Section 2

Strategic Context

PREAMBLE

This section identifies the key strategic issues that are relevant to the assessment of the Project, including a review of:

- *strategic support and justification provided by key government strategies, policies and plans;*
- *key features of the Mine Site and surrounds;*
- *potential cumulative impacts;*
- *existing and proposed agreements; and*
- *feasible alternatives considered and rejected.*

2.1 Strategic Support and Project Justification

2.1.1 Introduction

The Commonwealth and NSW Governments have published a range of documents that collectively provide the basis for State and Federal government strategic planning in NSW. Central to many of these documents is the recognition that the mining, agriculture and transport industries provide essential employment and economic activity for regional areas of NSW and that each of these industries must be developed in a manner that supports the communities and environment within which those industries operate. The planning documents that are relevant to the Project and a brief description of how each of those documents provides strategic support to the Project are outlined in the following subsections.

2.1.2 Commonwealth Strategies, Policies and Plans

2.1.2.1 Threatened Species Action Plan

The *Threatened Species Action Plan 2022-2032* maps a pathway to protect, manage and restore Australia's threatened species and important natural places. The objectives of the Plan are as follows.

- The risk of extinction is reduced for all priority species.
- The condition is improved for all priority places.
- New extinctions are prevented.
- At least 30 per cent of Australia's land mass is protected and conserved.

The Action Plan identifies the following eight action areas.

- Mitigating established and emerging threats.
- Conserving, restoring and improving habitat.
- Emergency preparedness and response.
- Climate change adaptation and resilience.
- Effective planning for conservation.
- Knowledge and tools, namely collection and management of data by the Commonwealth.
- Forging stronger partnerships.
- Community leadership and engagement.

At a strategic level, the Project supports the objectives and identified action areas from the Action Plan as follows.

- A detailed biodiversity assessment has been prepared in accordance with the relevant NSW guidelines (see Section 6.2), and the Project has been designed to avoid, minimise and mitigate impacts to Commonwealth-listed and other threatened species and communities. Additionally, offset requirements have been identified to offset those residual impacts that cannot be avoided.

- The Applicant would increase the area of protected land within Australia by establishing a Biodiversity Stewardship Area on its landholding immediately adjacent to the proposed Mine Site (see Section 6.2.9).
- The Project would also contribute to combating climate change through the provision of critical minerals that are essential to the development and manufacture of low carbon technology.

Finally, the Project has been referred to the Commonwealth Department of Climate Change, Energy, the Environment and Water in relation to its potential impact on Matters of National Environmental Significance under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (see Section 6.2.6.7).

2.1.2.2 Climate Change Act 2022

The Commonwealth *Climate Change Act 2022* seeks to legislate Australia's greenhouse gas emissions reduction target of:

- 43% below 2005 levels by 2030; and
- net zero emissions by 2050.

An assessment of the Project's Greenhouse Gas has been undertaken in accordance with NSW Guide for Large Emitters dated January 2025 (see Section 6.11). The Project would contribute to these targets as follows.

- By providing a critical high technology metal that, as a Commonwealth identified Strategic Material, is essential to the development and manufacture of low carbon emissions technology.
- By installing sufficient onsite solar generation capacity to reduce carbon dioxide (CO_2) emissions associated with power generation by approximately 16,000tpa when compared with grid power.
- By committing to regularly review the Project's greenhouse gas emissions and potentially increasing the onsite renewable generation and energy storage capacity as technology develops and economic circumstances change.

2.1.3 NSW Strategies, Policies and Plans

2.1.3.1 Critical Minerals and High-Tech Metals Strategy 2024 - 2035

The NSW *Critical Minerals and High-tech Metals Strategy 2024 – 2035* (Critical Minerals Strategy) outlines the NSW Government's vision to build on and position NSW as a major global supplier and processor of critical minerals and high-tech metals well into the future. The Critical Minerals Strategy identifies the importance of developing technologies and decarbonisation, with demand for these minerals expected to surge in the coming decades. Tin is identified as a strategic material, and the Project has been awarded a Grant under the Critical Minerals Strategy.

2.1.3.2 New England North-West Regional Plan 2041

The *New England North-West Regional Plan 2041* (Regional Plan) was released in September 2022 and provides an update on the NSW Government's priorities for the New England North-West Region. The Regional Plan includes 22 objectives. The Project would be consistent with or assist in the successful implementation of the following objectives.

Objective 4 – Responsibly manage mineral resources

This objective recognises the importance of the mining industry for the New England North-West Region, including the following.

> "Mining creates both direct and indirect jobs. It delivers resources for technological innovation required for delivering renewable energy infrastructure. It helps to diversify the regional economy, sustain local communities, provide skilled jobs and produce important resources for the people of NSW."

Strategies relevant to the Project include the following.

