ABN: 11 634 425 862

Scoping Report

for the

Monaro Rock Quarry

Prepared by:

R.W. CORKERY & CO. PTY. LIMITED

August 2021

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Prepared for:

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1. INTRODUCTION

1.1 SCOPE

Monaro Rock Pty Ltd ("Monaro Rock" or "the Applicant") proposes to construct and operate the Monaro Rock Quarry ("the Project") on land located in Royalla, approximately 5km north of the intersection of the Monaro Highway and Old Cooma Road and adjacent to the border separating New South Wales (NSW) and the Australian Capital Territory (ACT). The Project would be developed on land within NSW with access to the Project via a dedicated access road and intersection with the Monaro Highway, within the ACT. **Figure 1.1** presents the location of the Project in its local context.

As the Project would have components in both the ACT and NSW, separate applications will be required to satisfy the development planning requirements of each State.

Within NSW, the Project is classified as a State Significant Development in accordance with Clause 7(1)(a) of Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (State and Regional Development SEPP) as it would extract from a total resource of more than 5 million tonnes and the maximum annual extraction threshold of 500 000 tonnes per annum (tpa) would be exceeded. The Project will be assessed by the Department of Planning, Industry and Environment (DPIE) and the consent authority will be the Minister for Planning and Public Spaces (or their delegate) or the Independent Planning Commission (IPC).

Development approval for the short section of access road and intersection within the ACT would require a development application to be submitted to the Environment, Planning and Sustainable Development Directorate (EPSDD) and involve consultation with the Transport Canberra and City Services Directorate (TCCS).

It is also anticipated that the Project will require approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* due to the presence of threatened biodiversity. A referral to the Commonwealth Department of Agriculture, Water and the Environment is currently being prepared.

This *Scoping Report* has been prepared by R.W. Corkery & Co. Pty Limited (RWC) on behalf of the Applicant to provide an overview of the proposed Project. The report has been prepared generally in accordance with the guideline document *State significant development guidelines – preparing a scoping report* dated July 2021 and published by DPIE. The document is intended to provide the Department and relevant government agencies with sufficient information in relation to the proposed activities to enable Secretary's Environmental Assessment Requirements (SEARs) to be prepared. The document is also intended to inform the community and others about the Project to facilitate consultation throughout preparation of the application for development consent. Separate consultation with the ACT EPSDD will inform the assessment requirements for the component of the Project within the ACT.

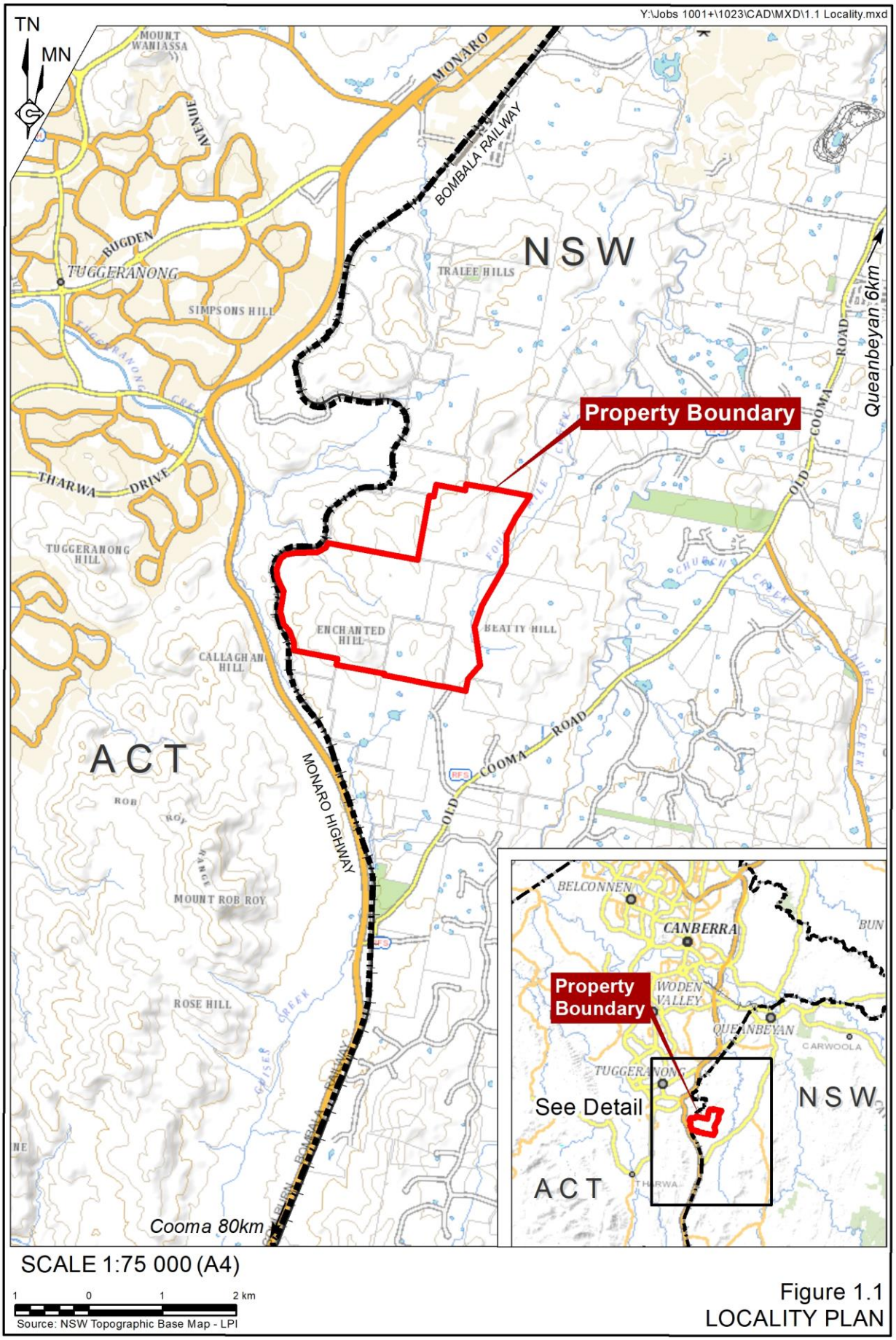

Figure 1.1
LOCALITY PLAN

1.2 THE APPLICANT

Monaro Rock is a joint venture between the McPherson Family and the Ferreira Family. The McPherson family owns and operates Monaro Mix Specified Concrete Pty Limited (Monaro Mix) which currently operates three premix concrete batching plants and supplies concrete and concrete pumping services within the Queanbeyan-Palerang Local Government Area and throughout the ACT region. The Ferreira family are directors of Pacific Formwork Pty Limited and Precast Projects Pty Ltd that offers formwork services and precast concrete products to the building industry within the Queanbeyan-Palerang Local Government Area and throughout the ACT region.

Through their associated companies, the directors of Monaro Rock have a combined 75 years of local and independent operations within Queanbeyan and the surrounding area and currently employ approximately 250 personnel. The Quarry development is intended to directly supply the operations of its parent companies as well as other construction and infrastructure projects within the surrounding region. The Applicant is seeking to gain greater confidence and control of the supply chain for raw materials to ensure the reliability of supply, the quality of materials and the costs.

1.3 DESCRIPTION OF THE PROJECT

The Applicant is seeking development consent to develop the Monaro Rock Quarry which would include the following.

- The progressive development of the Project comprising an extraction area, processing and stockpiling area and Quarry Access Road.
- Construction of two amenity barriers to mitigate potential environmental impacts.
- Construction and use of a dedicated Quarry Access Road including a crossing of the Goulburn Bombala Rail Line and an intersection with the Monaro Highway.
- A maximum extraction and processing rate of up to 750 000 tonnes per annum (tpa) at full capacity.
- Product transportation involving a maximum of 20 laden trucks per hour and no more than 150 laden trucks per day.
- Ongoing operations for a period of 30 years from the commencement of operations.

1.4 PROJECT OBJECTIVES

The objectives in developing and operating the Monaro Rock Project are to:

1. secure access to a strategically located and long-term hard rock resource that would provide a range of high-quality aggregates and road construction materials for use in the Queanbeyan-Palerang and ACT regions;
2. produce up to 750 000 tonnes per annum (tpa) of aggregates and road construction materials to meet the increasing supply demands of these markets over the next 30 years;

3. maximise the efficient resource recovery within the defined extraction area;
4. undertake activities in an environmentally responsible manner to meet all relevant criteria and satisfy reasonable community expectations;
5. develop the operation in a manner that is considerate of the wide variety of local land uses and community amenity;
6. ensure the health of its workforce and the surrounding community is not adversely affected;
7. provide a stimulus to the local economy through increasing local employment levels and supply opportunities; and
8. operate in a cost-efficient manner.

2. STRATEGIC CONTEXT

2.1 INTRODUCTION

The Project has been located to access a high-quality resource that is intended to supply concrete production and infrastructure development activities within the Queanbeyan-Palerang Local Government Area and the ACT region. The location of the extraction area and its supporting infrastructure (which together form the Project Site) will be carefully planned to include the following as much as is reasonably practical.

- A staged approach to development of the extraction area and associated processing infrastructure to ensure that the scale and intensity of development and associated environmental impacts are connected to the progressive ramping up of market demand and do not all occur during the initial development of the Project.
- A compact operating area that is situated to have a buffer between extraction and processing activities and privately-owned residences.
- An operating area that is largely obscured by existing hills and gullies.
- An operating area that would preferentially have direct access to the Monaro Highway, a State-managed road, potentially avoiding the need to use local roads adjacent to privately-owned residences. The location is also close to large regional centres that are the focus of infrastructure development.
- Total disturbance for quarrying and transport activities that would avoid native vegetation clearing as much as is practically possible while also considering Aboriginal cultural heritage, noise and dust generation and the proximity of blasting activities to private property.
- Consideration of potential presence of threatened vegetation communities and habitat for threatened flora and fauna within the Project Site.
- A water use strategy and plans for erosion and sediment control that acknowledges local reliance on water sources (groundwater and surface water).
- Consistency with environmental planning instruments and regional planning strategies with consideration of the zoning objectives of the land.
- Access to employment, supplier benefits and economic activity that supports the growth and vitality of the region.

Together, the above supports consideration of the material within the Project Site as a strategically significant resource. The high-quality resource would be extracted in a location that minimises environmental impacts as much as practically possible. It is acknowledged that the Project would represent a change in the local area and many in the community are concerned how that change may affect their lives.

The following subsections present a brief summary of the target resource and justification for the Project based on the current understanding and assessment of potential impacts. A summary of local land ownership and land uses patterns is provided as well as a brief consideration of cumulative impacts. These matters and potential impacts to the local community and natural environment will be investigated in detail in the *Environmental Impact Statement*.

2.2 TARGET RESOURCE

Understanding of the target resource has been informed by data obtained during an extensive exploration drilling program completed within the Project Site that has comprised both diamond cored drill holes and shallow percussion drill holes and comprehensive sampling and analysis. The rhyodacitic ignimbrite to be extracted from the proposed extraction area occurs within a geological unit referred to as the Deakin Volcanics which was deposited during the Silurian (**Figure 2.1**). The Deakin Volcanics comprise a southwest-dipping sequence of interbedded rhyodacitic ignimbrite, tuff, tuffaceous shale and minor quartz sandstones and volcanic breccia which typically show reddish brown alteration.

The estimated target resource within the proposed extraction area is approximately 32.4 million tonnes (Mt) which comprises 26Mt of fresh to slightly weathered rock and 6.4Mt of low-grade material or overburden. Petrographic analysis of the drill samples indicates excellent outcomes for the intended use as aggregates for concrete production and supports the proposed Project. A detailed geological and resource assessment will be presented in the EIS.

