



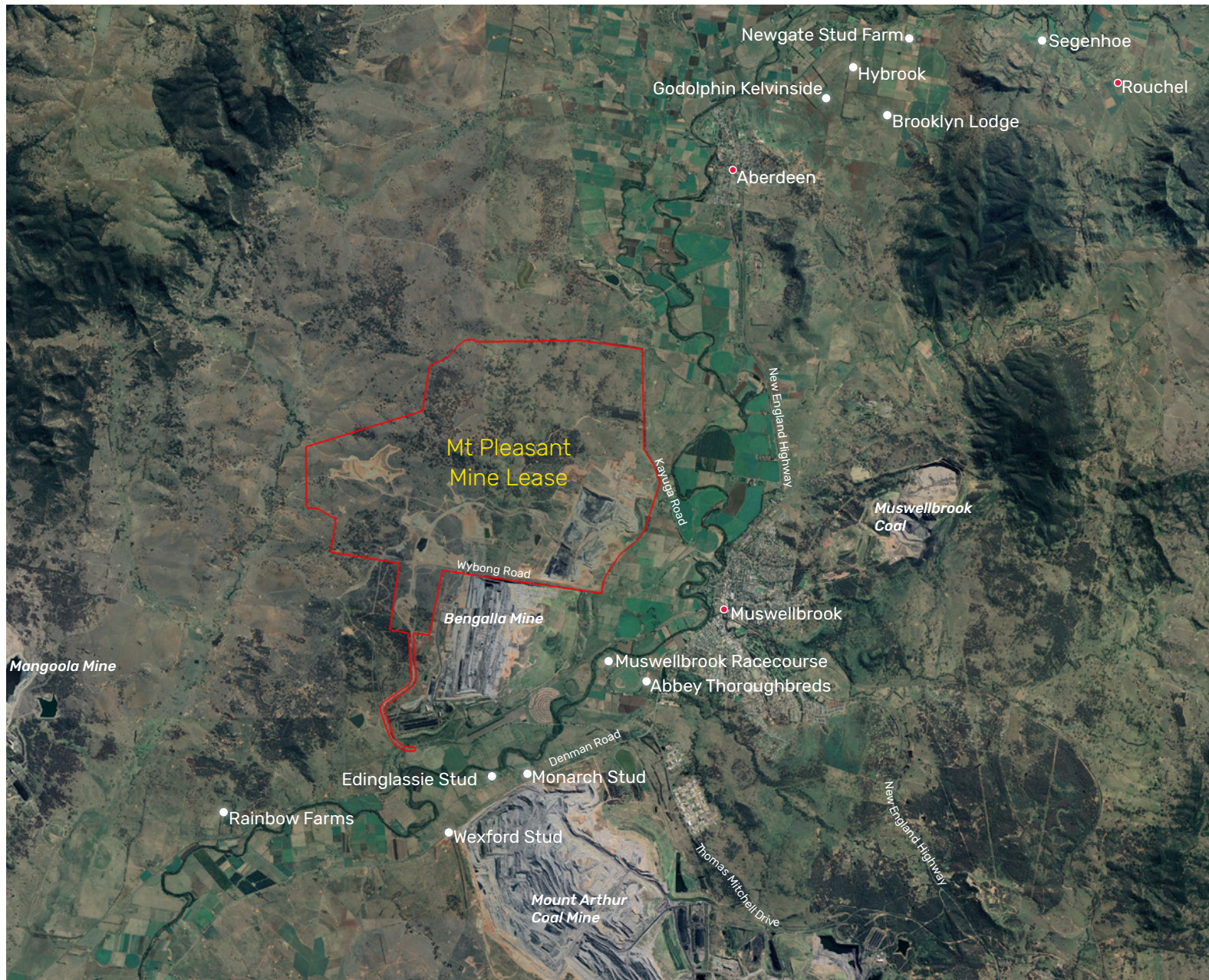
Mount Pleasant Optimisation Project

IPC Presentation - Visual and Landscape Character Impacts

Michael Wright

July 2022

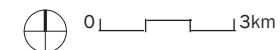
1. Location of the Proposal



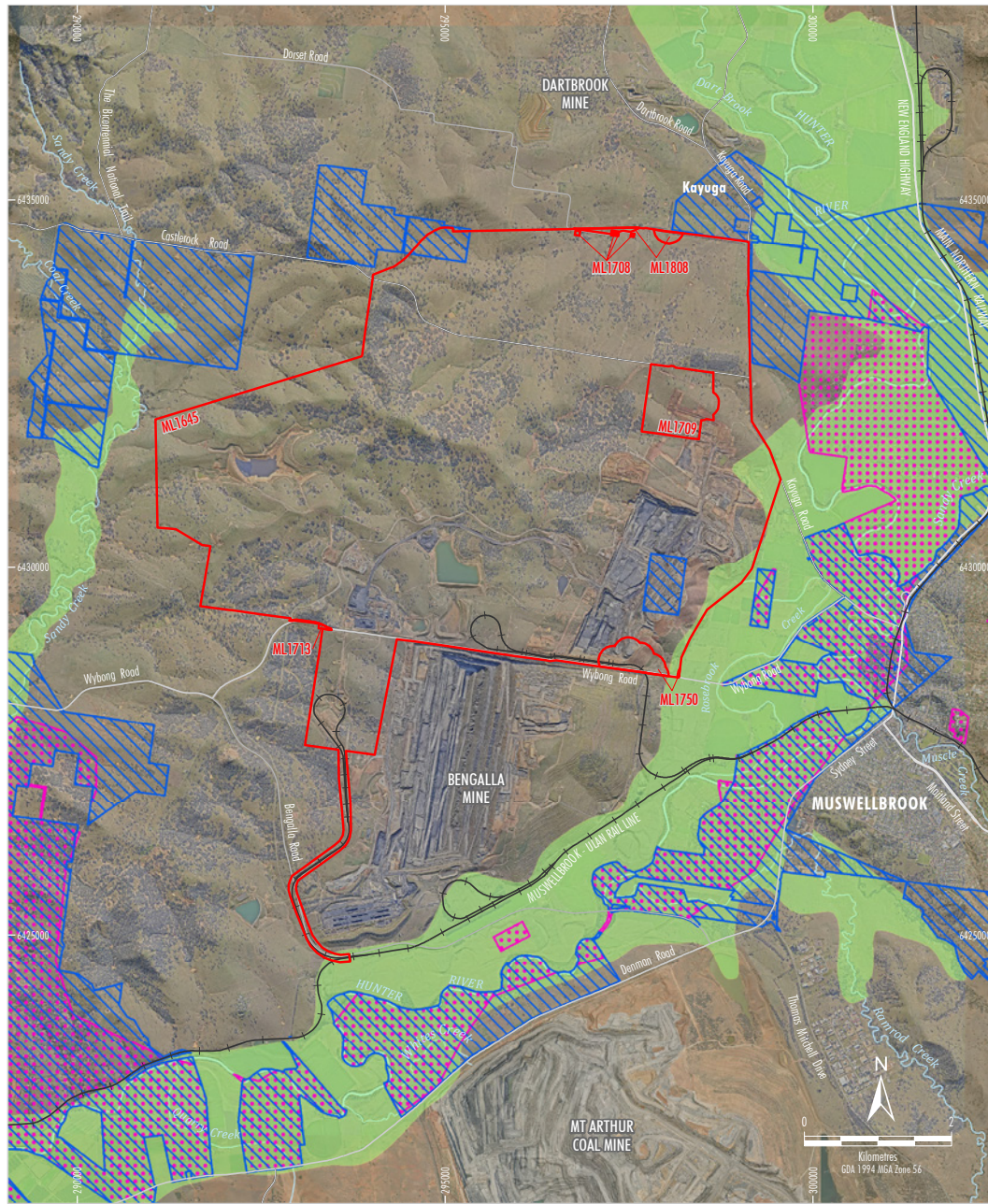
- Upper Hunter and Sedgenhoe Valleys are Rural and Highly Scenic without any coal mining activities
- Mt Pleasant Coal Mine is the most northerly open cut mine in the Hunter
- The proposed additional mining activities at Mt Pleasant extends this mine's impacts into this highly scenic and valuable landscape

LEGEND

- Thoroughbred breeding studs
- Major Towns



2. The Importance of Landscape



- LEGEND**
- Mining Lease Boundary (Mount Pleasant Operation)
 - Regionally Mapped Biophysical Strategic Agricultural Land
 - Equine Critical Industry Cluster
 - Viticulture Critical Industry Cluster

Source: MACH (2020); NSW Spatial Services (2020)
Orthophoto: MACH (2020)

- The floodplain around the Hunter River has been identified as Strategic Agricultural Land (SAL) in the Upper Hunter Strategic Land Use Plan (SLURP).
- The SLURP also recognises the importance of the region's "clean and green" branding to the agricultural industries
- The SLURP also identifies the river floodplain and adjoining slopes, directly adjacent to the Mt Pleasant Mine
- Tourism is also a major industry in the Hunter Valley. identified in the SLURP (2012) which states that: "The identity of a rural landscape and its scenic qualities are intrinsic to tourism."
- The National Trust of Australia have classified the regional landscape of this area of the Hunter Valley as visually important stating that these areas "contains rural scenery of great charm and importantly also draw on the dramatic, forested highlands as backdrops to views."



