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SOUTHERN GRAMPIANS SHIRE COUNCIL

Council Meeting Minutes

Wednesday 14 May 2025

Held in Council Chambers

5 Market Place Hamilton at 2:00 pm

Southern Grampians
SHIRE COUNCIL

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The Meeting opened at 5:30pm.

1 Membership

Councillors
Cr Dennis Heslin, Mayor
Cr Afton Barber
Cr Albert Calvano
Cr Adam Campbell
Cr Jayne Manning
Cr Helen Henry
Cr Katrina Rainsford

Officers
Mr Tony Doyle, Chief Executive Officer
Mr Darren Barber, Director People and Performance
Mr Rory Neeson, Director Wellbeing, Planning and Regulation
Ms Marg Scanlon, Director Infrastructure and Sustainability
Mrs Karly Herring, Governance Coordinator

2 Welcome and Acknowledgement of Country

The Mayor, Cr Heslin read the acknowledgement of country:

"Our meeting is being held on the traditional lands of the Gunditjmara, Tjap Wurrung and Bunganditj people.

I would like to pay my respects to their Elders, past and present, and the Elders from other communities who may be here today."

Please note: All Council meetings will be audio recorded, and may be livestreamed to Council's social media platform, with the exception of matters identified as confidential items in the Agenda.

By participating in open Council meetings, individuals consent to the use and disclosure of the information they share at the meeting (including any personal and/or sensitive information).

Other than an official Council recording, no video or audio recording of proceedings of Council Meetings will be allowed without the permission of Council.

3 Prayer

Cr Campbell led the meeting in a prayer.

"Almighty god, we humbly beseech thee to vouchsafe thy blessing upon this council.

Direct and prosper its deliberations to the advancement of thy glory and the true welfare of the people of the Southern Grampians shire."

4 Apologies

Nil

5 Confirmation of Minutes

RECOMMENDATION

That the Minutes of the Council Meeting held on 9 April 2025 be confirmed as a correct record of business transacted.

COUNCIL RESOLUTION

MOVED: **Cr Rainsford**
SECONDED: **Cr Calvano**

That the Minutes of the Council Meeting held on 9 April 2025 be confirmed as a correct record of business transacted.

CARRIED

6 Declaration of Interest

None Declared

7 Leave of Absence

Nil

8 Questions on Notice

8.1 Hamilton Basketball Association - Jason Thomas and Lisa Cleaver

Q1: In March 2024, Council adopted the Southern Grampians Shire Recreation Framework. This report estimated that user groups fees for these facilities would be $52,270 for the 2024/25 year. Can Council please confirm what the actual invoiced user group fees for each of these groups is for the 2024/25 year?

Response Q1:

The actual invoiced amount for user groups that the Recreation Framework is applicable to is $43,360, which applies only to Council managed reserves in the Shire. It should be noted that this amount is less than the predicted income due to some facilities being unavailable due to capital works.

Q2: Hiring a HILAC multi purpose court (basketball court) is $42.50 per hour per court as detailed on Councils Pricing Register. The register outlines that this is Partial Cost Pricing, which refers to a situation where less than the full cost of providing a service is recovered. Can Council please detail how the total cost of providing a HILAC multi purpose court (basketball court) per hour per court is calculated and what is this amount?

Response Q2:

The court hire fees for the 2024/2025 financial year, at HILAC are as follows:

- $60 per/court – group booking
- $35 per/court – school group booking
- $42.50 per/court – Adult and Junior HBA booking outside User Group Agreement use.

All pricing is acknowledged to be partial cost recovery.

Pricing has been historical, with benchmarking against like centres with CPI applied.

Pricing excludes light uses, office hire, storage and proportioned use of amenities.

Full cost recovery has not been directed or pursued by the Southern Grampians Council since the opening of HILAC and therefore not undertaken.

These costs will be reviewed and benchmarked as part of the next steps of the implementation of the HILAC Service Review.

8.2 West Side of Cox Street Hamilton - Frank Henry

Q1: When does the council expect to complete surfacing the west side of Cox St?

Response Q1:

Council has not committed to complete any further road works on Cox Street, Hamilton. While Council managed the redevelopment of the east lane of Cox Street, these project works were funded by state government. Council continues to advocate to the Department of Transport and Planning (DPT) to complete these works. The DTP has indicated that this work has not been included within their forward budget or program.

9 Public Deputations

There were no Public Deputations listed on tonight's agenda.

10 Petitions

There were no Petitions listed on tonight's agenda.

11 Informal Meetings of Councillors

The Southern Grampians Shire Council Governance Rules require that records of Informal Meetings of Councillors that meet the following criteria:

If there is a meeting of Councillors that:

a. took place for the purpose of discussing the business of Council or briefing Councillors;
b. is attended by at least one member of Council staff; and
c. is not a Council meeting, Delegated Committee meeting or Community Asset Committee meeting;

be tabled at the next convenient Council meeting and recorded in the minutes of that Council meeting.

An Informal Meeting of Councillors record was kept for:

- Briefing Session - 2 April 2025
- Briefing Session - 9 April 2025
- Briefing Session – 30 April 2025

This agenda was prepared on 7 May 2025. Any Informal Meeting of Councillors between that date and the date of tonight's Meeting will appear in the agenda for the next Council Meeting.

Informal Meeting of Councillors

ASSEMBLY DETAILS	
Title:	Briefing Session - 2 April 2025
Date:	2 April 2025
Location:	MJ Hynes Auditorium
Councillors in Attendance:	Cr Barber Cr Calvano Cr Campbell Cr Henry Cr Manning Cr Rainsford
Council Staff in Attendance:	Rory Neeson, Acting Chief Executive Officer Darren Barber, Director People and Performance Marg Scanlon, Director Infrastructure and Sustainability Daryl Adamson, Acting Director Wellbeing, Planning and Regulation Bill Scott, Manager Project Management Office Kunal Ponanna, Strategic Infrastructure Engineer Simone Logan, Acting Visitor Economy Coordinator

The Informal Meeting commenced at 10:30am.

MATTERS CONSIDERED		CONFLICTS OF INTEREST DECLARED
1	Safer Local Road and Street Program	Nil
2	Volcanic Trail Business Case	Nil
3	CBD Streetscape Concept Plans and Community Consultation	Nil
4	Award of Contract – Truck and Trailer	Nil
5	Organics Processing Tender Award	Nil
6	Transfer Station Fees and Charges	Nil

The Informal Meeting concluded at 4:45pm.

Informal Meeting of Councillors

ASSEMBLY DETAILS	
Title:	Briefing Session - 9 April 2025
Date:	9 April 2025
Location:	MJ Hynes Auditorium
Councillors in Attendance:	Cr Barber Cr Calvano Cr Campbell Cr Henry Cr Heslin Cr Manning Cr Rainsford
Council Staff in Attendance:	Tony Doyle, Chief Executive Officer Darren Barber, Director People and Performance Marg Scanlon, Director Infrastructure and Sustainability Rory Neeson, Director Wellbeing, Planning and Regulation Daryl Adamson, Manager Shire Strategy and Regulation Nick Templeton, Head of Finance

The Informal Meeting commenced at 11:00am.

MATTERS CONSIDERED		CONFLICTS OF INTEREST DECLARED
1	Councillor Only Meeting	Nil
2	Council Meeting Items	Nil
3	Food and Fibre Great South Coast	Nil
4	393 Gray Street planning Scheme Amendment	Nil
5	Operational Budget	Nil

The Informal Meeting concluded at 5:00pm.

Informal Meeting of Councillors

ASSEMBLY DETAILS	
Title:	Briefing Session - 30 April 2025
Date:	30 April 2025
Location:	MJ Hynes Auditorium
Councillors in Attendance:	Cr Barber Cr Calvano Cr Henry Cr Heslin Cr Manning Cr Rainsford
Council Staff in Attendance:	Tony Doyle, Chief Executive Officer Darren Barber, Director People and Performance Marg Scanlon, Director Infrastructure and Sustainability Rory Neeson, Director Wellbeing, Planning and Regulation Karly Herring, Governance Coordinator Jane Coshutt, Senior Community Development Coordinator Bill Scott, Manager Project Management Coordinator Bree Harris, Financial Services Coordinator

The Informal Meeting commenced at 11:00am.

MATTERS CONSIDERED		CONFLICTS OF INTEREST DECLARED
1	Review of s6 and s11a Instruments	Nil
2	2024 Election Report	Nil
3	Community Partnership Grants Policy Update	Nil
4	Restoration of Essential Public Assets (REPA) Contract Funding	Nil
5	Budget Submissions CAMMS Report/Business Case Prioritisation	Nil

The Informal Meeting concluded at 5:00pm.

12 Management Reports

12.1 Organics Processing Tender Award

Directorate: Infrastructure and Sustainability
Report Approver: Marg Scanlon (Director Infrastructure and Sustainability)
Report Author: Juan Donis, Sustainable Community Lead
Attachment(s): Nil

Executive Summary

This report provides Council with details on a sustainability initiative that identifies an opportunity to repurpose food, green organics and the effluent waste resources from HRLX which will reduce the projected Council costs and operational intensive compliance requirements. Over the past 18 months officers within the Works and Sustainability Teams have collaborated to ascertain effluent volumes, operational practices, environmental protection requirements and engaged with various external parties to research alternative, sustainable waste processing options. This initiative responds to Council's Sustainability and Climate Change Strategy and is identified within the HRLX Business Plan. This report provides Council with two options which have been developed by Officers following this research.

Following on site processing trials, engagement with the Environment Protection Authority (EPA) and the private sector, a two stage tender process was conducted to explore and evaluate a potential range of technologies for the processing of Food Organics and Garden Organics (FOGO), green waste and dry and wet effluent from the Hamilton Regional Livestock Exchange (HRLX) at Hamilton Transfer Station.

This tender process commenced on June 2024 through an Expression of Interest (EOI) for the design, supply, install and operation of an onsite organics processing solution to be located at the Hamilton Transfer Station. The intention of the EOI was to explore a range of solutions before evaluating the possibility of entering into a long-term lease agreement.

Two companies provided a response to the EOI, however, only one (GAIA Envirotech Pty. Ltd.) submitted a proposal in response to the tender. The proposed technology as nominated by GAIA for the organics processing is an in-vessel rapid composting unit which will be able to process up to 7,000 tonnes of organic materials from kerbside operations, located at Hamilton Transfer Station and HRLX per year, to produce commercial certified compost. This method of processing organic materials and the infrastructure proposed is used elsewhere with successful results, for example Ararat Rural City and Hepburn Shire Councils. The general method behind this organic processing is an in-vessel rapid compost which uses heat and humidity to compost the organic material.

The proposed arrangement includes a lease agreement for a period of seven years for a total value of up to $6,551,169 (ex GST) with an option to terminate the contract after three years, should the initiative fail to demonstrate the projected financial and material returns to Council. It should be noted that preliminary information provided by GAIA requires further development and subsequently it is proposed that this will be included as part of the next steps with the lease negotiation between GAIA and Council. The projected business case

estimates annual savings for Council between $150,000 and $200,000, in addition to providing a feasible solution to manage solid effluents at HRLX and a more sustainable management model for FOGO and green waste generally.

The contract will depend on Council successfully obtaining the EPA license and planning permit to operate an organics processing facility for a volume of approximately 7,000 tonnes per year.

Discussion

Over the last year works have been undertaken to determine what opportunities Council might have in terms of circular economy and waste minimisation within the Shire. It has been determined that Council's biggest opportunity was around organics processing to produce commercial compost or biochar was the most feasible solution which will require minimum upfront cost and can be managed by a third party under a lease agreement.

Currently Council is transporting approximately 6,000t per year of organic material comprising;

- FOGO kerbside – 2,500t
- Green Waste – 500t
- HRLX dry effluent – 3,000t

Current operations

Under the current contractual arrangement for the Kerbside FOGO collections, this material is transported to Camperdown for processing. Council, through its current kerbside collection services contract pays for both the collection and transportation costs to manage this material.

Historically green waste received at the Hamilton Transfer Station was combined with general waste however in more recent years Council has undertaken trials to repurpose this material. Green waste has been mulched and wind rolled by Council staff with regular testing to determine the optimal temperatures have been achieved to kill any germination. This mulch has been provided, free of any charge, to the local community on the agreement that the mulch is taken as a part of the trial. Follow up with recipients has confirmed that this mulch has been free of any contaminants.

HRLX effluent historically has been directed through a wastewater treatment system managed by Wannon Water. Over recent years Council entered into a Trade Waste Agreement with Wannon Water a three-year period (expiring in June 2025) with an annual cost of approximately $70,000. This agreement formally addresses the wet effluent processing undertaken by Wannon Water with the separated dry effluent stockpiled on Beath Street, land leased by Council. Continued stock piling of the dry effluent is not a long term option for Council, due to the EPA requirements and subsequently Officers have been liaising with the EPA to determine a sustainable long-term solution to reduce the amount of wet and dry effluent processed by a third party.

Future Operations

Over the past 12 months, Officers have been investigating sustainable options to divert, treat and repurpose organic materials with the objective to reduce Council costs, repurpose valuable organic material and resolve outstanding environmental protection issues.

Officers undertook a public EOI to ascertain industry interest and to inform a triple bottom line sustainable method to manage known volumes of organic waste. The EOI resulted in the rapid compost technology to be the most feasible available technology that can adapt to Council's needs and processes.

The identified organics processing solution will give Council the autonomy to process FOGO, Green Waste and HRLX dry effluent at the Hamilton Transfer Station and be able to retain the commercial grade compost material for future use and sales.

This solution will meet EPA requirements but also will reduce risks to Council resulting from third parties' capacity to manage the material or prices increases at short notice due to logistics.

It is proposed there will be a second stage within this project that will incorporate the wet effluent from HRLX, subsequently repurposing the waste wet effluent into the organic material, removing the volume of effluent going through Wannon Waters system and removing the associated Trade Waste Agreement costs to Council. A business case for the second stage will be developed after stage 1 is completed, which would also consider the opportunity to remove the need for the current Trade Waste Agreement between Council and Wannon Water which currently has an annual escalating fee to Council.

In addition to the processing plant, a hardstand, other on-site infrastructure and an EPA licence agreement are required. These are estimated to cost $500,000.

The proposed contract will be a lease agreement for a period of seven years for a total value of up to $6,551,169 ex GST.

Options

Fundamentally, based on this recent research and development undertaken by Officers, Council has two options in relation to the future management of FOGO, green organics and HRLX effluent. Each option requires the development of an EPA Licence Agreement, and this process has commenced.

1. Continue to operate business as usual. This option includes continued kerbside collection of FOGO and green organics and transfer station collection of green organics. This results in logistic costs to Council with a portion recouped through waste levy collected through Council Rates and transfer station gate fees which is not a cost recovery result. Specifically for the effluent, Council would continue with the Trade Waste Agreement with Wannon Water to manage the wet effluent. Council would continue to manage the dry effluent on site noting there is limited capacity to store and naturally process the dry effluent within EPA requirements.

This option is the least effective due to the long-term costs and operational requirements which would rely on Works and transfer station staff to support the process with fleet and labour.

This option fails to optimise the natural resource material to its full potential.

Maintaining business as usual is projected to result in yearly costs of approximately $200,000 for FOGO and $80,000 for mulch processing. Currently the management of the dry effluent at HRLX only consist in stockpiling the material onsite to let it dry over a period of 12 month. This does not comply with EPA requirements as the current site is not suitable for these operations. In addition, HRLX is in the process of obtaining an operating license with the EPA which might request Council to demonstrate how the material is properly controlled and managed onsite which Council will not be able to demonstrate. Continued operations might cost less in the short term, but it will increase Councils risk of EPA infringements and/or improvement notices and potentially compliance and rectification required works which that will be more expensive than the proposed alternative solution.

2. Establish a sustainable method of collection and treatment to repurpose the FOGO, green organics and HRLX effluent to realise a financial and environmental return over a defined period. This option as detailed within this report demonstrates innovation and best practice, noting it is reliant on an investment from Council, which is projected to provide a financial return. Further business case details are to be determined and subsequently this is the Officers preferred option with the proposal to return to Council with a further briefing and recommendation.

Regional Procurement

Collaborative procurement was not conducted for this tender as each Council in the region currently have contractual arrangements for the collection and disposal of FOGO. However, ongoing work is occurring with neighbouring LGAs to seek their interest to bring the FOGO and green waste material to Hamilton.

Financial and Resource Implications

A triple bottom line focus informed the development of this initiative and draft business case resulting in identified operational financial savings, carbon footprint reduction through reduced transportation to Camperdown and social implications through reduced costs to the community, repurposed natural materials enabling access to commercially grade compost.

The tender required the contractor to provide pricing for 5,000 tons and/or 7,000 tons of material processed per year during a five-to-seven-year period.

The business case of this project will depend on the length of the contract, the yearly volume of organics processed and the sales of the commercial certified compost. The table below provides a summary of the scenarios for a seven-year contract period based on 5,000 tons and 7,000 tons per year. As outlined within this report Officers seek feedback from Council in relation to the tolerance of investment and proposed pay-back period for Officers to explore further options and scenarios with the proposed contractor.

Scenario 1	Yearly Cost ($)	Scenario 2	Yearly Cost ($)
FOGO	$195,091.47	FOGO	283,347.14
Green Waste	$80,000.00	Green Waste	$80,000.00
Clean fill / Compost internal use	$75,000.00	Clean fill / Compost internal use	$75,000.00
HRLX - Solid Waste Disposal Cost (assuming same cost as FOGO)**	$278,702.10	HRLX - Solid Waste Disposal Cost (assuming same price as FOGO)**	$278,702.10
Total	**$628,793.57**	**Total**	**$717,049.24**
GAIA costs for 5000 tonnes	$750,000.00	GAIA costs for 7000 tonnes	$868,000.00
Difference BAU vs GAIA	$121,206.43	Difference BAU vs GAIA	$150,950.77
Yearly revenue from compost sales (if all compost is sold 50$/ton)	$200,000.00	Yearly revenue from compost sales (if all compost is sold 50$/ton)	$280,000.00
Yearly revenue from compost sales (if all compost is sold 75$/tonne)	$300,000.00	Yearly revenue from compost sales (if all compost is sold 75$/tonne)	$420,000.00
Total financial position 5000t - sales 50$/tonne	$78,793.57	Total financial position 7000t - sales 50$/tonne	$129,049.24
Total financial position 5000t - sales 75$/tonne	$178,793.57	Total financial position 7000t - sales 75$/tonne	$269,049.24

The following assumptions have been applied in the development of this business case:

- The real costs of processing HRLX dry effluent to meet EPA standards.
- The proposal is projected to be sustainable for the long term.
- Cost per tonne of commercial grade compost sales.
- Internal use of the material has been underestimated.
- Estimates are based on current known volumes of organics material sourced from across the Shire through the kerbside collection service.
- A one-off investment of $500,000 has not been factored into the above figures however this would be subject to a separate business case to be considered through the 2025/2026 budget process.
- Income sourced from compost sales requires further investigation. Anecdotally Officers are aware of local large-scale farms interested in accessing compost however further details on demands and volumes need to be determined.

** HRLX solid waste disposal estimations are conservative, if it is disposed in Melbourne under the classification of contaminated soil, the cost of disposal will be around $390,000 per year.

Including all the assumptions above, this business case is positive for the Council. This business case does not include future risks of cost increases from contractors nor changes in EPA requirements for the processing of organic material particularly dry effluent at HRLX.

In addition, a one-off investment in the order of $450,000 - $500,000 is required to ensure the Hamilton Transfer Station can operate this type of technology and to support Council in obtaining EPA licenses for the process. This future separate business case is proposed for additional necessary infrastructure; however, this investment can be phased over financial years, or it can be negotiated that the contractor absorbs the initial costs for construction and factored in through the life of the contract.

An EPA license and a planning permit are required to enable this proposal. Officers have commenced the process of securing the EPA license, however, this can take approximately six months. It is anticipated that the lead time between endorsement of this lease proposal and the commencement of the operation might be up to 12 months. Regardless of the preferred option Council is required to have an EPA licence for HRLX and this process has commenced. Officers have actively engaged with EPA over the past 18 months through the trail periods on site to manage the effluent and EPA have been very supportive.

Sales of commercial grade compost will be fundamental element to improve this business case. Based on current trends, it is assumed that compost processing cost is between $50 to $70 per tonne, with the estimate that the product could be sold for up to $90 per tonne. Officers are aware of local large scale agricultural producers who have an interest in long term supplies of the product. Council through its own operations could use the compost in parks, gardens and reserves and it is assumed residents and businesses would support purchasing local compost. This is a common initiative across various Councils including Hepburn Shire and Ararat City.

It is important to note, if this proposal is not supported, Council will continue to pay between $600,000 to $700,000 per year for the transportation and processing of the organic material. The real cost to Council will be approximately $150,000 per year, if Council is not able to sell the compost.

Cost recovery options will be further explored particularly to cover HRLX costs of processing dry effluent at the Hamilton Transfer Station.

Council Plan, Community Vision, Strategies and Policies

Grow Our Regional Economy
2.4 Support local business and industry
2.4.2 Support and facilitate business development and growth initiatives.

Protect Our Natural Environment
4.3 Sustainable waste management services
4.3.2 Manage waste efficiently to limit costs, reduce waste and grow circular economy.
4.3.3 Investigate, support and advocate for opportunities in renewable energy sources and re-use of waste streams.

This proposal is strategically aligned particularly with the recently adopted Sustainability and Climate Change Strategy and the HRLX Business and Marketing Plan. The Hamilton Livestock Exchange Advisory Committee have been engaged in the development of this initiative and while they have not been privy to the tender details as provided within this report, the Advisory Committee are supportive of the proposal objectives and attention to the EPA requirements.

Legislation

This proposed technology meets the requirement for organics processing under the Environmental Protection Act. It is an EPA requirement that a licence agreement is established specifically for HRLX in relation to the effluent and the proposed treatment.

Gender Equality Act 2020

A gender impact assessment is not required for this project as it is a waste resource processing initiative and while there will be benefits for the community, these benefits are for all.

Risk Management

A preliminary risk assessment has been undertaken which has guided the consideration and further development of this initiative. Fundamentally this risk assessment was driven by the unsustainable volumes of effluent at HRLX, projected cost escalations in waste logistics and the missed opportunity to repurpose a waste resource.

Taking control of this organic material processing will reduce Councils reliance on third party contractors' transportation and processing and internal operational support, resulting in reduced costs. This reliance exposes Council to increasing logistic costs and commercial volatility within the waste management sector. In addition, the lease agreement will include a termination clause which allows the parties the option to cease the lease if after three years the proposal is not cost effective for Council.

In addition, the lease agreement will be fully executed once the EPA license and planning permit has been obtained, this process might take six months.

Climate Change, Environmental and Sustainability Considerations

Onsite organics processing will reduce the transportation requirements to take the FOGO and green organic material between Hamilton to Camperdown which will reduce Council’s carbon footprint. As outlined within this report, while Council has a trade waste agreement for the wet effluent, currently Council does not have a manageable solution for the dry effluent sourced through HRLX. EPA have been very accommodating however the current situation is not acceptable for the long-term.

This proposal, put simply, takes significant volumes of green organics and livestock effluent, which is currently managed as waste, through a process to transform it into compost for reuse on private properties and Council public open space.

Community Engagement, Communication and Consultation

No formal broader community engagement has been undertaken for this initiative. Officers have proactively engaged with respective stakeholders to inform this initiative including EPA, private processing industry providers, Ararat Rural City Council (as a live operator of a similar system) and HRLXAC. This proposal, which is considered common practice across many European countries, has been identified within the HRLX Business and Marketing Plan and is supported by the HRLX Advisory Committee. If supported by Council, this initiative would be promoted locally and beyond as a proactive initiative that generates benefits to the community beyond the cost efficiencies and repurposing of the natural product.

Disclosure of Interests

All Council Officers involved in the development and advice provided in this Report affirm that no general or material interests need to be declared in relation to any matters in this Report.

Juan Donis, Sustainable Community Lead
Trevor Harley, Manager Works
Marg Scanlon, Director Infrastructure and Sustainability

RECOMMENDATION

That Council:

1. Note negotiations with GAIA Envirotech PTY LTD are ongoing to finalise service agreement details and conditions for the installation and operation of the proposed organic processing facility at Hamilton Transfer Station.
2. Authorise the Chief Executive Officer to negotiate the final details the proposed service agreement and any other document required to give effect to the terms of the service agreement.
3. Delegate to the Chief Executive Officer the power to enter into the agreement on behalf of Council, execute the contract and sign the lease contained within the service agreement, noting the service agreement will have a defined parameter of seven years to a maximum accumulative value of $6,551,169ex GST.
4. Note a further report will be tabled for a Council Briefing detailing the executed service agreement for Council's information.

COUNCIL RESOLUTION

MOVED: **Cr Manning**
SECONDED: **Cr Henry**

That Council:

1. **Note negotiations with GAIA Envirotech PTY LTD are ongoing to finalise service agreement details and conditions for the installation and operation of the proposed organic processing facility at Hamilton Transfer Station.**
2. **Authorise the Chief Executive Officer to negotiate the final details the proposed service agreement and any other document required to give effect to the terms of the service agreement.**
3. **Delegate to the Chief Executive Officer the power to enter into the agreement on behalf of Council, execute the contract and sign the lease contained within the service agreement, noting the service agreement will have a defined parameter of seven years to a maximum accumulative value of $6,551,169ex GST.**
4. **Note a further report will be tabled for a Council Briefing detailing the executed service agreement for Council's information.**

CARRIED

12.2 Award of Contract - No. 2024258 for the Supply and Delivery of One Haulage Tipper Truck and Dog Tipper Trailer

Directorate: Infrastructure and Sustainability
Report Approver: Marg Scanlon (Director Infrastructure and Sustainability)
Report Author: Trevor Haley, Manager Works
Attachment(s): 1. 2024258-_ Evaluation Report-_ Updated-signed-202505020918 [**12.2.1** - 8 pages]

Executive Summary

This contract is for the supply and delivery of one Haulage Tipper Truck and Dog Tipper Trailer for the primary function to carry out both capital and operational civil works across various locations within the Southern Grampians Shire Council. Tenderers were also invited to provide additional optional extras within their submissions including sustainability. This proposed heavy vehicle purchase is replacement of an aged fleet item that is at its end of life.

Following the tender evaluation process, the recommendation is that Council award Contract No. 2024258 for the Supply and Delivery of One (1) Haulage Tipper Truck and Dog Tipper Trailer to Blue Lake Vehicles Pty Ltd T/as Mount Gambier Isuzu & Iveco for the tendered amount of $415,200.000 excluding GST.

Discussion

Council has had a Tipper Truck and Dog Tipper Trailer within its fleet for more than 16 years. This unit is heavily used 12 months of the year for the purposes of collecting and delivery materials to site for both capital and maintenance works across the Shire.

This tender sought to secure a unit that is Euro 6 and 5 Star Australasian New Car Assessment Program (ANCAP) rated. Euro 6 is the current (sixth) iteration of the European Union's emissions standards for vehicles, aiming to reduce harmful pollutants like nitrogen oxides (NOx), hydrocarbons (HC), carbon monoxide (CO), and particulate matter (PM). The ANCAP defines the safety rating of the vehicle.

All vehicles nominated through this tender process were field tested by key operational staff to ensure the unit is fit for purpose for Southern Grampians Shire operational needs. All tenders were also evaluated against their capacity to provider support and servicing. This select tender process resulted in five suppliers invited to submit with three suppliers responding with five submissions received. No late tenders were received.

The following companies submitted tenders to Council and have been assessed by the tender assessment panel:

Iveco Trucks Australia Pty Ltd Mount Gambier and Bendigo
Hino Motor Sales Australia Pty Ltd
Barry Maney Group
Iveco Trucks Australia Pty Ltd Mount Gambier and Bendigo are the recommended contractor.

Financial and Resource Implications

This purchase will exhaust the remaining funds within the 2024/2025 Heavy Fleet Budget as identified in the 2024/2025 Heavy Fleet Program as endorsed by Council.

Council Plan, Community Vision, Strategies and Policies

Maintain and Renew Our Infrastructure
3.1 Plan and maintain sustainable assets and infrastructure
3.1.4 Strategically plan a sustainable long-term capital program with identification of funding and partnership opportunities.

Protect Our Natural Environment
4.4 Mitigate against and adapt to climate change
4.4.1 Investigate opportunities to reduce emissions and waste.

Legislation

Local Government Act 2020.

Gender Equality Act 2020

While a Gender Impact Assessment was not undertaken for this item, Council does have female operators and the infield assessment enabled consideration of operator functions and comfort with female operators involved and considered through this process.

Risk Management

Risk management has been a key factor in the determination of the heavy vehicle specification developed for this tender particularly considering operator requirements and ANCAP.

Collaborative Procurement Opportunities

There were no collaborative procurement opportunities available in relation to the tendering process or awarding of this contract.

Climate Change, Environmental and Sustainability Considerations

Only trucks with a Euro 6 were considered. Euro 6 trucks represent the latest emission standard for heavy vehicles, focusing on reducing pollutants.

Collaborative Procurement Opportunities

Collaboration was conducted through MAV who release tenders to the market on behalf of Local Government for the procurement of goods and services. Council requested quotations from three of these suppliers to ensure value for money was obtained.

Community Engagement, Communication and Consultation

No community engagement has been undertaken for this item; however, staff were actively involved in the development of the specification, demonstrations and assessment.

Disclosure of Interests

All Council Officers involved in the development and advice provided in this Report affirm that no general or material interests need to be declared in relation to any matters in this Report.

Trevor Haley Manager Works
Andrew Povey Senior Coordinator Works
Allan Wishart Fleet Co-ordinator

RECOMMENDATION

That Council:

1. Award Contract No. 2024258 the Supply and Delivery of One (1) Haulage Tipper Truck and Dog Tipper Trailer to Blue Lake Vehicles Pty Ltd T/as Mount Gambier Isuzu & Iveco for the tendered lump sum price of $415,200.000 excluding GST.

2. Authorise the Chief Executive Officer to execute Contract No 2024258 and any other documents required by or to give effect to the terms of the contract on behalf of Council.

COUNCIL RESOLUTION

MOVED: **Cr Calvano**
SECONDED: **Cr Barber**

That Council:

1. **Award Contract No. 2024258 the Supply and Delivery of One (1) Haulage Tipper Truck and Dog Tipper Trailer to Blue Lake Vehicles Pty Ltd T/as Mount Gambier Isuzu & Iveco for the tendered lump sum price of $415,200.000 excluding GST.**

2. **Authorise the Chief Executive Officer to execute Contract No 2024258 and any other documents required by or to give effect to the terms of the contract on behalf of Council.**

CARRIED

12.3 s11A Instrument of Appointment and Authorisation under the Planning and Environment Act 1987

Directorate: People and Performance
Report Approver: Darren Barber (Director People and Performance)
Report Author: Karly Saunders, Governance Coordinator
Attachment(s): 1. s11A Instrument of Appointment and Authorisation under the Planning and Environment Act 1987 [**12.3.1** - 2 pages]

Executive Summary

Council appoints many powers to its staff through instruments of delegation and authorisation.

The s11A Instrument of Appointment and Authorisation appoints Council staff to be authorised under the *Planning and Environment Act 1987* (the Act) and allows them to fully discharge their duties and responsibilities under that Act.

The s11A Instrument of Appointment and Authorisation was last adopted by Council on 11 September 2024.

The Instrument has been updated to reflect recent staffing changes and is attached for Council consideration.

Discussion

The Act, and a variety of other legislation, makes express provision for the appointment of authorised officers to act on behalf of Councils and these powers are essential to enable day to day decisions to be made and for the effective operation of the organisation.

The Instruments of Appointment and Authorisation are prepared for Council by Maddocks Lawyers.

S11A Instrument of Appointment and Authorisation

The s11A Instrument of Appointment and Authorisation:

- Appoints the officers to be authorised officers for the purposes of the *Planning and Environment Act 1987* and the regulations made under that Act; and

- Authorises the officers to institute proceedings for offences against the *Planning and Environment Act 1987* and the regulations made under that Act.

The Authorisation requires updating due to staff changes in the Planning Team including two officers' names being removed and one title amendment.

There is also an amendment to the wording of the S11 instrument to more closely align with the wording of section 147(4) of the *Planning and Environment Act 1987.*

These appointments and authorisations must be made by Council and are not delegated by the CEO.

Financial and Resource Implications

Council subscribes to the Delegations and Authorisations service provided by Maddocks Lawyers, the cost of which is provided for in Council's budget.

There are no other financial implications in reviewing the Instruments of Delegation.

Council Plan, Community Vision, Strategies and Policies

Provide Strong Governance and Leadership
5.1 Transparent and accountable governance
5.1.1 Strengthen the governance role of Councillors by informing, resourcing, skilling and supporting the role.
5.1.2 Ensure flexible and transparent decision making through open and accountable governance.

Legislation

Section 147(4) of the *Planning and Environment Act 1987* appoints officers to be authorised officers for the purposes of the Act and regulations made under the Act.

Section 313 of the *Local Government Act 2020* authorises the officers either generally or in a particular case to institute proceedings for offences against the Act and regulations described in the s11A Instrument of Appointment and Authorisation.

Gender Equality Act 2020

The adoption of this Instrument does not have any direct gender implications.

Risk Management

The use of the Maddocks service alleviates the potential risk of staff not being appropriately authorised in the exercise of various powers and functions. Updates are provided by Maddocks regularly and capture any legislative changes. The service is available to all Victorian Councils which enables consistency.

Climate Change, Environmental and Sustainability Considerations

Many of the activities undertaken by staff on behalf of Council have social, economic, or environmental effects, including many of the powers included in the instruments of authorisation and delegation. The Instruments ensure that the decisions are made by the most appropriate person or persons within the organisation.

Community Engagement, Communication and Consultation

There is no requirement for community consultation in relation to the review of the Instrument.

Affected staff have been consulted in the preparation of this Instrument and will be provided with confirmation of the amendments to the Instrument once considered by Council.

Disclosure of Interests

All Council Officers involved in the development and advice provided in this Report affirm that no general or material interests need to be declared in relation to any matters in this Report.

Karly Saunders, Governance Coordinator

RECOMMENDATION

In the exercise of the powers conferred by the legislation referred to in the attached instrument, Council resolves that:

1. Council adopt the attached s11A Instrument of Appointment and Authorisation for the members of Council staff set out in the instrument; and

2. The s11A Instrument of Appointment and Authorisation comes into force immediately the common seal of Council is affixed to the instrument and remains in force until Council determines to vary or revoke it, and on coming into force all previous s11A instruments are revoked.

COUNCIL RESOLUTION

MOVED: Cr Rainsford
SECONDED: Cr Campbell

In the exercise of the powers conferred by the legislation referred to in the attached instrument, Council resolves that:

1. **Council adopt the attached s11A Instrument of Appointment and Authorisation for the members of Council staff set out in the instrument; and**

2. **The s11A Instrument of Appointment and Authorisation comes into force immediately the common seal of Council is affixed to the instrument and remains in force until Council determines to vary or revoke it, and on coming into force all previous s11A instruments are revoked.**

CARRIED

12.4 s6 Instrument of Delegation from Council to Staff

Directorate: People and Performance
Report Approver: Darren Barber (Director People and Performance)
Report Author: Karly Saunders, Governance Coordinator
Attachment(s): 1. S6 Instrument of Delegation from Council to members of Council staff April 2025 [**12.4.1** - 72 pages]

Executive Summary

The Act, and a variety of other legislation, makes express provision for the appointment of delegates to act on behalf of Council. The delegation of powers is essential to enable day to day decisions to be made and for the effective operation of the organisation.

The s6 Instrument of Delegation from Council to Staff has been updated and is attached for consideration.

Discussion

The s6 Instrument of Delegation was last adopted by Council on 8 March 2023. Through this delegation, Council delegates certain statutory provisions directly to the relevant Council staff within the organisation.

The changes to the s6 Instrument include:

1. Inserted section 12(2)(b) of the *Road Management Act 2004* to provide for Council to provide consent to the Head, Transport for Victoria to discontinue a road or part of a road;
2. Removed the limitation for the powers in sections 19FA(1) and 19FA(3)(a)-(c) of the *Food Act 1984* being delegated "only in relation to temporary food premises or mobile food premises"; and
3. Amended a typographical error in s 12(1) of the Residential Tenancies (Caravan Parks and Moveable Dwellings Registration and Standards) Regulations 2024.

Financial and Resource Implications

Council subscribes to the Delegations and Authorisations service provided by Maddocks Lawyers, the cost of which is provided for in Council's budget.

There are no other financial implications in reviewing the Instrument of Delegation.

Council Plan, Community Vision, Strategies and Policies

Provide Strong Governance and Leadership
5.1 Transparent and accountable governance
5.1.1 Strengthen the governance role of Councillors by informing, resourcing, skilling and supporting the role.
5.1.2 Ensure flexible and transparent decision making through open and accountable governance.

Legislation

The power of delegation is provided for under Section 11 of the *Local Government Act 2020.*

Gender Equality Act 2020

There are no gender equality implications.

Risk Management

The use of the Maddocks service alleviates the potential risk of staff not being appropriately authorised in the exercise of various powers and functions. Maddocks update their Instruments twice a year and capture any legislative changes. The service is available to all Victorian Councils which enables consistency.

Climate Change, Environmental and Sustainability Considerations

Many of the activities undertaken by staff on behalf of Council have social, economic or environmental effects, including many of the powers included in the instruments of delegation. The Instruments of Delegation ensure that the decisions are made by the most appropriate person or persons with the organisation.

Community Engagement, Communication and Consultation

There is no requirement for community consultation in relation to the review of the Delegations.

The Instrument is available for viewing on Council's website and is also available for public inspection.

Staff have been consulted regarding the amendments to this Instrument and will be provided with an updated copy once it has been considered by Council.

Disclosure of Interests

All Council Officers involved in the development and advice provided in this Report affirm that no general or material interests need to be declared in relation to any matters in this Report.

Karly Saunders, Governance Coordinator

RECOMMENDATION

In the exercise of the powers conferred by the legislation referred to in the attached instrument of delegation, Council resolves that -

1. There be delegated to the members of Council staff holding, acting in or performing the duties of the offices or positions referred to in the attached *Instrument of Delegation to members of Council staff*, the powers, duties and functions set out in that instrument, subject to the conditions and limitations specified in that Instrument.

2. The instrument comes into force immediately the common seal of Council is affixed to the instrument.

3. On the coming into force of the instrument, the previous delegation is revoked.

4. The duties and functions set out in the instrument must be performed, and the powers set out in the instrument must be executed, in accordance with any guidelines or policies of Council that it may from time to time adopt.

COUNCIL RESOLUTION

MOVED: Cr Henry
SECONDED: Cr Manning

In the exercise of the powers conferred by the legislation referred to in the attached instrument of delegation, Council resolves that -

1. **There be delegated to the members of Council staff holding, acting in or performing the duties of the offices or positions referred to in the attached *Instrument of Delegation to members of Council staff*, the powers, duties and functions set out in that instrument, subject to the conditions and limitations specified in that Instrument.**

2. **The instrument comes into force immediately the common seal of Council is affixed to the instrument.**

3. **On the coming into force of the instrument, the previous delegation is revoked.**

4. **The duties and functions set out in the instrument must be performed, and the powers set out in the instrument must be executed, in accordance with any guidelines or policies of Council that it may from time to time adopt.**

CARRIED

12.5 2024 Election Report

Directorate: People and Performance
Report Approver: Darren Barber (Director People and Performance)
Report Author: Karly Saunders, Governance Coordinator
Attachment(s): 1. Election Report 2024 - Southern Grampians Shire Council [**12.5.1** - 50 pages]

Executive Summary

In 2024, general elections were held for 78 of 79 Victorian Councils on Saturday 26 October.

The attached Election Report provides information on the 2024 Southern Grampians Shire Council general election.

The Local Government (Electoral) Regulations 2020 state the Chief Executive Officer must ensure the report is submitted to the Council at the earliest practicable meeting of the Council held after the report is received by the Chief Executive Officer.

The report was received on 14 April 2025.

Discussion

The Election Report includes details on the end-to-end service delivery of electoral activities throughout the election timeline and details of postelection items including compulsory voting enforcement.

Highlights of the report include:

- 11 successful candidate nominations
- 8 redirected ballot packs
- 36 early voters
- 12,639 mailed ballot packs
- 10 unenrolled votes which were not admitted to the count
- 551 replacement ballot packs were issued during the voting period
- 8,704 returned ballot paper envelopes and an additional 2,257 ballot paper envelopes during the extended postal vote receipt period
- 185 returned ballot paper envelopes that were not admitted to the extraction and counting process due to the voter not having signed the declaration envelope or an entitlement was not found for the person
- 10,776 ballot papers were admitted to the extraction process; 34 ballot paper envelopes were rejected during the extraction with 10,742 proceeding to the count
- The results of the 2024 Southern Grampians Shire Council general election were declared at 3pm on Friday 8 November 2024 at Hamilton Art Gallery, 107 Brown Street, Hamilton
- The overall participation rate (voters marked off the roll) in the Southern Grampians Shire Council was 86.09% which is higher than the state average of 83.79% (excluding Melbourne City Council) and lower than the 88.47 participation rate at the 2020 Southern Grampians Shire Council general election. Analysis of voter participation for the different enrolment categories shows that participation is lower for voters who are enrolled on the Electoral Commission's list (86.08) compared to voters enrolled on the CEO's list (88.30%)

- Voter turnout (measured by the number of formal and informal ballot papers counted in the election as a percentage of voters on the voter's roll for the election) was 84.98%, compared to a state average of 81.46% (excluding Melbourne City Council). The voter turnout for the 2020 general election was 86.35%.
- The VEC received two written complaints relating to the election for Southern Grampians Shire Council. Complaints generally fall into two broad categories, election administration (the conduct of the election and services to voters) and election participation (complaints about candidates and participation in the election, and at times, alleging a breach of the *Local Government Act 2020* or Local Laws).

Financial and Resource Implications

The Victorian Electoral Commission is the statutory and independent election service provider for the conduct of local government elections.

A preliminary quotation was provided to Council in April 2024 by the VEC, with an invoice anticipated to be received in May 2025 which will contain the final cost.

The cost of the Election and payment to the VEC is accounted for in the Council budget.

Council Plan, Community Vision, Strategies and Policies

Provide Strong Governance and Leadership
5.1 Transparent and accountable governance
5.1.1 Strengthen the governance role of Councillors by informing, resourcing, skilling and supporting the role.
5.1.2 Ensure flexible and transparent decision making through open and accountable governance.

Provide Strong Governance and Leadership
5.2 Effective advocacy
5.2.2 Advocate on behalf of the community in line with identified and agreed priorities.

Legislation

The Chief Executive Officer must ensure that the report is submitted to the Council at the earliest practicable meeting of the Council held after the report is received by the Chief Executive Officer as per the Local Government (Electoral) Regulations 2020.

Gender Equality Act 2020

Not applicable.

Risk Management

Not applicable.

Climate Change, Environmental and Sustainability Considerations

Not applicable.

Community Engagement, Communication and Consultation

The Election Report forms part of the public record.

Disclosure of Interests

All Council Officers involved in the development and advice provided in this Report affirm that no general or material interests need to be declared in relation to any matters in this Report.

Karly Saunders, Governance Coordinator

RECOMMENDATION

That Council receive the 2024 Election Report.

COUNCIL RESOLUTION

MOVED: Cr Barber
SECONDED: Cr Henry

That Council receive the 2024 Election Report.

CARRIED

12.6 Audit and Risk Committee Independent Member Update

Directorate: People and Performance
Report Approver: Darren Barber (Director People and Performance)
Report Author: Darren Barber, Director People and Performance
Attachment(s): Nil

Executive Summary

Council's Audit and Risk Committee was established in accordance with Section 53 of the *Local Government Act 2020*.

This report informs the Committee that Mr Brian Densem's term as an Independent Committee member expired on 12 March 2025 and due to the length of time Mr Densem has served as member on the Committee, Council was required to advertise the position as per the Audit and Risk Committee Charter (extract below).

"Independent members can only serve for two consecutive terms without public advertisement, however, members may re-apply at the end of their term(s) and be reappointed for further terms through the public advertisement process".

Ms Aisling Cunningham's term of three years expired on 9 September 2023. Her appointment according to the charter (extract below) has not been recorded as part of an Audit and Risk Committee Meeting.

"Independent members shall be appointed for a term of three years, after which time Council can choose to exercise an option to renew the appointment for another term".

Discussion

Council's Audit and Risk Committee is established in accordance with Section 53 of the *Local Government Act 2020*. The membership of the Committee currently consists of two external members and two Councillors.

Following an advertised Expression of Interest process for approximately four weeks, nineteen applications were received. A shortlist evaluation and interview process followed with four applicants who had a great deal of audit and risk experience and knowledge. The interview panel consisted of Independent Member, Mr Bill Millard and the Director of People and Performance.

Financial and Resource Implications

Reviewing of applicants, shortlisting, arranging and attending interviews utilised Council resources with Council Officers and an Independent Member to select the best applicant for the position.

Independent members of the Audit and Risk Committee are paid a sitting fee as members of the Committee, and also if other functions are required.

Council Plan, Community Vision, Strategies and Policies

Support Our Community
1.1 An empowered and connected community
1.1.4 Ensure communication and engagement methods use inclusive practices and processes.

Provide Strong Governance and Leadership
5.1 Transparent and accountable governance
5.1.2 Ensure flexible and transparent decision making through open and accountable governance.

Legislation

Section 53 3 (a) and (b) of the *Local Government Act 2020* (the Act) requires that;

"(3) An Audit and Risk Committee must—

(a) include members who are Councillors of the Council; and
(b) consist of a majority of members who are not Councillors of the Council"

Gender Equality Act 2020

There are no *Gender Equality Act 2020* implications through the recruitment process of Independent Member of the Audit and Risk Committee.

Risk Management

The Audit and Risk Committee has clear function in review of Councils Risks as per the Committee Charter.

Climate Change, Environmental and Sustainability Considerations

There is no direct implication in this category associated with the report.

Community Engagement, Communication and Consultation

Changes in membership will be communicated to the relevant stakeholders when an update in membership has occurred.

Disclosure of Interests

All Council Officers involved in the development and advice provided in this Report affirm that no general or material interests need to be declared in relation to any matters in this Report.

Darren Barber, Director People and Performance

RECOMMENDATION

That Council:

1. Reappoint Ms Aisling Cunningham as Independent Member of the Audit and Risk Committee with an expiry date of 3 September 2026.
2. Appoint Mr Brian Densem as Independent Member for a three year term expiring on 12 March 2028.
3. Appoint Mr Brian Densem, as Chairperson for a two year term expiring on 12 March 2027.

COUNCIL RESOLUTION

MOVED: Cr Calvano
SECONDED: Cr Barber

That Council:

1. **Reappoint Ms Aisling Cunningham as Independent Member of the Audit and Risk Committee with an expiry date of 3 September 2026.**
2. **Appoint Mr Brian Densem as Independent Member for a three year term expiring on 12 March 2028.**
3. **Appoint Mr Brian Densem, as Chairperson for a two year term expiring on 12 March 2027.**

CARRIED

13 Notices of Motion

There were two Notices of Motion listed on tonight's agenda.

13.2 Notice of Motion #5/25 - Cr Rainsford - Lonsdale Street Site NHG Option Inclusion

Councillor: Cr Rainsford
Attachment(s): Nil

I hereby give notice of my intention to move the following motion at the Council Meeting to be held on 14 May 2025.

MOTION

That Southern Grampians Shire Council approves inclusion of the Council owned Lonsdale Street land as an optional site for the New Hamilton Gallery in the final consideration of this major CBD Project.

This Notice of Motion was withdrawn by Cr Rainsford

13.3 Notice of Motion #8/25 - Cr Campbell - Cost Shifting

Councillor: Cr Campbell
Attachment(s): Nil

I hereby give notice of my intention to move the following motion at the Council Meeting to be held on 14 May 2025.

MOTION

That Southern Grampians Shire Council:

Prepare a report at a future Council Meeting that details examples of State Government costing shifting, reduction in funding or levels of service and additional taxes and levies imposed on or collected by local government over the last ten years that includes but is not exclusive of:

a) Emergency response and relief funding in particular;
   i. the 2022 Flood event and;
   ii. the 2024/25 Grampians Fires,
b) State road repairs and upgrades,
c) School Crossing Supervisor Program,
d) Landfill Levy,
e) Fire Services Levy,
f) Immunisation,
g) Aged infrastructure (current funding focuses on new only),
h) Libraries,
i) Waste Levy,
j) Local Government Elections,
k) Management of waste from campgrounds (in particular Rocklands Reservoir and Grampians National Park).

COUNCIL RESOLUTION

MOVED: **Cr Campbell**
SECONDED: **Cr Henry**

That Southern Grampians Shire Council:

Prepare a report at a future Council Meeting that details examples of State Government costing shifting, reduction in funding or levels of service and additional taxes and levies imposed on or collected by local government over the last ten years that includes but is not exclusive of:

a) **Emergency response and relief funding in particular;**
   i. **the 2022 Flood event and;**
   ii. **the 2024/25 Grampians Fires,**
b) **State road repairs and upgrades,**
c) **School Crossing Supervisor Program,**
d) **Landfill Levy,**
e) **Fire Services Levy,**
f) **Immunisation,**
g) **Aged infrastructure (current funding focuses on new only),**
h) **Libraries,**
i) **Waste Levy,**
j) **Local Government Elections,**
k) **Management of waste from campgrounds (in particular Rocklands Reservoir and Grampians National Park).**

CARRIED

14 Urgent Business

There was no Urgent Business listed on tonight's agenda.

15 Mayor, Councillors and Delegate Reports

Address from the Mayor and Councillors in relation to matters of civic leadership and community representation, including acknowledgement of community groups and individuals, information arising from internal Committees and delegates committees, advocacy on behalf of constituents and other topics of significance.

15.1 Cr Afton Barber

Cr Barber provided a verbal report which can be viewed in the livestream of the Meeting on Council's Facebook page.

15.2 Cr Albert Calvano

Cr Calvano provided a verbal report which can be viewed in the livestream of the Meeting on Council's Facebook page

15.3 Cr Adam Campbell

Cr Campbell provided a verbal report which can be viewed in the livestream of the Meeting on Council's Facebook page

15.4 Cr Helen Henry

Cr Henry provided a verbal report which can be viewed in the livestream of the Meeting on Council's Facebook page.

15.5 Cr Dennis Heslin

Cr Heslin provided a verbal report which can be viewed in the livestream of the Meeting on Council's Facebook page.

15.6 Cr Jayne Manning

Cr Manning provided a verbal report which can be viewed in the livestream of the Meeting on Council's Facebook page.

15.7 Cr Katrina Rainsford

Cr Rainsford provided the following report:

'14 April: *Pigeon Ponds Hall Reserve Committee of Management Meeting*

23 April: *South West Alliance Wannon Candidates Forum*

24 April: *Hamilton Regional Livestock Exchange Auditorium*

25 April: *Anzac Day Cavendish and Hamilton Services attended*

30 April: *Councillor Briefing Meeting*

2 May: *Rail Freight Alliance Meeting Online*

6 May: *MAV Delegates Welcome and Induction Session On Line with MAV Chair Cr Anderson*

7 May: *Council Briefing*

11 May: *I enjoyed a wonderful Mother's Day picnic with one tranche of our family enjoying the ambience of the Camperdown Botanic Gardens situated on a crest between two Crater Lakes.*

12 May: *Sheepvention Committee; meeting held annually at our Hamilton Showgrounds, where I had the opportunity to meet the new event management team and hear reports from the volunteers involved in preparing for this years event.*

Finally this season is another extremely dry and difficult one with a shortage of water for rural homes, stock and domestic and low soil moisture for pastures and crops.

As a council we need to continue to lobby on behalf of our rural communities for recognition of the current financial hardships being experienced across our region. That the abhorrent new State Tax grab called the Emergency Services and Volunteers Fund Levy which will drain an estimated extra $4 million in levies from our property owners, rural, residential, commercial and industrial. During one of the driest seasons across the State.

We implore the Allan State Government to scrap the expansion of the current Fire Services Levy, provide complete reports of expenditure of the current levies and commence comprehensive community consultation.'

16 Confidential Reports

RECOMMENDATION

That the following items be considered in Closed Council as specified in section 66(2)(a) and referenced in section 3(1), Confidential Information (a) council business information, being information that would prejudice the Council's position in commercial negotiations if prematurely released.

COUNCIL RESOLUTION

MOVED: Cr Rainsford
SECONDED: Cr Calvano

That the following items be considered in Closed Council as specified in section 66(2)(a) and referenced in section 3(1), Confidential Information (a) council business information, being information that would prejudice the Council's position in commercial negotiations if prematurely released.

CARRIED

16.1 Restoration of Essential Public Assets (REPA) - Contract Funding

17 Close of Meeting

This concludes the business of the meeting.

The Council Meeting - 14 May 2025 closed at 6:26pm.

To be confirmed by Resolution at the next Council Meeting.

Southern Grampians
SHIRE COUNCIL

Revenue & Rating Plan

2025/26 – 2028/29

Revenue & Rating Plan
2025/26 – 2028/29

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    - 12.7 Borrowings 25

1. Purpose

The *Local Government Act 2020* requires that each council prepare a Revenue and Rating Plan covering a minimum of four years following each council election. This forms part of the Integrated Strategic Planning and Reporting Framework outlined in the *Local Government Better Practice Guide Revenue and Rating Strategy*. The plan outlines the revenue-raising framework that Council intends to operate within.

The Revenue and Rating Plan aims to identify the most suitable and sustainable revenue and rating strategy for Southern Grampians Shire Council. This approach, alongside other income sources, will enable Council to deliver essential services and infrastructure that align with the community's identified priorities.

This plan is a key component of Council's integrated planning framework, designed to support the achievement of its vision: a growing, inclusive, and connected community that promotes sustainability, diversity, and innovation.

The strategies outlined in this plan align with the objectives set out in the current Council Plan and will inform our budgeting, long-term financial planning, and other strategic planning documents within Council's framework.

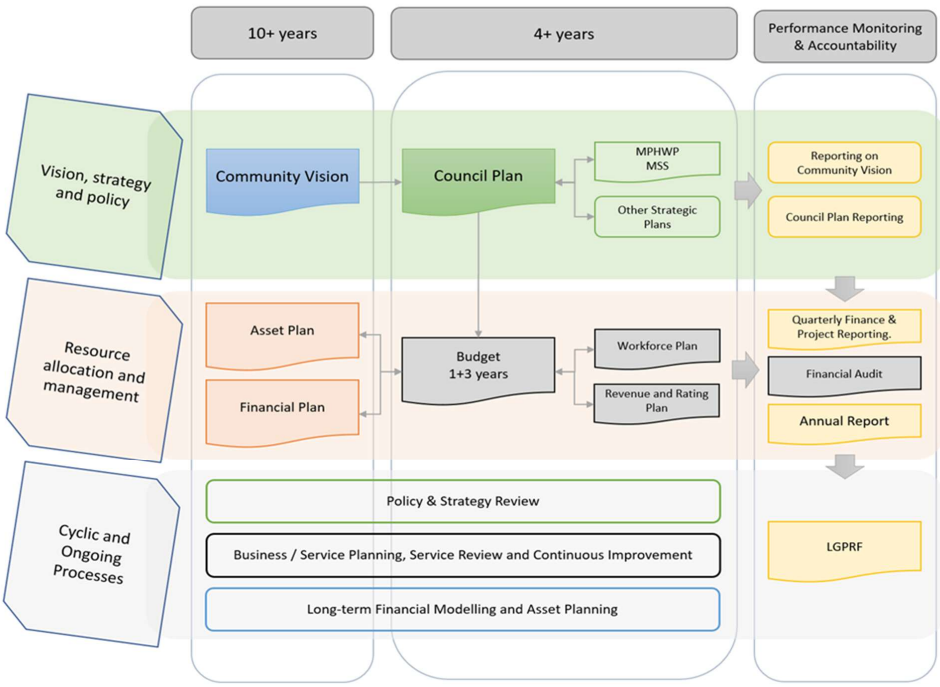


Fig 1: Planning and accountability framework. (Source: Department of Jobs, Precincts and Regions 2020

Section 3A (1) of the Act establishes that the primary objective of a municipal council is to "*endeavour to achieve the best outcomes for the local community having regard to the long term and cumulative effects of decisions."* This plan outlines how Council calculates the revenue required to fund its activities, and how the funding burden will be shared between ratepayers and other users of Council facilities and services.

Specifically, the plan will detail the decisions made by Council regarding the rating options available within the legislation, ensuring a fair and equitable distribution of rates among property owners. It will also outline the principles used in decision making for other revenue sources such as fees and charges, with reference legislation where applicable.

The Plan has been developed in accordance with the requirements set out in the *Local Government Act 2020*, the *Local Government Act 1989*, the *Valuation of Land Act 1960*, and relevant Victorian regulations. It serves as the guiding document for the Southern Grampians Shire Council to ensure its revenue policies are fair, transparent, and consistent with community expectations and legislative obligations.

It is important to note that this plan does not establish specific revenue targets for the Council. Instead, it outlines the strategic framework and the decisions that guide how Council will calculate and collect revenue.

2. Introduction

Southern Grampians Shire Council provides a range of services and facilities to the local community and must collect revenue to cover the costs associated with delivering these services and maintaining these facilities.

Council's revenue sources include:

- Rates and Charges (inclusive of waste charges)
- Statutory Fees and Fines
- User Fees
- Grants – Operating and Capital
- Cash and non-cash contributions from other parties (i.e., developers, community groups)
- Interest from investments
- Sale of Assets

The graph below illustrates Council's revenue sources from the proposed change to its 2025/26 Long Term Financial Plan and demonstrated in the 2024/25 adopted Budget.

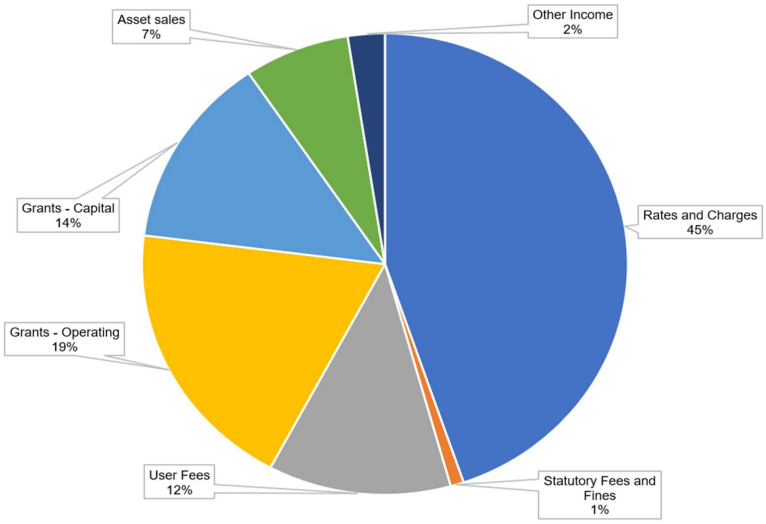


Fig 2: **Breakdown of revenue streams identified in 2025-2026 Proposed Budget**

Rates and charges are the primary source of revenue for Council, accounting for 45% of its adjusted underlying revenue.

The introduction of the Fair Go Rates System (rate capping) has presented significant financial challenges to Council's long-term financial sustainability. It continues to limit Council's ability to increase revenue beyond the rate cap, unless a variation is approved by the Essential Services Commission. Despite these constraints, maintaining service delivery levels and investing in community assets remain key priorities for Council.

Council provides a broad range of services to the community, many of which are subject to a fee or charge. The nature of these fees depends on whether the services are statutory or discretionary. Some fees, such as those for statutory planning, are set by State Government legislation and are known as regulatory fees, over which councils typically have no control. For other services, Council has the authority to set fees, and these will be determined based on the principles outlined in this Revenue and Rating Plan.

Council revenue can also be impacted by changes in funding from other levels of government. Some grants are allocated for specific services and are provided for a fixed period, while others are intended for the delivery of new community assets, such as roads or sports pavilions. It is essential for Council to clearly identify which grants it intends to apply for and to understand the obligations and expectations associated with these grants in terms of service delivery and infrastructure development.

3. Community Engagement

The Revenue and Rating Plan outlines Council's decision-making process on how revenues are calculated and collected.

The public consultation process included inviting feedback from the public on the appropriateness of rate charges for the level of Council services provided.

The Revenue and Rating Plan community engagement process:

- Feedback invited from Public (via survey)
- Draft Revenue and Rating Plan prepared by Council staff
- Draft Revenue and Rating Plan elements workshopped with Councillors
- Community feedback reviewed and presented to Council for consideration.
- Draft Revenue and Rating Plan (with any revisions) presented to 9 April 2025 Council meeting for endorsement.
- Draft Revenue and Rating Plan 2025 – 2026 presented to Council meeting on 11 June 2025 for adoption.

4. Rates and Charges

Rates are a property tax that allows Council to generate revenue for funding essential public services to meet the needs of the municipal population. Importantly, the system allows for flexibility, enabling Council to use various tools in its rating structure to address equity concerns and ensure fairness in the distribution of rates among all ratepayers.

Council has established a rating structure comprised of three key elements. These are:

- General Rates – Based on property values using the Capital Improved Valuation methodology, and form the central basis of rating under the *Local Government Act*.
- Municipal Charge - A 'fixed rate' portion per property to cover some of the administrative costs of Council.
- Service Charges - A 'user pays' component for council services to reflect benefits provided by Council to ratepayers who benefit from a service. E.g.: Waste Services.

Achieving a proper balance between these elements will help improve equity in how the rate burden is distributed across residents and ratepayers.

Council further distinguishes the application of general rates by implementing rating differentials based on the geographical location of properties. This approach is grounded in the principle that properties in different locations should contribute fairly and equitably, reflecting the benefits they receive.

Council also imposes a municipal charge, which is a minimum rate per property designed to cover a portion of the administrative costs of Council. In applying this charge, Council ensures that each rateable property in the municipality makes a contribution.

The formula for calculating General Rates, excluding any additional charges, arrears or additional supplementary rates is:

- Valuation (Capital Improved Value) x Rate in the Dollar (Differential Rate Type)

The exact rate in the dollar for each rating differential category is included in Council's annual budget once the Valuer-General has certified the Annual Property Valuations for properties within the Shire. Since this information is typically not available until May each year, Council must estimate revenue by using a method to distribute the burden across categories, rather than relying on the exact differential rate.

Council is mindful of the balance between rate revenue, an important source of income, with the community's sensitivity to rate increases. With the introduction of the State Government's Fair Go Rates System, all rate increases are capped at a rate determined by the Minister for Local Government, with the cap for the following financial year announced in December.

Planning for future rate increases is a critical part of the long-term financial planning process. It plays a key role in funding future service delivery levels and addressing the rising costs associated with providing council services.

Council currently applies a service charge to recover the cost of its kerbside waste services. This charge is not subject to the rate cap, and Council will continue to set the charge at a level that covers all collection and disposal costs associated with providing kerbside waste services. Other waste service charges, including transfer station fees, are included in fees and charges contained within the Pricing Register.

4.1 Rating Legislation

The legislative framework outlined in the *Local Government Act 1989* defines Council's authority to develop a rating system. This framework offers considerable flexibility, allowing Council to tailor a system that best meets its needs.

Section 155 of the *Local Government Act 1989* provides that a council may declare the following rates and charges on rateable land:

- General rates under section 158;
- Municipal charges under section 159;
- Service rates and charges under section 162;
- Special rates and charges under section 163;

The recommended strategy in relation to municipal charges, service rates and charges and special rates and charges is discussed later in this document.

Section 157 (1) of the *Local Government Act 1989* gives Council the option of using three different valuations types to apportion rates.

- Site value (SV),
- Net annual value (NAV) or
- Capital improved value (CIV)

In any case a council must publish a public notice to inform the community of its decision to change its system of valuation.

The advantages and disadvantages of each valuation basis is discussed further in this document. While this document outlines Council's strategy regarding rates revenue, detailed rates data will be included in Council's Annual Budget as required by the *Local Government Act 2020*.

Section 94(2) of the *Local Government Act 2020* states that a council must adopt a budget by 30 June each year (or at another time fixed by the Minister) to include:

- the total amount that the council intends to raise by rates and charges;
- a statement as to whether the rates will be raised by the application of a uniform rate or a differential rate;
- a description of any fixed component of the rates, if applicable;
- if the council proposes to declare a uniform rate, the matters specified in section 160 of the *Local Government Act 1989*;
- if the council proposes to declare a differential rate for any land, the matters specified in section 161(2) of the *Local Government Act 1989*;

Section 94(3) of the *Local Government Act 2020* also states that a council must ensure that, if applicable, the budget also contains a statement:

- that the council intends to apply for a special order to increase the council's average rate cap for the financial year or any other financial year; or
- that the council has made an application to the ESC for a special order and is waiting for the outcome of the application; or
- that a special Order has been made in respect of the council and specifying the average rate cap that applies for the financial year or any other financial year.

This plan outlines the principles and strategic framework that Council will utilise in calculating and distributing the rating burden to property owners, however, the quantum of rate revenue and rating differential amounts will be determined in Southern Grampians Shire Council's annual budget.

4.2 Rating Principles

When developing a rating strategy, in particular with reference to differential rates, a council should give consideration to the following good practice taxation principles:

- Tax
- Equity
- Efficiency
- Simplicity
- Benefit
- Capacity to Pay
- Diversity

Tax

The *"Tax"* principle implies that the rates paid are dependent upon the value of a ratepayer's real property and have no correlation to the individual ratepayer's consumption of services or the perceived benefits derived by individual ratepayers from the expenditures funded from rates.

Equity

Equity is a subjective concept that is difficult to define. What is considered fair for one person may be considered unfair for another. There two main equity concepts used across councils to develop rating strategies (and taxation more generally) are:

- Horizontal equity – ratepayers in similar situations should pay similar amounts (using accurate property valuations, grouped into similar property classes with the right to appeal a valuation) and
- Vertical equity – those who are better off should pay more than those less affluent (the rationale applies for the use of progressive and proportional income taxation). It implies a "relativity" dimension to the fairness of the tax burden.

Rates are essentially a wealth tax determined on the value of property. The tests of horizontal and vertical equity are solely based on a property's value. There is frequent debate around the characteristics of property owners that impinge on the application of a single equity principle. For practical reasons equity considerations generally focus on how the costs of universally available services can and should be shared between ratepayers.

Efficiency
Economic efficiency is measured by the extent to which production and consumption decisions by people are affected by rates. Efficiency can also relate to the cost of administration of rates. This includes the issuing of assessments, collection of rates (including maintaining and improving collection systems), monitoring outcomes, educating and informing ratepayers, and enforcement and debt recovery.

Simplicity
How easily a rates system can be understood by ratepayers and the practicality and ease of administration.

Benefit
A popular complaint levelled at councils is that "the rates I pay have no correlation with the services I consume or the benefits I receive". This argument is based on the benefit principle (the opposite of the tax principle) that argues there should be a clear nexus between consumption/benefit and the rate burden.

Other pricing instruments such as user charges (Pricing Register), special rates and charges and service rates and charges (e.g., Waste Service Charge) better lend themselves to dealing with the issue of benefit.

Capacity to Pay
The capacity of ratepayers or groups of ratepayers to pay rates. Council uses differential rates to address the capacity to pay issue, and has recently reviewed and updated its Financial Relief and Hardship Policy to provide support to ratepayers experiencing difficulty meeting their financial obligations.

Diversity
The capacity of ratepayers within a group to pay rates. There is considerable diversity in the economic circumstances of households related to household income. Similarly enormous business and rural/farming centric diversity exists within our Shire. Consideration of diversity of ratepayers has been factored into the development of this plan.

The rating challenge for Council therefore is to determine the appropriate balancing of competing considerations.

4.3 Rates and Charges Revenue Principles

Property rates will:

- be reviewed annually,
- not change dramatically from one year to the next; and
    - be sufficient to fund current expenditure commitments and deliverables outlined in the Council Plan, Long Term Financial Plan, and Asset Plan.

Differential rating should be applied as equitably as practically possible, in accordance with the Ministerial Guidelines for Differential Rating 2013. Additionally, the Local Government Better Practice Guide 2014 – Revenue and Rating Strategy has been referenced to further enhance and elaborate on the Revenue and Rating Principles outlined in this plan.

5. Determining the Valuation Base

Under the *Local Government Act 1989*, Council has three options as to the valuation base it elects to use. They are:

- Capital Improved Value (CIV) – Value of land and improvements upon the land.
- Site Value (SV) – Value of land only.
- Net Annual Value (NAV) – Rental valuation based on CIV

Capital Improved Value (CIV)
Capital Improved Value is the most commonly used valuation base by local government with between 80 - 90% of Victorian councils applying this methodology. Based on the value of both land and all improvements on the land, it is generally easily understood by ratepayers as it equates broadly to the market value of the property. Section 161 of the Local Government Act 1989 provides that a council may raise any general rates by the application of a differential rate if:

- it uses the capital improved value system of valuing land; and
- it considers that a differential rate will contribute to the equitable and efficient carrying out of its functions.

Where a council does not utilise CIV, it may only apply limited differential rates in relation to farmland, urban farmland or residential use land.

Advantages of using Capital Improved Value (CIV)

- CIV includes all property improvements, and hence is often supported on the basis that it more closely reflects “capacity to pay”. The CIV rating method considers the full development value of the property, and hence better meets the equity criteria than Site Value and NAV.
- With the increased frequency of valuations (previously two-year intervals, now annual intervals) the market values are more predictable and has reduced the level of objections resulting from valuations.
- The concept of the market value of property is more easily understood with CIV rather than NAV or SV.
- Most councils in Victoria have now adopted CIV which makes it easier to compare relative movements in rates and valuations across councils.
- The use of CIV allows Council to apply differential rates which greatly adds to Council’s ability to equitably distribute the rating burden based on ability to afford Council Rates.

Disadvantages of using CIV

- The main disadvantage with CIV is the fact that rates are based on the total property value which may not necessarily reflect the income level of the property owner as with pensioners and low-income earners.

Site value (SV)
There are currently no Victorian councils that use this valuation base. With valuations based simply on the valuation of land and with only very limited ability to apply differential rates, the implementation of Site Value in a Southern Grampians Shire Council context would cause a shift in rate burden, and would hinder Council’s objective of a fair and equitable rating system.

Net annual value (NAV)
NAV, in concept, represents the annual rental value of a property. However, in practice, NAV is loosely linked to capital improved value for residential and farm properties. Valuers derive the NAV directly as a percentage of CIV.

In contrast to the treatment of residential and farm properties, NAV for commercial and industrial properties are assessed based on actual market rental. This differing approach between commercial and residential or farm properties has led to some suggestions that all properties should be valued on a rental basis.

Overall, the use of NAV is not largely supported. For residential and farm ratepayers, actual rental values pose some problems. The artificial rental estimate used may not represent actual market value, and means the base is the same as CIV but is harder to understand.

Recommended valuation base
In choosing a valuation base, councils must decide on whether they wish to adopt a differential rating system (different rates in the dollar for different property categories) or a uniform rating system (same rate in the dollar). If a council was to choose the former, under the *Local Government Act 1989* it must adopt either of the CIV or NAV methods of rating.

Based on the different valuation basis and the principle to be applied to rating, Southern Grampians Shire Council has chosen to apply the CIV base for rating purposes. This basis of valuation considers the total market value of the land plus buildings and other improvements.

Differential rating allows (under the CIV method) Council to shift part of the rate burden from some groups of ratepayers to others, through different "rates in the dollar" for each class of property. Section 161(1) of the *Local Government Act 1989* outlines the requirements relating to differential rates, which include:

- A council may raise any general rates by the application of a differential rate, if Council considers that the differential rate will contribute to the equitable and efficient carrying out of its functions.
- If a council declares a differential rate for any land, the council must specify the objectives of the differential rate, which must be consistent with the equitable and efficient carrying out of the councils functions and must include the following:
  - A definition of the types or classes of land which are subject to the rate and a statement of the reasons for the use and level of that rate.
  - An identification of the type or classes of land which are subject to the rate in respect of the uses, geographic location (other than location based on whether the land is within a specific ward in the council's district).
  - Specify the characteristics of the land, which are the criteria for declaring the differential rate.

Once a council has declared a differential rate for any land, it must:
- Specify the objectives of the differential rates;
- Specify the characteristics of the land which are the criteria for declaring the differential rate.

The purpose of this is to ensure that Council has a solid foundation for developing its various charging structures when determining revenue strategies, and that these structures are in alignment with the provisions of the *Local Government Act 1989.*

The general objectives of each differential rates is to ensure that all rateable land contributes fairly to the cost of carrying out Council's functions. While there is no limit on the number or types of differential rates that can be applied, the highest differential rate can be no more than four times the lowest differential rate.

Property Valuations
The *Valuation of Land Act 1960* is the primary legislation governing property valuations. Under this act, the Victorian Valuer-General is responsible for conducting property valuations on an annual basis.

Southern Grampians Shire Council applies a **Capital Improved Value (CIV)** to all properties within the municipality, taking into account the full development value of the property. This method of valuation considers the total market value of the land, including buildings and other improvements. The land value is derived based on the principal of valuing land for its highest and best use at the time of valuation.

Council must be mindful of the impact that revaluations may have on different property types when implementing the differential rating strategy outlined in the previous section. It is important to ensure that increases and decreases in Council Rates remain affordable and that any significant changes, or "rating shocks" are mitigated to some degree.

There is a common misconception that as property values increase, Council receives a 'windfall gain' of additional revenue. This is not the case, as the revaluation process only leads to a redistribution of the rate burden across all properties in the municipality, without increasing the overall revenue collected by Council.

Rate capping sets a ceiling on the amount of revenue Council can raise in any given rating period. The process of apportioning differential rating multiples across properties with vastly different values and attributes is complex and requires careful analysis. It involves rigorous testing to ensure that fairness and equity are maintained, whilst also ensuring that the total revenue raised does not exceed the rate cap established by the Essential Services Commission.

Total income from rates is determined by Council during the budget process. In simple terms, to generate the same amount of rate revenue, as property values increase, the rate in the dollar decreases. This ensures that the overall rate burden remains consistent despite changes in property values.

Supplementary Valuations
Supplementary valuations are conducted for various reasons including rezoning, subdivisions, amalgamations, renovations, new constructions, extensions, occupancy changes and corrections. The Victorian Valuer-General is responsible for performing supplementary valuations and provides Council with monthly updates on valuation changes and Australian Valuation Property Classification Code (AVPCC) updates.

Supplementary valuations align the value of the affected property with the general valuation of other properties within the municipality. Objections to supplementary valuations can be lodged in accordance with Part 3 of the *Valuation of Land Act 1960*. Any objections must be submitted within two months of the issue of the supplementary Rate Notice.

Objections to Property Valuations
Part 3 of the *Valuation of Land Act 1960* allows a property owner to lodge an objection against the valuation of a property or the Australian Valuation Property Classification Code (AVPCC) within two months of the issue of the original or amended (supplementary) Rates and Valuation Charges Notice (Rates Notice). If the notice was not initially issued to the occupier of the land, the objection may be lodged within four months.

6. Rating Differentials

Council believes each differential rate will contribute to the equitable and efficient delivery of its functions. The purpose of levying differential general rates is to recognise the following inherent characteristics and historical circumstances:

- the different standard of municipal services provided to the residents and ratepayers in different areas of the Shire,
- the different range of municipal services available to the residents and ratepayers in different areas of the Shire,
- differences in the accessibility to municipal services for the residents and ratepayers in different areas of the Shire.

Southern Grampians Shire Council levies the following differential rates and ensures that, before applying the municipal charge, the total rate revenue maintains a 40% allocation in differential rate 1 with the remaining 60% allocated across differential rates 2 and 3 combined.

General Rate 1
Differential General Rate No.1 will be levied on the Capital Improved Valuation (CIV) of all rateable land in the parishes of North Hamilton and South Hamilton, excluding farmland (as defined in the Valuation of Land Act 1960) that comprises all or part of a single farm enterprise with an area of 40 hectares or more.

General Rate 2
Differential General Rate No.2 will be levied on the Capital Improved Valuation (CIV) of all rateable farmland (as defined in the Valuation of Land Act 1960) in the parishes of North Hamilton and South Hamilton comprising all or part of a single farm enterprise with an area of 40 hectares or more.

General Rate 3
Differential General Rate No.3 will be levied on the capital improved valuation of all other rateable land in the Shire.

Differential Rates Nos. 2 and 3 will be fixed at the same rate and will fluctuate as necessary to maintain the 40/60 total rate revenue apportionment. The rate for Differential Rates 2 and 3 will always be lower than that for Differential General Rate No.1.

7. Municipal Charge

An alternative principal rating option available to councils is the application of a municipal charge. Under Section 159 of the *Local Government Act 1989*, councils may declare a municipal charge to cover certain administrative costs. The legislation does not provide a definitive definition of 'administrative costs', nor does it mandate that councils specify the particular expenses covered by the charge.

The application of a municipal charge represents a decision to raise a portion of the rates through a flat fee for all properties, rather than relying solely on Capital Improved Value (CIV) valuation method.

Under the *Local Government Act 1989*, a council's total revenue from a municipal charge in a financial year must not exceed 20% of the combined total revenue from both the municipal charge and revenue from general rates (total rates).

The Municipal Charge applies equally to all properties and is based upon the recovery of a fixed cost for providing administrative services, regardless of the value of a property. Charging the same contribution amount per assessment to cover a portion of Council's administrative costs is considered an equitable method of recovering these expenses.

Southern Grampians Shire Council has decided to use this rating option and applies a municipal charge to all properties. A defined single farm enterprise, comprised of multiple properties can apply for an exemption to only pay one municipal charge.

Council's current position is that the Municipal Charge will be set to generate approximately 10% of the total rate revenue.

8. Current Rate Setting Process

The following diagram depicts how Council sets the municipal charge and the differential rates for the year.

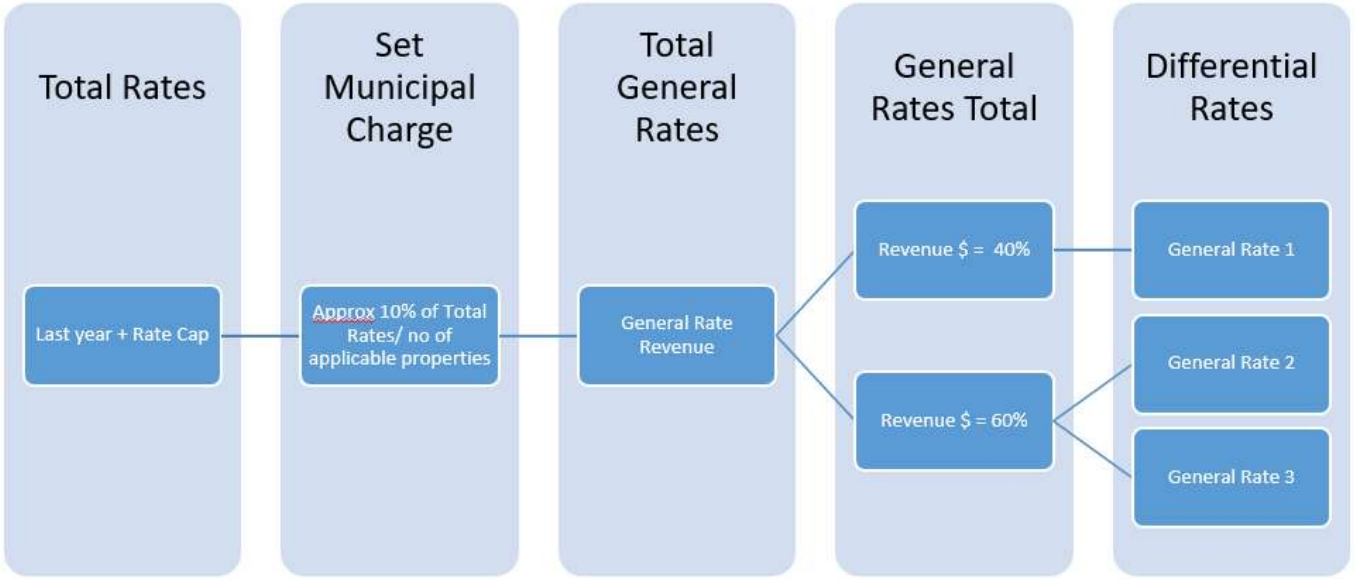


Fig 3. **Rate setting diagram reflecting current 60/40 differential split of liability**

9. Special Charges Schemes

The *Local Government Act 1989* recognises that councils need support to provide improved infrastructure for their local communities. The legislation allows councils to pass on the cost of capital infrastructure to property owners who directly benefit from the construction works. A "Special Charge" is defined by legislation, allowing Council to recover the cost of works from property owners who will receive a unique benefit from those works.

Special rates and charges may be used for purposes such as road construction, kerb and channelling, footpath provision, drainage, and other capital improvement projects that provide specific benefits to the property owners involved.

The special rate or special charges may be declared based on any criteria specified by Council in the rate (Section 163 (2)). In accordance with Section 163 (3), Council must specify:

- the wards, groups, uses or areas for which the special rate or charge is declared; and
- the land in relation to which the special rate or special charge is declared;
- the way the special rate or special charge will be assessed and levied; and
- details of the period for which the special rate or special charge remains in force.

The special rates and charges provisions are flexible and can be used to achieve a wide range of community objectives. The fundamental principle of special rates and charges is that they are levied based on the proof of a "special benefit" applies to those being charged. For example, they could be used to fund cooperative fire prevention schemes, ensuring that there are no 'free-riders' who benefit from the initiative without contributing to the costs.

Landscaping and environmental improvement programs that benefit small or localised areas could also be funded using special rates or charges. Council currently utilises a Special Rate to properties located in the Yatchaw area, which face ongoing drainage issues. The special charge only applies to properties that are connected to the Yatchaw drain, ensuring the costs are levied solely on those ratepayers who benefit from the drainage works.

10. Service Rates and Charges

Section 162 of the *Local Government Act 1989* provides Council with the opportunity to raise service rates and charges for any of the following services:

- The provision of a water supply;
- The collection and disposal of refuse;
- The provision of sewage services;
- Any other prescribed service.

Council currently applies a service charge for the kerbside collection and disposal of refuse in urban areas and some rural areas, covering Recycling, FOGO (Food Organic and Garden Organics) and Refuse.

A new glass recycling collection service is proposed to be introduced during the term of this Revenue and Rating Plan as part of the Southern Grampians Shire Council's transitions to the new standardised 4-stream waste collection services. While the State Government is collaborating with councils to provide funding and assisting with planning and infrastructure, the ongoing cost of providing the expanded service will be borne by Council.

Council retains the objective of setting the service charge for kerbside waste collection at a level that fully recovers the cost of the kerbside waste services, including disposal of the waste. Additionally, the charge will support the costs related to the disposal of waste, such as the provision for the rehabilitation of Council's landfill site as it approaches the end of its useful life.

It is recommended that Council retain the existing kerbside waste service charge. If Council decides not to levy waste service charges, the same amount would need to be raised through an increased general rate on applicable properties. This would result in higher valued properties potentially covering the waste service costs for lower valued properties, leading to an imbalance in the distribution of the cost.

While this principle applies to rates in general, the combination of a single fixed charge with valuation driven rates for the remainder of the rate invoice provides ensures a balanced and equitable outcome. This approach helps distribute the financial responsibility fairly while considering both the fixed costs and the value of properties within the municipality.

11. Collection & Administration of Rates & Charges

The purpose of this section is to outline the rate payment options, processes, and options available to support ratepayers experiencing financial hardship.

Payment Options
In accordance with the *Local Government Act 1989*, Section 167(1) & (2A), ratepayers have the option of paying rates and charges by way of four instalments or in full. Payments are due on the prescribed dates below, or alternatively a payment in full can be made by 30 September:

- 1st Instalment: 30 September
- 2nd Instalment: 30 November
- 3rd Instalment: 28 February
- 4th Instalment: 31 May.

Council offers a range of payment options including:

- In person at Council offices (EFTPOS, credit/debit cards and cash, cheques, money orders);
- Online via Council's website and directed to a third-party provider for direct debit;
- Centrepay;
- BPAY;
- Australia Post (over the counter, over the phone via credit card and on the internet) or
- By mail (cheques and money orders only with cheques to be phased out by June 2028)

Incentives for prompt payment
Section 168 of the Local Government Act 1989 allows councils to declare an incentive for the early payment of rates and charges. Historically Council have offered a 2% discount on General Rates for payments made in full by 30 September each year, however this will be subject to review during the budget preparation process each year. The discount does not apply to the Waste Charges or the State Revenue Fire Services Property Levy (which will soon be replaced by the Emergency Services Volunteer Fund Levy).

Interest on Arrears and Overdue Rates
Interest is charged on all overdue rates in accordance with Section 172 of the *Local Government Act 1989*. The interest rate applied is fixed under Section 2 of the *Penalty Interest Rates Act 1983*, which is determined by the Minister and published by notice in the Government Gazette.

Pensioner rebates
Holders of a Centrelink or Department of Veterans' Affairs (DVA) Pension Concession Card, or a DVA Gold Card indicating Total Permanent Incapacity (TPI) or War Widow status, may claim a rebate on their sole or principal place of residence. Upon initial application, ongoing eligibility is maintained unless the application is rejected by Centrelink or the Department of Veterans' Affairs during the annual verification process. Once eligibility is confirmed, the pensioner rebate is applied to the rate account before payment is required from the ratepayer.

For new applicants, once a Pensioner Concession Card (PCC) is granted, pensioners may apply for the rebate at any time during the rating year. Retrospective claims for up to one

previous financial year may be approved by Council upon verification of eligibility criteria. Claims for periods prior to this may be approved by the Department of Human Services.

Deferred payments
Under Section 170 of the *Local Government Act 1989*, Council may defer the payment of any rate or charge for an eligible ratepayer whose property is their sole place of residence. This allows the ratepayer an extended period to make payments, or, alternatively, to defer payments indefinitely until the ratepayer no longer owns or occupies the property in respect of which rates and charges are levied.

Deferral of rates and charges is available to all ratepayers who meet the eligibility criteria and can demonstrate financial duress. When Council approves an application for deferral, interest will continue to accrue on the outstanding balance of rates and charges, but at an interest rate set annually by Council. This deferred interest rate will typically be significantly lower than the penalty interest rate applied by Council to unpaid rates and charges.

Ratepayers wishing to apply for this provision must submit a Rates Hardship Application form, which is available at the Council offices, on the Council's website, or can be mailed upon request.

Rates Assistance
It is acknowledged that ratepayers may experience financial hardship due to a variety of circumstances, with meeting rate obligations being just one of several challenges they may face. The purpose of rates assistance is to offer options that help ratepayers in such situations manage their circumstances positively and alleviate the strain caused by financial hardship. Council have recently updated their Financial Assistance & Hardship policy which is available on our website for ratepayers to review. A copy can also be obtained by visiting our Customer Service Offices or via email by request.

Ratepayers may choose to either negotiate a rate payment plan or apply for a rate deferral with Council. To apply for this provision, ratepayers must submit a Rate Hardship or Rate Arrangement Application form, which is available at Council's offices, on the website, or can be mailed upon request.

Debt Recovery
Council makes every effort to contact ratepayers at their correct address; however, it is the ratepayers' responsibility to ensure that Council is notified of any changes to their contact details. Under Sections 230 and 231 of the *Local Government Act 1989*, both the vendor and the buyer of property, or their agents (e.g., solicitors or conveyancers), are required to notify Council of any disposition or acquisition of an interest in land.

If an account becomes overdue, Council will issue a final notice, including any accrued penalty interest. Council encourages ratepayers experiencing financial hardship to make contact and arrange a payment plan.

If the account remains unpaid and no payment arrangement has been made, Council may take legal action to recover the overdue amount without further notice. Any fees and court costs incurred will be recoverable from the ratepayer.

If an amount payable by way of rates in respect to land has been in arrears for three years or more, a council may sell or acquire the land to recover unpaid rates and charges, in accordance with Section 181 of the *Local Government Act 1989*. A court order is required to

enforce payment of the outstanding amount, and Council must ensure that no existing arrangements (such as payment plans) are in place. Council must serve notice on the landowner and/or provide public notice of its intention to conduct the sale or carry out the transfer.

Emergency Services and Volunteers Fund (formerly Fire Services Property Levy)
In 2012 the Victorian State Government passed legislation requiring the Fire Services Property Levy to be collected from ratepayers. Previously this was collected through building and property insurance premiums. The Fire Services Property Levy helps fund the services provided by the Metropolitan Fire Brigade (MFB) and Country Fire Authority (CFA), and all levies collected by Council are passed through to the State Government.

The Fire Services Property Levy is based on two components, a fixed charge, and a variable charge which is linked to the Capital Improved Value of the property. This levy is not included in the rate cap and increases in the levy are at the discretion of the State Government.

On 13 December 2024 the Victorian Government announced the Fire Services Property Levy (FSPL) will be replaced with the new Emergency Services and Volunteers Fund (ESVF) from 1 July 2025. Eligible CFA and VicSES volunteers may receive a rebate of ESVF on their principal place of residence. Further changes will occur from 1 July 2026 and more information will be available during the impending roll out.

12. Other Revenue Items

12.1 User Fees and Charges

The Southern Grampians Pricing Register outlines the fees that Council proposes to charge for the delivery of services and the use of community infrastructure. These fees account for 12% of Council's total revenue..

Examples of user fees and charges include:

- Hamilton Regional Livestock Exchange (HRLX)
- Community Services (Occasional & Family Day Care fees)
- Leisure Centre, Gym, and Pool visitation and membership fees
- Leases and facility hire fees
- Local Laws fees
- Library and Cinema fees and
- Art Gallery and Cultural Services fees

The provision of infrastructure and services form a key aspect of Council's role in supporting the local community. In delivering these services, Council must consider a range of 'Best Value' principles, including service cost and quality standards, value-for-money, and community expectations and values. Council must balance the affordability and accessibility of infrastructure and services with its financial capacity and in the interests of long-term financial sustainability.

Council must also comply with the government's *Competitive Neutrality Policy* for significant business activities and adjust service prices to neutralise any competitive advantages when competing with the private sector.

In providing services to the community, Council must determine the extent of cost recovery based on the level of both individual and collective benefits the services provide, while aligning with the community's expectations.

Services are provided based on one of the following pricing methods:

a. Market Price
b. Full Cost Recovery Price
c. Subsidised Price
d. Regulatory
e. Zero Cost Price

Market pricing refers to setting prices based on the benchmarked competitive prices of alternate suppliers. Generally, market pricing represents full cost recovery, plus an allowance for profit. Market prices will be applied when other providers exist in the market, and Council must meet its obligations under the government's *Competitive Neutrality Policy*.

It should be noted that if the market price is lower than Council's full cost price, the market price would represent a subsidy by Council for that service. If this occurs and other suppliers offer the service at the same price, it may indicate that Council is not the most efficient supplier in the market. In such cases, Council will assess whether there is a community service obligation and whether it should continue providing the service.

Full cost recovery price (b) aims to recover all direct and indirect costs incurred by Council. This pricing should be applied when a service provided by Council benefits individual customers specifically, rather than the community as a whole. In principle, fees and charges should be set at a level that recovers the full cost of providing the service, unless there is an overriding policy or imperative supporting subsidisation.

Subsidised Pricing occurs when Council subsidises a service by not passing the full cost onto the customer. Subsidies may range from full subsidies (e.g., where Council provides the service free of charge) to partial subsidies, when Council offers the service to the user at a discounted rate. The subsidy can be funded from Council's rate revenue or other sources, such as Commonwealth and State Government funding.

Council Subsidy Pricing (partial or full) is based on an understanding of the full cost of providing a service. When setting fees, Council considers:

- Both direct and indirect costs of the service
- Accessibility, affordability and efficient delivery of the service and
- Competitive neutrality with commercial providers.

Regulatory pricing refers to situations where the price or fee for a service is set by legislation, and Council cannot charge outside this framework.

Zero Cost Pricing means no charge is levied for the provision of the service.

Council develops a schedule of fees and charges (Pricing Register) as part of its annual budget. Proposed fees and changes are included in the pricing register and will be communicated to stakeholders prior to adoption of the budget, allowing them time to review and provide valuable feedback before the fees are finalised.

12.2 Statutory Fees and Charges

Statutory fees and fines are those which Council collects under the direction of legislation or other government directives. The rates used for statutory fees and fines are advised by the state government department responsible for the corresponding services or legislation, and generally Council will have limited discretion in applying these fees. These fees and charges account for 1% of Council's total revenue.

Examples of Statutory Fees and Fines include:

- Planning and subdivision fees
- Building and Inspection fees
- Infringements and fines
- Land Information Certificate fees

Penalty and fee units are used in Victoria's Acts and Regulations to describe the amount of a fine or a fee.

Penalty Units

Penalty units are used to define the amount payable for fines for many offences. For example, the fine for selling a tobacco product to a person aged under 18 is four penalty units.

One penalty unit is currently $203.51 from 1 July 2025 to 30 June 2026.

The rate for penalty units is indexed each financial year in line with inflation. Changes to the value of a penalty unit are announced in May and applied from 1 July annually.

Fee Units
Fee units are used to calculate the cost of a certificate, registration or licence that is set out in an Act or Regulation. For example, the cost of depositing a Will with the supreme court registrar of probates is 1.6 fee units.

The value of one fee unit is currently $16.81 as at 1 July 2025. The rate for a fee unit is indexed each financial year in line with inflation and announced in May applicable from 1 July annually.

The cost of fees and penalties is calculated by multiplying the number of units by the current value of the fee or unit. The exact cost may be rounded up or down.

12.3 Grants

Grant revenue represents income usually received from other levels of government. Operating grants account for 19% of Council's total revenue. Grants represent an important but sometimes unpredictable revenue source for Council.

Some grants are singular and attached to the delivery of specific projects, whilst others can be of a recurrent nature and may or may not be linked to the delivery of projects, both operational and capital in nature.

Council will proactively advocate to other levels of government for grant funding to support the delivery of important infrastructure and service outcomes for the community. Council may also use its own funds to leverage additional grant funding and maximise external funding opportunities.

When preparing its financial plan, Council will consider its project proposal pipeline, advocacy priorities, upcoming grant program opportunities, and co-funding options to determine which grants to apply for. Council will only apply for and accept external funding if it aligns with the Community Vision and does distort priorities outlined in the Council Plan.

Grant assumptions are clearly detailed in Council's budget document. No project that is reliant on grant funding will proceed until a signed funding agreement is in place.

12.4 Contributions

Contributions are funds received by Council, typically from non-government sources, and usually tied to specific projects. These contributions can take the form of either cash payments (monetary contributions) or asset handovers (non-monetary contributions).

Examples of Contributions include:

- Monies collected from developers under planning and development agreements
- Monies collected under developer contribution plans and infrastructure contribution plans
- Contributions from user groups towards upgrade of facilities
- Assets handed over to Council from developers at the completion of a subdivision, such as roads, drainage, and streetlights.

Contributions should always be linked to a planning or funding agreement. Council will not undertake any work on a contribution-funded project until a signed agreement outlining the contribution details is in place.

Contributions linked to developments may be received before any Council expenditure occurs. In such cases, the funds will be identified and held separately for the specific works outlined in the agreements.

12.5 Other Income

Council receives interest on funds managed as part of its investment portfolio, whether held in advance of expenditure or for special purposes. The investment portfolio is managed in accordance with Council's Investment Policy, which aims to earn the best return on funds whilst minimising risk.

12.6 Sale of Assets

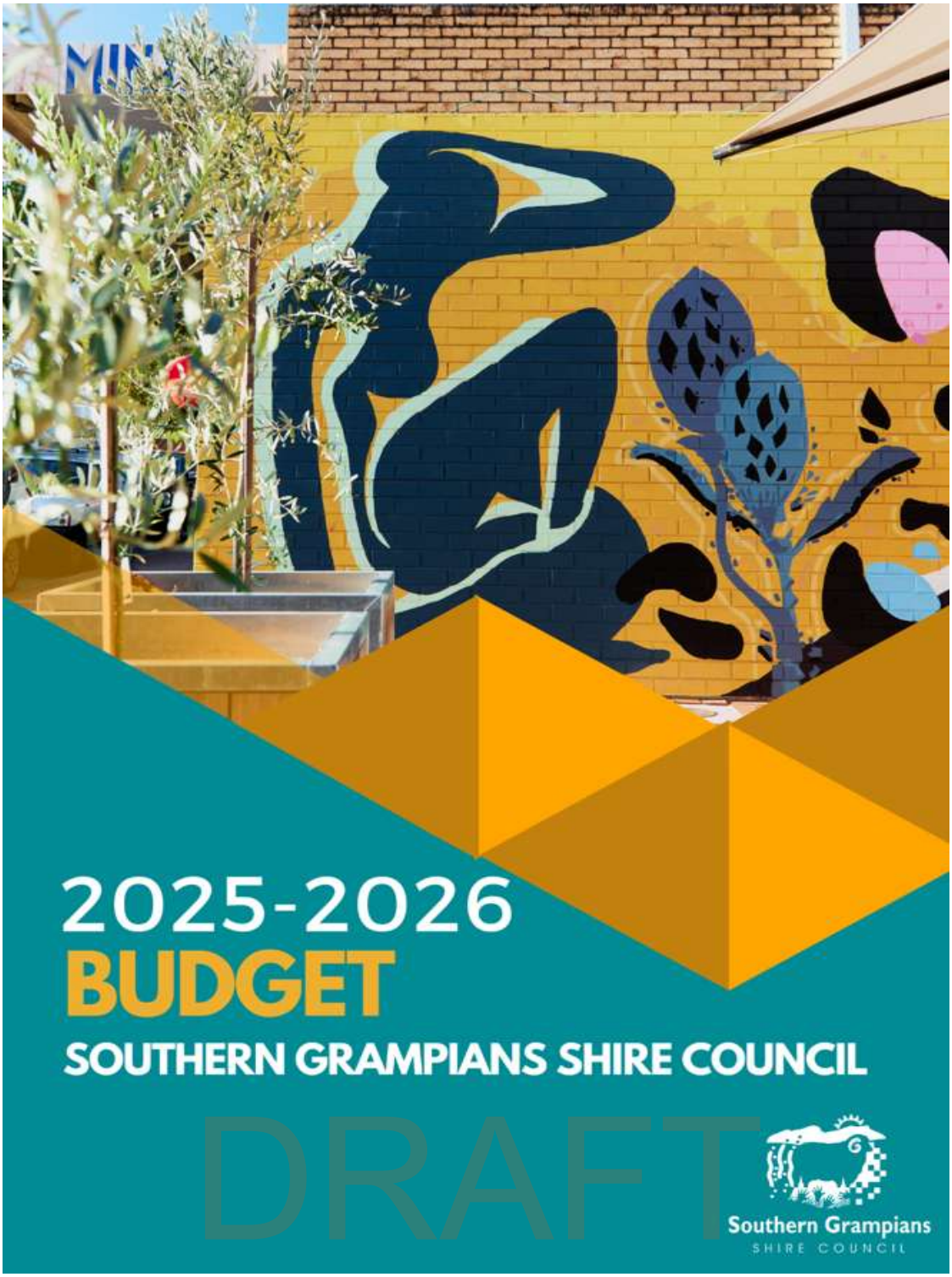
Sale of assets include trade-in or auction of vehicles/plant as part of cyclical replacement of fleet/plant, land exchange and sale of industrial estate lots. Section 114 of the *Local Government Act 2020*, stipulates that sale or exchange of land must be advertised and the process must be in accordance with the Community Engagement Policy.

12.7 Borrowings

While not a source of income, borrowings can be an important cash management tool in appropriate circumstances. Loans can only be approved by a council resolution and must be included in the adopted annual budget and long-term financial plan.

The following financial sustainability principles must be adhered to when considering new borrowings:

- Borrowings must only be applied for if it can be demonstrated repayments can be met in the Long-Term Financial Plan
- Borrowings must not be used to fund ongoing operations
- Borrowings are appropriate for funding large capital works if the benefits extend to future generations.
- Council will maintain its debt at levels that are sustainable and within prudential guidelines.


2025-2026
BUDGET
SOUTHERN GRAMPIANS SHIRE COUNCIL
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Disclaimer

The information contained in this document is for general guidance only. It is not professional advice and should not be used, relied upon or treated as a substitute for specific professional advice. Given the changing nature of laws, rules and regulations, and the inherent hazards of electronic communication, there may be delays, omissions or inaccuracies in information contained in this document.

The model budget, including financial statements, has been prepared in accordance with the requirements of the *Local Government Act 2020* and the *Local Government (Planning and Reporting) Regulations 2020*. While every effort has been made to ensure that the information contained in this document has been accurate and complies with relevant Victorian legislation, each Council remains responsible to ensure that the budget they prepare is compliant with all statutory requirements.

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Southern Grampians Shire Council Budget 2025-2026

Mayor and CEO's Introduction

Southern Grampians Shire Council is pleased to present the 2025-2026 Budget, which underpins the delivery of the Council Plan and aligns with our long-term Community Vision 2041.

In a financially challenging climate, Council remains committed to providing essential services and infrastructure to our communities in a way that is both efficient and financially responsible. Maintaining a focus on cost savings and continuous improvement is crucial, especially given ongoing inflationary pressures that affect operational costs within a rate-capped framework.

Council is dedicated to continuing to advance key intergenerational projects over the coming years, with this budget allocating funds for design works on the New Hamilton Gallery, Hamilton CBD Revitalisation, and the Hamilton Community Hub.

These multi-generational initiatives have been incorporated into Council's Long-Term Financial Plan (LTFP), ensuring alignment with ongoing operational services. The LTFP now projects improved financial outcomes, with underlying surplus results expected for most of the next decade, short-term debt that will be phased out over ten years, and liquidity ratios exceeding Council's benchmark in the latter years of the plan.

The 2025-2026 Capital Works Program represents a significant investment of $16.254 million, driving improvements in roads, bridges, footpaths, and essential infrastructure, as well as a variety of projects to support our broader community and outlying townships:

- Installation of fans for HILAC multipurpose courts
- Enclosure of the playground at Hamilton Lakes Edge
- Upgrades to BBQ units at Wannon Reserve
- Footpath construction in Cavendish from town centre to Recreation Reserve
- Implementation of the Penshurst Botanic Gardens Masterplan
- Two vouchers for free green waste disposal per rateable properties
- Increased funding for the Business Façade Improvement Program

Additional funded initiatives include:

- Road Safety Improvement Program across shire
- Procurement of a Southern Grampians Shire Council mobile app
- Build of hardstand at the Hamilton Transfer Station to support onsite Organics processing facility

As the custodian of over $500 million in community assets, Council acknowledges the responsibility of ensuring adequate funding for asset renewal each year, helping to maintain them in good condition for local communities.

Renewal projects funded in this budget include:

- Ongoing and expanded investment in infrastructure assets such as roads, bridges, culverts, drainage, and footpaths
- Continued upgrades to Council's plant machinery and equipment
- Refurbishment of the Penshurst Botanic Gardens Shelter (adjacent to the BBQ area)
- Enhancements to township entrance and tourism signage across the shire
- Playground renewals across the shire
- New books and resources for branch and mobile library
- Renewal of the aging outdoor pools

To support this comprehensive program of operational and capital works, Council has proposed a 3% rate increase, consistent with the rate cap set by the Minister for Local Government.

On behalf of my fellow Councillors and the Southern Grampians Shire Council team, I am proud to present the 2025-2026 Budget to the community. We look forward to delivering on our commitments and reporting back on our progress and achievements in the coming year.

Cr Dennis Heslin
Mayor

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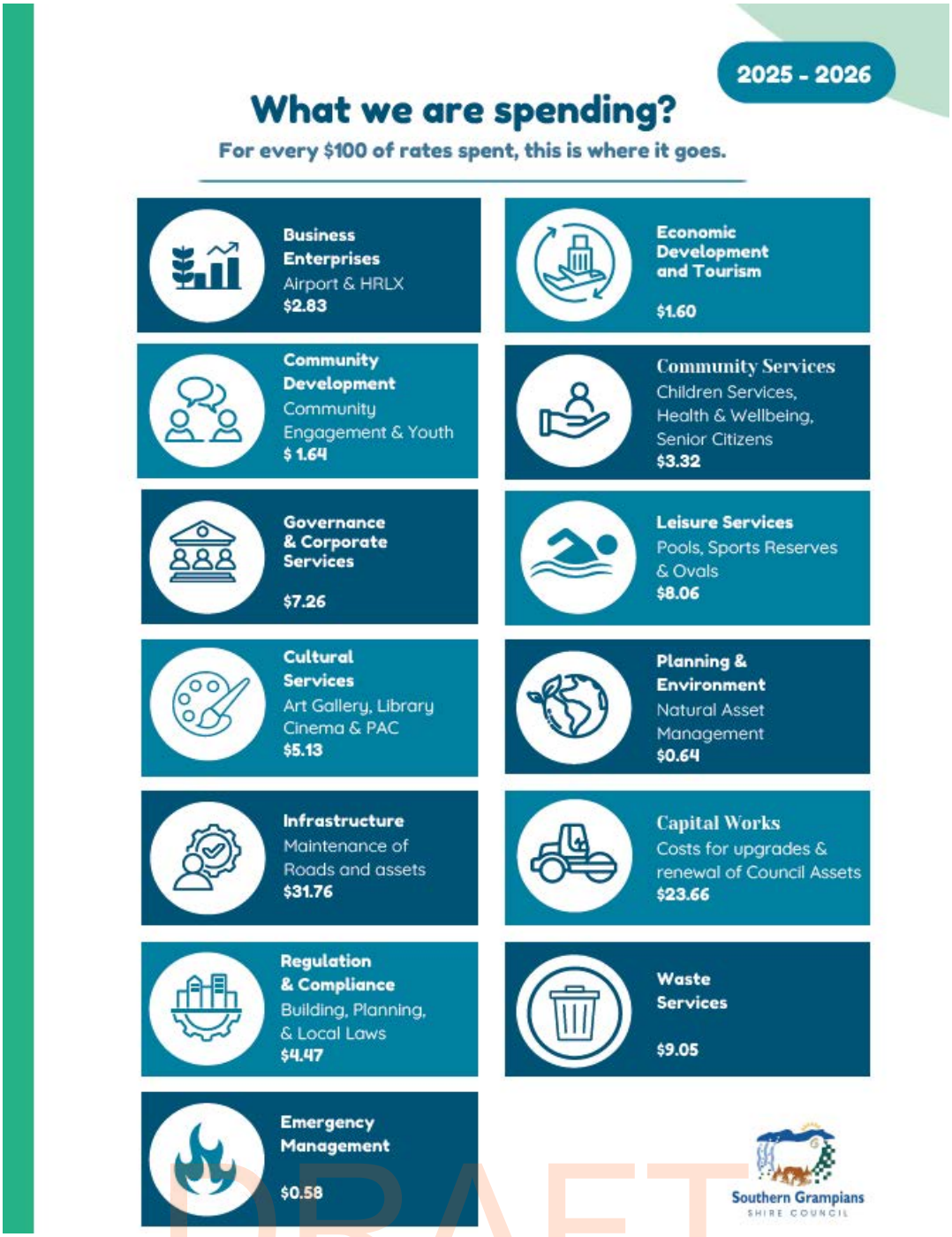
Southern Grampians Shire Council Budget 2025-2026



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Southern Grampians Shire Council Budget 2025-2026

Budget a Glance 2025 - 2026

Our Budget enables the delivery of over 70 services to the community.

$3,451 Average Rural Rate	**$1,066** Average Residential Rate

3.00% Rate increase in line with rate cap	**$227** Municipal Charge	**$430** Kerbside Waste Fee

$56.3m Operating Revenue	**$52.4m** Operating Expenditure	**$3.9m** Operating Surplus	**$5m** Borrowings

Capital Works $16.25m

Major Investments include:

- Roads, Bridges and Drainage: $7.64m
- Plant and Equipment: $1.9m
- Waste Infrastructure: $0.6m
- Buildings: $2.56m
- Footpaths and Cycleways: $0.460m
- Recreational Facilities: $2.18m

Community Grants

Council will continue to support local communities through more than $350,000 in grant funding, including:

- Infrastructure
- Heritage
- Events
- Arts

New Initiatives

- Progressing Major Projects including the Community Hub, the new Hamilton Gallery, and the Hamilton CBD Streetscape.
- Supporting tourism providers in recovery following the Grampians Fires.
- Business Facade Improvement Program
- Replacement of ageing tourism and township signage.
- Outdoor Swimming Pool Renewal Works.
- Implement Safer Local Roads and Streets Program.
- Investigate development of Food and Organics processing facility in Hamilton.
- Development of a new Council App.
- Installation of fans for multipurpose courts at HILAC.
- Installation of fencing around the Lakes Edge Playground.

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Southern Grampians Shire Council Budget 2025-2026

Budget Influences

This section sets out the key budget influences arising from the internal and external environment within which the Council operates.

External Influences

In preparing the 2025-2026 Budget, a number of external influences have been taken into consideration because they are likely to impact significantly on the services delivered by Council in the budget period. These include:

- The need to renegotiate Enterprise Bargaining Agreements (EBA) every three years.
- The increased demand for Council services and the need to review all services to ensure they are responsive, appropriate and efficient.
- Irregular funding from Victoria Grants Commission. A static period of four years together with only modest increases prior to and after this period, has eroded the index base.
- Roads to Recovery funding from 2025–2029 - $17.470m over the five years.
- Continuing escalation of utility costs essential for carrying out services (water, power, gas, communications and insurances).
- Continuing increases in the demand and associated costs to improve waste management service levels (Landfills, Transfer Stations and Refuse/Recycling collections) along with imposition of strict guidelines from government regarding management practices.
- The continuation of rate-capping by the State Government – set at 3.00% for 2025-2026.
- The increased costs across the organisation of meeting compliance standards set by other levels of government.

Internal influences

As well as external influences, there are also a number of internal influences which are expected to have a significant impact on the preparation of the 2025-2026 Budget.

- Continuing escalation of costs in relation to the maintenance and renewal of Council's ageing infrastructure assets.
- The need for more detailed planning of major developments to ensure capital delivery.

In an effort to reduce the impact of these matters, Council continues on a service delivery realignment to ensure resources align with the services provided and compliment the direction of the Council Plan.

A detailed examination of all revenues and expenses occurred during the preparation of this budget. Council will continue to look for savings and new revenue sources to achieve overall operational efficiencies.

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Southern Grampians Shire Council Budget 2025-2026

Budget Principles

Guidance is provided to all Council officers with budget responsibilities. These key budget principles upon which the officers were to prepare their budgets included:

- Existing fees and charges only to be increased to work towards achieving Council's Rating & Revenue Policy classifications.
- Grants to be based on confirmed funding levels.
- Continued focus on identifying revenue sources.
- Service levels to be maintained at 2024-2025 levels emphasising on innovation and efficiency, and using less resources.
- Contract labour to be minimised.
- New initiatives or employee proposals to be justified through a business case.
- Real savings in expenditure and increases in revenue identified in 2024-2025 to be preserved.
- Operating revenues and expenses arising from completed 2024-2025 capital projects to be included.

Cost escalations for the preparation of the 2025-2026 budget onwards include:

- Rate revenue to be projected at 3.00% which is the current year rate cap.
- Operating Grants increasing at 2%.
- Capital Grants only included where some level of surety arises and are linked directly to a specific capital project.
- Continuation of the Roads to Recovery program at committed levels, increasing in future years.
- User Fees and Charges increasing in line with service reviews and Council's Rating & Revenue Policy at 4%.
- Statutory Fees and Charges only increasing where legislation is known.
- Employee costs increasing at 1%.
- Materials & consumables increasing at 1%.
- Other operating expenses increasing at 1%.

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Southern Grampians Shire Council Budget 2025-2026

Budget Reports

This section includes the following reports and statements in accordance with the Local Government Act 2020 and the Local Government Model Budget 2025-2026.

1 Linkage to the Integrated Planning and Reporting Framework.

2 Services and Service Performance Indicators.

3 Financial statements.

4 Notes to the Financial Statements.

5 Detailed Capital Works Statement.

6 Financial Performance Indicators.

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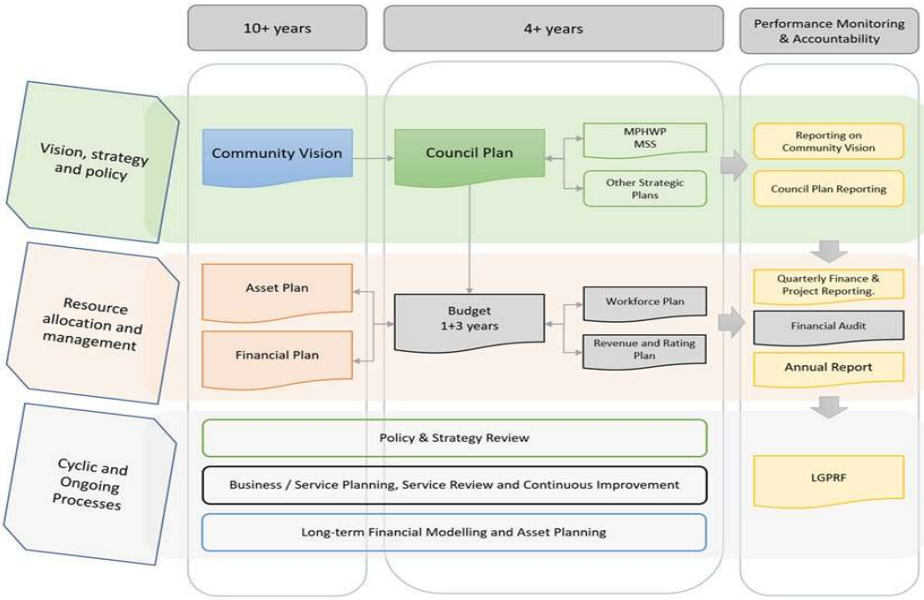
Southern Grampians Shire Council Budget 2025-2026

1 Link to the Integrated Strategic Planning and Reporting Framework

This section describes how the Budget links to the achievement of the Community Vision and Council Plan within an overall integrated strategic planning and reporting framework. This framework guides the Council in identifying community needs and aspirations over the long term (Community Vision and Financial Plan), medium term (Council Plan, Workforce Plan, and Revenue and Rating Plan) and short term (Budget) and then holding itself accountable (Annual Report).

1.1 Legislative planning and accountability framework

The Budget is a rolling four-year plan that outlines the financial and non-financial resources that Council requires to achieve the strategic objectives described in the Council Plan. The diagram below depicts the integrated strategic planning and reporting framework that applies to local government in Victoria. At each stage of the integrated strategic planning and reporting framework there are opportunities for community and stakeholder input. This is important to ensure transparency and accountability to both residents and ratepayers.



Source: Department of Jobs, Precincts and Regions

The timing of each component of the integrated strategic planning and reporting framework is critical to the successful achievement of the planned outcomes.

1.1.2 Key planning considerations

Service level planning

Although councils have a legal obligation to provide some services— such as animal management, local roads, food safety and statutory planning—most council services are not legally mandated, including some services closely associated with councils, such as libraries, building permits and sporting facilities. Further, over time, the needs and expectations of communities can change. Therefore councils need to have robust processes for service planning and review to ensure all services continue to provide value for money and are in line with community expectations. In doing so, councils should engage with communities to determine how to prioritise resources and balance service provision against other responsibilities such as asset maintenance and capital works.

Community consultation needs to be in line with a councils adopted Community Engagement Policy and Public Transparency Policy.

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Southern Grampians Shire Council Budget 2025-2026

1.2 Our purpose

Our Vision

'Southern Grampians is a growing, inclusive and connected community that fosters sustainability, diversity and innovation'

To achieve this vision, we have developed five fundamental priority areas, and these themes will guide the development and implementation of Council's objectives and strategies.

Our values

Southern Grampians has a clear strength in the bond and affinity between its Councillors, the community and staff. Staff support the community leadership and governance role of Councillors and work together to achieve the commitments of the Council Plan.

Having all Southern Grampians staff and Councillors practise the following organisational values, which were identified by staff and Councillors as being of the highest importance, will enhance the quality of this partnership.

- **Innovative:** we will be open to new ideas, will welcome creativity and embrace change.
- **Respectful:** we will be caring, accept difference and value diversity.
- **Collaborative:** together we will work smarter to achieve agreed common goals.
- **Trusting:** we will be open, honest and brave.
- **Empowering:** we will delegate opportunities and develop and inspire success.

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Southern Grampians Shire Council Budget 2025-2026

1.3 Themes and Strategic objectives

Council delivers services and initiatives to approximately 70 service categories. Each service contributes to the achievement of the Strategic Objectives as set out in the Council Plan for the years 2021-2025.

The following table lists the five Themes and Strategic Objectives as described in the Council Plan.

Theme		Strategic Objective
1	Support our Community	1.1 An empowered and connected community.
		1.2 Support and promote a healthy community.
		1.3 Grow a diverse and inclusive community.
		1.4 A safe community.
2	Grow our Regional Economy	2.1 Drive economic growth.
		2.2 Increase our regional profile.
		2.3 Continue to support the development of a skilled workforce.
		2.4 Support local business and community.
3	Maintain and Renew our Infrastructure	3.1 Plan and maintain sustainable assets and infrastructure.
		3.2 Safe and well-maintained transport routes and infrastructure for all modes of travel.
		3.3 Attractive Council-owned and managed community and open spaces.
4	Protect our Natural Environment	4.1 Protect and enhance biodiversity including the health of waterways, wetlands, soil and air.
		4.2 Balance environmental protection with Council's support for growth.
		4.3 Sustainable waste management services.
		4.4 Mitigate against and adapt to climate change.
5	Provide Strong Governance and Leadership	5.1 Transparent and accountable governance.
		5.2 Effective advocacy.
		5.3 Committed and skilled staff.
		5.4 Customer focused services.

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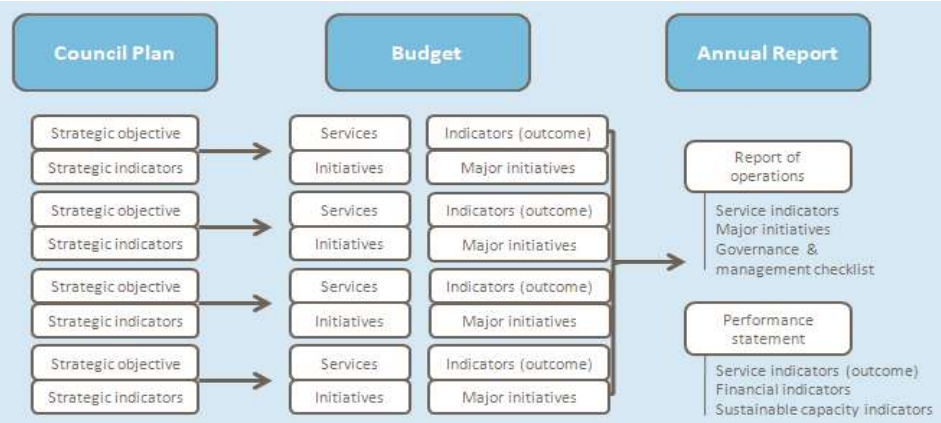
Southern Grampians Shire Council Budget 2025-2026

2 Services and service performance indicators

This section provides a description of the services and initiatives to be funded in the Budget for the 2025-2026 year and how these will contribute to achieving the strategic objectives outlined in the Council Plan. It also describes several initiatives and service performance outcome indicators for key areas of Council's operations. Council is required by legislation to identify initiatives and service performance outcome indicators in the Budget and report against them in their Annual Report to support transparency and accountability. The relationship between these accountability requirements in the Council Plan, the Budget and the Annual Report is shown below.

The relationship between these accountability requirements in the Council Plan, the Budget and the Annual Report is shown below.



Source: Department of Jobs, Precincts and Regions

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Southern Grampians Shire Council Budget 2025-2026

2.1 Support our community – an empowered community that is healthy, inclusive and connected

To support our community to be vibrant, growing, healthy, inclusive and connected, we will continue to plan, deliver and improve high quality, cost effective, accessible and responsive services.

To achieve this, we have set the following Strategic Objectives:

1.1 An empowered and connected community.

1.2 Support and promote a healthy community.

1.3 Grow a diverse and inclusive community.

1.4 A safe community.

The services, initiatives and service performance indicators for each business area are described below.

Service area	Description of services provided		2023/24 Actual $'000	2024/25 Forecast $'000	2025/26 Budget $'000
Senior Citizen Programs and Support	This service offers opportunities for older residents to participate in community and social activities across the Shire.	*Inc*	0	0	0
		Exp	68	70	65
		Surplus / (deficit)	(68)	(70)	(65)
Community Services Management	This service provides management support to coordinate a whole of organisation approach to service delivery across community and leisure portfolio, particularly in relation to delivering the Municipal Health and Wellbeing Plan.	*Inc*	2	0	0
		Exp	415	481	524
		Surplus / (deficit)	(413)	(481)	(524)
Community Planning Engagement and Support	This service coordinates Council's approach to community planning and citizen engagement, including skill development and capacity building for Councillors and community.	*Inc*	124	91	110
		Exp	987	1,213	1,130
		Surplus / (deficit)	(863)	(1,122)	(1,020)
Children's Services	This service provides quality education and care services i.e. Family Day Care and promotes the early years sector.	*Inc*	683	697	716
		Exp	874	896	895
		Surplus / (deficit)	(191)	(199)	(179)
Recreation Development and Support	This service is responsible for the management and planning of recreational opportunities in conjunction with the community, using community development processes.	*Inc*	0	0	0
		Exp	341	493	278
		Surplus / (deficit)	(341)	(493)	(278)
Sports Reserves	This service directly manages or provides operational assistance for 16 recreational reserves across the Shire to support both active and passive participation in sports and recreation.	*Inc*	5	246	61
		Exp	859	1,179	1,215
		Surplus / (deficit)	(854)	(933)	(1,154)
Lake Hamilton	This service provides a safe, functional, accessible and useable space for leisure and recreational activities, on water and surrounding open space.	*Inc*	1	1	1
		Exp	293	328	272
		Surplus / (deficit)	(292)	(327)	(271)
Aquatic Facilities	This service provides a geographic spread of aquatic facilities that deliver recreation, health, wellbeing, education, social and tourism/economic opportunities to our communities.	*Inc*	0	19	21
		Exp	784	565	755
		Surplus / (deficit)	(784)	(546)	(734)
Hamilton Indoor Leisure & Aquatic Centre	This service provides accessible leisure and aquatic experiences that facilitates and promotes wellbeing outcomes.	*Inc*	1,359	1,433	1,583
		Exp	2,762	2,765	2,872
		Surplus / (deficit)	(1,403)	(1,332)	(1,289)

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Southern Grampians Shire Council Budget 2025-2026

Service area	Description of services provided		2023/24 Actual $'000	2024/25 Forecast $'000	2025/26 Budget $'000
Art Gallery	This service supports tourism promotion and community engagement with the arts and acts as custodian of one of the most valuable collections in regional Australia.	*Inc*	425	450	370
		Exp	1,428	1,229	1,143
		Surplus / (deficit)	(1,003)	(779)	(773)
Performing Arts Centre	This service provides promotion and support of performing arts, encouraging both appreciation and participation. Also offers a conference and event venue for both the business and community sectors.	*Inc*	276	279	224
		Exp	957	904	943
		Surplus / (deficit)	(681)	(625)	(719)
Library	This service aims to be an effective and dynamic library service inspiring and connecting our community by providing diverse, accessible and creative collections, programs, spaces and experiences.	*Inc*	226	202	213
		Exp	827	793	836
		Surplus / (deficit)	(601)	(591)	(623)
Cinema	This service provides the community with a high-quality cinema experience.	*Inc*	222	292	302
		Exp	369	314	358
		Surplus / (deficit)	(147)	(22)	(56)
Civic & Community Arts	This service aims to increase visibility and activity of arts and culture in the community through a range of community programs or projects.	*Inc*	-	-	-
		Exp	29	14	18
		Surplus / (deficit)	(29)	(14)	(18)
Parks and Urban Spaces	This service provides and maintains appropriate parks and urban space areas across the Shire to support inclusive recreation activities for the whole community.	*Inc*	1	1	1
		Exp	931	823	928
		Surplus / (deficit)	(930)	(822)	(927)
Local Laws Operations	This service implements and enforces the Community Local Law No.1 (2015), provides parking control, coordinates domestic animal management including the operation of a Council owned pound facility, and supports the provision of law and order in the community.	*Inc*	351	402	384
		Exp	708	656	645
		Surplus / (deficit)	(357)	(254)	(261)
Maternal & Child Health	This service provides a primary health care service for the Shire's families with children from birth to school age.	*Inc*	547	433	448
		Exp	431	617	552
		Surplus / (deficit)	116	(184)	(104)
Emergency Management	This service coordinates emergency management planning to enable Council to coordinate and respond to emergencies in cooperation with other agencies.	*Inc*	1	60	60
		Exp	426	289	247
		Surplus / (deficit)	(425)	(229)	(187)
Botanic Gardens	This service maintains the historically significant Botanic Gardens in Hamilton (& Penshurst) and provides responsible management of flora, open spaces and built facilities on the grounds.	*Inc*	-	-	-
		Exp	388	463	525
		Surplus / (deficit)	(388)	(463)	(525)

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Southern Grampians Shire Council Budget 2025-2026

Major Initiatives

1) Engage Architects to complete design development (including costings) for the New Hamilton Art Gallery and undertake community consultation.
2) Strengthen partnerships with First Nations.
3) Undertake the detailed design of the Community Hub, civic square and streetscape.
4) Adopt new Municipal Public Health and Wellbeing Plan

Other Initiatives

5) Continue service reviews in context of other key strategic documents including the Long-Term Financial Plan and Asset Management Plans.
6) Undertake youth survey and update youth engagement strategies where required.

Service Performance Outcome Indicators

Service	Indicator	2023/24 Actual	2024/25 Forecast	2025/26 Budget
Maternal & Child Health	Participation in the MCH service	83.75%	80.00%	82.50%
	Participation in the MCH service by Aboriginal children	89.33%	80.00%	82.50%
Libraries	Library membership (Percentage of the population that are registered library members)	20.81%	14.00%	15.00%
Aquatic Facilities	Utilisation of aquatic facilities. (Number of visits to aquatic facilities per head of population)	10.4	7.1	10.0
Animal Management	Animal management prosecutions. (Percentage of animal management prosecutions which are successful)	0%	0%	0

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Southern Grampians Shire Council Budget 2025-2026

2.2 Grow our regional economy - a growing and diverse local and regional economy that supports local businesses

To develop our regional economy and businesses and achieve a strong, diversified local and regional economy.

To achieve this, we have set the following Strategic Objectives:

2.1 Drive economic growth.

2.2 Increase our regional profile.

2.3 Continue to support the development of a skilled workforce.

2.4 Support business and community.

The services, initiatives and service performance indicators for each business area are described below.

Service area	Description of services provided		2023/24 Actual $'000	2024/25 Forecast $'000	2025/26 Budget $'000
Economic Development	This service seeks, in conjunction with key stakeholders, to promote an environment that is conducive to a sustainable and growing local economy.	*Inc*	-	-	-
		Exp	274	409	299
		Surplus/ (deficit)	(274)	(409)	(299)
Airport	This service is responsible for the management and operation of the Hamilton Airport.	*Inc*	22	21	23
		Exp	402	404	411
		Surplus/ (deficit)	(380)	(383)	(388)
Livestock Exchange	This service is responsible for the management and operation of the Hamilton Regional Livestock Exchange (HRLX).	*Inc*	2,497	2,204	2,373
		Exp	1,577	1,586	1,532
		Surplus/ (deficit)	920	618	841
Tourism & Visitor Experience	This service aims to connect the visitor to the Greater Hamilton experience, encouraging them to stay longer and contribute more to the local economy.	*Inc*	114	20	18
		Exp	784	784	801
		Surplus/ (deficit)	(670)	(764)	(783)
Events Support	This services purpose is to increase visitation and visitor yield and increase quality visitor experiences through the support and marketing of events within the Shire.	*Inc*	6	1	3
		Exp	179	183	214
		Surplus/ (deficit)	(173)	(182)	(211)
Caravan Parks	This service provides low-cost camping and caravan park accommodation facilities in Coleraine and Penshurst.	*Inc*	20	15	30
		Exp	72	50	32
		Surplus/ (deficit)	(52)	(35)	(2)
Land Development	This service provides management of Council owned land to promote economic and industrial development and may also secure industrial land for potential development.	*Inc*	-	-	-
		Exp	67	-	-
		Surplus/ (deficit)	(67)	0	0

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Southern Grampians Shire Council Budget 2025-2026

Major Initiatives

1) Continue the sales campaign for the Hamilton Industrial Park.
2) Continue to complete the Hamilton CBD Streetscape design development to construction documentation.
3) Support developer to progress development of Lakes Edge, Hamilton.
4) Support tourism providers in recovery following Grampians fires.

Other Initiatives

5) Deliver the Business Facade Improvement Program.
6) Continue to progress replacement of ageing tourism and Council signage across the Shire.
7) Complete business cases for project readiness to deliver outcomes identified in the Volcanic Trails Master Plan.

Service Performance Outcome Indicators

Service	Indicator	2023/24 Actual	2024/25 Forecast	2025/26 Budget
Livestock Exchange	Number of sheep sold through the Hamilton Regional Livestock Exchange	1,155,661	1,200,000	1,250,000
Visitor Services	Number of visitors to the region	815,000	822,000	825,000

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Southern Grampians Shire Council Budget 2025-2026

2.3 Maintain and Renew our Infrastructure – provide access to high-quality built environment and infrastructure that meets community needs

To plan for our built environment and infrastructure that is accessible and meets the needs of the community.

To achieve this, we have set the following Strategic Objectives:

3.1 Plan and maintain sustainable assets and infrastructure.

3.2 Safe and well-maintained transport routes and infrastructure for all modes of travel.

3.3 Attractive Council owned and managed community and open spaces.

The services, initiatives and service performance indicators for each business area are described below.

Service area	Description of services provided		2023/24 Actual $'000	2024/25 Forecast $'000	2025/26 Budget $'000
Community Buildings	This service supports the use of community buildings, including halls and showgrounds throughout the Shire by ensuring they are maintained adequately.	*Inc*	9	16	16
		Exp	454	451	384
		Surplus/ (deficit)	(445)	(435)	(368)
Strategic Planning	This service monitors the Council's Planning Scheme as well as preparing major policy documents shaping the future of the Shire. It prepares and processes amendments to the Council Planning Scheme and carries out research on urban development issues.	*Inc*	-	98	-
		Exp	995	1,076	1,055
		Surplus/ (deficit)	(995)	(978)	(1,055)
Building Services	This service provides statutory building services including enforcement of the Building Act and Regulation to ensure community safety in the built environment.	*Inc*	103	73	72
		Exp	524	359	363
		Surplus/ (deficit)	(421)	(286)	(291)
Bridges & Culverts	This service ensures the development and maintenance of the Shires bridges and culverts.	*Inc*	-	-	-
		Exp	989	1,232	1,113
		Surplus/ (deficit)	(989)	(1,232)	(1,113)
Footpaths and Cycle Ways	This service ensures the development and maintenance of the Shires footpaths and cycle ways.	*Inc*	-	-	-
		Exp	823	588	834
		Surplus/ (deficit)	(823)	(588)	(834)
Facilities Management and Property Services	This service ensures Council owned buildings are maintained to acceptable standards, are fit for purpose and compliant with building regulations.	*Inc*	55	58	59
		Exp	762	945	934
		Surplus/ (deficit)	(707)	(887)	(875)
Playground and Skate Parks	This service creates social spaces for younger people and their families to recreate and includes provision of age-appropriate play activities (including skate parks) and safe playground equipment across the Shire.	*Inc*	-	-	-
		Exp	119	122	255
		Surplus/ (deficit)	(119)	(122)	(255)
Project Management	This service undertakes design, tendering, contract management and supervision of various works within Council's capital works program.	*Inc*	34	-	-
		Exp	1,419	649	686
		Surplus/ (deficit)	(1,385)	(649)	(686)
Statutory Planning	This service processes all planning applications, provides advice and makes decisions about development proposals which require a planning permit.	*Inc*	174	190	175
		Exp	405	577	579
		Surplus/ (deficit)	(231)	(387)	(404)
Plant Management & Operations	This service purchases and maintains Council vehicles, plant and equipment to meet functionality and safety needs and to maximise the performance and minimise operational cost of the fleet.	*Inc*	145	105	110
		Exp	1,709	106	16
		Surplus/ (deficit)	(1,564)	(1)	94

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Service area	Description of services provided		2023/24 Actual $'000	2024/25 Forecast $'000	2025/26 Budget $'000
Roads	This service aims to ensure responsible management of Council's road infrastructure and compliance with regulatory requirements.	*Inc*	19	20	5
		Exp	14,775	12,022	13,915
		Surplus/ (deficit)	(14,756)	(12,002)	(13,910)
Public Infrastructure	This service provides community and visitors with appropriate public infrastructure to meet community needs in relation to location, safety, hygiene, quality and environmental sustainability of public toilets.	*Inc*	-	-	-
		Exp	465	-	428
		Surplus/ (deficit)	(465)	0	(428)
Private Works	This service is provided on a case-by-case basis for private requests for minor works that may not be readily available to the community, for example sealing driveways.	*Inc*	18	-	-
		Exp	13	7	6
		Surplus/ (deficit)	5	(7)	(6)
VicRoads Contract Management	This service ensures responsible contract management of Council's VicRoads contract.	*Inc*	28	28	14
		Exp	23	57	62
		Surplus/ (deficit)	5	(29)	(48)

Major Initiatives

1) Complete Coleraine and Cavendish Structure Plans.
2) Complete outdoor swimming pool renewal works at sites across the Shire.
3) Develop and implement long term asset management plan for roads and footpaths.
4) Implement the Safer Local Roads and Streets program works.
5) Establish walking and cycling township loops including new footpath link in Cavendish.

Other Initiatives

6) Deliver Melville Oval playground renewal.
7) Installation of new fans at HILAC.
8) Undertake investigation for works required at Lake Hamilton dam wall.

Service Performance Outcome Indicators

Service	Indicator	2023/24 Actual	2024/25 Forecast	2025/26 Budget
Statutory Planning	Planning applications decided within required timeframes (percentage of regular and VicSmart planning application decisions made within legislated timeframes)	62.50%	80.00%	82.00%
Roads	Sealed local roads below the intervention level (percentage of sealed local roads that are below the renewal intervention level set by Council and not requiring renewal)	94.58%	56.00%	58.00%

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Southern Grampians Shire Council Budget 2025-2026

2.4 Protect our natural environment – Act as community leaders to promote and enhance a clean, green and sustainable environment

To promote our natural environment and achieve a culture that sustains a clean, green and sustainable environment.

To achieve this, we have set the following Strategic Objectives:

4.1 Protect and enhance biodiversity including the health of waterways, wetlands, soil and air.

4.2 Balance environmental protection with Council's support for growth.

4.3 Sustainable waste management services.

4.4 Mitigate against and adapt to climate change.

The services, initiatives and service performance indicators for each business area are described below.

Service area	Description of services provided		2023/24 Actual $'000	2024/25 Forecast $'000	2025/26 Budget $'000
Transfer Stations and Landfill Sites	This service manages the waste and recyclables collection process at the designated transfer stations within the Shire as well as any costs associated with landfill sites.	*Inc*	1,000	947	1,808
		Exp	1,658	1,895	2,154
		Surplus/ (deficit)	(658)	(948)	(346)
Waste & Recycling Collection	This service manages the waste and recyclables collection process within the Shire, including the collection of kerbside bins.	*Inc*	10	146	144
		Exp	2,692	2,377	3,484
		Surplus/ (deficit)	(2,682)	(2,231)	(3,340)
Natural Asset Management	This service develops environmental policy, coordinates and implements environmental projects and works with other services to improve Council's environmental performance.	*Inc*	85	100	95
		Exp	257	368	436
		Surplus/ (deficit)	(172)	(268)	(341)
Stormwater / Drainage	This service manages the maintenance and environmental issues associated with the stormwater/drainage networks throughout the Shire.	*Inc*	-	-	-
		Exp	816	582	776
		Surplus/ (deficit)	(816)	(582)	(776)
Yatchaw Drainage Authority	This service is responsible for the management and maintenance of the Yatchaw Drainage Scheme.	*Inc*	6	4	4
		Exp	11	7	6
		Surplus/ (deficit)	(5)	(3)	(2)
Quarry	This service is responsible for the sustainability in the supply of materials for road management and the realisation of returns from an economic asset.	*Inc*	36	-	-
		Exp	8	7	-
		Surplus/ (deficit)	28	(7)	0
Environmental Sustainability	This service implements Council's Sustainability Strategy and acts as a catalyst for Council and community sustainability actions within the Shire.	*Inc*	32	60	-
		Exp	469	742	577
		Surplus/ (deficit)	(437)	(682)	(577)
Fire Prevention	This service coordinates fire prevention planning and works in cooperation with other agencies.	*Inc*	2	-	5
		Exp	145	197	148
		Surplus/ (deficit)	(143)	(197)	(143)
Water	This service manages the Old Hamilton Reservoir and provides a source of non-potable water for irrigation purposes, maintaining sporting grounds and the amenity of the Hamilton Botanic Gardens.	*Inc*	-	-	5
		Exp	23	12	11
		Surplus/ (deficit)	(23)	(12)	(6)
Environmental Health	This service improves the health and wellbeing of the community and protects the Shire's environment.	*Inc*	133	118	141
		Exp	350	423	430
		Surplus/ (deficit)	(217)	(305)	(289)

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Major Initiatives

1) Complete negotiation and investigation to enable the development of a Food and Organics processing unit in Hamilton.
2) Develop masterplans for Nigretta Falls and Wannon Falls Reserves.
3) Develop the Stormwater Management Plan.

Other Initiatives

5) Develop Domestic Waste Water Management Plan.
6) Establish an integrated Fleet Management Model and policy.
7) Upgrade of bridges at Old Hamilton Reservoir.
8) Review and implement Hamilton and Penshurst Botanic Gardens Masterplans.
9) Review the Tree Management Plan to define future tree planting program.

Service Performance Outcome Indicators

Service	Indicator	2023/24 Actual	2024/25 Forecast	2025/26 Budget
Waste Collection	Kerbside collection waste diverted from landfill. (Percentage of recyclables and green organics collected from kerbside bins that is diverted from landfill)	60.54%	61.00%	63.00%
Food Safety	Critical and major non-compliance outcome notifications. (Percentage of critical and major non-compliance outcome notifications that are followed up by Council)	100.00%	100.00%	100.00%

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Southern Grampians Shire Council Budget 2025-2026

2.5 Provide strong governance and leadership – strong leadership, good governance and effective service delivery

To provide good governance and strong leadership and to achieve effective service delivery.

To achieve this, we have set the following Strategic Objectives:

5.1 Transparent and accountable governance.

5.2 Effective advocacy.

5.3 Committed and skilled staff.

5.4 Customer focused services.

The services, initiatives and service performance indicators for each business area are described below.

Service area	Description of services provided		2023/24 Actual $'000	2024/25 Forecast $'000	2025/26 Budget $'000
Executive and Councillor Support	This area of governance includes the Mayor, Councillors, Chief Executive Officer and Executive Leadership Team and associated support.	*Inc*	6	-	-
		Exp	1,977	2,388	2,048
		Surplus/ (deficit)	(1,971)	(2,388)	(2,048)
Governance Administration	This service has the responsibility to provide the organisation with appropriate strategic advice on Governance and Property related matters, enabling the organisation to be responsive to the needs of the Council and the community.	*Inc*	-	-	-
		Exp	209	293	292
		Surplus/ (deficit)	(209)	(293)	(292)
Financial Services	This service has the responsibility to provide the organisation with appropriate strategic advice, reporting and internal control on finance related matters. Financial services also provide accounts payable, receivable and rating administration.	*Inc*	1,046	561	365
		Exp	1,068	1,252	1,333
		Surplus/ (deficit)	(22)	(691)	(968)
Organisational Development	This service has the responsibility to provide the organisation with appropriate advice and administration for all human resource requirements and workforce management including policy development. The Unit also provides a mechanism for continual review and improvement.	*Inc*	60	-	-
		Exp	1,211	990	852
		Surplus/ (deficit)	(1,151)	(990)	(852)
Risk Management	This service has the responsibility to provide the organisation with appropriate advice and management of risk and OHS in relation to legal and other community requirements.	*Inc*	75	29	-
		Exp	396	389	399
		Surplus/ (deficit)	(321)	(360)	(399)
Procurement	This service has the responsibility to provide the organisation with appropriate advice, administration and policy on all procurement matters as specified in Section 186A of the Local Government Act 2020.	*Inc*	-	-	-
		Exp	342	382	378
		Surplus/ (deficit)	(342)	(382)	(378)
Communications	The Communications service assists the organisation to facilitate communication across both internal and external stakeholders and provide high quality information to the community.	*Inc*	-	-	-
		Exp	542	837	607
		Surplus/ (deficit)	(542)	(837)	(607)
Customer Service	Customer Service is the first point of contact for all communications with Council. This unit aims to provide accurate and a high quality of service to all customers.	*Inc*	-	-	-
		Exp	321	372	278
		Surplus/ (deficit)	(321)	(372)	(278)

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Service area	Description of services provided		2023/24 Actual $'000	2024/25 Forecast $'000	2025/26 Budget $'000
Business Systems	The Business Systems unit aims to maximise the organisation's capacity to utilise all of its many and diverse systems and is also responsible for the ongoing support of Councils IT requirements necessary to deliver effective services.	*Inc*	-	-	-
		Exp	2,619	2,259	2,237
		Surplus/ (deficit)	(2,619)	(2,259)	(2,237)
Corporate Buildings and Overheads	This service maintains buildings and grounds of corporate buildings, supports the whole organisation administration functions and coordinates centralised purchasing of corporate consumables. These expenses are offset by the recoup of internal charges to all services.	*Inc*	4,840	4,675	4,380
		Exp	1,029	819	819
		Surplus/ (deficit)	3,811	3,856	3,561
Depot Operations and Maintenance	This service coordinates the operation of Council's depots in Hamilton, Coleraine, Balmoral, Cavendish, Dunkeld and Penshurst to support works teams to deliver capital and maintenance programs.	*Inc*	25	36	27
		Exp	496	334	263
		Surplus/ (deficit)	(471)	(298)	(236)

Major Initiatives

1) Development of a new Council App.
2) Develop Council's Asset Management Framework and Asset Management Plans.
3) Upgrade of IT Infrastructure at the Hamilton Livestock Exchange.
4) Develop and implement Council Advocay Plan.
5) Adopt new Council Plan for 2025-2029.

Other Initiatives

6) Continue to promote Council's Gender Equity Plan and Responsibilities.
7) Mapping Mobile Blackspots and 3G Gaps to assist in future advocacy

Service Performance Outcome Indicators

Service	Indicator	2023/24 Actual	2024/25 Forecast	2025/26 Budget
Governance	Satisfaction with community consultation and engagement. (Community satisfaction rating out of 100 with the consultation and engagement efforts of Council)	44.00	49.00	51.00

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Southern Grampians Shire Council Budget 2025-2026

2.6 Reconciliation of Council services with budgeted operating result

	Surplus/ (Deficit)	Expenditure	Income / Revenue
	$'000	$'000	$'000
Support our Community	(2,544)	9,055	6,511
Grow Our Regional Economy	3,233	2,679	5,912
Plan for our Built Environment	(3,847)	9,708	5,861
Promote our Natural Environment	(5,235)	7,348	2,113
Provide Governance and Leadership	(8,063)	8,455	392
Total	**(16,456)**	**37,245**	**20,789**
Expenses added in:			
Depreciation	(14,846)		
Finance costs	(341)		
Surplus/(Deficit) before funding sources	**(31,643)**		
Funding sources added in:			
Rates and charges revenue	22,193		
Waste charge revenue	2,910		
Victoria Grants Commission	9,687		
Capital grants	710		
Total funding sources	35,500		
Operating surplus/(deficit) for the year	3,857		

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3 Financial Statements

This section presents information in regard to the Financial Statements and Statement of Human Resources. The budget information for the year 2025-2026 has been supplemented with projections to 2028-2029.

This section includes the following financial statements prepared in accordance with the Local Government Act 2020 and the Local Government (Planning and Reporting) Regulations 2020.

3.1 Comprehensive Income Statement

3.2 Balance Sheet

3.3 Statement of Changes in Equity

3.4 Statement of Cash Flows

3.5 Statement of Capital Works

3.6 Statement of Human Resources

3.1 Comprehensive Income Statement

For the four years ending 30 June 2029

	NOTES	Forecast Actual 2024/25 $'000	Budget 2025/26 $'000	Projections 2026/27 $'000	2027/28 $'000	2028/29 $'000
Income / Revenue						
Rates and charges	4.1.1	24,457	**25,103**	25,893	26,411	26,939
Statutory fees and fines	4.1.2	474	**499**	512	524	538
User fees	4.1.3	6,455	**6,873**	7,570	7,823	8,569
Grants - operating	4.1.4	11,123	**10,825**	11,041	11,262	11,487
Grants - capital	4.1.4	10,598	**7,637**	6,772	23,721	10,471
Contributions - monetary	4.1.5	105	**-**	-	-	30,000
Net gain (or loss) on disposal of property, infrastructure, plant and equipment		497	**3,965**	3,000	750	750
Other income	4.1.6	862	**1,387**	1,424	1,363	1,702
Total income / revenue		54,571	**56,289**	56,212	71,854	90,456
Expenses						
Employee costs	4.1.7	20,565	**20,670**	20,877	21,086	21,297
Materials and services	4.1.8	15,652	**15,738**	16,096	16,260	16,432
Depreciation	4.1.9	12,608	**14,846**	14,879	14,992	15,254
Allowance for impairment losses		1	**3**	3	3	3
Borrowing costs		21	**341**	560	675	621
Other expenses	4.1.10	1,277	**834**	836	844	853
Total expenses		50,124	**52,432**	53,251	53,859	54,459
Surplus/(deficit) for the year		4,446	**3,857**	2,960	17,995	35,996
Other comprehensive income						
Items that will not be reclassified to surplus or deficit in future periods						
Total other comprehensive income		-	**-**	-	-	-
Total comprehensive result		4,446	**3,857**	2,960	17,995	35,996

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Southern Grampians Shire Budget 2025-2026

3.2 Balance Sheet

For the four years ending 30 June 2029

	NOTES	Forecast Actual 2024/25 $'000	Budget 2025/26 $'000	Projections 2026/27 $'000	2027/28 $'000	2028/29 $'000
Assets						
Current assets						
Cash and cash equivalents		-	**5,209**	5,664	5,054	12,697
Trade and other receivables		3,830	**4,464**	4,587	4,751	5,060
Other financial assets		1,540	**1,540**	1,540	1,540	1,540
Inventories		534	**523**	534	540	545
Contract assets		93	**93**	93	93	93
Other assets		477	**468**	479	484	490
Total current assets	4.2.1	6,474	**12,297**	12,896	12,461	20,425
Non-current assets						
Trade and other receivables		29	**30**	31	31	32
Inventories		38	**38**	38	38	38
Property, infrastructure, plant & equipment		516,905	**518,314**	525,659	545,545	571,948
Right-of-use assets	4.2.4	103	**103**	103	103	103
Investment property		690	**690**	690	690	690
Total non-current assets	4.2.1	517,765	**519,175**	526,521	546,407	572,811
Total assets		524,240	**531,472**	539,418	558,868	593,236
Liabilities						
Current liabilities						
Trade and other payables		4,154	**4,110**	4,202	4,249	4,309
Trust funds and deposits		452	**452**	452	452	452
Contract and other liabilities		77	**82**	90	93	102
Provisions		4,603	**4,603**	4,603	4,603	4,603
Interest-bearing liabilities	4.2.3	1,222	**1,692**	2,352	1,697	1,770
Lease liabilities	4.2.4	103	**41**	41	41	41
Total current liabilities	4.2.2	10,611	**10,980**	11,740	11,136	11,278
Non-current liabilities						
Provisions		1,579	**1,579**	1,579	1,579	1,579
Interest-bearing liabilities	4.2.3	2,842	**5,848**	10,073	12,134	10,363
Total non-current liabilities	4.2.2	4,421	**7,427**	11,651	13,712	11,942
Total liabilities		15,032	**18,407**	23,392	24,848	23,220
Net assets		509,209	**513,065**	516,026	534,020	570,017
Equity						
Accumulated surplus		129,944	**133,801**	136,762	154,756	190,753
Reserves - Asset Revaluation		378,667	**378,667**	378,667	378,667	378,667
Other Reserves		597	**597**	597	597	597
Total equity		509,208	**513,065**	516,026	534,020	570,017

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Southern Grampians Shire Budget 2025-2026

3.3 Statement of Changes in Equity

For the four years ending 30 June 2029

	NOTES	Total $'000	Accumulated Surplus $'000	Revaluation Reserve $'000	Other Reserves $'000
2025 Forecast Actual					
Balance at beginning of the financial year		504,762	125,498	378,667	597
Surplus/(deficit) for the year		4,446	4,446	-	-
Balance at end of the financial year		**509,208**	**129,944**	**378,667**	**597**
2026 Budget					
Balance at beginning of the financial year		**509,208**	**129,944**	**378,667**	**597**
Surplus/(deficit) for the year		**3,857**	**3,857**	**-**	**-**
Balance at end of the financial year	4.3.2	**513,065**	**133,801**	**378,667**	**597**
2027					
Balance at beginning of the financial year		513,065	133,801	378,667	597
Surplus/(deficit) for the year		2,960	2,960	-	-
Balance at end of the financial year		**516,026**	**136,762**	**378,667**	**597**
2028					
Balance at beginning of the financial year		516,028	136,762	378,667	597
Surplus/(deficit) for the year		17,995	17,995	-	-
Balance at end of the financial year		**534,022**	**154,756**	**378,667**	**597**
2029					
Balance at beginning of the financial year		534,022	154,756	378,667	597
Surplus/(deficit) for the year		35,996	35,996	-	-
Balance at end of the financial year		**570,019**	**190,753**	**378,667**	**597**

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Southern Grampians Shire Budget 2025-2026

3.4 Statement of Cash Flows

For the four years ending 30 June 2029

	Notes	Forecast Actual 2024/25 $'000	Budget 2025/26 $'000	Projections 2026/27 $'000	2027/28 $'000	2028/29 $'000
		Inflows (Outflows)	**Inflows (Outflows)**	Inflows (Outflows)	Inflows (Outflows)	Inflows (Outflows)
Cash flows from operating activities						
Rates and charges		24,274	**25,035**	25,809	26,356	26,883
Statutory fees and fines		569	**499**	512	524	538
User fees		6,471	**6,878**	7,578	7,826	8,578
Grants - operating		11,123	**10,818**	11,038	11,290	11,469
Grants - capital		10,280	**7,643**	6,775	23,693	10,489
Contributions - monetary		105	**-**	-	-	30,000
Interest received		514	**331**	331	231	531
Other receipts		2,362	**486**	1,050	1,017	914
Employee costs		(20,004)	**(20,667)**	(20,871)	(21,080)	(21,290)
Materials and services		(17,635)	**(15,755)**	(16,031)	(16,229)	(16,389)
Short-term, low value and variable lease payments		(69)	**(66)**	(66)	(67)	(67)
Other payments		(1,208)	**(777)**	(770)	(777)	(785)
Net cash provided by/(used in) operating activities	4.4.1	16,782	**14,426**	15,355	32,785	50,869
Cash flows from investing activities						
Payments for property, infrastructure, plant and equipment		(28,727)	**(16,255)**	(22,224)	(34,877)	(41,657)
Proceeds from sale of property, infrastructure, plant and equipment		498	**3,965**	3,000	750	750
Proceeds from sale of investments		7,136	**-**	-	-	-
Net cash provided by/ (used in) investing activities	4.4.2	(21,093)	**(12,290)**	(19,224)	(34,127)	(40,907)
Cash flows from financing activities						
Finance costs		(21)	**(341)**	(560)	(675)	(621)
Proceeds from borrowings		3,000	**5,000**	7,000	4,000	-
Repayment of borrowings		(187)	**(1,524)**	(2,115)	(2,594)	(1,697)
Interest paid - lease liability		-	**-**	-	-	-
Repayment of lease liabilities		-	**(62)**	-	-	-
Net cash provided by/(used in) financing activities	4.4.3	2,792	**3,073**	4,324	732	(2,318)
Net increase/(decrease) in cash & cash equivalents		(1,519)	**5,209**	455	(611)	7,643
Cash and cash equivalents at the beginning of the financial year		1,519	**-**	5,209	5,664	5,054
Cash and cash equivalents at the end of the financial year		-	**5,209**	5,664	5,054	12,697

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Southern Grampians Shire Budget 2025-2026

3.5 Statement of Capital Works

For the four years ending 30 June 2029

	NOTES	Forecast Actual 2024/25 $'000	Budget 2025/26 $'000	Projections 2026/27 $'000	2027/28 $'000	2028/29 $'000
Property						
Land		535	-	-	-	-
Total land		535	-	-	-	-
Buildings		7,945	**2,560**	6,950	16,250	24,050
Total buildings		7,945	**2,560**	6,950	16,250	24,050
Total property		8,480	**2,560**	6,950	16,250	24,050
Plant and equipment						
Plant, machinery and equipment		2,348	**1,900**	1,500	1,300	1,300
Fixtures, fittings and furniture		-	**44**	-	-	-
Computers and telecommunications		50	**25**	40	85	50
Library books		71	**70**	70	70	70
Other Plant & Equipment		15	**15**	15	15	15
Total plant and equipment		2,484	**2,054**	1,625	1,470	1,435
Infrastructure						
Roads		7,567	**7,143**	5,938	6,042	6,042
Bridges		571	**405**	450	450	450
Footpaths and cycleways		815	**460**	50	50	50
Drainage		636	**120**	400	400	400
Recreational, leisure and community facilities		2,237	**2,180**	1,681	1,085	50
Waste management		1,092	**597**	-	-	-
Parks, open space and streetscapes		4,234	**665**	4,030	8,030	8,030
Off street car parks		455	**-**	-	-	50
Other infrastructure		158	**70**	1,100	1,100	1,100
Total infrastructure		17,763	**11,640**	13,649	17,157	16,172
Total capital works expenditure	4.5.1	28,727	**16,255**	22,224	34,877	41,657
Represented by:						
New asset expenditure		2,495	**4,045**	5,420	16,020	14,020
Asset renewal expenditure		16,429	**11,210**	15,304	18,807	17,637
Asset upgrade expenditure		9,803	**1,000**	1,500	50	10,000
Total capital works expenditure	4.5.1	28,727	**16,255**	22,224	34,877	41,657
Funding sources represented by:						
Grants		10,198	**7,637**	6,772	23,721	10,471
Council cash		15,031	**3,618**	8,452	7,156	31,186
Proceeds from assets (except investments)		498	**-**	-	-	-
Borrowings		3,000	**5,000**	7,000	4,000	-
Total capital works expenditure	4.5.1	28,727	**16,255**	22,224	34,877	41,657

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Southern Grampians Shire Budget 2025-2026

3.6 Statement of Human Resources

For the four years ending 30 June 2029

	Forecast Actual	Budget	Projections		
	2024/25	2025/26	2026/27	2027/28	2028/29
	$'000	$'000	$'000	$'000	$'000
Staff expenditure					
Employee costs - operating	20,565	**20,670**	20,878	21,086	21,297
Employee costs - capital	2,849	**2,857**	2,375	2,416	2,416
Total staff expenditure	23,414	**23,527**	23,253	23,502	23,713
	FTE	**FTE**	FTE	FTE	FTE
Staff numbers					
Employees	232.0	**232.0**	232.0	232.0	232.0
Total staff numbers	232.0	**232.0**	232.0	232.0	232.0

A summary of human resources expenditure categorised according to the organisational structure of Council is included below:

Department	Budget	Comprises	
	2025/26	Permanent Full Time	Part Time, Casual & Temporary
	$'000	$'000	$'000
Support our Community	**4,673**	1,731	2,942
Grow our Regional Economy	**909**	622	287
Maintain and Renew our Infrastructure	**9,328**	9,247	81
Protect our Natural Environment	**1,040**	487	553
Provide Strong Governance and Leadership	**4,720**	4,163	557
Total permanent staff expenditure	**20,670**	16,250	4,420
Capitalised labour costs	**2,857**		
Total expenditure	**23,527**		

A summary of the number of full time equivalent (FTE) Council staff in relation to the above expenditure is included below:

Department	Budget	Comprises	
	2025/26	Permanent Full Time	Part Time, Casual & Temporary
Support our Community	**55**	19	36
Grow our Regional Economy	**11**	8	3
Maintain and Renew our Infrastructure	**112**	103	8
Protect our Natural Environment	**11**	6	5
Provide Strong Governance and Leadership	**45**	41	4
Total staff	**232**	177	56

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Southern Grampians Shire Council Budget 2025-2026

4 Notes to the financial statements

This section presents detailed information on material components of the financial statements. Council needs to assess which components are material, considering the dollar amounts and nature of these components.

4.1 Comprehensive Income Statement

4.1.1 Rates and charges

Rates and charges are required by the Act and the Regulations to be disclosed in Council's budget.

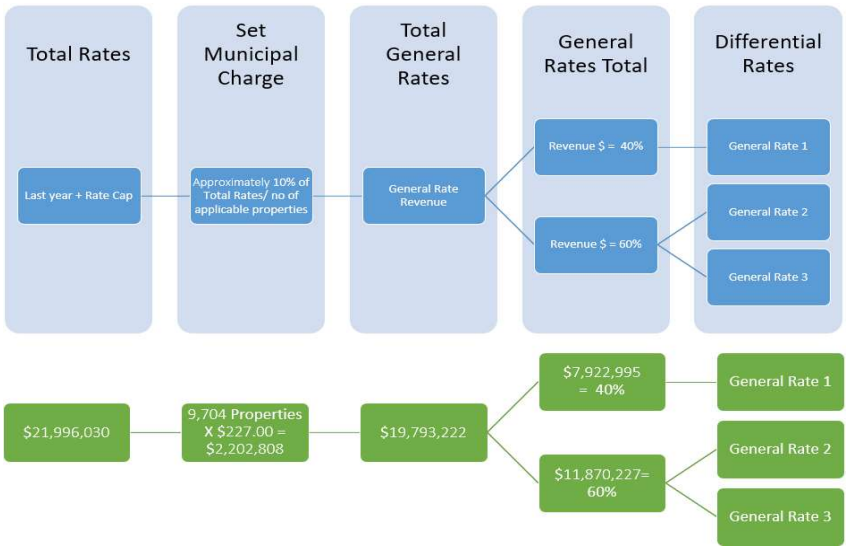
As per the *Local Government Act 2020* , Council is required to have a Revenue and Rating Plan which is a four year plan for how Council will generate income to deliver the Council Plan, program and services and capital works commitments over a four-year period.

In developing the Budget, rates and charges were identified as an important source of revenue. Planning for future rate increases has therefore been an important component of the financial planning process. The Fair Go Rates System (FGRS) sets out the maximum amount councils may increase rates in a year. For 2025-2026 the FGRS cap has been set at 3.00%. The cap applies to both general rates and municipal charges and is calculated on the basis of council's average rates and charges.

The level of required rates and charges has been considered in this context, with reference to Council's other sources of income and the planned expenditure on services and works to be undertaken for the community.

To achieve these objectives while maintaining service levels and a strong capital expenditure program, the average general rate and the municipal charge will increase by 3.00% in line with the rate cap.

The rate increase has been calculated using the following process:



This will raise total rates and charges and interest for 2025-2026 of $25,103,111.

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4.1.1 (a) The reconciliation of the total rates and charges to the Comprehensive Income Statement is as follows:

	2024/25 Forecast Actual $'000	2025/26 Budget $'000	Change $'000	%
General rates*	19,222	19,793	571	2.97%
General rates - Yatchaw	4	4	-	0.00%
Municipal charge*	2,135	2,203	68	3.18%
Other Supplementary rates and interest	157	145	(12)	-7.54%
Waste Collection Charges (Compulsory)	2,768	2,771	3	0.10%
Waste Collection Charges (Voluntary)	124	139	15	12.25%
Revenue in lieu of rates	200	206	6	2.95%
Discount	(153)	(158)	(5)	3.27%
Total rates and charges	**24,457**	**25,103**	**646**	**2.64%**

**These items are subject to the rate cap established under the FGRS*

4.1.1 (b) The rate in the dollar to be levied as general rates under section 158 of the Act for each type or class of land compared with the previous financial year

Type or class of land	2024/25 cents/$CIV*	2025/26 cents/$CIV*	Change
General rate 1 for rateable residential properties	0.00328	0.003366	2.62%
General rate 1 for rateable rural properties	0.00328	0.003366	2.62%
General rate 1 for rateable industrial properties	0.00328	0.003366	2.62%
General rate 1 for rateable commercial properties	0.00328	0.003366	2.62%
General rate 2 for rateable rural N/S properties	0.001755	0.001889	7.64%
General rate 3 for residential rural properties	0.001755	0.001889	7.64%
General rate 3 for rural properties	0.001755	0.001889	7.64%
General rate 3 for industrial rural properties	0.001755	0.001889	7.64%
General rate 3 for commercial rural properties	0.001755	0.001889	7.64%

4.1.1 (c) The estimated total amount to be raised by general rates in relation to each type or class of land, and the estimated total amount to be raised by general rates, compared with the previous financial year

Type or class of land	2024/25 $'000	2025/26 $'000	Change $'000	%
Residential	7,689	7,923	234	3.04%
Rural	10,423	10,750	327	3.13%
Industrial	329	319	(10)	-2.92%
Commercial	781	802	20	2.58%
Total amount to be raised by general rates	**19,222**	**19,793**	**571**	**2.97%**

Alternate view by rate code:

Type or class of land	2024/25 $'000	2025/26 $'000	Change $'000	%
General rate 1	7,817	7,923	106	1.35%
General rate 2	341	356	16	4.59%
General rate 3	11,064	11,514	450	4.06%
Total amount to be raised by general rates	**19,222**	**19,793**	**571**	**2.97%**

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Southern Grampians Shire Council Budget 2025-2026

4.1.1 (d) The number of assessments in relation to each type or class of land, and the total number of assessments, compared with the previous financial year

Type or class of land	2024/25 Number	2025/26 Number	Change Number	Change %
Residential	7,428	7,430	2	0.03%
Rural	3,109	3,115	6	0.19%
Industrial	258	256	(2)	-0.78%
Commercial	453	454	1	0.22%
Total number of assessments	**11,248**	**11,255**	**7**	**0.06%**

4.1.1 (e) The basis of valuation to be used is the Capital Improved Value (CIV)

4.1.1 (f) The estimated total value of each type or class of land, and the estimated total value of land, compared with the previous financial year

Type or class of land	2024/25 $'000	2025/26 $'000	Change $'000	Change %
Residential	2,614,977	2,623,198	8,221	0.31%
Rural	5,905,554	5,660,629	(244,925)	-4.15%
Industrial	109,320	103,164	(6,156)	-5.63%
Commercial	252,029	250,708	(1,321)	-0.52%
Total value of land	**8,881,880**	**8,637,699**	**(244,181)**	**-2.75%**

4.1.1 (g) The municipal charge under Section 159 of the Act compared with the previous financial year

Type of Charge	Per Rateable Property 2024/25 $	Per Rateable Property 2025/26 $	Change $	Change %
Municipal	220	227	7	**3.18%**

4.1.1 (h) The estimated total amount to be raised by municipal charges compared with the previous financial year

Type of Charge	2024/25 $	2025/26 $	Change $	Change %
Municipal	2,134,880	2,202,808	67,928	**3.18%**

4.1.1 (i) The rate or unit amount to be levied for each type of service rate or charge under Section 162 of the Act compared with the previous financial year and detailed disclosure of the actual service/s rendered for the amount levied

Type of Charge	Per Rateable Property 2024/25 $	Per Rateable Property 2025/26 $	Change $	Change %
Waste Charges Compulsory	415	430	15	3.61%
Waste Charges Elective	466	485	19	4.10%

4.1.1 (j) The estimated total amount to be raised by each type of service rate or charge, and the estimated total amount to be raised by service rates and charges, compared with the previous financial year

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Type of Charge	2024/25 $	2025/26 $	Change $	Change %
Waste Charges Compulsory	2,768,118	2,770,916	2,798	0.10%
Waste Charges Elective	123,600	138,744	15,144	12.25%
Total	**2,891,718**	**2,909,660**	**17,942**	**0.62%**

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4.1.1 (k) The estimated total amount to be raised by all rates and charges compared with the previous financial year

	2024/25	2025/26	Change	
	$'000	$'000	$'000	%
General Rates	19,222	19,793	571	2.97%
Municipal Charges	2,135	2,203	68	3.18%
Waste Charges	2,892	2,910	18	0.62%
Total Rates and charges	**24,249**	**24,906**	**657**	**2.71%**

4.1.1 (l) Fair Go Rates System Compliance

Southern Grampians Shire Council is required to comply with the State Government's Fair Go Rates System (FGRS). The table below details the budget assumptions consistent with the requirements of the Fair Go Rates System.

	2024/25*	2025/26
Total Rates (including Municipal Charges)	$ 21,357,135	$ 21,996,030
Number of rateable properties	11,248	11,255
Base Average Rate	1898.75	1954.33
Maximum Rate Increase (set by the State Government)	**2.75%**	**3.00%**
Capped Average Rate	$ 1,904	$ 1,954
Maximum General Rates and Municipal Charges Revenue	$ 21,370,038	$ 22,011,139
Budgeted General Rates and Municipal Charges Revenue	$ 21,357,135	$ 21,996,030
Budgeted number of rateable properties	$ 11,248	$ 11,255
Budgeted average rate	$ 1,899	$ 1,954
Budgeted rate increase	2.71%	2.93%

**2024/25 data is based on the ESC return for 2024/25*

4.1.1 (m) Any significant changes that may affect the estimated amounts to be raised by rates and charges

There are no known significant changes which may affect the estimated amounts to be raised by rates and charges. However, the total amount to be raised by rates and charges may be affected by:

- The making of supplementary valuations (2025-2026: estimated $0 and 2024-2025: ($12,879)).
- The variation of returned levels of value (e.g. valuation appeals).
- Changes of use of land such that rateable land becomes non-rateable land and vice versa.
- Changes of use of land such that residential land becomes business land and vice versa.

4.1.1 (n) Differential rates

General Rate 1

A differential general rate of 0.003366 cents in the dollar on the capital improved value of all rateable land in the parishes of North Hamilton and South Hamilton, excluding all farm land which comprises part of a single farm enterprise with an area of 40 hectares or more.

General Rate 2

A differential general rate of 0.001889 cents in the dollar on the capital improved value of all rateable farm land in the parishes of North Hamilton and South Hamilton and which comprises part of a single farm enterprise with an area of 40 hectares or more.

General Rate 3

A differential general rate of 0.001889 cents in the dollar on the capital improved value of all other rateable land in the Shire.

Objective of Differential Rateing

Council believes each differential rate will contribute to the equitable and efficient delivery of Council functions. The purpose of levying differential general rates is to recognise the following inherent characteristics and historical circumstances:

- the different standard of municipal services provided to the residents and ratepayers in different areas of the Shire,
- the different range of municipal services available to the residents and ratepayers in different areas of the Shire, and
- differences in the accessibility to municipal services for the residents and ratepayers in different areas of the Shire.

4.1.1 (o) Special rates

Yatchaw Drainage Authority

A Special Rate of 0.0001485 cents in the dollar on the capital improved value of all rateable land in the Yatchaw Drainage Area.

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4.1.2 Statutory fees and fines

	Forecast Actual 2024/25	Budget 2025/26	Change	
	$'000	$'000	$'000	%
Building Services	47	72	25	53.19%
Environmental Health	33	44	11	33.33%
Fire Prevention	-	5	5	100.00%
Local Laws Operations	178	180	2	1.12%
Rates & Charges	21	18	(3)	-14.29%
Roads & Streets	5	5	0	0.00%
Statutory Planning	190	175	(15)	-7.89%
Total statutory fees and fines	**474**	**499**	**25**	**5.27%**

Statutory fees relate mainly to fees and fines levied in accordance with legislation and include such items as building permits, animal registrations and parking fines.

4.1.3 User fees

	Forecast Actual 2024/25	Budget 2025/26	Change	
	$'000	$'000	$'000	%
Livestock Exchange	2,204	2,373	169	7.67%
Waste & Transfer Stations	957	1,048	91	9.51%
Hamilton Indoor Leisure & Aquatic Centre	1,433	1,583	150	10.47%
Community & Children's Services	653	679	26	3.98%
Cultural Services	415	373	(42)	-10.12%
Regulatory & Compliance	270	240	(30)	-11.11%
Other User Fees	522	577	55	10.54%
Total user fees	**6,455**	**6,873**	**419**	**6.49%**

User charges relate to the recovery of service delivery costs through the charges of fees to users of Council services. These include use of leisure, entertainment and other community facilities and the provision of human services such as family day care.

4.1.4 Grants

Grants are required by the Act and the Regulations to be disclosed in Council's budget.

Total Grants	Forecast Actual 2024/25	Budget 2025/26	Change	
	$'000	$'000	$'000	%
Commonwealth funded grants	17,442	14,323	(3,119)	-18%
State funded grants	4,279	4,138	(141)	-3%
Total grants received	**21,721**	**18,462**	**(3,259)**	**-15%**

Operating Grants include all monies received from State and Federal sources for the purposes of funding the delivery of Council services to ratepayers.

Capital Grants include all money received from State, Federal and Community sources for the purposes of funding the capital works program.

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Southern Grampians Shire Council Budget 2025-2026

Operating Grants	Forecast Actual 2024/25 $'000	Budget 2025/26 $'000	Change $'000	Change %
Recurrent - Commonwealth Government				
Financial Assistance Grants	9,497	9,687	190	2%
Recurrent - State Government				
Art Gallery (Arts Victoria – Operational Grant)	110	110	-	0%
Emergency Management	60	60	-	0%
Environmental Health	3	7	4	133%
Library (DEWLP - Public Libraries Funding)	177	177	-	0%
Local Laws Operations (School Crossings)	60	55	(5)	-8%
Maternal & Child Health (Operational Grant)	466	477	11	2%
Youth Services	73	60	(13)	-18%
Total recurrent grants	**10,446**	**10,633**	**187**	**2%**
Non-recurrent - Commonwealth Government				
Australia Day	-	10	10	100%
Non-recurrent - State Government				
Art Gallery Exhibitions	173	50	(123)	-71%
Balmoral Bowling Club	200	-	(200)	-100%
Flood Planning	98	-	(98)	-100%
Library	7	7	0	0%
Pest and Weed Eradication	85	85	0	0%
Recycling Services	46	-	(46)	-100%
Sustainability Heat Mapping	50		(50)	-100%
Youth Services	18	40	22	122%
Total non-recurrent grants	**677**	**192**	**(485)**	**-72%**
Total operating grants	**11,123**	**10,825**	**(298)**	**-3%**

Capital Grants	Forecast Actual 2024/25 $'000	Budget 2025/26 $'000	Change $'000	Change %
Recurrent - Commonwealth Government				
Roads to Recovery	2,375	3,926	1,551	65%
Recurrent - State Government	-	-	-	0%
Total recurrent grants	**2,375**	**3,926**	**1,551**	**65%**
Non-recurrent - Commonwealth Government				
Local Roads and Infrastructure Program (LRCIP)	3,527	711	(2,817)	-80%
Melville Oval - Facilities Project	2,043	-	(2,043)	-100%
Non-recurrent - State Government				
2022 Storm Event	505	-	(505)	-100%
Art Gallery	220	-	(220)	-100%
Botanic Gardens Toilet	180	-	(180)	-100%
Cox Street Hamilton - Streetscape	503	-	(503)	-100%
Hamilton Community and Cultural Precinct Designs	1,000	2,000	1,000	100%
Nigretta Falls Stair Replacement	220	-	(220)	-100%
Safer Roads and Streets Program	-	1,000	1,000	100%
Silvester Oval Lighting Upgrade	25	-	(25)	-100%
Total non-recurrent grants	**8,223**	**3,711**	**(4,513)**	**-55%**
Total capital grants	**10,598**	**7,637**	**(2,962)**	**-28%**

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4.1.5 Contributions

	Forecast Actual 2024/25 $'000	Budget 2025/26 $'000	Change $'000	Change %
Monetary	105	-	**(105)**	**0.00%**
Non-monetary	-	-	**0**	**0.00%**
Total contributions	**105**	**-**	**(105)**	**0.00%**

Contributions relate to money received from community groups or other bodies to assist in the funding of both capital and operating projects.

4.1.6 Other income

	Forecast Actual 2024/25 $'000	Budget 2025/26 $'000	Change $'000	Change %
Donations	-	40	40	100.00%
Interest	514	331	(183)	-35.60%
Insurance Claims	45	-	(45)	-100.00%
Reimbursements	128	92	(36)	-28.13%
Other Operating Revenue	175	924	749	428.00%
Total other income	**862**	**1,387**	**525**	**60.90%**

Other revenue includes reimbursements and other minor sources of revenue for various services provided by Council. Reimbursements are expenditure that is incurred by Council on behalf of another organisation and then recompensed after the event.

4.1.7 Employee costs

	Forecast Actual 2024/25 $'000	Budget 2025/26 $'000	Change $'000	Change %
Wages & Salaries	14,674	14,541	(133)	-0.91%
Public Holidays, Sick, Annual & Long Service Leave	3,098	3,185	87	2.81%
Superannuation	2,241	2,371	130	5.80%
Work Cover Premium & Expenses	495	510	15	3.03%
Fringe Benefits Tax	57	63	6	10.53%
Total employee costs	**20,565**	**20,670**	**105**	**0.51%**

Employee costs include all labour related expenditure such as wages and salaries and on-costs such as allowances, leave entitlements, employer superannuation, rostered days off, etc.

Operational Employee costs are estimated to increase by $0.105 million to $20.670 million compared to 2024-2025 forecast Budget ($20.565m). This amount varies from year to year due to the impact of a number of matters including additional works, resignations, redundancies, recruitment expenses, industrial relations advice and other associated on-costs as the workforce expands and contracts in line with service demands.

Other factors impacting employee costs are:

- Annual increment under Council's Enterprise Bargaining Agreement (EBA);
- Movement of staff through the banding system; and
- The balance of work carried out between operational projects and capital works.

Employees who work on capital works have their wages and associated on-costs charged to the asset category in the balance sheet of the projects.

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4.1.8 Materials and services

	Forecast Actual 2024/25 $'000	Budget 2025/26 $'000	Change $'000	Change %
Contractors	10,037	9,709	(328)	-3.27%
External Consultants & Professionals	548	381	(167)	-30.47%
Insurance	618	652	34	5.50%
Service charges & Consumables	3,272	3,508	236	7.21%
Utilities	1,177	1,488	311	26.42%
Total materials and services	**15,652**	**15,738**	**86**	**0.55%**

Materials and services include the purchases of consumables, payments to contractors for the provision of services, insurances and utility costs.

Whilst utility costs continue to escalate, Council has been implementing a number of energy efficient measures which will assist to minimise the increasing costs of utilities in some services areas.

4.1.9 Depreciation

	Forecast Actual 2024/25 $'000	Budget 2025/26 $'000	Change $'000	Change %
Property, Furniture & Fittings	1,453	1,354	(99)	-6.81%
Plant & Equipment	1,334	1,078	(256)	-19.19%
Infrastructure	9,822	12,414	2,592	26.39%
Total depreciation	**12,608**	**14,846**	**2,237**	**17.74%**

Depreciation is an accounting measure which attempts to allocate the value of an asset over its useful life for Council's property, plant and equipment including infrastructure assets such as roads and drains. Council has estimated the depreciation expense for the 2024-2025 year and used this as the basis for the 2025-2026 year. This amount is an estimate only as Council constantly re-values assets; however, these calculations will not be processed until the end of the 2025-2026 financial year.

The increase relates to updating the value of assets from prior years which have increased in value.

4.1.10 Other expenses

	Forecast Actual 2024/25 $'000	Budget 2025/26 $'000	Change $'000	Change %
Contributions & Grants to other organisations	554	268	(286)	-51.62%
Elected Members	279	268	(11)	-3.94%
Audit & Legal	109	112	3	2.75%
Other Expenses	335	186	(149)	-44.48%
Total other expenses	**1,277**	**834**	**(443)**	**-34.69%**

Other items of expense relate to a range of unclassified items including contributions to community groups, advertising, and other miscellaneous expenditure items.

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Southern Grampians Shire Council Budget 2025-2026

4.2 Balance Sheet

4.2.1 Assets

Cash and cash equivalents include cash and investments such as cash held in the bank and in petty cash and the value of investments in deposits or other highly liquid investments with short term maturities of three months or less. These balances are projected to not change significantly during the year.

Trade and other receivables are monies owed to Council by ratepayers and others. Short-term debtors are not expected to change significantly in the budget. Long-term debtors (non-current) relating to loans to community organisations and principal and interest debtors for private streets, Kerb & Channel and Footpath Schemes will decrease in accordance with agreed repayment terms.

Other assets include items such as prepayments for expenses that Council has paid in advance of service delivery, inventories or stocks held for sale or consumption in Council's services and other revenues due to be received in the next 12 months.

Property, infrastructure, plant and equipment is the largest component of Council's worth and represents the value of all the land, buildings, roads, vehicles, equipment, etc. which has been built up by Council over many years. The $1.409 million increase in this balance is attributable to the capital works program ($16.254 million of additional asset value), less depreciation of assets ($14.846 million), and sale of plant and equipment ($0.500 million).

Non-current assets held for sale includes land around the Lakes Edge Development and Hamilton Gateways Industrial land lots.

4.2.2 Liabilities

Trade and other payables are those to whom Council owes money as at 30 June. These liabilities are generally budgeted to remain consistent with 2024-2025 levels.

Provisions include accrued long service leave, annual leave and rostered days off owing to employees. These employee entitlements are also expected to remain constant due to active management of entitlements despite factoring in an increase for Collective Agreement outcomes.

Interest-bearing loans are classified as a liability, details of which are shown in the note below.

4.2.3 Borrowings

The table below shows information on borrowings specifically required by the Regulations.

	Forecast Actual	Budget	Projections	
	2024/25	2025/26	2026/27	2027/28
	$	$	$	$
Amount borrowed as at 30 June of the prior year	1,251	4,064	7,540	12,425
Amount proposed to be borrowed	3,000	5,000	7,000	4,000
Amount projected to be redeemed	(187)	(1,524)	(2,115)	(2,594)
Amount of borrowings as at 30 June	4,064	7,540	12,425	13,831
Amount (of opening balance) to be refinanced	-	-	-	-

Council is budgeting to repay loan principal of $1.524 million over the year for existing loans.

Council is anticipating new borrowings in the 2025-2026 year of $5.000 million followed by subsequent borrowings to fund a number of large intergenerational projects.

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Southern Grampians Shire Council Budget 2025-2026

4.3 Statement of changes in Equity

4.3.1 Reserves

Asset revaluation reserve which represents the difference between the previously recorded value of assets and their current valuations.

Subdividers Contributions are in lieu of provision of recreational land within a subdivision. These funds are used to develop strategically located parks and reserves for the benefit of residents in the general area, as provided in the Subdivision Act 1988 and Planning and Environment Act 1987.

The Parking Development Reserve is in lieu of provision of off-site parking as part of a development. These funds are used for the purchase and development of public access parking in the general area.

The Drainage Headworks Reserve is in lieu of meeting the cost to develop, upgrade and/or renew drainage infrastructure downstream of any subdivision development, a charge is levied on subdivision developers.

4.3.2 Equity

The $4.446 million increase in equity is a direct result of the surplus for the year.

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Southern Grampians Shire Council Budget 2025-2026

4.4 Statement of Cash Flows

4.4.1 Net cash flows provided by/used in operating activities

The net cash flows from operating activities does not equal the surplus (deficit) for the year as the expected revenues and expenses of the Council include non-cash items which have been excluded from the Cash Flow Statement.

The budgeted operating result is reconciled to budgeted cash flows available from operating activities as set out in the following table.

	Forecast Actual 2024/25 $'000	Budget 2025/26 $'000	Variance $'000
Surplus (deficit) for the year from operating activities	**4,446**	3,857	589
Depreciation	**12,609**	14,846	(2,237)
Net movement in current assets and liabilities	**(273)**	(4,277)	4,004
Cash flows available from operating activites	16,782	14,426	2,356

4.4.2 Net cash flows provided by/used in investing activities

The payments for investing activities ($28.727 million) represents the planned capital works expenditure – Note 4.5 explains how this investment is funded.

Proceeds from the sale of assets are estimated to be $7.364 million, and includes plant, equipment, commencement of sales from the Hamilton Industrial Estate, Lakes Edge land sales and other land sales.

4.4.3 Net cash flows provided by/used in

For 2025-2026 the total of principal repayments is projected to be $1.524 million and finance charges are projected to be $0.341 million. Council is budgeting to take up new loans totalling $5.000 million in 2025-2026 to fund intergenerational assets.

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Southern Grampians Shire Council Budget 2025-2026

4.5 Capital works program

This section presents a listing of the capital works projects that will be undertaken for the 2025/26 year, classified by expenditure type and funding source.

4.5.1 Summary

	Forecast Actual 2024/25 $'000	Budget 2025/26 $'000	Change $'000	%
Property	8,480	**2,560**	(5,920)	**-69.81%**
Plant and equipment	2,484	**2,054**	(430)	**-17.31%**
Infrastructure	17,763	**11,640**	(6,123)	**-34.47%**
Total	**28,727**	16,254	(12,473)	**-43.42%**

	Project Cost	Asset expenditure types				Summary of Funding Sources			
		New	Renewal	Upgrade	Expansion	Grants	Contributions	Council cash	Borrowings
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Property	**2,560**	1,000	560	1,000	-	2,397	-	163	4,000
Plant and equipment	**2,054**	15	2,039	-	-	-	-	2,054	-
Infrastructure	**11,640**	3,030	8,610	-	-	5,242	-	6,398	1,000
Total	**16,254**	4,045	11,209	1,000	-	7,639	-	8,615	5,000

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4.5.2 Current Budget

Capital Works Area	Project Cost	Asset expenditure types				Summary of Funding Sources			
		New	Renewal	Upgrade	Expansion	Grants	Contributions	Council cash	Borrowings
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
PROPERTY									
Buildings									
Buildings - LRCIP Funding	-	-	-	-	-	397	-	(397)	-
Buildings - RPPP S1 Funding	-	-	-	-	-	2,000	-	(2,000)	-
Buildings - Borrowings	-	-	-	-	-	-	-	(4,000)	4,000
Art Gallery - Design & Constructions	**1,000**	1,000	-	-	-	-	-	1,000	-
Digital Hub - Detailed Design	**1,000**	-	-	1,000	-	-	-	1,000	-
Facilities Management - Capital Renewal Works	**200**	-	200	-	-	-	-	200	-
Public Conveniences - Capital Renewals Works	**250**	-	250	-	-	-	-	250	-
Hamilton Mechanics Hall - Roof Cladding	**90**	-	90	-	-	-	-	90	-
HILAC - Floor Resurfacing	**20**	-	20	-	-	-	-	20	-
TOTAL PROPERTY	**2,560**	**1,000**	**560**	**1,000**	**-**	**2,397**	**-**	**(3,837)**	**4,000**
PLANT AND EQUIPMENT									
Plant, Machinery and Equipment									
Light Fleet - Passenger Vehicles	**500**	-	500	-	-	-	-	500	-
Heavy Plant - Replacement	**1,400**	-	1,400	-	-	-	-	1,400	-
Fixtures, Fittings and Furniture									
PAC - Stage Monitors Replacement	**19**	-	19	-	-	-	-	19	-
HILAC - Fans for Multipurpose Courts	**25**	-	25	-	-	-	-	25	-
Computers and Telecommunications									
Business Systems - IT Network Infrastructure	**25**	-	25	-	-	-	-	25	-
Library books									
Library - Book Purchases as per SLA	**55**	-	55	-	-	-	-	55	-
Library - Book Purchases Sir Irving Benson	**15**	-	15	-	-	-	-	15	-
Other Plant & Equipment									
Art Gallery - Additional	**15**	15	-	-	-	-	-	15	-
TOTAL PLANT AND EQUIPMENT	**2,054**	**15**	**2,039**	**-**	**-**	**-**	**-**	**2,054**	**-**

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Southern Grampians Shire Council Budget 2025-2026

4.5.2

Capital Works Area	Project Cost	Asset expenditure types				Summary of Funding Sources			
		New	Renewal	Upgrade	Expansion	Grants	Contributions	Council cash	Borrowings
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
INFRASTRUCTURE									
Roads									
Roads - RTR Funding	**-**	-	-	-	-	3,926		(3,926)	
Roads - Design Program	**110**	-	110	-	-	-	-	110	-
Roads - Safety Improvement Program	**2,300**	2,300	-	-	-	1,000	-	1,300	-
Gravel Road Resheet - Clearys Rd Hamilton Gravel	**122**	-	122	-	-	-	-	122	-
Road Resheet - Gartons Rd Mooralla Gravel Road	**80**	-	80	-	-	-	-	80	-
Resheet - Partridges Rd Hamilton Gravel Road	**111**	-	111	-	-	-	-	111	-
Resheet - Shilcocks Rd Rocklands Gravel Road	**199**	-	199	-	-	-	-	199	-
Resheet - Walkenhorst Rd Tarrington Final Seal -	**50**	-	50	-	-	-	-	50	-
Gallie Rd Coleraine	**113**	-	113	-	-	-	-	113	-
Final Seal - Hamilton-Chatsworth Road Croxton East	**278**	-	278	-	-	-	-	278	-
Final Seal - Victoria Point Rd Victoria Point	**222**	-	222	-	-	-	-	222	-
Reseal - Carmichael Street Hamilton	**30**	-	30	-	-	-	-	30	-
Reseal - Cavendish-Coleraine Road Cavendish	**26**	-	26	-	-	-	-	26	-
Reseal - Chamberlain Court Hamilton	**14**	-	14	-	-	-	-	14	-
Reseal - Dryden Street Hamilton	**12**	-	12	-	-	-	-	12	-
Reseal - E Gibbons Road Hamilton	**20**	-	20	-	-	-	-	20	-
Reseal - Fenton Street Hamilton	**29**	-	29	-	-	-	-	29	-
Reseal - French Street Hamilton	**21**	-	21	-	-	-	-	21	-
Reseal - Griffin Street Hamilton	**16**	-	16	-	-	-	-	16	-
Reseal - Hamilton Highway N Penshurst	**11**	-	11	-	-	-	-	11	-
Reseal - Hamilton Highway S Penshurst	**20**	-	20	-	-	-	-	20	-
Reseal - Hamilton-Chatsworth Road Croxton East	**54**	-	54	-	-	-	-	54	-
Reseal - Hamilton-Chatsworth Road Croxton East	**18**	-	18	-	-	-	-	18	-
Reseal - Hynes Road Glenisla	**101**	-	101	-	-	-	-	101	-
Reseal - Knapdale Lane Nareen	**28**	-	28	-	-	-	-	28	-
Reseal - Lower Hilgay Road Hilgay	**46**	-	46	-	-	-	-	46	-
Reseal - McKebery Street Coleraine	**14**	-	14	-	-	-	-	14	-
Reseal - McLuckies Lane Hamilton	**11**	-	11	-	-	-	-	11	-
Reseal - Melville Oval Perimeter Road Hamilton	**15**	-	15	-	-	-	-	15	-
Reseal - Mt Napier Road Hamilton	**161**	-	161	-	-	-	-	161	-
Reseal - Nareen Road Nareen	**140**	-	140	-	-	-	-	140	-

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Southern Grampians Shire Council Budget 2025-2026

4.5.2

Capital Works Area	Project Cost	Asset expenditure types				Summary of Funding Sources			
		New	Renewal	Upgrade	Expansion	Grants	Contributions	Council cash	Borrowings
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Roads cont.									
Reseal - Nareen Road Wandovale	**53**	-	53	-	-	-	-	53	-
Reseal - North Boundary Road Hamilton	**25**	-	25	-	-	-	-	25	-
Reseal - North Boundary Road Hamilton	**72**	-	72	-	-	-	-	72	-
Reseal - Strachan Street Hamilton	**14**	-	14	-	-	-	-	14	-
Reseal - Whyte Street N Coleraine	**16**	-	16	-	-	-	-	16	-
Reseal - Whyte Street S Coleraine	**20**	-	20	-	-	-	-	20	-
Reseal - Other	**48**	-	48	-	-	-	-	48	-
Rehab - Eddy Street Hamilton	**34**	-	34	-	-	-	-	34	-
Rehab - Gray Street – Mill Road (Gray St) Hamilton	**103**	-	103	-	-	-	-	103	-
Rehab - Gray Street – Mill Road (Mill Rd) Hamilton	**39**	-	39	-	-	-	-	39	-
Rehab - Lodge Road (From Mt Napier Rd) Hamilton	**140**	-	140	-	-	-	-	140	-
Rehab - Mt Napier Road Hamilton	**174**	-	174	-	-	-	-	174	-
Rehab - Nagorckas Road Tarrington	**696**	-	696	-	-	-	-	696	-
Rehab - Sedgewick Street Hamilton	**74**	-	74	-	-	-	-	74	-
Rehab - Sobeys Road Hamilton	**283**	-	283	-	-	-	-	283	-
Rehab - South Boundary Road Hamilton	**154**	-	154	-	-	-	-	154	-
Rehab - Vic Point Road Karabeal	**826**	-	826	-	-	-	-	826	-
Bridges									
Bridge - HIRL Pedestrian	**40**	-	40	-	-	-	-	40	-
Bridge - McCutcheons Rd Major Culvert	**322**	-	322	-	-	-	-	322	-
Bridge - Rockbank Road Bridge (coating works)	**43**	-	43	-	-	-	-	43	-
Footpaths and Cycleways									
Footpath - Annual Budget	**80**	-	80	-	-	-	-	80	-
Footpath links - Bell Street Penshurst	**32**	32	-	-	-	-	-	32	-
Footpath links - Cobb St Penshurst	**68**	68	-	-	-	-	-	68	-
Footpath links - Laidlaw St Coleraine	**17**	17	-	-	-	-	-	17	-
Footpath links - Riley St Cavendish	**79**	79	-	-	-	-	-	79	-
Footpath links - Ritchie St Penshurst	**66**	66	-	-	-	-	-	66	-
Footpath links - Scott Street Cavendish	**13**	13	-	-	-	-	-	13	-
Footpath links - Skene street Hamilton	**53**	53	-	-	-	-	-	53	-
Footpath links - Templeton St Dunkeld	**52**	52	-	-	-	-	-	52	-
Drainage									
Stormwater Drainage - Annual Renewal	**90**	-	90	-	-	-	-	90	-
Stormwater Drainage - Templeton St Dunkeld	**30**	-	30	-	-	-	-	30	-

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Southern Grampians Shire Council Budget 2025-2026

4.5.2

Capital Works Area	Project Cost	Asset expenditure types				Summary of Funding Sources			
		New	Renewal	Upgrade	Expansion	Grants	Contributions	Council cash	Borrowings
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Recreational, Leisure & Community Facilities									
Recreational Facilities - LRCIP Funding	**-**	-	-	-	-	313	-	(313)	-
Playgrounds - Enclose Lakes Edge Playground	**30**	-	30	-	-	-	-	30	-
Playgrounds - General Renewal	**350**	-	350	-	-	-	-	350	-
Swimming Pools - Annual Renewal	**1,800**	-	1,800	-	-	-	-	1,800	-
Waste Management									
Waste - Coleraine Landfill Remediation	**200**	-	200	-	-	-	-	200	-
Waste - Organics Processing Facility	**280**	280	-	-	-	-	-	280	-
Waste - Transfer Station bunker loading ramp	**117**	-	117	-	-	-	-	117	-
Parks, Open Space and Streetscapes									
Open Spaces - Borrowings	**-**	-	-	-	-	-	-	(1,000)	1,000
Hamilton CBD Streetscape Design	**400**	-	400	-	-	-	-	400	
Partnership Agreement & Business Case	**200**	-	200	-	-	-	-	200	-
Penshurst Botanic Gardens - Shelter Renewal	**20**	-	20	-	-	-	-	20	-
Pensurst Botanical Gardens - Masterplan Implement	**30**	-	30	-	-	-	-	30	-
Wannon Reserve - Upgrade 3 BBQ units	**15**	-	15	-	-	-	-	15	-
Other Infrastructure									
Hamilton Depot - Security & Parking Upgrade	**70**	70	-	-	-	-	-	70	-
TOTAL INFRASTRUCTURE	**11,640**	3,030	8,610	-	-	5,239	-	5,401	1,000
TOTAL NEW CAPITAL WORKS	**16,254**	**4,045**	**11,209**	**1,000**	**-**	**7,636**	**-**	**3,618**	**5,000**

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Southern Grampians Shire Council Budget 2025-2026

Summary of Planned Capital Works Expenditure
For the years ending 30 June 2027, 2028 & 2029

2026/27	Asset Expenditure Types					Funding Sources				
	Total $'000	New $'000	Renewal $'000	Expansion $'000	Upgrade $'000	Total $'000	Grants $'000	Contributions $'000	Council Cash $'000	Borrowings $'000
Property										
Land	0	0	0	0	0	0	0	0	0	0
Land improvements	0	0	0	0	0	0	0	0	0	0
Total Land	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Buildings	6,950	5,400	50	0	1,500	3,950	2,000	0	1,950	0
Heritage Buildings	0	0	0	0	0	0	0	0	0	0
Building improvements	0	0	0	0	0	0	0	0	0	0
Leasehold improvements	0	0	0	0	0	0	0	0	0	0
Total Buildings	6,950	5,400	50	0	1,500	3,950	2,000	0	1,950	0
Total Property	**6,950**	**5,400**	**50**	**0**	**1,500**	**3,950**	**2,000**	**0**	**1,950**	**0**
Plant and Equipment										
Art Collection	15	15	0	0	0	15	0	0	15	0
Plant, machinery and equipment	1,500	0	1,500	0	0	1,500	0	0	1,500	0
Fixtures, fittings and furniture	0	0	0	0	0	0	0	0	0	0
Computers and telecommunications	40	0	40	0	0	40	0	0	40	0
Library books	70	0	70	0	0	70	0	0	70	0
Total Plant and Equipment	**1,625**	**15**	**1,610**	**0**	**0**	**1,625**	**0**	**0**	**1,625**	**0**
Infrastructure										
Roads	5,938	0	5,938	0	0	5,938	4,772	0	1,166	0
Bridges	450	0	450	0	0	450	0	0	450	0
Footpaths and cycleways	50	0	50	0	0	50	0	0	50	0
Drainage	400	0	400	0	0	400	0	0	400	0
Recreational, leisure and community facilities	1,681	0	1,681	0	0	1,681	0	0	1,681	0
Waste management	0	0	0	0	0	0	0	0	0	0
Parks, open space and streetscapes	4,030	5	4,025	0	0	7,030	0	0	30	7,000
Aerodromes	0	0	0	0	0	0	0	0	0	0
Off street car parks	0	0	0	0	0	0	0	0	0	0
Other infrastructure	1,100	0	1,100	0	0	1,100	0	0	1,100	0
Total Infrastructure	**13,649**	**5**	**13,644**	**0**	**0**	**16,649**	**4,772**	**0**	**4,877**	**7,000**
Total Capital Works Expenditure	**22,224**	**5,420**	**15,304**	**0**	**1,500**	**22,224**	**6,772**	**0**	**8,452**	**7,000**

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Southern Grampians Shire Council Budget 2025-2026

2027/28	Asset Expenditure Types					Funding Sources				
	Total $'000	New $'000	Renewal $'000	Expansion $'000	Upgrade $'000	Total $'000	Grants $'000	Contributions $'000	Council Cash $'000	Borrowings $'000
Property										
Land	0	0	0	0	0	0	0	0	0	0
Land improvements	0	0	0	0	0	0	0	0	0	0
Total Land	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Buildings	16,250	16,000	250	0	0	19,250	15,000	0	250	4,000
Heritage Buildings	0	0	0	0	0	0	0	0	0	0
Building improvements	0	0	0	0	0	0	0	0	0	0
Leasehold improvements	0	0	0	0	0	0	0	0	0	0
Total Buildings	16,250	16,000	250	0	0	19,250	15,000	0	250	4,000
Total Property	**16,250**	**16,000**	**250**	**0**	**0**	**19,250**	**15,000**	**0**	**250**	**4,000**
Plant and Equipment										
Art Collection	15	15	0	0	0	0	0	0	15	0
Plant, machinery and equipment	1,300	0	1,300	0	0	0	0	0	1,300	0
Fixtures, fittings and furniture	0	0	0	0	0	0	0	0	0	0
Computers and telecommunications	85	0	35	0	50	0	0	0	85	0
Library books	70	0	70	0	0	0	0	0	70	0
Total Plant and Equipment	**1,470**	**15**	**1,405**	**0**	**50**	**1,470**	**0**	**0**	**1,470**	**0**
Infrastructure										
Roads	6,042	0	6,042	0	0	6,042	3,721	0	2,321	0
Bridges	450	0	450	0	0	450	0	0	450	0
Footpaths and cycleways	50	0	50	0	0	50	0	0	50	0
Drainage	400	0	400	0	0	400	0	0	400	0
Recreational, leisure and community facilities	1,085	0	1,085	0	0	1,085	0	0	1,085	0
Waste management	0	0	0	0	0	0	0	0	0	0
Parks, open space and streetscapes	8,030	5	8,025	0	0	5,030	5,000	0	30	0
Aerodromes	0	0	0	0	0	0	0	0	0	0
Off street car parks	0	0	0	0	0	0	0	0	0	0
Other infrastructure	1,100	0	1,100	0	0	1,100	0	0	1,100	0
Total Infrastructure	**17,157**	**5**	**17,152**	**0**	**0**	**14,157**	**8,721**	**0**	**5,436**	**0**
Total Capital Works Expenditure	**34,877**	**16,020**	**18,807**	**0**	**50**	**34,877**	**23,721**	**0**	**7,156**	**4,000**

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Southern Grampians Shire Council Budget 2025-2026

2028/29	Asset Expenditure Types					Funding Sources				
	Total $'000	New $'000	Renewal $'000	Expansion $'000	Upgrade $'000	Total $'000	Grants $'000	Contributions $'000	Council Cash $'000	Borrowings $'000
Property										
Land	0	0	0	0	0	0	0	0	0	0
Land improvements	0	0	0	0	0	0	0	0	0	0
Total Land	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Buildings	24,050	14,000	50	0	10,000	24,050	2,000	0	22,050	0
Heritage Buildings	0	0	0	0	0	0	0	0	0	0
Building improvements	0	0	0	0	0	0	0	0	0	0
Leasehold improvements	0	0	0	0	0	0	0	0	0	0
Total Buildings	24,050	14,000	50	0	10,000	24,050	2,000	0	22,050	0
Total Property	**24,050**	**14,000**	**50**	**0**	**10,000**	**24,050**	**2,000**	**0**	**22,050**	**0**
Plant and Equipment						**0**				
Art Collection	15	15	0	0	0	15	0	0	15	0
Plant, machinery and equipment	1,300	0	1,300	0	0	1,300	0	0	1,300	0
Fixtures, fittings and furniture	0	0	0	0	0	0	0	0	0	0
Computers and telecommunications	50	0	50	0	0	50	0	0	50	0
Library books	70	0	70	0	0	70	0	0	70	0
Total Plant and Equipment	**1,435**	**15**	**1,420**	**0**	**0**	**1,435**	**0**	**0**	**1,435**	**0**
Infrastructure										
Roads	6,042	0	6,042	0	0	6,042	3,471	0	2,571	0
Bridges	450	0	450	0	0	450	0	0	450	0
Footpaths and cycleways	50	0	50	0	0	50	0	0	50	0
Drainage	400	0	400	0	0	400	0	0	400	0
Recreational, leisure and community facilities	50	0	50	0	0	50	0	0	50	0
Waste management	0	0	0	0	0	0	0	0	0	0
Parks, open space and streetscapes	8,030	5	8,025	0	0	8,030	5,000	0	3,030	0
Aerodromes	0	0	0	0	0	0	0	0	0	0
Off street car parks	50	0	50	0	0	50	0	0	50	0
Other infrastructure	1,100	0	1,100	0	0	1,100	0	0	1,100	0
Total Infrastructure	**16,172**	**5**	**16,167**	**0**	**0**	**16,172**	**8,471**	**0**	**7,701**	**0**
Total Capital Works Expenditure	**41,657**	**14,020**	**17,637**	**0**	**10,000**	**41,657**	**10,471**	**0**	**31,186**	**0**

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Southern Grampians Shire Council Budget 2025-2026

Service Performance Outcome Indicators

Service	Indicator	Performance Measure	Computation
Governance	Consultation and engagement	Satisfaction with community consultation and engagement. (Community satisfaction rating out of 100 with the consultation and engagement efforts of Council)	Community satisfaction rating out of 100 with how Council has performed on community consultation and engagement
Statutory planning	Service standard	Planning applications decided within required timeframes (percentage of regular and VicSmart planning application decisions made within legislated timeframes)	[Number of planning application decisions made within 60 days for regular permits and 10 days for VicSmart permits / Number of planning application decisions made] x100
Roads	Condition	Sealed local roads below the intervention level (percentage of sealed local roads that are below the renewal intervention level set by Council and not requiring renewal)	[Number of kilometres of sealed local roads below the renewal intervention level set by Council / Kilometres of sealed local roads] x100
Libraries	Participation	Library membership (Percentage of the population that are registered library members)	[Number of registered library members / Population] x100
Waste management	Waste diversion	Kerbside collection waste diverted from landfill. (Percentage of recyclables and green organics collected from kerbside bins that is diverted from landfill)	[Weight of recyclables and green organics collected from kerbside bins / Weight of garbage, recyclables and green organics collected from kerbside bins] x100
Aquatic Facilities	Utilisation	Utilisation of aquatic facilities. (Number of visits to aquatic facilities per head of population)	Number of visits to aquatic facilities / Population
Animal Management	Health and safety	Animal management prosecutions. (Percentage of animal management prosecutions which are successful)	Number of successful animal management prosecutions / Total number of animal management prosecutions
Food safety	Health and safety	Critical and major non-compliance outcome notifications. (Percentage of critical and major non-compliance outcome notifications that are followed up by Council)	[Number of critical non-compliance outcome notifications and major non-compliance outcome notifications about a food premises followed up / Number of critical non-compliance outcome notifications and major non-compliance outcome notifications about food premises] x100
Maternal and Child Health	Participation	Participation in the MCH service. (Percentage of children enrolled who participate in the MCH service)	[Number of children who attend the MCH service at least once (in the financial year) / Number of children enrolled in the MCH service] x100
		Participation in the MCH service by Aboriginal children. (Percentage of Aboriginal children enrolled who participate in the MCH service)	[Number of Aboriginal children who attend the MCH service at least once (in the financial year) / Number of Aboriginal children enrolled in the MCH service] x100

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5 Financial Performance Indicators

5a Targeted performance indicators

The following tables highlight Council's current and projected performance across a selection of targeted service and financial performance indicators. These indicators provide a useful analysis of Council's intentions and performance and should be interpreted in the context of the organisation's objectives.
The targeted performance indicators below are the prescribed performance indicators contained in Schedule 4 of the *Local Government (Planning and Reporting) Regulations 2020*. Results against these indicators and targets will be reported in Council's Performance Statement included in the Annual Report.