2.3 PRELIMINARY JUSTIFICATION OF THE PROJECT

The Project Site and Quarry Access Road are located on land zoned E2 and RU2 under the *Queanbeyan Local Environmental Plan 2012* (Queanbeyan LEP) (see **Figure 2.2**). The Project has been designed with consideration of the objectives of these zones. Further review of the objectives of these zones will be provided in the EIS.

The proposed extractive industry is a permissible land use in accordance with the provisions of Clause 7(3)(a) of Sta*te Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* which states that:

*"(3) **Extractive Industry** Development for any of the following purposes may be carried out with development consent:*

(a) extractive industry on land on which development for the purposes of agriculture or industry may be carried out (with our without development consent)"

Extensive agriculture is permitted without consent on land zoned E2 or RU2 under the Queanbeyan LEP.

The Queanbeyan-Palerang Regional Council Local Strategic Planning Statement (LSPS) lists a range of planning priorities for the Local Government Area (LGA). Planning Priority 7 is to "*…actively promote and implement sound resource conservation and good environmental practice*." Specific outcomes under Planning Priority 7 include to ensure that extractive industries are protected from land-use conflict and to ensure they are undertaken in a sustainable manner. The proposed Quarry has been located to avoid any land use conflicts and limit possible environmental impacts for the local community.

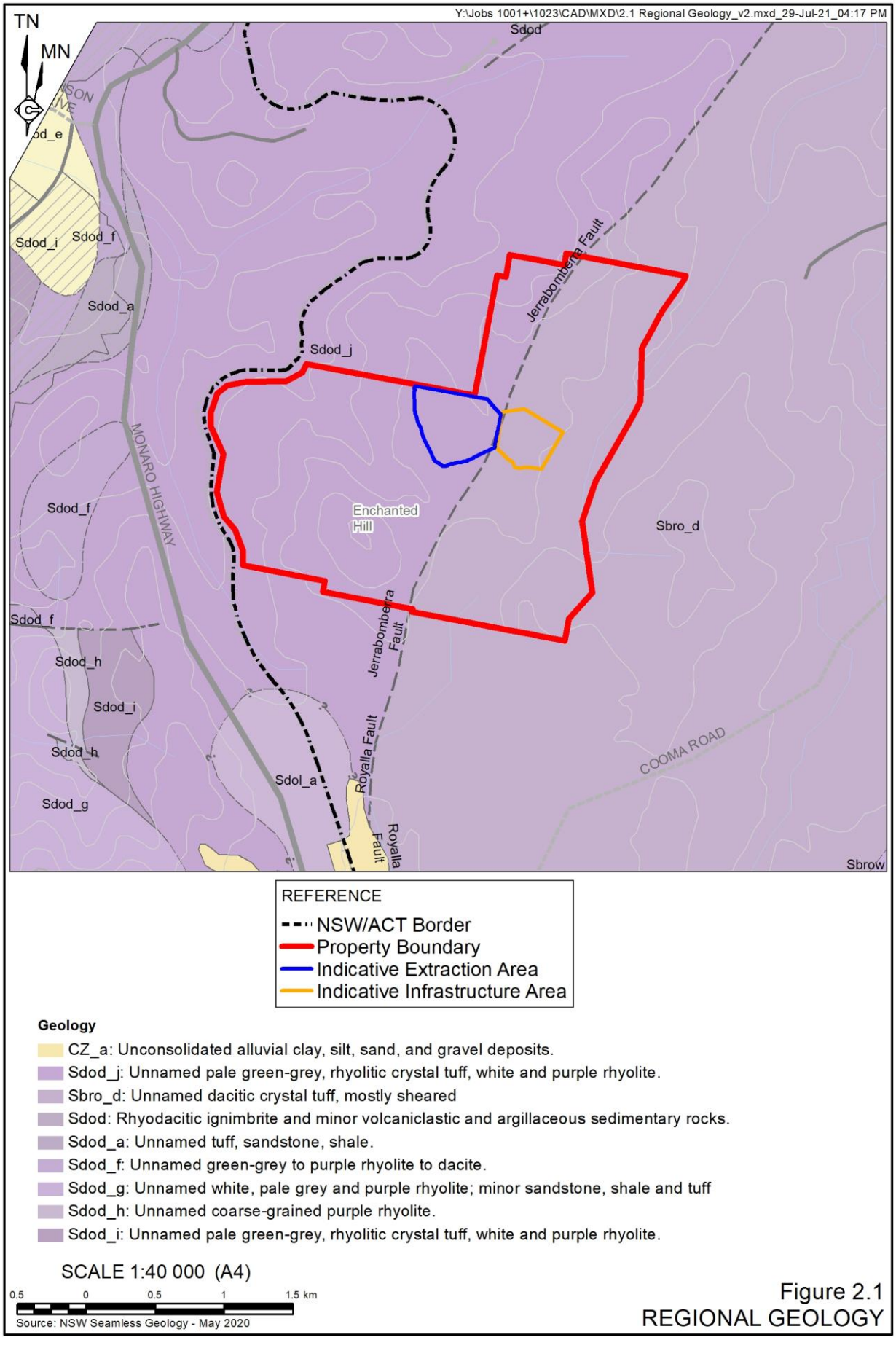

Figure 2.1
REGIONAL GEOLOGY

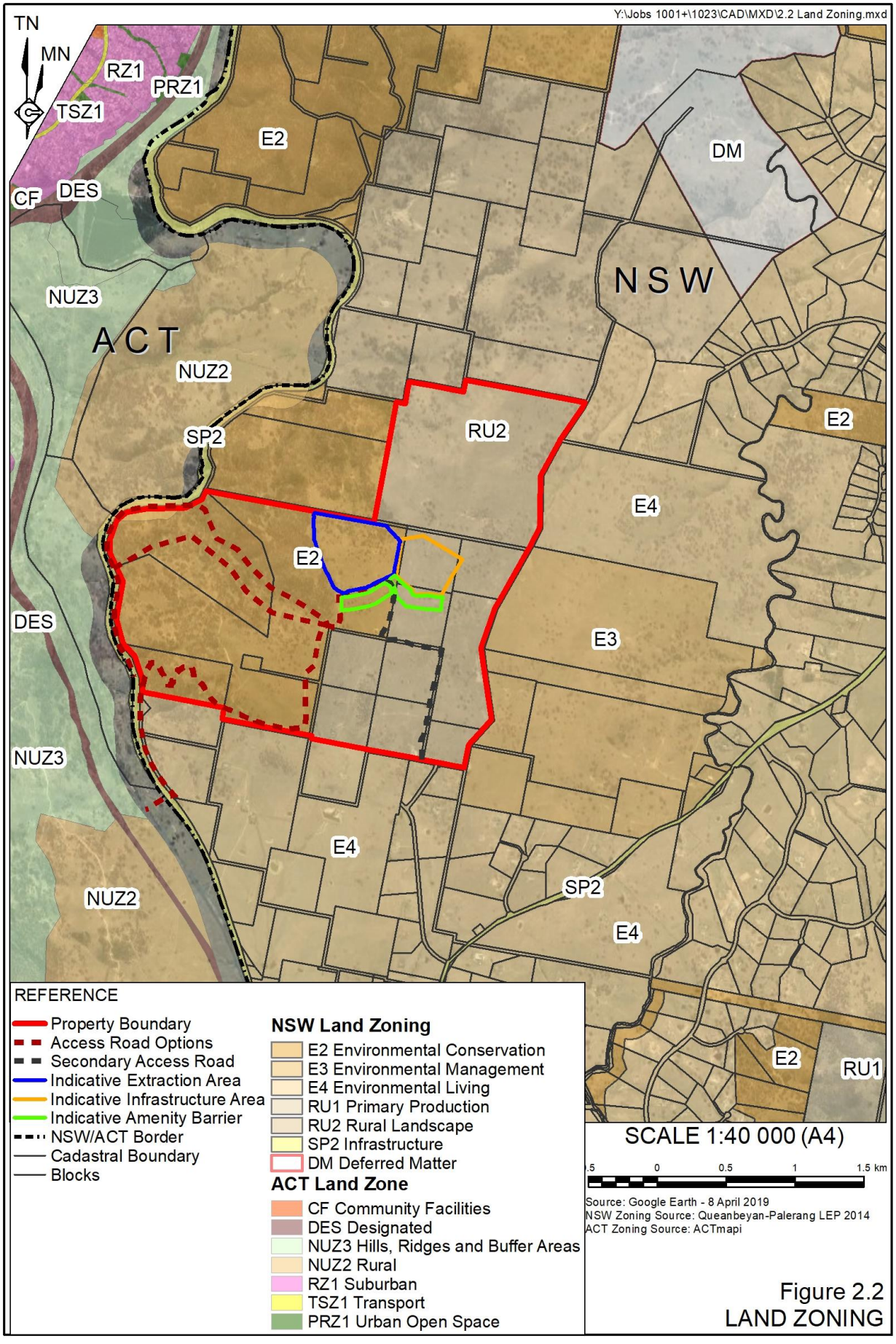

Figure 2.2
LAND ZONING

The *South East and Tableland Regional Plan 2036* has as its vision:

> *A borderless region in Australia's most geographically diverse natural environment with the nation's capital at its heart*

The document ties regional planning for the South East and Tableland Region with its proximity to Canberra and specifically to the concept of a borderless region. This is underpinned by the *ACT-NSW Memorandum of Understanding (MoU) on Regional Collaboration* that was signed in 2018 and which has a priority to take a regional approach to infrastructure, transport and economic development. The Project would be an example of a borderless operation in practice as it would involve extractive activity within NSW with the delivery of materials crossing into the ACT with final destinations in both regions. The concrete produced by the Quarry would also be used across both regions to support the development of public and private infrastructure.

The Project Site is located strategically near the regional centres of Queanbeyan and Tuggeranong with the Canberra CBD located approximately 25km to the north. The proposed resource has been quantified and assessed as being of high quality for concrete production that would be suitable for a range of applications in both construction and infrastructure projects.

It is considered that both the location and quality/volume of the targeted material is strategically significant. It is further considered that potential land use conflicts could be largely avoided through careful planning and ensuring that the Project is developed in an environmentally responsible manner that balances good environmental and social practice with economic benefits. Detailed assessment of potential impacts associated with biodiversity values, Aboriginal cultural heritage values, noise and dust generation and blasting activities will be presented in the EIS to demonstrate how these matters have been considered in planning and also have they would be managed over the life of the Project to minimise potential environmental impacts.

Strategic review of the market for concrete and construction aggregates in the Queanbeyan-Palerang LGA and the ACT supports the Project. Existing regional demand will be expanded by large regional infrastructure projects including the proposed upgrade to the Barton Highway, Light Rail Stage 2 and the Snowy Hydro 2.0 development. This does not include general growth in the region and the likely focus on infrastructure development to support the economy to re-bound following the COVID-19 pandemic. Regardless of the above, the Applicant has elected to take a staged approach to development, with key staging of surface disturbance and infrastructure development tied to projected production. More information on this approach is provided in Section 3.

The Project provides for significant economic and social benefits. The extraction of the target resource would ensure downward pressure is exerted on costs associated with construction material supply and would influence market costs associated with construction and infrastructure projects. As a local and independent company, Monaro Rock would employ local people and seek to supply the operation from local businesses. It is expected that between 20 to 30 full time personnel for the Project would be hired in addition to contractors and suppliers. At this preliminary stage, it is expected that the net benefits of the Project would outweigh costs associated with residual environmental and/or social impacts, as the Project would:

- contribute towards the supply of construction materials within the surrounding area;
- provide local employment opportunities;
- contribute to the continued economic growth at local, regional, State and National levels through flow-on effects; and

- providing further extraction and sale of strategically important resource, while avoiding, minimising and/or mitigating environmental and social impacts to the greatest extent practicable.