- "Consult with the NSW Division of Mining Exploration and Geoscience when assessing applications for land use changes (strategic land use planning, rezoning and planning proposals) and new developments or expansions.
- identifying future mine closure dates, understanding potential changes to water, economic/skill profiles and demographics, and considering land use changes, mine rehabilitation activities and post-mining land use opportunities"

Objective 9 – Lead renewable energy technology and investment

This objective recognises that the future of energy generation is renewable, and supports the development of renewable energy storage options, and distributed energy systems that are located close to their point of use. The Applicant proposes to install a 10 megawatt (MW) Solar Farm with inverter and 2MWh battery energy storage system (BESS) for onsite power generation with sufficient capacity to meet the daytime energy demand of the Mine Site. This would remove the need for a connection to the existing electricity grid, which reduces the need for Project-related vegetation disturbance. The Applicant anticipates the Project's emissions would be reduced by up to 15,924t of carbon dioxide equivalent (CO_2-e) per year, which would align with the State's 2050 net zero emissions target outlined in the *Climate Change (Net Zero Future) Act 2023*.

Objective 12 – Protect Regional Biodiversity and areas of High Environmental Value

The Applicant has, to the extent practicable, sought to avoid and minimise impacts on biodiversity. Unavoidable direct impacts would include approximately 315.2ha of native vegetation. The Applicant would progressively rehabilitate mined land throughout the life of the Project and would remove all infrastructure not required at the end of the Project-life and rehabilitate all remaining disturbed land. The Applicant would also establish a Biodiversity Stewardship Site that would provide additional protection and connectivity within the landscape.

Objective 15 – Understand, respect and integrate Aboriginal culture and heritage

The Project would not disturb any sites of Aboriginal heritage significance. One site with Aboriginal objects was identified at the Mine Site, however disturbance of this site will be avoided. The Applicant has erected a barrier around the site that will remain for the Project-life.

Objective 16 – Support the aspirations of Aboriginal people and communities in local planning

This objective recognises that working collaboratively with LALCs to build capacity for shared knowledge, constructive relationships, and meaningful approaches to strengthen economic self-determination. The Applicant would implement the following in relation to supporting Aboriginal economic participation.

- Prioritise Moombahlene and Glen Innes LALCs to explore employment needs and capacity.
- Engage with local LALCs on skill gaps, and local contracting opportunities.
- Monitor the proportion of Aboriginal employees.
- Offer an annual Indigenous training scholarship

The impact of these measures on improvements to indigenous wellbeing through employment and contracting is expected to be positive and of high significance to local Aboriginal people and communities.

Objective 17 – Celebrate local character

The Regional Plan states that "Character is the combination of things that make a place, street, village or town recognisable. It's all the things that are special and unique about a place and can help to create a sense of community". The settlement of Emmaville was established in 1872 after Alluvial tin was discovered nearby. Still known as a "mining town", the people of Emmaville feel a strong connection to the history of mining and there is strong support for the Project across the community. The Project is predicted to facilitate the economic revitalisation of Emmaville, strengthen community cohesion and contribute to the wellbeing of the community.

Objective 19 – Leverage new and upgraded infrastructure

This objective requires decision makers to consider freight transportation and leveraging economic opportunities to create benefits for the community. The Project would result in safety upgrades to sections of Grampians Road and its intersections with Schroders Road and Gulf Road. These upgrades and improvements were identified by a Road Safety Audit of Grampians Road and would be undertaken to meet the ARRB (2020) requirements for Class 4B unsealed roads, relevant Austroad guidelines and Australian Standards.

2.1.3.3 Northern New England High Country Regional Economic Development Strategy 2018 – 2022 – 2023 Update

The *Northern New England High Country Regional Economic Development Strategy 2018 – 2022* (RED Strategy) sets out a long-term economic vision and associated core strategies for the functional economic region encompassing the Glen Innes Severn, Tenterfield Shire and Southern Downs Regional LGAs. The Department of Regional NSW released an update to the Strategy in February 2023 (2023 Update).

The RED Strategy recognises mining as a key sector, and that the region contains the largest undeveloped hard rock tin deposit within Australia. Tin metal has applications in the electronics and renewable energy sectors and the Project, if approved, would support these sectors, particularly into the future considering supply from traditional international sources is forecast to decline as resources are depleted.

The 2023 Update affirmed that the key endowments stated in the RED Strategy, including the undeveloped hard rock tin deposit, remain valid.

2.1.3.4 20-Year Economic Vision for Regional NSW

The *20-Year Economic Vision for Regional NSW* (the Vision), published by the NSW Government in February 2021, aims to drive sustainable, long-term economic growth in regional NSW and unlock the significant economic potential of the regional areas in NSW. The Vision aims to add 180,000 residents and 64,000 jobs to regional areas in NSW over the 20 years from 2021. Mining is identified as one of the seven "engines" of the Vision. The Vision describes several priority actions for regional economic development.

The *Regional NSW Investment Attraction Strategy 2022 - 2027* (the IA Strategy), was subsequently released by the NSW Government in October 2022 to document the means (enablers) to achieve the Vision.