Targeted performance indicators - Service

Indicator	Measure	Notes	Actual	Forecast	Target	Target Projections			Trend
			2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	+/o/-
Governance									
Consultation and engagement (Council decisions made and implemented with community input)	**Satisfaction with community consultation and engagement** Community satisfaction rating out of 100 with the consultation and engagement efforts of Council		43	49	51	53	55	56	+
Roads									
Condition (sealed local roads are maintained at the adopted condition standard)	**Sealed local roads below the intervention level** Number of kms of sealed local roads below the renewal intervention level set by Council / Kms of sealed local roads		95%	56%	58%	60%	62%	64%	+
Statutory planning									
Service standard (planning application processing and decisions are in accordance with legislative requirements)	**Planning applications decided within the relevant required time** Number of planning application decisions made within the relevant required time / Number of planning application decisions made		62%	80%	82%	84%	86%	87%	+
Waste management									
Waste diversion (amount of waste diverted from landfill is maximised)	**Kerbside collection waste diverted from landfill** Weight of recyclables and green organics collected from kerbside bins / Weight of garbage, recyclables and green organics collected from kerbside bins		61%	61%	63%	65%	68%	70%	+

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Southern Grampians Shire Budget 2025-2026

Targeted performance indicators - Financial

Indicator	Measure	Notes	Actual	Forecast	Target	Target Projections			Trend
			2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	+/o/-
Liquidity									
Working Capital (sufficient working capital is available to pay bills as and when they fall due)	**Current assets compared to current liabilities** Current assets / current liabilities	1	152.10%	61.02%	111.99%	109.84%	111.90%	181.11%	o
Obligations									
Asset renewal (assets are renewed as planned)	**Asset renewal compared to depreciation** Asset renewal and upgrade expense / Asset depreciation	2	105.24%	208.06%	82.24%	112.94%	125.78%	181.18%	+
Stability									
Rates concentration (revenue is generated from a range of sources)	**Rates compared to adjusted underlying revenue** Rate revenue / adjusted underlying revenue	3	63.40%	53.34%	51.64%	51.57%	51.68%	32.57%	-
Efficiency									
Expenditure level (resources are used efficiently in the delivery of services)	**Expenses per property assessment** Total expenses / no. of property assessments		$4,737	$5,163	$5,403	$5,488	$5,550	$5,612	+

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Southern Grampians Shire Budget 2025-2026

5b Financial performance indicators

The following table highlights Council's current and projected performance across a range of key financial performance indicators. These indicators provide a useful analysis of Council's financial position and performance and should be interpreted in the context of the organisation's objectives.
The financial performance indicators below are the prescribed financial performance indicators contained in Part 3 of Schedule 3 of the *Local Government (Planning and Reporting) Regulations 2020*. Results against these indicators will be reported in Council's Performance Statement included in the Annual Report.

Indicator	Measure	Notes	Actual	Forecast	Budget	Projections			Trend
			2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	+/o/-
Operating position									
Adjusted underlying result (an adjusted underlying surplus is generated in the ordinary course of business)	**Adjusted underlying surplus (or deficit)** Adjusted underlying surplus (deficit) / Adjusted underlying revenue	4	-43.44%	-9.55%	-7.85%	-6.05%	-5.39%	-2.12%	+
Liquidity									
Unrestricted cash (sufficient cash that is free of restrictions is available to pay bills as and when they fall due)	**Unrestricted cash compared to current liabilities** Unrestricted cash / current liabilities		7.86%	14.51%	61.47%	61.36%	59.21%	126.24%	+
Obligations									
Loans and borrowings (level of interest bearing loans and borrowings is appropriate to the size and nature of Council's activities)	**Loans and borrowings compared to rates** Interest bearing loans and borrowings / rate revenue	5	5.33%	16.62%	30.04%	47.99%	52.37%	45.04%	+
Loans and borrowings (level of interest bearing loans and borrowings is appropriate to the size and nature of Council's activities)	**Loans and borrowings repayments compared to rates** Interest and principal repayments on interest bearing loans and borrowings / rate revenue		2.64%	0.85%	7.43%	10.33%	12.38%	8.61%	+
Indebtedness (level of long term liabilities is appropriate to the size and nature of a Council's activities)	**Non-current liabilities compared to own-source revenue** Non-current liabilities / own source revenue		8.01%	13.46%	19.63%	30.34%	37.19%	17.43%	+
Stability									
Rates effort (rating level is set based on the community's capacity to pay)	**Rates compared to property values** Rate revenue / CIV of rateable properties in the municipal district		0.25%	0.27%	0.28%	0.29%	0.30%	0.30%	o
Efficiency									
Revenue level (resources are used efficiently in the delivery of services)	**Average rate per property assessment** General rates and municipal charges / no. of property assessments		$1,838	$2,184	$2,267	$2,323	$2,370	$2,417	+

Key to Forecast Trend:
+ Forecasts improvement in Council's financial performance/financial position indicator
o Forecasts that Council's financial performance/financial position indicator will be steady
- Forecasts deterioration in Council's financial performance/financial position indicator

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Southern Grampians Shire Budget 2025-2026

Notes to indicators

5a **1. Working Capital**

This percetage indicates the proportion of current liabilities represented by current assets, and is a measure of Council's ability to manage it's short -term financial obligations. Councils' working capital is forecast to reduce in 2024-2025 as a result of significant capital works being delivered by the Council over the preceeding and current financial years. This restabilises from 2025-2026 onwards.

2. Asset renewal

This percentage indicates the extent of Council's renewal of assets against its depreciation charge (an indication of the decline in value of its existing capital assets). A percentage greater than 100 indicates Council is maintaining its existing assets, while a percentage less than 100 means its assets are deteriorating faster than they are being renewed and future capital expenditure will be required to renew assets.

This indicator shows Council's high renewal expenditure in 2024-2025, then a significant reduction in 2025-2026 investment before increasing towards the end of the four year projeted period as Council replace several valuable but aged intergenerational assets.

Generally over the longer term, Council has been achieving around 80% of its renewal target, however, some of the renewal gap is absorbed into asset upgrade and expansion works. Council is also reviewing its asset portfolio to reveal any assets that are not required to be renewed which are inflating the required renewal target and incurring depreciation charges.

3. Rates concentration

Reflects extent of reliance on rate revenues to fund all of Council's on-going services. Trend indicates Council is continuing to be reliant on rate revenue compared to all other revenue sources.

5b **4. Adjusted underlying result**

An indicator of the sustainable operating result required to enable Council to continue to provide core services and meet its objectives. Improvement in financial performance is required over the longer term as continued losses means reliance on Council's cash reserves or increased debt to maintain services.

5. Debt compared to rates

Trend indicates Council is balancing debt against its annual rate revenue as a planned lever to allow additional capital investment whilst maintaining a conservative percentage of borrowing. Currently, Council debt is budgeted at 30.04% in 2025-2026, rising to 52.37% of rate revenue at the end of 2027-2028, which is within the prudential level of 80%.

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Long Term Financial Plan
2025 – 2035
Southern Grampians
SHIRE COUNCIL
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1. Foreword

Highlights:

- Operating surplus in nine of the 10 years of the Long Term Financial Plan (LTFP).
- $131m investment in renewal of community assets, up from $100m in our previous LTFP.
- Strong cost management over the 10 years.
- Strong cash balances across the 10 years
- Peak debt of $16.5m is within the Victorian Auditor General's guidelines
- Borrowings will be largely repaid within the 10 years
- Three major and intergenerational projects being new Hamilton CBD Streetscape, a new Community Hub (Library, Digital Hub and Government Services) and a new Hamilton Gallery planned to be delivered over the 10 years.

Summary

Council's Long Term Financial Plan (LTFP) is an important strategic document that supports our planning for revenue growth, cost management and project delivery. Council is committed to strong financial governance, and our LTFP is a "road map" that allows us to have strong stewardship over financial sustainability, and plan for our future with confidence.

This year's LTFP, which covers the period 2025 to 2035, shows another year of improved financial capacity and positive trends over the 10 years, as a result of Council's strong cost management and focus on operational efficiency.

Council has an exciting vision to deliver several major projects over the next ten years, while also increasing our investment in the renewal of community assets.

Asset renewal is an important part of managing Council's financial sustainability and ensuring its assets are fit for purpose. Council owns and manages a diverse range of assets including roads, footpaths, bridges, drainage, playgrounds, sports facilities, and buildings. Not addressing asset renewal to an appropriate level means Council will accumulate assets at end of life, and renewal then becomes unaffordable.

In its 2025-35 LTFP, Council is investing $131m in asset renewal, a significant increase on the $100m in the 2024-34 LTFP and above the industry benchmark. This investment in community infrastructure will deliver positive outcomes across all asset classes for our community.

In addition to an investment of $1.1m each year in new infrastructure, the LTFP outlines a funding pathway for Council's three major projects – a redeveloped Hamilton CBD streetscape, new Community Hub and a new Hamilton Gallery - which is a mix of Council funds, loans and grant funding. Council has included a reliance on grants in its LTFP where it feels confident these can be achieved.

The design and funding of these projects has been carefully to ensure efficient planning and delivery, and Council are confident that all three will be transformative for many generations of our community.

An important premise for Council in its financial planning is to ensure any debt that is incurred can be repaid within a reasonable term, to ensure the organisation does not inherit generational debt. We are borrowing to fund important projects that will serve multiple generations of our community, but are ensuring we can repay that debt quickly, leaving future Councils the opportunity to do the same.

Our cost management within the organisation has had a significantly positive impact on our cash flow and given us this flexibility in our LTFP.

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Council benchmarks financial performance using key ratios for liquidity, indebtedness, and operations, detailed on page 33 of our LTFP. These ratios are color-coded—green for strong performance, amber for areas needing attention, and red for future corrective action.

Our financial benchmarking is intentionally conservative, exceeding standard local government practices to uphold rigorous financial governance. A prime example is our Adjusted Underlying Result, which excludes one-off revenues but retains non-cash expenses like depreciation. While some years fall below benchmark expectations, strong cash reserves and positive cash flow trends ensure Council's ability to manage fluctuations effectively.

With plans, strategies, priorities, issues and risks all being dynamic influences in relation to any planning and development, the LTFP is reviewed and adjusted annually to reflect material changes, and to incorporate the outcomes of reviews.

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2. Statutory & Regulatory Requirements

2.1 Local Government Act 2020

2.1.1 Strategic planning

Part 4 of the Local Government Act 2020 addresses planning and financial management and Division 1 covers strategic planning. The Financial Plan is one of the strategic plans subject to the Strategic planning principles. Section 89 of the Act sets out the Strategic planning principles as follows:

89 Strategic planning principles

(1) A Council must undertake the preparation of its Council Plan and other strategic plans in accordance with the strategic planning principles.

(2) The following are the strategic planning principles —
(a) an integrated approach to planning, monitoring and performance reporting is to be adopted;
(b) strategic planning must address the Community Vision;
(c) strategic planning must take into account the resources needed for effective implementation;
(d) strategic planning must identify and address the risks to effective implementation;
(e) strategic planning must provide for ongoing monitoring of progress and regular reviews to identify and address changing circumstances.

The Local Government Act 2020 introduces a requirement for Victorian councils to develop, adopt and keep in force a Financial Plan covering at least the next 10 financial years. Many councils already prepare long-term financial plans for internal management purposes. The requirements under the new Act mean councils must develop a Financial Plan that is publicly accessible. The specific legislative requirements for a Financial Plan are set out in section 91 of the Act as follows:

91 Financial Plan

(1) A Council must develop, adopt and keep in force a Financial Plan in accordance with its deliberative engagement practices.

(2) The scope of a Financial Plan is a period of at least the next 10 financial years.

(3) A Financial Plan must include the following in the manner and form prescribed by the regulations—
(a) statements describing the financial resources required to give effect to the Council Plan and other strategic plans of the Council;
(b) information about the decisions and assumptions that underpin the forecasts in the statements specified in paragraph (a);
(c) statements describing any other resource requirements that the Council considers appropriate to include in the Financial Plan;
(d) any other matters prescribed by the regulations.

(4) A Council must develop or review the Financial Plan in accordance with its deliberative engagement practices and adopt the Financial Plan by 31 October in the year following a general election.

(5) The Financial Plan adopted under subsection (4) has effect from 1 July in the year following a general election.

Section 91(1) and section 91(4) refer to deliberative engagement practices. The Act requires deliberative engagement practices to be incorporated into a council's community engagement policy.

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2.1.2 Financial management principles

Part 4 Division 4 of the Local Government Act 2020 addresses financial management. Section 101 of the Act sets out the financial management principles as follows:

101 Financial management principles

(1) The following are the financial management principles—
(a) revenue, expenses, assets, liabilities, investments and financial transactions must be managed in accordance with a Council's financial policies and strategic plans;
(b) financial risks must be monitored and managed prudently having regard to economic circumstances;
(c) financial policies and strategic plans, including the Revenue and Rating Plan, must seek to provide stability and predictability in the financial impact on the municipal community;
(d) accounts and records that explain the financial operations and financial position of the Council must be kept.

(2) For the purposes of the financial management principles, financial risk includes any risk relating to the following—
(a) the financial viability of the Council;
(b) the management of current and future liabilities of the Council;
(c) the beneficial enterprises of the Council.

2.1.3 Service performance principles

The Local Government Act 2020 requires Victorian councils to plan and deliver services in accordance with the service performance principles. Part 5 of the Act addresses council operations. Section 106 of the Act sets out the service performance principles as follows:

106 Service performance principles

(1) A Council must plan and deliver services to the municipal community in accordance with the service performance principles.

(2) The following are the service performance principles—
(a) services should be provided in an equitable manner and be responsive to the diverse needs of the municipal community;
(b) services should be accessible to the members of the municipal community for whom the services are intended;
(c) quality and costs standards for services set by the Council should provide good value to the municipal community;
(d) a Council should seek to continuously improve service delivery to the municipal community in response to performance monitoring;
(e) service delivery must include a fair and effective process for considering and responding to complaints about service provision.

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2.1.4 Community engagement and public transparency

The Local Government Act 2020 includes community engagement principles (section 56) and public transparency principles (section 58). The Act requires Victorian councils to adopt and maintain a public transparency policy (section 57) and to adopt and maintain a community engagement policy (section 55).

The Financial Plan is specifically referenced in section 55(2)(g) of the Act which requires (amongst other provisions) that a community engagement policy must:

(g) Include deliberative engagement practices which must include and address any matters prescribed by the regulations for the purposes of this paragraph and be capable of being applied to the development of the Community Vision, Council Plan, Financial Plan and Asset Plan.

2.2 Local Government (Planning and Reporting) Regulations 2020

The Local Government (Planning and Reporting) Regulations 2020 (the regulations) came into operation on 24 October 2020. Part 2 of the regulations prescribe the information to be included in a Financial Plan as follows:

5 Statements describing financial resources

(1) For the purposes of section 91(3)(a) of the Act, the statements describing the financial resources must be in the form set out in the Local Government Model Financial Report.

(2) For the purposes of section 91(3)(d) of the Act, the prescribed matters include a statement of capital works for the financial years to which the statements describing the financial resources referred to in section 91(3)(a) of the Act relate.

6 Statements describing other resource requirements

For the purposes of section 91(3)(d) of the Act, the prescribed matters include the following—

(a) a statement of human resources;

(b) a summary of planned expenditure in relation to the human resources referred to in the statement of human resources, categorised according to the organisational structure of the Council and classified separately as—

(i) permanent full time who are—
- (A) women; or
- (B) men; or
- (C) persons of self-described gender; or

(ii) permanent part time staff who are—
- (A) women; or
- (B) men; or
- (C) persons of self-described gender;

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(c) a summary of the planned number of full time equivalent Council staff referred to in the statement of human resources, categorised according to the organisational structure of the Council and classified separately as—

(i) permanent full time staff who are—

(A) women; or

(B) men; or

(C) persons of self-described gender; or

(ii) permanent part time staff who are—

(A) women; or

(B) men; or

(C) persons of self-described gender.

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3. Integrated Strategic Planning and Reporting Framework

This section describes how the Financial Plan links to the achievement of the Community Vision and the Council Plan within the Integrated Strategic Planning & Reporting framework. This framework guides the Council in identifying community needs and aspirations over the long term (Community Vision), medium term (Council Plan) and short term (Annual Budget) and then holding itself accountable (Annual Report).

The following diagram provides an overview of the core legislated elements of an integrated strategic planning and reporting framework and outcomes.

Source: Department of Jobs, Precincts and Regions

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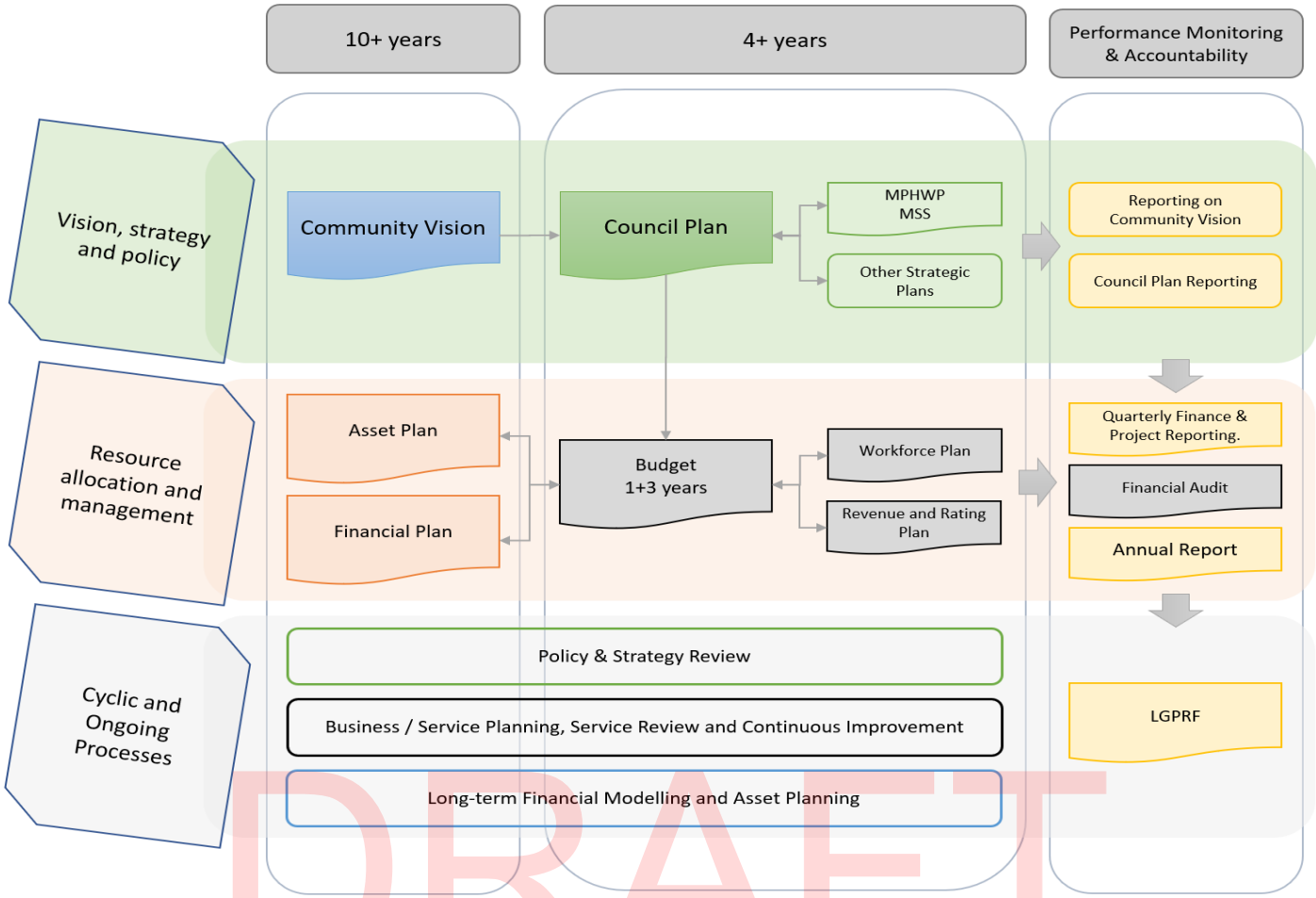
The following figure demonstrates how each element might inform or be informed by other parts of the integrated framework.



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Source: Department of Jobs, Precincts and Regions

4. Southern Grampians Strategic Planning & Reporting Framework

4.1 Overview & Principles

4.1.1 Strategic Planning Principles

The Financial Plan provides a 10 year financially sustainable projection regarding how the actions of the Council Plan may be funded to achieve the Community Vision. Two other models have been prepared at a high level only to provide Council with guidance about what "levers" are available to Council to develop different models, all of with have strengths and weaknesses. A "middle ground" or "Sustainable" approach has then been taken to develop a more detailed model (underpinned by the basic assumptions) to develop the detailed Financial Plan.

The Financial Plan is developed in the context of the following strategic planning principles:

a) Council has an integrated approach to planning, monitoring and performance reporting.
b) Council financial plan addresses the Community Vision by funding the aspirations of the Council Plan. The Council Plan aspirations and actions are formulated in the context of the Community Vision.
c) The Financial Plan statements articulate the 10-year financial resources necessary to implement the goals and aspirations of the Council Plan to achieve the Community Vision where possible taking into consideration preliminary findings of the 2021-2025 Plan and 2041 Community Vision.
d) Council's strategic planning principles identify and address the risks to effective implementation of the Financial Plan. The financial risks are included at section 3.2.2 below.
e) The Financial Plan provides for the strategic planning principles of progress monitoring and reviews to identify and adapt to changing circumstances.

4.1.2 Financial Management Principles

The Financial Plan demonstrates the following financial management principles:

3.2.1 Revenue, expenses, assets, liabilities, investments and financial transactions are managed in accordance with Council's financial policies and strategic plans.
3.2.2 Management of the following financial risks:
  a) the financial viability of the Council
  b) the management of current and future liabilities of the Council.
  c) the beneficial enterprises of Council (where appropriate).
3.2.3 Financial policies and strategic plans are designed to provide financial stability and predictability to the community.
3.2.4 Council maintains accounts and records that explain its financial operations and financial position

4.1.3 Engagement Principles

Council has developed a Community Engagement Policy in February 2021 with the propose to outline the principles and Council's commitment to engaging with Southern Grampians Shire's many communities and stakeholders in a way that is purposeful, representative, inclusive and easy to be involved in. The policy recognises the importance of designing community engagement methods to support maximum engagement and meet the specific outcomes of a particular initiative or project.

Principle 1: A community engagement process must have a clearly defined objective and scope
Principle 2: Participants in community engagement must have access to objective, relevant and timely information to inform their participation
Principle 3: Participants in community engagement must be representative of the persons and groups affected by the matter that is the subject of the community engagement
Principle 4: Participants in community engagement are entitled to reasonable support to enable meaningful and informed engagement

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Principle 5: Participants in community engagement are informed of the ways in which the community engagement process will influence Council decision-making

Council will implement robust and comprehensive community engagement practices to facilitate a dialogue that builds relationships and informs and improves decision-making. It will continually improve its capacity and performance in community engagement through ongoing training, resource development, and review and evaluation. Council will also work with communities to identify the most appropriate and effective engagement methods in order to continually improve relationships and understanding between all parties.

Council will undertake community engagement activities:

- ✓ When community input can enhance decision making or project outcomes
- ✓ To gain new information about community needs, aspirations and concerns
- ✓ When there will be a real or perceived change to existing services, programs or the use of public space and facilities
- ✓ When community members, business communities or other groups would have a particular interest in the outcome of a decision, project or development
- ✓ When council resolves to engage the community
- ✓ When legislation, policy or other agreement mandates Council will seek participant feedback to evaluate engagement processes and continue to adapt and improve our processes.

4.1.4 Service Performance Principles

Council services are designed to be purpose, targeted to community needs and value for money. The service performance principles are listed below:
a) Services are provided in an equitable manner and are responsive to the diverse needs of the community. The Council Plan is designed to identify the key services and projects to be delivered to the community. The Financial Plan provides the mechanism to demonstrate how the service aspirations within the Council Plan may be funded.
b) Services are accessible to the relevant users within the community.
c) Council provides quality services that provide value for money to the community. The Local Government Performance Reporting Framework (LGPRF) is designed to communicate council's performance regarding the provision of quality and efficient services.
d) Council is developing a performance monitoring framework to continuously improve its service delivery standards.
e) Council is developing a service delivery framework that considers and responds to community feedback and complaints regards service provision.

4.1.5 Asset Plan Integration

Integration of the Asset Plan is a key principle of the Council's strategic financial planning principles. The purpose of this integration is designed to ensure that future funding is allocated in a manner that supports service delivery and the effective management of Council's assets into the future. In June 2022 Council adopted the Asset Plan. The purpose of Council's Asset Plan is to;

- Demonstrate the responsible management of assets (and services provided from assets),
- Comply with regulatory requirements, and
- Communicate the scale of investment in assets which are required to sustainably deliver affordable services for the community in the foreseeable future.

The Asset Plan identifies the operational and strategic practices which will ensure that Council manages assets across their life cycle in a financially sustainable manner. The Asset Plan is underpinned by asset management plans which continue to be developed for each asset class. The asset management plans, provide Council with a sound base to understand the risks associated with managing its assets for the community's benefit together with a long term program to address and resolve asset management. A key principle behind the development of Councils Asset Management Plan is sustainability, that is financial, environmental and social.

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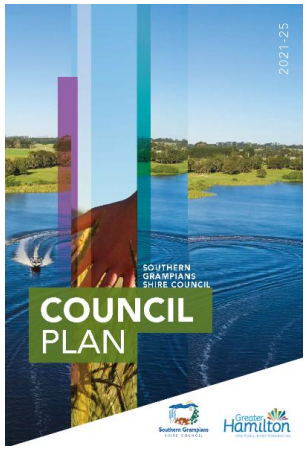
The Asset Plan is designed to inform the 10-year Financial Plan by identifying the capital renewal gap and maintenance funding that is required over the life of each asset category. The level of funding will incorporate knowledge of asset condition, risk assessments as well as the impact of intervention and service levels for each asset class. The intervention levels can be adjusted and adopted across a range of scenarios in light of the longer term financial capacity which is reviewed annually.

4.2 Council Plan 2021-2025



The Council Plan is the key document that drives Council's strategic direction for the period from 2021 to 2025. It outlines where Council and the community will aspire to be by 2025 and how Council will achieve those outcomes.

Under the Local Government Act 2020, Council must prepare and adopt a Council Plan for a period of at least the next four financial years after a general election, in accordance with its deliberative engagement processes.

A Council Plan must include:

+ the strategic direction of the Council
+ strategic objectives for achieving the strategic direction
+ strategies for achieving the objectives for the next four financial years
+ strategic indicators for monitoring the achievement of the objectives
+ a description of the Council's initiatives and priorities for services, infrastructure and amenity.

Progress and outcomes will be reported through the Southern Grampians Shire Council Annual Report and quarterly business reports. Our work is measured annually against the Performance Statement in the Annual Report and the community rates our performance through the annual Community Satisfaction Survey.

Council undertook an extensive and inclusive engagement process with the community to develop the Council Plan with common issues identified as:

✓ Digital Connectivity	✓ Support for community events and family activities
✓ Education pathways	✓ Transport connectivity
✓ Footpaths	✓ Volunteer Support
✓ Housing	✓ Walking & Cycling trails
✓ Inclusive and connected community	✓ Waste management
✓ Increased promotion of region and assets	✓ Youth Focus
✓ Road maintenance	

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The Council Plan identifies Council's five priority areas to be addressed over the next four years. These priorities have shaped the themes of the Council Plan. Under each theme, Councillors, Council staff and the community have identified objectives and strategies to measure and guide progress of achievement of the plan.

Themes	Key Priority	Objectives
1 Support our Community	An empowered community that is healthy, inclusive and connected	An empowered and connected community Support and promote a health community Grow a diverse and inclusive community A safe Community
2 Grow our Regional Economy	A growing and diverse local and regional economy that supports our local businesses	Drive economic growth Increase our regional profile Continue to support the development of a skilled workforce Support local business and industry
3 Maintain and Renew our Infrastructure	Provide access to a high-quality built environment and infrastructure that meets community needs.	Plan and maintain sustainable assets and infrastructure Safe and well-maintained transport routes and infrastructure Attractive Council-owned and managed community and open spaces
4 Protect Our Natural Environment	Act as community leaders to promote and enhance a clean, green and sustainable environment	Protect and enhance biodiversity including the health of waterways, wetlands, soil and air Balance environmental protection with Council's support for growth Sustainable waste management services Mitigate against and adopt to climate change
5 Provide Strong Governance and Leadership	Strong Leadership, good governance and effective service delivery	Transparent and accountable governance Effective Advocacy Committed and skilled staff Customer-focused services

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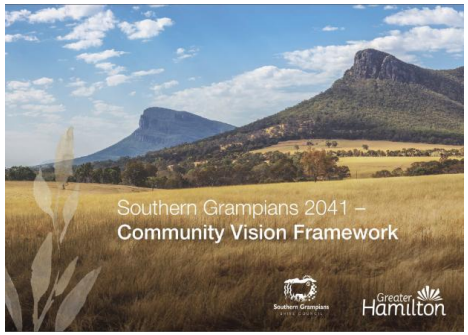
4.3 Southern Grampians 2041 – Community Vision Framework



Southern Grampians 2041 - Community Vision Framework (SG2041) is in essence a community vision, comprising a twenty-year strategic direction, together with suggested opportunities for advocacy and partnership with stakeholders.

It is ambitious in nature as our community expects us to have a longer-term view of how we shape our world. For consistency purposes, the key themes or pillars behind the workplan are the same themes found in the Council Plan 2021-25 – namely supporting community, growing regional economy, maintain and renew infrastructure, protect natural environment and provision of strong governance.

The assumptions built into SG2041 are:

1. Our limited funding requires us to collaborate with others to make our investments extend further.
2. We needed a longer-term work plan linked to a ten-year financial plan.
3. We must work smarter with decisions based on clearer understanding of how changes in technology, community needs and demographic shifts (ageing etc.) will affect our service and asset management delivery.

To determine priorities, input was obtained from a wide range of stakeholders. A significant deep dive into regional relationships, challenges and opportunities has occurred. A crystal ball view of the next twenty-years drives the thinking on challenges and how we respond as a community. One thing will be clear – the next two decades will not be the same as the last and together we must address a range of issues from climate change to ageing populations, the digital economy, meaningful reconciliation with the indigenous community and supporting each other.

We must start this strategic planning by recognising that we have a number of regionally significant assets and services, some of which are maintained by Council and others are not. These drive the liveability or 'attractiveness' of Southern Grampians. Investment and support of these assets protects our points of difference, the jobs they deliver, the services they offer are what make our Shire worth investing and living in.

The landscape itself, the volcanic grasslands and plains as well as Grampians National Park make our area both State and nationally significant.

We need to manage all key assets, regardless of who owns them, but do so sensibly and with financial accountability, based on data confirming the value they deliver and what we can afford. Council cannot do this work alone and it must therefore reach out to organisations, as well as State and Federal Government agencies on the services and facilities the community needs, the quality of the infrastructure that connects us and how beyond being an agricultural powerhouse, the community is supported to achieve its needs.

Tourism will be a key emerging platform in the next twenty-years. Ongoing infrastructure investment in the tourism sector allied to a genuine need to better connect our Shire within the region (rail, road, air, digital) will be the drivers of the next decade and beyond.

SG2041 will be a living document, as it was in this case, developed concurrently with the Council Plan (in preparation). In this way it will remain relevant and a proper reflection of the views of its community and their vision.

The key themes and opportunities identified in SG2041 are set out as Strategic Directions in E2 of the document and are closely linked with the Council Plan 2021-25 and Community Health and Wellbeing Plan 2021-25.

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Whilst the entire document is relevant to the development and maintenance of Council's Long Term Financial Plan, key themes outlined in 4.3.1 and 4.3.2 below effectively summarise the challenges and the opportunities, in the context of financial planning for the future. These matters may not be always under the control of Council, but in a world increasingly where we must partner with others to deliver services and opportunities, it must be considered in the fabric of the Southern Grampians Financial Planning Framework.

4.3.1 Key Challenges for Southern Grampians as identified in SG2041

The population demographic: Respondents noted the ageing population and need for services to support them, the loss of younger people and the need to attract more youth and young families to the area, noting that services need to support an increased population too.

The need for improved public transport and increased availability: The quality of linkages between local towns and regional centres was a recurrent theme. All forms of transport were discussed, including road, rail and air.

More opportunities for employment, and diversity of employment: This was frequently discussed and included more job opportunities for young people, more opportunities for women including the over 50 years age bracket, and roles that are more skilled rather than offering predominantly traditional employment such as agriculture.

The lack of educational opportunities for youth: Participants frequently noted the loss of students to larger centres for tertiary education, both university and other training, as well as the lack of suitable employment for their qualifications for them to return to the Shire. There were also several references to improving the local schools, and one reference to the need for day care.

The need to invest and improve in local infrastructure: Investment in roads, power and building and asset maintenance is an ongoing expectation.

The local economy (financial resources) and funding; Securing funding from all levels of government was noted as a challenge. This included securing funding for new projects.

Attracting new and more diverse businesses and industries: Opportunities are identified in many industries including the renewables sector, timber sector, horticulture industry and allied health services.

Housing supply, affordability and rising living costs: Rental shortages leading to challenges in securing hosing for new residents including key workers is a noted concern.

Climate change and environmental challenges: Climate change will require adaptation strategies, which may include climate appropriate crops renewed focus on water grids for reliable supply for a more diversified agricultural sector, and mitigation strategies including more efficient transport systems, focus on renewable energy and vegetation conservation.

Local health services: Additional services required to support the needs of the community, including mental health and aged care support.

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4.3.2 Key Opportunities for Southern Grampians as identified in SG2041

Natural environment and wildlife: Better management and maintenance of the natural environment habit and wildlife were identified as significant opportunities when attracting new residents and tourists.

Tourism: Strategic investment into tourism, especially eco and nature-based tourism are opportunities to be pursued.

Location: Hamilton is situated at the intersection of three key highways. The Henty Highway connects Hamilton and the Municipality with Horsham and Portland. The Hamilton Highway links to Ballarat and the Glenelg Highway is the most direct east-west route from Melbourne to Mount Gambier and the Limestone Coast.

Agriculture: The agriculture sector is, and will likely remain, the cornerstone of the Shire's economy. Opportunities to improve farming practices will consolidate this strength.

Residents: The talent and skills of the existing community and their sense of community was a recurring theme.

Education: Participants acknowledged the high quality schools in the area, providing early learning to Year 12 schooling, as well as the opportunity to provide tertiary education options locally. See also technical training (e.g. SW TAFE) and agricultural college (RIST) training opportunities. The independent education sector is also strong across the Shire.

Liveability: The Shire scores highly with respect to liveability in areas including climate, community volunteering, median house price, use of active transport (walking, cycling) and sport participation.

Parks, gardens, sport facilities: Including bike/hike trails and sporting opportunities.

Cultural arts and local events: Including the existing Hamilton Art Gallery, Hamilton Performing Arts Centre and cultural facilities and the opportunity to create a cultural scene as a tourist attractor.

Hospital facilities: Existing hospital services were noted as an asset; however, this was coupled with the growing need for additional health services to cater for the community more fully.

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4.4 Asset Plan 2022-2032

In June 2022 Council adopted the Asset Plan which has been developed in accordance with the Integrated Strategic Planning and Reporting Framework.

The purpose of Council's Asset Plan is to;

- Demonstrate the responsible management of assets (and services provided from assets),
- Comply with regulatory requirements, and
- Communicate the scale of infrastructure investment required to sustainably deliver affordable services for the community in the foreseeable future.

The Asset Plan takes a long-term outlook (10+ years) across Council's assets with consideration to the strategic needs, conditions and financial capacity. It provides a view (both strategic and in financial terms) of how the Council proposes to manage the whole portfolio of assets that it owns and controls. The Plan includes a strategic framework outlining the resources required and activities to be commissioned to ensure assets under Council's stewardship are developed, renewed, or maintained to deliver the required service potential.

The Asset Plan and Financial Plan have a strong reciprocal relationship, and each transparently recognise their interdependencies.

The Asset Plan will be based on and clearly connected to the Financial Plan and underlying budgets and projections. Assumptions underpinning the Asset Plan should be transparent and linked to preparation of the Financial Plan, budgets, service standards, and major capital initiatives.

Specific asset management plans underpin the Asset Plan. As Council increases its maturity in asset management planning these asset management plans are being developed. While Council has maintained a Road Asset Management Plan with the current document relating to the period 2021–2025. Council is developing the Building Asset Management Plan incorporating Council's total building assets are valued at $48M and with the development of the Building Assets Management Plan Council and community will be better informed on the building renewal needs and capacity. The Long Term Financial Plan has taken this into account which will enable prioritisation of building compliance and needs.

As Councils asset management planning matures, Council will have a sound base of the risks and opportunities associated with managing its assets for the community's benefit which also defines assets which are beyond their useful life, redundant or no longer required. Similarly, the building asset management plan will inform Council of opportunities to meet compliance and determined needs.

Council has utilised existing data together with operational information to develop individual asset management plans specifically for roads, bridges, culvert, footpaths, buildings and swimming pool infrastructure to inform this version of the Financial Plan.

The full documents can be accessed here: https://www.sthgrampians.vic.gov.au/files/assets/public/v/1/council-documents/management-plans/adopted_asset_plan_2022-2032.pdf
https://www.sthgrampians.vic.gov.au/files/assets/public/v/1/council-documents/management-plans/sgsc-council-plan-21-25.pdf

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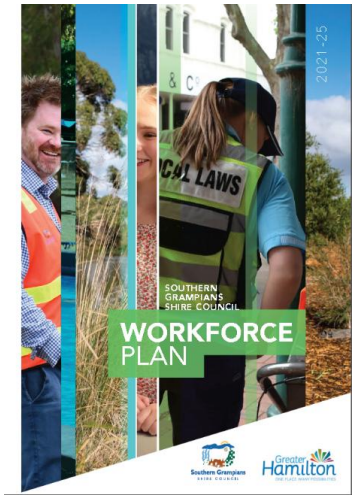
4.5 Workforce Plan 2021-2025



The Chief Executive Officer is responsible for establishing and maintaining an organisation structure for the Council and is also responsible for all staffing matters, including appointing, directing, managing and dismissing members of Council staff under s46(3)(a) and (b).

Under s 46(4) the Chief Executive Officer must develop and maintain a workforce plan that:

- describes the organisational structure of the Council
- specifies the projected staffing requirements for a period of at least 4-years, and
- sets out measures to seek to ensure gender equality, diversity, and inclusiveness.

Council revised its Workforce Plan under the new Integrated Strategic Planning and Reporting Framework (See Section 2) in late 2021. The plan is an internal document and as such is not adopted by Council, however Councillors, the Executive and staff were all participatory in its development and have access to the document.

Council is committed to deriving the following benefits from workforce planning:

- ✓ Recruiting, developing and deploying a highly skilled and diverse workforce to meet our future needs
- ✓ Positioning Council to be innovative, creative and outcome focused
- ✓ Improving productivity through better job design and resourcing decisions
- ✓ Reducing staff turnover and retaining top talent
- ✓ Building workforce capacity and capability
- ✓ Embedding a culture of diversity and inclusion.

The overall objective of the Workforce Plan is to identify current and future workforce development trends and requirements to enable proactive strategies that allow Council to deliver efficient services in the future.

The plan has a particular focus on strategies that relate to our aging workforce, workplace diversity, succession planning and the development of programs that address these challenges through education, training and development.

Through this Workforce Plan, Council is adopting a future-focused approach to the management of its people to ensure it is well positioned to meet future workforce requirements.

The challenges and pressures faced by local government as we transition to the workplace of the future will:

- Significantly impact how we communicate, collaborate and organise our workforce
- Require a major shift in management practices and skillsets
- Require significant workplace relations and HR policy reform;
- Require a different approach to attracting, retaining and engaging talent
- Require capacity building of the core workforce and flexibility in accessing alternate resourcing options

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4.6 Budget (4 Year Budget)

Council adopted its 4 year Budget for the 2023-2024 year on 21 June 2023 and is currently developing its 2024-2025 in conjunction with this document. This budget has been framed utilising the following parameters and assumptions:

- ✓ *Council Plan* – funding, initiatives and indicators are aligned with the 2021-2025 plan. Section 4.2 of this document provides a summary of the Plan.
- ✓ *Community Vision 2041* – this new piece of work was adopted in late 2021. This document helps to frame future directions and therefore budgets, which underpin this Long Term Financial Plan. Section 4.3 of this document provides a summary of the Vision.
- ✓ *Asset Plan* – This document outlines the need for responsible management of assets and services provided from assets, compliance with regulatory requirements and communication of the scale of infrastructure investment required to sustainably deliver affordable services for the community in the foreseeable future. This Asset Plan was adopted in 2022 and spans the period from 2022 until 2032.
- ✓ *The Workforce Plan* – this document has been in place for a number of years and was most recently updated in December 2021. It provides an organisational roadmap for the workforce. It details the challenges and actions required to meeting future requirements, enabling delivery of programs and services set out in the Council Plan. Section 4.5 of this document provides a summary of the Plan.

This Long Term Financial Plan has been built on the assumptions used for the development of the 2025-2026 four Year Budget and it is recognised that this requires continual review as Councils maturity of data gathering and interpretation increases. Whilst the plan has a 10 year outlook, Council's approach is to review annually to capture new information as it becomes available or is refined to provide a more accurate basis for decision making.

Council continues on its path of amending and identifying strategies, initiatives and indicators to provide new parameters (where necessary) to guide both the Long Term Financial Plan and subsequent 4 year budgets.

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The 2024-2025 Budget published the following 5 themes and relevant strategic objectives from the 2021-2025 Council Plan:

Theme	Strategic Objectives
1. Support our Community	1.1 An empowered and connected community. 1.2 Support and promote a healthy community. 1.3 Grow a diverse and inclusive community. 1.4 A safe community.
2. Grow our Regional Economy	2.1 Drive economic growth. 2.2 Increase our regional profile. 2.3 Continue to support the development of a skilled workforce 2.4 Support local business and community.
3. Maintain and Renew our Infrastructure	3.1 Plan and maintain sustainable assets and infrastructure. 3.2 Safe and well-maintained transport routes and infrastructure for all modes of travel. 3.3 Attractive Council-owned and managed community and open spaces.
4. Protect our Natural Environment	4.1 Protect and enhance biodiversity including the health of waterways, wetlands, soil and air. 4.2 Balance environmental protection with Council's support for growth. 4.3 Sustainable waste management services. 4.4 Mitigate against and adapt to climate change.
5. Provide Strong Governance and Leadership	5.1 Transparent and accountable governance. 5.2 Effective advocacy. 5.3 Committed and skilled staff. 5.4 Customer focused services.

For the 2025-2026 year, there are 36 Major and Minor initiatives identified through this review process to guide the delivery of Council services and are identified within the Budget.

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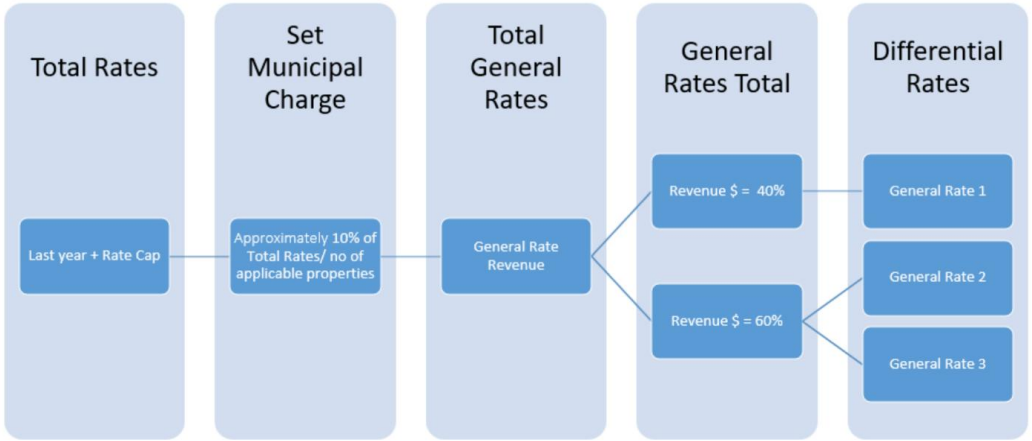
4.7 Revenue and Rating Plan 2025-2026 to 2028-2029

4.7.1 Revenue Planning

The Local Government Act 2020 requires that each council prepare a Revenue and Rating Plan covering a minimum of four years following each Council election. This forms part of the Integrated Strategic Planning and Reporting Framework outlined in the Local Government Better Practice Guide Revenue and Rating Strategy. The plan outlines the revenue-raising framework that the Council intends to operate within.



4.7.2 Rate Revenue

Rate Revenue makes up approximately 50% of Council's recurrent revenue (excluding capital grants). Until the 2021-2022, Council had a rating model which (generally speaking) saw properties outside the parishes of North and South Hamilton having a differential rate at 80% of the properties within those parishes.

The change in rating policy in 2021-2022 meant that the properties (generally speaking) within the parishes of North and South Hamilton would contribute 40% of the total rate revenue required by Council and those properties (generally speaking) outside the parishes of North and South Hamilton would contribute 60% of the total rate revenue required by Council.

4.7.3 Operating Grants

Operating grants are the next highest source of funding making up approximately 20% of recurrent revenue. These grants are set by other levels of government and Council has no real input into these amounts. Generally speaking the rate at which operating grants increase is around 2%.

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4.7.4 Other Revenue

Items of other revenue (which makes up the remaining approximately 30% of recurrent revenue) include Statutory & User Fees. Capital Grants and asset sales are highly variable and budgeted around specific projects and confirmed actions.

4.7.5 Loan Funds

Council has maintained a conservative loan portfolio to the current point in time, however with low interest rates and an ambitious capital works program, Council will need to leverage more funding to assist with funding long term inter-generational assets. Council has prepared a borrowing program for the next 10 years, however this will be reviewed each year in line with this plan as estimated values and assumptions are updated.

5. Financial Plan – Sustainable Model - Discussion

5.1 Level of Service Discussion

5.1.1 General Assumptions

Council provides approximately 70 services to the community and they all come at a varying cost to Council. Balancing which service and at what cost is extremely difficult and different people, groups of people, organisations, etc all have individual viewpoints on what this mix should be.

Once the mix of services is agreed, the decision about the mode, quantity and quality of the service has to be decided and costed. Funding and contributions to costs have to be examined as well as assets required to deliver the service.

The ever-changing environment we live in also impacts on preferences, functionality and accessibility of these services – never more so that in the past few years where every service offered by Council has had some form of change to the way it is delivered and communicated to the community.

Decisions about each service impacts on the culmination of budget allocations over both short and long term. Some services evolve and grow over time whilst others diminish or are only required in the short term to fill a gap not provided by another level of government.

Council must ensure that all services provided are in alignment with their long term plans and hence the development of Vision 2041, the Council Plan and Health and Wellbeing plan. Whilst these plans might not mention specific services in them, the services themselves need to be able to link to these plans and support or grow these long term visions, otherwise the question needs to be: why is the service being provided if not to support the common vision?

5.1.2 Specific Assumptions

Both this LTFP and the adopted 2025-2026 Budget have assumed a set level of service and determined budgets in accordance with these levels of service. Assets are utilised in assisting with achieving the service outcomes and modelling of asset renewal has been based on these existing levels of service.

As Council matures along the Integrated Planning and Reporting Framework journey, these levels of service, alignment to the Vision with supporting budgets and asset plans will also become more informative and insightful, guiding robust decisions backed by evidence.

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Council is also aware that whilst some services may show cash surpluses, when overlaid with the true cost of corporate overheads and the assets required to deliver the service, these cash surpluses are actually operational deficits.

Whilst each year during budget development, each service is reviewed at a high level, there are number of “triggers” that lead to more in depth service reviews. Triggers include factors such as legislative change, external funding changes, ability to deliver the service (absence of workforce skill/availability), and asset deterioration/obsolescence, to name a few. These are critical points to question whether Council is actually best placed to deliver this service to the community. Would exiting the service stimulate the local economy in a different way and eliminate Council expenditure?

Council is committed to reviewing all services as opportunities arise.

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5.2 Capital Works & Funding

5.2.1 Asset Renewal, Upgrade & Expansion

Council has long been working on the underlying assumption and planning that to maintain all of its existing assets in a safe and reliable state and renewing their condition at or prior to their agreed intervention levels, would require approximately $15m per annum. This amount excludes any improvements to the asset or expenditure on new assets.

Bearing in mind, that many assets are renewed to a "better" condition than their original state (eg roads are widened, timber bridges become steel and concrete, iron roof's become colour bond) and that if Council were to maintain this 100% renewal formulae, no other works could be afforded.

Instead Council has compromised and maintained "pure renewal" targeted at 80% with the remaining 20% being either captured in major funding opportunities or assets that will be renewed at a lower level than originally commissioned.

Unfortunately, external funding is almost always **only** available for new, upgraded or expanded assets. This creates difficulty for Council in two financial areas:

1. There is a funding gap between what Council would have allocated for the renewal of the asset and the cost of the upgrade work less any grant funding,
2. A new/expanded asset might offer some financial saving initially, but later in its life cycle, may cost more to maintain and more to renew – generally without any external funding assistance.

This gap between what Council **should** be spending on renewing their assets and what they are **actually** spending on renewing their assets is called the renewal gap.

5.2.2 Major Multi Year Projects & New Assets

Council has already committed to a number of large multi-year projects which are currently under planning and/or construction, for example the Redevelopment of Melville Oval.

Council has also carried out substantial investigative work with the community to develop strategic plans to guide what assets the community uses and values as part of their lifestyle. These plans are then translated in to work plans and incorporated into future budgets. Major capital projects included throughout the period of the Long Term Financial Plan include construction works for the Art Gallery, Community Hub, CBD revitalisation and Mill Road.

The key to this work is prioritising these projects across the longer term and ensuring that the best possible funding scenario is developed to minimise the impact on Council's bottom line. All projects need to be thoroughly supported by an evidence based business case that demonstrates both the costs and benefits to the community.

In a perfect world, an underlying assumption of all business cases would be that the investment in the asset would be outweighed by not only the imminent establishment expenditure but also the ongoing cost of maintaining the asset and ultimate renewal or removal at the end of its life. In Council's world, this would mean that very rarely would any asset be constructed. Instead Council must overlay what the "intangible" benefit will be to the community and make prudent financial decisions based on balance affordability with community desire.

5.2.3 Asset Maintenance

Council has a responsibility to maintain its assets. The level of maintenance is determined by a range of factors such as age, condition and use. As Councils asset management matures with increased validated data, clarity on roles and responsibilities particularly for shared assets and the associated priorities, Council's maintenance programs are better planned and delivered.

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5.3 Summary of Financial Assumptions

The following table details the assumptions used in the preparation of this version of the LTFP. Is should be noted that these are a snapshot as at a particular point in time and that these assumptions will be amended as more articulate data is available.

Lever	Current Model
Revenue	
Rate & Charges Increase	2025-2026 - 2.5% then 2.0% there after
Statutory Fees & Charges	2025-2026 4% then 2.5% for the remainder of the Plan
User Fees	2025-2026 4% then 3.5% for the remainder of the Plan
Grants – Operating	2.0% approximate level of increase from other levels of government
Grants – Capital	Roads To Recovery is a recurring grant, Local Roads & Community Infrastructure Program is a non recurrent grant and other have been modelled as anticipated and tied to the 10 Year Capital Plan
Contributions – Monetary	As per committed projects
Contributions – non-monetary	Not Modelled
Other Income	2025-2026 4% then 3.5% for the remainder of the Plan
Expenses	
Employee Costs	1% for the entirety of the Plan
Materials & Services	1% for the entirety of the Plan
Depreciation & Amortisation	As per asset portfolio
Other Expenses	1% for the entirety of the Plan
Capital Works	
Average Annual Asset Renewal – Infrastructure	80% renewal with an assumption that the remaining 20% is incorporated in specific upgrade or expansion projects
Average Annual Asset Renewal – Buildings	This fluctuates for the next 10 years as major building projects are implemented and will be further revised as more accurate modelling and decision around asset management are made.

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6. Summary

Council have reviewed all the preceding documents, their status, assumptions and outputs to develop its LTFP as part of the 2025-2026 budget process.

The following pages represent a set of financial statements for the coming 10 years based on the current financial assumptions – Section 5.3.

The first four years of these statements and the details of the underlying assumptions are clearly set out in the 2025-2026 Budget.

Now that the framework is almost complete, Council will analyse the outputs, set new parameters to guide financial sustainability (Section 5.4) and then reprioritise and re-work plans to fit into these new longer-term parameters.

This evolutionary cycle has been challenging; however, it has served the purpose of highlighting gaps in assumptions and plans and paves a way forward to refine each of the individual plans to improve alignment and consistency throughout the whole suite of documents available to the community.

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7. Financial Plan – Statements & Graphs

7.1 Model Financial Statements

7.1.1 Comprehensive Income Statement

Southern Grampians Shire Council
10 Year Financial Plan for the Years ending 30 June 2035
INCOME STATEMENT - GENERAL FUND

	Actuals	Current Year	Projected Years									
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35
	$	$	$	$	$	$	$	$	$	$	$	$
Income / Revenue												
Rates & Charges	23,452,000	24,456,808	25,103,141	25,892,670	26,410,523	26,938,733	27,477,508	28,027,058	28,587,599	29,159,351	29,742,538	30,337,389
Statutory Fees & Fines	615,000	474,069	499,140	511,619	524,409	537,519	550,957	564,731	578,849	593,321	608,154	623,357
User Fees	6,395,000	6,454,992	6,872,995	7,569,550	7,823,084	8,568,966	8,864,159	9,169,566	9,485,541	9,812,451	10,150,676	10,500,609
Grants - Operating	1,872,000	11,123,095	10,824,907	11,041,405	11,262,233	11,487,478	11,717,227	11,951,572	12,190,603	12,434,415	12,683,104	12,936,766
Grants - Capital	5,971,000	10,597,746	7,636,508	6,771,996	23,720,522	10,470,522	13,720,522	3,720,522	3,720,522	3,720,522	3,720,522	3,720,522
Contributions - Monetary	278,000	105,429	-	-	-	30,000,000	-	-	-	-	-	-
Contributions - Non-Monetary	145,000	-	-	-	-	-	-	-	-	-	-	-
Net Gain on Disposal of Assets	118,000	497,530	3,965,000	3,000,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Other Income	1,425,000	861,652	1,387,495	1,424,476	1,362,751	1,702,366	1,743,368	1,585,804	1,629,726	1,675,185	1,722,235	1,770,932
Total Income/ Revenue	**40,271,000**	**54,571,320**	**56,289,186**	**56,211,715**	**71,853,522**	**90,455,585**	**64,823,742**	**55,769,254**	**56,942,841**	**58,145,245**	**59,377,229**	**60,639,575**
Expenses												
Employee Costs	20,122,000	20,565,471	20,670,200	20,876,902	21,085,671	21,296,528	21,509,493	21,724,588	21,941,834	22,161,252	22,382,865	22,606,693
Materials & Services	10,828,000	15,652,360	15,738,072	16,096,363	16,259,526	16,431,973	16,606,334	16,782,636	16,960,901	17,141,155	17,323,422	17,507,730
Bad and doubtful debts - allowance for impairment losses	79,000	1,000	3,000	3,030	3,060	3,091	3,122	3,153	3,185	3,216	3,249	3,281
Depreciation	14,836,000	12,608,226	14,846,002	14,878,746	14,991,713	15,253,665	15,646,594	15,892,174	16,137,754	16,301,474	16,301,474	16,301,474
Borrowing Costs	42,000	20,929	341,223	560,422	674,553	621,286	548,256	764,102	849,808	707,997	515,348	303,919
Fair Value decrements on Investment Property	210,000	-	-	-	-	-	-	-	-	-	-	-
Other Expenses	6,941,000	1,277,034	833,614	835,890	844,249	852,692	861,218	869,831	878,529	887,314	896,187	905,149
Total Expenses	**53,058,000**	**50,125,020**	**52,432,111**	**53,251,353**	**53,858,773**	**54,459,234**	**55,175,018**	**56,036,484**	**56,772,010**	**57,202,409**	**57,422,545**	**57,628,247**
Surplus / (Deficit) for the year	**(12,787,000)**	**4,446,300**	**3,857,075**	**2,960,362**	**17,994,750**	**35,996,350**	**9,648,724**	**(267,230)**	**170,831**	**942,836**	**1,954,684**	**3,011,328**
Other Comprehensive Income												
Items that will not be reclassified to surplus or deficit in future periods												
Net Asset Revaluation Increment/(Decrement)	8,046,000	-	-	-	-	-	-	-	-	-	-	-
Total Other Comprehensive Income	**8,046,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Comprehensive Result	**(4,741,000)**	**4,446,300**	**3,857,075**	**2,960,362**	**17,994,750**	**35,996,350**	**9,648,724**	**(267,230)**	**170,831**	**942,836**	**1,954,684**	**3,011,328**

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7.1.2 Balance Sheet

Southern Grampians Shire Council
10 Year Financial Plan for the Years ending 30 June 2035
BALANCE SHEET - GENERAL FUND

	Actuals	Current Year	Projected Years									
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35
	$	$	$	$	$	$	$	$	$	$	$	$
ASSETS												
Current Assets												
Cash & Cash Equivalents	1,519,000	-	5,209,065	5,664,343	5,053,766	12,696,981	10,838,080	8,428,432	4,850,685	4,790,061	5,286,184	6,925,140
Trade & Other Receivables	5,781,000	3,829,830	4,463,714	4,585,658	4,750,976	5,059,996	5,199,857	4,974,129	5,085,393	5,199,714	5,317,183	5,437,890
Other Financial Assets	8,676,000	1,540,045	1,540,045	1,540,045	1,540,045	1,540,045	1,540,045	1,540,045	1,540,045	1,540,045	1,540,045	1,540,045
Inventories	342,000	534,299	523,279	534,388	539,672	545,244	550,879	556,575	562,335	568,159	574,048	580,002
Contract assets	93,000	93,000	93,000	93,000	93,000	93,000	93,000	93,000	93,000	93,000	93,000	93,000
Other Assets	326,000	477,134	468,135	478,851	483,805	489,873	495,281	500,565	506,110	511,724	517,409	523,166
Total Current Assets	16,737,000	6,474,308	12,297,238	12,896,285	12,461,264	20,425,139	18,717,141	16,092,747	12,637,568	12,702,703	13,327,867	15,099,243
Non-Current Assets												
Trade & Other Receivables	13,000	29,112	29,881	30,821	31,437	32,066	32,707	33,361	34,028	34,709	35,403	36,111
Inventories	-	38,250	38,250	38,250	38,250	38,250	38,250	38,250	38,250	38,250	38,250	38,250
Property, Infrastructure, Plant & Equipment	500,787,000	516,905,414	518,314,070	525,659,324	545,544,611	571,947,946	581,588,352	590,151,178	593,893,424	590,521,949	587,310,475	583,999,000
Right of use assets	103,000	103,000	103,000	103,000	103,000	103,000	103,000	103,000	103,000	103,000	103,000	103,000
Investment Property	690,000	690,000	690,000	690,000	690,000	690,000	690,000	690,000	690,000	690,000	690,000	690,000
Total Non-Current Assets	501,593,000	517,765,775	519,175,201	526,521,395	546,407,298	572,811,261	582,452,309	591,015,789	594,758,702	591,387,908	588,177,128	584,866,362
TOTAL ASSETS	**518,330,000**	**524,240,084**	**531,472,438**	**539,417,679**	**558,868,562**	**593,236,400**	**601,169,450**	**607,108,536**	**607,396,270**	**604,090,611**	**601,504,996**	**599,965,605**
LIABILITIES												
Current Liabilities												
Trade & Other Payables	5,201,000	4,153,859	4,110,024	4,202,072	4,249,008	4,308,808	4,360,015	4,409,494	4,462,150	4,515,551	4,569,710	4,624,641
Trust Funds & Deposits	452,000	452,000	452,000	452,000	452,000	452,000	452,000	452,000	452,000	452,000	452,000	452,000
Contract and other liabilities	379,000	76,924	81,906	90,206	93,228	102,116	105,634	109,274	113,039	116,935	120,966	125,136
Provisions	4,718,000	4,603,242	4,603,242	4,603,242	4,603,242	4,603,242	4,603,242	4,603,242	4,603,242	4,603,242	4,603,242	4,603,242
Interest-Bearing Liabilities	198,000	1,221,519	1,692,139	2,351,922	1,697,201	1,770,398	1,621,761	3,395,056	4,305,792	4,598,489	4,609,820	2,815,532
Lease Liabilities	41,000	103,000	41,031	41,031	41,031	41,031	41,031	41,031	41,031	41,031	41,031	41,031
Total Current Liabilities	10,989,000	10,610,544	10,980,341	11,740,472	11,135,709	11,277,595	11,183,682	13,010,097	13,977,254	14,327,248	14,396,768	12,661,582
Non-Current Liabilities												
Provisions	1,464,000	1,578,758	1,578,758	1,578,758	1,578,758	1,578,758	1,578,758	1,578,758	1,578,758	1,578,758	1,578,758	1,578,758
Interest-Bearing Liabilities	1,053,000	2,842,481	5,847,963	10,072,712	12,133,608	10,363,210	8,741,449	13,121,351	12,271,096	7,672,607	3,062,787	247,255
Lease Liabilities	62,000	-	-	-	-	-	-	-	-	-	-	-
Total Non-Current Liabilities	2,579,000	4,421,239	7,426,721	11,651,470	13,712,366	11,941,968	10,320,207	14,700,109	13,849,854	9,251,365	4,641,545	1,826,013
TOTAL LIABILITIES	**13,568,000**	**15,031,783**	**18,407,063**	**23,391,942**	**24,848,075**	**23,219,563**	**21,503,889**	**27,710,205**	**27,827,108**	**23,578,613**	**19,038,313**	**14,487,595**
Net Assets	**504,762,000**	**509,208,300**	**513,065,375**	**516,025,737**	**534,020,487**	**570,016,837**	**579,665,561**	**579,398,331**	**579,569,162**	**580,511,999**	**582,466,682**	**585,478,011**
EQUITY												
Accumulated Surplus	125,498,000	129,944,300	133,801,375	136,761,737	154,756,487	190,752,837	200,401,561	200,134,331	200,305,162	201,247,999	203,202,682	206,214,011
Reserves - Asset Revaluation	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000
Other Reserves	597,000	597,000	597,000	597,000	597,000	597,000	597,000	597,000	597,000	597,000	597,000	597,000
Total Equity	**504,762,000**	**509,208,300**	**513,065,375**	**516,025,737**	**534,020,487**	**570,016,837**	**579,665,561**	**579,398,331**	**579,569,162**	**580,511,999**	**582,466,682**	**585,478,011**

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7.1.3 Statement of Changes in Equity

Southern Grampians Shire Council
10 Year Financial Plan for the Years ending 30 June 2035
EQUITY STATEMENT - GENERAL FUND

	Actuals	Current Year	Projected Years									
	2023/24 $	2024/25 $	2025/26 $	2026/27 $	2027/28 $	2028/29 $	2029/30 $	2030/31 $	2031/32 $	2032/33 $	2033/34 $	2034/35 $
Total Equity												
Opening Balance	509,503,000	504,762,000	509,208,300	513,065,375	516,025,737	534,020,487	570,016,837	579,665,561	579,398,331	579,569,162	580,511,999	582,466,682
Surplus / (Deficit) for Year	(12,787,000)	4,446,300	3,857,075	2,960,362	17,994,750	35,996,350	9,648,724	(267,230)	170,831	942,836	1,954,684	3,011,328
Other Comprehensive Income												
- Net asset revaluation increment/(decrement)	8,046,000	-	-	-	-	-	-	-	-	-	-	-
Other Comprehensive Income	8,046,000	-	-	-	-	-	-	-	-	-	-	-
Total Comprehensive Income	(4,741,000)	4,446,300	3,857,075	2,960,362	17,994,750	35,996,350	9,648,724	(267,230)	170,831	942,836	1,954,684	3,011,328
Equity - Balance at end of the reporting period	**504,762,000**	**509,208,300**	**513,065,375**	**516,025,737**	**534,020,487**	**570,016,837**	**579,665,561**	**579,398,331**	**579,569,162**	**580,511,999**	**582,466,682**	**585,478,011**
Accumulated Surplus												
Opening Balance	138,311,000	125,498,000	129,944,300	133,801,375	136,761,737	154,756,487	190,752,837	200,401,561	200,134,331	200,305,162	201,247,999	203,202,682
Surplus / (Deficit) for Year	(12,787,000)	4,446,300	3,857,075	2,960,362	17,994,750	35,996,350	9,648,724	(267,230)	170,831	942,836	1,954,684	3,011,328
Total Comprehensive Income	(12,787,000)	4,446,300	3,857,075	2,960,362	17,994,750	35,996,350	9,648,724	(267,230)	170,831	942,836	1,954,684	3,011,328
Transfers to Other Reserves	(26,000)	-	-	-	-	-	-	-	-	-	-	-
Accumulated Surplus - Balance at end of the reporting period	**125,498,000**	**129,944,300**	**133,801,375**	**136,761,737**	**154,756,487**	**190,752,837**	**200,401,561**	**200,134,331**	**200,305,162**	**201,247,999**	**203,202,682**	**206,214,011**
Revaluation Reserve												
Opening Balance	370,621,000	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000	378,667,000
- Net asset revaluation increment/(decrement)	8,046,000	-	-	-	-	-	-	-	-	-	-	-
Other Comprehensive Income	8,046,000	-	-	-	-	-	-	-	-	-	-	-
Total Comprehensive Income	8,046,000	-	-	-	-	-	-	-	-	-	-	-
Revaluation Reserve - Balance at end of the reporting period	**378,667,000**	**378,667,000**	**378,667,000**	**378,667,000**	**378,667,000**	**378,667,000**	**378,667,000**	**378,667,000**	**378,667,000**	**378,667,000**	**378,667,000**	**378,667,000**
Other Reserves												
Opening Balance	571,000	597,000	597,000	597,000	597,000	597,000	597,000	597,000	597,000	597,000	597,000	597,000
Transfers from Accumulated Surplus	26,000	-	-	-	-	-	-	-	-	-	-	-
Other Reserves - Balance at end of the reporting period	**597,000**	**597,000**	**597,000**	**597,000**	**597,000**	**597,000**	**597,000**	**597,000**	**597,000**	**597,000**	**597,000**	**597,000**

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7.1.4 Statement of Cash Flows

Southern Grampians Shire Council
10 Year Financial Plan for the Years ending 30 June 2035
CASH FLOW STATEMENT - GENERAL FUND

	Actuals 2023/24 $	Current Year 2024/25 $	Projected Years 2025/26 $	2026/27 $	2027/28 $	2028/29 $	2029/30 $	2030/31 $	2031/32 $	2032/33 $	2033/34 $	2034/35 $
Cash Flows from Operating Activities												
Rates & Charges	23,620,000	24,274,255	25,034,758	25,809,137	26,355,734	26,882,848	27,420,505	27,968,915	28,528,294	29,098,860	29,680,837	30,274,453
Statutory Fees & Fines	590,000	569,069	499,140	511,619	524,409	537,519	550,957	564,731	578,849	593,321	608,154	623,357
User Fees	6,389,000	6,470,916	6,877,976	7,577,851	7,826,105	8,577,855	8,867,677	9,173,206	9,489,306	9,816,347	10,154,706	10,504,779
Grants - Operating	1,872,000	11,123,095	10,818,001	11,038,291	11,289,938	11,468,764	11,723,043	11,923,488	12,190,272	12,434,087	12,682,779	12,936,445
Grants - Capital	6,289,000	10,279,746	7,643,414	6,775,110	23,692,817	10,489,235	13,714,706	3,748,606	3,720,854	3,720,850	3,720,847	3,720,843
Contributions - Monetary	278,000	105,429	-	-	-	30,000,000	-	-	-	-	-	-
Interest Received	998,000	514,200	330,895	330,895	230,895	530,895	530,895	330,895	330,895	330,895	330,895	330,895
Trust Funds & Deposits Taken	65,000	-	-	-	-	-	-	-	-	-	-	-
Other Receipts	348,000	2,361,624	486,404	1,050,487	1,017,456	913,568	1,125,518	1,534,818	1,242,664	1,286,195	1,331,249	1,377,881
Net GST Refund/Payment	385,000	-	-	-	-	-	-	-	-	-	-	-
Employee Costs	(20,355,000)	(20,003,893)	(20,667,121)	(20,870,825)	(21,079,534)	(21,290,329)	(21,503,232)	(21,718,265)	(21,935,447)	(22,154,802)	(22,376,350)	(22,600,113)
Materials & Services	(11,771,000)	(17,635,323)	(15,755,041)	(16,031,504)	(16,228,771)	(16,388,962)	(16,572,097)	(16,750,307)	(16,925,578)	(17,105,273)	(17,286,970)	(17,470,695)
Short-term, low value and variable lease payments	(59,000)	(69,244)	(65,500)	(66,155)	(66,817)	(67,485)	(68,160)	(68,841)	(69,530)	(70,225)	(70,927)	(71,636)
Trust Funds & Deposits Repaid	-	-	-	-	-	-	-	-	-	-	-	-
Other Payments	(7,414,000)	(1,207,790)	(777,114)	(769,735)	(777,433)	(785,207)	(793,059)	(800,989)	(808,999)	(817,089)	(825,260)	(833,513)
Net Cash provided (or used in) Operating Activities	1,235,000	16,782,084	14,425,812	15,355,170	32,784,801	50,868,702	24,996,754	15,906,257	16,341,580	17,133,164	17,949,959	18,792,696
Cash Flows from Investing Activities												
Payments for Property, Infrastructure, Plant & Equipment	(18,654,000)	(28,726,640)	(16,254,658)	(22,224,000)	(34,877,000)	(41,657,000)	(25,287,000)	(24,455,000)	(19,880,000)	(12,930,000)	(13,090,000)	(12,990,000)
Proceeds from Sale of Property, Infrastructure, Plant & Equipment	202,000	497,530	3,965,000	3,000,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Payments for Investments	(210,000)	-	-	-	-	-	-	-	-	-	-	-
Proceeds from Sale of Investments	10,961,000	7,135,955	-	-	-	-	-	-	-	-	-	-
Net Cash provided (or used in) Investing Activities	(7,701,000)	(21,093,155)	(12,289,658)	(19,224,000)	(34,127,000)	(40,907,000)	(24,537,000)	(23,705,000)	(19,130,000)	(12,180,000)	(12,340,000)	(12,240,000)
Cash Flows from Financing Activities												
Finance Costs	(42,000)	(20,929)	(341,223)	(560,422)	(674,553)	(621,286)	(548,256)	(764,102)	(849,808)	(707,997)	(515,348)	(303,919)
Proceeds from Borrowings	-	3,000,000	5,000,000	7,000,000	4,000,000	-	-	9,000,000	4,000,000	-	-	-
Repayments of Borrowings	(577,000)	(187,000)	(1,523,898)	(2,115,469)	(2,593,825)	(1,697,201)	(1,770,398)	(2,846,803)	(3,939,519)	(4,305,792)	(4,598,489)	(4,609,820)
Repayment of Lease Liabilities	-	-	(61,969)	-	-	-	-	-	-	-	-	-
Net Cash Flow provided (used in) Financing Activities	(619,000)	2,792,071	3,072,911	4,324,109	731,623	(2,318,487)	(2,318,654)	5,389,095	(789,327)	(5,013,788)	(5,113,837)	(4,913,739)
Net Increase/(Decrease) in Cash & Cash Equivalents	(7,085,000)	(1,519,000)	5,209,065	455,279	(610,577)	7,643,215	(1,858,901)	(2,409,648)	(3,577,747)	(60,624)	496,122	1,638,957
plus: Cash & Cash Equivalents - beginning of year	8,604,000	1,519,000	(0)	5,209,065	5,664,343	5,053,766	12,696,981	10,838,080	8,428,432	4,850,685	4,790,061	5,286,184
Cash & Cash Equivalents - end of the year	**1,519,000**	**(0)**	**5,209,065**	**5,664,343**	**5,053,766**	**12,696,981**	**10,838,080**	**8,428,432**	**4,850,685**	**4,790,061**	**5,286,184**	**6,925,140**
Cash & Cash Equivalents - end of the year	1,519,000	(0)	5,209,065	5,664,343	5,053,766	12,696,981	10,838,080	8,428,432	4,850,685	4,790,061	5,286,184	6,925,140
Investments - end of the year	8,676,000	1,540,045	1,540,045	1,540,045	1,540,045	1,540,045	1,540,045	1,540,045	1,540,045	1,540,045	1,540,045	1,540,045
Cash, Cash Equivalents & Investments - end of the year	**10,195,000**	**1,540,045**	**6,749,109**	**7,204,388**	**6,593,811**	**14,237,026**	**12,378,125**	**9,968,477**	**6,390,730**	**6,330,106**	**6,826,228**	**8,465,185**
Representing:												
- Cash Restrictions	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
- Unrestricted	5,195,000	(3,459,955)	1,749,109	2,204,388	1,593,811	9,237,026	7,378,125	4,968,477	1,390,730	1,330,106	1,826,228	3,465,185
	10,195,000	**1,540,045**	**6,749,109**	**7,204,388**	**6,593,811**	**14,237,026**	**12,378,125**	**9,968,477**	**6,390,730**	**6,330,106**	**6,826,228**	**8,465,185**

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7.1.5 Statement of Capital Works

Southern Grampians Shire Council
10 Year Financial Plan for the Years ending 30 June 2035
STATEMENT OF CAPITAL WORKS - GENERAL FUND

	Actuals	Current Year	Projected Years									
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35
	$	$	$	$	$	$	$	$	$	$	$	$
Property												
Land												
Land	931,000	534,776	-	-	-	-	-	-	-	-	-	-
Total Land (excluding WIP)	931,000	534,776	-	-	-	-	-	-	-	-	-	-
Buildings												
Buildings	6,360,000	7,944,865	2,560,000	6,950,000	16,250,000	24,050,000	15,250,000	15,050,000	10,250,000	1,000,000	1,000,000	1,000,000
Total Buildings (excluding WIP)	6,360,000	7,944,865	2,560,000	6,950,000	16,250,000	24,050,000	15,250,000	15,050,000	10,250,000	1,000,000	1,000,000	1,000,000
Total Property (excluding WIP)	7,291,000	8,479,641	2,560,000	6,950,000	16,250,000	24,050,000	15,250,000	15,050,000	10,250,000	1,000,000	1,000,000	1,000,000
Plant & Equipment												
Heritage Plant & Equipment	-	-	-	-	-	-	-	-	-	-	-	-
Plant, Machinery & Equipment	824,000	2,348,260	1,900,000	1,500,000	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000	1,800,000	1,800,000	1,800,000
Fixtures, Fittings & Furniture	-	-	44,358	-	-	-	-	-	-	-	-	-
Computers & Telecommunications	110,000	50,000	25,000	40,000	85,000	50,000	55,000	20,000	20,000	20,000	55,000	55,000
Library Books	71,000	70,733	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000
Other Plant & Equipment	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Total Plant & Equipment (excluding WIP)	1,020,000	2,483,993	2,054,358	1,625,000	1,470,000	1,435,000	1,440,000	1,405,000	1,405,000	1,905,000	1,940,000	1,940,000
Infrastructure												
Roads	5,062,000	7,566,551	7,143,000	5,938,000	6,042,000	6,042,000	6,042,000	6,000,000	6,000,000	7,000,000	7,000,000	7,000,000
Bridges	73,000	570,720	405,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000
Footpaths & Cycleways	856,000	814,887	460,000	50,000	50,000	50,000	50,000	50,000	50,000	250,000	250,000	250,000
Drainage	97,000	635,727	120,000	400,000	400,000	400,000	200,000	200,000	200,000	400,000	400,000	400,000
Recreational, Leisure & Community Facilities	781,000	2,237,161	2,180,000	1,681,000	1,085,000	50,000	600,000	50,000	400,000	200,000	550,000	200,000
Waste Management	250,000	1,091,551	597,300	-	-	-	40,000	25,000	-	-	-	-
Parks, Open Space & Streetscapes	2,547,000	4,234,183	665,000	4,030,000	8,030,000	8,030,000	30,000	25,000	25,000	25,000	-	50,000
Aerodromes	4,000	-	-	-	-	-	60,000	100,000	-	-	-	-
Off Street Car Parks	3,000	454,584	-	-	-	50,000	25,000	-	-	-	-	-
Other Infrastructure	159,000	157,642	70,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,700,000	1,500,000	1,700,000
Total Infrastructure (excluding WIP)	9,832,000	17,763,006	11,640,300	13,649,000	17,157,000	16,172,000	8,597,000	8,000,000	8,225,000	10,025,000	10,150,000	10,050,000
Total Capital Works Expenditure	**18,143,000**	**28,726,640**	**16,254,658**	**22,224,000**	**34,877,000**	**41,657,000**	**25,287,000**	**24,455,000**	**19,880,000**	**12,930,000**	**13,090,000**	**12,990,000**
Represented by:												
New Asset Expenditure	2,530,000	2,494,528	4,045,000	5,420,000	16,020,000	14,020,000	220,000	15,000	15,000	165,000	15,000	15,000
Asset Renewal Expenditure	12,089,000	16,428,734	11,209,658	15,304,000	18,807,000	17,637,000	10,067,000	9,440,000	9,865,000	12,765,000	13,075,000	12,975,000
Asset Expansion Expenditure	-	-	-	-	-	-	-	-	-	-	-	-
Asset Upgrade Expenditure	3,524,000	9,803,378	1,000,000	1,500,000	50,000	10,000,000	15,000,000	15,000,000	10,000,000	-	-	-
Total Capital Works Expenditure	**18,143,000**	**28,726,640**	**16,254,658**	**22,224,000**	**34,877,000**	**41,657,000**	**25,287,000**	**24,455,000**	**19,880,000**	**12,930,000**	**13,090,000**	**12,990,000**
Funding sources represented by:												
Grants		10,597,746	7,636,508	6,771,996	23,720,522	10,470,522	13,720,522	3,720,522	3,720,522	3,720,522	3,720,522	3,720,522
Contributions		-	-	-	-	-	-	-	-	-	-	-
Reserves		-	-	-	-	-	-	-	-	-	-	-
Borrowings		3,000,000	5,000,000	7,000,000	4,000,000	-	-	9,000,000	4,000,000	-	-	-
Proceeds from assets (except investments)		497,530	-	-	-	-	-	-	-	-	-	-
Council cash (general revenue)		14,631,364	3,618,150	8,452,004	7,156,478	31,186,478	11,566,478	11,734,478	12,159,478	9,209,478	9,369,478	9,269,478
Total Capital Works Expenditure		**28,726,640**	**16,254,658**	**22,224,000**	**34,877,000**	**41,657,000**	**25,287,000**	**24,455,000**	**19,880,000**	**12,930,000**	**13,090,000**	**12,990,000**

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7.1.6 Statement of Human Resources

Southern Grampians Shire Council
10 Year Financial Plan for the Years ending 30 June 2035
STATEMENT OF HUMAN RESOURCES - GENERAL FUND

	Actuals	Current Year	Projected Years									
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35
Staff expenditure	$	$	$	$	$	$	$	$	$	$	$	$
Staff expenditure												
Employee costs - operating	20,122	20,565	20,670	20,878	21,086	21,297	21,509	21,725	21,942	22,161	22,383	22,607
Employee costs - capital	2,025	3,026	2,857	2,375	2,416	2,416	2,416	2,400	2,400	2,800	2,800	2,800
Total staff expenditure	22,147	23,591	23,527	23,253	23,502	23,713	23,925	24,125	24,342	24,961	25,183	25,407
Staff numbers	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE
Staff numbers												
Employees	225	232	232	232	232	232	232	232	232	232	232	232
Total staff numbers	225	232	232	232	232	232	232	232	232	232	232	232

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7.1.7 Financial Indicators (Ratios)

Southern Grampians Shire Council
10 Year Financial Plan for the Years ending 30 June 2035
FINANCIAL PERFORMANCE INDICATORS

	Current Year	Projected Years									
	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35
Operating Position											
Adjusted Underlying Result	-9.55%	-7.85%	-6.05%	-5.39%	-2.12%	-2.04%	-1.85%	-1.03%	0.34%	2.05%	3.78%
Liquidity											
Working Capital	61.02%	111.99%	109.84%	111.90%	181.11%	167.36%	123.69%	90.42%	88.66%	92.58%	119.25%
Unrestricted Cash	14.51%	61.47%	61.36%	59.21%	126.24%	110.68%	76.62%	45.72%	44.18%	47.42%	66.86%
Obligations											
Loans and Borrowings (compared to Rates)	16.62%	30.04%	47.99%	52.37%	45.04%	37.72%	58.93%	57.99%	42.08%	25.80%	10.10%
Loans and Borrowings Repayments (compared to Rates)	0.85%	7.43%	10.33%	12.38%	8.61%	8.44%	12.88%	16.75%	17.19%	17.19%	16.20%
Indebtedness	13.46%	19.63%	30.34%	37.19%	17.43%	26.20%	36.66%	33.75%	22.03%	10.80%	4.15%
Asset Renewal	208.06%	82.24%	112.94%	125.78%	181.18%	160.21%	153.79%	123.10%	78.31%	80.21%	79.59%
Stability											
Rates Concentration	53.34%	51.64%	51.57%	51.68%	32.57%	50.81%	50.94%	50.87%	50.80%	50.73%	50.66%
Rates Effort	0.27%	0.28%	0.29%	0.30%	0.30%	0.31%	0.32%	0.32%	0.33%	0.33%	0.34%
Efficiency											
Expenditure Level	$ 5,163	$ 5,403	$ 5,488	$ 5,550	$ 5,612	$ 5,686	$ 5,775	$ 5,850	$ 5,895	$ 5,917	$ 5,939
Revenue Level	$ 2,184	$ 2,267	$ 2,323	$ 2,370	$ 2,417	$ 2,466	$ 2,515	$ 2,565	$ 2,616	$ 2,669	$ 2,722

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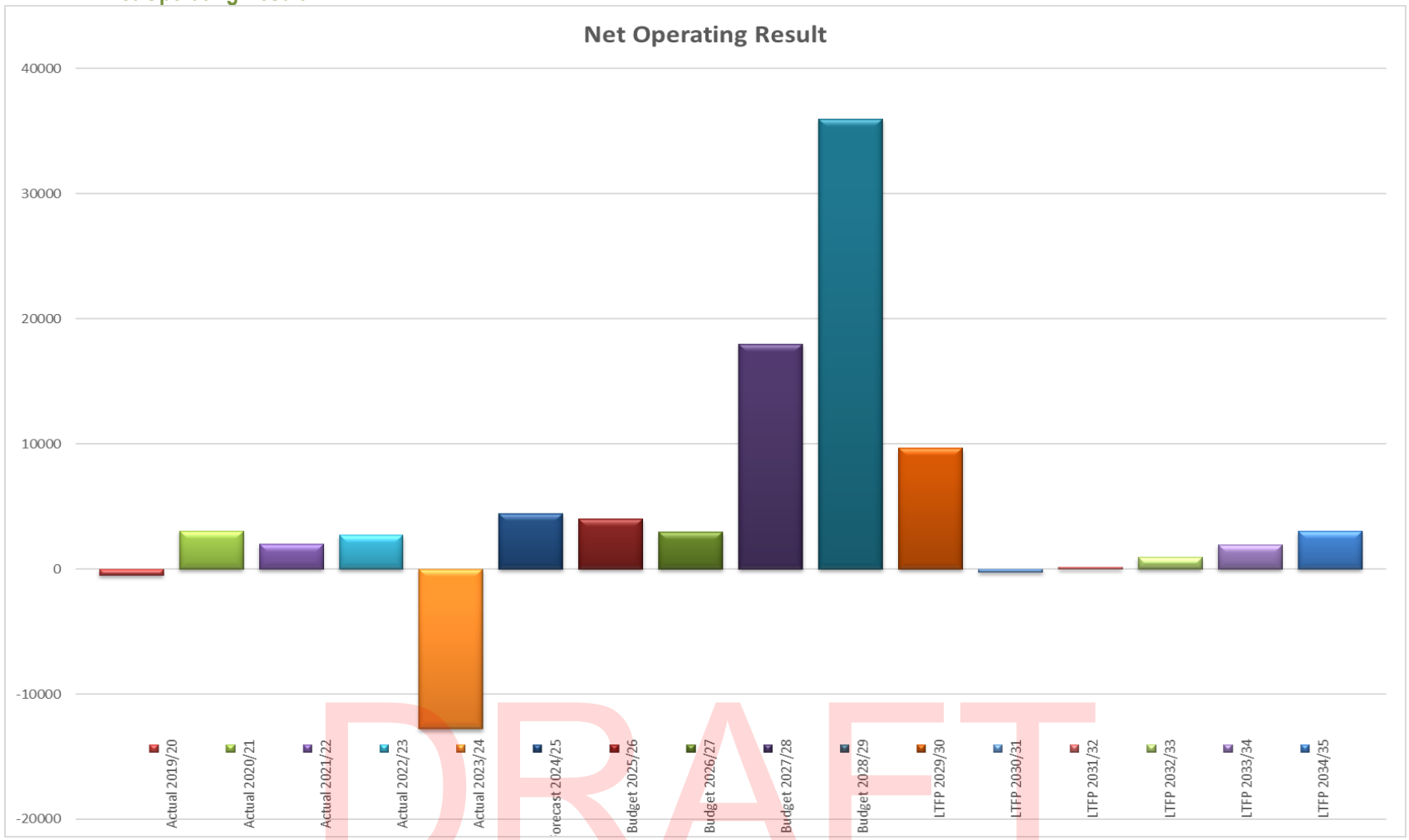
7.2 Graphs

7.2.1 Net Operating Result



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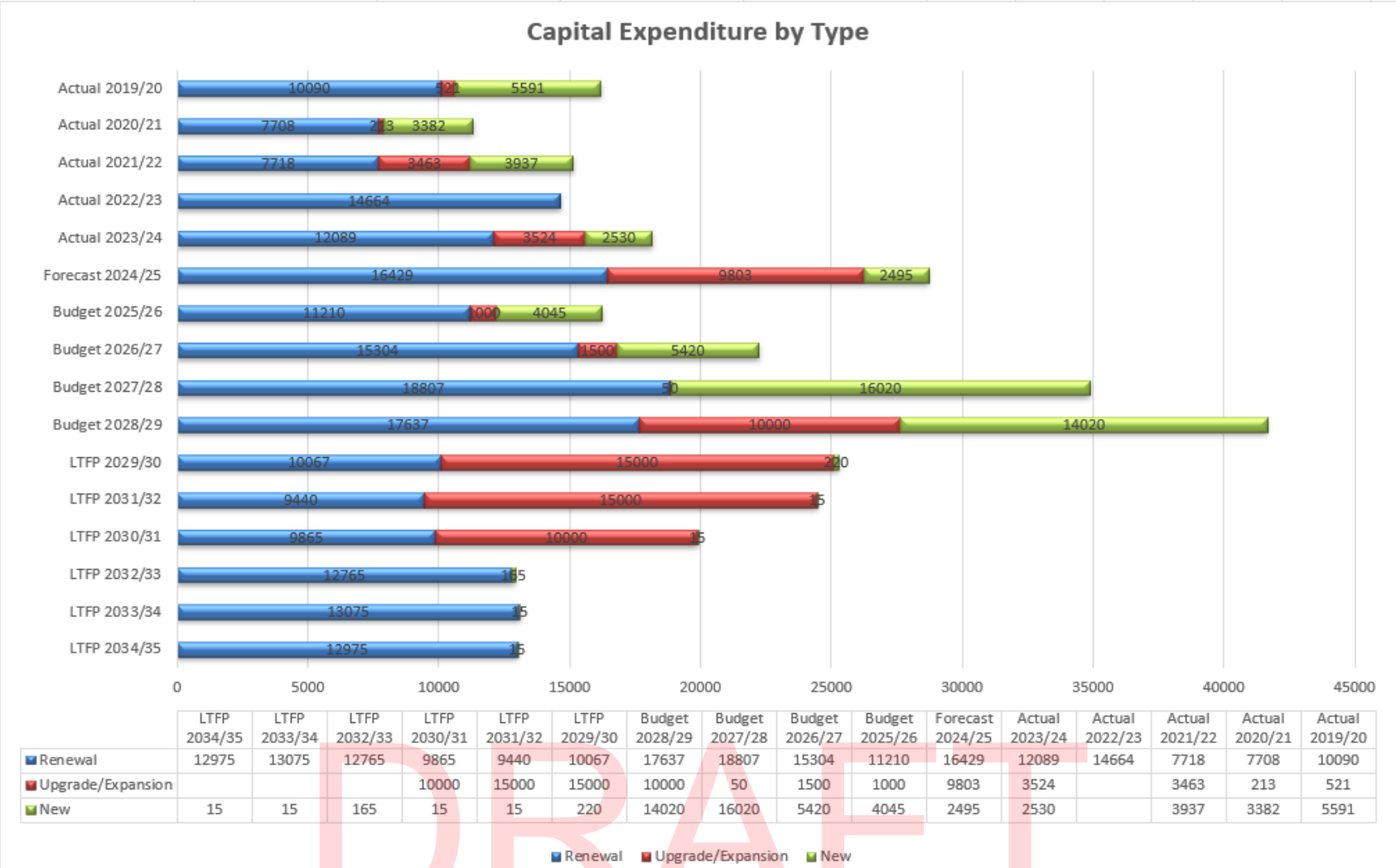
7.2.2 Capital Expenditure by Type



	LTFP 2034/35	LTFP 2033/34	LTFP 2032/33	LTFP 2030/31	LTFP 2031/32	LTFP 2029/30	Budget 2028/29	Budget 2027/28	Budget 2026/27	Budget 2025/26	Forecast 2024/25	Actual 2023/24	Actual 2022/23	Actual 2021/22	Actual 2020/21	Actual 2019/20
Renewal	12975	13075	12765	9865	9440	10067	17637	18807	15304	11210	16429	12089	14664	7718	7708	10090
Upgrade/Expansion				10000	15000	15000	10000	50	1500	1000	9803	3524		3463	213	521
New	15	15	165	15	15	220	14020	16020	5420	4045	2495	2530		3937	3382	5591

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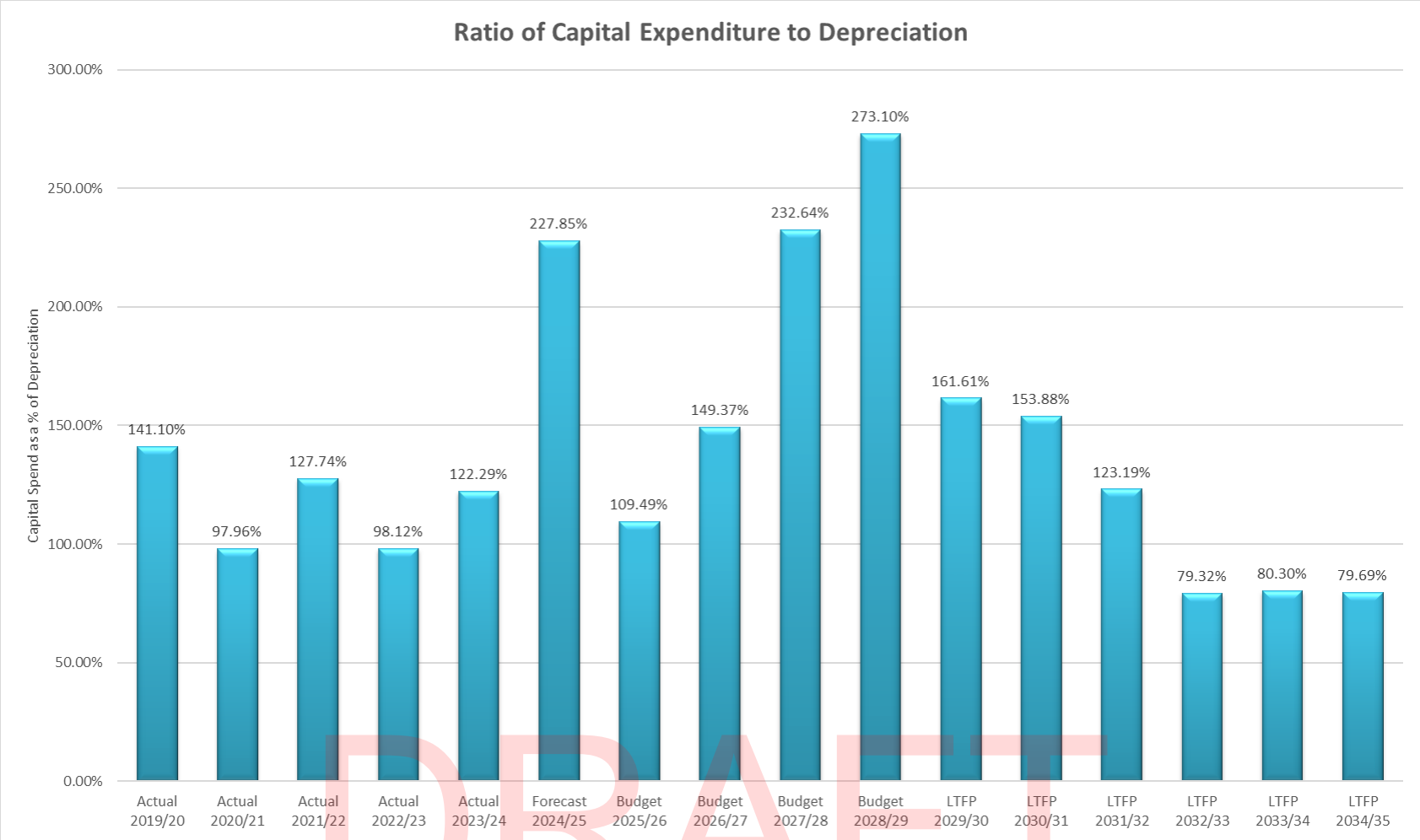
7.2.3 Capital Expenditure compared to Depreciation Expense



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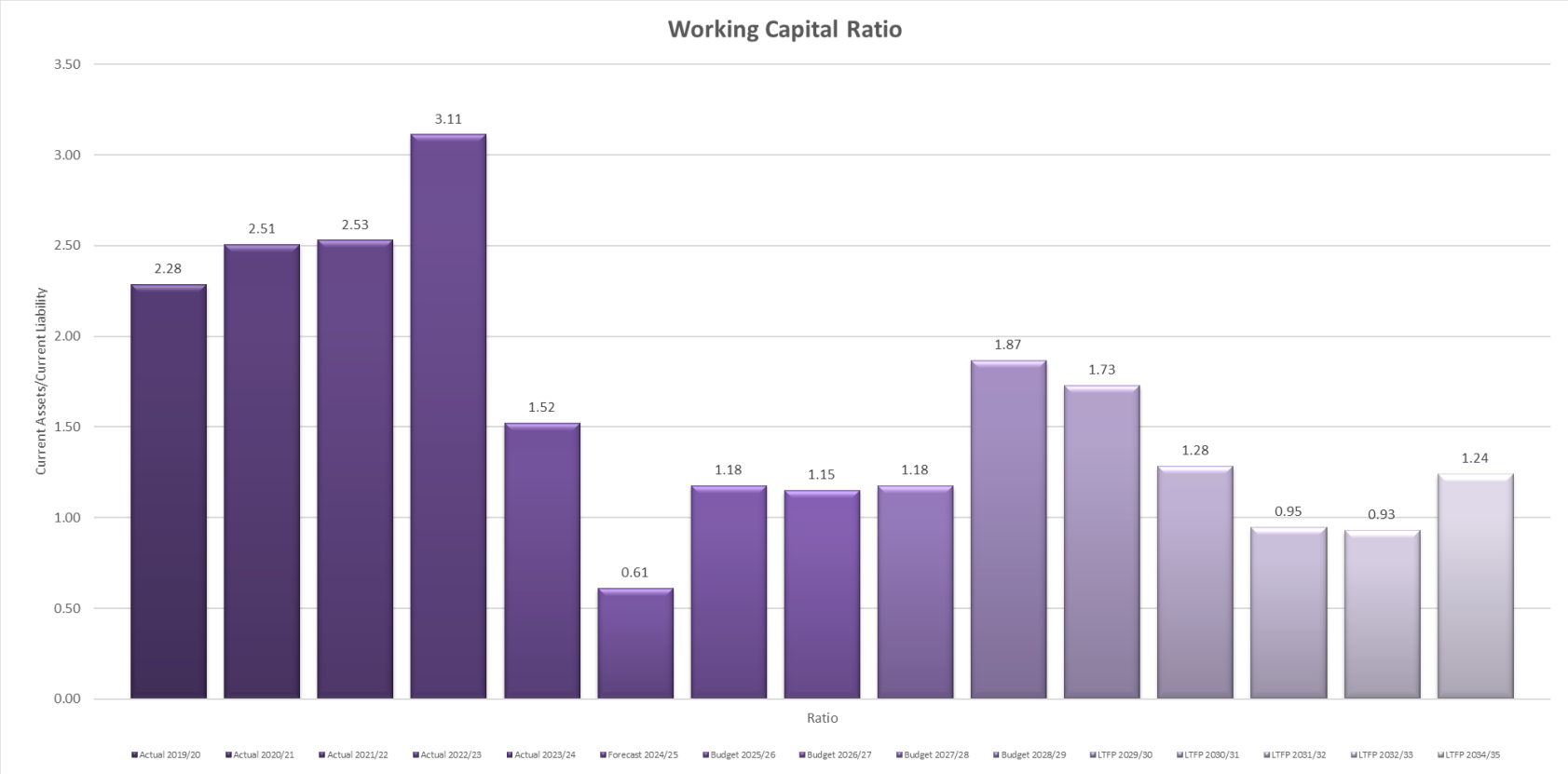
7.2.4 Working Capital Ratio



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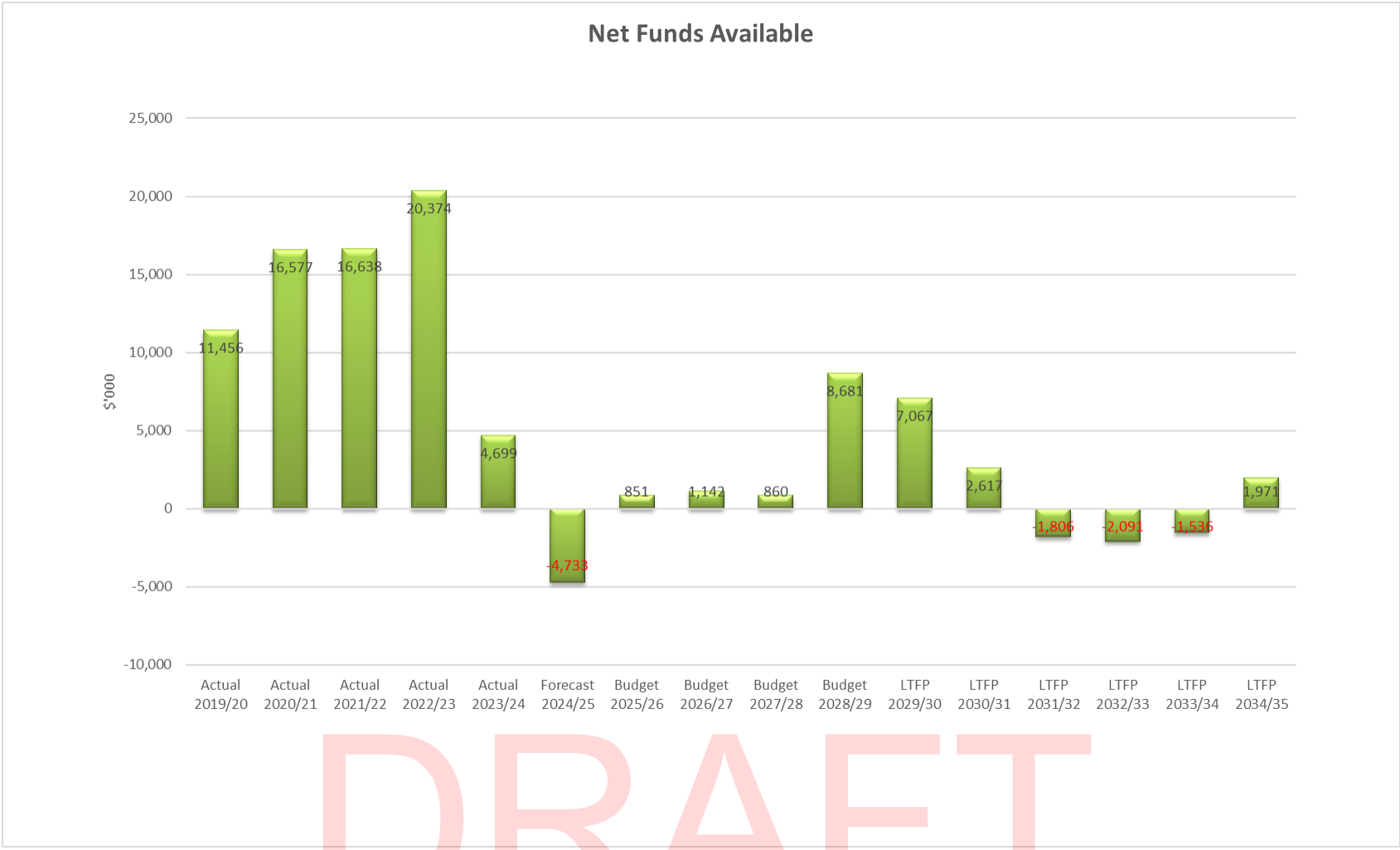
7.2.5 Net Funds Available



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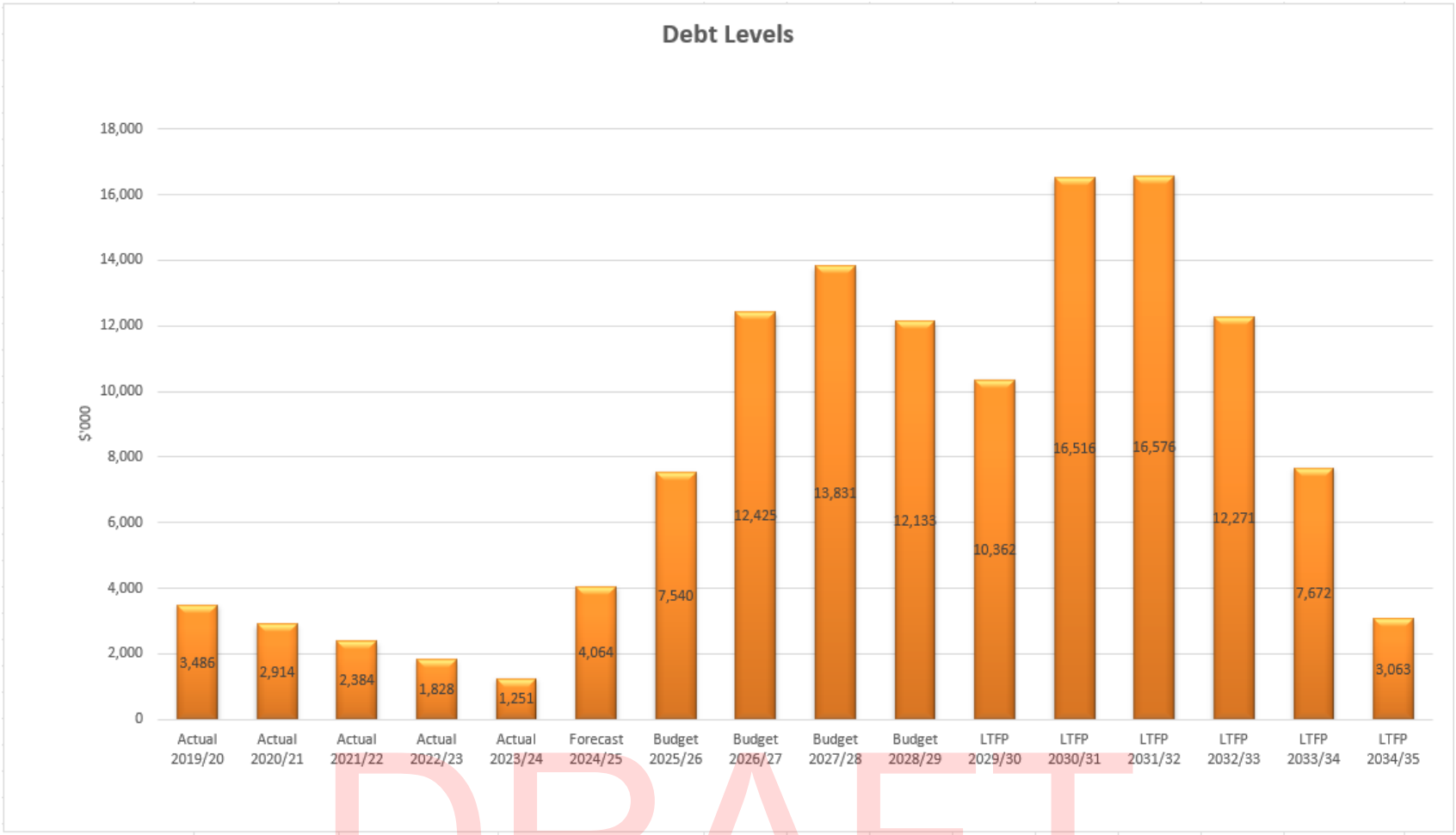
7.2.6 Debt Levels



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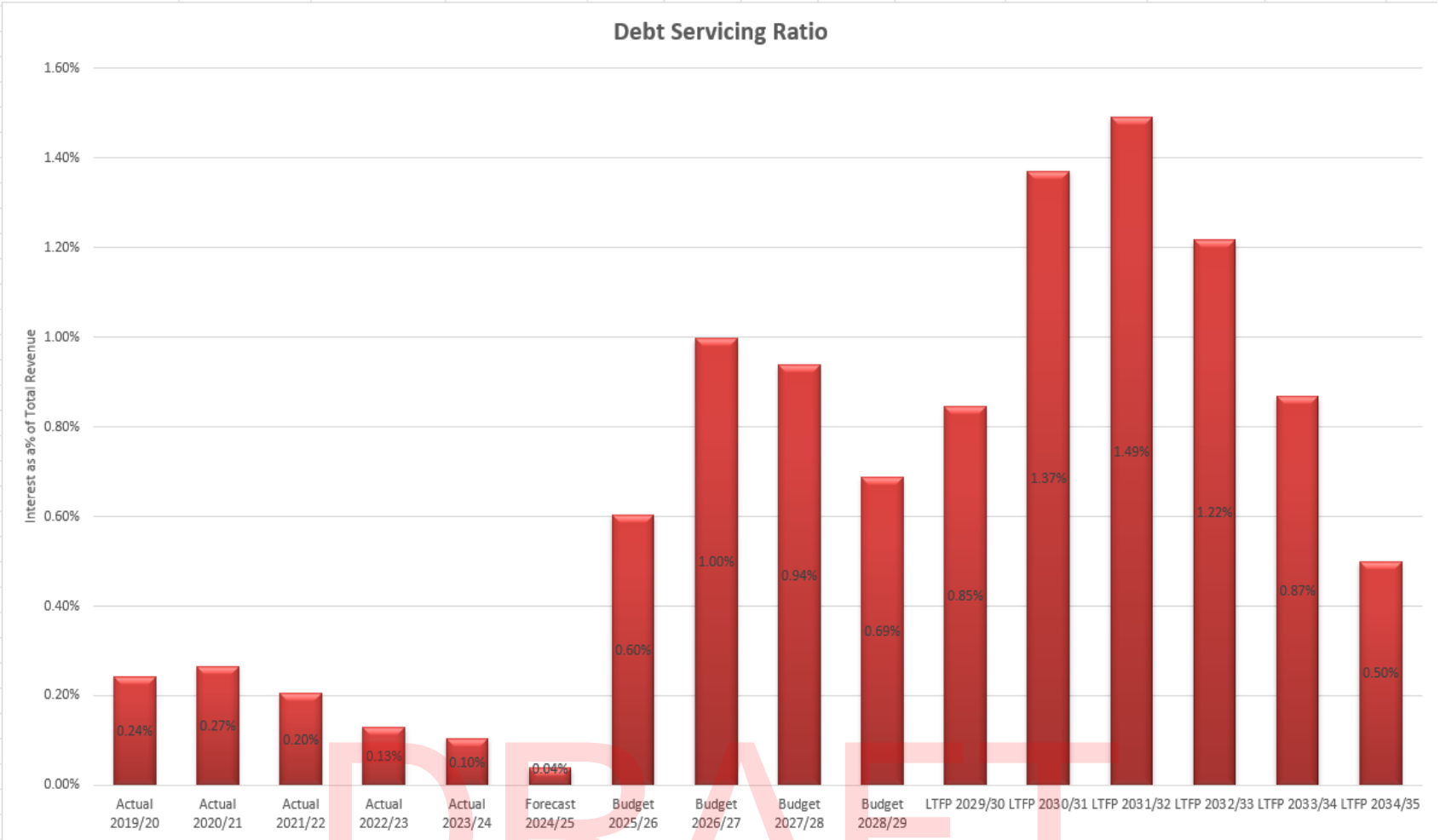
7.2.7 Debt Servicing



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Southern Grampians
SHIRE COUNCIL

Pricing Register

Public Document

2025/26

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Notification of Values of Fee and Penalty Units

Victorian Government departments and agencies charge fees for services and regulatory purposes, including licensing and registering certain activities, and fine for improper conduct and to discourage unlawful behaviour. Fees and fines are officially set and revised by legislation relevant to their application.

Under section 6 of the Monetary Units Act 2004, the values of fee and penalty units for the financial year commencing 01 July 2025 are as follows:

a) the value of the fee unit is $16.81
b) the value of the penalty unit is $203.51

These are subject to change by the relevant government department and are as shown in the Victoria Government Gazette. For further explanation on fees and fines, the following fact sheet is available via the link below:

https://www.dtf.vic.gov.au/financial-management-government/indexation-fees-and-penalties

The statutory fees listing in this document are not a complete listing and reference should also be made to the relevant department's webpages to confirm the statutory fee for the applicable financial year. The following link is provided for reference:

https://www.dtf.vic.gov.au/financial-management-government/indexation-fees-and-penalties

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Explanation Table

Classifications

Pricing Basis

F	Full Cost Pricing - Refers to the recovery of all direct and indirect costs involved in providing a service	Refers to the recovery of all direct and indirect costs involved in providing a service
M	Market Pricing - Refers to situations where Council provides services in competition with others in a competitive marketplace (and where Council must comply with National Competition Policy requirements)	Refers to situations where Council provides services in competition with others in a competitive marketplace (and where Council must comply with National Competition Policy requirements)
P	Partial Cost Pricing - Refers to the situation where less than the full cost of providing a service is recovered. It implies the existence of subsidization from rate revenue or from revenue from other services	Refers to the situation where less than the full cost of providing a service is recovered. It implies the existence of subsidization from rate revenue or from revenue from other services
R	Regulatory - Refers to the situation where the price or fee for a service is set by legislation and Council cannot charge outside this framework	Refers to the situation where the price or fee for a service is set by legislation and Council cannot charge outside this framework
Z	Zero Cost Pricing - Where no price is charged for the provision of the service	Where no price is charged for the provision of the service

Pricing Principle

A	Broad Community Service - Service provides a broad community benefit and it is impractical to levy a charge	Service provides a broad community benefit and it is impractical to levy a charge
B	Cost Benefit - Service is a minor part of the overall operation of the Council, or the potential for revenue collection is so minor as to be outweighed by the costs of collection	Service is a minor part of the overall operation of the Council, or the potential for revenue collection is so minor as to be outweighed by the costs of collection
C	Shared Benefit - Benefits from provision of the service accrue to the community as whole as well as individual users	Benefits from provision of the service accrue to the community as whole as well as individual users
D	Stimulus - A stimulus to the demand for the service is required. In the short term only part of the cost of the service is to be recovered	A stimulus to the demand for the service is required. In the short term only part of the cost of the service is to be recovered
E	Evasion - Charging prices to recover full cost may result in widespread evasion	Charging prices to recover full cost may result in widespread evasion
F	Equity - The service is targeted to low-income users	The service is targeted to low-income users
G	User Benefit - Service benefits particular users, making a contribution to their individual income, welfare or profits, without any broader benefits to the community.	Service benefits particular users, making a contribution to their individual income, welfare or profits, without any broader benefits to the community.
H	Regulatory - Fee Fixed by Legislation	Fee Fixed by Legislation
I	Market - Service provided is in competition with that provided by others and there is pressure to set a price which will attract adequate usage of the service	Service provided is in competition with that provided by others and there is pressure to set a price which will attract adequate usage of the service

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle

Southern Grampians Shire Council

Corporate and Governance

Governance - Local Law No 1 2021

Failing to Comply with a Direction of the Chair	Per Infringement	10 Penalty Units		N	R	H
Fraudulently Signing a Petition or Joint Letter	Per Infringement	20 Penalty Units		N	R	H
Using the Common Seal without Authority	Per Infringement	20 Penalty Units		N	R	H
Using a Replica of the Common Seal without Authority	Per Infringement	20 Penalty Units		N	R	H

Freedom of Information (Access Charges) Regulations 2014

Application Fee	Per Application	$31.80	$32.70	N	R	H
Photocopying – A4 Page	Per Page	$0.20	$0.20	N	R	H
Search Fee	Per Hour	1.5 Fee Units		N	R	H

Corporate Services

Budget Documents	Per Copy	$60.00	$62.50	N	F	G
Debt Recovery Costs non Magistrates Court	Per Item	At Cost - Maximum Charge of $300 per Item		N	F	G
Dishonour Cheque Fee	Per Dishonour	At Cost		N	F	G
Interest on Rates & Charges – Excludes Special Schemes	Per Annum	Penalty Interest Rate 10%		N	R	H
Interest on Other Debts	Per Annum	Penalty Interest Rate 10%		N	R	H
Land Information Certificates	Per Certificate	$29.70	$31.00	N	R	H
Non FOI Searches	Per Hour	$105.00	$110.00	N	F	G
Release of Property & Financial Information	Per Hour	$105.00	$110.00	N	F	G

Local Laws

Fees and Permits

Asset Protection Permit	Per permit	$260.00	$271.00	N	F	G
Excess Animal Permit	Per Permit	$175.00	$182.00	N	F	G
Fire Prevention – Block Clearance Administration Fee	Per Incidence	$215.00	$224.00	N	R	H
General Infringements Administration Fee	Per Infringement	$116.00	$121.00	N	F	G
General Permit	Per Permit	$126.00	$132.00	N	F	G
Local Law Permit Inspection Fee	Per Inspection	$60.00	$63.00	N	F	G
Occupation of Metered Parking Bays for Commercial Purposes (per day)	Per Day	$60.00	$63.00	Y	F	G
Occupation of Metered Parking Bays for Commercial Purposes (week)	Per Week	$175.00	$182.00	Y	F	G
Occupation of Metered Parking Bays for Charitable Purposes	No Charge		No Charge	Y	F	G
Parking Fees at meters	Per Hour	$1.20	$1.20	Y	F	G

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Fees and Permits [continued]						
Small Animal Trap – Deposit	Per Trap	$56.00	$59.00	N	F	G
Fees - Community Local Law No.1 of 2022						
Digital Event Signage - Tier 1	4 Week Period	$500.00	$500.00	N	M	I
Digital Event Signage - Tier 2	2 Week Period	$250.00	$250.00	N	M	I
Digital Event Signage - Tier 3	1 Week Period	$100.00	$100.00	N	M	I
Advertising sign placed on roads/footpaths	Per Permit	$116.00	$121.00	N	F	G
Advertising sign placed on roads/footpaths – Multiple permits for the same business premises	Per Permit	$175.00	$182.00	N	F	G
Bulk rubbish container on roads - per week	Per Week / Container	$60.00	$63.00	N	F	G
Busking	Per Permit	$18.00	$19.00	N	F	G
Collections on roads	Per Permit	$116.00	$121.00	N	F	G
Display of goods for sale	Per Permit	$116.00	$121.00	N	F	G
Display of goods for sale – Multiple permits for the same business premises: maximum per annum	Per Permit	$175.00	$182.00	N	F	G
Droving or Grazing of Livestock	Per Permit	$255.00	$266.00	N	F	G
Itinerant Trading permit – per year	Per Year	$1,150.00	$1,200.00	N	F	G
Itinerant Trading permit – per month	Per Month	$140.00	$146.00	N	F	G
Occupation of the Road for works in order to: occupy or fence off part of a road, erect a hoarding or overhead protection awning, use a mobile crane or travel tower for any building work, make a hole or excavate or reinstate a hole or excavation or any other works on any part of the road or road reserve	Per Worksite	As determined by Road Management Regulations (refer to Road Management fees)		N	F	G
Outdoor eating facilities on roads – 1st table	Per Table	$116.00	$121.00	N	F	G
Outdoor eating facilities on roads – subsequent tables	Per Table	$41.00	$43.00	N	F	G
Parklet Permit - per year	Per Permit	$1,150.00	$1,200.00	N	F	G
Street parties, street festivals and processions less than 100 people	Per Event	$60.00	$63.00	N	F	G
Street parties, street festivals and processions greater than 100 people	Per Event	$116.00	$121.00	N	F	G
Vehicle Crossings Construction	Per Permit	As determined by Road Management Regulations (refer to Road Management fees)		N	F	G

Other Infringements/Fees - Community Local Law No. 1 (2022)

Refer to https://www.dtf.vic.gov.au/financial-management-government/indexation-fees-and-penalties

Parking Infringements - Road Safety (General) Regulations 2019

Refer to https://www.dtf.vic.gov.au/financial-management-government/indexation-fees-and-penalties

Fees & Costs for Enforcement of Infringement Penalties (Magistrates' Court (Fees) Regulations 2022)

Refer to https://www.dtf.vic.gov.au/financial-management-government/indexation-fees-and-penalties

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Domestic Animals - Pound Fees						
Keeping/Sustenance While Impounded						
Dogs / Cats – For the first day	Per Day	$150.00	$150.00	N	F	I
Dogs / Cats – For each subsequent day	Per Day	$50.00	$55.00	N	F	I
Animal Surrender						
Surrender at animal pound - Dog / Cat	Per Animal	$70.00	$73.00	Y	F	I
Euthanasia / Disposal	Per Animal	Actual costs incurred		Y	F	I
Livestock - Pound Fees						
Impoundment						
For the impounding of livestock from any Crown, public or private land per animal.						
Sheep or Goat	Per Animal	$47.00	$62.00	N	P	B
Bull, Horse or Stallion	Per Animal	$145.00	$151.00	N	P	B
All Other Livestock	Per Animal	$76.00	$80.00	N	P	B
Other Domesticated Animal	Per Animal	$35.00	$36.50	N	P	B
For the walking or transporting of impounded livestock to a pound	At Cost	Actual costs incurred		N	F	I
Sustenance While Impounded						
Sheep or Goat	Per Animal Per Day	$24.00	$25.00	N	F	I
Other Livestock	Per Animal Per Day	$35.00	$37.00	N	F	I
Other Domesticated Animal	Per Day	$18.00	$20.00	N	F	I
Other Livestock Impoundment Fees						
Walking/Transporting Impounded Livestock to Pound	At Cost		At Cost	N	P	B
Notification to Owner of Impounded Livestock	Per Notification	$116.00	$121.00	N	F	B
Notification to Public of Intention to Sell Impounded Livestock	At Cost		At Cost	N	P	B
Euthanasia/Disposal of Impounded Livestock	At Cost		At Cost	N	F	B
For the giving of written notice to the owner of impounded livestock	Per Notice	$116.00	$121.00	N	F	I
Euthanasia/Disposal	At Cost	Actual costs incurred		N	F	I
Dog and Cat Registration (Domestic Animals Act 1994)						
The 2024/25 Registration year is from 11 April 2024 to 10 April 2025						
The 2025/26 Registration year is from 11 April 2025 to 10 April 2026						
Dog – Maximum Fee	Per Reg	$155.00	$162.00	N	R	H
Dog – Maximum Fee – Concession	Per Reg	$84.00	$88.00	N	R	H
Dog – Reduced Fee (1)	Per Reg	$67.00	$70.00	N	R	H
Dog – Reduced Fee (1) – Concession	Per Reg	$40.00	$42.00	N	R	H

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle

Dog and Cat Registration (Domestic Animals Act 1994) [continued]

Dog – Declared Dog	Per Reg	$276.00	$288.00	N	R	H
Dog – Restricted Breed Dog	Per Reg	$276.00	$288.00	N	R	H
Cat – Maximum Fee	Per Reg	$96.00	$100.00	N	R	H
Cat – Maximum Fee – Concession	Per Reg	$51.00	$54.00	N	R	H
Cat – Reduced Fee (1)	Per Reg	$37.00	$39.00	N	R	H
Cat – Reduced Fee (1) – Concession	Per Reg	$23.00	$24.00	N	R	H
Cat – Reduced Fee (1) – Concession Requirements				N	R	H
Cat – Reduced Fee (1) – Any cat to which the following descriptions apply - De-sexed cats, Cats over 10 years old, Cats kept for breeding by the proprietor of a domestic animal business conducted on registered premises, Cats registered with the Feline Control Council, the Governing Council of the Cat Fancy Australian and Victoria Incorporated, the Democratic Cat Council Incorporated or any successor in law of any one of those associations or a breed approved by Council, Any reduced fee pensioner.						
Dog – Reduced Fee (1) – Concession Requirements				N	R	H
Dog Reduced Fee (1) – Any dog to which the following descriptions apply - De-sexed dogs, Dogs over 10 years, Dogs kept for working stock, Dogs kept for breeding by the proprietor of a domestic animal business conducted on registered premises, Dogs that have undergone obedience training which complies with the regulations, Dogs registered with the Victorian Canine Association or any successor in law of that Association or any organisation approved by Council, Council approved trained assistance animals, Any reduced fee pensioner.						
Registration of Domestic Animal Business	Per Reg	$282.00	$294.00	N	R	H

Dog and Cat Infringements (Domestic Animals Act 1994)

Refer to https://www.dtf.vic.gov.au/financial-management-government/indexation-fees-and-penalties

Infringements (Environment Protection Act 1970)

Refer to https://www.dtf.vic.gov.au/financial-management-government/indexation-fees-and-penalties

Community Services

Occasional Care

Absence Fee	Per Child, Per Booked Hour	$13.50	$14.20	N	M	I
Applicable if notice given less than 48 hours prior to absence.						
Absence Fee - Members	Per Child, Per Booked Hour	$12.00	$12.60	N	M	I
Applicable if notice given less than 48 hours prior to absence.						
Care	Per Child, Per Hour	$13.50	$14.20	N	M	I
Care – Members Rate	Per Child, Per Hour	$12.00	$12.60	N	M	I
No Notification Fee	Per Booked Hour	$20.00	$21.00	N	P	E
This additional fee is applicable on top of Absence Fee when no notice provided of non-attendance. Child care subsidy cannot be applied to this fee.						

Family Day Care

Administration Charge – Educators	Per Fortnight	$55.00	$57.50	Y	P	E

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Family Day Care [continued]						
Administration Charge – Families	Per Child/Per Hour (3rd + Child Excluded Per Family)	$1.75	$1.85	N	F	G
Cultural Services						
Art Gallery						
Guided Tours – For 45 Participants						
Tour Only						
Monday to Friday 10.00am to 5.00pm (Business Hours) – Not for Profit & Local	Free		Free	Y	Z	G
Monday to Friday 10.00am to 5.00pm (Business Hours) – Non Local	Per Person	$0.00	$15.00	Y	F	G
Weekend and Outside Business Hours	Per Group	$180.00	$180.00	Y	F	G
Tour & Refreshments						
Monday to Friday 10.00am to 5.00pm (Business Hours) – Not for Profit & Local	Per Person	$22.00	$15.00	Y	F	G
Monday to Friday 10.00am to 5.00pm (Business Hours) – Non Local	Per Person	$22.00	$30.00	Y	F	G
Weekend and Outside Business Hours	Per Group	$300.00	$250.00	Y	F	G
Venue & Additional Hire Fees						
Not for Profit - Functions Within Business Hours	Pending Programming		Free	Y	Z	G
Not for Profit - Functions Outside Business Hours	Per Hour	$160.00	$160.00	Y	F	G
Corporate / Institution Functions Within Business Hours	Per Hour	$106.00	$160.00	Y	F	G
Corporate / Institution Functions Outside Business Hours	Per Hour	$160.00	$200.00	Y	F	G
Cleaning Fee	Per Hour	$0.00	$220.00	Y	F	G
Piano Hire - Not For Profit	Free		Free	Y	Z	G
Piano Hire - Commercial	Per hour	$0.00	$50.00	Y	F	G
Programs						
School Program - ALL	Free		Free	Y	Z	G
Public Program	Per Person		Dependent on public program	Y	F	G
Major Exhibition						
Adult	Per Person		Prices range from $8.00 to $40.00 depending on event	Y	M	I
			Last year fee Set by the CEO based on the Exhibition			

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Major Exhibition [continued]						
Concession	Per Person	Prices range from $5.00 to $35.00 depending on event		Y	M	I
		Last year fee Set by the CEO based on the Exhibition				
Children (under 18's)	Per Person	Prices range from Free to $25.00 depending on event		Y	Z	B
		Last year fee Set by the CEO based on the Exhibition				
Member	Per Ticket	Prices range from $5.00 to $35.00 depending on event		Y	F	G
Family Ticket (2ad + 2ch)	Per Family Pass	Prices range from $15.00 to $80.00 depending on event		Y	F	G
Cinema						
General Admission						
Adult	Per Ticket	$18.00	$18.00	Y	P	E
Concession	Per Ticket	$16.00	$16.00	Y	P	E
Student	Per Ticket	$16.00	$16.00	Y	P	E
Child - 12 & Under	Per Ticket	$13.00	$13.00	Y	P	E
Thrifty Thursday	Per Ticket	$13.00	$13.00	Y	P	E
Fund Raisers						
Minimum charge per fundraiser is fixed venue fee + 30 tickets.						
Fixed Venue Fee	Per Event	$120.00	$220.00	Y	P	E
Admission	Per Ticket	$15.00	$14.00	Y	P	E
Group Bookings						
Conference/Meetings Only						
Fixed Venue Hire Fee - 4 hours	4 Hour Block	$180.00	$330.00	Y	M	I
Fixed Venue Hire Fee - 6 hours	6 Hour Block	$260.00	$480.00	Y	M	I
Fixed Venue Hire Fee - Full Day (8 hours)	8 Hour Block	$430.00	$600.00	Y	M	I
Fixed Venue Hire Fee - Per hour after 8 hours	Per Hour	$100.00	$165.00	Y	M	I
Specialist Groups						
Conditions apply						
Film Group Full Price 12 Month Membership	Per 12 Month	$120.00	$140.00	Y	P	E
Film Group Concession 12 Month Membership	Per 12 Month	$95.00	$115.00	Y	P	E
Film Group Full Price 6 Month Membership	Per 6 Months	$63.00	$75.00	Y	P	E
Film Group Concession 6 Month Membership	Per 6 Month	$58.00	$70.00	Y	P	E
Film Group Full Price 3 Month Membership	Per 3 Month	$42.00	$50.00	Y	P	E
Film Group Concession 3 Month Membership	Per 3 Month	$37.00	$42.00	Y	P	E
Film Group Full Price Single Ticket	Per ticket	$18.00	$20.00	Y	P	E
Film Group Concession Single Ticket	Per ticket	$16.00	$18.20	Y	P	E

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Specialist Groups [continued]						
Library School Holiday Program	Per Ticket	$8.50	$7.00	Y	P	E
Outside School Hours Care	Per Ticket	$8.50	$10.00	N	P	E
Winda Mara Children's Program	Per Ticket	$8.50	$9.00	Y	P	E
Other						
Cinema Advertising - Per 30 seconds	Per 30 seconds	$35.00	$40.00	Y	P	I
Cinema Duty Officer - Minimum 3 Hours	3 hours	$165.00	$175.00	Y	P	E
Technical Support – (Minimum 3 Hours)	Per 3 hour block	$165.00	$175.00	Y	P	E
Technical Support – Additional Hours as Required	Per Hour	$55.00	$65.00	Y	P	E
Technical Support - Additional Hours as Required after 8 hours	Per Hour after 8 hours	$110.00	$125.00	Y	P	E
Library Services						
Book Club	Per Club	$177.00	$190.00	Y	F	G
Book Club – Library Facilitated	Per Person	$18.00	$19.00	Y	F	G
Book Sales	Per Item	Variable – Donation		Y	M	I
Debt Collection Charge	Per Event	$19.00	$20.00	Y	F	G
Events	Per Event	Variable – Free to $120.00		Y	M	I
		Last year fee Variable – Free to $100.00				
Exam Supervision - per session	Per Session	$200.00	$200.00	Y	F	I
Inter Library Loans	Per Loan	$3.50	$3.70	Y	F	G
Inter Library Loans – Universities	Per Loan	$19.50	$21.00	Y	F	G
Library Bag Sales	Per Item	$3.50	$4.00	Y	M	I
Lost or Damaged Items	Per Item	Replacement cost + processing fee (generated from LMS)		N	F	G
		Last year fee Replacement cost + processing fee				
Meeting Room Hire – Commercial	Per Event	$60.00	$63.00	Y	M	I
Meeting Room Hire – Community Groups and Not For Profit Organisations	Per Session	Free		Y	Z	A
Processing Fee	Per Event	$7.00	$7.50	Y	F	G
Purchase of PC headset	Per Set	$5.00	$6.00	Y	F	I
Purchase of USB	Per USB	$5.00	$5.50	Y	F	I
Replacement Card	Per Card	$2.30	$2.50	N	F	G
Training Courses	Per Event	Variable – Free to $200.00		Y	M	I
		Last year fee Variable – Free to $100.00				
Other						
Simplex A4 (Black & White)	Per Page	$0.30	$0.30	Y	M	I
Duplex A4 (Black & White)	Per Page	$0.60	$0.60	Y	M	I
Simplex A4 (Colour)	Per Page	$1.00	$1.00	Y	M	I

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Other [continued]						
Duplex A4 (Colour)	Per Page	$2.00	$2.00	Y	M	I
Simplex A3 (Black & White)	Per Page	$0.60	$0.60	Y	M	I
Duplex A3 (Black & White)	Per Page	$1.20	$1.20	Y	M	I
Simplex A3 (Colour)	Per Page	$2.00	$2.00	Y	M	I
Duplex A3 (Colour)	Per Page	$4.00	$4.00	Y	M	I
Laminating						
Credit Card Pouch	Per Item	$0.80	$1.00	Y	M	I
A4 Pouch	Per Item	$1.20	$1.50	Y	M	I
A3 Pouch	Per Item	$2.30	$3.00	Y	M	I

Performing Arts Centre

Function Room (including kitchen)

Function Room available between 8.30am - 12am

Includes one duty officer for duration of set up & event.

A 10% discount is available for consecutive full day space hire (Auditorium, Function Room and Ted Kenna VC Room price only).

Hire charges include: setting out of chairs, tables and trestles, use of kitchen and equipment (microwave and dishwasher included) and use of Entrance Foyer. Crockery and cutlery are provided.

Items not included are: table linen and flowers, although we can often advise on where to find such items.

Ted Kenna VC Room (Meeting Space Only)

Includes technical equipment, whiteboard & pens, set up & pack down.

A 10% discount is available for consecutive full day space hire (Auditorium, Function Room and Ted Kenna VC Room price only).

Break Out Areas

Breakout Area hire when used inconjunction with either Function Room or Ted Kenna VC Room.

Main Auditorium

Includes use of centre's sound & light equipment, dressing rooms & kitchen hire.

Includes one duty officer for the duration of set up & event.

A technician MUST be hired additional to the main Auditorium hire charge.

A 10% discount is available for consecutive full day space hire (Auditorium, Function Room and Ted Kenna VC Room price only).

Additional Hire Fees

Staffing

Applies to first 8 hours Monday – Saturday. Additional hours, Sunday and Public Holidays charged at double standard rate.

Operating Technician (Up to 8 hours) Public Holidays and Sundays		$0.00	$140.00	Y	F	G

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle

Equipment

Standard

Not for Profit

Sound Hire

Basic Sound Hire includes technician, 2 speakers, 2 fold back speakers, mixing desk and 2 microphones and 2 DI's

Lighting Hire

Basic Lighting Hire includes technician, 2 lighting trees, 2 lighting bars and lighting desk.

Ticketing

Leisure and Recreation Services

Hamilton Indoor Leisure & Aquatic Centre

Memberships

Platinum

Platinum Membership = Free Gold membership for those aged 80 & over

Gold

Gold - Adult

Direct Debit - Fortnightly	Per Fortnight	$46.00	$48.00	Y	M	I
12 Months Upfront	Per Year	$1,100.00	$1,145.00	Y	M	I

Gold - Adult Concession

Direct Debit - Fortnightly	Per Fortnight	$35.00	$36.50	Y	M	I
12 Months Upfront	Per Year	$845.00	$879.00	Y	M	I

Gold - Family

Family consists of 2 x Adult & Children u16 (on family medicare card)

Direct Debit - Fortnightly	Per Fortnight	$74.00	$77.00	Y	M	I
12 Months Upfront	Per Year	$1,780.00	$1,855.00	Y	M	I

Gold - Corporate & Club - 25% off

Direct Debit - Fortnightly	Per Fortnight	$34.00	$35.50	Y	M	I

Silver

Silver - Adult

Direct Debit - Fortnightly	Per Fortnight	$38.00	$40.00	Y	M	I
12 Months Upfront	Per Year	$910.00	$947.00	Y	M	I

Silver - Adult Concession

Direct Debit - Fortnightly	Per Fortnight	$29.00	$30.50	Y	M	I
12 Months Upfront	Per Year	$690.00	$718.00	Y	M	I

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Silver - Adult Off Peak						
Off peak pool time is 6.30am-9.30am weekdays. Gym is 1.30pm- 3.30pm 7 days a week						
Direct Debit - Fortnightly	Per Fortnight	$20.00	$21.00	Y	M	I
12 Months Upfront	Per Year	$480.00	$500.00	Y	M	I
Silver - Corporate & Club - 25% off						
Direct Debit - Fortnightly	Per Fortnight	$28.00	$29.50	Y	M	I
Bronze						
Bronze - Adult						
Direct Debit - Fortnightly	Per Fortnight	$34.00	$35.50	Y	M	I
12 Months Upfront	Per Year	$810.00	$843.00	Y	M	I
Bronze - Adult Concession						
Direct Debit - Fortnightly	Per Fortnight	$25.00	$26.00	Y	M	I
12 Months Upfront	Per Year	$615.00	$640.00	Y	M	I
Bronze - Child						
Under 16 Only						
Direct Debit - Fortnightly	Per Fortnight	$20.00	$21.00	Y	M	I
12 Months Upfront	Per Year	$480.00	$500.00	Y	M	I
Bronze - Family						
Family consists of: 2 x Adult & Children u16 on family medicare card.						
Direct Debit - Fortnightly	Per Fortnight	$62.00	$64.50	Y	M	I
12 Months Upfront	Per Year	$1,495.00	$1,555.00	Y	M	I
Bronze - Adult Off Peak						
Off peak pool time is 6.30am-9.30am weekdays. Gym is 1.30pm- 3.30pm 7 days a week						
Direct Debit - Fortnightly	Per Fortnight	$16.00	$17.00	Y	M	I
12 Months Upfront	Annually	$395.00	$411.00	Y	M	I
Bronze - Corporate & Club - 25% off						
Direct Debit - Fortnightly	Per Fortnight	$25.00	$26.00	Y	M	I
Other						
Fit 55's						
Direct Debit - Fortnightly	Per Fortnight	$16.00	$17.00	Y	M	I
Casual Fees						
Gym or Group Exercise						
Adult	Per Day	$19.00	$19.00	Y	M	I
Adult Concession	Per Day	$15.00	$15.00	Y	M	I

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Gym or Group Exercise [continued]						
School Group	Per Student	$8.00	$8.50	Y	M	I
Fit 55's	Per Person	$9.00	$9.50	Y	M	I
Training with Teens	Per Student Per Session	$11.00	$12.00	Y	M	I
10 Visit Pass for Gym or Group Fitness						
Valid for 12 months.						
Adult	Per Pass	$169.00	$169.00	Y	M	I
Adult Concession	Per Pass	$131.00	$131.00	Y	M	I
20 Visit Pass for Gym or Group Fitness						
Valid for 12 months.						
Adult	Per Pass	$321.00	$321.00	Y	M	I
Adult Concession	Per Pass	$249.00	$249.00	Y	M	I
Fit 55's	Per Pass	$160.00	$168.00	Y	M	I
Personal Training						
One on One						
45 minutes per session						
Personal Training Direct Debit - 1 Session Per Week	Per Person	$85.00	$104.00	Y	F	G
Personal Training Direct Debit - 2 Sessions Per Week	Per Person	$170.00	$207.50	Y	F	G
Personal Training Direct Debit - 3 Sessions Per Week	Per Person	$255.00	$312.00	Y	F	G
Personal Training - People with disability (NDIS)	Per Person	$42.50	$52.00	Y	F	G
Small Group						
Maximum 6 people per group.						
Personal Training - Casual	Per session	$20.00	$21.50	Y	F	G
Personal Training Direct Debit - 1 Session Per Week	Per Fortnight Direct Debit	$39.00	$41.50	Y	F	G
Personal Training Direct Debit - 2 Sessions Per Week	Per Fortnight Direct Debit	$79.00	$84.00	Y	F	G
Personal Training Direct Debit - 3 Sessions Per Week	Per Fortnight Direct Debit	$118.00	$125.00	Y	F	G
Personal Training - 5 Session pass	Per pass	$100.00	$105.00	Y	F	G
Personal Training - 10 Session pass	Per pass	$200.00	$210.00	Y	F	G
Recreational Swim						
Casual Fees						
Adult	Per Day	$8.00	$8.00	Y	M	I
Adult Concession	Per Day	$6.50	$6.50	Y	M	I
Child	Per Day	$5.50	$5.50	Y	M	I
Group - 2 x Adults + 3 x U16	Per Day	$25.00	$25.00	Y	M	I

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Casual Fees [continued]						
School Group	Per Student Per Session	$3.50	$3.70	Y	M	I
School Group – Carnival	Per Hour	$160.00	$168.00	Y	M	I
Includes exclusive use of HILAC Aquatic Area and 1 x Lifeguard						
School Swimming Admin Fee	Per Student	$3.00	$3.50	Y	M	I
10 Visit Swim Pass						
Adult	Per Pass	$72.00	$72.00	Y	M	I
Adult Concession	Per Pass	$57.00	$57.00	Y	M	I
Child	Per Pass	$47.00	$47.00	Y	M	I
Family	Per Pass	$197.00	$205.00	Y	M	I
20 Visit Swim Pass						
Adult	Per Pass	$137.00	$143.00	Y	M	I
Adult Concession	Per Pass	$108.00	$113.00	Y	M	I
Child	Per Pass	$89.00	$93.00	Y	M	I
Family	Per Pass	$375.00	$400.00	Y	M	I
Lane Hire						
Booking Fee – General	Per Lane Per Hour	$35.00	$36.50	Y	M	I
Aquatic Education						
Swim Lesson – 1st Child/Participant	Per person Per 1/2 Hour Session	$21.00	$21.00	N	M	I
Payment for full term upfront (non-refundable) or Direct Debit fortnightly all year (26 payments).						
Swim Lesson – 2nd Child/Participant	Per Person Per 1/2 Hour Session	$19.00	$19.00	N	M	I
Payment for full term upfront (non-refundable) or Direct Debit fortnightly all year (26 payments).						
Swim Lesson – Private Instructor	Per Person Per 1/2 Hour Session	$64.00	$64.00	N	F	G
Payment for full term upfront (non-refundable) or Direct Debit fortnightly all year (26 payments).						
Swim Lesson – People with Disability	Per Person Per 1/2 Hour Session	$34.00	$37.00	N	M	G
Payment for full term upfront (non-refundable) or Direct Debit fortnightly all year (26 payments).						
Swim Lesson – Squad	Per Child Per 3/4 Hour Session	$33.00	$33.00	N	M	G
Swim Program – Instructor (School Groups etc)	Per Hour Per Instructor	$71.00	$74.00	N	P	C
Court Hire						
School Holiday - Single Adult / Concession - Day Pass	Per Day	$5.00	$5.00	Y	P	C

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Court Hire [continued]						
School Holiday - Single Adult / Concession - Fortnight Pass	Per Fortnight	$20.00	$20.00	Y	P	C
Squash / Table Tennis						
Single	Per Person	$6.50	$6.50	Y	P	C
Single Concession	Per Person	$5.00	$5.50	Y	P	C
Group Hire	Per Court	$14.50	$15.00	Y	P	C
Group Hire – Includes Equipment Hire	Per Court	$20.00	$21.00	Y	P	C
Multi Purpose Courts						
Adult	Per Person	$6.50	$6.50	Y	P	C
Adult Concession	Per Person	$5.00	$5.50	Y	P	C
Group Hire	Per Court	$60.00	$63.00	Y	P	C
School Group	Per Court	$33.00	$35.00	Y	P	C
Room Hire						
Room Hire						
General Hire	2 Hour Block (Min)	$52.00	$55.00	Y	P	G
General Hire - 4 hours	4 Hour Block	$116.00	$121.00	Y	P	G
General Hire - 8 Hours	8 Hour Block	$183.00	$189.00	Y	P	G
School Group	2 Hour Block (Min)	$38.00	$40.00	Y	P	G
School Group	4 Hour Block	$87.00	$90.00	Y	P	G
School Group - 8 Hours	8 Hour Block	$173.00	$180.00	Y	P	G
Weekend with Tournament						
Program Room	Per Weekend	$116.00	$121.00	Y	P	G
Creche	Per Weekend	$116.00	$121.00	Y	P	G
Group Bookings						
Maximum 20 people per group.						
Dry Exercise	Per Group Per Hour	$84.00	$87.00	Y	P	G
Wet Exercise	Per Group Per Hour	$84.00	$87.00	Y	P	G
User Group Fees						
Special Events			As quoted	Y	M	I
HOSC – Swimming Club	As per user agreement		As per user agreement	Y	P	C
As per user agreement						
HABA/HJBA – Senior/Junior Basketball – Full Court	Per Court, Per Hour	$42.50	$44.00	Y	P	C
HABA & HJBA Competitions or Representative Teams Training						

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
User Group Fees [continued]						
HAS – Senior Squash Pennant	Per Court, Per Hour	$15.00	$16.00	Y	P	C
HAS – Junior Squash Pennant	Per Court, Per Hour	$7.50	$8.00	Y	P	C
HTTA – Senior Table Tennis	Per Court, Per Hour	$15.00	$16.00	Y	P	C
HTTA – Junior Table Tennis	Per Court, Per Hour	$7.50	$8.00	Y	P	C
Keen-Agers Table Tennis Program	Per Court, Per Hour	$7.50	$8.00	Y	P	C
Miscellaneous						
Program Instructor/Leisure services Officer	Per Hour	$71.00	$74.00	Y	F	G
Includes instructors, lifeguards & administration. Entry fee is additional.						
Replacement Customer Fob	Per Fob	$5.50	$6.00	Y	F	G
Hamilton Olympic Swimming Pool						
Hire						
Exclusive Use – Per Additional Lifeguard	Per Hour	$71.00	$74.00	Y	F	G
Insurance required. Minimum 1 hour charge.						
Lane Hire or Restricted Area	Per Hour	$35.00	$36.50	Y	P	C
During operational hours in line with HILAC.						
School Groups						
Carnival	Per Hour	$207.00	$215.00	Y	P	C
Includes Lifeguards x2 per hour						
Outside of Carnival	Per Hour	$100.00	$104.00	Y	P	C
Includes Lifeguard x1 and Lane Hire/Restricted Area						
Program Instruction	Per Hour	$71.00	$74.00	N	F	G
Swim & Survive program with Austswim qualified instructor. Minimum 1 hour charge.						
Swimming Lessons – General Public						
6 Week Program, 1/2 Hour Lesson Per Week.						
Other						
HOSC – Swimming Club	As per user agreement	As Per user agreement		Y	P	C
Program Instruction - Per Instructor	Per Hour	$71.00	$74.00	N	P	C
Commercial Bookings	Per Hour	$260.00	$270.00	Y	F	G
Includes 3 lifeguards & administration. Minimum 1 hour charge.						

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Community Swimming Pools (Excludes Hamilton)						
Hire						
Supervision & Lifeguard - Per staff member	Per Hour	$71.00	$74.00	Y	F	G
Insurance required. Minimum 1 hour charge.						
Lane Hire or Restricted Area	Per Hour	$35.00	$36.50	Y	P	C
Other						
Commercial Bookings	Per Hour	$260.00	$270.00	Y	F	G
Includes 3 lifeguards & administration.						
Melville Oval						
Canteen	Per Event	$150.00	$150.00	Y	M	C
Facility Cleaning Fee		$0.00	$250.00	Y	M	C
Function Room Hire	Per Event	$500.00	$600.00	Y	M	C
Function Room Hire - Not for Profit	Per Event	$150.00	$200.00	Y	M	C
Kiosk	Per Event	$150.00	$150.00	Y	M	C
Mitchell Park						
Damage Deposit	Per Event	$300.00	$312.00	N	M	G
Patterson Park						
Room Hire – Regular Users (Rock n Rollers, Yoga, Judo, Bowls, Schools, Mullerateronq)	Per Session	$23.00	$24.00	Y	P	C
Pedrina Park						
AFL Pavilion	Per Day	$210.00	$220.00	Y	F	G
Damage Deposit - AFL Pavilion	Per Hire	$236.00	$250.00	N	F	G
Inclusive Sports Hub						
Hire Fee	8 Hour Block	$445.00	$463.00	Y	P	C
Hire Fee - Not For Profit	8 Hour Block	$110.00	$115.00	Y	P	C
Damage Deposit	Per Event	$300.00	$312.00	N	P	C
Lake Hamilton						
Aquatic Centre Meeting Room Hire (Not for profit)	4 Hour Block	$110.00	$115.00	Y	P	C
Aquatic Centre Meeting Room Hire	Per Day	$210.00	$220.00	Y	P	C
Damage Deposit	Per Event	$300.00	$312.00	N	F	G
Hamilton Botanical Gardens						
Additional gardening service - (Weekday)	Per Hour	$75.00	$78.00	Y	F	I
Additional gardening service - (Weekends)	Per Hour	$120.00	$125.00	Y	F	I
Vehicle Gate Opening and Closing Charge	Per Event	$180.00	$187.50	Y	M	I
Rotunda – Electricity Charge	Per Event	$36.00	$37.50	Y	F	C

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Hamilton Botanical Gardens [continued]						
Hire Fee	Per Event	$196.00	$204.00	Y	F	C
Penshurst Botanical Gardens						
Hire Fee	Per Event	$206.00	$214.50	Y	F	C
Rotunda – Electricity Charge	Per Event	$36.00	$37.50	Y	F	C
Tier 1 Facility - Melville Oval, Hockey, Soccer						
Full Day (8hrs Clubrooms and Oval and Tennis/ Netball Courts) Daytime only	Per Day	$300.00	$312.00	Y	P	C
Full Day (8hrs Clubrooms and Oval) Daytime only	Per Day	$250.00	$260.00	Y	P	C
Full Day (8hrs Clubrooms and Tennis/Netball Courts) Daytime only	Per Day	$250.00	$260.00	Y	P	C
Half Day (4hrs Clubrooms and Oval or Tennis/ Netball Courts	4 Hour Block	$150.00	$150.00	Y	P	C
Half Day (4hrs Clubrooms and Oval or Tennis/ Netball Courts) -NIGHT-TIME	4 Hour Block	$310.00	$323.00	Y	P	C
Half Day (4hrs Clubrooms and Oval)	4 Hour Block	$125.00	$130.00	Y		
Half Day (4hrs Clubrooms and tennis/netball courts) - NIGHT-TIME	4 Hour Block	$285.00	$296.50	Y	P	C
Half Day (4hrs Clubrooms and tennis/netball courts)	4 Hour Block	$125.00	$130.00	Y	P	C
Half Day (4hrs Clubrooms and Oval) -NIGHT-TIME	4 Hour Block	$285.00	$296.50	Y	P	C
Facility Fee (Clubrooms and Oval or Tennis/Netball Courts) – Per Hour	Per Hour	$50.00	$52.00	Y	P	C
Facility Fee (Clubrooms and Oval or Tennis/Netball Courts) – Per Hour - NIGHT-TIME	Per Hour	$90.00	$94.00	Y	P	C
Facility Fee (Per Tennis/Netball Court) – Per Hour	Per Hour	$40.00	$42.00	Y	P	C
Facility Fee (Per Tennis/Netball Court) – Per Hour -NIGHT-TIME	Per Hour	$80.00	$83.50	Y	P	C
Facility Fee (Per Oval) – Per Hour	Per Hour	$40.00	$42.00	Y	P	C
Facility Fee (Per Oval) – Per Hour - NIGHT-TIME	Per Hour	$80.00	$83.50	Y	P	C
Tier 2 Facility - Mitchell Park, rest of Pedrina Park, CFA, Running Track						
Full Day (8hrs Clubrooms and Oval and Tennis/ Netball Courts) Daytime only	8 Hour Block	$75.00	$78.00	Y	P	C
Full Day (8hrs Clubrooms and Oval) Daytime only	8 Hour Block	$50.00	$52.00	Y	P	C
Full Day (8hrs Clubrooms and Tennis/Netball Courts) Daytime only	8 Hour Block	$50.00	$52.00	Y	P	C
Half Day (4hrs Clubrooms and Oval and Tennis/ Netball Courts	4 Hour Block	$50.00	$52.00	Y	P	C
Half Day (4hrs Clubrooms and Oval and Tennis/ Netball Courts) NIGHT-TIME	4 Hour Block	$130.00	$135.50	Y	P	C
Half Day (4hrs Clubrooms and Oval)	4 Hour Block	$30.00	$31.50	Y	P	C
Half Day (4hrs Clubrooms and Oval) - NIGHT-TIME	4 Hour Block	$110.00	$114.50	Y	P	C
Half Day (4hrs Clubrooms and tennis/netball courts)	4 Hour Block	$30.00	$31.50	Y	P	C
Half Day (4hrs Clubrooms and tennis/netball courts) -NIGHT-TIME	4 Hour Block	$110.00	$114.50	Y	P	C
Facility Fee (Clubrooms and Oval or Tennis/Netball Courts) – Per Hour	Per Hour	$20.00	$21.00	Y	P	C

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Tier 2 Facility - Mitchell Park, rest of Pedrina Park, CFA, Running Track [continued]						
Facility Fee (Clubrooms and Oval or Tennis/Netball Courts) – Per Hour - NIGHT-TIME	Per Hour	$40.00	$42.00	Y	P	C
Facility Fee (Per Oval) – Per Hour	Per Hour	$15.00	$15.60	Y	P	C
Facility Fee (Per Oval) – Per Hour -NIGHT-TIME	Per Hour	$35.00	$36.50	Y	P	C
Facility Fee (Per Tennis/Netball Court) – Per Hour	Per Hour	$15.00	$15.60	Y	P	C
Facility Fee (Per Tennis/Netball Court) – Per Hour - NIGHT-TIME	Per Hour	$35.00	$36.50	Y	P	C
All Council reserves & facilities						
New Linemarking	Per Request	$387.00	$403.00	Y	P	C
Non Return of Key	Per Key	$47.00	$100.00	Y	F	C
School Group linemarking for athletics	Per Request	$100.00	$104.00	Y	P	C
Touch Up Linemarking	Per Request	$92.00	$96.00	Y	P	C
Building and Planning Services						
Building Services						
Please note:						
Up to 30% building application fee is non-refundable, regardless of the assessment outcome.						
Other Charges						
Build over Easement Application		Prescribed Fee		N	R	H
Part 5 Report and Consent, Farm Building exemptions or any other building regulation determinations		Prescribed fee		N	R	H
Swimming Pools						
Failure to register swimming pool or spa within relevant timeframe	Per Breach	Prescribed Fees		N	R	H
Pool or Spa - information search fee	Annual	Prescribed Fees		N	R	H
Pool or Spa Registration Fee	Annual	Prescribed Fees		N	R	H
Planning and Subdivision – Non Statutory						
Extensions of Time – 1st request	Per Ext	$196.00	$204.00	Y	M	I
Extensions of Time – 2nd request	Per Ext	$387.00	$403.00	Y	M	I
Extensions of Time – 3rd request	Per Ext	$558.00	$581.00	Y	M	I
Secondary Consent	Per Permit	$330.00	$344.00	N	M	I
Satisfaction Matters	Per Permit	$395.00	$411.00	N	M	I
Approval of Plans to Satisfaction of Responsible Authority	Per Permit	$806.00	$839.00	N	M	I
Liquor License Requests	Per request	$194.00	$202.00	N	M	I
Advertising Fees	Per Notice – On Site	$84.00	$87.50	N	M	I
Advertising Fees	Per Letter Adjoining owners	$7.50	$7.80	N	M	I
Copies of Permits & Plans	Per Permit	$121.00	$126.00	N	M	I

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle

Planning and Subdivision – Non Statutory [continued]

Letters of Request – Researched Information – Per Residential Request	Per Residential Request	$150.00	$156.00	Y	M	I
Letters of Request – Researched Information – Per Commercial Request	Per Commercial Request	$165.00	$172.00	Y	M	I
Letters of Request – Researched Information – Per Tenement Request	Per Tenement Request	$170.00	$177.00	Y	M	I
Council supplied title search – 1 Search (e.g. Search statement and plan)	Per Permit	$37.50	$39.00	N	M	I

Planning and Subdivision – Statutory

Applications for Permits and Applications to Amend Permits

Permit Application

Permit Application – Use Only

Class 1 - Change or allow a new use of the land	Fee Unit	89 fee units	N	R	H

Permit Application – Single Dwelling

To develop land for a single dwelling per lot or use and develop land for a single dwelling per lot and undertake development ancillary to the use of the land for a single dwelling per lot included in the application (other than Class 7 or 8 permit, as relevant, to a permit to subdivide or consolidate land) if the estimated cost of the development is:

Class 2 - $10,000 or less	Fee Unit	13.5 fee units	N	R	H
Class 3 - More than $10,000 but not more than $100,000	Fee Unit	42.5 fee units	N	R	H
Class 4 - More than $100,000 but not more than $500,000	Fee Unit	87 fee units	N	R	H
Class 5 - More than $500,000 but not more than $1M	Fee Unit	94 fee units	N	R	H
Class 6 - More than $1M but not more than $2M	Fee Unit	101 fee units	N	R	H

Permit Application – VicSmart

Permit Application – VicSmart application if the estimated cost of the development is:

Class 7 - $10,000 or less	Fee Unit	13.5 fee units	N	R	H
Class 8 - More than $10,000	Fee Unit	29 fee units	N	R	H
Class 9 - VicSmart application to subdivide or consolidate land	Fee Unit	13.5 fee units	N	R	H
Class 10 - VicSmart application (other than class 7, 8 or 10)	Fee Unit	13.5 Fee Units	N	R	H

Permit Application – To develop land (other than a Class 2-8 or a permit to subdivide or consolidate land) if the estimated cost of the development is:

Class 11 - Less than $100,000	Fee Unit	77.5 fee units	N	R	H
Class 12 - More than $100,000 and not more than $1M	Fee Unit	104.5 fee units	N	R	H
Class 13 - More than $1M and not more than $5M	Fee Unit	230.5 fee units	N	R	H
Class 14 - More than $5M and not more than $15M	Fee Unit	587.5 fee units	N	R	H

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Permit Application – To develop land (other than a Class 2-8 or a permit to subdivide or consolidate land) if the estimated cost of the development is: *[continued]*						
Class 15 - More than $15M and not more than $50M	Fee Unit	1,732.5 fee units		N	R	H
Class 16 - More than $50M (to be charged at 50% until 13 Oct 2017)	Fee Unit	3,894 fee units		N	R	H
Permit Application – Subdivision of land						
Class 17 - Subdivide an existing building (other than a class 9 permit)	Fee Unit	89 fee units		N	R	H
Class 18 - Subdivide land into 2 lots (other than a class 9 or 16 permit)	Fee Unit	89 fee units		N	R	H
Class 19 - Realignment of a common boundary between lots or to consolidate 2 or more lots (other than a class 9 permit)	Fee Unit	89 fee units		N	R	H
Class 20 - To subdivide land other than class 9, 16, 17 or 18 (fee charged per 100 lots created)	Fee Unit	89 fee units		N	R	H
Class 21 - a) To create, vary or remove a restriction within the meaning of the Subdivision Act 1988; or	Fee Unit	89 fee units		N	R	H
Class 21 - b) To create or move a right of way; or	Fee Unit	89 fee units		N	R	H
Class 21 - c) To create, vary or remove an easement other than a right of way; or	Fee Unit	89 fee units		N	R	H
Class 21 - d) To vary or remove a condition in the nature of an easement (other than a right of way) in a Crown grant.	Fee Unit	89 fee units		N	R	H
Class 22 - A permit not otherwise provided for in this Regulation	Fee Unit	89 fee units		N	R	H
Permit Amendment						
Permit Amendment – Use Only						
Amendment to a permit (other than a permit to develop land or to use and develop land or to undertake development ancillary to the use of land for a single dwelling per lot) to change the statement of what the permit allows or to change any or all of the conditions which apply to the permit						
Class 1 - Change or allow a new use of the land	Fee Unit	89 fee units		N	R	H
Class 1 - Amendment to a permit (other than a permit to develop land or to use and develop land or to undertake development ancillary to the use of land for a single dwelling per lot) to change the statement of what the permit allows or to change any or all of the conditions which apply to the permit	Fee Unit	89 fee units		N	R	H
Permit Amendment – Single Dwelling						
To develop land for a single dwelling per lot or use and develop land for a single dwelling per lot and undertake development ancillary to the use of the land for a single dwelling per lot included in the application (other than Class 7 or 8 permit, as relevant, to a permit to subdivide or consolidate land) if the estimated cost of the development is:						
Class 2 - $10,000 or less	Fee Unit	13.5 fee units		N	R	H
Class 3 - More than $10,000 but not more than $100,000	Fee Unit	42.5 fee units		N	R	H
Class 4 - More than $100,000 but not more than $500,000	Fee Unit	87 fee units		N	R	H
Class 5 - More than $500,000 but not more than $1M	Fee Unit	94 fee units		N	R	H
Class 6 - More than $1M but not more than $2M	Fee Unit	101 fee units		N	R	H

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Permit Amendment – VicSmart						
Permit Amendment – VicSmart application if the estimated cost of the development is:						
Class 7 - $10,000 or less	Fee Unit	13.5 fee units		N	R	H
Class 8 - More than $10,000	Fee Unit	29 fee units		N	R	H
Class 9 - VicSmart application to subdivide or consolidate land	Fee Unit	13.5 fee units		N	R	H
Class 10 - VicSmart application (other than class 7, 8 or 10)	Fee Unit	13.5 Units		N	R	H
Permit Amendment – To develop land (other than a Class 2-8 or a permit to subdivide or consolidate land) if the estimated cost of the development is:						
Class 11 - Less than $100,000	Fee Unit	77.5 fee units		N	R	H
Class 12 - More than $100,000 and not more than $1M	Fee Unit	104.5 fee units		N	R	H
Class 13 - More than $1M and not more than $5M	Fee Unit	89 fee units		N	R	H
Class 14 - More than $5M and not more than $15M	Fee Unit	89 fee units		N	R	H
Class 15 - More than $15M and not more than $50M	Fee Unit	89 fee units		N	R	H
Class 16 - More than $50M (to be charged at 50% until 13 Oct 2017)	Fee Unit	89 fee units		N	R	H
Permit Amendment – Subdivision of land						
Class 17 - Subdivide an existing building (other than a class 9 permit)	Fee Unit	89 fee units		N	R	H
Class 18 - Subdivide land into 2 lots (other than a class 9 or 16 permit)	Fee Unit	89 fee units		N	R	H
Class 19 - Realignment of a common boundary between lots or to consolidate 2 or more lots (other than a class 9 permit)	Fee Unit	89 fee units		N	R	H
Class 20 - To subdivide land other than class 9, 16, 17 or 18 (fee charged per 100 lots created)	Fee Unit	89 fee units		N	R	H
Class 21 - a) To create, vary or remove a restriction within the meaning of the Subdivision Act 1988; or	Fee Unit	89 fee units		N	R	H
Class 21 - b) To create or move a right of way; or	Fee Unit	89 fee units		N	R	H
Class 21 - c) To create, vary or remove an easement other than a right of way; or	Fee Unit	89 fee units		N	R	H
Class 21 - d) To vary or remove a condition in the nature of an easement (other than a right of way) in a Crown grant.	Fee Unit	89 fee units		N	R	H
Class 22 - A permit not otherwise provided for in this Regulation	Fee Unit	89 fee units		N	R	H
Permit Applications for more than One Class						
An application for more than one class of permit set out in the above table:	Per Application	Sum of the highest of the fees which would have applied if separate applications were made and 50% of each of the other fees which would have applied if separate applications were made.		N	R	H

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Permit Applications for more than One Class [continued]						
An application to amend a permit in more than one class set out in the above table:	Per Application	Sum of the highest of the fees which would have applied if separate applications were made and 50% of each of the other fees which would have applied if separate applications were made.		N	R	H
Amending an Application after Public Notice (advertising) has been given						
1. Section 57A – Request to amend an application for permit after notice has been given; or	Per Application	40% of the application fee for that class of permit or amendment to permit; and Where the class of application is changing to a new class of higher application fee, the difference between the fee for the application to be amended and the fee for the new class.		N	R	H
2. Section 57A – Request to amend an application for an amendment to a permit after notice has been given:	Per Application	40% of the application fee for that class of permit or amendment to permit; and Where the class of application is changing to a new class of higher application fee, the difference between the fee for the application to be amended and the fee for the new class.		N	R	H
Certification of Subdivision						
Regulation						
Reg. 6 - Certification of a plan of subdivision	11.8 fee units	$187.60	$195.50	N	R	H
Reg. 7 - Alteration of plan under Section 10(2) of the Act	7.5 Fee Units	$119.20	$124.00	N	R	H
Reg. 8 - Amendment of certified plan under Section 11(1) of the Act	9.5 Fee Units	$151.00	$157.50	N	R	H
Engineering						
Reg. 9 - Checking of engineering plans	Per Plan	0.75% of the estimated cost of construction of the works proposed in the engineering plan (maximum fee)		N	R	H
Reg. 10 - Engineering plan prepared by Council	Per Plan	3.5% of the cost of works proposed in the engineering plan (maximum fee)		N	R	H
Reg. 11 - Supervision of works	Per Permit / Works	2.5% of the estimated cost of construction of the works (maximum fee)		N	R	H

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Table 1: Fees for Amendment to Planning Scheme (Regulation 6)						
Stage 1 For: a) considering a request to amend a planning scheme; and b) taking action required by Division 1 of Part 3 of the Act; and c) considering any submissions which do not seek a change to the amendment; and d) if applicable, abandoning the amendment	Fee Unit	206 fee units		N	R	H
Stage 2 For (i) up to and including 10 submissions which seek a change to an amendment and where necessary referring the submissions to a panel; or	Fee Unit	1,021 fee units		N	R	H
Stage 2 For (ii) 11 to (and including) 20 submissions which seek a change to an amendment and where necessary referring the submissions to a panel; or	Fee Unit	2,040 fee units		N	R	H
Stage 2 For (iii) Submissions that exceed 20 submissions which seek a change to an amendment, and where necessary referring the submissions to a panel; and	Fee Unit	2,727 fee units		N	R	H
Stage 3 For a) adopting the amendment or part of the amendment in accordance with section 29 of the Act; and b) submitting the amendment for approval by the Minister in accordance with section 31 of the Act; and c) giving the notice of the approval of the amendment required by section 36(2) of the Act.	Fee Unit	32.5 fee units		N	R	H
Stage 4 For a) consideration by the Minister of a request to approve the amendment in accordance with section 35 of the Act; and b) giving notice of approval of the amendment in accordance with section 36(1) of the Act.	Fee Unit	32.5 fee units		N	R	H
Table 2: Fees for Applications for Permits under Section 47 of the Planning and Environment Act 1987 (Regulation 9)						
Stage 1 - Use only	Fee Unit	89 fee units		N	R	H
Stage 2 - To develop land for a single dwelling per lot or use and develop land for a single dwelling per lot and undertake development ancillary to the use of land for a single dwelling per lot included in the application (other than a class 7 permit or a permit to subdivide or consolidate land) if the estimated cost of development is $10,000 or less	Fee Unit	13.5 fee units		N	R	H
Stage 3 - To develop land for a single dwelling per lot or use and develop land for a single dwelling per lot and undertake development ancillary to the use of land for a single dwelling per lot included in the application (other than a class 8 permit or a permit to subdivide or consolidate land) if the estimated cost of development is more than $10,000 but not more than $100,000	Fee Unit	42.5 fee units		N	R	H
Stage 4 - To develop land for a single dwelling per lot or use and develop land for a single dwelling per lot and undertake development ancillary to the use of land for a single dwelling per lot included in the application (other than a class 8 permit or a permit to subdivide or consolidate land) if the estimated cost of development is more than $100,000 but not more than $500,000	Fee Unit	87 fee units		N	R	H

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle

Table 2: Fees for Applications for Permits under Section 47 of the Planning and Environment Act 1987 (Regulation 9) [continued]

Stage 5 - To develop land for a single dwelling per lot or use and develop land for a single dwelling per lot and undertake development ancillary to the use of land for a single dwelling per lot included in the application (other than a class 8 permit or a permit to subdivide or consolidate land) if the estimated cost of development is more than $500,000 but not more than $1,000,000	Fee Unit	94 fee units		N	R	H
Stage 6 - To develop land for a single dwelling per lot or use and develop land for a single dwelling per lot and undertake development ancillary to the use of land for a single dwelling per lot included in the application (other than a class 8 permit or a permit to subdivide or consolidate land) if the estimated cost of development is more than $1,000,000 but not more than $2,000,000	Fee Unit	101 fee units		N	R	H
Stage 7 - VicSmart application if the estimated cost of development is $10,000 or less	Fee Unit	13.5 fee units		N	R	H
Stage 8 - VicSmart application if the estimated cost of development is more than $10,000	Fee Unit	29 fee units		N	R	H
Stage 9 - VicSmart application to subdivide or consolidate land	Fee Unit	13.5 fee units		N	R	H
Stage 10 - VicSmart Application (other than a class 7, 8 or 9 permit)		13.5 fee units		N	R	H
Stage 11 - To develop land (other than a class 2, class 3, class 7 or class 8 or a permit to subdivide or consolidate land) if the estimated cost of development is less than $100,000	Fee Unit	77.5 fee units		N	R	H
Stage 12 - To develop land (other than a class 4, class 5, or class 8 or a permit to subdivide or consolidate land) if the estimated cost of development is more than $100,000 and not more than $1,000,000	Fee Unit	104.5 fee units		N	R	H
Stage 13 - To develop land (other than a class 6 or class 8 or a permit to subdivide or consolidate land) if the estimated cost of development is more than $1,000,000 and not more than $5,000,000	Fee Unit	230.5 fee units		N	R	H
Stage 14 - To develop land (other than a class 8 or a permit to subdivide or consolidate land) if the estimated cost of development is more than $5,000,000 and not more than $15,000,000	Fee Unit	587.5 fee units		N	R	H
Stage 15 - To develop land (other than a class 8 or a permit to subdivide or consolidate land) if the estimated cost of development is more than $15,000,000 and not more than $50,000,000	Fee Unit	1,732.5 fee units		N	R	H
Stage 16 - To develop land (other than a class 8 or a permit to subdivide or consolidate land) if the estimated cost of development is more than $50,000,000*	Fee Unit	3,894 fee units		N	R	H
Stage 17 - To subdivide an existing building (other than a class 9 permit)	Fee Unit	89 fee units		N	R	H
Stage 18 - To subdivide land into 2 lots (other than a class 9 or class 16 permit)	Fee Unit	89 fee units		N	R	H
Stage 19 - To effect a realignment of a common boundary between lots or consolidate 2 or more lots (other than a class 9 permit)	Fee Unit	89 fee units		N	R	H

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle

Table 2: Fees for Applications for Permits under Section 47 of the Planning and Environment Act 1987 (Regulation 9) [continued]

Stage 20 - Subdivide land (other than a class 9, class 16, class 17 or class 18 permit)	Fee Unit	89 fee units per 100 lots created		N	R	H
Stage 21 - To a) create, vary or remove a restriction within the meaning of the Subdivision Act 1988; or b) create or remove a right of way; or c) create, vary or remove an easement other than a right of way; or d) vary or remove a condition in the nature of an easement (other than right of way) in a Crown grant.	Fee Unit	89 fee units		N	R	H
Stage 22 - A permit not otherwise provided for in the regulation	Fee Unit	89 fee units		N	R	H

Table 3: Fees for Applications to Amend Permits under Section 72 of the Planning and Environment Act 1987 (Regulation 11)

Fee 1 - Amendment to a permit to change the use of land allowed by the permit or allow a new use of land	Fee Unit	89 fee units		N	R	H
Fee 2 - Amendment to a permit (other than a permit to develop land for a single dwelling per lot or to use and develop land for a single dwelling per lot or to undertake development ancillary to the use of land for a single dwelling per lot) to change the statement of what the permit allows or to change any or all of the conditions which apply to the permit.	Fee Unit	89 fee units		N	R	H
Fee 3 - Amendment to a class 2 permit	Fee Unit	13.5 fee units		N	R	H
Fee 4 - Amendment to a class 3 permit	Fee Unit	42.5 fee units		N	R	H
Fee 5 - Amendment to a class 4 permit	Fee Unit	87 fee units		N	R	H
Fee 6 - Amendment to a class 5 or class 6 permit	Fee Unit	94 fee units		N	R	H
Fee 7 - Amendment to a class 7 permit	Fee Unit	13.5 fee units		N	R	H
Fee 8 - Amendment to a class 8 permit	Fee Unit	29 fee units		N	R	H
Fee 9 - Amendment to a class 9 permit	Fee Unit	13.5 fee units		N	R	H
Fee 10 - Amendment to a class 10 permit	Fee Unit	13.5 fee units		N	R	H
Fee 11 - Amendment to a class 12, 13, 14 or 15 permit	Fee Unit	77.5 fee units		N	R	H
Fee 12 - Amendment to a class 12, 13, 14, 15 or 16 permit *if estimated cost of development is between $100,000 and $1,000,000	104.5 Fee Units	104.5 fee units		N	R	H
Fee 13 - Amendment to a class 16 permit	Fee Unit	230.5 fee units		N	R	H
Fee 14 - Amendment to a class 17 permit	Fee Unit	89 fee units		N	R	H
Fee 15 - Amendment to a class 18 permit	Fee Unit	89 fee units		N	R	H
Fee 16 - Amendment to a class 19 permit	Fee Unit	89 fee units		N	R	H
Fee 17 - Amendment to a class 20 permit	Fee Unit	89 fee units per 100 lots created		N	R	H
Fee 18 - Amendment to a class 21 permit	Fee Unit	89 fee units		N	R	H
Fee 19 - Amendment to a class 22 permit	Fee Unit	89 Fee Units		N	R	H

Table 4: Other Fees

Fee 7 - For requesting the Minister to prepare an amendment to a planning scheme exempted from the requirements referred to in section 20(4) of the Act.	Fee Unit	270 fee units		N	R	H

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle

Table 4: Other Fees [continued]

Fee 8 - For requesting the Minister to prepare an amendment to a planning scheme exempted from certain requirements prescribed under section 20A of the Act.	Fee Unit	65 fee units		N	R	H
Fee 10 - For combined permit applications	Fee Unit	Sum of the highest of the fees which would have applied if separate applications were made and 50% of each of the other fees which would have applied if separate applications were made		N	R	H
Fee 12 - Amend an application for a permit or an application to amend a permit	Fee Unit	a) Under section 57A(3)(a) of the Act the fee to amend an application for a permit after notice is given is 40% of the application fee for that class of permit set out in the Table at regulation 9		N	R	H
Fee 13 - For a combined application to amend permit	Fee Unit	The sum of the highest of the fees which would have applied if separate applications were made and 50% of each of the other fees which would have applied if separate applications were made Under section 96A(4)(a) of the Act:		N	R	H
Fee 14 - For a combined permit and planning scheme amendment	Fee Unit	The sum of the highest of the fees which would have applied if separate applications were made and 50% of each of the other fees which would have applied if separate applications were made Under section 96A(4)(a) of the Act:		N	R	H
Fee 15 - For a certificate of compliance	Fee Unit	22 fee units		N	R	H
Fee 16 - For an agreement to a proposal to amend or end an agreement under section 173 of the Act	Fee Unit	44.5 fee units		N	R	H
Fee 17 - For a planning certificate (not electronic)	Fee Unit	1.5 fee units for an application not made electronically		N	R	H
Fee 17 - For a planning certificate (electronic)	Fee Unit	$7.20 for an application made electronically Min. Fee excl. GST: $7.20		N	R	H
Fee 18 - Where a planning scheme specifies that a matter must be done to the satisfaction of a responsible authority, Minister, public authority or municipal council	Fee Unit	22 fee units		N	R	H

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Environmental Health						
Waste Water Treatment System (Septic Tank)						
Application (Construct, Install or Alter)	Per Permit	Min 74 Fee Units		N	R	H
		Last year fee Min 61.00 Fee Units				
Application for Exemption	Per Application	Min 14.67 Fee Units		N	R	H
Application Minor Alteration	Per Permit	Min 37.25 Fee Units		N	R	H
Installation, replacement or relocation of the internal plumbing, fixtures or fittings of an on-site waste water management system						
Application to Amend Permit	Per Permit	Min 10.38 Fee Units		N	R	H
Application to Renew Permit	Per Permit	Min 8.31 Fee Units		N	R	H
Application Transfer Permit	Per Permit	Min 9.93 Fee Units		N	R	H
Inspection Fee	Per Hour	Min 6.12 Fee Units per hour		N	R	H
		Last year fee Min 6.12 Fee Units				
Permit & Plans Request	Per Application	$105.00	$135.00	N	F	G
Food Act 1984, Registrations						
New Registration Fee – General	Per Application	Pro rata registration fee + inspection fee		N	P	C
New Registration Fee – Express	Per Application	Pro rata registration fee + inspection fee + 50%		N	F	G
Inspection Fee	Per Inspection	$270.00	$310.00	N	P	C
Applicable to follow up & requested inspections.						
Late Fee	Per Application	20% of registration fee		N	F	G
Commercial Food Premises Annual Registration						
Class 1	Annually	$545.00	$621.00	N	P	C
Class 2	Annually	$460.00	$522.00	N	P	C
Class 3 & Class 3A	Annually	$230.00	$280.00	N	P	C
Additional Fee if > 10 EFT Employees	Per EFT Employee	$37.00	$37.00	N	P	C
Community Groups (Not for Profit) Food Premises Annual Registration						
Class 2	Annually	$160.00	$180.00	N	P	C
Food sold < 12 times per year.						
Class 3	Annually	$115.00	$130.00	N	P	C
Food sold > 12 times per year.						
Public Health and Wellbeing Act 2008						
Late Fee	Per Registration	20% of registration fee		N	F	G
Accommodation						
Public Health and Wellbeing Act						

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Accommodation [continued]						
Annual Registration Fee	Annually	$275.00	$325.00	N	P	C
New Registration Fee – General	Per Application	Pro rata registration fee + inspection fee		N	P	C
Transfer Fee	Per Application	$335.00	$380.00	N	F	G
Fee includes inspection, report & certificate.						
Inspection Fee	Per Inspection	$212.00	$245.00	N	P	C
Applicable to follow up & requested inspections.						
Beauty Parlour/Skin Penetration						
Public Health and Wellbeing Act						
Transfer Fee	Per transfer	$305.00	$345.00	N	R	H
Fee includes inspection, report & certificate						
Annual Registration Fee	Annually	$166.00	$173.00	N	P	C
New Registration Fee – General	Per Application	Pro rata registration fee + inspection fee		N	P	C
New Registration Fee – Express	Per Application	Pro rata registration fee + inspection fee + 50%		N	F	G
Application will be determined within 14 days of lodgement; providing payment and all documents listed in supporting documents section of application are submitted with the completed application to the satisfaction of Council's authorised Environmental Health Officer						
Inspection Fee	Per Inspection	$180.00	$210.00	N	P	C
Hairdressing						
Public Health and Wellbeing Act						
New Registration Fee – General	Per Application	$310.00	$360.00	N	P	C
New Registration Fee – Express	Per Application	$470.00	$550.00	N	F	G
Application will be determined within 14 days of lodgement; providing payment and all documents listed in supporting documents section of application are submitted with the completed application to the satisfaction of Council's authorised Environmental Health Officer						
Transfer Fee	Per Application	$310.00	$360.00	N	P	G
Fee includes inspection, report & certificate.						
Inspection Fee	Per Inspection	$180.00	$210.00	N	P	C
Applicable to follow up & requested inspections.						
Caravan Park Registrations						
Residential Tenancies Act - 3 Year Cycle 2025/2026						
Registration Fee < 25 Sites	Per Registration	17 Fee Units		N	R	H
Registration Fee 26 – 50 Sites	Per Registration	34 Fee Units		N	R	H
Registration Fee 51 – 100 Sites	Per Registration	68 Fee Units		N	R	H
New Registration Fee – General	Per Registration	Pro rata registration fee		N	R	H

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Caravan Park Registrations [continued]						
Transfer Fee	Per Registration		5 Fee Units	N	R	H
Inspection Fee	Per Inspection	$270.00	$281.00	N	F	G
Late Fee	Per Registration		20% of registration fee	N	F	G
Aquatic Facilities Registrations						
Category 1 Aquatic Facility Registration	Annual	$465.00	$530.00	N	P	C
Transfer of Category 1 Aquatic Facility Registration	Per Transfer	$610.00	$690.00	N	F	G
Aquatic Facility Inspection Fee	Per Inspection	$275.00	$310.00	N	P	C
Applicable per follow-up & requested water sampling						
Aquatic Facility Water Sampling Analysis Fee	Per Inspection	$365.00	$400.00	N	P	C
Applicable per follow-up & requested water sampling						
Late Fee	Per Registration		20% of registration fee	N	F	G
Visitor Services						
Tourism						
New Roundabout Signs – Council Owned	Per Sign – Minimum 6	$209.00	$220.00	Y	P	C
Minimum 6 Signs – this new price includes print, design and installation per panel. Customer does not own the sign, but they can pay for the event sign first time, then pay for a date update in future years. We pay for the proboard and storage of the signs. Includes design, print & installation – minimum 6 signs required per order. Council retains ownership of the signs.						
New Roundabout Signs – Event Owned	Per Sign – Minimum 6	$297.00	$310.00	Y	P	C
Minimum 6 Signs – this new price includes panel, print, design and installation per panel. Customer pays for the proboard and owns the sign and can pay for a date update in future years. Event organiser stores the panels themselves or arranges for signage contractor to store. Includes design, print & installation – minimum 6 signs required per order. Event organiser retains ownership of the signs.						
Roundabout Signs - Date Amendments to Existing	Per Sign – Minimum 6	$104.50	$110.00	Y	P	C
Minimum 6 Signs – this new price includes design, print and installation of the sign with a date update only. The price is only applicable to customers that already have a sign made for the same event in a previous year and the sign has been stored. Includes design, print & installation – minimum 6 signs required per order.						
Roundabout Signs - Installation of Existing	Per Sign – Minimum 4	$30.00	$32.00	Y	P	C
Minimum 4 Signs – this new price includes INSTALL ONLY. The price is only applicable to customers that already have a sign made for the same event in a previous year and the sign has been stored and DOES NOT REQUIRE A DATE UPDATE. Installation ONLY – minimum 4 signs required per order.						
Caravan Parks						
Site Fee - Powered						
Booking: Per Night	Per Night	$34.00	$36.00	Y	P	C
Booking: Per Week	Per Week	$210.00	$220.00	Y	P	C
Additional Night (Nights 8 to 13)	Per Night	$30.00	$32.00	Y	P	C
Booking: Per Fortnight	Per Fortnight	$350.00	$365.00	Y	P	C

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Site Fee - Unpowered						
Booking: Per Night	Per Night	$24.00	$25.00	Y	P	C
Booking: Per Week	Per Week	$154.00	$160.00	Y	P	C
Additional Night (Nights 8 to 13)	Per Night	$22.00	$23.00	Y	P	C
Booking: Per Fortnight	Per Fortnight	$280.00	$295.00	Y	P	C

Waste Services

Transfer Stations

Garbage

Out of Zone - Combined 2 bin waste service	Year Pass	$0.00	$430.00	N	P	C
Garbage - Minimum Charge	Per 240L Bin	$22.90	$24.50	Y	P	C
Garbage - By Volume	Per m3 - Minimum charge 1m3	$88.40	$93.00	Y	P	C
Garbage - By Weight - Hamilton Only	Per Tonne	$295.40	$311.00	Y	P	C
Garbage Containing Recyclables or Green Waste - Minimum Charge	Per 240L Bin	$29.00	$30.50	Y	P	C
Garbage containing Recyclables or Green Waste - By Volume	Per m3 - Minimum charge 1m3	$113.40	$119.50	Y	P	C
Garbage Containing Recyclables or Green Waste - By Weight - Hamilton Only	Per Tonne	$342.20	$360.00	Y	P	C
Commercial & Industrial / Building & Demolition Garbage - Hamilton Only	Per Tonne	$357.40	$390.00	Y	P	C

Green Waste

Green Waste - By Volume	Per m3 – Minimum Charge 1m3	$24.50	$25.50	Y	F	C
Green Waste - By Weight - Hamilton Only		$165.00	$172.00	Y	F	C

Recyclables

Clean Recyclables - 240L Bin	per 240L Bin	$11.50	$12.80	Y	P	C
Clean Recyclables - per tonne - Hamilton Only	per tonne	$126.30	$139.00	Y	P	C

Clean Fill

Concrete for Crushing - Hamilton Only	Per Tonne	$66.80	$69.50	Y	F	G
50mm or Finer Crushed Concrete or Aggregate - Hamilton Only			No charge	Y	Z	G

Tyres

Passenger	Per Tyre	$9.60	$11.00	Y	F	G
Light Truck	Per Tyre	$17.20	$19.00	Y	F	G
Medium/Heavy Truck	Per Tyre	$24.60	$27.00	Y	F	G
Tractor – Diameter <1m	Per Tyre	$114.40	$119.00	Y	F	G
Tractor – Diameter <2m	Per Tyre	$236.50	$246.00	Y	F	G

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
E-Waste						
Small (30x30x30)	Per m3 – Minimum Charge 1m3	$6.00	$6.30	Y	F	G
Medium (50x50x50)	Per m3 – Minimum Charge 1m3	$17.30	$18.00	Y	F	G
Large (>50x50x50)	Per m3 – Minimum Charge 1m3	$22.90	$24.00	Y	F	G
Bed Mattress						
Single	Per Mattress	$36.40	$38.00	Y	F	G
Double	Per Mattress	$41.60	$43.50	Y	F	G
Queen or King	Per Mattress	$41.60	$43.50	Y	F	G
Latex/Memory Foam – Any Size	Per Mattress	$41.60	$43.00	Y	F	G
Other						
Automotive Batteries			No charge	Y	Z	A
Empty Oil Containers	Per Container	$2.10	$2.20	Y	M	G
Refrigerator (Non-degassed)	Per Fridge	$22.90	$24.00	Y	F	G
Soft Furnishings		$41.60	$43.50	Y	F	C
Sump Oil & Oil Filters			No charge	Y	Z	A
This service is only available at the following locations - Hamilton, Glenthompson, Balmoral, Dunkeld and Coleraine						
Steel – Non Contaminated			No charge	Y	Z	A
Waste Management – Miscellaneous						
Replacement/New Mobile Garbage Bin	Per 120L Bin	$95.00	$95.00	N	F	G
Replacement/New Mobile Recycling Bin	Per 240L Bin	$95.00	$95.00	N	F	G
Replacement/New Organics Bin	Per 240L Bin	$95.00	$95.00	N	F	G
Kerbside Collection - Elective Services						
Elective Garbage 120L weekly	Annual	$233.00	$242.50	N	F	G
Elective Recycling 240L fortnightly	Annual	$135.20	$141.00	N	F	G
Elective FOGO 240L fortnightly	Annual	$147.70	$154.00	N	F	G
Elective - Combined 3 bin waste service	Annual	$465.90	$485.00	N	F	G
Infrastructure Services						
Miscellaneous						
Old Hamilton Reservoir Water Supply	Per KL	100% cost per kl (wannon water rate - non potable) plus 10% margin		N	F	G
Hamilton Aerodrome						
Aircraft Arrival Fee			No charge	Y	R	H
Aircraft Departure Fee			No charge	Y	R	H

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Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Hamilton Aerodrome [continued]						
Aircraft Training Flight Approach Fee		No charge		Y	R	H
Aircraft Parking Fee		No charge		Y	R	H
Hangar Site Rental – Non Commercial	Per Year	As detailed in the users licence agreement		Y	P	G
Hangar Site Rental – Commercial	Per Year	As detailed in the users licence agreement		Y	P	G
Non Hangar Site Rental – Non Commercial	Per Year	As detailed in the users licence agreement		Y	P	G
Non Hangar Site Rental – Commercial	Per Year	As detailed in the users licence agreement		Y	P	G
Terminal Building – Lease	Per Year	As detailed in the users licence agreement		Y	P	G
Aerodrome Grounds – Lease	Per Year	As detailed in the users licence agreement		Y	P	G
Refuelling Rights	Per Year	As detailed in the users licence agreement		Y	P	G
Non Hangar Site User Fee		No charge		Y	P	G
Aerodrome Water Supply – Private Users	Per KL	Cost + 0.11 per kl		Y	F	G
Hamilton Regional Livestock Exchange						
Cattle	Per Head	$15.95	$16.60	Y	M	I
Bulls	Per Head	$20.40	$21.50	Y	M	I
Calf	Per Head	$5.75	$6.00	Y	M	I
Horse	Per Head	$23.15	$24.00	Y	M	I
Sheep & Lambs	Per Head	$1.25	$1.30	Y	M	I
Ewe & Lambs at foot	Per Ewe	$1.75	$1.80	Y	M	I
Rams	Per Head	$1.65	$1.70	Y	M	I
Stock in Transit – Cattle	Per Head Per Night	$14.00	$14.60	Y	M	I
Stock in Transit – Sheep	Per Head Per Night	$1.15	$1.20	Y	M	I
Agents Fees	Per Annum	$168,655.00	$178,775.00	Y	M	I
Scanning/Data Fee – Store Cattle ONLY	Per Head	$1.55	$1.60	Y	M	I
Private Weighs – Includes Scanning Fee	Per Head + Opening Fees	$12.80	$13.80	Y	M	I
Opening Fees – Weekends, Public Holidays & After Hours	Per Event	$88.15	$91.00	Y	M	I
Non Hamilton and District Agents Association Sale	Per Sale	$1,983.80	$2,045.00	Y	M	I
Branding	Per Head	$1.25	$1.30	Y	M	I
Agistment	Per Head Per Week, Min 1 Week	$1.65	$1.70	Y	M	I
Agistment	Per Head, Per Night in Excess of 7 night	$0.60	$0.65	Y	M	I
Cattle Ear Tag – Supply	Per Untagged Animal	$30.10	$31.00	Y	M	I
Cattle Ear Tag – Fitting	Per Untagged Animal	$30.10	$31.00	Y	M	I

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Hamilton Regional Livestock Exchange [continued]

Name	Unit	Year 24/25 Fee (incl. GST)	Year 25/26 Fee (incl. GST)	GST	Pricing Basis	Pricing Principle
Sheep Ear Tag – Supply	Per Untagged Animal	$3.10	$3.20	Y	M	I
NCV Sheep (Light & Weak or Diseased Animals)	Per Head	$73.85	$76.50	Y	M	I
Truckwash – AVDATA	Per Minute	$1.60	$1.65	Y	M	I
Truckwash – Coin System – $1 Coin ONLY - Minimum $2	$2 Per 2 Minute	$1.00	$1.00	Y	M	I
Avdata Key Purchase	Per Key	$35.00	$35.00	Y	M	I
Stock Feeding - Small Bale	Per Bale	$17.10	$17.80	Y	M	I
Stock Feeding - Large bale	Per Bale	$107.00	$120.00	Y	M	I

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Fee 3 - Amendment to a class 2 permit	[Table 3: Fees for Applications to Amend Permits under Section 72 of the Planning and Environment Act 1987 (Regulation 11)]	30
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Stage 11 - To develop land (other than a class 2, class 3, class 7 or class 8 or a permit to subdivide or consolidate land) if the estimated cost of development is less than $100,000	[Table 2: Fees for Applications for Permits under Section 47 of the Planning and Environment Act 1987 (Regulation 9)]	29
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Stage 3 For a) adopting the amendment or part of the amendment in accordance with section 29 of the Act; and b) submitting the amendment for approval by the Minister in accordance with section 31 of the Act; and c) giving the notice of the approval of the amendment required by section 36(2) of the Act.	[Table 1: Fees for Amendment to Planning Scheme (Regulation 6)]	28
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Stage 4 For a) consideration by the Minister of a request to approve the amendment in accordance with section 35 of the Act; and b) giving notice of approval of the amendment in accordance with section 36(1) of the Act.	[Table 1: Fees for Amendment to Planning Scheme (Regulation 6)]	28
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Fee Name	Parent Name	Page
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Street parties, street festivals and processions greater than 100 people	[Fees - Community Local Law No.1 of 2022]	8
Street parties, street festivals and processions less than 100 people	[Fees - Community Local Law No.1 of 2022]	8
Student	[General Admission]	12
Sump Oil & Oil Filters	[Other]	36
Supervision & Lifeguard - Per staff member	[Hire]	21
Surrender at animal pound - Dog / Cat	[Animal Surrender]	9
Swim Lesson – 1st Child/Participant	[Aquatic Education]	18
Swim Lesson – 2nd Child/Participant	[Aquatic Education]	18
Swim Lesson – People with Disability	[Aquatic Education]	18
Swim Lesson – Private Instructor	[Aquatic Education]	18
Swim Lesson – Squad	[Aquatic Education]	18
Swim Program – Instructor (School Groups etc)	[Aquatic Education]	18
T		
Technical Support – (Minimum 3 Hours)	[Other]	13
Technical Support – Additional Hours as Required	[Other]	13
Technical Support - Additional Hours as Required after 8 hours	[Other]	13
Terminal Building – Lease	[Hamilton Aerodrome]	37
Thrifty Thursday	[General Admission]	12
Touch Up Linemarking	[All Council reserves & facilities]	23
Tractor – Diameter <1m	[Tyres]	35
Tractor – Diameter <2m	[Tyres]	35
Training Courses	[Library Services]	13
Training with Teens	[Gym or Group Exercise]	17
Transfer Fee	[Beauty Parlour/Skin Penetration]	33
Transfer Fee	[Accommodation]	33
Transfer Fee	[Hairdressing]	33
Transfer Fee	[Caravan Park Registrations]	34
Transfer of Category 1 Aquatic Facility Registration	[Aquatic Facilities Registrations]	34
Truckwash – AVDATA	[Hamilton Regional Livestock Exchange]	38
Truckwash – Coin System – $1 Coin ONLY - Minimum $2	[Hamilton Regional Livestock Exchange]	38
U		
Using a Replica of the Common Seal without Authority	[Governance - Local Law No 1 2021]	7
Using the Common Seal without Authority	[Governance - Local Law No 1 2021]	7
V		
Vehicle Crossings Construction	[Fees - Community Local Law No.1 of 2022]	8
Vehicle Gate Opening and Closing Charge	[Hamilton Botanical Gardens]	21
W		
Walking/Transporting Impounded Livestock to Pound	[Other Livestock Impoundment Fees]	9
Weekend and Outside Business Hours	[Tour Only]	11
Weekend and Outside Business Hours	[Tour & Refreshments]	11
Wet Exercise	[Group Bookings]	19
Winda Mara Children's Program	[Specialist Groups]	13

DRAFT

Southern Grampians SHIRE COUNCIL

Council Policy

COMMUNITY PARTNERSHIP GRANTS POLICY		
	Date Adopted:	
	Adopted By:	Council
	Review Due:	11.06.2028
	Responsible Officer:	Manager Communications and Engagement
	Directorate:	Office of the CEO
	EDRMS No:	

PURPOSE

Council's Community Partnership Grants Policy provides a framework for the Community Partnership Grants program facilitated by Southern Grampians Shire Council. The program seeks to assist Southern Grampians based community groups and not for profit organisations whose grant activities address specific community needs and Council's strategic objectives. This policy provides a consistent and transparent approach to the administration of the Community Partnership Grant program.

SCOPE

The policy applies to the administration, management, and delivery of Council's Community Partnership Grants Program, delivered by Southern Grampians Shire Council's Community Development team.

GENERAL PROVISIONS

Each year, Council delivers two rounds of Community Partnership Grants to facilitate and support community groups and organisations to apply for assistance to deliver projects and initiatives addressing various community needs. These include community projects, events, arts projects, environmental initiatives, community development initiatives, heritage projects and other activities. The grant categories and their purpose are outlined in the Council's Community Partnership Grants guidelines.

Council's Community Partnership Grants Policy confirms Council's commitment to providing funding avenues and support to community groups and organisations and ensures an equitable, open, transparent and accountable decision-making process.

It is a competitive process and is limited by the amount of funds available. Applicants are not guaranteed funding, nor the full amount requested. Projects funded previously cannot be guaranteed funding in future years. This needs to be considered when developing an application.

Eligibility

To be eligible for Council's Community Partnership Grants, applicants must meet the following criteria at the minimum:

- Either be based within Southern Grampians Shire or provide services, projects, events or programs within the boundaries of the municipality that directly benefit the Southern Grampians Shire.
- Be a not-for-profit, incorporated organisation, community groups or club. Applications from individuals will be eligible for the Arts and Culture and Heritage categories only.
- If an applicant is not an eligible organisation as defined above but meets all other eligibility criteria, they may be auspiced by an eligible organisation to apply on their behalf.
- Applicants must hold an adequate public liability insurance policy to cover the staff, members and the general public, as appropriate.
- Applicants must provide evidence of advice obtained regarding relevant permits, approvals, permissions and licenses from the relevant authorities prior to application.

The following groups or activities are not considered eligible for Council's Community Partnership Grants:

- Organisations, activities, or programs which are the responsibility of another level of government, eg. Education and Health.
- Political parties or associated lobby groups.
- Projects, activities or items directly related to gambling.
- The purchase of alcohol, tobacco and vaping goods.
- Inflatables on Council-owned land or facilities.
- Fundraising activities.
- Activities that have already started and/or need retrospective funding.
- Projects that don't meet the aims of the Council's Community Partnership Grants program or align with the Council Plan, Fair Access Policy or other Council strategies and plans.
- Items that are part of an organisation's core business or normal operating expenses e.g. salaries, insurances, utilities, rental of business premises.
- Applications that do not provide all required supporting documentation on closure of the grants round.
- Groups that have outstanding acquittals from a previous successful grant application.
- Privately-owned, for-profit businesses.
- Applications where the applicant's organisation/s promote and/or benefit directly from electronic gaming machines or activities at a business where these machines operate.

Application

All applications must be submitted through the SmartyGrants online system. Applicants who require support submitting an application are encouraged to seek support from Council.

All applications must be completed in full on closure of grant round. All supporting documentation requested must be provided. Applications that do not include all the required supporting information will not be eligible for assessment.

Late submissions will not be accepted.

In any financial year, applicants can make one or more submissions for different projects. The maximum amount that could be allocated per applicant per financial year is $15,000.

Applications for more than $3,000 must demonstrate matching cash contributions. Applicants must provide evidence of cash held, or other approved funding sources by submitting bank statements or grant approval notification. In-kind contributions cannot make up cash component.

Any applicable annual operational subsidies provided by Council are not to be used as the applicant's cash contribution toward the project.

Public Liability Insurance

Southern Grampians Shire Council requires applicants to hold current Public Liability Insurance to the value of $10 Million (this amount may be assessed on a case-by-case basis) to protect themselves against legal liability for third party's injury, death and/or damage to property caused by an occurrence in connection with the applicant's activities. This is proven by providing a valid Certificate of Currency for Public Liability Insurance.

This insurance must be in the name of the applicant, group or organisation. Where an applicant is being covered an auspicing agency's public liability insurance, they must ensure the cover is sufficient.

Assessment

Applications for Community Partnership Grants will be assessed against the criteria as outlined in the Community Partnership Grant program guidelines.

In addition to the grant program criteria outlined in the respective guidelines, to support an equitable and transparent distribution of funds, Council may also consider the following assessment criteria and factors, in determining whether to support grant applications:

- Number of grant applications received, and funds sought
- Amount of grant funding available within the Council's Community Partnership Grants annual budget
- Distribution and spread of funded activities across the municipality
- Degree of involvement of other stakeholders
- Intergration of Council's Fair Access Policy, principles, and community inclusion targeting and supporting all people regardless of age, gender, race, ability, or socio-economic status.
- Potential to develop and maintain project/event sustainability following Council support.

To ensure an accountable and transparent assessment process:

- Applications for grant funding $3000 and under will be assessed by two or more Council officers and approved under delegation by the CEO.
- Applications for grant funding above $3000 up to $15,000 will be assessed by three or more Council officers and approved under delegation by the CEO.
- Applications will then be ranked accordingly, based on defined scoring protocols.

- CEO will present approved applications to Councillors for noting at Council meeting.
- Successful applicants will be advised following a Council meeting.

The assessment process (including assessor names, conflict of interest declarations, decision comments for each application and recommendations) will be recorded within SmartyGrants.

All applicants will be informed of their application outcomes, and the successful applications will be announced publicly. Unsuccessful applicants will be offered the opportunity to discuss the application process.

All successful applicants will receive the approved funding from Council subject funding conditions.

Conflict of Interest

To ensure probity and fairness, all Council officers involved in grant assessment processes are required to declare their interests prior to assessing any applications. All declarations are recorded in SmartyGrants.

In the event of a conflict of interest, the relevant person must decline to participate in any discussion about the application and have this declaration noted as per Council's conflict of interest process. This process ensures that any potential, actual or perceived conflict of interest is promptly identified and managed appropriately.

To ensure impartiality, Council officers who have assisted with an application, will not be part of the Grants Assessment Team. Councillors are not involved in assessing grants and will only note grants awarded for each funding round.

Funding Conditions

Successful applicants must agree to the following funding conditions:

- Obtain all relevant project and event related permits, approvals, permissions and licenses from the relevant authorities prior to commencement
- Keep Council informed of any changes to the proposed funded activity
- Submit an acquittal to Council after completion of the funded activity
- Return the full amount of the grant to Council if the funded activity is no longer viable and/or cancelled, or contact Council's Grants Team to discuss a variation.
- Acknowledge the support provided by the Southern Grampians Shire Council in the following ways - media releases, brochures, flyers, advertising, newsletters and digital media; at events and activities by way of signage, public announcements, opportunity for speech and or presentation and participation at the event; and inclusion in any relevant publications e.g. annual report

Variations

Any change to the funded projects or funding amounts will require a formal variation request by Council. This request will need to be submitted online and will be assessed and approved by

the assessment panel. Applicants should not make changes to projects without receiving approval in writing. Failure to comply with this process may render applicants ineligible for future funding.

Acquittal

It is a condition of accepting a grant that successful applicants submit an online acquittal within sixty days of completion date of each funded project.

In general, acquittal reports may request (but are not limited to):
• A summary of the activity undertaken
• How the project achieved its objectives
• An evaluation including attendance figures, community impacts and outcomes
• Participant feedback received
• What challenges were encountered and how they were overcome
• Were there any unanticipated benefits
• Any future plans related or as a result
• Financial documentation showing actual expenditure
• Supporting documentation, including publicity and promotional materials, items produced with Council's logo, reviews, photos etc.
• Applicant's feedback on the grant program.

Recipients who have an outstanding funding acquittal for a grant, and do not have an approved variation in place, may be ineligible for funding in future grant rounds until the outstanding acquittal is completed.

Council's Community Partnership Grants Dispute Resolution Process

The decision to award grants is made by Southern Grampians Shire Council. The decision is final and there is no review or appeal process. Any disputes or complaints regarding the Council's Community Partnership Grants program or process will be dealt with in accordance with Council's Complaints Handling Policy.

ASSOCIATED POLICIES/DOCUMENTS

The Southern Grampians Council's Community Partnership Grants Policy is supported by the following Council Plans:

- Council's Community Partnership Grants Guidelines
- Southern Grampians Shire Council Plan
- Southern Grampians Shire Council Community Engagement Policy
- Council's Fair Access and Inclusion Policy

CHARTER OF HUMAN RIGHTS COMPLIANCE

It is considered that this policy is compatible with the relevant human rights identified in the *Charter of Human Rights and Responsibilities Act 2006 (Vic).*

GENDER EQUALITY COMPLIANCE

It is considered that this policy is compatible with the relevant gender equality principles identified in the *Gender Equality Act 2020.*

Is a Gender Impact Assessment required?

☒ Yes *(legally required for all policies that have a direct and significant impact on the public)*

☐ No *(please provide an explanation why a Gender Impact Assessment is not required)*

REFERENCES

- The Victorian Local Government Act 2020

REVIEW

This Policy may be reviewed every 3 years from its adoption.

END

Terms of Reference:

CBD Revitalisation Project Advisory Group

Purpose

The Hamilton CBD Revitalisation Project aims to revitalise an ageing CBD streetscape, to build upon the current business activity and ensure the CBD is an exciting and attractive place to visit into the future.

Southern Grampians Shire Council are working to design improvements to Hamilton's central business area's streets and public spaces to benefit residents, businesses and visitors. This project will explore options to improve public spaces, introduce more public art and signage, parking, and improved trees and landscaping.

The purpose of the CBD Revitalisation Project Advisory Group (the Project Advisory Group) is to provide Council and the project management team with advice and guidance on:

- Community and Business engagement
- Project implementation and timing
- Communications
- General advice around aspects of the project

The Project Advisory Group will support Council in an advisory capacity through the provision of local knowledge, advice and feedback as required for the duration of the design stages of the project.