It is acknowledged that there are strongly felt concerns in the local community regarding the physical impacts of the Project (biodiversity and heritage) as well as operational impacts (blasting, air quality, noise for example). A range of comprehensive assessments are proposed to provide thorough and technical investigation of possible impacts. This includes recommendations to avoid, minimise and mitigate impacts during operations to ensure the Project would not have unacceptable impacts to the local community and the natural environment.

2.4 LAND OWNERSHIP

The land on which the Project Site is situated is owned by the Applicant. The Quarry Access Road traverses freehold land owned by the Applicant and Crown Land. The Applicant has an in-principle agreement with the private lease-holder that controls the land between the railway line and the Monaro Highway. **Figure 2.3** displays the land ownership within and surrounding the Project Site.

A formal level crossing of the Goulburn Bombala Railway would be required. This will require In-Principle Agreement with the managers of the railway line (currently John Holland Rail). Preliminary discussions with John Holland Rail have indicated a crossing in this location is feasible.

2.5 LAND USES

2.5.1 On-Site Land Uses

The Project Site is currently used for grazing and passive biodiversity conservation. A summary of the principal sensitivities / constraints is provided as follows.

- The land within the proposed extraction area has undergone some historical vegetation clearing, however, large areas of native vegetation have been retained within the area including native grasses.
- The extraction area is located on comparatively steep-sloping land which constrains land uses and impacts upon the productivity of the land with land generally only suitable for grazing.
- The majority of the land to be disturbed for quarrying is on cleared land with some remnant paddock trees. Dense remnant vegetation occurs on the northern and western edges of the extraction area.
- The proposed alignment of the Quarry Access Road traverses areas of comparatively steep, heavily vegetated terrain.

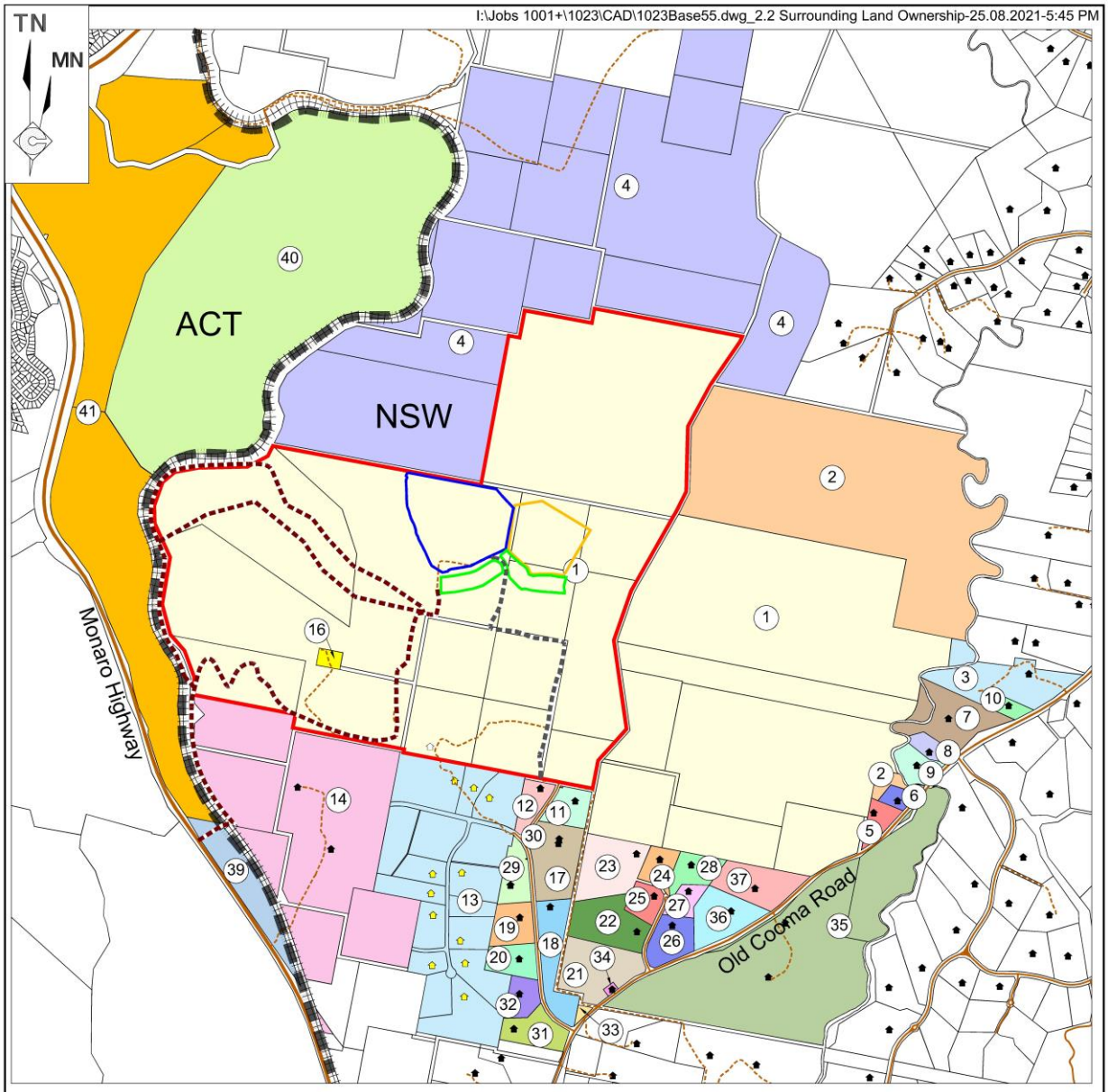

Figure 2.3
SURROUNDING LAND OWNERSHIP AND RESIDENCES

2.6 SURROUNDING LAND USES

Land uses surrounding the Project Site predominantly comprise grazing and rural lifestyle activities. Given the proximity of privately-owned residences within 2km of the Project Site, potential constraints include noise and vibration, air quality (including health) and visibility.

Infrastructure within the area surrounding the Project Site includes the Monaro Highway and Old Cooma Road. The Goulburn Bombala Rail Line runs parallel to the Monaro Highway immediately to the west of the Project Site. Passenger services ceased in 1989 with some tourist based service running since that time but now ceased due to the deterioration of the line.

A rural residential subdivision has recently been approved for the south of the Project site and it is noted that another subdivision is proposed to the east.

Figure 2.3 displays the land uses surrounding the Project Site sourced from Australian Land Use and Management (ALUM). It is noted that this information is broad in nature and may have changed since the data was prepared. Landowners may also not agree with the characterisation of their property.

2.7 CUMULATIVE IMPACTS

There are no known industries within the vicinity of the Project Site with the exception of the Royalla Solar Farm which is located approximately 2.5km to the southwest.

Quarrying operations to the north (the Cooma Road Quarry and Mugga (Symonston) Quarry) and to the south (Williamsdale Quarry) are not close enough to result in discernible cumulative amenity impacts (that is, associated with noise, air quality, blasting or views of operations). Traffic generated by the Williamsdale Quarry and using the Monaro Highway would have a cumulative impact of traffic levels on that highway. As it is not proposed to use Old Cooma Road for transport operations for the Project it would be very rare for traffic generated by the Cooma Road Quarry to use similar routes to that used by the Project.

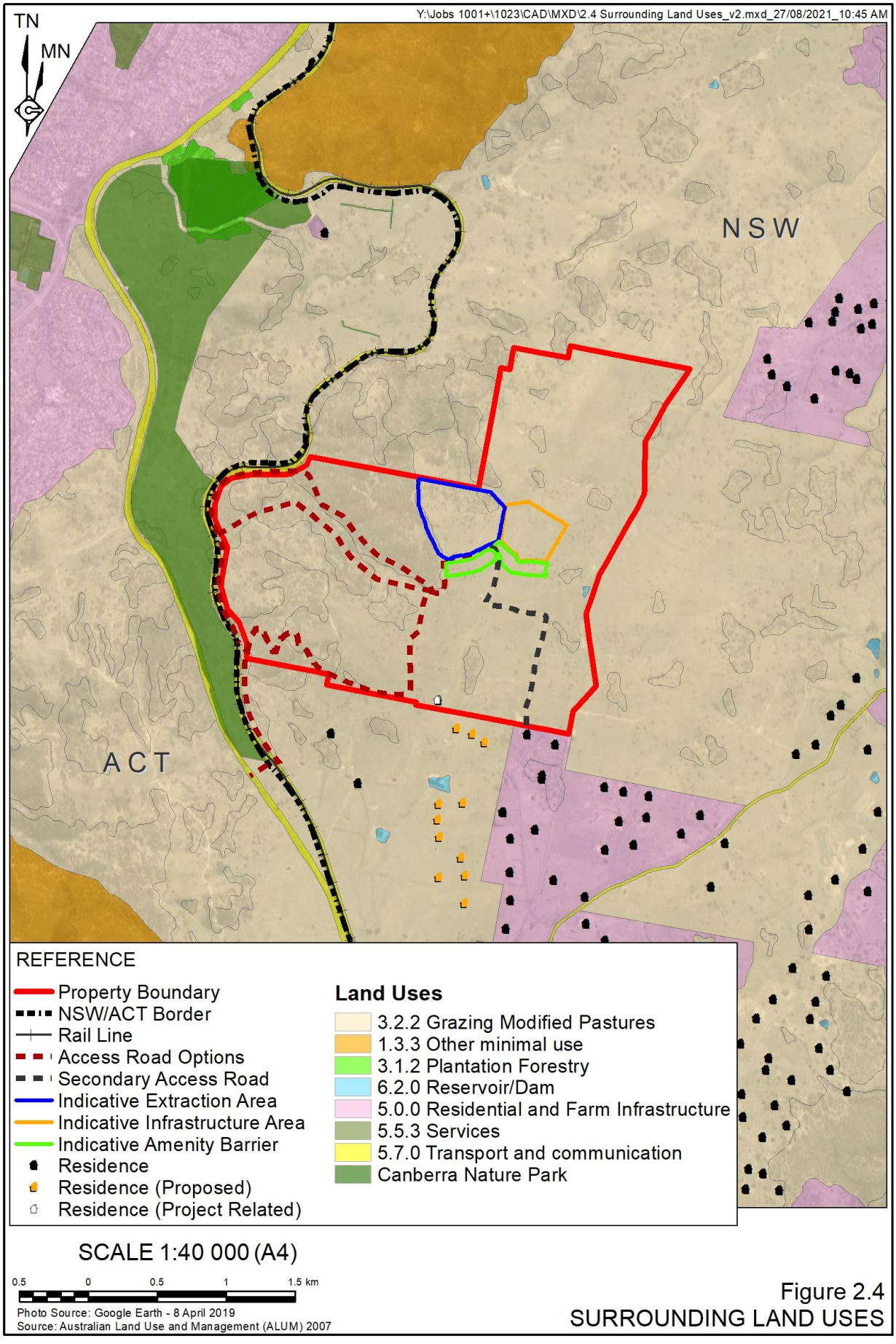

Figure 2.4
SURROUNDING LAND USES

3. PROJECT OVERVIEW

3.1 APPROVALS REQUIRED

Based upon the current design of the Project and understanding of the relevant environmental issues, the Project would require the following approvals to proceed.

- Development Consent from the Minister for Planning and Public Spaces, their delegate, or the Independent Planning Commission as the Project is classified as a "State Significant Development" under Schedule 1 (7(a)) of the *State Environmental Planning Policy (State and Regional Development) 2011*.
- Development Consent from the ACT land and planning authority (or the Minister for Planning and Land Management if the application is called-in) under the ACT *Planning and Development Act 2007* for the construction and use of a short road and an intersection with the Monaro Highway.
- Approval from the Commonwealth Minister for the Environment given the Project is considered likely to be a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999.*
- A Works Approval from the National Capital Authority for works within the road corridor of the Monaro Highway in accordance with Section 12 of the *Australian Capital Territory (Planning and Land Management) Act 1988*.
- An Environment Protection Licence from the Environment Protection Authority, under Section 47 of the *Protection of the Environment Operations Act 1997* for extractive activities.

