



**sunrise**  
energy metals

# Sunrise Project

## Road Upgrade and Maintenance Strategy



November 2022



SUNRISE PROJECT  
ROAD UPGRADE AND MAINTENANCE STRATEGY  
REVISION 2



3 NOVEMBER 2022  
Project No. CTL-17-03  
2020-CTEQ-1220-41PA-0001

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## 1. INTRODUCTION

The Sunrise Project (the Project) is situated near the village of Fifield, approximately 350 kilometres (km) west-northwest of Sydney, in New South Wales (NSW) (Figure 1).

The Project includes the establishment and operation of the following:

- mine (including the processing facility);
- limestone quarry;
- rail siding;
- gas pipeline;
- borefield, surface water extraction infrastructure and water pipeline;
- accommodation camp; and
- associated transport activities and transport infrastructure (e.g. the Fifield Bypass, road and intersection upgrades).

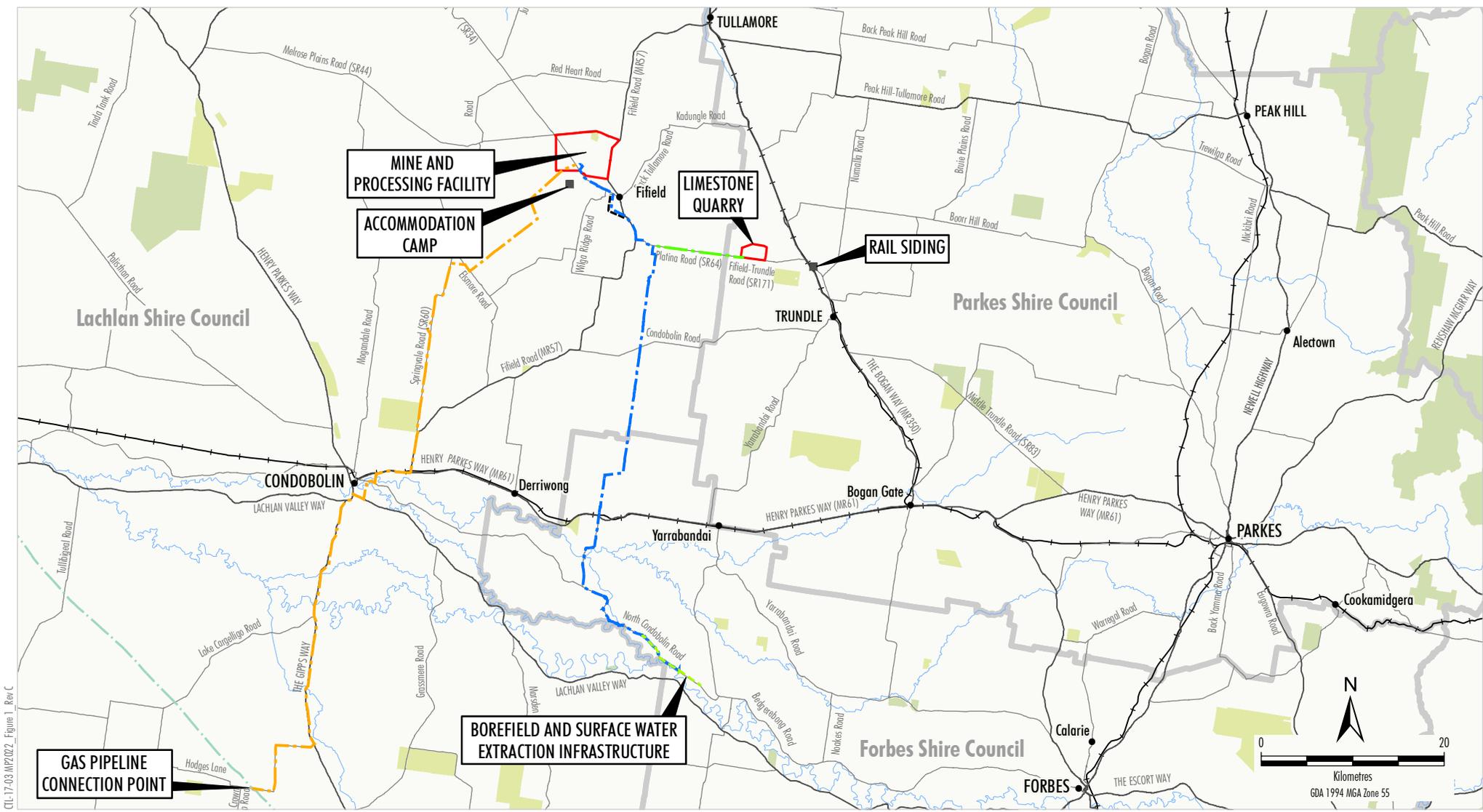
SRL Ops Pty Ltd owns the rights to develop the Project. SRL Ops Pty Ltd is a wholly owned subsidiary of Sunrise Energy Metals Limited (SEM)<sup>1</sup>.

Development Consent DA 374-11-00 for the Project was issued under Part 4 of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act) in 2001. Seven modifications to Development Consent DA 374-11-00 have since been granted under the EP&A Act:

- 2005 – to allow for an increase of the autoclave feed rate, limestone quarry extraction rate and adjustments to ore processing operations;
- 2006 – to allow for the reconfiguration of the borefield;
- 2017 – to allow for the production of scandium oxide;
- 2017 – to amend hazard study requirements;
- 2018 – to relocate the accommodation camp;
- 2018 – to implement opportunities to improve the overall efficiency of the Project; and
- 2022 – to implement changes to optimise the construction and operation of the Project.

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<sup>1</sup> SEM was previously Clean TeQ Holdings Limited (Clean TeQ).



CLC-17-03 IMP2022\_Figure 1\_Rev C



- LEGEND**
- National Park/Conservation Area
  - State Forest
  - Local Government Boundary
  - Railway
  - Existing Gas Pipeline
  - Mining Lease Boundary (ML)
  - Gas Pipeline
  - Water Pipeline
  - Borefield Infrastructure Corridor
  - Limestone Quarry Water Pipeline
  - Fifield Bypass

Source: Sunrise Energy Metals (2021); Clean TeQ (2017, 2018, 2020); Black Range Minerals (2000); NSW Spatial Services (2022)



**SUNRISE PROJECT**  
Regional Location

**Figure 1**

## 1.1 PURPOSE AND SCOPE

This Road Upgrade and Maintenance Strategy (RUMS) has been prepared by SEM in accordance with the requirements of Condition 43, Schedule 3 of Development Consent DA 374-11-00 (Table 1). In accordance with Condition 44, Schedule 3 of Development Consent DA 374-11-00, SEM will implement this RUMS. In addition, specific RUMS related requirements in Development Consent DA 374-11-00 are provided in Appendix B.

**Table 1**  
**Specific Development Consent Conditions**

<b>Development Consent DA 374-11-00 Schedule 3</b>	<b>Section Where Addressed in this RUMS</b>
<b>Road Upgrade and Maintenance Strategy</b>	
<i>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 TfNSW and Council, and to the satisfaction of the Planning Secretary. This strategy must:</i>	This RUMS
<i>a) identify the road and intersection upgrades required for the project, including all those outlined in Appendix 5;</i>	Sections 2
<i>b) include a program that details:</i> <ul style="list-style-type: none"> <li><i>– the scheduling of road upgrades required to be implemented in accordance with Appendix 5; and</i></li> <li><i>– the maintenance of the relevant sections of the road network following the upgrades; and</i></li> </ul>	Section 6 and 7
<i>c) be consistent with the terms of the VPA outlined in Appendix 3.</i>	Throughout

On 5 July 2018, the Planning Secretary approved the progressive submission of environmental management plans for the Project in accordance with Condition 12, Schedule 2 of Development Consent DA 374-11-00. The scope of this RUMS is specifically related to the following initial Project construction activities:

- development of the mine, including:
  - site establishment and earthworks;
  - construction of site access roads and haul roads;
  - processing facility earthworks;
  - establishment of temporary facilities required for construction activities (e.g. offices, lay down areas, communications infrastructure);
  - construction of the mine infrastructure area including the offices, workshops, warehouse, laboratory and amenities buildings, fuel storage areas, potable water treatment plant and car parking facilities;
  - construction of the tailings storage facility and evaporation pond;
  - construction of water management infrastructure including the raw water dam, water storage dam and sediment dams;
  - construction and operation of the concrete batch plant;
  - development of gravel and clay borrow pits (including blasting and crushing);
  - installation of appropriate fencing and barriers to ensure public safety and security for mining and construction; and

- other associated minor infrastructure, plant, equipment and activities;
- development and operation of the accommodation camp;
- development and operation of the borefield, surface water extraction infrastructure and water pipeline; and
- road upgrades.

In accordance with the above requirements and the requirements listed in the Voluntary Planning Agreement (VPA) (2020-CTEQ-0000-66AA-0051) dated 13<sup>th</sup> December 2018, this RUMS will:

- Detail the scope for the road and intersection upgrades;
- Nominate the applicable specifications for the road upgrades;
- Provide a schedule for the execution of the road and intersection upgrades; and
- Provide a maintenance strategy for the relevant sections of the road network.

## **1.2 STRUCTURE OF THIS ROAD UPGRADE AND MAINTENANCE STRATEGY**

The remainder of this RUMS is structured as follows:

- Section 2: Describes the review and update of this RUMS.
- Section 3: Describes the scope of the road and intersection upgrades.
- Section 4: Identifies the statutory requirements, design standards and Council and TfNSW requirements applicable to the works.
- Section 5: Describes the existing road and provides baseline traffic data.
- Section 6: Describes the expected construction and operational traffic.
- Section 7: Describes the road and intersection upgrade execution strategy and schedule. Including execution of design, commercial activities, construction and handover.
- Section 8: Details the road maintenance strategy.
- Section 9: Provides a contingency plan to manage unprecedented impacts and their consequences.
- Section 10: Describes the program to review and report on the effectiveness of management measures and improvement of environmental performance.
- Section 11: Describes the protocol for management and reporting of incidents, complaints and non-compliances with statutory requirements.
- Section 12: Provides references cited in this RUMS.

## 2. ROAD UPGRADE AND MAINTENANCE STRATEGY REVIEW AND UPDATE

The previous version of the RUMS was provided to Transport for NSW (TfNSW) (formerly the NSW Roads and Maritime Services (RMS)), Lachlan Shire Council (LSC), Forbes Shire Council (FSC) and Parkes Shire Council (PSC) for the purposes of consultation in accordance with Condition 43, Schedule 3 of Development Consent DA 374-11-00.

This RUMS has been updated to include minor revisions and to reflect the determination of Modification 7. This RUMS was provided to TfNSW, LSC, FSC and PSC for the purposes of consultation in accordance with Condition 45, Schedule 3 of Development Consent DA 374-11-00. Comments were received from TfNSW, LSC and PSC on 28 June 2022, 2 June 2022 and 12 August 2022 respectively, which were addressed in this RUMS. FSC did not have any comments on this RUMS.

Consistent with the Planning Secretary's approval for the progressive submission of environmental management plans on 5 July 2018, this RUMS, the scope of which will cover the initial Project construction activities will be re-submitted for approval prior to the commencement of construction of the limestone quarry, rail siding and gas pipeline, as well as prior to the commencement of mining operations.