Scope

The Project Advisory Group will:

- Assist with and support community and business engagement for the project duration
- Provide feedback and advice on project implementation timing
- Attend meetings as required

The Project Advisory Group will operate during the design stages of the project, or until such time Council resolves to dissolve the Group.

Authority

The Project Advisory Group will operate in an advisory capacity and is not authorised to make decisions on behalf of Council or the project management team.

The Project Advisory Group can provide advice and make recommendations to Council but has no decision making authority.

Membership and Chair

The Membership of the Project Advisory Group includes:

- 1 x Councillor – Chairperson
- 2 x Council Officers - Director Wellbeing and Regulation and Manager Communications and Engagement
- Community and Business representatives who nominate to be part of the group as part of the Expression of Interest process. If over nine nominations are received an interview process will be completed with a report presented to Council with a recommendation on who should be part of the group based on their response to the expression of interest.
- Administrative Officer

Appointment of Members

Nominations shall be invited from relevant local businesses and community members. The invitation for membership will be advertised across the Southern Grampians Shire.

Business and community representative members will be for a maximum of two years. Members may seek reappointment at the conclusion of their term.

The Councillor representative will be nominated and resolved upon by Council.

Guests may be invited to make presentations to the Project Advisory Group throughout the life of the project as requested by the group. This can include but not be limited to Council staff members, contractors or consultants engaged by Council.

Meeting Arrangements

The PAG will meet at bi-monthly throughout the concept design phase until the final designs are adopted by Council. Extraordinary meetings may be called with at least three days written notice to all members.

A quorum comprises four Business/Community Representative members and one Council Officer or Councillor. If a quorum is not present within half an hour after the scheduled start time of a meeting, the meeting is to be abandoned.

Meetings are to be held at the Council Offices, a Hamilton venue to be determined or via Microsoft Teams.

Reporting and Communication

- A Council officer will circulate an agenda at least three days prior to each meeting and take the minutes of the meeting.
- Minutes will be distributed to all members of the Project Advisory Group.
- The Chair will provide meeting updates to Council after each meeting.

Conduct

In performing the role of Project Advisory Group member, a person must:

- Act honestly.
- Exercise reasonable care and diligence.
- Not make improper use of their position.
- Declare any conflicts of interest
- Not make improper use of information acquired because of their position.
- Retain the confidentiality of any sensitive or personal material or information deemed to be 'commercial in-confidence'.

Project Advisory Group members are also required to conduct themselves in a manner that is consistent with the Southern Grampians Shire Council Code of Conduct.

It is important that the Project Advisory Group represents a broad range of views that represent the diversity of the community, and that each member contributes

meaningfully to meetings in a fair and unbiased manner, looking beyond personal interests for the benefit of the community.

Resignation

Resignation shall be submitted in writing to the Chair of the Group. The Project Advisory Group may terminate any member during their term for breaching Council Policy,

Procedures or the Code of Conduct. Council has the right to suspend or terminate any appointment to the Project Advisory Group.

Resources and Budget

The Project Advisory Group will not be responsible for managing finances.

Conflict of Interest disclosures

Members have a responsibility to declare any conflict or potential conflict between their business, professional or private interests; and their roles as members of the Project Advisory Group. The Project Advisory Group shall then determine if and how the member may participate in deliberation. Any declared conflicts must be noted in the Minutes of the meeting.

Review Date

The Terms of Reference will be reviewed as required.

Planning and Environment Act 1987

SOUTHERN GRAMPIANS PLANNING SCHEME

AMENDMENT C6Xsgra

INSTRUCTION SHEET

The planning authority for this amendment is the Minister for Planning.

The Southern Grampians Planning Scheme is amended as follows:

Planning Scheme Maps

The Planning Scheme Maps are amended by a total of two attached map sheets.

Zoning Maps

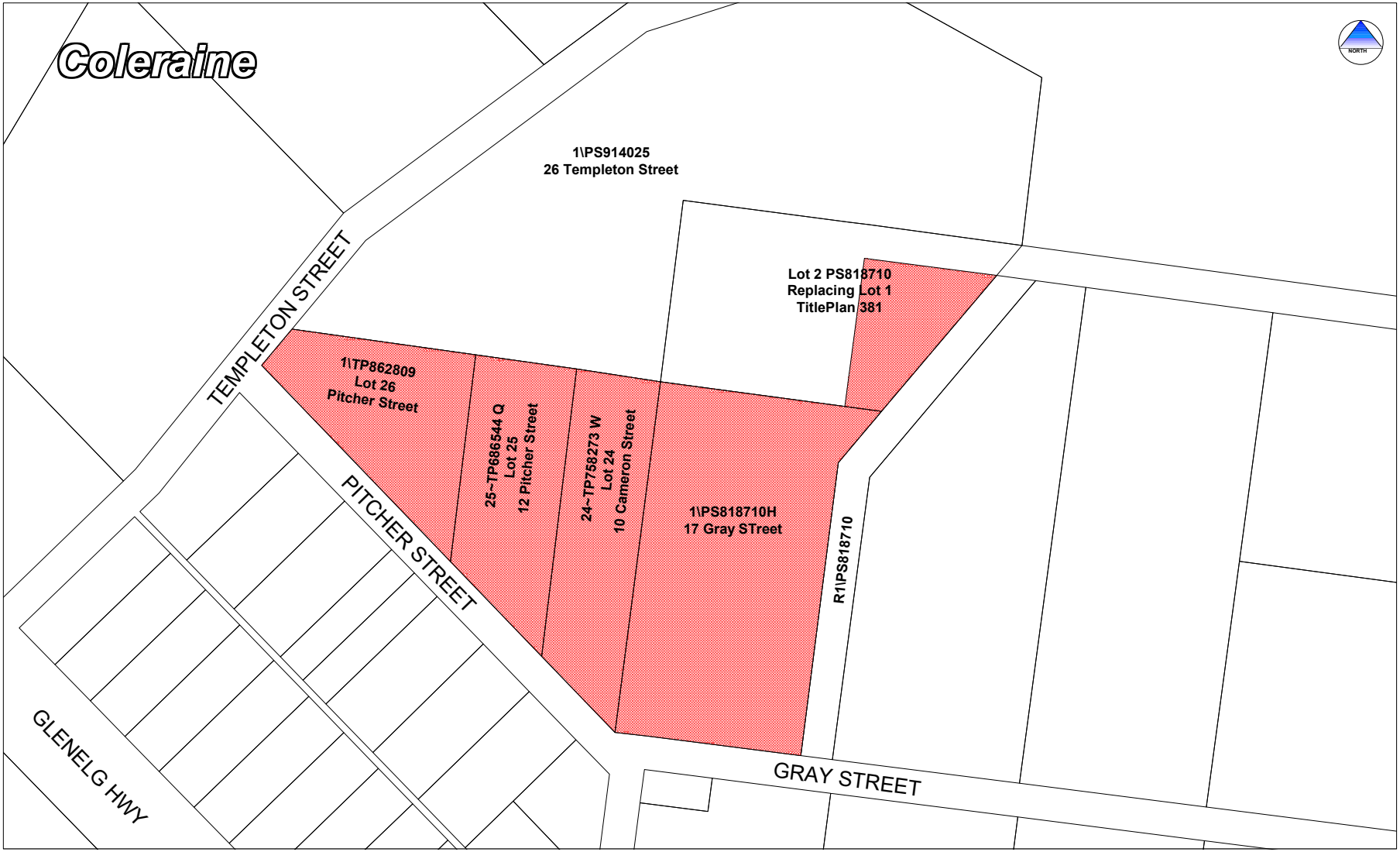
1. Amend Planning Scheme Map No 17 in the manner shown on the one attached map marked "Southern Grampians Planning Scheme, Amendment C6Xsgra".

Overlay Maps

2. Amend Planning Scheme Map No 17DPO in the manner shown on the attached map marked "Southern Grampians Planning Scheme, Amendment C6Xsgra".

End of document

DRAFT



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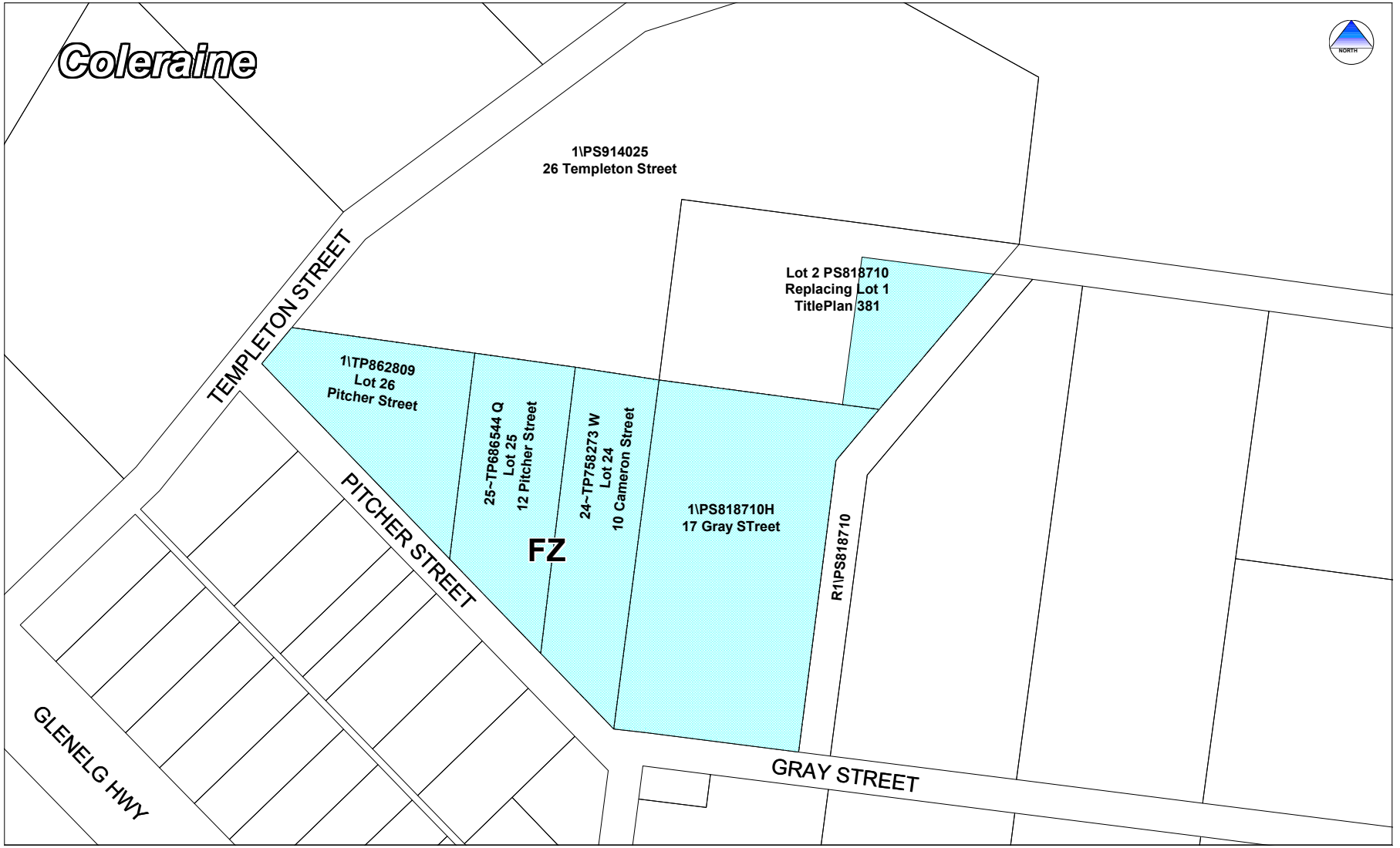
Metres

LDRZ - Low Density Residential

Southern Grampians Planning Scheme

CURRENT ZONING

Drawing: A4-DRAFT A Author: CLB	Project No: R21_001
RigbyBrosReZoningPlans_0221.WOR	Figure: 1
Date: 27 Nov 2024 Draft A	



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Metres

FZ - Farming

Southern Grampians Planning Scheme

PROPOSED ZONING

Drawing: A4-DRAFT A Author: CLB	Project No: R21_001
RigbyBrosReZoningPlans_0221.WOR	Figure: 2
Date: 27 Nov 2024 Draft A	

Scale: 1:3000

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Metres

AMENDMENT LAND

Southern Grampians Planning Scheme

Aerial Photo

Amendment Land

Drawing: A4-DRAFT A Author: CLB	Project No: R21_001
RigbyBrosReZoningPlans_0221.WOR	Figure: 3
Date: 27 Nov 2024 Draft A	

Scale: 1:3000

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Metres

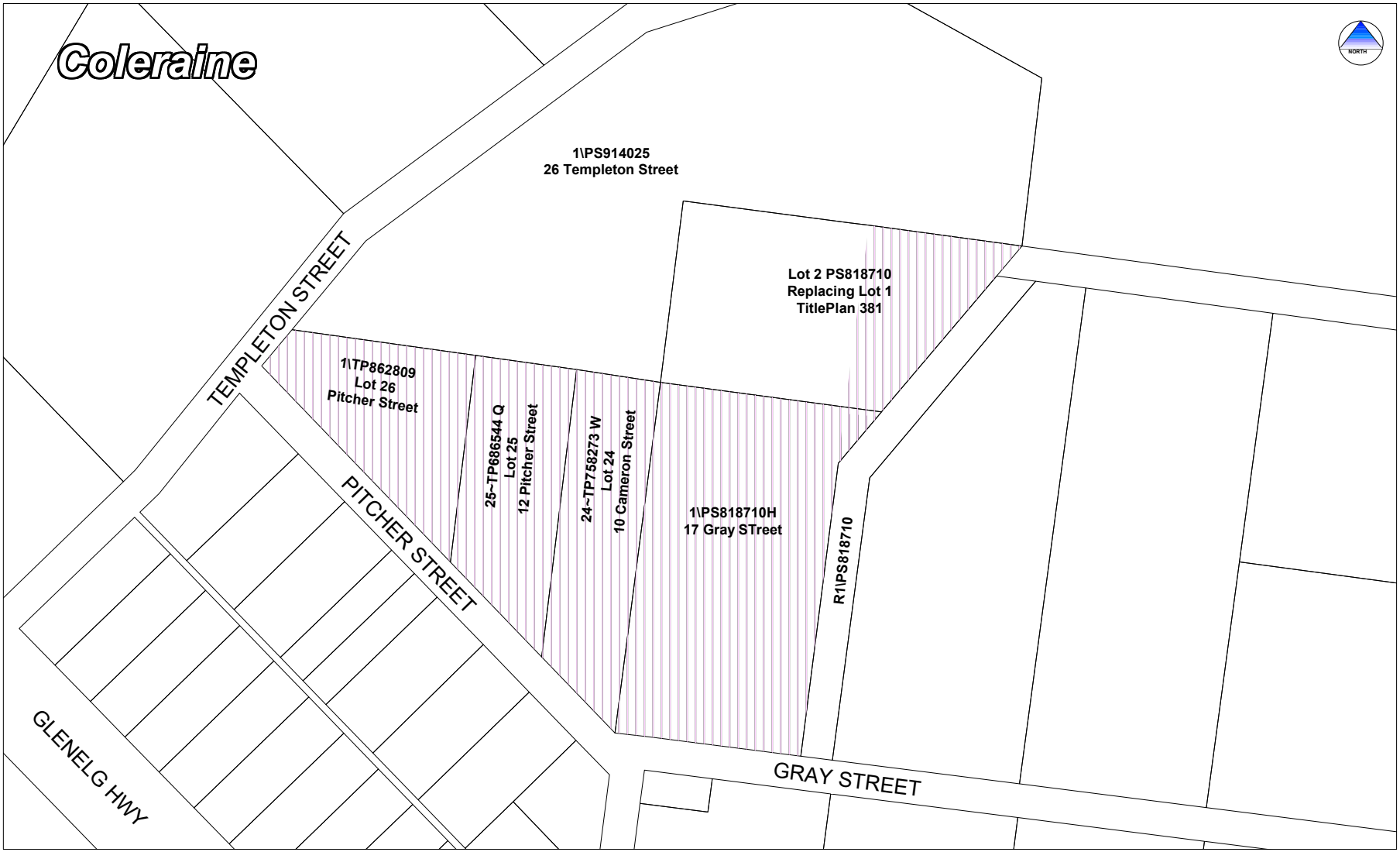
EXPANSION AREA

Southern Grampians Planning Scheme

Aerial Photo

Quarry Expansion Area

Drawing: A4-DRAFT A Author: CLB	Project No: R21_001
RigbyBrosReZoningPlans_0221.WOR	Figure: 7
Date: 27 Nov 2024 Draft A	



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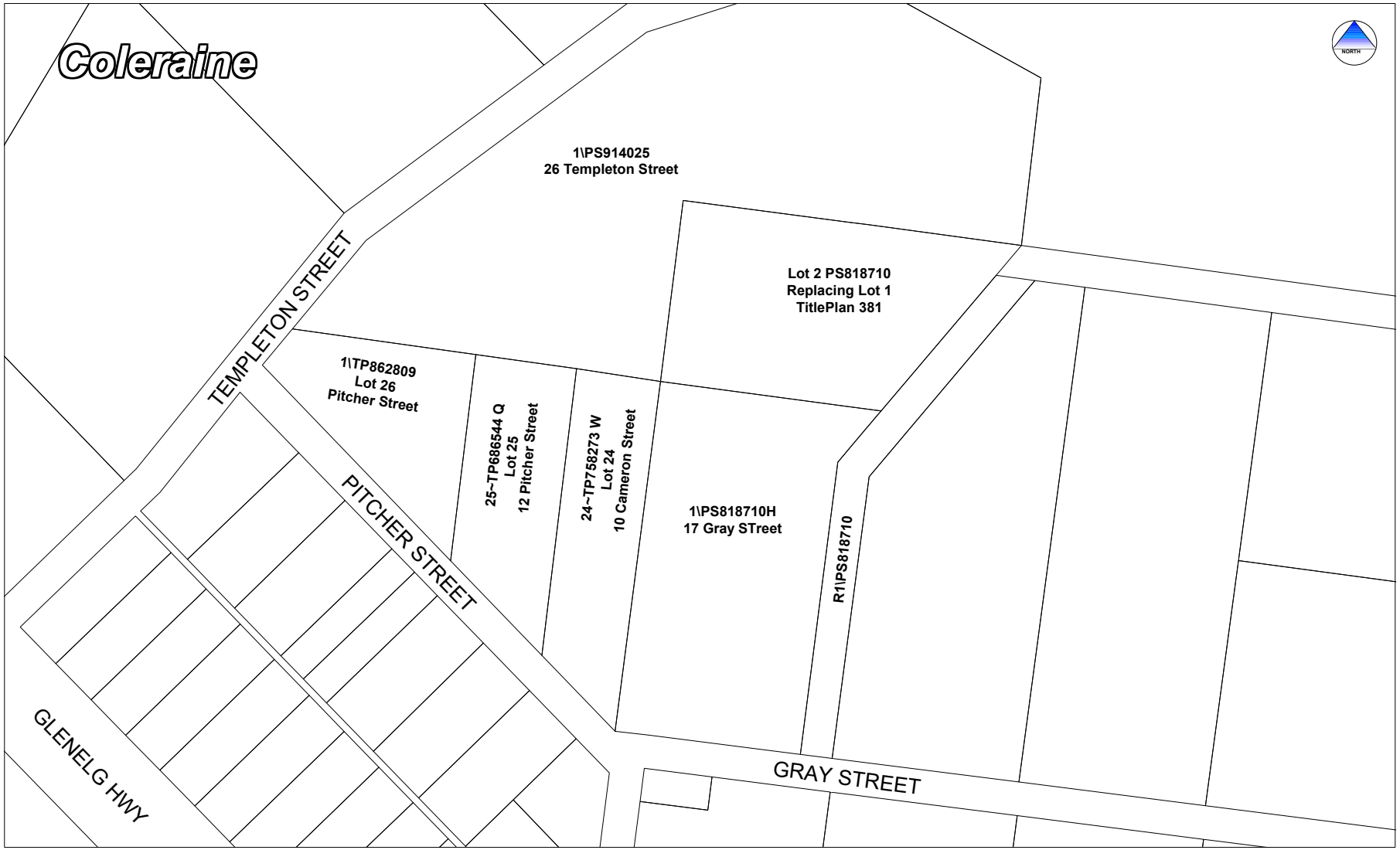
DEVELOPMENT OVERLAY

Southern Grampians Planning Scheme

Current Development Plan Overlay (Schedule 3)

Drawing: A4-DRAFT A Author: CLB	Project No: R21_001
RigbyBrosReZoningPlans_0221.WOR	Figure: 4
Date: 26 Feb 2021 Draft A	



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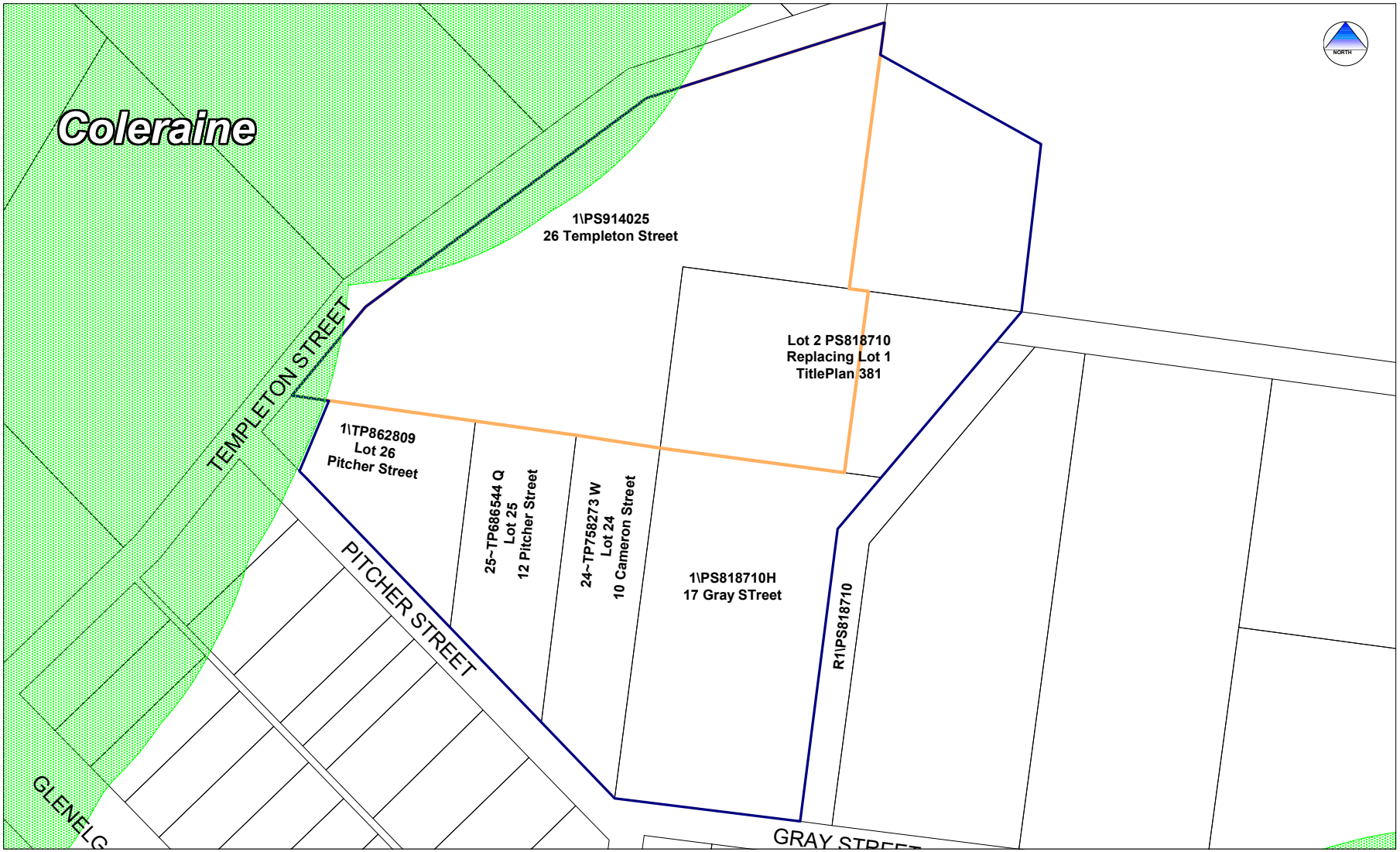
Metres

Southern Grampians Planning Scheme

Proposed Development Plan Overlay (Schedule 3)

Drawing: A4-DRAFT A Author: CLB	Project No: R21_001
RigbyBrosReZoningPlans_0221.WOR	Figure: 5
Date: 26 Feb 2021 Draft A	



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Metres

AREA CULTURAL HERITAGE SENSITIVITY

EXISTING WORK AUTHORITY AREA

PROPOSED WORK AUTHORITY AREA

Southern Grampians Planning Scheme

Existing & Proposed Work Authority 410 Boundaries

Drawing: A4-DRAFT A Author: CLB	Project No: R21_001
RigbyBrosReZoningPlans_0221.WOR	Figure: 6
Date: 27 Nov 2024 Draft A	

Plan Scale 1:4000

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metres

WA410 AREA

Southern Grampians Planning Scheme

WA410 CADASTRAL AREA

Drawing: A4-DRAFT A Author: CLB	Project No: R21_001
RigbyBrosReZoningPlans_0221.WOR	Figure: 8
Date: 27 Nov 2024 Draft A	

Planning and Environment Act 1987

PLANNING SCHEME AMENDMENT C6XSGRA PLANNING PERMIT APPLICATION PAXXXX

EXPLANATORY REPORT

Overview

Planning Scheme Amendment C6Xsgra is a combined planning scheme amendment and permit application proposal. The amendment rezones the land at 26 Templeton Street, Pitcher Street, 12 Pitcher Street, 10 Cameron Street and 17 Gray Street, Coleraine from Low Density Residential Zone (Schedule 1) to Farming Zone, and removes the Development Plan Overlay (Schedule 3) to facilitate the expansion of the existing Coleraine Quarry to this land.

Alongside the planning scheme amendment, Planning Permit Application PAXXXX seeks approval for the expansion of the existing extractive industry use at 26 Templeton Street, Coleraine, (Work Authority 410) to part of 26 Templeton Street and to part of the land to the south at Pitcher Street, 12 Pitcher Street, 10 Cameron Street and 17 Gray Street, Coleraine.

Where you may inspect this amendment

The amendment can be inspected free of charge at the [insert planning authority name] website at [insert planning authority's website]

And/or

The amendment is available for public inspection, free of charge, during office hours at the following places:

[insert planning authority's details]

The amendment can also be inspected free of charge at the Department of Transport and Planning website at http://www.planning.vic.gov.au/public-inspection or by contacting the office on 1800 789 386 to arrange a time to view the amendment documentation.

Submissions

Any person may make a submission to the planning authority about the amendment [and/or planning permit]. Submissions about the amendment [and/or planning permit] must be received by [insert submissions due date].

A submission must be sent to: [insert planning authority's address]

Panel hearing dates

In accordance with clause 4(2) of Ministerial Direction No.15 the following panel hearing dates have been set for this amendment:

- Directions hearing: [insert directions hearing date]
- Panel hearing: [insert panel hearing date]Details of the amendment

Who is the planning authority?

This Planning Scheme Amendment has been prepared by the Minister for Planning, who is the Planning Authority for this amendment.

The Amendment and combined planning permit have been prepared at the request of Rigby Brothers & Co Pty Ltd.

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Land affected by the amendment

The amendment applies to the land contained within the following five titles, formally known as:

- Lot 2 on Plan of Subdivision 818710 (in part) (26 Templeton Street, Coleraine)
- Lot 1 on Title Plan 862809 (Pitcher Street, Coleraine)
- Crown Allotment 25, Section 1B, Township of Coleraine, Parish of Konong Wootong (12 Pitcher Street, Coleraine)
- Crown Allotment 24, Section 1B, Township of Coleraine, Parish of Konong Wootong (10 Cameron Street, Coleraine, also known as part of 6 Pitcher Street, Coleraine)
- Lot 1 on Plan of Subdivision 818710 (17 Gray Street, Coleraine, also known as part of 6 Pitcher Street, Coleraine).

(**the Amendment Land**)

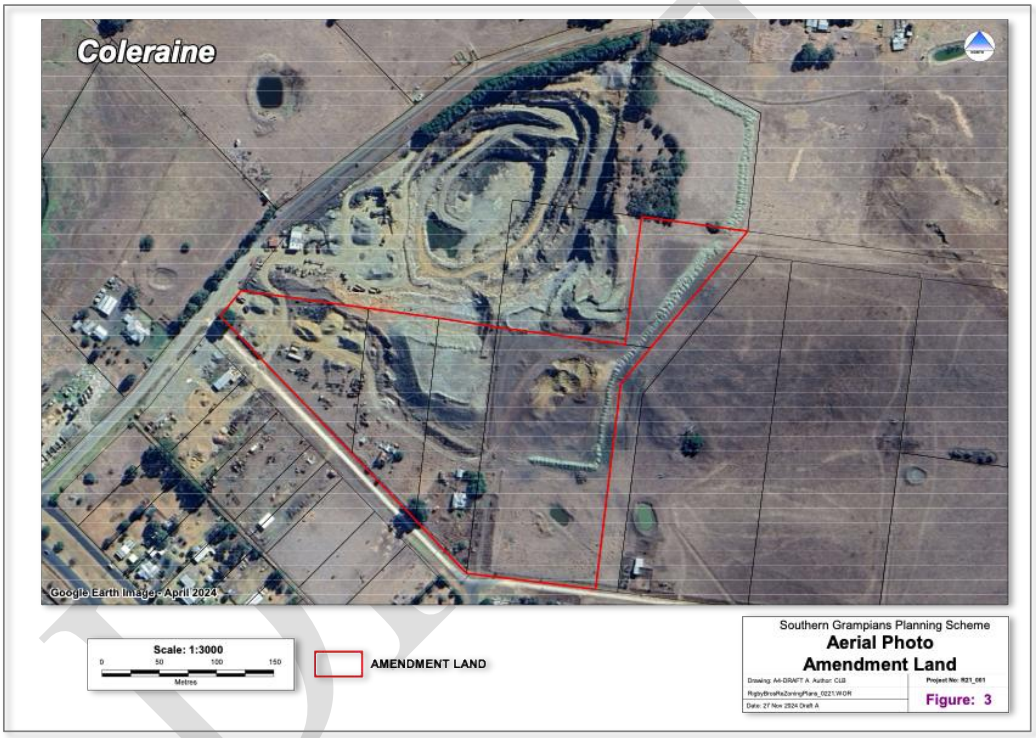

Figure 1 – The Amendment Land identified with red line

A mapping reference table for the lots within the Amendment Land is attached at Attachment A to this Explanatory Report.

What the amendment does

The amendment is made under Section 96A of the *Planning and Environment Act 1987* and seeks to make the following changes to the Southern Grampians Planning Scheme:

- Rezone the Amendment Land from Low Density Residential Zone (Schedule 1) (LDRZ1) to Farming Zone (FZ).
- Remove the Development Plan Overlay (Schedule 3) (DPO3) from the Amendment Land.

What the planning permit does

The concurrent planning permit application seeks permission to:

- Allow an expansion of the existing extractive industry (quarry) use at 26 Templeton Street Coleraine (**the Quarry**) to the full extent of Lot 1 PS914025 and Lot 2 PS 818710, and on to the adjacent lots to the south at Lot 1 P862809Y (Pitcher Street, Coleraine) (in part), Crown Allotment 25, Section 1B, Township of Coleraine, Parish of Konong Wootong (12 Pitcher Street, Coleraine), Crown Allotment 24, Section 1B, Township of Coleraine, Parish of Konong Wootong (10 Cameron Street, Coleraine) and Lot 1 PS 818710H (17 Gray Street, Coleraine) (**the Expansion Land**);
- Increase the area of Work Authority 410 from 5.58 hectares to 12.55 hectares;
- Increase in the disturbance area from 4.25 hectares to 7.8 hectares;
- Increase in the extraction depth to AHD 41.0 metres.
- Revise and modernise the extraction methods;
- Revise rehabilitation profiles for the quarry pit to comply with current standards.

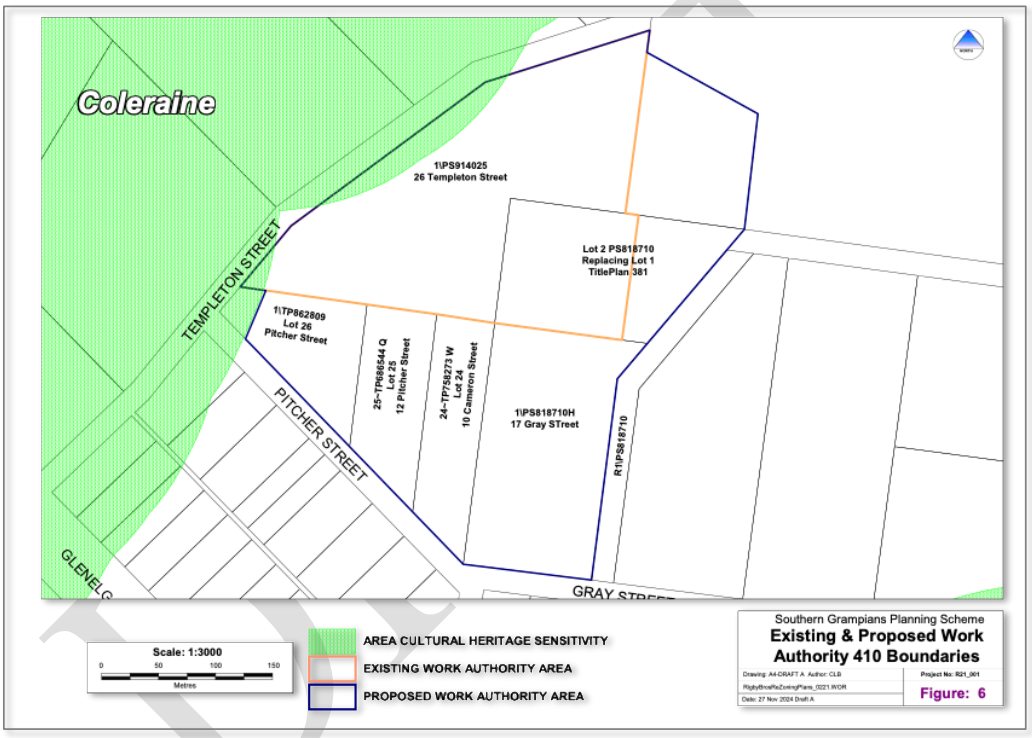

Figure 2 - proposed expansion to Work Authority 410 area

Strategic assessment of the amendment

Why is the amendment required?

The amendment is required to facilitate:

- The expansion of the existing Quarry at 26 Templeton Street Coleraine to the Amendment Land.
- To address the current anomalous LDRZ1 zoning and associated DPO3 of the Amendment Land between the Quarry and the Industrial 1 zoned lots on the south side of Pitcher Street, Coleraine.
- A combined amendment and planning permit process will ensure that the Expansion Land is developed in a coordinated and orderly manner.

Extractive industry is a prohibited use in the LDRZ1 and is not allowed by the DPO3 prior to the preparation of a Development Plan to the satisfaction of Council. To allow the Amendment Land to be used for extractive industry, it must be rezoned to a zone that permits extractive industry, and to remove the DPO3.

The Quarry is a long-standing use which has been operating from 26 Templeton Street for over 100 years and provides hard rock products used in road making and other construction purposes by a range of clients including Southern Grampians Shire Council. The amendment will enable access to additional rock resource and extend its operating life for approximately 30 years.

The amendment will also address the inappropriate residential zoning of the Amendment Land, which is incompatible with the agricultural and industrial zoning of the land to the north and south and to better reflect its existing non-residential character and reduce the potential for land use conflict into the future. It will also address the current dual zoning of the land at 26 Templeton Street.

The removal of the DPO3 will allow a permit to be granted for the expansion of the Quarry on to the Amendment Land and to remove a planning control that seeks to implement specific design outcomes for residential development in Rural Living zoned areas of Hamilton.

The rezoning to FZ will also facilitate the rehabilitation of the Quarry and transition to the agricultural end use for this land following the cessation of quarrying activities.

The amendment supports the relevant State and local strategies and their visions for settlement, natural resource management, and regional planning, as follows:

- The amendment will support the economic viability of the Shire's smaller towns by facilitating the expansion of an established extractive industry use.
- The amendment addresses policies discouraging incompatible land uses to co-locate by rezoning the Amendment Land to FZ.
- The amendment supports regional resource exploration and extraction policies by facilitating continued access to a key construction material resource while providing for the rehabilitation of the land to enable an agricultural end use.

How does the amendment implement the objectives of planning in Victoria?

The objectives of planning in Victoria are:

(a) *to provide for the fair, orderly, economic, and sustainable use, and development of land;*

(b) *to provide for the protection of natural and man-made resources and the maintenance of ecological processes and genetic diversity;*

(c) *to secure a pleasant, efficient, and safe working, living and recreational environment for all Victorians and visitors to Victoria;*

(d) *to conserve and enhance those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value;*

(e) *to protect public utilities and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community;*

(f) *to facilitate development in accordance with the objectives set out in paragraphs (a), (b), (c), (d) and (e);*

(fa) *to facilitate the provision of affordable housing in Victoria;*

(g) *to balance the present and future interests of all Victorians.*

The amendment implements these objectives as follows:

- The removal of the LDRZ1 and DPO3 from the Amendment Land and application of the FZ will allow for the Quarry use at 26 Templeton Street to continue and for agricultural end uses to be carried out in a coordinated and orderly manner that recognises the primary non-

residential character of this area of Coleraine, in accordance with the relevant State and local policy directions for Southern Grampians Shire.

- The amendment will facilitate further access to an important natural resource used in local road construction and for agricultural purposes, including farm tracks and standing areas. The Quarry site at 26 Templeton Street has been significantly disturbed by past quarrying and agricultural uses and contains minimal natural flora and fauna resources that require protection, ensuring that the impacts of the proposed and future use and development upon the site's environmental values and biodiversity are minimised.
- The additional agricultural land and the expansion to the Quarry will provide a pleasant, efficient, and safe working, living and recreational environment for both current and future workers and visitors to the area.
- The amendment will allow for the orderly provision and coordination of services on site and makes efficient use of existing infrastructure services.
- The amendment will enable the proposed Quarry expansion and future agricultural development of the site in a coordinated and orderly manner.
- The expansion of the Quarry will facilitate access to an important resource while minimising impacts on the surrounding land by allowing existing operations and facilities to continue to be used, ensuring that the economic needs of Southern Grampians Shire are met.
- The amendment will balance the short-terms needs of the community by facilitating the expansion of the Quarry use that provides an important construction material resource and employment opportunities against the agricultural end use of the site.

How does the Amendment address any environmental, social, and economic effects?

Environmental

The site is cleared farmland used for a quarry and other non-residential uses and contains no assessable native vegetation. It has a long history of non-residential use that has resulted in disturbance to the existing vegetation, which now comprises grazing grasses and planted trees. The impacts of the amendment and the expansion to the Quarry on the low environmental values of the site will be negligible. The proposed end use for the quarry is agriculture which will have no impact on the environment of the site.

There are no waterways or wetlands within the immediate vicinity of the site. The nearest waterway to the site is the Konong Wootong Creek 200 metres to the west. Water intercepted by the Quarry is directed to the extraction pit sump where it is used for quarry operations or for irrigation of rehabilitated areas. Water that is intercepted in the extraction area is not discharged to any nearby waterways.

Visual impacts from the quarry will be managed by earthen bunds planted with vegetation to provide a screen to the Quarry operations and extraction area.

Noise impacts associated with the rezoning to a non-residential zone will be consistent with the non-residential uses of the surrounding land. The potential for noise impacts from the Quarry expansion will continue to be managed in accordance with the controls set out the work plan and relevant EPA requirements and will be consistent with existing Quarry operations. Blasting activities have been carried out for the Quarry since at least the 1930s and will continue to be managed in accordance with the controls contained in the work plan.

Dust impacts from the expansion to the Quarry will be consistent with the existing Quarry operations and will be managed in accordance with the controls in the work plan, which include water suppression. Health risks associated with respirable crystalline silica dust are very low as the hard rock extracted at the Quarry, trachyte, contains negligible levels of silica.

Social

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The amendment will extend the operational life of an existing family owned and operated business that has been carried out from the land for decades and will continue to provide social benefits to the community. The Quarry will continue to provide a local source of employment in a rural context suffering population and economic decline. Post-closure, the amendment will also facilitate the transition to agricultural uses, a sector recognised as a major employer in the Shire.

Economic

The amendment will create additional agricultural land in line with State and local policy directions for Southern Grampians, as well as local investment and employment opportunities. The additional agricultural land will facilitate new and continuing agricultural enterprises in addition to allowing the Quarry to be expanded on to adjacent land, substantially increasing its operational life.

Does the amendment address relevant bushfire risk?

The land is not affected by the Bushfire Management Overlay; however, part of the land is within a Bushfire Prone Area. Care will be given in operation and construction of the site to ensure that no added Bushfire Risk is created.

Does the amendment comply with the requirements of any other Minister's Direction applicable to the amendment?

The amendment seeks to rezone the land to the FZ and the FZ schedule which is already contained within the Southern Grampians Planning Scheme. The existing DPO3 will be removed from the land. The amendment will utilise existing Planning Scheme provisions and accordingly the form and content of the amendment will be compliant with the *Ministerial Direction - The Form and Content of Planning Schemes*.

The amendment is supported by a planning report and other supporting documents that have been prepared to aid in the strategic evaluation of the amendment as per *Ministerial Direction 11 Strategic Assessment of Amendments*. To assist with preparing a comprehensive strategic evaluation, *Planning Practice Note 46: Strategic Assessment Guidelines* for preparing and evaluating planning scheme amendments was relied upon for guidance. The strategic assessment guidelines provide a consistent framework for preparing and evaluating an amendment and its outcomes.

The *Ministerial Direction 15 The Planning Scheme Amendment Process* sets out the timing for completion of the various steps in the planning scheme amendment process and has been relied upon in the preparation of this amendment.

How does the amendment support or implement the Planning Policy Framework and any adopted State policy?

Consistent with Clauses 11.01-1S, 11.01-1R, 11.02-1S, 11.02-1L the amendment provides for a very minor loss of residential land in on the outskirts of the Coleraine township where residential land is in low demand. It will deliver an increase in agricultural land that will support the local community by improving access to construction materials, additional agricultural opportunities and employment.

Consistent with Clauses 12.01-1S and 12.01-2S, the amendment will have minimal impacts on biodiversity or native vegetation as the site has low environmental values, being disturbed land with a history of agriculture and extractive industry use.

Consistent with Clause 13.01-1S, the amendment will not result in any risks from natural hazards as a result of climate change impacts.

Consistent with Clause 13.02-1S, the amendment will have no impact on bushfire risk for the Coleraine township. The reduction in the extent of residentially zoned land will have a minor reduction in the risk of bushfire impacts by limiting the opportunity for further residential development.

Consistent with Clause 13.05-1S, the amendment will appropriately manage the effects of noise on nearby sensitive uses by ensuring compliance with relevant noise emissions standards and by maintaining the existing intensity and operational methods of the quarry in relation to the proposed expansion to the Quarry.

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Consistent with Clauses 13.07-1S and 13.07-1L, the amendment will protect community amenity from non-compatible uses including extractive industry and agriculture by removing residentially zoned land adjacent to FZ and IN1Z land and reduce the potential for future land use conflicts with existing non-residential uses.

Consistent with Clauses 14.01-1S and 14.01-1L, the amendment will protect agricultural land by augmenting existing agricultural zoned land on the periphery of the Coleraine township and by avoiding the permanent removal of productive agricultural land. Extractive industry is a temporary use, with the life the Quarry to be extended by approximately 30 years, after which time land will return to productive agricultural use for grazing and general farming activities.

Consistent with Clause 14.02-2S, the amendment will ensure the protection of water quality by directing rain and surface waters to the quarry for treatment and re-use within the quarry operation without the need to discharge to local waterways.

Consistent with Clauses 14.03-1S and 14.03-1R, the amendment will facilitate the continued access to an important stone resource in the Southern Grampians Shire region in a context where the Quarry has supplied much needed products for local road and other construction projects for decades.

Consistent with Clause 15.03-2S, the amendment will have no impact on any place of Aboriginal cultural heritage significance.

Consistent with Clauses 17.01-1S and 17.01-1R, the amendment will facilitate an expansion of an existing extractive industry use that will continue to strengthen and diversify the Southern Grampians economy by providing employment and access to an important local construction material resource.

How does the amendment support or implement the Municipal Planning Strategy?

The proposal is consistent with the Southern Grampian's Municipal Planning Strategy by:

- Facilitating the continued operation of an important local Quarry business for Coleraine and Southern Grampian's economy and providing continued employment opportunities.
- Protecting the Shire's natural attributes including native vegetation and the natural landscape.
- Augmenting existing agricultural land, supporting Southern Grampian's largest employment and growth sector.
- Protecting agricultural uses and other non-residential uses from the encroachment of sensitive uses that are incompatible with farming practices and extractive industry uses.
- Ensuring that the Quarry expansion has considered agricultural end uses through an updated rehabilitation plan.
- Protecting waterways by ensuring surface water runoff is retained on site and not directed to nearby creeks or streams.
- Managing the impacts of quarrying by locating the Quarry expansion on land adjacent to the existing Quarry, allowing existing infrastructure and quarrying practices to continue with minimal impacts to adjacent and nearby land.

Does the amendment make proper use of the Victoria Planning Provisions?

The amendment makes proper use of the Victoria Planning Provisions. The LDRZ1 will be appropriately removed from the Amendment Land as the purposes of this zone are inconsistent with the zoning of surrounding land and existing non-residential uses. The DPO3 will be removed as it seeks outcomes for residential development and relates to Rural Living zoned residential land in Hamilton and is inconsistent with the surrounding non-residential zoning. It is a logical extension of the existing zoning pattern of the Quarry land to the north that is in the FZ. The FZ will be complementary to the non-residential character of the land to the north and the south. The FZ will also permit the expansion of an existing extractive industry use on to land contiguous with that use.

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How does the amendment address the views of any relevant agency?

The amendment incorporates feedback received to date from TBC

Does the amendment address relevant requirements of the *Transport Integration Act 2010*?

The amendment and planning application are in keeping with the objectives of the *Transport Integration Act 2010* in facilitating preventing disruption both in the short or long term to transport systems, as well as complying with the requirement for development not to prevent future transport network expansion.

Resource and administrative costs

What impact will the new planning provisions have on the resource and administrative costs of the responsible authority?

Costs associated with the planning scheme amendment process will be met by the proponent of this amendment.

The planning permit will be considered by the Minister for Planning as part of this combined planning scheme amendment and planning permit application. It is not anticipated that the future planning permit applications facilitated by the PSA will have a significant administrative burden on Southern Grampians Shire Council.

ATTACHMENT A - Mapping reference table

Location	Land /Area Affected	Mapping Reference	Address	Proposed Zone changes	Proposed Overlay changes	Proposed deletion changes
Coleraine	Land bounded by Templeton Street, Pitcher Street and Grey Street, Coleraine	Southern Grampians C6Xsgra Map17 Southern Grampians C6Xsgra dpoMap17	26 Templeton Street, Coleraine, Pitcher Street, Coleraine, 12 Pitcher Street, Coleraine, 10 Cameron Street, Coleraine and 17 Gray Street, Coleraine	Rezone from LDRZ1 to FZ	DPO3	D-DPO3

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Our Ref: EQ20000290
Contact: Andrew Natoli
Phone: 9853 5000 / 0417 101 236
Email: andrew.natoli@equipelawyers.com.au

10 January 2025

Southern Grampians Shire Council
Attention: Andrew Nield
1 Market Place
Hamilton VIC. 3300
By email: anield@sthgrampians.vic.gov.au

Dear Andrew

26 Templeton Street, Pitcher Street, 12 Pitcher Street, 10 Cameron Street & 17 Gray Street, Coleraine
Section 96A combined planning scheme amendment and planning permit application
Proposed expansion to the Coleraine Quarry

We act for Rigby Bros & Co Pty Ltd (**Rigby**).

1 We have been instructed to prepare an application to Southern Grampians Shire Council (**Council**) for a combined planning scheme amendment and planning permit application under section 96A of the *Planning and Environment Act 1987* (**the Act**) to faciliate an expansion of the existing quarry at 26 Templeton Street, Coleraine.

2 The purpose of this letter is to set out the background to the proposal and to request a pre-lodgement meeting with Council officers.

Background

3 Rigby is the owner and occupier of the land at 26 Templeton Street Coleraine (**the Quarry Land**), from which it operates a hard rock quarry known as Coleraine Quarry (**the Quarry**) under Work Authority No. 410 (**WA 410**).

4 The Quarry has been in operation for over 100 years and provides a range of hard rock products used in construction and for road bases by a range of customers in the Southern Grampians region, including Council.

5 The Quarry currently operates under a work plan approved in 1975 as Extractive Industry Licence 393, which was transferred to WA410 in April 1996 following the commencement of the *Mineral Resources (Sustainable Development) Act 199*0 (**the MRSDA**).

6 The Quarry is soon to be exhausted of accessible materials available within approved extraction limits from the 1975 work plan.

Proposed quarry expansion

7 To secure the Quarry's on-going operation, a variation to WA410 and its approved work plan is required to expand its approved extraction limits. The variation will also provide for the modernisation of the Quarry's operations and to implementation of an improved post-closure rehabilitation profile and end use outcomes that are consistent with contemporary standards (**the Proposed Quarry Expansion**).

8 The Proposed Quarry Expansion proposes an increase in the Quarry's existing extraction and disturbance areas within the Quarry Land and on to new land located to the south of the Quarry at Pitcher Street, 12 Pitcher Street, 10 Cameron Street & 17 Gray Street, Coleraine.

9 A variation to WA410 was statutorily endorsed by the Department of Energy, Environment and Climate Action (**DEECA**) through its Earth Resources Regulation branch (**ERR**), on 30 October 2024 (**the Endorsed Work Plan Variation**), pursuant to section 77TD of the MRSDA.

10 To faciliate the Endorsed Work Plan Variation, planning permission is required (**the Planning Permit Application**). A planning scheme amendment to rezone parts of the land surrounding the Quarry is also required to allow planning approval to be granted (**the Planning Scheme Amendment**).

11 To faciliate the proper consideration of the Proposed Quarry Expansion, it is proposed to seek a combined planning scheme amendment and planning permit application under section 96A of the Act.

The Planning Scheme Amendment

12 The existing extent of WA410 within the Quarry Land is zoned Farming. However, parts of 26 Templeton Street and the land to the south of the Quarry are currently zoned Low Density Residential (**LDRZ**) and subject to a Development Plan Overlay (**DPO**).

13 Both the LDRZ and DPO prohibit the use and development of land for 'extractive industry'.

14 To enable a planning permit to be granted for the use and development of the surrounding land for the Proposed Quarry Expansion, it is proposed to amend the Southern Grampians Planning Scheme (**the Planning Scheme**) to:

14.1 Rezone those parts of the land proposed to be used and developed for extractive industry in association with the Quarry to Farming Zone; and

14.2 Remove the DPO from those parts of the land proposed to be used and developed for extractive industry in association with the Quarry.

The planning permit application

15 The Planning Permit Application seeks permission for the expansion of the existing Quarry on to new parts of 26 Templeton Street, and on to the adjacent lots to the south at Pitcher Street, 12 Pitcher Street, 10 Cameron Street & 17 Gray Street, Coleraine.

16 The Proposed Quarry Expansion is anticipated to provide access to approximately 1 million tonnes of additional hard rock resource. The annual production of the Quarry has been approximately 30,000-40,000 tonnes and, on this basis, it is anticipated that the life of the expanded Quarry would be in the order of 30 years.

17 In summary, the Proposed Quarry Expansion proposes:

- 17.1 An increase in the size of the WA410 area from 5.58 hectares to 12.55 hectares and an increase in the disturbance area from 4.25 hectares to 7.8 hectares.
- 17.2 The majority of new extraction will be made available within the existing Quarry pit, with the increase in the disturbance area generally associated with the creation of new hardstand for processing and other purposes, stockpiles, sediment trap, sediment dam and weighbridge, and to facilitate rehabilitation profiles that are consistent with contemporary standards.
- 17.3 The maximum depth of extraction and maximum terminal depth increased from 72 metres AHD to 41 metres AHD.
- 17.4 Revised rehabilitation profiles to better accord with contemporary standards.

18 No changes to the operations of the Quarry (including to the hours of use, vehicular access and movement, and blasting practices) are not proposed as part of the Proposed Quarry Expansion. No native vegetation is required to be removed, and all undisturbed areas of Aboriginal cultural heritage sensitivity will be avoided.

19 Under the planning controls proposed under the Planning Scheme Amendment, planning permission for the Proposed Quarry Expansion will be required under the following provisions:

- 19.1 Clause 35.07-4 (Farming Zone) – a permit is required to develop the land for extractive industry. A permit is required to extend the Quarry on to the Expansion Land, and a permit is required for the Quarry Land to increase the size of the extraction area.
- 19.2 Clause 52.08-1 (Earth and Energy Resources Industry) – a permit is required to develop land for earth and energy resources industry (extractive industry).

Request for pre-lodgement meeting

20 To assist our client with the preparation and lodgement of the s 96A application with Council, our client would greatly appreciate an opportunity to meet with planning officers to discuss the preferred processes and any additional application requirements.

21 To facilitate these discussions, the following documents are enclosed:

- 21.1 Draft planning report.
- 21.2 Draft amendment instruction sheet
- 21.3 Draft Explanatory report.

21.4 Draft zoning and overlay maps.

21.5 Draft planning permit.

21.6 Endorsed Work Plan Variation.

22 We thank you for your assistance in progressing the matter to this point.

23 Please note that our client is also happy to provide any further technical information associated with the Endorsed Work Plan Variation as necessary.

We look forward to hearing from you. Please do not hesitate to contact us on 9853 5000 if you have any queries regarding this letter.

Yours faithfully

Andrew Natoli
Director
Equipe Lawyers

Encl.

EQUIPE

PLANNING REPORT (DRAFT)

S96A PLANNING SCHEME AMENDMENT AND PERMIT APPLICATION

26 TEMPLETON STREET, PITCHER STREET, 12 PITCHER STREET, 10 CAMERON STREET & 17 GRAY STREET, COLERAINE

Prepared for
Rigby Bros & Co Pty Ltd

January 2025

STAFF RESPONSIBLE FOR PREPARING THIS REPORT:

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1 INTRODUCTION AND SUMMARY

1.1 This Planning Report has been prepared by Equipe Lawyers on behalf of Rigby Bros & Co Pty Ltd (**the Proponent**) in support of a combined rezoning request and planning permit application (pursuant to Section 96A of the *Planning and Environment Act 1987*) (**the 96A Application**).

1.2 The Proponent is the operator of the existing Coleraine Quarry (**the Quarry**) at 26 Templeton Street, contained within Lot 1 PS914025 and Lot 2 of PS818710 (**the Quarry Land**) and Work Authority No. 410 (**WA410**).

1.3 The purpose of the 96A Application is to facilitate the expansion of the Quarry onto adjacent land to the east and south of the Quarry Land.

1.4 The report provides an outline of the proposed amendment to the Southern Grampians Planning Scheme (**the Planning Scheme**), an assessment against the relevant Ministerial Directions, Planning Practice Notes and Victoria Planning Provisions. The report also provides an assessment of the proposed extension to the Quarry that the amendment seeks to facilitate.

1.5 The Quarry Land has been used for extractive industry (extraction and processing of trachyte) since the late 1800s in its current configuration since 1947, when operations were contracted to a third party by the Shire of Wannon. Blasting operations commenced in the 1930s, with extraction works up to that time carried out by hand. In 1969, with the Shire incapable of holding a quarry licence, the Quarry's licence was transferred to the Proponent to continue operations on behalf of the Shire. The Proponent continued to manage the Quarry on behalf of the Shire until it was amalgamated into Southern Grampians Shire in 1997 who then sold the Quarry Land to the Proponent.

1.6 The Quarry previously operated under Extractive Industry Licence 393, which was transitioned to Work Authority 410 (**WA410**) in April 1996 following the introduction of the *Mineral Resources (Sustainable Development) Act 1990* (**the MRSDA**). The most recent update to the Work Plan was made in 1975, with additional conditions added during the WA410 transition in 1996.

1.7 The Quarry is operated under an existing use right for extractive industry established under the Planning Scheme.

1.8 The Proponent proposes to expand the Quarry to include new land to accommodate an extension of the extraction pit to the east and to include land to the south that is currently used for stockpiling as part of the Quarry use. The expansion of the work authority and extraction area will provide access to additional hard rock (trachyte) reserves and enable a more appropriate rehabilitation profile, and it will also regularise the use of land to the south as part of the Quarry (**the Proposed Quarry Expansion**).

1.9 The Proposed Quarry Expansion proposes to include the following land as part of an expanded WA410:

1.9.1 The eastern sections of Lot 1 PS914025 and Lot 2 PS818710 at 26 Templeton Street, Coleraine, which will accommodate the proposed extension to the extraction area. This land is vacant paddocks and is not currently within WA410 and has not been previously used as part of the Quarry.

1.9.2 Lots to the south at Lot 1 TP862809 (Pitcher Street, Coleraine) (in part), Crown Allotment 25, Section 1B, Township of Coleraine, Parish of Konong Wootong (12 Pitcher Street, Coleraine), Crown Allotment 24, Section 1B, Township of Coleraine, Parish of Konong Wootong (10 Cameron Street, Coleraine, also known as part of 6 Pitcher Street, Coleraine) and Lot 1 PS818710H (17 Gray Street, Coleraine, also known as part of 6 Pitcher Street, Coleraine). These lots comprise vacant paddocks, with parts currently used for stockpiling as part of the Quarry and it proposed to formally include these as part of the Quarry Land.

(**the Expansion Land**).

1.10 Except for its northernmost section (at Lot 1 PS914025), the Expansion Land is currently zoned Low Density Residential (**LDRZ**), under which extractive industry is a prohibited use (**the Amendment Land**). The Amendment Land must therefore be rezoned to Farming Zone (**FZ**) to facilitate the Proposed Quarry Expansion.

1.11 The 96A Application includes the following applications:

1.11.1 A request to rezone the Amendment Land from LDRZ to FZ and to remove the Development Plan Overlay (Schedule 3) (**the Amendment**).

1.11.2 A planning permit application seeking permission to use and develop the Expansion Land for extractive industry as part of the Quarry (**the Permit Application**).

1.12 The Department of Energy, Environment and Climate Action (**DEECA**) statutorily endorsed the Work Plan Variation application (**PLN-000923**) for WA410 for the Proposed Quarry Expansion on 30 October 2024 (**the Endorsed Work Plan Variation**), pursuant to section 77TD of the MRSDA. The Endorsed Work Plan Variation and written notice of statutory endorsement is enclosed with this application, in accordance with the requirements of Clause 52.09-2 of the Planning Scheme.

1.13 It is submitted that the 96A Application and the Proposed Quarry Expansion is appropriate and represents an acceptable planning outcome for the following reasons:

1.13.1 The Quarry Land is a large rural allotment that has been used for extractive industry for well over 100 years and is situated within an area used for a range of agricultural activities.

1.13.2 The Expansion Land includes rural allotments currently used for agricultural and other non-residential purposes and is contiguous with the Quarry Land.

1.13.3 The Expansion Land is partly zoned Low Density Residential Zone and affected by the Development Plan Overlay, which both seek residential outcomes. The current

planning controls are incompatible with the agricultural zoning of the surrounding land to the north, including the Quarry Land, and the industrial zoning of the land to the south across Pitcher Street.

1.13.4 The Proposed Quarry Expansion represents a modest increase to the existing extraction area and will provide further access to a valuable hard rock resource that will support the continuation of this long-established extractive industry business.

1.13.5 The Proposed Quarry Expansion will not result in any unreasonable landscape or visual impacts to surrounding properties or the wider Coleraine area. While the Quarry is located within proximity to the Coleraine township, it is within an historically modified landscape that has existed in its present condition for over 100 years. The effects of the Proposed Quarry Expansion will primarily be confined to areas immediately adjacent to the existing Quarry pit, minimising the potential for external visual impacts.

1.13.6 The Proposed Quarry Expansion will utilise existing infrastructure and processes that are not changing and which have not caused unreasonable impacts to nearby land. The same blasting practices that have occurred on the site since the 1930s will continue and not cause unreasonable adverse amenity, health or safety impacts on surrounding land uses into the future.

1.13.7 There is no proposed change to the current level of activity or hours of operation for the Quarry, meaning there will be no material change to local traffic conditions or the potential for other amenity impacts as a result of the Proposed Quarry Expansion.

1.13.8 The Proposed Quarry Expansion will not result in the loss of any native vegetation.

1.13.9 The Proposed Quarry Expansion will not impact on groundwater, which is estimated to be approximately 18 metres below the maximum proposed Quarry pit depth of 41 metres AHD. No groundwater is proposed to be utilised and groundwater licencing is therefore not required.

1.13.10 The Proposed Quarry Expansion will not impact any registered areas of Aboriginal Cultural Heritage Sensitivity (**ACHS**). The existing WA410 boundary intersects with two areas of ACHS along the Templeton Street frontage. These small areas have been subject to significant ground disturbance from the long established Quarry use and are not proposed to change. The Proposed Quarry Expansion Land has been designed to avoid impacting any undisturbed areas of ACHS.

1.13.11 The Work Authority area of the Quarry, including the proposed expansion, will be progressively rehabilitated and returned to agricultural production, consistent with purposes of the FZ.

1.13.12 The existing Quarry use is consistent with the purposes of the FZ and the objectives and strategies of all relevant State and local planning policies related to rural areas and extractive industry, as well as the decision guidelines of Clause 52.09 and

Clause 65. The Proposed Quarry Expansion will have no impact on the Quarry's on-going compliance with all relevant planning controls and policies.

1.13.13 The 96A Application will extend the life of a long established extractive industry that has been supplying much needed hard rock products to the local construction industry. In the longer term, the Amendment will address existing zoning anomalies and reduce potential for land use conflicts from the encroachment of sensitive uses.

1.13.14 The Proposed Quarry Expansion and the 96A Application will deliver a net community benefit.

1.14 The combined Permit Application and Amendment comprises this Planning Report and the following documents which are contained in appendices:

1.14.1 Certificates of Title and Plan.

1.14.2 C6Xsgra - Explanatory Report.

1.14.3 C6Xsgra – Instruction Sheet.

1.14.4 PAXXXXX draft planning permit.

1.14.5 Zone and overlay maps.

1.14.6 Endorsed Work Plan Variation No. PLN-000923 (including all technical reports and plans).

1.14.7 Referral authority checklist.

1.14.8 Referral authority responses.

1.14.9 Written notice of statutory endorsement and checklist.

1.14.10 Statutory endorsement conditions.

2 SITE ANALYSIS

THE QUARRY LAND

2.1 The Quarry Land includes parts of two rural lots situated at the north-western periphery of the township of Coleraine with a total area of approximately 5.58 hectares.

2.2 It is approximately 700 metres from the township's outer north-western residential areas. Further afield, the Quarry Land is approximately 34 km north-west of Hamilton, 60 km east of the border with South Australia and 290 km west of Melbourne.

2.3 The Quarry Land is contained within WA410 and includes the following lots:

2.3.1 Part of Lot 1 on Plan of Subdivision 914025N (Volume 12505 and Folio 230). This lot contains approximately 4.2 hectares of the Quarry Land and includes the access road, processing and stockpiling area and the substantial portion of the extraction pit. This land is not affected any easements or restrictions and has a depth limitation of 15.24 metres.

2.3.2 Part of Lot 2 on Plan of Subdivision 818710H (Volume 12233 Folio 838). This lot contains approximately 1.2 hectares of the Quarry Land and includes the southeastern corner of the extraction pit. This land is not affected by any easements or restrictions.

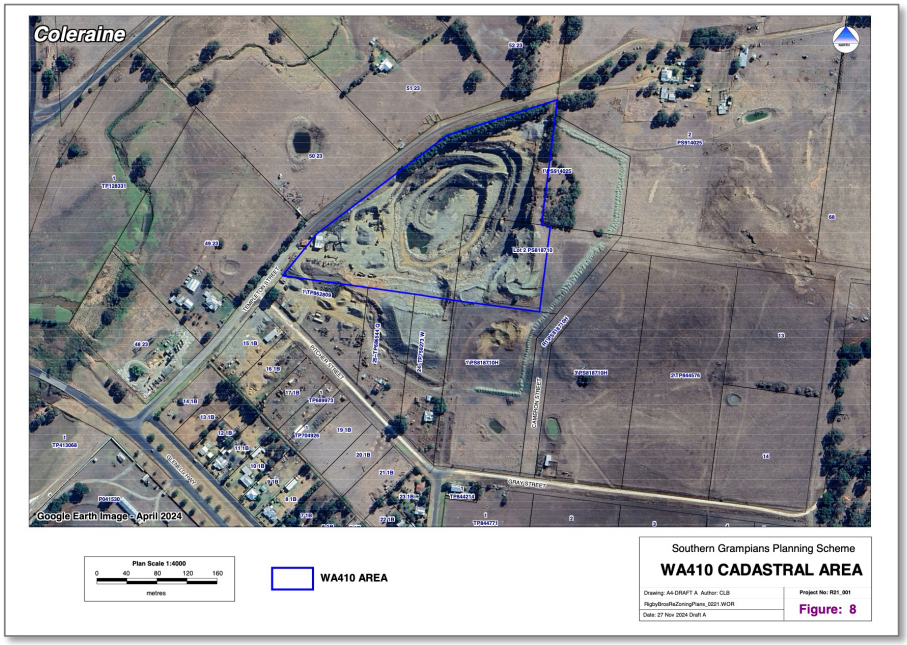

Figure 1: the Quarry Land (source: BCA Consulting)

2.4 Existing stockpiles are located in the south-east and north-east corners, with additional stockpiles, the access road and quarry plant and workshops located in the south-west area.

Crushers and mobile plant are located above the Quarry pit along the western boundary. Screening vegetation is located partially around the northern extent of the extraction area, adjacent to Templeton Road and the land to the east. The east of the Quarry Land, beyond the WA410 boundary, is cleared farmland with a centrally located stand of trees.

2.5 In the context of the wider landscape, the Quarry Land is located on the western end of a small ridge running along the north of the Coleraine township, and has a high point of approximately 135 metres AHD at the eastern boundary and a low point of 88 metres AHD at the western boundary, with a fall of approximately 47 metres. Over the years extraction has moved in an eastward direction.

2.6 The existing WA410 area includes a disturbance area of approximately 4.25 ha.

2.7 There is no groundwater currently observed within the Quarry Land. The 'Visualising Victoria's Groundwater' website notes that a bore drilled within the Quarry Land in 1983 found trachyte to a depth of 70 metres, which is approximately 23 metres AHD and well below the existing extraction limit of approximately 70 metres AHD for WA410 and the extraction depth of quarrying at 41 metres AHD approved under the Endorsed Work Plan Variation.

2.8 The Quarry Land has historically been used for quarrying purposes for over 100 years as a local source of trachyte, typically used in the production of concrete and as a road making aggregate. The is no history of seismic activity and no known geological sources of instability.

2.9 The nearest watercourse is the Konongwootong Creek 200 metres to the north-west, which flows from Konongwootong Reservoir 10 km to the north and terminates at Bryan Creek approximately 1 km to the south of the Quarry.

THE EXPANSION LAND

2.10 The Expansion Land includes adjacent land to the south and east:

2.10.1 26 Templeton Street: part of Lot 1 on Plan of Subdivision 914025N (Volume 12505 and Folio 230). Lot 1 has an area of 5.452 ha, a depth limitation of 15.24 metres and does not contain any easements or restrictions. This part of Lot 1 was previously part of 68 Templeton Street and has been used for agriculture.

2.10.2 26 Templeton Street: part of Lot 2 on Plan of Subdivision 818710H (Volume 12233 Folio 838). Lot 2 has an area of 1.876 ha and no depth limitation. It does not contain any easements or restrictions. This part of Lot 2 was previously included a government road that has been relocated further to the east and was otherwise used for agriculture.

2.10.3 Pitcher Street Coleraine: part of Lot 1 on Title Plan 862809Y (Volume 05809 and Folio 730, and formally known as Crown Allotment 26). Lot 1 has an area of 9,300sqm and a depth limitation of 15.24 metres. It does not contain any easements or restrictions. This land was previously used for animal grazing and is currently used to store machinery.

2.10.4 12 Pitcher Street Coleraine: Crown Allotment 25, Section 1B, Township of Coleraine, Parish of Konong Wootong (Volume 06925 and Folio 919). This lot has an area of 9,000sqm and a depth limitation of 15.24 metres. There are no easements or registered restrictions that affect this lot. This land was previously used for a dwelling and animal grazing but has been abandoned for 30 years and now contains stockpiles for the Quarry.

2.10.5 10 Cameron Street Coleraine: Crown Allotment 24, Section 1B, Township of Coleraine, Parish of Konong Wootong (Volume 05737 and Folio 230). This lot is also known as part of the property at 6 Pitcher Street, Coleraine and has an area of 9,700sqm and a depth limitation of 15.24 metres. There are no easements or registered restrictions that affect this lot. This land was previously used for a dwelling and animal grazing but has been abandoned for 15 years and is now includes stockpiles for the Quarry.

2.10.6 17 Gray Street Coleraine: Lot 1 on Plan of Subdivision 818710H (Volume 12233 and Folio 837). This lot is also known as part of the property at 6 Pitcher Street, Coleraine, and has an area of 2.425 ha and a depth limitation of 15.24 metres. There are no easements or registered restrictions. This land was previously used for animal grazing.

2.11 The extended areas of the Quarry Land at 26 Templeton Street that are part of the Expansion Land consist of cleared farmland with a small area of planted trees located to the east of the Quarry.

2.12 The Expansion Land to the south of the Quarry consists of cleared lots used for non-residential uses. There are two dwellings within the Expansion Land at Crown Allotments CA 24 and CA25 (12 Pitcher Street and 10 Cameron Street) that have not been occupied for over 15 years and are intended to be demolished in the future.

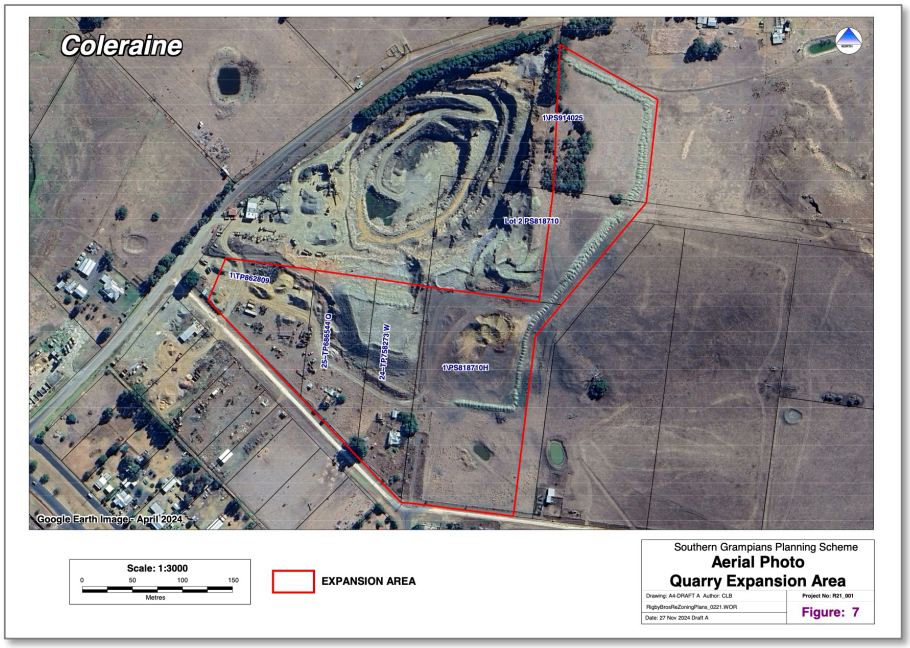

Figure 2: the Expansion Land (source: BCA Consulting)

THE AMENDMENT LAND

2.13 The Amendment Land consists of part of the land at 26 Templeton Street, and the four lots to the south of the Quarry that is currently zoned LDRZ:

2.13.1 26 Templeton Street: Lot 2 on Plan of Subdivision 818710H (Volume 12233 Folio 838) (in part). The area of this lot that is part of the Amendment Land has an area of 6,100sqm.

2.13.2 Pitcher Street Coleraine: Lot 1 on Title Plan 862809Y (Volume 05809 and Folio 730).

2.13.3 12 Pitcher Street Coleraine: Crown Allotment 25, Section 1B, Township of Coleraine, Parish of Konong Wootong (Volume 06925 and Folio 919).

2.13.4 10 Cameron Street Coleraine: Crown Allotment 24, Section 1B, Township of Coleraine, Parish of Konong Wootong (Volume 05737 and Folio 230) (also known as part of the property at 6 Pitcher Street, Coleraine).

2.13.5 17 Gray Street Coleraine: Lot 1 on Plan of Subdivision 818710H (Volume 12233 and Folio 837) (also known as part of the property at 6 Pitcher Street, Coleraine).

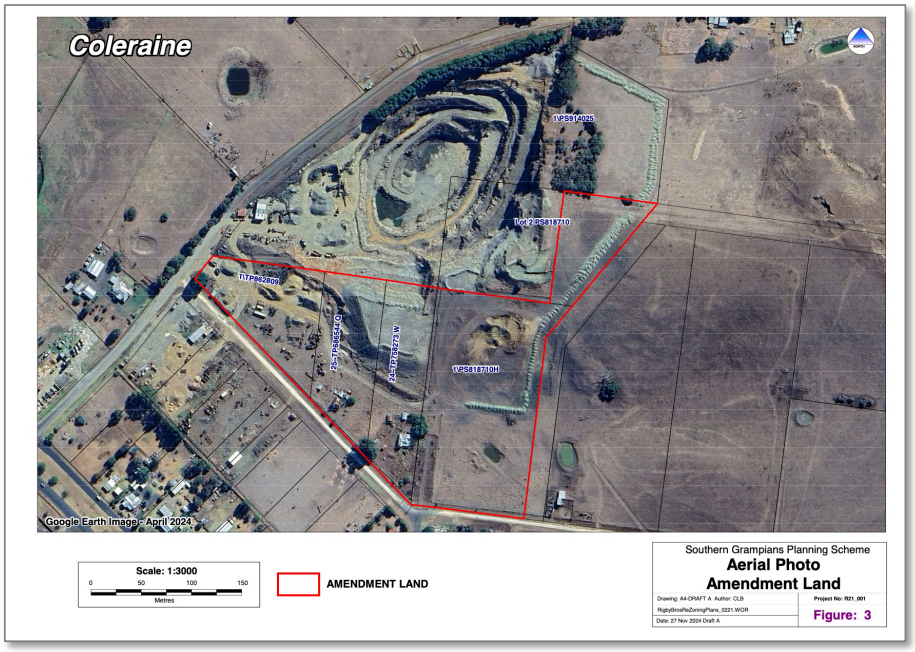

Figure 3: the Amendment Land (source: BCA Consulting)

THE SURROUNDING LAND

2.14 The surrounding area is used for a mix of residential and agriculture and other non-residential uses. The land to the west, north and east is primarily agriculture while to the south there is a strip of industrially zoned land used for non-residential uses, and further to the south and south-east are rural residential allotments. Also to the south, across the Glenelg Highway, is a large area of industrial land containing a significant warehouse development. Further afield is the Coleraine Sports Park 400 metres to the east, the Coleraine Showgrounds 300 metres to the south and the Coleraine township proper is approximately 550 metres to the southeast. The Coleraine township is home to around 1,000 people and includes a range of community facilities, including the Coleraine Hospital on McLeod Street.

2.15 In respect of public infrastructure, the Glenelg Highway is the main thoroughfare through Coleraine, linking the township with Hamilton to the east and Casterton to the west. There is a bridge on the Glenelg Highway approximately 300 metres to the south-west of the Quarry, over Konongwootong Creek. Templeton Street, an unmade single carriageway adjoining the Quarry's western boundary, provides the main access and electricity to the land. Pitcher Street is located to the south of the Expansion Land and is an unmade single lane road.

2.16 The closest waterway is Konongwootong Creek, 300 metres to the west. There are two mapped wetlands within 2km of the Quarry, and at least 400 metres from the Work Authority boundary.

2.17 A number of existing Work Authorities are located near the Quarry Land, including WA589 6km to the east, and WA1512 and WA1451, both around 4.5km to the north. It is unclear if these WAs are currently operational.

2.18 The closest sensitive receptors are within the proposed Work Authority area and owned by the Proponent (at CA24 and CA25, Section 1B, Township of Coleraine). As noted above these dwellings have been uninhabited for a significant period of time and it is intended that they be removed in the near future. There are 15 other dwellings within 500 metres of the Work Authority and more within 1 km, with the Coleraine township approximately 750 metres to the south-east. There are in excess of 500 dwellings within 2 km of the Work Authority. The closest occupied dwelling is on the corner of Cameron Street and Pitcher Street, approximately 30 metres from the expanded Work Authority boundary. Sensitive receptors within 500 metres of the Work Authority are demonstrated on Figure 4 below.

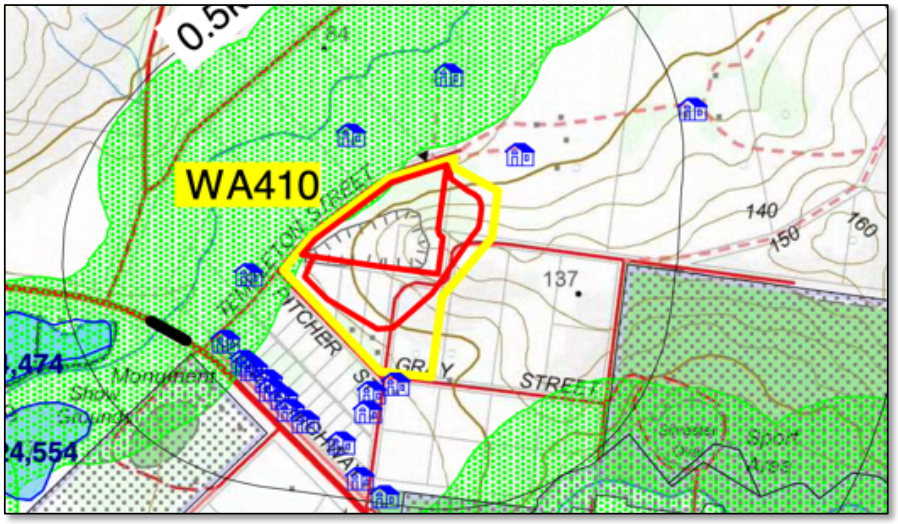

Figure 4: Locality Plan (source: Figure 2, Endorsed Work Plan, BCA Consulting)

2.19 The surrounding land to the east, west and south is zoned LDRZ, while the lots on the south side of Pitcher Street are zoned IN1Z. The land generally to the north of the Quarry Land and around the perimeter of the Coleraine township extending for some kilometres is zoned FZ.

2.20 In the immediate context, the LDRZ lots fronting the Glenelg Highway to the south contain dwellings, with much of the balance of the nearby LDRZ land is absent of dwellings and used instead for agricultural purposes. The location of nearby dwellings shown in Figure 4 above.

2.21 The land 200 metres either side of Konongwootong Creek is identified as an area of Aboriginal Cultural Heritage Sensitivity (**ACHS**). Two small areas of this ACHS land coincide with the Quarry Land, while a third area occupies the western end of the Expansion Land at Lot 1 TP862809 (Pitcher Street).

2.22 There are no known historic places within any part of the land, as confirmed by the Heritage Victoria referral comments dated 2 October 2024.

THE QUARRY

2.23 The Proponent has been operating the Quarry since 1969, and has owned the Quarry Land since 1997.

2.24 The current area of the Quarry Land and WA410 is 5.58 hectares, which includes a total disturbance area of approximately 4.25 hectares. The maximum permitted depth of extraction is RL 285 feet, which is estimated to coincide with 72 metres AHD. The Quarry maintains 10 metre wide buffer areas to site boundaries in accordance with the Work Plan.

2.25 The Quarry utilises traditional drill and blasting practices as well as soft rock (excavator and dozer) techniques. The soft rock techniques are utilised to remove overburden and highly weather trachyte, while blasting is used to extracted less weathered materials. Overburden consists mostly of siltstone and 'salamander' (moderately weathered trachyte).

2.26 The Quarry contains an area of fixed plant including crushers, screening machines and stockpiling conveyors, which is located to the west of the Quarry pit. Mobile plant is currently not utilised at the Quarry. Site offices, amenities, operational support and maintenance areas are located in the south-west corner of the Quarry Land at present.

2.27 Material stockpiles are located around the perimeter of the Quarry extraction area, and these have recently been expanded to areas within the Expansion Land to accommodate material that has exceeded the safe storage capacity of the Quarry Land.

2.28 The annual production output of the Quarry is approximately between 30,000 and 40,000 tonnes.

2.29 The Quarry's extraction area is characterised by steep benches that have proceeded in an easterly direction, into the western end of the low ridgeline that runs across the northern periphery of the township. This has progressed both historically and under the current 1975 Work Plan and is not consistent with current standards for rehabilitation profiles.

2.30 The Quarry undertakes blasting on average twice per year. All blasting activities are carried out by licenced personnel in accordance with a Blast Management Plan. Blasting operations occur from Monday to Friday, from 10:00am to 4:00pm, and neighbours are consulted prior to blasting. Consistent with typical blasting practice, no detonators or explosive materials are stored on the site.

2.31 The Quarry is operated with a dry pit and dewatering is not required. There is a dam on the Quarry Land which is used to supply water for dust suppression and other operations when the processing plant is in operation. This dam is fed by rainwater intercepted by the Quarry pit and disturbance area. The Quarry produces no slimes and there is no groundwater intersected on the site.

2.32 Seven workers are employed at the Quarry, with additional casuals and contractors engaged from time to time for specific activities, such as plant maintenance, stripping, drilling, blasting and rehabilitation.

2.33 The Quarry generates a small amount of domestic rubbish and general waste. Portable toilets are utilised and there is no sewer or septic systems on the land. Domestic rubbish is removed by employees whilst other waste materials are appropriately stored and removed by licenced contractors.

2.34 The Quarry maintains an active Fire Response Plan to manage wildfire risk relating to the surrounding farmland. However, the Quarry is not included within the Bushfire Management Overlay, with the nearest affected area approximately 1.5 km away on the south side of the Coleraine township.

PLANNING PERMIT HISTORY

2.35 There are no records of any planning permits being issued to the Quarry Land.

2.36 The most recent update to WA410 occurred in 1975 when it was known as Extractive Industry Licence 393. In April 1996, EIL393 was assigned to WA410, and some conditions were updated at the same time. No other changes have occurred to the Work Plan since 1975.

3 THE PROPOSAL

3.1 This combined planning scheme amendment and planning permit application is made under section 96A of the Act to allow the variation and expansion of the size of the Work Authority, as endorsed by DEECA through the Endorsed Work Plan Variation.

THE PLANNING SCHEME AMENDMENT

3.2 The amendment to the Planning Scheme seeks to rezone the Amendment Land from Low Density Residential Zone – Schedule 1 (**LDRZ1**) to Farming Zone (**FZ**), and to remove the Development Plan Overlay – Schedule 3 (**DPO3**) (**the Amendment**).

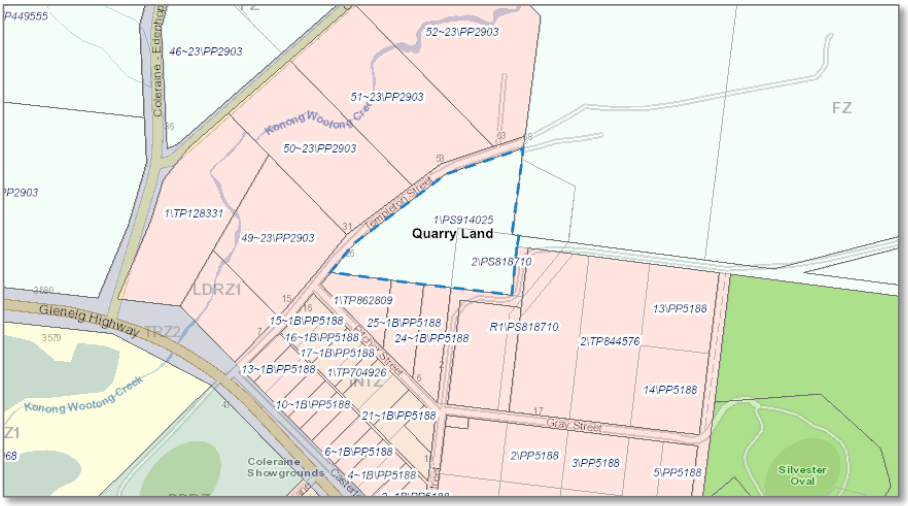

Figure 5. Existing zoning map (source: VicPlan)

3.3 The LDRZ1 and the DPO3 prohibit the use and development of land for extractive industry.

3.4 The FZ is well-accepted as an appropriate zone for the use and development of land for extractive industry. The proposed FZ will utilise the existing FZ provisions the Southern Grampians Planning Scheme and no variations to this zone or its schedule are proposed.

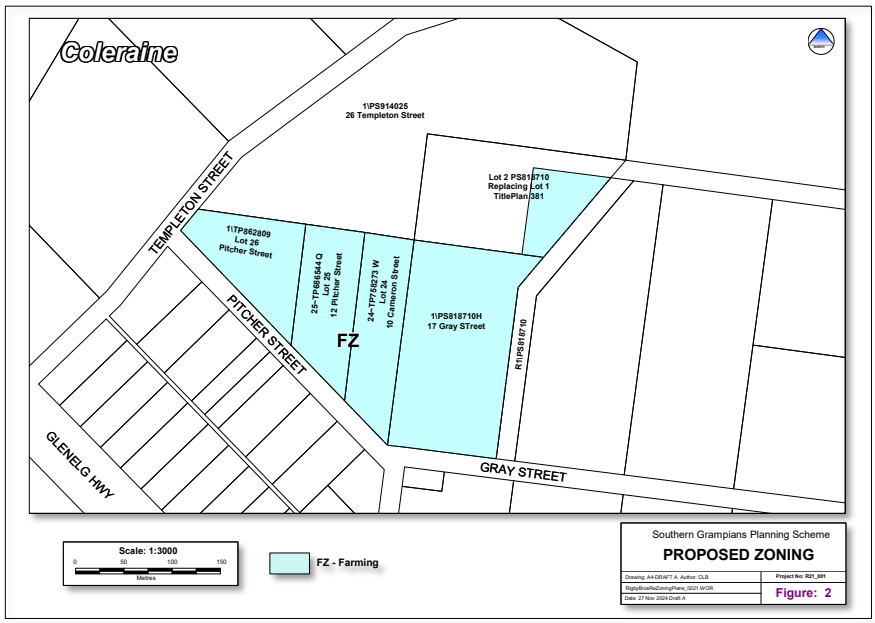

Figure 6. Proposed zoning map (source: BCA Consulting)

3.5 The DPO prohibits the grant of a permit to use or subdivide land, construct a building or construct or carry out works until a development plan has been prepared to the satisfaction of the responsible authority. The DPO3 provides exemptions to this general prohibition in relation to:

3.5.1 One dwelling on a lot.

3.5.2 Agriculture and any buildings or works for agriculture.

3.5.3 The extension, alteration or modification to an existing use or development.

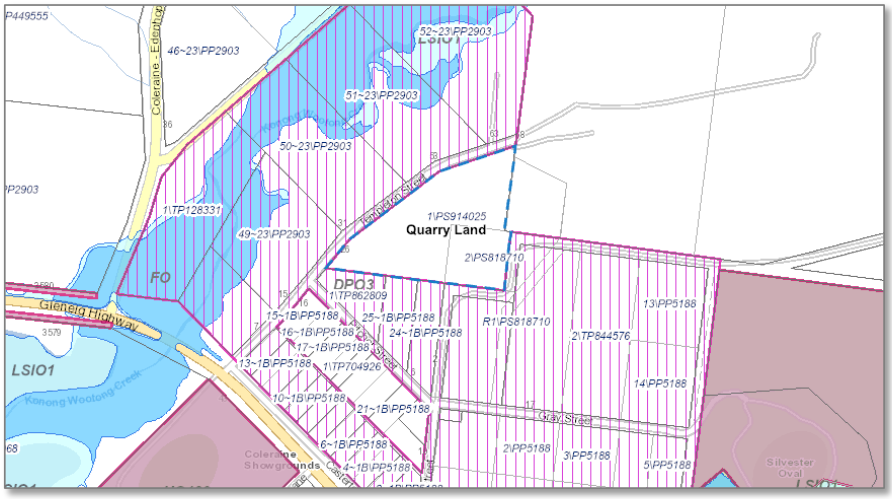

Figure 7. Existing overlay map (source: VicPlan)

3.6 The Amendment will implement planning controls that are compatible with and better reflect the non-residential character of the Quarry use and surrounding land uses and reduce the potential for future land use conflicts.

THE PROPOSED QUARRY EXPANSION

3.7 The application for a planning permit pursuant to section 96A proposes to expand the extraction area of the Quarry to secure additional material reserves and extend its life in accordance with the Endorsed Work Plan Variation (**the Permit Application**). The Proposed Quarry Expansion is shown on *Figure 3 – Site Layout Plan*, prepared by BCA Consulting, below at Figure 8.

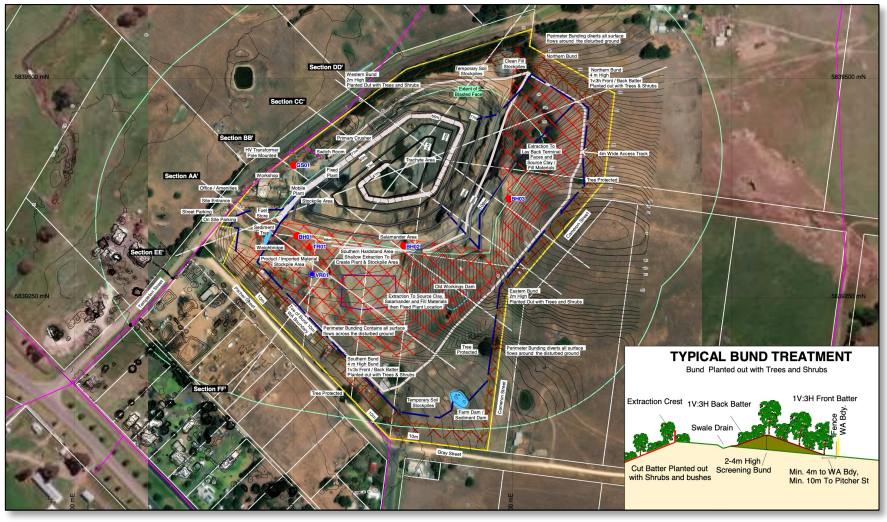

Figure 8: Excerpt of Site Layout Plan (source: Figure 3 of the Endorsed Work Plan, BCA Consulting)

3.8 The Proposed Quarry Expansion will comprise the following:

3.8.1 An increase in the size of the Work Authority area from 5.58 hectares to 12.55 hectares.

3.8.2 An increase in the disturbance area from 4.25 hectares to 7.8 hectares. Much of this increase is associated with the removal of overburden and highly weathered trachyte along the south and eastern sides of the existing Quarry pit to facilitate the creation of additional land for stockpiling and hardstand, and to enable a more appropriate rehabilitation profile. The majority of additional resource will be obtained by extracting deeper within the existing Quarry pit and not from the surrounding land.

3.8.3 Creation of new hardstand for processing and other purposes, stockpiles, sediment trap, sediment dam and weighbridge in the extended area to the south of the Quarry pit.

3.8.4 The proposed maximum depth of extraction and maximum terminal depth will be increased from 72 metres AHD to 41 metres AHD. It is noted that this is below the 15.24 metre lot depth limitation. Any extraction below this depth is required to be reported to the ERR to enable a royalty to be paid to the Crown.

3.8.5 The base of the pit at 41 metres AHD will be above any predicted groundwater which is conservatively estimated to be at 23 metres AHD at its highest. It is not anticipated that groundwater will be intercepted during extraction.

3.8.6 The expanded extraction area will incorporate three areas that will be excavated for specific purposes:

(a) To the east, to achieve a satisfactory rehabilitation profile of 1 metre vertical to 3 metre horizontal benches;

(b) To the south, to create a hardstand and stockpile area to a maximum depth of 8 metres; and

(c) Inside the existing extraction pit to facilitate access to additional fresh trachyte resource.

3.8.7 Rehabilitation will be undertaken progressively throughout the Quarry's life as far as reasonably practical. The final rehabilitation objectives will be completed once extraction has ceased.

3.8.8 Soil stockpile heights will be limited to a maximum height of 2.0 metres and will be entirely contained within the disturbance area at a location close to extraction crests to facilitate rehabilitation works. Soil stockpiles will be contoured and grassed to manage dust and erosion until required for rehabilitation. Overburden stockpiles located within worked areas will have a maximum height of 15 metres within the disturbed area and 7 metres when located on the natural surface. Product stockpiles will have a maximum height of 12 metres and will generally be located close to the processing plant and access gate, or located on the floor of the Quarry.

3.8.9 Blasting has occurred at the Quarry since the 1930s and will continue with an average of two blasting events per year. No changes to blasting events or practices are proposed, which will continue to be managed in accordance with a Blast Management Plan.

3.8.10 The Proposed Quarry Expansion will not require the removal of any native vegetation.

3.9 The Proposed Quarry Expansion will provide access to the following estimated resource volumes:

3.9.1 Top soil – 5,000 cubic metres

3.9.2 Salamander – 200,000 tonnes (moderately weathered trachyte resource)

3.9.3 Trachyte – 1,000,000 tonnes (fresh trachyte resource)

3.9.4 Overburden – 290,000 cubic metres (weathered trachyte and siltstone)

3.10 A Fire Response and Readiness Plan has been prepared for the Proposed Quarry Expansion to manage bushfire risk.

EXTRACTION OF MATERIAL

3.11 No changes are proposed to the current working methods used to extract and process rock from the Quarry, which includes traditional soft rock excavation with machinery include excavators and dozers, and hard rock techniques including drilling and blasting.

3.12 The Proposed Quarry Expansion will continue to use the existing fixed plant as approved under the 1975 Work Authority approval until such time as it requires relocation to permit the full extraction of the trachyte resource. The fixed plant is currently located to the west of the existing extraction pit and will eventually be relocated to the southern hardstand area where it will be shielded by stockpiles. Mobile plant will eventually be utilised and will include excavators and dozers for stripping overburden and to drill rock for blasting. Other mobile plant that will be used from time to time includes crushing and screening plant. Front end loaders are used for moving materials.

3.13 As noted above, the Quarry will continue existing blasting activities with no changes proposed and will be in accordance with a Blast Management Plan which accompanies the Endorsed Work Plan Variation.

3.14 Blasting activities will continue approximately two times per year and will be carried out by licenced and qualified personnel. After each blasting event, the qualified personnel will ensure all unused materials are removed from the Quarry. A controlled blasting zone will be established within 200 metres of the WA410 boundary. Within this zone, the blast designs will be modified as necessary to address the proximity of sensitive receptors. Blast events will be carefully managed with sentries located on public roads as required.

3.15 Blasting times will occur from 10:00am to 4:00pm, Monday to Friday. Neighbours will be notified prior to blasting in accordance with the Blast Management Plan.

3.16 No explosive materials will be stored on the site. An explanation about the amenity impacts of blasting are discussed later in this report.

PROCESSING OF MATERIAL

3.17 The Quarry will continue to employ a dry pit with traditional hard and soft rock techniques to remove soil and the resource, with only minor changes are proposed to the existing processing plant arrangement by the Proposed Quarry Expansion to accommodate the expanded disturbance area.

3.18 No slimes will be produced by the Quarry. There will continue to be no intersection of groundwater, and no groundwater dewatering is required.

3.19 Material suitable for crushing and screening will be processed through either the fixed or (once established) mobile crushing and screening plant, depending on the Quarry's needs. The

location of the fixed and mobile processing plants is depicted in Figure 3 – Site Layout Plan to the west of the Quarry pit (above at Figure 8). The plant will be relocated to the proposed southern hardstand area as required to enable access to additional resource within the Quarry extraction area.

3.20 Stockpiling of soil and overburden will be required when the sequencing of stripping, extraction and progressive rehabilitation does not allow direct placement. Soil stockpiles will be limited to a height of no greater than 2.0 metres and sited within the disturbance area at a location close to extraction crests until required for rehabilitation works.

3.21 Overburden stockpiles will be limited to a maximum height of 15 metres where within disturbance areas, or to a maximum height of 7 metres if located on the natural surface level within the disturbance area. If higher overburden stockpiles become necessary, they will be located inside the Quarry pit and benched appropriately.

3.22 Soil and overburden stockpiles will be contoured and grassed to manage dust and erosion until they are required for rehabilitation purposes. Overburden stockpiles will incorporate contour drains to direct surface water flows to the Quarry drainage control system. Topsoil and overburden will be stockpiled within the southern hardstand area. The proposed location of soil and overburden stockpiles is depicted in Figure 3 – Site Layout Plan (above at Figure 8).

3.23 The rate of extraction for the Quarry varies and is determined by market forces. Typically, the Quarry has had an annual production output of between 30,000 and 40,000 tonnes, which is not anticipated to change significantly. It is anticipated that the Proposed Quarry Expansion and additional resource will increase the life of the Quarry by approximately 30 years.

OPERATING HOURS

3.24 No changes are proposed to the existing operating hours of the Quarry as part of the Proposed Quarry Expansion. The current operating hours are:

Extraction (All earthworks, stockpiling and cartage)

3.24.1 Monday to Friday: 7:00am to 6:00pm.

3.24.2 Saturday: 7:00am to 6:00pm.

3.24.3 Sunday & Public Holidays: No extraction works.

Sales

3.24.4 Monday to Friday: 7:00am to 6:00pm.

3.24.5 Saturday: 7:00am to 6:00pm.

3.24.6 Sunday & Public Holidays: No sales.

Processing (crushing, screening, washing, etc., incl. cartage from stockpiles)

3.24.7 Monday to Friday: 7:00am to 6:00pm.

3.24.8 Saturday: 7:00am to 6:00pm.

3.24.9 Sunday & Public Holidays: No processing.

Blasting

3.24.10 Monday to Friday: 10:00am to 4:00pm.

3.24.11 Saturday, Sunday & Public Holidays: No blasting.

3.25 Only essential maintenance works are undertaken outside of these hours.

STAFF AND CAR PARKING

3.26 The Proposed Quarry Expansion will not result in an increase in the existing number of staff working at the Quarry. The Quarry currently employs seven workers, with additional casual workers as required.

3.27 On-site parking for staff will continue to be located in its present location within the Quarry Land.

3.28 Visitor parking is provided in Templeton Street.

TRAFFIC AND ACCESS

3.29 The Quarry is accessed from Templeton Street, which is not proposed to change.

3.30 The Proposed Quarry Expansion will not change the current vehicle access and traffic flow operations associated with the Quarry. There is no proposed change to the current level of activity within the Quarry that could necessitate changes to existing truck movements.

3.31 Traffic management signs will be maintained at the main site access track and critical locations to minimise vehicle movements. The existing accessway entrance with Templeton Street will continue to be gated and locked when left unattended.

3.32 The boundary of WA410 will continue to be bounded with a stock proof fence.

NATIVE VEGETATION AND THREATENED SPECIES

3.33 Native vegetation removal is not required for the Proposed Quarry Expansion. DEECA has required Work Plan conditions for the protection of other trees not required to be removed.

REHABILITATION AND SITE END USE

3.34 Rehabilitation and site closure measures are provided for in the Rehabilitation and Site Closure Plan, which forms part of the Endorsed Work Plan Variation.

3.35 When the Quarry use ceases the land will be (where sufficiently flat) returned to a mix of general farmland for animal grazing or cropping, with steeper areas made safe and planted out with shrubs and bushes. Upper benches will be planted with suitable vegetation.

3.36 All crushing, screening and mobile equipment associated with the Proposed Quarry Expansion will be removed from the site.

3.37 Access roads, site fencing, site office, weighbridge, workshops and associated plant will be retained in a hardstand area of area of approximately 1 ha.

3.38 A lake is proposed for the extraction pit to be used for stock water and irrigation. It is expected the lake will reach an equilibrium at 46 metres AHD (a depth of approximately 5 metres).

3.39 The progressive rehabilitation of the Quarry will be integrated into daily Quarry operations as far as practical to achieve a timely and successful rehabilitation outcome.

3.40 Upper terminal quarry faces will be profiled with berms on terminal benches covered within a minimum 500 millimetres of overburden material and 100 millimetres of topsoil planted with suitable vegetation.

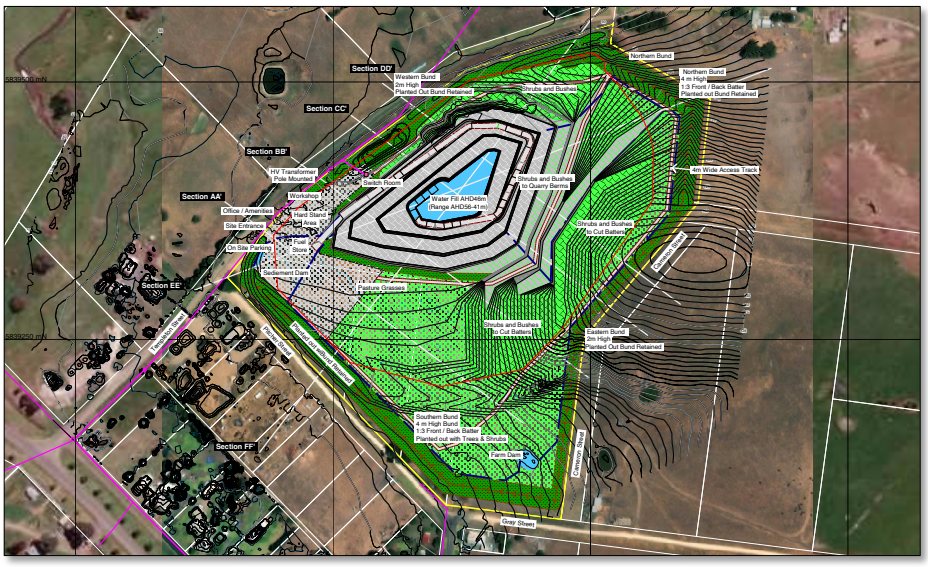

Figure 9: Excerpt of WA410 Final Landform Plan (source: Figure 4 of the Endorsed Work Plan, BCA Consulting)

4 PLANNING CONTROLS

4.1 This section sets out the relevant objectives, policies, and permit requirements of the Planning Scheme.

WHY IS A PERMIT REQUIRED?

4.2 Following the Amendment, the Proposed Quarry Expansion will require planning permission under the following provisions of the Planning Scheme:

Farming Zone – schedule to the Farming Zone (FZ)

4.3 Clause 35.07-4 – a permit is required to develop the land for extractive industry. A permit is required to extend the Quarry on to the Expansion Land, and a permit is required for the Quarry Land to increase the size of the extraction area.

Earth and Energy Resources Industry

4.4 Clause 52.08-1 – a permit is required to develop land for earth and energy resources industry (extractive industry).

POLICY CONTEXT

4.5 The Proposed Quarry Expansion area must be considered in the context of the relevant planning objectives and policies of the Municipal Planning Strategy (MPS) and Planning Policy Framework (PPF) and particularly those policies for rural areas and extractive industry.

4.6 The following policies contained in the MPS are relevant to the consideration of the application:

Clause 02.01 Context

4.7 Primary production and conservation are the major land uses in the Shire, followed by forestry and extractive industry.

4.8 The Proposed Quarry Expansion is consistent with this policy context.

Clause 02.03-1 Settlement

4.9 In effectively planning for future urban growth, the Council seeks to provide and enforce clear settlement boundaries and support development that contributes to the economic viability and liveability of the Shire's smaller towns, including small-scale light and service industries.

4.10 The Proposed Quarry Expansion is consistent with this strategy.

Clause 02.03-2 Environmental and landscape values

4.11 In relation to settlements, the protection of remnant vegetation is a high priority due to its contribution to biodiversity and habitat provision.

4.12 In relation to landscapes, the Council will ensure that development does not adversely impact the landscape, environmental setting or presentation of the Shire.

4.13 The Proposed Quarry Expansion is consistent with these strategies as no vegetation or important habitat areas will be impacted and there will no significant landscape impacts to the area.

Clause 02.03-4 Natural resource management

4.14 The MPS anticipates significant growth in agro-forestry, together with mining and renewable energy. Council seeks to protect agriculture from use and development that is inconsistent with farming practices, and to protect natural resources important to agriculture.

4.15 Council will also ensure that use and development minimise water run-off so that it does not cause soil degradation or negatively impact rivers and streams.

4.16 The Proposed Quarry Expansion is consistent with these strategies.

Clause 02.03-7 Transport

4.17 In planning for transport facilities, Council will manage the impacts of mining, quarrying, timber harvesting and wind farm development on existing road infrastructure.

4.18 The Proposed Quarry Expansion is consistent with this objective as there will be no material change to traffic or to the intensity of the existing Quarry use.

Clause 13.02-1S Bushfire planning

4.19 This clause seeks to strengthen the resilience of settlements and communities to bushfire through risk-based planning that prioritises the protection of human life.

4.20 The Proposed Quarry Expansion seeks only to expand an existing use and will have no impact on bushfire risk. The Bushfire Management Overlay does not apply to the Quarry Land.

Clause 13.05-1S Noise management

4.21 This seeks to assist the management of noise effects on sensitive land uses.

4.22 The Proposed Quarry Expansion seeks to expand the extraction area and will not result in an increase in the intensity of the existing operations or the potential for additional noise impacts.

Clause 13.07-1S Land use compatibility

4.23 This clause seeks to protect community amenity, human health and safety while facilitating appropriate commercial, industrial, infrastructure or other uses with potential adverse off-site impacts.

4.24 The Proposed Quarry Expansion seeks to expand the extraction area and will not result in an increase in the intensity of the existing operations or the potential for additional amenity, health or safety impacts to the surrounding area.

Clause 13.07-1L Land surrounding industrial zones

4.25 A strategy of this policy is to discourage incompatible land uses near Industrial 1 and 2 zoned land that will compromise the viability of the industrial area.

4.26 The Proposed Quarry Expansion is consistent with this strategy as it will be compatible with industrial land uses consistent with the Industrial 1 zoning of the land to the south of Pitcher Street.

Clause 14.01-1S Protection of agricultural land

4.27 This clause seeks to protect the state's agricultural base by preserving productive farmland.

4.28 The Proposed Quarry Expansion is a temporary use and development, which will rehabilitate and return the Quarry Land to agricultural production upon the completion of extraction activities.

Clause 14.01-2S Sustainable agricultural land use

4.29 This clause seeks to encourage sustainable agricultural land use.

4.30 Extractive industries are recognised as suitable land uses in agricultural areas and the Proposed Quarry Expansion will have no impact on surrounding agricultural uses, including high value uses.

Clause 14.03-1S - Resource Exploration

4.31 This clause sets out State planning policy for extractive industry and earth resources generally. The objective of this policy is:

> *To encourage exploration and extraction of natural resources in accordance with acceptable environmental standards.*

4.32 Relevant strategies listed to achieve this objective include:

> *Provide for the long term protection of natural resources in Victoria.*
>
> *Protect the opportunity for exploration and extraction of natural resources where this is consistent with overall planning considerations and application of acceptable environmental practice.*

Recognise the possible need to provide infrastructure for the exploration and extraction of natural resources.

Ensure planning schemes do not impose conditions on the use or development of land that are inconsistent with the Mineral Resources (Sustainable Development) Act 1990, the Greenhouse Gas Sequestration Act 2008, the Geothermal Energy Resources Act 2005, or the Petroleum Act (1998).

Develop and maintain buffers around mining and quarrying activities.

Ensure planning permit applications clearly define buffer areas appropriate to the nature of the proposed extractive uses, which are to be owned or controlled by the proponent of an extractive industry.

Determine buffer areas between extractive activities and sensitive land uses on the following considerations:

- *Appropriate limits on effects can be met at the sensitive locations using practical and available technology.*
- *Whether a change of land use in the vicinity of the extractive industry is proposed.*
- *Use of land within the buffer areas is not limited by adverse effects created by the extractive activities.*
- *Performance standards identified under the relevant legislation.*
- *Types of activities within land zoned for public use.*

4.33 The Proposed Quarry Expansion is consistent with the objectives and strategies of this clause:

4.33.1 The Proposed Quarry Expansion will provide for a long-term expansion for access to an important construction material resource.

4.33.2 The Proposed Quarry Expansion is consistent with existing and proposed planning considerations and has had regard for contemporary environmental protection practices.

4.33.3 Buffer areas along the expanded WA410 boundary with either be retained as existing or increased in dimensions and will be appropriately designed and dimensioned taking in to account the existing site circumstance, the location of existing sensitive receptors and current ERR requirements to minimise external impacts. Buffer areas are clearly delineated within the endorsed work plan variation documents and will be retained in the control of the Quarry.

Clause 14.03-1R Resource exploration and extraction – Great South Coast

4.34 This clause seeks to facilitate access to key construction material resources in the region, including on-site quarrying.

4.35 The Proposed Quarry Expansion will ensure that the Quarry continues to supply local industry with much needed rock products.

Clause 17.01-1S Diversified economy

4.36 The objective of this clause to strengthen and diversify the economy.

4.37 The Proposed Quarry Expansion will ensure that the Quarry continues to supply local industry with much needed rock products and supports the growth of the local construction economy.

ZONING & OVERLAYS

4.38 The following zone and overlay provisions apply to the land.

Farming Zone

4.39 The Quarry Land is zoned FZ. The Expansion Land, where within the recently expanded area of Lot 1 on PS 914025, is zoned FZ. See Figure 5 above.

4.40 The purpose of the FZ seeks generally to provide for the use of land for agriculture, but also allows for non-agricultural uses where they do not adversely affect the use of land for agriculture:

> *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
>
> *To provide for the use of land for agriculture.*
>
> *To encourage the retention of productive agricultural land.*
>
> *To ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture.*
>
> *To encourage the retention of employment and population to support rural communities.*
>
> *To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.*
>
> *To provide for the use and development of land for the specific purposes identified in a schedule to this zone.*

4.41 A permit is required to use and develop the land for the Proposed Quarry Expansion pursuant to clause 35.07-4.

Low Density Residential Zone (Schedule 1)

4.42 The Expansion Land (other than Lot 1 on PS914025 and part of Lot 2 on Plan of Subdivision 818710H) is zoned LDRZ1. See Figure 7 above.

4.43 The purposes of the LDRZ seek to provide for low-density residential development where sewerage infrastructure is not present:

> *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
>
> *To provide for low-density residential development on lots which, in the absence of reticulated sewerage, can treat and retain all wastewater.*

4.44 Extractive industry is a 'Section 3 – Prohibited' use, pursuant to Clause 32.03-1.

Development Plan Overlay

4.45 The Amendment Land is currently affected by the DPO3.

4.46 The DPO head provision includes the following purposes:

> *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
>
> *To identify areas which require the form and conditions of future use and development to be shown on a development plan before a permit can be granted to use or develop the land.*
>
> *To exempt an application from notice and review if a development plan has been prepared to the satisfaction of the responsible authority.*

4.47 DPO3 was amended by Amendment C25 in in August 2013 and is currently titled 'Rural Living' and seeks the following objectives:

> *To ensure the co-ordinated and sequential development of land in order to ensure that the long term residential development opportunities of Hamilton are not compromised.*
>
> *To protect long term subdivision and development opportunities for Hamilton.*
>
> *To require development to respond to the existing topography and natural assets of the precinct.*
>
> *To provide for larger rural living (lifestyle lots) on land to the north-west and south-east of Hamilton.*

4.48 The Panel Report for C25 does not identify how the DPO3, which seeks residential built form and subdivision outcomes for areas of Hamilton zoned 'Rural Living', should be applied in those areas of Southern Grampians Shire outside of Hamilton.

4.49 Prior to the gazettal of Amendment C25, the DPO3 applied to Low Density Residential Zone areas across the Shire and sought more general outcomes for these areas including the provision of reticulated water and sewerage infrastructure and the sealing of roads.

4.50 The DPO3 is proposed to be removed from the Amendment Land as it will prohibit a permit being granted for the use and development of the Proposed Quarry Expansion.

PARTICULAR PROVISIONS

4.51 A permit is required under Clause 52.08-1 (Earth and Energy Resources Industry) to use and develop land for earth and energy resources industry (which includes extractive industry)[1] where the conditions in the 'Table of exemptions' to this Clause are not met. A permit has not

[1] Clause 73.03 Land Use Terms.

previously been granted under this provision for the Quarry and a permit is therefore required for the extension of the Quarry within the Quarry Land as well as within the Expansion Land.

4.52 Clause 52.09 (Extractive Industry and Extractive Industry Interest Areas) applies to all applications to use or develop land for extractive industry, for land within an extractive industry interest area, or land within 500m of an existing or proposed extractive industry operation.

4.53 This clause sets out specific requirements for extractive industry proposals and requires all permit applications to be accompanied by (at clause 52.09-2):

> *A copy of a work plan or a variation to an approved work plan that has received statutory endorsement under section 77TD of the Mineral Resources (Sustainable Development) Act 1990.*
>
> *The written notice of statutory endorsement under section 77TD(1) of the Mineral Resources (Sustainable Development) Act 1990.*
>
> *Any conditions specified under section 77TD(3) of the Mineral Resources (Sustainable Development) Act 1990.*

4.54 The above documents have been included with this application.

EXTERNAL REFERRALS

4.55 Clause 52.09 was amended by VC160 and requires that external referrals undertaken as part of the statutory endorsement process of the Work Plan must not be re-referred for the purposes of Clause 66 of the Planning Scheme. Specifically, clause 52.09-3 provides:

> ***Referral of applications***
>
> *An application to use or develop land for extractive industry must be referred under section 55 of the Act to the person or body specified as the referral authority in Clause 66.*
>
> *Unless the referral authority is the Roads Corporation, the referral requirement in Clause 66 does not apply if a copy of a work plan or variation to an approved work plan accompanying the application was given to the referral authority under section 77TE of the Mineral Resources (Sustainable Development) Act 1990.*

4.56 The DEECA referred the Endorsed Work Plan Variation to the following referral authorities.

- 4.56.1 The 'Planning and Environment Assessment' branch of DEECA;
- 4.56.2 Environment Protection Authority Victoria; and
- 4.56.3 Heritage Victoria.

4.57 The Endorsed Work Plan Variation was not referred to any non-statutory agencies.

4.58 The referral responses are included with this application. Refer to the referral authority checklist.

4.59 None of the referral authorities have objected to the Endorsed Work Plan Variation, subject to conditions.

5 ASSESSMENT OF THE PLANNING SCHEME AMENDMENT

5.1 The following provides an assessment of the Amendment against the requirements of the *Planning Practice Note 46: Strategic Assessment Guidelines for Preparing and Evaluating Planning Scheme Amendments*.

WHY IS THE AMENDMENT REQUIRED?

5.2 The Amendment is required to facilitate:

5.2.1 The expansion of the existing Quarry at 26 Templeton Street Coleraine to the Amendment Land.

5.2.2 To address the current anomalous LDRZ1 zoning and DPO3 affecting the Amendment Land between the Quarry and the Industrial 1 Zone lots on the south side of Pitcher Street, Coleraine.

5.2.3 A combined amendment and planning permit process to ensure that the Expansion Land is developed in a coordinated and orderly manner.

5.3 Extractive industry is a prohibited use in the LDRZ1 and is prohibited by the DPO3 prior to the preparation of a Development Plan to the satisfaction of Council. To enable the Amendment Land to be used for extractive industry and facilitate the extension of the Quarry, it is necessary for it to be rezoned to a zone that permits extractive industry and to remove the DPO3.

5.4 The Quarry is a long standing use that has been operating from the Quarry Land for over 100 years. Over this period it has been supplying hard rock products used in road making and other construction purposes by a range of clients, including Council. The Amendment will unlock access to additional rock resource and extend its operating life for approximately 30 years so it can continue to supply these important products to local industry.

5.5 The Amendment will also address the inappropriate LDRZ zoning of the Amendment Land, which is incompatible with its immediate agricultural and industrial zoning context to the north and south. It will also better reflect its existing non-residential character and reduce the potential for land use conflicts into the future.

5.6 The Amendment will also address discrepancies in the zoning of land at 26 Templeton Street, which is currently in two zones.

5.7 The removal of the DPO3 will allow a permit to be granted for the Proposed Quarry Expansion within the Amendment Land and remove the requirements for residential design outcomes that have no relevance to the Quarry or the surrounding lots.

5.8 The rezoning to FZ will also facilitate the rehabilitation of the Quarry and transition to the agricultural end use for this land following the cessation of quarrying activities.

5.9 The Amendment supports the relevant State and local strategies and their visions for settlement, natural resource management, and regional planning, as follows:

5.9.1 The Amendment will support the economic viability of the Shire's smaller towns by facilitating the expansion of an established extractive industry use that supplies important rock products to the local construction industry.

5.9.2 The Amendment supports policies that discourage incompatible land uses to co-locate by rezoning the Amendment Land from LDRZ to FZ.

5.9.3 The Amendment supports regional resource exploration and extraction policies by facilitating continued access to a key construction material resource while providing for the rehabilitation of the land to enable an agricultural end use.

HOW DOES THE AMENDMENT IMPLEMENT THE OBJECTIVES OF PLANNING IN VICTORIA?

5.10 Section 4(1) of the Act sets out the relevant objectives of planning in Victoria:

(a) to provide for the fair, orderly, economic, and sustainable use, and development of land;

(b) to provide for the protection of natural and man-made resources and the maintenance of ecological processes and genetic diversity;

(c) to secure a pleasant, efficient, and safe working, living and recreational environment for all Victorians and visitors to Victoria;

(d) to conserve and enhance those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value;

(e) to protect public utilities and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community;

(f) to facilitate development in accordance with the objectives set out in paragraphs (a), (b), (c), (d) and (e);

(fa) to facilitate the provision of affordable housing in Victoria;

(g) to balance the present and future interests of all Victorians.

5.11 The Amendment implements these objectives as follows:

5.11.1 The removal of the LDRZ1 and DPO3 from the Amendment Land and application of the FZ will allow for the Quarry use at the Quarry Land to continue and for agricultural end uses to be carried out in a coordinated and orderly manner that recognises the primary non-residential character of this area of Coleraine, in accordance with the relevant State and local policy directions for Southern Grampians Shire.

5.11.2 The Amendment will facilitate additional access to an important natural resource used in local road construction and for agricultural purposes. The Quarry Land has

been significantly disturbed by past quarrying and agricultural uses. The Proposed Quarry Expansion will not cause any impacts to the environmental biodiversity values of the area.

5.11.3 The additional FZ land and the Proposed Quarry Expansion will provide a pleasant, efficient, and safe working, living and recreational environment for both current and future workers and visitors to the area.

5.11.4 The Amendment will allow for the orderly provision and coordination of services on site and makes efficient use of existing infrastructure services.

5.11.5 The Amendment will enable the Proposed Quarry Expansion and future agricultural end uses to occur in a coordinated and orderly manner.

5.11.6 The Amendment and Proposed Quarry Expansion will facilitate access to an important rock resource while minimising impacts to surrounding land and will ensure that this long standing use can continue to supply important rock products to support the local economy.

HOW DOES THE AMENDMENT ADDRESS ANY ENVIRONMENTAL, SOCIAL, AND ECONOMIC EFFECTS?

Environmental effects

5.12 The Amendment Land is cleared farmland used for a quarry and other non-residential uses and contains no assessable native vegetation. It has a long history of non-residential use that has resulted in disturbance to the existing vegetation, which now comprises grazing grasses and planted trees. The impacts of the Amendment and the extension to the Quarry on the existing low environmental values of the site will be negligible. The proposed end use for the Quarry is agriculture which will have no impact on the environment of the site.

5.13 There are no waterways or wetlands within the immediate vicinity of the site. The nearest waterway to the site is the Konongwootong Creek 200 metres to the west. Water intercepted by the Quarry is directed to the extraction pit sump where it is used for quarry operations or for irrigation of rehabilitated areas. Water that is intercepted in the extraction area is not discharged to any nearby waterways.

5.14 Visual impacts from the Quarry will be managed by earthen bunds planted with vegetation to provide a screen to the Quarry operations and extraction area.

5.15 Noise impacts associated with the rezoning to a non-residential zone will be consistent with the non-residential uses of the surrounding land. The potential for noise impacts from the Quarry extension will continue to be managed in accordance with the controls set out the work plan and relevant EPA requirements and will be consistent with existing Quarry operations. Blasting activities have been carried out for the Quarry since at least the 1930s and will continue to be managed in accordance with the controls contained in the work plan.

5.16 Dust impacts from the extension to the quarry will be consistent with the existing Quarry operations and will be managed in accordance with the controls in the work plan, which

include water suppression. Health risks associated with respirable crystalline silica dust are very low as the hard rock extracted at the Quarry, trachyte, contains negligible levels of silica.

Social effects

5.17 The Amendment will extend the operational life of an existing family owned and operated quarry business that has been carried out from the land for decades and will continue to provide social benefits to the community. The Quarry will continue to provide a local source of employment in a rural context suffering population and economic decline. Post-closure, the Amendment will also facilitate the transition to agricultural uses, a sector recognised as a major employer in the Shire.

Economic effects

5.18 The Amendment will create additional agricultural land in line with State and local policy directions for Southern Grampians, as well as local investment and employment opportunities. The additional agricultural land will facilitate new and continuing agricultural enterprises in addition to allowing the Quarry to be extended on to adjacent land, substantially increasing its operational life.

DOES THE AMENDMENT ADDRESS RELEVANT BUSHFIRE RISK?

5.19 The land is not affected by the BMO however, part of the land is within a Bushfire Prone Area.

5.20 A Bushfire Management Plan has been prepared and endorsed with the Endorsed Work Plan Variation that will guide the Quarry's operations in this regard.

DOES THE AMENDMENT COMPLY WITH THE REQUIREMENTS OF ANY OTHER MINISTER'S DIRECTION APPLICABLE TO THE AMENDMENT?

5.21 The Amendment seeks to rezone the Amendment Land to the FZ and the FZ schedule controls which are already contained within the Planning Scheme. The existing DPO3 will be removed from the Amendment Land. The Amendment will utilise existing Planning Scheme provisions and accordingly the form and content of the Amendment will be compliant with the *Ministerial Direction - The Form and Content of Planning Schemes*.

5.22 The Amendment is supported by this planning report and supporting documents that have been prepared to aid in the strategic evaluation of the amendment as per *Ministerial Direction 11 Strategic Assessment of Amendments*.

HOW DOES THE AMENDMENT SUPPORT OR IMPLEMENT THE PLANNING POLICY FRAMEWORK AND ANY ADOPTED STATE POLICY?

5.23 Consistent with Clauses 11.01-1S, 11.01-1R, 11.02-1S, 11.02-1L the Amendment provides for a very minor loss of residential land in on the outskirts of the Coleraine township where residential land is in low demand. It will deliver an increase in agricultural land that will

support the local community by improving access to construction materials, additional agricultural opportunities and employment.

5.24 Consistent with Clauses 12.01-1S and 12.01-2S, the Amendment will have minimal impacts on biodiversity or native vegetation as the site has low environmental values, being disturbed land with a history of agriculture and extractive industry use.

5.25 Consistent with Clause 13.01-1S, the Amendment will not result in any risks from natural hazards as a result of climate change impacts.

5.26 Consistent with Clause 13.02-1S, the Amendment will have no impact on bushfire risk for the Coleraine township. The reduction in the extent of residentially zoned land will have a minor reduction in the risk of bushfire impacts by limiting the opportunity for further residential development.

5.27 Consistent with Clause 13.05-1S, the Amendment will appropriately manage the effects of noise on nearby sensitive uses by ensuring compliance with relevant noise emissions standards and by maintaining existing intensity and operational methods in relation to the proposed extension to the Quarry.

5.28 Consistent with Clauses 13.07-1S and 13.07-1L, the Amendment will protect community amenity from non-compatible uses including extractive industry and agriculture by removing residentially zoned land adjacent to FZ and IN1Z land and reduce the potential for future land use conflicts with existing non-residential uses.

5.29 Consistent with Clauses 14.01-1S and 14.01-1L, the Amendment will protect agricultural land by augmenting existing agricultural zoned land on the periphery of the Coleraine township and by avoiding the permanent removal of productive agricultural land. Extractive industry is a temporary use, with the life the Quarry to be extended by approximately 30 years, after which time the land will return to productive agricultural use for grazing and general farming activities.

5.30 Consistent with Clause 14.02-2S, the Amendment will ensure the protection of water quality by directing rain and surface waters intercepted by quarrying activities to the quarry pit and dams for treatment and re-use without the need to discharge to local waterways.

5.31 Consistent with Clauses 14.03-1S and 14.03-1R, the Amendment will facilitate the continued access to an important stone resource in the Southern Grampians Shire region in a context where the Quarry has supplied much needed products for local road and other construction projects for decades.

5.32 Consistent with Clause 15.03-2S, the Amendment will have no impact on any place of Aboriginal cultural heritage significance.

5.33 Consistent with Clauses 17.01-1S and 17.01-1R, the Amendment will facilitate an expansion of an existing extractive industry use that will continue to strengthen and diversify the Southern

Grampians economy by providing employment and access to an important local construction material resource.

HOW DOES THE AMENDMENT SUPPORT OR IMPLEMENT THE MUNICIPAL PLANNING STRATEGY?

5.34 The Amendment appropriately responds to the Southern Grampian's Municipal Planning Strategy by:

5.34.1 Facilitating the continued operation of an important local Quarry business for Coleraine and Southern Grampian's economy and providing continued employment opportunities.

5.34.2 Protecting the Shire's natural attributes including native vegetation and the natural landscape.

5.34.3 Augmenting existing agricultural land, supporting Southern Grampian's largest employment and growth sector.

5.34.4 Protecting agricultural uses and other non-residential uses from the encroachment of sensitive uses that are incompatible with farming practices and extractive industry uses.

5.34.5 Ensuring that the Proposed Quarry Expansion has considered agricultural end uses through an updated rehabilitation plan.

5.34.6 Protecting waterways by ensuring surface water runoff is retained on site and not directed to nearby creeks or streams.

5.34.7 Managing the impacts of quarrying by locating the Proposed Quarry Expansion on land adjacent to the existing Quarry, allowing existing infrastructure and quarrying practices to continue with minimal impacts to adjacent and nearby land.

DOES THE AMENDMENT MAKE PROPER USE OF THE VICTORIA PLANNING PROVISIONS?

5.35 The Amendment makes proper use of the Victoria Planning Provisions.

5.36 The LDRZ1 will be appropriately removed from the Amendment Land as the purposes of this zone are inconsistent with the zoning of surrounding land and the existing non-residential uses.

5.37 The DPO3 will be removed as it seeks outcomes for residential development and relates to rural living residential land in Hamilton, which have no relevance to existing non-residential uses and the Proposed Quarry Expansion.

5.38 The Amendment seeks a logical extension of the existing zoning pattern of the Quarry Land to the north that is in the FZ. The FZ will be complementary to the non-residential character of the land to the north and the south. The FZ will also permit the extension of an existing extractive industry use on to land contiguous with that use.

5.39 The Amendment will also apply a single zone to land at 26 Templeton Street, which is currently in two zones.

HOW DOES THE AMENDMENT ADDRESS THE VIEWS OF ANY RELEVANT AGENCY?

5.40 [To be inserted following final feedback].

DOES THE AMENDMENT ADDRESS RELEVANT REQUIREMENTS OF THE TRANSPORT INTEGRATION ACT 2010?

5.41 The Amendment is in keeping with the objectives of the *Transport Integration Act 2010* by preventing disruption in both the short or long term to existing and proposed transport systems, as well as complying with the requirement for development not to prevent future transport network expansion.

6 ASSESSMENT OF THE PLANNING PERMIT APPLICATION

STRATEGIC AND LAND USE CONSIDERATIONS

6.1 The objectives of the Farming Zone and planning policy relevant to the Proposed Quarry Expansion generally seek to protect the use of land for agricultural purposes and promote economic development that is compatible with agricultural uses.

6.2 In relation to the Quarry Land, the Proposed Quarry Expansion will continue to be consistent with the objectives and purposes of the FZ and those policies. In relation to the Expansion Land, the proposed quarry use will be consistent with the objectives and purposes of the FZ and those policies. In particular:

6.2.1 The Proposed Quarry Expansion will retain the Quarry Land as a large rural landholding, which will be rehabilitated and returned to agricultural use following the completion of the quarry use. The Expansion Land will be retained as rural allotments which will also be rehabilitated and used for agricultural purposes.

6.2.2 The FZ seeks to promote the use of land for agricultural activities as well as uses which are compatible with agricultural and other rural activities. The use of land for the Quarry is consistent with these purposes and the Proposed Quarry Expansion will not adversely affect the ability of surrounding land to satisfy these ambitions.[2]

6.2.3 The Proposed Quarry Expansion will provide further access to a valuable rock resource and will extract this resource in a manner that is entirely consistent with State planning policies for earth and energy resources. The Proposed Quarry Expansion will enable the additional rock resource to be extracted while implementing best practice environmental and risk management controls that are contained in the Endorsed Work Plan Variation. It will also deliver an improved rehabilitation profile and end use outcomes on the completion of the Quarry use.

6.2.4 The Proposed Quarry Expansion will retain its existing boundary buffers along the Templeton Street frontage, with the expanded area to provide space for compliant buffers along the east and south boundaries. While the Work Authority boundary will be moving closer to nearby dwellings, the primary purpose of the expanded extraction area to the south is to allow for a larger stockpile and operations area to the south of the existing Quarry pit and to facilitate a rehabilitated pit profile that is compliant with contemporary standards.

6.2.5 In accordance with Clause 14.03-1S, the Proposed Quarry Expansion will establish extensive and clearly defined buffers to sensitive uses which will be controlled by the Proponent over the life of the Quarry.

6.2.6 Some minor changes are proposed to the current extraction and processing methodologies. These include the introduction of mobile crushing and screening plant, the relocation of fixed plant, a change in the size of quarry haul trucks and

[2] See *Gibson v Moyne SC* [2014] VCAT 916 at [121]

extraction equipment, the introduction of excavators, the removal of explosives storage, changes to the height of overburden dumps and changes to batter profiles. Additional bunding will be installed to accommodate these changes which will assist in mitigating the potential for amenity to the nearest sensitive receptors and the surrounding area.

6.3 Overall, it is submitted that the Proposed Quarry Expansion is consistent with the objectives of the FZ and relevant State and local planning policy.

AMENITY

6.4 The Proposed Quarry Expansion will not result in the potential for increased or unreasonable amenity impacts to surrounding and nearby properties:

6.4.1 While the existing Quarry is located in proximity to a number of sensitive receptors, it has been in this location for over 100 years and amenity impacts from its operations are known and have been accepted by the wider community. The Proposed Quarry Expansion simply seeks to enable access to additional rock resource to extend the life of the Quarry. It will not result in an increase in the intensity of the existing Quarry use or an increase in the potential for amenity impacts to surrounding land. In any event, the risk of amenity impacts can be appropriately managed in accordance with the risk management strategies and controls contained in the Endorsed Work Plan Variation.

6.4.2 The Quarry is located at the western end of a ridgeline facing away from the Coleraine township. The majority of nearby dwellings are located fronting the Glenelg Highway to the south with limited views of the Quarry's operations with the bulk of view coming from agricultural land to the west across the Konongwootong Creek.

6.4.3 Noting that the Proposed Quarry Expansion seeks only minor increases in the area of extraction to accommodate new areas for stockpiling and hard stand with additional rock resources to be obtained primarily by extracting the existing pit deeper, visual impacts of the expansion will be minimised.

6.4.4 The expansion of the Work Authority area will permit the Quarry to install additional bunds and to increase buffer areas in the direction of the majority of nearby sensitive receptors located to the south and east.

6.4.5 The Proposed Quarry Expansion will not result in any additional adverse noise impacts upon the surrounding area because the changes proposed to the Quarry's current operation methods are minor and will be managed through additional buffers, plantings and bunds. The hours of use or activity levels, including blasting events, are not proposed to change. It is noted that given the small scale of the Quarry, blasting events at approximately two per annum are at the very low end of the scale of intensity. Despite the proximity of sensitive receptors to the Quarry, there have been no reported noise complaints indicating the community has accepted its impacts.

6.4.6 The Proposed Quarry Expansion will not result in the potential for increased air quality impacts to surrounding area due to the infrequent duration of blasting and the maintenance of existing levels of activity on the site. Dust suppression techniques will be employed as required using water stored in the Quarry dams.

NATIVE VEGETATION AND THREATENED SPECIES

6.5 The Quarry and Amendment Land is highly disturbed land with a long history of human activity. The Proposed Quarry Expansion does not require the removal of any native vegetation and will not impact any threatened flora or fauna.

6.6 Specific conditions have been provided by DEECA concerning the establishment of tree protection zones and these have been included in the Endorsed Work Plan Variation.

WATER MANAGEMENT AND EROSION

6.7 The Proposed Quarry Expansion is not likely to be affected by flooding or have noticeable effects on the flow of surface water.

6.8 The Proposed Quarry Expansion does not require drainage diversion as there are no waterways or drainage lines within WA410.

6.9 The closest waterbody is Konongwootong Creek 200 metres to the west. This creek will not be impacted by the Proposed Quarry Expansion. The Quarry is not within any special catchment areas.

6.10 Surface water management will be achieved by the strategic location of swale drains, bunding, sediment traps and sumps to ensure that water traversing over disturbed ground does not leave the site and is directed to the sediment dam and or quarry sump within the extraction area.

6.11 Incidental rainfall and surface water flows outside the disturbance area will be directed away from the extraction area through the strategic location of cut- off drains and bunds. This water will not be used in the operation of the quarry activities.

6.12 No groundwater is proposed to be extracted for this operation and no interception of groundwater is expected to occur.

6.13 A Water Management Plan will be maintained and updated as necessary to demonstrate surface water control features and locations.

TRAFFIC

6.14 The traffic operations of the Proposed Quarry Expansion will be identical to the existing Quarry's operations and no change is proposed to the intensity of the use. The Proposed Quarry Expansion will have no impact on the surrounding area's rural traffic context.

6.15 There will be no changes to the current access point or traffic flow generated by the existing Quarry operations. The site will continue employing the same traffic control measures to minimise vehicle movements within the site and warn of blasting activities.

7 CONCLUSIONS

7.1 The Amendment seeks to rezone the Amendment Land to FZ and remove the DPO3 to allow for the expansion of the Quarry to the Expansion Land, while addressing the anomalous LDRZ1 and associated DPO3 controls which are inappropriate in the context of the surrounding non-residential land uses.

7.2 The Quarry Land is a large rural allotment that has been used for extractive industry for well over 100 years and is situated within an area used for a range of agricultural activities.

7.3 The Expansion Land includes rural allotments currently used for agricultural and other non-residential purposes and is contiguous with the Quarry Land.

7.4 The Expansion Land is partly zoned Low Density Residential Zone and affected by the Development Plan Overlay, which both seek residential outcomes. The current planning controls are incompatible with the agricultural zoning of the surrounding land to the north, including the Quarry Land, and the industrial zoning of the land to the south across Pitcher Street.

7.5 The Proposed Quarry Expansion represents a modest increase to the existing extraction area and will provide further access to a valuable hard rock resource that will support the continuation of this long-established extractive industry business.

7.6 The Proposed Quarry Expansion will not result in any unreasonable landscape or visual impacts to surrounding properties or the wider Coleraine area. While the Quarry is located within proximity to the Coleraine township, it is within an historically modified landscape that has existed in its present condition for over 100 years. The effects of the Proposed Quarry Expansion will primarily be confined to areas immediately adjacent to the existing Quarry pit, minimising the potential for external visual impacts.

7.7 The Proposed Quarry Expansion will utilise existing infrastructure and processes that are not changing and which have not caused unreasonable impacts to nearby land. The same blasting practices that have occurred on the site since the 1930s will continue and not cause unreasonable adverse amenity, health or safety impacts on surrounding land uses into the future.

7.8 There is no proposed change to the current level of activity or hours of operation for the Quarry, meaning there will be no material change to local traffic conditions or the potential for other amenity impacts as a result of the Proposed Quarry Expansion.

7.9 The Proposed Quarry Expansion will not result in the loss of any native vegetation.

7.10 The Proposed Quarry Expansion will not impact on groundwater, which is estimated to be approximately 18 metres below the maximum proposed Quarry pit depth of 41 metres AHD. No groundwater is proposed to be utilised and groundwater licencing is therefore not required.

7.11 The Proposed Quarry Expansion will not impact any registered areas of ACHS. The existing WA410 boundary intersects with two areas of ACHS along the Templeton Street frontage. These small areas have been subject to significant ground disturbance from the long established Quarry use and are not proposed to change. The Proposed Quarry Expansion Land has been designed to avoid impacting any undisturbed areas of ACHS.

7.12 The Work Authority area of the Quarry, including the proposed expansion, will be progressively rehabilitated and returned to agricultural production, consistent with purposes of the FZ.

7.13 The existing Quarry use is consistent with the purposes of the FZ and the objectives and strategies of all relevant State and local planning policies related to rural areas and extractive industry, as well as the decision guidelines of Clause 52.09 and Clause 65. The Proposed Quarry Expansion will have no impact on the Quarry's on-going compliance with all relevant planning controls and policies.

7.14 The 96A Application will extend the life of a long established extractive industry that has been supplying much needed hard rock products to the local construction industry. In the longer term, the Amendment will address existing zoning anomalies and reduce potential for land use conflicts from the encroachment of sensitive uses.

7.15 The Amendment, the Proposed Quarry Expansion and the 96A Application will deliver a net community benefit.

8 DISCLAIMER

8.1 Equipe Lawyers Ltd (Equipe) has prepared this report for the benefit of Rigby Bros & Co Pty Ltd (the Client).

8.2 The report should not be used or relied upon for any purpose other than as an expression of the conclusions and recommendations of Equipe to the Client as to the matters within the scope of the report. Equipe and its officers and employees expressly disclaim any liability to any person other than the Client who relies on or purports to rely on the report for any other purpose.

8.3 Equipe has prepared the report with care and diligence. The conclusions and recommendations given by Equipe in the report are given in good faith and in the reasonable belief that they are correct and not misleading. The report has been prepared by Equipe based on information provided by the Client and by other persons. Equipe has relied on that information and has not independently verified or audited that information.

9 APPENDICES

APPENDIX 1 - CERTIFICATES OF TITLE AND PLAN

APPENDIX 2 - ENDORSED WORK PLAN VARIATION PLN-000923

APPENDIX 3 - STATUTORY ENDORSEMENT REFERRAL AUTHORITY CHECKLIST

APPENDIX 4 - REFERRAL AUTHORITY RESPONSES

APPENDIX 5 - WRITTEN NOTICE OF STATUTORY ENDORSEMENT

APPENDIX 6 - STATUTORY ENDORSEMENT CONDITIONS

EQUIPE

Our Ref: EQ20000290
Contact: Andrew Natoli
Phone: 9853 5000 / 0417 101 236
Email: andrew.natoli@equipelawyers.com.au

14 February 2025

Southern Grampians Shire Council
Attention: Andrew Nield
1 Market Place
Hamilton VIC 3300
By email: anield@sthgrampians.vic.gov.au

Dear Andrew

26 Templeton Street, Pitcher Street, 12 Pitcher Street, 10 Cameron Street & 17 Gray Street, Coleraine
Section 96A combined planning scheme amendment and planning permit application
Proposed expansion to the Coleraine Quarry

We continue to act for Rigby Bros & Co Pty Ltd (**Rigby**).

1 We thank you for our meeting on 30 January 2025 and your email dated 5 February 2025, requesting further information to support the proposed expansion the Coleraine Quarry (**the Quarry**).

2 The purpose of this letter is to respond to your request for further information and confirm whether requested docuents are required in light of relevant sections of the Endorsed Work Plan Variation (**the Endorsed Work Plan**) that already addressed these issues.

The requested information

3 The requested information includes the following additional assessments (summarised):

3.1 Amenity Impact Assessment: detailing likely noise (blasting and stone extraction) and dust impacts and proposed mitigation measures.

3.2 Visual Impact Assessment: examining and fully considering all matters affecting or likely to affect the visual amenity and landscape character by reason of the proposal.

3.3 Flora and Fauna Assessment: a preliminary assessment of existing flora and fauna attributes for the site, specifically as they relate to approval triggers in relation to native vegetation and threatened species requirements.

3.4 Priority Project List: has a request been made to include the proposal in the context of being included on the Extractive Industry Priority Project List.

3.5 Stakeholder engagement: evidence of any stakeholder engagement as part of the preparation of the Work Plan.

3.6 Traffic Impact Assessment: detailing the proposed vehicle movements to and from the site, including the amount and frequency, impacts on the site and surrounding road network, and any traffic mitigation measure required to support the proposal.

3.7 Updates to the Explanatory Report: to address Ministerial Direction 19 and Planning Practice Notes 92 and 89.

4 The following responds to each of the above requested items.

The Quarry is low risk use and requires a proportionate approach

5 When considering how to assess the proposal, at the outset it is important to emphasise the existing, low risk nature of the long standing Quarry use, which will not alter under the expansion proposal.

6 The Quarry is, by all measures, a small country quarry that has operated in its present township fringe location without causing significant impacts to surrounding properties since the 1800s.

7 The Quarry produces approximately 30-40,000 tonnes per annum, providing for a very modest income stream.

8 Any requirements that are imposed, including assessment requirements, must be proportionate to any new risks posed by what is a relatively minor expansion.

9 A proportionate, risk based approach is reflected in the relevant extractive industry and environmental requirements that are imposed on extractive industry operations. By way of example, Environment Protection Authority (**EPA**) guidance for quarries in urban areas with a production of less than 50,000 tonnes per year (which would include the Quarry) does not require any air quality assessment to be undertaken and simply requires the application of best practice.[1]

10 The approval of the Endorsed Work Plan will modernise and apply a best practice environmental management regime to the Quarry and replace the current work plan, which has not been updated since 1975.

11 The Endorsed Work Plan was statutorily endorsed by Earth Resources Regulation (**ERR**) unit of the Department of Energy, Environment and Climate Action (**DEECA**) as complying with the current framework for preparing work plans under the *Mineral Resources (Sustainable Development) Act 1990* (**the MRSDA**), the *Mineral Resources (Sustainable Development) (Extractive Industries) Regulations 2019*[2] (**the Regulations**) and *Preparation of Work Plans and*

[1] See page 6 of the EPA's Protocol for Environmental Management: Mining and Extractive Industries, Publication 1191, December 2007.
[2] *Mineral Resources (Sustainable Development) (Extractive Industries) Regulations 2019*

Work Plan Variation – Guideline for Extractive Industry Projects (December 2020)[3] (**the Guidelines**). The current risk-based work plan framework requires work plans to (inter alia):

11.1 Identify and assess all risks that an extractive industry may pose to the environment.

11.2 Identify and assess all risks the rehabilitation works may pose to the environment.

11.3 Include a risk management plan that specifies the control measures the work authority holder will use to eliminate or minimise all identified risks and monitoring to demonstrate compliance with performance standards.[4]

12 The Endorsed Work Plan, which includes the approved Risk Management Plan (**the RMP**), comprehensively documents the existing Quarry, the conditions on the Subject Land and the risks that need to be addressed as part of the Quarry operations. Importantly, it now includes a comprehensive suite of performance standards and strategies to address these risks, including issues such as native flora and fauna, noise, air quality, erosion control, surface water, groundwater, control of vermin and weeds.

13 As noted by the Tribunal, endorsement of the work plan "signifies that many matters such as potential impacts to biodiversity values of the subject land and its surrounds, potential amenity impacts from noise, dust and vibration, and quarry operations have been assessed and found to be acceptable by the relevant authorities under the MRSD Act regime."[5] In this instance, the relevant authorities to which the Endorsed Work Plan was referred included the EPA and the Planning and Environmental Assessment unit of DEECA (**DEECA-PEA**) (flora and fauna, clause 52.17 and native vegetation matters).

14 As noted in the *Planning Practice Note 89 – Extractive Industry and Resources* (**the Practice Note**), most of the information required to be submitted will be included in the statutorily endorsed work plan.

15 In the present case, it is submitted that many of the matters raised by Council have been address through the statutory endorsement process or are addressed in the Endorsed Work Plan. The matters are addressed further below.

Amenity impact Assessment and Visual Impact Assessment

16 We draw Council's attention to the RMP contained in the Endorsed Work Plan. A link to this document was provided in our email dated 10 January 2025 and we attach it separately to this letter by way of assistance. To support the RMP, the following adaptive management plans were also developed to support the Endorsed Work Plan:

16.1 Noise Management Plan (August 2024).

16.2 Dust Management Plan (August 2024).

17 These management plans were also provided to Council as part of the Endorsed Work Plan and are now separately attached to this letter by way of assistance.

18 As you will see, the RMP contains includes Risk Treatment Plans and a Risk Register specifically identifying key sensitive receptors, objectives, control measures and reporting requirements:

[3] *Preparation of Work Plans and Work Plan Variation – Guideline for Extractive Industry Projects (December 2020)*
[4] Reg 9 and 10 of the Regulations.
[5] See *B & J McLeod Holdings Pty Ltd v Moyne SC* [2023] VCAT 612 at [9].

18.1 Altered visual amenity - section 2.1.

18.2 Noise - section 2.2.

18.3 Dust - section 2.3.

18.4 Blasting - section 2.8.

19 The risks and control measures have been assessed and determined to be appropriate for the Quarry.

20 As noted in the recently updated *Writing Planning Permits* (May 2023) guide, where matters of detail or technicality are addressed by other regulatory approvals (like work plans) it is generally not appropriate for a planning permit to duplicate the regulation of these matters. In particular, where the technical expertise required to assess and enforce the particular requirement is held by other regulators. Duplication can also result in unnecessary costs and delays for operators and responsible authorities when similar documents are required to be approved and enforced under separate approvals. [6]

21 It is also relevant to note that, unlike documents that are approved once under a planning permit and then never revisited, ERR has the power to direct an operator to update a Work plan (including any controls contained in a RMP) at any time in response to changing risks or other circumstances.[7]

22 In the present case, it is clearly preferable that amenity matters identified by Council are best regulated through the work plan and that a further separate amenity impact assessment and visual impact assessment would only duplicate these requirements, causing unnecessary administrative burden and costs without any practical benefits.

23 For the above reasons, it is submitted that the RMP satisfactorily addresses the issues raised by Council and that a separate Amenity Impact Assessment and Visual Impact Assessment should not be required. It is resectfully requested that Council waive this requirement.

Flora and Fauna Assessment

24 As you will be aware, the Endorsed Work Plan was referred to the Planning and Environment Assessment unit of DEECA (**DEECA–PEA**) as part of the endorsement process.

25 DEECA–PEA is the relevant referral authority in relation to flora and fauna and native vegetation matters, including permissions required under clause 52.17 (native vegetation).

26 Under clause 52.17-7 (clarified in the Practice Note) a planning permit is not required for the removal of native vegetation required to enable an extractive industry, as this is dealt with through the approval of a work plan under the MRSDA.

27 As part of the work plan process DEECA–PEA officers have reviewed the Endorsed Work Plan and sought further information, which was provided through emails exchanged with BCA during July 2024. A copy of these emails and additional information were included in the Endorsed Work Plan provided to Council are now separately attached to this letter by way of assistance.

[6] *Writing Planning Permits* (May 2023), page 31.
[7] Section 77HA of the MRSDA.

28 These discussions culminated in a DEECA–PEA's formal referral response in a letter dated 22 October 2024.[8] This response was provided to Council with the Endorsed Work Plan and is now attached to this letter by way of assistance.

29 The emails and letter demonstrate that DEECA-PEA is satisfied that matters relating to flora fauna have been comprehensively reviewed and that, subject to conditions being imposed on the Endorsed Work Plan to protect retained vegetation, no further assessment or action is required.

30 In light of the above, a further flora and fauna assessment will simply confirm the matters in respect of which DEECA-PEA, the agency with the relevant expertise, has already been satisfied.

31 In the circumstances, it is submitted that such an assessment will simply incur further costs with no practical benefits and the requirement is unnecessary. It is resectfully requested that Council waive this requirement.

Stakeholder engagement

32 The Endorsed Work Plan includes a Community Engagement Plan (**the CEP**), which sets out the history of prior stakeholder engagement for the Endorsed Work Plan. A copy of the CEP was included with the Endorsed Work Plan and is attached separately to this letter by way of assistance.

33 The Endorsed Work Plan was developed through an extensive process of consultation which commenced in 2018, when an initial site meeting occurred with officers of ERR, Council and DELWP. This was followed by another site meeting in2022 and numerous email exchanges and virtual meetings with ERR and other agencies in relation to the development of the final proposals that now form part of the Endorsed Work Plan, including the RMP.

34 Our client has also consulted with the Gunditj Mirring Traditional Owners Aboriginal Corporation, who provided advice on avoiding areas of Aboriginal cultural heritage sensitivity.

Priority Project List

35 Our client has not requested that the proposed expansion be included on the Priority Project List.

Transport Impact Assessment

36 As noted above, the proposed expansion will not result in changes to the traffic movements or the nearby traffic conditions, which have adequately accommodated the Quarry operations without any impacts to the safety or operation of the local traffic network.

37 Nevertheless, to address Council's concerns, we advise that our currently seeking to engage a traffic engineer to provide advice on the matters requested. The Traffic Impact Assessment (**the TIA**) will be provided to Council in due course.

[8] Letter from Mia Ifergan of DEECA – PEA to ERR dated 22 October 2024.

Updates to the Explanatory Report

38 We are currently considering your request for changes to the Explanatory Report to address the matters set out in your email. We will update you in due course.

Request for confirmation of information requirements

39 In the meantime, our client would greatly appreciate it if you could confirm that, except for the TIA and the updated Explanatory Report, Council's request for information has been satisfied.

Please do not hesitate to contact us on 9853 5000 if you have any queries regarding this letter.

Yours faithfully

Andrew Natoli
Director
Equipe Lawyers

Encl.

1. Risk Management Plan (endorsed 30 October 2024).
2. Noise Management Plan (August 2024).
3. Dust Management Plan (August 2024).
4. Correspondence between BCA and DEECA-PEA (July 2024).
5. Referral response from DEECA-PEA (16 October 2024).
6. Community Engagement Plan (endorsed 30 October 2024).

BCA Consulting Admin

From: Ben J Seamons (DEECA) <ben.seamons@deeca.vic.gov.au>
Sent: Friday, 19 July 2024 12:52 PM
To: BCA Consulting Admin; Mia Ifergan (DEECA)
Cc: Leigh L Street (DEECA); Jeff J White (DEECA); 'Anne Rigby'
Subject: RE: OFFICIAL: WA410 Rigbey Brothers Quarry Colerain - advice

Categories: Cameron
JOB No:: R21_001

Thanks Cameron / Mia,

From the engagement between DEECA-PEA and yourself it appears to have resolved the revision requirement regarding native vegetation for both parties (thank you).
I'll await the re-submission for finalisation.

Regards Ben

Ben Seamons
Senior Assessment Officer | Earth Resources Regulator | Resources Victoria
Department of Energy, Environment and Climate Action

E: ben.seamons@deeca.vic.gov.au | deeca.vic.gov.au

RESOURCES VICTORIA

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We acknowledge Victorian Traditional Owners and their Elders past and present as the original custodians of Victoria's land and waters and commit to genuinely partnering with them and Victoria's Aboriginal community to progress their aspirations.

OFFICIAL

From: BCA Consulting Admin <admin@bcaconsulting.com.au>
Sent: Friday, July 19, 2024 12:45 PM
To: Mia Ifergan (DEECA) <mia.ifergan@deeca.vic.gov.au>; Ben J Seamons (DEECA) <ben.seamons@deeca.vic.gov.au>
Cc: Leigh L Street (DEECA) <leigh.street@deeca.vic.gov.au>; Jeff J White (DEECA) <jeff.white@deeca.vic.gov.au>; 'Anne Rigby' <annrigby@bigpond.net.au>
Subject: RE: OFFICIAL: WA410 Rigbey Brothers Quarry Colerain - advice

EXTERNAL SENDER: Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hey Mia

Thanks for the comments. Your controls are fairly generic, and ones that we incorporate into our work plan anyways, so no real issues from out end, but we will go through them and make them a little more descriptive / clearer, as per your comments

Ben, are you satisfied that this response from Mia addressed your concerns around the status of the vegetation on the site?

Cheers

Cameron Black Mobile +61 418 572 458

BCA CONSULTING
EARTH RESOURCES

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OFFICIAL

From: Mia Ifergan (DEECA) <mia.ifergan@deeca.vic.gov.au>
Sent: Thursday, July 18, 2024 11:22 AM
To: BCA Consulting Admin <admin@bcaconsulting.com.au>; Ben J Seamons (DEECA) <ben.seamons@deeca.vic.gov.au>
Cc: Leigh L Street (DEECA) <leigh.street@deeca.vic.gov.au>; Jeff J White (DEECA) <jeff.white@deeca.vic.gov.au>; 'Anne Rigby' <annrigby@bigpond.net.au>
Subject: RE: OFFICIAL: WA410 Rigbey Brothers Quarry Colerain - advice

Hello Cameron,

Thank you for sending through the above information and for your patience in this back-and-forth correspondence. The extent of the expansion in the admin update is definitely a lot clearer in the attached site layout and also thank you for providing evidence of planted vegetation.

From the site layout plan there seems to be potential impacts to native vegetation within the Work Authority WA410 Boundary to trees which intend to be 'protected'. These need to be retained to satisfy the requirements of Clause 52.17 Under the Victorian Planning Provisions.

If you do intend to carry out the works as indicated in Site Layout Plan Draft E sent to us on the 11/07/2024, we request that it be amended to:

1. Include the Tree Protection zones which include fencing around the Trees to be retained in line with the below:

   a. 12 times the diameter of the tree trunk at 130 cm above ground level (to a maximum distance of 15 metres) but no less than 2 metres from the base of the trunk, and

   b. 2 metres from remnant patches of native vegetation.

c. be constructed of [star pickets/ paraweb/ or similar] and remain in place until all works are completed to the satisfaction of the department.

2. The Workplan should also specify that none of the following may occur within the Tree Protection Zone:

a. vehicular or pedestrian access, trenching or soil excavation

b. storage or dumping of tools, equipment or waste

c. construction of entry and exit pits for underground services

If the above protections are included in the Workplan, then DEECA will be satisfied that the requirements of the the *Guidelines for the removal, destruction or lopping of native vegetation (Department of Environment, Land, Water and Planning, 2017)* have been met.

If you wish to send us any updated versions of the documentation provided, we will be happy to review them.

Best,

Mia

OFFICIAL

From: BCA Consulting Admin <admin@bcaconsulting.com.au>
Sent: Thursday, July 11, 2024 9:54 AM
To: Mia Ifergan (DEECA) <mia.ifergan@deeca.vic.gov.au>; Ben J Seamons (DEECA) <ben.seamons@deeca.vic.gov.au>
Cc: Leigh L Street (DEECA) <leigh.street@deeca.vic.gov.au>; Jeff J White (DEECA) <jeff.white@deeca.vic.gov.au>; 'Anne Rigby' <annrigby@bigpond.net.au>
Subject: RE: OFFICIAL: WA410 Rigbey Brothers Quarry Colerain - advice

EXTERNAL SENDER: Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hey Mia
Please find attached the information and photos we have been acquiring to address the status of vegetation to be removed as part of the Quarry extension to the WA410.
I have included a plan showing the approx. location of the images, as well as the images we received from Anne Rigby should you require a better quality.
Unfortunately these photo have been through a few email chains and have lost their geo referencing, so positions are approximate only, however I hope they still serve the purpose.

To keep all correspondence together for future reference, I have included an updated Site Layout plan (Draft E), reflecting the subtle changes to the screening bund to protect the trees on / near the property boundary, and a copy of the previous email from 2 July 2024 indicating the status of the plantation trees in the north east of the site

Please advise if you require any additional details.

Cheers

Cameron Black Mobile +61 418 572 458

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OFFICIAL

From: Mia Ifergan (DEECA) <mia.ifergan@deeca.vic.gov.au>
Sent: Monday, July 1, 2024 4:59 PM
To: BCA Consulting Admin <admin@bcaconsulting.com.au>
Cc: Leigh L Street (DEECA) <leigh.street@deeca.vic.gov.au>; Ben J Seamons (DEECA) <ben.seamons@deeca.vic.gov.au>; Jeff J White (DEECA) <jeff.white@deeca.vic.gov.au>
Subject: OFFICIAL: WA410 Rigbey Brothers Quarry Colerain - advice

Dear Cameron,
Thank you for your email to Jeff White, received on Saturday 22 June 2024, and for your time during our meeting last Friday 28 June regarding the determination of the status of vegetation to be removed as a part of Work Plan Variation for WA410, the Rigby Brothers Colerain Quarry.

I have been assessing and comparing the documentation and maps provided by yourself in June and the ones we have on file from a site visit we undertook in 2018 and noticed some minor discrepancies to the disturbance area and am unable to confirm what vegetation is to be removed on the maps supplied.

To help DEECA to confirm that the vegetation that is to be removed is exempt under Clause 52.17-7 - Planted Vegetation, I advise for the following information be provided to DEECA's Planning and Environment Assessment team:

1. A map clearly showing the extent of the expansion area of the quarry, and the extent of new disturbance area as a consequence of the variation
2. Geo-referenced (or referenced on the map) pictures of the vegetation to be removed
3. In the absence of available evidence of an agreement resulting in the planted vegetation, providing the species of the trees will assist DEECA in determining their status. For example, if the trees are not native to Victoria we will be able to rule them as exempt.

Please do not hesitate to contact me regarding any question of clarifications.

Best regards,

Mia

Mia Ifergan (she/her)
Senior Planning Officer
Major and State Projects | Planning and Environment Assessment | Regions, Environment, Climate Action and First Peoples| Department of Energy, Environment and Climate Action

Sending to you from Wurundjeri Country

Arthur Rylah Institute,123 Brown Street, Heidelberg, 3084
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We acknowledge Victorian Traditional Owners and their Elders past and present as the original custodians of Victoria's land and waters and commit to genuinely partnering with them and Victoria's Aboriginal community to progress their aspirations.

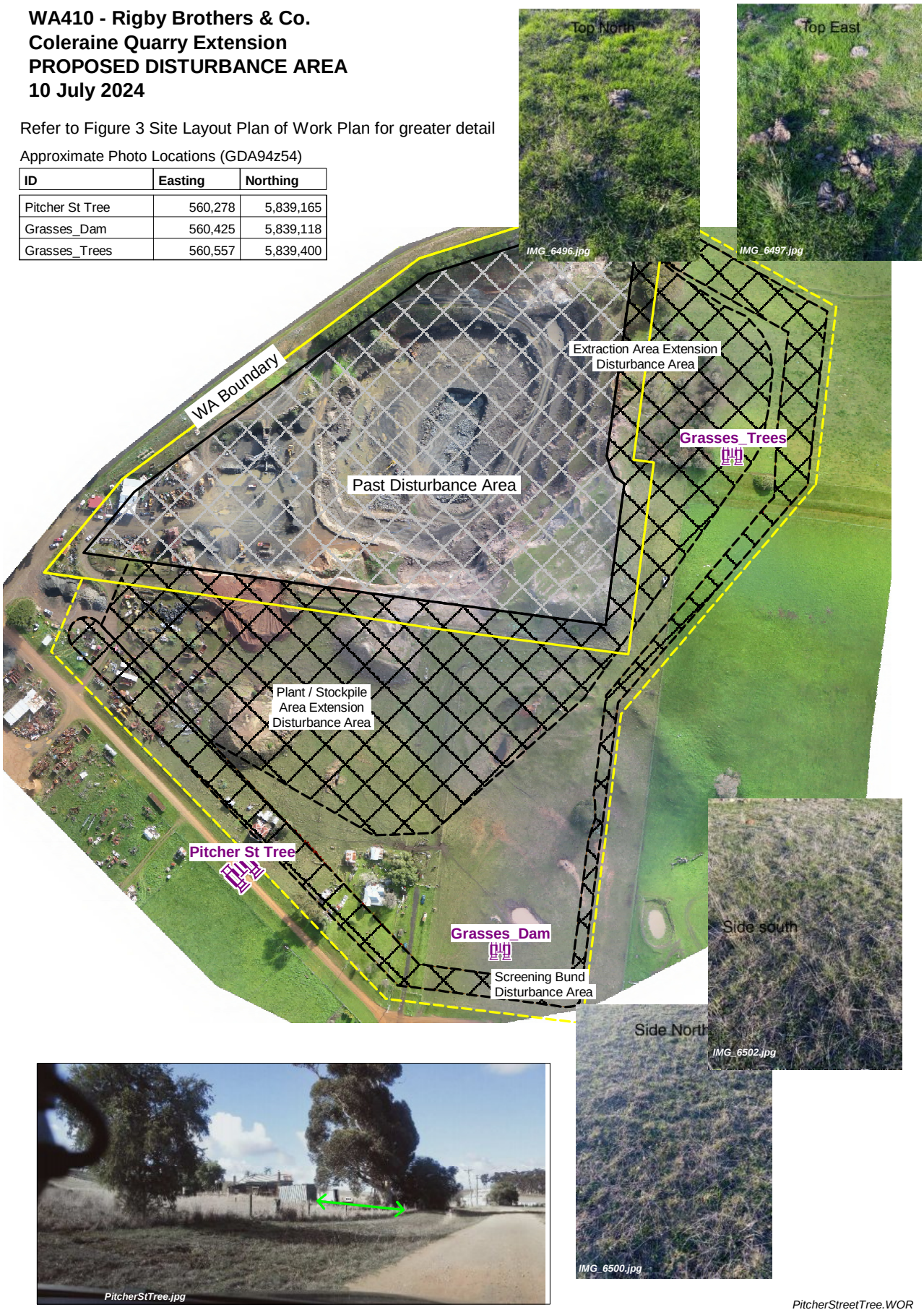
OFFICIAL

WA410 - Rigby Brothers & Co.
Coleraine Quarry Extension
PROPOSED DISTURBANCE AREA
10 July 2024

Refer to Figure 3 Site Layout Plan of Work Plan for greater detail

Approximate Photo Locations (GDA94z54)

ID	Easting	Northing
Pitcher St Tree	560,278	5,839,165
Grasses_Dam	560,425	5,839,118
Grasses_Trees	560,557	5,839,400



PitcherStreetTree.WOR

10th July 2024

Mia Ifergan

Senior Planning Officer

Major and State Projects DEECA -PEA

Athur Rylah Institute

123 Brown Street, Heidelberg, 3084

Email: mia.ifergan@delwp.vic.goc.au

In approximately 1976 – 1978 the Wannon shire purchased 3.1 acres of land from Stanley G Rigby and extended the boundary of the Quarry to the original boundary.

Discussions were held between David Barry Troeth, the owner of 67 Templeton Street Coleraine and the Directors of Rigby Bros & Co Stan Rigby and Doug Rigby of 26 Templeton Street Coleraine.

It was decided by both parties to plant trees on Troeth Bros land to help screen the Quarry.

Today Rigby Bros & Co have purchased the land where that plantation is located and are working towards extending the extractive lease area with the new boundary.

There will be a bund wall and approximately 2,500 – 3000 trees and shrubs planted around the perimeter of the quarry area.

Your Sincerely

S G Rigby

Stanley G Rigby

Director Rigby Bros & Co

B Troeth

David Barry Troeth

owner of 67 Templeton Street Coleraine

Planning and Environment Regulations 2015

Form 9

Section 96J

PLANNING PERMIT GRANTED UNDER SECTION 96J OF THE PLANNING AND ENVIRONMENT ACT 1987

Permit No.:	PAXXXXX
Planning scheme:	Southern Grampians Planning Scheme
Responsible authority:	Southern Grampians Shire Council
ADDRESS OF THE LAND:	• 26 Templeton Street, Coleraine (Lot 2 on Plan of Subdivision 818710) • Pitcher Street, Coleraine (Lot 1 on Title Plan 862809) • 12 Pitcher Street, Coleraine (Crown Allotment 25, Section 1B, Township of Coleraine) • 6 Cameron Street, Coleraine (Crown Allotment 24, Section 1B, Township of Coleraine) • 17 Gray Street, Coleraine (Lot 1 on Plan of Subdivision 818710)

THE PERMIT ALLOWS:

Planning scheme clause No.	**Description of what is allowed** Use and development of extractive industry
Clause 35.07-1	Use of land for extractive industry
Clause 35.07-4	Buildings and works associated with a use in Section 2 of Clause 35.07-1
Clause 52.08-1	Use and development for earth and energy resource industry

THE FOLLOWING CONDITIONS APPLY TO THIS PERMIT:

Layout not altered

1. The endorsed plan/s must not be altered or modified (whether or not to comply with any statute, rule or local law or for any other reason) without the consent of the Responsible Authority.
2. Except in accordance with this permit, no alteration may be made to the natural condition or topography of the land within 20 metres of the boundary of land. This does not apply to driveways, drains, bund walls or landscaping.

Work Authority

Date issued: XX Month XXXX	**Signature for the responsible authority:**
Date permit comes into operation: XX Month XXXX (or if no date is specified, the permit comes into operation on the same day as the amendment to which the permit applies comes into operation)	

3. The use and development of the site must not commence until the Work Authority is granted in accordance with the requirements of the *Mineral Resources (Sustainable Development) Act 1990* and associated regulations.

4. At all times the use and development of the site must be in accordance with the Work Authority, including the approved work plan, issued pursuant to the *Mineral Resources (Sustainable Development) Act 1990* and associated regulations.

Landscape Plan

5. Before the development starts, a landscape plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the landscape plan will be endorsed and will then form part of the permit. The plan must be drawn to scale with dimensions and provided in digital format. The landscaping plan must show or describe (as relevant):

   a.

6. Before the use starts or by such later date as is approved by the Responsible Authority in writing, the landscaping works shown on the endorsed plans must be carried out and completed to the satisfaction of the Responsible Authority.

7. The landscaping shown on the endorsed plans must be maintained and managed (including noxious weed management, grazing management and pest animal management) to the satisfaction of the Responsible Authority, this includes the replacement of any dead, diseased or damaged plants.

Hours of operation

8. The use hereby permitted (including any pre-construction works) must only operate between 7:00am to 6:00pm.

9. The use must not operate on Sundays or public holidays.

10. The permit holder may, with the prior written consent of the Responsible Authority, operate the quarry outside of the operating hours set out in condition [XXX refer to hours of operation condition] for the purpose of managing equipment breakdowns or other unforeseen circumstances to the satisfaction of the Responsible Authority.

Blasting events

11. Blasting events must only occur between 10:00am – 4:00pm Monday to Friday.

12. Blasting events must not be undertaken on Saturdays, Sundays or public holidays.

13. All blasting must comply with the requirements of the Work Authority granted pursuant to the *Mineral Resources (Sustainable Development) Act 1990* and associated regulations and must be occur in accordance with the approved Work Plan.

Permit Expiry

14. This permit will expire if:

   a. the use and development has not commenced within a period of five (5) years from the date of this permit; or

   b. the Work Authority for the use issued under the provisions of the *Mineral Resources (Sustainable Development) Act 1990* and associated regulations is cancelled.

Date issued: XX Month XXXX	**Signature for the responsible authority:**
Date permit comes into operation: XX Month XXXX (or if no date is specified, the permit comes into operation on the same day as the amendment to which the permit applies comes into operation)	

Planning and Environment Regulations 2015
Form 9

Section 96J

THIS PERMIT HAS BEEN AMENDED AS FOLLOWS:

Date of amendment	*Brief description of amendment*	*Name of responsible authority that approved the amendment*

THIS PERMIT HAS BEEN EXTENDED AS FOLLOWS:

Date of extension	*Period of extension to commence use (specify date where possible)*	*Period of extension to commence development (specify date where possible)*	*Period of extension to complete development or any stage (specify date where possible)*	*Period of extension to certify plan of subdivision (specify date where possible)*

USEFUL INFORMATION:

(the following information does not form part of this permit)

1. The permitted use or development may need to comply with, or obtain the following further approvals:

   a. [Insert as relevant, e.g. *The recommendations of a cultural heritage management plan approved under the* Aboriginal Heritage Act 2006, or *a building permit under the* Building Act 1993].

Date issued: XX Month XXXX	**Signature for the responsible authority:**
Date permit comes into operation: XX Month XXXX (or if no date is specified, the permit comes into operation on the same day as the amendment to which the permit applies comes into operation)	

Planning and Environment Regulations 2015

Form 9

Section 96J

IMPORTANT INFORMATION ABOUT THIS PERMIT

WHAT HAS BEEN DECIDED?

The responsible authority has issued a permit. This permit was granted by the Minister under section 96I of the **Planning and Environment Act 1987** on approval of Amendment No. [C6Xsgra] to the Southern Grampians Planning Scheme.

WHEN DOES A PERMIT BEGIN?

The permit operates from a day specified in the permit being a day on or after the day on which the amendment to which the permit applies comes into operation.

WHEN DOES A PERMIT EXPIRE?

1. A permit for the development of land expires if–
   - the development or any stage of it does not start within the time specified in the permit; or
   - the development requires the certification of a plan of subdivision or consolidation under the **Subdivision Act 1988** and the plan is not certified within two years of the issue of the permit, unless the permit contains a different provision; or
   - the development or any stage is not completed within the time specified in the permit, or, if no time is specified, within two years after the issue of the permit or in the case of a subdivision or consolidation, within five years of the certification of the plan of subdivision or consolidation under the **Subdivision Act 1988**.
2. A permit for the use of land expires if–
   - the use does not start within the time specified in the permit, or if no time is specified, within two years after the issue of the permit; or
   - the use is discontinued for a period of two years.
3. A permit for the development and use of land expires if–
   - the development or any stage of it does not start within the time specified in the permit; or
   - the development or any stage of it is not completed within the time specified in the permit, or, if no time is specified, within two years after the issue of the permit; or
   - the use does not start within the time specified in the permit, or, if no time is specified, within two years after the completion of the development; or
   - the use is discontinued for a period of two years.
4. If a permit for the use of land or the development and use of land or relating to any of the circumstances mentioned in section 6A(2) of the **Planning and Environment Act 1987**, or to any combination of use, development or any of those circumstances requires the certification of a plan under the **Subdivision Act 1988**, unless the permit contains a different provision–
   - the use or development of any stage is to be taken to have started when the plan is certified; and
   - the permit expires if the plan is not certified within two years of the issue of the permit.
5. The expiry of a permit does not affect the validity of anything done under that permit before the expiry.

WHAT ABOUT REVIEWS?

- In accordance with section 96M of the **Planning and Environment Act 1987**, the applicant may not apply to the Victorian Administrative Tribunal for a review of any condition in this permit.

Date issued: XX Month XXXX	**Signature for the responsible authority:**
Date permit comes into operation: XX Month XXXX (or if no date is specified, the permit comes into operation on the same day as the amendment to which the permit applies comes into operation)	

Work Authority WA410
Work Plan (WA) PLN-000923

Licence Ownership Details	
Licensee	Rigby Brothers & Co Pty Ltd
Registered Address	29 Templeton Street Coleraine Victoria 3315

Mineral Resources (Sustainable Development) Act 1990

Tenement Number: WA410

Plan Number: PLN000923

Work Plan Variation Statutorily Endorsed

Signed: _____

Delegate of the Department Head

Date: 30/10/2024

Plan Summary Details	
Project Name	Rigby Bros Quarry, Coleraine
Plan Description	See Section 1.2 of Work Plan Description file, WA410 WPDescription_v01_Aug24.pdf

Area Details	
Property Name	Coleraine Quarry
Address	26 Templeton Street
Suburb / Town	Coleraine
Postcode	3315
Land Tenure (ownership) details	
Land Tenure Type	The site is owned by operator (freehold)
Depth Limitations	Yes
Depth Limits	Partly Nil, 50feet, 15.24m

Resource Type	
WA Commodity	Trachyte
WA Primary Commodity	Trachyte
Total Resource Estimate	1,200,000.00
Unit of Measure	Tonnes

Proposed Final Depth of Extraction	
Estimated Max Terminal	92.00 metres

Depth	
Batter Slope Angle	degrees

Top soil, overburden and subsoil disturbance	
Est Volume of Top Soil	5,000.00
Unit of Measure Top Soil	Cubic metres
Est Depth of Top Soil	200.00 metres
Est Volume of Overburden	290,000.00
Unit of Measure Overburden	Cubic metres
Est Depth of Overburden	8.00 metres
Area of Disturbance	10.90 hectares

Operation Type	
Operation Type	Dry open pit
Operation Type – Other	

Plant, Equipment and Method
See Section 3.3 of Work Plan Description, WA410 WPDescription_v01_Aug24.pdf

Operating Hours (24 Hour)			
	Above Ground Operations	**Sales**	**Processing**
Mon-Fri Start	7:00	7:00	7:00
Mon-Fri End	18:00	18:00	18:00
Sat Start	7:00	7:00	7:00
Sat End	18:00	18:00	18:00
Sun Start	N/A	N/A	N/A
Sun End	N/A	N/A	N/A
Public Holiday Activity	No	No	No
Operational hours Clarification	see section 5.4 Work Plan Description, WA410 WPDescription_v01_Aug24.pdf		

Attachments Provided (as part of) Work Plan

Work Plan Specific Conditions - 20241030
WA410_Fig2_LocationPlan_v01
WA410_Fig1_RegionalPlan_v00
WA410_Fig2A_CrownLandMap
WA410_Fig3_SiteLayoutPlan_V03
WA410 WPDescription_v03_Aug24
WA410_RiskRegister_v01
WA410_RMP_v02_September_2024
WA410_RehabPlan_August2024_v01
Fig4_FinalLandform_v00
WA410_CommEngPlan_ August 2024

Appendices

WA410 Geotech Assessment_r01
WA410_GCMP August2024
AED Consulting_12032021_162041
WA410 DustManPlan
CQ2136-REP(AcRpt)-R1.0
WA410 NoiseManPlan
WA410_aavProcessList
Boandik – Gunditjmara Elder Letter of Advice
WA410_DEECA Veg_emails
WA410_BMP_Sample _August2024
WA410 WaterManPlan
WA410_IMMP_Sept2024
WA410_FireResponseReadinessPlan_Feb2024
Council Correspondence re Rezoning
26-Templeton-Street-Coleraine-Vicplan-Planning-Property-Report
WA410_Titles

WORK PLAN SPECIFIC CONDITIONS

Work Authority WA410

Mineral Resources (Sustainable Development) Act 1990

Tenement Number: WA410

Plan Number: PLN000923

Work Plan Variation Statutorily Endorsed

Signed: _____

Delegate of the Department Head

Date: 30/10/2024

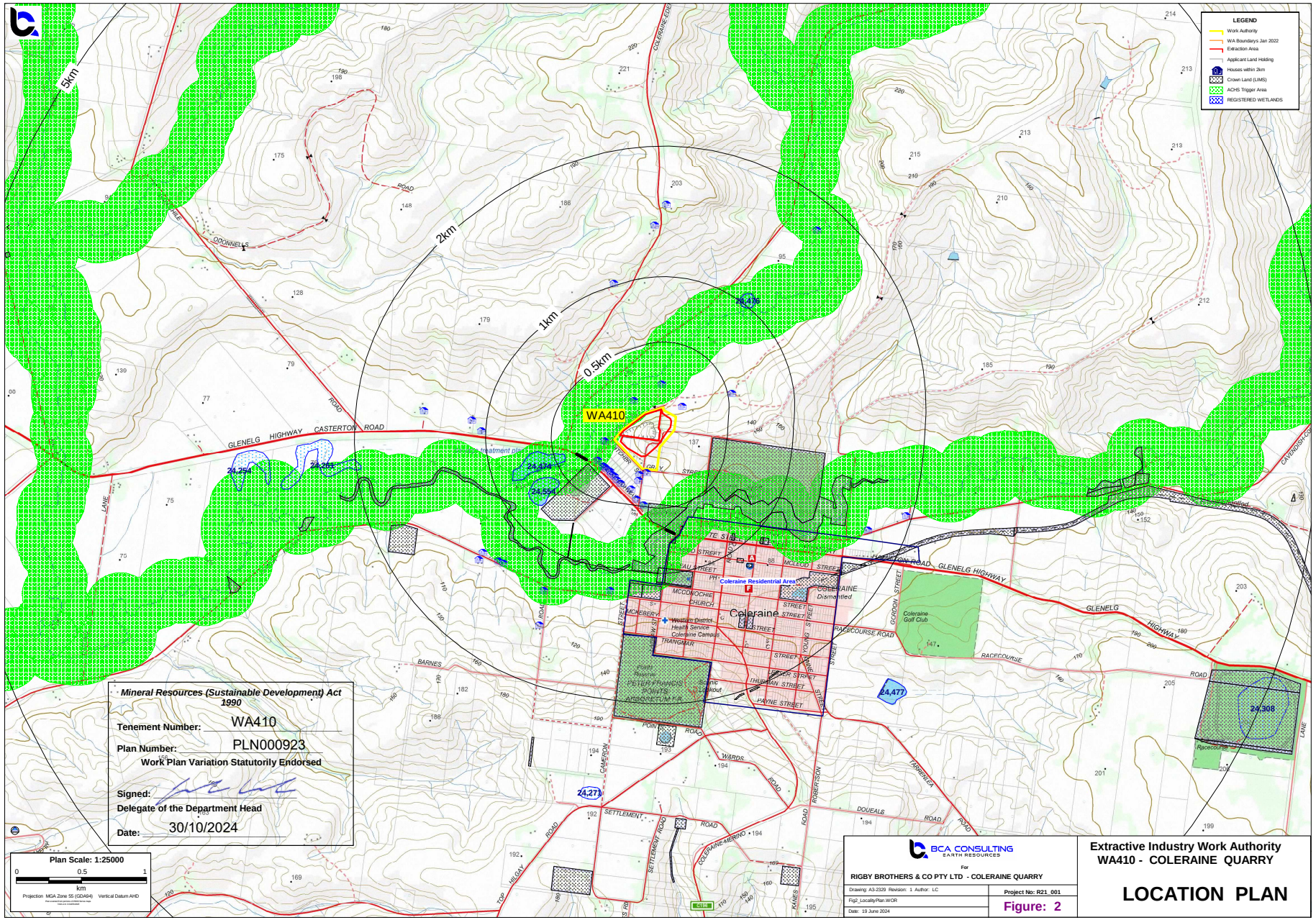
DEPARTMENT OF ENERGY ENVIRONMENT AND CLIMATE ACTION – PLANNING AND ENVIRONMENTAL ASSESSMENT

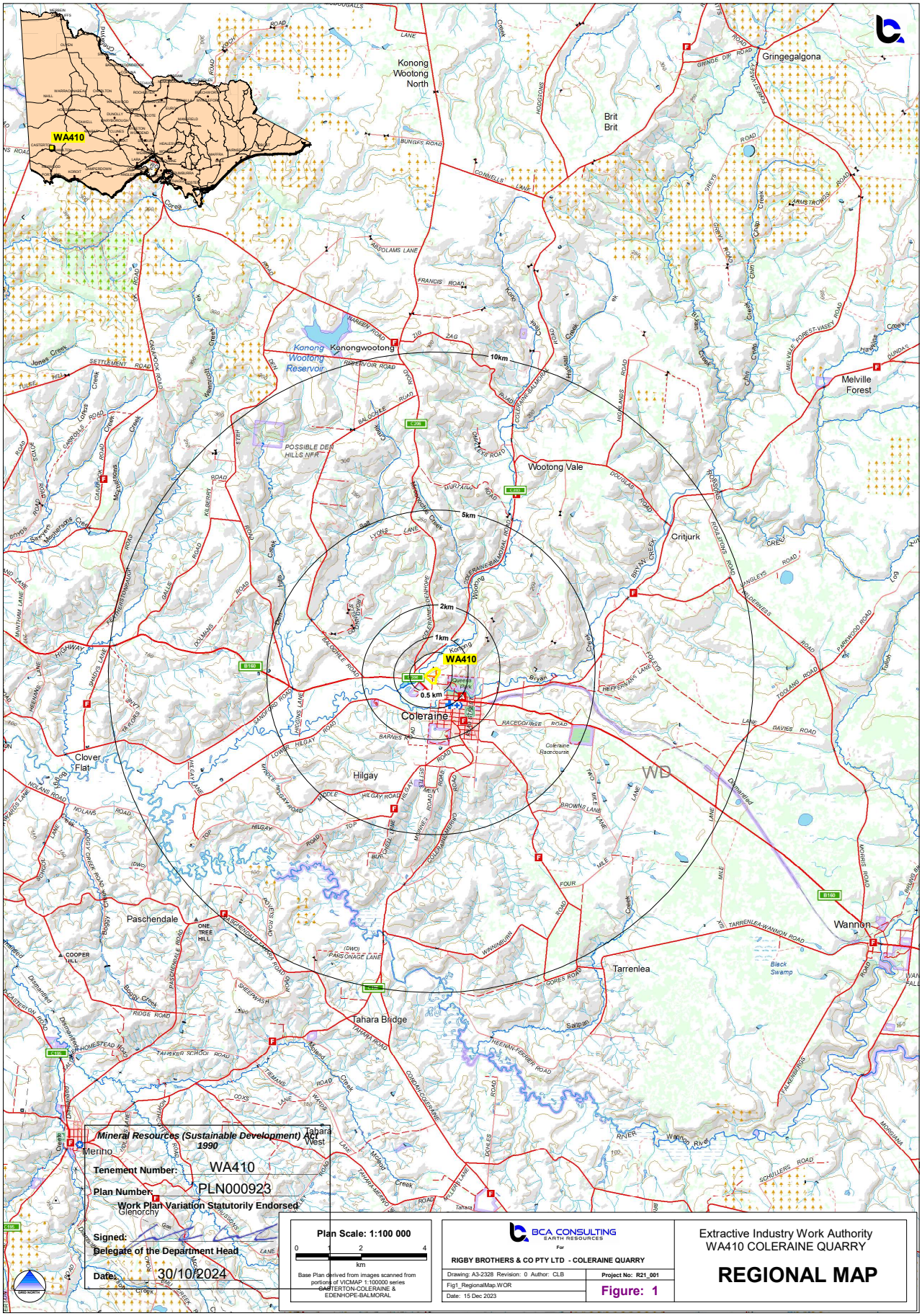
1. The No Go Zones should include mapped Tree Protection zones which include fencing around the trees to be retained in line with the below:

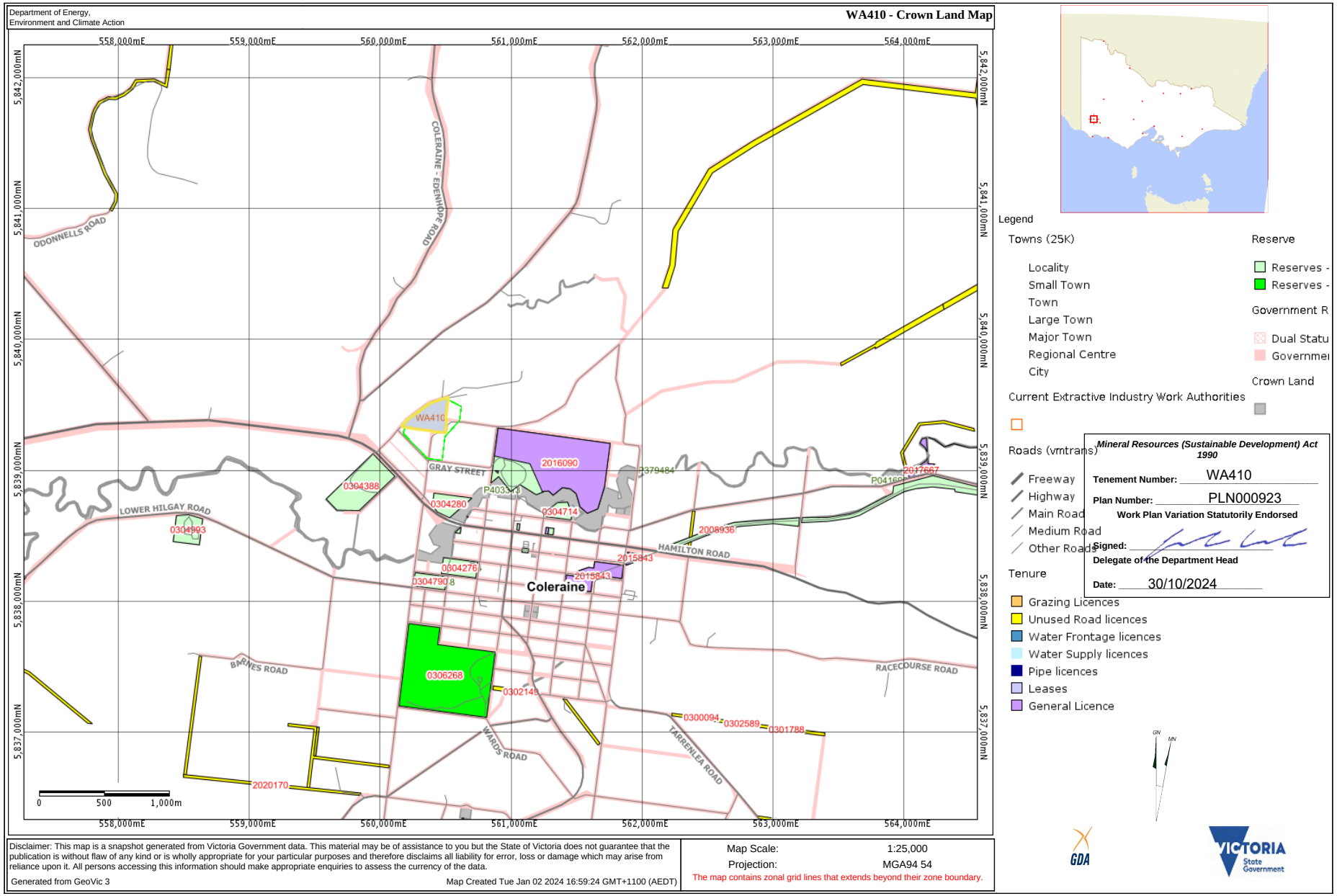
   a. 12 times the diameter of the tree trunk at 130 cm above ground level (to a maximum distance of 15 metres) but no less than 2 metres from the base of the trunk, and
   b. be constructed of visible materials and remain in place until all works are completed.

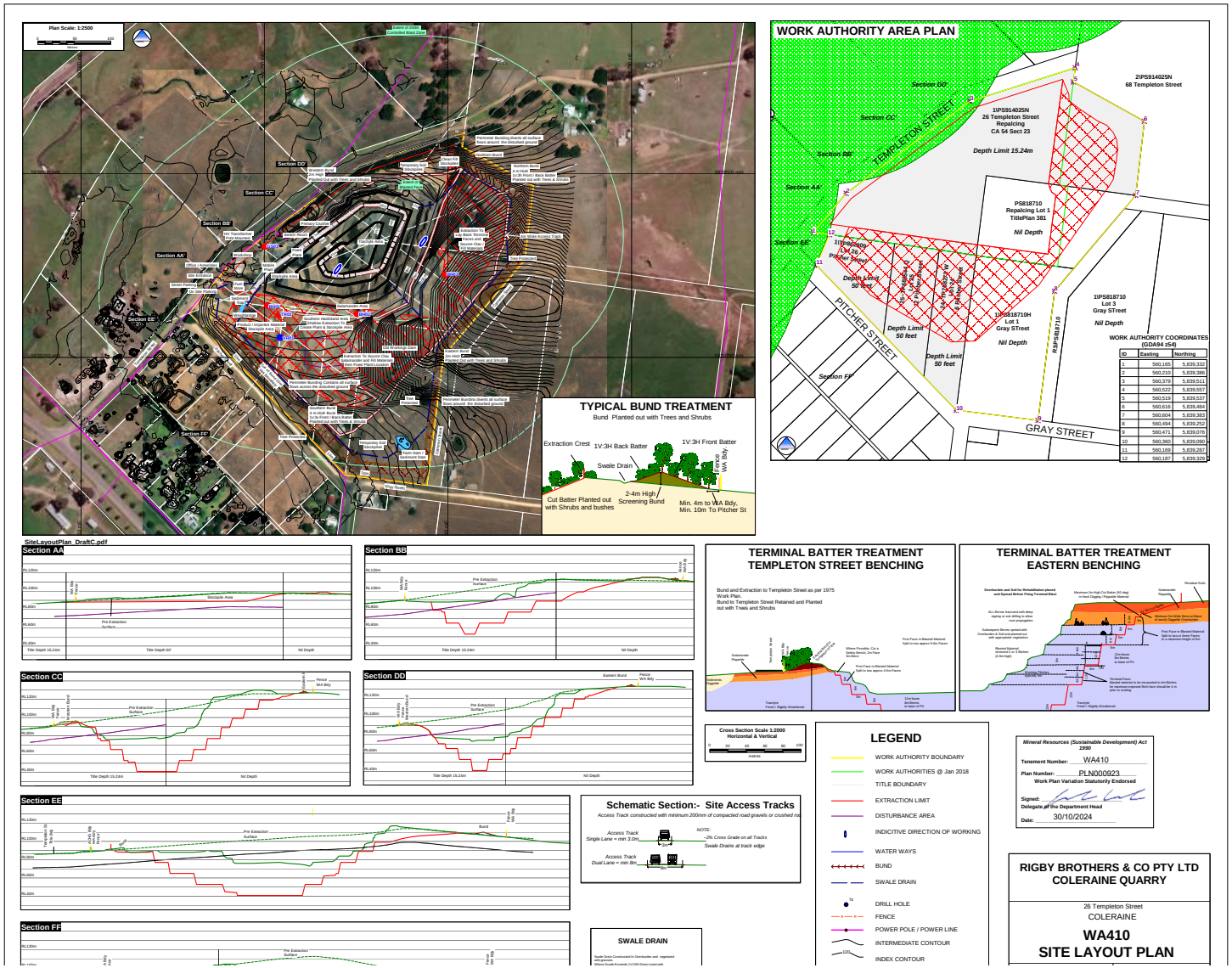
2. None of the following may occur in the Tree Protection Zones Vehicular or pedestrian access, trenching or soil excavation:

   c. Storage or dumping of tools, equipment or waste.
   d. Construction of entry and exit pits for underground services.


LEGEND
Work Authority
WA Boundarys Jan 2022
Extraction Area
Applicant Land Holding
Houses within 2km
Crown Land (LIMS)
ACHS Trigger Area
REGISTERED WETLANDS
5km
2km
1km
0.5km
WA410
GLENELG HIGHWAY
CASTERTON ROAD
Coleraine
Coleraine Residential Area
Coleraine Golf Club
Racecourse
Western District Health Service Coleraine Campus
MCCONOCHIE CHURCH
PETER FRANCIS POINTS ARBORETUM R.R.
Scenic Lookout
COLERAINE Dismantled
RACECOURSE ROAD
GLENELG HIGHWAY
HARROWAY ROAD
24,477
24,308
24,271
24,294
24,295
24,554
24,434
Mineral Resources (Sustainable Development) Act 1990
Tenement Number: WA410
Plan Number: PLN000923
Work Plan Variation Statutorily Endorsed
Signed:
Delegate of the Department Head
Date: 30/10/2024
Plan Scale: 1:25000
0 0.5 1
km
Projection MGA Zone 55 (GDA94) Vertical Datum AHD
BCA CONSULTING EARTH RESOURCES
For
RIGBY BROTHERS & CO PTY LTD - COLERAINE QUARRY
Drawing: A3-2329 Revision: 1 Author: LC
Fig2_LocalityPlan.WOR
Date: 19 June 2024
Project No: R21_001
Figure: 2
Extractive Industry Work Authority
WA410 - COLERAINE QUARRY
LOCATION PLAN


WA410
Konong Wootong North
Gringegalgona
Brit Brit
Konong Wootong Reservoir
Konongwootong
Melville Forest
Wootong Vale
Critjurk
10km
5km
2km
1km
0.5 km
Coleraine
Clover Flat
Hilgay
Paschendale
Wannon
Tarrenlea
Tahara Bridge
Merino
Tahara West
Glenorchy
Mineral Resources (Sustainable Development) Act 1990
Tenement Number: WA410
Plan Number: PLN000923
Work Plan Variation Statutorily Endorsed
Signed:
Delegate of the Department Head
Date: 30/10/2024
Plan Scale: 1:100 000
Base Plan derived from images scanned from portions of VICMAP 1:100000 series CASTERTON-COLERAINE & EDENHOPE-BALMORAL
BCA CONSULTING EARTH RESOURCES
For
RIGBY BROTHERS & CO PTY LTD - COLERAINE QUARRY
Drawing: A3-2328 Revision: 0 Author: CLB
Fig1_RegionalMap.WOR
Date: 15 Dec 2023
Project No: R21_001
Figure: 1
Extractive Industry Work Authority
WA410 COLERAINE QUARRY
REGIONAL MAP


Department of Energy,
Environment and Climate Action
WA410 - Crown Land Map
558,000mE
559,000mE
560,000mE
561,000mE
562,000mE
563,000mE
564,000mE
5,842,000mN
5,841,000mN
5,840,000mN
5,839,000mN
5,838,000mN
5,837,000mN
ODONNELLS ROAD
COLERAINE - EDENHOPE ROAD
WA410
GRAY STREET
2016090
2379484
0304388
P403548
0304280
0304714
LOWER HILGAY ROAD
0304993
2008936
HAMILTON ROAD
2015843
0304276
0304790
Coleraine
BARNES ROAD
RACECOURSE ROAD
0306268
0302149
0300094
0302589
0301788
WARDS ROAD
TARRENLEA ROAD
2020170
0
500
1,000m
Legend
Towns (25K)
Locality
Small Town
Town
Large Town
Major Town
Regional Centre
City
Current Extractive Industry Work Authorities
Roads (vmtrans)
Freeway
Highway
Main Road
Medium Road
Other Roads
Tenure
Grazing Licences
Unused Road licences
Water Frontage licences
Water Supply licences
Pipe licences
Leases
General Licence
Reserve
Reserves -
Reserves -
Government R
Dual Statu
Governmer
Crown Land
Mineral Resources (Sustainable Development) Act 1990
Tenement Number: WA410
Plan Number: PLN000923
Work Plan Variation Statutorily Endorsed
Signed:
Delegate of the Department Head
Date: 30/10/2024
GDA
VICTORIA
State Government
Disclaimer: This map is a snapshot generated from Victoria Government data. This material may be of assistance to you but the State of Victoria does not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for error, loss or damage which may arise from reliance upon it. All persons accessing this information should make appropriate enquiries to assess the currency of the data.
Generated from GeoVic 3
Map Created Tue Jan 02 2024 16:59:24 GMT+1100 (AEDT)
Map Scale: 1:25,000
Projection: MGA94 54
The map contains zonal grid lines that extends beyond their zone boundary.


WORK AUTHORITY AREA PLAN
TYPICAL BUND TREATMENT
Bund Planted out with Trees and Shrubs
Extraction Crest
1V:3H Back Batter
1V:3H Front Batter
Swale Drain
2-4m High Screening Bund
Cut Batter Planted out with Shrubs and bushes
Min. 4m to WA Bdy, Min. 10m To Pitcher St
PITCHER STREET
GRAY STREET
TEMPLETON STREET
WORK AUTHORITY COORDINATES (GDA94 z54)
TERMINAL BATTER TREATMENT TEMPLETON STREET BENCHING
TERMINAL BATTER TREATMENT EASTERN BENCHING
Section AA
Section BB
Section CC
Section DD
Section EE
Section FF
LEGEND
WORK AUTHORITY BOUNDARY
WORK AUTHORITIES @ Jan 2018
TITLE BOUNDARY
EXTRACTION LIMIT
DISTURBANCE AREA
INDICITIVE DIRECTION OF WORKING
WATER WAYS
BUND
SWALE DRAIN
DRILL HOLE
FENCE
POWER POLE / POWER LINE
INTERMEDIATE CONTOUR
INDEX CONTOUR
Schematic Section:- Site Access Tracks
SWALE DRAIN
RIGBY BROTHERS & CO PTY LTD
COLERAINE QUARRY
26 Templeton Street
COLERAINE
WA410
SITE LAYOUT PLAN
Tenement Number: WA410
Plan Number: PLN000923
Work Plan Variation Statutorily Endorsed
Delegate of the Department Head
Date: 30/10/2024

BCA CONSULTING
EARTH RESOURCES

Mineral Resources (Sustainable Development) Act 1990

Tenement Number: WA410

Plan Number: PLN000923

Work Plan Variation Statutorily Endorsed

Signed: _____

Delegate of the Department Head

Date: 30/10/2024

Work Plan Description

for

Extractive Industry Work Authority WA410

RRAM Designation:- PLN-000923

Rigby Brothers & Co Pty Ltd

Coleraine Quarry -

WA410 – Coleraine Quarry
26 Templeton Street
COLERAINE VIC 3315

Project No. R21_001
August 2024

Rigby Brothers & Co Pty Ltd
(03) 5575 2564
Rigby.bros.quarry@gmail.com

BCA CONSULTING
EARTH RESOURCES

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Revision History.

Document Date:	Description:
10 May 2019	1st draft of Work Plan Variation (Coffey Services Aust)
18 Dec2023	2nd draft by BCA of WPV, submitted to Compliance
24 April 2024	3rd Draft including Geotec comments
28 August 2024	2ndSubmission – addressing June 2024 RFI

1. INTRODUCTION

1.1. PLAN INFORMATION

Plan ID
PLN-000923

Tenement
WA410

Plan Type
Work Plan Variation

Author
Debra Farrelly, Rigby Brothers & Co Pty Ltd

Cameron Black, BCA Consulting

Project Name
Coleraine Quarry

1.2. PLAN DESCRIPTION

This Work Authority Variation and Work Plan Variation relates to expanding the current tenement WA410 to enable further extraction of the trachyte, to bring all the operations and stockpiles within the Work Authority and to enable an effective rehabilitation plan to be implemented for the closure of operations of the quarry.

This Work Plan Variation describes:

- the risk-based Work Plan approach for all operations, required by legislation
- the extraction, processing, rehabilitation methodology and ancillary processes adopted on the site
- the site closure and rehabilitation plan
- the community engagement plan, required by legislation

This Work Plan Variation updates the 1975 work plan for the site which has not been updated since it was first approved. Consequently, this work plan variation describes several changes from the 1975 approved Working Proposal. This Work Plan replaces all previous Work Plans and Work Plan Variations for WA410. Aside from numerous changes to bring the Work Plan up to the current legislation, the most notable changes are:

- an increase in the Work Authority area to 12.55 hectares, (from 5.58 hectares)
- an increase in the disturbance area to 7.8 hectares, (from 4.25 hectares)
- the introduction of mobile crushing and screening equipment, and relocation of the fixed plant
- the development of a rehabilitation plan, with a change in the rehabilitation profile, noting no change to the 1975 rehabilitation objective
- a change in the size of the quarry haul trucks and extraction equipment (excavator and wheel loaders)
- the introduction of excavators as well as loaders for extraction and sales
- removal of explosives storage

- a change to the blasting practices (Note this is not a change in blasting practice but a removal of the stated number of holes and rows to allow greater flexibility in blast management)
- where available, the adoption of a minimum 20m buffer (note that in some areas of the quarry, ie to Templeton Street, this is not possible due to the previous allowance of a 10m buffer
- change to maximum height of overburden dumps
- A change in batter profile of soft (diggable) material to not steeper than 1V:3H
- Alignment of operating hours with EPA daytime hours or as specified in any future planning permission
- Alignment of vertical datum to AHD(m), not RL(feet) ie front gate is at approximately 88mAHD from 2019 mapping and stated as 288.67RL (feet) on the 1978 work plan.
- A change in the maximum extraction depth, from RL285feet (as quoted in Work Authority conditions for EIL 393-3 Revised conditions dated 26.04.1996 Page 7), to AHD41m. The quarry floor as at 2020 is AHD72m

The expansion of WA410 is to the east and south of the 1975 approved work authority.

Very briefly, the expansion to the east is to allow for a more compliant rehabilitation profile of these faces and the expansion to the south is for processing and stockpiling activities. Extraction of the trachyte resource remains within the current pit, just to an increased depth.

The land is a combination of land already owned, recently purchased or in the hands of the Rigby Brothers & Co owners, see below for a map showing the old and new WA410 boundaries and other significant changes.

Map comparing 1975 approved boundary to this work plan

Key

WORK AUTHORITY BOUNDARY EXPANSION (circa 2024)

WORK AUTHORITY BOUNDARY @ Jan 2018 (Approved 1975)

EXTRACTION ZONE APPROVED 1975

EXTRACTION ZONE (This Work Plan)

TITLE BOUNDARY

IMAGE: Google Earth , 2020

The quarry operation is located at 26 Templeton Street, Coleraine, Victoria on the western edge of Coleraine township, in western Victoria and has been in operation since 1947. The Work Authority is bounded by Templeton Street to the west, Pitcher Street to the southwest and Cameron Street (undeveloped) to the southeast. The location of WA410, and its proximity to Coleraine, is shown in greater detail on the attached plans, Figure 1 Regional Plan and Figure 2 Locality Plan.

This Work Plan Variation describes the method of working the quarry and the extractive area where quarry activities will be undertaken. The quarry extractive operations (trachyte) essentially remain confined to the existing extraction area, with some minor variations to include past activities and to the east to enable a better rehabilitation outcome and there will be some shallow extraction to the south to create a more useable stockpiling area. To maximise the extraction of stone from within the extraction area, this Work Plan describes the relocation of plant infrastructure and product stockpiles, which will be accommodated on the area to the south.

The WA area recognises a recently gazetted revision to the alignment of a gazetted, but undeveloped, road (Cameron Street) and land to the east that has changed due to a recent sub-division. At the time of drafting this Work Plan, the 1975 Work Authority area is in the Farming Zone and some of the expansion (to the south) is zoned as Low Density Residential Zone. Protracted discussions with Southern Grampians Shire Council and Earth Resources are now positive to rezoning to enable the site to continue to operate and will be finalised before the Work Authority is granted, see attached letter from Council, Letter - *Equipe Lawyers - Proposal for rezoning - Rigby Brothers Quarry - Work Authority No 410 - 26 Templeton Street Coleraine.PDF*.

The site will continue to be a drill and blast trachyte quarry and is currently operating with multiple benches.

Historically the site has maintained an extraction rate of 30-40,000 tonnes per year, and this is not planned to change.

The expansion of the site will enable access to a further 1.2 million tonnes of rock (1,000,000t trachyte and 200,000t salamander) and on current extraction, would enable the site to operate for at least another 20 years.