3.2 PROJECT SITE AND ITS ACCESS

Table 3.1 presents the lots located wholly or partially within the Project Site and its proposed access.

Table 3.1
Lot / Deposited Plan Numbers

Component	Deposited Plan	Lot
Project Site	555380	1, 2
	754912	6, 152, 255, 256, 257, 258, 259, 282, 283, 301, 302
	1019607	7002
Quarry Access Road[1]	1244966	5403
Note 1: Refers to the parts of the Quarry Access Road beyond the Project Site boundary.		

3.3 PROJECT SITE LAYOUT AND OPERATIONS

Quarry design and planning is in its early stages and plans for operational areas are preliminary and indicative only. It is likely that the proposed layout will change as more information is provided through technical assessment and from the community.

Figure 3.1 presents the indicative layout of the Project Site. It is expected that the Project would be developed as a single open cut extraction area. Processing would commence within the extraction area using mobile equipment, with adjacent land progressively developed as a standalone processing and stockpiling area. Access arrangements for the Project would require the construction of a dedicated Quarry Access Road to the southwest of the disturbance areas and would enter the public road network at an intersection with the Monaro Highway. There are currently three options being considered for the Quarry Access Road on the Applicant's property. The final option will be determined based on the construction and operational constraints, environmental and amenity impacts and costs associated with each option including the likely cost to offset biodiversity impacts that cannot be avoided.

Product despatch would occur principally using 19m B-Double vehicles, but other higher capacity vehicles or smaller rigid trucks may be used from time to time. The ability for heavy vehicles to backload fill material for blending or rehabilitation, or for recycling of concrete washout material will be included in the application.

At this stage in planning for the Project the details of operations are yet to be finalised, however, the following may be used as a guide.

- Hours of Operation – Standard operating hours of 6:00am to 6:00pm Monday to Saturday are proposed with extended hours for transportation (starting from 5:00am).
- Number of Trips in and out – traffic levels would vary with the stage of development but would not exceed 20 laden loads leaving the Project Site in any hour.
- End destination of materials – the material would initially be used to supply concrete batching plants associated with the Applicant but would also supply other markets such as infrastructure development projects.
- The proposed Project Site is steep on its western side and therefore careful planning of erosion and sediment controls would be included in assessment of the Project. It is envisaged that all water would be sourced via on-site dams constructed in accordance with the maximum harvestable rights capacity of the land on which it would operate.
- It is expected that the Quarry would employ 8 to 10 permanent staff as well as up to 20 drivers for transport activities and additional contract or part-time personnel.

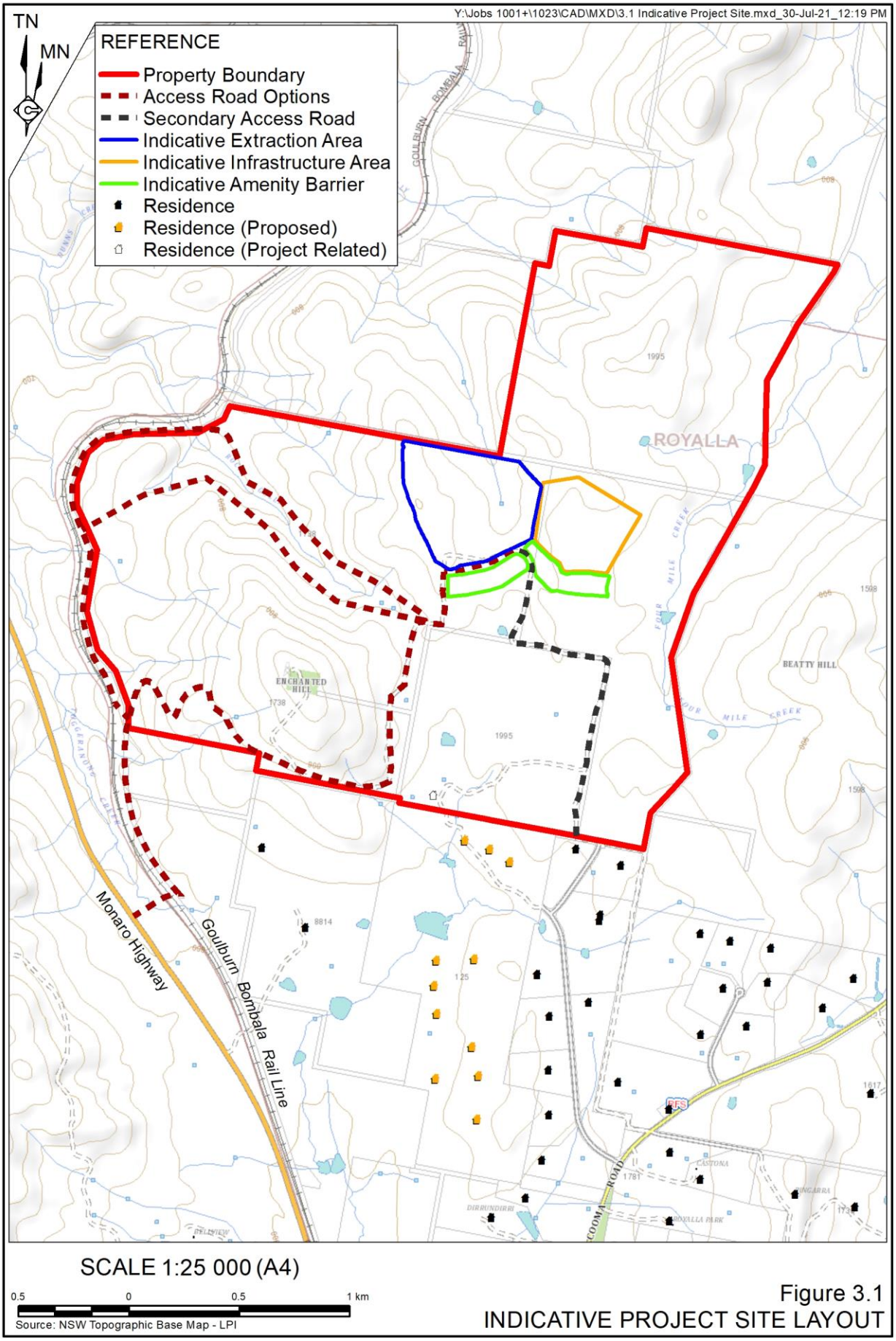

Figure 3.1
INDICATIVE PROJECT SITE LAYOUT

3.4 PROJECT TIMING

Initial resource estimates indicate a total resource in the proposed target area of 32.4 million tonnes with excellent prospects for continued high quality hard rock supply to expand the development in the future. The proposed rate of production would be scaled to meet demand with the following stages expected.

- Project Site Establishment and Construction – up to 100 000tpa during initial development.
- Stage 1 – up to 250 000tpa principally using mobile processing equipment. Stage 2 – up to 500 000tpa coincident with and expanded processing areas and commissioning of fixed processing equipment.
- Stage 3 – up to 750 000tpa of material at full capacity.

Timing for each stage would be dependent on client demand but it is anticipated that Stage 2 would be commenced within five years of approval. It is anticipated that the Project life would be 30 years.

3.5 ALTERNATIVES CONSIDERED

During the preliminary planning of the Project, a range of alternatives have been considered principally with respect to the extraction area boundary, the location of processing equipment and the alignment of the Quarry Access Road. It is noted that the final location of Quarry components will be determined during the preparation of the EIS to ensure potential impacts are minimised.

Extraction Area Boundaries

The boundary of the extraction area displayed in **Figure 3.1** has been adjusted through the preliminary planning phase to minimise potential environmental impacts. The extraction area has been located with consideration of amenity impacts associated with the Project (e.g. visibility and noise) by using Beatty Hill and Enchanted Hill as topographic barriers between privately-owned residences and Quarry operations, wherever possible. These design objectives have been achieved whilst ensuring that the extraction area overlies the highest quality rock to ensure that end products meet market demands and production wastes are minimised.

Location of Processing Equipment

Various configurations and locations of processing equipment have been considered during the preliminary planning phase. The currently proposed strategy would utilise mobile processing equipment during Stage 1. During Stage 2, a fixed processing plant would be installed within the processing and stockpiling area adjacent to the extraction area. Processing operations would be appropriately shielded (e.g. cut into the existing landform) to ensure that impacts to amenity are minimised.

Alignment of the Quarry Access Road

During the preliminary planning phase, access to the Quarry was considered both via Monaro Station Road and Old Cooma Road and directly via the Monaro Highway. The currently proposed alignment of the Quarry Access Road has been chosen to avoid impacts upon the local road network by providing access directly via the Monaro Highway. Three options are currently being considered for the internal alignment of the Quarry Access Road. .

Rate of Extraction

Careful consideration of the proposed rate of extraction was undertaken. While many projects of this nature propose only a maximum extraction rate, Monaro Rock propose to stage this component of the Project. This approach has been selected:

- in recognition of the fact that the Company would develop supply contracts over time (in addition to its parent companies);
- to provide the community with realistic expectations of operational intensity and associated environmental impacts; and
- to permit Monaro Rock to progressively clear vegetation and develop infrastructure as it is needed for the Project.

The Company is confident that the quality of the resource, its marketing and the relationship and service benefits of a locally owned and operated supply would permit a high rate of growth for the operation.

4. STATUTORY CONTEXT

A range of Commonwealth and State legislation and State and Local planning instruments will apply to the Project. **Table 4.1** presents a summary of statutory considerations relating to the Project.

Table 4.1
Statutory Considerations

Statutory Reference	Section	Consideration	Relevance
Mandatory Considerations under the Act and Regulation			
Environmental Planning and Assessment Act 1979	1.3	Relevant objects of the Act • to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources. • to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment. • to promote the orderly and economic use and development of land. • to promote the delivery and maintenance of affordable housing. • to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats. • to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage). • to provide increased opportunity for community participation in environmental planning and assessment.	Development consent is required under the EP&A Act for extractive industries in NSW. The Project will be submitted for approval under Part 4, Division 4.7 of the EP&A Act as a State Significant Development (SSD). The EIS for the Project will address each of the objects of the Act. The determining authority for the Project will be the NSW Minister for Planning and Public Spaces (or his delegate) or the Independent Planning Commission (IPC).
	4.15	In determining a development application, a consent authority is to take into consideration: • the provisions of— – any relevant existing or proposed environmental planning instrument, and – any development control plan, and – any planning agreement that has been entered into; • The requirements of the *Environmental Planning and Assessment Regulation 2000*; • the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality; • the suitability of the site for the development; • any submissions made in accordance with this Act or the regulations; and • the public interest.	These matters will be considered in detail in the EIS for the Project. Relevant environmental planning instruments include: • Queanbeyan Local Environmental Plan 2012 • SEPP (State and Regional Development) 2011 • SEPP (Mining, Petroleum Production and Extractive Industries) 2007 • SEPP 33 – Hazardous and Offensive Development • SEPP 55 – Remediation of Land • SEPP (Infrastructure) 2007 It is noted that under Clause 11 of the SEPP (State and Regional Development) 2011, Development Control Plans do not apply to SSD.