The following identifies how the Project is consistent with the Vision's priority actions and the enablers of the IA Strategy (in brackets).

- Principle 2 (Enabler 3) – Improved travel between regional centres and from regional centres to international gateways.

  The Project would improve transport linkages between the Mine Site, Emmaville and the New England Highway via upgrades to sections of the Concentrate Transport Route.

- Principle 5 (Enabler 1) – A skilled labour force for current and future needs of the regions.

  The Project would enable the Applicant and its suppliers and contractors to continue to employ and train regionally-based employees, including young people and members of the Aboriginal community.

2.1.3.5 Climate Change Policy Framework

The NSW *Climate Change Policy Framework* published in 2016:

- defines the NSW Government's role in reducing carbon emissions and adapting to the impacts of climate change;
- sets policy directions to guide implementation of the framework;
- commits NSW to achieving aspirational long-term objectives of net-zero emissions by 2050 and to help NSW become more resilient to a changing climate; and
- sets out next steps for implementation.

The *Climate Change Policy Framework* is supported by the NSW *Net Zero Plan Stage 1: 2020–2030* (Net Zero Plan) published in March 2020. The Net Zero Plan identifies four priorities as follows.

1. Drive uptake of proven emissions reduction technologies.
2. Empower consumers and businesses to make sustainable choices.
3. Invest in the next wave of emissions reduction innovation.
4. Ensure the NSW Government leads by example.

The Project is consistent with Priorities 1 to 3 as follows and provides the NSW Government with the opportunity to demonstrate a commitment to Priority 4.

- The Project would rely primarily on renewable energy, a 10 megawatt (MW) Solar Farm with inverter and 2MWh battery energy storage system (BESS), for onsite power generation. This system would have sufficient capacity to meet the energy demand of the Mine Site during daytime hours. This would remove the need for a connection to the existing electricity grid, thus reducing CO_2 emissions by up to 16,000 tonnes per annum (tpa).
- Following commencement, the Applicant would progressively review and implement lower emissions intensive technologies and would seek to increase the proportion of electricity sourced from renewable sources in line with the targets identified in the *Climate Change (Net Zero Future) Act 2023* and State and Federal commitments in relation to emissions reduction targets.
- The project would produce critical minerals that will be essential for the development of low emission technology.

2.1.4 Local Planning Context

2.1.4.1 Glen Innes Severn Council Local Strategic Planning Statement

The *Glen Innes Severn Council Local Strategic Planning Statement* (the Statement) sets out the economic, social and environmental land use needs for the Glen Innes Severn community to 2040. The Statement provides clear planning priorities and identifies the framework to maximise opportunities for employment and economic development within the Glen Innes Severn LGA.

Whilst mining is not specifically identified in the Statement, the Project would support the following priorities:

- Priority 6 - Continue to develop service and logistics infrastructure on appropriate sites and encourage new industry opportunities.

  Whilst the Project represents the return of an historical economic activity, it can be considered a new industry opportunity for the current generation of residents. The Project would be situated on land where mining is permissible (with consent) and result in upgrades to sections of local roads, including Grampians and Wellington Vale Roads with improved safety features and flood protection.

- Priority 10 - Promote and support the transition to renewable energy.

  The Project would produce high quality tin concentrate that is a critical metal for the energy transition and includes the development of on-site power generation capacity from renewable sources to support operations that may, in future, be connected to the electricity distribution network.

2.1.4.2 Glen Innes Severn Development Control Plan 2014

The *Glen Innes Severn Council Development Control Plan* (DCP) provides guidance on the planning and design guidelines to support the planning controls in the LEP. Clause 11 of the *State Environmental Planning Policy (State and Regional Development) 2011* states that Development Control Plans do not apply to State Significant Development. Notwithstanding this, this subsection provides an overview of relevant matters raised in the Plan and how the Project would address those matters.

Chapter 4 (Rural Development) of the DCP applies to the land zoned RU1 and C3. The primary aims and objectives of this chapter include the following.

- To enhance the character of the rural areas.
- To encourage the use of existing or potentially productive land for agricultural purposes.
- To reduce potential for rural land use conflict.
- To protect old-growth, significant hollow-bearing trees and conservation significant vegetation through recognition of their ecological value and scarcity in the landscape.
- To improve the ecological function of riparian areas within the landscape.
- To improve the stability of the bed and banks of waterways through the management of riparian vegetation.

Section 4.6 of the DCP specifies the environmental considerations required for developments identified as rural land use zones in the LEP. These considerations include the following.