The site currently employs seven people and that is expected to continue.

Descriptions of the geological information, the sensitive receptors and quarry operations are detailed in the following sections, with reference to the included maps.

1.3. PLAN DESCRIPTION

There has been quarrying activity at this site since the late 1800's with quarrying techniques progressing from the early manual pick extraction, then to a rip and push operation, and in the 1930, a drill and blast operation. Since the late 1800's, the stone has been used around the area for roadmaking, noting that some of this very early extraction occurred up to 500 metres from the site of the current WA410.

In approximately the 1920's the site now known as WA410 was being used by the local shire who owned a crushing plant and would call for tender for portable steam engines to be brought in to run the plant. Blasting commenced in the 1930's and the steam powered crushing plant operated all through that time.

The WA410 tenement came into being in 1947, and the local Shire contracted the operation of the quarry to George Riordan to run the quarry, with the Shire owning the land and the license.

The original fixed crushing plant (visible on the cover photo of this document) commenced construction in 1950 and was commissioned in 1951 and operated until approximately 2007. The Shire also owned land at 15 Templeton Street which was used for stockpiling rock and there was a 'tar shed' that operated on that land.

In the late 1960's requirements changed and the Shire was no longer able to hold the license for a quarry, the operator – George Riordan did not want to apply for a license. As a result, in 1969 Rigby Brothers & Co Pty Ltd purchased the rights to run the quarry on behalf of the Shire and successfully applied for a license to run the quarry.

The Rigby Brothers

In 1978 a second and larger crushing plant was built with capacity to take larger rocks which were transported to the original plant for further crushing and screening to sizes. When the original crushing plant was de-commissioned, hammer mills and screening systems were placed/erected at the larger crushing plant enabling the rock to be sorted into the different sizes.

After the amalgamation of Shires, the Southern Grampians Shire sold the quarry land to Rigby Brothers and Co Pty Ltd in 1997. The Work Plan for E.I. Licence 393 has undergone at least three renewals / variations in the past, the most recent being the 1975 Work Plan.

The 1975 Work Plan was issued revised conditions in April 1996, and assigned WA410, as a result of the adoption of the 1990 MRSDA. Those conditions cite that the quarry was:

"to be operated in accordance with the Approved Working proposal, being the Revised Working Plan dated 18-8-1970."

There has been no change to the Work Plan since the 1996 conditions, nor has there been any official direction by the Department to update the 1975 work Plan.

A Work Authority / Work Plan variation process was started in 2018, and the application assigned PLN-000923, however it was pointed out by the Department (ERR) at the 2018 initial site meeting that the land to the south was zoned Low Density Residential and did not allow extractive industry. The Work Authority variation process stalled until council support of rezoning was officially obtained. Subsequent investigation shows that there appears to have been a mix up in rezoning when council sold the quarry, zoning the land to the south of Pitcher Street Industrial, and left the land to the north of Pitcher Street, immediately adjoining the quarry, as Low Density Residential.

The quarry operations are covered under Work Authority WA410 that initially included two land parcels, previously described as Lot 1 on Title Plan 381 (nil depth limit) and Crown Allotment 54 Section 23 (50 feet depth limit), owned by Rigby Brothers & Co Pty Ltd.

Both titles in WA410 (as it is at 2023) have been expanded by subdivision through land acquired by Rigby Bros, the new titles for the two parcels of land are:

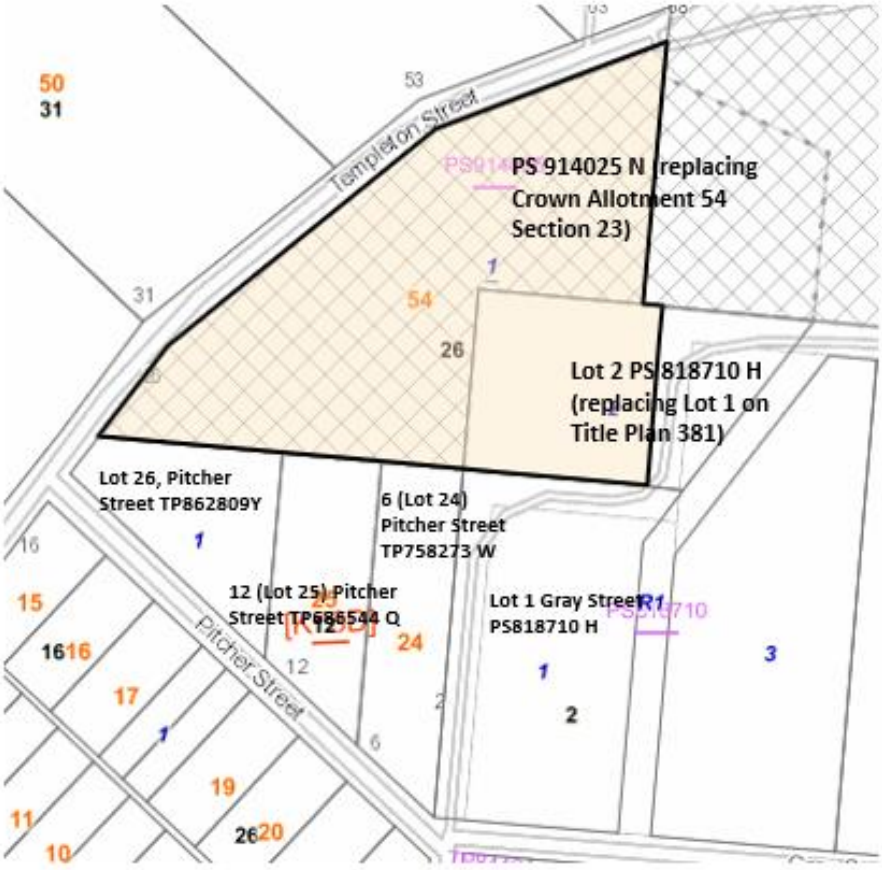
- Lot 2 PS 818710 H (replacing Lot 1 on Title Plan 381) with increase in land size (purchased) and nil depth limit – Farming Zone.

- PS 914025 N (replacing Crown Allotment 54 Section 23) with an increase in land size (purchased) and 15.24 metres depth limit – Farming Zone.

The expansion of the Work Authority is a mixture of land added to the two titles above and the following parcels of land:

- Lot 26, Pitcher Street TP862809Y with a depth limit of 50 feet, Low Density Residential Zone, which is owned by Rigby Brothers & Co Pry Ltd. The land was previously used to house animals. Currently used by Rigby Bros to store machinery.
- 12 (Lot 25) Pitcher Street TP686544 Q with a depth limit of 50 feet, Low Density Residential Zone, which is owned by Delma Rigby (shareholder of Rigby Bros) for a house and small paddock for animals, which was abandoned 30 years ago and the house will be demolished. Currently partly used by Rigby Bros to store machinery.
- 6 (Lot 24) Pitcher Street TP758273 W with a depth limit of 50 feet, Low Density Residential Zone, which is owned by Stan Rigby (shareholder of shareholder of Rigby Brothers & Co Pty Ltd) for a house and small paddock for animals. No one has lived in the house for 15 years and the house is not habitable and will be removed.
- Lot 1 Gray Street PS818710 H with no depth limit, Low Density Residential Zone, which is owned by Stan Rigby (shareholder of Rigby Brothers & Co Pty Ltd) which is used for grazing sheep and cattle, never any house on the site.

Below is a drawing showing the recent changes to title boundaries, with the current title and boundaries shown on Figure 3 Site Layout Plan. A description of titles and ownership is presented in section 5.1 below.



Planning Property Reports

The planning properties reports for all parcels comprising WA410 are attached as 26-Templeton-Street-Coleraine-Vicplan-Planning-Property-Report.pdf, noting that this document does not reflect the sub-division of 68 Templeton street and the inclusion of the subdivided area on to the title of 26 Templeton Street.

These will show zoning across WA410 is a combination of Farming and Industrial

2. GEOLOGICAL INFORMATION

2.1. SITE GEOLOGY

A detailed description of the regional, local and site geology can be found in the Civil Mining and Quarry Geotechnics (CMQ) Geotechnical Assessment dated April 2024, included as *RBR0001-REP-0_Coleraine Quarry Geotechnical Assessment.pdf.*

Briefly: the site is situated within the Den Hills Formation of the Coleraine Volcanic Group (200-140 Ma), which comprise trachyte and basalt lava flows, domes and laccoliths. The existing pit walls are predominately developed within trachyte, with the eastern boundary exposing a combination of weathered trachyte and siltstone.

The degree of weathering of exposed trachyte at the site generally decreases with depth, with moderately weathered material (colloquially known as salamander) encountered up to 10 m below natural surface level, overlying slightly weathered followed by fresh trachyte towards the base of the excavation. A profile of highly weathered residual soils constitutes the uppermost horizon of approximately 1 m across the site.

The fresh trachyte at the quarry is characterised as 'very strong', with an estimated unconfined compressive strength (UCS) of up to 150 MPa based on field observations. The material is blocky with up to four major defect sets encountered across the site.

Several intrusive investigations were performed within the WA410 boundary as summarised in Table 1 below. This includes five boreholes and one trench. The borehole coordinates have been estimated based on Figure 3 in the Coffey (2019) report.

The current exposures in the quarry are predominantly trachyte with the eastern boundary developed weathered trachyte and siltstone. Flow foliation in the trachyte is evident but does not form a significant structural discontinuity in the rock mass. The trachyte is moderately weathered (salamander) down to a depth of around 10 metres (top bench) on the hill (east wall) but only down to 7 m (one bench) on the west and southern walls. Below this the rock mass is slightly weathered. The current floor is within the slightly weathered zones.

The fresh rock is hard and strong and the fresh rock breaks with typical conchoidal fractures. No strength tests are reported for the trachyte other than a reported Los Angeles abrasion index of 22. The probable unconfined compressive strength could exceed 150 MPa. Published data for similar rock types (fresh basalt) suggest a range for 100 to 250 MPa.

In February 2019, 3 holes were drilled on the southern border of the existing WA area. The approximate locations of these holes are shown in Figure 3. The drill holes were not formally logged but the drill hole geology, as reported by the quarry owners, is shown in Table 1. In addition, a deep trench to 5 metres depth and a VicRoads drilled hole and a Geological Survey groundwater borehole are also reported within the WA area. The approximate locations of these holes are also shown in Figure 3.

Table 1 Reported drill hole lithology

Drill hole	***Estimated collar RL***	***Comments***
BH01	*97 m RL*	*Drilling stopped at 11m (86 m RL). No hard rock found. Nogroundwater encountered.*
BH02	*113 m RL*	*Shale found from 12m to 24m (89 m RL). Drilling stopped at 24m. Nohard rock found. No groundwater encountered.*
BH03	*131 m RL*	*Drilling stopped at 48m (83 m RL). No hard rock found. Nogroundwater encountered.*
TR01 (trench)	*96 m RL*	*Trench to 5 metres depth (91 m RL). No hard rock found. No groundwater encountered.*

VR01 *VicRoads (1982)*	*107 m RL*	*Collar approximate some 15 metres off the northern boundary of theWA. Reported as clay from surface to 21m (86 m RL). No groundwater encountered.*
GS01 *Geological Survey*	*70 m depth*	*Groundwater bore (March 1983). Reported trachyte to 70 metredepth (16 m RL). No groundwater was recorded.*

In February 2024, CMQ visited the quarry to map the quarry faces. Based on the drill hole information and the face mapping updated geological information, the previous Coffey geological data was validated, and a geological model built that defines the resource and geotechnical characteristics of the resource. Subsequently, the contact zone along the eastern batters was re-evaluated and the final batter profiles determined.

2.2. ESTIMATED RESOURCE

The resource figures presented have been estimated from the available information and have been calculated based on the design presented on Figure 3 Site Layout Plan, as compared to the most recent available mapping from 2019, and where necessary, interpolating from the pre-extraction surface derived from Vic Map data.

A simplified geological interpretation is shown on the sections presented on Figure 3 Site Layout Plan and has been used to arrive at the resource estimates.

A breakdown between the extraction areas is presented below:

Soil	5,000 cubic metres
Overburden Insitu and Stockpiled	290,000 cubic metres
Salamander	200,000 tonnes
Trachyte	1,0000,000 tonnes

Production rates will be matched to sales demand therefore quarry life will depend on market conditions. At the proposed sales figures, the life of the quarry can be expected to be more than 30 years.

The site can supply a range of road base and aggregate products, including a “soft” crushed rock (a mix of Salamander and the harder overburden) that is suited to farm tracks and cow standing areas, which is ideally suited to the more highly weathered material, some of which has been classified as overburden in the above resource estimates.

3. QUARRY OPERATIONS

3.1. AREA OF EXTRACTION & DISTURBANCE

The total extraction area is **7.8 hectares**. Of this total 7.8 hectares, 4.3 hectares is in the trachyte and harder salamander (blasted) and the balance of 3.5 hectares is in siltstone / softer salamander (diggable).

The total disturbed area, including past extraction and bunding (to Templeton Street) the extraction area, visual screening bunds, site access roads, soil and overburden stockpiles is approximately **10.9 hectares.**

Note: There is no change to the site access. The only access to the Work Authority will be from the existing Templeton Street entrance. Other than emergency vehicle access, there will be no quarry access from either Pitcher Street or Cameron Street.

The extent of the extraction area is shown on Figure 3 Site Layout Plan.

The maximum disturbance at any time is estimated to be **10.4 hectares**: comprising of:

- approximately 0.4 hectares site access roads, etc,
- approximately 2.3 hectares for soil stockpiles, screening mounds and out of pit overburden stockpile areas,
- approximately 2.5 hectares hardstand and stockpile area
- approximately 5.2 hectares (i.e. the remaining area) unrehabilitated extraction area (comprising trachyte and salamander).

3.2. METHOD AND SCALE OF OPERATION

The site will employ both traditional soft rock (excavator, dozer) techniques to remove overburden and extremely / highly weathered trachyte as well as hard rock (drill and blast) methods to extract the harder salamander and slightly weathered to fresh trachyte. Product classification will be based on market requirements and is a combination of physical properties and material colour. The site workforce may be supported with casuals and/or contractors engaged for specific activities such as, but not limited to, stripping, drilling and blasting and rehabilitation.

Soil will be stripped and initially stockpiled outside the active extraction area, but within the disturbance area, close to where it will be required for rehabilitation to assist in visual screening, then either hauled directly to prepared progressive rehabilitation areas or stockpiled within the extraction area for later use in rehabilitation. Soil stockpiles are shown schematically in Figure 3 Site Layout Plan.

A brief summary of the extraction process is presented below.

- Soil is removed and used in progressive rehabilitation, to top dress screening bunds or stored in temporary stockpiles within the disturbance area
- overburden is removed and used directly in building screening bunds, placed in storage areas within the excavation area or used directly in progressive rehabilitation for backfilling / reprofiling.
- resource is extracted and hauled to the processing plant, or processed through a mobile processing unit
- cut-off drains, mounds and other surface water management control features will be continually updated and modified to ensure sediment-laden water is directed to sediment traps or the quarry sumps and clean water is directed away from disturbance areas.

The progress of earth works and progressive rehabilitation will be reviewed on a regular basis to ensure the rehabilitation activities are effective in meeting the rehabilitation objectives.

3.2.1. Depth of Extraction

The geological interpretation has identified the resource is typically open at depth, with the base of the quarry limited by the available real estate. This Work Plan describes a maximum total depth of

the excavation to AHD41m. A shallow (2-3meter deep) sump will be required when excavating at the lowest level for water management.

The maximum depth of the excavation, when measured from the highest point on the eastern boundary (AHD133m) to the designed pit floor (AHD41m) will be 92m.

3.2.2. Volume of Extraction

The total volume of the extraction described by this work plan variation excluding topsoil, is approximately 825,000 cubic metres. This volume includes the salamander and overburden taken out of the hardstand / stockpile area, so is not directly relatable with the trachyte resource.

The depth of overburden across the site but is typically 8 to 10 metres thick on the eastern boundary and 5-7 metres thick on the western and southern boundaries. Overburden is all easily diggable and consists of clays and extremely to highly weathered material and unusable quarry rock. Diggable material may be blended with weathered material at varying proportions to make a low-grade 'soft' crushed rock product, traditionally used to supply the local 'farm track' market.

The broken material is loaded into dump trucks and taken for crushing and processing at the plant to produce the required aggregate and crushed rock products or stockpiled within the disturbance area for use in rehabilitation.

The operation will produce an excess of overburden/waste rock with respect to the minimum required to achieve the rehabilitation objectives.

3.2.3. Stages of Extraction

The progressive development of the extraction area is provided schematically in Figure 3 Site Layout Plan.

The extraction area is essentially divided into three distinct areas:

1. The eastern faces, where the terminal batter is extracted at 1vertical to 3horizontal in diggable material to achieve a satisfactory rehabilitation outcome and
2. the southern hardstand / stockpile area, a shallow (from zero to a maximum 8m) extraction in diggable material to create a workable and manageable hardstand area.
3. the main pit where the trachyte is extracted.

The upper (ie diggable) eastern batters and terminal faces will be developed early in the process to provide material for the northeastern screening mound with excess overburden stored temporarily in the northern worked out area of the quarry. Establishing the terminal eastern batters allows access to the resource on the eastern faces. As the eastern and northern faces develop, overburden will be used to build the pit access / haul road. The terminal batter in the diggable material on the eastern face will be cut on grade, and will not require any back fill, just dressing with topsoil and revegetation, initially with grasses and ground covers to manage erosion, then revegetated with trees and shrubs for long term.

In conjunction with developing the eastern terminal batter profile, the southern hardstand area will be prepared for product stockpile, and overburden stockpiles, and a location for mobile processing plant and relocation of the fixed plant. Material excavated from the southern area will be used to construct the southern screening mound, with any excess material stockpiled within the disturbance area for later use in rehabilitation.

The main pit, where the trachyte resource comes from will be developed laterally, both to the east as space becomes available, and to the southwest to the terminal extent. As the available area increases, drop cuts or lower levels will be developed until the maximum design depth is reached.

The balance of land not used for quarrying and ancillary operations and any rehabilitated areas of the site consistent with requirements will continue to be managed for agricultural or other purposes in accordance with the Farming Zone over the land.

Only those areas approved in the Work Plan will be opened for quarrying and ancillary operations.

The site has the capacity to accept large quantities of imported materials for commercial reasons, which typically will include 'paddock rock' and/or 'clean fill' (uncontaminated soil, including gravel and rock), or potentially other processed or extracted rock brought to the site for blending with rock extracted onsite. Whilst the volume of overburden and quarry waste rock material generated by the site is sufficient to fulfil the rehabilitation requirements (see Section 3.5 of the Rehabilitation Plan), imported soil or clean fill, and possibly mulch, could also potentially be used to supplement site rehabilitation. If so, such importation of materials will be in accordance with the Imported Materials Management Plan (see also Section 3.5.5).

3.2.4. Design of Extraction Pit

Working faces and terminal faces are shown diagrammatically on inset on Figure 3 Site Layout Plan, and where possible incorporate a 2m high "safety" face. The site has previously, and will continue, to work with 12m high faces. The site traditionally uses excavators to load shot rock into haul trucks, working in two or three 4 to 6metre high flitches, allowing ample opportunity to scale blasted faces of loose material, particularly important at the terminal profile.

Although the terminal pit is designed to incorporate a 2m high "safety" face where possible, it is noted that due to past approvals, the 2m high safety face is not always practical, such as at some section to Templeton Street. At these locations the existing (steep) bund and access track provide the security measures for unauthorised access (see additional comments in the Sensitive Receptors Section)

As stated above, Overburden thickness is variable across the site, and an average overburden depth of 7m has been adopted (noting that the shallower overburden is on the southern and western boundaries, most of which have already been excavated.).

Terminal Face Design (see inset Typical Terminal Crest Treatment on Figure 3 Site Layout Plan)

Maximum number of faces = 9

Maximum face height 12m

Maximum number of benches = 8

Minimum bench width 8m

Overall terminal wall angle (top crest to bottom toe) is 1V:1.3H (37 deg).

NOTE: Working faces may be steeper than the terminal design above, with the faces in the diggable material at 1V to 3H and the blasted face typically 80deg, see Typical Method of Working inset on Figure 3 Site Layout Plan.

The final extraction limit is surveyed and marked out on the ground with yellow posts.

The extraction boundary, as defined above, is shown on Figure 3 Site Layout Plan.

Where practical, Safety bunds are established along the edge of pit ramps and all quarry faces. Safety bunds are constructed at an appropriate height, width and durability to withstand forces from the vehicles moving through that area. Where not practical, for example some working faces with under cutting, other appropriate safety measure will be adopted to restrict access to the crest.

All slopes/batters including excavations, roadways, stockpiles and dumps are constructed and maintained to ensure stability. If there is a significant slope failure event, operations will cease in that area, the relevant authority notified and the appropriate steps taken to address the incident.

3.3. PROCESSING METHODS & FACILITIES

3.3.1. Fixed Plant

There is a small fixed plant on this Work Authority, as previously approved by the 1975 plan. This fixed plant comprises multiple crushers, screens and stockpiling conveyors to produce the range of products required for the market. This plant will continue to be used for as long as possible but will need to be relocated to fully extract the resource. The location of the relocated fixed plant is shown schematically on Figure 3 Site Layout Plan, and will be in the southern hardstand area, to take advantage of the noise abutment provide by the cutting and shielding to the west by process stockpiles to assist in meeting noise requirements. The exact location and orientation will be determined at the appropriate time and will be dependent upon the types of crushers purchased and meeting the relevant noise and any other EPA requirements at the time.

3.3.2. Mobile Plant

Mobile plant most frequently used for extraction will comprise an excavator and/or dozer for stripping to remove overburden and highly weathered rock, and a drill rig for drill and blast to extract the harder, fresher rock. Front-end loaders, excavators or haul trucks will be used for material cartage.

The site will employ (self-powered) mobile crushing and screening units (including stacking conveyors) to supplement the fix plant output, to produce specialised products, or as the primary means of processing. When employed, a mobile crushing / screening train has the advantage of separating the various phases of the process, with potentially some mobile crushing equipment located within the excavation, whilst other items are located on the surface. Any mobile crushing /screening plant(s) will be located so as to meet all relevant legislative requirements and may be located close to the excavation face.

The more traditional earthmoving equipment and mobile crushing and screening equipment will vary as demand requires, but typically involves:

- Front-end loaders for sales truck loading, stockpile duties, product movement, general site tidy up works, feeding mobile processing plant or face loading
- an excavator for soil overburden stripping, and potentially for feeding any mobile processing plant.
- a dozer to push out backfill material, prepare and tidy up quarry floor and hardstand areas, pushing overburden and for profiling overburden mounds and final rehabilitation batters.
- a road grader to maintain all internal roads and for the final profiling of rehabilitated areas.
- a water cart is available whenever the site is operational.

The earthmoving and mobile processing equipment will vary as demand requires but equipment choice will always be in consideration of meeting noise limit requirements.

All mobile equipment is serviced and operated by qualified personnel. All self-powered equipment will be fitted with appropriate noise suppression, spark arrestors, roll-over structures and fire extinguishers.

In addition to the standard equipment, specialised equipment may be brought in as required (e.g. cranes or elevated platforms) for plant maintenance, etc.

3.4. STOCKPILING FACILITIES

3.4.1. Topsoil

Stockpiling of soil and overburden will take place when the sequencing of stripping, extraction and progressive rehabilitation does not allow direct placement.

Soil is stripped and placed in windrows to assist in surface water diversion, then either used directly in progressive rehabilitation or stockpiled within the disturbance area. Soil stockpiles will be limited in height to not greater than 2m and preferably located close to extraction crests where they will ultimately be used in site rehabilitation. Soil stockpiles will be contoured and grassed to manage erosion until they are required for use in rehabilitation.

The location of soil stockpiles is shown schematically on Figure 3 Site Layout Plan. Soil stockpiles will not be retained post closure.

3.4.2. Overburden

Overburden is used to create the screening bunds, and this workplan variation describes additional screening bunds to the northeast and to the south, with excess overburden stockpiled within the disturbance area, either in the north of the extraction area in worked out areas or in the southern hardstand area. As sufficient area is developed within the excavation, overburden will be used to construct the pit access roads and for progressive rehabilitation of terminal quarry berms. Overburden may also be blended with plant reject material, either for use as a low-grade product or for use in backfilling and other rehabilitation activities.

Overburden stockpiles, without benching, within the worked-out areas will be limited in height to a maximum 15m, whilst overburden stockpiles located on the natural surface, within the disturbance area, will be limited to 7m. If higher stockpiles become necessary, then they will be benched in accordance with the Ground Control Management Plan and located within the extraction area. Overburden stockpiles will always be located to not impact the overall risk assessment of the site. Overburden stockpiles will have 1V:2H side slopes with a contour drain at the base of the dump to direct any runoff into the site drainage control system. Overburden stockpiles will be contoured and vegetated as required or otherwise stabilised to manage erosion.

The location of overburden stockpiles is shown schematically on Figure 3 Site Layout Plan.

3.4.3. Product

Product stockpiles, including any imported material stockpiles that will be crushed and / or sized, are located within the disturbance area, mostly close to the access gate and on the southern hardstand area. Depending on the product (ie beaching rock or rip rap) some stockpiles may be located within the excavation area.

The maximum height of product stockpiles will be 12m. Mobile processing plant units include stacking conveyors and product stockpiles from these units may be as high as 8m under the stacking conveyors. Product stockpiles created by front-end loaders will typically be 4m high but could reach the maximum 12m if ramped.

By their very nature, product stockpiles are dynamic as they are continuously produced and then sold. The indicative location of product stockpiles is shown on Figure 3 Site Layout Plan.

3.5. OTHER QUARRY INFRASTRUCTURE

3.5.1. Site Office, Amenities, Operational Support and Maintenance Areas

The typical infrastructure associated with an extractive industry is located on site, close to the entrance and includes a site office and amenities, a workshop and equipment store, vehicle wash-down and hardstand areas for servicing and maintenance of mobile plant, fuel storage, electrical switch room and employee parking.

Visitor parking is located on Templeton Street outside the WA Area. As of 2023 the site does not have a weighbridge, however, as the southern hardstand area is developed, a weighbridge will be installed. Refer to Figure 3 Site Layout Plan.

Wheeled vehicles are generally accommodated in the heavy vehicle parking area adjacent to the workshop when the site is not in operation, while tracked vehicles are generally parked in a safe place within the pit. The heavy vehicle accommodation will always be within the disturbance area and/or workshop area.

A high voltage sub-station is located immediately west of the processing plant, with power coming into the site via overhead powerlines from the west and distributed to the site office, workshop and fixed plant.

A diesel generator may be used to supplement power to the processing plant and to power the Pug Mill.

3.5.2. Fuel and Hydrocarbon Storage

Self-bunded fuel storages for approximately 10,000 litres of diesel and 1,000 litres of petrol. Oil, greases, other hydrocarbon stores and oxy-acetylene stores are all located in the workshop area (all fuel and hydrocarbon storage are AS1940 compliant).

3.5.3. Water Usage and Supply Infrastructure

Process water (which is clean water used in dust suppression, in crushing and screening, in any product rinsing or irrigation of rehabilitated areas) is be obtained from the collected incident rainfall on disturbed areas. Mains water is available at the site office and as a backup for dust suppression if required.

Process water will be used for dust suppression on the access road, hardstand and the quarry floor and also irrigation on the site. There will be no washing of clayey sands or overburden on the site.

Incident rainfall is directed to sediment dams on the surface and the quarry sump located in the base of the excavation. The exact location of sumps, pipes, drains and pumps is dynamic as excavation progresses. The overriding principal is to direct surface water to low points in the base of the excavation, the quarry sumps, which are designed to keep the pit floor dry and keep water away from the extraction faces.

Typical annual water usage for this site (as based on the predicted sales / dust suppression and irrigation operation) is in the order of 10-15 megalitres.

There are no groundwater extraction bore supply bores on the site and, if it became necessary, the operation would supplement extra water from a licenced water contractor.

3.5.4. Water Management Infrastructure

The pit is operated dry and dewatering is not required. Any collected rainfall on disturbed areas is adequately contained within the sediment dam(s) and / or quarry sumps.

A groundwater bore was drilled in March 1983 (GS01, on Figure 3 Site Layout Plan) and it is reported that it encountered trachyte to the end of hole at 70 metres depth. It was reported that no

groundwater was found in this drill hole. On the basis of this and the observation that there is no inflow of groundwater into the current pit (floor at AHD72m), the groundwater level in the vicinity of the WA area is expected to be at or below AHD23m. The VVG website suggests groundwater in the range of 20-50m about the excavation, which puts the GW level at between AHD60-30 m at the base of the quarry. Anecdotally, groundwater is not evident and no groundwater dewatering is required. Previous work by Coffey (2018) has been verified by the CMQ (2024) geotechnical assessment that acknowledges groundwater is estimated at between 20-30m below the base of the pit.

The key infrastructure requirement for the surface water management strategy is to direct surface water flows across disturbed ground into the excavation, where it is directed to quarry sumps. If necessary, these sumps will be drained with pumps and the water used to irrigate rehabilitated areas or the surrounding pasture, and as a contingency the water can be directed to the sediment dam in the southeast corner of the Work Authority.

Equipment/infrastructure to move water around the site will comprise pumps, dams, tanks, pipelines and constructed features such as swale drains, bunds and sediment dams. The equipment includes self-powered / self-priming pumps and 100mm poly pipe / 'lay flat', or similar. Water is pumped to a holding tank or water truck for use around the site. The location of these features is stage-dependent and will move about the site as extraction progresses.

The surface water management features for the site are simple and are shown on Figure 3 Site Layout Plan and Figure 4 Final Landform Plan. The attached adaptive Surface Water Management Plan describes the relevant associated Trigger Action Response Plans (TARPs) for managing any risks that may be posed by this water management infrastructure.

3.5.5. Additional Processing Activities

Additional processing activities that typically may occur on the site include accepting, sizing, sorting, mixing and blending of imported and processed materials for use in rehabilitation. Stockpiling, testing, loading for sale and dispatching loaded materials will all occur on the work authority.

Other more general activities that will occur on the site include:

- maintenance of access roads, haul roads and site tracks; and
- accepting and placing clean fill into batters or stockpiles.

It is emphasised that the site does not currently import material, and that importing material is not required for achieving the rehabilitation outcome. The Imported Materials Management Plan is incorporated with this Work Plan Variation to formalise the previously held opinions that extractive industries can import "clean fill" without triggering a future Work Plan Variation and demonstrate compliance to the EPA regulations around waste.

Any material imported as part of the Work Authority's operations will be handled in accordance with the site's Imported Materials Management Plan, which documents the process and controls for managing the receiving, sorting, processing and stockpiling of imported materials. Imported materials may include 'paddock rock', 'clean fill' or solid inert wastes from nearby construction projects and earth works, or potentially other processed or extracted rock, brought to the site for blending with rock extracted onsite, or, if required, soil and 'clean fill', and possibly mulch, (noting that the definition of "mulch" is described in the Imported Materials Management Plan) to supplement site rehabilitation. The potential impacts related to imported materials are considered in a Risk Treatment Plan included in the Risk Management Plan. The volume of imported material is determined by the stockpiling and hardstand areas, and if any material can be used directly in rehabilitation.

It is acknowledged that if solid inert waste (see Imported Material Management Plan for the definition) is accepted onto the site for reprocessing and recycling into saleable products then separate planning permission may be required, as a 'materials recycling' use is regulated by Council.

3.6. WASTE DISPOSAL METHODS & FACILITIES

3.6.1. Extracted Quarry Waste

Extracted quarry waste is material that has been extracted from this site but has no commercial value and remains on site and includes overburden, plant oversize, out of specification products and non-saleable products. However, this material is not surplus to the sites needs as it remains onsite to be either:

- ⇒ blended with other material for sale as a low-grade product, if or when an opportunity arises; or
- ⇒ utilised in achieving the final rehabilitated landform.

These extracted materials are natural and sourced from this site and contain no added chemicals or other harmful waste products, and therefore may be used in quarry rehabilitation, either directly or following temporary stockpiling.

Extracted quarry waste generated by the site is classified by its physical properties, with any clayey or friable materials stockpiled as overburden or used directly as compacted backfill on the quarry floor or on terminal berms. Overburden and waste rock stockpiles are located within the disturbance area as indicated on Figure 3 Site Layout Plan.

3.6.2. Sediment-laden Water

In the context of extractive industries, sediment-laden water is that containing natural solids from material rinsing / washing processes, and from surface water collecting within the disturbed area that is directed to sediment traps. However, there will be no washing of material on this site and no production of slimes, so no significant volumes of sediment-laden water are produced.

As above, the incident rainfall collected within the excavated and disturbed areas will be directed to quarry sumps within the excavation or to a sediment dam.

The surface water management is designed so that collected water is given sufficient retention time in the various structures to allow solids to fall out of suspension.

There will be no discharge of dirty water from the site. The quarry sumps are well below the existing or rehabilitated ground level and the capacity of the quarry sumps throughout the life of the quarry will be more than sufficient to accommodate storm events.

The quarry sumps, drains and other surface water management features are shown on Figure 3 Site Layou Plan. The Water Management Plan has associated Trigger Action Response Plans (TARPs) for managing any risks that may be posed sediment-laden water collected on the site.

3.6.3. Storage of Slimes

No slimes are produced on site and so there is no requirement for slimes storage.

3.6.4. Domestic Rubbish and General Waste

A small amount of domestic rubbish and general waste typically generated by the operation is contained in bins and emptied / collected by the local shire council.

3.6.5. Derelict and Redundant Plant

All derelict and redundant plant, vehicles, machinery and equipment is stored in a designated area, as much as possible out of sight of the general public from Work Authority boundaries, until removed or sold to a third party.

4. SENSITIVE RECEPTORS & KEY HAZARDS

This site presents several challenges in meeting the current industry-imposed guidelines, however it must be understood that a quarry of some description has been operating at the site and in close proximity to the local community since the late 1800's. More recently the Rigby's have a multi-generational connection to the site. It is acknowledged that if this were a new operation it would face severe challenges to meet the current workplan requirements. No amount of impact assessments around noise, blasting and visual amenity will provide any new insight, as it is well known that as residential development (the majority of which is the Rigby family) has grown around the site and that the contemporary "guidelines" espoused by the regulators are not being consistently met. For the site to continue to operate and to work towards a more appropriate rehabilitation outcome it will rely heavily on the "or minimised as far as reasonably practicable" clause in the Mineral Resources (Sustainable Development) Act 1990, as amended 1 July 2021)

2 (1) (b) (i)

> *risks posed to the environment, to members of the public, or to land, property or infrastructure by work being done under a licence or extractive industry work authority are identified and are eliminated* ***or minimised as far as reasonably practicable****; and*

This clause from the MRSDA is reproduced to emphasise to future regulators that the criteria quoted in the relevant guidelines are just that, guidelines.

This workplan and the attached Risk Management Plan, which includes individual Risk Treatment Plans and a Risk Register, introduces numerous modern controls and criteria to addresses in detail the assessment and management of the risks associated with all the quarrying and rehabilitation hazards relevant to this operation. The introduction of and adherence to these contemporary controls, will result in a significant reduction of the impact from the quarrying hazards, emphasising the as far as reasonably practicable aspect of the MRSDA.

Following is a description of the sensitive receptors potentially impacted by this operation, i.e. in relation to the environment, any member of the public, or land, property or infrastructure within the vicinity of the work, and a discussion of the more significant hazards that may potentially impact those sensitive receptors.

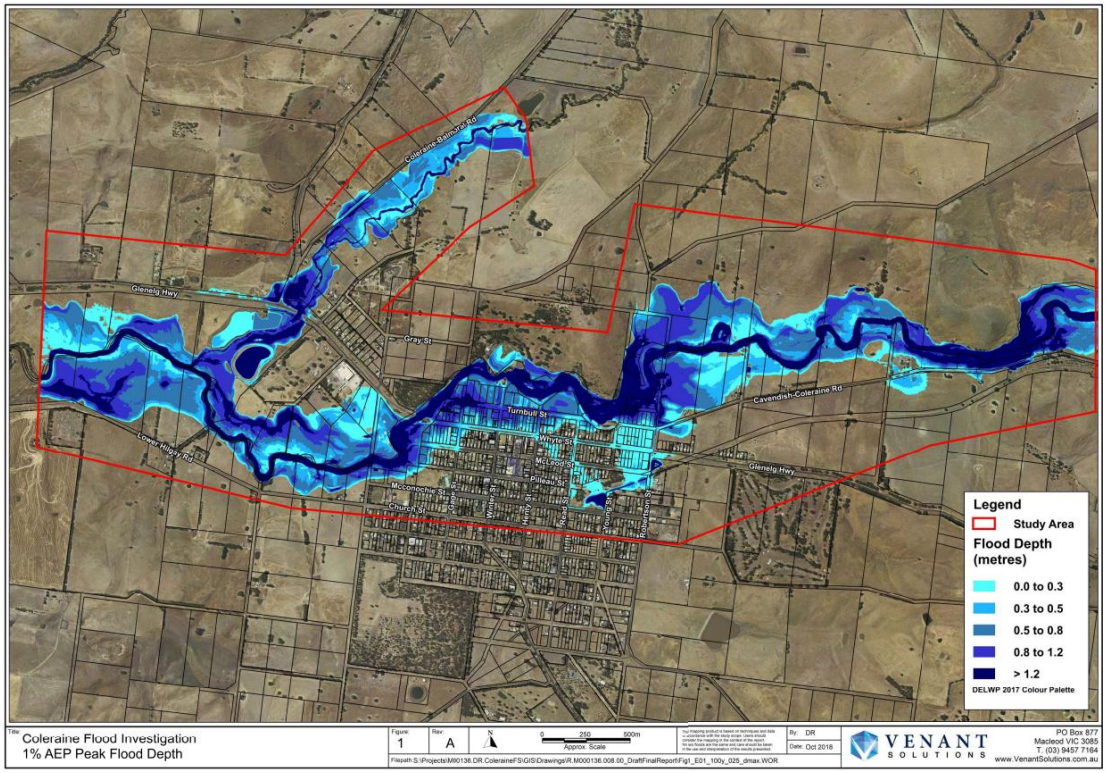
4.1. SENSITIVE RECEPTORS

Figure1 Regional Plan and Figure 2 Location Plan identify the location of various waterways, residences, commercial and industrial development, public facilities and public infrastructure, such as roads, bridges, pipelines, powerlines and other assets, within 2km of the Work Authority.

The extent (Figure 2 Locality Plan) and status (WA410 CrownLandMap) of Crown land and private land in the vicinity is shown on Figure 2 Locality Plan and WA410_CrownLandMap. Crown land immediately adjacent the site is all road reserves. There is a Delegated Management Reserve (Tenure ID 0304388, associated with the show grounds) some 300m to the southwest,) a Delegated Management Reserve (Tenure ID 0304280, associated with the picnic area, West Park) some 300m to

the south, and the sports area (Silvester Oval) some 400m to the east. There is also crown land associated with Bryan Creek, some 730 m to the south.

There are no waterways or wetlands within the immediate vicinity of the site. The closest mapped wetlands is associated with the Coleraine water plant, some 450m to the south west. Bryan Creek is some 730 metres to the south and Konong Wootong Creek some 200m to the west. A 2019 Venant Solutions document, titles Coleraine Flood Investigation Report, commissioned by Southern Grampians Shire shows 1%AEP not impacting the quarry. (see screen grab below). The full report is available on the Web, but not included with this submission.



There is no assessable native vegetation removed by this Work Plan. The extension to the south is over land that has already been disturbed by generations of use, and the extension to the northeast is through some planted eucalyptus and grazing land, and is not regarded as assessable native vegetation. Rigby's have been advised (as a result of the 2018 site meeting) that a 2018 email from DELWP to ERR (but not available to the applicant) confirms this. As no assessable native vegetation is being removed, no offsets are required and the 2017 Vegetation guidelines are not triggered.

There are 2 houses with the Work Authority. These houses are vacant and will remain vacant until they are removed. There are 15 houses within 500m of the Work Authority and numerous more within 1000m, as the township of Coleraine is only 750m from the quarry . There are in excess of 500 residential properties within 2km of the Work Authority. The closest residence is on the corner of Cameron Street and Pitcher Street, some 30m from the WA boundary and 160m from the stockpile area.

The Glenelg Highway is approximately 220m from the work Authority

The township of Coleraine is approximately 600 metres from the Work Authority.

There are two bridges on the Glenelg Highway, one over Konong Wootong Creek, approximately 300m southwest of the Work Authority and one over Bryan Creek, approximately 500m south east of the Work Authority.

There are no high voltage powerlines, pipelines or other linear infrastructure within the vicinity of the quarry. There is a low voltage supply power line on the western boundary of the Work Authority to Templeton Street.

There is no known contaminated land, no known slimes storages, and no underground workings on the site.

The land tenure and depth limitations are presented under Area Details in Section 5.1.

4.2. VISUAL AMENITY IMPACTS

A quarry and associated activities has been at the site of WA410 since the late 1800's and given its location on a high hill, and proximity to the township of Coleraine, is (and has always been) highly visible. It goes without saying that the quarry has been highly visible for several generations.

A visual amenity assessment has not been undertaken as it is plainly obvious the site is highly visible and will always be highly visible, and that the local community have developed an acceptance and understanding of the quarry's impact to the local community.

This Work Plan Variation does not describe any significantly greater ground disturbing activities, so will not significantly increase the visual impact.

The extension of the quarry to the northeast is to allow for the eastern and highly visual northern faces to be laid back to a flatter and more acceptable batter, then vegetated and treed. As vegetation is established, and trees develop, the visual impact of the quarry will be reduced. In addition, this Work Plan describes a northern (and eastern) bund and a southern bund, that will also be vegetated with trees and shrubs to assist in screening the operation (as well as acting as collector / diversion structure for surface water management).

Refer to the attached Risk Management Plan, including Risk Treatment Plans and Risk Register, for detailed risk assessment and risk management, including control measures.

4.3. DUST & NOISE IMPACTS

4.3.1. Dust

WA410 uses standard industry control measures to manage dust generated from traffic movements and processing. Additionally, this Work Plan Variation includes a site-specific Dust Management Plan to adaptively capture any new controls, monitoring requirements or reporting responsibilities that might be required by other agencies.

Although this Work Plan Variation describes an increased plant and stockpile area, the risks associated with this changing hazard have essentially been managed for the past several decades, as a prime objective of this Work Plan Variation is to formalise the activity outside the 1978 approval. Additionally, to an outsider looking in, the only noticeable "change" will be the perimeter bunding and treed vegetation described by this work plan variation.

Historical there have been some issues with dust generated from quarrying operations leaving the site, particularly on hot dry windy days. These issues were raised informally / verbally by neighbours contacting the site directly, and the activity (generally crushing / screening) ceased until climatic conditions became more favourable. Over the years the site has significantly improved its control mechanisms through a greater awareness of community expectations, changes in plant configuration,

(water sprays and the like) and more stringent dust control actions. This work plan variation formalises these improvements, as well as including more contemporary controls to ensure dust impacts can remain below prescribed limits and the risks can be minimised, as far as reasonably practicable, with the implementation of standard industry control measures for this hazard.

The low level of activity for this quarry means that the impacts described by this Work Plan Variation will continue to be relatively minor, noting that the community have been living with the quarry for over 100 years. For this operation standard industry control measures are implemented for these hazards, which will be sufficient to minimise any risks posed. These hazards do not require specialised risk management at this site.

This operation does not pose a risk to the public from any fugitive respirable crystalline silica dust leaving the site, due to the negligible silica content of the trachyte rock.

Refer to the attached Risk Management Plan, including Risk Treatment Plans and Risk Register and the Dust Management Plan, for detailed risk assessments and risk management, including control measures.

4.3.2. Noise

Although there are a number of residential properties within the immediate vicinity of the quarry, a formal Noise Impact Assessment has not been conducted. A quarry with associated extractive activities has been operational at the site or in the immediate vicinity of WA410 since the late 1800's. Due to its proximity to the township of Coleraine, the site is (always has been) highly visible and accountable. The primary crusher identified as a principle source of noise from the site has been in its current location since the mid 1970's and has operated with the knowledge of council and the regulator without issue. This extension does not increase the noise impact to the environment. The extension of the quarry to the east and southeast will marginally increase the distance to receptors to the west (from drilling, load and haul equipment) and as vegetation is progressively established, will soften (reduce, but not completely remove) the impact of noise from the quarry. In addition, this Work Plan describes a northern, eastern and a southern bund, that will also be vegetated with trees and shrubs to further assist in screening the operation from immediate neighbours (receptors). Additionally, the activity area is surrounded by rural agriculture which assists in "diluting" noise attenuation.

The low level of activity for this quarry means that the impacts described by this Work Plan Variation will continue to be relatively minor, noting that the community have been living with the quarry for over 100 years. For this operation standard industry control measures are implemented for these hazards, which will be sufficient to minimise any risks posed. These hazards do not require specialised risk management at this site.

Refer to the attached Risk Management Plan, including Risk Treatment Plans and Risk Register and the Noise Management Plan, for detailed risk assessments and risk management, including control measures.

4.4. SURFACE WATER IMPACTS

Surface water can be both a sensitive receptor, with downstream water quality and quantity potentially impacted (e.g. erosion and sedimentation), and a source of hazard for the quarrying operation that then poses a risk to sensitive receptors (e.g. storm events or failure of water storages).

4.4.1. Surface Water Management

The Water Act 1989 Guidelines for Quarries and Mines 2004 provide the following guidance regarding Take and use licences and their implications for operators of mines and quarries:

- A licence is required to take and use water from a waterway.
- A take and use licence is not required for tailing, slime or process dams.
- A take and use licence is not required for quarries or mines if the water entering the open cut is from direct rainfall.
- A take and use licence is not required for quarries or mines that are used as a lake or water feature from which no water is taken or used.

Based on this advice, it has been standard practice from the water authorities in the past to acknowledge that a take and use licence is not required for the use of any incident water from the quarry that is used for processing purposes, nor does the water body in the final landform require licensing.

In addition, the farm dam (to the south east), and the old workings dam(eastern boundary) have been in use for several decades by the land owners for irrigation and stock use.

Surface water traversing over disturbed ground is managed by the strategic location of bunds, predominantly the perimeter screening bunds, swale drains, sediment traps and sumps to ensure this water does not leave the site and is instead directed to the sediment dam and/or the quarry sump within the extraction area. The erosion and sediment control measures adopted when disturbing new ground are consistent with EPA guidance.

Incident rainfall water falling outside the disturbance area is directed away from the disturbed areas by the perimeter screening bunds. Only clean water, as defined by the EPA guidelines, is allowed to leave the site.

The site is not located within any designated water supply catchment, and licencing of incident water collecting within the disturbance area is dams are required.

Refer to the attached Risk Management Plan, including Risk Treatment Plans (Surface Water Flows, Erosion and Sedimentation) and Risk Register, for detailed risk assessment and risk management. The control measures across the site to manage surface water, such as perimeter drains, pipelines, bunding and cut-off drains, are detailed in the Risk Management Plan.

4.4.2. Drainage Diversion

There is no intersection or diversion of any natural waterways by this operation and all surface water flows directed around the disturbed areas returns to its natural slope flow. Only incident rainfall water within the disturbance area is collected.

The perimeter bunding to the Work Authority diverts surface water flows from outside the Work Authority from entering the Work Authority.

4.5. GROUNDWATER IMPACTS

Groundwater can be both a sensitive receptor, with groundwater quality potentially impacted, and a source of hazard for the quarrying operation that then poses a risk to sensitive receptors (e.g. discharge of excess groundwater from the site or the unintended intersection of groundwater).

4.5.1. Depth of Groundwater

Groundwater is not expected to be intercepted by this operation.

A single groundwater bore (GS01, see Figure 3 Site Layout Plan) was drilled on the WA in March 1983. It is reported that it encountered trachyte to the end of hole at 70 metres depth, that is, the trachyte occurs down to at least +AHD23m well below the approved depth of quarrying, at AHD41m. It is

reported that no significant groundwater was found in this drill hole. This assessment coincides with anecdotal site assessment that groundwater has never been encountered at the site.

The Visualising Victoria's Groundwater website suggests groundwater in the range of 20-50m about the excavation, which puts the GW level at between AHD60-30m at the base of the quarry. Given there is no obvious signs of groundwater in the exposed faces, it is concluded the quarry will not intersect ground water.

If groundwater were to be intersected works will cease in the immediate area and Earth Resources Regulation and the responsible water authority notified. No additional works will be undertaken in the immediate area until the appropriate authorisation (i.e. a groundwater extraction licence, special operating conditions, etc) is obtained from the relevant water authority.

Refer to the attached Risk Management Plan, including Risk Treatment Plans and Risk Register, for detailed risk assessment and risk management, including control measures.

4.5.2. Groundwater Management

The site is not located with the vicinity of any declared water supply catchments, the closest being the Konong Wootong Reservoir located approximately 11km to the north. The site is not in a Groundwater Management Area.

The quarry plan sees the maximum floor elevation at AHD41m. This is above the estimated regional groundwater level at below approximately AHD23m.

As the site is not in a groundwater management area, intersection of groundwater is not expected and no groundwater will be extracted for use there is no requirement for groundwater licencing or a Groundwater Management Plan.

4.6. ECOLOGICAL IMPACTS

It is a requirement of the work plan guidelines to address ecological impacts from vegetation removal. The ecological values within the vicinity of the operation can be impacted by the work being undertaken, most significantly by any clearance of native vegetation. The removal, destruction or lopping of native vegetation needs to be kept to the minimum extent necessary to undertake the work. The loss of biodiversity due to unavoidable native vegetation removal must then compensated for with an appropriate offset strategy under a process administered by DELWP.

This Work Plan Variation does not require the removal of any accessible native vegetation, so the ecological impacts (as defined by the guidelines) are negligible. Refer to the attached email trail (Native Vegetation Advice), Risk Management Plan, including Risk Treatment Plans and Risk Register, for detailed risk assessment and risk management, including control measures.

4.6.1. Vegetation Clearing

The extraction activity is in paddocks that have been farmed, cropped and grazed for several generations. A stand of planted eucalyptus trees to the northeast will be removed as part of this work plan. DELWP have confirmed that these trees are not assessable native vegetation as defined by the 2017 Guidelines for removal, destruction or lopping of native vegetation.

As no native vegetation is being removed, and no vegetation offsets are required, a formal ecological assessment has not been undertaken.

4.6.2. DELWP Wetland

There are three DELWP mapped wetlands within 2km of the quarry, 24472 and 24554 to the south west and 24476 to the north east. See Figure 2 Locality Plan. The wetlands are at least 400m from the Work Authority Boundary, and area associated with Konong Wootong Creek.

This work plan does not impact on any drain lines and does not describe any additional loss of catchment that could impact these wetlands, and groundwater is considered to be well below the base of the quarry. It is considered extremely unlikely that any quarrying activity will have any measurable impact on these wetlands.

4.7. BLASTING IMPACTS

The site undertakes blasting to extract the resource and, depending on the size of the blast, requires approximately 2 small blasts a year. Standard drill and blast techniques are employed on the site and a Blast Management Plan is developed for each blast. All blasting activities are carried out by qualified personnel and no detonators or explosive materials are stored on site. The Explosive Contractor brings all necessary components on the day of the blast and after the blast removes all unused materials.

Blasting is a highly regulated activity with very prescriptive legislation and regulations. The Blast Management Plan is consulted and documented before, during and after each blast as per regulations. Blast Management Plans are continually updated, based on available monitoring results, to strive to meet the requirements of the relevant regulations and any specific requirements of Earth Resources. The Blast Management Plan includes blast design, initiation sequence and the site-specific procedures for exclusion zones, notifying neighbours and any other protocols that are required, as well as any monitoring locations that are required.

This site has been blasting since the 1930's and has co-existed in harmony with its immediate neighbours and the broader community. It is also emphasised that the site has been blasting with the knowledge of the local council and the regulator all this time. Given the incident free and harmonious relationship with the community, and the lack of any blasting related issues, notably no flyrock issues, it is evident that the local community's tolerance for blasting is much higher than an urban community. It is also acknowledged that the site has not been monitoring blasts: up until this Work Plan is approved, the site has no Work Plan or Work Authority conditions that set blasting limits or stipulate blast monitoring, and there has been no direction or reason to undertake blast monitoring. In preparation for this work plan, the last 2 blasts have been monitored. Monitoring results indicate that contemporary ground vibration (peak particle velocity of 5mm/s) and over pressure (115 dB(L)) values are exceeded at some of the closest receptors. It is emphasised that these threshold levels are set by the Regulator to minimise nuisance to the receptor and are not related to structural damage.

It is highly likely, based on the limited monitoring results, that the site has been exceeding the contemporary blasting threshold at some receptors for several decades, and that the local community are accepting of the infrequent blast "nuisance". Whilst blast design can reduce the impacts, through increasing burden, spacing, stemming, sequencing, explosive type and density etc, the blast orientation and implication for the fragmentation must be considered. The site is very small with very limited opportunity to align blasting orientation, a typical blast control for over pressure and vibration. Additionally the site has a small jaw crusher (24 x 36), which can only accept a limited lump size, so fragmentation is a key criteria. Designing a shot that meets blasting nuisance threshold levels will have an impact the fragmentation (decreasing fragmentation and increasing the lump size) and result in more secondary breakage with a rock breaker. The "… as far as reasonable practicable …" aspects of the Acts is tested here, a short (in the order of seconds), very infrequent (once or twice a year) nuisance is proposed to have a lesser impact on the community than a rock breaker operating 4-5 hours a day, 2-3 day a week for several weeks.

Airblast overpressure and ground vibration are controlled by designing all shots to minimise impacts at the nearest sensitive sites and susceptible infrastructure, whilst still achieving an acceptable degree of fragmentation. All shots will be videoed and where necessary the shots will also be monitored and

the results recorded to compare to the airblast and ground vibration limits to inform subsequent shot design (burden, spacing, stemming sequencing). The blast facing orientations will always be designed to minimise the airblast and flyrock risks by ensuring that blasts face away from the nearest sensitive sites, as far as practicable.

Given the proximity of the quarry to sensitive receptors and the township of Coleraine, a Controlled Blasting Zone will be established within 400m of the blast site and/or more generally, within 200m of the Work Authority Boundary.

Blasting times are consistent with those approved for Work Authority, i.e. to the period from 10:00 am to 4:00 pm Monday to Friday, and all neighbours are engaged prior to blasting.

Refer to the attached Risk Management Plan, including Risk Treatment Plans and Risk Register, for detailed risk assessment and risk management, including control measures.

4.8. HAZARDOUS MATERIALS

Apart from fuel, explosives and potentially dust suppressants, no other chemicals or additives are used in the processing on the site. There are no hazardous materials / chemicals contained within the resource to be excavated. No acid water is generated by the development. There are no known acid sulphate materials in the resource.

A register of MSDA sheets of any chemicals (i.e. hydrocarbons and dust suppressants) used on the site is maintained at the quarry office for review if required.

Refer to the attached Risk Management Plan, including Risk Treatment Plans and Risk Register, for detailed risk assessment and risk management, including control measures.

4.9. HERITAGE IMPACTS

The Victorian Heritage Register and Heritage Inventory have been reviewed and there no places of historic heritage currently within the vicinity of the site. There are no Heritage Overlays in the vicinity shown under the Planning Scheme.

An area of Aboriginal Cultural Heritage Sensitivity impacts both the original Work Authority (to Templeton Street) and part of Lot 26 Pitcher Street that the Work Authority is expanding into. The impact of the area of Aboriginal Cultural Heritage Sensitivity is shown on the Work Authority Area Plan inset on Figure 3 Site Layout Plan. The original WA410 was granted prior to the 2010 AHA, so by definition already has approval and is not a trigger. The western extremity of Lot 26 Pitcher Street is impacted by an area of Aboriginal Culturally Heritage Sensitivity, and to avoid any complicating issues, has been excluded from the Work Authority. At the time of drafting this Work Plan Variation, advice from the Gunditj Mirring Registered Aboriginal Party and a local heritage advisor was contradicting, and the decision was made to exclude this area from the Work Authority. Therefore a Cultural Heritage Management Plan is not required as the original Work Authority area has approval for disturbance (and has already been subject to significant ground disturbance) and the extension of the Work Authority avoids the Aboriginal Culturally Heritage Sensitivity area.

Refer to the attached Risk Management Plan, including Risk Treatment Plans and Risk Register, for detailed risk assessment and risk management, including control measures.

5. KEY SUMMARY INFORMATION

5.1. AREA DETAILS

Property Name:
Coleraine Quarry

Street Address:
26 Templeton Street Coleraine, VIC, 3315

Land Tenure:
Freehold:

Title Name	Registered Owner	Title Depth
Lot 2 PS 818710 H (replacing Lot 1 on Title Plan 381) 26 Templeton Street	Rigby Brothers & Co Pty Ltd	Nil Depth
PS 914025 N (replacing Crown Allotment 54 Section 23)	Rigby Brothers & Co Pty Ltd	15.24 m
Lot 26, Pitcher Street TP862809Y	Rigby Brothers & Co Pty Ltd	50 feet
12 (Lot 25) Pitcher Street TP686544 Q	Delma Rigby, (shareholder of Rigby Brothers & Co Pty Ltd)	50 feet
6 (Lot 24) Pitcher Street TP758273 W	Stan Rigby (shareholder of Rigby Brothers & Co Pty Ltd)	50 feet
Lot 1 Gray Street PS818710 H	Stan Rigby (shareholder of Rigby Brothers & Co Pty Ltd)	Nil Depth

Copies of titles and title plans are attached as WA410_Titles_Compilation.pdf.

Depth Limitations
YES, 50 feet, 15.24m, nil

5.2. STONE RESOURCE & EXTRACTION

Work Authority Commodity
Trachyte

Work Authority Commodity Primary
Trachyte

Total Resource Estimate
1.2 million tonnes

Maximum Terminal Depth of Extraction
Maximum Terminal Depth AHD41m

Overall Slope Angle (maximum of terminal batters)
1V:1.3H (~37deg)

Estimated Topsoil Volume
5000 in situ cubic metres

Estimated Topsoil depth
200 mm

Estimated Overburden Volume
290,000 cubic metres

Estimated Overburden Depth
7m

Area of Disturbance
10.9 hectares

Maximum Disturbance at Any Time
10.4 hectares

5.3. OPERATION TYPE

Dry open cut

5.4. OPERATION HOURS

Operating hours are be aligned to the standard EPA 'day period' hours and will at all times be in accordance with any Council requirements.

Extraction
(all earth works, stockpiling and onsite cartage)

Extraction activities will occur within the hours specified in the planning permission.

No work Sundays or public holidays.

Sales
(movement of transport vehicles into and from the site)

Sales activities will occur within the hours specified in the planning permission.

No work Sundays or public holidays.

Processing
(crushing, screening, washing, etc., incl. cartage from stockpiles)

Processing activities will occur within the hours specified in the planning permission.

No work Sundays or public holidays.

Operation Hours Clarification
Works outside of these hours is only for essential maintenance unless otherwise authorised.

Blasting times are restricted to the period from 10:00 am to 4:00 pm Monday to Friday.

5.5. OTHER WORK PLAN COMPONENTS

The Mineral Resources (Sustainable Development) Act 1990 and its associated Regulations require, in addition to the information above, the following key components of a Work Plan. These are provided as separate documents.

Location Map (Work Plan Area)
The required information is presented on a combination of the following:

- Figure 1, Regional Plan

- Figure 2, Location Plan
- Figure 2A WA410 Crown Land Status

Site Map

The required information is presented on the following:

- Figure 3, Site Layout Plan

Risk Management Plan

The Risk Management Plan includes individual Risk Treatment Plans for each hazard and a Risk Register. These identify the quarrying and rehabilitation hazards relevant to this operation, the risks these hazards may pose to sensitive receptors, and provide detailed risk assessment and risk management. The risks are assessed in regard to the sensitive receptors that may potentially be impacted by this operation, being those in relation to the environment, any member of the public, or land, property or infrastructure within the vicinity of the work. The risk management set out in these documents includes control measures, performance standards and an outline of the relevant management systems, practices or procedures for monitoring and managing the risks.

Refer to the attached Risk Management Plan, including Risk Treatment Plans and Risk Register, for detail.

Community Engagement Plan

The aim of the Community Engagement Plan (CEP) is to share relevant information about the extractive industry operations, throughout the life of the Work Authority, with the community likely to be affected by the operations, and to provide reasonable opportunities for the community to express their views about activities at the site and the potential end uses of the site. The name and contact details of the site manager are displayed on a sign at the site entrance for any members of the community to use for providing feedback.

Refer to the attached Community Engagement Plan for detail.

Rehabilitation Plan

The objectives of the Rehabilitation Plan for the site is to leave the rehabilitated land in a safe, stable and sustainable condition, in a form that will be suitable to the end land uses and will not be hazardous to the land users and the public after the completion of quarrying activities. The affected land will be managed and progressively rehabilitated throughout the quarry life to minimise the impact to the community, as far as reasonably practicable, i.e. without compromising the ability to work the site and the commercial viability of the operation.

The final landform will be a shallow (5-10m deep) pit lake in the base of the excavation, with suitable areas retained as hardstand or returned to pasture, with the quarry faces vegetated with trees and shrubs.

The Rehabilitation Plan details the objectives, strategies and design for rehabilitation, as well as the monitoring and criteria for rehabilitation of all domains within the site, up to the final closure of the site. The Rehabilitation Plan objectives will be discussed with the broader community and relevant stakeholders, which are routinely and specifically canvased through implementation of the site Community Engagement Plan.

Refer to the attached Rehabilitation Plan and Figure 4, Rehabilitation Landform, for detail.

5.5.1. ATTACHMENTS

Work Plan Attachments

Work Plan Components	
Work Plan Description	WA410 WPDescription_v02_Aug24.pdf (this document)
Figure 1, Regional Plan	WA410_Fig1_RegionalPlan_v00.pdf
Figure 2, Location Plan	WA410_Fig2_LocationPlan_v01.pdf
Crown Land Status	WA410_Fig2A_CrownLandMap.pdf
Figure 3, Site Layout Plan	WA410_Fig3_SiteLayoutPlan_v01.pdf
Risk Management Plan: Risk Treatment Plans Risk Register	 WA410_RMP_v01_Apr2024.pdf WA410_RiskRegister_v01.pdf
Community Engagement Plan	WA410_CommEngPlan_ r2Jan 2024.pdf
Rehabilitation Plan: Text Figure 4, Rehabilitation Landform	 WA410_RehabPlan_Apr2024_v01.pdf WA410_Fig4_RehabLandform_v00.pdf

Supporting Documents

Property Documents	
Certificate of Title	WA410_Titles.pdf
Planning Property Report	26-Templeton-Street-Coleraine-Vicplan-Planning-Property-Report.pdf *Note at the time of submission the property report had not been updated to show the subdivision of 68 Templeton Street and change to 26 Templeton Street*
Southern Grampians Shire Council	Council Correspondence re Rezoning.PDF
Other Documents	
Noise Assessment	CQ2136-REP(AcRpt)-R1.0.pdf
Noise Management Plan	WA410 NoiseManPlan.pdf
Silica Dust Assessment	AED Consulting_12032021_162041.pdf
Dust Management Plan	WA410 DustManPlan.pdf
Water Management Plan	WA410 WaterManPlan.pdf
Geotechnical Assessment	WA410 Geotech Assessment_r01.pdf RBR0001-MEM-0-Coleraine Quarry Water Balance.pdf
Ground Control Management Plan	WA410_GCMP 2024_Apr.pdf
Native Vegetation Advice	WA410_DEECA Veg_emails.pdf
Imported Materials Management Plan	WA410_IMMP_Jan2023.pdf
Fire Response and Readiness Plan	WA410_FireResponseReadinessPlan_Feb2024.pdf
Blast Management Plan Sample	WA410_BMP_Sample _August2024.pdf
ACHS Planning Tool	WA410_aavProcessList.pdf

RISK REGISTER FOR WORK AUTHORITY NUMBER: WA410 - Coleraine Quarry

Last Updated: August 2024

Hazard	Risk No	Risk Event	Causes / Risk Pathway	Sensitive Receptors	Phase of Project			Inherent Risk - Risk Assessment without control measures			Residual Risk - Risk Assessment with applied control measures			Summary of Key Monitoring	Risk Treatment Plan + Adaptive Mangmnt Plan?
					Construction	Operations	Rehabilitation	Likelihood	Consequence	Risk Rating	Likelihood	Consequence	Risk Rating		
ALTERED VISUAL AMENITY	1	Plant, operations or exposed faces visible from residences	Ground disturbing activity	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 2 km from Work Authority	Yes	Yes	Yes	Likely	Minor	Medium	Possible	Minor	Medium	12 monthly inspections from outside the quarry boundary to check effectiveness of screening vegetation, plantings on upper batters, dumps	see RTP
	2	Plant, operations or exposed faces visible from public roads	Ground disturbing activity	Users of Templeton Street, Pitcher Street and Gray Street plus users of far Glenelg Highway, Casterton Road, Coleraine Balmoral Road and Coleraine Edenhope Road.	Yes	Yes	Yes	Likely	Minor	Medium	Possible	Minor	Medium	12 monthly inspections from outside the quarry boundary to check effectiveness of screening vegetation, plantings on upper batters, dumps	see RTP
NOISE	3	Excessive noise at any sensitive receptors from vehicle movements	Truck / vehicle movements (loaders, haul trucks)	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 1 km from Work Authority	Yes	Yes	Yes	Likely	Minor	Medium	Possible	Minor	Medium	Occassional observations at receptor sites, hand held monitoring, or as directed	see RTP and Noise Man Plan
	4	Excessive noise at any sensitive receptors from processing plant	Processing Plant (incl. fixed and mobile plant, screens, stackers)	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 1 km from Work Authority	Yes	Yes	Yes	Likely	Moderate	High	Possible	Minor	Medium	Occassional observations at receptor sites, hand held monitoring, or as directed	see RTP and Noise Man Plan
	5	Excessive noise at any sensitive receptors from blast hole drilling equipment	Blast hole drill rig	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 1 km from Work Authority	Yes	Yes	Yes	Likely	Minor	Medium	Possible	Minor	Medium	Occassional observations at receptor sites, hand held monitoring, or as directed	see RTP and Noise Man Plan
	6	Excessive noise at any sensitive receptors from excavating equipment	Excavating equipment (dozer, loader, excavator)	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 1 km from Work Authority	Yes	Yes	Yes	Likely	Minor	Medium	Possible	Minor	Medium	Occassional observations at receptor sites, hand held monitoring, or as directed	see RTP and Noise Man Plan
DUST	7	Excessive dust from vehicle movements on all access roads, site roads and hardstands impacting sensitive receptors	Truck / vehicle movements (road trucks, loaders, haul trucks)	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 1 km from Work Authority	Yes	Yes	Yes	Possible	Moderate	Medium	Unlikely	Moderate	Medium	Ongoing visual monitoring by all staff, monitor for adverse conditions	see RTP + Dust Man. Plan
	8	Excessive dust from processing plant and equipment impacting sensitive receptors	Excavation and associated site operations	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 1 km from Work Authority	Yes	Yes	Yes	Likely	Moderate	High	Possible	Moderate	Medium	Ongoing visual monitoring by all staff, monitor for adverse conditions	see RTP + Dust Man. Plan
	9	Excessive dust from blast hole drilling and blasting impacting sensitive receptors	Blasting operations (drilling and shots)	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 1 km from Work Authority	Yes	Yes	Yes	Possible	Moderate	Medium	Unlikely	Moderate	Medium	Ongoing visual monitoring by all staff, monitor for adverse conditions	see RTP + Dust Man. Plan
	10	Excessive dust from overburden dumps (construction & maintenance) impacting sensitive receptors	Construction and maintenenace of overburden mounds	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 1 km from Work Authority	Yes	Yes	Yes	Possible	Moderate	Medium	Unlikely	Moderate	Medium	Ongoing visual monitoring by all staff, monitor for adverse conditions	see RTP + Dust Man. Plan
	11	Excessive dust from stockpiles impacting sensitive receptors	Construction, loading and maintenance of product stockpile mounds	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 1 km from Work Authority	Yes	Yes	Yes	Possible	Moderate	Medium	Unlikely	Moderate	Medium	Ongoing visual monitoring by all staff, monitor for adverse conditions	see RTP + Dust Man. Plan
	12	Excessive dust when stripping impacting sensitive receptors	Stripping and associated site operations	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 1 km from Work Authority	Yes	Yes	No	Likely	Moderate	High	Possible	Moderate	Medium	Ongoing visual monitoring by all staff, monitor for adverse conditions	see RTP + Dust Man. Plan
	13	Excessive dust during rehabilitation impacting sensitive receptors	Rehabilitation and associated site operations	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 1 km from Work Authority	No	Yes	Yes	Likely	Moderate	High	Possible	Moderate	Medium	Ongoing visual monitoring by all staff, monitor for adverse conditions	see RTP + Dust Man. Plan
SURFACE WATER FLOWS	14	Diverted surface flows impacting downstream environments	Poorly designed / maintained site water management	Waterway (Konong Wootong Creek 200m to the west) and three (3)DELWP mapped wetlands to the south of Work Authority, Adjacent property and environment	Yes	Yes	Yes	Possible	Minor	Medium	Unlikely	Minor	Low	3 monthly for diversion infrastructure Residence time / freeboard for storm water Inspect after storm events	see RTP +Water Management Plan
	15	Storm water overwhelming water management infrastructure leading to flooding of the quarry and causing impacts to adjacent land or environment	Significant storm events (ie >5%AEP)	Waterway (Konong Wootong Creek 200m to the west) and three (3)DELWP mapped wetlands to the south of Work Authority, Adjacent property and environment	Yes	Yes	Yes	Unlikely	Minor	Low	Rare	Minor	Low	3 monthly for diversion infrastructure Residence time / freeboard for storm water Inspect after storm events	see RTP +Water Management Plan
EROSION AND SEDIMENTATION	16	Erosion from stockpiles (product and other) resulting in silt laden run-off	Excessive/uncontrolled erosion from stockpiles & associated site operations and uncontrolled run-off	Waterway (Konong Wootong Creek 200m to the west) and three (3)DELWP mapped wetlands to the south of Work Authority, Adjacent property and environment	Yes	Yes	Yes	Likely	Minor	Medium	Unlikely	Minor	Low	Monthly inspect for erosion and runoff Inspect infrastructure after storm events	see RTP +Water Management Plan
	17	Erosion from bunds resulting in silt laden run-off	Excessive/uncontrolled erosion from bunds & associated site operations and uncontrolled run-off	Waterway (Konong Wootong Creek 200m to the west) and three (3)DELWP mapped wetlands to the south of Work Authority, Adjacent property and environment	Yes	Yes	Yes	Likely	Minor	Medium	Unlikely	Minor	Low	Monthly inspect for erosion and runoff Inspect infrastructure after storm events	see RTP +Water Management Plan
	18	Erosion from hardstand areas resulting in silt laden run-off	Excessive/uncontrolled erosion from hardstand areas & associated site operations and uncontrolled run-off	Waterway (Konong Wootong Creek 200m to the west) and three (3)DELWP mapped wetlands to the south of Work Authority, Adjacent property and environment	Yes	Yes	Yes	Likely	Minor	Medium	Unlikely	Minor	Low	Monthly inspect for erosion and runoff Inspect infrastructure after storm events	see RTP +Water Management Plan
	19	Erosion from roads and other disturbed areas resulting in silt laden run-off	Excessive/uncontrolled erosion from roads, excavation & other associated site disturbance and uncontrolled run-off	Waterway (Konong Wootong Creek 200m to the west) and three (3)DELWP mapped wetlands to the south of Work Authority, Adjacent property and environment	Yes	Yes	Yes	Likely	Minor	Medium	Unlikely	Minor	Low	Monthly inspect for erosion and runoff Inspect infrastructure after storm events	see RTP +Water Management Plan
	20	Silt laden water discharged to the environment from a water dam overtopping	Turbid water overtoping sediment dam due to flooding	Waterway (Konong Wootong Creek 200m to the west) and three (3)DELWP mapped wetlands to the south of Work Authority, Adjacent property and environment	Yes	Yes	Yes	Possible	Minor	Medium	Unlikely	Minor	Low	Monthly inspect for erosion and runoff Inspect infrastructure after storm events	see RTP +Water Management Plan
GROUND DISTURBANCE	21	Ground disturbing works inadvertently destroy historical heritage	Excavation & associated site operations	Aboriginal and Historical cultural heritage	Yes	Yes	Yes	Unlikely	Minor	Low	Rare	Minor	Low	Visual inspections during soil removal Staff induction as per CHMP	see RTP
	22	Ground disturbing works impacting on ecological values of retained native vegetation	Excavation & associated site operations	Ecological values of native vegetation	Yes	Yes	Yes	Possible	Minor	Medium	Rare	Minor	Low	Ongoing visual inspections of vegetation condition / fencing / "no-go" areas	see RTP
	23	Ground disturbing works resulting in impact to three DELWP mapped wetland	Impact on native vegetation within the nearby mapped wetland and creek due to disturbance on site	Ecological values of DELWP wetland and Konong Wootong Creek	Yes	Yes	Yes	Unlikely	Minor	Low	Rare	Minor	Low	Ongoing visual inspections of wetland condition / fencing / "no-go" areas	see RTP
	24	Ground disturbing works impacting on groundwater	Excavation & associated site operations	Groundwater	Yes	Yes	Yes	Unlikely	Minor	Low	Rare	Minor	Low	Visual monitoring for groundwater interception / inflow rate / quality	see RTP
	25	Ground disturbing works impacting residences in and public roadways	Excavation & associated site operations	Nearby residents	Yes	Yes	No	Possible	Moderate	Medium	Possible	Moderate	Medium	Ongoing inspection for maintained offset	see RTP

Hazard	Risk No	Risk Event	Causes / Risk Pathway	Sensitive Receptors	Phase of Project			Inherent Risk - Risk Assessment without control measures			Residual Risk - Risk Assessment with applied control measures			Summary of Key Monitoring	Risk Treatment Plan + Adaptive Mangmnt Plan?
					Construction	Operations	Rehabilitation	Likelihood	Consequence	Risk Rating	Likelihood	Consequence	Risk Rating		
GROUND INSTABILITY	26	Batter failure impacting buffer zone or beyond WA boundary	Excavation & associated site operations	Nearby public roads, public & private property, infrastructure	No	Yes	Yes	Possible	Moderate	Medium	Rare	Moderate	Medium	Monthly inspection of batters and surface water management infrastructure Inspect after storm events	see RTP + Ground Control Man. Plan
	27	Localised failure of upper batter in diggable material	Excavation & associated site operations	Nearby public roads, public & private property, infrastructure	No	Yes	Yes	Possible	Minor	Medium	Rare	Minor	Low	Monthly inspection of batters and surface water management infrastructure Inspect after storm events	see RTP + Ground Control Man. Plan
	28	Excessive erosion compromising stability and impacting buffer zone or beyond WA boundary	Excessive/uncontrolled erosion of terminal batters	Nearby public roads, public & private property, infrastructure	No	Yes	Yes	Possible	Moderate	Medium	Unlikely	Minor	Low	Monthly inspection of batters and surface water management infrastructure Inspect after storm events	see RTP + Ground Control Man. Plan
BLASTING	29	Excessive ground vibration at closest receptors	Poor shot design / unknown ground conditions / poor supervision	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 1 km from Work Authority	Yes	Yes	No	Likely	Moderate	High	Possible	Moderate	Medium	Occassional ground vibration monitoring at sensitive sites, or as directed	see RTP + Blast Man. Plan
	30	Excessive airblast at closest receptors	Poor shot design / unknown ground conditions / poor supervision	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 1 km from Work Authority	Yes	Yes	No	Likely	Moderate	High	Possible	Moderate	Medium	Occassional airblast overpressure monitoring at sensitive sites, or as directed	see RTP + Blast Man. Plan
	31	Blasts resulting in flyrock impacting members of the public	Poor shot design / unknown ground conditions / poor supervision	Nearby residences within 500m of WA (4 onTempleton Street to the west, 3 on Pitcher Street, 3 on Cameron Street and 12 on Casterdon Rd to the south), residences within 1 km from Work Authority	Yes	Yes	No	Possible	Critical	Very High	Rare	Critical	High	Every blast videoed for flyrock	see RTP + Blast Man. Plan
	32	Blasts resulting in flyrock impacting infrastructure	Poor shot design / unknown ground conditions / poor supervision	Low Voltage transmission line along Templeton Street. Templeton Street and Pitcher Street.	Yes	Yes	No	Possible	Major	High	Rare	Major	Medium	Every blast videoed for flyrock	see RTP + Blast Man. Plan
PROCESS WATER AND STORAGES	33	Discharge from overtopping of water storage dams to surface waterways and the environment	Significant storm events (ie >5%AEP)	Waterway (Konong Wootong Creek 200m to the west) and three (3) DELWP mapped wetland to south of Work Authority. Adjacent land downstream of Work Authority	No	Yes	Yes	Possible	Minor	Medium	Unlikely	Minor	Low	Monthly inspection of water storages Inspect after storm events	see RTP
	34	Failure of process water infrastructure resulting in discharge to surface waterways and the environment	Poorly designed / maintained process water infrastructure	Waterway (Konong Wootong Creek 200m to the west) and three (3) DELWP mapped wetland to south of Work Authority. Adjacent land downstream of Work Authority	No	Yes	Yes	Possible	Minor	Medium	Unlikely	Minor	Low	Monthly inspection of water storages Inspect after storm events	see RTP
	35	Failure of a water storage resulting in discharge to surface waterways and the environment	Poorly designed / maintained storage dam	Waterway (Konong Wootong Creek 200m to the west) and three (3) DELWP mapped wetland to south of Work Authority. Adjacent land downstream of Work Authority	No	Yes	Yes	Possible	Moderate	Medium	Unlikely	Moderate	Medium	Monthly inspection of water storages Inspect after storm events	see RTP
IMPORTED MATERIALS	36	Impacts on surface water and groundwater from imported material containing contaminants	Importation of materials	Konong Wootong Creek and three DELWP mapped wetlands, closest is 450m south west of Work Authority. Groundwater well below quarry floor	Yes	Yes	Yes	Possible	Minor	Medium	Unlikely	Minor	Low	Ongoing inspection of imported materials	see RTP + IMMP
	37	Polluting waste being imported to the site	Importation of materials	Ecological values of land / adjoining land uses	Yes	Yes	Yes	Possible	Minor	Medium	Unlikely	Minor	Low	Ongoing inspection of imported materials	see RTP + IMMP
	38	Introducing weeds or soil-borne diseases	Importation of materials	Ecological values of land / adjoining land uses	Yes	Yes	Yes	Possible	Minor	Medium	Unlikely	Minor	Low	Ongoing inspection of imported materials	see RTP + IMMP
UNAUTHORISED SITE ACCESS	39	Unauthorised access to quarry faces and operating equipment	Gaining access to unsafe areas	Members of the public	Yes	Yes	Yes	Possible	Major	High	Rare	Major	Medium	Annual Inspection of fencing / signage / gates	see RTP
FUEL, LUBRICANTS, OTHER HAZARDOUS MATERIALS	40	Spills / discharges whilst refuelling	Accidental spillage of fuel	Surface water/ waterways/groundwater / ecological values	Yes	Yes	Yes	Possible	Minor	Medium	Unlikely	Minor	Low	Monthly inspection of pollution controls	see RTP
	41	Fuel / oil leakage from equipment	Mechanical failure / accident	Surface water/ waterways/groundwater / ecological values	Yes	Yes	Yes	Possible	Minor	Medium	Unlikely	Minor	Low	Monthly inspection of pollution controls	see RTP
	42	Spills / damage from hazardous materials storages	Spillage or accident at hazardous materials storages	Surface water/ waterways/groundwater / ecological values	Yes	Yes	Yes	Possible	Moderate	Medium	Rare	Moderate	Medium	Monthly inspection of fuel and/or chemical storages	see RTP
WEEDS, PESTS AND DISEASES	43	Allowing weeds to spread from the site to neighbouring properties	Uncontrolled proliferation of weeds	Ecological values of land / adjoining land uses	Yes	Yes	Yes	Possible	Moderate	Medium	Unlikely	Moderate	Medium	6 monthly site inspections (Spring & Autumn)	see RTP
	44	Harbouring pest animals	Uncontrolled proliferation of pest animals	Ecological values of land / adjoining land uses	Yes	Yes	Yes	Possible	Minor	Medium	Unlikely	Minor	Low	6 monthly site inspections (Spring & Autumn)	see RTP
	45	Unsanitised plant / equipment introducing weeds / diseases	Plant (not clean prior to arriving on site)	Ecological values of land / adjoining land uses	Yes	Yes	Yes	Possible	Moderate	Medium	Unlikely	Moderate	Medium	Annual inspections (Spring)	see RTP
RUBBISH / NON QUARRY WASTE	46	Uncontrolled handling of domestic rubbish and general waste resulting in pollution of waterways and/or adjacent land	Domestic and industrial general waste	Surface water / adjoining land uses	Yes	Yes	Yes	Possible	Minor	Medium	Rare	Minor	Low	Monthly site inspection for quantities, types and location of wastes stored	see RTP
	47	Loss of the amenity through the poor handling of redundant plant and equipment	Redundant plant and equipment	Surface water / adjoining land uses	Yes	Yes	Yes	Possible	Minor	Medium	Rare	Minor	Low	Monthly site inspection for quantities, types and location of wastes stored	see RTP
FIRE	48	Plant / machinery / hot works igniting a fire and potentially escaping the site	Machinery or plant igniting fire	Ecological values / members of the public / property	Yes	Yes	Yes	Possible	Critical	Very High	Rare	Critical	High	Annual inspection of preparedness prior to wildfire danger season Monitor VicEmergency app/website during wildfire danger season	see RTP + Fire Response & Readiness Plan
	49	Wildfire entering the site and danger being exacerbated by onsite activities	Unsafe storage of flammable and combustible substances, flammable and combustible wastes allowed to accumulate on site	Ecological values / members of the public / property	Yes	Yes	Yes	Unlikely	Critical	High	Rare	Critical	High	Annual inspection of preparedness prior to wildfire danger season Monitor VicEmergency app/website during wildfire danger season	see RTP + Fire Response & Readiness Plan
SOIL BIOLOGICAL ACTIVITY	50	Unsuccessful rehabilitation due to loss of soil biological activity	Poor topsoil storage practices	Biodiversity of soil	Yes	Yes	Yes	Likely	Minor	Medium	Unlikely	Minor	Low	6 monthly inspection of topsoil stockpiles	see RTP
VEHICLE SEDIMENT TRANSPORT	51	Excessive dust, mud or stone carried onto public roads	Dust / sediment adhered to vehicles not removed before leaving site	Public roads and amenity	Yes	Yes	Yes	Likely	Minor	Medium	Unlikely	Minor	Low	Daily observations, respond to complaints	see RTP

Accountable Personnel

Personnel accountable for the implementation, management and review of the Risk Management Plan

Personnel	Roles and Responsibilities
Work Authority Holder	Identification and allocation of resources
General Manager / Business Owner	Identification and allocation of resources
Quarry Manager	Distribution of resources, co-ordination , implementation
Site Supervisior	Implementation

Mineral Resources (Sustainable Development) Act 1990

Tenement Number: WA410

Plan Number: PLN000923

Work Plan Variation Statutorily Endorsed

Signed:

Delegate of the Department Head

Date: 30/10/2024

BCA CONSULTING
EARTH RESOURCES

Mineral Resources (Sustainable Development) Act 1990

Tenement Number: WA410

Plan Number: PLN000923

Work Plan Variation Statutorily Endorsed

Signed:

Delegate of the Department Head

Date: 30/10/2024

Risk Management Plan

for

Extractive Industry Work Authority WA410

RRAM Designation:- PLN-000923

Rigby Bros & Co Pty Ltd – Coleraine Quarry

WA410 – Coleraine Quarry
26 Templeton Street
COLERAINE VIC 3315

Project No. R21_001
September 2024

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Revision History

Document Date	Description
24 April 2024	1st draft of Risk Management Plan
23 Aug 2024	2ndSubmission – addressing June 2024 RFI

1. RISK MANAGEMENT PLAN

1.1. Introduction

This Risk Management Plan (RMP) is submitted with Work Plan (PLN-000923) and relates to WA410, known as the Coleraine Quarry. The application is for expanding the current tenement WA410 to enable further extraction of Trachyte within the current WA410 Work Plan. The Work Plan Variation also includes a brief description of the processing and associated ancillary activities which are already covered by existing approvals.

The current operation was approved in 1975 and is nearing the end of its easily accessible resource. A viable resource has been identified at depth, which requires the south and east extents to be pushed back to both allow the deeper extraction and to meet post July 2021 rehabilitation requirements.

The operation is located at 26 Templeton Street, Coleraine, Victoria on the western edge of Coleraine in western Victoria, see attached Figure 1 Regional Plan. This quarry has been in operation since the late 1800s with blasting introduces in the 1930's and modern quarrying practices implemented from 1947.

The Work Authority is on land owned by Rigby Brothers & Co Pty Ltd. The Work Plan describes the extraction, processing and sales activities occurring on WA410. The resource is Trachyte used for a range of road construction activities within the local area.

A Cultural Heritage Management Plan is not required for the Work Authority Variation, as the area impacted within 26 Templeton Street (the original Work Authority Area) which has been subject to significant ground disturbance and that the granting of the work authority pre- dates current legislation. T he extension of WA410 into Lot 12 Pitcher Street has been designed to avoid the small area of Aboriginal Cultural Heritage Sensitivity, thereby protecting this area from any extractive industry activity and avoiding the requirement to undertake a Cultural Heritage Management Plan

Bryan Creek is some 730 metres to the south and Konong Wootong Creek some 200m to the west of the site.

There is no proposed change to the current level of activity at the quarry and therefore no change to trucking movements. Operating hours are be aligned to the standard EPA 'day period' hours and will at all times be in accordance with any Council requirements. Additionally, it should be noted that this quarry is a 'low tonnage' operation with infrequent blasting (2 to 3) times per year.

A full description of the works at the site can be found in Work Plan Description document.

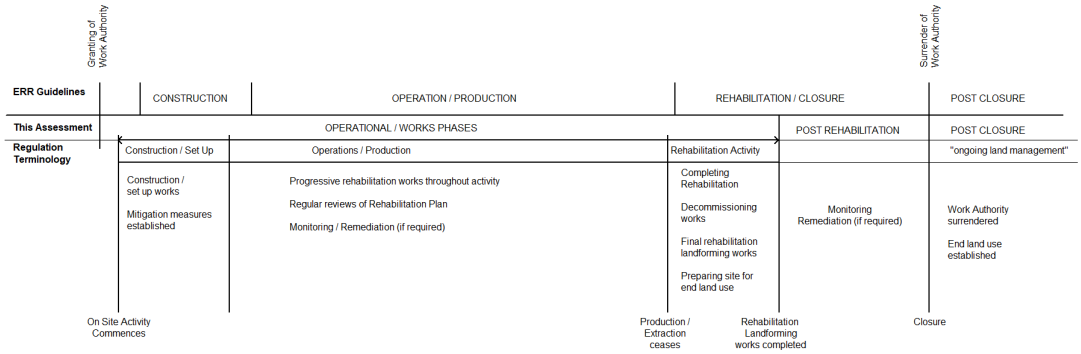
1.2. Description of Risk Assessment Process

This Risk Management Plan, including the Risk Register, for WA410 has been developed by BCA Consulting in conjunction with Rigby Brothers & Co Pty Ltd Quarries key personnel, Stan Jason & Anne Rigby & Debra Farrelly (nee Rigby).

The methodology adopted in this document is to consider the hazards that may be present, and the risks they pose, in association with the extractive industry. The Risk Management Plan focusses on the hazards present during its Operational / Works phases (i.e. during major works, including construction, production and rehabilitation activities). As distinct from the Post Rehabilitation phase, as it relates to any particular part of the site, i.e. after completion of rehabilitation activities

(apart from any necessary follow-up monitoring and maintenance), or after closure of the site (Post Closure), which are a focus of the Rehabilitation Plan.

The hazard identification and risk assessment process adopted for the site is in the context of the quarry life as represented in the schematic below, showing the indicative sequence of phases as it relates to any particular part of the site. Note: the term “closure” is not a term commonly used in the extractive industries, and not used in the applicable Regulations, but is used here to align with the Earth Resources Regulator’s guidelines and defined as the point in time, subsequent to completion of all rehabilitation works, when the Work Authority can be surrendered and the rehabilitation bond returned.



The discussion of the hazards, and the assessment of the risks they pose, adopts extractive industry accepted norms that do not always “neatly” fit the requirements of the various Earth Resources Regulator’s guidelines. With the primary aim of satisfying the Regulations and being a functional Work Plan for the quarry operator.

As a starting point for developing this Risk Management Plan, a table of standard quarrying and rehabilitation hazards were presented to Rigby Brothers & Co Quarry personnel, then reviewed and discussed, both on site and more recently via virtual meetings. This review considered standard control measures and their relevance / effectiveness in meeting applicable standards and acceptance criteria, including whether they addressed the EPA’s General Environmental Duty (further detail below). Where it was considered necessary, extra proportionate control measures were implemented.

These discussions focused on:

- Identifying the hazards that may arise from all site-based activities throughout the Operational / Works phases that might result in risk events.
- Identifying sensitive receptors within the vicinity of the site, in relation to the environment, any member of the public or to land, property or infrastructure; including a review of any previous complaints or feedback received from the community or stakeholders.
- Identifying individual risk events that the identified hazards may pose to the sensitive receptors.
- Reviewing the applicability of standard industry control measures and effectiveness of existing control measures.
- Reviewing the proposed control measures, including any site-specific control

measures that might be required.

- The implementation of the necessary control measures and the resultant residual risk of individual risk events.
- The monitoring and management systems that may be required to ensure the control measures continue to meet relevant performance standards.

Additionally, as a basis for the Rehabilitation Plan, the discussion of hazards considered:

- Identification of any hazards that may be associated with the rehabilitated land that could potentially pose long-term risks to the environment, members of the public, or to land, property or infrastructure after closure of the site and surrender of the Work Authority (i.e. Post Closure).
- A review of any potential long-term risks posed by the rehabilitated land to identify those risks that may require monitoring, maintenance, treatment or other ongoing land management activities after closure. If any are identified, consideration of how these risks could be eliminated or minimised to such a low level that no ongoing risk management would be necessary after closure.

The risk assessments presented in this Work Plan Variation are qualitative risk assessments as the nature of the industry and inherent variability means that there is simply not enough information available to undertake quantitative risk assessments. The risk assessments utilise the risk matrix adopted by the Earth Resources Regulator (ERR), as presented below. A full description of the likelihood and consequence ratings is contained in the ERR document Preparation of Work Plans and *Work Plan Variations, Guideline for Extractive Industry Projects*, December 2020.

Likelihood	Insignificant	Minor	Moderate	Major	Critical
Almost Certain	Medium	High	Very High	Very High	Very High
Likely	Medium	Medium	High	Very High	Very High
Possible	Low	Medium	Medium	High	Very High
Unlikely	Low	Low	Medium	High	High
Rare	Low	Low	Medium	Medium	High
	Consequence				

NOTE: As of December 2020, ERR has directed that the consequence ratings for risks associated with Fire must be critical.

Environment Protection Legislation

As of July 2021, the *Environment Protection Act 2017*, as amended by the *Environment Protection Amendment Act 2018*, identifies that all businesses can cause pollution and waste and that the combined effect can have an impact on human health and the environment. The General Environmental Duty (GED) is at the centre of the amended *Environment Protection Act 2017* and focuses on prevention of environmental impact rather than managing the impacts after they have occurred and is based on a person or business's duty to protect human health and the environment from pollution and waste.

Industry-specific guidance on the general requirements of this legislation is provided in EPA Publication 1823.1, *Mining and Quarrying – Guide to preventing harm to People and the environment*. The GED is defined within the *Environment Protection Act 2017* and it is stipulated that "a person who is engaging in an activity that may give rise to risks of harm to human health or the environment from pollution or waste must minimise those risks, so far as reasonably practicable".

Determining what is deemed 'reasonably practicable' is explained within EPA Publication 1856, *Reasonably Practicable*, and relates to the implementation of control measures that are proportionate to the potential risk. This is based on the potential for harm to occur, the potential impacts on the environment, and considers what control measures are available to reduce the risk, as well as their associated costs.

It is deemed the responsibility of the operator, the 'duty holder', to understand and assess the risks which their operations may pose on human health or the environment, and once understood, implement proportionate control measures to mitigate or minimise the risk of harm.

The definition of harm within the *Environment Protection Act 2017* introduces the concept of what is deemed 'unreasonable', with numerous guidelines and protocols offering definitions or examples of what is considered unreasonable.

The risk assessments and risk management documented within the individual Risk Treatment Plans that follow, for hazards that are also subject to EPA regulation, are developed in consideration of EPA guidance and compliance standards

Risk Register

The Risk Register provides an overview of the assessment and management of the risks associated with each identified hazard during the quarry's Operational / Works Phases and is attached separately.

1.3. Hazards Considered

In developing the Risk Management Plan and the Risk Register for this site, the hazards that are typically associated with extractive industries and rehabilitation activities (both progressive rehabilitation and final rehabilitation works), are listed in the table below, were discussed and considered with regard to the sensitive receptors. Where such hazards are identified in relation to the proposal, individual Risk Treatment Plans are provided below with a detailed assessment of risks posed to sensitive receptors by the hazards, along with detailed risk management. If the hazard is not applicable at the site, then it is marked as such in the table below.

Note: The only access to the Work Authority will be from the existing Templeton Street entrance. Other than emergency vehicle access, there will be no quarry access from either Pitcher Street or Cameron Street.

While the identified hazards may be present, the level of risk posed by these hazards to sensitive receptors and the level of risk management that is appropriate must be determined. The application and implementation of the documented control measures presented in the Risk Treatment Plans below aim to reduce as far as practicable the likelihood, and where applicable, the consequence, of the identified hazards where they pose a risk to the identified sensitive receptors. As operators of the current WA410 at Coleraine Rigby Brothers & Co have several decades of quarrying experience in the local community and have detailed knowledge of the necessary risk

management and control measures required for the safe operation of this site without unduly impacting sensitive receptors.

This site presents several challenges in meeting the current industry-imposed guidelines, however it must be understood that a quarry of some description has been operating at the site and in close proximity to the local community since the late 1800's. More recently the Rigby's have a multi-generational connection to the site. It is acknowledged that if this were a new operation it would face severe challenges to meet the current workplan requirements. No amount of impact

assessments around noise, blasting and visual amenity will provide any new insight, as it is well known that as residential development (the majority of which is the Rigby family) has grown around the site and that the contemporary "guidelines" espoused by the regulators are not being consistently met. For the site to continue to operate and to work towards a more appropriate rehabilitation outcome it will rely heavily on the "or minimised as far as reasonably practicable" clause in the Mineral Resources (Sustainable Development) Act 1990, as amended 1 July 2021).

2 (1) (b) (i)

> *risks posed to the environment, to members of the public, or to land, property or infrastructure by work being done under a licence or extractive industry work authority are identified and are eliminated* ***or minimised as far as reasonably practicable****; and*

This clause from the MRSDA is reproduced to emphasise to future regulators that the criteria quoted in the relevant guidelines are just that, guidelines.

This Risk Management Plan, which includes individual Risk Treatment Plans and a Risk Register, introduces numerous modern controls and criteria to addresses in detail the assessment and management of the risks associated with all the quarrying and rehabilitation hazards relevant to this operation. The introduction of and adherence to these contemporary controls, will results in a significant reduction of the impact from the quarrying hazards, emphasising the as far as reasonably practicably aspect of the MRSDA.

To further emphasise the *as far as reasonably practicable*, aspect of the MRSDA, this is a small country quarry, producing 30-40,000 tonnes per annum, therefore a very modest income stream, and it is our opinion that the imposition of copious impact assessments to satisfy the regulator will not provide any clearer understanding of the risks to sensitive receptors, or how to mitigate them.

In the past the site has not undertaken any monitoring, specifically around blasting, noise dust, as there has been no requirement to or direction to. Recent monitoring has demonstrated the site does not meet the current guidelines, and changes to blasting practices, machinery maintenance, dust suppression systems etc have been made, and will continue to be made.

The control measures to be implemented for the Operations / Production phase are considered adequate for any new works, i.e. Construction phase, so are not considered separately. The Rehabilitation Activities column in the table shows the hazards associated with undertaking the rehabilitation works, however the associated risks are often being managed along with the Operations / Production risks as the activities are occurring at the same time for most of the quarry life, as part of progressive rehabilitation. The risk assessments for these hazards have identified that the control measures to mitigate the risks from Operations / Production and Rehabilitation Activities are essentially identical in most cases, with the only variable being timing.

		OPERATIONAL / WORKS PHASES		
HAZARD	**COMMENT**	**PRODUCTION & CONSTRUCTION**	**REHABILITATION ACTIVITIES**	**POST CLOSURE**
Altered visual amenity		YES	YES	NO
Noise		YES	YES	NO
Dust		YES	YES	NO
Surface water flows		YES	YES	YES
Erosion and sedimentation		YES	YES	YES
Ground disturbance		YES	YES	NO
Ground instability		YES	YES	YES
Blasting		YES	YES	NO
Process water and storages		YES	YES	YES
Slimes storage	NOT APPLICABLE	NO	NO	NO
Imported materials		YES	YES	NO
Unauthorised site access		YES	YES	NO
Fuel, lubricants, other hazardous materials		YES	YES	NO
Weeds, pests and diseases		YES	YES	NO
Rubbish / general waste		YES	YES	NO
Fire		YES	YES	NO
Soil biological activity		YES	YES	NO
Vehicle sediment transport		YES	YES	NO

To provide a complete overview of the applicable hazards, the table also identifies hazards potentially associated with the rehabilitated land (post closure), where they relate to the extractive industry use, that may pose long-term risks to the environment, members of the public, or to land, property or infrastructure. These post closure hazards are discussed in detail in the Rehabilitation Plan.

While the identified post closure hazards may be present, it needs to be determined whether such hazards would actually pose any risks that require ongoing management. As detailed in the Rehabilitation Plan, there will not be any 'relevant risks' (post closure) posed by the hazards associated with the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities.

Elimination of Risks: In determining the residual risk it is often the case that, with the application of effective control measures, the residual risk is LOW, which is the lowest risk rating in the December 2020 ERR risk matrix. In some instances, it might be argued that the residual risk is so low that it has effectively been eliminated, however quarry managers believe they need to be conscious of all quarrying and rehabilitation hazards (and their associated risks) that exist on the

site, no matter how small the risk might be. As they must consider their obligations under all relevant legislation (i.e. OH&S, Heritage, etc.) and not just the *Mineral Resources (Sustainable Development) Act 1990* (MRSDA).

1.4. Accountable Personnel

The following table outlines the roles and responsibilities of the various personnel within the organisation for the successful implementation and management of the Risk Management Plan. These personnel are accountable for the identification and allocation of resources, as well as the implementation, management and review of this Risk Management Plan.

Role	Responsibilities
Work Authority Holder	Identification and allocation of resources
General Manager / Business Owner	Identification and allocation of resources
Quarry Manager	Distribution of resources, co-ordination, implementation
Site Supervisor	Implementation

2. RISK TREATMENT PLANS

Risk Treatment Plan abbreviations

The following abbreviations are used throughout the Risk Treatment Plans:

RTP Risk Treatment Plan
C Construction / Set-up phase of the operation
O Operations / Production phase of the operation
R Rehabilitation Activities phase of the operation

2.1. Altered Visual Amenity

Scope

This risk treatment plan is to assess and manage the potential visual impacts to sensitive receptors during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Crown Allotment 54 Section 23)	Eastern boundary	Potential to impact amenity by seeing site operation	Proximity to site
2.	12 (Lot 25) Pitcher Street	Southern boundary	Potential to impact amenity by seeing site operation	Proximity to site
3.	6 (Lot 24) Pitcher Street	Southern boundary	Potential to impact amenity by seeing site operation	Proximity to site
4.	Lot 1 Gray Street	Southern boundary	Potential to impact amenity by seeing site operation	Proximity to site
5.	Pitcher Street	Southern boundary	Potential to impact amenity by seeing site operation	Proximity to site
6.	Templeton Street	Western boundary	Potential to impact amenity by seeing site operation	Proximity to site
7.	Cameron Street	Northern boundary	Potential to impact amenity by seeing site operation	Proximity to site
8.	Users of road network west of the quarry	Western sightlines	Impact to amenity by seeing site operations	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
1.	Plant, operations or exposed faces visible from residences	C, O, R	Likely	Minor	MEDIUM
2.	Plant, operations or exposed faces visible from public roads	C, O, R	Likely	Minor	MEDIUM

Quarrying Considerations

A quarry with associated extractive activities has been at the site or in the immediate vicinity of WA410 since the late 1800's. Due to its proximity to the township of Coleraine, the site is (always has been) highly visible, especially from any western vantage point for several decades. This extension will not increase the visual impact. The extension of the quarry to the east and south east allows the most visual faces to be laid back to a more suitable geometry, and allows for vegetation to be established. As vegetation is progressively established, it will soften (reduce, but not completely remove) the visual impact of the quarry. In addition, this Work Plan describes a northern, eastern and a southern bund, that will also be vegetated with trees and shrubs to further assist in screening the operation from immediate neighbours (receptors). A secondary function of these bunds will be to act as a collector / diversion structure for surface water management.

Lot 6 and Lot 12 Pitcher Street are not included as sensitive receptors as they are both uninhabitable, unoccupied and planned to be removed.

As outlined in the Work Plan document, an increase in the visual impact has not been identified.

Objectives

The key objectives of this risk treatment plan are to:

- Minimise as far as reasonably practicable the visibility of the site from nearby residences and public roads and public access Crown land areas
- Ensure that progressive rehabilitation works minimise visual amenity impacts as soon as practicable

Compliance standards

The compliance standards for this risk treatment plan is:

- Positive engagement and feedback from nearby residences

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- A reduction in the visibility of the site operations when viewed from residences or public roads
- No complaints related to visual amenity from nearby residences or other members of the public

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Construction of bunding with vegetation and landscaping along the Templeton Street, Pitcher Street and Cameron Street boundaries. As well as progressively establishing the bund as development extends to the south and east.	Landscaping maintained in neat and orderly condition, in compliance to Work Plan / Site Layout Plan
2.	Maintenance (and if necessary, re-planting) of any screening vegetation	Screening vegetation established, and healthy, in compliance to Work Plan / Site Layout Plan
3.	Progressively establish vegetation on topsoil stockpiles and overburden dumps to be retained more than 6 months, as well as outer faces of raised pads and rehabilitated landforms	Topsoil stockpiles and overburden dumps vegetated and stabilised within 6 months of construction. Stockpiles located and size minimised, as far as practicable, to reduce visual amenity impacts. Planted vegetation maintained.
4.	Establishing vegetation and trees on rehabilitated batters as soon as practicable, initially with grasses/shrubs whilst waiting for trees to grow	Progressive rehabilitation in accordance with Rehabilitation Plan
5.	Rehabilitation as early as practicable of terminal crest batters and upper terminal berms	Progressive rehabilitation in accordance with Rehabilitation Plan with established and healthy vegetation (shrubs and trees)
6.	Locating processing plant and stockpiles in accordance with approved layout	Crushing operations remain out of visual range of both nearby sensitive receptors and public roads – compliance to Site Layout Plan
7.	Site infrastructure and stockpiling areas maintained in a neat and tidy appearance – including administration office, amenities, weighbridge, light vehicle parking area, workshop, hydrocarbon stores, all associated buildings and containers, roads and tracks, overburden mounds, and product / imported materials / waste rock stockpiles.	Areas of site infrastructure and stockpiling visible to the public have a neat and tidy appearance

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
1.	Plant, operations or exposed faces visible from residences	**C,** O, R	Possible	Minor	MEDIUM
2.	Plant, operations or exposed faces visible from public roads	**C**, O, R	Possible	Minor	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Vegetation and landscape establishment on bund	The establishment and maintenance of screening vegetation and trees on upper batters, overburden dumps and stockpiles will be monitored 3 monthly until vegetation established and erosion minimised, and then 6 monthly. Additional planting and/or replanting will be done to remediate slow or failed vegetation growth.
2.	Progressive rehabilitation of upper terminal batters undertaken as soon as practicable	Timing of rehabilitation of segments of the terminal crest batters and upper berms.
3.	Effectiveness of screening vegetation and vegetation on upper batters, overburden dumps and stockpiles in limiting visual impact	12 monthly inspections from outside the quarry boundary will be used to check the effectiveness of screening vegetation and vegetation on upper batters, overburden dumps and stockpiles.
4.	Amenity impact	Complaints and comments raised through community engagement will be handled through the normal engagement process.

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Vegetation and landscape establishment	Annual review of rehabilitation works on upper batters, vegetation establishment monitoring, screening vegetation (trees) effectiveness (including photos as required) will be recorded by the Quarry Manager and reported to quarry management, to the community through community engagement activities and to Regulatory agencies as required.	To allow quarry management to assess performance and to identify any necessary remedial actions. To inform the community To inform management of future works.
2.	Progressive rehabilitation		
3.	Screening vegetation effectiveness		
4.	Amenity impact	Complaints reported through CEP	Complaint management

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	N/A	

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site Office
4.	Planning Permit Conditions	Site Office

2.2. Noise

Scope

This risk treatment plan is to assess and manage the potential noise impacts to sensitive receptors during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Crown Allotment 54 Section 23)	Eastern boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
2.	12 (Lot 25) Pitcher Street	Southern boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
3.	6 (Lot 24) Pitcher Street	Southern boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
4.	Lot 1 Gray Street	Southern boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
5.	Pitcher Street	Southern boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
6.	15 Templeton Street	Southern boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
7.	53 Templeton Street	North / West Boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
8.	63 Templeton Street	North / West Boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
9.	68 Templeton Street	North / West Boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
10.	34 Casterton Road	Southern	Potential to impact amenity with excessive or elevated noise	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
3.	Excessive noise at any sensitive receptors from vehicle movements (loaders, haul trucks)	C, O, R	Likely	Minor	MEDIUM
4.	Excessive noise at any sensitive receptors from processing plant (incl. fixed and mobile crushers)	C, O, R	Likely	Moderate	HIGH
5.	Excessive noise at any sensitive receptors from blast hole drilling equipment (drill rig)	C, O, R	Likely	Minor	MEDIUM
6.	Excessive noise at any sensitive receptors from excavating equipment (dozer, loader, excavator)	C, O, R	Likely	Minor	MEDIUM

Quarrying Considerations

A quarry with associated extractive activities has been at the site or in the immediate vicinity of WA410 since the late 1800's. Due to its proximity to the township of Coleraine, the site is (always has been) highly visible. The primary crusher, a principle source of noise from the site has been in its current location since the mid 1970's and has operated with the knowledge of council an the regulator without issue. This extension will not increase the noise impact. The extension of the quarry to the east and south east will marginally increase the distance to receptors to the west (from drilling, load and haul equipment) and as vegetation is progressively established, will soften (reduce, but not completely remove) the impact of noise from the quarry. In addition, this Work Plan describes a northern, eastern and a southern bund, that will also be vegetated with trees and

shrubs to further assist in screening the operation from immediate neighbours (receptors). Additionally, the activity area is surrounded by rural agriculture which assists in "diluting" noise attenuation.

Lot 6 and Lot 12 Pitcher Street are not included as sensitive receptors as they are both uninhabitable, unoccupied and planned to be removed.

Several residences are located within 1000m of the Work Authority boundary, the closest being a residence 150m to the North of the WA boundary on Templeton Street, with remainder of the residences 'skirting' the Pitcher Street and Templeton Street boundaries. There is a potential for site generated noise emissions to impact on these residences, as identified in the Acoustic Report prepared by CET titled "ACOUSTIC REPORT for RIGBY BROTHERS QUARRY, COLERAINE, VICTORIA" dated 12 January 2024. The report identifies the need for further measure to ameliorate noise at proximate sensitive receptors which are outlined below. The prime source of noise is the primary crusher, which has been in operation since 1978. The acoustic reports makes some recommendation re noise mitigation which will be implemented. It is emphasisied that both the MRSDA and the EPA GED both talk of ".. as far as reasonably practicable.." This site will surely test this interpretation, as it is argued that local all receptors (they cannot argue they did not know a quarry was in the area!) have been aware of the quarry and, by choosing to live in close proximity to the quarry, have a higher tolerance for noise impacts than a typical "urban" receptor.

The screening bund as designed and operations staying within the proposed 'daylight' operating hours are not expected to result in an increase in noise impacts. This work plan variation does not describe any increase in output, no increase in blasting frequency and no increase of other activities that will adversely impact noise generated from the site. More stringent traffic control and realignment of the haul road will marginally improve noise attenuation from quarry traffic as the perimeter bunds are constructed and vegetation established. The screening bund will be constructed in segments with the initial construction opposite the nearest residences. Additionally, no site activities will be undertaken8 from 6am to 7am (within the EPA 'night period'). The progressive construction of the screening bund and transition from initial surface extraction the noise impacts will reduce over time.

The screening bund and vegetation provide additional control measures to ensure operations, particularly overburden removal and drilling at the southern end of the site, are shielded from the residences to the south.

The fixed plant will eventually be relocated to the southern extension area, where it can take advantage of noise attenuation to the south and east by being located in the cutting, below natural ground, as well as the perimeter bund to the south and east, and stockpiles to the west. Mobile crushing and screening will also be introduced, which provides greater flexibility in locating plant. In the meantime, the current crushing and screening activities will incorporate a noise damping system, most likely consisting of rubber matting or similar to reduce the likelihood of intermittent noise exceedances during boot tipping activities, a significant but intermittent noise source. Overburden placed in the southern section of the site, will be shielded by the screening bund and vegetation. There is no planned change to the current operating hours and align with the current EPA 'day period'.

Drill and blast activity is infrequent, with an expected 2 to 3 blasts per year approximately.

The above outlined actions demonstrate as far as reasonably practicable, that the activity can significantly improve on past performance and not adversely increase impact the nearby receptors, and with the proposed control measures and monitoring, as documented below, the risks

associated with noise from the operation will be minimised as far as reasonably practicable. Therefore, compliance with the EPA General Environmental Duty can be expected.

A Noise Management Plan has been implemented which identifies the noise creating activities and adopted controls as well as roles and responsibilities of employees.

Objectives

The key objectives of this risk treatment plan are to:

- Manage and minimise offsite noise impacts on nearby sensitive receptors, including members of the public, residential land uses and other sensitive land uses and environments
- Reduce noise generation from onsite activities and materials handling to the extent practicable
- Eliminate or reduce noise related complaints from residences
- Noise experienced by nearby sensitive receptors is within limits set by EPA

Compliance standards

The compliance standards for this risk treatment plan are:

- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Publication 1823.1, June 2021: Mining and Quarrying – Guide to preventing harm to people and the environment
- EPA Publication 1254.2, May 2021: Noise Control Guidelines
- EPA Publication 1826.4, May 2021: Noise Limit and Assessment Protocol for the Control of Noise from Commercial, Industrial and Trade Premises and Entertainment Venues.

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- No noise complaints are received.
- Noise is managed to minimise risks to sensitive receptors, as far as reasonably practicable, in line with the General Environmental Duty

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Compliance to approved operating hours (Within the EPA 'Day Period' hours)	Hours as stipulated in the Work Plan or Planning Permit (or as otherwise amended by the planning permission) Extraction and processing EPA 'Daylight Hours' Monday to Friday No work on Saturday, Sundays and Public Holidays
2.	No noisy activities (earthworks, truck loading, haulage) permitted onsite within 250m of residences close to EPA 'night period hours'.	No onsite activities during and EPA 'night period' hours No exceedances of noise limits at residences during EPA 'night period' hours
3.	Establishment of screening bund, with initial segments constructed opposite the nearest residences	Compliance to Site Layout Plan and EPA noise limits
4.	Limitations on initial construction activities (e.g. bunds, haulage routes, crushing and screening) to be carried out in accordance with adherence to EPA noise limits.	Initial Construction Activities: EPA 'Daylight Hours' Monday to Friday Construction activities managed as outlined above.

5.	Extraction sequencing, equipment orientation and position to take advantage of shielding from bunds, vegetation, topography, stockpiles or other constructed features	Compliance to Site Layout Plan Locations with noise generating activities effectively screened from noise sensitive receptors.
6.	Screening operational areas from noise sensitive receptors: • Locate site access roads away from sensitive receptors; • Use of existing features (i.e. topography, vegetation) and stockpiles / bunds or other constructed features as noise barriers.	Compliance to Site Layout Plan Locations of noise generating activities effectively screened from noise sensitive receptors.
7.	Maintain access roads and site tracks in good condition	Roads and access tracks graded as required to minimise corrugations and potholes
8.	Minimise noise generated from plant operation, including vehicle speeds limits, quiet material unloading, minimise engine revving, etc.	Speed / traffic management signs maintained at critical locations, and drivers trained to operate plant so as to minimise noise generation and to report atypical noise.
9.	Reversing squawkers fitted to appropriate mobile plant	Squawkers fitted and operational to all mobile equipment
10.	Equipment selection and maintenance regime in accordance with manufacturer specifications.	All plant and equipment chosen and maintained as per manufacture specification to minimise noise emission
11.	Engineered noise abatement for grizzlies, crushers, conveyors, vibrating screens, stacking conveyors, pumps (only for pumping sediment dam) • Damping system encompassing the lining of the crusher bins with rubber matting or similar	Noise abatement devices fitted and maintained as per manufacture specification

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
3.	Excessive noise at any sensitive receptors from vehicle movements (loaders, haul trucks)	C, O, R	Possible	Minor	MEDIUM
4.	Excessive noise at any sensitive receptors from processing plant (incl. mobile plant, screens, stackers)	C, O, R	Possible	Minor	MEDIUM
5.	Excessive noise at any sensitive receptors from blast hole drilling equipment (drill rig)	C, O, R	Possible	Minor	MEDIUM
6.	Excessive noise at any sensitive receptors from excavating equipment (dozer, loader, excavator)	C, O, R	Possible	Minor	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Noise at sensitive receptors	Periodic noise monitoring will be undertaken to verify equipment noise levels, to ensure noise management measures remain effective and the operation is not emitting unreasonable noise. Complaints, as well as other community engagement activities, and any resulting actions will be documented. Where monitoring is directed by EPA or ERR, monitoring will be in accordance with the regulatory agencies' requirements. The adequacy of control measures against the GED will be assessed through the periodic monitoring, general observation as part of routine site inspections and feedback through community engagement.

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Incidents of noise complaints	Internally/ On Event	Use information to confirm presence of any noise issues, and identify key noise generating activities and necessary remedial actions, in addition to those in site layout plan.
2.	Reportable Events under MRSDA (non-compliance with approval, for noise impacts)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	CMPA Noise Management Guidelines	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Noise Management Plan	Site Office
4.	Work Plan / Work Authority Conditions	Site Office
5.	Planning Permit Conditions	Site Office

2.3. Dust

Scope

This risk treatment plan is to assess and manage the potential dust impacts to sensitive receptors during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Crown Allotment 54 Section 23)	Eastern boundary	Potential to impact amenity with excessive or elevated dust	Proximity to site
2.	12 (Lot 25) Pitcher Street	Southern boundary	Potential to impact amenity with excessive or elevated dust	Proximity to site
3.	6 (Lot 24) Pitcher Street	Southern boundary	Potential to impact amenity with excessive or elevated dust	Proximity to site
4.	Lot 1 Gray Street	Southern boundary	Potential to impact amenity with excessive or elevated dust	Proximity to site
5.	Pitcher Street	Southern boundary	Potential to impact amenity with excessive or elevated dust	Proximity to site
6.	Templeton Street	Western boundary	Potential to impact amenity with excessive or elevated dust	Proximity to site
7.	Cameron Street	Northern boundary	Potential to impact amenity with excessive or elevated dust	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
7.	Excessive dust from vehicle movements on all access roads, site roads and hardstands impacting sensitive receptors	C, O, R	Possible	Moderate	MEDIUM
8.	Excessive dust from processing plant and equipment impacting sensitive receptors	C, O, R	Likely	Moderate	HIGH
9.	Excessive dust from blast hole drilling & blasting impacting sensitive receptors	C, O, R	Possible	Moderate	MEDIUM
10.	Excessive dust from overburden dumps (construction & maintenance) impacting sensitive receptors	C, O, R	Possible	Moderate	MEDIUM
11.	Excessive dust from stockpiles impacting sensitive receptors	C, O, R	Possible	Moderate	MEDIUM
12.	Excessive dust when stripping impacting sensitive receptors	C, O	Likely	Moderate	HIGH
13.	Excessive dust during rehabilitation impacting sensitive receptors	O, R	Likely	Moderate	HIGH

Quarrying Considerations

Several residences are located within 1000m of the Work Authority boundary, the closest being a residence 150m to the North of the WA boundary on Templeton Street, with remainder of the residences 'skirting' the Pitcher Street and Templeton Street boundaries. There is a potential for site generated dust emissions to impact on these residences.

Lot 6 and Lot 12 Pitcher Street are not included as sensitive receptors as they are both uninhabitable, unoccupied and planned to be removed.

The low level of activity for this quarry means that the impacts will be relatively minor, for this operation, hence standard industry control measures are implemented for these hazards, which will be sufficient to minimise any risks posed. These hazards do not require specialised risk

management at this site. A Dust Management Plan has been implemented which identifies the dust generating activities and adopted controls as well as dust monitoring and a daily action plan.

Soil and overburden stripping will be avoided on hot, windy days, or as much as possible after extended dry periods where the inherent moisture content is reduced. There will be ample water (supply and storage) on site to manage dust through traditional methods, i.e. water carts and water sprays, sprinkler systems, etc. Mains water is available if required to supplement on-site water supply.

The above control measures demonstrate that the proposed activity can comply with EPA air pollution limits, without the need for formal monitoring. As documented below, the risks associated with dust generated on site will be minimised as far as reasonably practicable. Therefore, compliance with the EPA General Environmental Duty can be expected.

Respirable Crystalline Silica Risk

The AED Consulting Group report titled 'Analysis of Rock Samples for Rigby Bros Quarry' dated 12 March 2021 confirmed the lack of respirable silica within the resource. This operation does not pose a risk to the public from any fugitive respirable crystalline silica dust leaving the site, as the rock is a trachyte with negligible to no crystalline silica content, and therefore it is not possible to generate any respirable crystalline silica dust that could be carried off site, refer to AED (2021) report. WorkSafe Victoria recognises that the crystalline silica contents in Basalt is less than 1%, and trachyte has a similar low level of crystalline silica and not considered a 'crystalline silica substance' under the Occupational Health and Safety Regulations 2017 (OH&S Regulations). WorkSafe Victoria has advised that such operations do not need to comply with the OH&S Regulations relating to a 'crystalline silica process'. As no risk is posed to the health of onsite workers from respirable crystalline silica dust, the operation cannot possibly produce fugitive respirable crystalline silica dust that could pose a risk to the public.

Objectives

The key objectives of this risk treatment plan are to:

- Manage and minimise offsite dust impacts on all nearby sensitive receptors including members of the public, residential land uses, and other sensitive land uses or environments
- Control dust at the source. Reduce or prevent dust generated from onsite activities and materials transport, to the extent practicable
- Minimise the impact to the local environment and amenity, to protect the environmental values of the air as defined in the Environment Reference Standard

Compliance standards

The compliance standards for this risk treatment plan are:

- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Environment Reference Standard 2022 (ERS), or as amended, and National Environment Protection Measure (Ambient Air Quality) (NEPM AAQ)
- EPA Publication 1518, March 2013: Recommended Separation Distances for Industrial Residual Air Emissions
- EPA Publication 1823.1, June 2021: Mining and Quarrying – Guide to preventing harm to people and the environment
- EPA Publication 1961, Feb 2022: Guideline for Assessing and Minimising Air Pollution in Victoria

- EPA Publication 1894, September 2020: Managing Soil Disturbance – Guidance sheet
- EPA Publication 1895, September 2020: Managing Stockpiles – Guidance sheet
- EPA Publication 1897, Sept 2020: Managing Truck and Other Vehicle Movement – Guidance sheet

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- No nuisance dust related complaints
- Dust emissions are managed to minimise risks to sensitive receptors, as far as reasonably practicable, in line with the General Environmental Duty

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Minimise exposed / disturbed areas	Compliance to maximum disturbed area at any given time
2.	Stripping tasks restricted to areas within 250m from nearby sensitive receptor (nearest residence) // Stripping tasks halted whenever dust generated will drift toward a nearby residence(s) located at <250m from the WA boundary	Stripping confined to approved disturbance areas // Stripping activity stopped if wind speed and direction generate dust drifting toward a nearby residence at <250m
3.	Water cart / sprays used on exposed areas, roads, hardstand areas and stockpiles	Water cart and ample supply of water available on forecast hot, dry days or during extended dry periods when inherent moisture content is reduced
4.	Water sprays at critical location on any mobile and fixed processing plant	Ample supply of water available on forecast hot, dry days or during extended dry periods when inherent moisture content is reduced
5.	Crushing plant, screen boxes and conveyors are enclosed. Conveyor transfer points are fitted with dust suppression water systems (water mist and fog).	Dust suppression devices fitted to all operating dust-generating plant. Ample supply of water available for dust suppression water systems.
6.	Minimising exposure between conveyor discharge and top of stockpile	Conveyor and stockpile monitored and adjusted, as necessary, to minimise exposure
7.	Dry excavated material to be wetted in hot, dry, windy conditions or whenever dust generation requires	Quarry Manager's discretion based on weather forecast, visual observation or stakeholder engagement
8.	Minimise vehicle movements (restrict to designated areas) and limit vehicle speeds, adjusting speed as necessary to conditions	Speed / traffic management signs maintained at critical locations, and drivers trained to drive to conditions so as to minimise dust generation
9.	Suspension of potentially dusty operations (including blasting) during hot, dry, high wind conditions or whenever dust generation requires	Quarry Manager's discretion based on weather forecast, visual observation or stakeholder engagement
10.	Cover vehicles carrying dusty materials when transferring material from the site or treat with water to minimise dust	All dusty loads covered at weighbridge or sprayed with water prior to leaving site to transfer materials
11.	Contour, vegetate and stabilise screening bunds, as soon as practicable, and also topsoil / overburden stockpiles to be retained more than 3 months, as well as buffer areas	Screening bunds and topsoil / overburden stockpiles vegetated and stabilised within 3 months of construction. Planted vegetation maintained
12.	Progressively contour and vegetate topsoil stockpiles and overburden dumps to be retained more than 6 months, as well as outer faces of raised pads and rehabilitated landforms	Topsoil stockpiles and overburden dumps vegetated and stabilised within 6 months of construction. Stockpiles located and size minimised, as far as practicable, to reduce dust generation. Planted vegetation maintained
13.	Establish initial pasture on progressively rehabilitated landforms (cut or backfill), as soon as practicable.	Topsoiled and planted pasture on cut or backfill batters awaiting rehabilitation within 3 months. Pasture to be fully established within 12 months. Planted vegetation maintained
14.	Dust suppression equipment maintenance regime in accordance with manufacturer specifications.	All plant and equipment maintained as per manufacture specification to maximise dust suppression

15.	Continual visual monitoring by all staff for dust leaving the site, throughout operations, and notification to the Quarry Manager promptly for remedial action	No nuisance dust impacts to sensitive receptors

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
7.	Excessive dust from vehicle movements on all access roads, site roads and hardstands impacting sensitive receptors	C, O, R	Unlikely	Moderate	MEDIUM
8.	Excessive dust from processing plant and equipment impacting sensitive receptors	C, O, R	Possible	Moderate	MEDIUM
9.	Excessive dust from blast hole drilling & blasting impacting sensitive receptors	C, O, R	Unlikely	Moderate	MEDIUM
10.	Excessive dust from overburden dumps (construction & maintenance) impacting sensitive receptors	C, O, R	Unlikely	Moderate	MEDIUM
11.	Excessive dust from stockpiles impacting sensitive receptors	C, O, R	Unlikely	Moderate	MEDIUM
12.	Excessive dust when stripping impacting sensitive receptors	C, O	Possible	Moderate	MEDIUM
13.	Excessive dust during rehabilitation impacting sensitive receptors	O, R	Possible	Moderate	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Ongoing visual monitoring of dust generated on site by all staff	Visual monitoring for dust leaving the site Hourly assessment of dust on hot, dry or windy days
2.	Weather forecast and onsite conditions for potential adverse dust generating conditions	Monitor for likely adverse dust generating conditions that may lead to nuisance dust impacts to sensitive receptors
3.	Surface condition of exposed areas, roads, hardstand areas and stockpiles	Visual observation during regular inspections and informally by mobile plant operators and truck drivers
4.	Functionality of crushing plant's dust suppression systems	Plant pre starts – preventative maintenance cycle
5.	Complaints and observations / comments from sensitive receptors	Complaints and comments recorded

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Occurrences of dust leaving the site	Quarry Manager / On Event	Use data to confirm presence of any dust issues, and identify key dust generating activities and necessary remedial actions
2.	Excessive visible dust being generated by activities on site	Quarry Manager / On Event	To identify key dust generating activities and investigate any need for remedial actions to reduce dust generation
3.	Incidents of dust related complaints and comments	Quarry Manager / On Event	To identify dust related impacts to sensitive receptors and any targeted remedial actions necessary to rectify the issue
4.	Reportable Events under MRSDA (non-compliance with approval, for dust impacts)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	EPA guidance sheets (publications 1894, 1895, 1897)	https://www.epa.vic.gov.au/about-epa/publications
2.	CMPA Dust Management Guidelines	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site office
2.	Site Layout Plan	Work Plan
3	Dust Management Plan	Site office
4	Work Plan / Work Authority Conditions	Site office
5	Planning Permit Conditions	Site Office

2.4. Surface Water Flows

Scope

This risk treatment plan is to assess and manage the potential impacts of surface water flows (including storm events) into and through the site, or surface water flows diverted around the site, where the environment or sensitive receptors may be affected during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Note that all risks associated with erosion and sedimentation that may result from such surface water flows are addressed in the separate risk treatment plan for erosion and sedimentation.

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Surface water and environment	Waterway (Konong Wootong Creek 200m to the west) and three (3) DELWP mapped wetlands to the south of Work Authority	Potential to be impacted by modified flows from the catchment area	Downslope of site
2.	Neighbouring properties	Adjacent land downstream of Work Authority	Potential to be impacted by modified flows from the catchment area	Downslope of site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequences	Inherent Risk Rating
14.	Diverted surface flows impacting downstream environments	C, O, R	Unlikely	Minor	MEDIUM
15.	Storm water overwhelming water management infrastructure leading to flooding of the quarry and causing impacts to the adjacent land or environment	C, O, R	Unlikely	Minor	LOW

Quarrying Considerations

There are no waterways or drainage lines within the Work Authority that would require diversion and minimal risk of any diverted surface flows impacting any waterways. The closest mapped wetlands are associated with the water plant, some 450m to the southwest. Bryan Creek is some 730 metres to the south and Konong Wootong Creek some 200m to the west of the site.

The site water management strategy includes diversion of surface water flows away from disturbed areas across undisturbed ground, collecting and distributing it around the works, and to direct and collect incident rainfall and surface water flows on disturbed ground into sediment traps and sumps in the base of the excavation, below natural ground. If necessary, these sumps will be drained with pumps and the water used to irrigate rehabilitated areas or the surrounding pasture, and as a contingency the water can be directed to the sediment dam in the southeast corner of the Work Authority. The key water management features for managing any offsite impacts of surface water flows are also shown on Figure 3, Site Layout Plan, and any of these features retained at closure are shown on Figure 4, Rehabilitation Landform.

A Water Management Plan has been developed which describes the various water management features and a Trigger Action Response Plan (TARP) that responds to any water related events outside the standard water management controls.

The disturbance area will be enclosed with bunds / cut-off drains that divert clean water away from the disturbed area and return the surface flows back to their natural pathways. The principal purpose of the perimeter bunding is to create a visual screen and so will be far larger (in the order of 4m high) than the design required to divert surface water flows even at in consideration of the most extreme peak flows during storm events.

Objectives

The key objectives of this risk treatment plan are to:

- Protect the environmental values of the local water environment as defined in the Environment Reference Standard
- Manage and minimise the impact of any diversion of surface water flows required by the operation
- Manage and minimise the impact to onsite infrastructure, and resulting offsite impacts, due to storm events

Compliance standards

The compliance standards for this risk treatment plan are:

- Water Act (1989)
- Catchment and Land Protection Act (1994).
- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Environment Reference Standard 2022 (ERS), or as amended

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Storm water runoff and diverted flows are managed to minimise risks to downstream environments, as far as reasonably practicable, in line with the General Environmental Duty
- No detrimental effects to downstream environments due to diverted flows
- No storm water flooding / inundation of site infrastructure with subsequent offsite impacts.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Install diversion drainage structures (visual screening bunds, swales, etc) up-gradient of working areas to prevent clean surface water from entering the excavation / disturbance area.	Surface water diversion structures installed and effectively intercepting surface water before it reaches operating areas, as per the site layout plan. (Figure 3)
2.	Rain fall checked hourly on BoM website during significant rainfall events.	Daily records of rainfall, time and date maintained.
3.	Discharge points of diverted surface water flows direct water toward natural flow paths	Surface water flows diverted around the site returned to original flow paths, as far as practicable, as per the site layout Plan.
4.	Construct internal roads / tracks with sufficient diversion drains and culverts to manage stormwater flows.	Drainage structures associated with internal roads / tracks effectively manage stormwater flows.
5.	Where not part of a visual screening bund, diversion drains typically 1m wide and 0.4m deep adequate to accommodate the water flows from storm events (ie 5% AEP)	Diversion drains capable of handling major (5% AEP) storm event
6.	Maintain a sump in base of the excavation	Compliance to Work Plan, Water Management Plan and Site Layout Plan

7.	Maintenance of appropriate freeboard on all water storages / sediment dams / sumps to control offsite discharge	Freeboard levels maintained to prevent uncontrolled offsite discharge

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequences	Residual Risk Rating
14.	Diverted surface flows impacting downstream environments	C, O, R	Unlikely	Minor	LOW
15.	Storm water overwhelming water management infrastructure leading to flooding of the quarry and causing impacts to the	C, O, R	Rare	Minor	LOW

#	Details of the Risk Event	Phase	Likelihood	Consequences	Residual Risk Rating
	adjacent land or environment				

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Effectiveness of diversion drainage structures (pipes, bunds, swales, etc)	3 monthly inspection of diversion drainage structures to check performance, and remedial actions taken as necessary
2.	Effectiveness of storm water culverts and discharge points	Inspect drainage structures and discharge points after storm events to assess performance
3.	Retention of stormwater in sediment traps and sumps	Inspect for residence time of collected stormwater runoff
4.	Storage capacity / freeboard in all water storages, sediment dams and sumps	Storage capacity / freeboard to manage rainfall events – checking if sediment dams or sumps require clearing of sediment

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Effectiveness of diversion drainage structures	Internal reporting for site management after significant rainfall event or three monthly	To identify any necessary remedial actions required for diversion drainage structures, and for reviewing performance of the site's water management
2.	Effectiveness of stormwater culverts and discharge points	Internal reporting for site management after significant rainfall event or three monthly	To identify any necessary remedial actions required for stormwater culverts and discharge points, and for reviewing performance of site's water management
3.	Storage capacity / freeboard in all water storages, sediment dams and sumps	Internal reporting for site management after significant rainfall event or three monthly	To identify any necessary remedial actions, and/or modifications to maintain capacity / freeboard
4.	Reportable Events under MRSDA (non-compliance with approval, in managing impacts of surface water flows)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Guidelines for the Management of Water in Mines and Quarries (Earth Resources Regulator)	https://earthresources.vic.gov.au/legislation-and-regulations/guidelines-and-codes-of-practice/guidelines-management-of-water-in-mines-and-quarries
2.	CMPA Water Management Guidelines	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site Office
4.	Planning permit conditions	Site Office

2.5. Erosion and Sedimentation

Scope

This risk treatment plan is to assess and manage the potential impacts from erosion mobilising sediment, due to water flows on and across the site, and that sediment being carried offsite and affecting the environment or sensitive receptors during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Surface water and environment	Waterway (Konong Wootong Creek 200m to the west) and three (3) DELWP mapped wetlands to the south of Work Authority	Potential to be impacted by turbid water leaving the site	Downslope of site
2.	Neighbouring properties and public roadways	Adjacent land downstream of Work Authority	Potential to be impacted by turbid water leaving the site	Downslope of site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
16.	Erosion from stockpiles (product and other) resulting in silt laden run-off	C, O, R	Likely	Minor	MEDIUM
17.	Erosion from screening bunds resulting in silt laden run-off	C, O, R	Likely	Minor	MEDIUM
18.	Erosion from hardstand areas resulting in silt laden run-off	C, O, R	Likely	Minor	MEDIUM
19.	Erosion from roads and other disturbed areas resulting in silt laden run-off	C, O, R	Likely	Minor	MEDIUM
20.	Silt laden water discharged to the environment from a water dam overtopping	C, O, R	Possible	Minor	MEDIUM

Quarrying Considerations

Uncontrolled surface water flows across disturbed areas may cause erosion to take place, transporting sediment from extraction areas, stockpiles, constructed embarkments, natural slopes and rehabilitated landforms. Sediment deposition may affect land within the Work Authority area or neighbouring lands and waterways. There are no waterways or drainage lines within the Work Authority that could be affected. The closest mapped wetlands are associated with the water plant, some 450m to the southwest. Bryan Creek is some 730 metres to the south and Konong Wootong Creek some 200m to the west of the site.

WA410 is an existing, operating extractive operation with extraction and processing activities. The proposed expansion of the extraction area will result in the extraction moving to the east and south of the existing pit, as well as deeper. Stockpiles, both product and topsoil, and waste dumps as well as hardstand and other disturbance areas will be created. Whilst the development will not impact any drainage lines uncontrolled runoff / surface water flows may cause erosion to take place from extraction areas, stockpiles, constructed bunds, natural slopes and rehabilitated landforms. Sediment deposition may affect the Work Authority area or neighbouring lands.

The topographic constraints on the northeastern side of the extraction area will necessitate the diversion of some surface water flows into the pit. For the remainder of the site, the surface water

management strategy is to divert surface water flowing across undisturbed ground and distributing it around the works, where possible, by the strategic location of swale drains, bunding, sediment traps and sumps to ensure this water does not leave the site and is instead directed to the sediment dam within the extraction area.

The dams have been in place for decades. Sediment laden water from overtopping of the dams will be contained within the WA boundary by the screening bund and be directed to the pit sump.

An assessment of the erosion potential of the terminal batters on the upper benches has been undertaken (see attached Geotechnical Assessment). This assessment concludes that the risks associated with the erosion hazard on the upper batters can be adequately managed through batter design, revegetation and, where necessary, additional short-term erosion control measures until vegetation is established.

It is demonstrated that the steepest proposed batter design (1V:3H) can achieve the criteria of the Commonwealth of Australia (2016) guidelines within 2 years, with the short-term erosion control measures minimising the initial erosion within this period.

The measures adopted when disturbing new ground will be consistent with EPA guidelines and overburden and topsoil stockpiles will be contoured and vegetated as necessary or otherwise stabilised to manage erosion. Acceptance criteria are provided below to define the upper limit for erosion from earthworks on rehabilitated terminal batters (cut or backfill) that have not yet been stabilised to control erosion. Obtaining a quantitative measure of erosion is difficult, therefore the stated acceptance criteria for erosion are based on a qualitative (visual) assessment. Refer to Section 4.1 of the Rehabilitation Plan for discussion of suitable erosion criteria.

Objectives

The key objectives of this risk treatment plan are to:

- Prevent erosion and sediment runoff from onsite activities
- Manage and minimise offsite impacts of erosion and sediment run-off on surrounding environments
- Protect the environmental values of the local water environment as defined in the Environment Reference Standard
- Minimise the risk of failure of onsite infrastructure or rehabilitated areas due to erosion

Compliance standards

The compliance standards for this risk treatment plan are:

- Catchment and Land Protection Act (1994).
- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Environment Reference Standard 2022 (ERS), or as amended
- EPA Publication 1823.1, June 2021: Mining and Quarrying – Guide to preventing harm to people and the environment
- EPA Publication 1893, September 2020: Erosion, Sediment and Dust: Treatment Train –
- Guidance sheet
- EPA Publication 1894, September 2020: Managing Soil Disturbance – Guidance sheet
- EPA Publication 1895, September 2020: Managing Stockpiles – Guidance sheet

- EPA Publication 1896, September 2020: Working Within or Adjacent to Waterways – Guidance sheet

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Erosion and sedimentation are managed to minimise risks to downstream environments, as far as reasonably practicable, in line with the General Environmental Duty
- No delivery of sediment to land or waterways outside the Work Authority area
- No unmanaged areas of active soil erosion within the Work Authority area or adjacent areas due to site discharges
- Erosion: on rehabilitated terminal batters (cut or backfill) that have not yet been stabilised, including interim batters between stages, no erosion channels greater than 200mm deep and/or wide
- Erosion: on rehabilitated terminal batters (cut or backfill) that have not yet been stabilised, including interim batters between stages, no more than 5 erosion channels greater than 150mm deep and/or wide within a 20m wide area

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Surface water management and sediment controls maintained, and adapted as required, around all ground disturbing activities	Surface water management and sediment control structures effective in limiting / controlling erosion and sedimentation, and in accordance with the site layout plan.
2.	Construction of erosion and sediment control features consistent with EPA guidance	All works consistent with EPA guidance
3.	Maintain compliance to any EPA standards regarding management of any potential offsite discharge	Compliance to Work Plan Conditions and any EPA permission
4.	Design of all quarry faces, bund embankments and mounds to incorporate swales or catch drains as necessary.	All works in accordance with design to minimise erosion, as per site layout Plan
5.	Divert surface water away from disturbed areas with swale drains and bunds.	Minimal surface flows over disturbed areas with diversion structures, as per site layout plan
6.	Planning vegetation clearing and earthworks to limit, as far as practicable given operational requirements, the total erodible surfaces exposed at any one time. The screening bund will be used as temporary diversion structures during stripping, contoured and grassed to limit erosion	The total area of exposed erodible surfaces including the screening bund will be minimised.
7.	Construct all internal roads and tracks with sufficient diversion drains and culverts to ensure that stormwater is diverted away from roads.	Roads and tracks designed to minimise erosion and, where necessary, employ surface treatment to reduce erosion.
8.	Drainage off roads to be directed to vegetated areas through erosion protection structures	Side and angled drains off collection drains protected against erosion.
9.	Ensure that the gradient and orientation of tracks do not cause runoff to be fast flowing	Maintenance of tracks to minimise erosion.
10.	Strategic location of the sediment traps / dams.	Sediment traps / dams located as per site layout plan
11.	Clear sediment traps / dams and sumps of sediment, as necessary, to maintain sediment holding capacity	Functionality of sediment traps / dams and sumps maintained as per site layout plan
12.	Runoff from designated processing areas will be directed to the in pit water storage sump.	Runoff from all processing areas is directed to the in pit water storage sump.
13.	Overburden / top soil stockpiles, if located outside drained hardstands, have a contour drain at the base to intercept sediment-laden runoff and direct into the in pit sump or sediment dam.	Sediment-laden water draining from overburden / top soil stockpiles prevented from discharging from disturbance areas.

14.	Contour, vegetate and stabilise the visual screening bunds., which will be retained at closure to be retained more than 6 months	Screening bund stabilised when retained more than 6 months from construction. Planted vegetation maintained
15.	Progressively contour and vegetate topsoil stockpiles and overburden dumps to be retained more than 6 months, as well as outer faces of raised pads and rehabilitated landforms	Topsoil stockpiles and overburden dumps vegetated and stabilised within 6 months of construction. Planted vegetation maintained.
16.	Establish initial pasture on upper terminal batters in erodible materials, as soon as practicable.	Progressive rehabilitation to topsoil and plant pasture on upper terminal batters awaiting rehabilitation within 3 months and interim batters inactive for greater than 12 months. Pasture to be fully established within 12 months. Any erosion on rehabilitated upper terminal batters that are not yet stabilised is within erosion acceptance criteria (above). Planted vegetation maintained and remedial action taken if erosion criteria exceeded
17.	Erosion to be minimised in erodible materials on rehabilitated terminal batters (cut or backfill) that have not yet been stabilised, including interim batters, with early revegetation of grasses to reduce surface flows and erosion.	Progressive rehabilitation in accordance with Rehabilitation Plan. Any erosion on rehabilitated terminal batters that are not yet stabilised is within erosion acceptance criteria (above). Planted vegetation maintained and remedial action taken if erosion criteria exceeded.
18.	Establish initial vegetation on upper terminal batters in erodible materials and the screening bund, as soon as practicable, and also interim batters left inactive for more than 12 months	Progressive rehabilitation in accordance with Rehabilitation Plan. Topsoiled and planted grasses on upper terminal batters awaiting rehabilitation within 3 months and interim batters inactive for greater than 12 months. Grasses to be fully established within 12 months. Any erosion on rehabilitated upper terminal batters and the screening bund that are not yet stabilised is within erosion acceptance criteria (above). Planted vegetation maintained and remedial action taken if erosion criteria exceeded.
19.	Longitudinal swale drains on terminal faces awaiting rehabilitation and working faces after 12 months of inactivity	Treatment of terminal faces awaiting rehabilitation and working faces inactive for greater than 12 months. Remedial action taken if erosion criteria (above) exceeded.

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
16.	Erosion from stockpiles (product and other) resulting in silt laden run-off	C, O, R	Unlikely	Minor	LOW
17.	Erosion from bunds resulting in silt laden run-off	C, O, R	Unlikely	Minor	LOW
18.	Erosion from hardstand areas resulting in silt laden run-off	C, O, R	Unlikely	Minor	LOW
19.	Erosion from roads and other disturbed areas resulting in silt laden run-off	C, O, R	Unlikely	Minor	LOW
20.	Silt laden water discharged to the environment from a water dam overtopping	C, O, R	Unlikely	Minor	LOW

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Water management structures (drains, bunds, sediment traps and Dam, etc) evaluated for performance	Inspection of all water management structures after each significant rainfall event, remedial works as required.
2.	Sediment holding capacity of all sediment traps / dams and sumps	Three monthly inspections of sediment accumulation – checking if structures require clearing of sediment
3.	Evidence of erosion and subsequent sediment-laden runoff	Monthly inspections will be conducted of the site, as well as following significant rainfall events, which will include overburden and topsoil stockpiles, surface water management structures (including sedimentation dams), and potential receiving drainage lines. Inspections, and any required monitoring and remedial actions documented in site record book.

4.	Surface water quality	Regular surface water quality monitoring is not proposed but may be undertaken for specific investigations or if directed by the ERR.

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Surface water management structure performance in preventing offsite turbid discharge	Internally after three monthly inspections and after significant rainfall events.	To identify any necessary remedial actions required to maintain performance of surface water management features
2.	Sediment holding capacity of all sediment traps / dams and sumps	Internal reporting for site management after significant rainfall event or three monthly	To identify any necessary remedial actions, and/or modification of TARP (Water Storages / Sediment Dams), required to maintain sediment holding capacity
3.	Erosion from long-term stockpiles and rehabilitated terminal batters	Internally after monthly inspections and after significant rainfall events. Level of erosion on topsoil / overburden stockpiles retained more than 6 months. Level of erosion on rehabilitated terminal batters.	To identify any necessary remedial actions required to minimise erosion and generation of sediment-laden runoff.
4.	Surface water quality	The results of any required monitoring will be reported to ERR / EPA, and to other stakeholders through the community engagement process.	If necessary, water quality monitored to ensure it is in line with EPA requirements prior to discharge, and for reviewing performance of the site's water management process
5.	Reportable Events under MRSDA (non-compliance with approval, in managing impacts of erosion and sedimentation)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	EPA guidance sheets (publications 1893, 1894, 1895)	https://www.epa.vic.gov.au/about-epa/publications
2.	Guidelines for the Management of Water in Mines and Quarries (Earth Resources Regulator)	https://earthresources.vic.gov.au/legislation-and-regulations/guidelines-and-codes-of-practice/guidelines-management-of-water-in-mines-and-quarries
3.	CMPA Water Management Guidelines	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site office
4.	Planning Permit Conditions	Site office

2.6. Ground Disturbance

Scope

This risk treatment plan is to assess and manage the potential impacts resulting from ground disturbing activities occurring within the site, where the environment or sensitive receptors may be affected during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

However, all risks associated with the impact of ground disturbance on ground instability, surface water flows or any resulting erosion and sedimentation are addressed in separate risk treatment plans.

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Aboriginal cultural heritage	Aboriginal Cultural Heritage Sensitivity (ACHS) area in proximity to Lot 26 Pitcher Street south of Work Authority boundary.	Potential for Aboriginal cultural heritage to be impacted by ground disturbing activities within WA	Increased potential for Aboriginal cultural heritage to be discovered in operations
2.	Ecological values of native vegetation	Native vegetation within and adjacent to disturbance area	Potential to be impacted by ground disturbing activities within the WA	Proximity to site
3.	Ecological values of DELWP mapped wetland and waterways	Konong Wootong Creek and three DELWP mapped wetlands 24472 and 24554 to the southwest and 24476 to the east of the WA	Potential to be impacted by ground disturbing activities within the WA	Proximity to site
4.	Groundwater	Groundwater well below quarry floor Water within aquifers below ground	Potential to be impacted by ground disturbing activities within the WA	Visualising Victoria's Groundwater website
5.	Nearby residences	2 residences are located in proximity to the site with the closest being 150m from the WA boundary	Potential to be impacted by ground disturbing activities within the WA	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
21.	Ground disturbing works inadvertently destroy historical heritage	C, O, R	Unlikely	Minor	LOW
22.	Ground disturbing works impacting on ecological values of retained native vegetation	C, O, R	Possible	Minor	MEDIUM
23.	Ground disturbing works resulting in impact to Konong Wootong Creek three DELWP mapped wetlands	C, O, R	Unlikely	Minor	LOW
24.	Ground disturbing works impacting on groundwater	C, O, R	Unlikely	Minor	LOW
25.	Ground disturbing works impacting residences in and public roadways	C, O	Possible	Moderate	MEDIUM

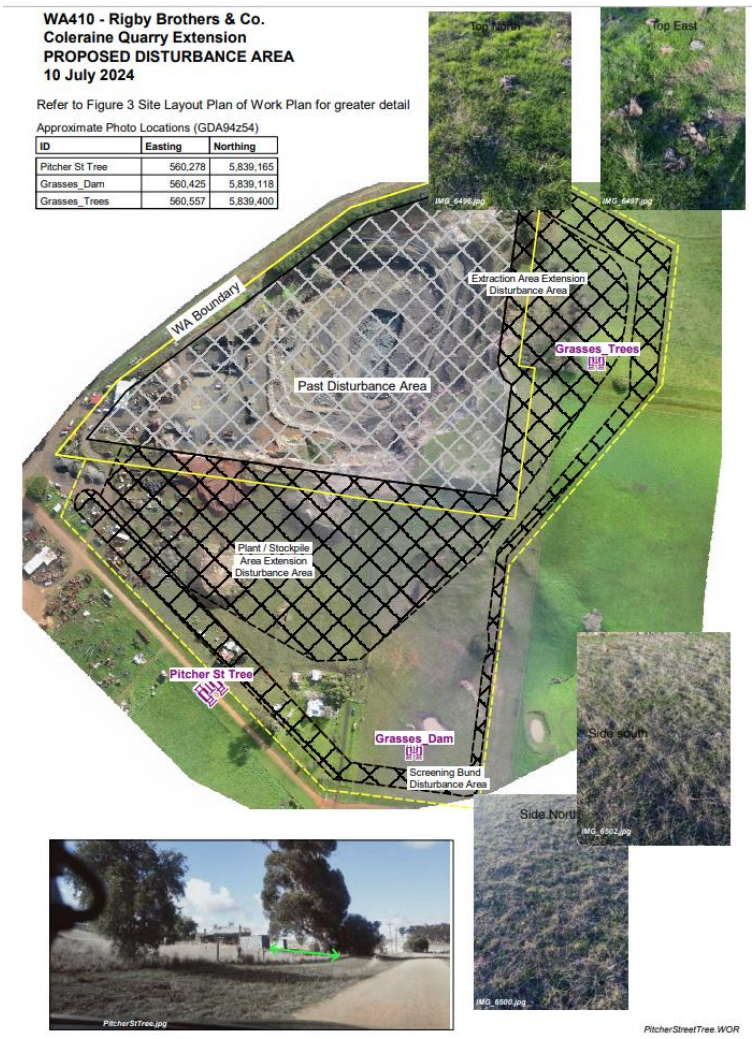
Quarrying Considerations

Aboriginal Cultural Heritage Sensitivity: An Aboriginal Cultural Heritage Sensitivity (ACHS) trigger area now encroaches the Work Authority along the Templeton Street Boundary, and also the western extremity of Lot 12 Pitcher Street (see Figure 3 Site Layout Plan). The 1978 approved Work Authority Area is exempt from any further investigation, citing either prior approval, ie the granting

of the Work Authority before the 2010 AHA or significant ground disturbance (it has been quarried out). More accurately, the WA was approved prior to the introduction of the 2010 AHA. The small area of ACHS impacting the Pitcher Street - Templeton Street Corner allotment has been removed from the Work Authority to minimise the risk to aboriginal heritage. This decision was taken after receiving conflicting advice from two Registered Aboriginal Parties, a local RAP representative, an Elder of the Boandik – Gunditjmara, who visited the site and did a cultural walk over and advised there was no cultural objects of aboriginal significance, and a representative of the Gunditj Mirring Traditional Owners Aboriginal Corporation (GMTOAC), who advised via a phone call that a mandatory CHMP would be required in any area of aboriginal cultural heritage is impacted by the activity. The conflicting advice was presented to a heritage consultant, who strongly advised "just remove the area". The Boandik – Gunditjmara Elder Letter of Advice is attached. There is no documented advice from GMTOAC or from the heritage advisor.

Heritage Victoria: There are no sites of historic heritage in the vicinity listed on either the Victorian Heritage Inventory or the Victorian Heritage Register or shown on any Heritage Overlay under the Planning Scheme. This has been confirmed by Heritage Vitoria via email.

Accessible Native Vegetation: The extraction area is predominantly in the current pit area with the trachyte resource extracted to a greater depth. There is some small increase in extraction into the paddocks that have been planted out with trees (northeast area), farmed, cropped and grazed (east and southeast area) or used as equipment / mobile plan storage (south) for several generations. A stand of planted eucalyptus trees to the northeast will be removed as part of this work plan, with DELWP agreeing (in 2017) that these trees are not assessable native vegetation as defined by the 2017 Guidelines for removal, destruction or lopping of native vegetation. As no native vegetation is being removed, and no vegetation offsets are required, a formal ecological assessment has not been undertaken.



Given the time lag from this original advice, and the lack of any formally documented advice from DELWP, further advice and clarification was

obtained from DEECA-PEA, which is included as 'Native Vegetation Advice'. This advice confirms that there is no accessible native vegetation being removed as a result of this Work Plan Variation.

Konong Wootong Creek 200m to the west and three DELWP mapped wetlands within 2km of the quarry, 24472 and 24554 to the southwest and 24476 to the northeast, which are defined as native vegetation. This work plan does not describe any drainage line diversion or intersection, and the perimeter bunding and visual screening ensures overland flows from outside the Work Authority are diverted around any disturbed ground, and will not impact these wetlands. Although, the site is relatively small, and the perimeter bunding that will be established on approval of the work plan, a separate Water Management Plan has been prepared. All the surface water management infrastructure is shown of Figure 3 Site Layout Plan.

Groundwater has not been encountered in the current excavation and is not expected to be intercepted within the extension area. The Visualising Victoria's Groundwater database suggests the depth to groundwater is approx. 15m or greater below the surface in the general area, this is confirmed by the 1980's bore located to the south of the WA. The geotechnical assessment has also concluded that ground water "is not anticipated to significantly influence pit wall stability" As no groundwater is expected to be intercepted, a formal groundwater assessment has not been undertaken.

Objectives

The key objectives of this risk treatment plan are to:

- Minimise potential for ground disturbing works to impact on heritage values, ecological values, environmental values of groundwater and proximate residences, due to exposed materials.

Compliance standards

The compliance standards for this risk treatment plan are:

- Aboriginal Heritage Act (2006)
- Heritage Act (2017)
- Guidelines for the Removal, Destruction or Lopping of Native Vegetation (DELWP, 2017)
- Catchment and Land Protection Act (1994)
- EPA Environment Reference Standard 2022 (ERS), or as amended, as it relates to groundwater

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- The discovery of any Aboriginal cultural heritage is managed in accordance with the Aboriginal Heritage Act
- The discovery of any historical heritage is managed in accordance with the Heritage Act
- No unauthorised impacts on ecological values of native vegetation
- No adverse impacts on the environmental values of groundwater in the vicinity as a result of ground disturbing works
- No turbid runoff and water within pit lake, as a result of ground disturbing works.
- No impact to proximate residences and roads

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Quarry Manager aware of requirements of Aboriginal Heritage Act 2006 and contingency measures for the discovery of any artefacts.	Monitoring for heritage artefacts during all soil and subsoil removal activities Compliance to Work Authority and Work Plan conditions
2.	Quarry Manager aware of requirements of Heritage Act 2017 and the contingency measures for the discovery of any artefacts.	Monitoring for heritage artefacts during all soil and subsoil removal activities Compliance to Work Authority and Work Plan conditions
3.	Operator training, operating procedures and supervision regarding discovery of Aboriginal or historic artefacts.	Standard Operating Procedures (SOPs)
4.	Maintaining agreed buffer zones.	Compliance to Work Plan and Site Layout Plan
5.	Fencing and signage of "no-go" areas, including native vegetation to be retained.	Suitable / effective fencing and signage in place.
6.	Maintain planted vegetation to ensure continued viability.	Compliance to Work Plan and Site Layout Plan
7.	All extraction will take place above the groundwater level	Regular monitoring for any groundwater inflow.
8.	Maintain compliance to any conditions of Rural Water Authority and/or EPA regarding management of groundwater impacts	Compliance to Work Plan Conditions and any EPA permission
9.	Visual monitoring of extraction area for presence of groundwater inflows.	Cease extraction if groundwater intercepted and report to relevant Water Authority.
10.	Appropriate signage and alerts near proximate residences and public roadways.	Standard Operating Procedures (SOPs)

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
21.	Ground disturbing works inadvertently destroy historical heritage	C, O, R	Rare	Minor	LOW
22.	Ground disturbing works impacting on ecological values of retained native vegetation	C, O	Rare	Minor	LOW
23.	Ground disturbing works resulting in impact to three DELWP mapped wetlands	C, O, R	Rare	Minor	LOW
24.	Ground disturbing works impacting on groundwater	C, O, R	Rare	Minor	LOW
25.	Ground disturbing works impacting residences in and public roadways	C, O	Possible	Moderate	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Aboriginal and historic heritage	Monitoring for heritage artefacts during all soil and subsoil removal activities, with contingency management measures in place.
2.	Unauthorised impacts on native vegetation	Native vegetation condition visually monitored and accidental damage to be reported to Quarry Manager. Fencing and buffer zone security and maintenance will be monitored through regular inspections.
3.	Condition of planted vegetation	Monitor for continued viability and maintain as necessary
4.	Groundwater inflows	The extraction area will be continually monitored for the presence of groundwater inflows during extraction activities.

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?

1.	Aboriginal Cultural Heritage Sensitivity self-assessment	Aboriginal Cultural Heritage Sensitivity self-assessment declaration have been completed and attached.	Identification of works that would require approval of a mandatory Cultural Heritage Management Plan (CHMP)
2.	Heritage impacts	Reporting as required under contingency measures and the Aboriginal Heritage Act and Heritage Act to all relevant authorities and indigenous stakeholders.	Mandatory reporting to regulator
3.	Groundwater inflows / infiltration	The presence of any groundwater within the extraction area will be reported to both the relevant Water Authority and ERR	To trigger a cessation of work in that area and the application for appropriate licensing arrangements.
4.	Groundwater impacts	The results of any required groundwater monitoring will be reported to ERR and/or the relevant Water Authority, and to other stakeholders through the community engagement process.	To identify any impacts to groundwater and, if impacted, identify any necessary targeted remedial actions and/or modification of
5.	Reportable Events under MRSDA (non-compliance with approval, in managing impacts of ground disturbance)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Guidelines for the Management of Water in Mines and Quarries (Earth Resources Regulator)	https://earthresources.vic.gov.au/legislation-and-regulations/guidelines-and-codes-of-practice/guidelines-management-of-water-in-mines-and-quarries
2.	Guidelines for the Removal, Destruction or Lopping of Native Vegetation (DELWP, 2017)	https://www.environment.vic.gov.au/native-vegetation/native-vegetation
3.	Applicant's Guide – Applications to Remove, Destroy or Lop Native Vegetation (DELWP, 2018)	https://www.environment.vic.gov.au/native-vegetation/native-vegetation

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site Office
4.	Planning Permit Conditions	Site Office

2.7. Ground Instability

Scope

This risk treatment plan is to assess and manage the potential hazard of ground instability within the site, where the environment or sensitive receptors may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Crown Allotment 54 Section 23)	Eastern boundary	Potential to be impacted by batter failure	Proximity to site
2.	12 (Lot 25) Pitcher Street	Southern boundary	Potential to be impacted by batter failure	Proximity to site
3.	6 (Lot 24) Pitcher Street	Southern boundary	Potential to be impacted by batter failure	Proximity to site
4.	Lot 1 Gray Street	Southern boundary	Potential to be impacted by batter failure	Proximity to site
5.	Pitcher Street	Southern boundary	Potential to be impacted by batter failure	Proximity to site
6.	15 Templeton Street	Southern boundary	Potential to be impacted by batter failure	Proximity to site
7.	53 Templeton Street	North / West Boundary	Potential to be impacted by batter failure	Proximity to site
8.	63 Templeton Street	North / West Boundary	Potential to be impacted by batter failure	Proximity to site
9.	68 Templeton Street	North / West Boundary	Potential to be impacted by batter failure	Proximity to site
10.	34 Casterton Road	Southern	Potential to be impacted by batter failure	Proximity to site
11.	Templeton Street & Pitcher Street	Western & Southern Boundary	Potential to be impacted by batter failure	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
26.	Batter failure impacting buffer zone or beyond WA boundary	O, R	Possible	Moderate	MEDIUM
27.	Localised (single bench) failure / Localised failure of upper batter in diggable material	O, R	Possible	Minor	MEDIUM
28.	Excessive erosion compromising stability and impacting buffer zone or beyond WA boundary	O, R	Possible	Moderate	MEDIUM

Quarrying Considerations

Lot 6 and Lot 12 Pitcher Street are not included as sensitive receptors as they are both uninhabitable, unoccupied and planned to be removed.

Failure of operating, terminal or rehabilitated quarry faces could impact on adjoining properties or community assets (roads) outside the WA boundary. The max terminal depth will be 65m, a combination of 6m (in the upper batters) and 12m benches (in the lower batters within the 'fresh' material) will be incorporated as part of the design. The depth of 65m will be achieved on the Cameron Street (East) side of the proposed extraction area. The Templeton Street side of the pit will be approximately 35m in depth.

Terminal faces will be re-profiled within the overburden material, to form a stable, a minimum 1V:3H rehabilitated batter. The current terminal faces in the fresh trachyte (at WA410) have been shown to be stable in excess of 30 to 40 years. The currently proposed pit geometry, resulting in an overall slope of 1V:1H consisting of individual bench heights of between 10m to 15m in the moderately weather to fresh material respectively couple with a final rehabilitation profile of 1v:3h in the overburden, and the WA buffer provides an adequate separation distance to any proximate receptors. This geometry results in a Factor of Safety (FoS) of 1.6 for the terminal batters and > 2.0 for the final (rehabilitated profile) batters.

Noting that general practice is for working faces to be blasted at an angle of 75-80 degrees, but once the expected levels of back break and subsequent final wall scaling, with controlled blasting techniques, as necessary, are factored in the terminal face will be at a maximum angle of 70 degrees. Once the terminal faces in rock are established, the likelihood of small failures and rock falls at the bench scale will be significantly reduced, and after an initial settling period the likelihood will further reduce with time.

The terminal bench design incorporates berm widths that match the minimum bench widths derived in the Geotechnical Assessment but are actually in addition to the backbreak and scaling that is already accounted for in establishing the terminal faces. The Geotechnical Assessment demonstrates that, in the event of any bench scale failure impacting these berms on terminal faces, the berm widths are sufficient to prevent such failures propagating up the slope and to catch the debris of any such failures and rock falls.

Regionally, the quarry is located within the Jurassic Den Hill Formation comprising volcanic domes and laccoliths of trachyte, phonolite and microsyenite. Surrounding the site is Quaternary aged alluvium to the north and Carboniferous to Permian Bacchus Marsh Formation. The Bacchus Marsh Formation comprises glacial deposits.

The trachyte resource ranges from moderately weathered to fresh. The moderately weathered trachyte, locally referred to as ‘Salamander’, has red-brown staining and extends to a depth of approximately ten metres from the top of the eastern wall, and seven metres (one bench height) on the western and southern walls. The slightly weathered to fresh trachyte is pale grey in colour and extends to the current pit floor and will extend to the proposed terminal pit associated with the work plan variation.

The geological / geotechnical model developed from the field investigation programs has been used in designing the extraction and rehabilitation sequence outlined in this proposal. In particular a crucial aspect of stability is the structural (geology) control on the respective faces. This deposit has strong structural on most walls, in particular the eastern and western walls. This is evident in the existing faces in WA410, as shown below:

Above – Typical the extraction area at WA410 showing strong structural control on existing pit batters

The groundwater level was identified in the resource drilling and the extraction floor will be approximately 15 metres below the planned terminal pit depth.

Blasting is routinely conducted as part of the extraction works. Blast management planning ensures blasting impacts, including back-break, are considered in blast design along with production rates and size profiles.

There are no other on-site or adjoining activities that would impact on the stability of the excavation.

There are no apparent faults in the pit, nor is there any history of seismic activity. As noted above the designed pit floor will be above groundwater.

There has been no record of slope failures or face instability due to ground movement at this site.

A geotechnical analysis of the proposed terminal slopes (see attached Geotechnical Assessment by CMQ Geotechnics). Additionally, CMQ has undertaken an assessment of erosion for the weathered zone (included in Geotechnical Assessment). Slope stability analysis determined Factors of Safety in excess of the nominated design criteria, and CMQ found that the residual risk to external receptors was assessed to be “Low”.

A Ground Control Management Plan (GCMP) for the site had also been developed by BCA and has been subsequently updated see (attached). The GCMP discusses and details the management and monitoring requirements which will be adopted at the site, which may include, but are not limited to, blast management, bench scaling and visual inspections, as well as periodic review of the GCMP document.

In support of the GCMP the site layout plan sets out the site water management strategy. This includes diversion of surface water flows, where possible, away from disturbed areas across undisturbed ground and, in particular, the localised management of surface water flows above pit crests, to ensure stability of upper weathered units. This approach will act to minimise erosion and ensure the upper batters in diggable / erodible material are vegetated and stabilised as soon as practicable. The key water management features for managing any offsite impacts of surface water flows are also shown on Figure 3, Site Layout Plan, and any of these features retained at closure are shown on Figure 4, Rehabilitation Landform.

The excavation will not intersect groundwater, with the interpreted groundwater table being some 15m below the surface.

Objectives

The key objectives of this risk treatment plan are to:

- Minimise potential for ground slips / failures to impact beyond the extraction limit

Compliance standards

The compliance standards for this risk treatment plan are:

- Geotechnical Guideline for Terminal and Rehabilitated Slopes – Extractive Industry Projects (ERR)
- CMPA Working Safely with Geotechnical Risk in Quarries

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- No ground slips / failure impacting beyond Extraction Boundary.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Marking out extraction boundary	Extraction Boundary marked with Yellow Posts
2.	Maintain buffer zones to Work Authority boundary	Compliance to Work Plan / Site Layout Plan
3.	Compliance to design of all quarry faces, embankments and mounds.	Compliance to Work Plan / Site Layout Plan / Ground Control Management Plan
4.	Stability assessment, as / if triggered by Ground Control Management Plan to confirm material strength parameters and slope design.	Review triggered and undertaken once a suitable depth of material / geological features are exposed, in accordance with Ground Control Management Plan, and performed by a suitably qualified and experienced person
5.	Undertake minimum five-yearly stability reviews after initial stability assessment, and other reviews, in accordance with geotechnical review triggers.	Reviews undertaken in accordance with Ground Control Management Plan and performed by a suitably qualified and experienced person
6.	Screening bunds max 4m high without benching. If bund higher bund heights become necessary, these will be formed in accordance with GCMP. No side slopes steeper than 1V:3H.	Compliance to Work Plan and Ground Control Management Plan
7.	Divert surface water away from cut batters / embankments with swale drains and bunds.	Compliance to Work Plan / Site Layout Plan Surface water controls designed to minimise erosion on upper terminal batters, as per site layout Plan
8.	Dewatering of batters and berms, with surface drainage controls in place ensuring long-term pooling of water is avoided.	Compliance to Work Plan / Site Layout Plan / Ground Control Management Plan Minimal surface water flows toward extraction areas and diversion structures in place above pit crests, and flows into the pit are carried to pit floor without long-term pooling on berms, as per Water Management Plan.
9.	Maintain terminal batters consistent with approved design by utilising blast site surveying, final wall scaling and, as necessary, controlled blasting techniques (e.g. contour, pre-split or trim blasting). Terminal benches cleared of loose rock, as necessary, following final wall scaling.	Terminal batters remain consistent with the design criteria in the Work Plan / Site Layout Plan, including overall slope angle, and are developed in accordance with Ground Control Management Plan.
10.	Site inspections at least monthly, before (if possible) and immediately after forecast significant rainfall events, and after completion of rehabilitation works.	Compliance to Work Plan / Site Layout Plan / Ground Control Management Plan Compliance to Rehabilitation Plan (Monitoring schedule)
11.	Investigation of any localised bench failures for evidence of potential larger or propagating failure.	Compliance to Work Plan / Site Layout Plan / Ground Control Management Plan Compliance to Rehabilitation Plan (Monitoring schedule)

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
26.	Batter failure impacting buffer zone or beyond WA boundary	O, R	Rare	Moderate	MEDIUM
27.	Localised (single bench) failure / Localised failure of upper batter in diggable material	O, R	Rare	Minor	LOW
28.	Excessive erosion compromising stability and impacting buffer zone or beyond WA boundary	O, R	Unlikely	Minor	LOW

Monitoring

#	Aspect to be monitored	Details of monitoring

1.	Slope stability	Regular Inspections will be conducted of extraction faces (both operating and rehabilitated), extraction pit perimeter and site surface water management structures in accordance with Ground Control Management Plan. Standard operating procedures require all operators to report changes in ground conditions. Inspections, reports and any remedial actions will be documented in site record book. Geological / geotechnical mapping, rockfall recording, materials testing, survey pin / prism and/or crack monitoring, as necessary, in accordance with the Ground Control Management Plan Results of site inspection and any remediation works recorded in the site record book.
2.	Surface water management	Inspections minimum monthly and after rain events will be conducted and include all surface water management structures. Inspections and any required remedial actions documented in site record book.
3.	Groundwater inflow	The extraction area will be continually monitored for the presence of groundwater inflows during extraction activities

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Slope stability	Internal reporting on performance of slopes and stability monitoring, at least annually, in line with Ground Control Management Plan. The results of any investigations of localised face failures, excessive surface cracking or other signs of instability will be documented under the site's Ground Control Management Plan. As appropriate, results also reported to ERR and any potentially impacted stakeholders.	Management intervention and, where necessary, for redesign of terminal batters, in accordance with Ground Control Management Plan. Data will be utilised in reviews under the Ground Control Management Plan.
2.	Groundwater	The presence of any groundwater within the extraction area will be reported to both the relevant Water Authority and ERR	Where necessary, triggering cessation of work in that area and the application for appropriate licensing arrangements. Data will be utilised in reviews under the Ground Control Management Plan.
3.	Surface water management	Internal reporting on performance of surface water management structures, for site management, after significant rainfall event or three monthly	To identify any necessary remedial actions required for surface water management features, and for reviewing performance of the site's water management
4.	Reportable Events under MRSDA (unexpected slope failure, progressive slope collapse, failure of slope stability control measures)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Geotechnical Guideline for Terminal and Rehabilitated Slopes – Extractive Industry Projects (Earth Resources Regulator)	https://earthresources.vic.gov.au/legislation-and-regulations/guidelines-and-codes-of-practice
2.	Guidelines for the Assessment of Geotechnical Risks in Open Pit Mines and Quarries (Earth Resources Regulator)	https://earthresources.vic.gov.au/legislation-and-regulations/guidelines-and-codes-of-practice/guidelines-assessment-of-geotechnical-risks-in-open-pit-mines
3.	CMPA Working Safely with Geotechnical Risk in Quarries	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Ground Control Management Plan	Site Office

4.	Site layout Plan	Site Office
5.	Work Plan / Work Authority Conditions	Site Office
6.	Planning Permit Conditions	Site Office

2.8. Blasting

Scope

This risk treatment plan is to assess and manage the potential impacts from blasting activities conducted on the site, where sensitive receptors may be affected during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Crown Allotment 54 Section 23)	Eastern boundary	Potential to be impacted by excessive blasting nuisances	Proximity to site
2.	Lot 1 Gray Street	Southern boundary	Potential to be impacted by excessive blasting nuisances	Proximity to site
3.	Pitcher Street	Southern boundary	Potential to be impacted by excessive blasting nuisances and flyrock	Proximity to site
4.	15 Templeton Street	Southern boundary	Potential to be impacted by excessive blasting nuisances and flyrock	Proximity to site
5.	53 Templeton Street	North / West Boundary	Potential to be impacted by excessive blasting nuisances and flyrock	Proximity to site
6.	63 Templeton Street	North / West Boundary	Potential to be impacted by excessive blasting nuisances and flyrock	Proximity to site
7.	68 Templeton Street	North / West Boundary	Potential to be impacted by excessive blasting nuisances	Proximity to site
8.	10 Residents along Casterton Road (street numbers 4, 6, 14, 22, 24, 26, 28, 30, 32, 34/36).	Southern	Potential to be impacted by excessive blasting nuisances	Proximity to site
9.	Coleraine Sports Park	550m Southwest of WA	Potential to be impacted by excessive blasting nuisances	Proximity to site
10.	Coleraine Showgrounds	350m Southwest of WA	Potential to be impacted by excessive blasting nuisances	Proximity to site
11.	Glenelg Highway	South of WA	Potential to be impacted by excessive blasting nuisances and flyrock	Proximity to site
12.	Casterton Road	South of WA	Potential to be impacted by excessive blasting nuisances	Proximity to site
13.	Coleraine Balmoral Road	North of WA	Potential to be impacted by excessive blasting nuisances	Proximity to site
14.	Coleraine Edenhope Road	North of WA	Potential to be impacted by excessive blasting nuisances	Proximity to site
15.	Powerline	Low voltage above ground powerline, adjacent to Templeton Road (south side)	Potential to be impacted by flyrock	Proximity to site
16.	Two bridges on the Glenelg Highway	South and Southwest of the WA	Potential to be impacted by excessive blasting nuisances	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
29.	Excessive ground vibration at closest receptors	C, O, R	Likely	Moderate	HIGH
30.	Excessive airblast at closest receptors	C, O, R	Likely	Moderate	HIGH

31.	Blasts resulting in fly rock impacting members of public	C, O, R	Possible	Critical	VERY HIGH
32.	Blasts resulting in fly rock impacting infrastructure	C, O, R	Possible	Moderate	HIGH

Quarrying Considerations

Lot 6 and Lot 12 Pitcher Street are not included as sensitive receptors as they are both uninhabitable, unoccupied and planned to be removed.

Blasting is a highly regulated activity with very prescriptive legislation and regulations. A specific Blast Management Plan is developed and documented before, during and after each individual blast, as per regulatory requirements. This includes the establishment of an appropriate Blast Exclusion Zone for each blast. All blasting associated activities are undertaken by appropriately trained and, where required, licensed individuals or contractors. Blast Management Plans will be continually updated, based on monitoring results, to meet the requirements set out in Section 131 of the Dangerous Goods (Explosives) Regulations 2022 and Appendix 2 of AS 2187.2-2006

Explosives – Storage and Use, Part 2: Use of Explosives, and any specific requirements of the Earth Resources Regulator, and are in general alignment with the CMPA Blast Management Plan Template in the Construction Materials Industry. The Blast Management Plan includes blast design, initiation sequence and the site-specific procedures for exclusion zones, notifying neighbours and any other protocols that are required, as well as any monitoring locations that are required.

The Earth Resources Regulator guidance defines sensitive sites, with respect to ground vibration and airblast, as including any land within 10m of a residence, hospital, school, or other premises in which people could reasonably expect to be free from undue annoyance and nuisance caused by blasting. The closest residence (to the north of Templeton Street) is approximately 150m and there are several other residences with 300m of potential blast locations. Blasting impacts at the closest residences will be managed with appropriate blast design.

Blasting has been conducted at WA 410 since the 1930's, and even today is infrequent, with 2 to 3 blasts per every 1 to 2 years (the site only sells approx. 30-40,000 tpa). The Rigbys have been conducting their own blasting since the mid 1960's and have a sound understanding of the grounds behaviour and how the rock structure behave with blasting and the extension area is not anticipated to present new challenges for Shot Firers and blast designers familiar with the regional geology.

Ground vibration and airblast are controlled by designing all shots to minimise impacts as far as reasonably practicable at the nearest sensitive sites and susceptible infrastructure and to meet the prescribed limits. All shots are videoed and where necessary the shots will also be monitored and the results recorded to inform subsequent designs with the goal of demonstrating compliance with the ground vibration and airblast overpressure limits and fly rock occurrences. The blast facing orientations will always be designed to minimise the airblast and fly rock risks by ensuring that blasts face away from the nearest sensitive sites, as far as practicable. The proposed direction of working shown in Figure 3 Site Layout is designed to achieve this outcome.

A Controlled Blasting Zone is to be established within 200m of WA boundary. Within this zone blast designs will be modified to further limit the potential for fly rock impacts to members of the public

Each blast within this zone will have its own specifically designed Blast Exclusion Zone that includes Blast Guards / Sentries on the public roads.

Blasting has been shown numerous times to have low or negligible impacts to native fauna and/or livestock in the vicinity of quarries. The infrequent effects of blast noise and airblast overpressure experienced by nearby stock / native fauna being likened to that of a single, brief thunderclap, to

which stock and fauna are accustomed. Therefore, it is not considered that any credible risk is posed to stock or native fauna from blasting activities on the site.

There will be no storage of explosives, primers, detonators, delays or other such explosive materials on site in excess of the minimums set by WorkSafe. Otherwise, all material required for the blast will be delivered on the day of the blast, with all excess material removed the same day.

Blasting times will be consistent with those approved for the adjacent WA410, i.e. to the period from 10:00 am to 4:00 pm Monday to Friday, and all neighbours are engaged prior to blasting.

Individual Blast Management Plans and appropriate Blast Exclusion Zones are developed and implemented for each individual blast, as required by relevant Regulations.

Objectives

The key objectives of this risk treatment plan are to:

- Minimise potential for excessive ground vibration and airblast at sensitive sites.
- Minimise potential of fly rock to cause harm.

Compliance standards

The compliance standards for this risk treatment plan are:

- As far as reasonably practicable strive for ground vibration (peak particle velocity) below 5 mm/s in at least 95 per cent of cases in a 12-month period and must not exceed 10 mm/s at any time, as measured at any sensitive site, or as otherwise limited by standards applied by ERR, the Council or other regulatory authority.
- As far as reasonably practicable strive for Airblast overpressure below 115 dB(L) in at least 95 per cent of cases in a 12-month period and must not exceed 120 dB(L) at any time, as measured at any sensitive site, or as otherwise limited by standards applied by ERR, the Council or other regulatory authority.
- Fly rock: no fly rock to leave the Blast Exclusion Zone or impacting people or infrastructure.
- Blast Management Plans in accordance with Section 131 of the Dangerous Goods (Explosives) Regulations 2022 and Appendix 2 of AS 2187.2-2006 Explosives – Storage and Use: Use of Explosives.
- Sensitive site: includes any land within 10m of a residence, hospital, school, or other premises in which people could reasonably expect to be free from undue annoyance and nuisance caused by blasting.

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- No fly rock leaving Blast Exclusion Zone
- No fly rock impacting people or infrastructure
- No blasting related issues / complaints experienced by nearby sensitive sites

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*

1.	Each shot designed and documented by a licensed Shot Firer and reviewed by Quarry Manager, with adaptation as necessary based on blast monitoring results.	Shot Firer and Quarry Manager review blast layout, drawing on experience and advice from drilling contractor and explosive supplier, document in the Blast Management Plan
2.	Blasting orientation for each shot designed to minimise the airblast and fly rock risks by ensuring that blasts face away from the nearest sensitive sites and minimise any Blast Exclusion Zones extending beyond WA boundaries.	Shot Firer and Quarry Manager review blast layout, drawing on experience and advice from drilling contractor and explosive supplier, document in the Blast Management Plan
3.	Establish "Controlled Blasting Zones" within 200m of adjacent public roads where blast designs are modified to limit fly rock, with blasts facing away from WA boundary, and temporary closure of the public roads and posting of Blast Guards / Sentries at time of shot.	"Controlled Blast Zones" documented on the Site Layout Plan and in the Blast Management Plan. Shot Firer and Quarry Manager review all blasts monitoring records / blast design for compliance to Blast Management Plan with closure of adjacent public roads (ie Blast Exclusion Zones)
4.	All blasts within the Controlled Blasting Zones monitored for fly rock, ground vibration and airblast and reviewed by the Quarry Manager.	Shot Firer to include records of blast design review in the Blast Records.
5.	All blasts within the Asset Protection Zones monitored for fly rock, ground vibration and airblast and reviewed by the Quarry Manager.	Shot Firer to include records of blasting design review in the Blast Records.
6.	Documented blast hole layout plan, including any special notes (ie hole depth, burden, sub-drill) distributed to Shot Firer, Quarry Manager, Driller	Shot Firer and Quarry Manager review blast layout for compliance to Blast Management Plan
7.	Notify nearby residences / occupiers at least 48 hours before the planned blast, indicating the day and planned time of blast	Quarry Manager to contact relevant receptors, and document on the relevant form/checklist, as per Blast Management Plan.
8.	Blast hole check / pre-shot inspection (documented evidence of hole depth, clearance, water, face, toe, front row burden)	Quarry Manager and Shot Firer review blast hole check, modify explosive charge mass / stemming as required to ensure compliance to Blast Management Plan
9.	Review explosives, primer, detonator, delay inventory	Shot Firer to ensure adequate explosives (bulk, primers, detonators, delays, etc) available
10.	On the morning of the blast, notify nearby residences indicating the planned time of blast	Quarry Manager to contact relevant receptors, and document on the relevant form/checklist, as per Blast Management Plan.
11.	Blasting times will be restricted to 10:00am to 4:00pm Monday to Friday. No blasting on weekends or public holidays.	Compliance to Work Plan and Blast Management Plan
12.	Initiate Blast Day protocols, ie establishment of a Blast Exclusion Zone, comprising signage on day of blast, to restrict access to the blast area and work area whilst loading shot, and other safety and pre-shot requirements	Shot Firer to review Blast Exclusion Zone area and signage to ensure safe loading of shot as per any SOPs, checklists and Blast Management Plan
13.	Prime and load all blast holes in accordance with design and any modification from pre-shot inspection	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
14.	Stem all holes and tie-in detonators, adding surface delays as required	Shot Firer to confirm delay sequence is as per design and any additional stemming as per pre-shot inspection report
15.	Clear the Blast Exclusion Zone of all equipment and non-essential personnel, adding any additional signage as required, posting Blast Guards / Sentries at critical access points, directing all non-essential personnel to designated safe areas, and ensuring all mobile equipment is in designated safe areas.	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
16.	Conduct all pre-blast checks, continuity, exploder, delays, etc, and connect exploder	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
17.	Check video equipment is set up and operational, and if additional monitoring is required	All shots videoed, with files stored on a remotely accessible server
18.	If required, confirm ground vibration and airblast monitoring equipment is set up and operational	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
19.	Initiate Blasting Protocols, ie final visual inspection of blast area, confirmation of safety of non-relevant personnel from Blast Guards / Sentries, blast siren sequence, blast initiation.	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
20.	Initiate Post-Blast Protocols, i.e. observation of shot for NO_2, inspection of shot, the muck profile, the Blast Exclusion Zone, sound "all clear" or initiate mis-fire protocols, as appropriate	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist

21.	No explosives or detonators to be kept on site	Compliance to Work Plan and Blast Management Plan

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
29.	Excessive ground vibration at closest receptors	C, O, R	Possible	Moderate	MEDIUM
30.	Excessive airblast at closest receptors	C, O, R	Possible	Moderate	MEDIUM
31.	Blasts resulting in fly rock impacting members of public	C, O, R	Rare	Critical	HIGH
32.	Blasts resulting in fly rock impacting infrastructure	C, O, R	Rare	Major	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Fly rock	Every blast videoed; files stored on remotely accessible server.
2.	Airblast	The actual Monitoring Location will be dependent upon the location of the blast and closest sensitive site, and documented on the monitoring record. At least 5 consecutive blast monitored for airblast overpressure, then if all compliant, at least 1 per 12 month period or as per ERR request. All blasts within Controlled Blasting Zones monitored for airblast. Copy of blast monitoring report emailed to Quarry Manager
3.	Ground Vibration	The actual Monitoring Location will be dependent upon the location of the blast and closest sensitive site, and documented on the monitoring record. At least 5 consecutive blasts monitored for ground vibration, then if all compliant, at least 1 per 12 month period or as per ERR request. All blasts within Controlled Blasting Zones monitored for ground vibration. Copy of blast monitoring report emailed to Quarry Manager

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Airblast, Ground Vibration and Fly rock	Monitoring results retained on site and made available to ERR on request	Shots monitored and subsequent design adjusted to ensure compliance
2.	Reportable Events under MRSDA (exceedance of ERR conditioned limits, damage to property/infrastructure, injury to public, fly rock ejected beyond area considered in approval, misfires, explosives theft)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Blast Management Plan Template in the Construction Materials Industry (CMPA)	CMPA website
2.	Appendix 2 of AS 2187.2-2006 Explosives – Storage and Use, Part 2: Use of Explosives	

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Blast Management Plans	Site Office
2.	Approved Work Plan & Risk Management Plan	Site Office
3.	Site Layout Plan	Work Plan
4.	Work Plan / Work Authority Conditions	Site office

5.	Planning Permit Conditions	Site office

2.9. Process Water and Storages

Scope

This risk treatment plan is to assess and manage the potential hazard associated with process water and storages on the site, where the environment or sensitive receptors may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Surface water and environment	Waterway (Konong Wootong Creek 200m to the west) and three (3) DELWP mapped wetlands to the south of Work Authority	Potential to be impacted by uncontrolled release / overtopping of water storages	Downslope of site
2.	Neighbouring properties and public roadways	Adjacent land downstream of Work Authority	Potential to be impacted by uncontrolled release / overtopping of water storages	Downslope of site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
33.	Discharge from overtopping of water storage dam to surface waterways and the environment.	O, R	Possible	Minor	MEDIUM
34.	Failure of process water infrastructure resulting in discharge to surface waterways and the environment.	O, R	Possible	Minor	MEDIUM
35.	Failure of a water storage resulting in discharge to surface waterways and the environment.	O, R	Possible	Moderate	MEDIUM

Quarrying Considerations

There will be a sediment dam located within the south easter portion of the extraction area during all stages of the development, then as additional area is opened up to the south, water will be stored in quarry sumps within the excavation and below natural ground level. Excess water from water storages, sediment dams or sumps will be pumped out and used to irrigate rehabilitated areas or the surrounding pasture. There is a risk of water being released from the small sediment dam and escaping to the environment during quarry operations. Otherwise, the design will prevent the release of water from the site.

The topographic constraints on the northeastern side of the extraction area will necessitate the direction of some surface water flows into the pit. For the remainder of the site, the surface water management strategy is to divert surface water flowing across undisturbed ground and distributing it around the works, where possible, by the strategic location of swale drains, bunding, sediment traps and sumps to ensure this water does not leave the site and is instead directed to the sediment dam within the extraction area.

Potential impacts of process water impacting the Konong Wootong Creek and the three DELWP mapped wetlands is considered low and negligible with the standard controls in place, based on the distance from the quarry to these water features.

Objectives

The key objectives of this risk treatment plan are to:

- Manage and minimise the risk of discharge of process water or water from storages that may impact the environment and waterways
- Protect the environmental values of the local water environment as defined in the Environment Reference Standard

Compliance standards

The compliance standards for this risk treatment plan are:

- Water Act (1989)
- Catchment and Land Protection Act (1994)
- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Environment Reference Standard 2022 (ERS), or as amended
- EPA Publication 1823.1, June 2021: Mining and Quarrying – Guide to preventing harm to people and the environment

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Ongoing integrity of process water infrastructure and water storages
- No unauthorised discharge of process water into the environment and waterways
- Process water and storages are managed to minimise risks to downstream environments, as far as reasonably practicable, in line with the General Environmental Duty.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Regular inspection of dam wall integrity	Checklists completed and remedial action documented
2.	Regular inspection of process water infrastructure	Checklists completed and remedial action documented
3.	Strategic location of quarry sumps	Compliance to Work Plan and Site Layout Plan
4.	Maintenance of appropriate freeboard on all water storages / sediment dams to ensure storage integrity	Integrity of water storages / sediment dams maintained through management of freeboard levels
5.	Excess water in water storages / sediment dams / sumps will be irrigated to rehabilitated areas or surrounding pasture, and as a contingency, the water will be directed to the sediment dam.	No water stored at more than maximum freeboard level and no standing water outside of quarry sumps

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
33.	Discharge from overtopping of water storage dam to surface waterways and the environment.	O, R	Unlikely	Minor	LOW
34.	Failure of process water infrastructure resulting in discharge to surface waterways and the environment.	O, R	Unlikely	Minor	LOW
35.	Failure of a water storage resulting in discharge to surface waterways and the environment.	O, R	Unlikely	Moderate	MEDIUM

Monitoring

No water quality monitoring is proposed

#	Aspect to be monitored	Details of monitoring
1.	Integrity of process water infrastructure	Monthly inspection

2.	Integrity of dam walls	Monthly inspection
3.	Storage capacity / freeboard in all water storages and sediment dams	Rainfall events and storage freeboard

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Process water infrastructure integrity	Internally after monthly Inspections	To identify any necessary remedial actions required to maintain infrastructure integrity
2.	Dam wall integrity	Internally after monthly Inspections	To identify any necessary remedial actions required to maintain dam wall integrity
3.	Storage capacity / freeboard in all water storages and sediment dams	Internal reporting for site management after significant rainfall event or three monthly	To identify any necessary remedial actions, and/or modification Storages / Sediment Dams, required to maintain capacity / freeboard
4.	Reportable Events under MRSDA (unexpected/abnormal inrush of water or other fluid, escape/leakage of potentially harmful slurry/substance)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	CMPA Water Management Guidelines	CMPA website
2.	CMPA Working Safely with Geotechnical Risk in Quarries	CMPA website
3.	Your Dam: Your Responsibility – A Guide to Managing the Safety of Small Dams (DELWP, 2018)	https://www.water.vic.gov.au/managing-dams-and-water-emergencies/dams/guidance-notes

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site layout plan	Site Office
3.	Work Plan / Work Authority Conditions	Site office
4.	Planning Permit Conditions	Site office

2.10. Imported Materials

Scope

This risk treatment plan is to assess and manage the potential hazard associated with the importation of materials, e.g. 'clean fill' (uncontaminated soil, including gravel and rock), mulch or recyclable materials (solid inert wastes), for processing, product blending or use in site rehabilitation, where the environment or sensitive receptors may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Surface water	Waterway (Konong Wootong Creek 200m to the west) and three (3) DELWP mapped wetlands to the south of Work Authority	Potential to be impacted by contaminated material imported to the site	Proximity to site
2.	Groundwater	Groundwater well below quarry floor Water within aquifers below ground	Potential to be impacted by contaminated material imported to the site	Visualising Victoria's Groundwater website
3.	Ecological values of land	Surrounding land (onsite and offsite)	Potential to be impacted by contaminated material imported to the site	Proximity to site
4.	Adjoining land uses	Neighbouring properties	Potential to be impacted by contaminated material imported to the site	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
36.	Impacts on surface water and groundwater from imported material containing contaminants	C, O, R	Possible	Minor	MEDIUM
37.	Polluting waste being imported to the site	C, O, R	Possible	Minor	MEDIUM
38.	Introducing weeds or soil-borne diseases	C, O, R	Possible	Minor	MEDIUM

Quarrying Considerations

It is emphasised that the site does not need to import material to fulfil its rehabilitation commitments, and that importing material (under an Imported Material Management Plan) may be undertaken to supplement income.

The site has the capacity to accept large quantities of material for blending and to supplement rehabilitation. This risk treatment plan addresses the risks associated with the importation of 'clean fill' to assist in rehabilitation and for the ongoing activity of blending materials and conditioning soil. 'Clean fill' consists of waste soil (being clay, silt and/or sand), gravel or rock (e.g. 'paddock rock') that is made up of naturally occurring materials. The soil material being classified as 'Fill Material' by the EPA, i.e. it is free from other industrial wastes.

Additionally, other processed or extracted rock will be brought to the site for blending with material extracted onsite to achieve product specifications, however such imported is not classified as 'waste' under EPA legislation.

Any material imported as part of the Work Authority's operations will be handled in accordance with the Imported Materials Management Plan. There is no intention to dispose of any imported waste materials within the backfill deposited in the pit.

Potential impacts of imported materials impacting the Konong Wootong Creek and the three DELWP mapped wetlands is considered low and negligible with the standard controls in place, based on the distance from the quarry to these water features.

Objectives

The key objectives of this risk treatment plan are to:

- Manage imported materials and prevent contamination of the site due to importing hazardous materials or soils carrying seeds of declared weeds or infested with soil-borne plant diseases
- Prevent unlicensed importation and storage of domestic or industrial wastes and hazardous materials

Compliance standards

The compliance standards for this risk treatment plan are:

- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Publication 1823.1, June 2021: Mining and Quarrying – Guide to preventing harm to people and the environment
- EPA Publication 1968.1, August 2021: Guide to classifying industrial waste
- EPA Publication 1828.2, July 2021: Waste disposal categories – characteristics and thresholds
- EPA Publication 1624: Industrial Waste Fact Sheet
- Catchment and Land Protection Act (1994)
- Planning and Environment Act (1987)

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- The management of imported materials does not adversely impact the environmental values of soil, surface water or groundwater, as defined in the Environment Reference Standard, within the Work Authority or its vicinity
- Importation and management of imported materials fully complies with applicable legislative and regulatory requirements
- Imported materials are managed to minimise risks to sensitive receptors, as far as reasonably practicable, in line with the General Environmental Duty.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Implementation of "Imported Materials Management Plan" prior to bringing any soil / fill material, mulch, solid inert waste /rock for blending to the site.	Imported Materials Management Plan in place before the importation of any material, consistent with relevant guidelines and EPA legislation.

2.	Source / supplier of imported material vetted for reputability.	Imported Materials Management Plan in place and all records / checklists up to date.
3.	Imported soils not to be sourced from areas of known declared weed infestation or areas known or suspected to contain Phytophthora cinnamomi.	Vetting procedures in place and followed to ensure soil is not sourced from areas with known weed infestations or known or suspected Phytophthora cinnamomi presence.
4.	All deliveries of imported materials accompanied by a 'Delivery Driver Checklist', or similar docket.	Imported Materials Management Plan in place and all records / checklists up to date.
5.	Confirm the EPA waste classification of the imported materials and confirm that the site is authorised to receive that material, and the importation meets all other EPA / ERR requirements	Imported Materials Management Plan in place and all records / checklists up to date.
6.	Visual inspection of all inbound deliveries prior to accepting on site, and again at point of dumping - rejected loads immediately removed from site.	Imported Materials Management Plan in place and all records / checklists up to date.
7.	Incidental waste that may later be discovered in imported materials are separated, sorted and removed from site.	Imported materials managed in accordance with the Imported Materials Management Plan.
8.	No imported materials in short-term stockpiles outside of approved disturbance area	No short-term stockpiles of imported materials outside of approved disturbance area.
9.	Monitor imported material volumes	Imported material volumes monitored to ensure limits are not exceeded, and in accordance with any EPA permission limits
10.	Maintain compliance to any EPA conditions regarding management of any imported waste materials	Compliance to Work Plan Conditions and any required EPA permission.

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
36.	Impacts on surface water and groundwater from imported material containing contaminants	C, O, R	Unlikely	Minor	LOW
37.	Polluting waste being imported to the site	C, O, R	Unlikely	Minor	LOW
38.	Introducing weeds or soil-borne diseases	C, O, R	Unlikely	Minor	LOW

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Source and characteristics of any imported materials	The Imported Materials Management Plan requires documentation and records of material type, EPA waste classification, tonnages, source / suppliers, inspections and any subsequent remedial action or rejection.
2.	Volumes of imported material received and stored on site	Volumes of imported material stored on site at any one time, as well as monthly volumes received, to ensure compliance with limits set in Imported Materials Management Plan and any EPA permission limits.

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Operation and adequacy of Imported Materials Management Plan	Internally after monthly inspections	To identify any necessary remedial actions, and/or modification of Imported Materials Management Plan.
2.	Importation of non-conforming materials	Report to Quarry Manager on detection / event	Removal / disposal of non-conforming materials.
3.	Reportable Events under MRSDA (non-compliance with approval, in managing impacts of imported materials)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Imported Materials Management Guideline for Mine and Quarry Operations (Earth Resources Regulator)	https://earthresources.vic.gov.au/legislation-and-regulations/guidelines-and-codes-of-practice

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site office
2.	Imported Materials Management Plan	Site office, when developed
3.	Work Plan / Work Authority Conditions	Site office
4.	Planning Permit conditions	Site office

2.11. Unauthorised Site Access

Scope

This risk treatment plan is to assess and manage the potential hazard associated with unauthorised access to the site, where members of the public may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Members of the public	Site accessed from Public Roads	Potential for unauthorised visitors to harm themselves	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
39.	Unauthorised access to quarry faces and operating equipment	C, O, R	Possible	Major	HIGH

Quarrying Considerations

The Work Authority is in a rural residential / farming area, with approximately 13 residences within 500m, with the closest residence, some 150m to the north of the Work Authority Boundary. The Work Authority is bounded with a combination of well-maintained fencing, standard multi-stranded stock proof fencing and vegetated screening bund to all boundaries. There is appropriate signage at the front gate and critical locations on the fences around the site warning of steep high faces. The site is only accessible from Templeton Street (the main access) and a locked farm gate to Pitcher Street.

Objectives

The key objectives of this risk treatment plan are to:

- Provide for the safety of members of the public when accessing a work authority area
- Prevent unauthorised access to the work authority area by members of the public

Compliance standards

The compliance standards for this risk treatment plan are:

- Safety on Public Land Act (2004)
- Work Authority Schedule of Conditions

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Boundary of Work Authority area is appropriately marked and secured to minimise chances of unauthorised entry
- Safety signage is clearly visible around the boundary and at all access points

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Work Authority boundary delineated and site enclosed with appropriate fencing: • Standard multi-stranded stock proof fencing on remainder of boundary	Fencing and boundary posts in place
2.	Gates and fences of suitable design and standard. Access gates to be locked when site unattended	Fencing and gates in place and secured
3.	Signage on fencing warning of operations and high faces	Signage installed
4.	Equipment locked and secured when not in use.	Equipment locked when not in use
5.	Design and construct onsite roads to safely accommodate the size and type of vehicles accessing and travelling within the site. Separate any general traffic from any internal haul routes.	Traffic management implemented
6.	Visitor supervision	Visitor parking near site entrance and visitors record book maintained

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
39.	Unauthorised access to quarry faces and operating equipment	C, O, R	Rare	Major	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Boundary signage and site fence integrity	Annual inspection of all site boundary fencing, signage and gates.
2.	Site visitors	Visitors record book entries completed
3.	Unauthorised entries	Records kept of unauthorised entries

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Boundary and site fence integrity	Annual inspection, outcomes reported internally	To identify any necessary remedial actions, which will be documented in site record book.
2.	Visitor entries	Internal reporting.	Ensure all visitors have exited site prior to end of operating hours.
3.	Unauthorised entries (site security breaches)	Internally reported to site management on event and regulatory authority as required	To improve site security to limit unauthorised site access.
4.	Reportable Events under MRSDA (injury to member of public due to unauthorised access)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	CMPA Traffic Management Guidelines	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Work Plan / Work Authority Conditions	Site office
3.	Planning Permit Conditions	Site office

2.12. Fuel, Lubricants and other Hazardous Materials

Scope

This risk treatment plan is to assess and manage the potential hazards associated with the use and handling of fuel, lubricants and hazardous materials on and across the site, where the environment or sensitive receptors may be affected during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Surface waters	Waterway (Konong Wootong Creek 200m to the west) and three (3) DELWP mapped wetlands to the south of Work Authority	Hydrocarbon and/or chemical release to surface waters	Proximity to site
2.	Groundwater	Groundwater approx. 15m below quarry floor Water within aquifers below ground	Hydrocarbon and/or chemical seepage into groundwater	Visualising Victoria's Groundwater website
3.	Ecological values of adjacent land	Surrounding farmland (onsite and offsite)	Hydrocarbon and/or chemical release to environment	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
40.	Spills / discharges whilst refuelling	C, O, R	Possible	Minor	MEDIUM
41.	Fuel / oil leakage from equipment (mechanical failure, accident)	C, O, R	Possible	Minor	MEDIUM
42.	Spills / damage from hazardous materials storages	C, O, R	Possible	Moderate	MEDIUM

Quarrying Considerations

The operation of the quarry will require the use and storage of hydrocarbons (fuel / oil / grease), dust suppressants, and other chemicals, as well as industrial gases associated with steel cutting (oxy-acetylene and other gases). Other than hydrocarbons and industrial gases, there will only be limited use of hazardous chemicals at the site if or when conditions require (such as herbicides or pesticides). Dust suppressants, and potential flocculants for erosion management, are industry proven and accepted environmentally safe products. There are no hazardous materials / chemicals contained within the resource to be excavated. No acid water is generated by the development. There are no known acid sulphate materials in the resource.

Potential impacts of hazardous matetrials impacting the Konong Wootong Creek and the three DELWP mapped wetlands is considered low and negligible with the standard controls in place, based on the distance from the quarry to these water features.

MSDS sheets for flocculants, dust suppressants, and any other chemicals used or stored on site will be maintained in the site office. All hydrocarbons will be stored or transported in commercially produced, fully compliant containments or tanks.

All hydrocarbon, industrial gas and chemical storage will be compliant to Australian Standards and the Earth Resources Regulator's requirements, and in accordance with EPA guidance.

Whilst explosives are used at the site, there are no bulk explosives stored on the site and the majority of blasting components will be brought to site on blast days.

Objectives

The key objectives of this risk treatment plan are to:

- Manage and minimise the risk of fuels, lubricants and other hazardous materials being released into the environment through leaks and spills

Compliance standards

The compliance standards for this risk treatment plan are:

- AS1940 – Storage and Handling of Flammable and Combustible Liquids
- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Publication 1823.1, June 2021: Mining and Quarrying – Guide to preventing harm to people and the environment
- EPA Publication 1698, June 2018: Liquid Storage and Handling Guidelines

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Fuels, lubricants and other hazardous materials are stored appropriately and are not leaking or discharging
- Fuels, lubricants and other hazardous materials are managed to minimise risks to sensitive receptors, as far as reasonably practicable, in line with the General Environmental Duty.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Hydrocarbon storage in accordance with AS 1940 (The Storage and Handling of Flammable and Combustible Liquids) and the Dangerous Goods (Storage and Handling) Regulations 2022	Fuel storage always in compliance with standard
2.	A contaminants spill kit available at all times when any refuelling, servicing and/or maintenance tasks are undertaken on site.	Spill kits available
3.	No major servicing / repairs conducted outside of workshop	Major services conducted at workshop, with installed triple interceptor trap
4.	Any areas where refuelling / servicing activities are being undertaken are drained to ensure no water leaves the site without first going through interceptor trap	Surface water management controls, directing to an interceptor trap, in place and effective
5.	MSDS sheets readily available for all dust suppressants, industrial gases, flocculants, herbicides, pesticides and any other chemicals used or stored on site	MSDS sheets for all chemicals used or stored on site maintained in the site office
6.	All chemicals stored in accordance with the EPA Liquid Storage and Handling Guidelines and relevant Australian Standards	Chemical storage in accordance with the guidelines, MSDS sheets and relevant standards

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
40.	Spills / discharges whilst refuelling	C, O, R	Unlikely	Minor	LOW
41.	Fuel / oil leakage from equipment (mechanical failure, accident)	C, O, R	Unlikely	Minor	LOW
42.	Spills / damage from hazardous materials storages	C, O, R	Rare	Moderate	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Integrity of fuel and chemical storages	Monthly site inspections
2.	Pollution controls and surface drainage effective and maintained.	Monthly site inspections

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Performance of fuel and chemical storages and surface drainage controls	Internally reported following monthly inspections	To identify any necessary remedial actions, which will be documented in site record book.
2.	Reportable Events under MRSDA (escape/leakage of potentially harmful substance)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	AS1940 – Storage and Handling of Flammable and Combustible Liquids	
2.	MSDS sheets for chemicals used or stored on site	

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site office
4.	Planning Permit conditions	Site office

2.13. Weeds, Pests and Diseases

Scope

This risk treatment plan is to assess and manage the potential hazard of weeds, pest animals and/or soil-borne disease on and across the site, where the environment or sensitive receptors may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

All risks associated with weeds / pathogens contained within materials that are imported onto the site are addressed in the risk treatment plan for Imported Materials.

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Ecological values of land	Surrounding land (onsite and offsite)	Potential to harbour weeds, pest animals and diseases that impact the site and adjoining land	Proximity to site
2.	Adjoining land uses	Neighbouring properties	Weeds / pests species introduced or allowed to spread	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
43.	Allowing weeds to spread from the site to neighbouring properties	C, O, R	Possible	Moderate	MEDIUM
44.	Harbouring pest animals	C, O, R	Possible	Minor	MEDIUM
45.	Unsanitised plant / equipment introducing weeds / diseases	C, O, R	Possible	Moderate	MEDIUM

Quarrying Considerations

Any weeds, pest animals and/or soil-borne disease present on the site, or introduced to the site by environmental factors or unsanitised plant / equipment, will be monitored and managed on an ongoing basis throughout the quarry life, to satisfy the requirements of both the Earth Resources Regulator and the Environment arm of the Department of Energy, Environment and Climate Action.