In accordance with Condition 6, Schedule 5 of Development Consent DA 374-11-00, this RUMS will be reviewed, and if necessary revised (to the satisfaction of the Planning Secretary), within three months of the submission of:

- an Annual Review (Condition 5, Schedule 5);
- an incident report (Condition 8, Schedule 5);
- an Independent Environmental Audit (Condition 10, Schedule 5); or
- any modification to the conditions of Development Consent DA 374-11-00 (unless the conditions require otherwise).

The reviews will be undertaken to ensure this RUMS is updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the Project.

Within four weeks of conducting a review of this RUMS, the Planning Secretary will be advised of the outcomes of the review and any revised documents submitted to the Planning Secretary for approval.

If agreed with the Planning Secretary, a revision to this RUMS required under Development Consent DA 374-11-00 may be prepared without undertaking consultation with all parties nominated under the relevant condition of Development Consent DA 374-11-00.

The revision status of this RUMS is indicated on the title page of each copy.

The approved RUMS will be made publicly available on the SEM website, in accordance with Condition 12, Schedule 5 of Development Consent DA 374-11-00.

### 3. SCOPE OF ROAD AND INTERSECTION UPGRADES

Road and intersection upgrades will be undertaken within the Lachlan Shire Council (LSC) and Parkes Shire Council (PSC) Local Government Areas (LGAs) in accordance with Condition 43, Schedule 3 of Development Consent 374-11-00 and the VPA. Figures 2a/b and 3a/b/c show the locations of road and intersection upgrades in the LSC and PSC LGAs, respectively.

#### **Road Upgrades**

The scope for the road upgrades for the Project is described below.

Prior to the Commissioning of the Development (as defined in the VPA), SEM will pay for and ensure the completion of 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:

- **Platina Road [SR64]** (between the Lachlan Shire boundary and Fifield Road [MR57]);
- **Fifield Road [MR57]** (between Platina Road [SR64] and Slee St [in Fifield Village]);
- **Wilmatha Road [SR34]** (between Slee St [in Fifield Village] and the mine and processing facility (MPF) access points); and
- **Fifield Trundle Road [SR171]** (between The Bogan Way [MR350] and the Parkes Shire boundary).

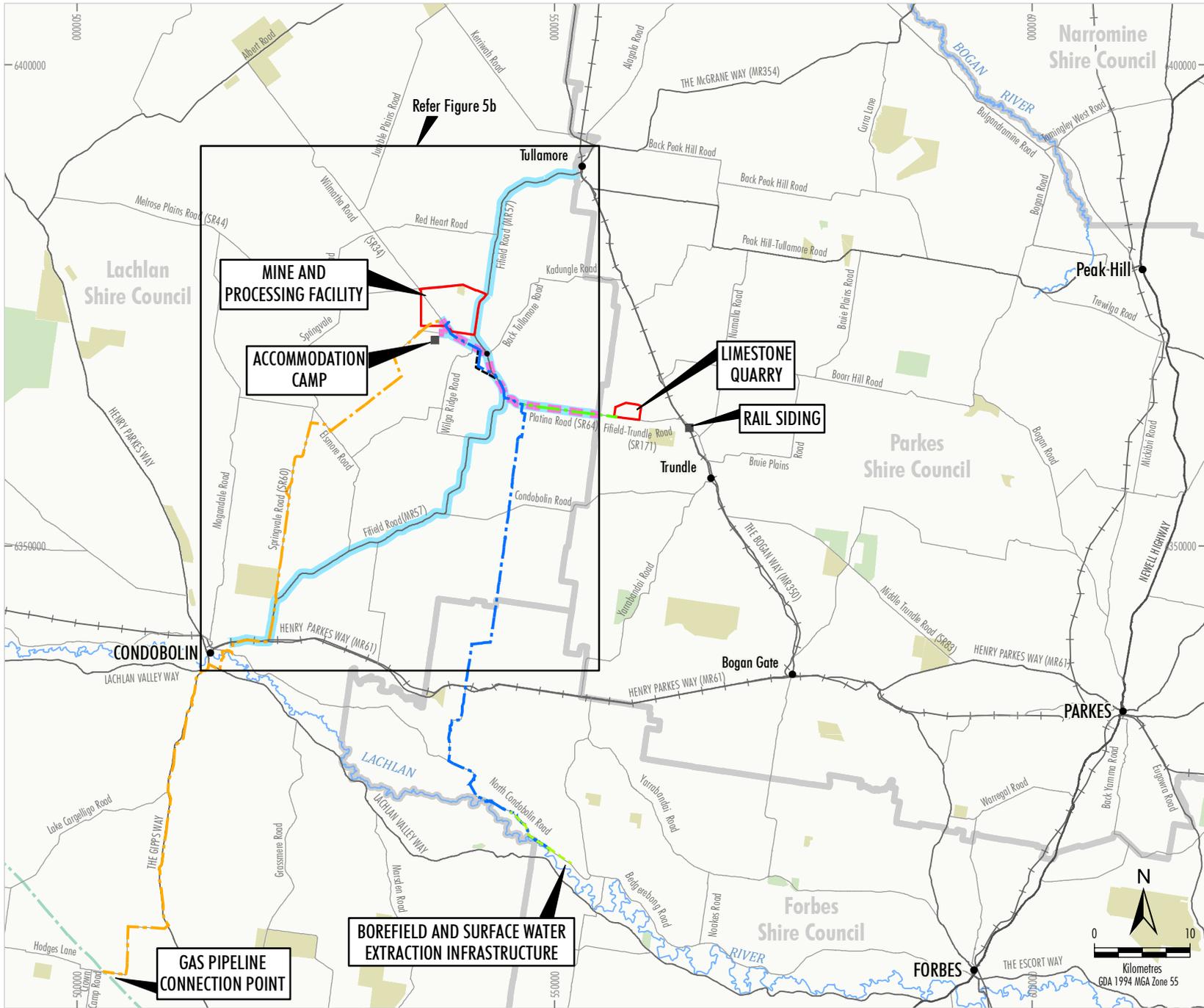
It is noted that the further widened road shoulders adjacent to private access roads/driveways (i.e. where children are likely to be boarding or disembarking school buses) will provide an improved area for school buses to park during boarding/disembarkation.

In addition, prior to the commissioning of the accommodation camp, Sunrise Lane will be upgraded between the accommodation camp access road and Wilmatha Road [SR34] to the following:

- 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 rail siding, a 675 m extension of Scotson Lane between The Bogan Way and the rail siding access point will be upgraded to an 8.0 m sealed pavement and 1.0 m gravel shoulders.

Prior to the commissioning of the mine and processing facility, three vehicle access points will be constructed from Wilmatha Road to the mine and processing facility.



- LEGEND**
- National Park/Conservation Area
  - State Forest
  - Local Government Boundary
  - Railway
  - Mining Lease Boundary (ML)
  - Existing Gas Pipeline
  - Gas Pipeline
  - Water Pipeline
  - Borefield Infrastructure Corridor
  - Limestone Quarry Water Pipeline
  - Fifeild Bypass
  - Extent of Road Upgrade
  - Extent of Road Safety Audit/  
Extent of Road Maintenance

Source: Sunrise Energy Metals (2021); Black Range Minerals (2000); NSW Spatial Services (2022)



SUNRISE PROJECT

Road Upgrades, Road Maintenance  
and Road Safety Audit -  
Lachlan Shire Council

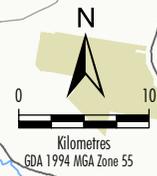
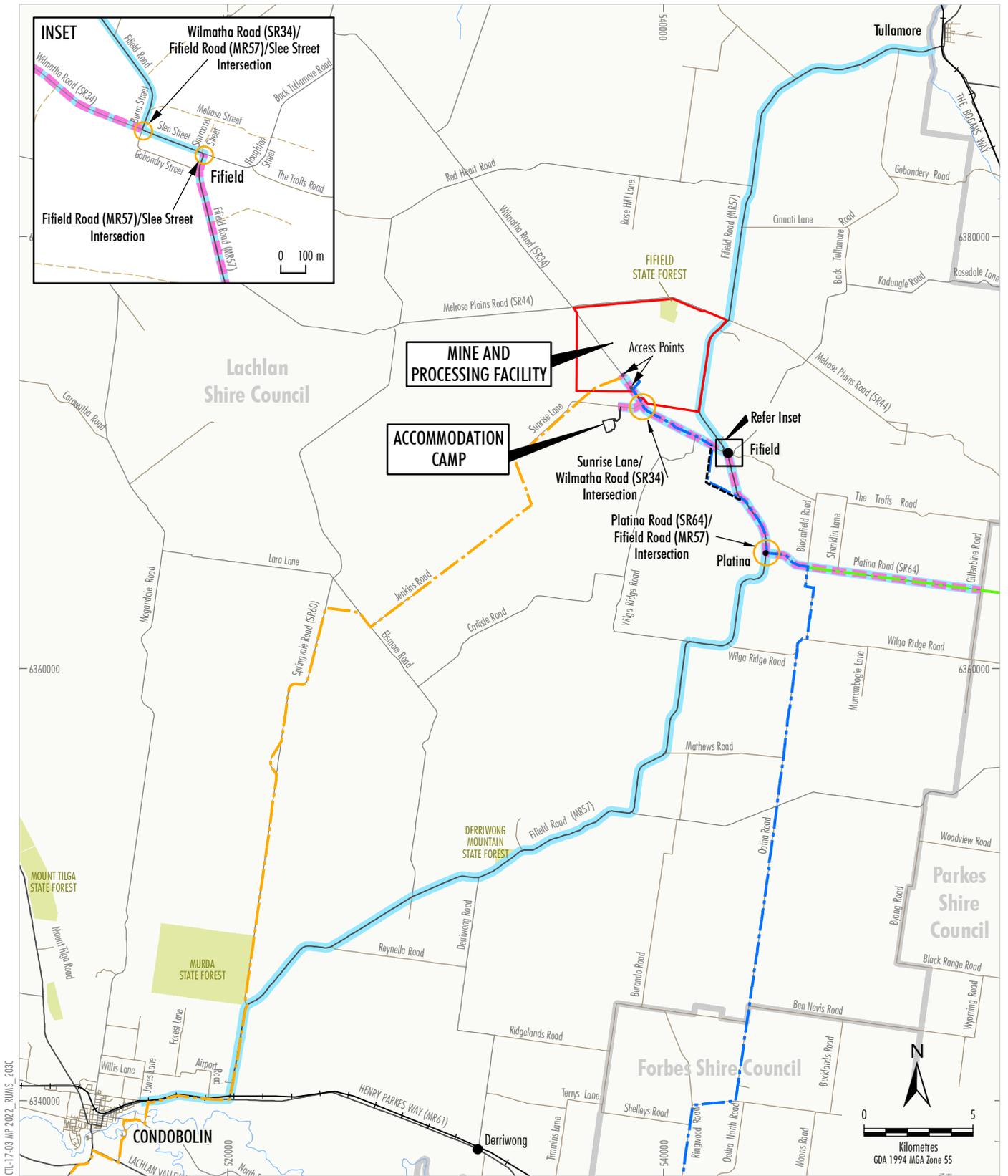


