

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

INTEGRATED STATE SIGNIFICANT DEVELOPMENT

DETERMINATION OF DEVELOPMENT APPLICATION PURSUANT TO SECTIONS 76(A)9 & 80

I, the Minister for Urban Affairs and Planning, pursuant to Sections 76(A)9 & 80 of the Environmental Planning and Assessment Act, 1979 determine the development application ("the application") referred to in Schedule 1 by granting consent to the application subject to the conditions set out in Schedules 2 to 5.

The reasons for the imposition of the conditions are to:

- (i) minimise the adverse impact the development may cause through water, noise and air pollution, and disturbance to archaeological sites, flora and fauna and the visual environment;
- (ii) provide for environmental monitoring and reporting; and
- (iii) set requirements for development infrastructure provision.

Andrew Refshauge MP

Minister for Urban Affairs and Planning,

SYDNEY,

2001

FILE NO.S98/01078

Red type represents December 2017 modification

Green type represents May 2018 modification

SCHEDULE 1

Applicant: Scandium21 Pty Ltd
Consent Authority: The Minister for Urban Affairs and Planning
Land: See Appendix 1
Development: Sunrise Mine Project

TABLE OF CONTENTS

DEFINITIONS	3
ADMINISTRATIVE CONDITIONS	6
Obligation To Minimise Harm To The Environment	6
Terms of Consent	6
Limits on Mining Operations	6
Limits on Quarrying Operations	6
Notification of Department	6
Updating & Staging of Strategies, Plans or Programs	7
Structural Adequacy	7
Demolition	7
Operation of Plant and Equipment	7
Planning Agreements	7
ENVIRONMENTAL PERFORMANCE CONDITIONS	9
Noise	9
Blasting	10
Air Quality	11
Meteorological Monitoring	12
Water	12
Biodiversity	14
Heritage	15
Transport	16
Construction Accommodation Camp	17
Visual	17
Bushfire Management	17
Dangerous Goods	17
Hazards and risk	17
Waste	18
Rehabilitation	18
ADDITIONAL PROCEDURES	20
Independent Review	20
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING	21
Environmental Management	21
Reporting	23
Auditing	23
Access to Information	23
APPENDIX 1: SCHEDULE OF LAND	24
APPENDIX 2: DEVELOPMENT LAYOUT PLANS	25
APPENDIX 3: TERMS OF VOLUNTARY PLANNING AGREEMENTS	34
APPENDIX 4: NOISE COMPLIANCE ASSESSMENT	40
APPENDIX 5: ROAD AND INTERSECTION UPGRADES	42

DEFINITIONS

Accommodation Camp	Accommodation camp located on the land listed in Appendix 1 and shown in Figure 8 of Appendix 2
Applicant	Scandium21 Pty Ltd, or any other person/s who rely on this consent to carry out the development that is subject to this consent
ARI	Average Recurrence Interval
BCA	Building Code of Australia
Borefields	The Borefields located on the land listed in Appendix 1 and shown in Figure 6 of Appendix 2
CCC	Community Consultative Committee
Clean water	Water not in contact with mine water
Construction	All site activities associated with the development, including clearing, trenching, earthworks, road works, development of borrow pits and tailings dams; or the location of earthmoving plant or buildings (portable or fixed) onto the site
Conditions of this consent	Conditions contained in Schedules 2 to 5 inclusive
Councils	Lachlan Shire Council, Parkes Shire Council, Forbes Shire Council
Day	The period from 7.00 am to 6.00 pm on Monday to Saturday, and 8.00 am to 6.00 pm on Sundays and Public Holidays
Department	Department of Planning & Environment
Development	The development as described in the EIS and comprising the: • mine including mine processing facility; • mining operations; • limestone quarry including limestone processing facility; • quarrying operations; • rail siding; • borefields; • water pipeline; and • gas pipeline; and • accommodation camp
DPI	Department of Primary Industries
DPI Water	The Division of Water within DPI
DSC	Dams Safety Committee
EIS	• Environmental Impact Statement prepared by Resource Strategies Pty Ltd dated October 2000 and supplemented by letters dated 3 December 2000 and 12 January 2001. • Statement of Environmental Effects prepared by Resource Strategies Pty Ltd dated May 2005. • Letter prepared by Ivanplats Syerston Pty Ltd dated 22 December 2005. • Environmental Assessment titled "Syerston Project Scandium Oxide Modification Environmental Assessment" dated May 2016 and Response to Submissions. • Letter prepared by Clean TeQ Holdings Limited dated 13 October 2017, and response to submissions dated 16 November 2017. • Environmental Assessment dated January 2018 and Response to Submissions dated 23 February 2018. • Letter prepared by Clean TeQ Holdings Limited dated 16 May 2018.
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPA	Environment Protection Authority
EPL	Environment Protection Licence issued under the POEO Act
Evening	The period from 6.00 pm to 10.00 pm
Feasible	Feasible relates to engineering considerations and what is practical to build or to implement
Gas pipeline	The gas pipeline located on the land listed in Appendix 1 and shown in Figure 1 of Appendix 2
Ha	Hectare
Heritage item	An item as defined under the <i>Heritage Act 1977</i> and/or an Aboriginal object or Aboriginal place as defined under the <i>National Parks and Wildlife Act 1974</i>
Incident	A set of circumstances that: a) causes or threatens to cause material harm to the environment; and/or b) breaches or exceeds the limits or performance measures/criteria in this

	consent
LAeq	Equivalent continuous sound pressure level with “A” weighted scale
Land	In general, the definition of land is consistent with the definition in the EP&A Act. However, in relation to acquisition it means the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent
Limestone processing facility	Infrastructure and plant associated with crushing operations for the preparation of limestone at the limestone quarry, exclusive of all quarrying activities
Limestone product	Limestone produced at the limestone quarry
Limestone quarry	Limestone quarry including the limestone processing facility, located on the land listed in Appendix 1 and shown in Figures 1 and 4 of Appendix 2
Limestone quarry water	Water that accumulates within active quarrying and infrastructure areas
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Mine	The mine including the mine processing facility, located on the land listed in Appendix 1 and shown in Figures 1, 2 and 3 of Appendix 2
Mine processing facility	Infrastructure and plant associated with the processing of ore at the Mine, including: • processing plant; • electricity and steam co-generation plant; • the industrial gas plants; • sulphur storage; • sulphuric acid plant; • hydrogen sulphide flare; • scandium oxide plant; and • water treatment plant.
Mine water	Water that accumulates within active mining and infrastructure areas
Mining operations	Includes the removal of overburden and extraction, processing, handling, storage and transportation of ore
Minor	Not very large, important or serious
Mitigation	Activities associated with reducing the impacts of the development prior to or during those impacts occurring
Night	The period from 10pm each night to 7.00 am on Mondays to Saturdays and to 8.00 am on Sundays and Public Holidays
NP&W Act	<i>National Parks & Wildlife Act 1974</i>
OEH	Office of Environment and Heritage
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Preliminary Works	Site establishment and earthworks associated with the mine processing facility and gas pipeline including: • clearing and grubbing; • topsoil removal; • slope protection; • installation of drainage, culverts, and storm water retention; • establishment of temporary roads, power, water and fuelling facilities; and • construction of fencing and gates, laydown areas, subsurface utilities and contractor hardstands.
Privately-owned land	Land that is not owned or leased by a public agency, or a mining company (or its subsidiary)
Public infrastructure	Infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, etc
Quarrying operations	The extraction, processing, stockpiling and transportation of limestone product and the associated removal of vegetation, topsoil and overburden
Rail siding	The rail siding located on the land listed in Appendix 1 and shown in Figures 1 and 5 of Appendix 2
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the development to a good condition to ensure it is safe, stable and non-polluting
RFS	Rural Fire Service
RMS	Roads and Maritime Services
Secretary	The Secretary of the Department, or nominee and/or delegate

Site	The land listed in Appendix 1
Transport route	Routes SR171, SR64, MR57 and SR34 between the rail siding and the mine, as shown in Figure 7 in Appendix 2
TSP	Total Suspended Particulate
VPA	Voluntary Planning Agreement
Water pipeline	The water pipeline located on the land listed in Appendix 1 and shown in Figure 1 of Appendix 2

SCHEDULE 2

ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.

TERMS OF CONSENT

2. The Applicant must carry out the development:
 - (a) generally in accordance with the EIS; and
 - (b) in accordance with the conditions of this consent.

Note: The general layout of the development is shown in the figures in Appendix 2.

3. If there is any inconsistency between the documents referred to in condition 2 above, the most recent document must prevail to the extent of the inconsistency.
4. The Applicant must comply with any reasonable requirements of the Secretary arising from the Department's assessment of:
 - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent (including any stages of these documents);
 - (b) any reports, reviews or audits commissioned by the Department regarding compliance with this consent; and
 - (c) the implementation of any actions or measures contained in these documents.

LIMITS ON MINING OPERATIONS

Mining Operations

5. The Applicant may carry out mining operations at the mine for 21 years from the day upon which mining operations start.

Ore Processing

6. In any calendar year, the Applicant must not exceed an autoclave feed rate of 2.5 million tonnes of ore at the mine .

Off-site Product Transport

7. In any calendar year, the Applicant must not transport more than 180 tonnes of scandium oxide and 40,000 tonnes of nickel and cobalt metal equivalents (as either sulphide or sulphate precipitate products) from the mine.

LIMITS ON QUARRYING OPERATIONS

Extraction

8. In any calendar year, the Applicant must not extract more than 790,000 tonnes of limestone from the limestone quarry.

Restriction on Use of Extracted Limestone

9. Limestone extracted from the limestone quarry may only be sent to the mine for use in mining operations, and may not be sold or used for any other purpose.

NOTIFICATION OF DEPARTMENT

10. The Applicant must notify the Department and the relevant Councils in writing of the day upon which the:
 - (a) development of the mine starts;
 - (b) commissioning of the mine processing facility starts;
 - (c) development of the limestone quarry starts;
 - (d) development of the gas pipeline starts;
 - (e) commissioning of the gas pipeline starts;
 - (f) development of the borefields starts;

- (g) development of the water pipeline starts;
- (h) commissioning of the water pipeline starts;
- (i) development of the rail siding starts;
- (j) rail siding operations start;
- (k) road or intersection upgrades start;
- (l) road or intersection upgrades are completed; and
- (m) development of the accommodation camp starts;
- (n) commissioning of the accommodation camp starts; and
- (o) accommodation camp capacity is reduced.

11. If the carrying out of the development is to be staged, then the Applicant must notify the Department and relevant Councils in writing prior to the commencement of the relevant stage, and clearly identify the development that would be carried out in the relevant stage.

UPDATING & STAGING OF STRATEGIES, PLANS OR PROGRAMS

12. With the approval of the Secretary, the Applicant may submit any strategy, plan or program required by this consent on a progressive basis.

To ensure these strategies, plans or programs are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval.

With the agreement of the Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all the parties referred to under the relevant condition of this consent.

Notes:

- While any strategy, plan or program may be submitted on a progressive basis, the Applicant must ensure that all development being carried out on site is covered by suitable strategies, plans or programs at all times.
- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.

STRUCTURAL ADEQUACY

Building and Structures

13. The Applicant must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

Notes:

- Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.

Pipeline Construction and Operation

14. The Applicant must design and construct the gas pipeline in accordance with the relevant Australian Standards, in particular AS2885 *Pipelines – Gas and Liquid Petroleum*, or its latest version.

Note: All utility crossings of Henry Parkes Way require concurrence from RMS in accordance with Section 138(2) of the Roads Act 1993.

DEMOLITION

15. The Applicant must ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.

OPERATION OF PLANT AND EQUIPMENT

16. The Applicant must ensure that all plant and equipment used on site, or in connection with the development, is:
- (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

PLANNING AGREEMENTS

17. Prior to carrying out any development under this consent after 6 May 2017, unless otherwise agreed by the Secretary, the Applicant must enter into a VPA with each of the relevant Councils, consistent with the offers summarised in Appendix 3. The VPA must include the provision of funding for:
- (a) the road upgrades required for the development;

- (b) ongoing road maintenance for the development; and
- (c) community enhancement initiatives in the locality.