The primary objective is to ensure that weed, pest animal and/or soil-borne disease problems do not develop and spread into adjoining land. Control measures will be carried out in accordance with relevant guidelines and standards, using approved treatment methods. Any herbicide or pesticide use will be in accordance with the manufacturer's recommendations, including the most appropriate time to ensure effective control. The revegetation of progressively rehabilitated areas will also be regularly monitored for weeds and pest animals, ensuring that the rehabilitation objectives are achieved in accordance with the Rehabilitation Plan.

The site, which is located on farming land, is actively managed to identify and mitigate the presence of weeds and pest animals.

Objectives

The key objectives of this risk treatment plan are to:

- Protect ecological values associated with the Work Authority area

- Prevent site activities contributing to the spread or proliferation of weeds, pest animals or soil-borne disease, on and off the Work Authority area

Compliance standards

The compliance standards for this risk treatment plan are:

- Catchment and Land Protection Act (1994)
- Planning and Environment Act (1987)

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Site operator complies with legislative requirements relating to the control and management of declared noxious weeds and pest animals
- The extractives operation does not contribute to the spread or proliferation of weeds, pest animals or soil-borne disease

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Engage appropriately licensed personnel to conduct any required herbicide or pesticide application to control weeds or pest animals.	Only licensed personnel are permitted to apply herbicides or pesticides.
2.	Eradicate or manage any declared noxious weeds or established pest animals, including identified habitats, present on the Work Authority area.	Infestations of declared noxious weeds and established pest animals are eradicated or controlled. Any herbicide or pesticide use is in accordance with manufacturer's recommendations, including the most appropriate time to ensure effective control.
3.	Clean equipment moved from areas of known weed infestation to remove weed seeds.	Cleaning procedures are in place and followed in areas with known weed infestations.
4.	Limit vegetation clearing and surface disturbance activities to the minimum required operationally.	In accordance with Work Plan and Site Layout Plan

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
43.	Allowing weeds to spread from the site to neighbouring properties	C, O, R	Unlikely	Moderate	MEDIUM
44.	Harbouring pest animals	C, O, R	Unlikely	Minor	LOW
45.	Unsanitised plant / equipment introducing weeds / diseases	C, O, R	Unlikely	Moderate	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Site flora and fauna for weeds and pest animals.	6 Monthly site inspections (Spring & Autumn)

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Site flora and fauna for any weeds and pest animals	6 Monthly inspections reported internally.	To review and revise adequacy of control measures and identify any necessary remedial actions.

2.	Reportable Events under MRSDA (non-compliance with approval, in managing weeds, pest animals and/or soil-borne disease)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	CMPA Noxious Weeds and Pest Animals Control Plan, Guideline and Template	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site office
4.	Planning permit conditions	Site office

2.14. Rubbish / General Waste

Scope

This risk treatment plan is to assess and manage the potential hazard associated with domestic rubbish and/or general waste generated on and across the site, where the environment or sensitive receptors may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Adjoining land uses	Neighbouring properties	Potential for amenity loss or to pollute / impact the adjacent land uses	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
46.	Uncontrolled handling of domestic rubbish and general waste resulting in pollution of waterways and/or adjacent land	C, O, R	Possible	Minor	MEDIUM
47.	Loss of amenity through the poor handling of redundant plant and equipment	C, O, R	Possible	Minor	MEDIUM

Quarrying Considerations

The site will generate a small amount of domestic rubbish and general waste. Domestic rubbish includes office waste, food scraps, packaging and paper waste from contractors or employees. Note the site currently operates a portable toilet system, there are no septic tanks on site. General waste may include redundant / discarded equipment, discarded conveyor belting, discarded screen decks, discarded tyres, discarded grease cartridges, discarded oil drums and oily rags. These materials will all be collected and periodically removed by contractors authorised to receive the wastes.

Objectives

The key objectives of this risk treatment plan are to:

- Manage and prevent domestic rubbish and general waste generated by site activities from adversely affecting soil, water or other aspects of the environment
- Protect the environmental values of water and soil, as defined in the Environment Reference Standard

Compliance standards

The compliance standards for this risk treatment plan are:

- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Environment Reference Standard 2022 (ERS), or as amended
- EPA Publication 1741.1, October 2020: Industry guidance: supporting you to comply with the general environmental duty.

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Soil, water and air within and near the Work Authority area are not detrimentally affected by the storage and/or management of domestic rubbish or general waste generated by site activities
- Domestic rubbish and general waste generated by site activities are managed to minimise risks to sensitive receptors, as far as reasonably practicable, in line with the General Environmental Duty.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Provide covered bins for temporary on-site storage of domestic rubbish and/or general waste at selected work sites.	Sealed bins provided at selected work sites.
2.	Redundant / discarded oil, grease rags, etc stored in sealed drums until removed	"Full" waste oil / grease, etc drums will not be stockpiled on site.
3.	Redundant plant, tyres and equipment stored onsite to be located where it cannot be seen from outside the site.	Redundant plant and equipment stored on site not visible to the public.
4.	No on-site disposal (or burning) of domestic rubbish or general waste generated from site activities. Use of off-site services / facilities authorised to receive the wastes generated, for recycling or disposal.	No domestic rubbish or general waste disposed on-site.
5.	No general waste or redundant equipment retained onsite for extended periods. Limit the volume and permitted timeframe for general wastes to be stored onsite.	General waste materials and redundant equipment not held on-site for extended periods.
6.	Protect any temporary waste storage areas from rainfall and stormwater or flood ingress and locate away from areas of protected habitat and/or waterways	Covered temporary waste storage areas and/or bins, that are away from protected areas and waterways.

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
46.	Uncontrolled handling of domestic rubbish and general waste resulting in pollution of environment	C, O, R	Rare	Minor	LOW
47.	Potential contamination of the amenity / environment through the poor handling of redundant plant and equipment	C, O, R	Rare	Minor	LOW

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Wastes stored on site	Quantities, types and location of wastes stored on site as part of monthly site inspection and review
2.	Disposal of waste to sites authorised to receive that waste	Register of contractors with appropriate authorisation

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Wastes stored on site	Monthly internal reporting	To improve waste management and ensure appropriate collection cycles
2.	Reportable Events under MRSDA (non-compliance with approval, in managing domestic rubbish and general waste)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Nil	

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site office
4.	Planning Permit Conditions	Site office

2.15. Fire

Scope

This risk treatment plan is to assess and manage the potential hazard of fires igniting on-site and potentially escaping the site, and also any onsite activity that may exacerbate a wildfire that burns onto the site, where the environment or sensitive receptors may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Ecological values of adjoining land	Surrounding farm land (onsite and offsite)	Potential to initiate / exacerbate fire that harms local environment	Proximity to site
2.	Members of the public	Nearby residences	Potential to initiate / exacerbate fire that harms local environment	Proximity to site
3.	Private property	Nearby properties, amenities	Potential to initiate / exacerbate fire that harms local environment	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
48.	Plant / machinery / hot works igniting a fire and potentially escaping the site	C, O, R	Possible	Critical	VERY HIGH
49.	Wildfire entering the site and danger being exacerbated by onsite activities	C, O, R	Unlikely	Critical	HIGH

Quarrying Considerations

The site is surrounded by farmed / cropped land. Wildfire can be an issue in the height of summer and an active Fire Response and Readiness Plan is maintained by the site. There is a risk that onsite works could ignite a fire that then initiates a wildfire through adjacent properties. Site management will be frequently communicating with the CFA or checking online fire danger alerts on days of Extreme or Catastrophic Fire Danger Rating, and when a Total Fire Ban has been declared. The quarry extraction areas and stockpile areas are well protected from fire and provide good emergency assembly areas for employees, contractors as well as the general public in an extreme fire event. The quarry sump, settlement dams and other water storages are available for firefighting purposes as required.

There are no activities occurring on this Work Authority that could exacerbate a wildfire that entered onto the site.

Objectives

The key objectives of this risk treatment plan are to:

- Control potential sources of fire ignition and activities that could lead to fire ignition and escape on days of elevated fire danger
- Manage onsite activities so that the danger posed by any wildfires burning onto the Work Authority area is not increased

Compliance standards

The compliance standards for this risk treatment plan are:

- Country Fire Authority Act and Regulations
- Planning and Environment Act (1987)
- EPA Publication 1667.3, June 2021: Management and storage of combustible recyclable and waste materials – guideline

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Any fire initiating within the Work Authority area is contained within the site
- The risk of onsite activities exacerbating the danger of wildfires burning onto the Work Authority area is minimised

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Fire Response and Readiness Plan (FRRP) in place and its detailed controls implemented.	FRRP in place, as required by ERR, documented and implemented
2.	All new site personnel and contractors attend a site induction prior to commencement of work, to ensure awareness and understanding of Fire Response and Readiness Plan	All those working on site aware of and understand their obligations under the Fire Response and Readiness Plan
3.	All vehicles well maintained and fitted with spark arrestors and fire extinguishers	Vehicles suitably equipped with serviceable fire extinguishers / knapsack spray packs as appropriate.
4.	No 'hot works on days of Total Fire Ban without written approval of CFA	No 'hot works' ignition sources (welding, steel cutting / grinding) on Total Fire Ban Days
5.	Refuelling and minor servicing to be conducted in cleared areas within the extraction area.	All refuelling and vehicle servicing in accordance with procedures
6.	Monitor Vic Emergency app / website, or similar, on days of extreme or catastrophic fire danger rating, or total fire ban days.	Record of engagement with agencies
7.	Liaising with CFA in times of extreme or catastrophic fire danger rating.	Record of engagement with agencies
8.	Flammable and combustible substances stored securely in accordance with relevant standards	Flammable and combustible substances stored in accordance with Fire Response and Readiness Plan.
9.	Flammable and combustible wastes are removed from the site as soon as practicable	No flammable waste is stockpiled onsite
10.	Establish and maintain fire breaks around site boundaries in high-risk fire areas	Fire breaks installed and maintained. Audit before high-risk season

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
48.	Plant / machinery / hot works igniting a fire and potentially escaping the site	C, O, R	Rare	Critical	HIGH
49.	Wildfire entering the site and danger being exacerbated by onsite activities	C, O, R	Rare	Critical	HIGH

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Site fire preparedness	Annual inspections prior to the wildfire danger season will include an assessment of the site's preparedness for fire and be recorded in the Manager's Report Book.
2.	Total Fire Ban days	Quarry Manager and/or Site Supervisor monitors Radio and CFA warnings (via VicEmergency app / website, or similar)
3.	Fire / weather warnings	Liaising with CFA in times of Extreme or Catastrophic Fire Danger Rating.

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Site fire preparedness	Internally following annual inspections	To identify any necessary remedial actions, and/or modification of Fire Response and Readiness Plan.
2.	Ignition / fire	The CFA will be informed of any uncontrolled fire on site or adjoining land	Emergency services response
3.	Reportable Events under MRSDA (outbreak of fire or explosion arising from work)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	CMPA Bushfire Response and Readiness Plan Template	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Fire Response and Readiness Plan	Site office
2.	Approved Work Plan & Risk Management Plan	Site Office
3.	Site Layout Plan	Work Plan
4.	Work Plan / Work Authority Conditions	Site office
5.	Planning permit conditions	Site office

2.16. Loss of Soil Biological Activity

Scope

This risk treatment plan is to assess and manage the potential hazard of loss of biological activity in soil stored in stockpiles, thus reducing its value for rehabilitation purposes, where the land involved may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Biodiversity of soil	On-site soils	Potential for soil biological viability to be lost	DEECA Advice

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
50.	Unsuccessful rehabilitation due to loss of soil biological activity	C, O, R	Likely	Minor	MEDIUM

Quarrying Considerations

Soil stockpiled inappropriately (i.e. buried too deeply, too long in adverse locations, etc) can lose viability requiring additional treatment before used in rehabilitation. The top 200mm (approximately) will be stripped and stored separately as topsoil in stockpiles with a maximum height of 2m. Soil stockpiles will be pushed up with a dozer ahead of overburden stripping, with the outer face profiled to a maximum 1V:3H batter to aid in vegetation establishment.

Viable / good quality soil will be stored separately to degraded / poor quality soil. Given the timeframe from initial soil stockpiling to use in rehabilitation it may be necessary to undertake some soil rejuvenation activities when inherent soil viability is considered inadequate. Soil may be imported under the control of the Imported Materials Management Plan to facilitate soil rejuvenation or to supplement soil profiles.

Objectives

The key objectives of this risk treatment plan are to:

- Protect existing soil structure, nutrient levels and biological activity in onsite soils
- Facilitate the rehabilitation of the quarry site by maintaining biological activity in stockpiled soils.

Compliance standards

The compliance standards for this risk treatment plan are:

- Catchment and Land Protection Act (1994).

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- The health of biologically active soil is maintained while it is stockpiled and reused in rehabilitation.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	If possible do not strip soil when it is very dry or saturated.	Condition of soil maintained.
2.	Minimise height of soil stockpiles.	Stockpiles ≤ 2m in height.
3.	Stabilise soil stockpiles (e.g. seeded / roughened / mulched) if they will not be disturbed for an extended period.	Soil stockpiles are stabilised within 3 months if not used in progressive rehabilitation.
4.	Soil layers, including any surface organic matter and any woody debris segregated and stockpiled separately	Topsoil and woody debris stockpiled separately
5.	Any imported soil checked / verified for weeds and soil-borne disease (via Imported Materials Management Plan).	Imported soils do not compromise onsite soils with weeds and soil-borne disease

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
50.	Unsuccessful rehabilitation due to loss of soil biological activity	C, O, R	Unlikely	Minor	LOW

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Maintenance of soil stockpiles.	6 Monthly site inspections will be conducted and will include any topsoil stockpiles, and any required monitoring and remedial actions documented in site record book.

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Maintenance of soil stockpiles	Internally after 6 monthly inspections	To identify any necessary remedial actions

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Nil	

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site Office
4.	Planning permit conditions	Site Office

2.17. Vehicle Sediment Transport

Scope

This risk treatment plan is to assess and manage the potential hazard associated with the carriage offsite of dust, clay (mud) or gravel by vehicles leaving the site, and subsequent deposition onto public roads, where members of the public or sensitive receptors may be affected during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Public roads and amenity	Public roads	Potential to be impacted by nuisance dust / sediment from quarry traffic	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
51.	Excessive dust, mud or gravel carried onto public roads	C, O, R	Likely	Minor	MEDIUM

Quarrying Considerations

Templeton Street is a Council maintained, sealed local road, comprising a two-lane, 6m wide carriageway with a 80km/h speed limit. There are numerous unsealed access roads, driveways and industries / activities in the vicinity that also use Templeton Street. There is potential that in unmanaged conditions dust and/or sediment from traffic leaving the site, or spillage from road trucks, could be deposited on the road and create nuisance to other road users.

The site access includes a section of purpose constructed and well-maintained gravel road between the extraction / processing area and the entry / exit onto Templeton Street. Management controls are in place to limit as much as possible the carriage of dust, mud or sand/gravel onto the sealed road.

Objectives

The key objectives of this risk treatment plan are to:

- Minimise the carriage of dust, clay (mud) or gravel by vehicles leaving the Work Authority
- Prevent road safety issues from hazards associated with the deposition of dust, clay (mud) or gravel onto external roads by traffic from the Work Authority

Compliance standards

The compliance standards for this risk treatment plan are:

- Planning and Environment Act 1979
- EPA Publication 1897, Sept 2020: Managing Truck and Other Vehicle Movement – Guidance sheet
- Planning Permit Conditions

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- No complaints from local road users regarding road conditions
- Minimal dust, clay (mud) or gravel carried by vehicles beyond the boundary of the Work Authority.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Main access road well-formed and maintained with high quality material	Sales vehicles use main access road, which is kept clean and free of excess material, and constructed of high-quality road base to minimise sediment pick up
2.	Minimise use of wheel wash or hoses to wash vehicle tyres Wastewater and sediment captured and reused on site	Use of wheel wash or hoses to wash vehicle tyres minimised with all wastewater / sediment captured
3.	Water cart used on access road	Employ water cart on high temperature / windy days, or in response to complaints
4.	Internal traffic management (speed, no-go areas, etc)	Driver instruction and training
5.	Road truck loads properly covered / secured before leaving site and/or not over-filled, to prevent spillage	Driver instruction and training
6.	Management of sediment transport to public roads consistent with EPA guidance	Sediment transport offsite consistent with EPA guidance

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
51.	Excessive dust, mud or gravel carried onto public roads	C, O, R	Unlikely	Minor	LOW

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Dust, mud or gravel deposition on surrounding roads	Daily observation
2.	Community complaints / concerns regarding spillage on roads	Complaints management / Community Engagement Plan

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Dust, mud or gravel deposition on surrounding roads	Monthly internal reports	To assess improvements required and to identify any necessary remedial actions
2.	Community complaints	Management and community through the Community Engagement process	To assess improvements required and to identify any necessary remedial actions
3.	Reportable Events under MRSDA (non-compliance with approval, in managing sediment transport onto public roads)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	CMPA Traffic Management Guidelines	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3	Dust Management Plan	Site Office
4	Work Plan / Work Authority Conditions	Site Office
5	Planning permit conditions	Site Office

Mineral Resources (Sustainable Development) Act 1990

Tenement Number: WA410

Plan Number: PLN000923

Work Plan Variation Statutorily Endorsed

Signed: _____

Delegate of the Department Head

Date: 30/10/2024

Rehabilitation Plan

for

Extractive Industry Work Authority WA410

RRAM Designation:- PLN-000923

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Project No. R21_001

August 2024

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Revision History

Document Date	Description
24 Apr 2024	1st draft of Rehabilitation Plan, including Geotech recommendations
30 August 2024	Revisions in response to ERR comments

1. PURPOSE OF REHABILITATION PLAN

This Rehabilitation Plan has been developed to address the requirements of Part 2 the Mineral Resources (Sustainable Development) (Extractive Industries) Regulations 2019, and in consideration of the *Preparation of Rehabilitation Plans – Guideline for Extractive Industry Projects*, March 2021, Version 1.0. This Rehabilitation Plan forms part of the Work Plan for the purposes of the *Minerals Resources (Sustainable Development) Act 1990* (MRSD Act).

The background for this extractive industry operation, including descriptions of the work, site setting, risk assessment and risk management are set out in detail in the other components of the Work Plan, with reference to the included drawings, particularly Figure 3 Site Layout Plan.

1.1. Overall Rehabilitation Objective

The overall objective of the Rehabilitation Plan is to leave the site in a manner that is:

- safe (is not likely to cause injury to members of the public)
- stable (is structurally, geotechnically and hydrogeologically sound)
- sustainable (is non-polluting and aligns with the principles of sustainable development, minimising as much as is feasible the potential long-term degradation of the environment), and
- in a form suitable to the Rigby family (the landowners) for the intended end land use, a combination of general farming and animal husbandry.

This objective has been approved by the Rigby family, the landowner, and is consistent with the current surrounding land use and the activities conducted prior to extractive industry use. This objective is also consistent with broader community and local stakeholder expectations, which are routinely and specifically canvased through implementation of the site Community Engagement Plan.

The rehabilitation landform meeting this objective is represented as a concept plan on the included Figure 4 Final Landform Plan

1.2. End Land Use

The site will be returned to a mix of general farmland suitable for livestock grazing and/or cropping on flatter area, with the terminal upper quarry batters (diggable material) cut at a batter not steeper than 1V:3H, and planted out with shrubs and bushes. The office, weighbridge workshops and associated infrastructure (electrical substation, septic systems etc) will be retained for site use, totalling approximately 1ha of hardstand area,

Water collecting in the rehabilitation landform will be directed to a water body (pit lake) located within the worked-out quarry void and used for stock water, irrigation and other uses on the Rigby Family's properties. Modelling indicates an equilibrium water level at approximately AHD46m, and that the pit lake will not over top the excavation. Where required existing licences will be varied.

In rehabilitating and preparing the land for the proposed end land uses, any additional planning permission that may be required will be obtained before undertaking those land use activities.

Upper terminal batters in diggable material will be shaped to a 1v:3h batter and covered by a minimum 100mm topsoil, then planted with suitable vegetation as per Figure 4 Final Landform Plan; typically groundcovers, shrubs, and medium and small trees appropriate to the end use of farmland.

Upper terminal faces in blasted material will be scaled and berms on terminal benches, down to the final pit lake level, will be covered with a minimum 500mm of overburden material and 100mm of soil then

planted with suitable vegetation as per Figure 4 Final Landform Plan; typically groundcovers, shrubs, and medium and small trees.

1.3. Other Rehabilitation Obligations

There are over-arching rehabilitation obligations under the standard Work Authority conditions, including a requirement for progressive rehabilitation and rehabilitating in accordance with the approved Work Plan (i.e. this Rehabilitation Plan and the associated Figure 4, Final Landform Plan).

The site does not have licensed dams.

The groundwater monitoring bore will not be required after closure, i.e. once the Work Authority is surrendered, having served their purpose by that point in confirming a successful rehabilitation outcome (see Section 2.5, Rehabilitation Milestones). Therefore, the groundwater monitoring bore can be decommissioned at closure in accordance with obligations under the relevant licences, however, the end uses for the site could potentially seek to re-purpose this bore as groundwater extraction bores with appropriate licensing.

There is no assessable vegetation to be removed and therefore no vegetation offsets required.

There are no other rehabilitation obligations or commitments under other legislation relevant to the extractive industry use on this site.

1.4. Rehabilitation Domains

The rehabilitation treatment required across the site may differ for the various elements of the landform and how they have been affected by the extractive industry operation. The Regulations require that this Rehabilitation Plan set out distinct rehabilitation domains that collectively amount to the landform that will be achieved upon completion of the site rehabilitation.

The legislative context relevant to rehabilitation domains under the *Mineral Resources (Sustainable Development) (Extractive Industries) Regulations 2019* is Regulation 11 (2), which requires that:

> The Rehabilitation Plan must include details of the proposed rehabilitation of land disturbed by work under the Work Plan including—
> (a) proposed land uses for the affected land after it has been rehabilitated, that considers community views expressed during consultation; and
> (b) a land form that will be achieved to complete rehabilitation, which must—
> (i) be safe, stable and sustainable; and
> (ii) be capable of supporting the proposed land uses referred to in paragraph (a); and
> (c) objectives that set out distinct rehabilitation domains that collectively amount to the land form described in paragraph (b); and
> (d) criteria for measuring whether the objectives described in paragraph (c) have been met.

Section 2 of the Rehabilitation Plan sets out the strategy for rehabilitation of the site throughout the entire life of the extractive industry operation.

Section 3 of the Rehabilitation Plan sets out the rehabilitation landform design, as shown in Figure 4 Final Landform Plan, for each of the key components of the site and how this rehabilitation work is to be undertaken.

Section 4 of the Rehabilitation Plan sets out how the rehabilitation objectives will be achieved with reference to the detail contained within the Rehabilitation Domains Table.

Section 5 presents the detailed Rehabilitation Domains Table with reference to areas outlined in the included Rehabilitation Domains Plan – the domains being further subdivided into subdomains.

Section 6 of the Rehabilitation Plan sets out the overall management of the site rehabilitation.

Notes on the approach taken in the Rehabilitation Plan to satisfy the legislative requirement for domains

The rehabilitation domains by the Regulations, including subdomains, are not necessarily spatial in nature, they are areas, activities or aspects of the site that require common rehabilitation treatment, with common objectives and/or rehabilitation / closure criteria. The Regulations do not require that domains be defined as mutually exclusive spatial areas and can be impractical to do so, for the following reasons:

- Those domains and subdomains that could be defined spatially can be overlapping, e.g. site roads / tracks, and sometimes overlapping with more than one other domain or subdomain.
- While some subdomains, not necessarily spatially confined, may occur across a number of broader domains, it should not be assumed that they require the same treatment or need to meet the same criteria across separate domains. The context and the hazards applicable to the broader domain and its particular rehabilitation objectives may impose differing requirements for each of these subdomains. For example, surface water controls to be retained within a rehabilitated pit will usually have differing rehabilitation / closure criteria to those retained outside of the pit, particularly when the end use differs for those domains.
- Some subdomains do apply across the entire site with common hazards, objectives and rehabilitation / closure criteria, regardless of the site-wide domains – for example: areas requiring weed control, areas requiring pest animal control, internal site fencing, etc. The domain covering these various site-wide subdomains has been termed "Residual Work Authority Area" in the Rehabilitation Domains Table.
- The requirement to undertake progressive rehabilitation, to minimise the impacts of various hazards and minimise rehabilitation obligations, necessarily requires ongoing rehabilitation works, segment by segment, for most of the domains and subdomains throughout the life of the operation. So, in practice, assessment of rehabilitation outcomes against rehabilitation / closure criteria will be applied progressively to segments of each domain or subdomain, with a final assessment of the whole domains and subdomains against the criteria to achieve closure.

For the reasons above, it is considered impractical to represent the domains and subdomains on a single drawing, given that they are not necessarily spatial nor spatially mutually exclusive. Attempting to do so would be more confusing than helpful. The domains and subdomains included in the Rehabilitation Domains Table should be self-evident with reference to Figure 3, Site Layout Plan, and Figure 4, Final Landform Plan.

However, with the above limitations in mind, a Rehabilitation Domains Plan is provided with Section 5. Otherwise, the domains and subdomains included in the Rehabilitation Domains Table should be self-evident with reference to Figure 3, Site Layout Plan, and Figure 4, Final Landform Plan.

Achieving a safe, stable and sustainable rehabilitation outcome is with regard to the rehabilitation landform considered as a whole, as required by the Regulations. While some rehabilitation domains are more directly linked to demonstrating aspects of a safe, stable and sustainable rehabilitation outcome for the site, most domains are not easily separated and can only be considered together in achieving the overall rehabilitation objectives – refer to Section 4.

2. REHABILITATION STRATEGY

Rehabilitation for the whole site will not be a single linear process, as it will occur in parallel to extraction and processing activities for much of the quarry life, nor will the parallel rehabilitation processes follow consistent timelines for differing parts of the site.

Rehabilitation will be undertaken progressively throughout much of the quarry life, as far as reasonably practicable, i.e. without compromising the ability to work the site and the commercial viability of the operation. Once the resource extraction ceases there will be areas within the site, particularly within the extraction area, that will already be fully rehabilitated and the rehabilitation objectives satisfied.

The Rehabilitation Plan is a conceptual plan for rehabilitation and achieving site closure, based on present thinking and may be influenced in the future by changes in regulatory and/or community expectations, market forces, new technology or operational practice. Any future changes to the overall rehabilitation objective, as a result of matters raised by the Earth Resources Regulator or by the local community through the Community Engagement Plan, will be discussed with the Earth Resources Regulator to determine the most appropriate pathway forward under the relevant regulations applicable at that time.

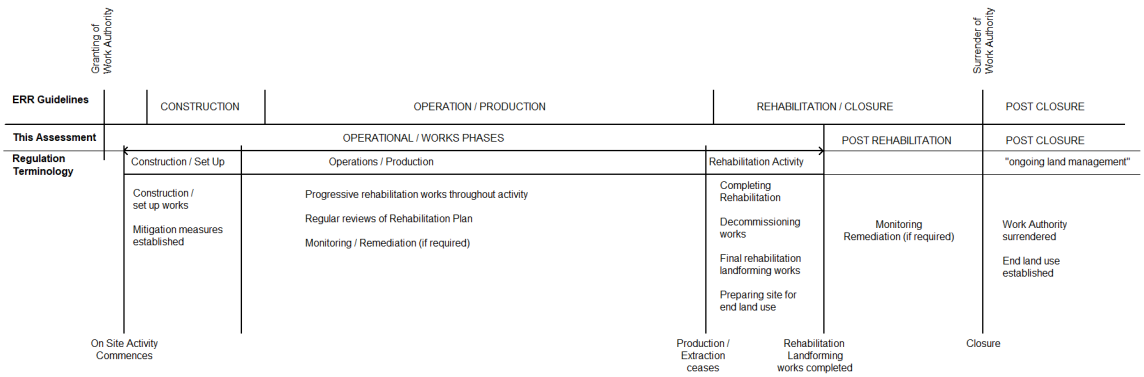
2.1. Phases of Rehabilitation

Rehabilitation for any particular part of the site will occur in a sequence of stages through the life of the quarry, and at any point in time the rehabilitation stage applicable to different parts of the site will differ.

The discussion of site rehabilitation presented in this document, along with any long-term risks associated with the rehabilitated land, aims to satisfy the Regulations while adopting extractive industry accepted norms, which do not neatly fit the requirements of the 2021 *Preparation of Rehabilitation Plans* guideline. A specific example of this is the use of the term “closure”. This is not a term commonly used in the extractive industries and not used in the applicable Regulations, but is used throughout the 2021 guideline.

The term “closure” is used here to be the point in time, subsequent to completion of all rehabilitation works, when all the stated criteria for closure have been satisfied to achieve the rehabilitation objectives for all rehabilitation domains, and thus allowing surrender of the Work Authority and return of the rehabilitation bond.

As is the case for the hazard identification and risk assessment process, set out in the Risk Management Plan, the rehabilitation at this site is in the context of the quarry life as represented in the following schematic, which includes the indicative rehabilitation sequence as it relates to any particular part on the site.



2.2. Progressive Rehabilitation

Progressive rehabilitation will be undertaken throughout the Operational / Works phases of the quarry to minimise, as far as reasonably practicable, the disturbed area remaining open and unrehabilitated at any given time. It must be understood that progressive rehabilitation can only be undertaken once a terminal crest has been achieved or an area is no longer required for stockpiling (temporary storage). Once the terminal extraction crest has been reached and excavated, rehabilitation will be occurring at appropriate parts within the site and each part will be at a different stage of rehabilitation. The progress of rehabilitation will mainly depend on the availability of areas for rehabilitation, the availability of suitable materials for rehabilitation and the climatic / seasonal conditions at the time.

Progressive rehabilitation, wherever possible, will be integrated into daily operations and, within the extraction area, will occur as soon as practicable after extraction, however this will not always be possible. Factors affecting the timing of progressive rehabilitation include (but are not limited to):

- the availability at any given time of suitable areas for rehabilitation across the site
- the availability at any given time of suitable material to undertake rehabilitation works
- climatic conditions and seasonal weather variation.

The rehabilitation of available segments of terminal face, including the placement of overburden, topsoiling and revegetation, can only occur after extraction limits have been reached, which requires the temporary stockpiling of soil and overburden material until required. The necessary stockpiling of soil and overburden will also limit the rehabilitation of those areas until the stockpiled material can be utilised.

The volume of overburden available on the site and the cost of rehandling overburden, along with regulatory requirements, are prime drivers for commencing the progressive rehabilitation of terminal faces as soon as possible. Additionally, progressive rehabilitation will be undertaken at the pit crests and upper terminal benches as soon as practicable after they are established, to mitigate potential visual impacts to nearby residences to the west along Templeton Street and Residents to the south.

Progressive rehabilitation is undertaken with the following principles applied to meet the rehabilitation objectives:

- storing adequate topsoil for use in site rehabilitation
- storing adequate overburden in nominated stockpile areas for future use
- undertake rehabilitation of available areas as soon as practicable, including the backfilling in compacted layers, topdressing and revegetating of any terminal faces and worked out pit floor areas
- where possible, directly place overburden in areas available for rehabilitation
- initially revegetate the final rehabilitated surfaces with pasture grass species to stabilise the surfaces and manage erosion
- initially revegetate the terminal crest batters in diggable / erodible material with grasses, utilising mulch, jute matting, rip-rap, etc., as necessary, to stabilise the rehabilitated surfaces and manage erosion
- actively encourage establishment of vegetation on rehabilitated batters and identify and plant out any other suitable areas
- minimising, as far as reasonably practicable, the disturbed area remaining open and unrehabilitated at any given time (including rehabilitated areas that have not yet met the rehabilitation objectives)

- continually monitor and evaluate the effectiveness of rehabilitation and revegetation, and modify as necessary, to ensure the stated objectives for individual rehabilitation domains are being achieved.

The success of progressive rehabilitation will be regularly reviewed and any required changes in the rehabilitation strategy will be implemented as appropriate. The criteria for achieving the rehabilitation objectives for individual rehabilitation domains and the monitoring frequency, as presented in Section 5 Rehabilitation Domains Table, are applied for all progressive rehabilitation undertaken on the site.

2.3. Maximum Disturbed Area

The development of the extraction area is provided schematically in Figure 3 Site Layout Plan.

The upper (ie diggable) eastern batters and terminal faces will be developed early in the process to provide material for the northeastern screening mound with excess overburden stored temporarily in the northern worked out area of the quarry. Establishing the terminal eastern batters allows access to the resource on the eastern faces and available areas for progressive rehabilitation. As the eastern and northern faces develop, overburden will be used to build the pit access / haul road. The terminal batter in the diggable material on the eastern face will be cut on grade, and will not require any back fill, just dressing with topsoil and revegetation, initially with grasses and ground covers to manage erosion, then revegetated with trees and shrubs for long term.

In conjunction with developing the eastern terminal batter profile, the southern hardstand area will be prepared for product and overburden stockpiles, as well as a location for mobile processing plant. Material excavated from the southern area will be used to construct the southern screening mound, with any excess material stockpiled within the disturbance area for later use in rehabilitation.

The main pit, where the trachyte resource comes from will be developed laterally, both to the east as space becomes available, and to the southwest to the terminal extent. As the available area increases, drop cuts or lower levels will be developed until the maximum design depth is reached.

The balance of land not used for quarrying and ancillary operations and any rehabilitated areas of the site consistent with requirements will continue to be managed for agricultural or other purposes in accordance with the Farming Zone over the land.

Progressive rehabilitation will be integrated into daily operations as much as possible, however it must be noted that the processing, stockpiling and infrastructure areas of this site will be in use until extraction and processing cease, so progressive rehabilitation is largely limited to the excavation area only.

The total area to be disturbed by this operation, including all roads, hardstands, other earthworks and extraction areas, is estimated to be **10.9 hectares**. However, as set out in Section 2.2, progressive rehabilitation will be undertaken as soon as practicable after extraction reaches terminal batters. The total area at any given time that may require rehabilitation will equal the total disturbed area and any opportunity will be taken for progressive rehabilitation will reduce this.

The maximum disturbed area open and unrehabilitated at any given time is estimated to be approximately **10.4 hectares** – including rehabilitated areas that will have not yet met the rehabilitation objectives.

2.4. Achievability of Rehabilitation Outcome

The rehabilitation of the quarry will be in accordance with the overall rehabilitation objective set out above, i.e. resulting in a landform that is safe, stable and sustainable for all the domains, and in a form that is non-polluting and suitable for the intended end land use. The rehabilitated landform is designed to meet this objective, as shown in Figure 4 Final Landform Plan.

The quarry hazards risk profile comprises elements of both a simple and of a complex operation in that the resource extraction, disturbance areas and activities are relatively small, however the sensitive receptors are relatively close.

Technical assessments to date show no uncertainties in achieving the final landform objectives. Pasture areas can easily be established and maintained, geotechnical assessments show the terminal batters to have an acceptable factor of safety and water modelling shows the excavation will have a pit lake that will not over top.

On the basis of the supporting technical assessments and current knowledge, the designed rehabilitation landform is found to be achievable and the rehabilitation objectives for each rehabilitation domain can be met, such that the land will be suitable for the intended end land uses. The Work Authority cannot be surrendered until all the specified criteria for closure, as presented in Section 5 Rehabilitation Domains Table, have been satisfied – these criteria being designed to demonstrate that the rehabilitation objectives for each rehabilitation domain have been met. The included geotechnical assessment has demonstrated that the terminal batter design will be safe and stable for the long-term (post closure), and hydrogeological assessments have demonstrated that a stabilised pit lake will be formed with a final water level at approximately AHD46m A more detailed assessment of the hazards potentially associated with the rehabilitated land (post closure), as a consequence of the changes due to the extractive industry use, is presented in Section 4.4, Identification of Post Closure Risks. Each potential hazard is assessed as to whether it may pose long-term risks to the environment, members of the public, or to land, property or infrastructure.

It is concluded that there will be no post closure risks that would require monitoring, maintenance, treatment, or any other ongoing land management activities (post closure), as a consequence of the changes due to the extractive industry use.

2.5. Rehabilitation Milestones

As above, progressive rehabilitation will be undertaken throughout the life of the quarry to minimise, as far as reasonably practicable, the disturbed area remaining open and unrehabilitated at any given time. The progress of extraction for this quarry will involve continuous extraction across the defined extraction area, as set out in Section 2.3, concurrently with deepening of the extraction within that footprint. The progress of rehabilitation will mainly depend on the availability of areas for rehabilitation, the availability of suitable materials for rehabilitation and the climatic / seasonal conditions at the time.

The design of the pit and the commitment to mitigate as far as reasonably practicable impacts to the viewshed from residents along Templeton Street and surrounding streets necessitates the early rehabilitation of the eastern batter upper pit benches. As extraction progresses and reaches a terminal limit on any of the upper benches, the terminal faces will be scaled of loose rock, covered with overburden and soil ready for planting out with trees and shrubs. Terminal berms will be constructed and profiled to be consistent with the rehabilitation landform, so no further reworking of the face profiles will be required. Additional rehabilitation works including overburden placement, topsoiling and any seeding will also be completed while access by mobile plant remains possible. For each segment of terminal face progressive rehabilitation will initially focus on the pit crests and uppermost terminal batters in diggable / erodible material to ensure they are stabilised. Progressive rehabilitation will initially focus on vegetating screening bunds and rehabilitating the upper terminal faces.

The following milestones in the site rehabilitation (“significant event or step” in the Regulations) and associated actions have been identified.

Milestone: Completed Rehabilitation Works on Uppermost Benches (Down to AHD90m - Most visible Benches)

Trigger / Gateway – completion of rehabilitation works undertaken on uppermost extraction benches down to AHD90m. This comprises establishment of screening bunds, excavation of diggable material down to

AHD90m or top of weathered rock (salamander) and the development of the “safety benches” in the blasted weathered rock down to AHD90m (eastern batters). To reach this milestone it will have been ensured:

- that establishment of the screening bunds has occurred (noting these bunds will remain post closure)
- that rehabilitation of segments of the upper terminal berms, as they become available, have included the placement of overburden, the spreading of topsoil and revegetation.
- that, where necessary, additional short-term erosion control measures are utilised until vegetation is established
- that progressively rehabilitated segments of the upper benches are being monitored for rehabilitation success and the rehabilitation objectives are achieved (expected within 2-4 years), where practicable, and the rehabilitation monitoring continues at the planned year-three frequency with remedial actions, if necessary, to ensure the rehabilitation objectives are maintained.

Rehabilitation works will be undertaken as extraction reaches any segment of the designed upper terminal batters. Works on the diggable material down to the blasted horizon above AHD90m will be formed to the designed 1v to 3h terminal profile, followed by the hard rock profile (blasted material) rehabilitated to terminal batters and berms above rock faces, which needs to be completed while access by mobile plant remains possible. The treatment of the upper batters and berms is detailed in Section 3.3 and will involve the splitting of the first 12m, or less depending on topography – into two shorter terminal rock faces. The 5m wide berms above the upper terminal rock faces (the two shorter faces and the uppermost full bench height face, yet to be extracted below) will be treated by placing, spreading and profiling overburden and topsoil, and this will occur prior to drilling and firing the last shot(s) for that segment of the upper faces. Safety bunds, drainage diversion measures, and screening vegetation above the extraction crest will have already been established, and monitored for each segment as it is rehabilitated. Terminal rock faces below this horizon will remain at full height.

In accordance with the closure criteria, ongoing erosion monitoring will be undertaken after completing all upper terminal batter slope treatments in diggable / erodible material.

Rehabilitation criteria in relation to completing rehabilitation works for this rehabilitation milestone are included in Section 5 Rehabilitation Domains Table.

Milestone: Review of Pit Rehabilitation Design

Trigger / Gateway – Although geotechnical assessments show the terminal design is stable, to provide the regulator with confidence around the design, a geotechnical review will undertaken prior to developing the AHD46m level. It is anticipated that it would be in the order of 4 years to reach equilibrium at this level.

This review would involve

- review pit design, in consideration of any observed structures to ensure the landform will remain safe, stable and sustainable.
- reassess predicted water level in the final pit lake.

Ahead of the trigger / gateway being reached, it is expected that enough data will be available to undertake a review of the rehabilitation design for the pit below the upper benches, including a review of the final pit lake level. This data will be derived from both a review of the accumulated knowledge (GCMP and GWMP) and any necessary further investigations, which may include further drilling within the excavation area. The review will reassess the long-term stability of the proposed design for the rehabilitated pit as well as the likely final level for the pit lake. The site’s GCMP and GWMP will also be reviewed and revised, as necessary, as a result of this review.

Rehabilitation criteria in relation to completing the review for this rehabilitation milestone are included in Section 5 Rehabilitation Domains Table.

It is expected that the review will confirm that the existing rehabilitation design will remain safe, stable and sustainable, including the absence of any significant wave erosion impacts. Once this is confirmed, extraction can progress to AHD53m and AHD41m and the rehabilitation of the terminal batters.

In the very unlikely event that this review required the rehabilitation outcome to be modified, the identified trigger / gateway allows for alternative outcomes that can still produce a rehabilitated landform that is safe, stable and sustainable, based on the gained knowledge. In that event, a Work Plan variation, or other approval process as deemed appropriate at that time, can then be initiated to alter this Rehabilitation Plan. These alternative rehabilitation outcomes may include:

- cessation of extraction to stop short of final design depth, with any necessary redesign of extraction pit (may include some level of backfill or buttressing), in the event that unexpected weaknesses in the rock mass are discovered that prevent the rehabilitation outcome being achieved; or
- significant redesign of extraction pit to accommodate unexpected geological structures or weaknesses in the rock mass, in the event that such unexpected conditions are discovered that prevent the rehabilitation outcome being achieved; or
- redesign of the extraction pit to accommodate significantly different egress zones, in the event of a significantly different final pit lake level being determined; or
- redesign of the extraction pit to accommodate an extra access ramp so that both ramps can act as egress zones at all pit lake levels, in the event that a final pit lake level cannot be determined with the necessary level of accuracy; or

Milestone: Resource Extraction Ceases

Trigger / Gateway - all resource extraction has been completed.

- at completion of all extraction activities, progressive rehabilitation has been maximised, as far as practicable, with regular monitoring, remediation and reviews of Rehabilitation Plan.
- final rehabilitation activities commence (final land forming, preparing site for end use and decommissioning works).

Once the resource extraction ceases many areas within the site, particularly within the extraction area, will already be fully rehabilitated and the rehabilitation objectives satisfied.

At completion of all extraction activities, progressive rehabilitation across the site will have been maximised, as far as practicable, particularly within the extraction area. The success of the progressive rehabilitation will have been regularly monitored, and any necessary remediation undertaken or adjustments to the rehabilitation program implemented.

The final phase of major rehabilitation activities will commence, which involves works to finalise the rehabilitation landform, works to prepare the site for the intended end uses and decommissioning works to remove plant and infrastructure that is not to be retained. The processing of stockpiles, sales activity, etc, may continue for some time after resource extraction has ceased, therefore the decommissioning and removal of particular plant and infrastructure cannot occur until these activities have finished.

Milestone: Completion of Rehabilitation Activities

Trigger / Gateway - completion of all extractive industry activities and major rehabilitation activities.

- cessation of all extractive industry activities and completion of major rehabilitation activities (earthworks, planting, decommissioning works, etc.) on the site.

- post rehabilitation phase commences – monitoring for rehabilitation success, remediation (if required) and assessment against rehabilitation / closure criteria.

Once all resource extraction ceases, it is anticipated that all earthworks and decommissioning works involved in the final rehabilitation work will be achieved within 12 months. However, revegetation will be dependent upon environmental and practical factors.

After completion of all the major rehabilitation and decommissioning works there will be a period of post rehabilitation monitoring with maintenance and remediation works completed as necessary. This monitoring phase is to confirm that rehabilitation objectives are being met and will continue until all closure criteria have been achieved.

Site Closure

Site Closure is effectively the last rehabilitation milestone. As defined previously, the term "closure" is used here to be the point in time when all the rehabilitation objectives have been achieved for all the rehabilitation domains. Therefore, allowing surrender of the Work Authority and return of the rehabilitation bond.

Site Closure is achieved once the post rehabilitation monitoring demonstrates that all closure criteria have been met for all the rehabilitation domains, in accordance with Section 5 Rehabilitation Domains Table.

The current understanding of the hydrogeological conditions indicates that the period of lake filling will take several years to reach its equilibrium level. The geotechnical investigations undertaken to date indicate that the walls of the pit will remain stable throughout this period of lake filling, both in terms of potential slope failure and any action of wave erosion at the lake's surface. Subject to confirmation by further studies, at the above milestones, and a period of stability monitoring, the pit walls will remain stable in the long-term and the final pit lake will never overflow, so the Work Authority could be surrendered before the final lake level reaches equilibrium,

2.6. Schedule for Rehabilitation

As stated previously, rehabilitation for the whole site will not be a single linear process, as it will occur in multiple areas in parallel to extraction and processing activities for much of the quarry life, nor will the individual areas undergoing rehabilitation across the site follow consistent timelines. The timing of rehabilitation works and the progress through phases of rehabilitation will differ for most of the separate rehabilitation domains. This timing is dependent on a range of factors, including the practical limits on extraction sequencing, availability of overburden / waste rock at various stages of extraction, practical operational limitations (e.g. areas required to remain open for processing, stockpiling, water management, etc.), the need to limit double handling costs, any need to undertake remedial measures for rehabilitated areas, seasonal / climatic conditions, and also external market forces.

Planning legislation prohibits the imposition of cessation dates on extractive industries, except in some urban situations, and allows for delays in starting the use of up to 5 years and the discontinuance of the use for up to 10 years, in recognition of the inherently variable nature of the market. Given that planning permission is effectively issued for the life of the resource and allows for a highly variable market, and the factors already mentioned regarding the realities of progressive rehabilitation, a schedule of rehabilitation activities can only be stated in relative terms.

Ongoing Progressive Rehabilitation

The planned timing of progressive rehabilitation for any particular part, or segment, of the site to be rehabilitated, where this can be practicably applied, is as follows:

- ***As soon as practicable*** *(depending on a range of factors)*: Complete earthworks to achieve the rehabilitation landform for that part as the extraction sequence / quarry development allows, including the placement of overburden and topsoil.

- ***Within 3 months of completing earthworks***: Initially stabilise segments of slope by seeding with pasture / grasses and, where necessary, undertaking any remedial works, including additional short-term erosion control measures until vegetation is established, followed by seeding / fertilising for final intended vegetation, as appropriate.
- ***Within 3 months of completing earthworks on any battered back segment of upper terminal face in diggable / erodible material***: Initially stabilise segments of slope by seeding with pasture / grasses and, where necessary, undertaking any remedial works, including additional short-term erosion control measures until vegetation is established. Followed by seeding / fertilising for final vegetation species (trees and shrubs).
- ***Rehabilitation of the terminal benches above final lake level***: Rehabilitation works differ for segments of terminal benches in blasted material (see Section 3.3 for detail). The placement, spreading and profiling of overburden and soil on the berms situated above the final lake level occurs prior to drilling and blasting the last shot(s) for that segment of each bench, when there will be sufficient space to get suitable machinery on the working bench and safely carry out the works. The subsequent revegetation on the berms will occur after the final shot(s) and will generally occur within 12 months, depending on environmental and practical factors.
- ***Within 12 months of the completed earthworks***: Initial pasture / grasses revegetation, where applied, will generally be established on rehabilitated segments of batters, however, this is dependent upon environmental and practical factors.
- ***Each Spring and Autumn*** *(i.e. six monthly intervals)*: Review and report vegetation status of rehabilitated parts, undertake any remedial earthworks necessary and supplement vegetation as appropriate.

Progressive rehabilitation will be carried out to ensure that the total disturbed area open and unrehabilitated at any given time will remain below 10.4 hectares throughout the life of the operation, including rehabilitated areas that will have not yet met the rehabilitation objectives.

Final Rehabilitation Activities, Post Rehabilitation Phase and Closure

Once all resource extraction ceases, the final rehabilitation activities will involve completion of final earthworks, final revegetation works and the decommissioning of any processing plant and/or other quarry infrastructure not identified as being retained post closure. This will be followed by a period of post rehabilitation monitoring and, where necessary, remediation until all the criteria for closure have been met.

It should be noted that the hardstand, plant and stockpile areas and overburden storage areas may be in use for some time after extraction has ceased, as stockpiles are processed and product is sold down and, potentially, some of the stockpiled overburden / waste rock is reprocessed.

At completion of all extraction and processing activities progressive rehabilitation will have been maximised, as far as practicable, with regular monitoring for rehabilitation success, remediation and reviews against the Rehabilitation Plan. Therefore, significant areas of the site will have already met rehabilitation objectives with vegetation well established and those areas already prepared for the intended end use. It is anticipated that all earthworks, decommissioning works and revegetation plantings involved in the final rehabilitation activities will be achieved within 12 months. However, the time required for full establishment of vegetation on the remaining unvegetated landform will be dependent upon environmental and practical factors.

- ***As soon as practicable after ceasing extraction***: Complete final earthworks and decommissioning works for remaining unrehabilitated areas to achieve the rehabilitation landform across the whole site, including the placement of overburden and topsoil.
- ***Within 3 months of completing final earthworks and decommissioning***: Initially stabilise remaining unrehabilitated slopes and pit floor by seeding with pasture / grasses and, where necessary,

undertaking any remedial works, including additional short-term erosion control measures until vegetation is established, followed by later seeding / fertilising for final intended vegetation, as appropriate.

- Within 3 months of completing earthworks on any battered back segment of upper terminal face in diggable / erodible material that remains unrehabilitated: Initially stabilise remaining unrehabilitated upper slopes by seeding with pasture / grasses and, where necessary, undertaking any remedial works, including additional short-term erosion control measures until vegetation is established. Followed by seeding / fertilising for final vegetation species (trees and shrubs).
- ***Rehabilitation of the terminal benches above final lake level***: The progressive placement, spreading and profiling of overburden and soil on the berms situated above the final lake level, and subsequent revegetation on those berms, will have been undertaken progressively as extraction progressed – refer to details in Ongoing Progressive Rehabilitation above. Any remaining rehabilitation works on these berms, including any necessary remediation of drainage measures, will occur within 12 months of ceasing extraction, depending on environmental and practical factors.
- ***Within 12 months of the completed earthworks and decommissioning***: Initial pasture / grasses revegetation, where applied, will generally be established on remaining unrehabilitated batters and pit floor, however, this will be dependent upon environmental and practical factors. Once initial pasture / grass cover is established, seeding and fertilising with final vegetation species (trees and shrubs) will be undertaken (generally within the 12 months).
- ***Within 12 months of the completed earthworks***: Any retained site infrastructure, hardstands, etc., prepared in accordance with requirements for end land use.
- ***Post Rehabilitation Monitoring***: Continue monitoring of rehabilitation outcomes in accordance with the monitoring frequency, as presented in Section 5 Rehabilitation Domains Table, assessing against the criteria for closure to achieve the rehabilitation objectives for individual rehabilitation domains.
- ***Each Spring and Autumn*** *(i.e. six monthly intervals)*: Review and report vegetation status of rehabilitation across the site, undertake any maintenance and remedial works, where necessary, including earthworks, supplementing vegetation as appropriate, and implementing any necessary remedial actions for site drainage and retained assets.
- ***Site Closure – Meeting Criteria for Closure***: The post rehabilitation monitoring will continue until the criteria for closure have been met and the rehabilitation objectives achieved for all rehabilitation domains. This monitoring and maintenance period is planned to continue for at least three years. The post rehabilitation monitoring and remedial actions may continue for a longer period, if necessary, until the relevant authorities are satisfied. This period could potentially be shorter if all the closure criteria were to be met and the rehabilitation objectives achieved prior to the end of the planned three years.

Potentially, previously extracted areas that have been fully rehabilitated could be excised from the Work Authority at some future stage, where it is practical to do so. This could occur where it can be demonstrated that the rehabilitation objectives are achieved for those areas and that they are ready for the proposed end land use. This would allow a reassessment and potential reduction of the rehabilitation bond at that time for the ongoing extractive industry on the remainder of the Work Authority.

3. REHABILITATION LANDFORM DESIGN

A conceptual, site wide plan of the Rehabilitation Landform is attached as Figure 4 Final Landform Plan.

3.1. Assets To Be Retained

The Work Authority holder is the landowner.

The constructed infrastructure / assets to be retained are mainly associated with the screening mound and water management, as listed below.

Assets retained post closure will be:

- Work Authority perimeter site fencing (by agreement with landowner, but not required to manage any post closure risk)
- All perimeter screening bunds and screening vegetation
- Swale drains (perimeter drains and cut-off drains above pit crests)
- Farm dam in the southwest of the WA.
- site access road and tracks (approx. 0.4ha)
- Office/amenities building(s), workshop, fuel store, water tank(s), standpipe, electrical substation, hardstand area (approx. 1ha)

Details regarding the retained onsite dams and other water infrastructure are set out in Sections 3.6 and 3.7.

It is estimated that approximately 1.3ha of site access, hardstand, access road and internal track(s) will be retained. The exact configuration of retained roads and tracks are decisions for the end uses of the site and may not be exactly as depicted on Figure 4 Final Landform Plan.

The southern and eastern perimeter bunds and associated swale drain perform a valuable role in the management and control of surface water for the site and will remain intact post closure.

The closure criteria provided require that the various retained assets are functioning appropriately and do not need maintenance at the time of closure.

3.2. Site Fencing

At closure the site will retain all fencing and any (improved) farm fencing on the site. The surface water diversion structures and any additional safety bunds or screening vegetation at the crest swill also be retained to hinder access to the faces, however, this retained fencing is not for the purpose of any necessary ongoing risk management to protect the public from risk posed by the rehabilitated land; as any such risks to members of the public post closure will have, as far as reasonably practicable, been minimised to acceptable levels.

All fencing retained will be utilised in the intended ongoing uses of the site after closure by Rigby Brothers & Co Pty Ltd, including maintaining standard farming / site security measures such as stock proof fences and gates. The proposed ongoing uses being general farming and rural industry. Any additional farm fencing that might be established during the life of the operation will also be retained at closure.

While the rehabilitated site could potentially be accessed by the public via adjoining private property and local roads, the constructed and vegetated perimeter bunds significantly restrict unauthorised pedestrian access and stop vehicle access: the only vehicle access being through the site access at Templeton Street and the farm gate access on Pitcher Street.

3.3. Terminal Face Treatment

The terminal face designs have been assessed by geotechnical analysis and identified as having an acceptable factor of safety for the long-term, (refer to the Risk Treatment Plan for Ground Instability for more detail). Note that the faces to Templeton Street have already been extracted as per the 1975 work plan, and whilst every attempt will be made to meet the new requirements, this may not always be possible. The detail of the terminal face profile, in particular the upper benches, is therefore dictated by the public safety hazard and has been designed to minimise the risk to public safety as far as is practicable by:

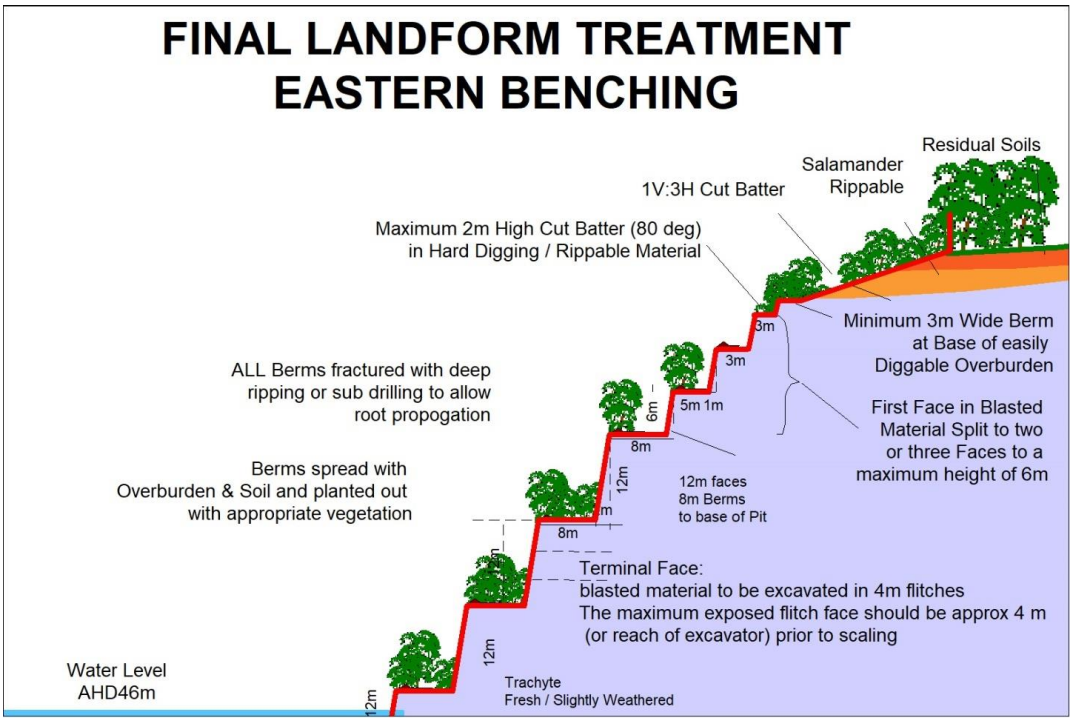
- Establishing a permanent screening bund and diversion drain at the site boundary and where necessary (ie part of the Templeton Street boundary) a safety bund behind the crest line of the excavation.
- Cutting the top batter through the diggable / erodible material to 1V:3H (18 degrees) where this exists or is possible. This cut batter is to be revegetated and erosion stabilised.
- Excavating the first face (drop) in rock, to approximately 2m, with a minimum 3m wide berm above and at its toe. The shallow height of the first face being designed to minimise the risk if someone were to fall over the face.
- Excavating the second face (drop), being the remainder of the upper split bench, to a maximum 6m high face where rock extends to the surface but will generally be much less (varying to align with the topography and ground conditions) and with a minimum 3m wide berm at its toe.
- Excavating the third and subsequent faces in 3-4m high flitches as required (or as determined by the excavator reach) to ensure adequate scaling of the face to a maximum 12m height with a minimum 8m wide berm.

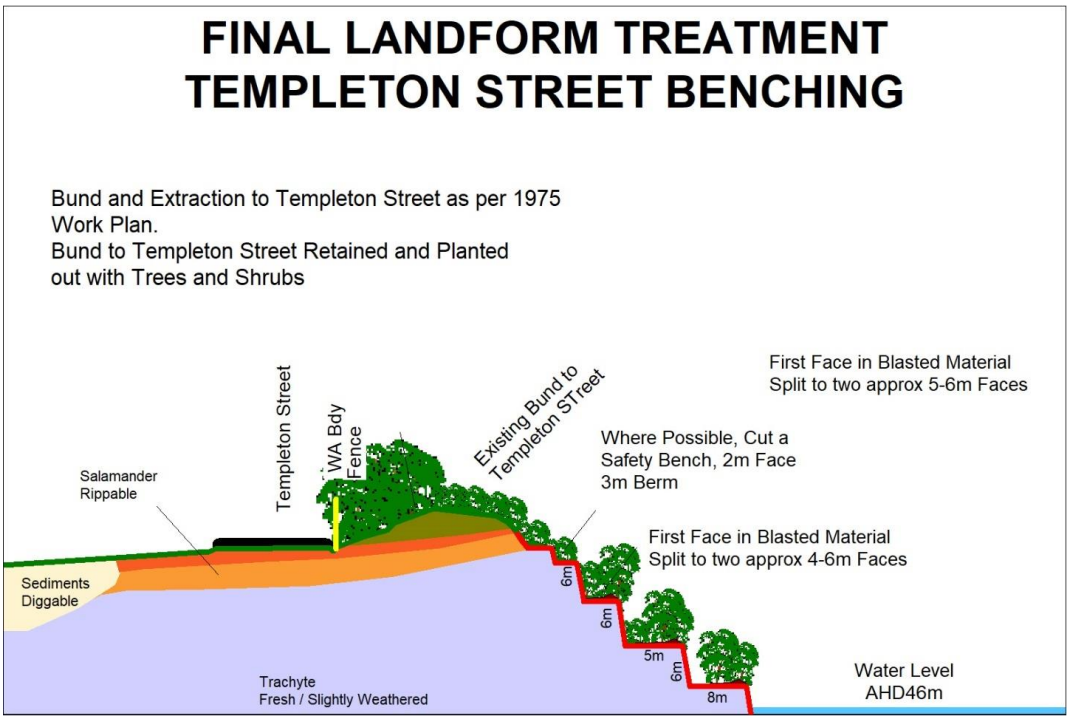
The upper terminal batters in diggable / erodible material will be rehabilitated progressively by placing and spreading suitable material upon completion of each segment. An adaptive approach will be utilised in profiling this batter as conditions will vary with the topography. An overall slope profile of 1V:3H will be implemented where topography allows. Refer to the schematics below.

An assessment of the erosion potential of the terminal batters for the upper benches has been undertaken (see attached Geotechnical Assessment). This assessment concludes that the risks associated with the erosion hazard on the upper batters can be adequately managed through batter design, revegetation and, where necessary, additional short-term erosion control measures until vegetation is established. These short-term measures could include localised drainage diversion, jute matting, mulch, or treatment with flocculants – the most effective method (if required) will be based on trials but likely vary with lateral variability in slope conditions. With the establishment of the initial vegetation alone it is expected that within 2-4 years erosion will be reduced to meet Commonwealth guidelines (refer to erosion assessment in the attached Geotechnical Assessment). It is demonstrated in the Geotechnical Assessment batter design can achieve the criteria of the Commonwealth of Australia (2016) guidelines within 3-4 years, with the short-term erosion control measures minimising the initial erosion within this period. Vegetated swale drains and/or diversion bunds will be established above terminal crests sloping toward the pit to minimise surface water flows over the cut batters and, where necessary, these drains will be lined to minimise erosion, e.g. using geo-fabric and/or ~180-200mm rubble to ensure erosion criteria are met.

The upper terminal batters and faces are designed to meet long-term (post closure) public safety requirements and necessitate that the last blast(s) for the terminal segments of the uppermost extraction bench will need specific blast design. The last blast(s) for the uppermost extraction bench will need to achieve a face split into a short face of approximately 2m (creating a short first drop to reduce the falling hazard) with a minimum 3m wide berm above and at its toe and then the remainder of the split as a variable height face (maximum 6m), with a minimum 5m wide berm at its toe. The remainder of the upper bench split could vary from zero to 6m in height depending on the intersection of the extraction limit with the variable topography and variable depths of weathering. The berms above the upper three terminal

rock faces (the two shorter faces and the uppermost full bench height face, yet to be extracted below) will be treated by placing, spreading and profiling overburden and topsoil. Safety bunds, drainage diversion measures, and screening vegetation will be established above the extraction crest for each segment as it is rehabilitated.





Where the final landform is established by backfilling, such as the northern area or in remediation of the hardstand area to be returned to pasture (in the south) the final landform will be achieved by placing overburden and quarry waste rock and / or plant oversize / reject in layers of approximately 1m, spreading and compacting with dozers / excavators, and profiling to achieve a uniform profile. The rehabilitated batter will then be topsoiled and pasture grasses established initially.

During the Operational / Works phases, a swale drain, and safety bund will be established around the crest of terminal faces. The safety bund will be remodelled into a small mound and swale drain as part of the rehabilitation landform.

Terminal benches in the blasted material will have faces with a slope of approximately 80 degrees, from the horizontal. Some variance in the slope of individual faces will occur due to the jointed nature of the rock and intersection of that jointing with the variably oriented quarry batters, but all terminal faces will have a slope not steeper than 80 degrees. All the terminal berms from the final lake level (AHD46m) and above will be rehabilitated by spreading the berms with approximately 500mm of overburden and soil, and then planted with vegetation. This will occur prior to drilling and firing the last shot(s) for that segment of the bench. Overburden / quarry waste rock and soil will be placed on top of the segment of bench (to become the berm), at the toe of the terminal face above, and then spread and profiled with dozers / excavators to achieve a uniform profile with a slight back slope to catch any loose material and assist in managing surface water runoff over from the quarry faces, as indicated in the schematic above. After blasting and as shot rock is loaded out in flitches, terminal faces will be scaled back to remove any loose rocks or potentially unstable blocks (standard procedure with all blasted faces)

Subsequent revegetation and remediation on the prepared berms will be conducted after the final blast(s) for that segment of bench with small equipment and/or pedestrian access. This planting on the berms will generally be within 12 months of the earthworks, depending on environmental and practical factors. All these berms will have a low edge bund approximately 0.3m high for worker safety, which will need to be put in place prior to the last blast on that bench, but usually after drilling the last blast holes. It is acknowledged that on the last blast there will be some impact on these low edge bunds at the berm crests, but this can be addressed prior to mucking out the shot whilst excavator access is still available. There will be no public access to these lower berms after closure, so the low edge bunds do not need to be maintained for the long-term for public safety reasons, but will remain on the rehabilitated berms and assist in long-term control of drainage on the berms.

As part of the Operational / Works phases, a standard multi-stranded stock-proof fence (appropriately signposted), a swale drain and a screening bund will be established around the Work Authority boundary. See Section 3.2 for further discussion.

A safety bund will also be established that separates the retained site infrastructure (office, workshop, weighbridge, vehicle parking, etc.) from the crest of the pit. This is a permanent structure that will ensure the ongoing safety of the landowner and their future employees, contractors and visitors in relation to the end uses on the site. This safety bund will be designed to prevent any vehicles from being able to cross into the rehabilitated pit, i.e. the bund will be at least 1.5 times the axle height of the largest vehicle.

3.4. Pit Floor Treatment and Reprofiling of Stockpile Pads

Once extraction is finished from the floor of the pit, including some backfill material if used for the access ramp, the pit floor will be allowed to be completely covered by captured surface water resulting in the establishment of a shallow pit lake. Excess overburden material may be placed in various locations within the pit void prior to recharge but any such material will be below the water surface after pit lake levels have risen.

The Hydrogeological Assessment demonstrates that a range of stabilised levels may be expected for the final pit lake in the long-term as the determined level is highly sensitive to net evaporation rates and the imperviousness factors. However, the sensitivity analysis conducted shows that the pit lake can never reach

a level at which it may overflow. The best estimate derived for the equilibrium level of the pit lake is AHD46m, taking in the order of 4 years to be reached, with an assumed maximum of AHD56m (ie into the next bench) and a minimum of AHD42m, ix a “damp’/ dry foot. As the lake level rises the volume of water required to raise the level increases and the evaporation rate and infiltration rate also increases due to the increasing surface area, therefore the rate of rise will steadily diminish and achieve equilibrium.

To maintain access to the pit lake as well providing an egress zones after closure for public safety reasons, the access ramp to the pit floor will be retained as part of the terminal face extraction (as shown in Figure 4). These ramps may be constructed in rock or in backfilled material. The geotechnical assessment shows that if used, backfill material is safe and stable in the long term.

Future assessment will be undertaken, as per the Rehabilitation Milestones set out above, to review the likely range of levels for the final pit lake.

3.5. Overburden and Soil Requirements

The following estimates of material excavated have been obtained from the resource evaluation, the pit design, local site experience and extrapolation:

- Soil: 5,000m^3: -The top 200mm of material is treated as soil and used or stockpiled separately for rehabilitation and totals approximately 5,000 cubic metres
- Overburden:- 250, 000m^3 The next 1-7m of material is easily diggable and has been classified as clay overburden, approximately 250,000 cubic metres in total. Of this material, a proportion may be treated as Salamander, or highly to moderately weathered material, and when mixed with salamander is a saleable product..
- Salamander: 200,000 tonnes. The next 4-5 m is highly variable, (generally highly to moderately weathered trachyte) but where hard enough to blast is treated as salamander, and blended with the harder diggable material to create a saleable product, supplementing this resource figure but discounting the overburden figure.
- Trachyte: 1,000,000 tonnes The trachyte is open at depth, but laterally well defined, with the southern and eastern interfaces all but achieved. The resource continues under Templeton Street, but exactly how far is not known, and is not recoverable due to WA boundaries and the road.

In addition to the insitu overburden, there is approximately 40,000 cubic metres of clay overburden already stockpiled on the site (the majority of which is in the area to the south and a small amount in the worked out area to the north.

The total volume of material available for rehabilitation is approximately 290,000 cubic metres.

The minimum volume of material required for rehabilitation is approximately 30,000 cubic metres, made up of:

53m Level	1,000m^3
65m Level	2,000m^3
77m Level	2,500m^3
89m Level	3,000m^3
Hardstand Area	6,000m^3
Upper Batters	13,000m^3
Miscellaneous	2,500m^3

The volume of material required to achieve rehabilitation is based on the linear metres of terminal berms within the berm (typically 8m wide), down to AHD53m, with a minimum overburden depth of 500mm.

Some additional material (miscellaneous in the above table) will be required for the wider section of the benching profile and upper batters in diggable material.

There is more than sufficient overburden to achieve the desired rehabilitation outcomes, so careful management of the excess overburden / waste rock is not required. As described in Section 3.4, the building up of stockpile pads on the sloping land outside of the pit is a key component of the overburden management strategy.

Excess overburden may be blended with other materials on site to supplement the salamander products or used in the construction of the access road to the pit, allowing the resource under the access road to be extracted.

The minimum volume of soil required for rehabilitation to allow top dressing to a minimum 100mm, is approximately 5,100 cubic metres. Given the marginal shortfall, well within the accuracy of the modelling (ie 250mm of soil) will yield 6,300 cubic metres of soil) ,careful planning of soil stockpiling will be undertaken.

In addition to the identified overburden / interburden material, other sources of quarry waste rock/material include, but not limited to:

- Plant waste rock / reject [OR oversize / reject] (estimated at approx. 7% of the primary raw feed (PRF)) – approximately 100,000 cubic metres
- Unsaleable products
- Suitable imported materials (clean fill)

Excess overburden and quarry waste rock and / or plant waste may be used to supply select fill type works that arise from time to time, blended with the “fresher stone”, or used inside the disturbance area to either flatten out the batters at selected locations or to raise the level of the quarry floor, which may be more undulating as a result (noting the floor will eventually be submerged), or raise the surface of the reprofiled plant and stockpile areas. Placement in the base of the excavation will require double handling , so whilst possible, it would be used as a last resort, most likely in the final stages of the quarry life as the access road is extracted and backfilled. These options meet the final land use rehabilitation objectives for each respective domain.

Please Note:

- The timing of overburden placement on the terminal batters and berms occurs after extraction limits have been achieved and will initially require the temporary stockpiling of soil and overburden until required. Where possible, overburden will be stockpiled within the excavation area close to where it will be required for rehabilitation.
- The site has the capacity to accept large quantities of imported materials (see Section 3.8) and in addition to sources of quarry waste rock and / or plant waste this may result in flatter batters than proposed, more backfilled areas, or the overall surface of the rehabilitation landform being at a higher level and a more undulating than proposed
- Soil and fill quantities will be continually monitored to ensure consistency with the rehabilitation objectives, and if a significant deviation from the rehabilitation objectives is observed the relevant authorities will be notified and the appropriate actions set in place.

3.6. Dams and Constructed Works

There is one farm dam on site which will be retained at closure. There are no slimes dams or process water facilities proposed for the operation.

There are no slimes storage dams or process water storages retained post closure. The pre-existing farm dam in the south east of the Work Authority will be retained.

All screening bunds that also serve as surface water diversion bunding, and associated swale drains, any pipelines, water pumps and water dams associated with the operation will remain in place after rehabilitation and closure to continue to direct and collect surface water flows across the property.

Roadways that might have been constructed as part of the works, other than those shown on Figure 4 Final Landform Plan, which are deemed unnecessary for the post closure land use will be removed / ripped and rehabilitated. Internal access tracks may be extended through the Work Authority buffer areas during final rehabilitation to provide practical linkages with existing external access tracks to facilitate post closure farming activities.

Hardstand and stockpile areas and not required at closure will be removed / ripped and the areas returned to pasture.

The visual screening bunds to the property (ie Work Authority) boundaries will be retained at closure. The screening bund is to be established early in the quarry development and revegetated as soon as practicable with topsoil and establishment of vegetation to provide improved visual amenity. It is considered appropriate that this view not be disturbed at site closure by removing the vegetation and the bunds.

Through the Operational / Works phases surface water is managed to ensure run-off from disturbed areas (including roads, hard stand areas, stockpiles and the screening bunds is intercepted and directed to settling ponds and ultimately a sump in the base of the quarry or to other strategic structures on the site. Thereby minimising the potential for dirty water run-off and erosion.

Water collecting in the sump is pumped up to the Plant Water Tank or directly to a stand pipe and is used around the site for dust suppression and irrigation. Any excess water is used to irrigate rehabilitated areas or used to irrigate the undisturbed areas of the site, or pumped to other sumps / dams. The stand pipe will remain at closure for post closure use / firefighting if required.

Post closure, any surface water diversion bunding, swale drains associated with the excavation area will remain in place after rehabilitation and closure to direct surface water flows to the retained sediment dams / water dams located within the pit. The pit sumps will be converted to water dams for post closure irrigation and ongoing farm use. The perimeter bunds will be retained in the rehabilitation landform and will continue to direct surface flows around the site.

Surface water diversion bunding, drains and perimeter bunds are retained to ensure ongoing, long-term management of surface water flows through and around the site without the need for ongoing maintenance. As set out in the closure criteria, these features must be functioning to manage surface water flows, diverting flows away from rehabilitated extraction areas and not requiring maintenance to achieve closure.

3.7. Imported Material

It is emphasised that importing material is not required to achieve the rehabilitation objective.

Whilst the volume of overburden, extremely weathered material and quarry waste rock generated by the site is sufficient to fulfil the rehabilitation requirements (see Section 3.5), imported soil or clean fill, and possibly mulch, could potentially be imported for commercial advantage and used to supplement site rehabilitation.

Imported material in the manner of clean fill could be brought to the site for commercial reasons, typically “paddock rock” and/or clean fill, or potentially other processed or extracted raw sands / rock will be brought to the site for blending with rock extracted onsite. The site has the capacity to accept large quantities of such imported materials and in addition to sources of quarry waste rock [OR plant waste] this may result in some variance to the rehabilitation landform within the pit as set out in Section 3.5. However, any stockpiled imported materials onsite will have a specific use and will be fit for purpose, and any

changes to the pit rehabilitation will always remain consistent with the overall rehabilitation objective, i.e. a pit lake will still be formed.

Prior to importing any external material, the requirements of the site's Imported Materials Management Plan, prepared in accordance with the Earth Resources Regulator's guideline, will be reviewed to ensure it is still suitable and satisfies any guidelines issued by the Environment Protection Authority.

There will be no stockpiles of imported materials remaining on the site once rehabilitation is complete.

3.8. Weeds and Pest Animals

The development of any weed or pest animal issues on the site will be monitored and managed on an ongoing basis at the quarry through to site closure, to satisfy the requirements of both the Earth Resources Regulator and the Environment arm of the Department of Energy, Environment and Climate Action.

Spraying to control weeds will be undertaken using approved treatments and all pest animals will be controlled using approved methods.

There will be no legacy of the extractive industry related activity that poses a post closure risk of weeds, pest animals and/or soil-borne disease on the rehabilitated land.

3.9. Revegetation

The overall rehabilitation objective includes returning the site to a form suitable to the Rigby Family for farming activities, including, pasture, cropping (where available), grazing and firewood production etc. Any vegetation planted is not to be considered assessable native vegetation, and will be at all times consistent local expectation and good farming practice.

Perimeter Bunds: Whilst it is not planned to establish any significant areas of indigenous native vegetation, it will be necessary throughout the life of the site to establish some perimeter planting vegetation on the visual screening bunds and upper batters. All perimeter screening vegetation will be retained at closure by agreement with the landowner.

The rehabilitated terminal batters, quarry floor and other disturbed areas will be fertilised and seeded with appropriate pasture grasses and/or agricultural crops. A variety of revegetation methods may be required to establish a viable vegetative cover and, where necessary, short-term cover grasses or brush-matting may be established initially on rehabilitated surfaces to stabilise them and manage erosion.

In due course rehabilitated pasture / cropping areas may be progressively incorporated into the general farming activities on the remainder of the site. Where necessary, during the life of the operation, cover grasses and native vegetation will also be utilised to stabilise topsoil stockpiles, overburden dumps, the faces of constructed stockpile pads and other disturbed areas prone to wind or surface water erosion.

The conceptual plan of rehabilitation is presented on Figure 4 Final Landform Plan.

Excavated Batters -The overall rehabilitation objective is to return the flat or flatter areas of the site to a form suitable to the proposed end uses. It is acknowledged that the prime objective of the proposed treed revegetation is to achieve a visual screen to the quarry faces, thereby minimising the visual amenity impact of the terminal faces (as per Figure 4 Final Landform Plan). This will mainly be achieved with plantings on the upper terminal crest batter and in backfill on the berms above the future pit lake level, as well as any perimeter planting and/or vegetation screens.

Terminal crest batter in diggable / erodible material: The profiled uppermost terminal quarry face and the extraction crest will be planted with suitable vegetation, typically groundcovers, shrubs, and small to large trees. Although, initial stabilisation of the terminal batter in diggable / erodible material may involve the planting of short-term cover grasses or other groundcovers as soon as possible, or alternate measures as

necessary, to manage erosion. Groundcovers will be selected based on survival rate, effectiveness in meeting the rehabilitation objectives, or other expert advice.

Terminal benches above final pit lake level: The berms on the upper terminal benches will be covered with overburden and soil and also planted with suitable native vegetation, typically small to medium trees, shrubs and grasses / groundcovers. Plant species will be selected based on survival rate, effectiveness in meeting the rehabilitation objectives, or other expert advice.

As described in Section 3.3, it will be necessary to undertake prompt progressive rehabilitation at the terminal crest batters and upper berms. As also pointed out, soil development in the diggable / erodible material has significant lateral variability on the site and so a variety of revegetation and erosion control methods may be required to initially establish a viable vegetative cover on the terminal crest batter. Where appropriate, cover grasses may also be utilised to stabilise topsoil stockpiles or other disturbed areas prone to wind or surface water erosion.

Terminal quarry floor: The quarry floor will not be vegetated. Modelling demonstrates the pit floor will form a lake reaching equilibrium at approximately AHD46.

The conceptual plan of rehabilitation is presented on Figure 4 Final Landform Plan.

4. ACHIEVING SITE CLOSURE

The Rehabilitation Domains Table in Section 5 outlines the criteria and monitoring to evaluate the success of the site's rehabilitation program in achieving a safe, stable and sustainable rehabilitated landform that supports the proposed end land use. These apply to the rehabilitation works carried out throughout the Operational / Works phases, i.e. the progressive rehabilitation works during the construction and production phases, and the final rehabilitation works completed toward the end of the site's Operational / Works phases. The rehabilitation of the site has been designed such that the rehabilitated land will not, after closure, pose any risks to the environment, members of the public, or to land, property or infrastructure that would require ongoing monitoring, maintenance, treatment or land management.

4.1. Rehabilitation / Closure Criteria

The success of site rehabilitation will be regularly reviewed against the stated criteria for individual rehabilitation domains and sub-domains, which when met will demonstrate that the rehabilitation objectives have been achieved. The specific criteria and the monitoring frequency for assessing them are presented in Section 5 Rehabilitation Domains Table.

Progressive rehabilitation works will be ongoing throughout most of the quarry life, and will be particularly applicable during the early rehabilitation of the upper batters and berms for each extraction stage, and its success will be assessed against the relevant criteria for the rehabilitated parts of the site on an ongoing basis.

In line with rehabilitation objectives, a focus of the criteria during progressive rehabilitation of the various domains will initially be on measuring the success of the prevention of erosion within the extraction area and dirty water run-off from the disturbance footprint. These risks will be mitigated through diversion drains / bunds, vegetation establishment, additional short-term erosion control measures, strategic location of batter swale drains and other surface water management strategies as required.

Obtaining a quantitative measure of erosion from rehabilitated areas as erosion control measures / revegetation takes effect is difficult, therefore the erosion criteria presented in Section 5 Rehabilitation Domains Table are based on a qualitative (visual) assessment. The table below offers some generally accepted interpretations comparing quantitative soil losses to a visual assessment of any scouring on relatively uniform slopes (i.e. not involving concentrated flows).

Quantitative Assessment Soil Loss (RUSLE Equation or similar)	**Qualitative / Visual assessment**
Less than 5 tonnes per hectare per annum	Not noticeable to the naked eye
5-50 tonnes per hectare per annum	Scouring / erosion barely noticeable
50-200 tonnes per hectare per annum	Scouring typically up to 200mm wide and/or deep (criteria for rehabilitated batters not yet stabilised)
200-600 tonnes per hectare per annum	Scouring typically up to 5-600mm wide and/or deep

Other criteria will concentrate on the establishment and maintenance of the rehabilitated land for the intended end land uses on applicable areas and ensuring the health of the ultimate pit lake.

In addition to the criteria outlined in the Rehabilitation Domains Table it is understood that the Earth Resources Regulator may, from time to time, require specific rehabilitation and/or site closure requirements, including any monitoring and reporting requirements. If there are additional requirements, they shall be documented appropriately (i.e. Trigger Action Response Plans / TARPs, etc.) and available for review on request.

4.2. Rehabilitation Monitoring

Monitoring of rehabilitation success against the stated criteria, particularly progressive rehabilitation and through to the final rehabilitation works, is an integral part of the Operational / Works phases of the site, and will continue after completion of all rehabilitation works (i.e. the Post Rehabilitation phase). The rehabilitation monitoring will occur at varying frequency, generally decreasing over the first three years, until the stated criteria are met. The ongoing rehabilitation monitoring records will adopt the worksheets / proformas used throughout the Operational / Works phases.

Section 5 Rehabilitation Domains Table lists the rehabilitation / closure criteria and details the monitoring frequency over the initial three years for each rehabilitation domain, during both the Operational / Works phases (throughout production and final rehabilitation works) and the period following completion of rehabilitation works (Post Rehabilitation). Given the projected site closure is decades in the future it is difficult to commit to a more specific rehabilitation monitoring program at this point-in-time. For those parts of the site where progressive rehabilitation has been completed and the rehabilitation objectives already achieved, the rehabilitation monitoring will continue at the planned year-three frequency to ensure the rehabilitation objectives are maintained. The monitoring program is the subject of constant review and, if required, increased monitoring can be adopted, or more effective criteria imposed, if it becomes apparent through the Operational / Works phases that the rehabilitation objectives are not being met.

After completion of all the major rehabilitation and decommissioning works there will be a period of post rehabilitation monitoring for the final rehabilitation works, with maintenance and remedial works completed as necessary. This final post rehabilitation monitoring program is designed to demonstrate that the criteria for closure have been met and that the rehabilitation objectives have been achieved for all rehabilitation domains. This post rehabilitation monitoring phase will continue until the closure criteria have been met and is planned to continue for at least three years.

The post rehabilitation monitoring and remedial actions may continue for more than three years, if necessary, as could also be required by the Earth Resources Regulator. If so, the monitoring will be conducted at the planned year-three frequency, or more frequently if required, until the relevant authorities are satisfied that all the closure criteria have been met. It is also possible that all the closure criteria could be met and the rehabilitation objectives achieved prior to the end of the planned three years, and then the Work Authority could be surrendered ahead of schedule.

A critical review of the rehabilitation monitoring program and effectiveness of the monitoring frequency and closure criteria will be undertaken either:

- some 5 years before the anticipated cessation of resource extraction, or
- when development of the AHD53m level is commenced

and will address all relevant matters to the satisfaction of all the relevant authorities at that time.

To ensure that the rehabilitation monitoring reflects the stated criteria the following activities will occur:

- auditing the site for remaining plant, machinery, scrap, rubbish, etc.
- qualitative measure of erosion on rehabilitated upper batters
- establishment of native vegetation on upper batters and berms compatible with the surrounding dry eucalypt forest
- pasture establishment that is agriculturally viable on rehabilitated areas outside of the excavation
- measuring suspended solids in run-off from the site
- survey of weeds and pest animals.

4.3. Remedial Works

If criteria are not being met or rehabilitation is not satisfactorily progressing, based on the monitoring, maintenance and remedial activities will be undertaken to ensure criteria are met. Example situations would include, but not limited to:

- Damage to fencing – repair fencing, investigate the cause, initiate additional measures as necessary (Note: perimeter fencing to be maintained up to site closure and then retained by agreement with landowner, but is not required to manage any post closure risk associated with the rehabilitated land)
- Poor revegetation development – investigate cause, engage specialist for advice on pasture / native vegetation species, soil properties, fertiliser, remedial works as required
- Excessive weed presence – initiate one off weed eradication program, review weed management schedule and pasture / native vegetation establishment
- Excessive erosion – repair the area, review vegetation establishment, review surface water management activities, consider more appropriate location of drains and/or culverts. Investigate alternative erosion control devices (e.g. rock armour, hay bales, vegetation).

4.4. Identification of Post Closure Risks

Hazards potentially associated with the rehabilitated land (post closure), as a consequence of the changes due to the extractive industry use, may pose long-term risks to the environment, members of the public, or to land, property or infrastructure. If such post closure risks are posed to these sensitive receptors and require monitoring, maintenance, treatment or any other ongoing land management activities, then these 'relevant risks' (as defined in the Regulations) must be identified and assessed in the Rehabilitation Plan.

The table below is from the Risk Management Plan and lists the hazards that are typically associated with extractive industries and rehabilitation works, with the last column specifically identifying the hazards potentially associated with the rehabilitated land (post closure). This list of hazards formed the basis of the hazard identification in relation to the whole proposal. Where such hazards are identified as being applicable to the site, individual Risk Treatment Plans are provided in the Risk Management Plan for the Operational / Works phases, which include undertaking Rehabilitation Activities. If the hazard is not applicable to the site then it is marked as such in the table below.

While there may be identified hazards potentially associated with the rehabilitated land (post-closure), which relate to the past use of extractive industry, it firstly needs to be determined if such hazards would pose an actual risk to sensitive receptors that would require ongoing management after closure.

As detailed below for each hazard that is applicable, there will not be any 'relevant risks' (post closure) posed by the hazards potentially associated with the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities.

HAZARD	COMMENT	OPERATIONAL / WORKS PHASES		POST CLOSURE
		PRODUCTION & CONSTRUCTION	REHABILITATION ACTIVITIES	
Altered visual amenity		YES	YES	NO
Noise		YES	YES	NO
Dust		YES	YES	NO
Surface water flows		YES	YES	NO
Erosion and sedimentation		YES	YES	YES
Ground disturbance		YES	YES	NO
Ground instability		YES	YES	YES
Blasting		YES	NO	NO
Process water and storages		YES	YES	YES
Slimes storage	NOT APPLICABLE	NO	NO	NO
Imported materials		YES	YES	NO
Unauthorised site access		YES	YES	NO
Fuel, lubricants, other hazardous materials		YES	YES	NO
Weeds, pests and diseases		YES	YES	YES
Rubbish / general waste		YES	YES	NO
Fire		YES	YES	NO
Soil biological activity		YES	YES	NO
Vehicle sediment transport		YES	YES	NO

Altered visual amenity

The screening bund and vegetation established during the Operational / Works phases of the site will be retained post closure, however, as there will be no legacy of the extractive industry related activity that would require screening, they are not required to manage any ongoing related risk. There is no ongoing maintenance or management required post closure in association with the bund or any screening vegetation or batter rehabilitation. By the time site closure comes around, the bunds, any screening vegetation and the vegetation on terminal batters and at the crest will have been in place for several years and become part of the landscape, and removing them serves no purpose.

There is no post closure hazard posed by the rehabilitated land that requires visual screening that would need ongoing maintenance. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Noise

There will be no ongoing operation of vehicles or machinery post closure in association with the site's extractive industry, with the Rehabilitation Plan preparing the site for a return to general farming on those parts not occupied by the rehabilitated pit.

There is no extractive industry related activity proposed post closure on the rehabilitated land that could generate noise. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Dust

There will be no ongoing operation of vehicles or machinery post closure in association with the site's extractive industry, with the Rehabilitation Plan preparing the site for a return to general farming, with vegetation fully established on rehabilitated areas at closure, apart from the pit lake.

There is no extractive industry related activity proposed post closure on the rehabilitated land that could generate dust. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Surface water flows

There are no waterways or wetlands impacted by this work plan and post closure there will be no impact to any waterways or mapped wetlands.

The risks associated with this hazard occur as a result of surface water flows that may need to be modified or diverted during Operational / Works phases and with retained surface water diversion this hazard could still exist post closure. As detailed in this rehabilitation plan visual screening bunds, swale drains, any in pit rock-lined drains / chutes and diversion bunding will remain in place at site closure directing incident surface water to the pit lake or to the retained water dams on the site. These retained surface water management features are designed to ensure ongoing, long-term management of surface water flows through and around the site without the need for ongoing maintenance, thus mitigating any long-term risk. At closure these structures will have been in place for decades and if any remedial works became necessary they would have been implemented long before closure. As set out in the closure criteria, to achieve closure these features must be functioning to manage surface water flows, diverting flows away from rehabilitated extraction areas and not requiring maintenance.

At closure there will be no risks associated with surface water flows (including storm water) and there will be no legacy of the extractive industry related activity that increases the post closure risk associated with surface water flows and flooding on the rehabilitated land. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Erosion and sedimentation

Uncontrolled surface water flows have the potential to cause erosion on the rehabilitated landform, so this hazard could still exist post closure. The rehabilitated landform will have gentle (1V:3H) batters, that will be covered in pasture grasses at closure and suitable for general farming. This landform is consistent with the surrounding land, i.e. the nearby Mclean Hill and Mt Boulton display similar topography and ground cover. It is anticipated that when the rehabilitation objective of "pasture" has been achieved, the rehabilitated landform will be self-sustaining and erosion negligible. Some site drainage will be retained in the rehabilitated landform and any sedimentation that may occur, particularly as a result of any erosion on the rehabilitated batters, will be contained within the excavated landform and will not increase the risk to the surrounding environment.

Uncontrolled surface water flows have the potential to cause erosion on the rehabilitated landform, so this hazard could still exist post closure. The rehabilitated landform outside of the rehabilitated pit will have gentle slopes that will be covered in pasture grasses at closure and suitable for general farming. This landform is consistent with the surrounding land. It is anticipated that when the rehabilitation objective of established pasture has been achieved, the rehabilitated landform will be self-sustaining and erosion negligible. Some site drainage through this area will be retained in the rehabilitated landform and any minor sedimentation that may occur will be contained onsite within the dams that are to be retained for the ongoing land uses.

The disturbed area within the rehabilitated pit is 'self-contained' and it is anticipated that when the rehabilitation objectives have been achieved, including established vegetation on the upper erodible

batters, the rehabilitated landform will be self-sustaining and erosion negligible. As detailed in Section 3.7, swale drains, rock-lined drains / chutes and diversion bunding will remain in place at site closure directing surface water from the east to the pit lake or to the retained water dams on the site. These retained surface water management features will ensure that any sedimentation that may occur will be contained on the site, thus mitigating any long-term risk.

Subject to confirmation by further studies, at the rehabilitation milestone documented in the Rehabilitation Plan, and a period of erosion monitoring, it can be demonstrated that any erosion on the upper pit batters is likely to remain within acceptable limits in the long-term. The Geotechnical Assessment has determined that, with suitable measures implemented as soon as practicable after construction, erosion can be minimised and meet standards within 3-4 years of construction. At closure most of these rehabilitated upper batters will have been in place for decades and if any remedial works became necessary they would have been implemented long before closure. As set out in the closure criteria, to achieve closure erosion criteria must have been met and no further remedial action required.

Any erosion and sedimentation risk at closure will be very low and there will be no legacy of the extractive industry related activity that increases the post closure risk of erosion and sedimentation on the rehabilitated land. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Ground disturbance

The risks associated with the hazard of ground disturbance occur when disturbing the ground. Post closure there will be no quarry related ground disturbance, the vegetation established on the upper batters and berms of the pit will remain in place, and no additional ground will be required to be disturbed to achieve the rehabilitated landform. Any topsoil or overburden stockpiles will have been used in rehabilitation and excess overburden used as backfill within the pit (see Section 3.5), and these areas rehabilitated so there will not be any disturbance remaining post closure.

The current understanding of the hydrogeological and hydrological conditions indicates that the period of pit lake filling will take 4 years, with an equilibrium level at AHD46m. As modelled, the pit lake will not over top the excavation. Pit lake filling will be solely dependent on surface water run off, and there is no groundwater infiltration

At closure all areas of ground disturbance will be fully rehabilitated and there will be no legacy of the extractive industry related activity that increases the post closure risk associated with ground disturbance on the rehabilitated land. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Ground instability

The majority of risks associated with the hazard of ground instability occur when excavating new ground or within a period of settlement following excavation. After completion of the final rehabilitation works some risk may still be present and a simple monitoring program will be put in place. The rehabilitated landform will be monitored / inspected as per the Rehabilitation Plan with any recommendations and remediation implemented, or as directed by the Earth Resources Regulator.

Whilst some residual risk of ground instability remains post closure, it is concluded that given the competency of the rock / terminal faces, the constructed 1V:3H rehabilitated batters, the erosion controls implemented, the shallow excavation (less than 15m deep), and no interaction with groundwater, the likelihood of a failure is very low.

Subject to confirmation by further studies, at the rehabilitation milestones documented in the Rehabilitation Plan, and a period of stability monitoring, it can be demonstrated that the pit walls and backfill are likely to remain stable in the long-term. The Geotechnical Assessment has determined a

minimum Factor of Safety of 2.0 for the designed rehabilitation slopes of the quarry, including the proposed backfill base for the southern ramp into the pit – this analysis also considering the slow filling of the pit with water.

The ground instability risk at closure will be very low and there is no activity proposed post closure on the rehabilitated land that increases the risk of ground instability. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Blasting

There will be no blasting post closure, with the Rehabilitation Plan preparing the site for a return to general farming. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Process water and storages

Post closure the quarry sumps will become farm dams and the incident water collected and used for pasture irrigation and for stock. There will be no other process water infrastructure retained on site. These dams will be in constructed low points on the quarry floor, below the surrounding natural surface and will have no potential to release water beyond the excavation in the event of a breach.

As set out in the closure criteria, to achieve closure these dams must be suitable for the end use, with adequate capacity, functioning overflow structures and not requiring any maintenance, and additionally farm dams must be accessible by stock. It is anticipated that these farm dams / sediment traps may collect some sediment until vegetation is fully established across the site during final rehabilitation. If required, any sediment collected in retained farm dams / sediment traps will be cleaned from the dams during the post rehabilitation monitoring phase and used to supplement site rehabilitation, prior to closure.

The risk associated with the retained water storages at closure, as a legacy of the extractive industry related activity and given that their there will be no other retained process water infrastructure, will be extremely low and there is no activity proposed post closure on the rehabilitated land that changes this risk. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Slimes storage

Slimes are not produced on the site and therefore there will be no slimes storages.

Imported materials

Any materials importation to supplement site rehabilitation will be in accordance with an Imported Materials Management Plan and so it will be extremely unlikely that such imported materials incorporated into the site rehabilitation will pose any post closure risk. During the Operational / Works phases only soil / ‘clean fill’, mulch or solid inert waste suitable for recycling will be imported to the site and potentially used in rehabilitation. Additionally, there will be no stockpiles of imported materials remaining on the site once rehabilitation is complete.

The imported materials risk at closure will be extremely low and there will be no legacy of the extractive industry related activity that increases the post closure risk of imported materials on the rehabilitated land. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Unauthorised site access

Post closure the site will retain all fencing and any (improved) farm fencing on the site by agreement with the landowner. However, members of the public will no longer be at risk post closure as the rehabilitated landform will eliminate as far as reasonably practicable the steep slopes at the extraction crests and the potential for falls from height / injury that will be present during the Operational / Works phases. While unauthorised site access by the public is still possible post closure, the public will not be at risk due to any past extractive industry on the site, sharing the same risk as the surrounding farm land with regard to unauthorised access. The fencing to be retained across the site is not required to manage any risk to the public. At closure it will be confirmed that the retained fences are to the landowner's satisfaction and suitable for the end land uses, and that no maintenance is required.

The rehabilitated landform will include a number of permanent features that will not require ongoing maintenance and serve to further minimise any risk posed to the public after closure:

- a bund and associated swale drain established above the crest of terminal faces for long-term management of surface water flows around the rehabilitated pit crest;
- screening vegetation established at the crest of terminal faces;
- a larger safety bund established that separates the retained site infrastructure (office, sheds, vehicle parking, etc.) from the crest of the rehabilitated pit, which will ensure the ongoing safety of the landowner and their future employees, contractors and visitors. This safety bund will be designed to prevent any vehicles from being able to cross into the rehabilitated pit, i.e. the bund will be at least 1.5 times the axle height of the largest vehicle; and
- an access ramp down into the pit will be retained for emergency access and egress from the ultimate pit lake.

Given the intended end use it is considered that unauthorised site access to the rehabilitated pit by the public will be unlikely after closure. With the measures detailed above, the distance to the exposed faces from the property boundaries, and the intervening topography, the likelihood of any person falling or driving a vehicle over an exposed quarry face on this site is very unlikely. It is noted that the Earth Resources Regulator's risk matrix is not designed for consideration of such remote possibilities, with any risk event that potentially results in a fatality or life-threatening injury erroneously rating as a 'High Risk' no matter how remote the possibility of the event occurring.

The retained access ramp into the pit will ensure that egress from the pit lake will always be possible no matter what the pit lake level is over the period of lake filling that will occur after closure of the site. The Geotechnical Assessment has found that this ramp will remain stable and accessible in the long-term during the period of lake filling. The ramp is unlikely to become inaccessible due to any accumulated small rockfalls over the long-term, but even if that became an issue at some point in the future it could easily be resolved with a grader, or similar, in an emergency situation.

On the basis of the above, there will be no legacy of the extractive industry related activity that poses a post closure risk to the public, due to unauthorised site access, on the rehabilitated land. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Fuel, lubricants, other hazardous materials

The Rehabilitation Plan prepares the site for a combination of general farming activities and equipment maintenance and storage facilities which will include appropriate fuel and lubricants storage. The integrity of the fuel and lubricants store will be monitored throughout the operating life of the site, with any remedial actions implemented and documented. At closure it will be confirmed that the integrity of the fuel and lubricants store remains and that no maintenance or remediation is required.

Such ongoing fuel and lubricants storage will not be in association with the quarry, so there will be no legacy of the extractive industry related activity that poses a post closure risk to the public from fuel, lubricants or other hazardous materials on the rehabilitated land. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Weeds, pests and diseases

While weeds, pest animals and/or soil-borne disease are still possible on the site post closure, they will not be as a result of the past extractive industry on the site, sharing the same risk as the surrounding farm land. All landowners / land managers have an obligation to manage weeds, pest animals and/or soil-borne disease, and the rehabilitated landform does not introduce any new or additional risk that requires any additional controls beyond the monitoring and maintenance up to site closure that is set out in the Rehabilitation Plan.

There will be no legacy of the extractive industry related activity that poses a post closure risk of weeds, pest animals and/or soil-borne disease on the rehabilitated land. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Rubbish / general waste

There will be no ongoing requirement to manage rubbish and general waste post closure in association with extractive industry activities, with the Rehabilitation Plan preparing the site for a return to general farming, including the removal of any redundant / discarded plant and equipment. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Fire

While fire is still possible on the site post closure, it will not be as a result of the past extractive industry on the site, sharing the same risk as the surrounding properties. All landowners / land managers have an obligation to manage the risk of fire, and the rehabilitated landform does not introduce any new or additional risk that requires any additional controls beyond that set out in this Risk Management Plan that apply up to site closure.

There will be no legacy of the extractive industry related activity that poses a post closure risk of fire on the rehabilitated land. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

Soil biological activity

The biological activity of the soil stored in stockpiles will be maintained as much as possible to assist in achieving rehabilitation objectives, with the Rehabilitation Plan preparing the site for a return to general farming. There will be no ongoing soil storage post closure, with all stored soil used in the site rehabilitation. Therefore, no relevant risks will be posed to the environment, members of the public, or to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

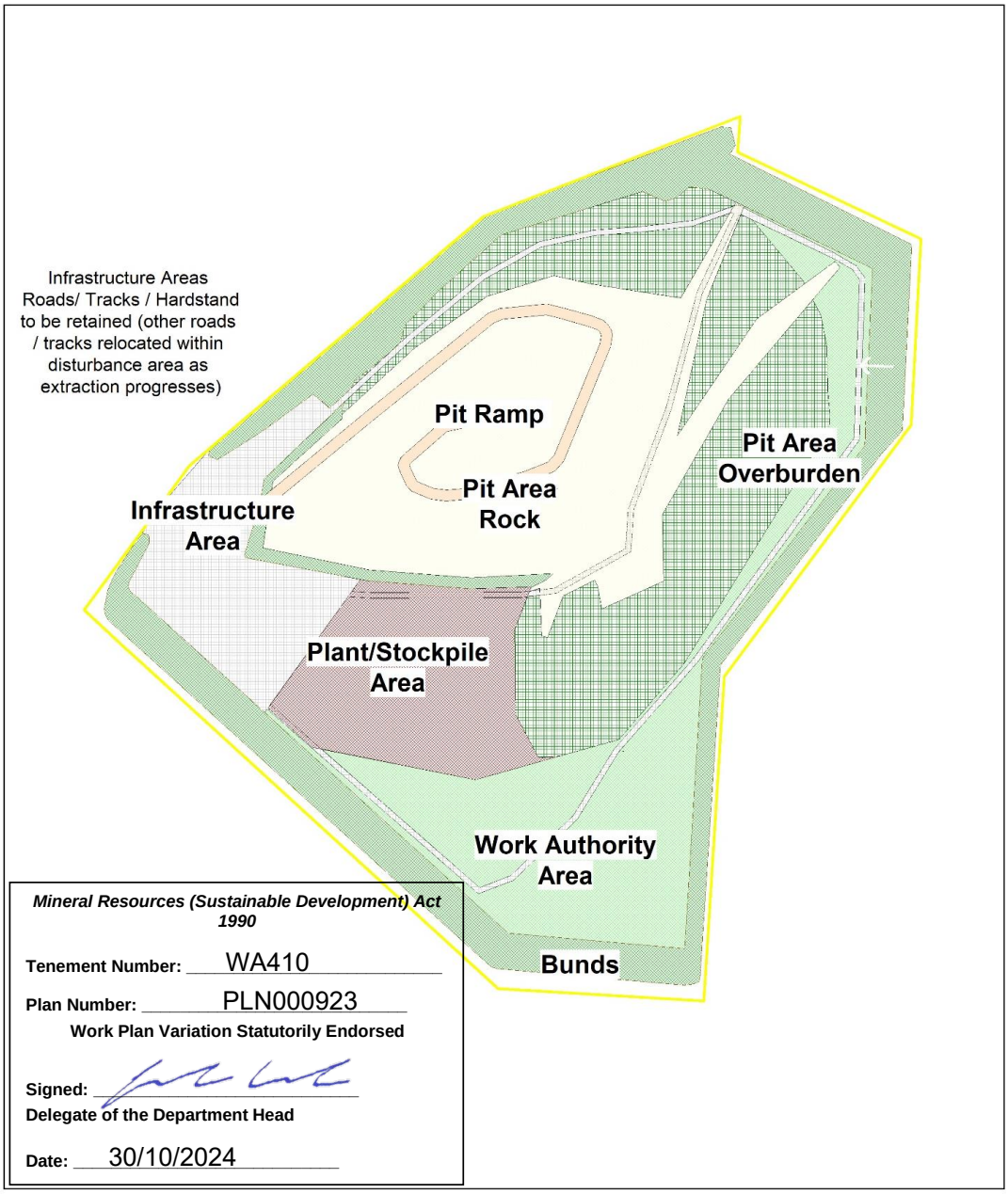
Vehicle sediment transport

There will be no ongoing truck or vehicle movements post closure in association with the quarry, with the Rehabilitation Plan preparing the site for a return to general farming, so there will be no legacy of the extractive industry related activity that poses a post closure risk due to vehicle sediment transport from the rehabilitated land. Therefore, no relevant risks will be posed to the environment, members of the public, or

to land, property or infrastructure in the vicinity of the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities after closure.

5. REHABILITATION DOMAINS

5.1. REHABILITATION DOMAINS PLAN



REHABILITATION DOMAINS PLAN

5.2. REHABILITATION DOMAINS TABLE

5.2.1. Domain: Infrastructure Areas

Objective: Except the infrastructure to be explicitly retained for farm use or rural industry use, crushing plant has been decommissioned and removed, with associated areas rehabilitated and suitable for use for general farming and animal husbandry, to the landowner's satisfaction.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Administration Buildings And associated infrastructure all retained post closure (see Sec 3.1)	**Closure**: Administration office, amenities, weighbridge, all small buildings, light vehicle parking infrastructure and surrounding areas will be maintained in good repair and in a neat/tidy appearance.	Photograph all retained infrastructure, include a general description of infrastructure and surrounds. Record / photograph any disrepair to buildings.	**Post Rehabilitation Phase** Annually for general condition and appearance.
Crushing Plant and Hardstand Area	**Closure**: Processing plant will be decommissioned and removed from site. No contaminated land remains on site. Workshop, fuel stores, oil and grease stores, and all associated buildings, containers and hardstands, including surrounding areas, will be rehabilitated to viable pasture / crops. Min 90% groundcover vegetation establishment (for pasture) Min 80% canopy vegetation establishment (for trees / shrubs) No bare patches greater than $10m^2$.	Record / photograph any redundant or derelict plant or infrastructure Presence of any contamination of land, remedial works undertaken, if necessary. Visual estimate of pasture establishment (ground cover) General description of pasture / crop vitality Record / photograph any bare patches Record / photograph any weed infestation	**Post Rehabilitation Phase** Final decommissioning and removal of infrastructure Annually review adequate completion of decommissioning works. Pasture / crop establishment Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required)
Workshops, Fuel / Lubricant or Hazardous Materials Storages, and part of hardstand area retained post closure (see Sec 3.1)	**Closure:** Workshop, fuel/lubricant or hazardous materials storages, and all associated buildings, containers and hardstands, including surrounding areas, will be maintained in good repair and in a neat/tidy appearance. Fuel/lubricant or hazardous materials storages: Integrity / suitability for end land uses at closure, not requiring maintenance No contaminated land All fixed processing plant will be dismantled and stored neatly or removed.	Photograph all retained infrastructure, include a general description of infrastructure and surrounds. Record / photograph any disrepair to plant or infrastructure. Condition and suitability of fuel/lubricants or hazardous materials storages for end land uses. Presence of any contamination of land, remedial works undertaken, if necessary	**Post Rehabilitation Phase** Annually for general condition and appearance. Annually for storage / removal of processing plant. Annually for integrity of fuel/lubricant or hazardous materials storage, and any soil contamination

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5.2.1. Domain: Infrastructure Areas

Objective: Except the infrastructure to be explicitly retained for farm use or rural industry use, crushing plant has been decommissioned and removed, with associated areas rehabilitated and suitable for use for general farming and animal husbandry, to the landowner's satisfaction.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Product Stockpile Area(s) and any Associated Hardstands	**Areas of Completed Progressive Rehabilitation**: Any redundant product stockpile areas, including any associated hardstands, will be rehabilitated as soon as practicable. **Closure**: All stockpiles removed and any hardstand areas (in excess of a maximum 1ha to be retained) rehabilitated to viable pasture / crops Min 90% groundcover vegetation establishment (for pasture) Min 80% canopy vegetation establishment (for trees / shrubs) No bare patches greater than $10m^2$.	Visual estimate of pasture establishment (ground cover) General description of pasture / crop vitality Record / photograph any bare patches Record / photograph any weed infestation	**Ongoing Progressive Rehabilitation** Annually review for any redundant areas that could be rehabilitated, aiding compliance with maximum disturbed area at any given time. **Post Rehabilitation Phase** Final removal of stockpiles and hardstands. Annually review adequate completion of decommissioning works. Pasture / crop establishment Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required)
Access Roads / Tracks	**Areas of Completed Progressive Rehabilitation**: Any redundant roads and tracks will be rehabilitated as soon as practicable. **Closure**: All redundant roads and tracks (in excess of approx. 0.4ha to be retained) rehabilitated to viable pasture / crops. Min 90% groundcover vegetation establishment (for pasture) Min 80% canopy vegetation establishment (for trees / shrubs) No bare patches greater than $10m^2$.	Visual estimate of pasture establishment (ground cover) General description of pasture / crop vitality Record / photograph any bare patches Record / photograph any weed infestation	**Ongoing Progressive Rehabilitation** Annually review for any redundant roads / tracks that could be rehabilitated, aiding compliance with maximum disturbed area at any given time. **Post Rehabilitation Phase** Final removal of roads and tracks that are not to be retained. Annually review adequate completion of road / track decommissioning works. Pasture / crop establishment Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required)
Roads / Tracks Retained post closure (see Sec 3.1)	**Closure**: Main site access and internal site access tracks (totalling approx. 0.4ha) retained. Surfaces of site access road and internal tracks maintained to standard acceptable to landowner. Edge drains to roads and tracks in good repair and effectively managing surface water flows.	General description of retained road and track surfaces and edge drains Record / photograph typical sections	**Post Rehabilitation Phase** Annually for general condition.

5.2.1. Domain: Infrastructure Areas

Objective: Except the infrastructure to be explicitly retained for farm use or rural industry use, crushing plant has been decommissioned and removed, with associated areas rehabilitated and suitable for use for general farming and animal husbandry, to the landowner's satisfaction.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Sediment Dams and water infrastructure All retained post closure (see Sec 3.1)	**Areas of Completed Progressive Rehabilitation**: Any necessary modification to retained sediment / water dams to ensure long-term stability (after closure), e.g. overflow structures, will be implemented prior to extraction ceasing for quarry purposes. **Closure**: Retained diversion bunding, swale drains, water tanks, pipelines, water pumps and water dams functioning to adequately manage water supply for end land use and do not require maintenance. Retained water dams have functioning overflow structures and accessible by stock. Retained water dams have adequate capacity (i.e. not filled with sediment). Retained water dams licenced for end land useif appropriate.	Visual inspection for stability and signs of erosion in dam walls. Sedimentation within water dams. Visual inspection for condition of diversion bunding, swale drains, water tanks, pipelines, water pumps, water supply bores and groundwater monitoring bores. Record / photograph condition of dam walls. Record / photograph condition of diversion bunding, swale drains, water tanks, pipelines, water pumps, and any other water management.	**Ongoing Progressive Rehabilitation** Annually review for any need to modify the water dams, particularly if it is planned to cease water extraction from that dam for quarry purposes. **Post Rehabilitation Phase** Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required) Additional inspections after significant rainfall events.
Power and Telecommunications Retained post closure (see Sec 3.1)	**Closure**: Power poles & lines (above or below ground), and telecommunications infrastructure, all retained Power and telecommunications infrastructure will be maintained in good repair.	General description of retained power and telecommunications infrastructure Record / photograph condition of infrastructure	**Post Rehabilitation Phase** Annually for general condition.

5.2.1. Domain: Infrastructure Areas

Objective: Except the infrastructure to be explicitly retained for farm use or rural industry use, crushing plant has been decommissioned and removed, with associated areas rehabilitated and suitable for use for general farming and animal husbandry, to the landowner's satisfaction.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Infrastructure Areas (Erosion)	**Areas of Completed Progressive Rehabilitation**: No erosion channels greater than 50mm deep and/or wide on any progressive rehabilitation. No more than 5 erosion channels greater than 20mm deep and/or wide within a 20m wide area on any progressive rehabilitation. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: No erosion channels greater than 50mm deep and/or wide on any rehabilitated infrastructure areas. No more than 5 erosion channels greater than 20mm deep and/or wide within a 20m wide area on any rehabilitated infrastructure areas.	Visual inspection for erosion channels, recording depth, width and number of any channels and photographed for follow up.	**Ongoing Progressive Rehabilitation** 6 Monthly. Additional inspections after significant rainfall events. **Post Rehabilitation Phase** Y1 - 2 Monthly Y2 - 3 Monthly Y3 - 6 Monthly (and further, if required) Additional inspections after significant rainfall events.
Infrastructure Areas (Surface Water Controls)	**Areas of Completed Progressive Rehabilitation**: No turbid water leaving progressively rehabilitated infrastructure areas. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: Surface water flows satisfactorily controlled to prevent erosion in infrastructure areas. No turbid water leaving any rehabilitated infrastructure areas. All retained swale drains, diversion bunds and sediment traps in place and functioning to manage surface water flows and do not require maintenance. Retained sediment traps have adequate capacity (i.e. not filled with sediment).	Visual inspection for turbidity, water quality specific monitoring as per Surface Water Management Plan Water quality in accordance with Water Quality for Farm Water Supplies as per Agriculture Victoria's recommendations (based on Australian and New Zealand Guidelines for Fresh and Marine Water Quality (Primary Industries)), or specific CMA requirements	**Ongoing Progressive Rehabilitation** Monthly visual inspection Additional inspections after significant rainfall events. **Post Rehabilitation Phase** Y1 - 1 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required) Additional inspections after significant rainfall events.

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5.2.2. Domain: Screening Bund Areas (Bunds)

Objective: All screening bunds stable and vegetated to the landowner's satisfaction.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Screening / Perimeter Bunds 2.3ha Retained post closure (see Sec 3.1)	**Areas of Completed Progressive Rehabilitation**: Screening bunds graded and profiled to design. Viable pasture / screening vegetation established on bunds as soon as practicable after construction. Min 90% pasture establishment or min 80% overstorey vegetation establishment with a min 70% understorey vegetation established. No bare patches greater than $10m^2$. Adjacent swale drains established as soon as practicable with construction of screening bunds and functioning to manage surface water flows. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: Screening bunds (approx. 2.3ha) maintained in good repair with viable vegetation established. Min 90% pasture establishment or min 80% overstorey vegetation establishment with a min 70% understorey vegetation established. No bare patches greater than $10m^2$. Adjacent swale drains functioning to manage water flows and do not require maintenance.	Effectiveness of screening bunds in screening site operations (prior to final site rehabilitation). Visual estimate of pasture / screening vegetation establishment. General description of vegetation vitality / species survival Visual inspection for condition of swale drains. Record / photograph any bare patches Record / photograph condition of swale drains.	**Ongoing Progressive Rehabilitation** 3 Monthly following completion of construction works until vegetation established. Then 6 monthly until vegetation fully established and erosion minimised. Additional inspections after significant rainfall events until vegetation fully established. Annually review for any need to remediate bund faces or planted vegetation. **Post Rehabilitation Phase** Y1 – 3 Monthly Y2 – 6 Monthly Y3 - 12 Monthly (and further, if required)

5.2.2. Domain: Screening Bund Areas (Bunds)

Objective: All screening bunds stable and vegetated to the landowner's satisfaction.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Screening Bunds (Erosion)	**Areas of Completed Progressive Rehabilitation**: No erosion channels greater than 50mm deep and/or wide on any progressive rehabilitation. No more than 5 erosion channels greater than 20mm deep and/or wide within a 20m wide area on any progressive rehabilitation. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: No erosion channels greater than 50mm deep and/or wide on any rehabilitated infrastructure areas. No more than 5 erosion channels greater than 20mm deep and/or wide within a 20m wide area on any rehabilitated infrastructure areas.	Visual inspection for erosion channels, recording depth, width and number of any channels and photographed for follow up.	**Ongoing Progressive Rehabilitation** 6 Monthly. Additional inspections after significant rainfall events. **Post Rehabilitation Phase** Y1 - 2 Monthly Y2 - 3 Monthly Y3 - 6 Monthly (and further, if required) Additional inspections after significant rainfall events.

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5.2.3. Domain: Overburden Storage Areas (Pit Area Overburden and part of Plant /Stockpile Area)

Objective: At closure all overburden stockpiles / waste rock dumps have been removed or reshaped/reprofiled with associated areas fully rehabilitated and suitable for farming use, to the landowner's satisfaction, or as otherwise required for rural industry use.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Overburden Mounds and Stockpile Pads	**Areas of Completed Progressive Rehabilitation**: Any redundant overburden mound areas will be rehabilitated as soon as practicable. **Closure**: All overburden mounds (apart from retained perimeter bund) removed/reprofiled or used in rehabilitation and land rehabilitated to viable pasture / crops. Min 90% groundcover vegetation establishment (for pasture) Min 80% canopy vegetation establishment (for trees / shrubs) No bare patches greater than $10m^2$.	General description of overburden mounds Record / photograph overburden mounds Visual estimate of pasture establishment (ground cover) General description of pasture / crop vitality Record / photograph any bare patches Record / photograph any weed infestation	**Ongoing Progressive Rehabilitation** Annually review for any redundant areas that could be rehabilitated, aiding compliance with maximum disturbed area at any given time. **Post Rehabilitation Phase** Upon completion of rehabilitation landforming works. Pasture / crop establishment Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required)
Waste Rock Dumps / Imported Materials Stockpiles	**Areas of Completed Progressive Rehabilitation**: Any redundant waste rock dump areas or any redundant imported materials stockpile areas will be rehabilitated as soon as practicable. **Closure**: All waste rock dumps, including any associated hardstands, removed or used in rehabilitation and land rehabilitated to viable pasture / crops. Any stockpiles of imported materials, including any associated hardstands, removed or used in rehabilitation and land rehabilitated to viable pasture / crops. Min 90% groundcover vegetation establishment (for pasture) Min 80% canopy vegetation establishment (for trees / shrubs)) No bare patches greater than $10m^2$.	General description of waste rock dumps and any imported materials stockpiles Record / photograph waste dumps and any imported materials stockpiles Visual estimate of pasture establishment (ground cover) General description of pasture / crop vitality Record / photograph any bare patches Record / photograph any weed infestation	**Ongoing Progressive Rehabilitation** Annually review for any redundant areas that could be rehabilitated, aiding compliance with maximum disturbed area at any given time. **Post Rehabilitation Phase** Upon completion of rehabilitation landforming works, then annually. Pasture / crop establishment Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required)

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5.2.3. Domain: Overburden Storage Areas (Pit Area Overburden and part of Plant /Stockpile Area)

Objective: At closure all overburden stockpiles / waste rock dumps have been removed or reshaped/reprofiled with associated areas fully rehabilitated and suitable for farming use, to the landowner's satisfaction, or as otherwise required for rural industry use.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Overburden Storage Areas (Erosion)	**Areas of Completed Progressive Rehabilitation**: No erosion channels greater than 200mm deep and/or wide on any progressive rehabilitation. No more than 5 erosion channels greater than 150mm deep and/or wide within a 20m wide area on any progressive rehabilitation. No erosion channels greater than 50mm deep and/or wide on any progressive rehabilitation. No more than 5 erosion channels greater than 20mm deep and/or wide within a 20m wide area on any progressive rehabilitation. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: No erosion channels greater than 50mm deep and/or wide on any rehabilitated overburden storage areas. No more than 5 erosion channels greater than 20mm deep and/or wide within a 20m wide area on any rehabilitated overburden storage areas.	Visual inspection for erosion channels, recording depth, width and number of any channels & photographed for follow up.	**Ongoing Progressive Rehabilitation** Y1 - 2 Monthly, following construction of screening bund Y2 - 3 Monthly until initial grasses established and erosion limited Y3 – 6 Monthly, until long-term vegetation established and erosion minimised. **Post Rehabilitation Phase** Y1 - 2 Monthly Y2 - 3 Monthly Y3 - 6 Monthly (and further, if required) Additional inspections after significant rainfall events.

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5.2.3. Domain: Overburden Storage Areas (Pit Area Overburden and part of Plant /Stockpile Area)

Objective: At closure all overburden stockpiles / waste rock dumps have been removed or reshaped/reprofiled with associated areas fully rehabilitated and suitable for farming use, to the landowner's satisfaction, or as otherwise required for rural industry use.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Overburden Storage Areas (Surface Water Controls)	**Areas of Completed Progressive Rehabilitation**: No turbid water leaving progressively rehabilitated overburden storage areas. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: Surface water flows satisfactorily controlled to prevent erosion in overburden storage areas. No turbid water leaving any rehabilitated overburden storage areas. All retained swale drains, diversion bunds and sediment traps in place and functioning to manage surface water flows and do not require maintenance. Retained sediment traps have adequate capacity (i.e. not filled with sediment).	Visual inspection for turbidity, water quality specific monitoring as per Surface Water Management Plan Water quality in accordance with Water Quality for Farm Water Supplies as per Agriculture Victoria's recommendations (based on Australian and New Zealand Guidelines for Fresh and Marine Water Quality (Primary Industries)), or specific CMA requirements	**Ongoing Progressive Rehabilitation** Monthly visual inspection. Additional inspections after significant rainfall events. **Post Rehabilitation Phase** Y1 – 1 Monthly Y2 – 6 Monthly Y3 - 12 Monthly (and further, if required) Additional inspections after significant rainfall events.

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5.2.4. Domain: Pit Upper Benches (down to AHD90m) (Pit Area Rock)

Objective: Once extraction progresses beyond the upper quarry benches, these benches will be fully rehabilitated to a safe, stable and sustainable landform, including the establishment of a healthy vegetation cover, and will remain so at closure.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Pit Upper Benches – Uppermost Terminal Batters (Design and Construction)	**Areas of Completed Progressive Rehabilitation**: Terminal batter on upper benches meet split-bench design (below) in progressive rehabilitated areas. Crest swale drains and rock-lined drains/chutes constructed and functioning to manage surface water flows in progressively rehabilitated areas. Safety bund (1m high) established at crest in progressively rehabilitated areas. Any necessary remedial rehabilitation undertaken as soon as practicable. **Completed Rehabilitation of Uppermost Benches** Terminal crest cut in diggable/erodible material with slope of 1V:3H (18 deg)). First face (drop) in blasted material not greater than 2m high, with minimum 3m wide berms. Second face (drop) to a maximum 6m high (will vary to align with the topography) with minimum 5m wide berm at toe. Quarry berms covered with minimum 500mm overburden and 100mm of soil. Crest swale drains and rock-lined drains/chutes constructed and functioning to manage surface water flows. Safety bund (1m high) established at crest Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure:** Rehabilitated batters established in accordance with the Rehabilitation Plan, are stable and likely to remain stable in long-term. Crest swale drains and rock-lined drains/chutes functioning to manage surface water flows and do not require maintenance. Safety bund (1m high) established at crest.	Effectiveness of surface water cut off drains, rock-lined drains/chutes and bunding at extraction crest. Visual assessment of rehabilitated uppermost benches, looking for presence/absence of landform slumping, cracks or movement Record / photograph condition of surface water cut off drains, rock-lined drains/ chutes and bunding. Record / photograph condition of rehabilitated upper benches. Rehabilitation landform constructed in accordance with the Rehabilitation Plan	**Ongoing Progressive Rehabilitation** Annually review for any uppermost terminal batters that could be rehabilitated. 3 Monthly once works completed on terminal batter in diggable/erodible materials, for progressively rehabilitated areas, until initial grasses established and other measures have limited erosion. Then 6 monthly until long-term vegetation fully established and erosion minimised. Additional inspections after significant rainfall events until vegetation fully established. **Uppermost Benches Rehabilitation Works** 3 Monthly once rehabilitation works are completed on all upper terminal batters in diggable/erodible materials, until initial grasses established and other measures have limited erosion. Then 6 monthly until long-term vegetation fully established and erosion minimised. Additional inspections after significant rainfall events until vegetation fully established. **Post Rehabilitation Phase** Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required) Additional inspections after significant rainfall events.

Pit Upper Benches – Uppermost Terminal Batters (Tree / Shrub Vegetation)	**Areas of Completed Progressive Rehabilitation**: Grasses initially established, as soon as practicable, on batters in diggable/erodible materials (utilising mulch, jute matting, etc., as necessary) in progressively rehabilitated areas. Viable vegetation established on batters in diggable/erodible materials in progressively rehabilitated areas. Viable screening vegetation established at crest in progressively rehabilitated areas. Min 80% initial grass cover, with a min 80% overstorey vegetation establishment, on progressively rehabilitated batters in diggable/ erodible materials. No bare patches greater than $10m^2$, on progressively rehabilitated batters in diggable/erodible materials. Fencing maintained to prevent access to upper benches while works are still being undertaken and vegetation is being established. Any necessary remedial rehabilitation undertaken as soon as practicable. **Completed Rehabilitation of Uppermost Benches** Viable vegetation established on batters in diggable/ erodible materials. Viable screening vegetation established at crest. Min 80% overstorey vegetation establishment, with a min 70% understorey vegetation established, on rehabilitated batters in diggable/erodible materials. No bare patches greater than $10m^2$, on rehabilitated batters in diggable/erodible materials. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: Viable vegetation established on batters in diggable/ erodible materials. Viable screening vegetation established at crest. Min 80% overstorey vegetation establishment, with a min 70% understorey vegetation established, on rehabilitated batters in diggable/erodible materials.	Visual estimate of vegetation establishment (canopy cover) on rehabilitated batters, and estimate of visual impact remediation General description of vegetation vitality / species survival Effectiveness of any fencing, where required, to control access by stock and native fauna until vegetation established Record / photograph any bare patches Record / photograph any weed infestation	**Ongoing Progressive Rehabilitation** 3 Monthly once works completed on terminal batter in diggable/erodible materials, for progressively rehabilitated areas, until initial grasses established and other measures have limited erosion. Then 6 monthly until long-term vegetation fully established and erosion minimised. Additional inspections after significant rainfall events until vegetation fully established. Annually review for any need to supplement planted vegetation. **Uppermost Benches Rehabilitation Works** 3 Monthly once rehabilitation works are completed on all upper terminal batters in diggable/erodible materials, until initial grasses established and other measures have limited erosion. Then 6 monthly until long-term vegetation fully established and erosion minimised. Additional inspections after significant rainfall events until vegetation fully established. Annually review for any need to supplement planted vegetation. **Post Rehabilitation Phase** Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required) Additional inspections after significant rainfall events.

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5.2.4. Domain: Pit Upper Benches (down to AHD90m) (Pit Area Rock)

Objective: Once extraction progresses beyond the upper quarry benches, these benches will be fully rehabilitated to a safe, stable and sustainable landform, including the establishment of a healthy vegetation cover, and will remain so at closure.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
	No bare patches greater than $10m^2$, on rehabilitated batters in diggable/erodible materials.		

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5.2.4. Domain: Pit Upper Benches (down to AHD90m) (Pit Area Rock)

Objective: Once extraction progresses beyond the upper quarry benches, these benches will be fully rehabilitated to a safe, stable and sustainable landform, including the establishment of a healthy vegetation cover, and will remain so at closure.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Pit Upper Benches – Uppermost Terminal Batters (Erosion)	**Areas of Completed Progressive Rehabilitation**: Grasses initially established, as soon as practicable, on batters in diggable/erodible materials (utilising mulch, jute matting, etc., as necessary) in progressively rehabilitated areas. <u>In the first 3 years after rehab. batter earthworks:</u> No erosion channels greater than 200mm deep and/or wide on any progressive rehabilitation. No more than 5 erosion channels greater than 150mm deep and/or wide within a 20m wide area on any progressive rehabilitation. <u>By the end of the third year after earthworks:</u> No erosion channels greater than 50mm deep and/or wide on any progressive rehabilitation. No more than 5 erosion channels greater than 20mm deep and/or wide within a 20m wide area on any progressive rehabilitation. Any necessary remedial rehabilitation undertaken as soon as practicable. **Completed Rehabilitation of Uppermost Benches** No erosion channels greater than 50mm deep and/or wide on any rehabilitated upper terminal batters. No more than 5 erosion channels greater than 20mm deep and/or wide within a 20m wide area on any rehabilitated upper terminal batters. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: No erosion channels greater than 50mm deep and/or wide on any rehabilitated pit upper benches. No more than 5 erosion channels greater than 20mm deep and/or wide within a 20m wide area on any rehabilitated pit upper benches.	Visual inspection for erosion channels, recording depth, width and number of any channels and photographed for follow up. Erosion review and slope performance review undertaken in accordance with Ground Control Management Plan.	**Ongoing Progressive Rehabilitation** Y1 - 2 Monthly, following completion of earthworks on upper terminal batter in diggable/erodible materials Y2 - 3 Monthly until initial grasses established and other measures have limited erosion Y3 – 6 Monthly, until long-term vegetation established and erosion minimised. Additional inspections after significant rainfall events. Annually review for any need to remediate areas of erosion. **Uppermost Benches Rehabilitation Works** Y1 – 2 Monthly once rehabilitation works are completed on all upper terminal batters in diggable/erodible materials Y2 – 3 Monthly until initial grasses established and other measures have limited erosion Y3 – 6 Monthly, until long-term vegetation established and erosion minimised Additional inspections after significant rainfall events until long-term vegetation fully established. Annually review for any need to remediate areas of erosion. **Post Rehabilitation Phase** Y1 - 2 Monthly Y2 - 3 Monthly Y3 - 6 Monthly (and further, if required) Additional inspections after significant rainfall events.

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5.2.4. Domain: Pit Upper Benches (down to AHD90m) (Pit Area Rock)

Objective: Once extraction progresses beyond the upper quarry benches, these benches will be fully rehabilitated to a safe, stable and sustainable landform, including the establishment of a healthy vegetation cover, and will remain so at closure.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Pit Upper Benches – Uppermost Terminal Batters (Surface Water Controls)	**Areas of Completed Progressive Rehabilitation**: No turbid water flowing away from pit in any progressively rehabilitated extraction areas. Surface water drainage functioning to divert water flows away from progressively rehabilitated batters in diggable/erodible material. Rock-lined drains/chutes functioning to direct runoff from slopes above the quarry into the pit through progressively rehabilitated extraction areas. Any necessary remedial rehabilitation undertaken as soon as practicable. **Completed Rehabilitation of Uppermost Benches** No turbid water flowing away from pit for rehabilitated extraction areas. Surface water drainage functioning to divert water flows away from progressively rehabilitated batters in diggable/erodible material. Rock-lined drains/chutes functioning to direct runoff from slopes above the quarry into the pit. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: No turbid water flowing away from pit for rehabilitated extraction areas. Surface water drainage functioning to divert water flows away from progressively rehabilitated batters in diggable/erodible material and do not require maintenance. Rock-lined drains/chutes functioning to direct runoff from slopes above the quarry into the pit and do not require maintenance.	Visual inspection for performance of diversion drainage and rock-lined drains/ chutes, specific monitoring as per Surface Water Management Plan Water quality in accordance with Water Quality for Farm Water Supplies as per Agriculture Victoria's recommendations (based on Australian and New Zealand Guidelines for Fresh and Marine Water Quality (Primary Industries)), or specific CMA requirements	**Ongoing Progressive Rehabilitation** Visual inspections of surface water controls for progressively rehabilitated areas Y1 - 1 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required) Additional inspections after significant rainfall events. **Uppermost Benches Rehabilitation Works** Visual inspections of surface water controls once rehabilitation works are completed on all upper terminal batters, until vegetation established and erosion minimised Y1 - 1 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required) Additional inspections after significant rainfall events. **Post Rehabilitation Phase** Visual inspections of surface water controls Y1 - 1 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required) Additional inspections after significant rainfall events.

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5.2.4. Domain: Pit Upper Benches (down to AHD90m) (Pit Area Rock)

Objective: Once extraction progresses beyond the upper quarry benches, these benches will be fully rehabilitated to a safe, stable and sustainable landform, including the establishment of a healthy vegetation cover, and will remain so at closure.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Pit Upper Benches – Terminal Berms in Rock down to AHD90m Level (Design and Construction)	**Areas of Completed Progressive Rehabilitation:** Terminal faces not steeper than 80 degrees with maximum terminal face height 15m. Berms on upper benches not less than 8m wide. Upper berms down to the AHD90m level covered with minimum 500mm overburden and 100mm of soil for progressively rehabilitated areas. Batter swale drains and rock-lined drains/chutes constructed and functioning to manage surface water flows in progressively rehabilitated areas. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: Rehabilitated pit walls established in accordance with the Rehabilitation Plan, or shallower slope if necessary, are stable and likely to remain stable in the long-term. Batter swale drains and rock-lined drains/chutes functioning to manage flows and do not require maintenance.	Effectiveness of batter swale drains and rock-lined drains/chutes. Visual assessment of upper benches, looking for presence/absence of landform slumping, cracks or movement Record / photograph condition of batter swale drains and rock-lined drains/chutes. Record / photograph condition of rehabilitated quarry berms. Rehabilitated landform constructed in accordance with the Rehabilitation Plan (allowing for finalisation of egress zones)	**Ongoing Progressive Rehabilitation** 3 Monthly once works completed on terminal berm, for progressively rehabilitated areas. Then 6 monthly, until vegetation established and any erosion of fill minimised. Additional inspections after significant rainfall events. **Post Rehabilitation Phase** Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required) Additional inspections after significant rainfall events.

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5.2.4. Domain: Pit Upper Benches (down to AHD90m) (Pit Area Rock)

Objective: Once extraction progresses beyond the upper quarry benches, these benches will be fully rehabilitated to a safe, stable and sustainable landform, including the establishment of a healthy vegetation cover, and will remain so at closure.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Pit Upper Benches – Terminal Berms in Rock down to AHD90m Level (Tree / Shrub Vegetation)	**Areas of Completed Progressive Rehabilitation**: Quarry berms down to the AHD90m level covered with minimum 500mm overburden and 100mm of soil for progressively rehabilitated areas. Viable vegetation established on berms for upper benches down to the AHD90m level in progressively rehabilitated areas. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: Viable vegetation established on berms for upper benches down to the AHD90m level. Established vegetation minimising, as far as practicable, the visual impact of rock faces.	Visual estimate of vegetation establishment on quarry berms and visual impact remediation General description of vegetation vitality / species survival Record / photograph any weed infestation	**Ongoing Progressive Rehabilitation** 3 Monthly once works completed on terminal berm, for progressively rehabilitated areas. Then 6 monthly, until vegetation established and any erosion of fill minimised. Additional inspections after significant rainfall events. Annually review for any need to supplement planted vegetation. **Post Rehabilitation Phase** Y1 - 3 Monthly Y2 - 6 Monthly Y3 -12 Monthly (and further, if required) Additional inspections after significant rainfall events.
Pit Upper Benches – Terminal Berms in Rock down to AHD90m L Level (Surface Water Controls)	**Areas of Completed Progressive Rehabilitation**: Surface water flows from berms and flows from rock-lined drains/chutes being directed to pit floor/lake without long-term ponding on berms, in progressively rehabilitated extraction areas. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: Surface water flows from berms and flows from rock-lined drains/chutes being directed to pit floor/lake without long-term ponding on berms, and no remediation required.	Visual inspection of surface water flows from berms and flows from rock-lined drains/chutes Record / photograph condition of quarry berms.	**Ongoing Progressive Rehabilitation** Visual inspections of surface water controls for progressively rehabilitated areas Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required) Additional inspections after significant rainfall events. **Post Rehabilitation Phase** Visual inspections of surface water controls Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required) Additional inspections after significant rainfall events.

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5.2.4. Domain: Pit Upper Benches (down to AHD90m) (Pit Area Rock)

Objective: Once extraction progresses beyond the upper quarry benches, these benches will be fully rehabilitated to a safe, stable and sustainable landform, including the establishment of a healthy vegetation cover, and will remain so at closure.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Pit Upper Benches – Terminal Berms in Rock down to AHD90m Level (Erosion of fill)	**Areas of Completed Progressive Rehabilitation**: <u>In the first 3 years after earthworks on berms:</u> No erosion channels greater than 200mm deep and/or wide on any progressive rehabilitation. No more than 5 erosion channels greater than 150mm deep and/or wide within a 20m wide area on any progressive rehabilitation. <u>By the end of the third year after earthworks:</u> No erosion channels greater than 50mm deep and/or wide on any progressive rehabilitation. No more than 5 erosion channels greater than 20mm deep and/or wide within a 20m wide area on any progressive rehabilitation. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: No erosion channels greater than 50mm deep and/or wide on any rehabilitated pit batters or the pit floor. No more than 5 erosion channels greater than 20mm deep and/or wide within a 20m wide area on any rehabilitated pit batters or the pit floor.	Visual inspection for erosion channels, recording depth, width and number of any channels and photographed for follow up.	**Ongoing Progressive Rehabilitation** 3 Monthly once works completed on terminal berm, for progressively rehabilitated areas. Then 6 monthly, until vegetation established and any erosion of fill minimised. Additional inspections after significant rainfall events. Annually review for any need to remediate areas of erosion. **Post Rehabilitation Phase** Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required) Additional inspections after significant rainfall events.

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5.2.5. Domain: Pit and Lower (Pit Area Rock)

Objective: At closure lower quarry faces/benches and pit floor forming a safe, stable and sustainable landform, in preparation for water filling to ultimately establish a healthy pit lake.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Pit Lower Benches – Terminal Batters for below AHD90m Level (Design and Construction)	**Areas of Completed Progressive Rehabilitation:** Terminal faces not steeper than 80 degrees with maximum terminal face height 12m . Berms on lower benches scaleable with height of face, but not less than 8m wide with 12m faces,. Surface water flows from berms and flows from rock-lined drains/chutes being directed to pit floor/lake without long-term ponding on berms, in progressively rehabilitated extraction areas. Any necessary remedial rehabilitation undertaken as soon as practicable. **Review of Pit Rehabilitation Design**: A**HD53m** Complete a review of long-term stability of final pit design, including consideration of lake filling and future wave erosion impacts, confirming the pit will remain safe and stable post closure. Groundwater Management Plan revised as result of reassessment of hydrogeological conditions **Closure**: Rehabilitated pit walls established in accordance with the Rehabilitation Plan, or shallower slope if necessary, are stable and likely to remain stable in the long-term. Surface water flows from berms and flows from rock-lined drains/chutes being directed to pit floor/lake without long-term ponding on berms	Visual assessment of lower benches, looking for presence/absence of landform slumping, cracks or movement Visual inspection of surface water flows from berms and flows from rock-lined drains/chutes Record / photograph condition of rock-lined drains/chutes. Record / photograph condition of quarry berms. Continued suitability of terminal design for long-term stability (via Ground Control Management Plan) Presence of any groundwater Continued suitability of terminal design for long-term stability (via Ground Control Management Plan) Hydrogeological conditions including groundwater infiltration rate. Rehabilitated landform constructed in accordance with the Rehabilitation Plan	**Ongoing Progressive Rehabilitation** 3 Monthly once works completed on terminal batters, for progressively rehabilitated areas, until vegetation established and erosion minimised. Then 6 monthly. Additional inspections after significant rainfall events. **Post Rehabilitation Phase** Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required) Additional inspections after significant rainfall events.

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5.2.5. Domain: Pit and Lower (Pit Area Rock)

Objective: At closure lower quarry faces/benches and pit floor forming a safe, stable and sustainable landform, in preparation for water filling to ultimately establish a healthy pit lake.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Pit Backfill	**Areas of Completed Progressive Rehabilitation:** Overall batters in backfill not steeper than 1V:2H (26 deg) with individual faces not steeper than 1V:1.5H (34 deg), with a maximum lift height of 18m for lower lifts and 15m for higher lifts. Berms on backfill not less than 10m wide. Surface water flows being directed to pit floor/lake, in progressively backfilled extraction areas. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: Pit backfill established in accordance with the Rehabilitation Plan, or shallower slope if necessary, is stable and likely to remain stable in the long-term. Pit lake retained in rehabilitated landform. Surface water flows being directed to pit floor/lake, in progressively backfilled extraction areas.	Visual assessment of backfill, looking for presence/absence of landform slumping, cracks or movement Visual inspection of surface water flows within the pit. Record / photograph condition of backfill. Rehabilitated landform constructed in accordance with the Rehabilitation Plan	**Ongoing Progressive Rehabilitation** Following completion of successive backfill lifts: Y1 - 1 Monthly Y2 - 3 Monthly Y3 - 6 Monthly (and further, if required) **Post Rehabilitation Phase** Y1 - 1 Monthly Y2 - 3 Monthly Y3 - 6 Monthly (and further, if required)

Pit Lake (fill to maximum AHD46m)	**Ongoing Progressive Rehabilitation**: Ongoing monitoring of pit water and groundwater according to Groundwater Management Plan. Management of acidic return water from plant, water supply and runoff from stockpiles ensures that pit water does not become acidified. If increased salinity and/or dropping water levels are detected during operations, then peak surface water flows directed into the pit (with appropriate authorisation). If any glue-green algae is detected during operations then copper sulphate dosing utilised to limit any further blooms. **Closure**: Any required modifications or remedial actions implemented following findings of Review of Pit Lake Pit prepared for gradual lake filling to establish a healthy and sustainable pit lake. Pit prepared for establishment of a healthy and sustainable pit lake with turbidity, pH and salinity stabilised within acceptable ranges and no blue-green algal blooms present. Water quality criteria comparable or better than pre-extraction groundwater quality and consistent with EPA beneficial use segment. Any required modifications to pit wall design or remedial actions implemented following findings of major reviews (above). Final pit lake level to be attained without overflowing, in accordance with the Rehabilitation Plan, with revised level (if necessary), and pit walls likely to remain safe and stable in the long-term (post closure) as the pit lake fills.	Pit water level Water quality of pit water Groundwater level in monitoring bores, water supply bores and inferred infiltration rate into pit, as required Water quality in groundwater monitoring bores, water supply bores and pit sump Water quality in accordance with Water Quality for Farm Water Supplies as per Agriculture Victoria's recommendations (based on Australian and New Zealand Guidelines for Fresh and Marine Water Quality (Primary Industries)), or specific CMA requirements Rehabilitation landform constructed in accordance with the Rehabilitation Plan	**Ongoing Progressive Rehabilitation** Groundwater level and water quality monitoring in accordance with the monitoring program in the Groundwater Management Plan Annually review water level, water quality and health of water body. Annually review groundwater level and groundwater quality in monitoring bores. **Post Rehabilitation Phase** Water level and water quality monitoring in accordance with the monitoring program in the Groundwater Management Plan, or as revised by reassessment during major reviews. Annually review water level, water quality and health of water body. **Post Rehabilitation Phase** Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required)

5.2.6. Domain: Pit Access Ramp / Pit Lake Egress Ramp

Objective: At closure the pit access ramp will be the main access / egress point for the pit lake and will be fully rehabilitated and vegetated

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Access Ramp Trafficable Surface	**Areas of Completed Progressive Rehabilitation**: Any redundant overburden mound areas will be rehabilitated as soon as practicable. **Closure**: All overburden mounds (apart from retained perimeter bund) removed/reprofiled or used in rehabilitation and land rehabilitated to viable pasture / crops. Min 90% groundcover vegetation establishment (for pasture) Min 80% canopy vegetation establishment (for trees / shrubs)	General description of ramp trafficable surface. Record / photograph trafficable surface mounds	**Ongoing Progressive Rehabilitation** Annually review for any areas that could be rehabilitated, aiding compliance with maximum disturbed area at any given time. **Post Rehabilitation Phase** Upon completion of rehabilitation landforming works. Pasture / crop establishment Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required)
Access Ramp embankment	**Areas of Completed Progressive Rehabilitation**: Any areas of the access ramp constructed with redundant waste rock, overburden or imported materials will be rehabilitated as soon as practicable. **Closure**: All areas of the access ramp constructed with redundant waste rock, overburden or imported materials rehabilitated to viable pasture / vegetation. Any stockpiles of imported materials, including any associated hardstands, removed or used in rehabilitation and land rehabilitated to viable pasture / crops. Min 90% groundcover vegetation establishment (for pasture) Min 80% canopy vegetation establishment (for trees / shrubs) .	General description of embankment status / condition Record / photograph embankment condition Visual estimate of pasture / shrubs / grasses (ground cover) establishment General description of vegetation vitality Record / photograph any bare patches Record / photograph any weed infestation	**Ongoing Progressive Rehabilitation** Annually review for any embankment areas that could be rehabilitated, aiding compliance with maximum disturbed area at any given time. **Post Rehabilitation Phase** Upon completion of rehabilitation landforming works, then annually. Pasture / crop establishment Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required)

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5.2.6. Domain: Pit Access Ramp / Pit Lake Egress Ramp

Objective: At closure the pit access ramp will be the main access / egress point for the pit lake and will be fully rehabilitated and vegetated

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Pit Lake Egress Zones	**Closure**: Access ramp retained into the base of the pit to act as egress zones during the long-term (post closure) rise of water level in the pit lake. Retained access ramp to remain stable and functioning to provide access, and not requiring significant maintenance in the long-term.	Access ramps into pit retained after final rehabilitation works in accordance with the Rehabilitation Plan.	**Post Rehabilitation Phase** Annually for general condition and stability

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5.2.7. Domain: Residual Work Authority Area

Objective: At closure site fencing, weeds, pest animals and surface water flows in the remainder of the Work Authority will have met required standards and will not be adversely affected by past quarry operations and associated rehabilitation works.
Ongoing farming uses and residences on the property remain in place at site closure and continue without adverse impacts due to past quarry operations.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Residual Area (Site Fencing) All retained post closure (see Sec 3.1)	**Areas of Completed Progressive Rehabilitation**: Integrity / suitability for purpose of Work Authority perimeter fencing and paddock fencing. Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: Not required for site security. The site perimeter fence will be retained upon closure, by agreement with the landowner, and must be to landowner's satisfaction / must be suitable for end land uses. Integrity / suitability at closure for end land uses, without requiring maintenance.	Condition and effectiveness of fencing (paddock fencing and perimeter fencing) in preventing access while works are still being undertaken, and while vegetation is being established. Condition and suitability of security / perimeter fencing, paddock fencing, and associated drains, bunds and screening vegetation, for end land uses.	**Ongoing Progressive Rehabilitation** Annually review for any need to remediate site fencing. **Post Rehabilitation Phase** Annually review for suitability for end land uses.

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5.2.7. Domain: Residual Work Authority Area

Objective: At closure site fencing, weeds, pest animals and surface water flows in the remainder of the Work Authority will have met required standards and will not be adversely affected by past quarry operations and associated rehabilitation works.
Ongoing farming uses and residences on the property remain in place at site closure and continue without adverse impacts due to past quarry operations.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Residual Area (Grazing Land)	**Areas of Completed Progressive Rehabilitation**: Any necessary remedial rehabilitation of land within ongoing farming areas of the property, undertaken as soon as practicable. Pasture is viable and in good condition for any remedial rehabilitation of grazing land in residual Work Authority areas. Min 90% pasture establishment for any remedial rehabilitation of grazing land in residual Work Authority areas. Min 80% tree / shrub establishment for any remedial rehabilitation of treed land in residual Work Authority areas. No bare patches greater than $10m^2$ for any remedial rehabilitation of grazing land in residual Work Authority areas. **Closure**: Pasture viable and in good condition for any grazing land that required remedial rehabilitation within residual Work Authority areas. Min 90% pasture cover for any grazing land that required remedial rehabilitation within residual Work Authority areas. Min 80% tree / shrub establishment for any remedial rehabilitation of treed land in residual Work Authority areas. No bare patches greater than $10m^2$ for any grazing land that required remedial rehabilitation within residual Work Authority areas.	Visual inspection of grazing land on the property for any impacts due to quarry operations General description of pasture cover and vitality Record / photograph any observed impacts to grazing land	**Ongoing Progressive Rehabilitation** Annual inspection for any need to remediate land within ongoing farming areas of the property. For any remedial pasture establishment Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required) **Post Rehabilitation Phase** Annual inspection for any need to remediate grazing land in residual Work Authority areas. For any remedial pasture establishment Y1 - 3 Monthly Y2 - 6 Monthly Y3 - 12 Monthly (and further, if required)

5.2.7. Domain: Residual Work Authority Area

Objective: At closure site fencing, weeds, pest animals and surface water flows in the remainder of the Work Authority will have met required standards and will not be adversely affected by past quarry operations and associated rehabilitation works.
Ongoing farming uses and residences on the property remain in place at site closure and continue without adverse impacts due to past quarry operations.

Subdomain	Rehabilitation / Closure Criteria	Elements to be Monitored	Monitoring Frequency
Residual Area (Weeds)	**Areas of Completed Progressive Rehabilitation**: Weeds less than 5% total ground cover within any specific progressively rehabilitated areas Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure**: Weeds less than 5% total ground cover within any specific areas	Visual estimate of weed coverage Record / photograph any weed infestation	**Ongoing Progressive Rehabilitation** 6 monthly inspections for any weeds within the Work Authority area. **Post Rehabilitation Phase** 6 monthly
Residual Area (Pest Animals)	**Areas of Completed Progressive Rehabilitation:** Pest animals controlled in accordance with local guidelines for progressively rehabilitated areas No visible impact of pest animals on land for any progressively rehabilitated areas Any necessary remedial rehabilitation undertaken as soon as practicable. **Closure:** Local guidelines are met for control of pest animals No visible impact of pest animals on land	Evidence of pest animals (photograph) Assessment of numbers (if possible)	**Ongoing Progressive Rehabilitation** 6 monthly inspections for any pest animals within the Work Authority area. **Post Rehabilitation Phase** 6 monthly

6. REHABILITATION MANAGEMENT

6.1. Roles and Responsibilities

The Work Authority holder will have the responsibility to ensure compliance with this Rehabilitation Plan throughout the life of the quarry and period of rehabilitation monitoring until the closure criteria are met and the rehabilitation bond is returned.

This responsibility will be delegated to the Quarry Manager (or their nominated representative) who will be responsible for managing the implementation of the Rehabilitation Plan, including:

- Delegating tasks associated with this Rehabilitation Plan where necessary.
- Providing adequate resources to implement this Rehabilitation Plan; and
- Providing adequate training to employees and contractors regarding their obligations under this Rehabilitation Plan.

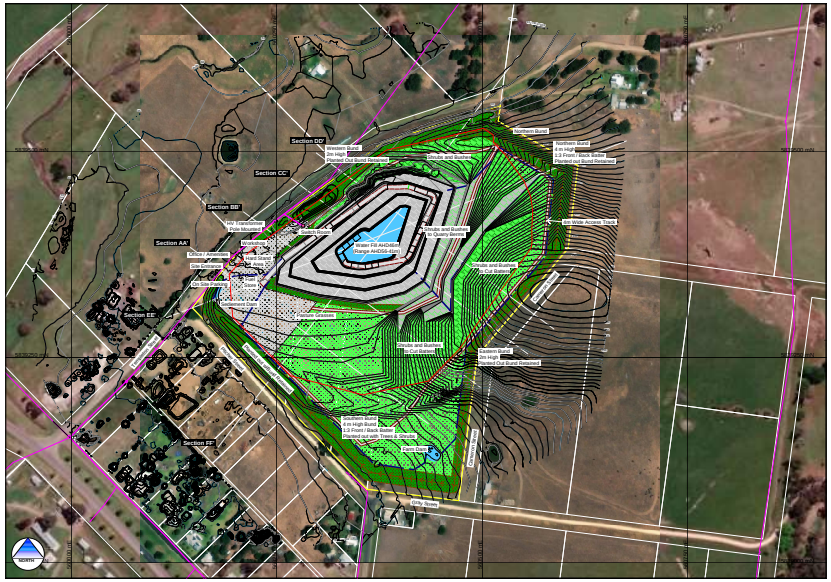
6.2. Documentation

All monitoring outcomes, including any visual inspection, worksheets / reports, any testing or analysis, any specialist reports, etc., will be recorded and retained at the Rigby Brothers & Co Pty Ltd offices for periodic review. Where appropriate or as required this information will be available to the Earth Resources Regulator or other relevant authorities.

6.3. Review

This Rehabilitation Plan will be subject to a comprehensive review every 10 years or as directed by Earth Resources Regulator.. The purpose of the review is to ensure that the Rehabilitation Plan adequately addresses the current requirements of the community and the Earth Resources Regulator. If required, the Rehabilitation Plan will be revised prior to resource extraction ceasing and may initiate a Work Plan variation, or other approval process as deemed appropriate at that point in time. The developing extent of progressive rehabilitation will also be presented at the community engagement meetings.

The Rehabilitation Plan reviews will take into consideration any changes that may have occurred on site, the results of any monitoring, advice from any specialist, the effectiveness or otherwise of any progressive rehabilitation and any directives from the Earth Resources Regulator.


Section DD
Section CC
Section BB
Section AA
Section EE
Section FF
Western Bund
Northern Bund
Eastern Bund
Southern Bund
4m Wide Access Track
Existing Dam
Future Pit Area
Range AHD58-65m
Existing Access Track
Existing Haul Road
Existing Quarry Access
Temporary Haul Road
Temporary Access Track
Temporary Bund
Future Haul Road
Future Quarry Access
Future Access Track
Future Bund
Future Dam
Future Sediment Dam
Future Clean Water Diversion
Future Dirty Water Diversion
Future Temporary Bund
Future Temporary Sediment Dam
Future Temporary Clean Water Diversion
Future Temporary Dirty Water Diversion
Future Temporary Access Track
Future Temporary Haul Road
Future Temporary Quarry Access
Future Temporary Dam

Mineral Resources (Sustainable Development) Act 1990

Tenement Number: WA410

Plan Number: PLN000923

Work Plan Variation Statutorily Endorsed

Signed:

Delegate of the Department Head

Date: 30/10/2024

RIGBY BROS & Co Pty. Ltd.

COMMUNITY ENGAGEMENT PLAN

Coleraine Quarry – WA410

WA410 – Coleraine Quarry
26 Templeton Street,
COLERAINE VIC 3315

Rigby Bros & Co Pty Ltd
Stan Rigby
(03) 5575 2564
Rigby.bros.quarry@gmail.com

13 June 2024

Reviewed August 2024

Version Control and Approval

Version No.	Prepared	Reviewed	Approved	Date	Description	Next Revision
0	Debra Farrelly	Stan Rigby Director	Stan Rigby Director	30/9/2020	Initial Plan	Mar 2024
1	Debra Farrelly	Cameron Black	Stan Rigby Director	20 Jan 2023	Review & update	
2	Debra Farrelly	Cameron Black	Stan Rigby Director	21 Feb 2024	Review & update	

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1. Company Representative Statement

The quarry situated at 26 Templeton Street, Coleraine has been operating since 1947, some 70 years and was purchased by Rigby Brothers Co. Pty Ltd (Rigby Bros) in 1969.

Rigby Bros owners and employees are a part of the community surrounding the quarry site and in the larger Coleraine community. We are fully committed to maintaining healthy and enduring relationships with all stakeholders.

We will be proactive in minimising any negative impacts on residences and businesses in close proximity to the quarry operations. Rigby Bros Pty Ltd are committed to minimising the impact of the quarry's operation on the environment and culturally sensitive locations in the local area.

Rigby Bros respects the rights of private landholders, including the residences and businesses, that are located around the quarry site at 26 Templeton Street, Coleraine. We have a close working relationship with local government as we are not only a business in their area but also a supplier for many of their projects and we acknowledge and respect the different roles and requirements of that relationship.

Rigby Bros has a strong history of supporting Coleraine community groups through sponsorship, participation on committees of management and donation of quarry time and resources to various projects. We also provide employment for local people and will continue to proudly support our community. We are a big part of the Coleraine community.

We welcome any feedback, concerns or questions from our community and promise that we will promptly address any concerns and respond to issues raised to our company.

Stan Rigby
Director
Rigby Brothers & Co Pty Ltd

2. Introduction

There has been a quarry of some type on the hill since the late 1800's, and the current quarry has been in operation since 1947 and operates under Work Authority WA410, previously EIL393, with the last updates being in April 1996.

The current approved Work Authority plan covers 5.58 Ha of land and enables the extraction of trachyte rock. The rock is extracted through blasting and then it is crushed to produce aggregate for sale.

Over the past 5 years the quarry has sold, on average, some 35,000 tonnes per annum. This has been sold as aggregate with approximately 40% being sold as Road base Class 1 aggregate, a high value aggregate.

Rigby Bros are applying to the Department of Earth Resources for a Variation to the current Work Authority, which will seek to extend the Work Authority area, however the proposal is to keep blasting activity within the current WA410 boundary.

The proposed changes to the Work Authority include, but are not limited to, rezoning land, moving the office and workshop out of the extractive area, increasing the extent of the pit, consolidating the stockpiles of aggregate, and planting trees for screening along Pitcher Street.

If the Work Authority variation is approved, it is expected that the quarry operations will be extended some 20 years and the development will be undertaken in four stages.

All mining licenses are required to include a Rehabilitation Plan which details the treatment to be undertaken to the mined area and how the land and surrounds will be left when operations cease, taking into account the proposed end use of the land. However due to the age of the license for WA410, there has never been an fully scoped Rehabilitation Plan. Part of the Work Authority Variation request being put forward by Rigby Bros includes a Rehabilitation Plan, which will be implemented in stages and be completed when the quarry operations cease, and the quarry is closed.

This Community Engagement Plan is the framework that Rigby Bros will use to inform, consult with and receive feedback from the community on the request for work authority variation, the stages of development and operation of the site and when operations cease the rehabilitation of the site.

This plan will also form the basis of on-going community engagement with all stakeholders and particularly keeping the sensitive receptors updated and informed of forthcoming blasting activities, as they occur and to formalise a complaints process to deal with any issues or complaints raised by stakeholders or local residents.

The objectives of this Community Engagement Plan are:

- To identify community and stakeholders, and understand their concerns / expectations;
- Provide a framework for effective communications and engagement, including a clear complaint and feedback procedure;
- Develop positive relationships between the quarry and the local community;
- Educate stakeholders about the value of the Rigby Bros Quarry to the area, and about the operational practices undertaken each day on site.

Rigby Brothers & Co Pty Ltd own the land of the current WA410 tenement and

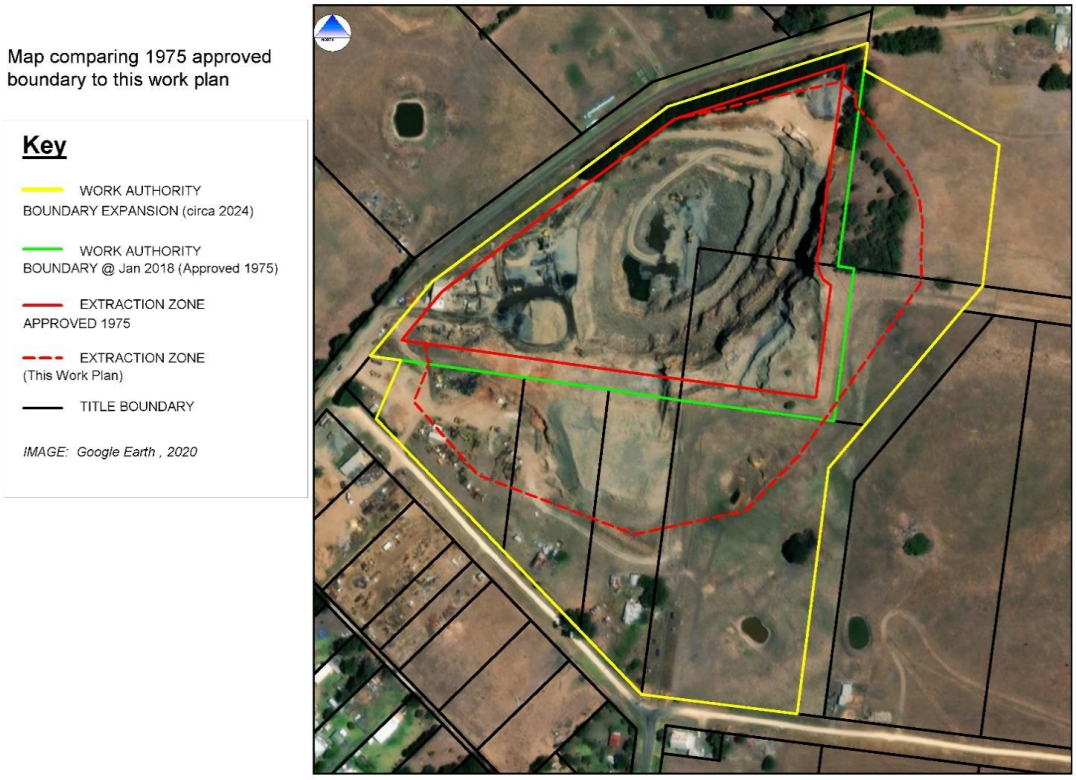


Figure 1 Quarry Site

Rigby Brothers & Co Pty Ltd management continually engage informally with the community to gain an understanding of the potential impacts that the quarry's operation may have and provide the opportunity for communication with stakeholders in the Coleraine area. This Community Engagement Plan formalises this process and outlines the details of that engagement.

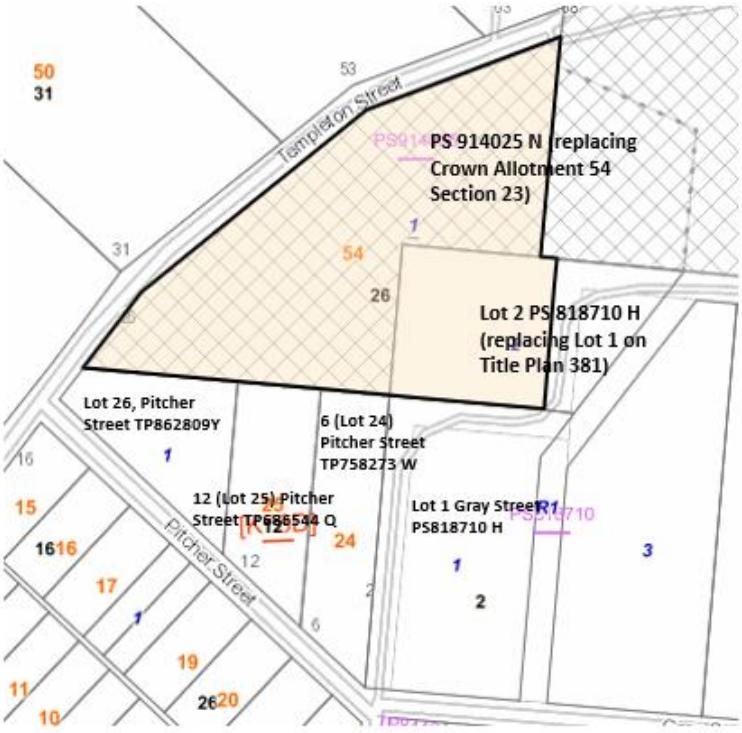
3. Site Description

The quarry is situated at 26 Templeton Street, Coleraine, which is on the western edge of the town, located in western Victoria. The site is 5.8 hectares. The current quarry is developed within two land parcels described as Lot 1 on Title Plan 381 and Crown Allotment 54 Section 23,

The expansion of the Work Authority is a mixture of land added to the two titles above and the following parcels of land:

- Lot 26, Pitcher Street TP862809Y with a depth limit of 50 feet, Low Density Residential Zone, which is owned by Rigby Brothers & Co Pry Ltd. The land was previously used to house animals. Currently used by Rigby Bros to store machinery.
- 12 (Lot 25) Pitcher Street TP686544 Q with a depth limit of 50 feet, Low Density Residential Zone, which is owned by Delma Rigby (shareholder of Rigby Bros) for a house and small paddock for animals, which was abandoned 30 years ago and the house will be demolished. Currently partly used by Rigby Bros to store machinery.
- 6 (Lot 24) Pitcher Street TP758273 W with a depth limit of 50 feet, Low Density Residential Zone, which is owned by Stan Rigby (shareholder of shareholder of Rigby Brothers & Co Pty Ltd) for a house and small paddock for animals. No one has lived in the house for 15 years and the house is not habitable and will be removed.
- Lot 1 Gray Street PS818710 H with no depth limit, Low Density Residential Zone, which is owned by Stan Rigby (shareholder of Rigby Brothers & Co Pty Ltd) which is used for grazing sheep and cattle, never any house on the site.

Below is drawing showing the recent changes to title boundaries, with the current title and boundaries



This site presents several challenges in meeting the current industry guidelines, however it is emphasised that a quarry of some description has been operating at the site and in close proximity to the local community since the late 1800's. More recently the Rigby's have a multi-generational connection to the site. It is acknowledge that if this were a new operation it would face severe challenges to meet the current workplan requirements. It is well known that as residential development (the majority of which is the Rigby family) has grown around the site that the contemporary "guidelines" imposed by the regulators are difficult to meet economically, and that for the site to continue to operate and work towards a more appropriate rehabilitation out come that it will rely heavily on the "***or minimised as far as reasonably practicable"*** clause in the Mineral Resources (Sustainable Development) Act 1990, as amended 1 July 2021)

2 (1) (b) (i)

> *risks posed to the environment, to members of the public, or to land, property or infrastructure by work being done under a licence or extractive industry work authority are identified and are eliminated* ***or minimised as far as reasonably practicable****; and*

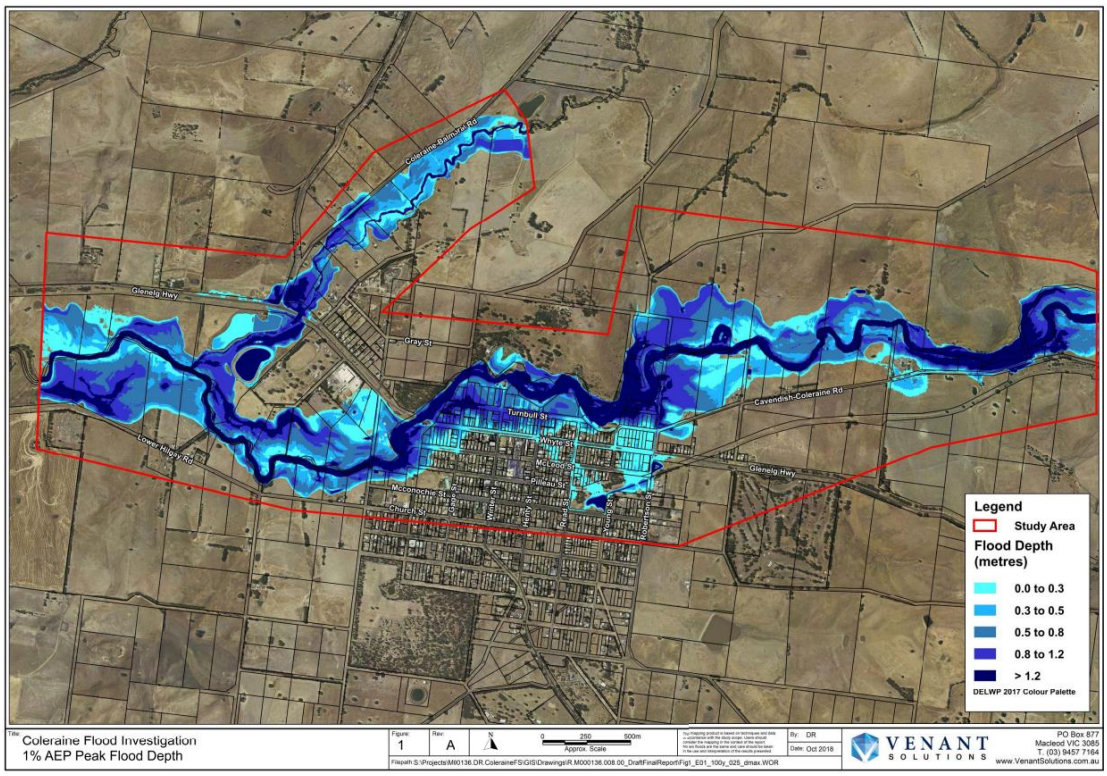
This clause from the MRSDA is reproduced to emphasise to the communitry that the criteria quoted in the relevant guidelines are just that, guidelines.

Following is a description of the sensitive receptors potentially impacted by this operation, i.e. in relation to the environment, any member of the public, or land, property or infrastructure within the vicinity of the work, and a discussion of the more significant hazards that may potentially impact those sensitive receptors.

The Location Plan, presented below, identifies the location of various waterways, residences, commercial and industrial development, public facilities and public infrastructure, such as roads, bridges, pipelines, powerlines and other assets, within 2km of the Work Authority.

There is a Delegated Management Reserve (Tenure ID 0304388, associated with the show grounds) some 300m to the south west,) a Delegated Management Reserve (Tenure ID 0304280, associated with the picnic area, West Park) some 300m to the south, and the sports area (Silvester Oval) some 400m to the east. There is also crown land associated with Bryan Creek, some 730 m to the south

There are no waterways or wetlands within the immediate vicinity of the site. The closest mapped wetlands is associated with the Coleraine water plant, some 450m to the south west. Bryan Creek is some 730 metres to the south and Konong Wootong Creek some 200m to the west. A 2019 Coleraine Flood Investigation Report commissioned by Southern Grampians Shire shows 1%AEP not impacting the quarry. (see screen grab below)



There is no assessable native vegetation removed by this Work Plan. The extension to the south is over land that has already been disturbed by generations of use, and the extension to the north east is through some planted eucalyptus and grazing land, and is not regarded as assessable native vegetation. Rigby's have been advised (as a result of the 2018 site meeting) that a 2018 email from DELWP to ERR (but not available to the applicant) confirms this.

There are 15 houses within 500m of the Work Authority and numerous more within 1000m, as the township of Coleraine is only 750m from the quarry. The township of Coleraine and residences to the east of the quarry are not impacted by the quarry, being on the other side of the significant hill. The closest residence, is on the corner of Cameron Street and Pitcher Street, some 30m from the WA boundary and 160m from the stockpile area.

The Glenelg Highway is approximately 220m from the work Authority

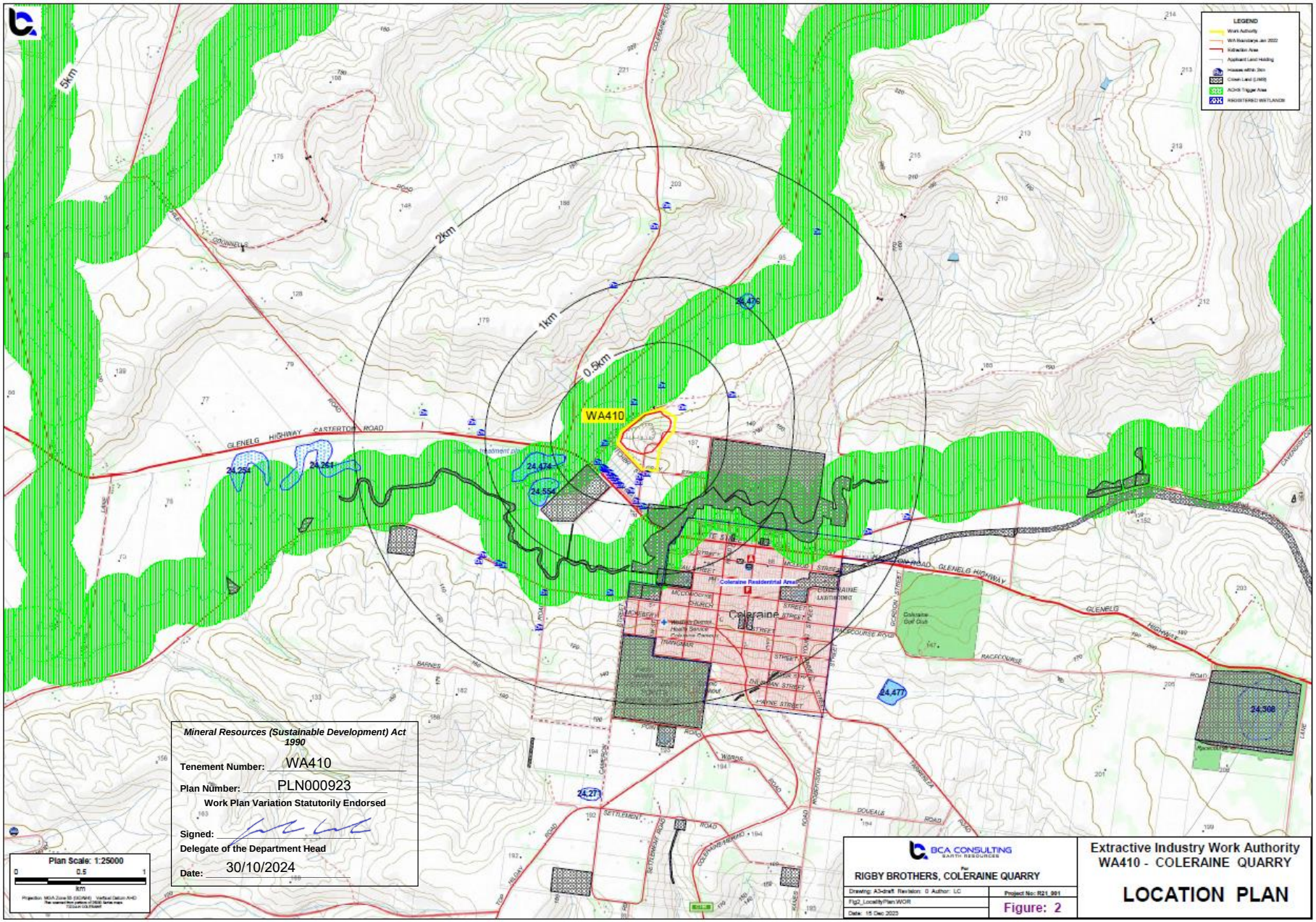
The township of Coleraine is approximately 600 metres from the Work Authority.

There are two bridges on the Glenelg Highway, one over Konong Wootong Creek, approximately 300m south west of the Work Authority and one over Bryan Creek, approximately 500m south east of the Work Authority

There are no high voltage powerlines, pipelines or other linear infrastructure within the vicinity of the quarry. There is a low voltage supply power line on the western boundary of the Work Authority to Templeton street.

There is no known contaminated land, no known slimes storages, and no underground workings on the site.

The plan below (Figure 2 reproduced from the Work Plan) shows the site and its surrounds, and the location of residential and industrial land in the vicinity.


LEGEND
5km
2km
1km
0.5km
WA410
GLENELG HIGHWAY
CASTERTON ROAD
Coleraine
Coleraine Residential Area
24,254
24,261
24,474
24,554
24,477
24,308
24,271
Mineral Resources (Sustainable Development) Act 1990
Tenement Number: WA410
Plan Number: PLN000923
Work Plan Variation Statutorily Endorsed
Signed:
Delegate of the Department Head
Date: 30/10/2024
Plan Scale: 1:25000
0 0.5 1
km
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EARTH RESOURCES
RIGBY BROTHERS, COLERAINE QUARRY
Figure: 2
Extractive Industry Work Authority
WA410 - COLERAINE QUARRY
LOCATION PLAN

4. Background

The first quarry operations commenced around 1947 and were undertaken by George Riordon until he sold the operations in 1969.

The four Rigby brothers – Arthur, Max, Stan and Doug borrowed money from their parents to form Rigby Brothers Co Pty Ltd and purchase the quarry in 1969.

Their parents and all four brothers and their families have lived or are still living within 500 metres of the quarry and form part of the sensitive receptors group of the quarry. This has placed Rigby Bros Pty Ltd in a unique position of directly knowing the impacts of the quarry operations.

Rigby Bros as sponsors and the brothers individually have been very active community members in the football club, racing club, P & A Society, fire brigade, community hall and many other local activities. Being active in the community has always provided the opportunity to communicate with locals and discuss any concerns about the quarry.

Rather than residents and businesses within 500 metres of the quarry being known as sensitive receptors, Rigby Bros would call them family, neighbors and friends and have welcomed and listened to their feedback. Notification of upcoming blasting has been informal and would generally be provided via a phone call or in person when visiting friends.

Rigby Bros understands that informal discussions and catching up with stakeholders on an irregular basis is no longer in line with general community expectations and does not meet requirements of authorities, such as Earth Resources Regulation Victoria. Therefore, a formal Stakeholder and Community Engagement Plan is required, which will set out aims, objectives that can be measured and timelines for activities to be undertaken.

Prior stakeholder engagement

Formal engagement with relevant government and semi-government stakeholders was undertaken at the first site meeting in 2018, and a subsequent site meeting in 2022. These site meetings discussed planning and regulatory issue for the Work Plan Variation. Past and ongoing consultation with Council and Earth Resources Regulation (Department of Jobs, Precincts and Regions) has occurred throughout the history of the site's operation and in developing previous Work Plans / Work Plan variations.

The table below provides a snapshot summary of prior engagement activities.

Table 1.

Stakeholder	What was discussed	Why were they engaged	When did engagement take place	Outcome
Southern Grampians Shire Council	Zoning issues of land surrounding the WA Road safety	Planning approvals	Numerous	Support of rezoning on endorsement of the Work Plan Reduced speed limits, improved road signage
Earth Resources Regulation (ERR)	Approvals Regulatory compliance	Work Plan approvals Regular site inspections	Various	Work Authority grant and Work Plan approvals Ensuring compliance with regulations
Extended Rigby Family members	Land use / continued access	Work Plan approvals	various	Renewed lease arrangement
Adjacent landowners and residents	Operational activities including blasting, noise and dust	Proximity to activity	Since commencement in 1970	Commitment to ongoing engagement.

5. Legislative Framework

This Community Engagement Plan is subject to the legislative requirements set out in the *Minerals Resource (Sustainable Development) Act 1990* and associated regulations. These are provided below:

Mineral Resource (Sustainable Development) Act 1990

Section 77G(3)(e) – Community Engagement Plan

Section 77K – Extractives industry duty to consult

Mineral Resource (Sustainable Development) (Extractive Industries) Regulations 2019 Reg 12 – A Community Engagement Plan that –

(a) identifies the community likely to be affected by the quarry operations; and

(b) sets out how the extractive industry authority holder will—

(i) identify community attitudes and expectations; and

(ii) share information with the community; and

(iii) receive feedback from the community; and

(iv) analyse community feedback and consider community concerns or expectations; and

(v) register, document and respond to complaints and other communications from members of the community in relation to the quarry operations.

6. Goals and Objectives

Goals

The goals of this Community Engagement Plan are to understand and address community concerns while maintaining and improving Rigby Brothers & Co Pty Ltd standing in the local community through:

- to provide the local community with information about the quarry operations, the opportunity to provide input and feedback on issues that affect them,
- to provide relevant stakeholders with information and the opportunity for them to provide input to and feedback on quarry operations,
- to provide an avenue for stakeholders and the local community to raise complaints in relation to the quarry operations,
- to meet the legislative requirements set out in the Mineral Resources (Sustainable Development) Act 1990 and associated regulations.

Objectives

To achieve the goals of this Community Engagement Plan, the objectives are to:

- to commence a formal and regular communication process with stakeholders and the local community,
- to provide information to stakeholders and the local community on the proposed 2021 Work Authority WA410 Variation request that Rigby Bros will submit to Earth Resources Regulation Victoria,
- provide an opportunity for stakeholders and the local community to provide input and feedback to the proposed 2021 Work Authority WA410 Variation request that Rigby Bros will submit to Earth Resources Regulation Victoria,
- to involve the community in development of a notification process for blasting activities,
- to involve the community in developing and implementing a complaints process for the local community to be able to raise concerns and issues and have them addressed in a timely manner.

7. Stakeholder Analysis

The following stakeholder analysis was compiled from research and analysis as outlined in the *Community Engagement Guidelines for Mining and Mineral Exploration*, published by Earth Resources Regulation.

Table 2.

Stakeholder	Issues (concerns and/or expectations)	Estimated level of impact on the stakeholder	Controls [*what will project do to minimise impact on stakeholder*]
Landowners (Rigby extended family)	Continued farming and access to land for storage Land rehabilitated to viable pasture / cropping	Low	Progressive rehabilitation Frequent discussions with landowner Rehabilitation Plan objectives must be met
Immediately adjacent landowners	Noise, dust, traffic and blasting Heavy haulage	Medium	Noise attenuation enclosure around crusher Water suppression via sprinklers or water carts Reduced speed limits Restriction of Blasting times Restricted road use times Ryans Road local deliveries only with restricted speed limits
Community within vicinity of quarry	Land rehabilitated so that it blends with surrounding land, and does not harbour vermin or weeds	Low	Rehabilitation Plan objectives must be met
Southern Grampians Shire Council	Local road safety, (traffic volumes and road maintenance)	Low	Better road & quarry warning signage Reduced speed limits

8. Communication

A variety of engagement techniques and communications channels will be used to meet the goals and objectives of this Community Engagement Plan. These will include:

- One-on-one engagement, both in person and otherwise, initiated either by the Rigbys or by the community
- The distribution of written information, specifically the Annual Christmas Letter
- Formal and informal meeting/ discussion for groups or individuals including the council.
- The scheduling of specific meetings or forums associated with individual issues, as required
- Responding to enquiries and complaints in a courteous and timely manner
- Notification of all interested parties to blasting

Feedback from all engagement activities will be collected and recorded, with attitudes and expectations regularly reviewed.

The Quarry Manager will be responsible for ensuring feedback is considered in the planning and execution of operational activities.

9. Stakeholder Engagement Plan

The **Spectrum of Public Participation**, by the International Association for Public Participation (IAP2), was designed to assist with the selection of the level of participation that defines the public's role in any public participation process. The Spectrum is used internationally, and is the approach recommended by Earth Resources Regulation for interaction with stakeholders. The table below outlines each of the five levels included within the Spectrum.

Level	IAP2 Goal	Promise
Inform	Provide balanced and objective information to stakeholders and assist their understanding	Keep stakeholders informed
Consult	Obtain stakeholder feedback on analysis, alternatives and/or decisions	Acknowledge stakeholder concerns and provide feedback on how stakeholder input influenced the final decisions
Involve	Work directly with stakeholders throughout the process to measure concerns. Stakeholder aspirations are understood and considered.	Stakeholder concerns directly reflected in alternatives
Collaborate	Partner stakeholders in each aspect of the decision including alternatives and solutions	Incorporate stakeholder advice and recommendations in decisions
Empower	Final decision making in the hands of the public	Implement community decisions

There are several community engagement techniques that are available to Rigby Brothers & Co. Pty Ltd to enable effective and transparent engagement with the local community. These techniques include, but are not limited to Newsletters, Fact Sheets, Company facebook page, Workshops, Advertisements / Public displays, Community notice boards, Community activities, Open houses, Public meetings, Face-to-face meetings and Surveys.

The appropriate community engagement technique is targeted to the individual stakeholder and will be selected based on a review of any changes to operational activities that have the potential to affect that particular stakeholder.

The following stakeholder engagement plan has been developed to respond to the issues identified in the stakeholder issues analysis. This plan has been developed in line with the International Association for Public Participation (IAP2) best practice.

Table 3.

Stakeholder	Issue or concern	Level of engagement (IAP2)	Key message	Method of engagement	Timing (weekly, monthly, as required)
Immediately impacted residents	Blasting Noise Dust	Inform	Noise attenuation measures have been taken Restricted working hours are in place	Face to face meeting Phone calls Email Letterbox drop	As required

			Water is being used to minimise dust		
Southern Grampians Shire Council	Road safety	Inform	Driver education	Face to face meeting Phone calls	As required
Landowner (Rigby Extended Family)	Cooperative Land use Progressive rehabilitation	Involve	Land availability (both for quarrying and/or farming) Fencing / stock runs	Face to face meeting	As required
Colerain Commumity	General information	Inform	Quarry update	Annual Christmas Message	Annually

10. Complaints Management Process

The Regulations require that a process is established to "register, document and respond to complaints and other communications from members of the community in relation to the quarry operations".

Complaints, enquiries and other communications from the community can be directed either to the Quarry Manager directly, with contact details at the Quarry entrance, or directed to Jason Rigby, Quarry Manager.

The Rigby Brothers & Co Pty Ltd complaints process maintains a written record of all complaints and enquiries, including the details of the complaint and the actions taken to address the complaint.

The process includes:

- acknowledging complaints promptly
- assessing complaints and assigning them priority
- planning an investigation if one is needed
- investigating the complaint to determine the facts and options for resolution
- responding to the complainant, including by keeping them informed of progress
- and providing a detailed response

Rigby Brothers & Co Pty Ltd is committed to being accessible and responsive when dealing with complaints. We expect our staff to be respectful, providing clear and reasoned information, and we recognise that people making complaints to us may be stressed, frustrated or upset. However, we do not tolerate behaviour that is offensive, abusive, threatening or consumes disproportionate resources. Where this is the case, we may take steps to reduce any detrimental impact of such behaviour on our staff, our productivity and resources.

11. Evaluation

To ensure compliance against the goals and objectives outlined in Section 6 of this document Rigby Brothers & Co Pty Ltd will review this Community Engagement Plan regularly.

Any changes that are made to operations that have the potential to change the risk profile of a stakeholder will be updated as soon as practicable.

The review will include an assessment of the plan's effectiveness and its performance against objectives. The review will be documented and available as part of any audit or assessment by Earth Resources Regulation.

12. Contact Us

The contacts for Rigby Brothers Co Pty Ltd are as follows:

Main Office address: 26 Templeton Street, Coleraine

Main Office phone number: 03 5575 2564

Rigby Bros main email address: rigby.bros.quarry@gmail.com

Rigby Bros Quarry Director: Stan Rigby
Mobile number: 0437 564 222

Rigby Bros Quarry Manager: Jason Rigby
Mobile number: 0438 752 385

Coleraine Quarry WA410 Geotechnical Assessment

Rigby Bros & Co Pty Ltd

28 August 2024

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		Kevin Kuang			
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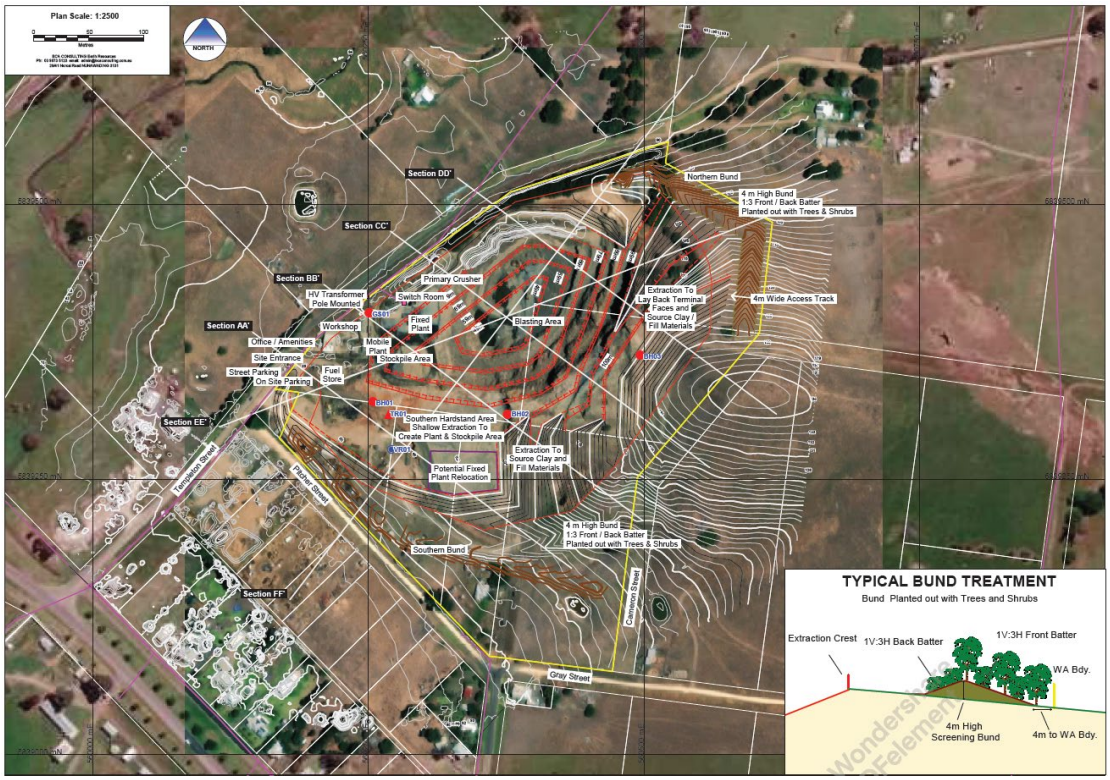
Executive Summary

Civil Mine & Quarry Geotechnics Pty Ltd (CMQ) have been engaged by Rigby Bros & Co Pty Ltd (Rigby Bros, the Client) to undertake a geotechnical assessment of the Client's *Coleraine Quarry*, Work Authority 410 (WA410), located in Coleraine, Victoria. The intent of the geotechnical assessment is to support submission of a work plan variation to the Department of Energy, Environment and Climate Action (DEECA) - Earth Resources Regulator (ERR) division to facilitate expansion of the terminal quarry design and associated work authority boundary.

Presented below is a plan view of the proposed pit design for Coleraine Quarry as prepared by BCA Consulting. Notably, the proposal consists of:

- Expanding the Work Authority area to 12.55 Ha from 5.58 Ha.
- Expanding the extraction area to 7.8 Ha from 4.25 Ha.
- Update to operational batter / berm profiles.
- Updates to rehabilitation landform profiles.



A series of geotechnical analyses were undertaken to verify the performance of the nominated terminal pit design, including:

- Kinematic analyses to assess suitable batter – berm configuration.
- Global stability analyses to assess the rock mass performance.
- Erosivity calculations to assess the potential erosion of rehabilitated overburden slopes.

Presented below is a summary of suitable pit design parameters for the WA410 site in line with the outcomes of the stability analyses as described above.

Geometrical parameter	Terminal design	Rehabilitation design
Batter angle (overburden)	1V:3H (18°)	1V:3H (18°)
Batter height ('diggable' material)	6 m	2 m

Geometrical parameter	Terminal design	Rehabilitation design
Bench width ('diggable' material)	5 m	5 m
Batter height (hard rock)	12 m	12 m
Bench width (hard rock)	8 m	8 m
Batter angle (hard rock)	6V:1H (80°)	6V:1H (80°)
Maximum pit depth	84 m	84 m

As per the analyses, implementing a robust drill and blast management plan as well as sufficient final wall scaling is essential to mitigate the risk of rockfall due to hazardous structural conditions.

Accordingly, best practice for minimising geotechnical risk in quarries is to implement final wall blasting and hard scaling methods to minimised blast damage i.e., damage to final walls, and to remove exfoliated rock mass from the slopes. This is particularly important along the eastern wall where parasitic jointing has resulted in pervasive crest loss.

CMQ recommends the following extraction methodology to be undertaken at the Coleraine Quarry:

- Drilling and blasting to be performed for a continuous 12 m face height.
- Blasted material to be excavated in 4 m flitches. The maximum exposed flitch face should be 4 m prior to scaling, upon which subsequent flitch excavation can occur.

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Appendix E: Coleraine Quarry WA410 Pit Lake Egress Ramp Technical Specification

1. Introduction

1.1. General

Civil Mine & Quarry Geotechnics Pty Ltd (CMQ) have been engaged by Rigby Bros & Co Pty Ltd (Rigby Bros, the Client) to undertake a geotechnical assessment of the Client's *Coleraine Quarry*, Work Authority 410 (WA410), located in Coleraine, Victoria. CMQ understands that the intent of the geotechnical assessment is to support submission of a work plan variation to the Department of Energy, Environment and Climate Action (DEECA) - Earth Resources Regulator (ERR) division to facilitate expansion of the terminal quarry design and associated work authority boundary. Figure 1 presents a plan of the Work Authority area showing the existing and proposed Work Authority boundaries, respectively.

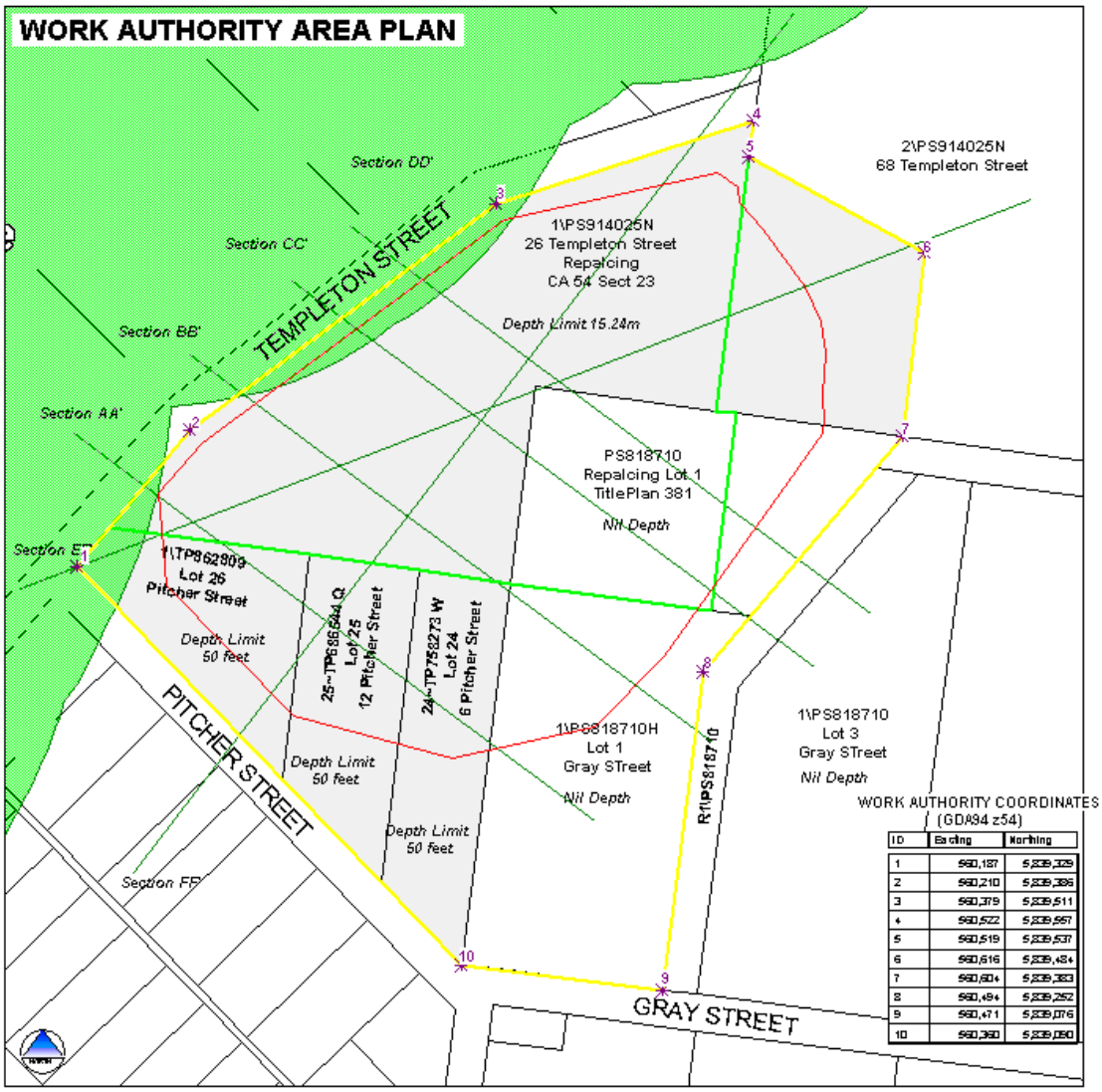

Figure 1 The Coleraine Quarry site layout plan, showing the current Work Authority (WA) boundary (green) and the proposed revision (yellow). The proposed extraction limit is shown in red.

1.2. Scope of Work

As outlined in the CMQ proposal titled "*Proposal for Geotechnical Assessment for WA410 Work Plan Variation, Coleraine Quarry*" (CMQ Ref: CMQ-PP_003), dated 15 January 2024, CMQ undertook the following scope of work:

- Site mapping of the available exposures on site at Coleraine Quarry and review of currently available geological information.
- Detailed review of the work completed by Coffey to date, including:
    - WA410 Coleraine Quarry Geotechnical Risk Assessment (Coffey Ref: MELGE217320), dated 7 May 2018
    - WA410 Work Plan Variation (PLN000923) Coleraine Quarry (Coffey Ref: MELGE217320), dated 10 May 2019
    - Rigby Bros Quarry East Wall Remediation (Coffey Ref: 754-MELGE272003AB), dated 28 August 2020.
- Geotechnical Engagement Session to outline the proposed geotechnical study approach.
- Development of a site geotechnical (soil and rock mass) model and interpret material parameters.
- Development of a site-specific structural model for the purposes of stereographic and kinematic analyses.
- 2D Limit Equilibrium (LE) stability modelling along three (3) nominated stability lines to calculate Factors of Safety (FoS) for the proposed Terminal and Rehabilitated Batters.
- Calculate the final landform erosion potential using the Revised Universal Soil Loss Equation (RUSLE)
- Document the outcomes of the geotechnical risk assessment along with risk treatment measures.
- Prepare a report (this report) for inclusion in the Work Plan supporting documentation that outlines and summarises the analytical components undertaken.

1.3. Limitations

This report has been prepared by CMQ for Rigby Bros & Co Pty Ltd and may only be used and relied on by Rigby Bros & Co Pty Ltd for the purpose agreed between CMQ and Rigby Bros & Co Pty Ltd as set out in Section 1.2 of this report.

CMQ otherwise disclaims responsibility to any person other than Rigby Bros & Co Pty Ltd arising in connection with this report. CMQ also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by CMQ in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. CMQ has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by CMQ described in this report. CMQ disclaims liability arising from any of the assumptions being incorrect.

CMQ has prepared this report on the basis of information provided by Rigby Bros & Co Pty Ltd and others who provided information to CMQ (including Government authorities), which CMQ has not independently verified or checked beyond the agreed scope of work. CMQ does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

1.4. Information Relied Upon

The following sources of information were relied upon for the geotechnical assessment detailed within this report:

- WA410 Coleraine Quarry Geotechnical Risk Assessment (Coffey Ref: MELGE217320), dated 7 May 2018
- WA410 Work Plan Variation (PLN000923) Coleraine Quarry (Coffey Ref: MELGE217320), dated 10 May 2019
- Rigby Bros Quarry East Wall Remediation (Coffey Ref: 754-MELGE272003AB), dated 28 August 2020.
- WA410 Site Layout Plan (BCA Ref: R21_001 Figure 3), dated 27 December 2023.
- Coleraine Quarry (WA410) Geotechnical Engagement Session Minutes, held on 12 February 2024.

2. Background

2.1. General

Coleraine Quarry (WA410) is located in the town of Coleraine in Western Victoria, approximately 33 km northwest of Hamilton and approximately 290 km west of Melbourne, as shown in Figure 2.

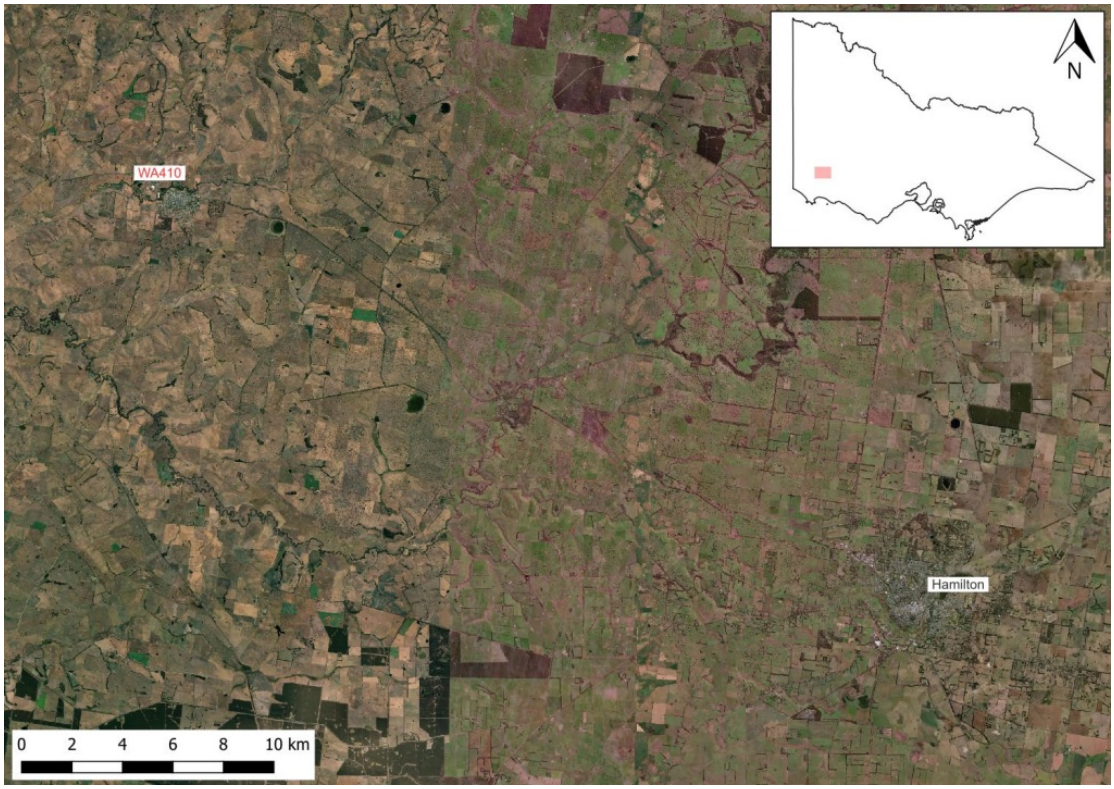

Figure 2 A regional scale location plan of the Coleraine Quarry (WA410). Aerial sourced from ESRI World Imagery (22/03/2024).

The Coleraine Quarry has had a long history of quarrying, with operations occurring as far back as the 1920s. The Rigby Brothers took over the quarry lease in August 1969, and operates the quarry to this day.

The primary resource of the Coleraine Quarry site is trachyte, which is an extrusive igneous rock that is used to produce aggregate and construction materials.

The current WA410 boundary covers an area of 5.58 ha, with operations occurring within a 4.25 ha extraction area at the northern portion of the site. The site is bounded by Templeton Street along its northwestern boundary and residential lots to the south and east of the site. As part of the proposed site expansion, the WA area will incorporate a number of the residential lots surrounding the site, land which is currently owned by Rigby Bros.

2.2. Regional Geology

WA410 is located within Western Victoria, within the Western Uplands, as defined by Victoria's Geomorphological Framework. Within the uplands, the quarry is located in an area of low elevation plateaux, which is characterised by the relatively low relief of the landscape, lower drainage density and the limited incision and dissection within the landscape. Slopes are gently inclined depending on the position in the landscape.

2.2.1. Outcrop Geology

The area in the vicinity of the Coleraine Quarry plays host to four geological units, which are listed below (from oldest to youngest):

Bacchus Marsh Formation

The oldest rocks in the vicinity of Coleraine Quarry are a series of glacial, fluvioglacial and glaciomarine deposits, which originated from several episodes of advance and melting of continental ice sheets that covered much of southern Australia in the Permian period (290 – 255 Ma), due to its proximity to the south pole at the time (O'Brien, 1996). Whilst this was a widespread event, the current exposures of these deposits are sparsely and irregularly distributed, with the majority of the unit either buried or dispersed by erosion. This Permian aged glacial deposits are collectively known as the Bacchus Marsh Formation in Victoria.