- *Where development is likely to have a significant impact on threatened species, populations or ecological communities, or their habitats within the meaning of the Biodiversity Conservation (BC) Act 2016, Environment Protection and Biodiversity Conservation Act (EPBC) Act 1999 and Fisheries Management Act 1994, council will require the submission of the of the following;*
  - *an ecological assessment prepared by a suitably qualified, experienced and independent person or persons; and/or*
  - *a preliminary Vegetation Management Plan (VMP) prepared by a suitably-qualified and experienced person such as an Ecologist, Bush Regenerator, Horticulturist or Landscape Architect with practical, demonstrated experience in bush regeneration, and/or*
  - *compensatory planting prepared in accordance with Table 4.1.*

Section 6.2 of the EIS addresses potential impacts on threatened species and ecological communities and provides a Biodiversity Development Assessment Report assessing the impact of the Project on biodiversity.

- *Roads are to be located outside riparian buffer areas where possible. Where roads traverse the riparian buffer area, the road design is to minimise the area of disturbance and demonstrate minimal impact on the riparian function and integrity.*

  All roads within the Mine Site would be constructed outside of riparian buffer areas where practical. Proposed upgrades to Grampians Road would also avoid or minimise impacts to riparian buffer areas to the extent practical. Section 6.2.6 of the EIS addresses potential impacts to vegetation as the result of Project-related disturbance for road upgrades.

2.1.4.3 Glen Innes Airport Master Plan 2022

The Glen Innes Airport Master Plan 2022 (the Master Plan) was prepared by the Glen Innes Severn Council to establish objectives, understand existing facilities, consider future demands and develop plans for future enhancement of the airport, and align with local strategic plans and strategies. The development of the Mine Camp at Glen Innes Airport aligns with the following objectives of the Master Plan.

- Develop a role for the airport as a community asset and driver of visitation to enhance socio-economic prosperity including employment, education, entrepreneurialism and innovation.
- Develop options for attracting and developing more general and recreational aviation activity at the airport, including administration, parking, and hangarage accommodation options for relevant target groups – consider industry partnerships to reduce capital expenditure to deliver such initiatives.

The Master Plan outlines a series of possible opportunities for the increased utilisation and future development of the Glen Innes Airport which were identified through reference to local strategic planning documents. The Master Plan shows the Mine Camp would be developed in the "Gateway and Events Zone", which was originally planned so as not to impinge on the opportunity to use this area for a flight school, or a range of aviation events, such as festivals, markets, concerts or weddings. The development of a Mine Camp at Glen Innes Airport would include the following facilities.

- Self-contained accommodation units
- Kitchen, dining and laundry facilities
- Administration Facilities
- Meeting and training rooms
- Recreational spaces with covered and uncovered seating

These facilities would provide a final land use that would align with the following opportunities outlined in the Master Plan.

- Fly-in tourism Accommodation
- Flying Training
- Conference Facilities
- Non-Aviation Events

2.2 Key Features

2.2.1 Local and Regional Community

The Applicant, through current and previous owners, has been intimately involved with the surrounding community since 2014 when community consultation and scoping for the "Stage 1 Project" commenced (see Section 1.5.1). In summary, the communities surrounding the Mine Site include the following.

- Surrounding rural residents (fence line and near neighbours).

  The area surrounding the Mine Site is a rural area with sparsely located agricultural properties, with one or two houses on each property (**Figure 1.5.3**). These are typically occupied by residents who rely on the respective property's agricultural operations for some or all their income or tenants.

- Residents of the town of Emmaville.

  The Applicant understands there is approximately 350 residents living within Emmaville. With tourist destinations within and in the vicinity of the township such as the Emmaville Mining Museum and the historic Ottery Arsenic Mine, Emmaville was, and is, closely associated with mining.

- Surrounding villages and towns

  Situated within the broader locality of the Mine Site are other villages and towns that include the following (refer **Figure 1.1.1**).

  - Torrington: located approximately 15km to the northeast of the Mine Site.
  - Deepwater: located approximately 30km to the east of the Mine Site.
  - Glen Innes: located approximately 40km to the southeast of the Mine Site.
  - Inverell: located approximately 60km to the southwest of the Mine Site.

It is anticipated that the Applicant's employees would either reside within Emmaville or the above villages, towns and surrounding areas or, where required, at Applicant Mine Camp in Glen Innes.

Appendices 18 and **19** present detailed profiles of the local and regional community and how the Project would impact the social and economic capacity of the community. These reports are also summarised in Sections 6.14 and 6.15 of this document.

2.2.2 Land Ownership

Figure 1.5.3 displays the land ownership within and surrounding the Mine Site. The land on which the proposed Mine Site would be situated is either owned by the Applicant, the State of NSW (managed by NSW Crown Lands) or the NSW Electricity Transmission Ministerial Holding Corporation.

The Mine Camp is located on land owned by Glen Innes Severn Council (**Figure 1.5.3**) All proposed road works would be undertaken within the road reserves of the relevant roads.

Land surrounding the Mine Site is typically privately owned or Crown Land.

2.2.3 Surrounding Land Uses

Figure 2.2.1 presents land uses within and surrounding the Mine Site, as defined by the NSW Land Use and Management database. In summary, the principal land use within the Mine Site is "Grazing native vegetation" with an area in the southern section also identified as being used for "Mining". Minor areas surrounding the Mine Site are also identified as being "Grazing modified pasture".