◀ **View from Castlerock Road facing south overlooking the south western section of the Mine Lease Area**

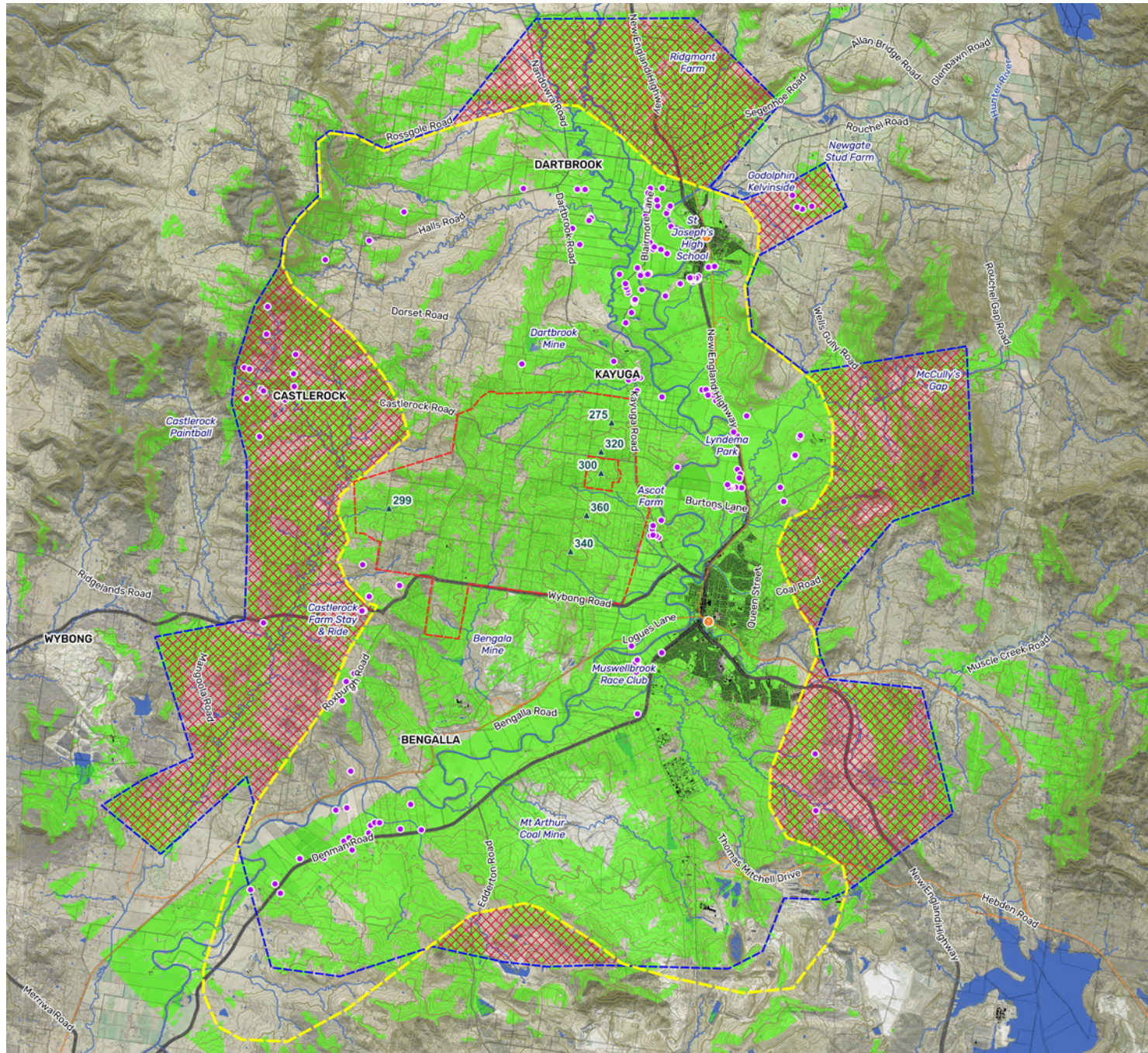
- The area to the north of the current mining operation remains an attractive rural landscape and is not an “existing mining” site from a visual and landscape perspective
- This is characteristic of the Hunter Valley in many locations but that will be almost entirely altered on the western side of the valley opposite Muswellbrook.



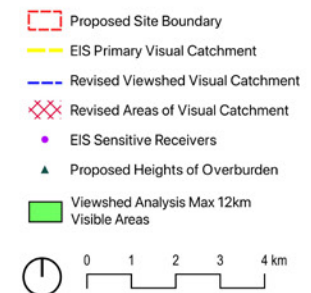
◀ **View from Castlerock Road facing east overlooking the north eastern section of the Mine Lease Area**

- This new proposal will dramatically increase the degree of change in the landscape and therefore substantially increase the levels of visual impact, compared to the previously approved plan

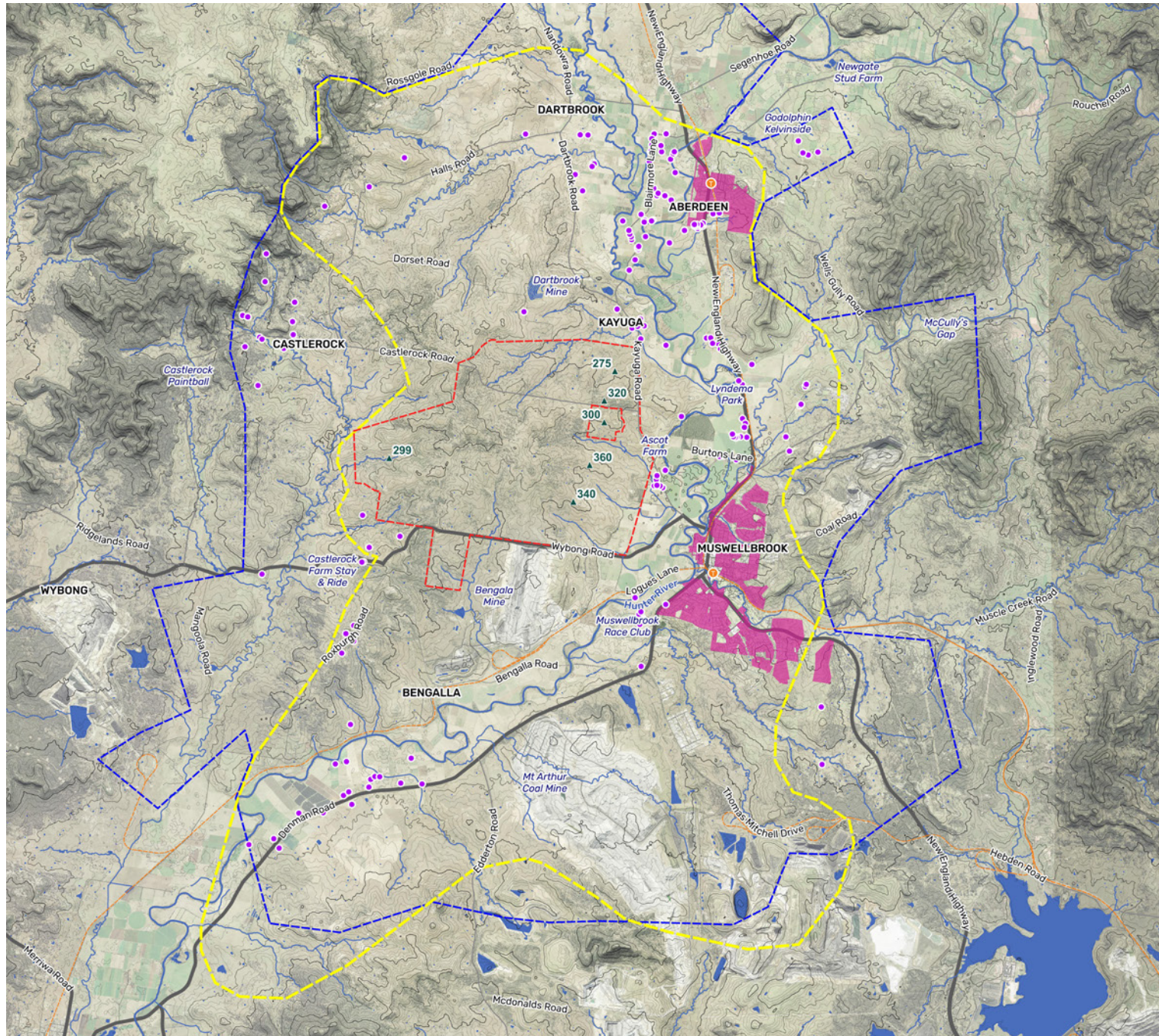
Revised Primary Visual Catchment



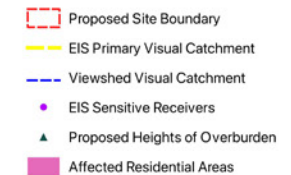
- The Primary Visual Catchment in the VLA has been underestimated
- A detailed viewshed analysis shows the degree of visibility of the proposed mine from a wider range of viewpoints