Coleraine Volcanic Group

In the Jurassic period (200 – 140 Ma), alkalic and tholeiitic magmas (alkali basalt, trachyte and basalt) were erupted as flows and domes, and intruded as plugs and dykes, associated with the initiation of rifting of Antarctica from Australia (Morand *et al*., 2003). The Coleraine Volcanic Group was erupted over a land surface that included the Bacchus Marsh Formation in the Coleraine area. The Coleraine Volcanic Group consisted of two distinct units: the Den Hills Formation, and the nearby Hypatia Formation. The Den Hills Formation erupted as a series of trachyte, phonolite and microsyenite, and appears as cream to dark grey, fine grained volcanic deposits (Day, 1983). No pyroclastic rocks have been observed within the Group, with relatively localised flows. Trachyte from the Coleraine Quarry has been dated at 163±3 Ma by Bowen (1975) or 156±2 Ma by Richards & Singleton (1981). The Den Hills Formation makes up the resource deposit within the WA410 boundary.

The Hypatia Formation does not outcrop within the WA410 footprint, with the closest outcrop located approximately 750 m NW of the site.

Eumeralla Formation

In the early Cretaceous (140 Ma), a rift basin formed between Antarctica and Australia as the two continents separated. As rifting developed along southern Victoria, a series of grabens and half-grabens formed, bounded by normal faults, and were subsequently filled by coarse clastic fluvial deposits derived from the local basement, and a volcanogenic component derived from a contemporaneous volcanic source (Mitchell *et al*., 1997). Widespread deposition of fluvial to lacustrine sandstone, shale and coal continued unconformably over the rift-related half-grabens and overlapped onto basement rocks to the north. These deposits were named the Eumeralla Formation which is the main exposed Cretaceous unit of the Otway Basin. In the Coleraine area, outcrops of the Eumeralla Formation are found on the southern side of Bryan Creek.

Quaternary Alluvium

The youngest units found in the Coleraine Quarry area are a series of undifferentiated, unconsolidated Quaternary sediments which are associated with the nearby Bryan Creek to the south, and Konong Wootong Creek to the northwest. These sediments are comprised mostly of sand and silt, along with interbedded gravel. Water flow along these two channels have incised into the surrounding geology, depositing the relatively young alluvial sediments along the banks.

2.2.2. Major Structures

Four major structures are located within 20 km of the Coleraine Quarry site. These are (from closest to furthest) the Zig Zag Fault, Brit Brit Fault, Latani Fault and Miakite Creek Fault (see Figure 3 below). None of these structures are listed as neotectonic features on Geoscience Australia's Neotectonic Features Database, however, evidence of Cenozoic activity exists on some structures. No signs of major structures were observed during the CMQ site inspection as outlined in Section 4.

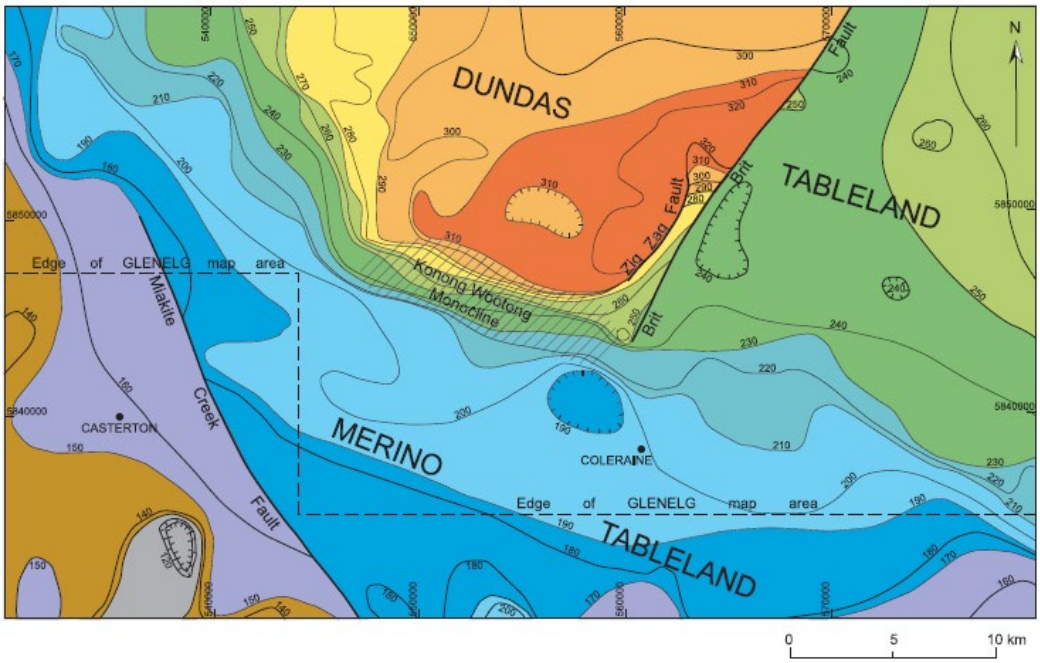

Figure 3 A geological map of the southern part of the Dundas Tableland and the adjacent Merino Tableland, centred near Coleraine, showing the nearby fault structures.

Brit Brit Fault

The Brit Brit Fault is a steeply-dipping northeast-southwest trending fault, with a prominent surface expression in the form of a fault scarp extending for approximately 20 km, with a maximum displacement of 80 m in the centre, decreasing in both directions. Towards the southern end of the fault, the displacement is taken up in part by the Zig Zag Fault and becomes a monocline near Coleraine. The dip direction of this structure is not known (Morand *et al*., 2003). The closest point of the Brit Brit Fault from the Coleraine Quarry is approximately 7 km away. Displacement of the duricrust surface across the fault trace indicates some Cenozoic activity.

Zig Zag Fault

Named after the nearby Zig Zag Road NNE of Coleraine, the Zig Zag Fault is a northeast-southwest trending fault, that runs parallel to the Brit Brit Fault 1 km to the west. The Zig Zag Fault forms a scarp with 50-60 m of displacement (Morand *et al*., 2003). The Zig Zag Fault can be found approximately 8 km north of the Coleraine Quarry. Displacement of the duricrust surface across the fault trace indicates some Cenozoic activity.

Latani Fault

The Latani Fault is an important north-south trending fault that shows the different relationships with the Grampians Group. Much of its length corresponds to the western limit of the Grampians Group outcrops. Analysis of the surrounding fault structures suggest that the primary movement of the Latani Fault is generated by strike-slip movement. The closest point of the Latani Fault to the Coleraine Quarry is approximately 17 km away The Latani Fault is the oldest of the nearby structures, and is associated with the Delamerian Orogeny in the Cambrian period.

Miakite Creek Fault

The Miakite Creek Fault is a northwest-southeast trending fault that is approximately 35 km in length, and is marked by a fault scarp and a straight section of the Miakite Creek. Ferricrete (ferruginised Parilla Sand) is displaced/warped by up to 20 m across the fault trace, indicating some Cenozoic activity. The Miakite Creek Fault appears to be a relatively young structure, post-dating the deposition and ferruginisation of the Parilla Sand (Morand *et al*., 2003). The Miakite Fault can be found 17 km southwest of the Coleraine Quarry.

2.3. Site Geology

The site is situated within the Den Hills Formation of the Coleraine Volcanic Group (200-140 Ma), which comprise trachyte and basalt lava flows, domes and laccoliths. Existing pit wall are predominately developed within trachyte, with the eastern boundary exposing a combination of weathered trachyte and siltstone.

The degree of weathering of exposed trachyte at the site generally decreases with depth, with moderately weathered material (colloquially known as salamander) encountered up to 10 m below natural surface level, overlying slightly weathered followed by fresh trachyte towards the base of the excavation. A profile of highly weathered residual soils constitutes the uppermost horizon of approximately 1 m across the site.

The fresh trachyte at the quarry is characterised as 'very strong', with an estimated unconfined compressive strength (UCS) of up to 150 MPa based on field observations. The material is blocky with up to four major defect sets encountered across the site.

Several intrusive investigations were performed within the WA410 boundary as summarised in Table 1 below. This includes five boreholes and one trench. The borehole coordinates have been estimated based on Figure 3 in the Coffey (2019) report. Respective borehole and trench locations are presented below in Figure 6.

Table 1 The boreholes drilled around Coleraine Quarry (Coffey, 2019).

Borehole ID	GDA2020 MGA Zone 54		Estimated collar (m RL)	Comments
	Easting	Northing		
BH01	560262.04	5839319.79	97	Drilling stopped at 11 m below surface level (86 m RL). No hard rock found. No groundwater encountered.
BH02	560384.51	5839306.89	113	Shale found from 12 m to 24 m below surface level (89 m RL). Borehole terminated at 24 m. No hard rock found. No groundwater encountered.
BH03	560500.84	5839360.67	131	Drilling terminated at 48 m (83 m RL). No hard rock found. No groundwater encountered.
TR01 (trench)	560274.06	5839308.66	96	Trench excavated to a depth of 5 m below ground (91 m RL). No hard rock found. No groundwater encountered.
VR01 (VicRoads 1982)	560271.31	5839276.90	107	Approximately located some 15 m off the northern boundary of the WA boundary. Reported as clay from surface to 21 m depth (86 m RL). No groundwater encountered.
GS01 (Geological Survey)	560233.09	5839392.02	70	Groundwater bore drilled in March 1983. Reported trachyte to 70 m depth (16 m RL). No groundwater was encountered.

2.4. Hydrogeology

Borehole data reviewed by CMQ, including that presented in Table 1, indicates that no significant groundwater table has been intersected across the various campaigns of up to 70 m depth. This is consistent with anecdotal evidence provided by site personnel who suggest groundwater seepage through exposed faces is rarely encountered. A search of the Visualising Victoria's Groundwater (VVG) database (Federation University Australia, 2019) indicated variable depth to groundwater across the Coleraine Quarry site, ranging from 5 m depth in the eastern extents of the quarry (towards Konong Wootong Creek) to 50 m depth at the western extents of the site. Figure 21 depicts the depth to groundwater within the Coleraine region as per VVG.

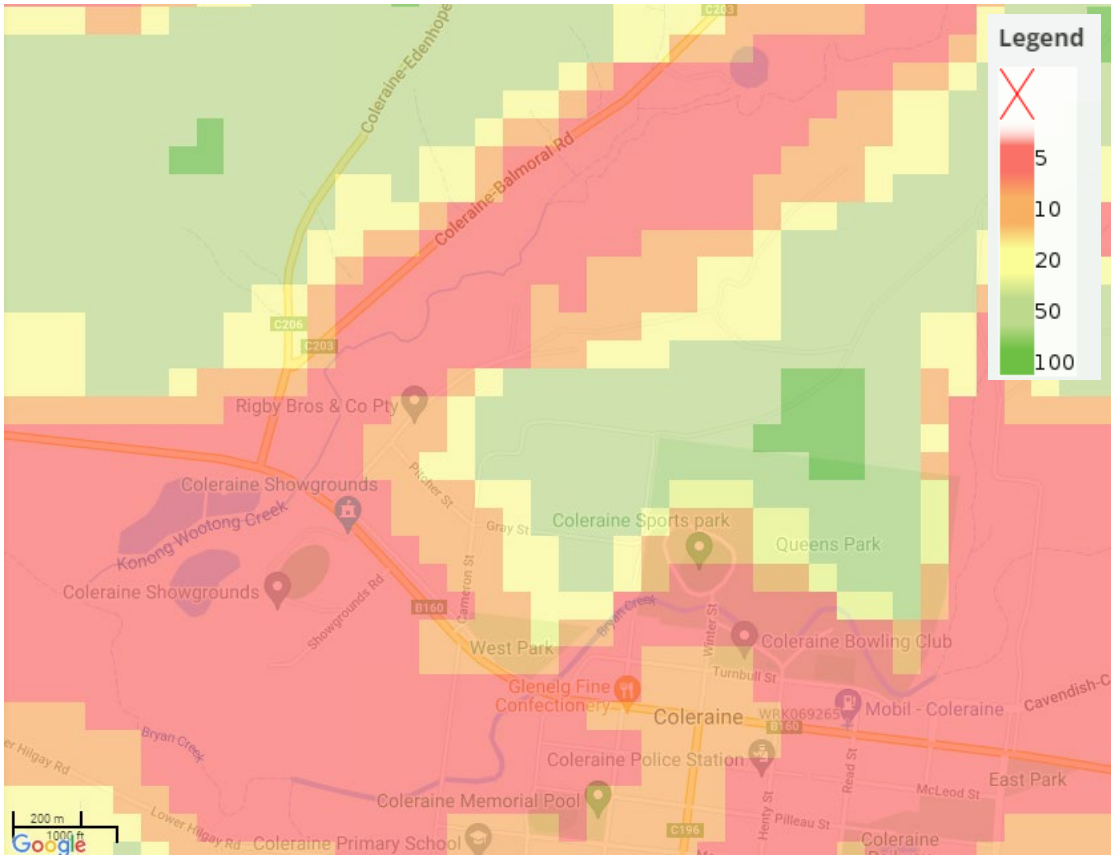

Figure 4 An extract of the Visualising Victoria's Groundwater database of the Coleraine area (extracted 22/03/2024).

Based on the above information, the groundwater table is estimated at between 20 – 30 m below the proposed pit floor (RL 49 m). Accordingly, site groundwater is not anticipated to significantly influence pit wall stability.

2.5. Hydrology

Surface water drainage at the Coleraine Quarry site occurs in sympathy with the surrounding topography which generally decreases in elevation from east to west toward the Konong Wootong Creek. Water which is intercepted by the pit is diverted towards the base of the excavation where it is collected in designated sump locations. A mobile pump is located at the base of the quarry which is used to dewater the sumps in the unlikely event of flooding due to intense rainfall.

2.6. Historical Stability Performance

From 2018 to 2020, the Client engaged Coffey to undertake a number of site inspections and subsequent geotechnical reviews of the Coleraine Quarry, including collating information pertaining to the past stability performance of the site. A summary of this information is presented below:

- In general, the historic performance of the quarry walls is considered satisfactory with the exception of localised sections of the east wall which exhibit crest loss due to a combination of blasting, excavation (including scaling of loose material) and defect orientation.
- Specifically, the southern end of the eastern wall, facing northeast (towards 320°) exhibits increased crest loss and wedge formation. This coincides with a prominent joint set daylighting and outward dipping orientation that facilitates kinematically feasible planar wedges to unravel.

- Immediately above the ramp in this area, scaling of loose crest material in January 2020 resulted in significant crest loss when damaged rock reportedly broke back readily to outward dipping joints, reducing the RL 89 berm width from 6.0 – 7.5 m to approximately 3.5 m.
- This portion of the wall lies closest to the contact between trachyte and overlying sediments which act as a potential plane of weakness within the slope.
- Owing to the January 2020 instability event, WorkSafe Victoria issued an Improvement Notice (V00048404542L111-01) regarding the eastern wall which resulted in the suspension of works below the area of concern.
- Recommendations developed by Coffey (2020) included excavating a cutback of the southeast sediment batters or constructing a rockfall bund at the base of the pit to delineate an exclusion zone.

CMQ understands that the Client resumed works in the southeastern corner of the quarry following the development and implementation of a Ground Control Management Plan (GCMP) in 2020. Furthermore, the updated pit design considers stability in this area through reduced batter-berm geometries within the sedimentary units, as outlined in Section 3.

2.7. Sensitive External Receptors

The WA410 site is located within 1 km of the northwestern margins of the Coleraine Township, as well as major road networks including the Glenelg Highway (B160), Coleraine-Balmoral (C203), and Colerain – Edenhope (C206) Roads. The Bryan Creek, a natural watercourse which flows to the north of the Colerain Township, is within 1 km of the WA410 site at its closest point. In the immediate vicinity of the quarry are several local roads, including Templeton Street and Pitcher Street to the west and south, respectively, and private farmland used for agricultural purposes. Figure 5 presents a map of external sensitive receptors as described above.

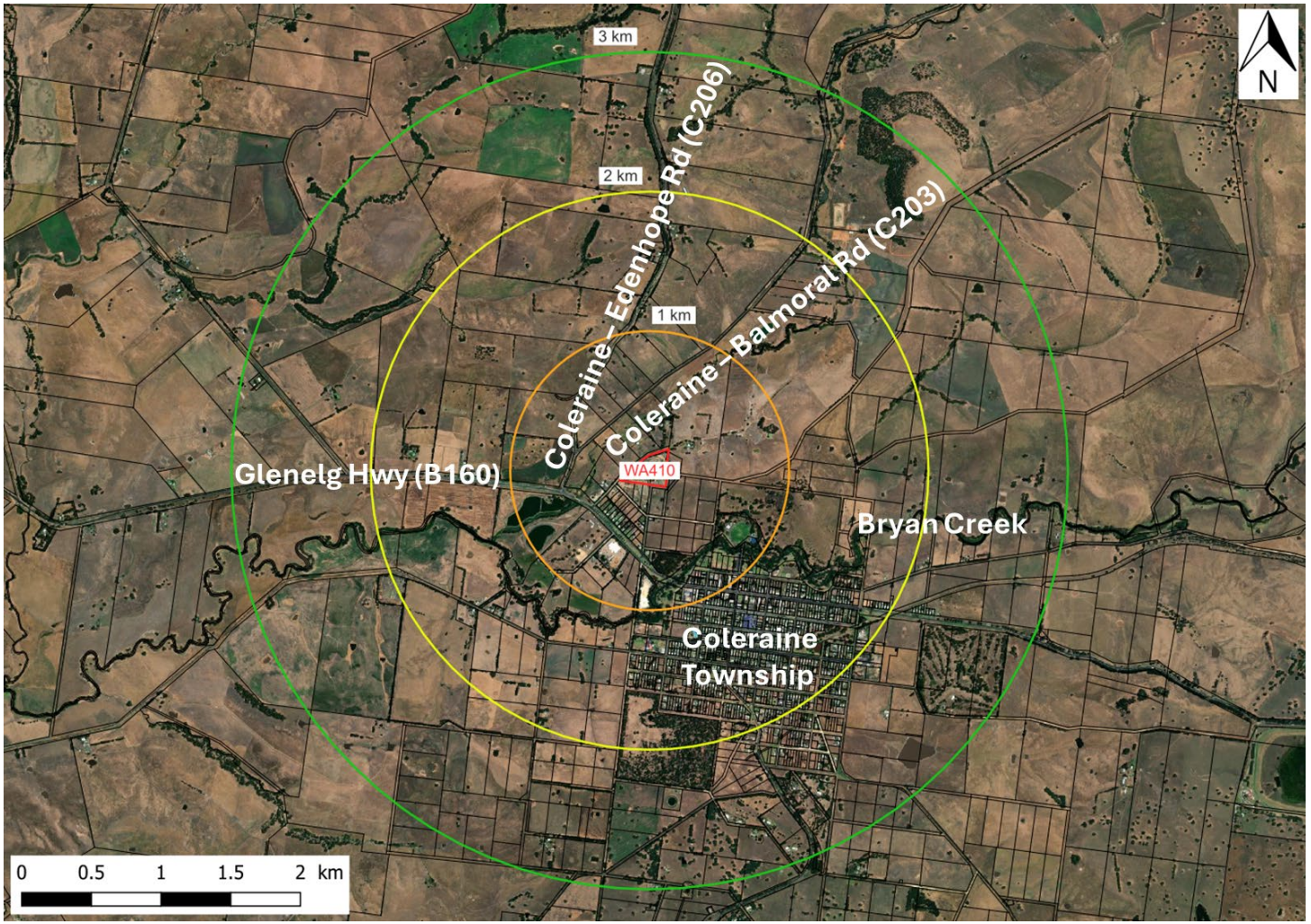

Figure 5 Sensitive External Receptors for WA410

3. Proposed Pit Design

Figure 6 presents a plan view of the proposed pit design for Coleraine Quarry as prepared by BCA Consulting. Notably, the proposal consists of:

- Expanding the Work Authority area to 12.55 Ha from 5.58 Ha.
- Expanding the extraction area to 7.8 Ha from 4.25 Ha.
- Update to operational batter / berm profiles.
- Updates to rehabilitation landform profiles.

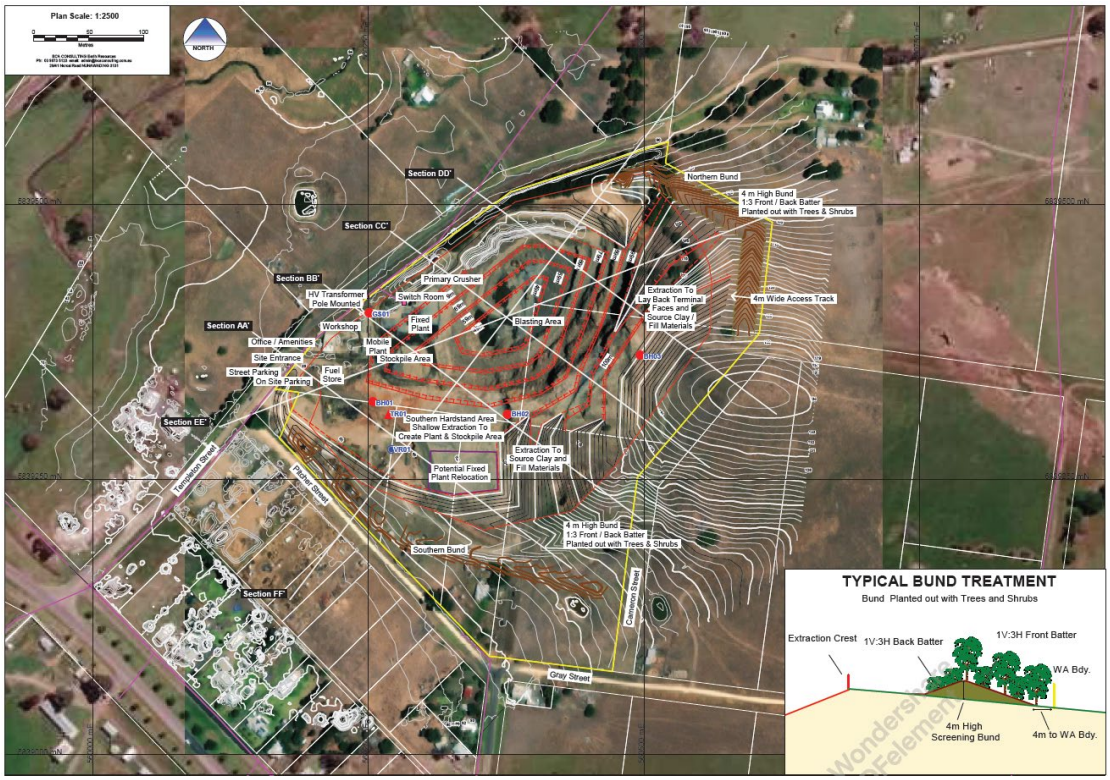

Figure 6 Plan view of proposed WA410 expansion after BCA (2023)

Summarised in Table 2 are the current and proposed operational pit geometries, respectively. Figure 7 presents the proposed terminal batter geometry for the eastern wall.

Table 2 A summary of the slope batter geometries for the current and proposed pit design.

Geometrical parameter	Current design (existing WP)	Proposed design
Batter height (hard rock)	12 m	12 m
Bench width (hard rock)	8 m	8 m
Batter angle (hard rock)	6V:1H (80°)	6V:1H (80°)
Batter angle (overburden)	1V:2H (27°)	1V:3H (18°)
Maximum pit depth	61 m	84 m

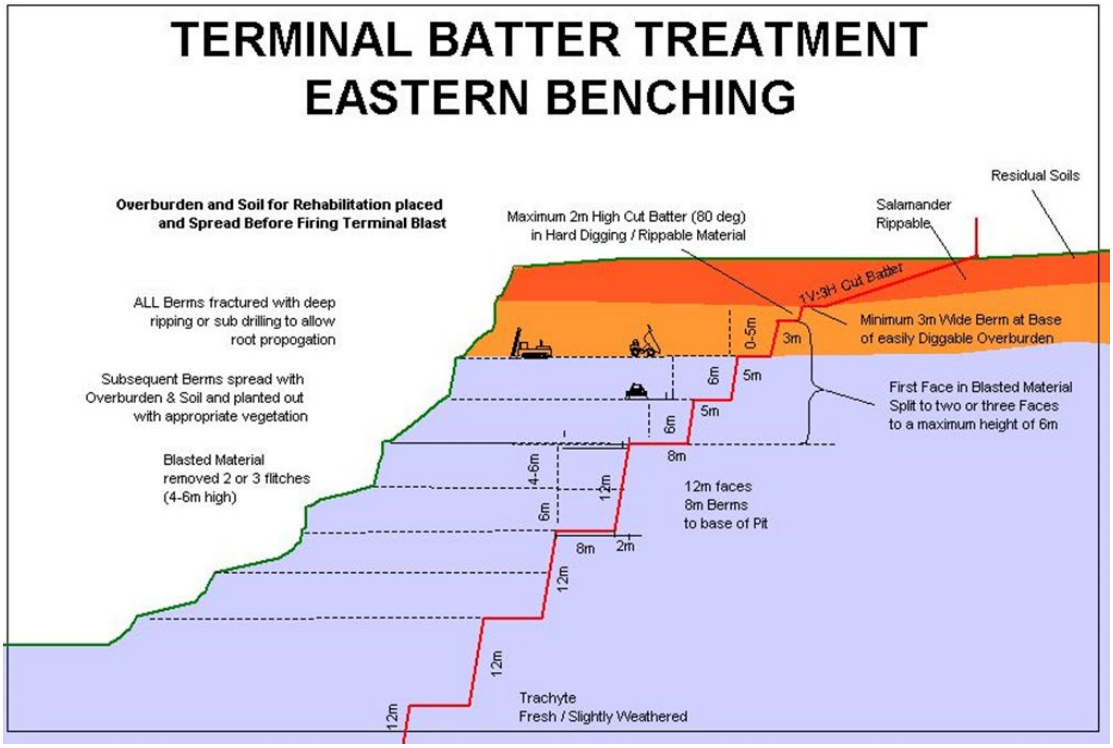

Figure 7 Typical cross-section of proposed terminal batter geometry for WA410 east wall after BCA (2023)

Proposed site rehabilitation shall consist of the following the elements:

- Construction of two 4 m high visual screening bunds to the north and south of the pit which are to be planted out with shrubs and trees at the completion of mining. Topsoil and overburden material required to form the bunds will be harvested and stored on-site during quarry excavation.
- Berms spread with overburden and topsoil and planted out with appropriate vegetation upon attainment of terminal design.
- Minimum height and width of upper 'diggable' benches 2 m and 5 m respectively, incorporating appropriate drainage grades to shed water towards the base of the pit in a controlled manner.

Figure 8 illustrates a typical rehabilitation geometry as it applies to WA410.

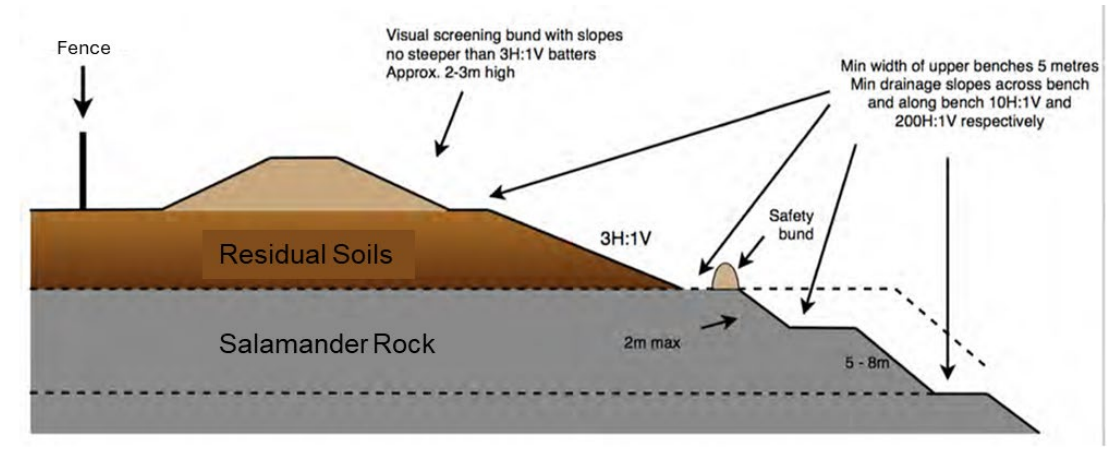

Figure 8 Typical rehabilitation geometry

4. 2024 CMQ Site Inspection

4.1. General

On 5 February 2024, Dr Sanjive Narendranathan (Principal Engineer) and Mr Kevin Kuang (Senior Engineering Geologist) conducted a site visit at the Coleraine Quarry. The objective of the site visit was to inspect the stability performance of the existing quarry batters, undertake structural and defect mapping, and to gain a visual appreciation of the efficacy of operational procedures and potential hazards on site. The site inspection also involved visiting the locations inspected previously by Coffey to reconcile observations. against their observations.

Visual inspections encompassed the entire extraction area, with structural field measurements taken from safely accessible batters. The key observations pertaining to the stability of the quarry are summarised below.

4.2. Observations

At the time of inspection, quarrying activities were occurring along the eastern batters using conventional drill and blast methods, and truck and excavator methods (see Figure 9). Historically, the site has maintained an extraction rate of 30,000 – 40,000 tonnes per year.

Figure 9 An image of the current working face along the eastern batters of the Coleraine Quarry.

Some degree of vegetation had established along the northern and western batters of the quarry, with minimal extraction occurring along these faces (see Figure 10).

Figure 10 An image of the northern and western batters of Coleraine Quarry, showing the growth of vegetations along the batters.

As shown in Figure 11, site stratigraphy was observed to consist of:

- Variably thick residual soils of up to 1 m depth, overlying;
- Highly to moderately weathered trachyte of between 7 – 10 m depth, overlying;
- Slightly weathered to fresh trachyte below 10 m depth.

Figure 11 A view of the eastern batters showing the moderately to highly weathered trachyte (colloquially known as salamander) near the crest of the slope, and the fresh to slightly weathered trachyte below.

Along the eastern batters, evidence of past wedge and planar instabilities were identified resulting in localised crest loss due to a moderately dipping joint set observed to daylight across the face. This included the January 2020 instability that resulted in significant crest loss of up to 5 m. An inspection of this area showed that no further episodes of instability has occurred, with those prominent joint sets still visible (see Figure 12).

Figure 12 The eastern batters of the Coleraine Quarry, with outward dipping joints indicated.

During the inspection, minor erosion was observed within the upper weathered salamander component of the deposit, particularly along the northern batter section of the ramp (see Figure 13). Erosion gullies were observed up to 0.3 m in depth.

Figure 13 An image of erosion of the upper salamander component of the trachyte deposit.

No evidence of deep-seated cracking or slumping was observed. The base of the pit was observed to be mostly dry, with no evidence of uncontrolled pooling, seepage, or infiltration of groundwater into the pit.

4.3. Conclusions

Based on the above site inspection, the following points should be noted as they pertain to the anticipated geotechnical performance at the Coleraine Quarry:

- In general, inspection observations noted in above are consistent with the past operational history of the site, along with previous inspections carried out by Coffey in 2018 and 2020.
- The stability of the batter faces is likely to be structurally controlled as a result of defect sets (i.e. joints), with consistently distributed and oriented structures below the salamander.
- Minor crest loss as a result of blasting and subsequent wall scaling was identified due to the presence of outward dipping joints along the eastern face. Accordingly, formation of tetrahedral wedges and planar blocks are likely to be the main structurally controlled instabilities that have the potential to impact quarry operations, which requires further analysis as detailed in the latter sections of this report.
- Inspections of the current quarry batters indicates that they are stable, with no large-scale, deep-seated instabilities apparent. It is recommended that the ongoing visual monitoring and face inspection of the quarry batters be continued.
- The weathering profile is fairly consistent throughout the quarry, with moderately to highly weathered material (salamander) found between 7 and 10 m from the original ground surface.
- Erosion of the highly weathered material along the northern batters section of the ramp was observed.
- No evidence of uncontrolled pooling, seepage, or infiltration of groundwater into the pit

5. Geotechnical Domains and Model

5.1. General

The basis for formulating geotechnical domains is to segregate the quarry pit into sectors or zones, which have similar geological and geotechnical characteristics, and are anticipated to exhibit similar geotechnical attributes and modes of instability. Figure 14 outlines the considerations that are considered when developing site specific geotechnical domains.

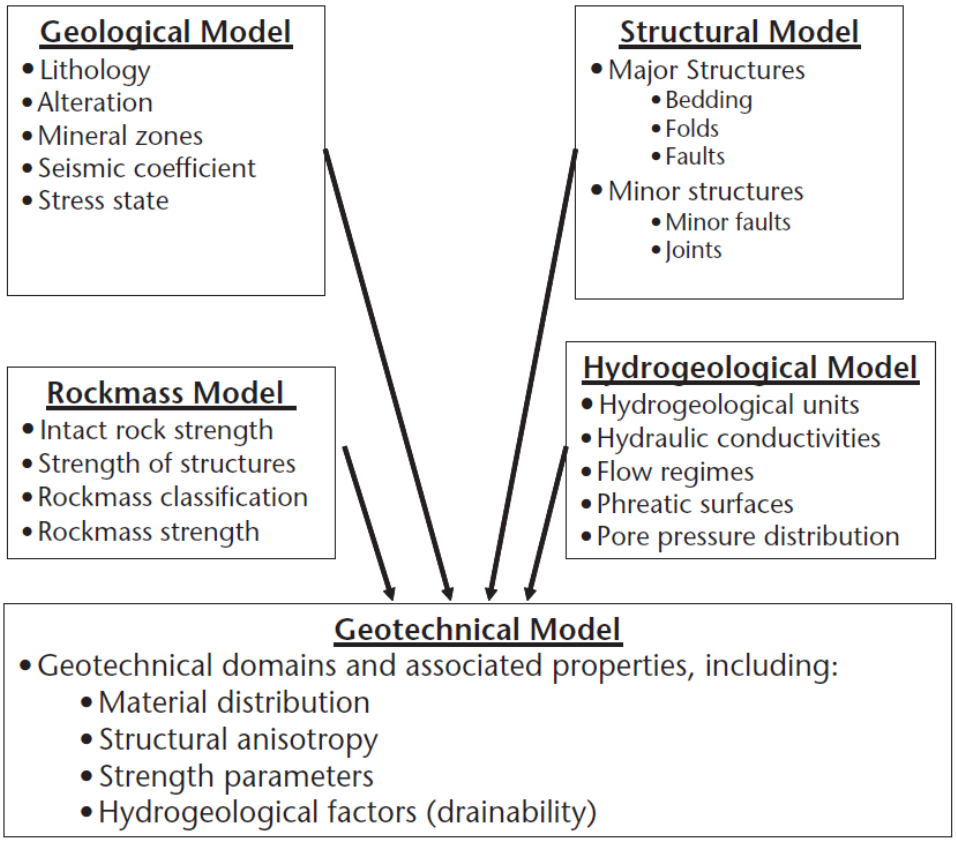

Figure 14 The development of a Geotechnical Domain Model (Read & Stacey, 2009).

The requisite inputs to the geotechnical model have been developed based on the site investigation and desktop study and espousing the philosophy set out by Read & Stacey (2009). The domaining philosophy for the Coleraine Quarry is based on the batter orientations and the nature of the prominent defect sets. It should be noted that, as further assessments are undertaken, the geotechnical domains nominated in this report can be progressively refined.

5.2. Structural Considerations

A fundamental component of the geotechnical domains within a structurally controlled deposit is the variation in the orientation and dip of the geological structures in relation to the respective quarry pit sectors. In this section, the structural analyses have been undertaken using stereographic projection techniques for the purpose of identifying structure orientations which may be critical.

The structural information utilised in these analyses was obtained from a targeted campaign of defect mapping undertaken during the site visit. The intent of the mapping was to identify defect sets and orientations that are likely to impact on quarry slope stability performance.

Based on the mapping undertaken during the CMQ site visit on 5 February 2024, four (4) predominant defect sets have been identified from a total of 201 structures. Table 3 summarises the angle and orientation of each defect set, with a stereographic analysis shown in Figure 15.

Table 3 The identified defect sets during the CMQ site inspection in February 2024. The values in square brackets represent the minimum and maximum ranges).

Joint set ID	Dip (°)	Dip direction (°)	Condition
J1	47 [32-64]	339 [314-005]	Clean, with minor iron oxide coating, rough, planar/undulating
J2	57 [42-70]	71 [052-087]	Clean, with minor iron oxide coating, rough, planar/undulating
J3	50 [41-60]	260 [240-282]	Clean, with minor iron oxide coating, rough, planar/undulating
J4	76 [70-80]	268 [256-276]	Clean, with minor iron oxide coating, rough, planar/undulating

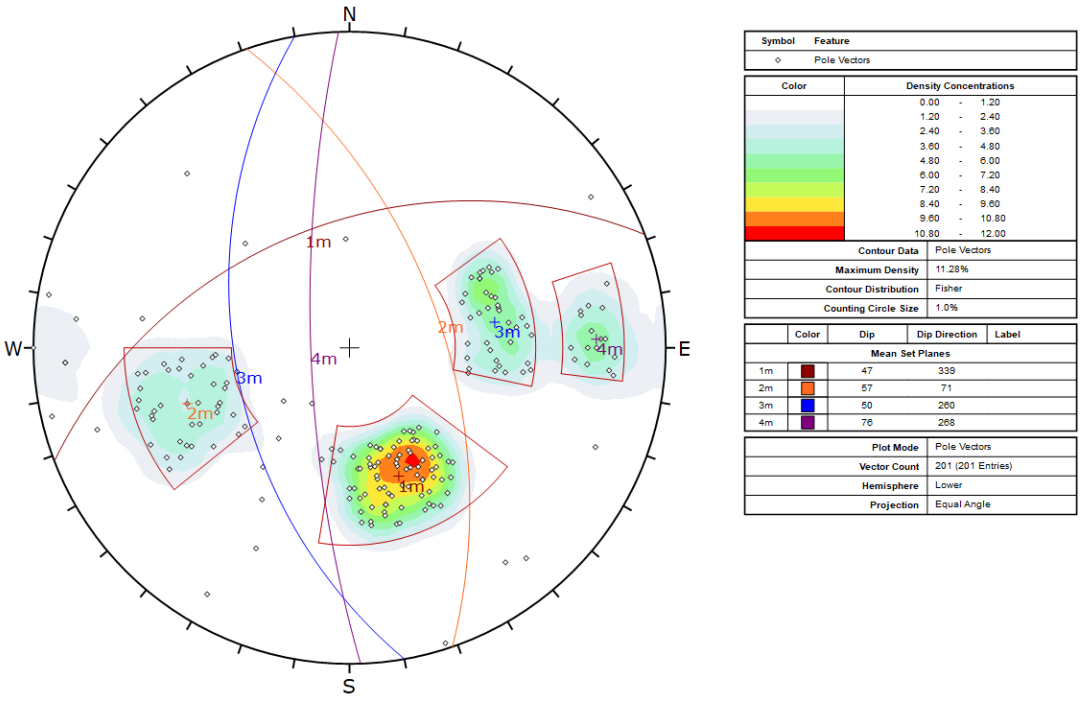

Figure 15 A stereographic projection of the major defect planes at the Coleraine Quarry site (all batters).

5.2.1. Interpretation of Stereographic Projections

Kinematic stability is governed by the characteristics of structural defects (e.g. length of defect) as well as the orientation and design of batter geometries. The potential for kinematic instabilities to manifest are typically identified through the use of stereographic projections and are subject to further limit equilibrium analyses. Discontinuities (or geological defects) are plotted as lower hemisphere 'poles' with reference to the slope face which is being assessed. An example of a stereonet showing the above key features is presented in Figure 16.

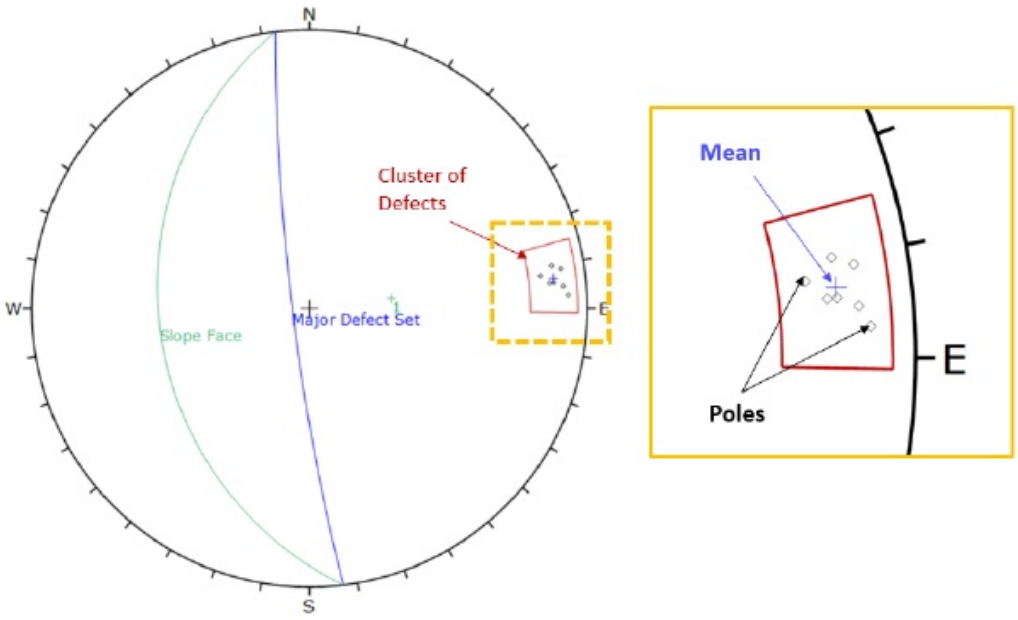

Figure 16 An example stereonet depicting key elements.

For the Coleraine Quarry, the key structurally controlled instability mechanism was identified in Figure 15 as tetrahedral wedge and planar sliding, outlined in further detail below.

5.2.1.1. Tetrahedral Wedge Instability

From a kinematic perspective, tetrahedral wedge instabilities require a specific occurrence of structural conditions to be feasible, which includes:

- The dip of the discontinuity planes are flatter than the angle of the slope face.
- The dip of at least one discontinuity plane is greater than the friction angle of the discontinuity surface.
- Two or more planes of discontinuity intersect the slope face.

An example of tetrahedral wedge sliding is shown in Figure 17 along with the corresponding stereographic projection.

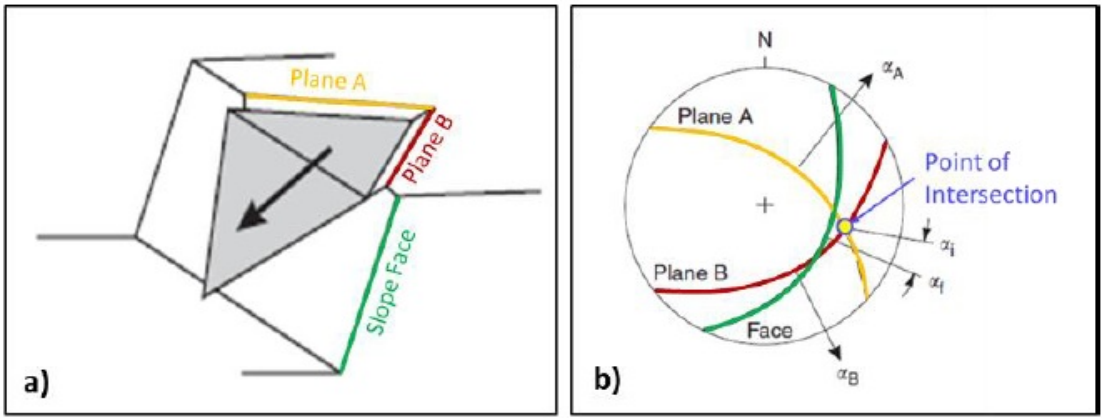

Figure 17 A schematic of kinematically feasible tetrahedral wedge and the corresponding stereographic projection.

With respect to stereographic projections, the range of dip and dip directions where critical kinematic instabilities are likely to occur is represented by a daylight envelope (representing the zone where two or more discontinuities will impact the slope face.

5.2.1.2. Planar Slide Instability

The kinematic conditions which must be satisfied for a planar instability to occur include:

- The dip of the discontinuity must be less than the dip of the slope face but greater than the friction angle of the discontinuity surface.
- The dip direction of the of the discontinuity must be sub-parallel to that of the slope.

An example of tetrahedral wedge sliding is shown in Figure 18 along with the corresponding stereographic projection.

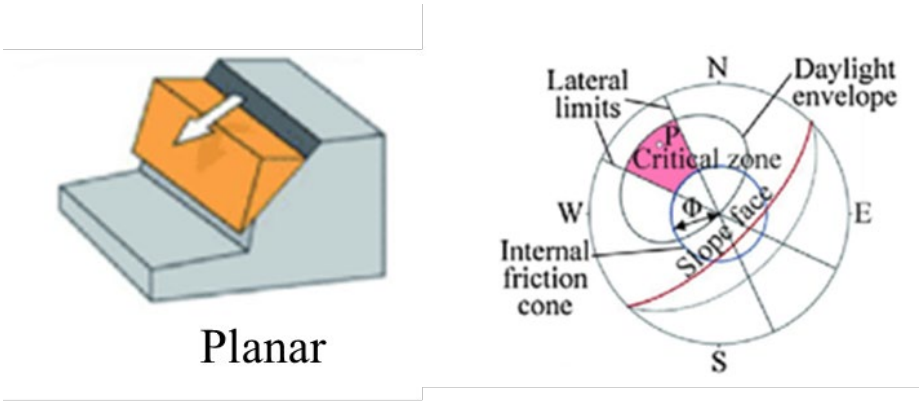

Figure 18 A schematic of kinematically feasible planar wedge and the corresponding stereographic projection.

It should be noted that true planar failure is rarely encountered in nature, often presenting instead as pseudo wedge failure due to multiple instability planes.

5.2.2. Analysis of Stereographic Projection

The identified major defect sets at Coleraine Quarry are represented using a lower hemispherical stereographic projection for each of the proposed quarry batters, along with the respective slope orientations within the pit. Figure 19 presents the nominated batter orientation domains for the proposed pit design, with corresponding information summarised in Table 4.

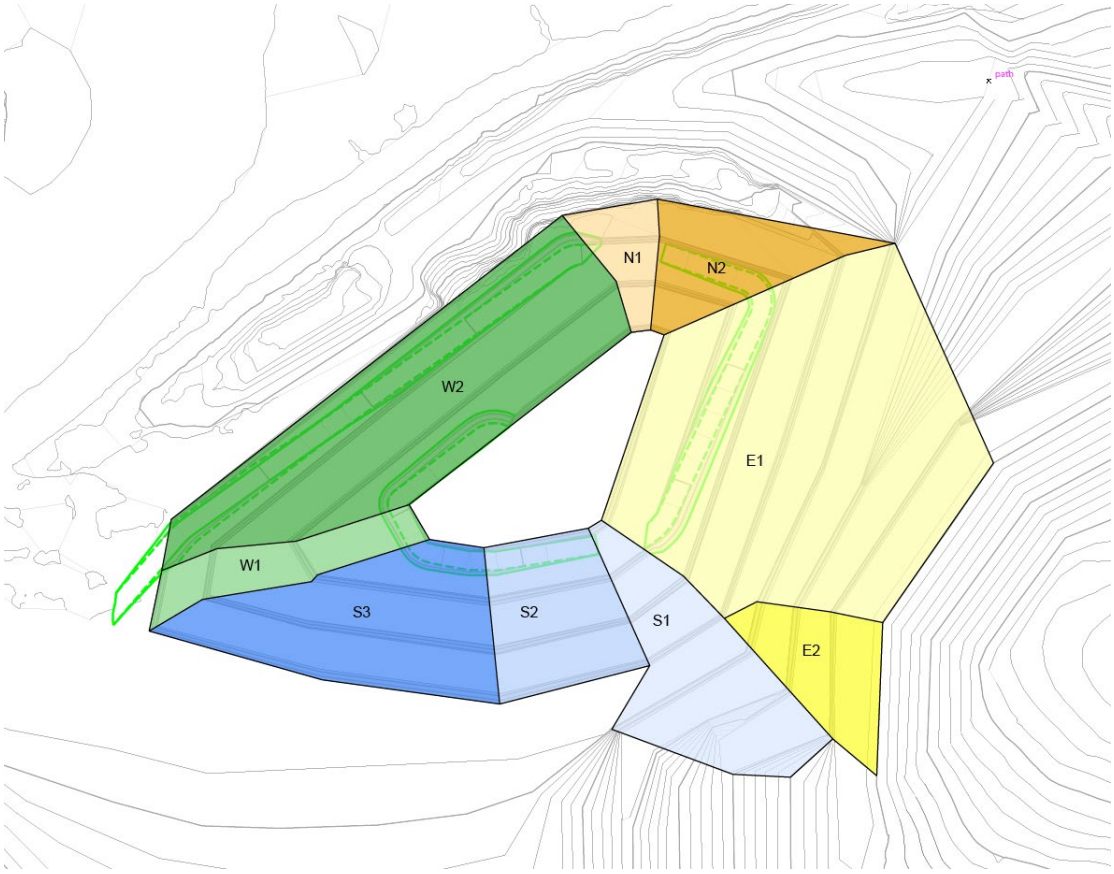

Figure 19 The proposed pit design for Coleraine Quarry indicating the nominated sub-domains.

Table 4 The batter orientations within the proposed pit design at Coleraine Quarry.

Domain	Batter sub-domain	Batter orientation (°)
North	N1	179
	N2	198
East	E1	290
	E2	275
South	S1	330
	S2	349
	S3	010
West	W1	032
	W2	142

Examples of the east and south wall stereographic projections are shown in Figure 20 and Figure 21 respectively. The full suite of stereographic analyses is presented in Appendix A.

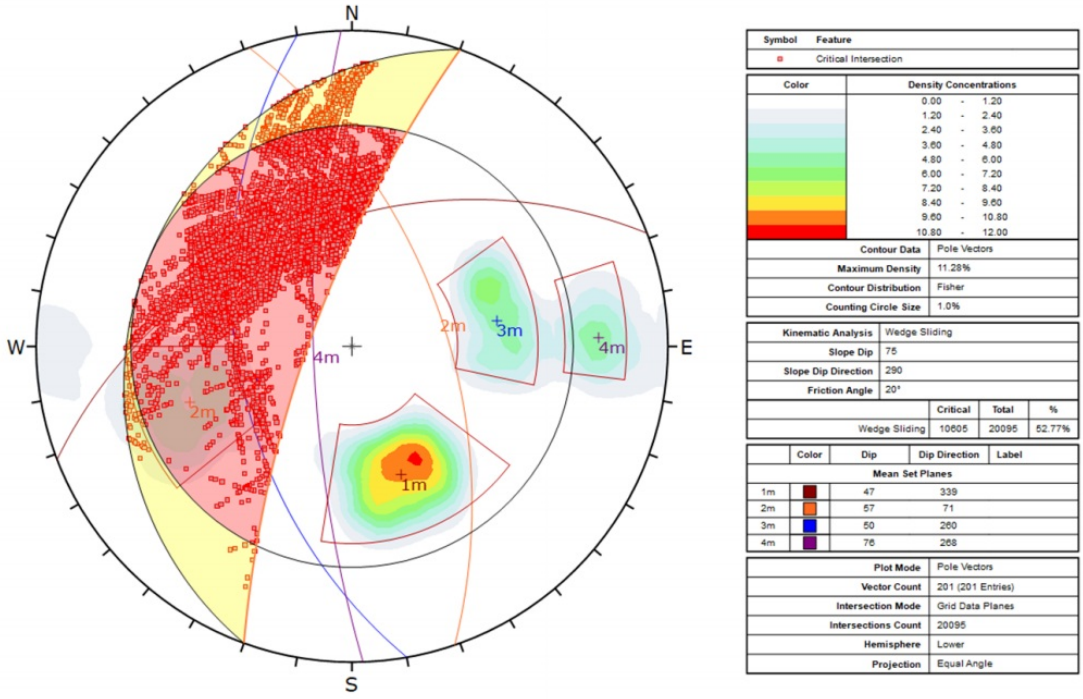

Figure 20 The stereographic projection for the eastern batters (batter orientation E1) for tetrahedral wedge sliding.

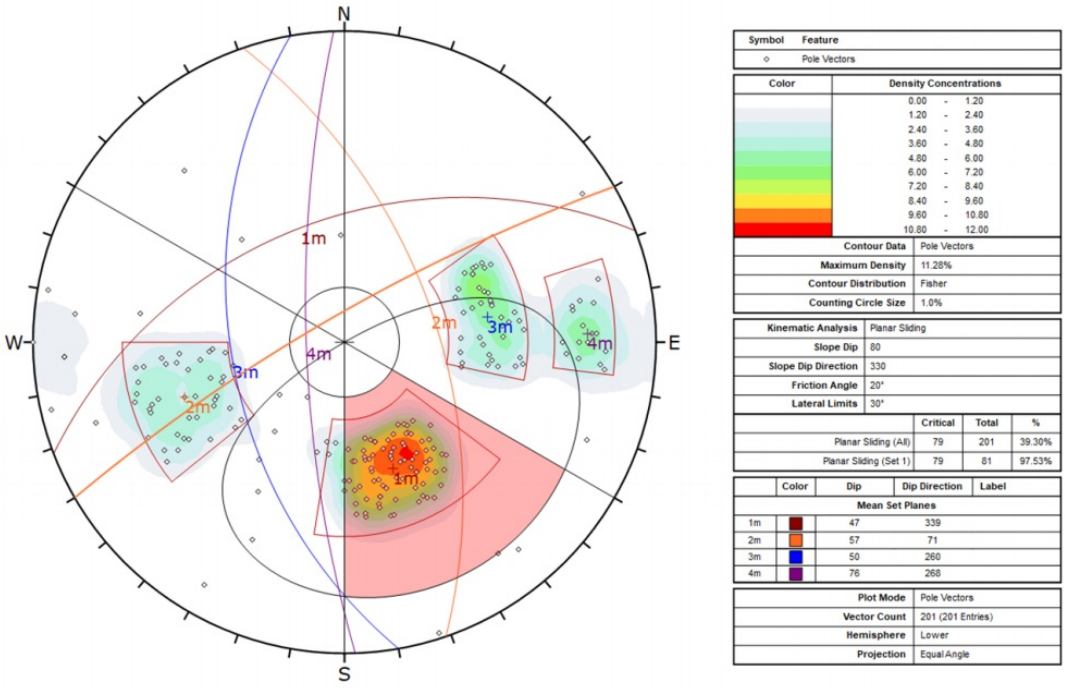

Figure 21 The stereographic projection for the southern batters (batter orientation S1) for planar sliding.

Based on the analyses, the following modes of instability have been identified for each of the proposed pit walls (Table 5). It should be noted that where multiple instability types are identified, the order of presentation denotes the likelihood of that particular instability mode manifesting (i.e. left is more likely, right is less likely).

Table 5 A summary of the structurally controlled modes for the proposed pit design.

Domain	Batter sub-domain	Structural instability mode
North	N1	Planar
	N2	Planar
East	E1	Wedge, planar
	E2	Wedge, planar
South	S1	Wedge, planar
	S2	Wedge, planar
	S3	Wedge, planar
West	W1	Wedge, planar, toppling
	W2	Planar

5.3. Composite Stability Mechanisms

5.3.1. Active Passive Wedge Type Instabilities

Active/passive wedges are a type of composite kinematic (structural) instability, however, cannot be identified using stereographic projections alone. Active/passive wedge instabilities occur when a rock mass slides along a set of persistent discontinuities, such as a shear zone or bedding plane, that is oriented with an outward dip that daylights at the slope face. The active/passive wedge mechanism is illustrated in Figure 22.

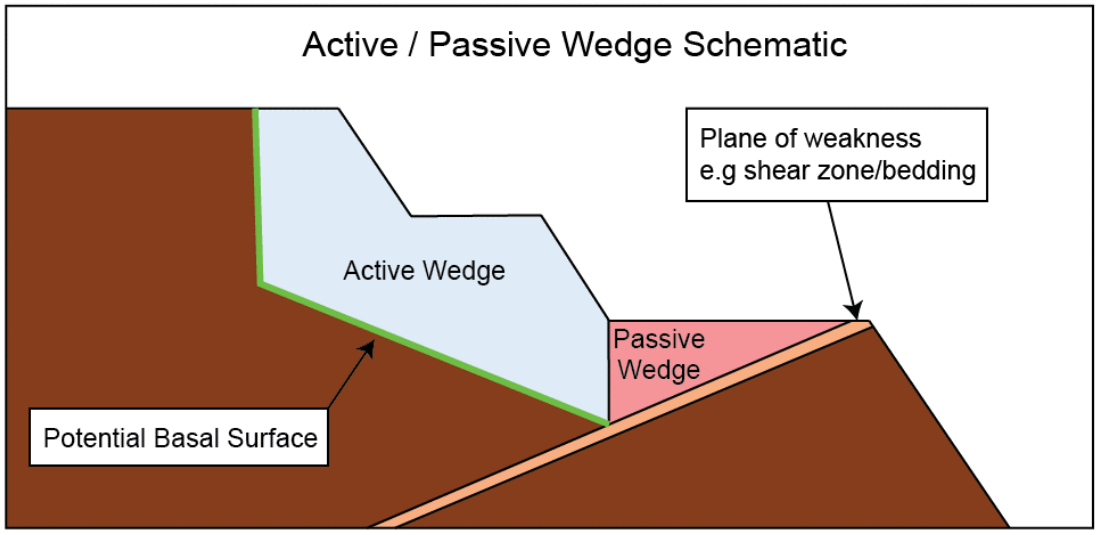

Figure 22 A schematic of the active/passive wedge mechanism.

As shown, the driving forces are transferred from the active block (blue) resulting in a dislodgement of the passive block (red). In order for the active/passive wedge to be feasible, discontinuities must also be present (the potential basal plane), or the weight of the sliding block must be sufficiently large to cause a shear in the rock mass. The transitional point between the active/passive wedge can be identified by severe fracturing and shearing of the rock mass and may occur over a range of possible orientations (not just vertical, which is depicted in Figure 22).

Based on the site observations, CMQ does not expect that the potential failure mechanism is likely to manifest in the currently exposed batters. However, it is important that regular and ongoing mapping be undertaken as extraction continues to identify these potential instabilities.

5.3.2. Circular Instability

Circular failure typically occurs within soil and highly disturbed and/or weathered material that typically does not have any remnant structure (Figure 23). Circular failure is dependent upon the shear strength characteristic of the material, and the slope angle of the cut face.

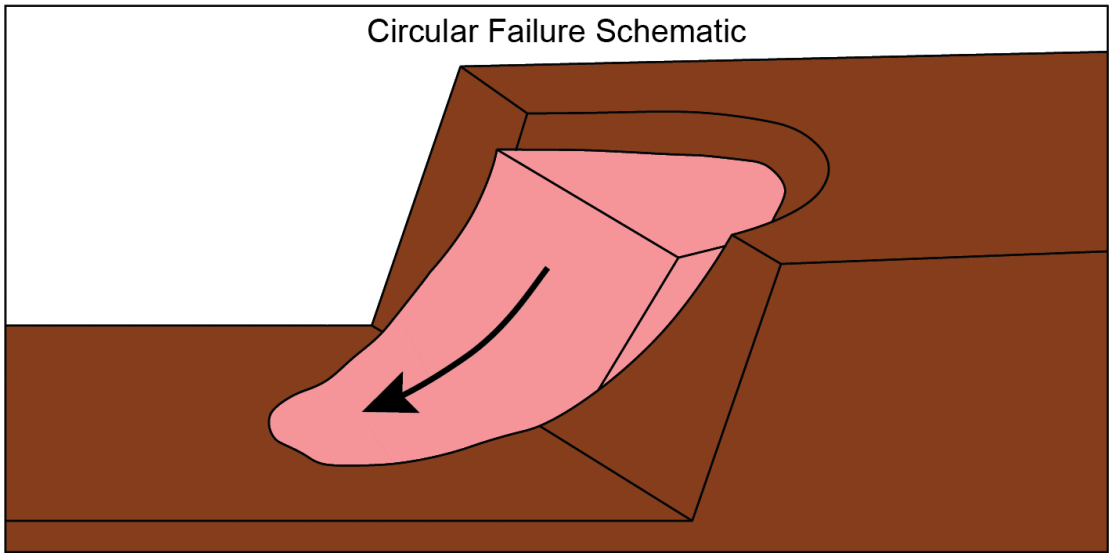

Figure 23 A schematic of a circular failure.

At the Coleraine Quarry site, this instability mechanism may manifest within the extremely or highly weathered material. Accordingly, the potential circular failure mechanisms are likely to be of small scale and unlikely to present global slope instability.

5.4. Interpretation of Material Strength Properties

The soil and rock material at the site has been assessed based on the respective degree of weathering (ISRM 1981), defined in Table 6.

Table 6 A summary of material type by degree of weathering after ISRM (1981).

Unit	Degree of weathering	Weathering grade
1	Residual Soil	RS
2	Highly Weathered	HW
3	Moderately Weathered (Salamander)	MW
4	Slightly Weathered	SW
5	Fresh	FR

Adequate definition of the material shear strength characteristics requires espousing suitable criterion based on unique strength parameters to derive an appropriate relationship between normal and shear stresses. For rock units, the Generalised Hoek-Brown (GHB) criterion was utilised. For lower strength soil units, the Mohr-Coulomb (MC) criterion was adopted.

Table 7 summarises the strength criterion type along with the strength parameters required for each material type.

Table 7 A summary of strength criterion and parameters by material type.

Unit	Strength criterion	Required strength parameters
1	Mohr-Coulomb	Cohesion (c') and Friction Angle (ϕ')
2	Generalised Hoek-Brown	Uniaxial Compressive Strength (σ_c), Geological Strength Index (GSI)
3	Generalised Hoek-Brown	
4	Generalised Hoek-Brown	
5	Generalised Hoek-Brown	

For each material type and associated strength criterion, strength parameters were obtained through either field test estimates or site observations. Field test estimates include the determination of the Uniaxial Compressive Strength (UCS) for intact rock mass, and site observation includes the determination of the Geological Strength Index (GSI).

5.4.1. Intact Rock Mass

Table 8 below shows the field strength estimates for each material type as identified on site.

Table 8 A summary of the intact rock mass properties as per ISRM (1981).

Unit	Grade	Term	Field identification	Typical UCS range (MPa)	Adopted UCS (MPa)
2	R1	Very weak	Crumbles under firm blows with point of geological hammer and can be peeled by a pocketknife.	1-5	3
3	R3	Medium strong	Firm blow with geological pick indents rock to 5 mm, knife just scrapes surface.	25-50	25
4	R4	Strong	Handheld specimens broken by a single blow of a geological hammer.	50-100	50
5	R5	Very strong	Requires many blows of a geological hammer to break intact rock specimens.	100-250	100

The Geological Strength Index (GSI) for jointed rocks defines the relationship between the rock mass structure and the surface quality. Figure 24 presents the GSI chart for jointed rocks after Hoek & Marinos (2000), which has been adopted for correlating site observations with rock mass strength.

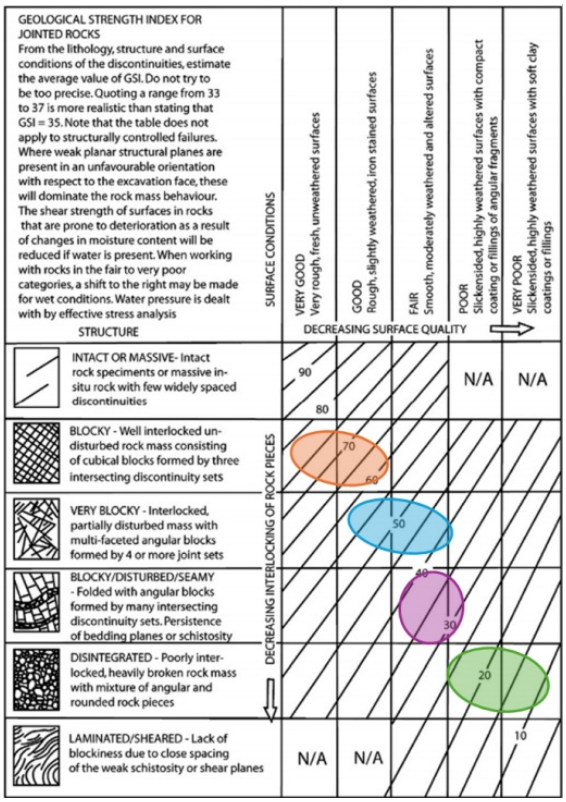

Figure 24 A basic GSI chart after Hoek & Marinos (2000) depicting the estimated strengths of the observed materials on site.

5.4.2. Residual Soil Strength Parameters

Residual strength parameters for the residual soil, which are largely comprised of sands and to a lesser degree silts and clays were interpreted based on site observations and experiences dealing with similar materials. The material parameters for residual soils are presented in the following sub-section.

5.4.3. Shear Strength Curves

Table 9 summarises the respective strength parameters adopted for each geological unit encountered at WA410. Presented in Figure 25 is the corresponding shear strength curves derived using the below values.

Table 9 Material shear strength parameters for WA410

Shear strength curve (criterion) parameters				
Mohr-Coulomb criterion				
Unit	Cohesion, c' (kPa)	Friction Angle, φ' (°)		Unit Weight (g/cm^3)
1	0	30		1.7
Generalised Hoek-Brown criterion				
Unit	mb	s	a	Unit Weight (g/cm^3)
2	0.21	5.97E-06	0.55	2.2
3	0.56	8.11E-05	0.52	2.3
4	1.15	5.33E-04	0.51	2.5
5	3.64	1.12E-02	0.50	2.6

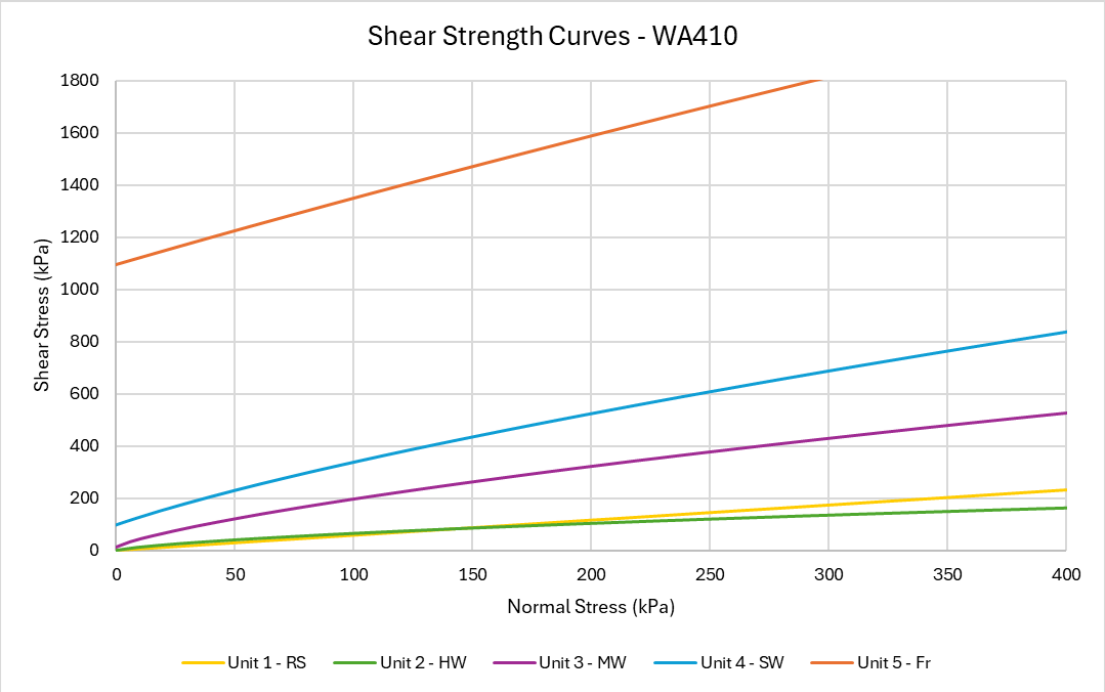

Figure 25 Material shear-normal stress relationships

5.4.4. Defect Strength

Shear strength parameters for site discontinuities were derived based on field correlations and the experience of CMQ with similar materials from within the region. The shear strength of defect planes was interpreted using the Barton-Bandis (1990) shear strength function, which requires the following input parameters:

- JCS – Joint Compressive Strength
- JRC – Joint Roughness Coefficient
- Residual Friction Angle (ϕr')

Table 10 summarises the interpreted Barton-Bandis shear strength parameters used for the kinematic analyses.

Table 10 Shear strength parameters for defect planes

JCS (MPa)	JRC	Residual friction angle (°)
100	7	30

6. Stability Analyses Approach

6.1. Overview

Stability analyses for WA410 were undertaken to assess the performance of the proposed quarry pit slopes for the following scales of instability:

- Local stability i.e., kinematic (structural). Based on the stability observations and targeted defect mapping as previously outlined. Kinematically controlled mechanisms are not anticipated to extend beyond the 'working' batter scale due to the limited persistence of structures as observed on site. Both wedge and planar type instabilities were considered as part of this assessment, as well as the efficacy of design berm widths to retain unravelled material.
- Global stability. Undertaken for the inter-ramp and overall slope scales using two-dimensional limit equilibrium modelling. Analyses were performed on three critical sections (detailed in Section 6.3) of the proposed quarry pit to assess the overall scale slope stability performance. Sensitivity analysis was undertaken to assess the influence of seismic loading events and short-term elevations to groundwater conditions.

6.2. Design Acceptance Criteria

Design acceptance criteria (DAC) for the WA410 were nominated in line with accepted industry practice as outlined in DJPR's (2020a) 'Geotechnical Guideline for Terminal and Rehabilitated Slopes', and published precedents, as outlined in CSIRO's 'Guidelines for Open Pit Slope Design', (eds. Read and Stacey, 2009). In nominating suitable design acceptance criteria, CMQ has utilised the Factor of Safey (FoS) criteria outlined in Table 2 of DJPR (2020a) and Table 9-3 of Stacey and Read (2009).

Table 11 Factor of Safety Guidelines after DJPR (2020a)

Consequence of failure	Examples	Minimum FoS
Not serious	Individual benches; small slopes (< 50 m), temporary slopes, not adjacent to haulage roads	1.3
Moderately serious	Any slope of a permanent or semi-permanent nature. Includes terminal slopes	1.6
Very serious	Medium sized (50-100 m) and high slopes (< 150 m) carrying major haulage roads or underlying permanent mine installations. Includes rehabilitation slopes	2.0

Distilling the above in specific relation to the WA410 terminal pit design, FoS criteria were nominated for the assessment in line with the instability scales assessed, as follows:

- Global scale instabilities:
  - Terminal batters – **FoS > 1.6**
  - Rehabilitated batters – **FoS > 2.0**

In addition to the above, DAC for short-term loading events were nominated as follows:

- Pseudo static (seismic) – **FoS > 1.1**
- Fully saturated conditions – **FoS > 1.1**

6.3. Minimum Required Bench Width

The minimum required bench width was calculated for the critical structural instability (i.e., lowest FoS), for both tetrahedral wedge and planar failures. In both cases, the calculation compares the maximum spill width of the bulked failed material against the design catch bench width of 8 m, as illustrated in Figure 26 below.

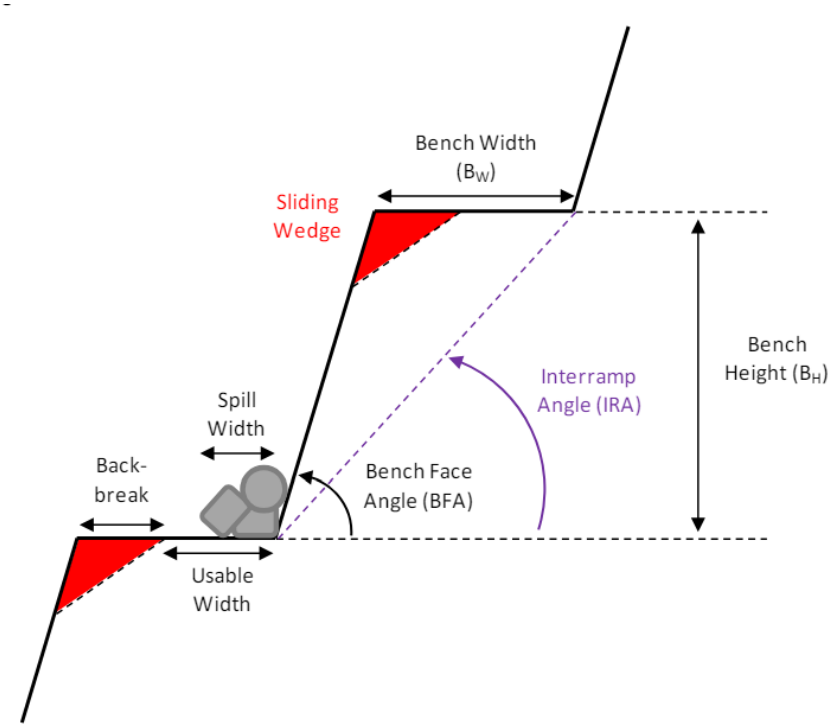

Figure 26 Typical catch bench geometry (Rocscience, 2022)

The following assumptions were employed when performing the minimum required bench width calculations:

- Calculations account for the fact that blasted material is to be excavated in three, four-metre-high flitches. It is assumed that once a flitch is excavated, the exposed section of wall is scaled and all remaining loose material is removed before excavation of the subsequent flitch commences.
- For tetrahedral wedge failures, methodology derived by Gibson et al. (2006) was relied upon. This approach assumes that the failed material typically forms a conical or pyramidal-shaped pile, the radius of which denotes the minimum required bench width.
- For planar failures, a simplified 2D estimation of spill width was used based on slump geometry.
- Failed material bulking factor of 1.5.
- Failed material rill angle of 38º.
- Retainment of 80% of spilled material
- Blasting and subsequent wall scaling eliminates ongoing risk of structural instability.

6.4. Nominated Stability Sections

Three critical stability sections were nominated for the limit equilibrium component of the analyses. The basis for nomination was as follows:

- Stability Section 1 (S1): representative of critical batter geometry along the east wall.
- Stability Section 2 (S2): intersects the proposed hardstand area and Pitcher Street i.e., sensitive receptors.
- Stability Section 3 (S3): intersects the proposed primary crusher and Templeton Street i.e., sensitive receptors.

Presented in Figure 27 is a plan showing stability section alignment over the proposed pit.

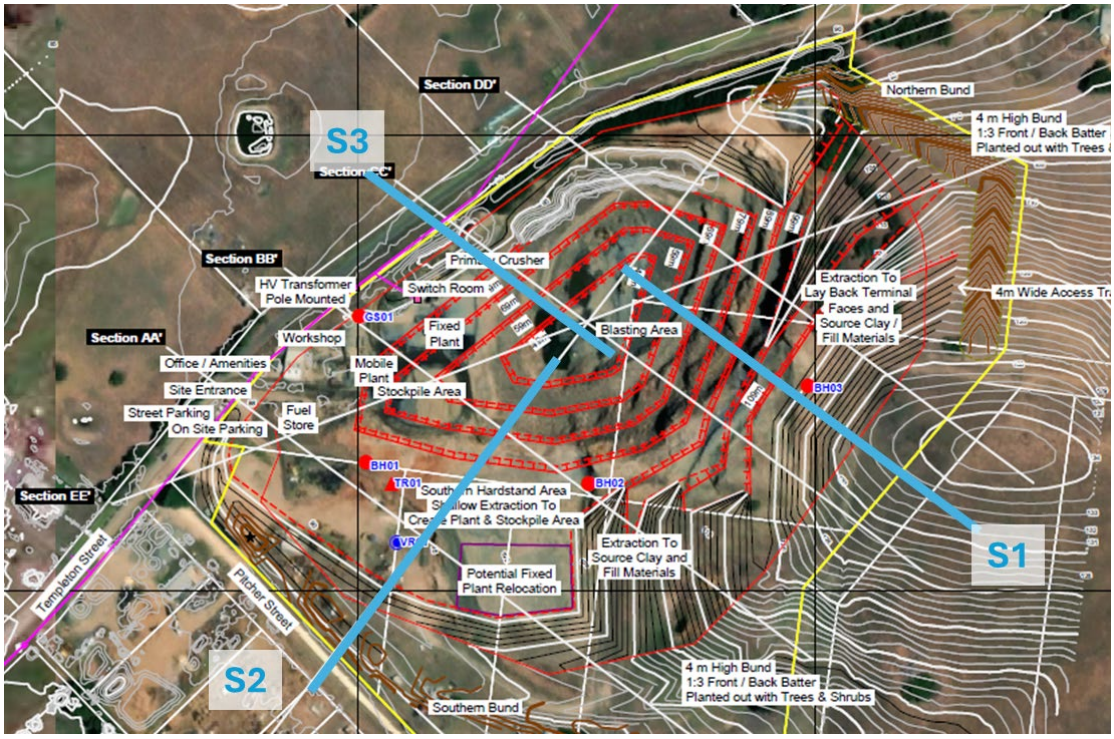

Figure 27 Plan of nominated stability sections

6.5. Stability Model Construction

The construction of a stability model incorporates and combines the elements of subsurface geology, hydrogeology, material properties and slope design geometry as defined by the geotechnical model. Figure 28 presents the constructed stability model for section S1 with critical features annotated.

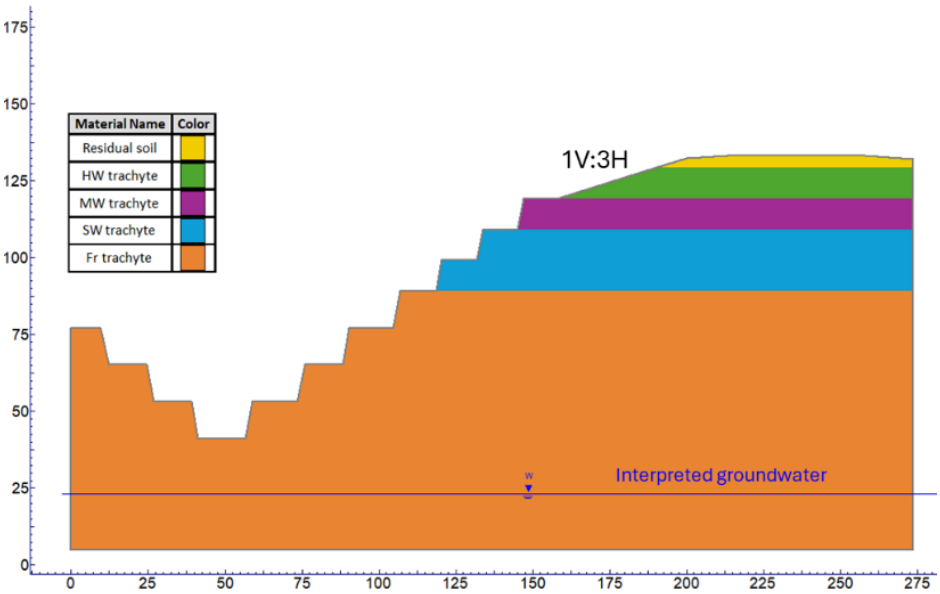

Figure 28 Constructed stability model – stability section S1

7. Stability Analyses Results

7.1. Kinematic Analyses

Kinematic analyses were undertaken for the critical mechanisms identified in Section 5.2.2, namely tetrahedral wedge and planar instabilities, for the respective WA410 batter orientations. As part of this assessment, the efficacy of design catch benches was considered given the formation of critical instabilities as identified by the kinematic analyses.

7.1.1. Tetrahedral Wedge Analyses

Analyses of tetrahedral wedge sliding was undertaken for the proposed pit design using Rocscience's SWedge considering the four major joint sets as outlined in Section 5.2. The kinematic analysis undertaken is considered conservative as SWedge 7.0 employs an infinite defect length model, i.e. a defect plane can occur across the entire length of slope and bench. The results of the kinematic analyses are summarised in Table 26 with the full suite of results presented in Appendix B. It should be noted that the wedge volumes refer to those calculated for the critical wedges, i.e., those with the lowest FoS.

Table 12 Summary of kinematic results – tetrahedral wedge

Domain	Orientation*	No. of feasible wedges	Min FoS	Critical Vol. (m^3)	No. wedges FoS<1.1	No. wedges FoS<1.3	No. wedges FoS<1.5
North	N1	1	24.64	2.95	0	0	0
	N2	1	24.40	3.66	0	0	0
East	E1	4	1.24	148.11	0	1	1
	E2	4	1.19	81.33	0	1	1
South	S1	5	1.28	793.97	0	2	2
	S2	5	1.31	636.18	0	2	2
	S3	5	1.41	230.17	0	0	2
West	W1	4	1.45	76.30	0	0	1
	W2	1	24.16	5.33	0	0	0

*Refer to Table 4 for orientations

Figure 29 presents the stability model output for the critical wedge along orientation E2 due to intersection of joint sets J1 and J4 (FoS = 1.19).

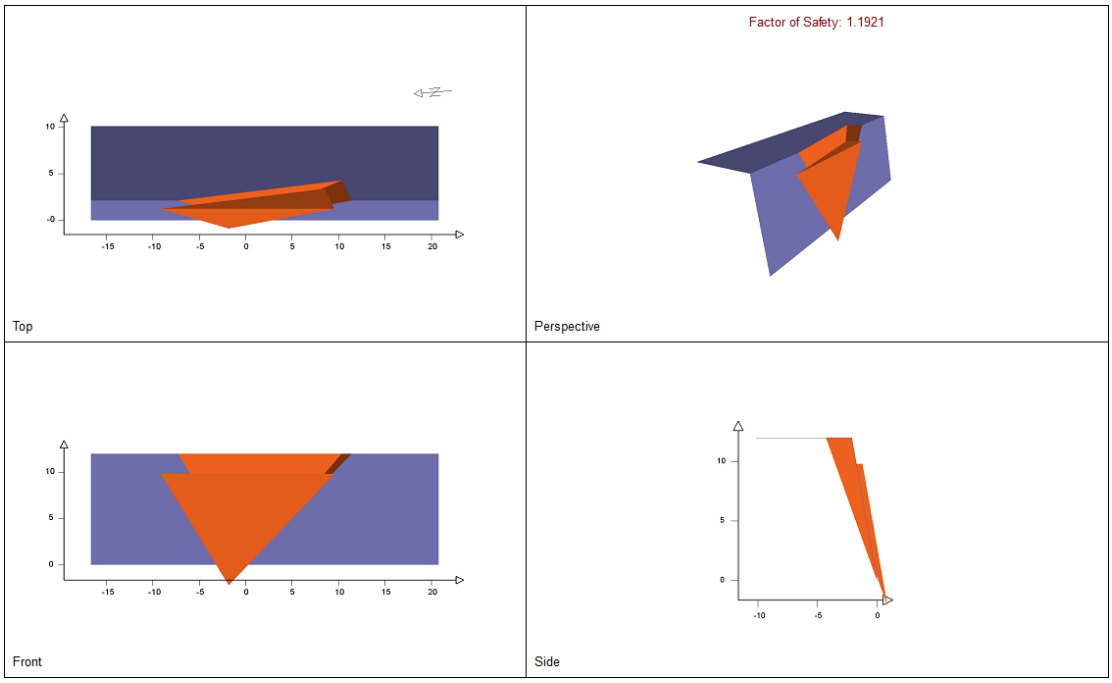

Figure 29 Stability model output – critical wedge analysis – Orientation E2

Presented in Figure 30 are the results of the minimum bench width assessment for the critical wedge as identified above (Orientation E2, J1 and J4). The assessment was performed for a range of bench face angles to account for potential non-conformances during blasting. The minimum required bench width at the design bench angle of 80º is 2.9 m.

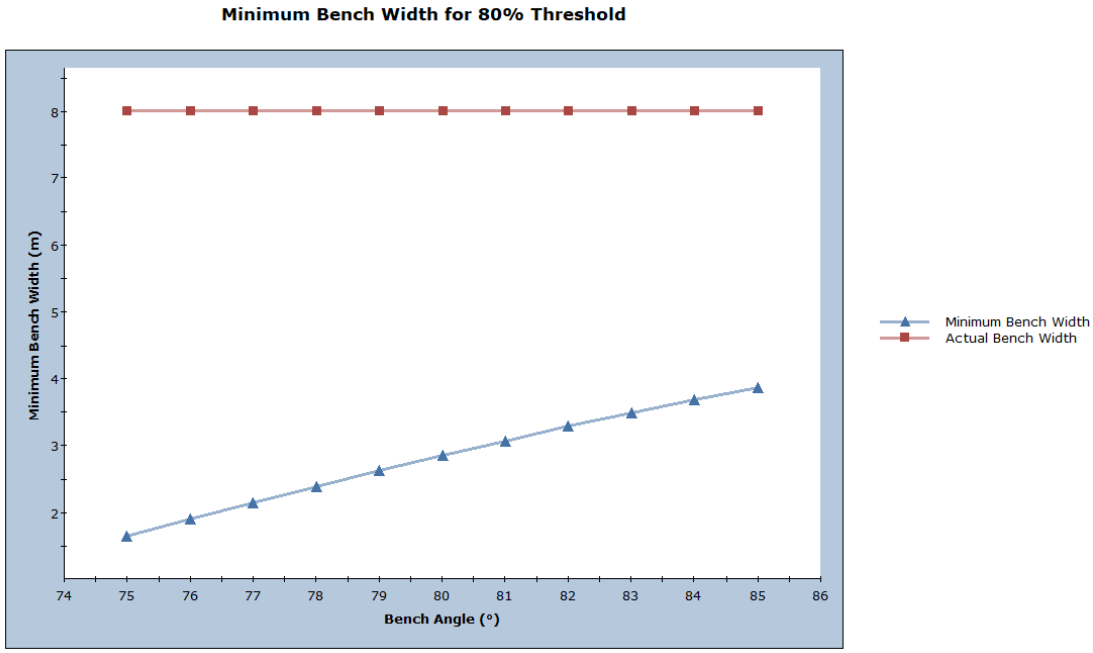

Figure 30 Minimum bench width plot for the critical wedge (E2, J1+J4)

The results of the kinematic tetrahedral wedge analyses indicate:

- Manifestation of wedge failures were possible for all wall orientations, however, were more likely to occur along the east and south quarry domains.
- In all cases, minimum FoS values exceeded 1.2, indicating potential wedges encountered on site are likely to remain stable under expected conditions. Accordingly, it is anticipated that blasting and subsequent wall scaling of loose material is sufficient to eliminate hazardous conditions associated with wedge formation during quarrying activities.
- For wedges with calculated FoS < 1.5, corresponding material volumes ranged from 76 – 265 m^3. However, given the highly jointed nature of the deposit, it is considered unlikely that individual blocks sizes would exceed ~10 m^3.
- Minimum bench width calculations for the critical wedge (FoS = 1.2) indicate that the design catch bench width of 8 m is sufficient to retain potential spillage during flitch excavation (required width of 2.9 m).

7.1.2. Planar Analyses

Analyses of planar sliding were undertaken using Rocscience's RocPlane for the east wall of the proposed pit design given known instances of past occurrence. The analyses considered a moderately dipping joint of 52º derived from mapping data of planar structures along the east wall. Table 13 summarises the results of the analysis with corresponding stability model output presented in Figure 31.

Table 13 Summary of kinematic results – planar slide

Domain	Defect dip (º)	Calculated FoS	Wedge vol. (m^3/m)
East	52	1.05	45.56

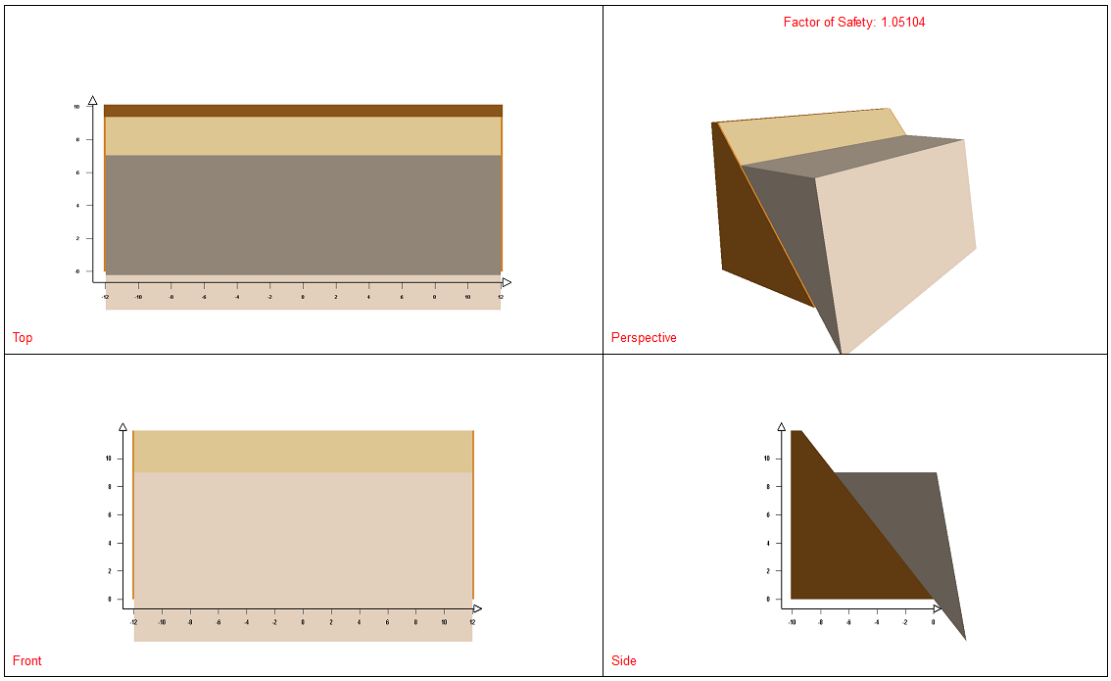

Figure 31 Stability model output – critical planar analysis – east wall

Presented in Figure 32 are the results of the minimum bench width assessment for the east wall given a planar failure. The assessment was performed for a range of bench face angles to account for potential non-conformances during blasting. The minimum required bench width at the design bench angle of 80º is 5.5 m.

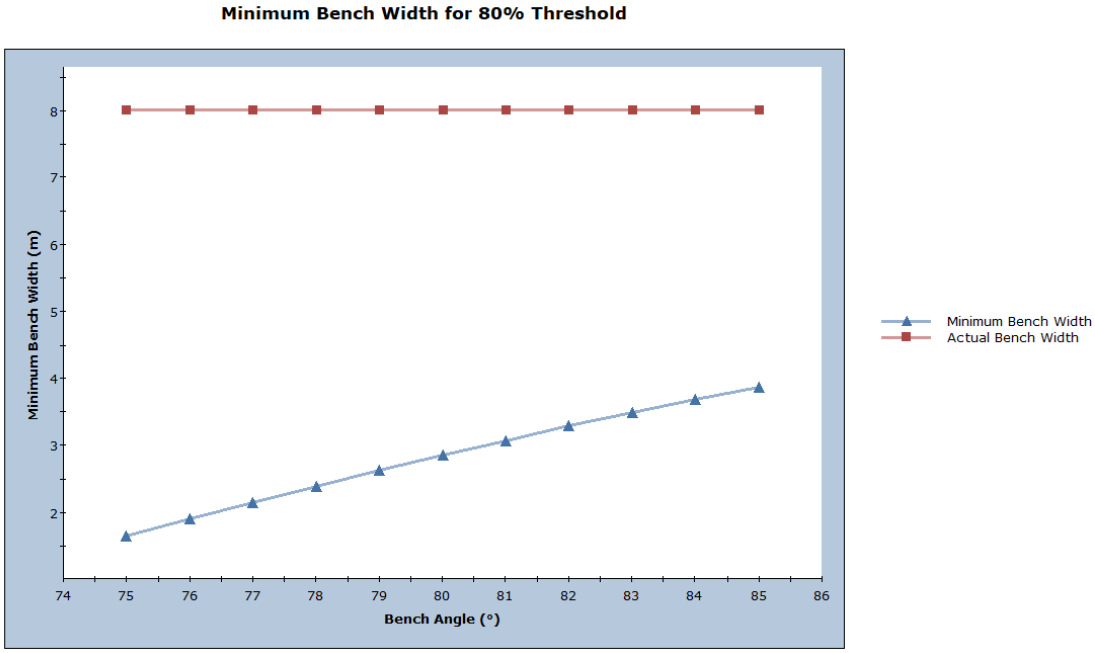

Figure 32 Minimum bench width plot for an east wall planar failure

The results of the kinematic planar slide analyses indicate:

- The calculated FoS for critical planar sliding along the east wall is 1.05, indicating a meta-stable condition. This result is consistent with CMQs' understanding given past instances of planar failure within this area.
- Given the calculated meta-stable conditions, it is anticipated that potential planar instabilities will be dislodged during blasting. However, to reduce the risk of hazardous material unravelling during flitch excavation, wall scaling of loose material is required before proceeding to excavate subsequent flitches.
- Minimum bench width calculations for the critical plane indicate that the design catch bench width of 8 m is sufficient to retain potential spillage during flitch excavation (required width of 5.5 m).

7.2. Global Stability Analyses

Slope stability analyses were undertaken using Rocscience's Slide 2D Limit-equilibrium (LE) modelling software for the nominated stability sections considering inter-ramp and global scales of instability, respectively. The following scenarios were assessed:

- Base case**:** expected groundwater conditions as per Section 2.4
- Sensitivity analyses**:**
  - Seismic loading for 1:500 and 1:2500-year return periods.
  - Fully saturated slope conditions.

As outlined in Section 6.2, design acceptance criteria (DAC) for the global stability analyses include:

- Global scale instabilities:
  - Terminal batters – **FoS > 1.6**
  - Rehabilitated batters – **FoS > 2.0**
- Sensitivity analyses:
  - Pseudo static (seismic) – **FoS > 1.1**
  - Fully saturated conditions – **FoS > 1.1**

Results of the global stability analyses are presented in the following sub-sections.

7.2.1. Base Case

Table 14 summarises the results of base case global stability analyses for WA410, with corresponding stability model outputs presented in Figure 33 to Figure 35.

Table 14 Summary of global stability analyses results – base case

Section	Instability scale	DAC	Calculated FoS
S1	Inter-ramp	FoS > 2.0	2.62
	Overall slope		6.83
S2	Inter-ramp		2.45
	Overall slope		9.24
S3	Inter-ramp		8.78
	Overall slope		4.74

The results of base case global stability analyses indicate:

- The stability performance of all nominated critical stability sections exceeded the rehabilitation DAC (FoS > 2.0) at both the inter-ramp and overall slope scales.
- This reaffirms the understanding that batter stability at WA410 is controlled by structural discontinuities at the individual bench scale.

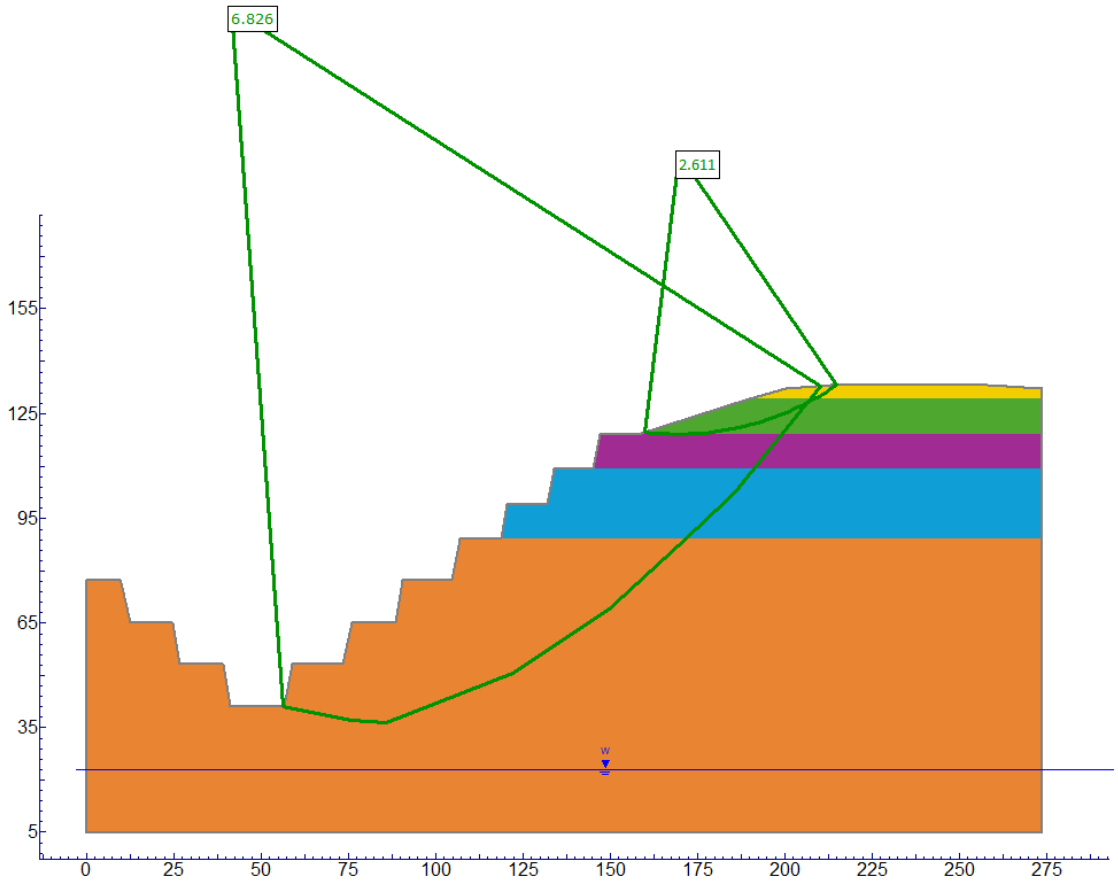

Figure 33 Stability model output – base case – stability section S1

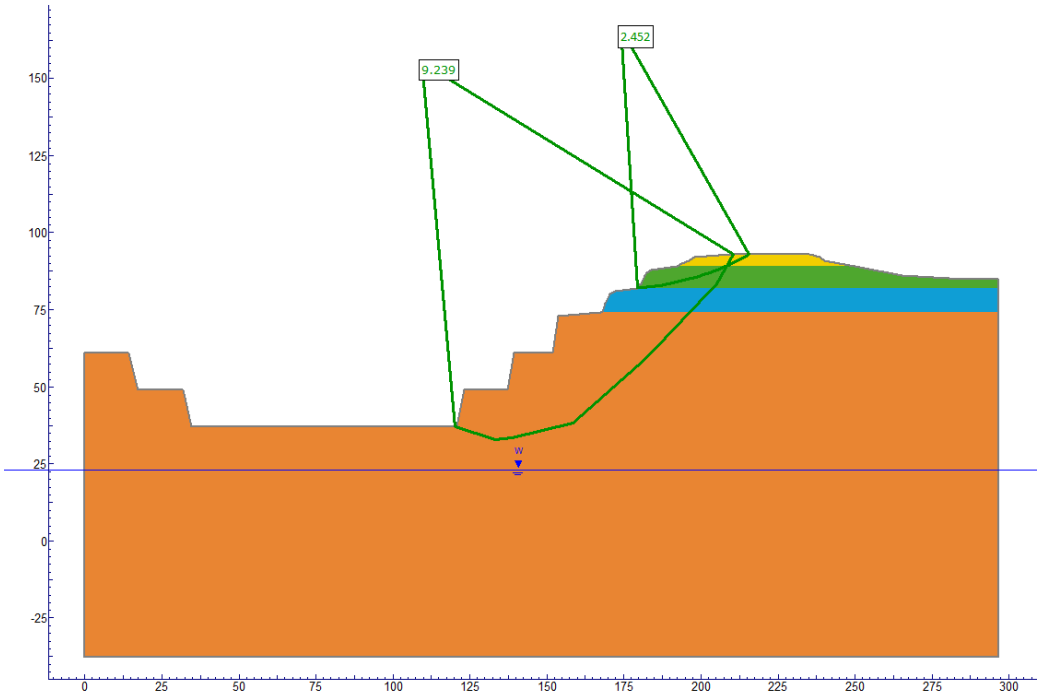

Figure 34 Stability model output – base case – stability section S2

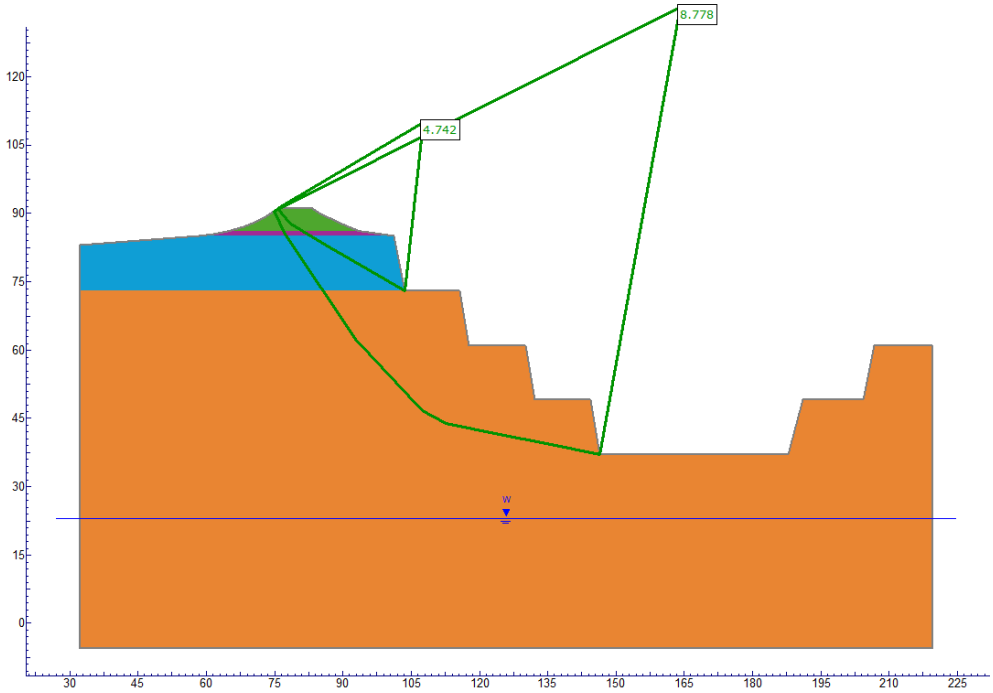

Figure 35 Stability model output – base case – stability section S3

7.2.2. Sensitivity Analyses

7.2.2.1. Seismic Loading

Sensitivity analyses were performed to assess the potential slope stability implication associated with a 1:500-year and 1:2500-year return event. A pseudo-static analysis approach was adopted in line with methodology derived by Hynes-Griffin and Franklin (1984), referred to as the United States Army Corps of Engineers (USACE) method, which assumes:

- Earthquakes can be modelled as a static force acting on the failed mass.
- No dynamic pore water pressures are generated.
- Materials show no significant loss of strength induced by cyclic loading.

When undertaking a pseudo-seismic analyses, Hynes-Griffin and Franklin (1984) recommend using a seismic coefficient equal to half the peak ground acceleration (PGA). PGA values for a the respective 1:500-year and 1:2500-year return events were obtained from the National Seismic Hazard Assessment (NSHA, 2018), and are presented in Table 15. Figure 36shows the NSHA (2018) hazard atlas map for a 1:500- year return event, annotating the location of WA410.

Table 15 Summary of seismic input parameters – WA410

Return interval	Peak ground acceleration (g)	Seismic coefficient - H_z
1:500	0.0075	0.00375
1:2500	0.03	0.015

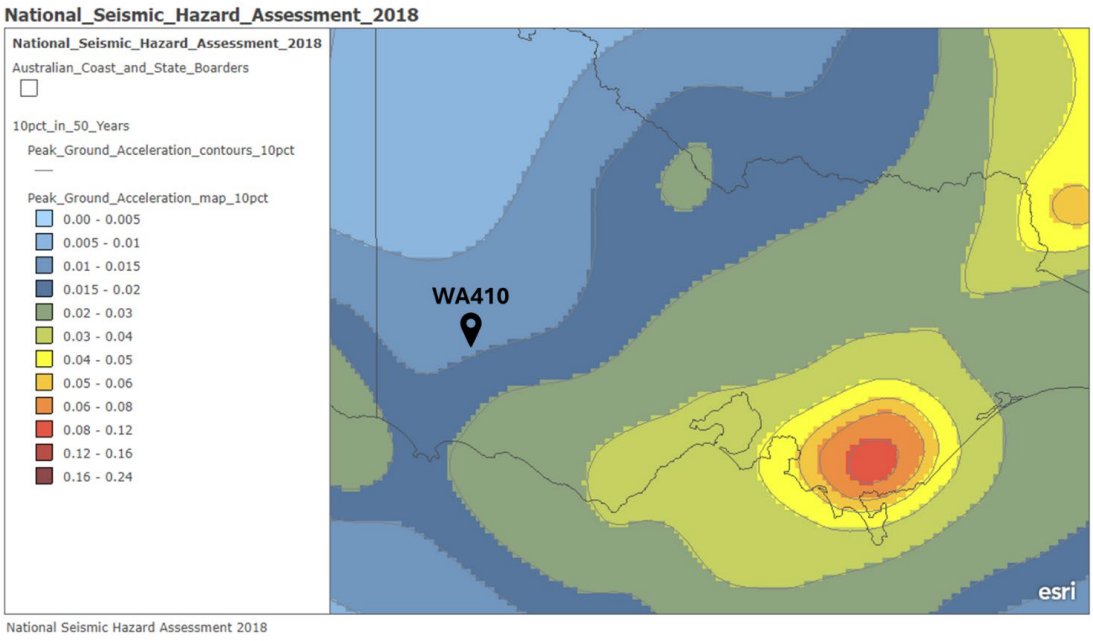

Figure 36 Seismic hazard atlas map (1:500-year) for WA410 after NSHA (2018)

Table 16 summarises the results of the seismic loading sensitivity analyses with corresponding stability model outputs presented in Figure 36 to Figure 42.

Table 16 Summary of global stability sensitivity analyses results – seismic loading

Section	Return interval	DAC	Calculated FoS
S1	1:500	FoS > 1.1	6.78
	1:2500		6.64
S2	1:500		9.19

	1:2500		9.02
S3	1:500		8.73
	1:2500		8.58

The results of seismic loading sensitivity analyses indicate:

- The stability performance of all nominated critical stability sections exceeded the requisite seismic DAC (FoS > 1.1) for both a 1:500-year and 1:2500-year return events.
- This highlights the robustness of the proposed terminal design under seismic conditions.

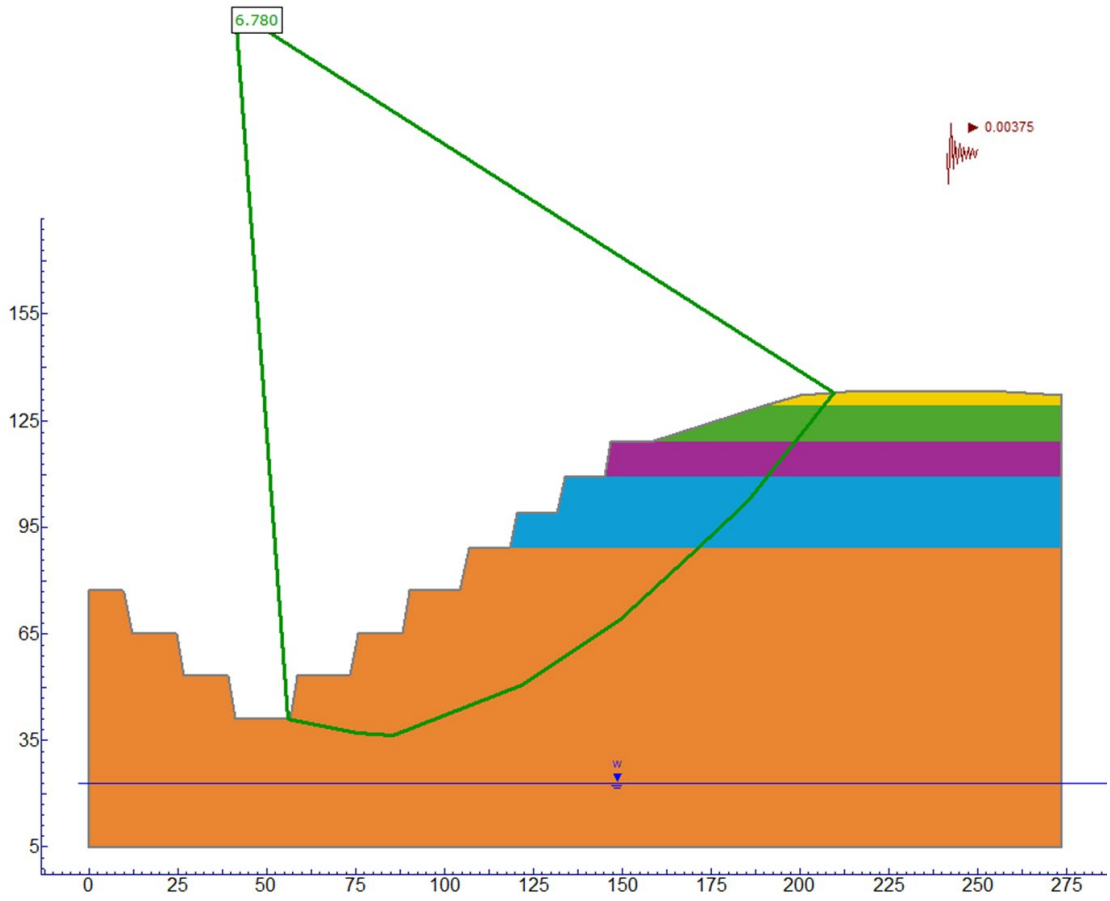

Figure 37 Stability model output – seismic analyses – 1:500-year – stability section S1

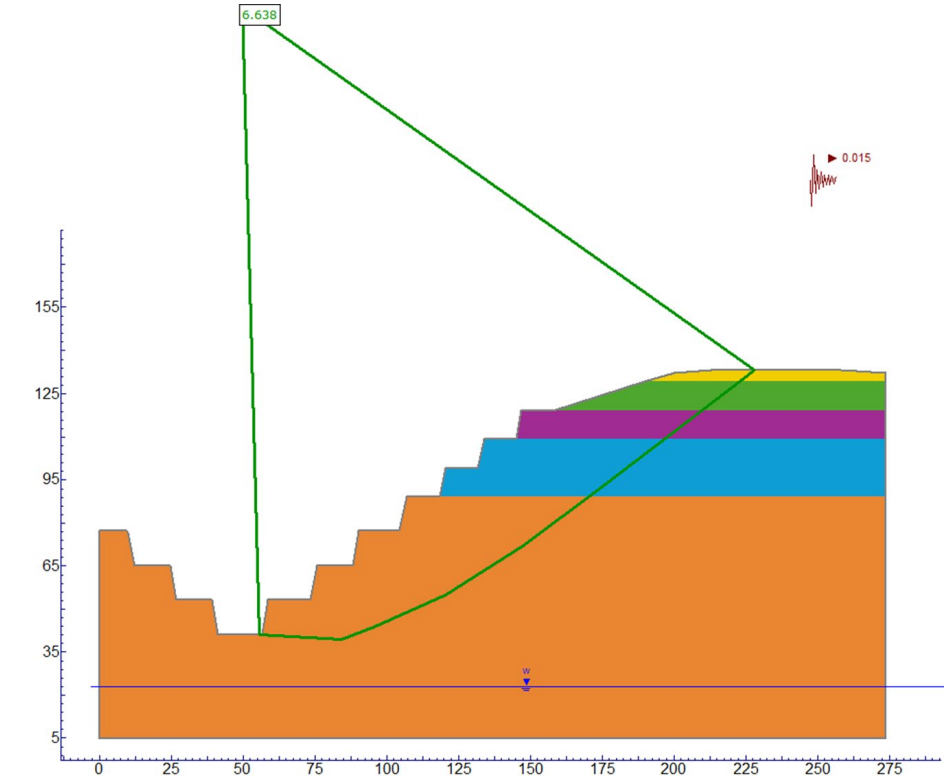

Figure 38 Stability model output – seismic analyses – 1:2500-year – stability section S1

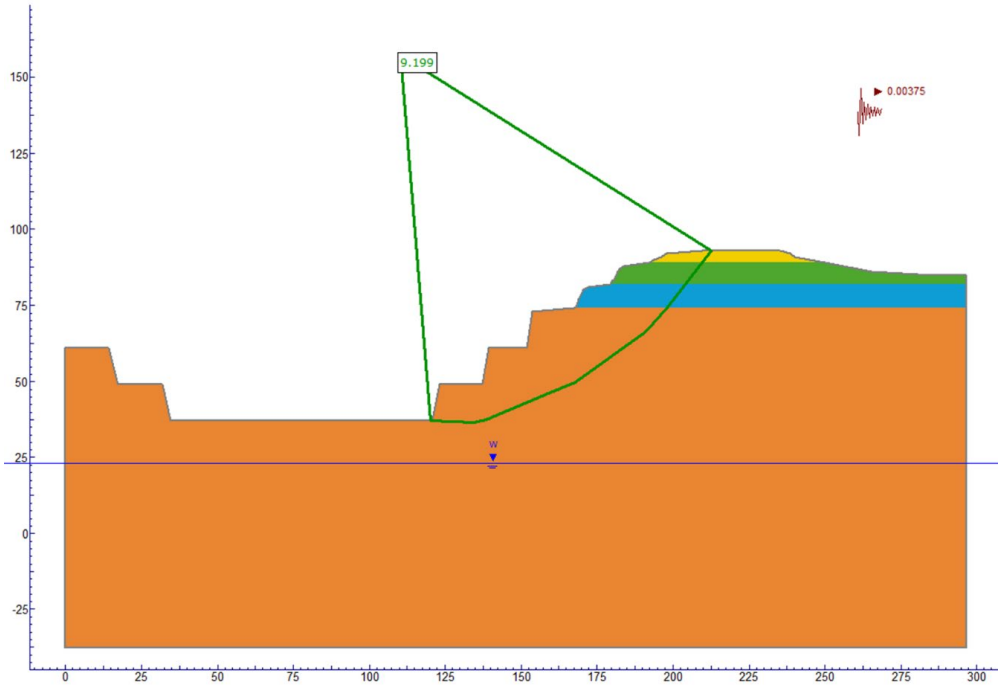

Figure 39 Stability model output – seismic analyses – 1:500-year – stability section S2

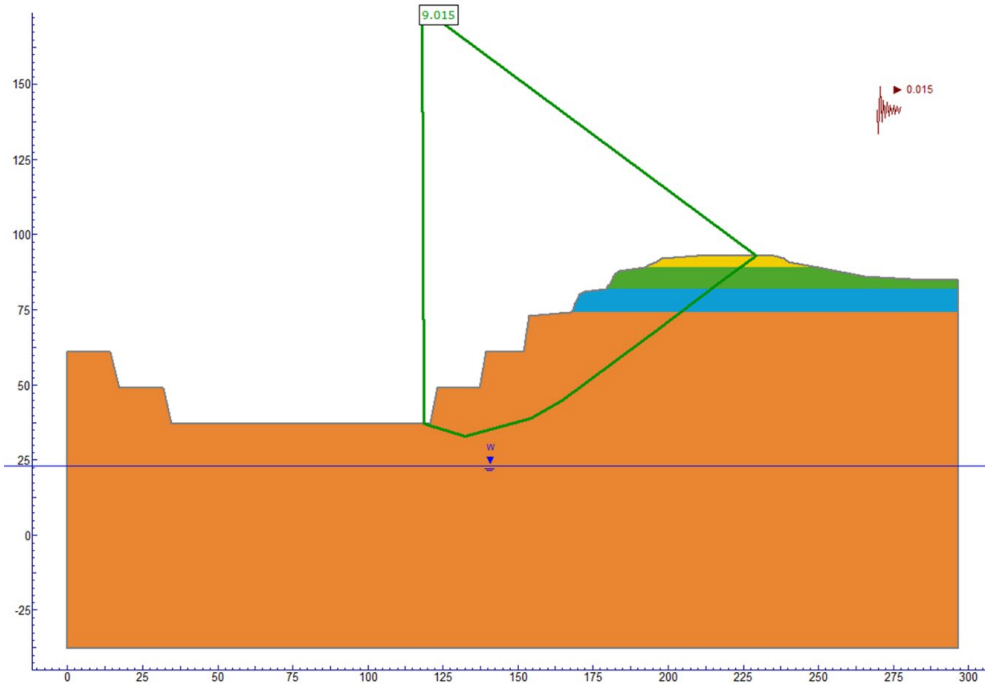

Figure 40 Stability model output – seismic analyses – 1:2500-year – stability section S2

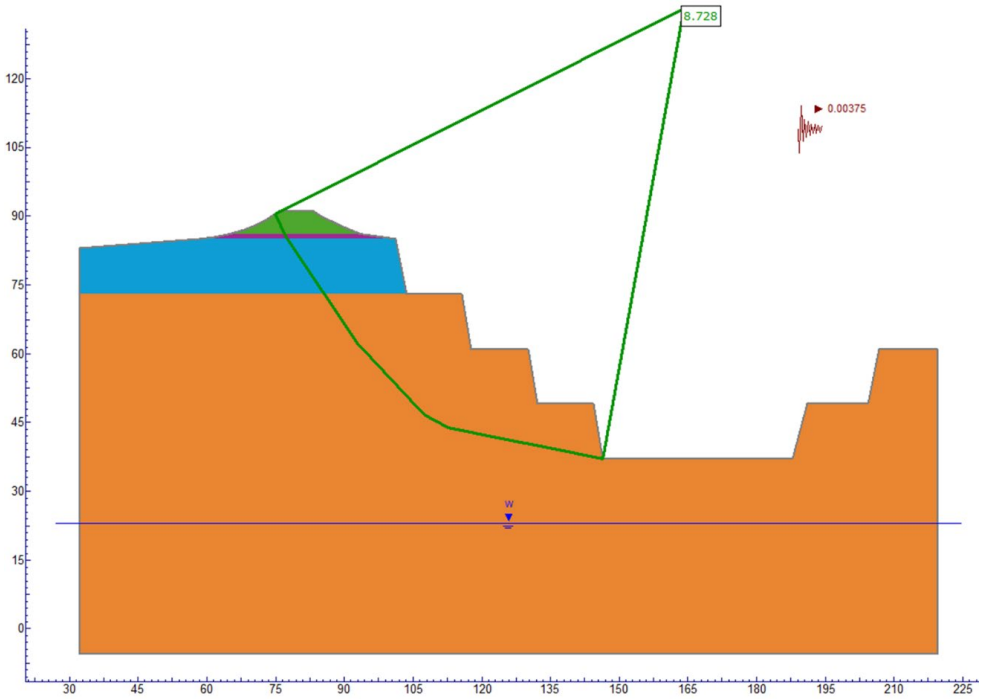

Figure 41 Stability model output – seismic analyses – 1:500-year – stability section S3

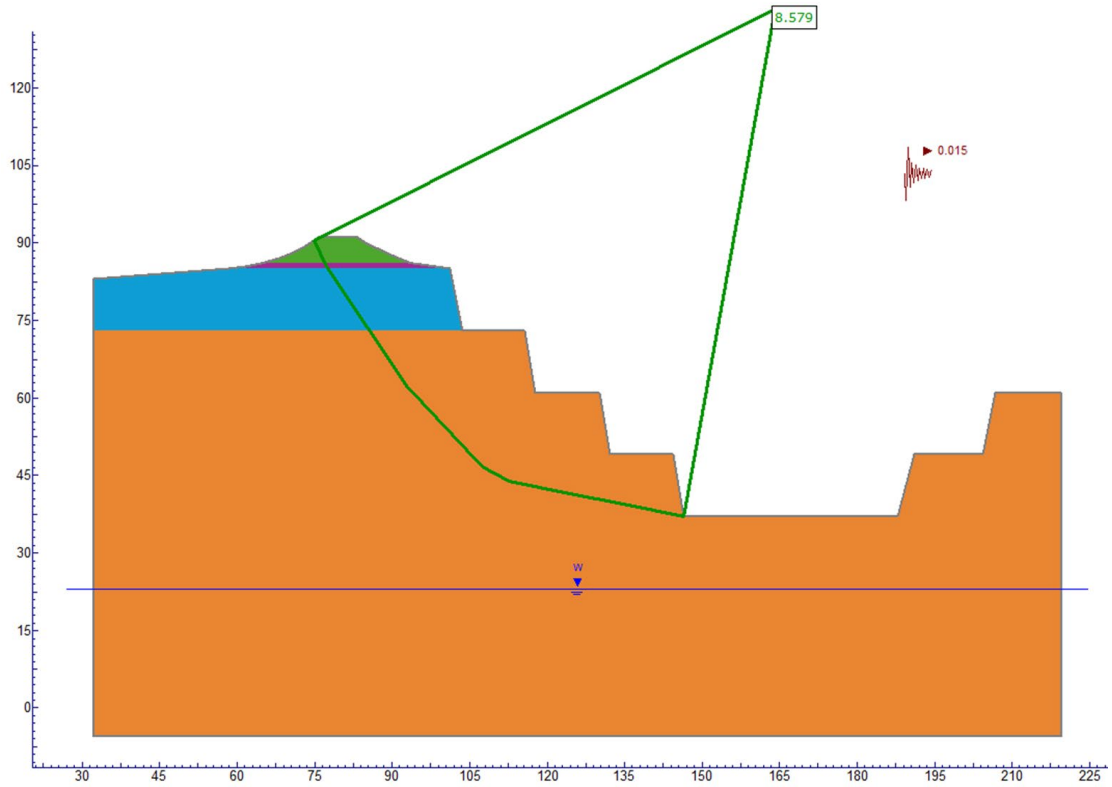

Figure 42 Stability model output – seismic analyses – 1:2500-year – stability section S3

7.2.2.2. Fully Saturated Conditions

Sensitivity analyses were performed to assess the potential slope stability implication associated with fully saturated batter conditions. Such conditions may reflect potential deficiencies in surface water management protocols during intense and / or prolonged rainfall events. However, it should be noted that fully saturated conditions are highly pessimistic and representative of a 'worst case' scenario. Table 17 summarises the results of the fully saturated sensitivity analyses with corresponding stability model outputs presented in Figure 43 to Figure 45.

Table 17 Summary of global stability sensitivity analyses results – fully saturated conditions

Section	DAC	Calculated FoS
S1	FoS > 1.1	4.99
S2		7.10
S3		6.69

The results of fully saturated sensitivity analyses indicate:

- The stability performance of all nominated critical stability sections exceeded the requisite fully saturated DAC (FoS > 1.1).
- This highlights the robustness of the proposed terminal design under extreme phreatic conditions.

A pit lake is included in the final rehabilitation landform, which will involve some depth of water at the base of the pit, subject to seasonal rainfall and runoff fluctuations. This scenario was considered as part of the assessment of fully saturated conditions, where all batters are modelled as inundated. A static pit lake would effectively serve as a counterweight to the pit floor. This will subsequently increase confinement therefore not representing a critical scenario, and will increase the FoS from the results presented in Table 17.

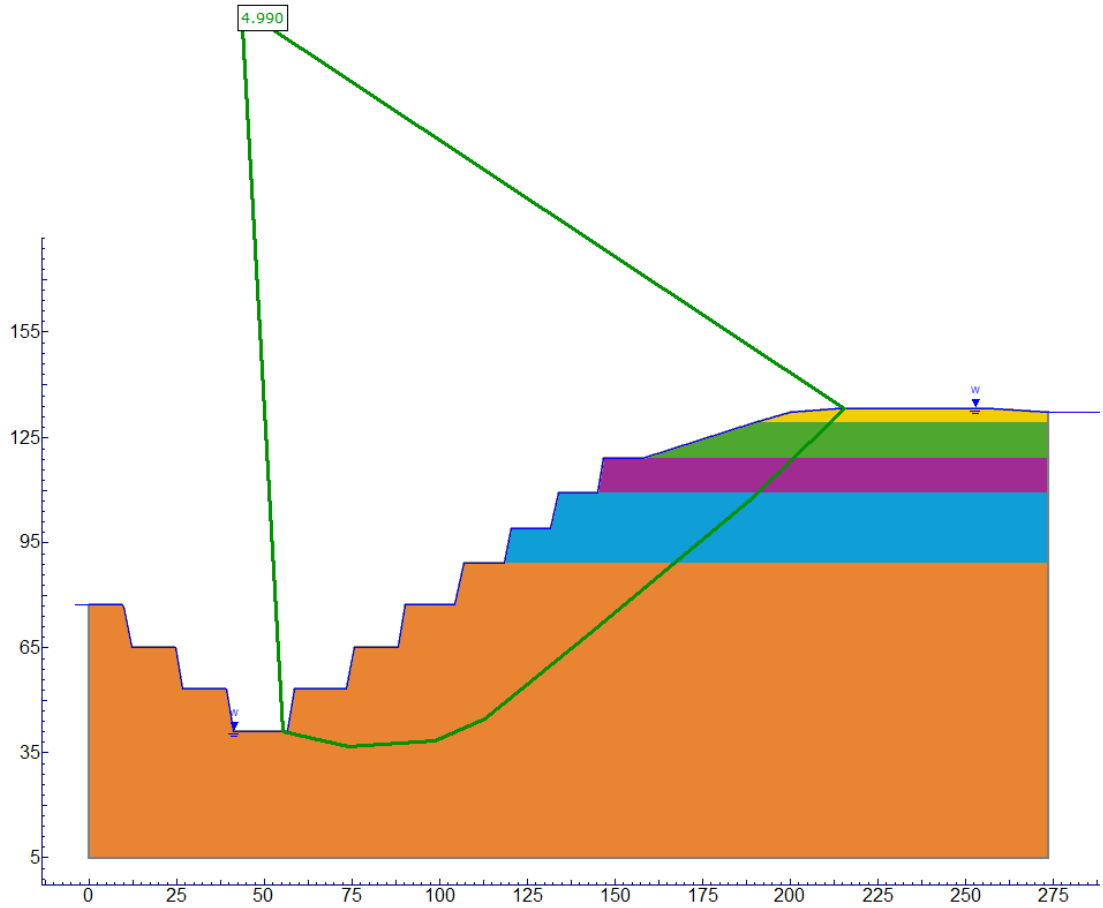

Figure 43 Stability model output – fully saturated conditions – stability section S1

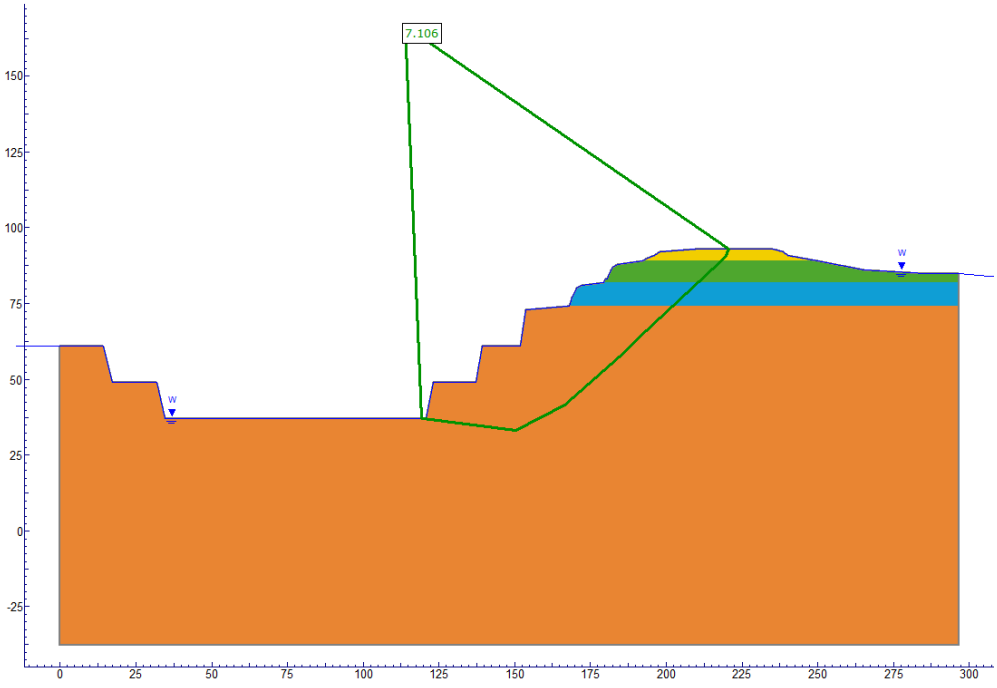

Figure 44 Stability model output – fully saturated conditions – stability section S2

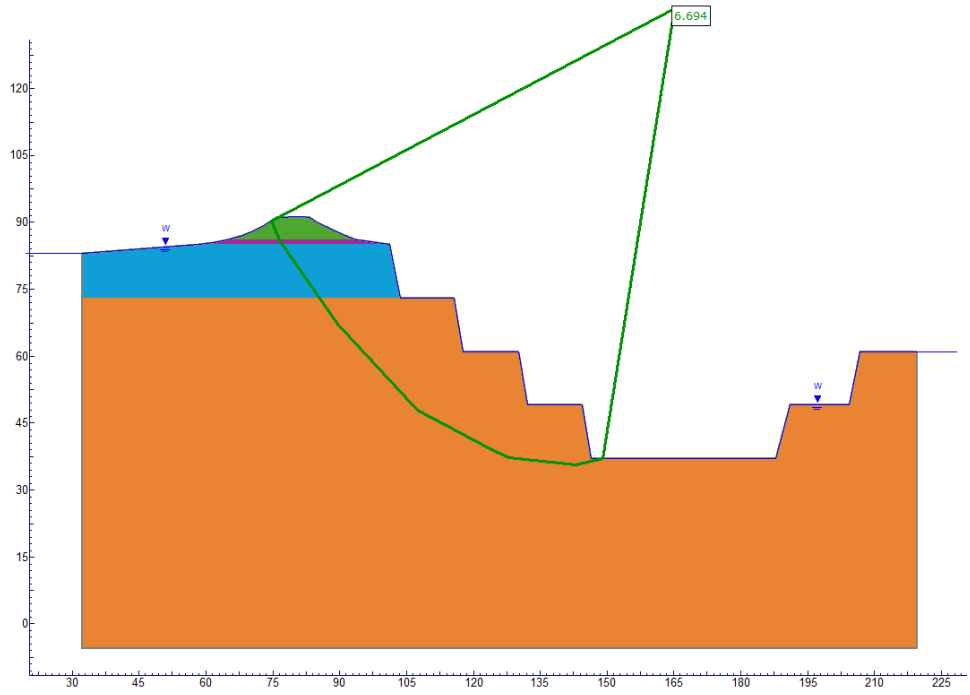

Figure 45 Stability model output – fully saturated conditions – stability section S3

7.3. Summary of Stability Analyses Results

Summarised in the following sub-sections are the stability analyses results for both kinematic and global stability analyses.

7.3.1. Kinematic Analyses Results

The results of the kinematic analyses indicate:

- Wedge and planar type instabilities were identified as the most probable modes of structurally controlled bench failure. Accordingly, these two modes were kinematically analysed.
- Specifically, manifestation of wedges was identified for all wall orientations, and planar failure most prominent along the eastern wall.
    - Several instances of historic planar sliding have been recorded along the east wall resulting in crest loss at select locations.
- Minimum bench width calculations for the critical wedge (FoS = 1.2) indicate that the design catch bench width of 8 m is sufficient to retain potential spillage during flitch excavation (required width of 2.9 m).
- Minimum bench width calculations for the critical plane indicate that the design catch bench width of 8 m is sufficient to retain potential spillage during flitch excavation (required width of 5.5 m).
    - Furthermore, given the prevalence of crest loss due to planar sliding along the east wall, should crest loss occur along contiguous flitches, catch capacity of the working flitch remains above the required 5.5 m.
- Minimum FoS for wedge instability was calculated as 1.2, with a corresponding volume of 81 m^3 (Orientation E2, J1 and J4). Accordingly, potential wedges encountered on site are likely to remain stable under expected conditions.
- The calculated FoS for critical planar sliding along the east wall is 1.05, indicating a meta-stable condition. This outcome aligns with reports of historic planar sliding along the eastern walls.

Notably, proper blasting and subsequent wall scaling practices will be a critical control against the formation of hazardous structurally controlled instabilities. CMQ has prepared appropriate recommendations for blasting and scaling, presented in Section 10.1.

7.3.2. Global Stability Analyses Results

The results of global stability analyses indicate:

- The stability performance of all nominated critical stability sections exceeded the requisite DAC as defined in Section 6.2 for both base case and sensitivity analyses, including for seismic and fully saturated conditions.
- This is to be expected given the high strength of the trachyte rock mass and historic site performance which indicates quarry stability is structurally controlled.

8. Erodibility Potential Assessment

8.1. General

The Revised Universal Soil Loss Equation (RUSLE) is a tool used to estimate the potential soil loss due to direct rainfall on an exposed slope and can provide an indication of the general erosion risk of the surface. It is also useful for quantifying the impact of various factors that contribute to erosion when designing batters, under long term (rehabilitated) conditions. Accordingly, the upper residual soil / XW trachyte slopes re-profiled to 1V:3H have been considered as part of this assessment.

It is important to note that RUSLE only accounts for soil loss due to direct rainfall on the slope, not concentrated flow from any catchments flowing onto the slope.

8.2. Nominated Erosion Potential Criteria

Two conventionally applied erodibility potential criterions have been adopted for this erosion assessment. These design acceptance criterions, as suggested by the Commonwealth of Australia (2016) and by Morse and Rosewell (1996) and Landcom (2004) were adopted to assess the potential volume of soil loss at a site against tolerance levels. In the following subsections, each criterion is discussed in further detail.

Criterion 1

Based on the Erosion Hazard Guidelines (after Morse and Rosewell (1996) and Landcom (2004)), which are summarised in Table 18.

Table 18 Soil loss classes after Morse and Rosewell (1996) and Landcom (2004)

Soil loss class	Calculated soil loss (t/ha/yr)	Erosion hazard
1	0 to 150	Very low
2	151 to 225	Low
3	226 to 350	Low-moderate
4	351 to 550	Moderate
5	551 to 750	High
6	751 to 1500	Very high
7	>1500	Extremely high

Criterion 2

Criterion 2 is based on the soil loss tolerances which are cited in 'Mine Rehabilitation, Leading Practice Sustainable Development Program for the Mining Industry' (Commonwealth of Australia, 2016). This design acceptance criteria indicates that the soil loss should not exceed 4.5 tonnes per hectare per year (i.e., 4.5 t/ha/yr).

8.3. Potential Erodibility

8.3.1. RUSLE Equation

The RUSLE equation calculates an annual erosion rate based on the multiplication of five factors, and is expressed as:

$$A = R \cdot K \cdot LS \cdot C \cdot P$$

Where: A = Estimated average soil loss in tonnes per hectare per year

R = Rainfall erosivity factor

LS = Topographic factor that accounts for slope length and slope gradient

C = Erosion practice control

P = Ground cover factor

A discussion of RUSLE factors in the relation to the proposed batter designs is included in the following sections.

8.3.2. Rainfall Erosivity Factor (R)

This factor is determined by the intensity of rainfall in the area and is therefore not a design parameter. Empirical relationships have been established to correlate mean annual precipitation with the Rainfall Erosivity Factor "R". Yu and Rosewell (1996) established a relationship to estimate the R-factor based on studies conducted in south-eastern Australia. The relationship had a very good correlation with R2 = 0.91. The R-Factor and mean annual relationship is expressed as:

$$R = 0.0438 \cdot P^{1.61}$$

Where: P = Mean annual precipitation (mm)

Mean annual precipitation for the Coleraine Quarry was obtained from the Bureau of Meteorology (2024) for the nearby station (090173) at Hamilton Airport, approximately 33 km east of Coleraine, Victoria. The mean annual precipitation (based on 40 years of rainfall data) for the Hamilton area is 619.3 mm. Accordingly, the rainfall erosivity factor (R) was calculated to be 1262.2.

8.3.3. Soil Erodibility Factor (K)

The soil erodibility factor (K) accounts for the erodibility of the soil based on its composition e.g., sandy clay. Nomograph equations (and visual representations) are frequently relied upon for deriving suitable K-factors, which is a simple method that makes use of basic soil properties e.g., particle size distributions. According to the CSIRO publication after Yang et al. (2017) most of these models e.g., Wischmeier et al., 1971 were and are developed for American soils and are not necessarily applicable to Australian Soils. According to Yang et al. (2017) the nomograph developed by Rosewell (1993) referred to as 'K_SOILOSS' yielded comparative results to field measurements and is a preferred method for deriving a suitable K-factor for Australian soils (for soils containing <68% silt). The K_SOILOSS nomograph equation is expressed as:

$$K_{SOIL\,LOSS} = \left(2.77 \cdot M^{1.14} \cdot 10^{-7} \cdot (12 - OM)\right) + \left(4.28 \cdot 10^{-3} \cdot (SS - 2)\right) + \left((3.29 \cdot 10^{-3} \cdot (PP - 3)\right)$$

Where: M = Particle Size Parameter = (%Silt+%Very Fine Sand) x (100 –%Clay)

OM = Organic Matter (%)

SS = Soil Structure (ranging from; 1-very fine granular; 2-fine granular; 3-medium to coarse grained; and 4-blocky, platy or massive)

PP = Permeability (ranging from; 1-rapid; 2- moderate to rapid; 3-moderate; 4-slow to moderate; 5-slow; and 6-very slow)

Available soil data required for the input into the above nomograph equation was obtained from the publicly available Soil and Landscape Grid of Australia (SGLA, 2017) database. This data access platform enables the user to query soil data on the site location with a 95% confidence interval and provides the necessary information to estimate the K-factor. Summarised in Table 19 are the adopted overburden soil index parameters (obtained from SGLA (2017)) used to calculate the particle size parameter 'M'.

Table 19 Summary of overburden soil properties after SGLA (2017)

%Sand (0.05 to 0.1 mm)	%Silt (0.02 to 0.05 mm)	%Clay (<0.02 mm)	M – Particle Size Parameter
40	15	45	3025

Summarised below in Table 20 are the parameters obtained from the SGLA (2017) used to calculate the K-factor for WA410.

Table 20 Summary of K-factor parameters after Rosewell (1993)

% Organic Matter (OM)	Soil Structure (SS)	Permeability (PP)	K-factor (Rosewell, 1993)
5	3	3	0.0355

Based on the above, a K-factor of 0.223 has been adopted for this erosion assessment.

8.3.4. Topographic Factor (LS)

The topographic factor (LS) accounts for a slopes height (L) and gradient (S) and is used to represent the effect of topography on erosion rates. The equations for calculating the LS in RUSLE are:

$$LS = L \cdot S$$
$$L = \left(\frac{\lambda}{22.13}\right)^{m}$$
$$m = \frac{\beta}{1+\beta}$$
$$\beta = \frac{\sin(\theta)}{3 \cdot \sin^{0.8}(\theta) + 0.56}$$
$$S = 16.8 \cdot \sin(\theta) - 0.5; \quad \theta \geq 9\%$$

Where: λ = slope length (m)

m = variable length-slope component

β = variable slope gradient component

θ = slope angle

Summarised in Table 21 are the topographic factor parameters for WA410.

Table 21 Summary of topographic factors

Geometry	Gradient (V:H)	Slope height (m)	Topographic Factor – LS
Residual soil slope	1V:3H (18.4°)	15 m (maximum)	5.41

8.3.5. Erosion Control Factor (C)

The erosion control (C) factor is used to measure the effect of vegetation and management practices on erosion rates. C-Factor reductions due to increased grass coverage were adopted after Landcom (2004), which have been broadly correlated to C-Factor reductions after Sprague (1999) which relates the expected erosion reduction due to different grass (perennial seeding) periods. The C-factors used to assess the erosion potential of the site are summarised in Table 22. It should be noted that the correlated C-factors present a conservative approach to reducing soil erosion over time, i.e., C-factor reductions may be quicker than those tabulated. As outlined in the Work Plan, ongoing and active maintenance will be employed until grass covers reach the desired level and have become 'fully' established (i.e. can maintain grass coverage without active maintenance).

Table 22 Summary of C-Factors

Treatment	Time after application (months)	Assumed grass cover (%)	C-Factor after Landcom (2004)	C-Factor after Sprague (1999)
Untreated	NA	0	1.0	1.0
Topsoiled and vegetated	0	0	1.0	0.7
	1 – 3	15	0.55	0.1
	3 – 6	30	0.32	
	6 – 12	45	0.18	0.05
	12 – 18	60	0.1	0.01

Treatment	Time after application (months)	Assumed grass cover (%)	C-Factor after Landcom (2004)	C-Factor after Sprague (1999)
	18 – 24	75	0.04	0.01
	>24	80	0.02	0.01

8.3.6. Ground Cover Factor (P)

The erosion control practice factor (P) measures the effect of practices that reduce flow velocity and tendency for water to flow directly downhill (e.g., track-walking or punching straw into the ground). Table 23 presents a summary of typical erosion control practices and the respective P-factor.

Table 23 Summary of K-factor parameters after Rosewell (1993)

Surface condition	Ground Cover Factor (P)
Compacted and smooth	1.3
Track-walked along contour	1.2
Track-walked up and down slope	0.9
Punched straw	0.9
Sacrificial layer (loose to 0.3 m depth)	0.8

Typical 'C' and 'P' factors presented in above have been adopted from various sources, including Meyer and Ports (1976), Israelson et al. (1980), Goldman et al. (1980), URS Greiner Woodward Clyde (1999), the North American Green website (2020) and Sprague (1999).

For this assessment and based on our understanding of the Client's objective, CMQ has adopted a ground cover factor of P = 0.9 for this analysis.

8.3.7. Results and Discussion

The results of the erodibility assessment are summarised in Table 24 and presented in Figure 46.

Table 24 Summary of erosion potential assessment

Slope	Scenario	Calculated erosion loss (t/ha/yr)	Erosion criteria	
			Criteria 1	Criteria 2
Re-profiled residual soils	Untreated	137.0	Very low (0 to 150 t/ha/yr)	Commonwealth (2016) Guideline not satisfied
	Perennial grasses	4.1		Commonwealth (2016) Guideline satisfied

The results of the assessment indicates that:

- The erosion potential of residual soil / XW trachyte slopes re-profiled to 1V:3H is considered 'very low' (<150 t/ha/yr) for treatment scenarios assessed.
- However, only with perennial grass uptake was the Commonwealth (2016) Guideline satisfied (<4.5 t/ha/yr). Accordingly, the proposed updated work plan incorporates provisions for re-vegetated re-profiled slopes as part of rehabilitation obligations.

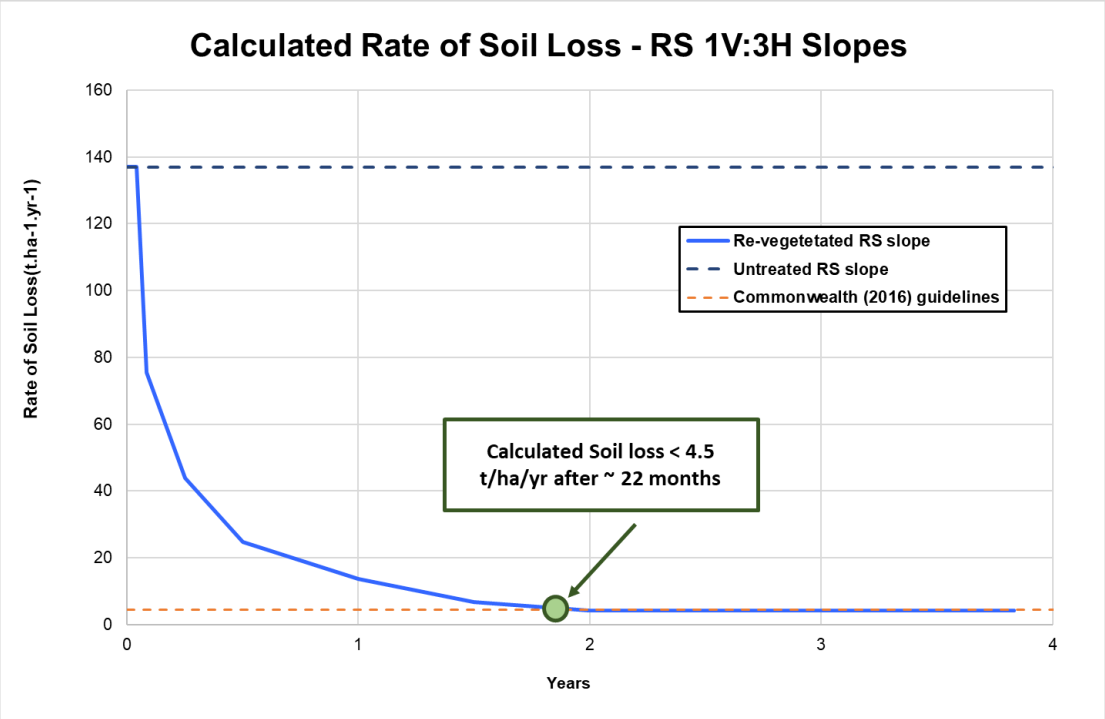

Figure 46 Calculated rate of soil loss – WA410

9. Geotechnical Risk Assessment

9.1. General

The geotechnical risk assessment is a quantitative assessment based on the 'likelihood' and 'consequence' of a major geotechnical hazard occurring.

The qualitative risk assessment process has been utilised, as outlined in the risk assessment matrix presented in Figure 47, which aligns with the Australian Standard for Risk Management AS/NZ Standard 4360 (Standards Australia 2004)

9.2. Geotechnical Hazards

Table 25 details the findings of this geotechnical assessment and identified geotechnical hazards relating to the proposed bench design profile at the Coleraine Quarry.

Table 25 Geotechnical hazards at WA410

Hazard	Description
Hazard 1 Structural instabilities - rockfall	Rockfall from batter faces due to jointed nature of the deposit. May be exacerbated by blast induced damage or insufficient wall scaling. The scale of rockfall is not anticipated to exceed 10 m^3 in volume. The consequence of rockfall includes potential injury / fatality of site personnel working below.
Hazard 2 Structural instabilities – wedge / planar slide	Typically, small scale, structurally driven, or material instabilities, such as wedge and/or planar. Generally, these instabilities will occur at the individual bench scale. Inappropriate pit geometry, such as over steepening, can increase the potential for this hazard to occur. Furthermore, structural instability causing crest loss reduces the capacity of berms to retain potential rockfall spillage.
Hazard 3 Slumping of residual soils and XW trachyte	Moderate slope volume movements that are governed by the soil or extremely weathered rock mass shear strength characteristics. Mobilisation of this hazard occurs in a circular/rotational manner and is dependent upon the slope geometry and depth of the weathering profile. Consequences of this type of hazard can include partial or full loss of pit crests and impacts to ramps and haul roads.
Hazard 4 Large scale slope instability	Larger slope volume movements that are governed by the rock mass shear strength characteristics. Slope instability occurs when the driving forces of a rock mass are greater than resisting forces. The consequences of this type of hazard can include partial or full loss of pit crests including pit ramps and haul roads. In extreme cases the failure zone may migrate some distance from the pit crest which may exceed the work authority boundary.

9.3. Risk Assessment Process

A semi quantitative risk assessment process was employed in line with methodology published in the DJPR (2020b) guideline titled *Preparation of Work Plans and Work Plan Variations, Version 1.3*, dated December 2020. As per the guidance, the process involves the consideration of the source risks, corresponding consequences and the likelihood of those consequences occurring.

Figure 47 and Figure 48 present the risk matrix and risk rating descriptions relied upon for this process, respectively. Detailed definitions of the likelihood and consequence indicators are outlined in the DJPR (2020b) document.

Likelihood						
	Almost Certain	Medium	High	Very High	Very High	Very High
	Likely	Medium	Medium	High	Very High	Very High
	Possible	Low	Medium	Medium	High	Very High
	Unlikely	Low	Low	Medium	High	High
	Rare	Low	Low	Medium	Medium	High
		Insignificant	Minor	Moderate	Major	Critical
		Consequence				

Figure 47 Risk assessment matrix (DJPR, 2020)

Risk level	Description
Very High	Totally unacceptable level of risk. Controls must be put in place to reduce the risk to lower levels.
High	Generally unacceptable level of risk. Controls must be put in place to reduce the risk to lower levels or seek specific guidance from ERR.
Medium	May be acceptable provided the risk has been minimised as far as reasonably practicable.
Low	Acceptable level of risk provided the risk cannot be eliminated.

Figure 48 Risk rating acceptability (DJPR, 2020)

For the purpose of this geotechnical risk assessment, two categories of risk have been considered:

- Operational / Occupational Health and Safety (OH&S) risks, and
- Risks to external / sensitive receptors (e.g., environment, any member of the public or land, property, or infrastructure in the vicinity of the quarry which may be put at risk by the hazard associated with quarrying or rehabilitation activities.

The risk assessment considering these two types of risk are presented in Table 26 and Table 27, respectively.

Based on the risk assessment presented below, the residual geotechnical risk to external receptors has been assessed to be “Low”.

Table 26 OH&S risk assessment for WA410

Element at risk	Quarry domain	Hazard type	Likelihood	Consequence	Risk rating	Control	Likelihood	Consequence	Residual risk rating	Comments
Internal Batters - Personnel safety and quarry mobile plant, including access ramps	All batters	**Hazard 1** Structural instabilities - rockfall	Possible	Major	High	Good final wall scaling techniques, bench clean-up, controlled blasting, regular visual inspections and monitoring.	Rare	Major	Medium	• Detailed blast designs should be developed to minimise rock mass damage on terminal batters. • Wall scaling techniques should be employed to ensure loose rocks are removed from the face, including appropriate cleaning of benches were required. • Regular visual observations / monitoring to be undertaken.
		Hazard 2 Structural instabilities – wedge / planar slide	Possible	Moderate	Medium	Good final wall scaling techniques, bench clean-up, controlled blasting, regular visual inspections and monitoring.	Rare	Moderate	Medium	• Detailed blast designs should be developed to minimise rock mass damage on terminal batters. • Wall scaling techniques should be employed to ensure loose rocks are removed from the face, including appropriate cleaning of benches were required. • Regular visual observations / monitoring to be undertaken.
		Hazard 3 Slumping of residual soils and XW trachyte	Possible	Minor	Medium	Profiling of batters within weathered units to create stable landforms, where practicable vegetate sloped batters, regular inspections and monitoring.	Rare	Minor	Low	• Flattening of batter faces results in a more stable landform that is less susceptible to adverse stress states and erosion. • Vegetating slope batters reduces the erosion potential of batters and potential undercutting which may otherwise lead to instability. • Progressive rehabilitation of upper slopes which may be more susceptible to erosion. Consider the use of short-term erosion controls. • Regular visual observations / monitoring to be undertaken.
		Hazard 4 Large scale slope instability	Rare	Critical	High	Controlled blasting, regular visual inspection and monitoring, adequate surface water management.	Negligible	Critical	Low	• The calculated FoS was well in excess of the nominated design acceptance criteria under the expected case. • The calculated stability performance was maintained even under 'worst' case events • Implementation of surface water management plans. • Regular visual observations / monitoring to be undertaken and if required revise geotechnical assessment based on field observations.
Quarry infrastructure	Western batters	**Hazard 4** Large scale slope instability	Rare	Major`	Medium	Controlled blasting, regular visual inspection and monitoring, adequate surface water management.	Negligible	Major	Low	• The calculated FoS was well in excess of the nominated design acceptance criteria under the expected case. • The calculated stability performance was maintained even under 'worst' case events • Implementation of surface water management plans. • Regular visual observations / monitoring to be undertaken and if required revise geotechnical assessment based on field observations.

Table 27 External sensitive receptors risk assessment for WA410

Element at risk	Quarry domain	Hazard type	Likelihood	Consequence	Risk rating	Control	Likelihood	Consequence	Residual risk rating	Comments
Surrounding local roads e.g., Templeton St and Pitcher St	Southern and western batters	**Hazard 4** Large scale slope instability	Rare	Critical	High	Controlled blasting, regular visual inspection and monitoring, adequate surface water management.	Negligible	Critical	Low	• The calculated FoS was well in excess of the nominated design acceptance criteria under the expected case. • The calculated stability performance was maintained even under 'worst' case events • Implementation of surface water management plans. • Regular visual observations / monitoring to be undertaken and if required revise geotechnical assessment based on field observations.
Major roads e.g., B160, C203, C206	Southern and western batters	**Hazard 4** Large scale slope instability	Rare	Major	Medium	Controlled blasting, regular visual inspection and monitoring, adequate surface water management.	Negligible	Major	Low	• The calculated FoS was well in excess of the nominated design acceptance criteria under the expected case. • The calculated stability performance was maintained even under 'worst' case events • Implementation of surface water management plans. • Regular visual observations / monitoring to be undertaken and if required revise geotechnical assessment based on field observations.
Surrounding farmland	All batters	**Hazard 4** Large scale slope instability	Rare	Moderate	Medium	Controlled blasting, regular visual inspection and monitoring, adequate surface water management.	Negligible	Major	Low	• The calculated FoS was well in excess of the nominated design acceptance criteria under the expected case. • The calculated stability performance was maintained even under 'worst' case events • Implementation of surface water management plans. • Regular visual observations / monitoring to be undertaken and if required revise geotechnical assessment based on field observations.

10. Conclusions and Recommendations

Table 28 presented a summary of suitable pit design parameters for the WA410 site in line with the outcomes of the stability analyses presented above. The respective design parameters satisfy stability performance criteria at the individual bench, multi-bench, and overall slope scales, and achieve the nominated erosion criteria for overburden slopes subsequent to planned re-vegetation as part of rehabilitation.

Table 28 A summary of the slope batter geometries for the current and proposed pit design.

Geometrical parameter	Terminal design	Rehabilitation design
Batter angle (overburden)	1V:3H (18°)	1V:3H (18°)
Batter height ('diggable' material)	6 m	2 m
Bench width ('diggable' material)	5 m	5 m
Batter height (hard rock)	12 m	12 m
Bench width (hard rock)	8 m	8 m
Batter angle (hard rock)	6V:1H (80°)	6V:1H (80°)
Maximum pit depth	84 m	84 m

As per the analyses, implementing a robust drill and blast management plan as well as sufficient final wall scaling is essential to mitigate the risk of rockfall due to hazardous structural conditions. Accordingly, relevant drill and blast considerations are discussed in the following subsections.

10.1. Final Blast and Scaling

Best practice for minimising geotechnical risk in quarries is to implement final wall blasting and hard scaling methods to minimised blast damage i.e., damage to final walls, and to remove exfoliated rock mass from the slopes. This is particularly important along the eastern wall where parasitic jointing has resulted in pervasive crest loss. Accordingly, CMQ recommends the following extraction methodology to be undertaken at the Coleraine Quarry:

- Drilling and blasting to be performed for a continuous 12 m face height.
- Blasted material to be excavated in 4 m flitches. The maximum exposed flitch face should be 4 m prior to scaling, upon which subsequent flitch excavation can occur.

In addition to the above, pre-split or trim blasting are considered effective measures to reduce the prevalence of crest loss in deposits such as WA410. The specific need to employ these can be evaluated during the course of extraction. A summary of each method is provided below.

10.1.1. Pre-split Blasting

- Pre-split blasting involves the drilling and loading of a row of holes along the intended excavated batter face (pre-split row) with lightly loaded decouple charges. The purpose of the presplitting is to create a continuous fracture plane between the presplit holes, coincident with the intended batter face, to reduce blast-induced damage and overbreak / underbreak of the batter face as a result of production blasting.
- For pre-split blasting to be successful, buffer and easer rows with reduced charge should also be drilled ahead of the intended batter face. The intention of the buffer and easer holes are to decouple the pre-split from the production blast and thus reduce the blast-induced damage on the batter face. An example of the set-up for pre-split blasting is presented in Figure 49 below.
- The timing and detonation of the presplit holes greatly impacts the success of presplitting. Ideally, pre-split holes should be detonated before the adjacent blasts are drilled, however it is acknowledged that this is often impracticable. Pre-split blasting should be detonated before the first production shot, or on the first delay of the production shot (Eades, 2019).
- As noted by Read and Stacey (2009), where pre-split techniques are correctly employed and the geology is favourable, the slope damaged caused by tensile failure and radial cracking can be significantly reduced. The following geological conditions are considered favourable for pre-split blasting: massive rock, tight joints, dominant joint orientation more than 30° off strike of the designed

face, and the absence of weak structures that form wedges of daylight on the batter face and catch berm.

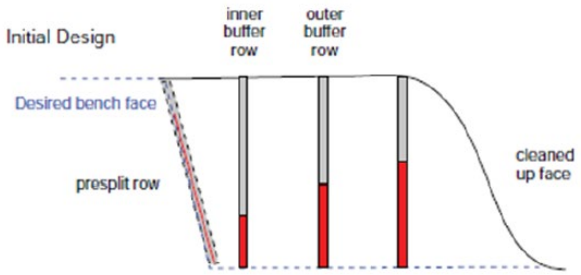

Figure 49 Schematic of pre-split blasting after Read and Stacey (2009)

10.1.2. Trim Blasting

- In trim blasting, rows of holes are drilled ahead of the toe of the intended batter face, known as the trim row. The trim row is established to define the toe (rather than the crest) of the batter. A minimum standoff distance from the toe is required to reduce blast-induced damage of the toe and slope. The toe standoff distance is a crucial part of the drill and blast design, as this may result in the overbreak or underbreak of the batter. An example of the set-up for trim blasting is presented in Figure 50 below.
- Notably, trim blasting occurs after the main production blast. As such, the trim blast design is typically unique and progressively refined based on the observed batter conditions after production blasting based on information gathered as batter faces are exposed. Nonetheless, careful blast design is required to ensure that the trim blast is successful and does not propagate beyond the design crest.
- It is noted that the batter face angles after trim blasting is typically between 60–75°, however this is usually established based on structure of the rock mass rather than as a direct result of the blasting process itself.
- Trim blasting is considered effective in rock mass with a blocky nature or where near-vertical beddings may cause overhang / formation of irregular faces. As discussed above, pre-splitting is considered effective where the blocky joints are tight, in all other scenarios, trim blast is considered most effective.

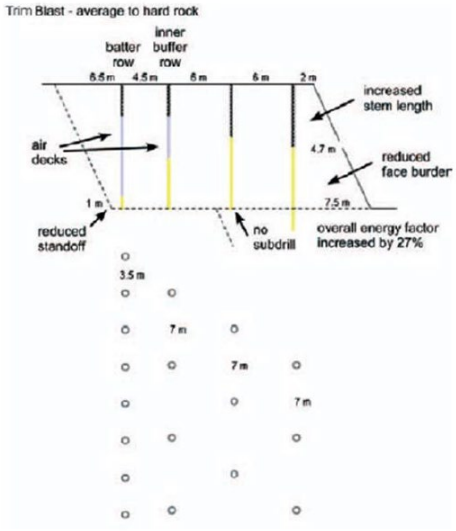

Figure 50 Example of trim blast after Read and Stacey (2009)

Both techniques outlined above can be implemented utilising electronic denotators to achieve suitable blast timings.

10.2. Construction of Pit Lake Egress Ramp

As part of the final rehabilitation landform, a pit lake egress ramp will be constructed. However, as the exact location of this ramp has not yet been decided, and that it is not expected to impact overall slope stability due to a lower slope angle and effectively decouples the overall slope geometry, the addition of the ramp represents a more conservative scenario, and is expected to improve the FoS.

Given the long-term nature of the rehabilitated landform, stability considerations around the egress ramp are centred around ensuring that the ramp is constructed with suitable material and with a consistent process. As such, a technical specification is recommended to be implemented during the construction of the ramp to ensure proper compaction and mitigate erosion.

A technical specification has been developed to address these concerns and have been included as Appendix E.

11. References

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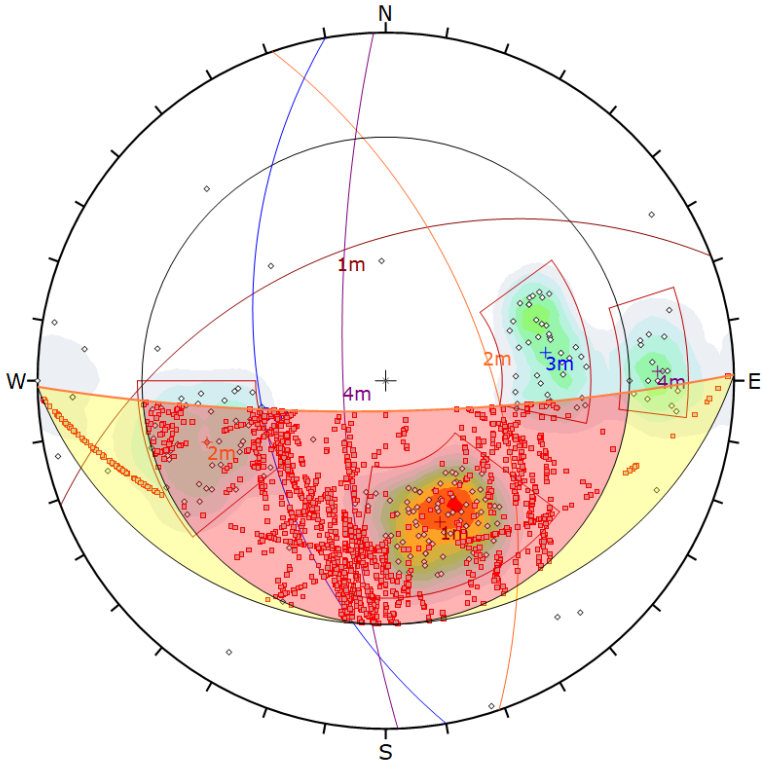
Appendix A Stereographic Analyses

path
N1
N2
W2
E1
W1
S3
S2
S1
E2

Northern Batters – N1 – Tetrahedral Wedge



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

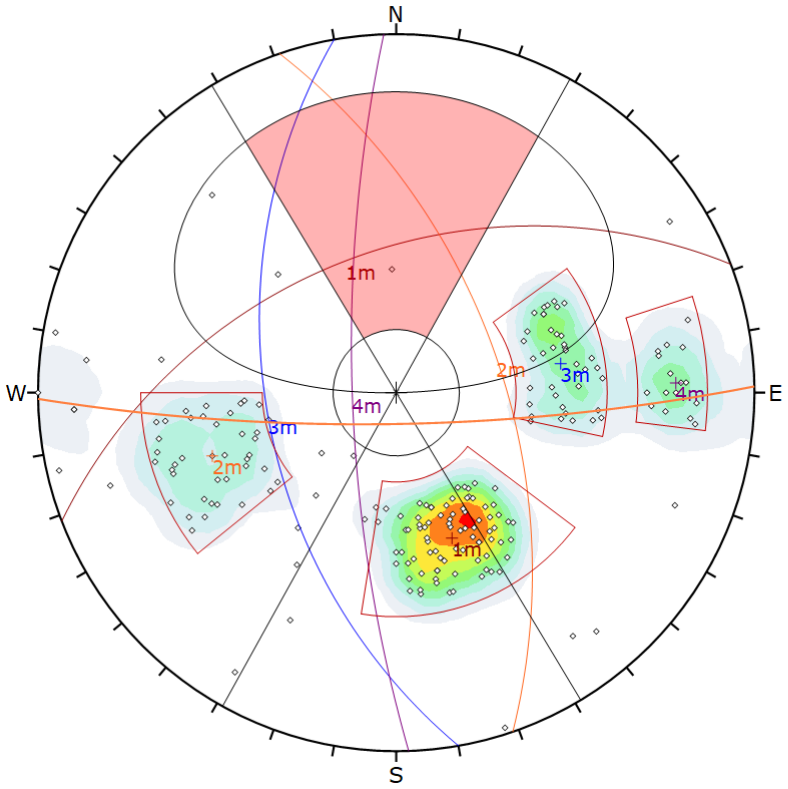
Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding		
Slope Dip	80		
Slope Dip Direction	179		
Friction Angle	20°		
	Critical	Total	%
Wedge Sliding	1629	20095	8.11%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Intersection Mode	Grid Data Planes
Intersections Count	20095
Hemisphere	Lower
Projection	Equal Angle

Northern Batters – N1 – Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

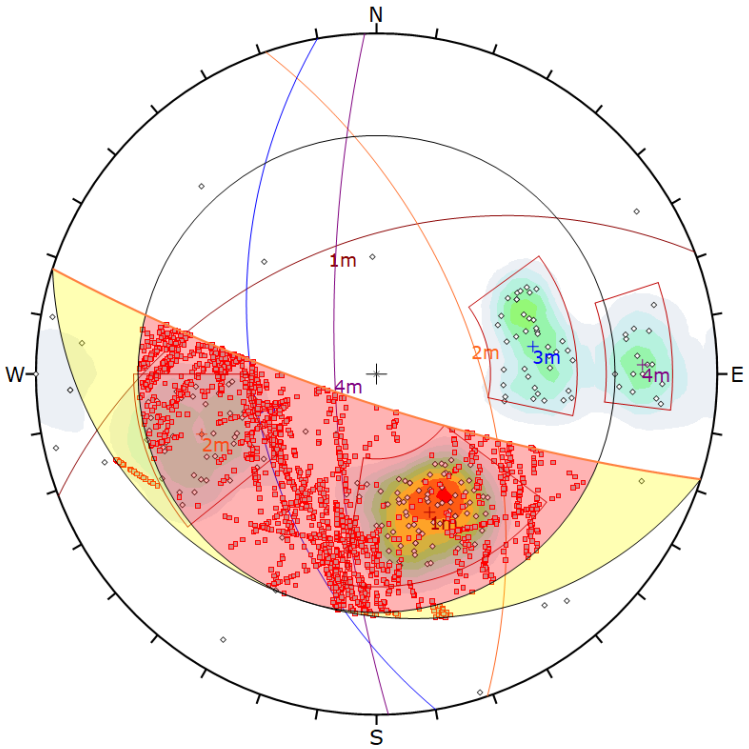
Kinematic Analysis	Planar Sliding
Slope Dip	80
Slope Dip Direction	179
Friction Angle	20°
Lateral Limits	30°

	Critical	Total	%
Planar Sliding (All)	1	201	0.50%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Hemisphere	Lower
Projection	Equal Angle

Northern Batters – N2 – Tetrahedral Wedge



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

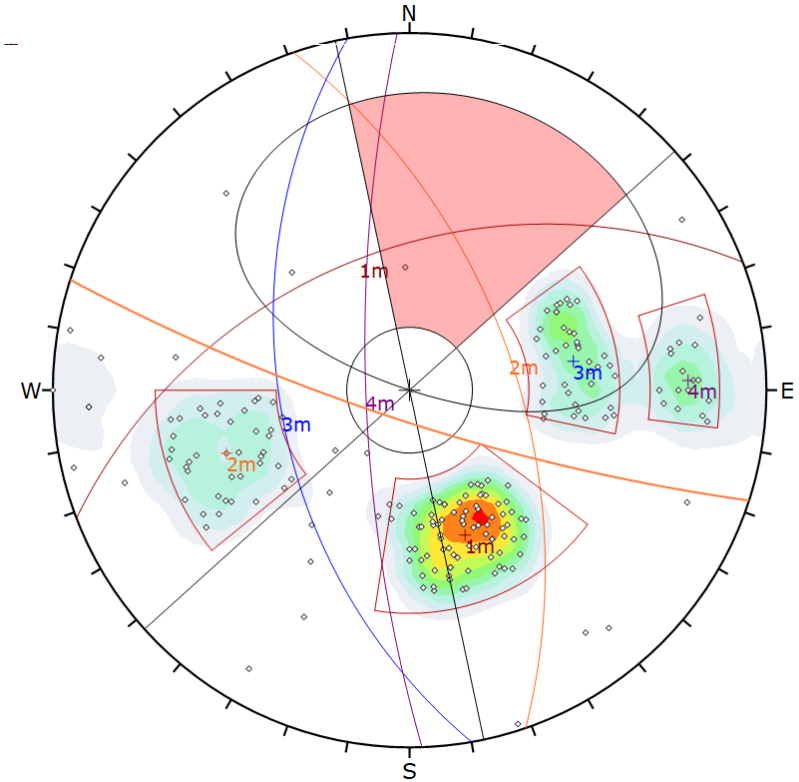
Kinematic Analysis	Wedge Sliding
Slope Dip	80
Slope Dip Direction	198
Friction Angle	20°

	Critical	Total	%
Wedge Sliding	1985	20095	9.88%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Intersection Mode	Grid Data Planes
Intersections Count	20095
Hemisphere	Lower
Projection	Equal Angle

Northern Batters – N2 – Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

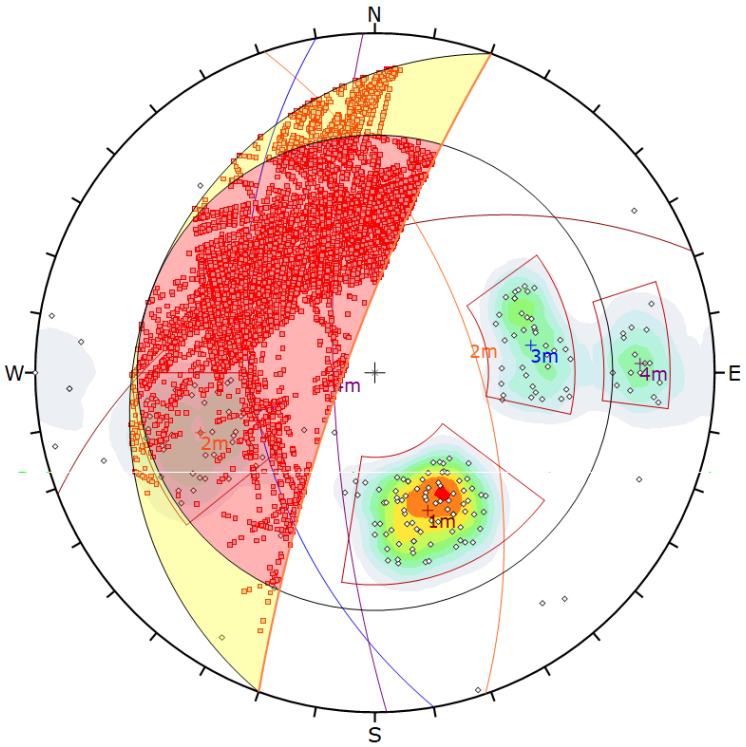
Kinematic Analysis	Planar Sliding
Slope Dip	80
Slope Dip Direction	198
Friction Angle	20°
Lateral Limits	30°

	Critical	Total	%
Planar Sliding (All)	1	201	0.50%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Hemisphere	Lower
Projection	Equal Angle

Eastern Batters – E1 – Tetrahedral Wedge



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

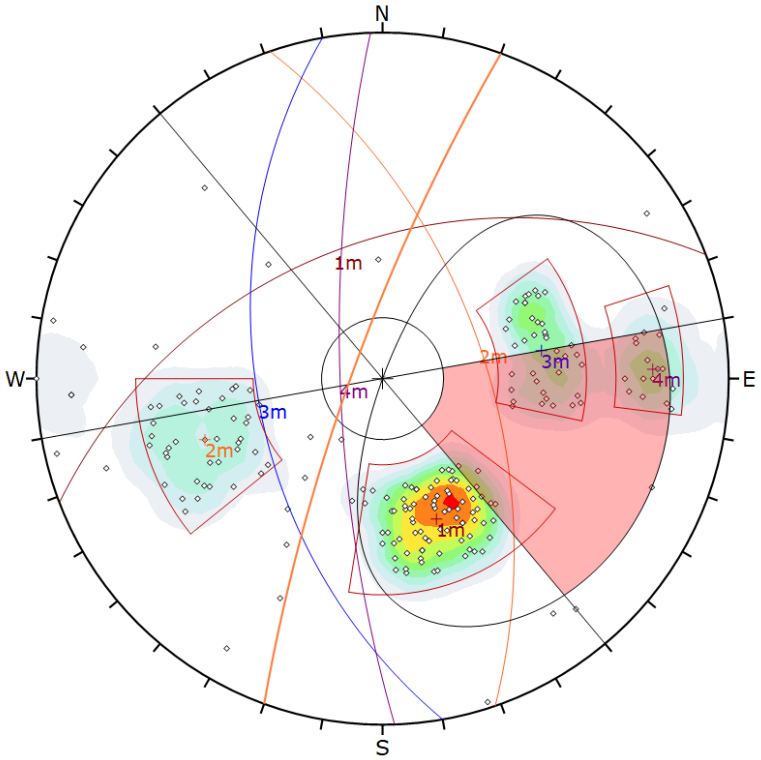
Kinematic Analysis	Wedge Sliding
Slope Dip	80
Slope Dip Direction	290
Friction Angle	20°

	Critical	Total	%
Wedge Sliding	11518	20095	57.32%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Intersection Mode	Grid Data Planes
Intersections Count	20095
Hemisphere	Lower
Projection	Equal Angle

Eastern Batters – E1 – Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

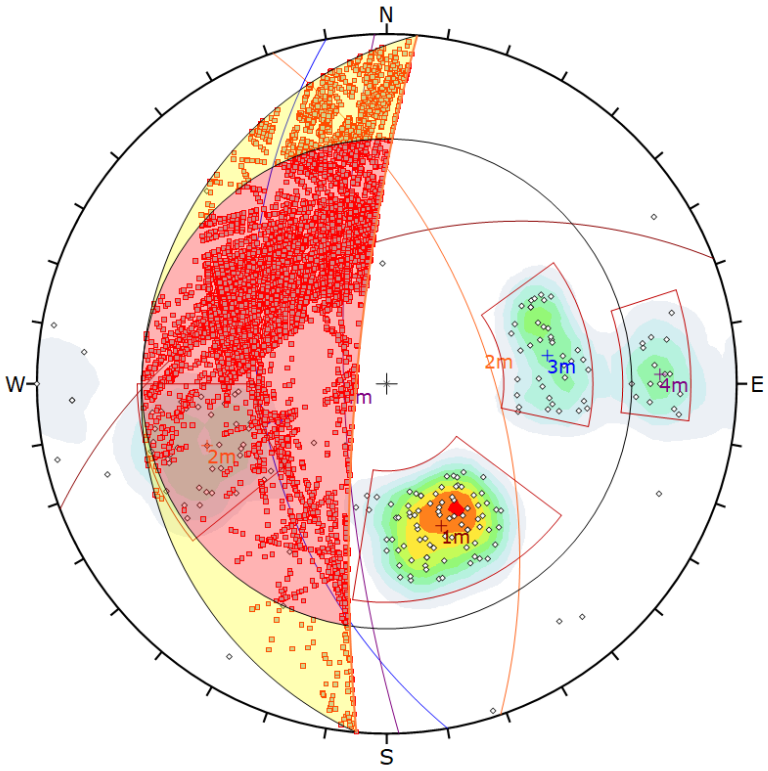
Kinematic Analysis	Planar Sliding
Slope Dip	80
Slope Dip Direction	290
Friction Angle	20°
Lateral Limits	30°

	Critical	Total	%
Planar Sliding (All)	39	201	19.40%
Planar Sliding (Set 1)	6	81	7.41%
Planar Sliding (Set 3)	20	39	51.28%
Planar Sliding (Set 4)	13	16	81.25%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Hemisphere	Lower
Projection	Equal Angle

Eastern Batters – E2 – Tetrahedral Wedge



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

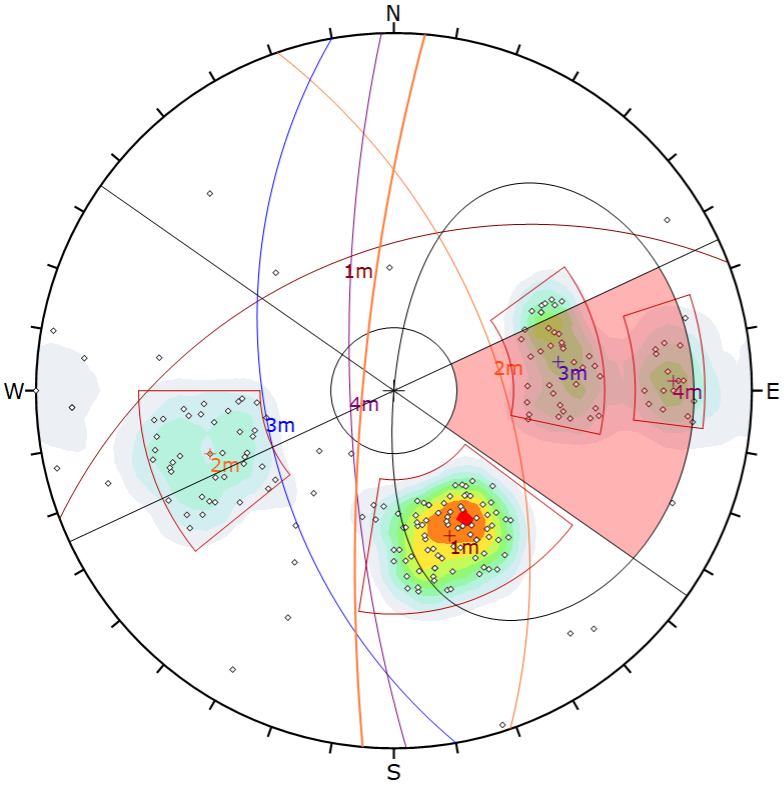
Kinematic Analysis	Wedge Sliding
Slope Dip	80
Slope Dip Direction	275
Friction Angle	20°

	Critical	Total	%
Wedge Sliding	10103	20095	50.28%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Intersection Mode	Grid Data Planes
Intersections Count	20095
Hemisphere	Lower
Projection	Equal Angle

Eastern Batters – E2 – Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

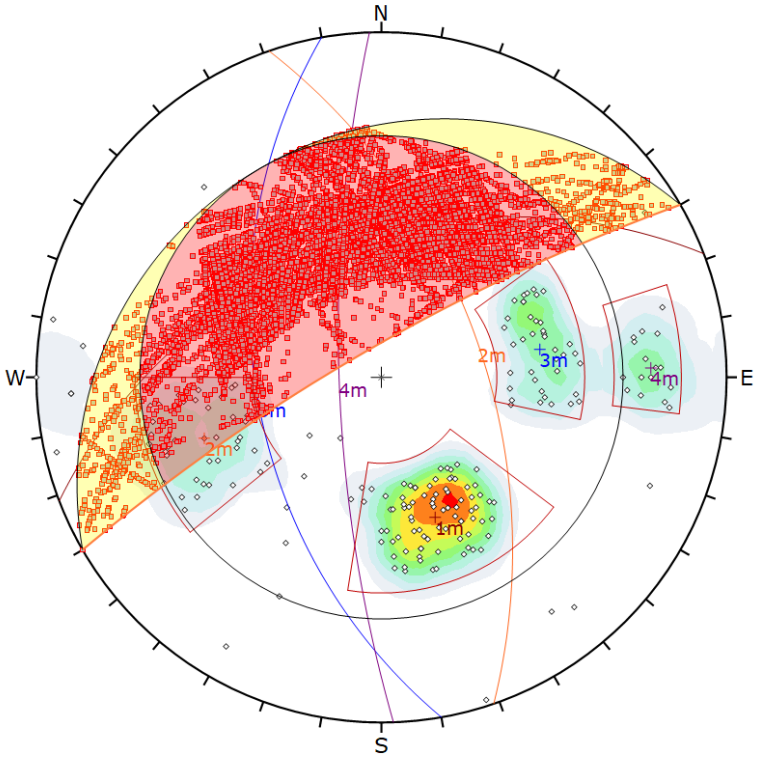
Kinematic Analysis	Planar Sliding
Slope Dip	80
Slope Dip Direction	275
Friction Angle	20°
Lateral Limits	30°

	Critical	Total	%
Planar Sliding (All)	44	201	21.89%
Planar Sliding (Set 3)	31	39	79.49%
Planar Sliding (Set 4)	13	16	81.25%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Hemisphere	Lower
Projection	Equal Angle

Southern Batters – S1 – Tetrahedral Wedge



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

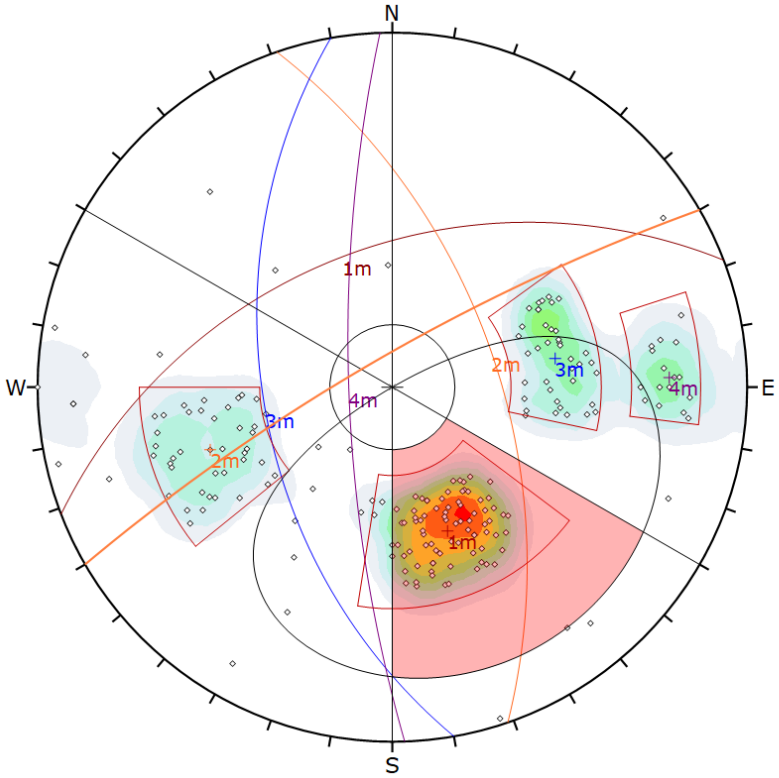
Kinematic Analysis	Wedge Sliding
Slope Dip	80
Slope Dip Direction	330
Friction Angle	20°

	Critical	Total	%
Wedge Sliding	14571	20095	72.51%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Intersection Mode	Grid Data Planes
Intersections Count	20095
Hemisphere	Lower
Projection	Equal Angle

Southern Batters – S1 – Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

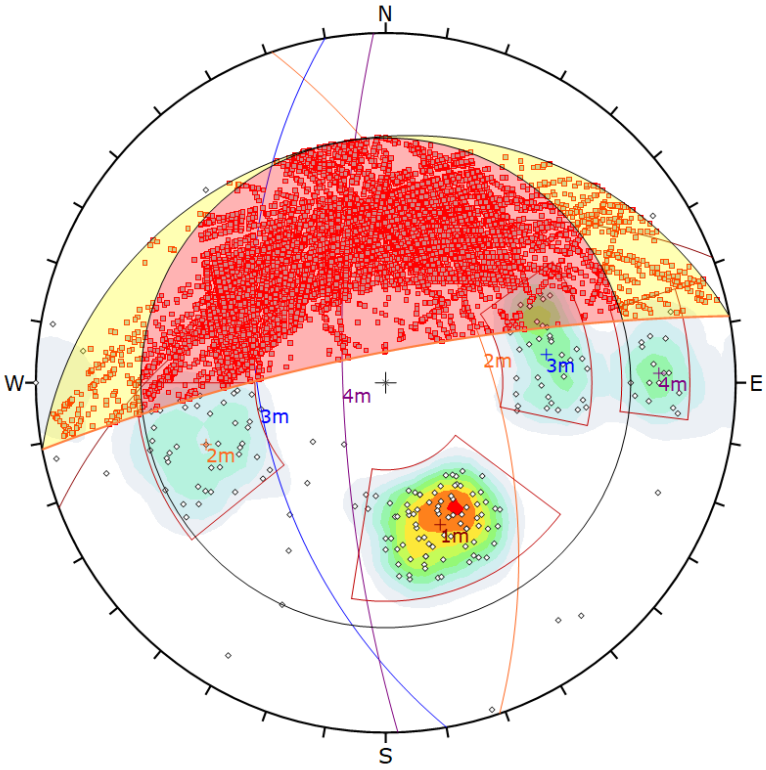
Kinematic Analysis	Planar Sliding
Slope Dip	80
Slope Dip Direction	330
Friction Angle	20°
Lateral Limits	30°

	Critical	Total	%
Planar Sliding (All)	79	201	39.30%
Planar Sliding (Set 1)	79	81	97.53%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Hemisphere	Lower
Projection	Equal Angle

Southern Batters – S2 – Tetrahedral Wedge



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

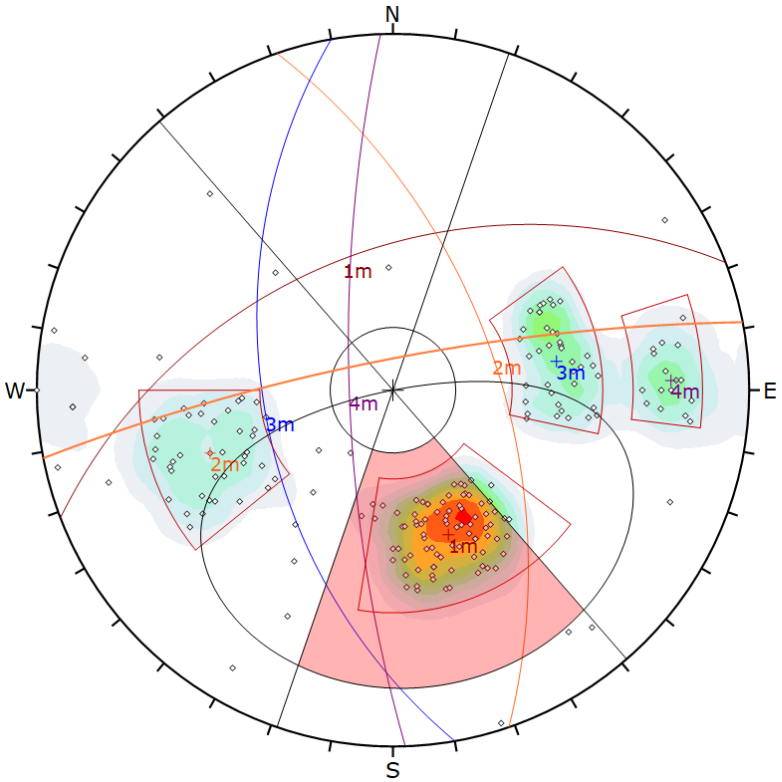
Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Wedge Sliding		
Slope Dip	80		
Slope Dip Direction	349		
Friction Angle	20°		
	Critical	Total	%
Wedge Sliding	14483	20095	72.07%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Intersection Mode	Grid Data Planes
Intersections Count	20095
Hemisphere	Lower
Projection	Equal Angle

Southern Batters – S2 – Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

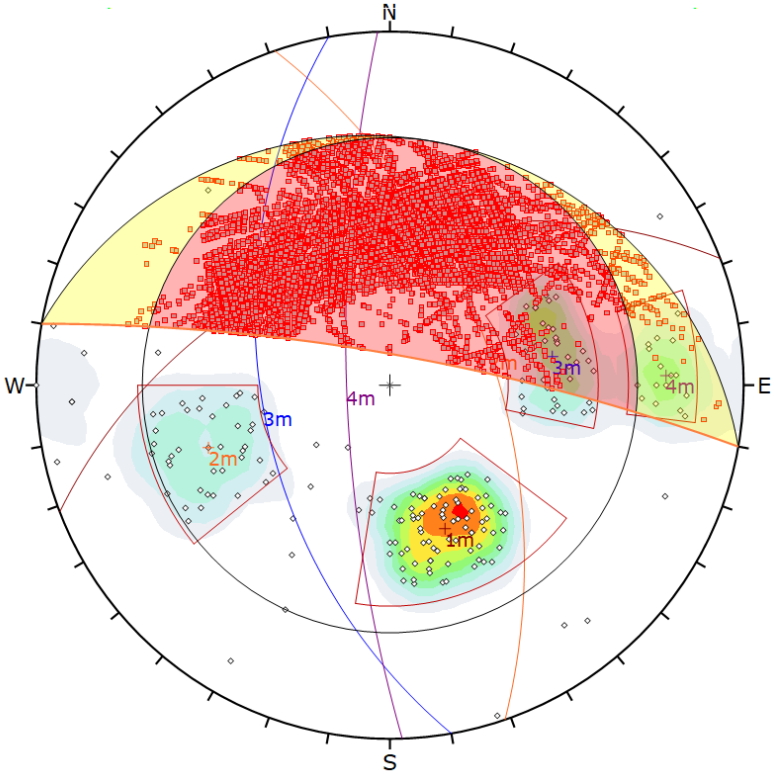
Kinematic Analysis	Planar Sliding
Slope Dip	80
Slope Dip Direction	349
Friction Angle	20°
Lateral Limits	30°

	Critical	Total	%
Planar Sliding (All)	81	201	40.30%
Planar Sliding (Set 1)	79	81	97.53%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Hemisphere	Lower
Projection	Equal Angle

Southern Batters – S3 – Tetrahedral Wedge



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

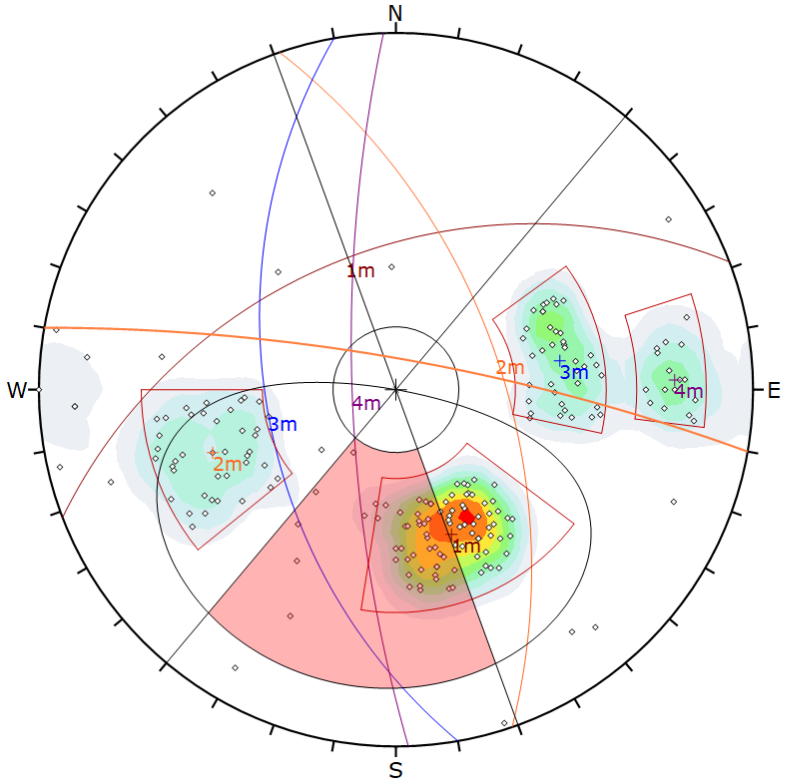
Kinematic Analysis	Wedge Sliding
Slope Dip	80
Slope Dip Direction	10
Friction Angle	20°

	Critical	Total	%
Wedge Sliding	13382	20095	66.59%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Intersection Mode	Grid Data Planes
Intersections Count	20095
Hemisphere	Lower
Projection	Equal Angle

Southern Batters – S3 – Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

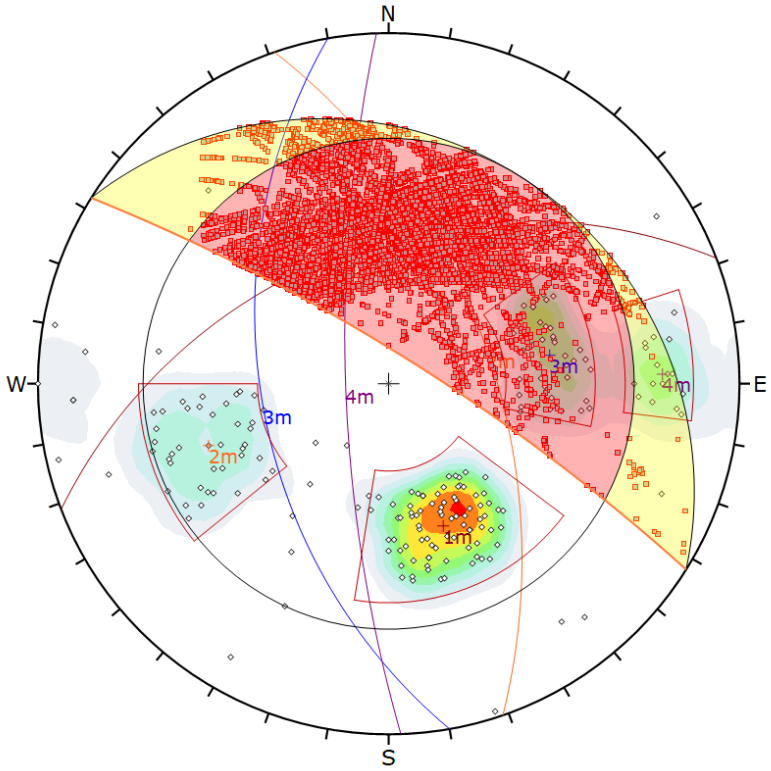
Kinematic Analysis	Planar Sliding
Slope Dip	80
Slope Dip Direction	10
Friction Angle	20°
Lateral Limits	30°

	Critical	Total	%
Planar Sliding (All)	45	201	22.39%
Planar Sliding (Set 1)	38	81	46.91%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Hemisphere	Lower
Projection	Equal Angle

Western Batters – W1 – Tetrahedral Wedge



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

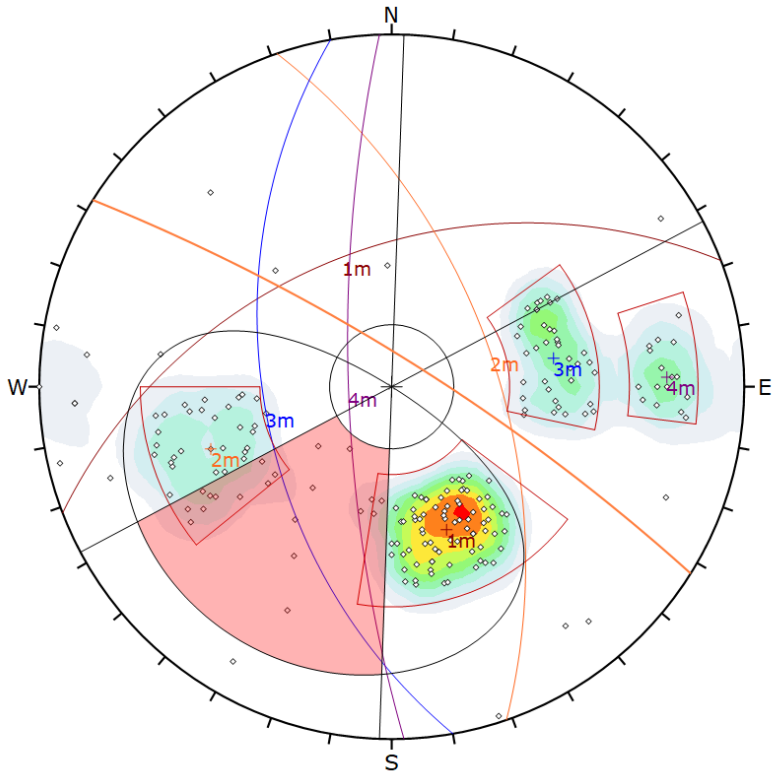
Kinematic Analysis	Wedge Sliding
Slope Dip	80
Slope Dip Direction	32
Friction Angle	20°

	Critical	Total	%
Wedge Sliding	11391	20095	56.69%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Intersection Mode	Grid Data Planes
Intersections Count	20095
Hemisphere	Lower
Projection	Equal Angle

Western Batters – W1 – Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

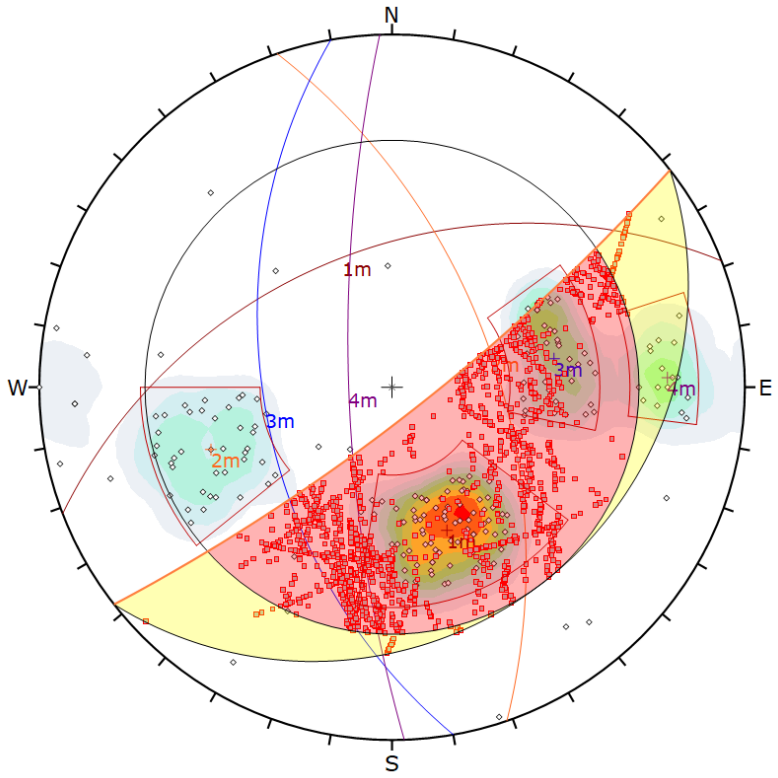
Kinematic Analysis	Planar Sliding
Slope Dip	80
Slope Dip Direction	32
Friction Angle	20°
Lateral Limits	30°

	Critical	Total	%
Planar Sliding (All)	20	201	9.95%
Planar Sliding (Set 1)	2	81	2.47%
Planar Sliding (Set 2)	10	39	25.64%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Hemisphere	Lower
Projection	Equal Angle

Western Batters – W2 – Tetrahedral Wedge



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

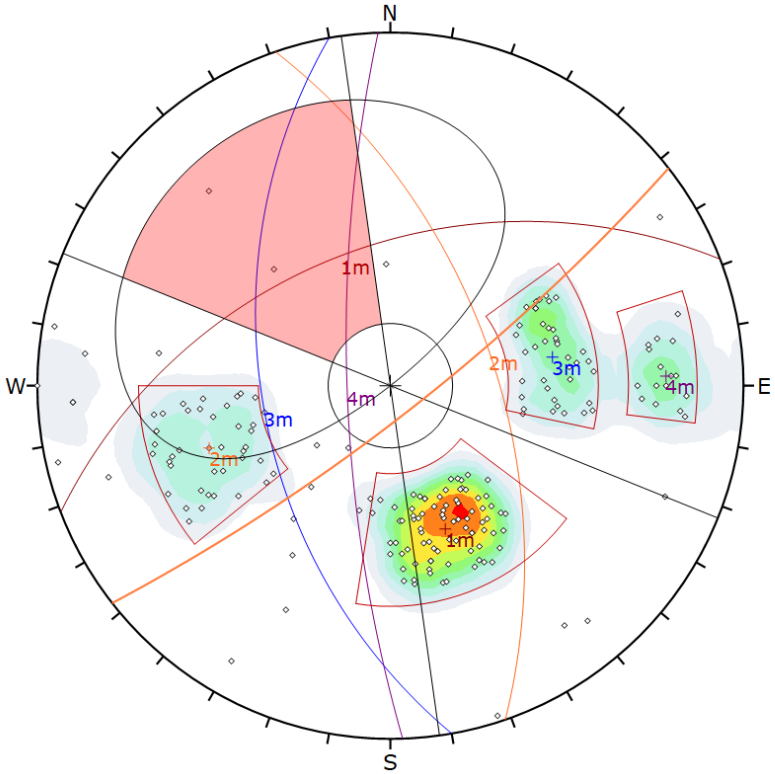
Kinematic Analysis	Wedge Sliding
Slope Dip	80
Slope Dip Direction	142
Friction Angle	20°

	Critical	Total	%
Wedge Sliding	1529	20095	7.61%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Intersection Mode	Grid Data Planes
Intersections Count	20095
Hemisphere	Lower
Projection	Equal Angle

Western Batters – W2 – Planar



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 1.20
	1.20 - 2.40
	2.40 - 3.60
	3.60 - 4.80
	4.80 - 6.00
	6.00 - 7.20
	7.20 - 8.40
	8.40 - 9.60
	9.60 - 10.80
	10.80 - 12.00

Contour Data	Pole Vectors
Maximum Density	11.28%
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	80
Slope Dip Direction	142
Friction Angle	20°
Lateral Limits	30°

	Critical	Total	%
Planar Sliding (All)	2	201	1.00%

	Color	Dip	Dip Direction	Label
Mean Set Planes				
1m		47	339	
2m		57	71	
3m		50	260	
4m		76	268	

Plot Mode	Pole Vectors
Vector Count	201 (201 Entries)
Hemisphere	Lower
Projection	Equal Angle

Appendix B Kinematic Analysis – Tetrahedral Wedge Results

Wedge ID	Safety Factor	Wedge Volume (m3)	Persistence Joint 1 (m)	Persistence Joint 2 (m)	Wedge Length Along Slope Strike (m)
N1_J1+J2	N/A	N/A	N/A	N/A	N/A
N1_J1+J3	N/A	N/A	N/A	N/A	N/A
N1_J1+J4	N/A	N/A	N/A	N/A	N/A
N1_J2+J3	N/A	N/A	N/A	N/A	N/A
N1_J2+J4	N/A	N/A	N/A	N/A	N/A
N1_J3+J4	24.63526206	2.945741065	8.579361837	8.579361837	1.610057869
N2_J1+J2	N/A	N/A	N/A	N/A	N/A
N2_J1+J3	N/A	N/A	N/A	N/A	N/A
N2_J1+J4	N/A	N/A	N/A	N/A	N/A
N2_J2+J3	N/A	N/A	N/A	N/A	N/A
N2_J2+J4	N/A	N/A	N/A	N/A	N/A
N2_J3+J4	24.39797047	3.663191558	9.060560406	8.963693784	4.253675453
E1_J1+J2	N/A	N/A	N/A	N/A	N/A
E1_J1+J3	1.804569817	235.2022923	12.92002889	16	20.81070036
E1_J1+J4	1.238687046	148.1121199	17.80898209	16.42237909	15.73757069
E1_J2+J3	24.61755013	8.042511252	14.4667673	16	13.85640646
E1_J2+J4	9.677820213	88.75273002	21.51483695	21.51483695	19.80069483
E1_J3+J4	N/A	N/A	N/A	N/A	N/A
E2_J1+J2	N/A	N/A	N/A	N/A	N/A
E2_J1+J3	1.754157897	429.7833691	14.55385659	30.90962644	33.75826717
E2_J1+J4	1.192077786	81.3311564	16.69888326	17.80989262	18.73575417
E2_J2+J3	23.13409895	41.17352794	24.77796425	30.90962644	29.85640646
E2_J2+J4	9.285576086	330.6994375	38.48171573	43.44536744	43.12153226
E2_J3+J4	N/A	N/A	N/A	N/A	N/A
S1_J1+J2	1.298081433	762.8475507	59.43575543	18.33767231	58.1732919
S1_J1+J3	1.741491892	670.3337011	51.13962577	14.34436672	53.42177399
S1_J1+J4	1.284434047	793.969465	53.8565985	14.88083176	54.76368757
S1_J2+J3	26.21697546	1.609755698	8.488488696	8.51342218	2.911761874
S1_J2+J4	10.42683252	10.97858678	9.784464456	9.784464456	4.253675453
S1_J3+J4	N/A	N/A	N/A	N/A	N/A
S2_J1+J2	1.860019835	576.333192	46.07016387	14.20677546	46.49458123
S2_J1+J3	1.306365487	636.1811492	53.83871636	18.29062786	52.44168424
S2_J1+J4	1.395624966	625.5871079	47.73012909	14.55908177	46.49160544
S2_J2+J3	26.32463958	1.451888939	8.217846644	8.217846644	1.263967197
S2_J2+J4	10.50367543	8.912824123	8.963903171	8.963903171	2.3914022
S2_J3+J4	N/A	N/A	N/A	N/A	N/A
S3_J1+J2	1.925095361	194.2855432	15.53283221	12.54578844	17.74870827
S3_J1+J3	1.423690383	44.5276344	21.90694321	18.29062786	18.20541204
S3_J1+J4	1.407566174	230.1728045	21.90694321	16.42237909	18.20541204
S3_J2+J3	26.0284364	1.92992387	9.146832543	9.067410206	4.434472412
S3_J2+J4	10.42961642	10.63499412	9.355565082	9.355565082	4.434472412
S3_J3+J4	N/A	N/A	N/A	N/A	N/A
W1_J1+J2	1.918783973	182.4847391	13.14758086	13.14758086	15.90760965
W1_J1+J3	N/A	N/A	N/A	N/A	N/A
W1_J1+J4	1.454860372	76.29854507	17.39721356	16.42237909	12.41716177
W1_J2+J3	25.16745712	4.542011618	12.71212583	12.1431543	9.879177252
W1_J2+J4	10.15043667	21.71873787	12.71212583	11.65171138	9.879177252
W1_J3+J4	N/A	N/A	N/A	N/A	N/A
W2_J1+J2	N/A	N/A	N/A	N/A	N/A
W2_J1+J3	N/A	N/A	N/A	N/A	N/A
W2_J1+J4	N/A	N/A	N/A	N/A	N/A
W2_J2+J3	N/A	N/A	N/A	N/A	N/A
W2_J2+J4	N/A	N/A	N/A	N/A	N/A
W2_J3+J4	24.16304141	5.329477203	11.22751953	11.22751953	6.931195199

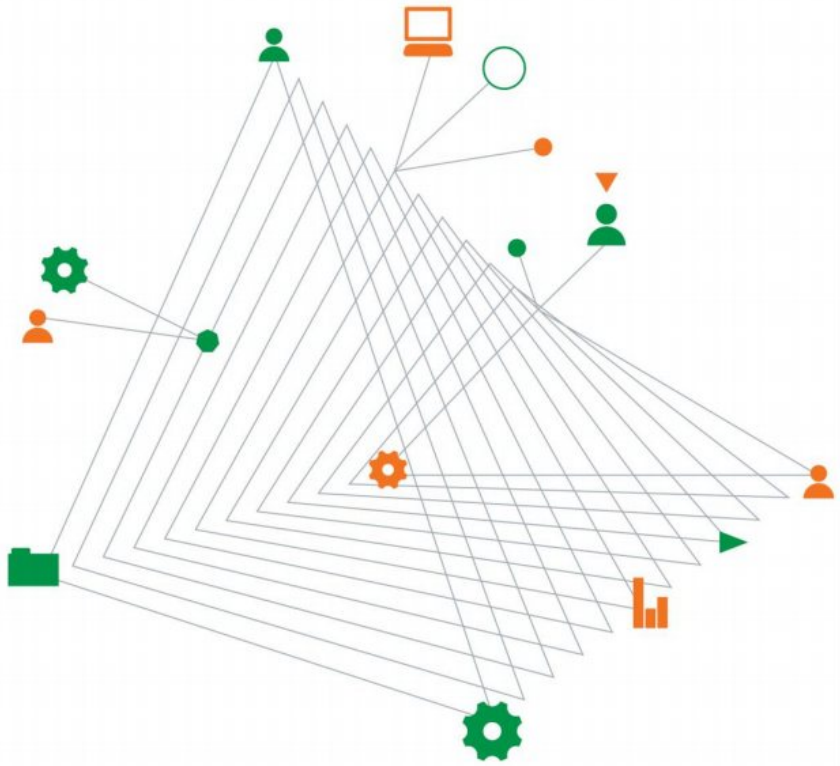
Appendix C Coffey (2018) Geotechnical Risk Assessment

Rigby Bros & Co Pty Ltd

WA410 Coleraine Quarry

Geotechnical Risk Assessment

7 May 2018



Experience comes to life when it is powered by expertise

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WA410 Coleraine Quarry Geotechnical Risk Assessment

Prepared for
Rigby Bros & Co Pty Ltd
Quarry Road, Coleraine, VIC 3315

Prepared by
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ABN: 55 139 460 521

Document authorisation

Our ref: MELGE217320

Please find attached a copy of the draft report on the geotechnical risk assessment of the Coleraine quarry. The assessment was undertaken by Don Miller, Principal Engineering Geologist on 23 April 2018.