Lot 1 DP 1008294, owned by the NSW Electricity Transmission Ministerial Holding Corporation, is sub-leased to Transgrid and its wholly owned subsidiary, Lumea. A section of the Applicant-owned Lot 2 DP 1008294 is sub-leased to the NSW Telecommunications Authority (NSW TA). Situated within these lands, collectively known as Transgrid Site Grampian Ridge 250528 (**Figure 2.2.1**), are the following telecommunications equipment and associated infrastructure.

- 28.0m lattice tower (Transgrid/Lumea).
- 30.0m monopole tower (Transgrid/Lumea).
- Equipment Shelters (Transgrid/Lumea, NSW TA and NSW Rural Fire Service).
- Antennae (Transgrid/Lumea, NSW TA and NSW Rural Fire Service).
- Solar arrays (Transgrid/Lumea and NSW TA).

Rural land surrounding the Mine Site is used primarily for "Grazing native vegetation," with areas of "Grazing modified pasture". The village of Emmaville is located approximately 7km to the southeast of the Mine Site with areas of prior alluvial tin mining located to the east and west of the village (**Figure 2.2.1**).

The Mine Camp and surrounding land forms part of the Glen Innes Airport and is surrounded by land used for "grazing modified pastures" (**Figure 2.2.1**).

2.2.4 Natural and Built Features

Figure 2.2.2 presents natural and built features within and surrounding the Mine Site and Mine Camp.

Natural features include the following.

- Nature reserves, including:
  - the Torrington State Conservation Area;
  - Severn River Nature Reserve;
  - Kings Plains National Park; and
  - Fladbury Nature Reserve
- Rivers and creeks, including
  - the Severn and Beardy Rivers and Vegetable Creek in the vicinity of the Mine Site; and
  - Reddestone and Furracabad Creeks in the vicinity of the Mine Camp.