Table 4.1 (Cont'd)
Statutory Considerations

Statutory Reference	Section	Consideration	Relevance
Mandatory Considerations under the Act and Regulation (Cont'd)			
Environmental Planning and Assessment Regulation 2000	2(7)	Clause 7 of Schedule 2 of the EP&A Reg specifies the required contents of an EIS.	The EIS prepared for the Project will need to satisfy the content requirements listed under the EP&A Reg. and any relevant guidelines.
Mandatory Considerations under EPIs			
Queanbeyan Local Environmental Plan 2012		Objectives of Zone E2 Environmental Conservation • To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values. • To prevent development that could destroy, damage or otherwise have an adverse effect on those values. • To protect threatened species and rivers, creeks and gully ecosystems within Queanbeyan. • To identify and protect escarpment areas that enhance the visual amenity of Queanbeyan and possess special aesthetic or conservational value. • To protect water quality by preventing inappropriate development within catchment areas. Objectives of Zone RU2 Rural Landscape • To encourage sustainable primary industry production by maintaining and enhancing the natural resource base. • To maintain the rural landscape character of the land. • To provide for a range of compatible land uses, including extensive agriculture.	The Project Site and Quarry Access Road is located on land zoned E2 and RU2 under the Queanbeyan LEP (see **Figure 4.1**). The objectives of these zones will be considered in the EIS. The proposed extractive industry is a permissible land use in accordance with the provisions of Clause 7(3)(a) of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* which states that: *"(3) Development for any of the following purposes may be carried out with development consent:* (a) *extractive industry on land on which development for the purposes of agriculture or industry may be carried out (with our without development consent)"* Extensive agriculture is permitted without consent on land zoned E2 or RU2 under the Queanbeyan LEP.
Considerations under other Legislation			
Environment Protection and Biodiversity Conservation Act 1999		Potentially relevant "matters of national environmental significance" (MNES) to the Project includes listed threatened species and ecological communities.	MNES that occur within the property boundary include EPBC Act Box-Gum Woodland, Pink-tailed Worm-lizard, and Pale Pomaderris. Given that the project may impact MNES, it will be referred to the Commonwealth to determine if the Project is a 'controlled action' and an approval under the EPBC Act is required.

Table 4.1 (Cont'd)
Statutory Considerations

Statutory Reference	Section	Consideration	Relevance
Considerations under other Legislation (Cont'd)			
ACT Planning and Development Act 2007	6	The object of the Act is to provide a planning and land system that contributes to the orderly and sustainable development of the ACT: • consistent with the social, environmental and economic aspirations of the people of the ACT; and • in accordance with sound financial principles.	Development consent will be required to construct and use a short section of access road and intersection with the Monaro Highway. As the Project will be referred to the Commonwealth Department of Agriculture, Water and the Environment, the assessment is likely to fall under the impact track development pathway.
Protection of the Environment Operations Act 1997	The *Protection of the Environment Operations Act 1997* (POEO Act) provides the environmental protection framework for regulation and reduction of pollution and waste in NSW as well as for monitoring of environmental quality. The POEO Act is administered by the Environment Protection Authority (EPA), which issues environment protection licences (EPLs) for wide-ranging scheduled activities, including extractive activities.		The Project would require an EPL under Chapter 3 of the POEO Act to carry out "extractive activities".
Water Management Act 2000	The *Water Management Act 2000* (WM Act) is administered by the Division of Water within the Department of Industry. The WM Act provides clear arrangements for controlling land-based activities that affect the quality and quantity of the State's water resources. The WM Act provides the following types of approvals. • water use approval (section 89) – which authorises the use of water at a specified location for a particular purpose, for up to 10 years; • water management work approval (section 90) – which authorises the construction and use of specified water supply, drainage and flood works; • controlled activity approval (section 91(2)) – which authorises works carried out within 40m of waterfront land; and • aquifer interference activity approval (section 91(3)) – which authorises interference of an aquifer. The WM Act also contains provisions for basic landholder rights which entitle the owner or occupier of a landholding to take water without the need for a water access licence or approval under the harvestable rights provisions of the WM Act.		Section 4.41 of the EP&A Act identifies that if development consent is granted for a SSD a water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91 of the *Water Management Act 2000* are not required. It is anticipated that an aquifer interference approval would not be required. The Project Site is located within a harvestable rights order area and water collected under harvestable rights would be used for the Project.

Table 4.1 (Cont'd)
Statutory Considerations

Statutory Reference	Section	Consideration	Relevance
Considerations under other Legislation (Cont'd)			
Biodiversity Conservation Act 2016	The purpose of the *Biodiversity Conservation Act 2016* (BC Act) is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.		Biodiversity impacts related to the Project are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). Impacts to biodiversity are to be avoided or reduced as a first priority. Any residual impacts on biodiversity would be offset in accordance with the BC Act.
National Parks and Wildlife Act 1974	The *National Parks and Wildlife Act 1974* (NP&W Act) aims to manage and conserve nature, objects, places and features that have ecological and cultural value. An Aboriginal Heritage Impact Permit (AHIP) is generally required for consent to destroy, deface or damage and Aboriginal object or Aboriginal place.		Pursuant to section 4.41 of the EP&A Act, an AHIP under the NP&W Act would not be required for the carrying out of the Project, if required. Regardless, an acceptable arrangement would be required should the Project require harm to any Aboriginal objects or sites.
Roads Act 1993	The *Roads Act 1993* (Roads Act) applies to public roads in NSW. Consent is required under section 138 of the Roads Act for works or structures that disturb the surface of a public road or connect a road to a classified road.		The Quarry would not access the public road network in NSW and therefore an approval under the Road Act 1993 would not be required.
Crown Lands Management Act 2016	The *Crown Land Management Act 2016* applies to any Crown lands, Crown roads or Crown road reserves.		Crown lands have been identified within the footprint of the Quarry Access Road. Landowners consent for works over the subject Crown Land would be obtained prior to development.
Rural Fires Act 1997	The aims of the *Rural Fires Act 1997* (Rural Fires Act), administered by the NSW Rural Fire Service, are to prevent, mitigate and suppress bush and other fires in rural fire districts, to coordinate fire-fighting to protect persons from injury and death, and to limit property damage arising from fires.		Pursuant to section 4.41 of the EP&A Act, separate approval is not required under Section 100B of the Rural Fires Act, however, the EIS will detail potential hazards, including bush fire.
Considerations under other EPIs			
SEPP (State and Regional Development) 2011	This SEPP was gazetted on 1 October 2011 and applies to all projects satisfying nominated criteria made following that date. The purpose of this SEPP is to define those projects of State Significance or proposed on State Significant Sites and therefore require Ministerial approval under the provisions of the EP&A Act 1979.		The Project would extract from a total resource of more than 5 million tonnes and exceed the minimum threshold of 500 000 tonnes of extracted materials per year which therefore qualifies the Project as SSD as nominated in Clause 7(1)(a & b) within Schedule 1 of the SEPP.

Table 4.1 (Cont'd)
Statutory Considerations

Statutory Reference	Section	Consideration	Relevance
Considerations under other EPIs (Cont'd)			
SEPP (Mining, Petroleum Production and Extractive Industries) 2007		This SEPP was gazetted on 17 February 2007 in recognition of the importance to New South Wales of mining, petroleum production and extractive industries. The SEPP specifies matters requiring consideration in the assessment of any mining, petroleum production and extractive industry development. A summary of the matters that the consent authority needs to consider when assessing a new or modified proposal is as follows. • Clause 12: Compatibility with other land uses. • Clause 13: Compatibility with mining, petroleum, production or extractive industry. • Clause 14: Natural resource and environmental management. • Clause 15: Resource recovery. • Clause 16: Transportation. • Clause 17: Rehabilitation	The EIS will include an assessment of how each of these clauses is addressed with respect to the Project.
SEPP 33 – Hazardous and Offensive Development		Hazardous and offensive industries, and potentially hazardous and offensive industries, relate to industries that, without the implementation of appropriate impact minimisation measures, would, or potentially would, pose a significant risk in relation to the locality, to human health, life or property, or to the biophysical environment.	As the only hazardous substances to be stored on the Project Site would be restricted to well managed diesel fuel and other hydrocarbon products, the Project would not be classified as a potentially hazardous industry. This SEPP does not apply to explosives as it is not intended to store explosives on the Project Site.
SEPP 55 – Remediation of Land		SEPP 55 aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. In particular, this policy requires consideration of whether a development requires a consent for remediation works or not and, where warranted, requires that remediation works meet certain standards and notification requirements.	As the areas proposed for disturbance within the Project Site have previously been used for passive biodiversity conservation and agriculture, it is highly unlikely any contamination is present that requires remediation work prior to undertaking the proposed extraction operation. SEPP 55 is therefore not likely to be relevant to the consideration of the Project.
SEPP (Infrastructure) 2007		The Infrastructure SEPP identifies, amongst other things, the matters to be considered in the assessment of development adjacent to particular types of infrastructure including electricity transmission or distribution infrastructure, railways and rail infrastructure and road infrastructure.	The Project would qualify as a traffic generating development with relevant size or capacity under Schedule 3 of the Infrastructure SEPP. In accordance with Clause 104, before determining the development application, the consent authority must refer the Project to TfNSW.

Table 4.1 (Cont'd)
Statutory Considerations

Statutory Reference	Section	Consideration	Relevance
Considerations under other EPIs (Cont'd)			
SEPP (Koala Habitat Protection) 2021		The Koala SEPP aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline.	The Queanbeyan-Palerang Regional LGA is listed under Schedule 1 of the Koala SEPP. An assessment of the potential for Koala habitat, including a review of feed trees and Koala presence will be completed for the Project. Preliminary survey of the Project site did not identify koala or its habitat.
Considerations under other Planning Documents			
Queanbeyan Development Control Plan 2012		The *Queanbeyan Development Control Plan* (DCP) provides development controls for specific types of development. Whilst specific controls have not been identified for the extractive industry, a number of environmental objectives within the DCP are relevant to the Project, as follows. Part 2 – All Zones • To maintain and improve the amenity of Queanbeyan Part 5 Rural and Environmental Zones • Ensure that development maintains the rural character of the locality and minimises disturbance to the landscape and the environment generally. • Ensure land use is ecologically sustainable, taking into account the environmental capabilities of the land and based on best management practices. • Ensure that development does not create or exacerbate soil erosion. • Ensure agricultural production is not jeopardised by the intensification of development in the rural areas. • Minimise the creation of vehicular access points to major roads. • Ensure that development is based on catchment management principles and does not have an unsustainable impact on surface and groundwater resources. • Preserve prime agricultural land for long term sustainable production.	Although Clause 11 of the SEPP (State and Regional Development) 2011, specifies that Development Control Plans do not apply to SSD, it is appropriate that the EIS for the Project consider each of the relevant objectives within the *Queanbeyan DCP*.

Table 4.1 (Cont'd)
Statutory Considerations

Statutory Reference	Section	Consideration	Relevance
Considerations under other Planning Documents (Cont'd)			
Queanbeyan-Palerang Regional Council Local Strategic Planning Statement		In March 2018, the NSW Government introduced new requirements for all councils to prepare and make Local Strategic Planning Statements (LSPS). These statements are required to set out: • the 20-year vision for land-use in the local area; • the special characteristics which contribute to local identity; • shared community values to be maintained and enhanced; and • how growth and change will be managed into the future. The Queanbeyan-Palerang Regional Council LSPS identifies a range of priority actions including the following in relation to extractive industry. 4.7.1 – Protect primary production, and ground water and extractive industries, together with the other parts of their supply chains, including freight and logistics facilities, from surrounding land-use conflict 4.7.3 – Ensure primary production and extractive industries are undertaken in a sustainable manner.	The EIS for the Project will consider relevant priority actions within the Queanbeyan-Palerang Regional Council LSPS and address how the Project would help to meet these objectives.

5. ENGAGEMENT

5.1 ENGAGEMENT TO DATE

5.1.1 Government Agencies

Consultation with officers of Queanbeyan-Palerang Council has commenced with a briefing meeting held on Thursday 15 April 2021.

