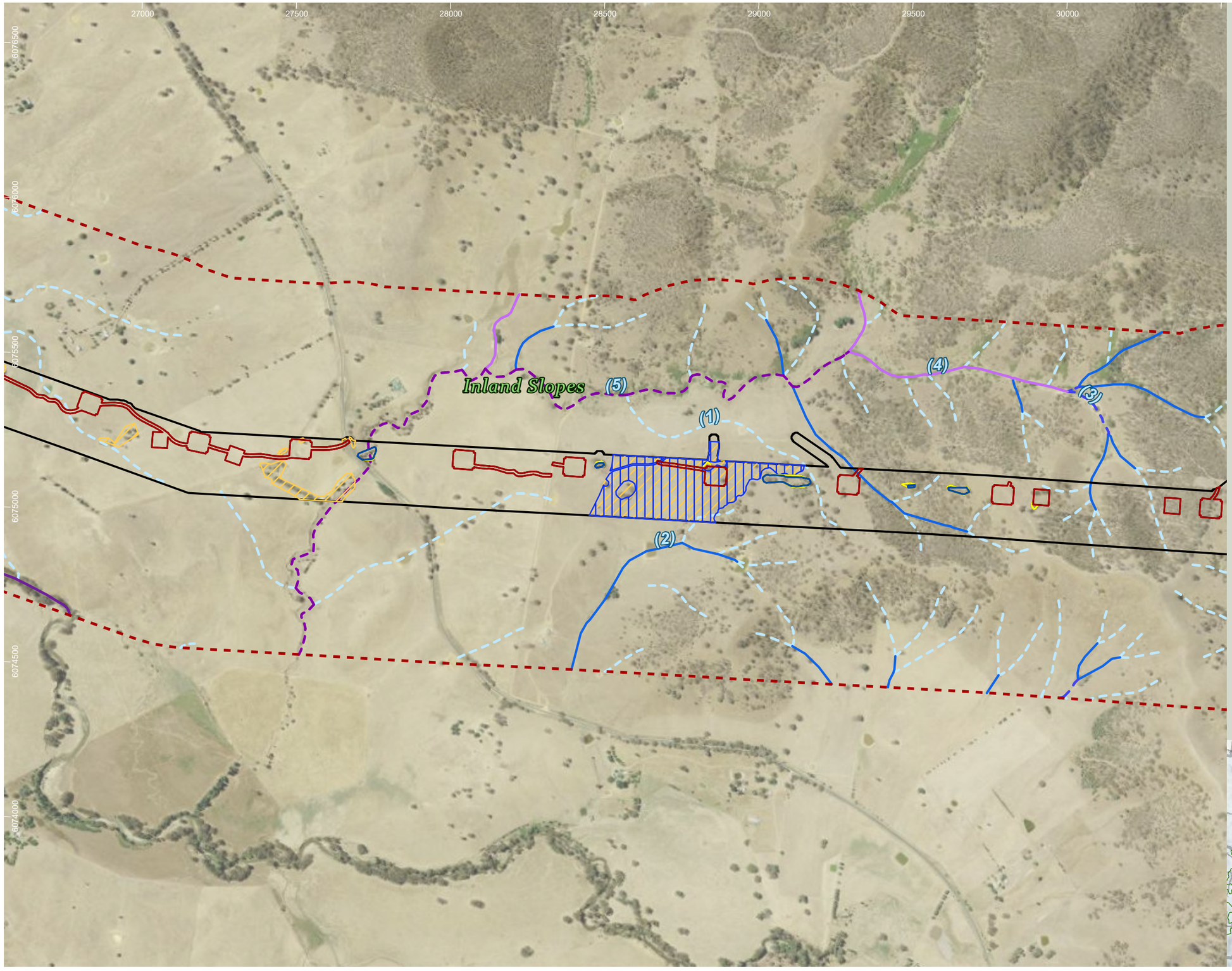
Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

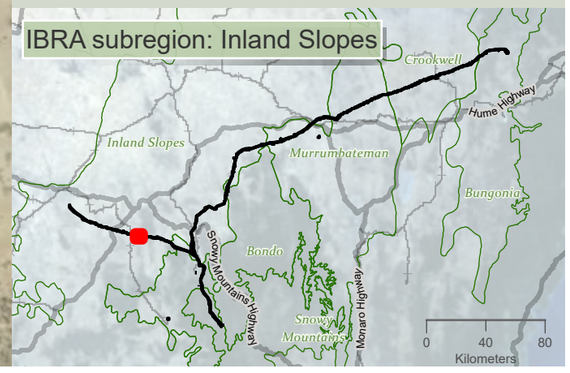
- 1
- 2
- 3
- 4
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

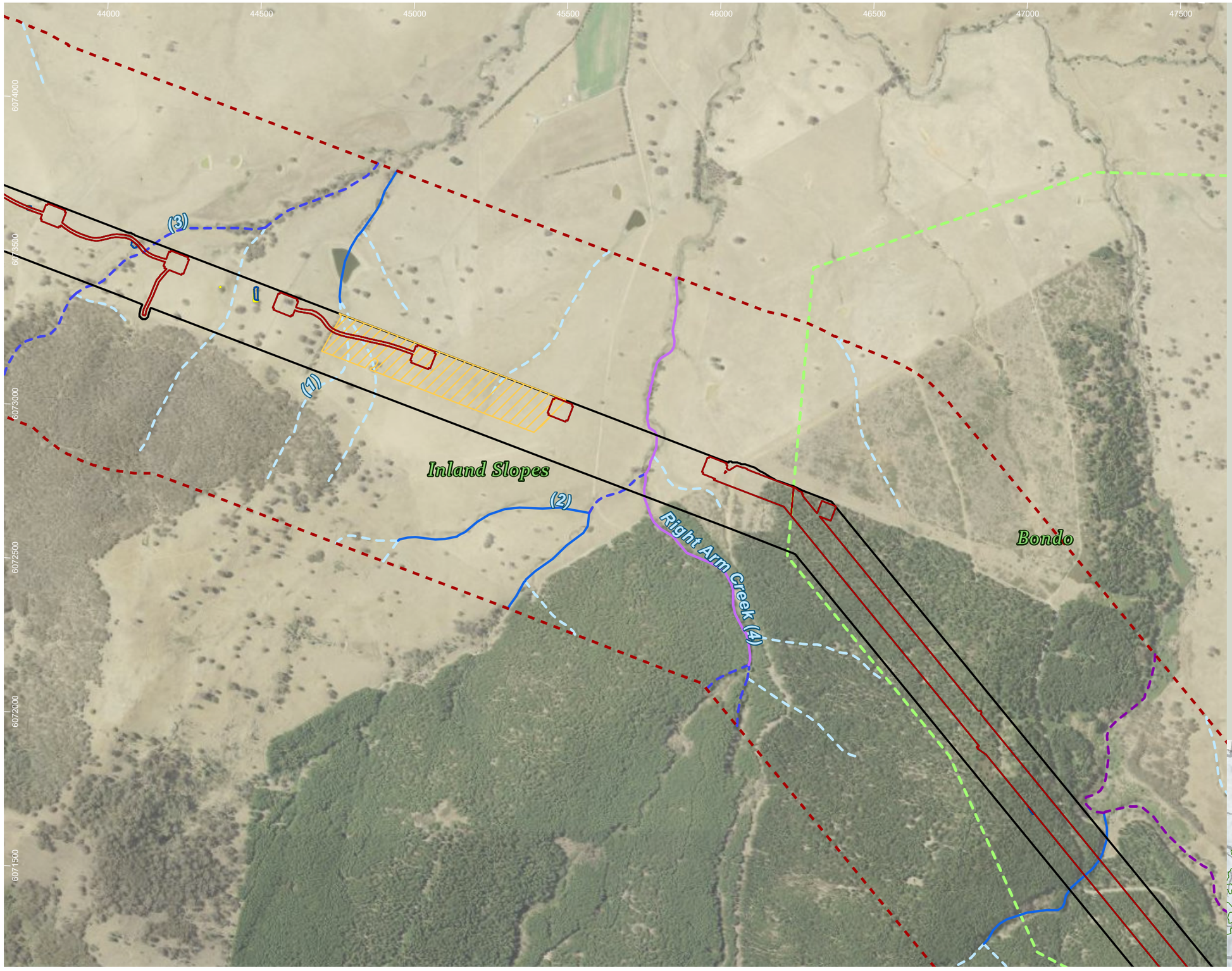
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 13

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

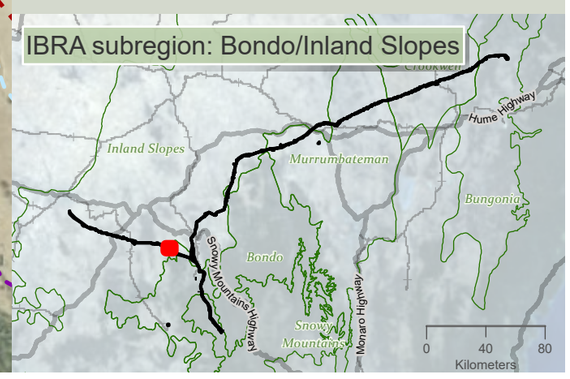
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

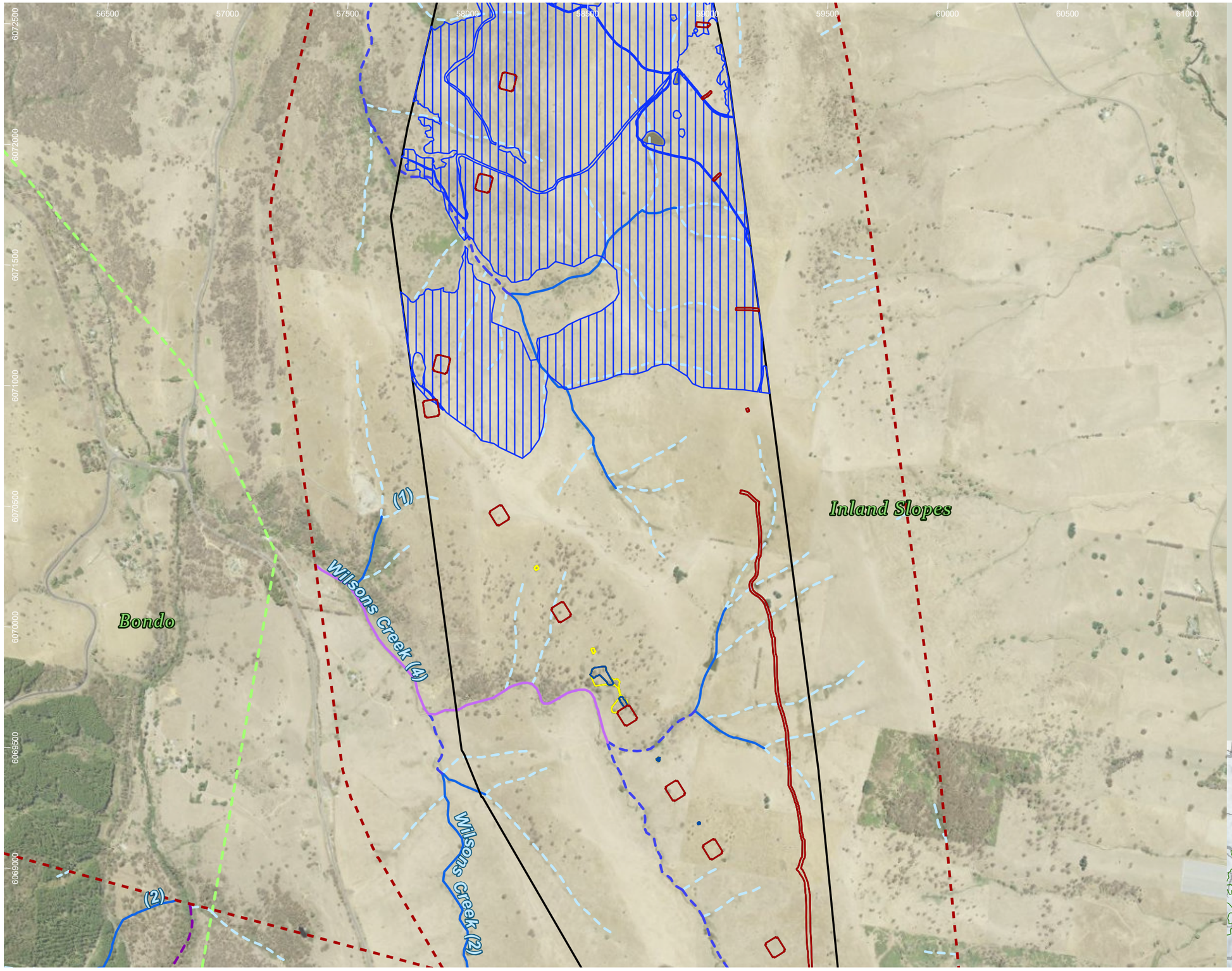
Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 18

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

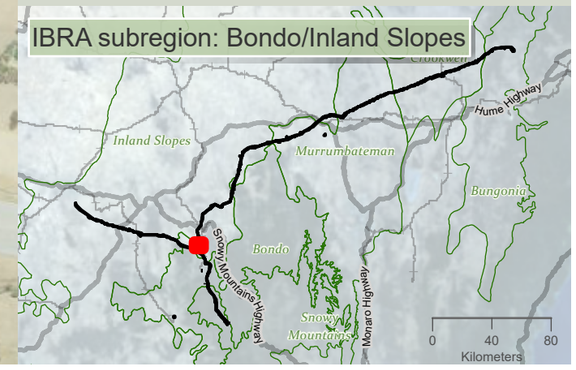
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Synemon plana



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 39

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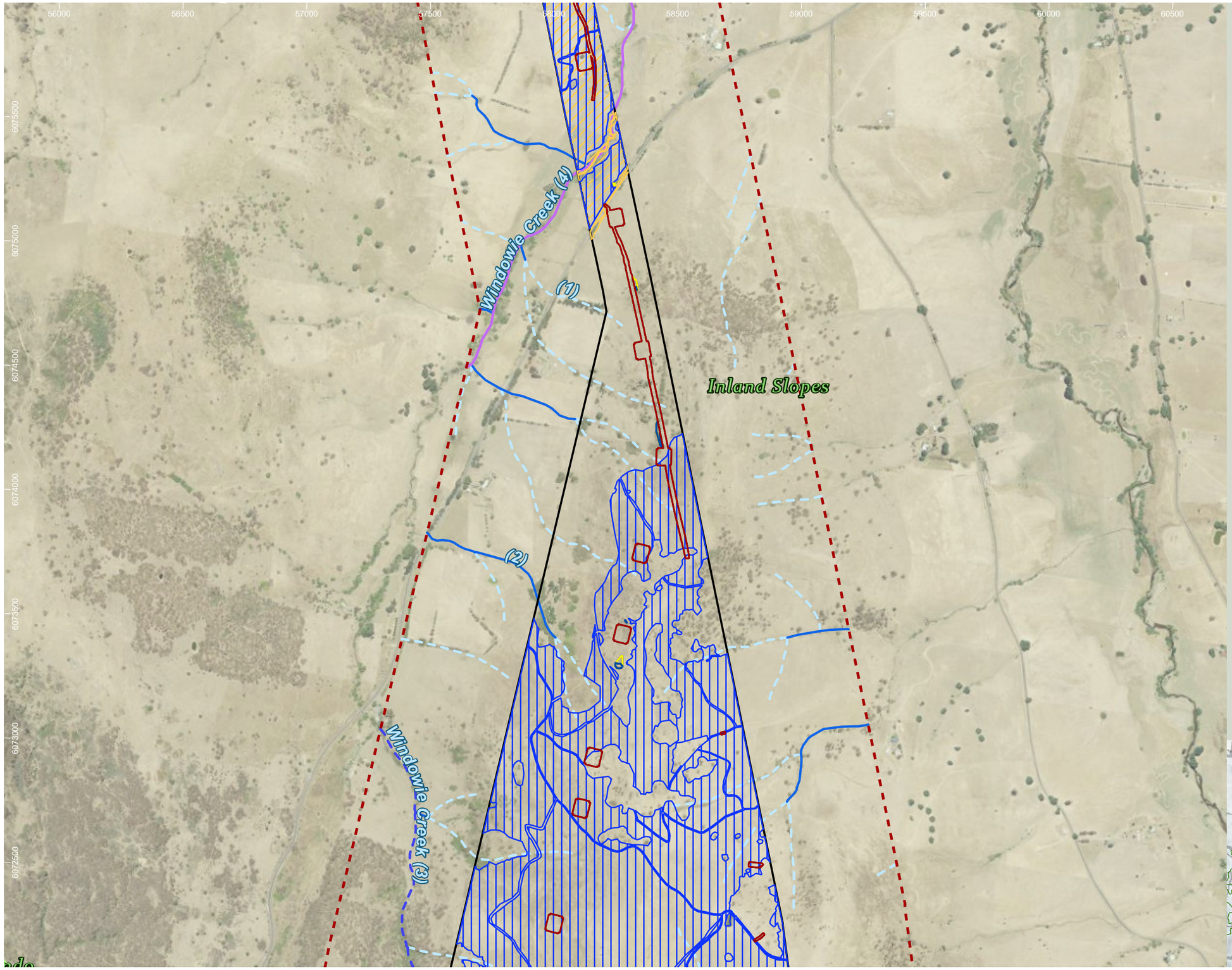
Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

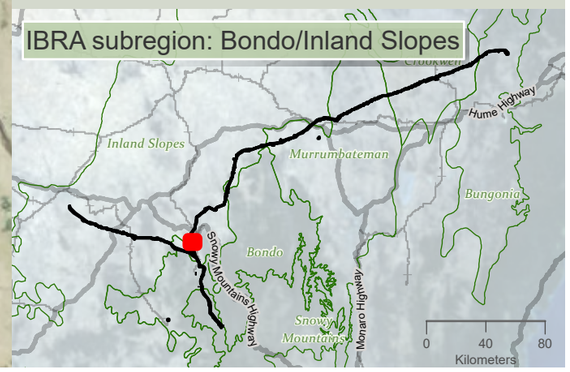
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 40

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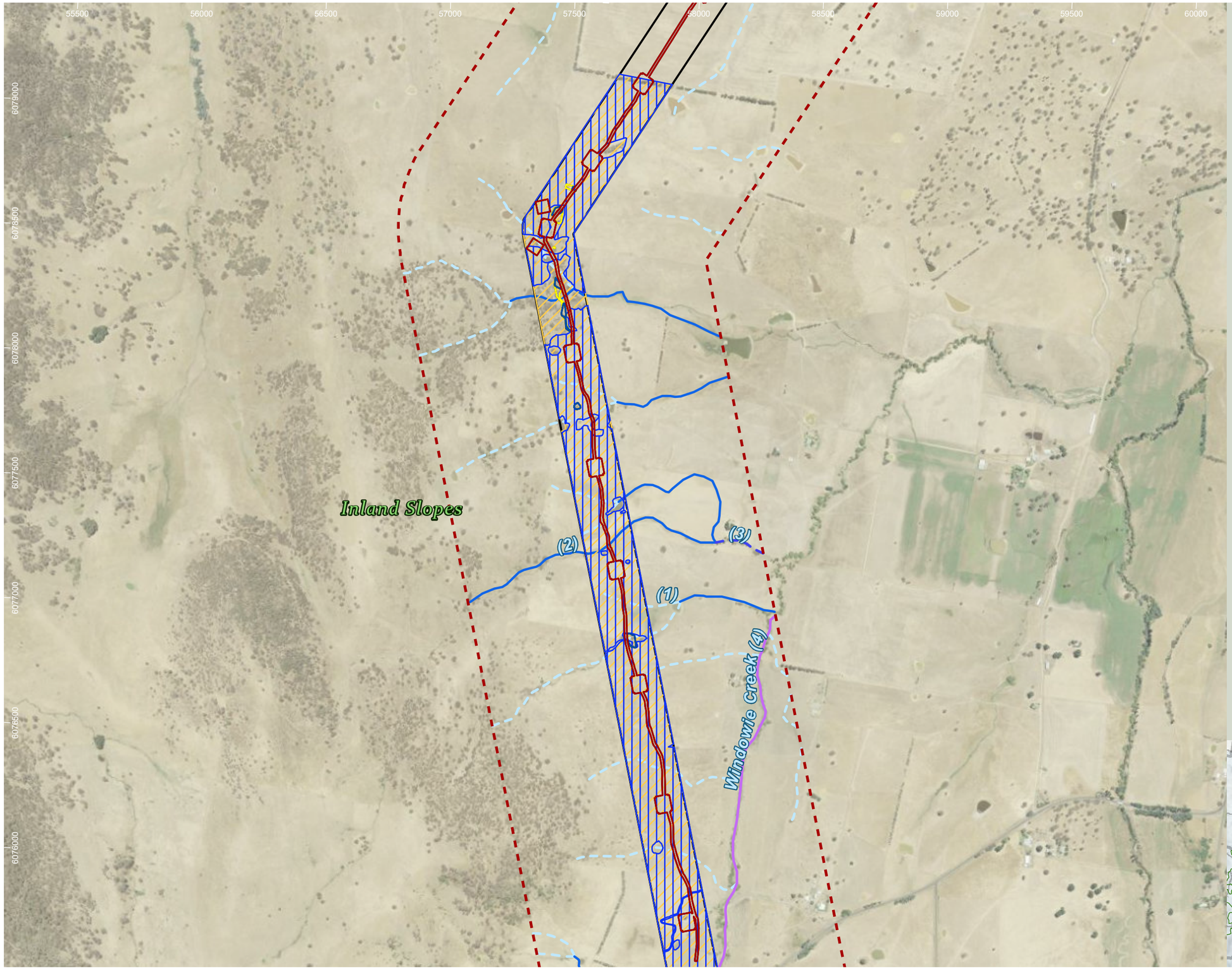
Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

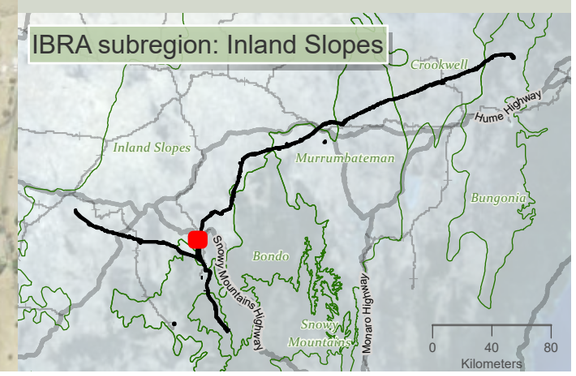
- 0
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

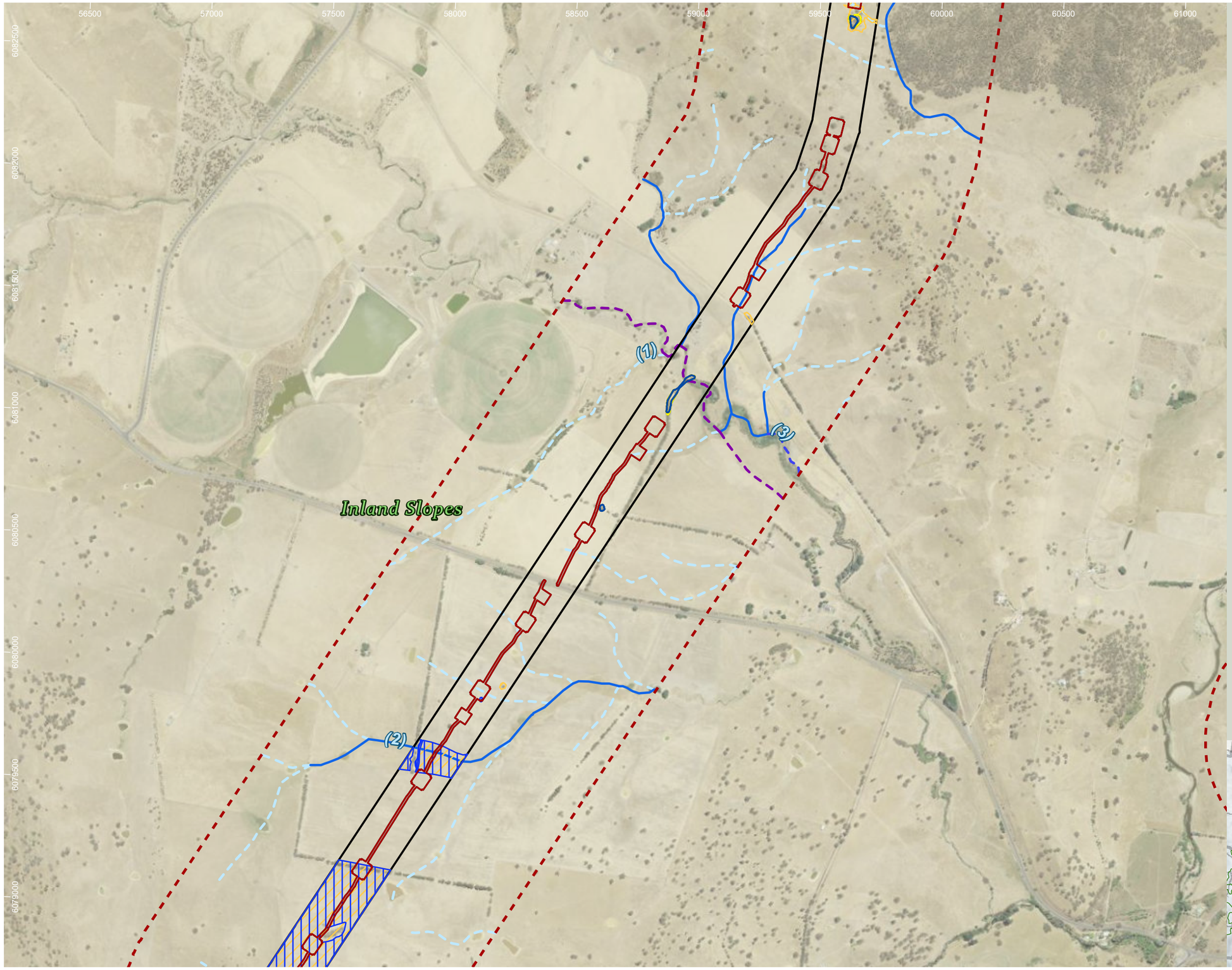
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 41

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

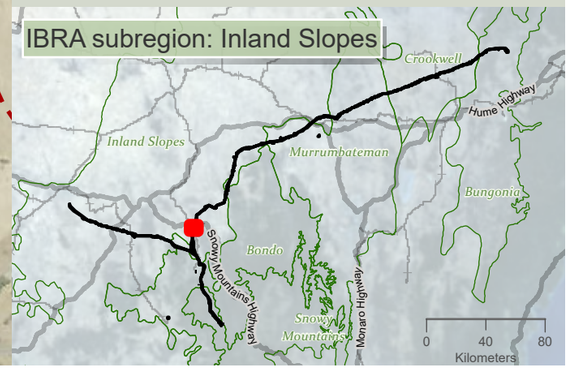
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 42

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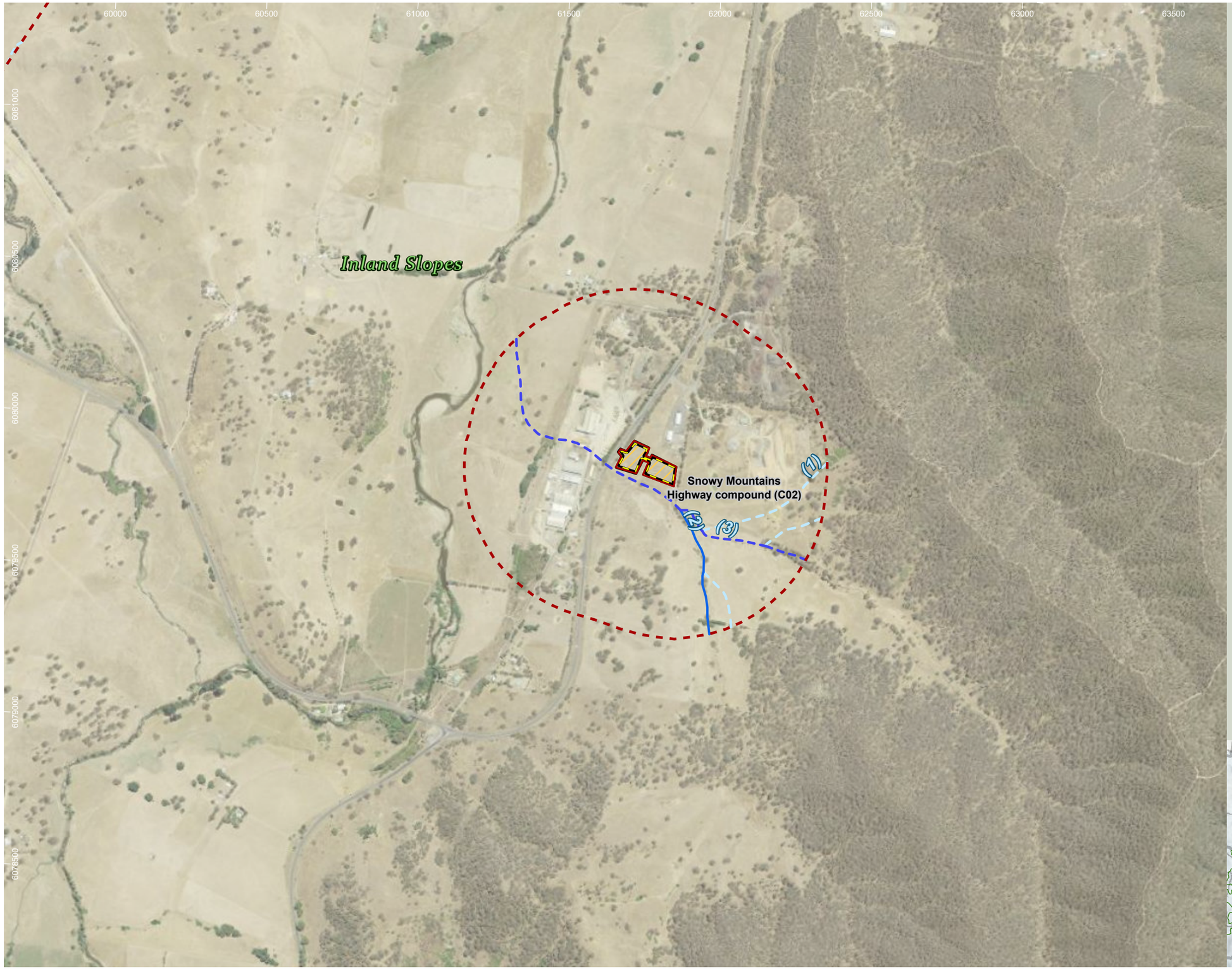


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

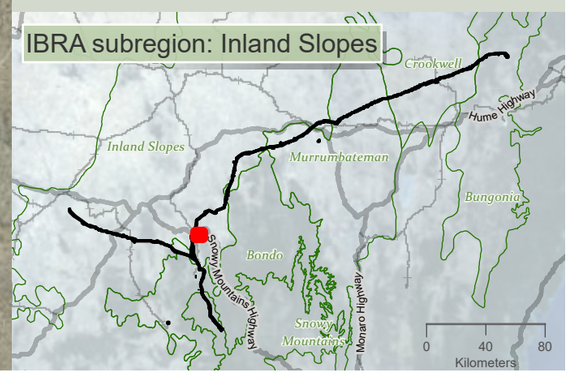
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 43

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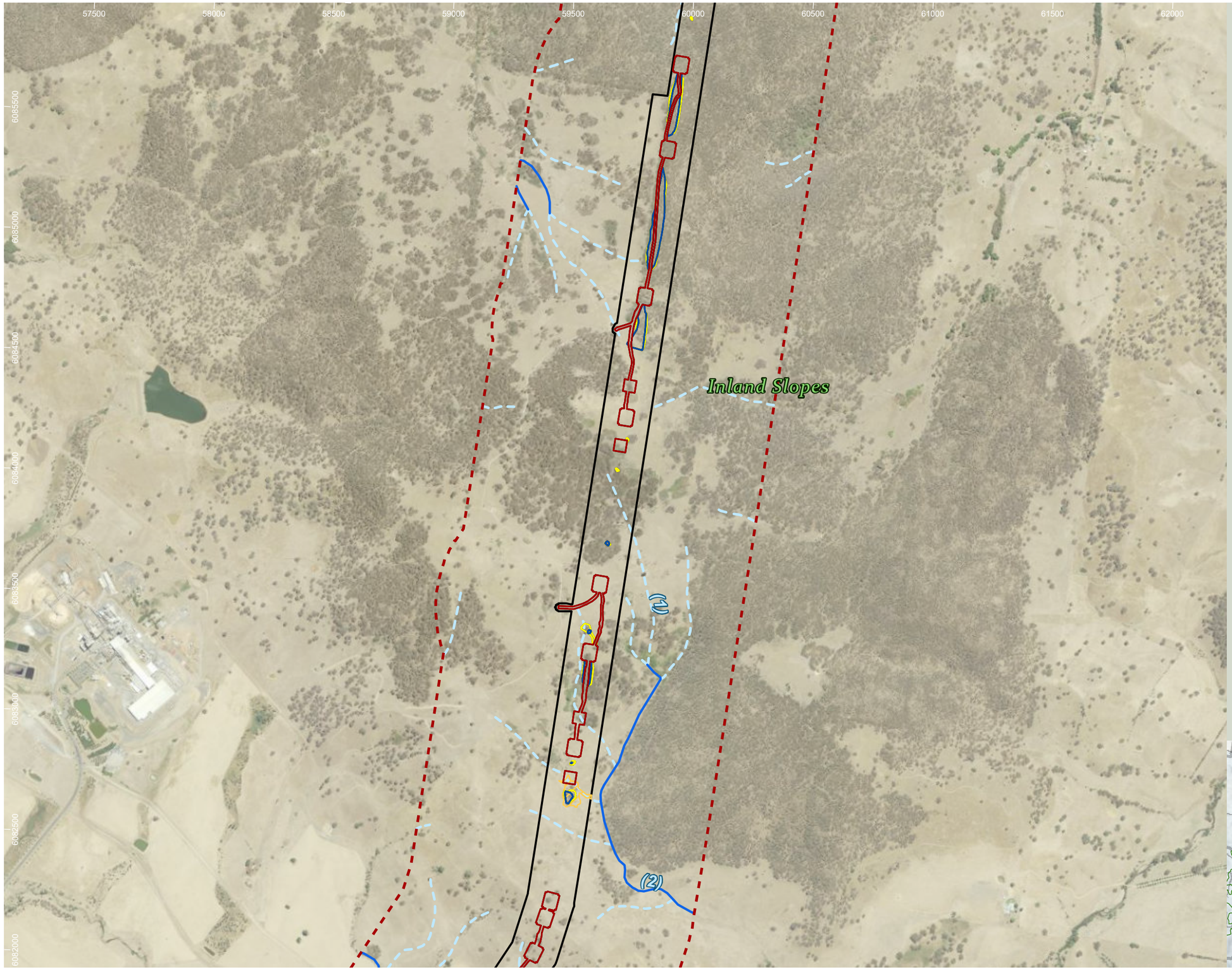


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

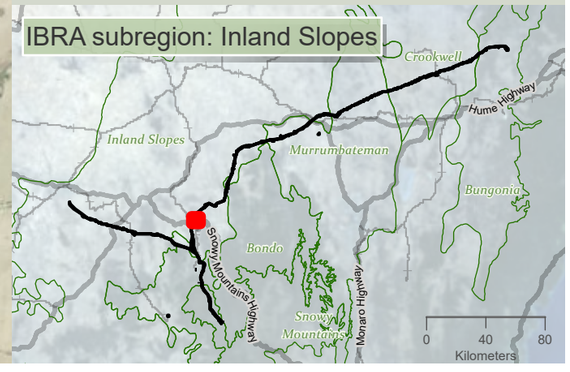
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 44

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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61000 61500 62000 62500 63000 63500 64000 64500

6091500 6091000 6090500 6090000 6089500 6089000

Gocup Creek (4)

(1)

(3)

(2)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

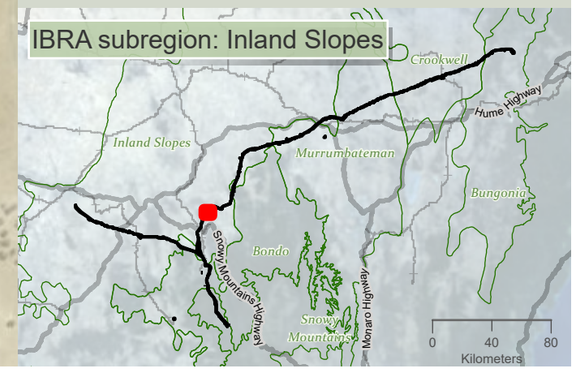
- 1
- 2
- 3
- 4
- 8

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\SyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 46

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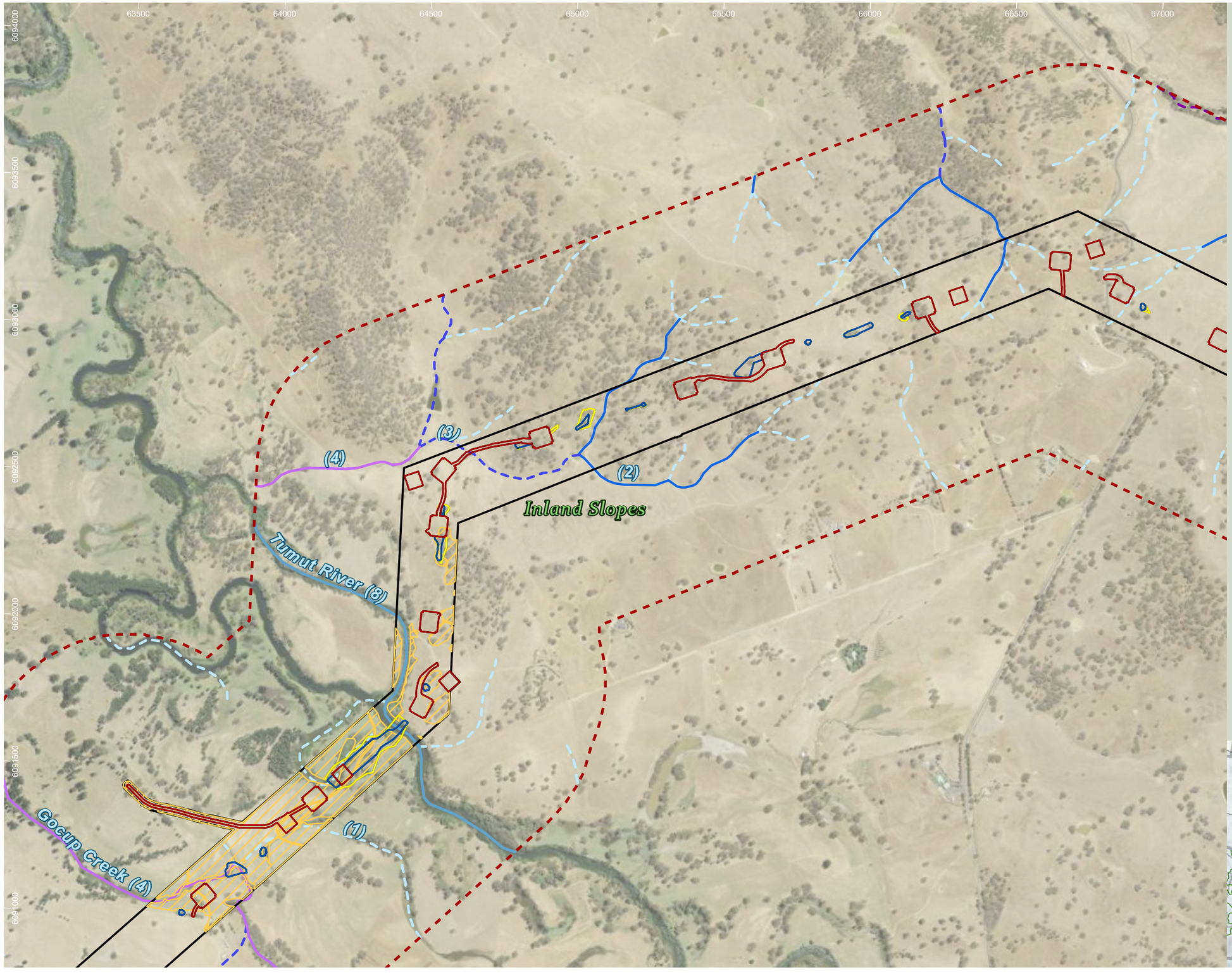


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

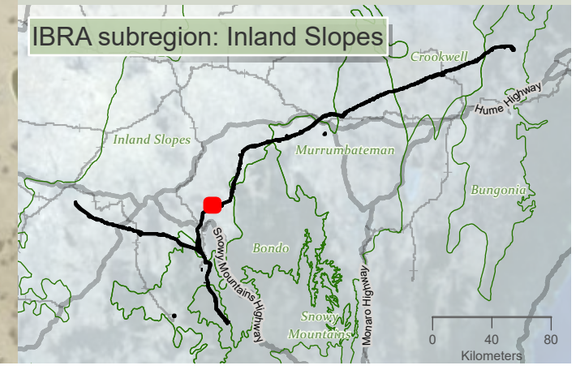
- 1
- 2
- 3
- 4
- 5
- 8

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 47

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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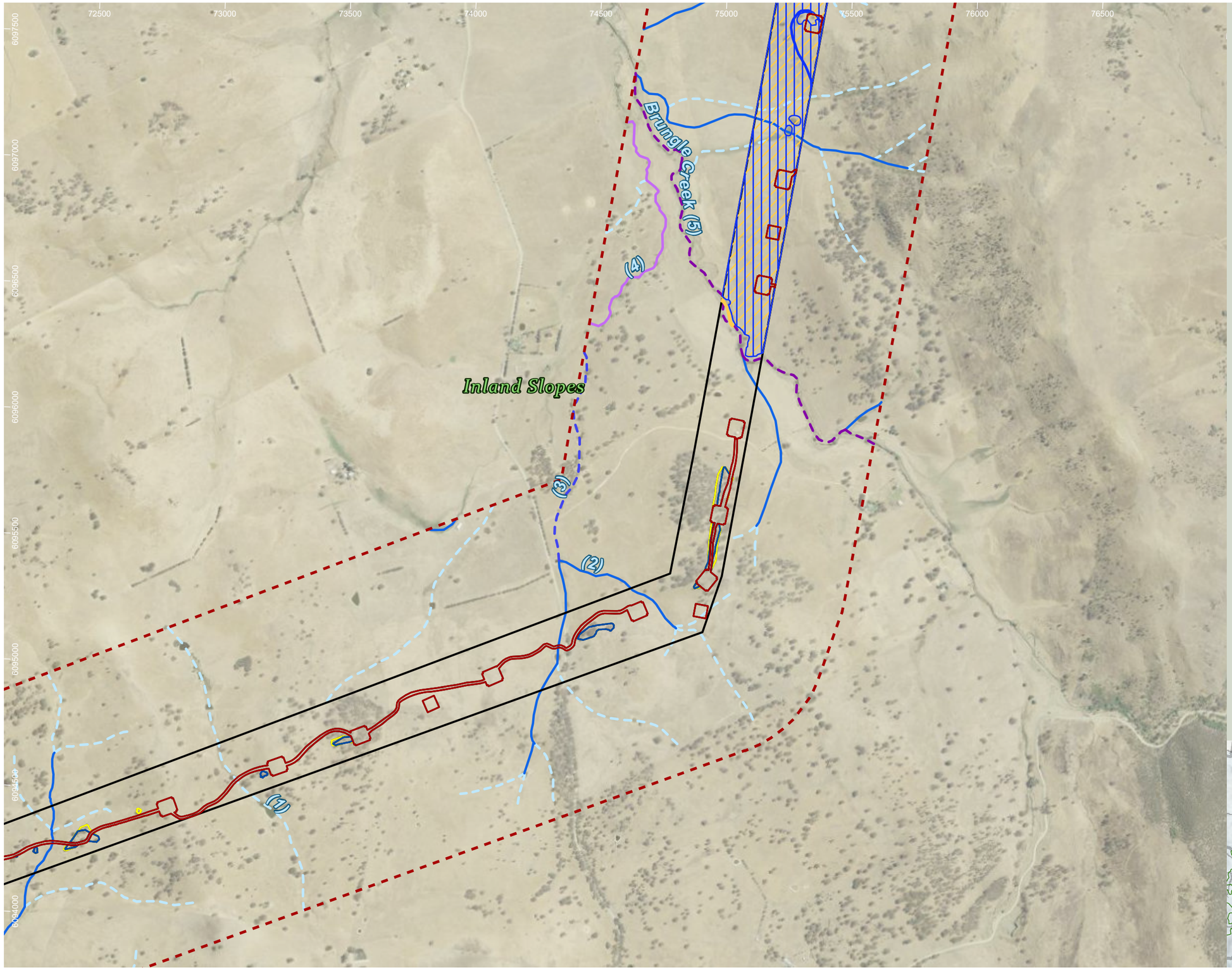


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

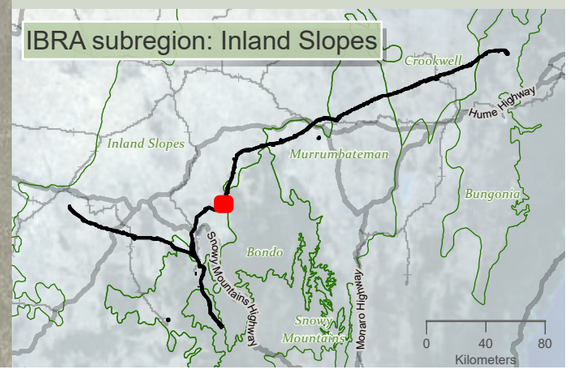
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



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niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 50

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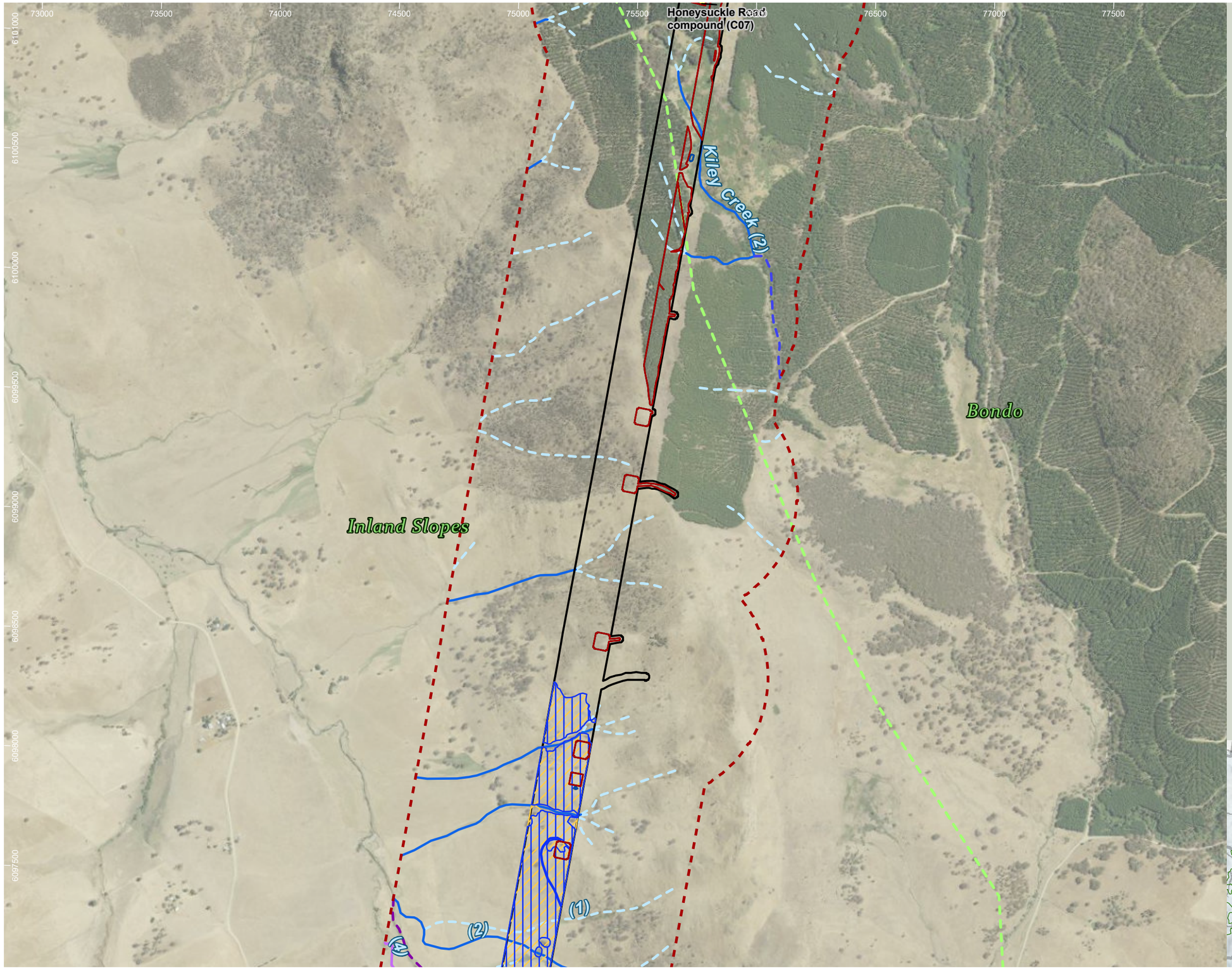


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

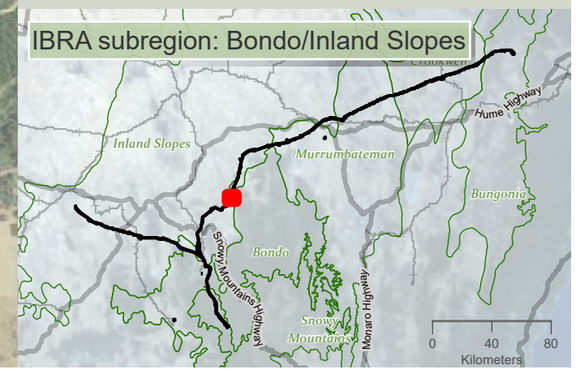
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 51

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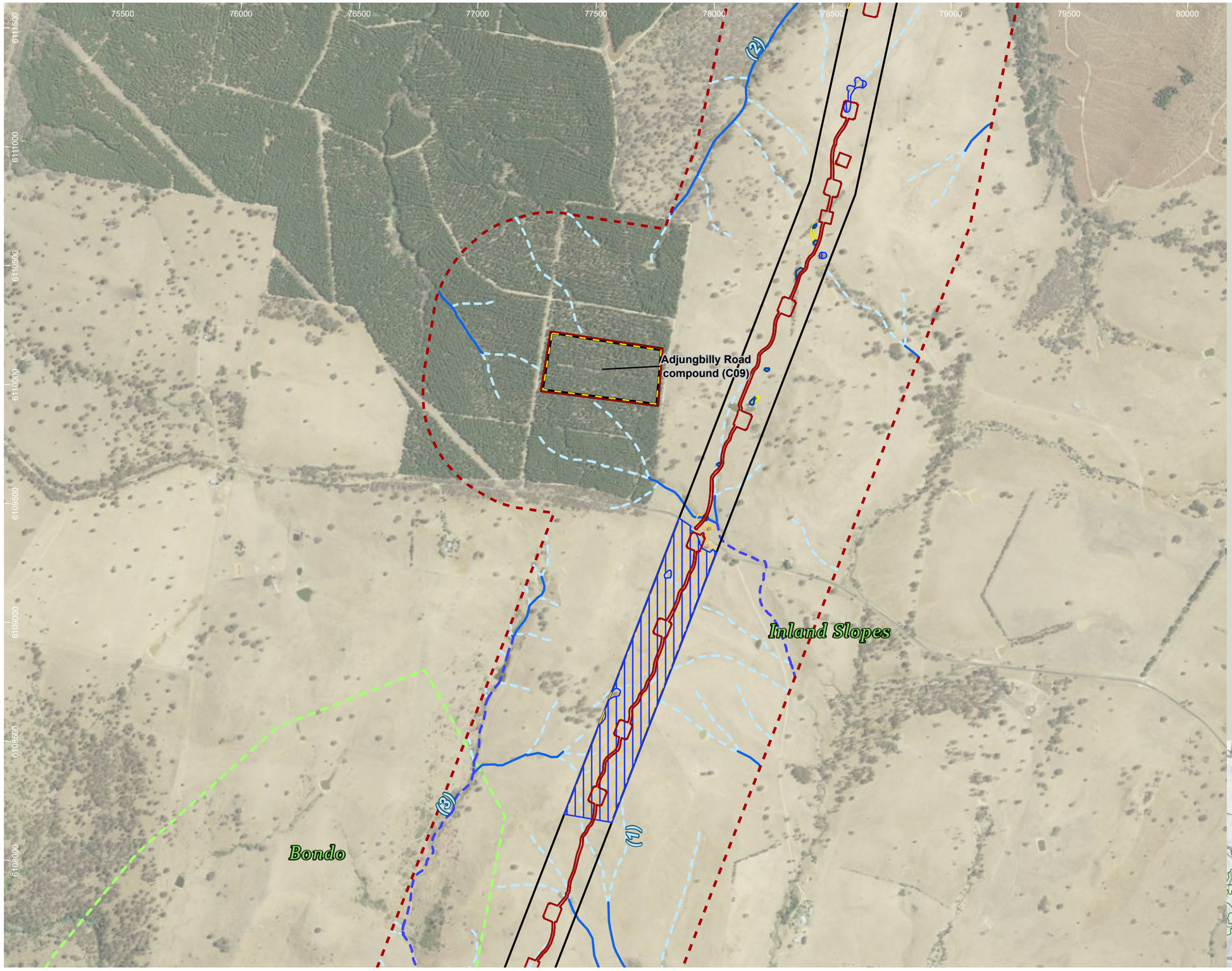


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

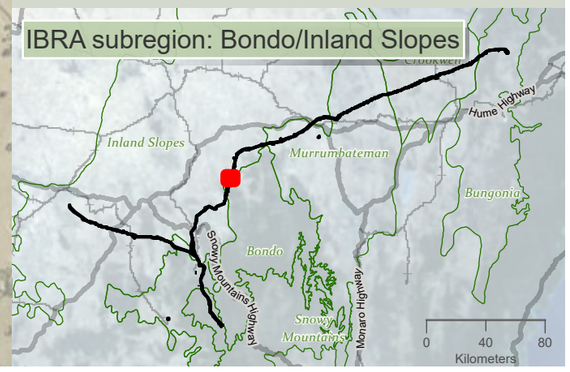
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche9699 - Confidential Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 54

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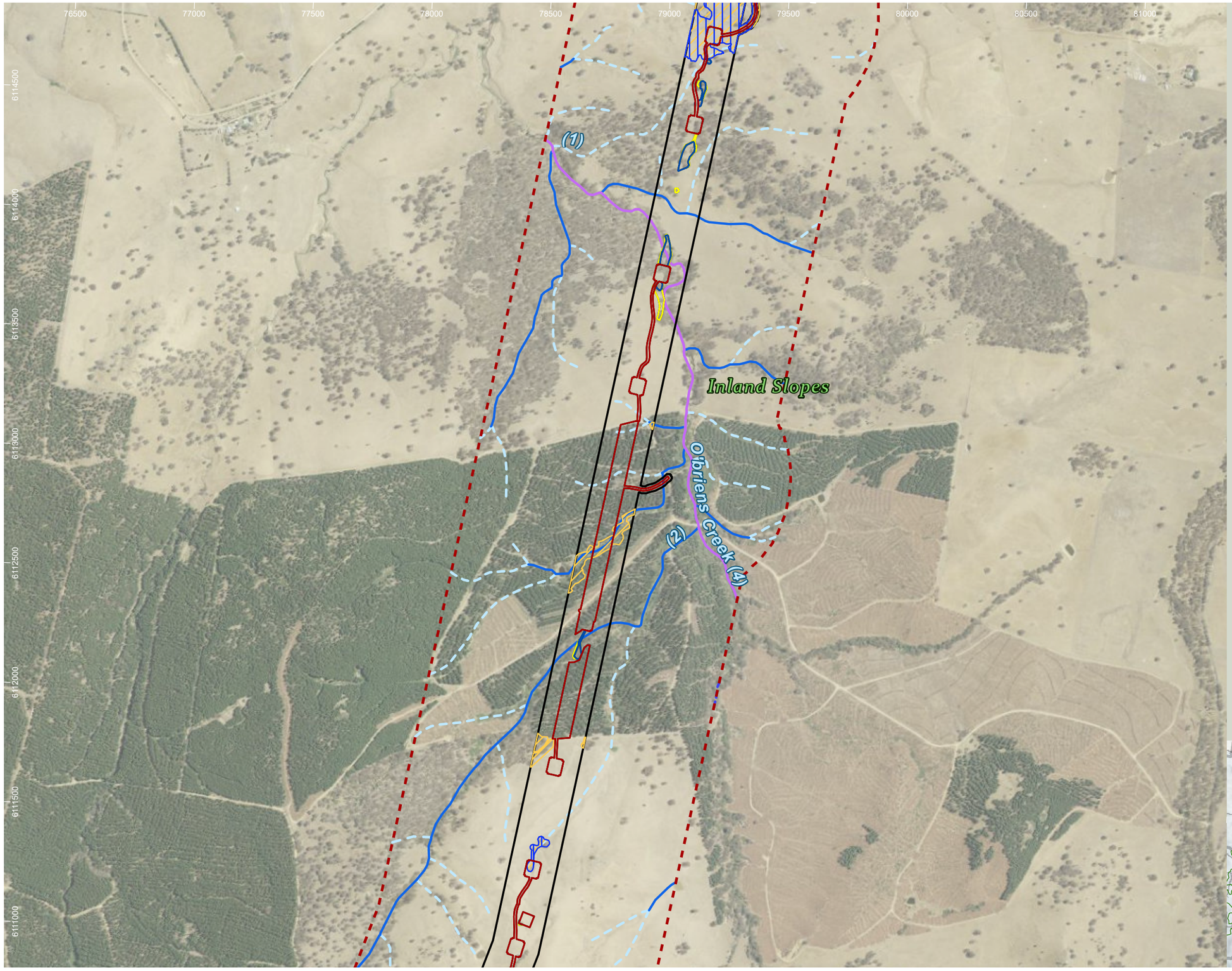


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

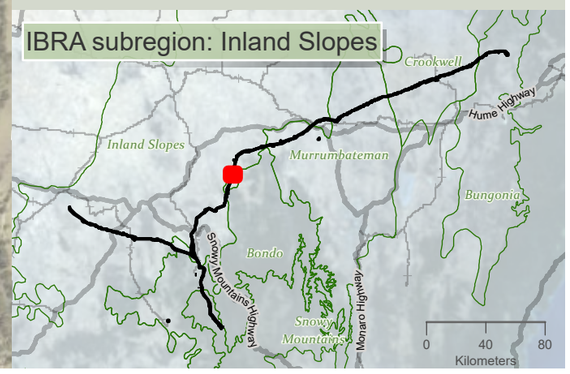
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 55

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77000 77500 78000 78500 79000 79500 80000 80500 81000 81500

6118000 6117500 6117000 6116500 6116000 6115500 6115000 6114500

Inland Slopes

Cart Road Creek (3)

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

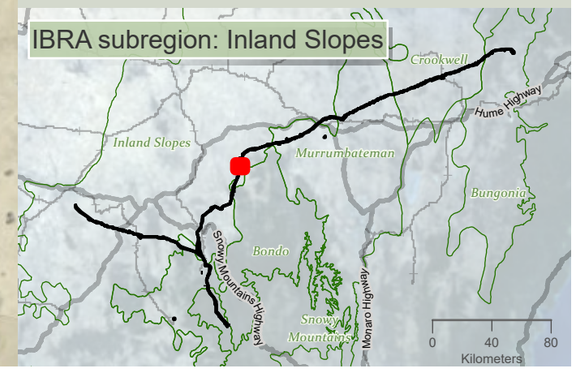
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 56

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77500 78000 78500 79000 79500 80000 80500 81000 81500 82000

6121500 6121000 6120500 6120000 6119500 6119000 6118500 6118000

(1)

Oak Creek (5)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

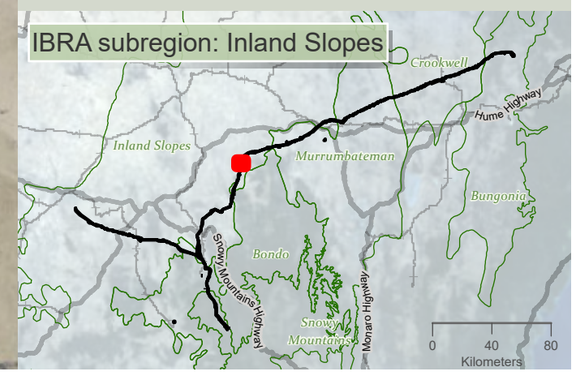
- 1
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\Sync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 57

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79000 79500 80000 80500 81000 81500 82000 82500 83000

6124500 6124000 6123500 6123000 6122500 6122000 6121500

Inland Slopes

(1)

(2)

Yellow Clay Creek (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

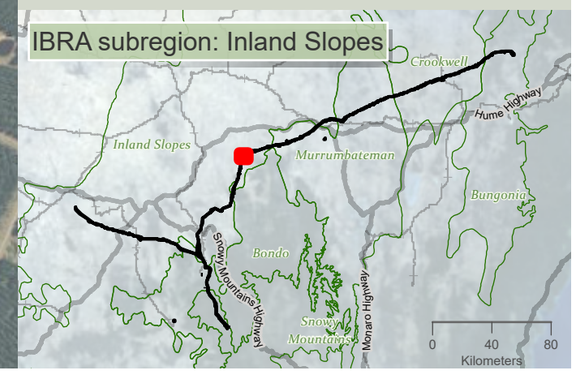
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 58

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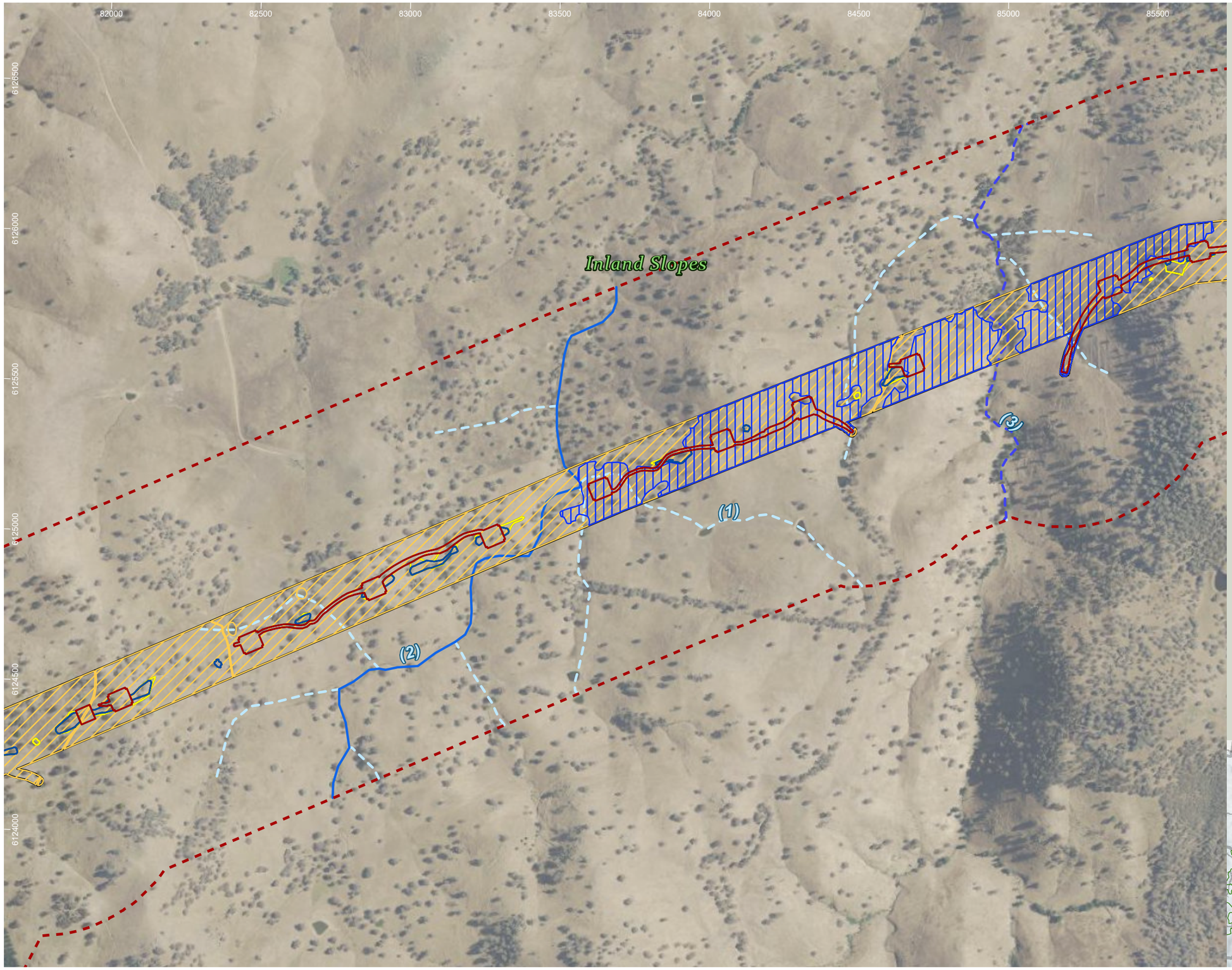


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

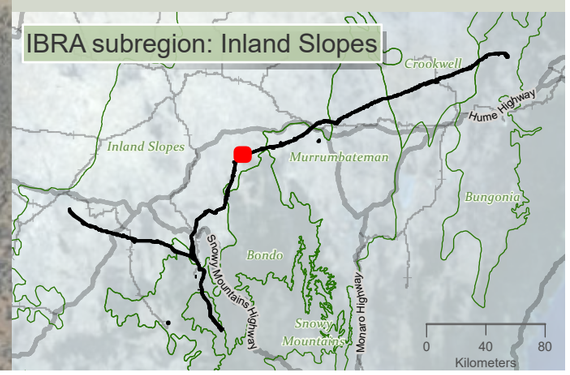
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 59

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85500 86000 86500 87000 87500 88000 88500

6127500 6127000 6126500 6126000 6125500 6125000

Rocky Creek (2)

Inland Slopes

Dicks Gully (2)

(1) (2) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

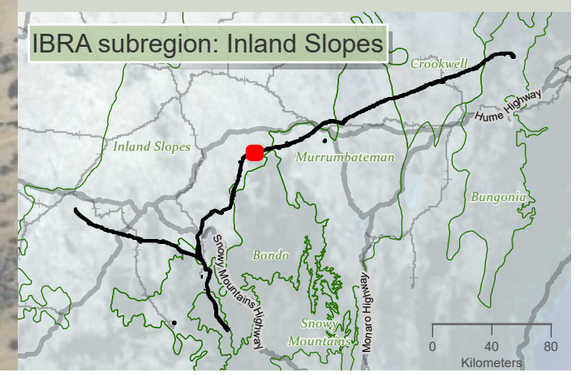
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

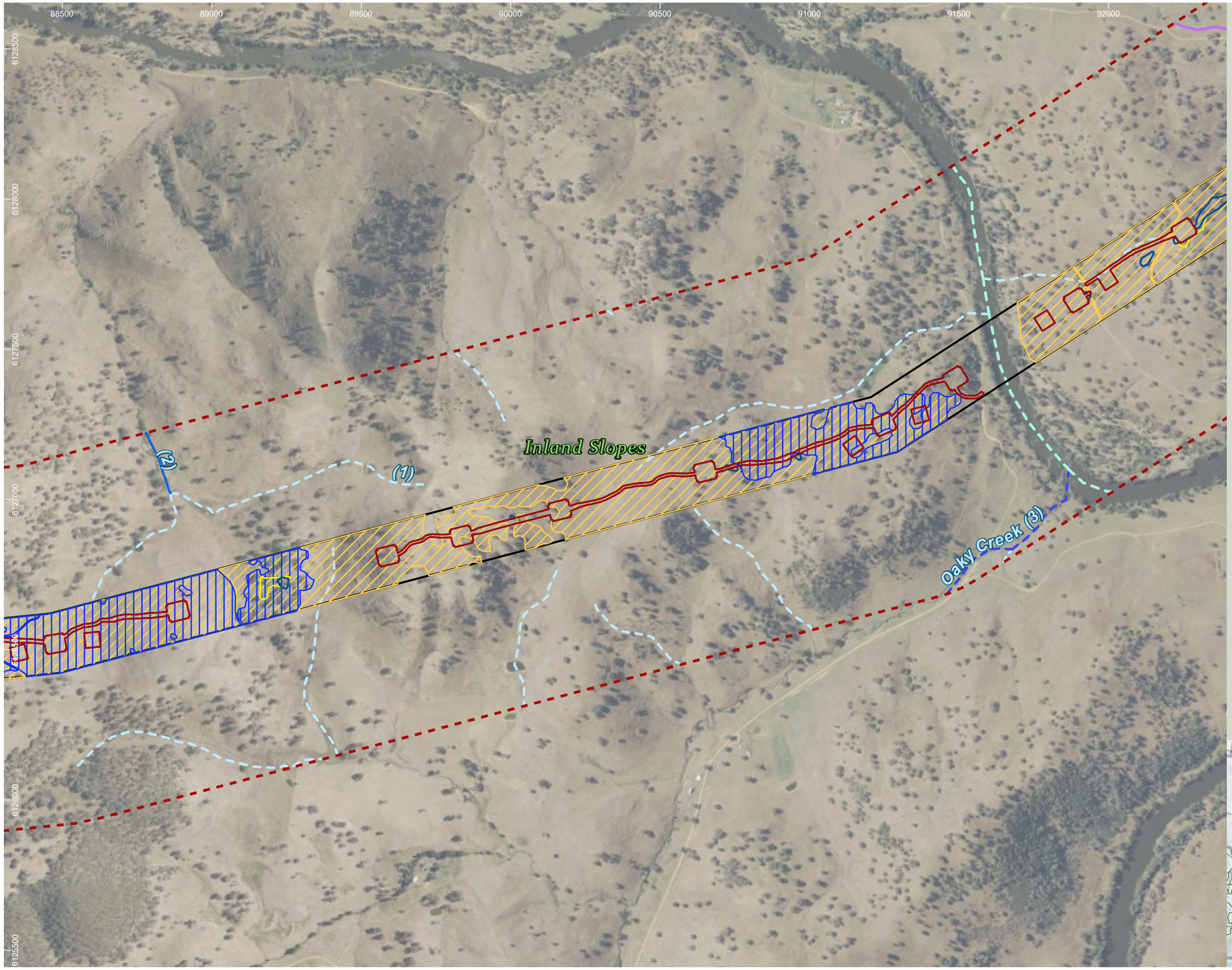
Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 60

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MathewZajeczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

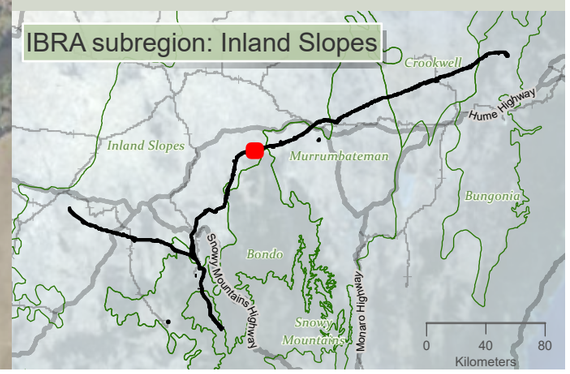
- 1
- 2
- 3
- 4
- 9

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 61

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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92000 92500 93000 93500 94000 94500 95000 95500

6130000 6129500 6129000 6128500 6128000 6127500 6127000

Oak Creek (4)

(1)

(2)

Inland Slopes

Murrumbidgee River (9)

Bondo

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

- 1
- 2
- 3
- 4
- 9

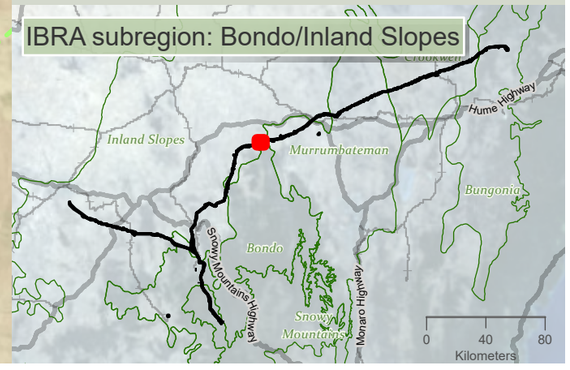
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana

IBRA subregion: Bondo/Inland Slopes



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 62

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

95000
95500
96000
96500
97000
97500
98000
98500
6131000
6130500
6130000
6129500
6129000
6128500
6128000

Oak Creek (1)
Jugiong Creek (4)
(1)
(2)
(3)
Oak Creek (4)
Inland Slopes
Murrumbateman
Bondo

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

- 1
- 2
- 3
- 4

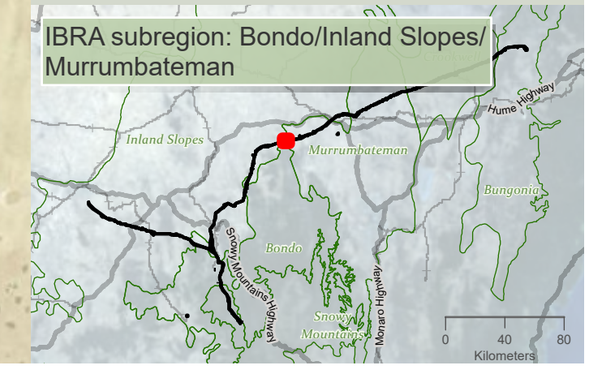
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana

IBRA subregion: Bondo/Inland Slopes/ Murrumbateman



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

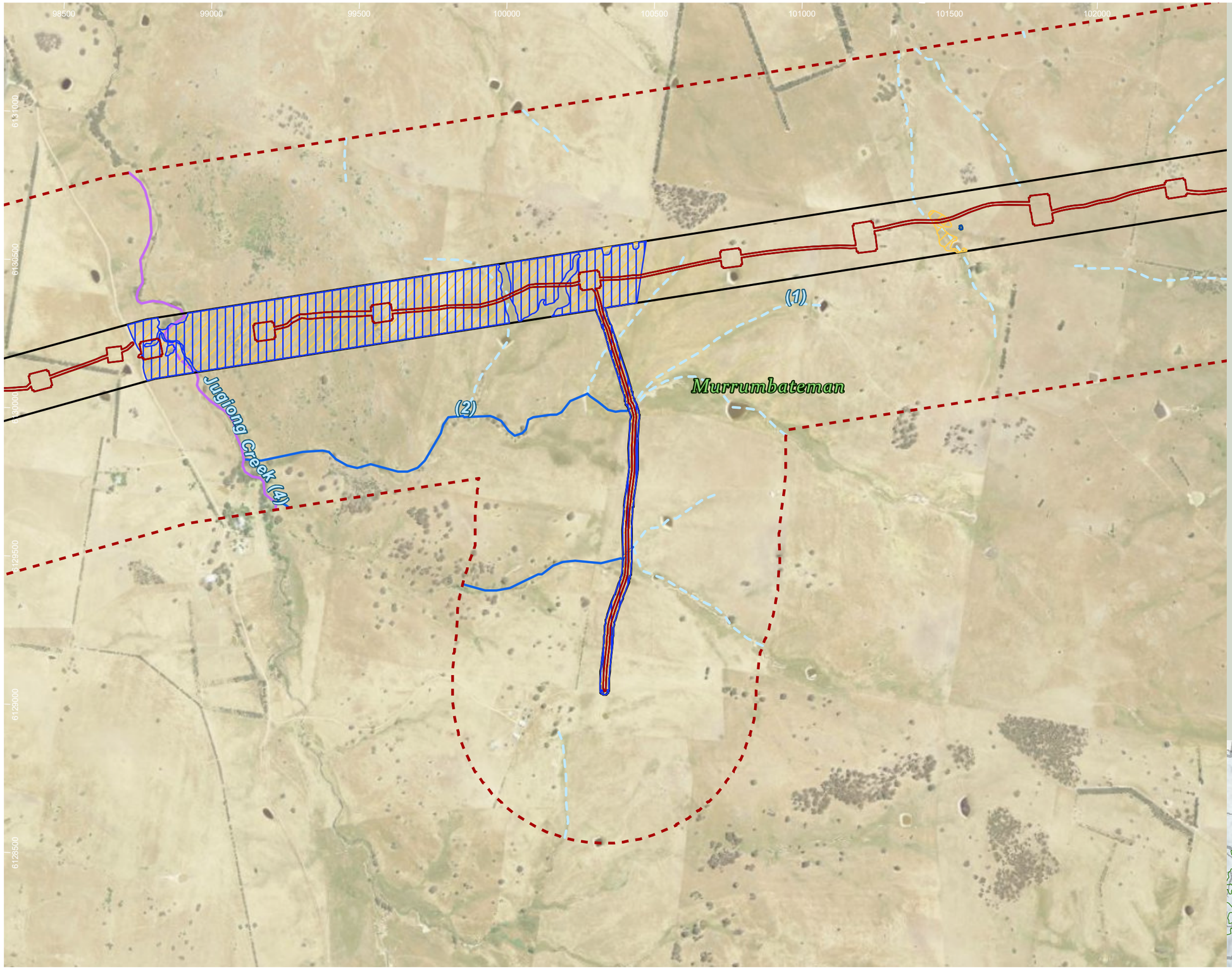
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 63

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

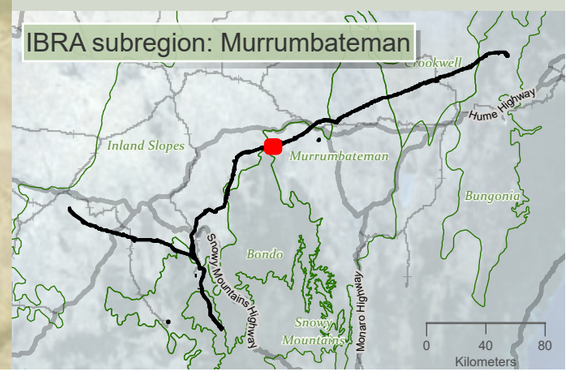
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

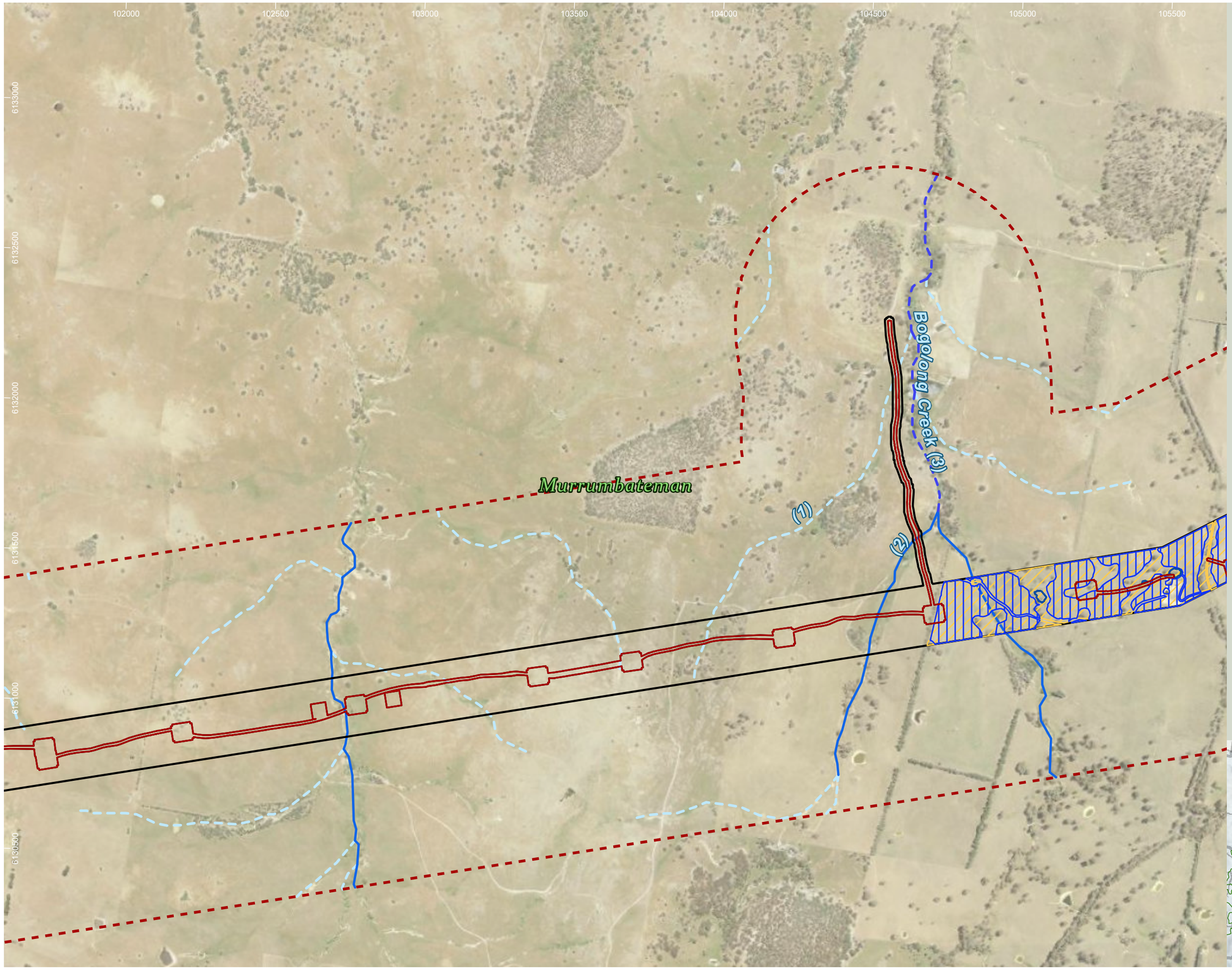
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 64

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

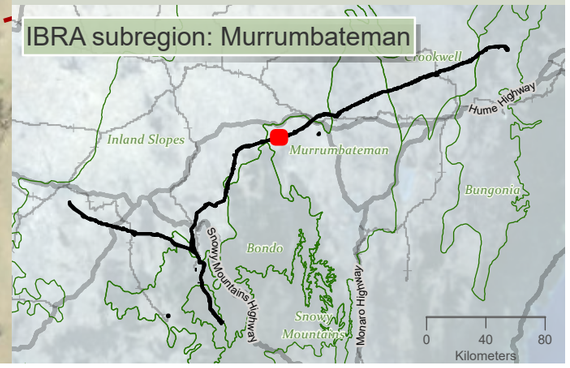
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 65

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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105000 105500 106000 106500 107000 107500 108000 108500

6133500 6133000 6132500 6132000 6131500 6131000

Murrumbateman

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

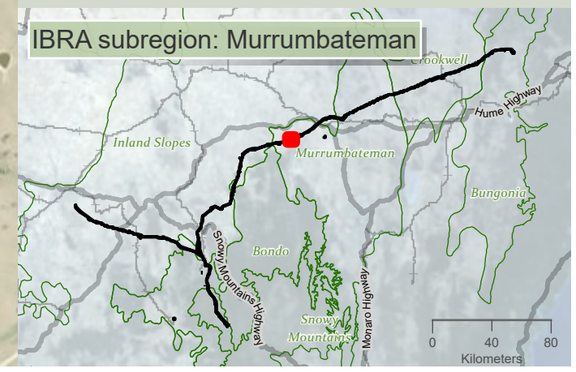
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 66

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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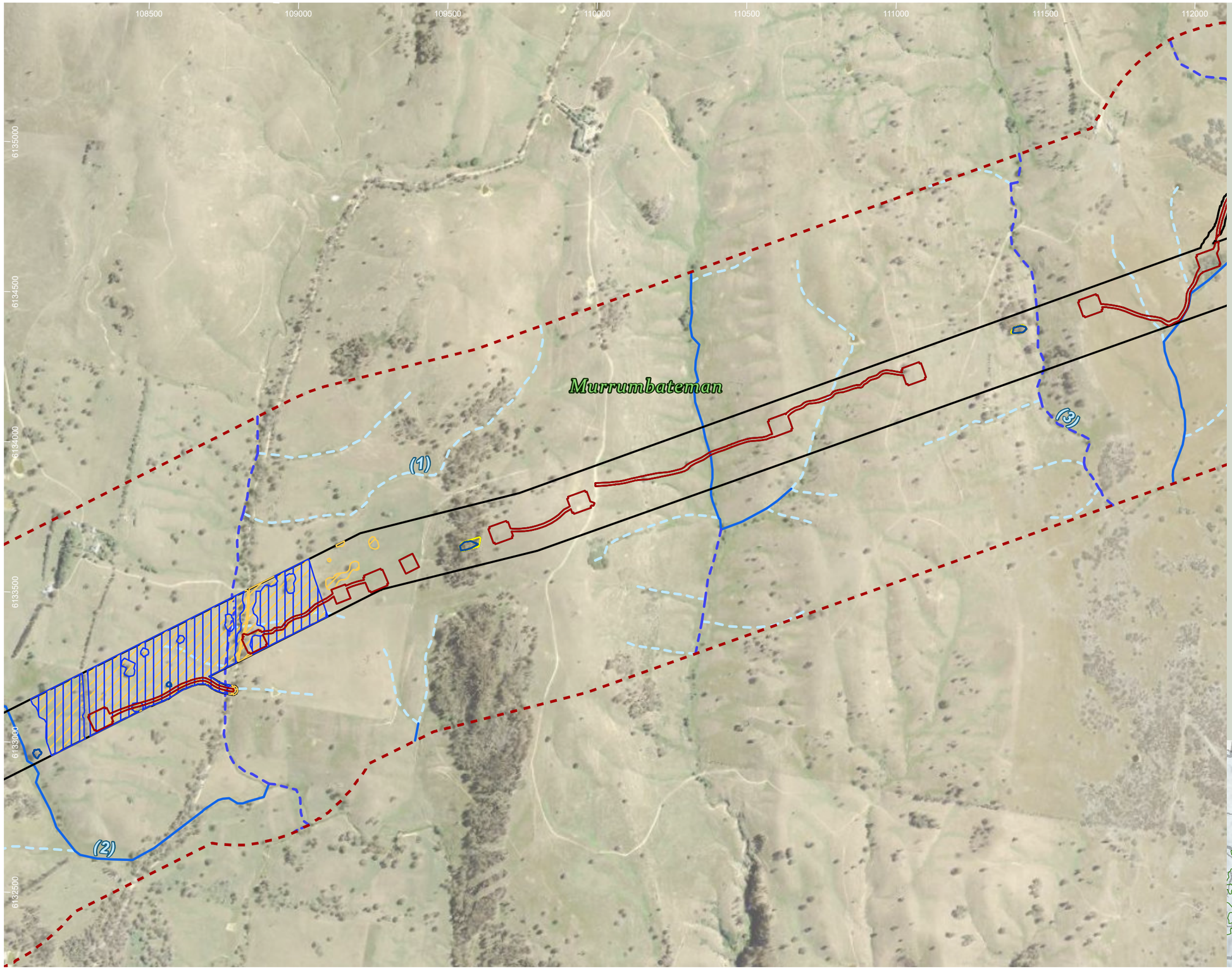


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

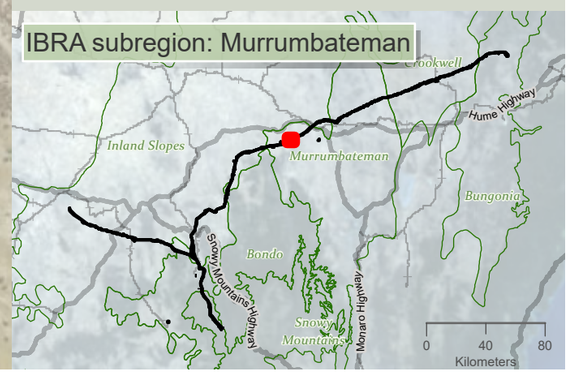
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 67

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

111500 112000 112500 113000 113500 114000 114500 115000

6136500 6136000 6135500 6135000 6134500 6134000

Murrumbateman

Mccullums Creek (3)

(1)

(2)

(3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

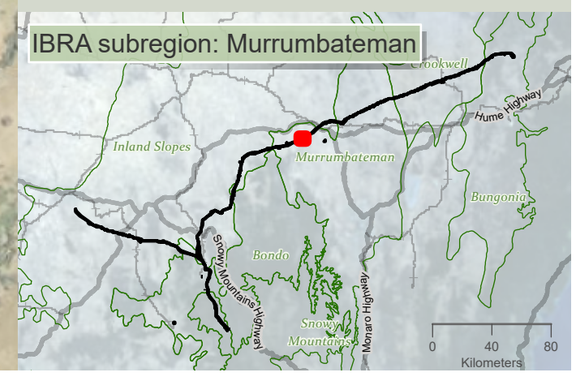
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 68

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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114500 115000 115500 116000 116500 117000 117500 118000

6138500 6138000 6137500 6137000 6136500 6136000

Murrumbateman

Derringullen Creek (5)

(1)

(3)

Bowning Creek (5)

Yass River (6)

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

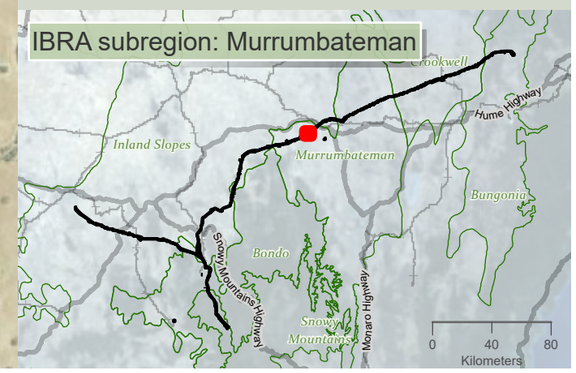
- 1
- 2
- 3
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 69

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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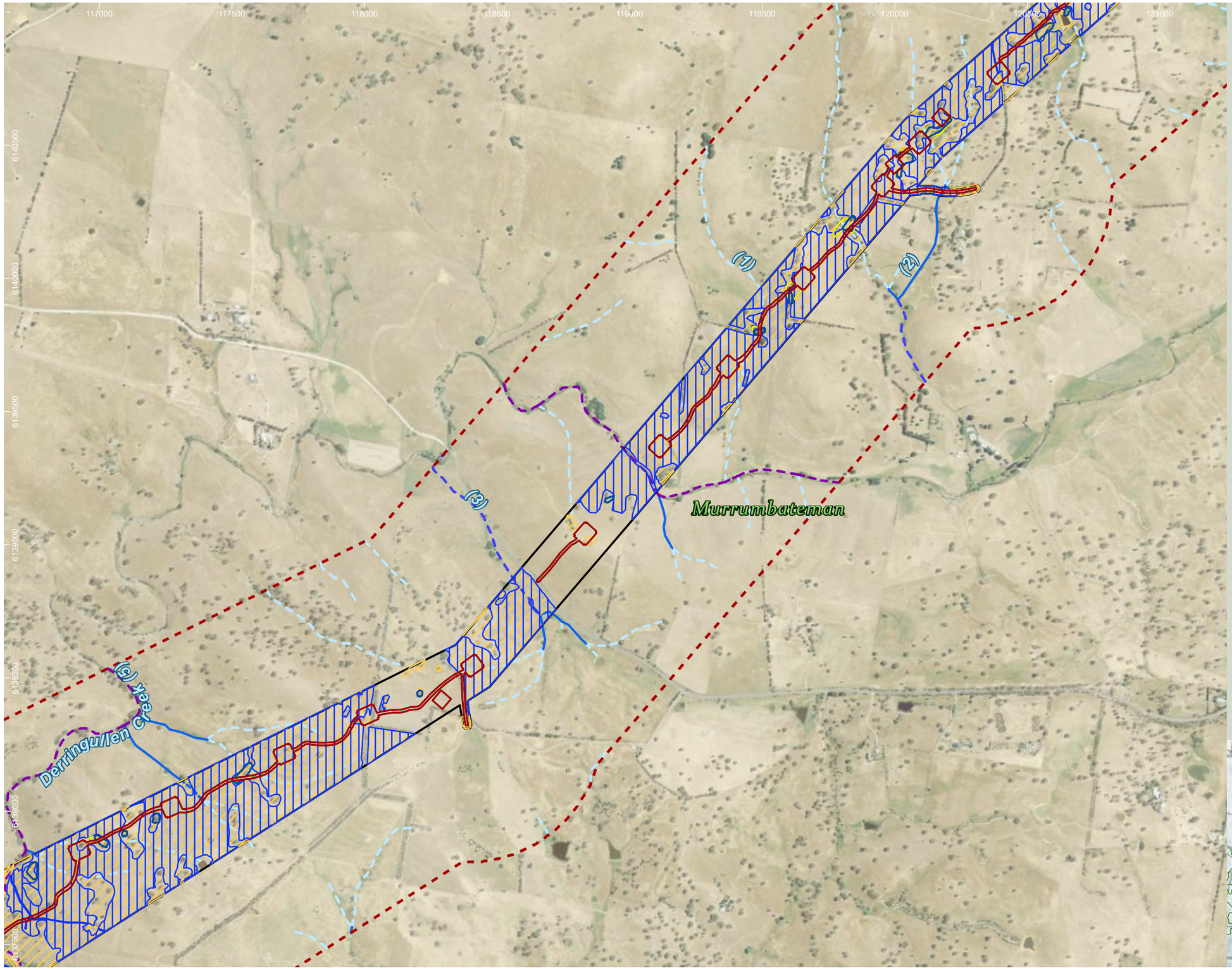


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

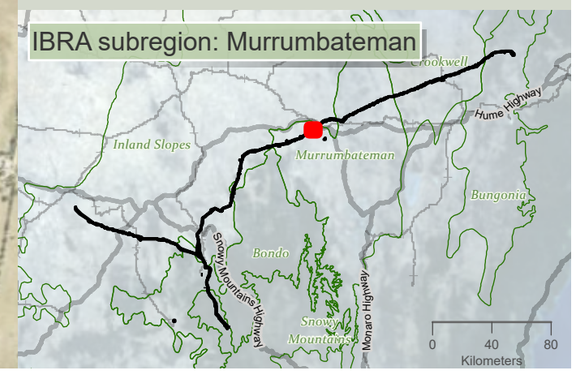
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

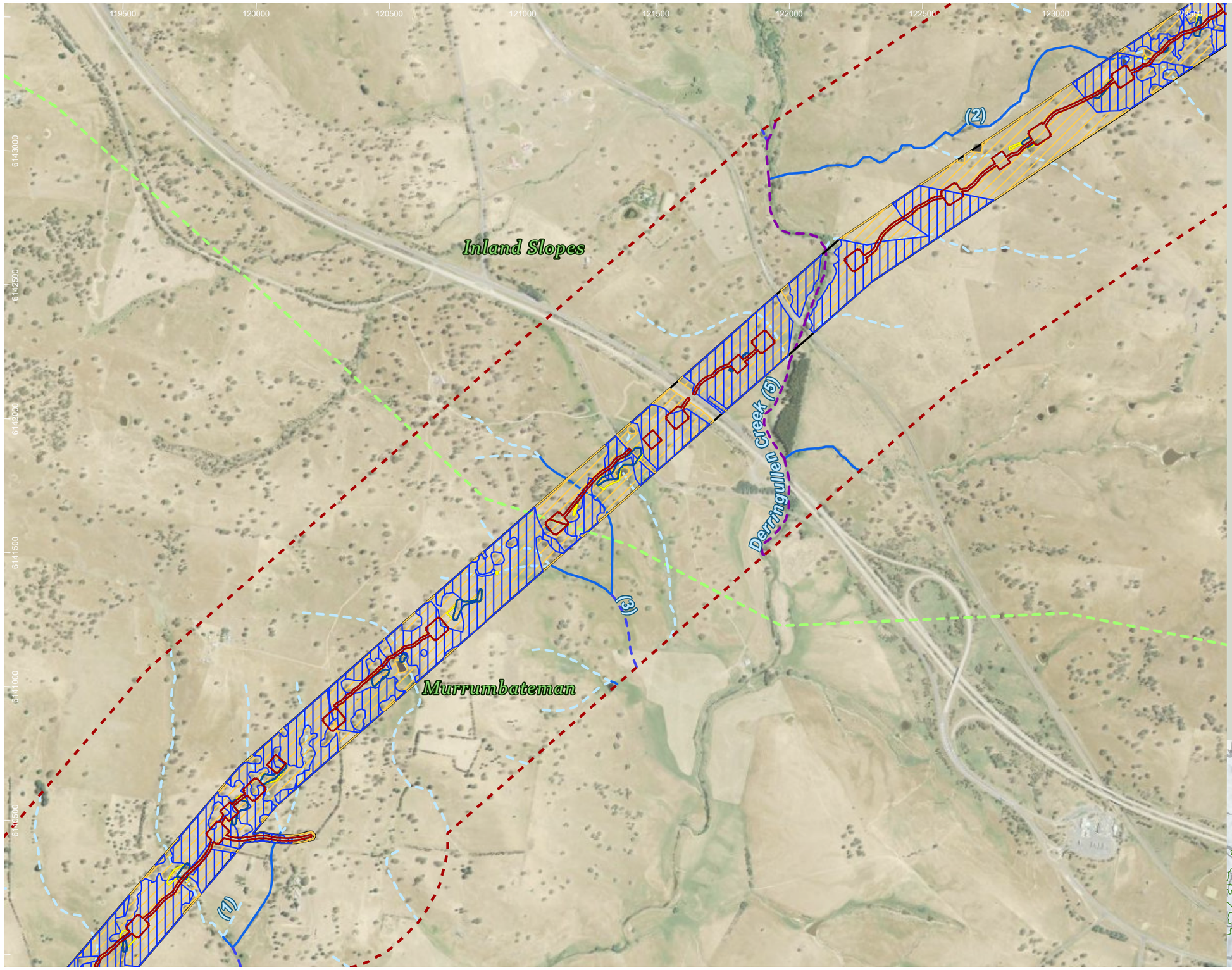
Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 70

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential\Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

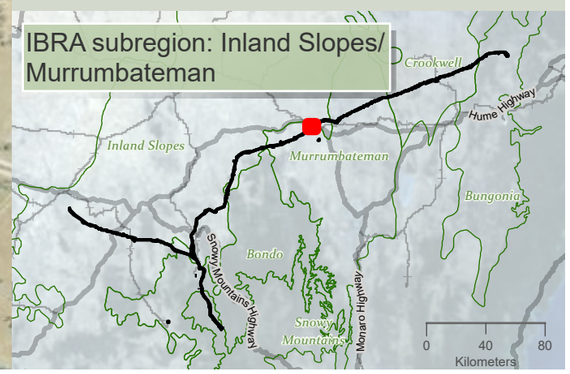
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

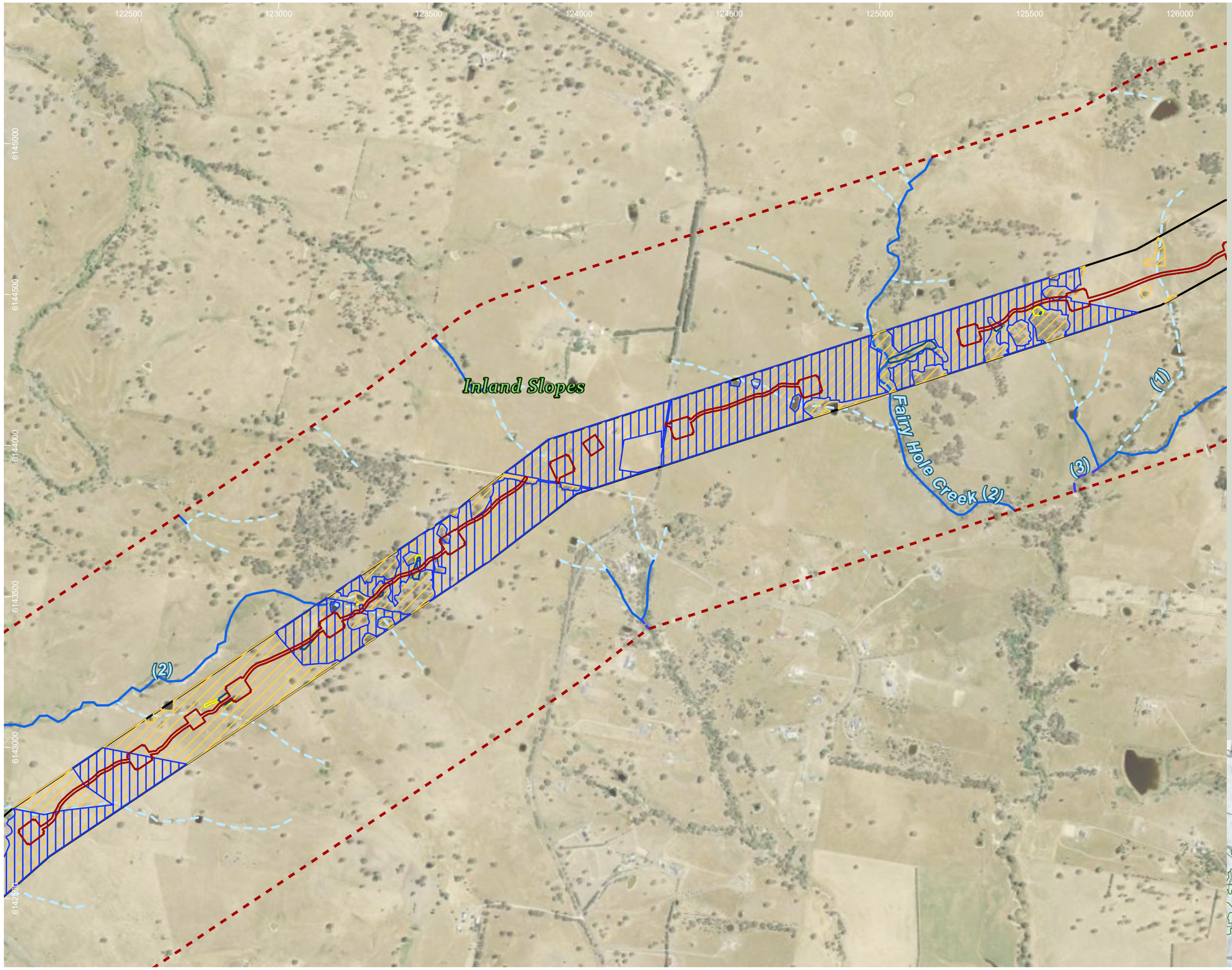
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 71

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

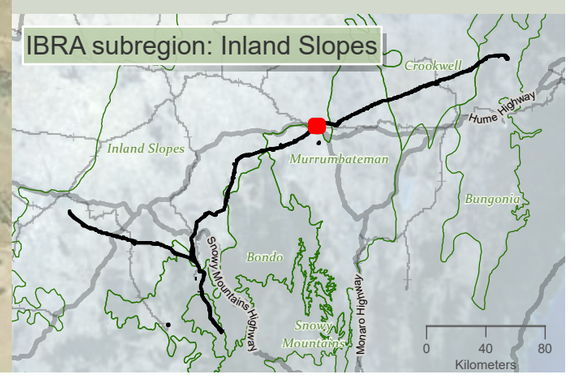
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 73

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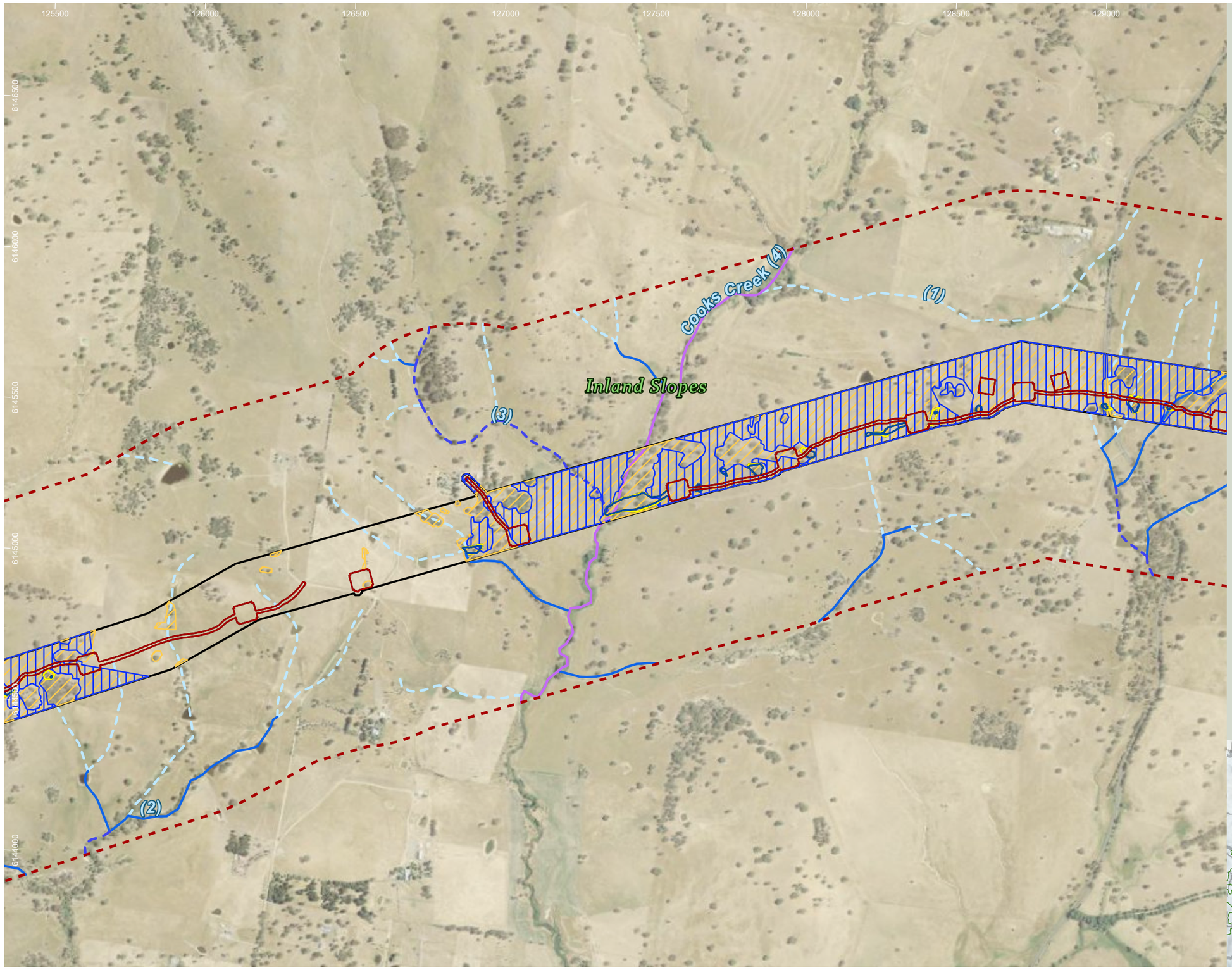


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

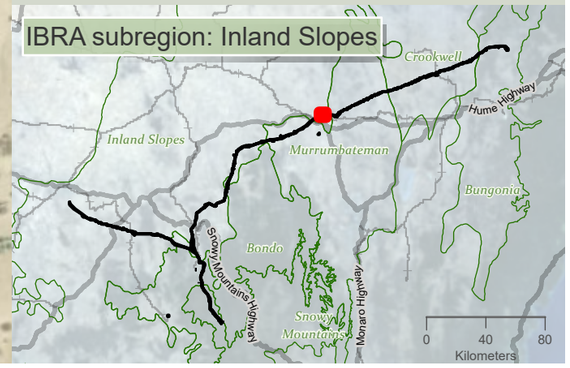
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 74

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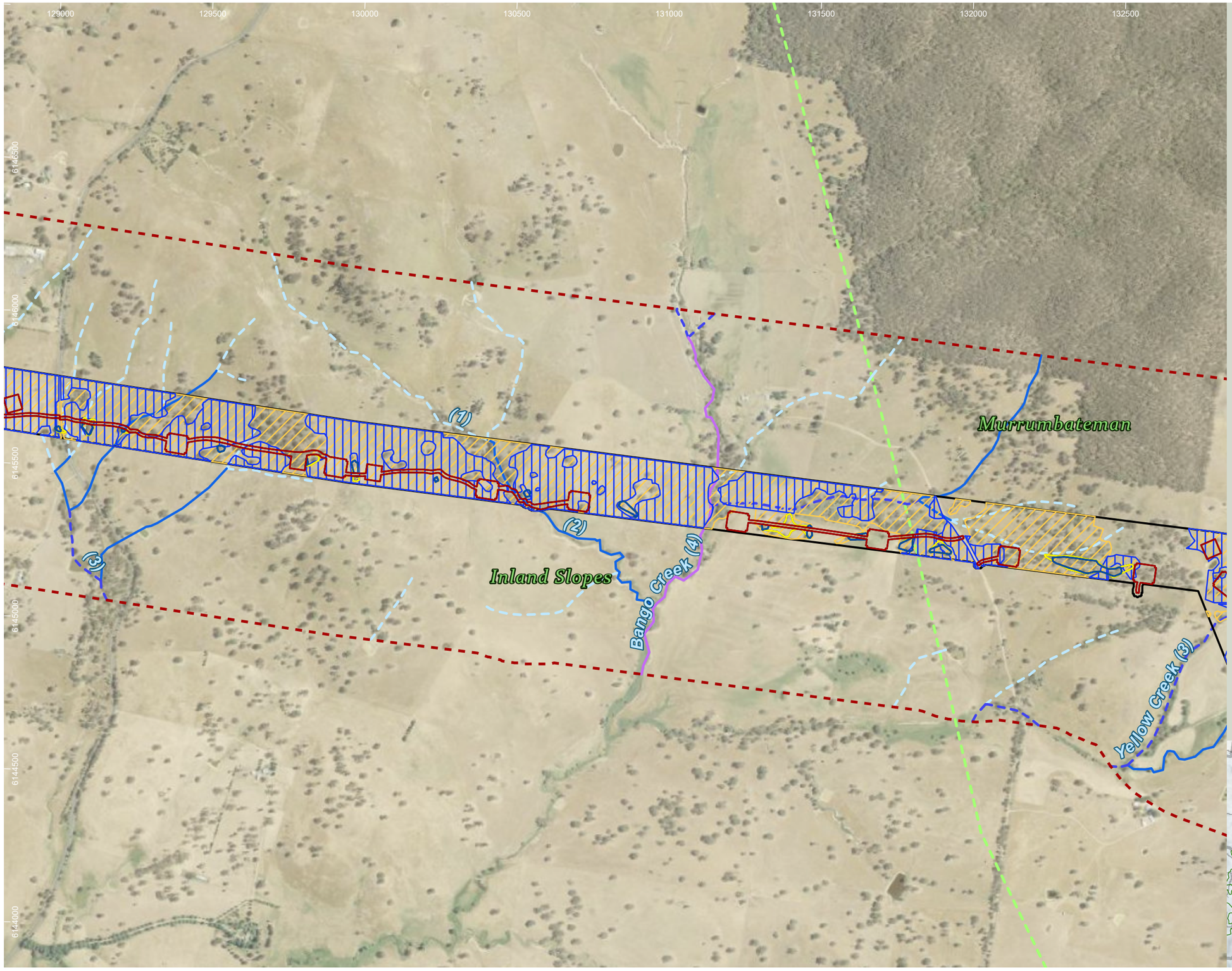


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

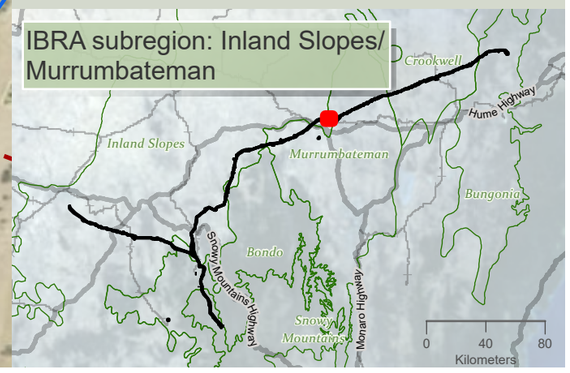
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 75

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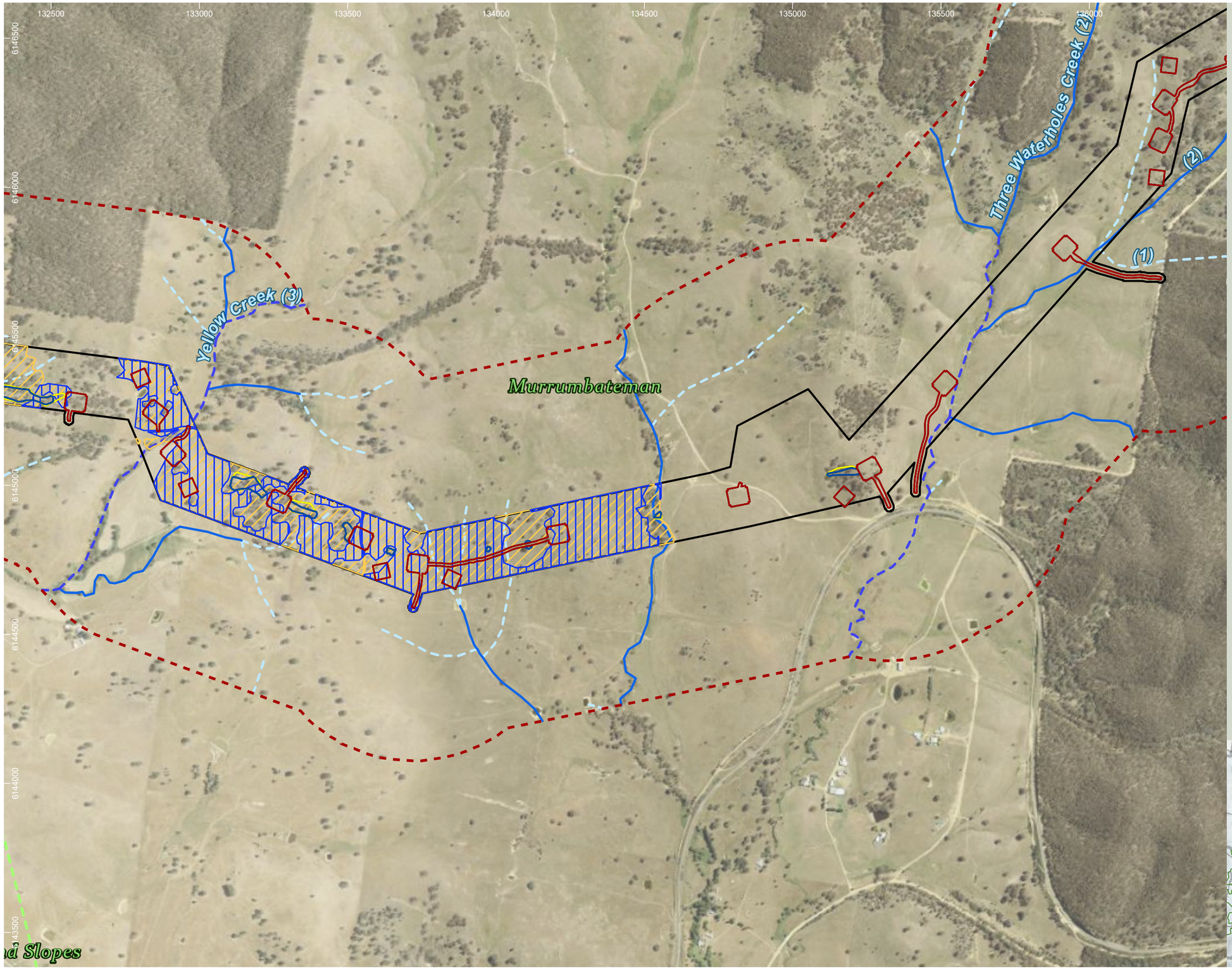


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

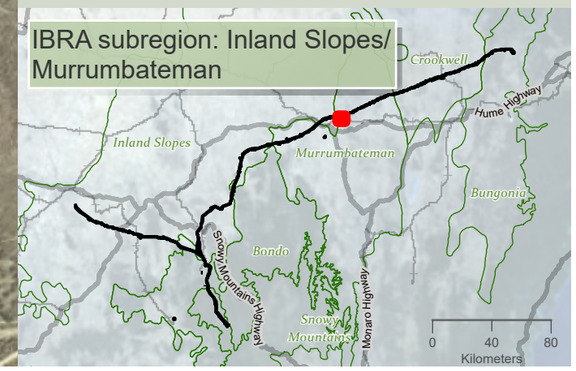
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 76

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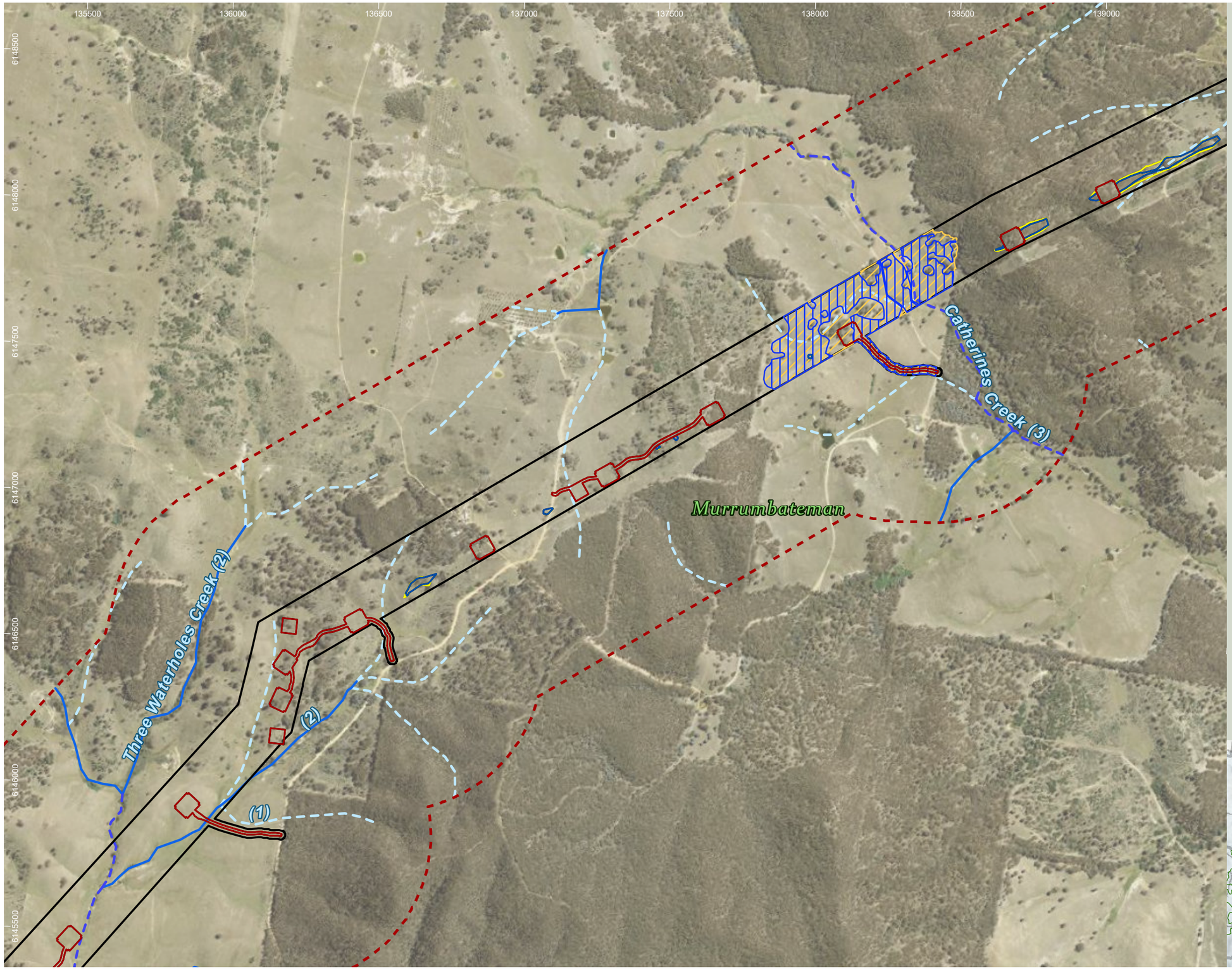


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

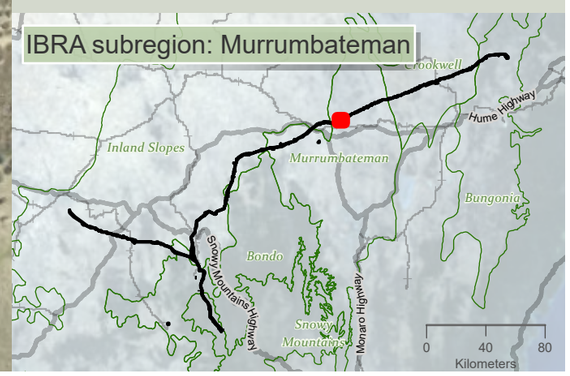
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 77

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138500 139000 139500 140000 140500 141000 141500 142000

6150000 6149500 6149000 6148500 6148000 6147500

Bunton Creek (3)

(1)

(2)

Murrumbateman

Catherines Creek (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

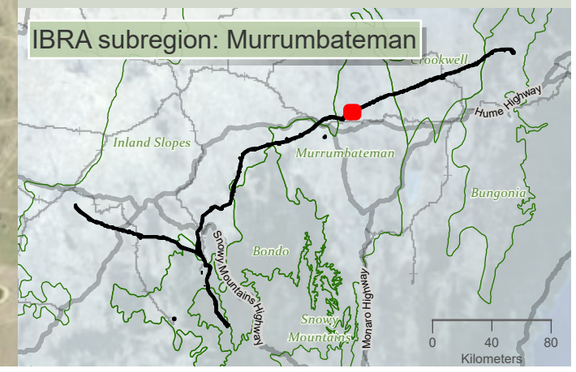
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 78

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141500 142000 142500 143000 143500 144000 144500 145000

6152000 6151500 6151000 6150500 6150000

Murrumbateman

Bunton Creek (3)

Felled Timber Creek (3)

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

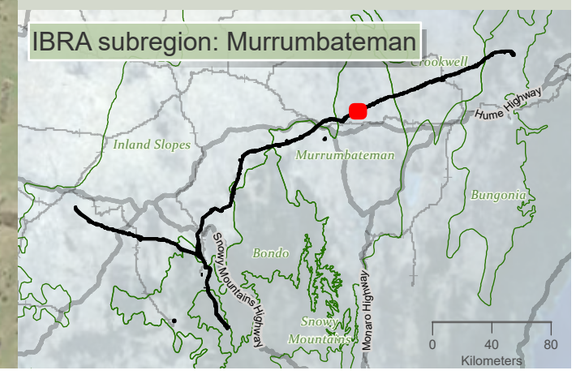
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 79

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144500 145000 145500 146000 146500 147000 147500 148000

6153500 6153000 6152500 6152000 6151000

Murrumbateman

Jerrawa Creek (5)

Felled Timber Creek (3)

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

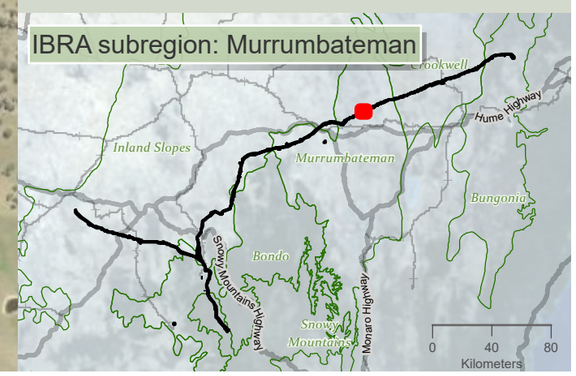
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 400
m
N
WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 80

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148000 148500 149000 149500 150000 150500 151000 151500

6155000 6154500 6154000 6153500 6153000 6152500

Murrumbateman

Sams Creek (2)

Jerrawa Creek (5)

(2)

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

- 1
- 2
- 3
- 4
- 5

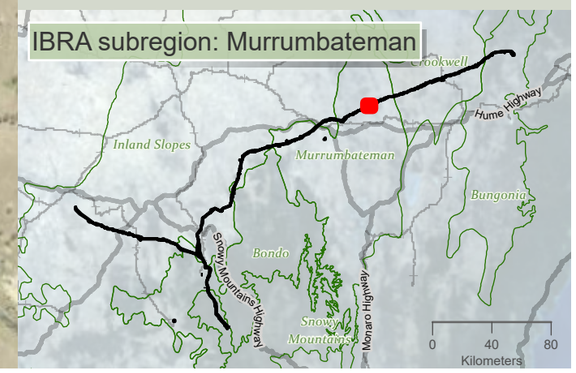
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana

IBRA subregion: Murrumbateman



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 81

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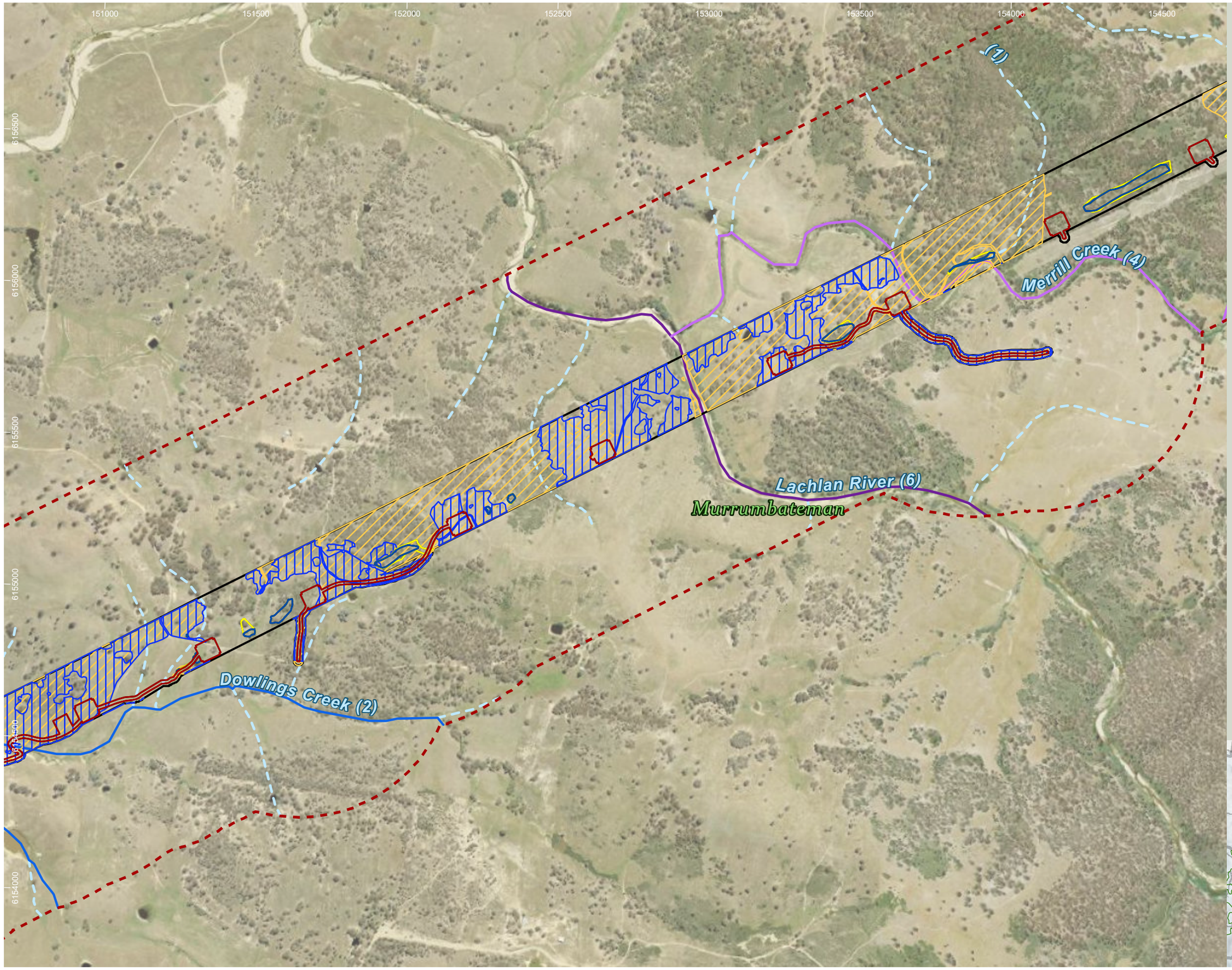


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

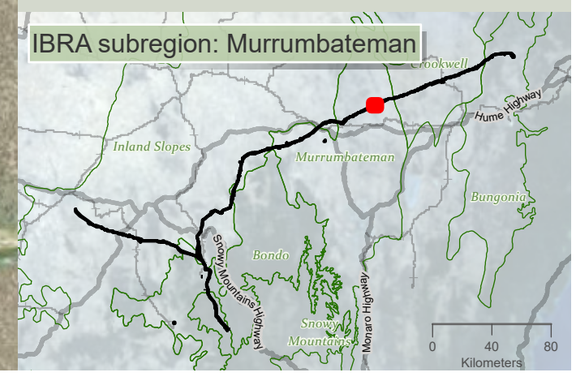
- 1
- 2
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 82

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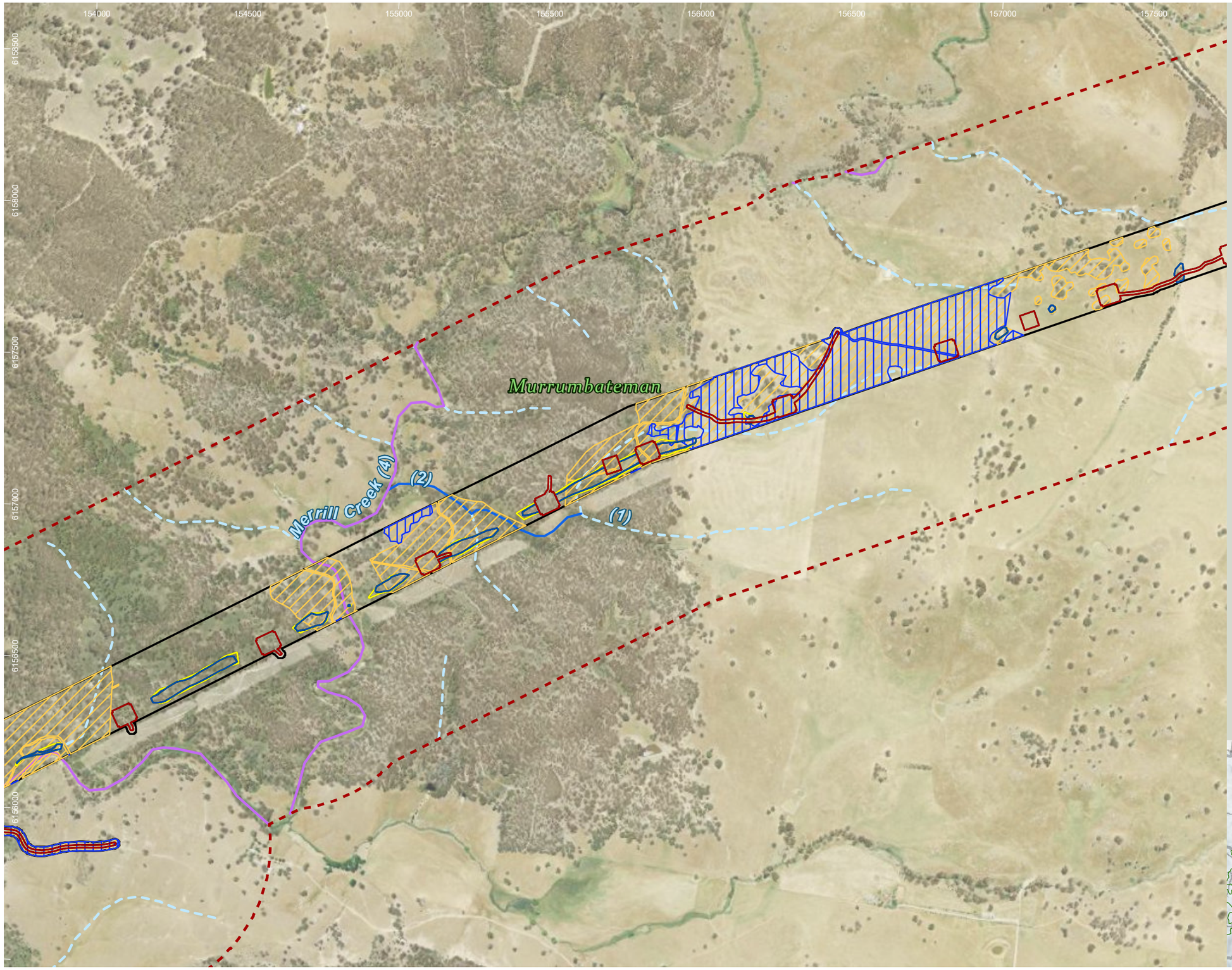


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

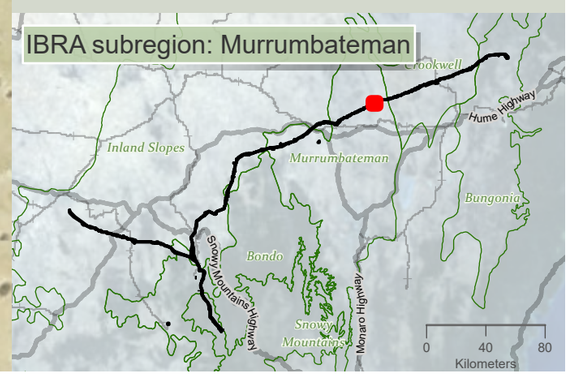
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 83

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157000 157500 158000 158500 159000 159500 160000 160500

6159500 6159000 6158500 6158000 6157500 6157000

Murrumbateman

(2) Middle Creek (1)

(1)

Middle Creek (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

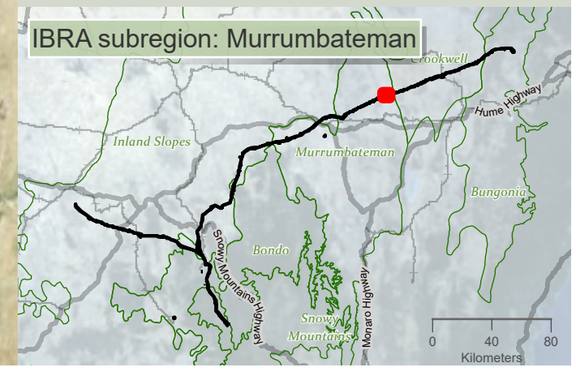
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana



0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 84

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160500 161000 161500 162000 162500 163000 163500 164000

6161000 6160500 6160000 6159500 6159000 6158500 6158000

Crookwell

Murrumbateman

Merrill Creek (2)

Middle Creek (1)

(1)

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

- 1
- 2
- 3

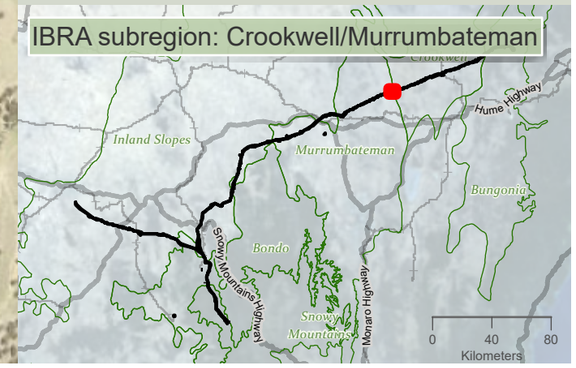
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra
- Synemon plana

IBRA subregion: Crookwell/Murrumbateman



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 85

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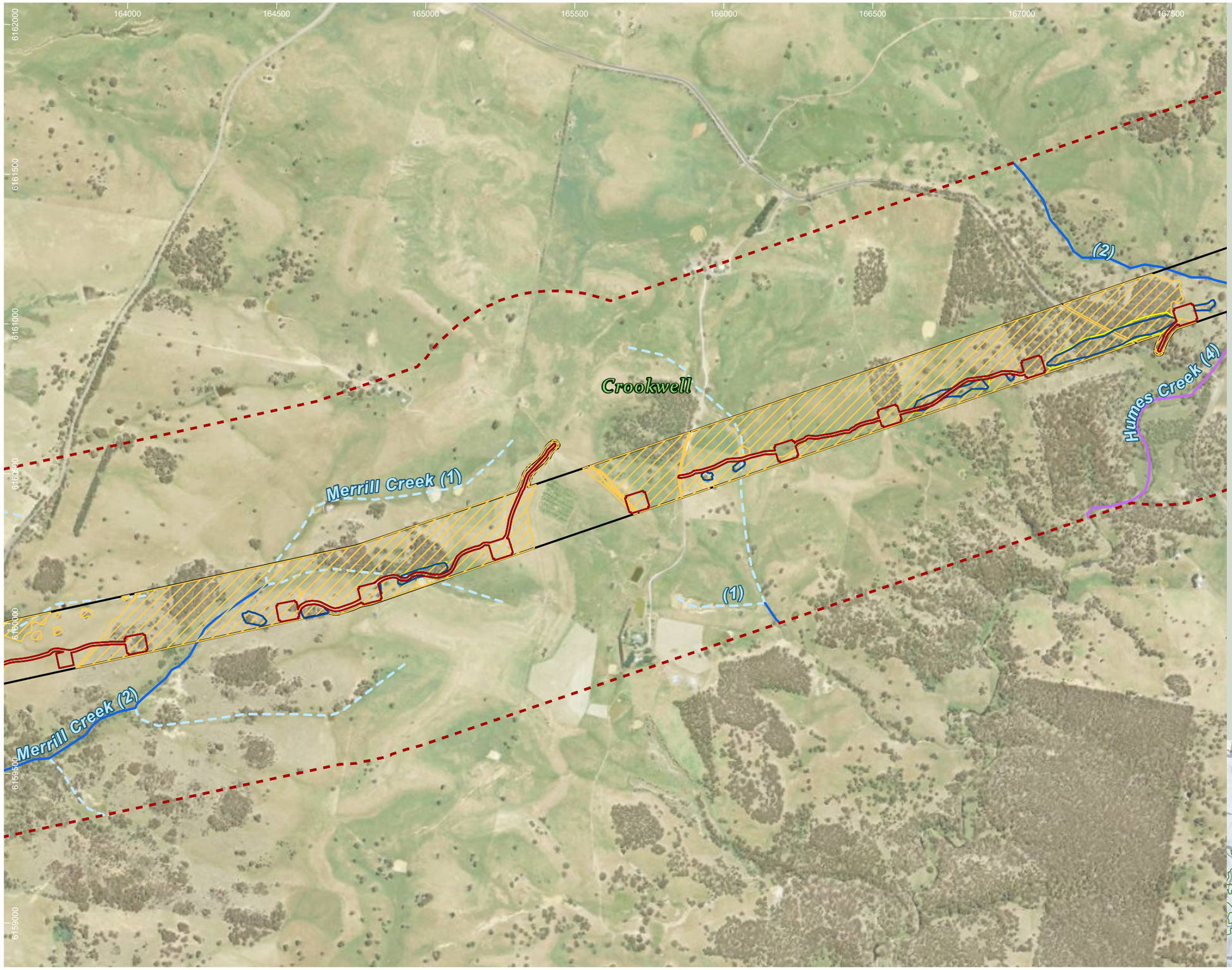


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

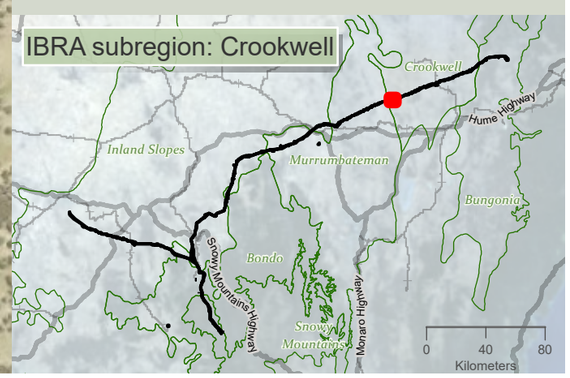
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 86

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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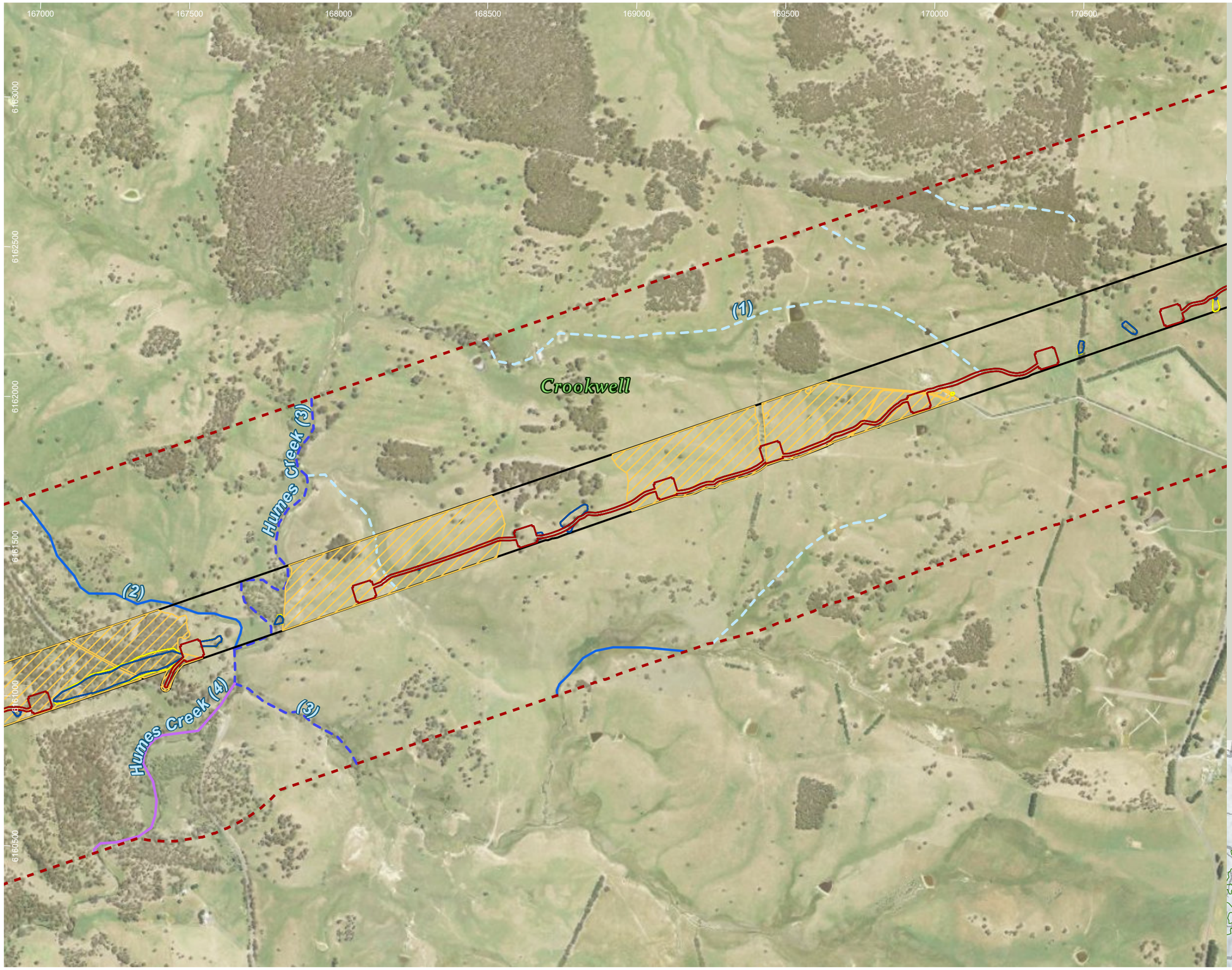


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

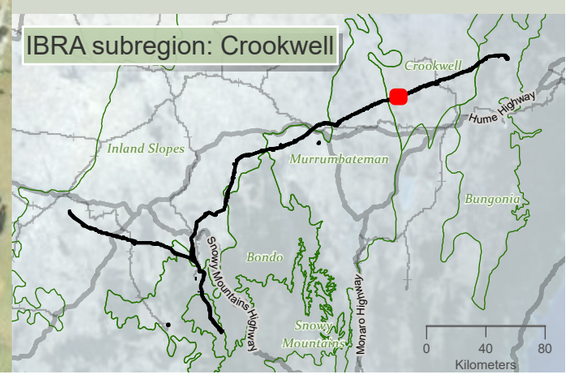
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 87

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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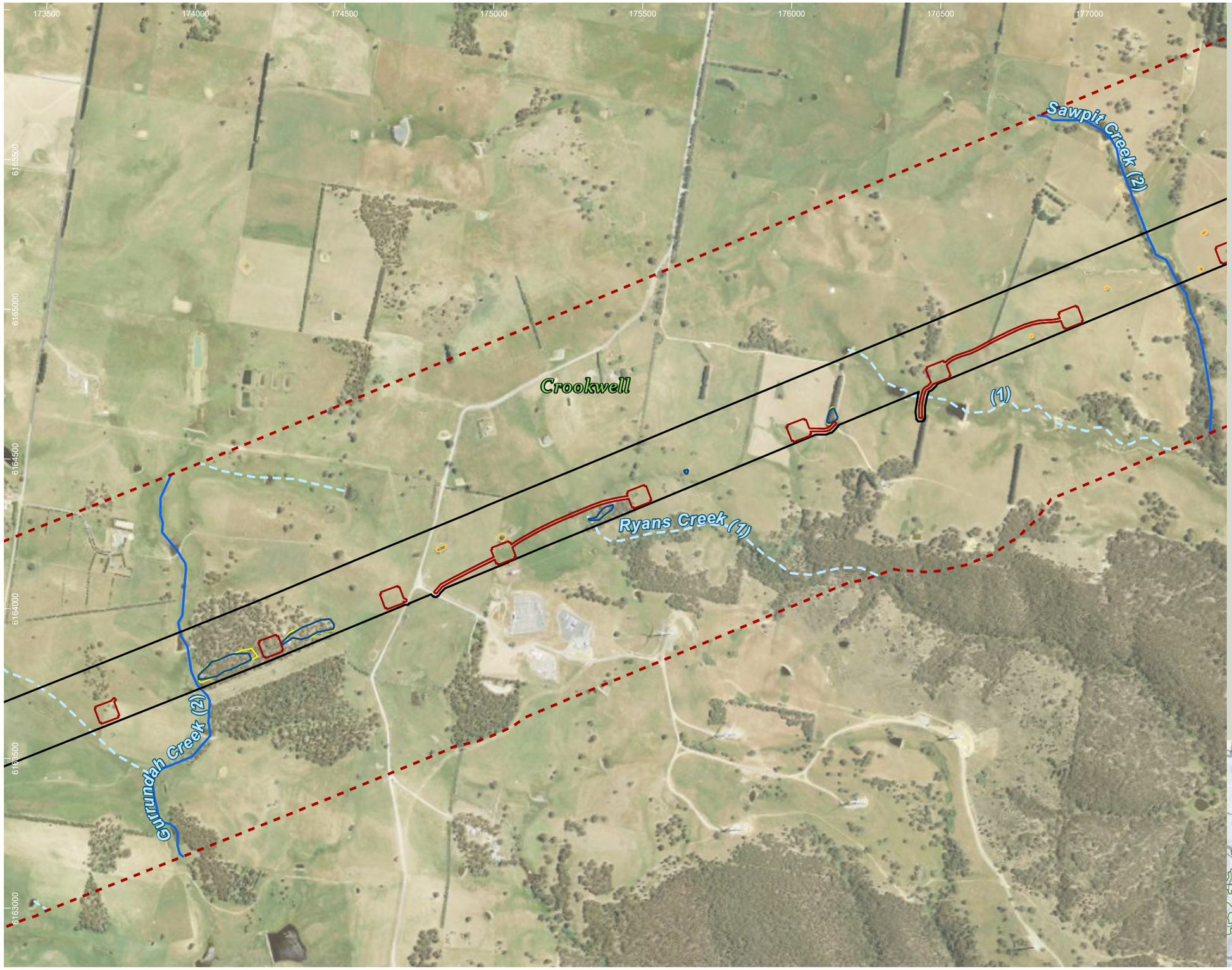


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

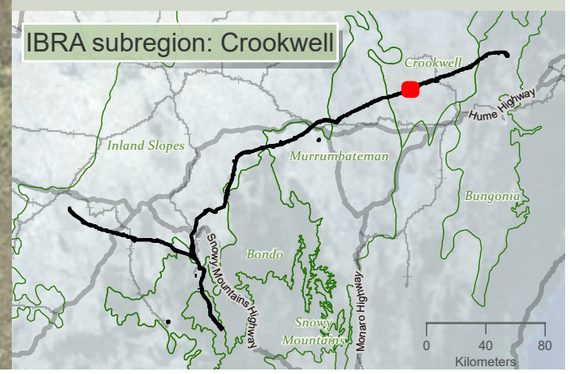
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 89

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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177000 177500 178000 178500 179000 179500 180000 180500

6167500 6167000 6166500 6166000 6165500 6165000 6164500

Crookwell

(1)

(2)

Kialla Creek (3)

Sawpit Creek (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

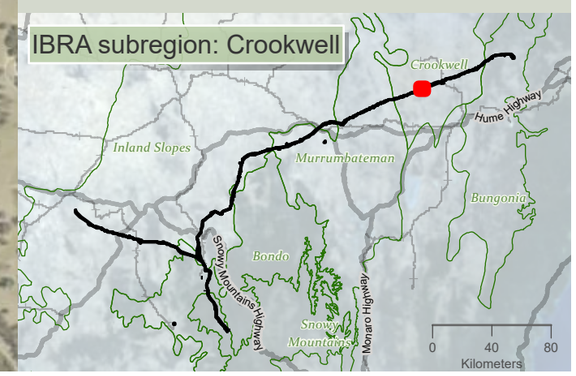
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 90

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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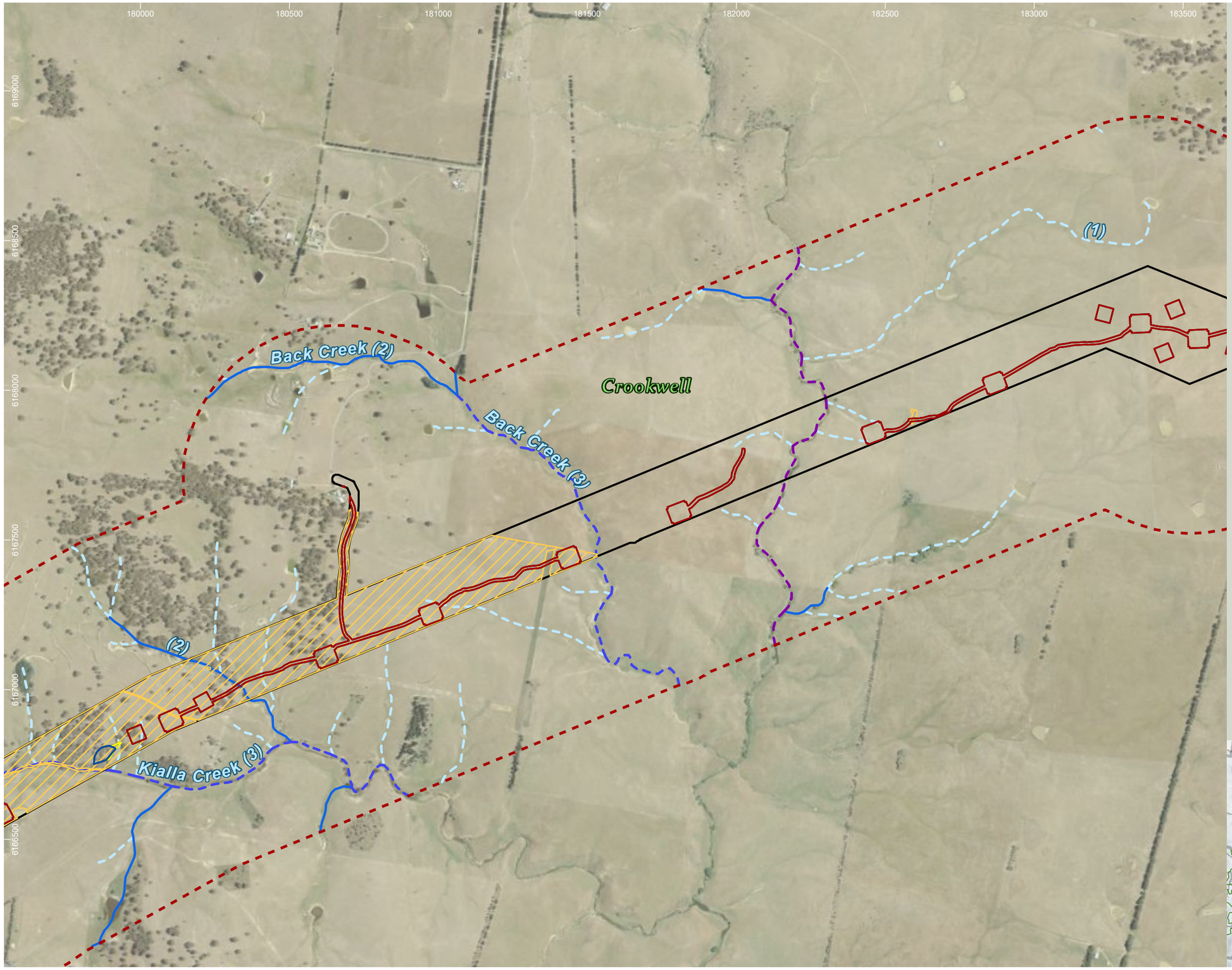


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

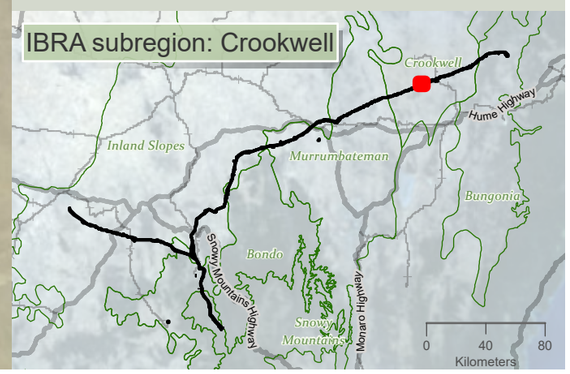
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

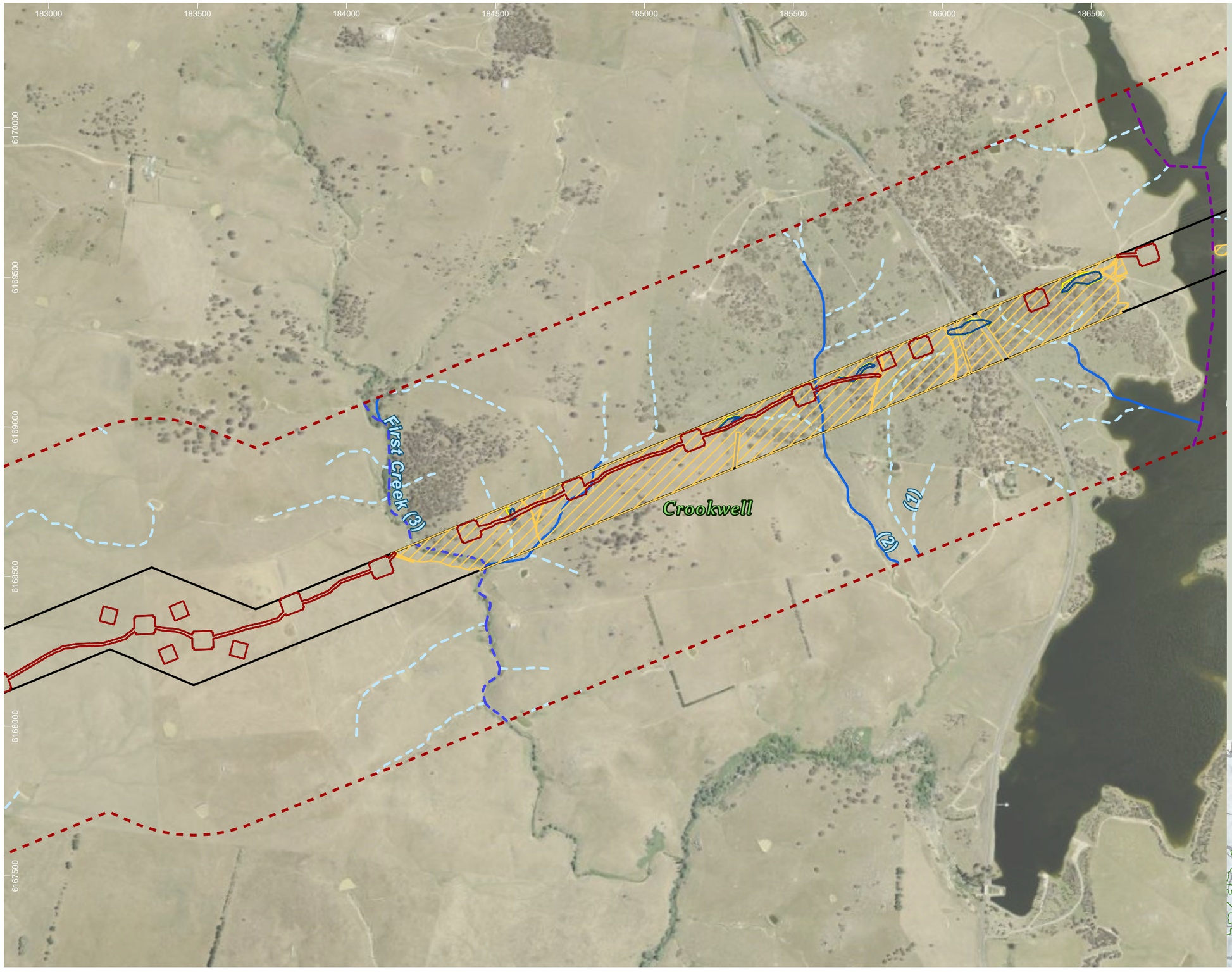
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 91

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

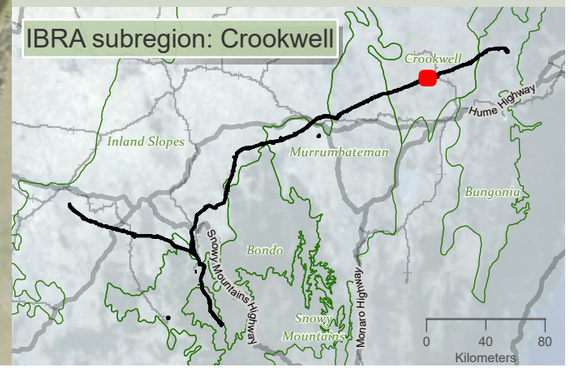
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



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niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

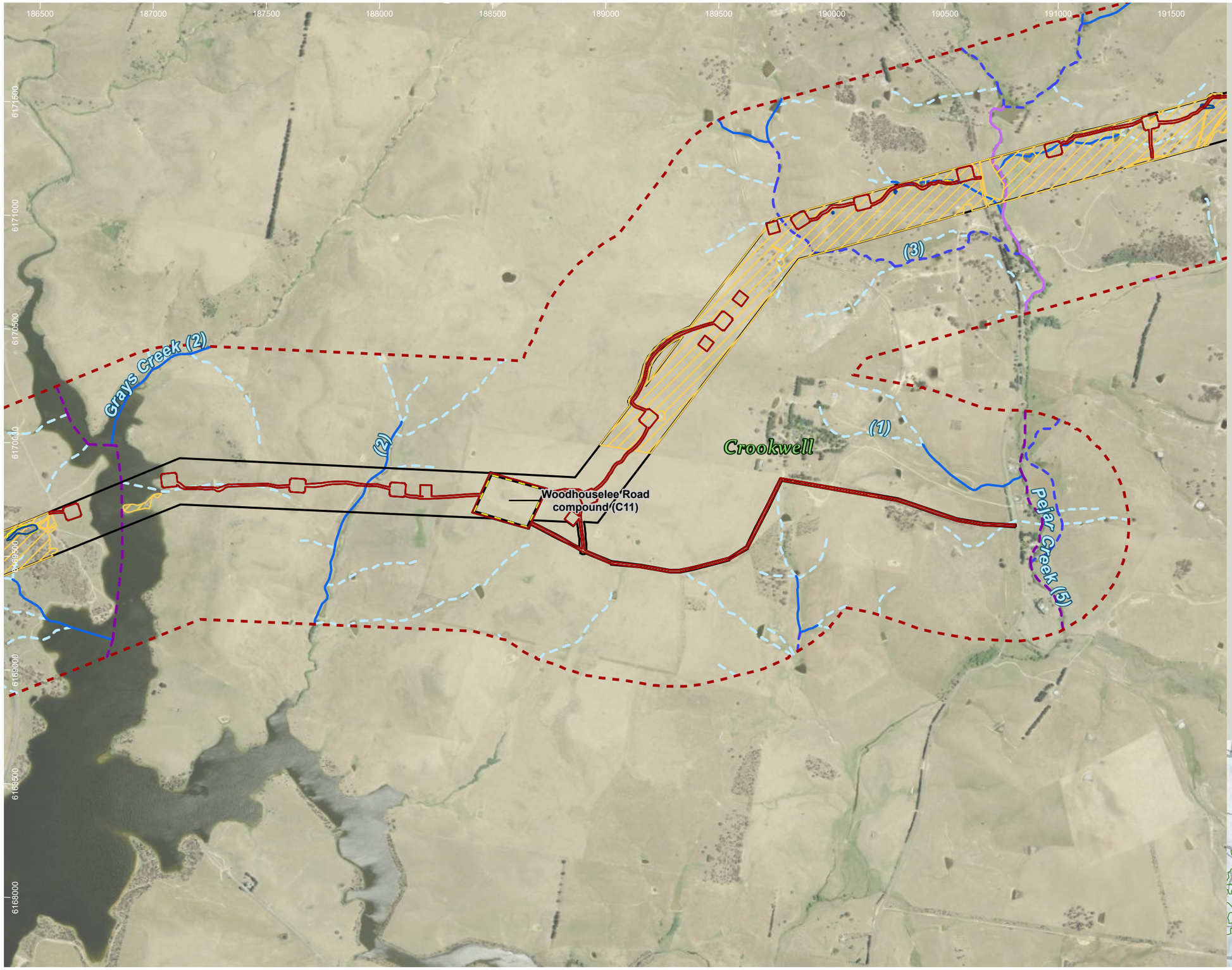
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 92

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

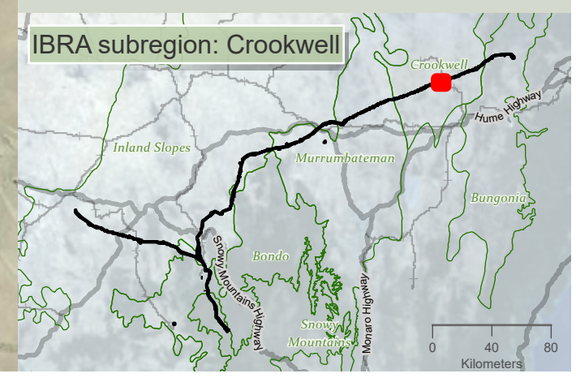
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



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niche Environment and Heritage

0 500
m

WGS 1984 Web Mercator

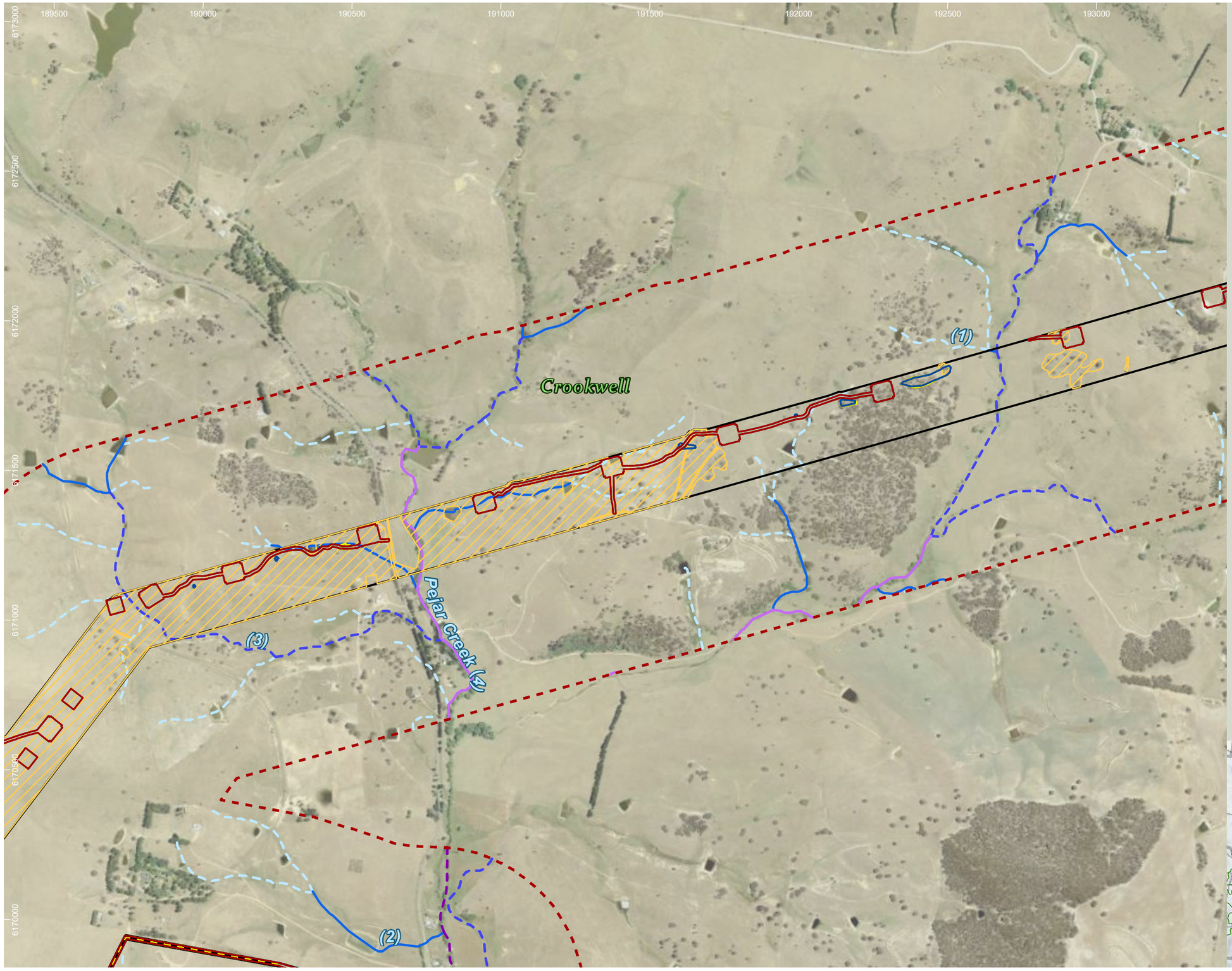
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 93

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

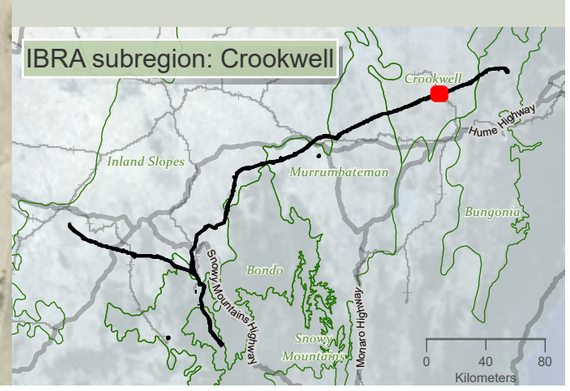
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 94

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193000 193500 194000 194600 195000 195500 196000 196500

6174000 6173500 6173000 6172500 6172000 6171500 6171000

(3) (2) (1)

Melamalong Creek (7)

Crookwell

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

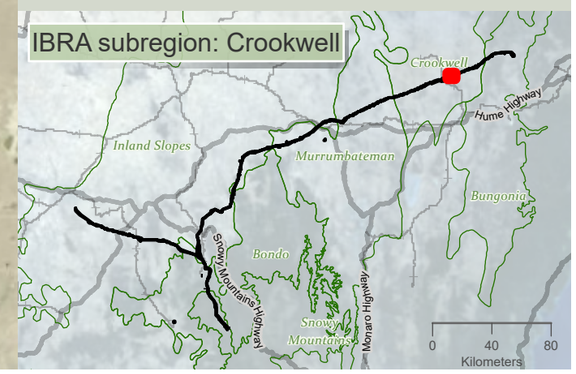
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 400 m

N

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 95

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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196000 196500 197000 197500 198000 198500 199000 199500

6175000 6174500 6174000 6173500 6173000 6172500

Tarlo River (5)

Crookwell

(2)

(3)

Sawpit Gully (3)

(1)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

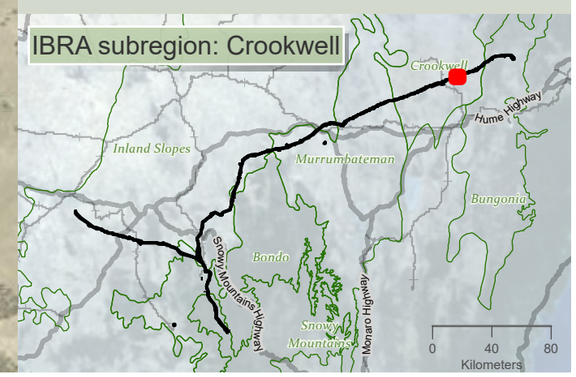
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 96

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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199500 200000 200500 201000 201500 202000 202500 203000

6176500 6176000 6175500 6175000 6174500 6174000

Crookwell

Turrallo Creek (5)

Tarlo River (5)

(1) (2) (3) (4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

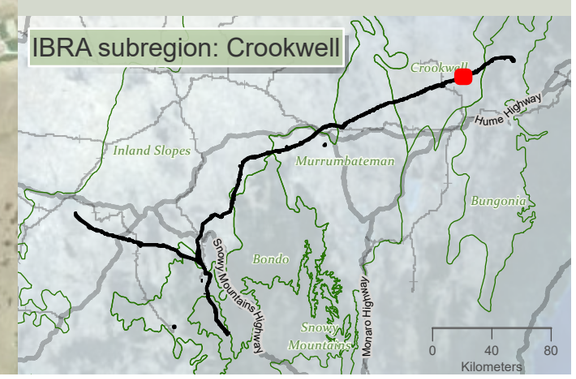
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6899 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 97

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214000 214500 215000 215500 216000 216500 217000 217500 218000

6185500 6185000 6184500 6184000 6183500 6183000 6182500

(4) (2) (3) (1) (4)

Kerrawary Creek

Bungonia

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

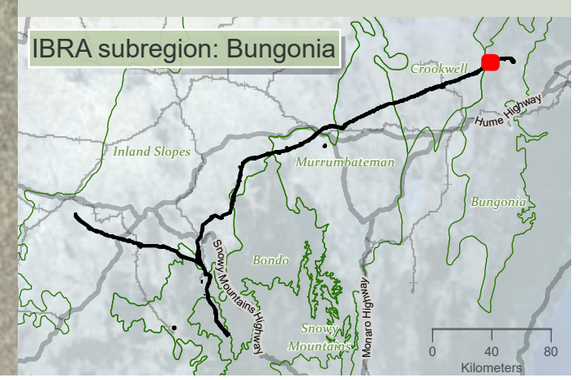
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 102

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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217500 218000 218500 219000 219500 220000 220500 221000

6187000 6186500 6186000 6185500 6185000 6184500

Bannaby Creek (3)

(1)

Bungonia

(2)

(3)

(4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

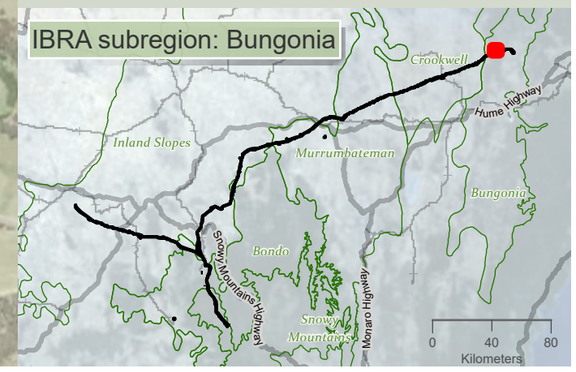
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 103

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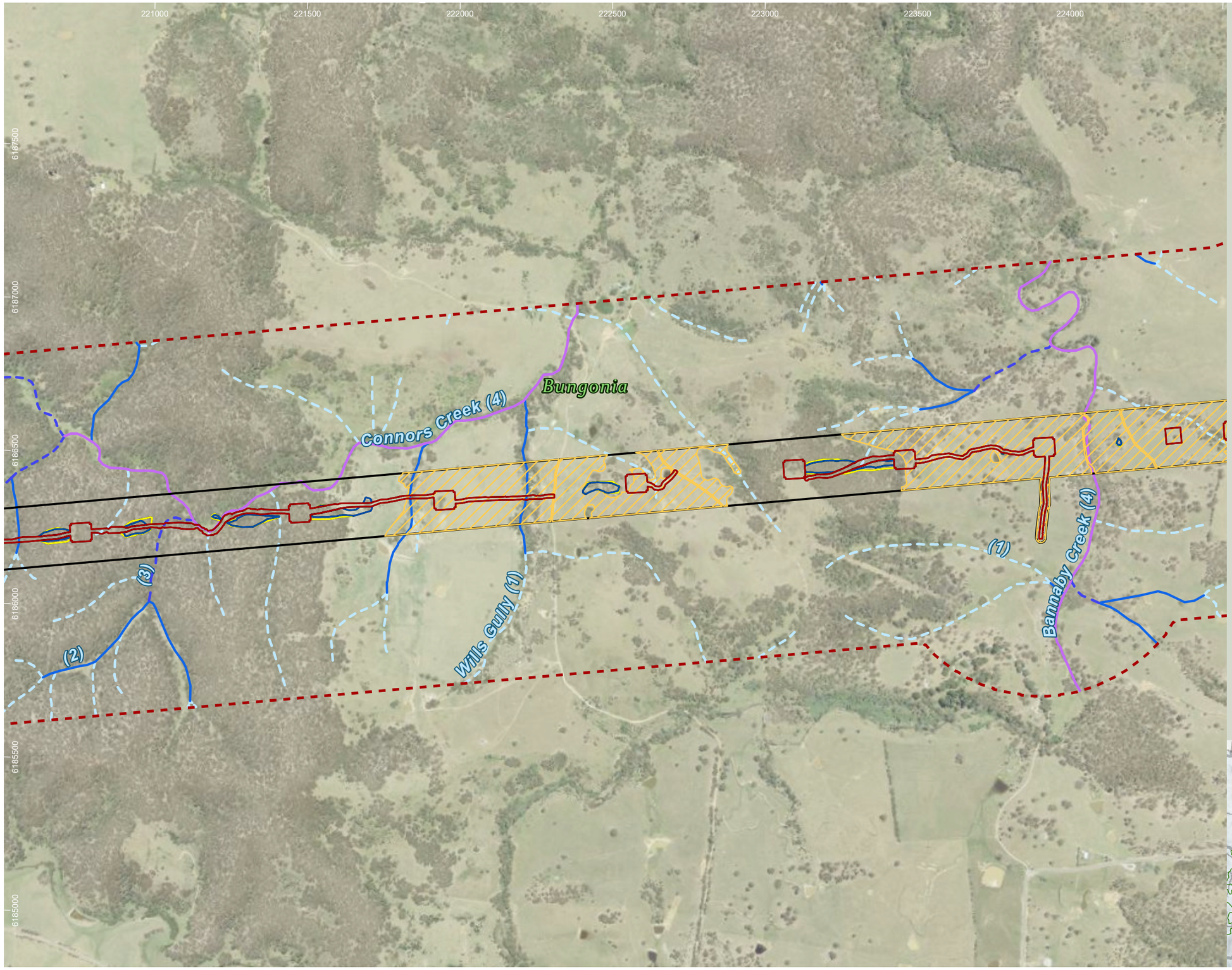


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

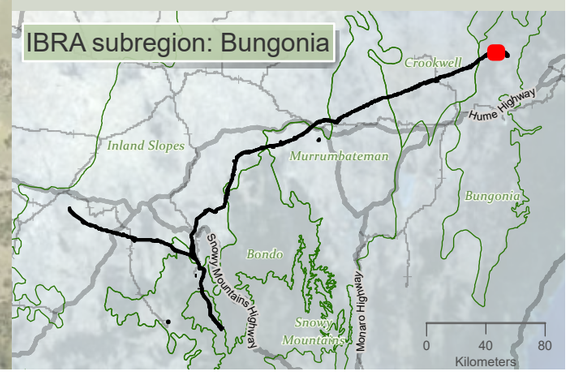
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 104

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

224500 225000 225500 226000 226500 227000 227500

6188000 6187500 6187000 6186500 6186000 6185500

(1) (2) (3) (4)

Bungonia

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

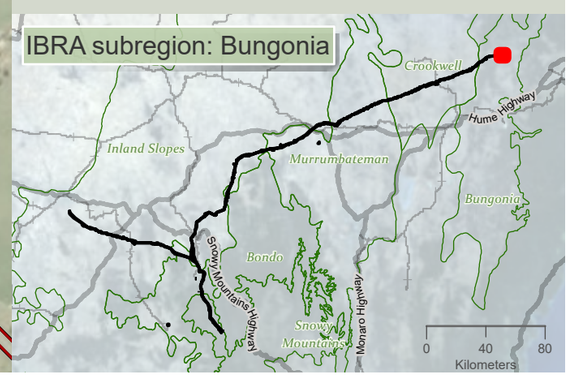
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

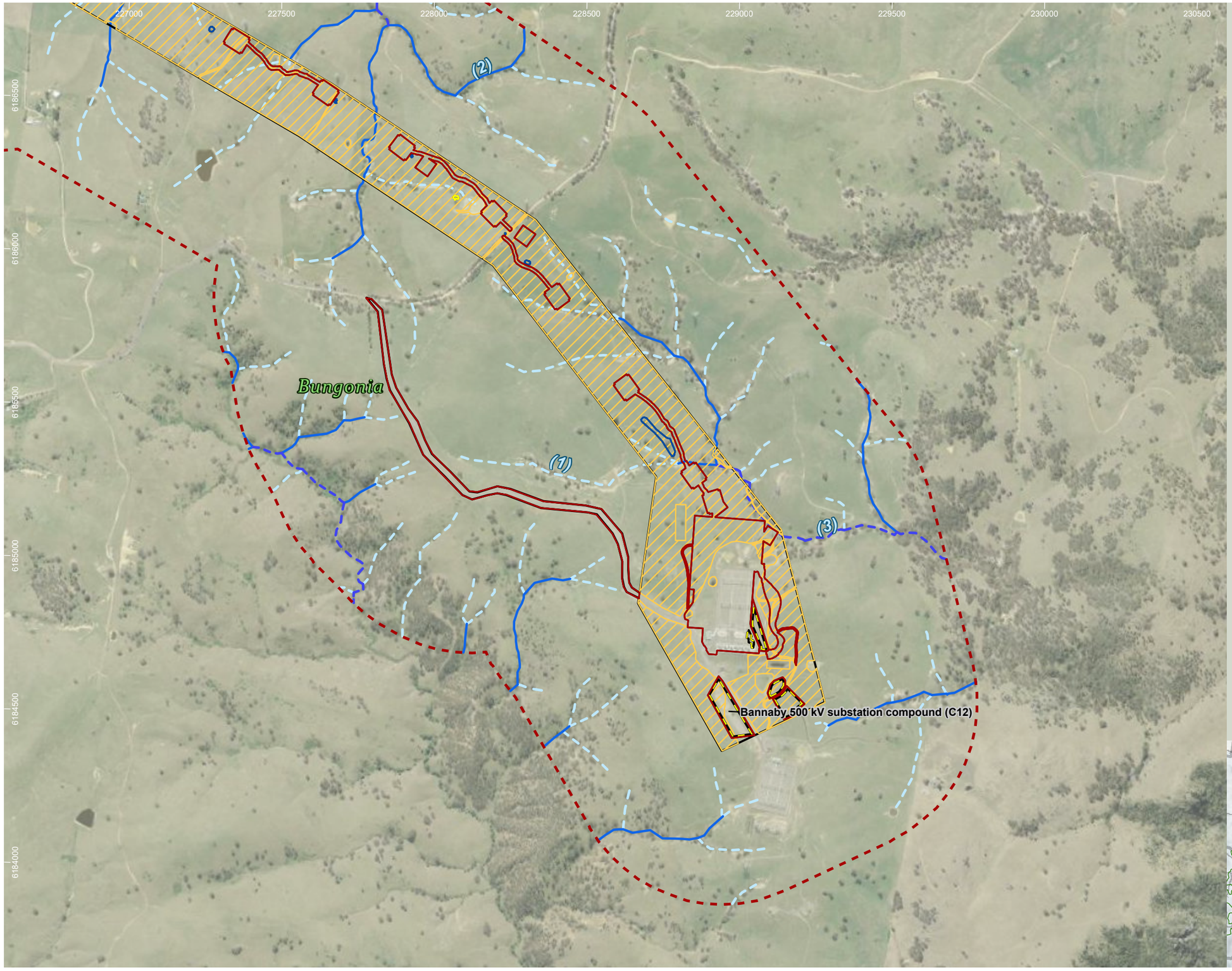
Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 105

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski; Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

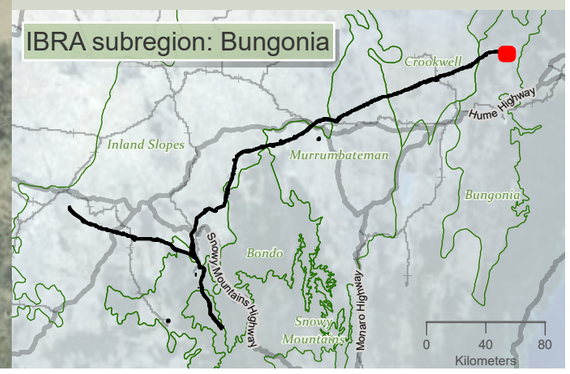
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Invertebrate species habitat

- Keyacris scurra



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Invertebrate species habitat

HumeLink BDAR

Figure 13-4 map reference 106

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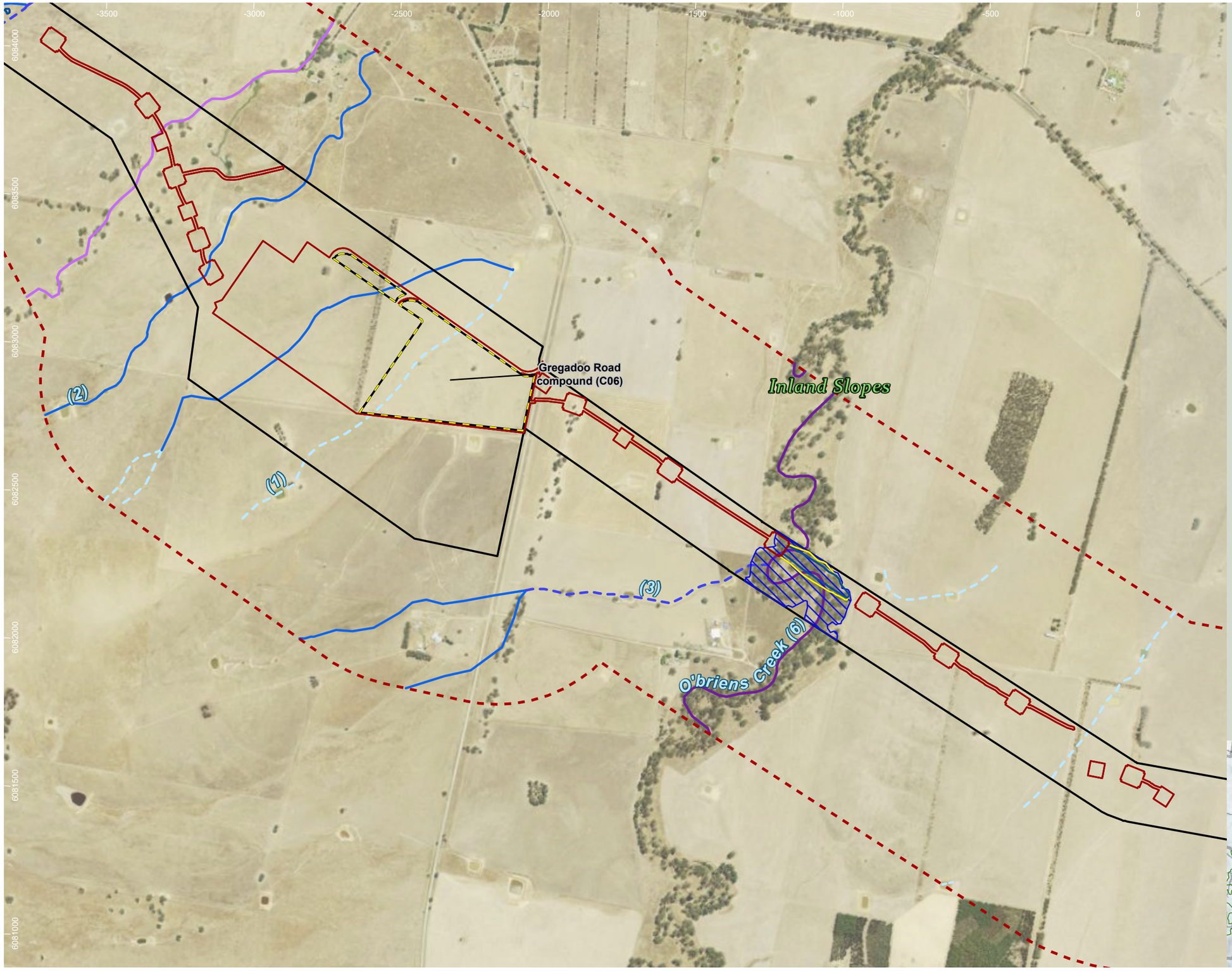


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

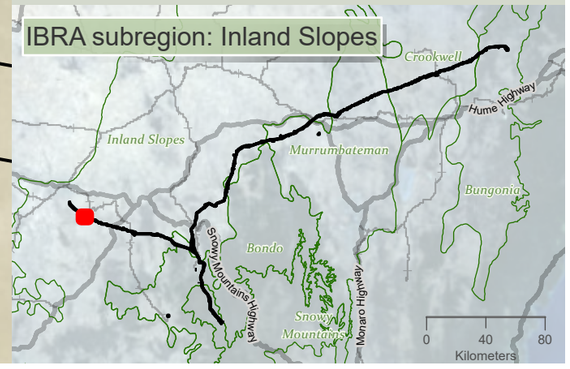
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 4

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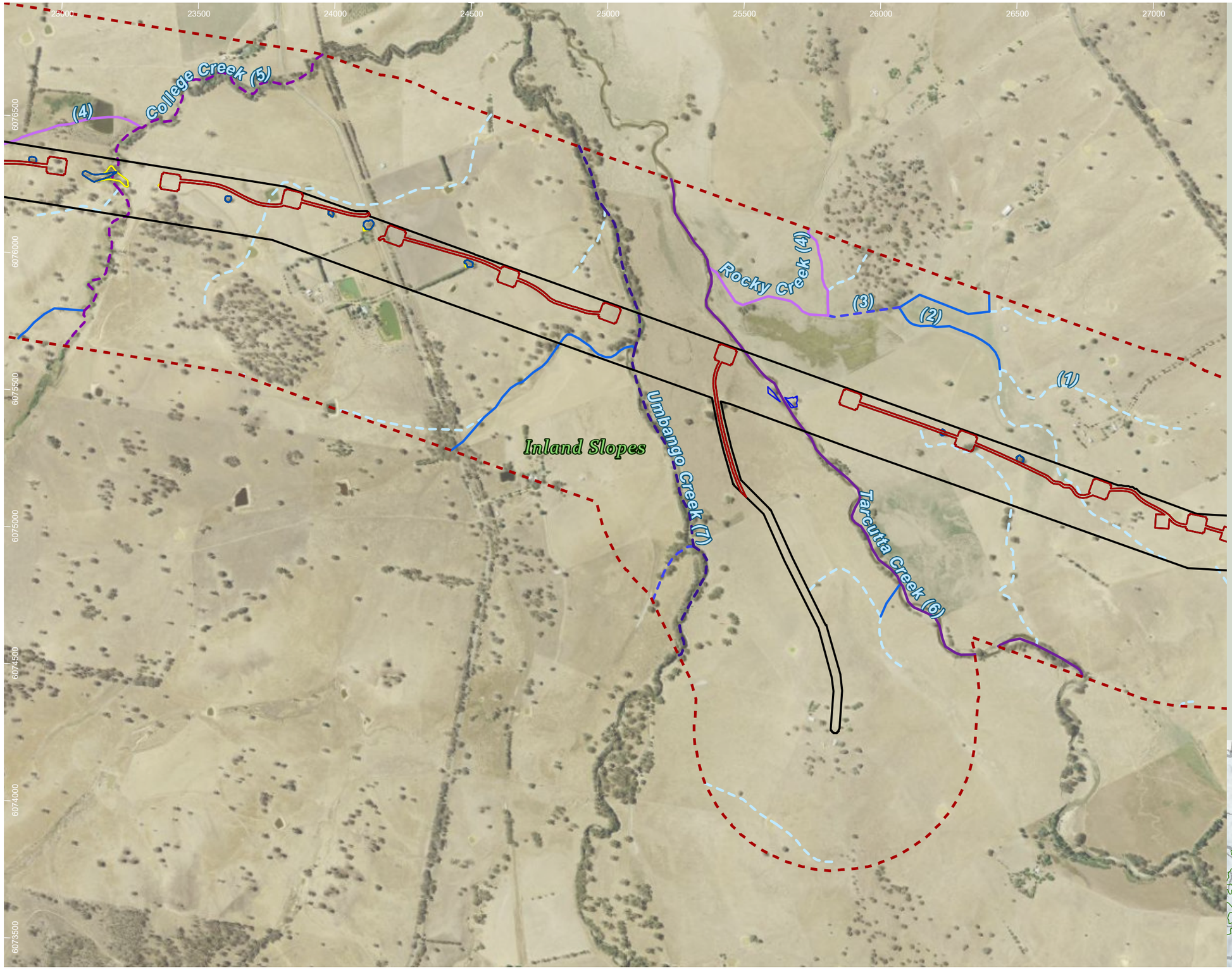