SCHEDULE 3

ENVIRONMENTAL PERFORMANCE CONDITIONS

NOISE

Hours of Construction/Operation

- The Applicant must comply with the restrictions in Table 1, unless otherwise agreed by the Secretary.

Table 1: Restriction on Hours of Construction/Operation

Activity	Operating Hours
- Construction of the: - gas pipeline; - water pipeline and borefields; - rail siding; - accommodation camp; and - road upgrades - Construction materials haulage along the transport route	7 am to 6 pm, Monday to Sunday
All quarrying operations (excluding truck loading on the limestone quarry site)	7 am to 5 pm, Monday to Sunday

Note: All other operations are permitted 24 hours per day, seven days per week.

Construction Noise

- The Applicant must minimise the noise generated during construction of the development in accordance with the best practice requirements outlined in the *Interim Construction Noise Guideline (DECC, 2009)*, or its latest version.

Operational Noise Criteria - Mine

- The Applicant must ensure that the noise generated by development at the mine does not exceed the criteria in Table 2.

Table 2: Noise Criteria (dB(A)) - Mine

Location	Day <i>L_{aeq} (15 minute)</i>	Evening <i>L_{aeq} (15 minute)</i>	Night <i>L_{aeq} (15 minute)</i>
Currajong Park	35	39	40
All other privately-owned residences	35	35	35

Note: To identify the residence referred to in Table 2, see Figure 8 in Appendix 4.

Operational Noise Criteria – Limestone Quarry

- The Applicant must ensure that the noise generated by development at the limestone quarry does not exceed the criteria in Table 3.

Table 3: Noise Criteria (dB(A)) – Limestone Quarry

Location	Day <i>L_{aeq} (15 minute)</i>	Evening <i>L_{aeq} (15 minute)</i>	Night <i>L_{aeq} (15 minute)</i>
Moorelands	42	35	35
Lesbina	38	35	35
Eastbourne			
Gillenbine	37	35	35
All other privately-owned residences	35	35	35

Note: To identify the residences referred to in Table 3, see Figure 8 in Appendix 4.

Operational Noise Criteria – Rail Siding

- The Applicant must ensure that the noise emissions from the development at the rail siding do not exceed the noise limits in Table 4 at all non-development related residences.

Table 4: Noise Criteria (dB(A)) – Rail Siding

Location	Day <i>L_{aeq} (15 minute)</i>	Evening <i>L_{aeq} (15 minute)</i>	Night <i>L_{aeq} (15 minute)</i>
Glen Rock	37	35	35
Ballanrae			
Spring Park			

Note: To identify the residences referred to in Table 4, see Figure 8 in Appendix 4.

Noise Management Requirements

6. Noise generated by the development is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy* (EPA, 1999), or its latest version. Appendix 4 sets out the meteorological conditions under which the criteria in conditions 3 – 5 above apply, and the requirements for evaluating compliance with these criteria.

Noise Agreements

7. However, the noise criteria in conditions 3 – 5 above do not apply if the Applicant has an agreement with the owner/s or leaseholders of the residence to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.

Operating Conditions

8. The Applicant must:
 - (a) minimise the noise impacts of the development during meteorological conditions under which the noise limits in this consent do not apply; and
 - (b) undertake regular attended monitoring of the noise of the development, to ensure compliance with the relevant conditions of this consent.

Noise Management Plan

9. Prior to carrying out any development under this consent after 6 May 2017, the Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with the EPA;
 - (b) include management of construction, traffic and operational noise;
 - (c) describe the measures that would be implemented to ensure compliance with the noise criteria and operating conditions of this consent;
 - (d) include a noise monitoring program for evaluating and reporting on:
 - compliance against the noise criteria in this consent;
 - compliance against the noise operating conditions; and
 - (e) defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.
10. The Applicant must implement the approved Noise Management Plan for the development.

BLASTING

11. Blasting may only be undertaken at the limestone quarry.

Blasting Criteria

12. The Applicant must ensure that blasting at the limestone quarry does not cause exceedances of the criteria in Table 5.

Table 5: Blasting Criteria (dB(A))

Location	Airblast overpressure (db(lin peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on privately-owned land	120	10	0%
	115	5	5% of total blasts over any 12 month period

13. However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner, and has advised the Department in writing of the terms of this agreement.

Blasting Hours

14. The Applicant may only carry out blasting at the limestone quarry between 9:00am and 5:00pm Monday to Saturday, inclusive. No blasting is allowed on Sundays, public holidays or at any other time without the written approval of the Secretary.

Operating Conditions

15. The Applicant must:
- implement best management practice to:
 - protect the safety of people and livestock in the surrounding area;
 - protect public or private infrastructure/ property in the surrounding area from damage from blasting operations; and
 - minimise the dust and fume emissions from any blasting; and
 - monitor and report on compliance with the relevant blasting conditions in this consent, to the satisfaction of the Secretary.

Blast Management Plan

16. Prior to carrying out any blasting at the limestone quarry, the Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must:
- describe the measures that would be implemented to ensure compliance with the blasting criteria and operating conditions of this consent;
 - propose and justify any alternative ground vibration limits for any public infrastructure in the vicinity of the site (if relevant); and
 - include a monitoring program for evaluating and reporting on compliance with the blasting criteria and operating conditions.
17. The Applicant must implement the approved Blast Management Plan for the development.

AIR QUALITY

Odour

18. The Applicant must ensure that no offensive odours are emitted from the development, as defined under the POEO Act.

Air Quality – Mine

19. The Applicant must ensure that gaseous emissions from the development at the mine comply with the requirements of any EPL or the relevant requirements of the *Protection of the Environment Operations (Clean Air) Regulation 2010* and the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2016)* (or its latest version).
20. On submission of an application for an Environment Protection Licence, the Applicant must provide a revised air quality impact assessment to ensure the impacts of the proposal are appropriately assessed and demonstrate compliance with the relevant requirements of the *Protection of the Environment Operations (Clean Air) Regulation 2010*, to the satisfaction of the EPA.

Air Quality Criteria - Development

21. The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables 6, 7 and 8 at any residence on privately owned land.

Table 6: Long term impact assessment criteria for particulate matter

Pollutant	Averaging period	d Criterion
TSP matter	Annual	a 90 µg/m ³
Particulate matter < 10 µm (PM10)	Annual	a 30 µg/m ³

Table 7: Short term impact assessment criterion for particulate matter

Pollutant	Averaging period	d Criterion
Particulate matter < 10 µm (PM10)	24 hour	a 50 µg/m ³

Table 8: Long term impact assessment criteria for deposited dust

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
c Deposited dust	Annual	b 2 g/m ² /month	a 4 g/m ² /month

Notes to Tables 6-8:

- a. *Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).*
- b. *Incremental impact (i.e. incremental increase in concentrations due to the development on its own).*
- c. *Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.*
- d. *Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.*

Operating Conditions

22. The Applicant must:
 - (a) minimise:
 - dust emissions from the development;
 - the surface disturbance of the development, including implementing interim rehabilitation strategies to stabilise areas prone to dust generation that cannot be permanently rehabilitated; and
 - the greenhouse gas emissions of the development; and
 - (b) carry out any monitoring required by the EPA, and publish the results of this monitoring on its website.

Air Quality Management Plan

23. On submission of an application for an Environment Protection Licence, unless otherwise agreed by the Secretary and the EPA, the Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary and the EPA. This plan must:
 - (a) Be prepared in consultation with the EPA;
 - (b) outline the procedure for notifying property owners and occupiers likely to be affected by dust from the operations;
 - (c) describe the measures that would be implemented to ensure compliance with the relevant air quality criteria and operating conditions of this consent;
 - (d) include an air quality monitoring program for evaluating and reporting on:
 - baseline monitoring undertaken prior to development consent;
 - compliance against the air quality criteria in this consent;
 - compliance against the air quality operating conditions; and
 - (e) defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.
24. The Applicant must implement the approved Air Quality Management Plan for the development.

METEOROLOGICAL MONITORING

25. During the life of the development, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the mine that complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline.

WATER

Water Supply

26. The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of development on site to match its available water supply.

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development.

Water Pollution

27. Unless an EPL authorises otherwise, the Applicant must comply with Section 120 of the POEO Act.

Compensatory Water Supply

28. The Applicant must provide a compensatory water supply to anyone whose basic landholder water rights (as defined in the *Water Management Act 2000*) are adversely and directly impacted as a result of the development. This supply must be provided in consultation with DPI Water, and to the satisfaction of the Secretary.

The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributable to the development. Equivalent water supply must be provided (at least on an interim basis) as soon as possible after the loss is identified, unless otherwise agreed with the landowner.

If the Applicant and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

If the Applicant is unable to provide an alternative long-term supply of water, then the Applicant must provide alternative compensation to the satisfaction of the Secretary.

Water Management Performance Measures

29. The Applicant must ensure the development on site complies with the performance measures in Table 9, to the satisfaction of the Secretary.

Table 9: Water Management Performance Measures

Feature	Performance Measure
Water management – General	- Maintain separation between clean and mine water management systems - Minimise the use of clean water on site
Construction and operation of infrastructure	- Design, install and maintain erosion and sediment controls generally in accordance with the series <i>Managing Urban Stormwater: Soils and Construction including Volume 1, Volume 2A – Installation of Services and Volume 2C – Unsealed Roads</i> - Design, install and maintain infrastructure within 40 m of watercourses generally in accordance with the <i>Guidelines for Controlled Activities on Waterfront Land (DPI 2012)</i>, or its latest version - Design, install and maintain any creek crossings generally in accordance with the <i>Policy and Guidelines for Fish Habitat Conservation and Management (DPI, 2013)</i> and <i>Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries 2003)</i>, or their latest versions
Clean water diversion infrastructure	Maximise the diversion of clean water around disturbed areas on site
Sediment dams (mine and limestone quarry)	Design, install and/or maintain the dams generally in accordance with the series <i>Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries</i>
Mine and limestone quarry water storages	- Design, install and/or maintain mine and limestone water storage infrastructure to ensure no discharge of mine or limestone quarry water off-site (except in accordance with an EPL) - On-site storages (including mine infrastructure dams, groundwater storage and treatment dams) are suitably designed, installed and/or maintained to minimise permeability - Ensure that the floor and side walls of the Tailings Storage Facility, Evaporation Basin and Surge Dam are designed with a minimum of a 900 mm clay or modified soil liner with a permeability of no more than 1×10^{-9} m/s, or a synthetic (plastic) liner of 1.5 mm minimum thickness with a permeability of no more than 1×10^{-14} m/s (or equivalent) - Design, install and maintain the water storages to capture and convey the 100 year, 72-hour ARI rainfall event - Design, install and/or maintain the facilities to meet the requirements of the DSC - The design of the Tailings Storage Facility should conform to: - DSC3A – Consequence Categories for Dams (DSC); and - DSC3F – Tailings Dams (DSC)
Chemical and hydrocarbon storage	Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standards
Irrigation Area	Manage the irrigation area in accordance with the EPA's <i>Environmental Guidelines: Use of Effluent by Irrigation</i>

Water Management Plan

30. Prior to carrying out any development after 6 May 2017, the Applicant must prepare a Water Management Plan for the development in consultation with DPI Water and the EPA, and to the satisfaction of the Secretary. This plan must include:
- (a) a Water Balance that:
- includes details of:
 - sources and security of water supply, including contingency planning for future reporting periods;

- water use and management on site;
 - reporting procedures, including the preparation of a site water balance for each calendar year; and
 - describes the reasonable and feasible measures that would be implemented to minimise clean water use on site and maximise the reuse of recovered tailings water at the facility;
- (b) a Surface Water Management Plan, that includes:
- baseline data on water flows and quality in the watercourses that could be affected by the development (if available);
 - a detailed description of the water management system on-site, including the:
 - clean water diversion systems;
 - erosion and sediment controls; and
 - water storages; and
 - irrigation area;
 - objectives and performance criteria, including trigger levels for investigating any potential or actual adverse impacts associated with the development, including the:
 - surface water flows and quality;
 - downstream flooding;
 - a program to monitor and report on:
 - the effectiveness of the water management system and tailings storage facility; and
 - surface water flows and water quality;
 - the performance measures listed in Table 9;
 - impacts on water users;
 - downstream flooding;
 - a plan to respond to any exceedances of the trigger levels and/or performance criteria, and minimise and/or offset any adverse surface water impacts of the development;
- (c) a Groundwater Management Plan, that includes:
- baseline data on groundwater levels, yield and quality in the region and privately-owned groundwater bores that could be affected by the development in the vicinity of the borefields;
 - groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts associated with the development in the vicinity of the borefields;
 - a program to monitor and report on:
 - groundwater inflows into the open cut pits, if relevant;
 - the seepage/leachate from the tailings storage facility and evaporation ponds; and
 - the impacts of the development on:
 - groundwater supply of any potentially affected landholders, particularly around the borefields;
 - regional and local aquifers; and
 - post-mining groundwater recovery;
 - a plan to respond to any exceedances of the groundwater assessment criteria, and mitigate any adverse impacts of the development;

31. The Applicant must implement the approved Water Management Plan for the development.

BIODIVERSITY

Revegetation

32. For every 1 ha of native woodland vegetation cleared for the mine or limestone quarry, a minimum of 2 ha must be revegetated as native woodland.