For and on behalf of Coffey

Don Miller
Principal Engineering Geologist

Quality information

Revision history

Revision	Description	Date	Author	Reviewer	Signatory
V01	Draft	07/05/2018	DRM	MF	DRM

Distribution

Report Status	No. of copies	Format	Distributed to	Date
V01	1<99>	PDF	Heinz de Chelard	07/05/2018

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Figure 9 Plate - West wall batters

Figure 10 Plate - North wall batters

Figure 11 Plate - South wall batters

Appendices

Appendix 1 Risk Assessment - Public Infrastructure within the GRZ

WA410 Coleraine Quarry Geotechnical Risk Assessment

1. Introduction

The Rigby Bros. quarry at Coleraine has been in operation since 1947 and was acquired by Rigby Bros. & Co Pty Ltd in 1969. The quarry is located within the Coleraine Volcanic Group of Jurassic Age (200 – 140 Ma) Den Hills Formation and comprises trachyte erupted as a dome. (Ref 1).

The quarry is operated under Work Authority WA410 (previously EIL393). The quarry is applying for a Work Plan Variation to extend its operations and as part of that the Department of Economic Development, Jobs, Training and Resources (DEDJTR) has requested that a geotechnical risk assessment be made of the existing quarry operations.

Don Miller, Principal Engineering Geologist from Coffey Services Australia visited the site to carry out a geotechnical survey of the site on 23 April 2018 for the geotechnical risk assessment.

2. Site Location and description

The quarry is located on the eastern edge of Coleraine in western Victoria as shown in Figure 1. The detailed site plan is shown in Figure 3. This figure includes surface contours from a drone survey conducted by Catchment Health Engineering in August 2015. The contours are at 2 metre intervals only and the crest and toe lines of the quarry are not explicitly located. It is reported that the Work Authority conditions include:

Existing Work Authority area: 5.58Ha
Depth of extraction: 50m below site entry gate level.
Batter profile detail: Rehabilitation batter profiles are yet to be determined.
Existing bench profile detail: Nominal bench height from 6 to 12m, Nominal bench width = 10m.
Method of Processing: Rock crushing and grading on site
Ground water interception: Some inflows of groundwater are evident from the northern end of the lowest bench into a sump on the quarry floor. Flow rates are low but it is reported that the sump always contains water.
Blasting: Blasting is used as per the existing WA within the boundary of the existing site.

The quarry gate level is approximately at 88 m RL. The current quarry floor is at 72 m RL, some 16 metres below the gate level. The quarry has developed 6 benches into a ridge of trachyte to the east where the current quarry crest is at 132 m RL, some 60 metres above the quarry floor.

The current quarry is approximately 160 m (EW) x 180 m (NS) measured at the quarry crest.

A single groundwater bore was drilled on the WA area (at 5839277N, 560271E - some 100 m south of the current south wall crest) in March 1983. It is reported that it encountered trachyte to the end of hole at 70 metres depth, that is, the trachyte occurs down to at least a reduced level of +16 m RL, well below the approved depth of quarrying, at 38 m RL. It is reported that no significant groundwater was found in this drill hole.

3. Geotechnical conditions

The current exposures in the quarry are all trachyte. Flow foliation is evident but does not from a significant structural discontinuity in the rock mass. The trachyte is moderately weathered

(salamander) down to a depth of around 10 metres (top bench) on the hill (east wall) but only down to 7 m (one bench) on the west and southern walls. Below this the rock mass is slightly weathered. The current floor is within the slightly weathered zones.

The fresh rock is hard and strong and the fresh rock breaks with typical conchoidal fractures. No strength tests are reported for the trachyte other than a reported Los Angeles abrasion index of 22. The probable unconfined compressive strength would exceed 150 MPa. Published data for similar rock types (fresh basalt) suggest a range for 100 to 250 MPa.

An area survey was undertaken of the orientations of the major defect sets exposed in the batters. The results are collated in Figure 2 which shows that there are three major defect sets developed throughout the rock mass. This figure shows the defect set orientations measured from representative samples of the three major defect sets (only 1 pole for defect set 3) and shown as poles in a lower hemisphere projection. The defect sets orientations are listed in Table 1.

Table 1 Major Defect Orientations

Defect Set no	Dip	Dip Drn (AMG)	Roughness
1	46°	311°	Undulating Smooth
2	56°	074°	Planar Smooth
3	74°	142°	Planar Smooth

All the defect sets have defect trace lengths exceeding 6 metres.

4. Current batter stability

Currently there are some 1200 metres of exposed batters. Historical images show that the top four benches on the east wall have been in place since before 2005 (the oldest aerial image available) and, anecdotally, since 1985. There have been no reported failures in these benches in this period.

Figure 3 shows a recent aerial survey (drone) of the site undertaken in August 2015. Typical cross sections taken from this data through the east (section A-A'), west (section B-B'), south (section C-C') and north walls (section D-D') are shown in Figures 4 to 7. The section lines are shown in Figure 3.

Figure 4 is a cross section of the west wall and shows that on the high east wall the overall slope height is 50 metres with an overall angle (toe to crest) of some 42°. Individual batters are standing at around 70°, batter heights range from 6 metres to 10 metres and berm widths range from 4 to 8 metres. The west, south and north walls (Figures 5 to 7 respectively) have similar geometry or flatter overall slope angles). Figures 5 to 7, for the west, south and north walls respectively, show this overall slope geometry, or a lower overall slope angle, is evident for the other walls.

The east wall batters are controlled by defect set 1 which lies sub-parallel to the batter faces and which blasting breaks back to. This is clearly shown in Figure 8. Similarly, in the west wall batters the batters break back to defect set 2 during blasting as shown in Figure 9. Defect set 3 is steeply dipping and intersects the east and west batters at high angles and only contributes marginally to batter stability in these walls, acting as end planes for the more extensive defect set 1 and 2 exposures.

The east walls are stable and have been for some 12 years. Deepening of the quarry by a further 2 or 3 benches should not see any substantial change to this stability condition provided the same overall

slope angle is maintained. Similar conditions to that previously experienced are expected with individual batters breaking back to defects from defect set 1 where they exist.

The west walls are stable and have been for some 12 years. Deepening of the quarry by a further 2 or 3 benches should not see any substantial change to this stability condition provided the same overall slope angle is maintained. Similar conditions to that previously experienced are expected with individual batters breaking back to defect set 2 where they exist.

The north walls, currently standing at around 47°, are stable and show very few defect bounded blocks (Figure 10). The individual batters are 10 metres high. Deepening of the quarry by a further 2 or 3 benches should not see any substantial change to this stability condition provided the same overall slope angle is maintained.

The south walls are stable (Figure 11). Defect Sets 1 and 2 can from wedges in the south batters (with an intersection dipping at 30° to the north). Such wedges were not observed in the south wall (Figure 11) and possibly would be unlikely to fail due to the low intersection angle and the expected friction angle of the defects developed in the trachyte. No evidence of such wedge failures is seen in the south walls. The south walls include one area in moderately weathered trachyte that is standing at 16 metres high and with a batter angle of some 80°. This wall has been standing in this condition since 2011, some 7 years. Deepening and extending the quarry should not see any substantial change to this stability condition provided the same overall slope angle is maintained.

A brief site inspection of the 10-metre-wide buffer zones beyond the crest line showed no signs of surface cracking that might indicate substantial slope movement.

Based on the measurements and observations on site the quarry appears stable and has been for a considerable period of time. Minor overbreak, of some 1 to 2 metres, occurs during blasting particularly on the east and west walls, as the ground breaks back to unfavourably oriented defects that are present throughout the rock mass. Overbreak is possible on the southern walls in a combination of the two major defect sets, although this has not been observed to date.

The likelihood of slope scale failure is assessed as rare, based on the observable evidence and the length of time that the current walls have been standing without failure.

5. Geotechnical Risk Zone (GRZ)

Geotechnical risk for the Coleraine quarry are related to the potential future movement of ground and the identification of possible impacts of those movements on the environment, infrastructure, operations and people.

Risks to groundwater from the quarry development are considered low as no significant groundwater table has been intersected by the current quarry developments and a local public groundwater borehole drilled in 1983 failed to record significant groundwater flows to well below the current approved depth of mining.

The geotechnical survey data reported here suggest that, other than the minor loss of crests resulting from the intersection of rock mass defects, there is no significant risk of large scale batter failure in any of the walls of the quarry. The east wall of the quarry at 50 metres high has been in place since 1985 and has had no reported failures in that time. No large faults or shears are recorded or evident in the immediate area that could contribute to large scale slope failure. On this basis failures in the quarry are restricted to minor batter scale failures that typically occur during blasting. Future design of berm widths sufficient to accommodate this, particularly in the east and west walls will ensure access to individual benches is not lost and remains at a minimum of 8 metres.

Should a few of the rock mass defects combine to result in a multi-batter failure then that failure would be expected to be at the average dip of the defects at about 46° in the west wall and 56° in the west wall. Defect lengths recorded exceed typical 6 m batter heights so multi-batter failure is a possibility. Over the full height of the current quarry wall this would result in minimal loss at the top crest as the slope already has an overall slope angle (42°) less than this. Similar conditions apply on the remaining walls, where the overall slope is lower than the average defect dip.

The rock mass comprises slightly weathered trachyte. Whilst no test results exist indicating the likely strength of this rock, the expected high compressive strength and high modulus, shown by the typical conchoidal fracturing evident in the fresh rock, would suggest that, in a 50-metre-high slope cut at an overall slope of 42° that significant ground movements and/or ground failure is unlikely.

On this basis of the discussion above, a GRZ that corresponds to the current extraction limit plus some 20 metres is appropriate. This zone is shown in Figure 3 superimposed over the quarry plan. This line corresponds roughly to 10 metres outside the current WA boundary on the northern and eastern boundaries, on pasture land on the eastern boundary and lies within stockpile and overburden areas on the southern side of the quarry.

6. Risk assessment for assets within the GRZ

The proposed GRZ identifies the zone within which the risk to public safety, environment and infrastructure is to be assessed. The GRZ is shown superimposed over the area in Figure 3. The geotechnical risk assessment follows the guidelines published in AS/NZS ISO 31000:2018. Appendix 1 lists the risk assessment guidelines adopted by Rigby Bros & Co Pty Ltd for the Coleraine quarry operations. Table 2 summarises the geotechnical risk assessment and the reasoning behind that assessment for the public infrastructure and environment within the GRZ.

WA410 Coleraine Quarry Geotechnical Risk Assessment

Table 2 Risk assessment - Public infrastructure within the GRZ

Asset	Event	Likelihood	Consequence	Risk Level	Action
Cameron Street road reserve adjacent to the south east and eastern WA boundary.	Slope failure resulting in loss of ground that impacts the road reserve.	**Unlikely** Development of the eastern boundary is at full extent and has been standing for more than 12 years without failure. Future development of the quarry to the south will be cut at the same overall slope angle and a similar likelihood of failure will apply. South wall not currently exposed near the quarry walls but analysis suggest the potential for kinematically feasible wedges indicates a mean intersection line of the contributing defects of some 30°, considered below that of the friction angle of the defects. This is stable unless water pressure acts on the defects. There is no evidence, in the existing south walls of such failures. These walls have been stable (for 7 years), are high (16 metres) and standing near vertical.	**Minor** Cameron Street reserve is undeveloped. No public access.	**Low**	Ongoing visual inspection of crest conditions behind the eastern and southern walls. Diversion of water from near crests on the southern walls as they develop.
Templeton Street road reserve adjacent to the northern WA boundary.	Slope failure resulting in loss/gross movement of ground	**Rare** No significant failures have occurred in the current faces which have been standing stable for more than 12 years. The Templeton Street	**Moderate** Templeton Street has infrequent public access (dead end). Any slope failure/gross movement that impacts the street may affect the local community access	**Low**	Ongoing visual inspection of crest conditions behind the

WA410 Coleraine Quarry Geotechnical Risk Assessment

Asset	Event	Likelihood	Consequence	Risk Level	Action
	that impacts the road reserve.	road reserve is located 10 metres from the existing crests in the northern walls of the quarry. The defect sets 1 and 2 strike perpendicular to this face and cause only minor crest disruption. This condition will continue with further development south along the Templeton Road easement.	and, if it occurred during transit, the potential for a vehicular accident and injury.		northern walls. Diversion of water from near crests on the northern walls as they develop.
Overhead (domestic) power transmission line within Templeton Street road reserve. Telstra cable within Templeton Street road reserve	Slope failure resulting in loss of ground that impacts the power poles or the Telstra cable	**Rare** There are two power poles adjacent to the quarry northern faces. The southernmost is located adjacent to the existing quarry offices and more than 100 m from the current working faces. Future development may bring the faces adjacent to the pole. The northernmost is located mid-way along the northern faces and is more than 10 metres from the existing crests. The Telstra cable is located within the road reserve with a connection point at the current quarry office, as such, the comments for the power pole at this location similarly apply. No failures have occurred in these walls over a period longer than 12 years.	**Moderate** Loss of electrical power to (two) local houses could result in minor disruption of around a day. Loss of Telstra cable could result in minor disruption for around a day.	**Low**	Ongoing visual inspection of crest conditions behind the northern walls.
Underground drainage pipeline surface run-off drain located at the side of the workshop,	Slope failure resulting in loss of ground that impacts the pipeline.	**Rare** The drain and pipework is located adjacent to the existing quarry offices and more than 100 m from the current working faces. Future	**Minor** Negligible environmental damage, no disruption to local community.	**Low**	Ongoing visual inspection of crest conditions behind the

WA410 Coleraine Quarry Geotechnical Risk Assessment

Asset	Event	Likelihood	Consequence	Risk Level	Action
running under Templeton Street and exiting some 20 metres into the adjacent paddock.		development may remove/rehabilitate the drain and the need for the pipeline. No failures have occurred in the northern walls over a period longer than 12 years.			northern walls when they extend to this area.

7. Conclusions

At the request of the operators of the Coleraine quarry, Rigby Bros. & Co Pty Ltd, a geotechnical risk assessment has been carried out of the current quarry. The review has included site mapping to identify the major structural defects in the rock mass to determine the likely causes of batter scale failures within the quarry. These structures cause minor break back and loss of crests during blasting.

Past historical records show that quarry walls have been stable with no significant failures for at least the last 12 years and anecdotally for the last 30 years. The rock mass is blocky and slightly weathered and comprises a very strong trachyte.

Minimal ground movement has been observed from past operations and deepening of the quarry is not expected to alter this.

A Geotechnical Risk Zone of 20 metres from the extraction limit is proposed for the site based on the past experiences of slope stability and the current overall slope geometry. Provided the overall slope geometry is continued this zone width will continue as the quarry is deepened.

The only public infrastructure identified within the GRZ are

- the (undeveloped) Cameron Street road reserve,
- the Templeton Road easement,
- a power line,
- a Telstra connection to the site, and
- a sump drainage pipe.

In all cases the risk to these public infrastructure is assessed as **Low** and management actions are to continue with visual observations of the quarry walls adjacent to the infrastructure.

8. References

Department of Primary Industries (2003) Glenelg Special Area Map Geological Report Geological Survey Victoria Report 123.

RocData 5.0, Rocscience software.

ASNZS ISO 3100:2018 Risk management – Principles and Guidelines.

WA410 Coleraine Quarry Geotechnical Risk Assessment

Important information about your Coffey Report

As a client of Coffey you should know that site subsurface conditions cause more construction problems than any other factor. These notes have been prepared by Coffey to help you interpret and understand the limitations of your report.

Your report is based on project specific criteria

Your report has been developed on the basis of your unique project specific requirements as understood by Coffey and applies only to the site investigated. Project criteria typically include the general nature of the project; its size and configuration; the location of any structures on the site; other site improvements; the presence of underground utilities; and the additional risk imposed by scope-of-service limitations imposed by the client. Your report should not be used if there are any changes to the project without first asking Coffey to assess how factors that changed subsequent to the date of the report affect the report's recommendations. Coffey cannot accept responsibility for problems that may occur due to changed factors if they are not consulted.

Subsurface conditions can change

Subsurface conditions are created by natural processes and the activity of man. For example, water levels can vary with time, fill may be placed on a site and pollutants may migrate with time. Because a report is based on conditions which existed at the time of subsurface exploration, decisions should not be based on a report whose adequacy may have been affected by time. Consult Coffey to be advised how time may have impacted on the project.

Interpretation of factual data

Site assessment identifies actual subsurface conditions only at those points where samples are taken and when they are taken. Data derived from literature and external data source review, sampling and subsequent laboratory testing are interpreted by geologists, engineers or scientists to provide an opinion about overall site conditions, their likely impact on the proposed development and recommended actions. Actual conditions may differ from those inferred to exist, because no professional, no matter how qualified, can reveal what is hidden by earth, rock and time. The actual interface between materials may be far more gradual or abrupt than assumed based on the facts obtained. Nothing can be done to change the actual site conditions which exist, but steps can be taken to reduce the impact of unexpected conditions.

For this reason, owners should retain the services of Coffey through the development stage, to identify variances, conduct additional tests if required, and recommend solutions to problems encountered on site.

Your report will only give preliminary recommendations

Your report is based on the assumption that the site conditions as revealed through selective point sampling are indicative of actual conditions throughout an area. This assumption cannot be substantiated until project implementation has commenced and therefore your report recommendations can only be regarded as preliminary. Only Coffey, who prepared the report, is fully familiar with the background information needed to assess whether or not the report's recommendations are valid and whether or not changes should be considered as the project develops. If another party undertakes the implementation of the recommendations of this report there is a risk that the report will be misinterpreted and Coffey cannot be held responsible for such misinterpretation.

Your report is prepared for specific purposes and persons

To avoid misuse of the information contained in your report it is recommended that you confer with Coffey before passing your report on to another party who may not be familiar with the background and the purpose of the report. Your report should not be applied to any project other than that originally specified at the time the report was issued.

Interpretation by other design professionals

Costly problems can occur when other design professionals develop their plans based on misinterpretations of a report. To help avoid misinterpretations, retain Coffey to work with other project design professionals who are affected by the report. Have Coffey explain the report implications to design professionals affected by them and then review plans and specifications produced to see how they incorporate the report findings.

WA410 Coleraine Quarry Geotechnical Risk Assessment

Data should not be separated from the report*

The report as a whole presents the findings of the site assessment and the report should not be copied in part or altered in any way.

Logs, figures, drawings, etc. are customarily included in our reports and are developed by scientists, engineers or geologists based on their interpretation of field logs (assembled by field personnel) and laboratory evaluation of field samples.

These logs etc. should not under any circumstances be redrawn for inclusion in other documents or separated from the report in any way.

Geoenvironmental concerns are not at issue

Your report is not likely to relate any findings, conclusions, or recommendations about the potential for hazardous materials existing at the site unless specifically required to do so by the client. Specialist equipment, techniques, and personnel are used to perform a geoenvironmental assessment. Contamination can create major health, safety and environmental risks. If you have no information about the potential for your site to be contaminated or create an environmental hazard, you are advised to contact Coffey for information relating to geoenvironmental issues.

Rely on Coffey for additional assistance

Coffey is familiar with a variety of techniques and approaches that can be used to help reduce risks for all parties to a project, from design to construction. It is common that not all approaches will be necessarily dealt with in your site assessment report due to concepts proposed at that time. As the project progresses through design towards construction, speak with Coffey to develop alternative approaches to problems that may be of genuine benefit both in time and cost.

Responsibility

Reporting relies on interpretation of factual information based on judgement and opinion and has a level of uncertainty attached to it, which is far less exact than the design disciplines. This has often resulted in claims being lodged against consultants, which are unfounded. To help prevent this problem, a number of clauses have been developed for use in contracts, reports and other documents. Responsibility clauses do not transfer appropriate liabilities from Coffey to other parties but are included to identify where Coffey's responsibilities begin and end. Their use is intended to help all parties involved to recognise their individual responsibilities. Read all documents from Coffey closely and do not hesitate to ask any questions you may have.

* For further information on this aspect reference should be made to "Guidelines for the Provision of Geotechnical information in Construction Contracts" published by the Institution of Engineers Australia, National headquarters, Canberra, 1987.

WA410 Coleraine Quarry Geotechnical Risk Assessment

Figures

Figure 1 Site location
Figure 2 Major Defect Set Orientations
Figure 3 Detailed site layout.
Figure 4 Typical cross section - East Wall
Figure 5 Typical cross section - West Wall
Figure 6 Typical cross section - South Wall
Figure 7 Typical cross section - North Wall
Figure 8 Plate - East wall batters
Figure 9 Plate - West wall batters
Figure 10 Plate - North wall batters
Figure 11 Plate - South wall batters

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Projection: GDA 1994 MGA Zone 54
SA
PENOLA
VIC
ARARAT
CASTERTON
WA 410
COLERAINE
MERINO
HAMILTON
MOUNT GAMBIER
PORT MACDONNELL
HEYWOOD
MACARTHUR
MORTLAKE
KOROIT
CAMPERDOWN
PORTLAND
WARRNAMBOOL
0 km 30
Balmoral Road
Glenelg Highway
Cavendish-coleraine Road
Hamilton Road
Lower Hilgay Road
Barnes Road
Passcourse Road
Grey Street
Turnbull Street
White Street
Macleod Street
Pillean Street
Macdonalds Street
Church Street
Makebery Street
Trangmar Street
Young Street
Gordon Street
Robertson Street
Henty Street
Wilson Street
Sayle Street
Lindsay Street
Sturdee Street
Campion Street
Fletcher Street
Hampton Street
Shanks Bunds Road
Cavendish Road
Young Woolsey Creek
Byrne Creek
LEGEND
Main road
Minor road
Track
Railway
Major watercourse
Minor watercourse
WA 410 boundary
Source:
WA 410 approximately digitised by Coffey.
Roads, tracks, railway, and watercourses from Vicmap.
Imagery from ArcGIS Online (capture date unknown).
coffey
A TETRA TECH COMPANY
Date: 03.05.2018
Project: 754-MELGE217320
File Name: 217320_01_F001_GIS
Rigby Bros Quarry
Geological Risk Assessment
Site Location
Figure No: 1
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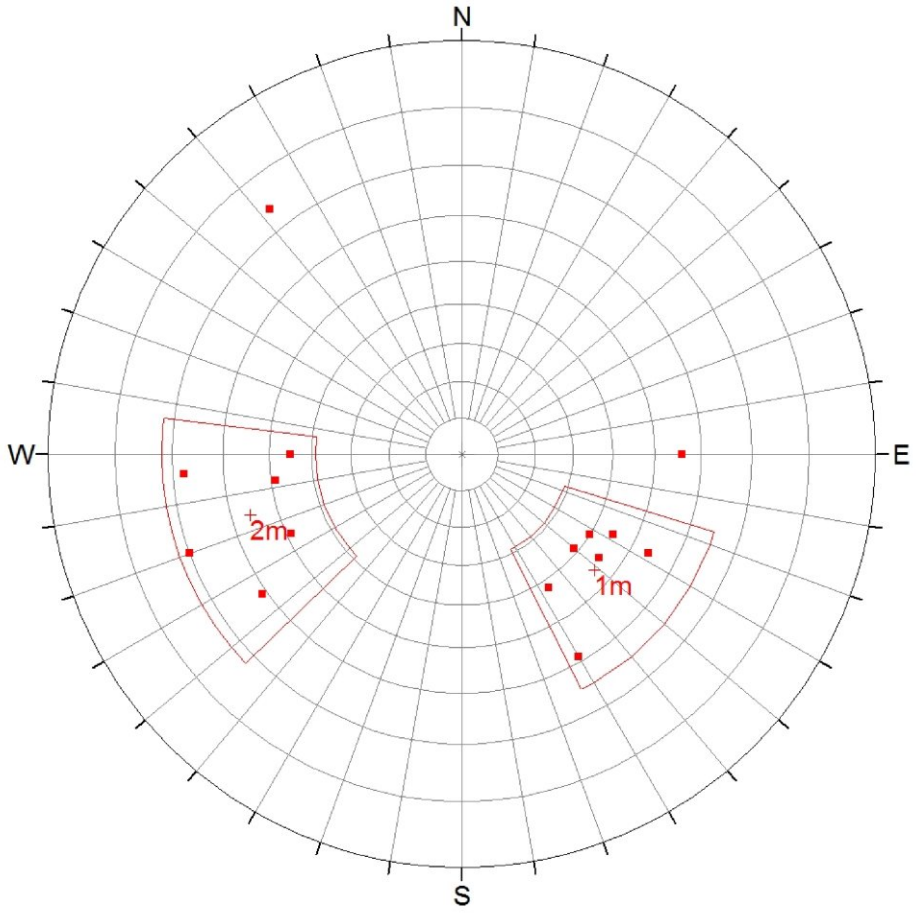
Disclaimer: This figure has been produced for internal review only and may contain inconsistencies or omissions. It is not intended for publication.



Poles

Equal Angle
Lower Hemisphere
15 Poles
15 Entries

Source:
Diagram from Coffey.

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File Name: 217320_01_F002_GIS

Rigby Bros Quarry
Geological Risk Assessment

Recorded Defect Orientations (AMG)

Figure No: 2
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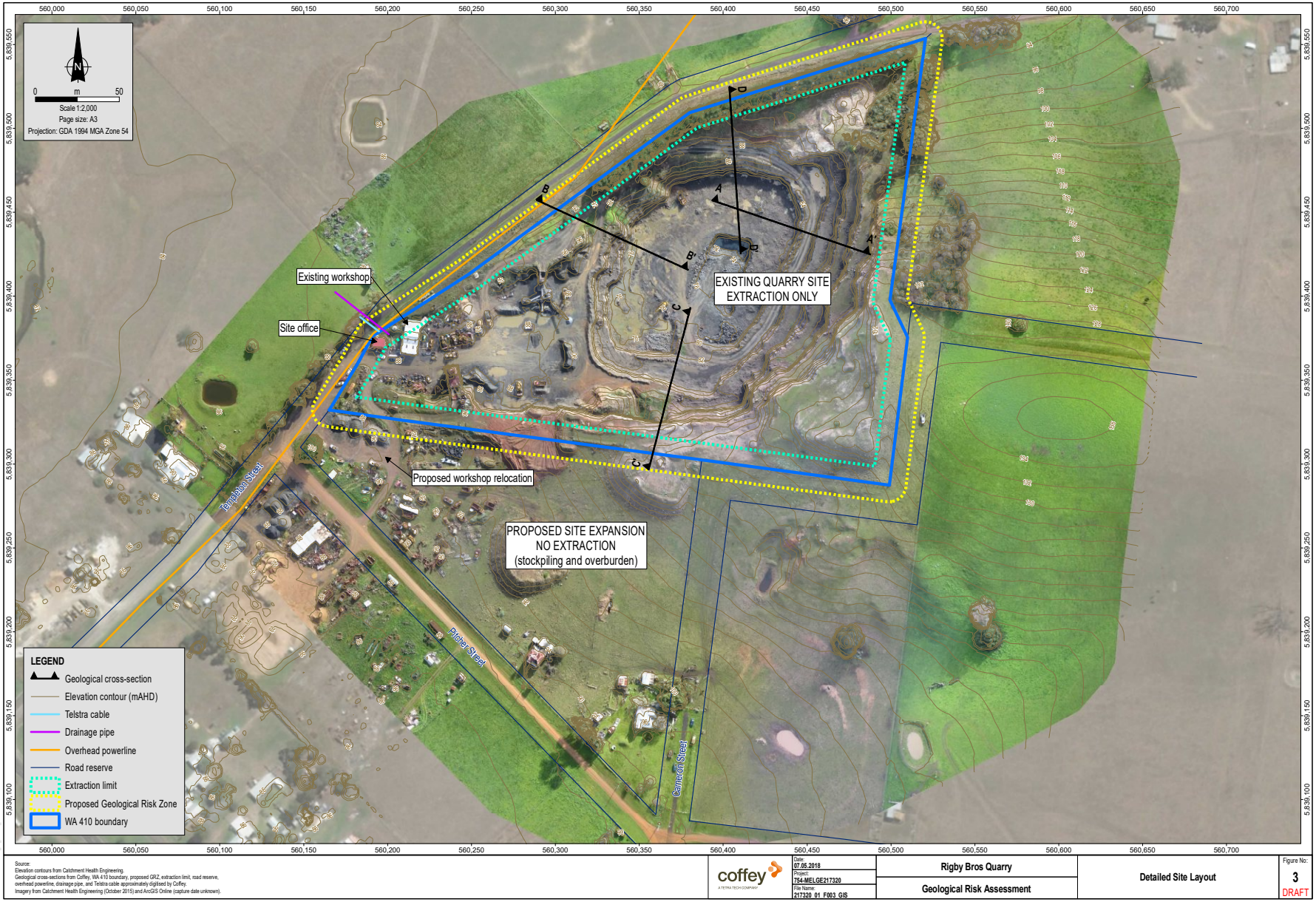
N
0 m 50
Scale 1:2,000
Page size: A3
Projection: GDA 1994 MGA Zone 54
Existing workshop
Site office
Proposed workshop relocation
EXISTING QUARRY SITE
EXTRACTION ONLY
PROPOSED SITE EXPANSION
NO EXTRACTION
(stockpiling and overburden)
Bingabon Street
Pitcher Street
Carmeron Street
LEGEND
Geological cross-section
Elevation contour (mAHD)
Telstra cable
Drainage pipe
Overhead powerline
Road reserve
Extraction limit
Proposed Geological Risk Zone
WA 410 boundary
Source:
Elevation contours from Catchment Health Engineering.
Geological cross-sections from Coffey. WA 410 boundary, proposed GRZ, extraction limit, road reserve, overhead powerline, drainage pipe, and Telstra cable approximately digitised by Coffey.
Imagery from Catchment Health Engineering (October 2015) and ArcGIS Online (capture date unknown).
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Date: 07.05.2018
Project: 754-MELGE217320
File Name: 217320_01_F003_GIS
Rigby Bros Quarry
Geological Risk Assessment
Detailed Site Layout
Figure No: 3
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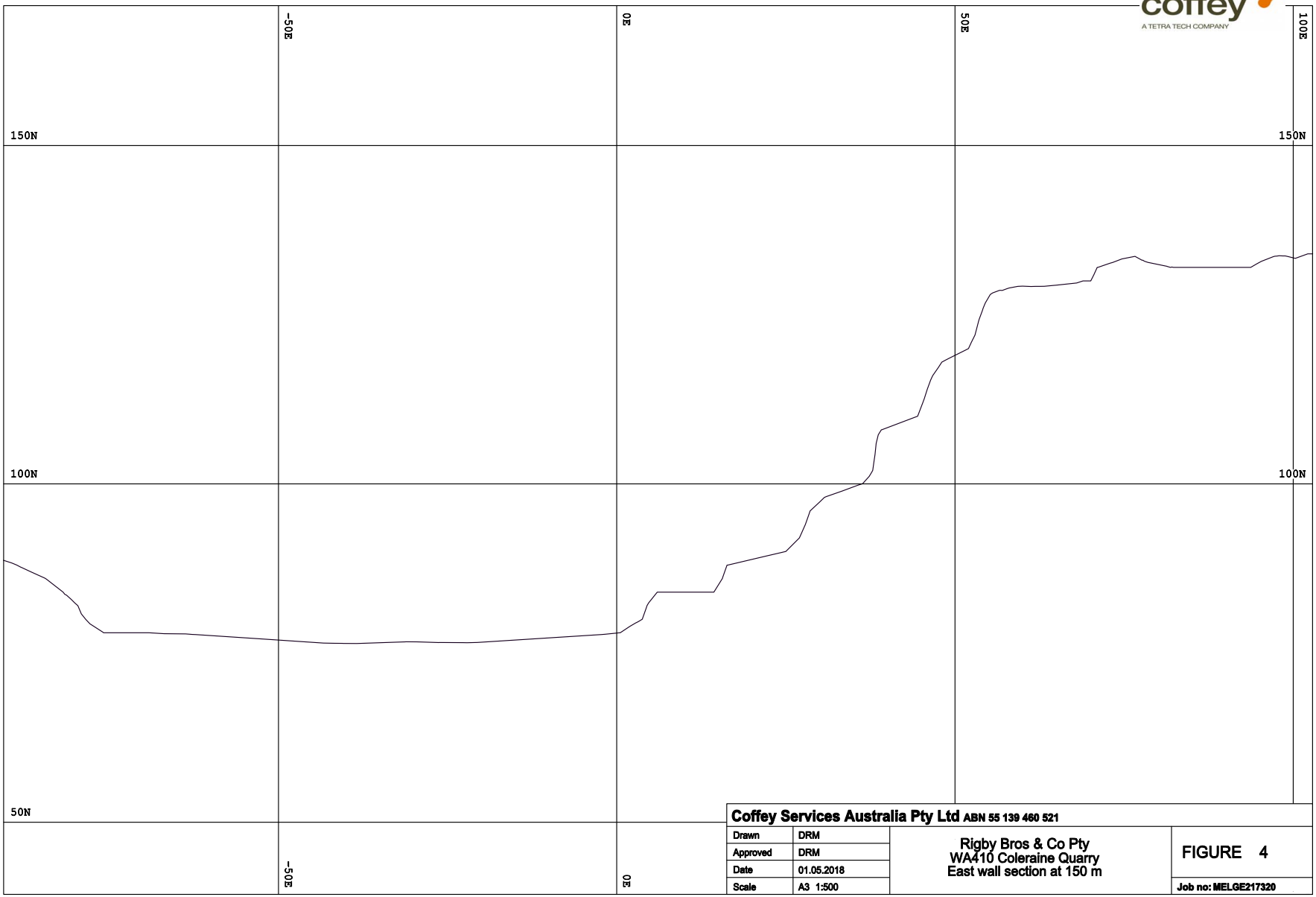
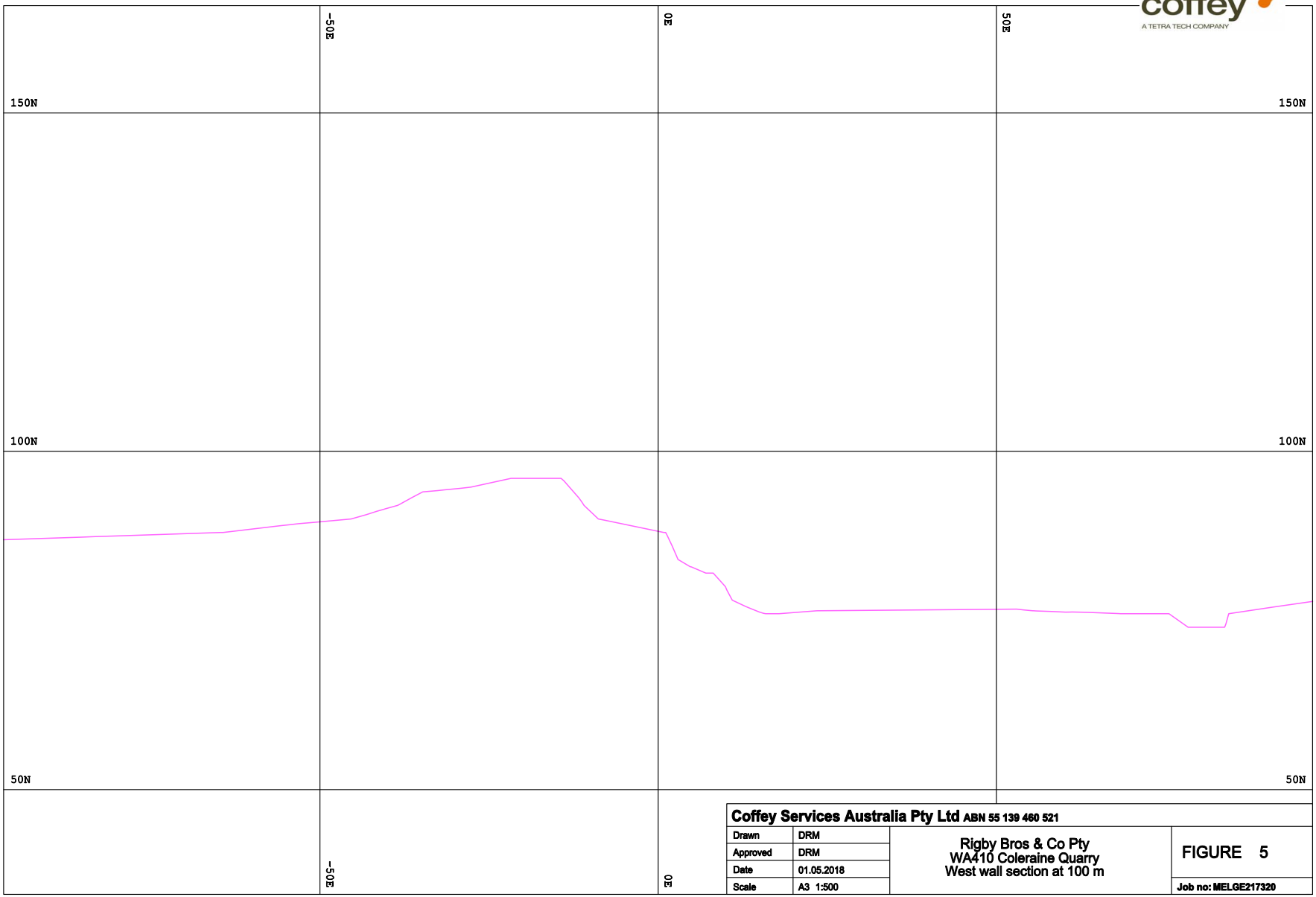
Disclaimer: This figure has been produced for internal review only and may contain inconsistencies or omissions. It is not intended for publication.



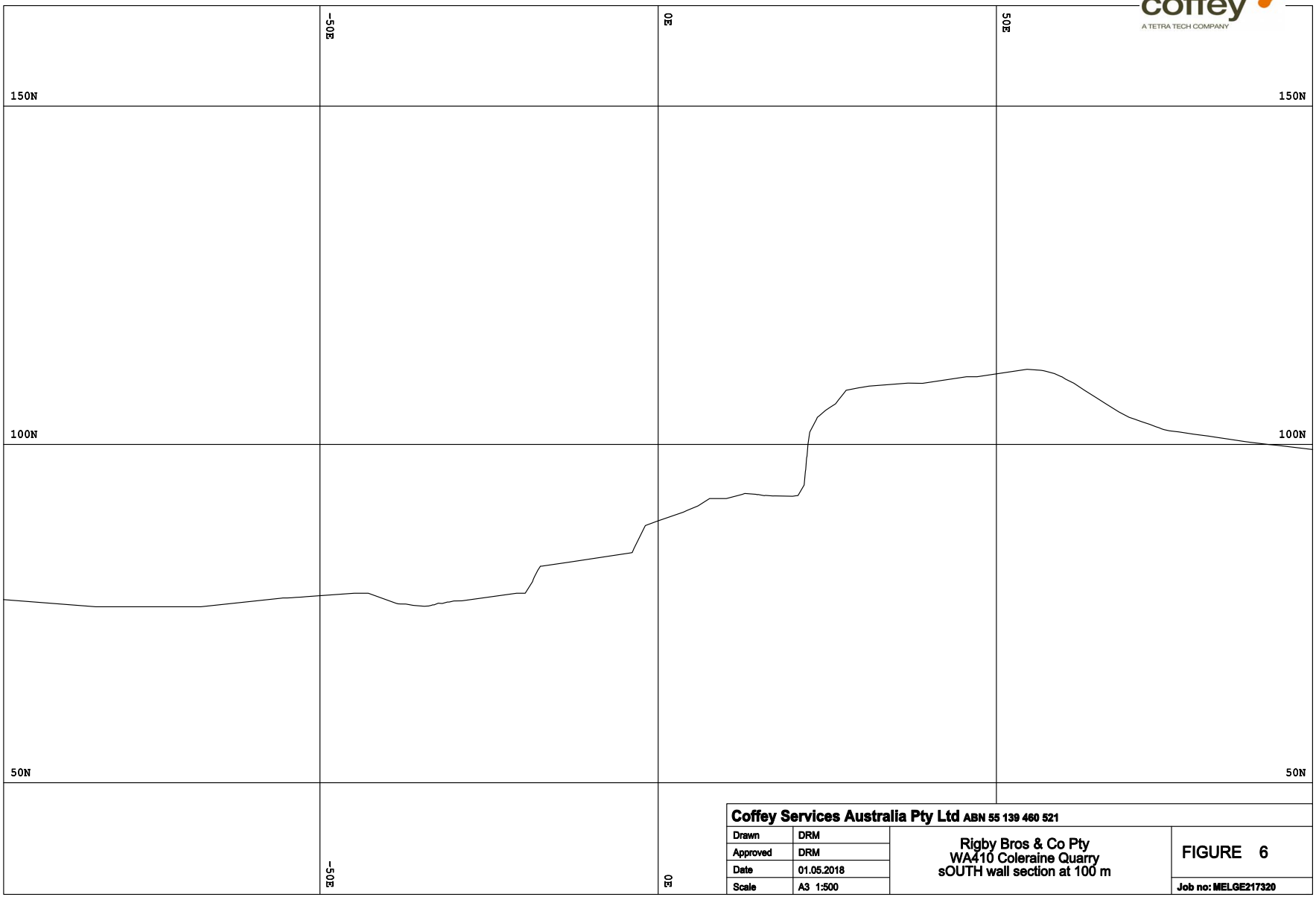
east_wall_xsn_str_01

SURPAC - Coffey Services Australia



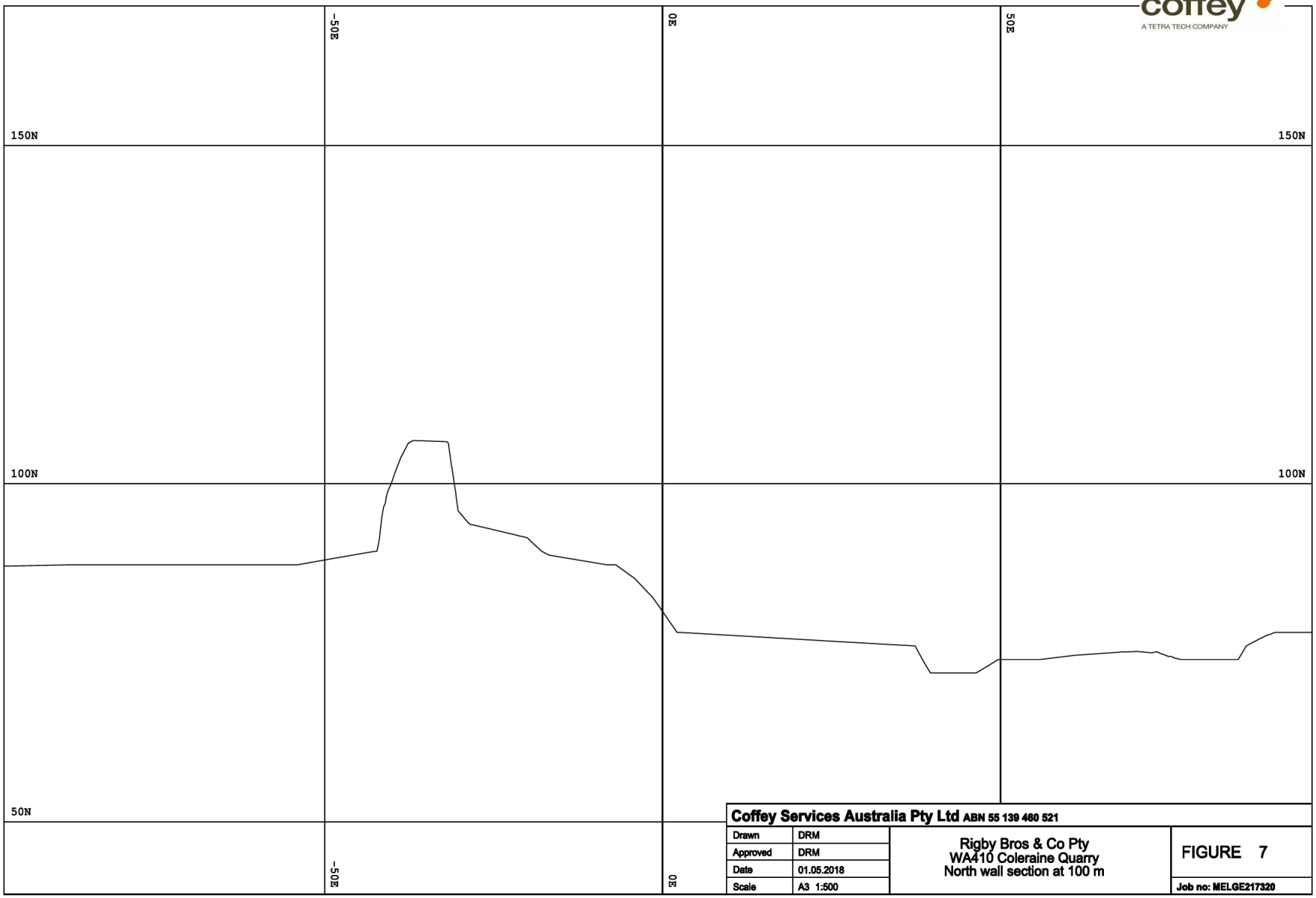
west_wall_xsn_str

SURPAC - Coffey Services Australia



south_wall_xsn_str

SURPAC - Coffey Services Australia



north_wall_xsn_str

SURPAC - Coffey Services Australia

Source:
Photo from Coffey.

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Project: 754-MELGE217320
File Name: 217320_01_F008_GIS

Rigby Bros Quarry
Geological Risk Assessment

East Wall Defects

Figure No.: 8
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File Name: 217320_01_F009_GIS

Rigby Bros Quarry
Geological Risk Assessment

West Wall Defects

Figure No.: 9
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Date: 07.05.2018
Project: 754-MELGE217320
File Name: 217320_01_F010_GIS

Rigby Bros Quarry
Geological Risk Assessment

North Wall Defects

Figure No.: 10
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Date: 07.05.2018
Project: 754-MELGE217320
File Name: 217320_01_F011_GIS

Rigby Bros Quarry
Geological Risk Assessment

South Wall Defects

Figure No.: 11
DRAFT

Appendix A - Risk Assessment Risk Assessment Guideline

The following classification of geotechnical risk has been adopted by Rigby Bros & Co Pty Ltd.

Likelihood

Likelihood (Probability)		
Level	**Description**	**Probability of occurrence (expected to occur)**
Almost certain	Will occur in most circumstances when the activity is undertaken. Knowledge/evidence at site suggests this event/risk occurs almost all the time.	>50%
Likely	Will probably occur in most circumstances when the activity is undertaken. Knowledge/evidence at site suggest this event occurs at regular intervals.	10 – 50%
Possible	Might occur when the activity is undertaken. Occurs on an irregular basis but frequently enough to be more that a remote possibility.	1 – 10%
Unlikely	Could happen at some time when the activity is undertaken. Aware that the event has occurred in the past.	1%
Rare	May happen only in exceptional circumstances when the activity is undertaken. The event/risk is not known to have occurred at the site.	<1%

Consequence

Consequences Types	
Severity Level	**Description**
Severe	Maximum risk exceeds $1M. Business interruption causes problems to external customers that lasts between 1 and 2 weeks. Civil prosecution. Incident could result in revocation of licence/permits, large fines and/or jail penalties. Significant medium-term impact important environmental/habitat and/or widespread local community complaints. Injury or illness that results in a fatality or permanently impairs more than 1 pe4rson's life. No return to work. Serious harm to a member of the public or injury to members of the public. Members of the public required to be displaced for extended periods of time (days). Ongoing serious social or health impacts
Major	Maximum risk between $500k and $1M. Business interruption causes problems to external customers that lasts up to 5 days. Systematic small to medium breaches or 1 large breach of regulations. Breach of regulatory requirements with lily action by regulatory authorities resulting in enforceable undertakings notice and/or financial penalties. Moderate. Short or long term environmental impact that extends beyond site

Consequences Types	
Severity Level	**Description**
	boundaries and/or may result in local community complaints. Illness or injury permanently impairs a person's life. Return to work with rehabilitation and alternate role. Injury to member of the public requiring medical attention. Members of the public required to take temporary shelter for a brief period.
Moderate	Maximum risk $50k to $500K. Business interruption causes problems to external customers that lasts up to 1 day. Multiple regulatory breaches. Regulator may express concern. Possible breach requires notification to regulator. Small scale and short term environmental impact to localised are of low environmental value. No/minor interest by local community. Injury or illness that temporarily impairs a person's life. Return to work with rehabilitation to same role. Nuisance event to public safety (no medical attention). Minor social or health impacts to local population.
Minor	Maximum risk $50k. Minor business disruption. Minor regulatory breach Temporary delay in business operations. Issue resolved in day to day management. Negligible and short term environmental impact. N interest by local community. Injury or illness that may require medical treatment or first aid resulting in no lost time. No impact on public safety offsite.
Insignificant	No business disruption. No regulatory breach. Issue resolved in a day to day operation. No environmental impact. First aid treatment, minor injury, no time off work

Risk Matrix

		Consequence				
		Insignificant	**Minor**	**Moderate**	**Major**	**Severe**
Likelihood	**Almost certain**	Medium	High	High	Extreme	Extreme
	Likely	Medium	Medium	High	Extreme	Extreme
	Possible	Low	Medium	Medium	High	Extreme
	Unlikely	Low	Low	Medium	High	High
	Rare	Low	Low	Low	Medium	High

Management Actions

Risk Rating Priority for Action			
Risk Level	**Acceptance guide**	**Action**	**Recommended action time frame**
Extreme	Not acceptable	Cease or isolate source of risk	Immediate
		Implement further risk controls	Up to 1 month
		Monitor, review and document controls	Ongoing
High	Generally (in most circumstances) not acceptable	Implement risk controls if reasonably practicable	1 to 3 months
		Monitor, review and document controls	Ongoing
Medium	Generally (in most circumstances) acceptable	Implement risk controls if reasonably practicable	3 to 6 months
		Monitor review and document controls	Ongoing
Low	Acceptable	Monitor and review	Ongoing

Appendix D Coffey (2020) Geotechnical Assessment – East Wall Remediation

Level 1, 436 Johnston Street
Abbotsford
Vic 3067 Australia

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f: +61 3 9290 7499
coffey.com

28 August 2020

Our ref: 754-MELGE272003AB

Rigby Bros & Co Pty Ltd
26 Templeton St
Coleraine,
VIC, 3315

Attention: Mr Jason Rigby

Dear Jason,

754-MELGE272003 - Rigby Bros Quarry East Wall Remediation

1. Introduction

Rigby Bros & Co Pty Ltd (Rigby Bros) operate a quarry on Templeton Street, Coleraine, Victoria on the eastern edge of Coleraine in western Victoria. The Work Authority is bounded by Templeton Street to the west, and Cameron Street (undeveloped) to the south east.

Coffey Services Australia Pty Ltd (Coffey) has been commissioned by Rigby Bros to undertake a site visit and analysis of the eastern wall of the quarry pit, in order to provide advice and recommendations on remediation of the wall.

WorkSafe Victoria inspected the quarry on 21 January 2020. The Entry Report (reference number V0004840542L) and Improvement Notice (reference number V00048404542L/111-01) raised several points concerning the eastern wall which required action, namely:

- Observed the current working bench width was 10 – 12m with batter face of 10 – 13m height. The eastern wall in that area is 62m high
- Observed blocky rock mass conditions on the eastern wall due to intersecting joints with potential for rock blocks to dislodge from the faces, posing a rock fall risk to personnel working below
- Observed a section of wall lacked rock fall protection benches immediately above the active work area
- Observed that benches above the active work are lacked crest and toe bunding and that, in places, rill lay along the toe of batters. Employees require access to the batters to extract rock.
- Observed loose rock on benches above the active work area
- Observed areas of minor crest overhang
- Concluded that a safe system of work incorporating batter design and construction for the active eastern part of the quarry has not been provided.

- Directed that a safe system of work associated with the eastern batter be provided and noted a Ground Control Management Plan (GCMP) incorporating minimum safe batter/berm configuration, inspection requirements, a geotechnical risk and control register, set back distance for parking up mobile plant within the pit area, and specific risk mitigation measures for the eastern batters.
- Directed that bunding be installed to close access to the eastern batter and that an alternative access route be provided via the north side of the quarry if extraction from the current bench was to continue.

As a result of WorkSafe's findings, all work under the eastern wall has been suspended until the wall can be remediated to the satisfaction of WorkSafe.

Coffey Associate Engineering Geologist Mick Morrongiello conducted site visits on 25 January and 20 March 2020. Geotechnical Engineer Rachel Duyvestyn also attended site on 20 March 2020. During the site visits, the east wall was inspected and data was collected for the analyses detailed in this report.

A Ground Control Management Plan (GCMP) is being prepared and will be submitted separately.

2. Site Description

Work Authority 410 (WA410) is located on the north-western side of Coleraine and is bounded by Templeton Street to the northwest and the undeveloped northern extension of Cameron Street to the southeast. Figure 1 shows the most recent aerial photograph from Google Earth and Figure 2 shows the topographic map and cadastral data for the site, including the pre-quarry contours.

The WA410 pit has been excavated into a west facing slope above the Konong Wootong Creek and is currently approximately 193m long (NE-SW) by 157m wide (NW-SE). The higher, eastern wall (Figure 3) is approximately 60m high at the highest point. The crest of the eastern wall is currently approximately ten metres from the Work Authority boundary at its closest point.

3. Site history and Work Authority

The Rigby Bros quarry at Coleraine has been in continuous operation since 1947 (over 70 years) and was acquired by Rigby Bros & Co Pty Ltd in 1969.

The current quarry operations are covered under WA410, with revised conditions issued on April 1996 for the periodic renewal of E.I. Licence 393-3. Those conditions direct that the quarry was:

> *"to be operated in accordance with the Approved Working proposal, being the Revised Working Plan dated 18-8-1970."*

The plan shows the workings as at 14 August 1970. The plan is the second of two plans, the first of which is not available and presumably a location plan. There is no approved rehabilitation plan.

3.1. Extraction method and processing

The quarry extracts stone using blasting, typically on 6m- or 12m-high benches, with 76mm diameter production holes drilled on a staggered 2.4m x 2.4m pattern. Broken stone from each blast is loaded via excavator and trucked to an on-site crusher and grader located on the western wall. Crushed stone is stockpiled in an area immediately south of the crusher. A loader is used to rehandle material between stockpiles and to load crushed stone into road trucks which exit the site at the quarry gate located in the southwest corner of the Work Authority area.

Figure 1: Rigby Bros quarry site with WA410 boundary in yellow (Google Earth imagery dated 30 August 2019)

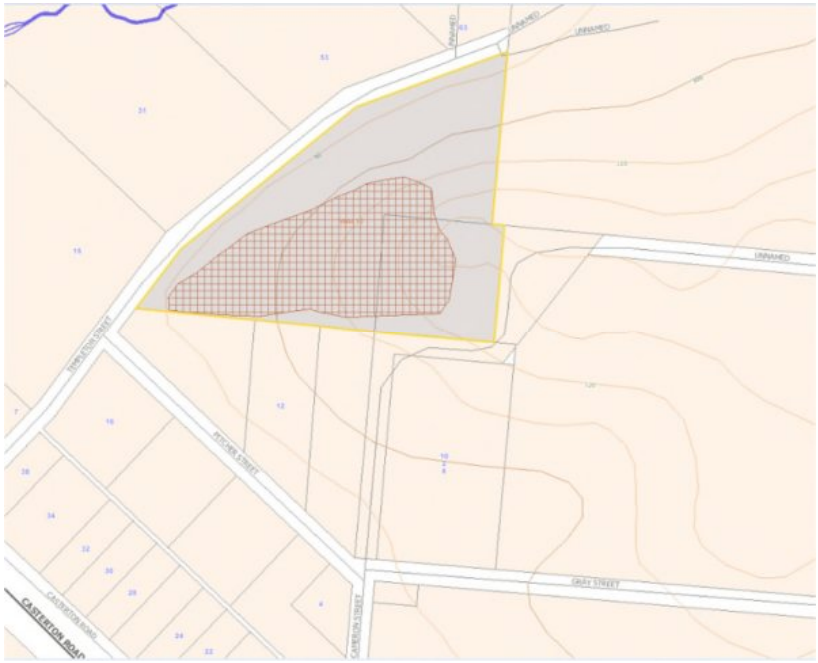

Figure 2: Topographic map and cadastral data for WA410 (source Geovic). WA410 shown shaded with yellow outline and approximate quarry extents hatched. Pre-quarry contours shown with 10m intervals. Property parcels shown in grey.

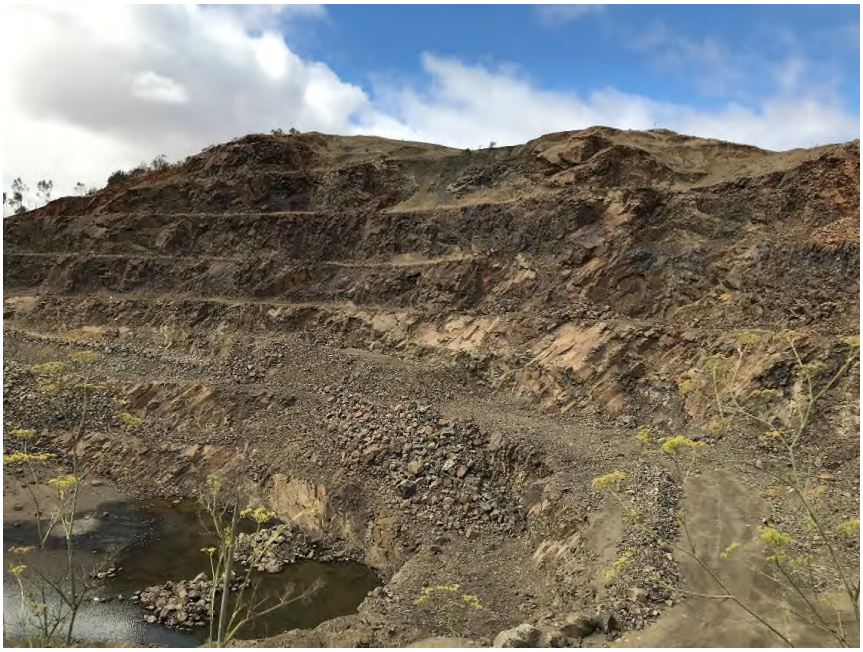

Figure 3: Eastern wall of WA410 quarry (20 March 2020, looking northeast)

4. Geology

4.1. Regional geology

An extract of the Geological Survey of Victoria map of the area is included in Figure 4.

Regionally, the quarry is located within the Jurassic Den Hill Formation comprising volcanic domes and laccoliths of trachyte, phonolite and microsyenite.

Surrounding the site is Quaternary aged alluvium to the north and Carboniferous to Permian Bacchus Marsh Formation. The Bacchus Marsh Formation comprises glacial deposits.

The Den Hill Formation intruded through the Bacchus Marsh formation and underlying bedrock.

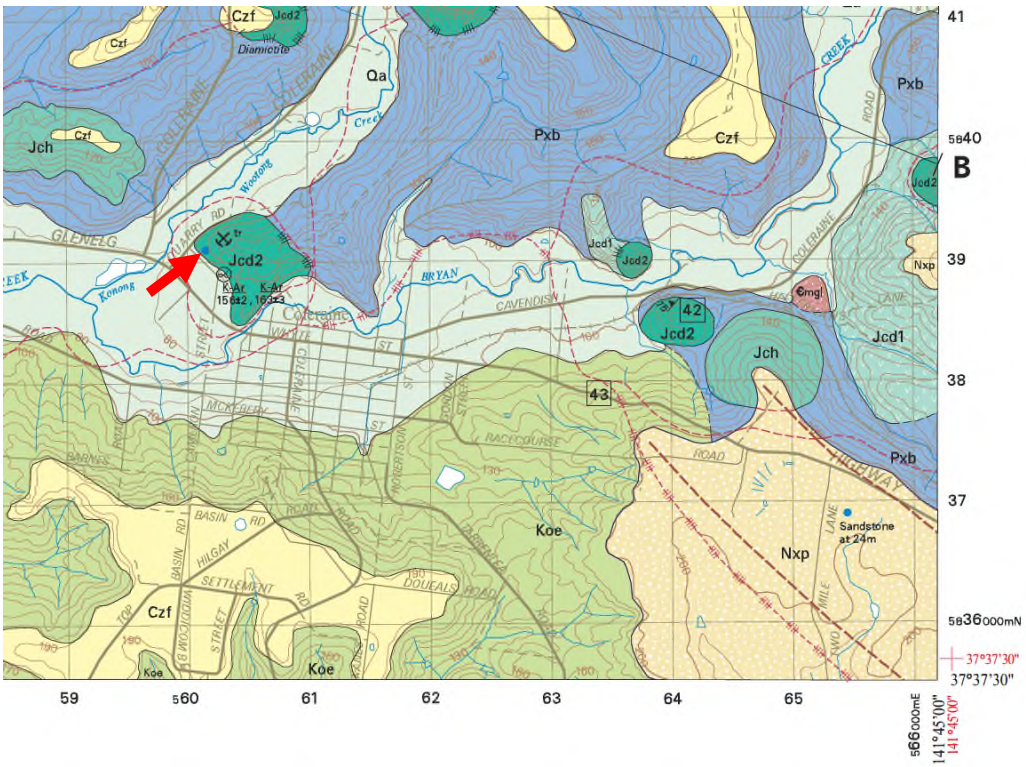

Figure 4: Extract of Nareen and part of Coleraine 1:50,000 geological map (Geological Survey of Victoria 2003) with Rigby Bros quarry marked by red arrow. Legend: Qa – Recent alluvial flood plain; Czf – Eluvial; Nxp – Parilla Sand; Koe – Eumerella Formation; Jcd2 – Den Hills Formation domes and laccoliths; Jcd2 – Den Hills Formation lava flows; Jch – Hypatia Formation; Pxb –Bacchus Marsh Formation. Grid spacing is 1000m.

4.2. Site geology

There are two principal lithologies at the site: the trachyte, the target of the quarry operation, and the sediments.

The trachyte ranges from moderately weathered to fresh. The moderately weathered trachyte, locally referred to as ‘Salamander’, has red-brown staining and extends to a depth of approximately ten metres from the top of the eastern wall, and seven metres (one bench height) on the western and southern walls. The slightly weathered to fresh trachyte is pale grey in colour and extends to the current pit floor.

No laboratory testing has been completed by Coffey on rock samples. Field assessment and observations have been used to assign a rock strength of Very High Strength to the trachyte in both moderately and slightly weathered to fresh weathering grades. Published data for similar rock types (fresh basalt) suggest a range for Unconfined Compressive Strength (UCS) of 100 to 250 MPa.

Based on geological maps of the area, the sediments are likely to be Bacchus Marsh Formation. The material has completely weathered to clay and, where exposed in the upper part of the eastern wall, has been locally ‘baked’ by contact with the trachyte during intrusion. No laboratory tests have been performed on the clay but, based on field assessments, away from the trachyte margin, the clay is estimated to be high plasticity.

4.3. Groundwater

A groundwater bore (GS01) was drilled in March 1983 approximately 40 m south of the site. It was reported that this bore encountered trachyte to the end of the hole at 70 metres depth and no significant groundwater was encountered.

Coffey personnel observed minor groundwater seepage on the northern side of the lowest batter of the pit over approximately ten metres of wall length (see Figure 5). The inflow was not considered significant.

At the time of inspecting the site, water was standing in the bottom of the pit. Coffey are advised that this is mostly run off and we note that between the two site visits in 2020, water levels increased, consistent with seasonal rainfall patterns. The depth of the pool was not measured but is estimated to be in the order of 0.5-1.0m deep.

Figure 5: WA410 quarry looking northwards from southern pit crest (20 March 2020). Minor seepage in lower northern batter showing as a dark patch.

5. Excavation Stability

5.1. Historical Stability Experience

Currently there are more than 1200 metres of exposed batter length. Historical images show that the top four benches on the east wall have been in place since before 2005 (the oldest aerial image available of adequate resolution) and, anecdotally, since 1985. There have been no reports of significant failure in these benches in this period.

In 2018, as part of preparing a work plan variation for WA410 (our ref 754-MELGE217320), Coffey undertook a brief site inspection of the 10-metre-wide buffer zones beyond the crest line. No signs of surface cracking that might indicate substantial slope movement were observed.

Figure 6 shows the pit on 20 March 2020. Most of the excavation (walls facing west, south, east and north) appears to be stable with only localised loss of berm crests inferred to be due to a combination of blasting, excavation (including scaling of loose material) and defect orientation. Batter faces have not been presplit and this has likely contributed to their very blocky appearance. No instances of full height batter failure were observed on the walls facing west, south, east and north or were noted from discussions with Rigby Bros.

There are relatively minor deposits of loose rock on the berms with overspill from ramp windrows the likely source of the rill piles on the lower berm at the northern end of the eastern wall. Fly rock is likely to have contributed a significant proportion of the visible rocks lying on the berms.

The southern end of the eastern wall, facing northeast (towards 320°) exhibits increased crest loss and wedge formation (Figure 7). This coincides with a prominent joint set daylighting and dipping with an orientation that allows kinematically feasible planar wedges to occur. Immediately above the ramp in this area, scaling of loose crest material in January 2020 resulted in significant crest loss when damaged rock reportedly broke back readily to pitward dipping joints, reducing the RL 89 berm width from 6.0 – 7.5 m to approximately 3.5 m.

This portion of the wall also lies closest to the margin of the trachyte and the contact with the surrounding sediments can be seen approximately in line with the crest of the RL 122 bench (Figure 8).

The southern end of the eastern wall corresponds with the area of concern to WorkSafe. Stability analyses of the southern portion of the eastern wall have been undertaken and are outlined below.

Figure 6: Panoramic photo taken from southwestern crest (20 March 2020)

Figure 7: Southern end of the east wall, looking northeast across the area closed at the direction of WorkSafe. Note the prominant joints dipping northeast (to left) that form the back scarp of crest loss zones.

Figure 8: Eastern wall looking northeast from surface level. Grey-brown grassed area corresponds to sediments.

5.2. Observations of stability

Coffey visited the site on 25 January and 20 March 2020 to assess the existing slope and collect the data required for the analyses. Joint sets were identified, and defect orientation measurements were taken (see Section 5.3).

The southern portion of the eastern wall, above the area closed by WorkSafe, was inspected for signs of instability.

No evidence of deep-seated cracking or slumping was observed. The drainage pattern was consistent with the profile of the surface and no evidence of pooling or localised high infiltration was observed.

Along the upper rock batter between RL 122 and RL110, five localised areas of instability were observed. These are illustrated in Figure 9 and Figure 10 and are described below:

Area A - Block resting on a structure oriented approximately 38 / 325 (dip / dip direction) daylighting through the batter facing approximately 70 / 310. Rear of wedge defined by trachyte-sediment contact dipping 70 / 120. Block appears intact and site personnel report it has been in place since the slope was excavated (>10 years).Figure 11 and Figure 12 further illustrate this block. The block is visible in photographs from a site visit in April 2018.

Areas B and C – Batter faces respectively north and south of A that exhibit signs of unravelling. Previous rockfall was evident at C with blocks sizing to approximately 0.5m caught on the berm below at RL109.5. No berm remains below B and it is likely that the material built up on the next berm below came from B. Jointing in the area dips steeply back into the face, suggesting toppling type mechanism may exist.

Area D – Localised crest cracking on RL 122 crest and RL 110 crest (not shown). Unable to inspect closely but appear to be due to a combination of defects and run off.

Area E – Batter face exhibiting signs of unravelling with large (length >2m) blocks caught on the RL 110 berm. The blocks show parting has occurred on a joint. The contact between trachyte and sediments lies close behind this face and may be a contributing factor. South of this, eroded sediment material has built up on the RL 110 berms and no catch capacity is available.

Areas A to D lie on a protruding part of the crest and this slope profile has likely contributed to the instability observed through reduced lateral restraint.

Figure 9: Localised instability in the upper part of the south-eastern wall.

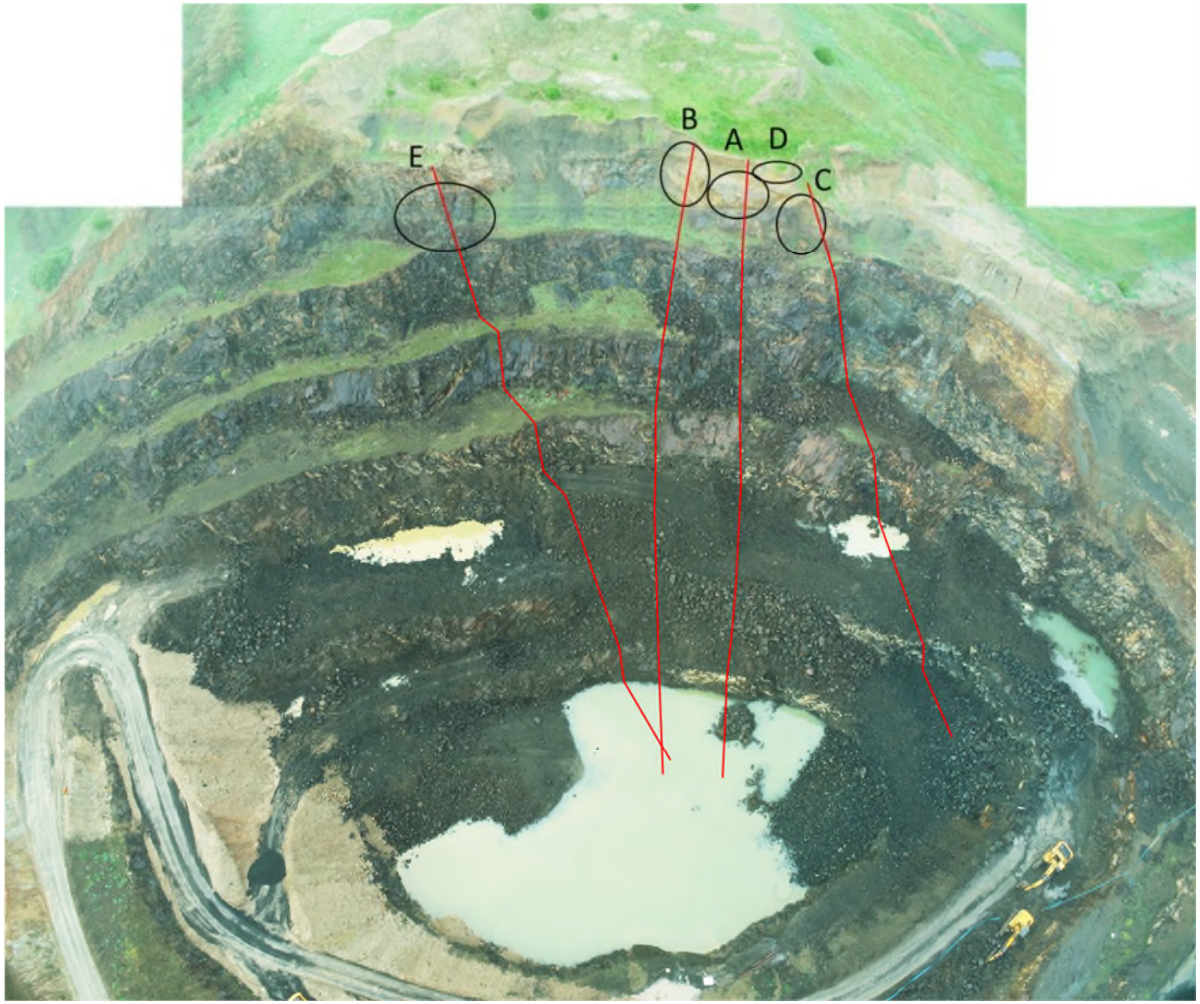

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Figure 10: Areas of instability and rock fall analysis section lines (Rigby Bros supplied drone imagery dated 24 June 2020).

Figure 11: Large block on crest at Zone A, 20 March 2020, looking northeast.

Figure 12: Large block on crest at Zone A, 25 January 2020, looking north

5.3. Geotechnical Data

5.3.1. Defect sets

Defects have been mapped during site visits in 2018 and 2020. Mapping was undertaken using a geological compass, and due to access restrictions and Coffey's Safe Work Method Statement requirements, measurements were taken away from the defect faces by sighting. The mapped sets are summarised in Table 1 and a stereonet of all the data is shown in Figure 13. The data set exhibits a bias towards Set 1, reflecting attempts to mitigate the risk of errors from sighting defects by taking additional readings.

Table 1: Mapped sets. Note: values in square brackets are the minimum and maximum angles.

Set	Defect type	Dip	Dip direction	Trace length	Spacing	Condition	Walls
J1	Joint	43 [35-60]	318 [298-340]	8.0m	1.5 – 2.0m	Clean / oxide coating, rough, planar	East & southeast
J2	Joint	59 [45-70]	072 [052-090]	8.0m	1.0m	Clean / oxide coating, rough, undulating	East & west
J3	Joint	64 [56-74]	256 [238-270]	1.0m	1.5 – 2.0m	Clean / oxide coating, rough, undulating	East & northeast
CN	Contact	70	120	10+m	2.0m	Metamorphosed clay up to 0.5m. Trachyte margin rough, undulating	Southeast

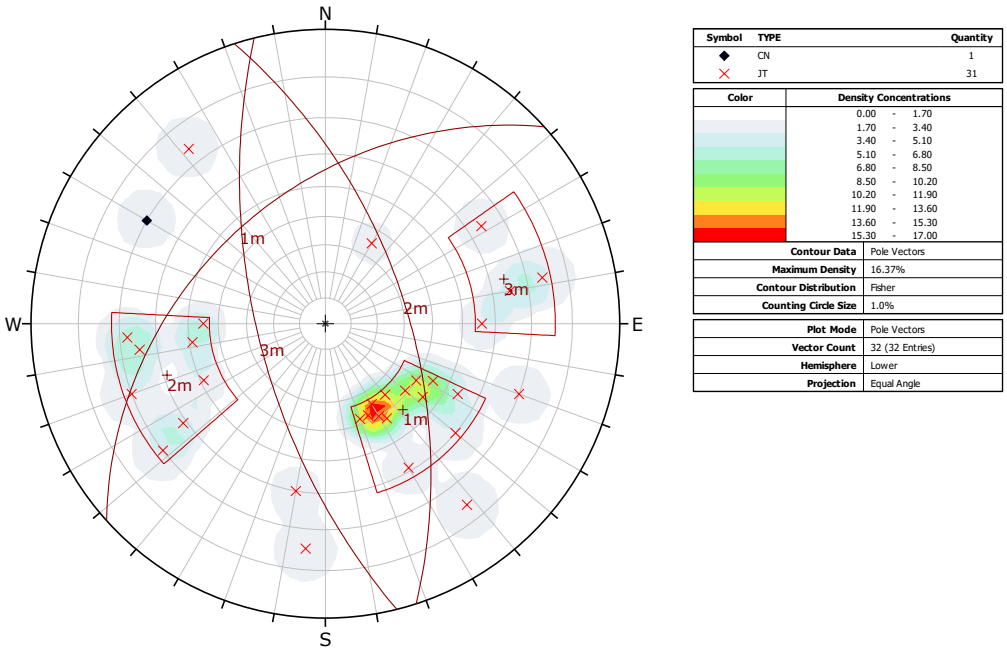


Figure 13: Mapped defects from 2018 and 2020 site visits (all walls)

5.3.2. Tilt test

Tilt tests were performed on clean pieces of trachyte with rough planar faces (JRC = 3). Pieces were selected at random and were not tightly fitting. Five tests were performed and the average angle of tilting to cause slippage was 40°.

5.3.3. Geological Strength Index

The exposed slightly weathered to fresh faces were classed as Very Blocky and the observed joint conditions were classed as Good, implying a Geological Strength Index (GSI) of 50 – 60 in these rocks.

In the moderately weathered salamander, joint conditions were classed as Fair and a lower GSI of 45 – 50 is appropriate.

6. Analysis of slope stability

6.1. Acceptence criteria

The acceptance criteria for Factor of Safety (FoS) adopted for the stability analyses are shown in Table 2:

Table 2: Adopted acceptance criteria (after Read & Stacey 2009)

Scale	Minimum Factor of Safety
Batter	1.2
Multiple batter	1.3

6.2. Bulk density

No site-specific bulk density measurements were available. Bulk density has been estimated as 2.60 t/m^3 based on data published in the Field Geologists Manual (2001).

6.3. Preliminary estimate of joint shear strength

The friction angle and cohesion of the mapped joints has been estimated based on field observations and published data for similar rock types. This range of preliminary estimates is shown in Table 3.

6.4. Back analysis of Area A block

A back analysis of the stability of the block in Area A (see Section 5.2) has been undertaken using Rocscience RocPlane. The batter is 12m high with face angle of 75°. The assumed failure mechanism is planar failure on a J1 joint and back release on the trachyte – sediment contact. The joint and contact are assumed to dip orthogonally to the batter. The joint is terminated against the contact and daylights approximately 3m above the toe of the batter. The model is shown schematically in Figure 14.

As the block has remained in place at least two years, a target FoS of 1.0 has been used.

Joint waviness has been run at 8° (average – minimum dip) and 4° (half value).

The sensitivity of the calculated FoS to the input parameters has been explored by running the model with a range of input values. Results of the back analysis are shown in Table 4.

Table 3: Preliminary estimates of joint shear strength

Parameter	Estimated value (degrees)	Source / assumptions
Peak friction angle **ϕj**	37 – 56 degrees	Barton's approximation tan ϕj ≈ Jr / Ja with Jr = 1.5, Ja = 1.0 – 2.0
Residual friction angle **ϕr**	>24 degrees	Barton Bandis failure criterion using tilt test data. Expected to be a lower bound estimate as surfaces were not tightly fitting.
	40 - 42 degrees	Read & Stacey (2009) for basalt
Basic friction angle **ϕb**	35 – 38 degrees	Read & Stacey (2009) for basalt
Cohesion	0 kPa	Clean / hard infill and exposure to blasting and unloading.

Figure 14: Schematic model of Area A block

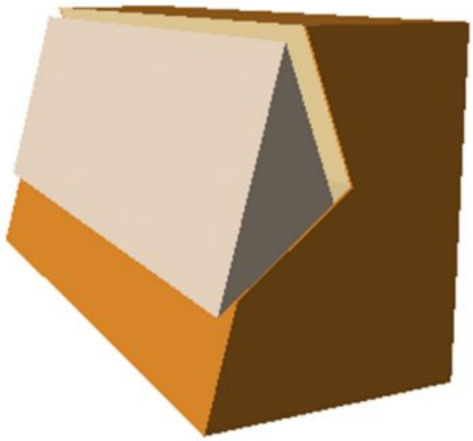


Table 4: Back analysed factors of safety for Area A block.

Joint dip	Joint waviness	Joint friction angle (zero cohesion assumed)						
		30°	32.7	35°	38.5	40°	45°	50°
38	8°	0.92	1.00	1.08	1.20	1.25	1.46	1.70
	4°	0.82	-	0.99	1.11	1.16	1.37	1.62
43	8°	0.77	-	0.90	1.00	1.05	1.22	1.43
	4°	0.69	-	0.83	0.93	0.98	1.15	1.35

6.5. Adopted joint shear strength

For the measured joint dip at Area A, adopting a joint shear strength of at least friction angle 35° and cohesion 0 kPa fits the target FoS.

The modelled behaviour with joint dip of 43° is similar to the case of the batter above the ramp where the planar wedge failed during scaling, suggestive of a FoS close to 1.00. The joint shear strength of friction angle 38° and cohesion 0 kPa meets this criterion.

On the basis of the back analysis and considering the observed slope behaviour at Area A and above the ramp, a joint shear strength of friction angle 38° and cohesion 0 kPa is adopted.

The adopted joint shear strength implies the block at Area A has a factor of safety likely greater than 1.0.

6.6. Kinematic analysis

6.6.1. Potential mechanisms

Using Rocscience Dips, the potential for structurally controlled batter failures at the southern end of east wall has been assessed and is summarised in Table 5 and the stereonets illustrating the kinematic analyses are included in Appendix A.

The principal kinematically feasible mechanism is planar wedge on Joint Set 1. Wedges formed between Joint Set 1 and either of Joint Sets 2 or 3 are kinematically feasible and are likely to slide on Joint Set 1, with the steeper structures providing release surfaces. Wedges between Joint sets 2 and 3 are kinematically feasible but are considered less likely as Joint Set 2 is more prevalent on the western wall than in the southern end of the eastern wall. Toppling is assessed as unlikely away from the contact due to lower frequency of structures dipping steeply back into the batters in the southern end of the eastern wall.

Table 5: Potential for structurally controlled failure of a batter facing 75 / 320 as at southern end of east wall.

Mecha-nism	Sets	Commentary
Planar Wedge	Joint Set 1	Joint Set 1 is observed to control crest loss and wedge formation within the area.
Sliding Wedge	Joint Sets 1 and 2	Intersections between Joint Sets 1 and 2 have the potential to form wedges but are relatively uncommon in the southern end of the eastern wall as Joint Set 2 appears to be more prevalent on the western wall. This wedge combination results in sliding on Joint Set 1 and so, in effect, Join Set 2 represents a release structure to facilitate planar failure on Joint Set 1.
	Joint Sets 1 and 3	Intersections between Joint Sets 1 and 3 are relatively common in the southern end of the eastern wall. This wedge combination results in sliding on Joint Set 1 and so, in effect, Join Set 3 represents a release structure to facilitate planar failure on Joint Set 1.
	Joint Set 2 and 3 + Random	Where they occur, intersections between these sets have the potential to form wedges. Joint Set 2 appears to be more prevalent on the western wall and so the risk of this wedge forming in the batters facing 75 / 320 is lower.
Flexural Toppling	Contact Random from west wall	Unlikely away from the contact as the critical defect orientations are not widespread within the batters facing 75 / 320

7. Proposed Plan 1: Remediation of eastern wall by cutback

A potential means of remediating the southern end of the eastern wall is by eliminating the rock fall risks posed by Areas A to E described in Section 5.2). This could be achieved by cutting back the slope above the RL109.5 berm to remove the identified areas of instability.

The assumptions applied in developing the cutback concept include:

- Crest of cutback to be within the current extraction limit.
- The excavated material will mostly comprise weathered sediments with localised pockets of rock, particularly behind Areas A and E.
- The slope angle in sediments to be as close to 3 horizontal : 1 vertical as the space allow, noting that it is likely that any future rehabilitation plan would require rehabilitated slopes to be battered to this profile.
- Minimum mining width of 8m based on 5m wide road and pit edge windrow.
- The cutback should not compromise the ability to mine the proposed future stages of the quarry.
- There is capacity in the existing overburden dumps to the south of the quarry to accommodate the excavated material.

The conceptual cutback plan is shown in Figure 15 and Figure 16. It is anticipated that approximately 32,000 cubic metres of material will be removed, including the existing dump.

The model indicates there is sufficient room to excavate down to the required level and maintain at least 8m standoff from the existing berm crest.

The southern slope has been modelled at 3 horizontal : 1 vertical or flatter to avoid leaving an over-steep lip where the existing dump lies and to provide space for an access ramp, the alignment of which is to be confirmed if and when the concept is adopted. The ramp would be cut into the sediments forming the slope and this may require steepening of the areas currently modelled flatter than 3 horizontal : 1 vertical.

At the northern end of the cutback, the presence of rock will likely permit a steeper batter configuration and it is expected a similar batter-berm configuration as is in use elsewhere in the pit will be applied. As modelled, the northern part of the conceptual model has slopes at 0.6 horizontal : 1 vertical facing west and 1.5 horizontal : 1 vertical facing southwest.

The proposed west facing slope is modelled at 1.5 horizontal : 1 vertical or flatter.

Given the risk of rock fall from the cutback, while work is underway in the cutback, an area similar to the current exclusion zone within the main pit would be closed to all personnel.

Once the cutback has reached the RL109.5 berm, it is proposed that an excavator be used to dislodge loose material remaining on the crest. This may be done by working along the crest with the bucket and / or by dragging a heavy chain along the crest.

Windrows will be placed around the crest of the cutback and, on completion, the ramp will also be windrowed. Additionally, windrows will be placed to clearly close the access along the berms from the northern end of the pit.

Coffey understands that concerns were raised by the Earth Resources Regulation team in relation to Proposed Plan 1. The substance of the concerns relates to the upper batters to be cut in the sediments being steeper than 3 horizontal : 1 vertical on some slopes and that provision to stockpile the overburden within the existing WA410 was not included in the concept.

In light of this, Rigby Bros has advised that they will not proceed with this option at this stage.

It is noted that the proposed pit expansion included in the draft Work Plan Variation removes most of the southern end of the eastern wall where the batter slope towards 320. It is this batter orientation that likely resulted in the planar wedges forming along crests that are of concern in the existing slope. The proposed pit expansion has batters orientated away from 320 at not steeper than 76° and it is anticipated that the pattern of crest loss will be better.

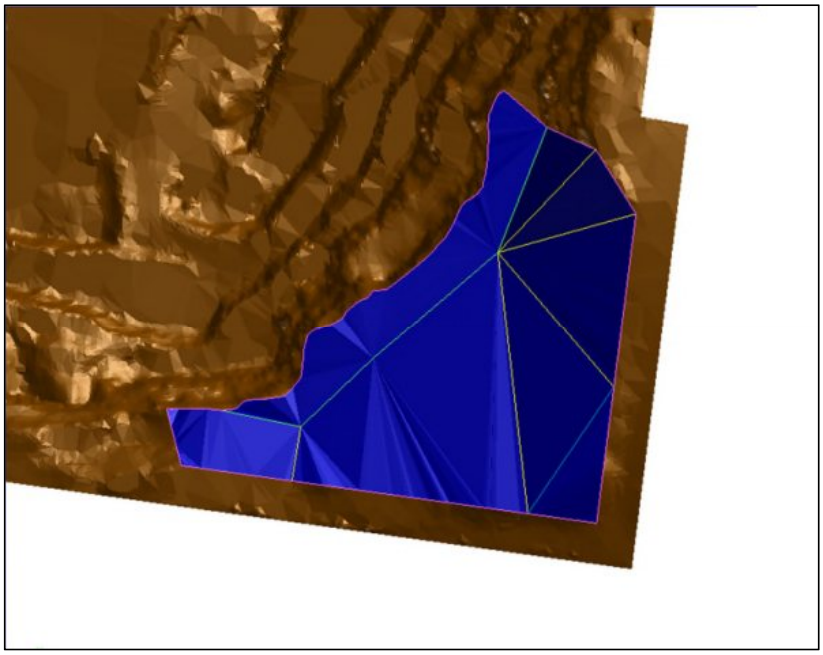


Figure 15: Conceptual model of proposed cutback (blue) superimposed on 2018 drone survey (brown).

Figure 16: Outline of conceptual model of proposed cutback (pink) superimposed on 2018 drone photography.

8. Proposed Plan 2: Realignment of ramp to leave an exclusion in the pit

An alternative concept not dependent on a cutback has been developed. The alternative option is to move the current haul road at the base of the eastern slope to the western wall via a switchback north of the exclusion zone in force at present and establish a “NO GO” area beneath the eastern wall.

This may require localised zones of backfilling to achieve an appropriate road grade.

The exclusion zone will effectively sterilise part of the pit.

Rigby Bros has advised that this is the preferred option at this stage and has re-aligned the ramp to provide access into the bottom of the pit via the north and west walls. On the basis of this advice, Coffey have undertaken more detailed analysis and optimisation of this concept.

8.1. Rockfall analysis

In order to determine the size of the “NO GO” area, rockfall analyses have been completed to simulate the two-dimensional distribution of rocks that fall from the slope.

8.1.1. Manual Update of Topographic Model

The three-dimensional model taken from drone survey data in 2018 and previously provided to Coffey has been manually updated using photographs provided by Rigby Bros and taken by Coffey during the site visits. No additional survey quality data was available for inclusion.

The updated surface approximates the shape of the eastern wall in July 2020 and has been used to model rock fall from the areas of concern in the upper parts of the eastern wall.

Should a model of improved accuracy be required, Coffey recommends Rigby Bros engage a suitably qualified surveyor to update the 2018 topographic model.

8.1.2. Analysed Sections

Four sections have been analysed for rock fall behaviour. They are oriented at right angles to the slope and pass through areas of concern outlined in Section 5.2. Their location is shown in ‘

Figure 10. The sections have been named for the areas of concerns they begin at.

8.1.3. Analysis Method and Scenarios

Rock fall analyses have been undertaken using the Rocscience software RocFall version 8.004.

The analysis method used is based on the Lumped Mass algorithm. The limited data available to calibrate the model precludes the use of the Rigid Body algorithm.

Models have been run with two different assumed rock sizes: 20kg and 1 tonne. 500 rocks of each size have been simulated falling down the modelled slopes. The scenarios run are listed in Table 6.

8.1.4. Material Properties

The properties adopted for the rock fall analyses have been selected based on the tilt testing done during Coffey’s site visits and reference information provided with the RocFall software. The parts of the sections cut from the 2018 drone survey have a higher density of points and, therefore, modelled roughness, than the parts of the sections cut from the manually updated pit topography. To account for the apparently smoother conditions in the manually updated parts of the profile, increased slope roughness has been applied to force a wider range of surface orientations to be considered. Additionally, vertices in the manually updated parts of the sections are assumed to have positions

distributed around the plotted position with a standard deviation of 0.2m in horizontal and vertical directions. No statistical variation of the drone survey vertices has been included.

The properties are summarised in Table 7.

Table 6: Rock fall model scenarios.

Section	Scenario ID	Description
A and D	A1	Estimated profile of section through Areas A and D without windrow on pit floor.
	A2	As for A1 with added 2.5m high windrow on pit floor centred 10m from the toe of the lowest batter.
	A3	As for A1 with rill material on bench immediately above pit floor removed and no windrow on the pit floor.
B	B1	Estimated profile of section through Area B without windrow on pit floor.
	B2	As for B1 with added 2.5m high windrow on pit floor centred 10m from the toe of the lowest batter.
	B3	As for B1 with rill material on bench immediately above pit floor removed and no windrow on the pit floor.
	B4	As for B1 with rill material on bench immediately above pit floor removed and excavation of existing quarantined material at original ramp level to leave 2.5m high windrow along pit edge.
C	C1	Estimated profile of section through Area C without windrow on pit floor.
E	E1	Estimated profile of section through Area E without windrow on pit floor.
	E2	As for E1 with added 2.5m high windrow on pit floor centred 10m from the toe of the lowest batter.
	E3	As for E1 with rill material on bench immediately above pit floor removed and no windrow on the pit floor.
	E4	As for E1 with rill material on bench immediately above pit floor removed and excavation of existing quarantined material at original ramp level to leave 2.5m high windrow along pit edge.

Table 7: Material properties adopted for rockfall analysis

Material Name	Color	Normal Restitution	Tangential Restitution	Friction Angle	Slope Roughness (deg)
Face (drone survey)		Normal Mean: 0.45 Std Dev: 0.04 Rel. Min: 0.12 Rel. Max: 0.12	Normal Mean: 0.85 Std Dev: 0.04 Rel. Min: 0.12 Rel. Max: 0.12	40	Normal Mean: 0 Std Dev: 3 Rel. Min: 10 Rel. Max: 10
Face (estimated profile)		Normal Mean: 0.45 Std Dev: 0.04 Rel. Min: 0.12 Rel. Max: 0.12	Normal Mean: 0.85 Std Dev: 0.04 Rel. Min: 0.12 Rel. Max: 0.12	40	Normal Mean: 0 Std Dev: 5 Rel. Min: 15 Rel. Max: 15
Berm / Ramp		Normal Mean: 0.32 Std Dev: 0.04 Rel. Min: 0.12 Rel. Max: 0.12	Lognormal Mean: 0.8 Std Dev: 0.04 Rel. Min: 0.12 Rel. Max: 0.12	40	Normal Mean: 0 Std Dev: 5 Rel. Min: 15 Rel. Max: 15
Rill slope		Normal Mean: 0.32 Std Dev: 0.06 Rel. Min: 0.18 Rel. Max: 0.18	Lognormal Mean: 0.71 Std Dev: 0.14 Rel. Min: 0.42 Rel. Max: 0.28	40	Normal Mean: 0 Std Dev: 10 Rel. Min: 30 Rel. Max: 30

8.1.5. Results of Rockfall Analysis

The results of each scenario modelled are shown graphically in Appendix B. Table 8 describes the results.

The results can be summarised as:

1. The construction of a 2.5m high windrow on the pit floor centred 10m from the toe of the lower-most batter will likely contain the vast majority (greater than 99%) of rock fall trajectories from the areas of concern.
2. The less than 1% of trajectories that modelling indicates may exceed the pit floor windrow, are expected to remain close to ground level and come to rest within several metres of the windrow.
3. Assuming it could be done safely, excavating the rill material from the lowermost bench on the east wall will likely not reduce the need for the pit floor windrow.
4. Similarly assuming it could be done safely, excavating part of the already blasted material from the old east wall ramp within the exclusion zone to leave a pit edge windrow will likely not reduce the need for the pit floor windrow away from Section E.
5. Along Section C, there is adequate bench space to trap falling rocks above the current pit floor.

Table 8: Results of rock fall model scenarios.

Section	Scenario ID	Result
A and D	A1	64% of rocks reach the pit floor, coming to rest at up to 20m from the toe of the wall. Approximately 35% of rocks come to rest on the already excavated old ramp. 1% of rocks come to rest on the rill of the bench immediately above the pit floor.
	A2	Similar result to A1 but with 99.4% of rocks contained behind the 2.5m high windrow10m from the toe of the wall.
	A3	49% of rocks reach the pit floor coming to rest at up to 20m from the toe of the wall. 16% or rocks are trapped on the cleared bench.
B	B1	80% of rocks reach the pit floor, coming to rest at up to 25m from the toe of the wall. Approximately 15% of rocks come to rest on the blasted material of the old ramp. 4% of rocks come to rest on the rill of the bench immediately above the pit floor.
	B2	Similar result to B1 but with 99.0% of rocks contained behind the 2.5m high windrow10m from the toe of the wall.
	B3	Approximately 10% of rocks are trapped on the cleared bench. 73% of rocks reach the pit floor, coming to rest up to 25m from the toe of the slope.
	B4	80% of rocks are trapped on the partially excavated old ramp. 11% of rocks are trapped on the cleared bench immediately above the pit floor. 8% of rocks reach the pit floor, extending up to 18m from the toe of the slope.
C	C1	Approximately one third of rocks are retained on existing berm at RL108.8 and a further 6% of rocks are retained on existing berm at RL88. The majority of rocks come to rest on the RL110 bench within 15m of the wall. 0.4% of rocks reach RL78 bench.
E	E1	Approximately one third of rocks reach the pit floor, stopping up to 25m from the wall. 55% of rocks come to rest on the blasted material of the old ramp. 1.5% of rocks come to rest on the rill of the bench immediately above the pit floor.
	E2	Similar trajectories as for E1 but with 100% of rocks contained behind the 2.5m high windrow10m from the toe of the wall.
	E3	The cleared bench traps 12.6% of rocks. Nearly 20% of rocks come to rest on the pit floor, extending up to 20m from the toe of the slope.
	E4	93% of rocks are trapped on the partially excavated old ramp. Less than 1% of rocks make it past the old ramp with only 2 trajectories reaching the pit floor, both stopping within 15m of the toe.

8.2. Exclusion Zone

The rockfall simulations indicate that an exclusion zone bounded by a windrow of at least 2.5m height and centred at 10m from the toe of the lower most batter should adequately isolate personnel from the rockfall risk. Windrows to restrict access should also be placed on other benches where there is access to the exclusion zone.

The proposed exclusion zone and windrow placement is illustrated in Figure 17.

The rockfall modelling undertaken does not indicate that excavation of rill and already-blasted material from benches along the east wall above the current pit floor removes the need for a windrow at the base of the pit.

9. Conclusions and Recommendations

Historically the eastern wall of WA410 has been stable, with no large-scale failures recorded in at least the last decade. The southern portion of the eastern wall facing toward 320 has been impacted by the formation of planar wedges on a pervasive joint set. This has reduced berm widths locally and left a block on the wall at RL109.5 that appears to be unstable. Other areas of concern have also been identified

The potential for eliminating the five identified areas of concern by excavating a cutback of the slope has been assessed and found to be feasible within the current Work Authority boundaries and the identified constraints. The cutback is expected to generate approximately 32,000 bcm of material, predominantly sediments. Coffey understands that the Earth Resources Regulation team has expressed concerns with this proposed course of action and Rigby Bros have advised that they will not proceed with the cutback at this stage.

An alternative course of action that involves leaving the upper portion of the slope as is and implementing a permanent exclusion zone at the base of the wall has been evaluated. Rock fall modelling indicates an exclusion zone delineated with a windrow at least 2.5m high and centred 10m from the toe of the lowermost batter should contain rock fall from the areas of concern on the southern part of the eastern wall. This will effectively sterilise a significant proportion of the pit floor until the slope is cut back with a future expansion. Coffey recommends that this windrow be constructed along with vehicle windrows at other levels on the slope to prevent access to the exclusion zone.

Excavation of existing blasted material and rill from benches along the east wall to improve rock fall catch capacity has been considered. The rock fall modelling indicates that, while these works will likely reduce the number of rocks reaching the floor of the pit, they will not likely remove the need for the windrow and exclusion zone on the pit floor. Should Rigby Bros choose to excavate this material, Coffey recommends that a specific Safe Work Method Statement (or similar) be developed and this document be reviewed by a suitably qualified geotechnical engineer / engineering geologist.

Your attention is drawn to the attached document entitled “Important Information about your Coffey Report” attached to this report.

Sincerely

Mick Morrongiello
Associate Engineering Geologist

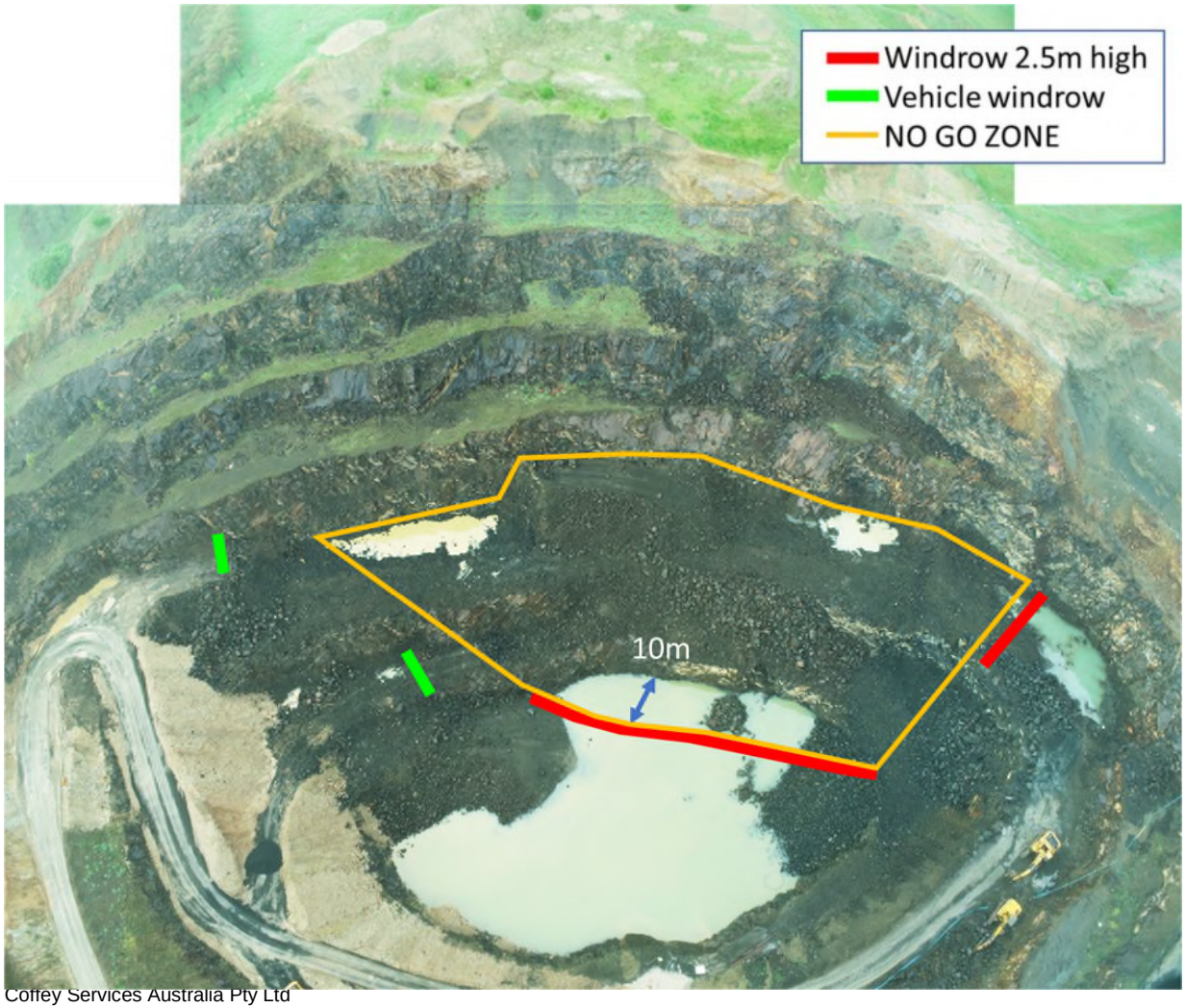
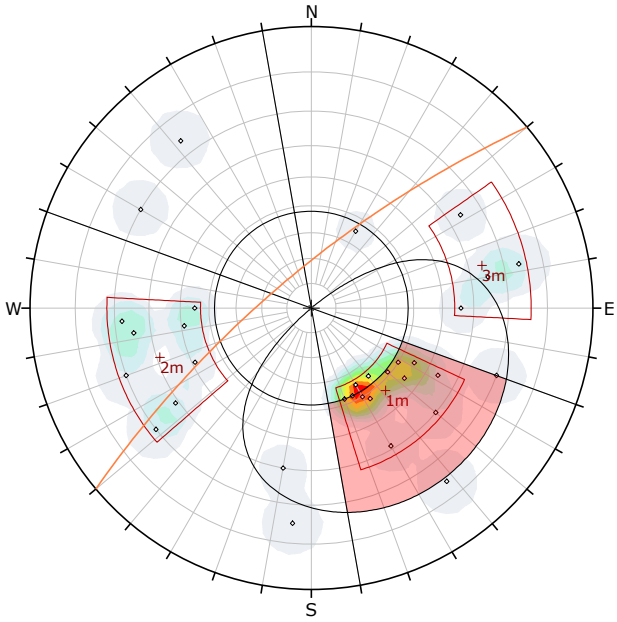


Figure 17: Recommended placement of windrows and exclusion zone.

Appendix A - Kinematic Analysis using Dips

754-MELGE272003 - Rigby Bros Quarry East Wall Remediation

Planar wedge potential for batters facing 75 / 320



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
	0.00 - 1.70
	1.70 - 3.40
	3.40 - 5.10
	5.10 - 6.80
	6.80 - 8.50
	8.50 - 10.20
	10.20 - 11.90
	11.90 - 13.60
	13.60 - 15.30
	15.30 - 17.00

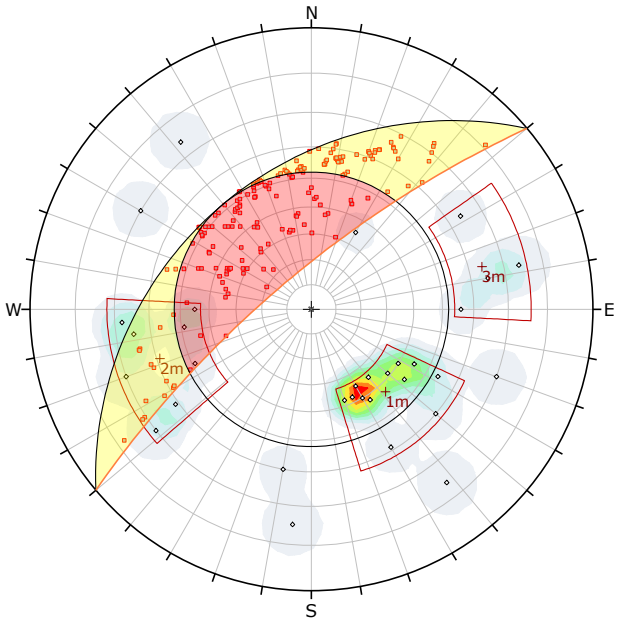
Contour Data	Pole Vectors
Maximum Density	16.37%
Contour Distribution	Fisher
Counting Circle Size	1.0%

Kinematic Analysis	Planar Sliding
Slope Dip	75
Slope Dip Direction	320
Friction Angle	38°
Lateral Limits	30°

	Critical	Total	%
Planar Sliding (All)	12	32	37.50%
Planar Sliding (Set 1)	11	13	84.62%

Plot Mode	Pole Vectors
Vector Count	32 (32 Entries)
Hemisphere	Lower
Projection	Equal Angle

Sliding wedge potential for batters facing 75 / 320



Symbol	Feature
◇	Pole Vectors
▫	Critical Intersection

Color	Density Concentrations
	0.00 - 1.70
	1.70 - 3.40
	3.40 - 5.10
	5.10 - 6.80
	6.80 - 8.50
	8.50 - 10.20
	10.20 - 11.90
	11.90 - 13.60
	13.60 - 15.30
	15.30 - 17.00

Contour Data	Pole Vectors
Maximum Density	16.37%
Contour Distribution	Fisher
Counting Circle Size	1.0%

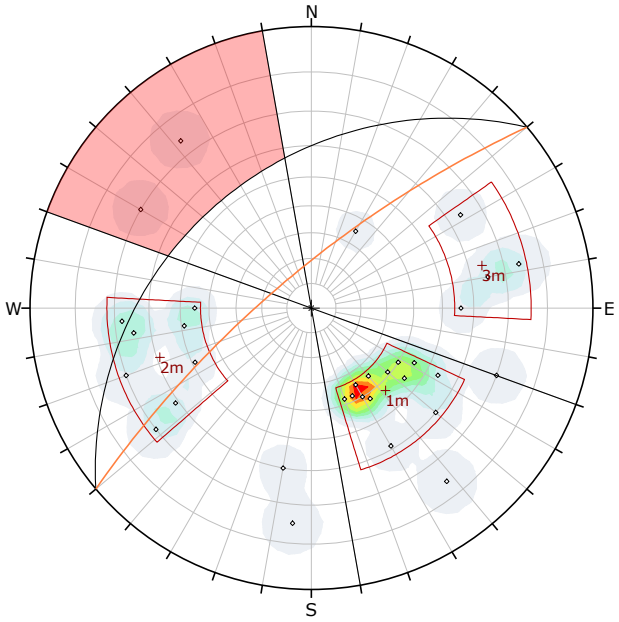
Kinematic Analysis	Wedge Sliding
Slope Dip	75
Slope Dip Direction	320
Friction Angle	38°

	Critical	Total	%
Wedge Sliding	193	496	38.91%

Plot Mode	Pole Vectors
Vector Count	32 (32 Entries)
Intersection Mode	Grid Data Planes
Intersections Count	496
Hemisphere	Lower
Projection	Equal Angle

754-MELGE272003 - Rigby Bros Quarry East Wall Remediation

Flexural toppling potential for batters facing 75 / 320



Symbol	Feature
◇	Pole Vectors

Color	Density Concentrations
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	1.70 - 3.40
	3.40 - 5.10
	5.10 - 6.80
	6.80 - 8.50
	8.50 - 10.20
	10.20 - 11.90
	11.90 - 13.60
	13.60 - 15.30
	15.30 - 17.00

Contour Data	Pole Vectors
Maximum Density	16.37%
Contour Distribution	Fisher
Counting Circle Size	1.0%

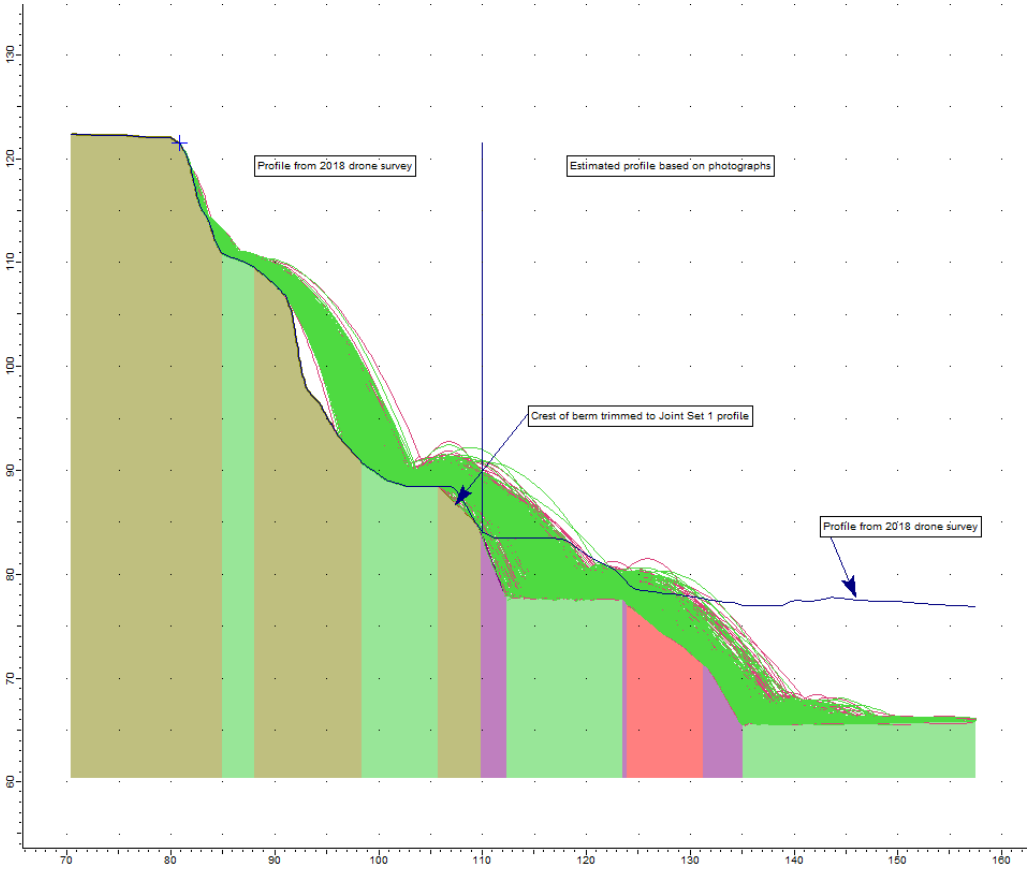
Kinematic Analysis	Flexural Toppling
Slope Dip	75
Slope Dip Direction	320
Friction Angle	38°
Lateral Limits	30°

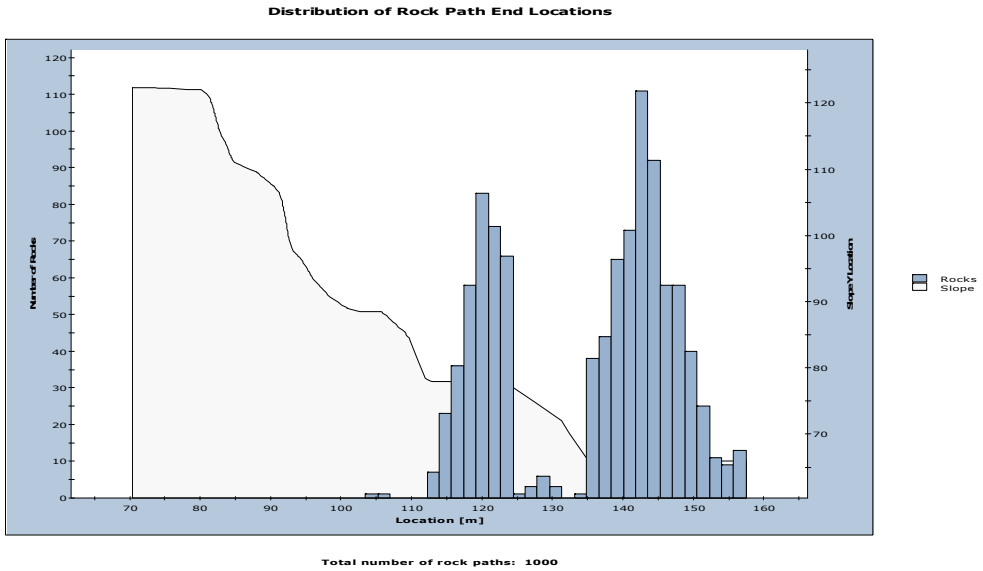
	Critical	Total	%
Flexural Toppling (All)	2	32	6.25%

Plot Mode	Pole Vectors
Vector Count	32 (32 Entries)
Hemisphere	Lower
Projection	Equal Angle

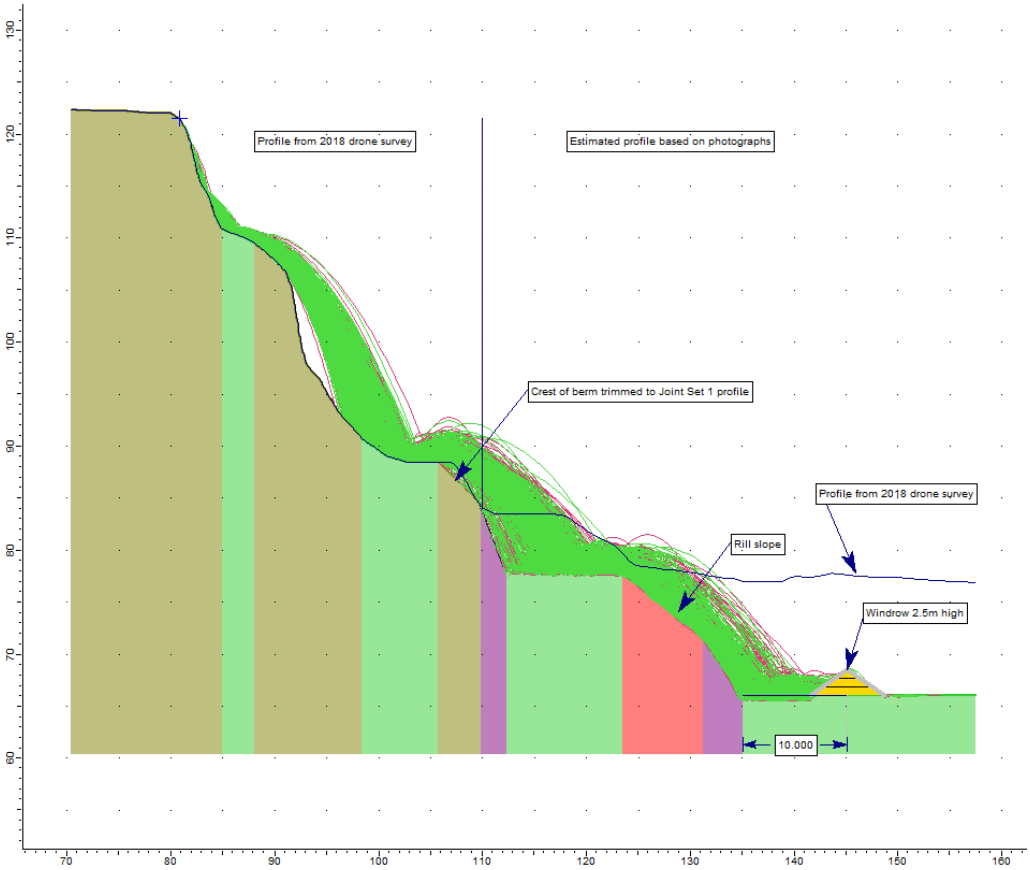
Appendix B - Rock Fall Analysis using Rocfall

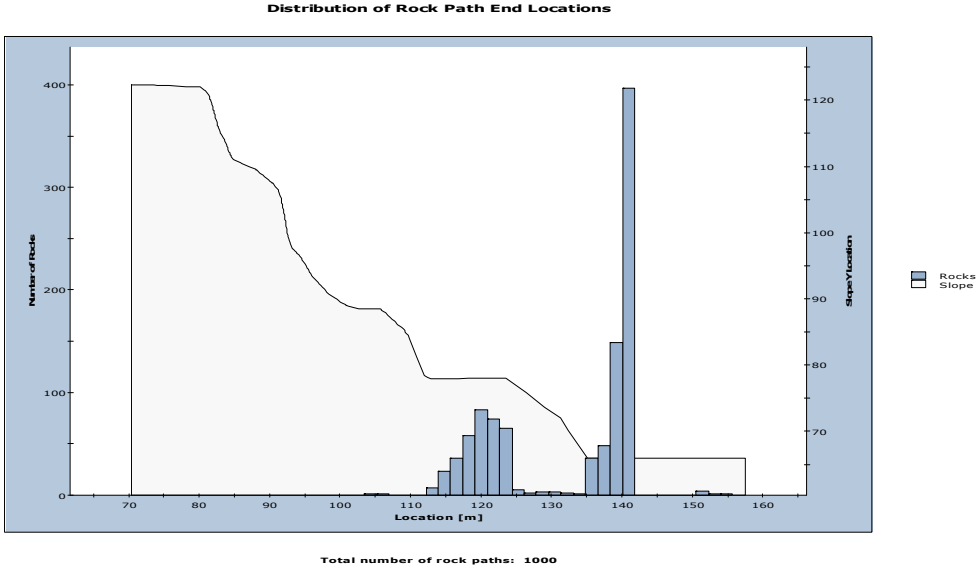
Rockfall Scenario A1



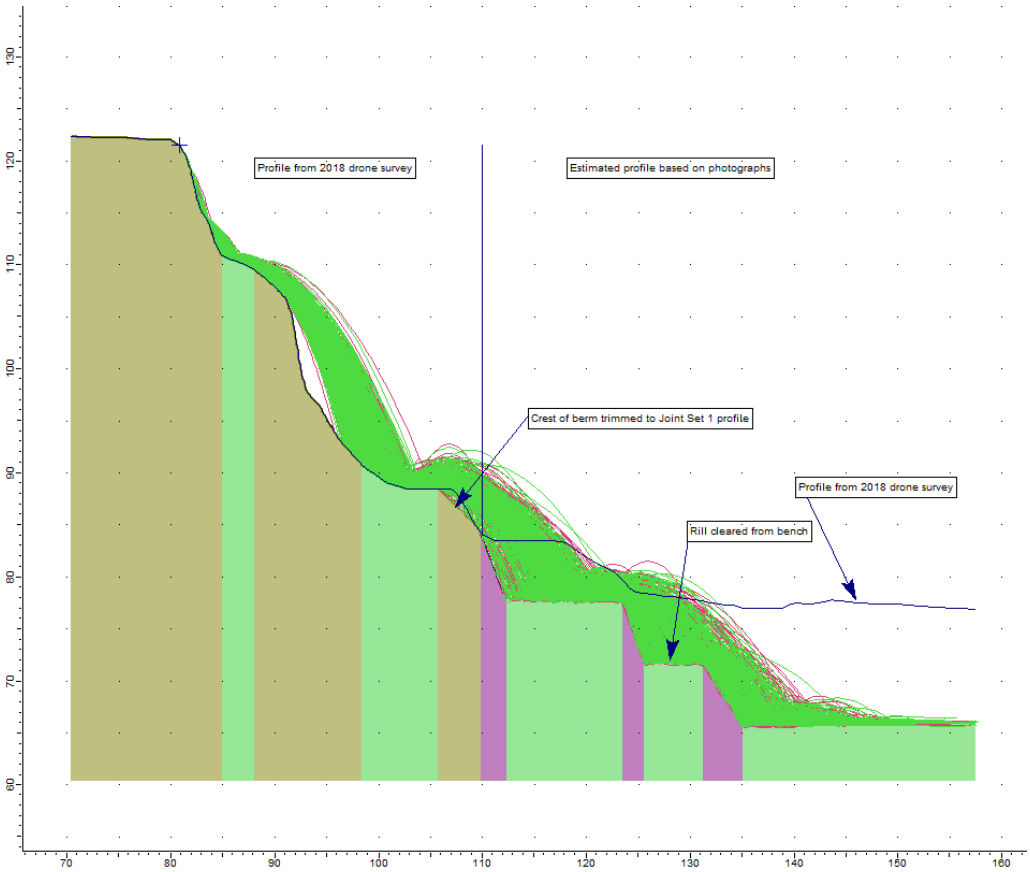


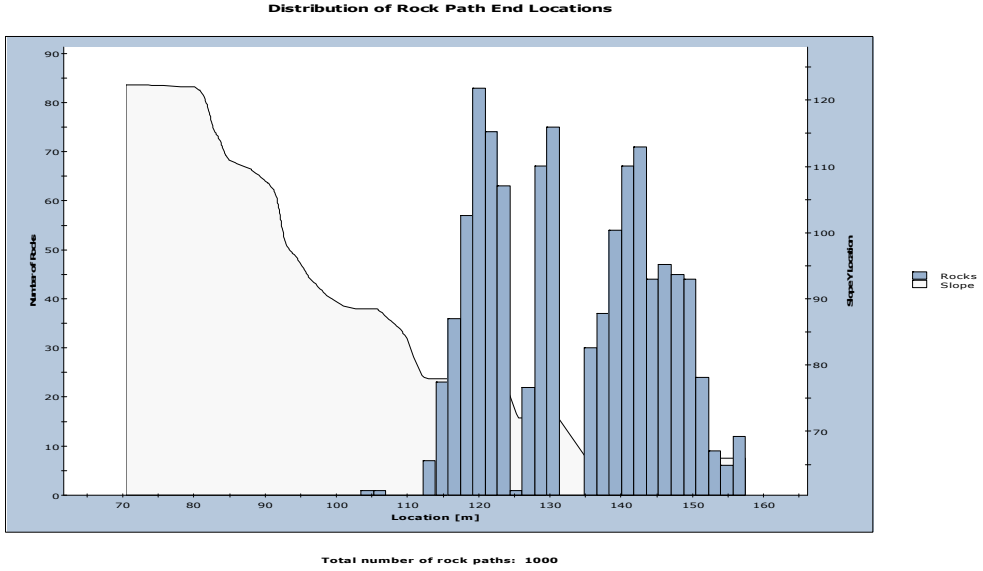
Rockfall Scenario A2



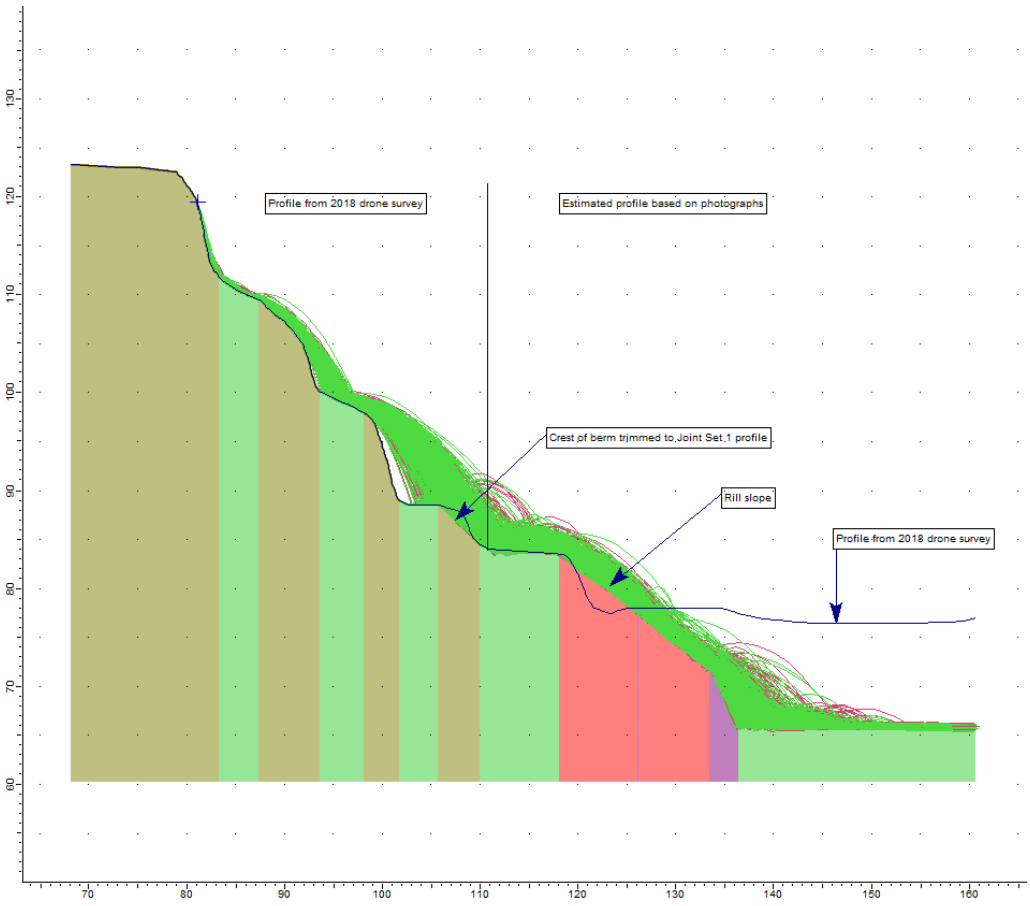


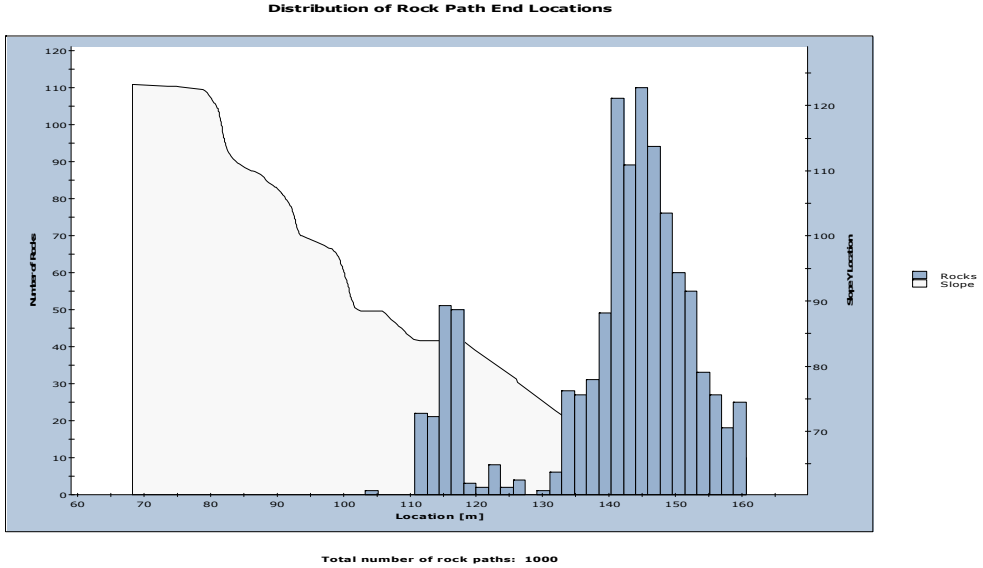
Rockfall Scenario A3





Rockfall Scenario B1





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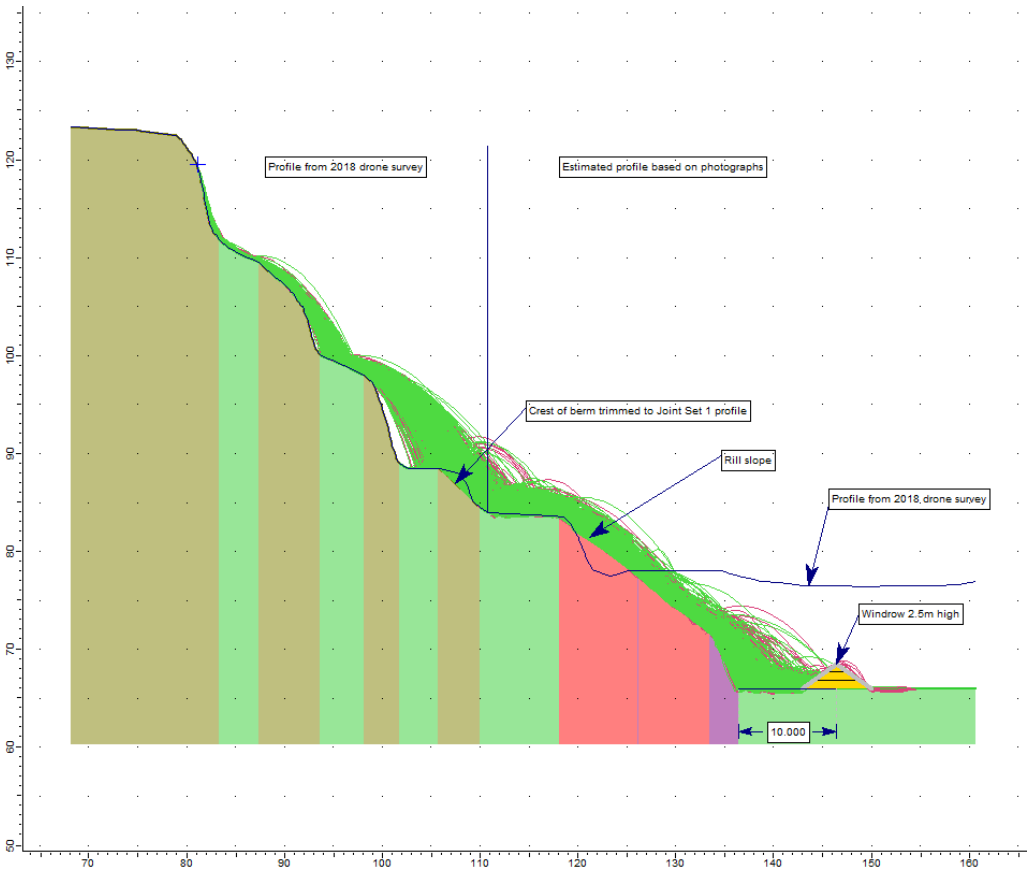

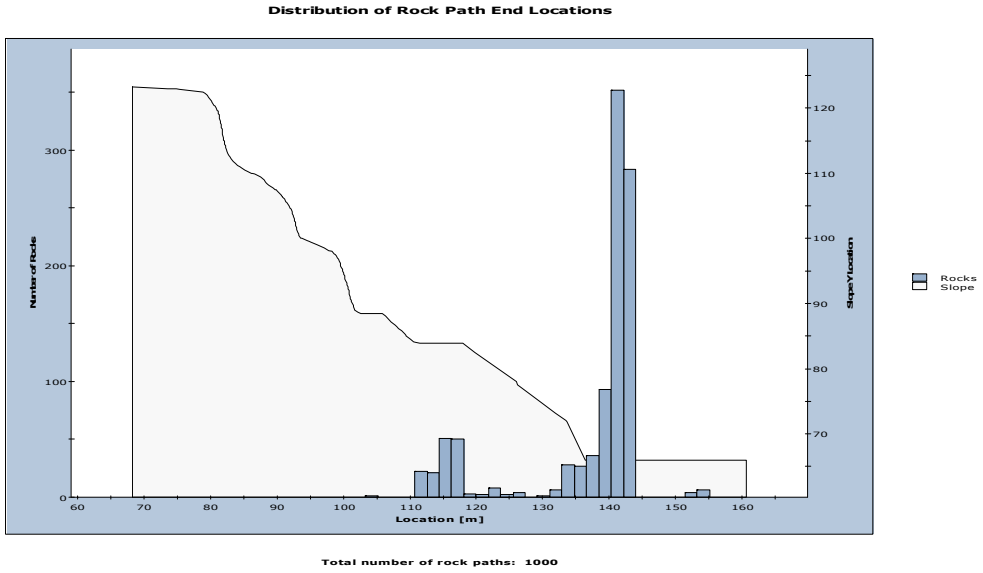

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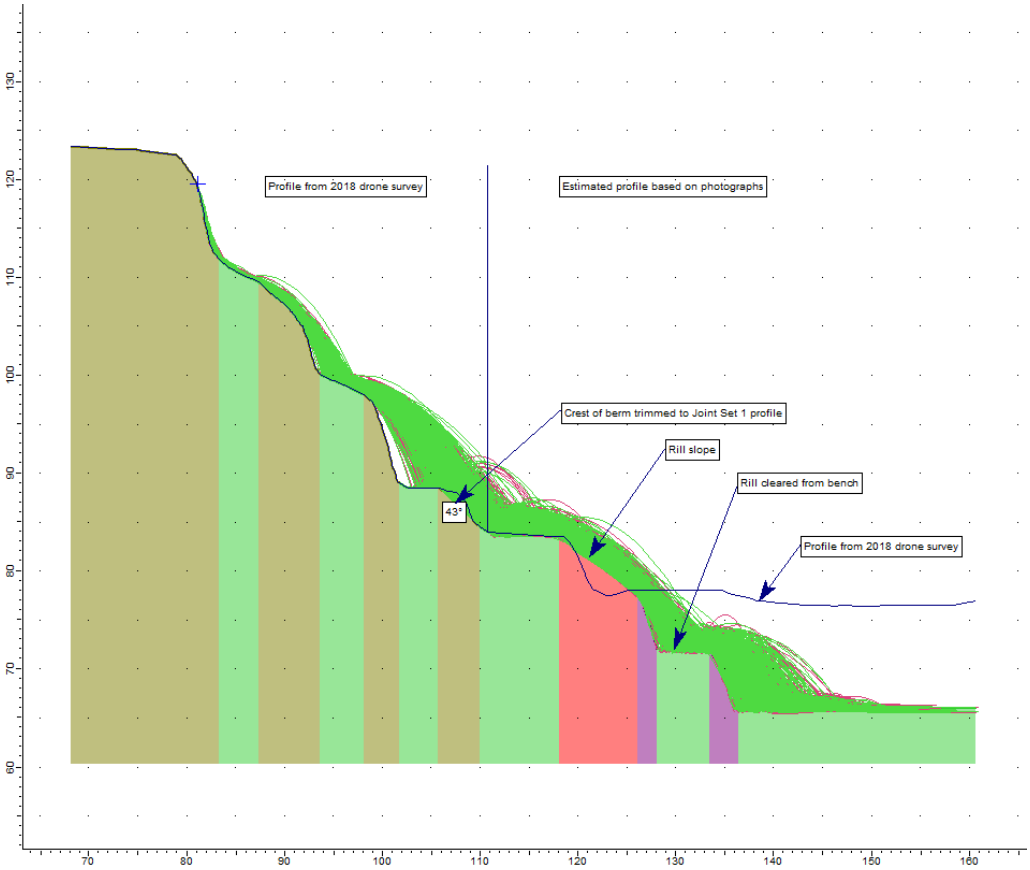
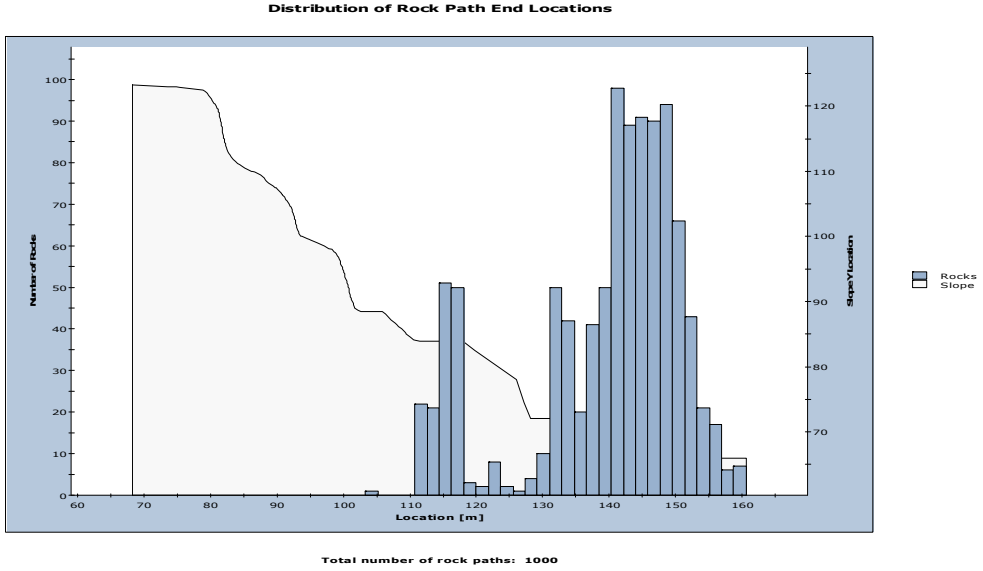
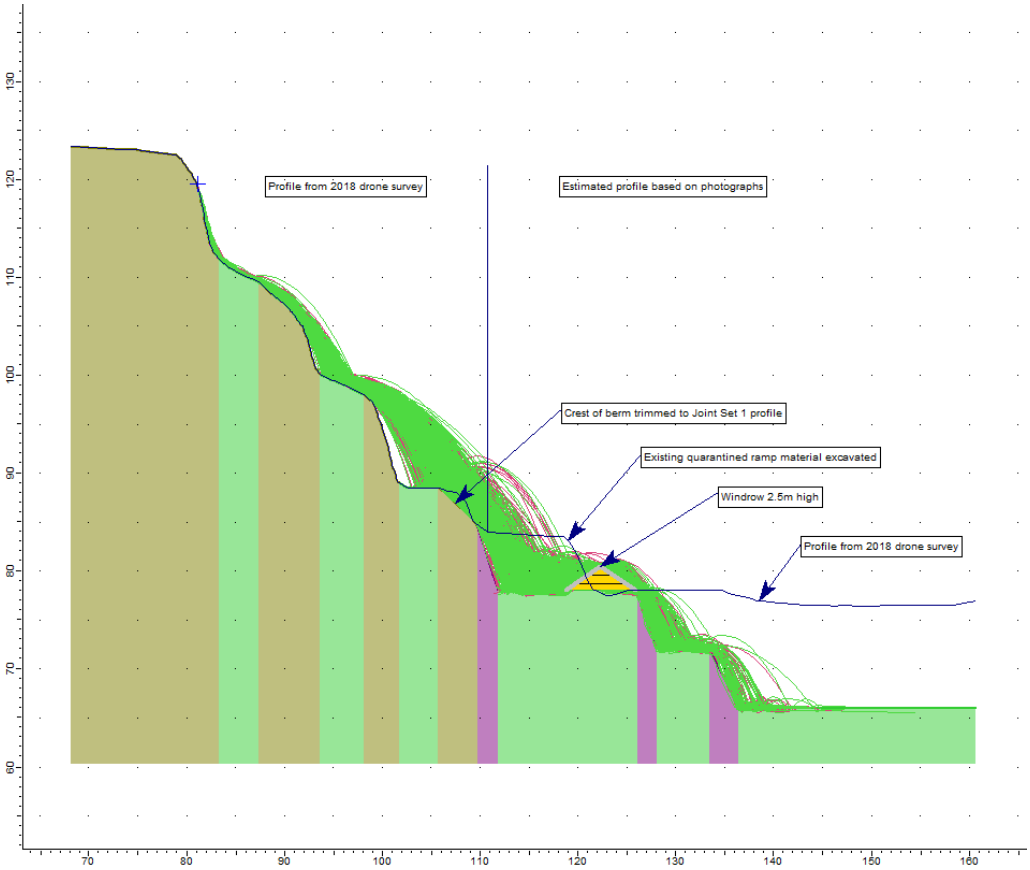
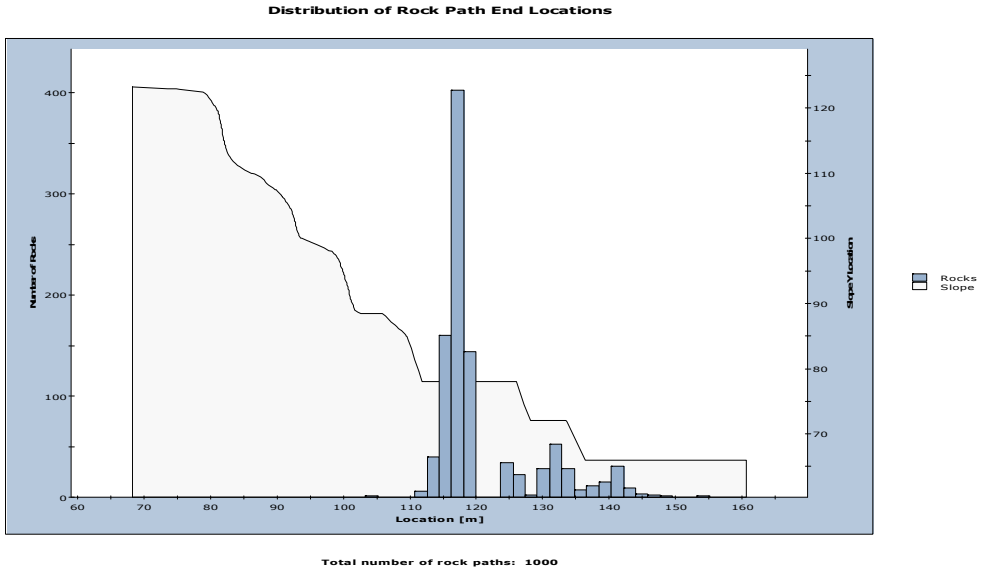


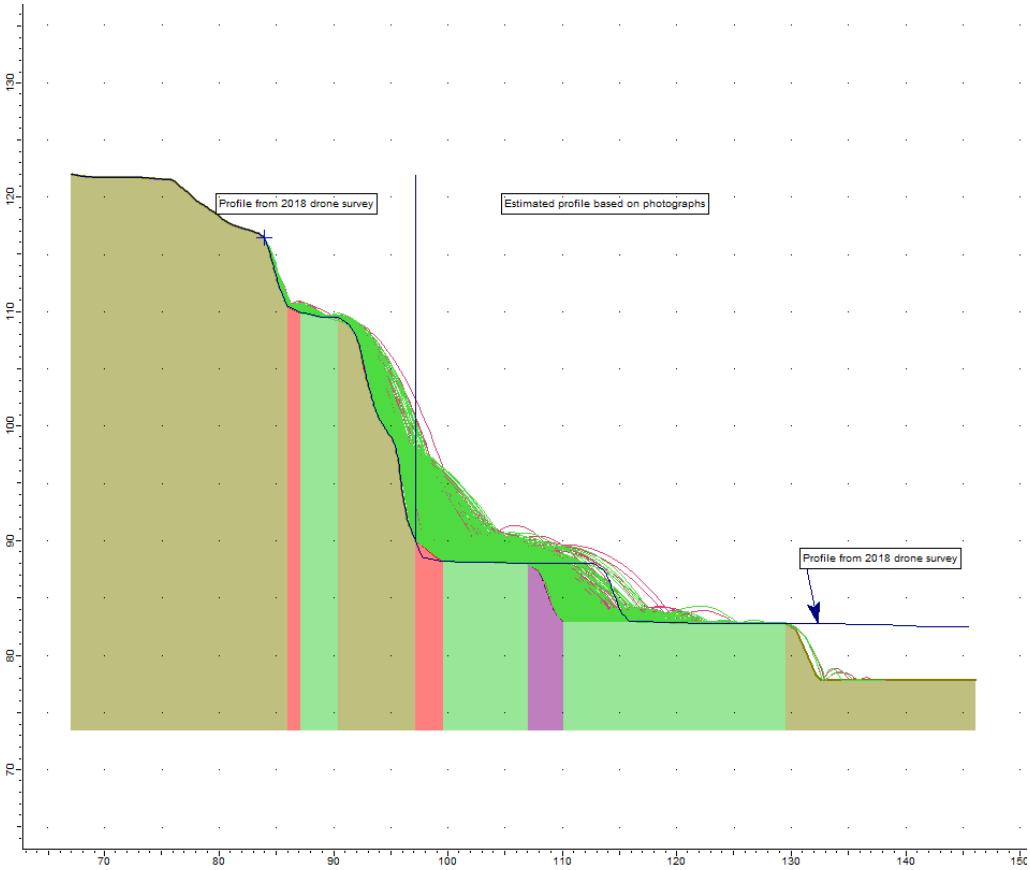


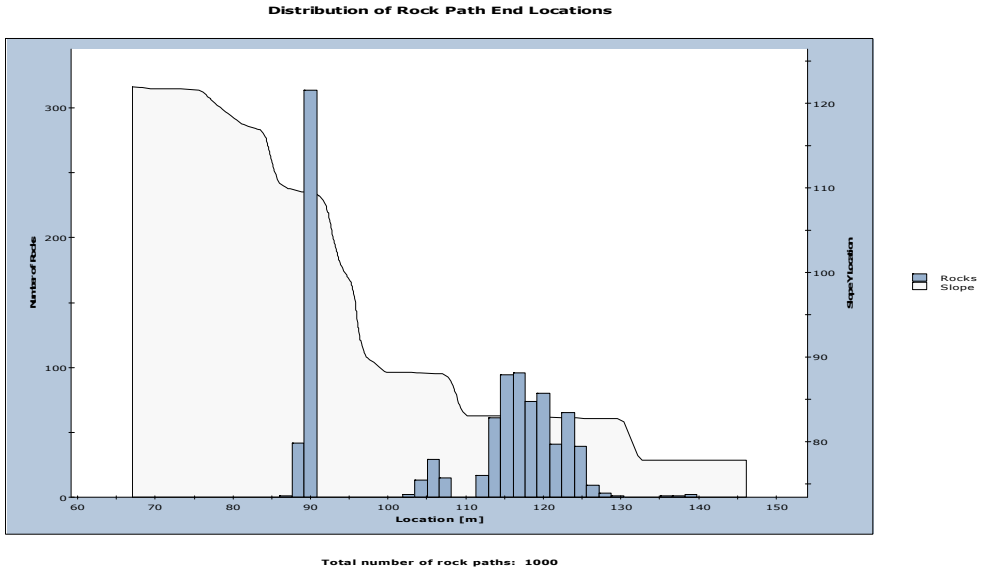
Rockfall Scenario B4



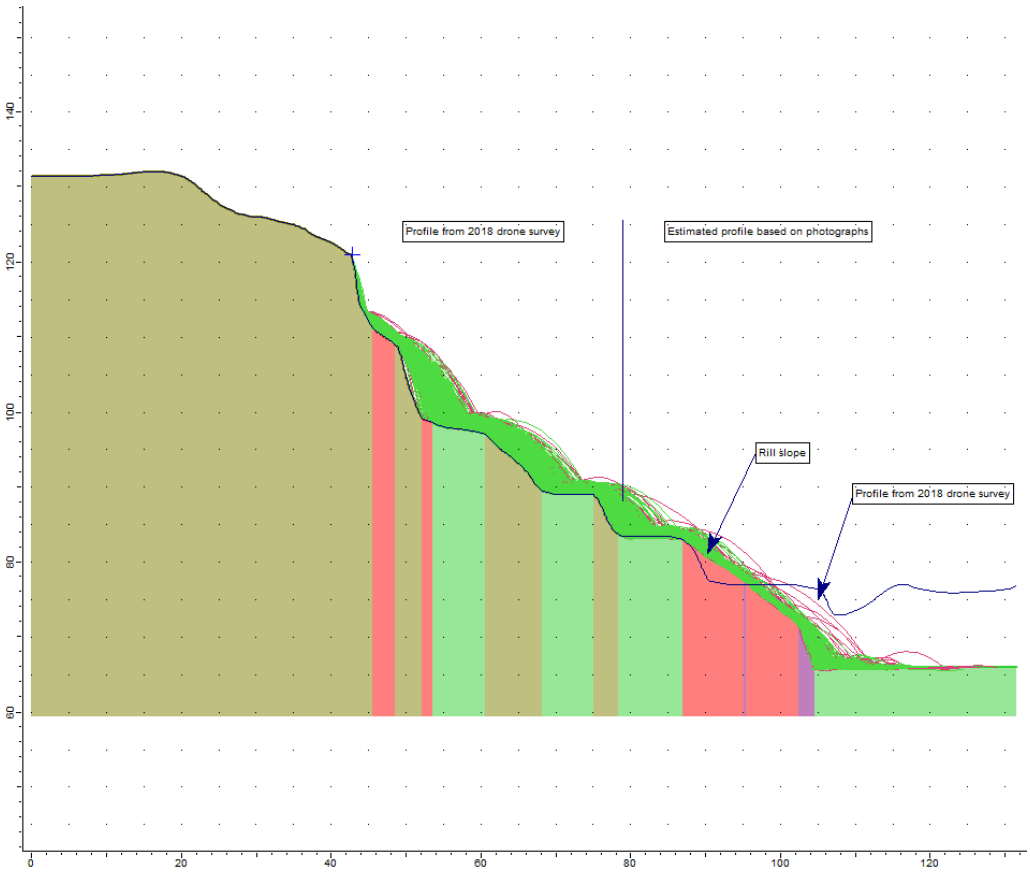


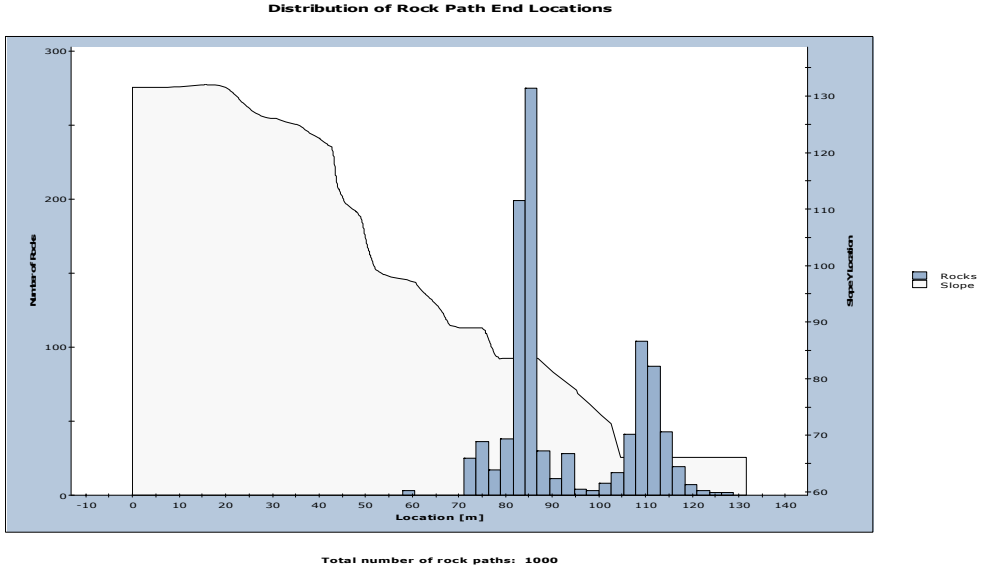
Rockfall Scenario C1



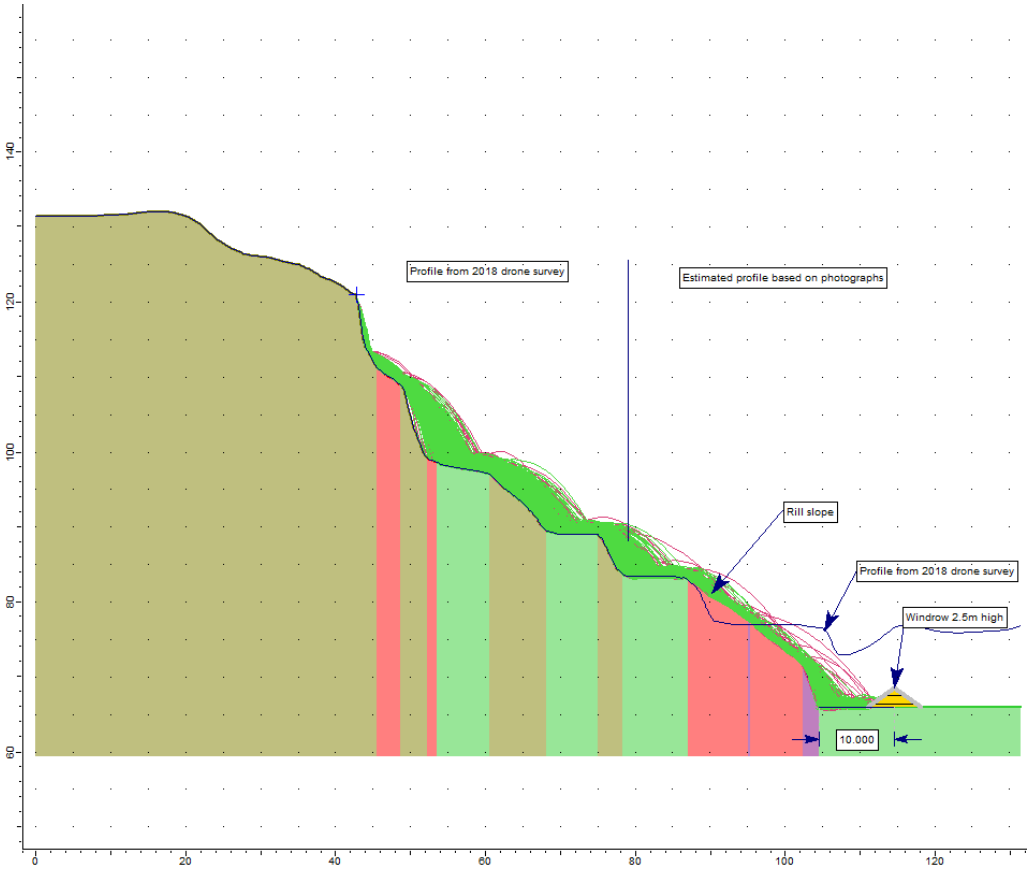


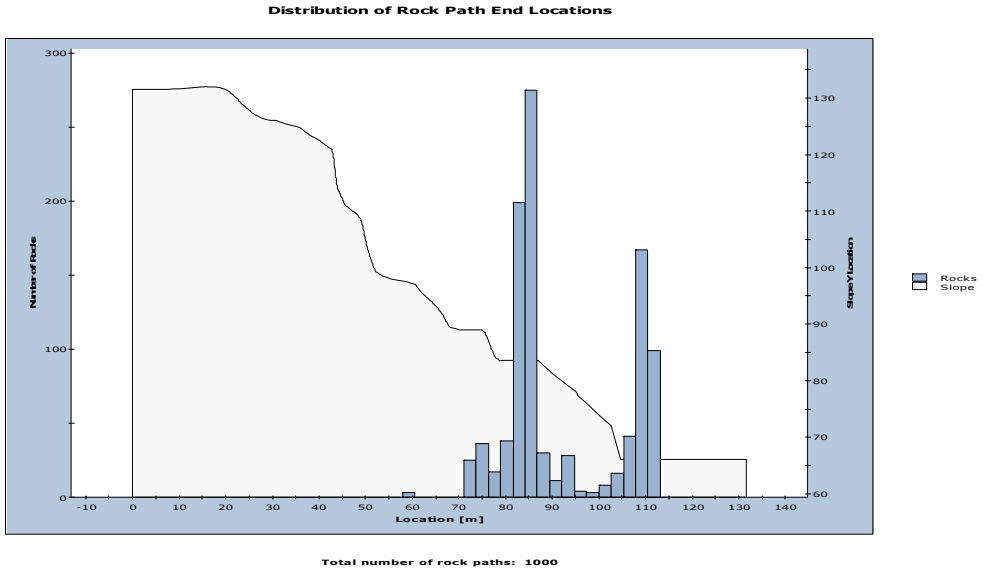
Rockfall Scenario E1





Rockfall Scenario E2





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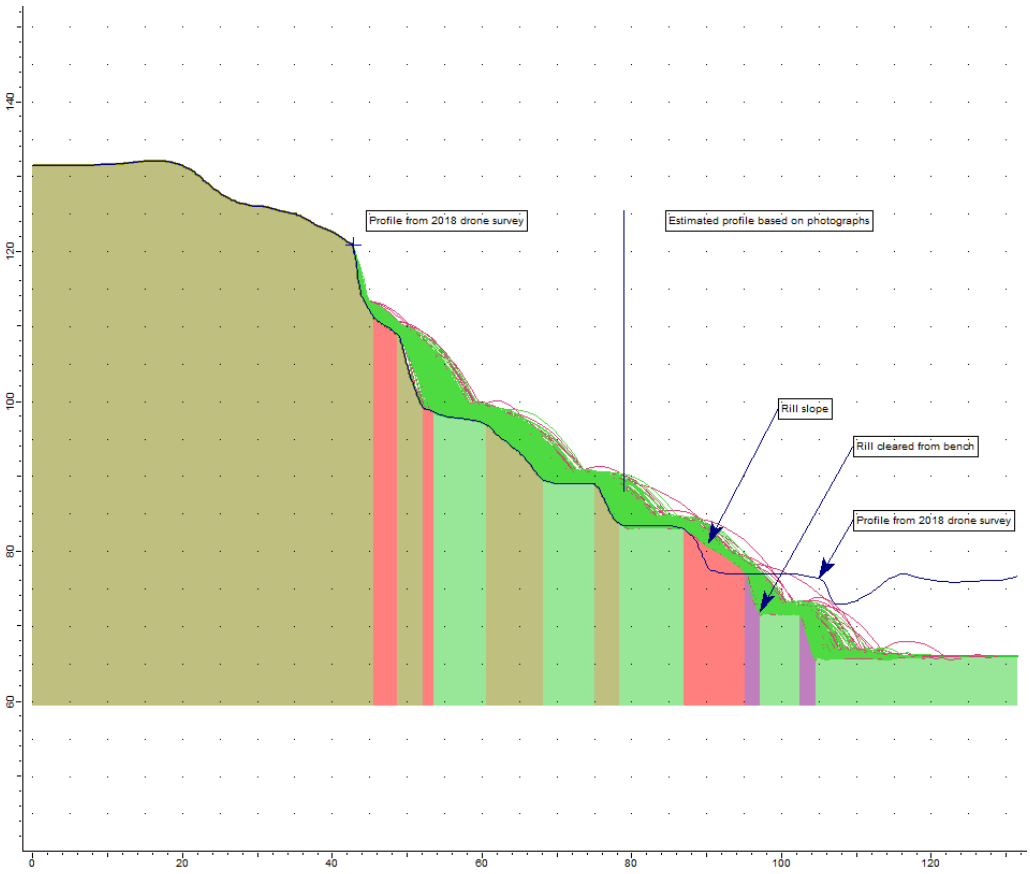

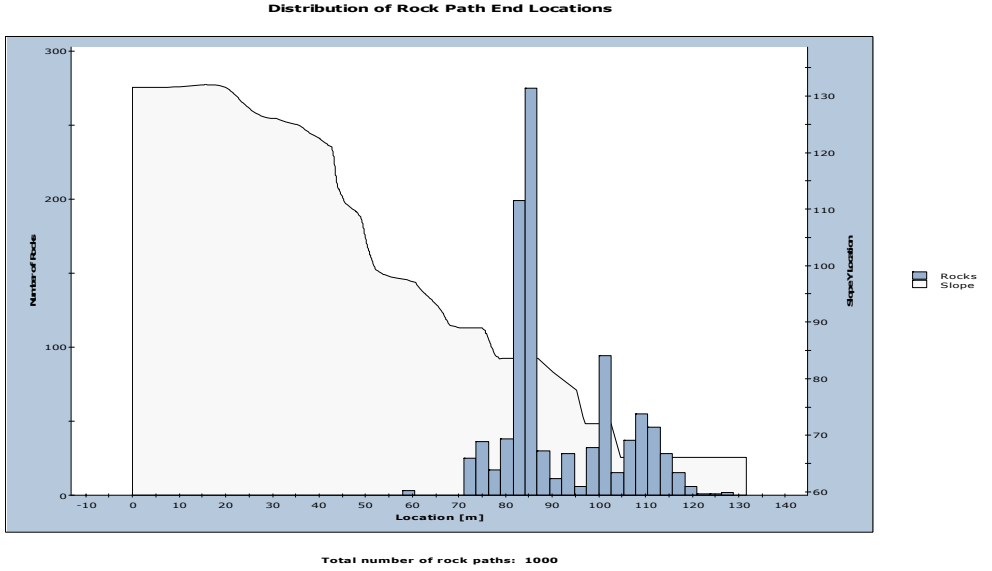

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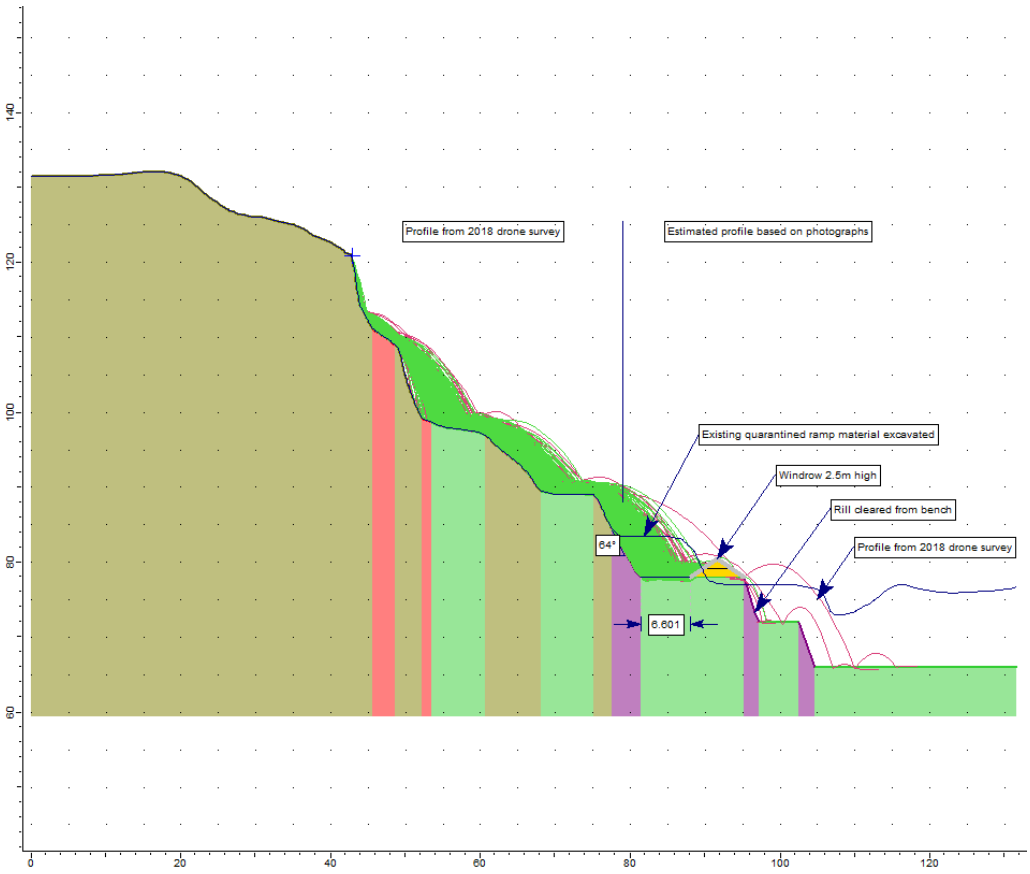
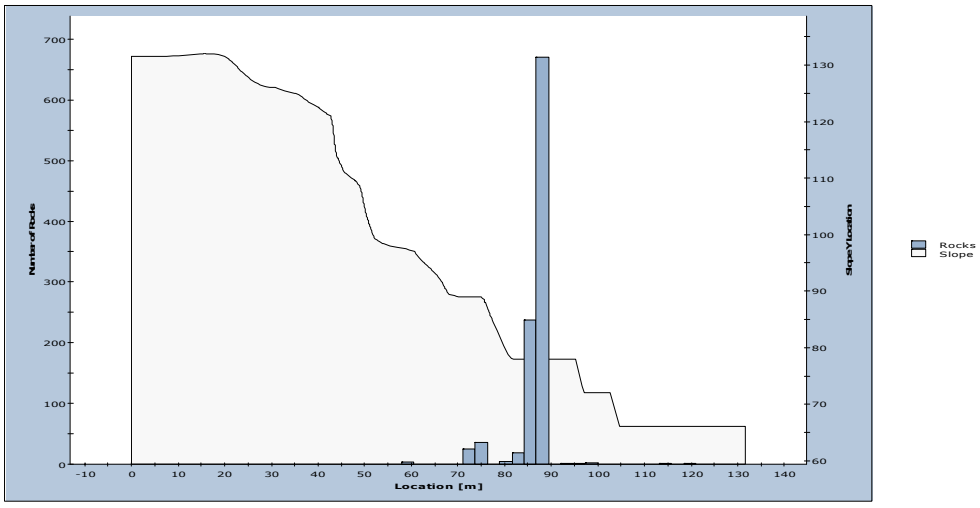


Distribution of Rock Path End Locations



Total number of rock paths: 1000

Appendix E Pit Lake Egress Ramp Technical Specification

Coleraine Quarry WA410 Pit Access Ramp / Pit Lake Egress Technical Specification

Rigby Bros & Co Pty Ltd

28 August 2024

This document is confidential and shall remain the property of Civil Mine & Quarry Geotechnics. The document may only be used for the specific purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. No party other than Civil Mine & Quarry Geotechnics' client may rely on this document without the prior written consent of Civil Mine & Quarry Geotechnics, and no responsibility is accepted for any damages suffered by any third party arising from decisions or actions based on this document.

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Document Details

Project Number	RBR0001
Project Name	Coleraine Quarry WA410 Geotechnical Assessment
Document Title	Coleraine Quarry WA410 Pit Lake Egress Ramp Technical Specification
Document Number	RBR0001-RPT-0-0002

Revision History

Date	Revision	Author		Reviewer	
		Name	Signature	Name	Signature
28/08/2024	0	Kevin Kuang		Sanjive Narendranathan	

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Figure Index

No table of figures entries found.

Table Index

Table 1 The Select Fill Particle Size Distribution Table 4

1. Introduction

To access the full resource, and as part of the final rehabilitation landform, a pit lake egress ramp will be constructed. However, as the exact location of this ramp will be determined by available overburden and production requirements, and has not been modelled in the Geotechnical Assessment. Regardless of the location of the pit ramp, it is not expected to negatively impact the overall slope stability due to a lower slope angle, and effectively provides a decoupling mechanism the mitigates against large scale slope failure, the addition of the ramp represents a more conservative scenario, and is expected to improve the Factor of Safety (FoS).

Given the long-term nature of the rehabilitated landform, stability considerations around the egress ramp are centred the effects of wave action and surface water runoff causing scouring and washout. As such, a technical specification is recommended to be implemented during the construction of the ramp to ensure proper compaction and mitigate erosion.

The following technical specification details the requirements for fill material and the delivery of earthworks for the construction of a future pit lake egress ramp at Coleraine Quarry.

Expected construction activities are anticipated to consist of:

- Selection of suitable clay from the overburden on site at Coleraine Quarry, as defined in Table 1.
- Construct the ramp using a haul truck and dozer operation and compaction of the fill material in horizontal layers using a bottom-top sequence.
- Ensure adequate surface and internal drainage measures are incorporated to facilitate the maintenance of stability during operations, and to cater for seasonal rainfall events.

2. Material Definitions

2.1. Select Fill

Select Fill shall be earth material which does not contain any organic material where percent fines of the material is greater than 12%. The material shall have a Plasticity Index of more than 7% as defined by AS1289. The material shall not contain rock fragments having dimensions greater than 150 mm.

The Select Fill material shall meet the grading requirements shown in Table 1, when tested in accordance with AS 1289.3.6.1 (2009).

Table 1 The Select Fill Particle Size Distribution Table

AS1152 Sieve Size (mm)	% Passing by Mass
37.5	80-100
2.36	30-100
0.075	0-20

2.2. Surface Drains Erosion Control Rock Material

The surface (swale) drain erosion material protection, where required, shall comprise 150 mm size durable, free draining rock fragments and shall conform to the quality requirements set out below and is subject to the approval by the Quarry Manager or delegate. It is envisaged that the appropriate erosion protection will be designed and installed in the following locations/scenarios:

- In locations where the longitudinal grade is steep (i.e. greater than 2%)
- Around the periphery of drainage inlets, and
- As an energy dissipator at swale drain and site associated drainage discharge points.

2.3. Unsuitable Material

Unsuitable Material are defined as containing one or more of the following:

- Organic material (i.e., topsoil/subsoil material).
- Material that is loose, soft, excessively wet, unstable or otherwise not suitable for the specified use.

3. Validation Criteria

In addition to the required specifications in the above sections, the following ramp compaction criteria shall be targeted:

- Dynamic Cone Penetrometer (DCP) testing: a minimum of 4 blows per 100 mm.

4. Foundation Preparation

4.1. General

The ramp foundation shall be excavated within the limits of the ramp (where applicable), with open and underground drainage installed where required.

4.2. Temporary Catch Drains

The Quarry Manager will ensure that temporary catch drains are constructed for collection and diversion of surface run-off as identified by the Quarry Manager or delegate.

4.3. Material Category

Prior to commencing excavation in any area, and during excavation work, the Quarry Manager or delegate shall inspect each type of material encountered and agree on the category of the material as per Section 2 of this document.

4.4. Unsuitable Material

4.4.1. General

Excavation of Unsuitable Material shall be undertaken in a manner that minimises any removal of adjacent suitable ground.

Material used to replace excavated Unsuitable Material shall be Select Fill Material.

4.4.2. Treatment of Unsuitable Material

Where Unsuitable Material is encountered, the construction workforce shall submit the proposed *in-situ* treatment or the extent of excavation (removal) for the Quarry Manager or delegate to review.

4.4.3. Clearing, Grubbing and Stripping

After the completion of any required clearing, grubbing or stripping of areas upon which fill is to be placed, any Unsuitable Material immediately below these areas shall be treated *in-situ* or be excavated to a maximum depth of 1.5 m, and replaced with suitable Select Fill Material which shall be spread and compacted as specified, to provide a suitable subgrade and key-in for the subsequent fill layers.

Where material:

- Is unsuitable and does not exceed 250 mm in depth, it shall be treated *in-situ* or be excavated and replaced.
- Has become unsuitable to any depth due to the construction workforce negligence or use of inappropriate methods, it shall be treated *in-situ* or excavated and replaced.

4.5. Excavation Operations

The construction workforce shall conduct its operations such that the area outside the limits of the excavation is not unduly disturbed. Any falls or slips of material that occur shall be removed and the area treated to prevent recurrence.

If any area on cut batters becomes unstable or unsafe, the construction workforce shall install suitable measures to restrict access to the area (e.g., erection of warning signs and temporary fencing). The affected area shall be inspected and assessed by a qualified geotechnical engineer (e.g. CMQ) and made safe prior to excavation proceeding in the affected area.

4.6. Groundwater

Groundwater is not anticipated to be encountered as part of these earthworks, as the water table ix expected to be found at 20 m below the quarry design floor. Should groundwater or seepage be encountered, the construction workforce shall notify the Quarry Manager or delegate for assessment and further instruction of the proposed action(s) to remedy the situation. The Quarry Manager or delegate shall notify a qualified geotechnical engineer and/or a qualified hydrogeologist for advice if the extent of groundwater seepage encountered requires specialist engineering input.

5. Construction of Earthworks

5.1. General

The construction of earthworks includes the preparation of areas upon which fill is to be constructed (following any site excavation) and the selection, placement and compaction of material.

5.2. Foundation

The foundation (subgrade) areas upon which fill is to be constructed shall be prepared for test rolling by the construction workforce to identify any unsuitable/unstable areas. Any unsuitable areas detected by test rolling shall be rectified.

The construction workforce shall not commence placing any Select Fill Material on the prepared areas until the area has been approved by the Superintendent.

5.3. Test Roll

The following test rolling procedure is to be followed with Fill layers:

- The equipment operator is to drive up at a walking pace for each pass of the Select Fill Material layer during the Quarry Manager or delegate inspection. The Quarry Manager or delegate is to walk adjacent to the equipment/vehicle (suitable sheep’s foot/padfoot roller, or fully laden haul truck) and observe how the layer behaves when driven over.

The following test rolling procedure is to be followed for the prepared foundation:

- The prepared foundation (subgrade) surface shall be assessed as suitable for fill placement when no visually observable additional settlement on the final pass of the equipment/vehicle is observed, with the number of passes limited to no more than two (2).

Any “failed” material needs to be removed, re-worked and compacted or replaced with compacted Select Fill Material. DCP testing can be utilised by the Quarry Manager or delegate to confirm the depth of “weak or failed” materials.

5.4. Placing of Fill

5.4.1. General

The proposed fill compaction lift heights and compaction requirements are summarised below:

- Maximum Lift Height: 1.0 m following compaction.
- Minimum compaction - 4 blows with the DCP per 100 mm of the 1.0 m lift.

Fill shall be placed and spread in uniform horizontal layers and shall be compacted to meet the specified requirements outlined in Sections 2 and 3 above.

Prior to the cessation of each workday, the top of the fill shall be shaped and compacted to minimise damage resulting from any overnight wet weather (significant rain event).

At the edge of the slope, the construction workforce shall over-place and trim material at the edge of the slope to ensure the specified compaction is achieved right to the edge of the ramp.

5.5. *In-situ* Treatment of Materials

In-situ treatment of 'Unsuitable Material' constitutes ripping to a minimum depth of 250 mm, moisture conditioning and re-compacting the material to the specified criteria.

5.6. Drainage Layer

A suitable drainage system and associated management measures shall be incorporated into the construction of the ramp.

If required, the existing site surface drainage system will be modified to incorporate and have adequate capacity to accommodate ramp Swale Drain stormwater surcharges.

An open Toe Drain will be constructed within the ramp footprint and will be maintained clean of all debris to facilitate the discharge of any stormwater. The Toe Drain(s) will be emptied of any residual water before being subsequent filled with Select Fill Material.

The ramp will include a Swale Drain on the final surface. The existing site surface drainage system will be modified to incorporate the ramp Swale Drain surcharges and direct these to the pit lake.

Critical to successful drainage construction will be:

- The clay fill selection.
- Removal of all debris from and maintenance of Toe Drains.
- Placement and adequate compaction of the Toe Drain backfill.
- Existing site drainage receiving the ramp Swale Drain discharge to be founded in competent material with adequate capacity and connection to the pit lake.
- Backfill around the drainage inlets to the pit lake to incorporate adequate rock beaching to stabilise against erosion and to minimise the velocity of stormwater flows.

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Rigby Brothers & Co Pty Limited

GROUND CONTROL MANAGEMENT PLAN

for

Extractive Industry Work Authority WA410

Coleraine Quarry

August 2024

WA410 – Coleraine Quarry
26 Templeton Street
COLERAINE VIC 3315

Project No. R21_001
August 2024

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Ground Control Management Plan

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August 2024

Document Control / Authorisation

The preparation of this Ground Control Management Plan has been a collaborative effort between BCA Consulting, Civil Mining and Quarry Geotechnics and Rigby Brothers & Co Pty. Ltd., for implementation at their Coleraine Quarry, WA410.

Revision history

Revision	Description	Date	Originator	Reviewer	Approver
00	Coffey Service - GCMP	21 May 2021	MM	PC / RW	RW
01	Revised Draft for 2024 WPV	24 August 2024	CLB	SJ	

Distribution

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Review

As a minimum, this Ground Control Management Plan will be reviewed within 3 years of being approved.

NEXT REVIEW DATE: August 2027

August ERR WPV 2024 Changes in green

WA410 Coleraine Quarry

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WA410 Coleraine Quarry

1. INTRODUCTION

1.1. Ground Control Management Plan

A Ground Control Management Plan (GCMP) is a tool for stability management, which documents the history and evolution of the geotechnical aspects of the quarry, describes the geotechnical setting, and explains the way in which ground instability hazards are managed. The GCMP should be a single, adaptive and logical document. Importantly, it should be easy-to-follow, non-technical document, to be used by anyone who needs to understand the factors influencing instability risk at the site and how the risk is to be managed over the life of the quarry. The GCMP encompasses identification, assessment and control of operational slopes and the design and rehabilitation of terminal slopes and dumps in sympathy with the intended end land uses.

This GCMP formalises the ground control processes adopted by Rigby Brothers & Co Pty Ltd who operate the quarry Work Authority WA410, located at 26 Templeton Street, Coleraine.

The GCMP has been developed based on the current knowledge of site-specific conditions, future quarry plans and currently accessible faces.

The GCMP applies to all site personnel and contractors working in the quarry.

This GCMP has been prepared by BCA Consulting Earth Resources in consultation with Civil Mining and Quarry Geotechnics, and key personal of Rigby Brothers & Co Pty Ltd to the requirements of Earth Resources Regulation. The GCMP is to demonstrate that as far as reasonably practicable the instability risks at this small quarry are adequately managed, and that the controls are commensurate with the level of risk to any sensitive receptors.

The intent of the GCMP is to enable effective and safe quarrying at WA410 by providing the framework so the geotechnical conditions can be monitored and assessed, and appropriate and proportional controls implemented and, if required, designs modified.

1.2. Scale of Operation / Sensitive Receptors

The site is bounded by Templeton Street to the northwest and the undeveloped northern extension of Cameron Street to the southeast. Figure 1 presents a Google Earth image of the site taken in 2019.

The size and scale of the operation, the relatively low activity level of operations, the location, the extraction on top of a ridgeline, and the close proximity of nearby sensitive receptors all demonstrate a medium risk profile for the quarry.

The WA410 site is located within 1 km of the northwestern margins of the Coleraine Township, as well as major road networks including the Glenelg Highway (B160), Coleraine-Balmoral (C203), and Colerain – Edenhope (C206) Roads. The Bryan Creek, a natural watercourse which flows to the north of the Colerain Township, is within 1 km of the WA410 site at its closest point. In the immediate vicinity of the quarry are several local roads, including Templeton Street and Pitcher Street to the west and south, respectively, and private farmland used for agricultural purposes. Figure 5 presents a map of external sensitive receptors as described above.

The WA410 pit has been excavated into a west facing slope above the Konong Wootong Creek and is currently approximately 193m long (NE-SW) by 157m wide (NW-SE). The higher, eastern wall is approximately 60m high at the highest point. The crest of the eastern wall is currently approximately ten metres from the Work Authority boundary at its closest point.

WA410 Coleraine Quarry

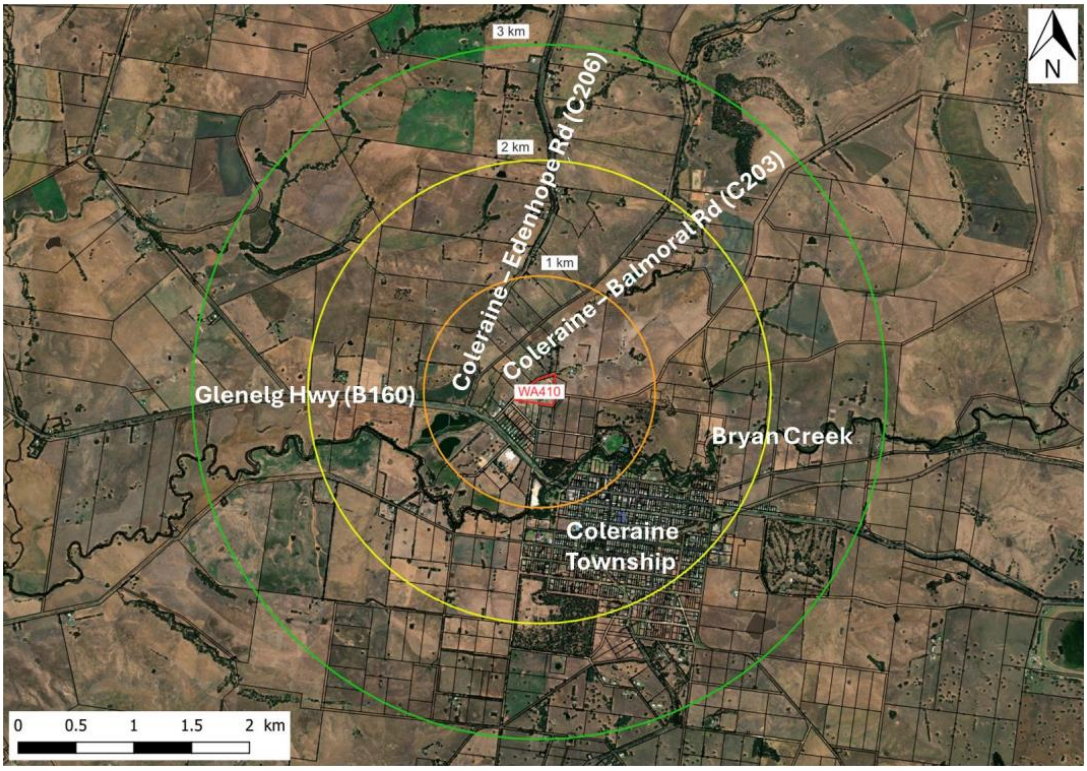


Figure 1 A regional scale location plan of the Coleraine Quarry (WA410).

2. RELEVANT DOCUMENTS

The following documents were consulted in the preparation of this GCMP:

- Coffey-754-MELGE272003AC - GCMP_Rev00
- RBR0001-REP-A_Coleraine Quarry Geotechnical Assessment (CMQ, 2024Geotechnical Assessment)
- WA410 Coleraine Quarry Geotechnical Risk Assessment, Coffey project MELGE217320, 25 May 2018.
- WA410 Approved Work Plan
- Mineral Resources (Sustainable Development) (Extractive Industries) Regulations 2019
- Occupational Health and Safety Regulations 2017
- WA410 Emergency Management Plan
- Geotechnical Guideline for Terminal and Rehabilitated Slopes – Extractive Industry Projects, September 2020 (Earth Resource Regulation: Department of Jobs, Precincts and Regions)
- Preparation of Rehabilitation Plans – Guideline for Extractive Industry Projects, March 2021 (Earth Resource Regulation: Department of Jobs, Precincts and Regions)

3. DOCUMENT CONTROL AND REVIEW

The GCMP will be reviewed to validate any collected data and designs adopted at the site. The minimum review frequency is listed inside the cover page, however other triggers to review the GCMP include:

- within three years of the last approval, and sooner if:
- an unexpected movement of ground occurs; or
- the ground conditions encountered change significantly; or
- the quarry plan or the quarrying method are to change, i.e. before proposed changes are made to quarry planning and design strategies
- after changes are noted in ground conditions or local geology
- if new risk management methods are implemented.

4. RESPONSIBILITIES AND ACCOUNTABILITIES

Responsibilities and accountability for the implementation of this Ground Control Management Plan (GCMP) at the Coleraine Quarry are outlined below.

4.1. Rigby Brothers & Co Pty Ltd

The WA410 tenement is held and operated by Rigby Brothers & Co Pty Ltd .

As the operator of WA410, Rigby Brothers & Co Pty Ltd is to ensure that:

- A Quarry Manager is appointed;
- The GCMP is implemented and all regulatory requirements are met;
- Adequate resources are allocated to fulfil the requirements of the GCMP; and
- Resources be made available to update the GCMP when required.

In terms of operations, Rigby Brothers & Co Pty Ltd will ensure that:

- Geotechnical aspects are adequately considered in relation to quarry design, planning and operation;
- Safe work procedures related to ground control are developed and implemented, with monitoring and modification when needed, in conjunction with all relevant site personnel and contractors;
- Appropriate budget allocations for ground control management are available;
- All quarry design and planning is documented and includes consideration of relevant geotechnical recommendations;
- Risk management practices are engaged for instability hazards identified during the planning and design stages of the quarry; and
- A system is in place to ensure all rock falls and slope failures are inspected, documented, and reported.

4.2. Quarry Manager

The Quarry Manager is to:

- Allocate the responsibilities and accountabilities of any unoccupied roles detailed in the GCMP to other suitably qualified and experienced persons.
- Appoint a Site Supervisor, when necessary, to operate as 'second-in-charge' to the Quarry Manager, or to assume responsibilities in their absence, in implementing the GCMP.
- Facilitate the development and implementation of the GCMP and the allocation of resources to achieve this;
- Ensure adequate ongoing training is provided to all site personnel to allow an understanding of ground control principles and practices;
- Commission reviews of the GCMP by an external geotechnical consultant; and
- Facilitate regular audit, review and quality assurance programs.

In terms of operations, the Quarry Manager will ensure that:

- Geotechnical aspects are adequately considered in relation to quarry design, planning and operation;
- Safe work procedures related to ground control are developed and implemented, with monitoring and modification when needed, in conjunction with all relevant site personnel and contractors;
- Appropriate budget allocations are sought for the ground control program;

Quarry design and planning is documented and accounts for any geotechnical recommendations as agreed with the Qualified Geotechnical Engineer, when one has been engaged;

- Hazards identified during the planning and design stages of the quarry are assessed and controls implemented where appropriate; and
- All rock falls and failures are to be inspected and documented, and the standard reporting procedure is to be followed.

4.3. Qualified Geotechnical Engineer

A Qualified Geotechnical Engineer, when engaged, is to ensure that:

- Analyses, reviews and designs are undertaken within the relevant scope of work agreed with Rigby Brothers & Co Pty Ltd;
- Current and relevant information is sought from site personnel or contractors to inform analyses, reviews and designs;
- Analyses, reviews and designs are properly documented;
- Where requested, advice is given relating to operational geotechnical issues; and
- Where identified, potential improvements to site processes relating to instability risk management, data collection or analysis methodology are communicated to the Quarry Manager / Site Supervisor.

4.4. All Site Personnel and Contractors

All site personnel and contractors are to ensure that:

- Safe work procedures are followed for all site activities;
- No work is undertaken without authorisation of the Quarry Manager / Site Supervisor;
- Only work in line with current competence is undertaken;
- Ground conditions are visually inspected and/or monitored during the shift for any occurrences of rock falls, cracking and general ground movement;
- If ground conditions change, the work area is evacuated, and the Quarry Manager / Site Supervisor is immediately notified; and
- **Other relevant information in relation to slope stability is reported to the Quarry Manager / Site Supervisor.**

5. SITE DESCRIPTION

Coleraine Quarry (WA410) is located in the town of Coleraine in Western Victoria, approximately 33 km northwest of Hamilton and approximately 290 km west of Melbourne, as shown in Figure 1.

WA410 Coleraine Quarry

The Coleraine Quarry has had a long history of quarrying, with operations occurring as far back as the 1920s. The Rigby Brothers took over the quarry lease in August 1969 and operates the quarry to this day.

The primary resource of the Coleraine Quarry site is trachyte, which is an extrusive igneous rock that is used to produce aggregate and construction materials.

The current WA410 boundary covers an area of 5.58 ha, with operations occurring within a 4.25 ha extraction area at the northern portion of the site. The site is bounded by Templeton Street along its northwestern boundary and residential lots to the south and east of the site (refer to Figures 2 and Figure 3). As part of the proposed site expansion, the WA area will incorporate a number of the residential lots surrounding the site, land which is currently owned by Rigby Bros.

The site is a small, hard rock quarry, with output in the order of 30-50,000 cubic metres per year of aggregates and road base. Drilling, blasting, extraction, crushing and screening is undertaken on an as needed / campaign basis. There is no proposed change to the current level of activity at the quarry, nor the campaign basis of the operations. The operating hours are standard EPA day period hours, i.e. 7am-6pm (Mon-Sat).

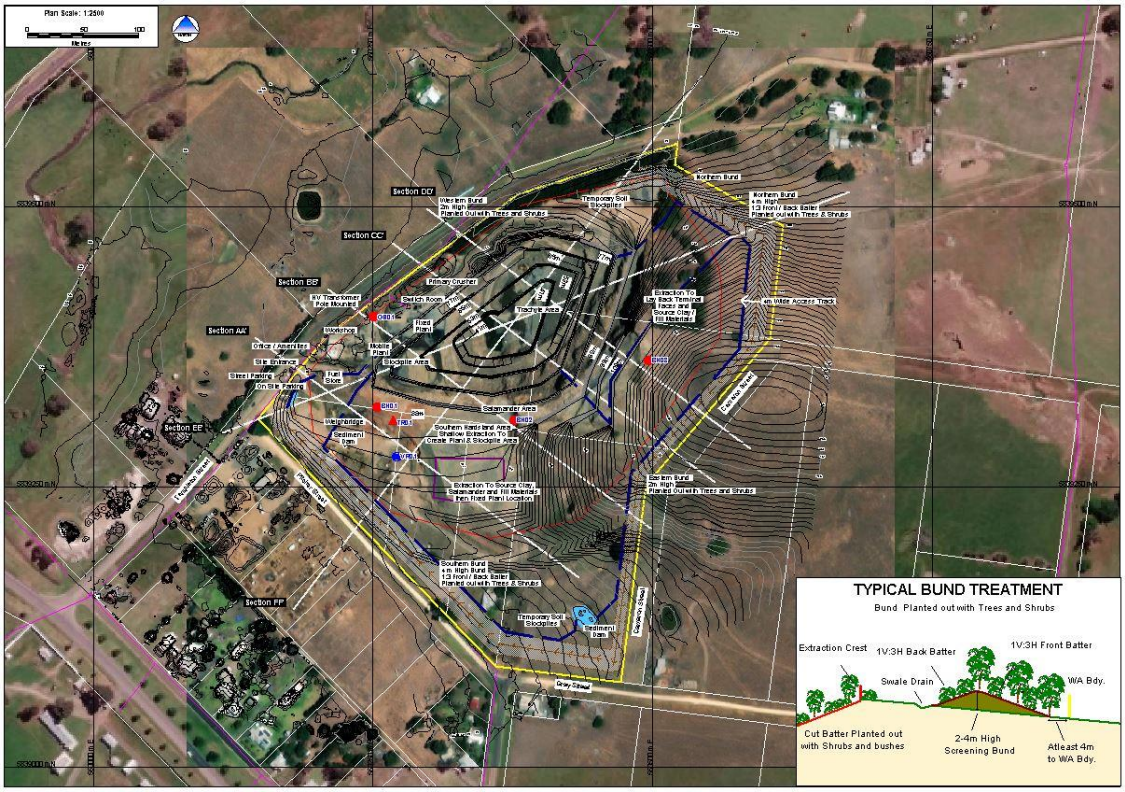


Figure 2: Quarry site with WA410 boundary in yellow

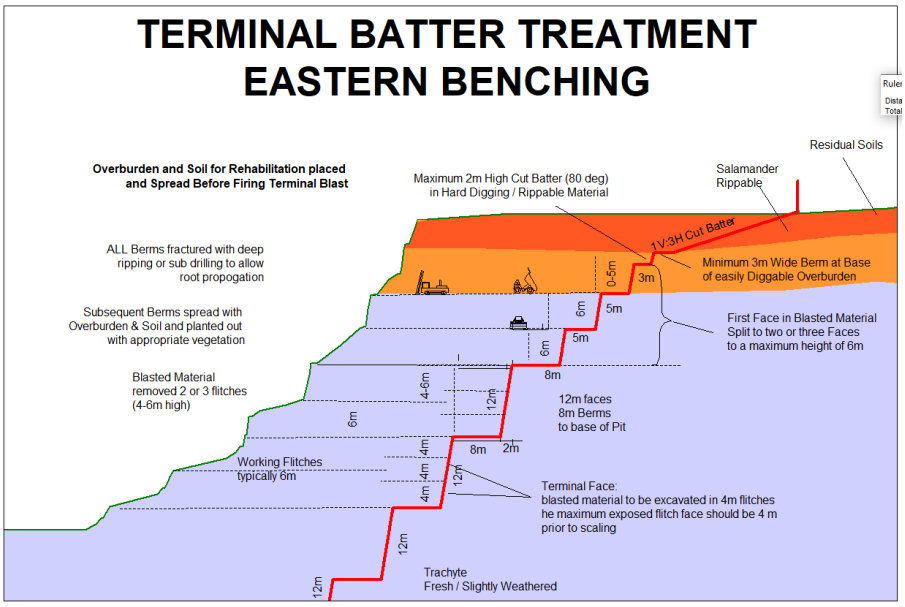


Figure 3: Schematic sections, showing depth of quarry, existing topography and terminal batter design

6. GEOLOGY

6.1. Regional Geology

WA410 is located within Western Victoria, within the Western Uplands, as defined by Victoria's Geomorphological Framework. Within the uplands, the quarry is located in an area of low elevation plateaux, which is characterised by the relatively low relief of the landscape, lower drainage density and the limited incision and dissection within the landscape. Slopes are generally gently inclined depending on the position in the landscape.

6.2. Outcrop Geology

The area in the vicinity of the Coleraine Quarry plays host to four geological units, which are listed below (from oldest to youngest).

Bacchus Marsh Formation

The oldest rocks in the vicinity of Coleraine Quarry are a series of glacial, fluvioglacial and glaciomarine deposits, which originated from several episodes of advance and melting of continental ice sheets that covered much of southern Australia in the Permian period (290 – 255 Ma), due to its proximity to the south pole at the time (O'Brien, 1996). Whilst this was a widespread event, the current exposures of these deposits are sparsely and irregularly distributed, with the majority of the unit either buried or dispersed by erosion. These Permian aged glacial deposits are collectively known as the Bacchus Marsh Formation in Victoria.

Coleraine Volcanic Group

In the Jurassic period (200 – 140 Ma), alkalic and tholeiitic magmas (alkali basalt, trachyte and basalt) erupted as flows and domes, and intruded as plugs and dykes, associated with the initiation of rifting of Antarctica from Australia (Morand *et al*., 2003). The Coleraine Volcanic Group erupted over a land surface that included the Bacchus Marsh Formation in the Coleraine area. The Coleraine Volcanic Group consisted of two distinct units: the Den Hills Formation, and the nearby Hypatia Formation. The Den Hills Formation erupted as a series of trachyte, phonolite and microsyenite, and appears as cream to dark grey, fine grained volcanic deposits (Day, 1983). No pyroclastic rocks have been observed within the Group, with relatively localised flows. Trachyte from the Coleraine Quarry has been dated at 163±3 Ma by Bowen (1975) or 156±2 Ma by Richards & Singleton (1981). The Den Hills Formation makes up the resource deposit within the WA410 boundary.

The Hypatia Formation does not outcrop within the WA410 footprint, with the closest outcrop located approximately 750 m NW of the site.

Eumeralla Formation

In the early Cretaceous (140 Ma), a rift basin formed between Antarctica and Australia as the two continents separated. As rifting developed along southern Victoria, a series of grabens and half-grabens formed, bounded by normal faults, and were subsequently filled by coarse clastic fluvial deposits derived from the local basement, and a volcanogenic component derived from a contemporaneous volcanic source (Mitchell *et al*., 1997). Widespread deposition of fluvial to lacustrine sandstone, shale and coal continued unconformably over the rift-related half-grabens and overlapped onto basement rocks to the north. These deposits were named the Eumeralla Formation which is the main exposed Cretaceous unit of the Otway Basin. In the Coleraine area, outcrops of the Eumeralla Formation are found on the southern side of Bryan Creek.

Quaternary Alluvium

The youngest units found in the Coleraine Quarry area are a series of undifferentiated, unconsolidated Quaternary sediments which are associated with the nearby Bryan Creek to the south, and Konong Wootong Creek to the northwest. These sediments are comprised mostly of sand and silt, along with interbedded gravel. Water flow along these two channels have incised into the surrounding geology, depositing the relatively young alluvial sediments along the banks.

6.3. Major Structures

Four major structures are located within 20 km of the Coleraine Quarry site. These are (from closest to furthest) the Zig Zag Fault, Brit Brit Fault, Latani Fault and Miakite Creek Fault (see Figure 4 below). None of these structures are listed as neotectonic features on Geoscience Australia's Neotectonic Features Database, however, evidence of Cenozoic activity exists on some structures. No signs of major structures were observed during the CMQ site inspection.

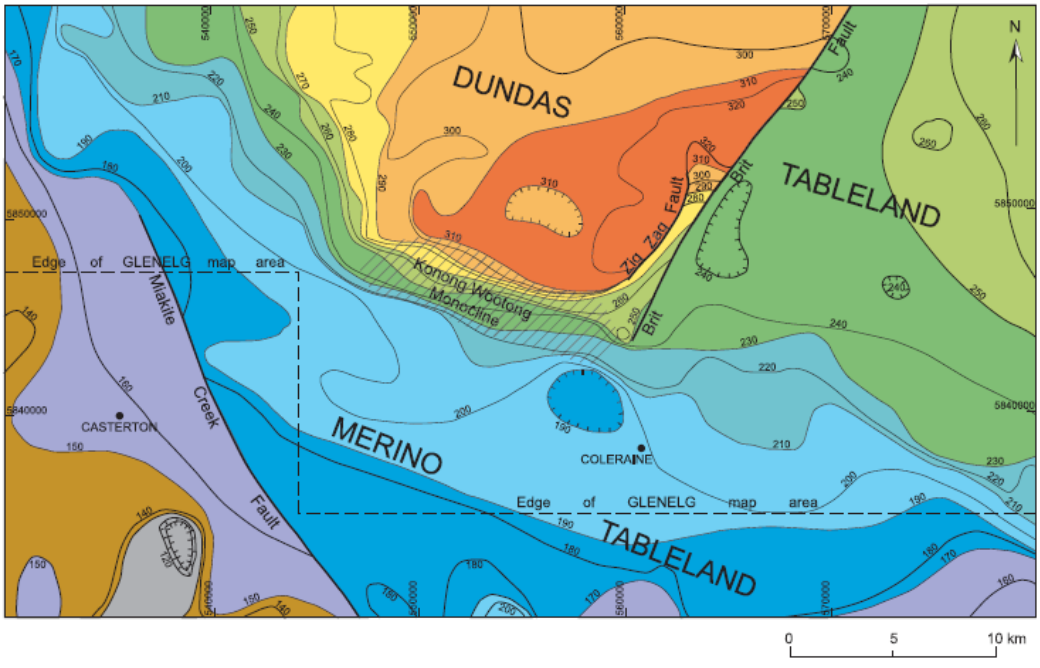


Figure 4 A geological map of the southern part of the Dundas Tableland and the adjacent Merino Tableland, centred near Coleraine, showing the nearby fault structures.