Figure 2a



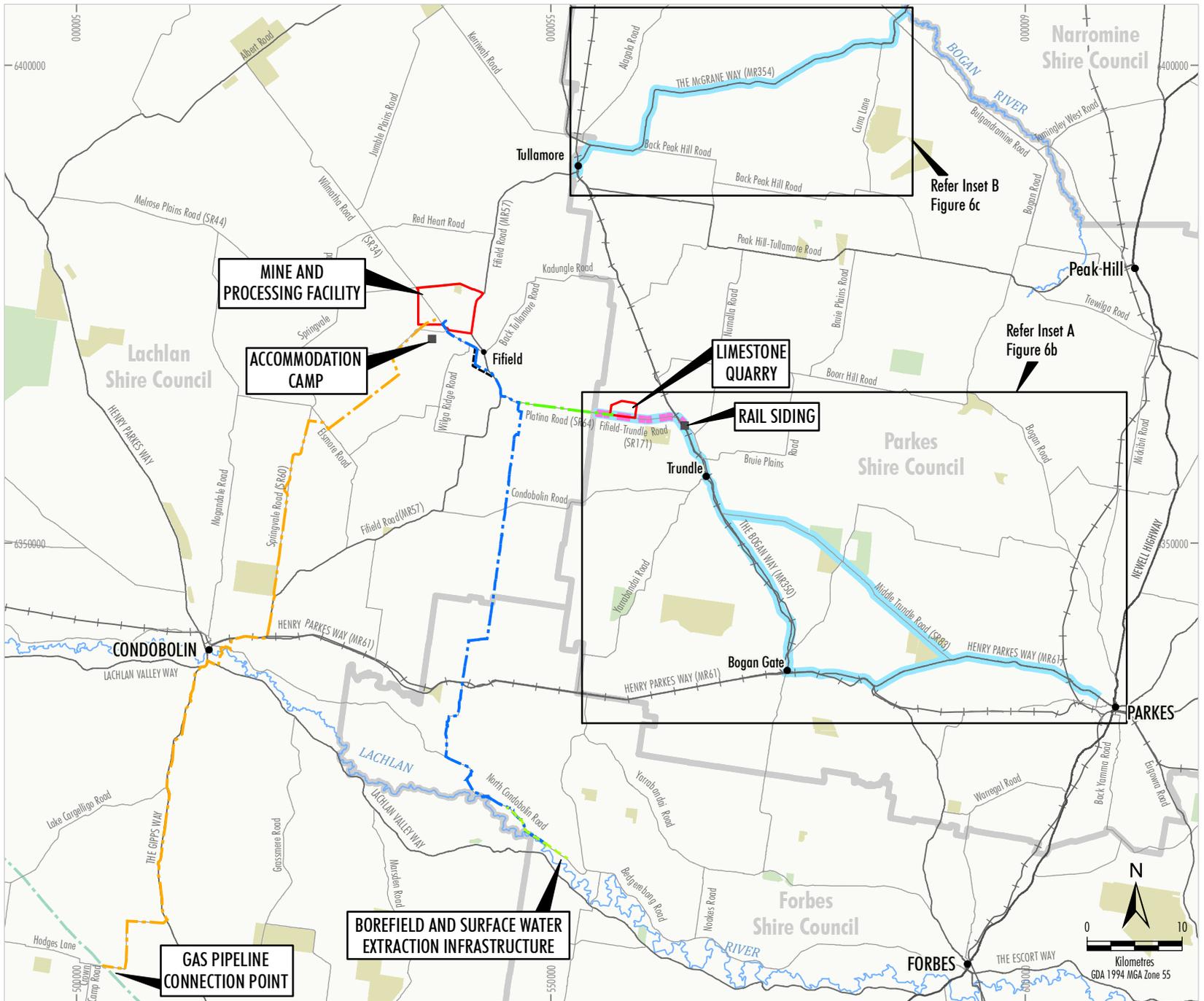
Source: Sunrise Energy Metals (2021); Black Range Minerals (2000); NSW Spatial Services (2022)

- LEGEND**
- State Forest
  - Local Government Boundary
  - Railway
  - Mining Lease Boundary (ML)
  - Gas Pipeline
  - Water Pipeline
  - Limestone Quarry Water Pipeline
  - Fife Road Bypass
  - Extent of Road Upgrade
  - Extent of Road Safety Audit/  
Extent of Road Maintenance



SUNRISE PROJECT  
 Road Upgrades, Road Maintenance and  
 Road Safety Audit - Lachlan Shire Council  
 Inset

Figure 2b

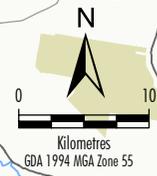


- LEGEND**
- National Park/Conservation Area
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  - Local Government Boundary
  - Railway
  - Mining Lease Boundary (ML)
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  - Limestone Quarry Water Pipeline
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  - Extent of Road Upgrade
  - Extent of Road Safety Audit/  
Extent of Road Maintenance

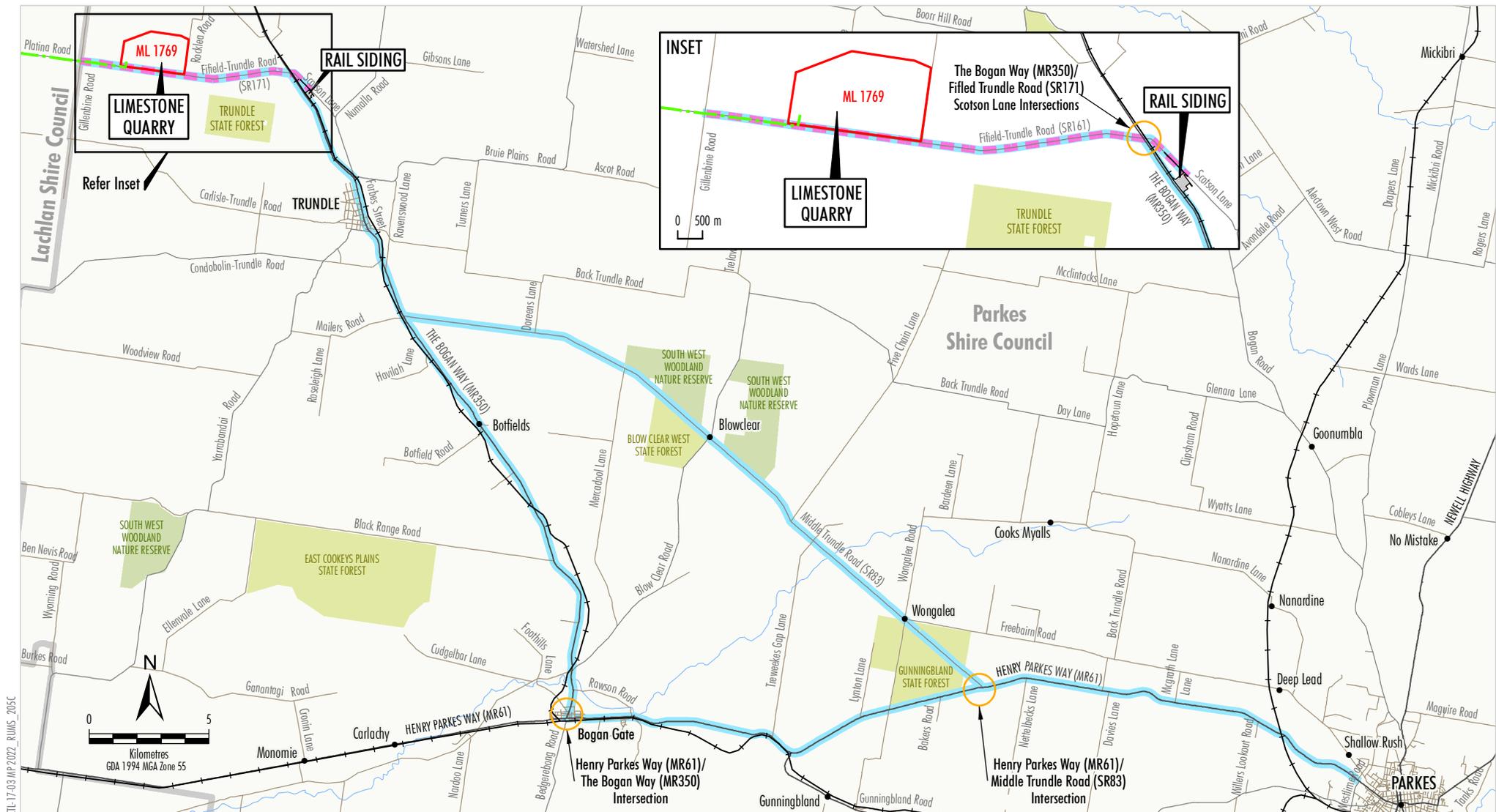
Source: Sunrise Energy Metals (2021); Black Range Minerals (2000); NSW Spatial Services (2022)



**SUNRISE PROJECT**  
 Road Upgrades, Road Maintenance  
 and Road Safety Audit -  
 Parkes Shire Council



**Figure 3a**



CLL-17-03-IMP-2022\_RUMS\_205C

**LEGEND**

- National Park/Conservation Area
- State Forest
- Local Government Boundary
- Railway
- Mining Lease Boundary (ML)
- Limestone Quarry Water Pipeline
- Extent of Road Upgrade
- Extent of Road Safety Audit/  
Extent of Road Maintenance