Revegetation Strategy

33. Prior to carrying out any development under this consent after 6 May 2017, the Applicant must prepare a Revegetation Strategy for the development, in consultation with OEH, to the satisfaction of the Secretary. This strategy must:

- (a) include updated estimates of the likely clearing of native vegetation required over the life of the development;
- (b) identify areas on or off site that will be available for revegetation over the life of the development;
- (c) propose a strategy for progressive rehabilitation and revegetation for the development and which reflects the requirements of condition 32 (for the mine and limestone quarry); and
- (d) include a program to monitor and review the effectiveness of the strategy over the life of the development.

34. The Applicant must implement the approved Revegetation Strategy for the development.

Biodiversity Management Plan

35. Prior to carrying out any development under this consent after 6 May 2017, the Applicant must prepare a Biodiversity Management Plan for the development in consultation with OEH, and to the satisfaction of the Secretary. This plan must:
- describe the short, medium, and long term measures that would be implemented to:
 - manage and enhance the quality of remnant vegetation and fauna habitat on site, with specific emphasis on the preservation of remnant Box woodland; and
 - ensure that the Revegetation Strategy is effectively implemented over the life of the development;
 - include detailed performance and completion criteria for evaluating the performance of the revegetation area identified in the approved Revegetation Strategy, and triggering remedial action (if necessary);
 - include a detailed description of the measures that would be implemented for:
 - protecting vegetation and fauna habitat outside the approved disturbance area on-site;
 - enhancing the quality of existing vegetation and fauna habitat in the revegetation area identified in the approved Revegetation Strategy;
 - minimising, clearing and avoiding unnecessary disturbance within the approved development footprint;
 - recording the details of any vegetation clearing that is undertaken for the development;
 - progressively rehabilitating and revegetating the site, particularly in temporary disturbance areas;
 - maximising the salvage of resources within the approved disturbance area - including vegetative and soil resources – for beneficial reuse in the rehabilitation of the site;
 - collecting and propagating seed;
 - identifying and managing significant impacts on any threatened fauna species not identified in the EIS, (particularly the Yellow-bellied Sheathtail Bat, Little Pied Bat, Greater Long eared bat, Barking Owl, Pied Honey eater, Major Mitchell's Cockatoo and Superb Parrot);
 - minimising the impacts on threatened fauna on site, including pre-clearance surveys (with an emphasis on tree hollows, stags and roosting bats);
 - seasonally adjusting activities to minimise disturbance of potential breeding activities;
 - minimising potential exposure to tailings;
 - implementing a fauna rescue strategy (including provision of artificial roosts);
 - controlling weeds and feral pests;
 - managing bushfire risk;
 - controlling erosion;
 - include a seasonally-based program to monitor and report on the effectiveness of these measures;
 - identify the potential risks to the successful implementation of the Biodiversity Management Plan, and include a description of the contingency measures that would be implemented to mitigate against these risks; and
 - include details of who would be responsible for monitoring, reviewing, and implementing the plan.
36. The Applicant must implement the approved Biodiversity Management Plan for the development.

HERITAGE

Protection of Heritage Sites

37. Unless otherwise authorised under the NP&W Act, the Applicant must ensure that the development does not cause any direct or indirect impact on any Aboriginal heritage items located outside the approved disturbance area of the development.
38. Prior to any disturbance of the artefacts identified as Syerston 1 in the EIS, the Condobolin Local Aboriginal Council or the Wiradjuri Branch of the NSW Aboriginal Land Council must be invited to collect the artefacts.
39. The pastoral out station on the western boundary of the mine site (illustrated in Figure 5 in Appendix M of the EIS) should be retained if practical and feasible.

Heritage Management Plan

40. Prior to carrying out any development under this consent after 6 May 2017, the Applicant must prepare a Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared by a suitably qualified and experienced person(s) whose appointment has been endorsed by the Secretary;
 - be prepared in consultation with OEH and the Condobolin Local Aboriginal Land Council, Wiradjuri Branch of the NSW Aboriginal Land Council (in relation to the management of Aboriginal heritage values);
 - include a description of the measures that would be implemented for:
 - managing the discovery of any human remains or previously unidentified heritage objects on site; and
 - ensuring workers on-site receive suitable heritage inductions prior to carrying out works on the site,

- and that suitable records are kept of these inductions;
- (d) include a description of the measures that would be implemented for:
 - protecting, monitoring and/ or managing Aboriginal heritage items on site, paying particular attention to the following sites as identified in the EIS:
 - Syerston 2 – open scatter and possible knapping floor;
 - Syerston 3 – isolated flake of brown/red vitreous volcanic material; and
 - Scarred tree beside the Fifield to Wilmatha Road;
 - implementing archaeological investigations and/ or salvage measures for Aboriginal heritage items on site;
 - maintaining and managing reasonable access for Aboriginal stakeholders to heritage items on site;
 - on-going consultation with the Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage on site; and
 - protecting Aboriginal sites and items outside the development disturbance area from the development; and
- (e) include the following for the management of non-Aboriginal heritage:
 - a description of the measures that would be implemented for:
 - protecting, monitoring and/or managing heritage objects on site (particularly the pastoral out station referred to in condition 39 of this consent);
 - recording, prior to disturbance, any heritage areas or structures that will be impacted by the development, and making these records publicly available;
 - managing the discovery of any previously unidentified heritage objects on site; and
 - implementing archaeological investigations and/ or salvage measures for heritage items on site;

41. The Applicant must implement the approved Heritage Management Plan for the development.

TRANSPORT

Restriction on Transport Routes

42. The Applicant must ensure route MR 354 is not used for heavy vehicles travelling to and from the development, unless otherwise agreed by the Secretary.

Road Upgrade and Maintenance Strategy

43. Prior to carrying out any development under this consent after 6 May 2017, the Applicant must prepare a Road Upgrade and Maintenance Strategy for the development, in consultation with RMS and Council, and to the satisfaction of the Secretary. This strategy must:
- (a) identify the road and intersection upgrades required for the project, including all those outlined in Appendix 5; and
 - (b) include a program that:
 - details the scheduling of road upgrades required to be implemented in accordance with Appendix 5; and
 - the maintenance of the relevant sections of the road network following the upgrades.
44. The Applicant must implement the approved Road Upgrade and Maintenance Strategy for the development.

Traffic Management Plan

45. Prior to carrying out any development under this consent after 6 May 2017, the Applicant must prepare a Traffic Management Plan for the development in consultation with the relevant road authority, and to the satisfaction of the Secretary. This plan must include:
- (a) details of all transport routes and traffic types to be used for development-related traffic;
 - (b) a program to monitor and report on the amount of metal sulphide/sulphate precipitate and scandium oxide transported from the mine;
 - (c) a program to monitor and report on the amount of limestone transported from the limestone quarry;
 - (d) the measures that would be implemented to:
 - minimise traffic safety issues and disruption to local users of the transport route/s during construction and decommissioning of the development, including:
 - temporary traffic controls, including detours and signage;
 - notifying the local community about development-related traffic impacts; and
 - a traffic management system for managing over-dimensional vehicles; and
 - (e) a Road Transport Protocol for all drivers transporting materials to and from the site with measures to:
 - ensure drivers adhere to the designated transport routes;
 - verify that these heavy vehicles are completely covered whilst in transit;
 - co-ordinate the staggering of heavy vehicle departures to minimise impacts on the road network, where practicable;
 - minimise disruption to school bus timetables and rail services;
 - ensure travelling stock access and right of way to the adjacent travelling stock route;

- maintain radio communications between all school buses and heavy vehicle operators operating on the transport route between the rail siding and mine;
- manage worker fatigue during trips to and from the site;
- manage appropriate driver behaviour including adherence to speed limits, safe overtaking and maintaining appropriate distances between vehicles (i.e. a Driver Code of Conduct);
- inform drivers of relevant drug and alcohol policies;
- regularly inspect vehicles maintenance and safety records;
- implement contingency procedures when the transport route is disrupted;
- respond to emergencies;
- transport processing reagents safely; and
- ensure compliance with and enforcement of the protocol.

46. The Applicant must implement the approved Traffic Management Plan for the development.

ACCOMMODATION CAMP

47. Prior to carrying out any development at the **accommodation camp**, unless otherwise agreed by the Secretary, the Applicant must prepare a final layout for the accommodation camp in consultation with Lachlan Shire Council, and to the satisfaction of the Secretary.
- 47A. **Prior to reducing the capacity of the accommodation camp, unless otherwise agreed by the Secretary, the Applicant must prepare a reduced capacity accommodation camp layout in consultation with Lachlan Shire Council, and to the satisfaction of the Secretary.**

VISUAL

Operating Conditions

48. The Applicant must:
- implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development;
 - ensure that all external lighting associated with the development complies with *Australian Standard AS4282 (INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting*, or its latest version;
 - take all practical measures to shield views of the development from users of public roads and privately-owned residences; and
 - ensure the visual appearance of all ancillary infrastructure (including paint colours, specifications and screening) blends in as far as possible with the surrounding landscape, to the satisfaction of the Secretary.

BUSHFIRE MANAGEMENT

49. The Applicant must:
- ensure that the development:
 - provides for asset protection in accordance with the RFS's *Planning for Bushfire Protection 2006* (or equivalent); and
 - is suitably equipped to respond to any fires on site;
 - develop procedures to manage potential fires on site and in the vicinity of the site, in consultation with the RFS; and
 - assist the RFS and emergency services as much as possible if there is a fire in the vicinity of the site.

DANGEROUS GOODS

50. The Applicant must ensure that the storage, handling, and transport of dangerous goods is done in accordance with:
- the relevant Australian Standards, particularly AS1940 and AS1596;
 - the *Australian Code for the Transport of Dangerous Goods by Road and Rail*; and
 - Hazardous Industry Planning Advisory Paper No 11 'Route Selection'*.
51. Bulk storage of hydrogen sulphide (H₂S) and sulphur dioxide (SO₂) is not permitted at the mine, other than to ensure process continuity in the event of a process upset, start-up or shut-down.

HAZARDS AND RISK

Pre-Construction Hazard Studies

52. Prior to **commencement of construction of the mine processing facility and gas pipeline (except for preliminary works)**, the Applicant must prepare and submit for approval a:

- (a) Fire Safety Study for the **mine processing facility and gas pipeline**, covering all relevant aspects of the Department's publication *Hazardous Industry Planning Advisory paper No. 2, 'Fire Safety Study'* and the *New South Wales Government's Best Practice Guidelines for Contaminated Water Retention and Treatment Systems*.
- (b) Final Hazard Analysis for the **mine processing facility and gas pipeline**, prepared by a suitably qualified and experienced person(s) approved by the Secretary, consistent with the Department's publication *Hazardous Industry Planning Advisory Paper No. 6, 'Guidelines for Hazard Analysis'*. The Final Hazard Analysis must report on the implementation of the recommendation made by the Preliminary Hazard Assessment, within the EIS.
- (c) Construction Safety Study for the mine processing facility and gas pipeline, prepared in accordance with *Hazardous Industry Planning Advisory Paper No. 7, 'Construction Safety Study Guidelines'*.
- (d) Hazard and Operability Study for the mine processing facility and **gas pipeline**, to be conducted by a suitably qualified and experienced team and chaired by a suitably qualified and independent, whose appointments have been endorsed by the Secretary. The study shall be consistent with the Department's *Hazardous Industry Planning Advisory Paper No. 8, 'HAZOP Guidelines'*. The final report for the study must be accompanied by a program for the implementation of all recommendations made within the report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented

52A. Construction of the mine processing facility and gas pipeline must not commence until approval of the Pre-Construction Hazard Studies has been given by the Secretary.