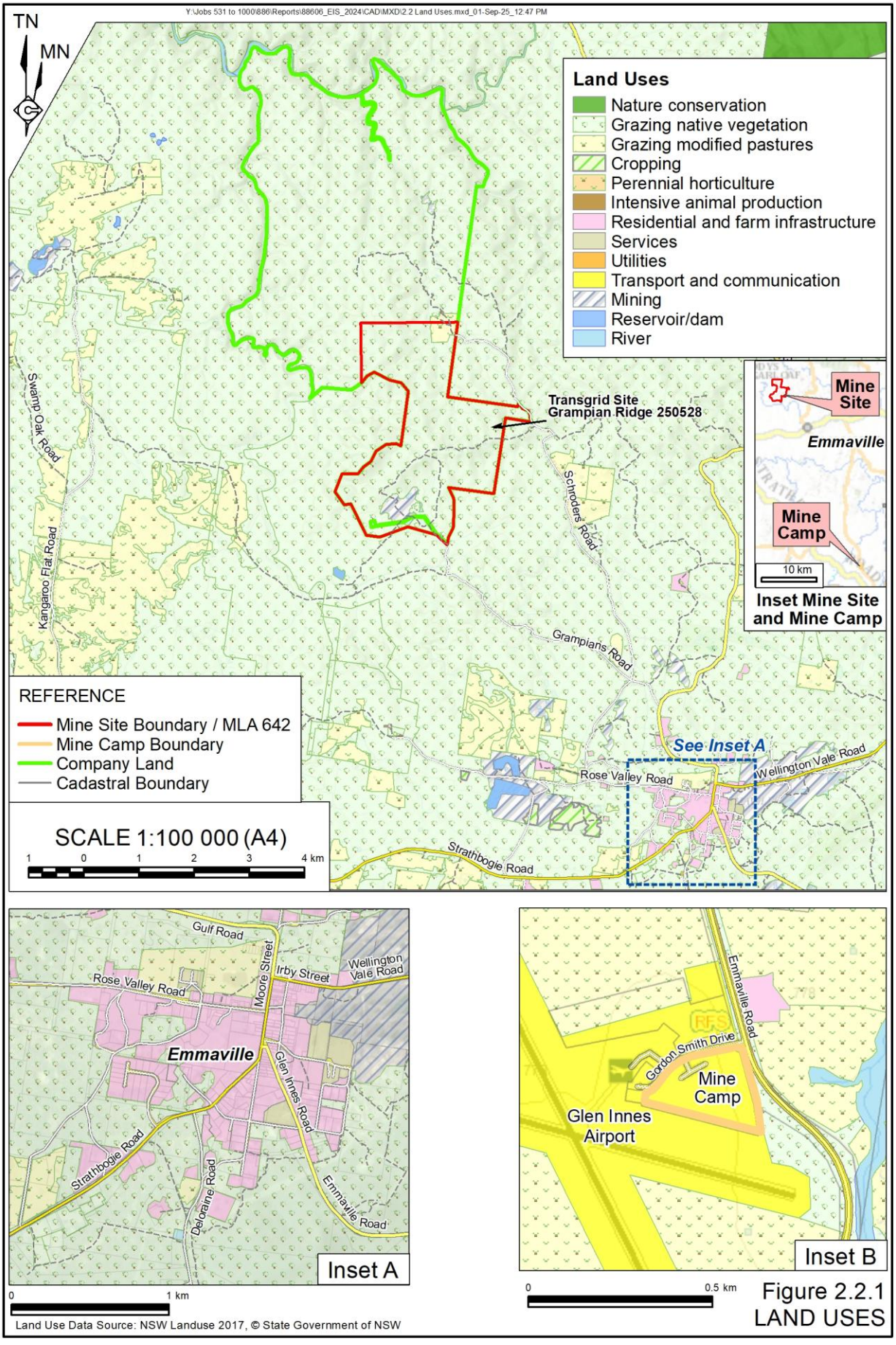
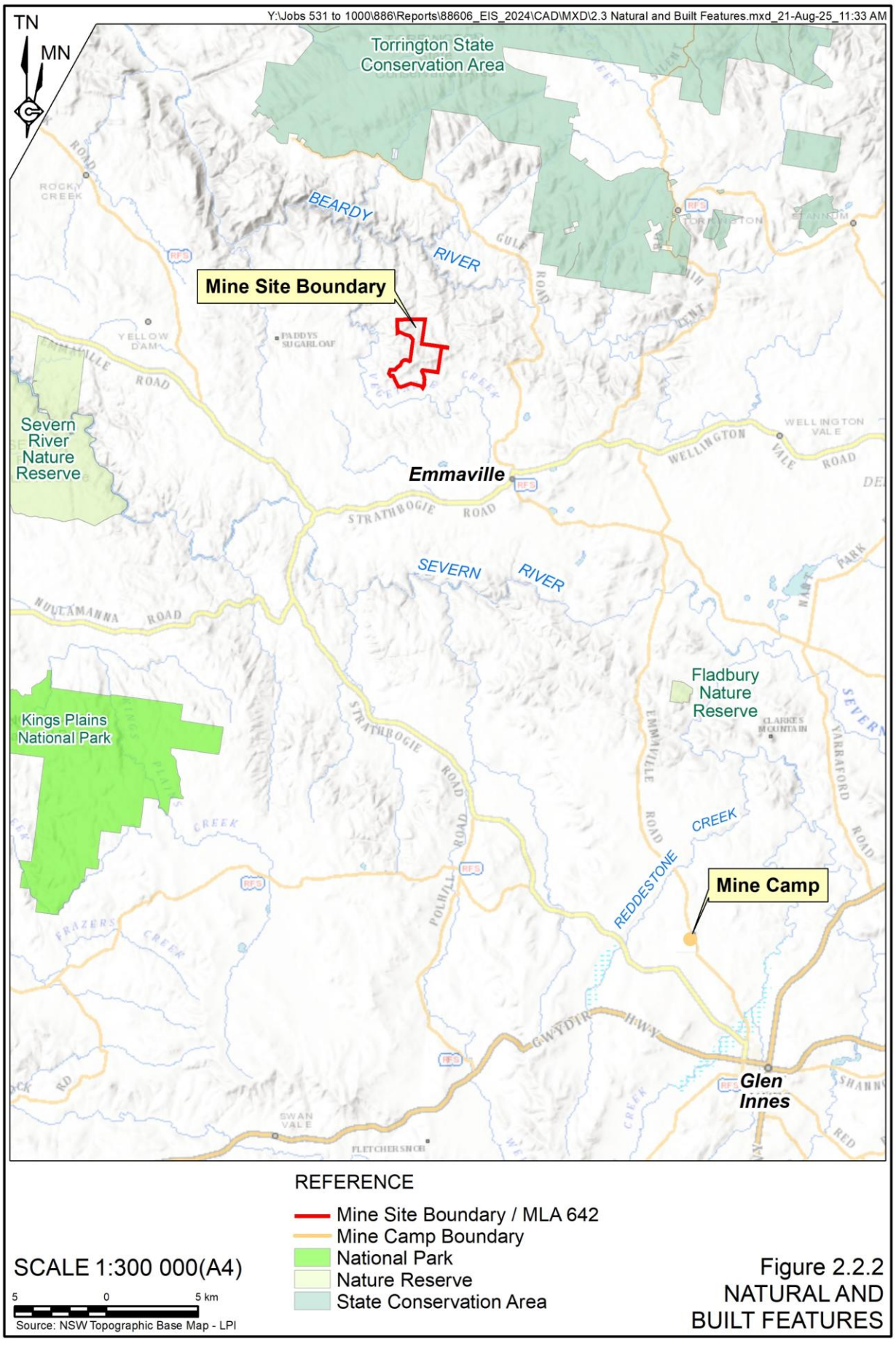