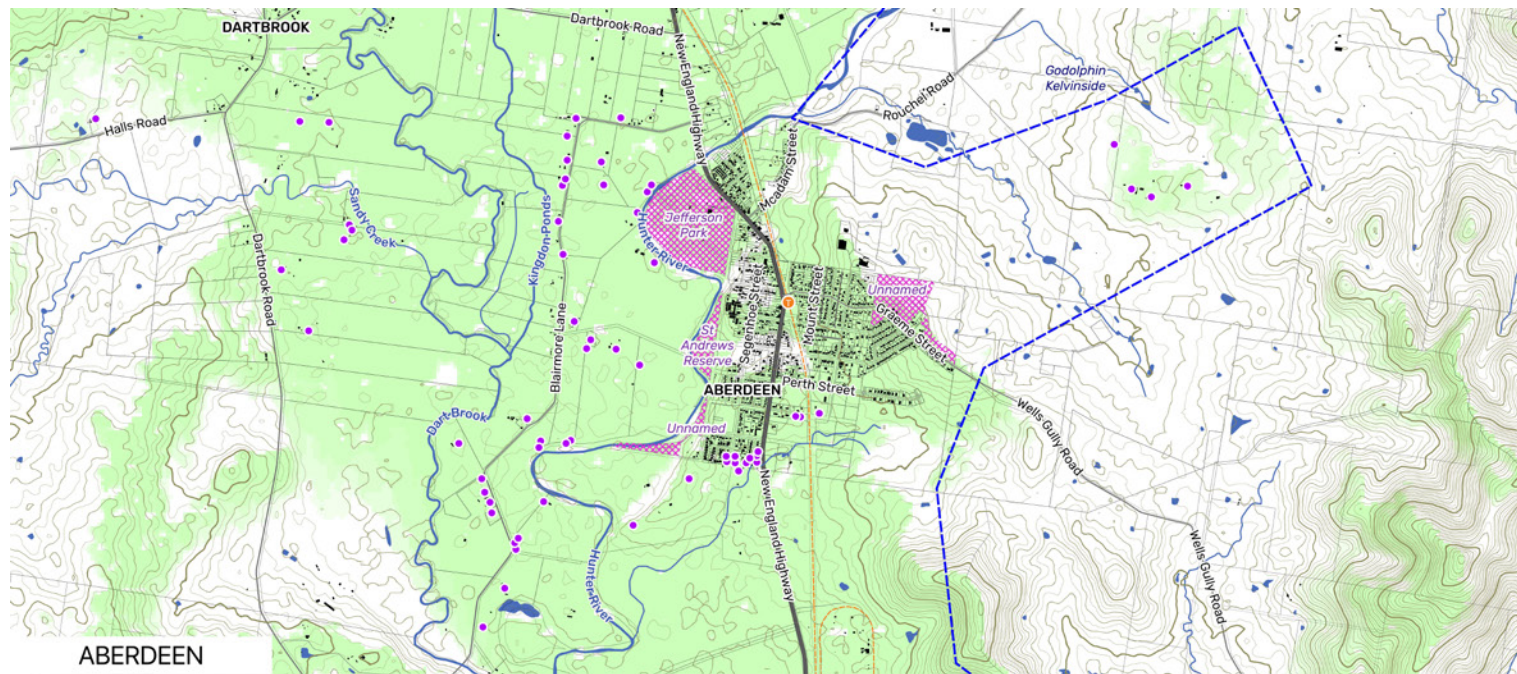
Sensitive Receivers



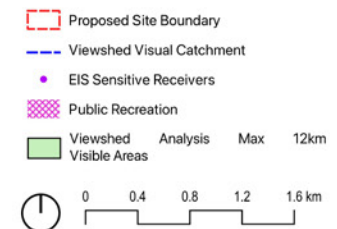
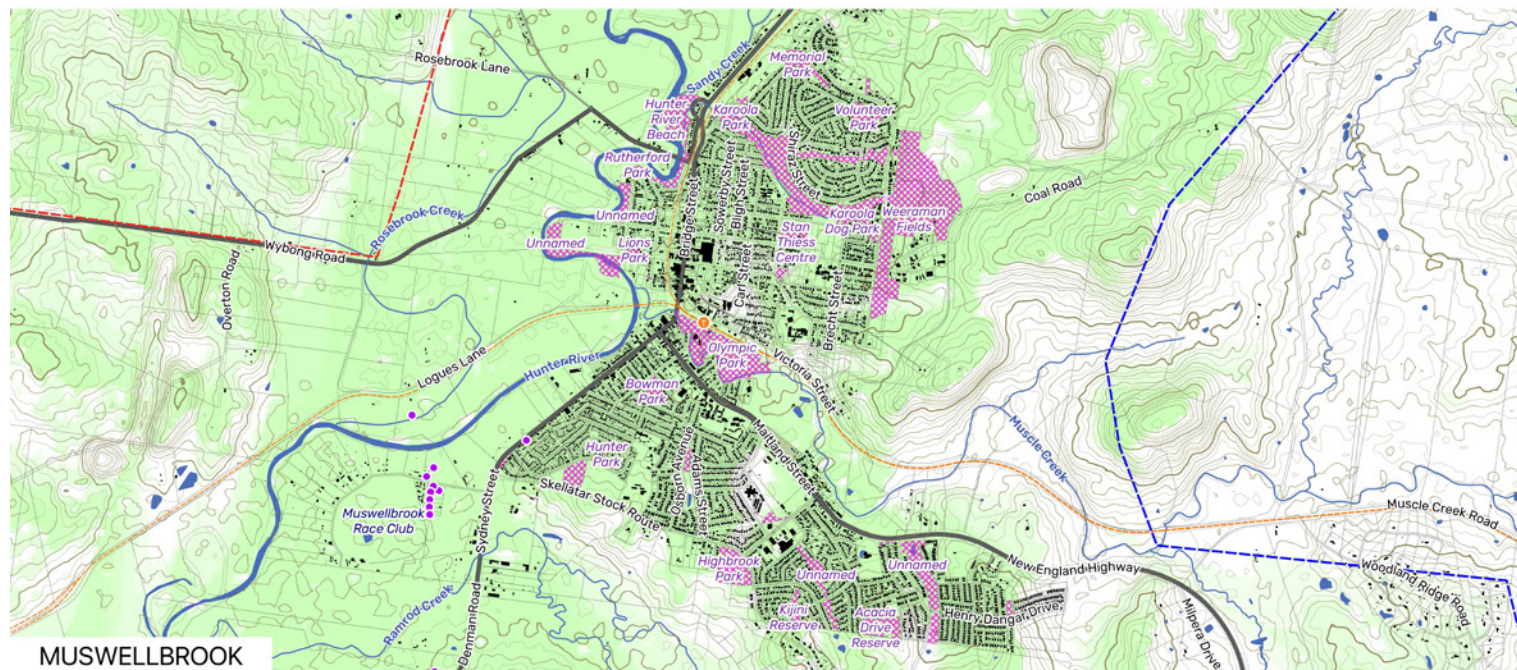
- The number of affected residents has also been underestimated in the VLA
- It does not accurately assess the quantum of local residents affected by the proposed expansion of the mine
- The Castlerock area and the residential area around the Yearling Barn facility on Godolphin's Kelvinside stud have not been assessed as having direct visual impact
- There are 14,000 people living in Aberdeen and Muswellbrook which overlook this mine area