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

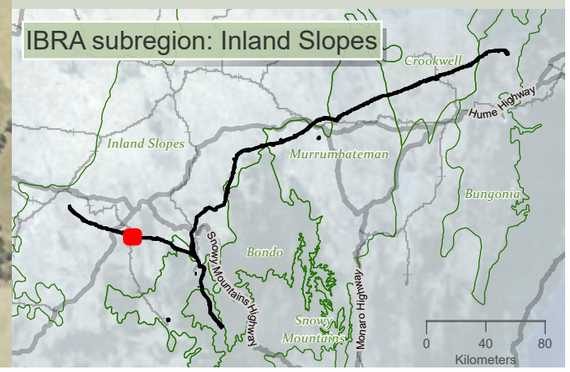
- 1
- 2
- 3
- 4
- 5
- 6
- 7

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 12

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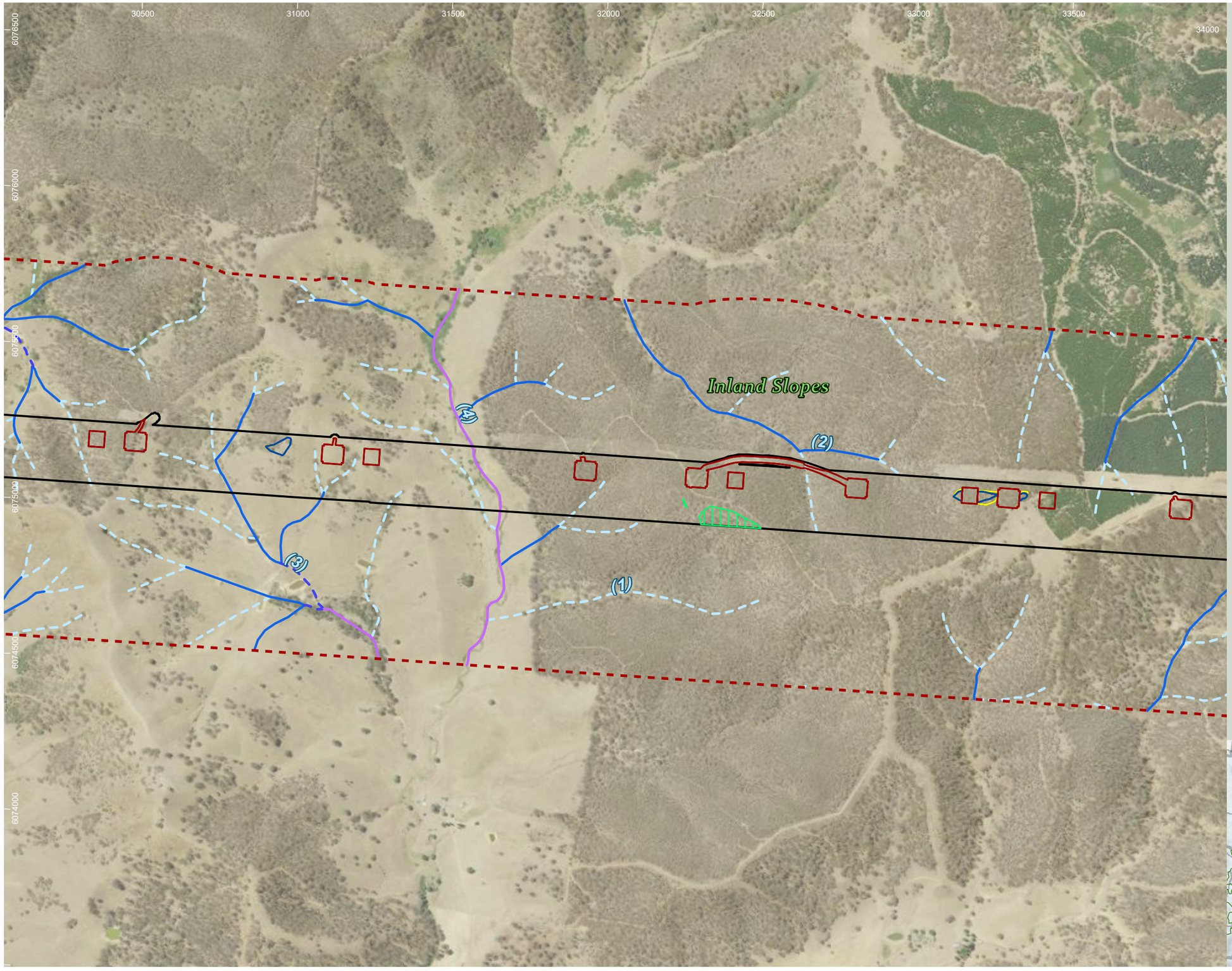


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

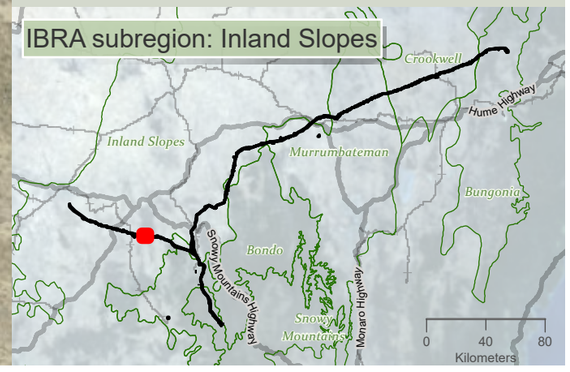
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Miniopterus orianae oceanensis



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\Sync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 14

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

37500 38000 38500 39000 39500 40000 40500

6076500 6075000 6074500 6074000 6073500

(1) (2) (3)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

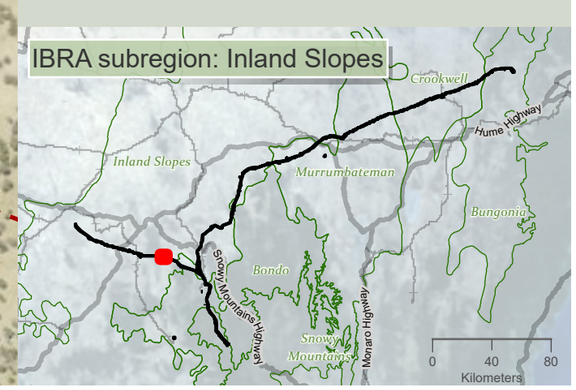
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Miniopterus orianae oceanensis



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 16

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Drawn by: MathewZajeczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\EC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

50000 50500 51000 51500 52000 52500 53000 53500

6070500 6070000 6069500 6069000 6068500 6068000

Sharps Creek (3)

Uncles Creek (3)

(2)

Bondo

(1)

Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

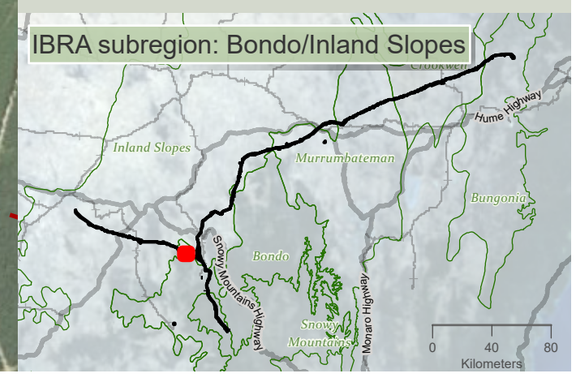
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 20

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699_Humelink_BDAR_Stage 2 Part B.aprx

53500 54000 54500 55000 55500 56000 56500 57000

6070000 6069500 6069000 6068500 6068000 6067500

Bondo

(1) (2)

Adelong Creek (5)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

- 0
- 1
- 2
- 4
- 5

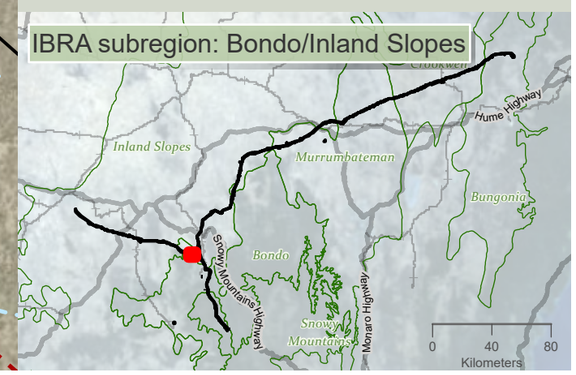
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone

Bat species habitat

- Myotis macropus

IBRA subregion: Bondo/Inland Slopes



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 21

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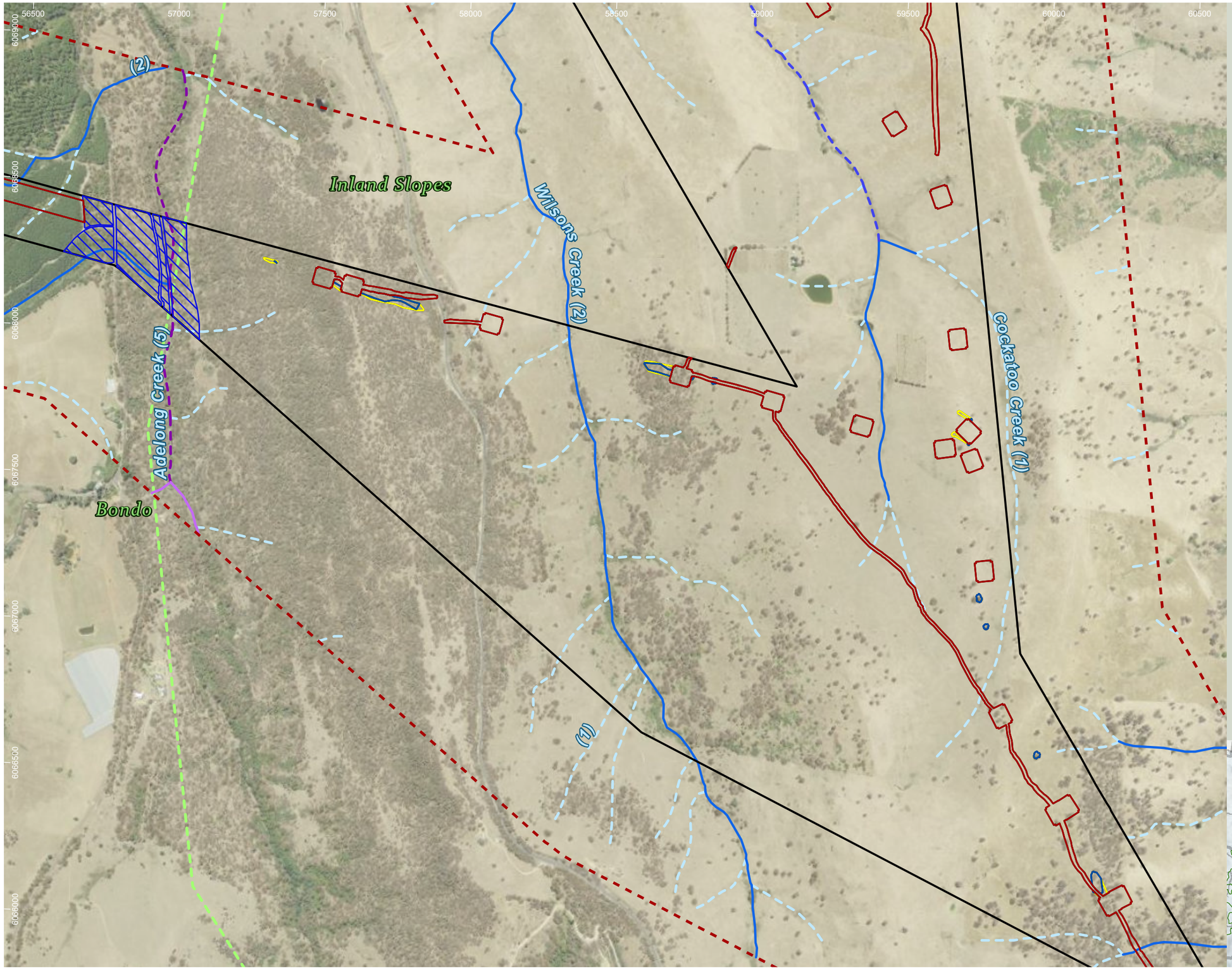


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

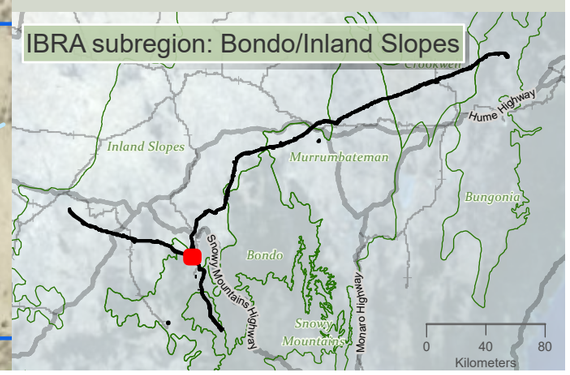
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 22

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61500 62000 62500 63000 63500 64000 64500 65000 65500 66000

6052000 6051500 6051000 6050500 6050000 6049500 6049000 6048500 6048000

Snubba Creek (4)

Ridings Creek (2)

Bondo

Snubba Road compound (C16)

(1)

(3)

Snubba Creek (3)

Snowy Mountains

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

- 1
- 2
- 3
- 4
- 5

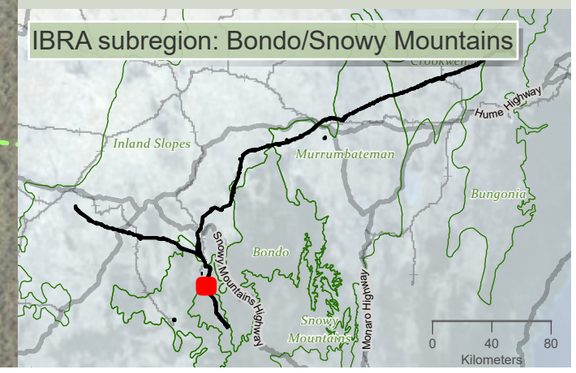
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus

IBRA subregion: Bondo/Snowy Mountains



niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 30

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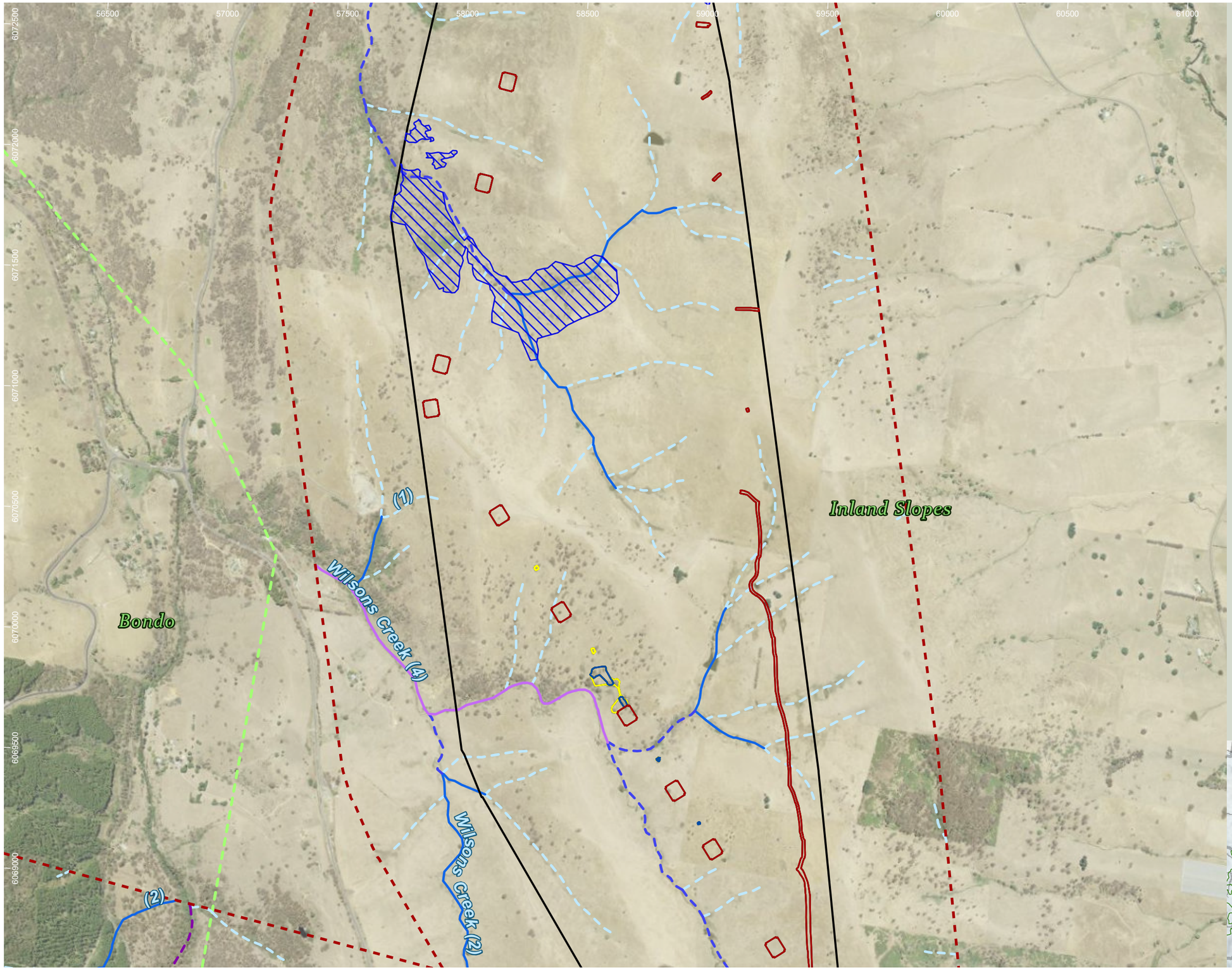


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

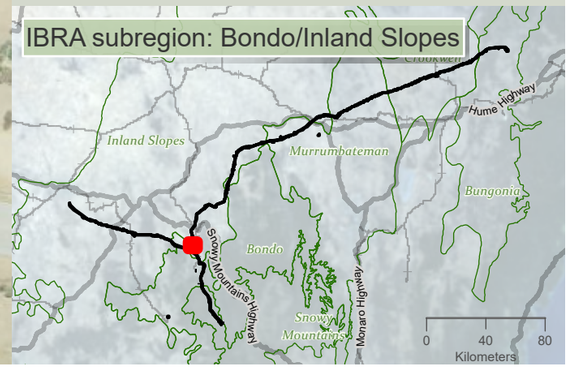
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 39

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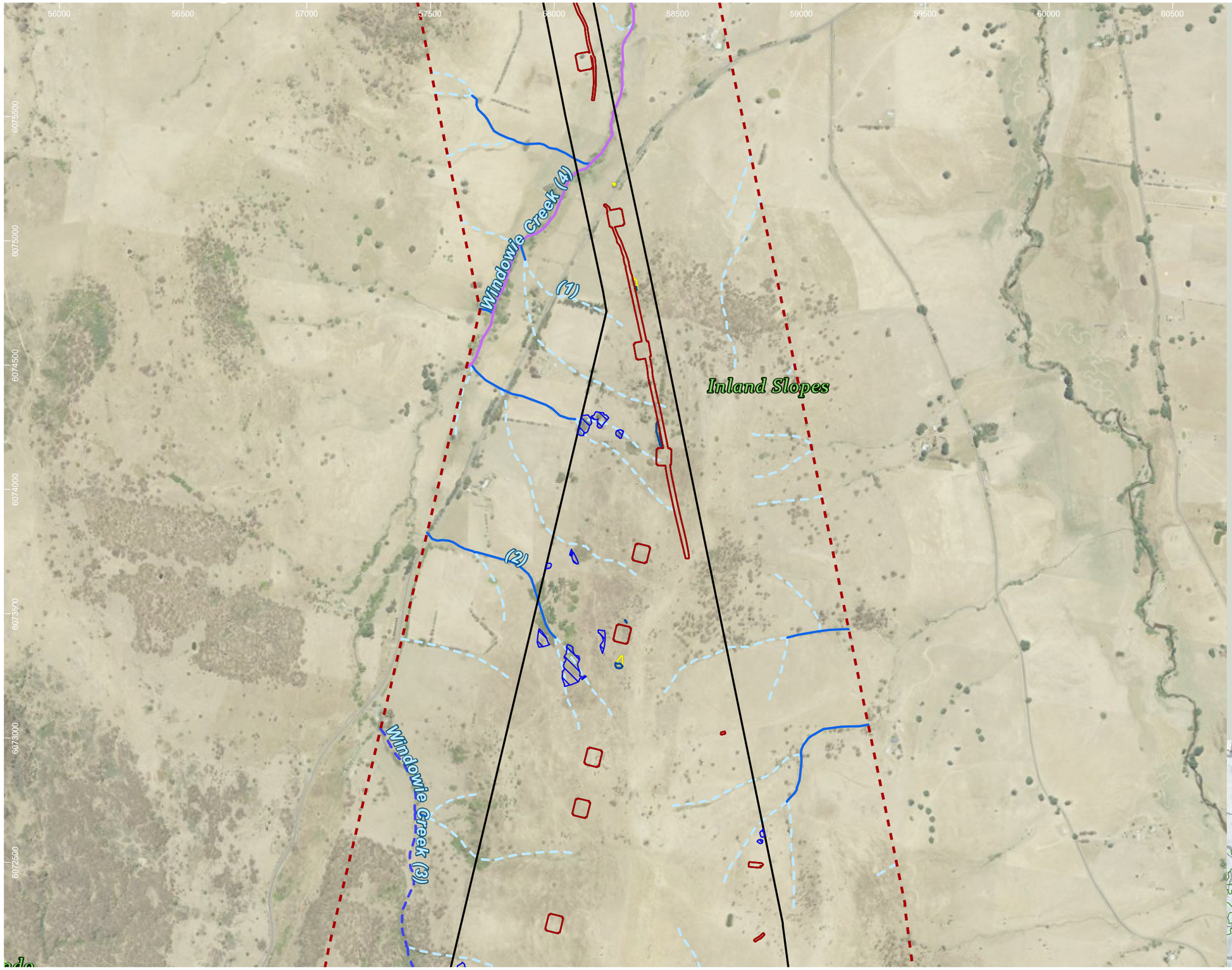


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

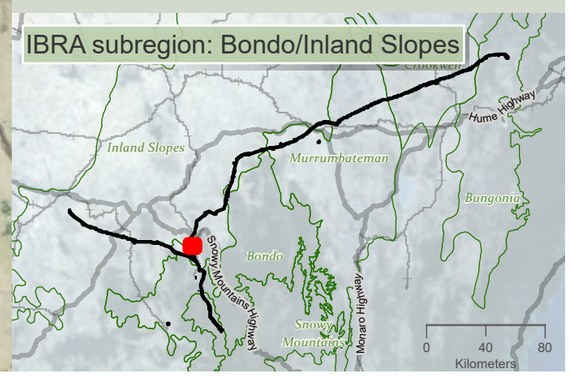
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 40

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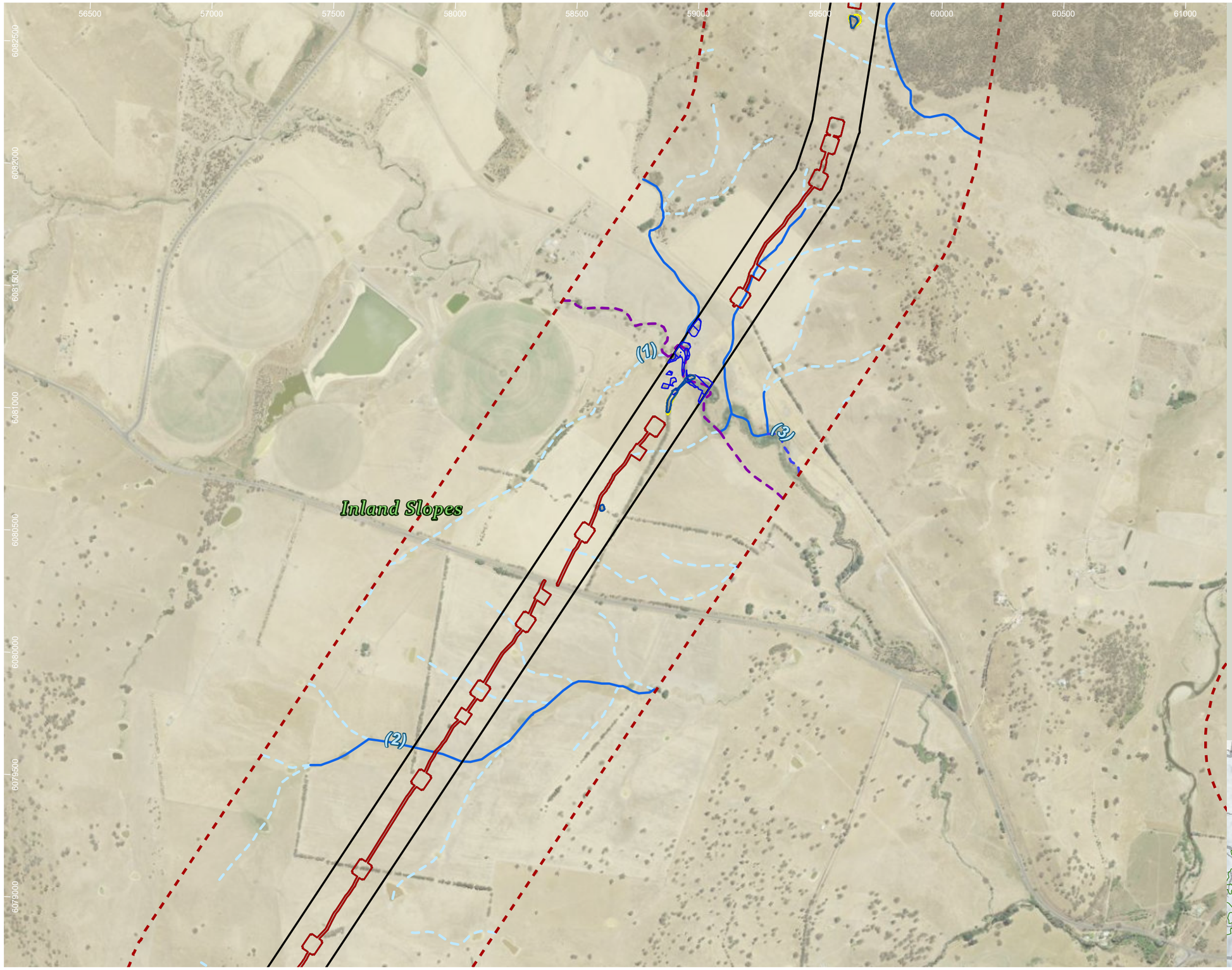


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

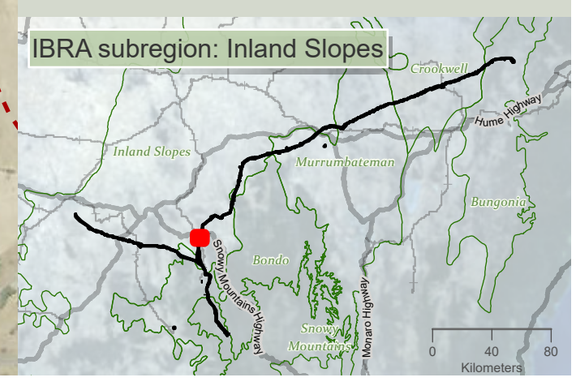
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 42

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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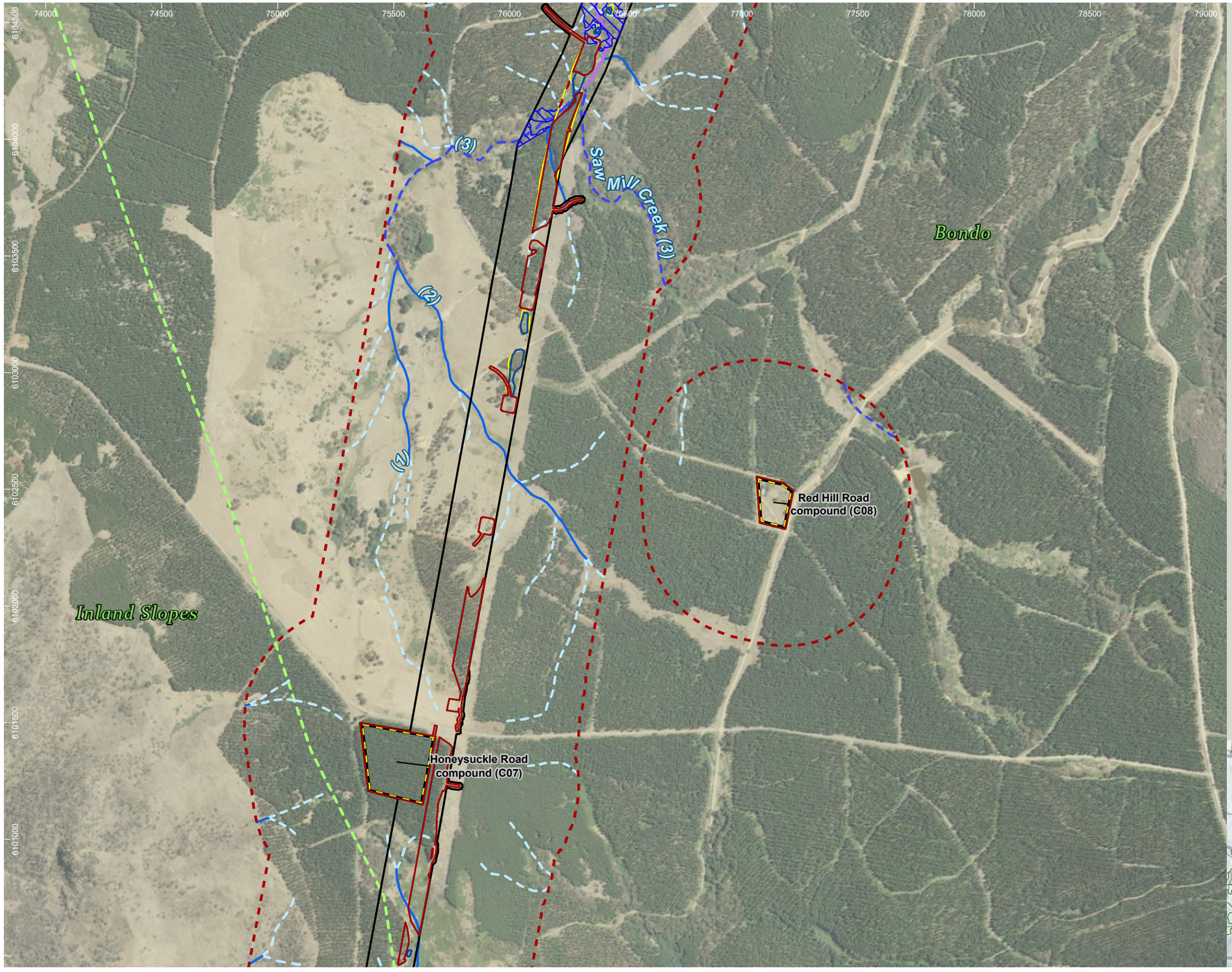


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

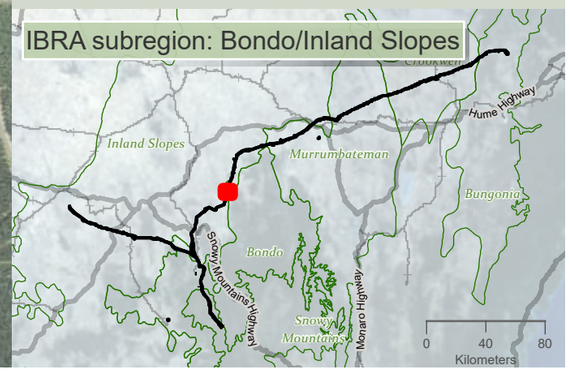
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 52

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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74500 75000 75500 76000 76500 77000 77500 78000 78500 79000

6108000 6107500 6107000 6106500 6106000 6105500 6105000 6104500

(3) (1) (2) (4)

Inland Slopes

Bondo

Saw Mill Creek (4)

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

- 1
- 2
- 3
- 4
- 6

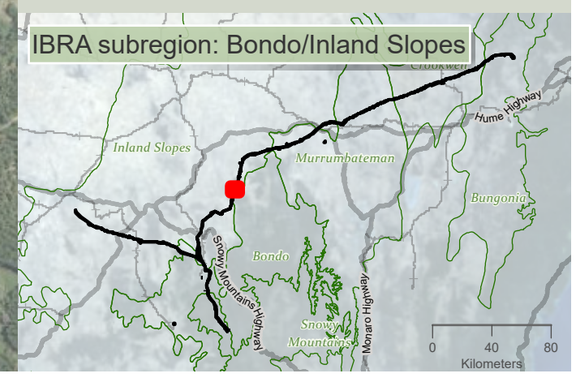
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus

IBRA subregion: Bondo/Inland Slopes



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niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 53

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

88500 89000 89500 90000 90500 91000 91500 92000

6128500 6128000 6127500 6127000 6126000 6125500

Inland Slopes

(1)

(2)

Oaky Creek (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

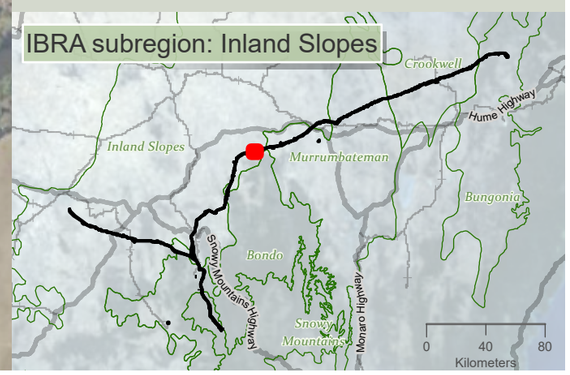
- 1
- 2
- 3
- 4
- 9

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

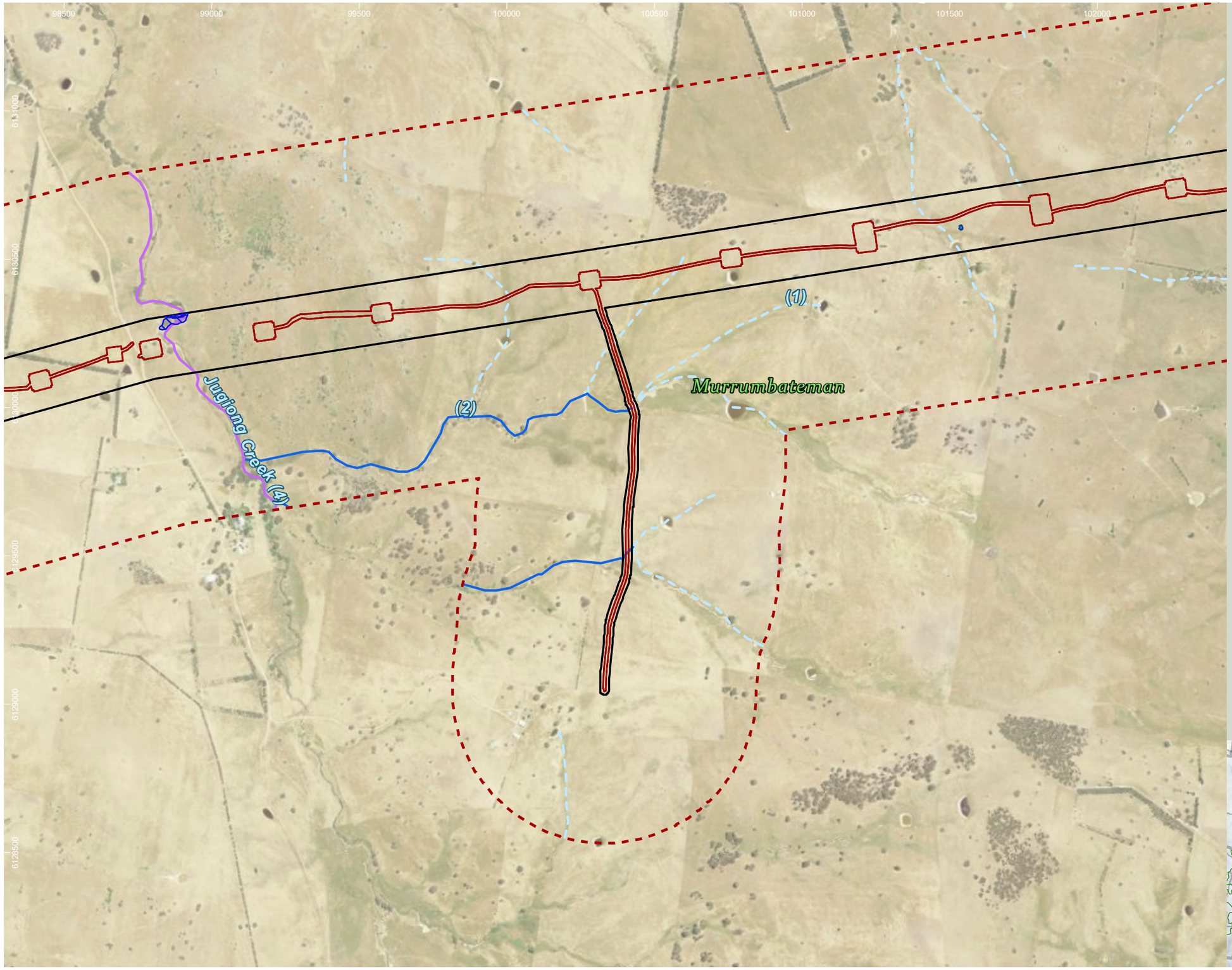
Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 61

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajeczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6899 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

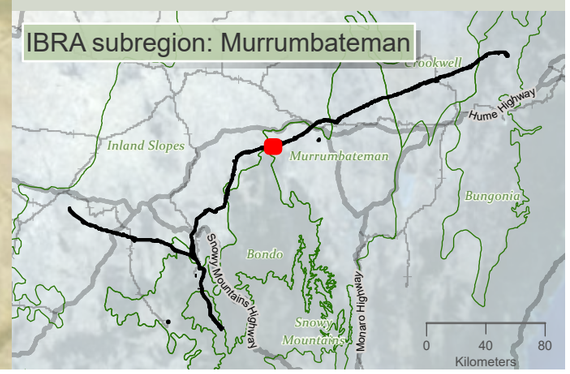
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 64

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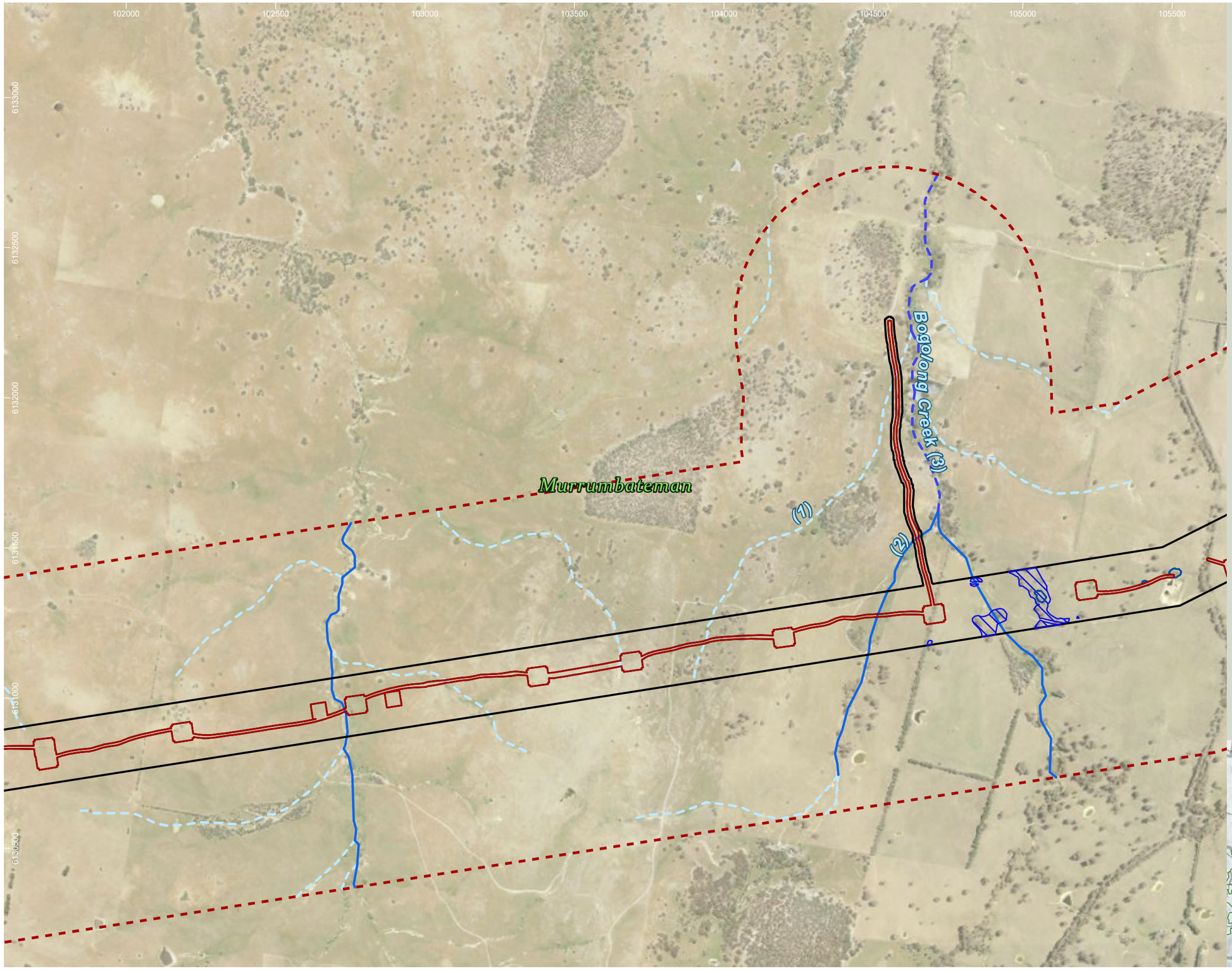


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

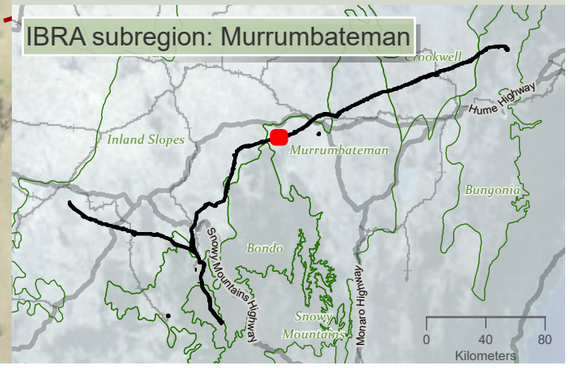
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 65

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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105000 105500 106000 106500 107000 107500 108000 108500

6133500 6133000 6132500 6132000 6131500 6131000

Murrumbateman

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

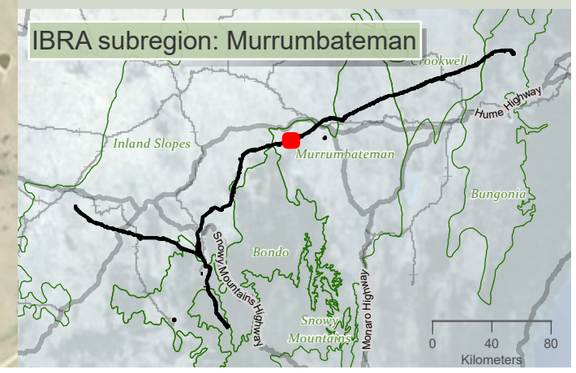
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 66

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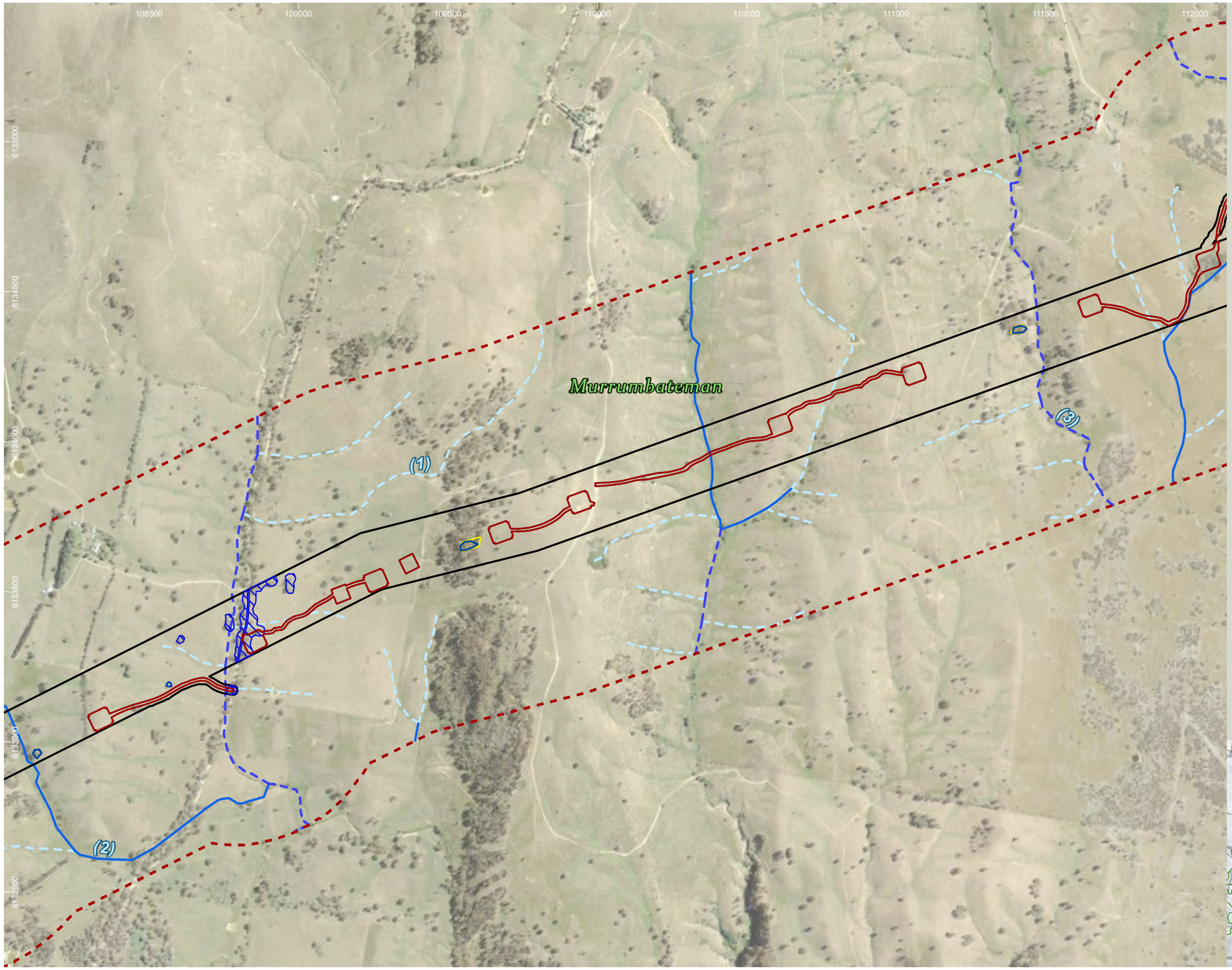


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

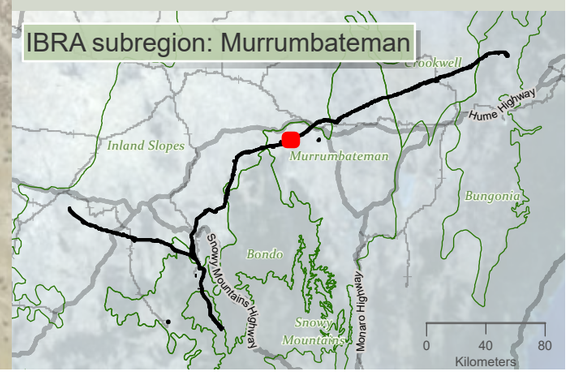
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 67

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111500 112000 112500 113000 113500 114000 114500 115000

6136500 6136000 6135500 6135000 6134500 6134000

Murrumbateman

Mccullums Creek (3)

(1)

(2)

(3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

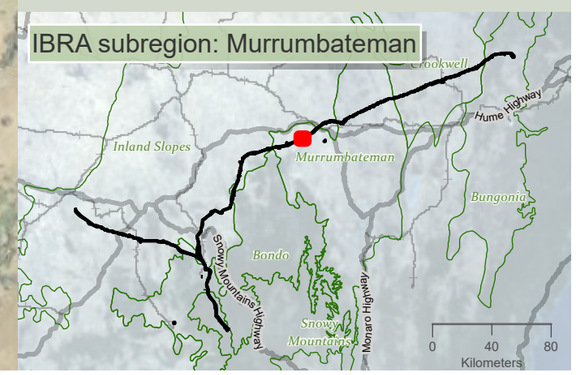
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Miniopterus orianae oceanensis
- Myotis macropus



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 68

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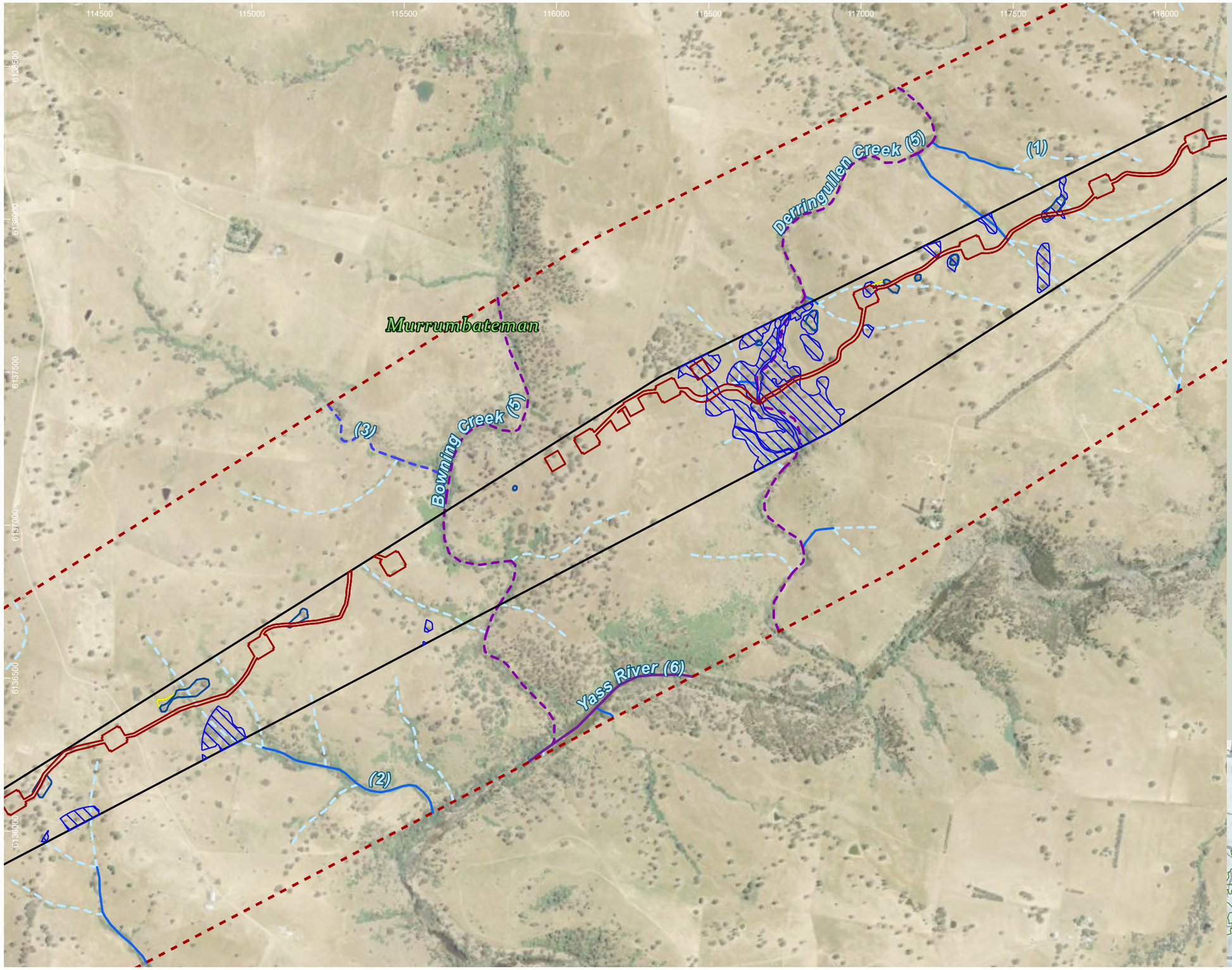


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

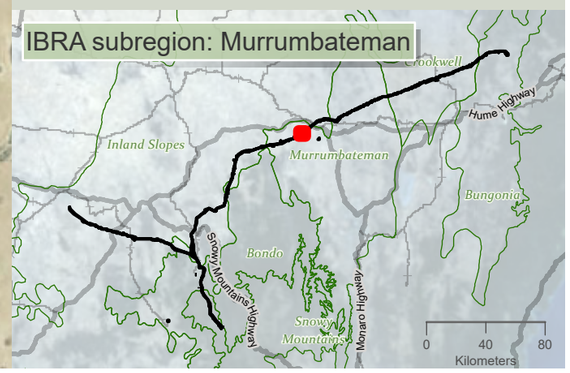
- 1
- 2
- 3
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 69

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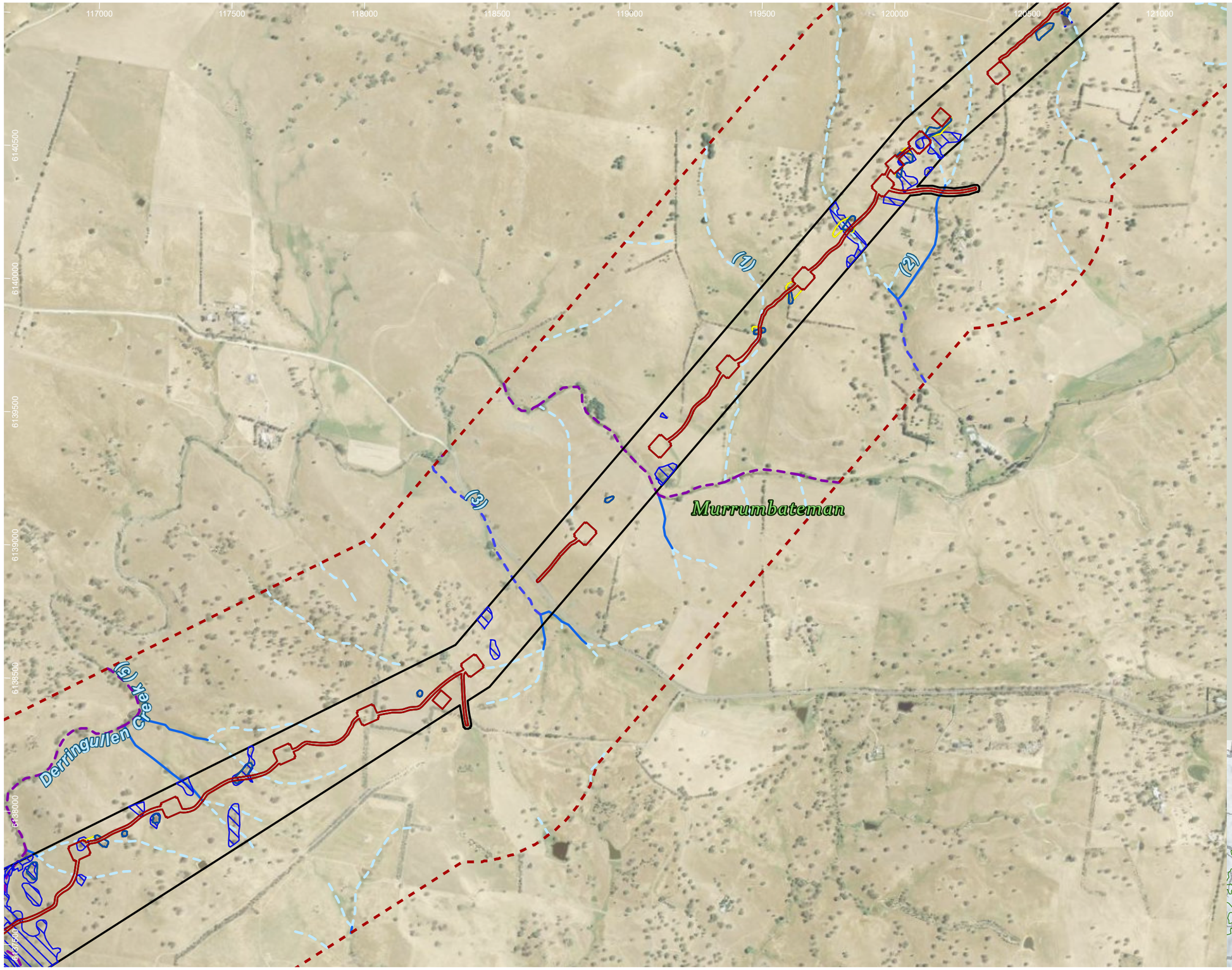


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

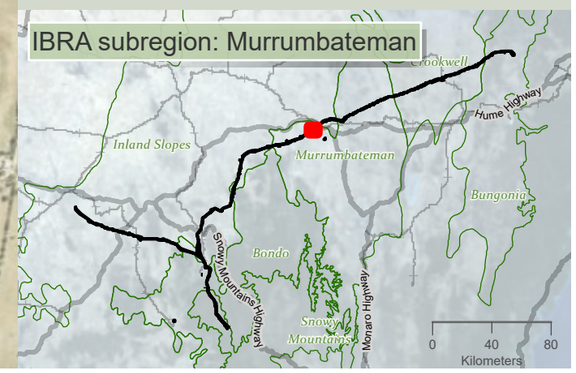
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 70

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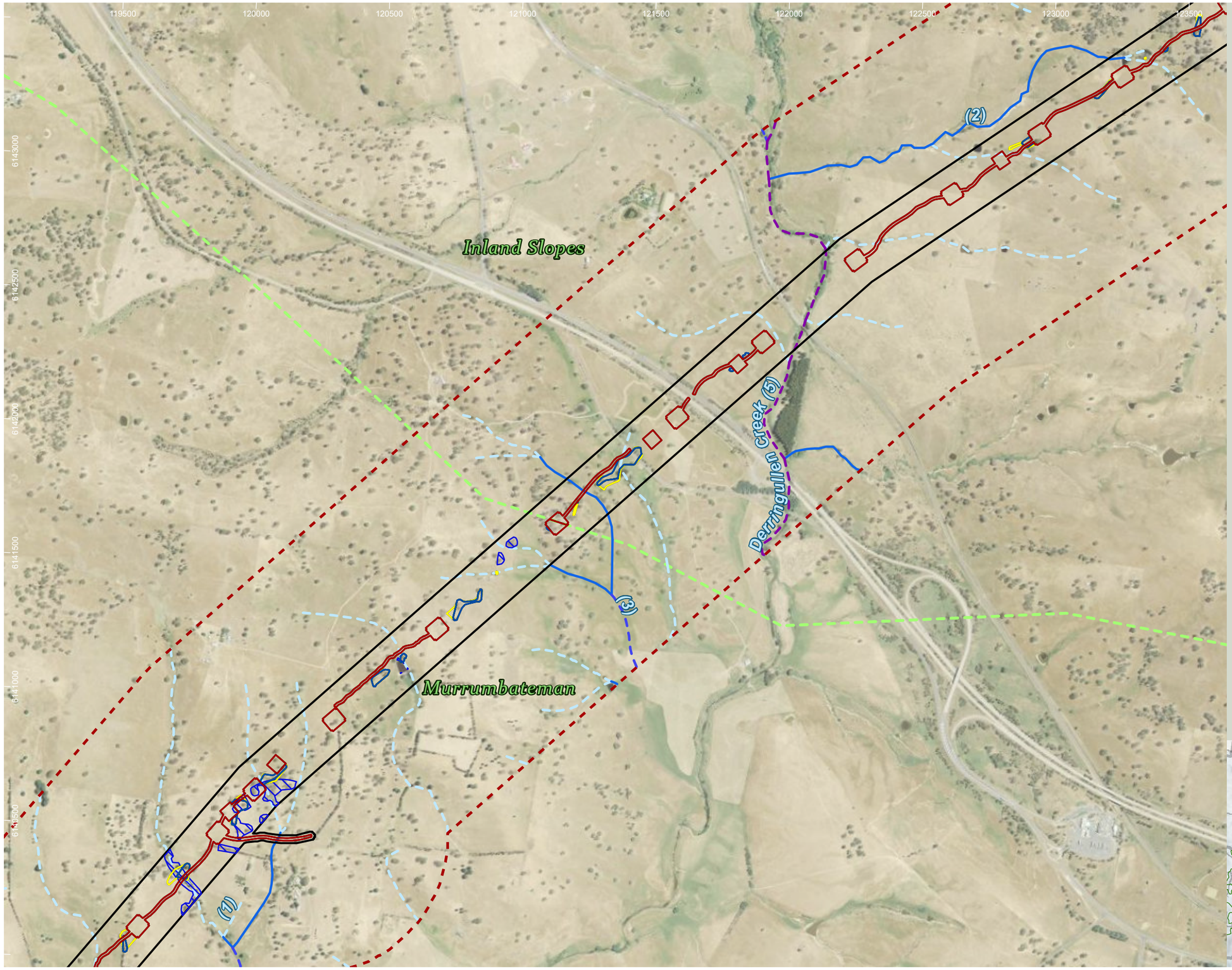


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

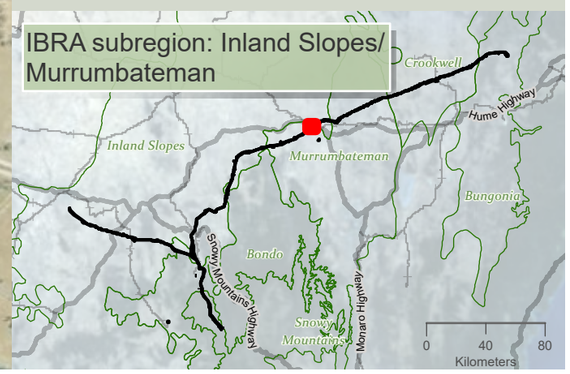
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 71

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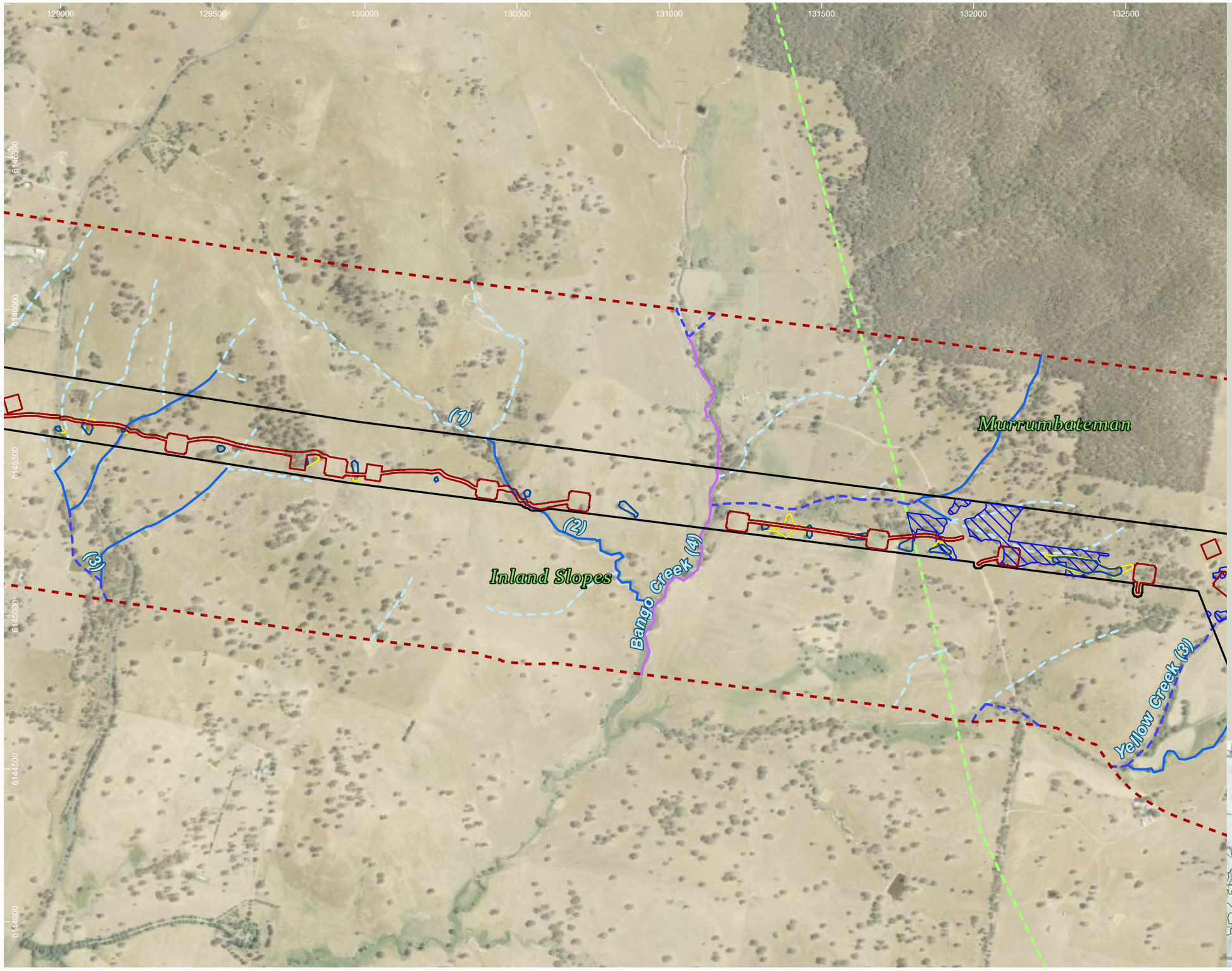
Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

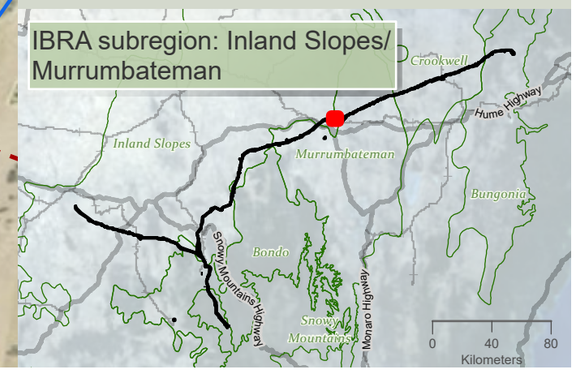
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 75

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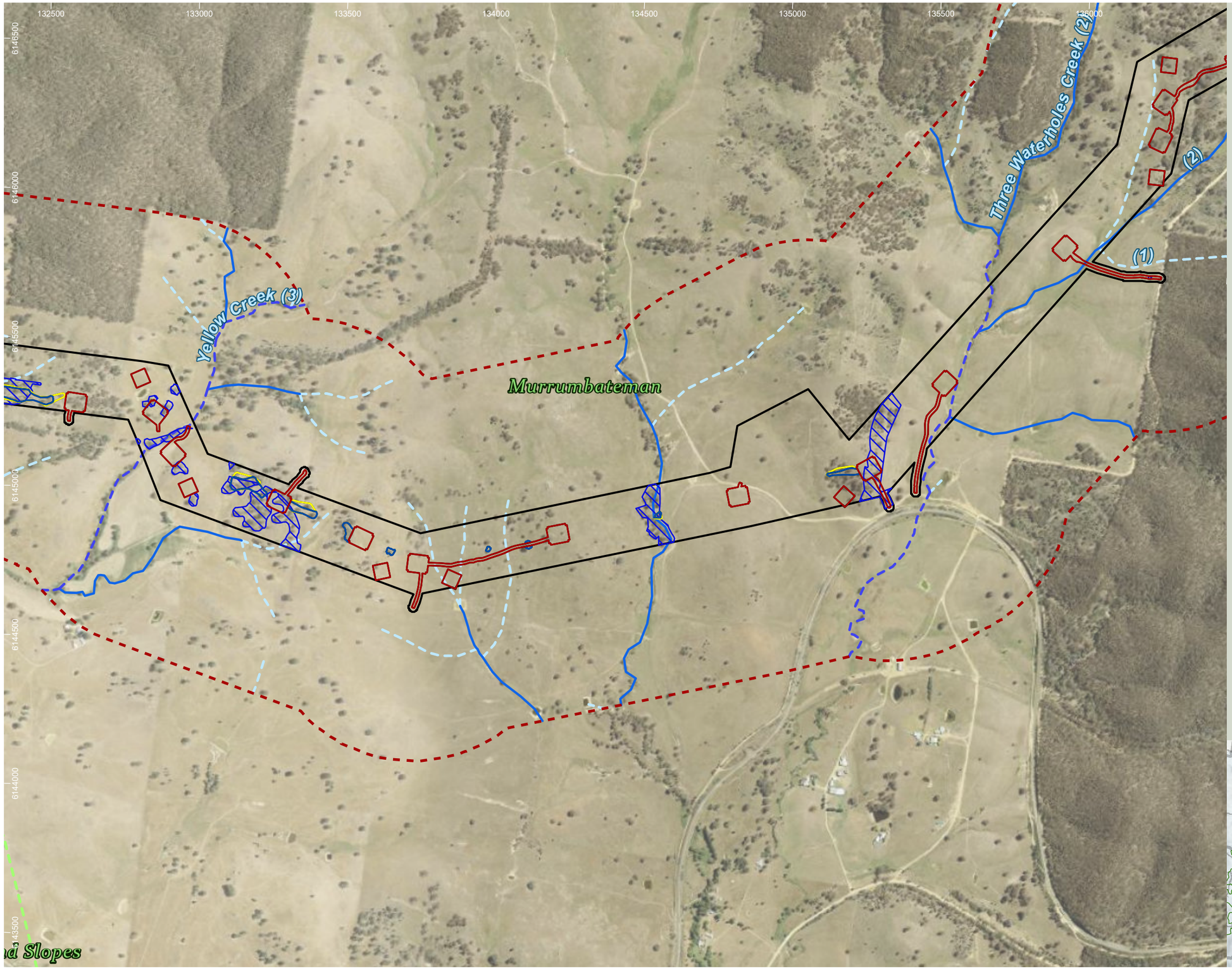


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

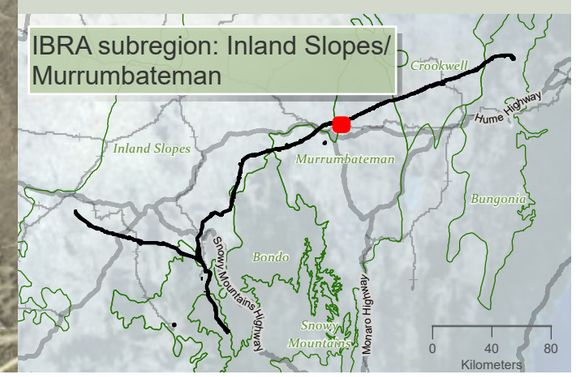
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 76

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Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\FoldenNiche\6699_Humelink_BDAR_Stage 2 Part B.aprx

135500 136000 136500 137000 137500 138000 138500 139000

6148500 6148000 6147500 6147000 6146500 6146000 6145500

Catherines Creek (3)

Murrumbateman

Three Waterholes Creek (2)

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

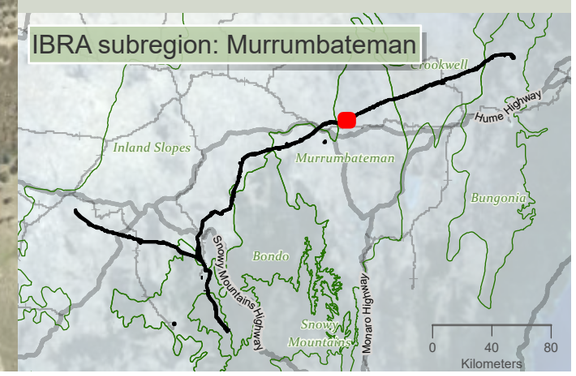
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

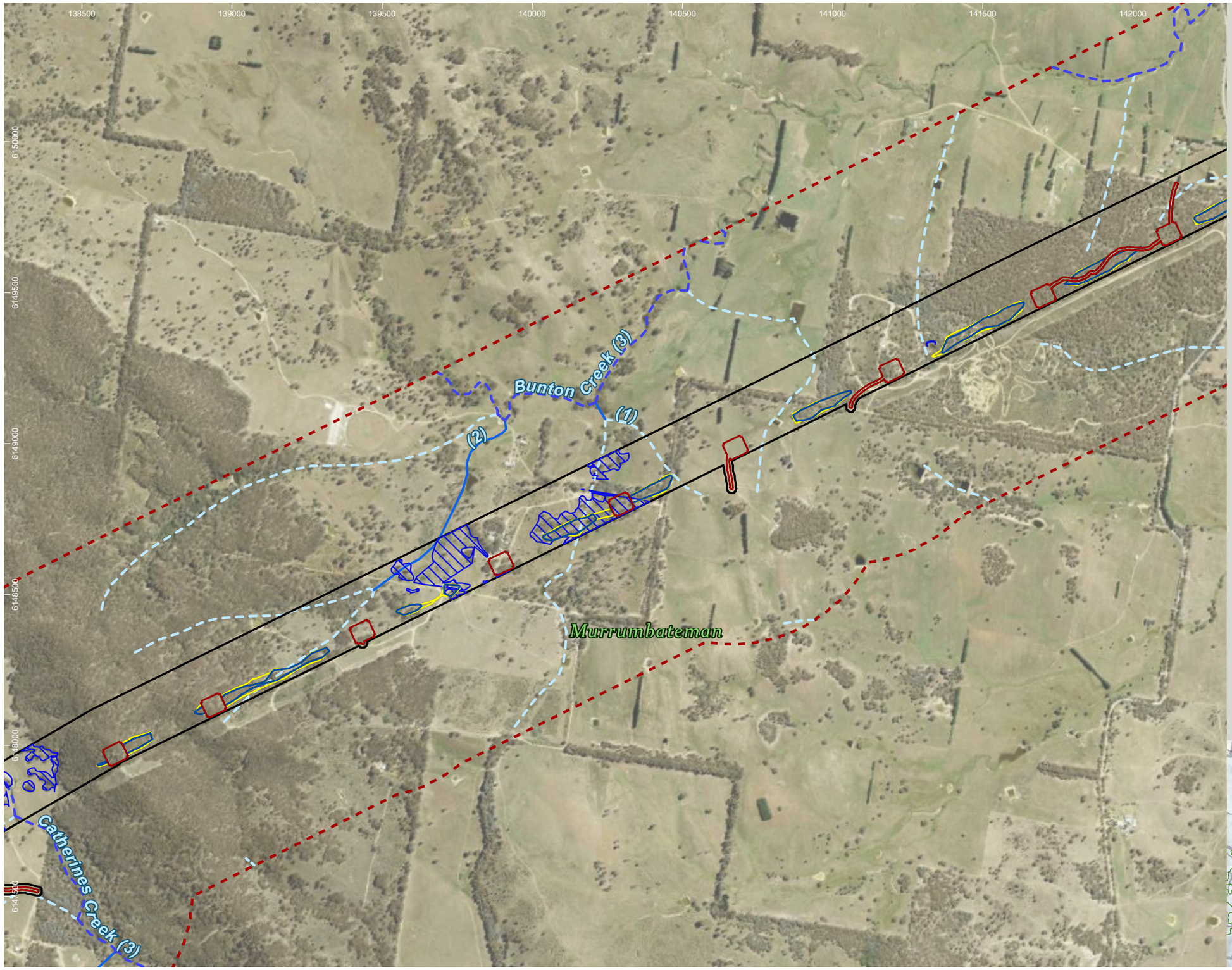
Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 77

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

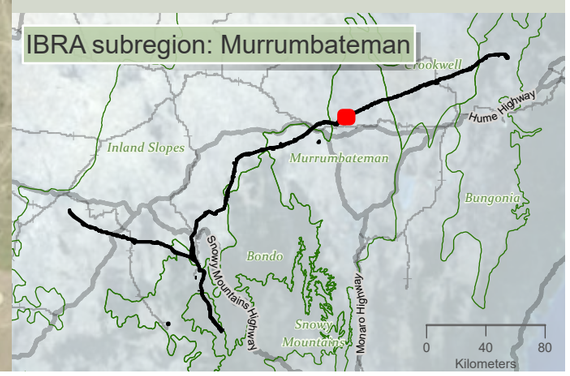
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 78

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential\Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

141500 142000 142500 143000 143500 144000 144500 145000

6152000 6151500 6151000 6150500 6150000

Murrumbateman

Bunton Creek (3)

Felled Timber Creek (3)

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

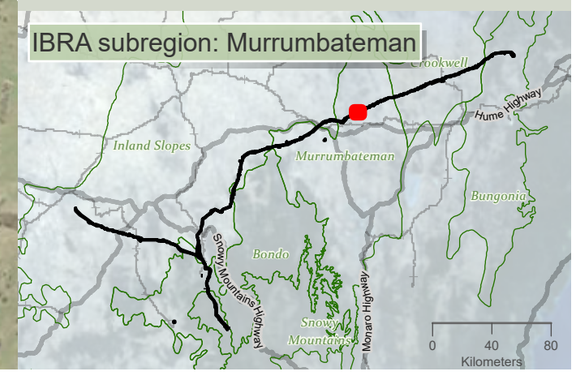
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 79

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\Folder\Niche\6699_Humelink_BDAR_Stage 2 Part B.aprx Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

144500 145000 145500 146000 146500 147000 147500 148000

6153500 6153000 6152500 6152000 6151000

Murrumbateman

Jerrawa Creek (5)

Felled Timber Creek (3)

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

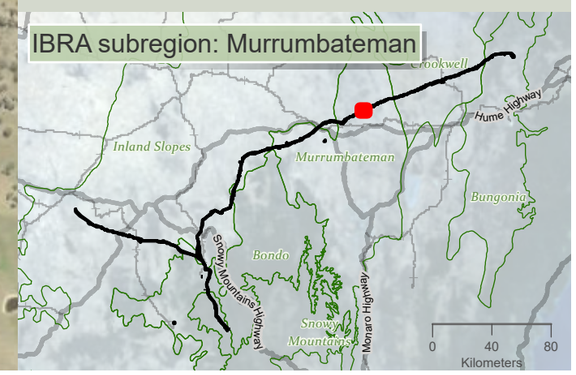
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 80

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Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

148000 148500 149000 149500 150000 150500 151000 151500

6155000 6154500 6154000 6153500 6153000 6152500

Murrumbateman

Sams Creek (2)

Jerrawa Creek (5)

(2)

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

- 1
- 2
- 3
- 4
- 5

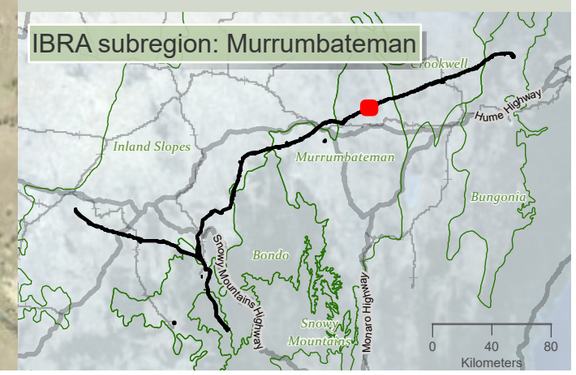
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus

IBRA subregion: Murrumbateman



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 81

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

151000 151500 152000 152500 153000 153500 154000 154500

6156500 6156000 6155500 6155000 6154500 6154000

(1)

Merrill Creek (4)

Lachlan River (6)

Murrumbateman

Dowlings Creek (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

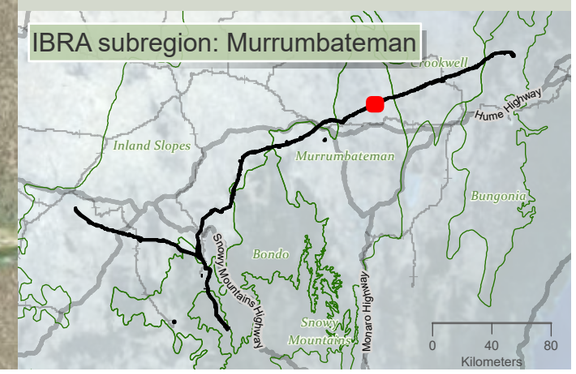
- 1
- 2
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

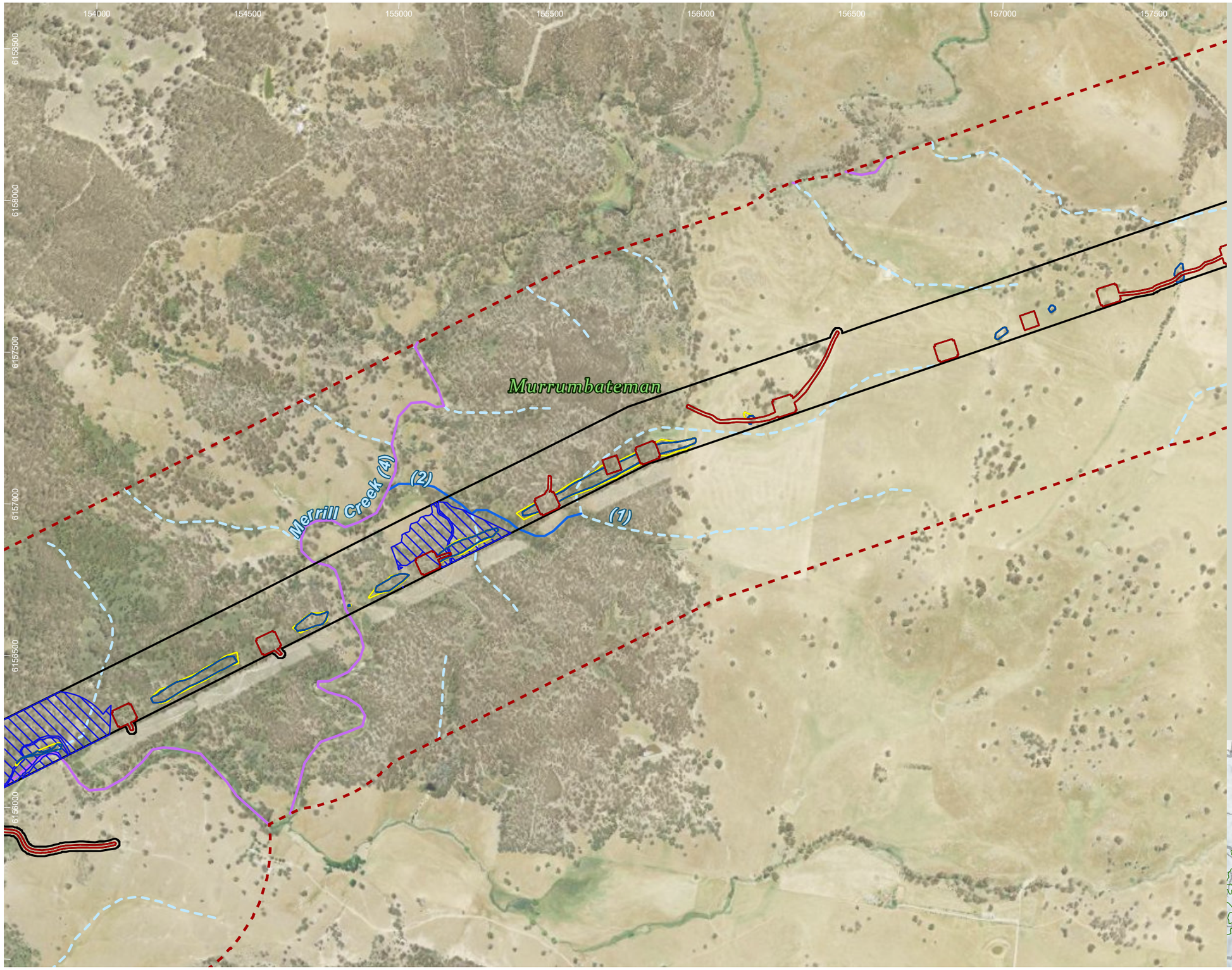
Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 82

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

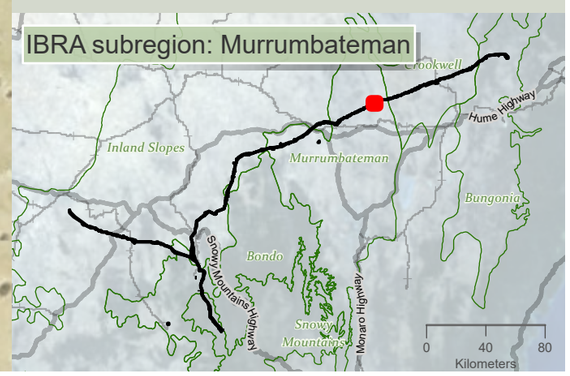
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 83

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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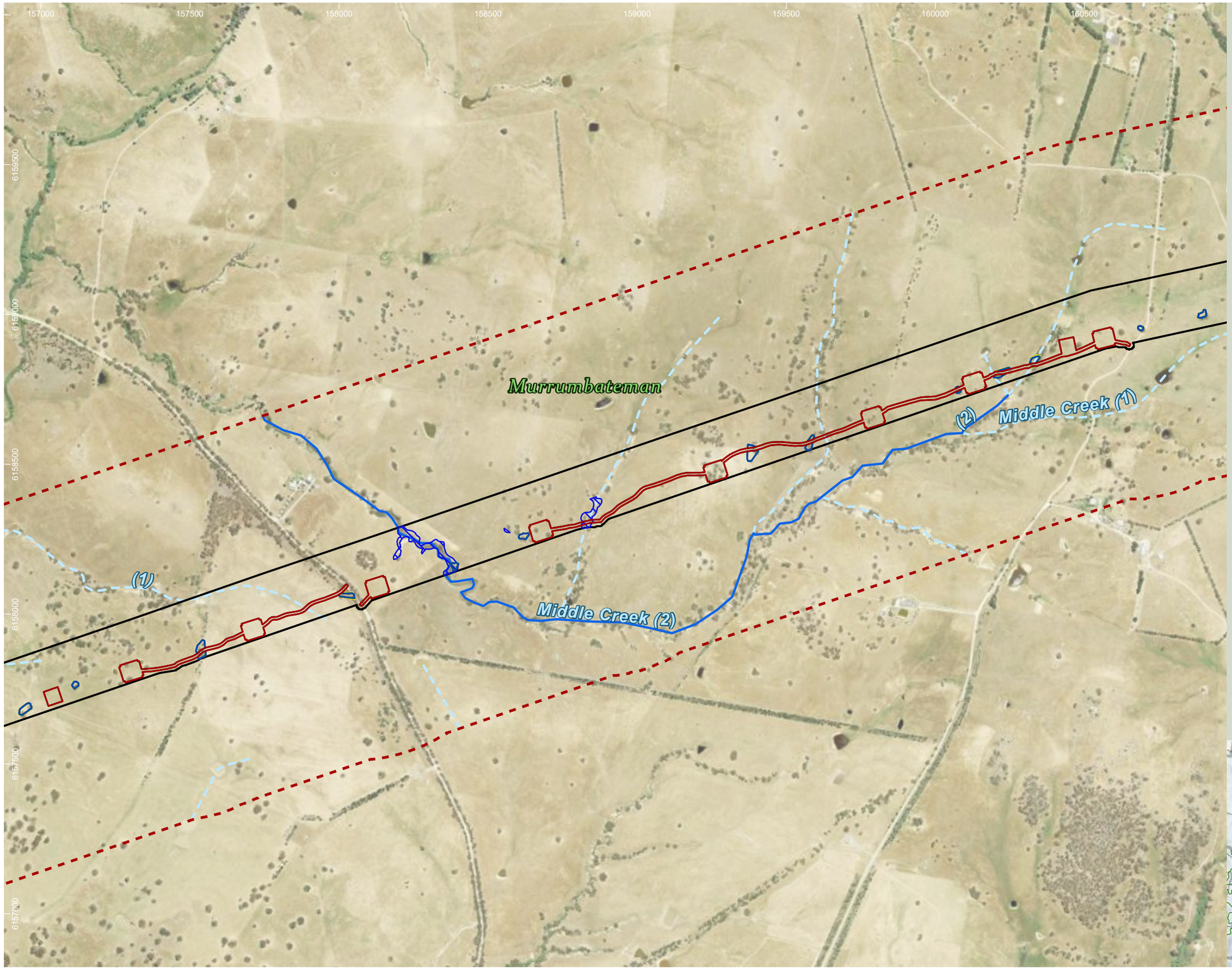
Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

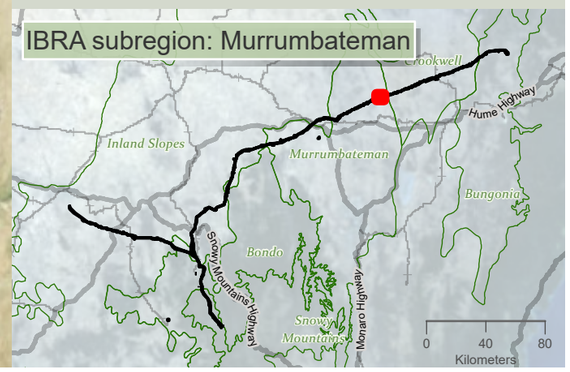
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 84

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Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

160500 161000 161500 162000 162500 163000 163500 164000

6161000 6160500 6160000 6159500 6159000 6158500 6158000

Crookwell

Murrumbateman

Merrill Creek (2)

Middle Creek (1)

(1)

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

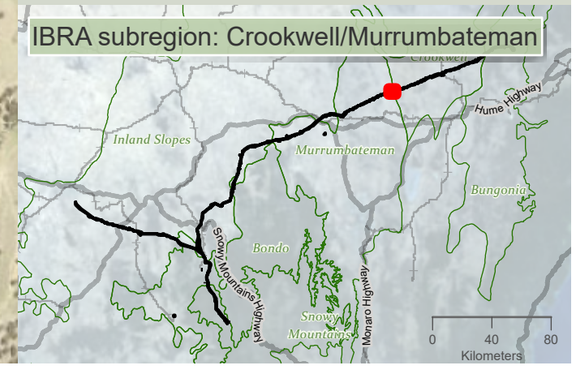
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 85

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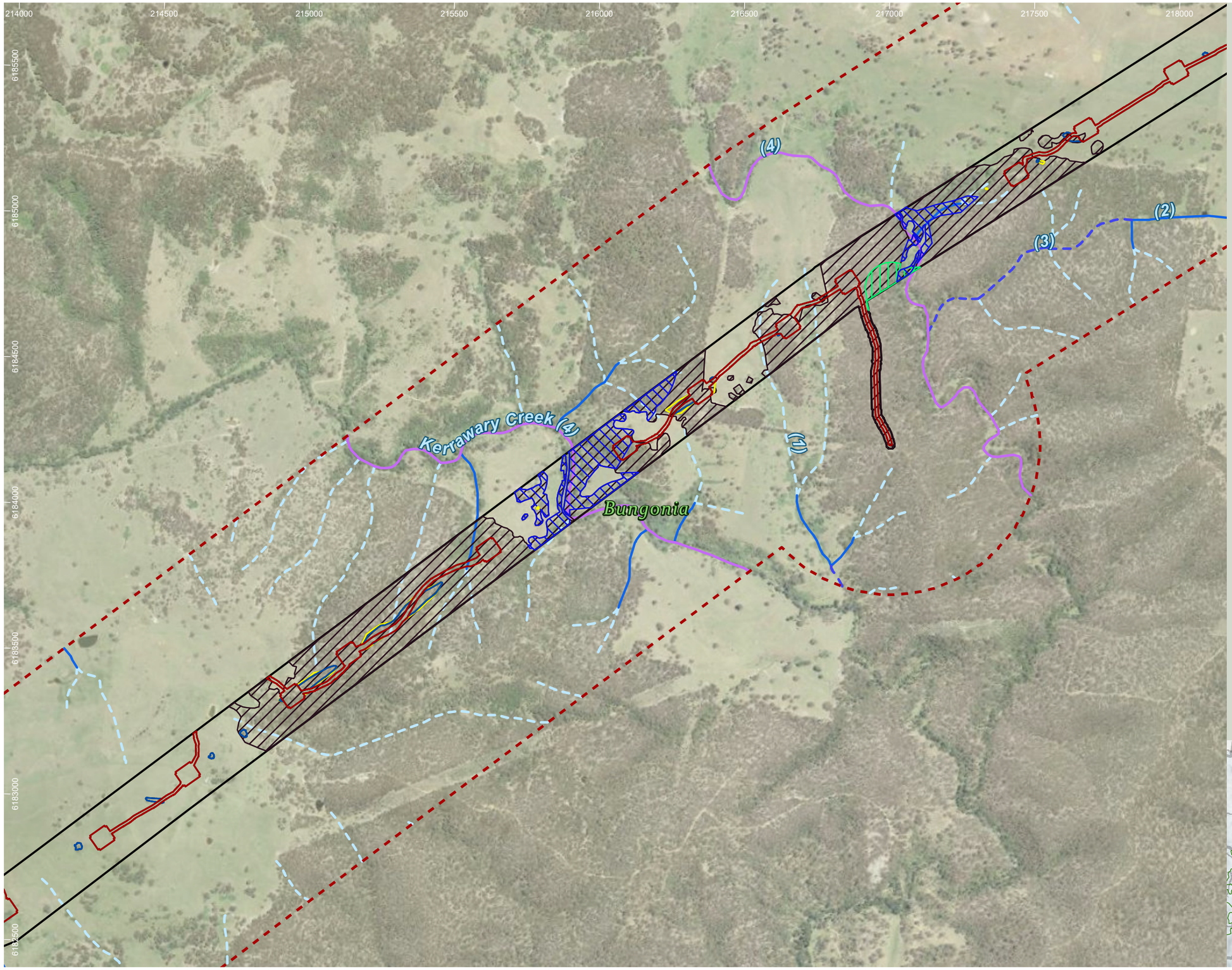
Drawn by: MatthewZajeczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

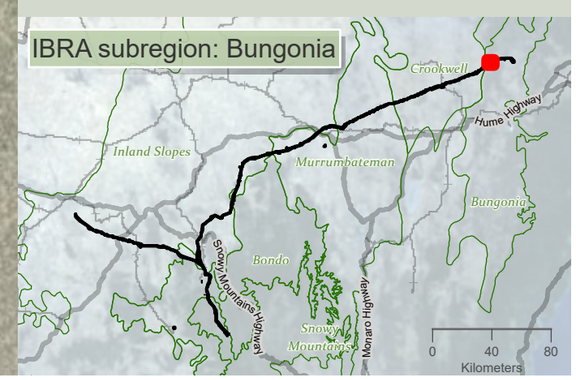
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Chalinolobus dwyeri
- Miniopterus orianae oceanensis
- Myotis macropus



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 102

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

217500 218000 218500 219000 219500 220000 220500 221000

6187000 6186500 6186000 6185500 6185000 6184500

Bannaby Creek (3)

(1)

Bungonia

(2)

(3)

(4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

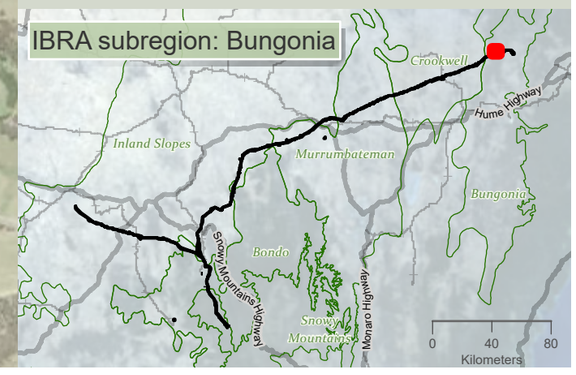
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Chalinolobus dwyeri
- Miniopterus orianae oceanensis
- Myotis macropus



0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

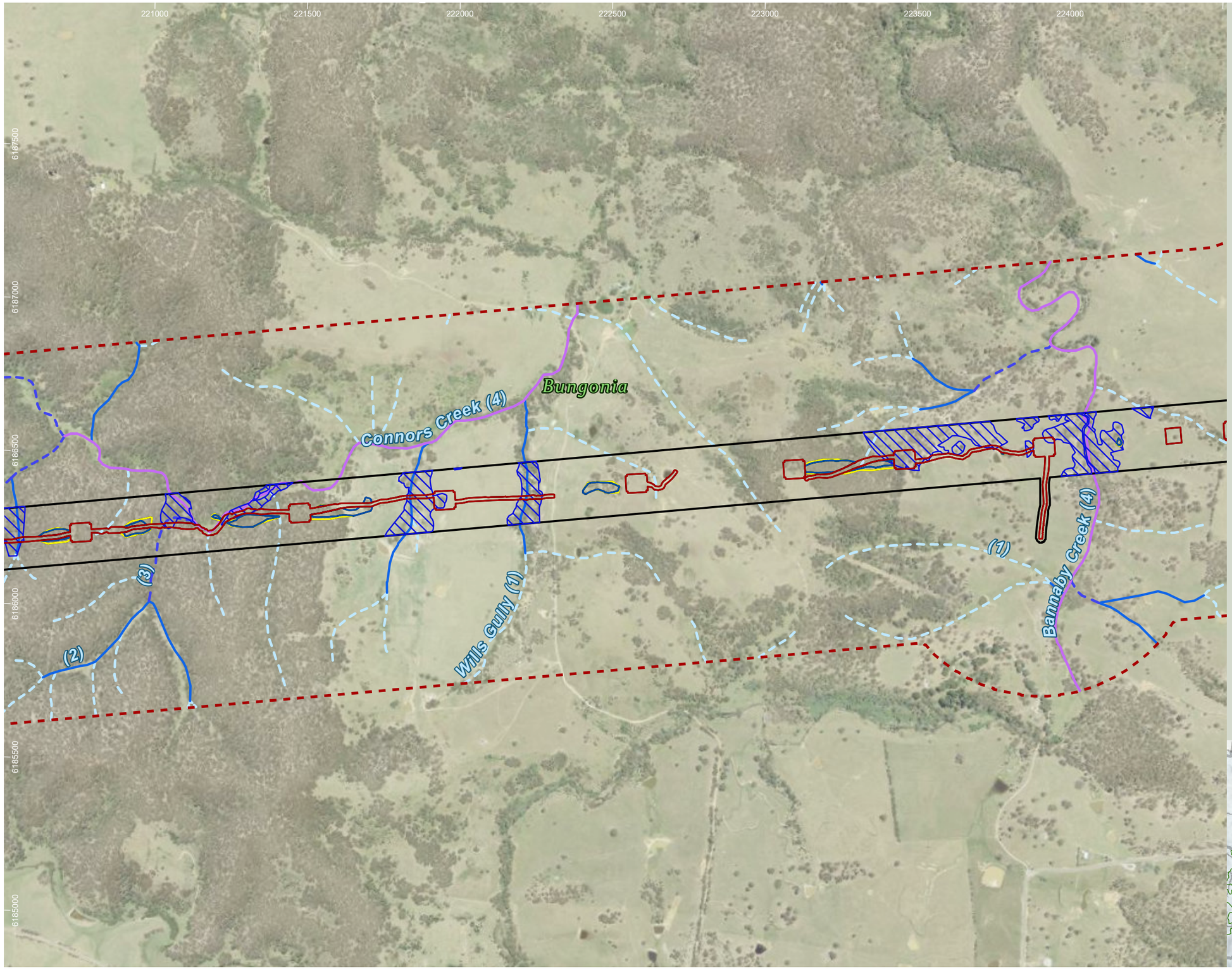
Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 103

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

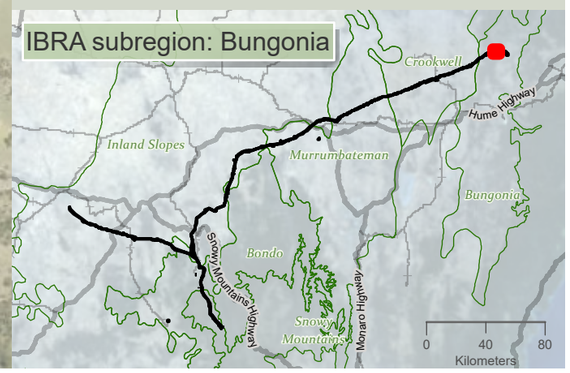
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Myotis macropus



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 104

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224500 225000 225500 226000 226500 227000 227500

6188000 6187500 6187000 6186500 6186000 6185500

(1) (2) (3) (4)

Bungonia

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

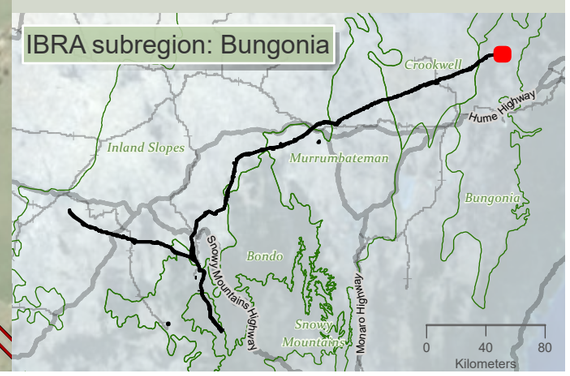
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Chalinolobus dwyeri
- Myotis macropus



0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 105

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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227000 227500 228000 228500 229000 229500 230000 230500

6186500 6186000 6185500 6185000 6184500 6184000

(2)

Bungonia

(1)

(3)

Bannaby 500'kV substation compound (C12)

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

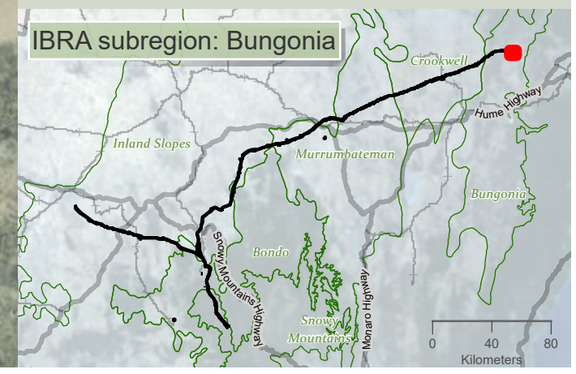
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bat species habitat

- Chalinolobus dwyeri
- Myotis macropus



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bat species habitat

HumeLink BDAR

Figure 13-5 map reference 106

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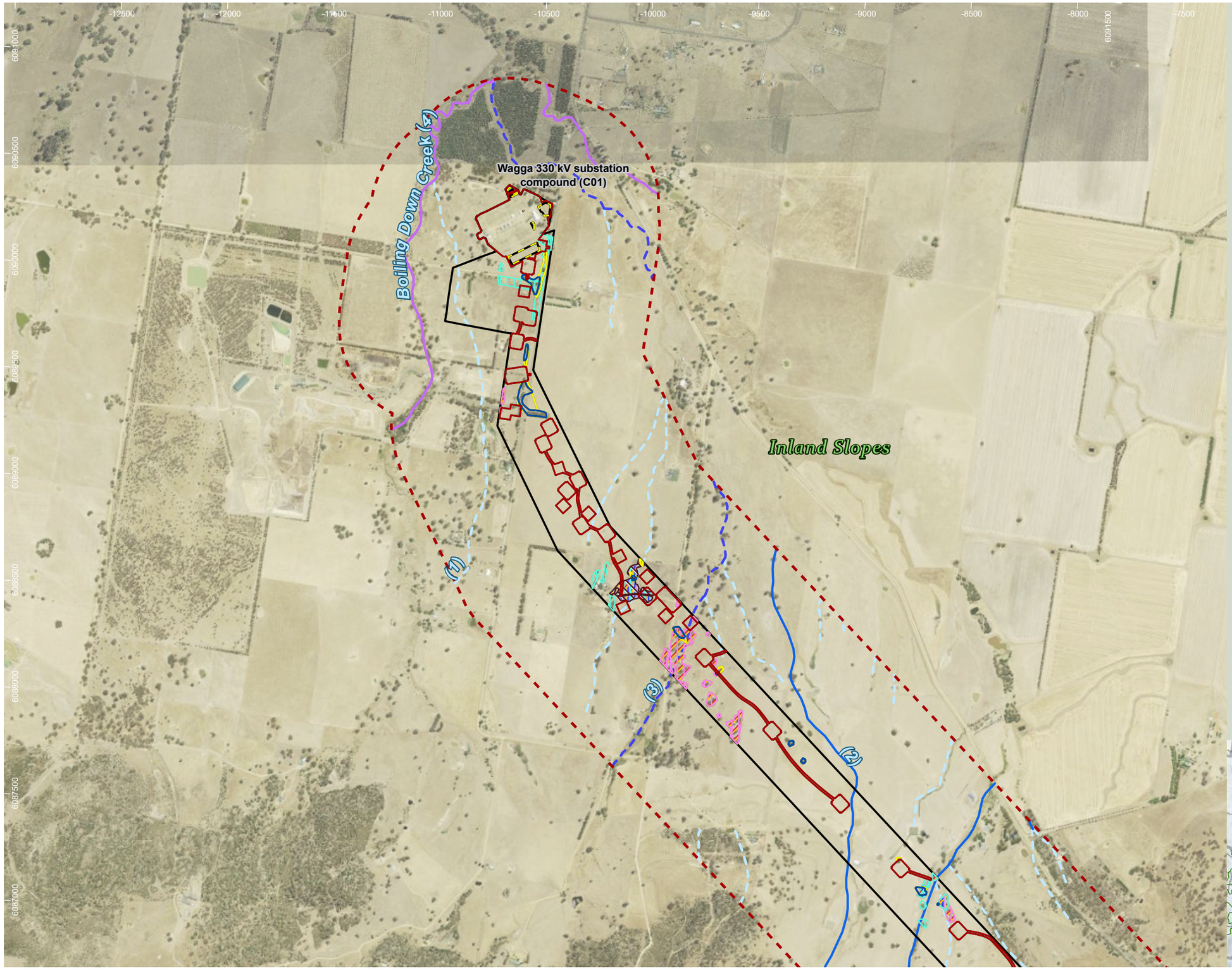


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

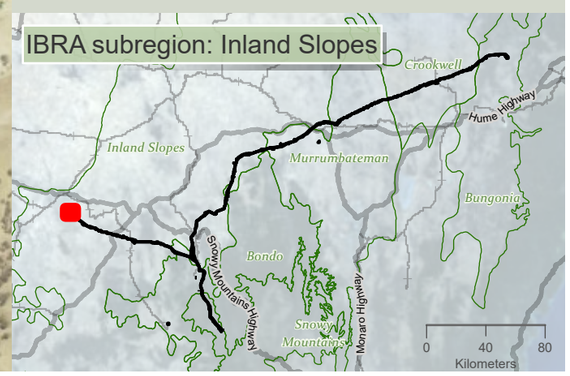
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



niche Environment and Heritage

0 N 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 1

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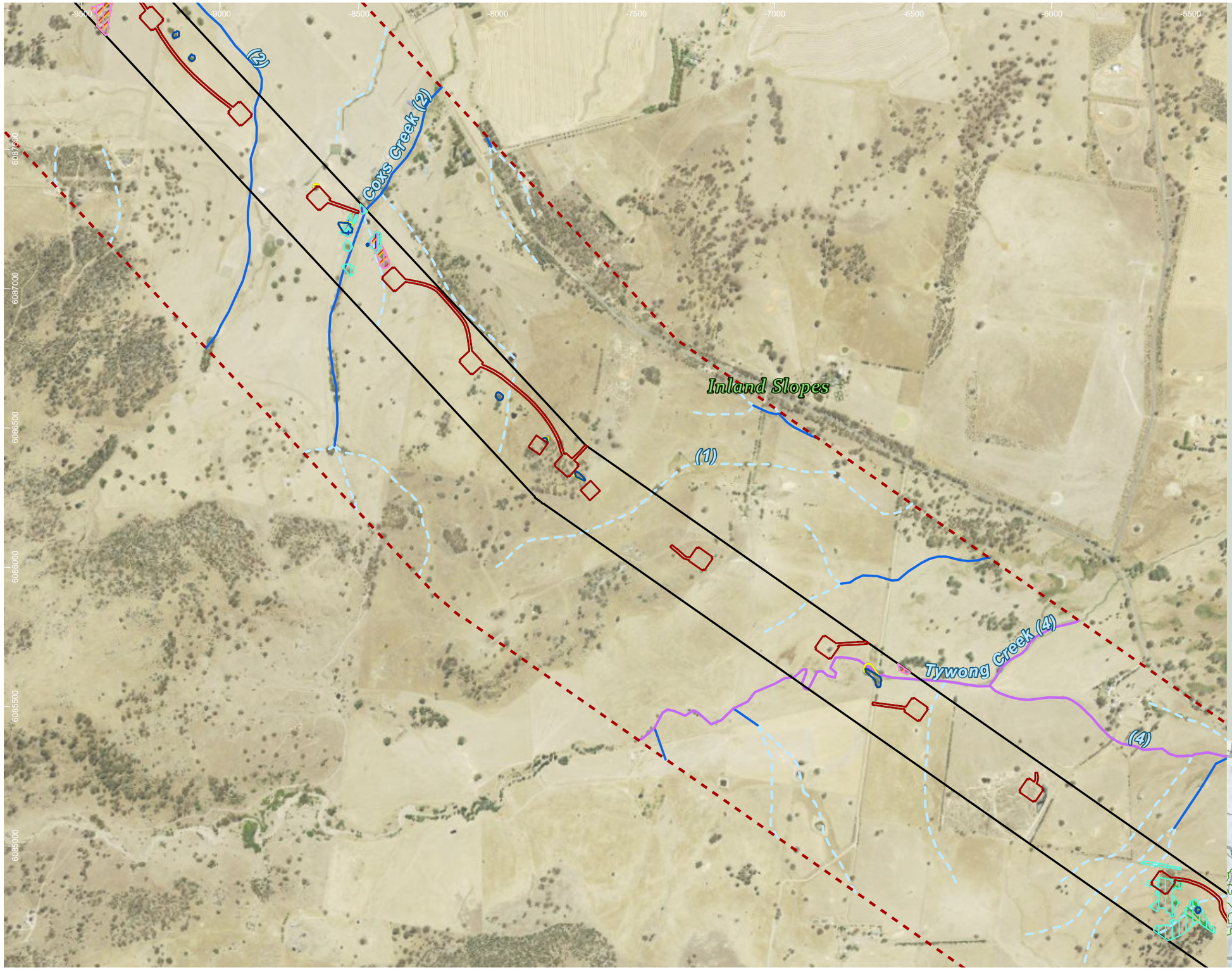


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

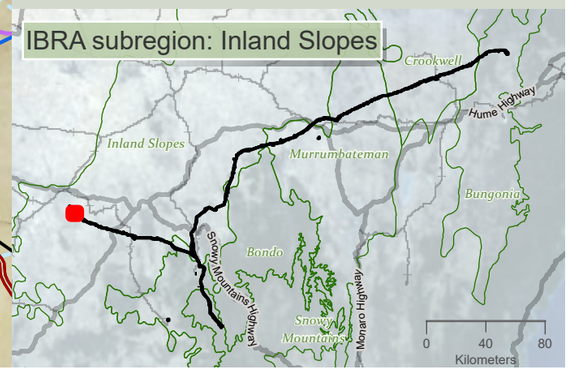
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 2

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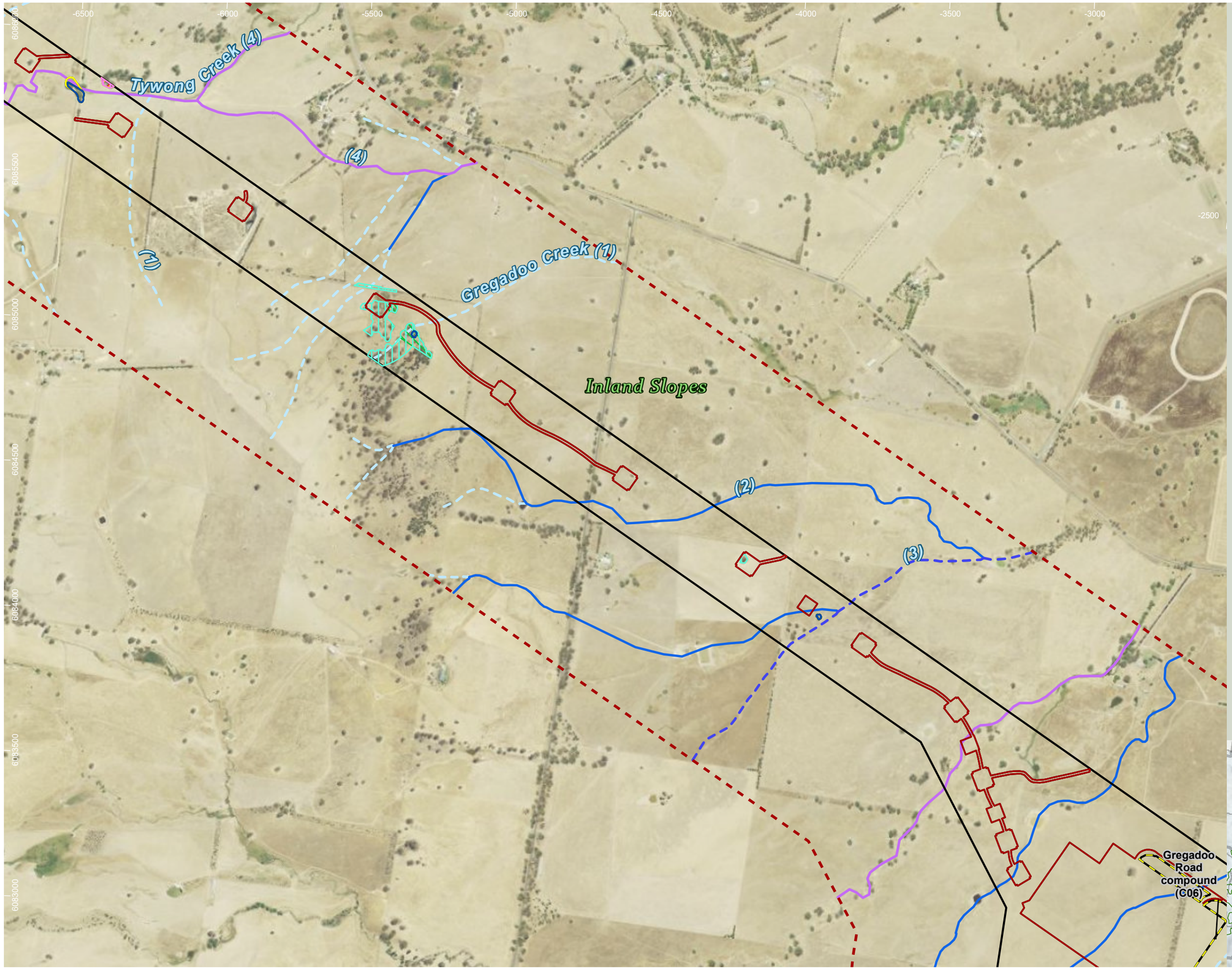


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

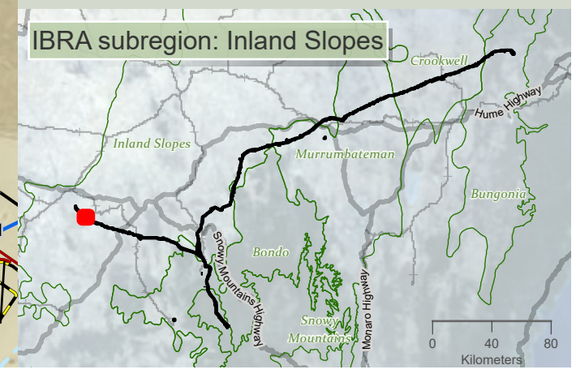
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Polytelis swainsonii



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 3

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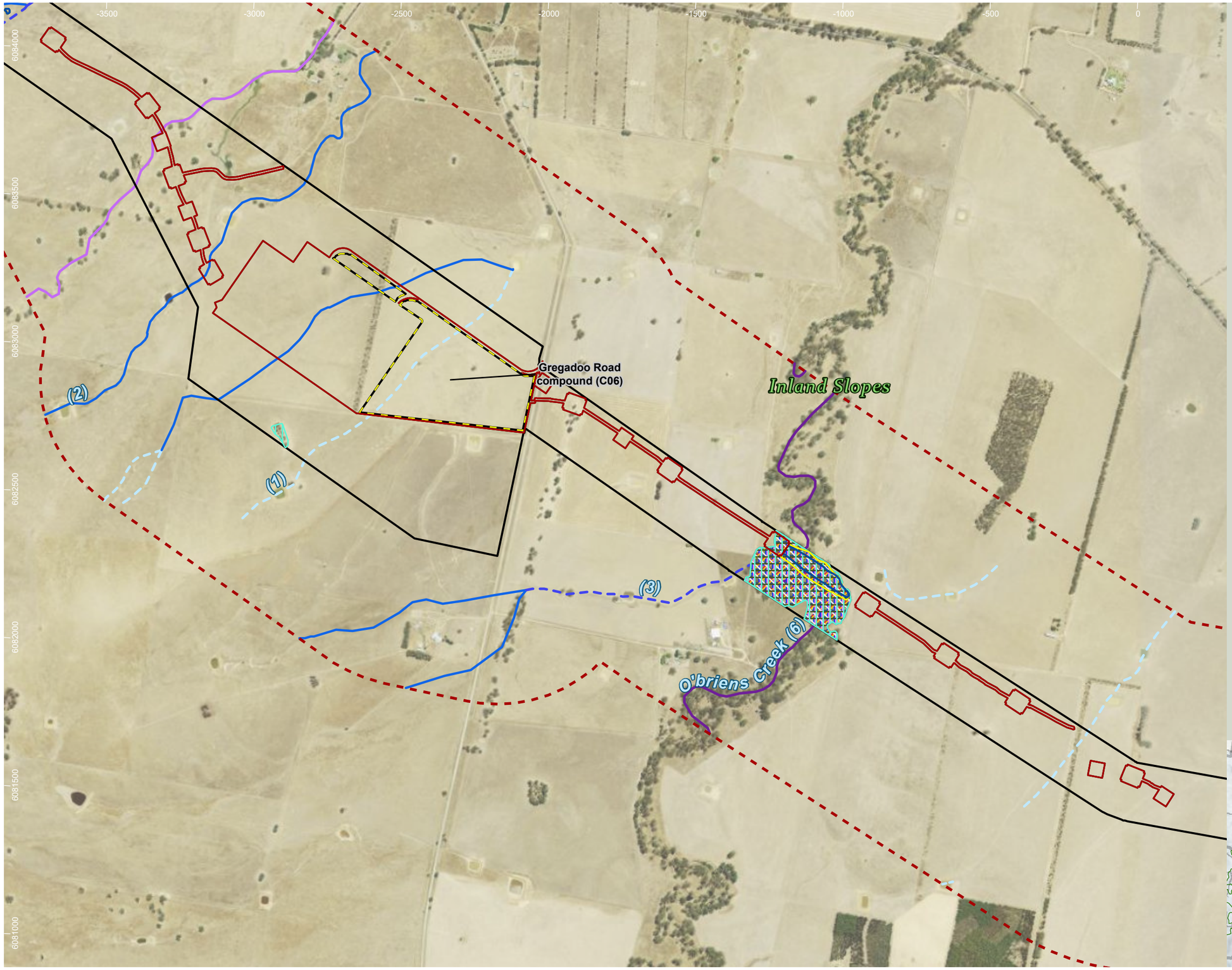


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

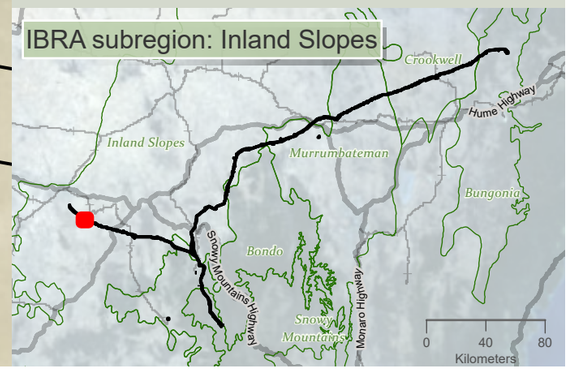
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Ninox strenua
- Polytelis swainsonii



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 4

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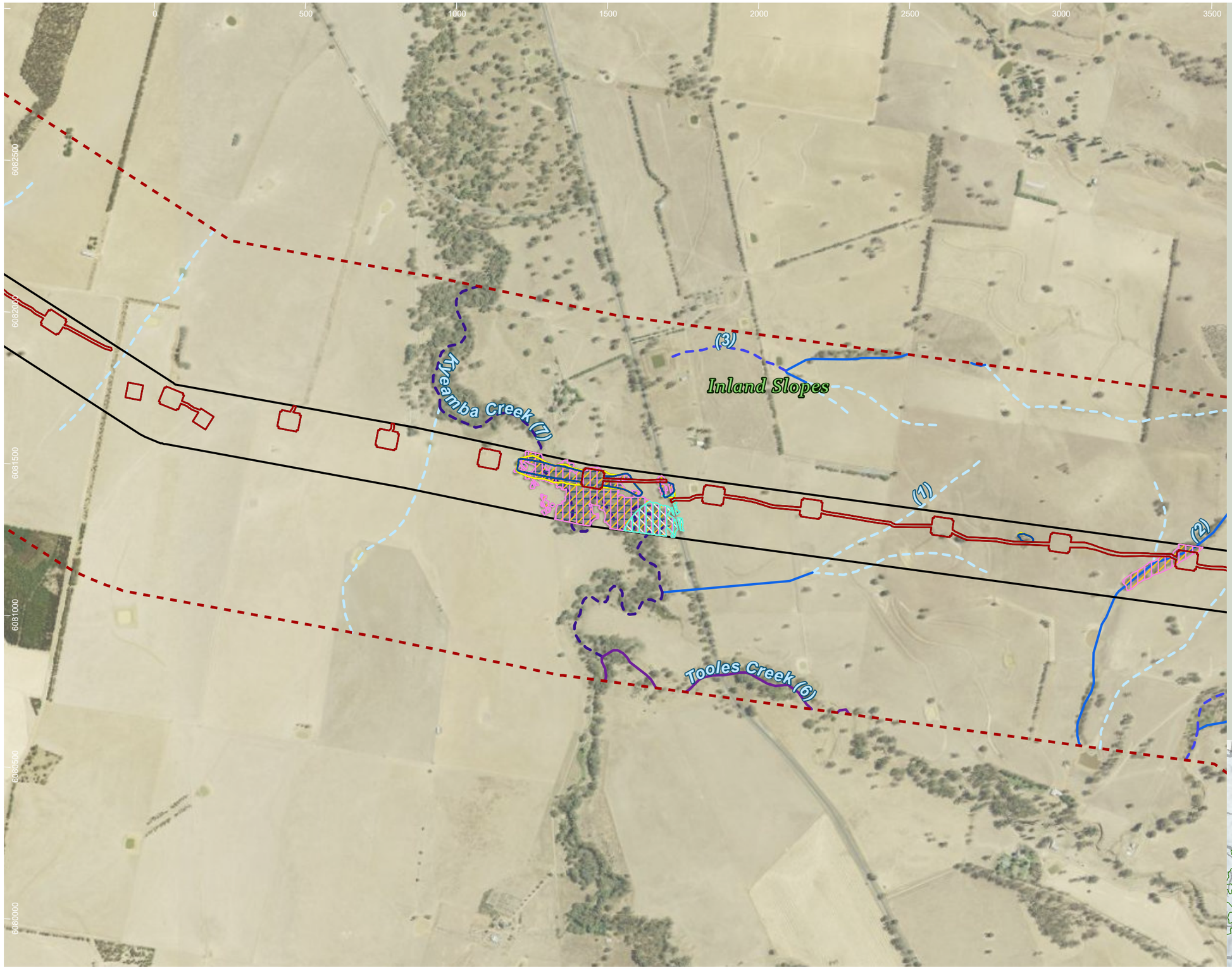


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

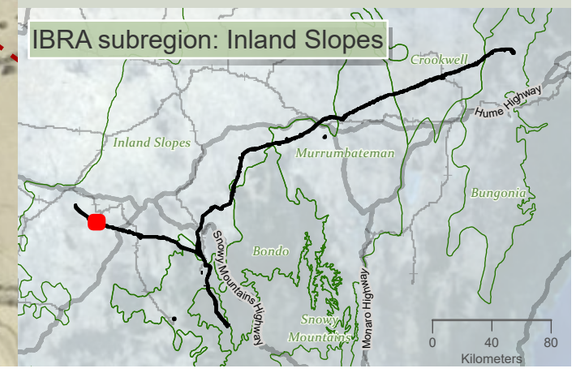
- 1
- 2
- 3
- 6
- 7

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 5

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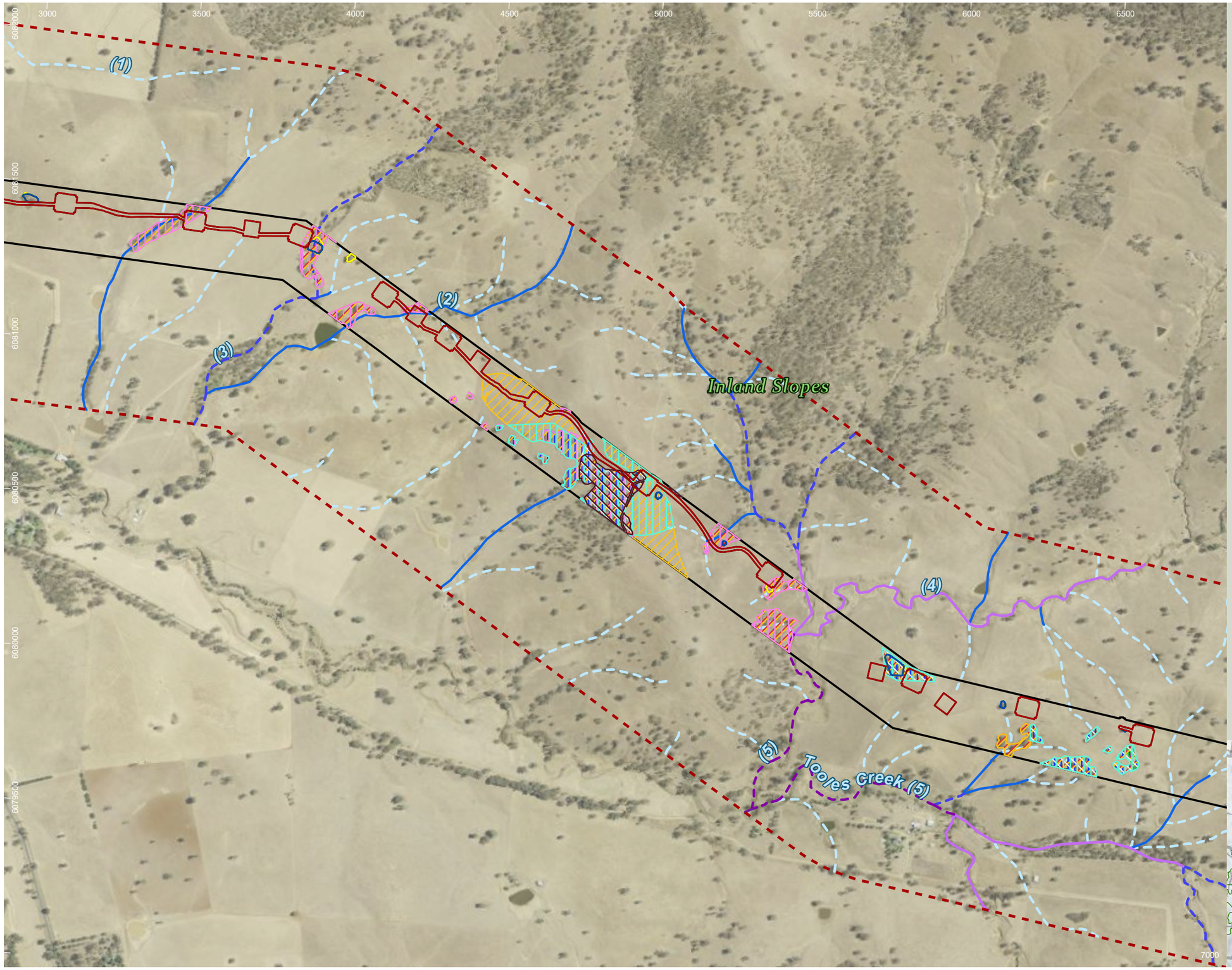


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

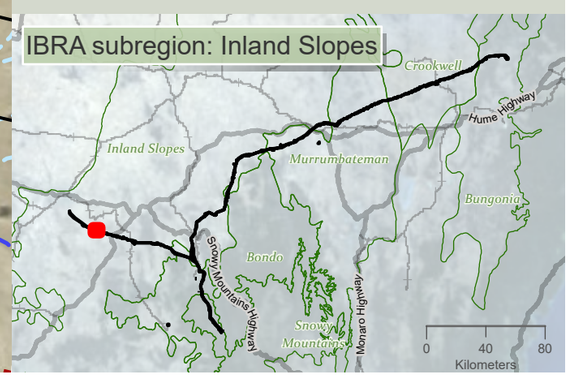
- 1
- 2
- 3
- 4
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 6

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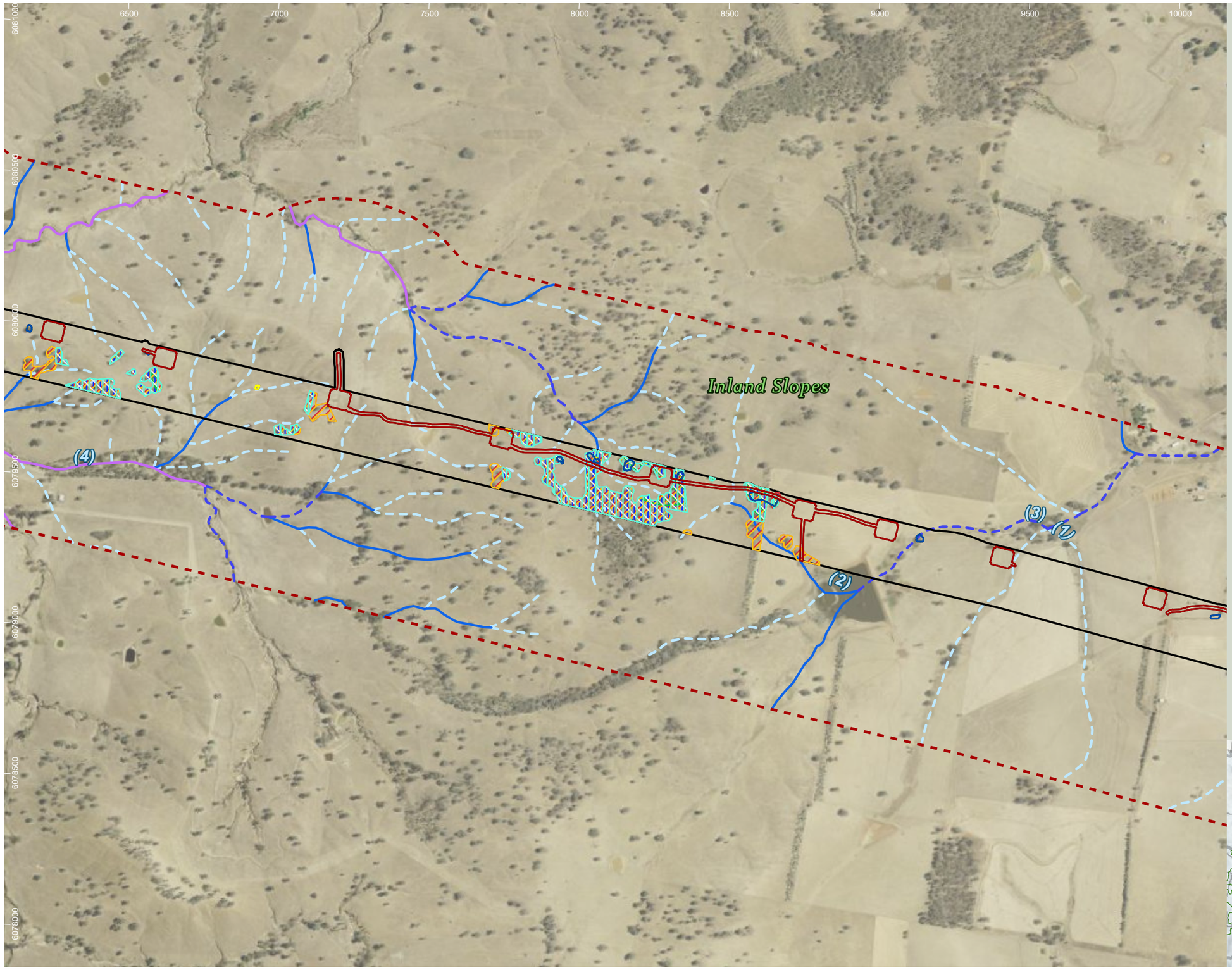


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

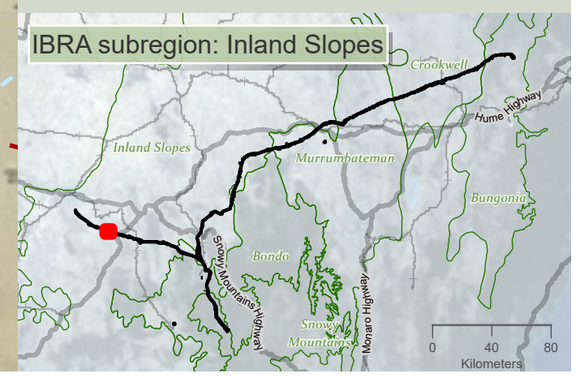
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox connivens
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 7

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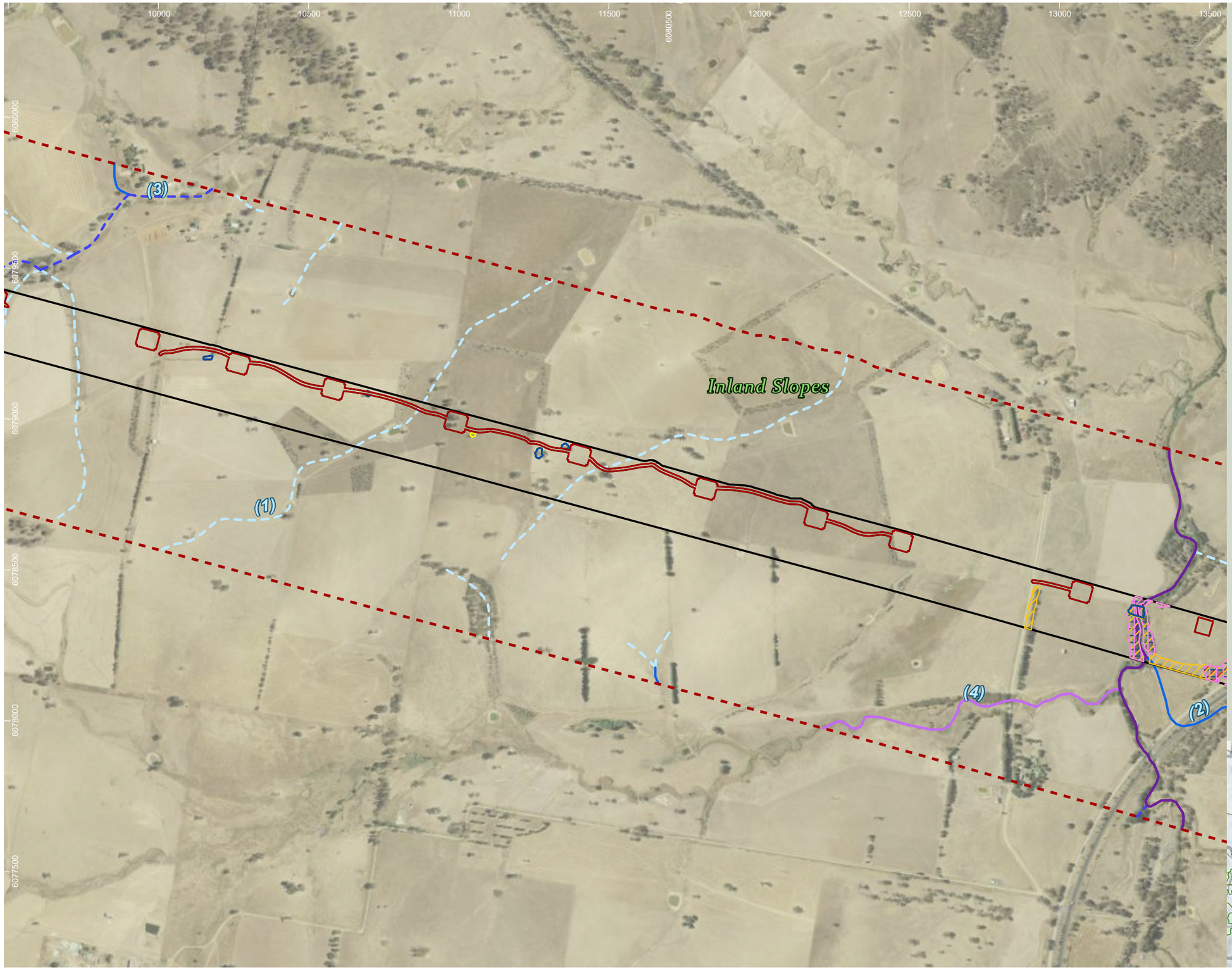


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

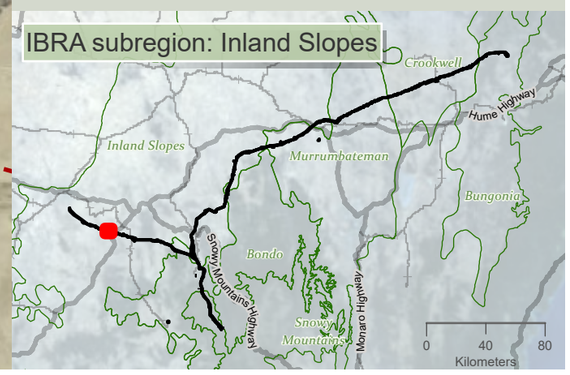
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 8

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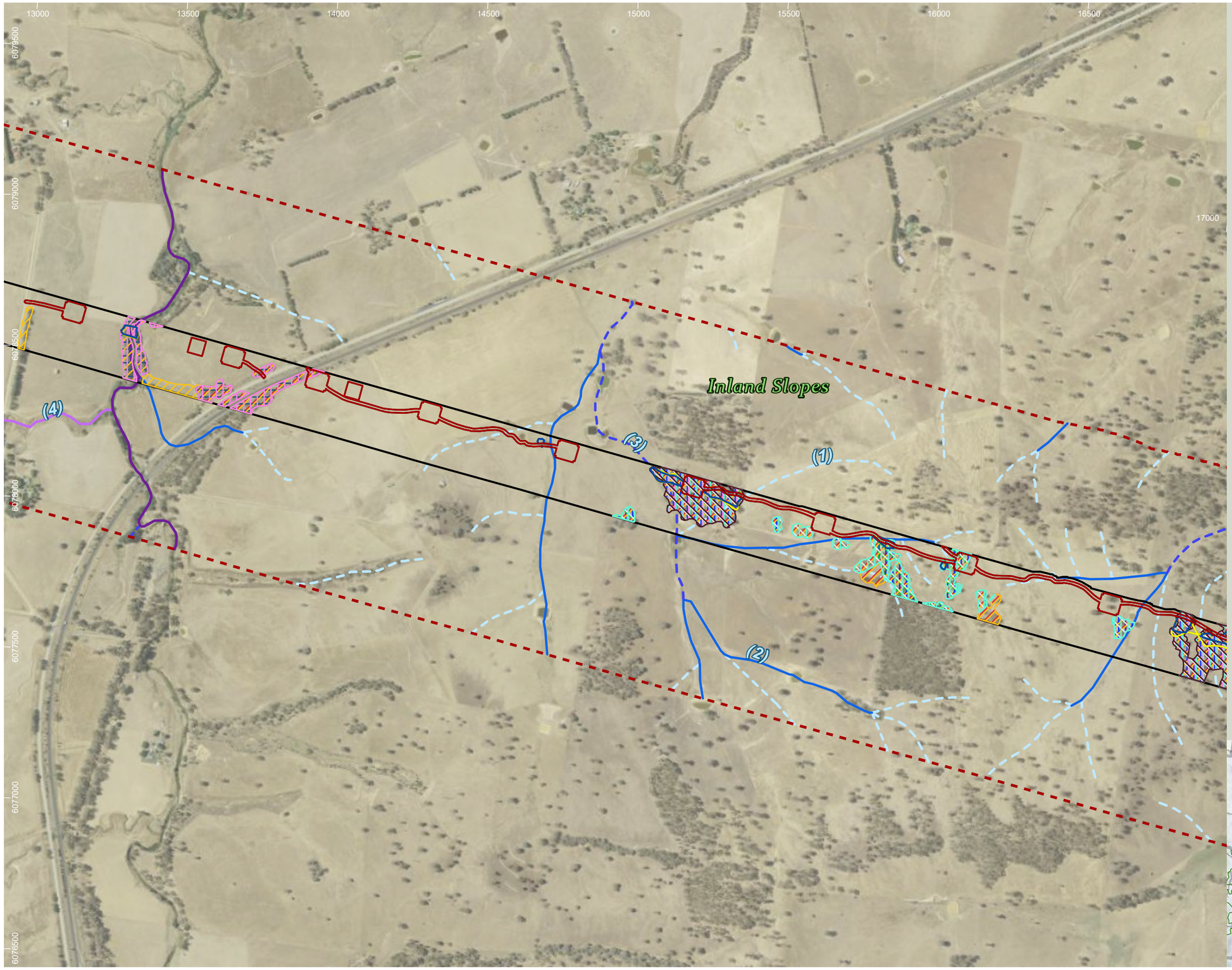


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

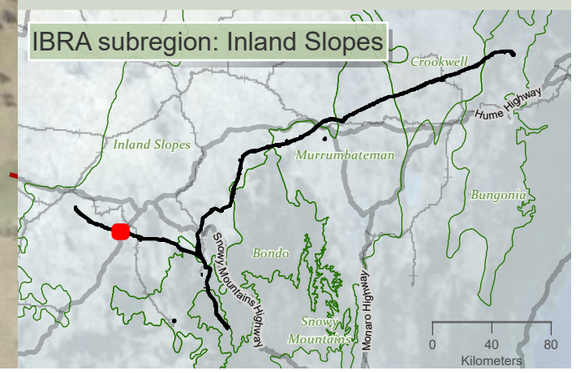
- 0
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 9

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16500 17000 17500 18000 18500 19000 19500 20000 20500

6079000

6078500 6078000 6077500 6077000 6076500 6076000

(1) (2) (3)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

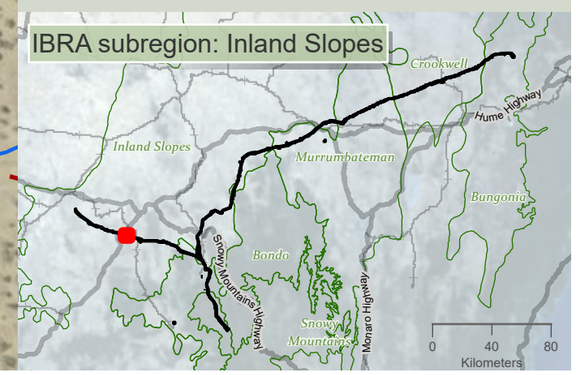
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 10

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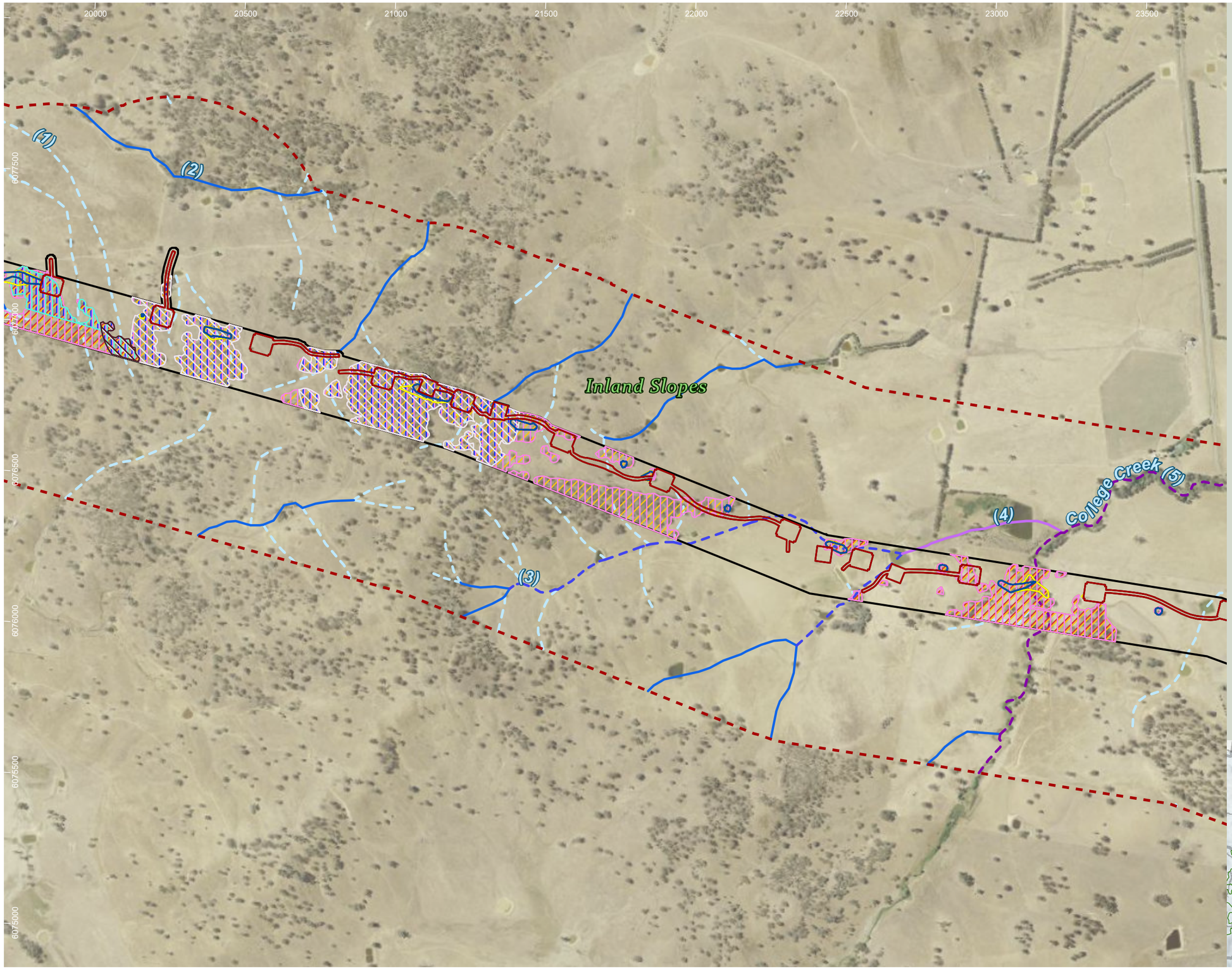


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

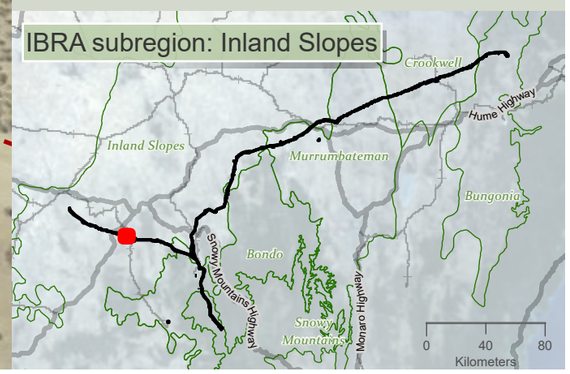
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 11

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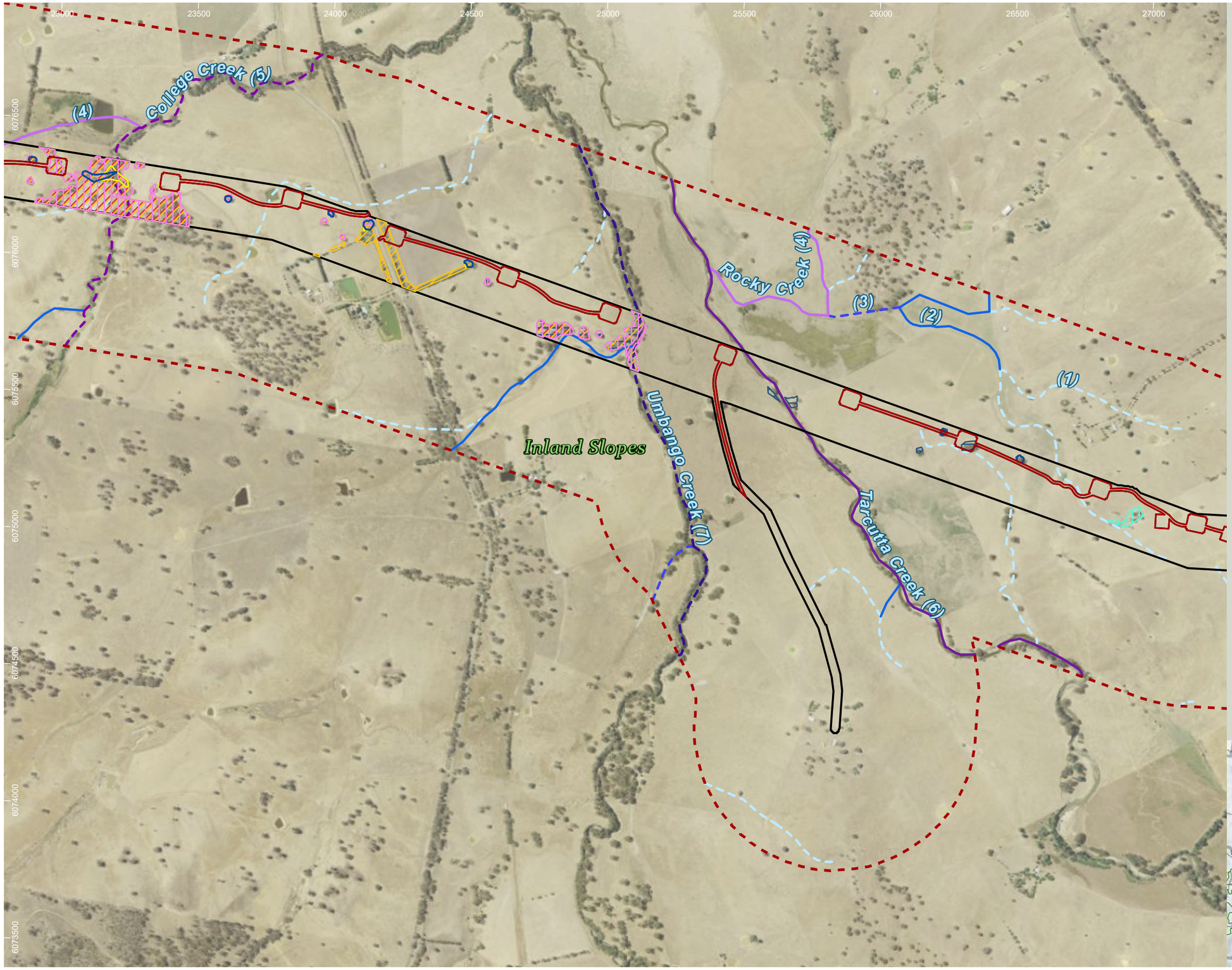


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

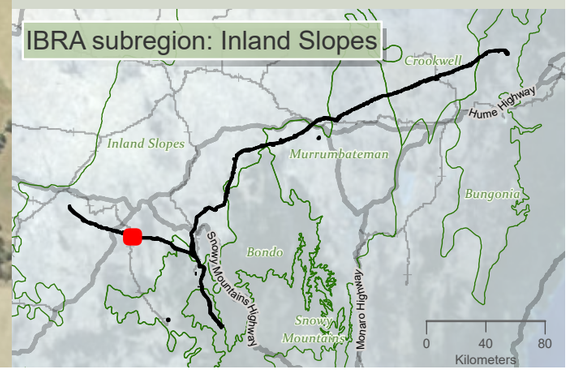
- 1
- 2
- 3
- 4
- 5
- 6
- 7

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 12

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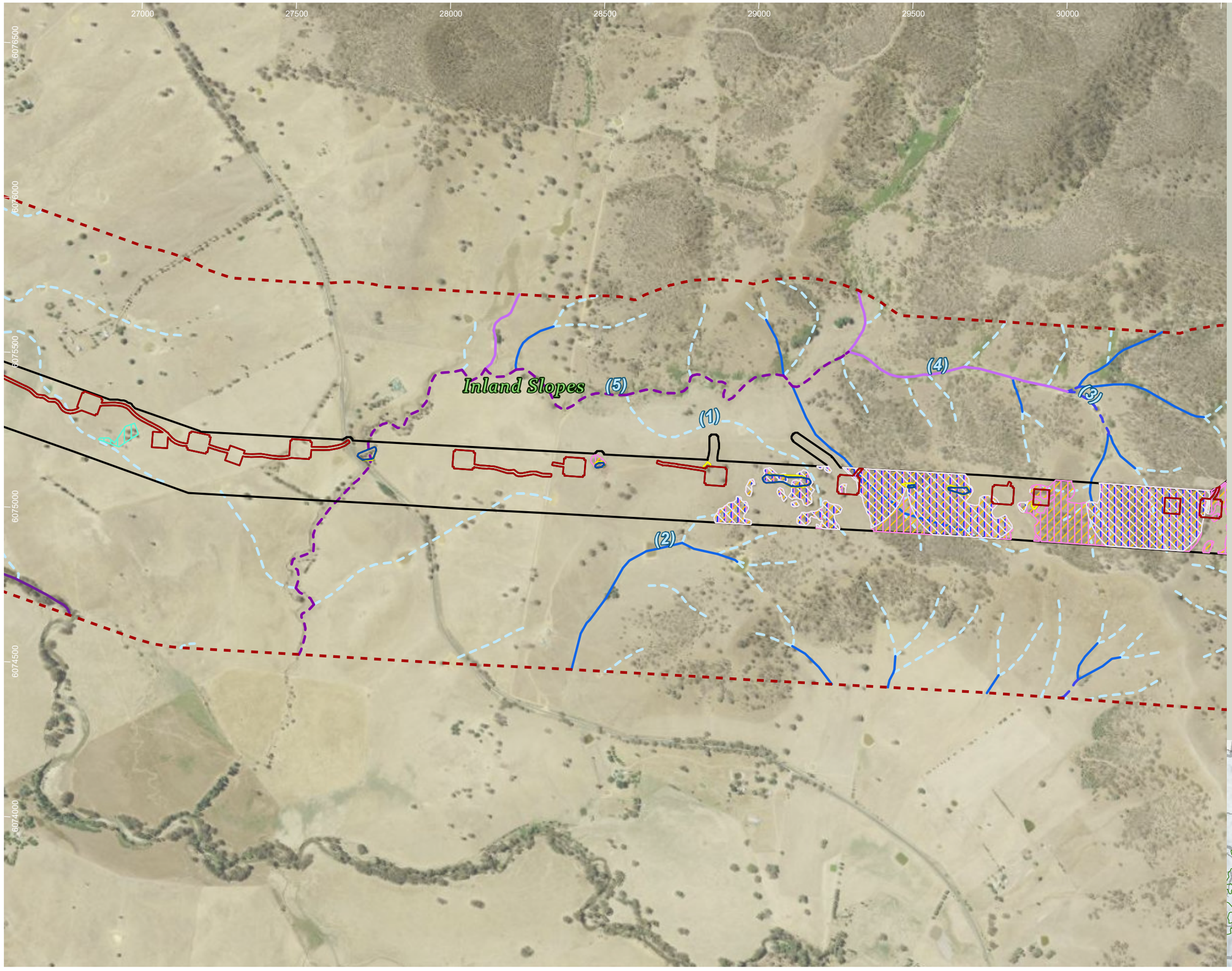


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

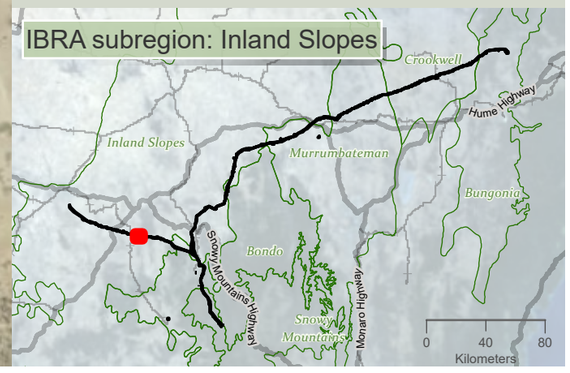
- 1
- 2
- 3
- 4
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 N 350
m

WGS 1984 Web Mercator

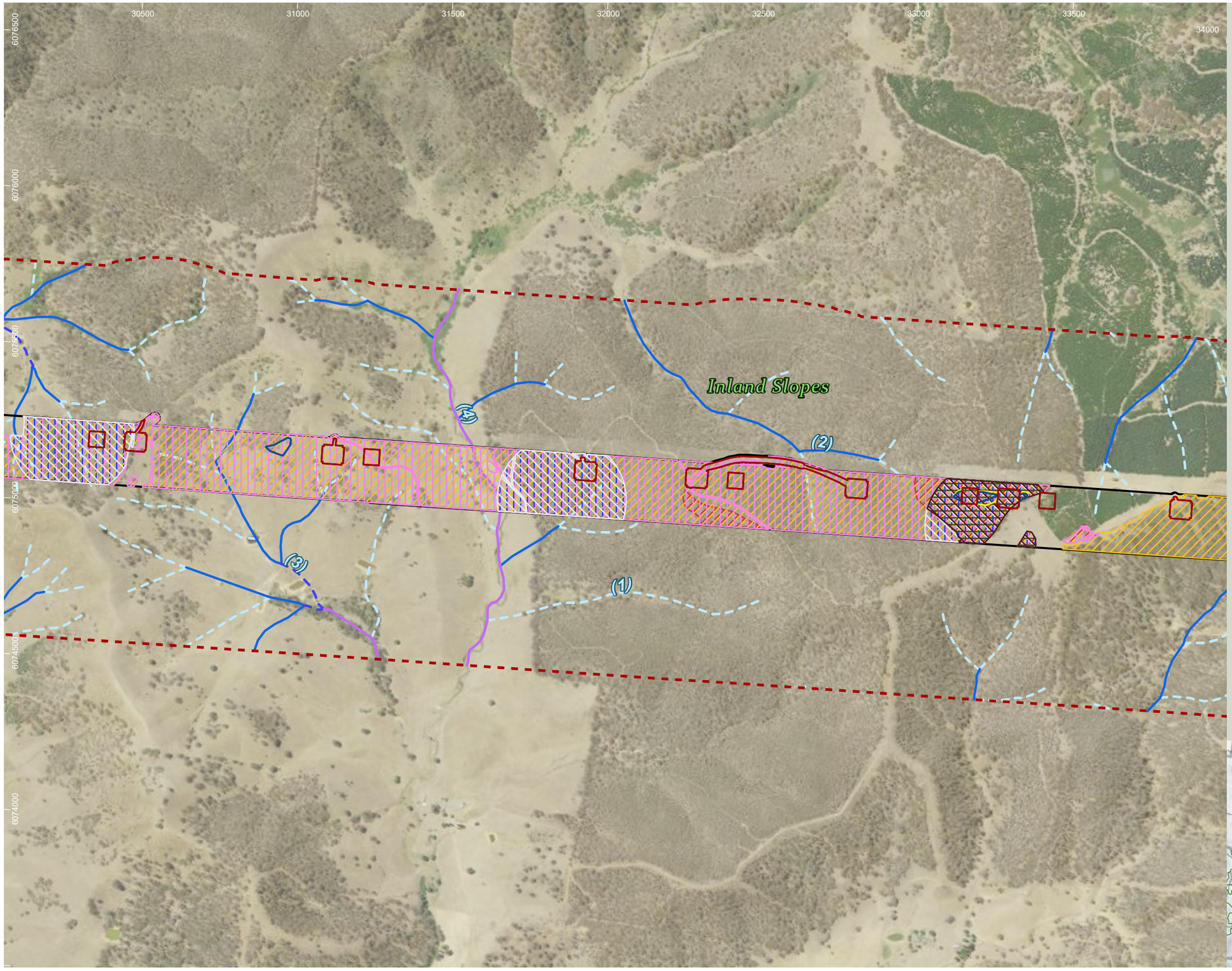
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 13

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

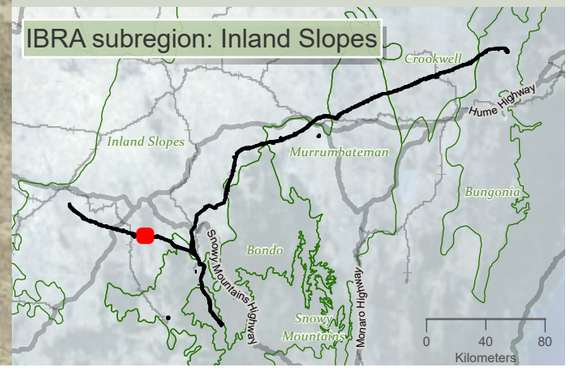
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Ninox strenua
- Tyto novaehollandiae



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 14

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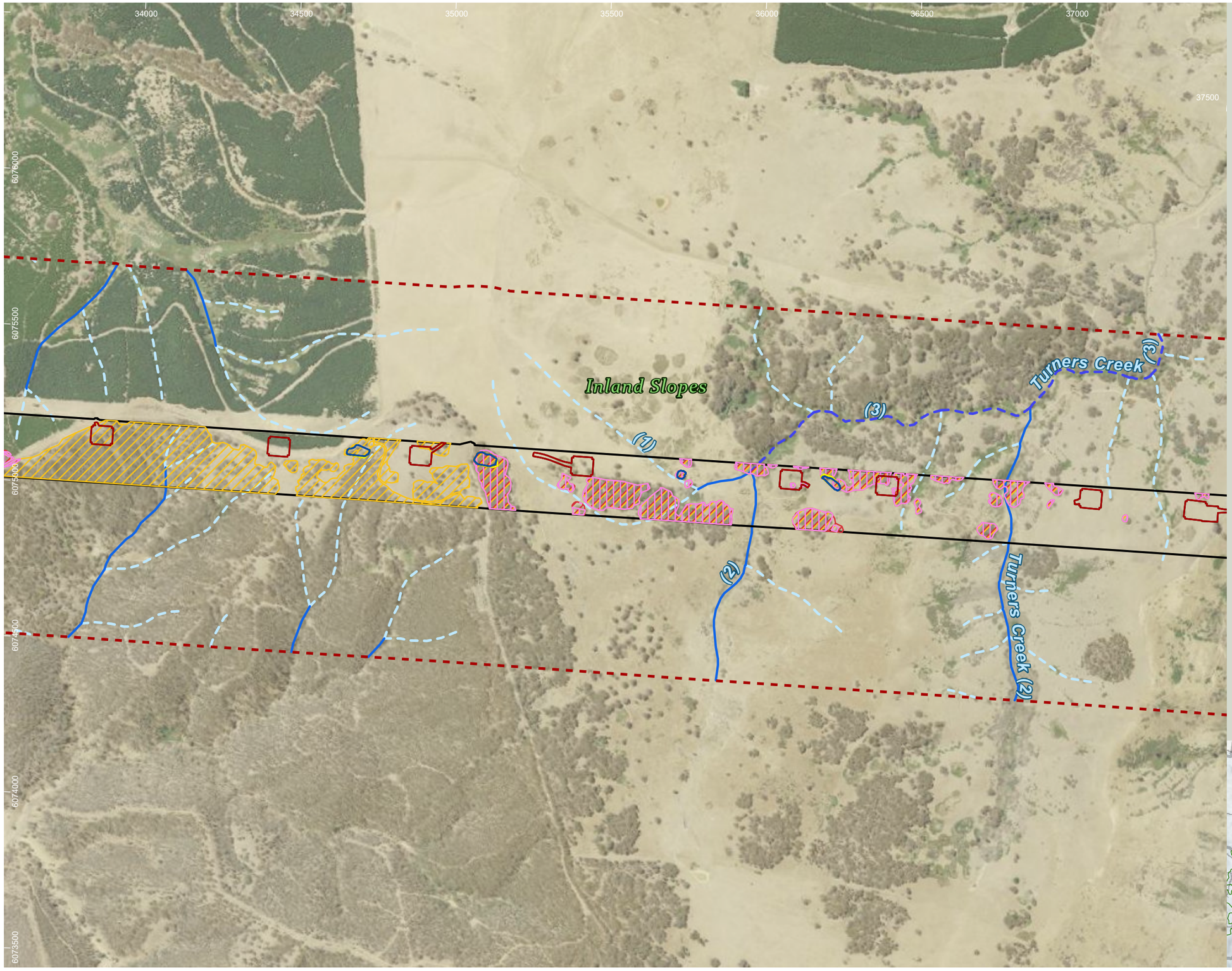


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

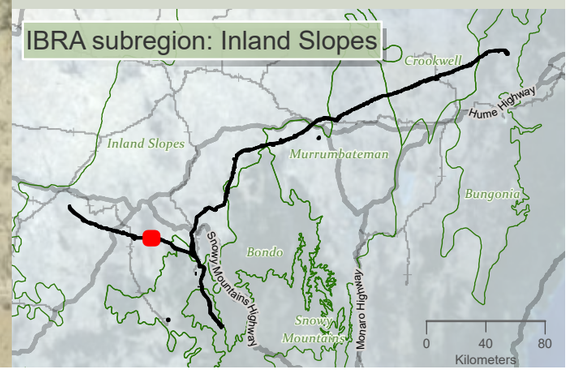
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Hieraaetus morphnoides
- Lophoictinia isura



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 15

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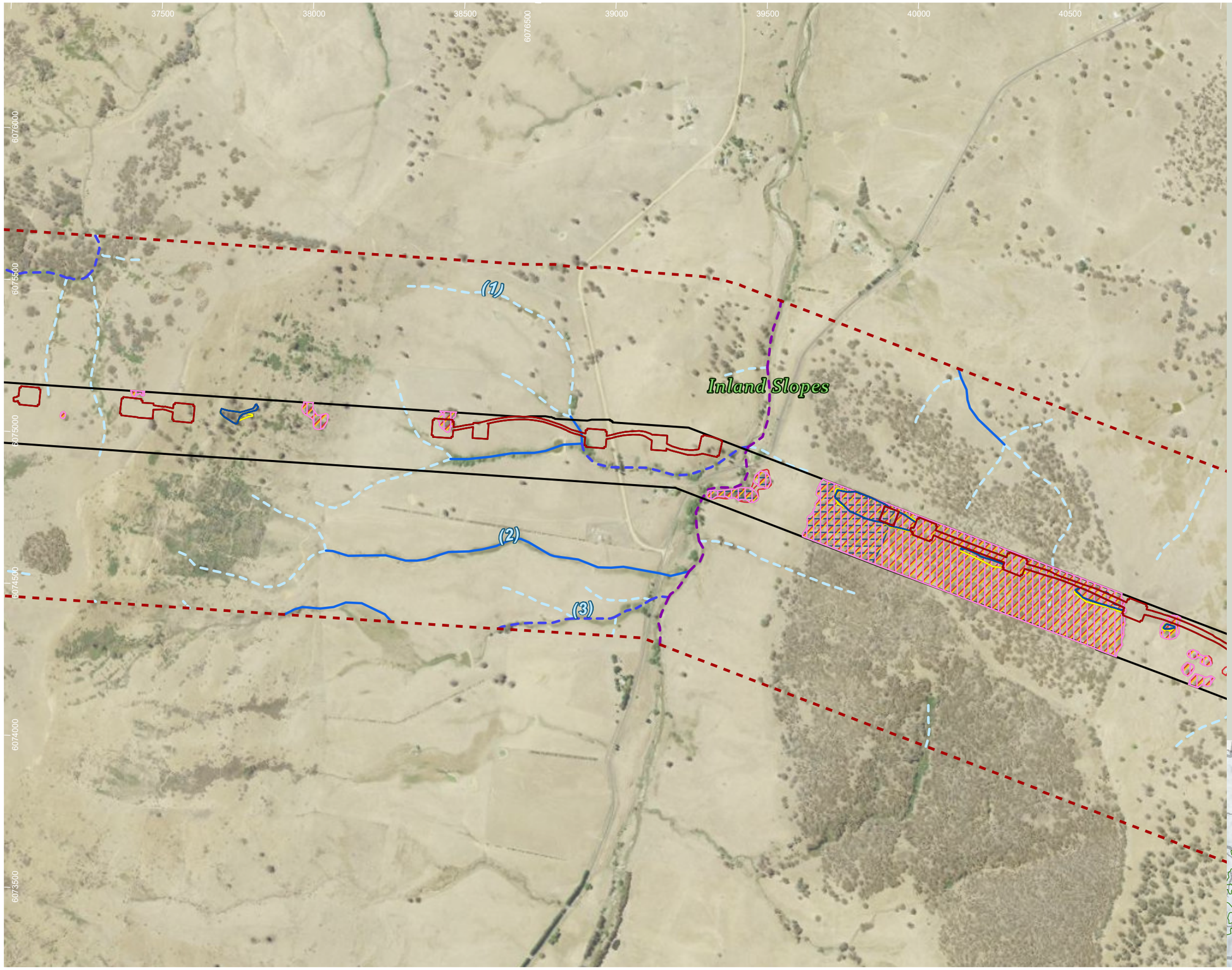


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

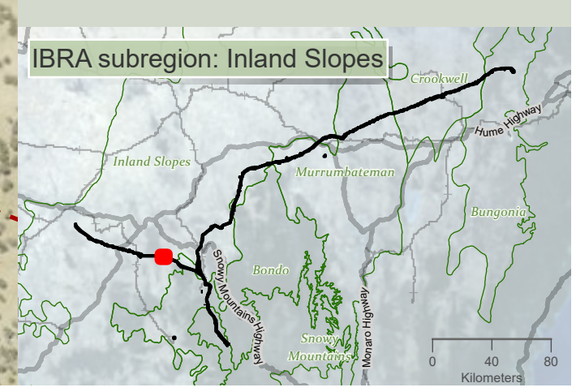
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 16

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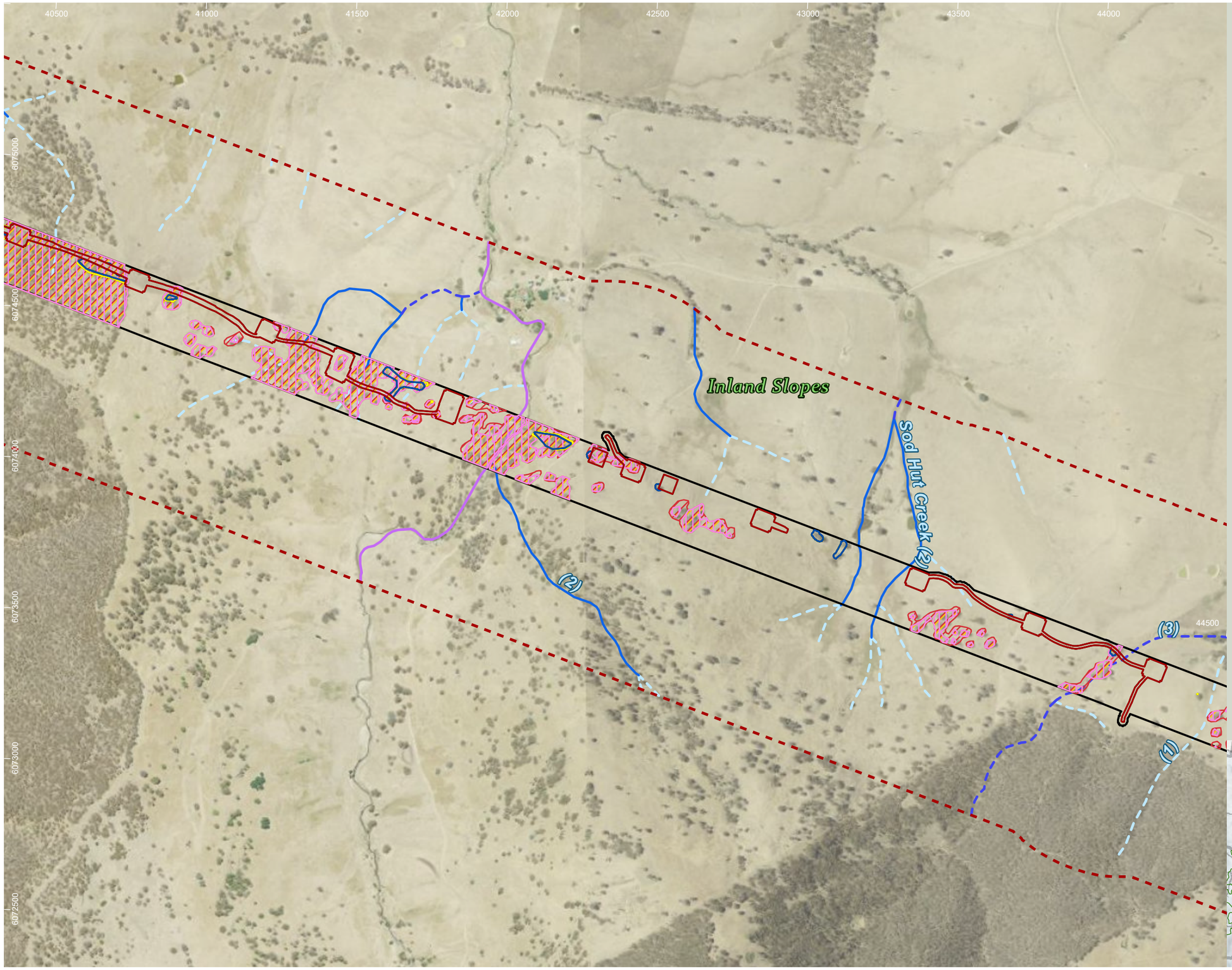


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

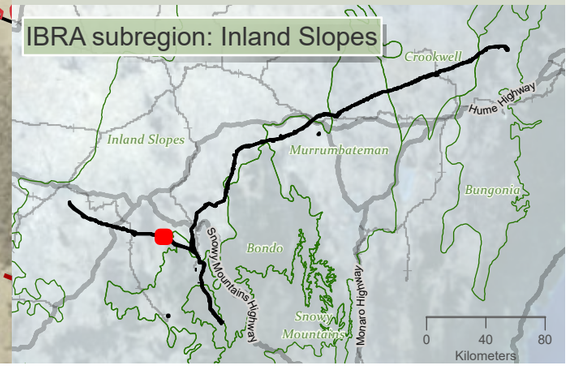
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Hieraaetus morphnoides
- Lophoictinia isura



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 17

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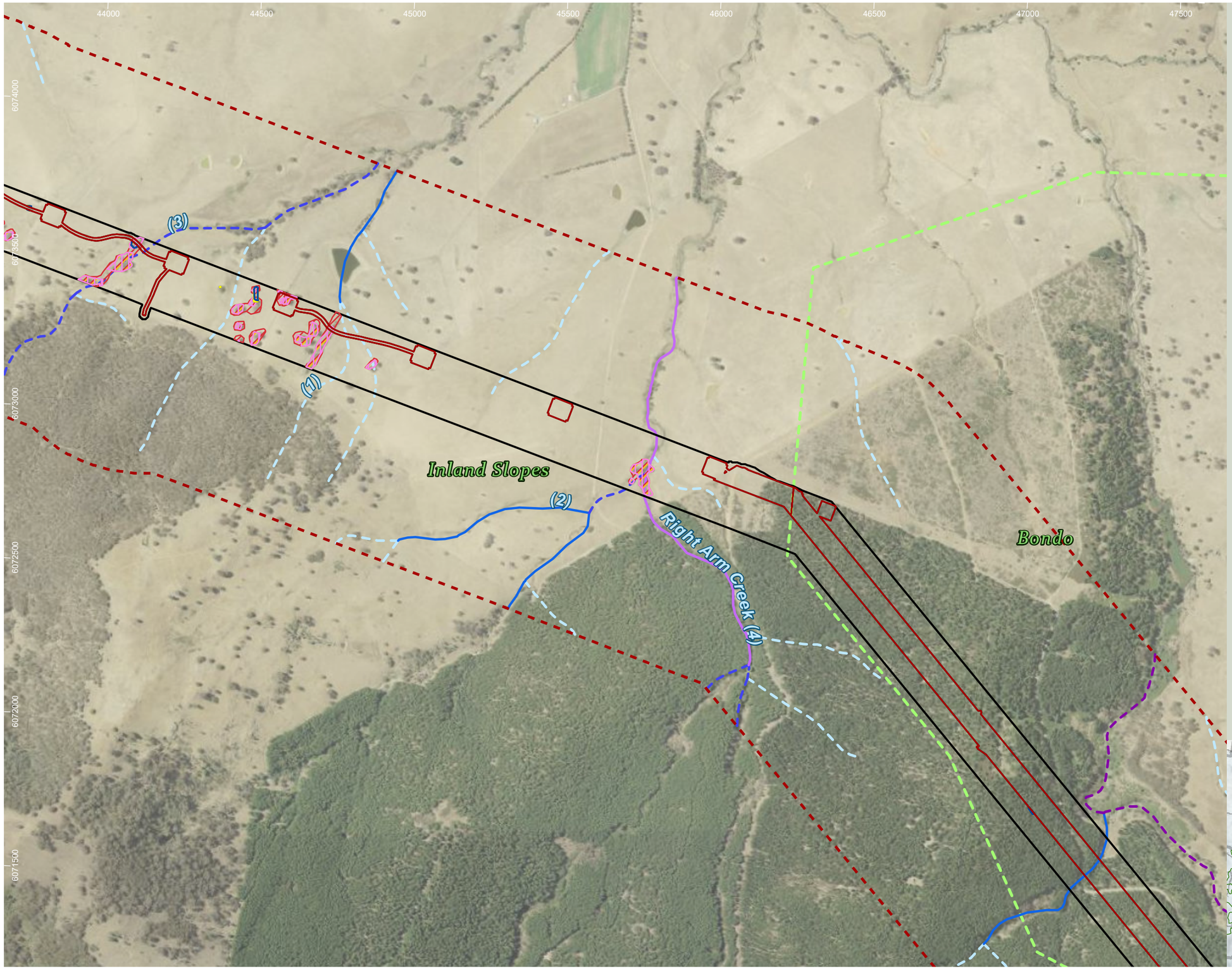


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

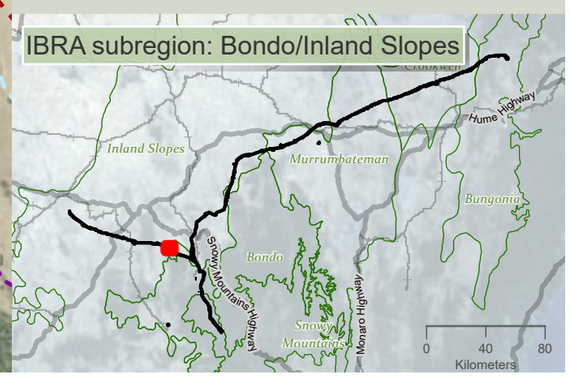
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Hieraaetus morphnoides
- Lophoictinia isura



Drawn by: MatthewZajaczkowski; Last updated: 18/08/2023; File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 18

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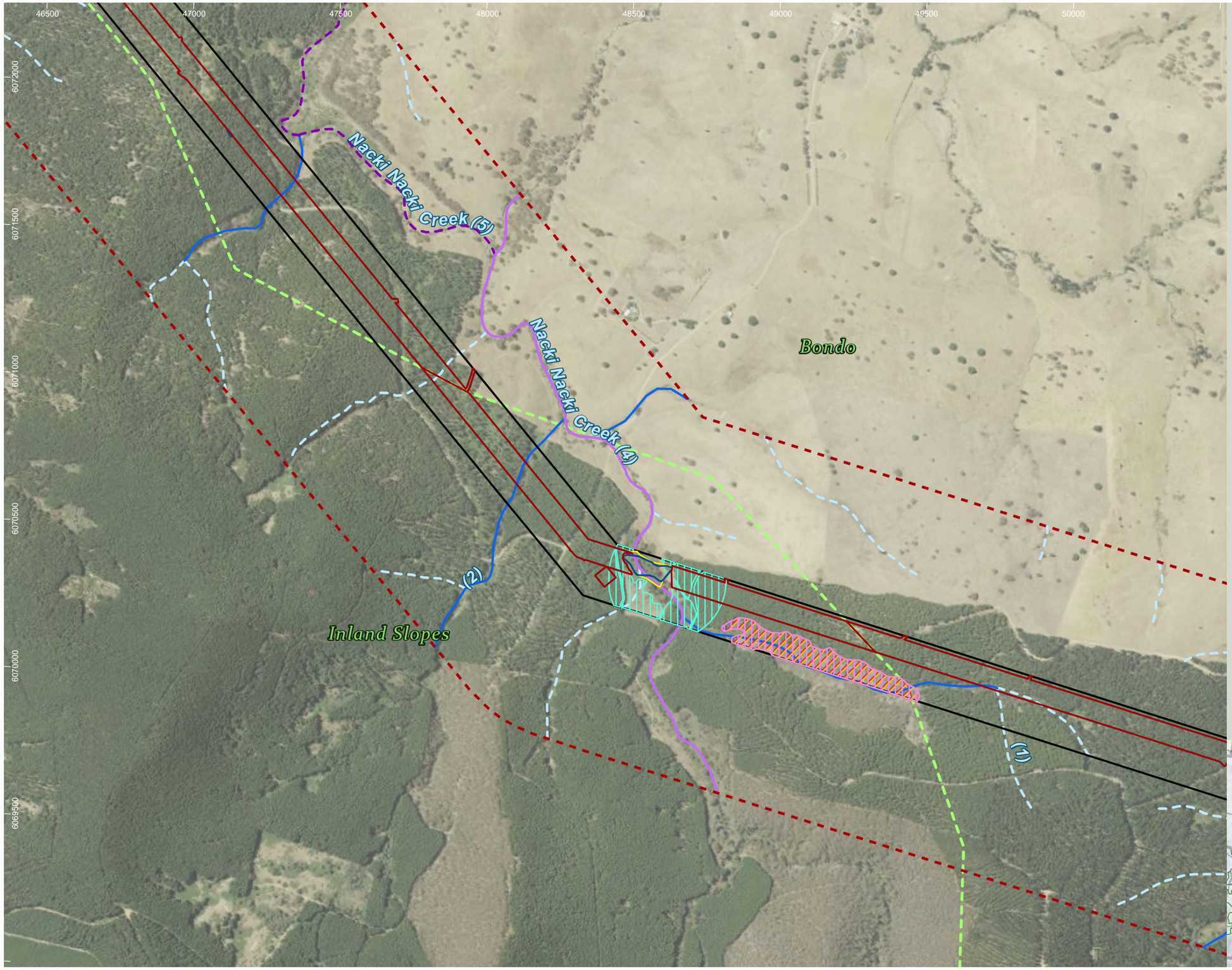


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

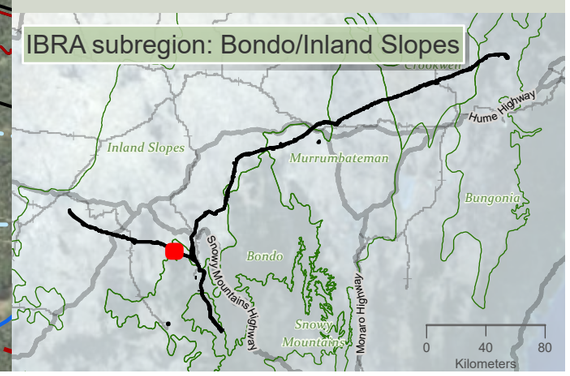
- 1
- 2
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Hieraaetus morphnoides
- Lophoictinia isura
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 19

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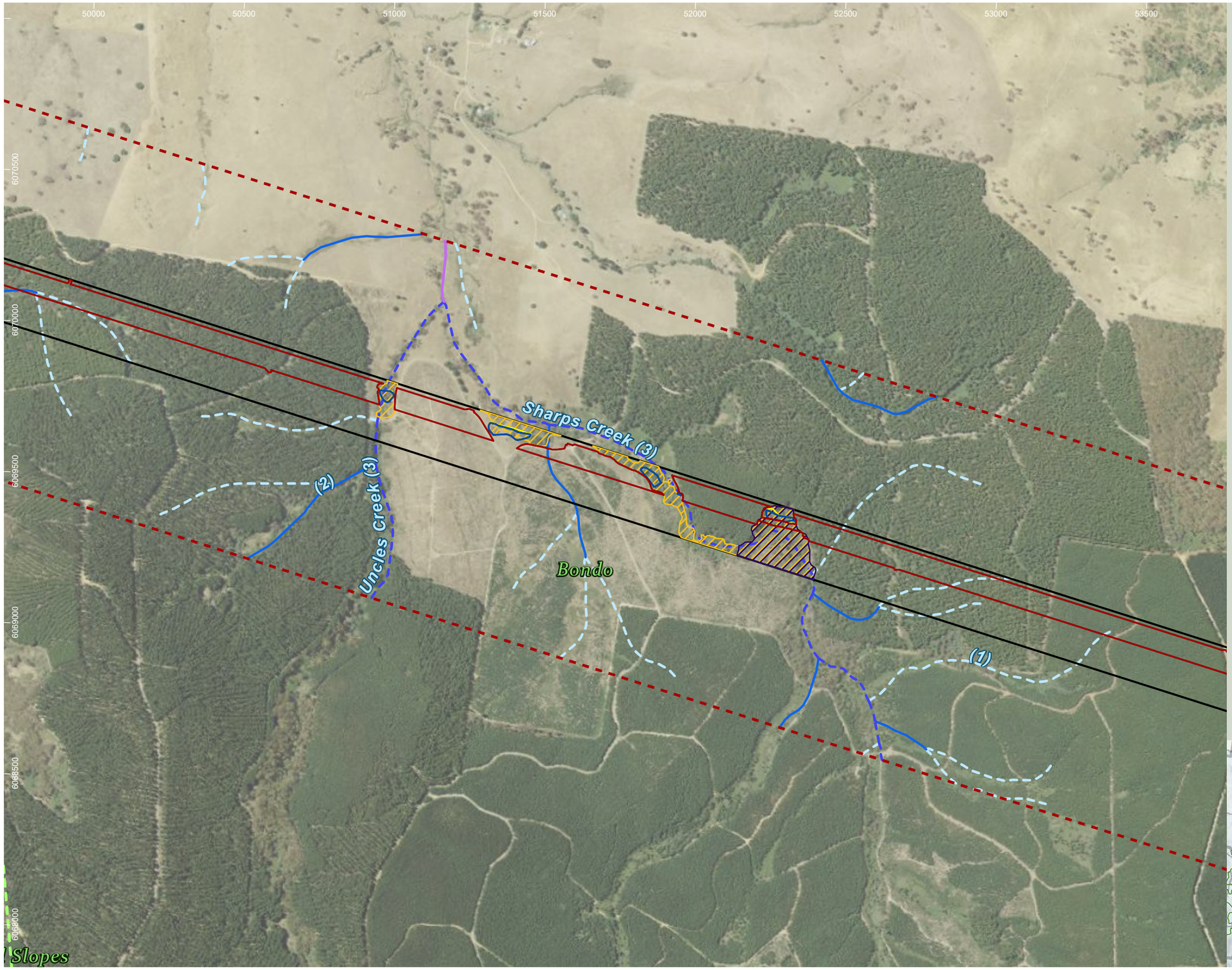


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

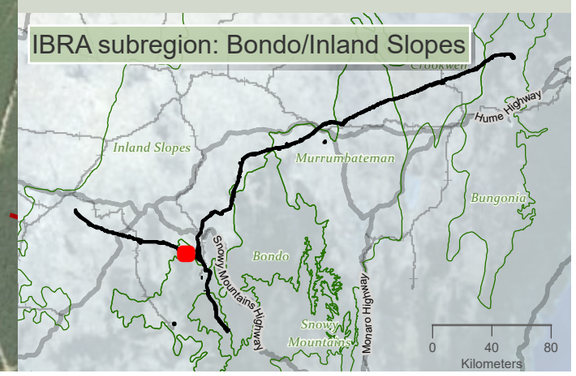
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Hieraaetus morphnoides
- Petroica rodinogaster



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 20

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Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699_Humelink_BDAR_Stage 2 Part B.aprx

53500 54000 54500 55000 55500 56000 56500 57000

6070000 6069500 6069000 6068500 6068000 6067500

Bondo

(1) (2)

Adelong Creek (5)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

- 0
- 1
- 2
- 4
- 5

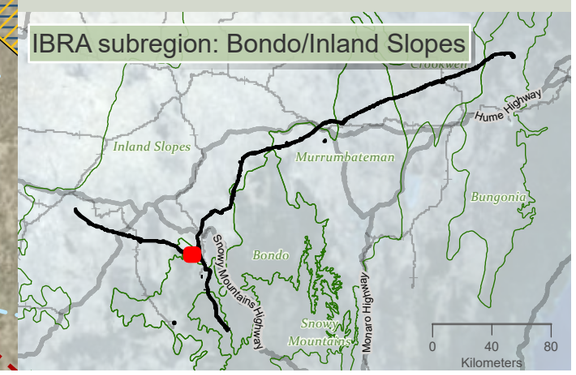
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone

Bird species habitat

- Callocephalon fimbriatum
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Petroica rodinogaster

IBRA subregion: Bondo/Inland Slopes



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 21

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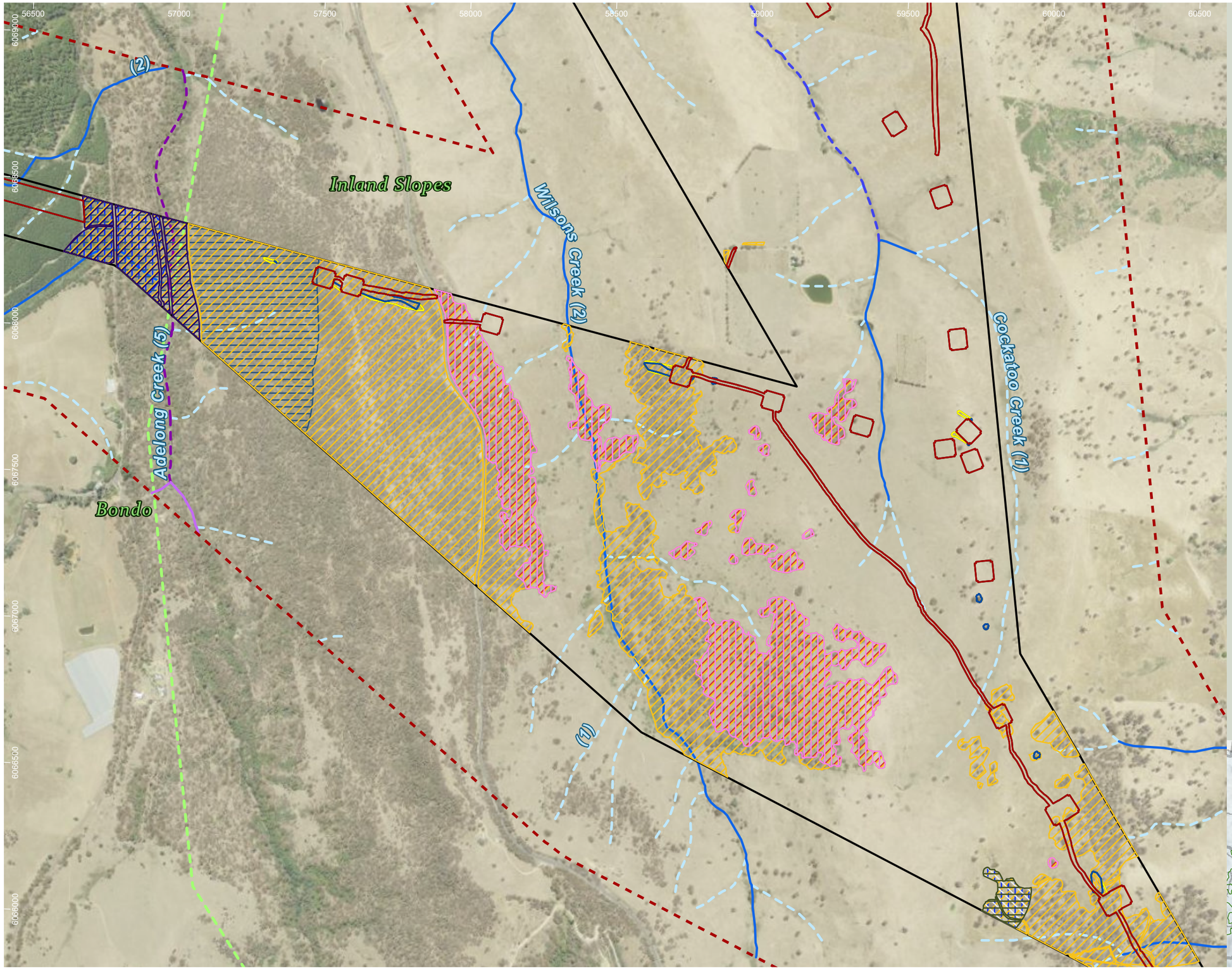