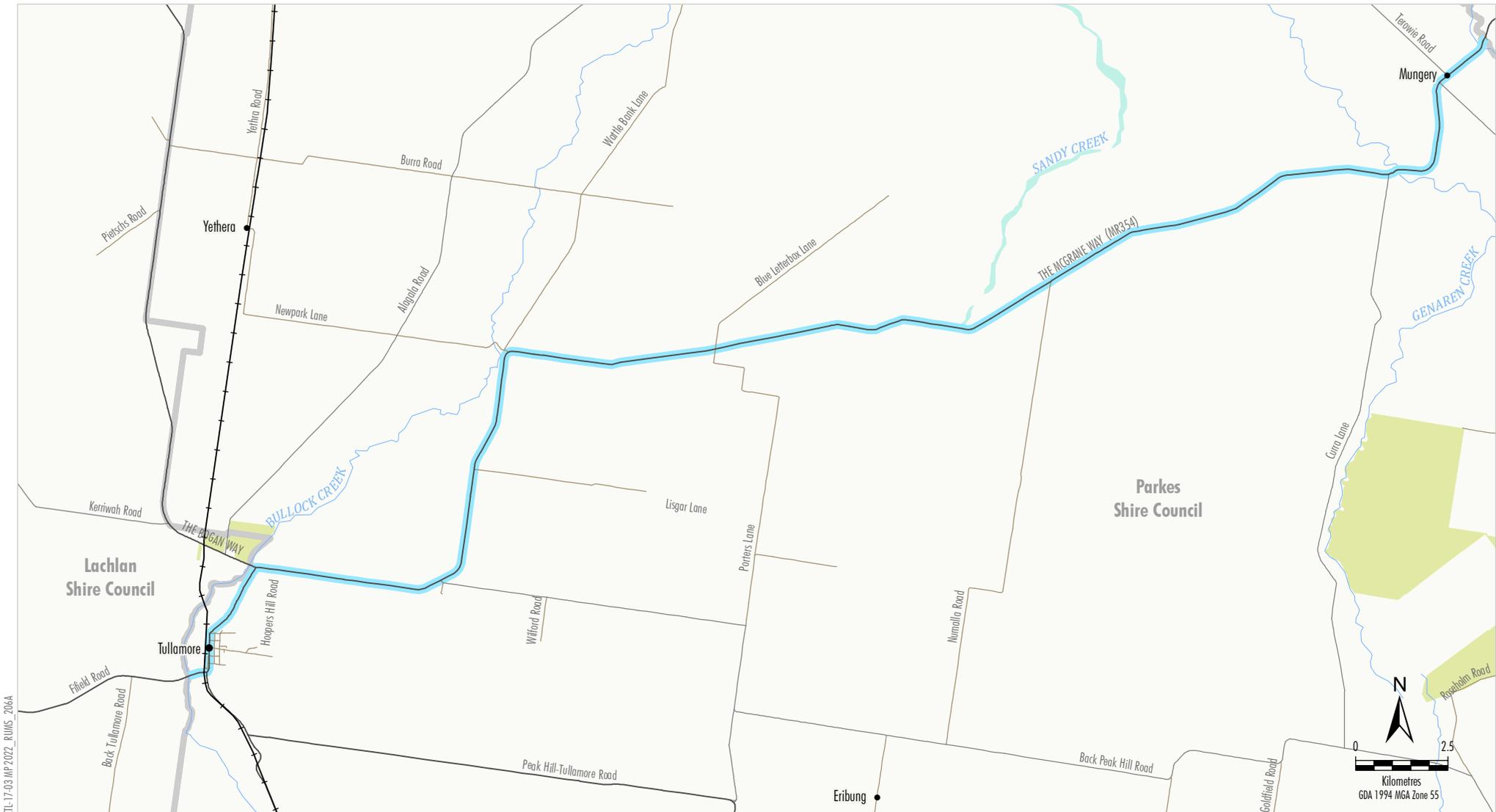
Source: Sunrise Energy Metals (2021); Black Range Minerals (2000);  
NSW Spatial Services (2022)



SUNRISE PROJECT

Road Upgrades, Road Maintenance and  
Road Safety Audit - Parkes Shire Council  
Inset A

**Figure 3b**



CLU-17-03 MP 2022\_RUMS\_206A

- LEGEND**
- State Forest
  - Local Government Boundary
  - Railway
  - Extent of Road Safety Audit/  
Extent of Road Maintenance

Source: Sunrise Energy Metals (2021); Black Range Minerals (2000);  
NSW Spatial Services (2022)



SUNRISE PROJECT

Road Upgrades, Road Maintenance and  
Road Safety Audit - Parkes Shire Council  
Inset B

**Figure 3c**

### ***Intersection Upgrades***

Prior to the Commissioning of the Development (as defined in the VPA), SEM will pay for and ensure the completion of the following intersection upgrades:

- **Platina Road [SR64] /Fifield Road [MR57]** – upgrade to Austroads standards;
- **Fifield Road [MR57] /Slee Street [in Fifield Village]** – signage and line marking to Austroads standards, for heavy vehicle route upgrade;
- **Slee Street [in Fifield Village]/Wilmatha Road [SR34]/Fifield Road** – signage and line marking to Austroads standards for heavy vehicle route upgrade;
- **Henry Parkes Way [MR61] and Middle Trundle Road [SR83]** – a Channelised Right Short [CHR] turn lane, constructed in accordance with Austroads guidelines for basic rural intersection treatments;
- **Henry Parkes Way [MR61] and The Bogan Way [MR350]** – signage and line marking to Austroads standards;
- **Sunrise Lane/Wilmatha Road [SR34]** – remove the transition between the gravel and dirt surfaces while Wilmatha Road remains unsealed, then seal a minimum of 30 m of Sunrise Lane on the approach to the intersection once Wilmatha Road is sealed;
- **Fifield-Trundle Road and Limestone Quarry access** – basic rural intersection treatment; and
- **Wilmatha Road and the three MPF access points** – intersection treatment to be developed in consultation with the LSC.

Prior to the commissioning of the rail siding, SEM will pay for and ensure the completion of the following intersection upgrades:

- **The Bogan Way [MR350] /Fifield Trundle Road [SR171] and Scotson Lane** – right-left staggered T-intersections with signage and line marking to Austroads standards.

### ***Rail Level Crossings***

Prior to the commencement of construction of the mine and processing facility, SEM will undertake rail level crossing safety assessments of the following rail level crossings in accordance with Condition 44B of Development Consent DA 374-11-00:

- Henry Parkes Way approximately 5 km west of Parkes on the OBH railway line (active level crossing);
- Henry Parkes Way in Bogan Gate on the BGT railway line (Give Way signs);
- Three level crossings on The Bogan Way between Bogan Gate and Trundle on the BGT railway line (Give Way signs);
- The Bogan Way south of Henry Parkes Way at Gunningbland on the OBH railway line (active level crossing);
- Fifield Road in Tullamore on the BGT railway line (Give Way signs);
- Scotson Lane near The Bogan Way on the BGT railway line (Give Way signs); and
- Fifield Road just to the north of its intersection with Henry Parkes Way on the Orange Broken Hill Railway (Active level crossing).

Based on the outcomes of the safety assessments, SEM will upgrade the relevant rail level crossings deemed necessary as per Condition 44B of Development Consent DA 374-11-00 (Section 3.4).

### ***Pedestrian Access Treatments***

Prior to the limestone haulage from third party suppliers, pedestrian access upgrades to be completed in Trundle (in consultation with PSC) include:

- a modified kerb extension treatment near 61/63 Forbes Street;
- a modified kerb extension treatment between Croft Street and East Street;
- threshold treatments at the northern and southern entries to Trundle; and
- speed reduction warning signs on the northern and southern approaches to Trundle.

### ***Other Works***

Prior to the Commissioning of the Development (as defined in the VPA), SEM will reach an agreement with the relevant Councils on funding and the timing of works as to any additional, specific road safety matters relevant to the Project as deemed necessary by the road safety audits (See Section 3.3 for a summary of the road safety audits).

In addition, SEM will establish formal bus stops (if required) based on the outcomes of the road safety audit and in consultation with councils and bus operators.

## **4. STATUTORY REQUIREMENTS, DESIGN STANDARDS AND OTHER APPLICABLE REQUIREMENTS**

### **4.1 STATUTORY REQUIREMENTS**

The following NSW Acts (and their Regulations) may be applicable to the design of the road and intersection upgrades:

- Local Government:
  - Lachlan Local Environmental Plan;
  - Parkes Local Environmental Plan;
  - Forbes Local Environment Plan;
- NSW State Law:
  - State Environmental Planning Policy (Infrastructure) 2007;
  - Environmental Planning and Assessment Act 2017;
  - Biodiversity Conservation Act 2016;
  - National Parkes and Wildlife Act 1974;
  - Heritage Act 1977;
  - Roads Act 1993; and
  - Protection of the Environment Operations Act 1997.

### **4.2 DESIGN STANDARDS**

Design standards applicable to the upgrade of the roads and intersections include:

- Transport of NSW (TfNSW) Design Codes and Specifications.
- Austroads Standards (generally included in TfNSW Standards).

### **4.3 ROAD SAFETY AUDITS**

In accordance with the terms of the VPA with LSC, PSC and Forbes Shire Council (FSC), road safety audits are to be conducted prior to Commissioning of the Development (as defined in the VPA) to determine appropriate road upgrade requirements for the operational phase of the Project.

The audits will identify potential safety risks to road users, including identifying deficiencies or non-conformances along a route. The non-conformances will be allocated a risk rating based on the likelihood and severity of a poor safety outcome.

The road safety audit locations are provided below and shown on Figures 2 and 3 for the LSC and PSC local government areas, respectively.

- **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]);
- **Wilmatha Road [SR34]** (between Slee St [in Fifield Village] and Mine Access Points); and
- **Fifield Road [MR57]** (between Red Heart Road [SR41] and the Lachlan Shire Boundary).
- **Henry Parkes Way [MR61]** (between Westlime Road [western outskirts of Parkes] and The Bogan Way [MR350]);
- **Middle Trundle Road [SR83]** (between Henry Parkes Way [MR61] and The Bogan Way [MR350]);
- **The Bogan Way [MR350N]** (between Henry Parkes Way [MR61] and Fifield Trundle Road [SR171]);
- **Fifield Trundle Road [SR171]** (between The Bogan Way [MR350] and the Parkes Shire boundary); and
- **Fifield Road [MR 57]** (between the Parkes Shire Boundary and The Bogan Way [MR350]);
- **The Bogan Way [MR350N]** (between Fifield Road [MR57] and The McGrane Way [MR354]);
- **The McGrane Way [MR354]** (between The Bogan Way [MR350] and the Parkes Shire Boundary).

As referred to in Section 2 above, prior to the Commissioning of the Development (as defined in the VPA), SEM will reach agreement with the relevant Councils on funding and the timing of works for any additional, specific, road safety matters relevant to the Project as deemed necessary by the road safety audits.

#### 4.4 RAIL LEVEL CROSSING SAFETY ASSESSMENTS

In accordance with Condition 44B, Schedule 3 of Development Consent DA 374-11-00, SEM will undertake rail level crossing safety assessments prior to the commencement of the construction of the mine and processing facility. The safety assessments will:

- consider the operation of each of the level crossings along the transport routes associated with the development;
- be prepared in consideration of the railway crossing risk assessment procedure outlined in Appendix A of the *Establishing a Railway Crossing Safety Management Plan* (NSW Roads Traffic Authority, 2011);
- determine any rail crossing upgrade requirements necessary to achieve compliance with AS 1742.4 *Manual of uniform control devices, Part 7: Railway crossings* and the *Austrads Guides to Road Design* (Austrads, 2021) under existing conditions;
- determine any potential impacts on the operation of the level crossings as a result of construction and operation of the development; and
- determine any incremental rail crossing upgrade requirements necessary as a result of the development to ensure compliance with AS 1742.7 *Manual of uniform control devices, Part 7: Railway crossings* and the *Guides to Road Design* (Austrads, 2021).

The safety assessments will be prepared in consultation with the relevant rail infrastructure manager and to the satisfaction of the TfNSW.

Based on the outcomes of the safety assessments, SEM will identify the funding arrangements with TfNSW for any incremental rail crossing upgrades deemed necessary by the safety assessments as a result of the Project.

SEM will then complete any incremental rail crossing upgrades identified as part of the safety assessments prior to the commissioning of the mine and processing facility, or other timing as may be agreed with TfNSW.

## 5. EXISTING ROAD DESCRIPTION AND BASELINE DATA

### 5.1 DESCRIPTION OF EXISTING ROADS TO BE UPGRADED

The roads and intersections subject to upgrade are described below (Figure 2a/b & 3a/b/c).