In addition, consultation with John Holland Rail and NSW Crown Lands has occurred to investigate the feasibility of the proposed route for the Quarry Access Road.

Initial consultation with officers of the ACT Government has commenced including with the ACT Environment, Planning and Sustainable Development Directorate and Transport Canberra and City Services Directorate. This consultation is preliminary at this stage.

5.1.2 Community

A flyer was distributed to residents in the vicinity of the Quarry Site in the week commencing 12 April 2021 advising that representatives of Monaro Rock and RWC would be available at the gate of the property on Friday, 16 April and Saturday, 17 April 2021. **Appendix 2** contains a copy of the flyer distributed to residents prior to the community information session.

The intent of the sessions was to hear from the community regarding their current experience of the local area and to raise any issues of concern in relation to the Project. It is estimated that 80 people attended the meeting on 16 April 2021 and 120 attended on 17 April 2021 with many people attending both meetings. Approximately 120 people registered at the events and provided contact information for further information on the Project.

A community feedback form was made available to all attendees at the meeting and was emailed to all registered community members following the event. The community was encouraged to circulate the community feedback form to people who they were aware of that did not attend the meeting but may wish to contribute. Several community members made direct phone calls to representatives of the Project to seek further information.

To date 24 community feedback forms have been provided by community members directly to the Project team.

As a result of community interest in the Project, a meeting was requested with Kristy McBain MP the Federal Member for Eden-Monaro. The meeting was held on 12 May 2021 in Ms McBain's offices.

5.2 COMMUNITY VIEWS

A number of concerns were raised by the community during the preliminary community information sessions and since that time in community feedback forms. **Table 5.1** presents a summary of the key issues raised. Not all matters raised in discussions or in community feedback forms are presented in **Table 5.1**, however all matters discussed have been considered by the Project team and where relevant, information provided to the specialist consultants as they undertake their assessments.

Table 5.1
Key Findings of Preliminary Community Engagement

Category	Matter Raised / Discussed
Strategic Context	
	• Need for the Quarry considering existing Quarry operations.
The Project and Key Alternatives	
	• Community preference for road access at the Monaro Highway but this has its own road safety risks.
	• Rainfall is inconsistent in the area and may not support the Project, while at the same time groundwater resources are being impacted by over-use
	• Broad discussion held regarding threatened ecological communities and flora and fauna including how risks may be managed and biodiversity offset areas established to support native wildlife.
Statutory Issues	
	• Consistency with the objectives of zoning under the *Queanbeyan Local Environment Plan 2012*.
Community Engagement	
	• Some residents were concerned the letterbox delivery was not broad enough.
Key Issues to be Addressed in the EIS	
Access – traffic	• Community preference for use of Monaro Highway. However, many considered it unlikely that the Project would get approval to use the Monaro Highway directly and traffic would need to use Old Cooma Road.
	• Sight distance at an intersection with the Monaro Highway due to the crest near the proposed intersection.
	• Accidents on intersection with Old Comma Road an example of what may happen at new intersection.
	• Suicide accident at the highway recently.
	• Seasonal changes to traffic including fog and winter/Easter traffic towards Snowy Mountains likely to impact transport.
	• Old Cooma Road has narrow lanes with an upgrade underway. May not be suitable for more Quarry traffic.
Health Risks	• Health risks including silicosis and asthma. One resident was reported to have silicosis. • Concerns were expressed regarding impacts to children and elderly people.
Air – atmospheric emissions and particulate matter	• Community feedback was provided concerning strong northwesterly and easterly winds common in the region.
	• Dust across properties is a concern.
	• Comparison was made with Williamsdale Quarry that is considered to generate a lot of dust.
Noise and Blasting	• Likely impact of strong northeasterly and easterly winds as well as temperature inversions (still quiet nights) and impact on noise propagation.
	• Frequency and noise generated by blasting.
	• Impacts of blasting on house structure and foundations as well as possibility of spooking animals.
	• Some local residents suffer PTSD and there is concern about blasting impacts.

Table 5.1 (Cont'd)
Key Findings of Preliminary Community Engagement

Category	Matter Raised / Discussed
Key Issues to be Addressed in the EIS (Cont'd)	
Biodiversity – native vegetation and native fauna	• Kangaroo grass is native and protected.
	• Box Gum Woodland is critically endangered.
	• Pink tailed worm lizard and threatened frogs.
	• Discussion about Landcare involvement in progressive rehabilitation and particularly selection of species. Advice was given regarding how the area may be conserved (fencing and weed/feral animal control).
Water – surface water	• Local residents were concerned that rainfall was not consistent enough to support the operation.
	• Guises Creek (south of the Project Site) is used for drinking water at some properties. Water quality impacts will affect them.
	• Concern regarding water quality in Jerrabomberra Creek
	• Many properties use tank water and do not have first flush systems.
Water – groundwater	• Local residents have experienced reduced availability from groundwater bores that is considered to be due to population growth and more bores accessing the groundwater table.
	• Recent Council cemetery development has approval for two large diameter bores to keep the cemetery lawns green. Bores are at 85m depth.
Visual Amenity	• Change to the outlook from properties in the region.
Social Impacts	• Impacts associated with rural amenity and lifestyle which is a key reason people choose to live in the area.
	• Impact to property values.

Notwithstanding the matters described in **Table 5.1**, there are six key themes to the public feedback received to date which will be the focus of future consultation and environmental assessment.

1. The need for the Quarry considering the presence of other operators in the region and the status and capacity of these operations.
2. The risk of amenity impacts including noise, air quality (dust), blasting and views of the operation.
3. The health risk associated with extraction and processing of material that contains quartz and may generate respirable crystalline silica.
4. The removal of native vegetation, in particular Box Gum Woodland which is a critically endangered ecological community and threatened flora and fauna including the Pink-tailed Legless Lizard (*Aprasia parapulchella*), Golden Sun Moth (*Synemon plana*) as well as the Silky Swainsona Pea (*Swainsona sericea*) and Small Purple-pea (*Swainsona recta*), amongst others.
5. Traffic-related impacts through entry onto the Monaro Highway, or failing that option for access, the impacts of traffic accessing Old Cooma Road via Monaro Station Road.
6. Access to groundwater for the operation would impact local water availability that is already compromised.

5.3 ENGAGEMENT TO BE CARRIED OUT

5.3.1 Government Agencies

Consultation with Queanbeyan-Palerang Council (Council) will continue throughout the assessment process. This will include consultation with elected Councillors where needed. Although Council will not determine the application it is recognised that Council will have both short term and long term roles in the operation of the Project and the input from Council on local planning matters will be of great value.

In addition, it is proposed that the relevant elected officials will be kept informed of the Project as it progresses.

NSW State government agencies will be consulted throughout the development process starting with a review of the assessment requirements of each agency.

Approval will be sought from the ACT Government for construction and use of an intersection with the Monaro Highway. Consultation with the ACT Environment, Planning and Sustainable Development Directorate and Transport Canberra and City Services Directorate will be ongoing for this purpose.

Finally, it is considered that the Project will be a controlled action under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). Following formal referral of the Project to the Commonwealth Department of Agriculture, Water and the Environment (DAWE), ongoing consultation will occur with the Commonwealth government. While assessment of the Project is likely to occur under the existing bilateral agreements between the Commonwealth government and the NSW and ACT Governments, ongoing engagement will be necessary to ensure that appropriate levels of assessment are presented when DAWE is considering whether to grant an approval under the EPBC Act.

5.3.2 Community

Many people in the community of Royalla and surrounds have expressed their objection to the Project at this early stage. Proactive and informative engagement will be undertaken to educate the community about how environmental risks are managed at quarrying operations and to inform them of the progress of the application. Detailed information has been provided regarding the concerns in the community as well as features of the local environment that may influence Project outcomes and are being considered in Project planning.

The principal objective of ongoing consultation will be informing the community of the development, listening to feedback and then explaining how that feedback has been incorporated into the Project. As described in the NSW Government *Undertaking Engagement Guidelines for State Significant Projects* positive engagement outcomes will best be achieved through engagement that is:

- open and inclusive;
- easy to access;
- relevant;

- timely; and
- meaningful.

While consensus on the Project is not likely to be achieved, it is proposed that all relevant stakeholders will be made of aware of the details of the Project and given the opportunity to provide feedback to the Project team.

It is not possible to move or relocate strategically significant resource to another location and therefore, feedback from the community will inform the design of Project components and proposed management of the site. For example, the community has expressed its preference that traffic associated with the Project directly enter the Monaro Highway. However, this must be considered against the possible amenity impacts of a road and ecological impacts associated with developing the road. In addition, road safety risks associated with Monaro Highway and the peak traffic period such as Easter have been discussed with the community and will be considered in planning of operations.

Information concerning the Project will be made available from a dedicated project website (currently under development) with opportunities available to provide feedback directly through the website, via phone or email and at future consultation events.

It is proposed that brief community newsletters and/or fact sheets will be used as an engagement tool to inform the community of assessment progress, the development application process and on key matters such as community health risks.

Monaro Rock will be organising a further community meeting prior to submission of the EIS to update the community on the Project. This is likely to be structured as an open day. In addition, all community members will have an opportunity to formally write a submission to the Department of Planning, Industry and Environment (DPIE) during the public exhibition of the EIS.

Monaro Rock have commissioned Jane Seaborne of Landscape Research + Communications to prepare a Social Impact Assessment (SIA) for the Project. Ms Seaborn was present at the community information session on Saturday, 17 April 2021 and will continue consultation with the community on the social impacts of the Project in the near future. This is likely to involve direct interviews with individuals or small groups.

6. PROPOSED ASSESSMENT OF IMPACTS

Table 6.1 presents a summary of specific matters to be assessed in the EIS. The relevant legislation, guidelines and policies associated with each matter are presented in the Scoping Summary provided as **Appendix 1**.