Figure 2.2.1
LAND USES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TN
MN
Torrington State Conservation Area
BEARDY RIVER
Mine Site Boundary
Severn River Nature Reserve
Emmaville
SEVERN RIVER
Fladbury Nature Reserve
Kings Plains National Park
Mine Camp
Glen Innes
REFERENCE
Mine Site Boundary / MLA 642
Mine Camp Boundary
National Park
Nature Reserve
State Conservation Area
SCALE 1:300 000(A4)
5 0 5 km
Source: NSW Topographic Base Map - LPI
Figure 2.2.2
NATURAL AND BUILT FEATURES

The New England Region, including the area surrounding the Mine Site and Mine Camp is known for its scenic qualities, with rolling hills and areas of farmland and native vegetation.

Built features within and surrounding the Mine Site include the following (**Figure 2.2.1**).

- Telecommunications equipment and infrastructure associated with Transgrid Site Grampian Ridge 250528 (refer **Figure 2.2.1**).
- Regional roads, including Emmaville and Wellington Vale Roads.
- Local roads, including Grampians, Gulf and Schroders Roads.
- Unnamed access tracks.
- The township of Emmaville, including residences, a general store, two hotels, and other infrastructure.
- Agricultural infrastructure, including farm residences, sheds, fences, silos and pastural land.

Built features surrounding the Mine Camp include the following (**Figure 2.2.1**).

- Glen Innes Airport, operated by the Glen Innes Severn Council. The airport is used for private and Rural Fire Service aircraft and there were no regular scheduled flights at the time of finalisation of this document (**Figure 2.2.1**). The Mine Camp occurs within the footprint of an approved but yet to be constructed 600 bed accommodation facility intended to service a flight school.
- Local roads, including Emmaville and Strathbogie Roads.
- State roads, including the New England and Gwydir Highways.

The town of Glen Innes, located approximately 7km to the southeast of the Mine Camp.

2.2.5 Risks and Hazards

An environmental risk assessment for the Project was undertaken and is presented in **Appendix 5**. In summary, key risks and hazards associated with the Project include the following.

- Traffic and transportation, including upgrades to sections of local and regional roads along the Concentrate Transport Route (i.e. Grampians and Wellington Vale Roads) including improvements to waterway crossings (Vegetable Creek) to reduce flood risk.
- Surface water, erosion and sediment control, including diversion of surface water around the active sections of the Mine Site and into natural drainage.
- Surface water quality, including release of mine-affected runoff generated from catchments and landforms within which processing operations occur or where processing residues or waste rock would be stored.
- Final landform and land use, including the establishment of acceptable final landforms and rehabilitation of those landforms.

- Visual amenity, including design of acceptable active and final landforms.
- Soils, land capability and agriculture, including disturbance and re-establishment of equivalent land.
- Biodiversity, including disturbance of areas of native vegetation.
- Aboriginal and historic heritage, including disturbance of areas which may be of heritage significance.
- Noise, vibration and air quality, particularly for Transgrid Site Grampian Ridge 250528 and residences neighbouring the Mine Site.
- Amenity and social impacts, including impacts to the social and community fabric of residents within Emmaville and occupants of rural residences in the vicinity of the Mine Site.

The following environmental aspects are not anticipated to be significant risks or hazards for the Project for the following reasons.

- Flooding – The proposed open cut pits and principal mining components are situated in elevated catchment headwater settings which suggest that flooding, and any resulting flood risk, is considered low.
- Groundwater – the nature and occurrence of the target resource within the continuation of hard silicified metasediments at depth results in limited groundwater being present. Furthermore, groundwater abstraction for the purpose of Project-related water supply would only occur in areas where a sustainable supply can be assured and impacts to existing users are acceptable. Notwithstanding, a detailed hydrogeological assessment, in accordance with the NSW Aquifer Interference Policy is presented in **Appendix 11**.
- Social and Economic – the anticipated impacts would likely be positive for the township of Emmaville and surrounds. Notwithstanding, separate Social Impact and Economic Assessments are presented in **Appendix 18** and **19**, respectively.

These key risks would be addressed using the management and mitigation measures detailed throughout the EIS, and are addressed specifically in **Appendix 4** of this report.

2.3 Cumulative Impacts

Cumulative impacts from the Project are addressed throughout the EIS. In summary, the cumulative impact from the Project is expected to be negligible due to the relatively isolated nature of the Mine Site and the absence of mining or extraction operations in the vicinity.

2.4 Planning and Other Agreements

It is anticipated that the Applicant would enter into a Planning Agreement with Glen Innes Severn Council. This agreement would address the maintenance of local roads utilised by the Applicant and any other relevant matters, as agreed with Council.

Consultation with the surrounding community was undertaken throughout the preparation of the EIS, and would continue to be ongoing throughout the operation of the Project. The Applicant anticipates that, where required, agreements with surrounding landholders would be negotiated based on individual circumstances and anticipated impacts on their property.