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

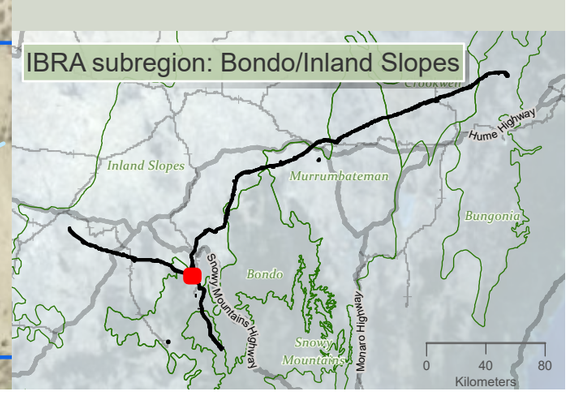
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 22

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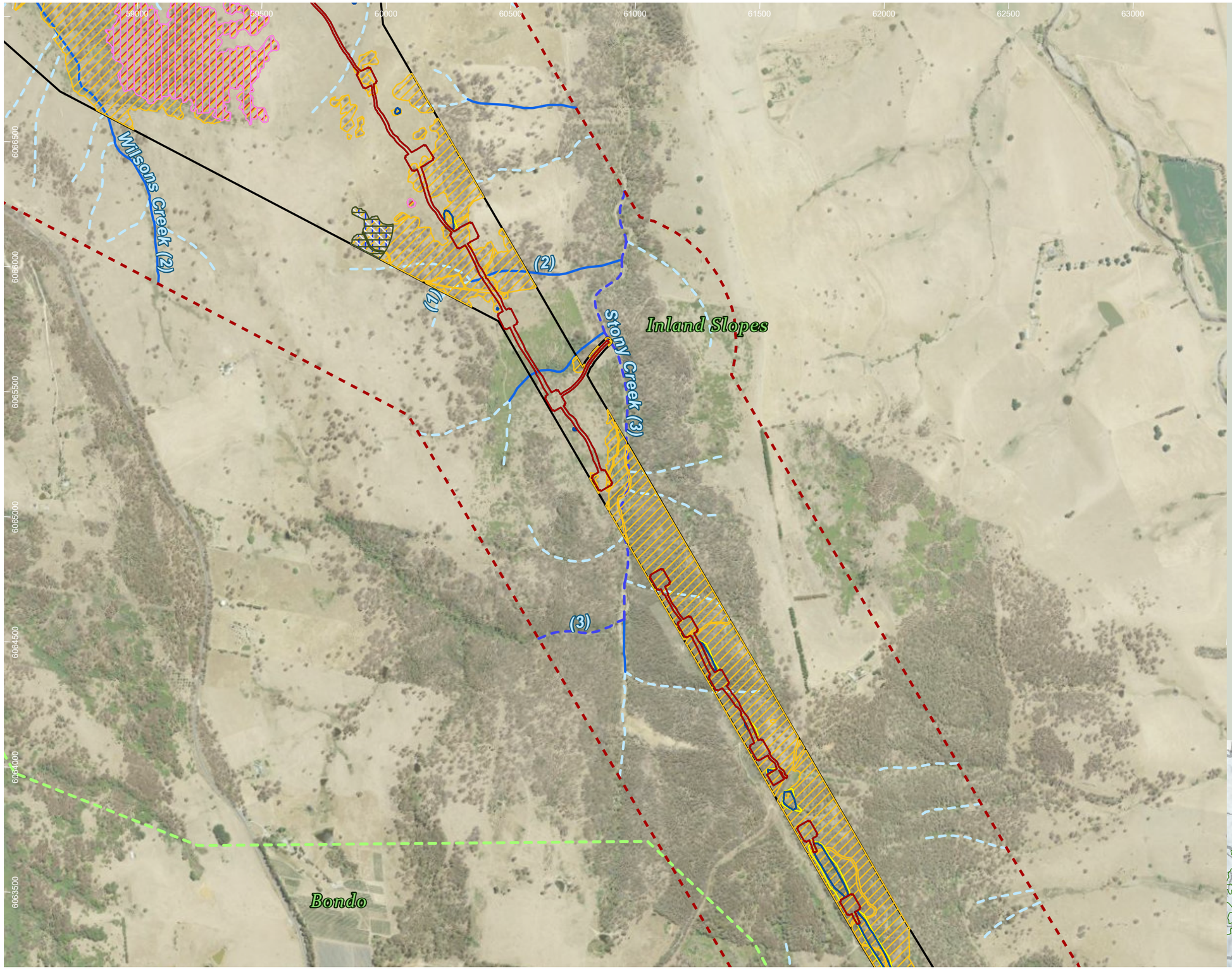


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

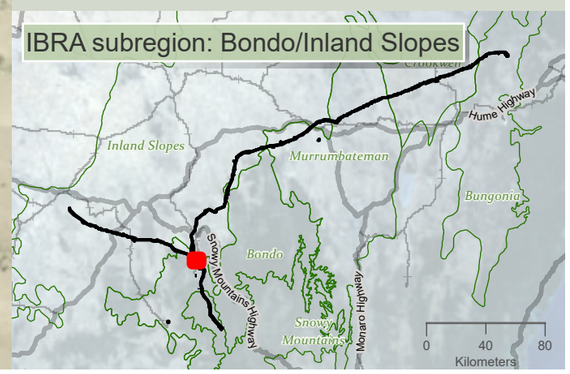
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Ninox strenua



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niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 23

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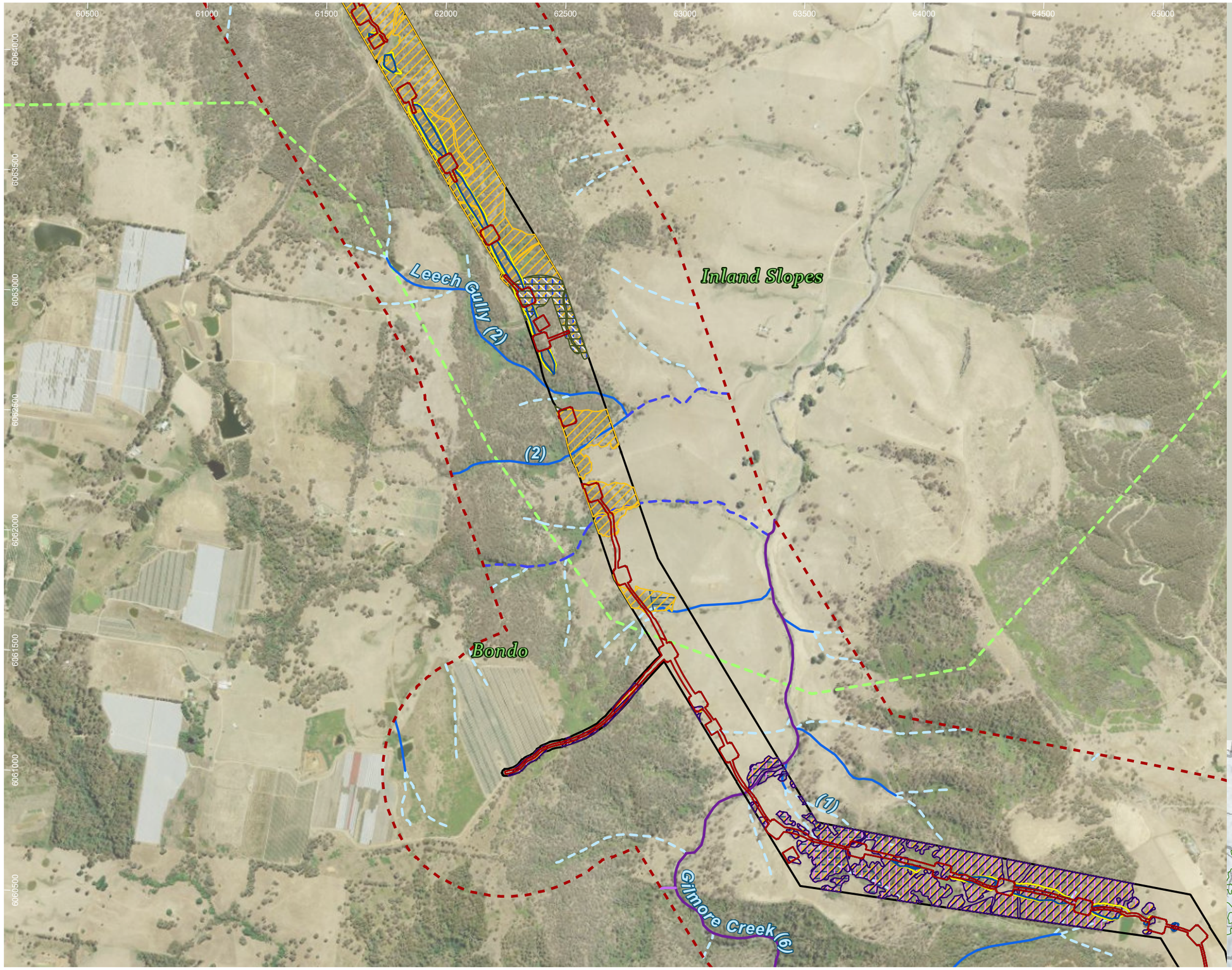


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

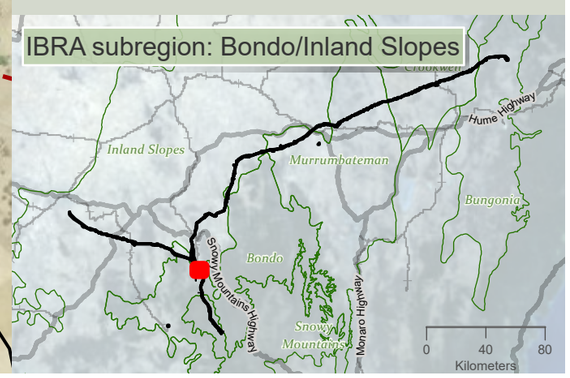
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 24

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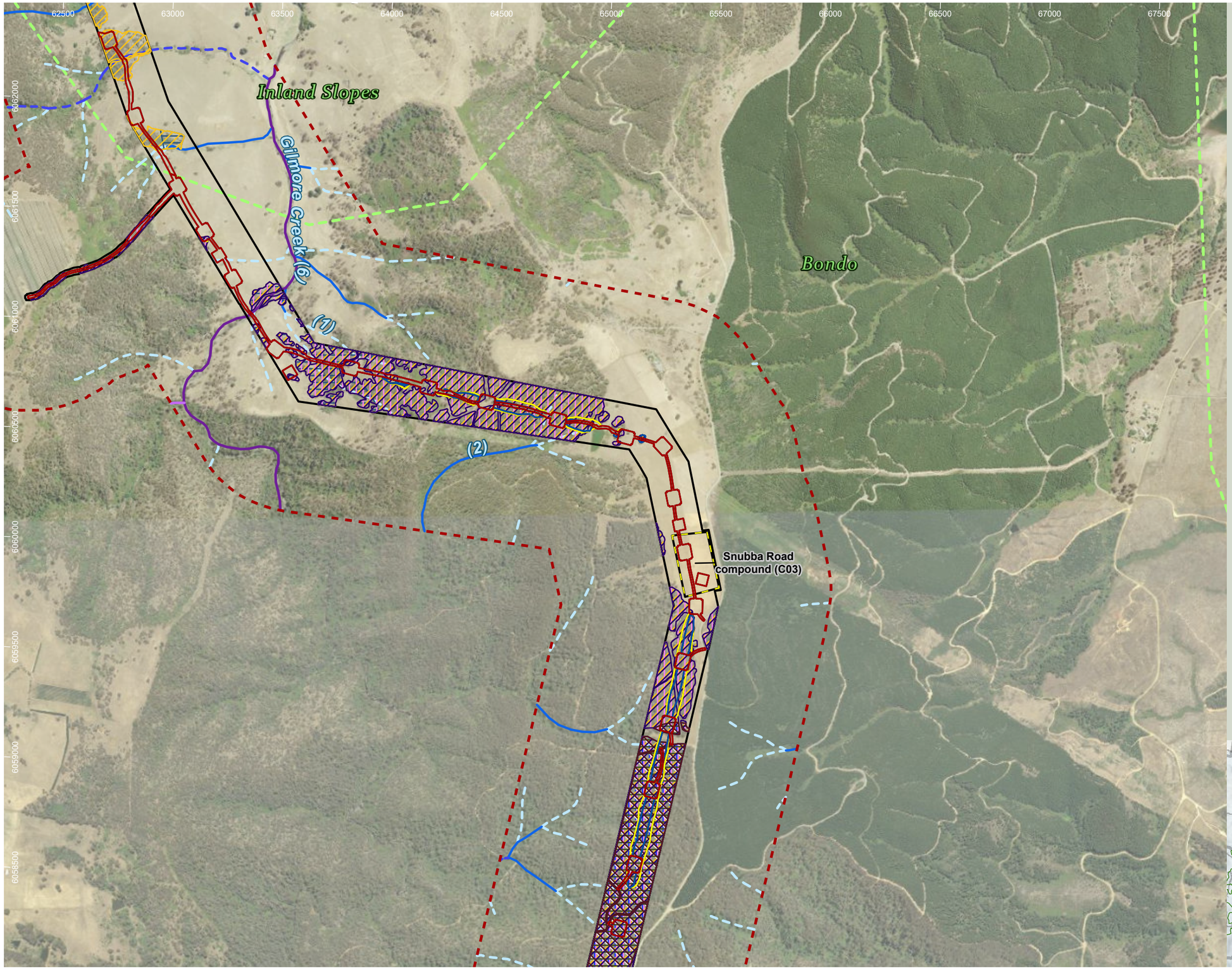


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

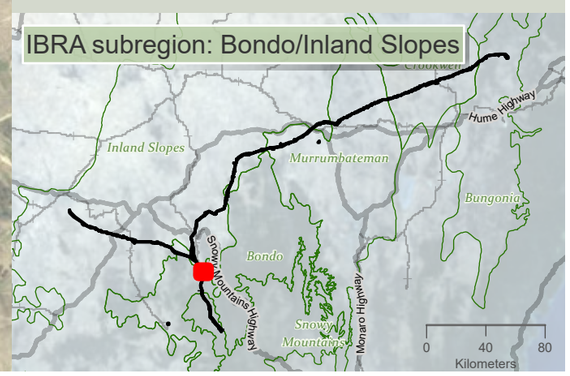
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae



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niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 25

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HumeLink project areas

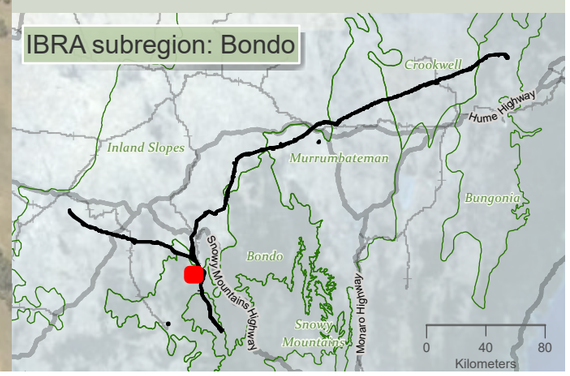
- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

- 1
- 2
- 3
- 5

Bird species habitat

- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Ninox strenua
- Petroica rodinogaster



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 26

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HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

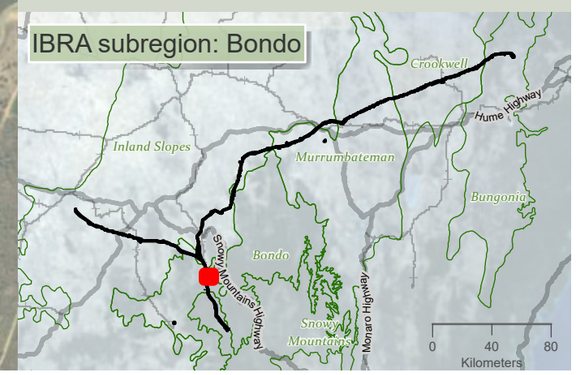
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 28

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62000 62500 63000 63500 64000 64500 65000 65500 66000 66500

6055500 6055000 6054500 6054000 6053500 6053000 6052500 6052000

Bondo

(1) (2) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

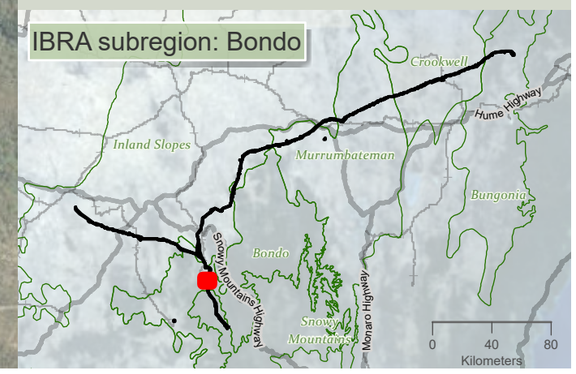
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae



niche Environment and Heritage

0 500
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 29

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61500 62000 62500 63000 63500 64000 64500 65000 65500 66000

6052000 6051500 6051000 6050500 6050000 6049500 6049000 6048500 6048000

Snubba Creek (4)

Ridings Creek (2)

Bondo

Snubba Road compound (C16)

(1)

(3)

Snubba Creek (3)

Snowy Mountains

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

- 1
- 2
- 3
- 4
- 5

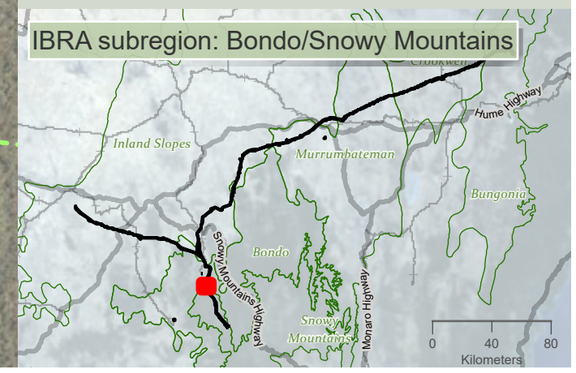
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae
- Tyto tenebricosa

IBRA subregion: Bondo/Snowy Mountains



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niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 30

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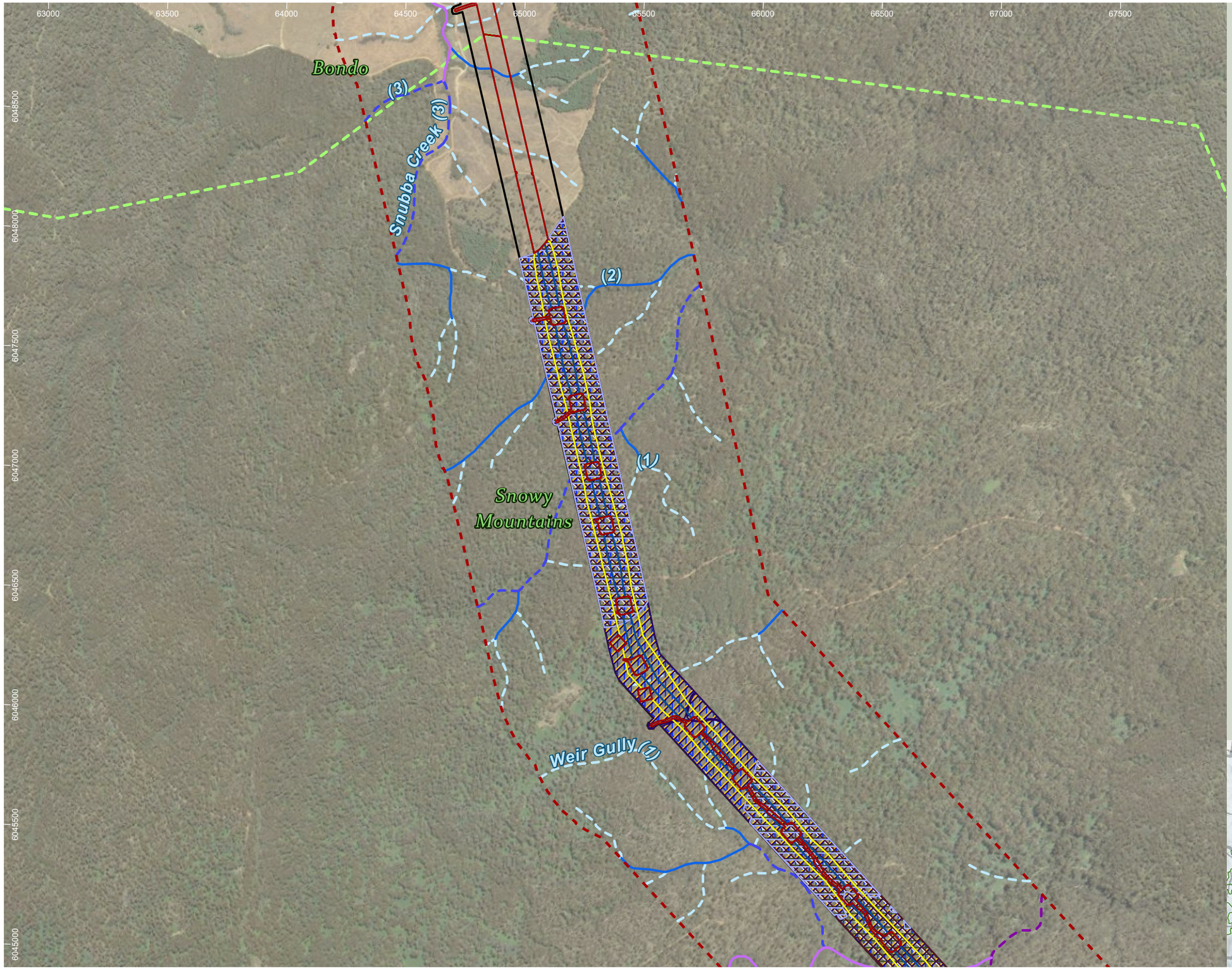


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

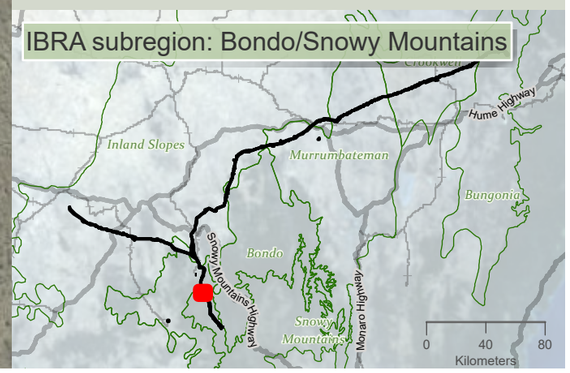
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae
- Tyto tenebricosa



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 31

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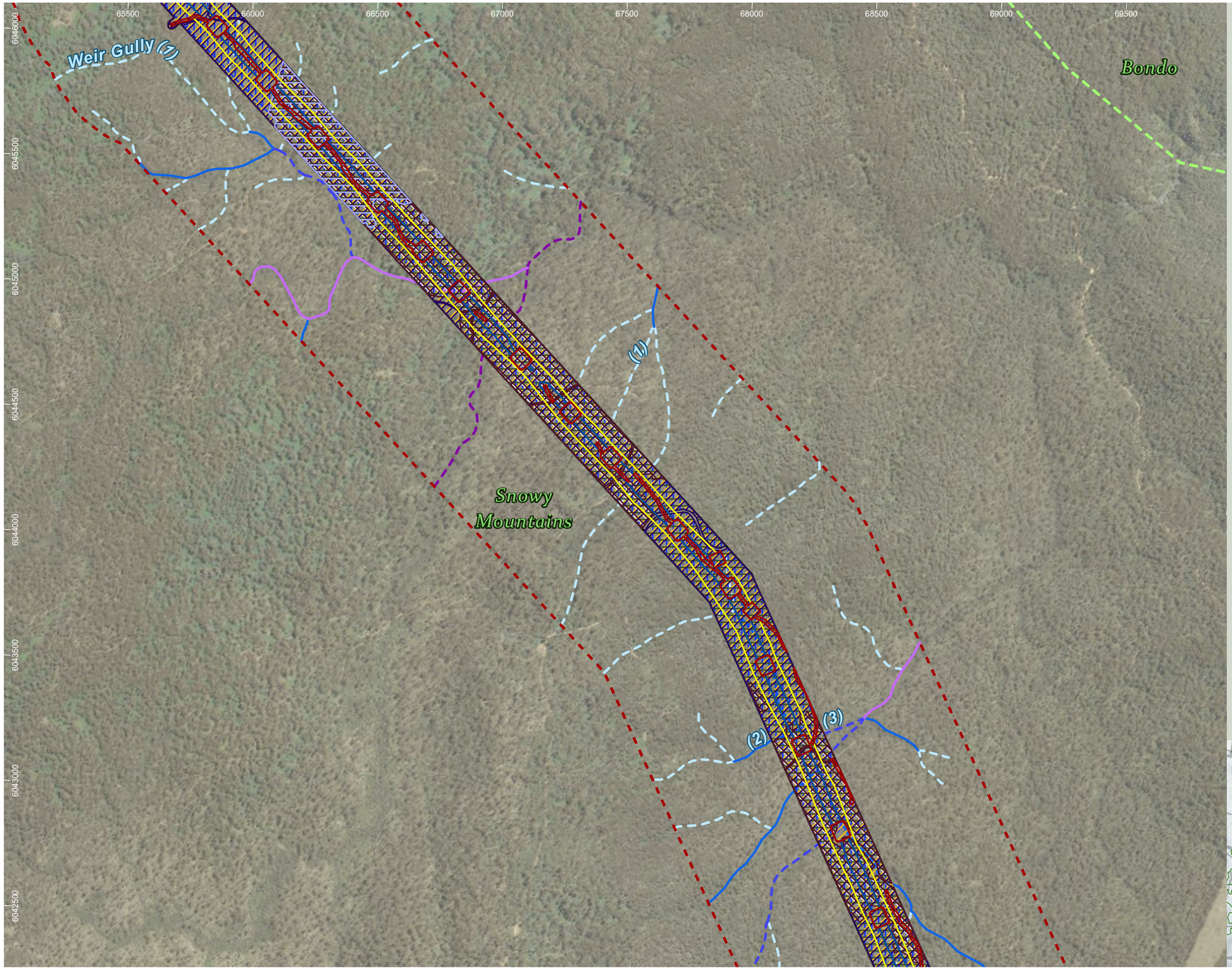


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

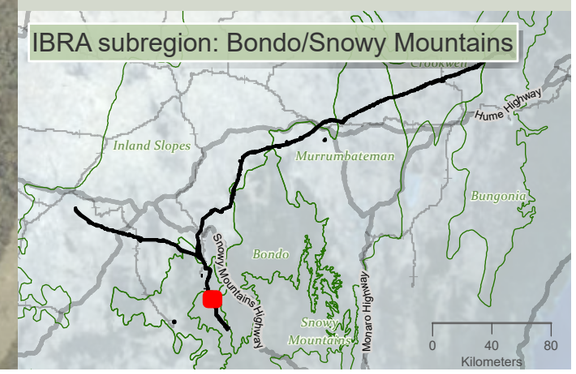
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae
- Tyto tenebricosa



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 32

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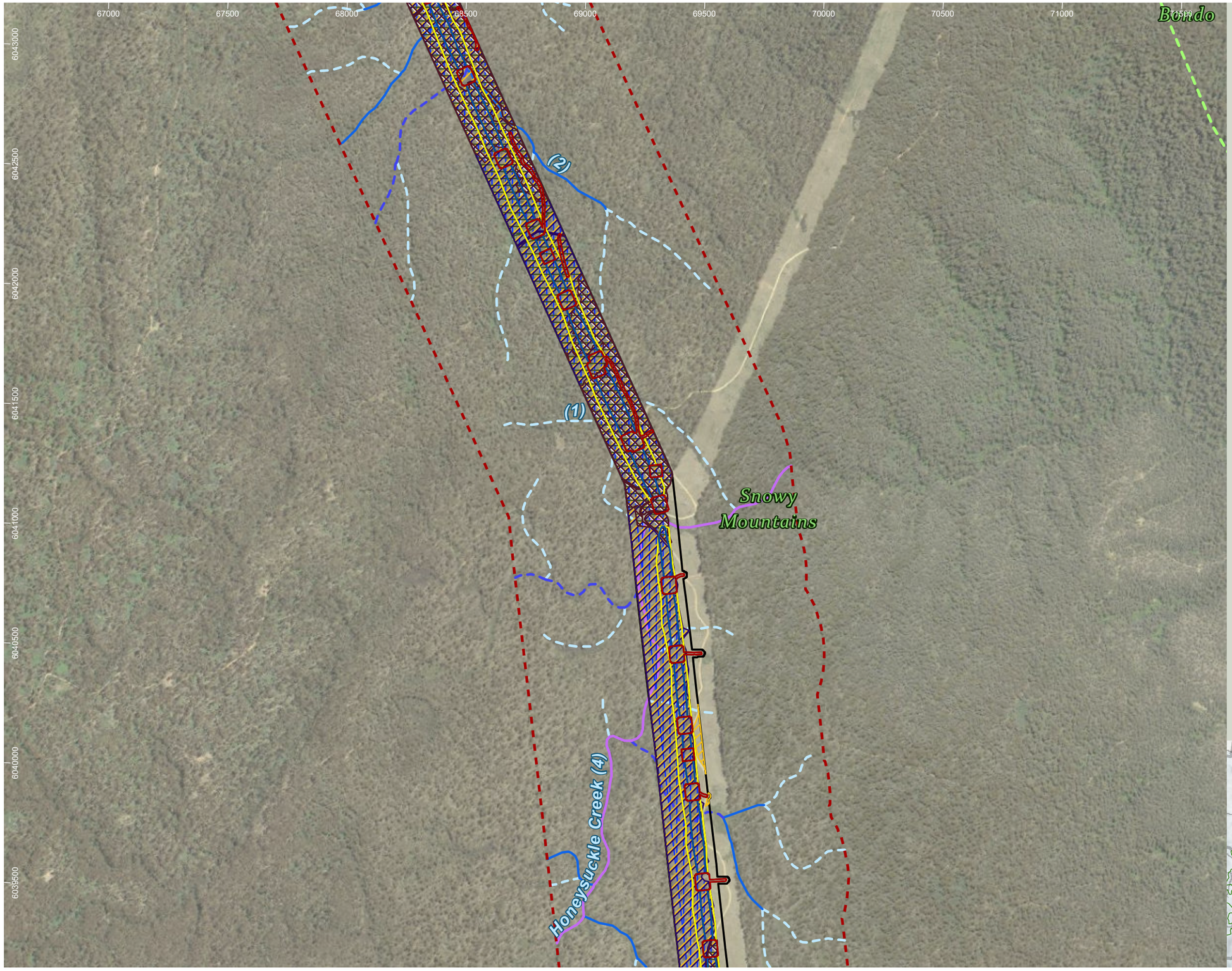


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

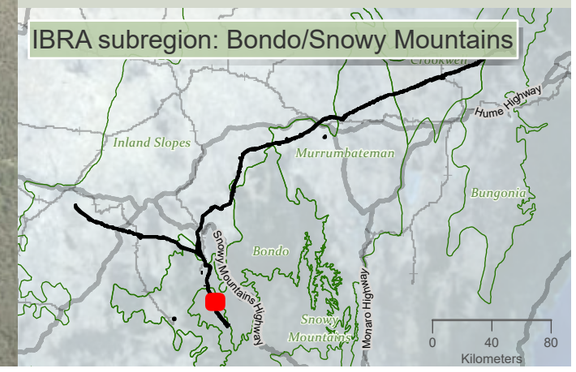
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 33

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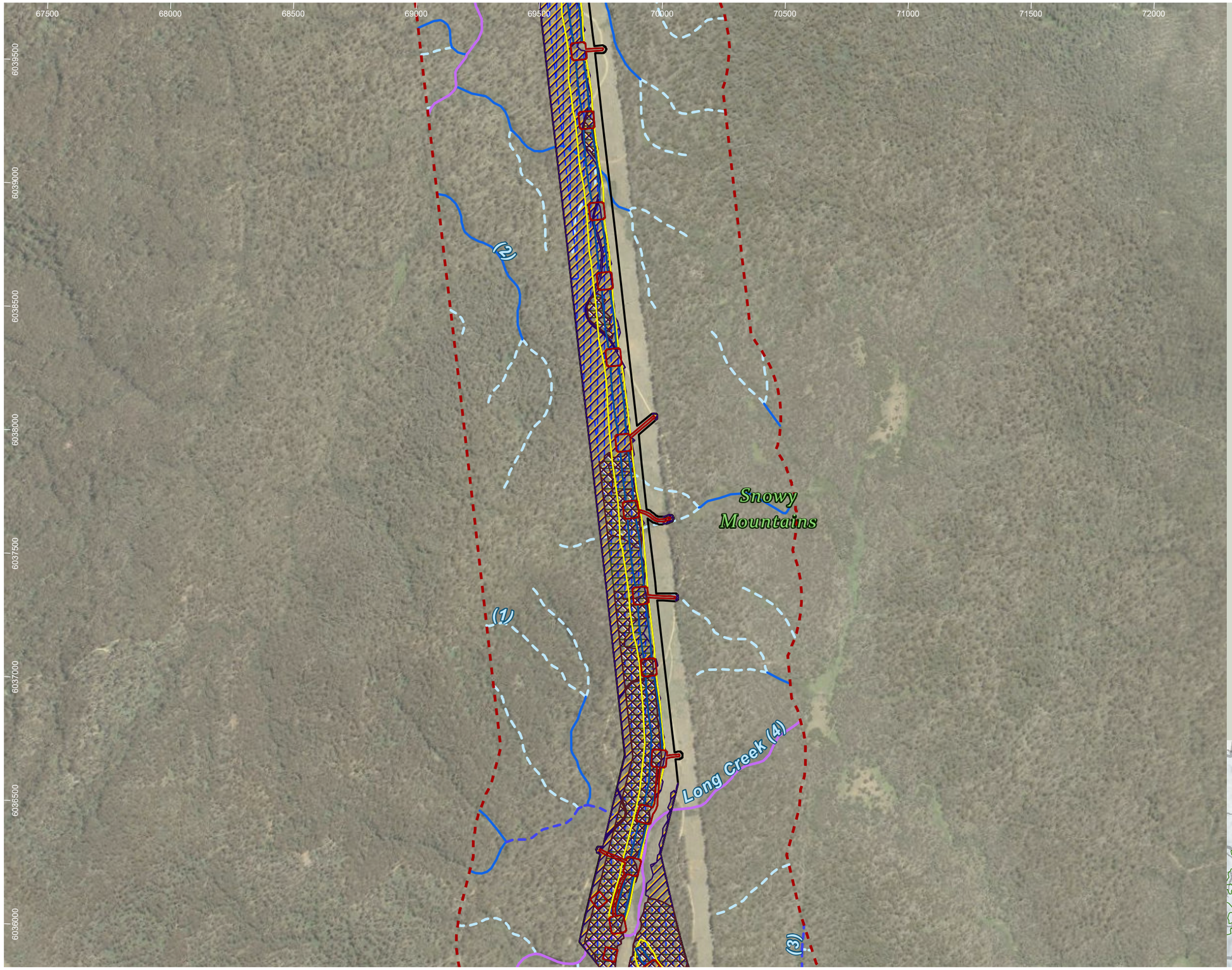


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

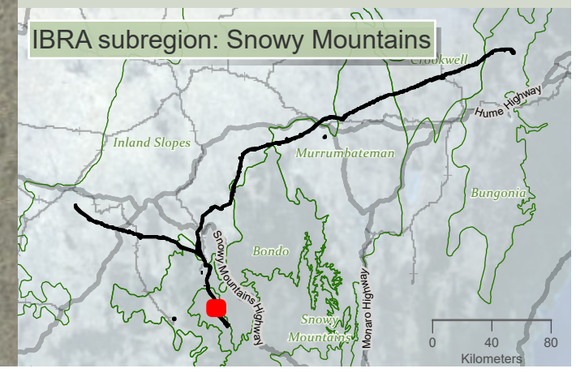
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 34

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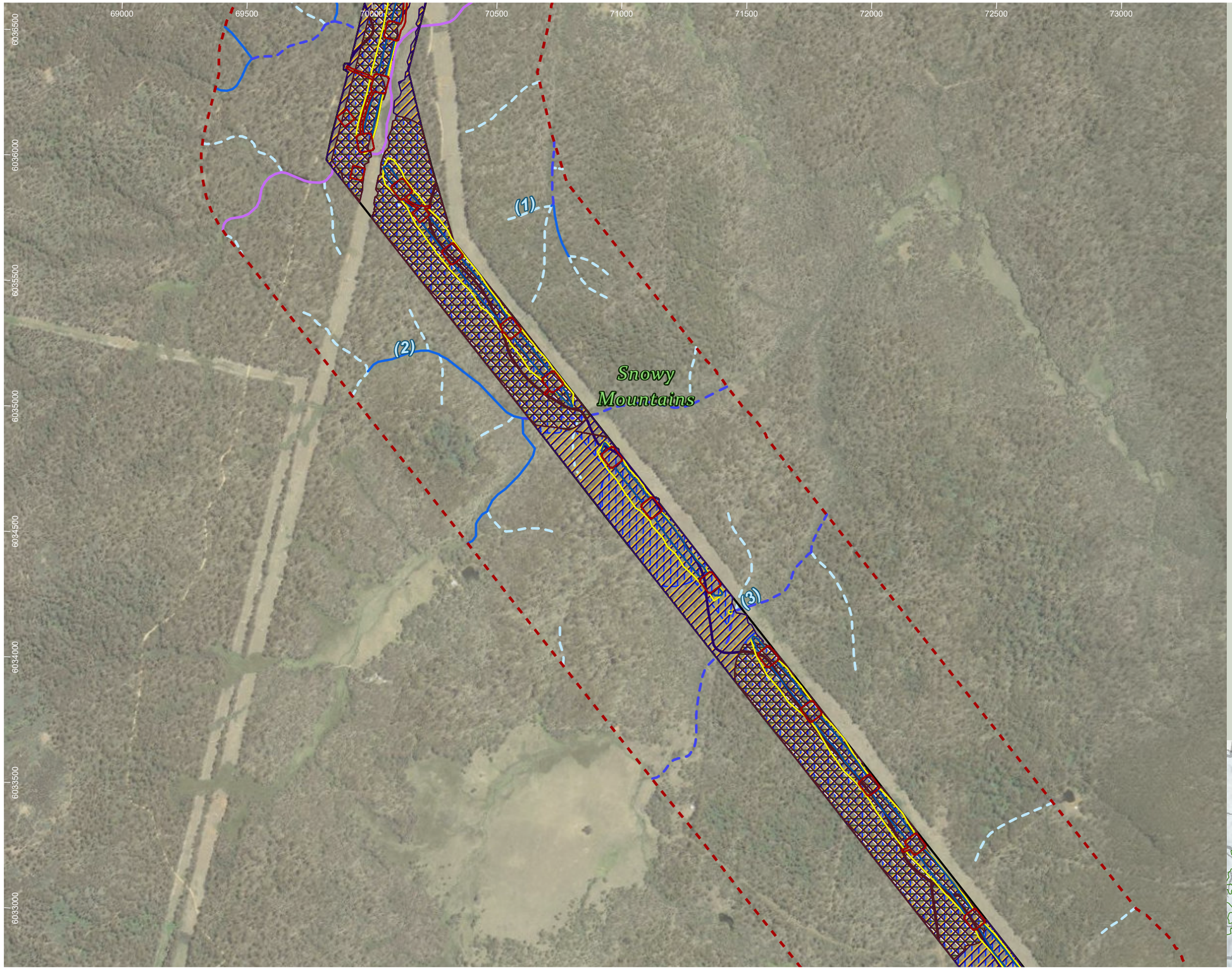


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

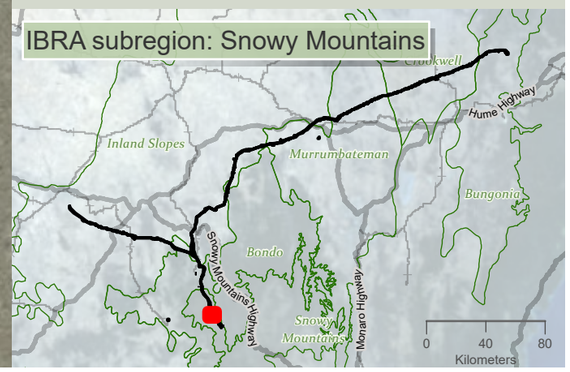
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae



niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 36

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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71000 71500 72000 72500 73000 73500 74000 74500 75000 75500

6033500 6033000 6032500 6032000 6031500 6031000 6030500

(3) (2) (1) (3)

Bondo

Snowy Mountains

Plain Creek

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

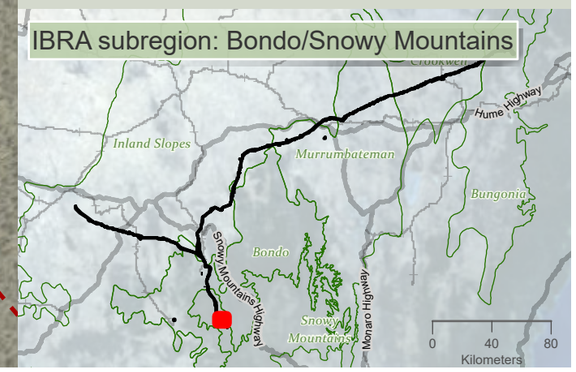
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae



niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 37

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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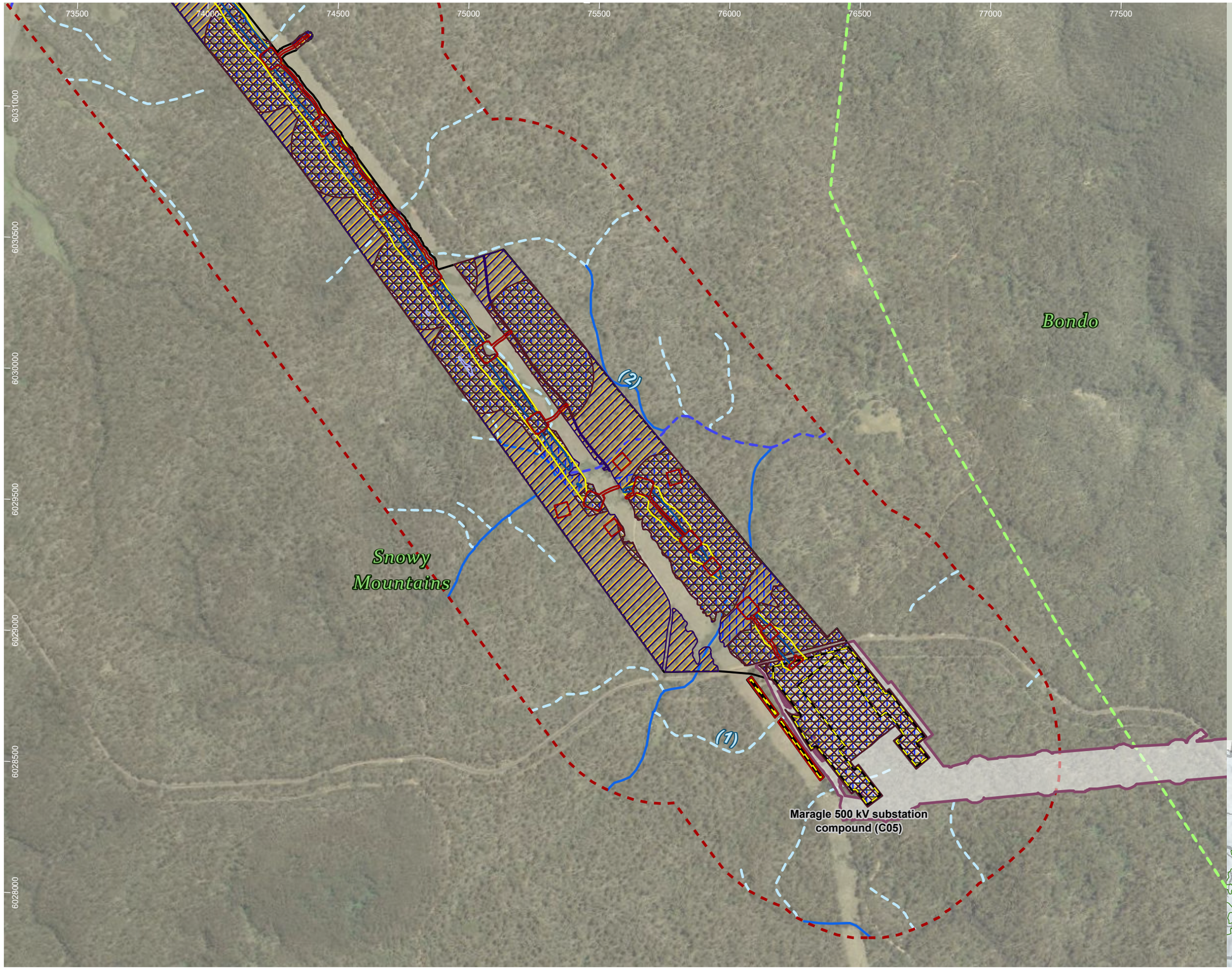


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- Snowy 2.0 Transmission Connection project
- IBRA subregion

Strahler stream order

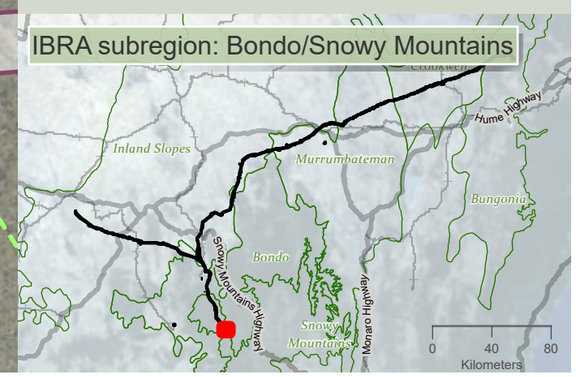
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae
- Tyto tenebricosa



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 38

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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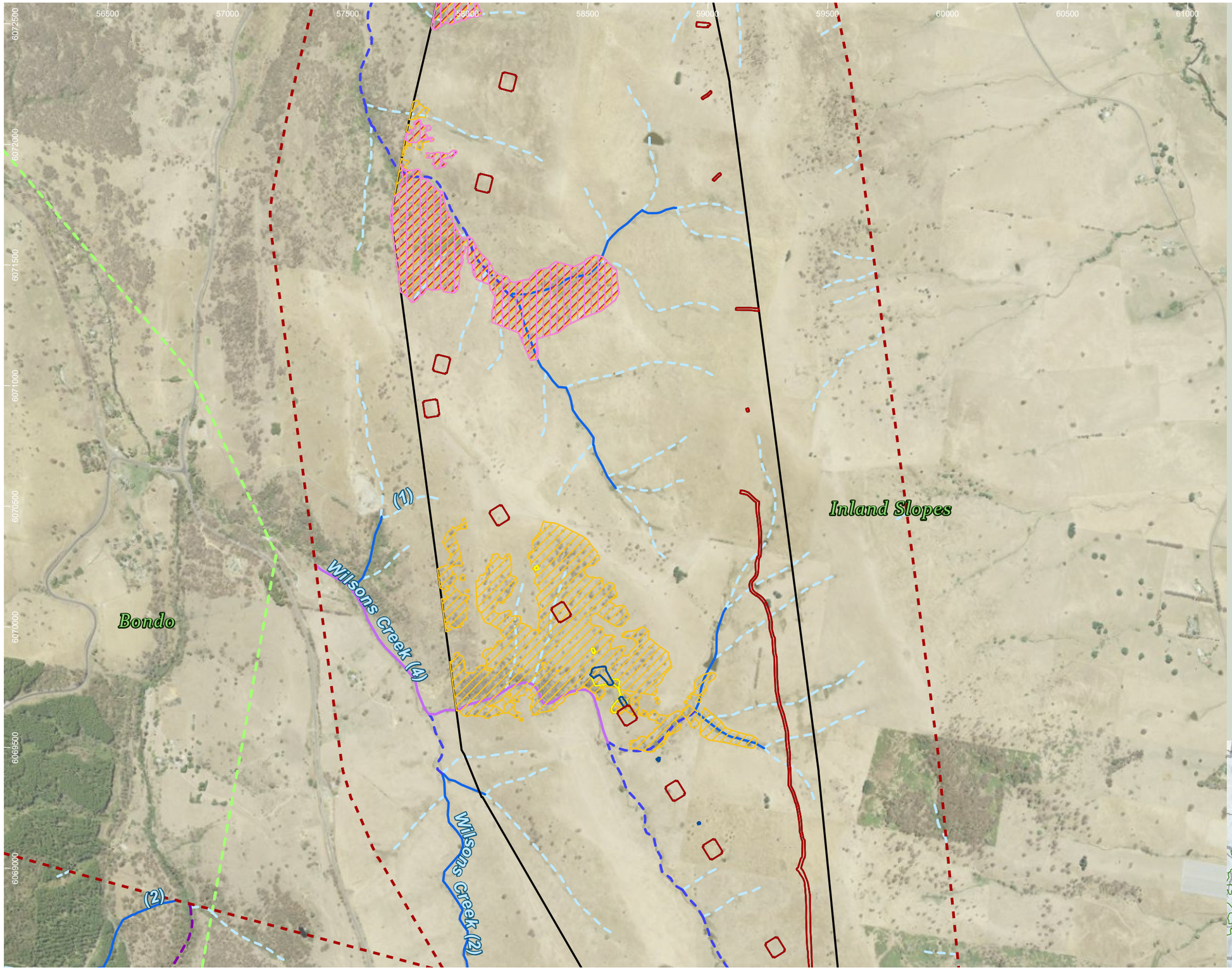


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

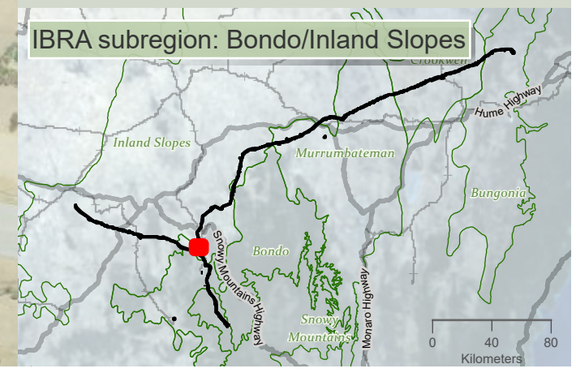
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Hieraaetus morphnoides
- Lophoictinia isura



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 39

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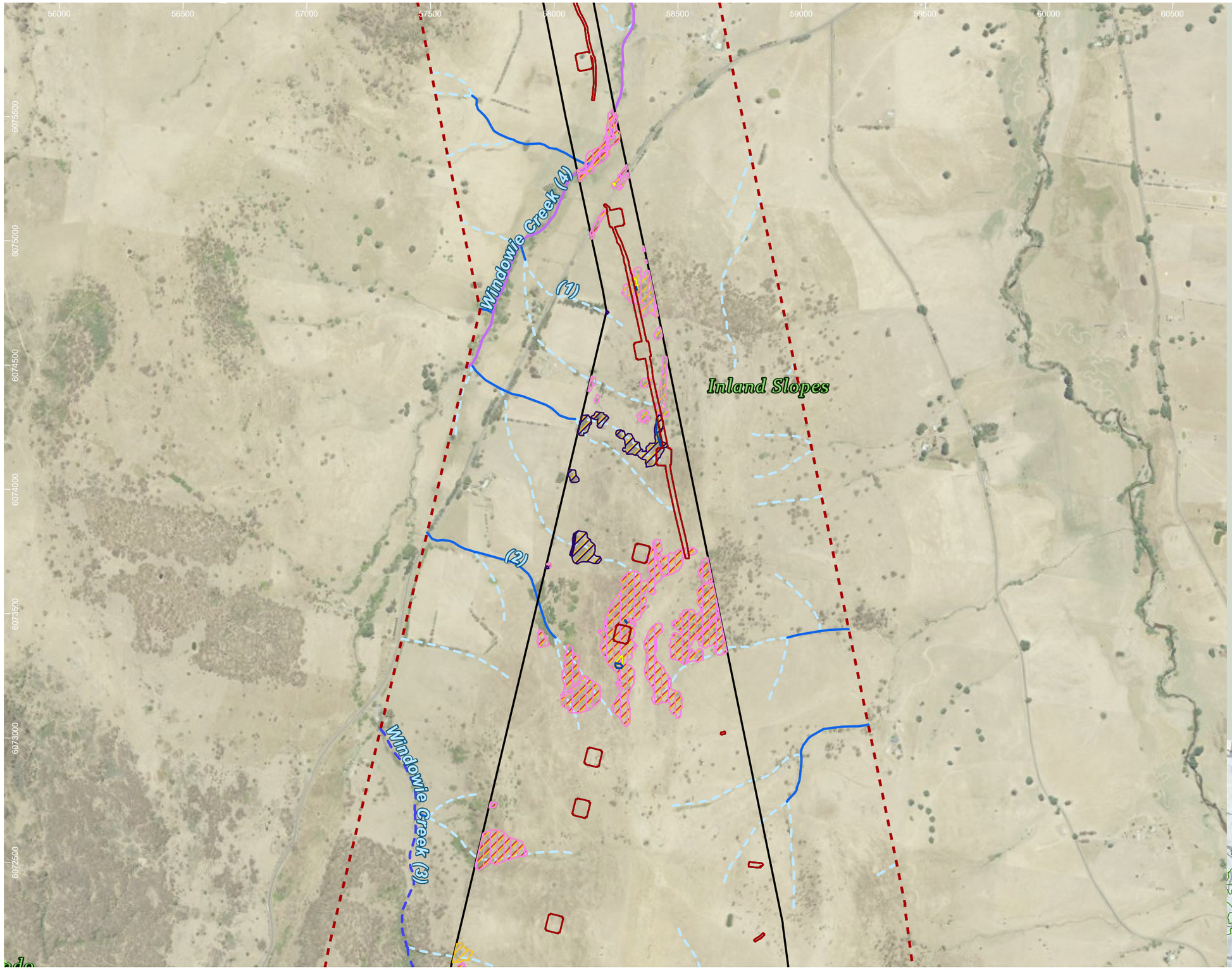


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

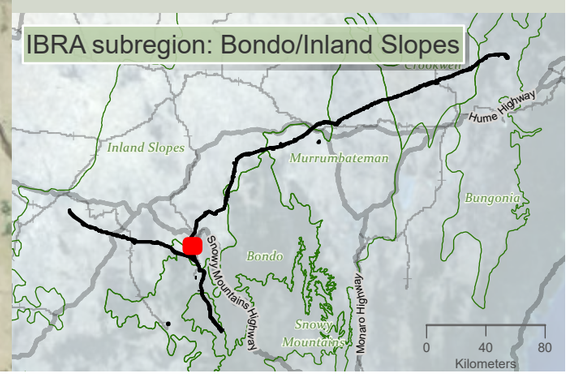
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Hieraaetus morphnoides
- Lophoictinia isura
- Petroica rodinogaster



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 40

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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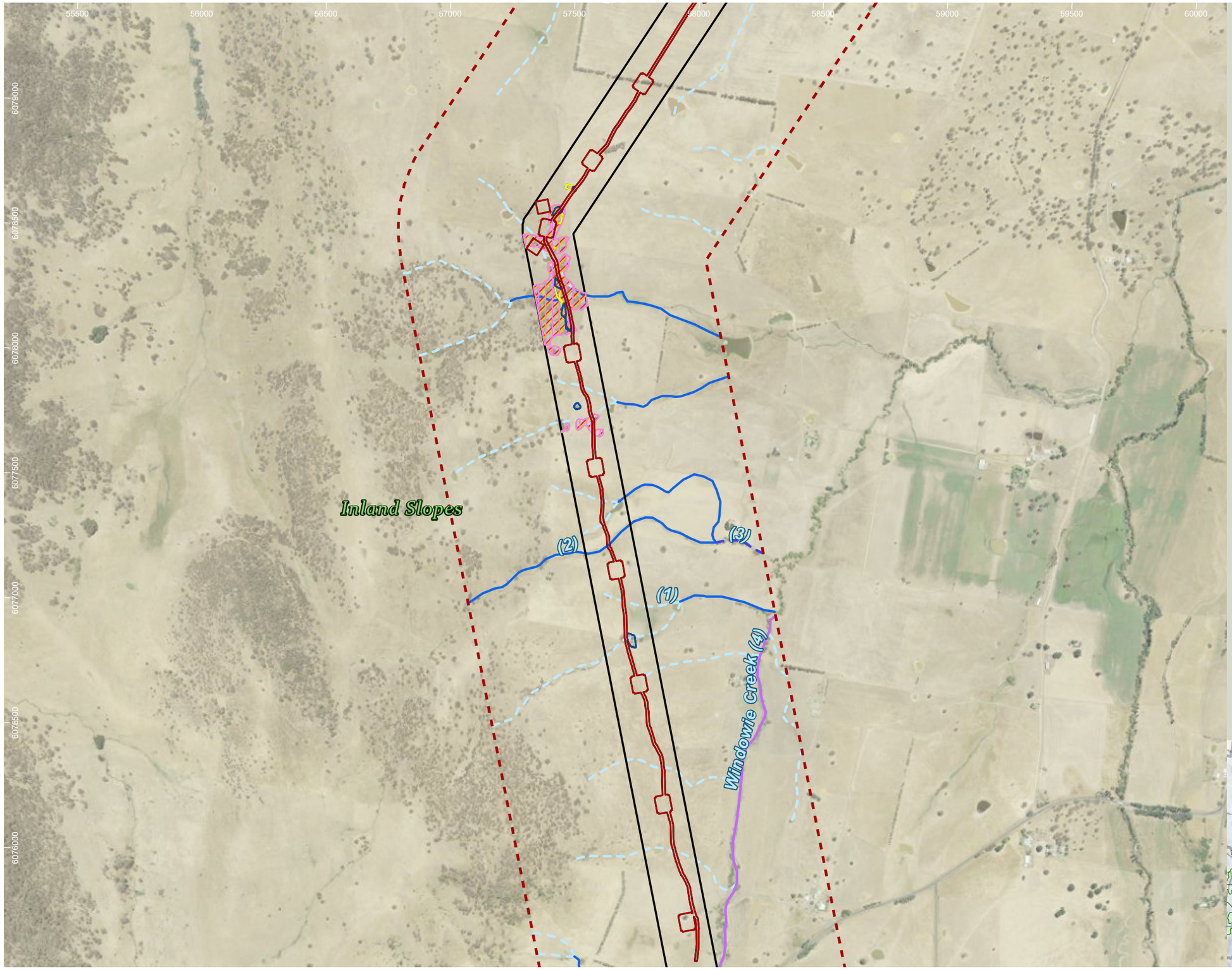


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

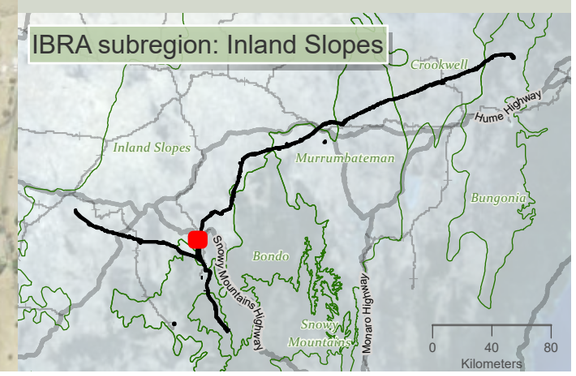
- 0
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Hieraaetus morphnoides
- Lophoictinia isura



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niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

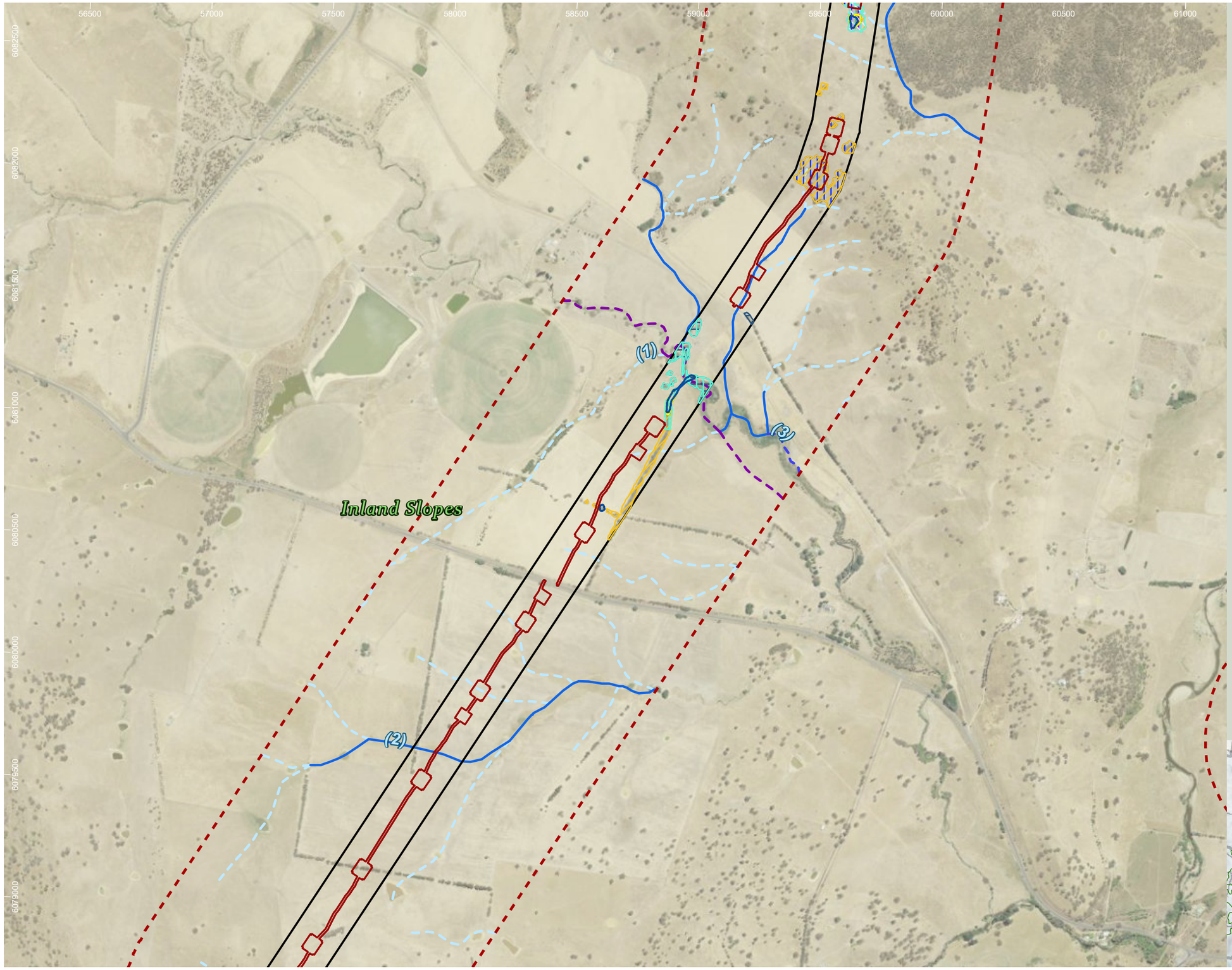
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 41

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

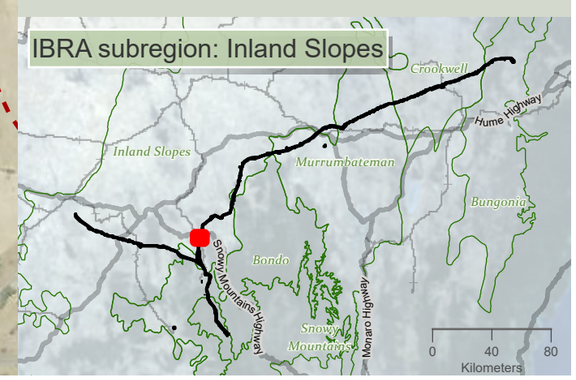
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 42

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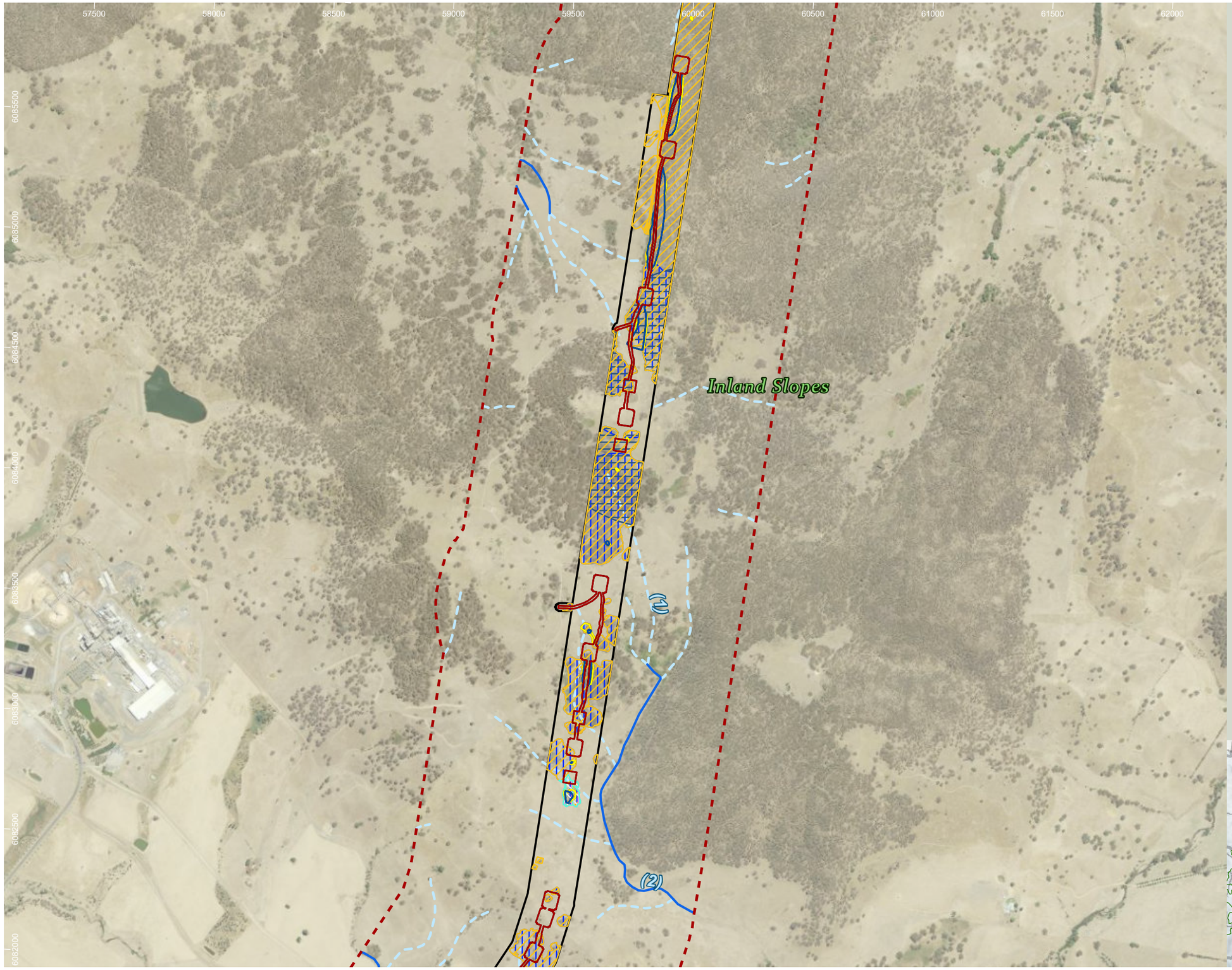


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

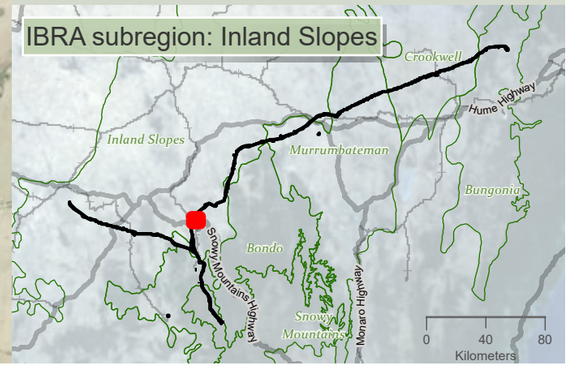
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 44

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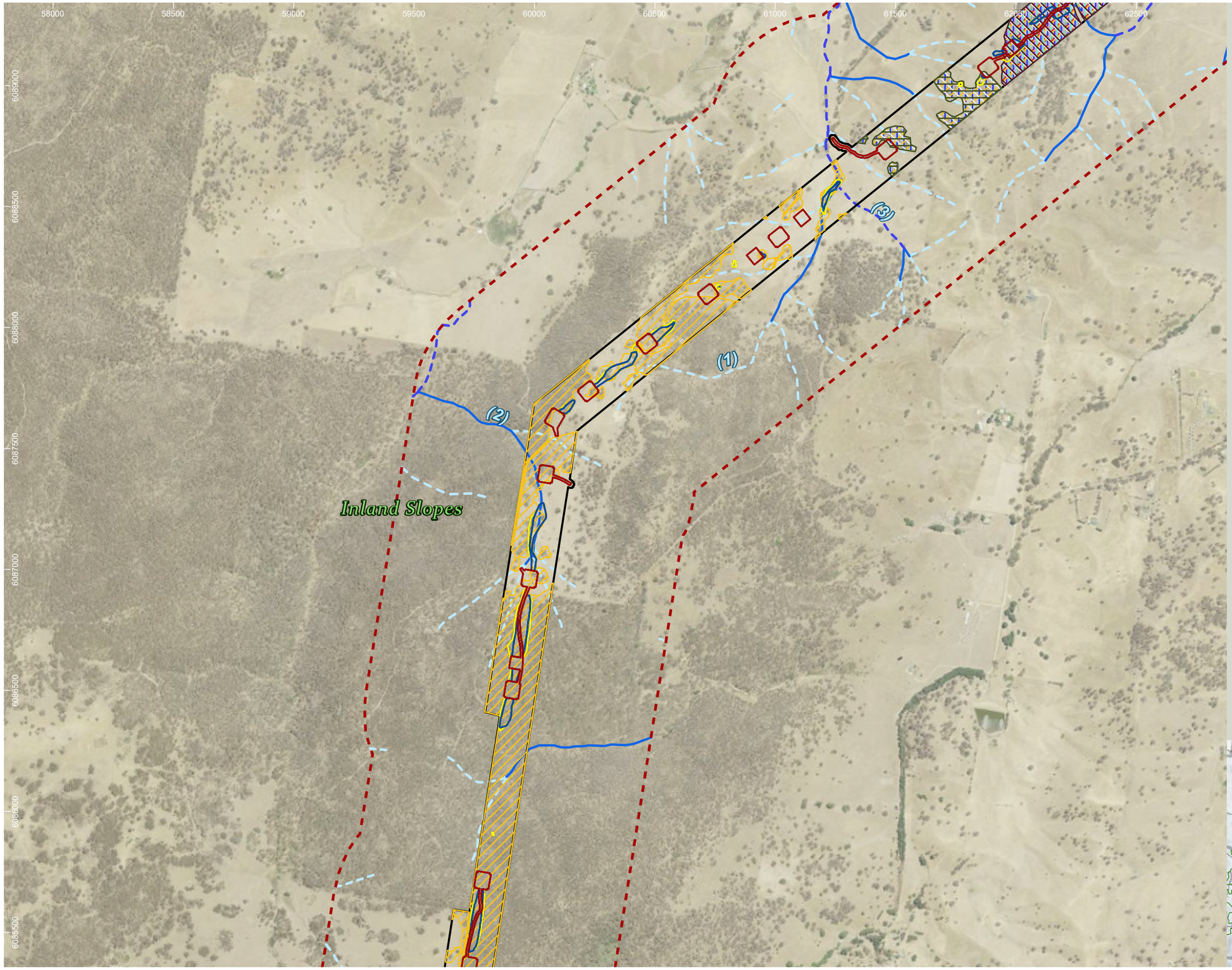


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

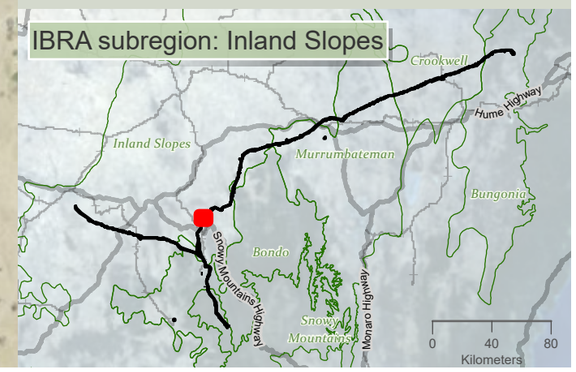
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Ninox strenua
- Polytelis swainsonii
- Tyto novaehollandiae



niche Environment and Heritage

0 500 m

N

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 45

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61000 61500 62000 62500 63000 63500 64000 64500

6095000 6094000 6093000 6092000 6091000 6090000 6089000

Gocup Creek (4)

(1)

(3)

(2)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

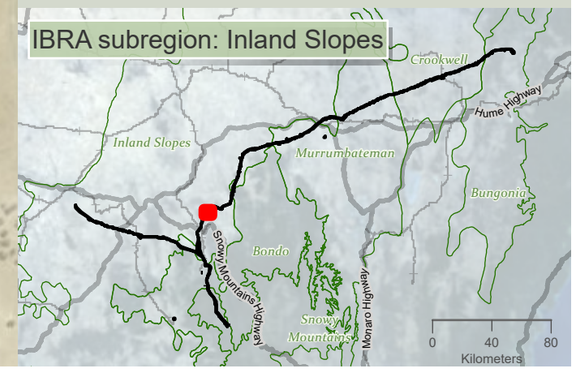
- 1
- 2
- 3
- 4
- 8

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Ninox strenua
- Polytelis swainsonii
- Tyto novaehollandiae



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 46

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63500 64000 64500 65000 65500 66000 66500 67000

6094000 6093500 6093000 6092500 6092000 6091500 6091000

(1) (2) (3) (4) (8)

Inland Slopes

Tumut River (8)

Gocup Creek (4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

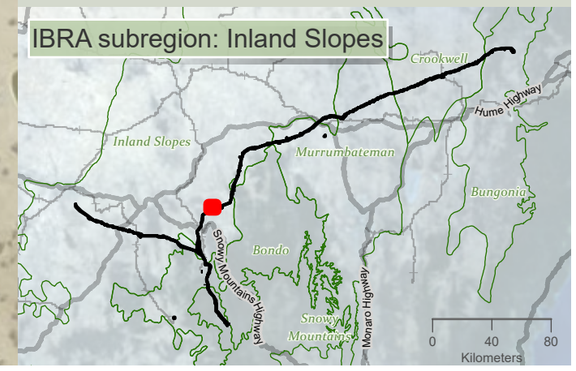
- 1
- 2
- 3
- 4
- 5
- 8

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 47

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66500 67000 67500 68000 68500 69000 69500 70000

6094000 6093500 6093000 6092500 6092000 6091500

(1) (2) (3) (5)

Inland Slopes

Killimicat Creek

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

- 1
- 2
- 3
- 5

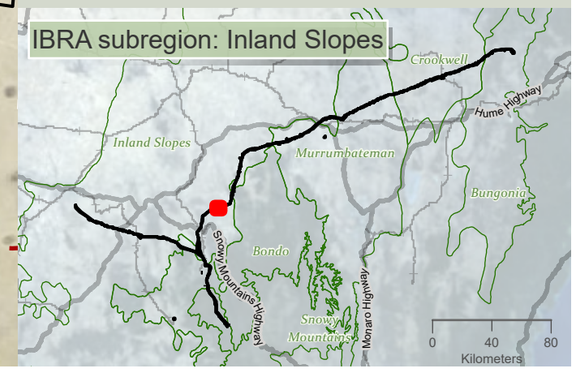
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae

IBRA subregion: Inland Slopes



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 48

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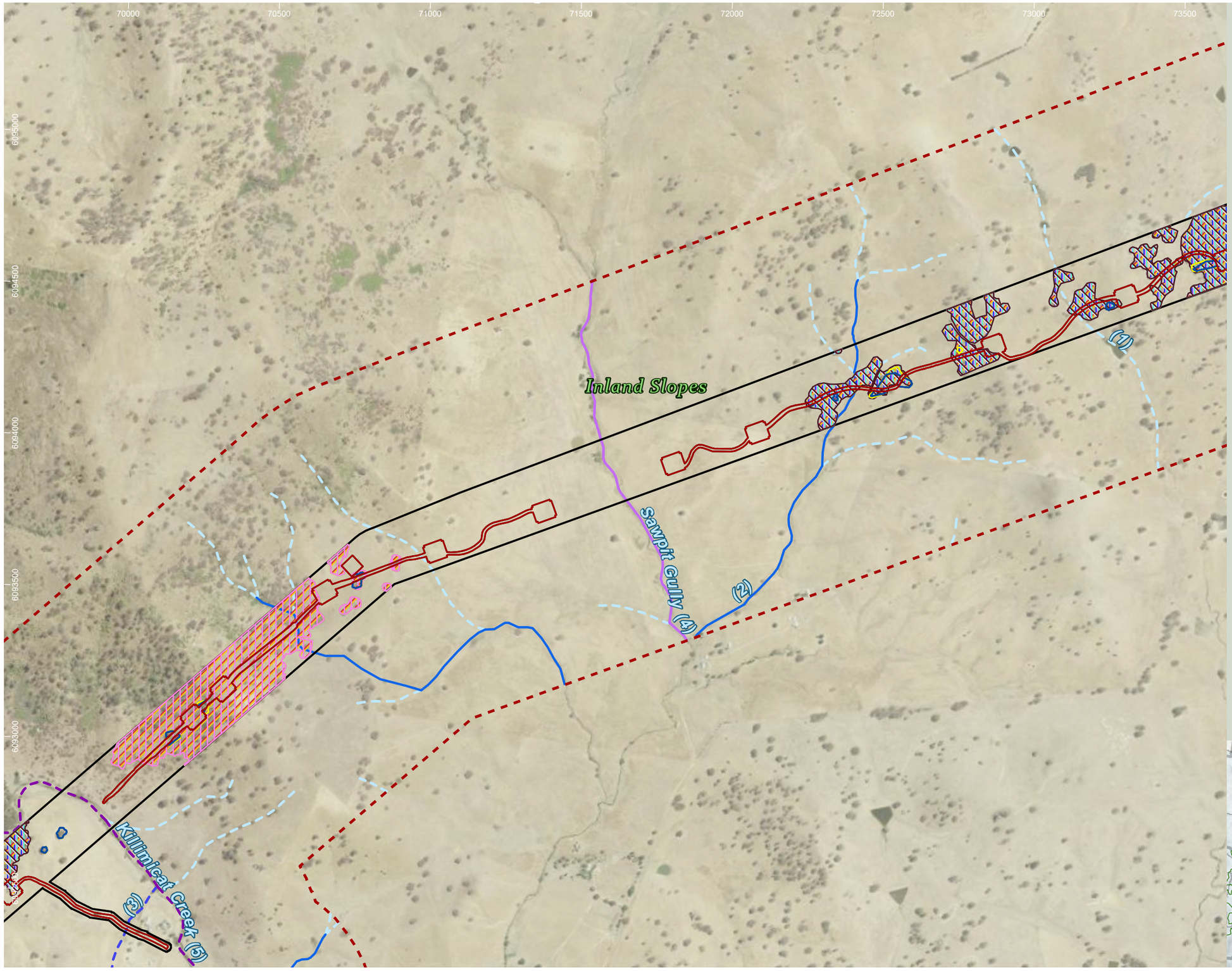


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

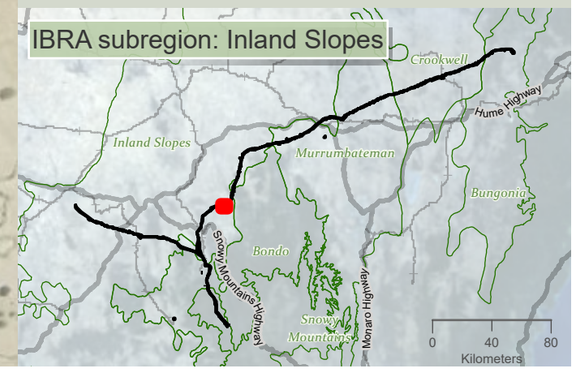
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 49

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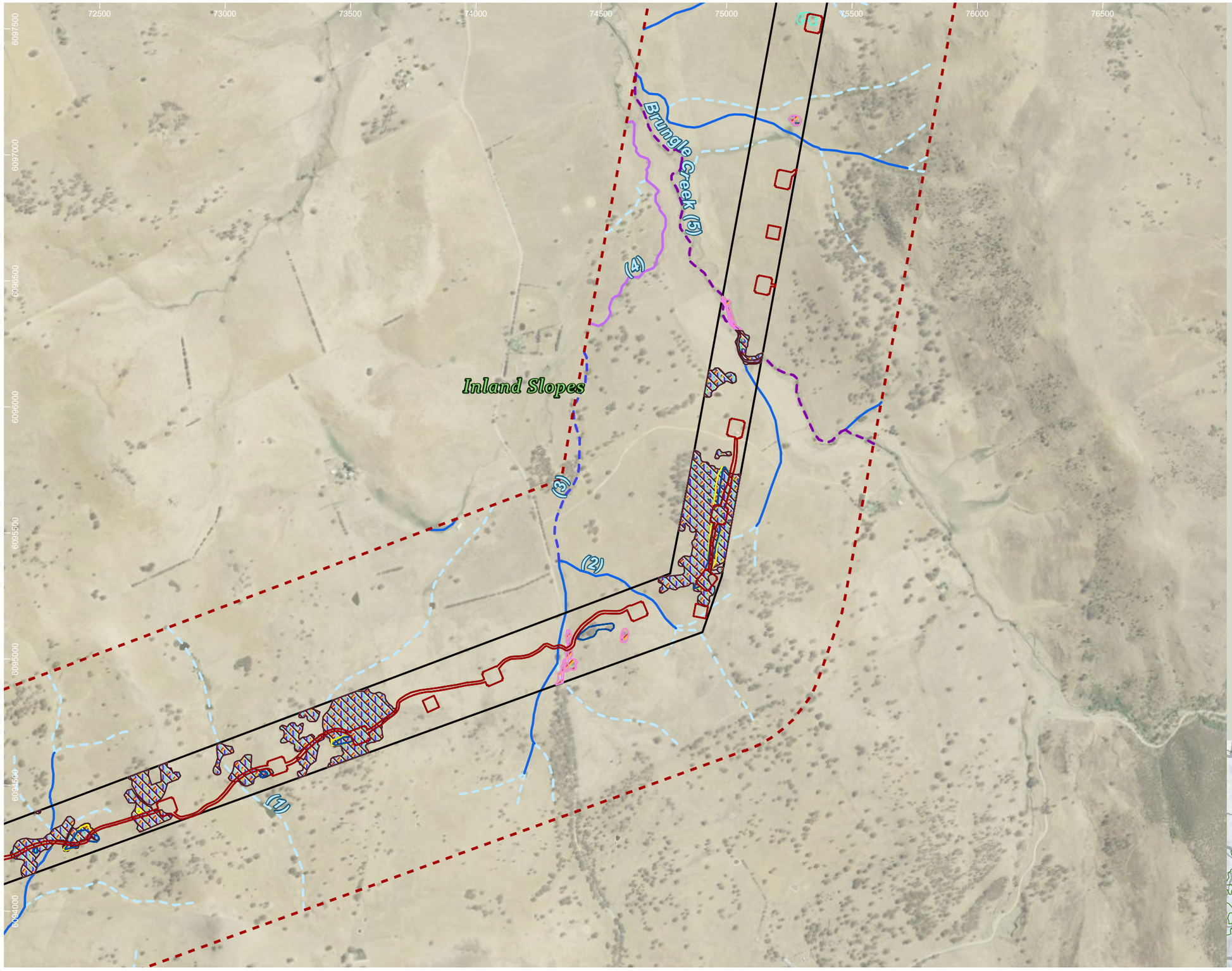


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

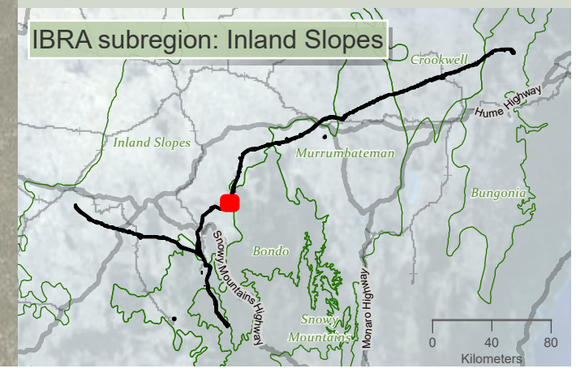
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

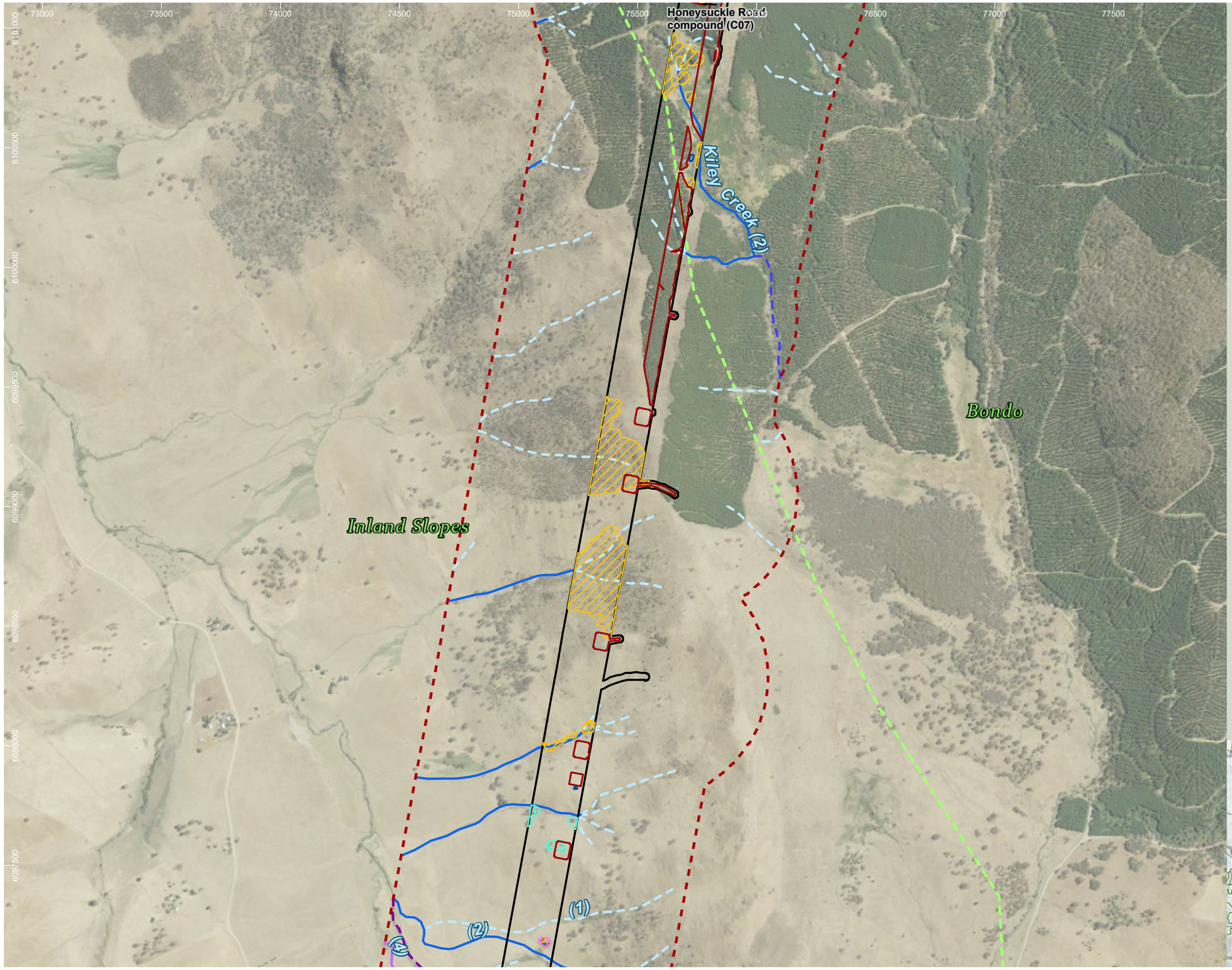
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 50

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

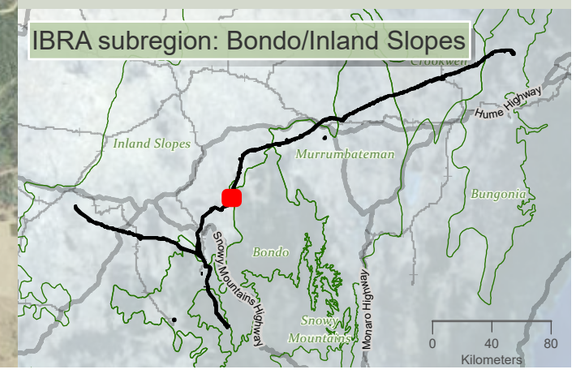
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Polytelis swainsonii



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 51

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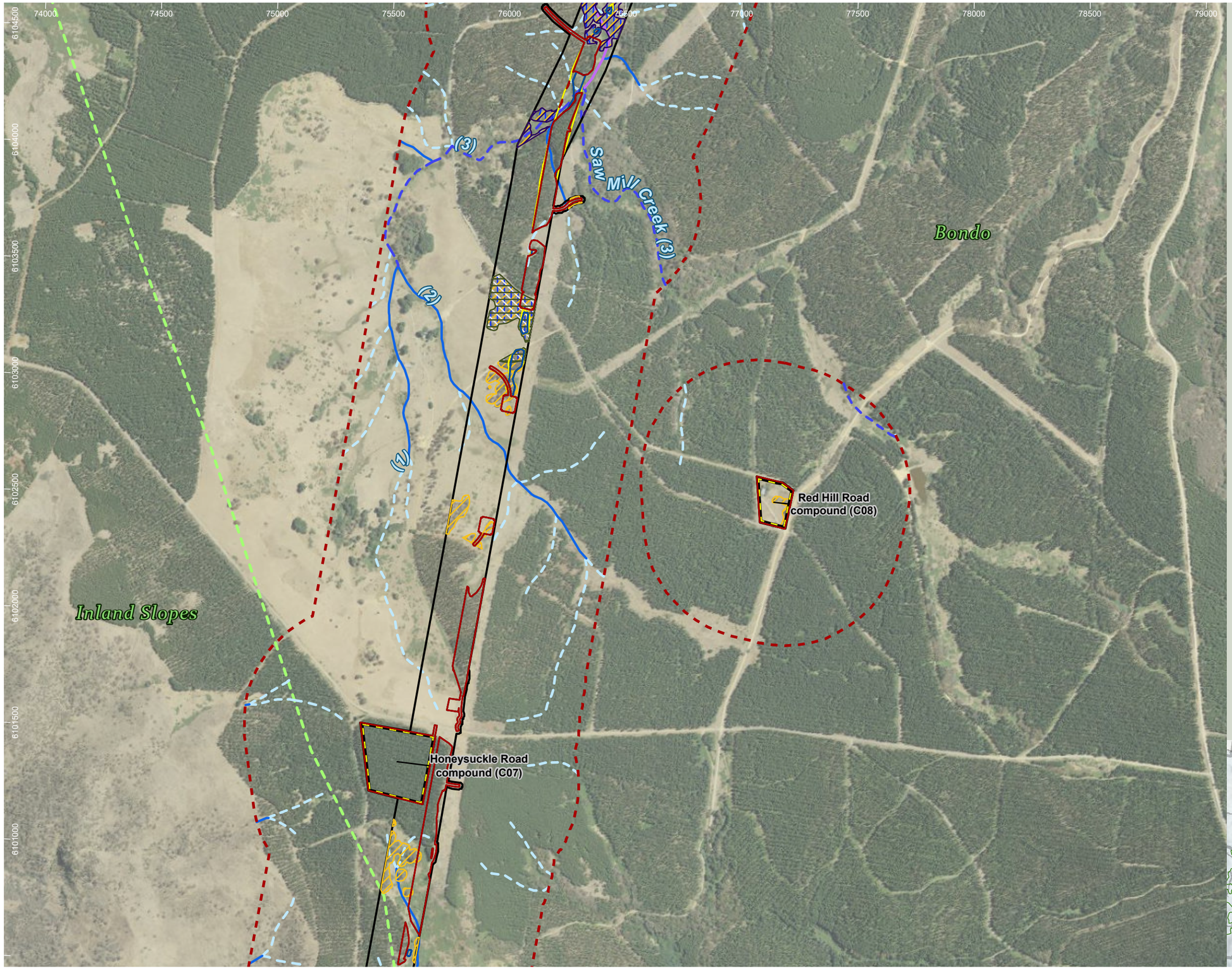


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

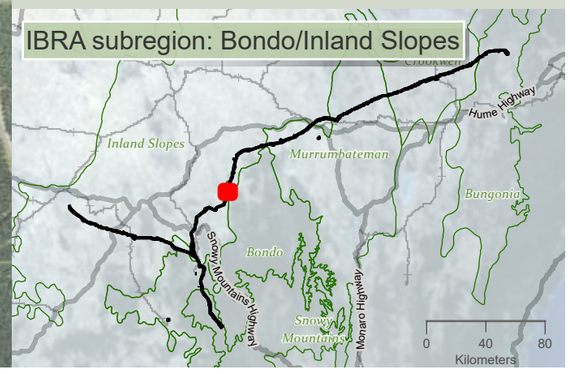
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 52

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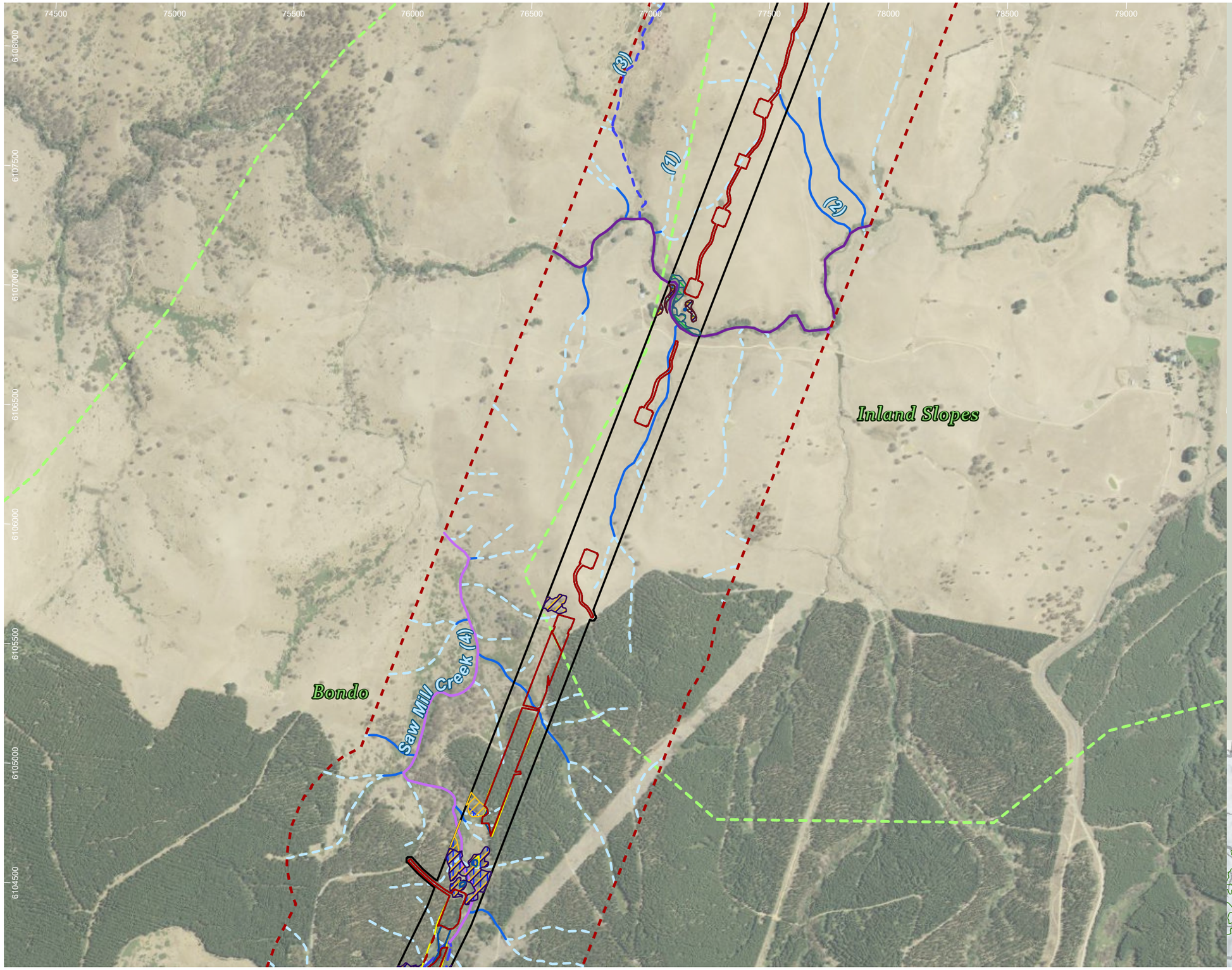


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

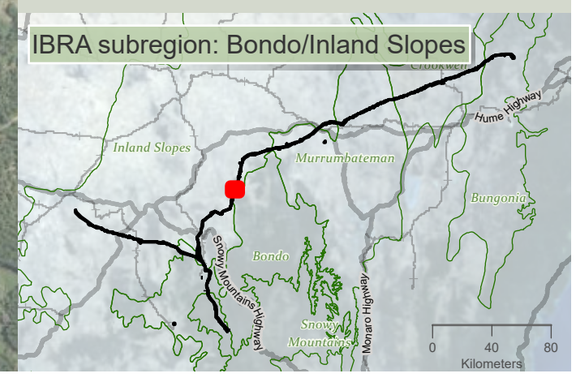
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 53

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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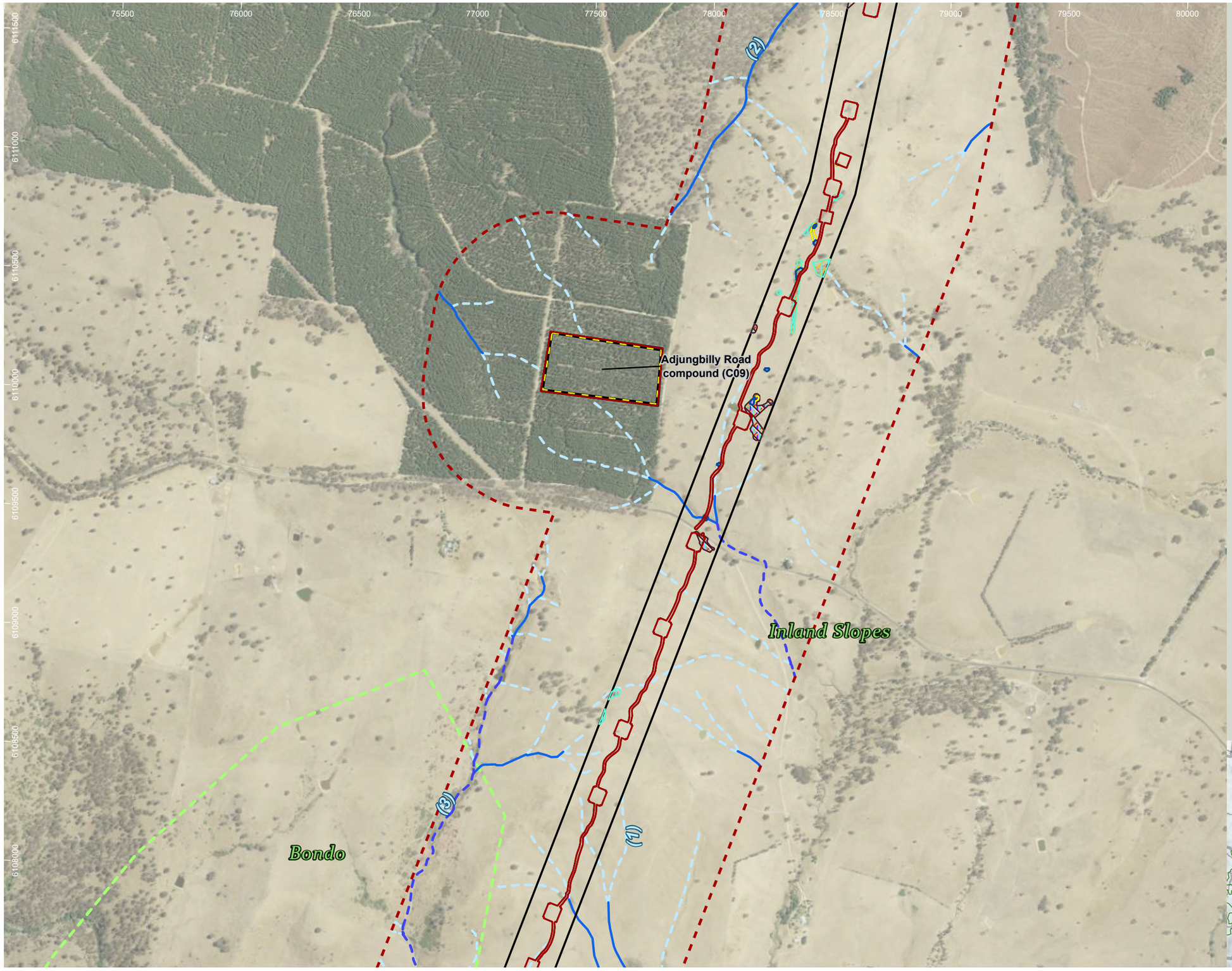


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

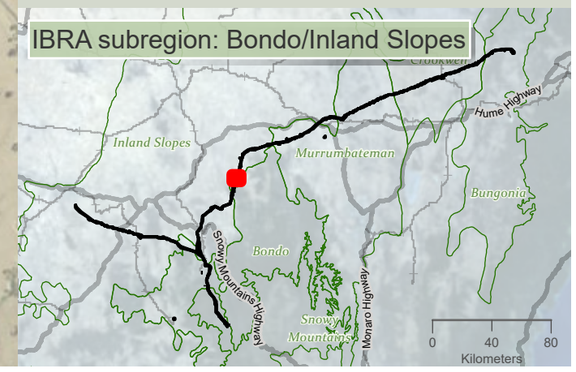
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



Drawn by: MatthewZajackowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 54

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

76500 77000 77500 78000 78500 79000 79500 80000 80500 81000

6114500 6114000 6113500 6113000 6112500 6112000 6111500 6111000

(1)

(2)

Inland Slopes

Obriens Creek (4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

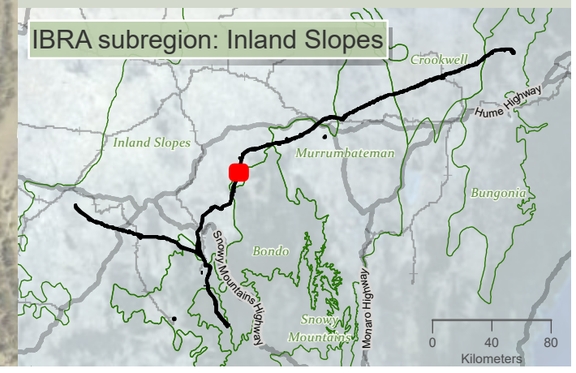
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



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niche Environment and Heritage

0 500
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 55

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

77000 77500 78000 78500 79000 79500 80000 80500 81000 81500

6118000 6117500 6117000 6116500 6116000 6115500 6115000 6114500

Inland Slopes

Cart Road Creek (3)

(2)

(1)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

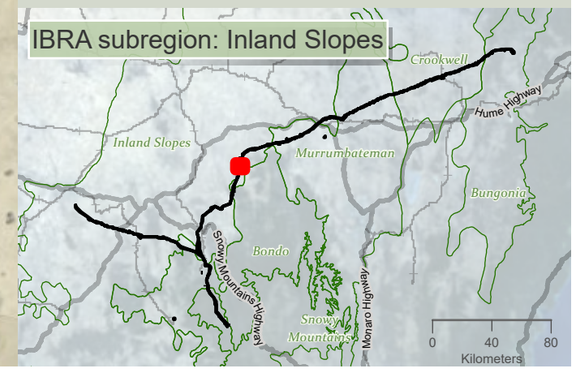
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Hieraaetus morphnoides
- Lophoictinia isura



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 56

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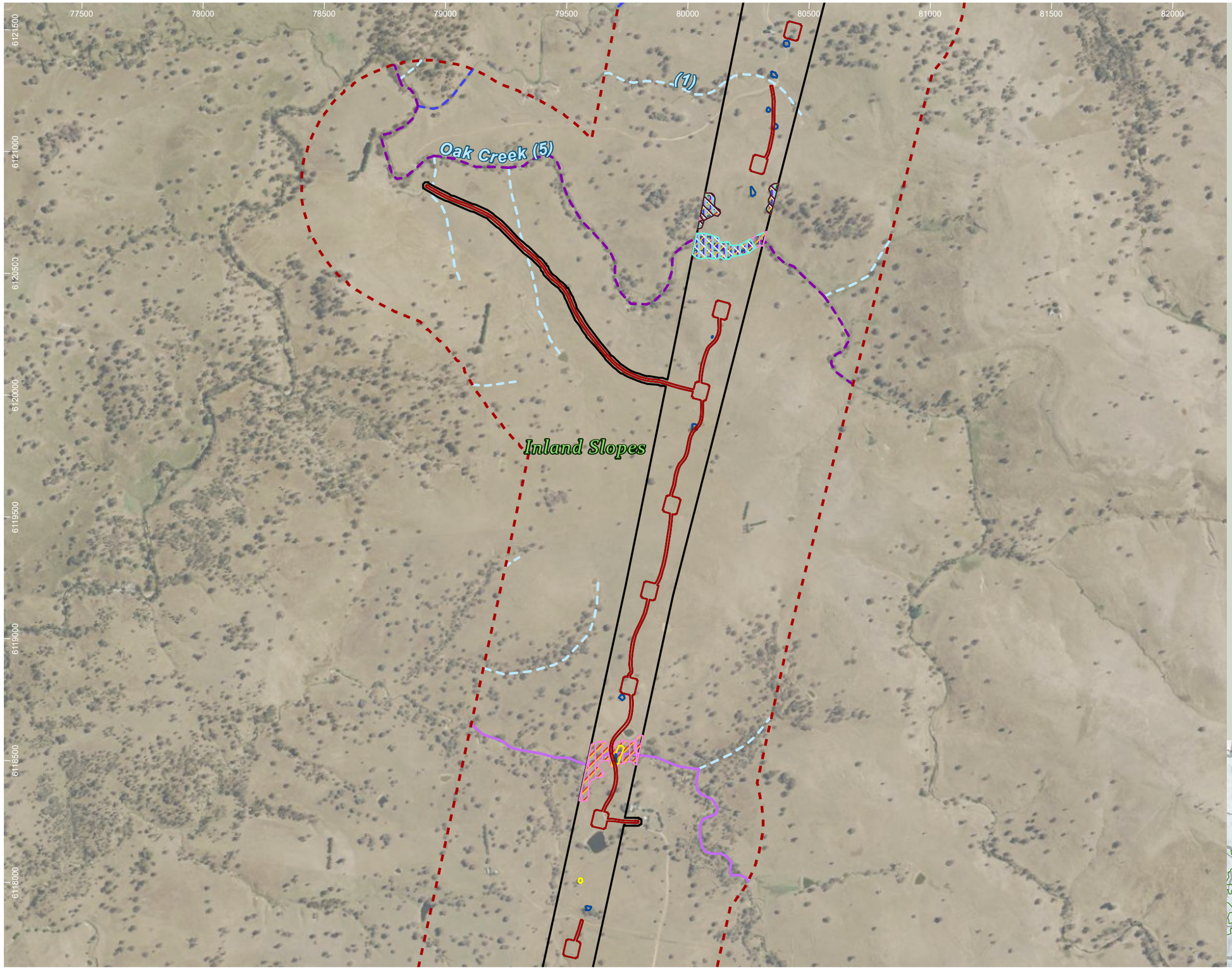


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

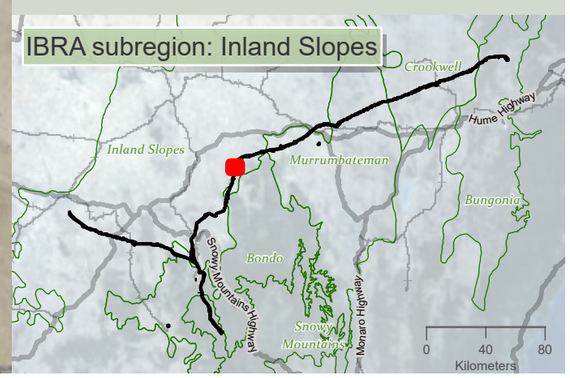
- 1
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



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niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 57

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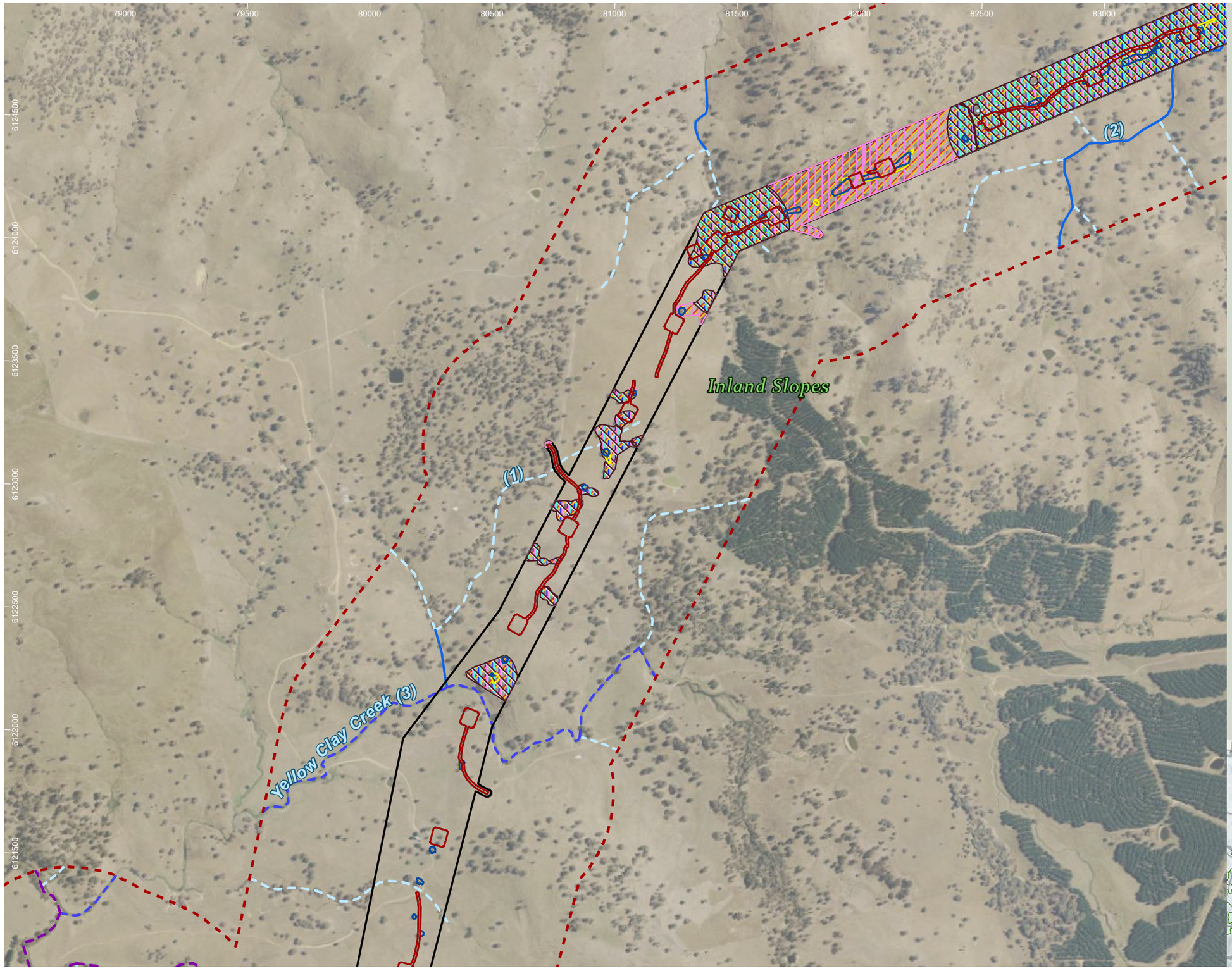


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

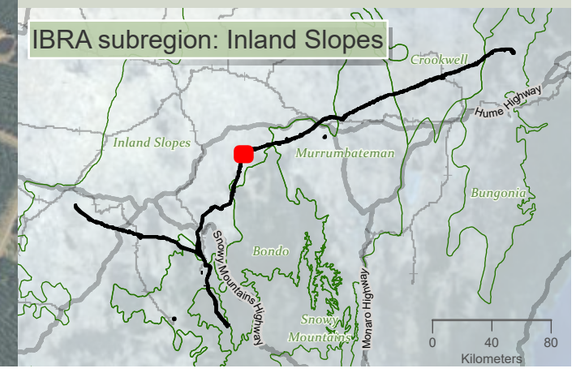
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 58

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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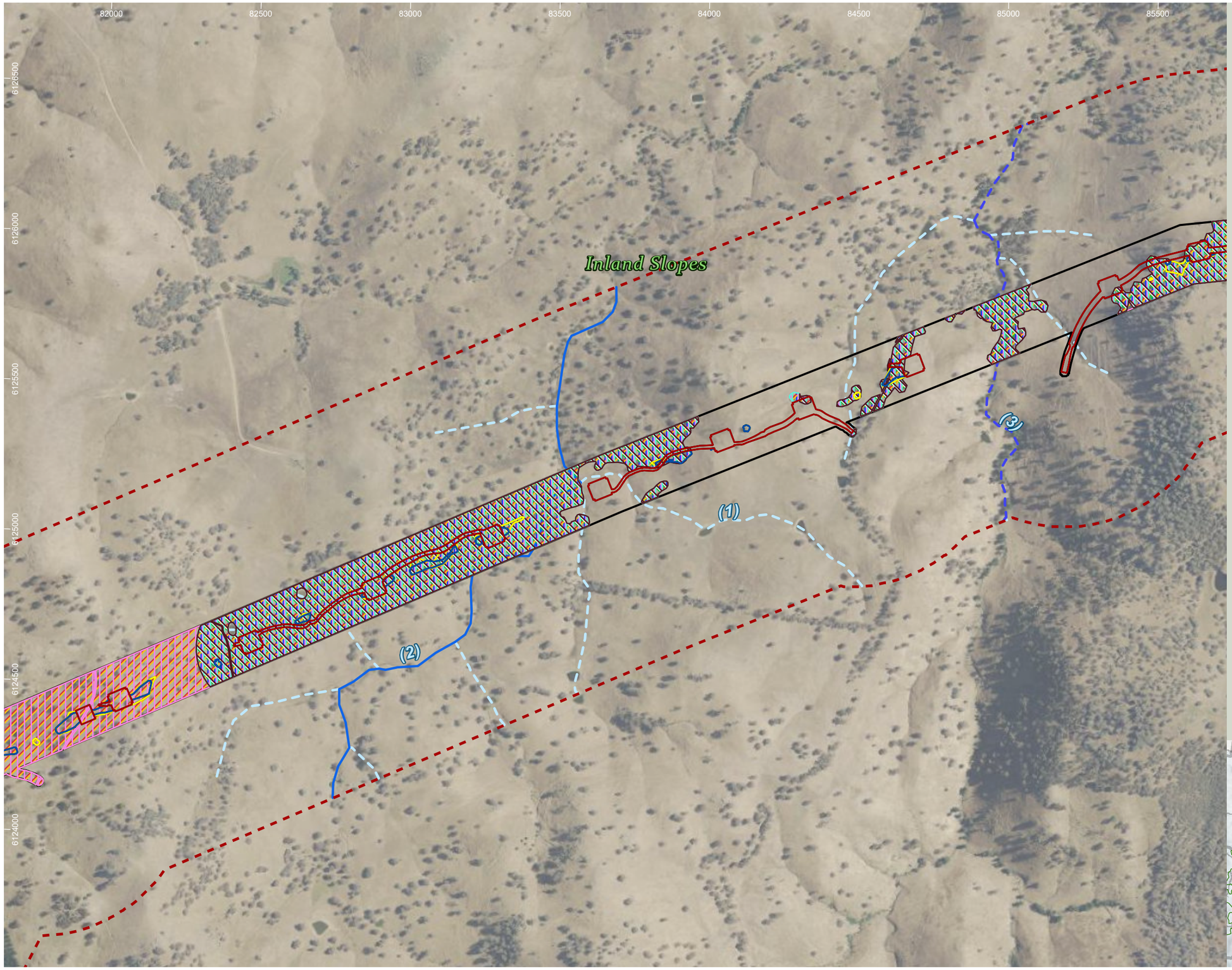


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

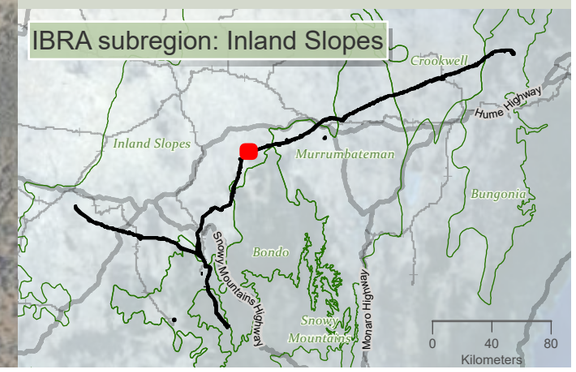
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 59

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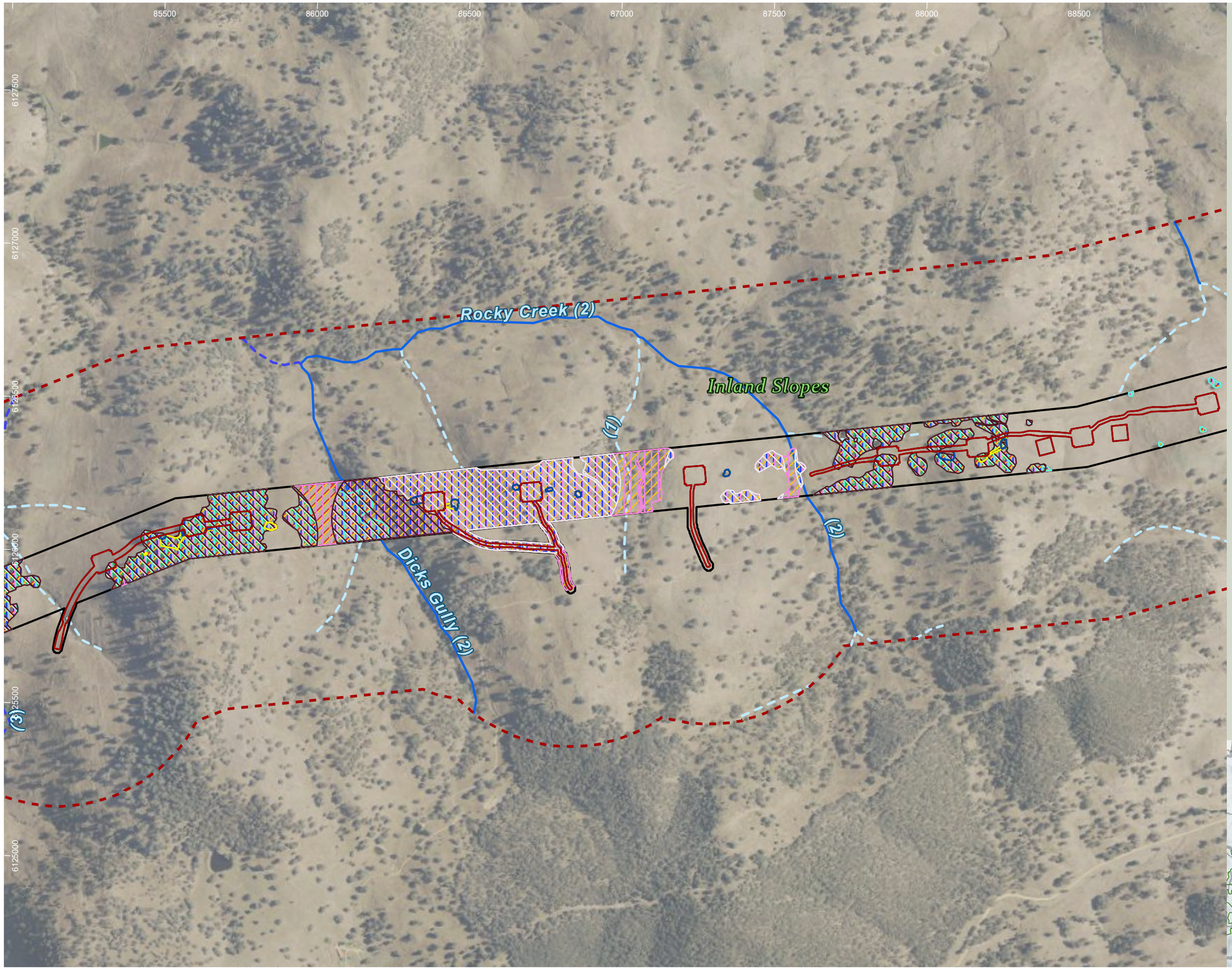


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

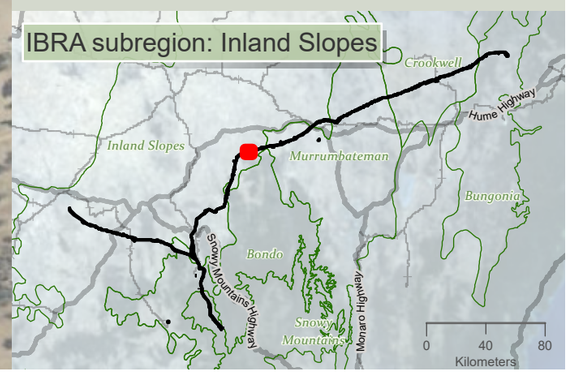
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 60

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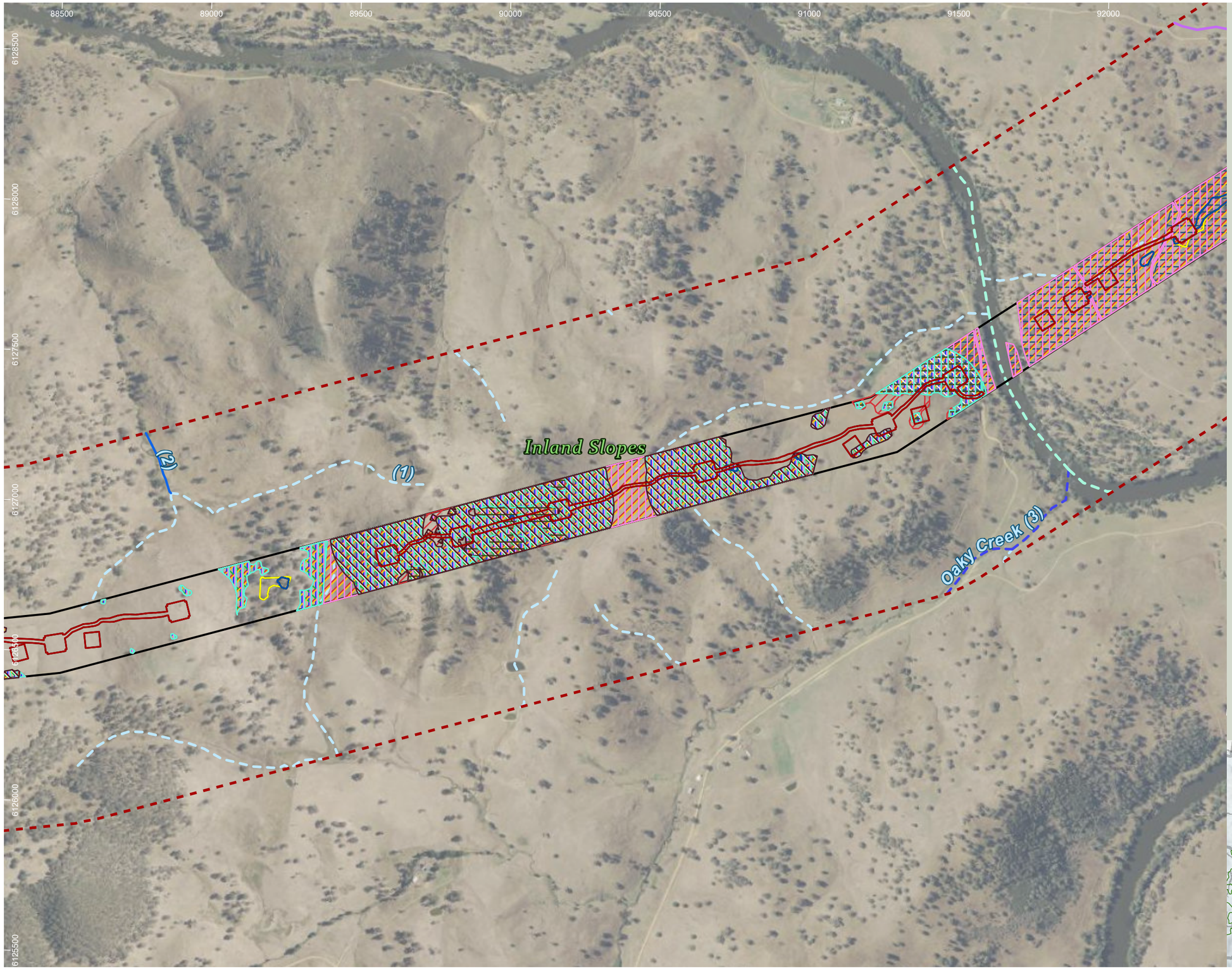


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

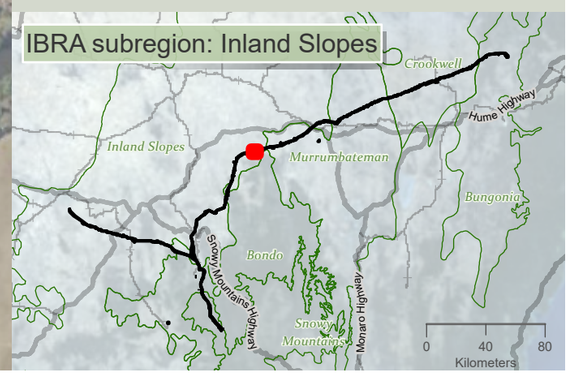
- 1
- 2
- 3
- 4
- 9

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Ninox strenua
- Polytelis swainsonii
- Tyto novaehollandiae



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6899 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 61

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92000 92500 93000 93500 94000 94500 95000 95500

6130000 6129500 6129000 6128500 6128000 6127500 6127000

Oak Creek (4)

(1)

(2)

Inland Slopes

Murrumbidgee River (9)

Bondo

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

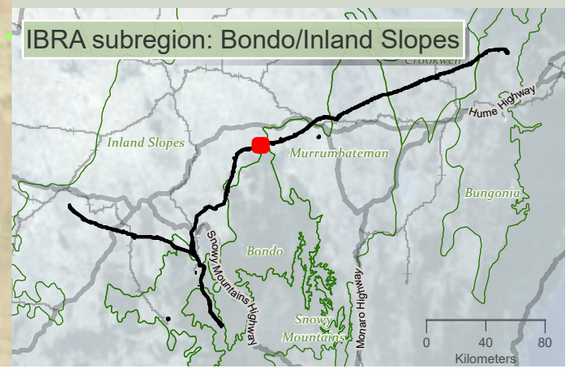
- 1
- 2
- 3
- 4
- 9

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 62

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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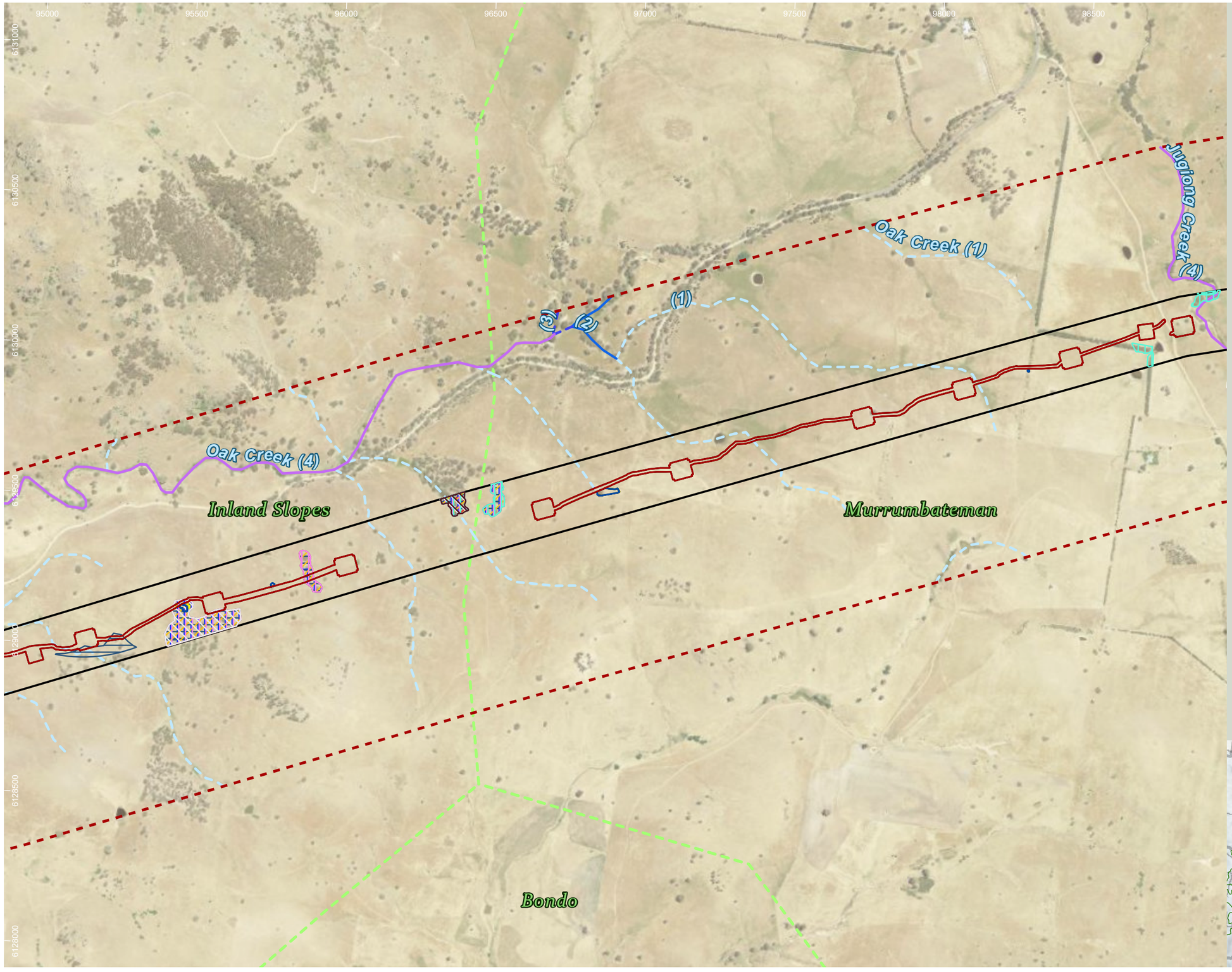


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

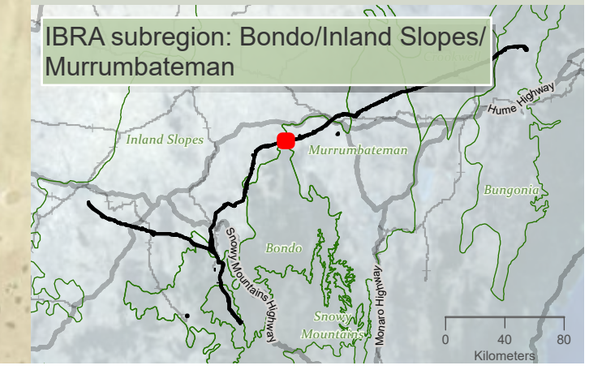
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 N 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 63

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98500 99000 99500 100000 100500 101000 101500 102000

6131000 6130500 6130000 6129500 6129000 6128500

(1)

(2)

Jugiong Creek (4)

Murrumbateman

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

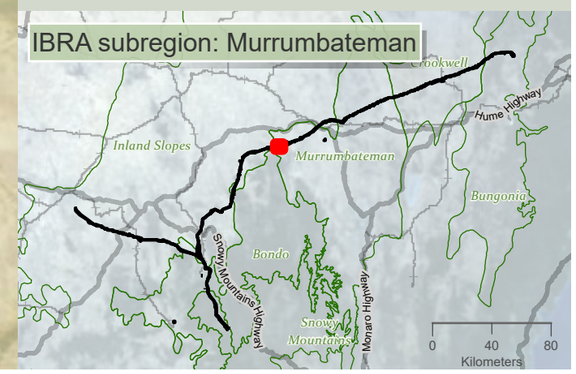
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 64

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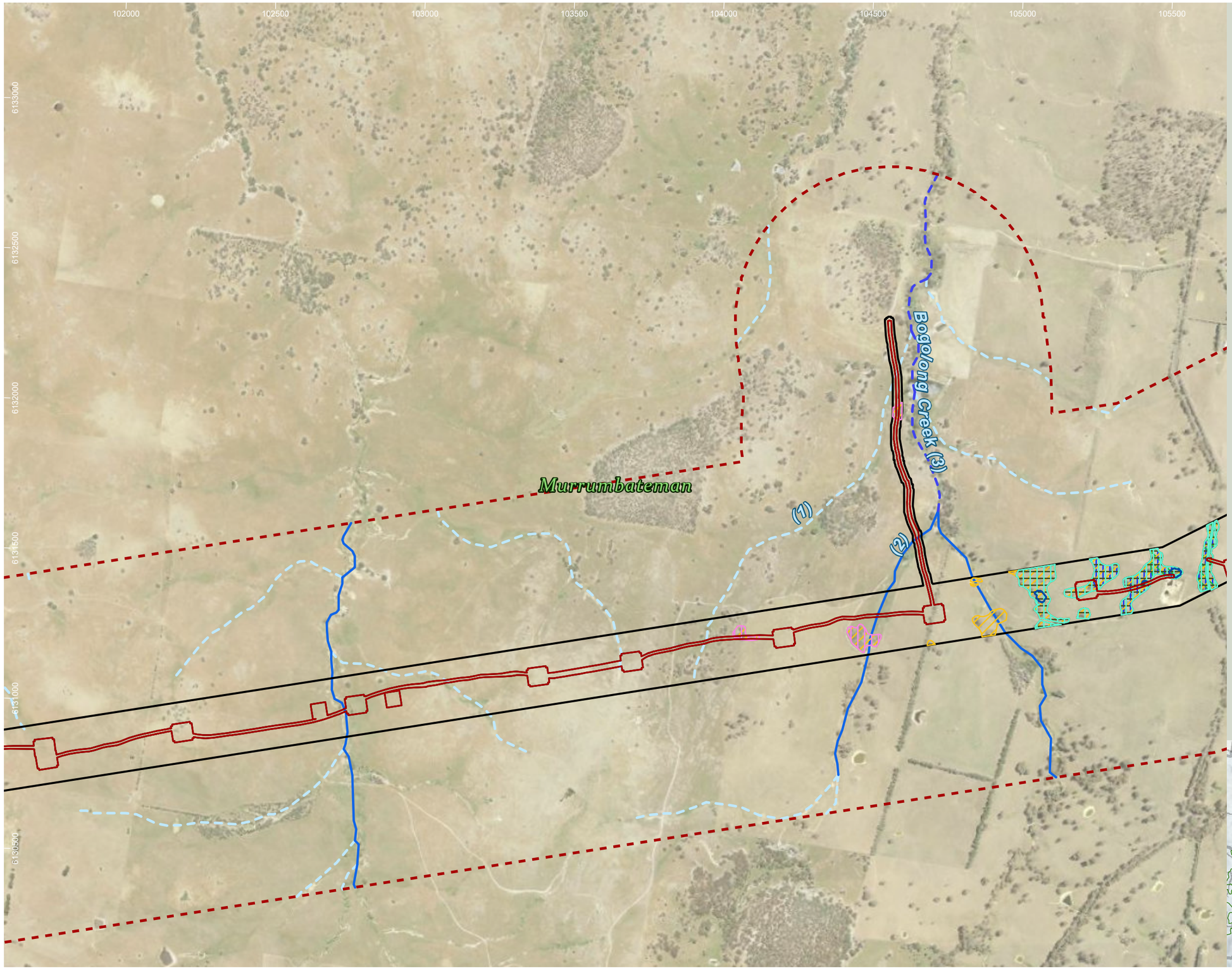


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

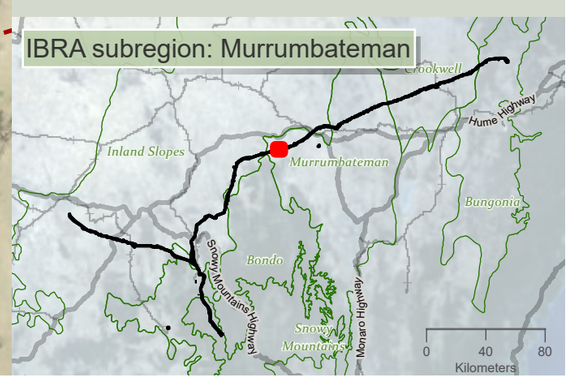
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 65

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105000 105500 106000 106500 107000 107500 108000 108500

6133500 6133000 6132500 6132000 6131500 6131000

Murrumbateman

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

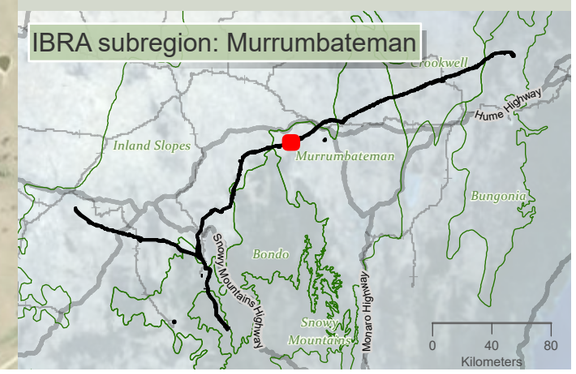
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 66

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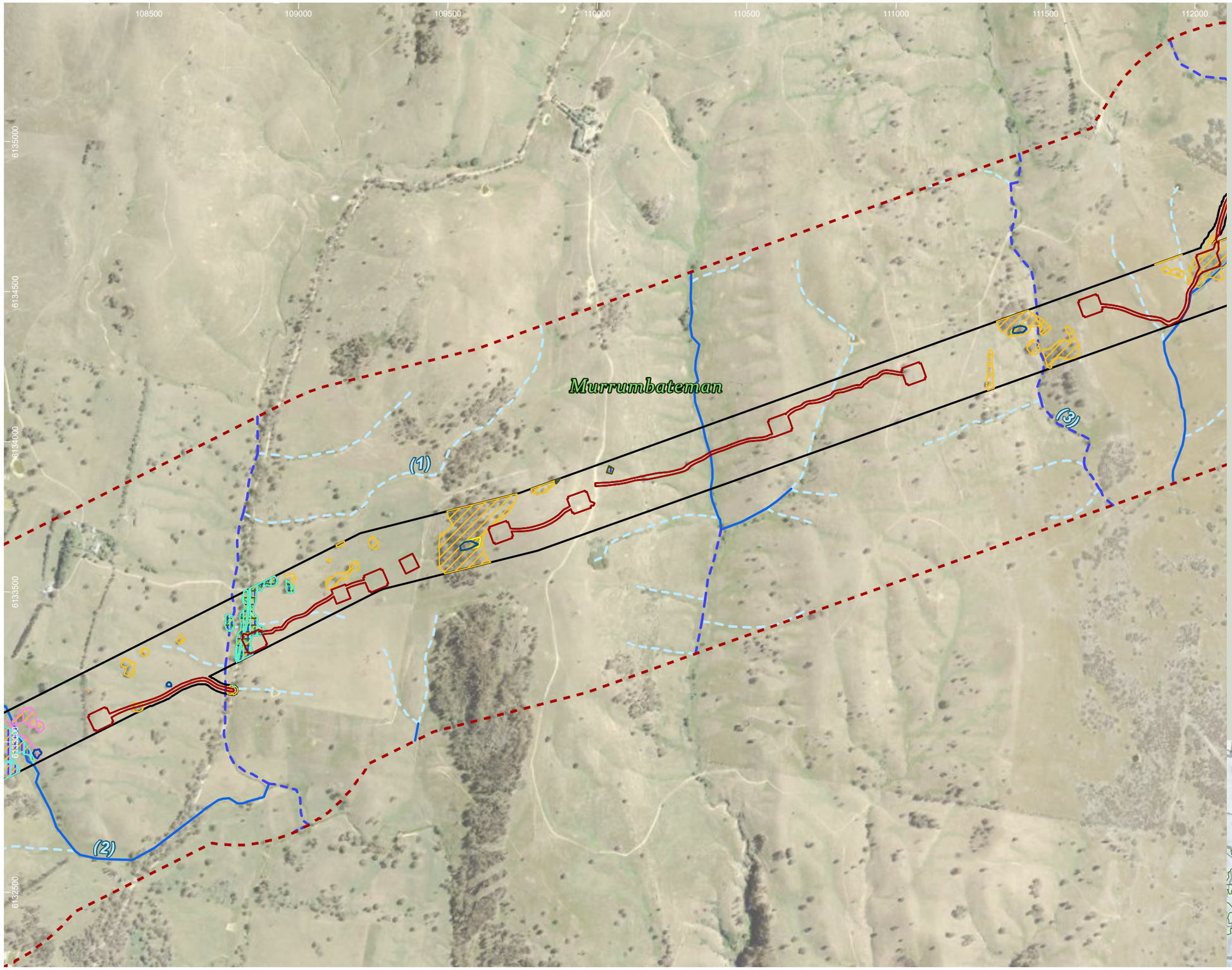


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

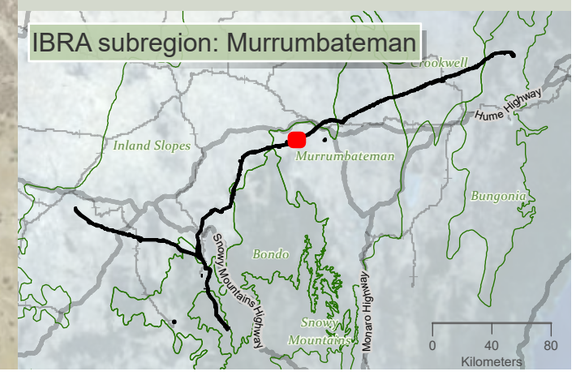
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 67

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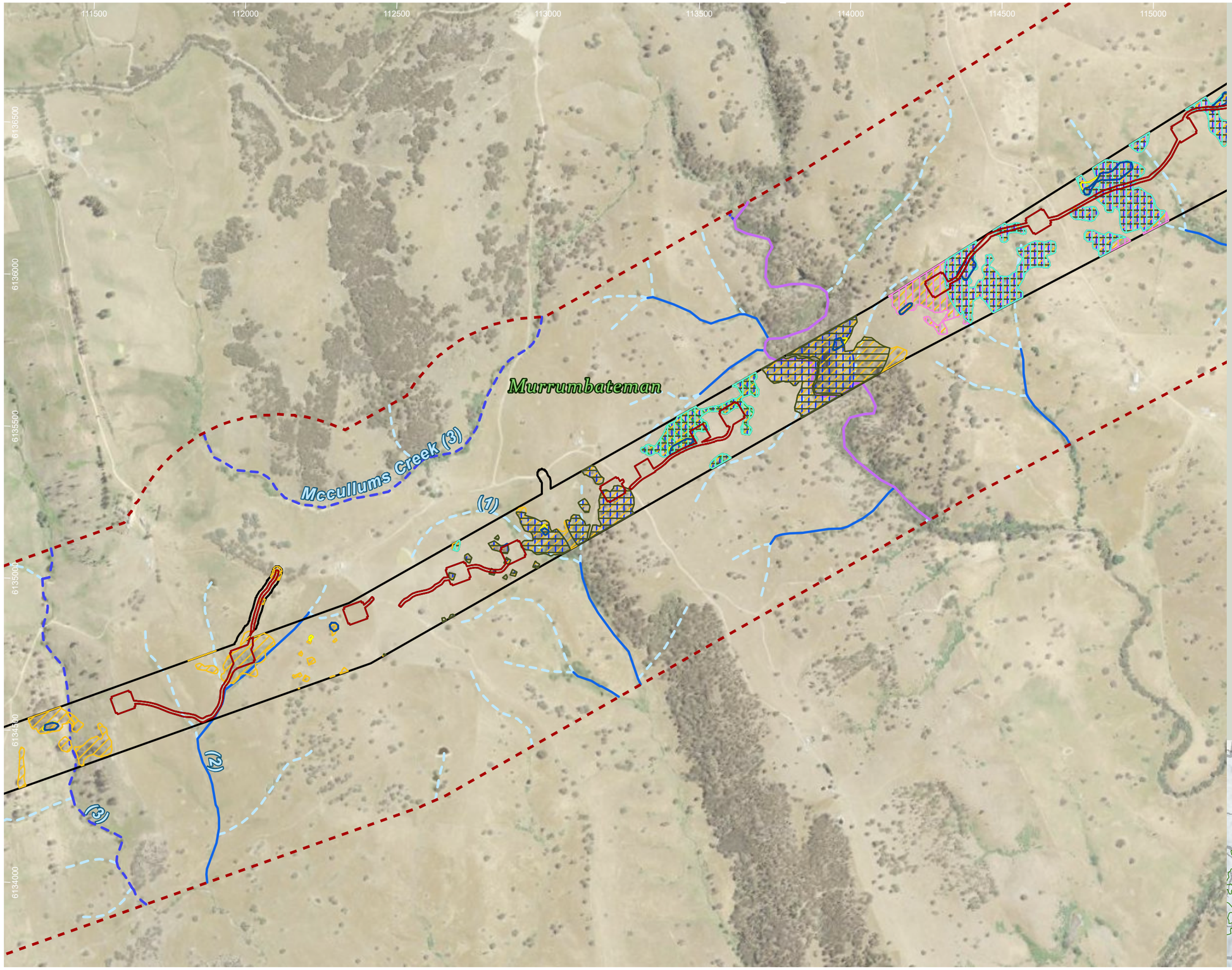


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

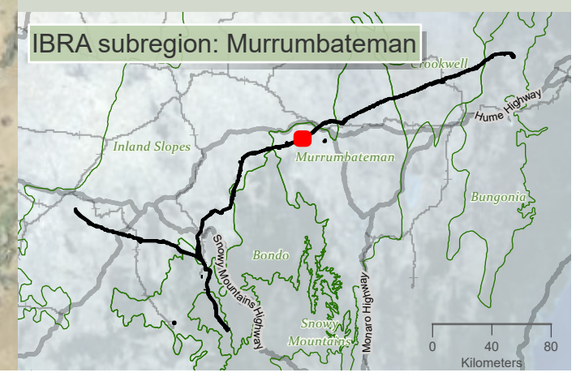
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 68

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114500 115000 115500 116000 116500 117000 117500 118000

6138500 6138000 6137500 6137000 6136500 6136000

Murrumbateman

Derringullen Creek (5)

Bowning Creek (5)

Yass River (6)

(1) (2) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

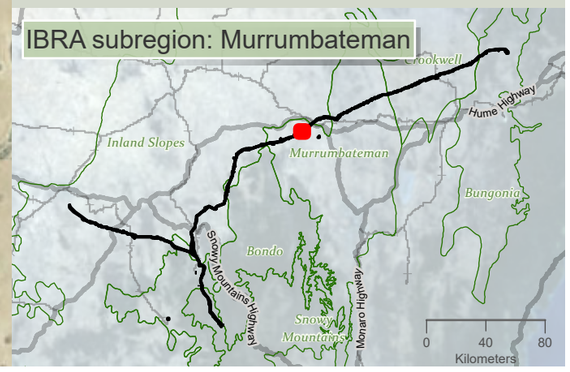
- 1
- 2
- 3
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 69

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117000 117500 118000 118500 119000 119500 120000 120500 121000

6140500 6140000 6139500 6139000 6138500 6138000

(1) (2) (3)

Murrumbateman

Derringullen Creek

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

- 1
- 2
- 3
- 5

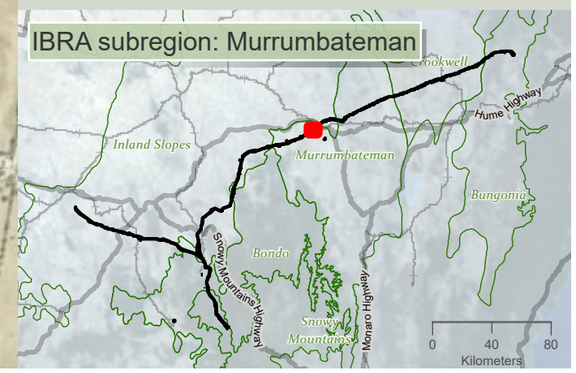
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Ninox strenua
- Polytelis swainsonii

IBRA subregion: Murrumbateman



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 70

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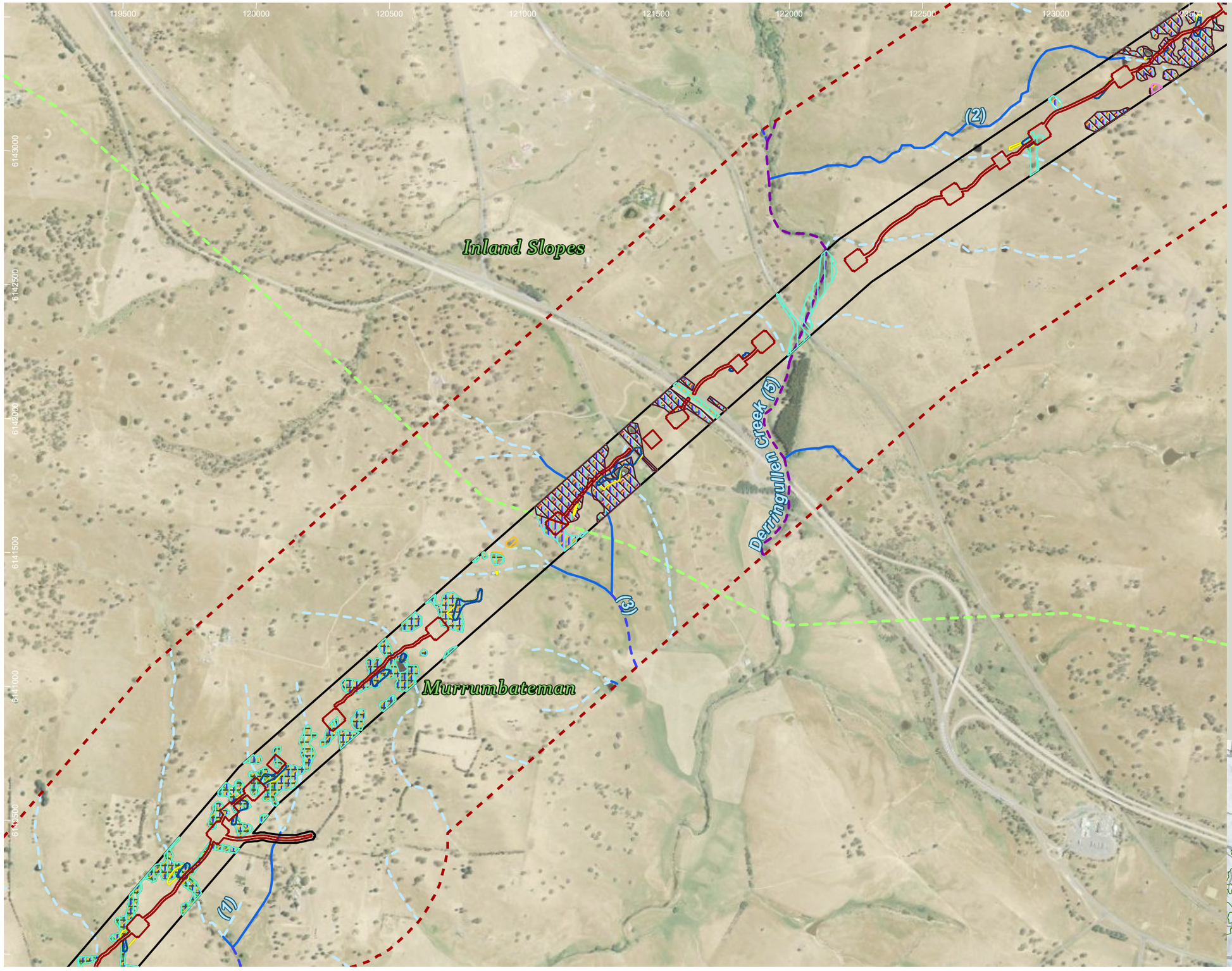


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

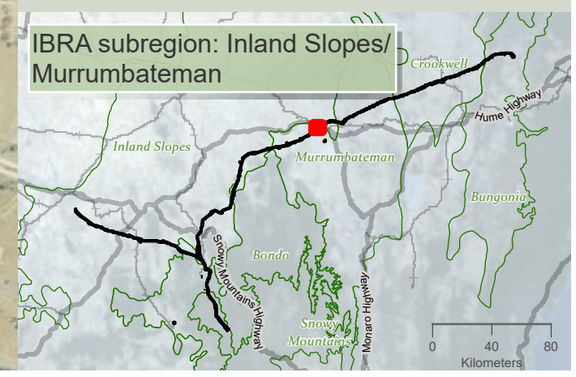
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Ninox strenua
- Polytelis swainsonii
- Tyto novaehollandiae



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 71

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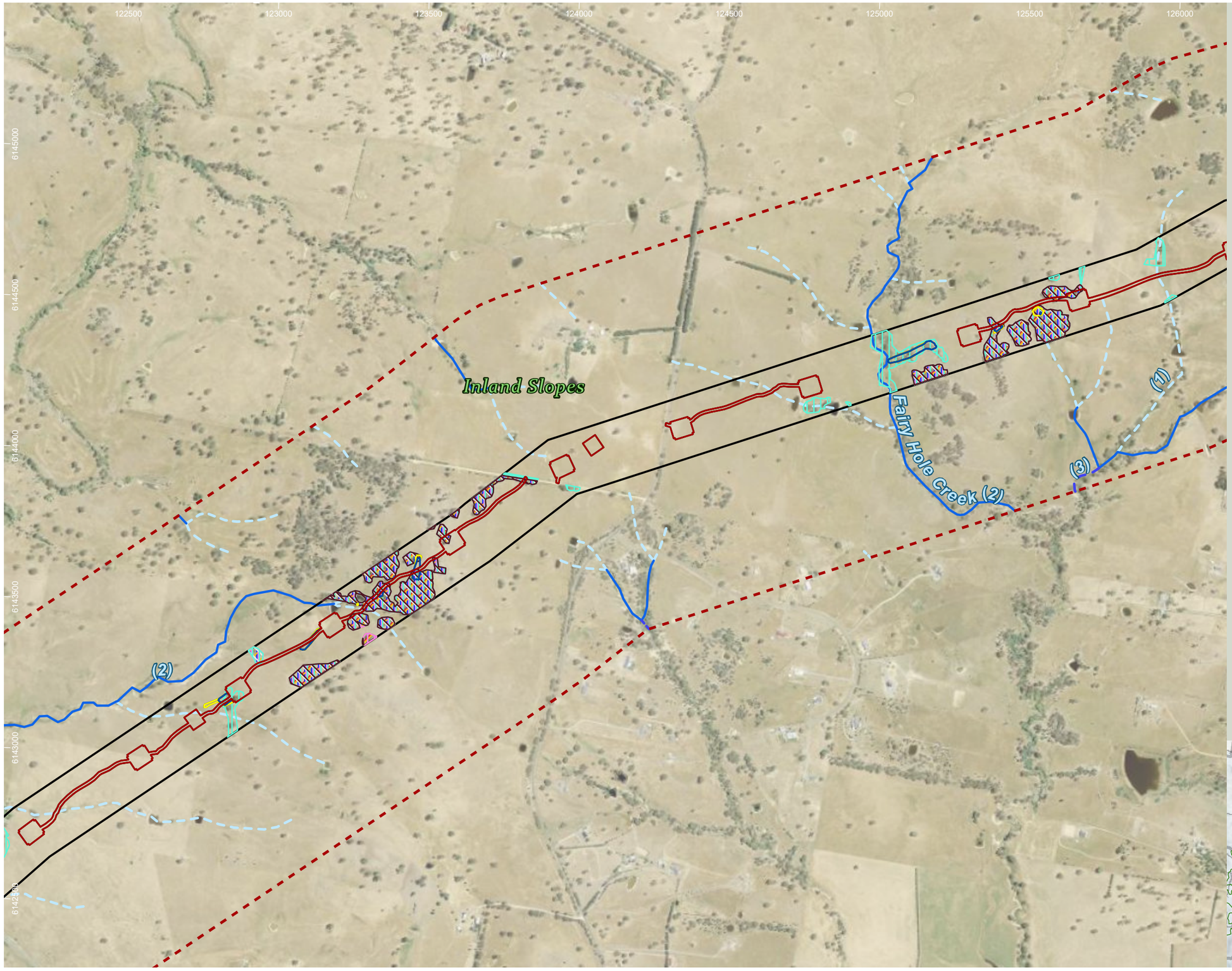


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

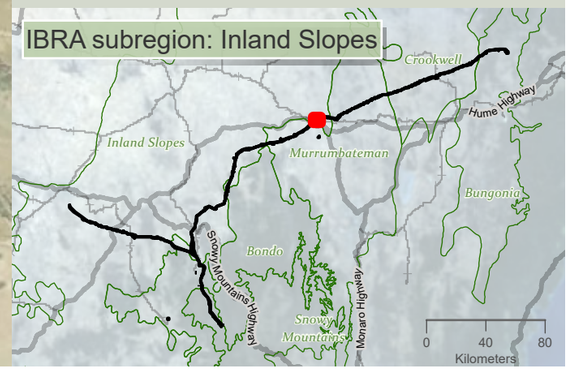
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 73

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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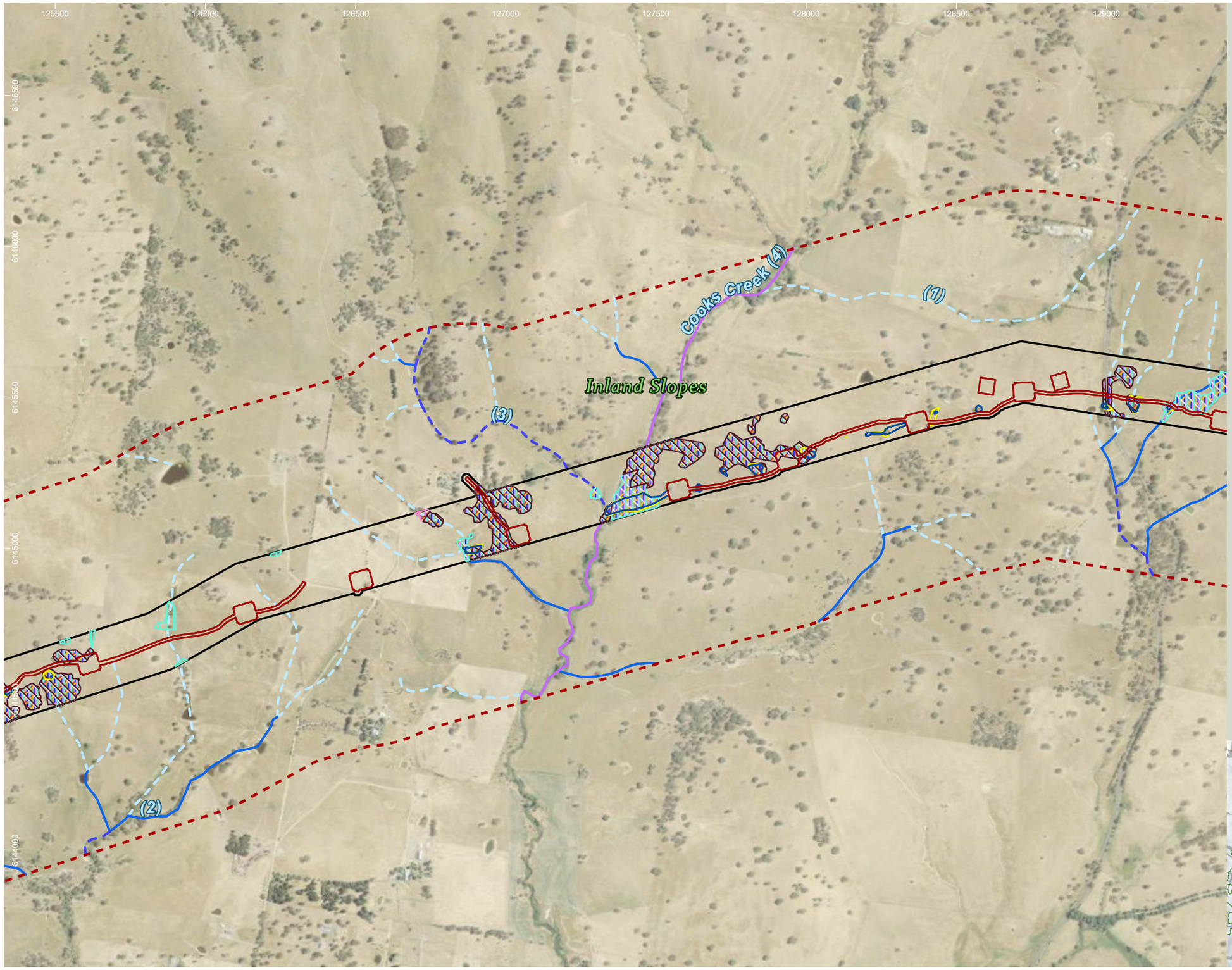


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

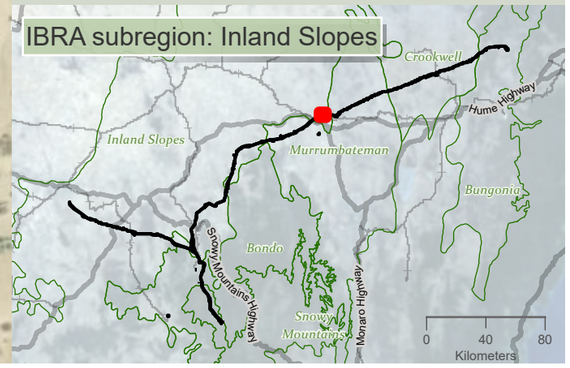
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Polytelis swainsonii
- Tyto novaehollandiae



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

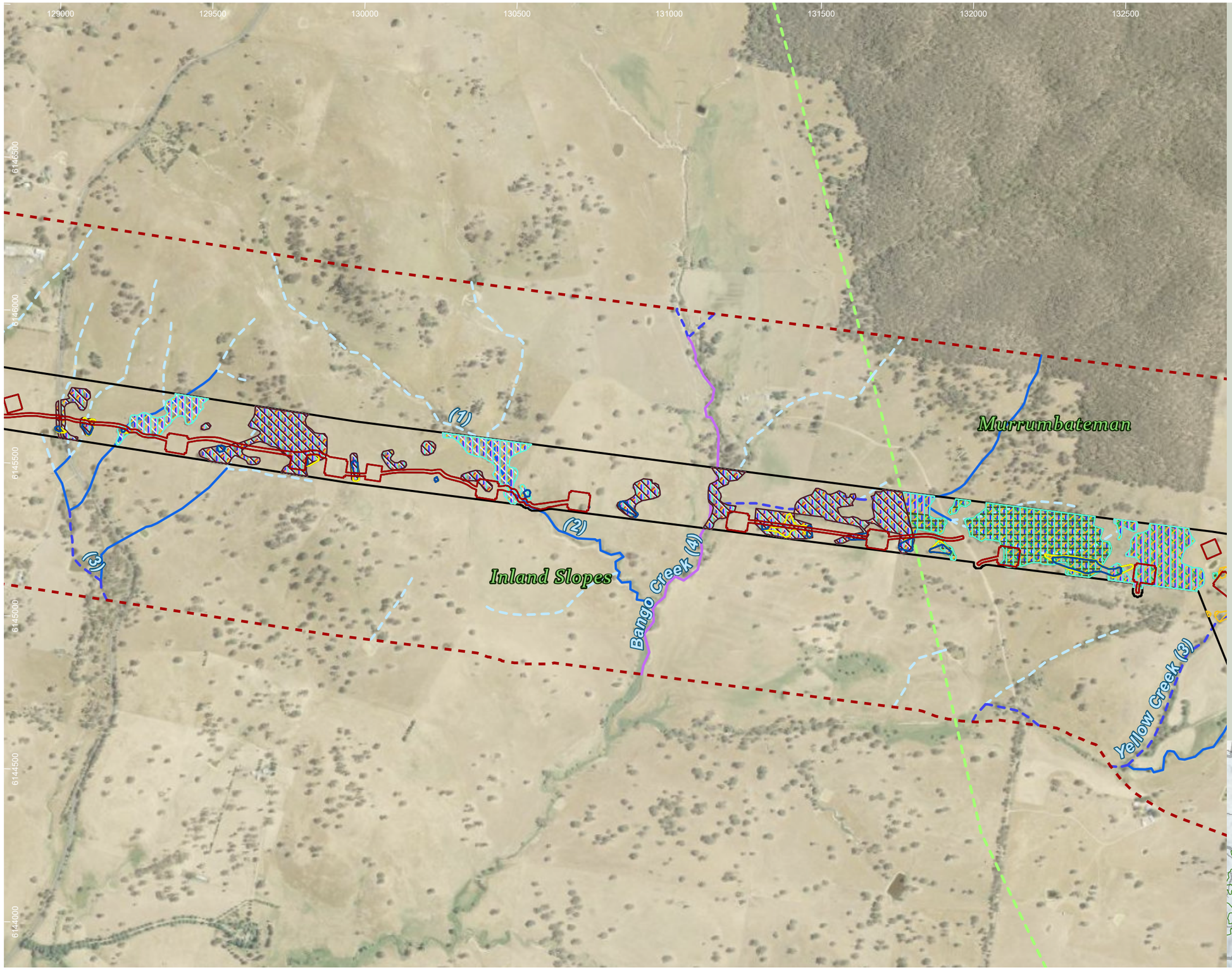
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 74

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

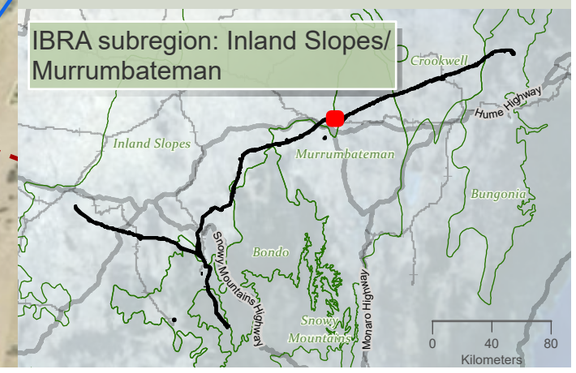
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Burhinus grallarius
- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox connivens
- Ninox strenua
- Polytelis swainsonii
- Tyto novaehollandiae



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 75

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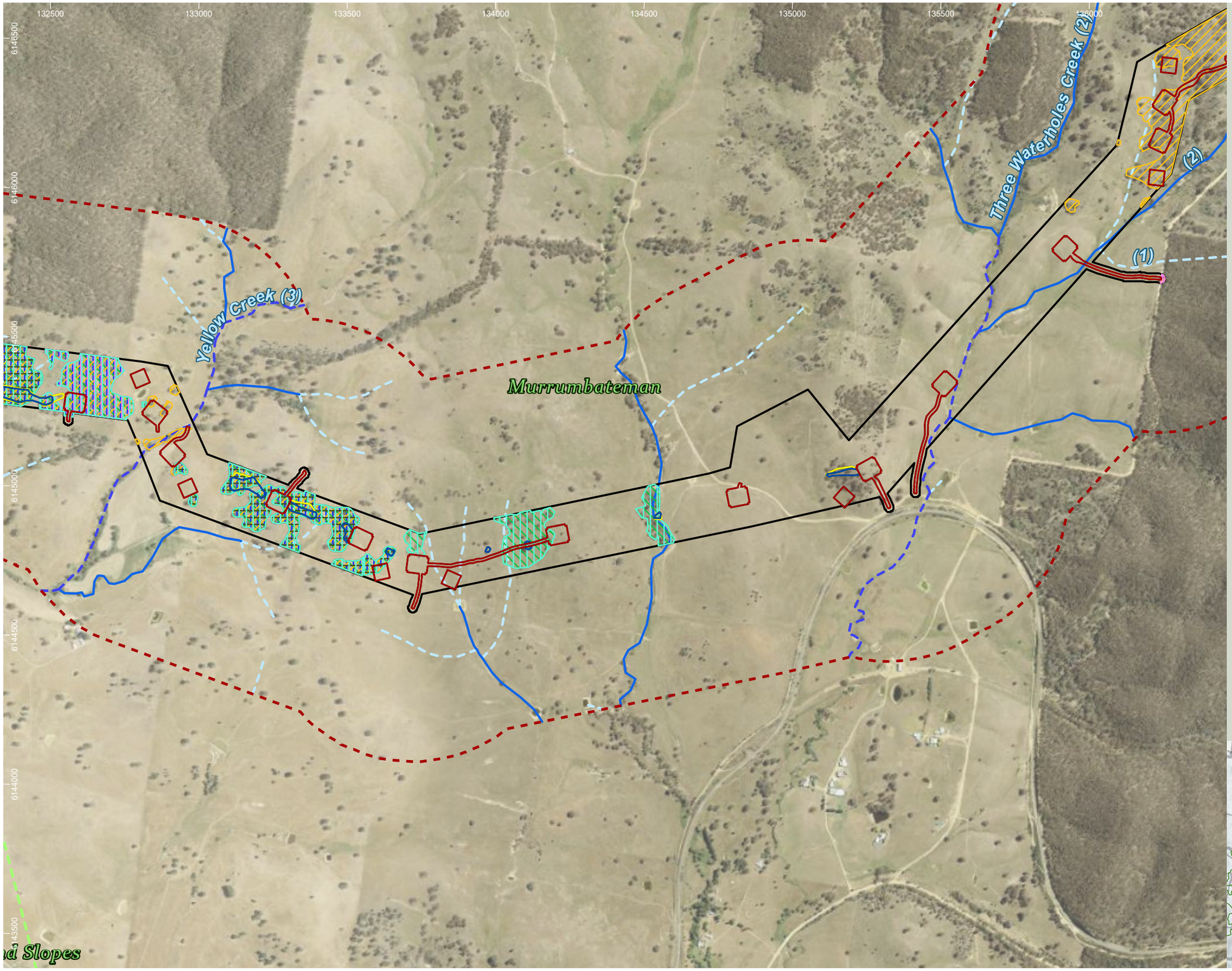


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

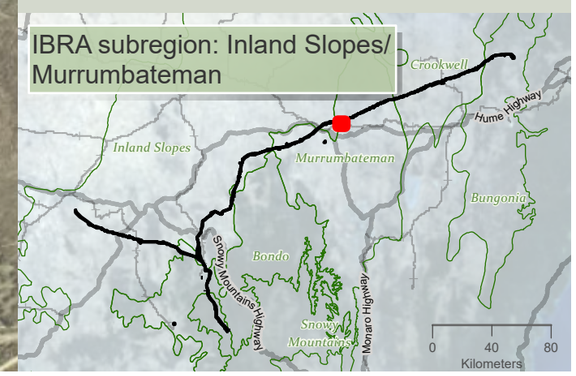
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 76

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135500 136000 136500 137000 137500 138000 138500 139000

6148500 6148000 6147500 6147000 6146500 6146000 6145500

Catherines Creek (3)

Murrumbateman

Three Waterholes Creek (2)

(2)

(1)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

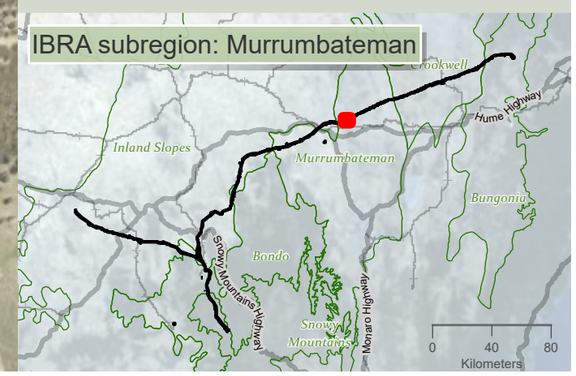
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 77

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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138500 139000 139500 140000 140500 141000 141500 142000

6150000 6149500 6149000 6148500 6148000 6147500

Bunton Creek (3)

(1)

(2)

Murrumbateman

Catherines Creek (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

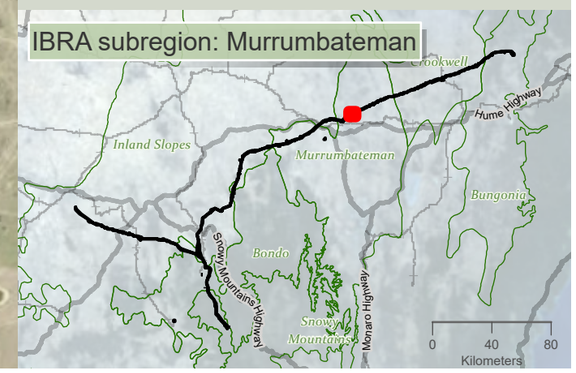
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 78

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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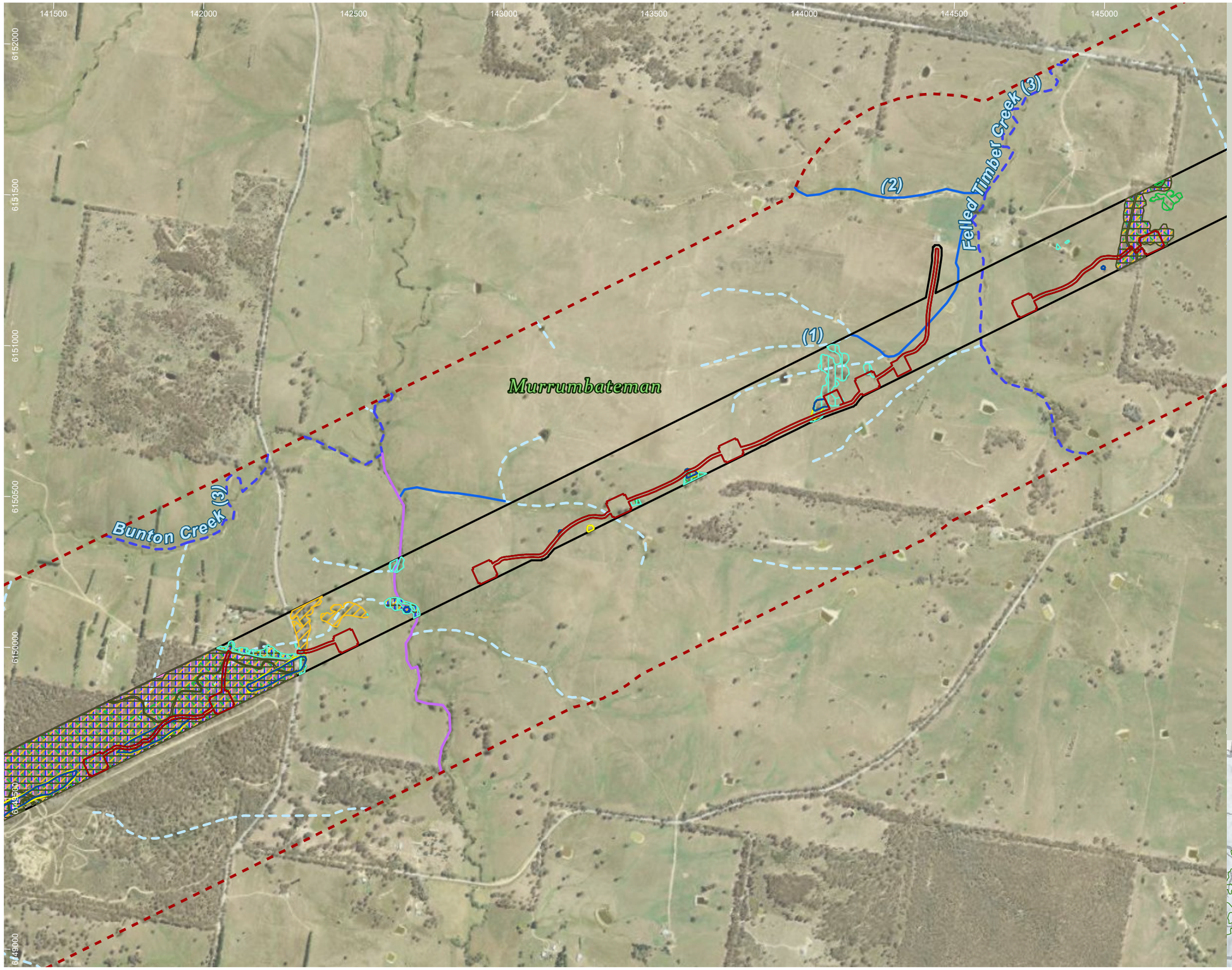


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

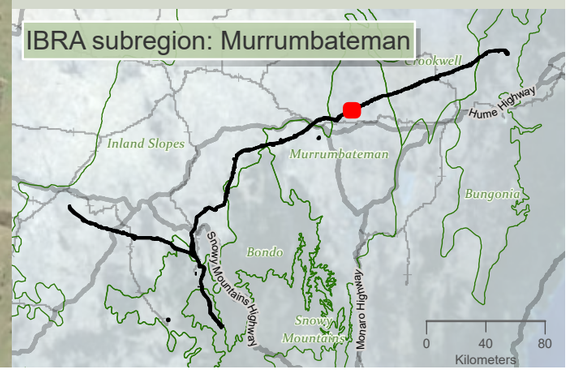
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 79

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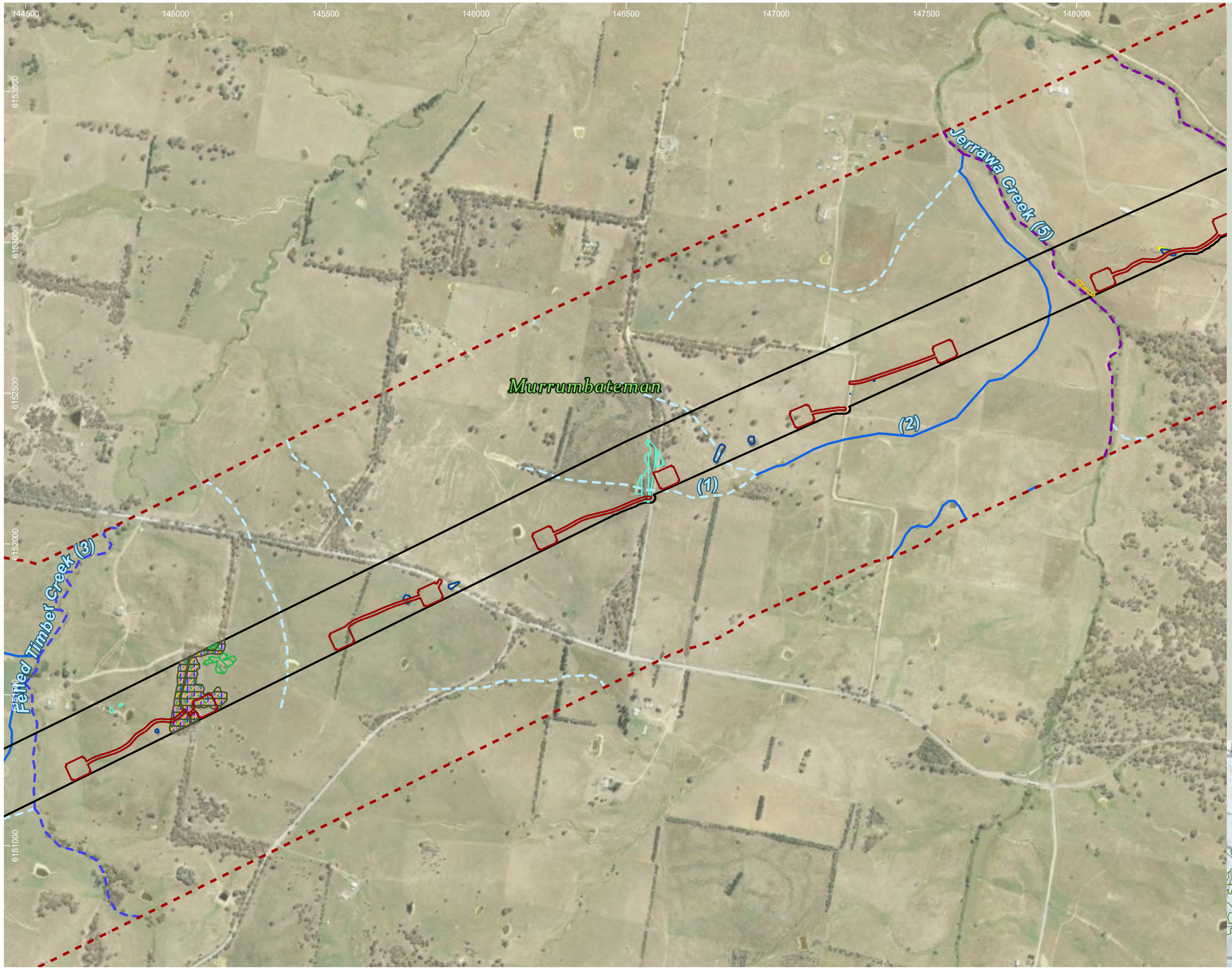


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

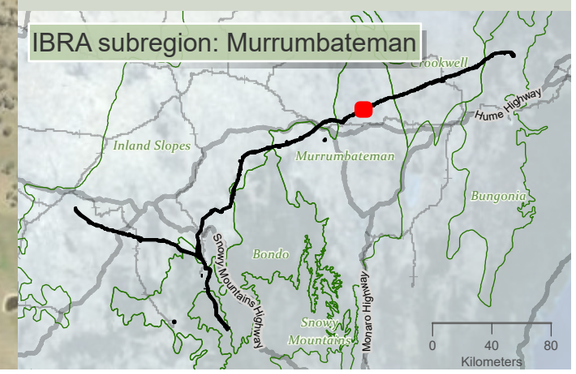
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 80

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148000 148500 149000 149500 150000 150500 151000 151500

6155000 6154500 6154000 6153500 6153000 6152500

Murrumbateman

Sams Creek (2)

Jerrawa Creek (5)

(2)

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

- 1
- 2
- 3
- 4
- 5

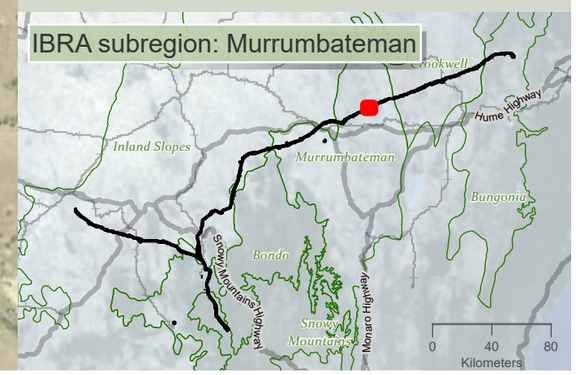
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox strenua
- Polytelis swainsonii

IBRA subregion: Murrumbateman



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 81

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151000 151500 152000 152500 153000 153500 154000 154500

6156500 6156000 6155500 6155000 6154500 6154000

(1)

Merrill Creek (4)

Lachlan River (6)

Murrumbateman

Dowlings Creek (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

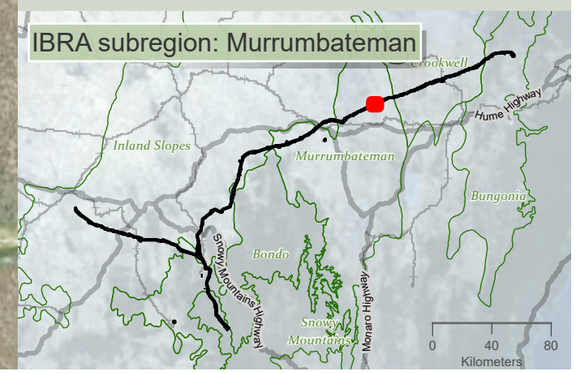
- 1
- 2
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 82

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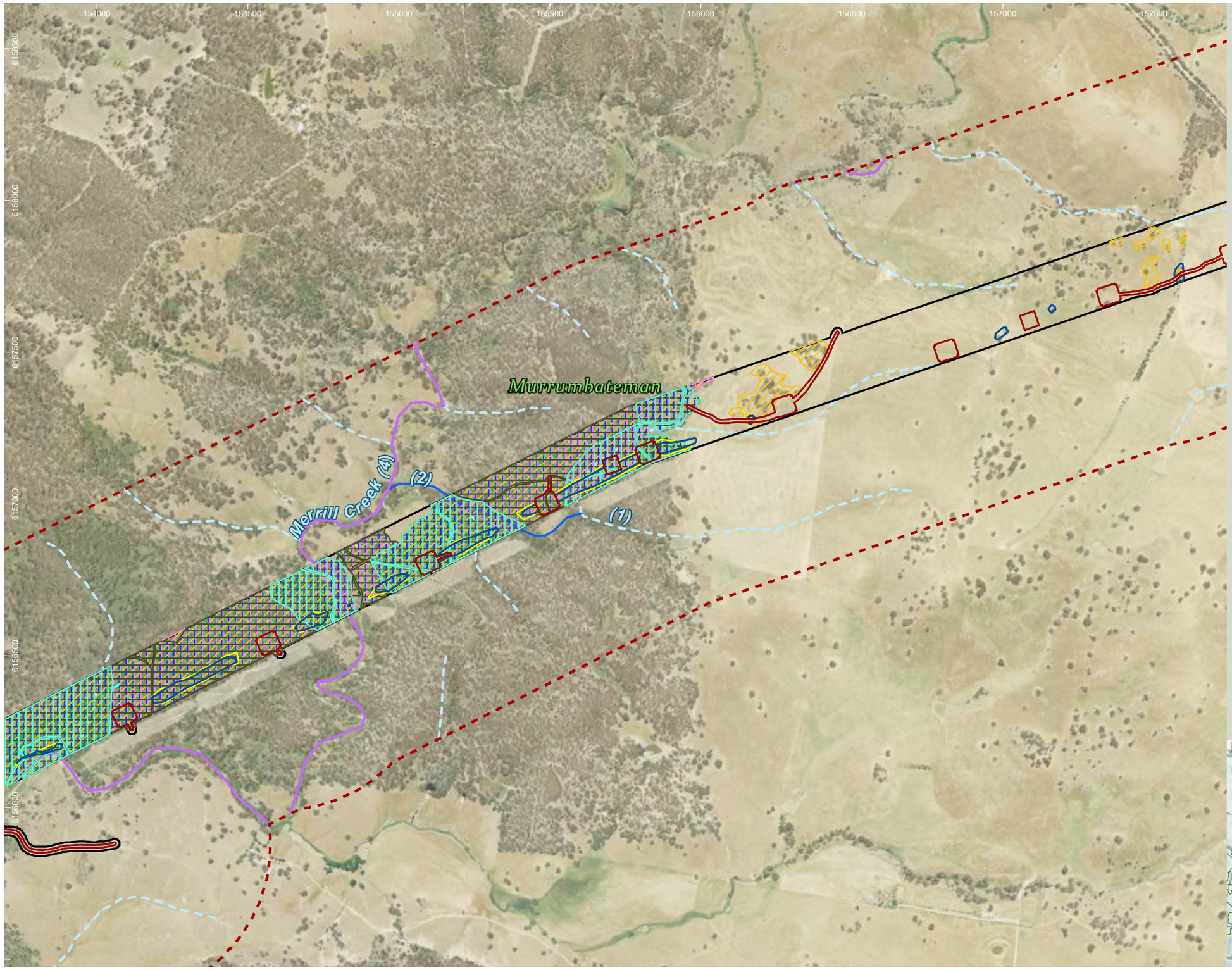


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

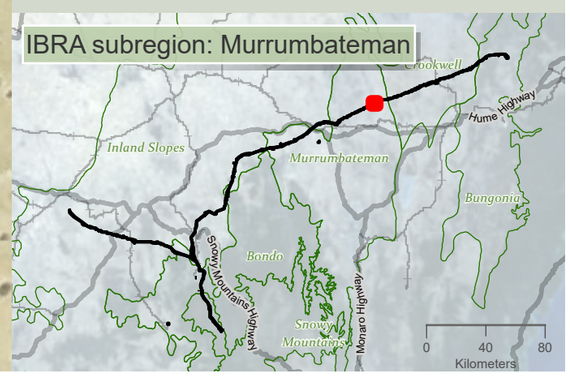
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 83