Table 6.1
Preliminary Assessment Matters

Issue	Existing Environment	Further Investigations	Potential Impacts	Proposed Assessment
Access – traffic	Entry to the Project Site would be via the Monaro Highway and the proposed Quarry Access Road. The Monaro Highway is an approved 25m B-double route.	Levels of service and performance would be assessed on the Monaro Highway including investigations regarding appropriate intersection design.	Whilst traffic volumes generated by the Project would avoid local roads, minor impacts may occur on the State road network.	A traffic assessment will be undertaken by an appropriately qualified consultant to document the potential impacts on the surrounding road network.
Air – atmospheric emissions and particulate matter	The Project Site lies within a predominantly rural area with land uses principally comprising grazing and rural residential living.	Data drawn from the NSW DPIE Air Quality Monitoring Network (AQMN) to inform modelling exercises.	The Project would result in an increase in received particulates and emissions in areas surrounding the Project Site. The potential impacts would relate to particulates in various size fractions.	An air quality assessment will be undertaken by a suitably qualified consultant. The assessment will include modelling of the potential for emissions of airborne particulates under a range of operational scenarios and under prevailing meteorological conditions.
Health Risks	Petrographic analysis of the target resource indicates a quartz content ranging from 30% to 40%. Crushing and handling of material has the potential to liberate respirable crystalline silica.	Predictive modelling of dust generation and dispersion will inform consideration of environmental health risks from RCS.	RCS is a known workplace health risk. Community exposure to RCS is a growing concern in the community.	In direct response to the concerns raise in the community, a human health risk assessment would be commissioned to accompany the EIS.
Amenity – noise	The Project Site lies within a predominantly rural area with land uses principally comprising grazing and rural residences with the principal noise sources being the Monaro Highway and Old Cooma Road.	Background noise survey to assist in quantifying the existing noise environment.	Activities within the indicative Project Site could result in increased received noise levels at surrounding residences under certain meteorological conditions.	A noise assessment will be undertaken by an appropriately qualified consultant to predict the received noise levels under different operational scenarios and under prevailing meteorological conditions. A range of design and operational safeguards will be incorporated into the Project to achieve compliance with applicable noise criteria.
Amenity – visual	Elevated sections of the Project Site and Quarry Access Road may be visible from residences located to the south and southeast. Beatty Hill and Enchanted Hill provide topographic barriers between potential vantage points to the west, east and northeast.	Further observations are planned to assess potential viewing locations.	The removal of hard rock from elevated areas within the Project Site could possibly cause local changes in view lines and view scape.	A visual amenity assessment will be undertaken by RWC to identify the visual catchment of the Project which will be supported by photographs of the Project Site, cross-sections from key surrounding vantage points and photo montages.
Biodiversity – native vegetation and native fauna	Preliminary ecological surveys completed to date have identified the presence of Yellow Box Grassy Woodland which is a Critically Endangered Ecological Community listed under the NSW *Biodiversity Conservation Act 2016* and under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This CEEC is present within some parts of the proposed alignment of the Quarry Access Road (**Figure 6.1**). Threatened species identified during preliminary surveys include Silky swainson-pea, Pale Pomaderris, Pink-tailed Legless Lizard (habitat), Dusky Woodswallow, Gang-gang Cockatoo and Varied Sittella.	The Applicant plans to commission further ecological surveys to quantify offset requirements under the applicable NSW biodiversity assessment methodology and will also submit a referral to the Commonwealth Department of Agriculture, Water and the Environment (DAWE).	Impacts would principally occur as a result of clearing vegetation and removing both individual plants and habitat area. The potential significance of these impacts has yet to be determined and will be presented in the EIS.	A Biodiversity Development Assessment Report (BDAR) will be completed to identify the presence and status of the PCTs and individual species within the area to be disturbed. Appropriate design and operational safeguards will also be investigated.
Hazards and Risks – general	The Project Site is located on Bushfire Prone Land and incorporates Class 1 and Class 3 vegetation. There are no identified flooding risks.	Further investigations are proposed to identify the vegetation classes within the Project Site. No further investigations are required in relation to flood planning.	The Project may increase the risk of fire on the Project Site without the proper management and mitigation measures. Project components may also be subject to bush fire attack.	An assessment of bush fire risk will be completed for the Project by RWC. No further assessment of flooding is required for the Project.
Hazards and Risks – waste	The Project Site is currently used for agricultural activities principally comprising grazing of livestock and minimal waste is produced on site.	Further investigations are proposed to identify types and quantities of waste including overburden, processing fines and general waste.	Potential negative effects include the unlicenced on-site storage of waste products if management and mitigation measures are not implemented.	Waste quantities will be calculated and appropriate management and mitigation measures put in place to ensure all waste generated is managed appropriately.

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Table 6.1 (Cont'd)
Preliminary Assessment Matters

Issue	Existing Environment	Further Investigations	Potential Impacts	Proposed Assessment
Heritage – Aboriginal cultural and historic heritage	Much of the area in the vicinity of the Project Site has been previously disturbed through agricultural activities, however, large areas of remnant vegetation remain in places. Several first order drainage features traverse the Project Site.	Requirements for additional Aboriginal cultural heritage survey would be clarified following the receipt of SEARs. Consultation with Aboriginal stakeholders would be conducted following the outcomes of the survey, as required.	The approach to the management of any identified sites will be developed in consultation with the Aboriginal stakeholders.	An Aboriginal Cultural Heritage Assessment of the proposed disturbance footprint will be undertaken and an assessment of the significance of any identified objects assessed in accordance with the relevant guidelines. The approach to the salvage and curation of any artefacts within areas to be disturbed would be discussed with all registered Aboriginal stakeholders.
Land – land capability and soils	The soils of those sections of the Project Site proposed to be disturbed have been identified as being Land and Soil Capability Class 7 (very low capability land).	No further investigations are required.	Soil resources are limited within the disturbance area however, the extraction operations would involve the removal and transfer/storage of as much topsoil and selected subsoil from this area as possible.	A land and soils assessment will be undertaken for the Project.
Land – rehabilitation	The landforms withing the existing Project Site are in harmony with the surrounding area with large parts covered by remnant native vegetation.	Further investigations are proposed to identify suitable vegetation for use in rehabilitation activities.	Potential negative effects include rehabilitation that is not in harmony with the existing landscape and a reduction in suitable habitat for native fauna.	The proposed progressive and final rehabilitation of the Project Site would be presented in the EIS with an objective to minimise the visual intrusiveness of the operations and progressively generate a final landform which, to the greatest extent practicable, is in sympathy to the surrounding landforms and landscape. Revegetation activities will focus on creating suitable habitat for native species.
Economic – economic costs and benefits	The Project would provide expanded employment opportunities for the local community and flow-on-effects through capital expenditure in the region.	Further investigations are proposed to confirm market requirements.	The potential impacts of the Project would include additional direct and indirect employment opportunities to the local and regional area that would assist in increasing current levels of economic activity and benefits to the broader community.	A cost-benefit analysis and assessment of the need for Quarry products in the surrounding region will be completed for the Project.
Project Need	There are currently several existing quarrying operations in the region.	Analysis if market conditions, background and local competitive pressures will be undertaken against the understanding of resource quality, Project location and benefits.	The local community has expressed a concern that the need for the Quarry is not justified.	In direct response to the concerns raised in the community, an assessment focusing on justifying the need for the Project has been commissioned to accompany the EIS.
Social – social cohesion	Preliminary consultation has identified that there is a strong sense of community in the local area.	The Applicant will undertake engagement as described in a Community and Stakeholder Engagement Plan (CSEP)	Potential negative impacts will be identified through consultation undertaken in accordance with the CSEP. Mitigation measures will be developed and communicated to potentially affected stakeholders.	Landscape Research + Communications will prepare a Social Impact Assessment for the Project.
Water – groundwater	Groundwater has not been intercepted during exploration drilling within the Project Site. The Quarry Site is separated from groundwater users to the east by the Royalla Fault, a significant regional structure that is considered likely to limit connectivity of aquifers across this boundary.	Sampling of local groundwater levels would be used to develop a conceptual model of the groundwater setting. Two piezometers have been installed in exploration drilling holes for this purpose and there is a third historic bore on the property.	The lack of water encountered in drilling and understanding of regional geological features indicates that there would be limited interaction with groundwater and unlikely connectivity to the east of the Quarry Site.	No significant impacts to groundwater users with respect to groundwater quality or volume are expected to occur and sensitive groundwater receivers would not be impacted due to extraction operations. A conceptual groundwater assessment would be prepared for the Project.
Water – surface water	Surface runoff is largely discharged via overland flow and by several first order drainage features originating from Beatty Hill and Enchanted Hill. A single named watercourse "Four Mile Creek" traverses the eastern extent of the Project Site beyond the proposed limit of disturbance.	Assessment of potential runoff volumes requiring management from additional Project-related disturbance areas (e.g. stockpiling and loading areas).	Reduction in water quality of downstream watercourses as a consequence of the discharge of sediment-laden runoff. It is noted that mitigation measures would be implemented to avoid any such discharges.	A surface water assessment will be undertaken for the Project including erosion and sediment controls and a simple water balance. The assessment will include the relevant design criteria of the water management infrastructure and required design and operational safeguards.

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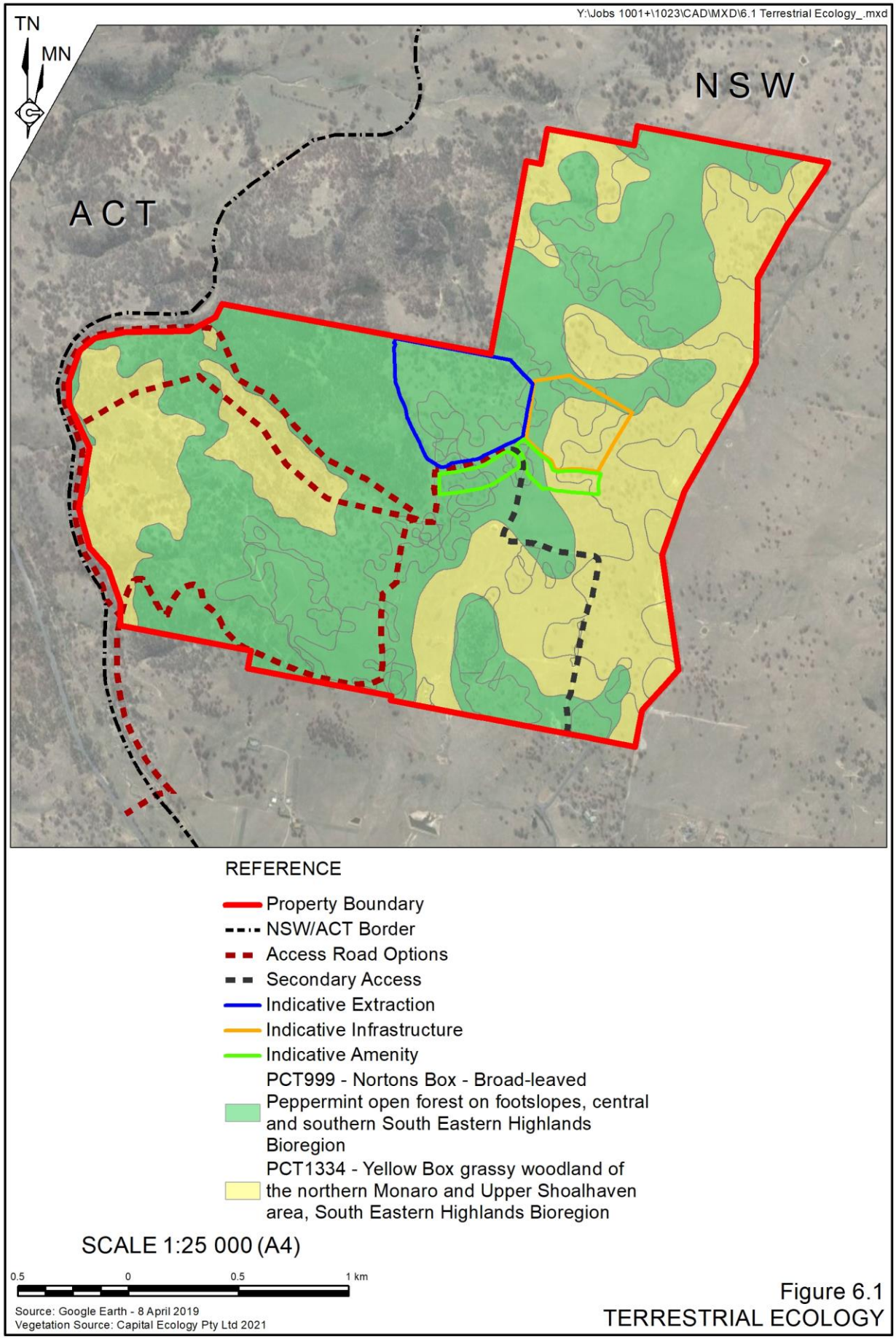

Figure 6.1
TERRESTRIAL ECOLOGY

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Appendix 1

Scoping Summary

(Total No. of pages including blank pages = 6)

This scoping summary table has been compiled to assist in guiding the level of assessment that is proposed to be undertaken for the respective environmental matters within the Environmental Impact Statement.