The Applicant engaged Registered Aboriginal Parties to participate in field surveys for the Aboriginal Cultural Heritage Assessment. The Applicant also sought wider engagement with the local Aboriginal Community to gauge interest in partnerships that promote employment and training opportunities.

As shown on **Figure 1.5.3** in Section 1.5.4, some sections of key Mine Site components, including the internal Mine Site access road, haul road, Southern open cut pit, Solar Farm and Administration Area are situated within Crown Land. All Crown land and Crown roads within the Mine Site are the subject of a Section 265 Compensation Agreement between the Applicant and Crown Land NSW. This agreement was executed on the 26 March 2025. All Crown roads impacted by Project-related activities within the Mine Site are the subject of a 26 March 2025 deed agreement and works consent that was issued by Crown Land NSW under Sections 138 and 71 of the *Roads Act 1993*

2.5 Alternatives Considered

During the preliminary planning of the Project, a range of alternatives were considered principally with respect to the power supply, crushing operations, the location of processing equipment, waste rock emplacements and facilities for the internment of processing residues. The final location of the Mine Site components and Mine Camp were determined throughout the preparation of the EIS to ensure potential impacts would be minimised. The option of not carrying out the development is addressed in Section 7.8.

Electricity Supply

The Applicant considered construction of a powerline and associated infrastructure to connect the Mine Site with the external power network via either:

- connection with Essential Energy's 66kV transmission line approximately 7km south of the Mine Site; or
- connection with Transgrid's 330kV Armidale to Dumaresq transmission line approximately 11km west of the Mine Site.

The Applicant selected the proposed onsite power generation option as it would result in reduced greenhouse gas emissions, reduced Project-related disturbance of native vegetation and/or privately-owned land as well as preserving the existing amenity of the local community.

Crushing Operations

The Applicant considered a range of crushing plant options to maintain optimal processing plant throughput. The adopted option sustains processing operations at a feasible economic rate whilst preserving existing environmental amenity to the extent practical. This option also aligns the Project's maximum electricity demand with its maximum renewable power generation via the proposed 10MW solar farm.

Location of Processing Plant

Various configurations and locations of the processing plant and supporting infrastructure have been considered during the feasibility planning phase. The proposed location places key noise and dust generating processing activities in the northern section of the Mine Site. This area was selected to utilise topographic shielding to preserve existing environmental and visual amenity of near neighbours and Emmaville residents.

This location also reduces the required distances for the transfer of processing residues (i.e. the CDA and RSF), thus preserving local amenity with regards to noise, dust and visibility.

Location of Waste Rock Emplacements

Various locations for the waste rock emplacements were considered with the proposed locations selected to place noise generating activities (i.e. haul, tip and compaction) in topographically shielded, valley areas. In addition, the shorter haul distances (from open cut pit to waste rock emplacement) would reduce dust generation and exhaust emissions.

Residue Storage and Disposal

A range of locations for the residue storage facility were inspected and considered. The proposed location was selected as the underlying topography satisfies the volumetric requirements for residue storage with the smallest, and thus most stable embankment. This location also places this facility proximal to other Mine Site components, thus keeping Project-related disturbance to an almost single, consolidated area. This ensures habitat connectivity around the Mine Site and without the need for isolated areas of disturbance and/or habitat. Finally, the facility's location was selected as this location provides the greatest level of topographic shielding, thus preserving the visual amenity and landscape character of neighbouring residents.

Biodiversity Offsetting

The Applicant considered options for retiring the Project's biodiversity offsetting requirements via either the Credit Supply Register or direct payment into the Biodiversity Conservation Fund. However, as the Applicant has a substantial landholding adjoining the Mine Site that contains similar native vegetation and species habitat, it has elected to establish an onsite Biodiversity Offset Area through a Biodiversity Stewardship Agreement. This is a "nature positive" outcome for the management of the Project's biodiversity impacts as it represents "like for like" offsetting in the same bioregion within which the Project would occur.

Mine Camp Location

Various locations for the proposed Mine Camp were considered. The proposed location was selected due to it being situated on cleared land with an historic approval for use as an accommodation facility. In addition, the proposed location either has existing, or requires minor

disturbance, to connect with water, wastewater and electricity distribution networks. This reduces the need for additional Project-related disturbance whilst also reducing the need for onsite water storage and wastewater management

The proposed Mine Camp location is also directly connected to the regional road network which has sufficient capacity for additional Project-related traffic movements. The proposed location also seeks to preserve local amenity by reducing Project-related light vehicle movements and parking demand within both residential areas and commercial centres.

Final Voids

The Applicant considered options for backfilling the final voids that are proposed to remain in the final landform following the cessation of mining operations. However, as the tin resource beneath the floors of the proposed open cut pits would remain open at depth, any backfilling of the proposed final voids would effectively sterilise this resource from future development.