**Fifield Road (MR57N)** is a Regional Road also known as Main Road 57 North, which runs northwards from Henry Parkes Way approximately 6 km east of Condobolin, through Fifield to Tullamore. In Fifield, it is known as Slee Street. It is crossed by the Parkes Narromine Railway just to the north of its intersection with Henry Parkes Way at an active level crossing, and by the Bogan Gate Tottenham Railway at a passive level crossing at Tullamore. It is a two lane sealed road with centre line marking. The speed limit on Fifield Road is typically 100 km/h and reduced to 50 km/h at Fifield. As a Regional Road, TfNSW provides financial assistance to the LSC for the management of this portion of MR57.

**Fifield-Trundle Road (SR171)/Platina Road (SR64)** is also known as Shire Road 171/Shire Road 64, and extends west from The Bogan Way approximately 6 km north of Trundle to Fifield Road approximately 5 km south of Fifield. Fifield-Trundle Road is located within Parkes Shire whilst Platina Road is located within Lachlan Shire. Fifield-Trundle Road typically has a 6.5 m wide formation with 6.0 m wide seal. Platina Road typically has a sealed surface approximately 4 m wide, with 1 m gravel shoulders. There is limited line marking. The intersections at the ends of Fifield-Trundle Road and Platina Road are basic rural T-intersections, without auxiliary lane treatments or channelisation.

**Wilmatha Road (SR34)**, also known as Shire Road 34, runs northwest from Fifield past the Project site (Mining Lease (ML) 1770), and crosses Melrose Plains Road at the north-western boundary of ML 1770. Wilmatha Road has an unsealed surface approximately 8 to 12 m wide and a speed limit of 100 km/h. The MPF access point will intersect Wilmatha Road at an Austroads Type C intersection.

**Sunrise Lane** will be used by Project traffic travelling to and from the accommodation camp. The access road to the accommodation camp is off Sunrise Lane. Sunrise Lane is an unsealed road.

Further detail is provided in:

- *Syerston Project Modification 4 Road Transport Assessment* (GTA Consultants, 2017a)
- *Road Transport Route Post Construction (Existing Road) Road Safety Audit* (GTA Consultants, 2017b)
- *Road Transport Route Road Safety Audit* (GTA Consultants, 2018)

**Scotson Lane** is a local unsealed road extending between The Bogan Way near Fifield-Trundle Road and Numalla Road, crossing the Bogan Gate Tottenham Railway at a passive level crossing. Its intersection with The Bogan Way is slightly offset to the south from the intersection of Fifield-Trundle Road with The Bogan Way.

### 5.2 HISTORIC TRAFFIC VOLUMES AND CAPACITY

Traffic survey data in the vicinity of the Project area are summarised in Table 2, with traffic survey locations shown on Figure 4.

Traffic volumes are generally low and the proportion of heavy vehicles varies from low (7%) to relatively high (51%) (TTPP, 2021).

There are no intersection operation capacity concerns in the vicinity of the Project (TTPP, 2021).

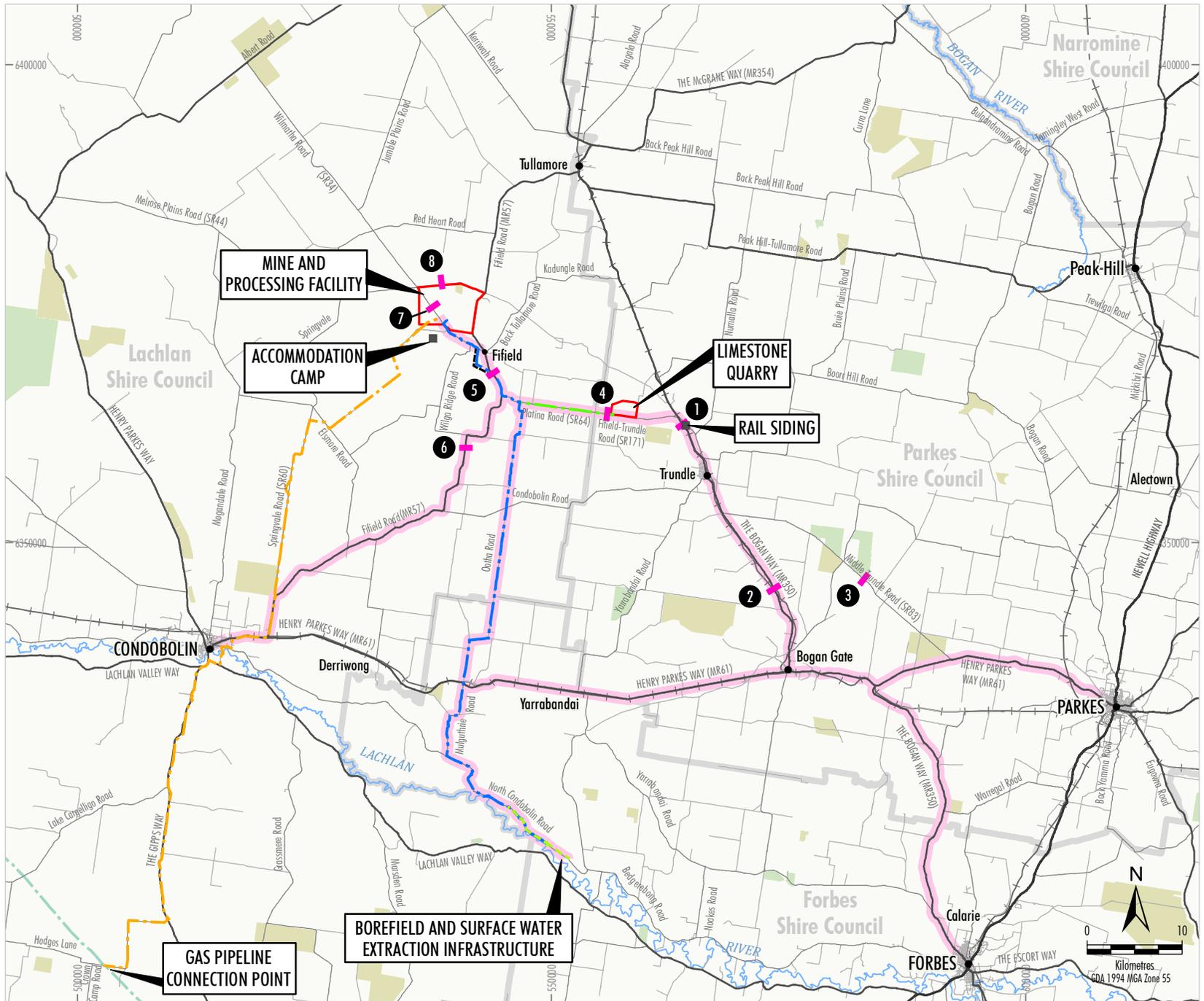
Further detail is provided in *Project Execution Plan Modification Road Transport Assessment* (TTPP, 2021).

**Table 2**  
**Surveyed Annual Average Daily Traffic Volumes**

Site <sup>1</sup>	Location	2017			2018		
		Light	Heavy	Total	Light	Heavy	Total
1	The Bogan Way between Trundle and Fifield-Trundle Road	329	76	405	332	51	383
2	The Bogan Way between Bogan Gate and Middle Trundle Road	291	86	377	285	43	328
3	Middle Trundle Road between The Bogan Way and Henry Parkes Way	170	30	200	243	19	262
4	Platina Road/Fifield-Trundle Road between The Bogan Way and Fifield Road	66	15	81	61	6	67
5	Fifield Road between Slee Street and Platina Road	200	95	295	187	148	335
6	Fifield Road between Platina Road and Springvale Road	139	99	238	147	150	297
7	Wilmatha Road north of Sunrise Lane	14	4	18	15	5	20
8	Melrose Plains Road between Fifield Road and Wilmatha Road	9	4	13	7	2	9

Source: After TTPP (2021).

<sup>1</sup> Refer to Figure 4 for locations.



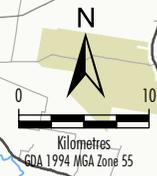
**LEGEND**

- National Park/Conservation Area
- State Forest
- Local Government Boundary
- Railway
- Mining Lease Boundary (ML)
- Existing Gas Pipeline
- Gas Pipeline
- Water Pipeline
- Borefield Infrastructure Corridor
- Limestone Quarry Water Pipeline
- Fifiel Bypass
- Traffic Survey Location
- Key Project-related Traffic Routes

Source: Sunrise Energy Metals (2021); Black Range Minerals (2000); NSW Spatial Services (2021)

**sunrise**  
 energy metals

**SUNRISE PROJECT**  
 Long Term Traffic Monitoring Sites



**Figure 4**

## 6. PROJECT TRAFFIC DETAILS

### 6.1 OPERATING HOURS

The hours of operation for the Project are specified in Condition 1, Schedule 3 of Development Consent DA 374-11-00 and is reproduced below:

**Table 3**  
**Operating Hours**

<i>Activity</i>	<i>Operating Hours</i>
<ul style="list-style-type: none"> <li>• <i>Construction of the:</i> <ul style="list-style-type: none"> <li>– <i>gas pipeline;</i></li> <li>– <i>water pipeline and borefields;</i></li> <li>– <i>rail siding;</i></li> <li>– <i>accommodation camp; and</i></li> <li>– <i>road upgrades</i></li> </ul> </li> <li>• <i>Construction materials haulage along the transport route</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>7 am to 6 pm, Monday to Sunday</i></li> </ul>
<ul style="list-style-type: none"> <li>• <i>All quarrying operations (excluding truck loading on the limestone quarry site)</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>7 am to 5 pm, Monday to Sunday</i></li> </ul>

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

During the construction phase, deliveries to the project will arrive and depart between 7.00 am to 6.00 pm.

Once the operational phase commences, haulage of materials to and from the Project will occur 24 hours per day, seven days a week.

### 6.2 CONSTRUCTION TRAFFIC

Construction activities for the Project will include the development of the mine (including the processing facility), accommodation camp, borefield, surface water extraction infrastructure, water pipeline, rail siding and road upgrades and are anticipated to be undertaken over an approximate three year period.

Key Project-related traffic during the construction stage of the Project will consist of:

- employees and visitors travelling to and from the Project site and accommodation camp (light vehicles and shuttle buses);
- delivery of construction materials to the Project site, accommodation camp, borefield, surface water extraction site and water pipeline (typically heavy vehicles and some oversize vehicles); and
- delivery of consumables to the Project site and accommodation camp (e.g. supplies, diesel) (typically heavy vehicles).

Construction deliveries to the mine site will generally use the following haulage route from Parkes or Condobolin. The route from Parkes includes Henry Parkes Way, The Bogan Way, Fifield-Trundle Road, Platina Road, Fifield Road, Slee St, Wilmatha Road and the MPF access points.

The route from Condobolin travels via Henry Parkes Way, Fifield Road, Slee St, Wilmatha Road and the MPF access points.

Construction deliveries for the water pipeline will generally be via Henry Parkes Way and either Mulguthrie Road or Ringwood Road (northern sections), depending on the section of pipeline being constructed at the time.

SEM will provide shuttle buses for the transportation of the construction workforce to minimise traffic movements associated with the Project workforce.