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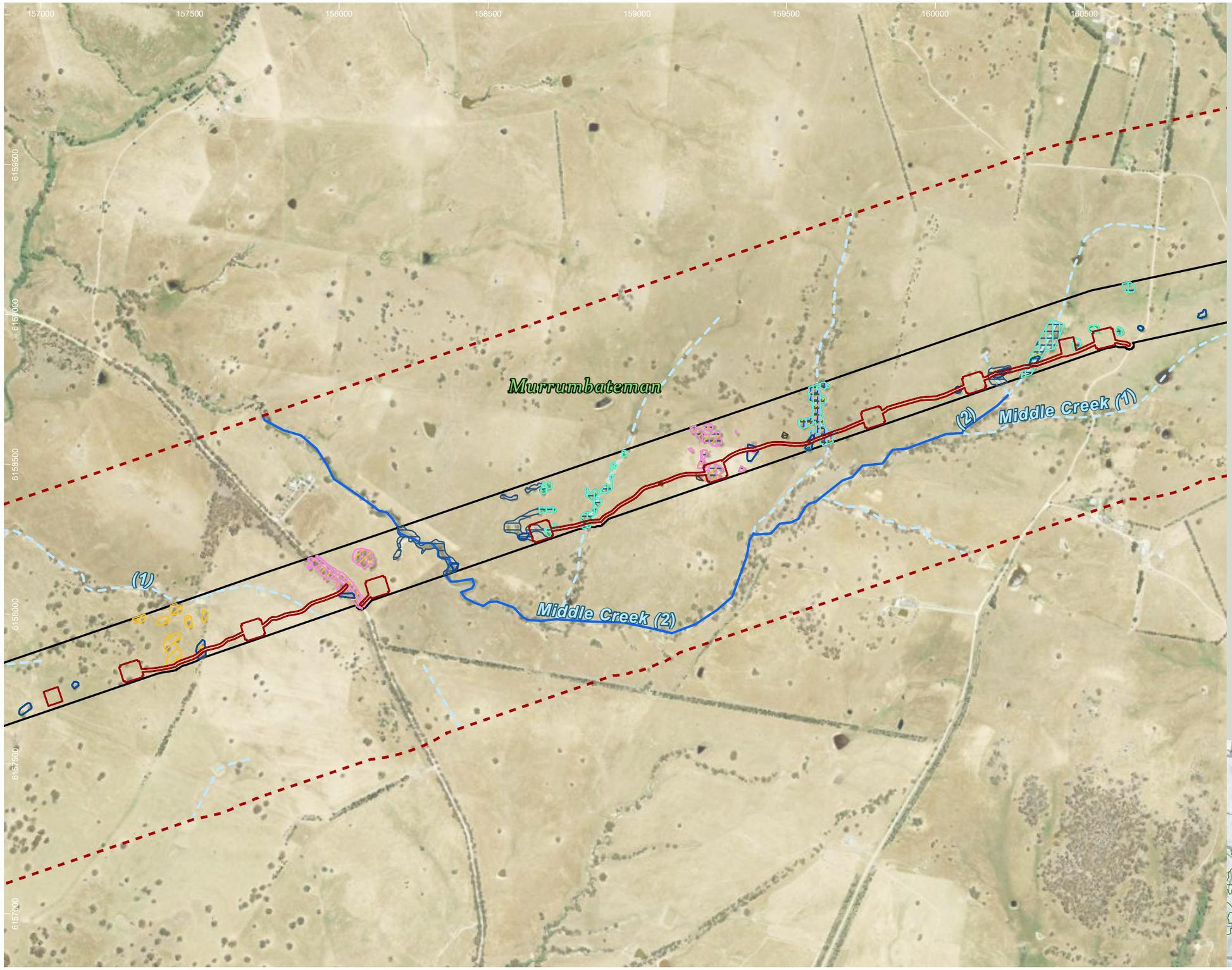


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

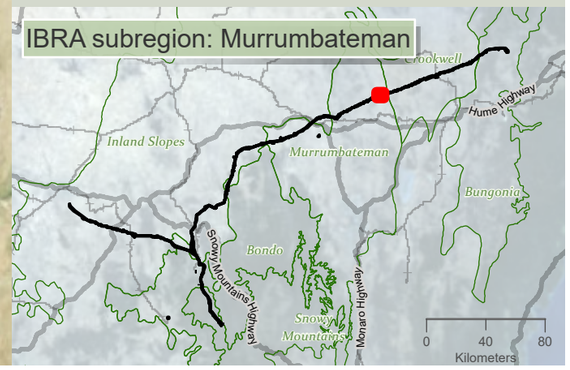
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Lophoictinia isura
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 84

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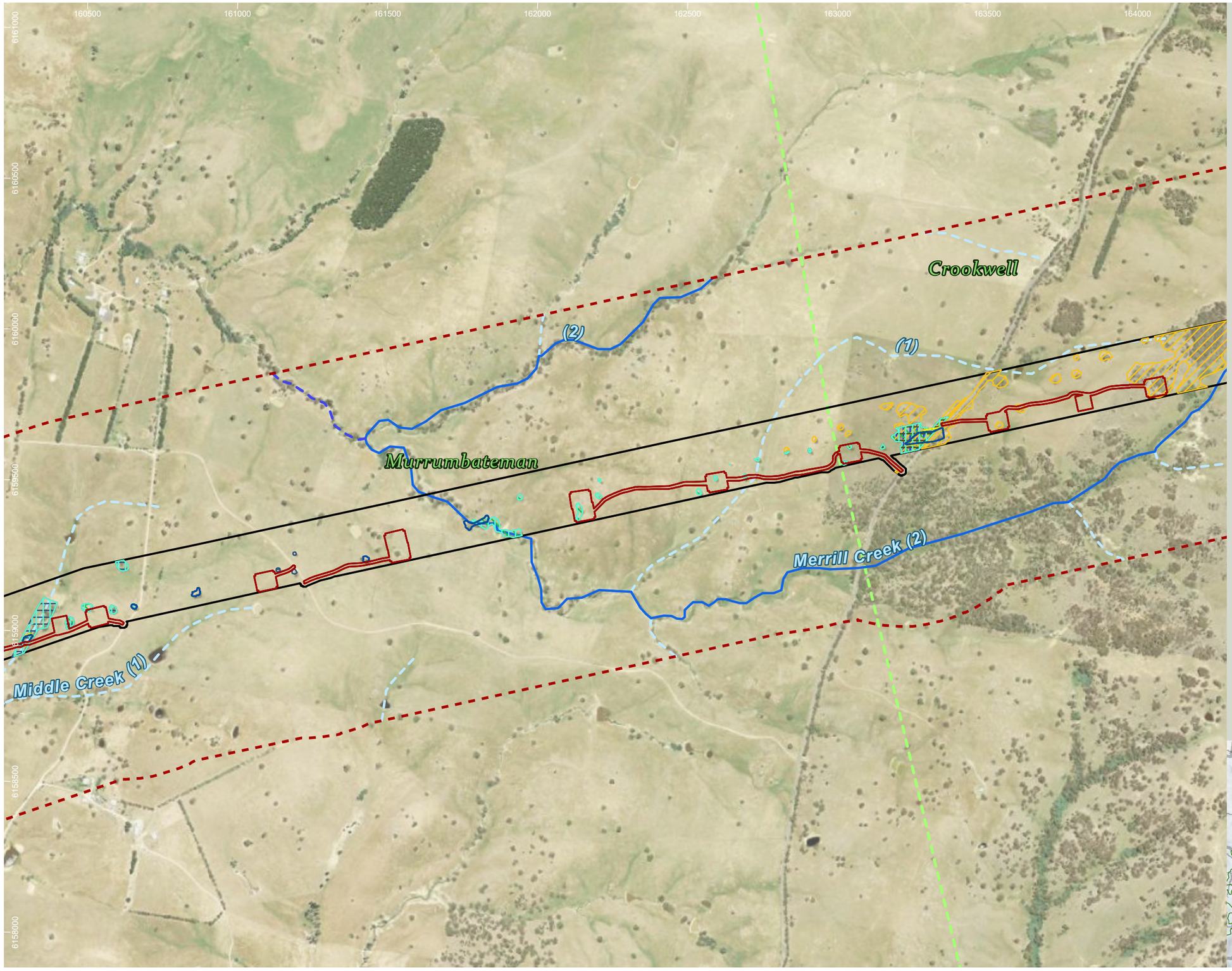


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

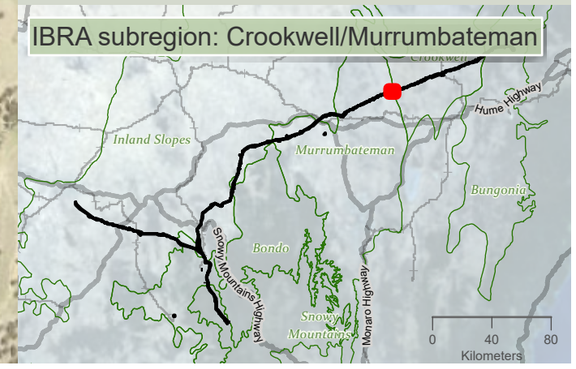
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Ninox strenua
- Polytelis swainsonii



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 85

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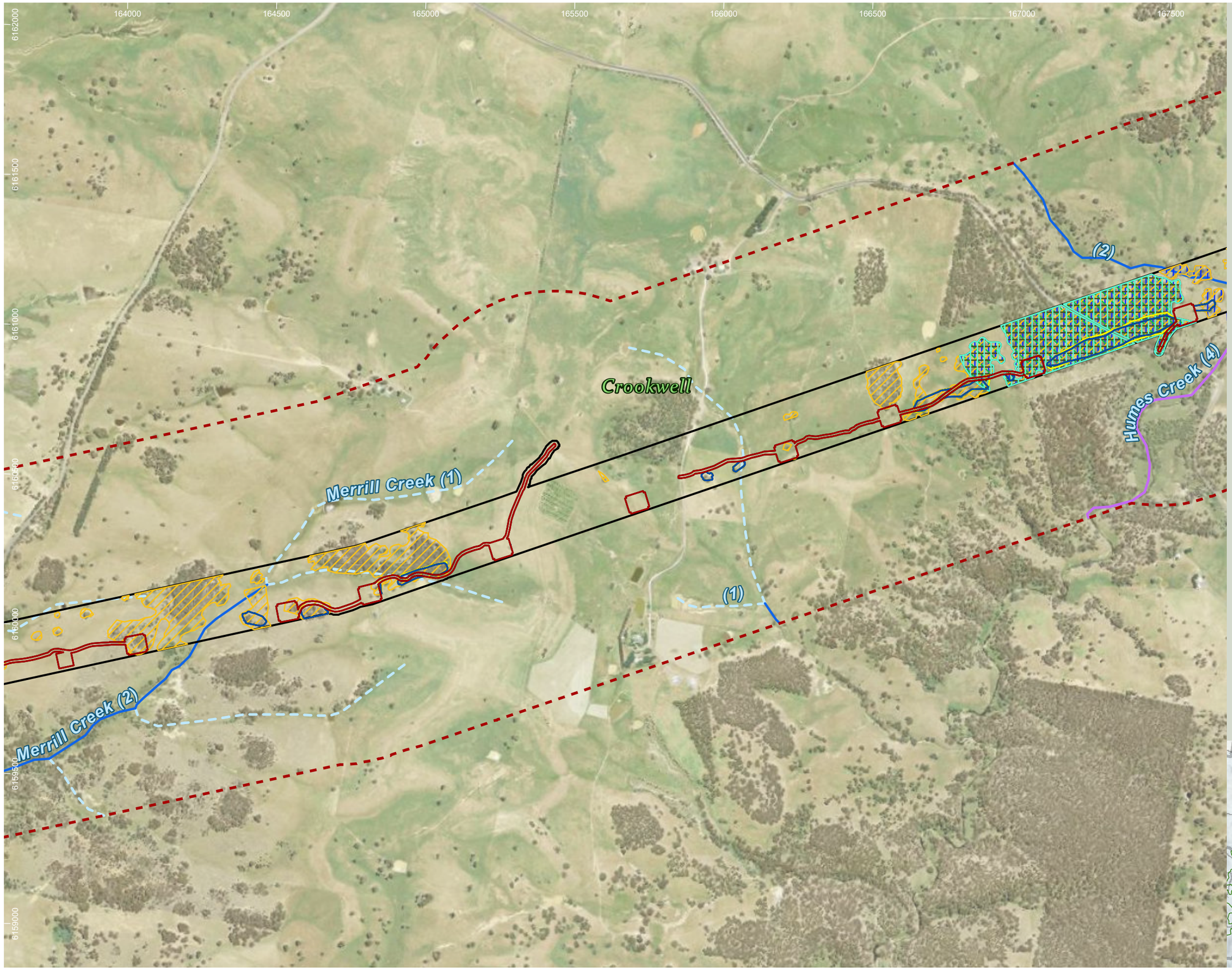


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

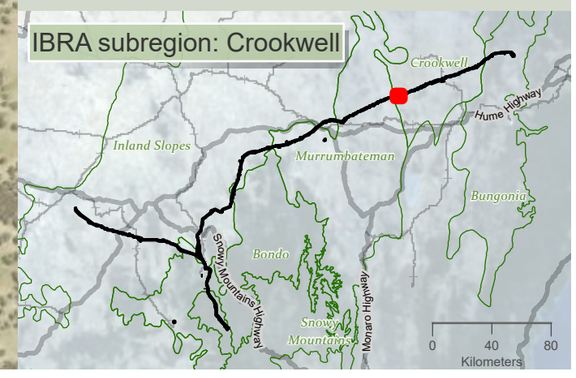
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 86

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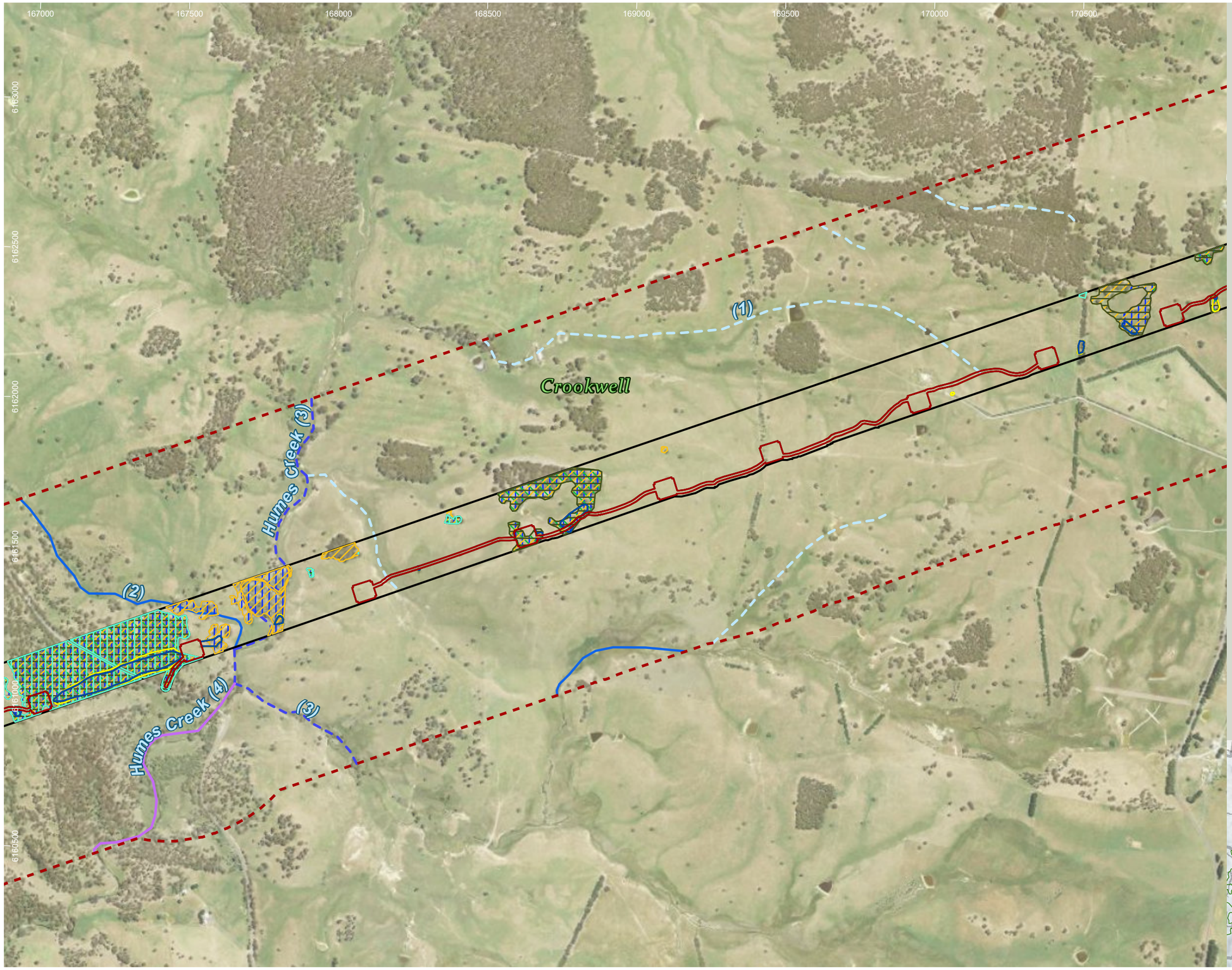


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

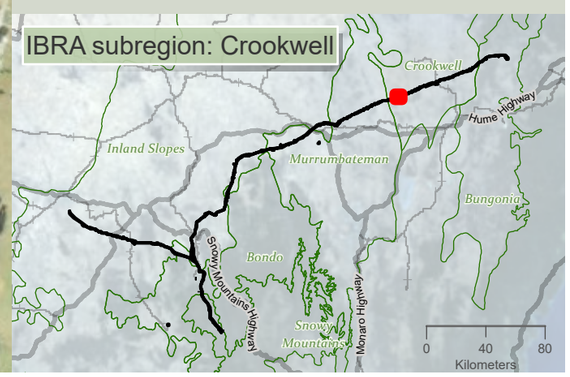
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 87

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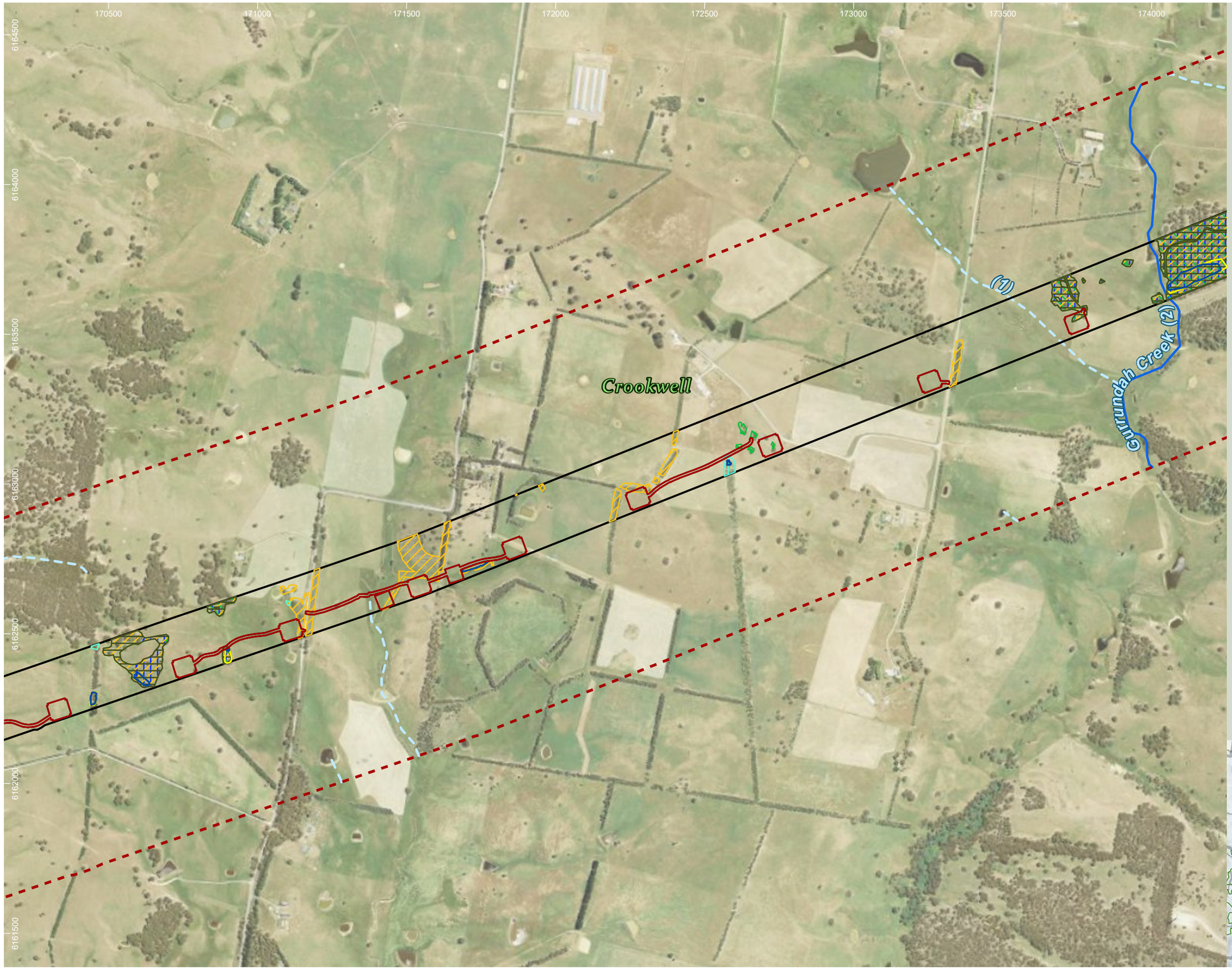


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

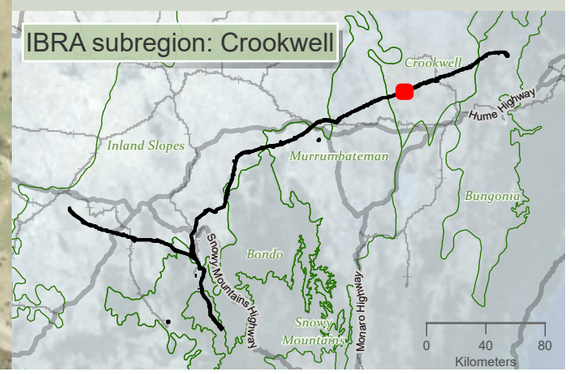
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 88

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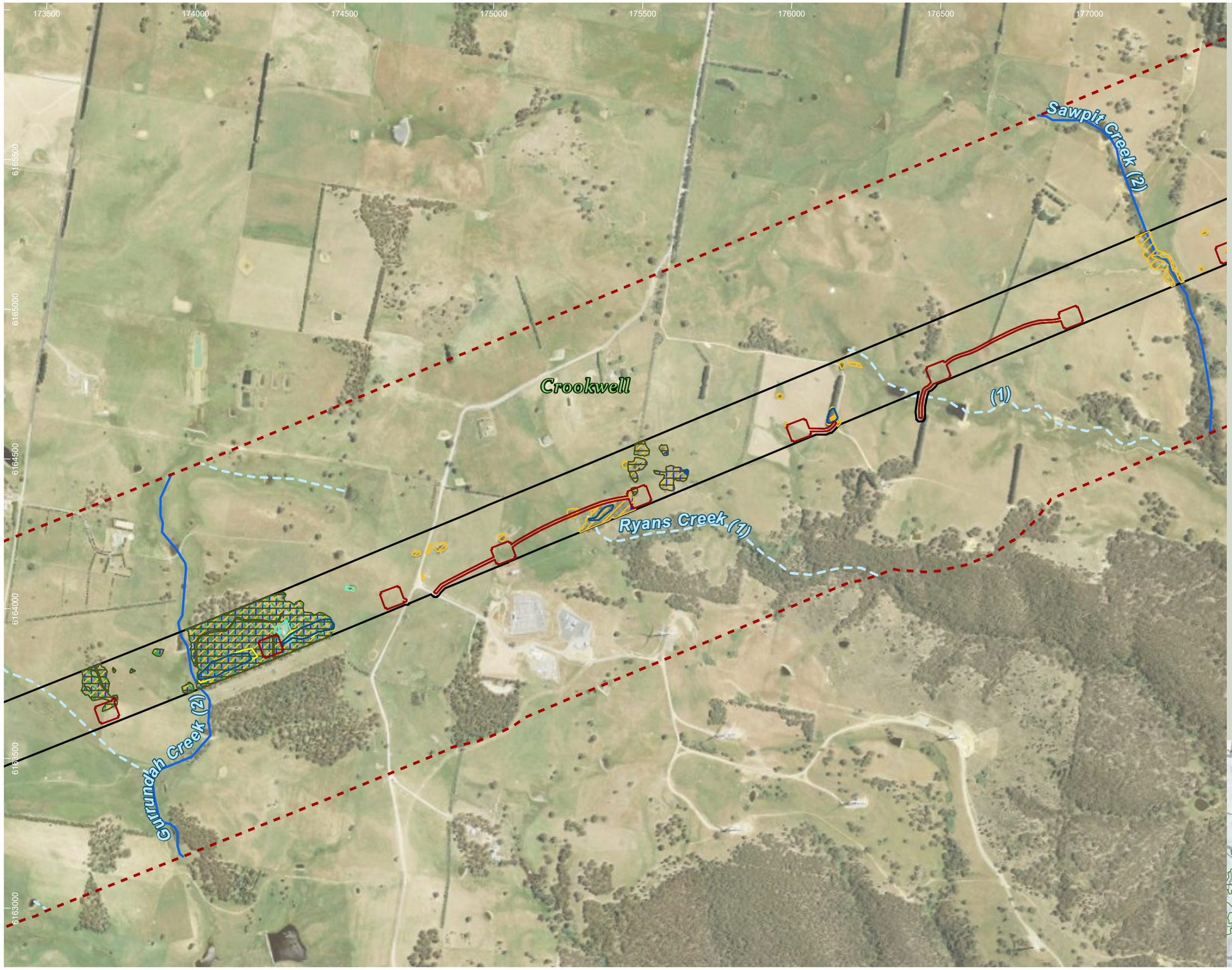


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

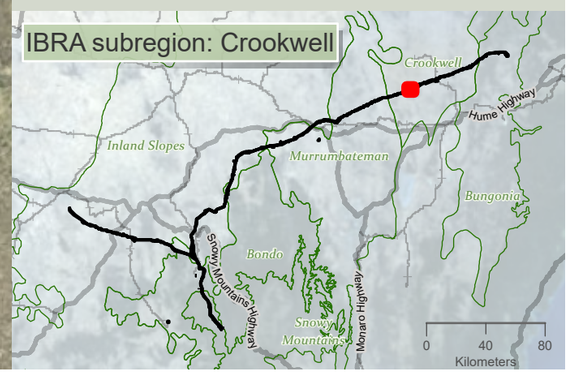
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 89

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177000 177500 178000 178500 179000 179500 180000 180500

6167500 6167000 6166500 6166000 6165500 6165000 6164500

Crookwell (1)

Kialla Creek (3)

(2)

Sawpit Creek (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

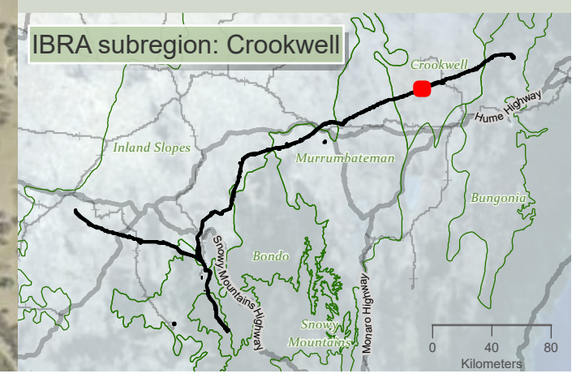
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Hieraaetus morphnoides



0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 90

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180000 180500 181000 181500 182000 182500 183000 183500

6169000 6168500 6168000 6167500 6167000 6166500

Back Creek (2)

Back Creek (3)

Crookwell

(1)

(2)

Kialla Creek (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

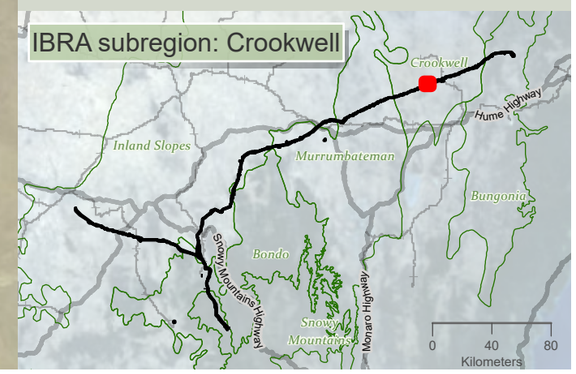
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Haliaeetus leucogaster
- Hieraaetus morphnoides



niche Environment and Heritage

0 400
m
N

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 91

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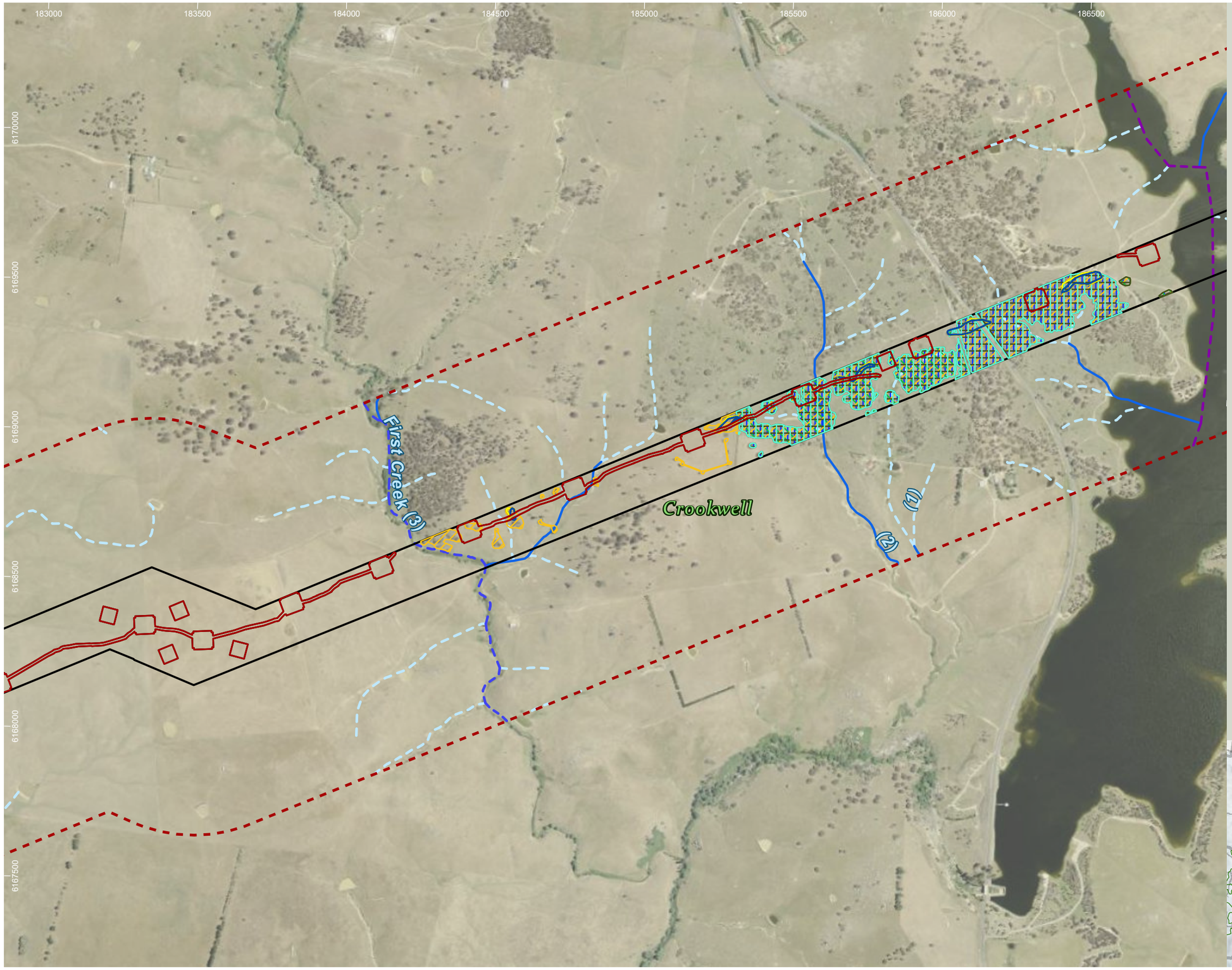


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

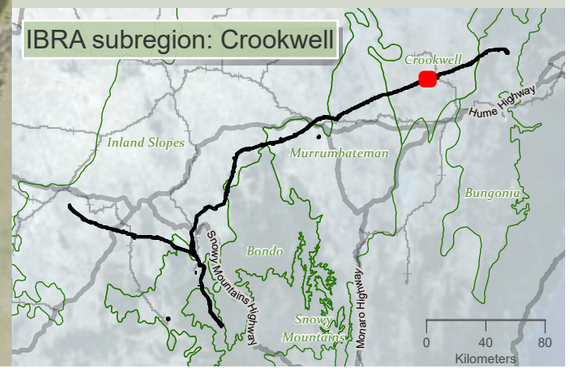
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 92

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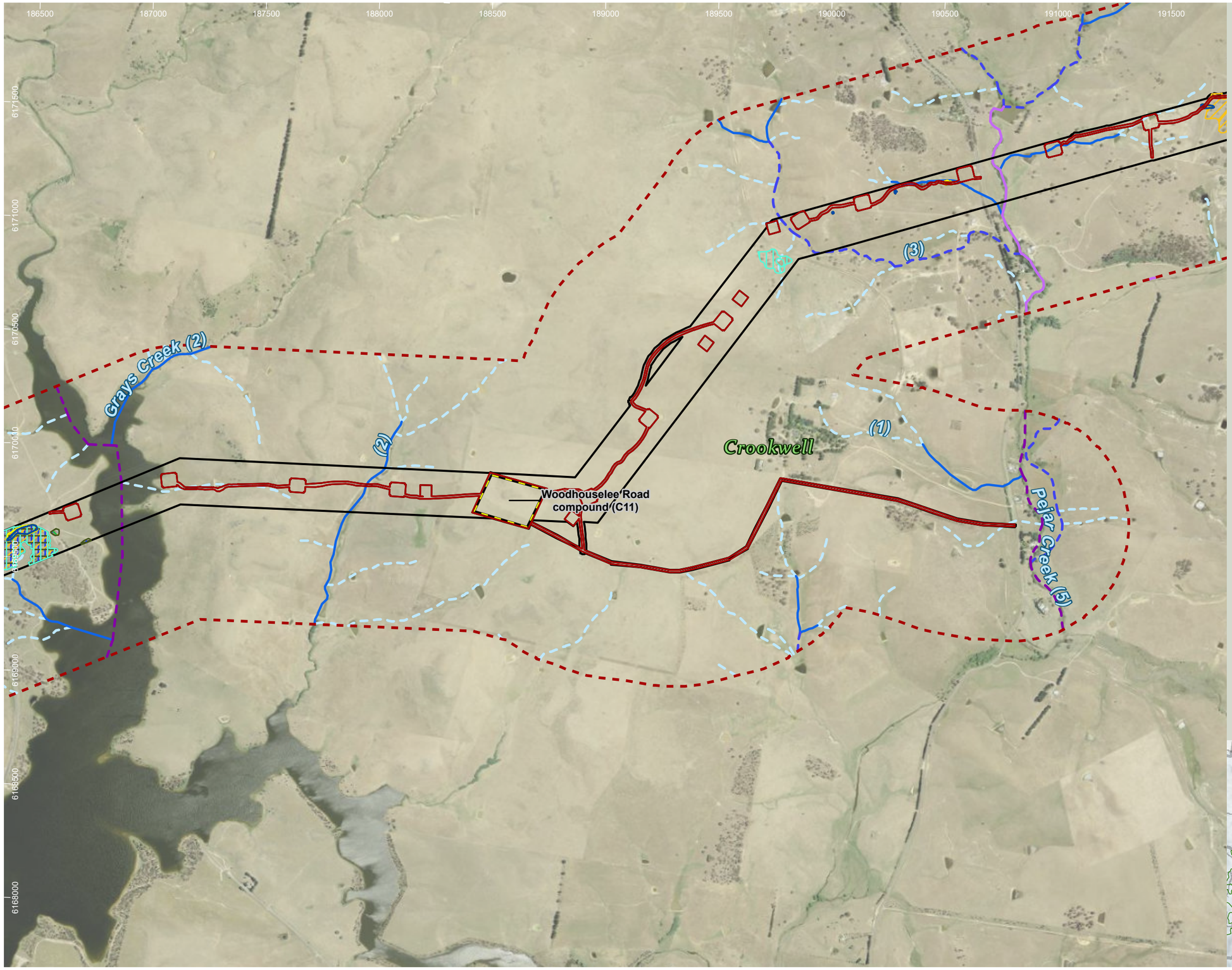


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

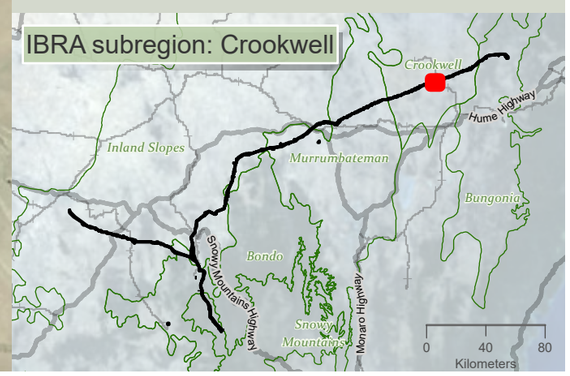
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 93

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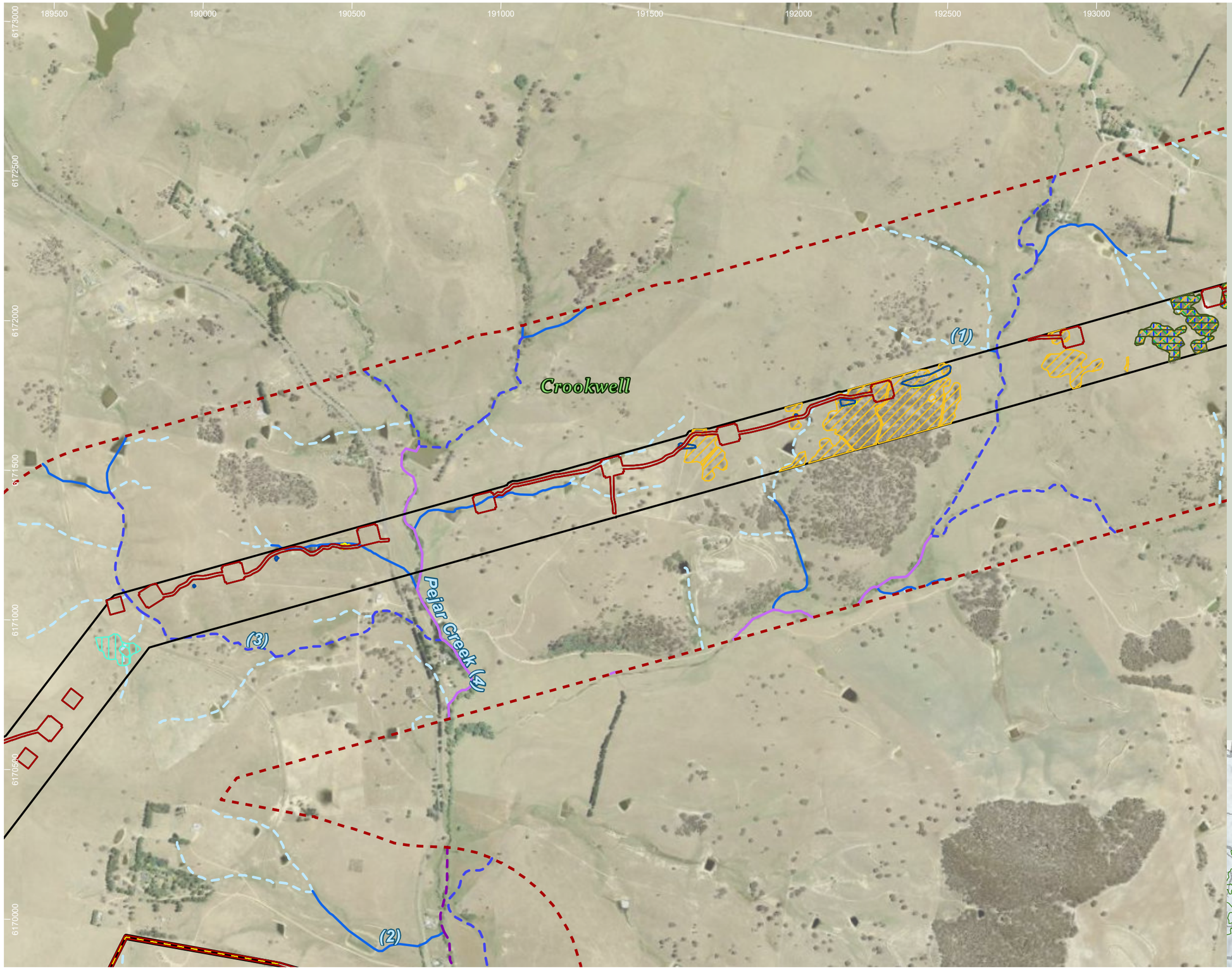


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

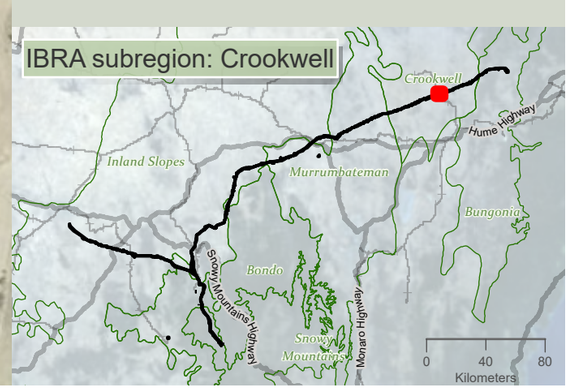
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 94

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193000 193500 194000 194500 195000 195500 196000 196500

6174000 6173500 6173000 6172500 6172000 6171500 6171000

(3) (2) (1)

Melamalong Creek (7)

Crookwell

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

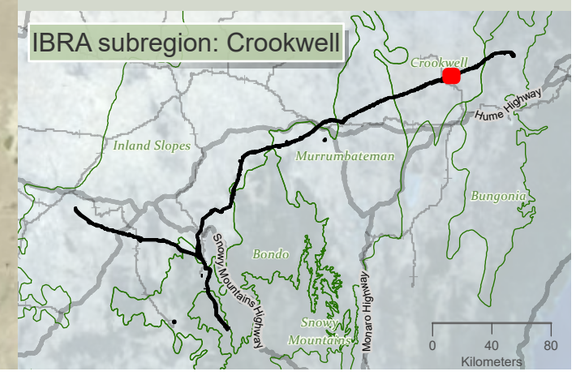
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 95

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196000 196500 197000 197500 198000 198500 199000 199500

6175000 6174500 6174000 6173500 6173000 6172500

Tarlo River (5)

Crookwell

(2)

(3)

Sawpit Gully (3)

(1)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

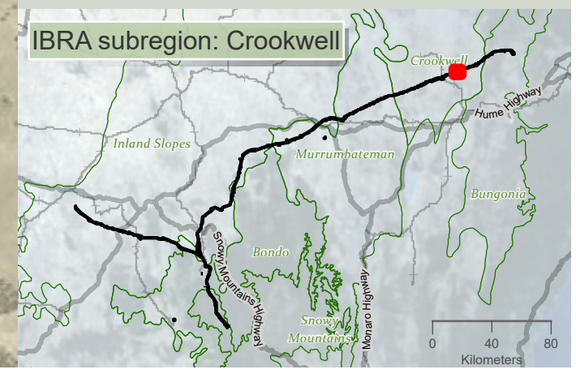
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 96

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199500 200000 200500 201000 201500 202000 202500 203000

6176500 6176000 6175500 6175000 6174500 6174000

Crookwell

Turrallo Creek (5)

Tarlo River (5)

(1) (2) (3) (4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

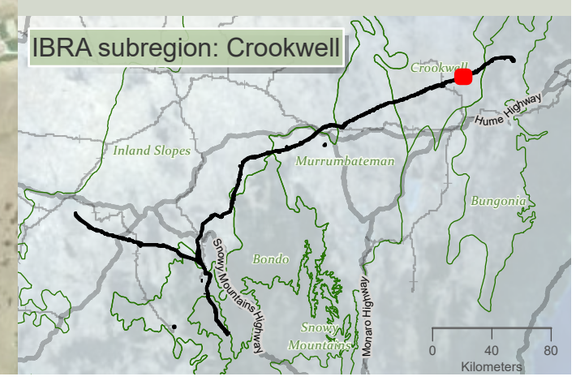
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Haliaeetus leucogaster
- Hieraaetus morphnoides
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 97

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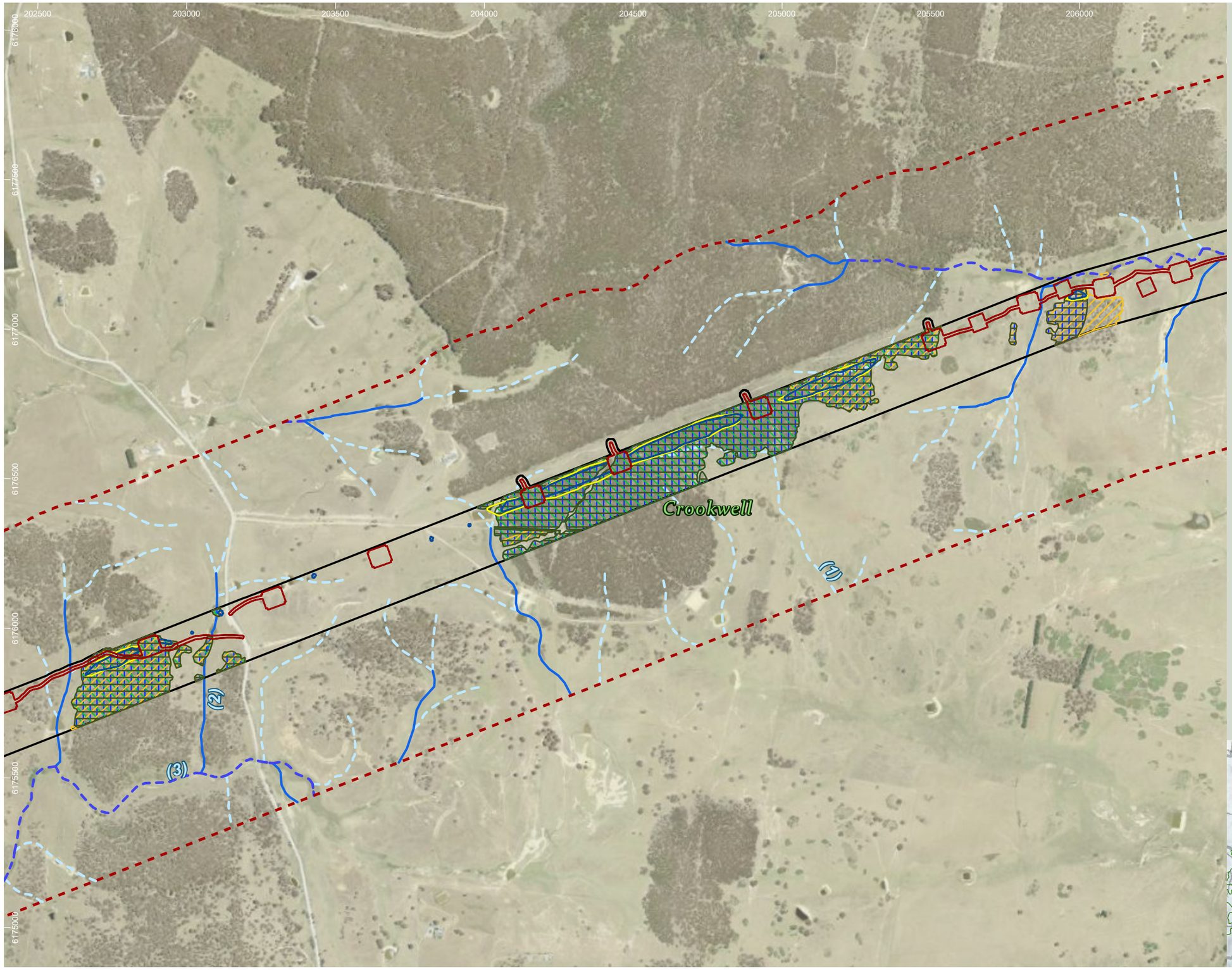


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

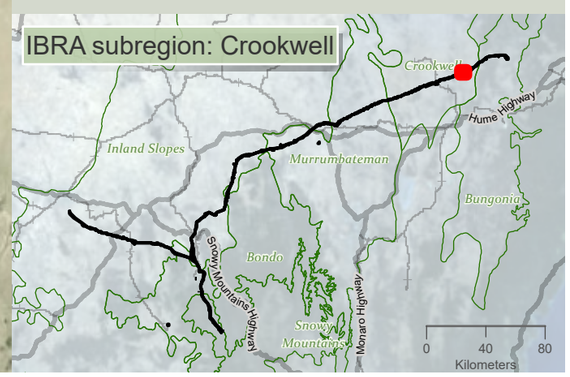
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox strenua



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 98

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206000 206500 207000 207500 208000 208500 209000 209500

6179500 6178500 6177500 6176500

Myrtle Creek (4)

(3)

Cowpers Creek (3)

Crookwell

(2)

(1)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

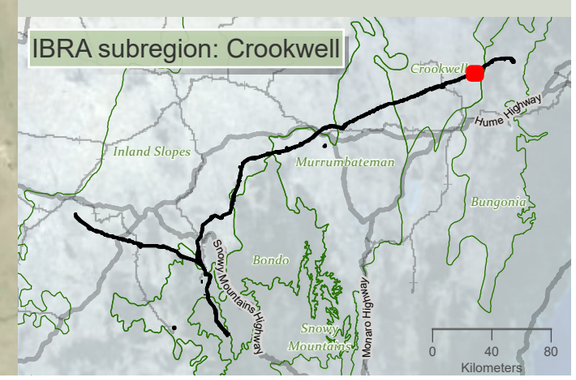
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox strenua
- Polytelis swainsonii



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 99

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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208500 209000 209500 210000 210500 211000 211500 212000 212500

6181000 6180500 6180000 6179500 6179000 6178500

Crookwell

(1) (2) (3) 4

Bungonia

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

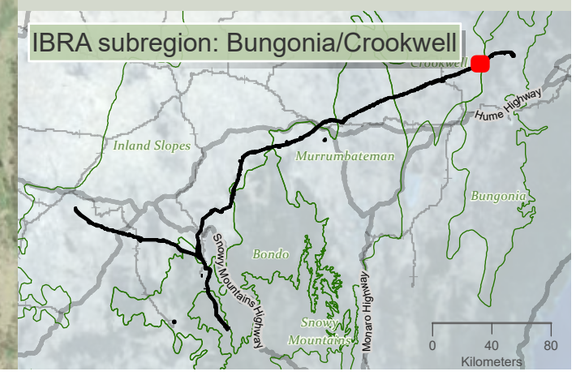
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone

Bird species habitat

- Hieraaetus morphnoides



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 100

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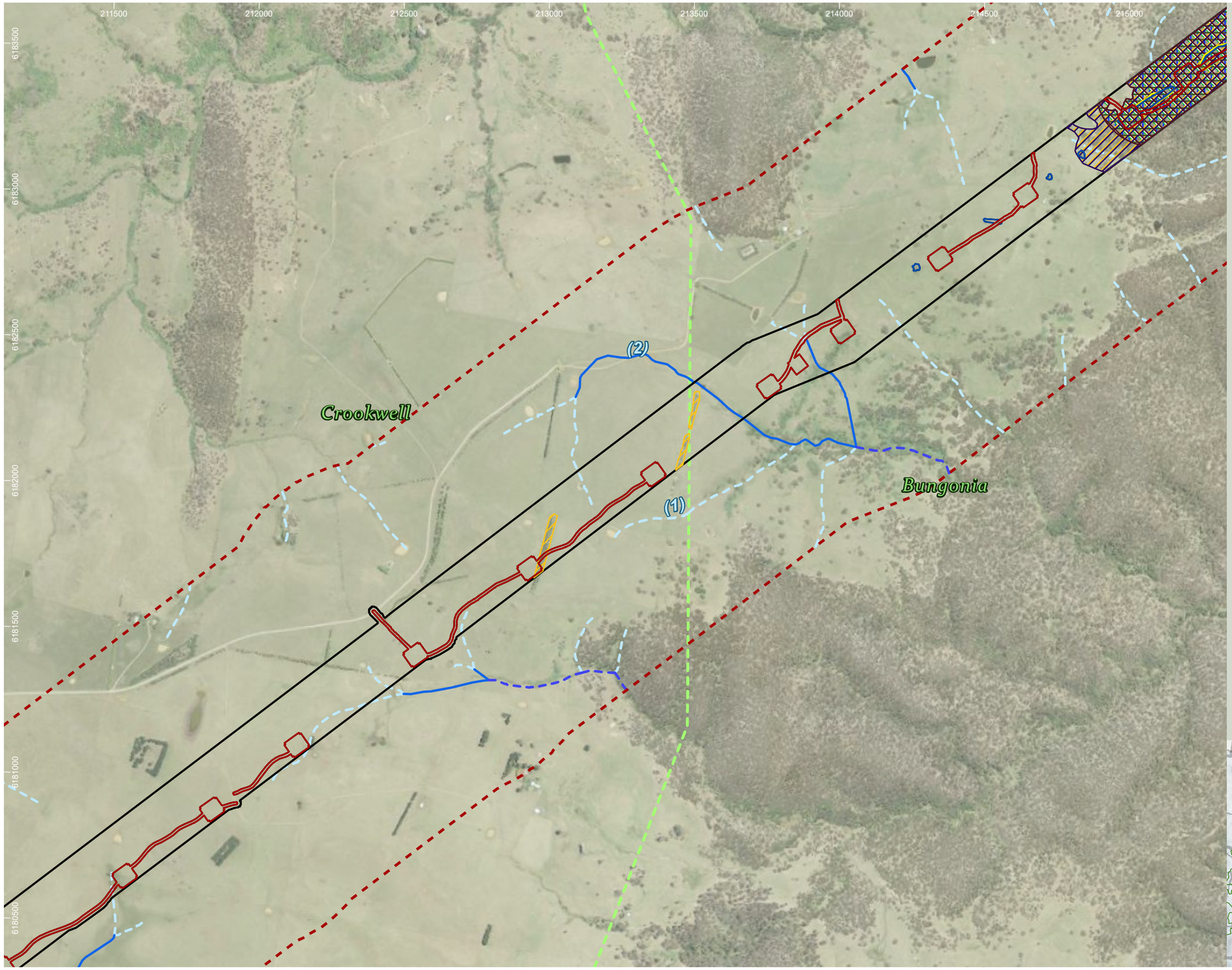


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

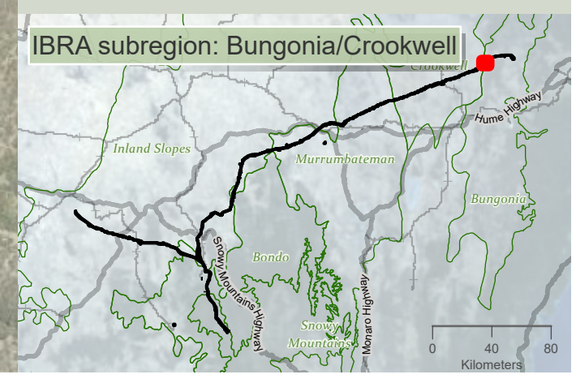
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 101

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214000 214500 215000 215500 216000 216500 217000 217500 218000

6185500 6185000 6184500 6184000 6183500 6183000 6182500

(4) (2) (3) (1) (4)

Kerrawary Creek

Bungonia

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

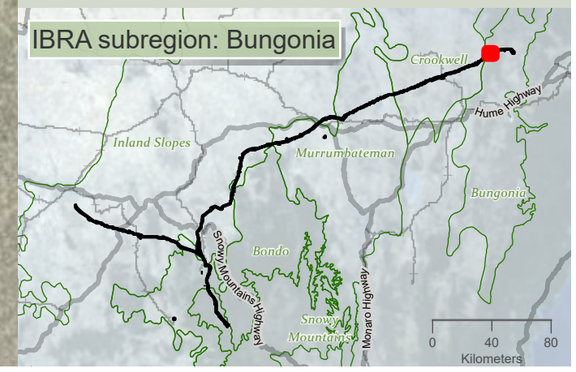
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 102

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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217500 218000 218500 219000 219500 220000 220500 221000

6187000 6186500 6186000 6185500 6185000 6184500

Bannaby Creek (3)

(1)

Bungonia

(2)

(3)

(4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

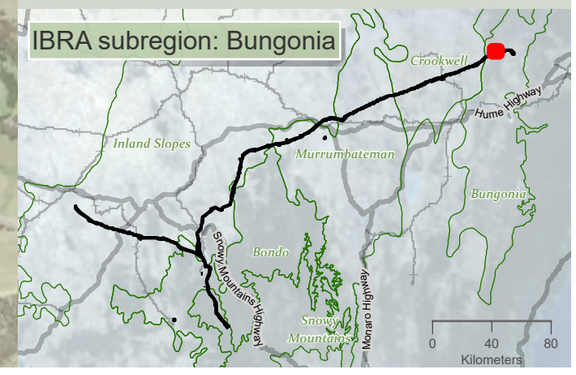
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 103

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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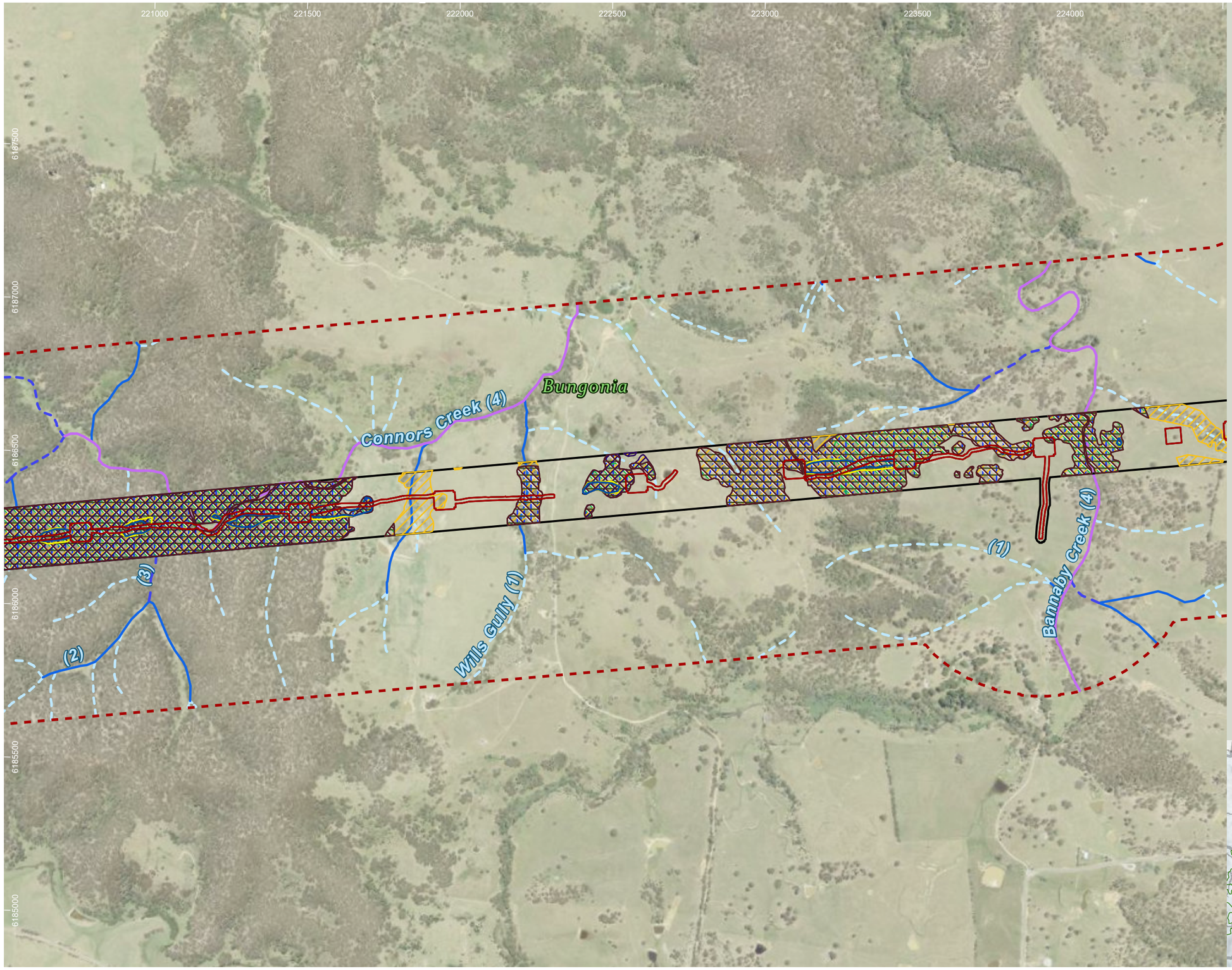


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

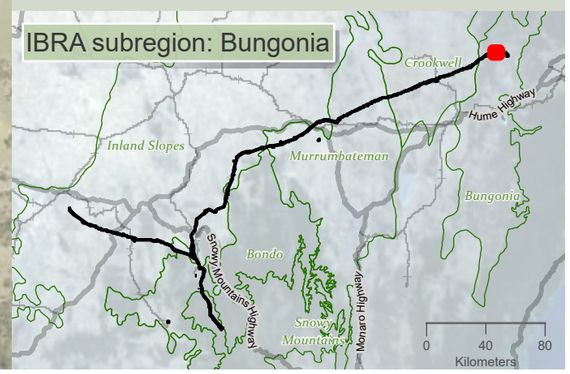
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Petroica rodinogaster
- Tyto novaehollandiae



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 104

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224500 225000 225500 226000 226500 227000 227500

6188000 6187500 6187000 6186500 6186000 6185500

(1) (2) (3) (4)

Bungonia

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

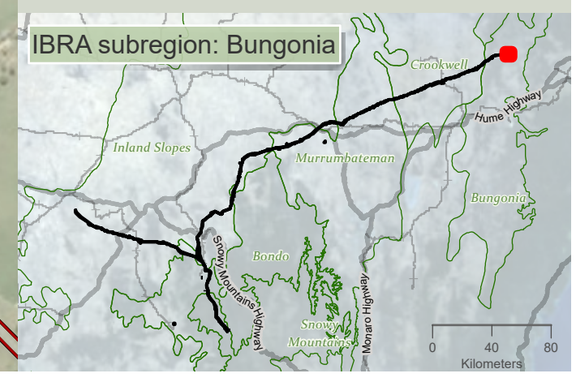
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Tyto novaehollandiae



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 105

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227000 227500 228000 228500 229000 229500 230000 230500

6186500 6186000 6185500 6185000 6184500 6184000

(2) (1) (3)

Bungonia

Bannaby 500'kV substation compound (C12)

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

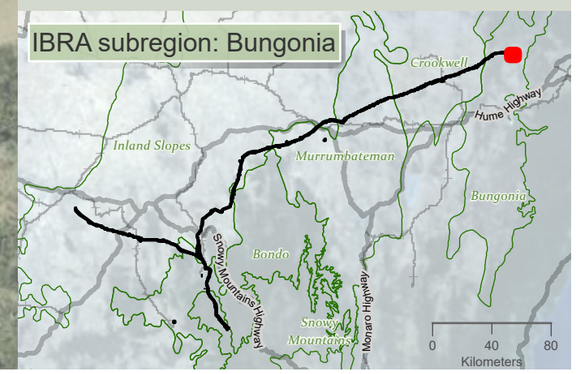
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Bird species habitat

- Callocephalon fimbriatum
- Calyptorhynchus lathami
- Hieraaetus morphnoides
- Ninox connivens
- Ninox strenua
- Tyto novaehollandiae



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Bird species habitat

HumeLink BDAR

Figure 13-6 map reference 106

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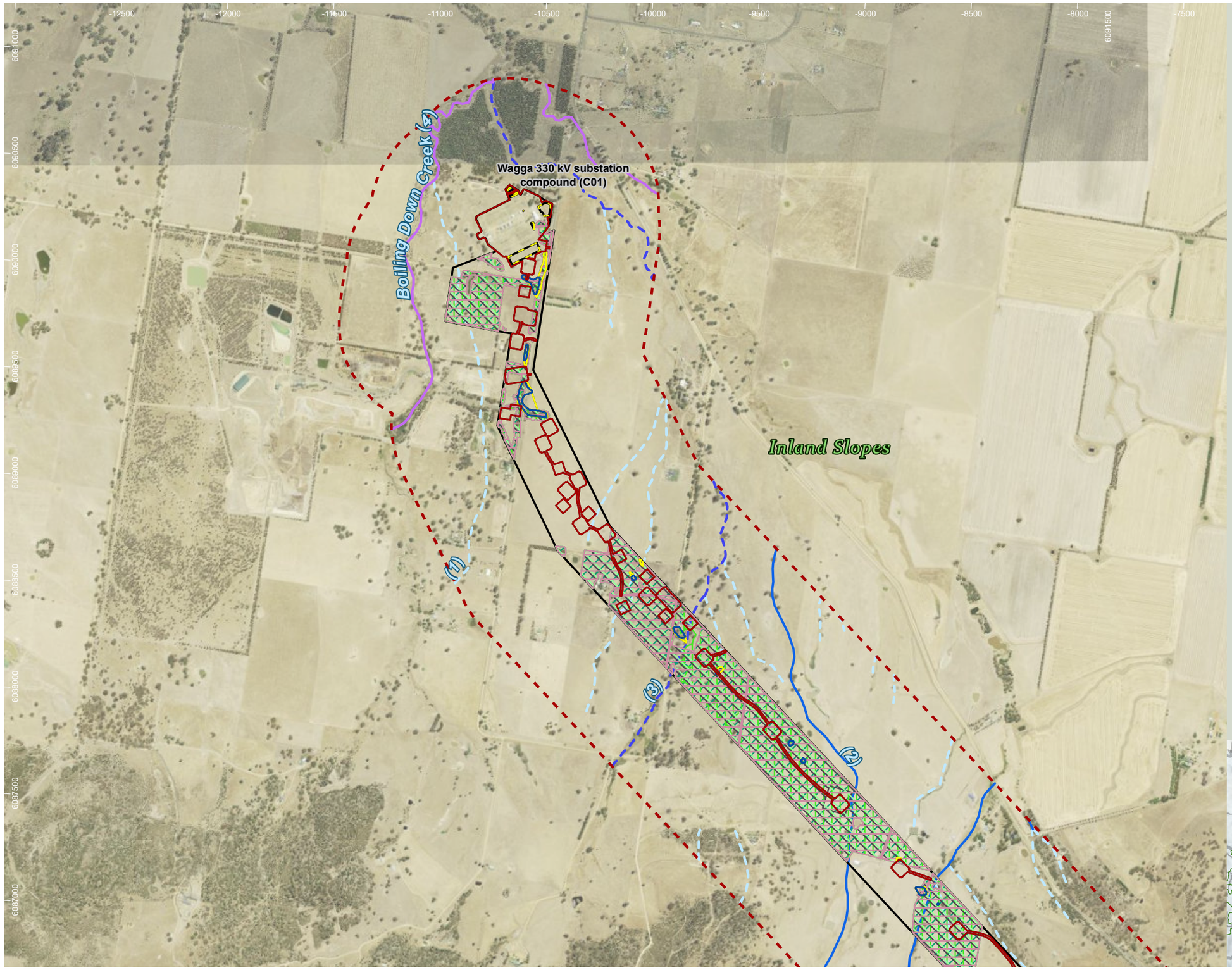


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

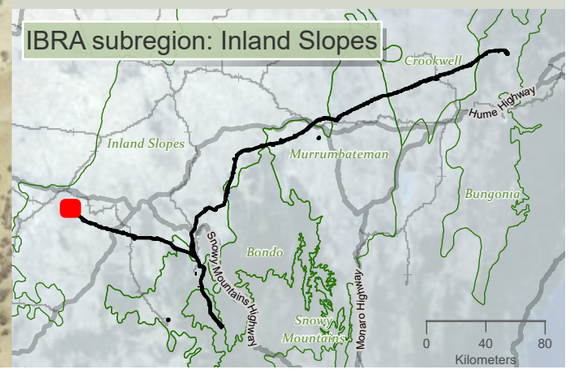
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Swainsona recta
- Swainsona sericea



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niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 1

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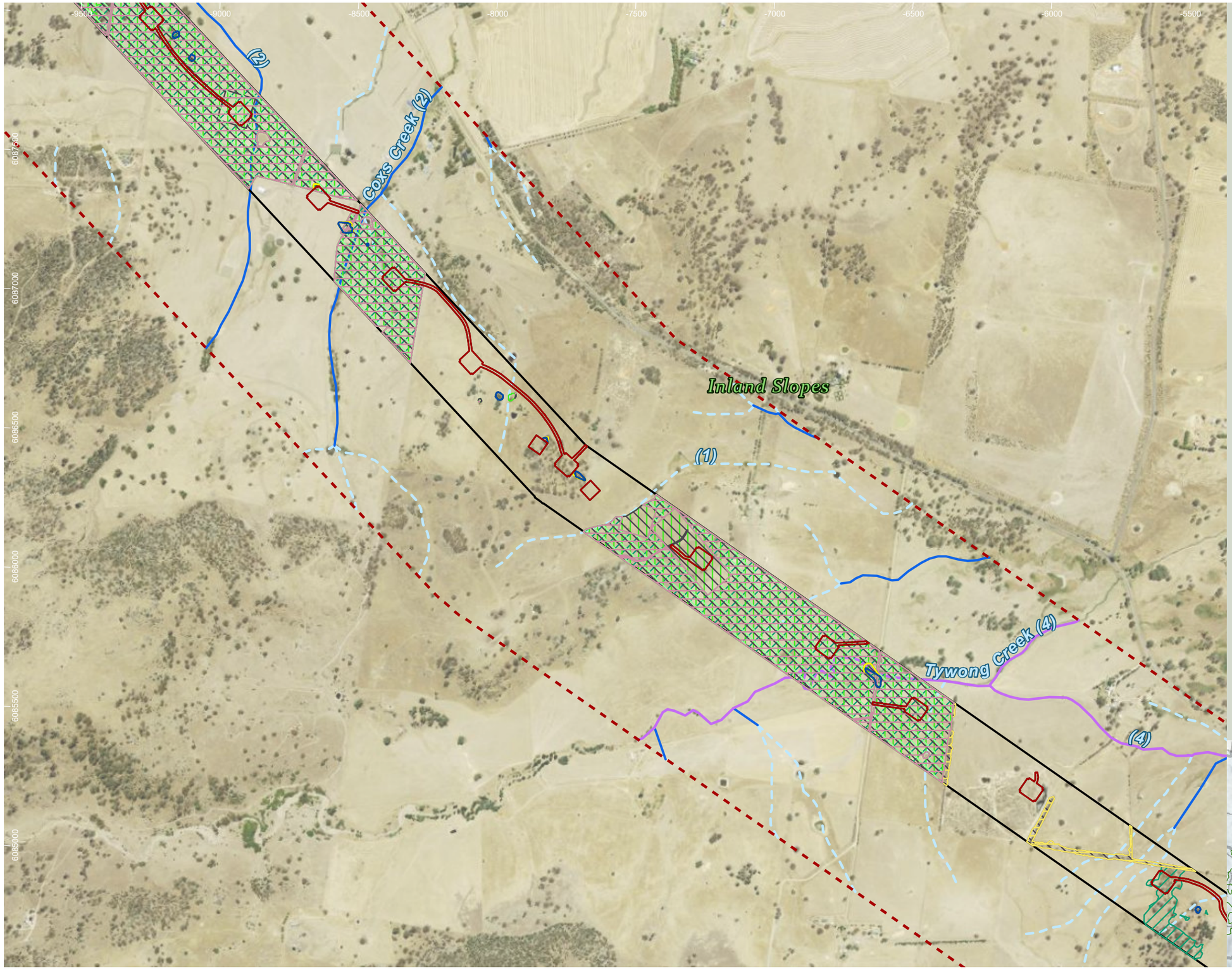


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

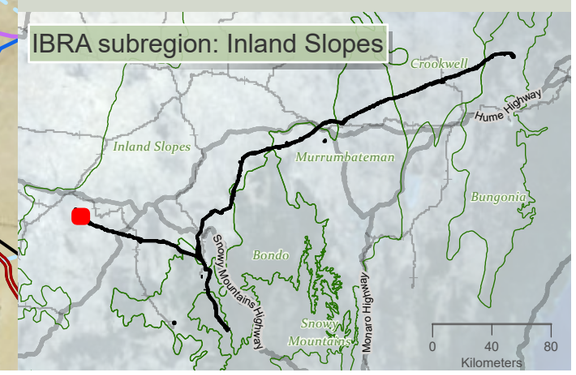
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 2

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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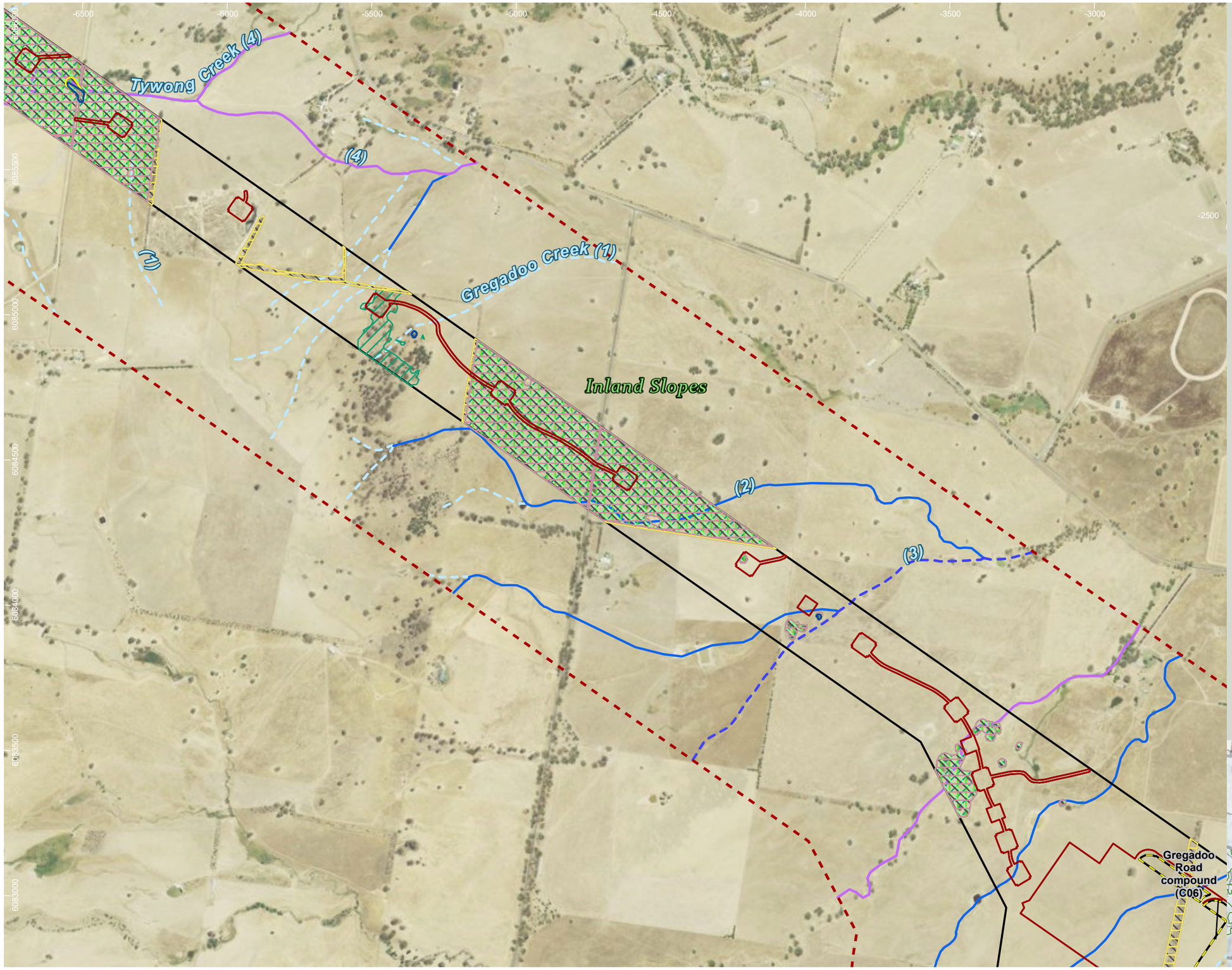


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

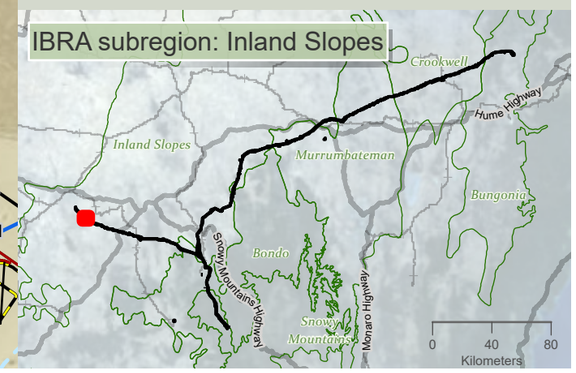
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\FolderNiche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 3

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-3500 -3000 -2500 -2000 -1500 -1000 -500 0

6084000 6083500 6083000 6082500 6082000 6081500 6081000

Gregadoo Road compound (C06)

Inland Slopes

(1) (2) (3) (4) (5) (6)

O'briens Creek (6)

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

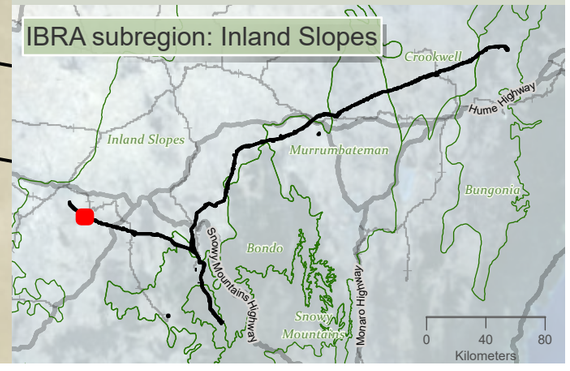
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 4

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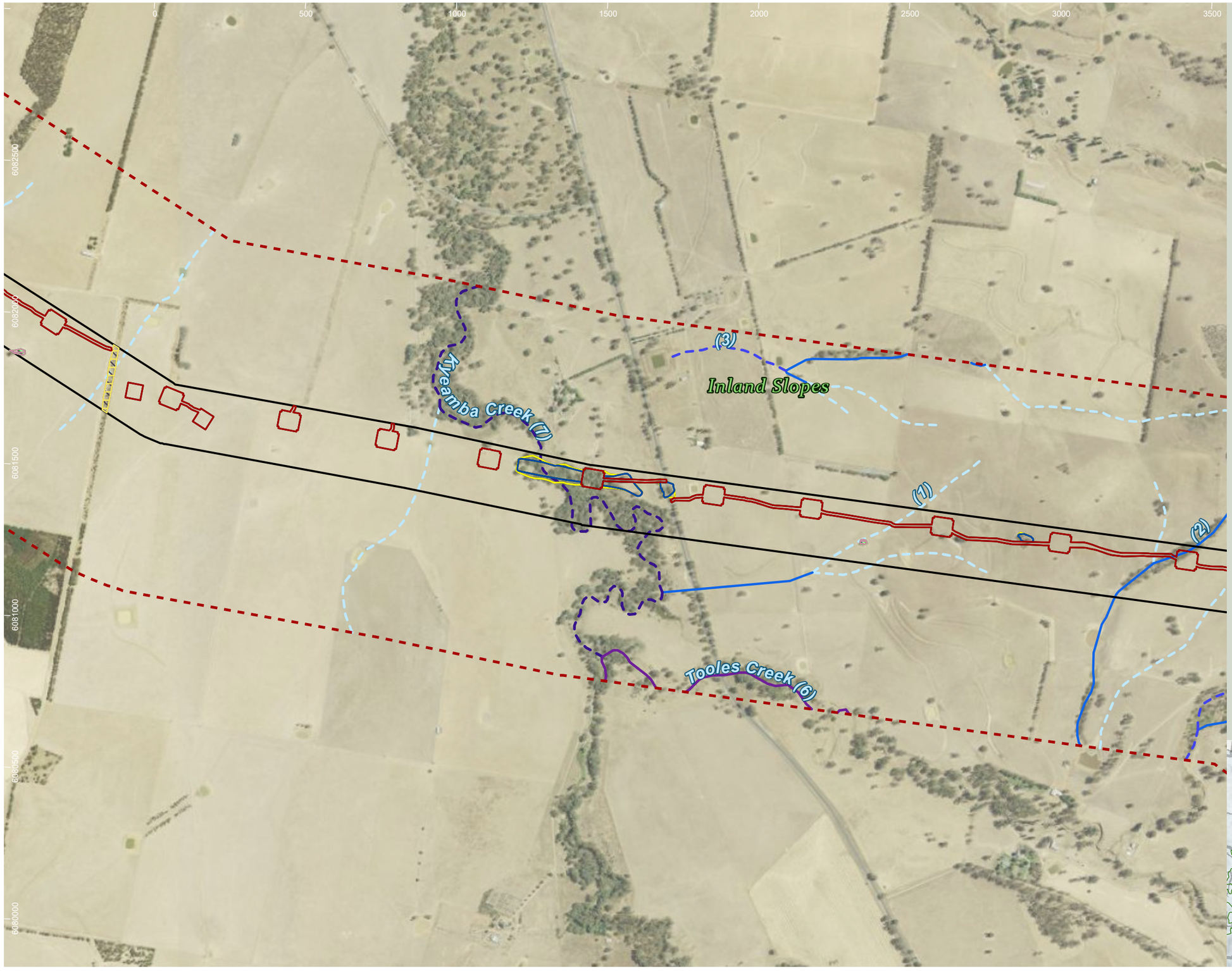


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

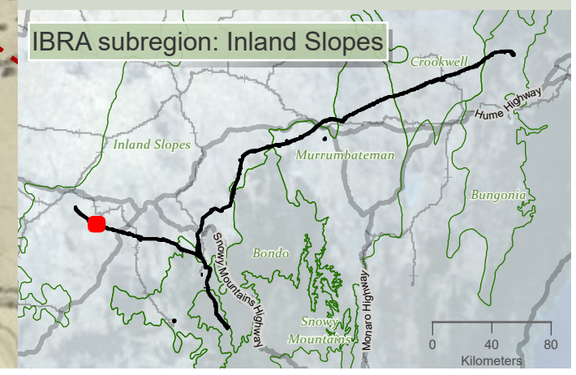
- 1
- 2
- 3
- 6
- 7

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 5

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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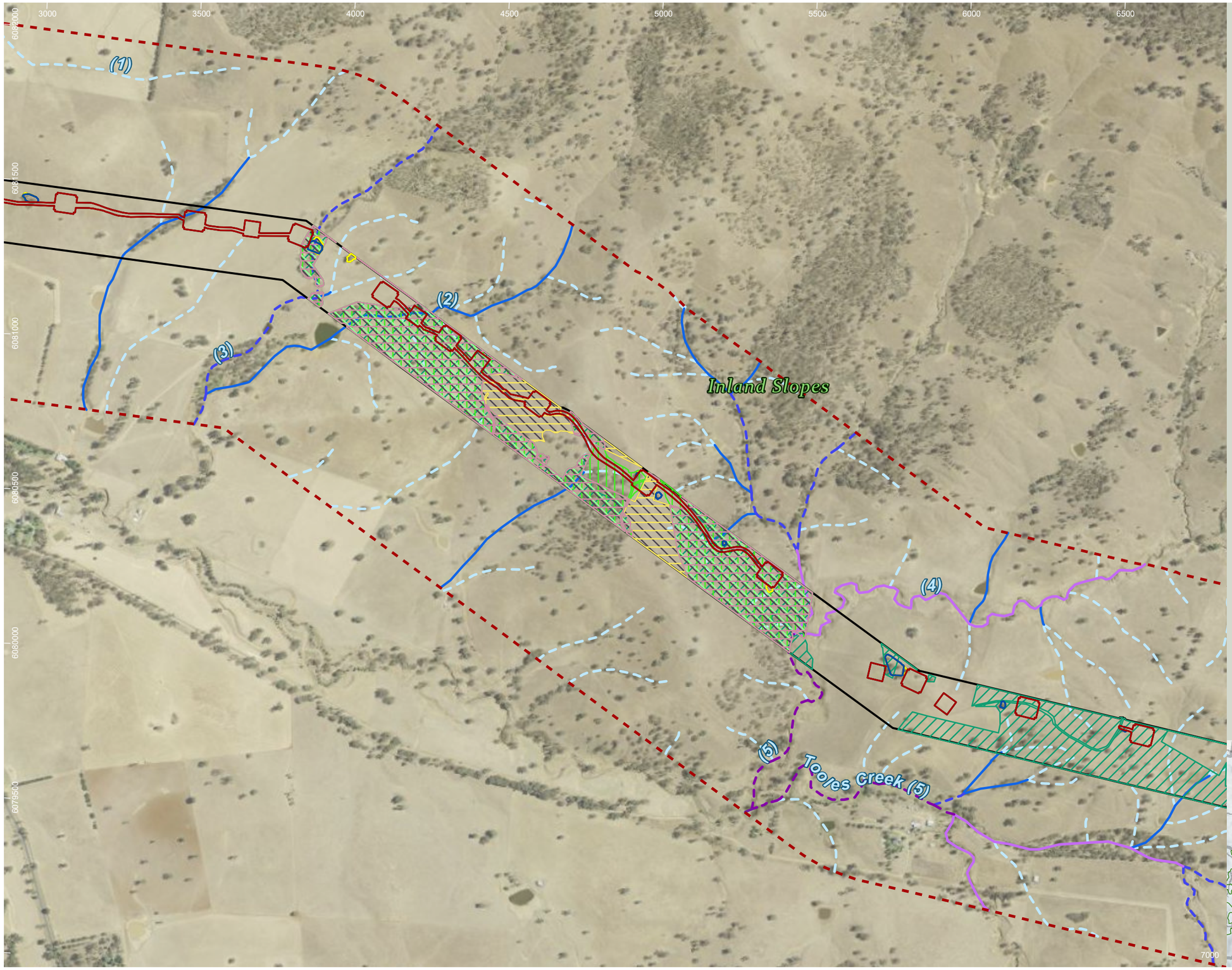


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

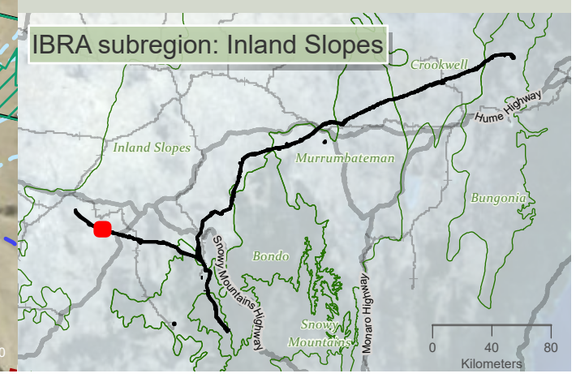
- 1
- 2
- 3
- 4
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 6

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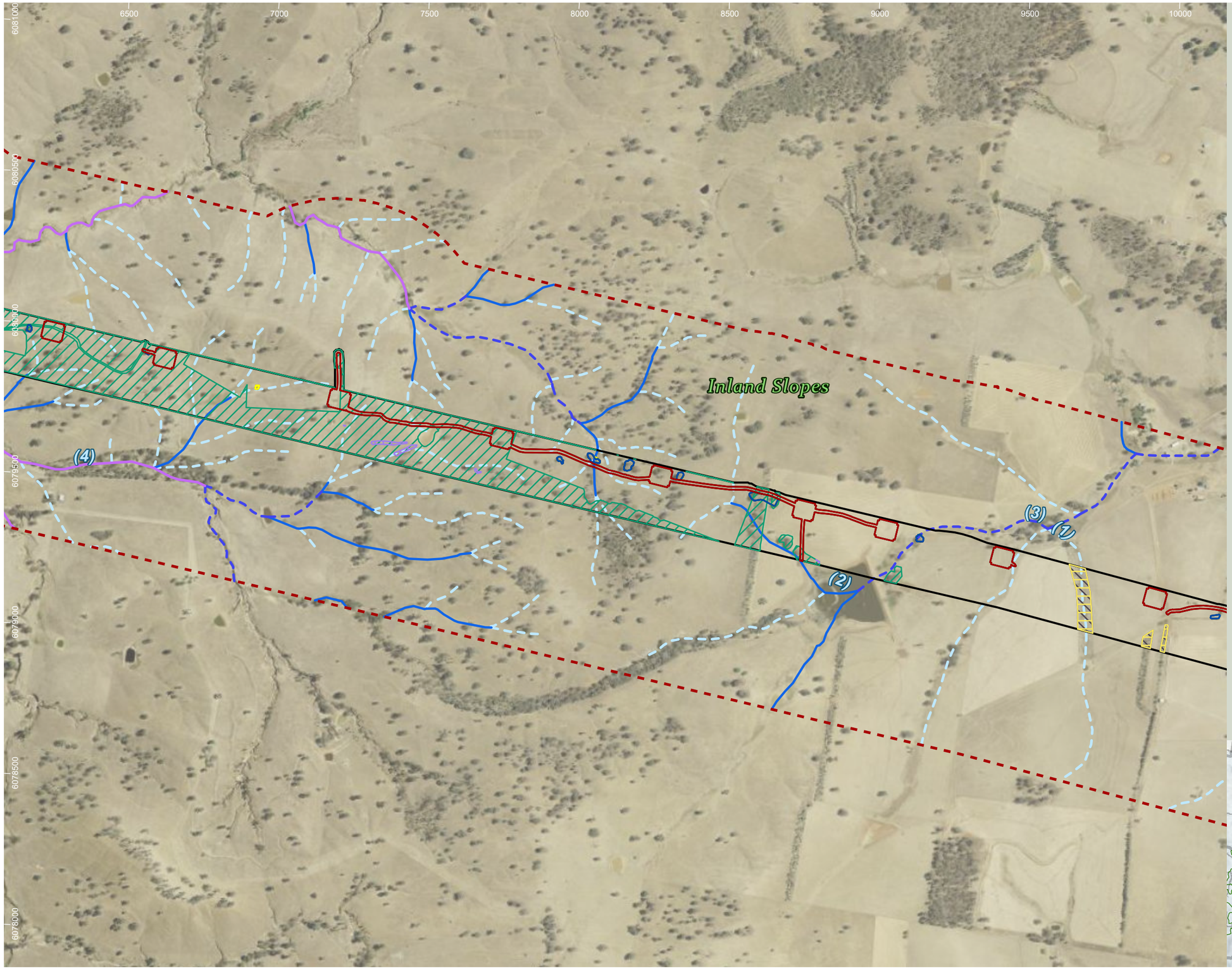


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

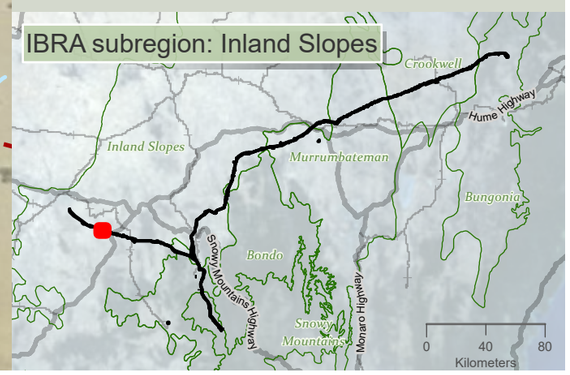
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Senecio garlandii



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 7

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

10000 10500 11000 11500 6080500 12000 12500 13000 13500

6080000 6079500 6079000 6078500 6078000 6077500

(1) (2) (3) (4)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

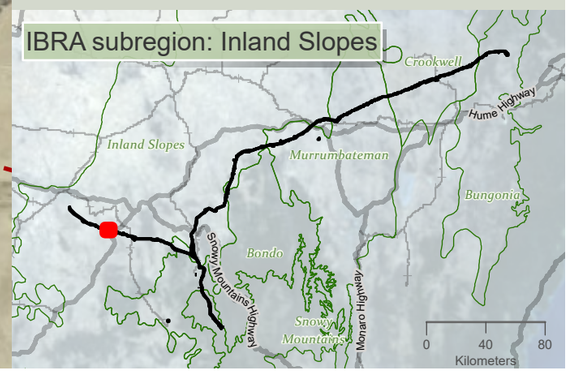
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 8

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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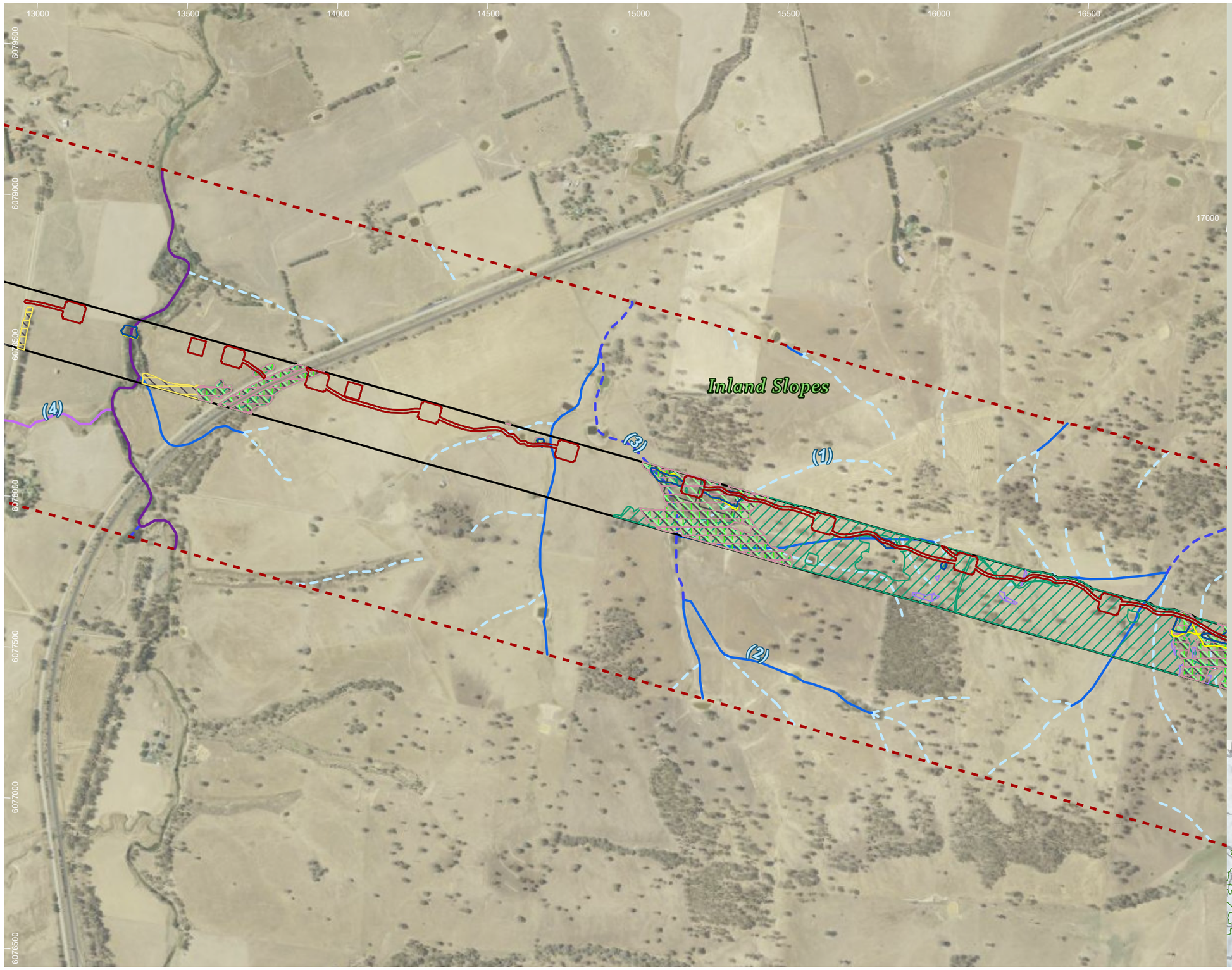


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

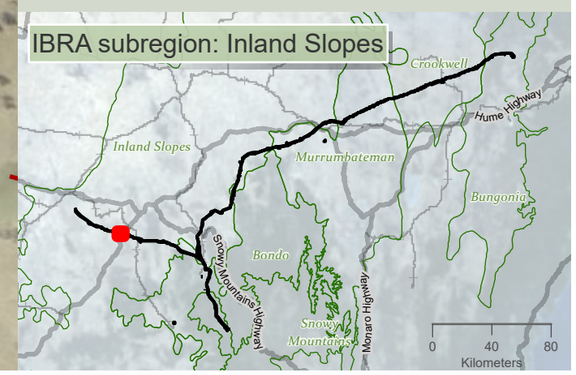
- 0
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Senecio garlandii
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 400 m

N

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 9

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16500 17000 17500 18000 18500 6079000 19000 19500 20000

6078500 6078000 6077500 6077000 6076500 6076000

(1) (2) (3)

Inland Slopes

20500

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

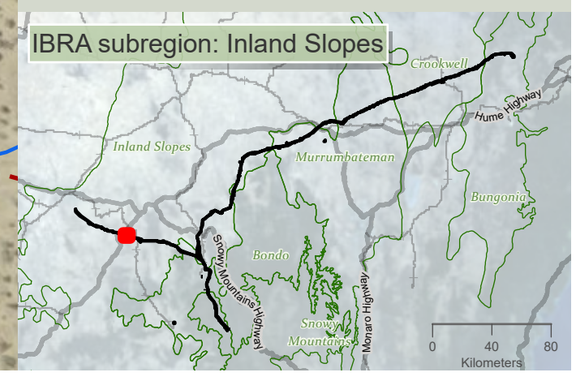
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Senecio garlandii
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 10

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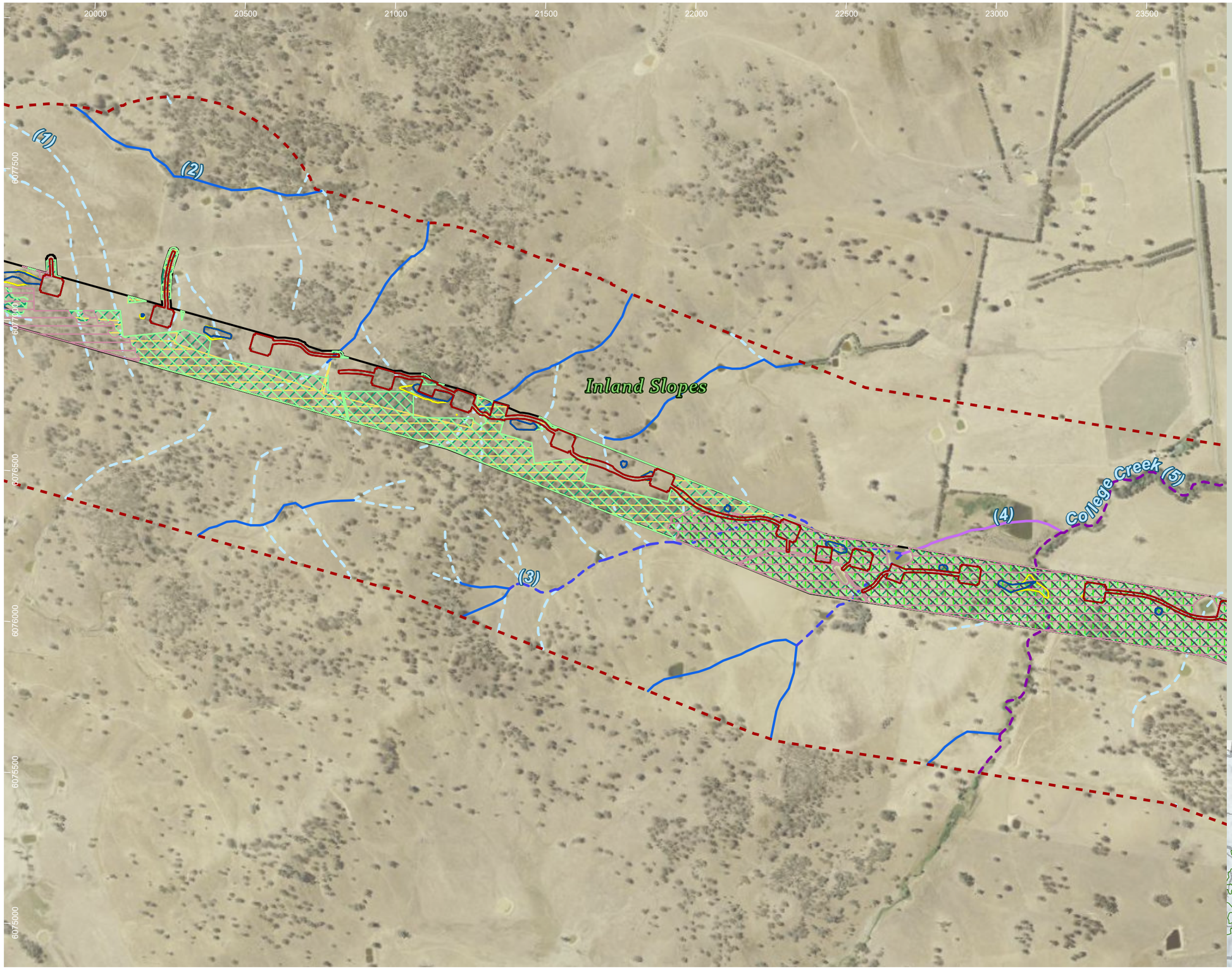


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

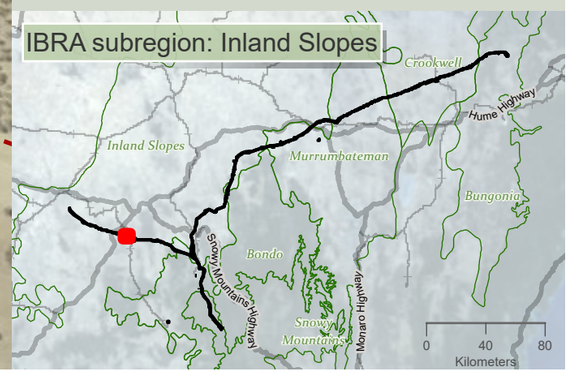
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 11

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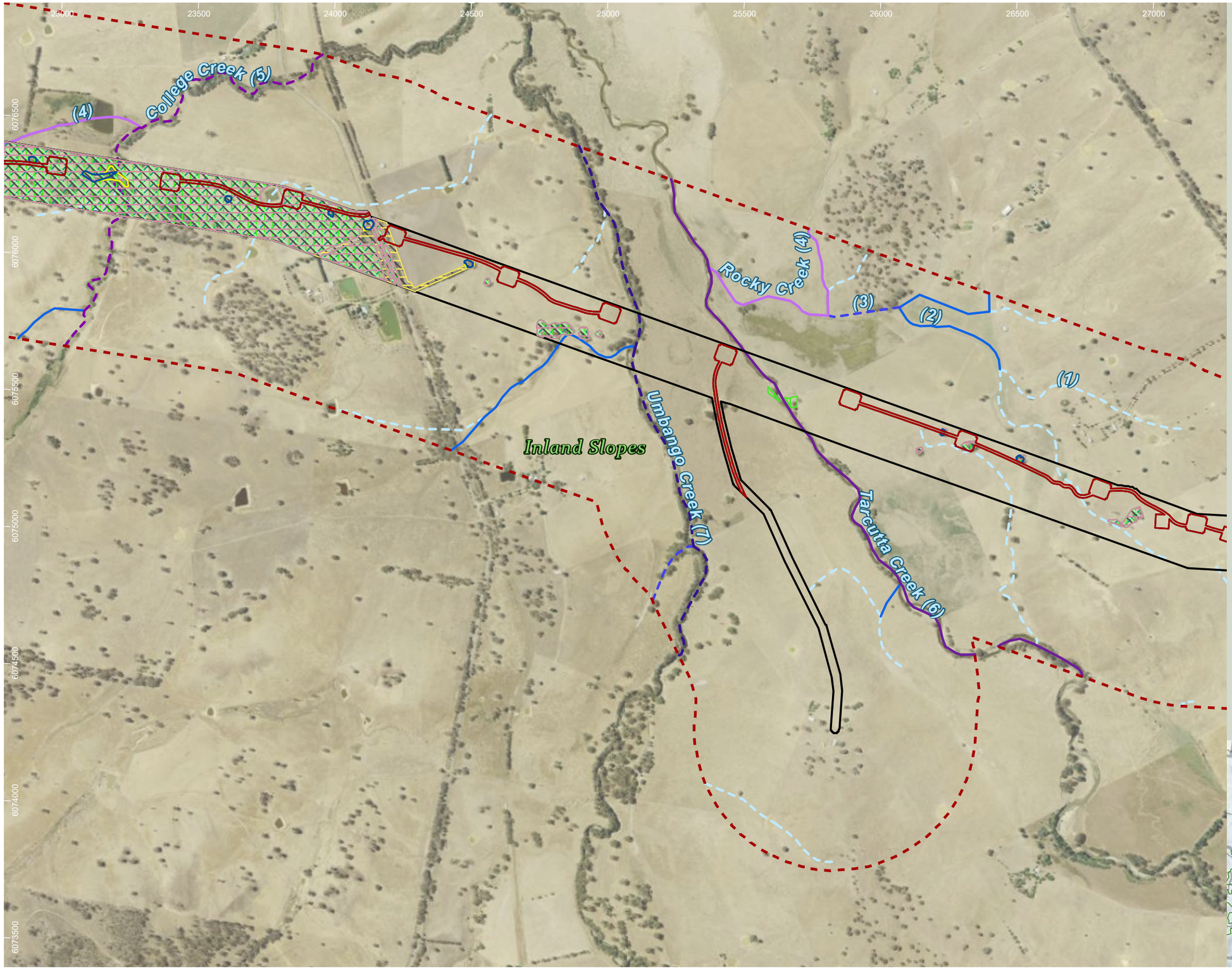


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

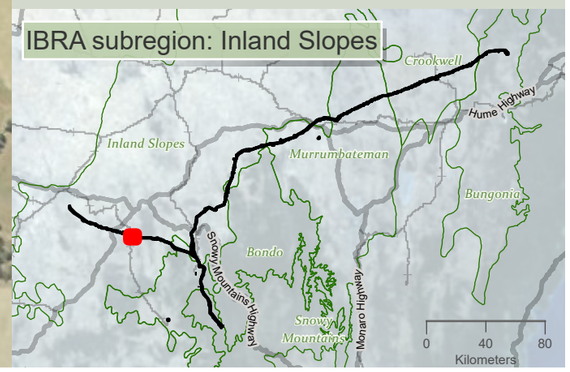
- 1
- 2
- 3
- 4
- 5
- 6
- 7

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 12

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Drawn by: MathewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

27000 27500 28000 28500 29000 29500 30000

6076500 6075000 6075500 6075000 6074500 6074000

Inland Slopes (5) (1) (4) (3) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

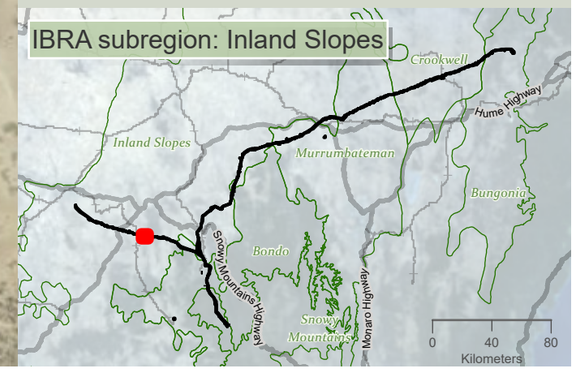
- 1
- 2
- 3
- 4
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 13

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30500 31000 31500 32000 32500 33000 33500 34000

6076500 6076000 6075500 6075000 6074500 6074000

Inland Slopes

(1) (2) (3) (4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

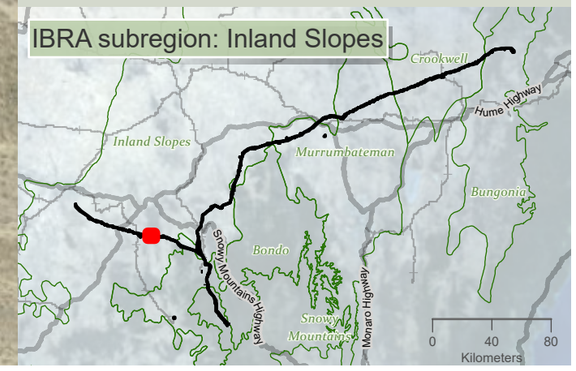
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Caesia parviflora var minor
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Senecio garlandii
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 14

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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34000 34500 35000 35500 36000 36500 37000 37500

6076000 6075500 6075000 6074500 6074000 6073500

Inland Slopes

Turners Creek (3)

(1)

(3)

(2)

Turners Creek (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

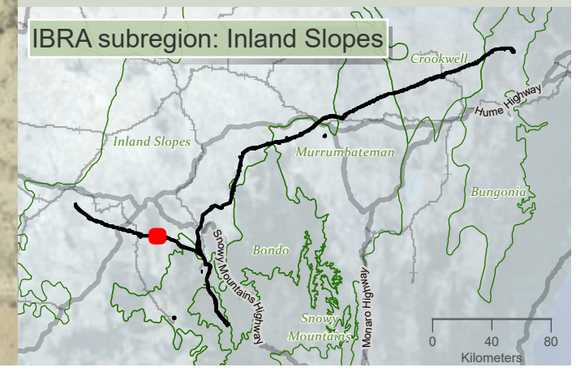
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Caesia parviflora var minor
- Euphrasia arguta
- Senecio garlandii
- Swainsona sericea



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\ai6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 15

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

37500 38000 38500 6076500 39000 39500 40000 40500

6075500 6075000 6074500 6074000 6073500

(1) (2) (3)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

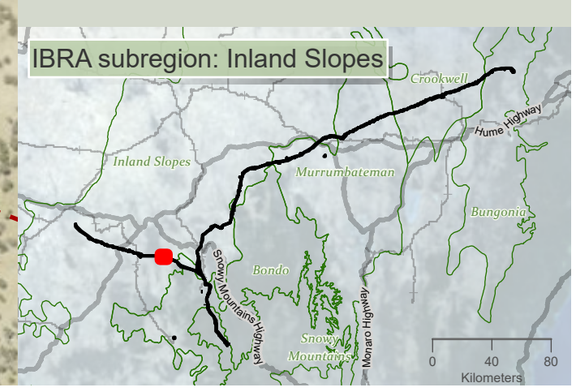
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Euphrasia arguta
- Senecio garlandii
- Swainsona sericea



Drawn by: MathewZajeczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\EC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 16

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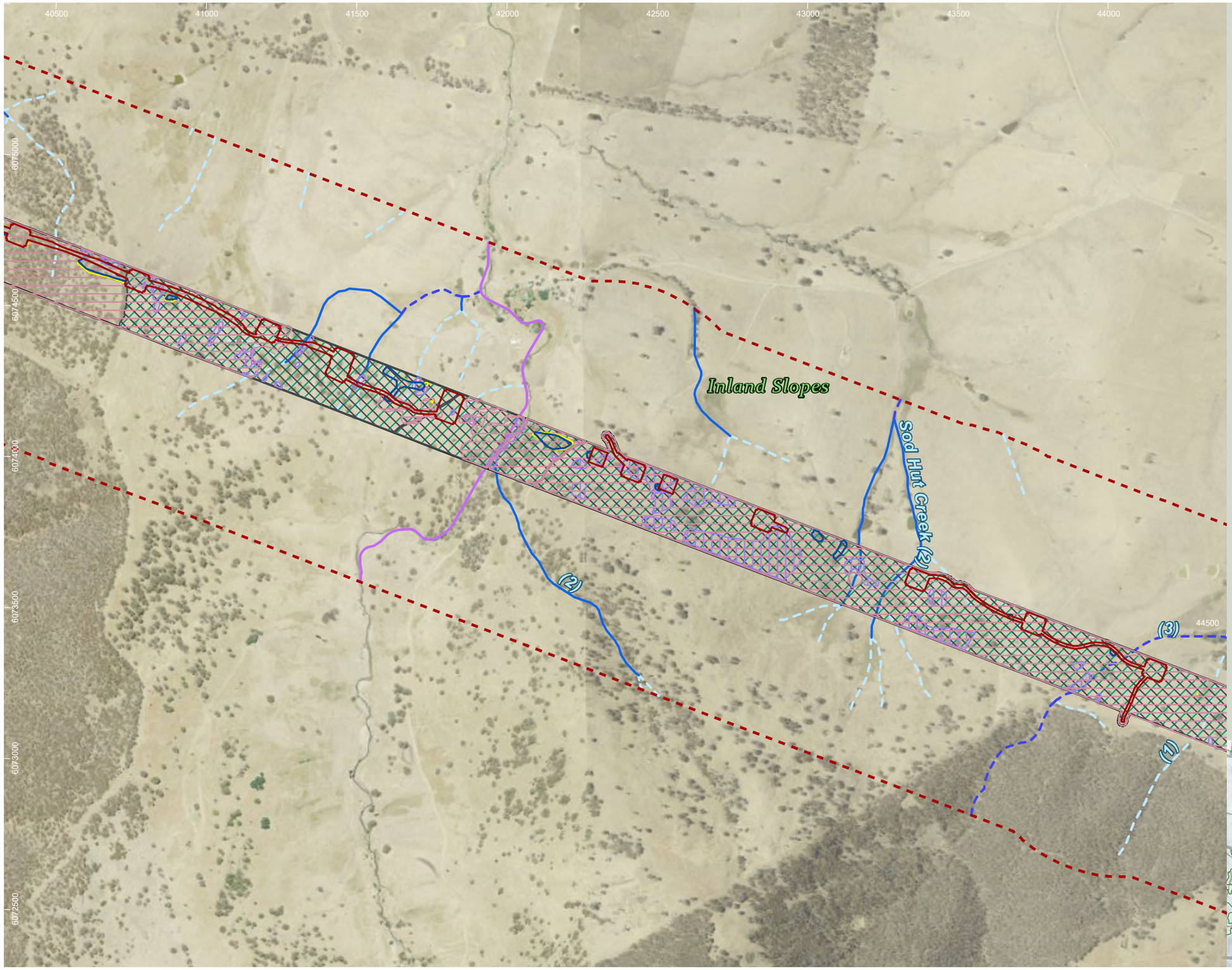


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

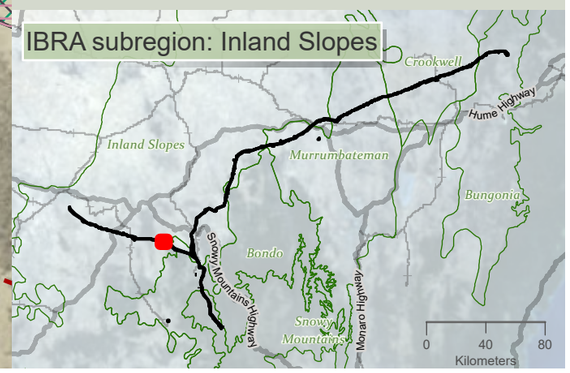
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Euphrasia arguta
- Senecio garlandii
- Swainsona sericea



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

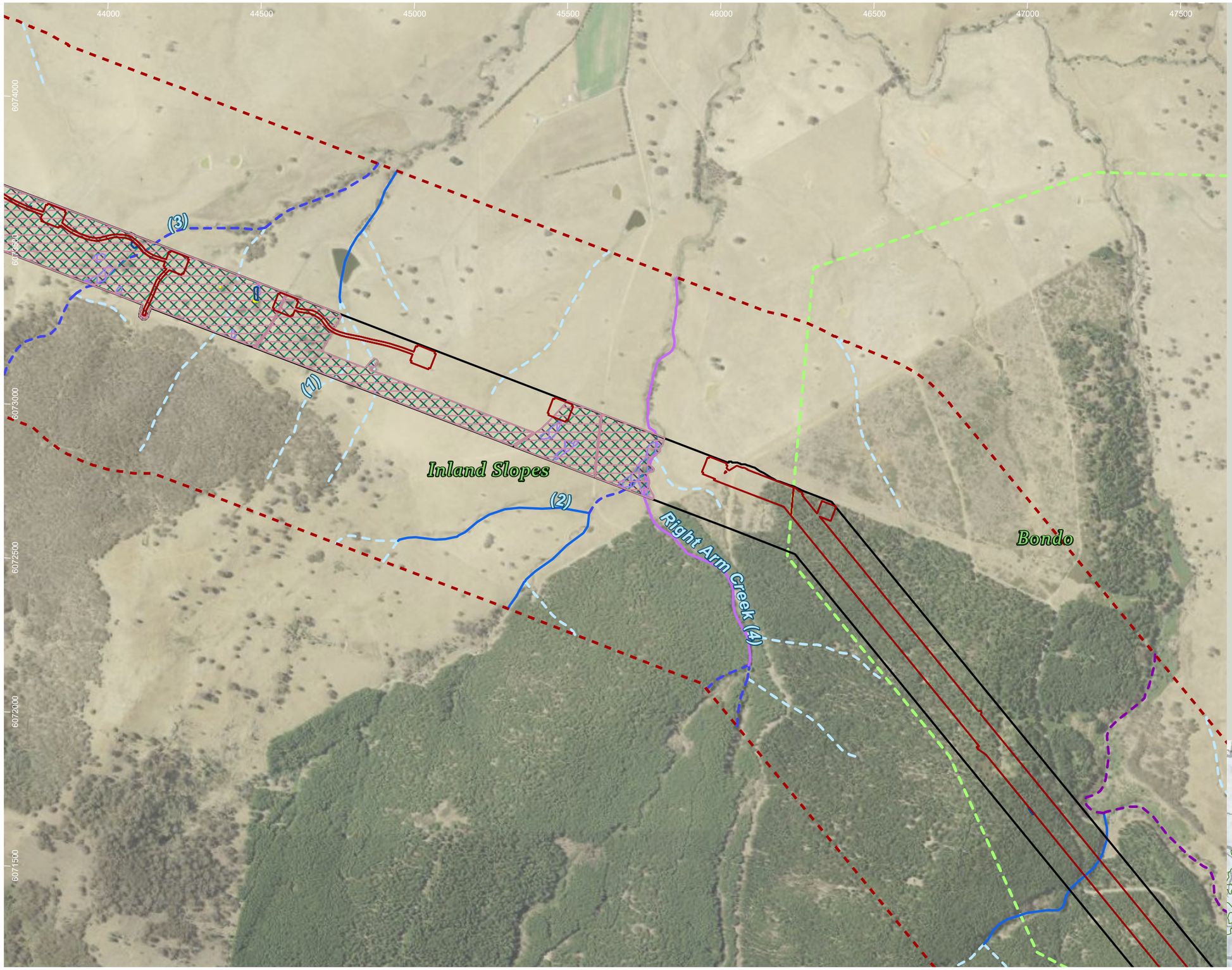
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 17

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

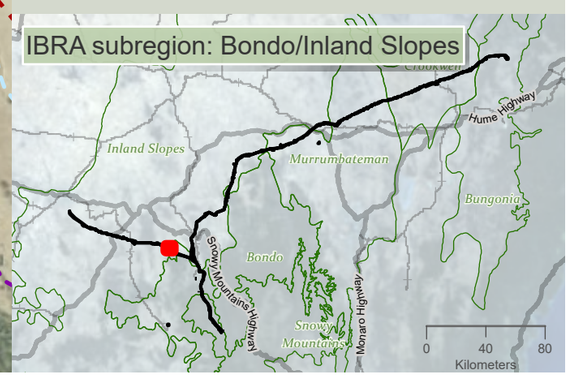
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Euphrasia arguta
- Senecio garlandii
- Swainsona sericea



niche Environment and Heritage

0 N 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 18

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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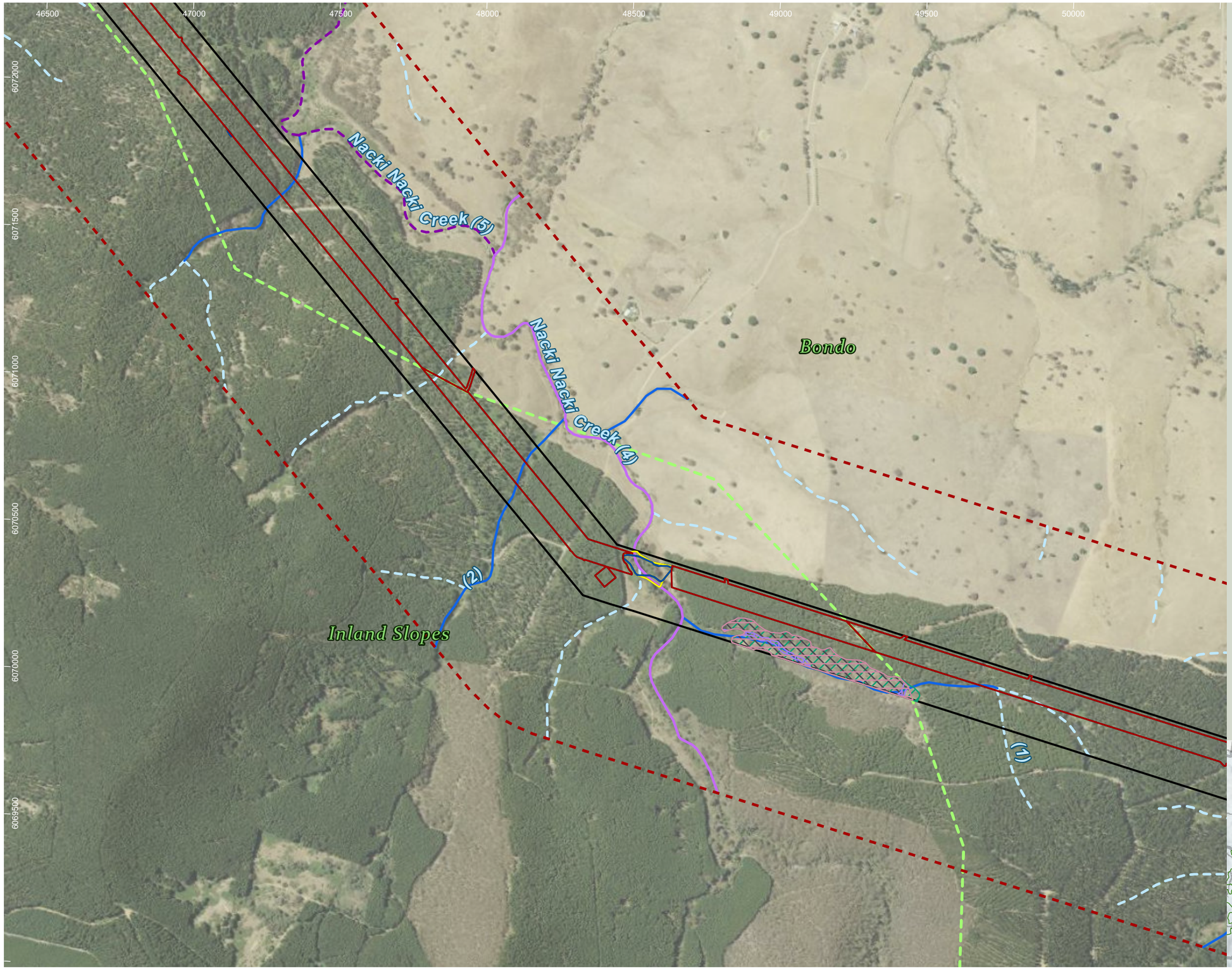


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

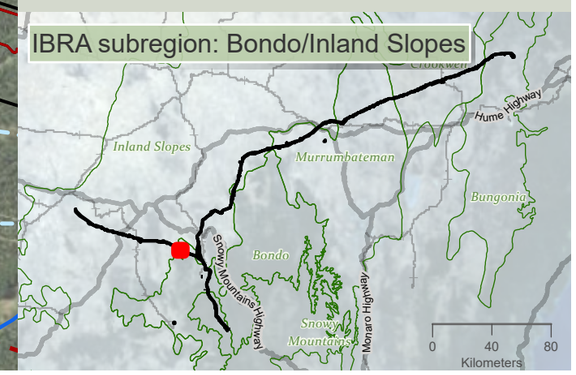
- 1
- 2
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Euphrasia arguta
- Senecio garlandii
- Swainsona sericea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

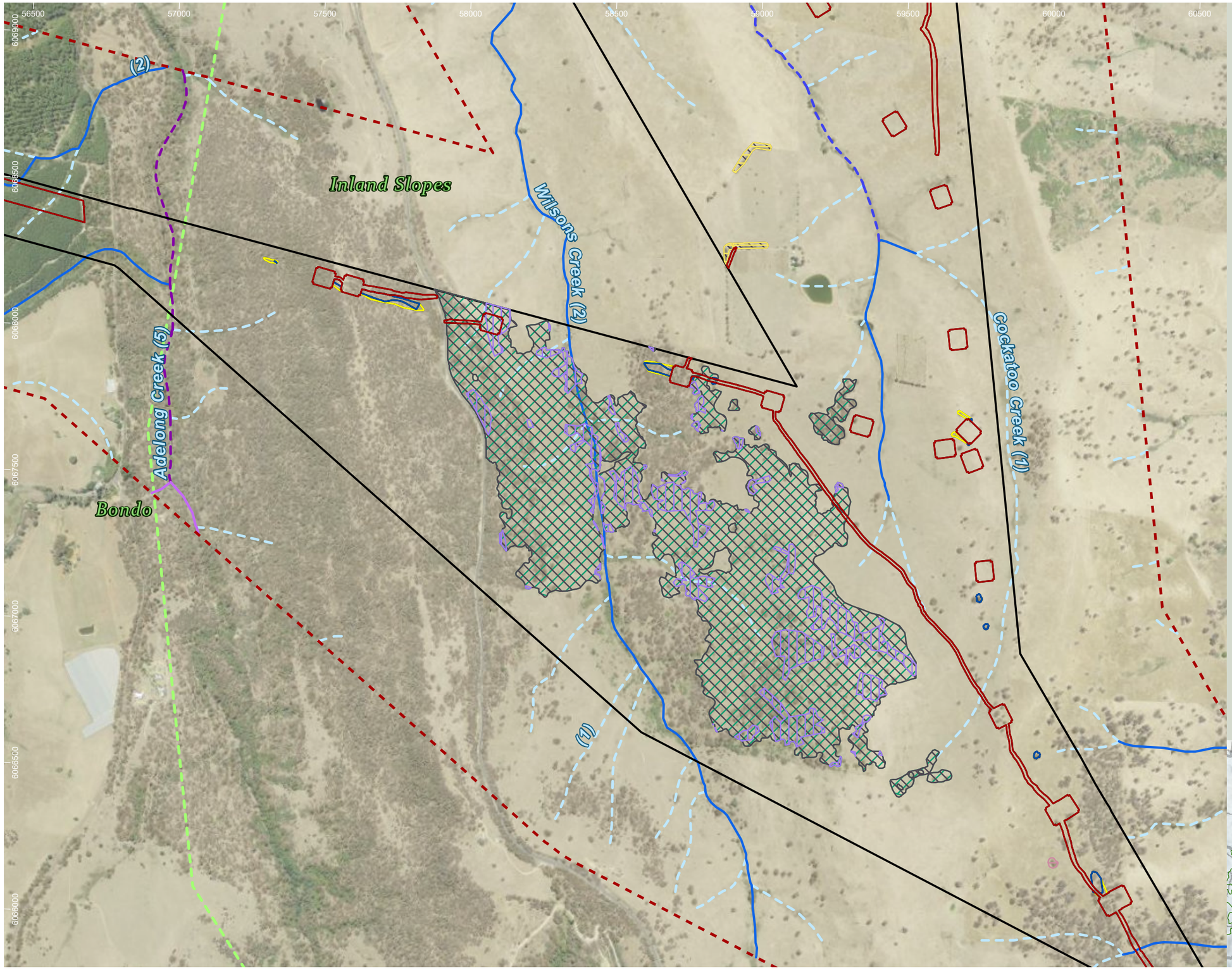
Herb and forb species habitat

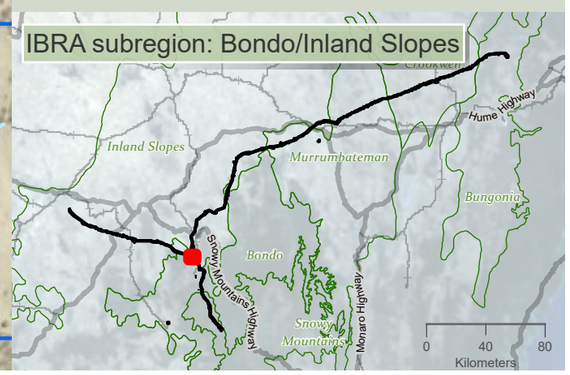
HumeLink BDAR

Figure 13-7 map reference 19

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx





HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Senecio garlandii
- Swainsona sericea

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 22

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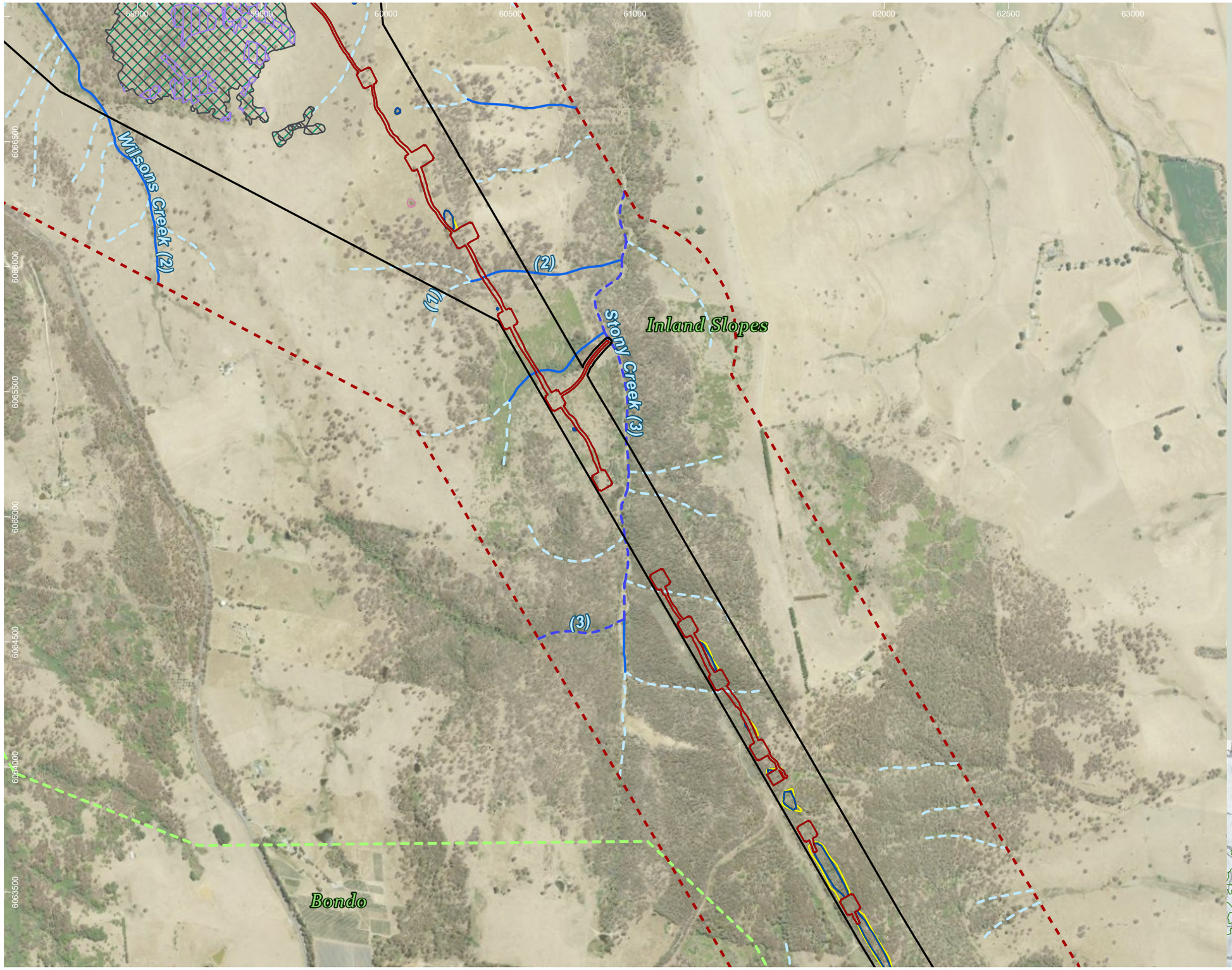


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

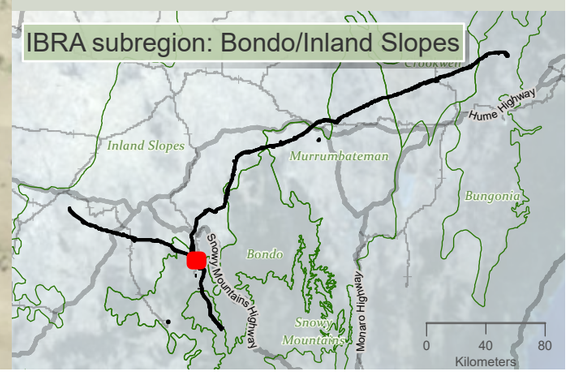
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Euphrasia arguta
- Senecio garlandii
- Swainsona sericea



Drawn by: MathewZajaczkowski; Last updated: 18/08/2023; File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 23

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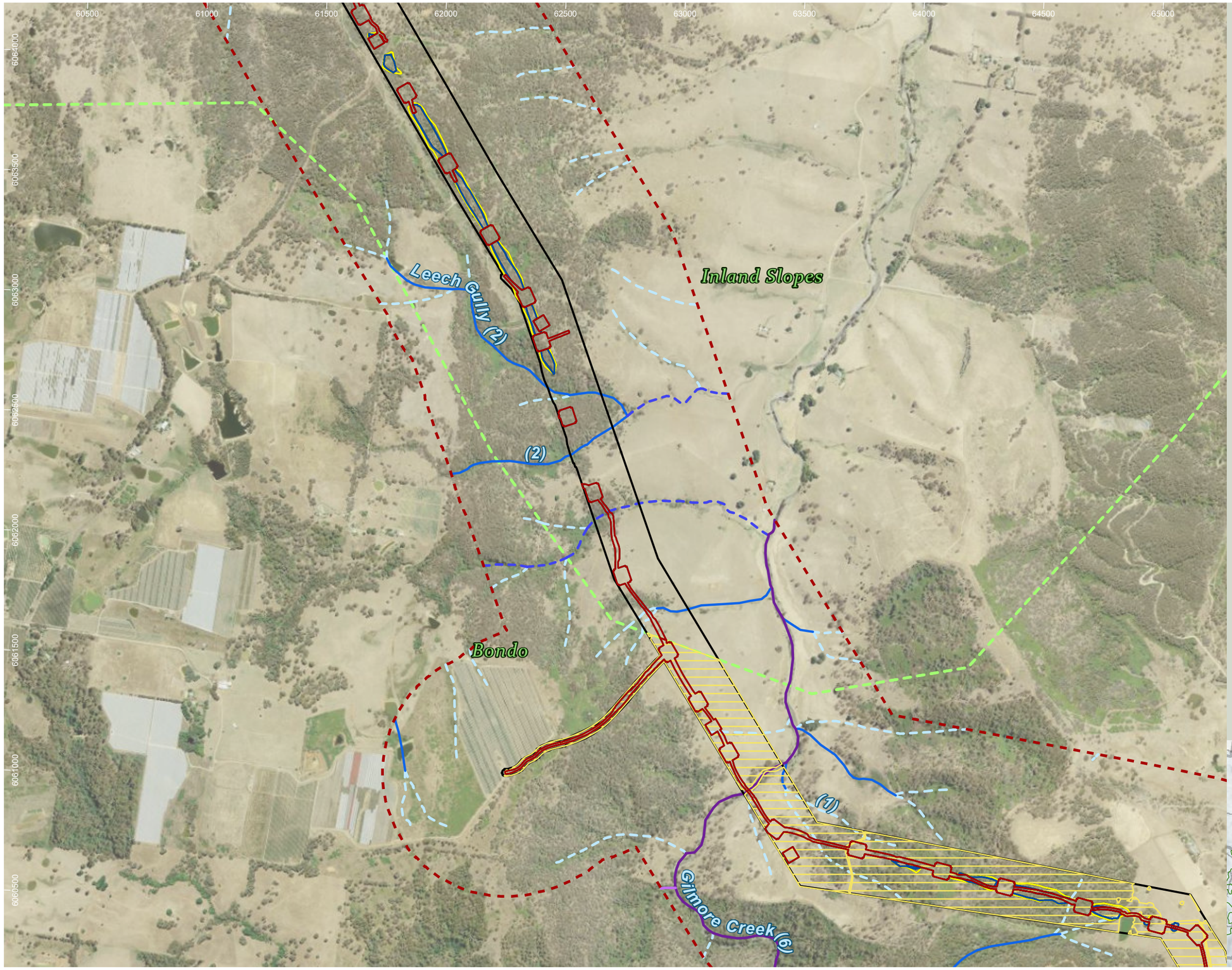


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

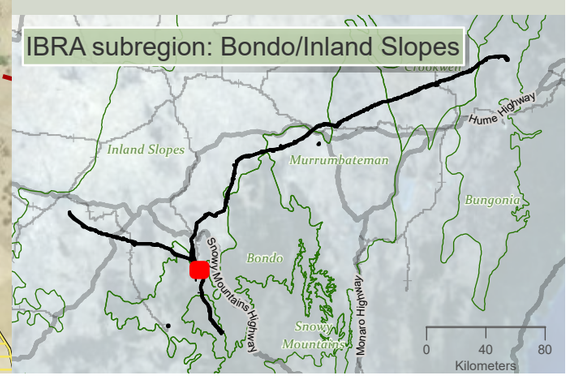
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Leucochrysum albicans var tricolor



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 24

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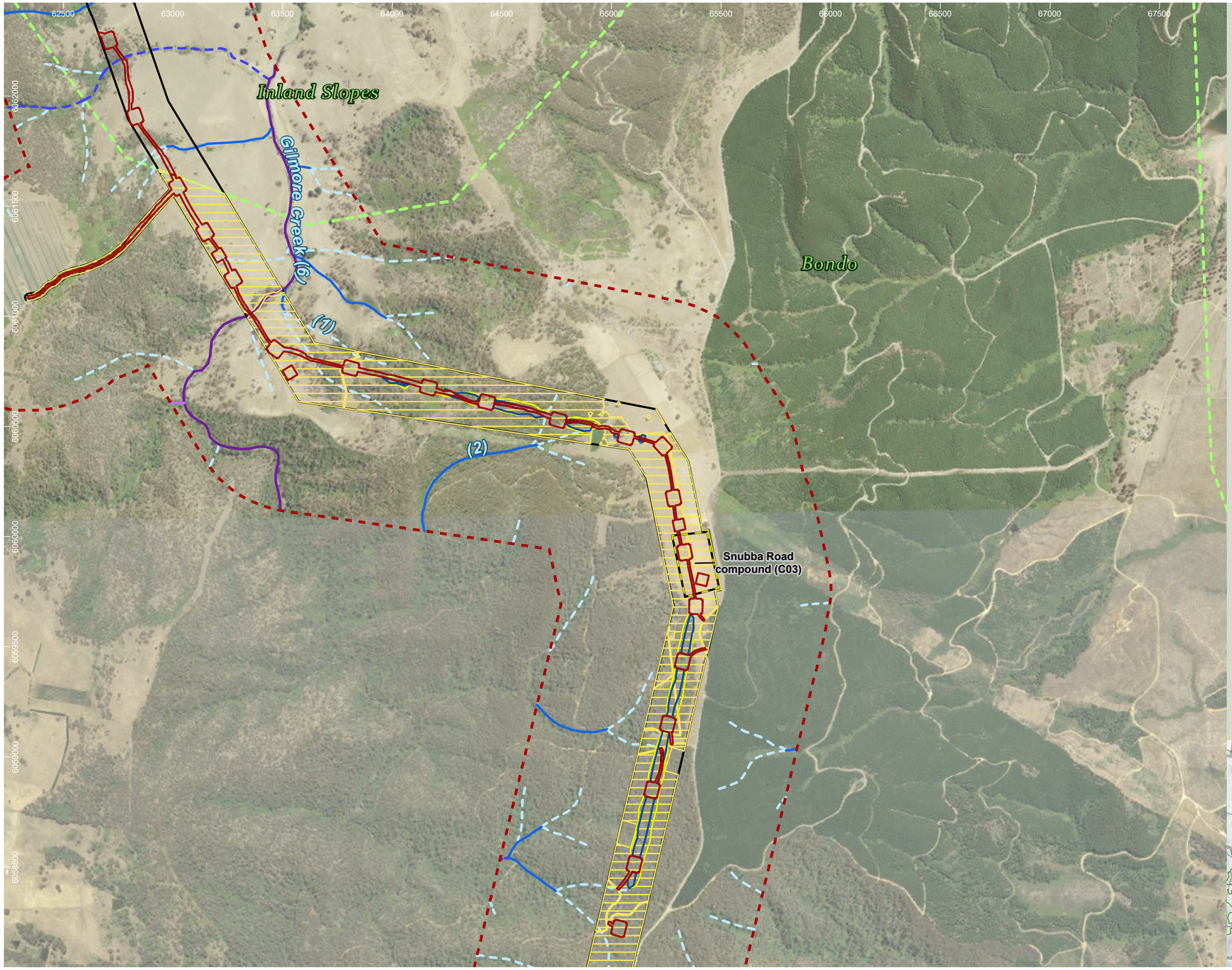


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

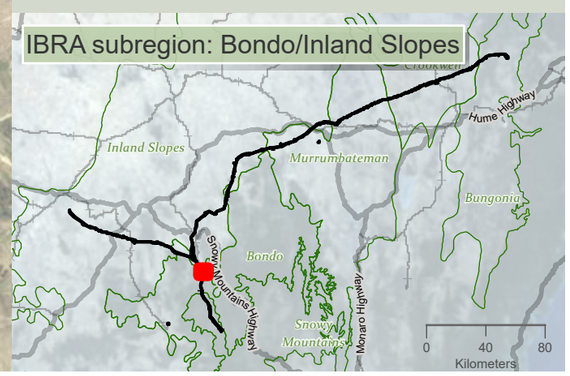
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Leucochrysum albicans var tricolor



niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 25

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62500 63000 63500 64000 64500 65000 65500 66000 66500 67000

6058500 6058000 6057500 6057000 6056500 6056000 6055500

(2) (1) Bondo

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

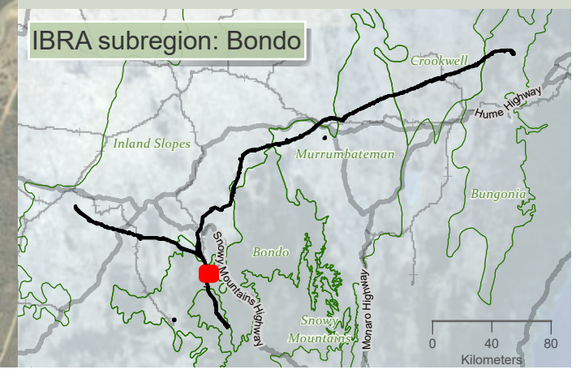
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Leucochrysum albicans var tricolor



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 28

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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61500 62000 62500 63000 63500 64000 64500 65000 65500 66000

6052000 6051500 6051000 6050500 6050000 6049500 6049000 6048500 6048000

Snubba Creek (4)

Ridings Creek (2)

Bondo

Snubba Road compound (C16)

(1)

(3)

Snubba Creek (3)

Snowy Mountains

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

- 1
- 2
- 3
- 4
- 5

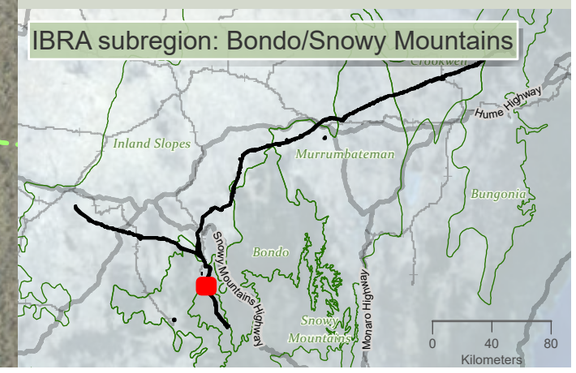
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Calotis glandulosa
- Irenepharsus magicus

IBRA subregion: Bondo/Snowy Mountains



niche Environment and Heritage

0 N 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 30

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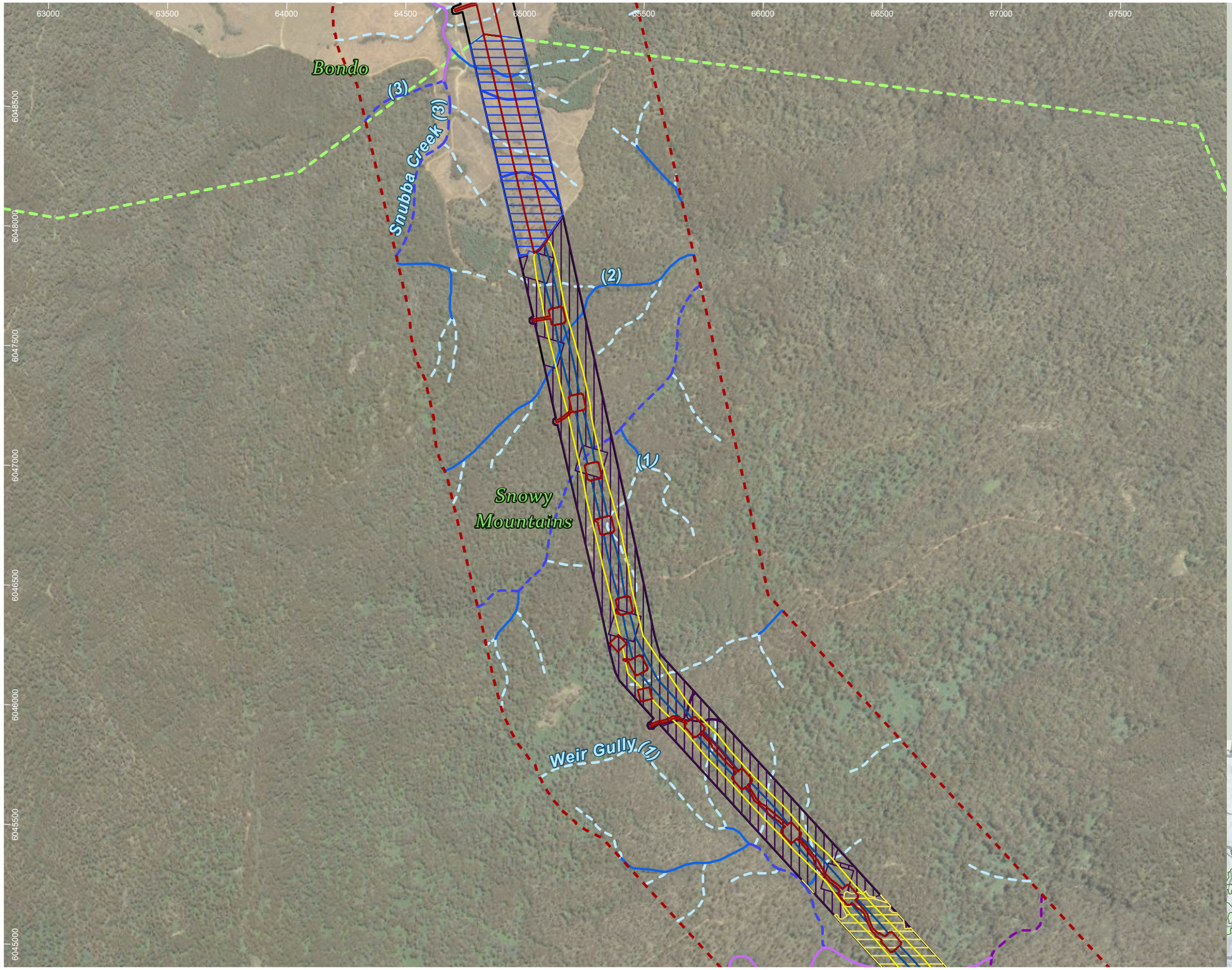


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

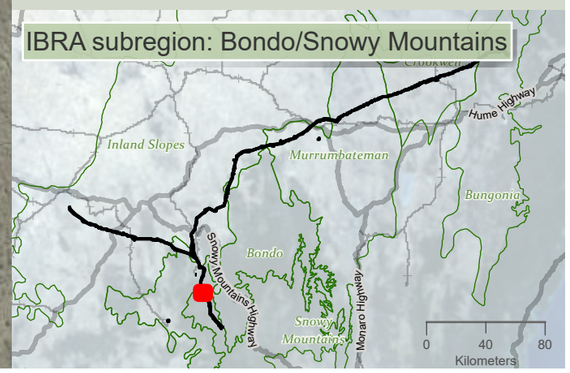
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Calotis glandulosa
- Irenepharsus magicus
- Leucochrysum albicans var tricolor



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 31

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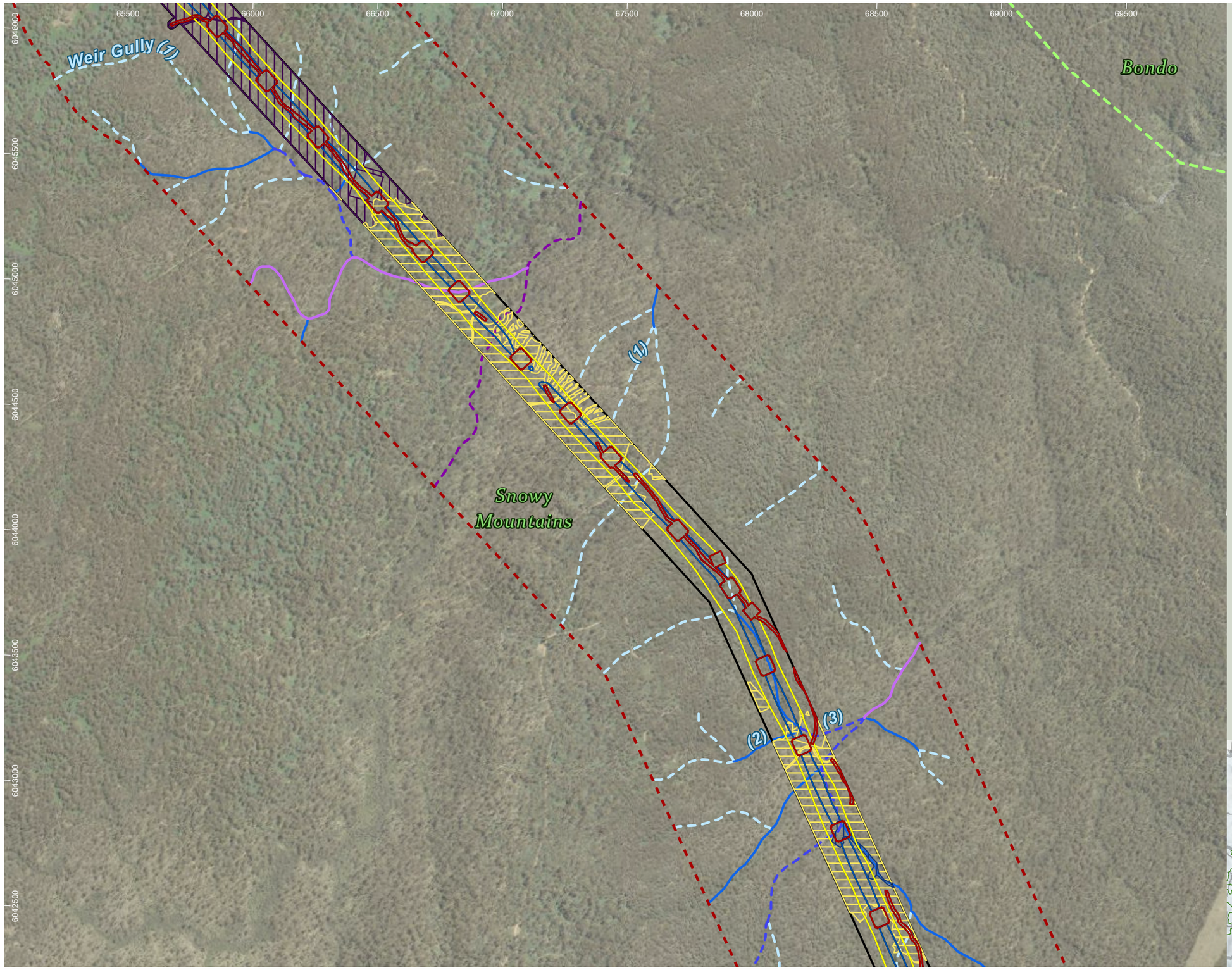


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

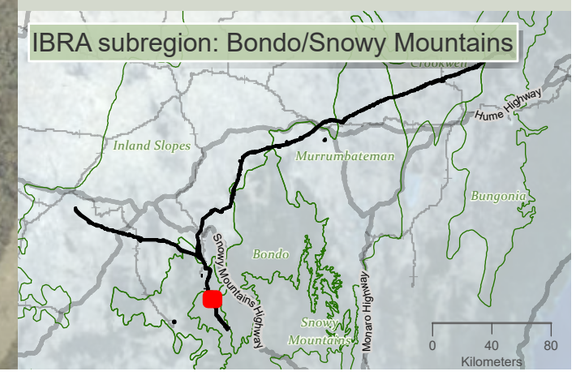
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Irenepharsus magicus
- Leucochrysum albicans var tricolor
- Xerochrysum palustre



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 32

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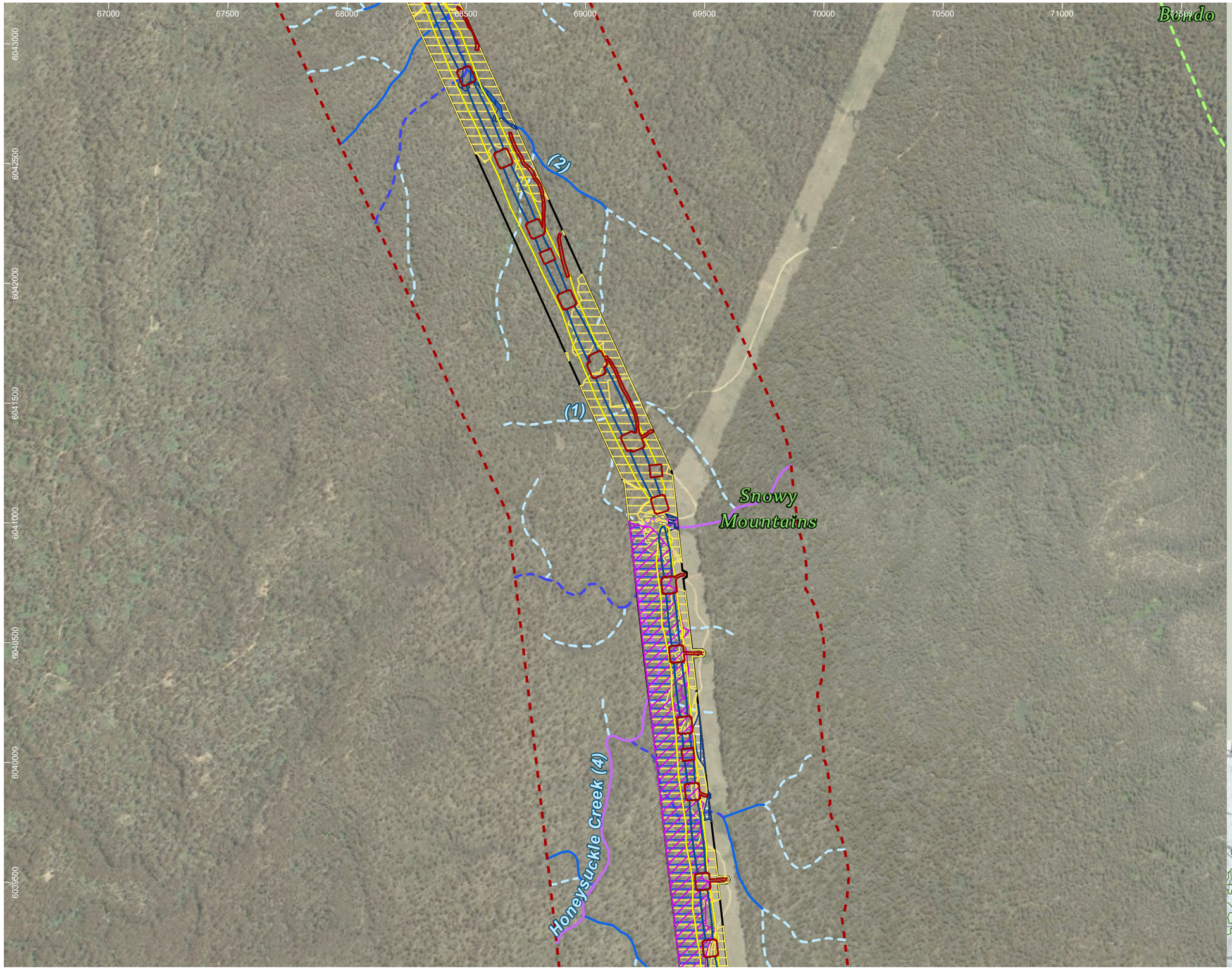


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

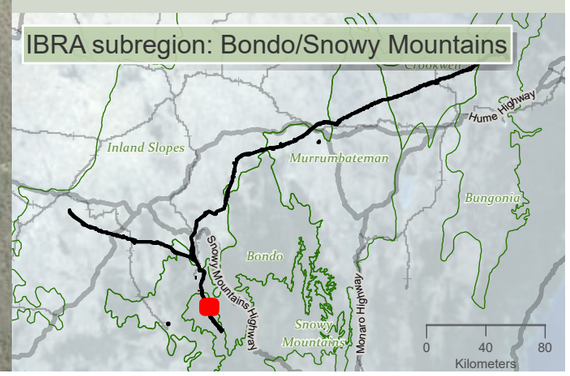
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Calotis glandulosa
- Euphrasia scabra
- Leucochrysum albicans var tricolor
- Thesium australe
- Xerochrysum palustre



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 33

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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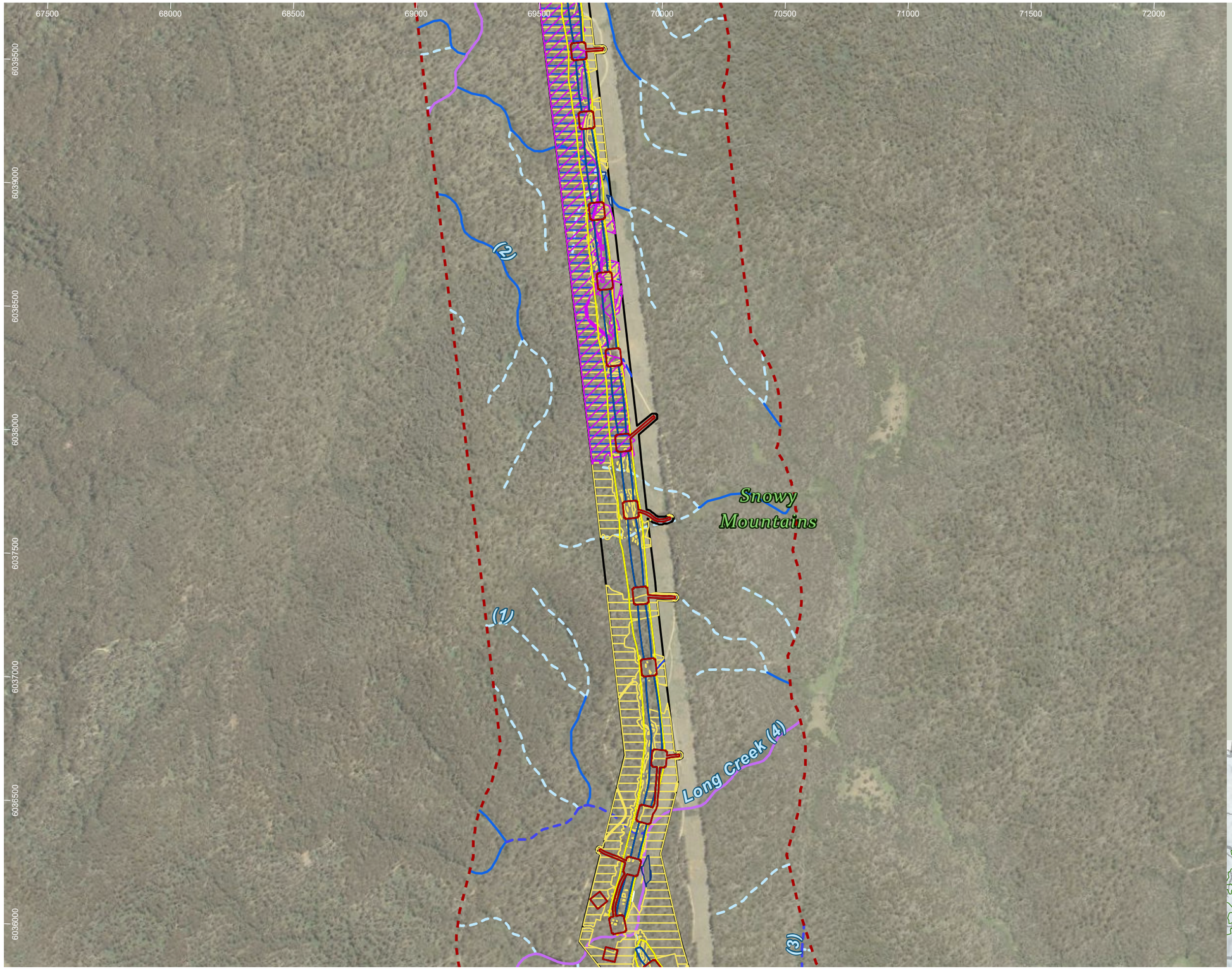


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

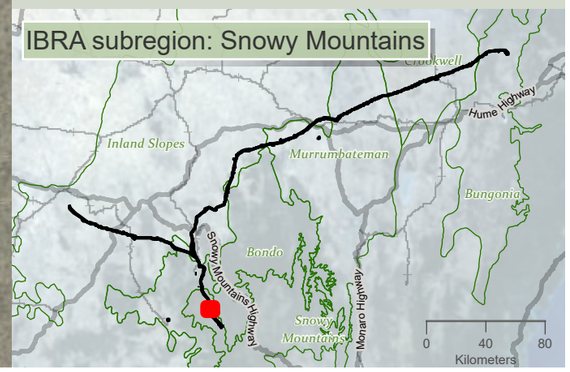
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Calotis glandulosa
- Euphrasia scabra
- Leucochrysum albicans var tricolor
- Thesium australe
- Xerochrysum palustre



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niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 34

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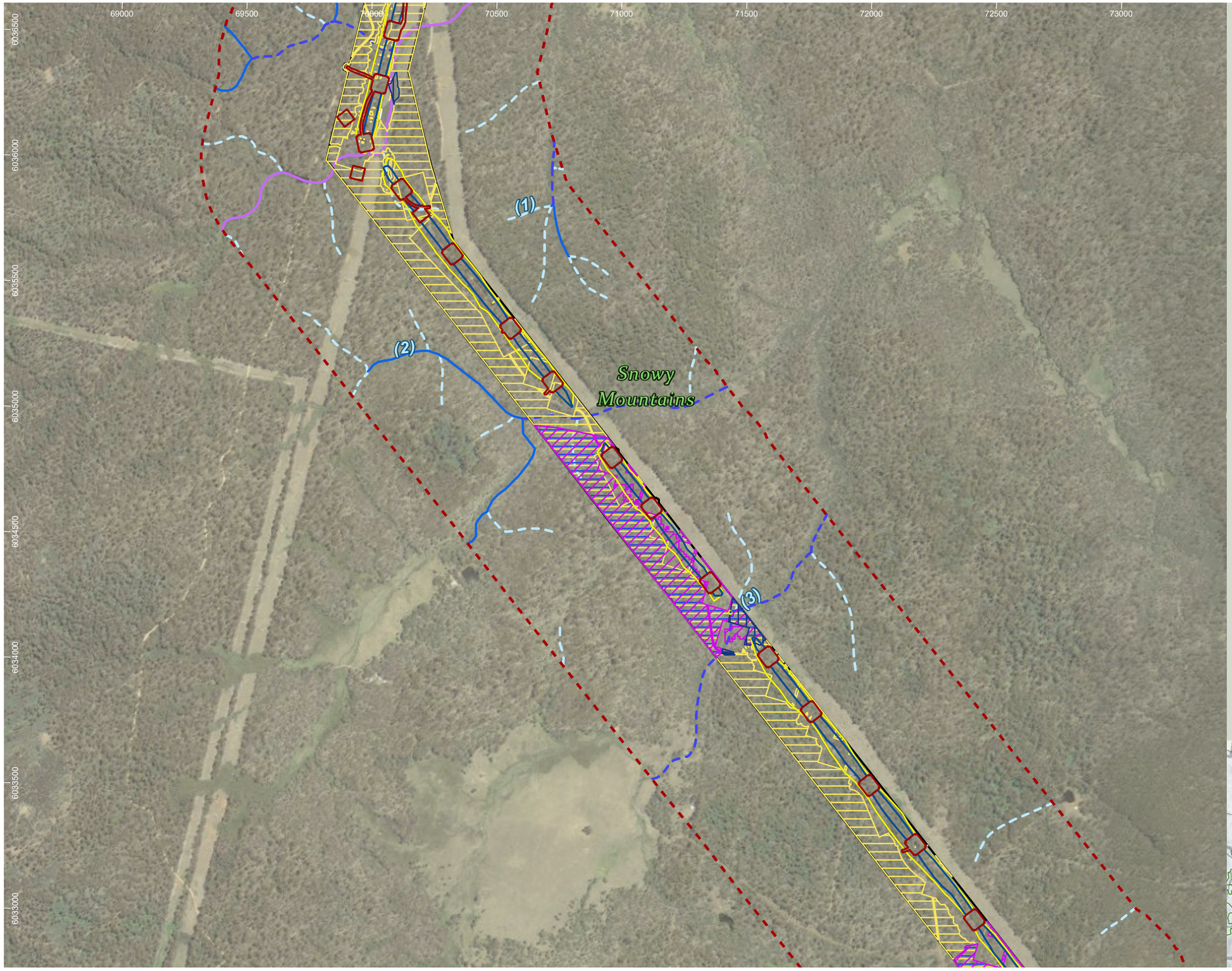


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

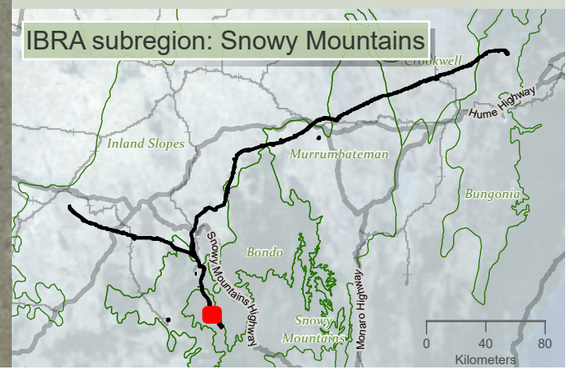
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Calotis glandulosa
- Euphrasia scabra
- Leucochrysum albicans var tricolor
- Thesium australe
- Xerochrysum palustre



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 36

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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71000 71500 72000 72500 73000 73500 74000 74500 75000 75500

6033500 6033000 6032500 6032000 6031500 6031000 6030500

(3)

Bondo

Snowy Mountains

(2)

Plain Creek (3)

(1)

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

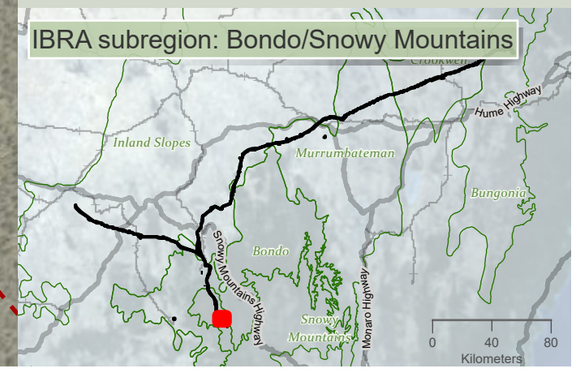
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Calotis glandulosa
- Calotis pubescens
- Euphrasia scabra
- Glycine latrobeana
- Leucochrysum albicans var tricolor
- Rutidosis leiolepis
- Thesium australe
- Xerochrysum palustre



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 37

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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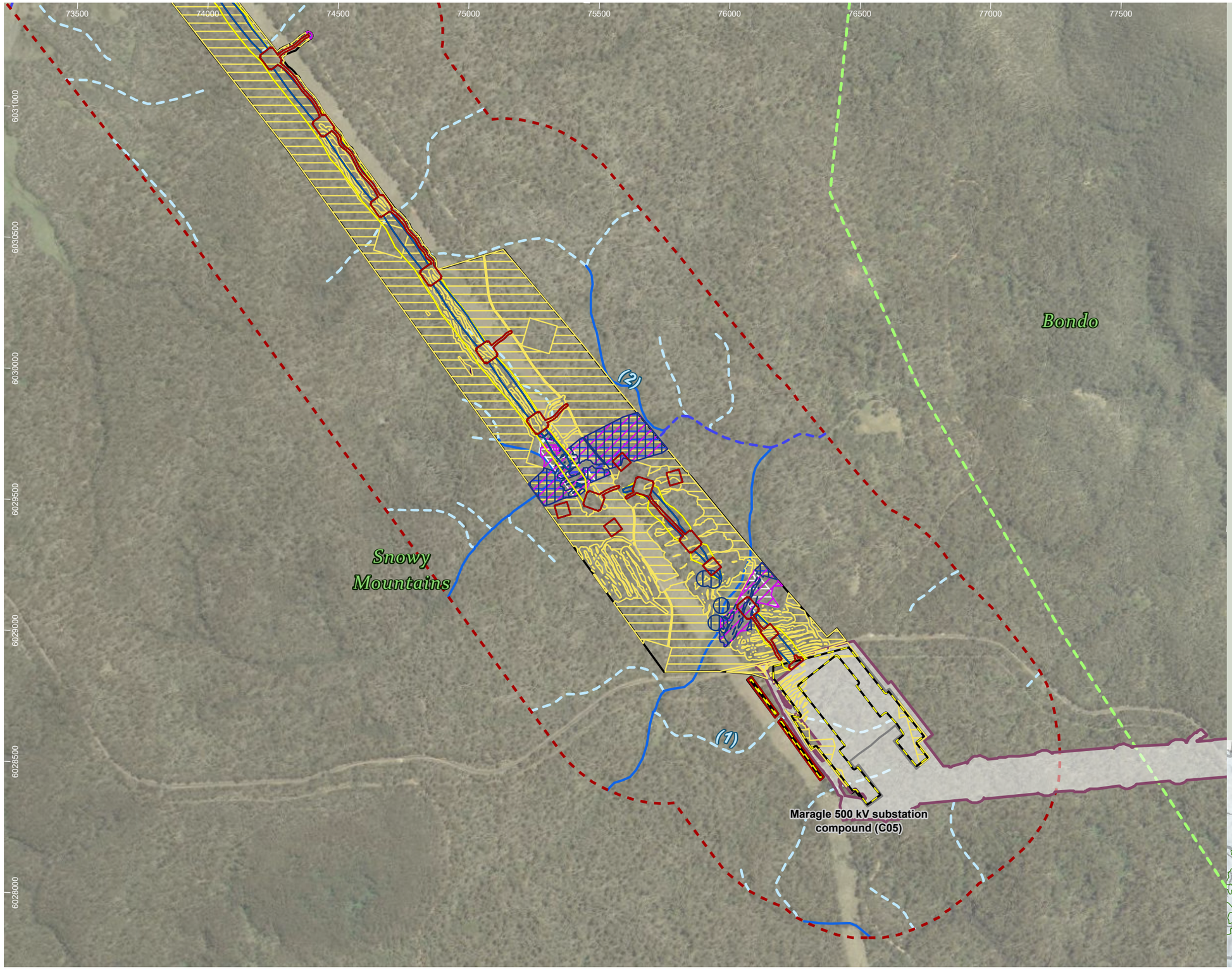


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- Snowy 2.0 Transmission Connection project
- IBRA subregion

Strahler stream order

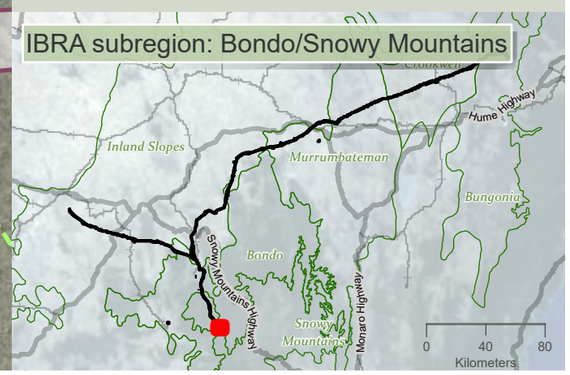
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Calotis glandulosa
- Euphrasia scabra
- Irenepharsus magicus
- Leucochrysum albicans var tricolor
- Thesium australe
- Xerochrysum palustre



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 38

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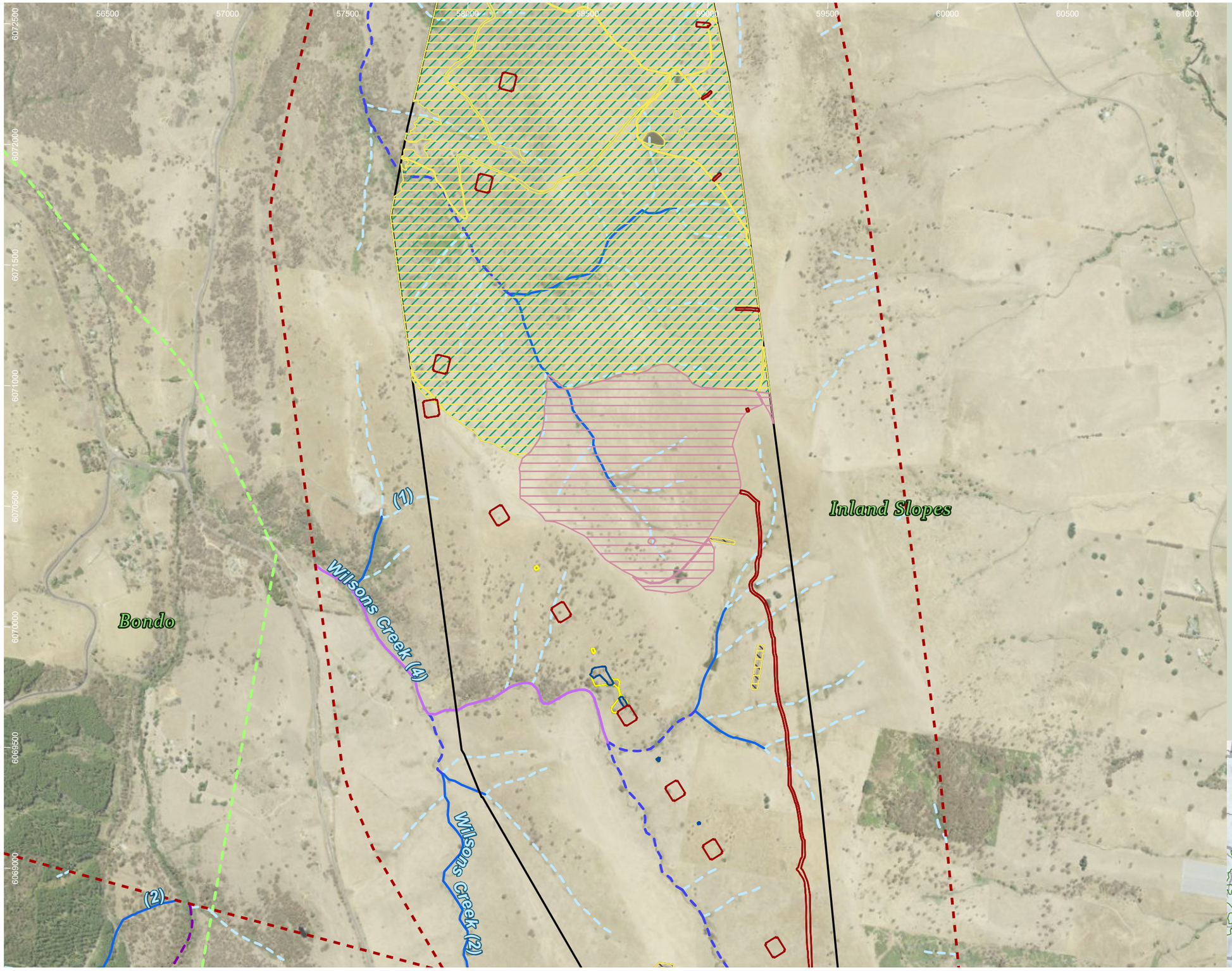


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

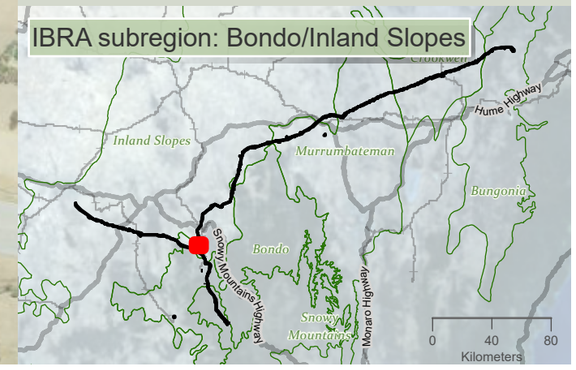
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona sericea



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 39

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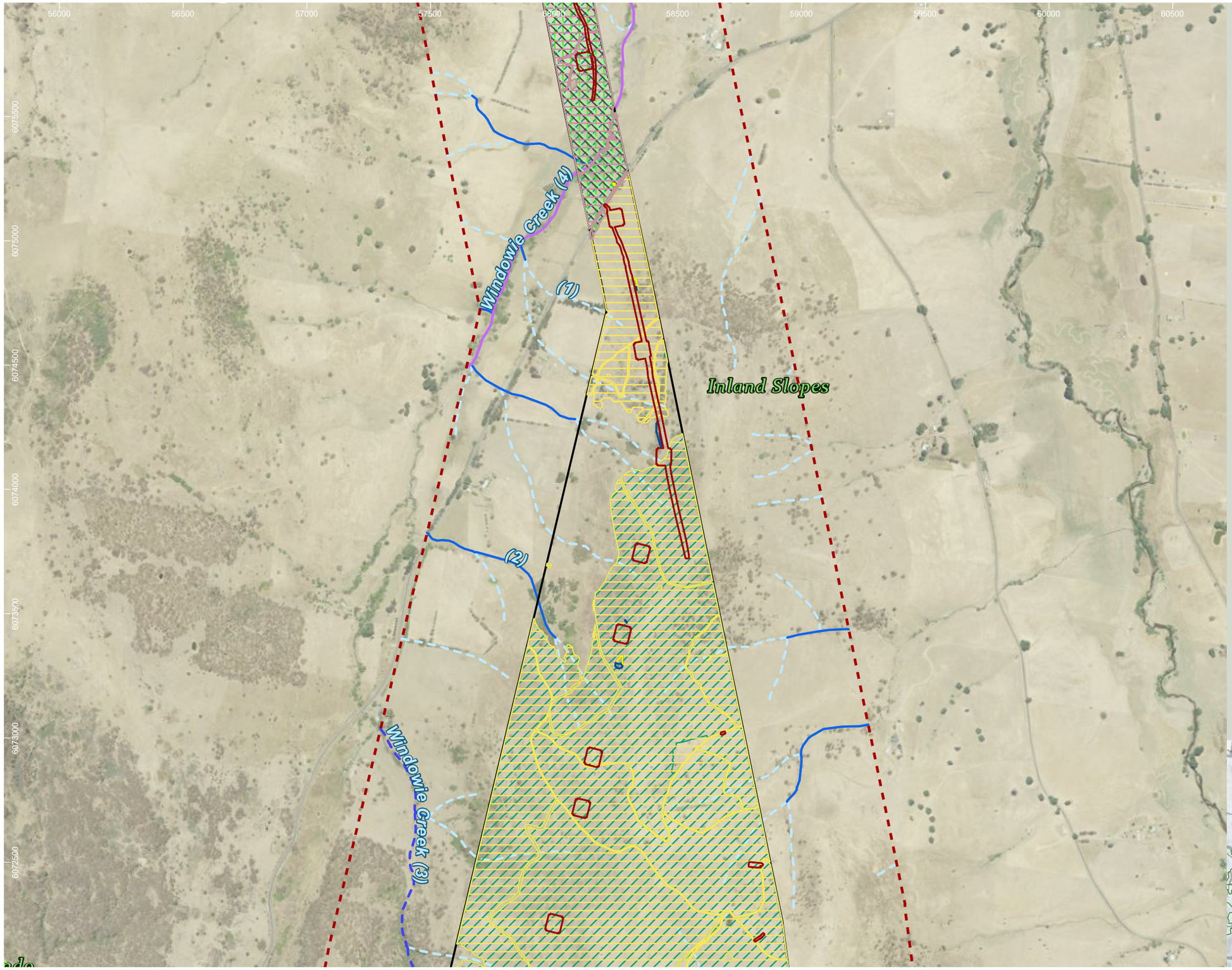


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

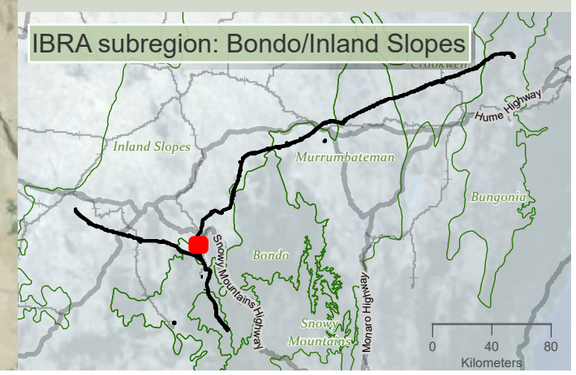
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 40

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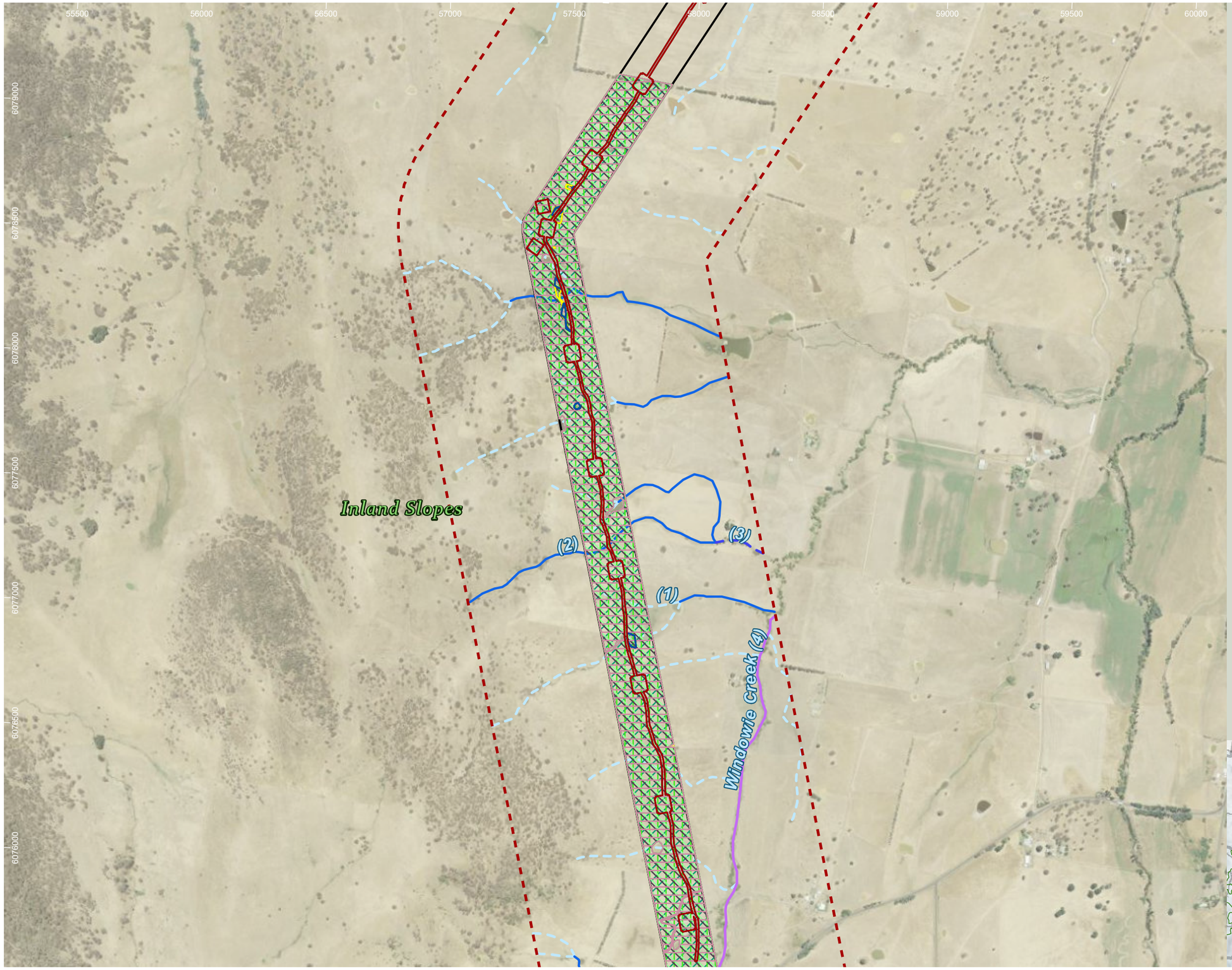


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

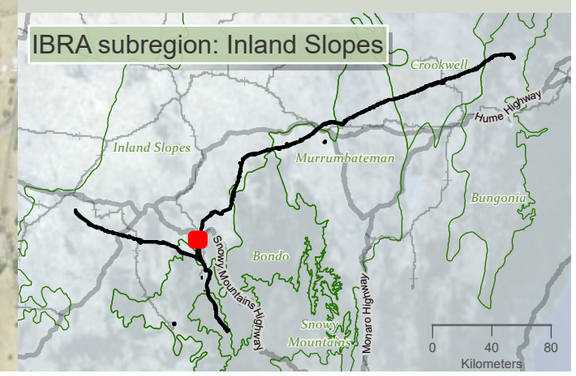
- 0
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 41

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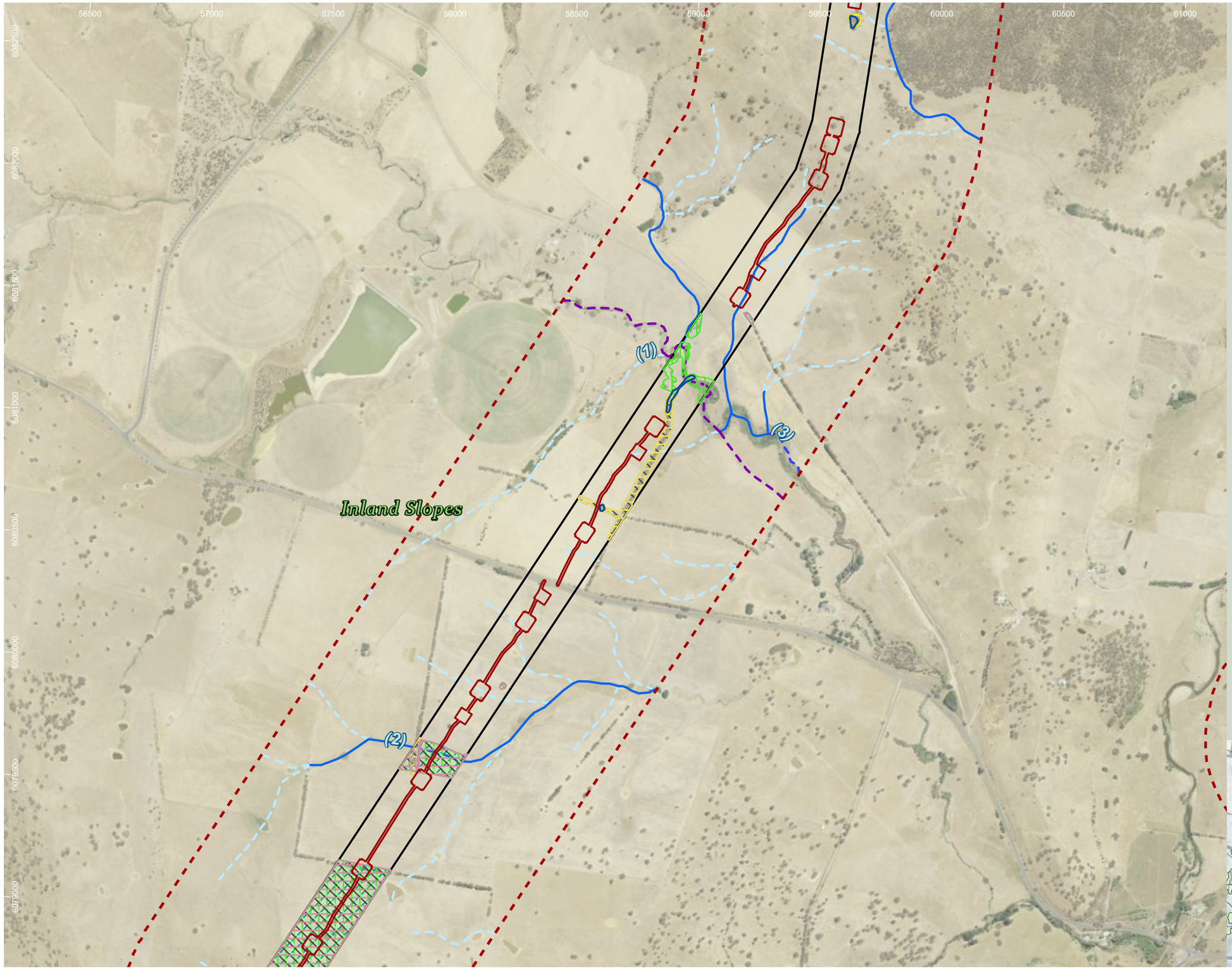


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

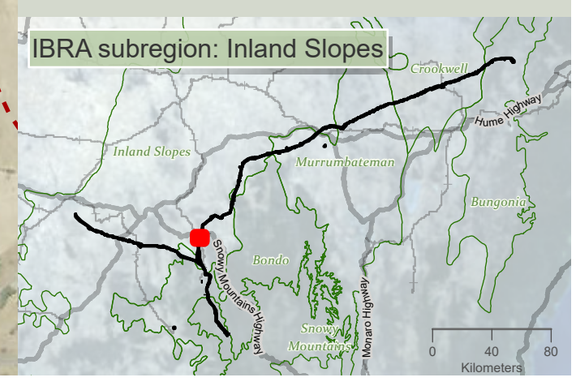
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



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niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 42

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61000 61500 62000 62500 63000 63500 64000 64500

6091500 6091000 6090500 6090000 6089500 6089000 6088500

Gocup Creek (4)

(1)

(3)