Pre-Commissioning Hazard Studies

- 53. Prior to commissioning of the mine processing facility and gas pipeline, the Applicant must prepare and submit for approval:
 - (a) Transport of Hazardous Materials Study for the development, covering the transport of hazardous materials including details of routes to be used for the movement of vehicles carrying hazardous materials to or from the development. The Study must be carried out in accordance with the Department's publication *Hazardous Industry Planning Advisory Paper No. 11, 'Route Selection'*. Suitable routes identified in the Study must be used except where departures are necessary for local deliveries or emergencies.
 - (b) Emergency Plan for the development, prepared by suitably qualified person(s) approved by the Secretary, that is consistent with the Department's publication *Hazardous Industry Planning Advisory Paper No. 1, 'Industry Emergency Planning Guidelines'*. The Plan must be developed in consultation with the State Emergency Services, RFS and Fire & Rescue NSW, and include detailed procedures for the development and include consideration of the safety of all people outside the development who may be at risk from the development.
 - (c) Safety Management System for the development, prepared in accordance with the Department's publication *Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'*. The System must cover all operations on-site and associated transport activities involving hazardous materials. All safety-related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to procedures, must be clearly specified in the System. Records must be kept on-site and must be available for inspection by the Secretary upon request.

53A. Commissioning of the mine processing facility and gas pipeline must not commence until approval of the Pre-Commissioning Hazard Studies has been given by the Secretary.

WASTE

- 54. The Applicant must:
 - (a) implement all reasonable and feasible measures to minimise the waste generated by the development;
 - (b) classify all waste in accordance with the EPA's *Waste Classification Guidelines 2014* (or its latest version);
 - (c) store and handle all waste generated on site in accordance with its classification;
 - (d) not receive or dispose of any waste on site;
 - (e) ensure that waste is disposed of at appropriately licensed waste facilities; and
 - (f) manage on-site sewage treatment and disposal in accordance with the requirements of the relevant Councils and EPA.

REHABILITATION

Rehabilitation Objectives

- 55. The Applicant must rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EIS, and comply with the objectives in Table 10.

Table 10: Rehabilitation Objectives

Feature	Objective
Site (as a whole)	• Safe, stable & non-polluting • Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation of the site • Final landforms to: - restore native vegetation communities and ecosystem function (in the applicable domains); - sustain the intended land use for the post-mining domains; - minimise visual impacts - be generally in keeping with the natural terrain features of the area; - incorporate micro-relief • incorporate drainage lines consistent with topography and natural drainage where reasonable and feasible
Final voids	• Minimise: - the size and depth of the final void/s - the drainage catchment of the final voids - risk of flood interaction for all flood events up to and including a 1 in 100 year or 1% annual exceedance probability storm event
Surface infrastructure	• To be decommissioned and removed, unless agreed otherwise by the Secretary
Agriculture	• Agriculture (pasture for grazing) land use areas are established and self-sustaining within a reasonable timeframe
Community	• Ensure public safety • Minimise the adverse socio-economic effects of mine closure

Progressive Rehabilitation

56. The Applicant must rehabilitate the site progressively, that is, as soon as is practicable following disturbance, to the satisfaction of the Secretary Industry.

Rehabilitation Management Plan

57. Prior to carrying out any development under this consent after 6 May 2017, the Applicant must prepare a Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with the Department, OEH, DPI and relevant Councils;
 - be prepared in accordance with relevant guidelines and consistent with the rehabilitation objectives in the EIS and in Table 10;
 - include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);
 - describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, and address all aspects of rehabilitation including timeframes for achieving specified rehabilitation objectives;
 - review the final land use options, including the use of void water at the mine and limestone quarry;
 - include a mine closure strategy that details measures to minimise the long term impacts associated with mine closure, including final landform and the final voids, final land use and socio-economic issues;
 - include interim rehabilitation where necessary to minimise the area exposed for dust generation;
 - include a strategy for the preparation of the site for habitat rehabilitation as part of the revegetation program, including the exclusion of stock feeding on bushland reconstruction areas;
 - include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and
 - build to the maximum extent practicable on the other management plans required under this consent.
58. The Applicant must implement the approved Rehabilitation Management Plan for the development.

SCHEDULE 4

ADDITIONAL PROCEDURES

INDEPENDENT REVIEW

1. If an owner of privately-owned land considers the development to be exceeding the relevant criteria in schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.

If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant must:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:
 - consult with the landowner to determine his/her concerns;
 - conduct monitoring to determine whether the development is complying with the relevant criteria in schedule 3; and
 - if the development is not complying with these criteria, then identify the measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Secretary and landowner a copy of the independent review.

Note: Where the independent review finds that the development is not complying with applicable criteria, the Department may take enforcement action under the EP&A Act to ensure compliance with the consent.

SCHEDULE 5

ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. Prior to carrying out any development under this consent after 6 May 2017, the Applicant must prepare an Environmental Management Strategy for the development in consultation with the relevant authorities and the CCC and to the satisfaction of the Secretary. This strategy must:
 - (a) provide the strategic framework for environmental management of the development;
 - (b) identify the statutory approvals that apply to the development;
 - (c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (d) include overall ecological and community objectives for the development, and a strategy for the restoration and management of the areas affected by operations, including elements such as creek lines and drainage channels, within the context of those objectives;
 - (e) identify cumulative environmental impacts and procedures for dealing with these at each stage of the development;
 - (f) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise;
 - respond to any non-compliance; and
 - respond to emergencies; and
 - (g) include:
 - copies of any strategies, plans and programs approved under the conditions of this consent; and
 - a clear plan depicting all the monitoring to be carried out in relation to the development.
2. Following approval, the Applicant must carry out the development in accordance with this strategy.

Adaptive Management

3. The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:

- (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.

Management Plan Requirements

4. The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, are consistent with other plans prepared for other stakeholders, and include:
 - (a) detailed baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - any relevant limits or performance measures/criteria;
 - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
 - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
 - (d) a program to monitor and report on the:
 - impacts and environmental performance of the development;
 - effectiveness of any management measures (see c above);
 - (e) a contingency plan to manage any unpredicted impacts and their consequences;

- (f) a program to investigate and implement ways to improve the environmental performance of the development over time;
- (g) a protocol for managing and reporting any:
 - incidents;
 - complaints;
 - non-compliances with statutory requirements; and
 - exceedances of the impact assessment criteria and/or performance criteria; and
- (h) a protocol for periodic review of the plan.

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

Annual Review

5. By the end of March each year, the Applicant must review the environmental performance of the development for the previous calendar year to the satisfaction of the Secretary. This review must:
 - (a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;
 - (b) include a comprehensive review of the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the:
 - relevant statutory requirements, limits or performance measures/criteria;
 - monitoring results of previous years; and
 - relevant predictions in the EIS;
 - (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - (d) identify any trends in the monitoring data over the life of the development;
 - (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - (f) describe what measures will be implemented over the next year to improve the environmental performance of the development.

Revision of Strategies, Plans and Programs

6. Within 3 months of the submission of:
 - (a) annual review under condition 4 above;
 - (b) incident report under condition 8 below;
 - (c) audit under condition 10 below; or
 - (d) any modification to the conditions of this consent (unless the conditions require otherwise),

the Applicant must review and, if necessary, revise the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.

Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted to the Secretary for approval.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.

Community Consultative Committee

7. The Applicant must establish and operate a CCC for the development to the satisfaction of the Secretary, in accordance with the *Community Consultative Committee Guidelines for State Significant Project (2016)*, or its latest version. The Applicant must ensure at least one CCC meeting is held prior to any development at the mine, unless the Secretary agrees otherwise.

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.*
- *In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Applicant, Councils, and the local community.*

REPORTING

Incident Reporting

8. The Applicant must immediately notify the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the development, the Applicant must notify the Secretary and any other relevant agencies as soon as practicable after the Applicant becomes aware of the incident. Within 7 days of the date of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

9. The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

AUDITING

10. Within 1 year of the commencement of the development, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
 - (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
 - (b) include consultation with the relevant agencies;
 - (c) assess the environmental performance of the development and assess whether it is complying with the requirements in this consent, and any other relevant approvals, EPL/s; and/or mining lease/s;
 - (d) include a comprehensive Hazard Audit of the development in accordance with the Department's publication *Hazardous Industry Planning Advisory paper No. 5 - Hazard Audit Guidelines*, including a review of the Site Safety Management System and all entries made in the incident register since the previous Audit.
 - (e) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and
 - (f) recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals.

Note: This audit team must be led by a suitably qualified auditor, and include experts in water resources, noise, air quality, ecology, and any other fields specified by the Secretary.

11. Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

ACCESS TO INFORMATION

12. The Applicant must:
 - (a) make the following information publicly available on its website as relevant to the stage of the development:
 - the EIS;
 - current statutory approvals for the development;
 - approved strategies, plans or programs required under the conditions of this consent;
 - a comprehensive summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;
 - a complaints register, which is to be updated on a monthly basis;
 - any independent environmental audit, and the Applicant's response to the recommendations in any audit; and
 - any other matter required by the Secretary; and
 - (b) keep this information up to date, to the satisfaction of the Secretary.

APPENDIX 1

SCHEDULE OF LAND

Site	Land Description
Mine	Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11 DP 754021 Lot 7001 DP 1028245 Lots 7301 and 7302 DP 1148734 Lot 7303 DP 1148889 Lot 1 DP 652705
Fifield Bypass Road	Lots 8 and 28 DP 752111 Crown Road
Limestone quarry	Lots 11, 12 and 24 DP 752089 Lot 352 DP 629402 Lot 281 DP 610057
Rail siding	Part Lot 39 DP 752117
Gas pipeline	Lots 10 and 17 DP 752086 Lots 4, 5, 27 and 28 DP 752087 Lots 1 and 2 DP 580284
Borefields/water pipeline	Lot 6 DP 598735 Lots 24 and 103 DP 752106
Accommodation camp	Lot 17 DP 752086

And all Crown road reserves, crown land, road reserves, main roads, rail corridors, and travelling stock routes within the development application area, as modified.