Daily traffic movements associated with the MPF during the construction phase will peak at approximately 308 movements/day (excluding movements between the mine and processing facility and accommodation camp).

The key Project-related traffic routes are shown on Figure 4.

## **6.3 OPERATIONAL TRAFFIC**

### **6.3.1 Traffic Travel Routes**

The routes used by vehicles travelling to and from the Project would vary according to the origin/destination. The more significant routes will include:

- rail siding – Scotson Lane, Fifield-Trundle Road, Platina Road, Fifield Road, Slee Street, Wilmatha Road, and the MPF access points;
- limestone quarry – Quarry Access Road, Fifield-Trundle Road, Platina Road, Fifield Road, Slee Street, Wilmatha Road, and MPF access points;
- Sydney/Parkes – Henry Parkes Way, The Bogan Way, Fifield-Trundle Road, Platina Road, Fifield Road, Slee Street, Wilmatha Road, and MPF access points (external limestone supply and lime deliveries would adopt this route);
- Sydney/Parkes – Henry Parkes Way, Middle Trundle Road, The Bogan Way, Fifield-Trundle Road, Platina Road, Fifield Road, Slee Street, Wilmatha Road, and MPF access points (all of the heavy vehicle movements associated with the key deliveries e.g. limestone would not use Middle Trundle Road);
- Newcastle – Mitchell Highway, The McGrane Way, The Bogan Way, Fifield Road, Wilmatha Road, and MPF access points;
- Condobolin, Ootha and local sources – Henry Parkes Way, Fifield Road, Slee Street, Wilmatha Road, and MPF access points;
- Trundle and Bogan Gate – The Bogan Way, Fifield-Trundle Road, Platina Road, Fifield Road, Slee Street, Wilmatha Road, and MPF access points; and
- Tullamore – Fifield Road, Wilmatha Road, and MPF access points.

### **6.3.2 Total Traffic**

Daily traffic movements associated with the MPF during the operations phase will peak at approximately 270 vehicles/day (TTPP, 2021).

## 7. ROAD AND INTERSECTION UPGRADE EXECUTION STRATEGY

### 7.1 OVERVIEW

Prior to the commissioning of the accommodation camp, the upgrade of Sunrise Lane and the intersection between Sunrise Lane and Wilmatha Road will be completed. The design and execution of this upgrade will be completed by the SEM appointed Accommodation Camp Installation Contractor.

The upgrade of the remainder of roads and intersections will commence promptly following the Final Investment Decision (FID) (as defined in the VPA) and be completed prior to the Commissioning of the Development (as defined in the VPA).

Upgrade works will be prioritised and delivered in the following sequence:

- **Wilmatha Road [SR34]** - between Slee St [in Fifield Village] and the MPF access points;
- **Fifield Trundle Road [SR171]** - between The Bogan Way [MR350] and the Parkes Shire boundary;
- **Platina Road [SR64]** - between the Lachlan Shire boundary and Fifield Road [MR57]), the narrower sections of Platina Road will be upgraded first; and
- **Fifield Road [MR57]** (between Platina Road [SR64] and Slee St [in Fifield Village]).

As the Scotson Lane/Bogan Way intersection is near Fifield Trundle Road [SR171], the design of this intersection will be completed at the same time as the Fifield Trundle Road design.

During the road upgrade works the condition of the above roads will be periodically visually assessed by SEM. If required, the sequence of work will be adjusted to address any road condition issues caused by construction traffic.

Intersection upgrades (including special surfacing treatments where required) will be prioritised in accordance with above sequence.

### 7.2 DESIGN

The design of the road and intersection upgrades will be completed by the LSC. LSC will subcontract the various design disciplines to a panel of known professional companies. Subcontracted components are expected to include:

- Survey;
- Geotechnical Investigation; and
- Geometric and structural Road Design.

All design works will be completed in accordance with the requirements listed in Section 4.

During the execution of the design work, input (including the Safety in Design process) and approval will be sought from key stakeholders, including:

- TfNSW in the case of State Roads;
- LSC / PSC (if available) in the cases of local and regional roads, or alternatively; and
- Consultant Project Management firms.

### **7.3 EXECUTION**

SEM, via the Accommodation Camp Installation Contractor will upgrade Sunrise Lane prior to the commissioning of the accommodation camp.

All other construction activities will be completed in accordance with the listed priorities. During the design phase an execution plan will be developed that will detail the packaging of the scope and the timing for the upgrades.

It is proposed that the road and intersection upgrade works will be executed by:

- The Lachlan Shire Council and Parkes Shire Council, if resources available, or alternatively; and
- Tender/Contract from a list of known and suitably skilled road construction contractors.

It is proposed to complete the upgrades via a single work front, or alternatively (if required by the schedule) multiple work fronts.

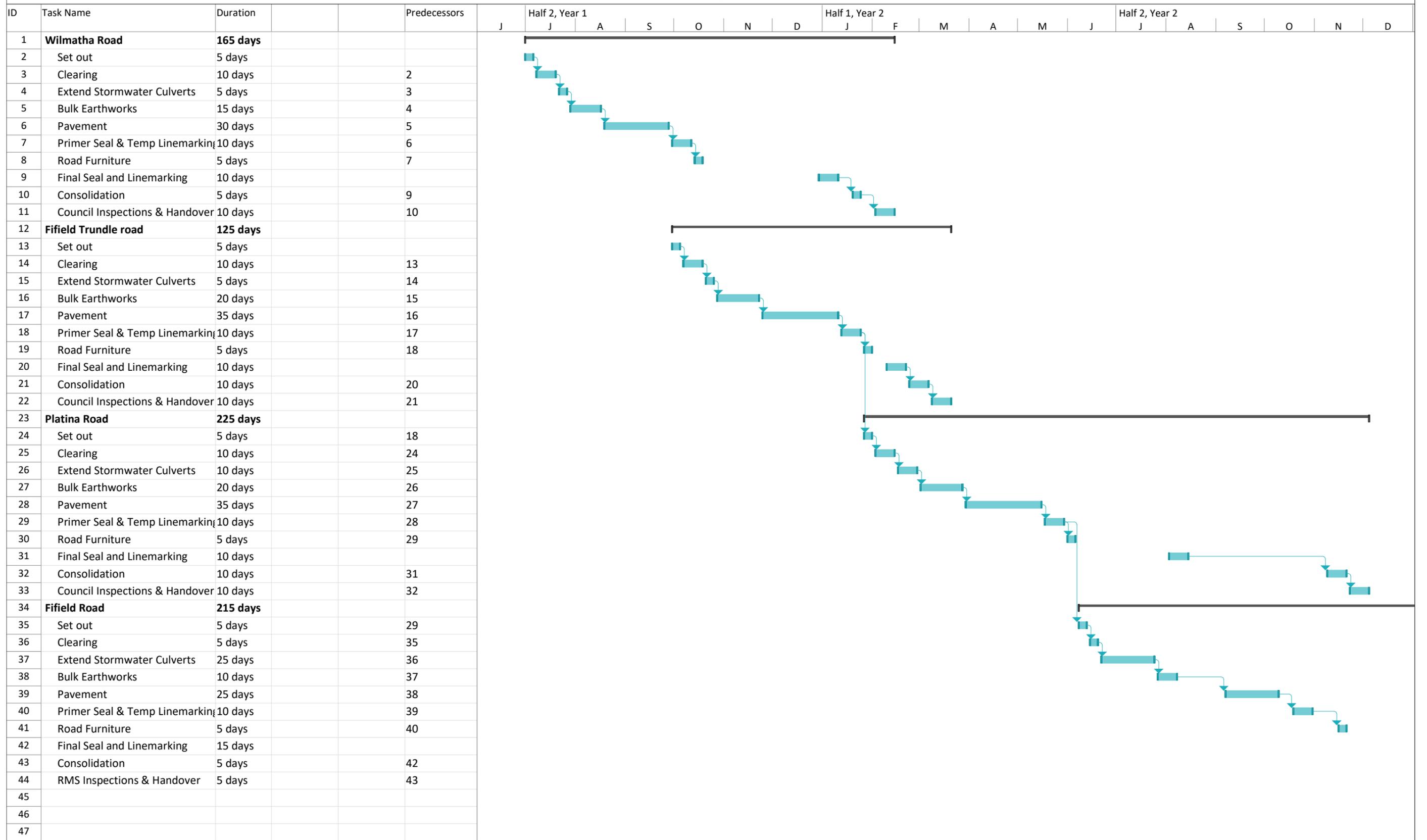
Supervision of the road and intersection upgrades will be provided by the organisation completing the upgrades. In addition, SEM will provide overall oversight on safety, quality, scope and progress.

Prior to execution of the road and intersection upgrades, SEM will develop a Traffic Management Plan and Stakeholder Communication Plan to ensure the local community are made aware of the proposed upgrades including timing and progress of the works. This will include contact details for SEM to allow community members to request further information or provide feedback to the Company. In addition, the works will be undertaken to minimise traffic delays for the local community.

It is noted that heavy rainfall may result in roads being closed and access to work fronts will be suspended when required.

A Gantt Chart providing a high-level schedule of the proposed upgrade works is provided in Figure 5.

Figure 5 - Road Upgrade Schedule



Project: External Roads Upgrade P	Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline	
	Split		External Tasks		Inactive Summary		Manual Summary		Progress	
	Milestone		External Milestone		Manual Task		Start-only		Manual Progress	
	Summary		Inactive Task		Duration-only		Finish-only			

## 8. ROAD MAINTENANCE STRATEGY

Maintenance of Project related roads will be completed by the relevant Council in accordance with the terms of the VPA. In accordance with the VPA, SEM will also provide Road Maintenance Contributions to the relevant Councils to ensure timely and efficient maintenance works are undertaken. The Road Maintenance Contributions are to be utilised on the Project related roads as follows.

### *Parkes Shire Council*

- **Middle Trundle Road [SR83]** (between Henry Parkes Way [MR61] and The Bogan Way [MR350]);
- **The Bogan Way [MR350]** (between Henry Parkes Way [MR61] and Fifield Trundle Road [SR171]);
- **Fifield Trundle Road [SR171]** (between The Bogan Way [MR350] and the Parkes Shire boundary);
- **Fifield Road [MR 57]** (between the Parkes Shire Boundary and The Bogan Way [MR350]);
- **The Bogan Way [MR350]** (between Fifield Road [MR57] and The McGrane Way [MR354]);
- **The McGrane Way [MR354]** (between The Bogan Way [MR350] and the Parkes Shire boundary); and
- **Scotson Lane** (between the rail siding access road and The Bogan Way [MR350]).

### *Lachlan Shire Council*

- **Fifield Road [MR57]** (between Henry Parkes Way [MR61] and Slee St [in Fifield Village], between Slee St [in Fifield Village] and Red Heart Road [SR41] and between Red Heart Road [SR41] and the Lachlan Shire boundary);
- **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]);
- **Wilmatha Road [SR34]** (between Slee St [in Fifield Village] and MPF access points); and

### *Forbes Shire Council*

- **North Condobolin Road** (between the borefield and Ootha-Mulguthrie Road);
- **Ootha-Mulguthrie Road** (between North Condobolin Road and Henry Parkes Way [MR61]);
- **Ootha-Ringwood Road** (between Henry Parkes Way [MR61] and Burkes Road);
- **Burkes Road** (between Ootha- Ringwood Road and Ootha North Road); and
- **Ootha North Road** (between Burkes Road and the Forbes Shire boundary).