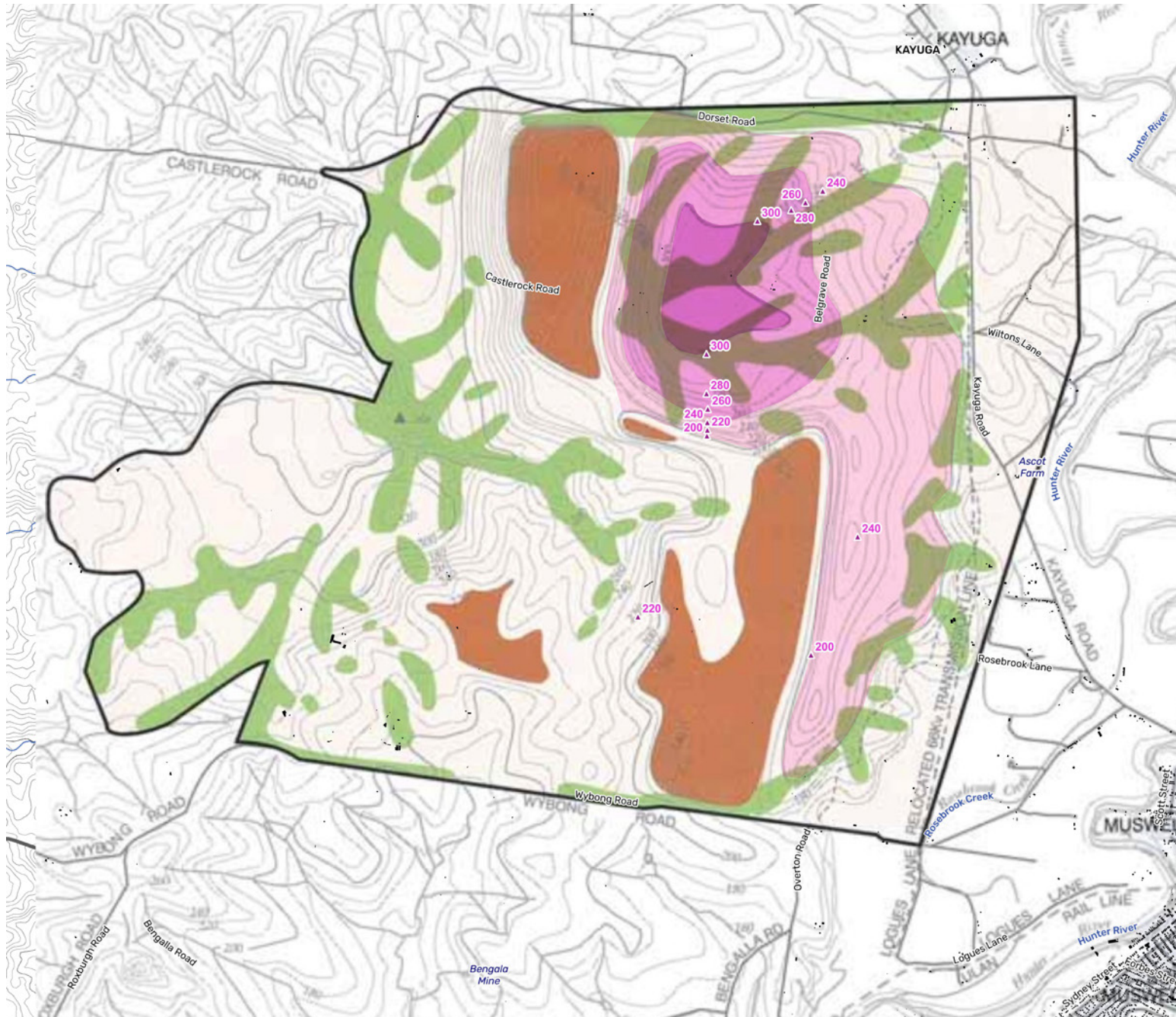
Viewshed Analysis - Public Recreational Spaces



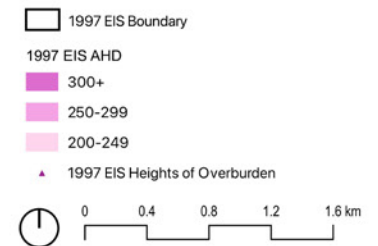
- These plans shows the public recreation areas with sight lines to the mine project
- The majority of these recreational areas (with the exception of Muswellbrook Racecourse) were not classified as sensitive receivers within the EIS-LVA.
- There are approximately 25 public recreational areas across Muswellbrook and Aberdeen combined that will have the potential for sight lines to the Project



Originally approved overburden landform

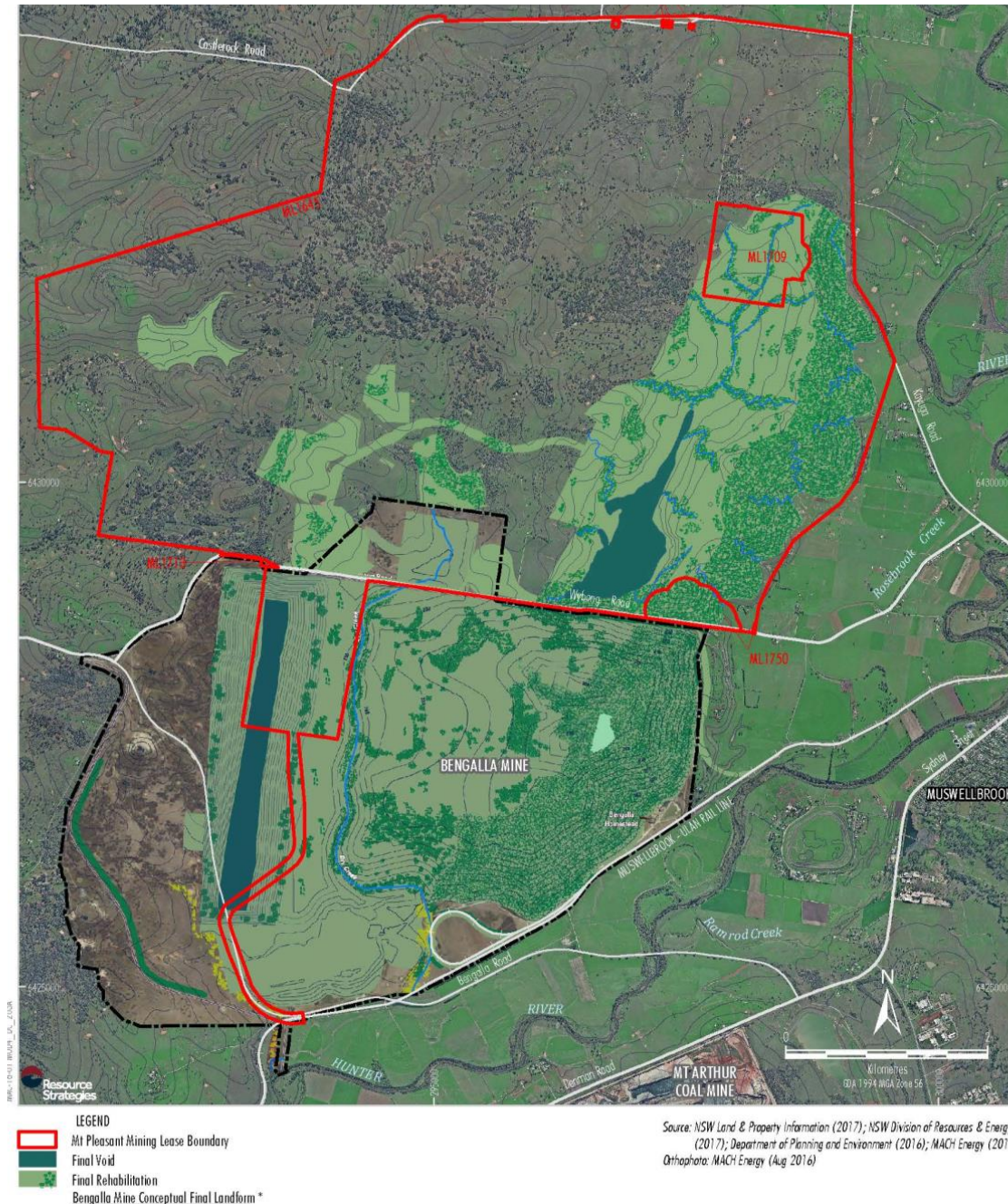


- DPIE SSD Report cites the 1999 mine plan as the current approved Mine Plan
- The main overburden landform for this approval was to reach heights of 300m and it was restricted to the northern/central area of then MLA
- The approved maximum height for the eastern overburden area was 240m AHD