(2)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

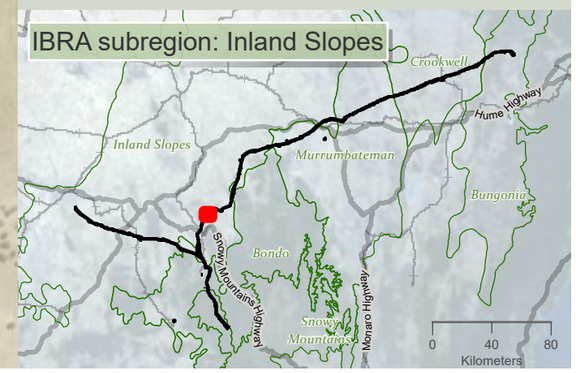
- 1
- 2
- 3
- 4
- 8

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Swainsona sericea



niche Environment and Heritage

0 400 m

N

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 46

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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63500 64000 64500 65000 65500 66000 66500 67000

6094000 6093500 6093000 6092500 6092000 6091500 6091000

(1) (2) (3) (4)

Inland Slopes

Tumut River (8)

Gocup Creek (4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

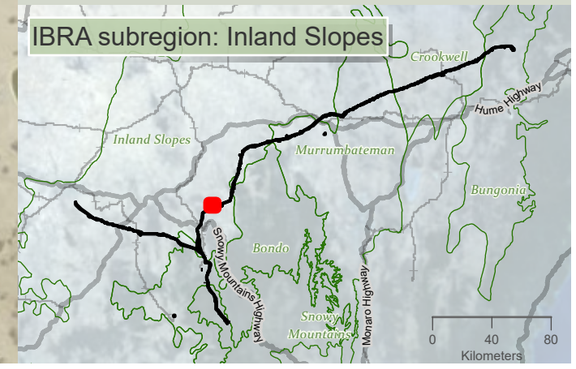
- 1
- 2
- 3
- 4
- 5
- 8

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Swainsona sericea



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 47

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

66500 67000 67500 68000 68500 69000 69500 70000

6094000 6093500 6093000 6092500 6092000 6091500

(1) (2) (3) (5)

Inland Slopes

Killimicat Creek

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

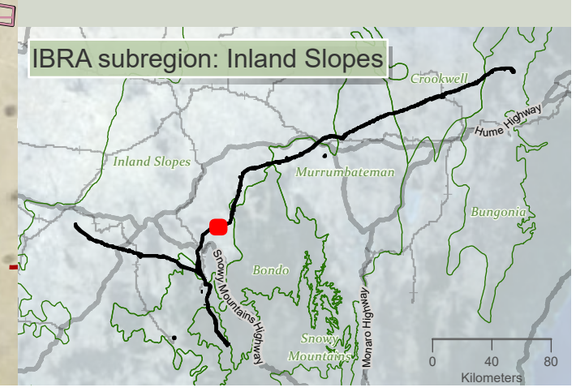
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Swainsona sericea



niche Environment and Heritage

0 N 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 48

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70000 70500 71000 71500 72000 72500 73000 73500

6095000 6094500 6094000 6093500 6093000 6092500

Inland Slopes

Sawpit Gully (4)

Killimicat Creek (5)

(1) (2) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

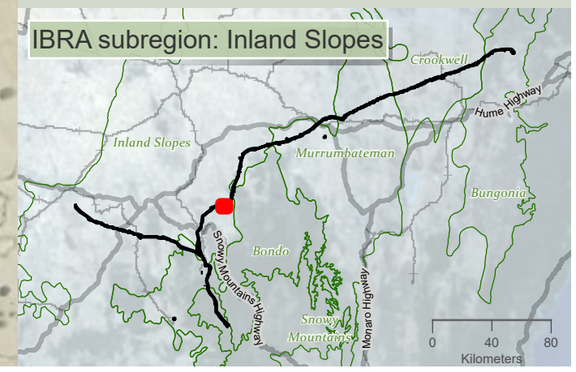
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Swainsona sericea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

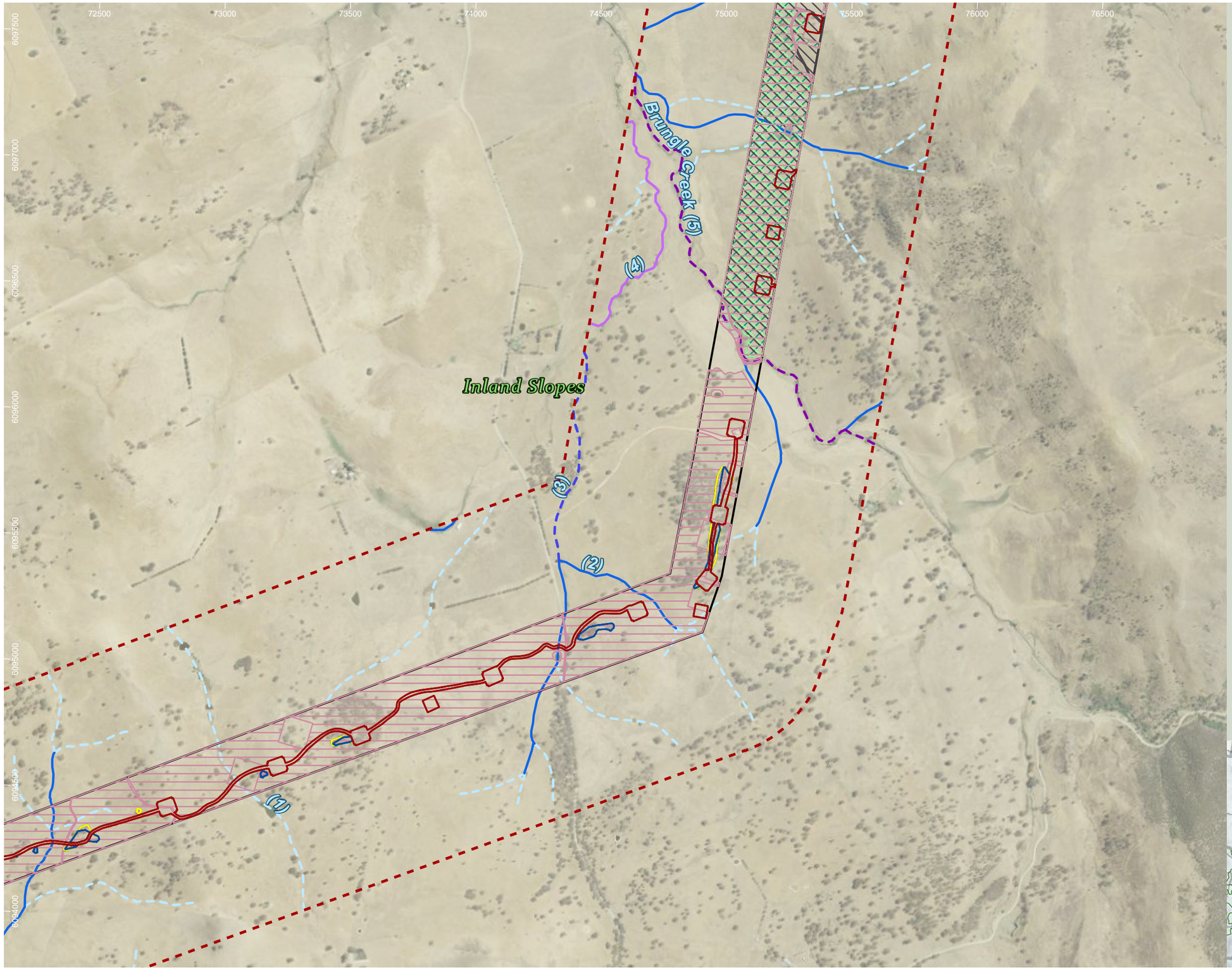
Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 49

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

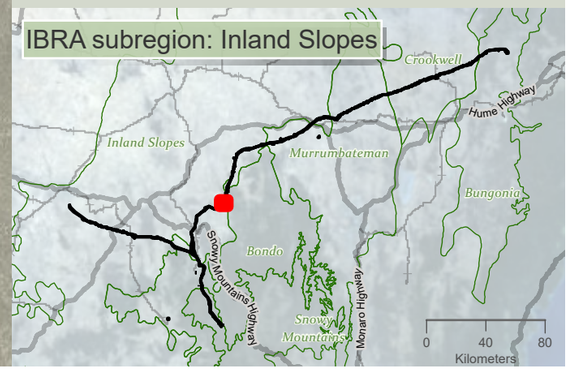
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Euphrasia arguta
- Swainsona recta
- Swainsona sericea



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

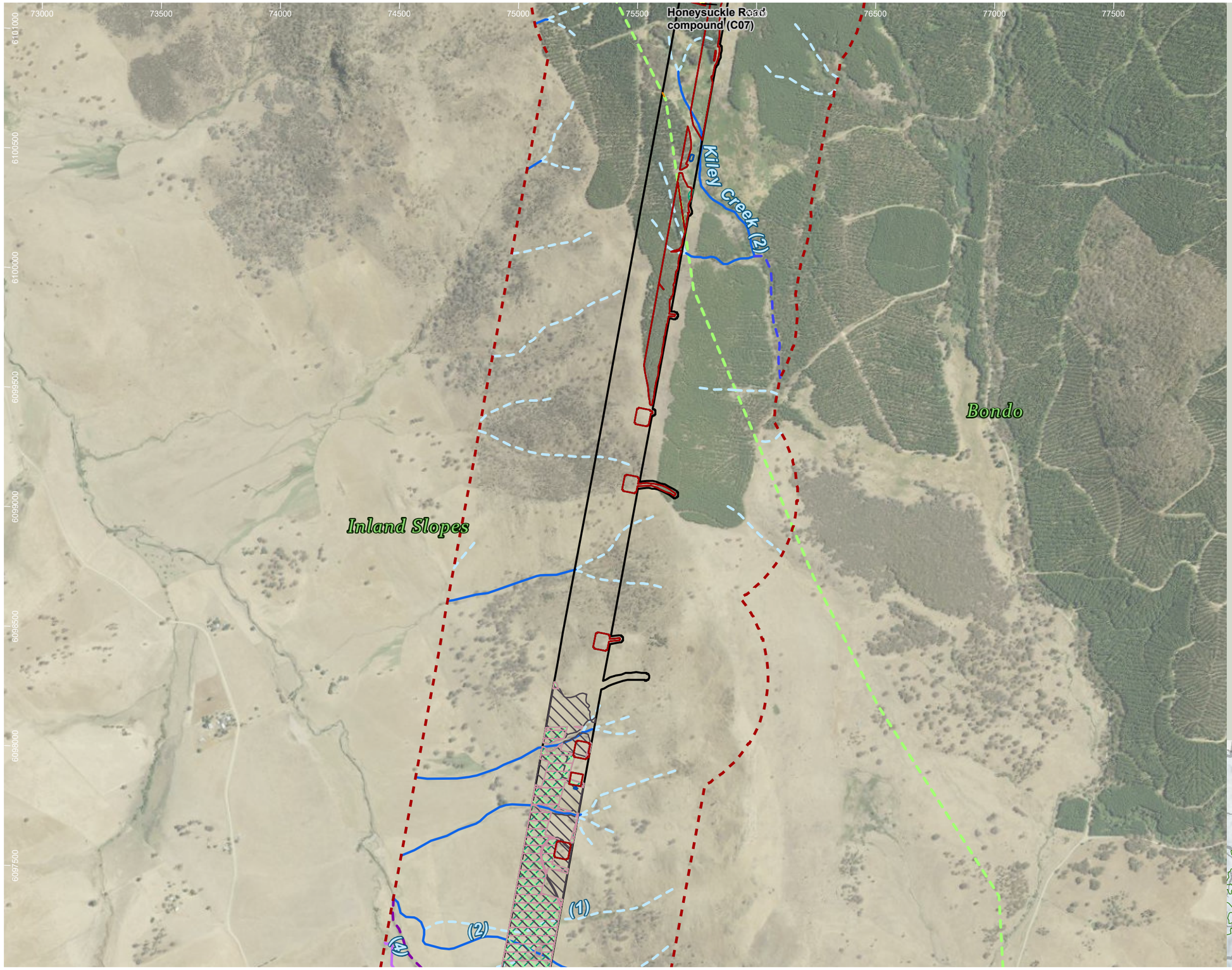
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 50

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

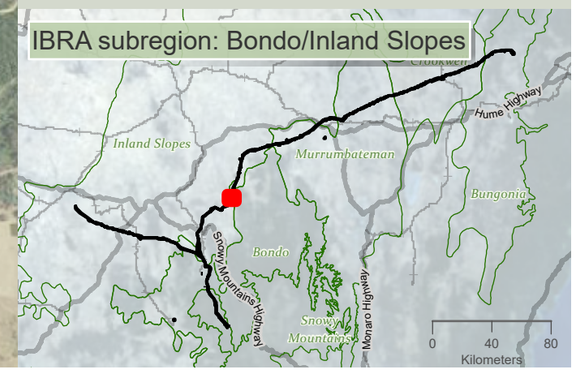
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Caesia parviflora var minor
- Euphrasia arguta
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 51

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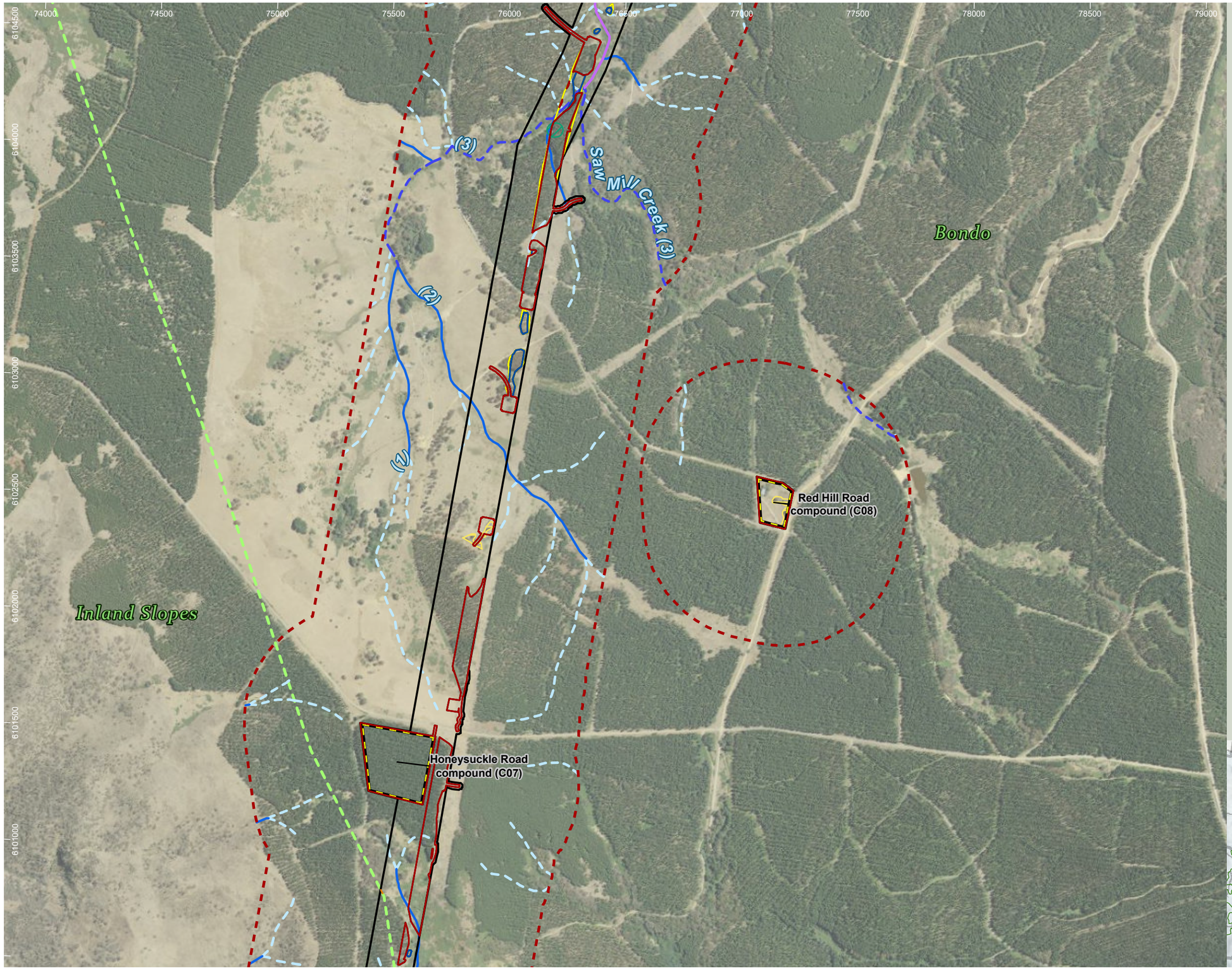


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

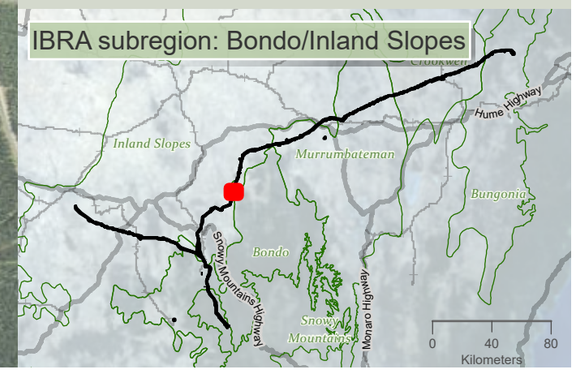
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Caesia parviflora var minor
- Leucochrysum albicans var tricolor



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 52

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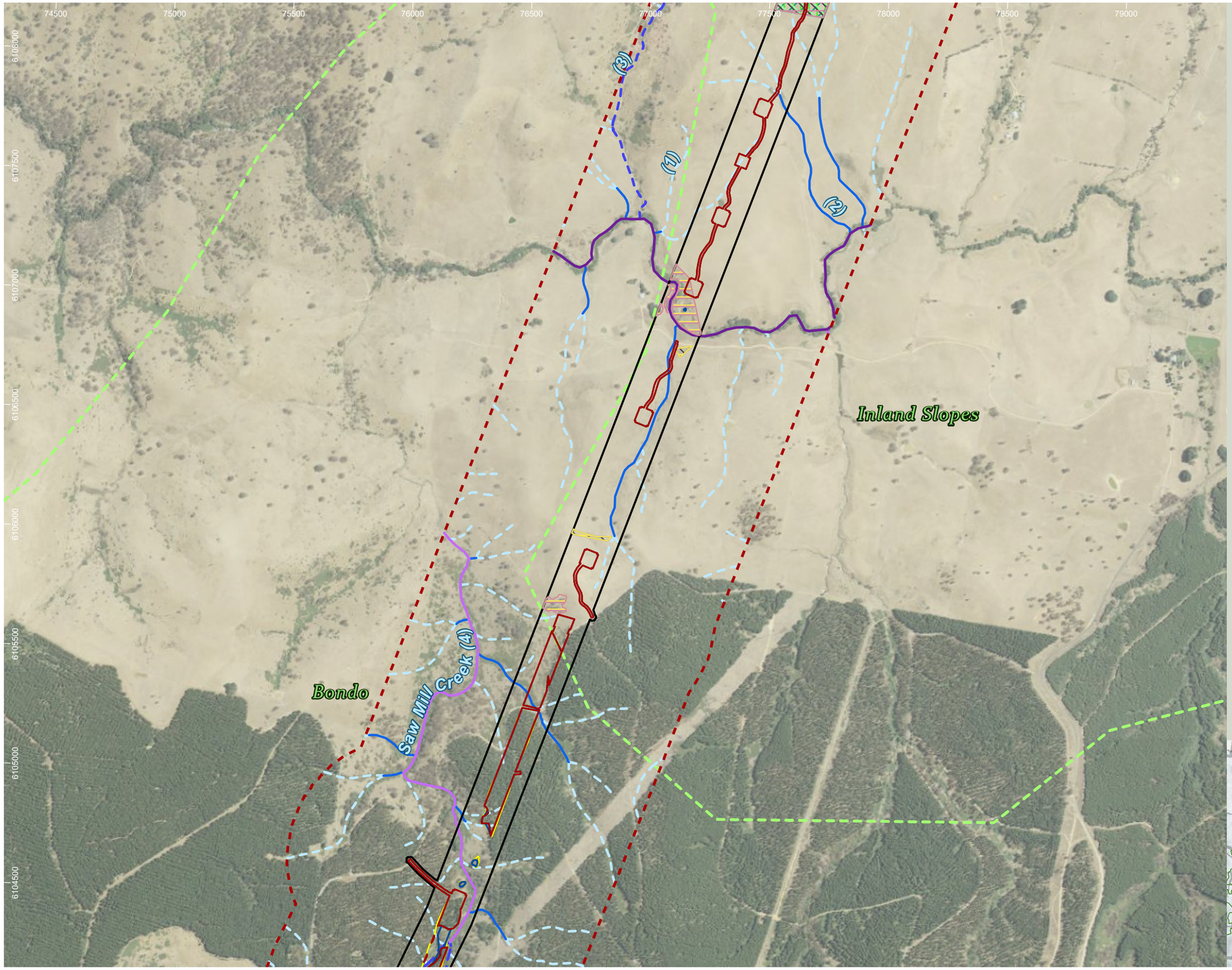


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

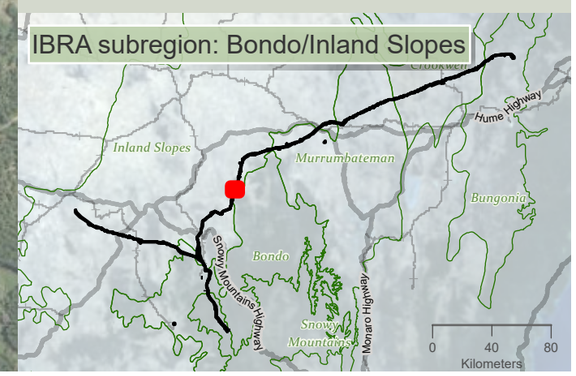
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 53

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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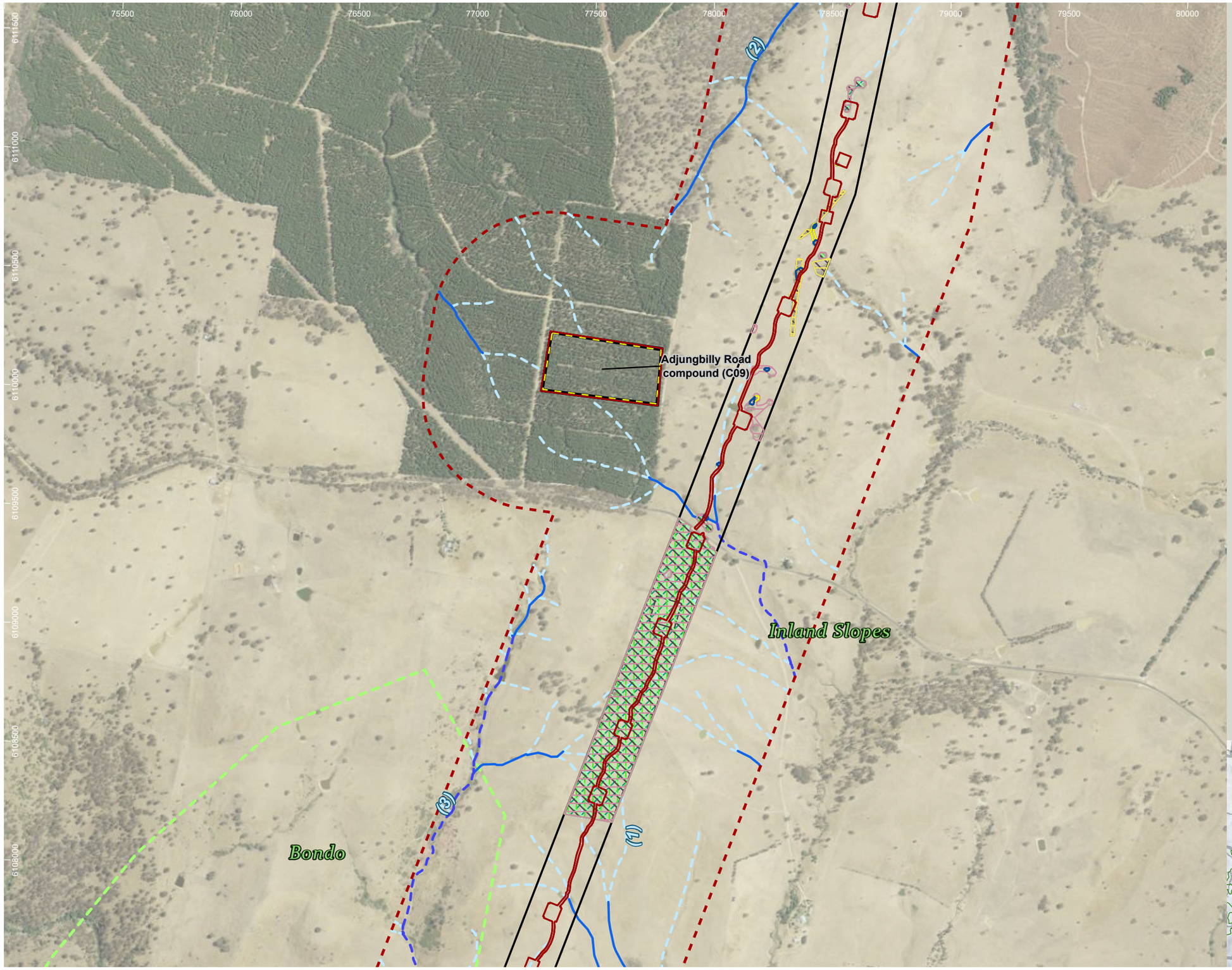


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

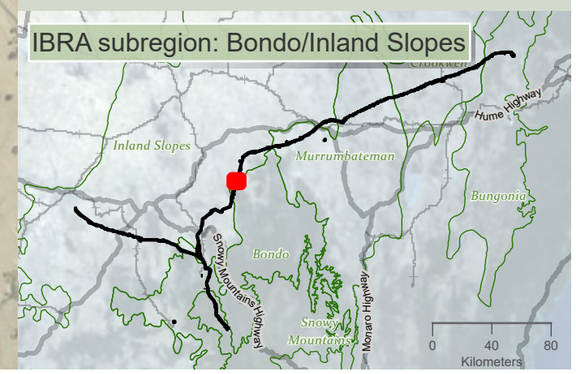
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



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niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 54

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76500 77000 77500 78000 78500 79000 79500 80000 80500 81000

6114500 6114000 6113500 6113000 6112500 6112000 6111500 6111000

(1) (2) (4)

Inland Slopes

O'briens Creek

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

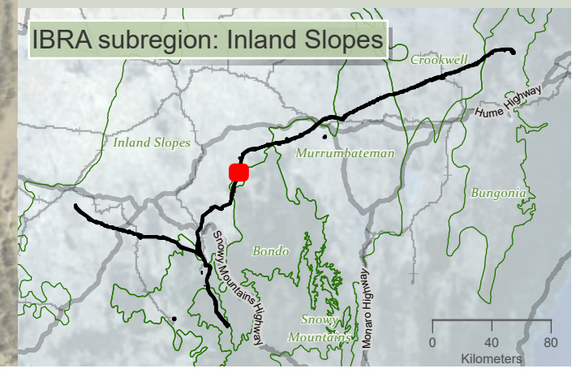
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 55

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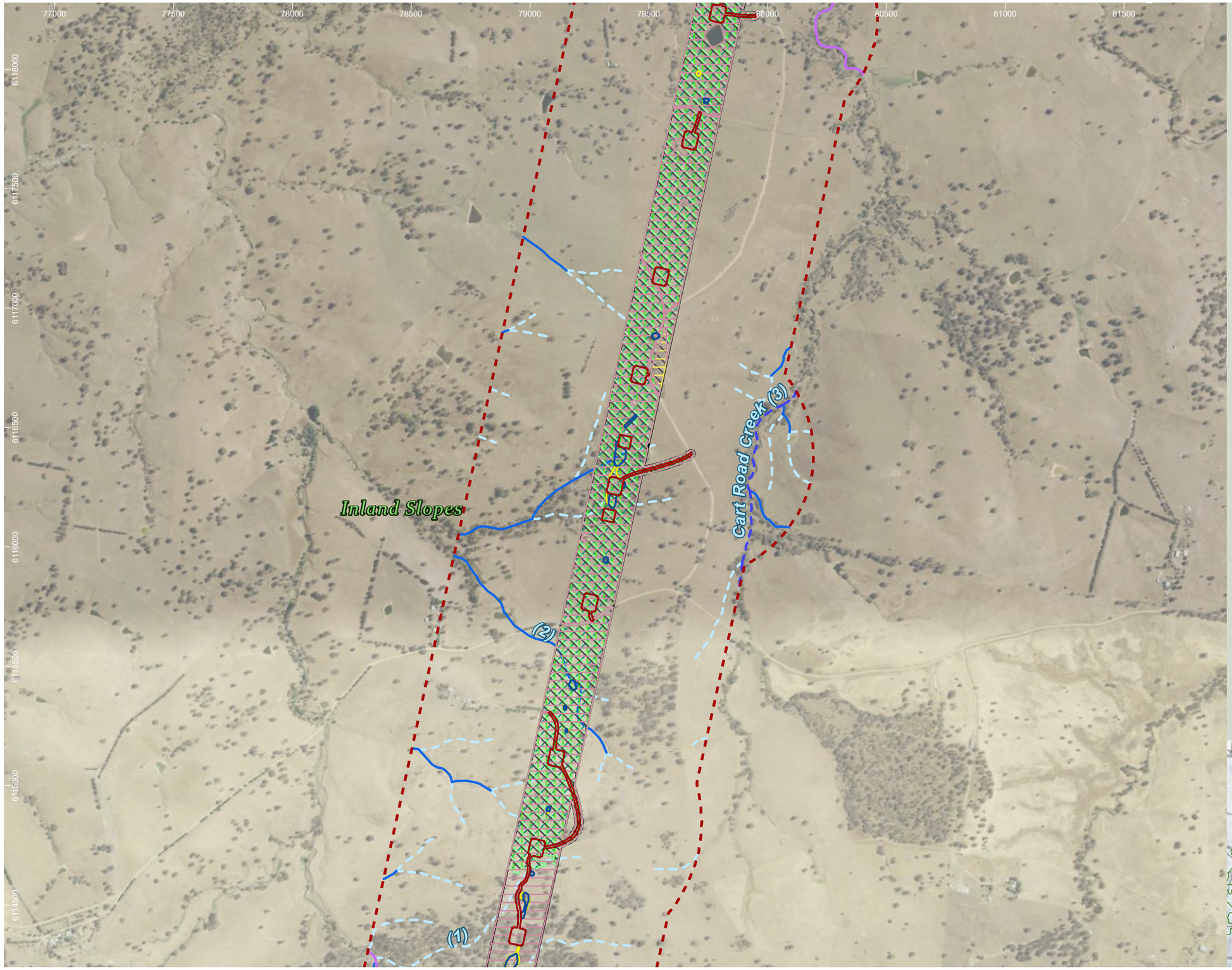


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

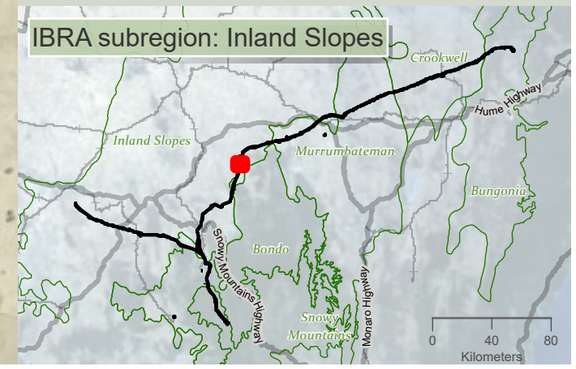
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 56

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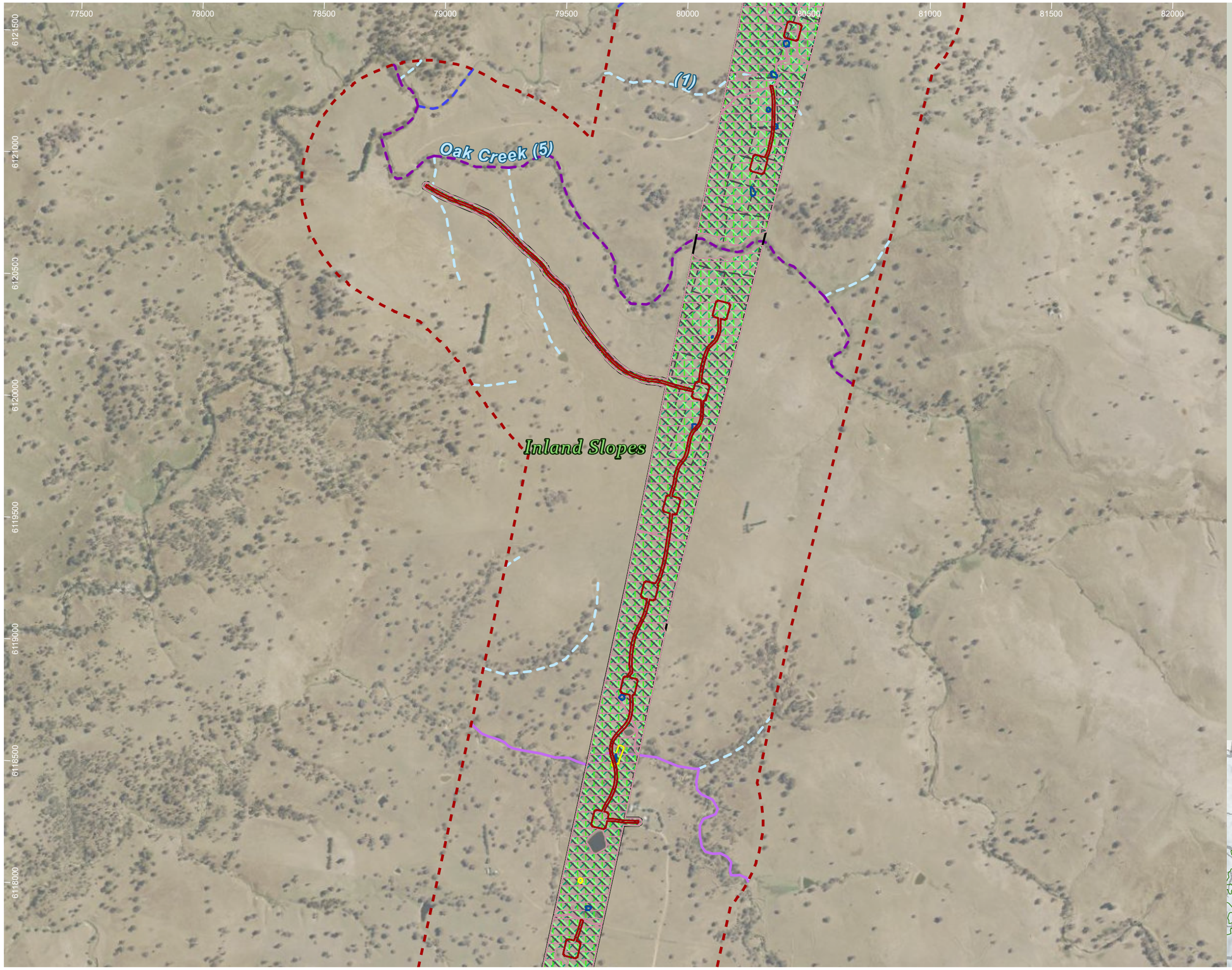


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

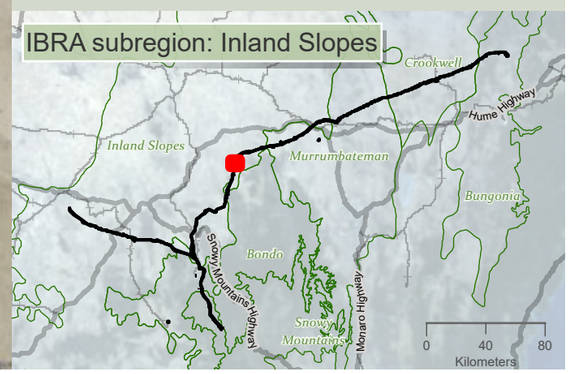
- 1
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 57

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79000 79500 80000 80500 81000 81500 82000 82500 83000

6124500 6124000 6123500 6123000 6122500 6122000 6121500

Inland Slopes

(1)

(2)

(3)

Yellow Clay Creek

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

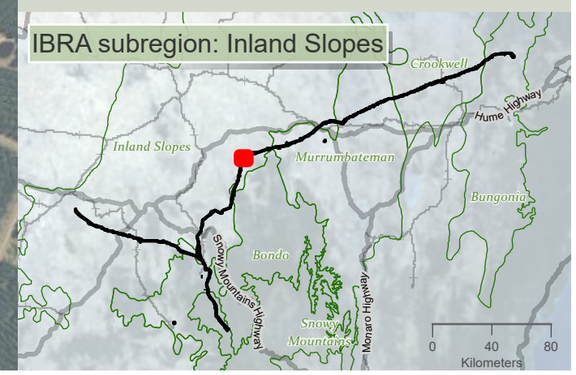
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 58

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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82000 82500 83000 83500 84000 84500 85000 85500

6126500 6126000 6125500 6125000 6124500 6124000

Inland Slopes

(1) (2) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

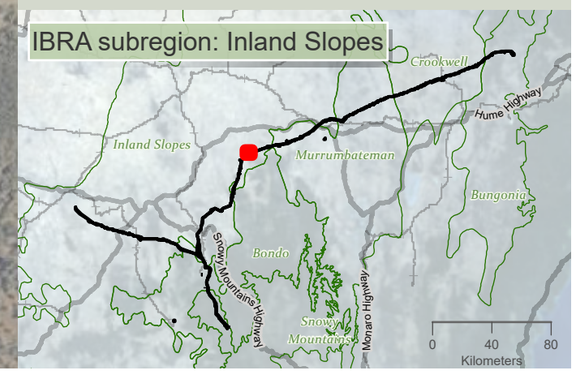
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Euphrasia arguta
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 400 m

N

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 59

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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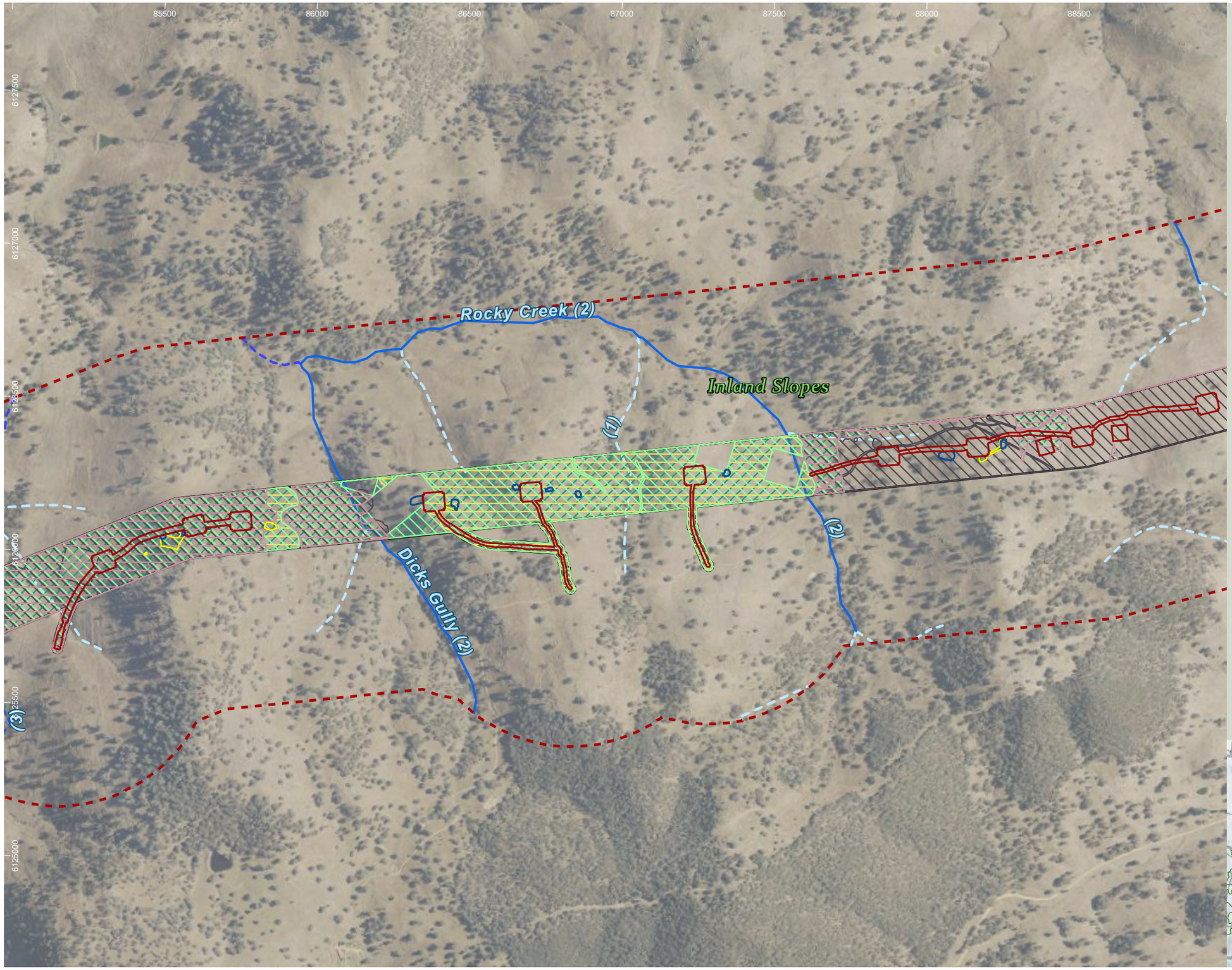


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

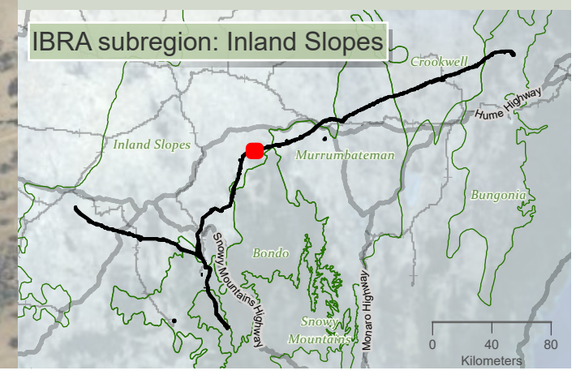
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 60

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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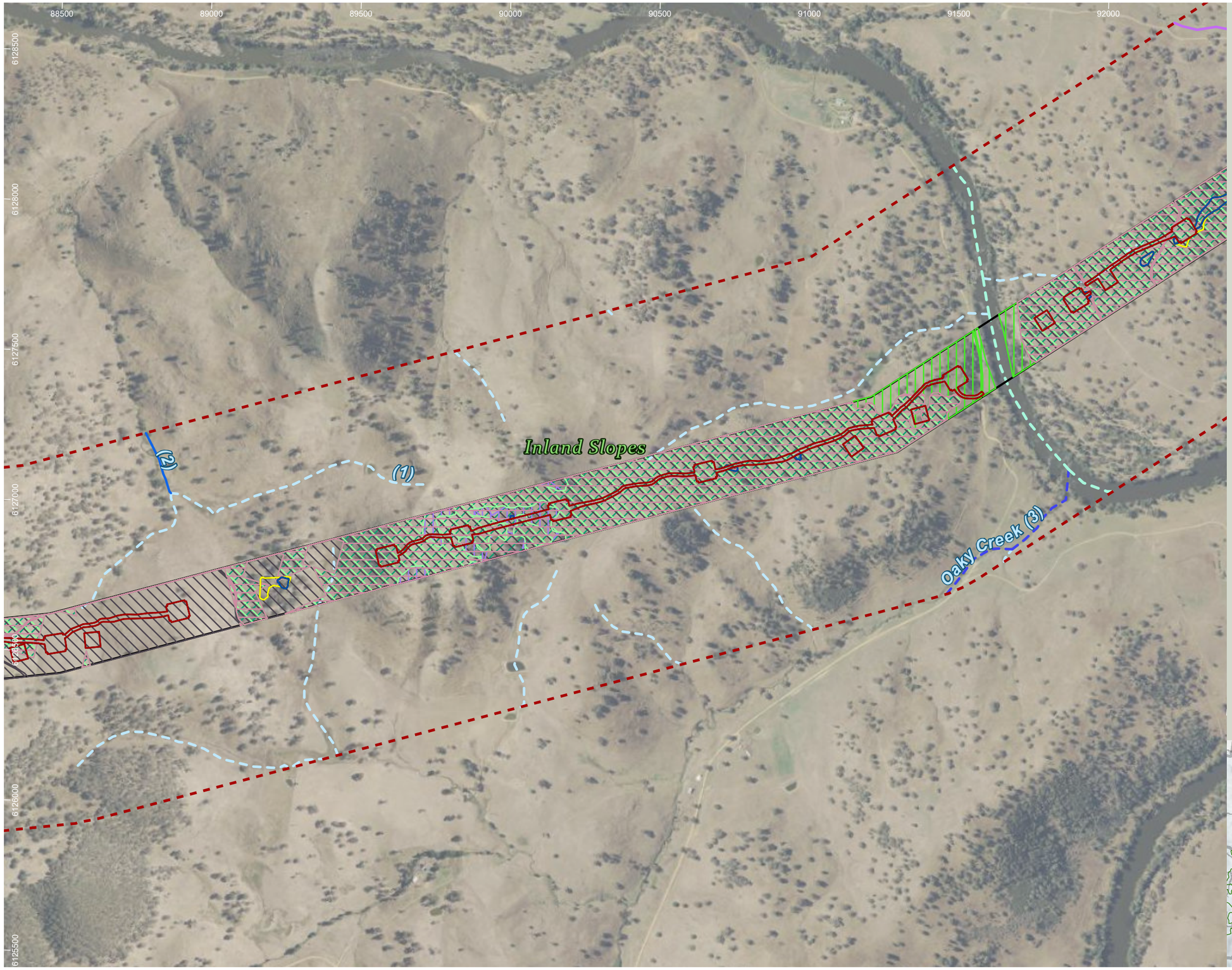


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

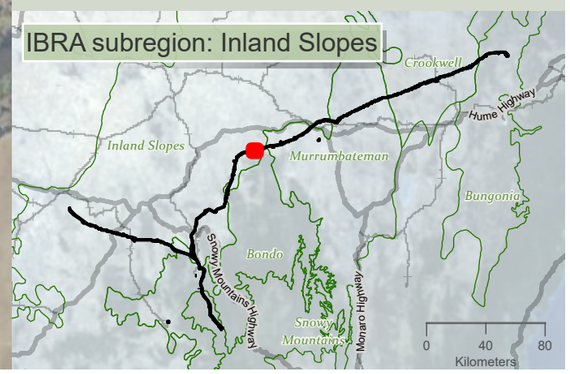
- 1
- 2
- 3
- 4
- 9

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Senecio garlandii
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 61

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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92000 92500 93000 93500 94000 94500 95000 95500

6130000 6129500 6129000 6128500 6128000 6127500 6127000

Oak Creek (4)

Murrumbidgee River (9)

(1) (2) (3)

Inland Slopes

Bondo

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

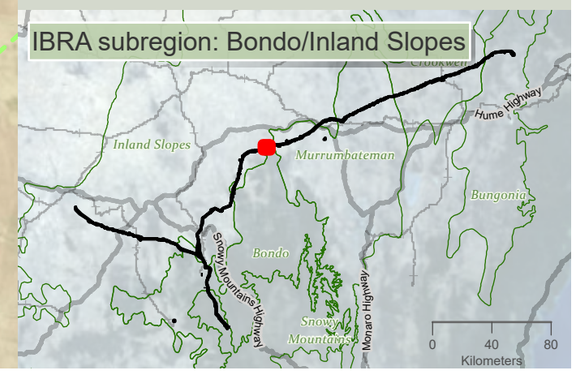
- 1
- 2
- 3
- 4
- 9

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 62

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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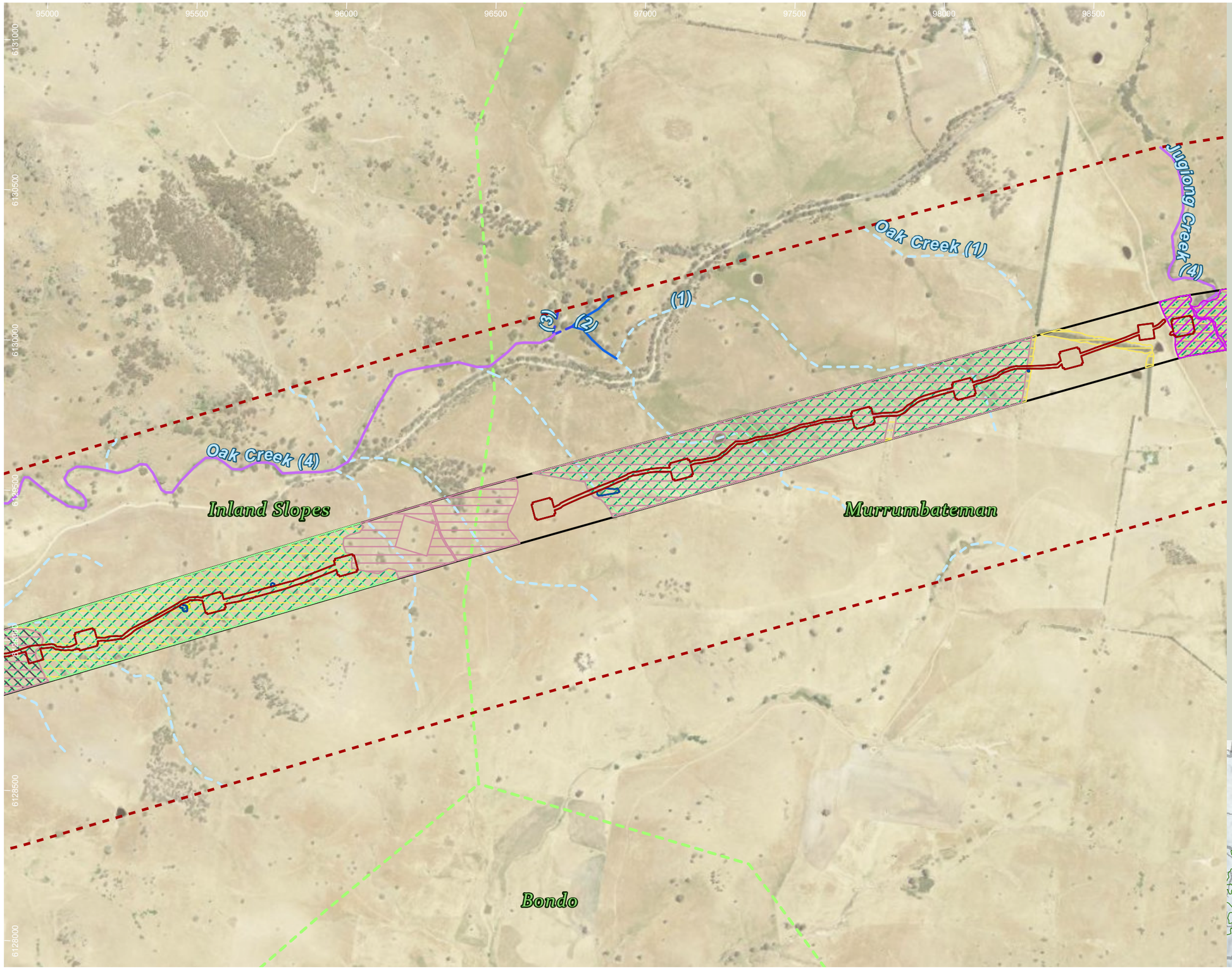


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

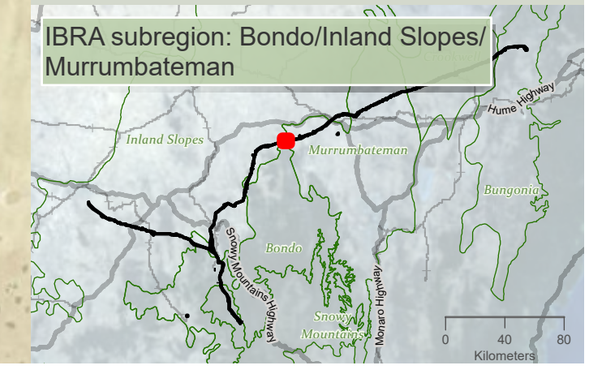
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 63

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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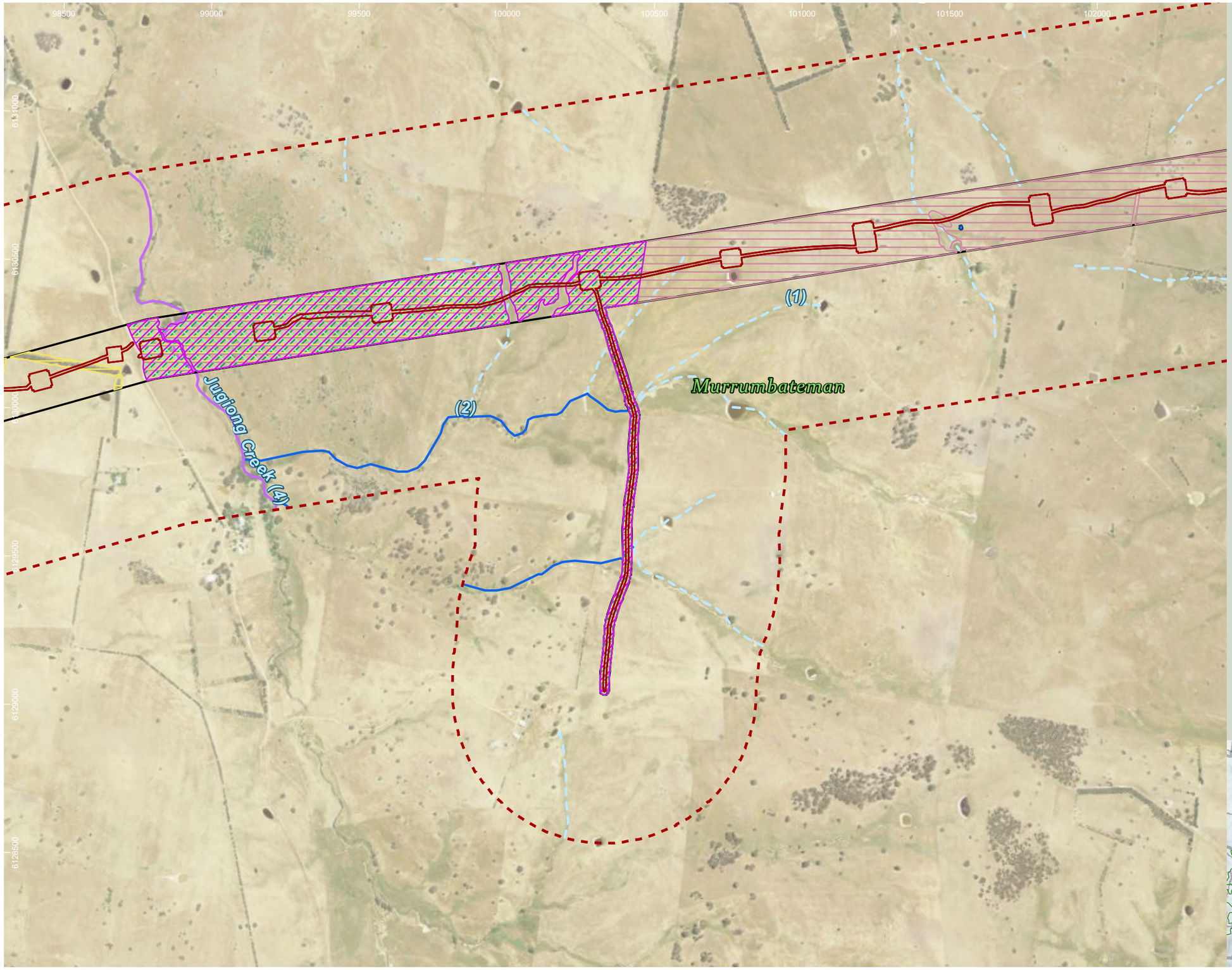


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

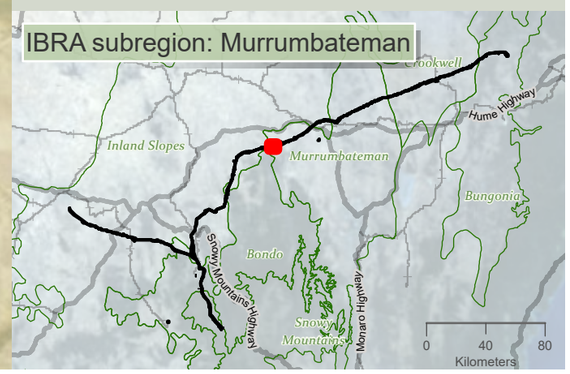
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

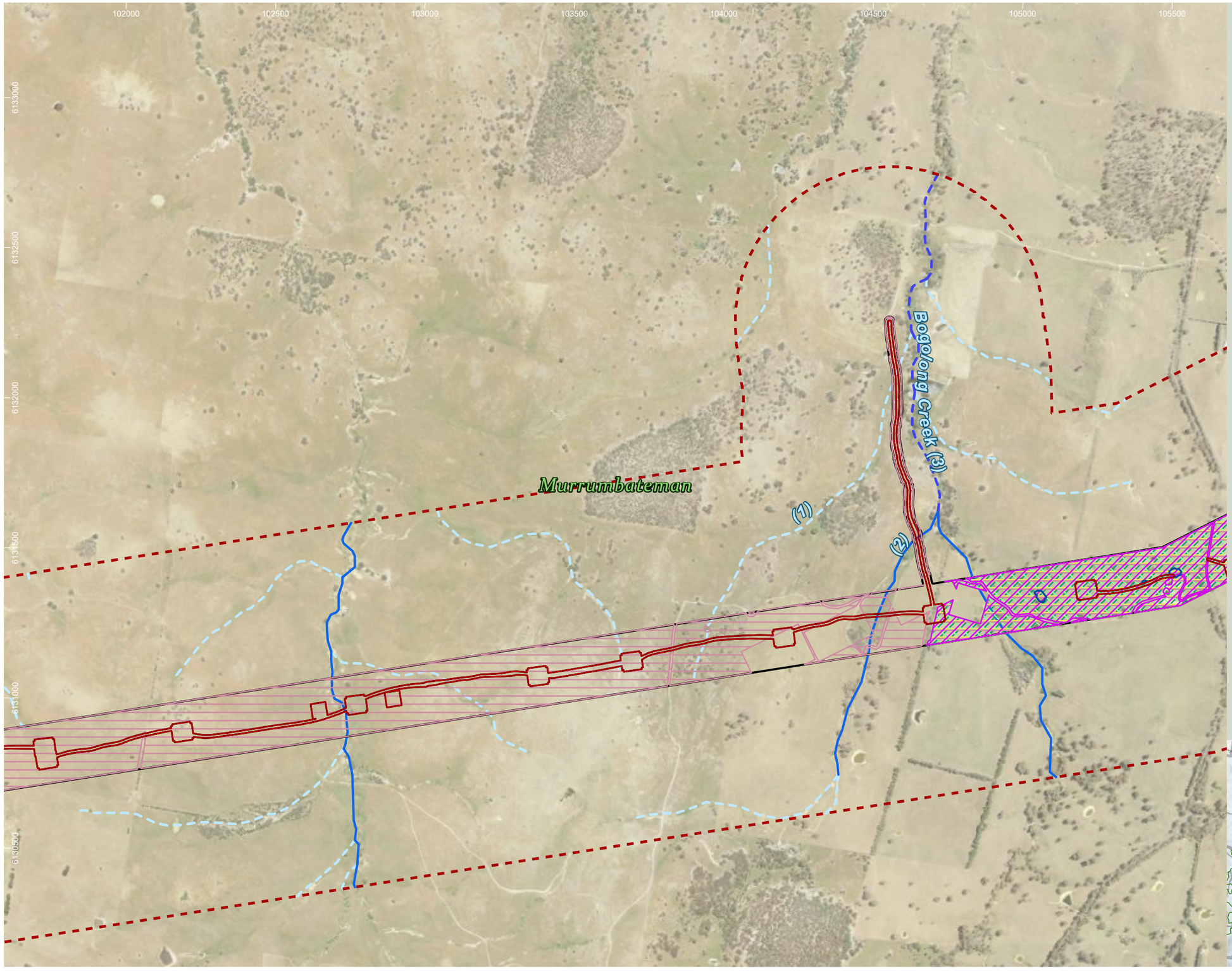
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 64

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

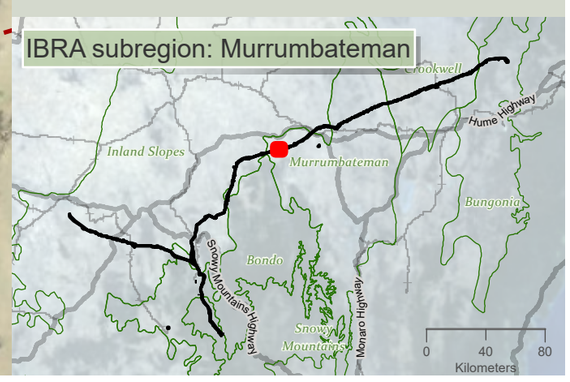
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 65

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105000 105500 106000 106500 107000 107500 108000 108500

6133500 6133000 6132500 6132000 6131500 6131000

Murrumbateman

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

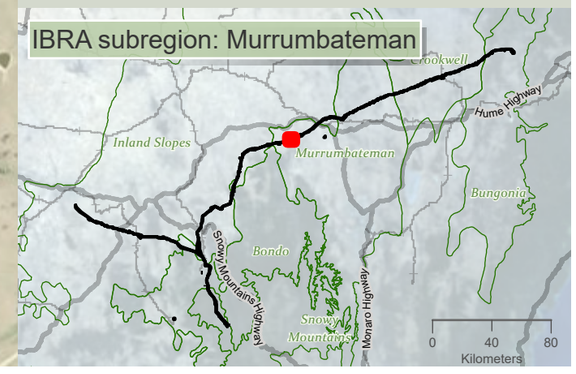
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 66

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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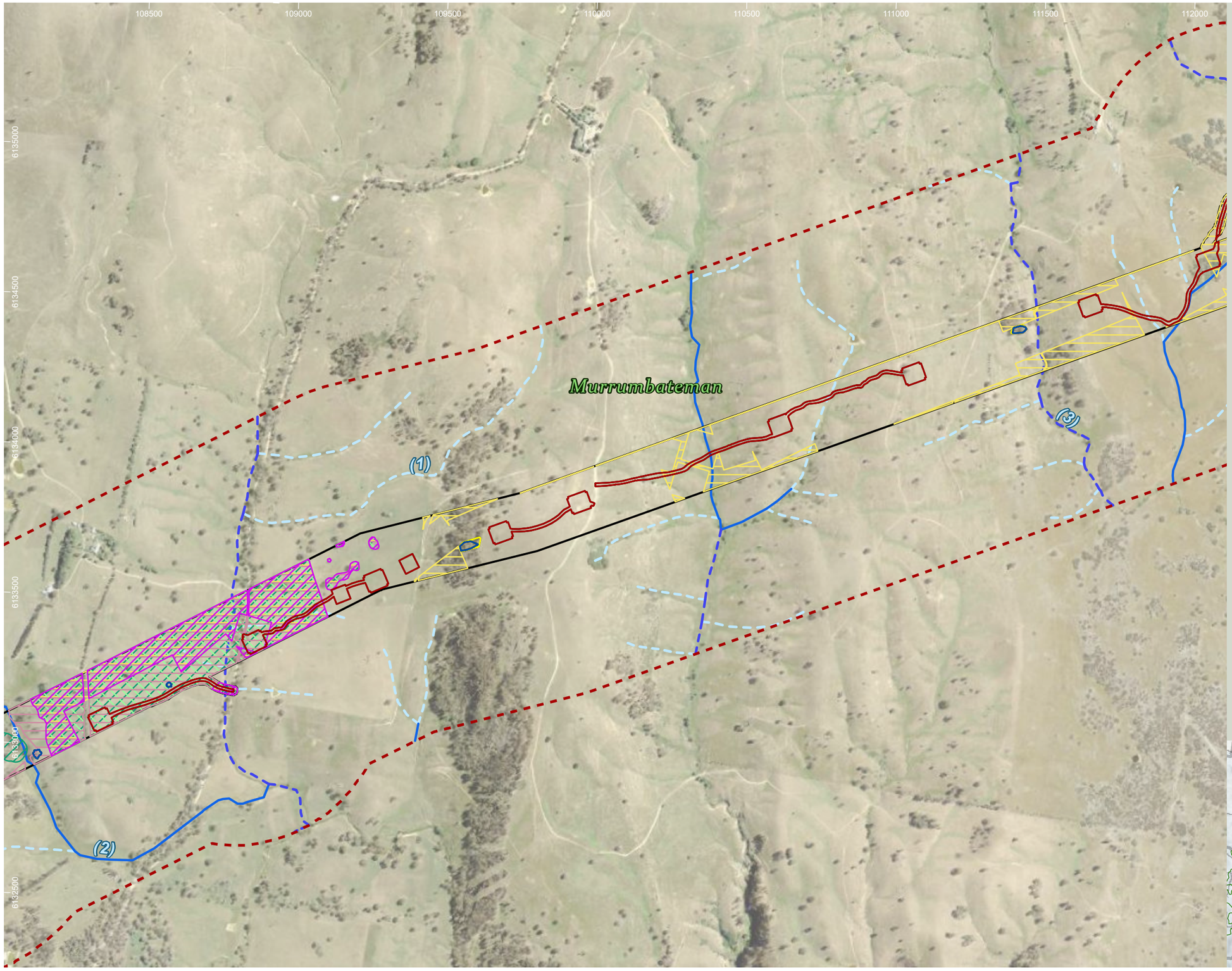


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

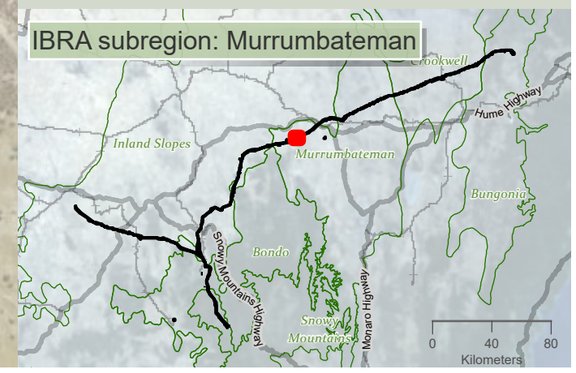
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 67

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111500 112000 112500 113000 113500 114000 114500 115000

6136500 6136000 6135500 6135000 6134500 6134000

Murrumbateman

Mccullums Creek (3)

(1)

(2)

(3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

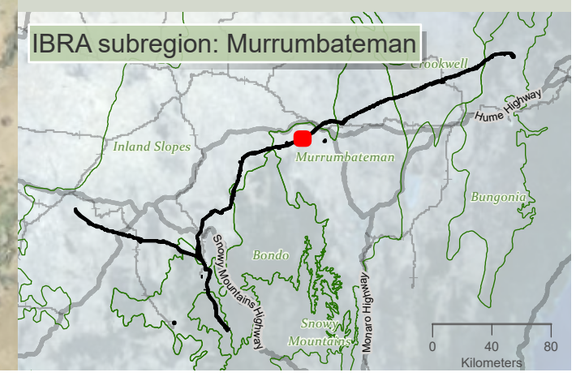
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



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niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

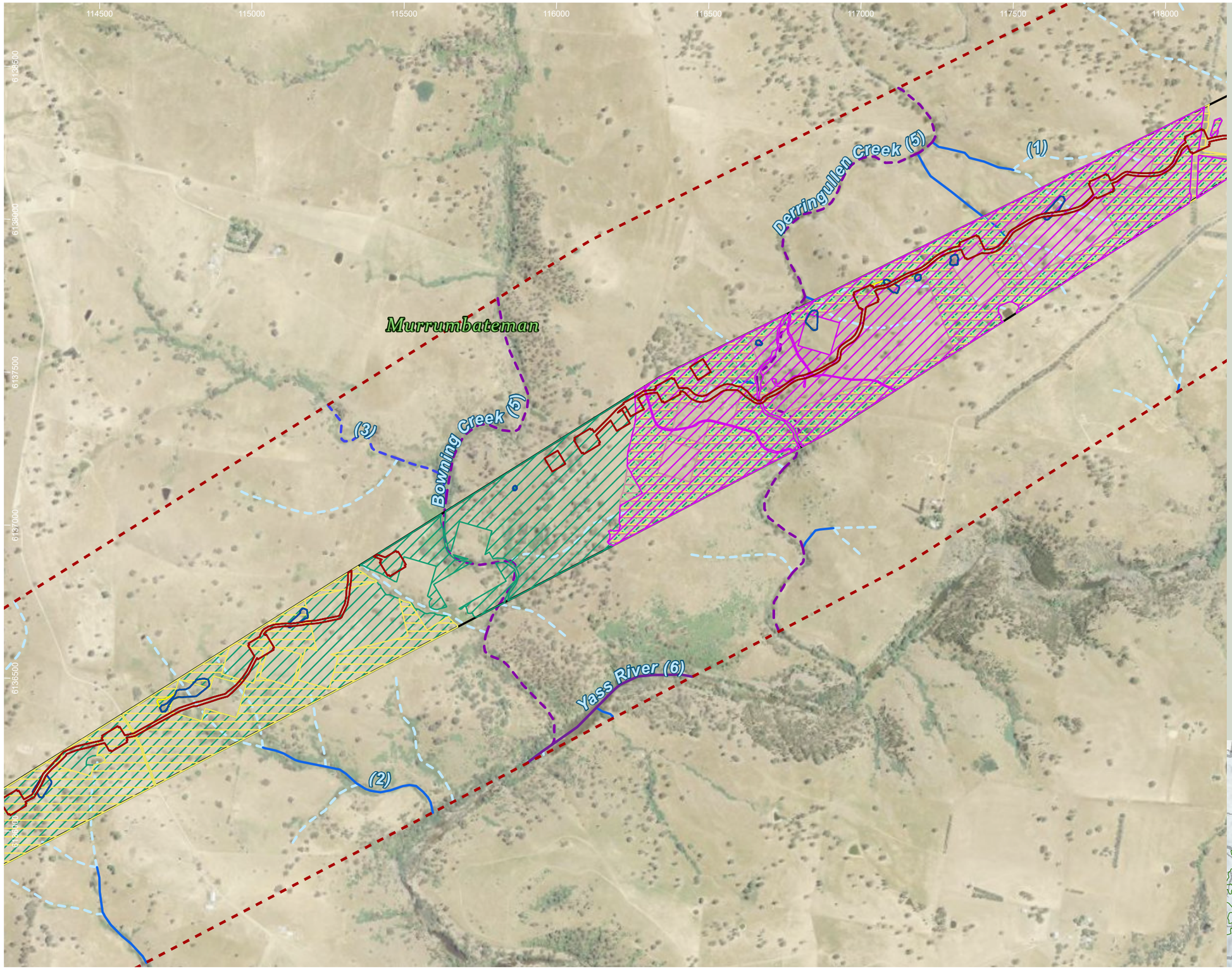
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 68

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

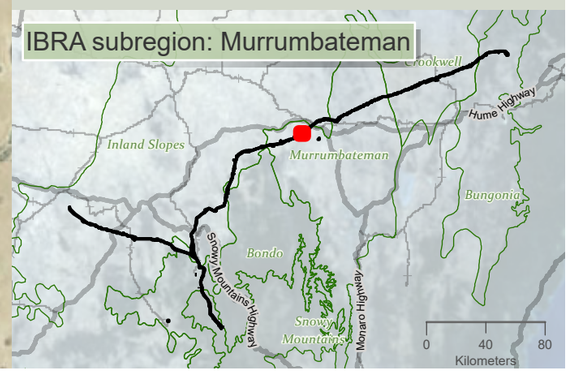
- 1
- 2
- 3
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



Niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 69

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117000 117500 118000 118500 119000 119500 120000 120500 121000

6140500 6140000 6139500 6139000 6138500 6138000 6137500

(1) (2) (3)

Murrumbateman

Derringullen Creek

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

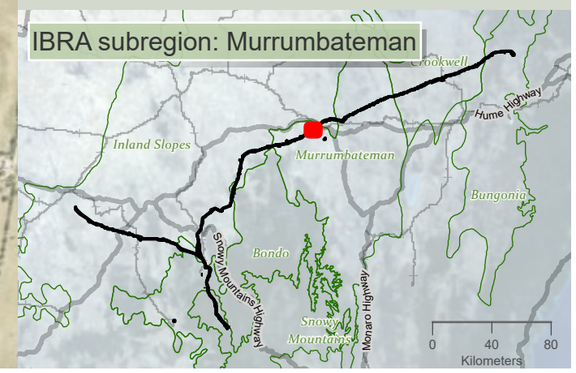
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 70

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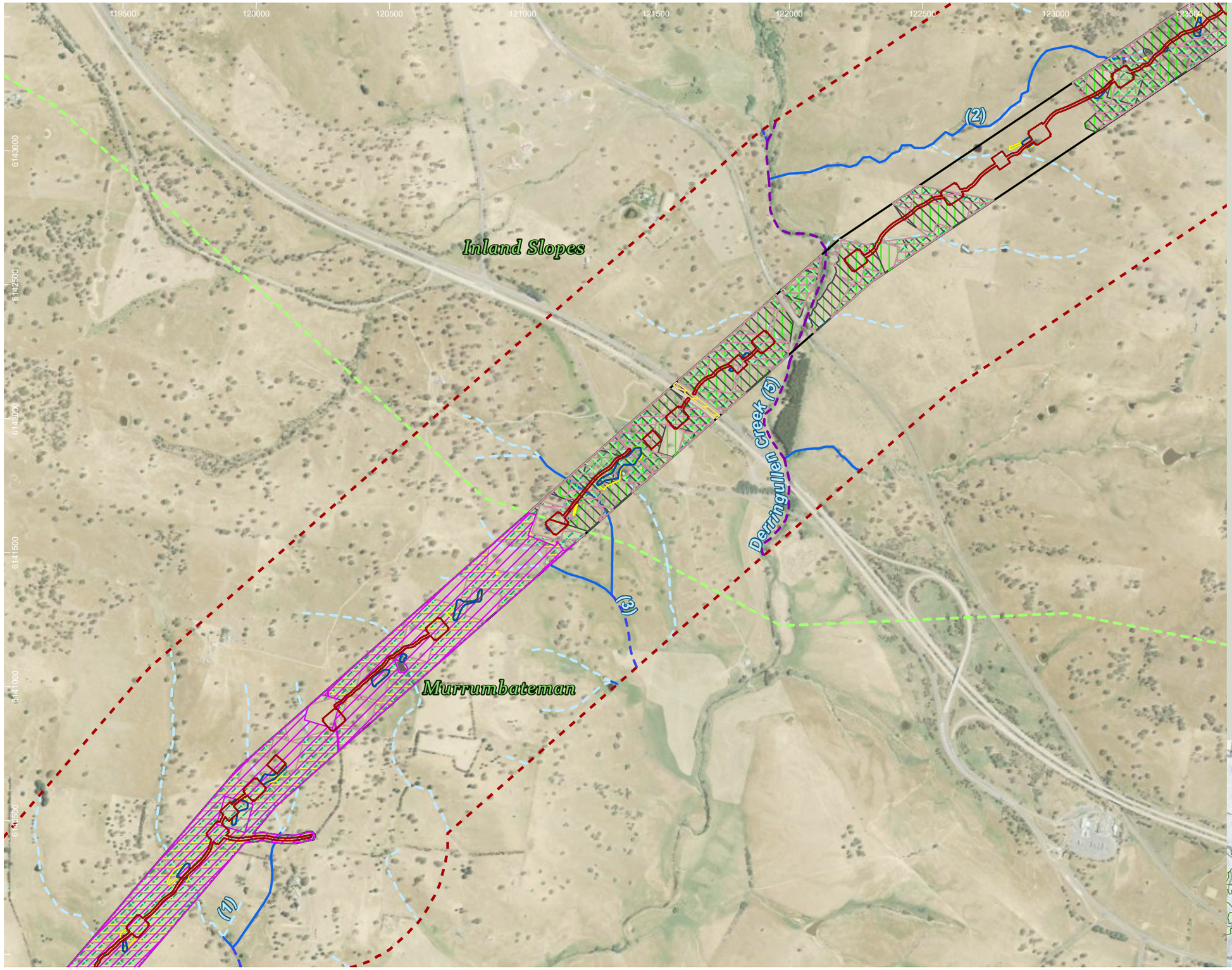


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

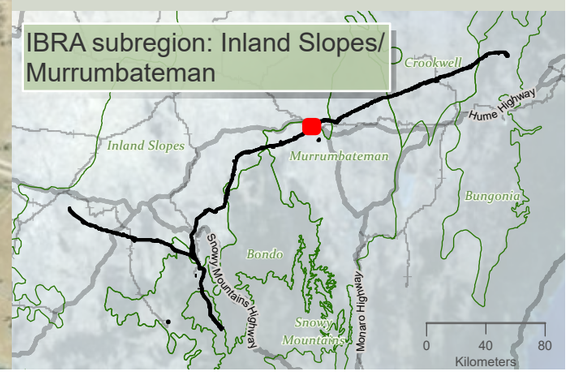
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 71

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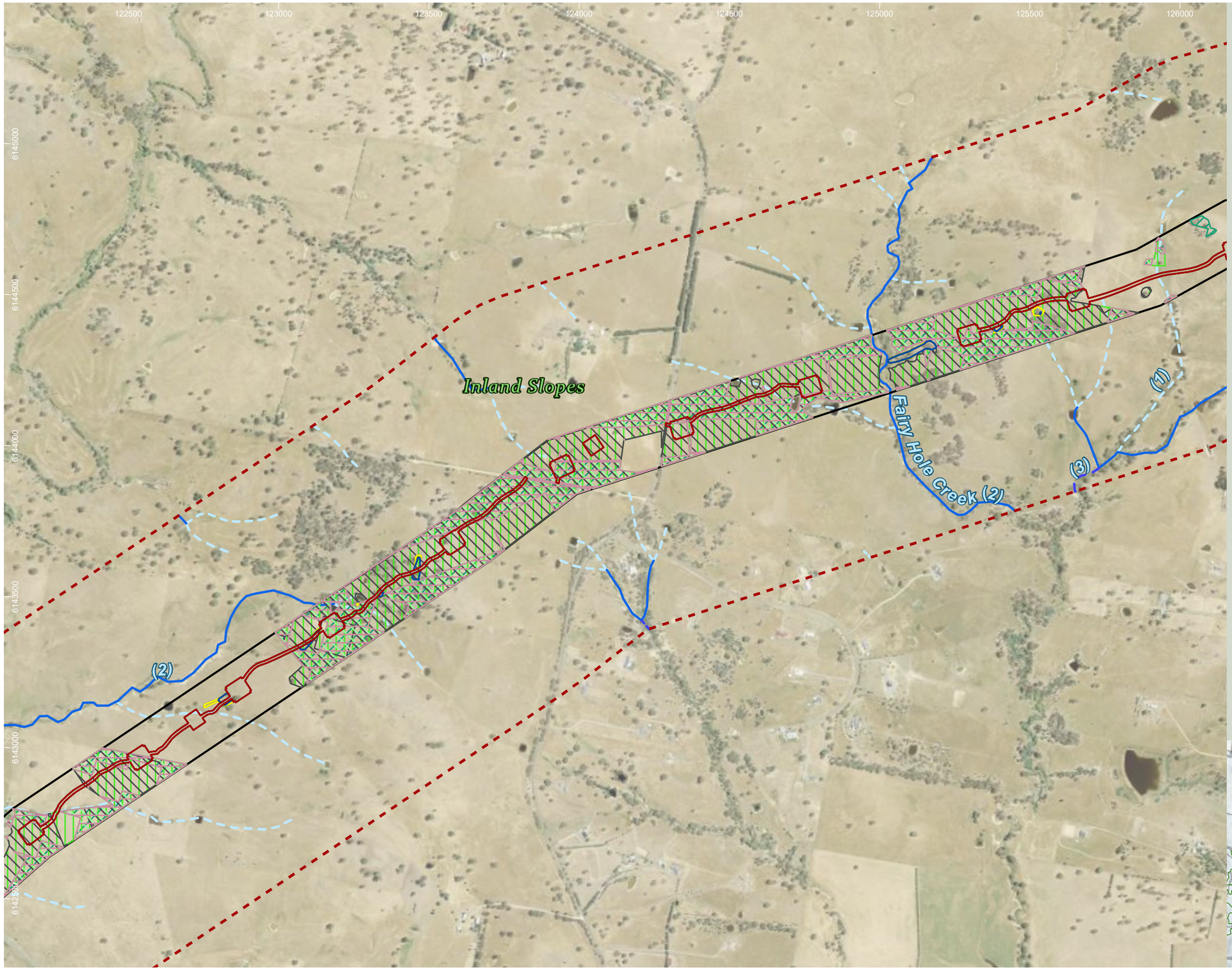


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

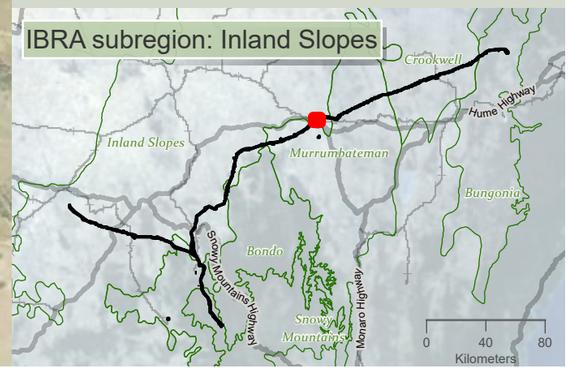
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Swainsona recta
- Swainsona sericea



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 73

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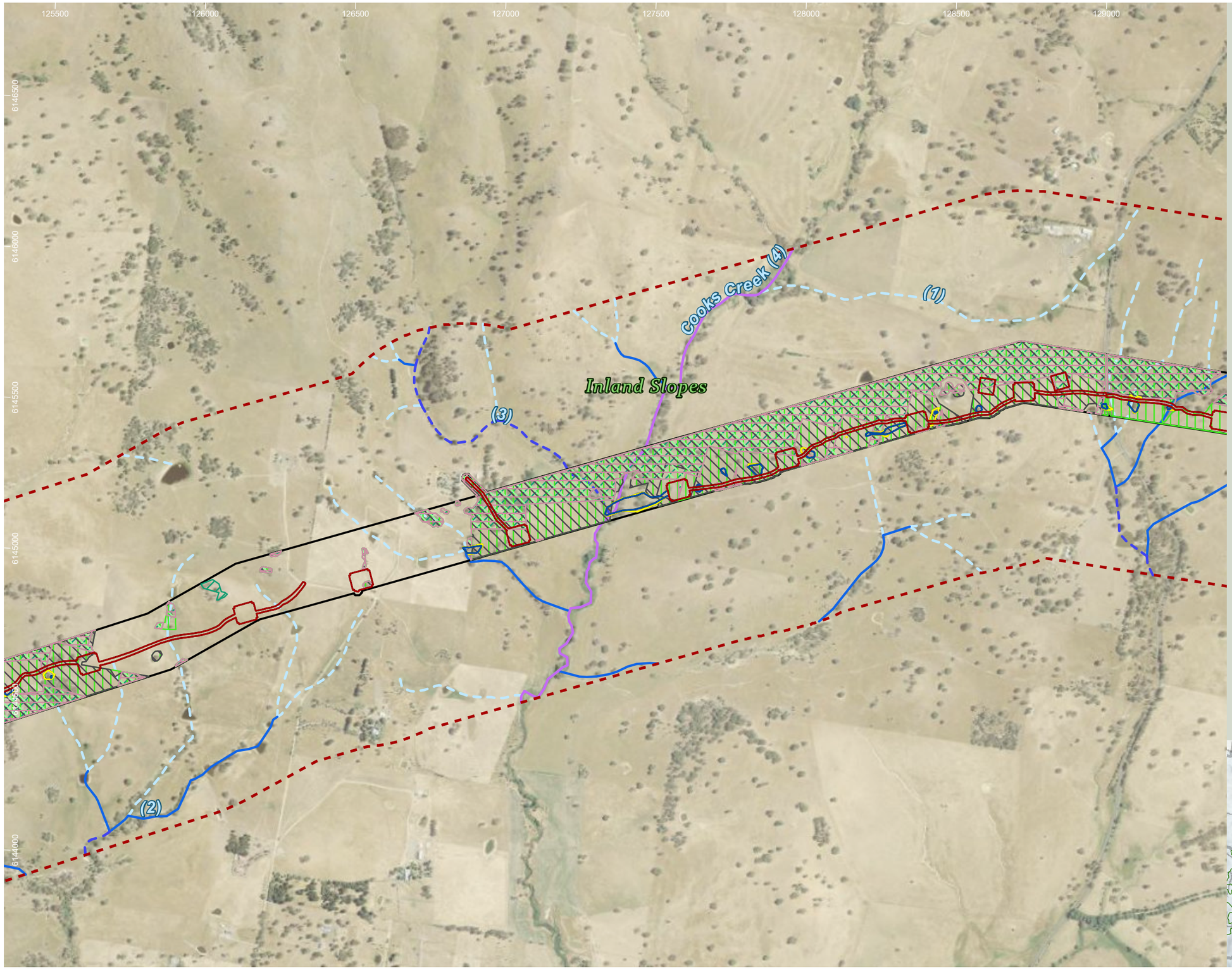


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

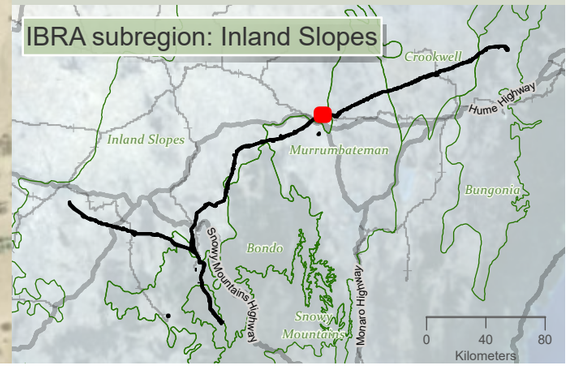
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Swainsona recta
- Swainsona sericea



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

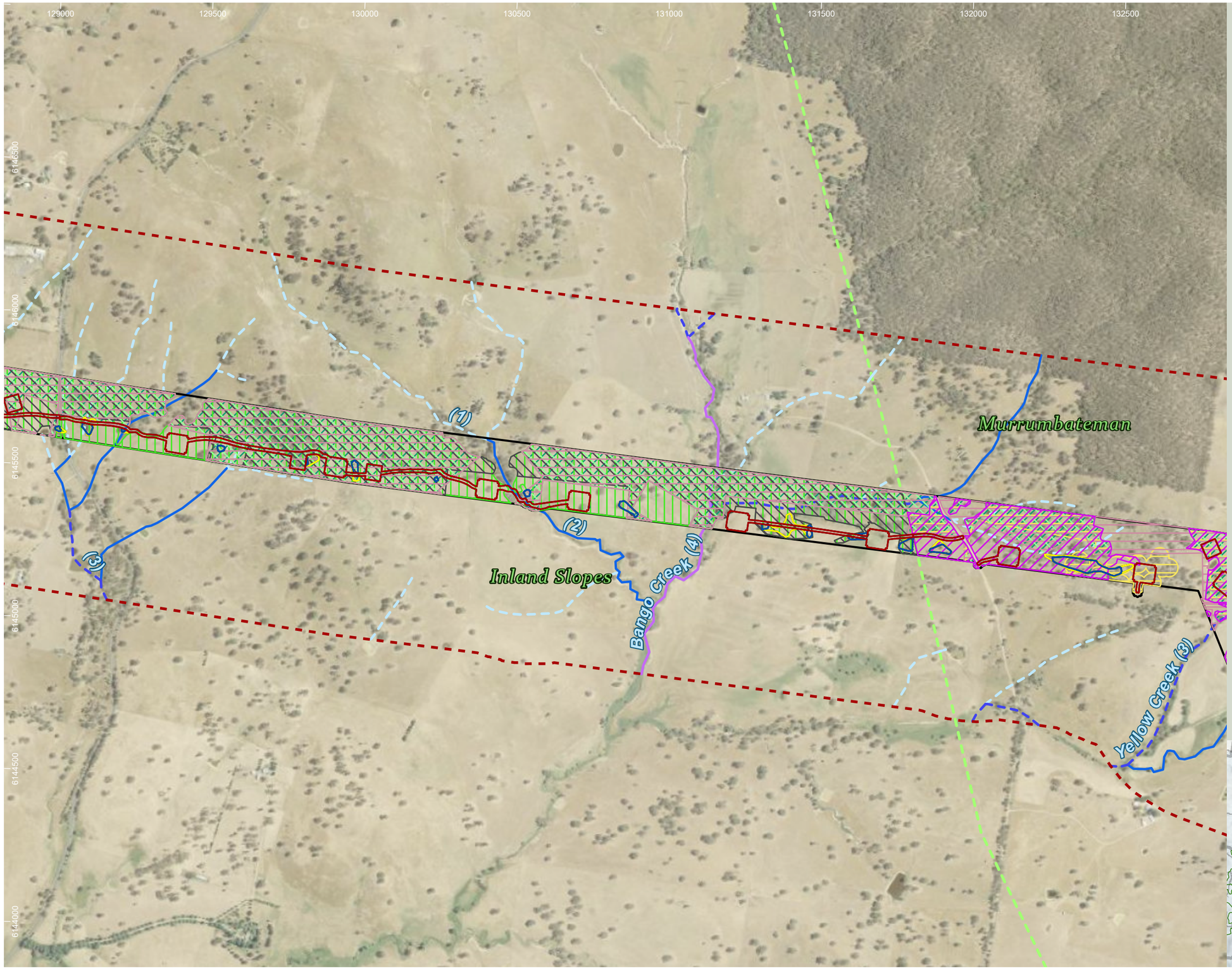
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 74

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

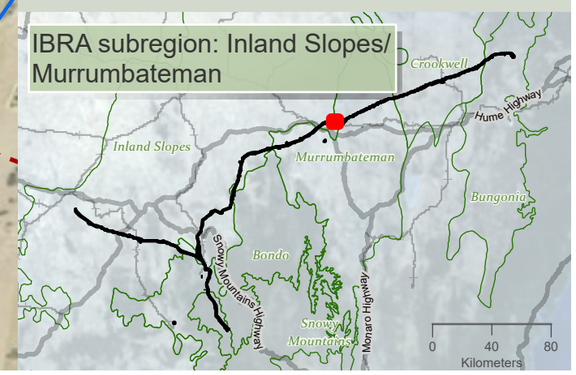
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Cullen parvum
- Euphrasia arguta
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 75

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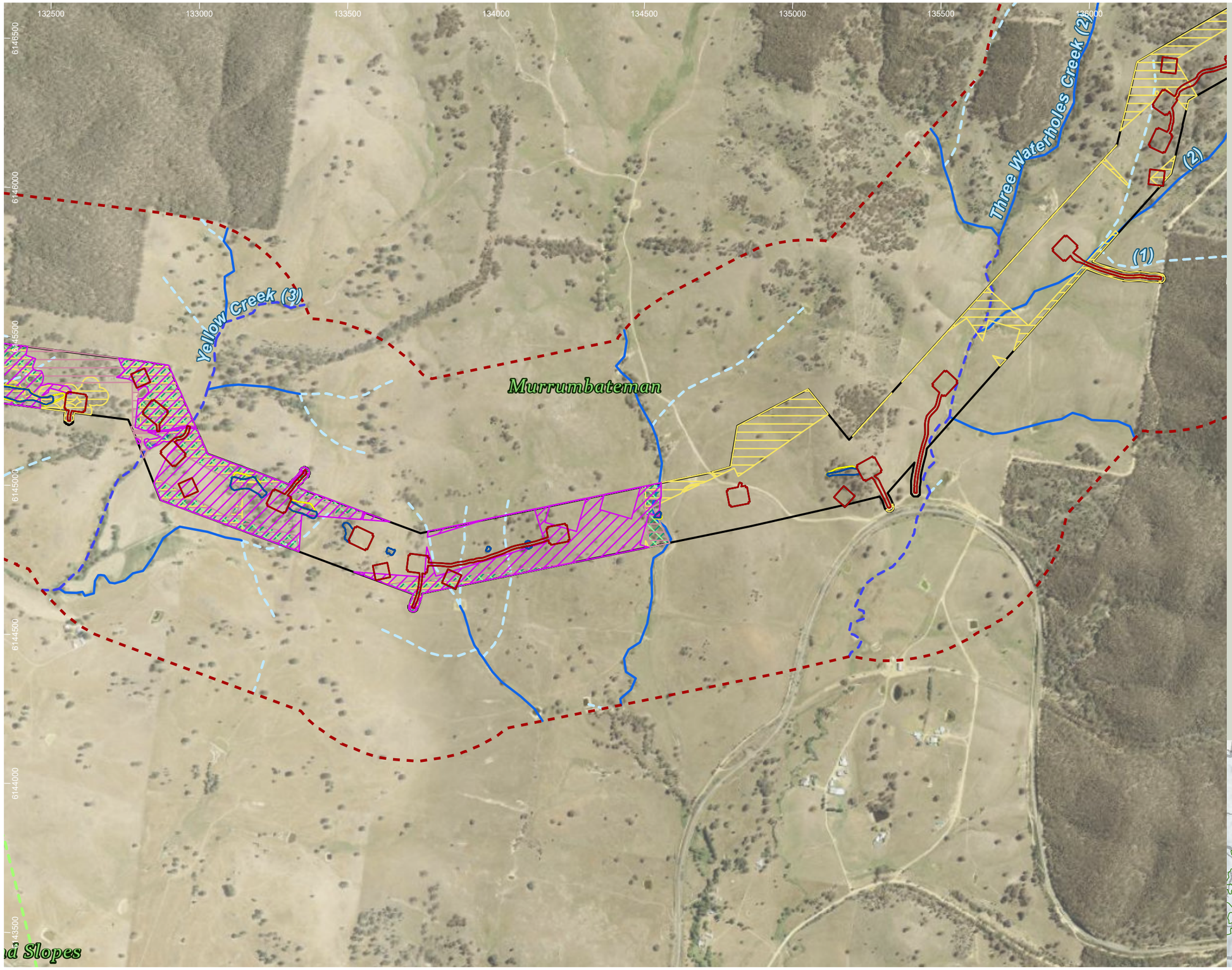


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

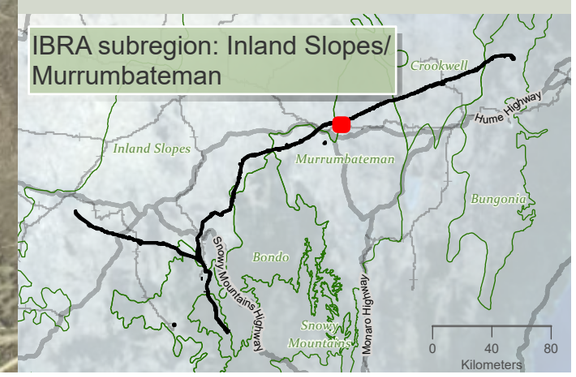
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 76

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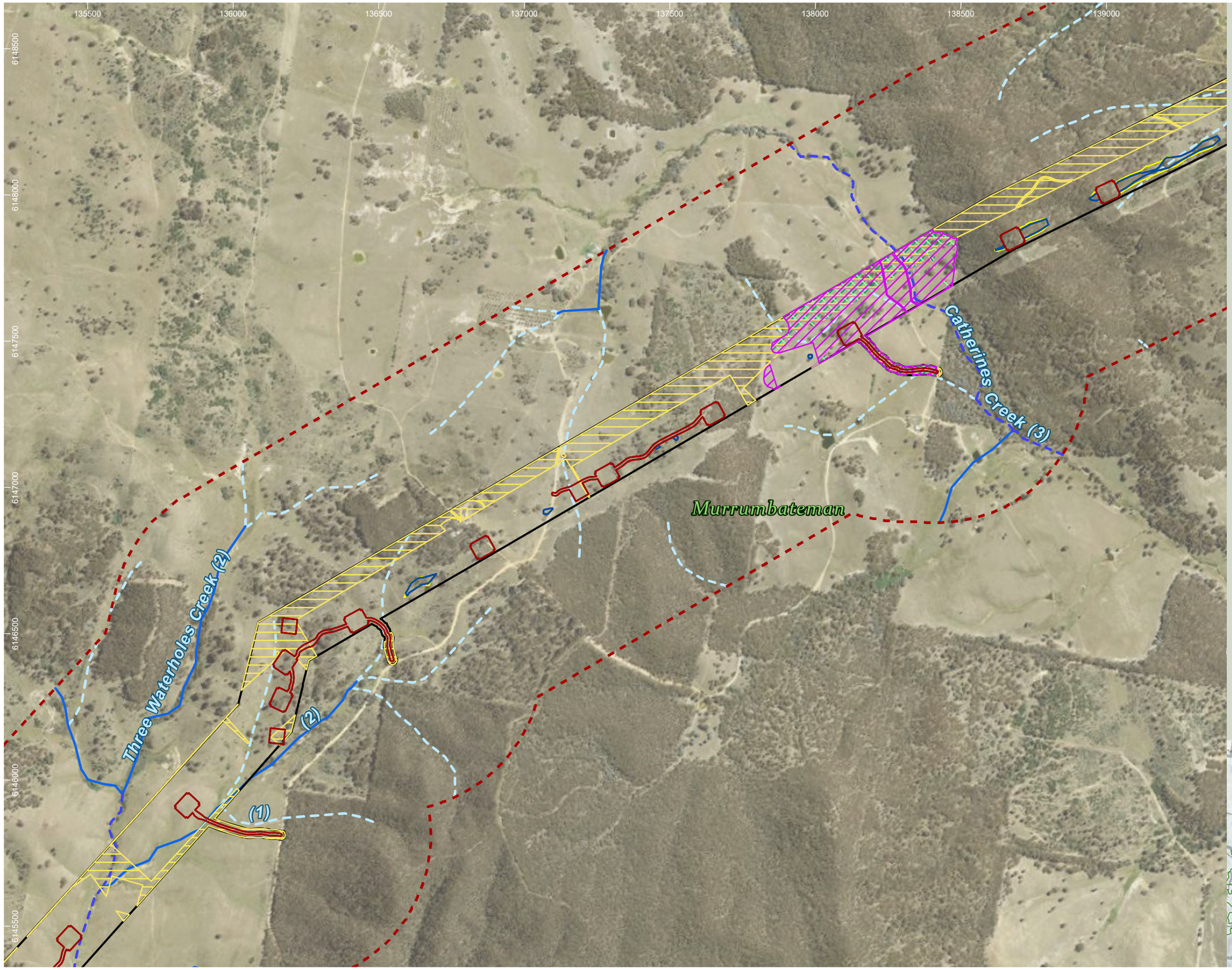


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

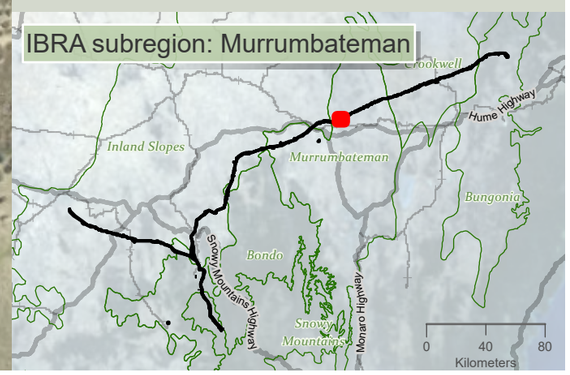
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 77

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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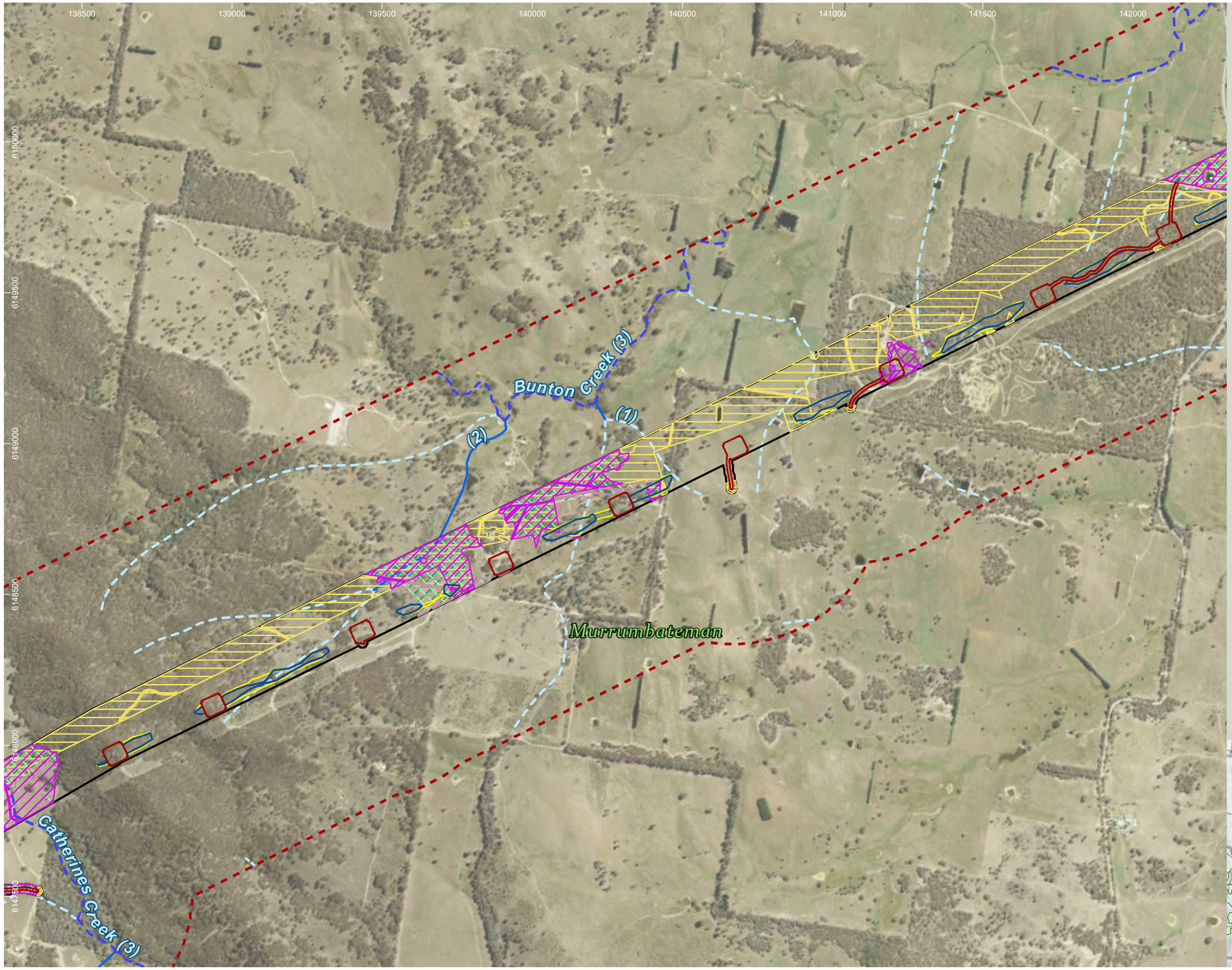


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

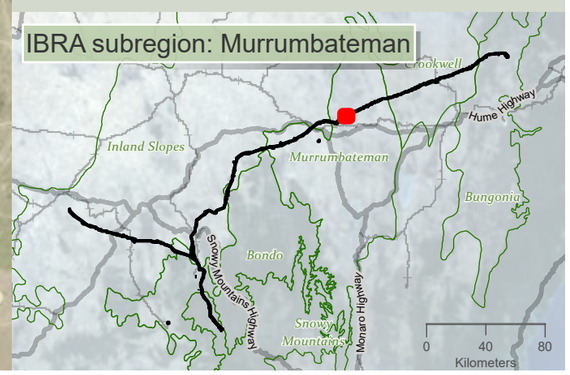
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 78

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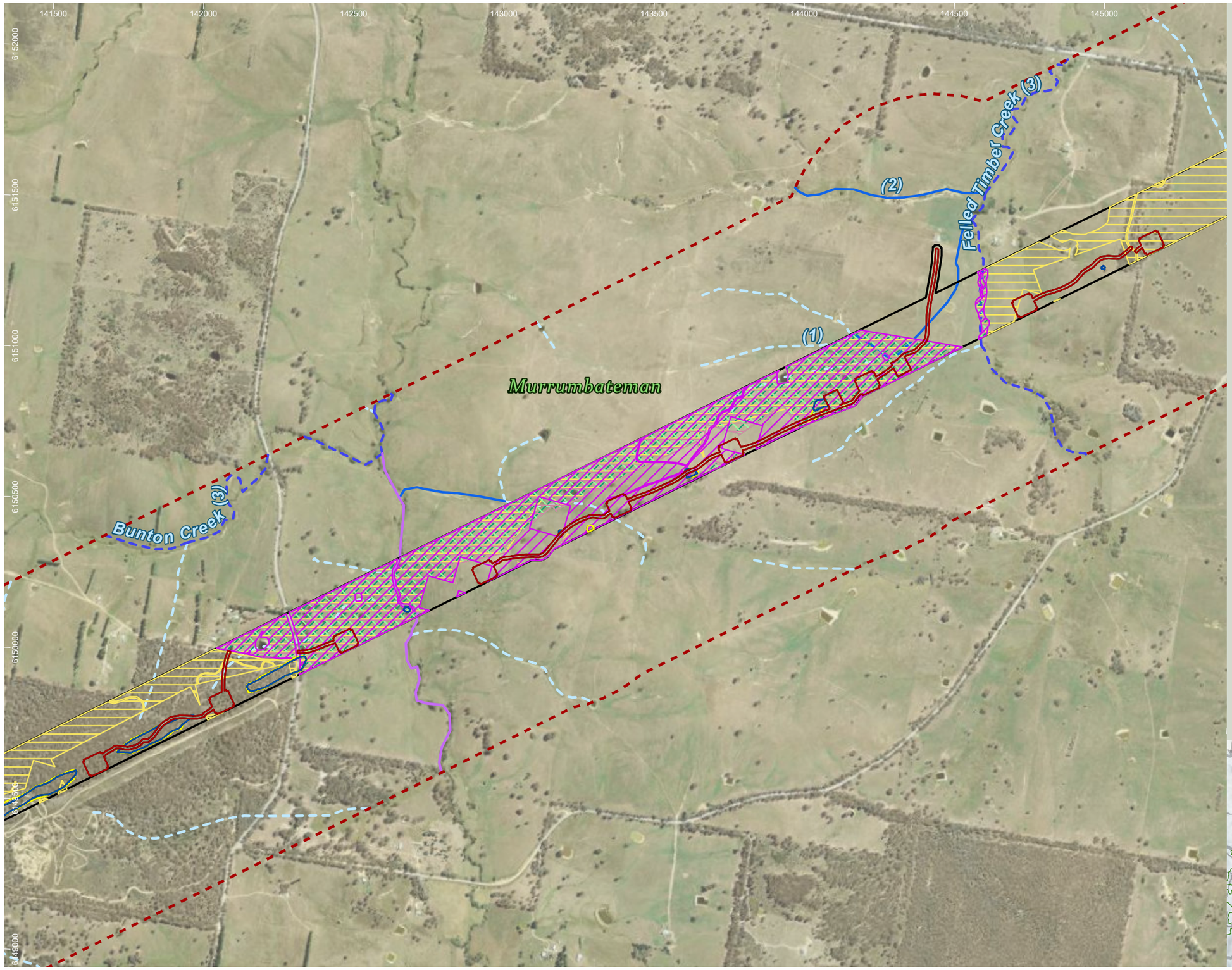


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

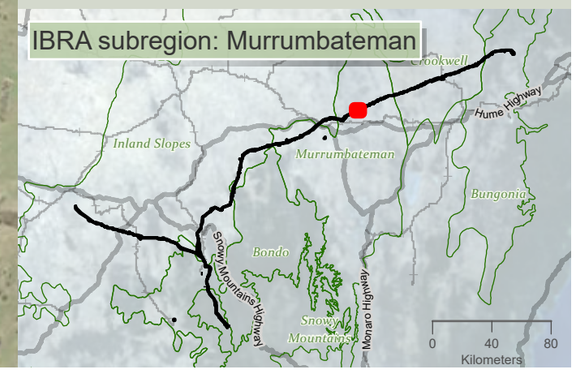
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 79

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144500 145000 145500 146000 146500 147000 147500 148000

6153500 6153000 6152500 6152000 6151000

Murrumbateman

Jerrawa Creek (5)

Felled Timber Creek (3)

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

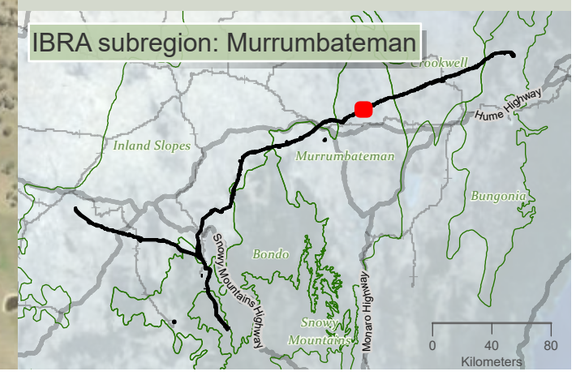
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 80

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148000 148500 149000 149500 150000 150500 151000 151500

6155000 6154500 6154000 6153500 6153000 6152500

Murrumbateman

Sams Creek (2)

Jerrawa Creek (5)

(1)

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

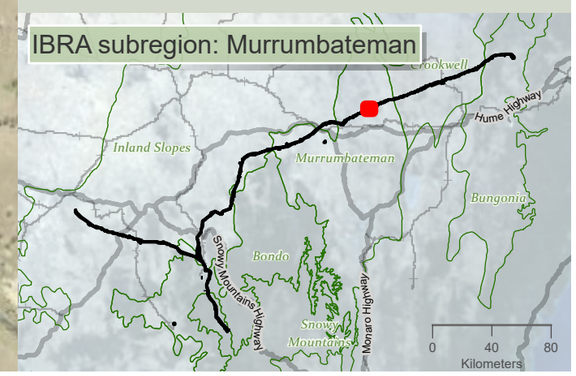
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 81

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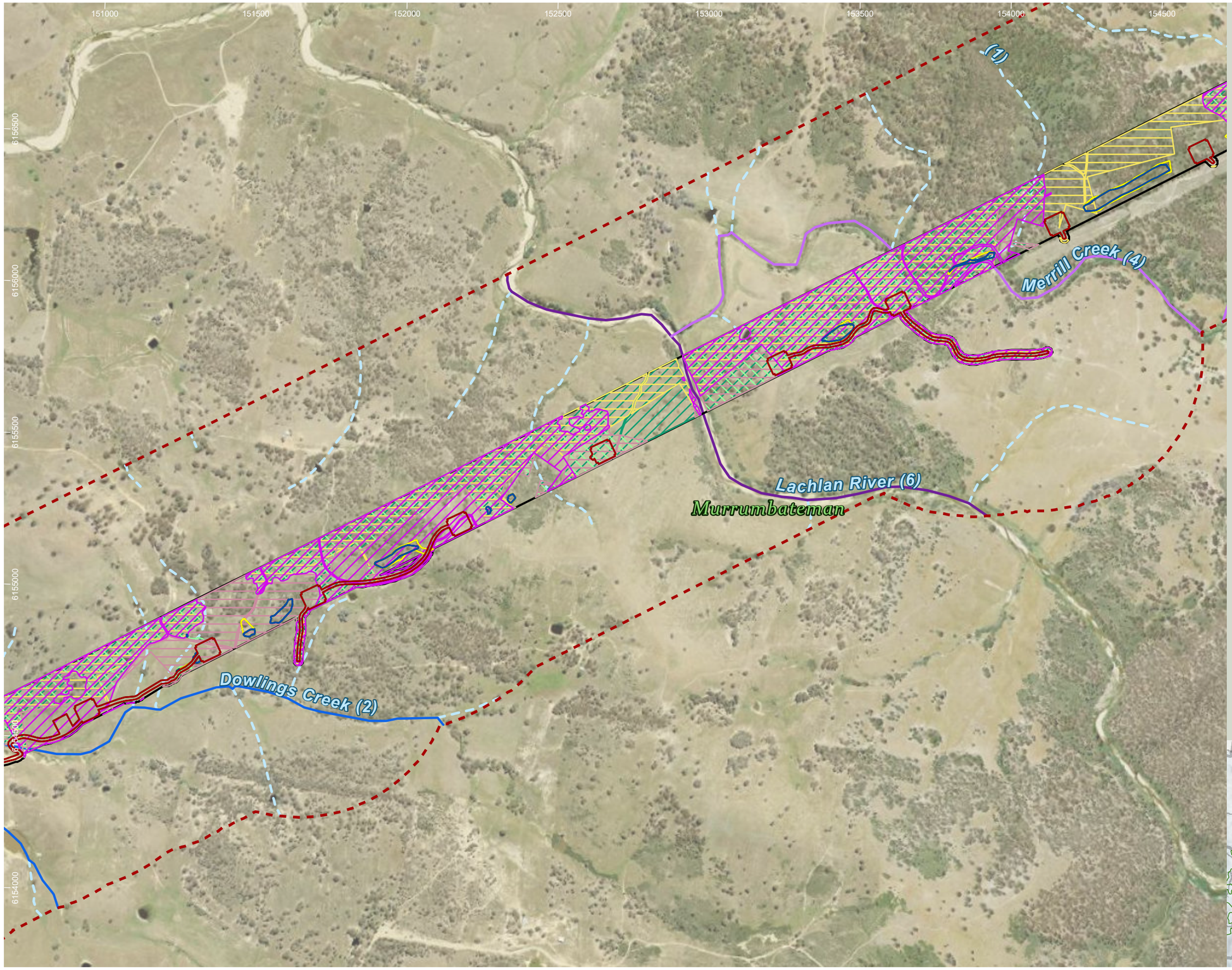
Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

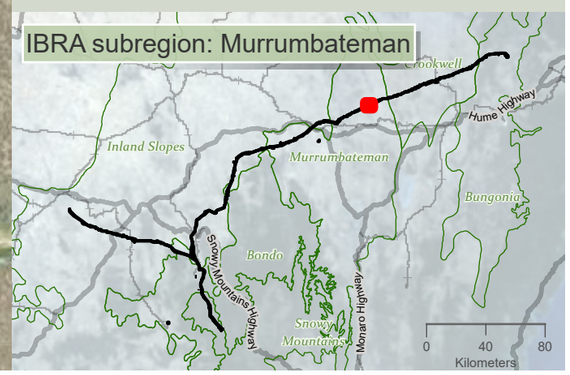
- 1
- 2
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



niche Environment and Heritage

0 N 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

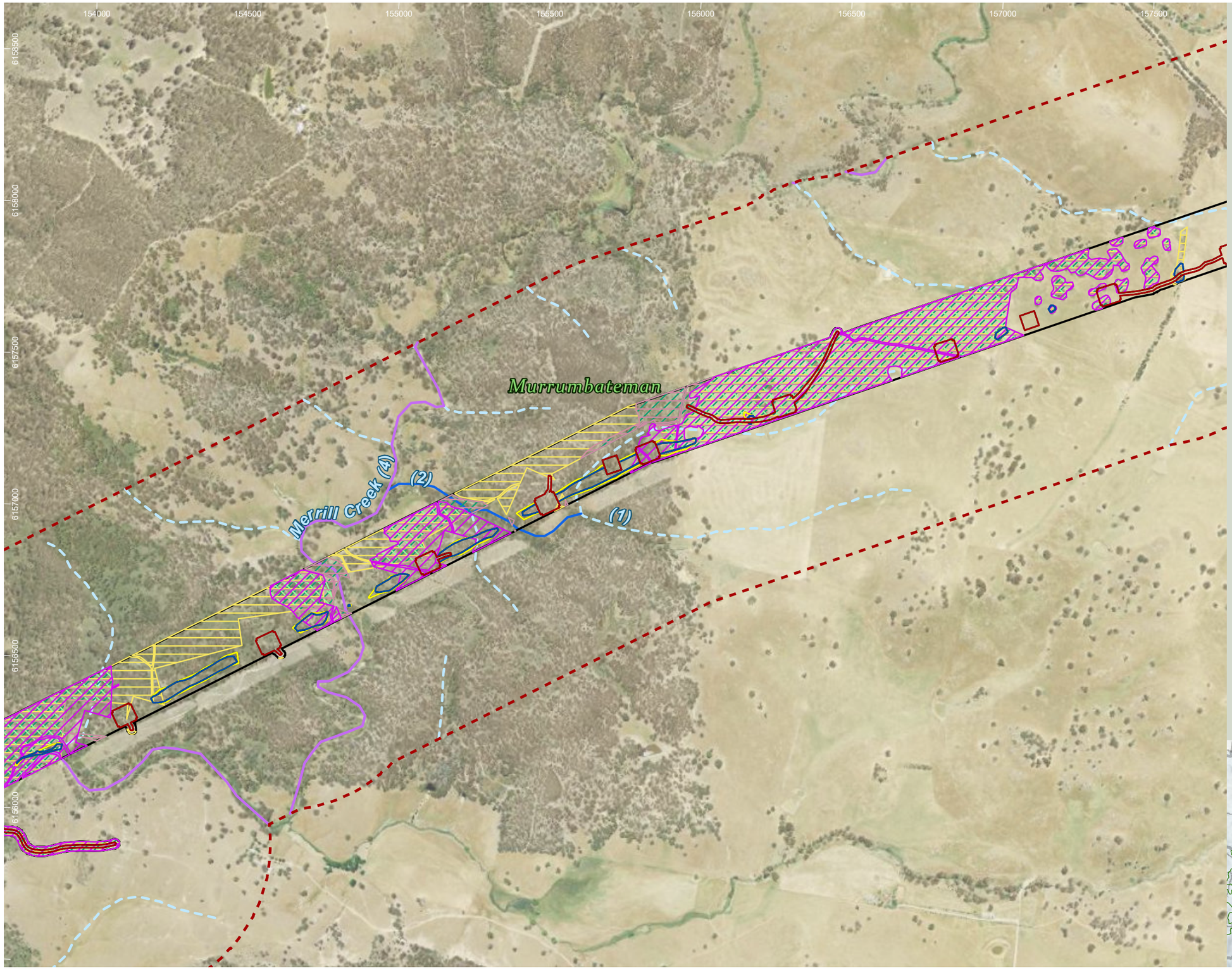
Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 82

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski: Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

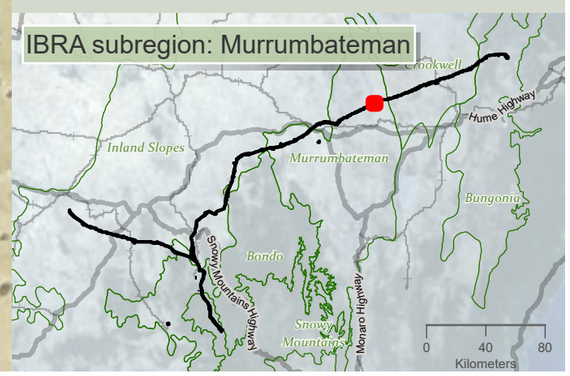
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 83

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

157000 157500 158000 158500 159000 159500 160000 160500

6159500 6159000 6158500 6158000 6157500 6157000

Murrumbateman

(1)

(2)

Middle Creek (1)

Middle Creek (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

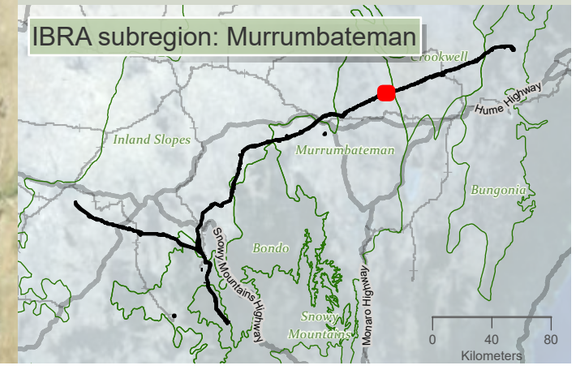
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 84

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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160500 161000 161500 162000 162500 163000 163500 164000

6161000 6160500 6160000 6159500 6159000 6158500 6158000

Crookwell

(2)

(1)

Murrumbateman

Merrill Creek (2)

Middle Creek (1)

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

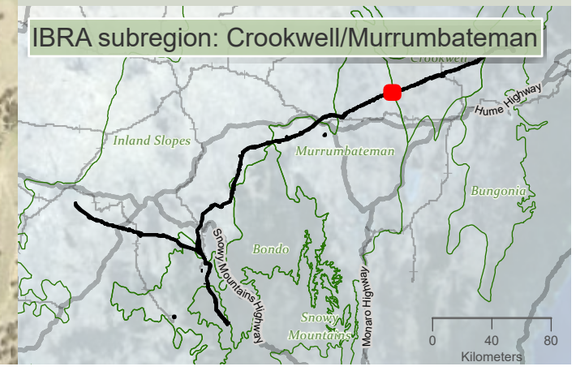
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Lepidium hyssopifolium
- Leucochrysum albicans var tricolor
- Swainsona recta
- Swainsona sericea
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 85

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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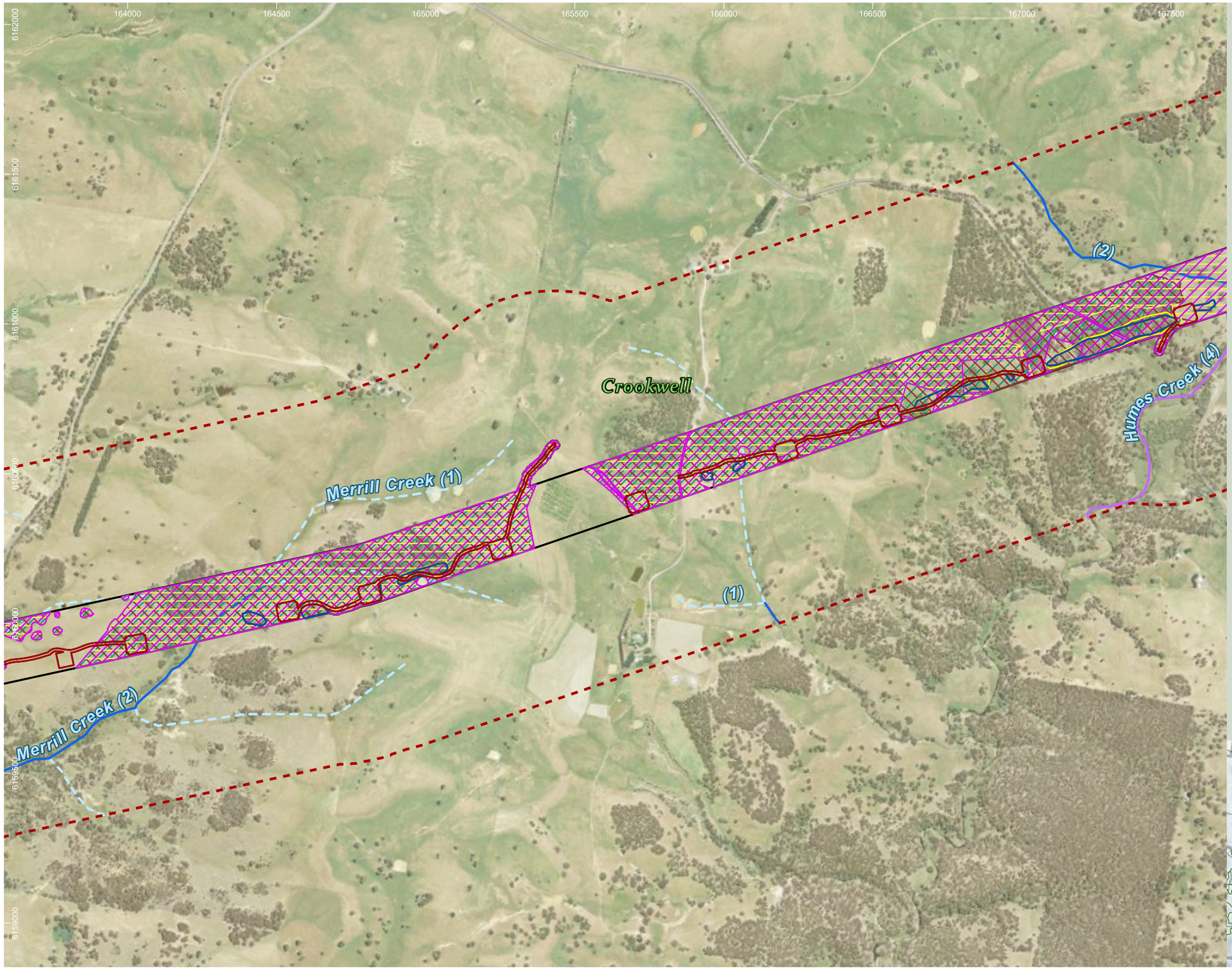


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

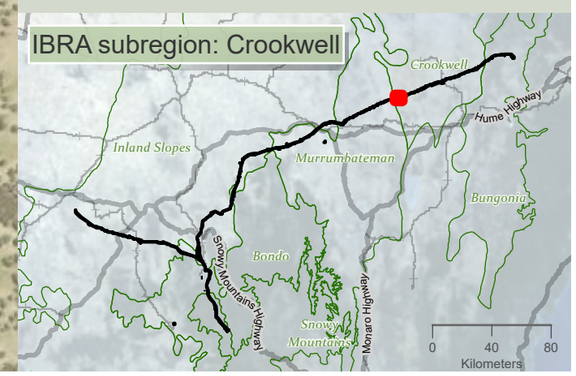
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Lepidium hyssopifolium
- Leucochrysum albicans var tricolor
- Thesium australe



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\ai\6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 86

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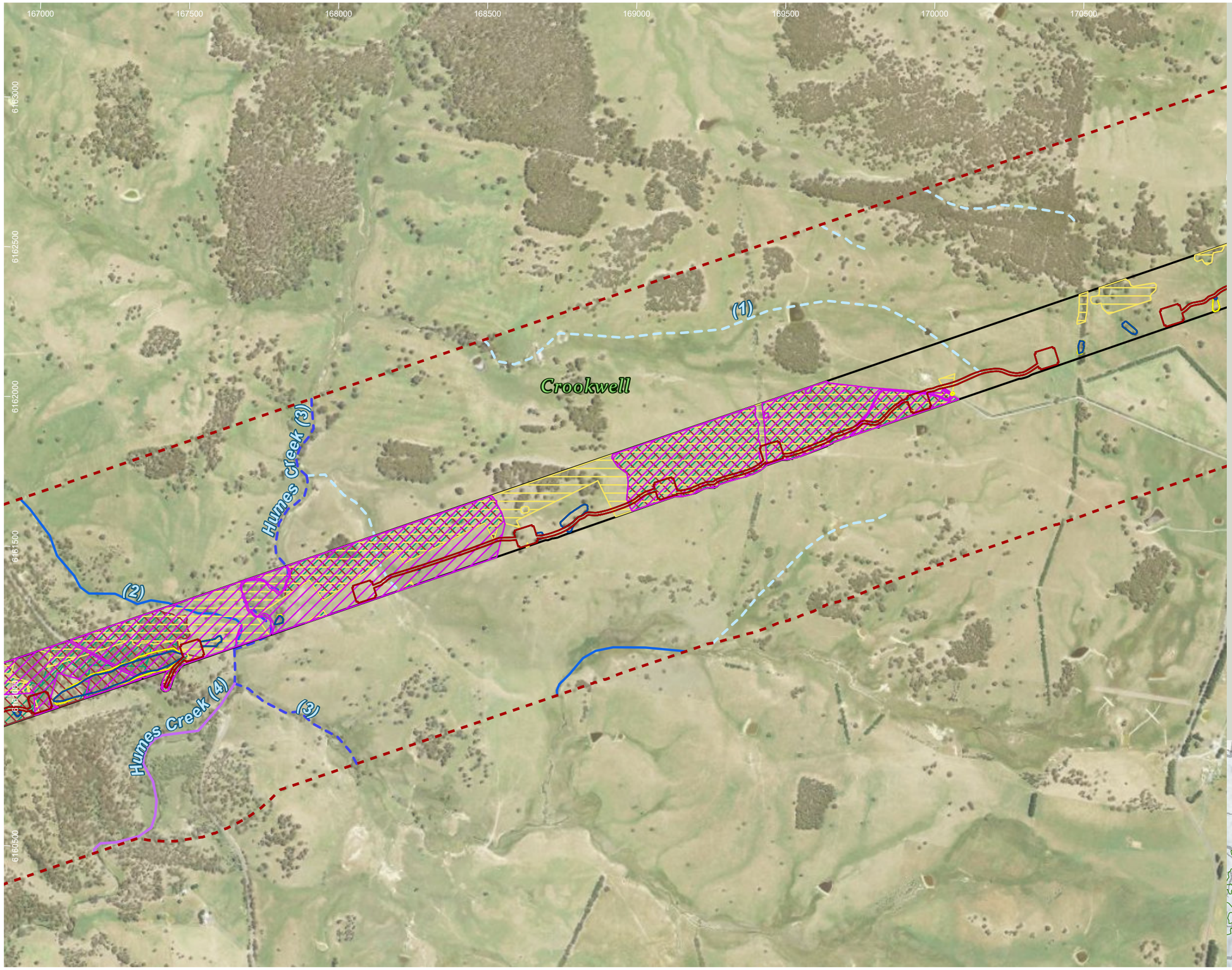


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

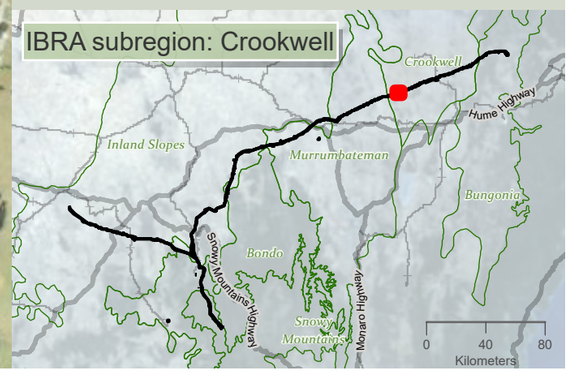
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Lepidium hyssopifolium
- Leucochrysum albicans var tricolor
- Thesium australe



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 87

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

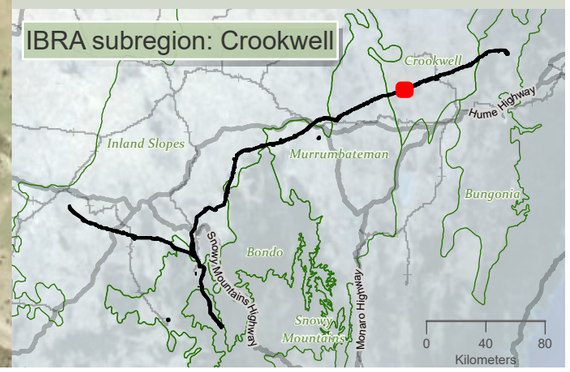
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

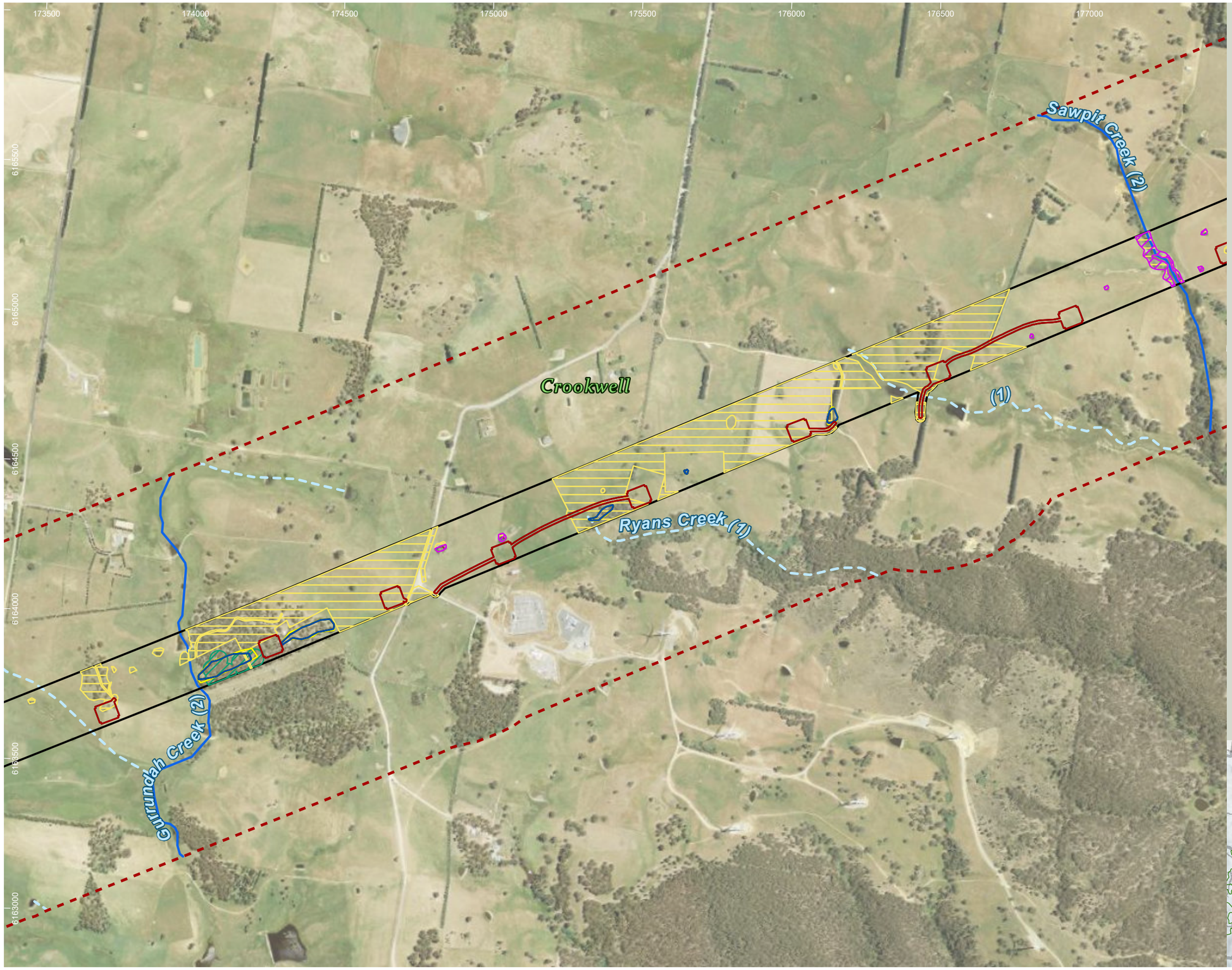
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 88

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

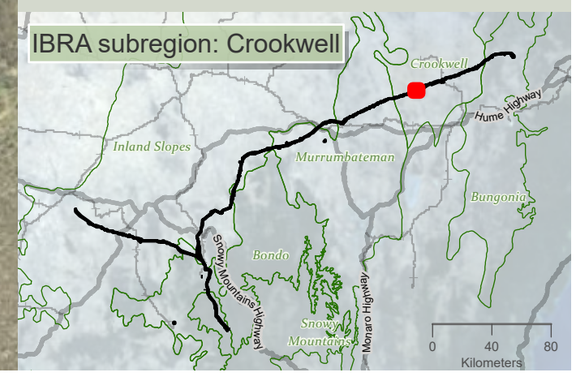
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Lepidium hyssopifolium
- Leucochrysum albicans var tricolor
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 89

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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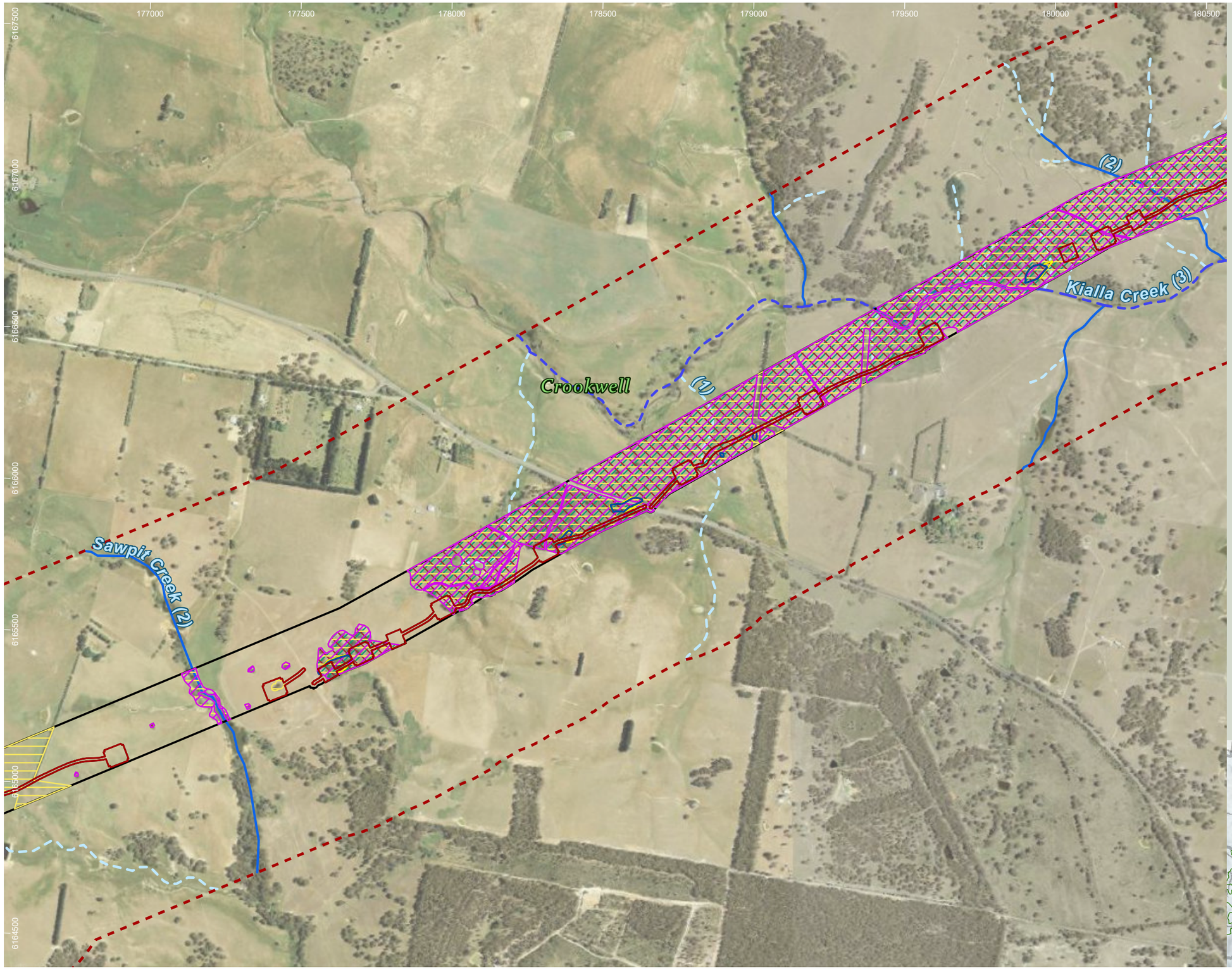


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

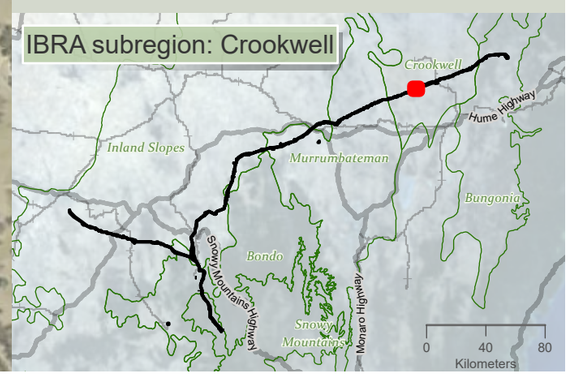
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Lepidium hyssopifolium
- Leucochrysum albicans var tricolor
- Thesium australe



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 90

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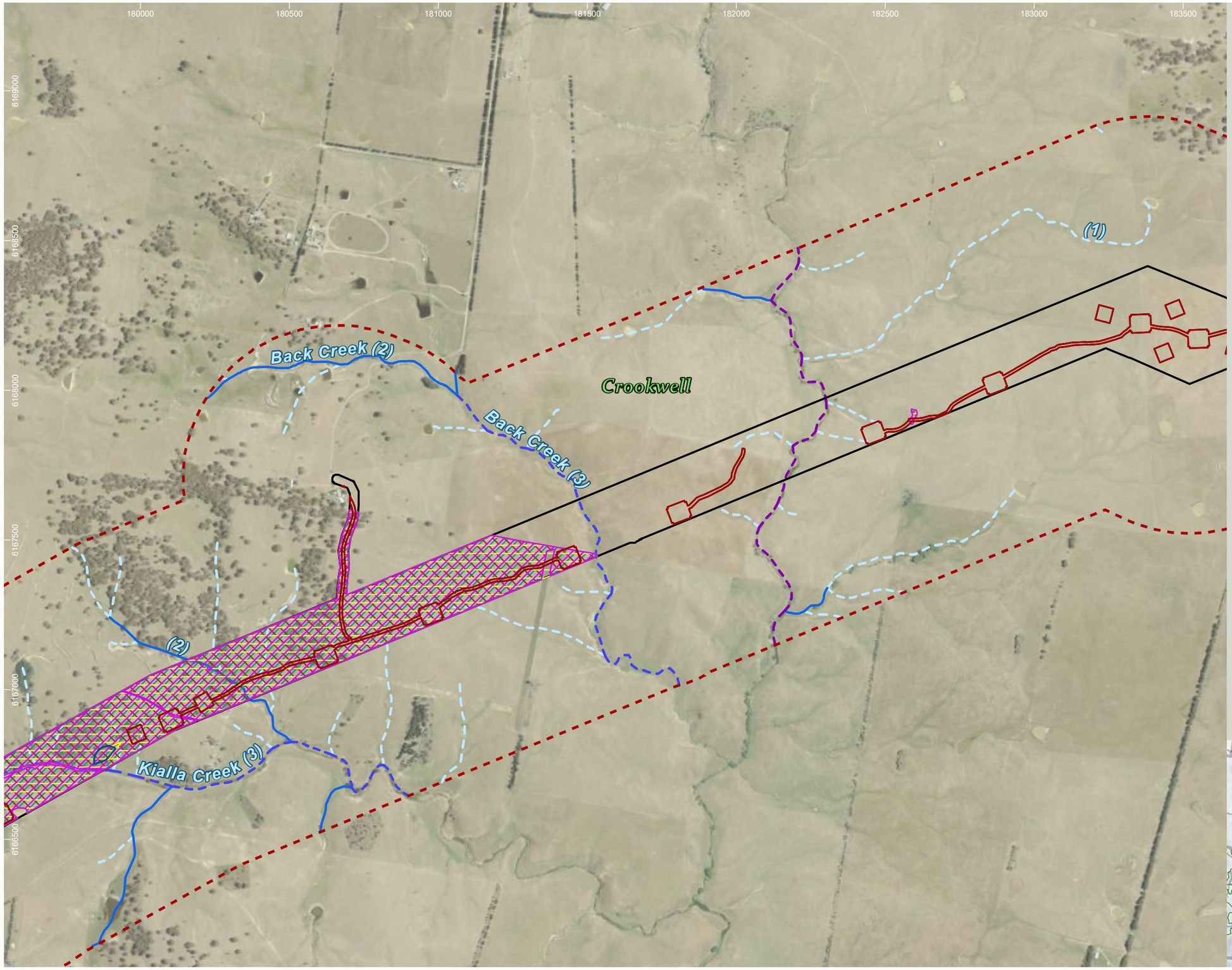


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

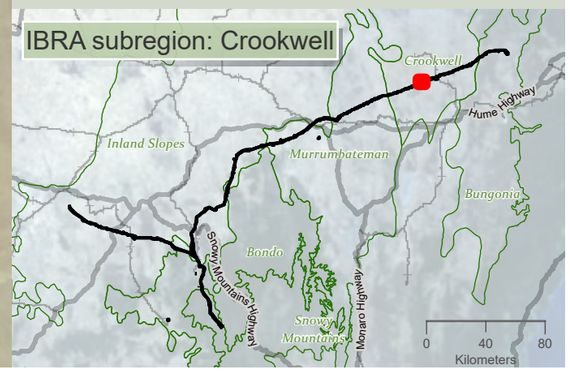
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Lepidium hyssopifolium
- Leucochrysum albicans var tricolor
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 91

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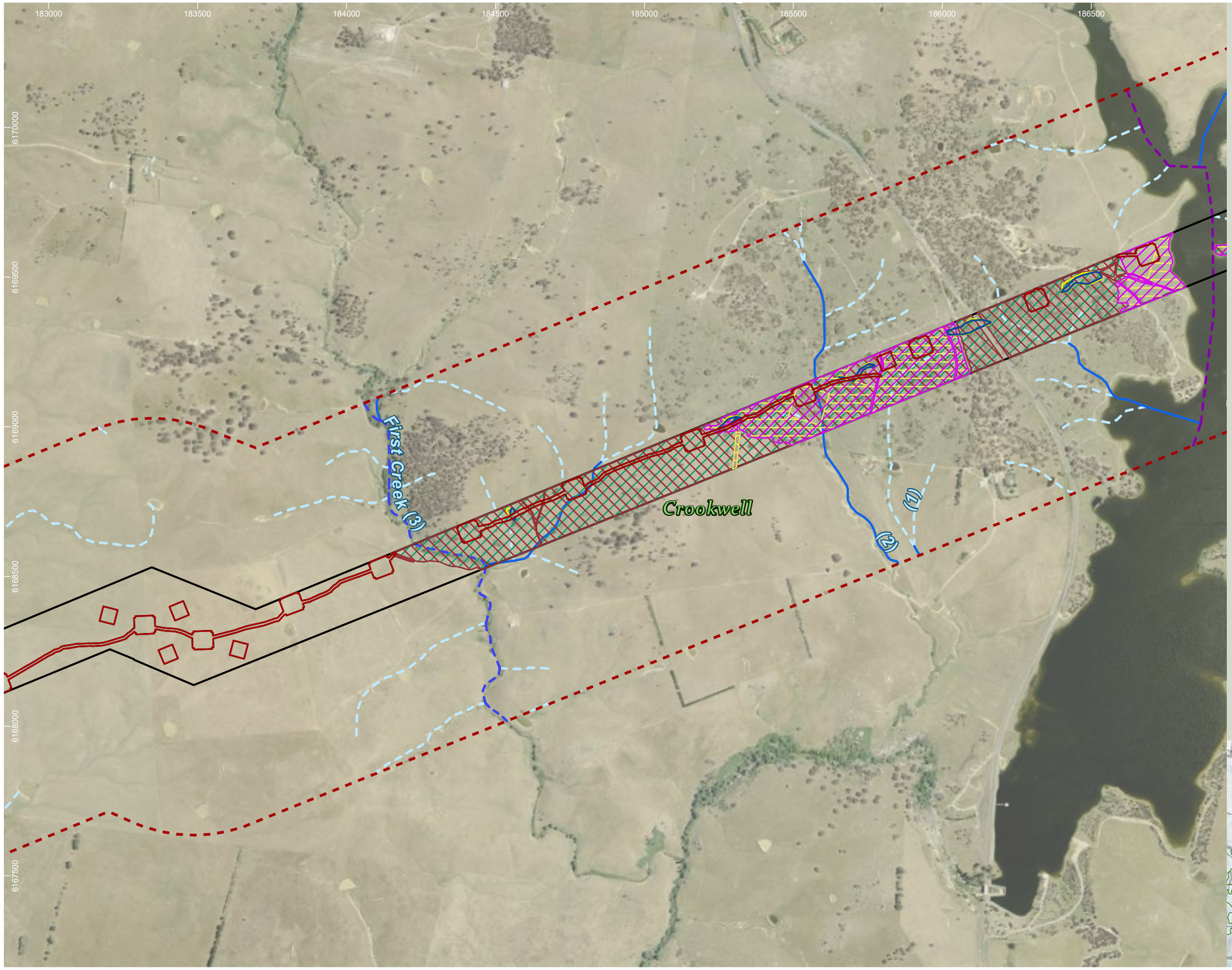


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

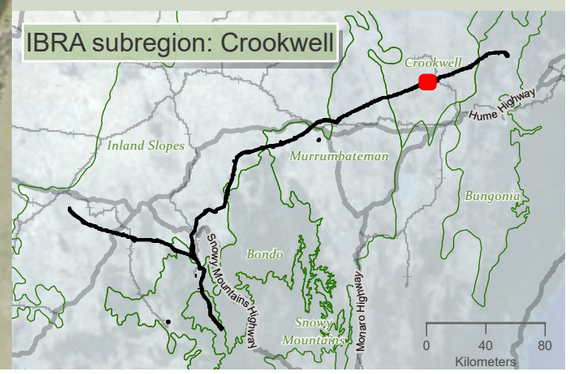
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Lepidium hyssopifolium
- Leucochrysum albicans var tricolor
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 92

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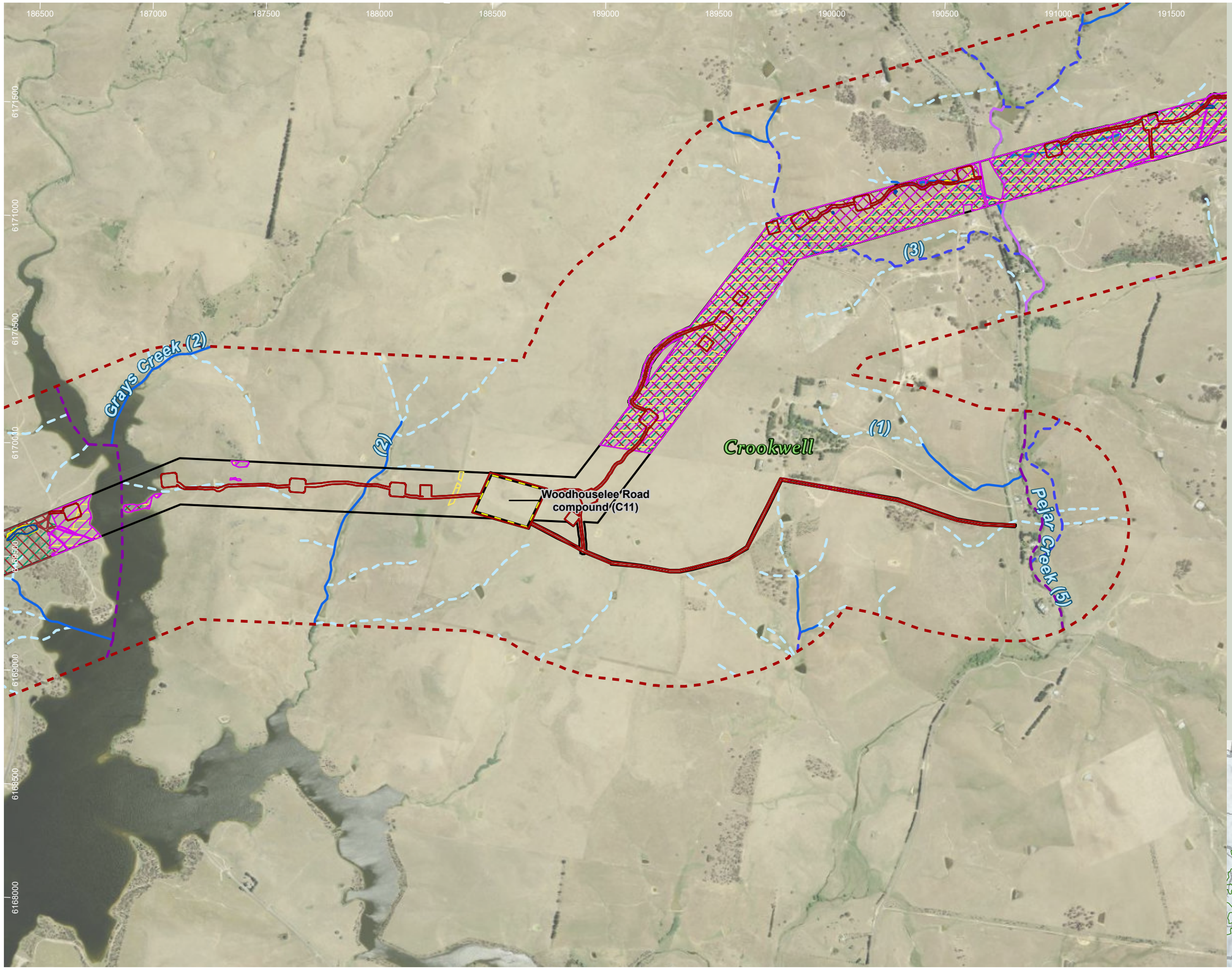


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

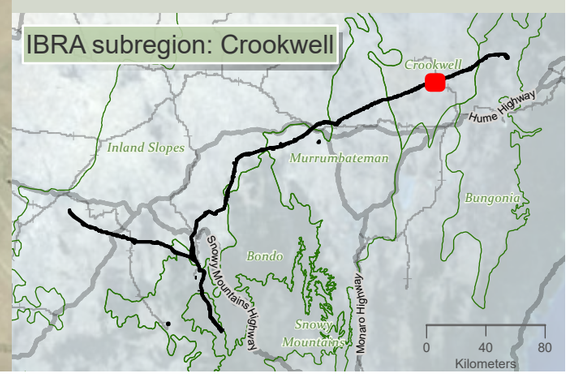
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Lepidium hyssopifolium
- Leucochrysum albicans var tricolor
- Thesium australe



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 500
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 93

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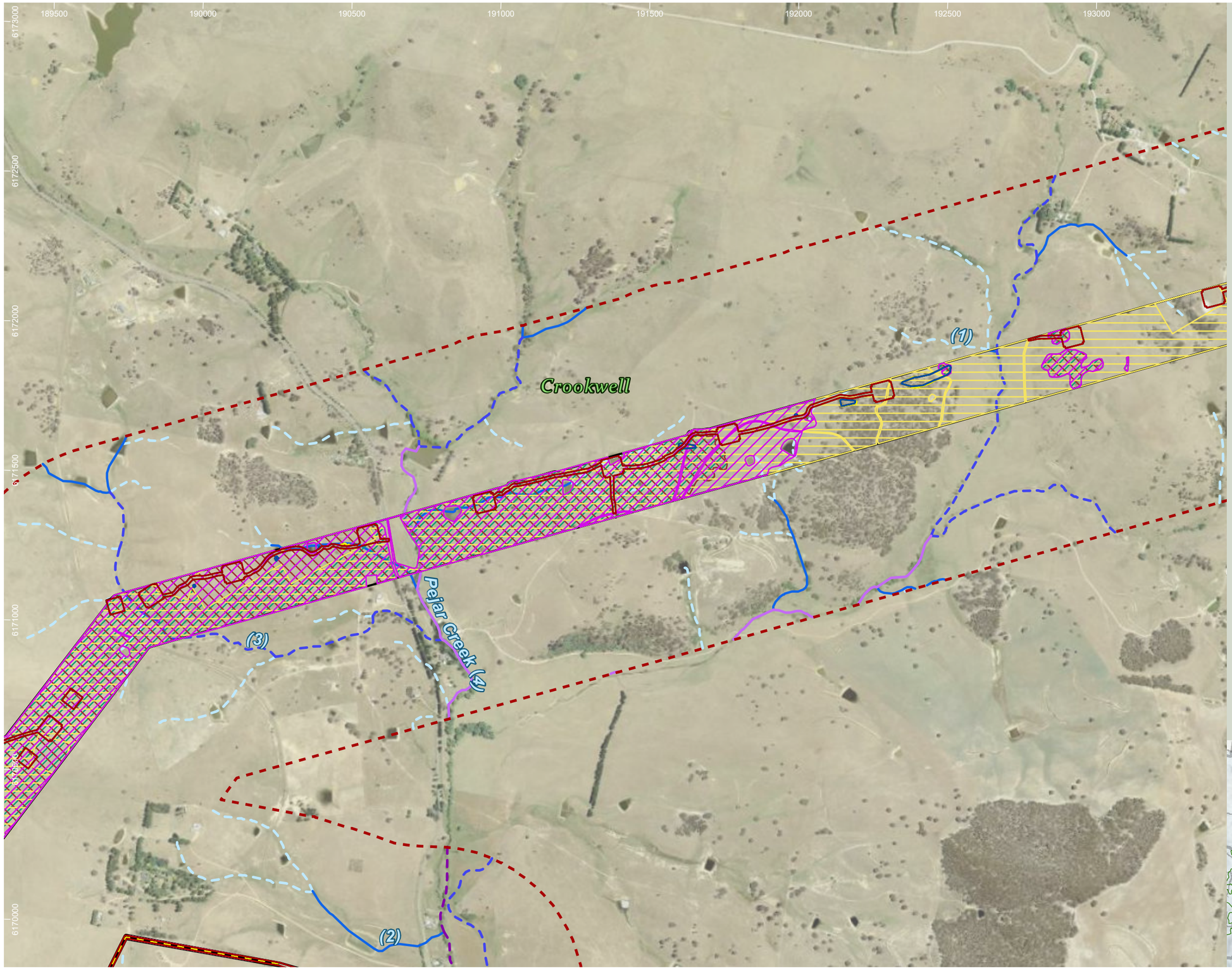


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

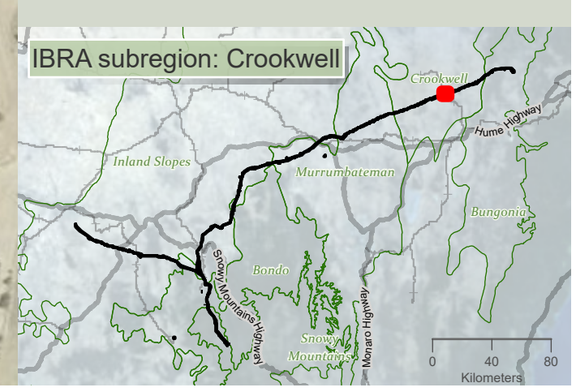
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Lepidium hyssopifolium
- Leucochrysum albicans var tricolor
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 94

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193000 193500 194000 194600 195000 195500 196000 196500

6174000 6173500 6173000 6172500 6172000 6171500 6171000

Melamalong Creek (7)

(3) (2) (1)

Crookwell

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

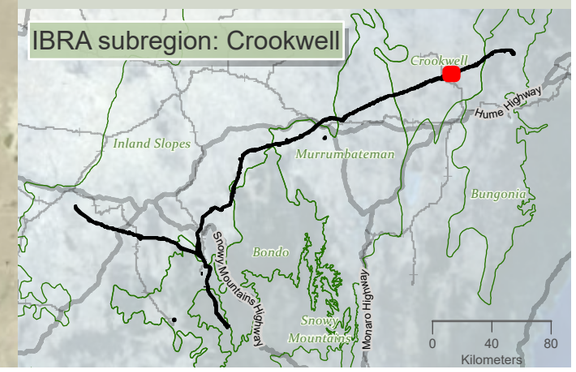
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Lepidium hyssopifolium
- Leucochrysum albicans var tricolor
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 95

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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196000 196500 197000 197500 198000 198500 199000 199500

6175000 6174500 6174000 6173500 6173000 6172500

Crookwell

Tarlo River (5)

Sawpit Gully (3)

(1) (2) (3) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

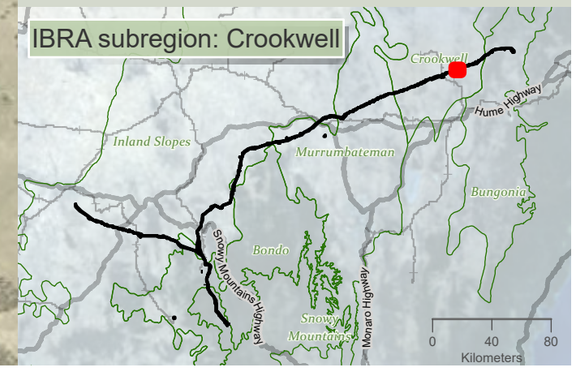
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Lepidium hyssopifolium
- Leucochrysum albicans var tricolor
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 96

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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199500 200000 200500 201000 201500 202000 202500 203000

6176500 6176000 6175500 6175000 6174500 6174000

Crookwell

Turrallo Creek (5)

Tarlo River (6)

(1) (2) (3) (4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

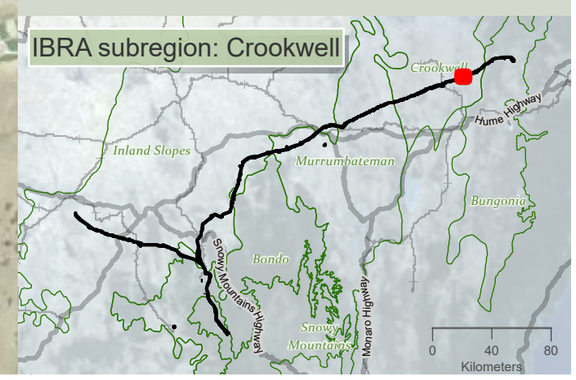
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Lepidium hyssopifolium
- Leucochrysum albicans var tricolor
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 97

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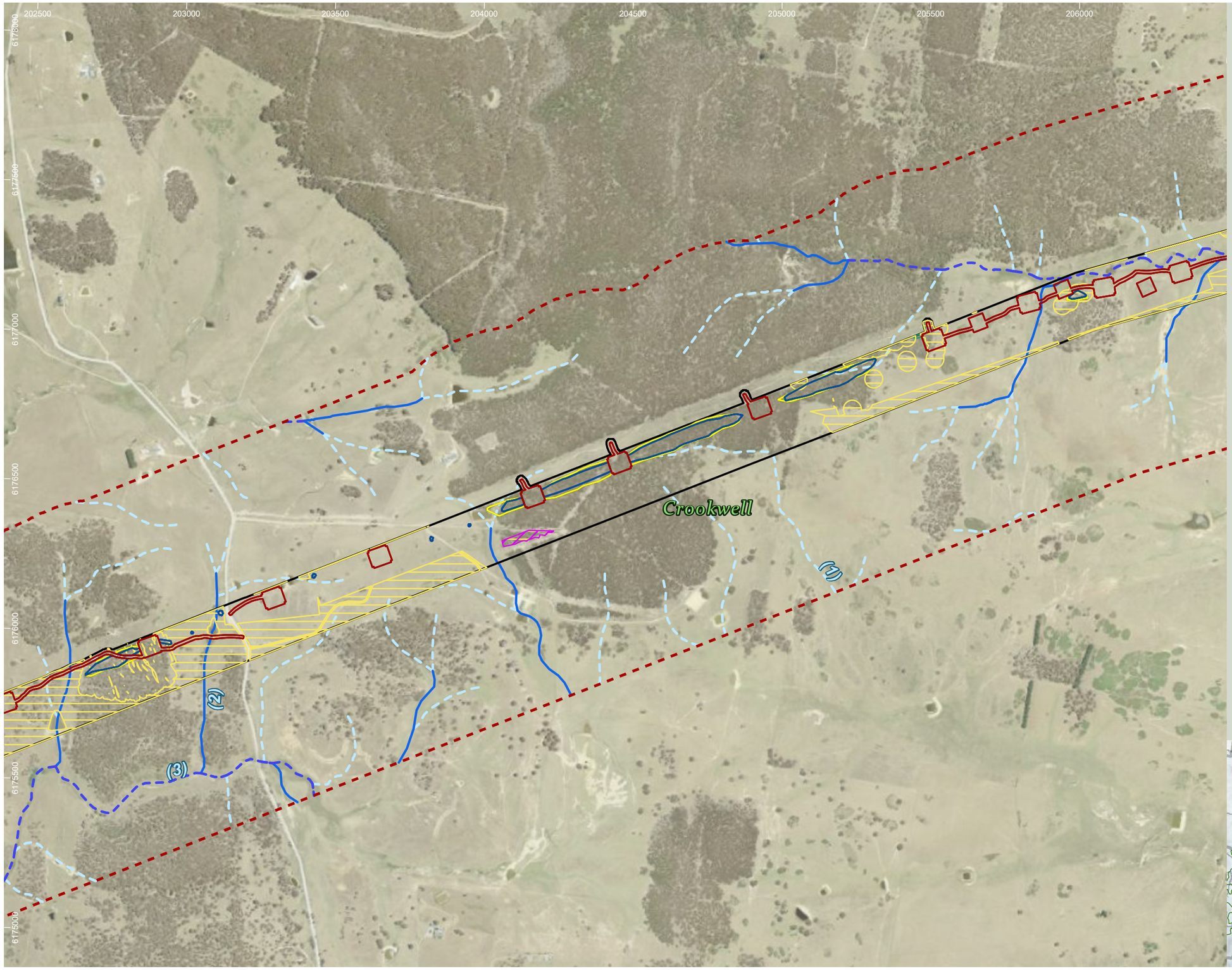


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

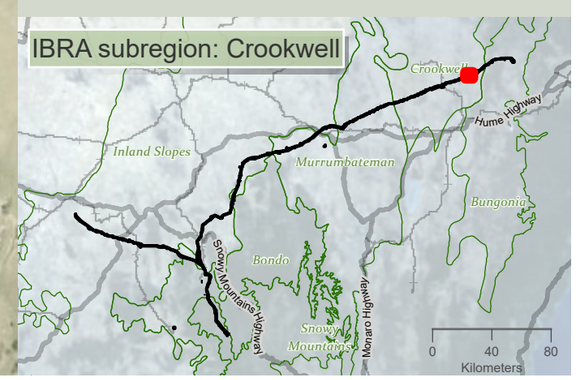
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Ammobium craspedioides
- Leucochrysum albicans var tricolor
- Thesium australe



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 98

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206000 206500 207000 207500 208000 208500 209000 209500

6179000 6178500 6178000 6177500 6177000 6176500

Myrtle Creek (4)

(3)

(2)

Cowpers Creek (3)

Crookwell

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

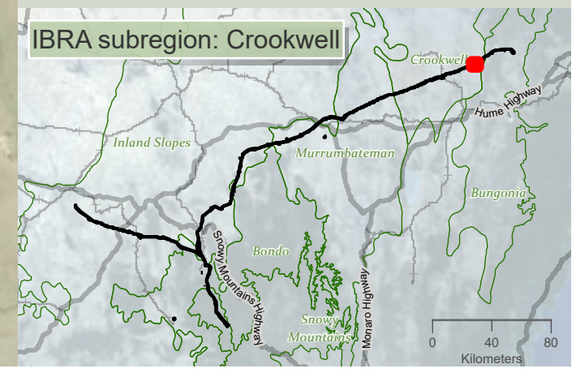
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Leucochrysum albicans var tricolor



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 99

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208500 209000 209500 210000 210500 211000 211500 212000 212500

6181000 6180500 6180000 6179500 6179000 6178500

Crookwell

(1) (2) (3)

Bungonia

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

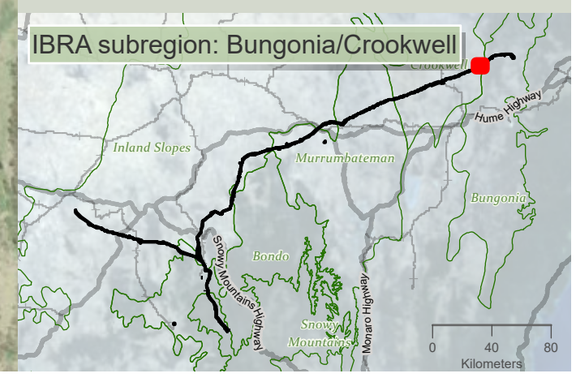
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone

Herb and forb species habitat

- Leucochrysum albicans var tricolor



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 100

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211500 212000 212500 213000 213500 214000 214500 215000

6183500 6183000 6182500 6182000 6181500 6181000 6180500

Crookwell

Bungonia

(1)

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

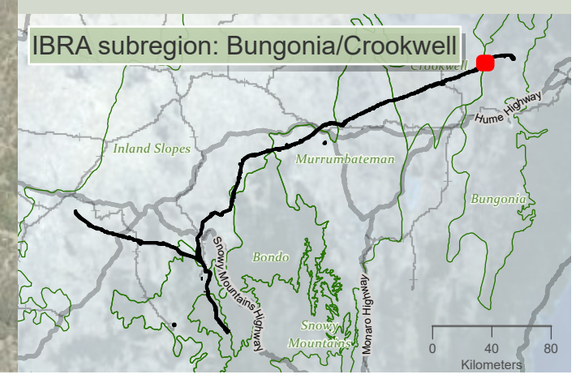
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Leucochrysum albicans var tricolor



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 101

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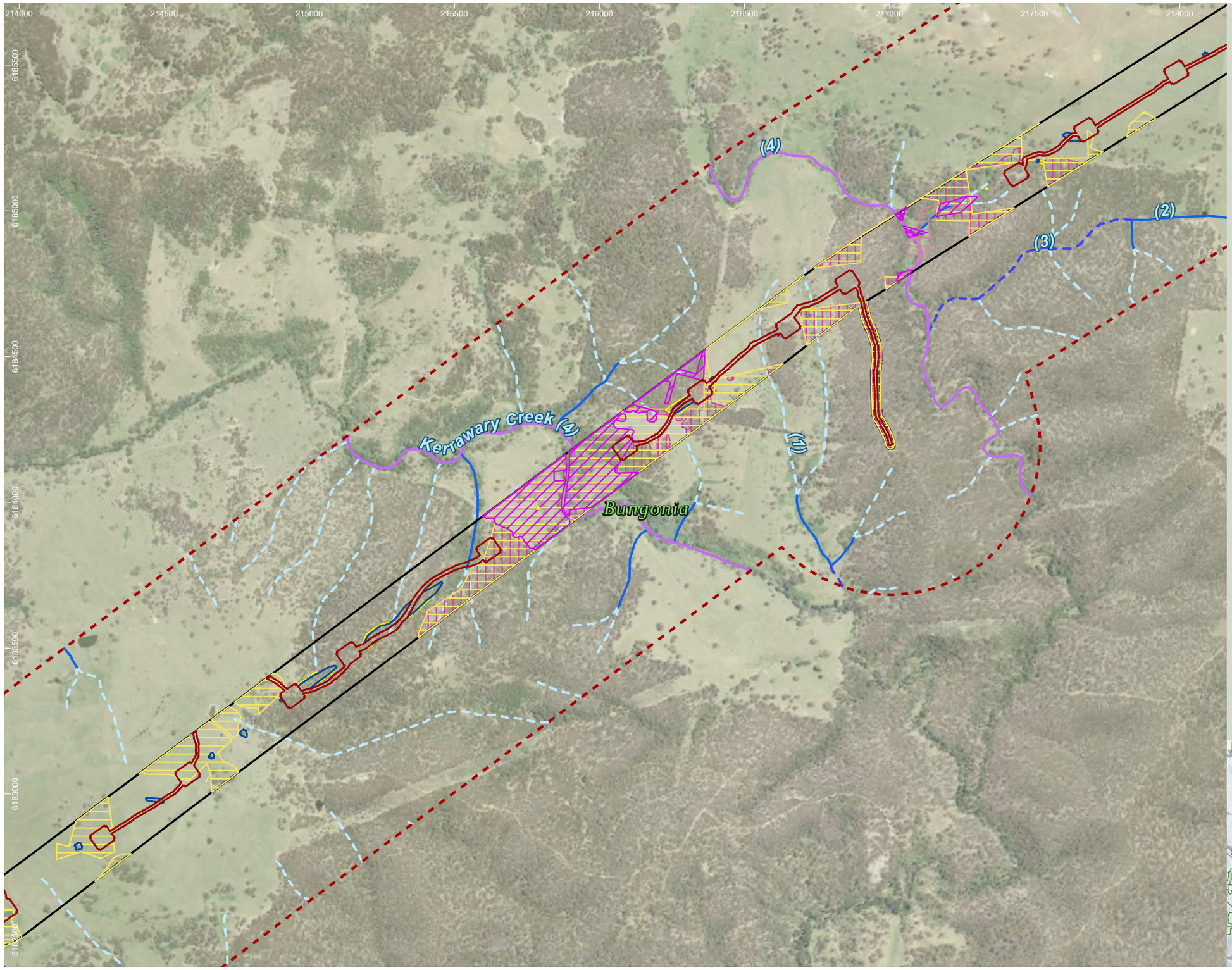


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

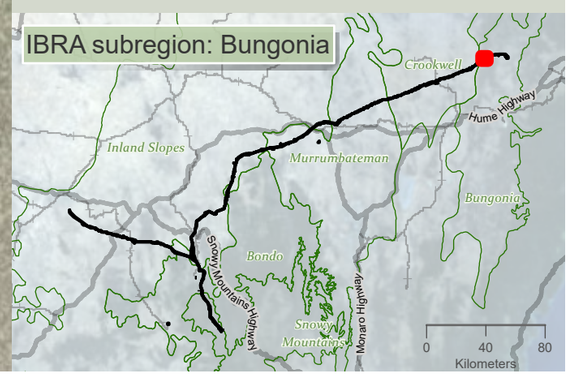
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Baloskion longipes
- Leucochrysum albicans var tricolor
- Swainsona sericea
- Thesium australe



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 102

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217500 218000 218500 219000 219500 220000 220500 221000

6187000 6186500 6186000 6185500 6185000 6184500

Bannaby Creek (3)

(1)

Bungonia

(2)

(3)

(4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

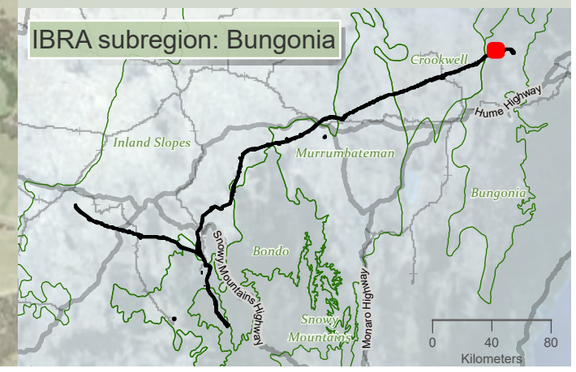
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Baloskion longipes
- Leucochrysum albicans var tricolor
- Swainsona sericea
- Thesium australe



0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 103

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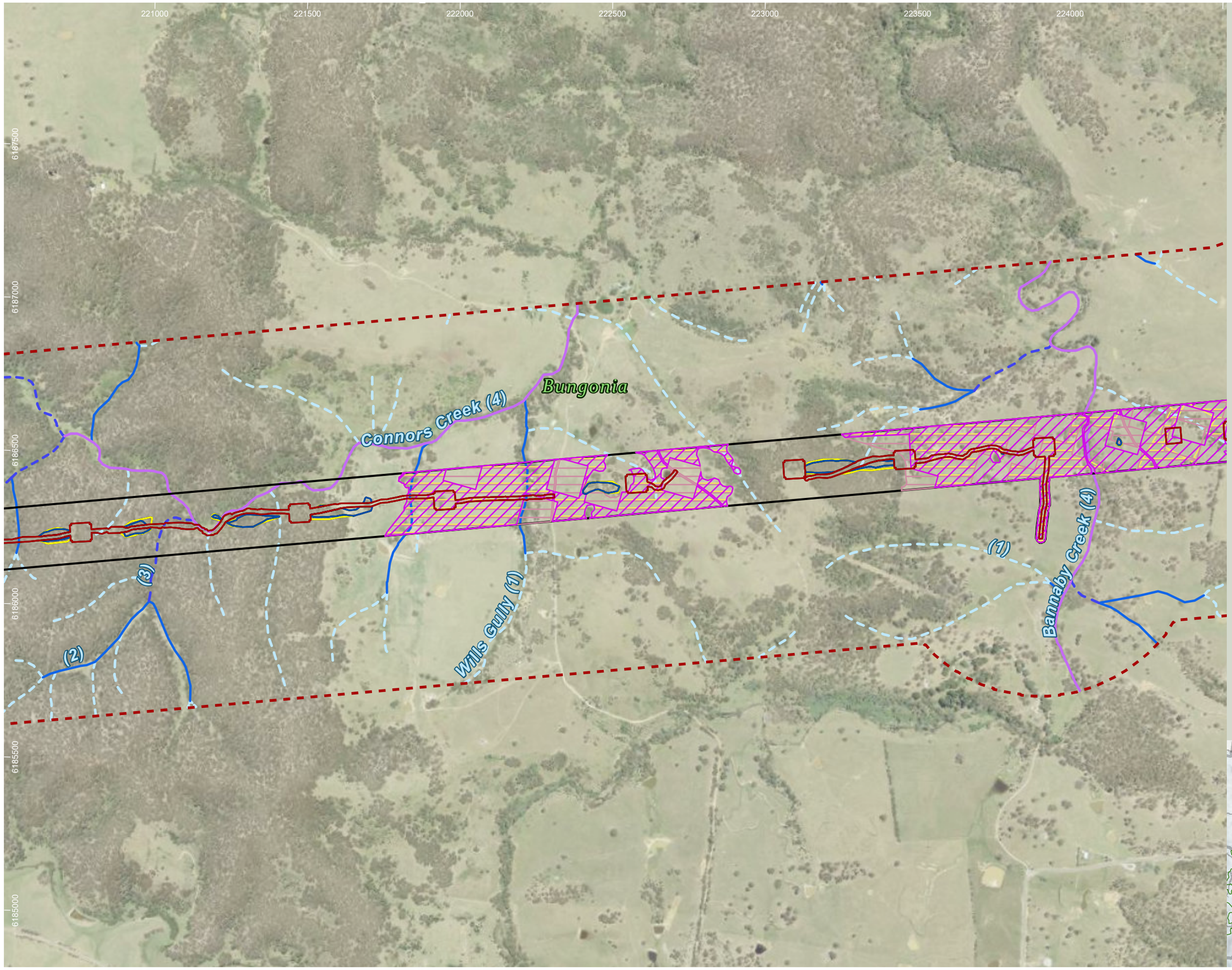


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

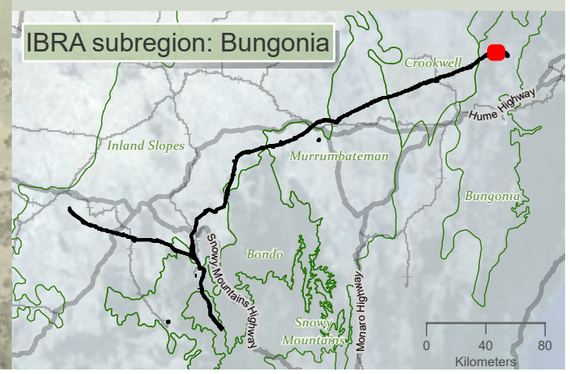
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Leucochrysum albicans var tricolor
- Swainsona sericea
- Thesium australe



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niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 104

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224500 225000 225500 226000 226500 227000 227500

6188000 6187500 6187000 6186500 6186000 6185500

(1) (2) (3) (4)

Bungonia

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

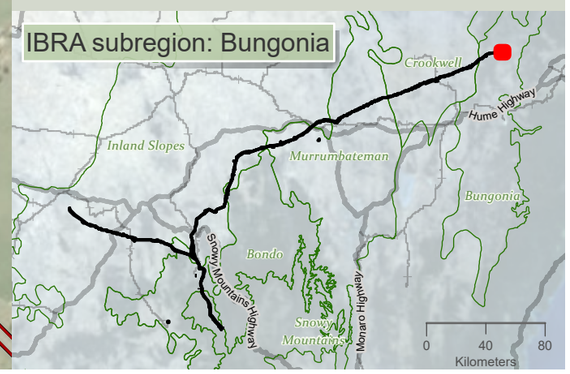
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Leucochrysum albicans var tricolor
- Swainsona sericea
- Thesium australe



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 105

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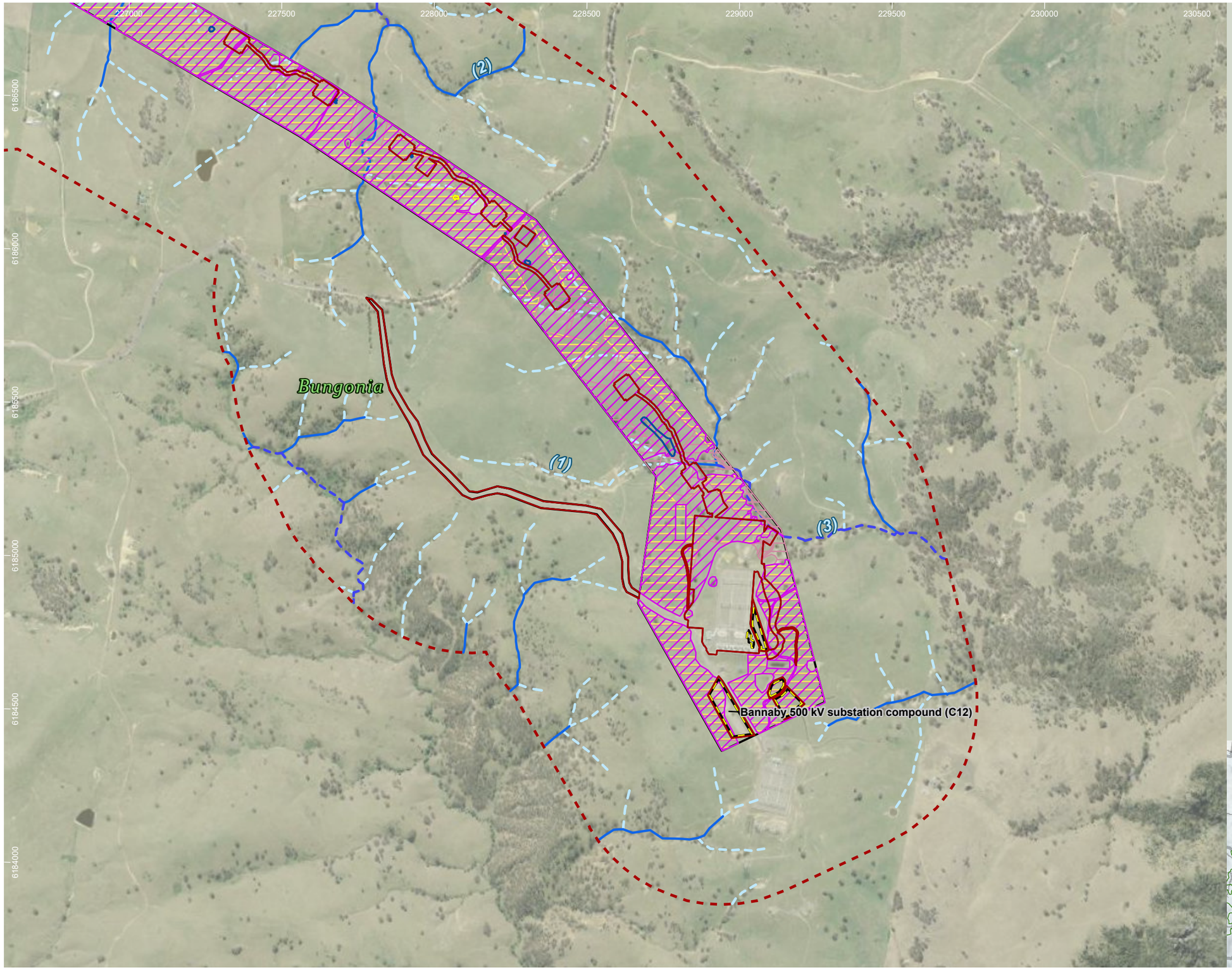


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

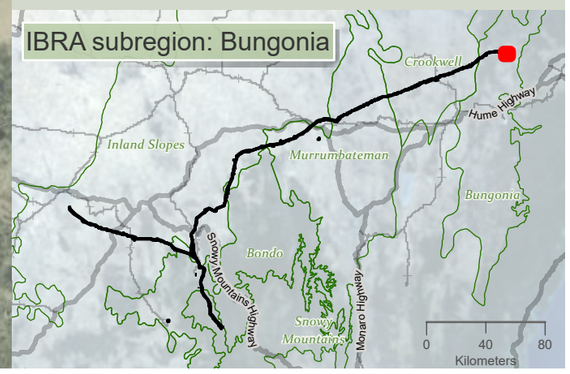
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Herb and forb species habitat

- Leucochrysum albicans var tricolor
- Swainsona sericea
- Thesium australe



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Herb and forb species habitat

HumeLink BDAR

Figure 13-7 map reference 106

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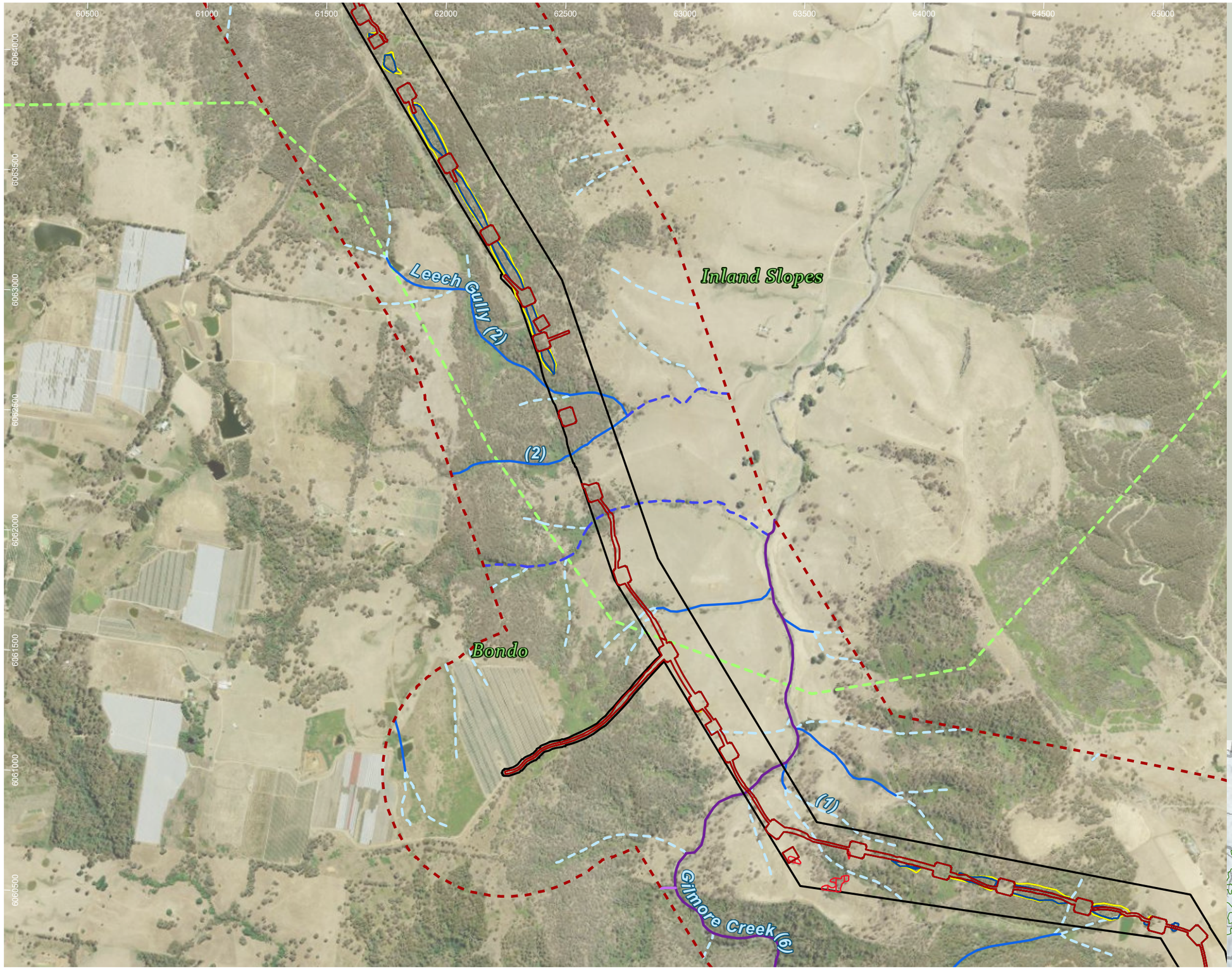


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

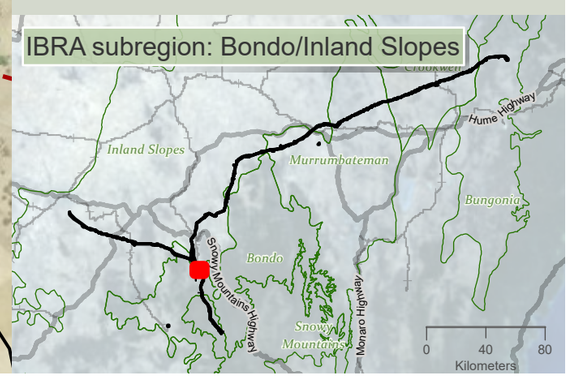
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Rodent species habitat

- Pseudomys fumeus



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Rodent species habitat

HumeLink BDAR

Figure 13-8 map reference 24

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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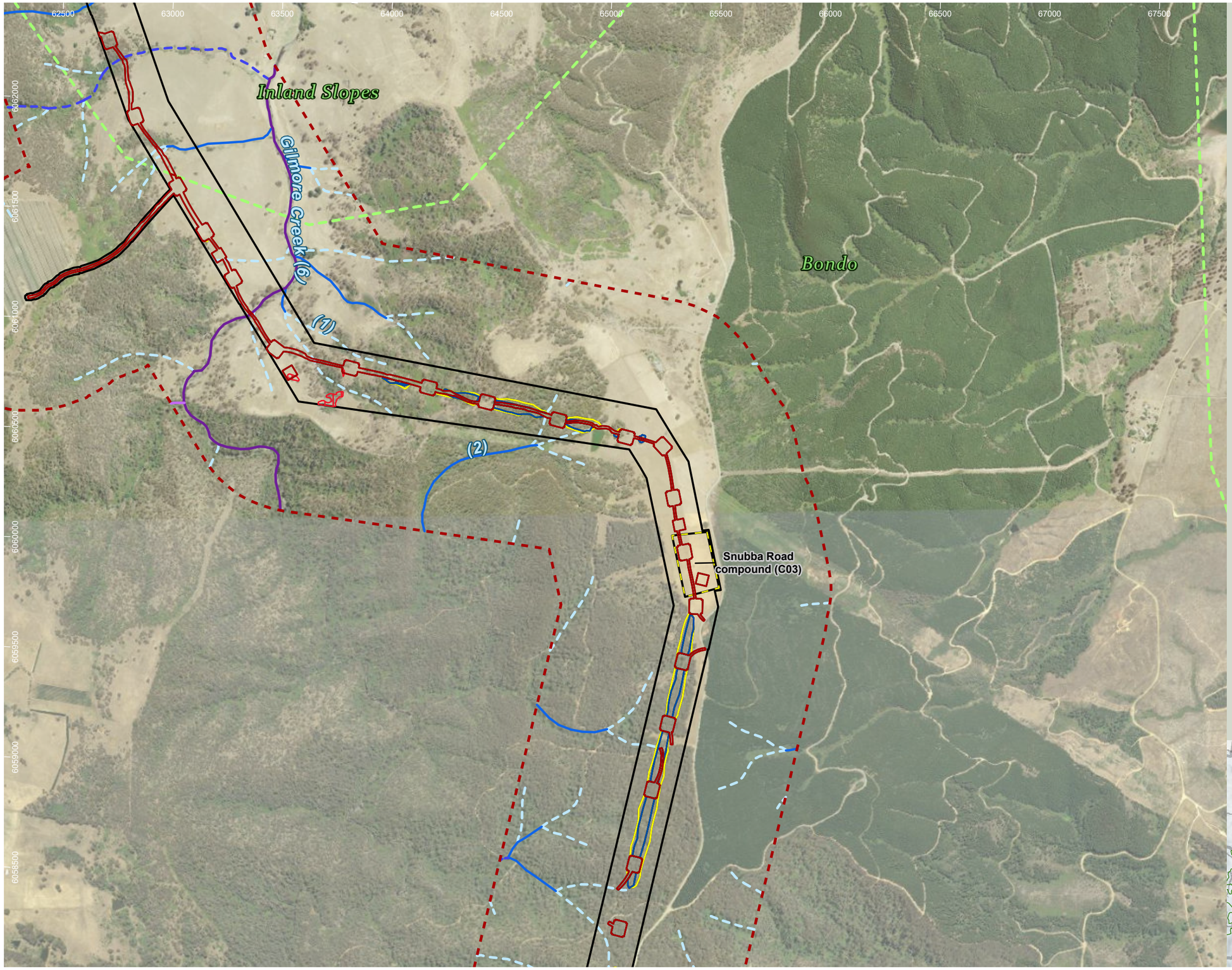