SEM will maintain Sunrise Lane (between the accommodation camp site access road and Wilmatha Road [SR34]), to the satisfaction of LSC, during the construction and operation phase of the Project.

In addition, the VPA allows for the payment of Major Repair Contributions on the Project transport routes on an as-needs basis during the life of the Project but limited to a maximum of five kilometres of construction in any year, unless mutually agreed between SEM and the Councils. These contributions are to address exceptional failure of or damage to roads where NSW and Commonwealth Government grants do not cover the full cost of repairs. The Major Repair Contributions do not substitute for the Road Maintenance Contributions.

## **9. CONTINGENCY PLAN**

In the event a performance measure for the Project may not have been met or a performance indicator is considered to have been exceeded, SEM will implement the following Contingency Plan:

- The SEM Environmental Superintendent will report the incident in accordance with Section 11.1.
- SEM will apply adaptive management (Section 9.1).
- SEM will identify an appropriate course of action in consultation with the haulage contractor identified as being responsible for the exceedance (where required). The course of action may include contingency measures such as, but not limited to, those described in Section 9.2.
- SEM will submit a report describing the proposed course of action to the DPE for approval.
- SEM will implement the approved course of action to the satisfaction of the DPE.

### **9.1 ADAPTIVE MANAGEMENT**

In accordance with Condition 3, Schedule 5 of Development Consent DA 374-11-00, SEM will assess and manage risks to comply with the criteria and/or performance measures outlined in Schedule 3 of Development Consent DA 374-11-00.

Where any exceedance of these criteria and/or performance measures occurs, at the earliest opportunity SEM will:

- take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;
- consider all reasonable and feasible options for remediation and submit a report to the DPE describing these options and preferred remediation measures; and
- implement remediation measures as directed by the Planning Secretary.

## 10. REVIEW AND IMPROVEMENT OF ENVIRONMENTAL PERFORMANCE

### 10.1 ANNUAL REVIEW

In accordance with Condition 5, Schedule 5 of Development Consent DA 374-11-00, SEM will review the environmental performance of the Project by the end of March each year (for the previous calendar year) to the satisfaction of the Planning Secretary.

In relation to road upgrade and maintenance management, the Annual Review will (where relevant):

- 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;
- 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;
- identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
- identify any trends in the monitoring data over the life of the development;
- identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
- describe what measures will be implemented over the next year to improve the environmental performance of the development.

Based on consideration of the above points, the Annual Review will determine the effectiveness of relevant management measures implemented at the Project.

The Annual Review will be made publicly available on the SEM website.

### 10.2 INDEPENDENT ENVIRONMENTAL AUDIT

In accordance with Condition 10, Schedule 5 of Development Consent DA 374-11-00, an independent environmental audit of the Project will be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary. The audit will be prepared in accordance with the relevant *Independent Audit Post Approval Requirements* (DPE, 2020) (or its latest version) and include consultation with the relevant agencies (TfNSW, relevant councils).

The independent environmental audit will assess the environmental performance of the Project and assess whether the Project is complying with the requirements of Development Consent DA 374-11-00. In addition, the independent environmental audit will assess the adequacy of this RUMS and, if necessary, appropriate measures or actions to improve the environmental performance of the Project or this RUMS will be recommended.

An independent environmental audit will be conducted within one year of the commencement of the development under this consent, after 6 May 2017, and every 3 years thereafter, unless the Planning Secretary directs otherwise.

In accordance with Condition 11, Schedule 5 of Development Consent DA 374-11-00, within 3 months of commissioning the independent environmental audit, or as otherwise agreed by the Planning Secretary, SEM will submit a copy of the independent environmental audit report to the Planning Secretary, together with its response to any recommendations contained in the independent environmental audit report.

The independent environmental audit, and SEM's response to the recommendations in the audit, will be made publicly available on the SEM website, in accordance with Condition 12, Schedule 5 of Development Consent DA 374-11-00.

## 11. REPORTING PROTOCOL

In accordance with Condition 4(g), Schedule 5 of Development Consent DA 374-11-00, SEM has developed protocols for managing and reporting the following:

- incidents;
- complaints;
- non-compliances with statutory requirements; and
- exceedances of the impact assessment criteria and/or performance criteria.

These protocols are described in detail in SEM's Environmental Management Strategy.

In accordance with Condition 9, Schedule 5 of Development Consent DA 374-11-00, SEM will provide regular reporting on the environmental performance of the Project on the SEM website.

### 11.1 INCIDENT REPORTING

An incident is defined as a set of circumstances that causes or threatens to cause material harm to the environment and/or breaches or exceeds the limits or performance measures/criteria in Development Consent DA 374-11-00.

In the event that review of monitoring data or a complaint indicates an incident has occurred, the incident will be reported in accordance with Condition 8, Schedule 5 of Development Consent DA 374-11-00. The Planning Secretary will be notified in writing via the Major Projects website immediately after SEM becomes aware of an incident. The notification will identify the Project name and development application number, and set out the location and nature of the incident.

Subsequent notification will be given and reports submitted in accordance with the requirements set out in Appendix 6 of Development Consent DA 374-11-00. A written incident notification addressing the requirements set out below will be submitted to the Planning Secretary via the Major Projects website within seven days after SEM becomes aware of an incident. Written notification of an incident will:

- identify the development and application number;
- provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
- identify how the incident was detected;
- identify when SEM became aware of the incident;
- identify any actual or potential non-compliance with conditions of consent;
- describe what immediate steps were taken in relation to the incident;
- identify further action(s) that will be taken in relation to the incident; and
- identify a project contact for further communication regarding the incident.

Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, SEM will provide the Planning Secretary, relevant councils, and any other relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested by the Planning Secretary.

- a summary of the incident;
- outcomes of an incident investigation, including identification of the cause of the incident;
- details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
- details of any communication with other stakeholders regarding the incident.

## **11.2 COMPLAINTS**

SEM will maintain a Community Complaints Line (tel: 1800 952 277) and email address (community@sunriseem.com) for the sole purpose of receiving community contacts and complaints. The Community Complaints Line number will be available on the website and included in SEM's advertising and community communication tools. The Community Complaints line will be staffed 24 hours a day, seven days a week during construction and operations. SEM will respond to callers on the next business day. If the issue is urgent a member of the leadership team will be contacted immediately.

SEM has developed a procedure that outlines its commitment to receiving, resolving and recording complaints received from the community. Detailed records of each complaint resolution are kept in SEM's record management systems.

Complaints will be investigated within 24 hours of receipt. The cause of the complaint will be analysed and actions to resolve the complaint taken as soon as possible. In complex cases where resolution will take more than 48 hours, SEM will commit to update the community member regularly until the complaint is resolved.

In accordance with Condition 12(a), Schedule 5 of Development Consent DA 374-11-00, a complaints register will be made available on the SEM website and updated monthly.

## **11.3 NON-COMPLIANCES WITH STATUTORY REQUIREMENTS**

A protocol for managing and reporting non-compliances with statutory requirements has been developed as a component of SEM's Environmental Management Strategy and is described below.

Compliance with all approvals plans and procedures is the responsibility of all personnel (staff and contractors) employed on or in association SEM and the Project.

SEM will undertake regular inspections, internal audits and initiate directions identifying any remediation/rectification work required, and areas of actual or potential non-compliance.

As described in Section 8.1, SEM will report incidents in accordance with Condition 8, Schedule 5 of Development Consent DA 374-11-00.

A review of compliance with all conditions in Development Consent DA 374-11-00 and Mining Lease 1770 will be undertaken prior to (and included within) each Annual Review.

Additionally, in accordance with Condition 10, Schedule 5 of Development Consent DA 374-11-00, an independent environmental audit (Section 12.2) will be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary to assess whether SEM is complying with the requirements in Development Consent DA 374-11-00.

#### **11.4 Exceedances of Impact Assessment Criteria and/or Performance Criteria**

A protocol for managing and reporting exceedances of impact assessment criteria and/or performance criteria is provided in the VPA.

#### **11.5 Access to Information**

In accordance with Condition 12, Schedule 5 Development Consent DA 374-11-00, SEM will make the following information publicly available on its website as relevant to the stage of the development:

- the EIS (as specified in the Definitions section of Development Consent DA 374-11-00);
- current statutory approvals for the development;
- approved strategies, plans or programs required under the conditions of the 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 the consent;
- a complaints register, which is to be updated on a monthly basis;
- any independent environmental audit, and SEM's response to the recommendations in any audit;
- any other matter required by the Planning Secretary; and
- keep this information up to date, to the satisfaction of the Planning Secretary.

## 12. REFERENCES

Austrroads (2021) *Austrroads Guides to Road Design*.

GTA Consultants (2017a) Syerston Project Modification 4 Road Transport Assessment, November 2017

GTA Consultants (2017b) *Road Transport Route Post Construction (Existing Road) Road Safety Audit*, November 2017

GTA Consultants (2018) *Road Transport Route Road Safety Audit*, August 2018

NSW Road Traffic Authority (2011) *Establishing a Railway Crossing Safety Management Plan*.

Planning Agreement – *Clean TeQ Sunrise Mine Project* (executed 13 December 2018)

The Transport Planning Partnership (TTPP) (2021) *Sunrise Project Execution Plan Modification Road Transport Assessment*.

## **APPENDICES**

### **APPENDIX A: KEY TERMS OF THE VOLUNTARY PLANNING AGREEMENTS**

**APPENDIX 3**  
**TERMS OF VOLUNTARY PLANNING AGREEMENTS**

**Community Enhancement Contribution**

- Clean TeQ shall pay an annual total payment of \$400,000 plus CPI to Forbes Shire Council (FSC), Parkes Shire Council (PSC) and Lachlan Shire Council (LSC).
- The total payment shall be allocated 50% to Lachlan Shire Council, with 25% each to Parkes Shire Council and Forbes Shire Council, unless otherwise determined jointly by FSC, LSC and PSC.
- The first payment of \$400,000 shall be payable within 21 days of signing of this Agreement and then paid on the same date each year until Mining Operations cease.

If the Final Investment Decision is not reached within 12 months of the initial payment, no further annual Community Enhancement Contributions will be made until the Final Investment Decision is reached. Once the Final Investment Decision is reached payments will resume within 21 days of the Final Investment Decision and continue annually.