Source: Coal and Allied Operations, EIS 1997

Conceptual Final Landform

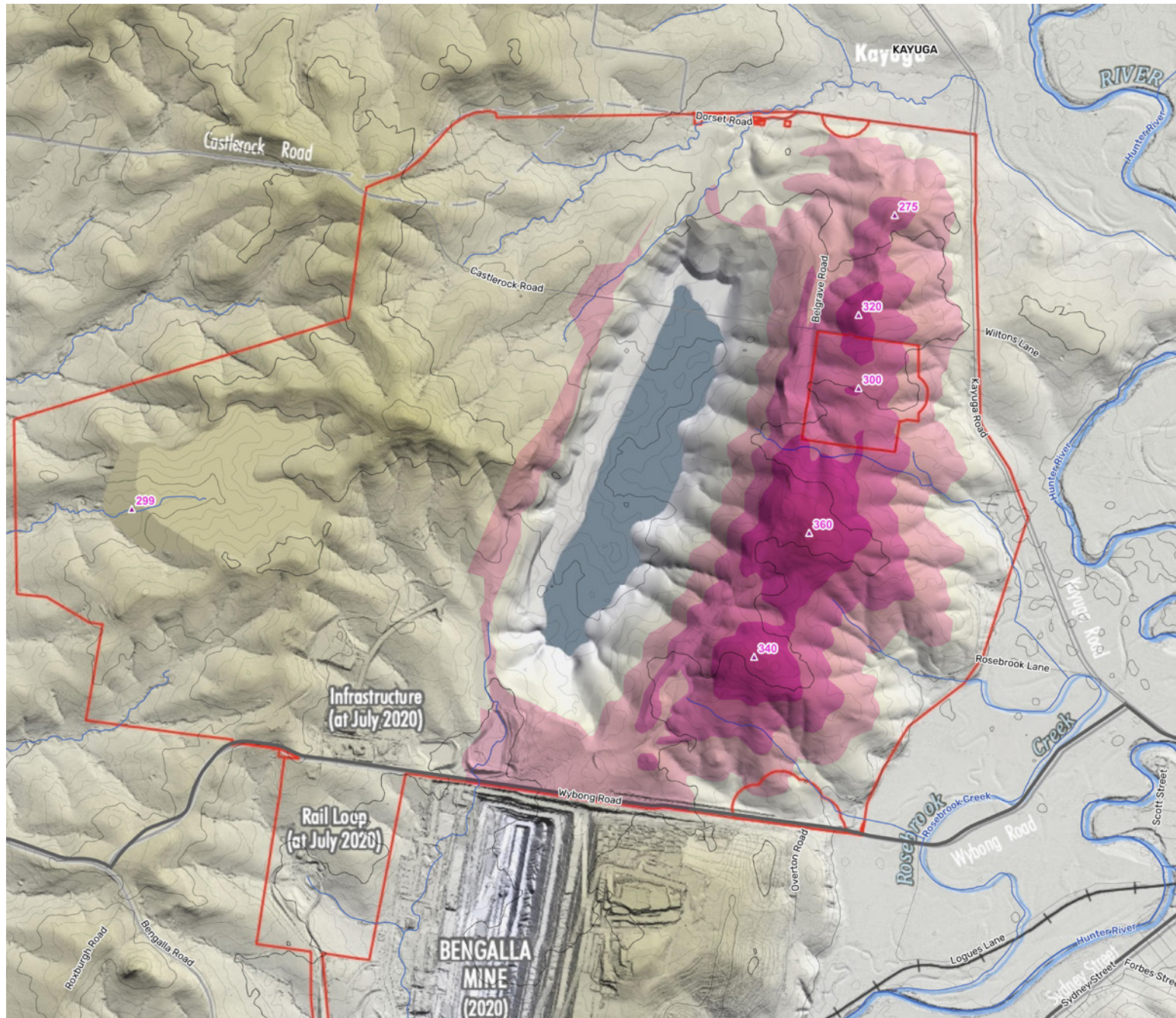


Source: NSW Government Department of Planning and Environment

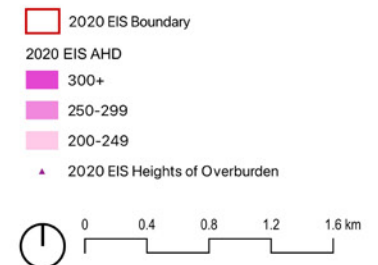
Current Approvals

- DPIE SSD Report refers to the 1999 approval as the benchmark for this current assessment
- However the current approval for this MLA is Mod 5 - dated 29 June 2022
- This plan is included on page 38 in the Notice of Determination
- The plan shows a greatly reduced overburden footprint compared to the 1999 approved plan and also the current application.
- The final overburden landform and void in this approval is restricted to the south eastern corner of the MLA

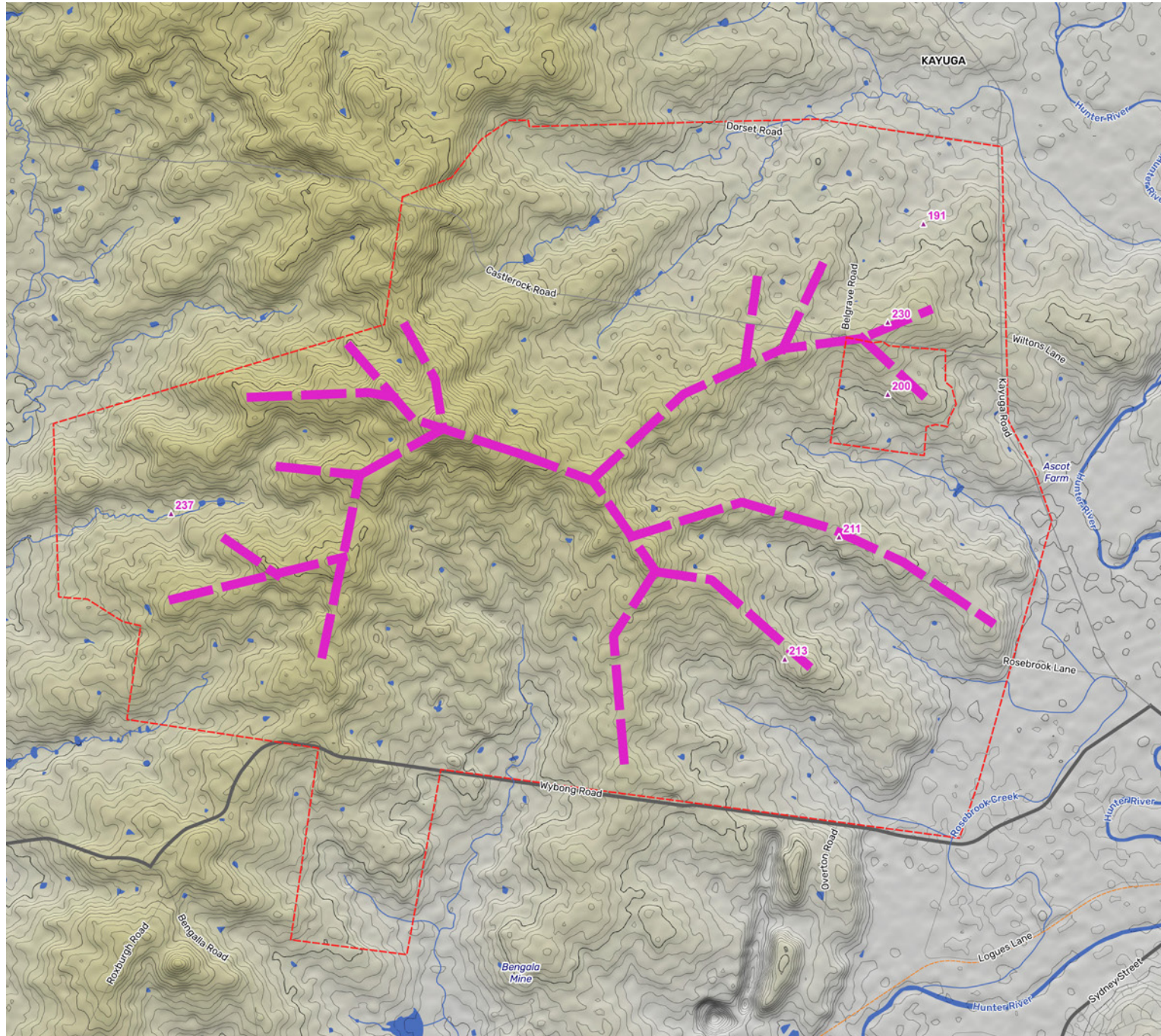
Current proposed overburden landform



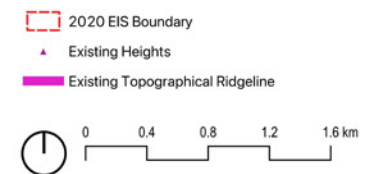
- By contrast, the proposed overburden landform covers most of the eastern side of the site reaching heights of up to 360m AHD
- This proposal doubles the overburden area and at much higher elevations creating a wall nearly 200m high
- This proposed 360m overburden landform would be 120m higher than the 1999 approved 240m landform in this location
- This massive landform which would be around 6km long greatly increases the visual impacts on the surrounding area
- The increased height and scale of the landform makes it visible from many more locations than any of the previous approvals