APPENDIX 2
DEVELOPMENT LAYOUT PLANS

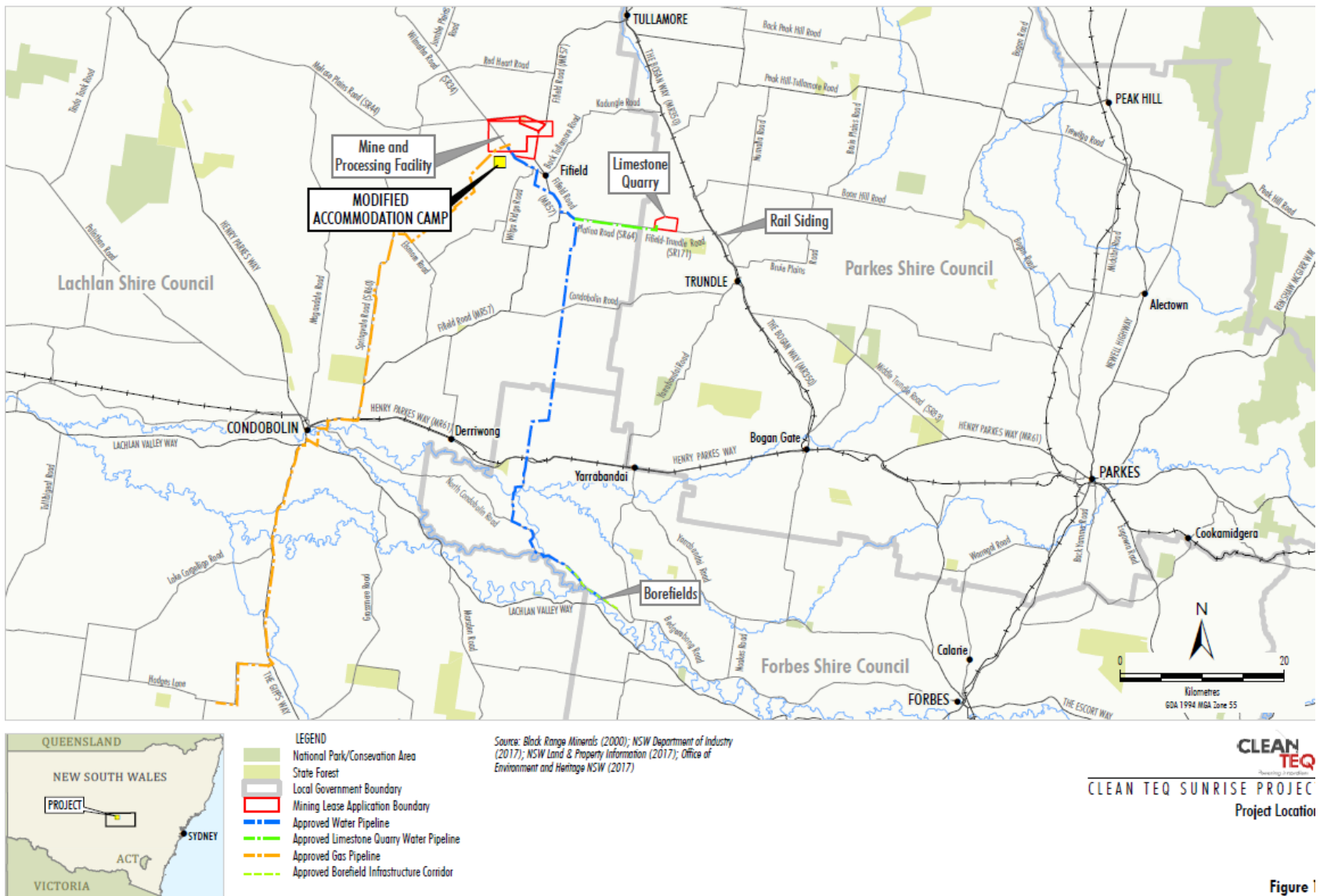


Figure 1

Figure 1: Development Components

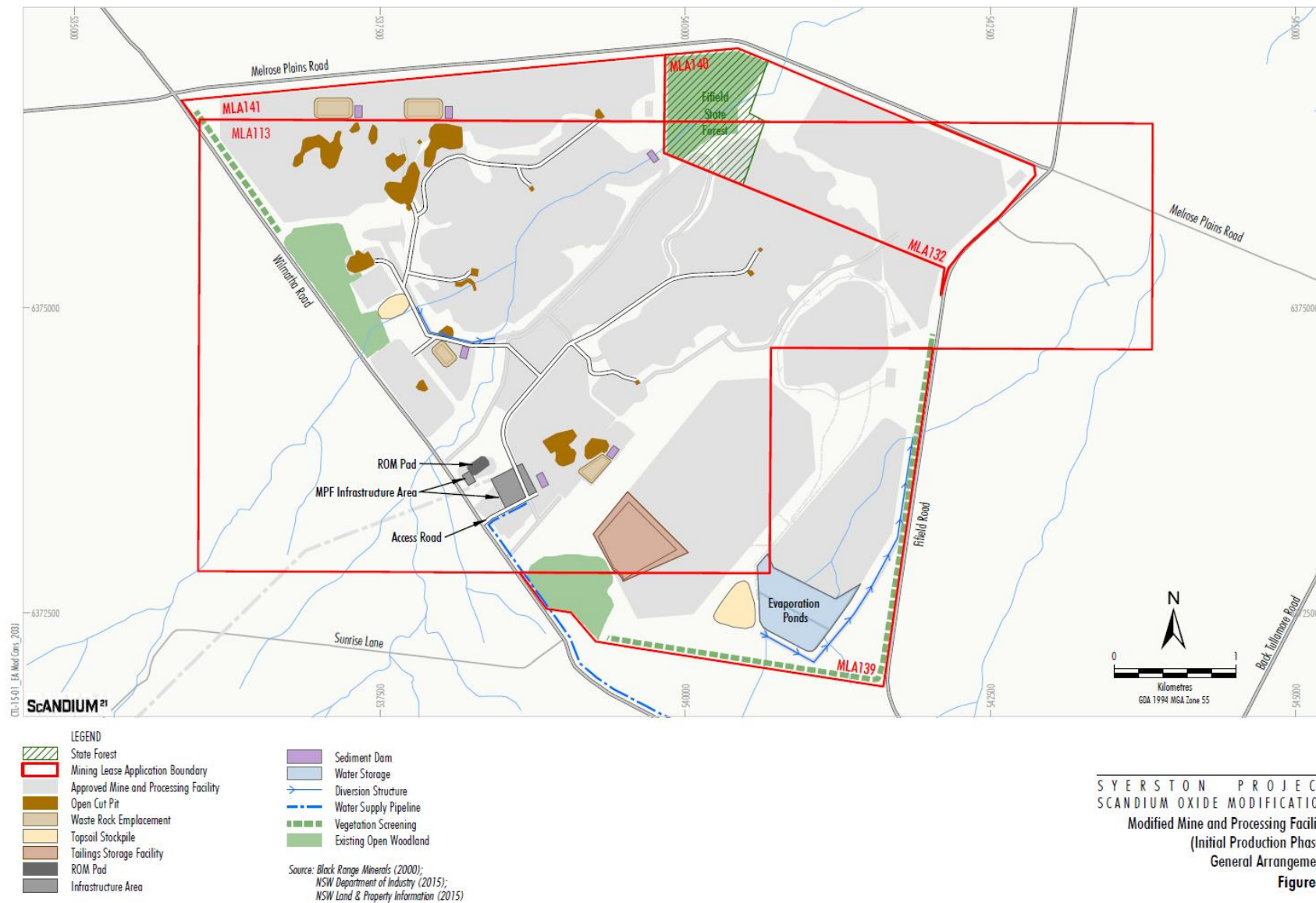
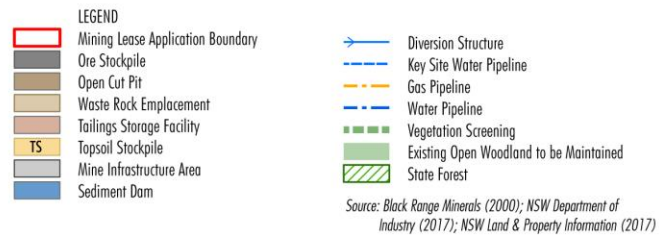
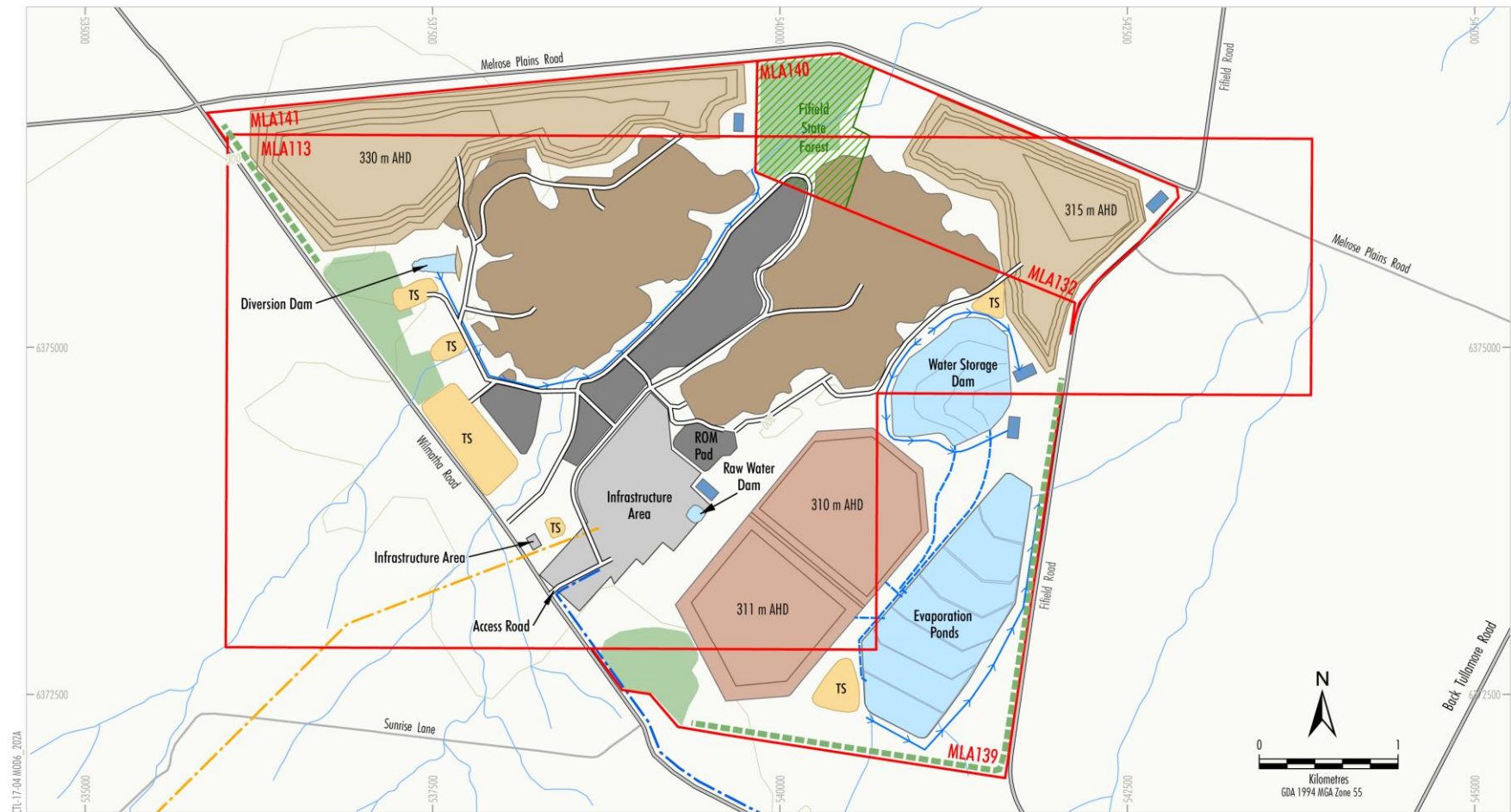


Figure 2: Mine Layout - stage 1



CLEAN TEQ
Powering innovation

CLEAN TEQ SUNRISE PROJECT
Approved Mine and Processing Facility
General Arrangement
(Full Production Phase)