**Road Maintenance Contribution**

- Clean TeQ shall pay an annual **Road Maintenance Contribution** totalling \$340,000 plus CPI as follows:
  - (i) Lachlan Shire Council: \$168,000
  - (ii) Parkes Shire Council: \$152,000
  - (iii) Forbes Shire Council: \$20,000
- The first annual contribution shall be paid within 21 days of the Final Investment Decision and then paid on the same date each year until Mining Operations cease.
- If the Final Investment Decision is not reached within 12 months of the initial payment, no further Road Maintenance Contributions shall be made until the Final Investment Decision is reached. Once the Final Investment Decision is reached, payments shall resume within 21 days of the Final Investment Decision payable annually on the same date.
- The Road Maintenance Contributions are to be used to maintain the following roads:

*Parkes Shire Council*

- Middle Trundle Road [SR83] (between Henry Parkes Way [MR61] and The Bogan Way [MR350]);
- The Bogan Way [MR350] (between Henry Parkes Way [MR61] and Fifield Trundle Road [SR171]);
- Fifield Trundle Road [SR171] (between The Bogan Way [MR350] and the Parkes Shire boundary);
- Fifield Road [MR 57] (between the Parkes Shire Boundary and The Bogan Way [MR350]);
- The Bogan Way [MR350] (between Fifield Road [MR57] and The McGrane Way [MR354]); and
- The McGrane Way [MR354] (between The Bogan Way [MR350] and the Parkes Shire Boundary).
- Scotson Lane between the rail siding access road and The Bogan Way [MR350].

#### *Lachlan Shire Council*

- 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]);
- Wilmatha Road [SR34] (between Slee St [in Fifield Village] and Mine Access Road); and
- Fifield Road [MR57] (between Red Heart Road [SR41] and the Lachlan Shire Boundary).

#### *Forbes Shire Council*

- North Condobolin Road (between the bore fields and Ootha-Mulguthrie Road);
  - Ootha-Mulguthrie Road (between North Condobolin Road and Henry Parkes Way [MR61]);
  - Ootha- Ringwood Road (between Henry Parkes Way [MR61] and Burkes Road);
  - Burkes Road (between Ootha- Ringwood Road and Ootha North Road); and
  - Ootha North Road (between Burkes Road and the Forbes Shire Boundary).
- Clean TeQ shall maintain Sunrise Lane (between the accommodation camp site access road and Wilmatha Road [SR34]), to the satisfaction of LSC, during the construction and operation phase of the mine and processing facility.

#### **Project Facilitation Contribution**

Clean TeQ shall pay LSC, PSC and FSC each an annual Project Facilitation Contribution of \$30,000 within 21 days of the Final Investment Decision and then on the same date each year thereafter. The payments are to be made during the period between Final Investment Decision and two years to the day after the commencement of construction.

#### **Consumer Price Index**

- The Community Enhancement Contribution, the Road Maintenance Contribution and the Project Facilitation Contribution are all subject to CPI. The three different contributions shall be indexed according to the CPI at the time of payments after the initial payment.

#### **Major Repair Contributions**

- Clean TeQ shall pay Major Repair Contributions on the Transport Route to address exceptional failure of or damage to roads where government grants do not cover the full cost of repairs.
- The Major Repair Contribution shall be undertaken on an as needs basis during the life of the mine, but limited to a maximum 5 km of construction in any year, unless mutually agreed between Clean TeQ and the relevant council(s).
- Clean TeQ shall pay the Major Repair Contribution to the Council(s) within 30 Business Days of the date of the letter notifying the relevant Council of acceptance of the Cost Report. These contributions are to be mutually agreed by the Parties and do not substitute for the nominated Road Maintenance Contributions.

## Road and Intersection Upgrades

Clean TeQ shall pay for and be responsible for the following Road and Intersection Upgrades. Such upgrades shall commence promptly following the Final Investment Decision, or earlier at the sole discretion of Clean TeQ:

### *Road Upgrades*

Prior to the commissioning of the Accommodation Camp, Clean TeQ shall pay for and require the completion of the upgrade of Sunrise Lane (between the Accommodation Camp access road and Wilmatha Road [SR34]) to the following:

- 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).

Construction of the Road and Intersection Upgrades are to commence promptly following the Final Investment Decision and be completed prior to the Commissioning of the Development.

Prior to the Commissioning of the Development (meaning the date on which the testing of the Mine Processing Facility to verify that it functions according to its design objectives and specifications is completed), Clean TeQ shall pay for and be responsible for the delivery of 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:

- Platina Road [SR64] (between the Lachlan Shire boundary and Fifield Road [MR57]);
- Fifield Road [MR57] (between Platina Road [SR64] and Slee St [in Fifield Village]);
- Wilmatha Road [SR34] (between Slee St [in Fifield Village] and the mine and processing facility access road); and
- Fifield Trundle Road [SR171] (between The Bogan Way [MR350] and the Parkes Shire boundary).

Clean TeQ shall prepare a road construction programme detailing the work specifications, timing and scheduling of road upgrades required. The programme shall be prepared by the Clean TeQ in consultation with the relevant Councils. The road upgrades shall be undertaken in accordance with the road construction programme unless otherwise agreed the relevant Councils.

### *Intersection Upgrades*

Prior to the Commissioning of the Development (as defined in the VPA), Clean TeQ shall pay for the following intersection upgrades:

- Platina Road [SR64] /Fifield Road [MR57];
- Fifield Road [MR57] /Slee Street [in Fifield Village];
- Slee Street [in Fifield Village]/Wilmatha Road [SR34]/Fifield Road;
- The Bogan Way [MR350] /Fifield Trundle Road [SR171] and Scotson Lane;
- Henry Parkes Way [MR61] and Middle Trundle Road [SR83];
- Henry Parkes Way [MR61] and The Bogan Way [MR350]; and
- Sunrise Lane/Wilmatha Road [SR34] - 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.

Clean TeQ shall prepare a road construction programme detailing the work specifications, timing and scheduling of intersection upgrades required. The programme shall be prepared by the Clean TeQ in consultation with the relevant Councils. The road upgrades shall be undertaken in accordance with the road construction programme unless otherwise agreed the relevant Councils.

#### *Road Safety Audits*

Prior to Commissioning of the Development, Clean TeQ shall pay for and deliver a road safety audit to determine road upgrade requirements on the following roads (including intersections and rail crossings):

- 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]);
- Wilmatha Road [SR34] (between Slee St [in Fifield Village] and Mine Access Road); and
- Fifield Road [MR57] (between Red Heart Road [SR41] and the Lachlan Shire Boundary);
- Henry Parkes Way [MR61] (between Westlime Road [western outskirts of Parkes] and The Bogan Way [MR350]);
- Middle Trundle Road [SR83] (between Henry Parkes Way [MR61] and The Bogan Way [MR350]);
- The Bogan Way [MR350] (between Henry Parkes Way [MR61] and Fifield Trundle Road [SR171]);
- Fifield Road [MR 57] (between the Parkes Shire Boundary and The Bogan Way [MR350]);
- The Bogan Way [MR350] (between Fifield Road [MR57] and The McGrane Way [MR354]);
- Fifield Trundle Road [SR171] (between The Bogan Way [MR350] and the Parkes Shire boundary); and
- The McGrane Way [MR354] (between The Bogan Way [MR350] and the Parkes Shire Boundary).

Prior to the Commissioning of the Development, Clean TeQ shall reach an agreement with the relevant Councils on funding and the timing of works as to any additional, specific road safety matters relevant to the Project as deemed necessary by the road safety audit.

APPENDIX B

ROAD UPGRADE AND MAINTENANCE STRATEGY RELATED DEVELOPMENT CONSENT  
DA 374-11-00 CONDITIONS

**Table B-1**  
**Road Upgrade and Maintenance Strategy Related Development Consent DA 374-11-00 Conditions**

Development Consent DA 374-11-00 Schedule 3	Section Where Addressed in this RUMS
<p><b>Road Upgrade and Maintenance Strategy</b></p> <p>43. <i>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 TfNSW and Council, and to the satisfaction of the Planning Secretary. This strategy must:</i></p> <p>a) <i>identify the road and intersection upgrades required for the project, including all those outlined in Appendix 5;</i></p> <p>b) <i>include a program that details:</i></p> <ul style="list-style-type: none"> <li>• <i>the scheduling of road upgrades required to be implemented in accordance with Appendix 5; and</i></li> <li>• <i>the maintenance of the relevant sections of the road network following the upgrades; and</i></li> </ul> <p>c) <i>be consistent with the terms of the VPA outlined in Appendix 3.</i></p>	<p>This RUMS</p> <p>Section 2</p> <p>Section 6 and 7</p> <p>Throughout</p>
<p>44. <i>The Applicant must implement the approved Road Upgrade and Maintenance Strategy for the development.</i></p>	
<p><b>Additional Road and Intersection Upgrades</b></p> <p>44A. <i>The Applicant must:</i></p> <p>(a) <i>construct two additional vehicle access points from Wilmatha Road to the mine and processing facility, prior to the commissioning of the mine and processing facility; and</i></p> <p>(b) <i>upgrade the 675 metre extension of Scotson Lane road to the rail siding access road to an 8 metre sealed pavement with 1 metre gravel shoulders, prior to the commissioning of the rail siding, to the satisfaction of the appropriate roads authority.</i></p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> <li>• <i>See Appendix 2 for the location of the roads and intersections referred to above.</i></li> <li>• <i>The road and intersection works identified above include all road furniture and safety requirements required to meet relevant road standards, to the satisfaction of the appropriate roads authorities.</i></li> <li>• <i>If there is a dispute between the relevant parties about the implementation of this condition, then any party may refer the matter to the Planning Secretary for resolution.</i></li> </ul>	<p>Section 3</p>

**Table B-1 (Continued)**  
**Road Upgrade and Maintenance Strategy Related Development Consent DA 374-11-00 Conditions**

Development Consent DA 374-11-00 Schedule 3	Section Where Addressed in this RUMS
<p><b>Rail Level Crossings</b></p> <p>44B. <i>The Applicant must:</i></p> <p>(a) <i>undertake rail level crossing safety assessments, in consultation with the relevant Rail Infrastructure Manager, and to the satisfaction of TfNSW, prior to the commencement of construction of the mine and processing facility. The assessments must:</i></p> <ul style="list-style-type: none"> <li>• <i>consider the operation of each of the level crossings along the transport routes associated with the development;</i></li> <li>• <i>be prepared in consideration of the railway crossing risk assessment procedure outlined in Appendix A of the Establishing a Railway Crossing Safety Management Plan (NSW Roads Traffic Authority, 2011);</i></li> <li>• <i>determine any rail crossing upgrade requirements necessary to achieve compliance with AS 1742.4 Manual of uniform control devices, Part 7: Railway crossings and the Austroads Guides to Road Design under existing conditions;</i></li> <li>• <i>determine any potential impacts on the operation of the level crossings as a result of construction and operation of the development; and</i></li> <li>• <i>determine any incremental rail crossing upgrade requirements necessary as a result of the development to ensure compliance with AS 1742.7 Manual of uniform control devices, Part 7: Railway crossings and the Guides to Road Design (Austroads, 2021);</i></li> </ul> <p>(b) <i>identify funding arrangements with TfNSW for any incremental rail crossing upgrades deemed necessary by the rail level crossing safety assessments as a result of the development; and</i></p> <p>(c) <i>complete any incremental rail crossing upgrades prior to the commissioning of the mine and processing facility, or other timing as may be agreed with TfNSW.</i></p> <p><i>Note: If there is a dispute between the relevant parties about the scope, timing or implementation of any rail level crossing upgrade works, then any party may refer the matter to the Planning Secretary for resolution</i></p>	<p>Section 4.4</p>