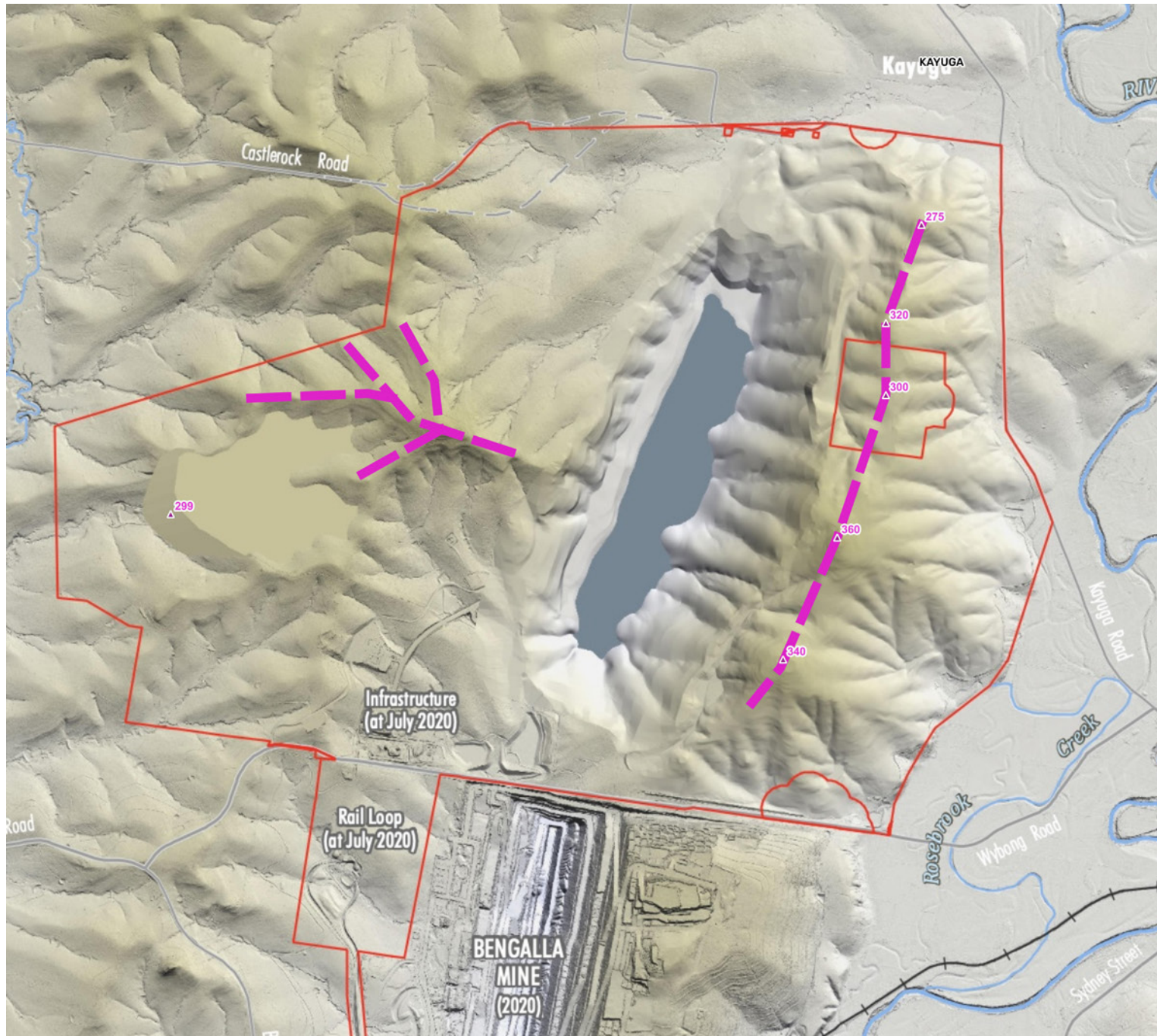
The natural landform prior to mining on the site



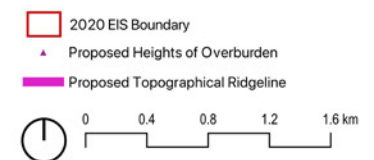
- The original landform had a series of ridges and gullies in the form of fingers running down toward the river



Final proposed landform



- This proposed landform serves the connection of the people, in and around Muswellbrook, to the Castlerock landscape
- The new landform will reduce the view from the east to between 2 and 4 kms instead of the current 20+ kms blocking the views of the distant hills on the western horizon.
- Combined with the overburden dump at Bengalla this new landform will create a high wall enclosing the river valley, approximately 9km in length.



Source: EIS Appendix M, Visual and Landscape Assessment, Figure A-8

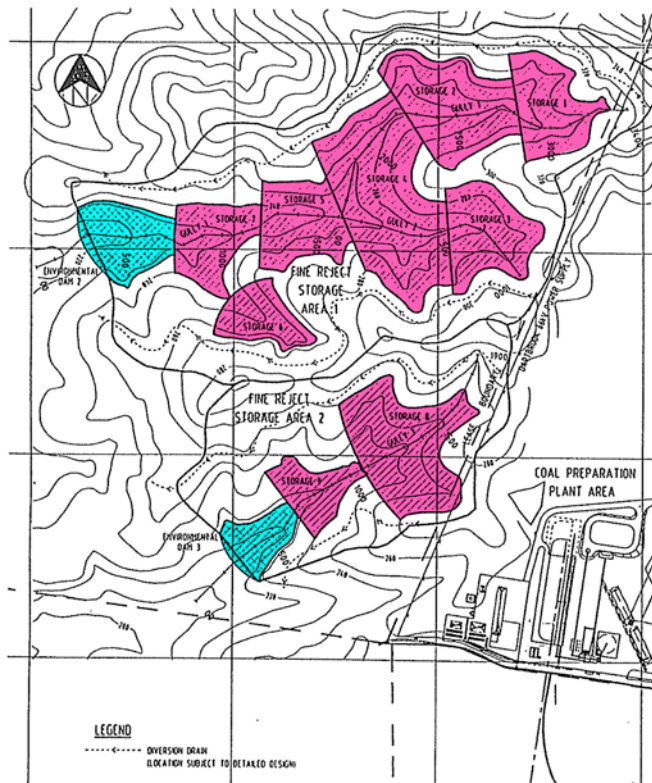
Viewpoint from St Heliers Street and Sowerby Street in Muswellbrook demonstrating the scale of the proposed landform at the mine

- The overburden wall runs north south directly parallel to New England Highway and the Muswellbrook township itself.
- It will be the equivalent to 12 Sydney Harbour Bridges joined end to end across the western side of the town.
- The proposed height will be the equivalent of 2 Sydney Harbour Bridges

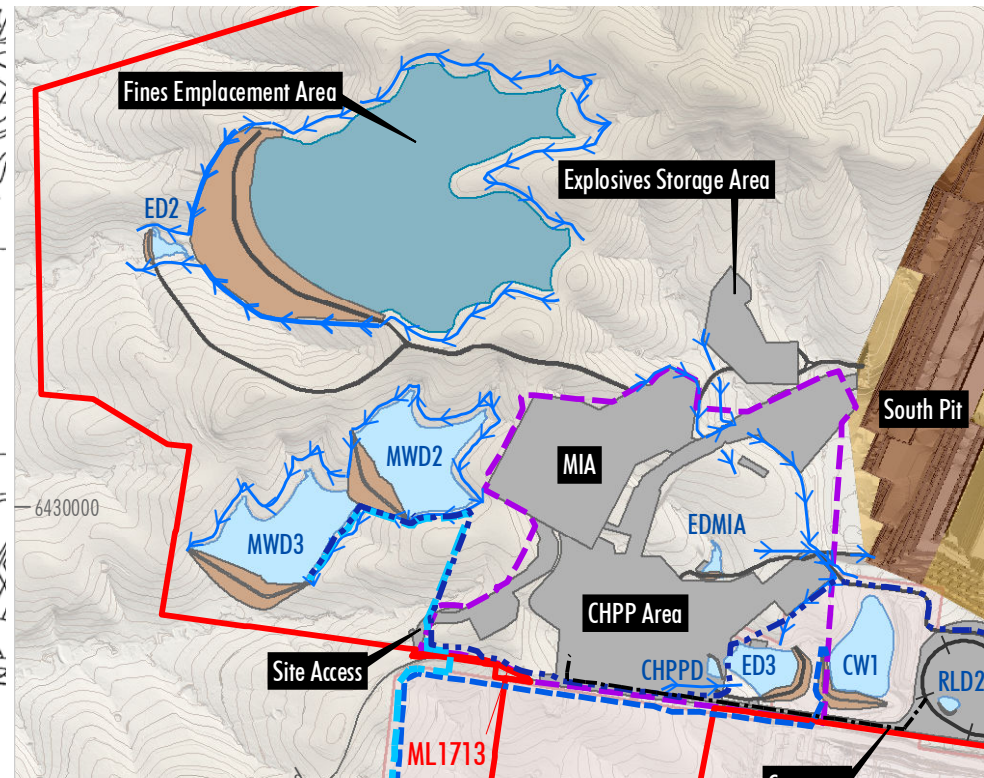


Source: EIS Appendix M Visual and Landscape Assessment 2020

Original approved Tailings Dam (1997) comprised multiple terraced storages with staged rehabilitation