Figure 1

Figure 3: Mine Layout - stage 2

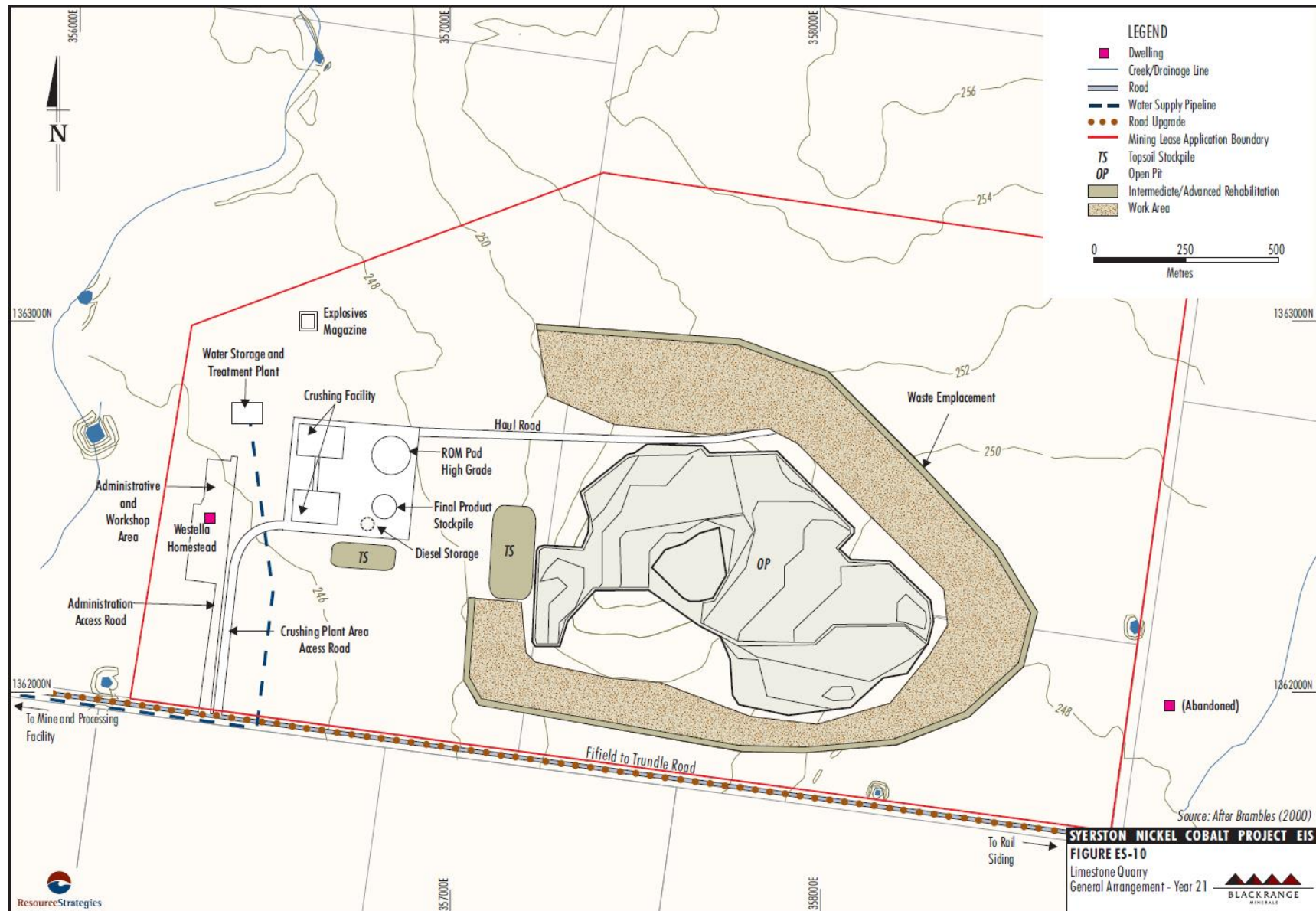


Figure 4: Limestone Quarry Layout

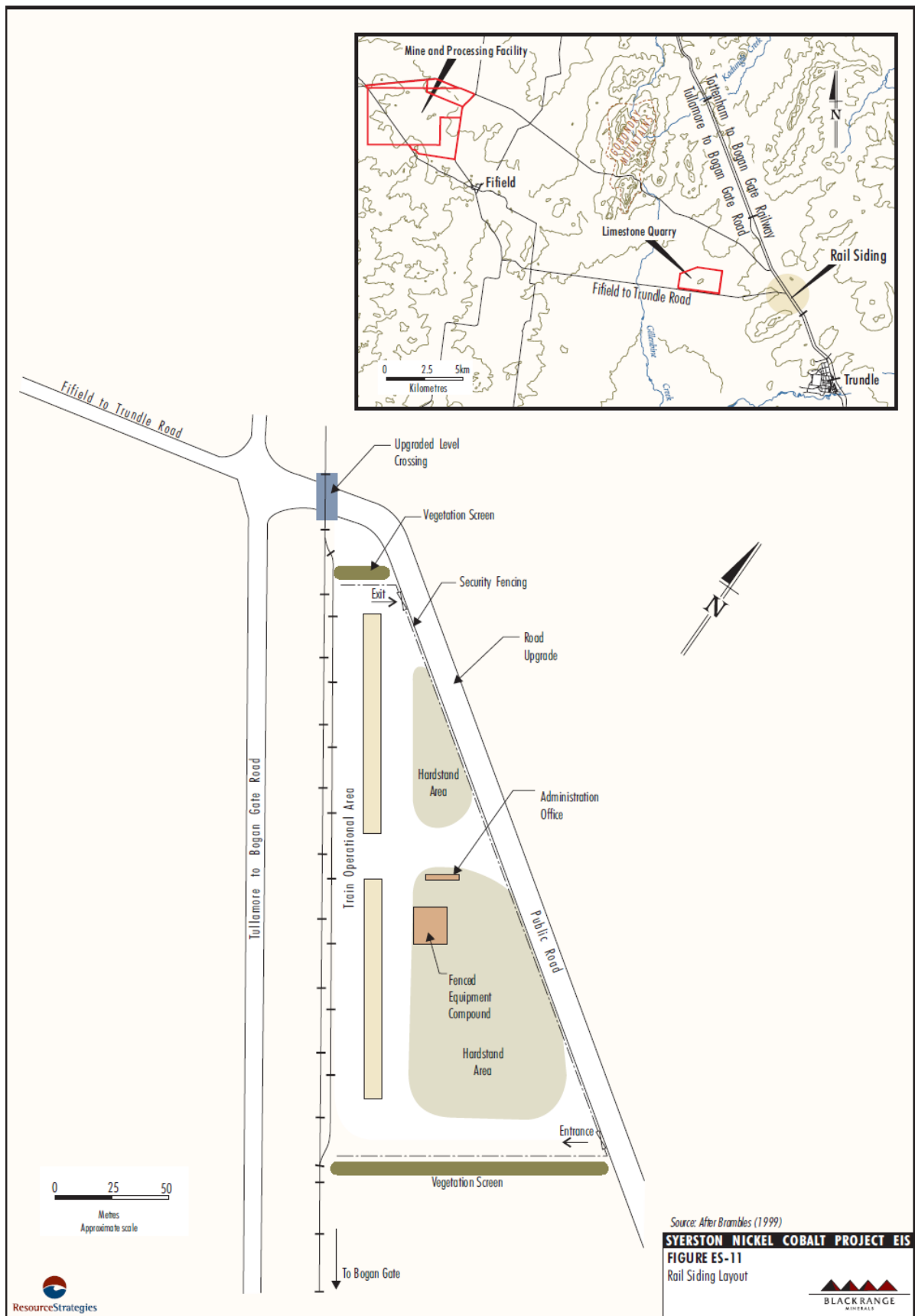


Figure 5: Rail Siding Layout

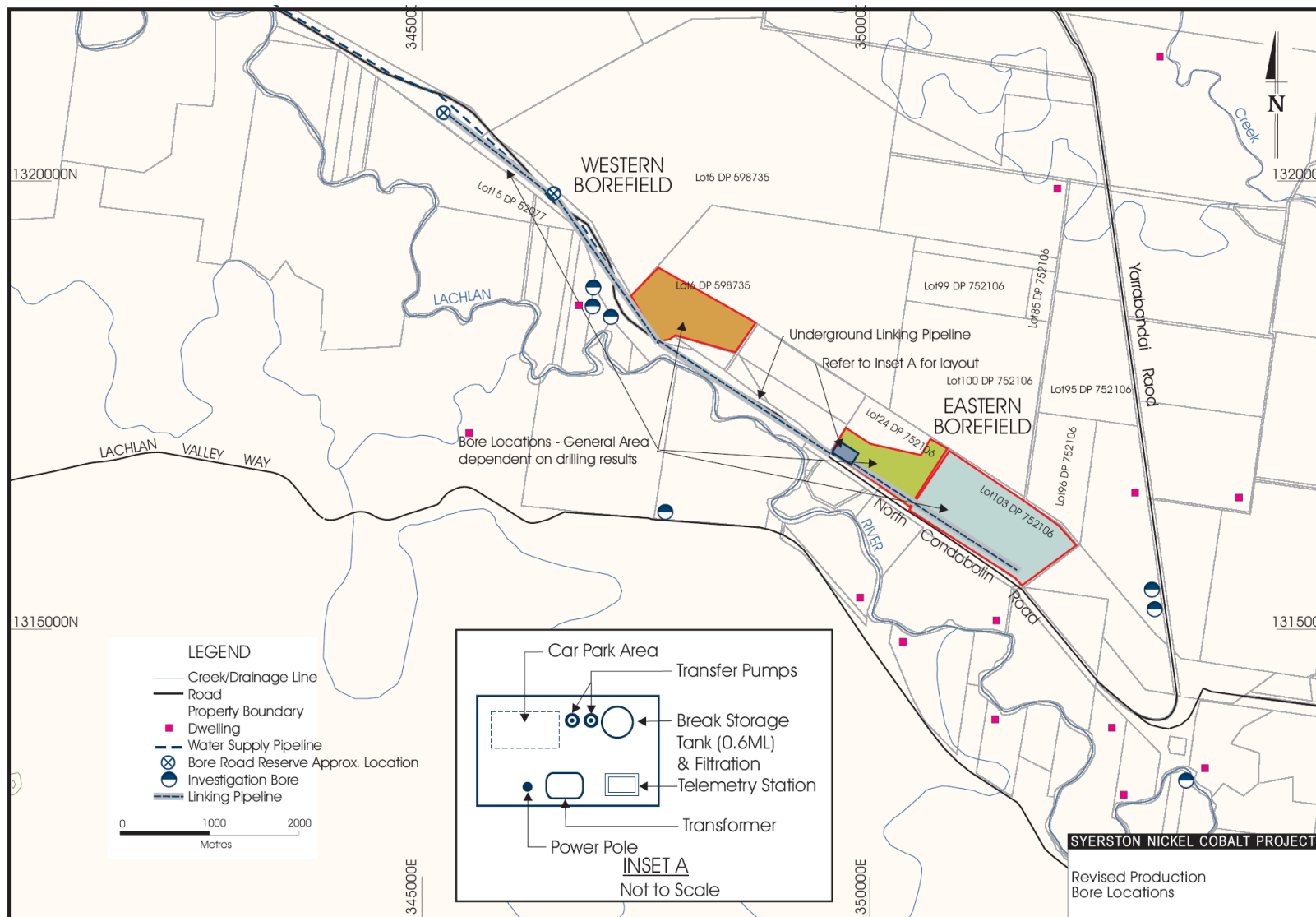


Figure 6: Borefields Layout

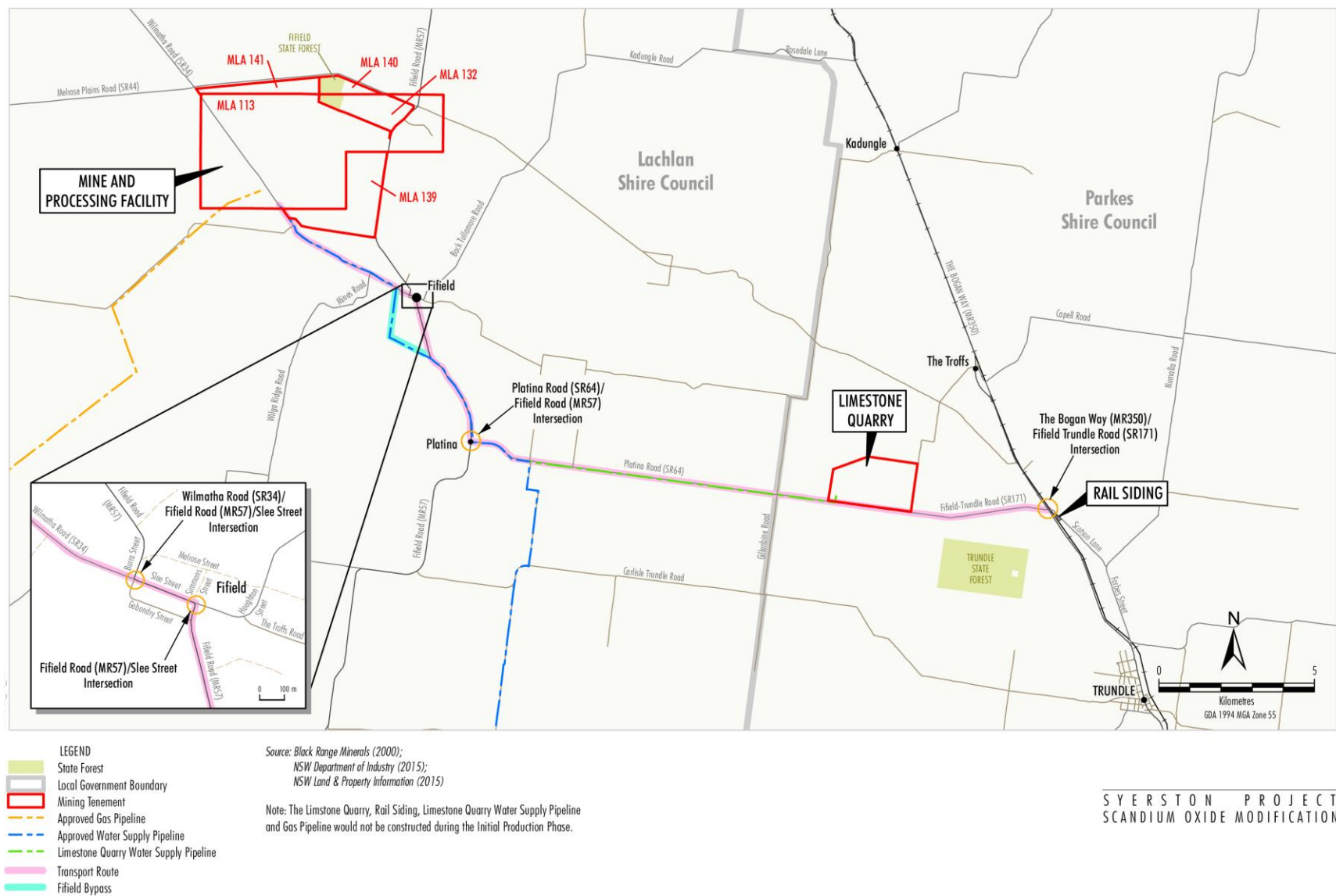


Figure 7: Transport Route

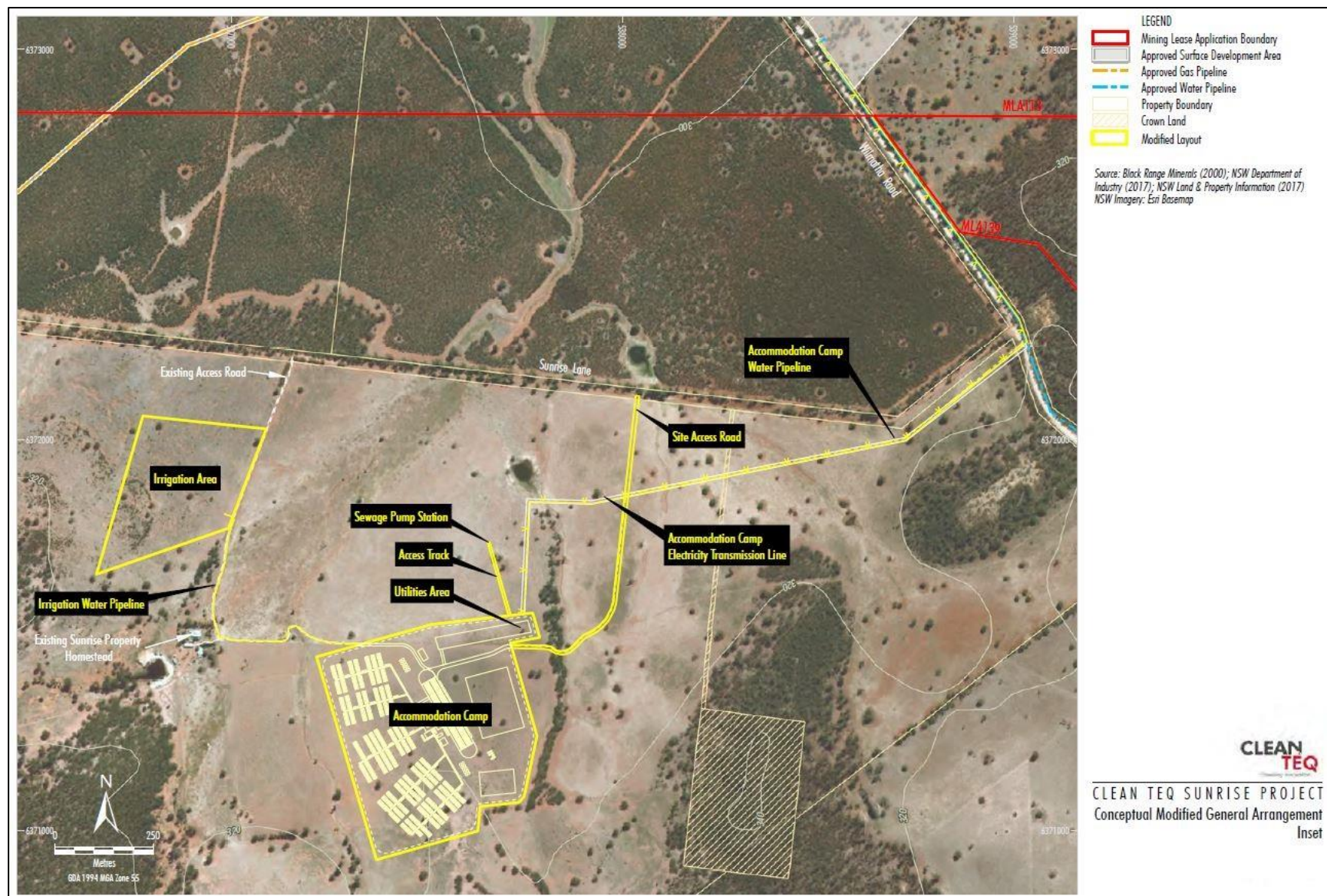


Figure 8: Accommodation Camp Layout

APPENDIX 3
TERMS OF VOLUNTARY PLANNING AGREEMENTS

Proposed Voluntary Planning Agreement Framework Syerston Nickel Cobalt Project Lachlan Shire Council

COMMUNITY ENHANCEMENT

1. The owner of the Syerston Mine (the owner) shall pay the following construction community enhancement contribution to the Lachlan Shire Council (LSC) for the provision of infrastructure and services generated by the development within six months of the commencement of construction of the Mine and processing facility.

Construction Community Enhancement Contribution (\$) = \$200,000

2. From the commencement of operation of the processing facility until mining operations cease on the site, the owner shall pay the following annual contribution to the LSC for the provision of infrastructure and services generated by the development.

Annual Operations Community Enhancement Contribution (\$) =

\$100,000 +

$\$300,000 \times Em \div 335 \times WF_{LSC}$

Notes:

- *Em* = the number of full-time equivalent employees/contractors at the Project.
- WF_{LSC} = the percentage of the workforce residing in Forbes Shire, Lachlan Shire and Parkes Shire that resides in Lachlan Shire as determined by employment records held by the owner.
- *Em* and WF_{LSC} are to be calculated for the first time within three months of the commencement of operation of the processing facility, and then recalculated on the same date each following year.
- The \$100,000 and \$300,000 shall be indexed according to the CPI at the time of payments after the initial payment.
- The fixed \$100,000 component shall be reviewed between the owner and LSC every 5 years from the date of commencement of operation of the processing facility.

The owner shall pay the first annual operations community enhancement contribution within six months of the commencement of operation of the processing facility, and then paid on the same date each following year until mining operations cease on the site.

Recognition of the owner's contribution to the potential supply of borefield water to the Fifield township will be discussed and agreed between the owner and LSC.

ROAD UPGRADES

3. Prior to the commissioning of the accommodation camp, the owner shall pay for the following upgrades of Sunrise Lane (between the accommodation camp site access road and Wilmatha Road [SR34]):

- all weather unsealed surface for an operating speed standard of 80 km/h; and.
- carriageway width of 9 m (equivalent to two 3.5 m lanes and two 1.0 m wide shoulders).

Prior to the commissioning of the Mine and processing facility, the owner shall pay for the following upgrades:

- road pavement (8.0 m sealed pavement and 1.0 m gravel shoulders); and
- all private access roads (3.5 m sealed private access road approach and 3.0 m gravel shoulders along road 30 m either side of all private access roads).

to the following roads (Figures 1a and 1b):

- **Platina Road [SR64]** (between the Lachlan Shire boundary and Fifield Road [MR57]);
- **Fifield Road [MR57]** (between Platina Road [SR64] and Snee St [in Fifield Village]); and
- **Wilmatha Road [SR34]** (between Snee St [in Fifield Village] and the Mine and processing facility access road).

In addition, prior to the commissioning of the Mine and processing facility, the owner shall pay for the following intersection upgrades (Figure 1b):

- **Platina Road [SR64] /Fifield Road [MR57] Intersection** – upgrade signage and line marking in accordance with relevant Austroads requirements.