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

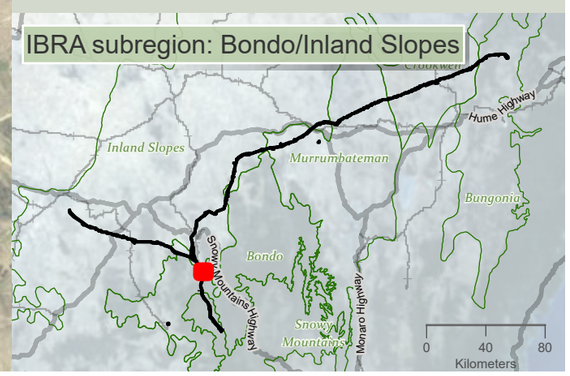
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Rodent species habitat

- Pseudomys fumeus



niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Rodent species habitat

HumeLink BDAR

Figure 13-8 map reference 25

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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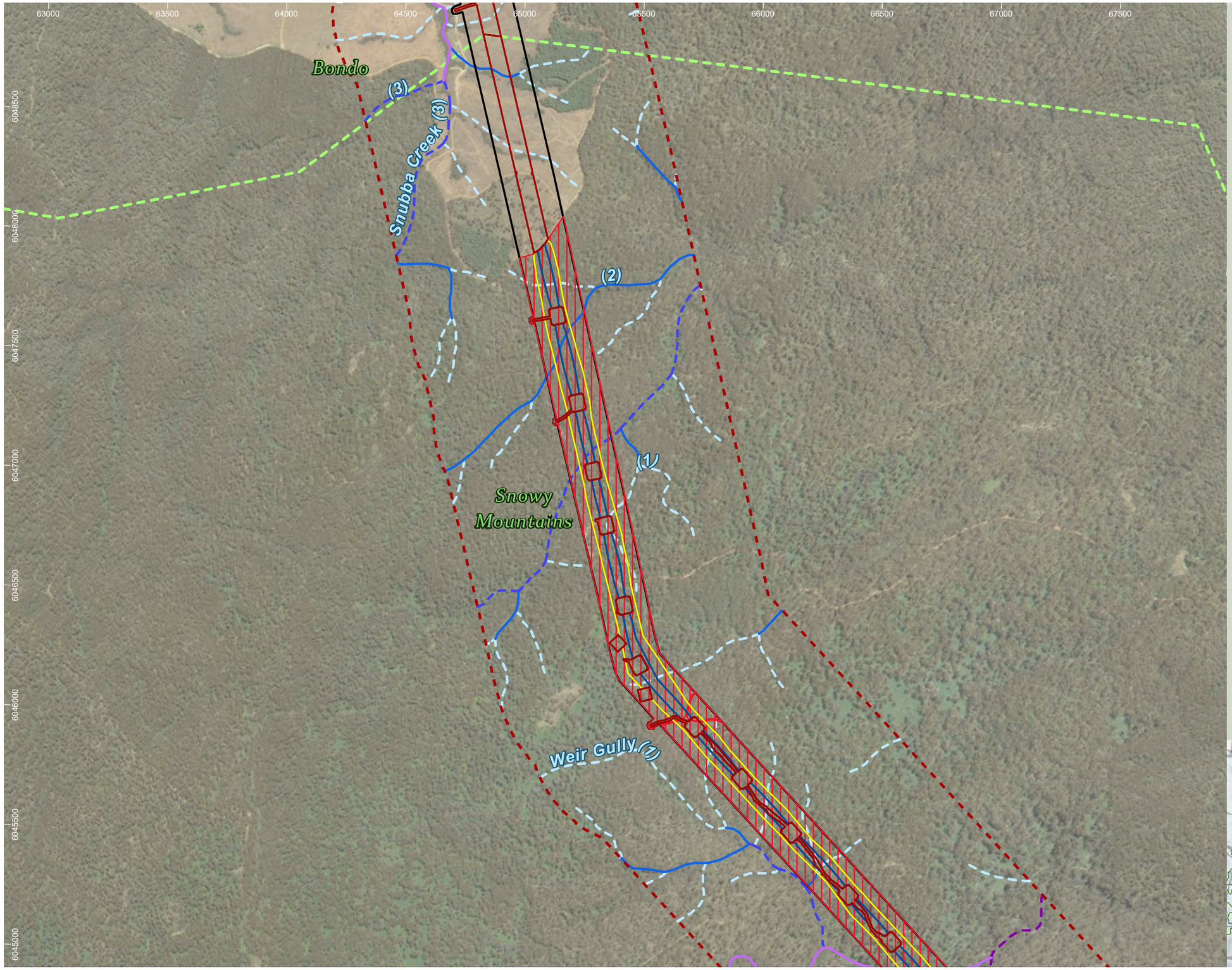


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

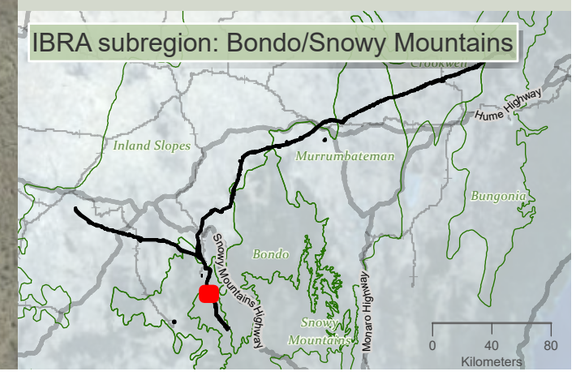
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Rodent species habitat

- Pseudomys fumeus



niche Environment and Heritage

0 500 m

N

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Rodent species habitat

HumeLink BDAR

Figure 13-8 map reference 31

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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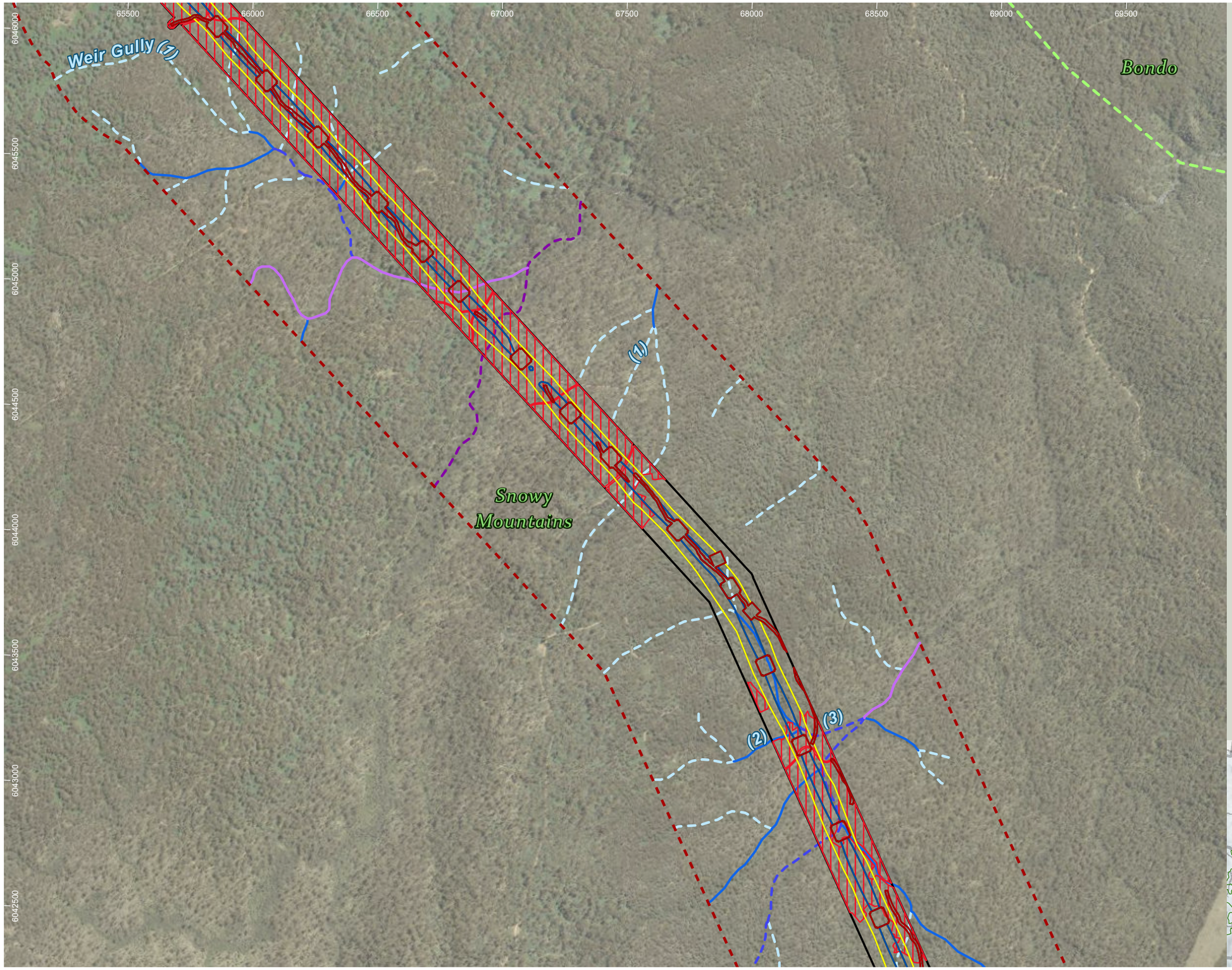


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

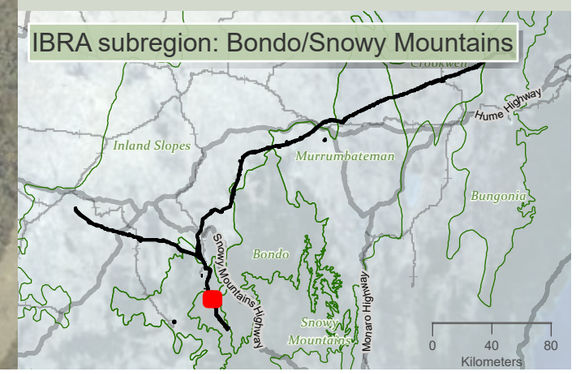
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Rodent species habitat

- Pseudomys fumeus



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Rodent species habitat

HumeLink BDAR

Figure 13-8 map reference 32

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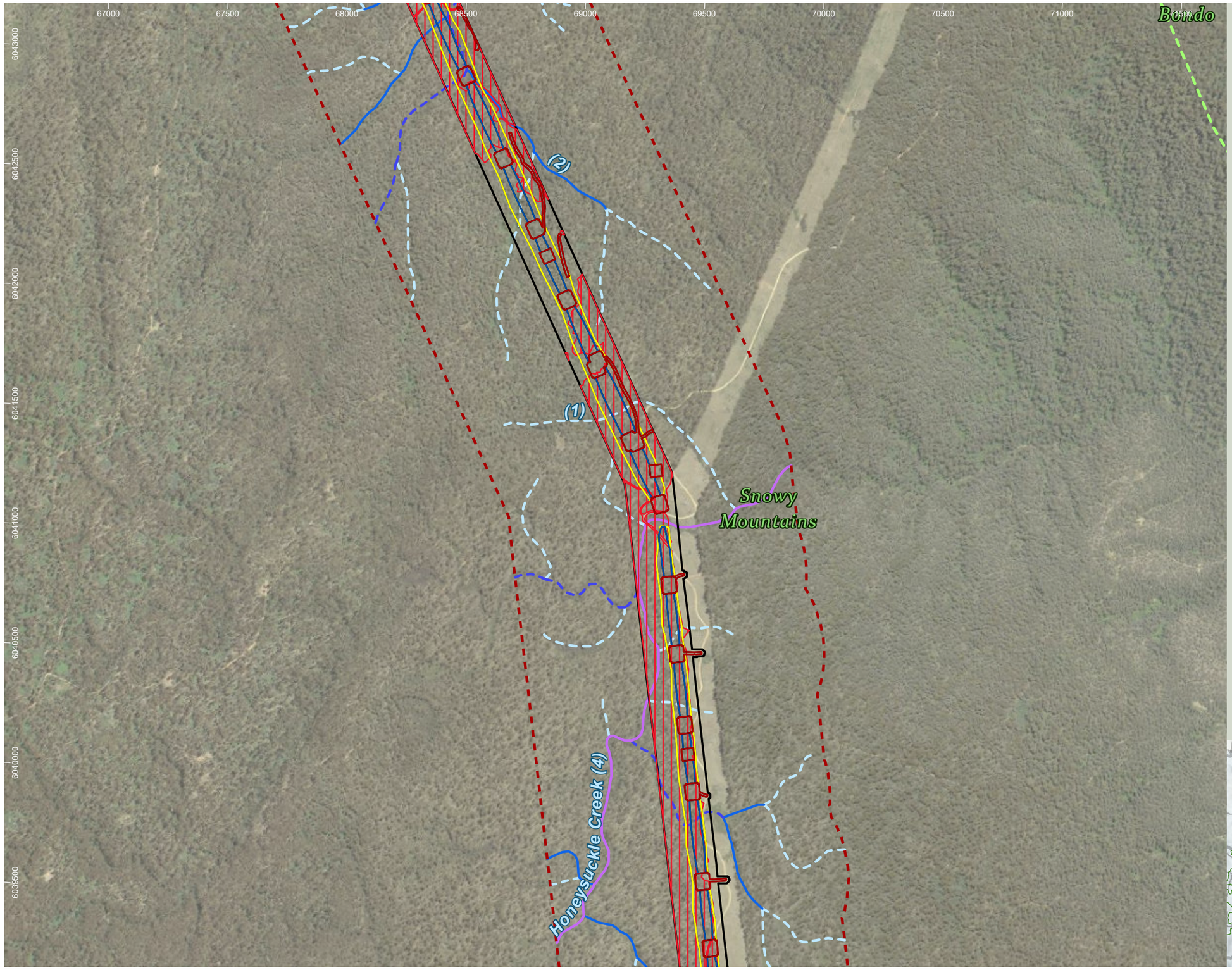


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

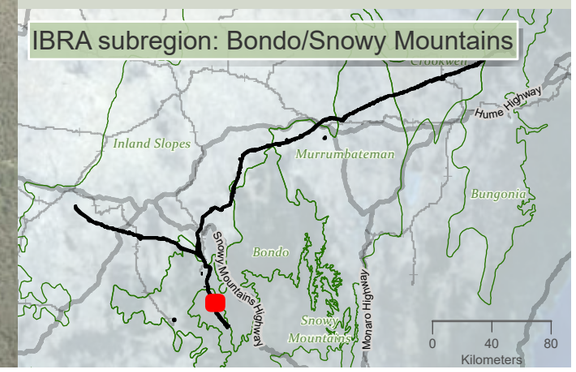
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Rodent species habitat

- Pseudomys fumeus



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Rodent species habitat

HumeLink BDAR

Figure 13-8 map reference 33

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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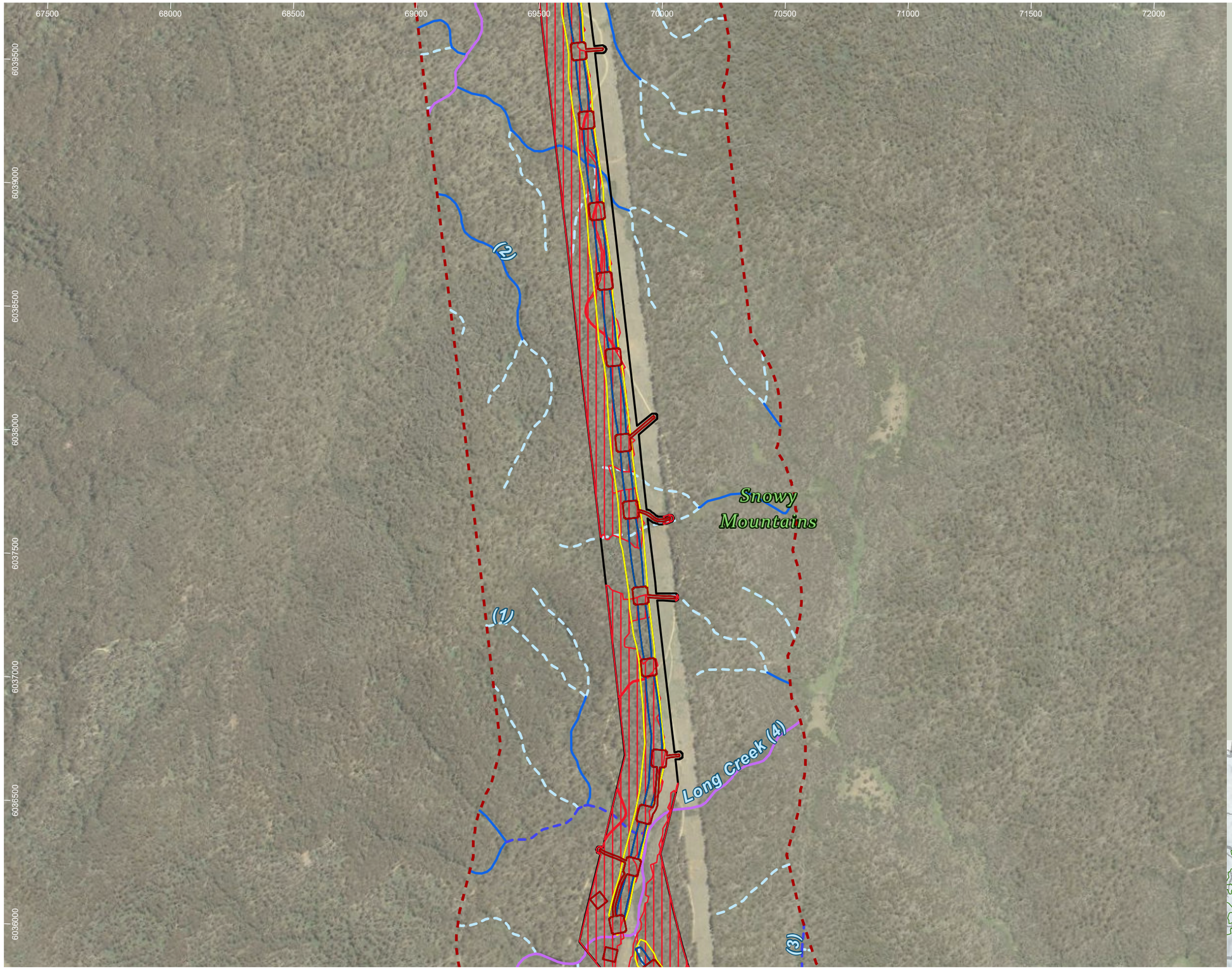


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

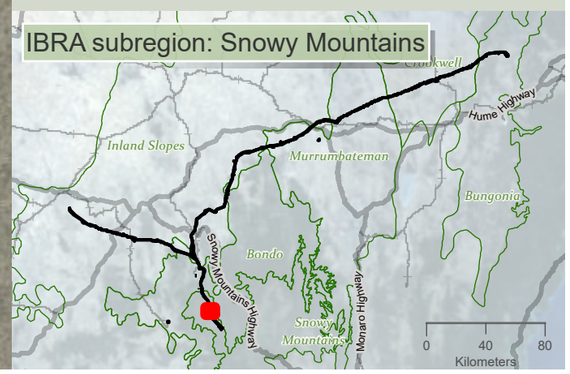
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Rodent species habitat

- Pseudomys fumeus



niche Environment and Heritage

0 450
m
WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Rodent species habitat

HumeLink BDAR

Figure 13-8 map reference 34

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HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

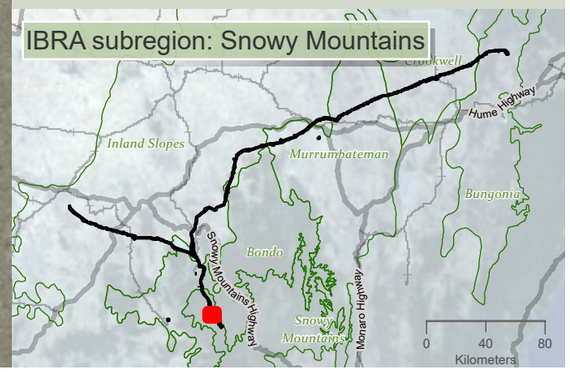
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Rodent species habitat

- Pseudomys fumeus



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Rodent species habitat

HumeLink BDAR

Figure 13-8 map reference 36

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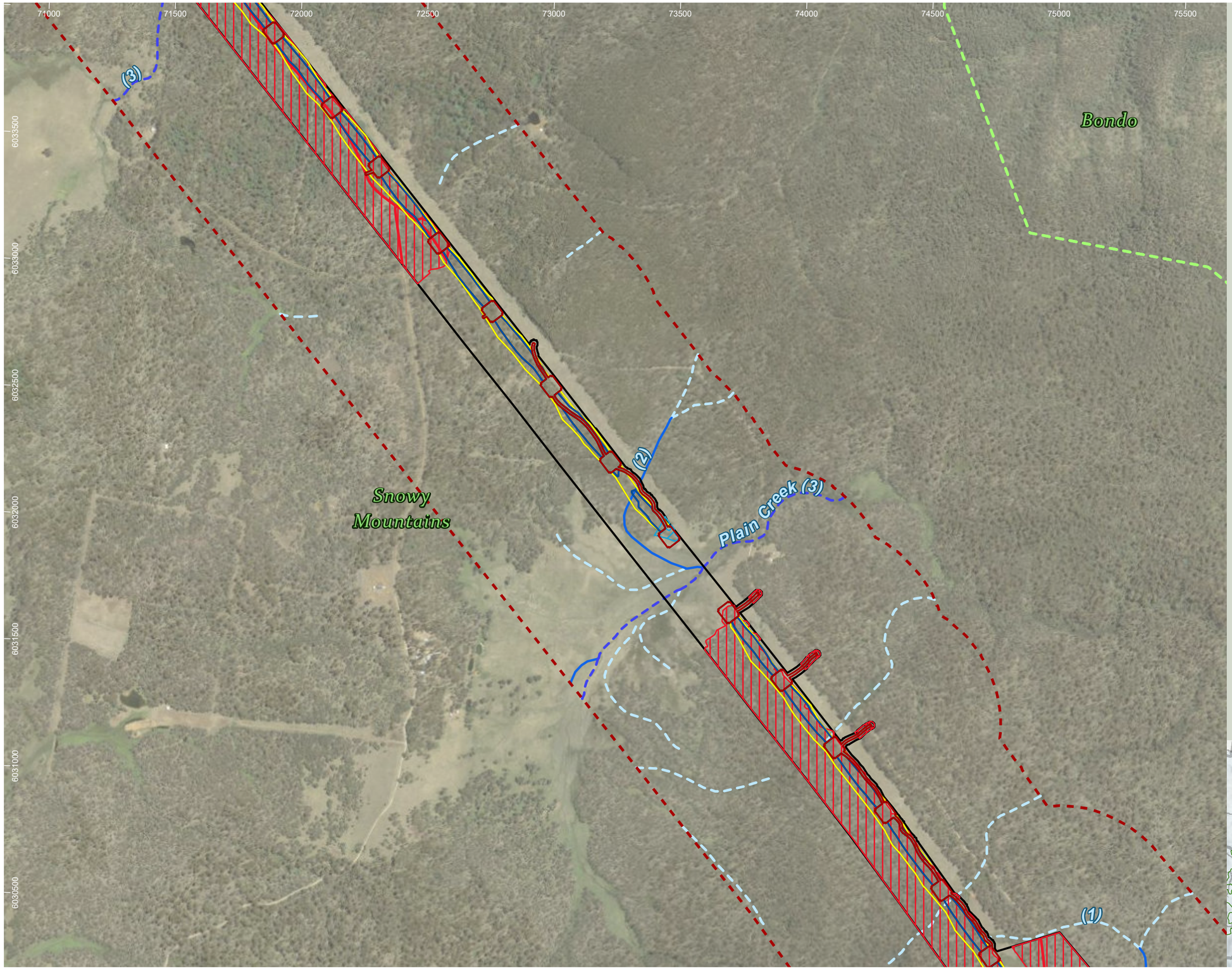


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

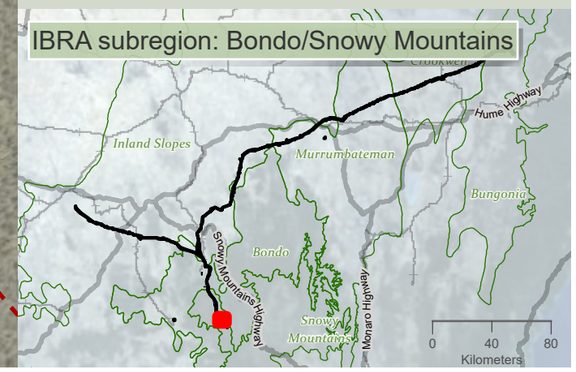
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Rodent species habitat

- Mastacomys fuscus
- Pseudomys fumeus



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Rodent species habitat

HumeLink BDAR

Figure 13-8 map reference 37

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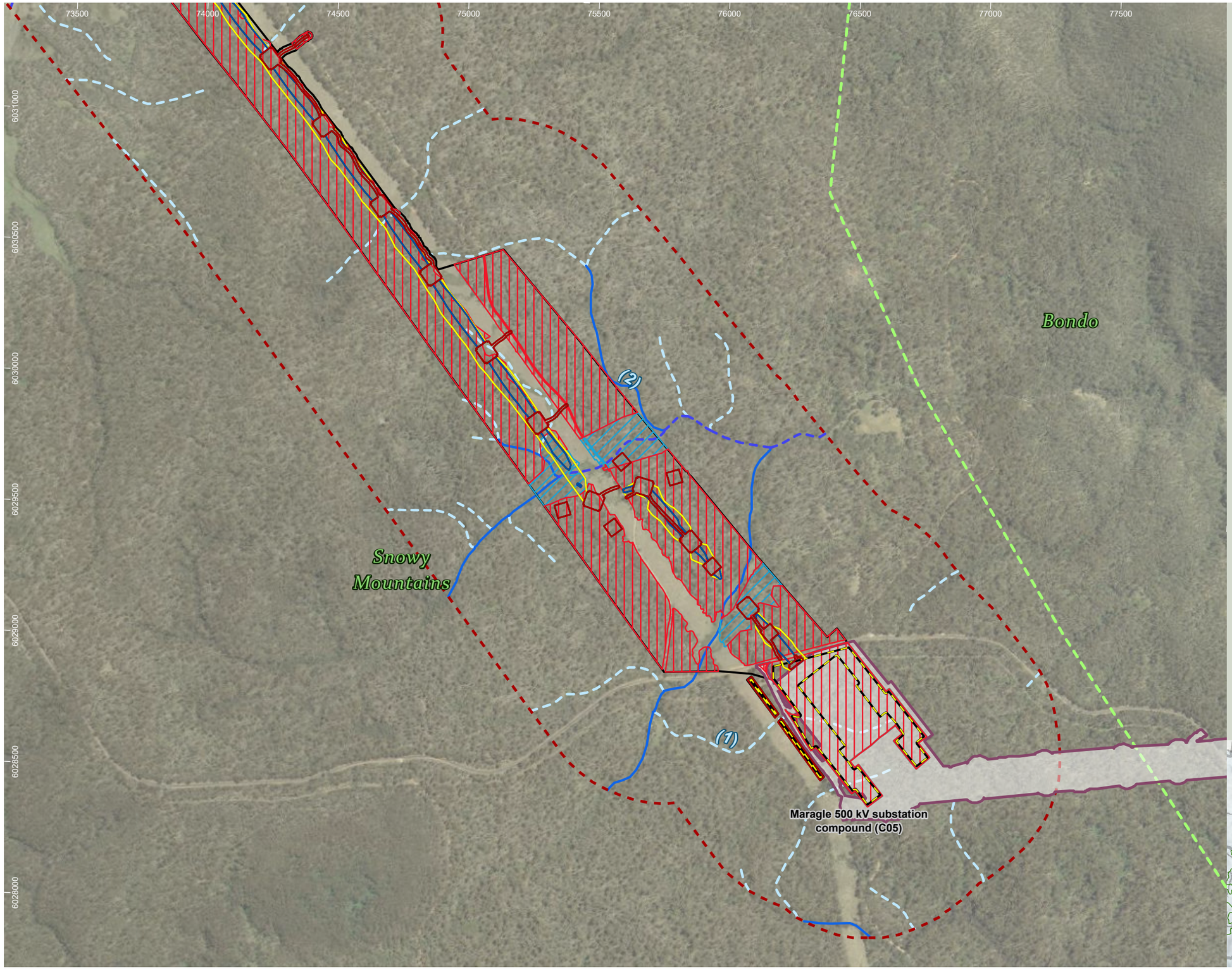


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- Snowy 2.0 Transmission Connection project
- IBRA subregion

Strahler stream order

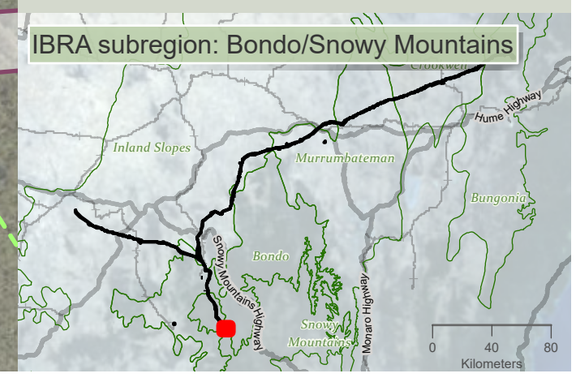
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Rodent species habitat

- Mastacomys fuscus
- Pseudomys fumeus



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Rodent species habitat

HumeLink BDAR

Figure 13-8 map reference 38

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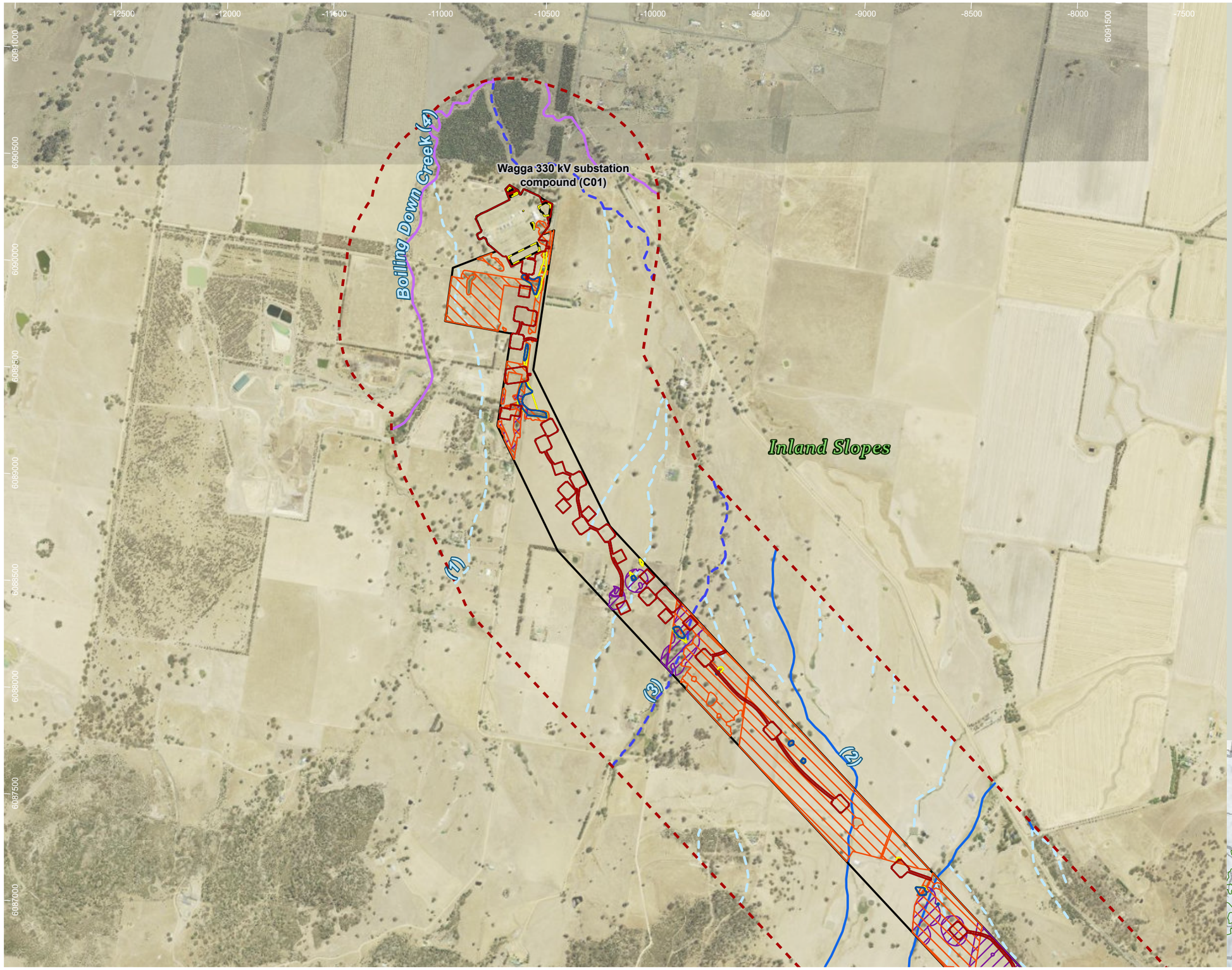


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

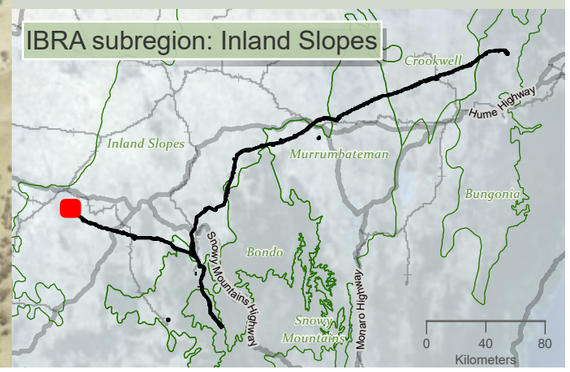
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 1

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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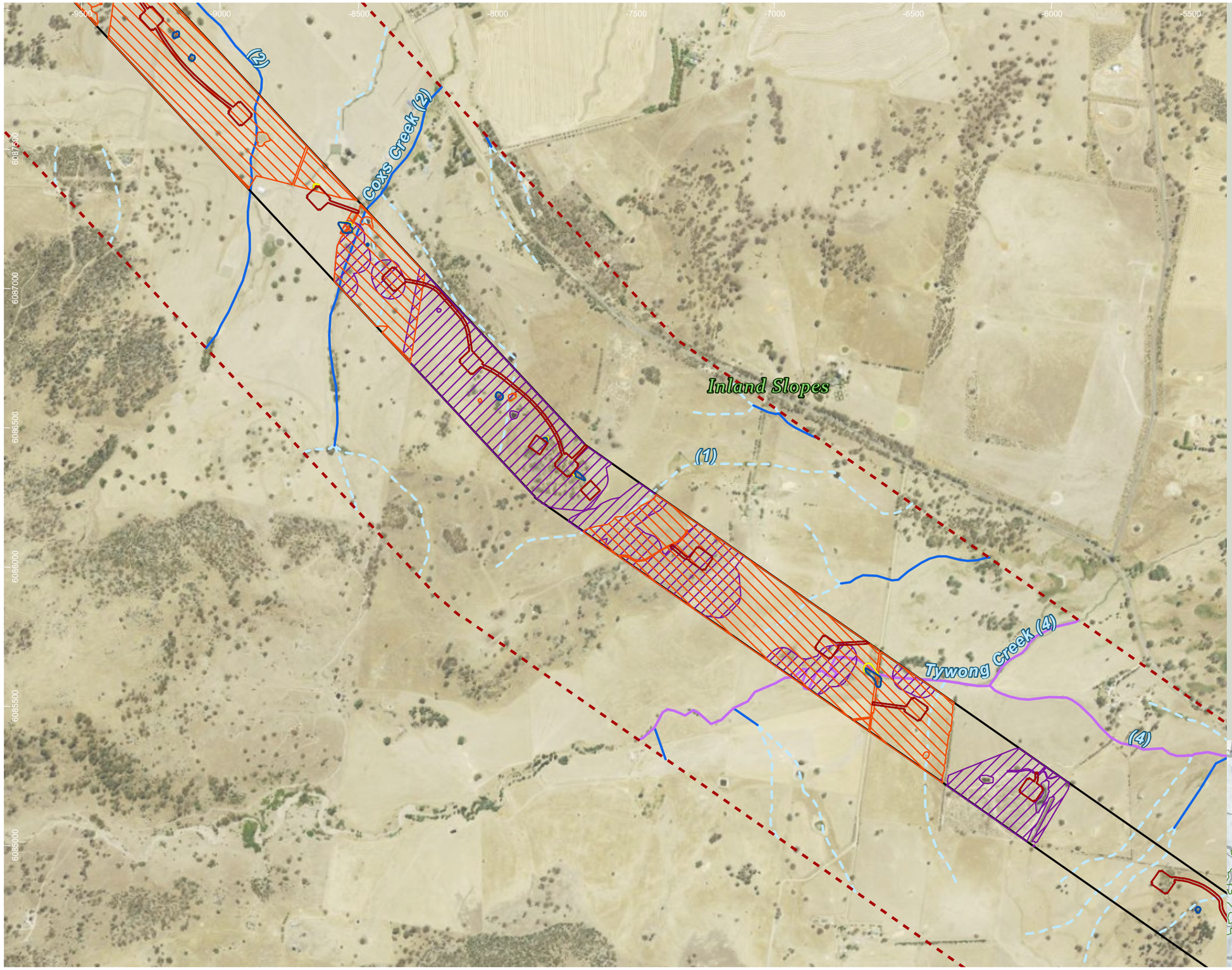


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

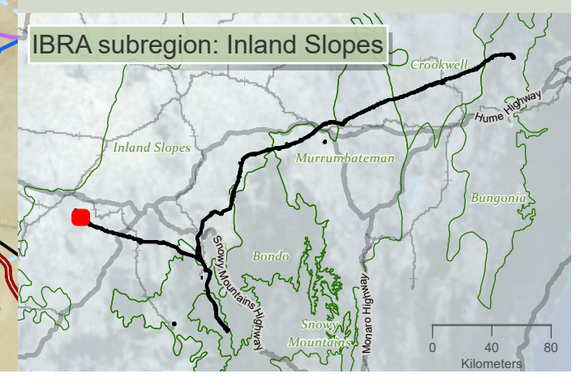
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



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Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 2

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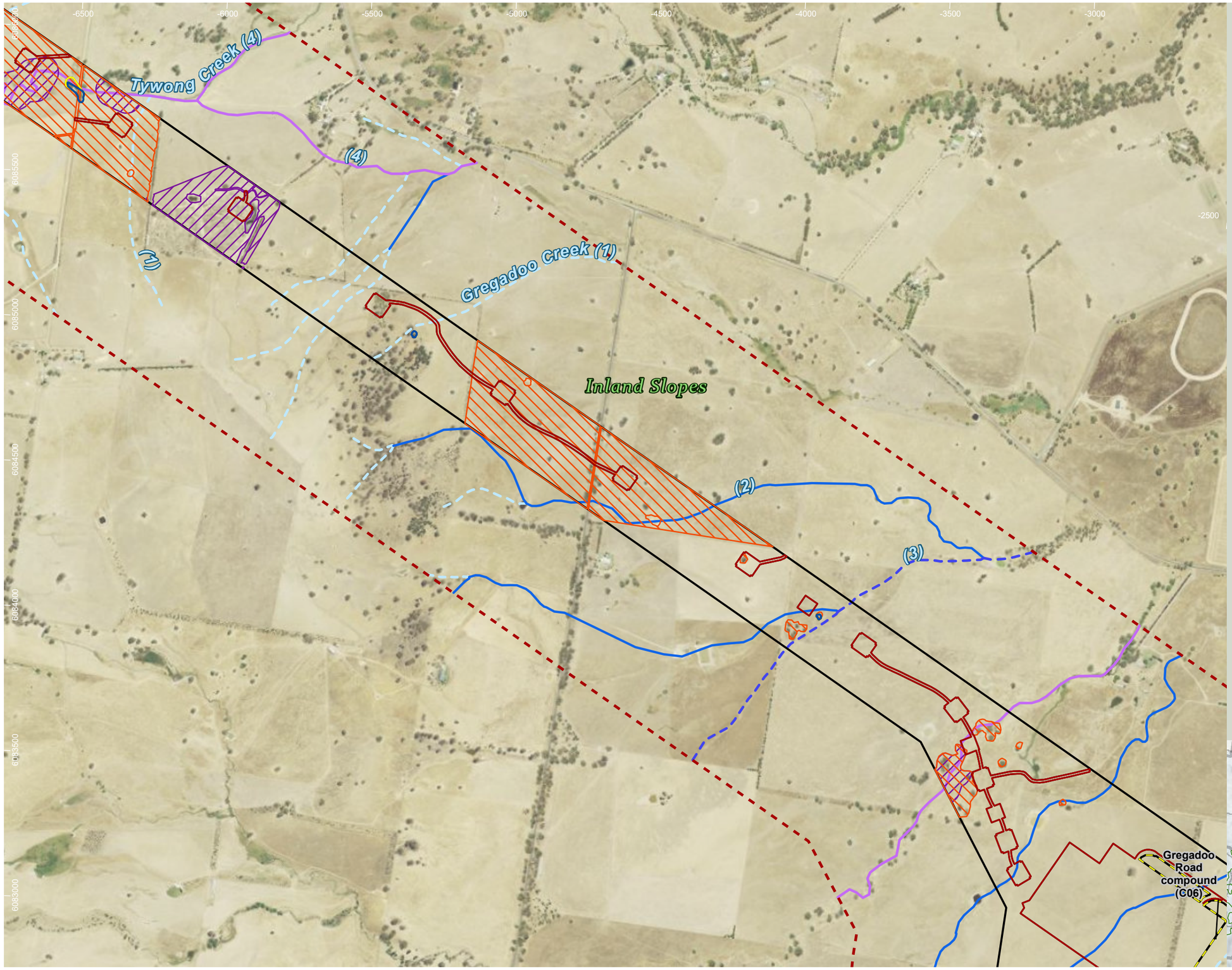


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

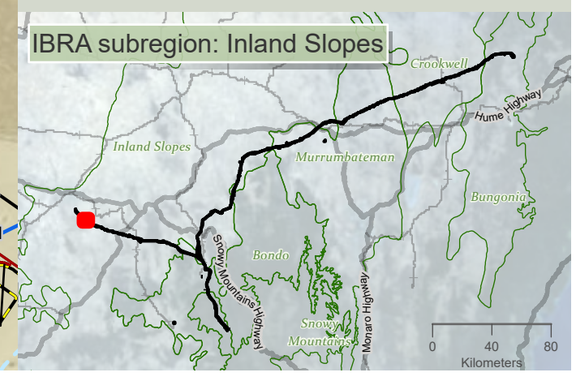
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



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niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 3

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-3500 -3000 -2500 -2000 -1500 -1000 -500 0

6084000 6083500 6083000 6082500 6082000 6081500 6081000

Gregadoo Road compound (C06)

Inland Slopes

(1) (2) (3)

O'briens Creek (6)

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

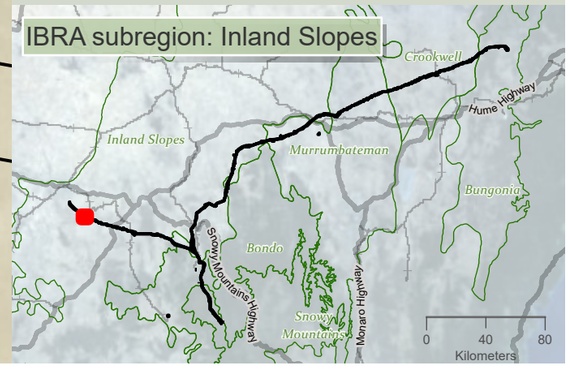
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

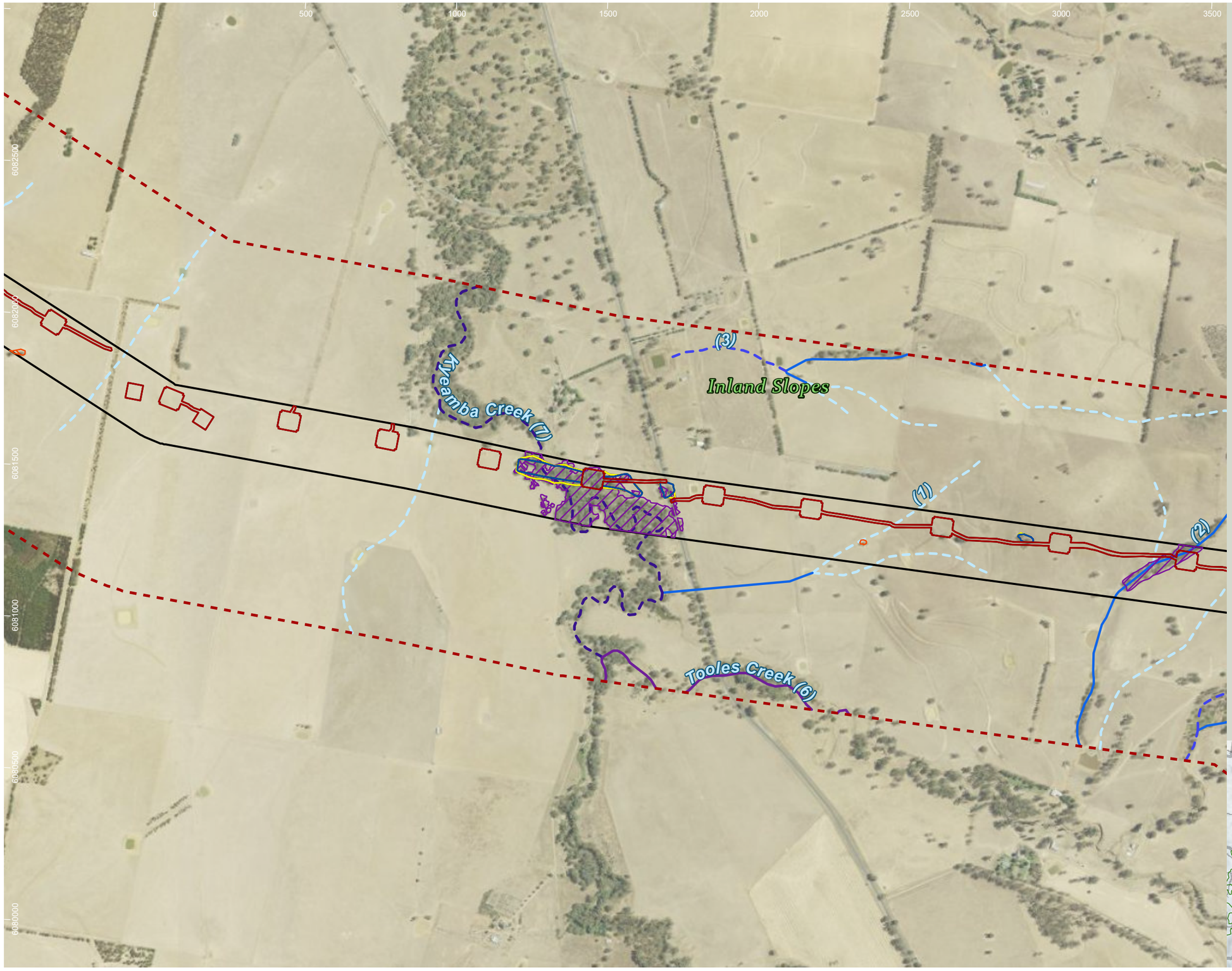
Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 4

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

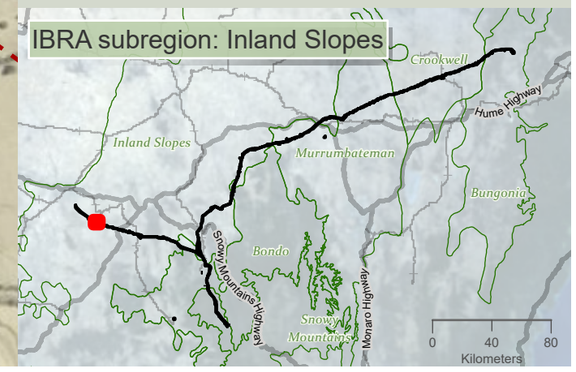
- 1
- 2
- 3
- 6
- 7

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

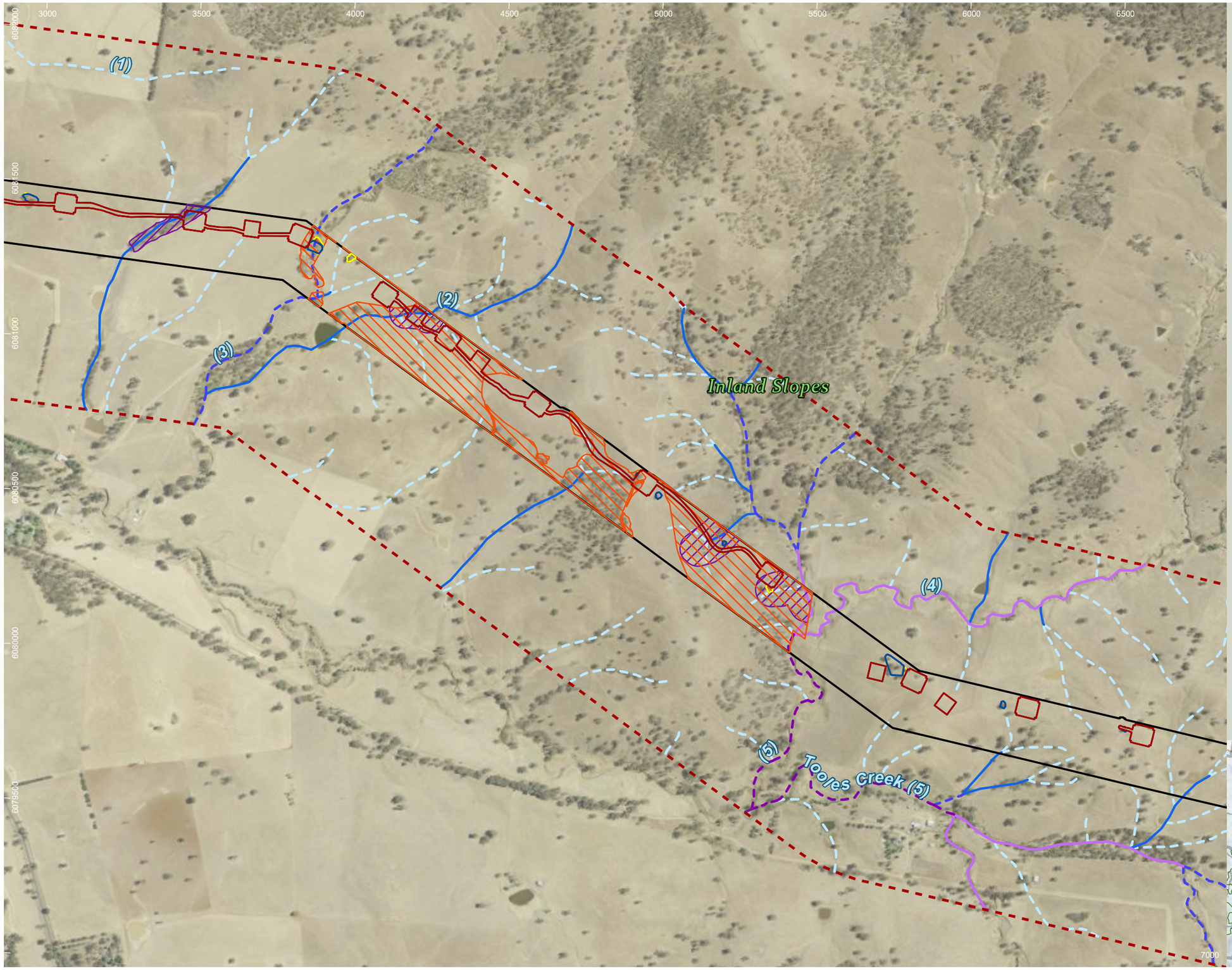
Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 5

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDrive\Sync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

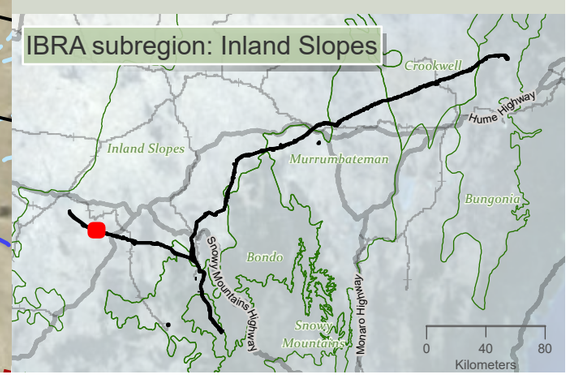
- 1
- 2
- 3
- 4
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

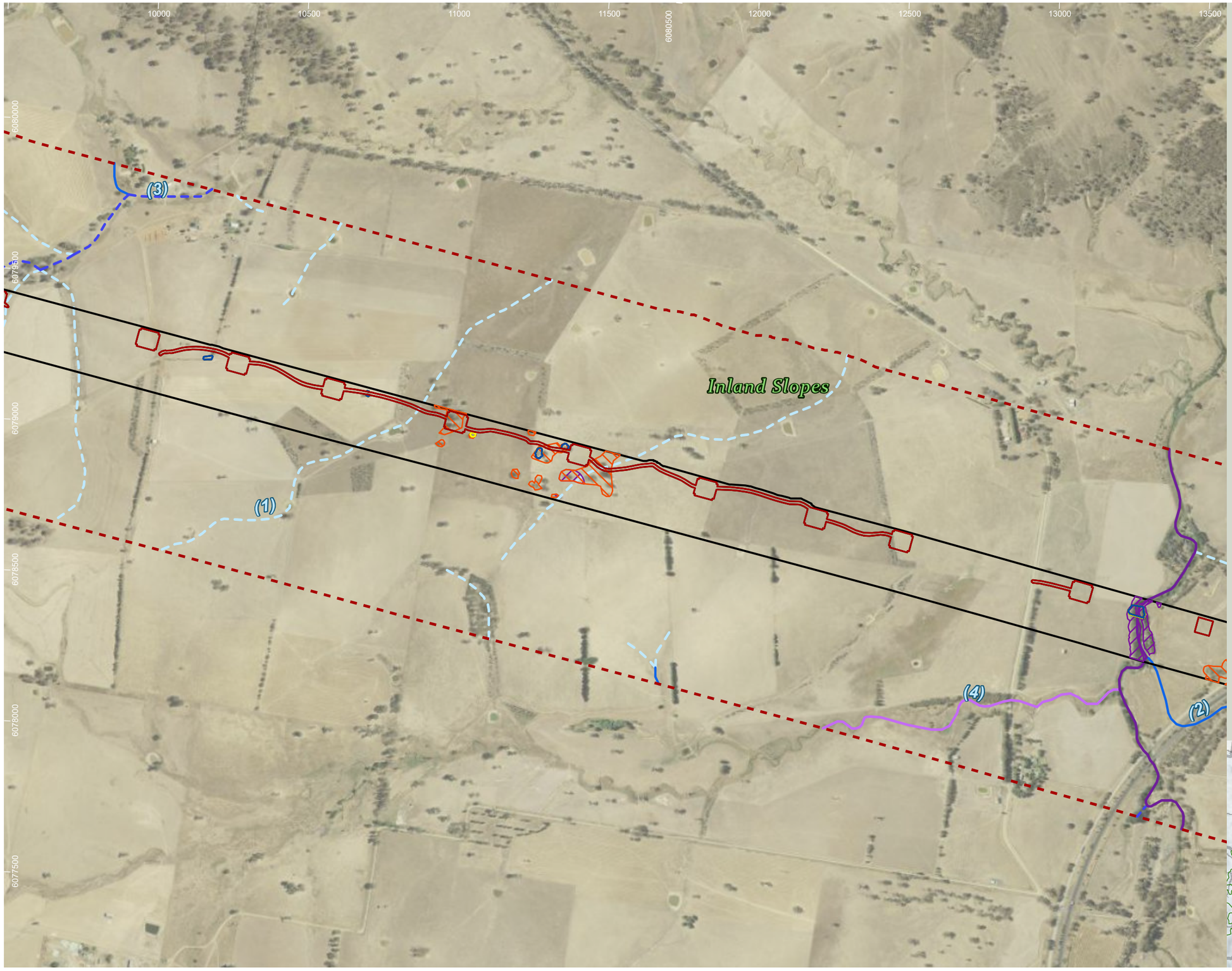
Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 6

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski | Last updated: 18/08/2023 | File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

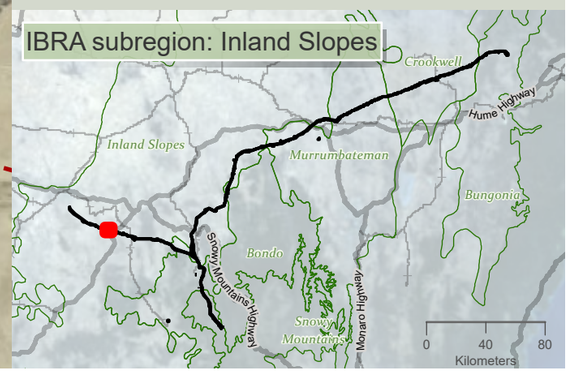
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

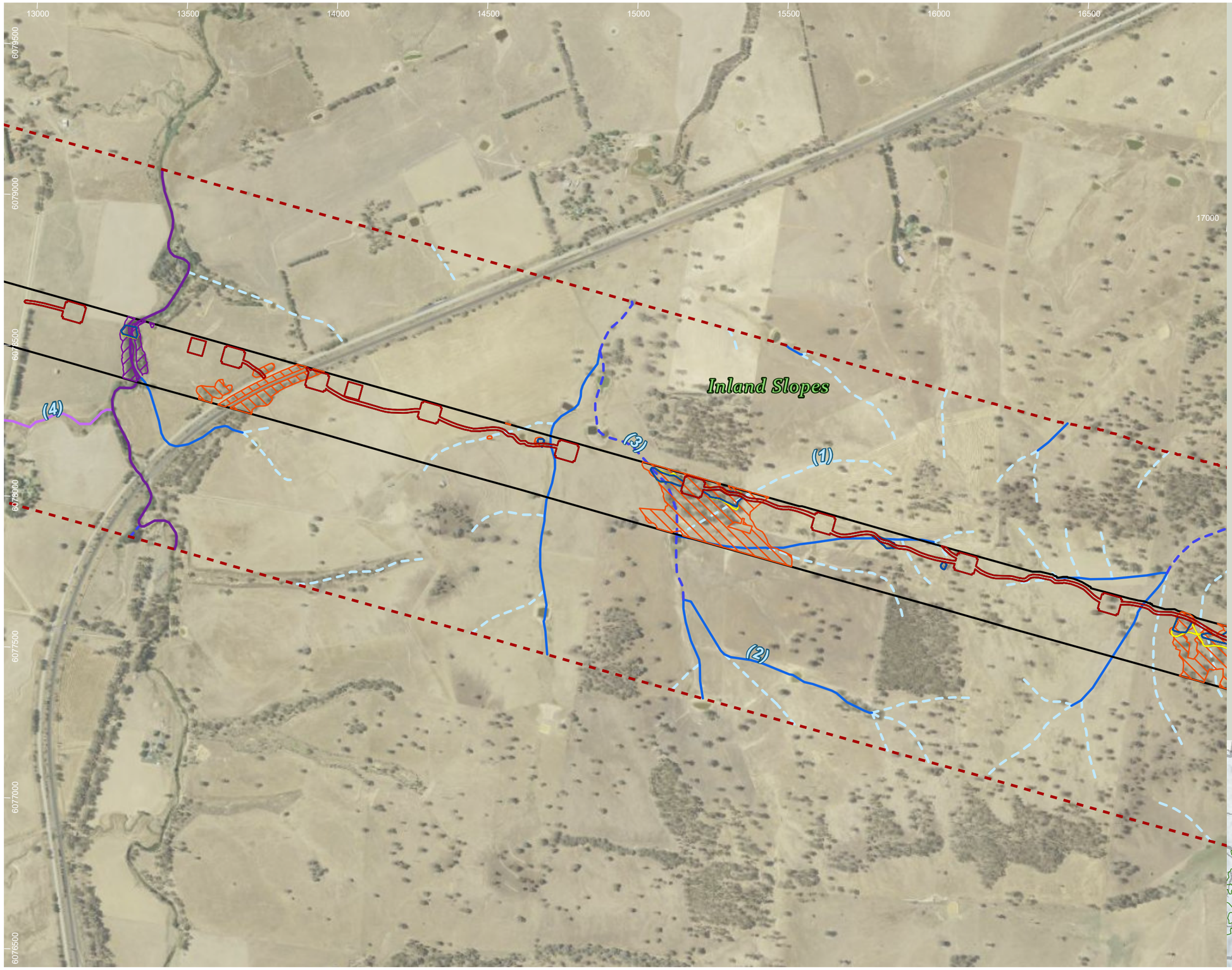
Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 8

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

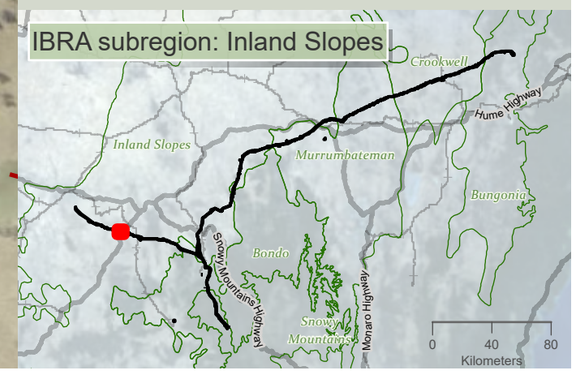
- 0
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

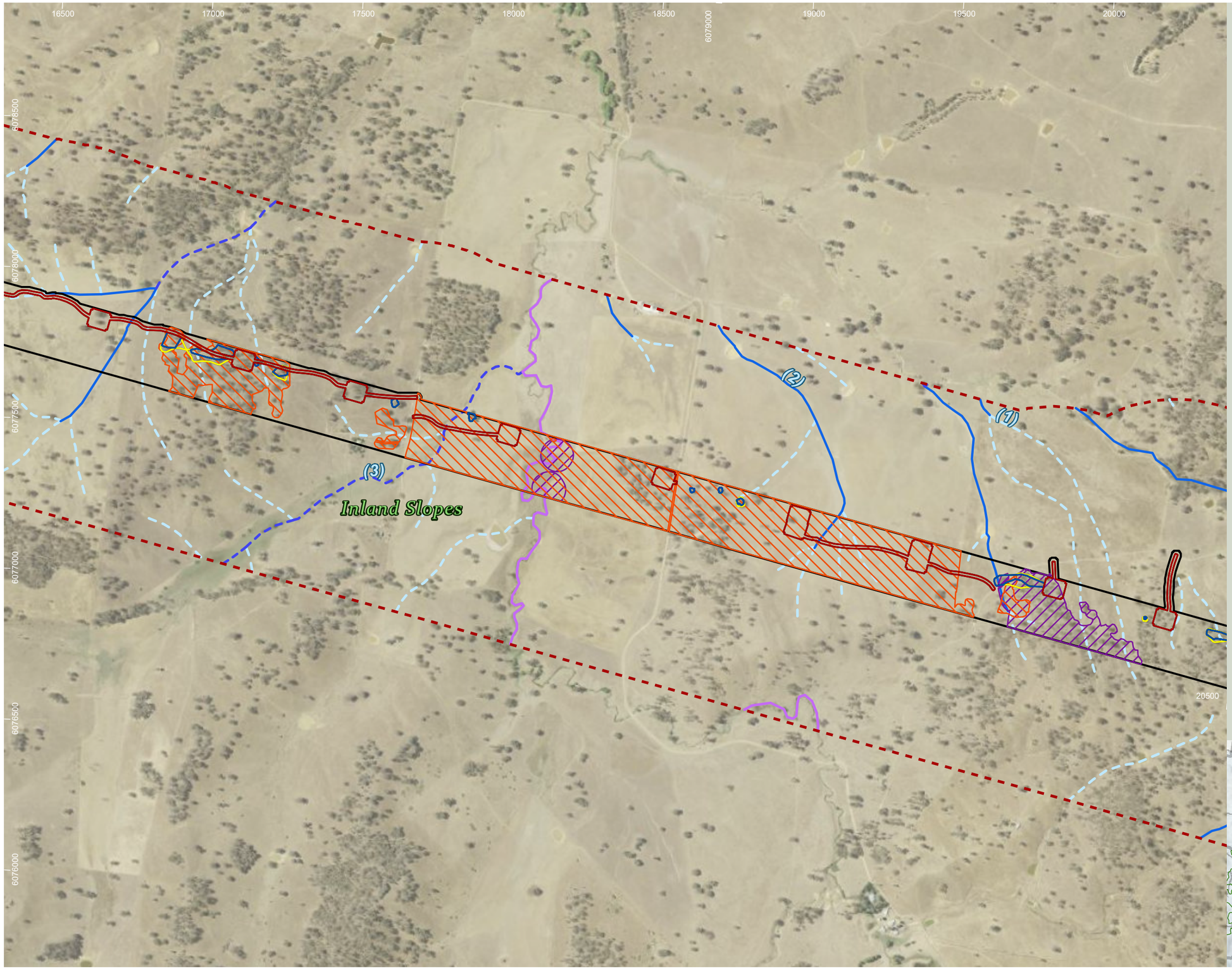
Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 9

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699_Humelink_BDAR_Stage 2 Part B.aprx - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

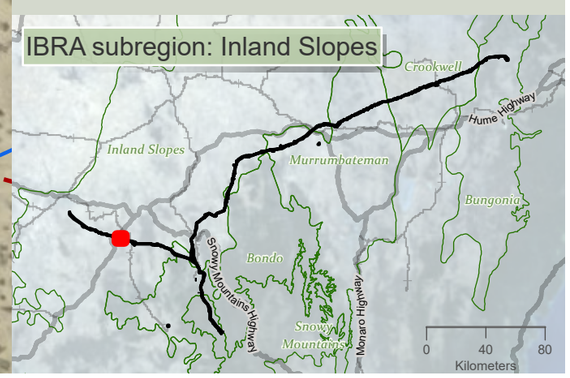
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 10

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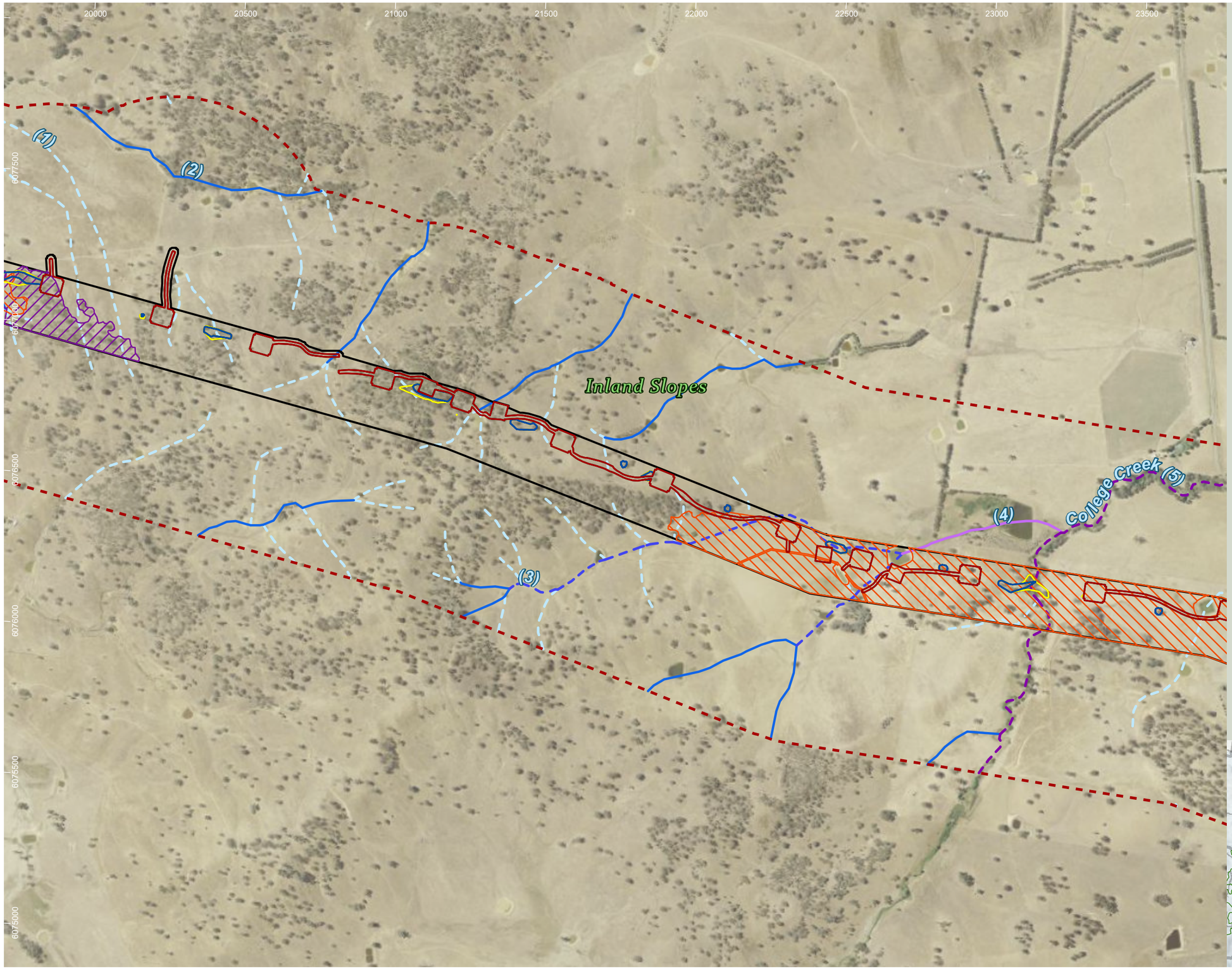
Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

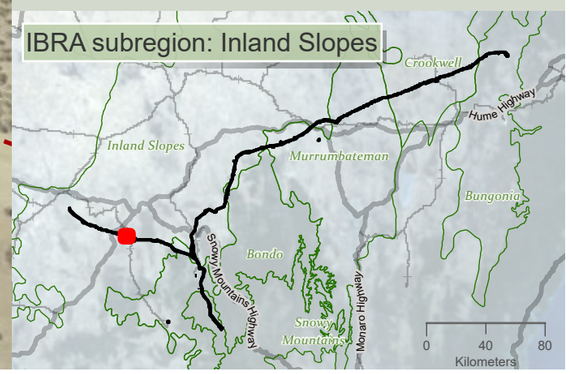
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

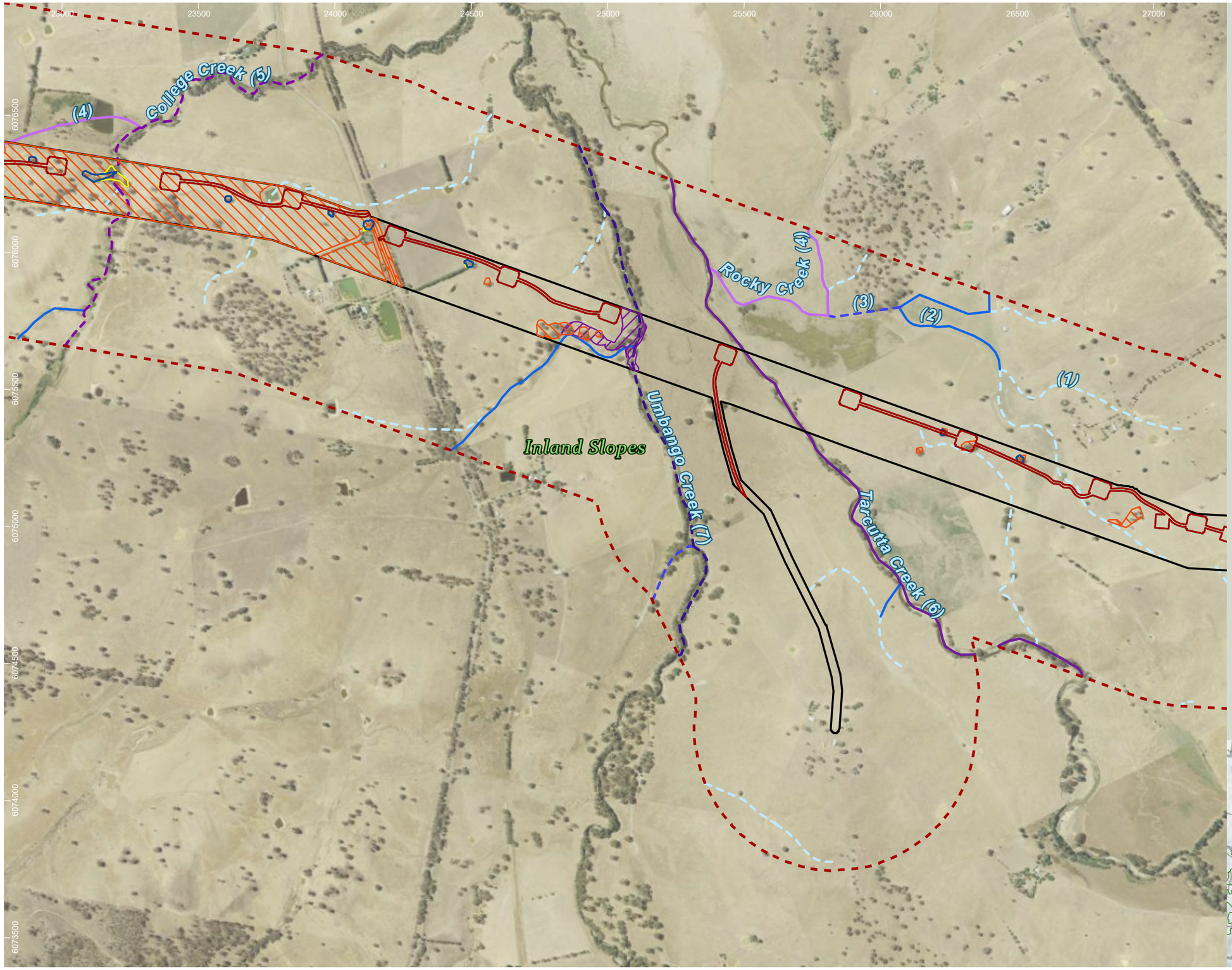
Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 11

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

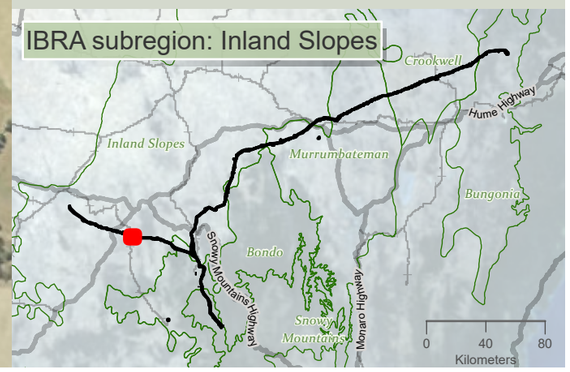
- 1
- 2
- 3
- 4
- 5
- 6
- 7

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 12

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Drawn by: MathewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

27000 27500 28000 28500 29000 29500 30000

6076500 6075000 6075500 6075000 6074500 6074000

Inland Slopes (5) (1) (4) (3) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

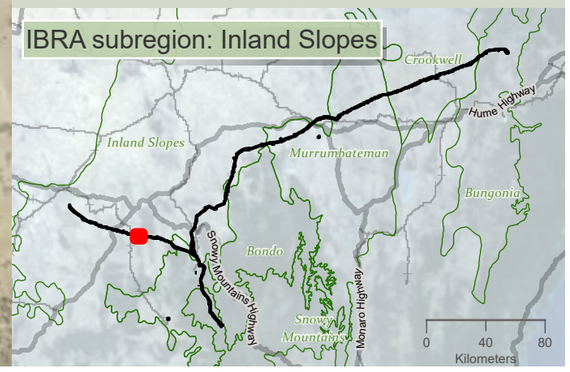
- 1
- 2
- 3
- 4
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

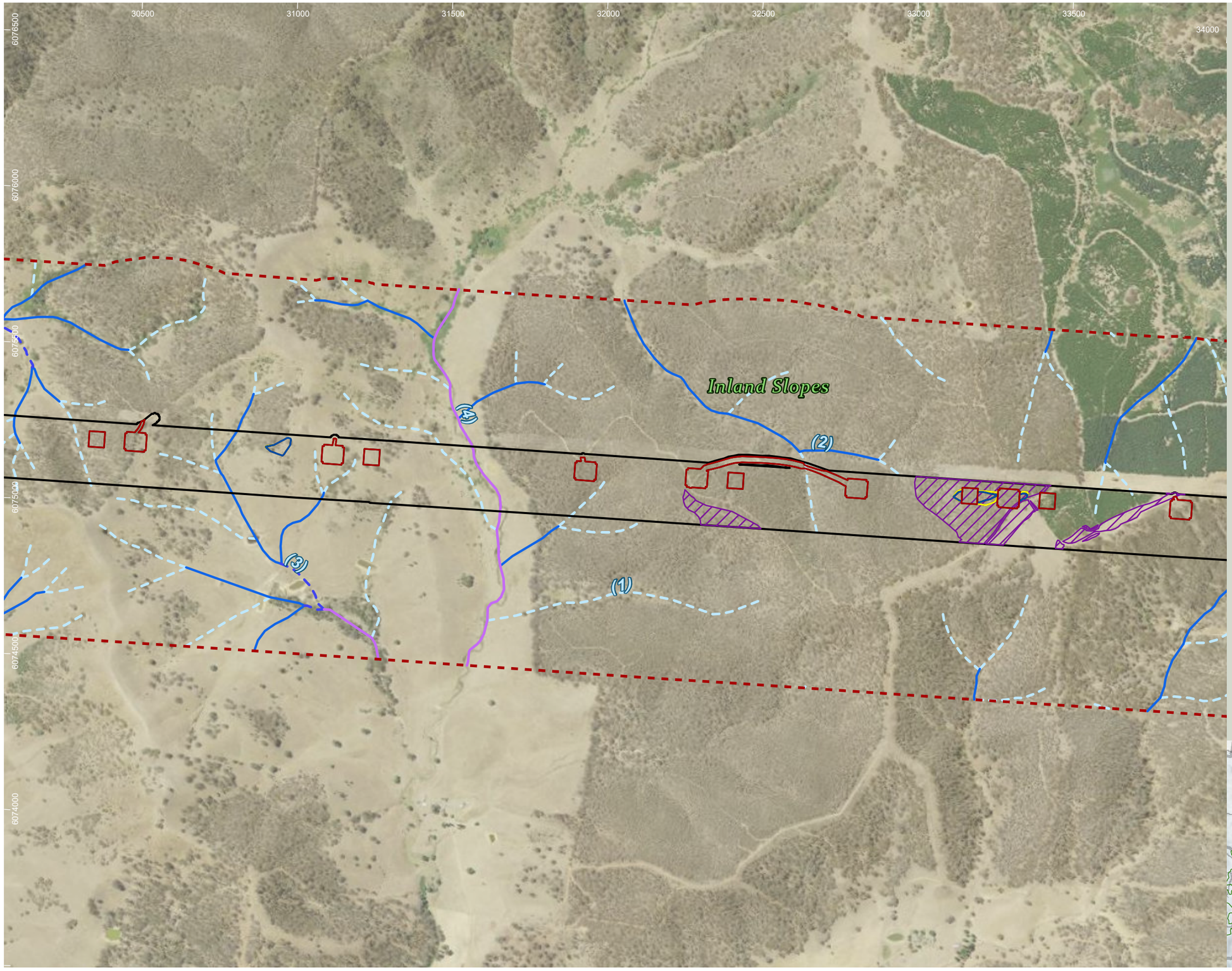
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 13

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

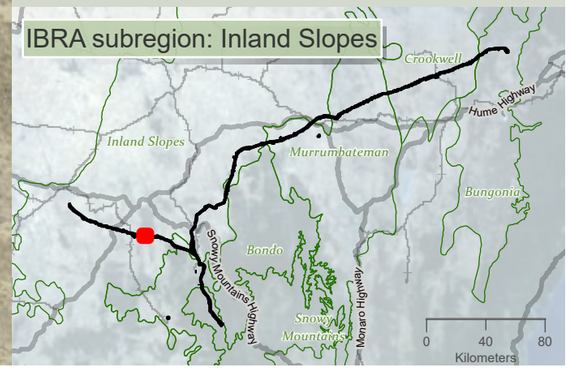
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 N 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 14

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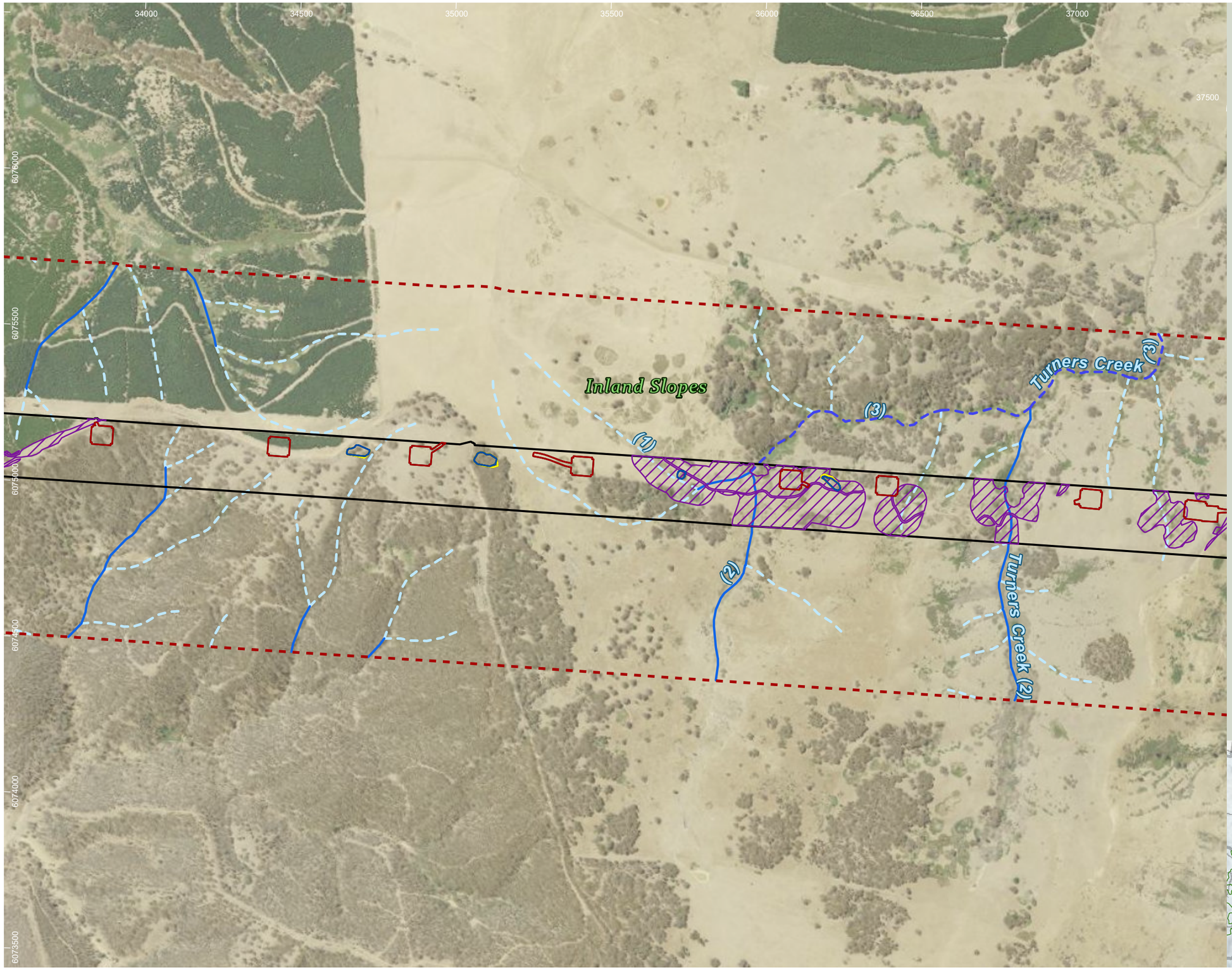


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

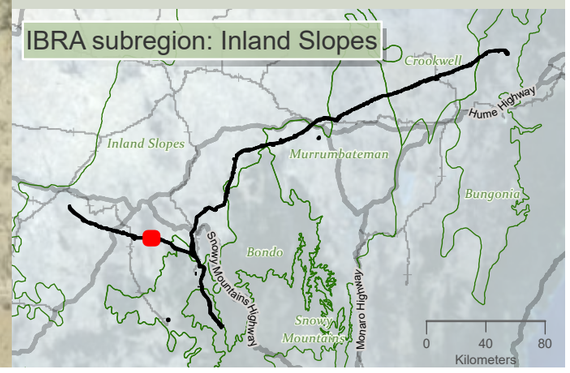
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

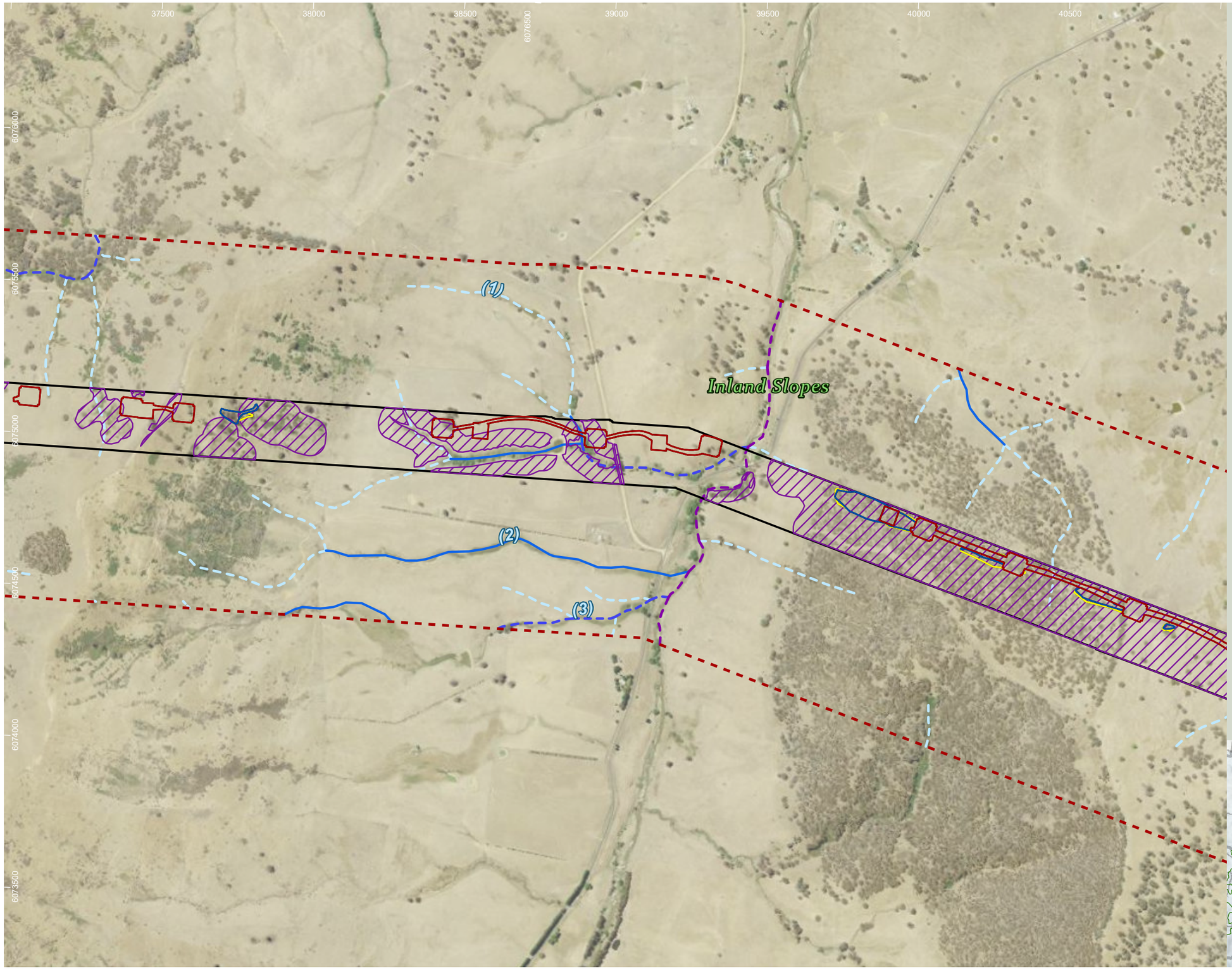
Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 15

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajeczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

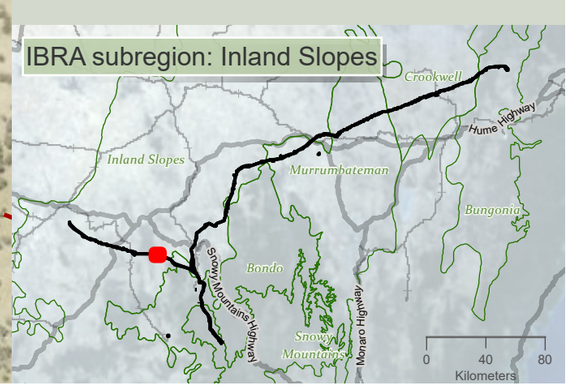
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



Drawn by: MathewZajeczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 16

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

40500 41000 41500 42000 42500 43000 43500 44000

6075000 6074500 6074000 6073500 6073000 6072500

Inland Slopes

Sod Hut Creek (2)

(2) (3) (1)

44500

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

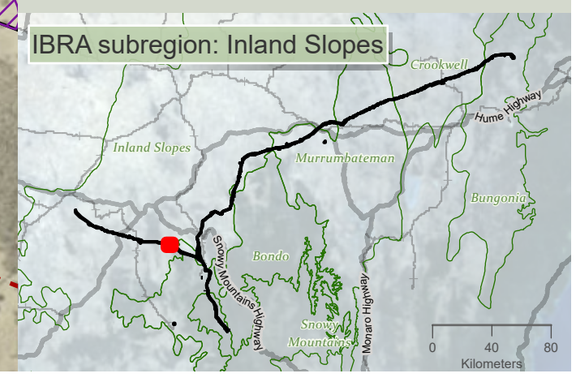
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



niche Environment and Heritage

0 400 m

N

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 17

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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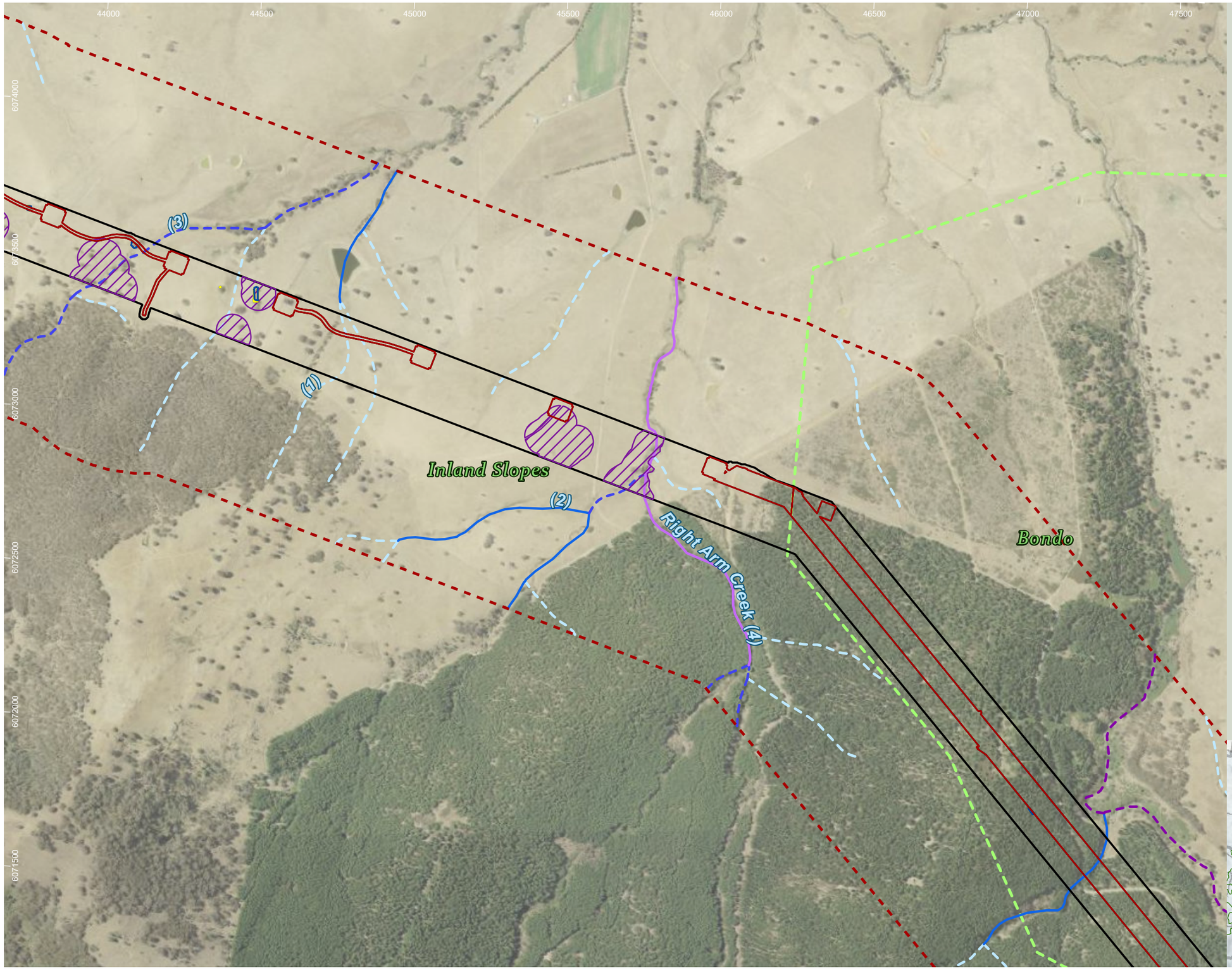


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

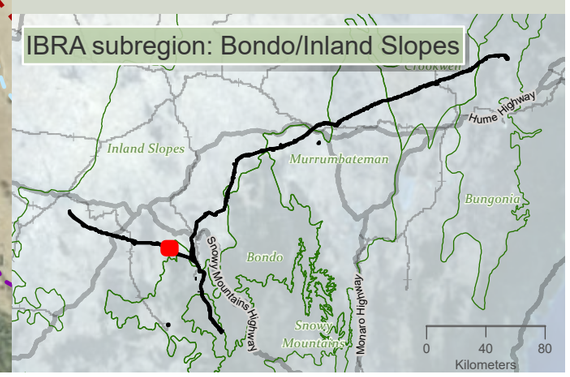
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 18

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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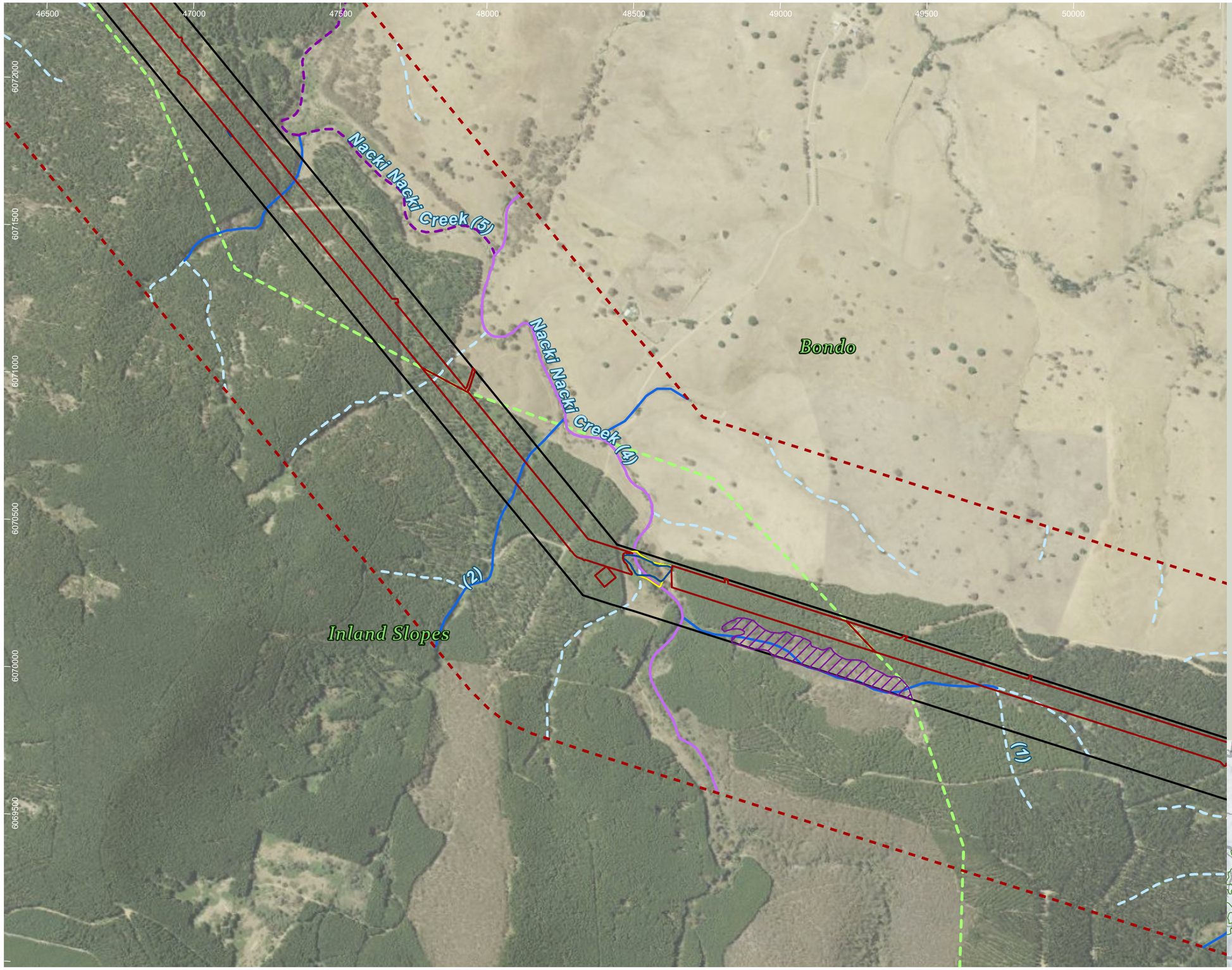


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

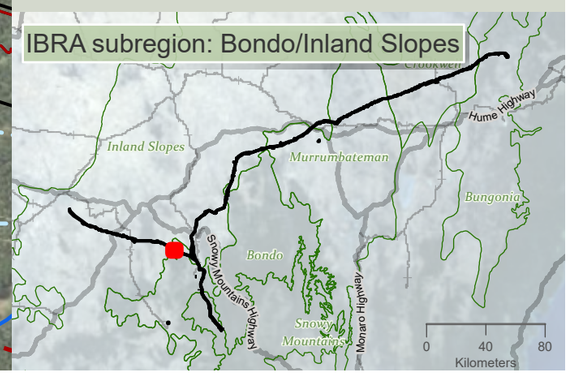
- 1
- 2
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 19

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

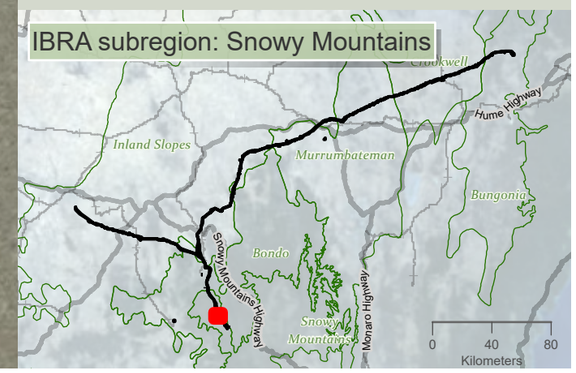
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Cyclodomorphus praealtus



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 36

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71000 71500 72000 72500 73000 73500 74000 74500 75000 75500

6033500 6033000 6032500 6032000 6031500 6031000 6030500

(3)

Bondo

Snowy Mountains

(2)

Plain Creek (3)

(1)

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

- 1
- 2
- 3

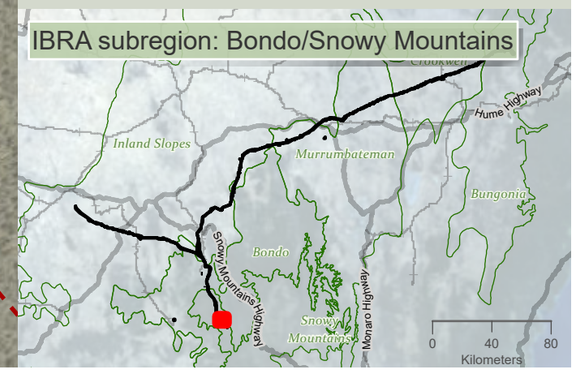
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Cyclodomorphus praealtus

IBRA subregion: Bondo/Snowy Mountains



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 37

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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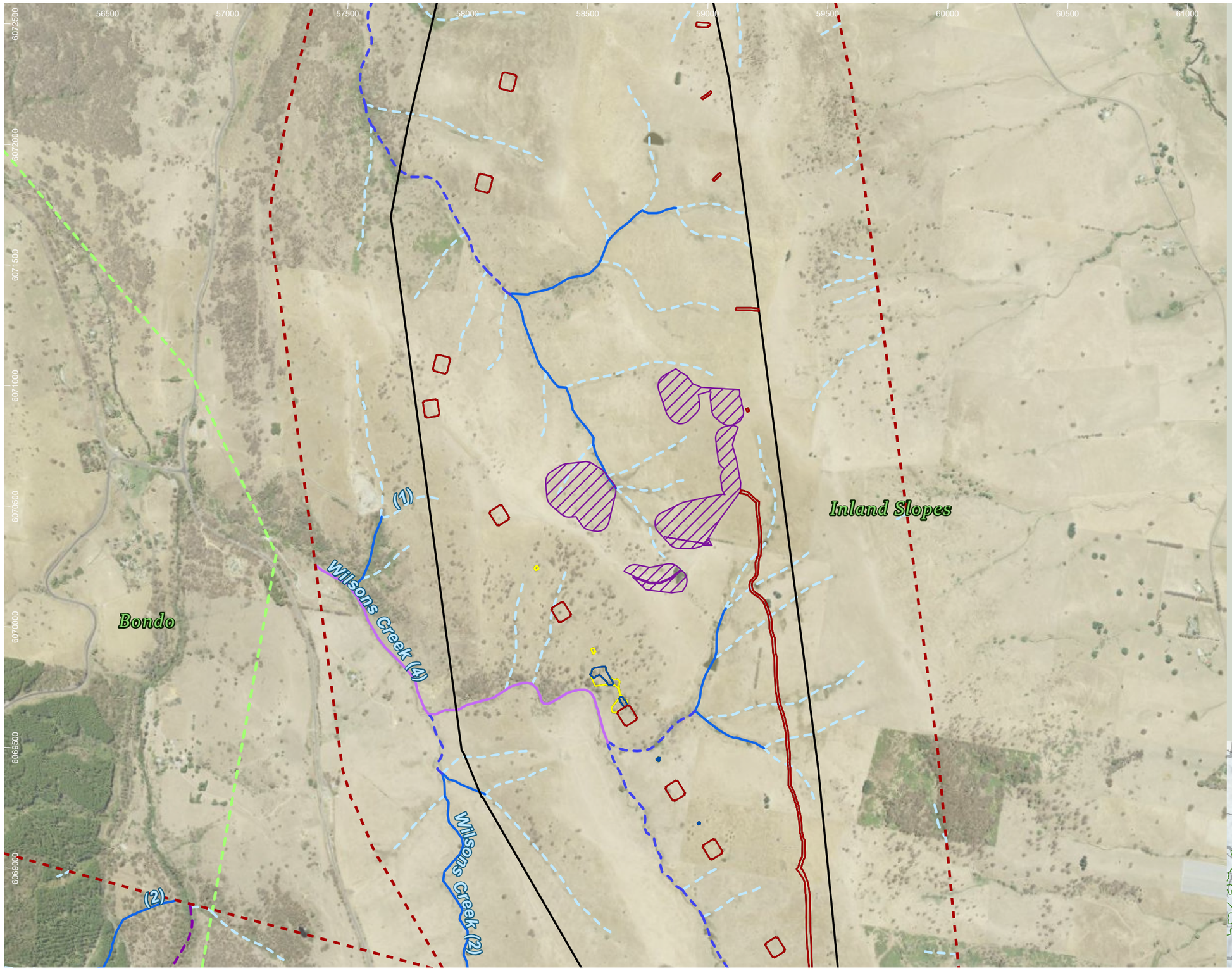


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

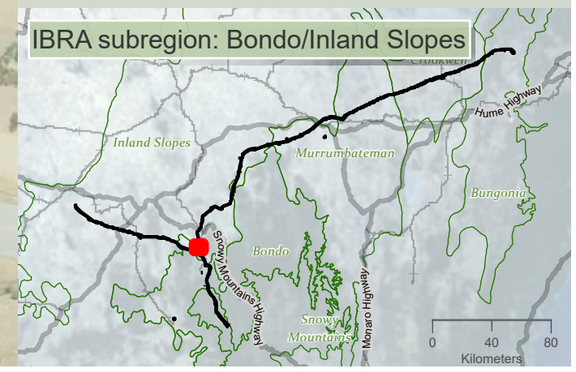
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 39

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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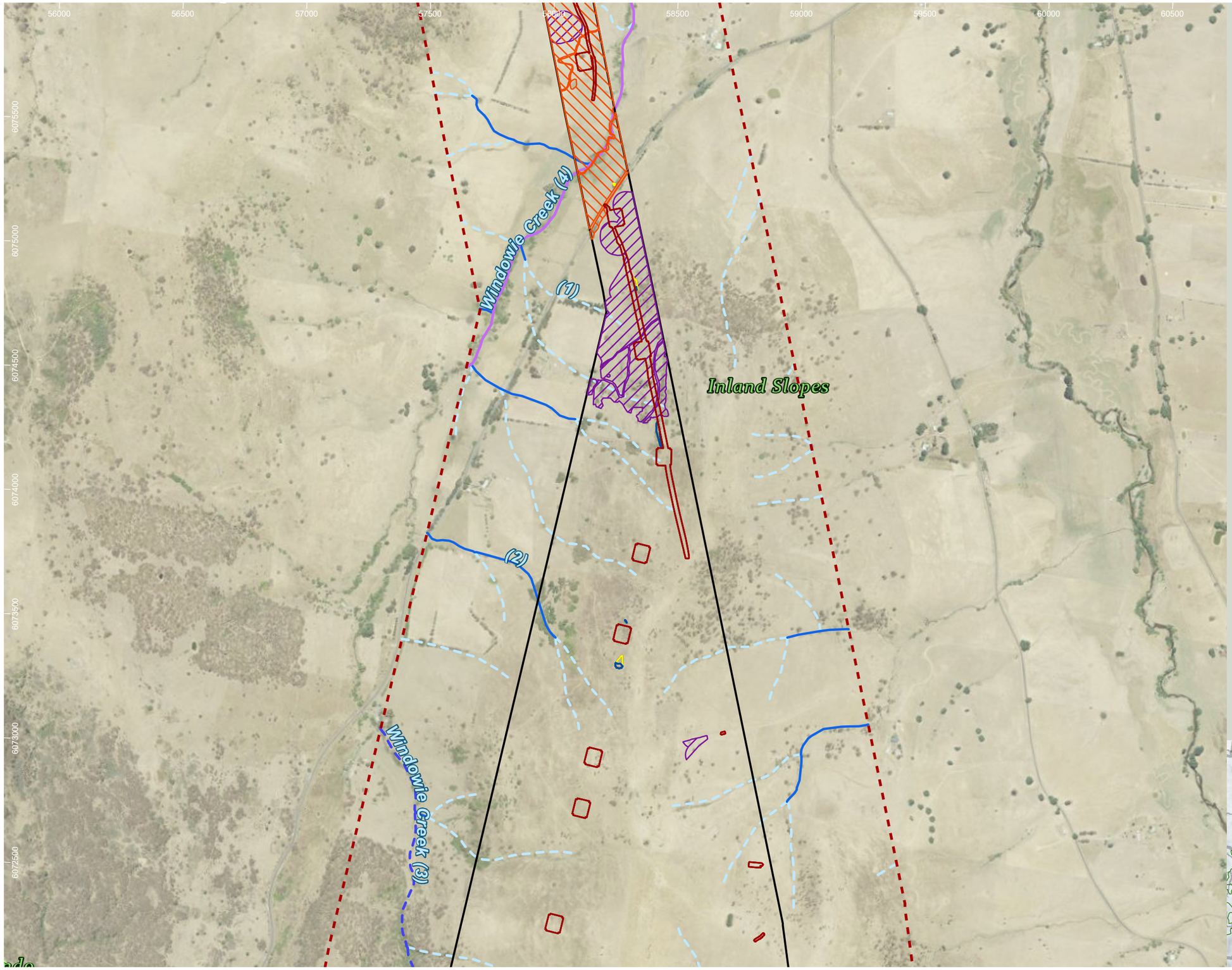


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

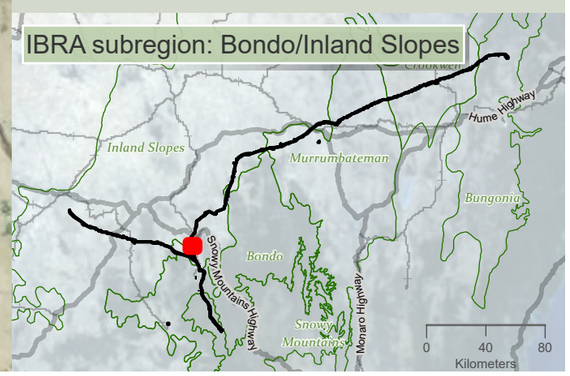
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 40

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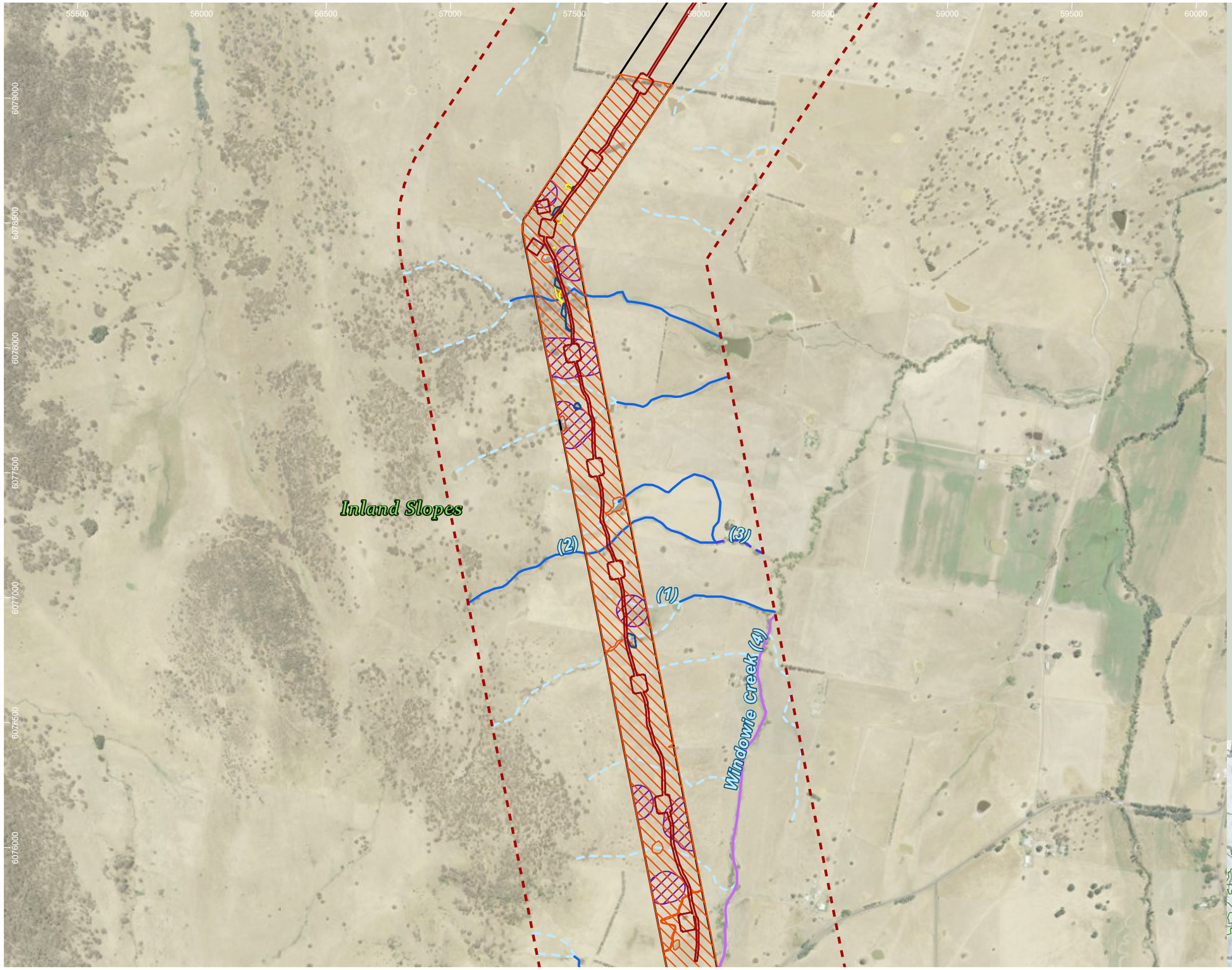


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

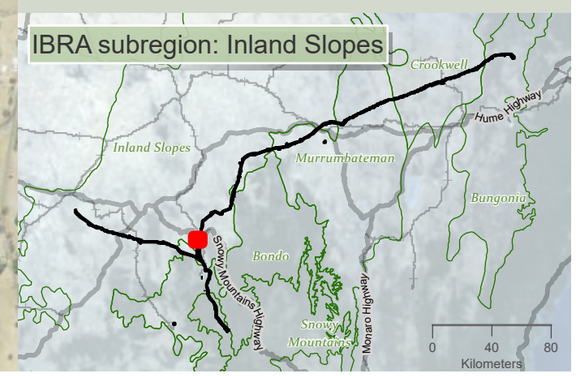
- 0
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 41

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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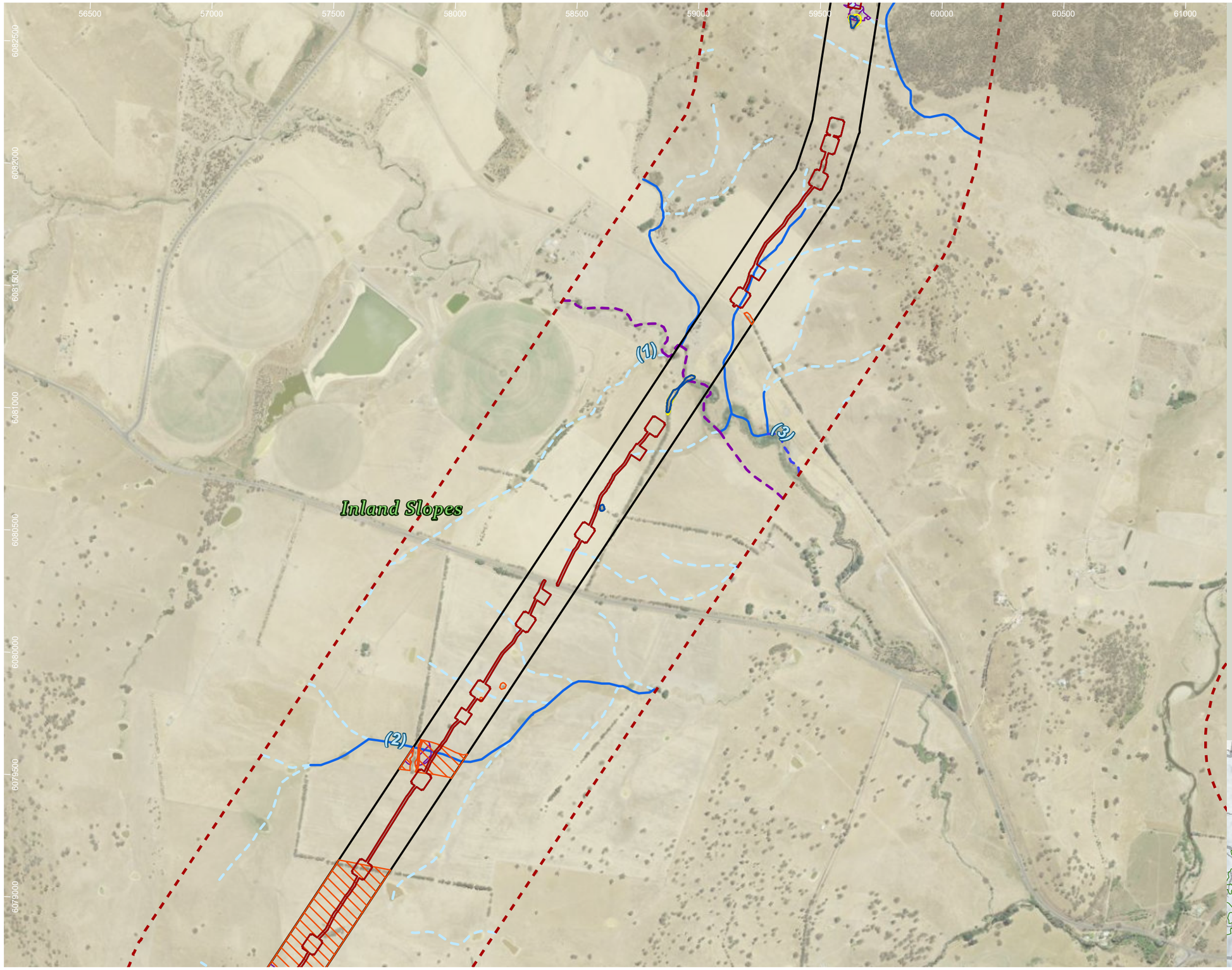


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

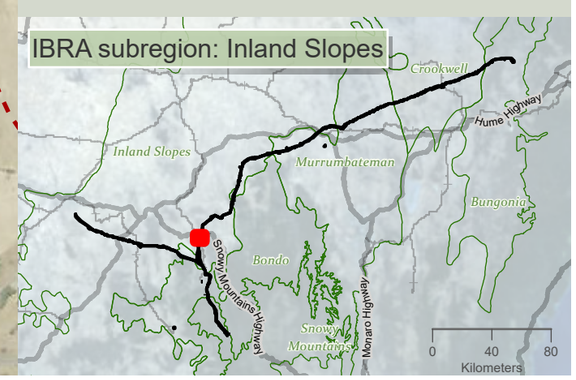
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 42

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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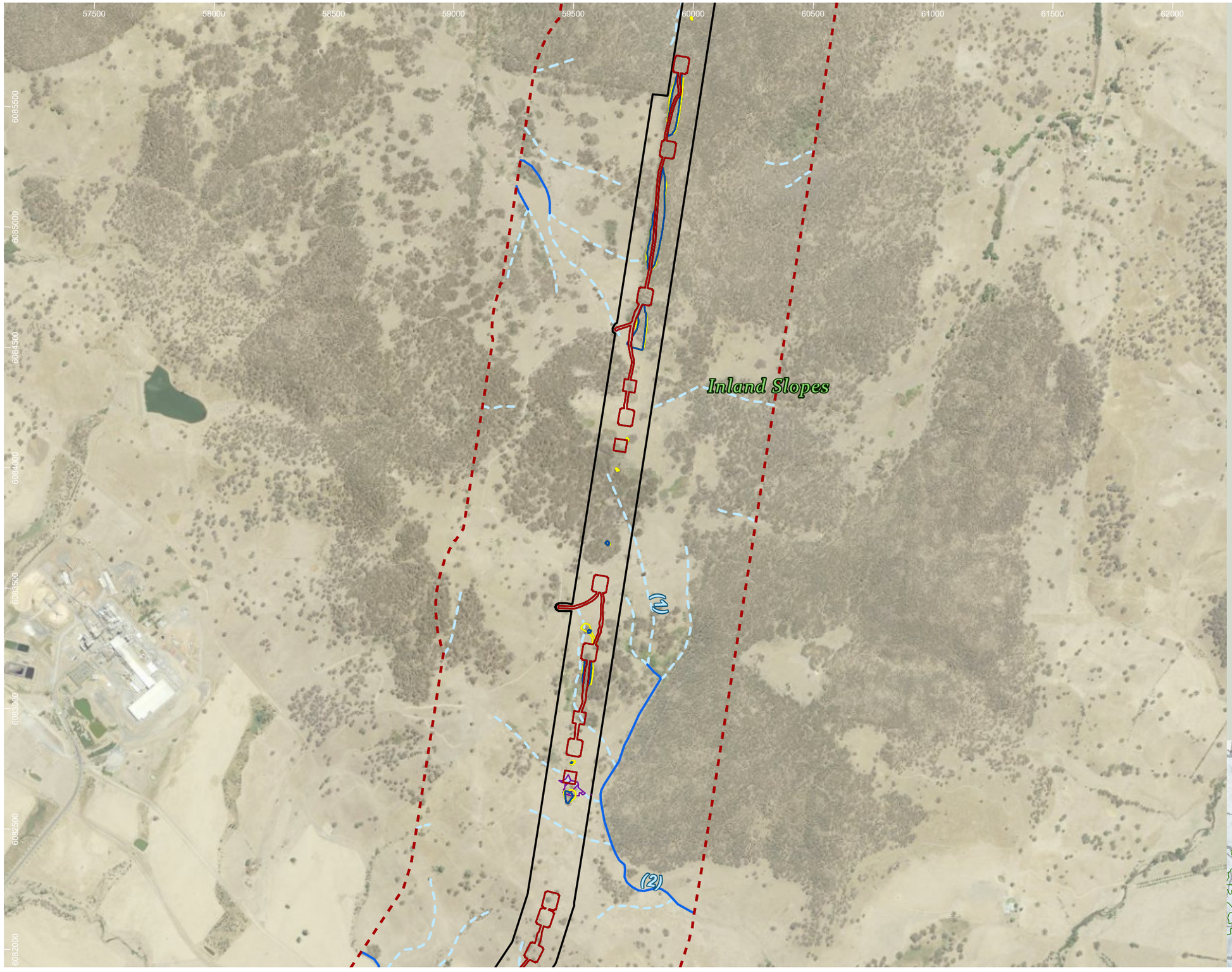


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

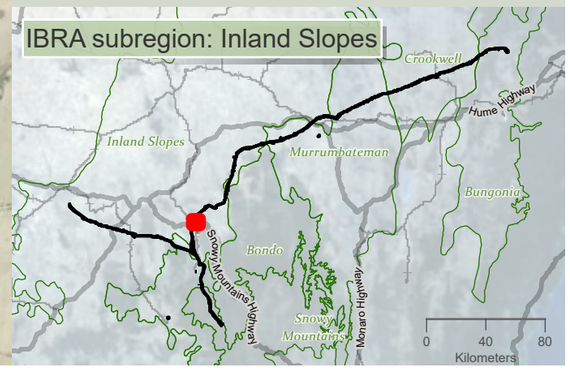
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 44

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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61000 61500 62000 62500 63000 63500 64000 64500

6090500 6090000 6089500 6089000 6088500

Gocup Creek (4)

(1)

(3)

(2)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

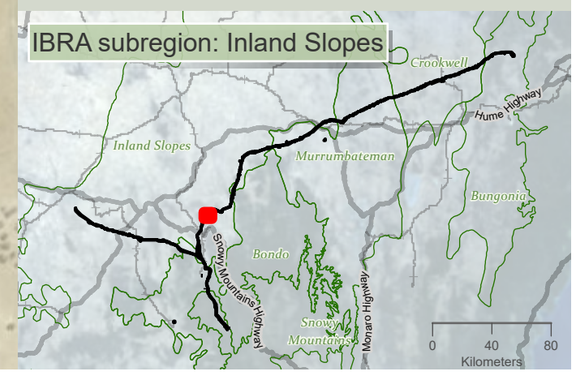
- 1
- 2
- 3
- 4
- 8

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 46

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63500 64000 64500 65000 65500 66000 66500 67000

6094000 6093500 6093000 6092500 6092000 6091500 6091000

(1) (2) (3) (4) (8)

Inland Slopes

Tumut River (8)

Gocup Creek (4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

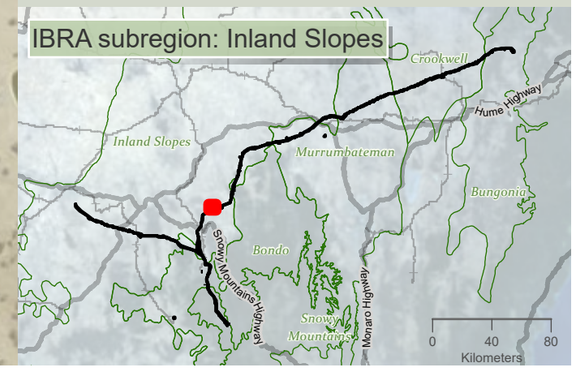
- 1
- 2
- 3
- 4
- 5
- 8

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 47

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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66500 67000 67500 68000 68500 69000 69500 70000

6094000 6093500 6093000 6092500 6092000 6091500

(1) (2) (3) (5)

Inland Slopes

Killimicat Creek (5)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

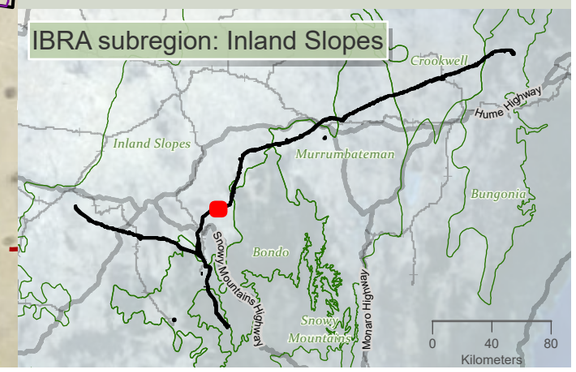
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 48

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70000 70500 71000 71500 72000 72500 73000 73500

6095000 6094500 6094000 6093500 6093000

Inland Slopes

Sawpit Gully (4)

Killimicat Creek (5)

(1) (2) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

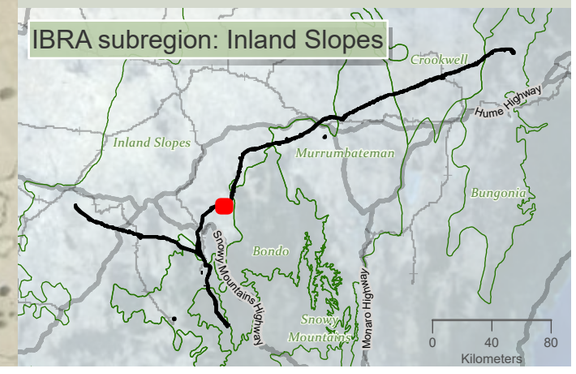
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 49

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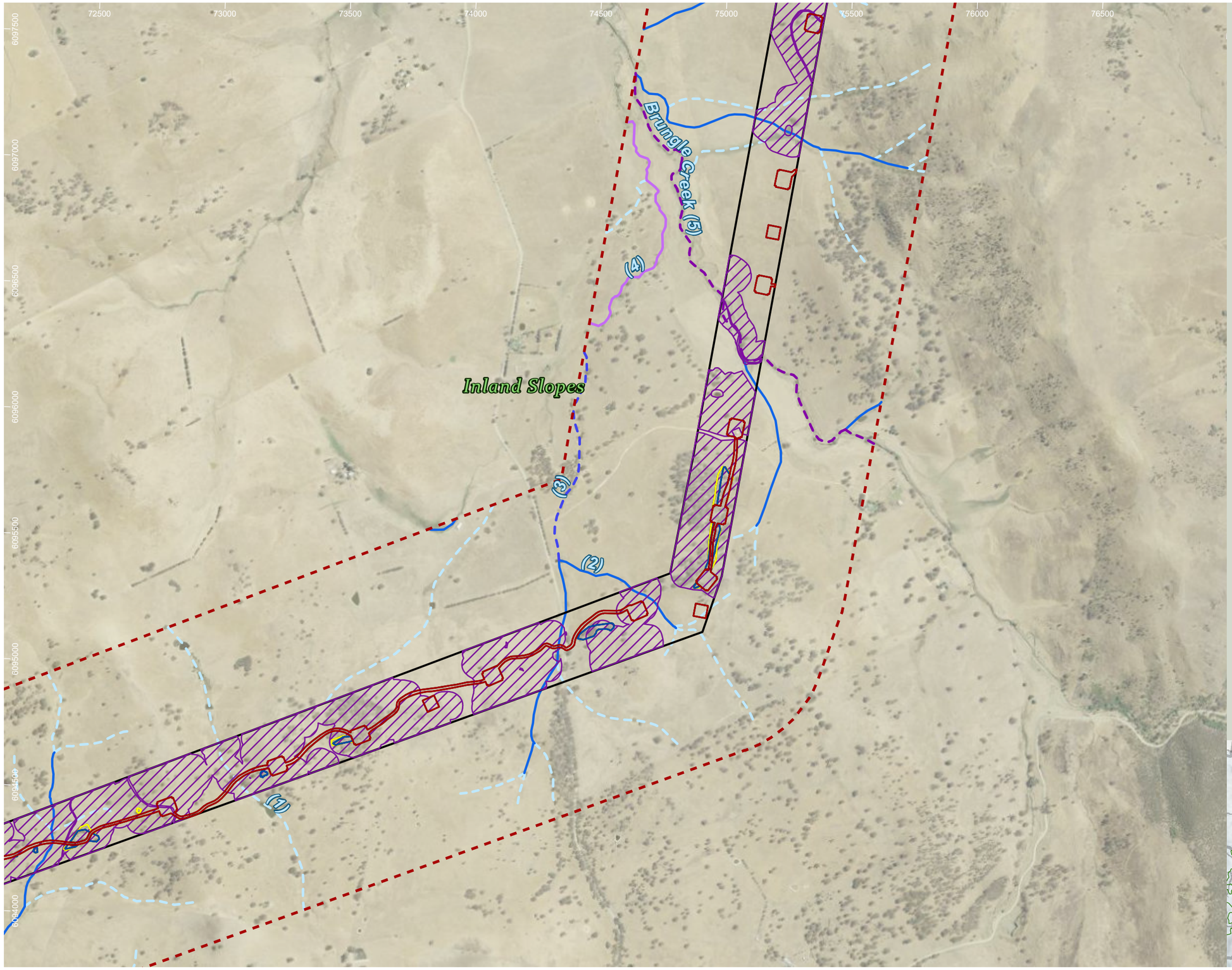
Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

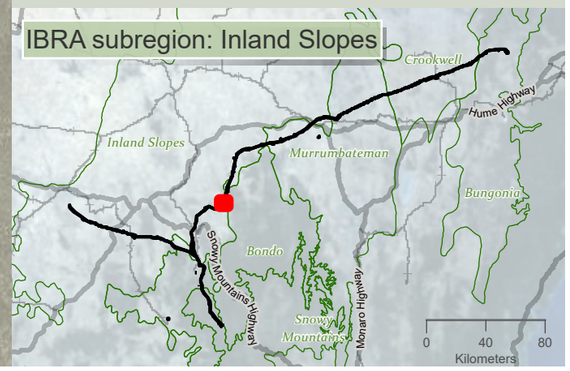
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 50

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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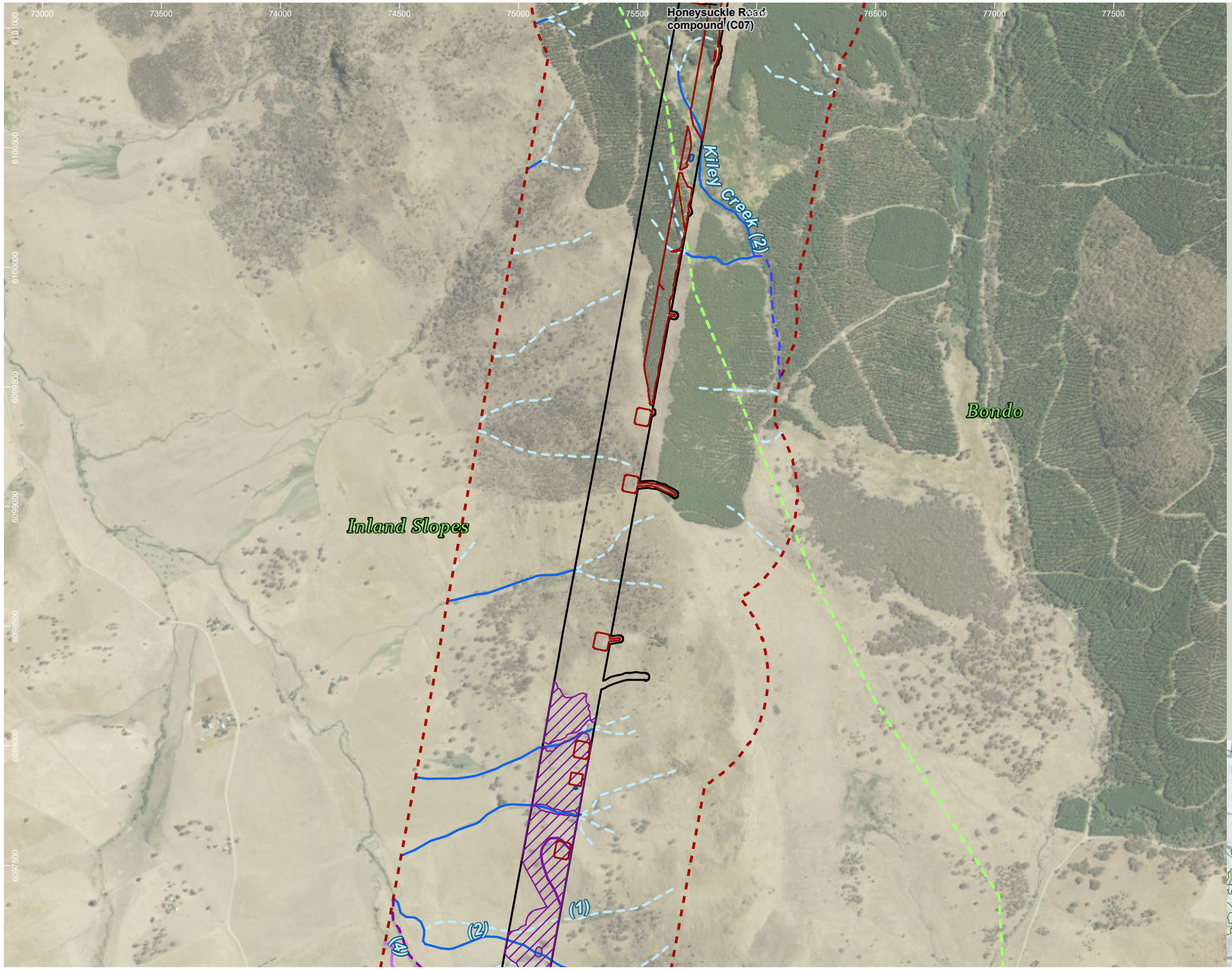


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

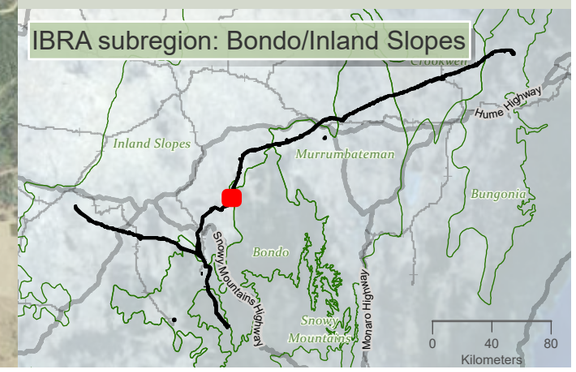
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 51

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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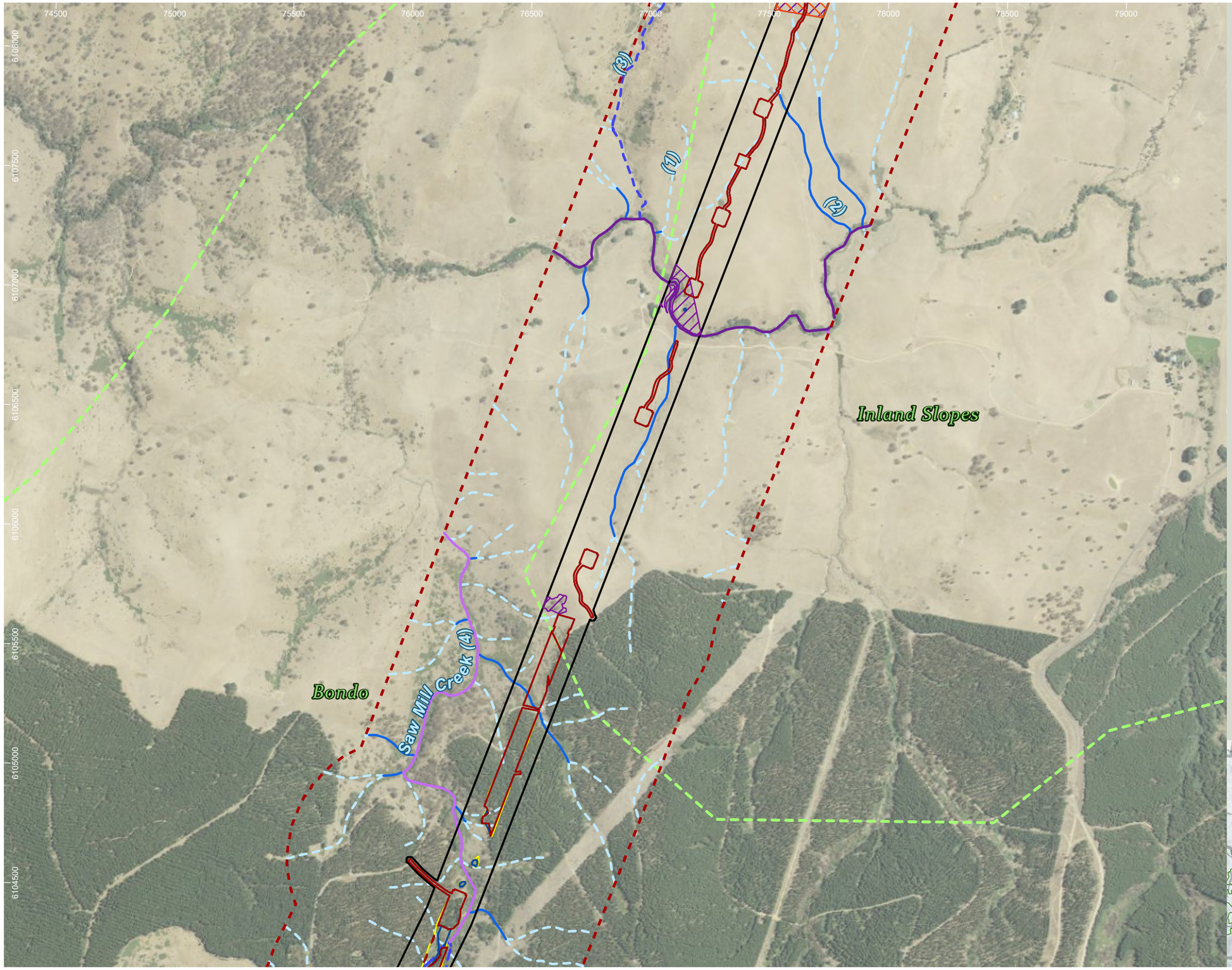


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

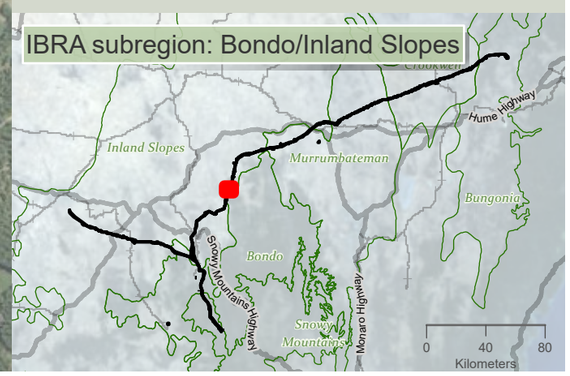
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 53

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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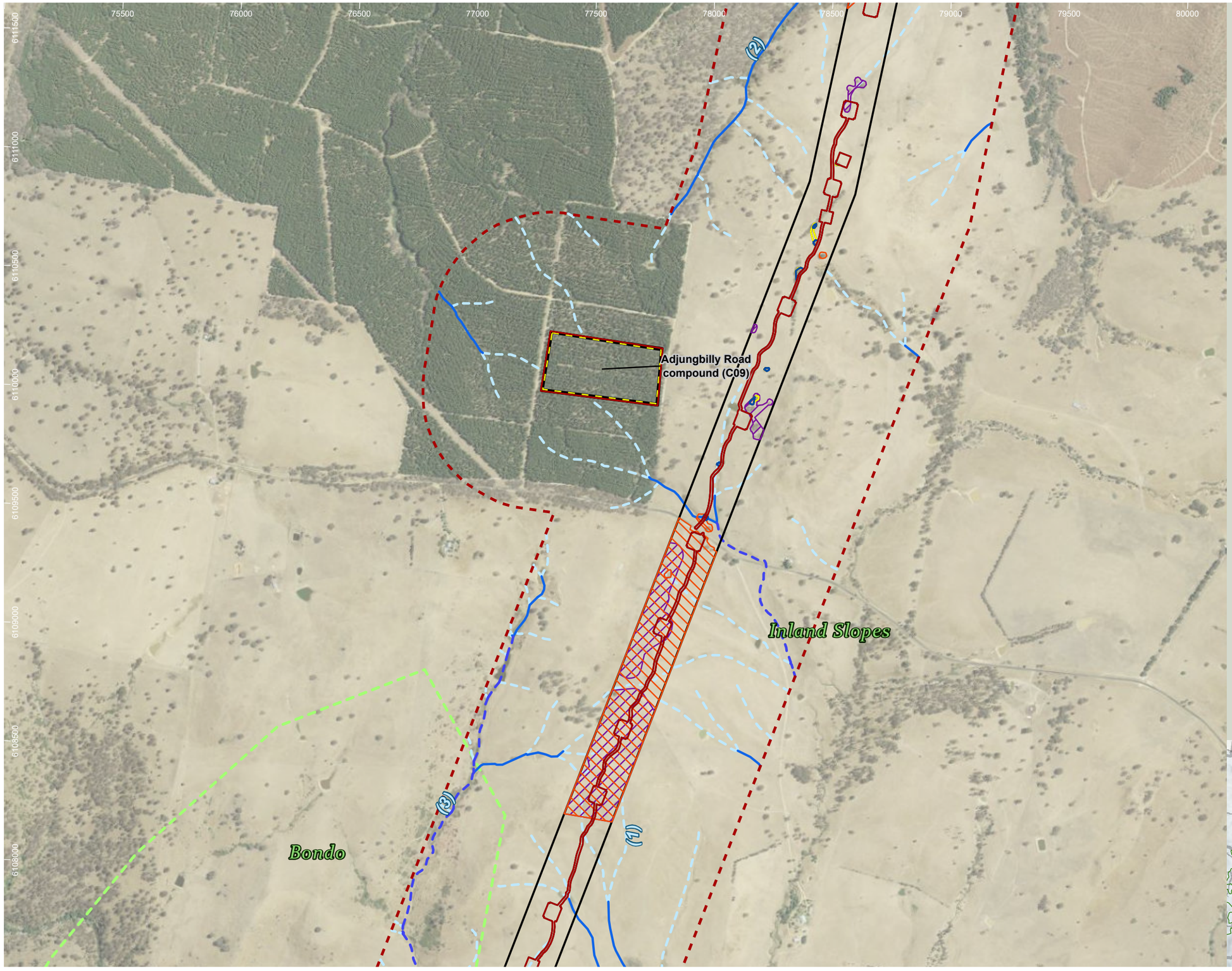


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

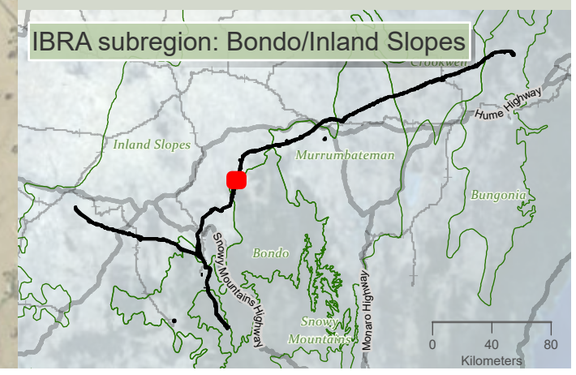
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 54

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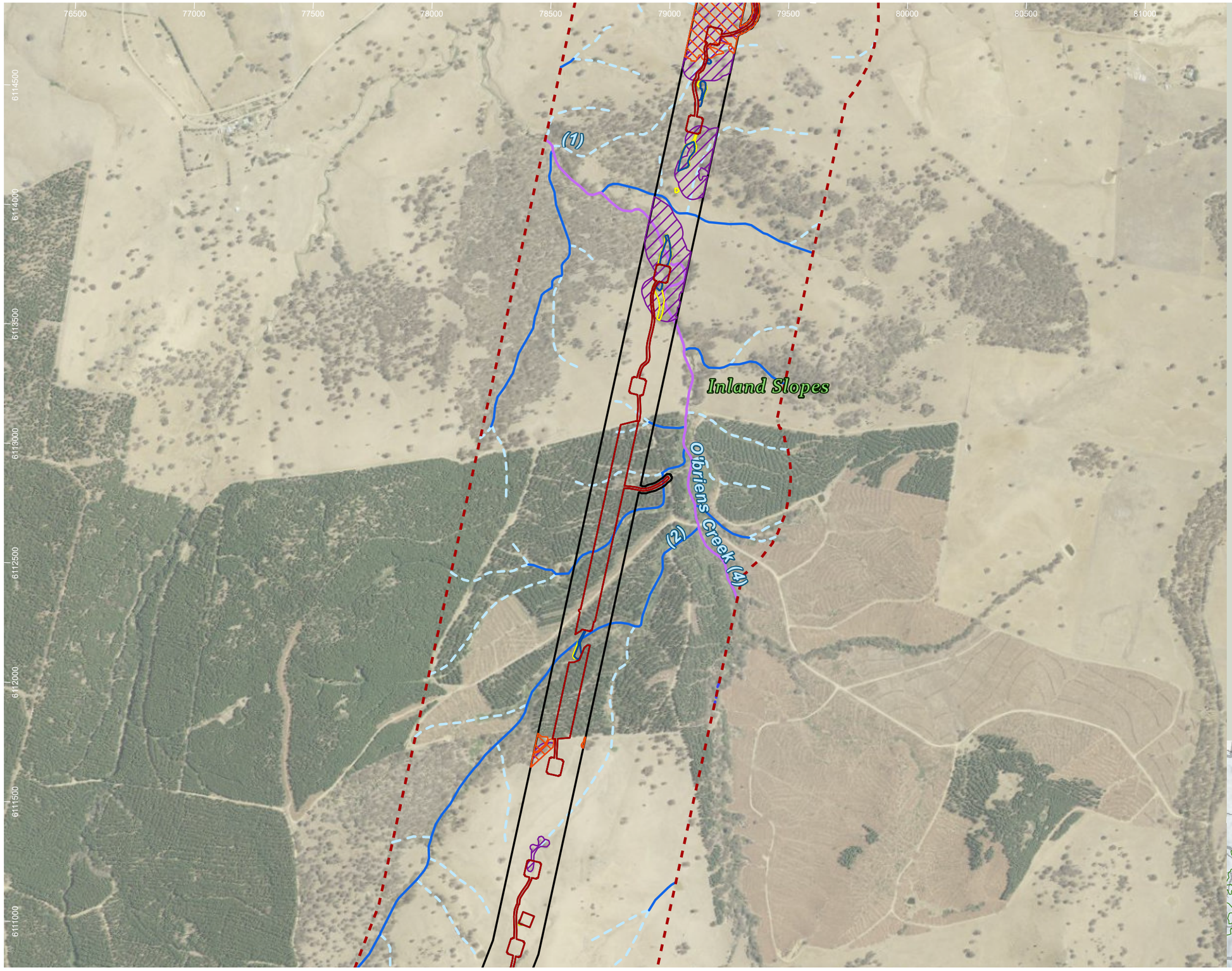
Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\Folder\Niche\6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

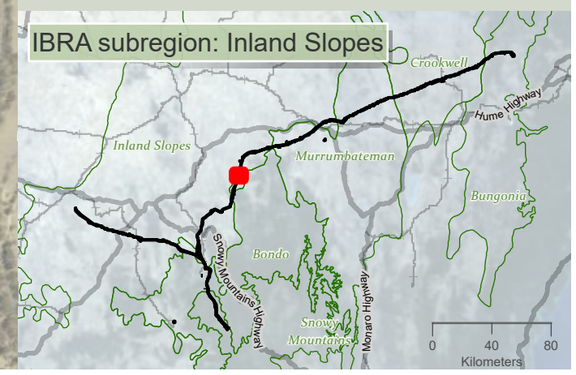
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 55

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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77000 77500 78000 78500 79000 79500 80000 80500 81000 81500

6118000 6117500 6117000 6116500 6116000 6115500 6115000 6114500

Inland Slopes

Cart Road Creek (3)

(1) (2) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

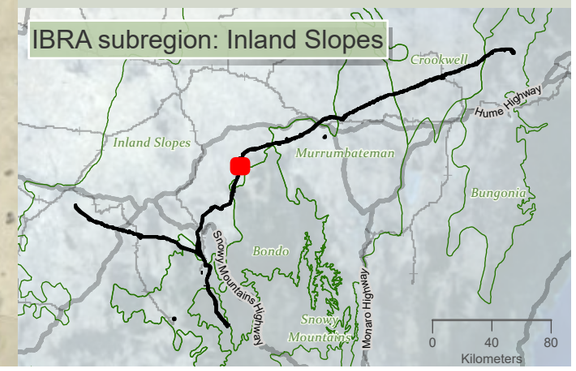
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 56

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Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

77500 78000 78500 79000 79500 80000 80500 81000 81500 82000

6121500 6121000 6120500 6120000 6119500 6119000 6118500 6118000

(1)

Oak Creek (5)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

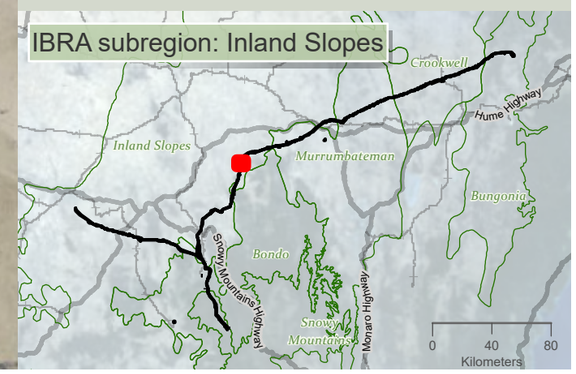
- 1
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 57

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

79000 79500 80000 80500 81000 81500 82000 82500 83000

6124500 6124000 6123500 6123000 6122500 6122000 6121500

Inland Slopes

(1)

(2)

Yellow Clay Creek (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

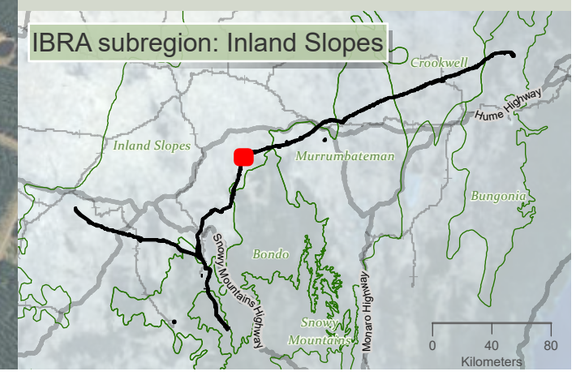
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

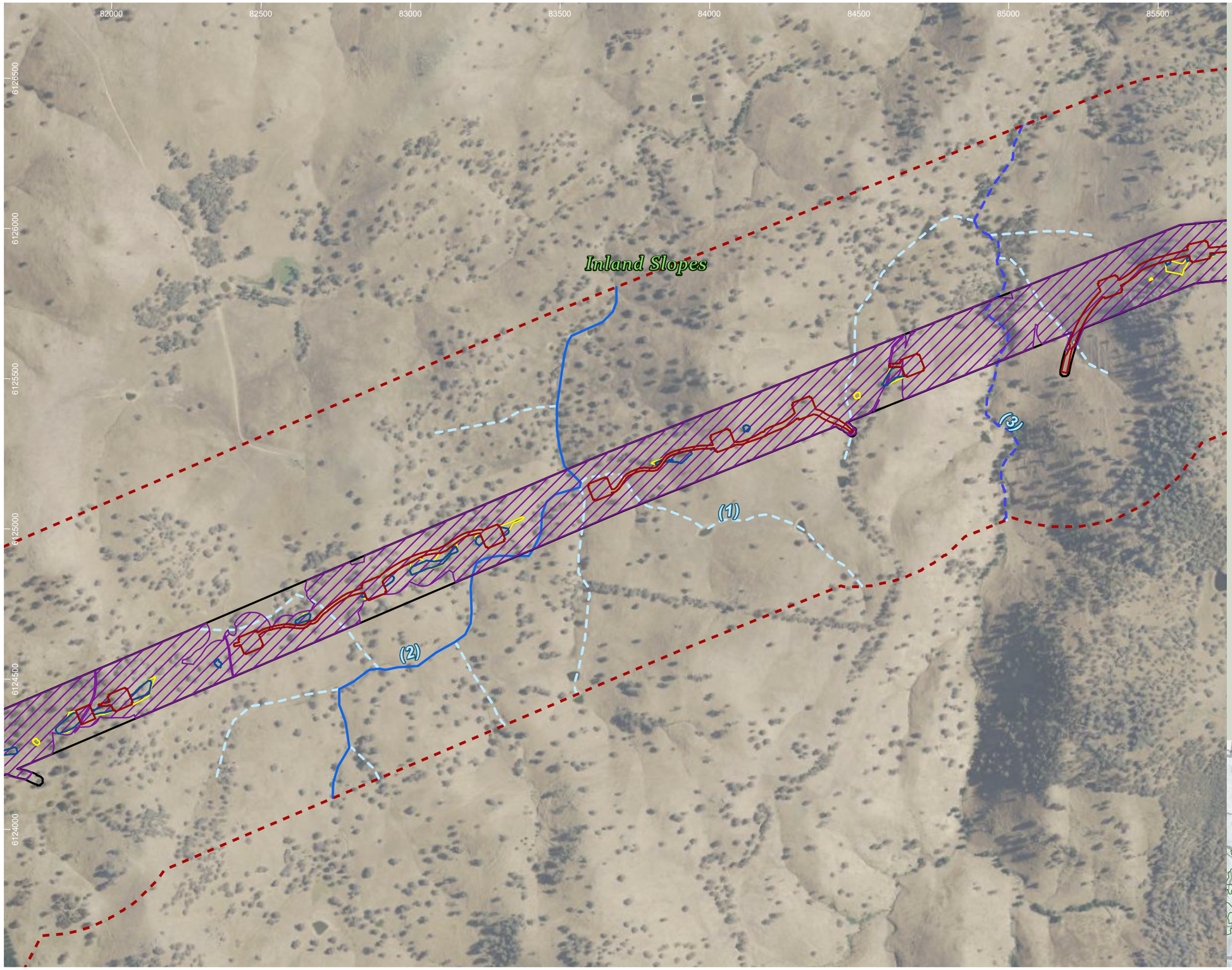
Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 58

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

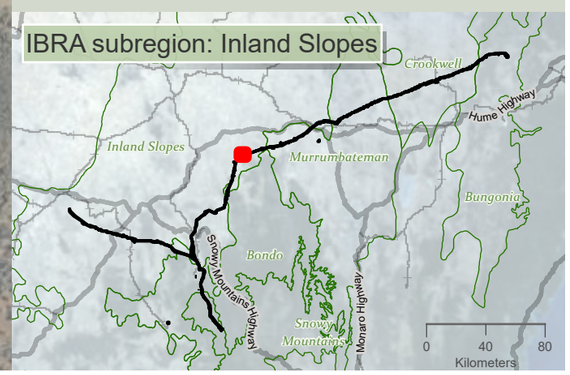
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 59

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\FolderNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

85500 86000 86500 87000 87500 88000 88500

6127500 6127000 6126500 6126000 6125500 6125000

Rocky Creek (2)

Inland Slopes

(1)

(2)

Dicks Gully (2)

(3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

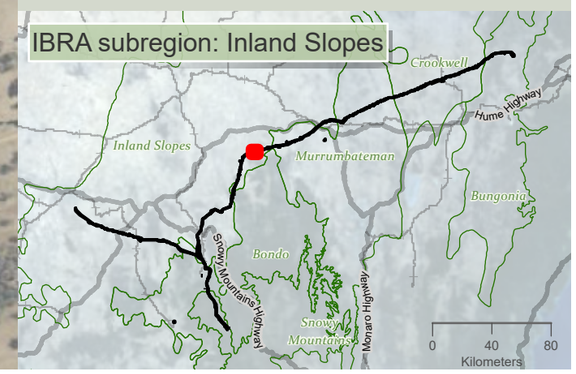
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 60

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Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

88500 89000 89500 90000 90500 91000 91500 92000

6128500 6128000 6127500 6127000 6126500 6126000 6125500

Inland Slopes

(1)

(2)

Oaky Creek (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

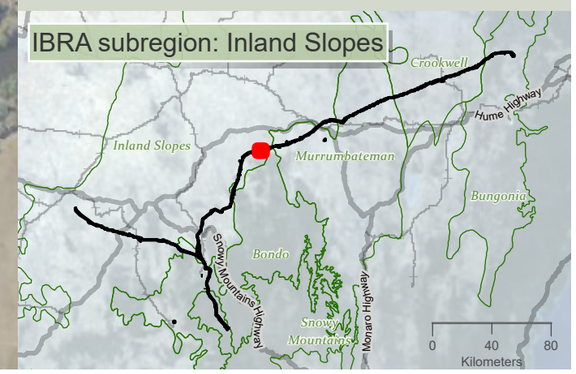
- 1
- 2
- 3
- 4
- 9

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 61

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Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

92000 92500 93000 93500 94000 94500 95000 95500

6130000 6129500 6129000 6128500 6128000 6127500 6127000

Oak Creek (4)

Murrumbidgee River (9)

(1)

(2)

Inland Slopes

Bondo

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

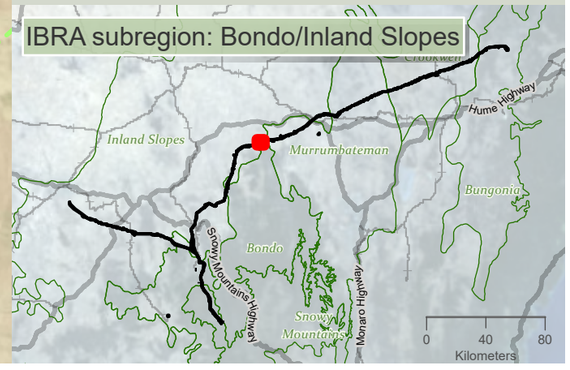
- 1
- 2
- 3
- 4
- 9

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 62

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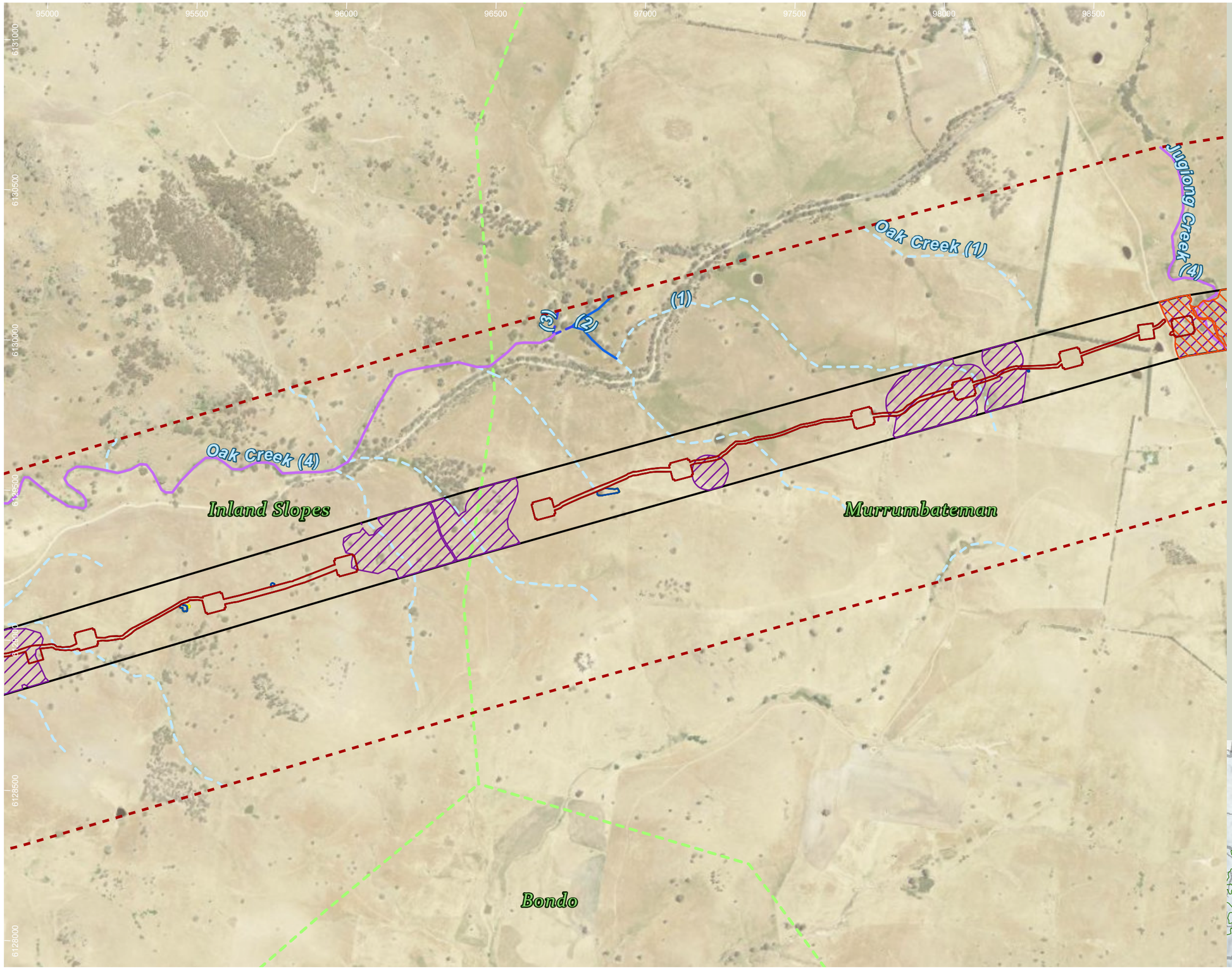


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

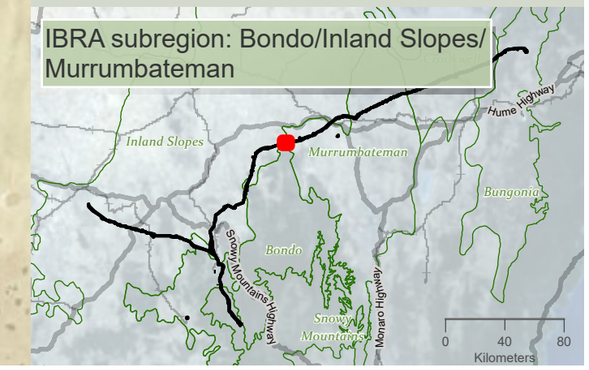
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 63

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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98500 99000 99500 100000 100500 101000 101500 102000

6131000 6130500 6130000 6129500 6129000 6128500

(1)

(2)

Jugiong Creek (4)

Murrumbateman

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

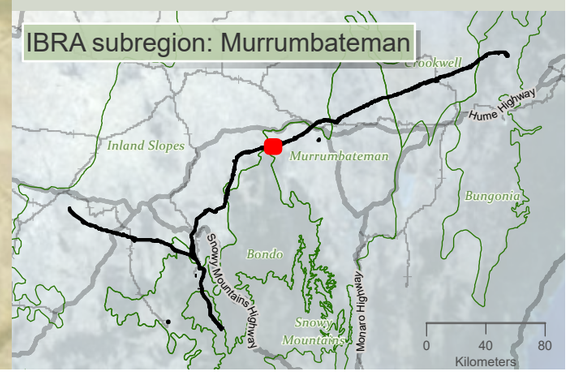
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 64

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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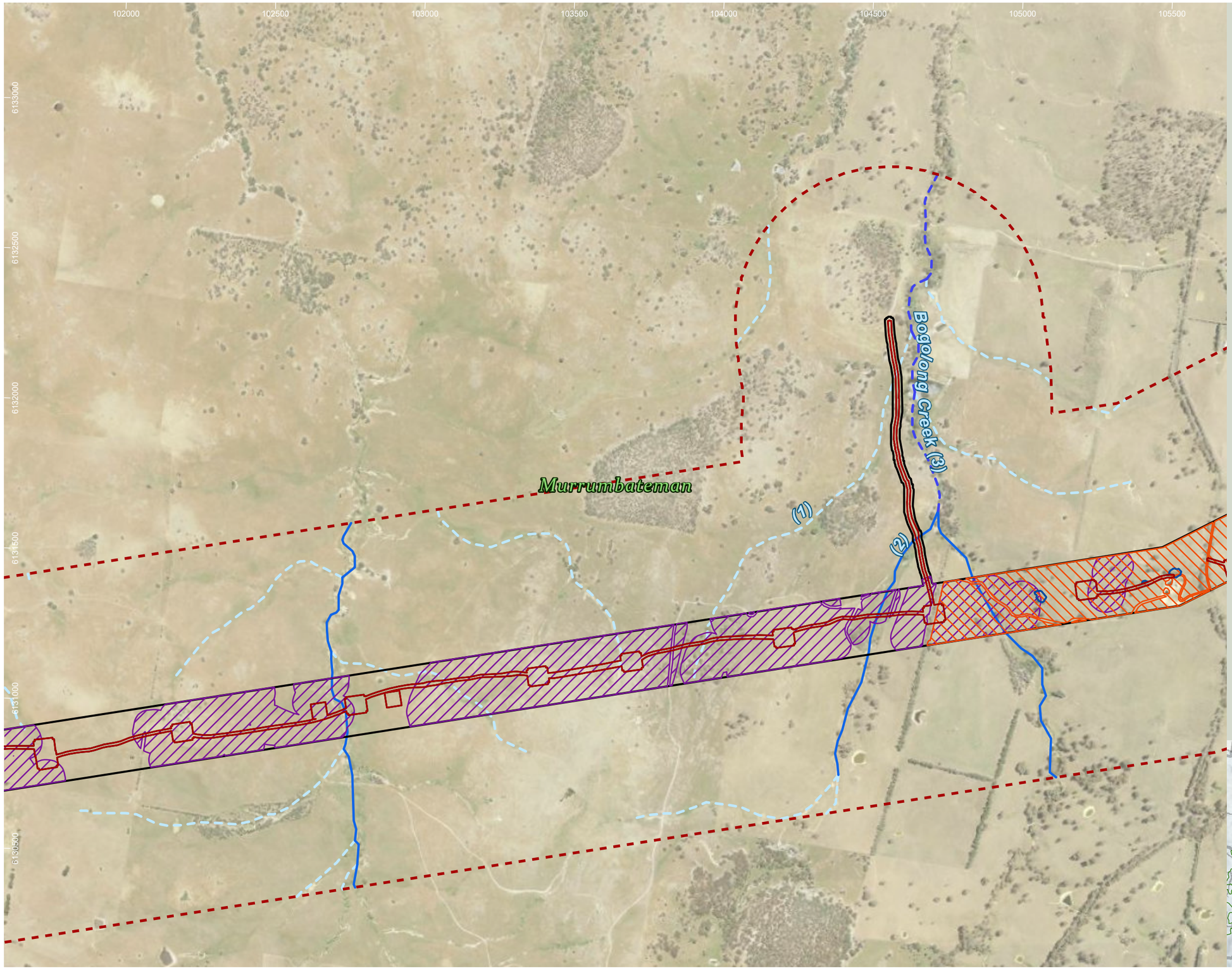


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

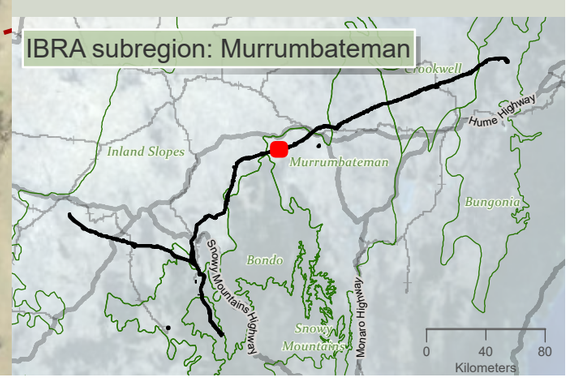
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 65

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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105000 105500 106000 106500 107000 107500 108000 108500

6133500 6133000 6132500 6132000 6131500 6131000

Murrumbateman

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

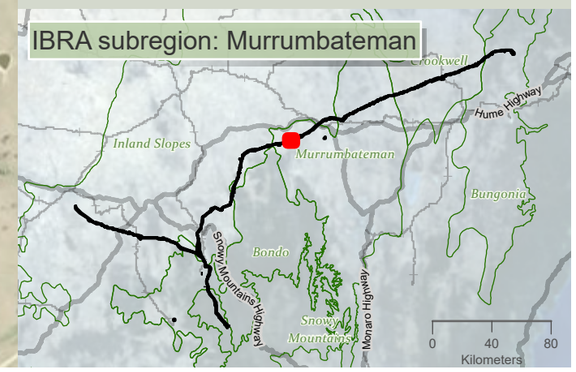
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 66

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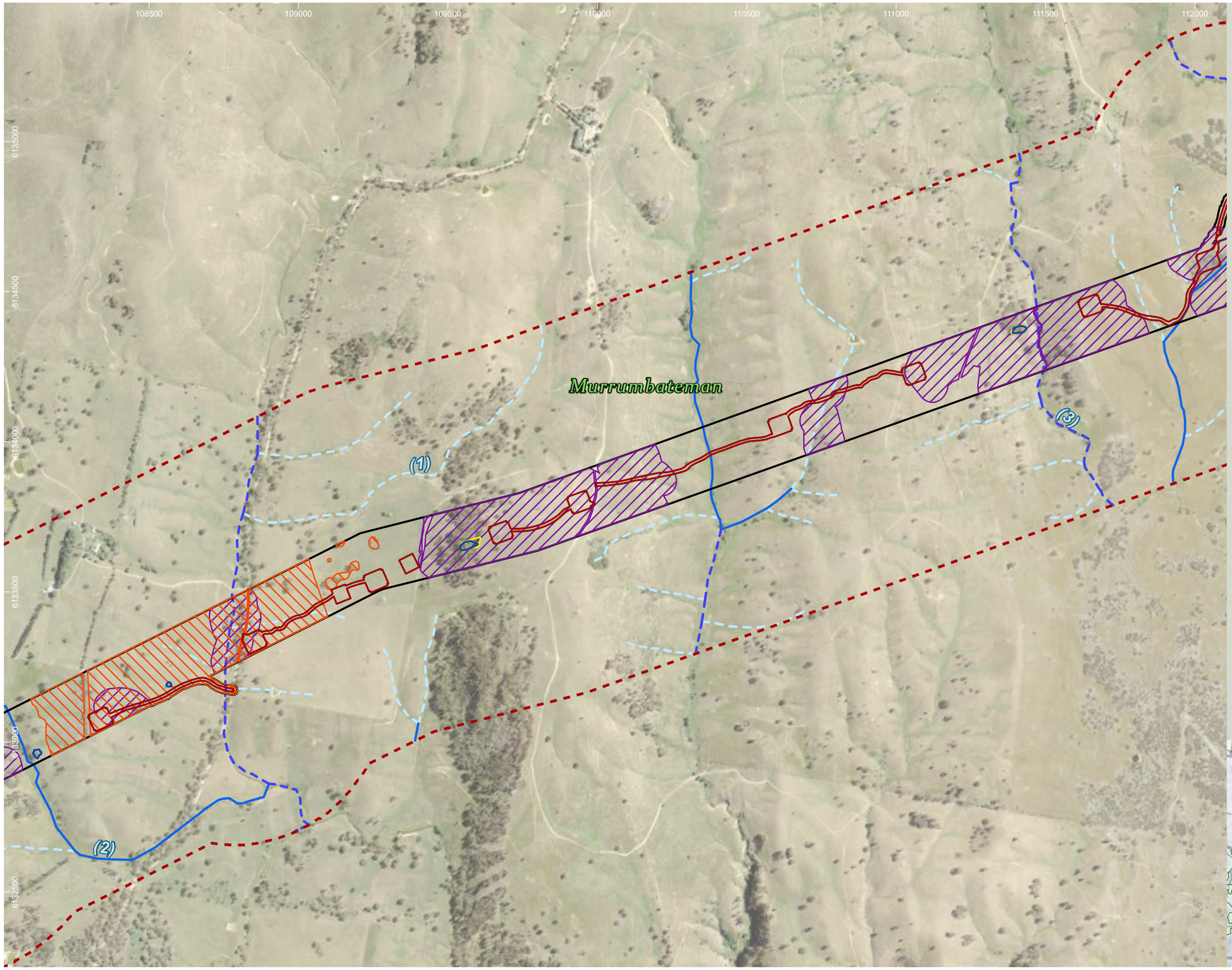


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

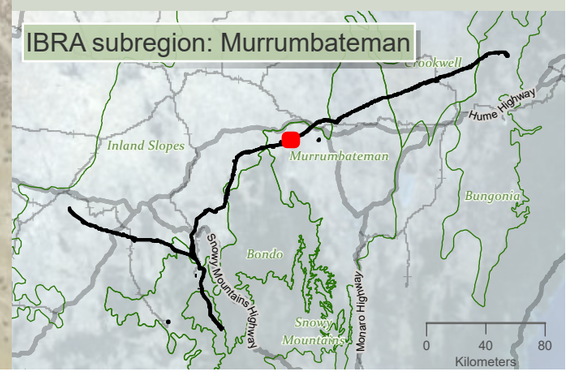
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 67

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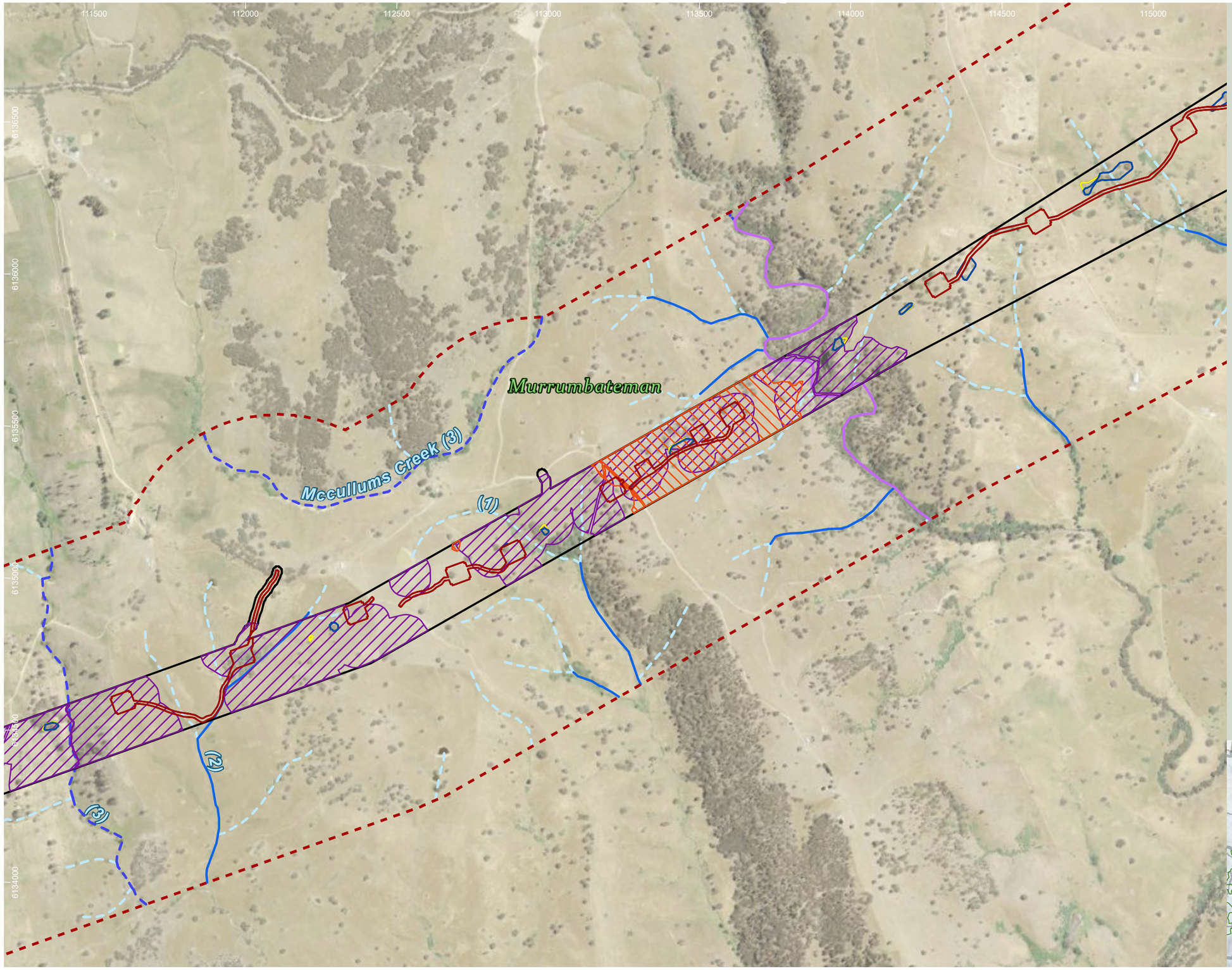


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

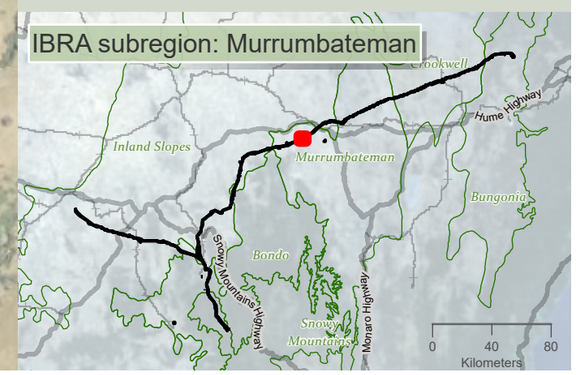
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 68

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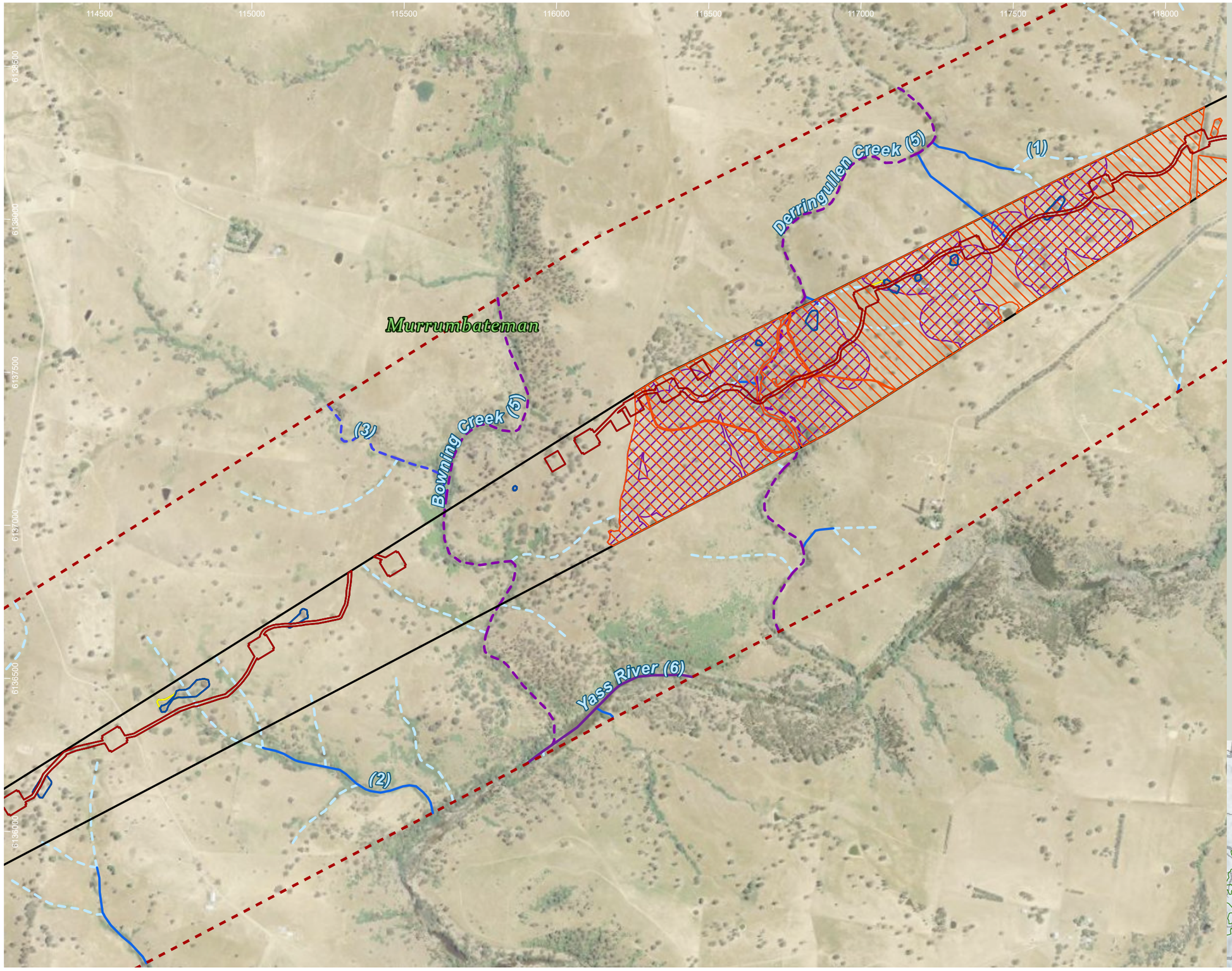


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

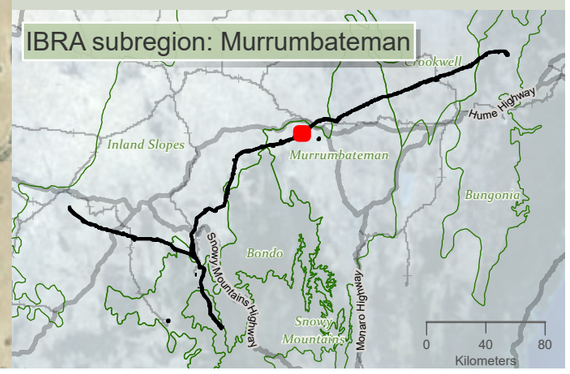
- 1
- 2
- 3
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 69

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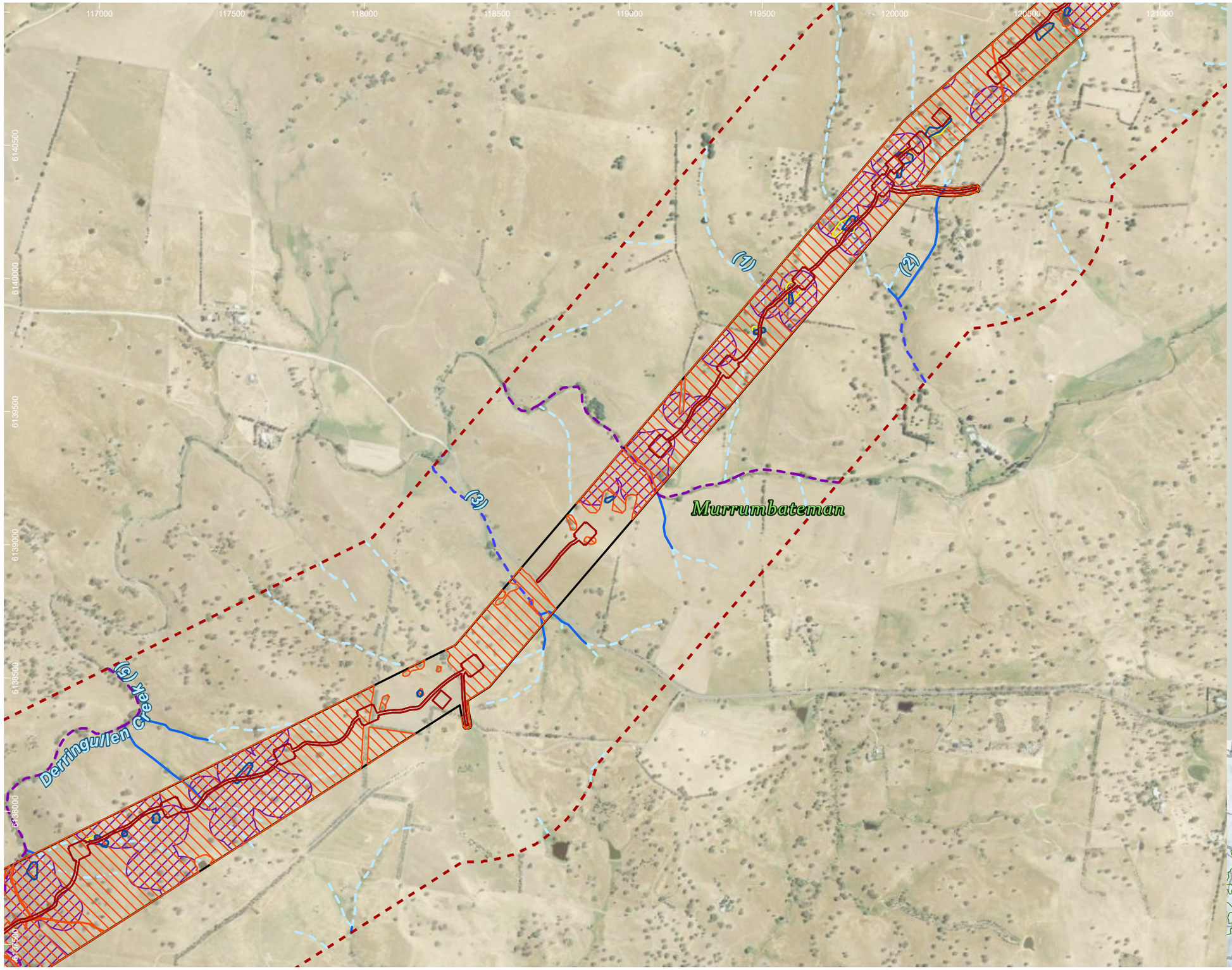


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

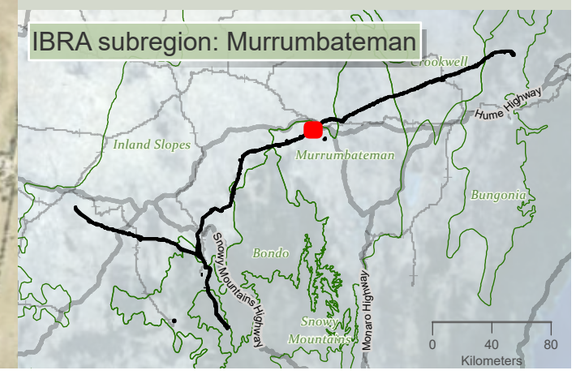
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



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niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 70

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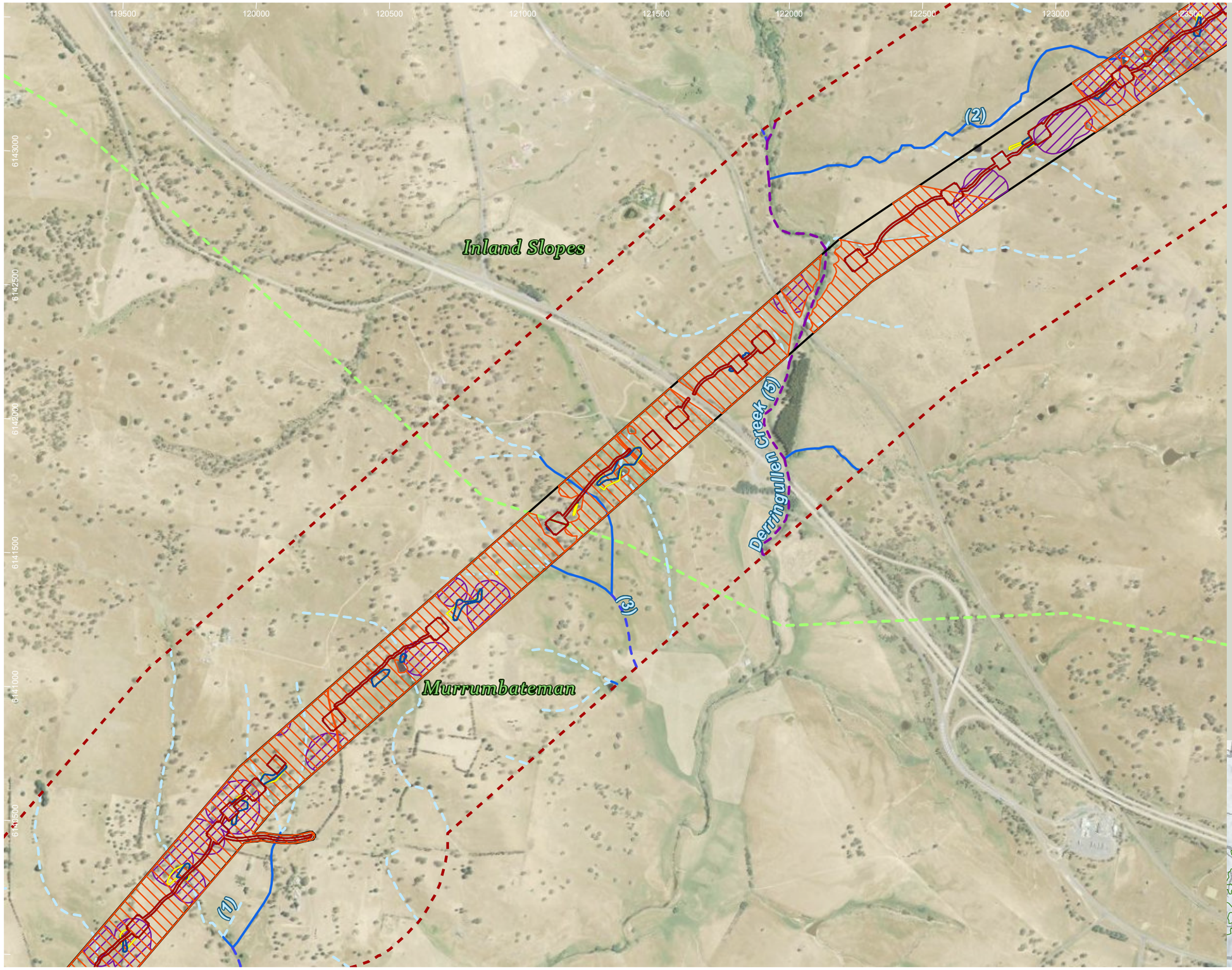