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Table A1
Scoping Summary

Level of Assessment	Matter	CIA	Engagement	Relevant government plans, policies and guidelines	Scoping Report Reference
Detailed	Access – traffic	Y	General	• Guide to Traffic Generating Development (RTA) • Road Design Guide (RMS) & relevant Austroads Standards	Section 6
	Air – atmospheric emissions and particulate matter	N	General	• Protection of the Environment Operations (Clean Air) Regulation 2002 • Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA) • Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA) • Assessment and Management of Odour from Stationary Sources in NSW (DEC) • National Greenhouse Accounts Factors (Commonwealth)	Section 6
	Amenity – noise	N	General	• NSW Noise Policy for Industry (EPA) • Interim Construction Noise Guideline (EPA) • NSW Road Noise Policy (EPA) • Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC)	Section 6
	Biodiversity – native vegetation and native fauna	Y	General	• Commonwealth EPBC 1.1 Significant Impact Guidelines – Matters of National Environmental Significance (Commonwealth of Australia, 2013) • Commonwealth EPBC 1.2 Significant Impact Guidelines – Actions on, or Impacting upon, • Commonwealth Land and Actions by Commonwealth Agencies (Commonwealth of Australia, 2013) • Commonwealth Department of the Environment – Nationally Threatened Ecological Communities and Threatened Species Guidelines (various) • Commonwealth Department of the Environment – Survey Guidelines for Nationally Threatened Species (various) • Biodiversity Assessment Method (EES 2020) • Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH 2017) • Ancillary rules: Biodiversity conservation actions • Ancillary rules: Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying variation rules • NSW Guide to Surveying Threatened Plants (OEH 2016) • Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna – Amphibians (DECC 2009) • Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities – Working Draft (DEC 2004) • Threatened Species Assessment Guideline – The Assessment of Significance (DECC 2007) • OEH principles for the use of biodiversity offsets in NSW • NSW State Groundwater Dependent Ecosystem Policy (NOW)	Section 6
	Heritage – Aboriginal cultural and historic heritage	N	Specific	• The Burra Charter (The Australia ICOMOS charter for places of cultural significance) • Guide to investigation, assessing and reporting on Aboriginal cultural heritage in NSW (OEH) 2011 • Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH) • Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (OEH) • Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (OEH) • NSW Heritage Manual (OEH) • Statements of Heritage Impact (OEH)	Section 6
	Social – social amenity	N	Specific	• Social impact assessment guideline for State significant mining, petroleum production and extractive industry development (	Section 5
Standard	Amenity - visual	N	General	• Refer to Scoping Report	Section 6
	Hazards and Risks - general	N	General	• State Environmental Planning Policy No. 33 – Hazardous and Offensive Development • Hazardous and Offensive Development Application Guidelines – Applying SEPP 33 • Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis • Planning for Bushfire Protection 2019 (RFS) • Floodplain Development Manual (OEH) • Floodplain Risk Management Guideline (OEH)	Section 6

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Table A1 (Cont'd)
Scoping Summary

Level of Assessment	Matter	CIA	Engagement	Relevant government plans, policies and guidelines	Scoping Report Reference
Standard (Cont'd)	Hazards and Risks - waste	N	General	• Waste Classification Guidelines (EPA) • Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes 1999 (EPA)	Section 6
	Land – land capability and soils	N	General	• State Environmental Planning Policy No. 55 – Remediation of Land • Agricultural Land Classification (DPI) • Rural Land Capability Mapping (OEH) • Soil and Landscape Issues in Environmental Impact Assessment (NOW) • Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC) • Guidelines for Consultants Reporting on Contaminated Sites (EPA) • Agricultural Issues for Extractive Industry Development (DPI)	Section 6
	Land – rehabilitation	N	General	• Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth) • Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth) • Strategic Framework for Mine Closure (ANZMEC-MCA)	Section 6
	Water – surface water	N	General	• NSW State Rivers and Estuary Policy (NOW) • NSW Government Water Quality and River Flow Objectives (EPA) • Using the ANZECC Guideline and Water Quality Objectives in NSW (EPA) • National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ) • National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ) • Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (EPA) • Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volume 2E: Mines and Quarries (DECC) • Managing Urban Stormwater: Treatment Techniques (EPA) • Managing Urban Stormwater: Source Control (EPA) • Technical Guidelines: Bunding & Spill Management (EPA) • A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH) • NSW Guidelines for Controlled Activities (NOW)	Section 6
	Economic – economic costs and benefits	N	General	• NSW Government Guide to Cost Benefit Analysis (NSW Treasury). • Guideline for the economic assessment of mining and coal seam gas proposals • Technical Notes supporting the Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals.	Section 6
Minor	Water - groundwater	N	General	• NSW Aquifer Interference Policy 2012 (NOW) • NSW State Groundwater Policy Framework Document (NOW) • NSW State Groundwater Quality Protection Policy (NOW) • NSW State Groundwater Quantity Management Policy (NOW) • Australian Groundwater Modelling Guidelines 2012 (Commonwealth) • National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC) • Guidelines for the Assessment & Management of Groundwater Contamination (EPA)	Section 6

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Appendix 2

Community Information Session Flyer

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R.W. CORKERY & CO.
PTY. LIMITED ABN 31 002 033 712
GEOLOGICAL & ENVIRONMENTAL CONSULTANTS

9 April 2021

To the resident

Monaro Rock Quarry Project – Project Overview

Monaro Rock Pty Ltd (Monaro Rock) proposes to construct and develop a new hard rock quarry ("the Project") in Royalla, NSW, approximately 5km north of the intersection of the Monaro Highway and Old Cooma Road near the NSW/ACT border (see included map). The Project would be State Significant Development and would be assessed by the Department of Planning, Industry and Environment.

Monaro Rock is a joint venture between Monaro Mix Pty Limited and Pacific Formwork Pty Limited, both well established and respected local businesses operating in Queanbeyan and the ACT. The Project would initially be developed to provide aggregates and other products to concrete batching operations associated with Monaro Rock. However, it is planned that the operation would ultimately provide products for local and regional infrastructure and construction projects.

Initial resource estimates indicate a total resource of 30 million tonnes with excellent prospects for continued high quality hard rock supply. The proposed rate of production would be scaled to meet demand with a production limit of 750 000 tonnes per annum at full capacity. The development application will be supported by an Environmental Impact Statement (EIS) that presents the outcomes of detailed technical environmental assessments including potential impacts associated with transportation, dust and noise generation, vegetation clearing, social and visual amenity, Aboriginal and historic heritage and water resources.

We are in very early stages of planning for the Project and we are eager to hear the community's perspectives on the proposed development so these may be included in our ongoing planning. It is proposed that personnel from Monaro Rock and R.W. Corkery & Co (RWC) will be available at the gate of the property (located at the end of Mates Drive) on the following days and times.

- Friday 16 April 2021 between 10:00am and 12:00pm
- Saturday 17 April 2021 between 8:00am and 10:00am

At this time you will be able to provide initial feedback and register for future updates on the Project. To register your interest or if you are unable to make the meetings, do not hesitate to contact the following people in relation to the Project.

Nick Warren, Principal Environmental Consultant (RWC) – nick@rwcorkery.com or 0437 635 975

John Patterson, Group Operations Manager (Monaro Rock) – john.patterson@monarorock.com.au or 0429 092 238

Yours sincerely

Nick Warren
Principal Environmental Consultant

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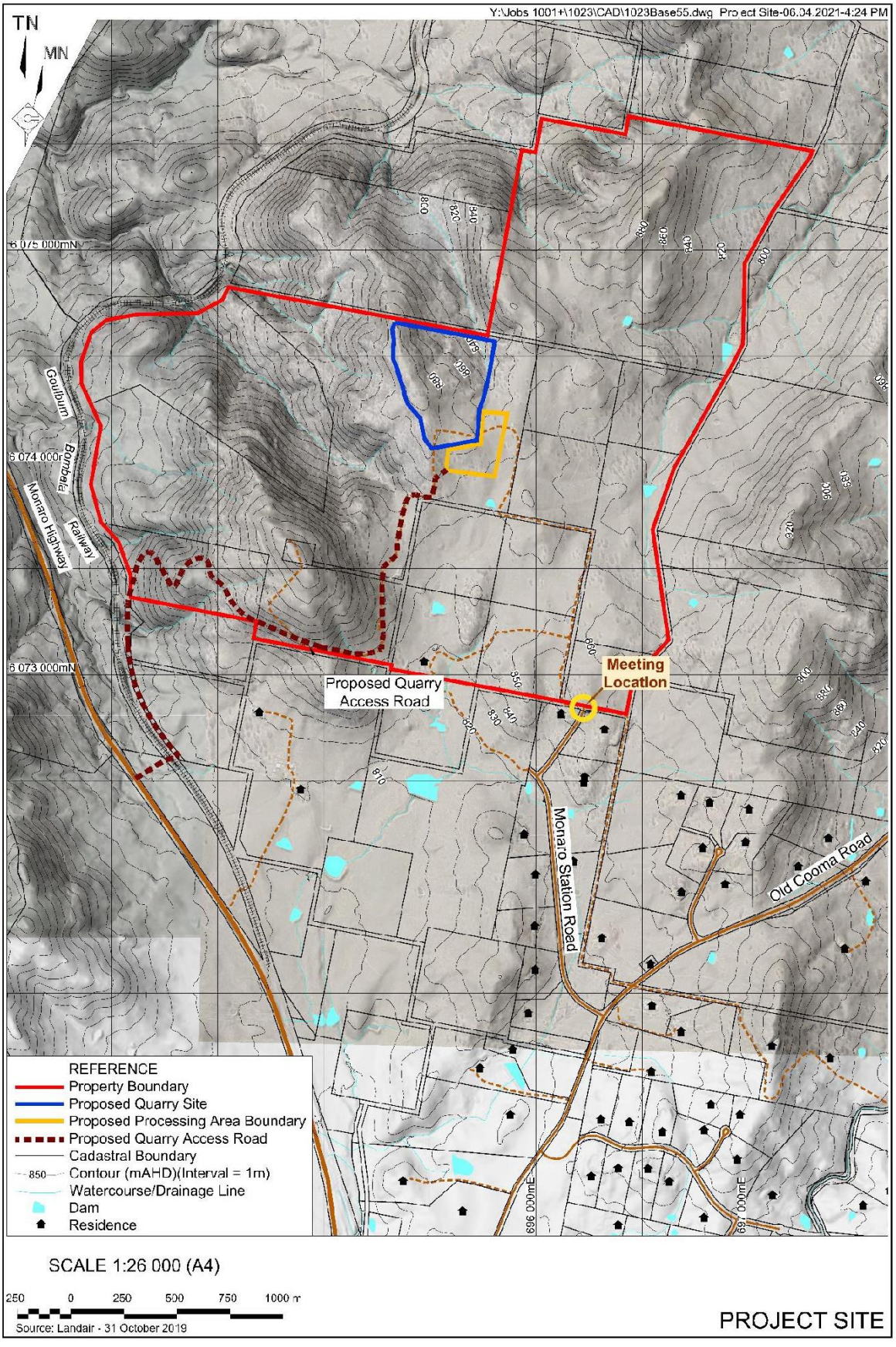
Level 1, 12 Dangar Road, PO Box 239, BROOKLYN NSW 2083
Telephone: (02) 9985 8511 Email: brooklyn@rwcorkery.com

Orange Office:
62 Hill Street, ORANGE NSW 2800
Telephone: (02) 6362 5411 Email: orange@rwcorkery.com

Brisbane Office:
Level 54, 111 Eagle Street, BRISBANE QLD 4000
Telephone: (07) 3205 5400 Email: brisbane@rwcorkery.com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MN
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Gaulburn
Bombala
Monaro Highway
Railway
Proposed Quarry Access Road
Meeting Location
Monaro Station Road
Old Cooma Road
696 000mE
699 000mE
REFERENCE
Property Boundary
Proposed Quarry Site
Proposed Processing Area Boundary
Proposed Quarry Access Road
Cadastral Boundary
850 Contour (mAHD)(Interval = 1m)
Watercourse/Drainage Line
Dam
Residence
SCALE 1:26 000 (A4)
250 0 250 500 750 1000 m
Source: Landair - 31 October 2019
PROJECT SITE