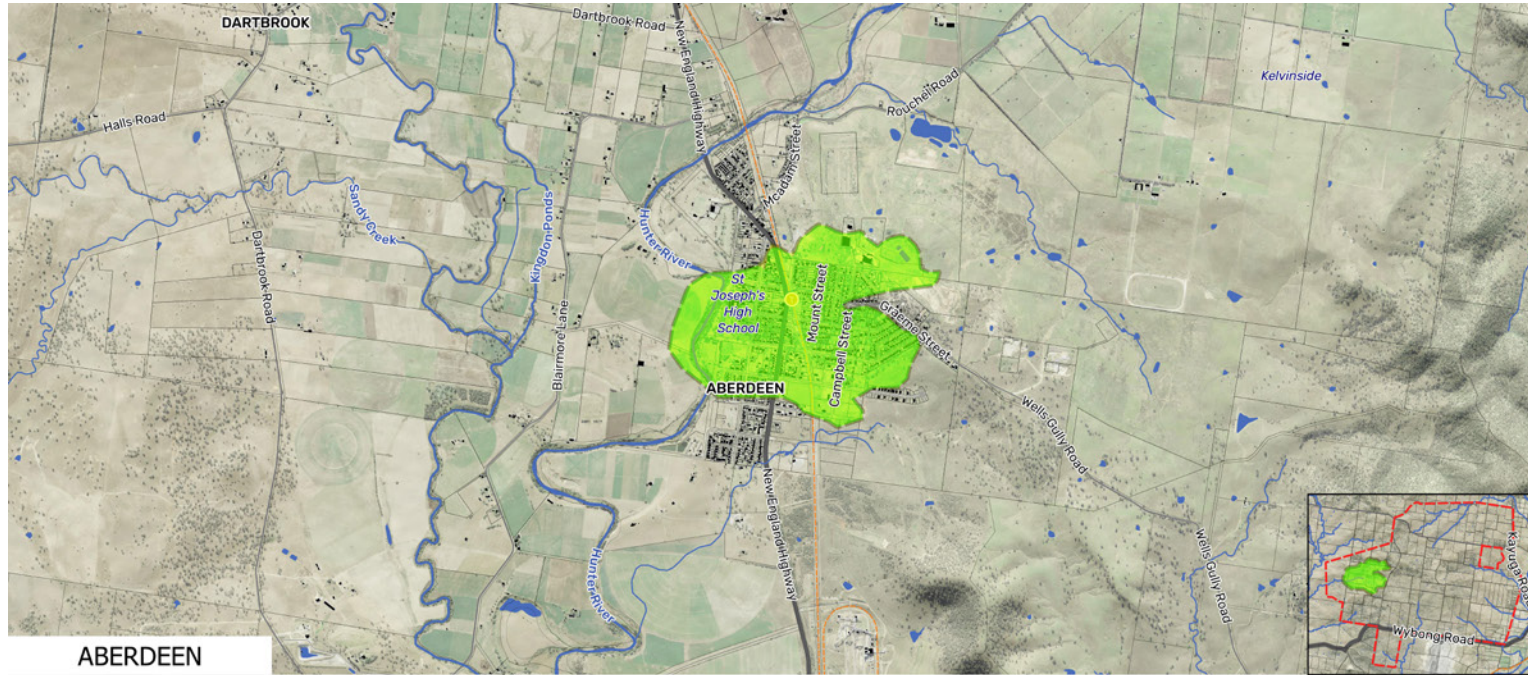
Source: Coal and Allied Operations, EIS 1997, Volume 3b Chapter 4, Fines Rejects Storage



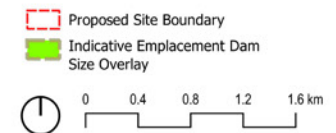
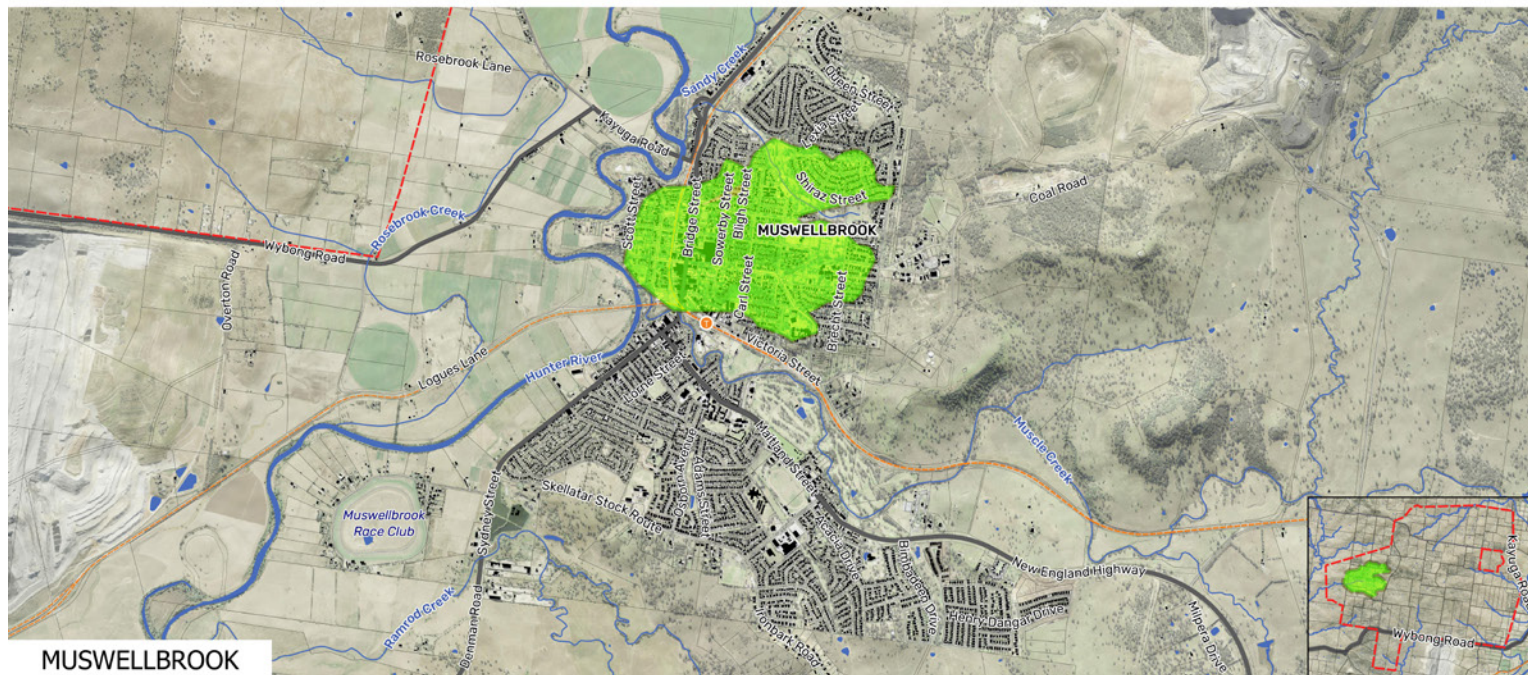
Source: Mount Pleasant Optimisation Project. Visual and Landscape Assessment (Appendix M) 2020

- The modifications to the proposed final tailings emplacement landform is significantly different to the approved 1997 EIS landform
- The proposed tailings solution comprises one monolithic landform
- It will be approximately 196 ha in size with a 70m high dam wall
- It will be almost completely flat landform with a 0-1% slope
- This will contrast with the surrounding undulating landform