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

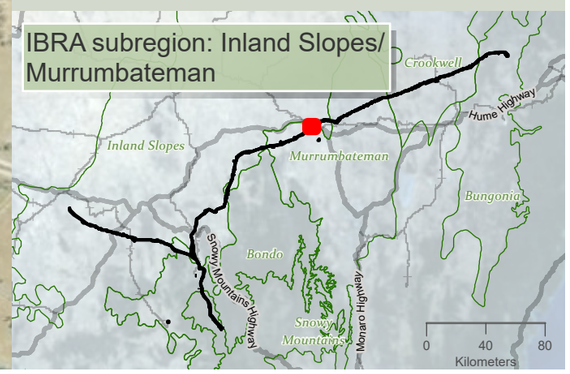
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



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niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 71

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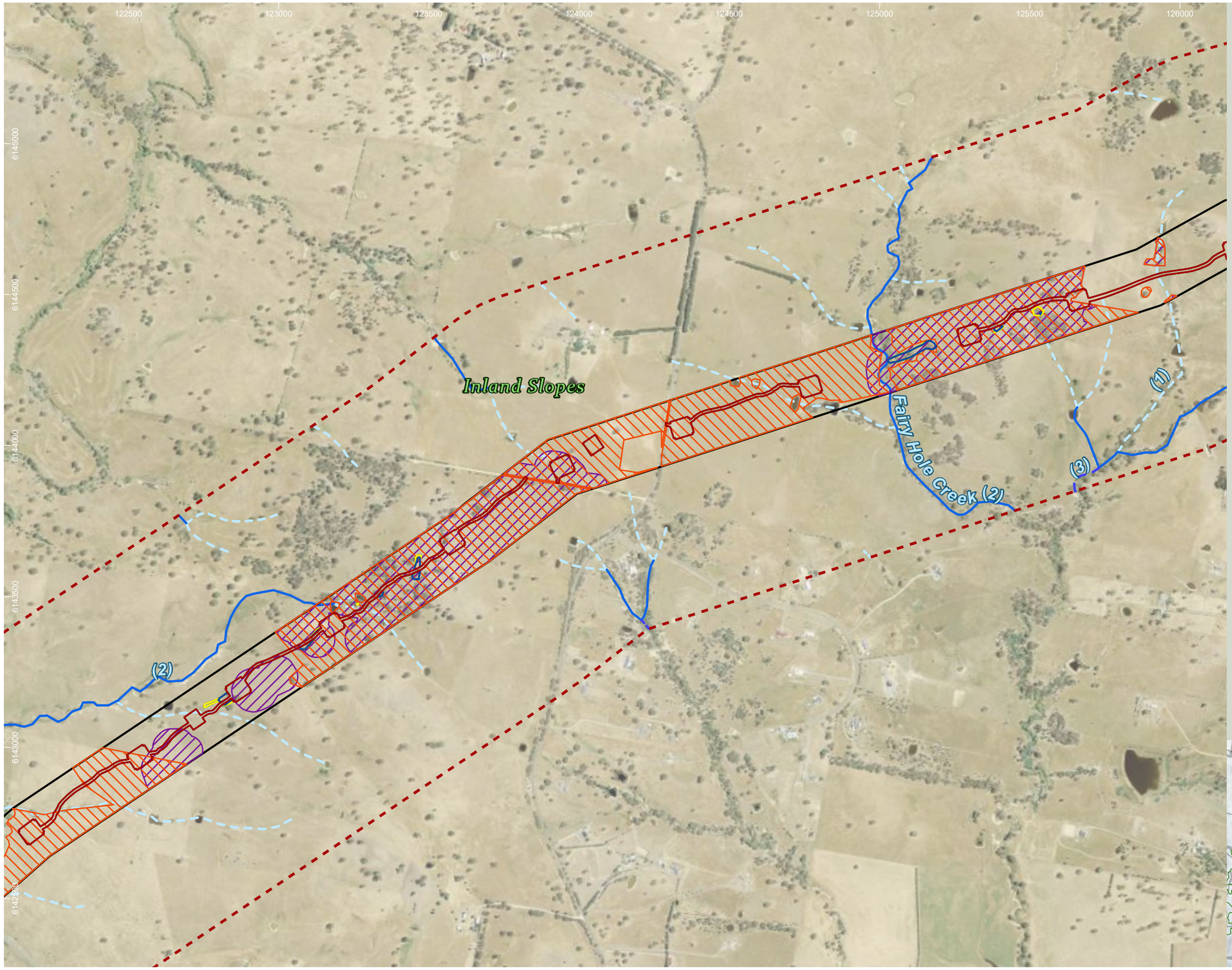


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

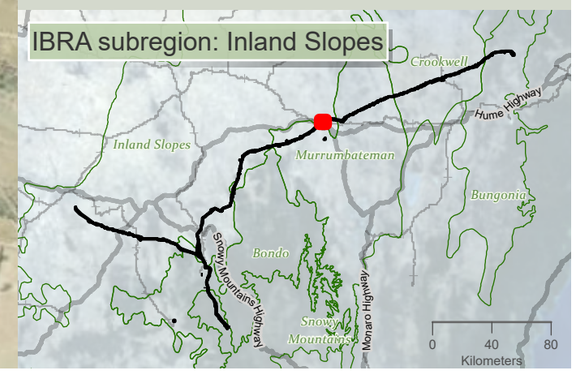
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 73

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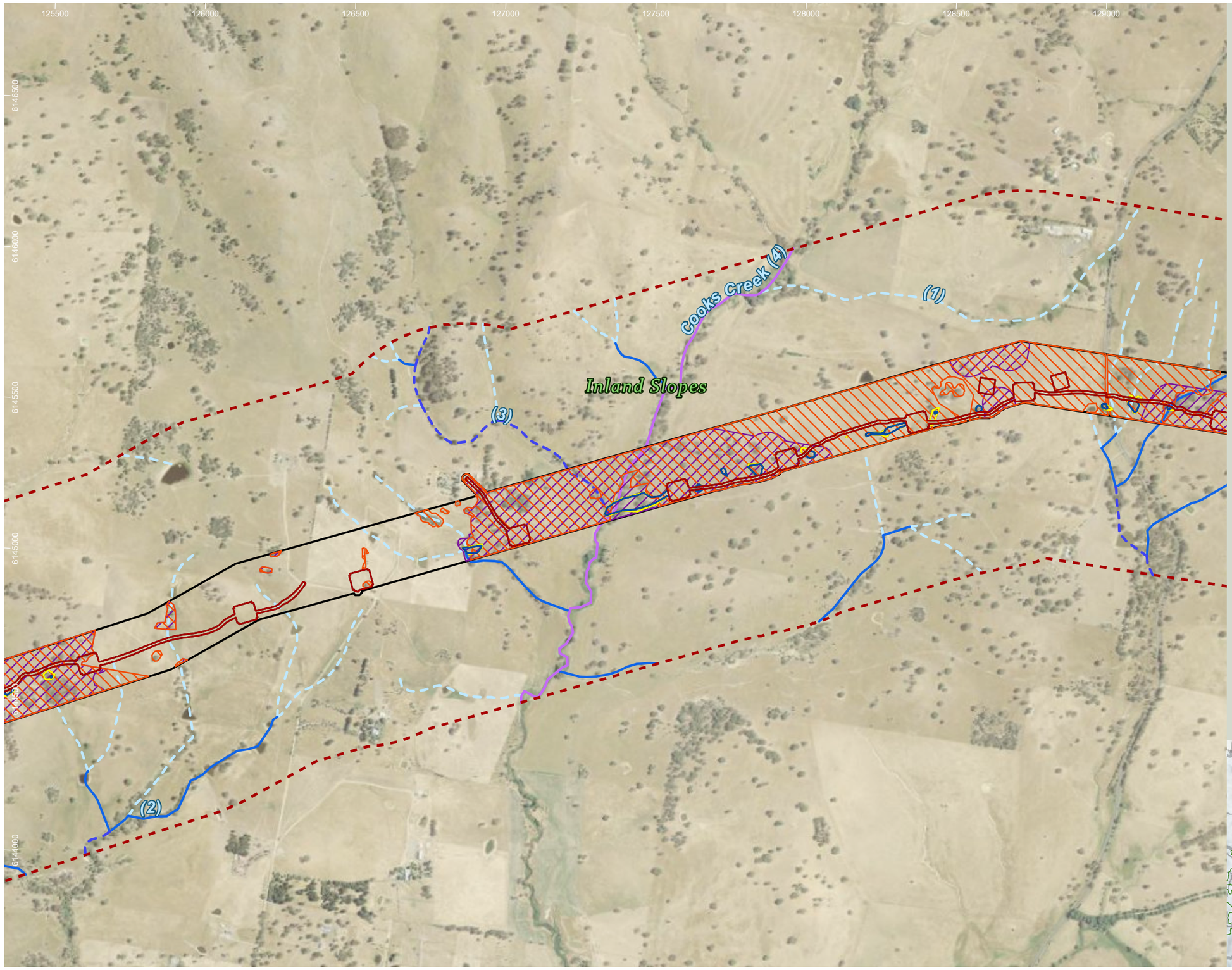


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

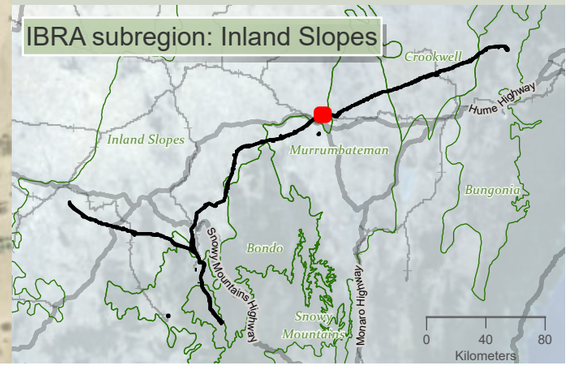
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



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niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 74

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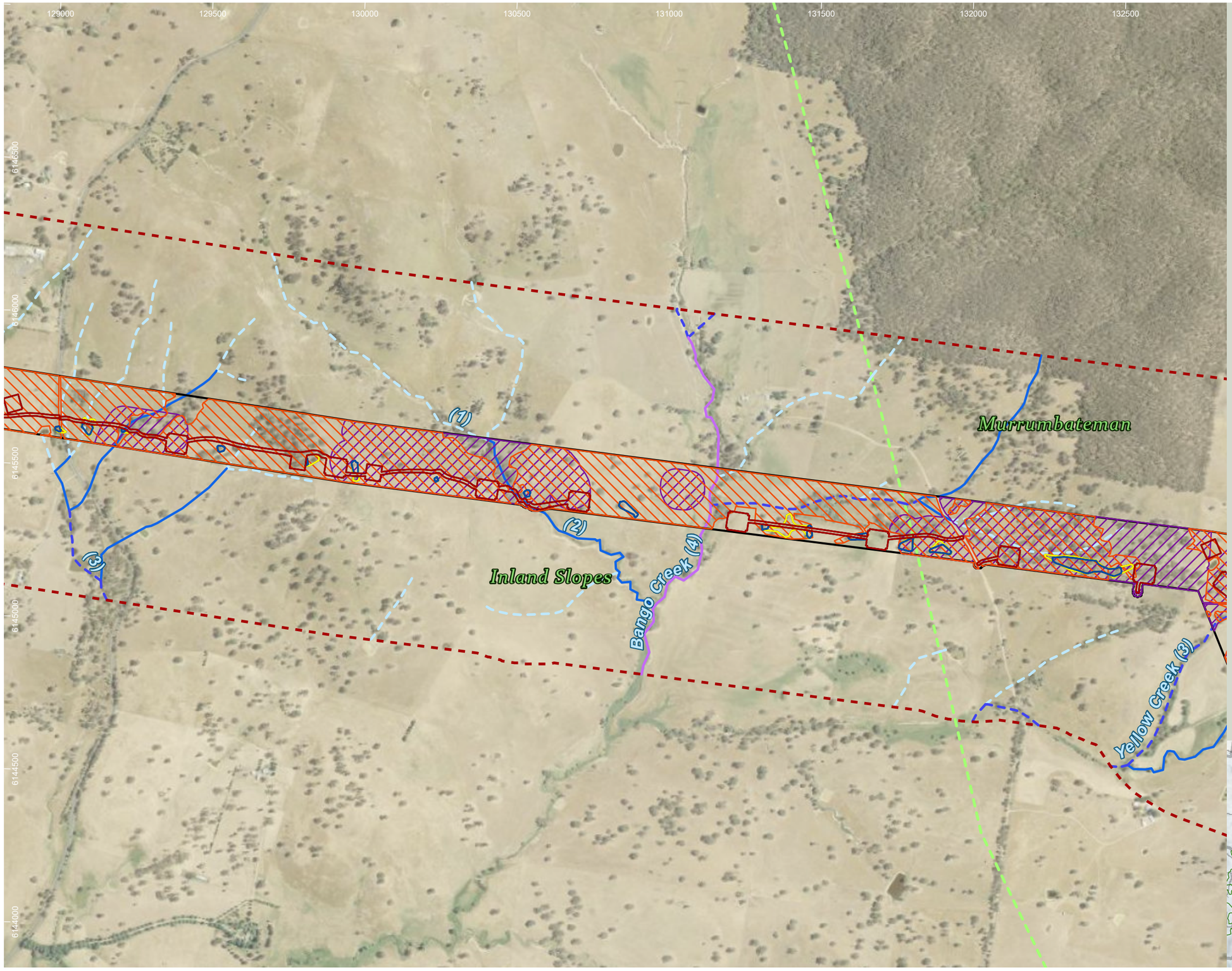


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

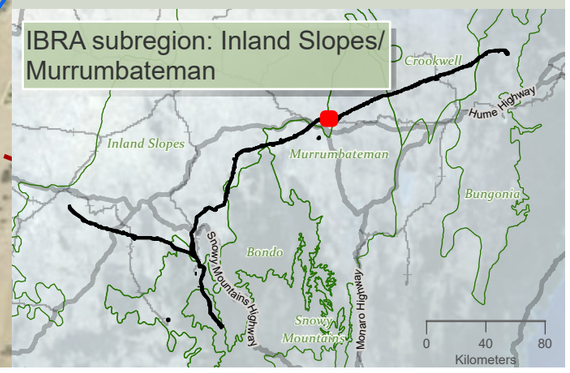
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 75

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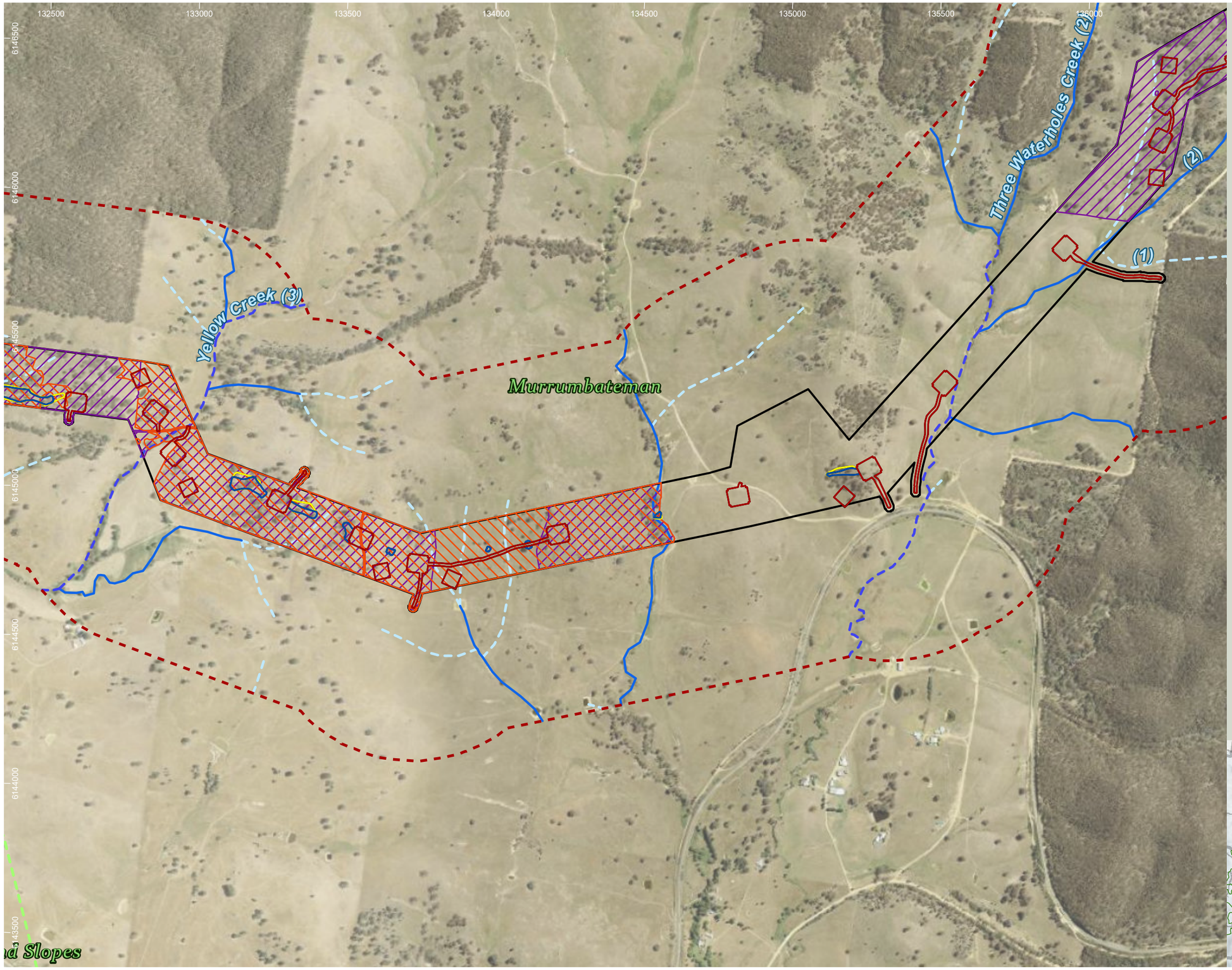


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

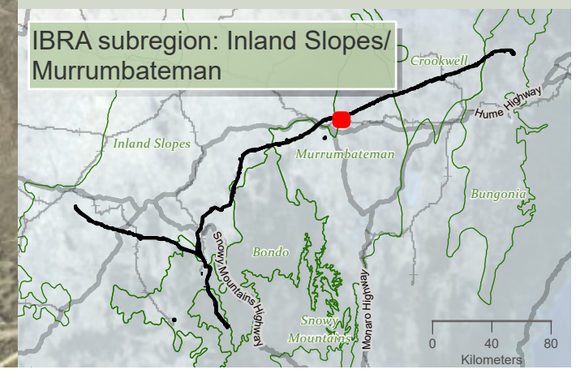
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 76

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski: Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

135500 136000 136500 137000 137500 138000 138500 139000

6148500 6148000 6147500 6147000 6146500 6146000 6145500

Three Waterholes Creek (2)

Catherines Creek (3)

Murrumbateman

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

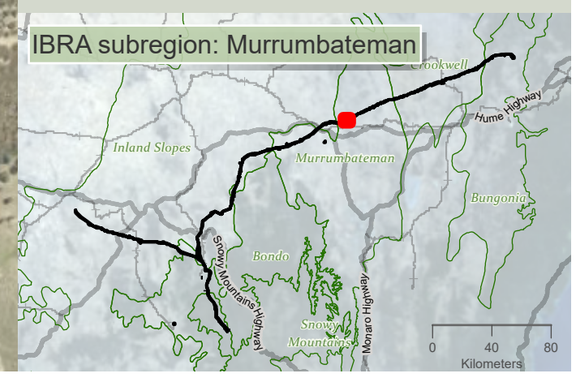
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

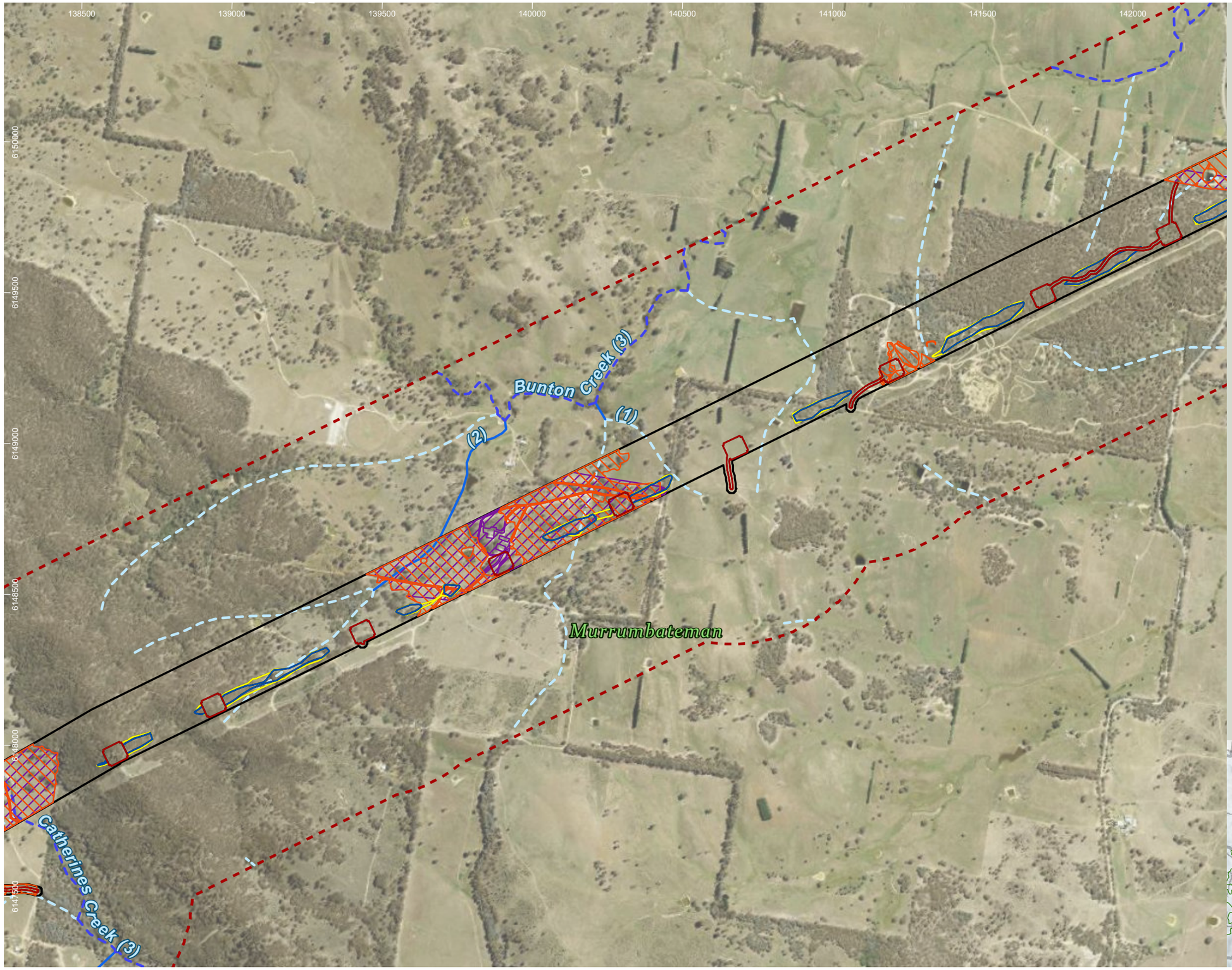
Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 77

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

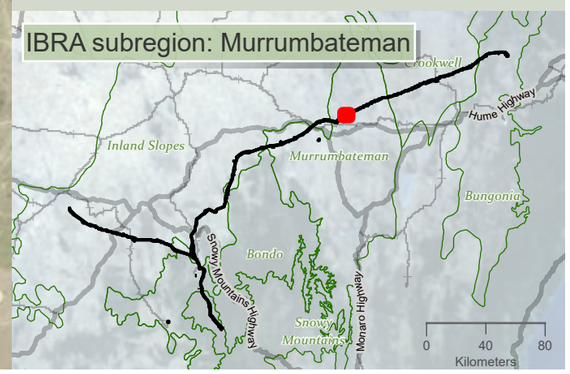
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 78

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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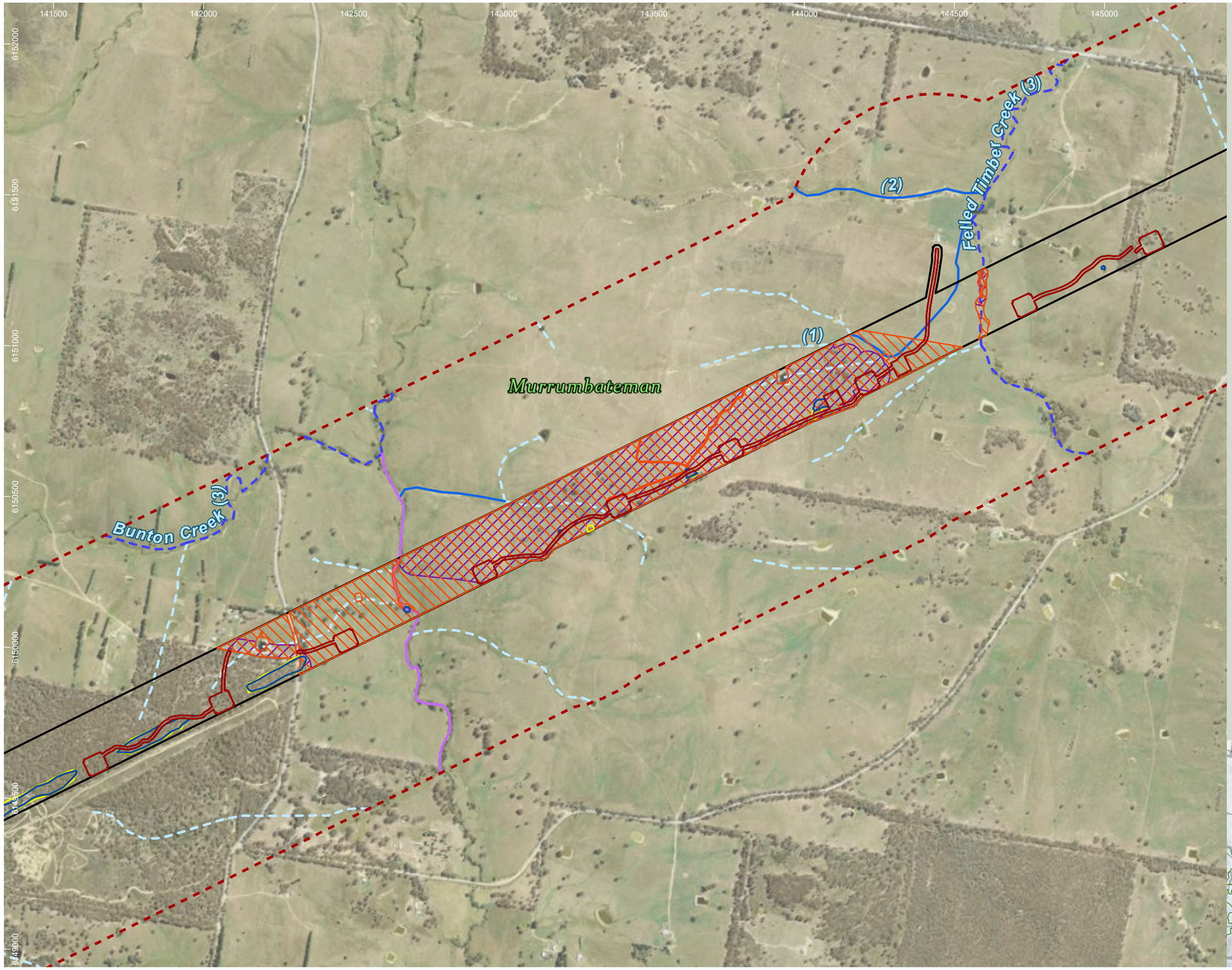


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

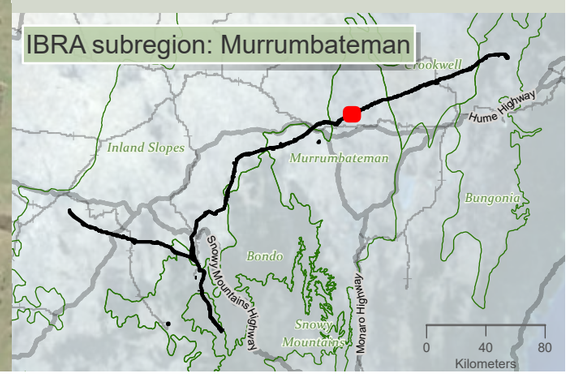
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 79

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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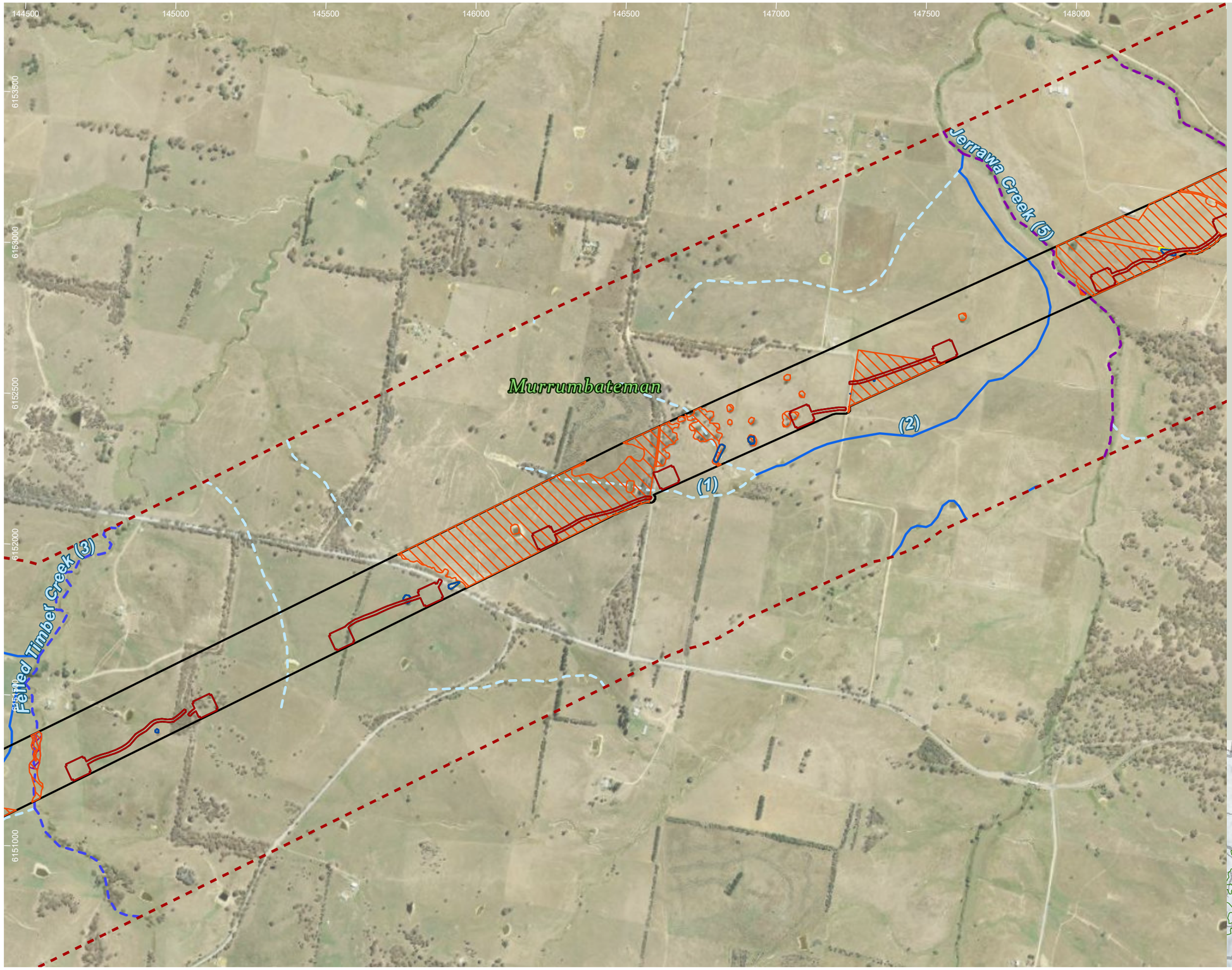


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

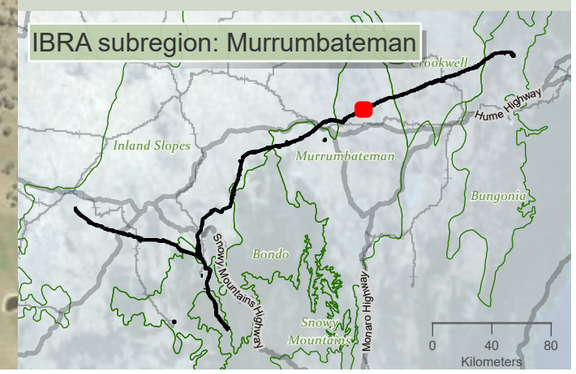
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 80

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148000 148500 149000 149500 150000 150500 151000 151500

6155000 6154500 6154000 6153500 6153000 6152500

Murrumbateman

Sams Creek (2)

Jerrawa Creek (5)

(2)

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

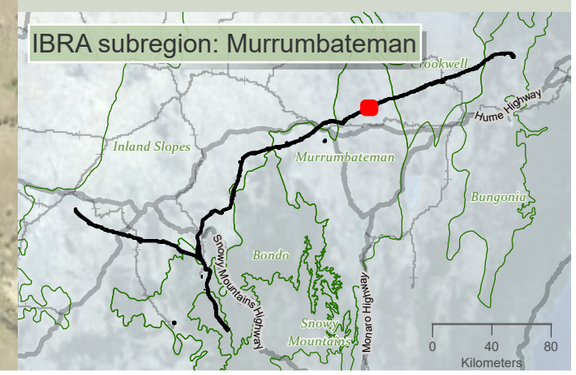
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 81

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

151000 151500 152000 152500 153000 153500 154000 154500

6156500 6156000 6155500 6155000 6154500 6154000

(1)

Merrill Creek (4)

Lachlan River (6)

Murrumbateman

Dowlings Creek (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

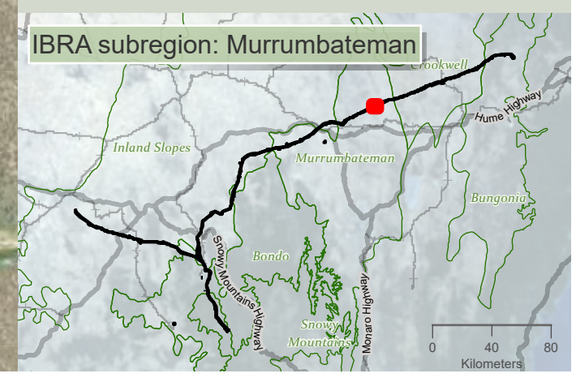
- 1
- 2
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Delma impar



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

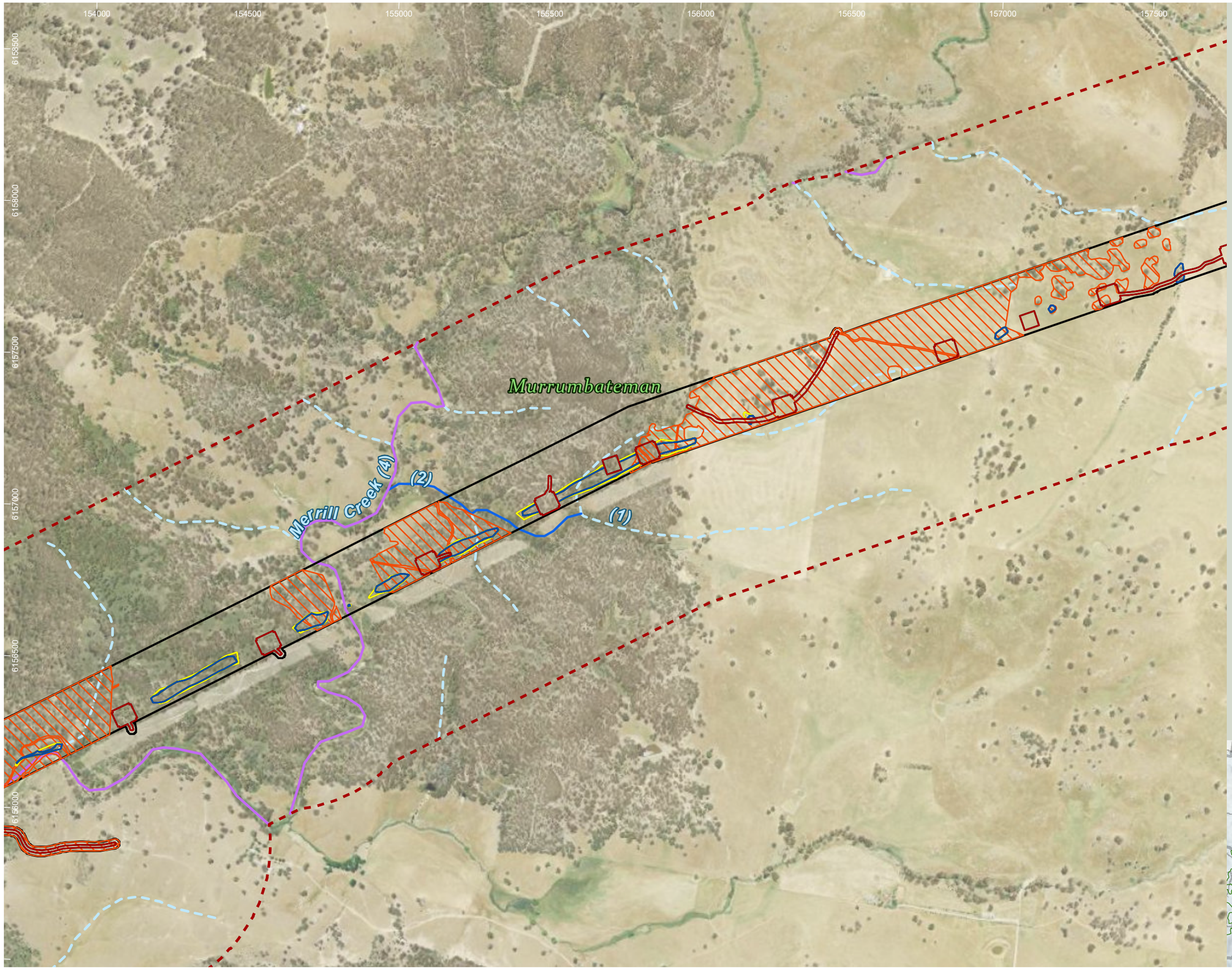
Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 82

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

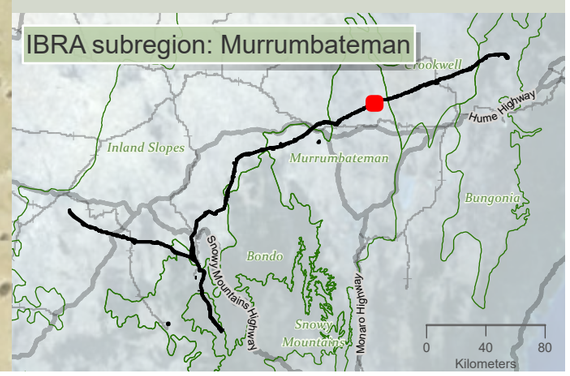
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Delma impar



niche Environment and Heritage

0 N 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

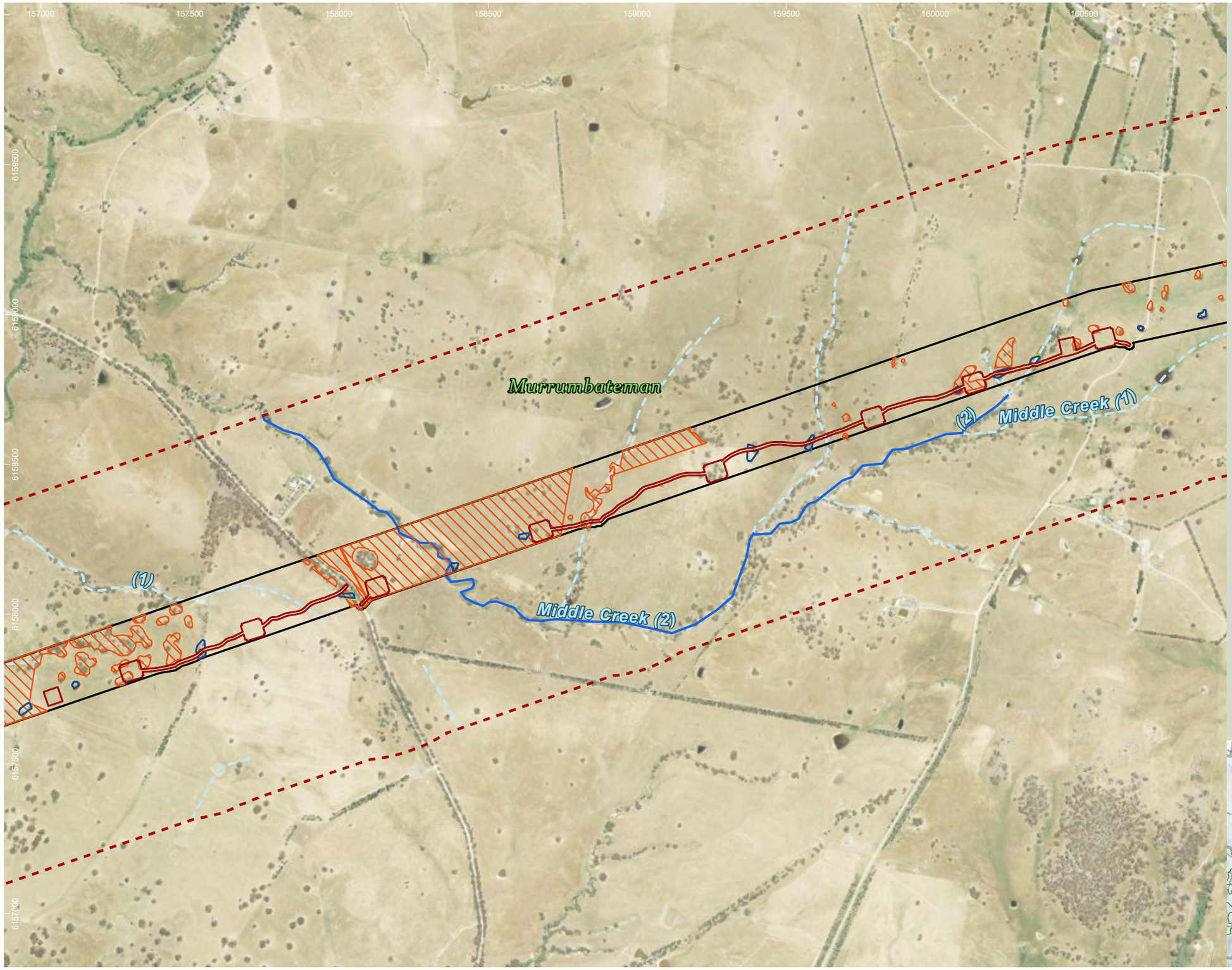
Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 83

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699_Humelink_BDAR_Stage 2 Part B.aprx - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

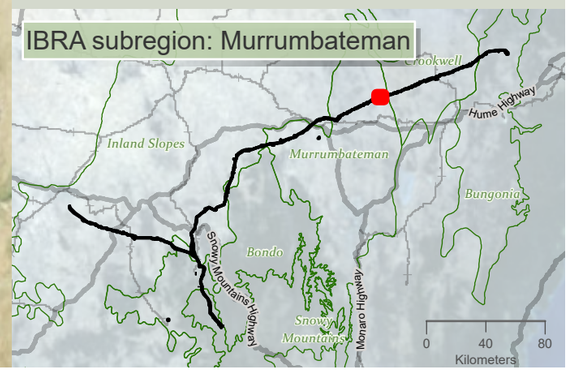
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Delma impar



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDrive\Syne\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 84

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

160500 161000 161500 162000 162500 163000 163500 164000

6161000 6160500 6160000 6159500 6159000 6158500 6158000

Crookwell

(2)

(1)

Murrumbateman

Merrill Creek (2)

Middle Creek (1)

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

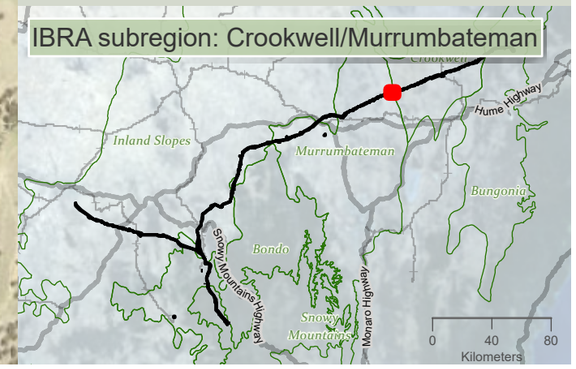
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

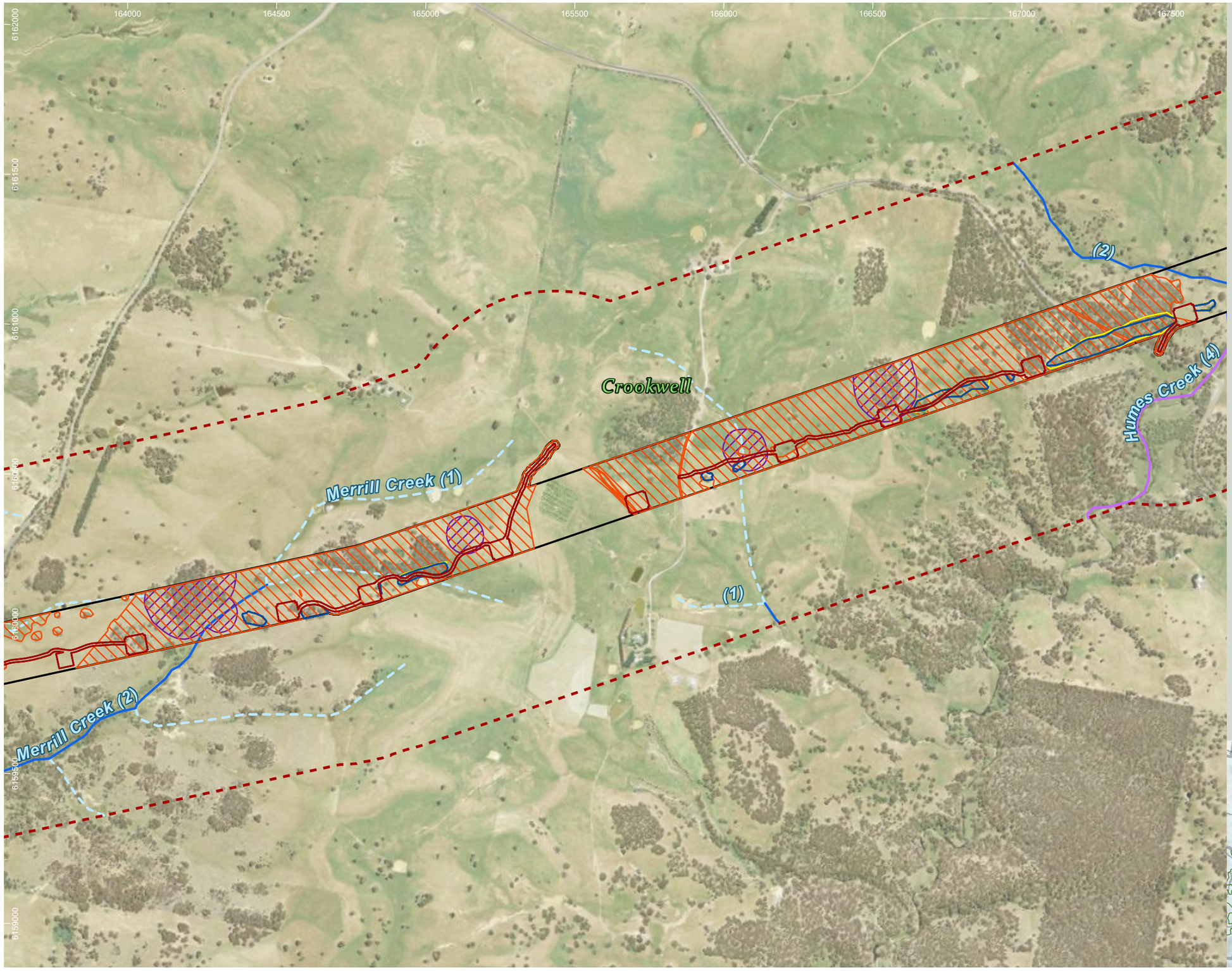
Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 85

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDrive\Syne\Folder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

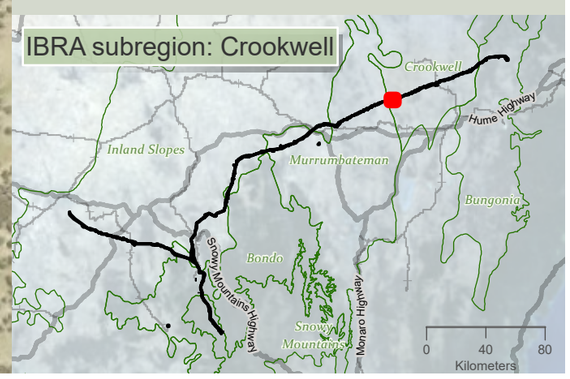
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 86

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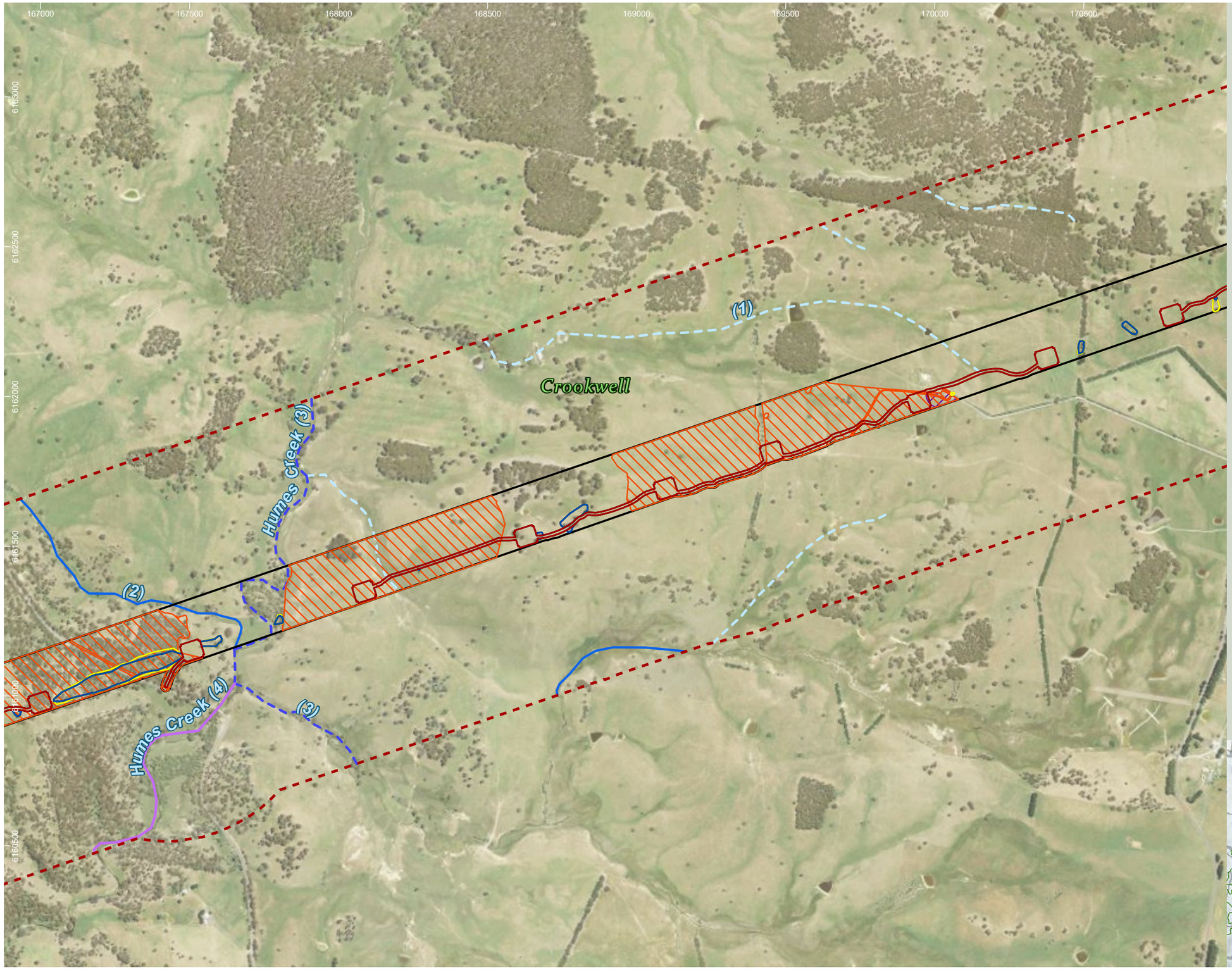


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

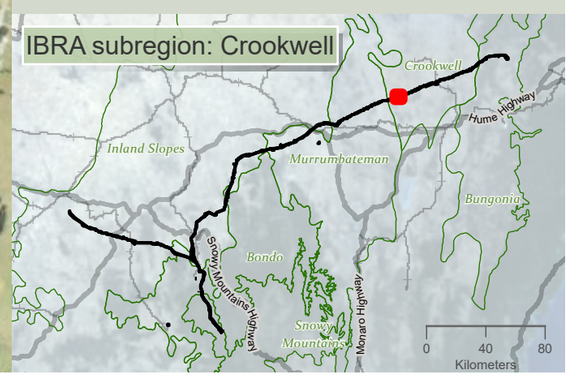
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 87

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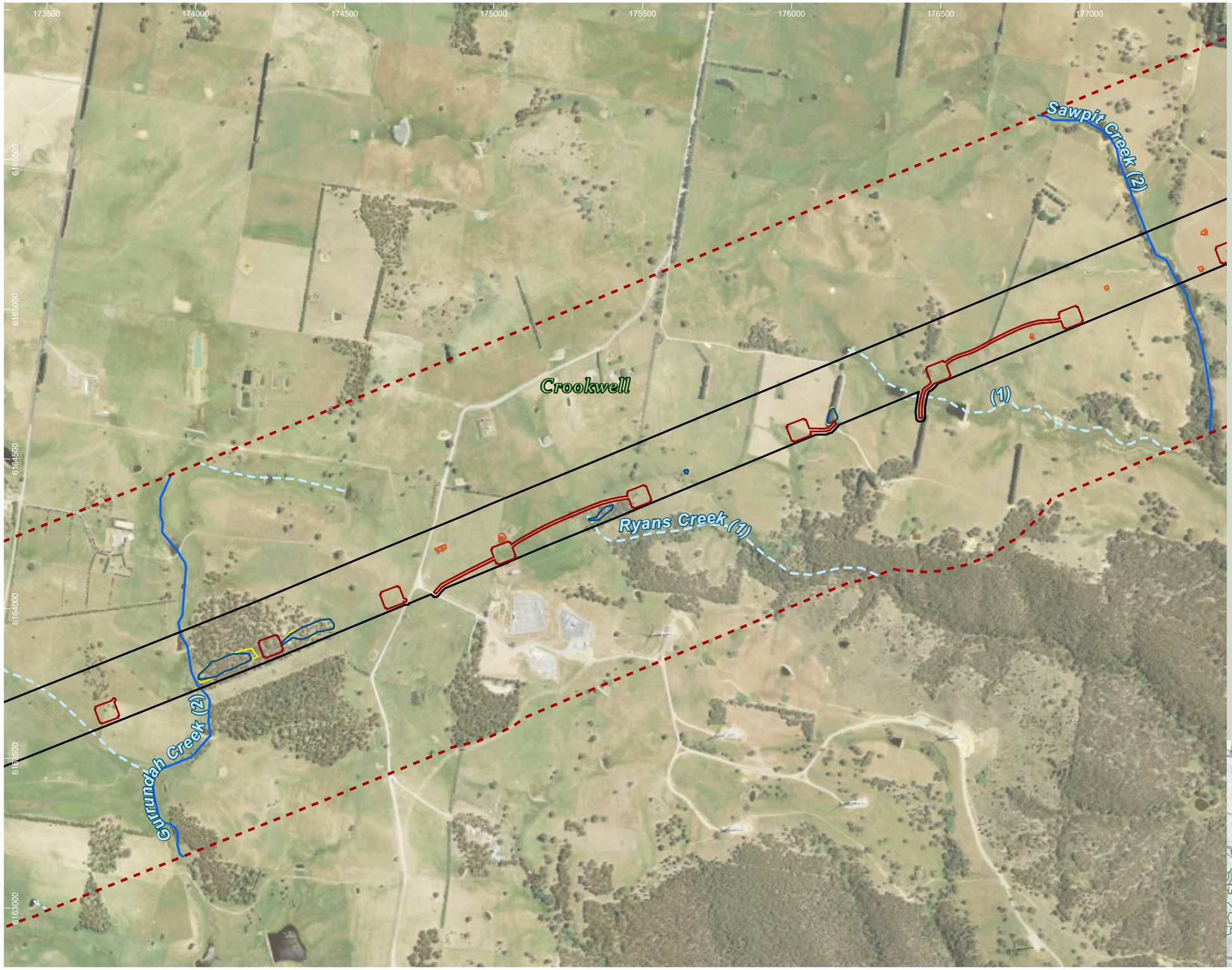


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

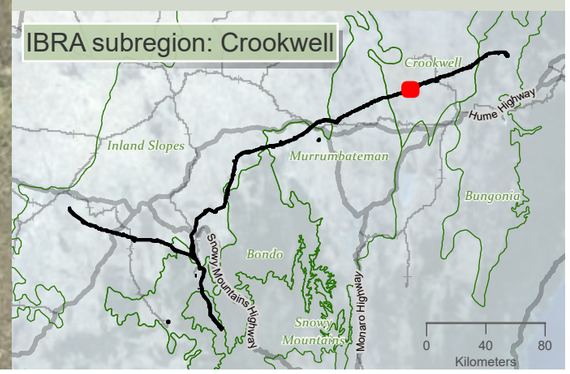
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 89

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

177000 177500 178000 178500 179000 179500 180000 180500

6167500 6167000 6166500 6166000 6165500 6165000 6164500

Crookwell

(1)

(2)

Kialla Creek (3)

Sawpit Creek (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

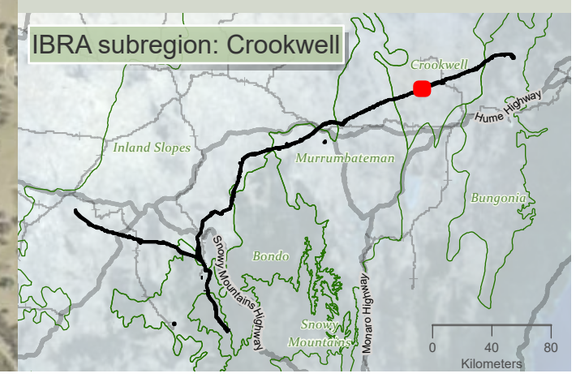
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 90

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment\EC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

180000 180500 181000 181500 182000 182500 183000 183500

6169000 6168500 6168000 6167500 6167000 6166500

Back Creek (2)

Back Creek (3)

Crookwell

(1)

(2)

Kialla Creek (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

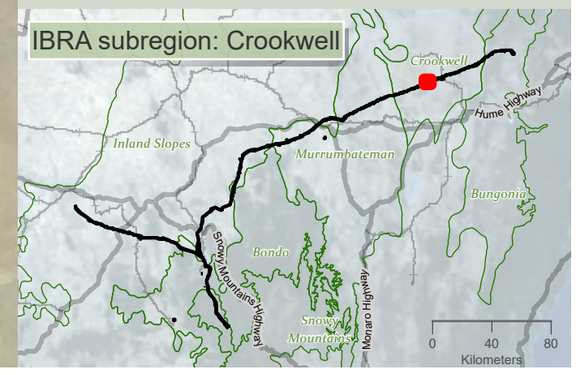
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 91

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699_Humelink_BDAR_Stage 2 Part B.aprx

183000 183500 184000 184500 185000 185500 186000 186500

6170000 6169500 6169000 6168500 6168000 6167500

First Creek (3)

Crookwell

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

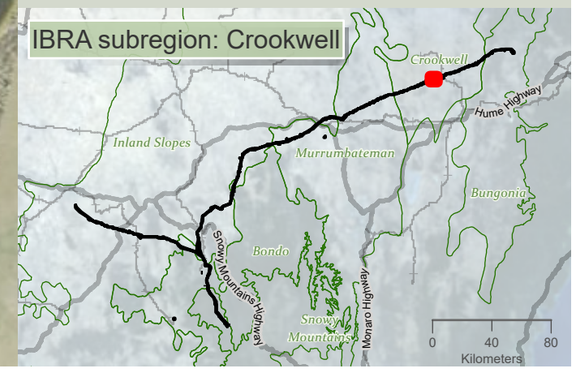
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 92

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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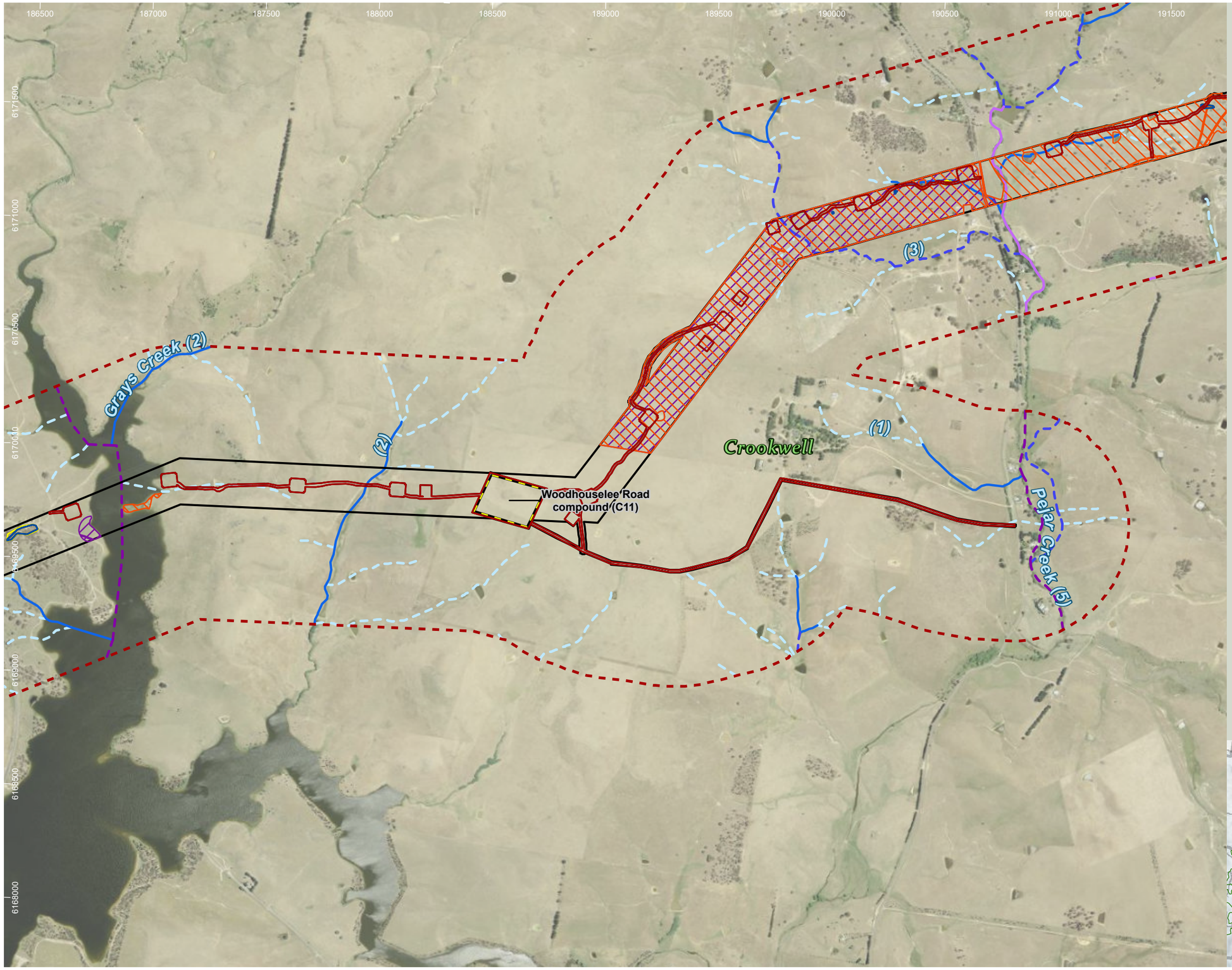


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

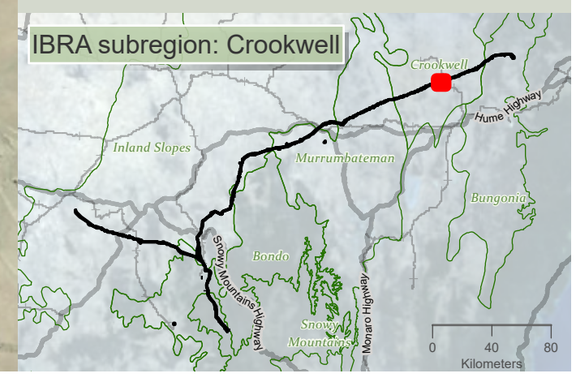
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 93

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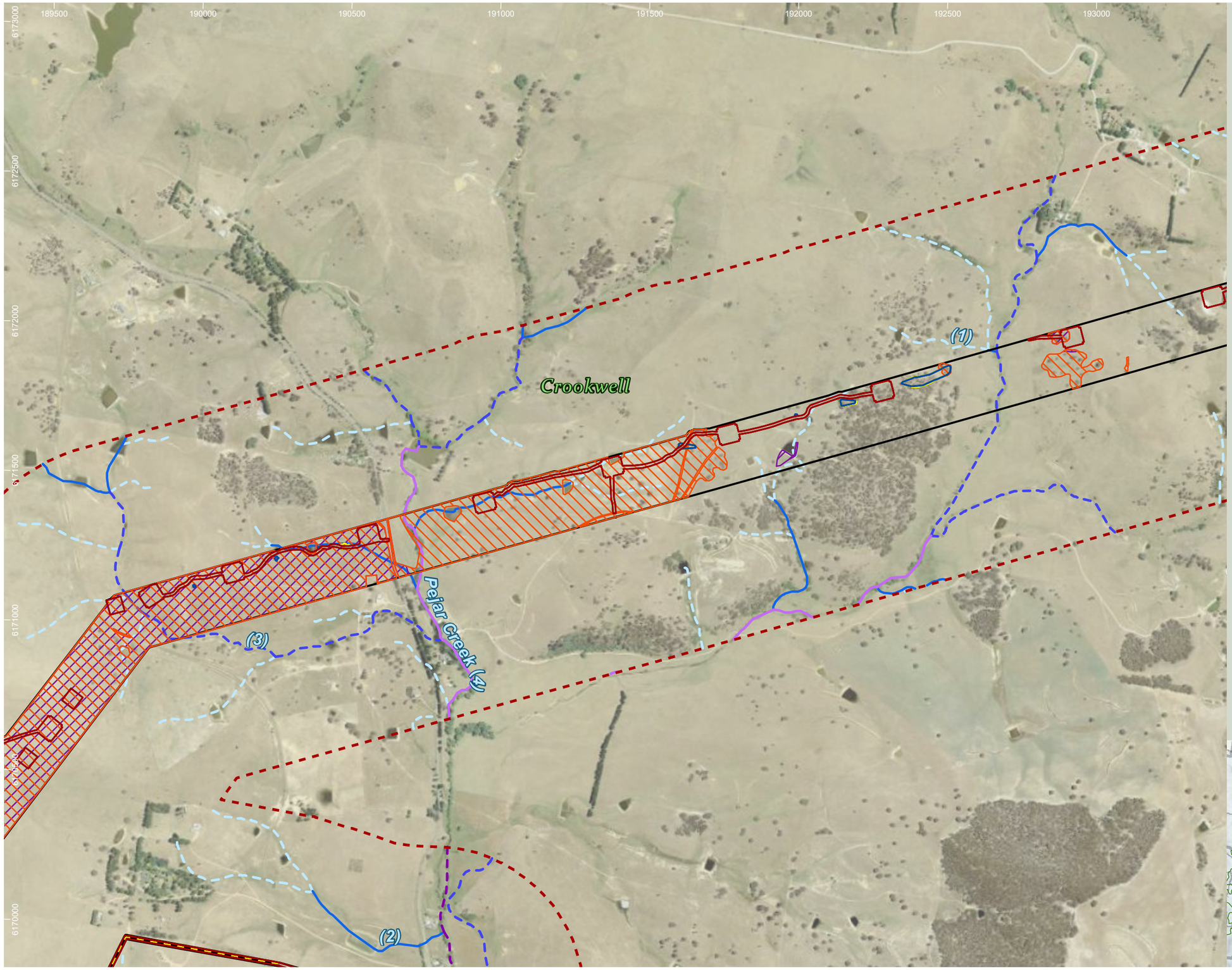


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

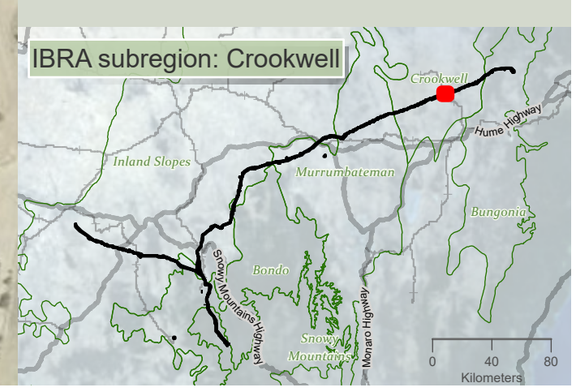
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 94

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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193000 193500 194000 194600 195000 195500 196000 196500

6174000 6173500 6173000 6172500 6172000 6171500 6171000

(3) (2) (1)

Melamalong Creek (7)

Crookwell

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

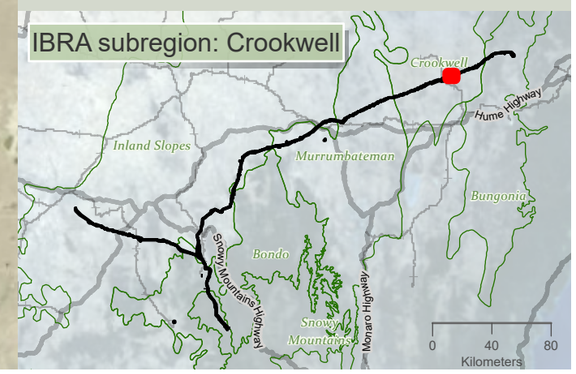
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 95

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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196000 196500 197000 197500 198000 198500 199000 199500

6175000 6174500 6174000 6173500 6173000 6172500

Crookwell

Tarlo River (5)

Sawpit Gully (3)

(1) (2) (3) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

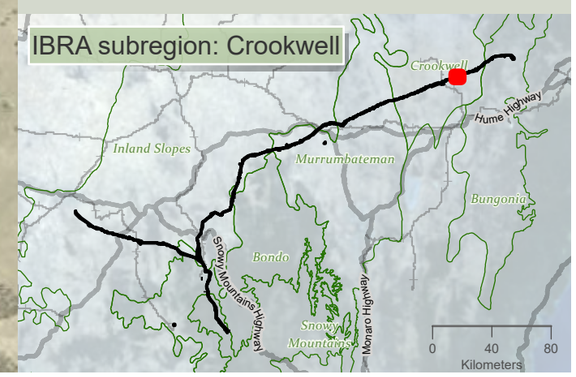
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 96

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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199500 200000 200500 201000 201500 202000 202500 203000

6176500 6176000 6175500 6175000 6174500 6174000

Crookwell

Turrallo Creek (5)

Tarlo River (5)

(1) (2) (3) (4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

- 1
- 2
- 3
- 4
- 5

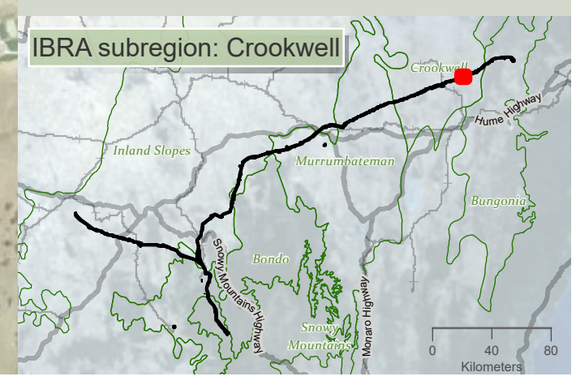
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Delma impar

IBRA subregion: Crookwell



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 97

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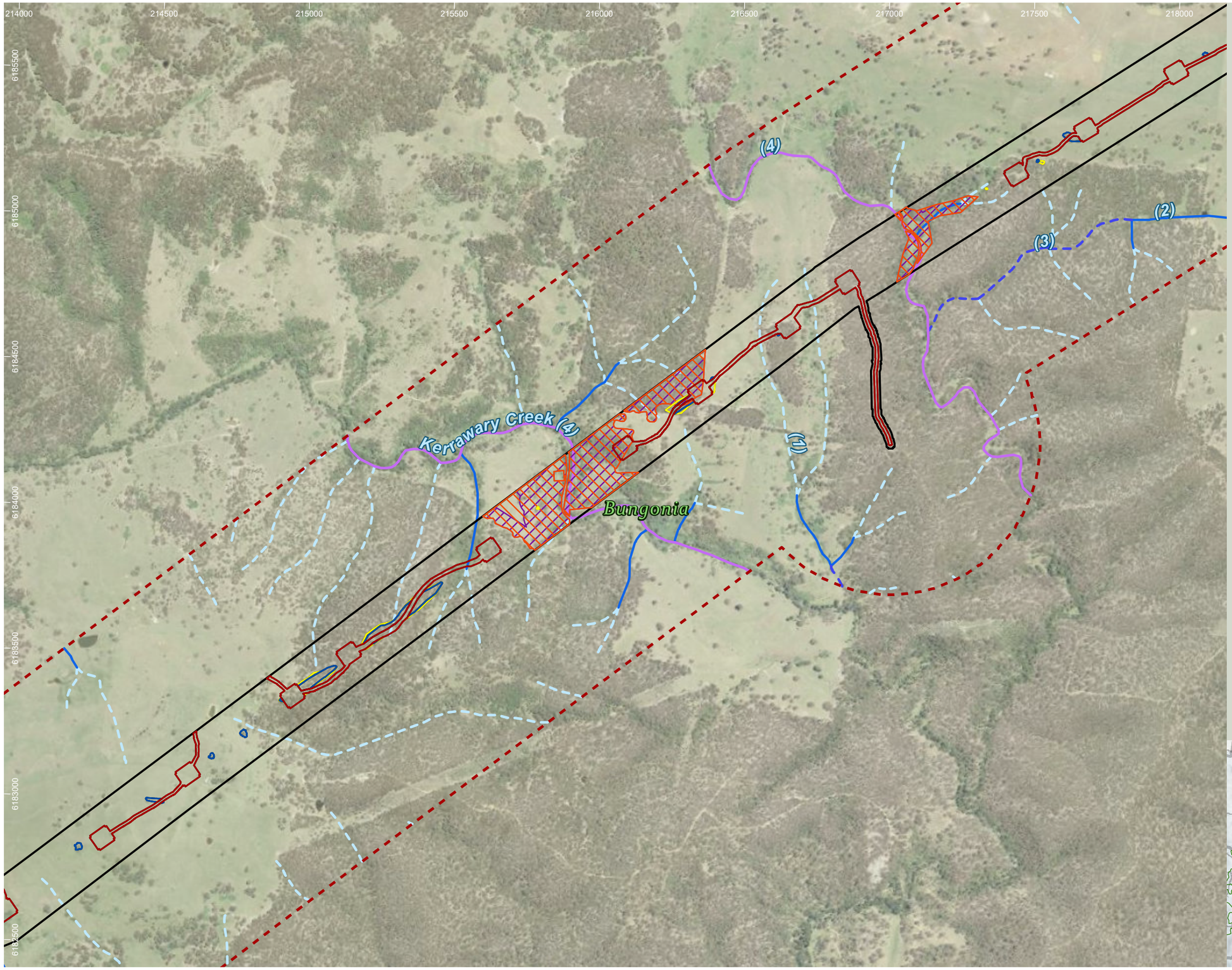


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

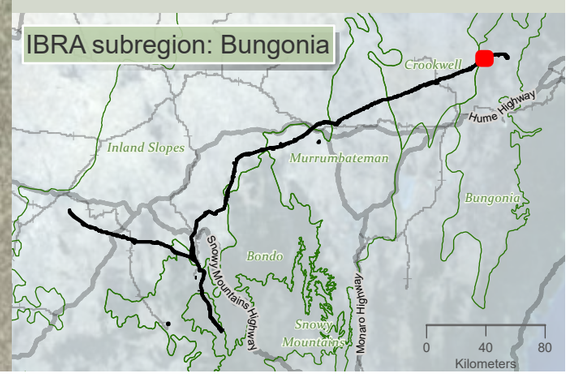
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 102

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Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

217500 218000 218500 219000 219500 220000 220500 221000

6187000 6186500 6186000 6185500 6185000 6184500

Bannaby Creek (3)

(1)

Bungonia

(2)

(3)

(4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

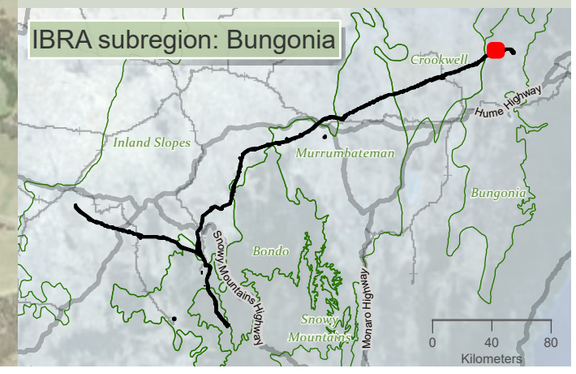
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

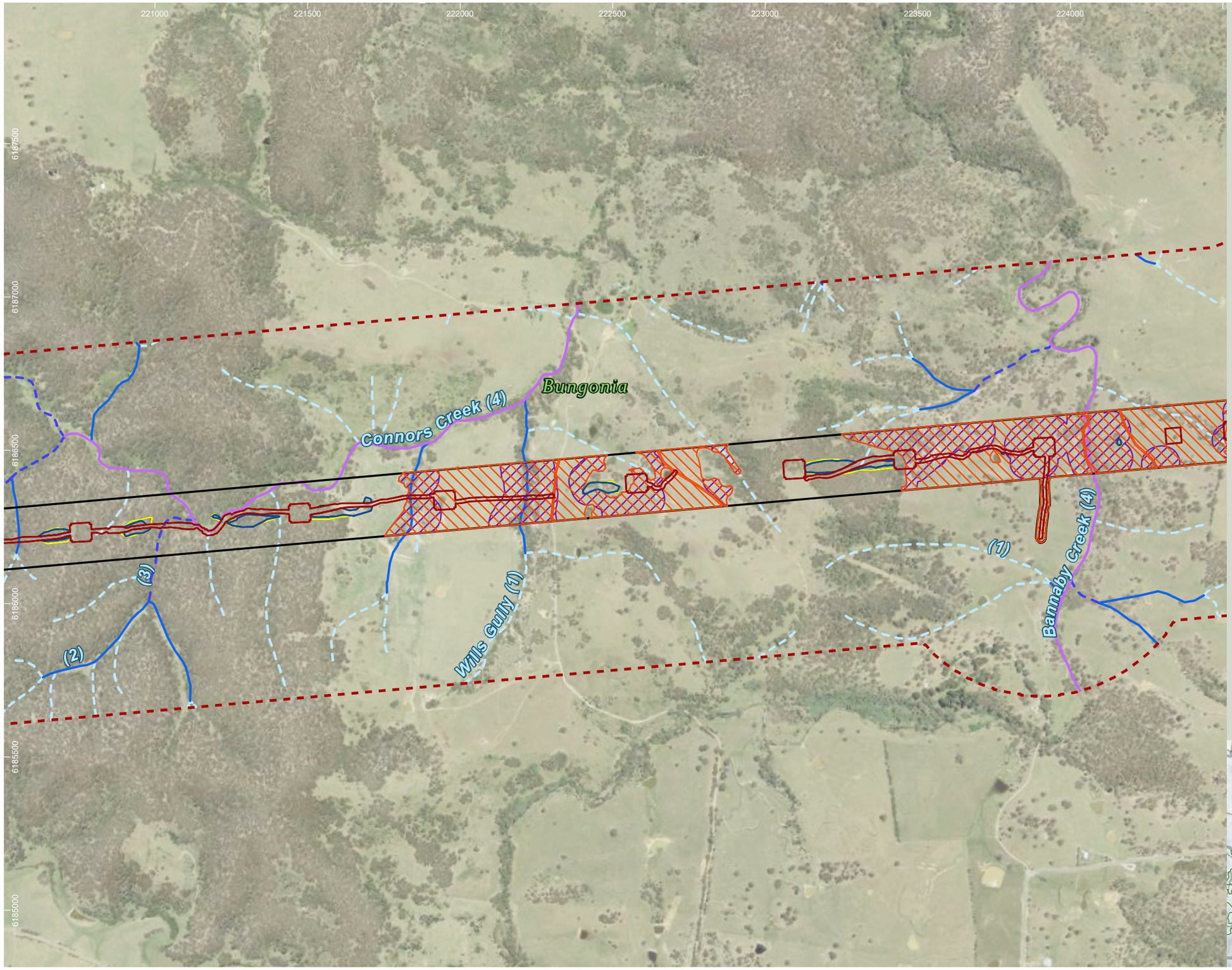
Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 103

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

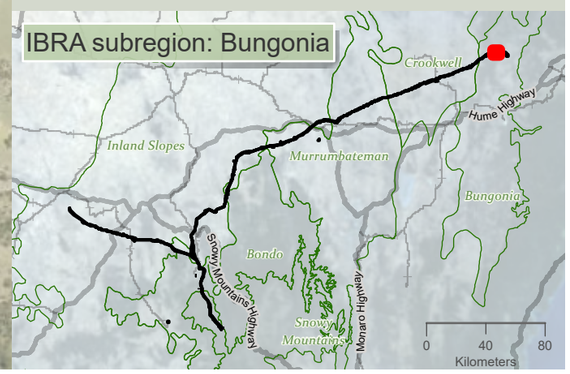
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 104

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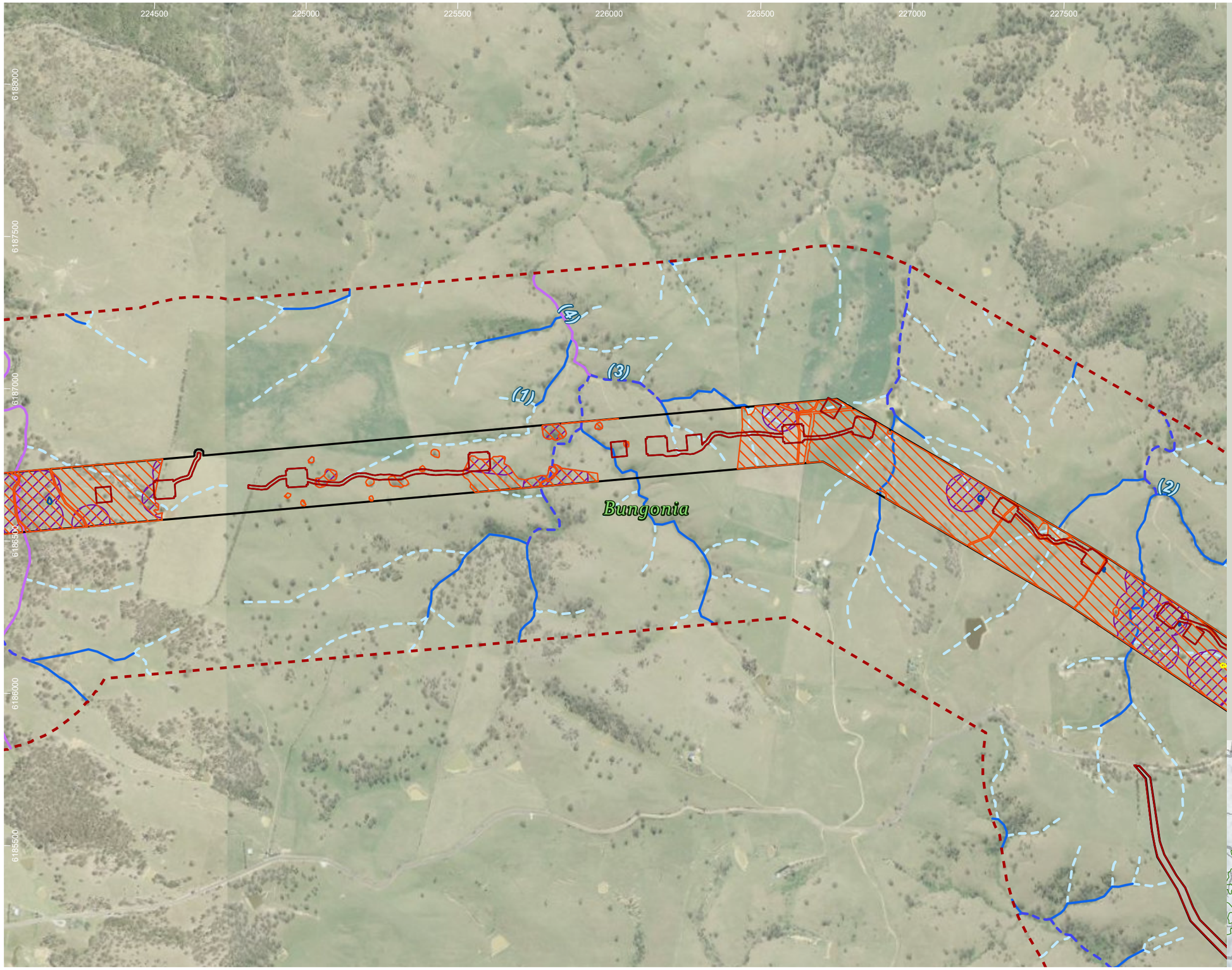


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

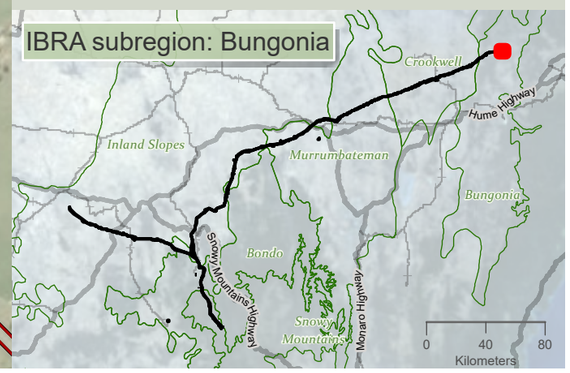
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 105

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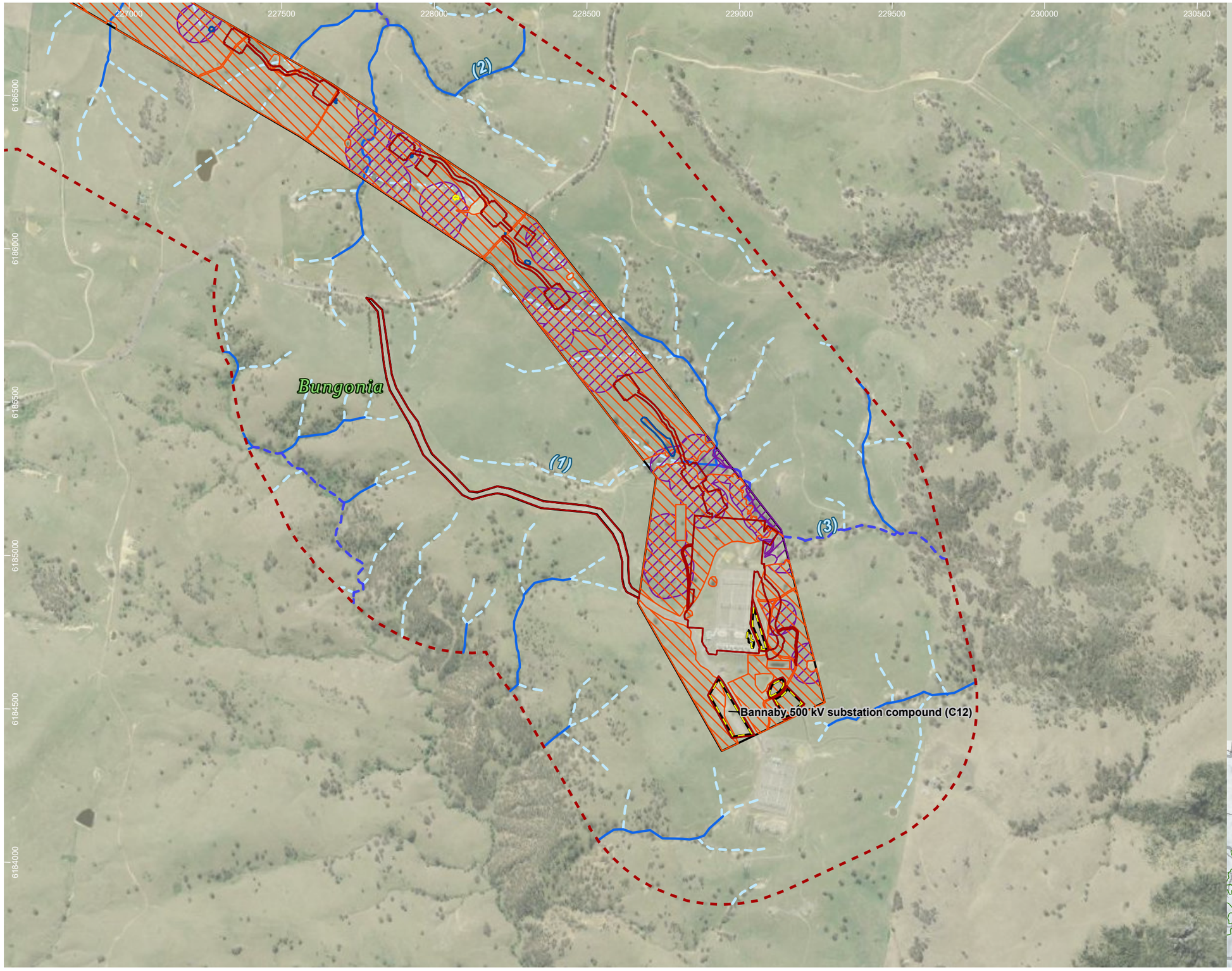


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

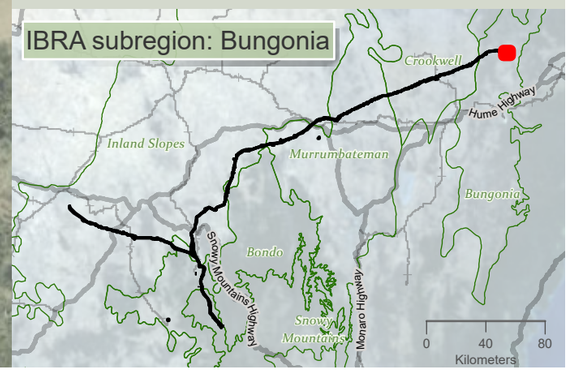
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Reptile species habitat

- Aprasia parapulchella
- Delma impar



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niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Reptile species habitat

HumeLink BDAR

Figure 13-9 map reference 106

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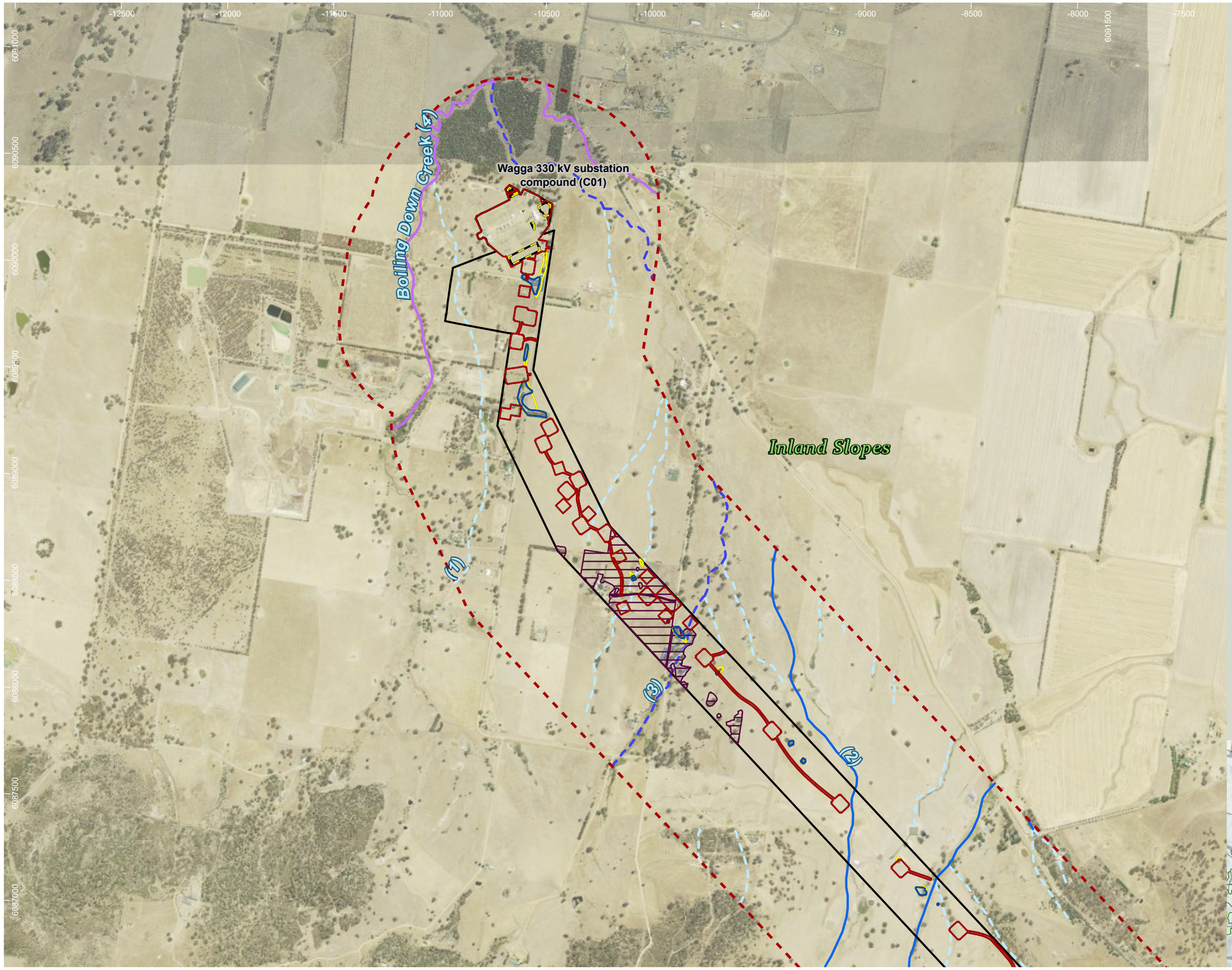


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

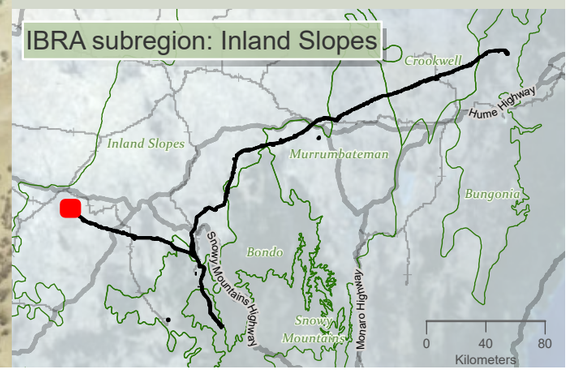
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Grevillea wilkinsonii



niche Environment and Heritage

0 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 1

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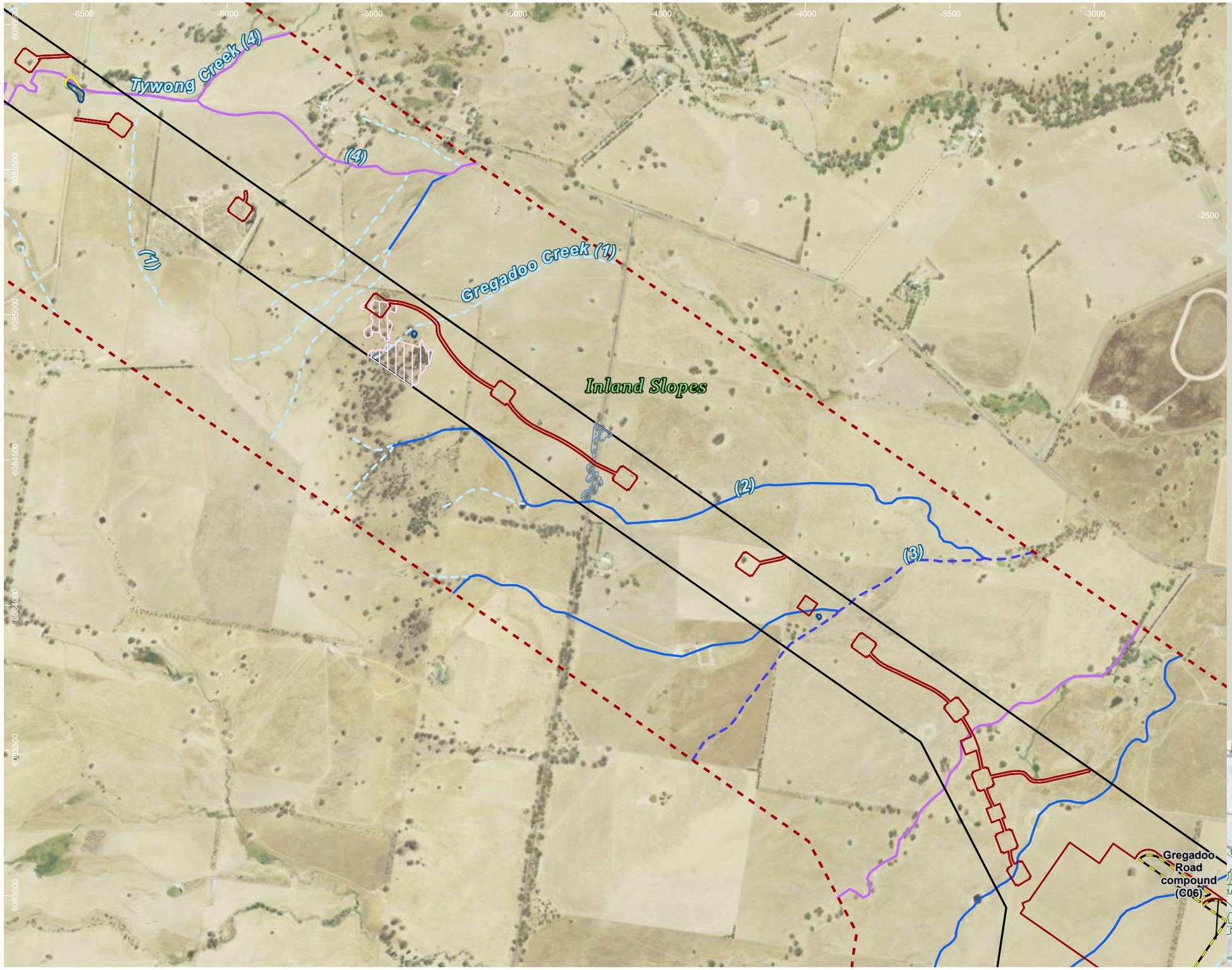


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

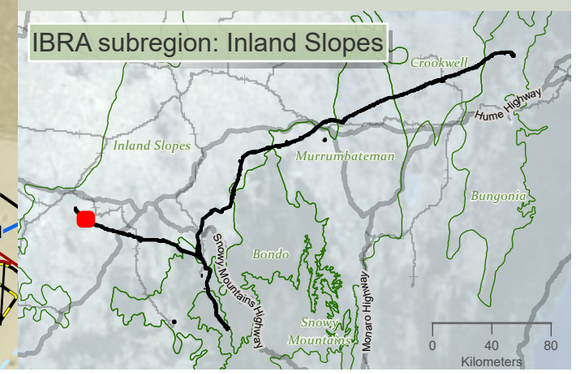
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Pultenaea humilis



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 3

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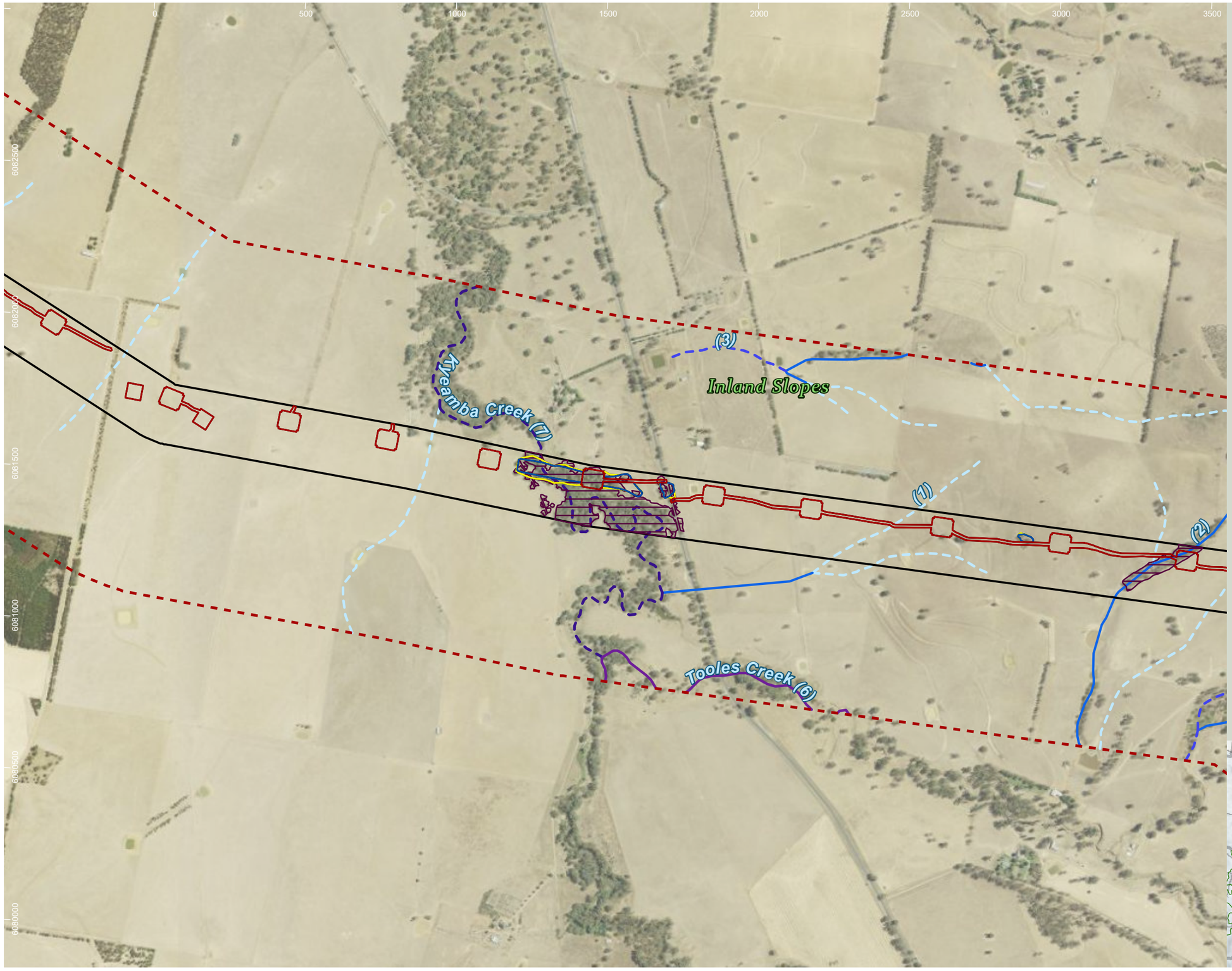


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

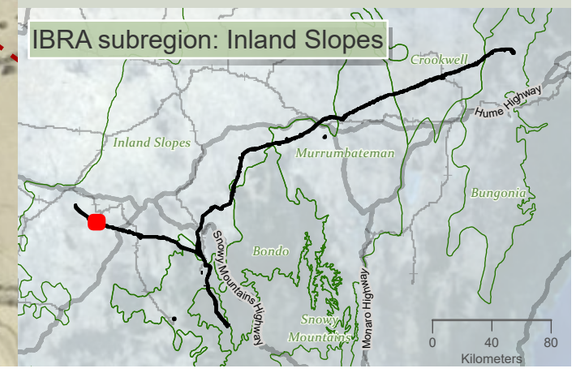
- 1
- 2
- 3
- 6
- 7

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea wilkinsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 5

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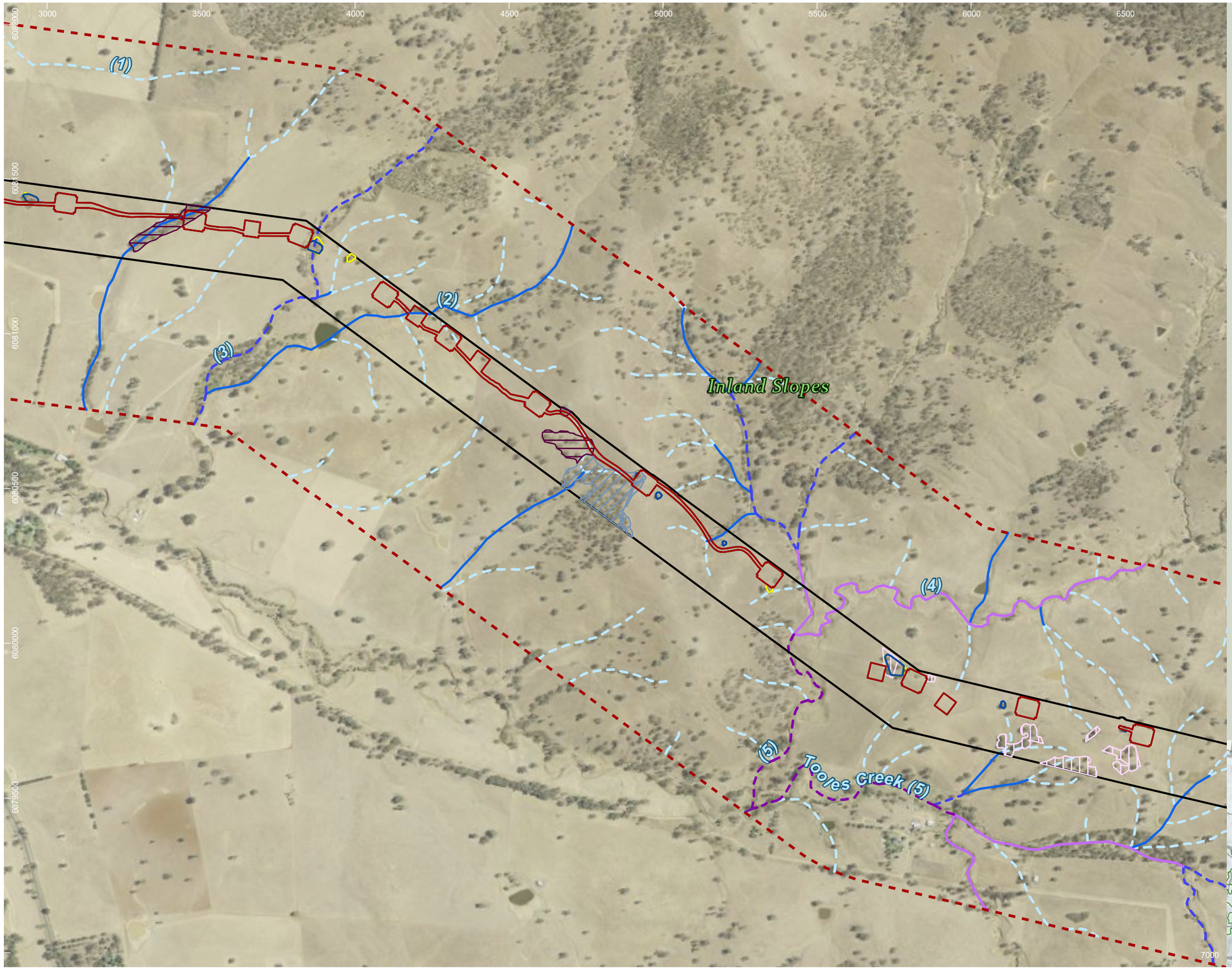


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

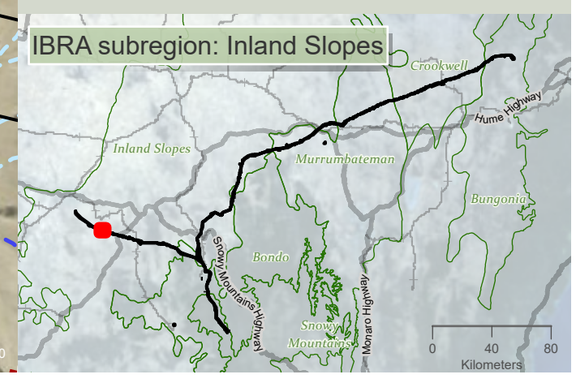
- 1
- 2
- 3
- 4
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Grevillea wilkinsonii
- Pultenaea humilis



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 6

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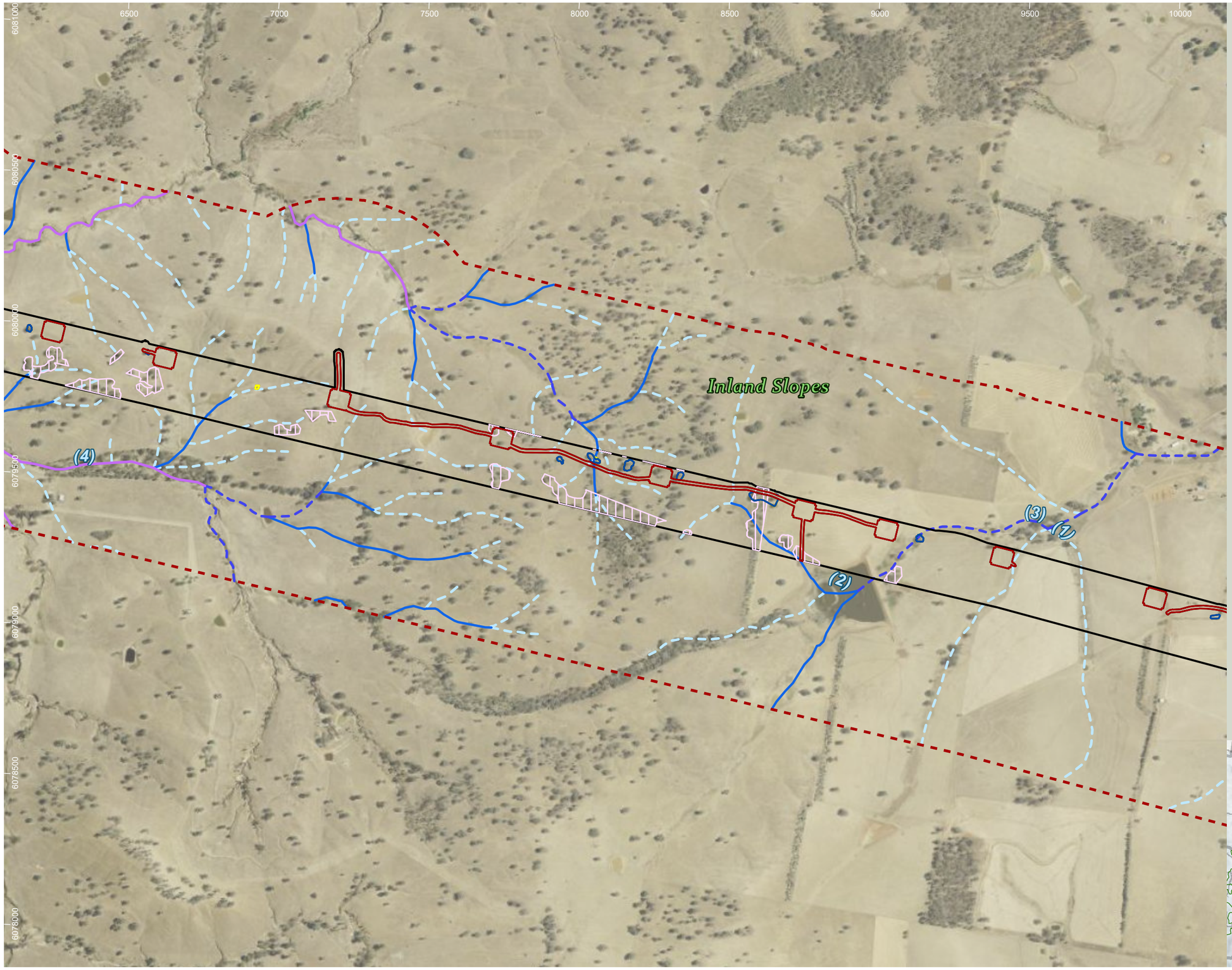


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

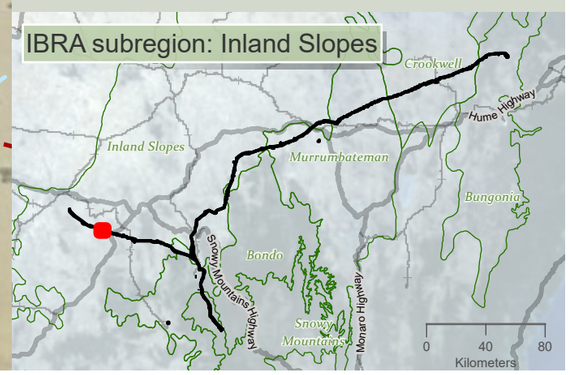
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Pultenaea humilis



Drawn by: MathewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 7

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10000 10500 11000 11500 6080500 12000 12500 13000 13500

6080000 6079500 6079000 6078500 6078000 6077500

(1) (2) (3) (4)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

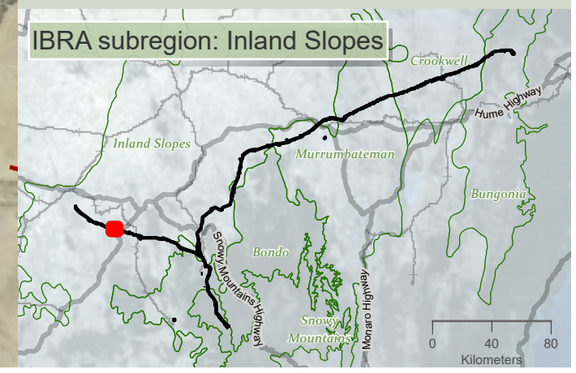
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea wilkinsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 8

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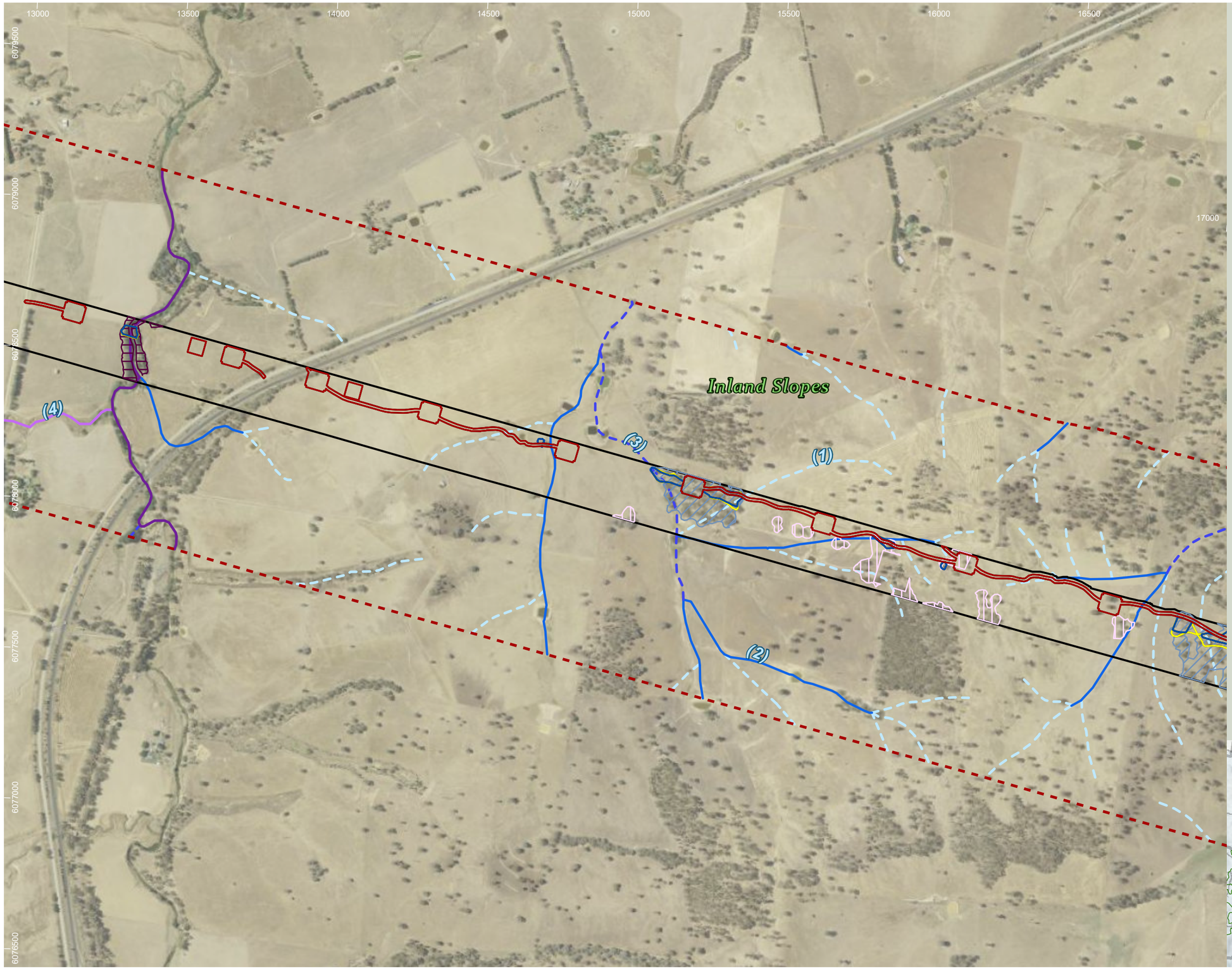
SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx - Confidential impact assessment



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

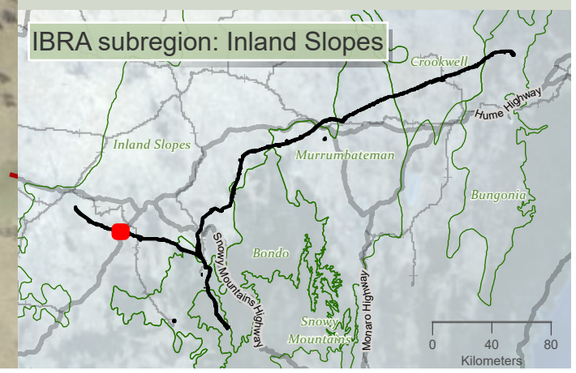
- 0
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Grevillea wilkinsonii
- Pultenaea humilis



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 9

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16500 17000 17500 18000 18500 6079000 19000 19500 20000

6078500 6078000 6077500 6077000 6076500 6076000

(1) (2) (3)

Inland Slopes

20500

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

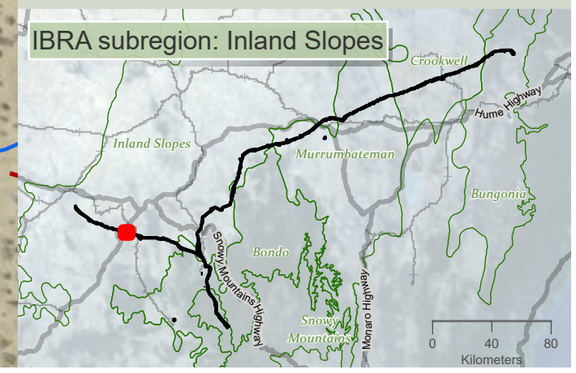
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Bossiaea fragrans
- Pultenaea humilis
- Zieria obcordata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 10

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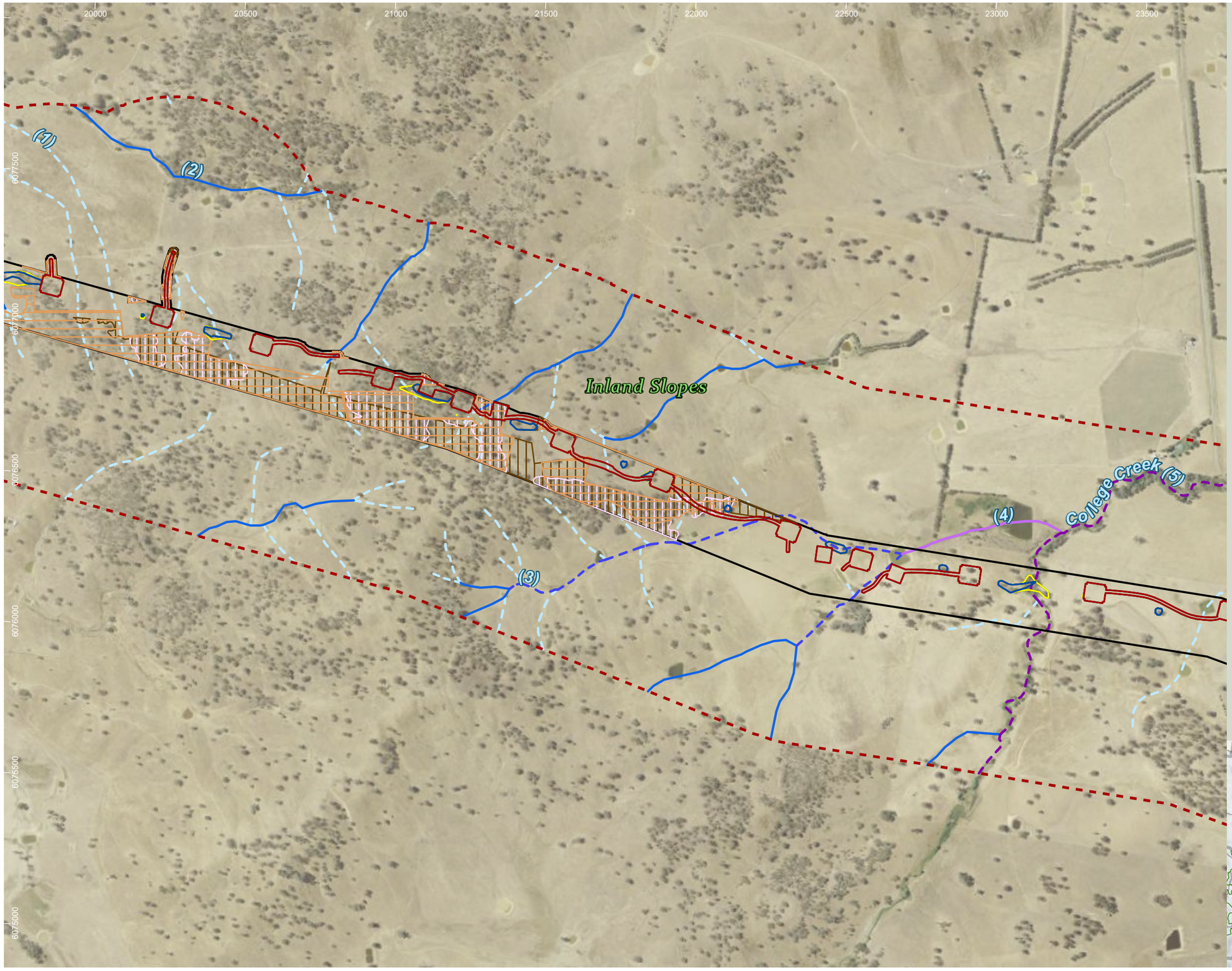


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

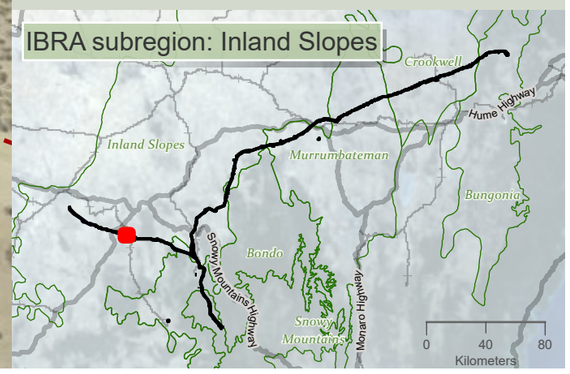
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Bossiaea fragrans
- Pultenaea humilis
- Zieria obcordata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 11

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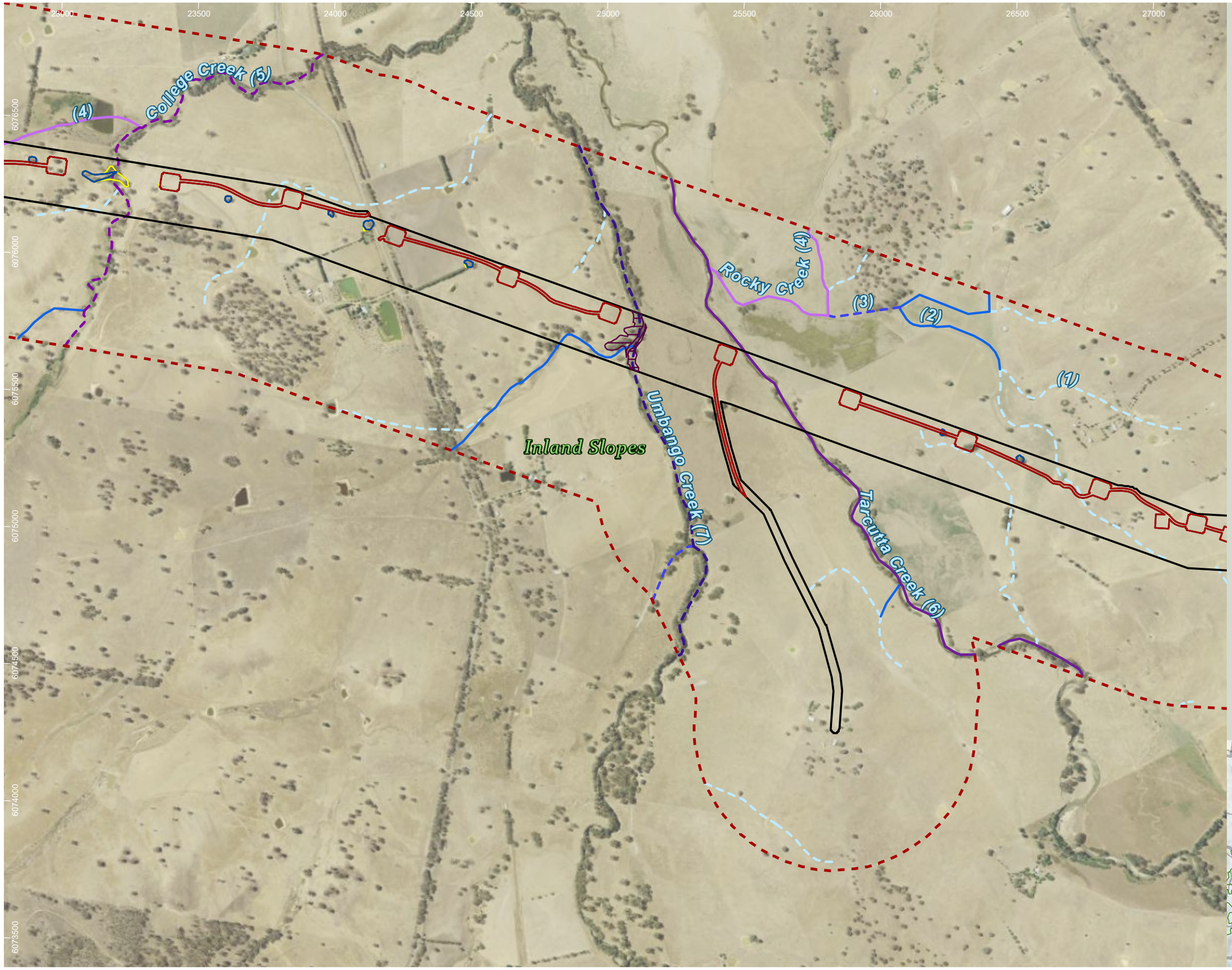


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

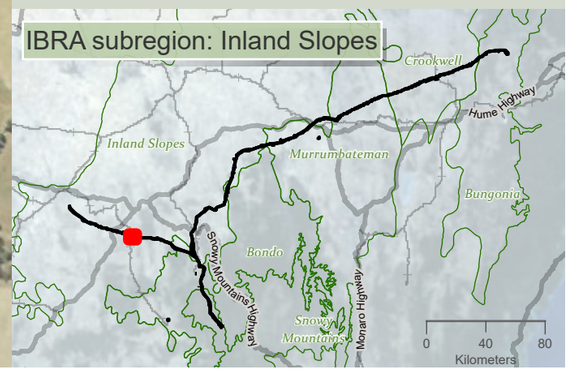
- 1
- 2
- 3
- 4
- 5
- 6
- 7

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea wilkinsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 12

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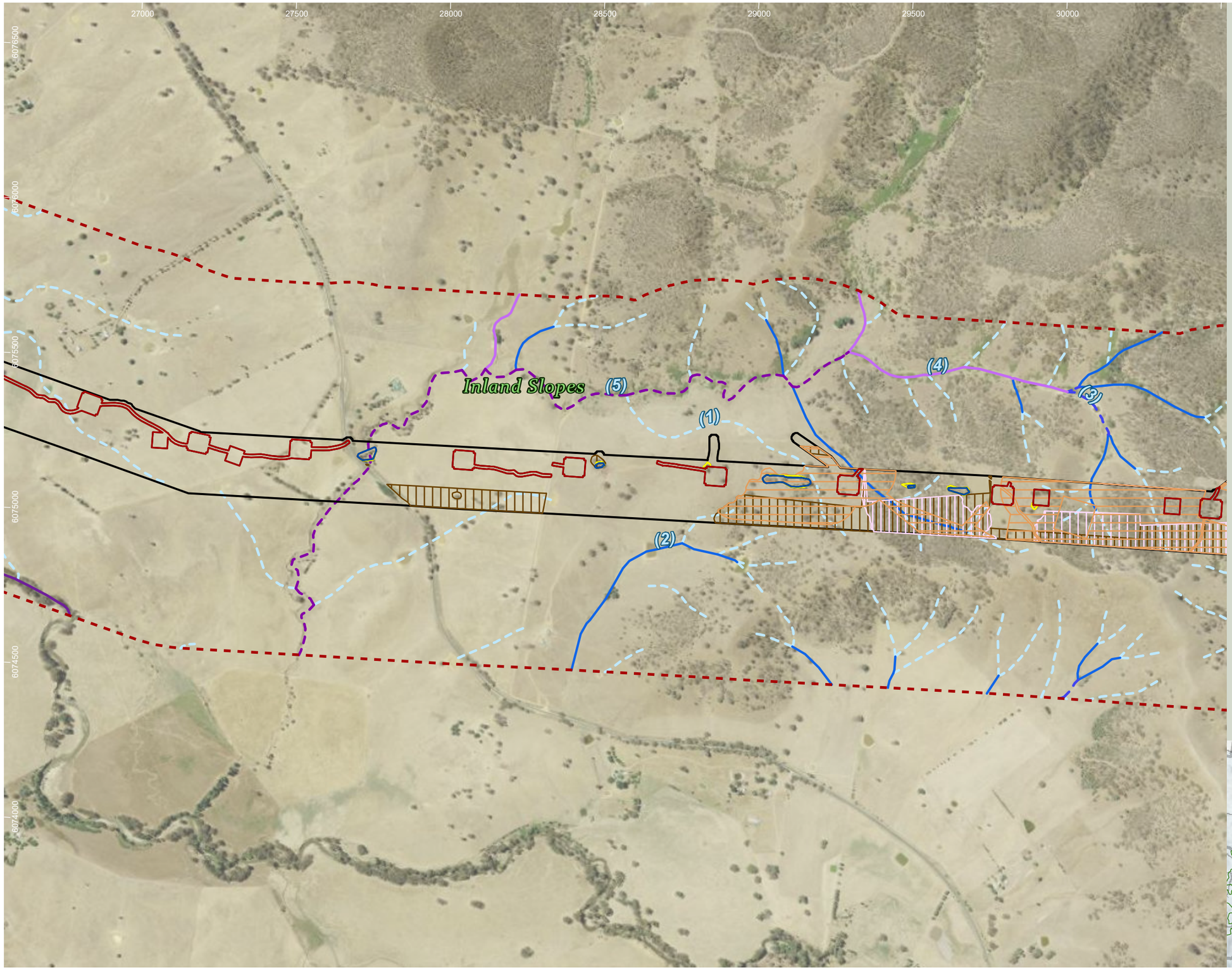


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

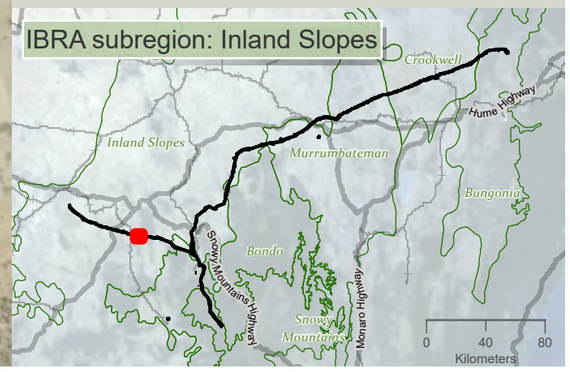
- 1
- 2
- 3
- 4
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Bossiaea fragrans
- Pultenaea humilis
- Zieria obcordata



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\SyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 N 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 13

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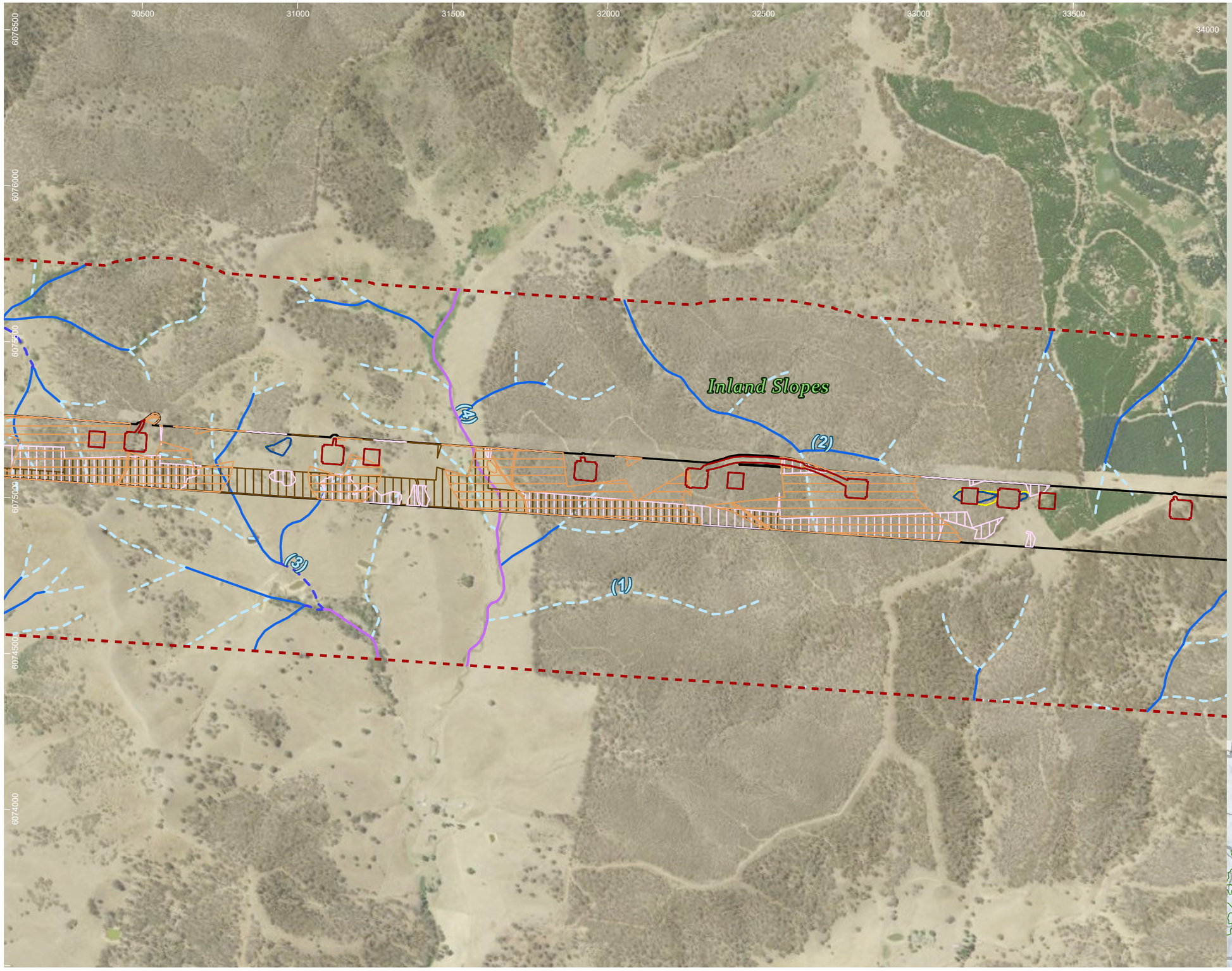


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

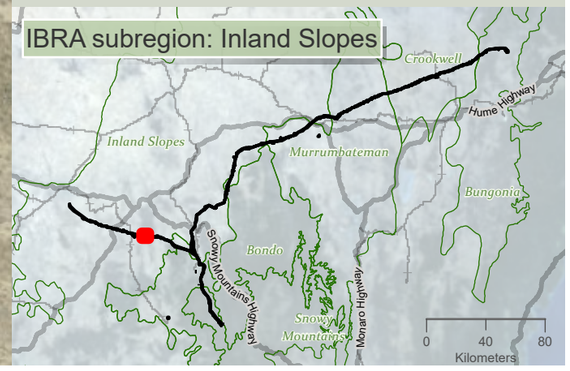
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Bossiaea fragrans
- Pultenaea humilis
- Zieria obcordata



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niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 14

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34000 34500 35000 35500 36000 36500 37000 37500

6076000 6075500 6075000 6074500 6074000 6073500

Inland Slopes

Turners Creek (3)

Turners Creek (2)

(1) (2) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

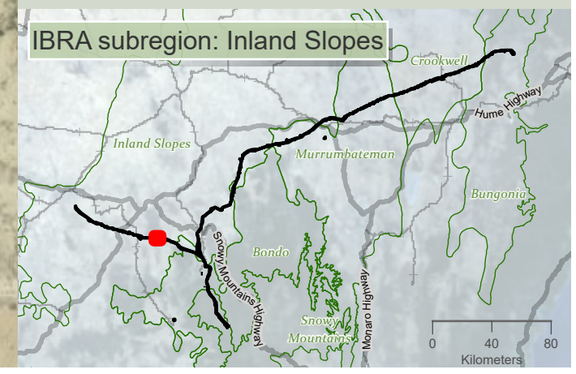
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia phasmoides
- Persoonia marginata
- Pultenaea humilis
- Zieria obcordata



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 15

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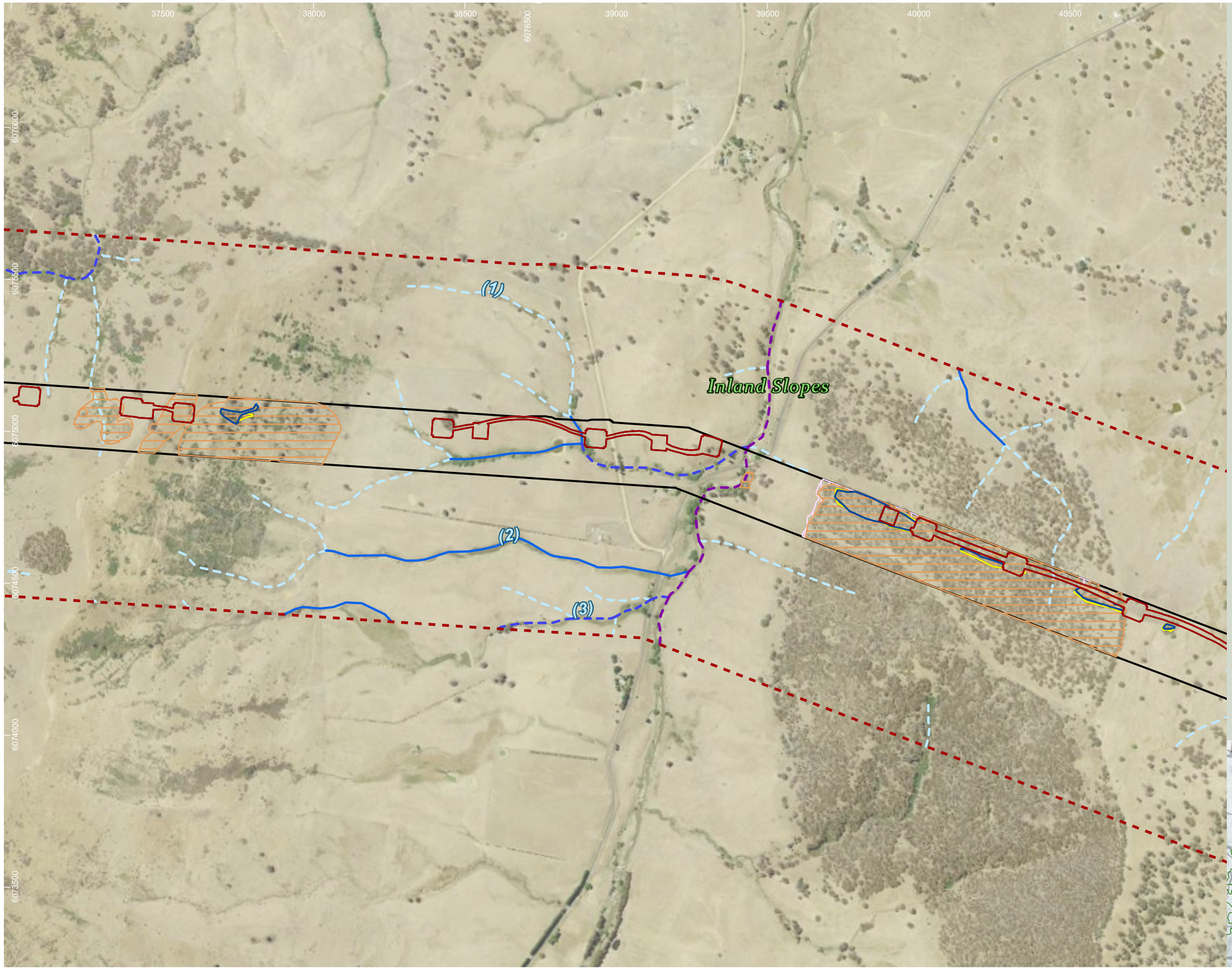


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

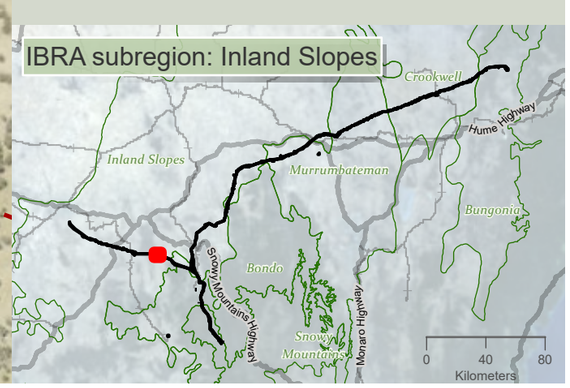
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Pultenaea humilis
- Zieria obcordata



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niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 16

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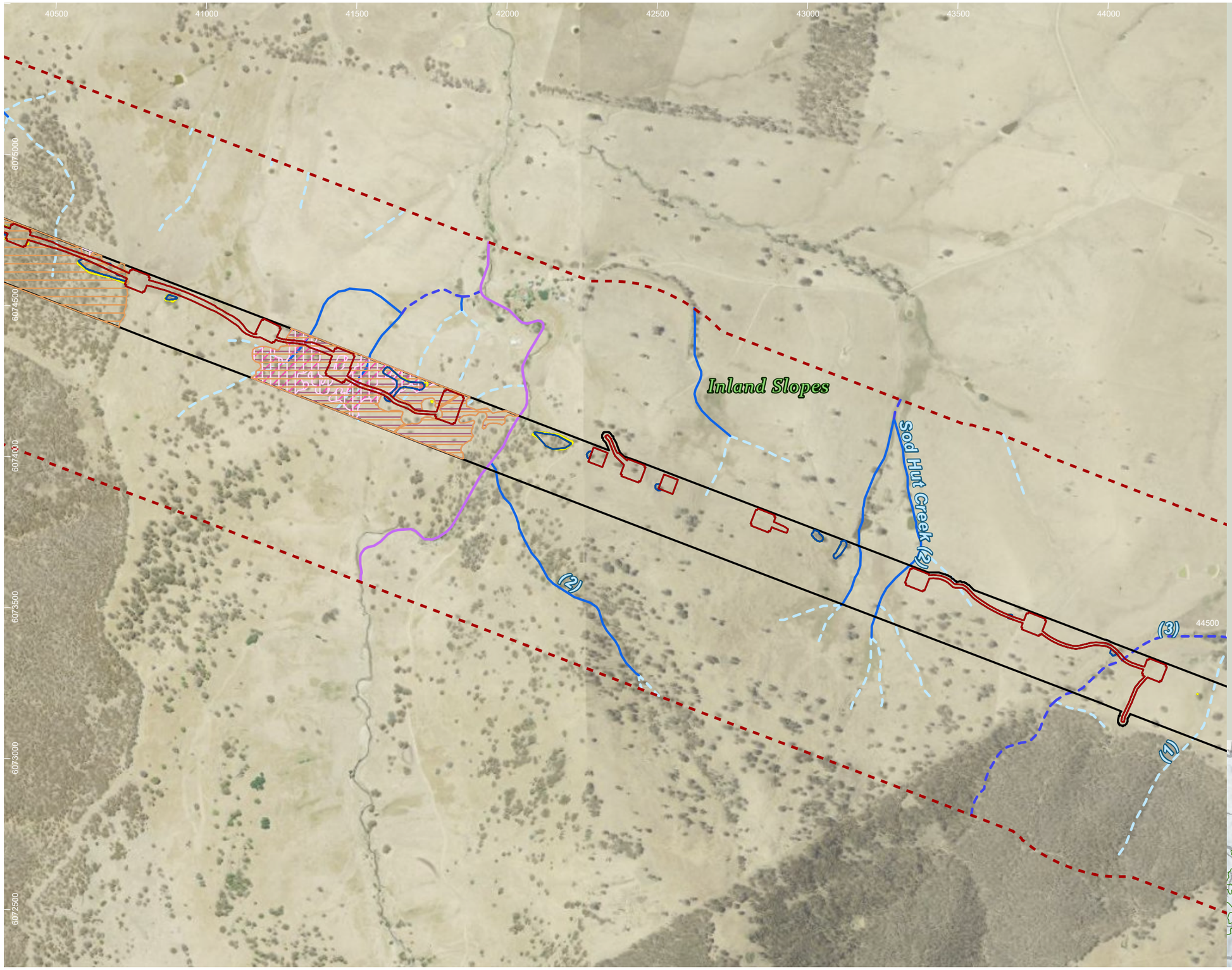


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

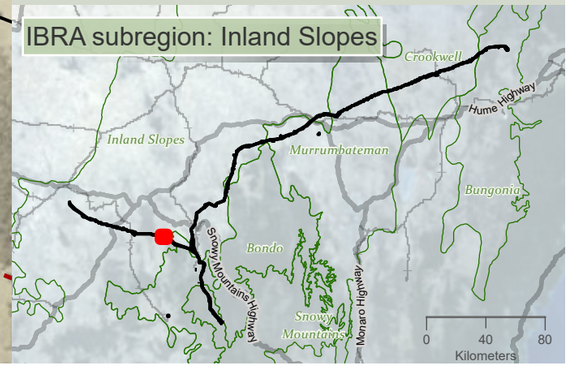
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia phasmoides
- Persoonia marginata
- Pultenaea humilis
- Zieria obcordata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 17

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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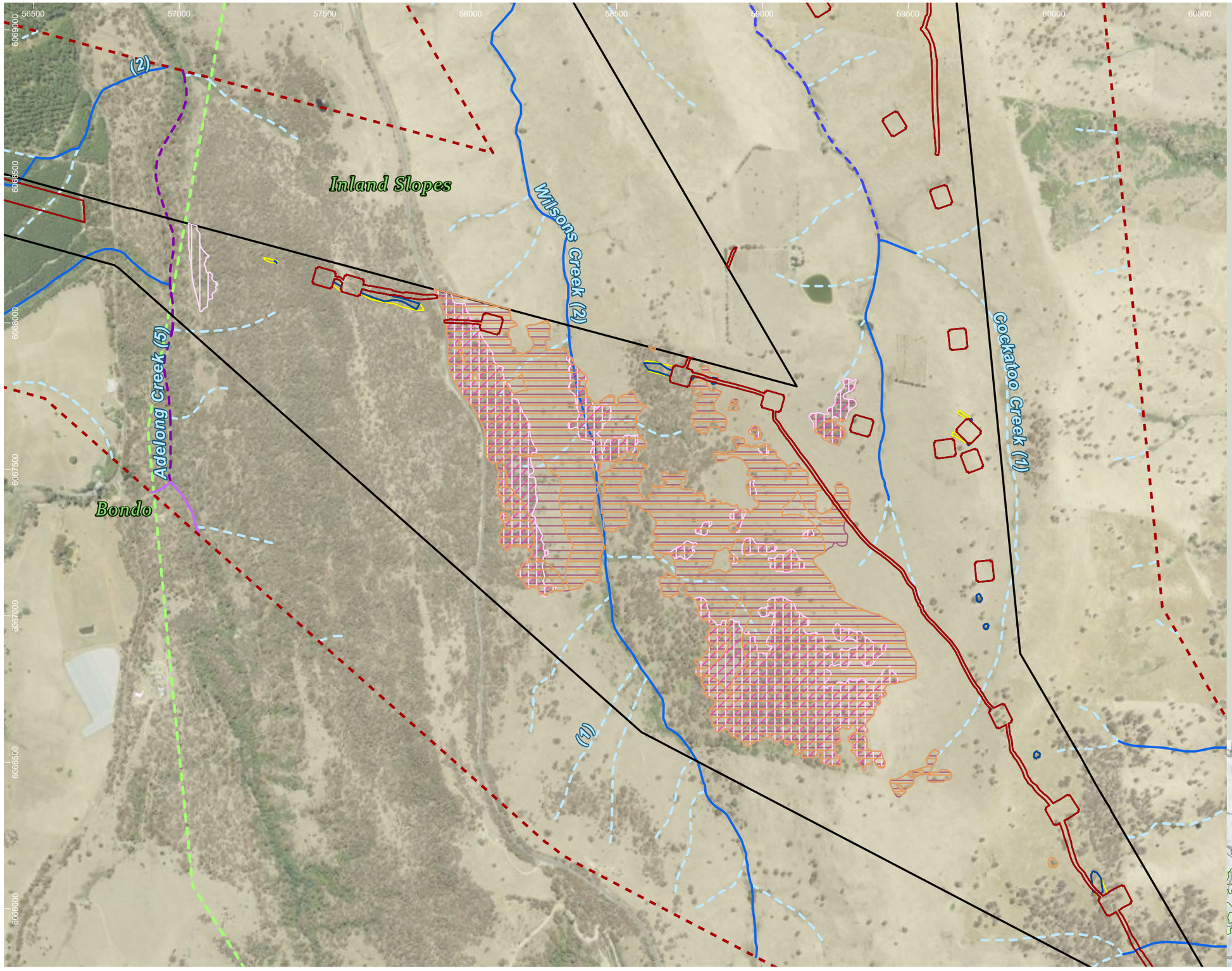


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

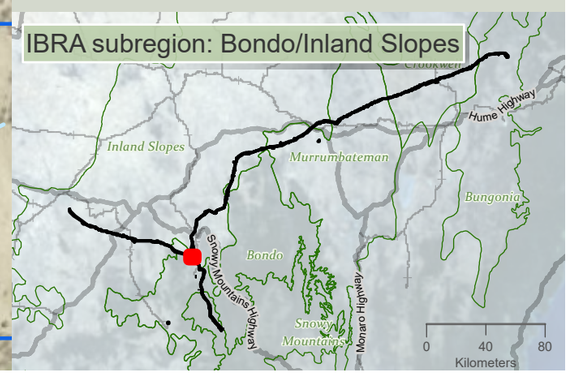
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia phasmoides
- Persoonia marginata
- Pultenaea humilis
- Zieria obcordata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 22

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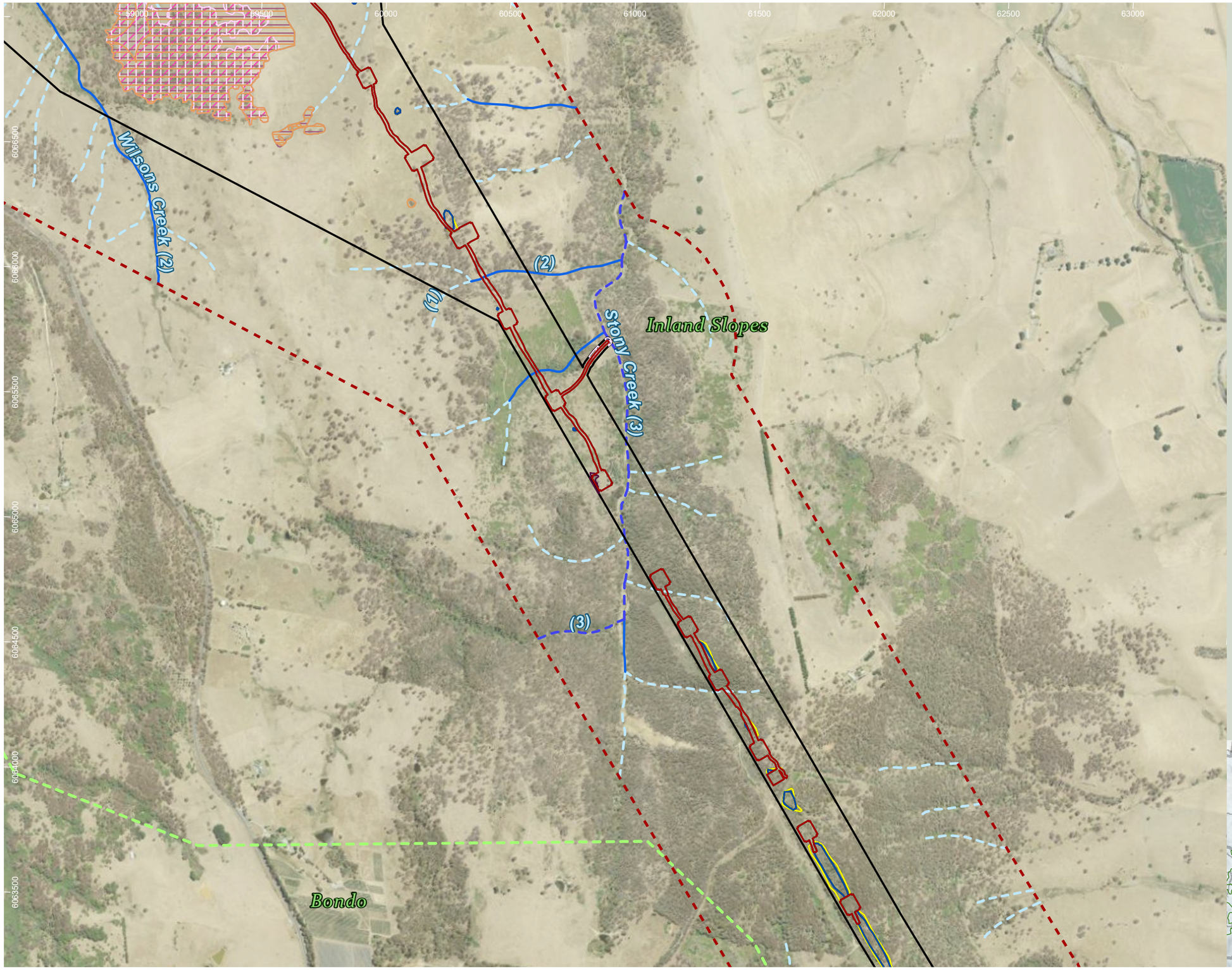


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

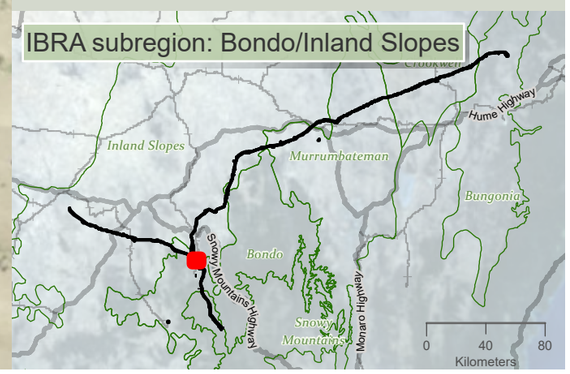
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia phasmoides
- Grevillea wilkinsonii
- Persoonia marginata
- Pultenaea humilis
- Zieria obcordata



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 23

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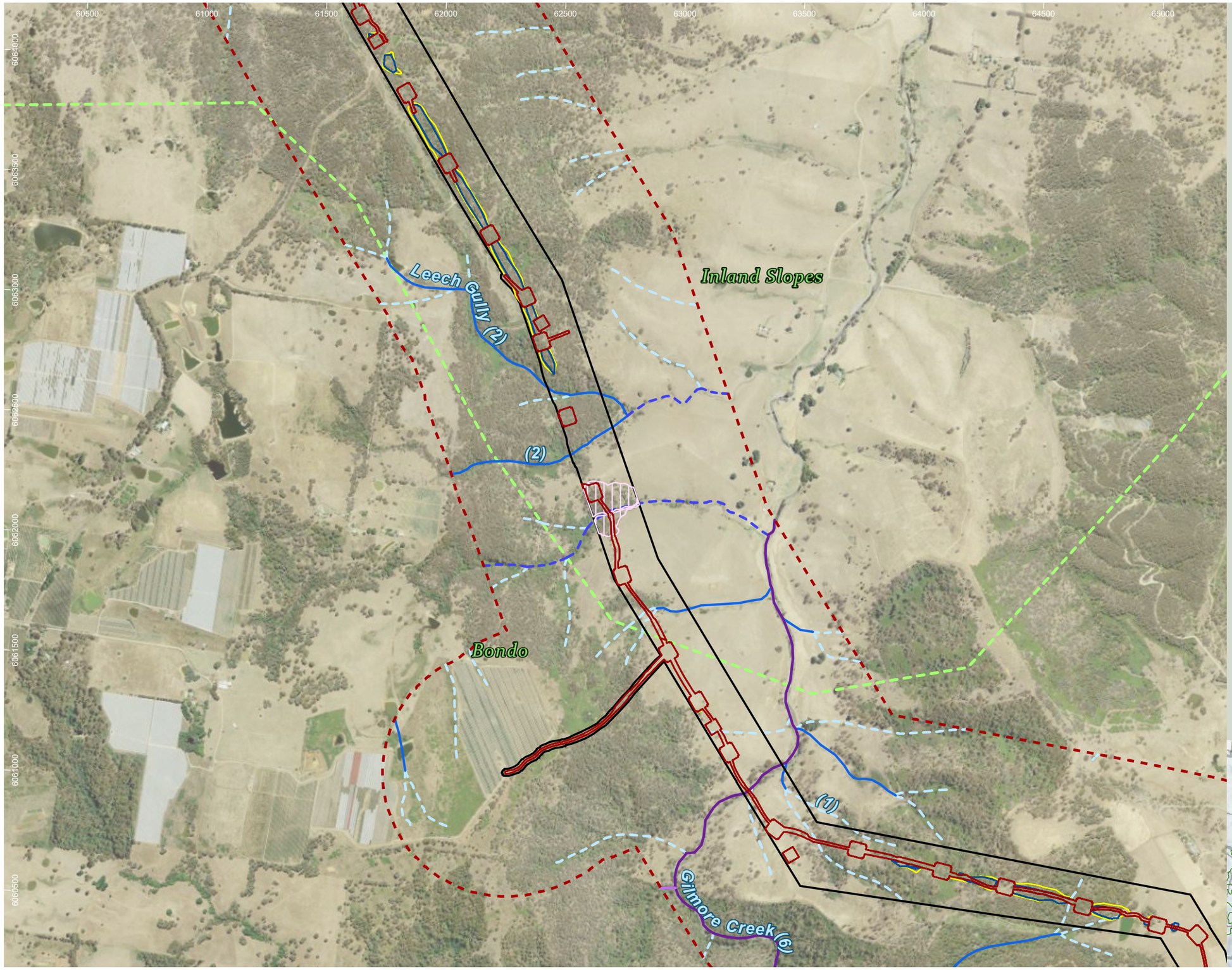


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

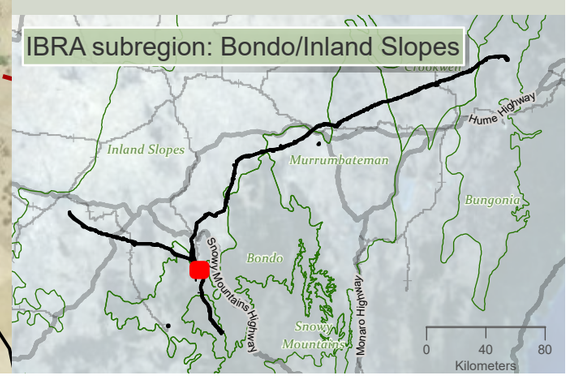
- 1
- 2
- 3
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Pultenaea humilis



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 24

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61500 62000 62500 63000 63500 64000 64500 65000 65500 66000

6052000 6051500 6051000 6050500 6050000 6049500 6049000 6048500 6048000

Snubba Creek (4)

Ridings Creek (2)

Bondo

Snubba Road compound (C16)

(1)

(3)

Snubba Creek (3)

Snowy Mountains

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

- 1
- 2
- 3
- 4
- 5

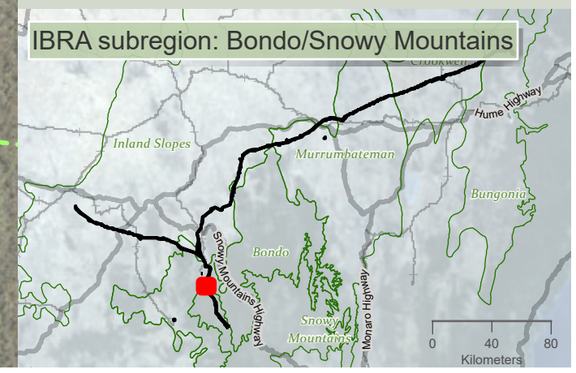
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Haloragis exalata subsp exalata

IBRA subregion: Bondo/Snowy Mountains



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niche Environment and Heritage

0 N 550 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 30

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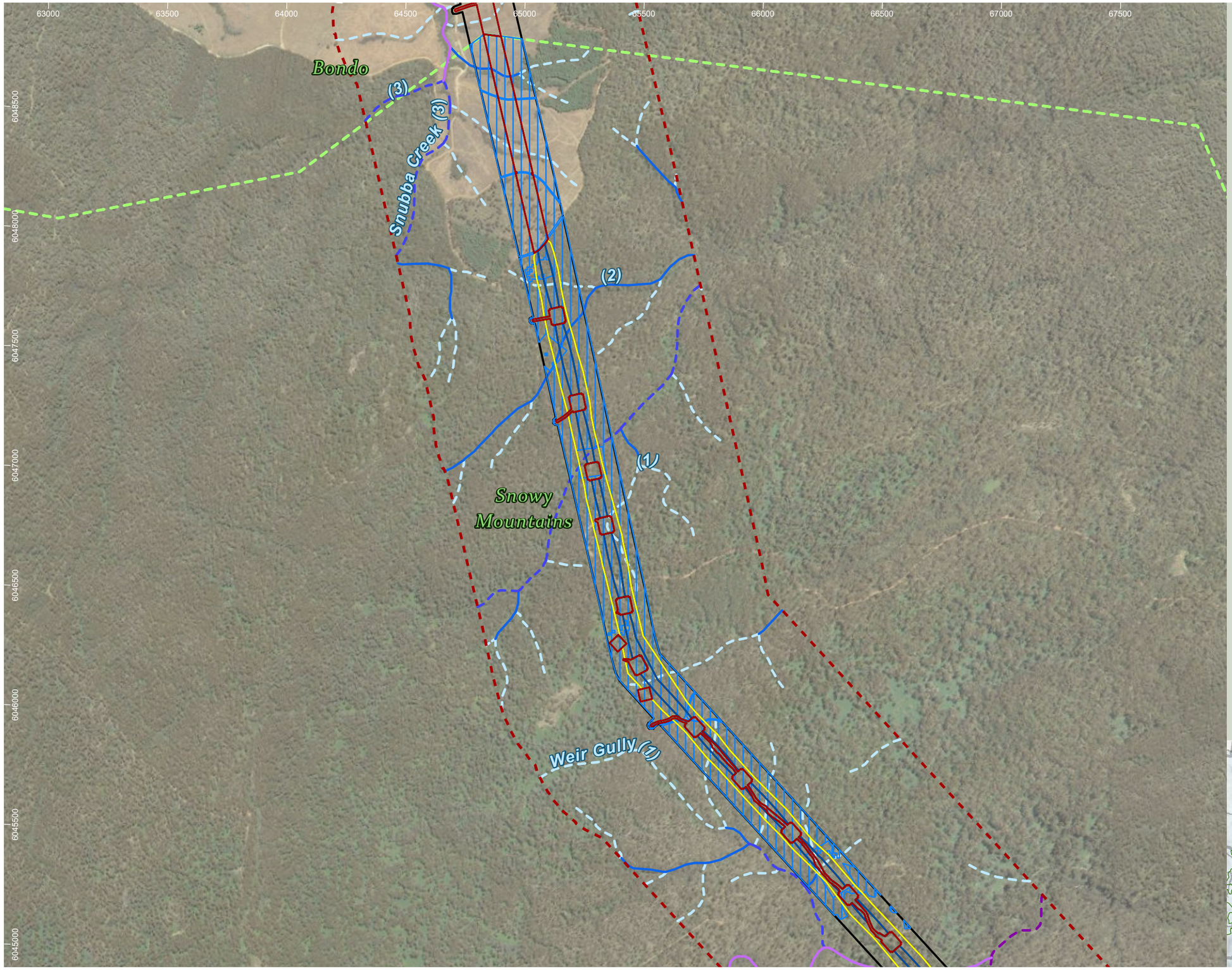


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

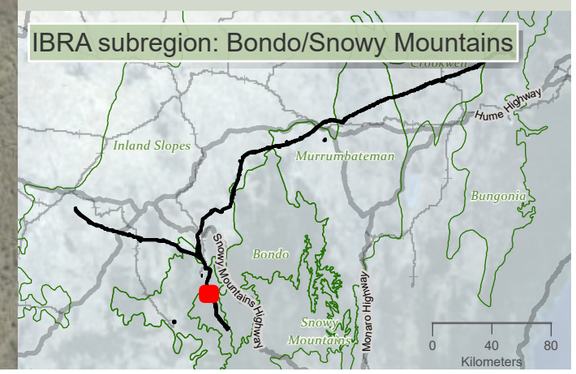
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Haloragis exalata subsp exalata



niche Environment and Heritage

0 500 m

N

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 31

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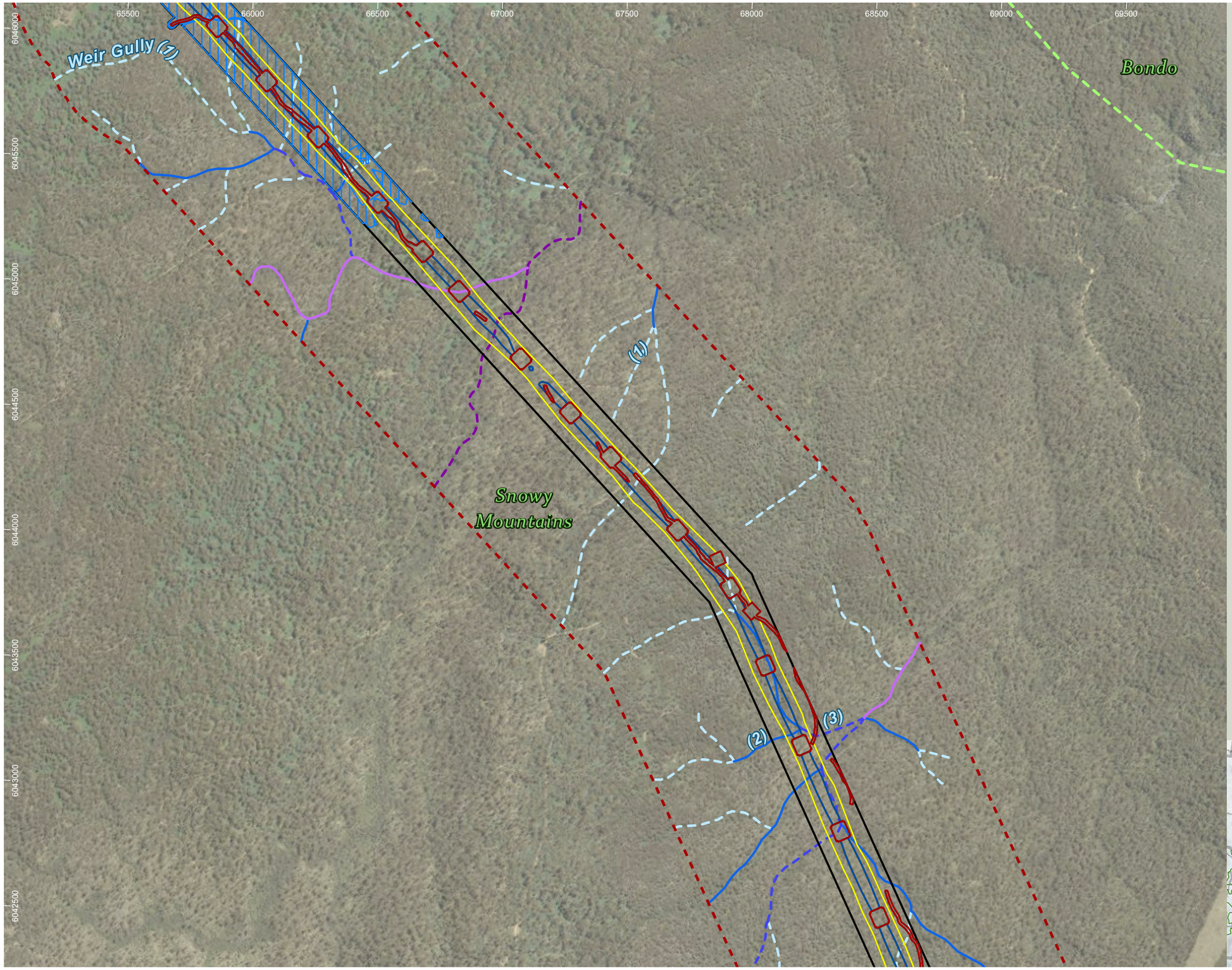


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

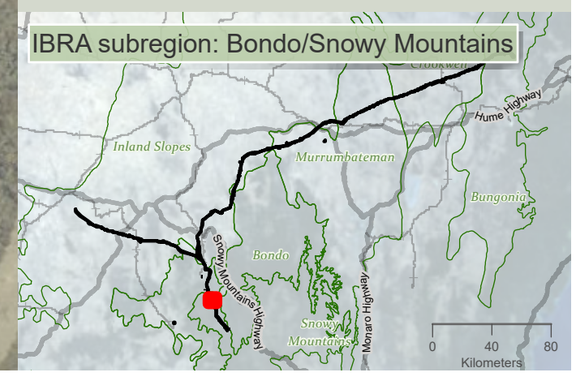
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Haloragis exalata subsp exalata



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 32

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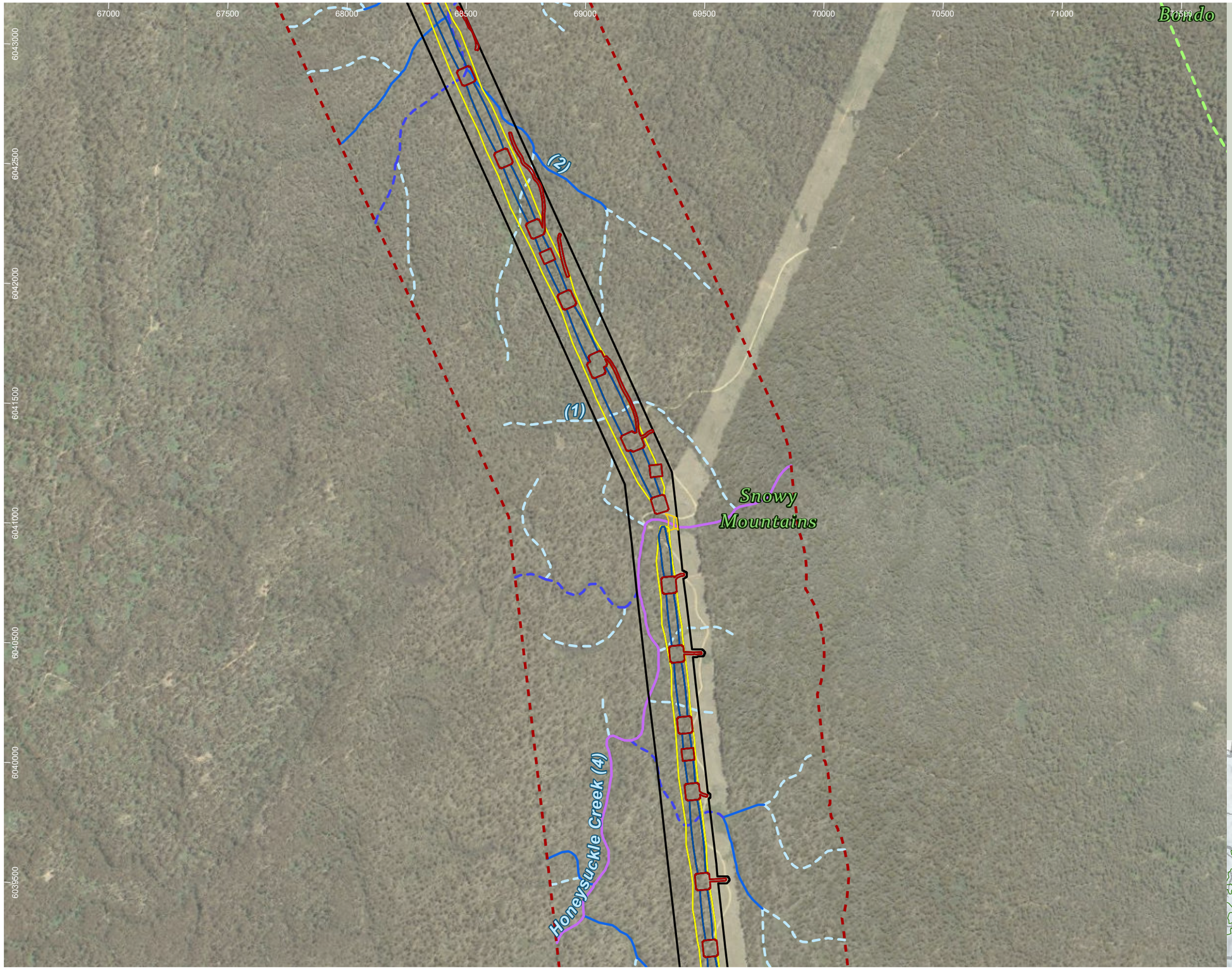


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

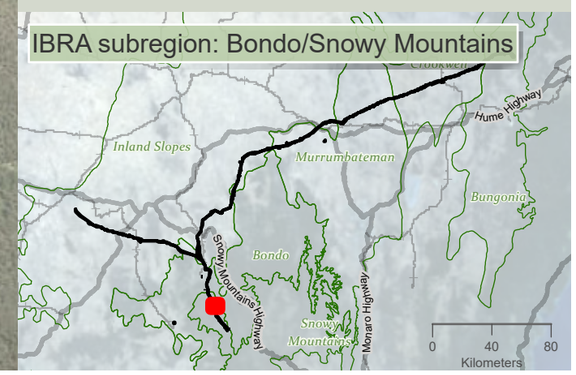
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Discaria nitida



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 33

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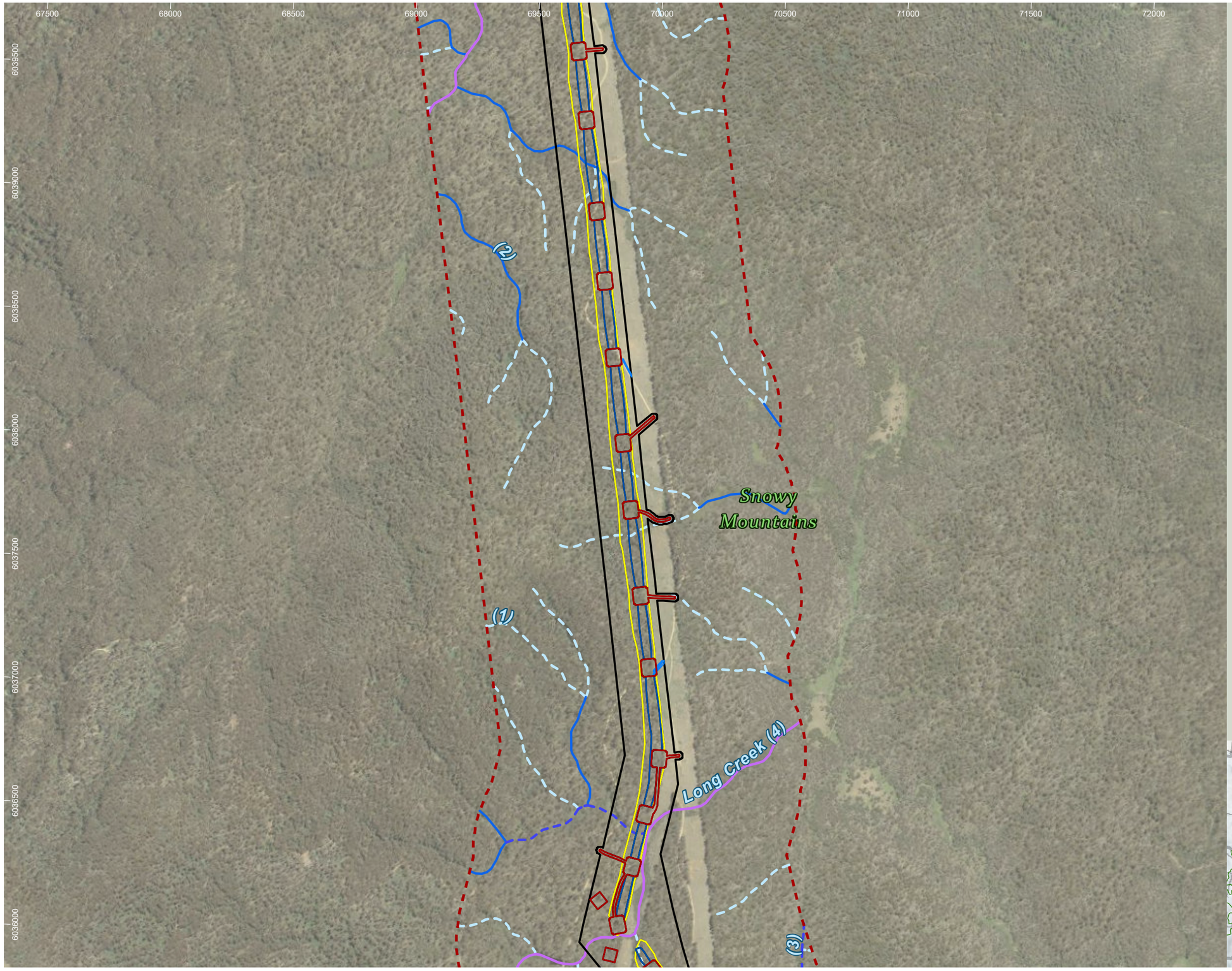


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

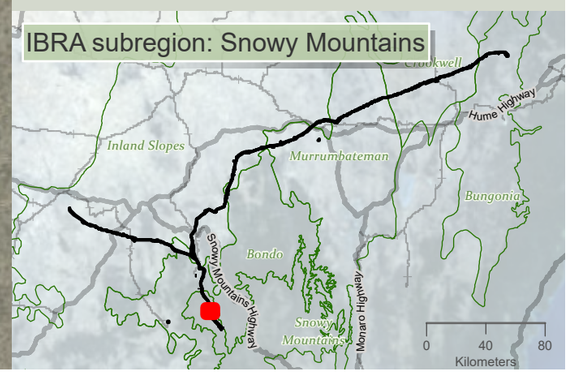
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Haloragis exalata subsp exalata



niche Environment and Heritage

0 450
m
WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 34

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69000 69500 70000 70500 71000 71500 72000 72500 73000

6036500 6036000 6035500 6035000 6034500 6034000 6033500 6033000

(1) (2) (3)

Snowy Mountains

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

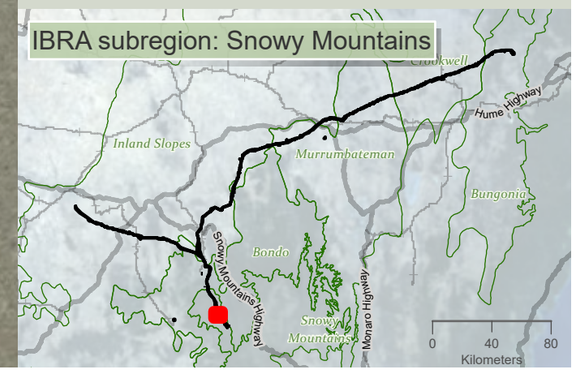
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Discaria nitida



niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 36

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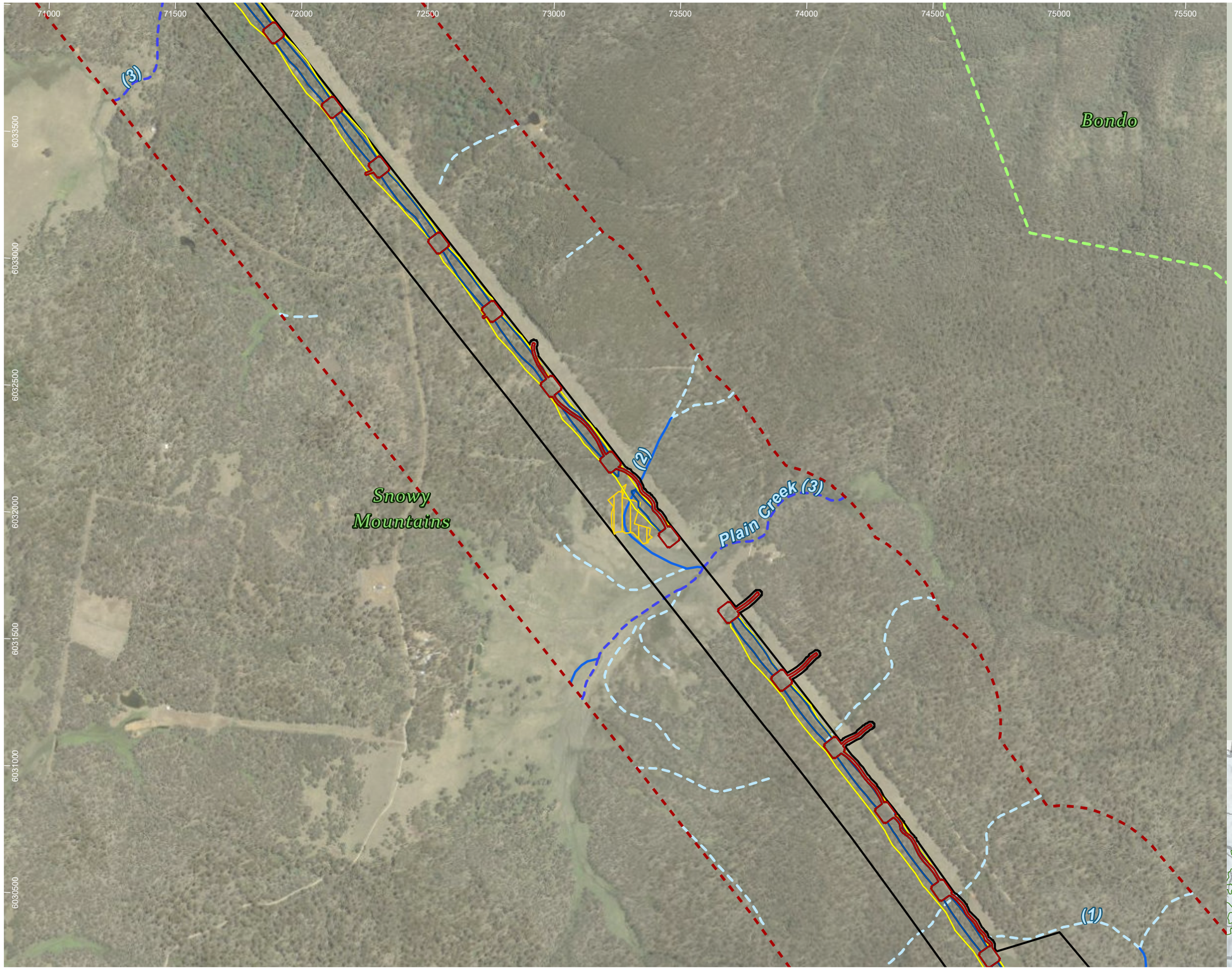


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

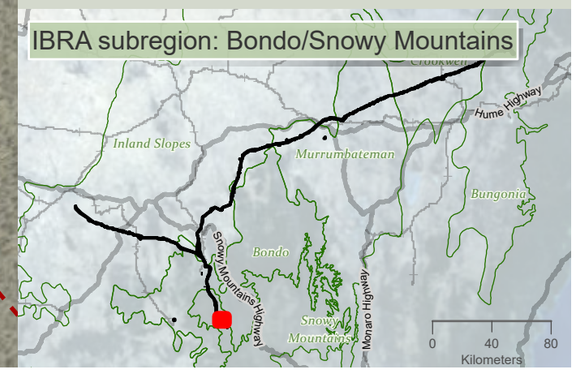
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Discaria nitida
- Haloragis exalata subsp exalata



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 37

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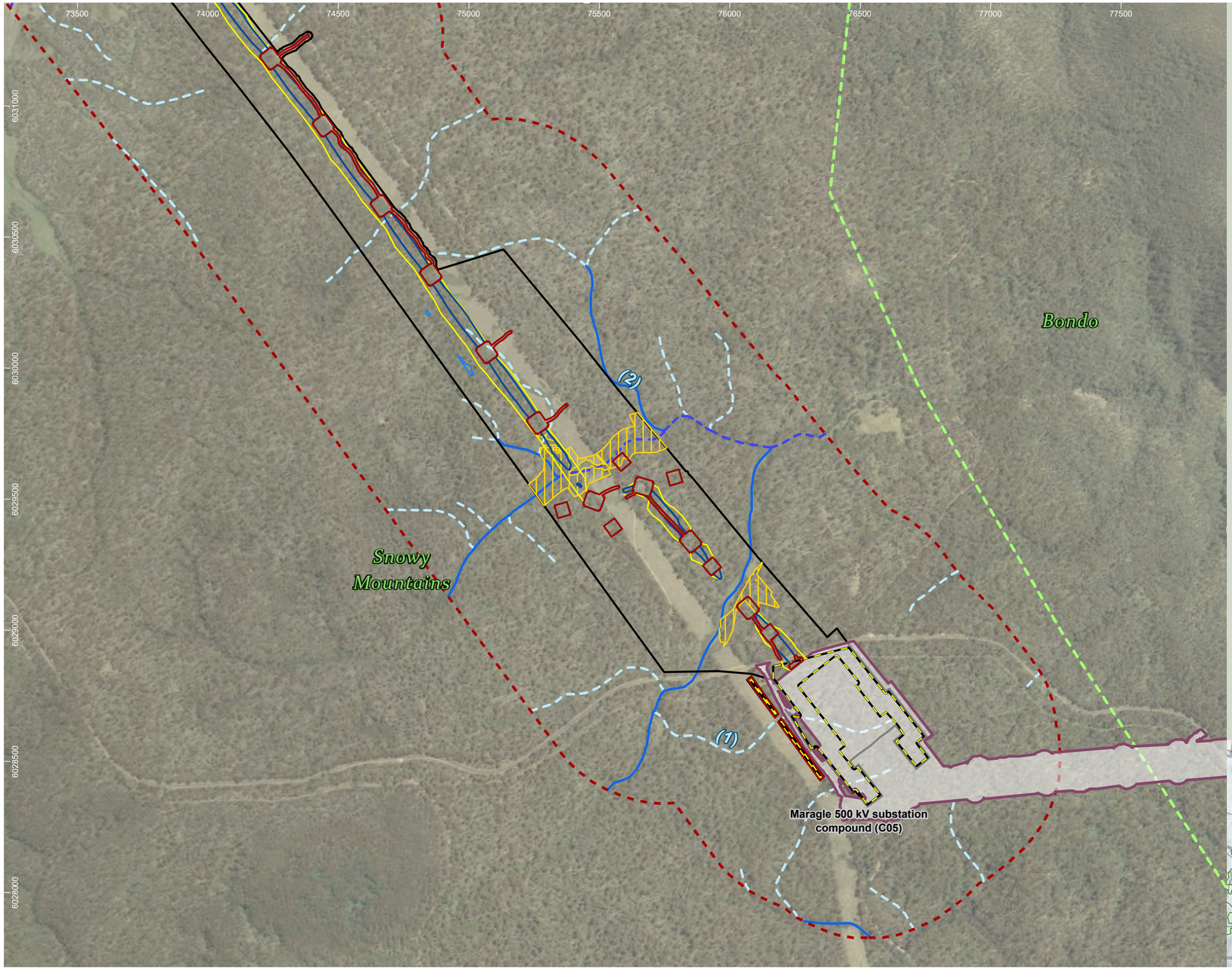