- **Fifield Road [MR57] /Slee Street [in Fifield Village] Intersection** – upgrade signage and line marking in accordance with relevant Austroads requirements.
- **Slee Street [in Fifield Village]/Wilmatha Road [SR34]/Fifield Road Intersection** – upgrade signage and line marking in accordance with relevant Austroads requirements (including installation of advance warning signs on the Slee Street [in Fifield Village], Fifield Road [MR57] and Wilmatha Road [SR34] approaches).
- **Sunrise Lane/Wilmatha Road [SR34] Intersection**- remove the transition between the gravel and dirt surfaces while Wilmatha Road remains unsealed, and then seal a minimum of 30 m of Sunrise Lane on the approach to the intersection once Wilmatha Road is sealed.

4. The owner shall prepare a road construction programme detailing the timing and scheduling of road upgrades required by Condition 3 above. The programme shall be prepared by the owner in consultation with LSC, prior to commencement of construction of the Mine and processing facility. The road upgrades described in Condition 3 above shall be undertaken in accordance with the road construction programme unless otherwise agreed with LSC. The road upgrades can be undertaken by the LSC or an alternative appropriately qualified contractor.

5. Prior to the commissioning of the limestone quarry and/or Rail Siding, the owner shall pay for a road safety audit to determine road upgrade requirements on the following roads (including intersections and rail crossings) (Figures 1a and 1b):

- **Henry Parkes Way [MR61]** (between Jones Lane [eastern outskirts of Condobolin] and Fifield Road [MR57]);
- **Fifield Road [MR57]** (between Henry Parkes Way [MR61] and Slee St [in Fifield Village] and between Slee St [in Fifield Village] and Red Heart Road [SR41]);
- **Platina Road [SR64]** (between the Lachlan Shire Boundary and Fifield Road [MR57]);
- **Slee St [in Fifield Village]** (between Fifield Road [MR57] and Wilmatha Road [SR34]); and
- **Wilmatha Road [SR34]** (between Slee St [in Fifield Village] and Melrose Plains Road [SR44]);
- **Springvale Road [SR60]** (between Fifield Road [MR57] and Melrose Plains Road [SR44]);
- **Melrose Plains Road [SR44]** (between Springvale Road [SR60] and 4.65 km after the Melrose Plains Road [SR44]/Back Tullamore Road [SR1151] Intersection).

The road safety audit must also determine if the Fifield Bypass is required.

6. Prior to the commissioning of the limestone quarry and/or Rail Siding, the owner shall pay for the road upgrades identified in the road safety audit and agreed with the LSC, described in Condition 5 above.

ROAD MAINTENANCE

7. The owner shall maintain Sunrise Lane (between the accommodation camp site access road and Wilmatha Road [SR34]), to the satisfaction of LSC, during construction and operation of the mine and processing facility.

8. The owner shall make annual contributions to LSC towards the maintenance of the following roads associated with the heavy vehicle transport route (Figures 2a and 2b):

- **Platina Road [SR64]** (between the Lachlan Shire boundary and Fifield Road [MR57]); and
- **Fifield Road [MR57]** (between Platina Road [SR64] and Slee St [in Fifield Village]);

- **Slee St [in Fifield Village]** (between Fifield Road [MR57] and Wilmatha Road [SR34]); and
- **Wilmatha Road [SR34]** (between Slee St [in Fifield Village] and the Mine and processing facility access road).

The owner shall also make annual contributions to LSC towards the maintenance of the following roads that are likely to experience additional light vehicle traffic (Figures 2a and 2b):

- **Fifield Road [MR57]** (between Henry Parkes Way [MR61] and Platina Road [SR64]); and
- **Henry Parkes Way [MR61]** (between Jones Lane [eastern outskirts of Condobolin] and Fifield Road [MR57]).