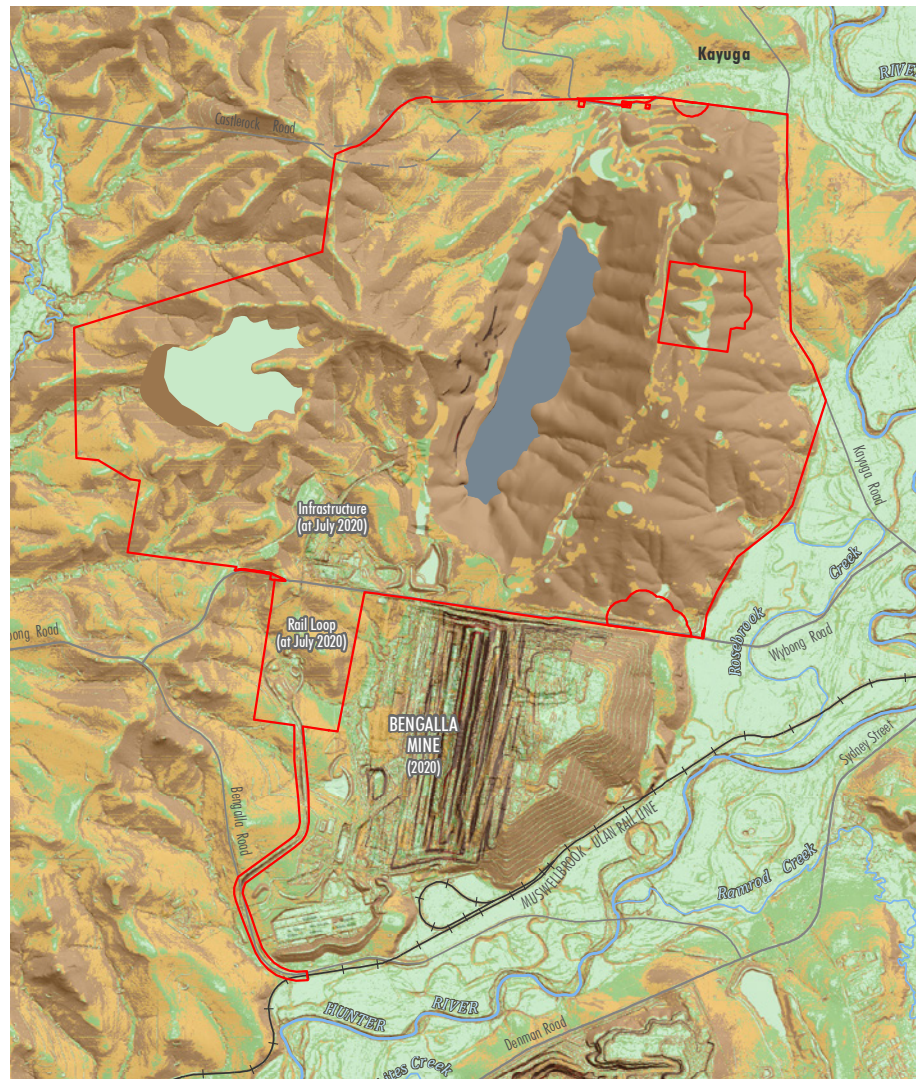
Proposed tailings dam overlaid ontop of Muswellbrook and Aberdeen



- The scale of the proposed tailings dam can be better understood when overlaid on the towns of Muswellbrook and Aberdeen
- The new tailings dam is almost as large as the entire town of Aberdeen and will stand out as an obvious anomaly in the landscape.



Projected Final Landform Indicative Slope Map

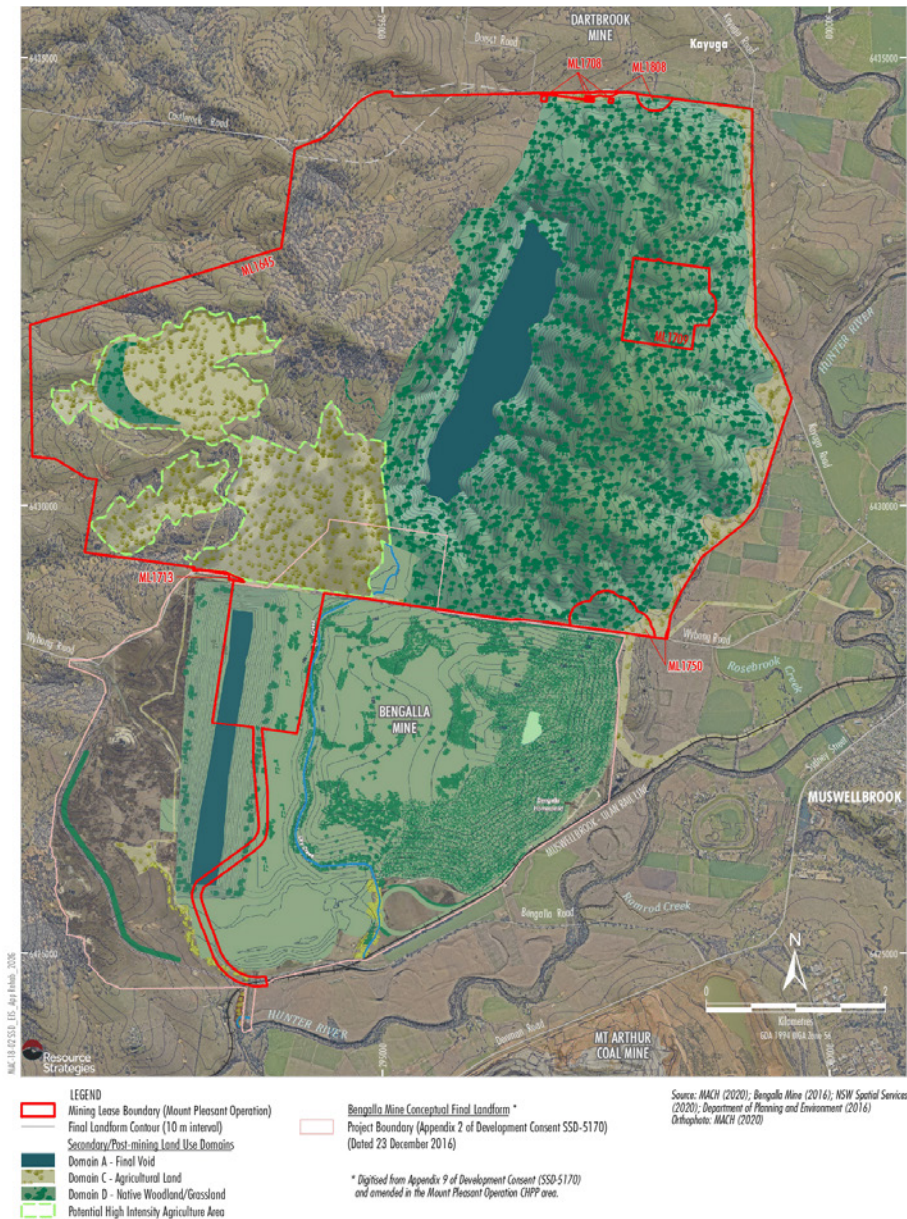


- This plan shows the projected conceptual final landform after mining activities have ceased with an indicative slope analysis.
- The slope analysis indicates that a high proportion of the site will have slopes that are up to 33% which does not align with the current landforms

LEGEND	
	Mining Lease Boundary (Mount Pleasant Operation)
	Project Final Void Waterbody
Slope Percent (%)	Slope Classification (degrees)
0.0 - 1.018	Level (<= 0°35')
1.018 - 3.055	Very gently inclined (0°35' - 1°45')
3.055 - 5.678	Gently inclined (1°45' - 3°15')
5.678 - 32.49	Moderately inclined (3°15' - 18°)
32.49 - 57.74	Steeply inclined (18° - 30°)
57.74 - 100	Very steeply inclined (30° - 45°)

Source: MACH (2021); NSW Spatial Services (2021)

Proposed Site Rehabilitation Plan



- This plan shows the projected conceptual final land use areas after mining activities have ceased
- This plan provides an overly optimistic and unrealistic representation of tree cover across the final overburden landform.
- Consistent tree cover across the landform, where slopes exceed 1:3 (or 33.3%) in steepness, is unlikely to be achieved
- The flat tailings dam is proposed to become agricultural land which also seems optimistic given the soil conditions and the virtually flat landform

Note: Light vehicle access roads and upslope diversions associated with minimising the catchment of the final void and Fines Employment Area are not shown.

Source: EIS, Attachment 8 - Rehabilitation and Mine Closure Addendum (Figure 9)

Direct and indirect dynamic impacts - from clouds of gas and dust



- Dust from all mining activities and gas from fugitive blasts pose a significant risk to the Studs and any tourism industries in the area
- Dust and gas emissions can impact over large areas, e.g.
- Mt Arthur Mine blast 2014
- Hazelwood Mine fire 2014
- These events are often widely reported creating Dynamic Impacts
- Mach has already recieved a penalty notice for offensive blast fumes emitted from the Mt Pleasant site



Conclusion

1. DPIE SSD Assessment relies on the EIS Appendix M Visual & Landscape Assessment (VLA)
2. VLA underestimated the Primary Visual Catchment
3. VLA underestimated the number of Sensitive Receivers
4. DPIE report uses inappropriate benchmarks to assess this proposal
5. Current proposed landform totally blocks long distance views to the west from Muswellbrook and the adjoining areas.
6. Tailings Dam bears no resemblance to the 1999 Approved Design, from a series of 9 smaller terraced dams becoming one large flat dam with a 70m high wall.
7. Rehabilitation Plans paint an overly optimistic view of the future with no mention of how to maintain this Woodland in the face of major challenges such as Climate Change.
8. Dust from all mining activities and Gas from fugitive blasts are not adequately assessed nor addressed but will have significant Direct and Indirect Visual Impacts and the wider valley.

Thankyou