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- Snowy 2.0 Transmission Connection project
- IBRA subregion

Strahler stream order

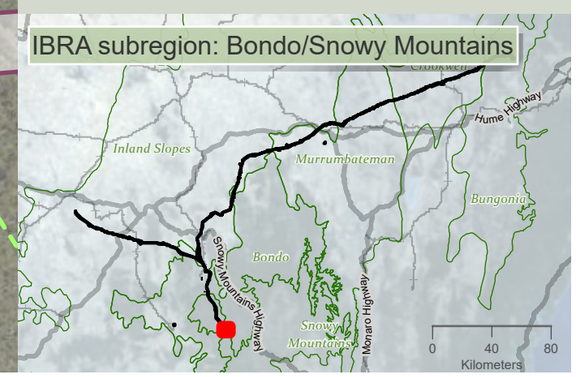
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Discaria nitida
- Haloragis exalata subsp exalata



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 38

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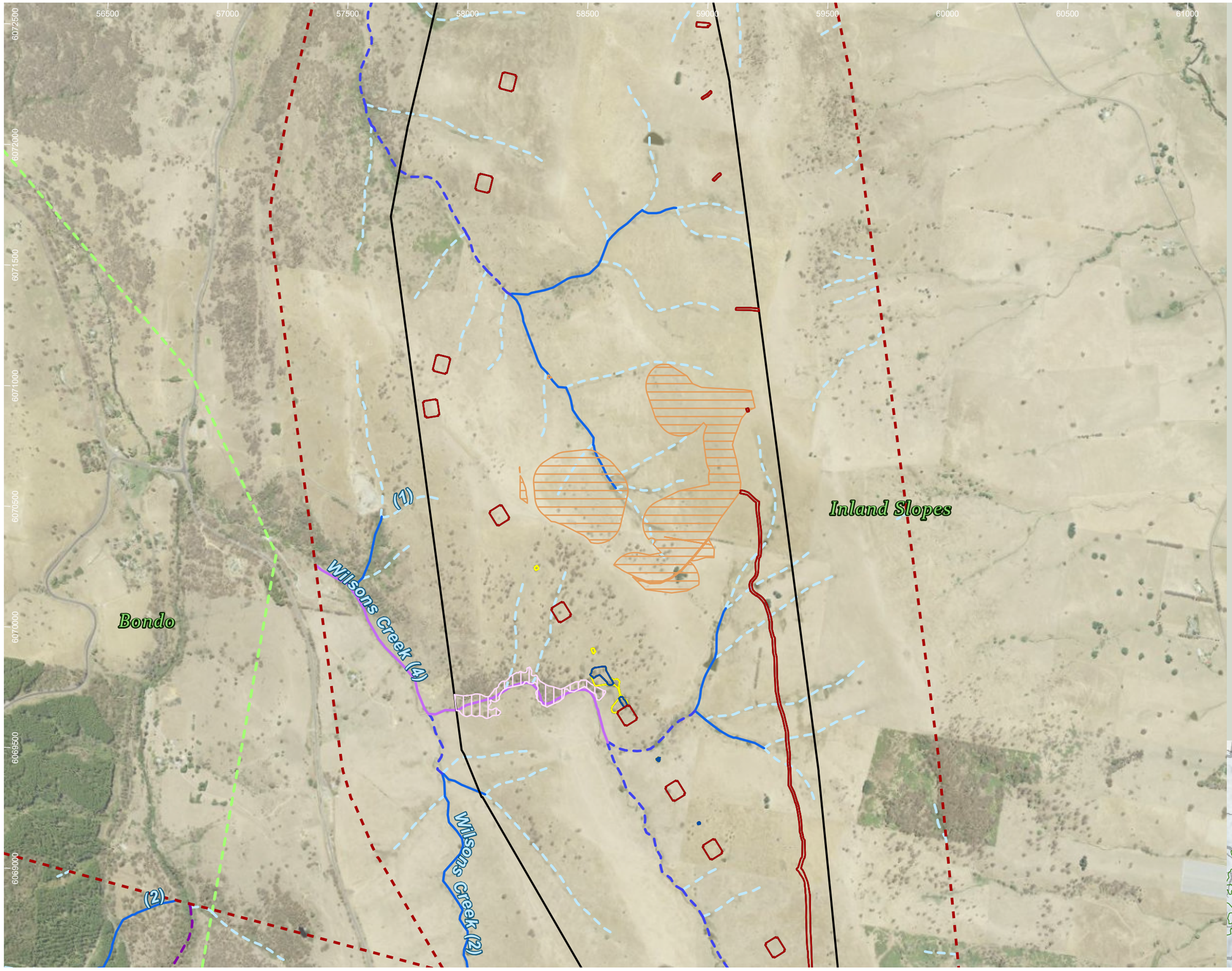
Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx - Confidential



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

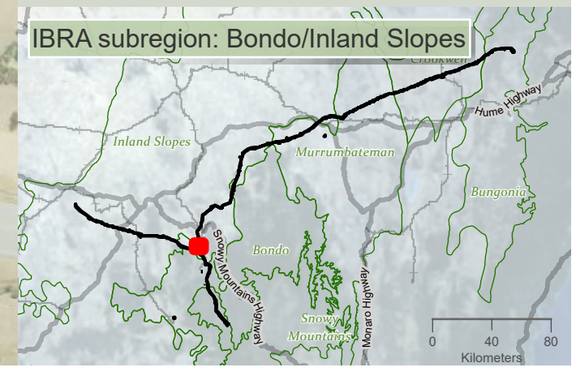
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Pultenaea humilis
- Zieria obcordata



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 39

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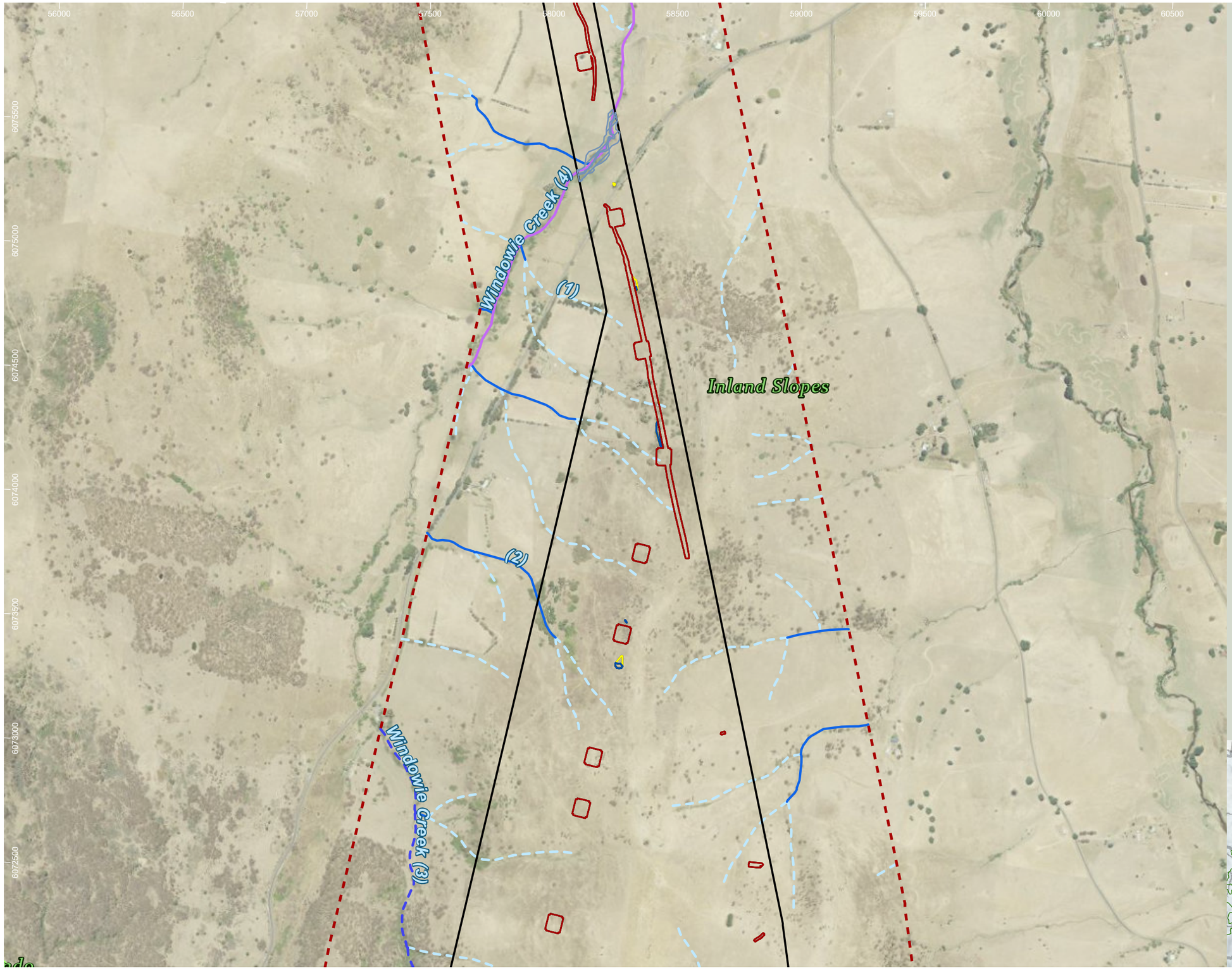


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

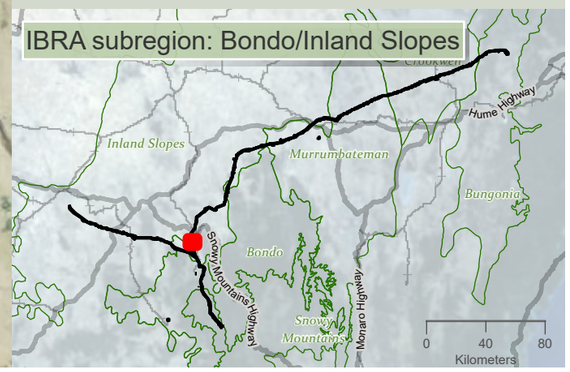
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 40

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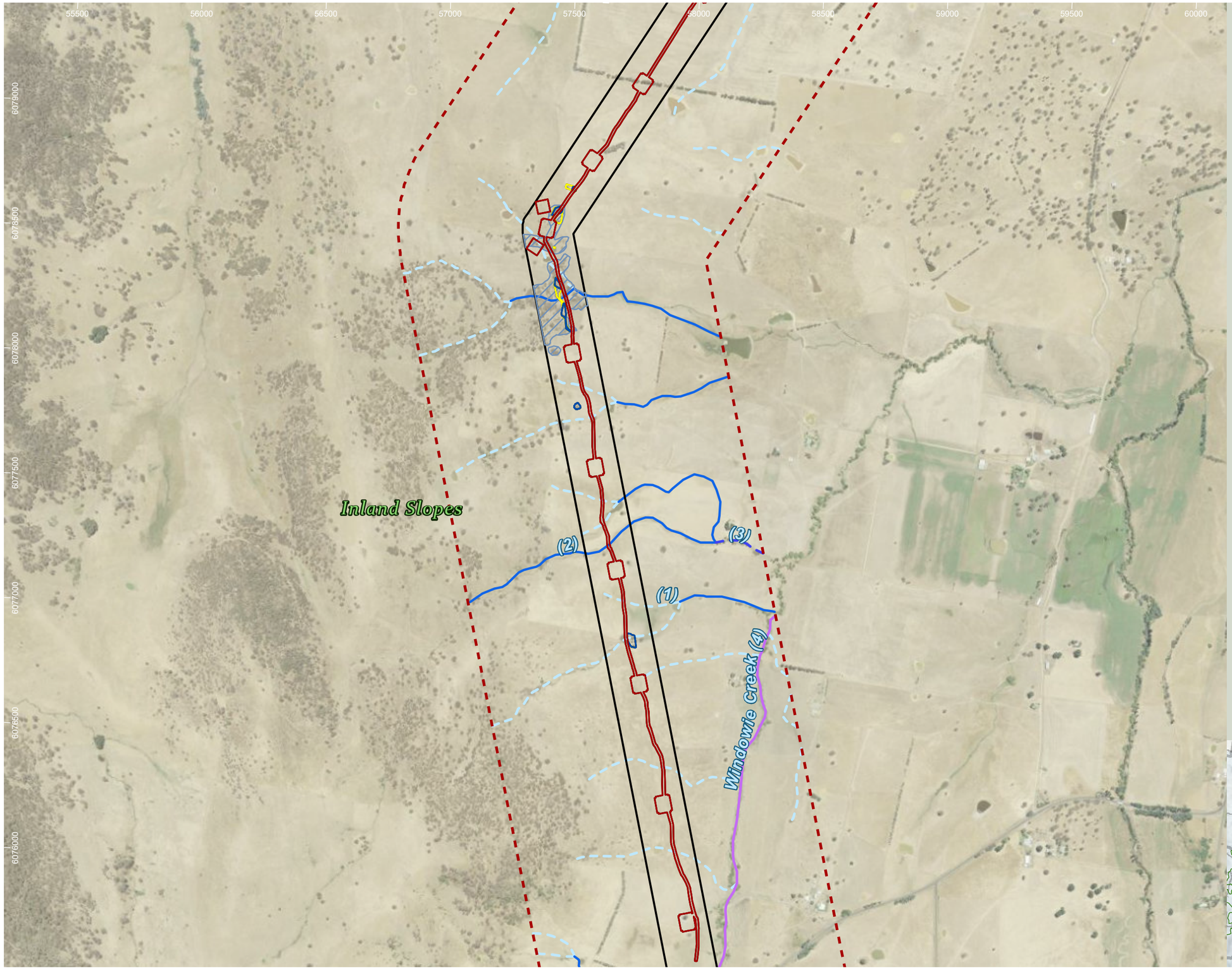


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

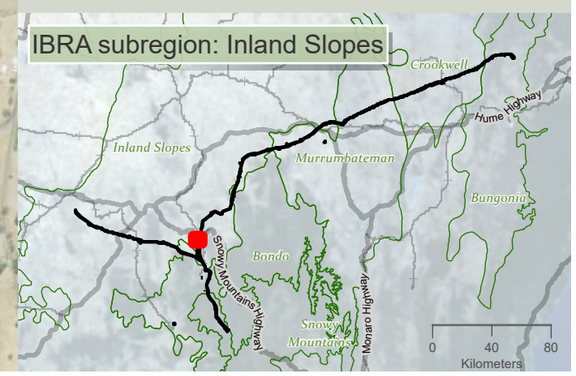
- 0
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 41

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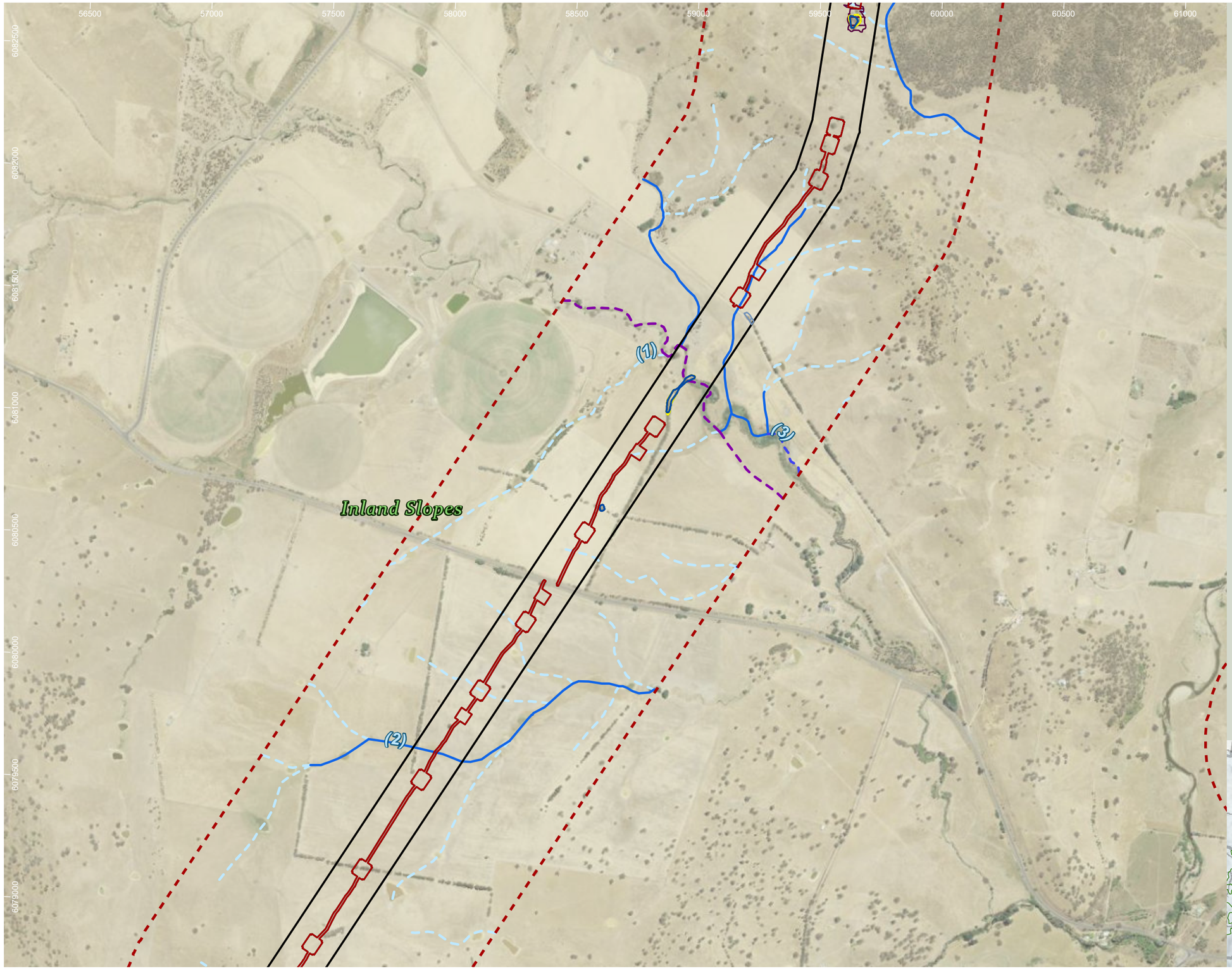


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

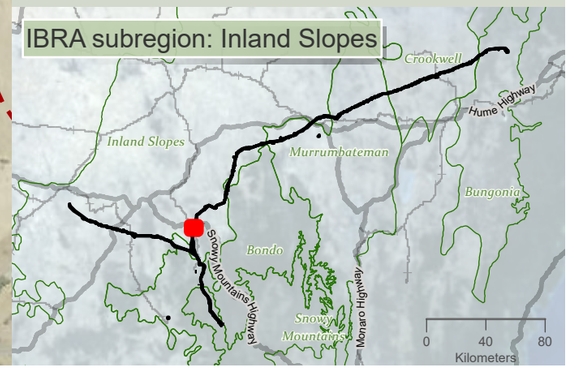
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Grevillea wilkinsonii



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDrive\Sync Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 42

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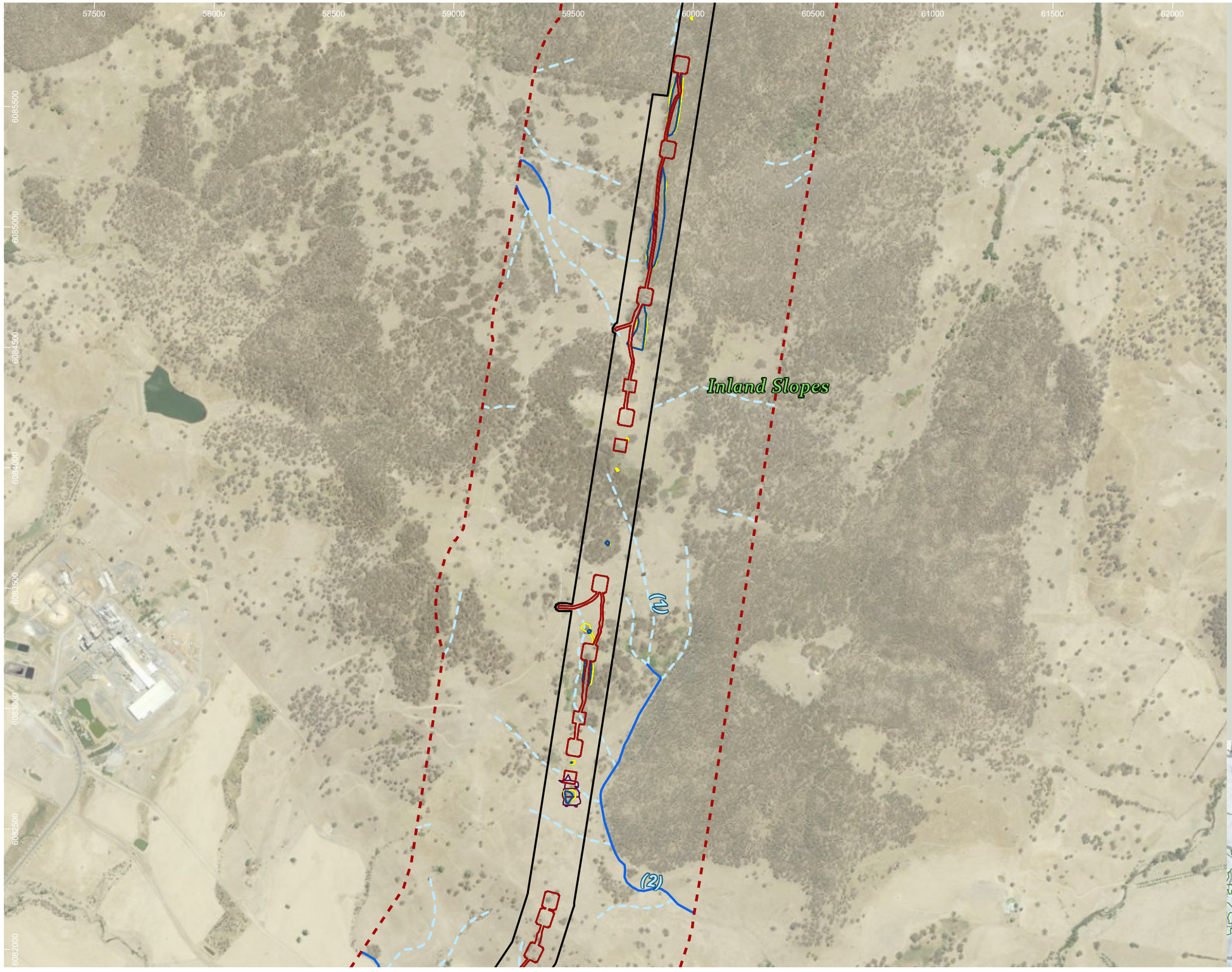


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

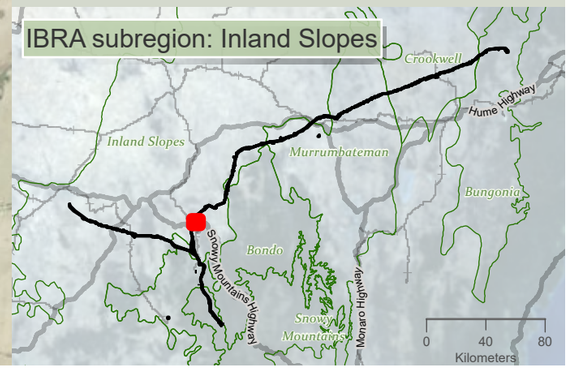
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea wilkinsonii



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 44

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61000 61500 62000 62500 63000 63500 64000 64500

6095000 6094000 6093000 6092000 6091000 6090000 6089500 6089000 6088500

Gocup Creek (4)

(1)

(2)

(3)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

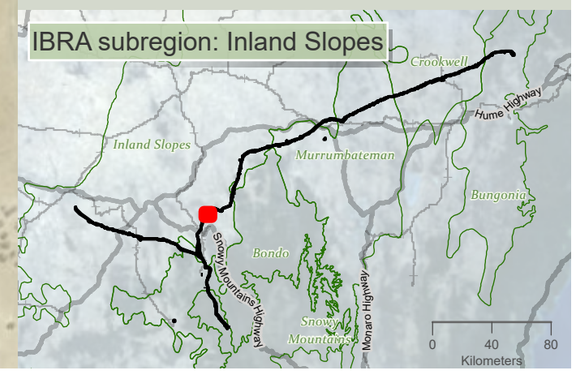
- 1
- 2
- 3
- 4
- 8

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea wilkinsonii
- Zieria obcordata



niche Environment and Heritage

0 400
m
N

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 46

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63500 64000 64500 65000 65500 66000 66500 67000

6094000 6093500 6093000 6092500 6092000 6091500 6091000

(1) (2) (3) (4)

Inland Slopes

Tumut River (8)

Gocup Creek (4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

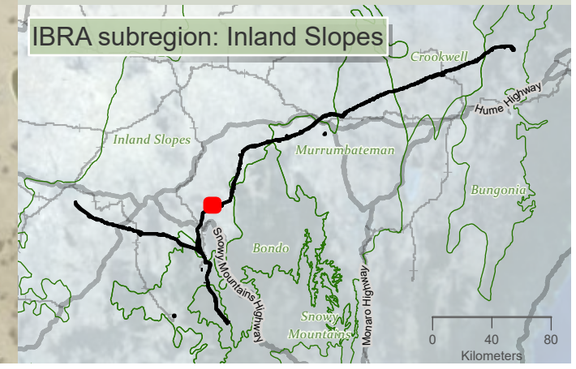
- 1
- 2
- 3
- 4
- 5
- 8

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea wilkinsonii
- Zieria obcordata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 47

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66500 67000 67500 68000 68500 69000 69500 70000

6094000 6093500 6093000 6092500 6092000 6091500

(1) (2) (5)

Inland Slopes

Killimicat Creek

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

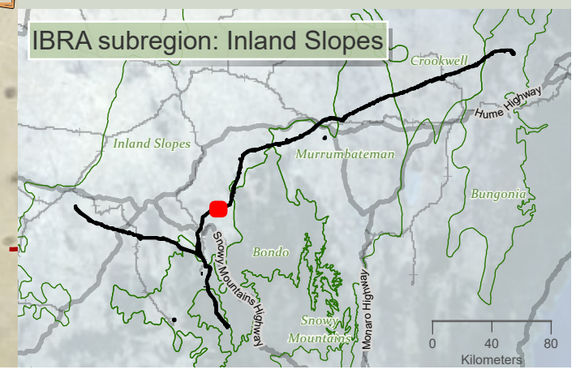
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Zieria obcordata



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 48

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Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

70000 70500 71000 71500 72000 72500 73000 73500

6095000 6094500 6094000 6093500 6093000 6092500

Inland Slopes

Sawpit Gully (4)

Killimicat Creek (5)

(1) (2) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

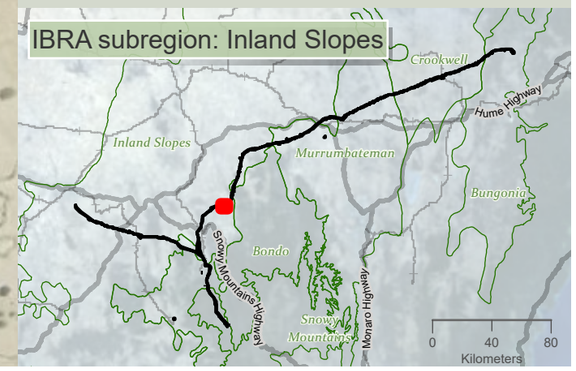
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Zieria obcordata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 49

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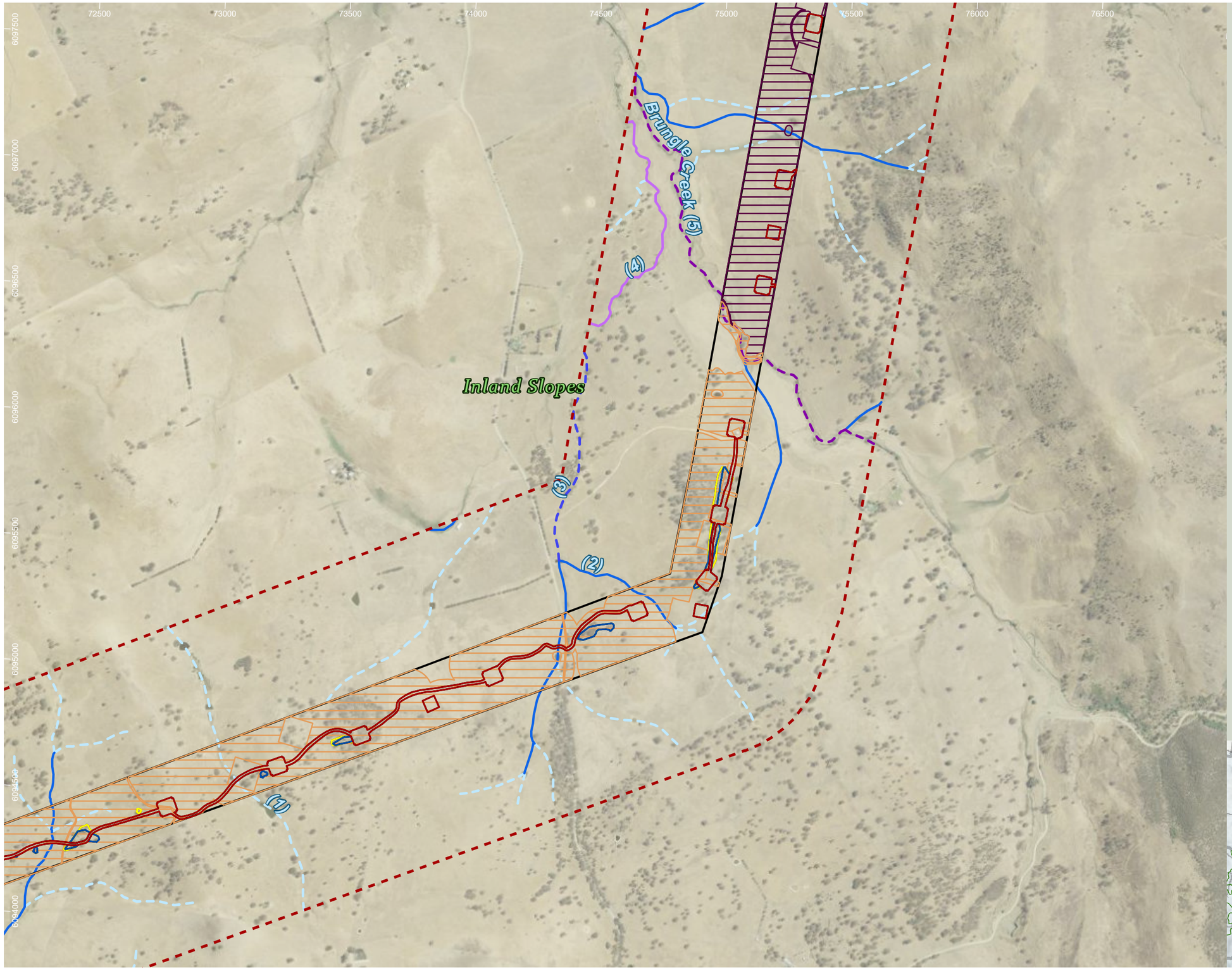
Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

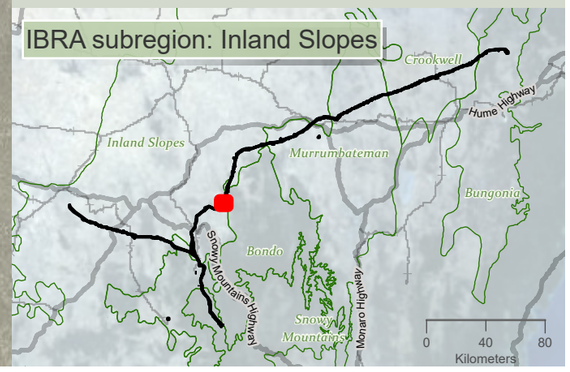
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea wilkinsonii
- Zieria obcordata



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDrive\Sync\Folder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 50

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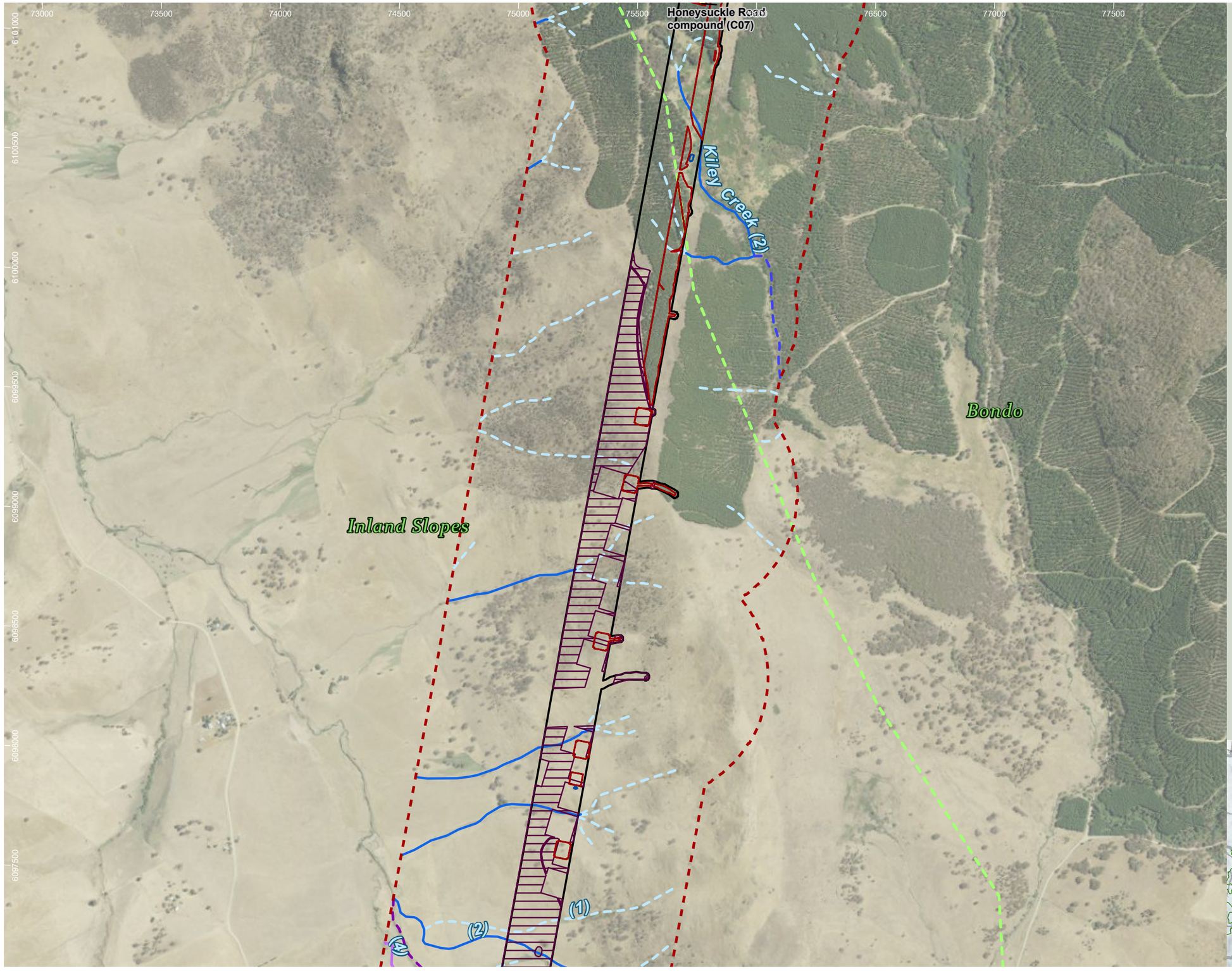


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

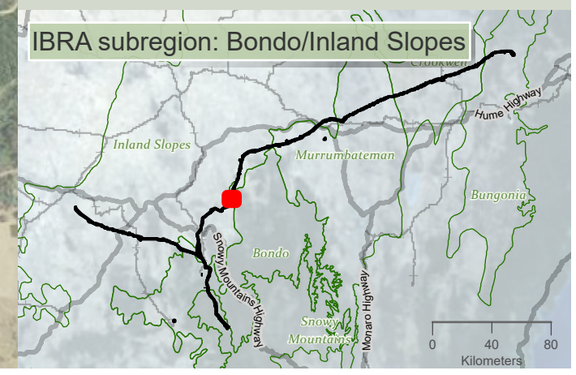
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea wilkinsonii



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 51

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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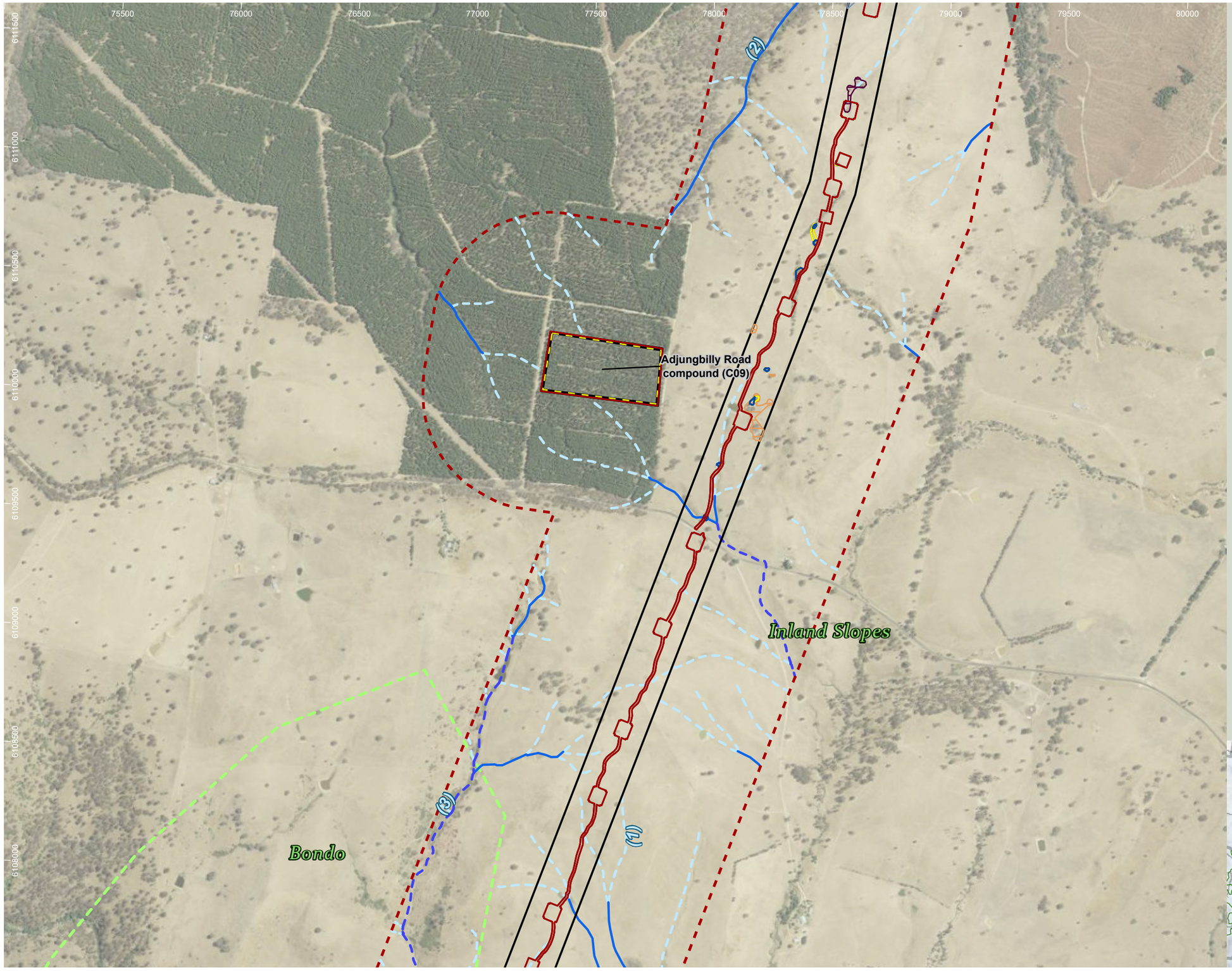


HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds
- IBRA subregion

Strahler stream order

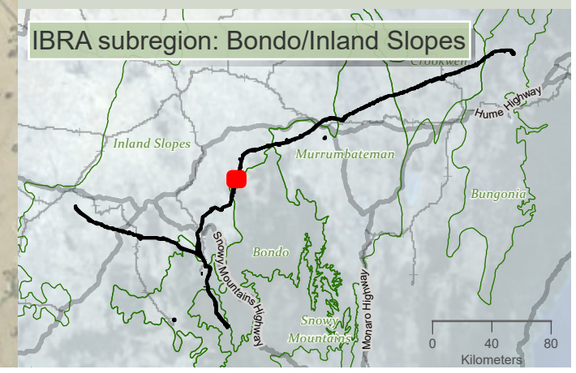
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Grevillea wilkinsonii
- Zieria obcordata



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 54

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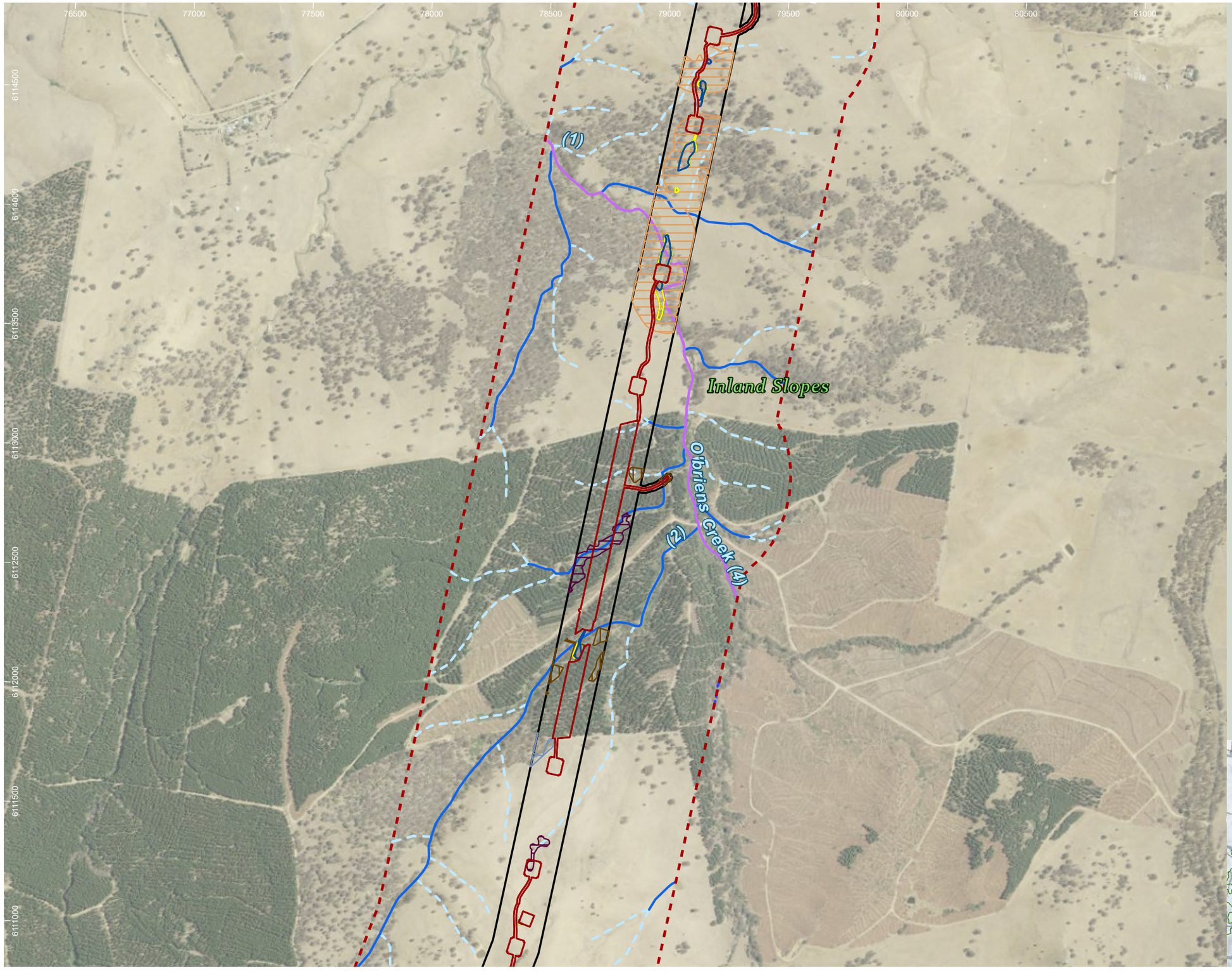


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

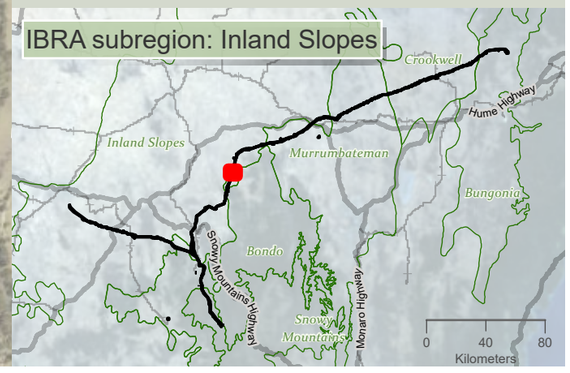
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Bossiaea fragrans
- Grevillea wilkinsonii
- Zieria obcordata



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 500
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 55

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77000 77500 78000 78500 79000 79500 80000 80500 81000 81500

6118000 6117500 6117000 6116500 6116000 6115500 6115000 6114500

Inland Slopes

Cart Road Creek (3)

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

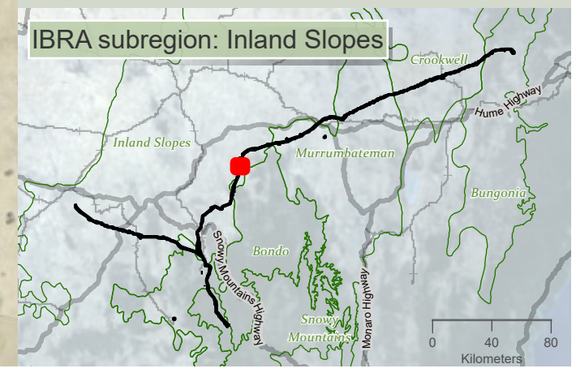
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Zieria obcordata



niche Environment and Heritage

0 500 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 56

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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77500 78000 78500 79000 79500 80000 80500 81000 81500 82000

6121500 6121000 6120500 6120000 6119500 6119000 6118500 6118000

(1)

Oak Creek (5)

Inland Slopes

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

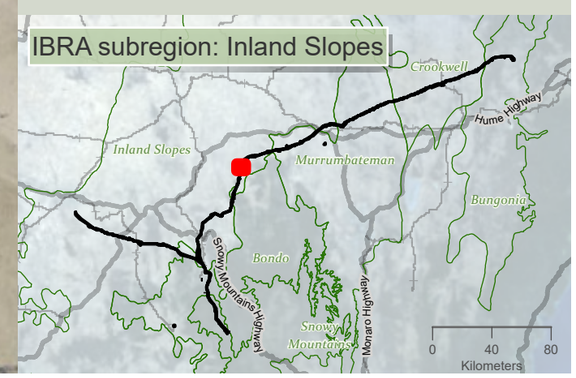
- 1
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea wilkinsonii



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\FoldenNiche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 57

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

79000 79500 80000 80500 81000 81500 82000 82500 83000

6124500 6124000 6123500 6123000 6122500 6122000 6121500

Inland Slopes

(1)

(2)

Yellow Clay Creek (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

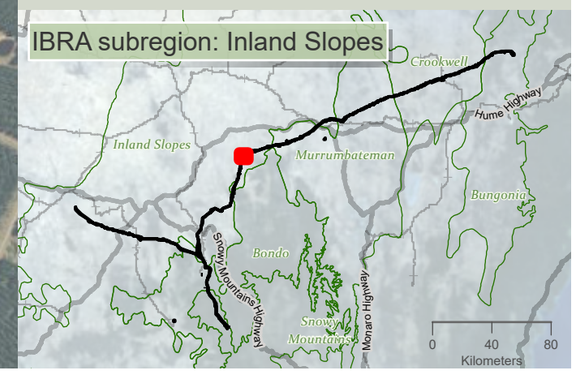
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Grevillea wilkinsonii



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

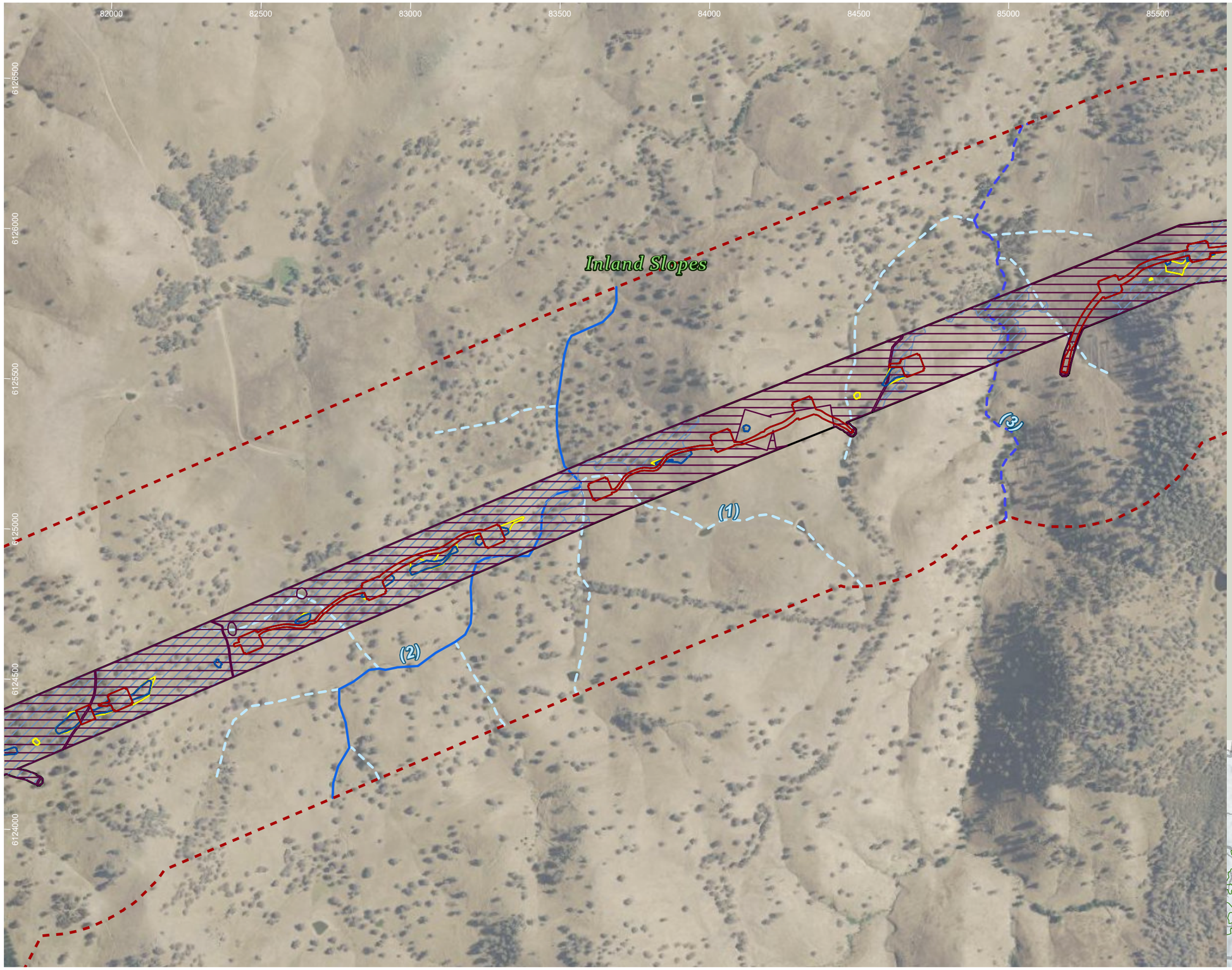
Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 58

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

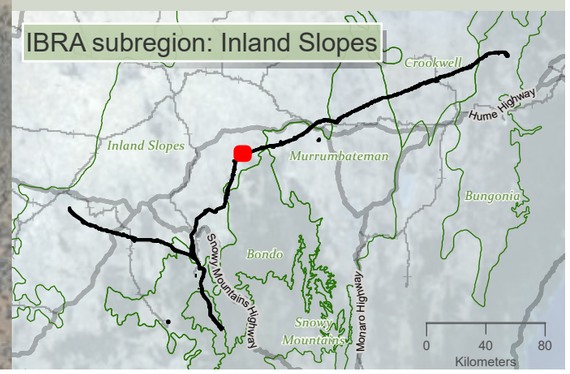
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Grevillea wilkinsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 59

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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85500 86000 86500 87000 87500 88000 88500

6127500 6127000 6126500 6126000 6125500 6125000

Rocky Creek (2)

Inland Slopes

Dicks Gully (2)

(1) (2) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

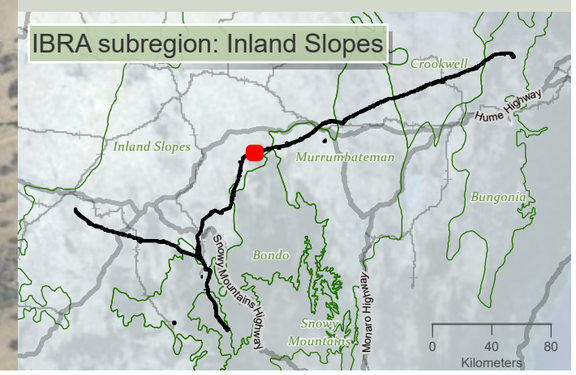
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Bossiaea fragrans
- Grevillea wilkinsonii
- Pultenaea humilis
- Zieria obcordata



Drawn by: MathewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

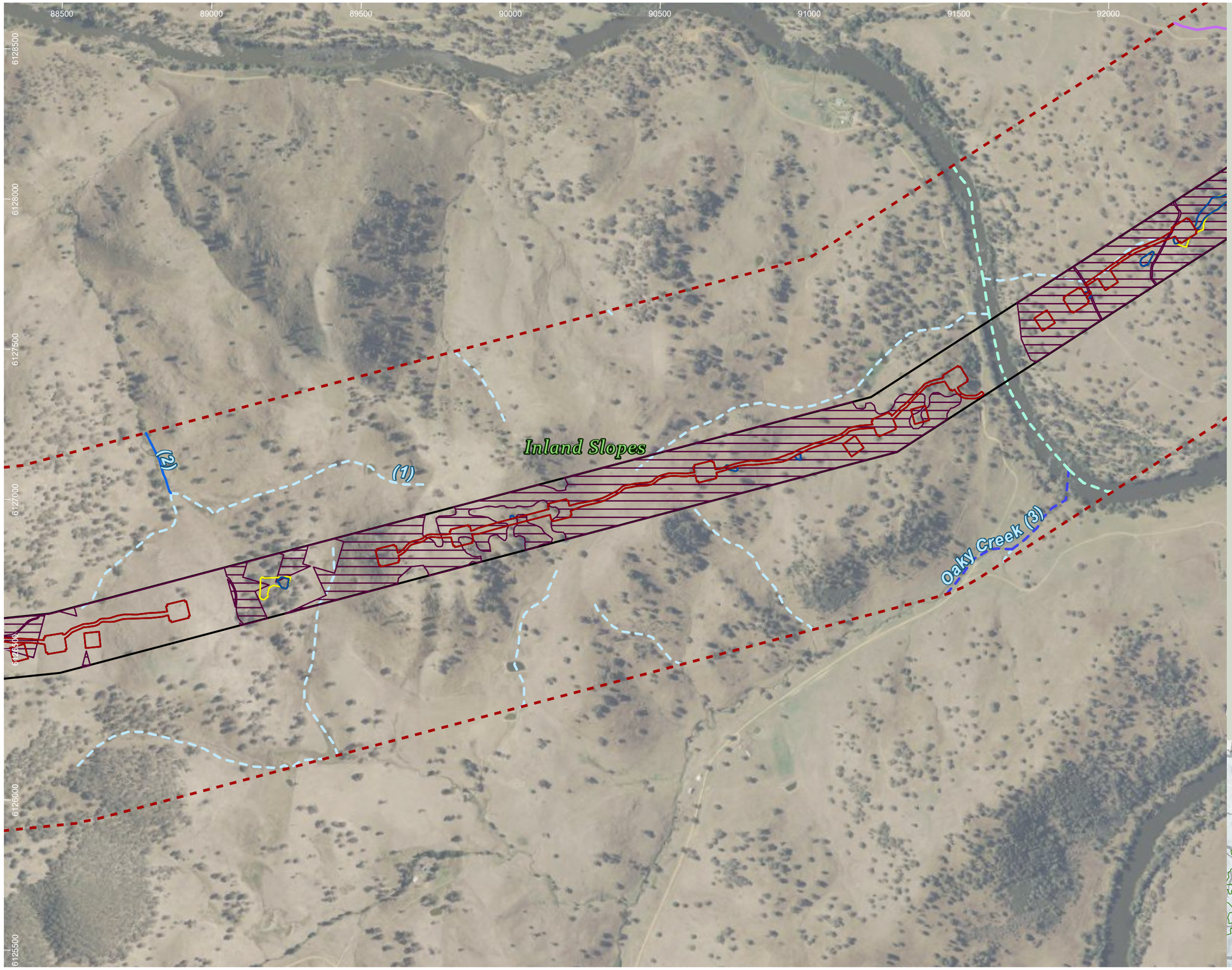
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 60

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

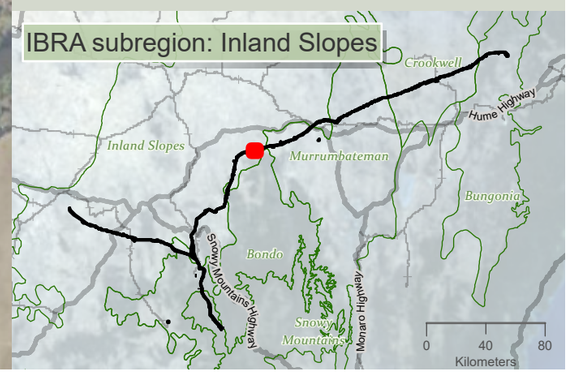
- 1
- 2
- 3
- 4
- 9

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea wilkinsonii



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 61

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92000 92500 93000 93500 94000 94500 95000 95500

6130000 6129500 6129000 6128500 6128000 6127500 6127000

Oak Creek (4)

Murrumbidgee River (9)

(1)

(2)

Inland Slopes

Bondo

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

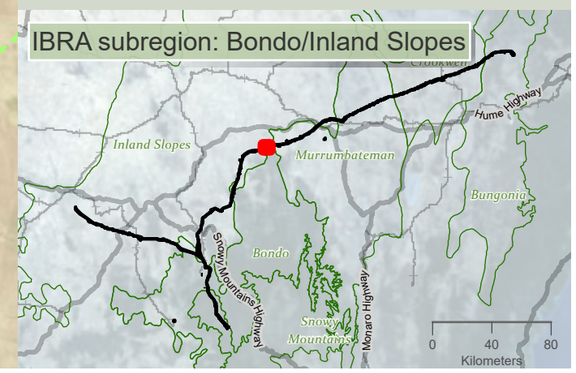
- 1
- 2
- 3
- 4
- 9

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Bossiaea fragrans
- Grevillea wilkinsonii
- Zieria obcordata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 62

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Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

95000
95500
96000
96500
97000
97500
98000
98500
6131000
6130500
6130000
6129500
6129000
6128500
6128000

Oak Creek (1)
Jugiong Creek (4)
Oak Creek (4)
(1)
(2)
(3)
Inland Slopes
Murrumbateman
Bondo

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

- 1
- 2
- 3
- 4

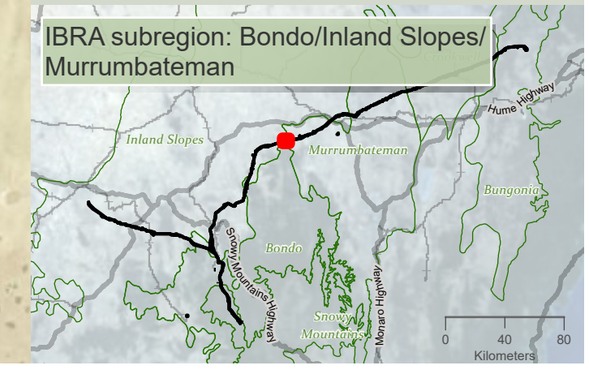
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Bossiaea fragrans
- Grevillea iaspicula
- Grevillea wilkinsonii
- Zieria obcordata

IBRA subregion: Bondo/Inland Slopes/ Murrumbateman



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 63

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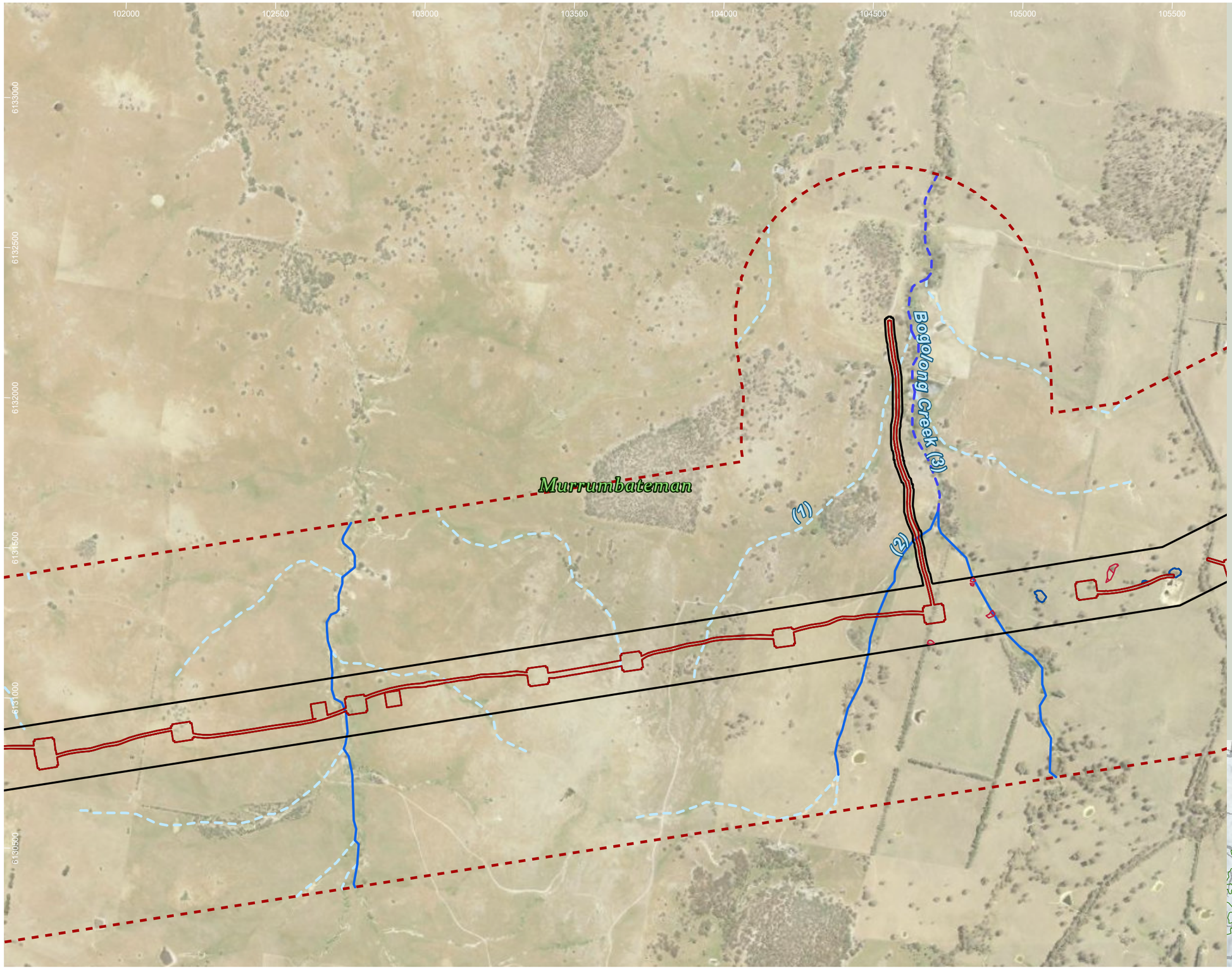
Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

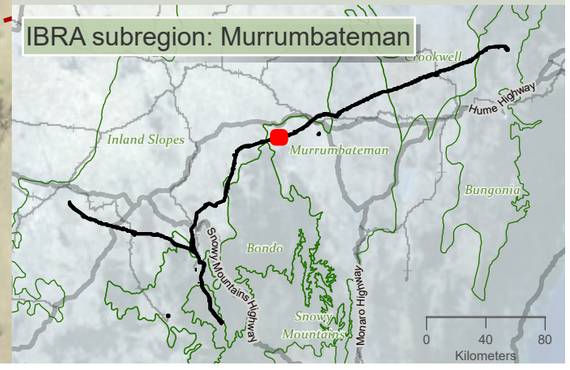
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea iaspicula



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 65

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105000 105500 106000 106500 107000 107500 108000 108500

6133500 6133000 6132500 6132000 6131500 6131000

Murrumbateman

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

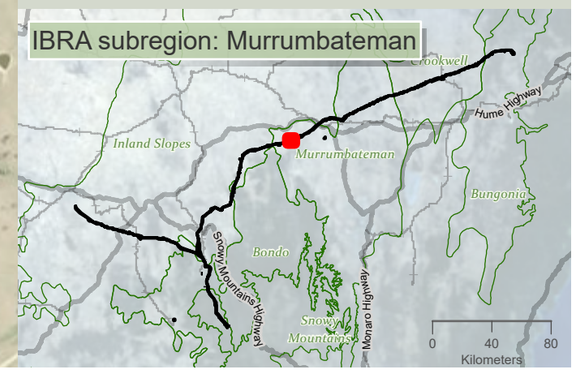
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea iaspicula



niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 66

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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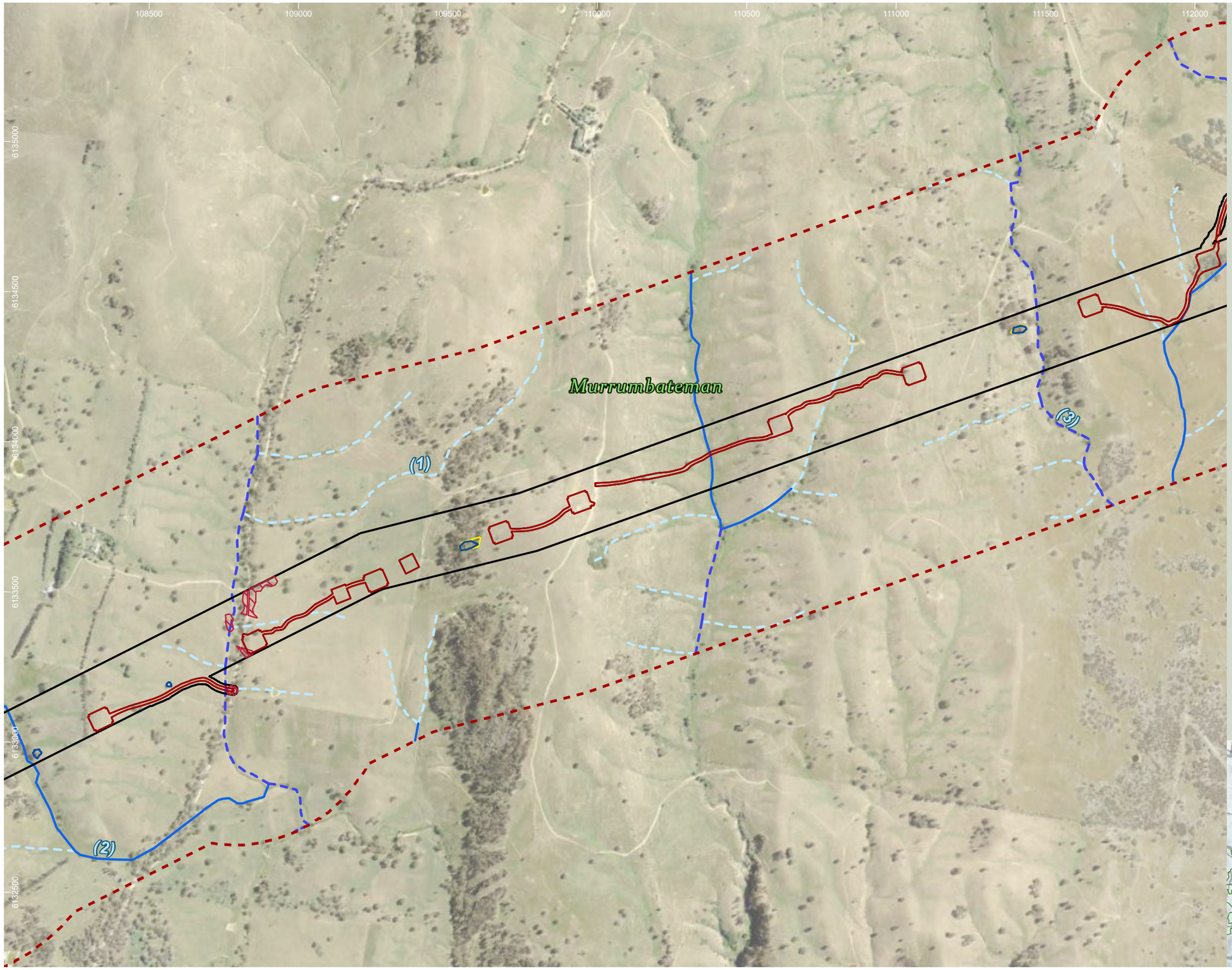


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

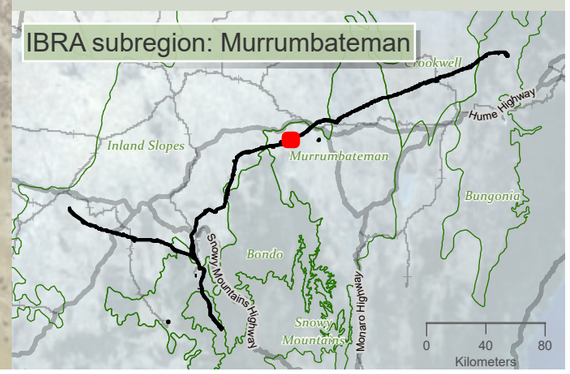
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea iaspicula



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 67

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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111500 112000 112500 113000 113500 114000 114500 115000

6136500 6136000 6135500 6135000 6134500 6134000

Murrumbateman

Mccullums Creek (3)

(1)

(2)

(3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

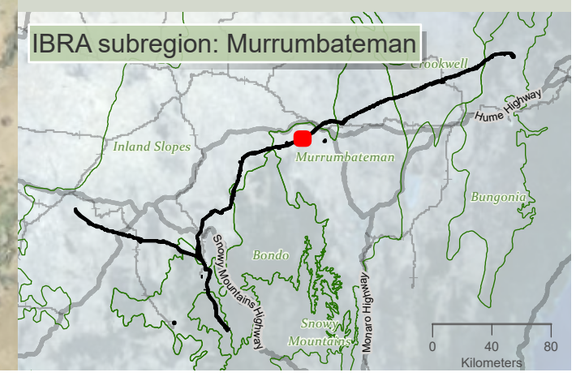
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea iaspicula



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 68

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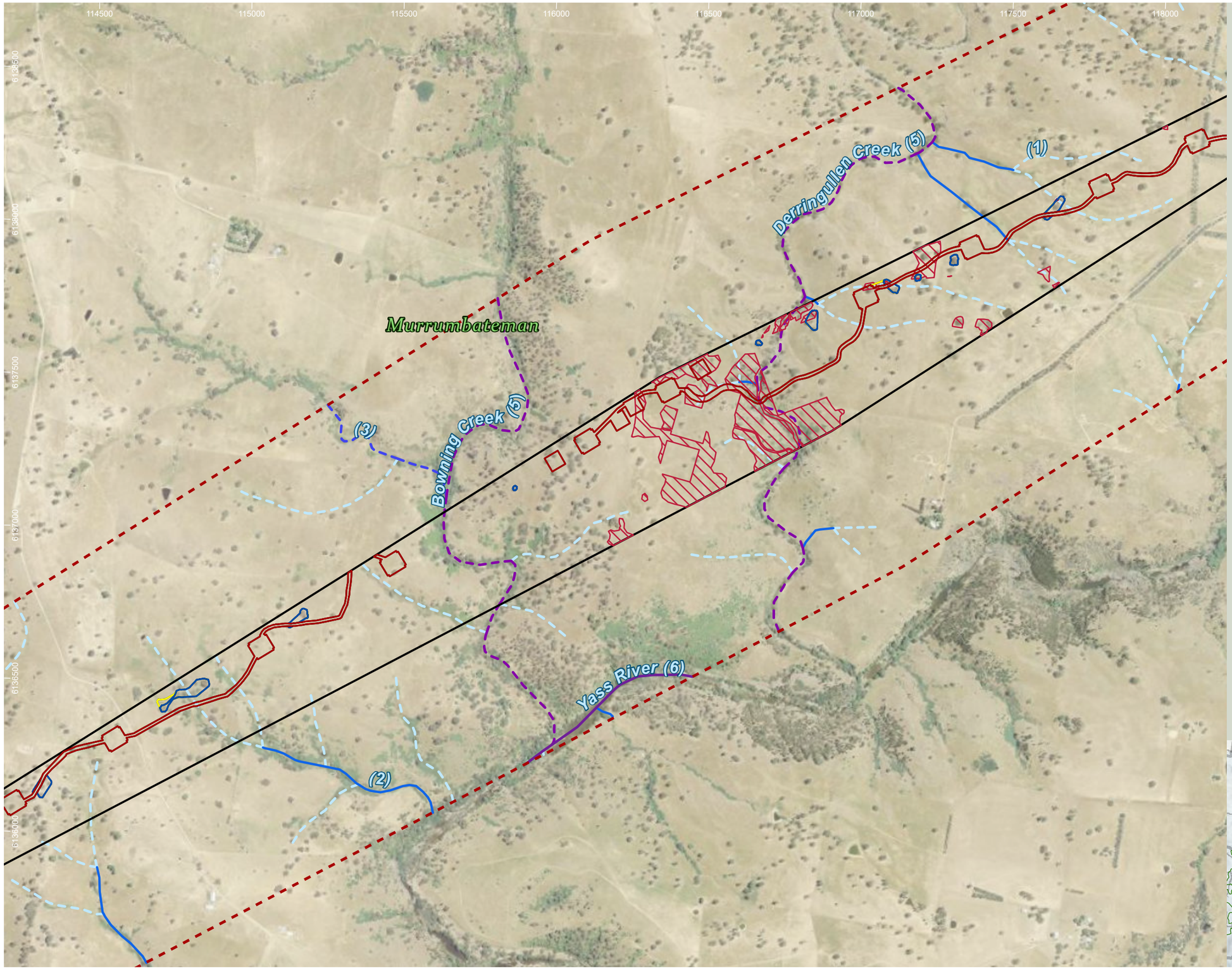


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

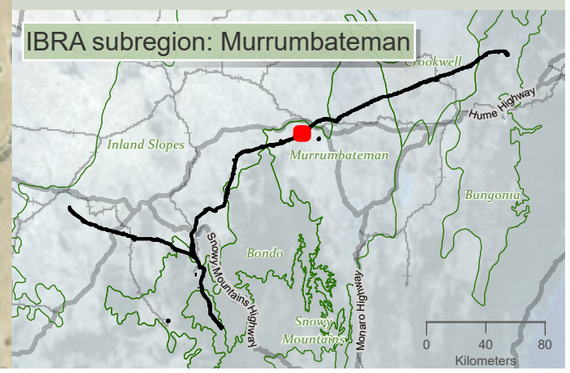
- 1
- 2
- 3
- 5
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea iaspicula



Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche9699 - Confidential Impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 350
m

WGS 1984 Web Mercator

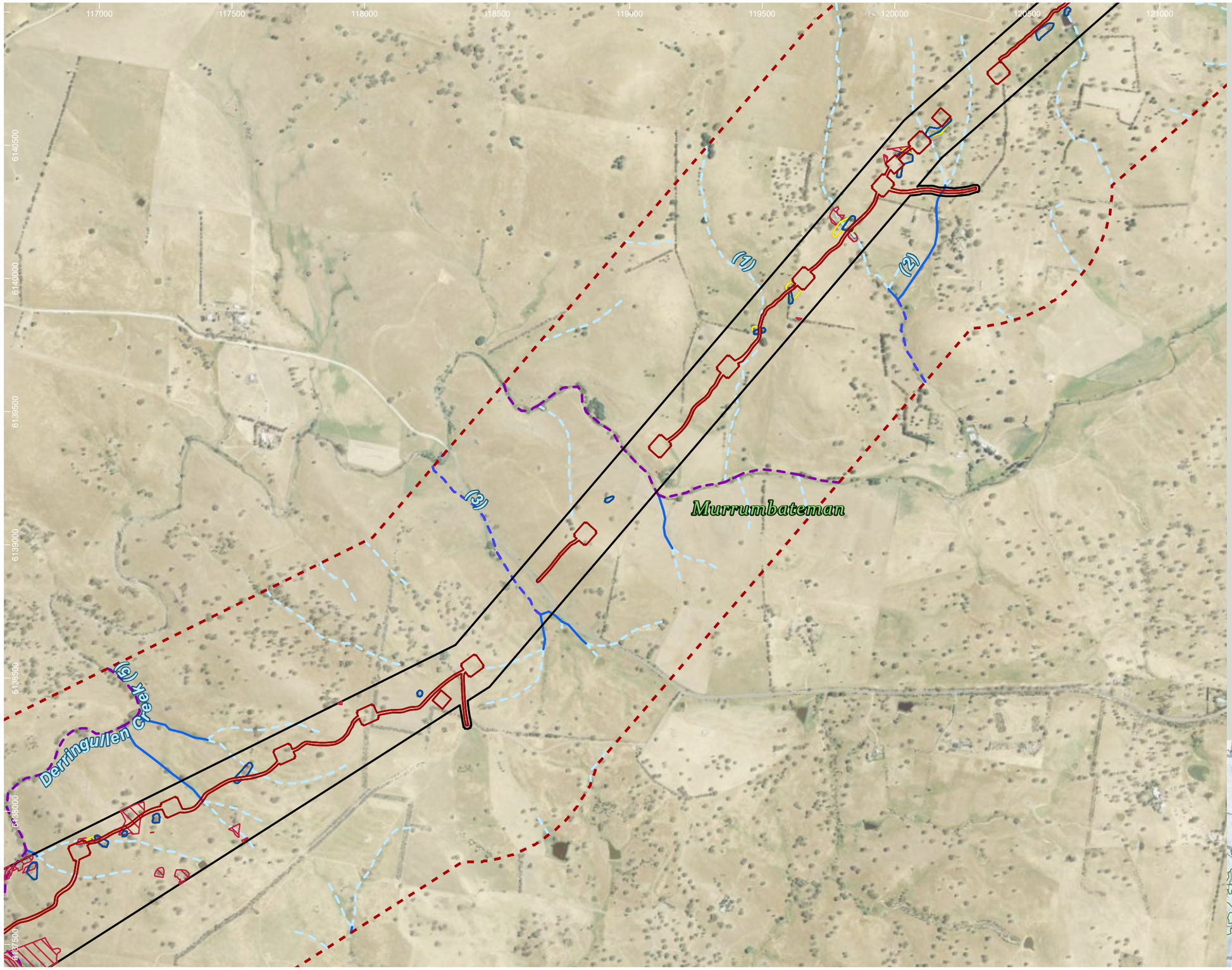
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 69

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

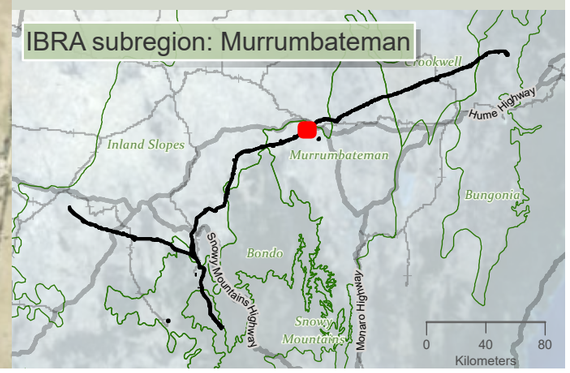
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea iaspicula



niche Environment and Heritage

0 450 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 70

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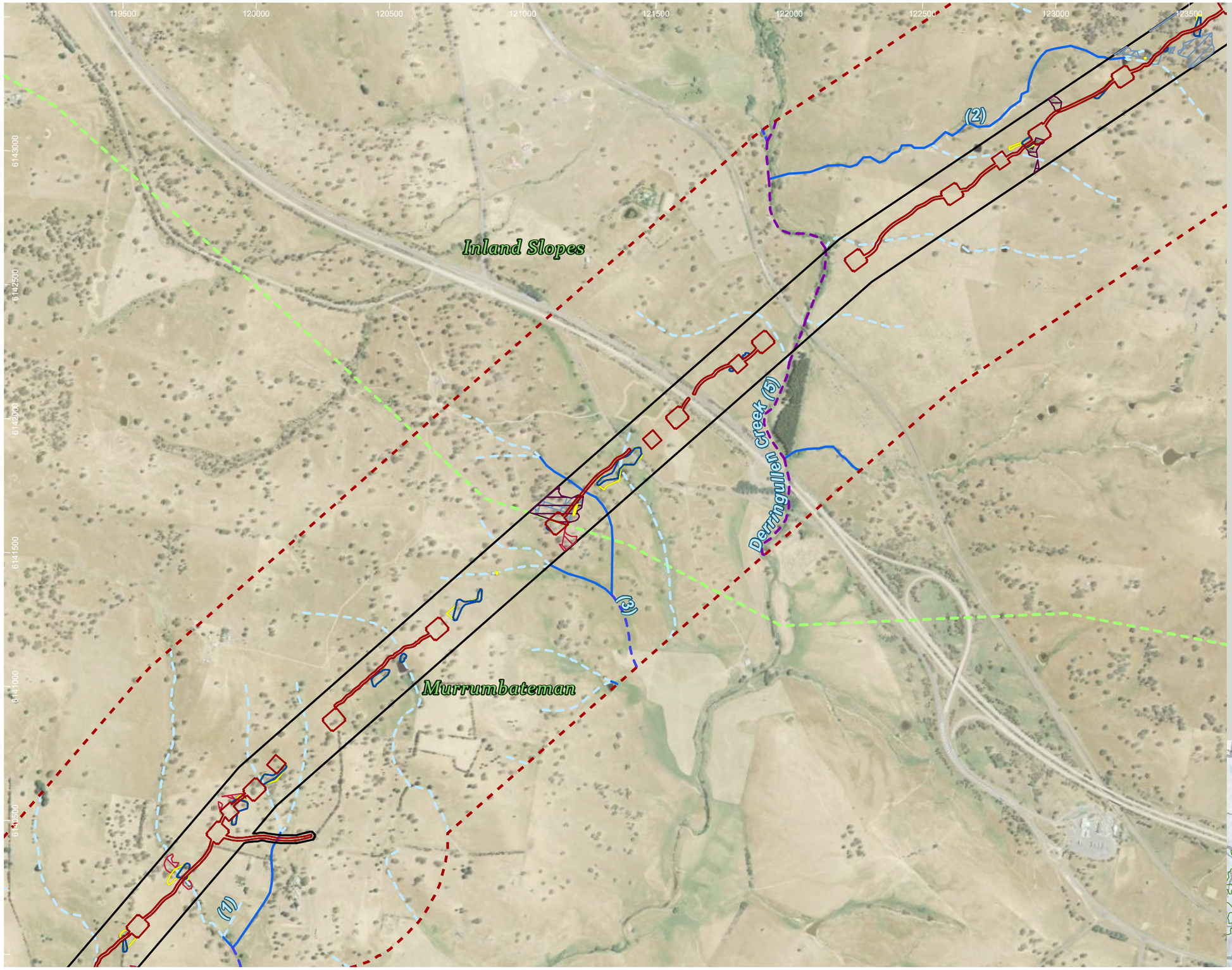


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

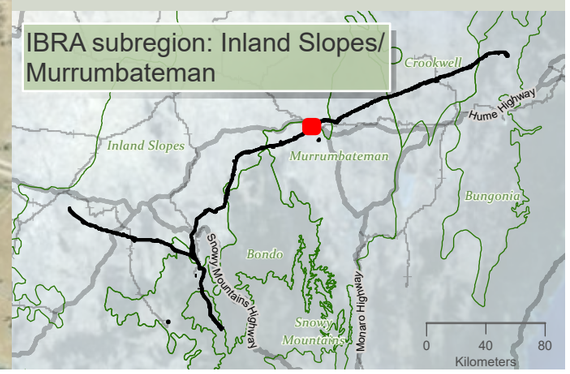
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Grevillea iaspicula
- Grevillea wilkinsonii



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niche Environment and Heritage

0 450
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 71

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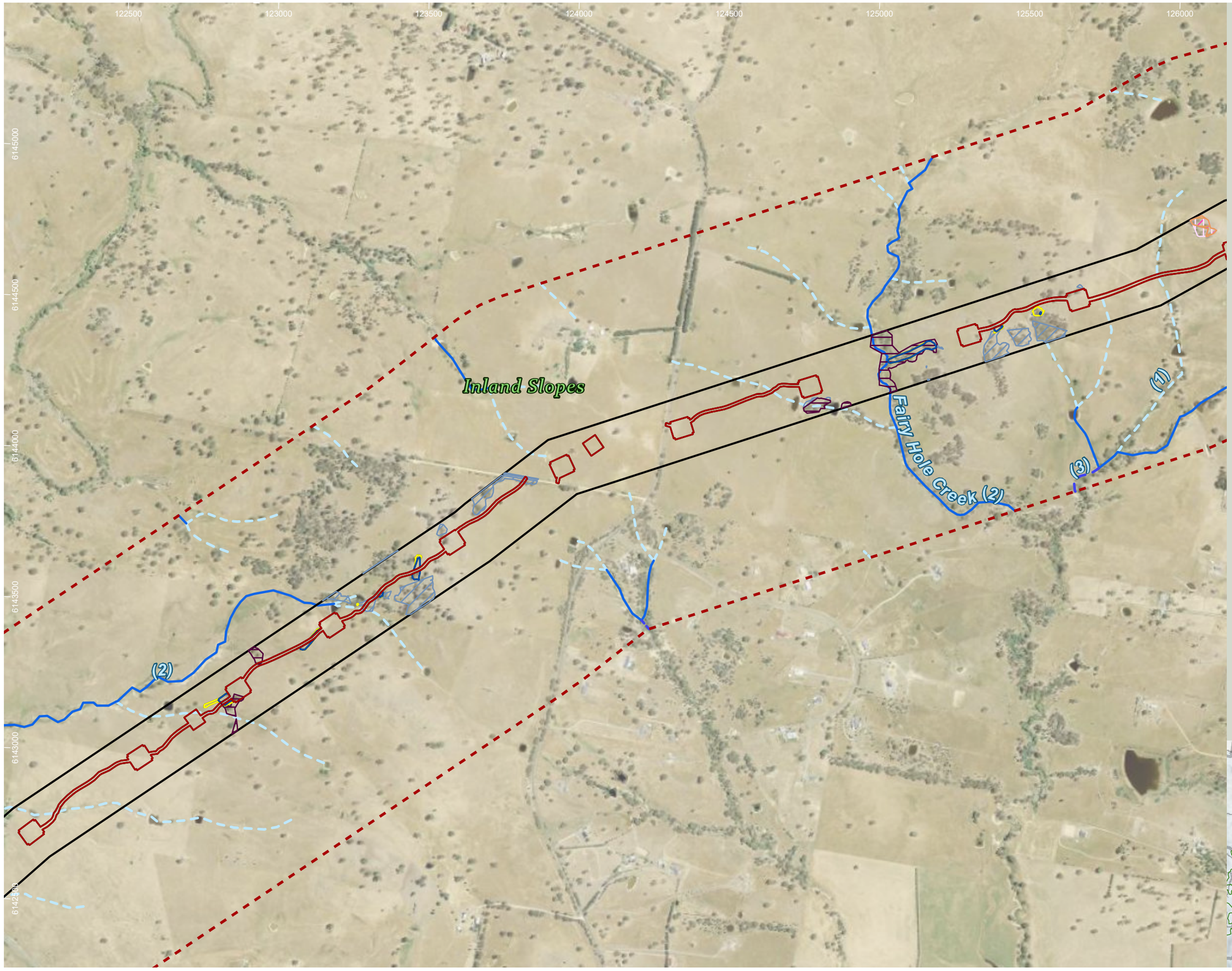


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

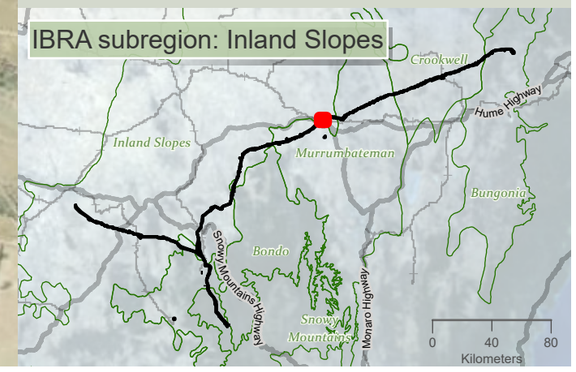
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Acacia phasmoides
- Grevillea wilkinsonii
- Pultenaea humilis
- Zieria obcordata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 73

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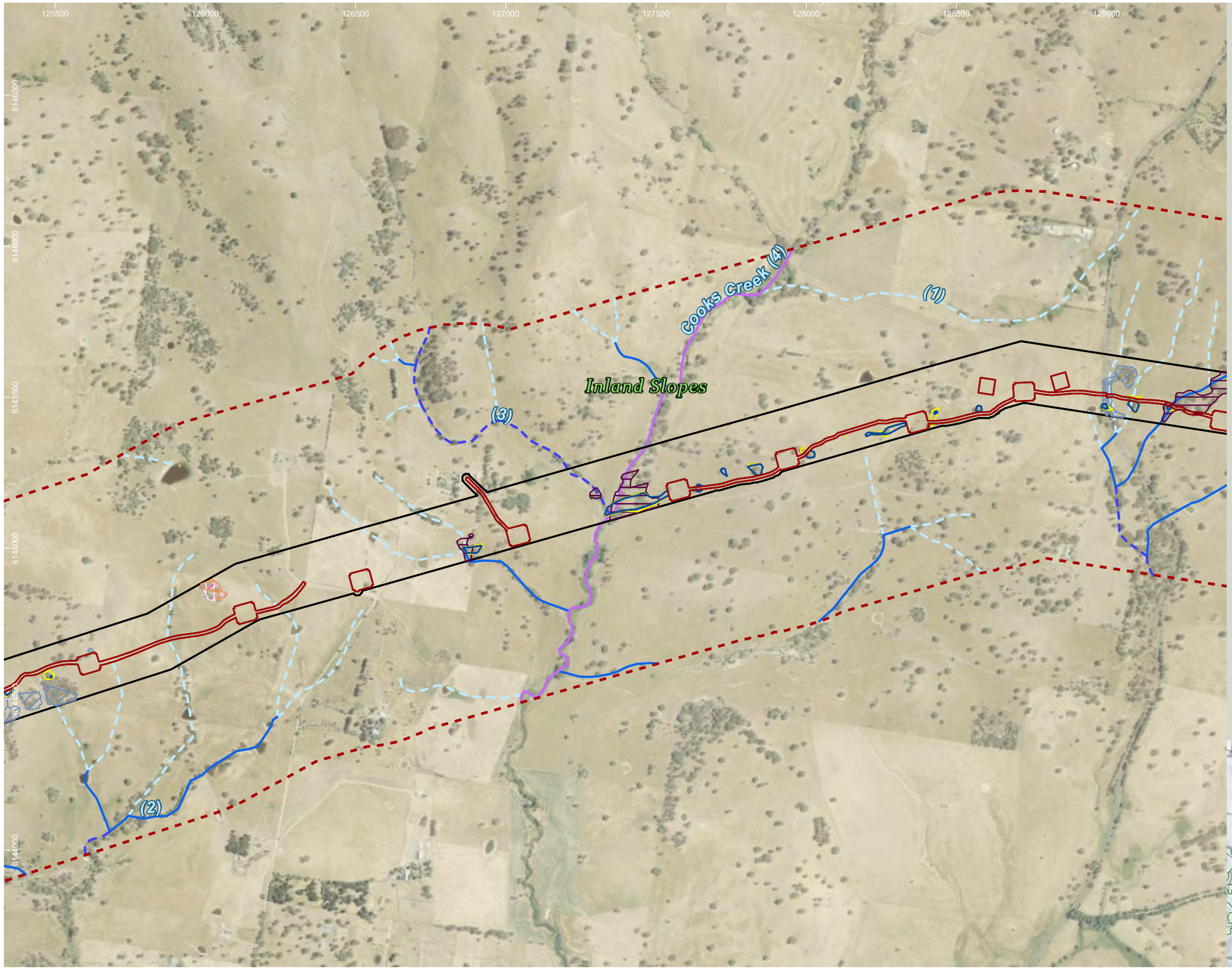


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

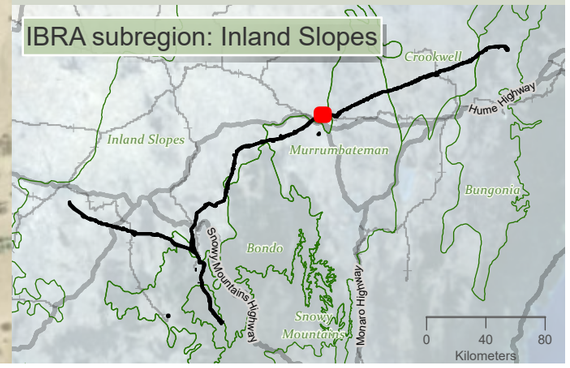
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Acacia phasmoides
- Grevillea wilkinsonii
- Pultenaea humilis
- Zieria obcordata



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niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 74

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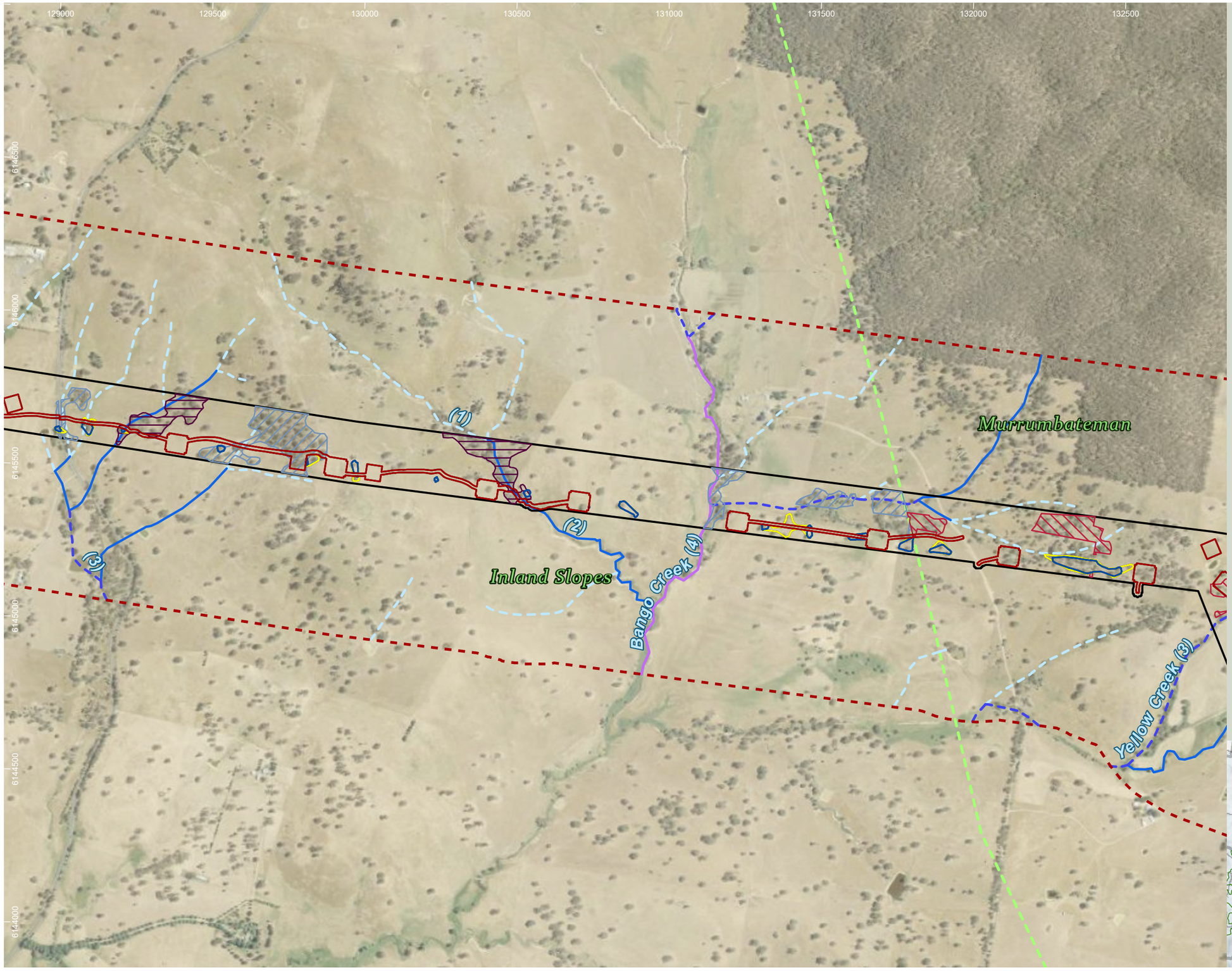


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

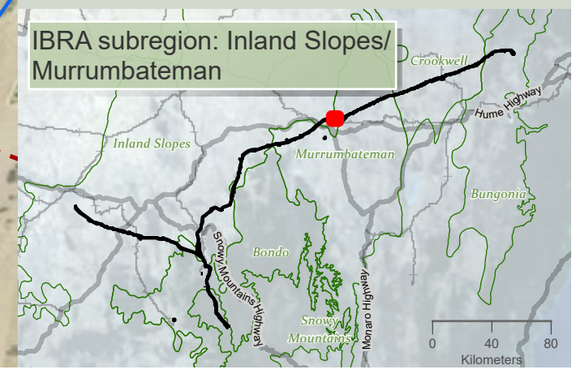
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia ausfeldii
- Grevillea iaspicula
- Grevillea wilkinsonii



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niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 75

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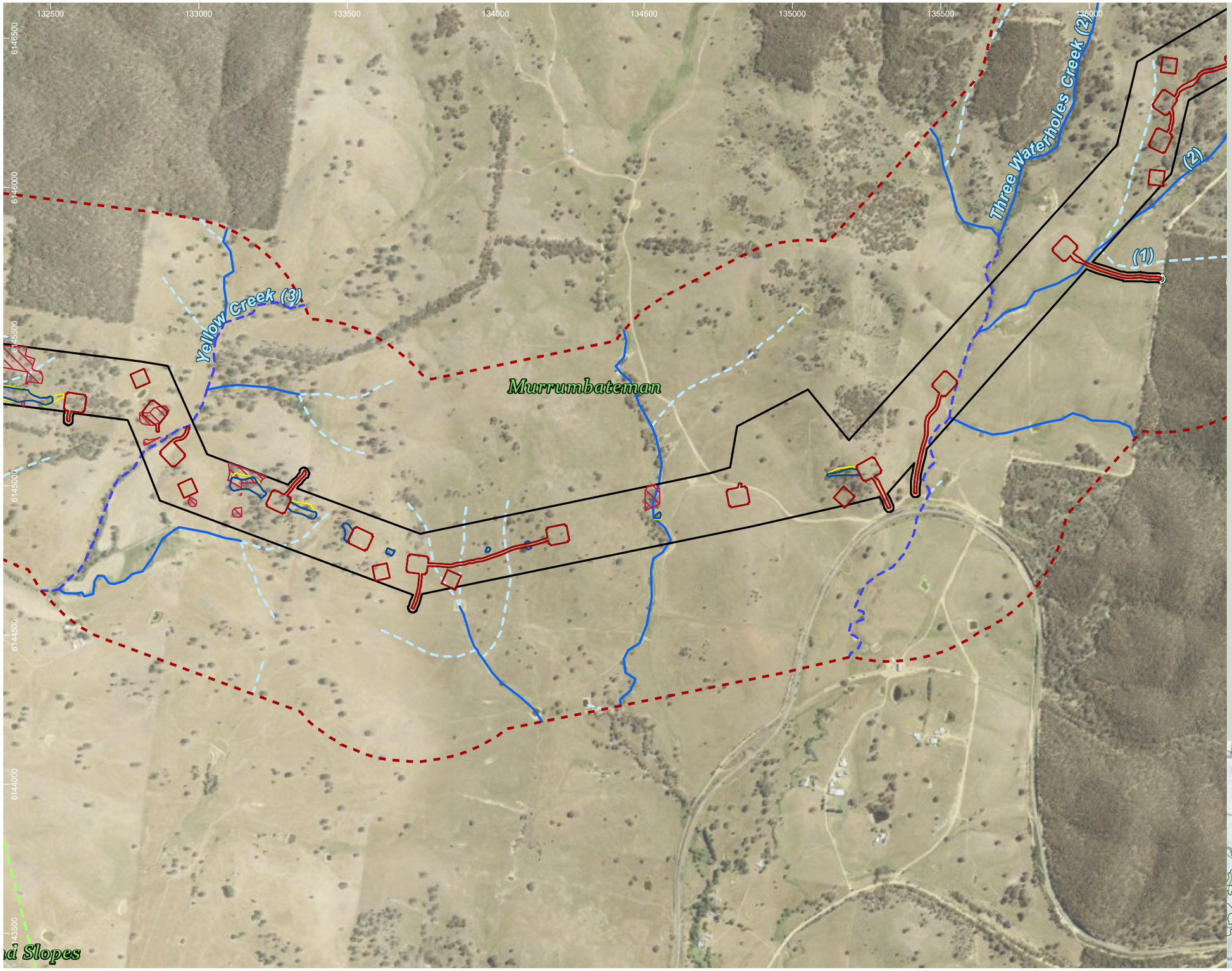


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

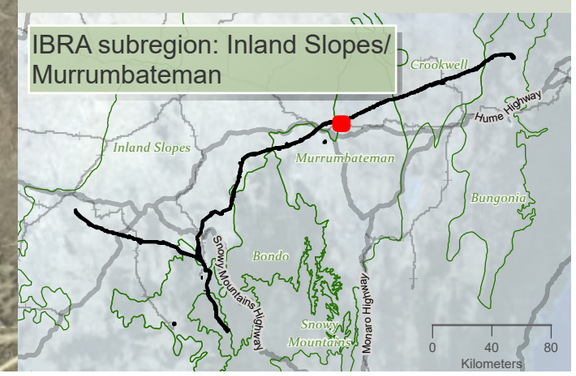
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea iaspicula
- Pomaderris pallida



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 76

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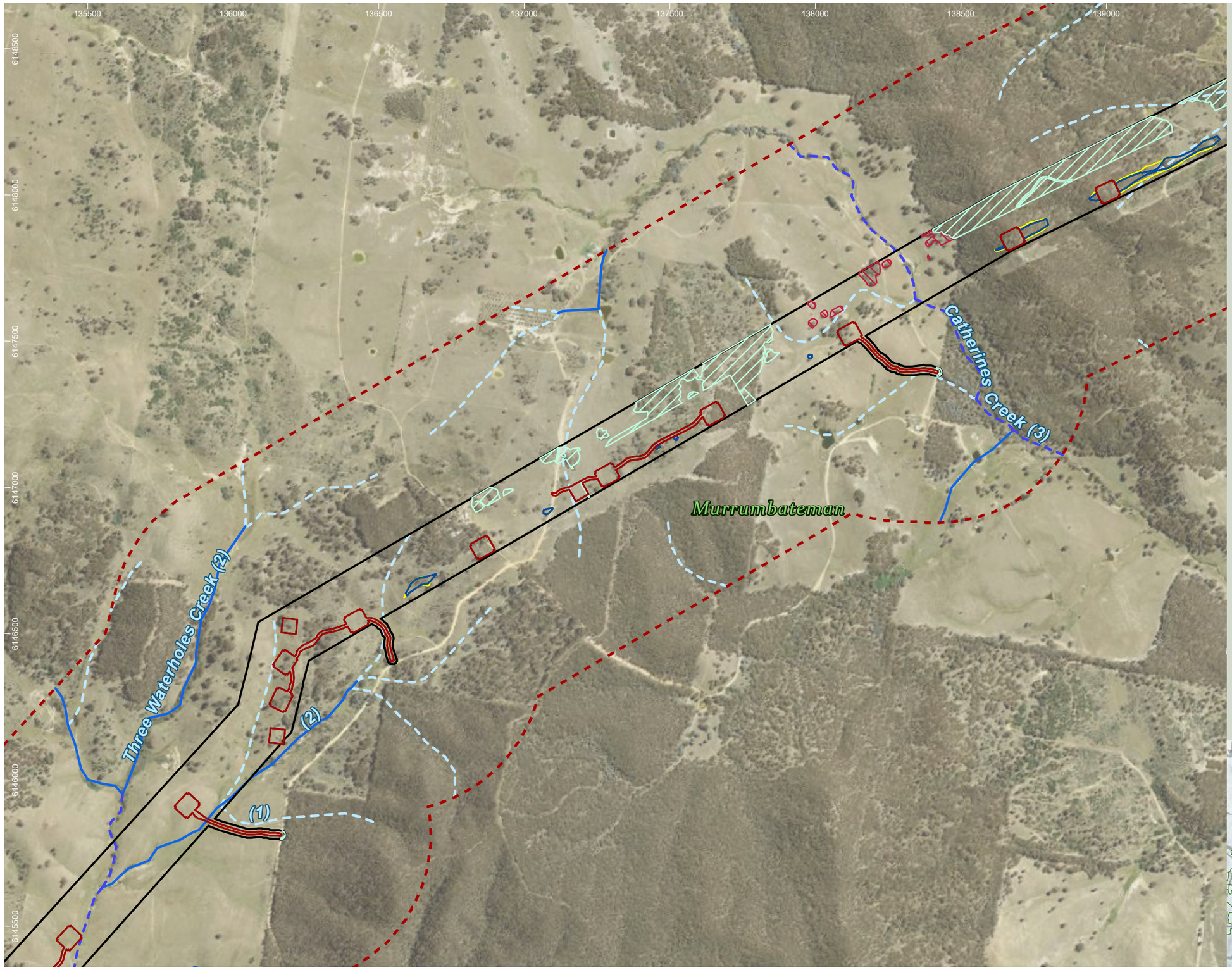


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

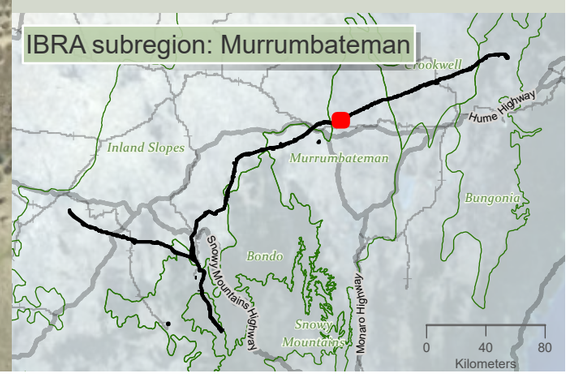
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea iaspicula
- Pomaderris pallida



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 77

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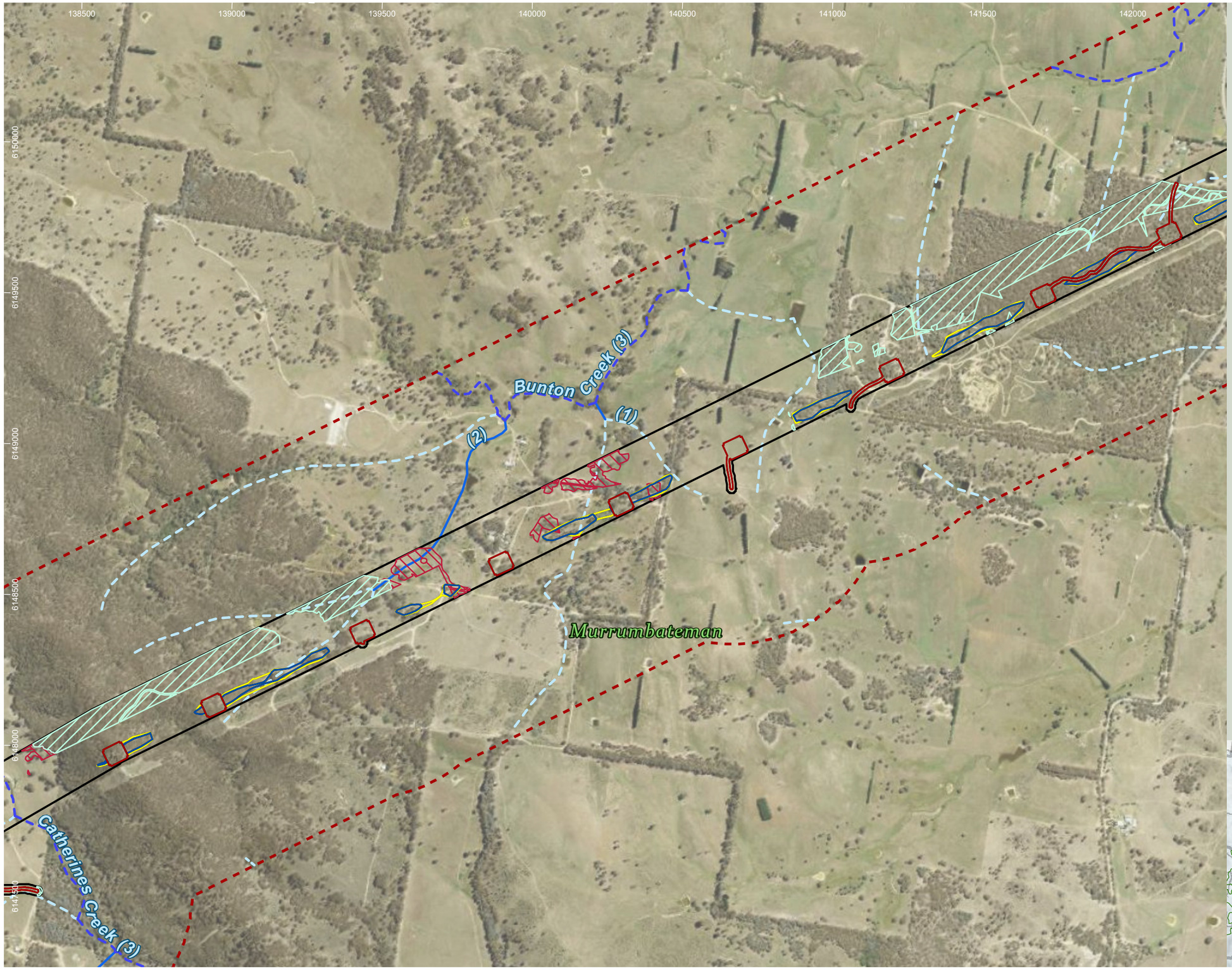


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

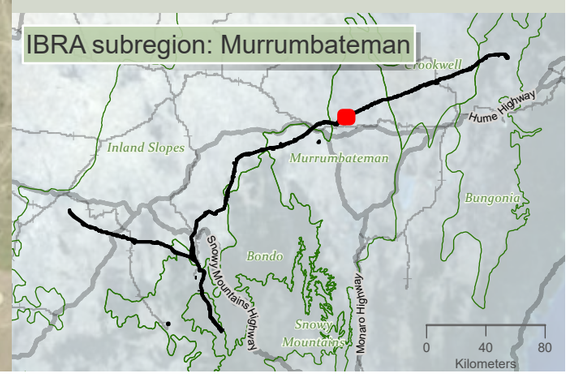
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea iaspicula
- Pomaderris pallida



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 78

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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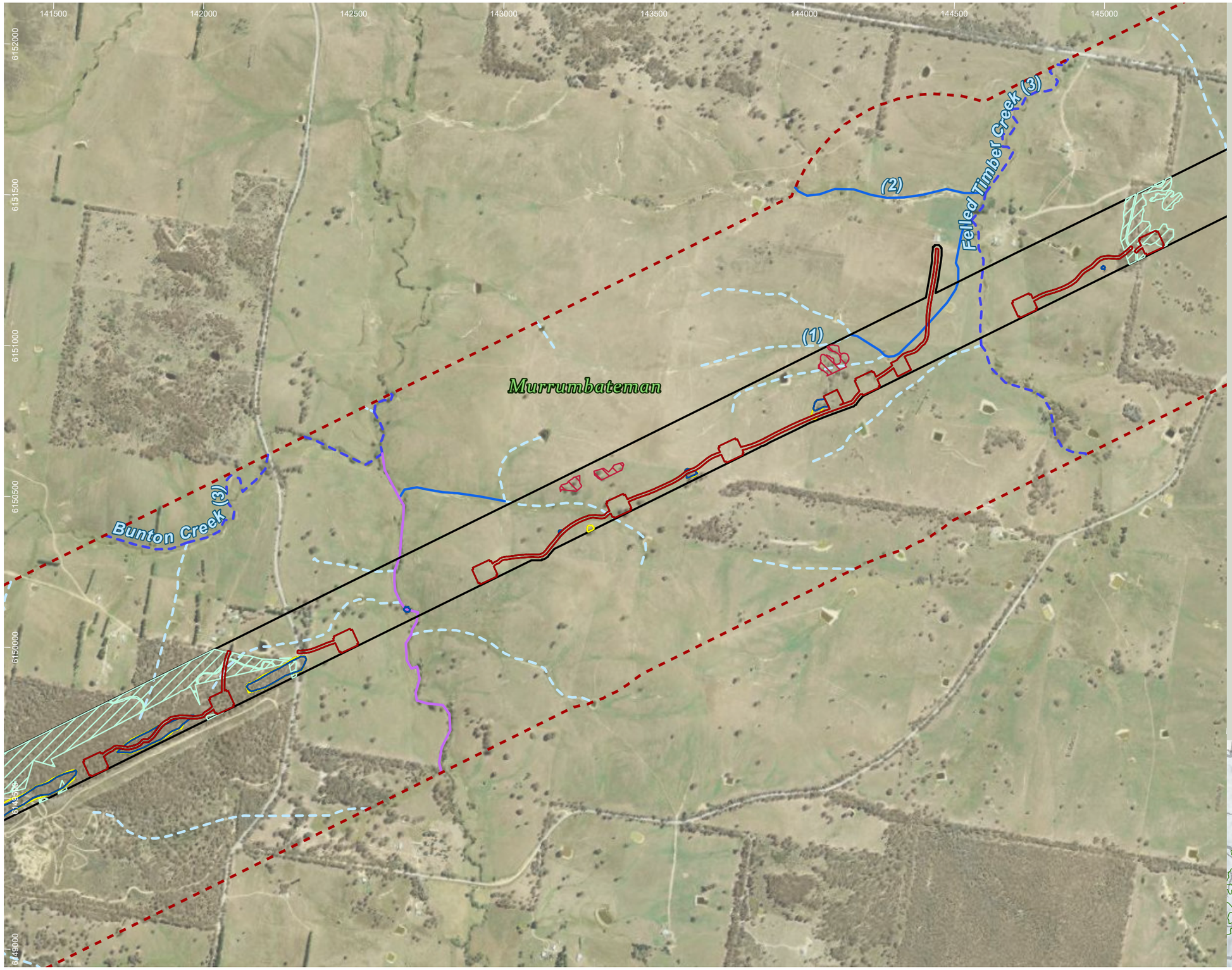


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

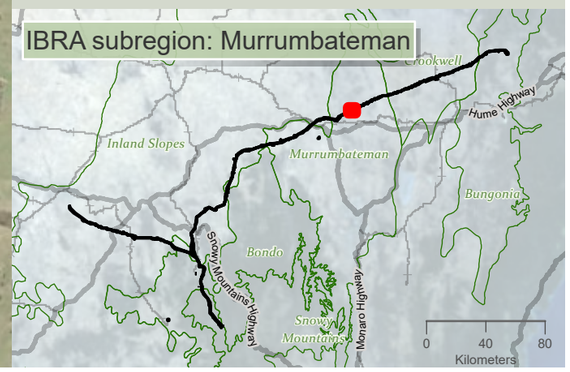
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea iaspicula
- Pomaderris pallida



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 79

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144500 145000 145500 146000 146500 147000 147500 148000

6153500 6153000 6152500 6152000 6151000

Murrumbateman

Jerrawa Creek (5)

Felled Timber Creek (3)

(1) (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

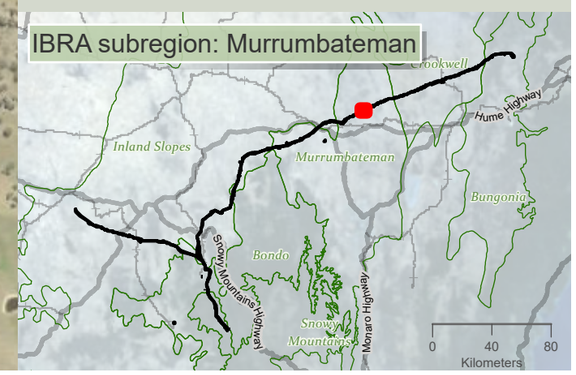
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Pomaderris pallida



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 80

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148000 148500 149000 149500 150000 150500 151000 151500

6155000 6154500 6154000 6153500 6153000 6152500

Murrumbateman

Sams Creek (2)

Jerrawa Creek (5)

(2)

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

- 1
- 2
- 3
- 4
- 5

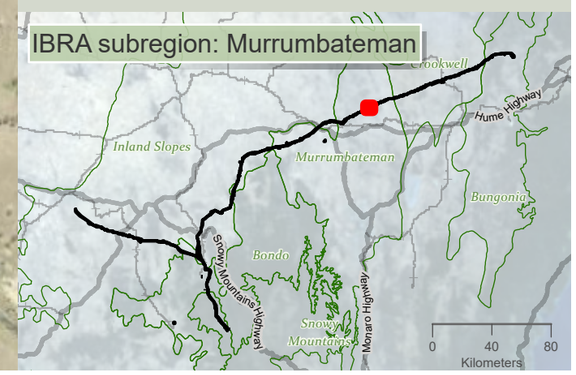
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea iaspicula

IBRA subregion: Murrumbateman



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 81

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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151000 151500 152000 152500 153000 153500 154000 154500

6156500 6156000 6155500 6155000 6154500 6154000

(1)

Merrill Creek (4)

Lachlan River (6)

Murrumbateman

Dowlings Creek (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

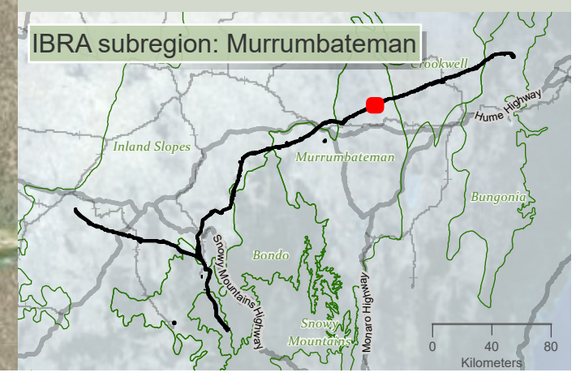
- 1
- 2
- 4
- 6

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea iaspicula
- Pomaderris pallida



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 82

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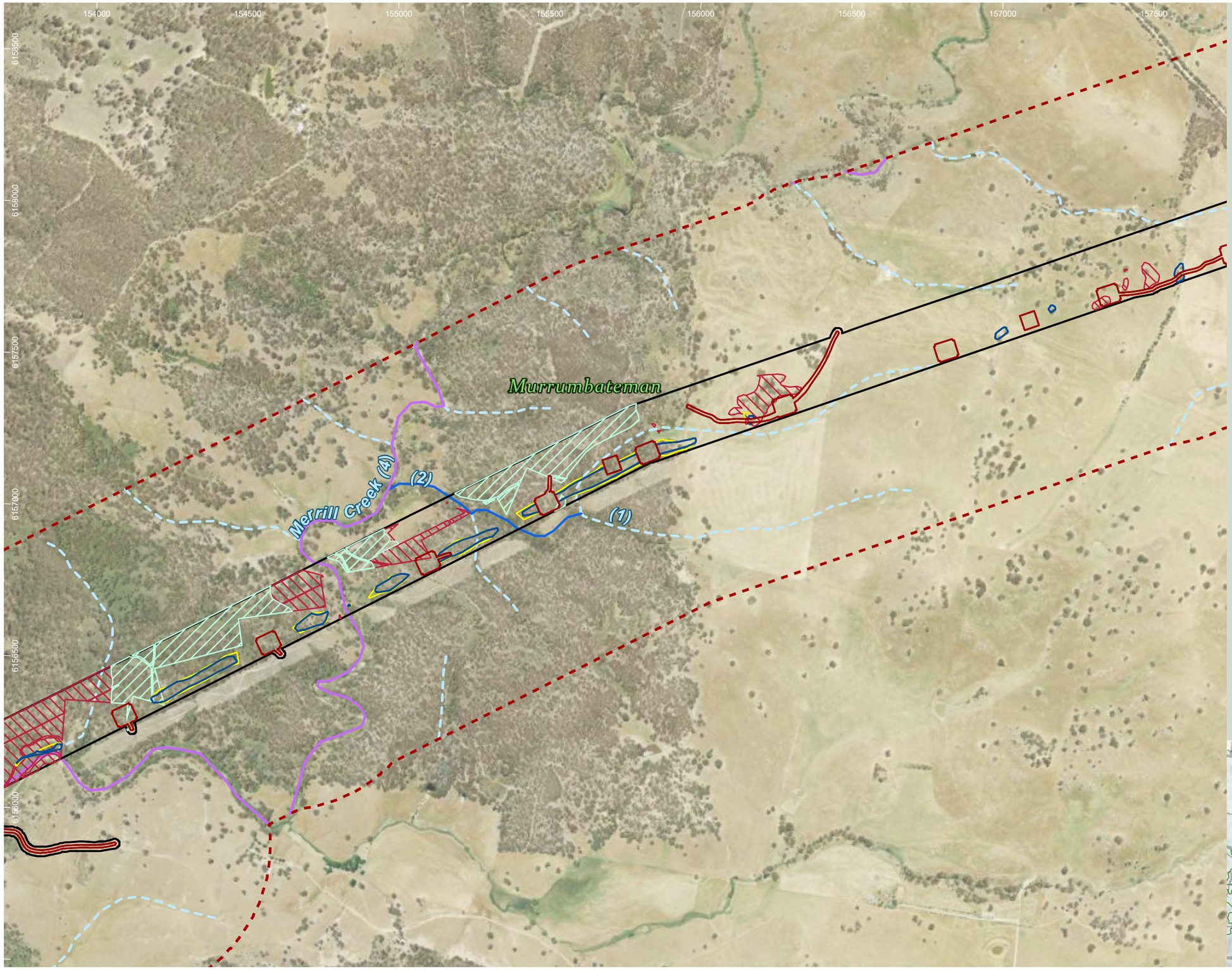
Drawn by: MatthewZajaczkowski: Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

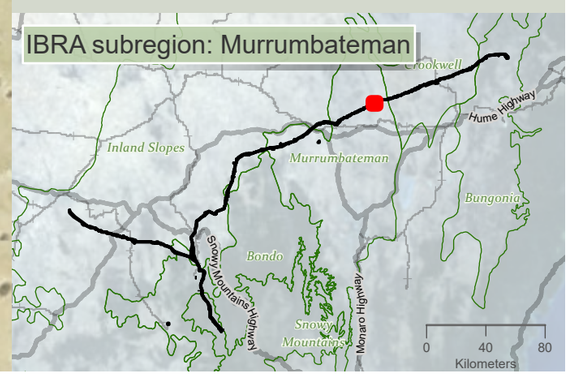
- 1
- 2
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea iaspicula
- Pomaderris pallida



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 83

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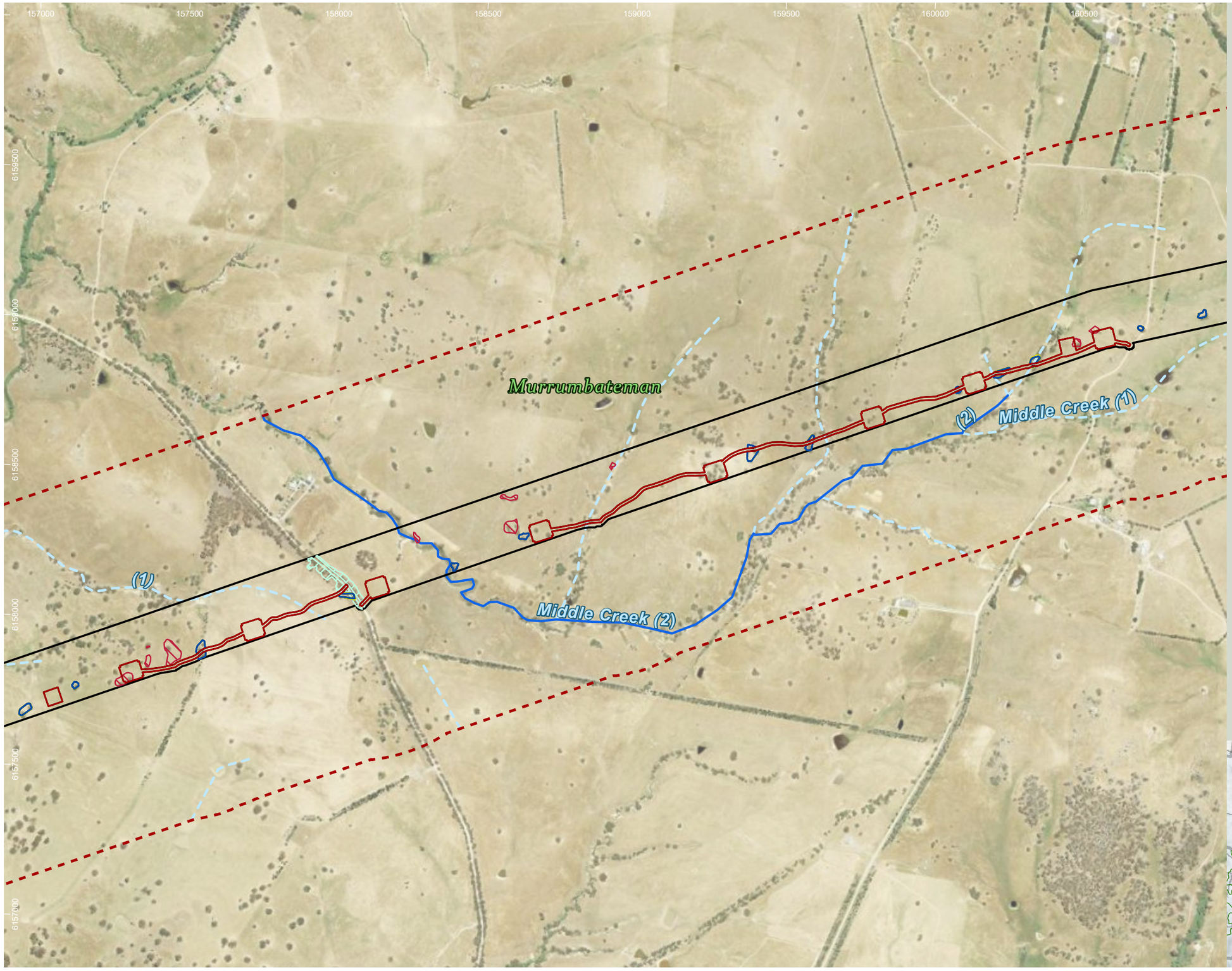


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

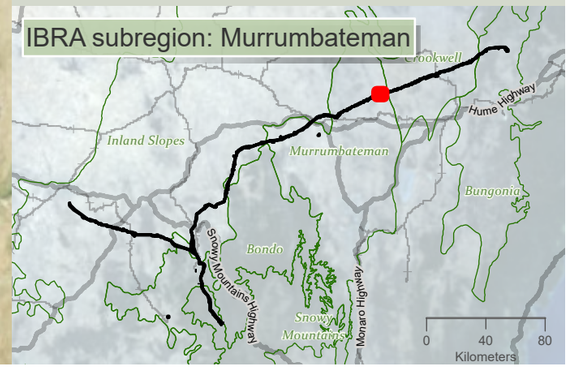
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Grevillea iaspicula
- Pomaderris pallida



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 84

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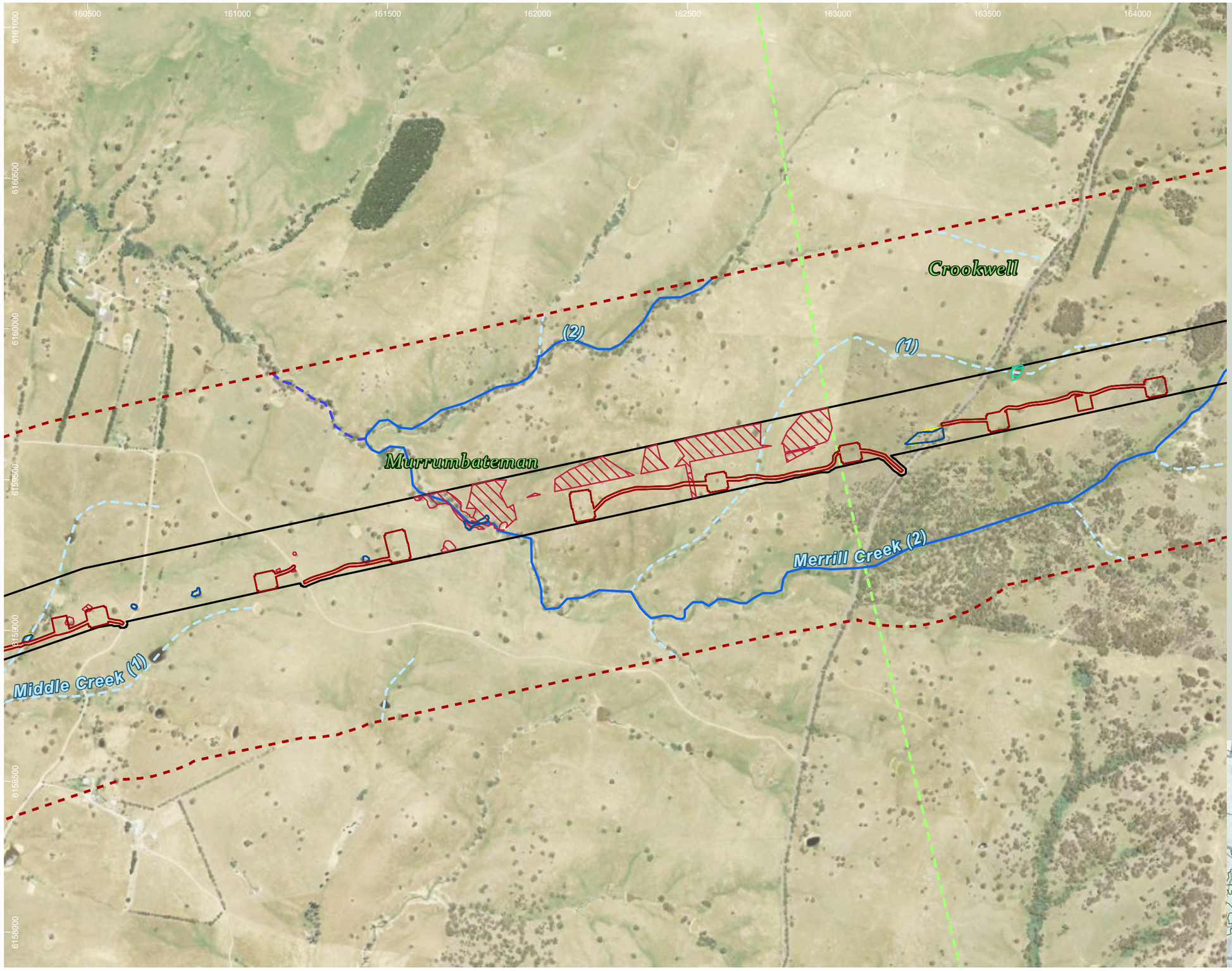


HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

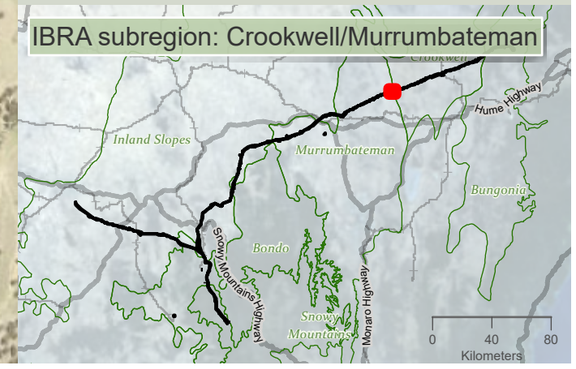
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Commersonia prostrata
- Grevillea iaspicula



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 85

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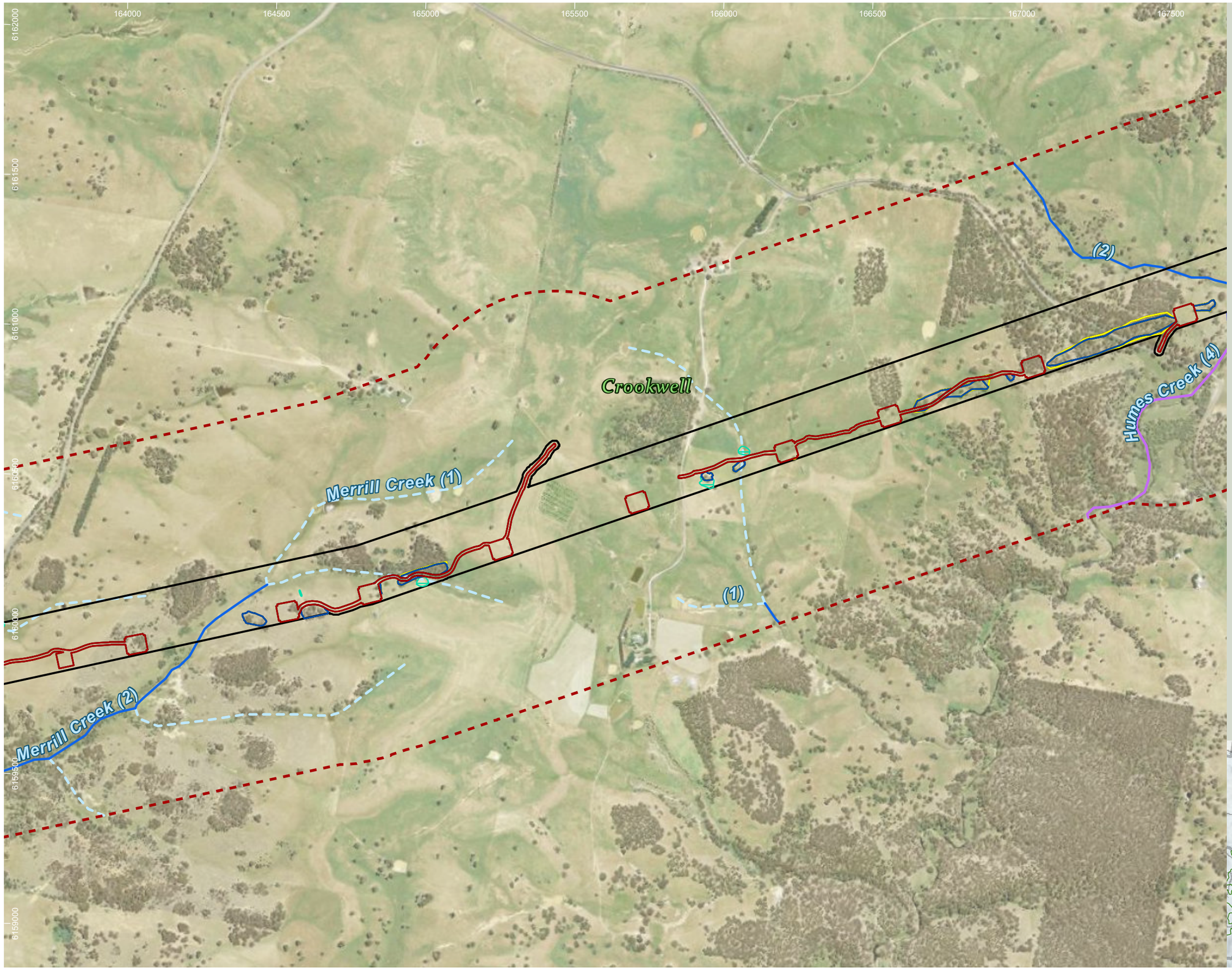


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

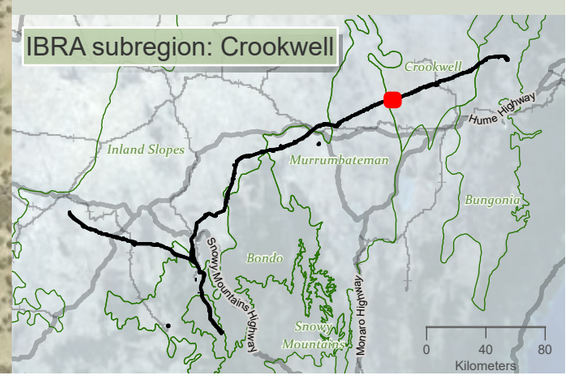
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Commersonia prostrata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 86

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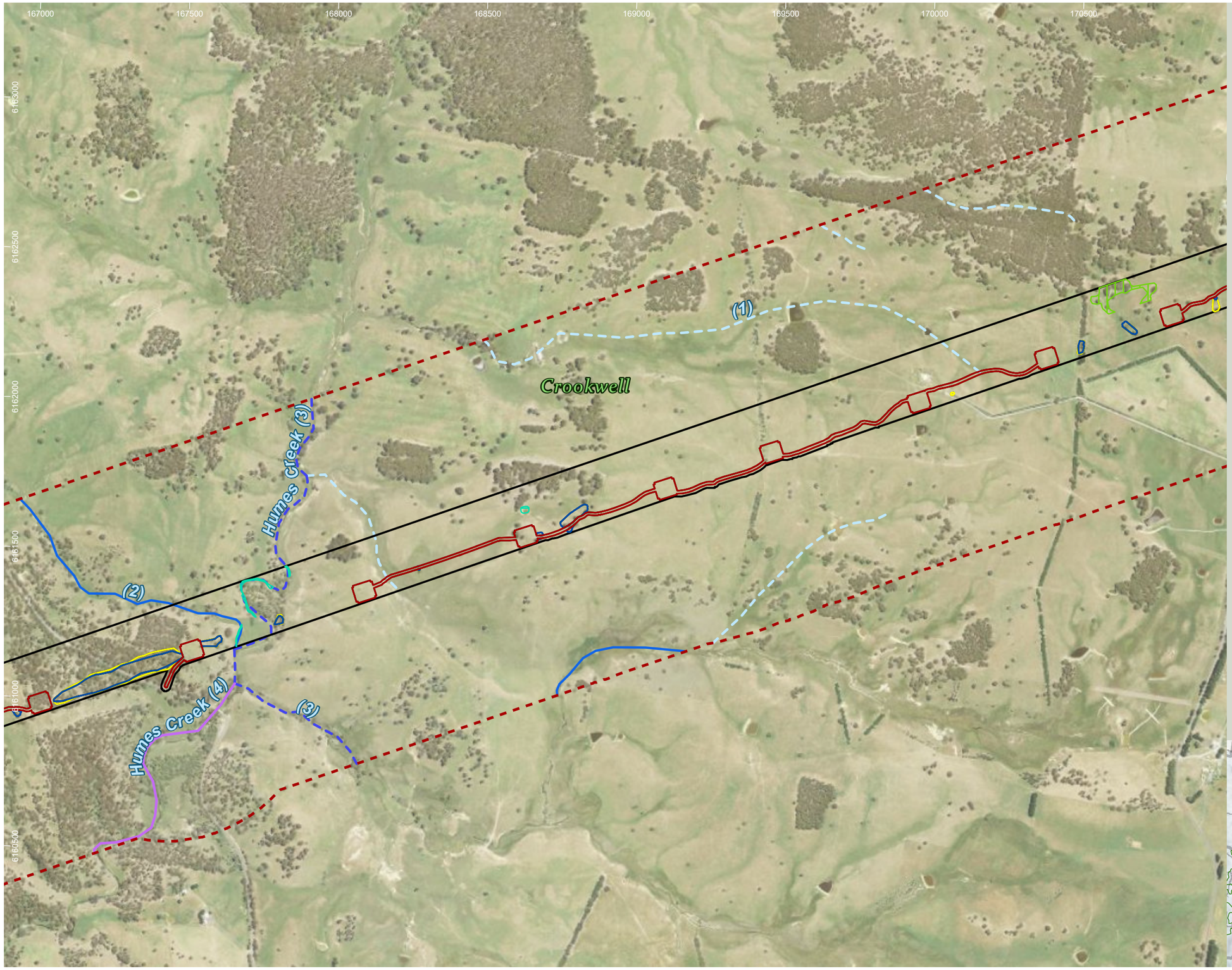


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

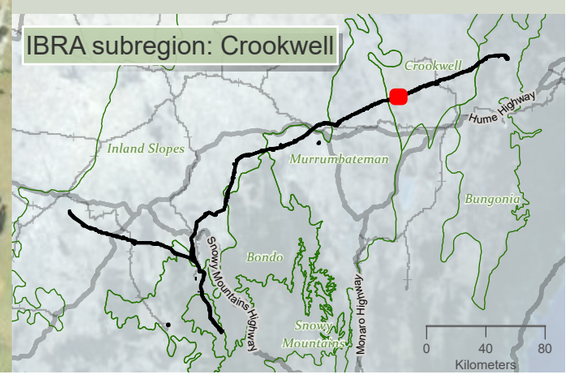
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia bynoeana
- Commersonia prostrata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 87

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Drawn by: MathewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment\EC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

170500 171000 171500 172000 172500 173000 173500 174000

6164500 6164000 6163500 6163000 6162500 6162000 6161500

Crookwell

(1)

Gurrundah Creek (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

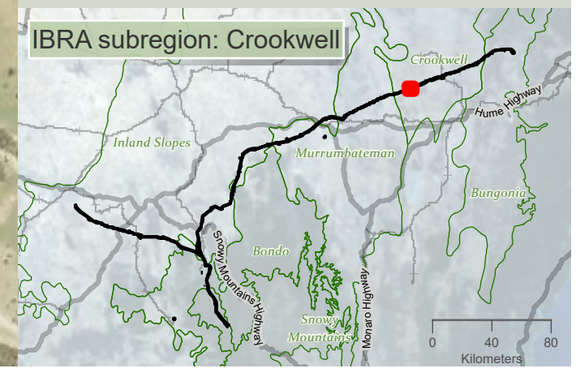
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia bynoeana
- Commersonia prostrata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 88

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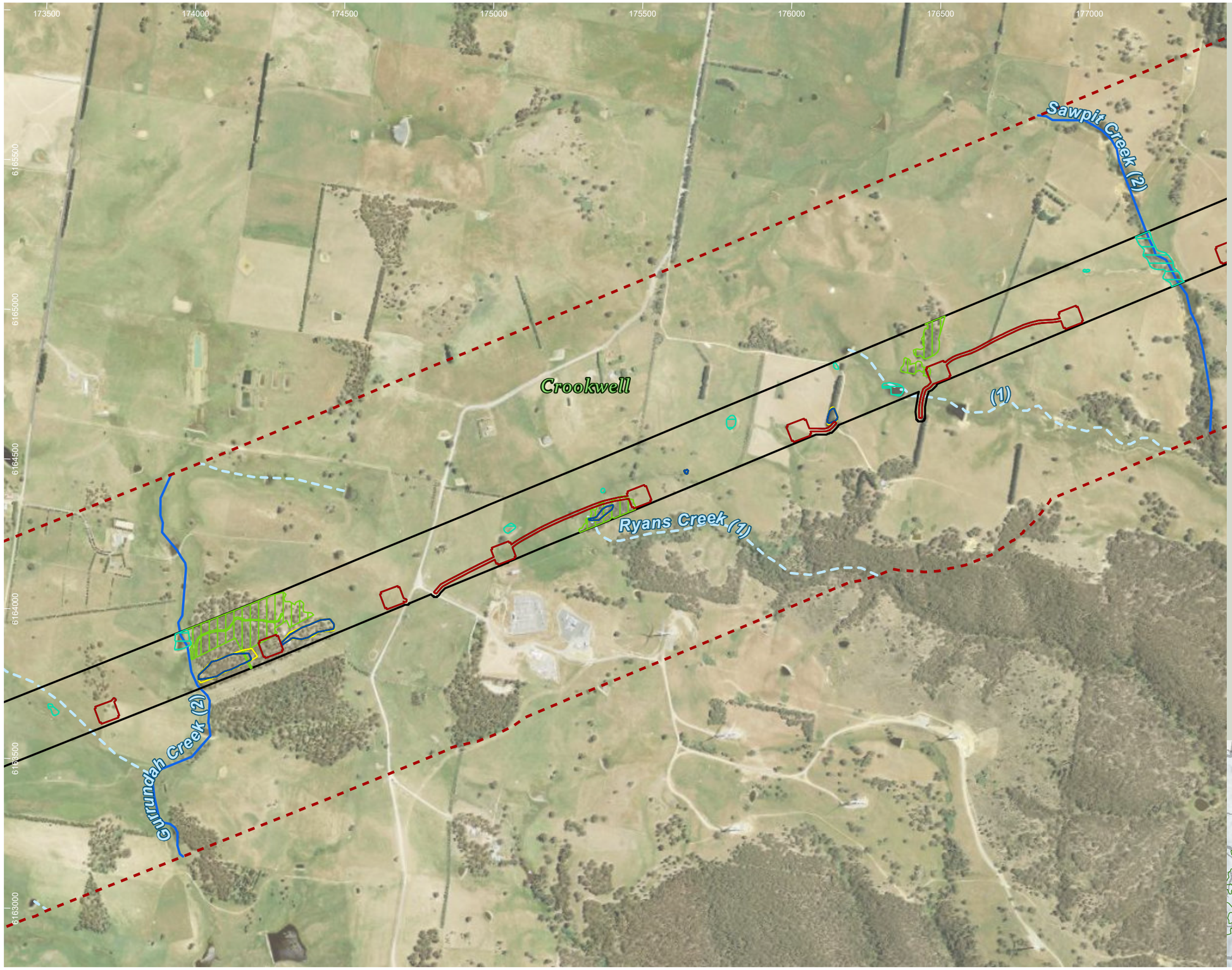
Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

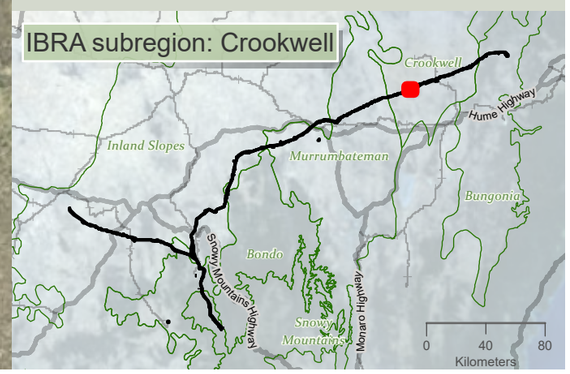
- 1
- 2

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia bynoeana
- Commersonia prostrata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 89

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Drawn by: MatthewZajaczkowski Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

177000 177500 178000 178500 179000 179500 180000 180500

6167500 6167000 6166500 6166000 6165500 6165000 6164500

Crookwell

(1)

(2)

Kialla Creek (3)

Sawpit Creek (2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

- 1
- 2
- 3

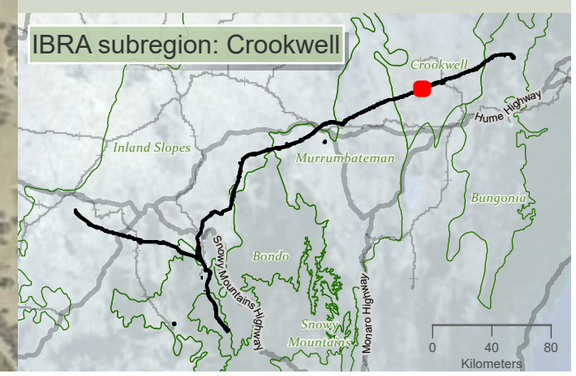
Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Commersonia prostrata

IBRA subregion: Crookwell



0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 90

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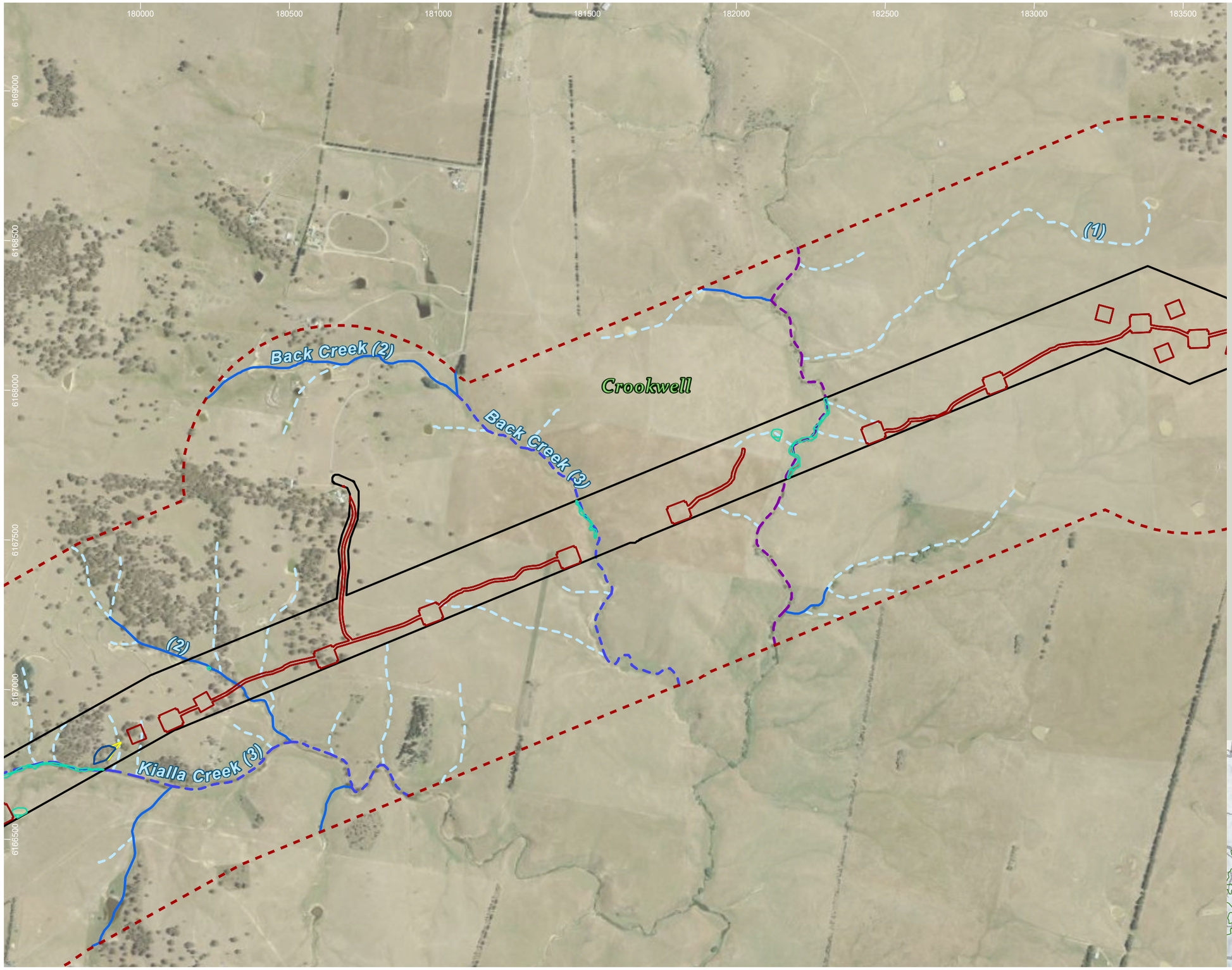


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

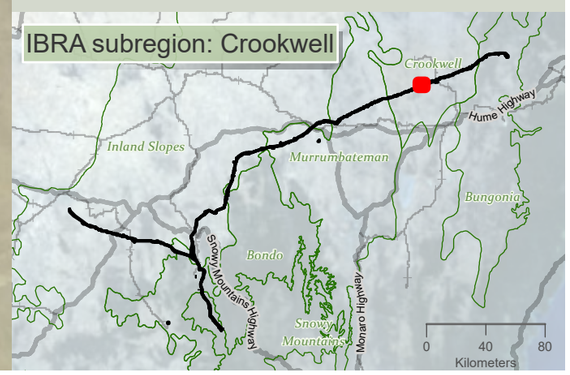
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Commersonia prostrata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 91

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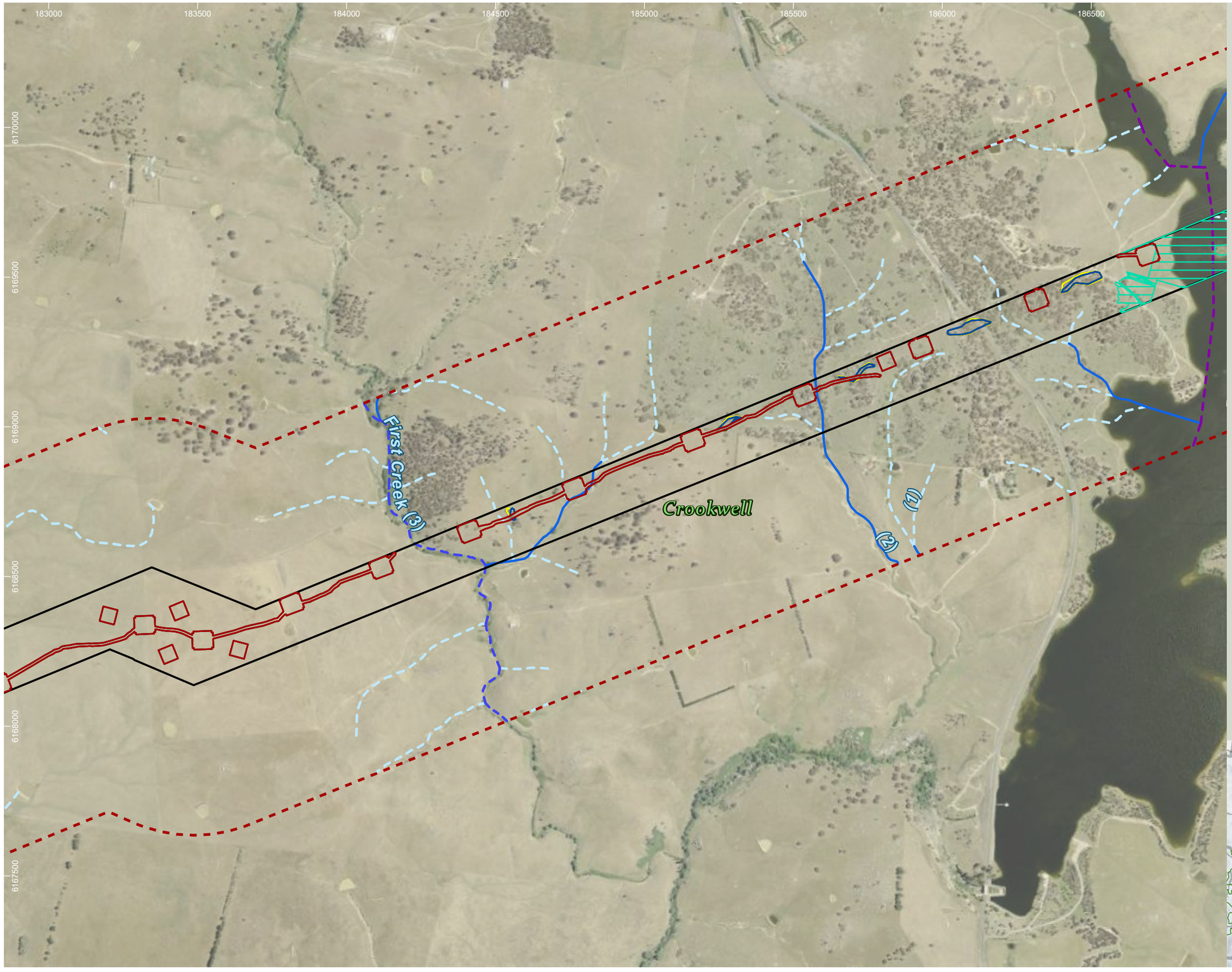
Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

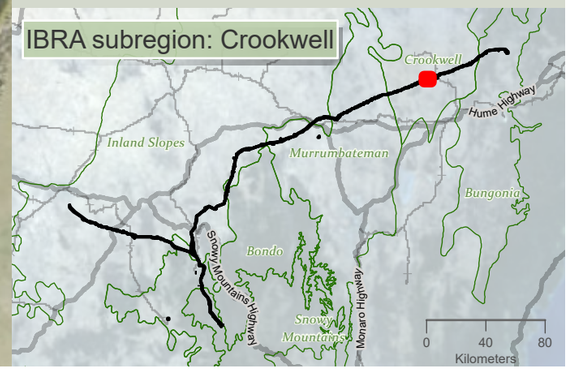
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Commersonia prostrata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

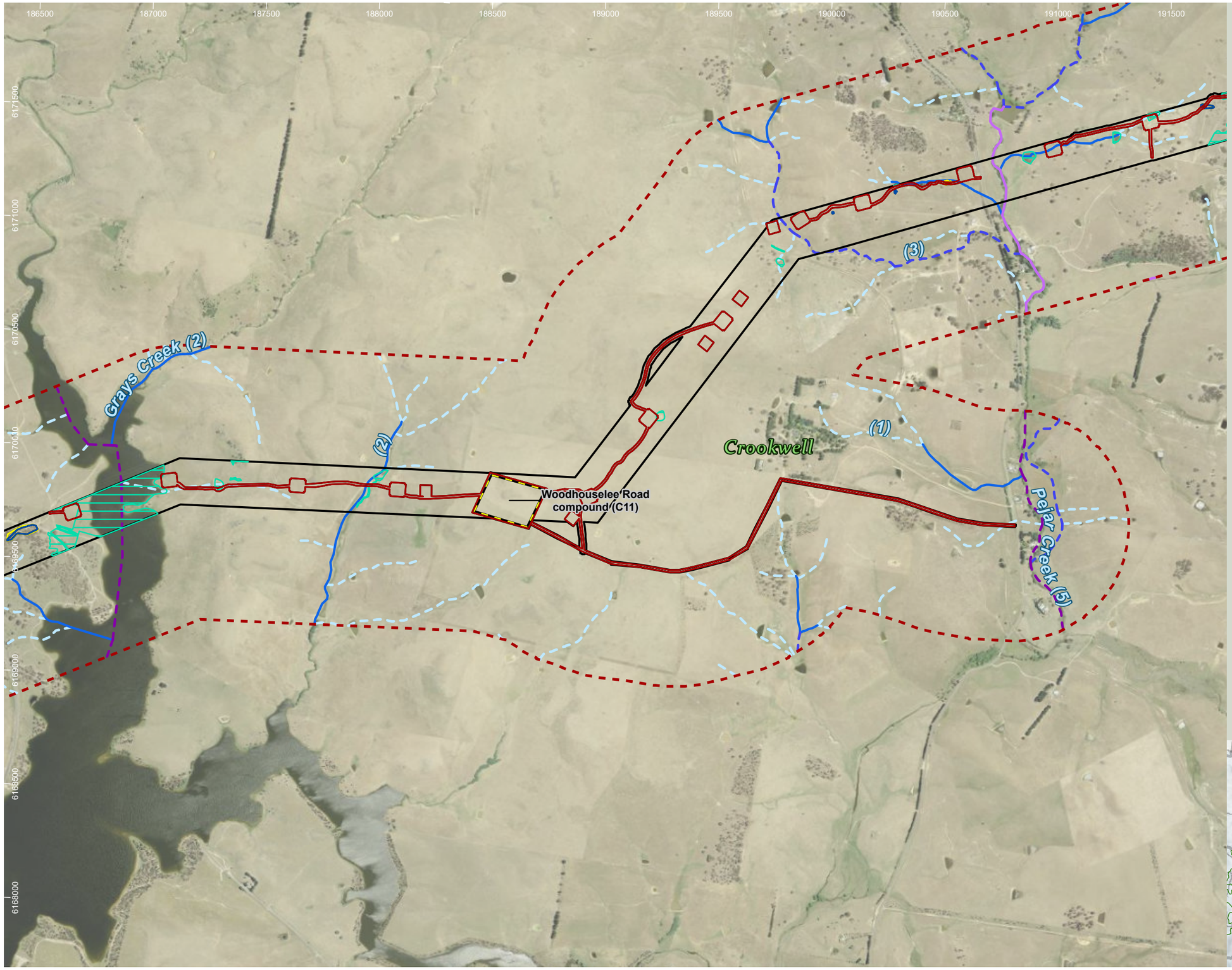
Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 92

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

Drawn by: MatthewZajaczkowski | Last updated: 18/08/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

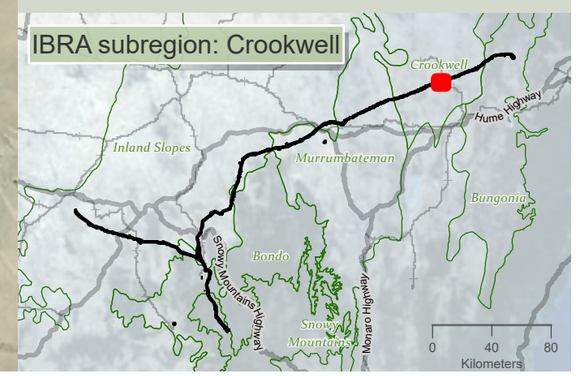
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Commersonia prostrata



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 500
m

WGS 1984 Web Mercator

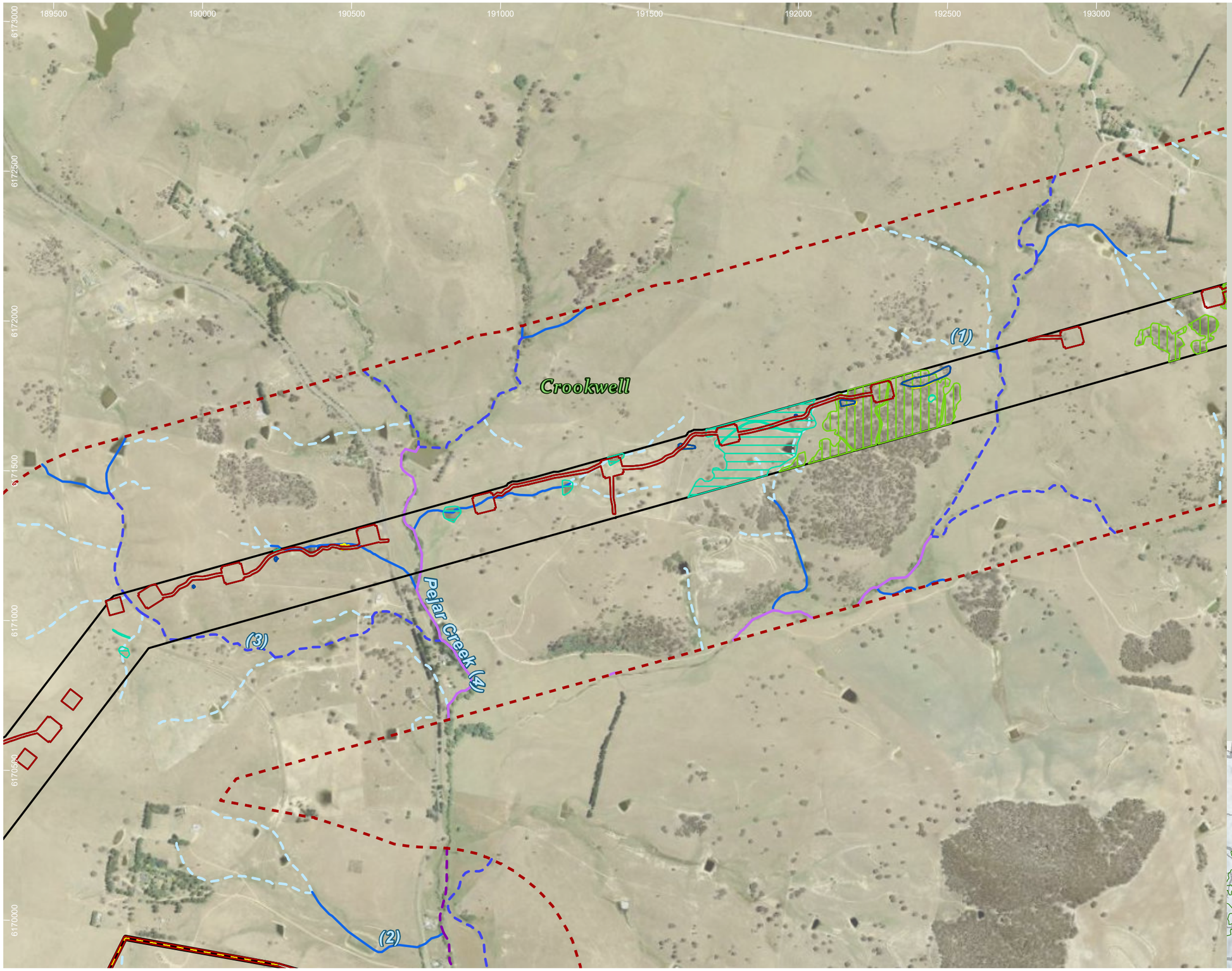
Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 93

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.



HumeLink project areas

- Project footprint
- Landscape assessment area
- Proposed construction compounds

Strahler stream order

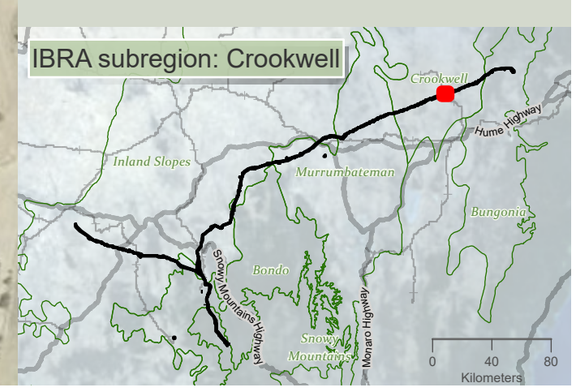
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia bynoeana
- Commersonia prostrata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 94

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193000 193500 194000 194500 195000 195500 196000 196500

6174000 6173500 6173000 6172500 6172000 6171500 6171000

(3) (2) (1)

Melamalong Creek (7)

Crookwell

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

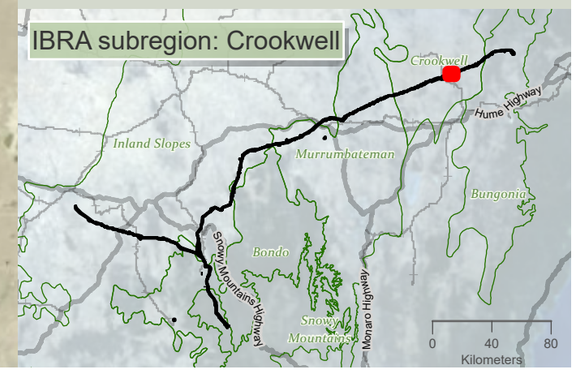
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia bynoeana
- Commersonia prostrata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 95

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196000 196500 197000 197500 198000 198500 199000 199500

6175000 6174500 6174000 6173500 6173000 6172500

Crookwell

Tarlo River (5)

Sawpit Gully (3)

(1) (2) (3) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

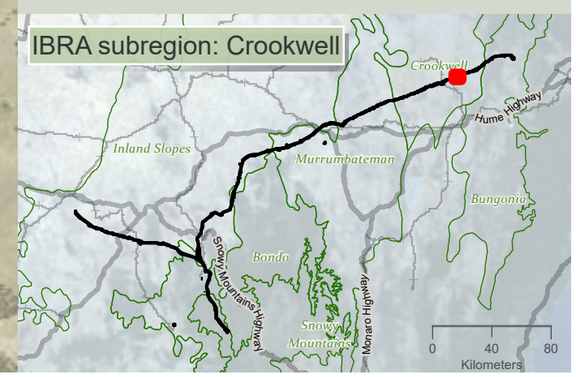
- 1
- 2
- 3
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia bynoeana
- Commersonia prostrata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 96

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

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199500 200000 200500 201000 201500 202000 202500 203000

6176500 6176000 6175500 6175000 6174500 6174000

Crookwell

Turrallo Creek (5)

Tarlo River (5)

(1) (2) (3) (4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

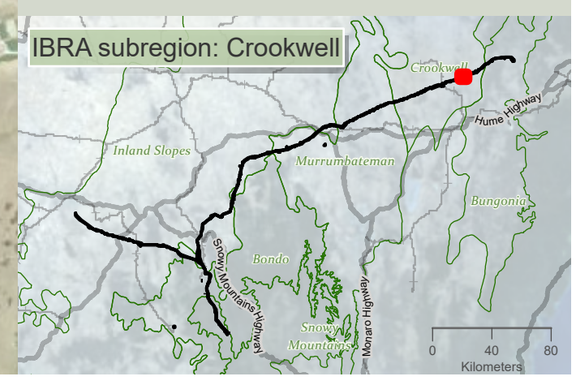
- 1
- 2
- 3
- 4
- 5

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia bynoeana
- Commersonia prostrata



Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSync\Folder\Niche\6699 - Confidential impact assessment\SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx

niche Environment and Heritage

0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 97

public/NSW_Imagery: © Department of Customer Service 2020 | Watercourses, Waterbodies, Road and Rail alignments, Protected areas of NSW © Spatial Services 2021. | Niche uses GDA2020 as standard for all project-related data. In order to ensure that data from numerous sources and coordinate systems is aligned, on-the-fly transformation to WGS1984 Web Mercator Auxilliary Sphere is used in the map above. For ease of reference, the grid tick marks and labels shown around the border of the map are presented in GDA2020, using the relevant MGA zone.

202500 203000 203500 204000 204500 205000 205500 206000

6178000 6177500 6177000 6176500 6176000 6175500 6175000

Crookwell

(1) (2) (3)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

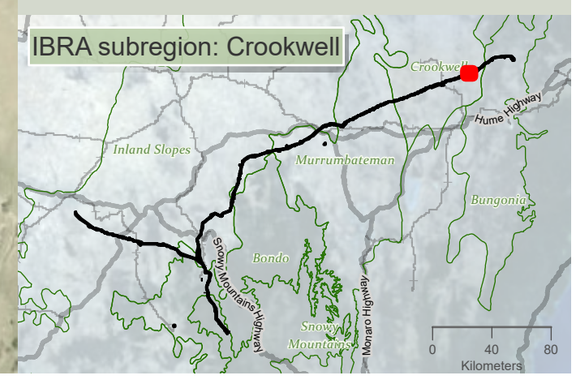
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia bynoeana
- Commersonia prostrata



0 400
m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 98

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206000 206500 207000 207500 208000 208500 209000 209500

6179000 6178500 6178000 6177500 6177000 6176500

Myrtle Creek (4)

(3)

Cowpers Creek (3)

Crookwell

(2)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

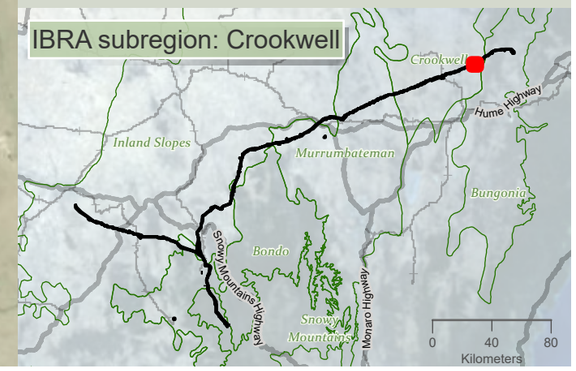
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Commersonia prostrata



0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 99

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208500 209000 209500 210000 210500 211000 211500 212000 212500

6181000 6180500 6180000 6179500 6179000 6178500

Crookwell

(1) (2) (3)

Bungonia

HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

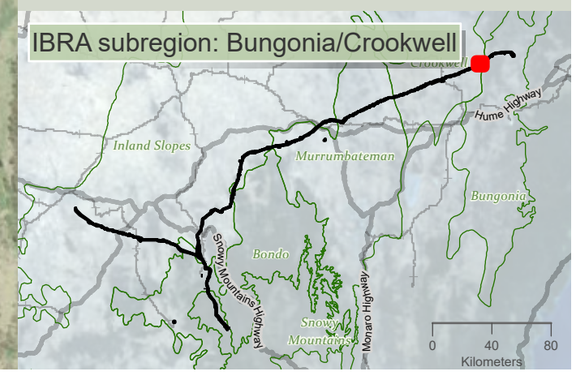
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone

Shrub species habitat

- Commersonia prostrata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 100

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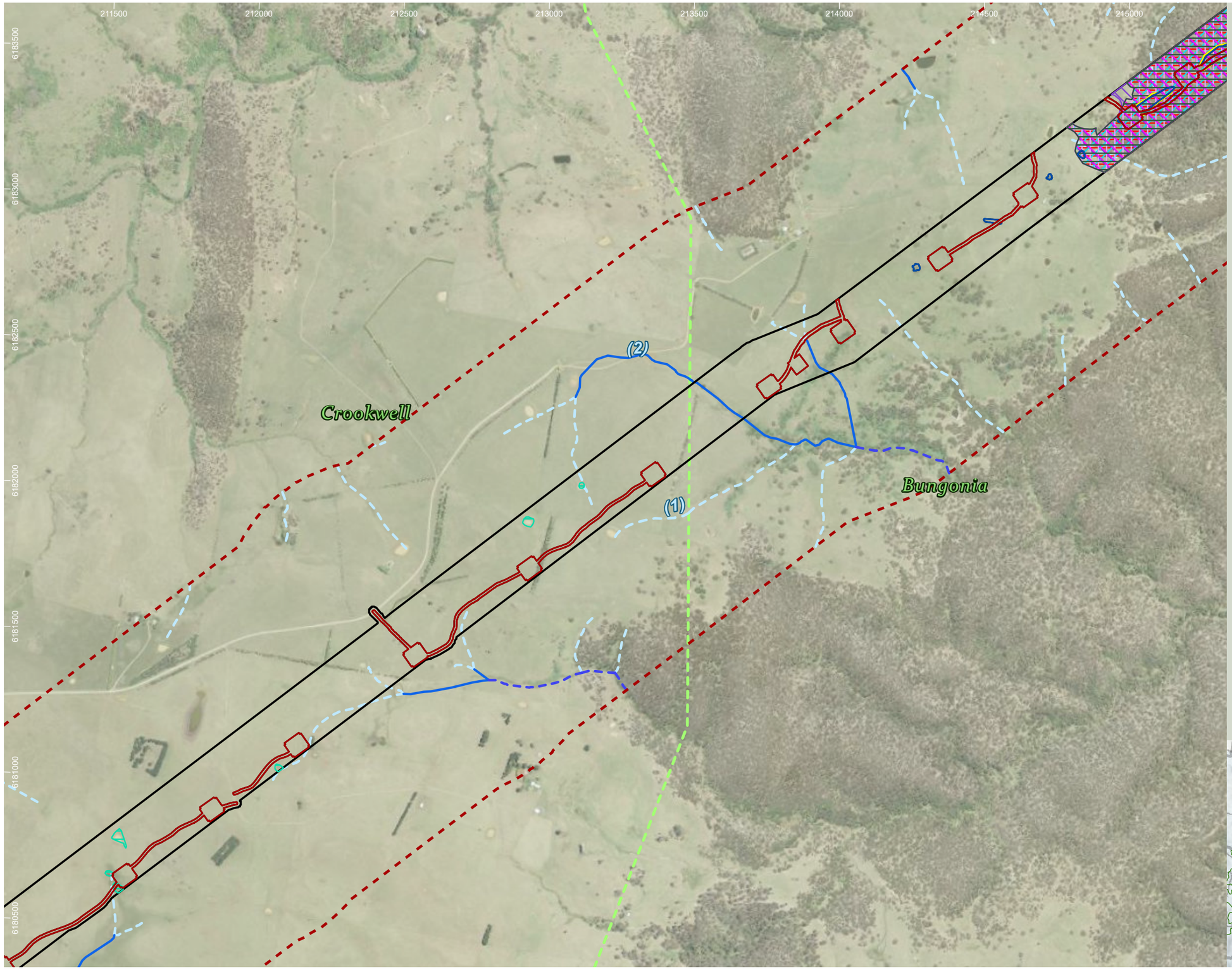
Drawn by: MatthewZajaczkowski Last updated: 18/09/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area
- IBRA subregion

Strahler stream order

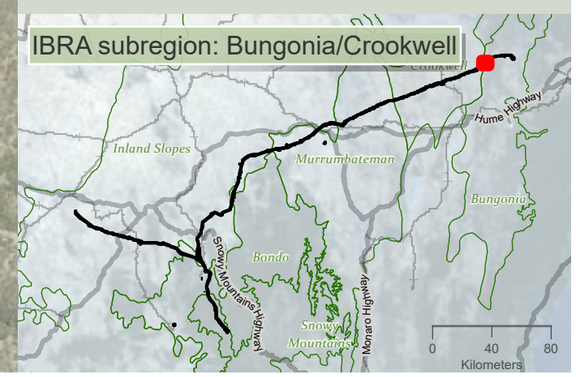
- 1
- 2
- 3

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia flocktoniae
- Commersonia prostrata
- Kunzea cambagei
- Persoonia mollis subsp revoluta
- Phyllota humifusa
- Pomaderris cotoneaster
- Pomaderris delicata



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 101

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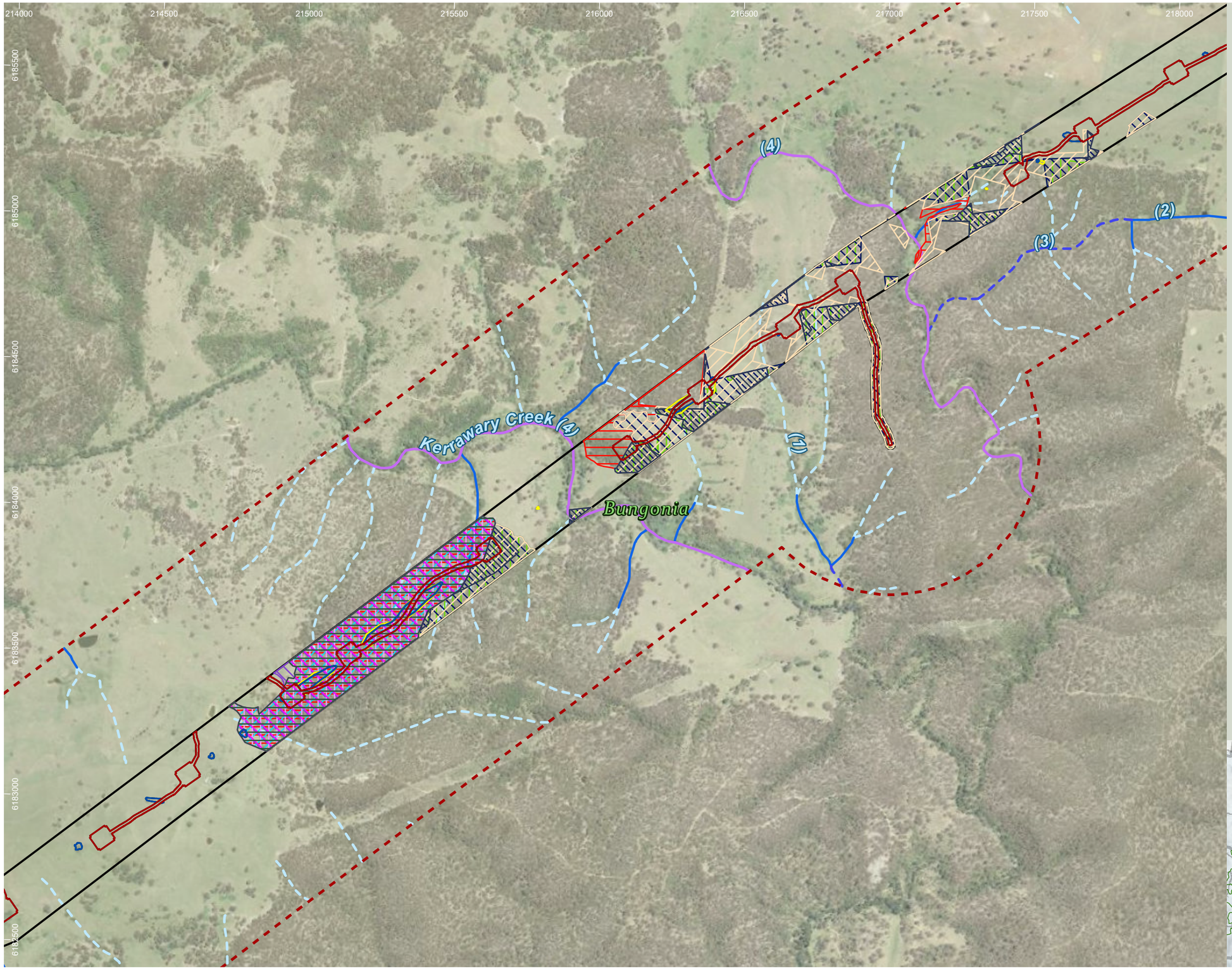
Drawn by: MatthewZajaczkowski; Last updated: 18/08/2023 File: C:\OneDriveSyncFolder\Niche\6699 - Confidential impact assessment SEC-EXT - BDAR_v2\a6699_Humelink_BDAR_Stage 2 Part B.aprx



HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

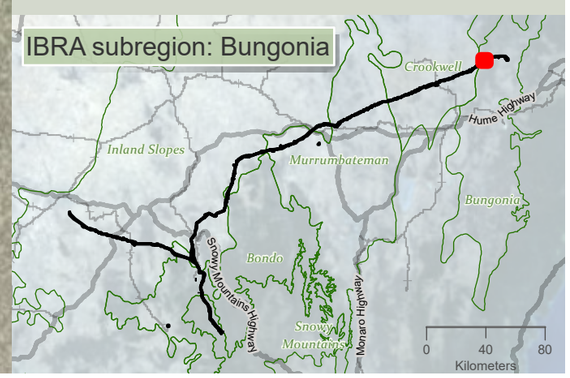
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia bynoeana
- Acacia flocktoniae
- Bossiaea oligosperma
- Dillwynia glaucula
- Kunzea cambagei
- Persoonia mollis subsp revoluta
- Phyllota humifusa
- Pomaderris cotoneaster
- Pomaderris delicata
- Solanum armourense



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 102

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217500 218000 218500 219000 219500 220000 220500 221000

6187000 6186500 6186000 6185500 6185000 6184500

Bannaby Creek (3)

(1)

Bungonia

(2)

(3)

(4)

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

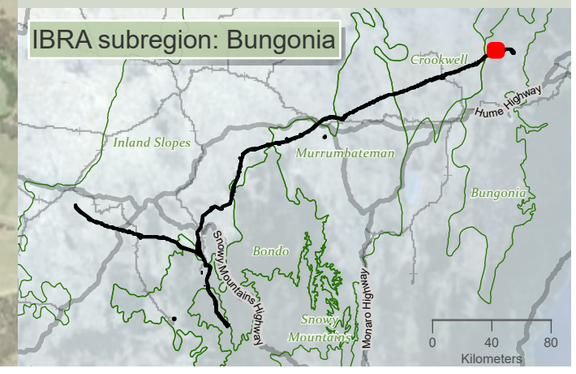
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia bynoeana
- Acacia flocktoniae
- Bossiaea oligosperma
- Dillwynia glaucula
- Kunzea cambagei
- Persoonia mollis subsp revoluta
- Phyllota humifusa
- Pomaderris cotoneaster
- Pomaderris delicata
- Solanum armourense



niche Environment and Heritage

0 400 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 103

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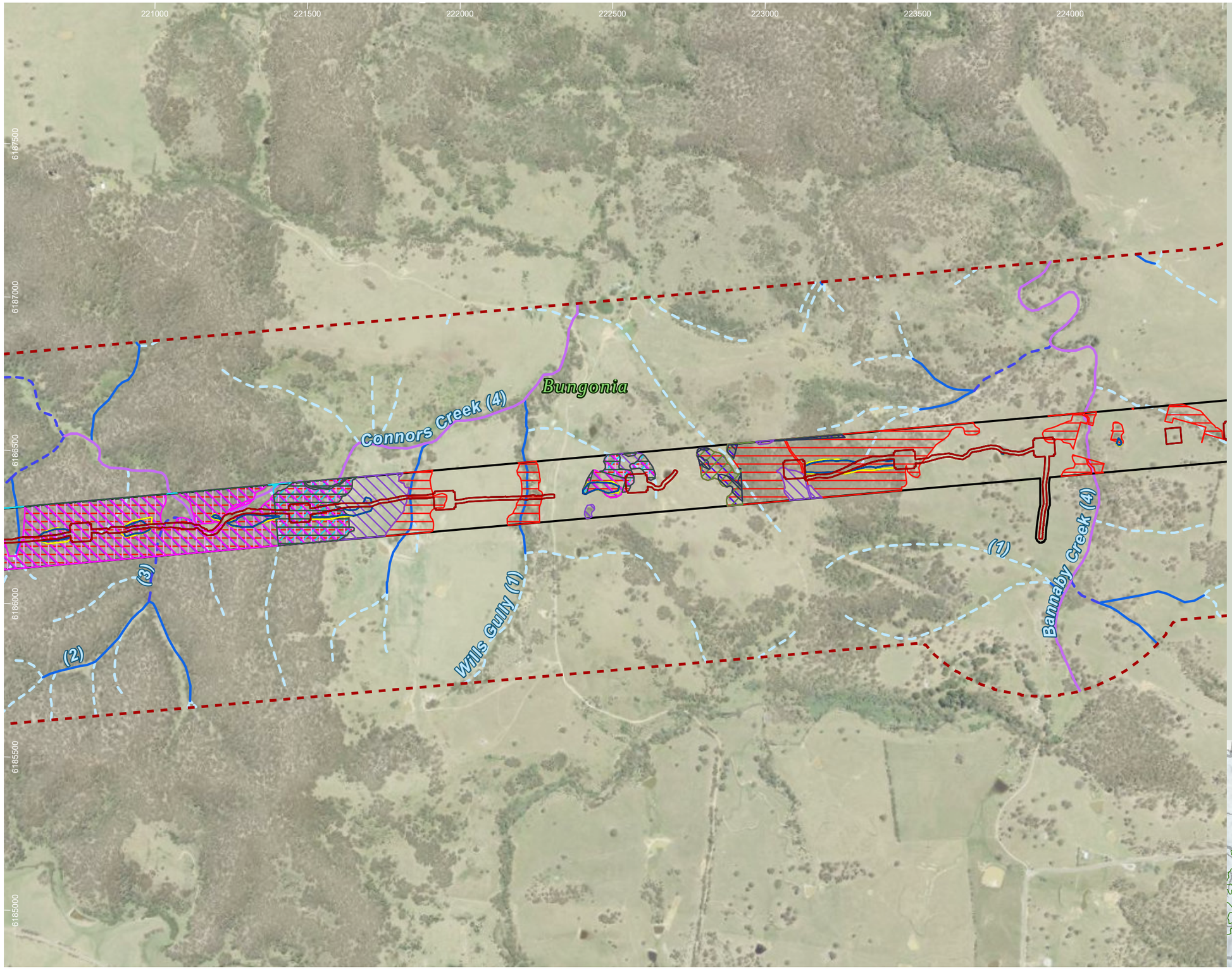


HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

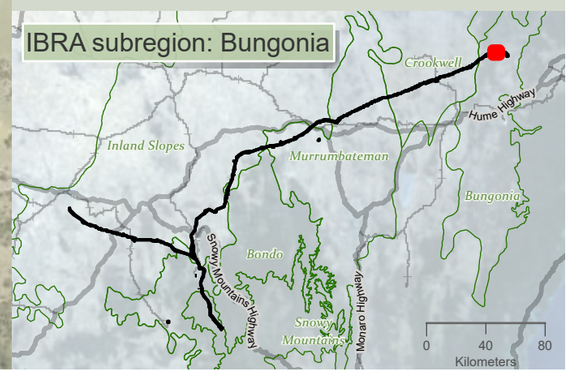
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia clunies rossiae
- Acacia flocktoniae
- Hakea dohertyi
- Kunzea cambagei
- Persoonia mollis subsp revoluta
- Phyllota humifusa
- Pomaderris cotoneaster
- Pomaderris delicata
- Solanum armourense



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 104

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224500 225000 225500 226000 226500 227000 227500

6188000 6187500 6187000 6186500 6186000 6185500

(1) (2) (3) (4)

Bungonia

HumeLink project areas

- Project footprint
- Landscape assessment area

Strahler stream order

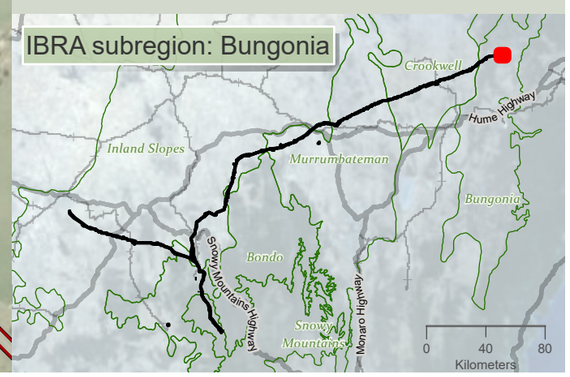
- 1
- 2
- 3
- 4

Indicative disturbance areas based on indicative design as at 25 October 2022. Subject to refinement in line with detailed design

- Total Clearing Zone
- Easement Clearing Zone
- Hazard Tree Zone

Shrub species habitat

- Acacia flocktoniae



niche Environment and Heritage

0 350 m

WGS 1984 Web Mercator

Niche PM: Simon Tweed
Niche Proj. #: 6699
Client: Aurecon

Shrub species habitat

HumeLink BDAR

Figure 13-10 map reference 105

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