The first annual contribution is to be made within 12 months of the commencement of construction of the Mine and processing facility, and then paid on the same date each following year until mining operations cease on the site.

The owner and LSC are to agree on the annual maintenance monitoring programme for the above listed roads prior to implementation and review this programme every year.

Each contribution is to be calculated as follows:

Annual ongoing maintenance contribution (\$) = $VM\%_{SR64} \times \text{Annual Expenditure}_{SR64} + VM\%_{MR57} \times \text{Annual Expenditure}_{MR57} + VM\%_{Slee\ St} \times \text{Annual Expenditure}_{Slee\ St} + VM\%_{SR34} \times \text{Annual Expenditure}_{SR34} + VM\%_{MR57} \times \text{Annual Expenditure}_{MR57} + VM\%_{MR61} \times \text{Annual Expenditure}_{MR61}$

Notes:

- *Annual Expenditure is the total annual standard road maintenance expenditure carried out by LSC on the above listed sections of road as evidenced by LSC records. Standard road maintenance expenditure must be associated with maintenance activities required to maintain the roads at the Levels as defined in the latest approved version of Lachlan Shire Council's Transport Services – Roads Asset Management Plan (unless otherwise agreed between the owner and the LSC).*
- *VM% = percentage of Syerston Mine vehicle axle counts to the total number of vehicle axle counts on the relevant sections of road listed above in the relevant 12 month period.*
- *The owner shall prepare and implement a Traffic Monitoring Programme in consultation with LSC, which contains suitable monitoring measures to accurately determine both the annual VM% and total annual vehicle axle counts on the above listed roads.*

Proposed Voluntary Planning Agreement Syerston Nickel Cobalt Project Forbes Shire Council

COMMUNITY ENHANCEMENT

1. The owner of the Syerston Mine (the owner) shall pay the following construction community enhancement contribution to the Forbes Shire Council (FSC) for the provision of infrastructure and services generated by the development within six months of the commencement of construction of the Mine and processing facility.

Construction Community Enhancement Contribution (\$) = \$100,000

2. From the commencement of operation of the processing facility until mining operations cease on the site, the owner shall pay the following annual contribution to the FSC for the provision of infrastructure and services generated by the development.

Annual Operations Community Enhancement Contribution (\$) = $\$300,000 \times E_m \div 335 \times WF_{FSC}$

Notes:

- E_m = the number of full-time equivalent employees/contractors at the Project.
- WF_{FSC} = the percentage of the workforce residing in FSC, LSC and PSC that resides in FSC as determined by employment records held by the owner.
- E_m and WF_{FSC} are to be calculated for the first time within three months of the commencement of run-of-Mine ore processing, and then recalculated on the same date each following year.
- \$300,000 shall be indexed according to the CPI at the time of payments after the initial payment.

The owner shall pay the first annual operations community enhancement contribution within six months of the commencement of operation of the processing facility, and then paid on the same date each following year until mining operations cease on the site.

Recognition of the owner's contribution to the potential supply of borefield water to the Ootha township will be discussed and agreed between the owner and FSC.

Proposed Voluntary Planning Agreement Syerston Nickel Cobalt Project Parkes Shire Council

COMMUNITY ENHANCEMENT

1. The owner of the Syerston Mine (the owner) shall pay the following construction community enhancement contribution to the Parkes Shire Council (PSC) for the provision of infrastructure and services generated by the development within six months of the commencement of construction of the Mine and processing facility.

Construction Community Enhancement Contribution (\$) = \$100,000

2. From the commencement of operation of the processing facility until mining operations cease on the site, the owner shall pay the following annual contribution to the PSC for the provision of infrastructure and services generated by the development.

Annual Operations Community Enhancement Contribution (\$) = $\$300,000 \times Em \div 335 \times WF_{PSC}$

Notes:

- *Em = the number of full-time equivalent employees/contractors at the Project.*
- *WF_{PSC} = the percentage of the workforce residing in Forbes Shire, Lachlan Shire and Parkes Shire that resides in Parkes Shire as determined by employment records held by the owner.*
- *Em and WF_{PSC} are to be calculated for the first time within three months of the commencement of run-of-Mine ore processing, and then recalculated on the same date each following year.*
- *\$300,000 shall be indexed according to the CPI at the time of payments after the initial payment.*

The owner shall pay the first annual operations community enhancement contribution within six months of the commencement of operation of the processing facility, and then paid on the same date each following year until mining operations cease on the site.

APPENDIX 4

NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions

13. The noise criteria in conditions 1 - 3 of Schedule 3 apply under all meteorological conditions except the following:
- (a) wind speeds greater than 3 m/s at 10 metres above ground level; or
 - (b) stability category F temperature inversion conditions and wind speeds greater than 2 m/s at 10 m above ground level; or
 - (c) Pascall stability classes G temperature inversion conditions

Determination of Meteorological Conditions

14. Except for wind speed at microphone height, the data to be used for determining meteorological conditions must be that recorded by the meteorological station on or in the vicinity of the Mine.

Compliance Monitoring

15. Unless directed otherwise by the Secretary, attended monitoring is to be used to evaluate compliance with the relevant conditions of consent.

Note: The Noise Management Plan (see condition 7 of Schedule 3) is required to include a noise monitoring program for the development, which will include details of the frequency of monitoring. The Secretary may direct that the frequency of monitoring increase or decrease at any time during the life of the development.

16. Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the NSW Industrial Noise Policy (as amended or replaced from time to time), in particular the requirements relating to:
- (a) monitoring locations for the collection of representative noise data;
 - (b) meteorological conditions during which collection of noise data is not appropriate;
 - (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and
 - (d) modifications to noise data collected including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.

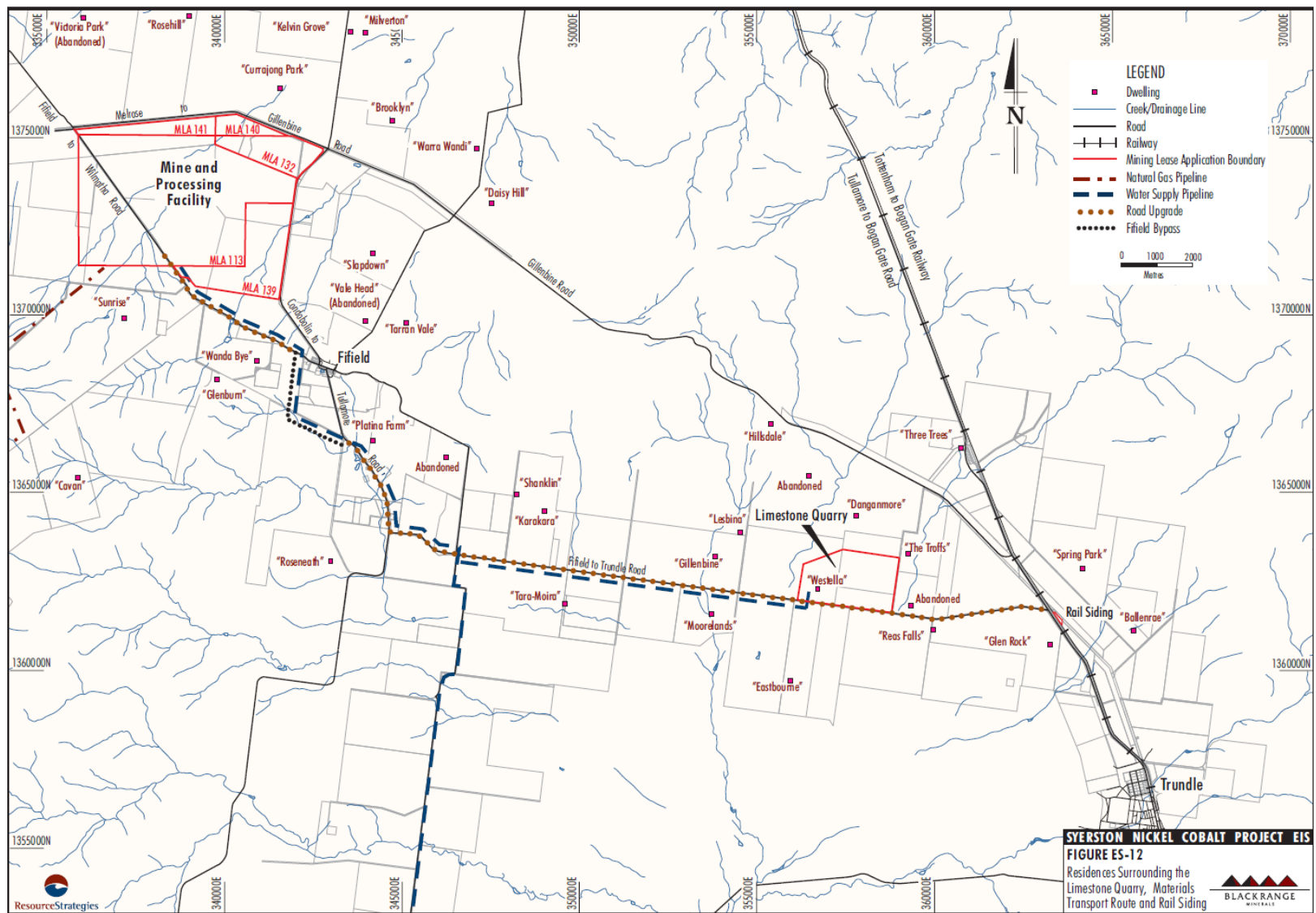


Figure 8: Residences surrounding the development

APPENDIX 5

ROAD AND INTERSECTION UPGRADES

1. Road upgrades – prior to commissioning of the mine processing facility	(a) Platina Road [SR64] (between the Lachlan Shire boundary and Fifield Road [MR57]); (b) Fifield Road [MR57] (between Platina Road [SR64] and Slee St [in Fifield Village]); (c) Wilmatha Road [SR34] (between Slee St [in Fifield Village] and the mine; and (d) Fifield Trundle Road [SR171] (between The Bogan Way [MR350] and the Parkes Shire boundary)
2. Intersection upgrades – prior to commissioning of the mine processing facility	(a) Platina Road [SR64] / Fifield Road [MR57]; (b) Fifield Road [MR57] / Slee Street [In Fifield Village]; (c) Slee Street [In Fifield Village] / Wilmatha Road [SR34] / Fifield Road; (d) The Bogan Way [MR350] / Fifield Trundle Road [SR171]; (e) Henry Parkes Way and Middle Trundle Road; (f) Henry Parkes Way and The Bogan Way; and (g) Sunrise Lane and Wilmatha Road [SR34].
3. Further road and intersection upgrades – prior to the development of the limestone quarry or rail siding	(a) Henry Parkes Way [SR61] (between Jones Lane and Fifield Road [MR57]); (b) Fifield Road [MR57] (between Henry Parkes Way [MR61] and Slee St [In Fifield Village] and between Slee St [in Fifield Village] and Red Heart Road [SR41]; (c) Platina Road [SR64] (between Lachlan Shire boundary and Fifield Road [MR57] ; (d) Slee St [in Fifield Village] (between Fifield Road [MR57] and Wilmatha Road [SR34]; (e) Wilmatha Road [SR34] (between Slee St [in Fifield Village] and Melrose Plains Road [SR44]); (f) Springvale Road [SR60] (between Fifield Road [MR57] and Melrose Plains Road [SR44]); (g) Henry Parkes Way [MR61] (between Westlime Road [western outskirts of Parkes] and The Bogan Way [MR350]) ; (h) Middle Trundle Road [SR83] (between Henry Parkes Way [MR61] and The Bogan Way [MR350]); (i) The Bogan Way [MR350] (between Henry Parkes Way [MR61] and Fifield Trundle Road [SR171]); (j) Fifield Trundle Road [SR171] (between The Bogan Way [MR350] and the Parkes Shire boundary); and (k) Melrose Plains Road [SR44] (between Springvale Road [SR60] and 4.65 km after the Melrose Plains Road [SR44] / Back Tullamore Road [SR1151] intersection).
4. Road upgrades – prior to commissioning of the accommodation camp	(a) Sunrise Lane, between the accommodation camp and Wilmatha Road [SR34].
5. Intersection upgrades – prior to commissioning of the accommodation camp	(a) Accommodation camp access road and Sunrise Lane.