Brit Brit Fault

The Brit Brit Fault is a steeply-dipping northeast-southwest trending fault, with a prominent surface expression in the form of a fault scarp extending for approximately 20 km, with a maximum displacement of 80 m in the centre, decreasing in both directions. Towards the southern end of the fault, the displacement is taken up in part by the Zig Zag Fault, and becomes a monocline near Coleraine. The dip direction of this structure is not known (Morand *et al*., 2003). The closest point of the Brit Brit Fault from the Coleraine Quarry is approximately 7 km away. Displacement of the duricrust surface across the fault trace indicates some Cenozoic activity.

Zig Zag Fault

Named after the nearby Zig Zag Road NNE of Coleraine, the Zig Zag Fault is a northeast-southwest trending fault, that runs parallel to the Brit Brit Fault 1 km to the west. The Zig Zag Fault forms a scarp with 50-60 m of displacement (Morand *et al*., 2003). The Zig Zag Fault can be found approximately 8 km north of the Coleraine Quarry. Displacement of the duricrust surface across the fault trace indicates some Cenozoic activity.

Latani Fault

The Latani Fault is an important north-south trending fault that shows the different relationships with the Grampians Group. Much of its length corresponds to the western limit of the Grampians Group outcrops. Analysis of the surrounding fault structures suggest that the primary movement of the Latani Fault is generated by strike-slip movement. The closest point of the Latani Fault to the Coleraine Quarry is approximately 17 km away The Latani Fault is the oldest of the nearby structures, and is associated with the Delamerian Orogeny in the Cambrian period.

Miakite Creek Fault

The Miakite Creek Fault is a northwest-southeast trending fault that is approximately 35 km in length, and is marked by a fault scarp and a straight section of the Miakite Creek. Ferricrete (ferruginised Parilla Sand) is displaced/warped by up to 20 m across the fault trace, indicating some Cenozoic activity. The Miakite Creek Fault appears to be a relatively young structure, post-dating the deposition and ferruginisation of the Parilla Sand (Morand *et al*., 2003). The Miakite Fault can be found 17 km southwest of the Coleraine Quarry.

6.4. Site Geology

The site is situated within the Den Hills Formation of the Coleraine Volcanic Group (200-140 Ma), which comprise trachyte and basalt lava flows, domes and laccoliths. Existing pit wall are predominately developed within trachyte, with the eastern boundary exposing a combination of weathered trachyte and siltstone.

The degree of weathering of exposed trachyte at the site generally decreases with depth, with moderately weathered material (colloquially known as salamander) encountered up to 10 m below natural surface level, overlying slightly weathered followed by fresh trachyte towards the base of the excavation. A profile of highly weathered residual soils constitutes the uppermost horizon of approximately 1 m across the site.

The fresh trachyte at the quarry is characterised as ‘very strong’, with an estimated unconfined compressive strength (UCS) of up to 150 MPa based on field observations. The material is blocky with up to four major defect sets encountered across the site.

Several intrusive investigations were performed within the WA410 boundary as summarised in

WA410 Coleraine Quarry

Table **1** below. This includes five boreholes and one trench. The borehole coordinates have been estimated based on Figure 3 in the Coffey (2019) report.

WA410 Coleraine Quarry

Table 1 The boreholes drilled around Coleraine Quarry (Coffey, 2019).

Borehole ID	GDA2020 MGA Zone 54		Estimated Collar (m RL)	Comments
	Easting	Northing		
BH01	560262.04	5839319.79	97	Drilling stopped at 11 m below surface level (86 m RL). No hard rock found. No groundwater encountered.
BH02	560384.51	5839306.89	113	Shale found from 12 m to 24 m below surface level (89 m RL). Borehole terminated at 24 m. No hard rock found. No groundwater encountered.
BH03	560500.84	5839360.67	131	Drilling terminated at 48 m (83 m RL). No hard rock found. No groundwater encountered.
TR01 (trench)	560274.06	5839308.66	96	Trench excavated to a depth of 5 m below ground (91 m RL). No hard rock found. No groundwater encountered.
VR01 (VicRoads 1982)	560271.31	5839276.90	107	Approximately located some 15 m off the northern boundary of the WA boundary. Reported as clay from surface to 21 m depth (86 m RL). No groundwater encountered.
GS01 (Geological Survey)	560233.09	5839392.02	70	Groundwater bore drilled in March 1983. Reported trachyte to 70 m depth (16 m RL). No groundwater was encountered.

WA410 Coleraine Quarry

Figure 5 A view of the eastern batters showing the moderately to highly weathered trachyte (colloquially known as salamander) near the crest of the slope, and the fresh to slightly weathered trachyte below.

Figure 6 East West Defects

WA410 Coleraine Quarry

Figure 7 West Wall Defects

Figure 8 North Wall Defects

6.5. Historical Stability Performance

From 2018 to 2020, the Client engaged Coffey to undertake a number of site inspections and subsequent geotechnical reviews of the Coleraine Quarry, including collating information pertaining to the past stability performance of the site. A summary of this information is presented below:

- In general, the historic performance of the quarry walls is considered satisfactory with the exception of localised sections of the east wall which exhibit crest loss due to a combination of blasting, excavation (including scaling of loose material) and defect orientation.
- Specifically, the southern end of the eastern wall, facing northeast (towards 320°) exhibits increased crest loss and wedge formation. This coincides with a prominent joint set daylighting and outward dipping orientation that facilitates kinematically feasible planar wedges to unravel.
- Immediately above the ramp in this area, scaling of loose crest material in January 2020 resulted in significant crest loss when damaged rock reportedly broke back readily to outward dipping joints, reducing the RL 89 berm width from 6.0 – 7.5 m to approximately 3.5 m.
- This portion of the wall lies closest to the contact between trachyte and overlying sediments which act as a potential plane of weakness within the slope.
- Owing to the January 2020 instability event, WorkSafe Victoria issued an Improvement Notice (V00048404542L111-01) regarding the eastern wall which resulted in the suspension of works below the area of concern.
- Recommendations developed by Coffey (2020) included excavating a cutback of the southeast sediment batters or constructing a rockfall bund at the base of the pit to delineate an exclusion zone.

Initial works resumed in the southeastern corner of the quarry following the development and implementation of a Ground Control Management Plan (GCMP) in 2020. Furthermore, the updated pit design considers stability in this area through reduced batter-berm geometries within the sedimentary units.

6.6. Defect Sets

A fundamental component of the geotechnical domains within a structurally controlled deposit is the variation in the orientation and dip of the geological structures in relation to the respective quarry pit sectors. A detailed discussion of the defect sets is presented in the 2024 CMQ Geotechnical Assessment, with the summary table reproduced for consideration of identifying structure orientations which may be critical.

The structural information utilised in these analyses was obtained from a targeted campaign of defect mapping undertaken during the site visit. The intent of the mapping was to identify defect sets and orientations that are likely to impact on quarry slope stability performance.

Based on the mapping undertaken during the CMQ site visit on 5 February 2024, four (4) predominant defect sets have been identified from a total of 201 structures. Table 2 summarises the angle and orientation of each defect set, with a stereographic analysis shown in **Error! Reference source not found.**.

Table 2 The identified defect sets during the CMQ site inspection in February 2024. The values in square brackets represent the minimum and maximum ranges.

Joint Set ID	Dip (°)	Dip Direction (°)	Condition
J1	47 [32-64]	339 [314-005]	Clean, with minor iron oxide coating, rough, planar/undulating
J2	57 [42-70]	71 [052-087]	Clean, with minor iron oxide coating, rough, planar/undulating
J3	50 [41-60]	260 [240-282]	Clean, with minor iron oxide coating, rough, planar/undulating
J4	76 [70-80]	268 [256-276]	Clean, with minor iron oxide coating, rough, planar/undulating

6.7. Groundwater

Borehole data reviewed by CMQ, including that presented in

Table **1**, indicates that no significant groundwater table has been intersected across the various campaigns of up to 70 m depth. This is consistent with anecdotal evidence provided by site personnel who suggest groundwater seepage through exposed faces is rarely encountered. A search of the Visualising Victoria's Groundwater (VVG) database (Federation University Australia, 2019) indicated variable depth to groundwater across the Coleraine Quarry site, ranging from 5 m depth in the eastern extents of the quarry (towards Konong Wootong Creek) to 50 m depth at the western extents of the site. **Error! Reference source not found.** depicts the depth to groundwater within the Coleraine region as per VVG.

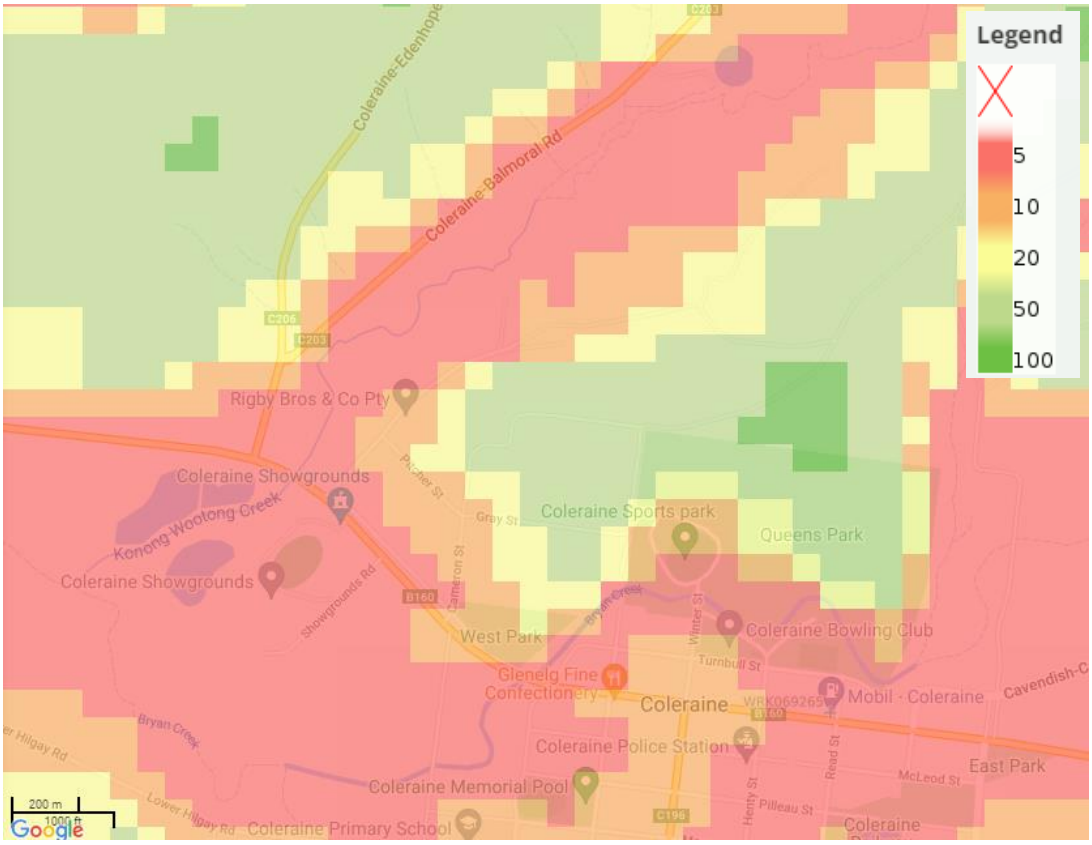


Figure 9 An extract of the Visualising Victoria's Groundwater database of the Coleraine area (extracted 22/03/2024).

Based on the above information, the groundwater table is estimated at between 20 – 30 m below the proposed pit floor (RL 49 m). Accordingly, site groundwater is not anticipated to significantly influence pit wall stability.

6.8. Surface Water

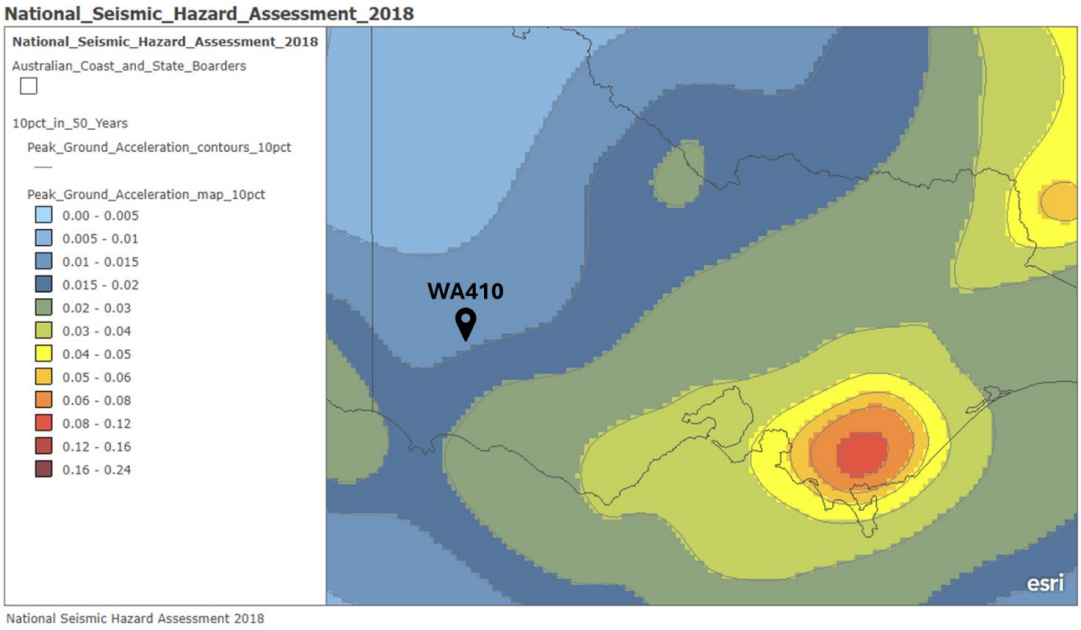
Surface water drainage at the Coleraine Quarry site occurs in sympathy with the surrounding topography which generally decreases in elevation from east to west toward the Konong Wootong Creek. Water which is intercepted by the pit is diverted towards the base of the excavation where it is collected in designated sump locations. A mobile pump is located at the base of the quarry which is used to dewater the sumps in the unlikely event of flooding due to intense rainfall.

6.9. Seismicity

Seismicity is considered in detail in the 2024 CMQ Geotechnical Assessment, Section 7.7.7.1. The 1:500 year seismic hazard atlas map is reproduces below.

There are no records of seismic events impacting the site.

WA410 Coleraine Quarry



National Seismic Hazard Assessment 2018

The results of seismic loading sensitivity analyses indicate:

- The stability performance of all nominated critical stability sections exceeded the requisite seismic DAC (FoS > 1.1) for both a 1:500-year and 1:2500-year return events.
- This highlights the robustness of the proposed terminal design under seismic conditions.

7. SITE HISTORY

Rigby Bros & Co Pty Ltd (Rigby Bros) operate the quarry at Templeton Road, Coleraine, western Victoria. The quarry has been in continuous operation since 1947 and was acquired by Rigby Bros in 1969. The quarry operates under Work Authority 410 (WA410) and is located on the north-western side of Coleraine.

7.1. Extraction Method and Processing

The quarry extracts stone using blasting, typically on 6m- or 12m-high benches, with 76mm diameter production holes drilled on a staggered 2.4m x 2.4m pattern. Broken stone from each blast is loaded via excavator and trucked to an on-site crusher and grader located on the western wall. Crushed stone is stockpiled in an area immediately south of the crusher. A loader is used to rehandle material between stockpiles and to load crushed stone into road trucks which exit the site at the quarry gate located in the southwest corner of the Work Authority area. A front-end loader is used to rehandle material between stockpiles and to load material into road trucks.

7.2. Historical Instability Experience

Blasted faces exhibit traditional blocky / joint fractures.

WorkSafe Victoria inspected the quarry on 21 January 2020. The Entry Report (reference number

V0004840542L) and Improvement Notice (reference number V00048404542L/111-01) raised several points concerning the eastern wall which required action, namely along the eastern batters, evidence of past wedge and planar instabilities were identified resulting in localised crest loss due to a moderately dipping joint set observed to daylight across the face. This included the January 2020 instability that resulted in significant crest loss of up to 5 m. An inspection of this area showed that no further episodes of instability has occurred, with those prominent joint sets still visible (see below figure10).

WA410 Coleraine Quarry

Figure 10 The eastern batters of the Coleraine Quarry, with outward dipping joints indicated

During the GHD inspection, minor erosion was observed within the upper weathered salamander component of the deposit, particularly along the northern batter section of the ramp (see Figure 11). Erosion gullies were observed up to 0.3 m in depth.

Figure 11 An image of erosion of the upper salamander component of the trachyte deposit

7.3. Recording of Instability Observations

Due to the infrequent use of the site, Coleraine Quarry's occupational health and safety procedures for reporting / risk assessment require a "Coleraine Quarry's – Opening and Closing Quarry Checklist" to be completed at the start of each extraction campaign / works program, including an assessment of any instability risks. Also, an OH&S Incident Report Form must be completed if any unmanaged hazard is identified or a risk event occurs that poses a risk to site personnel or contractors. A review of these records shows no previous reporting of any identified dangerous ground conditions or failures / instabilities for the site.

As above, negligible erosion impacts are expected on quarry faces due to the shallow depth of colluvium and strong weathering and the location of the quarry on a ridge crest.

8. GEOTECHNICAL SYSTEMS

8.1. Geological Structure Stability Analysis

As described in Section 6.6 (Geology) of this report and shown in Table 2, four (4) predominant defect sets have been identified from a total of 201 structures.

The identified major defect sets at Coleraine Quarry are represented using a lower hemispherical stereographic projection for each of the proposed quarry batters, along with the respective slope orientations within the pit. Figure 12 presents the nominated batter orientation domains for the proposed pit design, with corresponding information summarised in Table 3.

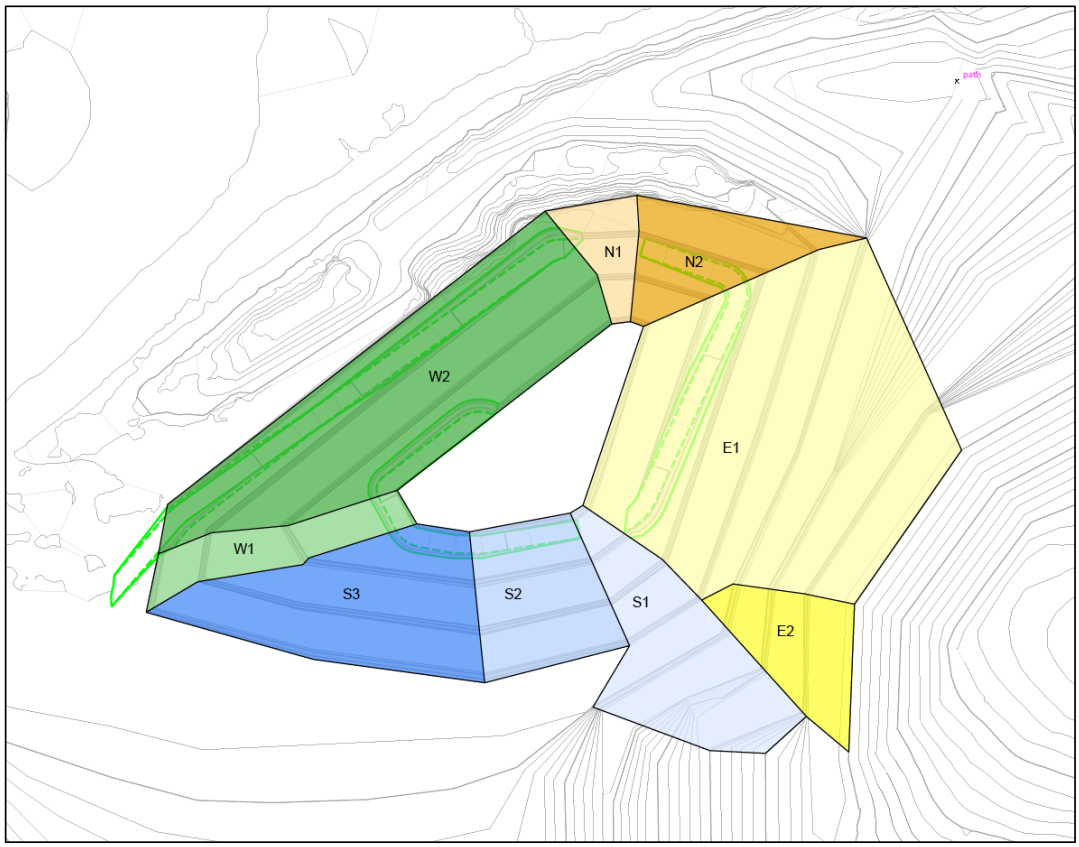


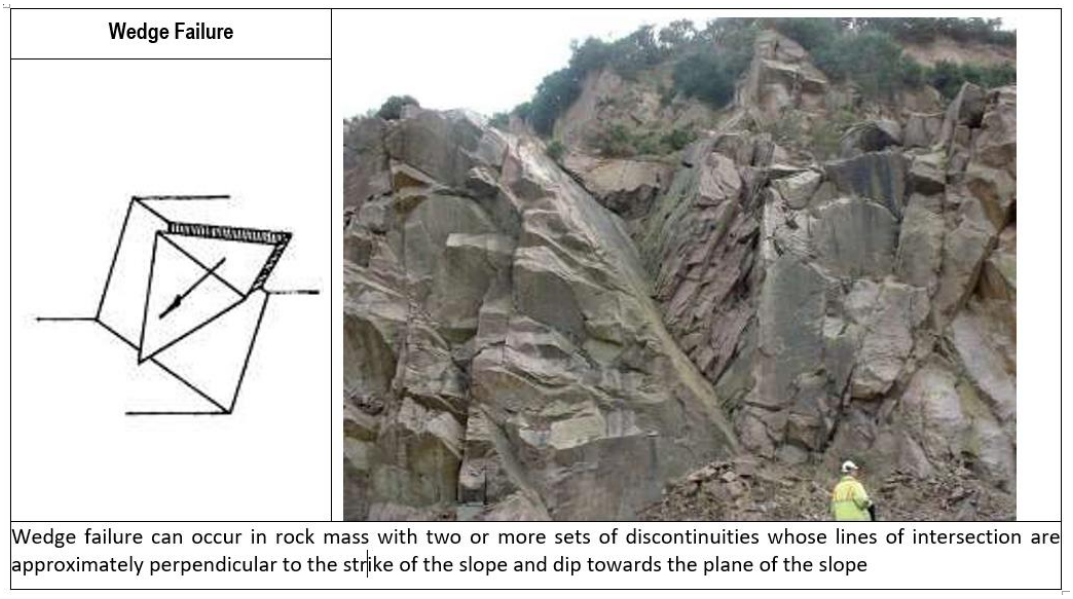
Figure 12 The proposed pit design for Coleraine Quarry indicating the nominated sub-domains.

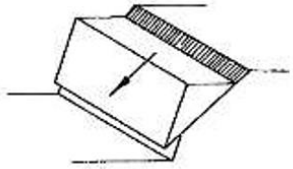
Table 3 The batter orientations within the proposed pit design at Coleraine Quarry.

Domain	Batter sub-domain	Batter orientation (°)
North	N1	179
	N2	198
East	E1	290
	E2	275
South	S1	330
	S2	349
	S3	010
West	W1	032
	W2	142

8.2. Predominant potential instability structures

For the Coleraine Quarry, the key structurally controlled instability mechanism identified using a stereographic analysis of the rock joints is tetrahedral wedge and planar sliding, as shown in pictorially and schematically below.



Planar Failure	
	
A planar failure of rock slope occurs when a mass of rock in a slope slides down along a relatively planar failure surface. The failure surfaces are usually structural discontinuities such as bedding planes, faults, joints or the interface between bedrock and an overlying layer of weathered rock.	

Based on the analyses, the following modes of instability have been identified for each of the proposed pit walls (Table 4). It should be noted that where multiple instability types are identified, the order of presentation denotes the likelihood of that particular instability mode manifesting (i.e. left is more likely, right is less likely).

Table 4 A summary of the structurally controlled modes for the proposed pit design.

Domain	Batter sub-domain	Structural instability mode
North	N1	Planar
	N2	Planar
East	E1	Wedge, planar
	E2	Wedge, planar
South	S1	Wedge, planar
	S2	Wedge, planar
	S3	Wedge, planar
West	W1	Wedge, planar, toppling
	W2	Planar

8.3. Composite Stability Mechanisms

8.3.1 Active Passive Wedge Type Instabilities

Active/passive wedges are a type of composite kinematic (structural) instability, however, cannot be identified using stereographic projections alone. Active/passive wedge instabilities occur when a rock mass slides along a set of persistent discontinuities, such as a shear zone or bedding plane, that is oriented with an outward dip that daylights at the slope face. The active/passive wedge mechanism is illustrated in Figure 14.

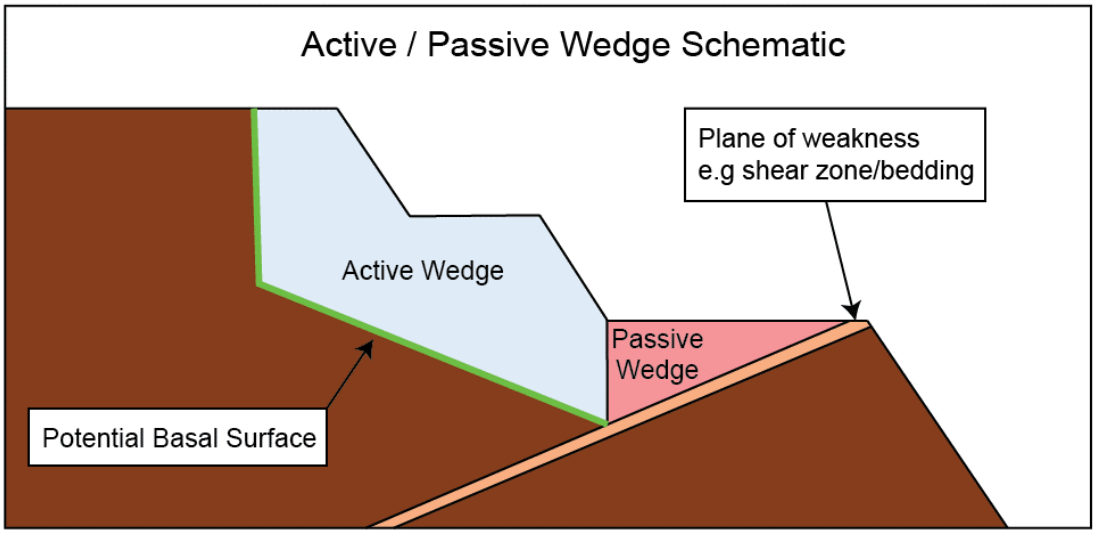


Figure 14 A schematic of the active/passive wedge mechanism.

As shown, the driving forces are transferred from the active block (blue) resulting in a dislodgement of the passive block (red). In order for the active/passive wedge to be feasible, discontinuities must also be present (the potential basal plane), or the weight of the sliding block must be sufficiently large to cause a shear in the rock mass. The transitional point between the active/passive wedge can be identified by severe fracturing and shearing of the rock mass and may occur over a range of possible orientations (not just vertical, which is depicted in 14).

Based on the site observations, CMQ does not expect that the potential failure mechanism is likely to manifest in the currently exposed batters. However, it is important that regular and ongoing mapping be undertaken as extraction continues to identify these potential instabilities.

8.3.2 Circular Instability

Circular failure typically occurs within soil and highly disturbed and/or weathered material that typically does not have any remnant structure (Figure 15). Circular failure is dependent upon the shear strength characteristic of the material, and the slope angle of the cut face.

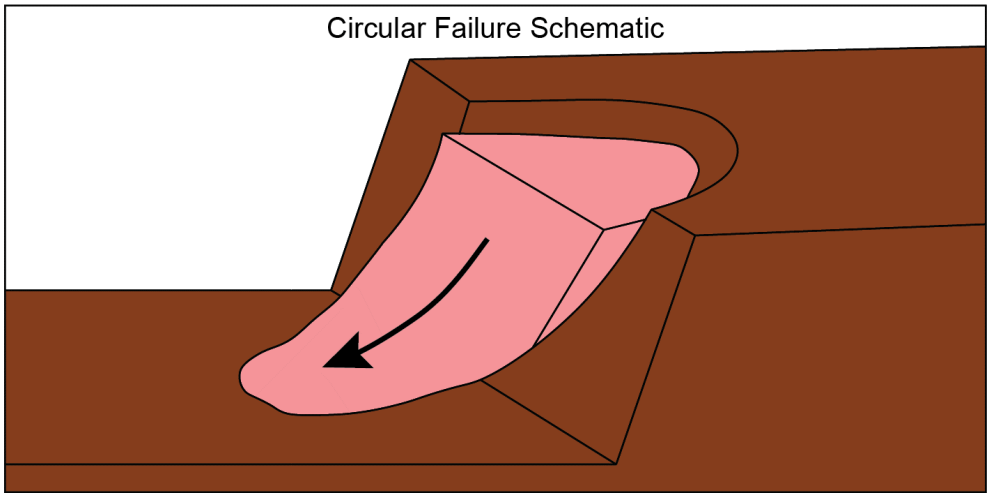


Figure 15 A schematic of a circular failure.

At the Coleraine Quarry site, this instability mechanism may manifest within the extremely or highly weathered material. Accordingly, the potential circular failure mechanisms are likely to be of small scale and unlikely to present global slope instability.

9. QUARRY DESIGN AND PLANNING

9.1. Pit Design

The batter designs have been designed based on historical practices, the experience of the Quarry Manager and the experience of BCA Consulting in similar materials. Geotechnical assessments by geotechnical experts such as CMQ are used to verify the stability of existing and future slopes. These assessments may result in adjustments to the batter profiles and batter orientations.

The design process endeavours to prevent hazardous or unexpected slope failures during the life of the quarry by:

- Application of the recommended slope configurations, maximum face heights and minimum berm widths
- Considering the interaction between any infrastructure, haul roads / ramps and the slopes;
- Minimisation / avoidance of convex slope sectors; and
- Providing for surface water control and dewatering.

If any multi-bench slope failure is identified designs will be checked by a Qualified Geotechnical Engineer, this GCMP updated, and the slope configuration parameters adjusted based on geotechnical investigations.

If an observed batter profile is not compliant with the specified slope configuration, the Quarry Manager may either:

- Direct that the design be amended to achieve compliance; or
- Initiate a geotechnical investigation addressing the matter using up to date data as the basis for a decision to approve the revised slope configuration / specifications; or
- Undertake an assessment of the risk associated with excavating a slope configuration different from that specified and approve the non-compliant design where it presents an acceptable level of risk.

At no stage are design modifications to be implemented without the appropriate site approvals and documentation.

The slope configurations for the quarry are summarised in Table 5 below and are based on a geotechnical investigation and stability analysis, an assessment of past performance of the quarry walls and experience in similar materials.

Table 5: Summary of preliminary slope configuration parameters (working and terminal batters)

Geometrical parameter	Terminal design	Rehabilitation design
Batter angle (overburden)	1V:3H (18°)	1V:3H (18°)
Batter height ('diggable' material)	6 m	2 m
Bench width ('diggable' material)	5 m	5 m
Batter height (hard rock)	12 m	12 m
Bench width (hard rock)	8 m	8 m
Batter angle (hard rock)	6V:1H (80°)	6V:1H (80°)
Maximum pit depth	84 m	84 m

9.2. Waste Dump / Large Screening Mound Design

The waste dumps are designed with consideration of foundation conditions, dumped materials and water management to provide for stable lifts and overall dump stability.

9.3. Site Experience

The site data collected as the pit is excavated is not intended to replace geotechnical investigations but rather to be used in conjunction with structural geological data from geotechnical investigations to inform future pit designs.

Slope performance and geotechnical conditions will be continually checked against the expected conditions and this information will be used in updating geotechnical recommendations.

10. HAZARD AWARENESS

10.1. Site Hazard Identification / Risk Assessment

As a minimum a hazard report, consisting of both the “Condition Report” (Form 1) and a “General Slope Stability Checklist”, included as Appendices to this GCMP, will be conducted monthly, or as a minimum at the start of and completion of all extraction and crushing campaigns. A Hazard Report will also be conducted after significant rain events.

Where possible, photographs of quarry faces and rehabilitated batters will be taken to allow an objective assessment to be undertaken.

10.2. Personal Risk Assessment

Coleraine Quarry engages contractors for plant maintenance and other specialised services. Contractors are required to provide safe work procedures as part of the tender process, and as such, the forms / process described here are generic only. The emphasis is that there will be a documented process to undertake a personal risk assessment, as a minimum at the start of each extraction and crushing campaign and at suitable ongoing frequency, typically monthly but dependent upon the level of activity at the site.

The Coleraine Quarry – Opening and Closing Quarry Checklist, or something similar to the “Take 5” checklist (presented below), is typically used on a daily / routine basis.

If any unmanaged hazard is identified or a risk event occurs that poses a risk to site personnel or contractors then an OH&S Incident Report Form, or similar (such as the Hazard/Near Miss form below), will be completed.

These forms are the first level of officially reporting any hazards, including instability hazards, in the work area.

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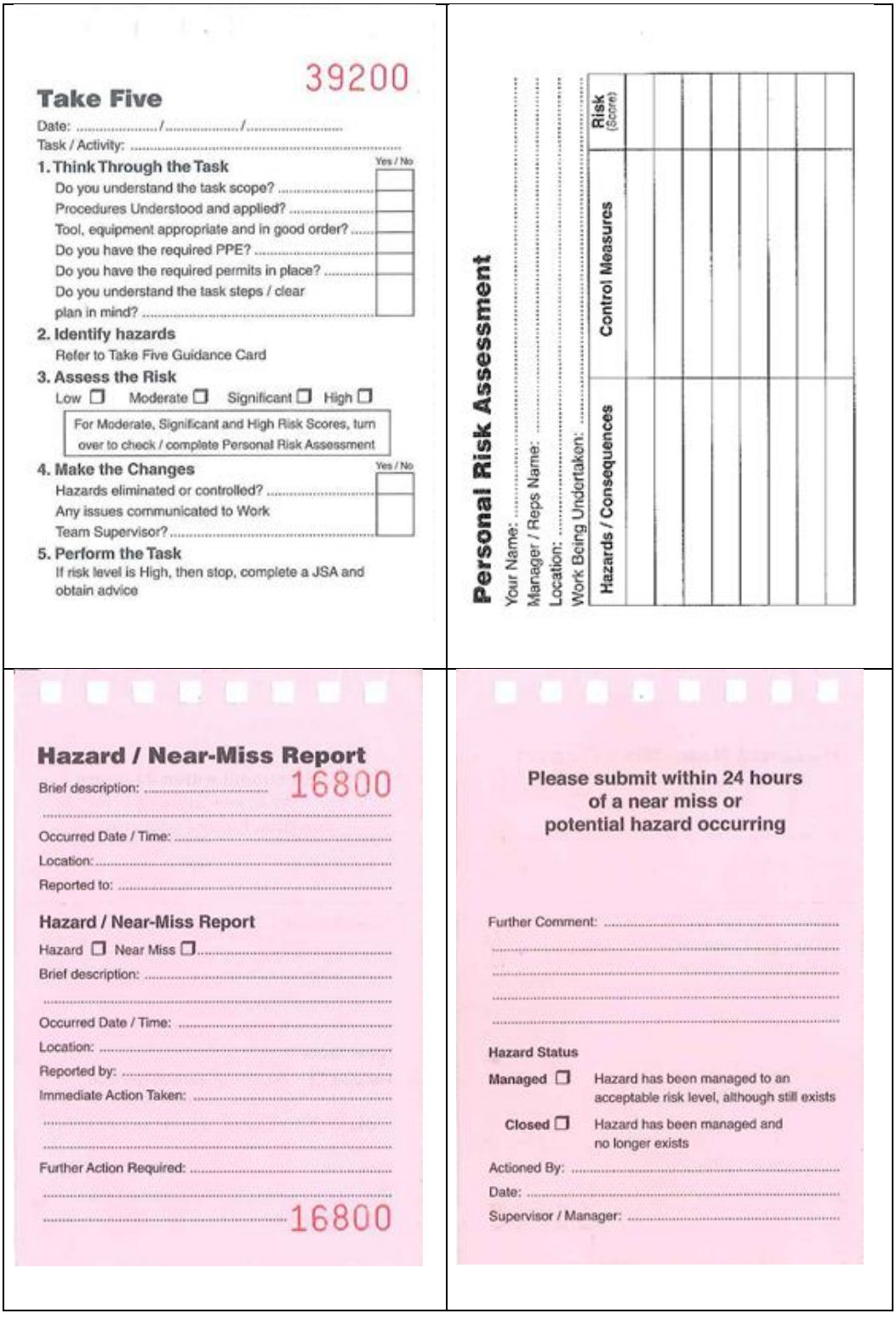
WA410 Coleraine Quarry



Take Five 39200

Date: ...../...../.....

Task / Activity: .....

1. Think Through the Task (Yes / No)

- Do you understand the task scope? .....
- Procedures Understood and applied? .....
- Tool, equipment appropriate and in good order? .....
- Do you have the required PPE? .....
- Do you have the required permits in place? .....
- Do you understand the task steps / clear plan in mind? .....

2. Identify hazards

Refer to Take Five Guidance Card

3. Assess the Risk

Low ☐ Moderate ☐ Significant ☐ High ☐

For Moderate, Significant and High Risk Scores, turn over to check / complete Personal Risk Assessment

4. Make the Changes (Yes / No)

- Hazards eliminated or controlled? .....
- Any issues communicated to Work Team Supervisor? .....

5. Perform the Task

If risk level is High, then stop, complete a JSA and obtain advice

Personal Risk Assessment

Your Name: .....

Manager / Reps Name: .....

Location: .....

Work Being Undertaken: .....

Hazards / Consequences	Control Measures	Risk (Score)

Hazard / Near-Miss Report 16800

Brief description: .....

.....

Occurred Date / Time: .....

Location: .....

Reported to: .....

Hazard / Near-Miss Report

Hazard ☐ Near Miss ☐ .....

Brief description: .....

.....

Occurred Date / Time: .....

Location: .....

Reported by: .....

Immediate Action Taken: .....

.....

.....

Further Action Required: .....

.....

..... 16800

Please submit within 24 hours of a near miss or potential hazard occurring

Further Comment: .....

.....

.....

.....

.....

Hazard Status

Managed ☐ Hazard has been managed to an acceptable risk level, although still exists

Closed ☐ Hazard has been managed and no longer exists

Actioned By: .....

Date: .....

Supervisor / Manager: .....

11. QUARRY OPERATIONS

11.1. Drill and Blast

Blast designs and bench plans are prepared by the blasting contractor in conjunction with Coleraine Quarries. All blasts are videoed, specifically to monitor shot performance (dust, fumes, fragmentation), as well as fly rock and venting. A full description of the risk management for drilling and blasting is contained in the Work Plan and the Blast Management Plan.

Drilling and blasting are conducted on 12m high benches. Based on experience to date, blast patterns have been customised for the various materials encountered in the pit. It is expected that as quarrying progresses and blast designs are further refined, these standard patterns may change.

11.2. Scaling

Standard quarrying involves the controlled / managed removal of the blasted material and excavation of pit slopes and this is important for minimising the instability risk to pit personnel and maximising stone recovery.

The objective of scaling is to excavate back to design then to remove any loose material beyond the design face that is at imminent risk of failing. In assessing this risk of failure, consideration should be given to the strength of the rock mass, the orientation and spacing of structures and the presence of any seepage.

Not all material that is loose is at imminent risk of failure so care should be taken not to over excavate the face. Where rock is highly fragmented, particularly at berm levels where the effects of blasting are often more severe, it may be appropriate to scale only enough material that the fragmented ground is laid back to a slope angle where material no longer frets from the slope. If there is uncertainty regarding scaling, a Qualified Geotechnical Engineer should be consulted.

Faces should be adequately scaled and berms cleared of any unnecessary loose materials before completion of an area.

11.3. Minimum Bench Width

Adequate berm capacity is a key engineering control in managing rock fall risk. Typically, berm width to manage rock falls are in the order of 6-8m. The minimum 8m wide berms ensure the scaling activities can be managed so that effective berm widths are not unnecessarily narrowed. Where competent scaling consistently results in insufficient berm capacity, it may be necessary to change either the blasting design or the slope configuration for that area.

11.4. Edge Control

Regular inspections will pay particular attention to the edges of ramps and berms. Edges should not be left open and windrows should be constructed behind potentially unstable zones. Where support is necessary it will be appropriately designed and applied. Where conditions dictate, specific safe work procedures will be established with the aid of experienced external consultants.

11.5. Drainage Control

Drainage controls will be implemented to ensure surface runoff is directed away from the extraction area or, where necessary, directed into a sump within the extraction via drains through stable areas or lined drained (if required). Regular inspections will assess the effectiveness of drainage controls, particularly upslope of potentially unstable zones. Where conditions dictate, specific safe work procedures will be established for constructing appropriate drainage controls with the aid of experienced external consultants.

11.6. Terminal Batter Control – Multi Bench Hard Rock Quarries

Best practice for minimising geotechnical risk in quarries is to implement final wall blasting and hard scaling methods to minimised blast damage i.e., damage to final walls, and to remove exfoliated rock mass from the slopes. This is particularly important along the eastern wall where parasitic jointing has resulted in pervasive crest loss. Accordingly, the CMQ recommendation from April 2024 assessment will be adopted for terminal bench development at the Coleraine Quarry:

- Drilling and blasting to be performed for a continuous 12 m face height.
- Blasted material to be excavated in 4 m flitches. The maximum exposed flitch face should be 4 m prior to scaling, upon which subsequent flitch excavation can occur.

Noting that general practice is for working faces to be blasted at an angle of 75-80 degrees, but once the expected levels of back break and subsequent final wall scaling, with controlled blasting techniques, as necessary, are factored in the terminal face will be at a maximum angle of 70 degrees. Once the terminal faces in rock are established, the likelihood of small failures and rock falls at the bench scale will be significantly reduced, and after an initial settling period the likelihood will further reduce with time.

The terminal bench design incorporates berm widths that match the minimum bench widths derived in the Geotechnical Assessment but are actually in addition to the backbreak and scaling that is already accounted for in establishing the terminal faces. The Geotechnical Assessment demonstrates that, in the event of any bench scale failure impacting these berms on terminal faces, the berm widths are sufficient to prevent such failures propagating up the slope and to catch the debris of any such failures and rock falls.

Maintain terminal batters consistent with approved design by utilising blast site surveying, final wall scaling and, as necessary, controlled blasting techniques (e.g. contour, pre-split or trim blasting).Terminal benches cleared of loose rock, as necessary, following final wall scaling.

In addition to the above, pre-split or trim blasting are considered effective measures to reduce the prevalence of crest loss as WA410. The specific need to employ these will be evaluated during the course of extraction. A summary of each method is provided below.

11.6.1 Pre-split Blasting

- Pre-split blasting involves the drilling and loading of a row of holes along the intended excavated batter face (pre-split row) with lightly loaded decouple charges. The purpose of the presplitting is to create a continuous fracture plane between the presplit holes, coincident with the intended batter face, to reduce blast-induced damage and overbreak / underbreak of the batter face as a result of production blasting.
- For pre-split blasting to be successful, buffer and easer rows with reduced charge should also be drilled ahead of the intended batter face. The intention of the buffer and easer holes are to decouple the pre-split from the production blast and thus reduce the blast-induced damage on the batter face. An example of the set-up for pre-split blasting is presented in Figure 1 below.
- The timing and detonation of the presplit holes greatly impacts the success of presplitting. Ideally, pre-split holes should be detonated before the adjacent blasts are drilled, however it is acknowledged that this is often impracticable. Pre-split blasting should be detonated before the first production shot, or on the first delay of the production shot (Eades, 2019).
- As noted by Read and Stacey (2009), where pre-split techniques are correctly employed and the geology is favourable, the slope damaged caused by tensile failure and radial cracking can be significantly reduced. The following geological conditions are considered favourable for pre-split blasting: massive rock, tight joints, dominant joint orientation more than 30° off strike of the designed face, and the absence of weak structures that form wedges of daylight on the batter face and catch berm.

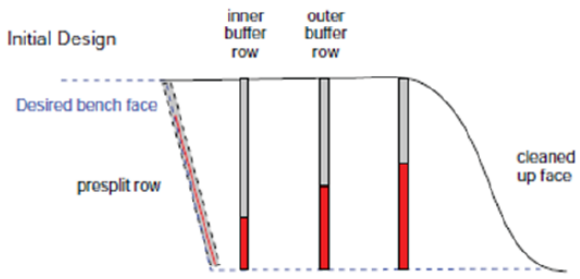
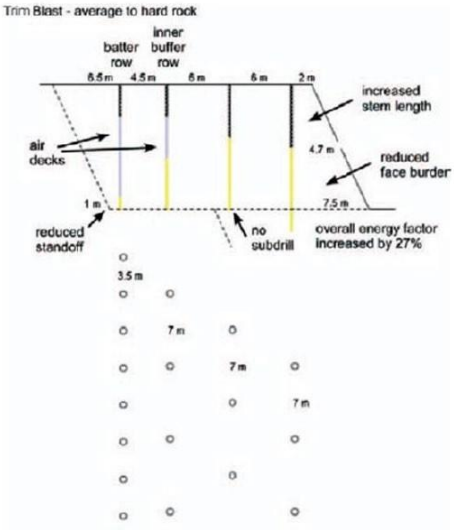


Figure 1 Schematic of pre-split blasting after Read and Stacey (2009)

11.6.2 Trim Blasting

- In trim blasting, rows of holes are drilled ahead of the toe of the intended batter face, known as the trim row. The trim row is established to define the toe (rather than the crest) of the batter. A minimum standoff distance from the toe is required to reduce blast-induced damage of the toe and slope. The toe standoff distance is a crucial part of the drill and blast design, as this may result in the overbreak or underbreak of the batter. An example of the set-up for trim blasting is presented in is presented in Figure 50 below.
- Notably, trim blasting occurs after the main production blast. As such, the trim blast design is typically unique and progressively refined based on the observed batter conditions after production blasting based on information gathered as batter faces are exposed. Nonetheless, careful blast design is required to ensure that the trim blast is successful and does not propagate beyond the design crest.
- It is noted that the batter face angles after trim blasting is typically between 60–75°, however this is usually established based on structure of the rock mass rather than as a direct result of the blasting process itself.
- Trim blasting is considered effective in rock mass with a blocky nature or where near-vertical beddings may cause overhang / formation of irregular faces. As discussed above, pre-splitting is considered effective where the blocky joints are tight, in all other scenarios, trim blast is considered most effective.



11.7. Backfilling Batters

Rehabilitation profiles in the plant and stockpile area will be achieved by placing overburden and quarry waste rock (weathered rock, crushed as necessary) against the terminal face / bench as necessary, spreading and compacting with dozers / excavators from the bottom up, and profiling to achieve a uniform batter. Regular inspections will check for any slumping or failure in the backfilled batters.

12. MONITORING PROCESSES

12.1. Visual Walkover Inspections

In addition to regular Hazard Reports and personal risk assessments (see Section 10), routine site inspections should be performed in areas determined to be of relevance in terms of the exposure to current operations

and activities and/or susceptibility to slope movements given the current conditions or historic performance. The main access roads and ramps, as well as relevant accessible berms, are to be walked as part of this inspection. Any geotechnical concern identified is to be addressed in the daily Pre-Start Meeting and details of the concern displayed where all site personnel and contractors have access and can review them.

The Quarry Manager / Site Supervisor, or their designated personnel, are to carry out the pre-work inspection for all active operational areas, including backfilled batters, waste dumps / overburden stockpiles and large constructed bunds. Such inspections should also be carried out after significant rainfall events or blasting. The visual observations from these inspections are to be recorded on the Crest Face & Toe Stability Checklist, included in the Appendices.

Inspections may be targeted based on geological or geotechnical models, face mapping, routine inspections, an existing instability or active failure, notification by other personnel or excessive movement rates indicated from any of the other methods employed to monitor the walls.

If any signs alluding to pit wall failure exist, the process described in Section 13 is to be followed. In this situation, the frequency of visual inspections must be increased. Visual monitoring may also be supplemented with more objective monitoring techniques.

12.2. Displacement Monitoring

Displacement monitoring covers methods for measuring the movement of ground. It is particularly suited to cases where a crack or other feature indicates the location of the failure surface.

Simple pins or pegs can be installed either side of tension cracking and a steel tape used to measure the distance between standard locations on the pegs (Figure 13). A similar approach is utilised with a line of surveyed pegs across a potentially unstable area, which permit measurement of movement in two dimensions. Both approaches rely on the selection of measurement sites and personnel to attend the site to take readings. Precision is an issue, particularly in ensuring that all readings are taken from the same reference points. Purpose built devices are also available, such as extensometers or 'Telltales'.

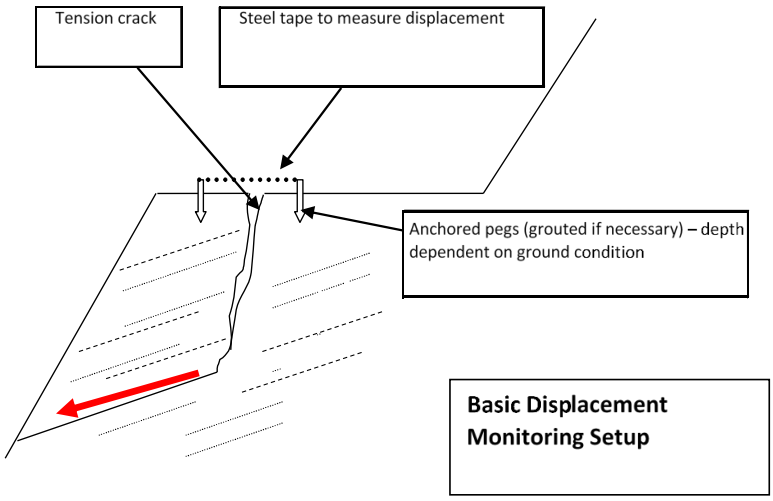


Figure 13: Schematic diagram of basic displacement monitoring

Wireline extensometers measure the displacement of a block by monitoring the amount of wire that has been unwound from the reel. The instruments may be deployed quickly with data downloaded to a handheld reader in the field. Data quality is impacted by wind distorting the wire and by sudden changes in the wire length not associated with slope movement. The former is effectively managed by shielding the wire from wind. The latter is best managed by avoiding contact with the wire. Wireline extensometers can be connected to extension leads or wireless networking, allowing data collection away from unstable ground, and with appropriate equipment, can be set up to provide automated monitoring in near real time.

12.3. Slope Performance

All instabilities are documented and any trends in the spatial distribution or contributing conditions are available for review by a Qualified Geotechnical Engineer. Further information is included in Section 13.

Other slope performance monitoring will occur from time to time and may include measurement of the as-quarried batter / berm configurations, review of rehabilitated batters, reviews of constructed waste dumps and large bunds, monitoring of blasting against regulated limits, or tracking of scaling activities (time allocation and tonnages moved).

Survey control of terminal toe and crest lines along with regular supervision will assist in maintaining the batter designs across the quarry. Drill and blast operations will routinely survey faces prior to blasting.

For slope performance monitoring to permit spatial assessment of performance, geographical coordinates of observations, or at least slope and domain, should be recorded.

12.4. Groundwater Levels

Note that groundwater is not an issue at this quarry, however, an understanding of groundwater levels around the pit is important for the assessment of design slope stability and in planning any necessary dewatering activities.

Where groundwater inflow or seepage occurs, the level must be recorded along with an estimation of the rate of inflow. If dewatering is required, the flow rates and volumes must be recorded.

13. MANAGING INSTABILITY AND WALL HAZARDS

13.1. Response and Investigation

In the event that a potential failure or other wall hazard is recognised within any part of the pit, all site personnel and contractors will be informed of the danger and the actions planned to deal with the hazard. Details of the potential failure zone are also to be discussed during the daily Pre-Start meeting to ensure all personnel are aware of the danger area. If an area continues to fail, then a specific procedure will be implemented.

If not documented anywhere else, Rigby Brothers & Co Pty Ltd response to instability or wall hazards is as per the diagram below.

All unexpected slope failures, progressive slope collapses and failures of slope stability control measures are ‘reportable events’ and must be reported to Earth Resources Regulation. This is a requirement of the Mineral Resources (Sustainable Development) (Extractive Industries) Regulations 2019.

All instabilities are investigated to ensure appropriate and effective controls are implemented. This information is also an important input into assessing the performance of slope configurations. Forms 2 and 3 (included in the Appendices), or something similar if included in the contractor’s procedures, may be used to document the instability:

Form 2 Rock Fall Report is to be used for each rock fall at the quarry and can be completed by personnel witnessing the event or the Quarry Manager / Site Supervisor. The objective is to capture relevant information from witnesses and observations from the location before conditions change. This form is to be passed to the Qualified Geotechnical Engineer when investigating instabilities.

Form 3 Slope Instability Report is to be filled in by the witnessing personnel or the Quarry Manager / Site Supervisor and then completed by a Qualified Geotechnical Engineer as part of an investigation into the underlying causes of the instability. The objective is to collect relevant technical data, but it is not intended to be a formal geotechnical analysis. This form is to be passed to the Quarry Manager / Site Supervisor or the Qualified Geotechnical Engineer responsible for assessing the need for additional controls or implementation of a recovery plan.

These forms should be fully completed, filed appropriately and the data regularly collated, and reviewed at least [annually / quarterly]. Should there be any uncertainty regarding the classification or reporting requirements for a failure or hazard, the Qualified Geotechnical Engineer should be consulted.

13.2. Remediation and Mitigation

The Quarry Manager / Site Supervisor, in consultation with a Qualified Geotechnical Engineer, as appropriate, must review the information related to the instability and make an assessment as to what controls or pit modifications are necessary.

Remedial and mitigation works to address slope instability or failure may include:

- Isolation of high-risk areas. This is based on the results of inspection and monitoring;
- Prevention of water inflow into tension cracks or implementation of rainfall runoff control (i.e. by sealing and covering, re-grading for alternate drainage control or through the use of windrows).
- Clearing loose debris (where possible, from the high wall)
- Localised cutbacks, unloading, design modifications or selective block excavation to remove potential hazards. This must be carefully managed to ensure a larger area is not destabilised as a result of the work and a specific safe work procedure is in place for the activity.
- Buttressing adjacent to the slope toe (i.e. material placement or design modification)
- Horizontal drain holes to help relieve water pressures to improve wall stability.

The measures required should be based on the site conditions, commensurate with the level of risk posed, and assessed on a case-by-case basis. Additional training may be required for the identification of key issues, general awareness, and appropriate actions for various circumstances, procedural requirements and management communication processes. Should there be any uncertainty with respect to remediation and mitigation practices, the Quarry Manager / Site Supervisor should consult the Qualified Geotechnical Engineer.

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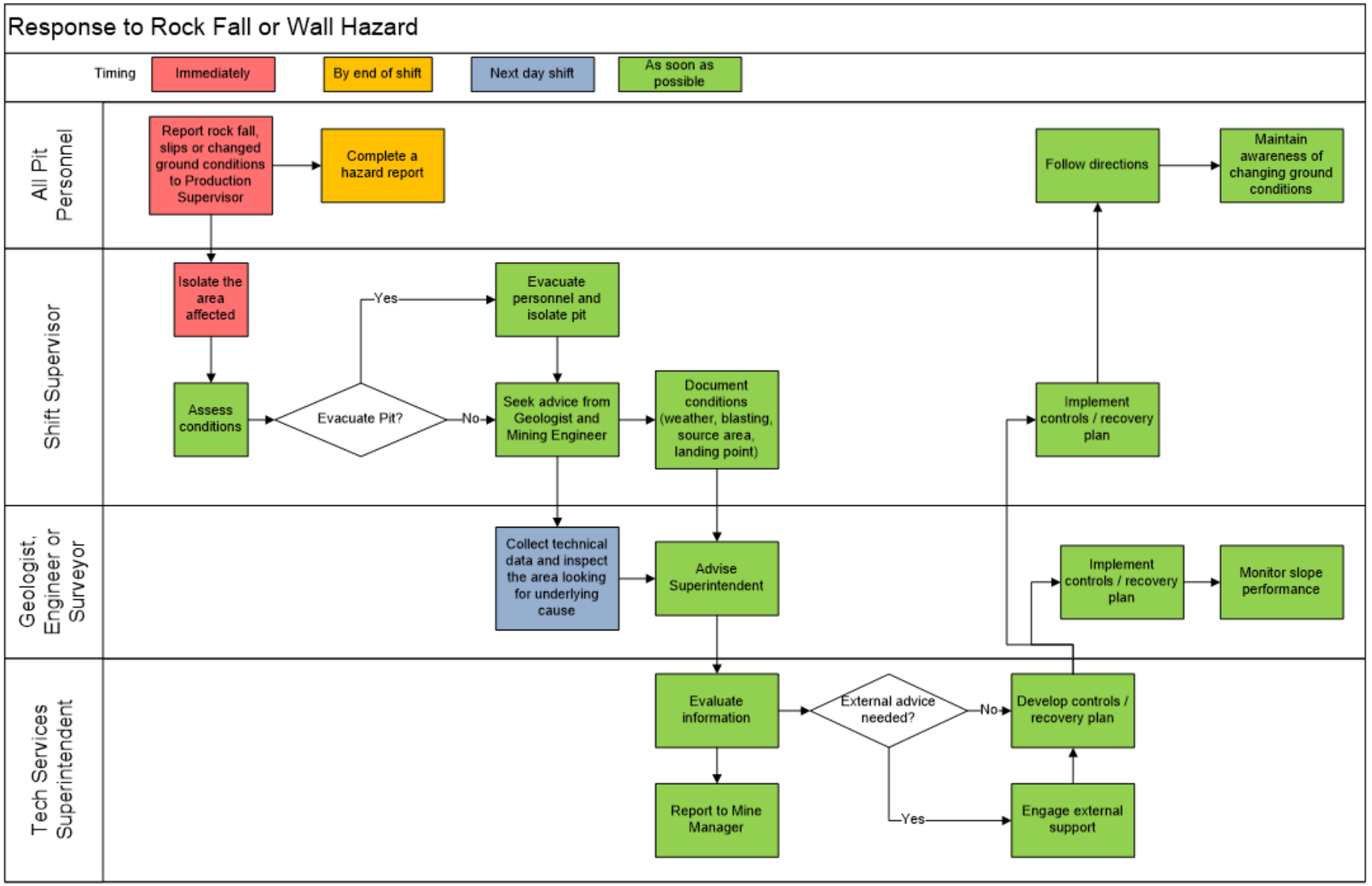

14. TRAINING

The CMPA Working-Safely with Geotechnical Risk in Quarries publication is a useful document to assist in training. This guideline can be found, amongst others, at:

https://cmpavic.asn.au/publications/support-sheets/

14.1. Identification of Slope Hazards

It is expected that all site personnel and contractors will contribute to the identification of slope hazards and risk assessment through personal risk assessment, hazard reporting and their Pre-Start / communications meetings.

The Quarry Manager / Site Supervisor will ensure that all slope hazards that have arisen are identified and, where possible, addressed. The response to slope hazards will often be discussed in a workshop setting with supervisory and management personnel from Coleraine Quarries, and relevant contractors. A summary of the discussion and the outcomes are to be taken back for discussion in the Pre-Start / communications meetings.

14.2. Hazard Information Sessions

When new slope stability hazards or hazardous practices related to geotechnical issues are identified in relation to the operations the Quarry Manager / Site Supervisor will arrange a suitable means for communicating the issues to all site personnel and contractors. Depending on the associated risks, the daily Pre-Start meeting, the production meeting or a weekly communications meeting may be a suitable venue. If the associated risk is high, a special meeting may be called.

The context of such a meeting would normally be in the form of a presentation to educate the site personnel and contractors as to:

- Describe how to identify the hazard; and
- What needs to be done with the hazard.

15. GCMP EFFECTIVENESS

The effectiveness of the GCMP will be monitored by;

- Regular updates to the document to ensure that the geotechnical data collection and analysis procedures reflect current practices;
- Regular updates to the document to ensure that quarrying methods, quarry design and planning issues reflect current practice;
- Expanding upon the geological, hydrogeological and geotechnical understanding as the site develops, including any advice, as appropriate, from a Qualified Geotechnical Engineer;
- Regular updates to this document to ensure that reference to the operations management, standard work procedures and hazard / incident reporting remains relevant;
- Maintaining a program of routine inspections for instability with feedback to operation management;
- Maintaining detailed records of any falls, slope failures or evidence of instability; and
- Maintaining a process of reviewing any necessary ground control measures and update ground control measures as necessary.

The Quarry Manager is responsible for ensuring that this document remains a relevant outline of the current system used to manage ground control for the Coleraine Quarry.

16. EMERGENCY RESPONSE

In the event of failure of ground that has caused injury, the Quarry Manager / Site Supervisor will:

- Declare an emergency and stop all operations.
- Direct the evacuation of site personnel and contractors to a safe location.
- Call for external emergency support by dialling 000.
- Isolate the area of instability.

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- Notify the company management.
- Support rescue efforts.
- Notify WorkSafe Victoria.
- Notify Earth Resources Regulation, Department of Energy, Environment and Climate Action.

17. GLOSSARY OF QUARRY TERMS

The following are brief explanations of some geotechnical and quarry terms:

Batter slope. The sections of rock mass between catch berms within pit walls – usually excavated to a specific inclination/angle from the horizontal.

Bedding planes. Planes of weakness in the rock that usually occur at the interface of parallel beds or laminae of material within the rock mass.

Buttress. A body of material either left unexcavated or placed against a section of the pit wall to prevent continued movement or propagation of wall failure.

Catch berm. The width of lateral ground (bench) separating successive batter slopes. The purpose of the catch berm is to both reduce the overall angle of the pit walls, and to catch any loose material or local scale rock mass failures, thus reducing the risk of injury to the workforce at the base of the pit.

Controlled drilling and blasting. The art of minimising rock damage during blasting. It requires the accurate drilling and placement and initiation of appropriate explosive charges in the perimeter holes to achieve efficient rock breakage with least damage to the remaining rock around an excavation.

Dip. The angle a plane or stratum is inclined from the horizontal.

Discontinuity. A plane of weakness in the rock mass (of comparatively low tensile strength) that separates blocks of rock from the general rock mass.

Elastic. The early stage of rock movement (strain) resulting from an applied stress which does not give permanent deformation of the rock - where the rock mass returns to its original shape or state when the applied stress is removed.

Fault. A naturally occurring plane or zone of weakness in the rock along which there has been movement. The amount of movement can vary widely.

Foliation. Alignment of minerals into parallel layers; can form planes of weakness/discontinuities in rocks.

GCMP. Ground Control Management Plan.

Geology. The scientific study of the Earth, the rock of which it is composed and the changes which it has undergone or is undergoing.

Geological structure. A general term that describes the arrangement of rock formations. Also refers to the folds, joints, faults, foliation, schistosity, bedding planes and other planes of weakness in rock.

Geotechnical engineering. The application of engineering geology, structural geology, hydrogeology, soil mechanics, rock mechanics and quarry seismology to the practical solution of ground control challenges.

Ground control. The ability to predict and influence the behaviour of rock in a quarry environment, having due regard for the safety of the workforce and the required serviceability and design life of the quarry.

Hazard. A set of circumstances which may cause harmful consequences. The likelihood of it doing so is the risk associated with it.

Induced stress. The stress that is due to the presence of an excavation. The level induced stress developed depends on the level of the in-situ stress and the shape and size of the excavation.

In-situ stress. The stress or pressure that exists within the rock mass before any quarry has altered the stress field.

Instability. Condition resulting from failure of the intact rock material or geological structure in the rock mass.

Joint. A naturally occurring plane of weakness or break in the rock (generally aligned subvertical or transverse to bedding), along which there has been no visible movement parallel to the plane.

Kinematic analysis. Considers the ability or freedom of objects to move under the forces of gravity alone, without reference to the forces involved.

LCR. Loss Control Report

Loose (rock). Rock that visually has potential to become detached and fall. In critical areas, loose rocks must be scaled to make the workplace safe.

Plane of weakness. A naturally occurring crack or break in the rock mass along which movement can occur.

Plastic. The deformation of rock under applied stress once the elastic limit is exceeded. Plastic deformation results in a permanent change in the shape of the rock mass.

PSI. Pre-Shift Instruction Meeting or Pre-Start Meeting

Ravelling. The gradual failure of the rock mass by rock blocks falling/sliding from pit walls - usually under the action of gravity, blast vibrations or deterioration of rock mass strength. A gradual failure process that may go un-noticed. The term unravelling is also used to mean the same thing.

Release of load. Excavation of rock during quarrying removes or releases the load that the rock was carrying. This allows the rock remaining to expand slightly due to the elastic properties of the rock.

Risk. An expression of the probability - the likelihood - that a hazard will cause an undesired result.

Rock mass. The sum total of the rock as it exists in place, taking into account the intact rock material, groundwater, as well as joints, faults and other natural planes of weakness that can divide the rock into interlocking blocks of varying sizes and shapes.

Rock mass strength. Refers to the overall physical and mechanical properties of a large volume of rock which is controlled by the intact rock material properties, groundwater and any joints or other planes of weakness present. One of the least well understood aspects of geotechnical engineering.

Rock mechanics. The scientific study of the mechanical behaviour of rock and rock masses under the influence of stress.

SWMS. Safe Work Method Statement.

Shear. A mode of failure where two pieces of rock tend to slide past each other. The interface of the two surfaces of failed rock may represent a plane of weakness, or a line of fracture through intact rock.

Slope. Any continuous face of rock mass within the overall pit wall (without stepping/berms).

SMS. Safety Management System

Strain. The change in length per unit length of a body resulting from an applied force. Within the elastic limit strain is proportional to stress.

Strength. The largest stress that an object can carry without yielding. Common usage is the stress at failure.

Stress. The internal resistance of an object to an applied load. When an external load is applied to an object, a force inside the object resists the external load. The terms stress and pressure refer to the same thing. Stress is calculated by dividing the force acting by the original area over which it acts. Stress has both magnitude and orientation.

Stress field. A descriptive term to indicate the pattern of the rock stress (magnitude and orientation) in a particular area.

Stress shadow. An area of low stress level due to the flow of stress around a nearby excavation, e.g. a large stope. May result in joints opening up causing rock falls.

Strike. The bearing of a horizontal line in a plane or a joint.

Stope. An excavation where ore is extracted on a large scale.

Support. The use of steel or timber sets, concrete lining, steel liners, etc that are placed in contact with the rock surface to limit rock movement. The rock mass must move on to the support before large stabilizing forces are generated. Support is applied externally to the rock mass (although untensioned cables can be classified as ground support).

Tension. The act of stretching of material. Tensile forces can cause joints to open and may release blocks causing rock falls.

Wall. A wall can pertain to a section of, or the complete profile of the perimeter of an open pit excavation.

Wedge. A block of rock bounded by joints on three or more sides that can fall or slide out under the action of gravity, unless supported.

Windrow. A continuous mound of loose material, of appropriate height, placed at the toe or crest of a slope as a barricade to falling objects or to prevent personnel/quarry equipment from falling inadvertently down pit walls. Windrows are also referred to as bunds.

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FORM 1: CONDITION REPORT

Date and Time of Inspection:	**Date:** **Time: From** **to**
Inspected By:	
General Area:	
Specific Levels or Areas Traversed:	
Issues Identified:	
Influencing Factors:	
Comments on Weather or Rainfall During Inspection:	
Recommended Actions: (Demarcation/Isolation/ Monitoring/Reporting/ Remediation)	
Reported to:	
Inspector Signature:	**Date:**
Superintendent's Signature:	**Date:**
Additional Comments:	

Notes or signs to look out for:

Cracks in face, behind crest or through berm / bench;

Floor heave, bulging at toe or dislocation;

Evidence of failure including signs of dislodged blocks and recent debris on haul road, berm or bench;

Blast induced damage, undercut faces or crests, or erosion impact;

Unfavourably oriented structures (e.g., fault dipping out of the face or wedge formation), poor rock mass conditions or change in geology/strata;

Water flows out of the face, cascading over crests, into tension cracks or abnormally high drain hole flows;

Situations outside standard operating conditions (eg, above normal face or excavation height).

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FORM 2: ROCK FALL REPORT

Date :	
Time :	
Location:	
Elevation:	
General Description:	
Origin of Rock Fall:	
Estimated Size (t):	
Average Rock Size (m):	
Largest Rock Size (m):	
Area Covered:	
Distance & Size of Furthest Rock from Wall / Toe:	
Rainfall Leading up to Rock Fall:	(Estimate or exact quantity)
Other Influencing Factors:	
Activity in the Area:	
Recommended Actions (Demarcation / Barricade or Isolation Details, etc):	
Reported to:	
Reported By:	**Date:**
Other Comments:	

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FORM 3: SLOPE INSTABILITY REPORT

General Location:		
Date/Time:		**Domain:**
Easting:	**Northing:**	**Elevation:**
Pit activity impacted:		
Description (including tension cracks):		
Dimensions of Instability:		
Slope Geometry: **-Overall height and angle:** **-Batter height and angle:** **-Berm width** **-Other comments:**		
Geological Controls: **-Lithology, alteration, weathering** **-Set number, orientation and spacing** **-Defect conditions**		
Other Influencing Factors or Controls (e.g. blast, quarrying**, rain, groundwater seepage):**		
Immediate Actions Recommended:		
Report Completed By:	**Date:**	
Additional Comments:		
Checklist & Attachments:	❑ Sketches, scaled plan and section drawings, survey scan ❑ Detailed mapping ❑ Photographs ❑ Delineation & survey of cracks ❑ Rainfall data ❑ Slope monitoring data ❑ Situation communicated to operations personnel	

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Attachment - *Crest, Face and Toe Stability Checklist*

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General Slope Stability Checklist			
Date of Inspection		**Inspected by**	

Area of Observation	**Action Required**	
Benches, Berms and Haul roads	**Yes**	**No**
Benches and haul roads stable and without signs of failure		
Wide enough for vehicles and Falling Rock Protection Berm at toe		
Adequate passing areas		
Drainage in place and is adequate/effective		
Roads in good condition, drained and without signs of movement		
Edge Protection Berms in place and in order		
Adverse drainage from access roads		
Stockpiles, Surge Piles and Overburden Dumps		
Installation of Edge Protection Berms to an adequate height where dumping is performed at the top of the stockpile/tip or overburden dump		
Cracking on the surface and crest of the stockpile or ponding		
Evidence of undercutting or undermining of the stockpile		
Washouts from rainfall		
Condition/integrity of physical barriers around previous unstable areas or barriers/fences preventing access (i.e. exclusion zones around undercut stockpiles)		
Where practical, draw point on surge piles identifiable		
Suitable lighting provided for active areas		
Installation of safety berms to an adequate height where dumping is performed		
Dams and Ponds		
Cracking of earthen slope		
Changes in quantity of seepage if seepage exists		
Significant erosion in proximity to spill way/overflow		
Significant shrinkage surrounding any pipe work through slope		
Pit Surrounds		
Drainage away from pit, including storm water		
Any water ponding or normal face water disappearing		
Condition/integrity of physical barriers around previous unstable areas or barriers/fences preventing access		
Surface settlement or subsidence		

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Signage		
Exclusion Zones signposted for Unstable Faces or other unstable slopes		
Entrance to Pit Requirements signposted, i.e. 10/20/30 Rule/Radio Contact prior to entry		
Warning signs posted at Sediment Ponds, Water Dams		
Crests		
Lowering of ground surface at or behind the crest of the overall slope/bench		
Water running over the crest of the overall slope/bench		
Water entering cracks behind the crest of the overall slope/bench		
New accumulations of water behind the crest of the overall slope/bench		
Surcharging of ground behind the crest of the overall slope/bench		
Tension cracks increasing in size and/or offsets, sliding of one face of the crack		
Excessive backbreaking		
Edge Protection Berm in place and in order		
Faces		
Bulging of the slope face		
Erosion or mass movement of slope materials down the slope		
Settlement of slope face		
Displacement across joints/bedding planes		
Open structural features inclined > 10 degrees out of the face		
Open structural features inclined steeply > 70 degrees out of the face		
Loose material or overhanging material on the face		
Irregular slope gradient		
Irregularities in plan of the slope face		
Excessive water seepage, surface water disappearance		
Drainage blankets blocked		
Overhanging rock above working faces/roadways, not protected by rock traps		
Signs of active/recent failure of the face including bulging of the face and/or sagging of the face		
Slope deterioration or deformation (batter, bench, floor bulging or toe heave)		
Toe		
Ground movements at or in front of the toe of the overall slope/bench		
Water issuing from or in front of the toe of the overall slope/bench		
New accumulation of water at the toe of the overall slope/bench		
Excavations at or near toe of structure not as per design of quarry/tip		
Falling Rock Protection Berm in place and in order		
Bulging or undercut toe		
Waterlogging at or near slope toe		
Other observations		

Analysis of Rock Samples

Prepared for: Rigby Brothers Quarry

STC-148-V2273 | Date: 12/03/2021

ADE CONSULTING GROUP

Document Information

Report Title: Analysis of Rock Samples
Prepared for: Rigby Brothers Quarry
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Version	Date	Author	Revision description	Reviewer
V1d	12/03/21	Nick Harisis	Draft for internal review	Ricky Rajan
V2f	12/03/21	Nick Harisis	Final for issue	Ricky Rajan

For and on behalf of
ADE Consulting Group Pty Ltd

Prepared by:	Reviewed by:	Issued by:
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1 Introduction

This correspondence is to confirm that in February, ADE Consulting Group received a number of samples of Trachyte rocks from the Rigby Brothers Quarry located at 26 Templeton Street, Coleraine, Victoria. The samples originated from the following stockpiles of the quarry:

Sample No	Sample Location
S217388	100 to 200 mm ballast stockpile
S217387	60 mm crushed rock stockpile
S217389	200 crushed rock stockpile

Sub samples were collected from each rock which were then combined. The resultant samples were forwarded to the Bureau Veritas Minerals laboratory in Adelaide. Following micro milling the samples underwent analysis for crystalline silica in the form of quartz by X-ray diffraction.

The results of the analysis are shown in the attached laboratory report. As can be seen, the levels of crystalline silica (as quartz) were found to be < 1%. The material was found to consist of the following minerals:

Mineral	Composition*	Percentage		
		Sample No S217387	Sample No S217388	Sample No S217389
K-Feldspar	$KAlSi_3O_8$	62	64	65
Quartz	SiO_2	<1	<1	<1
Kaolinite-serpentine group	$M_{2-3}Z_2O_5(OH)_4.nH_2O$	1	-	-
Smectite group	$X_{0.3}Y_{2.3}Z_4O_{10}(OH)_2.nH_2O$	4	<1	3
Plagioclase	$(Na, Ca)Al(Al, Si)Si_2O_8$	13	12	12
Spinel group	AB_2O_4	5	6	5
Amorphous	Unknown	16	16	15
Unasigned peak	Unknown	Trace	Trace	Trace
Total		100		

* Please see attached analytical report for further explanations.

It should be noted that no tridymite or cristobalite were detected in the samples.

I hope that the above information will be of assistance. Should you have any queries regarding this matter please do not hesitate to contact me.

Yours faithfully

Nick Harisis

Principal Occupational Hygienist/HSE Team Leader MRACI CChem

Appendix I – Laboratory Report

Mineralogical Report
N9571XD21

ADE Consulting Group

Mineralogy of Three Samples

12 March 2021

Reported by:Sophia Joseph Soly

Reviewed by: Roger Anderson

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Client Reference	STC-148-V2273

INTRODUCTION

On 1st of March 2021, ADE Consulting Group commissioned Bureau Veritas Minerals Pty Ltd Laboratories to conduct Crystalline Silica analysis on three samples.

The sample list is shown in Appendix 2. Cristaline Silica results are reported in tab 3.

Appendix 3 outlines some of the issues associated with these QXRD analyses. Appendix 4 provides detailed information associated with the identified minerals.

Note: Non-hazardous samples will be automatically disposed of after 3 months; hazardous samples will be automatically returned to the client, at the clients expense, after 3 months, unless otherwise advised by the client.

INDEMNITY STATEMENT

This report has been prepared for the client by Bureau Veritas Minerals Pty Ltd. Other parties, at the discretion of the client may be given access to the report or receive copies of the report.

While Bureau Veritas Minerals Pty Ltd has taken all reasonable care to ensure that the facts and opinions expressed in this report are accurate it does not accept any legal responsibility for any loss or damage suffered resulting from use of this report howsoever caused and whether by breach of contract, negligence or otherwise.

The results presented in this report pertain only to the sample received for testing.

Report:	N9571X021
Client	ADE Consulting Group
Report Date:	12/03/2021
Tab	3 of 8

SUMMARY - CRYSTALLINE SILICA IN THE SAMPLES

Sample	Crystalline Silica %
1-S217387	<1
2-S217388	<1
3-S217389	<1

QUANTITATIVE XRD - INCLUDING AMORPHOUS

Table 1 contains the QXRD wt% results.
Appendix 4 contains 'descriptions' of the minerals used in these refinements.

Table 1 – SEMI QUANTITATIVE XRD - INCLUDING AMORPHOUS

Mineral	Quartz	Kaolinite-serpentine group	Smectite group	Plagioclase	Feldspar	Spinel group	Amorphous	Total	Unassigned peak
1-S217387	<1	1	4	12	62	5	16	100	Tr
2-S217388	<1		<1	13	64	6	16	100	Tr
3-S217389	<1		3	12	65	5	15	100	Tr

Note: Tridymite and cristobalite were not detected

APPENDIX 1 - PROCEDURE

QXRD Procedure

To calculate the amorphous content in the samples, a known quantity of a zinc oxide internal standard was added to the samples. The resultant samples were micromilled and then lightly pressed into a back-packed sample holder. The XRD traces were collected under the following instrument conditions:

XRD generator	PANalytical X'Pert Pro PW3040 diffractometer, 40 kW, 40 mA
Filter	Iron
Radiation	CoKα (λ = 1.789Å)
Angular range	5° to 80° 2θ
Angular speed	0.04426° 2θ/second
Time per step	50.165
Step size	0.0167°
Divergence Slit	¼°
Anti-scatter Slit	½°
Spinning	4 seconds per revolution

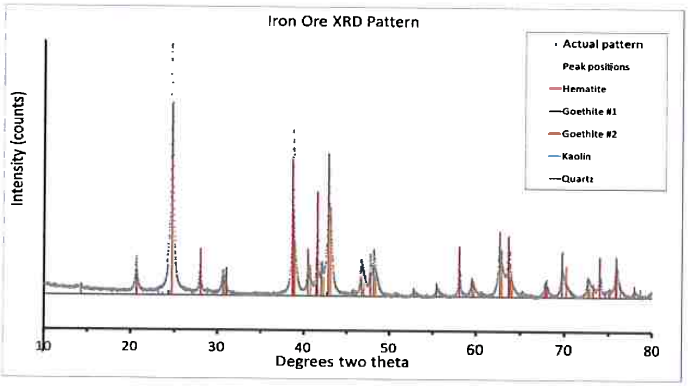
Mineral identification was undertaken using the X'Pert HighScore Plus search/match software and/or manual reference files on a selected number of samples based on elemental assay data. Rietveld quantitative analysis was performed on the XRD data using the commercial package HighScore Plus v4.7. Crystal structures were obtained from the commercial ICSD database. Amorphous contents were estimated by using an internal standard (i.e. zincite spike).

Note that the QXRD results are 'unvalidated'. Data validation is an additional service offered by Bureau Veritas Minerals, and involves comparing the QXRD-inferred assays with assay data provided by the client. This validation step provides an indication of the quality of the QXRD data.

X-ray diffraction overview (Not client specific)

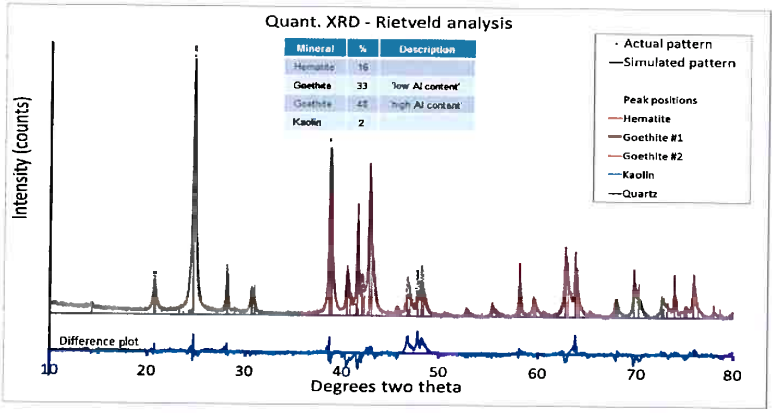
Powder X-ray diffraction is a non-destructive method for determining mineralogy. The X-rays interact with the atoms in the crystalline phases in a sample. This occurs through a process called 'diffraction', where the X-rays interact with the regular array of atoms that are present in crystalline materials. This can generate a 'diffraction pattern', as shown below for an iron ore sample. The peaks in this pattern indicate the presence of hematite, goethite and minor kaolin.

Note that conventional X-ray diffraction is generally insensitive to poorly-crystalline materials, since these do not have the regular array of atoms that are required for X-ray diffraction.



Rietveld analysis

Rietveld analysis can be used to quantify the mineralogy of a sample. It does this by 'simulating' the diffraction pattern from the known crystal structures of the minerals and by varying parameters such as mineral abundance and 'crystal properties' to obtain a good fit between the observed and calculated pattern. The results from a Rietveld refinement are shown below. Note than in this refinement, two goethite models were included - it is more usual for one to be present.



The Rietveld process simulates the XRD pattern from the known crystal structures of the minerals and varies parameters such as mineral abundance and 'crystal properties', so that the simulated pattern 'fits' the observed XRD pattern. A high degree of uncertainty exists when determining trace minerals (<5 wt%) by XRD. This is due to the relatively high background noise which tends to obscure minor peaks, which are required for a positive identification of a particular mineral. Crystalline analysis only quantifies the identified crystalline minerals and not amorphous material, unknown minerals or known minerals for which there is not a suitable crystal structure in the ICSD database.

There are a number of factors that can affect the quality of the XRD analyses. These include: (i) sample preparation (ii) the presence of poorly crystalline phases, (iii) the presence of minerals for which there is no crystal structure in the Rietveld database and (iv) the use of inappropriate crystal structures for a given mineral. Bureau Veritas use the standard ICSD database of crystal structures to estimate mineral abundances. XRD analyses may also be less accurate if there are a significant number of overlapping peaks from various phases.

The amorphous content could include random scattering from any non-crystalline material. Amorphous material has no defined peak that can be identified, and can only be measured once all other crystalline material has first been identified. The amorphous content may also include the difference between the experimental and calculated data (i.e. the unfitted phase(s) caused by solid solution series and/or poor crystallinity).

APPENDIX 2 - Sample List

Client sample ID	BV sample number
S217387	1-S217387
S217388	2-S217388
S217389	3-S217389

APPENDIX 3 - Issues affecting QXRD

There were a number of issues with the QXRD analysis, these should be considered when using the data.

(i) A number of peak overlaps were observed, these have been defined in the mineral list tab but are not limited to these overlaps. The peak overlaps cause issues defining and quantifying minerals within the samples.
(ii) Due to the lack of other identifying peaks, trace amounts of unknown peaks were observed in a number of samples.
(iii) Please also refer to the Appendix 4 Minerals List tab for other minor issues.

APPENDIX 4 - MINERAL LIST

Notes;
A number of peak overlaps have been defined in the mineral list but peak overlap is not limited to these stated overlaps.
The minerals below were included in the refinements but, in some cases, were not conclusively identified by QXRD (e.g. covellite, bornite, digenite).

Mineral	Composition	Comments
Quartz	SiO_2	
Kaolinite-serpentine group	$M_{2-3}Z_2O_5(OH)_4.nH_2O$	Kaolinite-serpentine group: Where M=Al, Fe^{3+}, Fe^{2+}, Mg, Mn^{2+}, Ni, Zn; Z=Al, Fe^{3+}, Si. Kaolinite was used in these QXRD refinements. Kaolinite, Serpentines, Dickite, Halloysite, Nacrite and Birnessite peaks overlap.
Smectite group	$X_{0-3}Y_{2-3}Z_4O_{10}(OH)_2.nH_2O$	Smectite group: Where X (exchangeable cations) = Ca^{2}, Li, Na; Y = Al, Cr^{3+}, Cu^{2+}, Fe^{2+}, Fe^{3+}, Li, Mg, Ni, Zn; Z = Al, Si. Montmorillonite was used in these QXRD refinements. Further investigation would be required for more accurate classification.
Plagioclase	$(Na, Ca)Al(Al, Si)Si_2O_8$	Plagioclase: Anorthite, sodian was used in these QXRD refinements
Feldspar	$(Na,K)AlSi_3O_8$	Feldspar: Anorthoclase and Sanidine were used in these QXRD refinements
Spinel group	AB_2O_4	Spinel group: Where A=Co, Cu, Fe^{2+}, Ge, Mg, Mn^{2+}, Ni, Ti, Zn; B=Al, Cr^{3+}, Fe^{2+}, Fe^{3+}, Mg, Mn^{3+}, Ti, V^{3+}. Magnetite was used in these QXRD refinements.
Unassigned peak	Unknown	Unassigned peak: Due to the lack of other identifying peaks, a number of unidentified peaks/phases were observed. Further work is required to determine the mineral giving rise to this peak. Tr = Trace. i.e. the mineral that gives rise to this peak is assumed to be presence in trace amounts.
Amorphous	Unknown	The amorphous content could include random scattering from any non-crystalline material. Amorphous material has no defined peak that can be identified, and can only be measured once all other crystalline material has first been identified. The amorphous content may also include the difference between the experimental and calculated data (i.e. the unfitted phase(s) caused by solid solution series and/or poor crystallinity).

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DUST MANAGEMENT PLAN

for

Extractive Industry Work Authority WA410

Coleraine Quarry

August 2024

WA410 – Coleraine Quarry
26 Templeton Street
COLERAINE VIC 3315

Project No. R21_001
August 2024

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WA410 – Coleraine Quarry Dust Management Plan

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August 2024

Document Control / Authorisation

The preparation of this Dust Management Plan has been a collaborative effort between BCA Consulting and Stan Rigby of Rigby Brothers, for implementation at their Coleraine Quarry, WA410

Revision history

Revision	Description	Date	Originator	Reviewer	Approver
00	Draft for comment	5 Nov 2024	CLB	FN	

Distribution

Report Status	No. of copies	Format	Distributed to	Date
Draft for Comment	1	PDF	Jason Rigby Stan Rigby	15 August 2024

Review

As a minimum, this Dust Management Plan will be reviewed within 3 years of being approved.

NEXT REVIEW DATE: August 2028

1. PURPOSE OF THE DUST MANAGEMENT PLAN

1.1. Introduction:

The Dust Management Plan is an adaptive management tool for managing both the risks posed by dust generated by quarrying activities and the potential risks posed by the operation to the environmental values of air quality and the public.

This document is to be used in conjunction with the Risk Management Plan component of the Work Plan for the quarry. The Risk Management Plan describes the dust hazard and risks associates with sensitive receptors at the time of drafting and includes the application of a range of control measures to manage the risks posed by dust generated by different quarry activities. This adaptive Dust Management Plan allows for the adaptive application of monitoring and control measures to manage the risks posed by potential changes to dust generating sources over time, ie as the quarry develops or as new equipment is introduced. This adaptive Dust Management Plan is included as a key component in the overall management of this hazard and ensuring the stated controls in the Risk Treatment Plans and any additional controls that might be required by the Earth Resources Regulator or other agencies are captured and continually reviewed to ensure their effectiveness.

This Dust Management Plan is for the following hazard in the Risk Management Plan:

- 2.3 Dust
- 2.17 Vehicle Sediment Transport

The Dust Management Plan is designed to be easy-to-follow, non-technical, and used by anyone who needs to understand the management of airborne dust generated on the site from any number of sources on the site and at any point during the life of the quarry, in respect of both the risks posed by dust emissions and the potential risks posed by the operation activities to emit dust.

The Quarry Manager is responsible for implementing this Dust Management Plan and can seek assistance from the General Manager and specialists as required, particularly if there are incidents due to dust related hazards. This Dust Management Plan requires that the Quarry Manager inspects the quarry operations for dust related hazards on a regular basis. Hazards are to be reported in the Coleraine Quarry risk management system.

Rigby Brothers strive to ensure that dust management measures on the site achieve ongoing compliance with all relevant requirements. The current objectives, relevant compliance criteria and requirements and acceptance criteria are set out below.

1.2. Respirable Crystalline Silica Risk

The resource quarried is a trachyte, and it has been confirmed that it contains negligible silica content. A full discussion is included in the Dust Risk Treatment Plan

1.3. Objectives:

- Manage and minimise offsite dust impacts on all sensitive land uses and environments
- Apply dust controls at the source to, the extent practicable; and
- Minimise impacts on local amenity and the environment and protect the environmental values of the air as defined in the Environment Reference Standards (ERS)

1.4. Relevant compliance criteria and requirements:

- EPA Victoria's (EPAV's) Air Pollution Assessment Criteria (APAC), which apply at nearby sensitive uses, are set out in the following table.

Indicator	Includes Background Dust Component	Averaging period	Criterion, µg/m³
PM_{10}	Yes	24 hours	50
		annual	20
$PM_{2.5}$	Yes	24 hours	25
		annual	8
RCS (as $PM_{2.5}$)	Yes	annual	3

- The APACs do not include a dust deposition criterion; however, an "insoluble solids" deposition rate of 4 g/m2.month (no more than 2 g/m2.month above background) represents a useful guideline for assessing whether dustfall (nuisance dust) is likely to impact on local amenity.
- The General Environmental Duty (GED) defined in Part 3.2 of the Environment Protection Act 2017 requires that a person who is engaging in an activity that may give rise to risk of human health or the environment from pollution or waste must minimise those risks, so far as reasonably practicable.

1.5. Acceptance criteria:

- No nuisance dust complaints from nearby residences or the immediate community.
- Management of dust emissions to minimise risks to sensitive receptors, as far as reasonably practicable, in accordance with the GED; and
- No complaints from local road users regarding sealed road conditions within the immediate vicinity of the quarry.

2. ROLES AND RESPONSIBILITIES

Responsibilities and accountability for the implementation of this Dust Management Plan at the Coleraine Quarry are outlined below.

2.1. General Manager

Development, resourcing, implementation and review of the Dust management Plan is the responsibility of the Rigby Brothers Quarries General Manager/Operations Manager. It is the General Manager/Operations Manager's responsibility to ensure that:

- A Dust Management Plan is developed, resourced, implemented and reviewed.
- Personnel and environment are not exposed to hazards arising from uncontrolled dust conditions during normal operations or while conducting monitoring or remedial works.
- Only competent in-house personnel or competent persons or organisations experienced in the identification and management of dust related risks in mines or quarries conduct dust impact studies and review and make recommendations on risk management controls.
- The work at the Quarry is compliant with all applicable current statutory and regulatory requirements.
- The Dust management Plan and all subsequent revisions are approved.
- Deviations between operating plans and the Dust management Plan are approved.

The General Manager may delegate duties under the Dust management Plan and to suitable WA410 operations personnel.

2.2. Quarry Manager

The Quarry Manager is responsible for implementing the Dust management Plan, specifically:

- Ensuring compliance with the Dust management Plan requirements through routine and regular audits
- Developing, documenting and implementing controls to manage dust related risks.
- Routine inspections for dust related hazards.
- Documenting and reporting dust hazards, and changes in conditions.
- Developing the pit in accordance with the extraction dust control design.
- Maintaining all dust management assets.
- Reviewing and implementing changes to dust management controls impacted by any changes to infrastructure.
- Review of the Dust management Plan as described in Section 6 of this plan.
- Communicating hazards and controls to workers and making sure that workers comply with the controls.
- Managing emergencies that involve dust related hazards, in accordance with the recommendations in this Plan.
- Ensuring that all new site personnel are familiarised with relevant sections of the Dust management Plan during the site induction process and that a copy of the Dust management Plan is available in a location which is readily accessible by all site personnel.

2.3. Quarry Supervisor

The Production Manager and Quarry Supervisor are responsible for:

- Ensuring that the Dust management Plan is implemented and complied with.
- Safe Working Procedures are implemented and monitored to ensure compliance.
- The quarry pit, waste/overburden dumps and stockpile faces are routinely inspected for dust related hazards and observations documented.

- All unexpected or uncontrolled dust occurrences are recorded and documented.
- Any problems with the functioning of dust management asset such as water pumps and sprays, water storage, pipes, and water trucks are reported and rectified.
- Regular and routine inspection and supervision of the quarry work area for dust related hazards is carried out.

2.4. All Quarry Personnel

It is the responsibility of all quarry personnel to:

- Perform all work in accordance with standard operating procedures that exist to meet the requirements of this Dust management Plan.
- Monitor site conditions during the shift for the occurrence of unexpected or uncontrolled dust plumes.
- Monitor airborne dust from site haul roads, benches hardstand areas and stockpiles for excess dust emissions.
- Report dust related hazards and ineffective controls.

3. COMPONENTS OF THE DUST MANAGEMENT PLAN

3.1. Potential Impacts of Dust

3.1.1. General

Dust emissions have the potential to cause health, amenity and vegetation impacts.

3.1.2. Health Impacts

Coleraine Quarry recognises the health effects associated with nuisance dust.

Coleraine Quarry is therefore committed to treating health impacts seriously and to ensure that the potential for impacts upon health are controlled as far as reasonably practicable.

3.1.3. Amenity Impacts

Coleraine Quarry is aware that dust emission can be significant in terms of the social and economic welfare of a community. The stress associated with sustained amenity impacts may also lead to secondary health impacts.

Coleraine Quarry is therefore committed to treating amenity impacts seriously and to ensure that the potential for impacts upon amenities are controlled as far as reasonably practicable.

3.1.4. Vegetation Impacts

Dust emissions are not expected to result in any significant native vegetation impacts due to the buffer zone surrounding the process area and lack of native vegetation. Despite this, and to protect all vegetation within the vicinity of the quarry, Coleraine Quarry is aware that high dust emissions over a sustained period can form a physical barrier on vegetation to restrict natural processes such as photosynthesis.

Coleraine Quarry is therefore committed to treating vegetation impacts and to ensure that the potential for impacts upon vegetation are controlled as far as reasonably practicable.

3.2. Identification of Dust Generating Activities and Acceptable Controls

A site audit has been conducted on the various work activities to identify potential sources of airborne dust hazards. A risk assessment was performed for each of these hazards and the most effective controls were adopted as far as reasonably practicable.

Higher order controls such as elimination, substitution and engineering controls were considered as well as administrative and PPE controls. The adopted controls for each activity are as follows:

Drilling:

- Provision of water for drillers dust suppression
- Wetting down of access roads and work area

Load and Haul:

- Water cannon as required on shot rock prior to load and haul
- Regular application of water on haul roads

- Minimise vehicle movements
- Reduce onsite vehicle speeds, particularly in dry and windy conditions

Crushing, Screening and Conveying Materials:

- Water sprays on conveyor discharges from jaw crusher and both hammermill crushers
- Water sprays on drop points from conveyor head drums
- Minimise the fall height of materials from conveyors to stockpile
- Screens enclosed with covers where practical
- Minimise material spillage from conveyors, particularly at transfer points
- Ensure aggregates surfaces are damp, but not so wet as to cause blockages in screens and chutes
- Ongoing visual monitoring of plant to identify areas where dust is generated

Stockpiling:

- Use water cannons, sprinklers for small stockpiles
- Maintain stockpile height to reduce fall heights on materials such as 20mm and 60mm crushed rock that contains a high percentage of fines

Mobile Equipment General Operations:

- Doors and windows of equipment are closed at all times
- Air conditioning installed within equipment cabins
- Cabins regularly cleaned using wet wiping
- Do not use compressed air to blow out cabins or filters

Traffic Areas:

- Regular application of water on traffic areas
- Minimise vehicle movements
- Ensure speed limits are maintained at a level to minimise dust generation

Sales Loading:

- Regular application of water on areas where loading from and surrounding traffic routes
- Ensure stockpiles being loaded from are wet down prior to loading using water cannon or sprinklers
- Truck drivers to remain in cabins whilst being loaded with windows closed
- Vehicles transporting dusty materials will be covered, or the loads wetted, to minimise dust generation
- The deposition of mud and fine material onto the site access road and public roads by departing sales trucks will be minimised by requiring them to use the wheel wash, clean loose dust/sediment from truck side rails, tailgates and draw bars (such material can be a significant dust source during dry weather).

Maintenance/Housekeeping:

- Wash down dusty areas well before performing maintenance work; taking into account you may create slip and fall hazards in doing so
- Use dust extraction systems in restricted or confined areas
- Ensure spillage on catwalks, under conveyors and transfer points is removed on a daily basis

Disturbed Surface Areas:

- Minimising the extent of potentially erodible areas
- Topsoil stripping operations will be suspended if dust drifts towards nearby sensitive receptors (within 500m)
- Excavated material will be wetted, as required, during hot, dry windy conditions

3.3. Particulate And Meteorological Monitoring

Three types of airborne dust monitoring are currently or will be undertaken by Rigby Brothers:

1. Visual dust monitoring
2. Onsite dust monitoring
3. Offsite sensitive receptor dust monitoring

Visual monitoring can make a valuable contribution to the dust control strategy on site as it provides a constant review of operational dust impacts. In the first instance, the appearance of excess airborne dust should be investigated, the source of the dust identified, and the incident recorded. If the hazard cannot immediately be controlled, work is to cease until the issue is rectified.

Benefits of visual monitoring for the Coleraine Quarry include:

- Quick and simple, and proportional to the scale of the operation.;
- Ability to respond to complaints promptly;
- Review of dust controls;
- Identifying the occurrence of acute dust events;
- Monitoring compliance with Work Authority;
- Demonstration of proactive approach and vigilance to authorities.

Dust disposition monitoring is also done on site and outside the Work Authority boundary as required.

The Quarry Manager monitors the weather forecasts on the Bureau of Meteorology (BOM) website for adverse conditions and uses this information to prepare for adverse wind conditions to minimise the impact of wind on generating airborne dust and determining the direction and extent which the dust may travel.

All details of dust monitoring are recorded in a dust management diary or a dust management data base.

4. Adopted Control and Monitoring Measures

Note: The controls listed below include all standard controls stated in the Approved Risk Management Plan and any additional control identified.

4.1. Controls

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Minimise exposed / disturbed areas	Compliance to maximum disturbed area at any given time
2.	Stripping tasks restricted to areas within 250m from nearby sensitive receptor (nearest residence) // Stripping tasks halted whenever dust generated will drift toward a nearby residence(s) located at <250m from the WA boundary	Stripping confined to approved disturbance areas // Stripping activity stopped if wind speed and direction generate dust drifting toward a nearby residence at <250m
3.	Water cart / sprays used on exposed areas, roads, hardstand areas and stockpiles	Water cart and ample supply of water available on forecast hot, dry days or during extended dry periods when inherent moisture content is reduced
4.	Water sprays at critical location on any mobile and fixed processing plant	Ample supply of water available on forecast hot, dry days or during extended dry periods when inherent moisture content is reduced
5.	Crushing plant, screen boxes and conveyors are enclosed. Conveyor transfer points are fitted with dust suppression water systems (water mist and fog).	Dust suppression devices fitted to all operating dust- generating plant. Ample supply of water available for dust suppression water systems.
6.	Minimising exposure between conveyor discharge and top of stockpile	Conveyor and stockpile monitored and adjusted, as necessary, to minimise exposure
7.	Dry excavated material to be wetted in hot, dry, windy conditions or whenever dust generation requires	Quarry Manager's discretion based on weather forecast, visual observation or stakeholder engagement
8.	Minimise vehicle movements (restrict to designated areas) and limit vehicle speeds, adjusting speed as necessary to conditions	Speed / traffic management signs maintained at critical locations, and drivers trained to drive to conditions so as to minimise dust generation
9.	Suspension of potentially dusty operations (including blasting) during hot, dry, high wind conditions or whenever dust generation requires	Quarry Manager's discretion based on weather forecast, visual observation or stakeholder engagement
10.	Cover vehicles carrying dusty materials when transferring material from the site or treat with water to minimise dust	All dusty loads covered at weighbridge or sprayed with water prior to leaving site to transfer materials
11.	Contour, vegetate and stabilise screening bunds, as soon as practicable, and also topsoil / overburden stockpiles to be retained more than 3 months, as well as buffer areas	Screening bunds and topsoil / overburden stockpiles vegetated and stabilised within 3 months of construction. Planted vegetation maintained
12.	Progressively contour and vegetate topsoil stockpiles and overburden dumps to be retained more than 6 months, as well as outer faces of raised pads and rehabilitated landforms	Topsoil stockpiles and overburden dumps vegetated and stabilised within 6 months of construction. Stockpiles located and size minimised, as far as practicable, to reduce dust generation. Planted vegetation maintained
13.	Establish initial pasture on progressively rehabilitated landforms (cut or backfill), as soon as practicable.	Topsoiled and planted pasture on cut or backfill batters awaiting rehabilitation within 3 months. Pasture to be fully established within 12 months. Planted vegetation maintained
14.	Dust suppression equipment maintenance regime in accordance with manufacturer specifications.	All plant and equipment maintained as per manufacture specification to maximise dust suppression
15.	Continual visual monitoring by all staff for dust leaving the site, throughout operations, and notification to the Quarry Manager promptly for remedial action	No nuisance dust impacts to sensitive receptors

4.2. Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Ongoing visual monitoring of dust generated on site by all staff	Visual monitoring for dust leaving the site Hourly assessment of dust on hot, dry or windy days
2.	Weather forecast and onsite conditions for potential adverse dust generating conditions	Monitor for likely adverse dust generating conditions that may lead to nuisance dust impacts to sensitive receptors
3.	Surface condition of exposed areas, roads, hardstand areas and stockpiles	Visual observation during regular inspections and informally by mobile plant operators and truck drivers
4.	Functionality of crushing plant's dust suppression systems	Plant pre starts – preventative maintenance cycle
5.	Complaints and observations / comments from sensitive receptors	Complaints and comments recorded

5. DAILY ACTION PLAN (includes adverse weather conditions)

Rigby Brothers have developed an action plan to manage dust emissions from the site throughout the day including during adverse weather conditions (refer to Attachment 'Dust Control – Daily Actions').

Dust complaints from employees are to be actioned through the site's issue resolution procedure. Community complaints will be actioned through the community complaints management process in the Community Engagement Plan. Where a satisfactory outcome is not achieved between the complainant and Rigby Brothers, the issue will be reported to the relevant authority ie WorkSafe, in regard to an employee complaint and ERR in regard to a resident's complaint.

6. REVIEW OF THE DUST MANAGEMENT PLAN

The Dust Management Plan will be reviewed regularly against the control measures adopted at the site for dust management.

The minimum review frequency is listed inside the cover page, however other triggers to review the Dust Management Plan include:

- prior to progressing to a new quarry extraction stage that requires revised dust management
- when new plant is introduced to the site – mobile or fixed
- when complaints are made by nearby residents
- with the introduction of new dust management controls

ATTACHMENT

Rigby Bros & Co Pty Ltd - Quarry

Dust Control – Daily Actions

Morning

Potential Dust Source	Action Required	Person Responsible
Wind direction can impact on amount of dust blown around	Check wind direction – use a flag or wind sock to confirm direction, use appropriate measures to lower impact of wind on dust movement	Quarry Manager (Jason Rigby)
Check all Tracks to see if ground is wet or dry	If tracks are dry – run water tanker over all tracks to wet down the tracks	Quarry Manager (Jason Rigby)
Check Stockpiles to see if dust is being blown from them	If visible dust being blown from stockpiles then use water cannon to reduce dust	Quarry Manager (Jason Rigby)
Crushing Plant Operating	Ensure water sprays are operational and ensure stockpile is not low. Ensure cabin seals are in good order and air-conditioner is operating and ensure door is closed while crusher is operating. Remove spillage on catwalks, under conveyors and transfer points	Crushing Plant Operator on the day.

Midday

Potential Dust Source	Action Required	Person Responsible
Wind direction can impact on amount of dust blown around	Check wind direction compared to morning check – use a flag or wind sock to confirm direction, use appropriate measures to lower impact of wind on dust movement	Quarry Manager (Jason Rigby)
Check all Tracks to see if ground is wet or dry	If tracks are dry – run water tanker over all tracks to wet down the tracks	Quarry Manager (Jason Rigby)
Check Stockpiles to see if dust is being blown from them	If visible dust being blown from stockpiles then use water cannon to reduce dust	Quarry Manager (Jason Rigby)

End of Day

Potential Dust Source	Action Required	Person Responsible
Check if rocks will be crushed the following day	Wet down rocks to be crushed the following day,	Quarry Manager (Jason Rigby)
Check wind strength and if dust is being blown around and out of the quarry	Wet down areas that are causing dust to be blown around eg tracks, stockpiles	Quarry Manager (Jason Rigby)

**Note – in times of extreme winds, Quarry Manager will consider shutting down operation of the crushing plant and cease other activities that may be causing extreme dust conditions.

www.cetgroup.com.au	Acoustic Report		Client: Rigby Bros. Quarry
	Project Nº:	CQ2136	
	Document Nº:	CQ2136-REP(AcRpt)-R1.0.doc	

ACOUSTIC REPORT
for
RIGBY BROTHERS QUARRY, COLERAINE, VICTORIA

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Rev	Description / Status	Prepared	Date	Checked	Date
1.0	Final Issue – general release	G. Pickering	240112		
0.1	First Issue – Client Review	G. Pickering	211115		

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Appendix 2 – Noise Measurement Data

1 Introduction

Rigby Brothers Quarry is located north-west of the township of Coleraine, at 26 Templeton Street. The site of the quarry is a basalt rich hill, which is surrounded by generally flat or gently undulating land.

An aerial view of the locality is shown in Figure 1.

Figure 1 – Quarry locality, aerial view *(Google Satellite image)*

The Quarry normally operates 5 days a week, Monday to Friday, during daytime hours, 7:30 to 17:00.

There are a number of residences in the vicinity. The four closest to the Quarry are located on 'farm' land, whilst the other residences are on more conventional, generously sized, residential blocks on the outskirts of Coleraine.

CET Group was commissioned to undertake noise measurements at noise sensitive locations in the vicinity, with the Quarry in operation.

2 Noise Sources

A view of the Quarry vicinity is shown in Figure 2.1. From a noise generation perspective, the Quarry can be considered to be in three parts:

1. The Pit or quarry face, where the raw stone is dug from the ground and is loaded by excavator into the tray of a haul truck. The truck then hauls the load up mine road(s) to the Crushing and Screening Plant. Noise is generated by the diesel powered excavating machines and haul trucks; the noise is produced all the time the machines are operating but the noise levels rise and fall frequently as the engines power up or down. The Pit is now well below the surrounding ground level, so this noise is contained somewhat.
2. The Crushing and Screening Plant (C&SP), where the raw stone is crushed and separated into stockpiles of specific particle size. This is the major noise source for the Quarry and its location is marked in Figure 2 by a red star. The Screening Plant (including secondary milling) is located at the normal ground level, whilst the primary crusher is located at a higher level, so that the raw material can be dropped in by gravity. The noise is generated from the crushing of the stone

and from the rattling of the screens that separate the product into specific particle sizes; this noise is fairly steady whilst the plant is operating. The noise level peaks when a haul truck approaches the tipping station, above the primary crusher. The roadway up to the tipping station is relatively steep and the heavily laden haul truck runs at full power to make the climb. Once at the top, the haul truck then reverses up the tipping station and tips out the load of rock. Typically, a haul truck arrives about every 6 to 7 minutes.

3. The Overburden areas, where excess unusable material is placed, for later restoration work. Noise is generated from diesel powered excavating machines and haul trucks. This work is periodic in nature, being only necessary when removing waste material from the Pit area or for opening up a new quarrying zone. On the day that noise measurements were taken, some of this activity was taking place, on the side of the Quarry closest to Location 5.

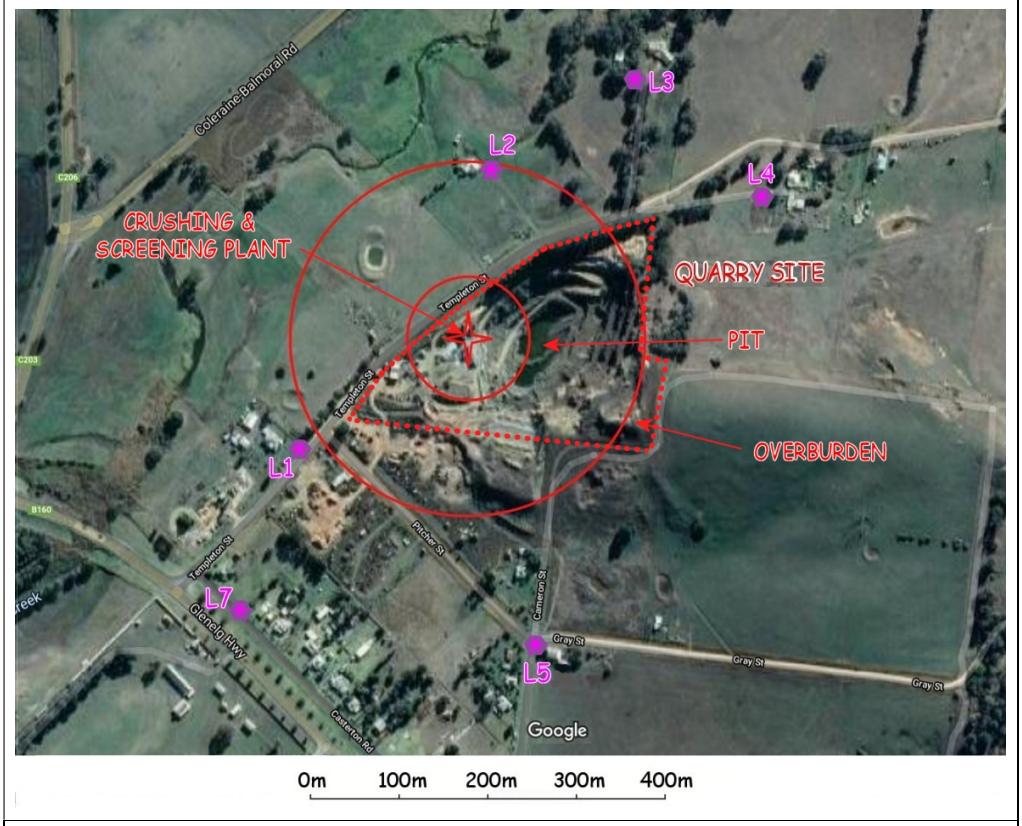

Figure 2.1 – Quarry and vicinity. Nearest noise sensitive locations are marked (L1 to L7). *(Google Satellite image)*

The noise sensitive locations nearby the Quarry are also shown in Figure 2.1, marked L1 to L7.

A photograph of the Crushing and Screening Plant is shown in Figure 2.2. Photographs from nearby locations looking toward the Quarry are included as Figures 2.3. 2.4 & 2.5.

Figure 2.2 – Crushing & Screening Plant

Figure 2.3 – View of the Quarry from Location L1

Figure 2.4 – View of the Quarry from Location L2

Figure 2.4 – View of the Quarry from Location L5

Note: The photographs have been enhanced so that the vehicles / equipment are more apparent in the landscape.

3 Permissible Noise Levels (PNL)

The Victorian EPA publication 1826.4, known as the **Noise Limit & Assessment Protocol,** provides guidance for acceptable noise levels for a variety of situations. The section of the protocol relevant to this Quarry is:

Part I: Commercial, industrial and trade premises,
Section 2. Noise limits - Rural Area Method

Noise levels based on zoning

Reference Cl. 2.7 Noise limits in rural areas for **earth resources** (includes quarries).

The Protocol provides that Section 2.7 be used to determine the noise limits for earth resources premises where the noise sensitive area is in a rural area - this is the case for this Quarry. The protocol provides noise level limits for four categories, namely:

- Where the noise sensitive area is zoned GWAZ, RCZ or RLZ;
- Where the noise sensitive area is zoned IN3Z or SUZ;
- Where the noise sensitive area is zoned IN1Z or IN2Z;
- In all other situations.

In this case, the noise sensitive locations are all in zone Low Density Residential (LDRZ1), so the fourth category (dot point) applies.

The applicable noise limits are:

Item	Period	Hours	Noise level limit
i.	Day	**0700—1800 Monday—Friday** 0700—1300 Saturdays	**46 dB(A)**
ii.	Evening:	1800—2200 all days 1300—1800 Saturdays 0700—1800 Sundays and public holidays	41 dB(A)
iii.	Night:	2200—0700	36 dB(A).

Background noise levels

The Protocol also allows for the background noise level to taken into account, in determining the noise limits. In this case, the background noise levels are considered to be neutral, so no adjustment applies.

Specific variations for mines, quarries and landfills

The Protocol also allows for variations to the noise limit for activities that occur occasionally, rather than as part of routine operations. These are defined in Section 5. Table 4.

The fourth row of Table 4 considers **Necessary unshielded work**, for example occasional work that is necessary but cannot practicably be shielded by barriers, landforms or natural topography. This category allows that, for the Day period, the noise limit may be increased by up to **10 dB.** This is applicable to the work that was being undertaken on the side of the Quarry closest to Location 5.

Permissible Noise Levels

The Quarry only operates during the **Day** period, so only Day period limits apply.

The permissible noise limits are summarised as follow:

- **Routine operations: 46 dB(A);**
- **Occasional operations: 56 dB(A);**

4 Noise Levels Recorded

On the day that site measurements were taken, the weather was fine and the breeze was negligible.

The noise level measured at each location is the average noise level over the measurement period (nominally 15 mins), with the 'A' weighted correction - this is identified by the notation L_{Aeq}

Noise level readings were taken over octave bands from 63 Hz to 8 kHz, as well as overall dB(A) readings. The maximum noise level readings are also included for comparison, 'though they are not relevant to the assessment. Full details of the data are included in Appendix 2.

For simplicity, the following summary references the average dB(A) readings ($\mathbf{L_{Aeq}}$) and the maximum dB(A) readings ($\mathbf{L_{Amax}}$) for each location.

Table 4.1 – Noise Level Data

Loc'n N°	Description	Dominant Noise	Approx Dist m	Mode	Overall dB(A)	PNL dB(A)	Diff'ce dB(A)
L1	Outside Residence at 15 Templeton St. Line of sight to Tipping Station.	*Crushing & Screening Plant mainly; Intermittent noise ex overburden work*	230	**L_{Aeq}**	**52.0**	**46**	**+6**
				L_{AMax}	69.6		
L2	Outside Residence at 53 Templeton St. Line of sight to Tipping Station.	*Crushing & Screening Plant mainly; Some audible noise ex Pit.*	195	**L_{Aeq}**	**50.8**	**46**	**+7**
				L_{AMax}	65.0		
L3	Outside Residence at 63 Templeton St. Line of sight to Tipping Station.	*Crushing & Screening Plant audible; Distant trucks, birds etc.*	350	**L_{Aeq}**	**45.5**	**46**	**0**
				L_{AMax}	62.4		
L4	Outside Residence at 68 Templeton St. No sightline to any work activity.	*Crushing & Screening Plant audible; Distant trucks, birds close by.*	370	**L_{Aeq}**	**45.3**	**46**	**-1**
				L_{AMax}	69.5		

L5	Outside Residence at 1 Gray St. Line of sight to overburden works. C&SP not visible.	*Overburden work dominant . Crushing & Screening Plant not audible.*	270#2 350#2	**L_{Aeq}**	**52.2**	**56**	**-4**
				L_{AMax}	65.8		
L7	Outside Residence at 34 Casterton Rd. Hill visible, C&SP not visible.	*Location on main road. Traffic noise dominant. Quarry only just audible during lulls in traffic noise.*	400	**L_{Aeq}**	**54.2**	**N/A#1**	**N/A#1**
				L_{AMax}	72.1		

Notes:
#1. Quarry noise effectively inaudible at this location, so noise limit for Quarry is not applicable.
#2. Approx 270 m from overburden work & 350 m from C&SP.

5 Conclusion

The Quarry only operates during the **Day** period, so only Day period limits apply.

The applicable permissible noise limits are:

- **Routine operations: 46 dB(A);**
- **Occasional operations: 56 dB(A);**

It is apparent from the results that, with regard to noise from the Quarry:

- The noise levels at Locations 1 & 2, the two locations closest to the C&SP, exceed the applicable limit [46 dB(A)];
- The noise level at Location 5 is significant, but due to the nature of the work it is within the applicable limit [56 dB(A)];
- The noise levels at all other locations are within the applicable limit [46 dB(A)].

The noise levels exceed the applicable limits at two locations, but at these two locations the background noise is generally relatively low, which makes the Quarry noise quite distinct.

It is noted that the noise levels recorded at these two locations, due to the Quarry, are less than those experienced at the nearby main road, due to passing traffic.

Further, it is noted that the residences at locations L1 to L4 are largely surrounded by farming land. On the day that measurements were taken, it was apparent that whilst the areas are generally quiet, there other significant sources of noise from time to time, such as tractors, chainsaws, heavy trucks and even cattle bellowing.

6 Further action

It is for the Quarry proprietors to consider any further action.

It is noted that for the Crushing & Screening Plant, it would likely be difficult and expensive to either treat the noise at source or screen off the noise from the surrounds, particularly given the prominent location of the primary crusher and the associated tipping station.

There has been some discussion about re-locating the Crushing & Screening Plant, as part of extending the quarrying operations to access additional parts of the resource.

APPENDIX 1 – Zoning

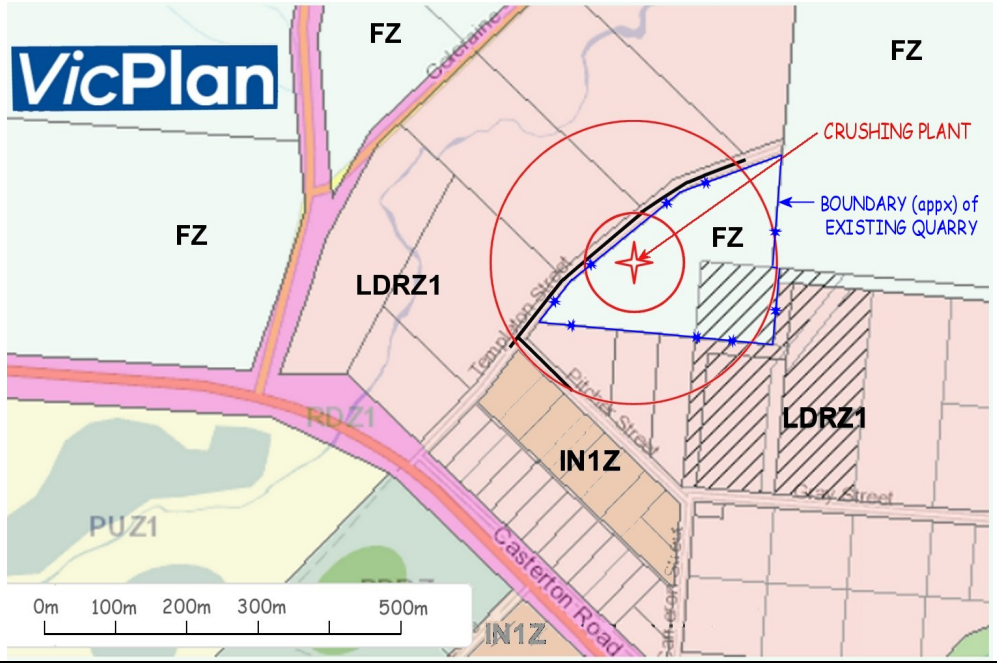

Figure A1 - Zoning for the locality (VicPlan map)

One might expect that the site of the Quarry itself would be an industrial area, however, it is zoned Farming (FZ).

The area surrounding the Quarry site is zoned mostly as Low Density Residential (LRDZ1); there is a section of land adjacent to the east side that is also zoned Farming (FZ).

There is an area to the south of the Quarry, but not directly adjacent to it, that is zoned Industrial (IN1Z). This land is largely vacant except for three residences at the south eastern end of the zone.

APPENDIX 2 – Noise Measurement Data

Noise levels recorded are tabulated below, with explanatory notes.

Rigby Bros Quarry, Coleraine
Noise measurement data
Date of readings: November 1st., 2021

Loc'n №	File №	Location	Description of noise(s)	Start Time	Dur'n (mins)		Octave Band Centre Fregency (Hz) 63	125	250	500	1000	2000	4000	8000	dB(A) O'all
L0	R190	Crusher Plant , 25m dist	Crushing & screening noise	9:00	18.0	L_{Aeq}	54.1	64.7	67.1	73.2	79.2	78.4	73.4	64.4	**83.0**
						L_{Amax}	63.8	79.2	75.1	83.7	85.5	87.5	85.5	73.1	91.0
L1	R191	Outs. Residence @ 15 Templeton	Quarry Audible - Crushing & O'burden. Also passing cars, distant trucks, cows birds	9:30	17.1	L_{Aeq}	32.6	38.5	47.3	44.6	45.5	44	39.7	30.8	**52.0**
						L_{Amax}	46.1	50.1	67.8	63.8	62.8	62.6	61.2	54.1	69.6
L1	R192	Outs. Residence @ 15 Templeton	Background 1. Distant trucks, birds, cows, 2 vehicles	10:00	15.1	L_{Aeq}	32.1	34	41.1	36.5	39.3	37.1	36.1	29.3	**46.0**
						L_{A90}	19.1	21.6	21.3	22.3	24.6	23.9	23.4	16.2	**32.8**
L2	R193	Outs. Residence @ 53 Templeton	Background 1. Distant trucks, birds, geese	10:25	3.7[#1]	L_{Aeq}	29.7	33.3	36.1	38.6	40.2	38.3	35.7	27.4	**45.5**
						L_{A90}	24.5	25.5	21.2	22.1	25.4	24.9	22.8	14.6	**34.1**
L2	R197	Outs. Residence @ 53 Templeton	Quarry quite Audible - Crushing Plant. Distant trucks, birds, geese	10:35	22.5	L_{Aeq}	40.8	42.6	36.2	38.6	44.7	44.9	42.5	30.5	**50.8**
						L_{Amax}	55.3	59.5	48.3	55.5	64.2	62.2	64.3	52.3	65.0
L3	R198	Outs. Residence @ 63 Templeton	Quarry Audible - Crushing Plant. Distant trucks, birds	11:00	21.2	L_{Aeq}	34.8	36.2	28.7	32.2	39.3	40.4	38	30.1	**45.5**
						L_{Amax}	50.4	49.2	39.7	47.4	52.9	56.6	61.9	53.8	62.4
L4	R199	Outs. Residence @ 68 Templeton	Quarry Audible. Distant trucks, magpies close by	11:30	13.7[#2]	L_{Aeq}	33.2	33.4	32.6	34.1	40.4	46.6	39.7	30.3	**45.3**[#2]
						L_{Amax}	49.7	43.2	46.8	52.2	58.6	69.4	63.8	56.5	69.6
L5&6	R200	Outs. Residence @ 1 Gray St.	Quarry Audible - only O'burden; Crushing not discernable Also passing cars, distant trucks	11:50	8.9[#3]	L_{Aeq}	35.8	38.1	39.8	41.2	47	45.5	41	37.5	**51.3**
						L_{Amax}	46.4	55.5	63.5	57.9	64.1	60.3	57.2	58.3	65.6
L5&6	R202	Outs. Residence @ 1 Gray St.	Background 1 (Lunch brk). 4 vehicles passed by	12:05	16.2	L_{Aeq}	30.7	36.4	37.1	40.4	45.3	40.6	37.3	33.8	**48.7**
						L_{A90}	18.9	23	24	23.7	28.9	26.6	20.6	14.7	**34.4**
						L_{Amax}	45.4	53.5	55.8	58.3	63.5	61.6	63.3	56.6	67.2
L2	R205	Outs. Residence @ 53 Templeton	Background 2. Distant trucks, birds, geese	12:25	16.3	L_{Aeq}	31.3	34.2	32	32.4	35.7	35.6	36.6	26.1	**42.9**
						L_{A90}	28.1	27.6	19.7	20.1	26.2	26.6	23.1	15.2	**35.8**
						L_{Amax}	43.2	49.8	50.7	49.4	54.9	54.3	59.7	47	59.8
L1	R206	Outs. Residence @ 15 Templeton	Background 2. Distant trucks, birds, cows, 6 vehicles	12:45	16.1	L_{Aeq}	30.9	34.5	45.3	42.8	45.7	42.1	37.7	31.4	**50.6**
						L_{A90}	18.3	20.2	20.7	23.2	27.5	25	22.3	15.3	**33.6**
						L_{Amax}	50.9	55	68.1	61.3	68.3	64.9	57.9	52.2	69.5
L7	R207	Outs. Residence @ 34 Casterton Rd	On the main rd. Noise mostly from passing trucks, cars Crushing Plant barely audible, only in lulls	01:10	16.1	L_{Aeq}	44.3	45.2	47.5	45.9	48.1	46.2	42.2	33.2	**54.4**
						L_{A90}	19.6	21.1	20.6	24.7	30.1	28	26.9	17.4	**37.3**
						L_{Amax}	65.2	63	65.7	64.5	64.2	67	70.6	59	72.1
L5 (&6)	R208	Outs. Residence @ 1 Gray St.	Quarry Audible - only O'burden; Crushing not discernable	02:00	3.5[#4]	L_{Aeq}	36.5	36.9	38.8	47.2	47.8	45	38.9	30.1	**52.2**
						L_{Amax}	45.7	47.5	57.3	64.6	63.5	58.6	52.5	48.5	65.8
L5 (&6)	R209	Outs. Residence @ 1 Gray St.	Crushing Plant barely audible. Overburden work halted No passing vehicles in this set	02:10	16	L_{Aeq}	29.4	29.7	28	30	33.7	32.7	31	32.2	**40.2**
						L_{A90}	22.7	23	23.3	25.7	28.8	27.1	22.1	14.6	**35.1**
						L_{Amax}	43.3	42.9	44	48.5	56	53.3	52.3	58	58.6

Notes

1 Reading R193. Reading was short duration, as Plant re-started after break.
2 Reading R199. Reading was steady at 45.3 +/- 0.1, till a chainsaw was started in the mid distance. Then reading shot up to 48.7 before stopped. (Octave readings include chainsaw)
3 Reading R200 Ceased early when Operators stopped for lunch.
4 Reading R208 Ceased after 3.5 mins - Operators asked to stop to allow taking L209

Unusable readings: R194, R195, R196, R201, R203, R204

Figure A2 - Noise Measurement Data

NOISE MANAGEMENT PLAN

for

Extractive Industry Work Authority WA410

COLERAINE QUARRY

August 2024

WA410 – Coleraine Quarry
26 Templeton Street
COLERAINE VIC 3315

Project No. R21_001
August 2024

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WA410 Coleraine Quarry
Noise Management Plan

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August 2024

Document Control / Authorisation

The preparation of this Noise Management Plan has been a collaborative effort between BCA Consulting and Jason Rigby of Rigby Brothers, for implementation at their Coleraine Quarry, WA410

Revision history

Revision	Description	Date	Originator	Reviewer	Approver
00	Draft for comment	5 August 2024	TF	FN	

Distribution

Report Status	No. of copies	Format	Distributed to	Date
Draft for Comment	1	PDF		15 Aug 2024

Review

As a minimum, this Noise Management Plan will be reviewed within 3 years of being approved.

NEXT REVIEW DATE: August 2028

1. PURPOSE OF THE NOISE MANAGEMENT PLAN

1.1. Introduction:

The Noise Management Plan is an adaptive management tool for managing both the risks posed by noise generated by quarrying activities and the potential risks posed by the operation to the environmental values of air quality and the public.

This document is to be used in conjunction with the Risk Management Plan component of the Work Plan for the quarry. The Risk Management Plan describes the noise hazards and risks associates with sensitive receptors at the time of drafting and includes the application of a range of control measures to manage the risks posed by the various noise sources generated by different quarry activities. This adaptive Noise Management Plan allows for the adaptive application of monitoring and control measures to manage the risks posed by potential changes to noise generating sources over time, ie as the quarry develops or as new equipment is introduced.. This adaptive Noise Management Plan is included as a key component in the overall management of this hazard and ensuring the stated controls in the Risk Treatment Plans and any additional controls that might be required by the Earth Resources Regulator or other agencies are captured and continually reviewed to ensure their effectiveness.

This Noise Management Plan is for the following hazard in the Risk Management Plan:

- 2.3 Noise
- 2.8 Blasting

The Noise Management Plan is designed to be easy-to-follow, non-technical, and used by anyone who needs to understand the management of Noise generated on the site from any number of sources on the site and at any point during the life of the quarry, in respect of both the risks posed by noise emissions and the potential risks posed by the operation activities to emit noise.

The Quarry Manager is responsible for implementing this Noise Management Plan and can seek assistance from the General Manager and specialists as required, particularly if there are incidents due to noise related hazards. This Noise Management Plan requires that the Quarry Manager inspects the quarry operations for noise related hazards on a regular basis. Hazards are to be reported in the Coleraine Quarry risk management system.

Coleraine Quarries strives to ensure that noise management measures on the site achieve ongoing compliance with all relevant requirements. The current objectives, relevant compliance criteria and requirements and acceptance criteria are set out below.

1.2. Objectives:

- Manage and minimise offsite noise impacts on all sensitive land uses and environments
- Apply noise controls at the source to the extent practicable; and
- Minimise impacts on local amenity, employees and the environment and protect the environmental values of the air as defined in the Environment Reference Standards (ERS)

1.3. Relevant compliance criteria and requirements:

- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Publication 1823.1, June 2021: Mining and Quarrying – Guide to preventing harm to people and the environment
- EPA Publication 1254.2, May 2021: Noise Control Guidelines
- EPA Publication 1826.4, May 2021: Noise Limit and Assessment Protocol for the Control of Noise from Commercial, Industrial and Trade Premises and Entertainment Venues.

- EPA Publication 1834.1, September 2023: Civil Construction, Building and Demolition Guide; Chapter 4 – Noise and vibration.
- WorkSafe Victoria Occupational Health and Safety Act 1994
- WorkSafe Victoria Occupational Health and Safety Regulations 2017
- Your Health and Safety Guide to Noise Edition No. 1 June 2007- WorkSafe Victoria

Worker Noise Exposure Standard:

Equivalent 8-hour Exposure Noise Levels	
Duration of Exposure (in hours)	LAeq Noise Level, in dBA
12	83
10	84
8	85
4	88
2	91
1	94
0.5	97
0.25	100

- Noise levels well above 85 dBA are acceptable under the OH&S (Noise) Regulations as long as the duration of the noise at the worker's ears is sufficiently short and hearing protection devices are being used.
- However, to be prudent it is recommended that workers should not be exposed to noise levels greater than 85 dBA, LA eq for any length of time. The General Environmental Duty (GED) defined in Part 3.2 of the Environment Protection Act 2017 requires that a person who is engaging in an activity that may give rise to risk of human health or the environment from pollution or waste must minimise those risks, so far as reasonably practicable.

Applicable Environmental Noise Limits:

Period	Hours	Noise Level Limit
Day	0700 – 1800 Monday -Friday 0700 – 1300 Saturdays	46 dB(A)
Evening	000 – 1800 Monday -Friday 0700 – 1300 Saturdays	41 dB(A)
Night	2200 - 700	36 dB(A)

1.4. Acceptance criteria:

The acceptance criteria for this risk treatment plan are:

- No noise complaints are received
- Noise is managed to minimise risks to sensitive receptors, as far as reasonably practicable, in line with the General Environmental Duty, and no unreasonable noise is experienced at sensitive receptors.

2. ROLES AND RESPONSIBILITIES

Responsibilities and accountability for the implementation of this Noise Management Plan at the Coleraine Quarry are outlined below.

2.1. General Manager

Development, resourcing, implementation and review of the Noise Management Plan is the responsibility of the Rigby Brothers General Manager/Operations Manager. It is the General Manager/Operations Manager's responsibility to ensure that:

- A Noise Management Plan is developed, resourced, implemented and reviewed.
- Personnel and environment are not exposed to hazards arising from uncontrolled noise conditions during normal operations or while conducting monitoring or remedial works.
- Only competent in-house personnel or competent persons or organisations experienced in the identification and management of noise related risks in mines or quarries conduct noise impact studies and review and make recommendations on risk management controls.
- The work at the Quarry is compliant with all applicable current statutory and regulatory requirements.
- The Noise Management Plan and all subsequent revisions are approved.
- Deviations between operating plans and the Noise Management Plan are approved.
- Purchase decisions of new plant include an assessment of noise hazards and that adequate controls have been engineered to reduce noise emissions as far as reasonably practicable.

The General Manager may delegate duties under the Noise Management Plan and to suitable WA410 operations personnel.

2.2. Quarry Manager

The Quarry Manager is responsible for implementing the Noise Management Plan, specifically:

- Ensuring compliance with the Noise Management Plan requirements through routine and regular audits.
- Developing, documenting and implementing controls to manage noise related risks.
- Routine noise monitoring for noise related hazards.
- Documenting and reporting noise hazards, and changes in conditions.
- Operating plant in accordance with the accepted noise controls.
- Drilling and blasting in accordance with noise management practices.
- Air blast overpressure monitoring, recording and reporting – modify blasting practices if required
- Maintaining all equipment noise control assets.
- Reviewing and implementing changes to noise management controls impacted by any changes to infrastructure.
- Review of the Noise Management Plan as described in Section 5 of this plan.
- Communicating hazards and controls to workers and making sure that workers comply with the controls.
- Respond to any public noise related complaints.
- Ensuring that all new site personnel are familiarised with relevant sections of the Noise Management Plan during the site induction process and that a copy of the Noise Management Plan is available in a location which is readily accessible by all site personnel.
- Compliance to approved operating hours as Hours as specified in the Work Plan or Planning Permit. Unless stated elsewhere, hours are:
  - Extraction and processing 7am to 6pm Monday to Saturday
  - No work on Sundays and Public Holidays

2.3. Quarry Supervisor

The Production Manager and Quarry Supervisor are responsible for:

- Ensuring that Noise Management Plan is implemented and complied with.
- Safe Working Procedures are implemented and monitored to ensure compliance.
- Plant identified as a source of excess noise are routinely inspected for the effectiveness of noise controls and appropriate actions taken if noncompliant.
- All unexpected or uncontrolled noise occurrences are recorded and documented.
- Any problems with the functioning of noise management assets such as noise attenuation barriers, plant mufflers and crushing and screening noise barriers are rectified.
- Regular and routine inspection and supervision of the quarry work area for noise related hazards is carried out.
- Ensure suitable noise PPE is available for use and that it is stored appropriately and workers are trained to use the PPE.

2.4. All Quarry Personnel

It is the responsibility of all quarry personnel to:

- Perform all work in accordance with standard operating procedures that exist to meet the requirements of this Noise Management Plan.
- Monitor and report site conditions during the shift for the occurrence of unexpected or uncontrolled noise.
- Monitor and report noise from site haul roads, benches hardstand areas and stockpiles for excess noise emissions.
- Monitor and report noise from fixed and mobile plant for excess noise emissions
- Report noise related hazards and ineffective controls.
- Use appropriate PPE in accordance with safe operating procedures as required.

3. COMPONENTS OF THE NOISE MANAGEMENT PLAN

3.1. Potential Impacts of Noise

3.1.1. General

Noise emissions have the potential to cause public nuisance and loss of amenity as well as cause health impacts such as loss of hearing.

3.1.2. Sensitive Receptors

Coleraine Quarry recognises and complies with its duty of care as an employer under the Victorian SafeWork legislation to provide and maintain a working environment that is safe and free of risks to health, so far as is reasonably practicable for employees. The term 'employees' includes workers, contractors and visitors.

Although there are a number of residential properties within the immediate vicinity of the quarry, a formal Noise Impact Assessment has not been conducted, with the site opting instead to undertake targeted noise monitoring as presented in the Jans 2024 Report by CET, as discussed in the Noise Risk Treatment Plan. This site, given its long history, its proximity to receptors and its aspect severely tests the "as far as reasonably practicable" "proportionality" aspect of both the MRSDA and EPA Acts It is emphasised that a quarry with associated extractive activities has been operational at the site or in the immediate vicinity of WA410 since the late 1800's. Due to its proximity to the township of Coleraine, the site is (always has been) highly visible and accountable. The primary crusher identified as a principal source of noise from the site has been in its current location since the mid 1970's and has operated with the knowledge of council and the regulator without issue.

3.1.3. Health Impacts

Coleraine Quarry recognises the health effects associated with excessive noise exposure. The level of hazardous noise impact on hearing can be gradual and is dependent on the level of noise (sound energy) and the length of exposure to the noise. Hazardous noise affects the functioning of the inner ear, which may cause temporary hearing loss. After a period of time away from noise, hearing may be restored. With further exposure to hazardous noise, the ear will gradually lose its ability to recover and the hearing loss will become permanent.

Permanent hearing loss results from the destruction of hair cells in the inner ear. These cells cannot be replaced or repaired by any presently known medical treatments or technology.

Usually, hazardous noise first affects the ability to hear high-frequency (high-pitched) sounds. This means that even though a person can still hear some sounds, conversation will start to sound 'muffled' and a person may find it difficult to understand what is being said.

Coleraine Quarry is therefore committed to treating health impacts seriously and to ensure that the potential for impacts upon health are controlled as far as reasonably practicable.

3.1.4. Amenity, Fauna and Community Health Impacts

Environmental noise can have a negative impact on the sensitive receiver including hearing impairment, hypertension, elevated stress levels, general annoyance and sleep disturbance. Some studies conclude that environmental noise at night can also affect directly or indirectly the health of the cardiovascular system of persons exposed.

Community health is not only extremely important to the community as it can have a direct impact on their lifestyle and general ambience, but it is also vital to the sustainability of our industry. Working quarries are

known to be a repository for wildlife and, as has been done so by quarries in the past, consideration should be where practicable given to wildlife such as nesting birds.

Coleraine Quarry is aware that noise emission can be significant in terms of the social and economic welfare of a community. The stress associated with sustained amenity impacts may also lead to secondary health impacts.

Coleraine Quarry is therefore committed to treating amenity impacts seriously and to ensure that the potential for impacts upon amenities are controlled as far as reasonably practicable.

3.2. Identification of Noise Generating Activities and Acceptable Controls

A preliminary acoustic assessment has been conducted on the various work activities to identify potential sources of noise hazards impacting external sensitive receptors (refer to Acoustic Report by CET Group). The assessment found that the dominant noise emitting activity is the crushing and screening activity.

Rigby Brothers performed a noise hazard identification and risk assessment for each of the identified noise hazards and the most effective controls were adopted as far as reasonably practicable. A noise hazard audit checklist is attached as Appendix A and is used in conjunction with Appendix B during subsequent routine audits to check the effectiveness of controls and to identify any new noise hazards.

Higher order controls such as elimination, substitution and engineering controls were considered as well as administrative and PPE controls. The adopted controls for each activity are as follows:

Drilling and Blasting:

- Selection of working hours to reduce impact on public
- Shot designed to minimise blast overpressure levels

Load and Haul (Resource and Waste):

- Regular maintenance of road surfaces
- Minimise vehicle movements
- Reduce onsite vehicle speeds

Crushing, Screening and Conveying Materials:

- Use of earth bunds to screen noise from crushing and screening plant
- Use plant fitted with noise abatement barriers where practical
- Compliance to approved operating hours
- Noise warning signage in place where required
- Screens and conveyors enclosed with covers where practical
- Ongoing visual monitoring of plant to identify areas where noise is generated

Stockpiling:

- Maintain stockpile height so as to reduce mobile plant noise exposure beyond work area

Mobile Equipment General Operations:

- Doors and windows of equipment are closed at all times
- Use mobile equipment fitted with noise abatement barriers where practical
- Minimise engine revving to reduce engine noise emissions

- Use suitable audible reversing devices
- Park mobile equipment in areas which have earth shielding where possible

Traffic Areas:

- Minimise vehicle movements
- Ensure speed limits are maintained at a level to minimise noise generation

Maintenance/Housekeeping:

- Minimise use of compressors and ensure that compressors are enclosed within sound attenuation barriers
- Use of power tools with low noise emissions rating where possible
- Use of appropriate hearing protection PPE
- Ensure spillage on catwalks, under conveyors and transfer points is removed on a daily basis to reduce the need for machinery. Ideally, spillage to be minimised and controlled by the use of serviceable conveyor scrapers and skirting

Disturbed Surface Areas:

- Minimising the extent of disturbed areas

4. Adopted Control and Monitoring Measures

Note: The controls listed below include all standard controls stated in the Approved Risk Management Plan and any additional control identified.

4.1. Controls

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	pliance to approved operating hours (Within PA 'Day Period' hours)	Hours as stipulated in the Work Plan or Planning Permit (or as otherwise amended by the planning permission) Extraction and processing EPA 'Daylight Hours' Monday to Friday No work on Saturday, Sundays and Public Holidays
2.	No noisy activities (earthworks, truck loading, haulage) permitted onsite within 250m of residences close to EPA 'night period hours'.	No onsite activities during and EPA 'night period' hours No exceedances of noise limits at residences during EPA 'night period' hours
3.	Establishment of screening bund, with initial segments constructed opposite the nearest residences	Compliance to Site Layout Plan and EPA noise limits

4.	Limitations on initial construction activities (e.g. bunds, haulage routes, crushing and screening) to be carried out in accordance with adherence to EPA noise limits.	Initial Construction Activities: EPA 'Daylight Hours' Monday to Friday Construction activities managed as outlined above.
5.	Extraction sequencing, equipment orientation and position to take advantage of shielding from bunds, vegetation, topography, stockpiles or other constructed features	Compliance to Site Layout Plan Locations with noise generating activities effectively screened from noise sensitive receptors.
6.	Screening operational areas from noise sensitive receptors: • Locate site access roads away from sensitive receptors; • Use of existing features (i.e. topography, vegetation) and stockpiles / bunds or other constructed features as noise barriers.	Compliance to Site Layout Plan Locations of noise generating activities effectively screened from noise sensitive receptors.
7.	Maintain access roads and site tracks in good condition	Roads and access tracks graded as required to minimise corrugations and potholes
8.	Minimise noise generated from plant operation, including vehicle speeds limits, quiet material unloading, minimise engine revving, etc.	Speed / traffic management signs maintained at critical locations, and drivers trained to operate plant so as to minimise noise generation and to report atypical noise.
9.	Reversing squawkers fitted to appropriate mobile plant	Squawkers fitted and operational to all mobile equipment
10.	Equipment selection and maintenance regime in accordance with manufacturer specifications.	All plant and equipment chosen and maintained as per manufacture specification to minimise noise emission
11.	Engineered noise abatement for grizzlies, crushers, conveyors, vibrating screens, stacking conveyors, pumps (only for pumping sediment dam) • Damping system encompassing the lining of the crusher bins with rubber matting or similar	Noise abatement devices fitted and maintained as per manufacture specification

4.2. Monitoring

Three types of noise monitoring are / will be undertaken by Rigby Brothers. Note that these include Personal Noise Monitoring for Occupational Health and Safety Compliance.:

1. Personal noise monitoring
2. Workplace environment noise monitoring
3. Offsite sensitive receptor noise monitoring

#	Aspect to be monitored	Details of monitoring
1.	Offsite Noise at sensitive receptors	Periodic noise monitoring will be undertaken to verify equipment noise levels, to ensure noise management measures remain effective and the operation is not emitting unreasonable noise. Complaints, as well as other community engagement activities, and any resulting actions will be documented. Where monitoring is directed by EPA or ERR, monitoring will be in accordance with the regulatory agencies' requirements. The adequacy of control measures against the GED will be assessed through the periodic monitoring, general observation as part of routine site inspections and feedback through community engagement.

In most situations the use of a hand-held integrating sound level meter will produce the most useful information for choosing appropriate noise control measures. In situations where workers are highly mobile or access for the person taking the measurement is difficult or unsafe, it may be more appropriate to use personal sound exposure meters also known as dose meters.

Similarly, hand-held sound level metres can be used to measure noise levels emitted by various machinery and plant to determine the workplace environment level of noise.

The preliminary external acoustic assessment measured noise levels at seven external locations and found the three locations to the south of the quarry (L1, L5 and L7) as receiving the highest noise levels.

5. REVIEW OF THE NOISE MANAGEMENT PLAN

The Noise Management Plan will be reviewed regularly against the control measures adopted at the site for noise management.

The minimum review frequency is listed inside the cover page, however other triggers to review the noise Management Plan include:

- prior to progressing to a new quarry extraction stage that requires revised noise management
- when new plant is introduced to the site – mobile or fixed
- when complaints are made by nearby residents
- with the introduction of new noise management controls

ATTACHMENT A

Rigby Bros & Co Pty Ltd - Quarry

General Noise Hazard Identification Checklist

Site		Conducted by	
Site Location		Date	

Yes, to any of the following indicates the need to carry out a further assessment potentially inclusive of a noise assessment if exposure to the noise cannot be immediately controlled.

Hazard Identification Questions	Yes	No	Noise Controls
Is a raised voice needed to communicate with someone about one metre away?			
Do your workers notice a reduction in hearing over the course of the day? (This may only become noticeable after work, for example, needing to turn up the radio on the way home)			
Are your workers using noisy powered tools or machinery?			
Are there noises due to impacts (such as hammering, pneumatic impact tools) or explosive sources (such as explosive powered tools, detonators)?			
Are personal hearing protectors used for some work?			
Do your workers complain that there is too much noise or that they can't clearly hear instructions or warning signals?			
Do your workers experience ringing in the ears or a noise sounding different in each ear?			
Do any long-term workers appear to be hard of hearing?			
Have there been any workers' compensation claims for noise induced hearing loss?			
Does any equipment have manufacturer's information (including labels) indicating noise levels equal or greater than any of the following: (a) 80 dB(A) LAeq,T (T= time period over which noise is measured)? (b) 130 dB(C) peak noise level? (c) 88 dB(A) sound power level?			
Do the results of audiometry tests indicate that past or present workers have hearing loss?			
Have the site received any complaints from neighbours or receptors?			

ATTACHMENT B

Rigby Bros & Co Pty Ltd - Quarry

Noise Control Effectiveness Checklist

Work Area	`e.g. Sales Area	**Conducted by**	
Work Activity	e.g. Loader Operator	**Date**	

Note: Noise level measurements taken at the worker's location.

Plant Specification:

Plant Type and Model	Komatsu WA420 Front End Loader	Comments
Noise Emissions Specifications	Does any equipment have manufacturer's information (including labels) indicating noise levels equal or greater than any of the following: (a) 80 dB(A) LAeq,T (T= time period over which noise is measured)? (b) 130 dB(C) peak noise level? (c) 88 dB(A) sound power level?	

Activity	Noise Controls	Effective*	Actions
Loader Tramming	▪ Engine bay sound proofing ▪ Cabin sound proofing ▪ Cabin door and window seals ▪ Hearing protection		
Loader maintaining stockpile floor	▪ Engine bay sound proofing ▪ Cabin sound proofing ▪ Cabin door and window seals ▪ Hearing protection		
Safety Devices such as reversing alarms			
Loading truck	▪ Engine bay sound proofing ▪ Cabin sound proofing ▪ Cabin door and window seals ▪ Hearing protection		

* In determining the effectiveness of the controls, consider the following:
- Are the control measures working effectively in both their design and operation?
- Are all noisy activities being identified?
- Have new work methods or new plant made the work quieter?
- Has instruction and training provided to workers been successful?
- Have new requirements or information indicated that current controls are no longer the most effective?
- Is an alteration planned to any structure, plant or process that is likely to result in a worker being exposed to hazardous noise?
- Has an incident occurred as a result of a worker being exposed to hazardous noise? and
- Have any audiometric tests revealed changes in hearing threshold levels?

Department of Premier and Cabinet

Process List

Project Name: WA410 - Rigby Bros Coleraine

Project Location: Coleraine

Date: 12-Aug-2024

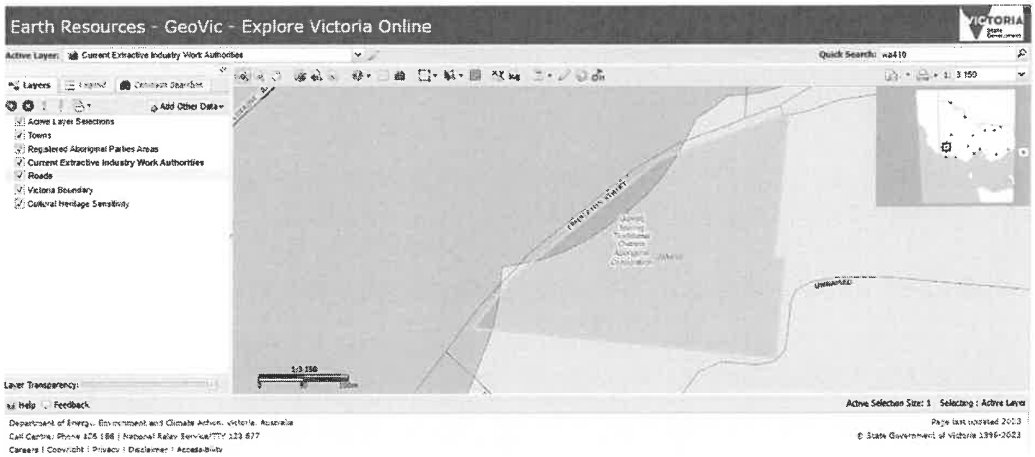
	QUESTION	ANSWER
Question 1	Is the proposed activity , or all the proposed activities, exempt?	No
Question 2	Are you undertaking a High Impact Activity as listed in the Aboriginal Heritage Regulations?	Yes
Question 3	Does your activity include significant ground disturbance?	Yes
Question 4	Does your activity area include areas of a registered cultural heritage place (regardless of significant ground disturbance) or cultural heritage sensitivity that have not previously been subject to significant ground disturbance?	No
Answer:	ON THE BASIS OF THE ANSWERS YOU HAVE ENTERED YOU ARE NOT REQUIRED BY THE REGULATIONS TO PREPARE A CULTURAL HERITAGE MANAGEMENT PLAN FOR THIS PROJECT	
	This process list is for information purposes only; the result must not be relied upon by a statutory authority in deciding whether a cultural heritage management plan is required for a proposed activity.	

To whom it may concern

I Bunggaditj Mara also known as Johnny Lovett a Boandik – Gunditjmara Elder, was contacted by Rigby Bros & Co Quarry, at 26 Templeton Street, Coleraine, 3315, to do a cultural walk over to establish if there were any cultural objects of aboriginal significance in the area as marked on the map.
I confirm there was none. I am a Native Title holder and have given evidence in the Royal Commission of Yoorook.

Bunggaditj Mara

5.3.2024



BCA Consulting Admin

From: Ben J Seamons (DEECA) <ben.seamons@deeca.vic.gov.au>
Sent: Friday, 19 July 2024 12:52 PM
To: BCA Consulting Admin; Mia Ifergan (DEECA)
Cc: Leigh L Street (DEECA); Jeff J White (DEECA); 'Anne Rigby'
Subject: RE: OFFICIAL: WA410 Rigbey Brothers Quarry Colerain - advice

Categories: Cameron
JOB No:: R21_001

Thanks Cameron / Mia,

From the engagement between DEECA-PEA and yourself it appears to have resolved the revision requirement regarding native vegetation for both parties (thank you).
I'll await the re-submission for finalisation.

Regards Ben

Ben Seamons
Senior Assessment Officer | Earth Resources Regulator | Resources Victoria
Department of Energy, Environment and Climate Action

E: ben.seamons@deeca.vic.gov.au | deeca.vic.gov.au

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We acknowledge Victorian Traditional Owners and their Elders past and present as the original custodians of Victoria's land and waters and commit to genuinely partnering with them and Victoria's Aboriginal community to progress their aspirations.

OFFICIAL

From: BCA Consulting Admin <admin@bcaconsulting.com.au>
Sent: Friday, July 19, 2024 12:45 PM
To: Mia Ifergan (DEECA) <mia.ifergan@deeca.vic.gov.au>; Ben J Seamons (DEECA) <ben.seamons@deeca.vic.gov.au>
Cc: Leigh L Street (DEECA) <leigh.street@deeca.vic.gov.au>; Jeff J White (DEECA) <jeff.white@deeca.vic.gov.au>; 'Anne Rigby' <annrigby@bigpond.net.au>
Subject: RE: OFFICIAL: WA410 Rigbey Brothers Quarry Colerain - advice

EXTERNAL SENDER: Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hey Mia

Thanks for the comments. Your controls are fairly generic, and ones that we incorporate into our work plan anyways, so no real issues from out end, but we will go through them and make them a little more descriptive / clearer, as per your comments

Ben, are you satisfied that this response from Mia addressed your concerns around the status of the vegetation on the site?

Cheers

Cameron Black Mobile +61 418 572 458

BCA CONSULTING
EARTH RESOURCES

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From: Mia Ifergan (DEECA) <mia.ifergan@deeca.vic.gov.au>
Sent: Thursday, July 18, 2024 11:22 AM
To: BCA Consulting Admin <admin@bcaconsulting.com.au>; Ben J Seamons (DEECA) <ben.seamons@deeca.vic.gov.au>
Cc: Leigh L Street (DEECA) <leigh.street@deeca.vic.gov.au>; Jeff J White (DEECA) <jeff.white@deeca.vic.gov.au>; 'Anne Rigby' <annrigby@bigpond.net.au>
Subject: RE: OFFICIAL: WA410 Rigbey Brothers Quarry Colerain - advice

Hello Cameron,

Thank you for sending through the above information and for your patience in this back-and-forth correspondence. The extent of the expansion in the admin update is definitely a lot clearer in the attached site layout and also thank you for providing evidence of planted vegetation.

From the site layout plan there seems to be potential impacts to native vegetation within the Work Authority WA410 Boundary to trees which intend to be 'protected'. These need to be retained to satisfy the requirements of Clause 52.17 Under the Victorian Planning Provisions.

If you do intend to carry out the works as indicated in Site Layout Plan Draft E sent to us on the 11/07/2024, we request that it be amended to:

1. Include the Tree Protection zones which include fencing around the Trees to be retained in line with the below:

   a. 12 times the diameter of the tree trunk at 130 cm above ground level (to a maximum distance of 15 metres) but no less than 2 metres from the base of the trunk, and

   b. 2 metres from remnant patches of native vegetation.

c. be constructed of [star pickets/ paraweb/ or similar] and remain in place until all works are completed to the satisfaction of the department.

2. The Workplan should also specify that none of the following may occur within the Tree Protection Zone:

a. vehicular or pedestrian access, trenching or soil excavation

b. storage or dumping of tools, equipment or waste

c. construction of entry and exit pits for underground services

If the above protections are included in the Workplan, then DEECA will be satisfied that the requirements of the the *Guidelines for the removal, destruction or lopping of native vegetation (Department of Environment, Land, Water and Planning, 2017)* have been met.

If you wish to send us any updated versions of the documentation provided, we will be happy to review them.

Best,

Mia

OFFICIAL

From: BCA Consulting Admin <admin@bcaconsulting.com.au>
Sent: Thursday, July 11, 2024 9:54 AM
To: Mia Ifergan (DEECA) <mia.ifergan@deeca.vic.gov.au>; Ben J Seamons (DEECA) <ben.seamons@deeca.vic.gov.au>
Cc: Leigh L Street (DEECA) <leigh.street@deeca.vic.gov.au>; Jeff J White (DEECA) <jeff.white@deeca.vic.gov.au>; 'Anne Rigby' <annrigby@bigpond.net.au>
Subject: RE: OFFICIAL: WA410 Rigbey Brothers Quarry Colerain - advice

EXTERNAL SENDER: Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hey Mia
Please find attached the information and photos we have been acquiring to address the status of vegetation to be removed as part of the Quarry extension to the WA410.
I have included a plan showing the approx. location of the images, as well as the images we received from Anne Rigby should you require a better quality.
Unfortunately these photo have been through a few email chains and have lost their geo referencing, so positions are approximate only, however I hope they still serve the purpose.

To keep all correspondence together for future reference, I have included an updated Site Layout plan (Draft E), reflecting the subtle changes to the screening bund to protect the trees on / near the property boundary, and a copy of the previous email from 2 July 2024 indicating the status of the plantation trees in the north east of the site

Please advise if you require any additional details.

Cheers

Cameron Black Mobile +61 418 572 458

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OFFICIAL

From: Mia Ifergan (DEECA) <mia.ifergan@deeca.vic.gov.au>
Sent: Monday, July 1, 2024 4:59 PM
To: BCA Consulting Admin <admin@bcaconsulting.com.au>
Cc: Leigh L Street (DEECA) <leigh.street@deeca.vic.gov.au>; Ben J Seamons (DEECA) <ben.seamons@deeca.vic.gov.au>; Jeff J White (DEECA) <jeff.white@deeca.vic.gov.au>
Subject: OFFICIAL: WA410 Rigbey Brothers Quarry Colerain - advice

Dear Cameron,
Thank you for your email to Jeff White, received on Saturday 22 June 2024, and for your time during our meeting last Friday 28 June regarding the determination of the status of vegetation to be removed as a part of Work Plan Variation for WA410, the Rigby Brothers Colerain Quarry.

I have been assessing and comparing the documentation and maps provided by yourself in June and the ones we have on file from a site visit we undertook in 2018 and noticed some minor discrepancies to the disturbance area and am unable to confirm what vegetation is to be removed on the maps supplied.

To help DEECA to confirm that the vegetation that is to be removed is exempt under Clause 52.17-7 - Planted Vegetation, I advise for the following information be provided to DEECA's Planning and Environment Assessment team:

1. A map clearly showing the extent of the expansion area of the quarry, and the extent of new disturbance area as a consequence of the variation
2. Geo-referenced (or referenced on the map) pictures of the vegetation to be removed
3. In the absence of available evidence of an agreement resulting in the planted vegetation, providing the species of the trees will assist DEECA in determining their status. For example, if the trees are not native to Victoria we will be able to rule them as exempt.

Please do not hesitate to contact me regarding any question of clarifications.

Best regards,

Mia

Mia Ifergan (she/her)
Senior Planning Officer
Major and State Projects | Planning and Environment Assessment | Regions, Environment, Climate Action and First Peoples| Department of Energy, Environment and Climate Action

Sending to you from Wurundjeri Country

Arthur Rylah Institute,123 Brown Street, Heidelberg, 3084
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We acknowledge Victorian Traditional Owners and their Elders past and present as the original custodians of Victoria's land and waters and commit to genuinely partnering with them and Victoria's Aboriginal community to progress their aspirations.

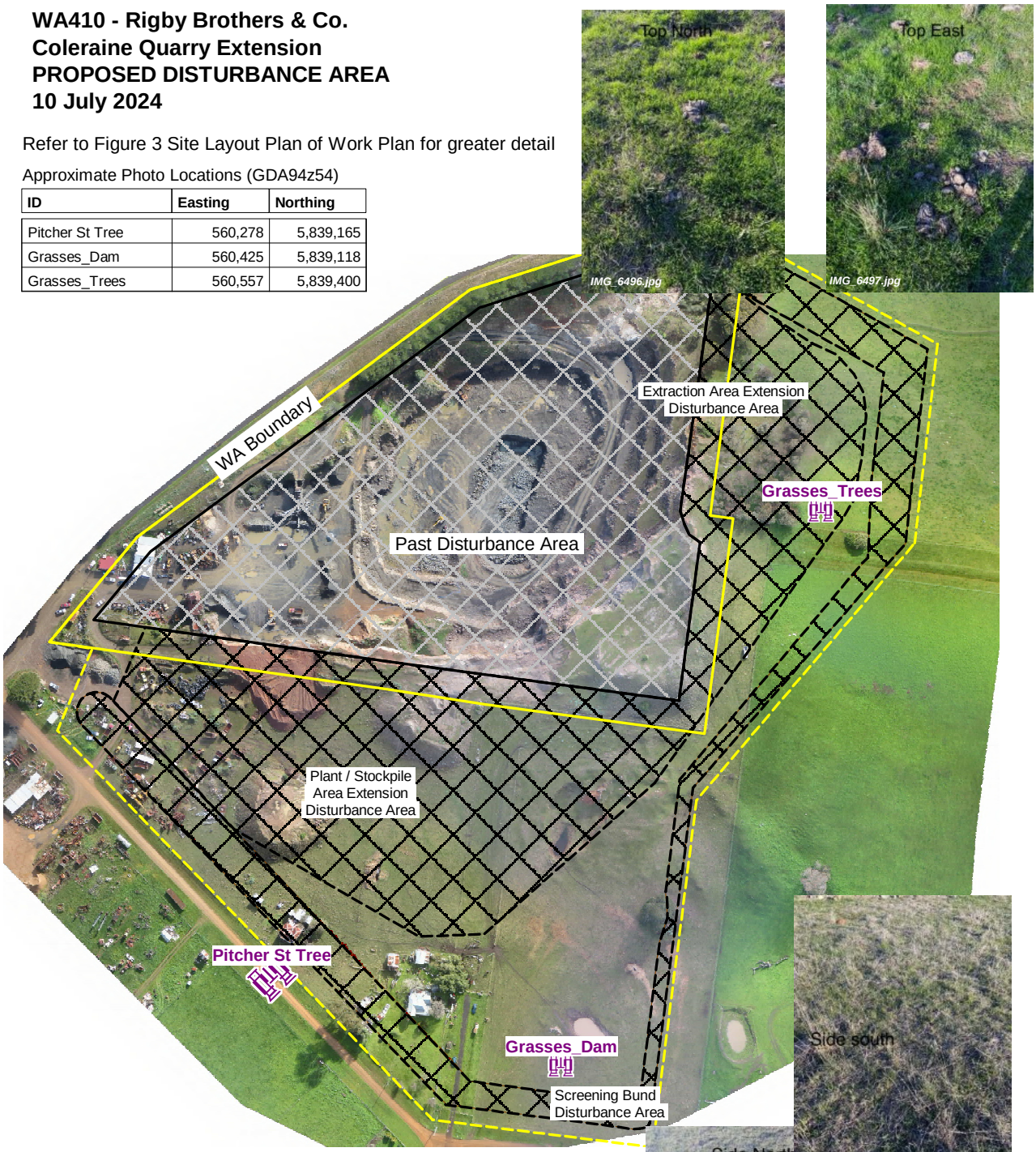
OFFICIAL

WA410 - Rigby Brothers & Co.
Coleraine Quarry Extension
PROPOSED DISTURBANCE AREA
10 July 2024

Refer to Figure 3 Site Layout Plan of Work Plan for greater detail

Approximate Photo Locations (GDA94z54)

ID	Easting	Northing
Pitcher St Tree	560,278	5,839,165
Grasses_Dam	560,425	5,839,118
Grasses_Trees	560,557	5,839,400



PitcherStreetTree.WOR

10th July 2024

Mia Ifergan

Senior Planning Officer

Major and State Projects DEECA -PEA

Athur Rylah Institute

123 Brown Street, Heidelberg, 3084

Email: mia.ifergan@delwp.vic.goc.au

In approximately 1976 – 1978 the Wannon shire purchased 3.1 acres of land from Stanley G Rigby and extended the boundary of the Quarry to the original boundary.

Discussions were held between David Barry Troeth, the owner of 67 Templeton Street Coleraine and the Directors of Rigby Bros & Co Stan Rigby and Doug Rigby of 26 Templeton Street Coleraine.

It was decided by both parties to plant trees on Troeth Bros land to help screen the Quarry.

Today Rigby Bros & Co have purchased the land where that plantation is located and are working towards extending the extractive lease area with the new boundary.

There will be a bund wall and approximately 2,500 – 3000 trees and shrubs planted around the perimeter of the quarry area.

Your Sincerely

S G Rigby

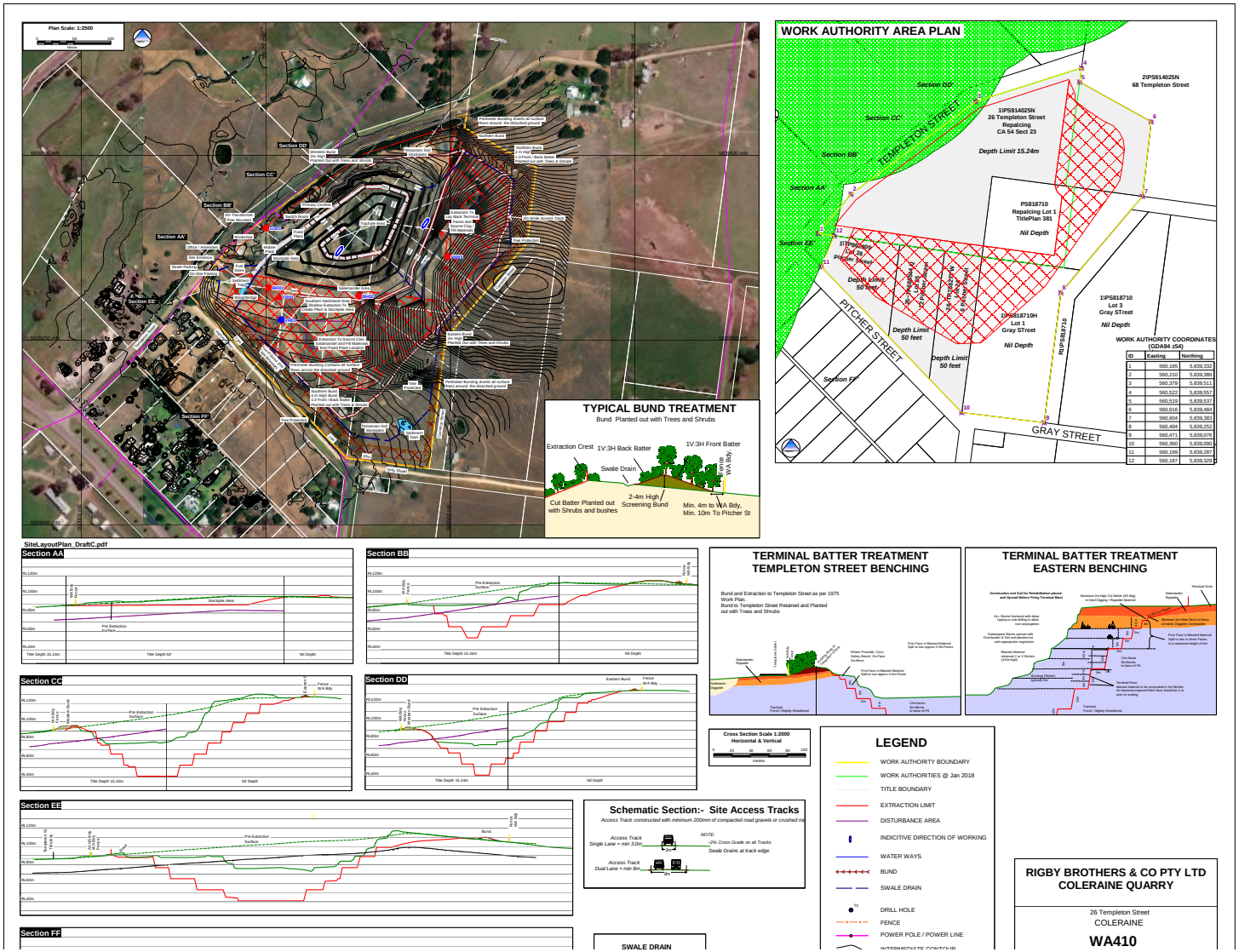
Stanley G Rigby

Director Rigby Bros & Co

B Troeth

David Barry Troeth

owner of 67 Templeton Street Coleraine


Plan Scale: 1:2500
TYPICAL BUND TREATMENT
Bund Planted out with Trees and Shrubs
Extraction Crest
1V:3H Back Batter
1V:3H Front Batter
Swale Drain
Cut Batter Planted out with Shrubs and bushes
2-4m High Screening Bund
Min. 4m to WA Bdy, Min. 10m To Pitcher St
WORK AUTHORITY AREA PLAN
2IPS914025N
68 Templeton Street
1IPS914025N
26 Templeton Street
Replacing
CA 54 Sect 23
Depth Limit 15.24m
PS818710
Repalcing Lot 1
TitlePlan 381
Nil Depth
1IPS818710
Lot 3
Gray STreet
Nil Depth
1IPS818710H
Lot 1
Gray STreet
Nil Depth
Depth Limit 50 feet
PITCHER STREET
GRAY STREET
RUPS818710
WORK AUTHORITY COORDINATES (GDA94 z54)
ID | Easting | Northing
1 | 560,165 | 5,839,332
2 | 560,210 | 5,839,386
3 | 560,379 | 5,839,511
4 | 560,522 | 5,839,557
5 | 560,519 | 5,839,537
6 | 560,616 | 5,839,484
7 | 560,604 | 5,839,383
8 | 560,494 | 5,839,252
9 | 560,471 | 5,839,076
10 | 560,360 | 5,839,090
11 | 560,169 | 5,839,287
12 | 560,187 | 5,839,329
SiteLayoutPlan_DraftC.pdf
Section AA
Section BB
Section CC
Section DD
Section EE
Section FF
TERMINAL BATTER TREATMENT
TEMPLETON STREET BENCHING
Bund and Extraction to Templeton Street as per 1975 Work Plan.
Bund to Templeton Street Retained and Planted out with Trees and Shrubs
TERMINAL BATTER TREATMENT
EASTERN BENCHING
Cross Section Scale 1:2000
Horizontal & Vertical
Schematic Section:- Site Access Tracks
Access Track constructed with minimum 200mm of compacted road gravels or crushed ro
Access Track Single Lane = min 3.0m
Access Track Dual Lane = min 8m
NOTE:
-3% Cross Grade on all Tracks
Swale Drains at track edge
SWALE DRAIN
LEGEND
WORK AUTHORITY BOUNDARY
WORK AUTHORITIES @ Jan 2018
TITLE BOUNDARY
EXTRACTION LIMIT
DISTURBANCE AREA
INDICITIVE DIRECTION OF WORKING
WATER WAYS
BUND
SWALE DRAIN
DRILL HOLE
FENCE
POWER POLE / POWER LINE
RIGBY BROTHERS & CO PTY LTD
COLERAINE QUARRY
26 Templeton Street
COLERAINE
WA410

Rigby Brothers & Co Pty Ltd

Blast Management Plan

WA410 Coleraine Quarry

Authorisation

V2 August 2024

Managing Director:	Stan Rigby
Quarry Manager:	Jason Rigby

Revised 22 August 2024 in response to ERR comments.

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Introduction

1. Overview

This Blast Management Plan together with the *Shot Firer's Report Book* aims to meet the requirements set out in Section 131 of the *Dangerous Goods (Explosives) Regulations 2022* and Appendix 2 of *AS 2187.2-2006 Explosives Storage and Use: Use of explosives.*

The Blast Management Plan (BMP) takes the form of a risk control plan and is used in explosive blasting at the Coleraine Quarry. The BMP is prepared by the Shot Firer before every blast and after consulting with all those involved in the blast.

2. Purpose of Blast Management Plan

The purpose of the BMP is to ensure blasts do not harm people or damage buildings/infrastructure in the area and to limit damage to the environment.

This is achieved by:

On Site

- Ensuring a safe site is provided for blasting operations
- Ensuring a safe exclusion zone is established and maintained
- Detailing the objectives for the blast
- Identifying risks and hazards associated with the objectives, including control and/or mitigation measures
- Identifying site-specific requirements including selection of personnel, training programs and communication systems
- Adopting the BMP as part of the overall blasting process, ensuring all tasks conducted in a planned manner
- Controlling the blast process from design to initiation, evaluation and misfire treatment.
- Implementing a review process to assess completion of objectives.

Off Site

- Implementing blasting management measures (monitoring) to ensure compliance with regulatory requirements and Work Authority conditions
- Assuring compliance with approval/contract specifications.
- Assuring the safety of the public, site personnel and surrounding properties
- Ensuring no damage to people, property, machines, livestock, infrastructure or the environment
- Responding to any complaints in timely and professional manner
- Ensuring the impacts of blasting operations on the surrounding community are minimised

Where required, the plan shall be submitted to a regulatory authority for authorisation.

Consideration is given to the possible environmental impact of air blast and ground vibration when designing the shot.

3. Relevant Regulation & Documentation

All blasting procedures on site will comply with:

- Work Authority conditions
- Site-specific Blast Management Plan
- Safe Work Method Statement for Blasting
- Company policy and procedure
- *Mineral Resources (Sustainable Development) Act 1990*
- *Dangerous Goods (Explosives) Regulations 2022*
- *Dangerous Goods (Storage and Handling) Regulations 2022*
- Australian Standard *AS 2187.1-1998 Explosives – Storage, Transport and Use, Part 1: Storage*
- Australian Standard *AS 2187.2-2006 Explosives – Storage and Use, Part 2: Use of Explosives*
- All documentation provided by the manufacturer of any equipment used in the process of blasting

Note that Coleraine Quarry's blast practices and standards are continuously reviewed to ensure that they meet community expectations.

Site Overview

4. Site Details

Site Name: **COLERAINE QUARRY** Work Authority No: **WA410**

Address: **26 Templeton Street Coleraine, Victoria 3315**

Surroundings: The location of nearby residences and surrounding land uses are presented in Figure 1 Site Location Map and nearby sensitive receptors on Figure 2 Sensitive Receptor Locations, below. The quarry extracts material from the side of a hill to its east and extends below ground level to the north, south and west. It is located on the outskirts of Coleraine township to the northwest of the town and set in topography that is favourable in suppressing the impact of blasting on sensitive receptors to the east and southeast (Coleraine Township) and less favourable to those sensitive receptors to northeast and southwest of the quarry (Templeton Street and Pitcher Street). The quarry has been operating for over 100 years and blasting since the 1930s. The operation has required only two to three blasts per annum due to the low market demand which limits exposure to blasting impact events on local residences. The blasts have been designed with a powder factor and drilling pattern which minimises ground vibration and air blast noise as far as reasonably practicable. The annual sales is between 20,000t and 40,000t.

5. Sensitive Receptors

A conservative value of 400m in front of the blast has been used as the extent of the Blast Exclusion Zone. The front of the blast is where a there is the greatest possibility of the ejection of fly rock which has the potential to cause harm.

Figure 1 shows the sensitive receptors surrounding the work authority and their location relative to the operation. Figure 2 shows the sensitive receptors in relation to the 400m blast exclusion zone for blasting the eastern, southern and western batters. Note that the adoption of the blasting exclusion zone is relative to the front of the location of the blast.

The closest residences are located within the Work Authority along the south and southeast of the quarry (north of Pitcher Street) and are within the 400m Blast Exclusion Zone (which is defined as relative to the blasted faces and in this case the northern faces of the quarry). Refer to Blast Exclusion Zone maps below. These two properties are owned by the quarry operator and the dwellings are dilapidated and uninhabited and will ultimately be demolished. Other sensitive receptors within the blast exclusion zone include Pitcher Street, Templeton Street, a section of Gray Street (150m), Konong Wootong Creek to the southwest, properties to the south of Pitcher St (currently used for old plant storage), a concrete batching plant along Templeton Street (owned by the operator) and two farms along Templeton Street northeast of the concrete batching plant. Current controls to mitigate the impact of blasting on these sensitive receptors is to vacate them during the time of blasting as well as minimising the blast frequency.

Other receptors within 500m of the 400m blasting zone include the Monument Showgrounds and the Glenelg Highway including 12 residences to the southwest, Coleraine Caravan Park and the Silvester Oval Sports Area to the southeast (both partly protected by the intervening topography).

There are no High Voltage (HV) Transmission Lines in close proximity to the site. There are several Low Voltage (LV) powerlines that provide power to the surrounding dwellings.

There are no water or gas pipelines in the vicinity. The township of Coleraine is located approximately 500km to the southeast to the south of the WA.

COLERAINE QUARRY LOCATION MAP – SENSITIVE RECEPTORS

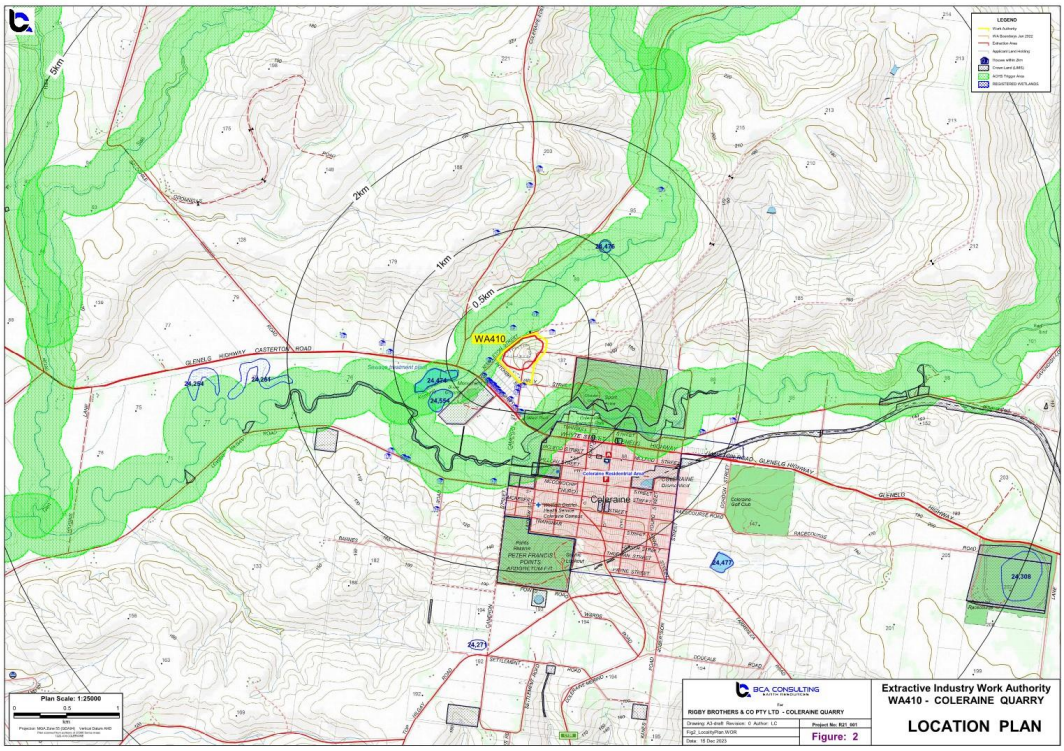
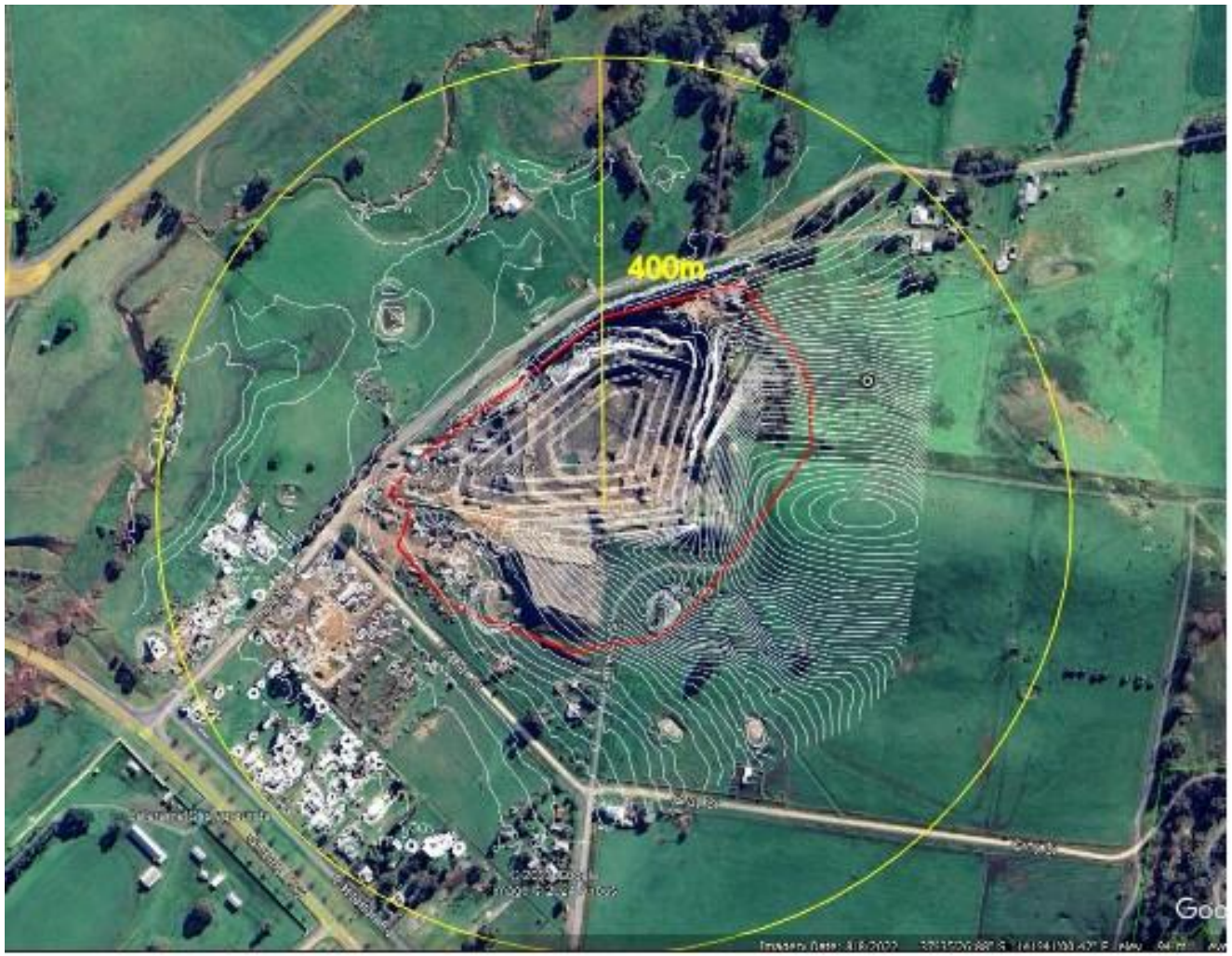


Figure 1 Site Location Map

Figure 2 Blast Exclusion Zones – Sensitive Receptors relative to direction of blasting.

400m Blast Exclusion Zone – Blasting eastern batters



400m Blast Exclusion Zone – Blasting southern batters

400m Blast Exclusion Zone – Blasting western batters

6. Geology and Extraction Method

Rock Formation:
The site is situated within the Den Hills Formation of the Coleraine Volcanic Group (200-140 Ma), which comprise trachyte and basalt lava flows, domes and laccoliths. The existing pit walls are predominately developed within trachyte, with the eastern boundary exposing a combination of weathered trachyte and siltstone.

The degree of weathering of exposed trachyte at the site generally decreases with depth, with moderately weathered material (colloquially known as salamander) encountered up to 10 m below natural surface level, overlying slightly weathered followed by fresh trachyte towards the base of the excavation. A profile of highly weathered residual soils constitutes the uppermost horizon of approximately 1 m across the site.

The fresh trachyte at the quarry is characterised as 'very strong', with an estimated unconfined compressive strength (UCS) of up to 150 MPa based on field observations. The material is blocky with up to four major defect sets encountered across the site.

The current exposures in the quarry are predominantly trachyte with the eastern boundary developed weathered trachyte and siltstone. Flow foliation in the trachyte is evident but does not form a significant structural discontinuity in the rock mass. The trachyte is moderately weathered (salamander) down to a depth of around 10 metres (top bench) on the hill (east wall) but only down to 7 m (one bench) on the west and southern walls. Below this the rock mass is slightly weathered. The current floor is within the slightly weathered zones.

The fresh rock is hard and strong and the fresh rock breaks with typical conchoidal fractures. No strength tests are reported for the trachyte other than a reported Los Angeles abrasion index of 22. The probable unconfined compressive strength could exceed 150 MPa. Published data for similar rock types (fresh basalt) suggest a range for 100 to 250 MPa.

Extraction Method and Processing:

The quarry extracts stone using blasting, typically on 12m-high benches, extracted on 6m flitches, with 89mm diameter production holes drilled on a staggered 2.4m x 2.4m pattern. Broken stone from each blast is loaded via excavator and trucked to an on-site crusher and grader located on the western wall. Crushed stone is stockpiled in an area immediately south of the crusher. A loader is used to rehandle material and load trucks.

7. Permits and Licences

The following approvals, licences and permits form the permission to blast on this site:

Licence Number	Date of Issue	Any Specific Conditions
Work Authority 410	16 July 1975	WA Conditions allow Blasting from **9:00am till 4:30pm** no secondary blasting
Note that there is no magazine and explosives are no longer stored on site		

Suitably trained and licensed Maxam staff are contracted for each shot.

8. Blasting Necessity, Frequency and Timing

Blasting is an essential part of the quarrying process for hard rock quarry sites and must be undertaken in a way that does not endanger people or cause damage to property, equipment or the environment. The blasting procedure is required to fragment the raw rock source material to a size that can be loaded and hauled into the crushing plant for processing.

The act of blasting creates noise, vibration, fumes and dust. There may also be a risk of fly rock that could result from poorly managed loading procedures, blast design or rock conditions.

The Coleraine Quarry is worked as a multi bench (up to 6) quarry and operates with 12 m faces.

The site has been operating with two blasts per annum which is based on the low production rate that supplies a small local market.

Blasting times are restricted to 10:00am to 4:30pm., Monday to Friday. There will be no blasting on weekends or public holidays.

Blasting may take place at any location within the extraction area (identified in Figures 1 and 2). The approximate location of each blast is recorded in the *Shot Firer's Report Book*.

9. Blasting Arrangements

On initial entry to site all third parties involved with the blast must adhere to company policy and minimum regulatory requirements.

All third-party contractors working on the site are inducted before being allowed to work.

Coleraine Quarry use contractors for the shot design, shot layout, blast hole drilling, blast hole surveying and supply of explosives (detonators, primers, bulk explosive, delays initiators etc). Shot design and layout and shot timing (initiation sequence) are prepared by the Blasting Contractors, Hamilton's Blasting, and reviewed and authorised by the Quarry Manager. Shot design layout and timing are reviewed by the shotfirer in conjunction with drilling contractors and explosive suppliers. All individuals and their company/organisation involved in the blast are recorded on the Shot Planning Report.

Toolbox meetings leading up to the blast and on the day keep all site personnel informed of specific blasting arrangements. The toolbox meeting on the day of the blast is used to assign the relevant individuals to specific roles.

10. Consultation and Communication

External Consultation System

NOTE: Unless otherwise specified by Council conditions, only occupants of residences and land managers for land within 1000m of the Work Authority will be notified. This list may change as a result of community consultation.

The Quarry Manager is responsible for notifying all potentially affected property occupants and land managers of the planned day, date and time of blasting.

Notification will be at least 48 hours before the planned blast and on the morning of the blast.

Where nominated by the resident, notification is by way of email and/or text message, otherwise a hardcopy letter is delivered to surrounding properties' letterboxes by hand, at least 48 hours prior to the blast. Updated information is via a phone call, or if unable to make direct contact, by way of a text message or email.

The surrounding property occupants and land managers within 1000m are shown in Table 1 below.

Occupants and Land Managers Beyond the Blast Exclusion Zone

A notice shall be posted on the town's noticeboard with blast information and contact details and in the local newspaper 2 weeks before the blast.

Due to the history of the quarry and its close proximity to the Coleraine township and environs, there are many blasting 'land occupant/owner sensitive receptors' that have been identified and would require notification of a blast. Table 1 below details these sensitive receptors. In addition, Table 2 specifically identifies the sensitive receptors (occupiers of residences) that fall within the Blast Exclusion Zone that also require to be vacated during the blast period. Note that details of all sensitive receptors are included in the risk assessment section of this plan.

Occupants and Land Managers Requiring Evacuation from within the Blast Exclusion Zone

In addition to the notification period above, occupants and land managers within the Blast Exclusion Zone boundary shall be notified one week, 48hrs and 24hrs before the blast. A positive response to at least one of these notifications is required to ensure that each sensitive receptor has been informed and is aware of the blast time. A positive response can be in the form of a text message acknowledgement.

A sweep of the affected properties shall be undertaken by the blast guards before each blast to ensure that all personnel have been evacuated from the area before closing off both Templeton and Pitcher streets.

A head count checklist shall be completed to ensure that all parties are accounted for. Mobile phone contact shall be made to check the location of those not positively identified in the sweep.

Sensitive receptors within and in proximity of the blasting exclusion zone are listed in Table 1.

Occupants and Land Managers within the blasting exclusion zone required to evacuate (dependent on blast direction) are listed in Table 2

Table 1 – Sensitive Receptors Impacted by blasting including residences to be notified.

Details of the Sensitive Receptor	Location and proximity to site
Residences within the WA boundary	Numbers 2, 6 and 12 Pitcher Street (owned by the quarry) south of the blasting limit. Uninhabitable residences - not occupied, planned to be removed
Residences within the Blast Exclusion Zone (within 400m of blast face)	Numbers 15, 31, 53, and 63 Templeton Street to the west of the WA. Numbers 4 and 10 Cameron Street South of WA.
Residences adjacent to the Blast Exclusion Zone	Numbers 68 and 70 Templeton Street. Numbers 4 to 36 (total 10) Casterton Road South of WA.
Users of Crown land and its habitat	Crown Allotment 54 (Section 23)
Roads partly within the Blast Exclusion Zone	Pitcher Street to the Southwest of the WA, Templeton Street to the Northwest of the WA, Gray Street to the South of the WA.
Glenelg Highway	2 lane sealed road, South of the WA
Casterton Road	Undivided gravel road, South of the WA

Details of the Sensitive Receptor	Location and proximity to site
Coleraine Balmoral Road	2 lane sealed road, North of the WA
Coleraine Edenhope Road	2 lane sealed road, North of the WA
Powerline within the Blast Exclusion Zone	Low voltage above ground powerline, adjacent to Templeton Road (south side)

Table 2 – Sensitive Receptor Contact Details within the Blast Exclusion Zone (to be vacated).

(NOTE: Contacted details have been redacted from this version of the BMP for privacy reasons)

Occupant / Land Manager	Address	Contact Name	Phone Number
Quarry Owner	Residences within the WA boundary Numbers 2, 6 and 12 Pitcher Street (owned by the quarry) south of the blasting limit.	Not Applicable	Not Applicable
Resident	15 Templeton Street	TBC	TBC
Resident	31 Templeton Street	TBC	TBC
Resident	53 Templeton Street	TBC	TBC
Resident	63 Templeton Street	TBC	TBC
Resident	4 Cameron Street	TBC	TBC
Resident	10 Cameron Street	TBC	TBC
Crown land	Crown Allotment 54 (Section 23)	TBC	TBC
Council	Pitcher Street to the Southwest of the WA, Templeton Street to the Northwest of the WA, Gray Street to the South of the WA.	TBC	TBC

Any comments, questions or complaints from property occupants or land managers regarding blasting and blasting nuisance will be managed through the Community Engagement Plan.

Internal Communication System

All internal quarry communications are on UHF, with the UHF Channel for blasting:

UHF CH 30 (unless changed on the day due to chatter)

People and Responsibility

11. People and Responsibility

Quarry Manager

The Quarry Manager is responsible for site operations including authorisation of the Shot Firer to commence with blasting operations. The Shot Firer is responsible for all aspects of the blast.

As the Quarry Manager gives final authorisation to fire the shot, they must be responsible for guaranteeing that the site is prepared for blasting.

Responsibilities specific to blasting are:

- Shot layout and design (spacing, burden, number of holes, angle of holes, hole depth, initiation sequence)
- Check weather forecasts several days ahead of the proposed shot and again on the day before shot
- Ordering and organising the delivery of bulk explosives and required consumables
- Ensuring adequately trained personnel available on the day of the shot
- Ensuring blast guards are available for closure of Templeton and Pitcher streets
- Verifying that all occupants within the blast zone have been evacuated
- Ensuring all people on the shot are adequately trained in their tasks.
- Ensuring standard exclusion zone protocols are appropriate for the shot
- Final authorisation to fire the shot.

Shot Firer

The Shot Firer is responsible for use of explosives during blasting operations as well as the concept of designing, loading and firing. The Shot Firer is responsible for the shot in the event of a misfire. The name of the person will be nominated for each blast in the *Shot Firer's Report Book.*

The Shot Firer is the final authority on who can access a shot, what can and cannot be done on a shot and what items can and cannot be brought onto a shot.

Responsibilities specific to the shot are:

- Ensuring the safety of themselves and others when handling or using explosives and their ingredients
- Displaying "DANGER BLASTING IN PROGRESS" signs at appropriate locations, including on the entrance to the quarry and at the office carpark on the day of the blast
- Ensuring that all occupants and residents within the Blast Exclusion Zone have been evacuated prior to the blast
- Ensuring that Templeton Street and Pitcher Street are closed and appropriate signs and blast guards placed at the barriers prior to the blast
- Comply with and enforcing the requirements set out in the Standard Operating Procedures
- The supervision of the blast crew under their direction including Mobile Processing Unit operators, whether employed or a subcontractor
- Conducting pre shot inspection of blast area and the Preparation and Set-up of a blast area which includes:
    - Demarcate the blast loading area by ensuring adequate barriers and/or bunting correctly erected
    - Set up of signs, barricades, bollards and/or flashing lights where appropriate
    - Dipping of holes and recording (where required) on drill / blast plan
    - Identify holes that require re-drilling, are damaged or contain water
    - Backfill holes where necessary
- Establishment of the Blast Exclusion Zone
- Ensure removal of all Mobile Plant & Personnel from Blast Exclusion Zone
- Inspecting explosives and other consumables to ensure they are sufficient and appropriate
- Operation of Explosives Charging Equipment in accordance with the Manufacturers recommendations and the Operating Procedures
- Conducting and/or being part of risk assessments with relation to explosive activities

- Ensuring the correct processes for the manufacture of explosives used in the blast is in compliance with legislation
- Blast loading activities which include;
    - Direct supervision of the priming and loading of all blast holes
    - Laying out of Explosive Accessories
    - Priming blast holes
    - Loading explosives into blast holes
    - Checking of product column rise to design
    - Stemming of blast holes
    - Clean up of blast area
    - Tie-in of blast pattern to Design
    - Direct supervision of any surface delay layouts
- Security of the blast area
- Reporting of lost accessories or incidents on the shot
- The completion and maintenance of Blasting Records
- Enforcement of the Blast Exclusion Zone, including final run through the area
- The preparation for the firing of shots including:
    - Inspection of the tie-in (walk the shot)
    - The allocation of Blast Guard locations
    - Ensuring Blast Guards are trained and competent in their duties
    - Prepare and check video / monitoring equipment, as required
    - Liaising with others and Blast Guards prior to clearing the area
- Direct supervision of Blasting Siren protocols
- Firing the shot
- Inspection of shot and post-blast
- Sounding ALL CLEAR siren
- Download and record results of any video / monitoring
    - Raise non-conformance for any fly rock ejected outside of inner blast area or exceedance of prescribed limits
- Completion of all paperwork / reporting requirements

Shot Firer's Assistant / Trainee Shot Firer

The Shot Firer's Assistant or Trainee Shot Firer(s) are to assist the Shot Firer as directed. Their details will be entered for each blast in the *Shot Firer's Report Book.*

Responsibilities are:

- ONLY follow direct instructions of Shot Firer.

Blast Guard / Sentry

The responsibilities of the Blast Guard / Sentry are to:

- Work under the direct control of the Shot Firer.
- Ensure all signage and barriers are in place
- Create a physical barrier at all defined access points to the Blast Exclusion Zone
- Be in communication with all other Blast Guards and the Shot Firer

- Immediately communicate any breaches to the Shot Firer
- Remains on duty until released by the Shot Firer
- Ensure all signage and barriers are removed after the ALL CLEAR is sounded
- The Blast Guard reports ONLY to the Shot Firer and is in direct communication with the Shot Firer and all other Blast Guards immediately prior to and immediately after the shot.

12. Training

Shot Firers must have a current explosives licence issued by WorkSafe under the *Dangerous Goods (Explosives) Regulations 2022* that must be endorsed for use of the explosives used and must be able to provide documentation to support this on the day of a shot. For quarries, the applicant must:

- have completed an approved WorkSafe training course or passed an approved test within the previous six months of making the application and provide a Certificate of Competency, Statement of Attainment or other written evidence;
- provide a portfolio demonstrating practical experience with explosives and documenting at a minimum:
- 12 production shots at quarries, or
- six months of continuous involvement in blasting operations at an underground mine;
- pass WorkSafe's written examination (only applicable for licence renewals); and
- pass the oral and practical examinations conducted by an assessor authorised by WorkSafe.

Explosives Licence Disqualifications

No person who would be disqualified from holding an explosives licence under the *Dangerous Goods (Explosives) Regulations 2022* shall be allowed to work on a shot.

13. Fitness for Work

For the purposes of this section, "working on a shot" is considered to include all tasks involved in the preparation of a blast, including (but not limited to) accepting deliveries of and transport of explosives, stemming, charging, firing and inspecting.

ALL PEOPLE on the site must be fit for work – adequately rested, hydrated, and free from of any influence from drugs or alcohol. Colaraine Quarry have a zero tolerance policy on drugs and alcohol.

14. Risk Assessment and Treatment

A detailed risk assessment and associated Risk Treatment Plan is included in the WA410 Work Plan documentation. An extract of this Risk Treatment Plan as at August 2023 is reproduced below. Noting that the included risk assessments do not assess the risks posed to site personnel or quarry property, as the Work Plan is required to focus on the risks posed to members of the public, the environment, public infrastructure and external property.

Sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Residences within the WA boundary	Numbers 2, 6 and 12 Pitcher Street south of the blasting limit.	Potential to be impacted by excessive blasting nuisances and fly rock	Proximity to Site

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
		Uninhabitable residences - not occupied, planned to be removed		
2.	Residences within the Blast Exclusion Zone (within 400m of blast face)	Numbers 15, 31, 53, and 63 Templeton Street to the west of the WA. Numbers 4 and 10 Cameron Street South of WA.	Potential to be impacted by excessive blasting nuisances and fly rock	Proximity to Site
3.	Residences adjacent to the Blast Exclusion Zone	Numbers 68 and 70 Templeton Street. Numbers 4 to 36 (total 10) Casterton Road South of WA.	Potential to be impacted by excessive blasting nuisances	Proximity to Site
4.	Users of Crown land and its habitat	Crown Allotment 54 (Section 23)	Potential to be impacted by excessive blasting nuisances	Proximity to Blast
5.	Roads partly within the Blast Exclusion Zone	Pitcher Street to the Southwest of the WA, Templeton Street to the Northwest of the WA, Gray Street to the South of the WA.	Potential to be impacted by excessive blasting nuisances and fly rock	Proximity to Blast
6.	Glenelg Highway	2 lane sealed road, South of the WA	Potential for users to be impacted by excessive blasting nuisances and flyrock	Proximity to Blast
7.	Casterton Road	Undivided gravel road, South of the WA	Potential for users to be impacted by excessive blasting nuisances and flyrock	Proximity to Blast
8.	Coleraine Balmoral Road	2 lane sealed road, North of the WA	Potential for users to be impacted by excessive blasting nuisances	Proximity to Blast
9.	Coleraine Edenhope Road	2 lane sealed road, North of the WA	Potential for users to be impacted by excessive blasting nuisances	Proximity to Blast
10.	Powerline within the Blast Exclusion Zone	Low voltage above ground powerline, adjacent to Templeton Road (south side)	Potential to be impacted by fly rock	Proximity to Blast
11.	Two bridges on the Glenelg Highway	South and Southwest of the WA	Potential to be impacted by excessive blasting nuisances	Proximity to Blast

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
1.	Excessive Ground Vibration at closest receptors	C, O	Likely	Moderate	HIGH
2.	Excessive Airblast at closest receptors	C, O	Likely	Moderate	HIGH
3.	Blasts resulting in fly rock impacting members of the public	C, O	Possible	Critical	VERY HIGH
4.	Blasts resulting in fly rock impacting infrastructure	C, O	Possible	Major	HIGH

Quarrying Considerations

Blasting is a highly regulated activity with very prescriptive legislation and regulations. A specific Blast Management Plan is developed and documented before, during and after each individual blast, as per regulatory requirements. This includes the establishment of an appropriate Blast Exclusion Zone

for each blast. All blasting associated activities are undertaken by appropriately trained and, where required, licensed individuals or contractors. Blast Management Plans will be continually updated, based on monitoring results, to meet the requirements set out in Section 131 of the Dangerous Goods (Explosives) Regulations 2022 and Appendix 2 of AS 2187.2-2006 Explosives – Storage and Use, Part 2: Use of Explosives, and any specific requirements of the Earth Resources Regulator, and are in general alignment with the CMPA Blast Management Plan Template in the Construction Materials Industry. The Blast Management Plan includes blast design, initiation sequence and the site-specific procedures for exclusion zones, notifying neighbours and any other protocols that are required, as well as any monitoring locations that are required.

The Earth Resources Regulator guidance defines sensitive sites, with respect to ground vibration and airblast, as including any land within 10m of a residence, hospital, school, or other premises in which people could reasonably expect to be free from undue annoyance and nuisance caused by blasting. The closest residence (to the north of Templeton Street) is approximately 150m and there are several other residences with 300m of potential blast locations. Blasting impacts at the closest residences will be managed with appropriate blast design.

Blasting has been conducted at WA 410 since the 1930's, and even today is infrequent, with 2 to 3 blasts per every 1 to 2 years (the site only sells approx. 30-40,000 tpa). The Rigbys have been conducting their own blasting since the mid 1960's and have a sound understanding of the grounds behaviour and how the rock structure behave with blasting and the extension area is not anticipated to present new challenges for Shot Firers and blast designers familiar with the regional geology.

Ground vibration and airblast are controlled by designing all shots to minimise impacts as far as reasonably practicable at the nearest sensitive sites and susceptible infrastructure and to meet the prescribed limits. All shots are videoed and where necessary the shots will also be monitored and the results recorded to inform subsequent designs with the goal of demonstrating compliance with the ground vibration and airblast overpressure limits and fly rock occurrences. The blast facing orientations will always be designed to minimise the airblast and fly rock risks by ensuring that blasts face away from the nearest sensitive sites, as far as practicable. The proposed direction of working shown in Figure 3 Site Layout is designed to achieve this outcome.

A Controlled Blasting Zone is to be established within 200m of WA boundary. Within this zone blast designs will be modified to further limit the potential for fly rock impacts to members of the public . Each blast within this zone will have its own specifically designed Blast Exclusion Zone that includes Blast Guards / Sentries on the public roads.

Blasting has been shown numerous times to have low or negligible impacts to native fauna and/or livestock in the vicinity of quarries. The infrequent effects of blast noise and airblast overpressure experienced by nearby stock / native fauna being likened to that of a single, brief thunderclap, to which stock and fauna are accustomed. Therefore, it is not considered that any credible risk is posed to stock or native fauna from blasting activities on the site.

There will be no storage of explosives, primers, detonators, delays or other such explosive materials on site in excess of the minimums set by WorkSafe. Otherwise, all material required for the blast will be delivered on the day of the blast, with all excess material removed the same day.

Blasting times will be consistent with those approved for the adjacent WA410, i.e. to the period from 10:00 am to 4:00 pm Monday to Friday, and all neighbours are engaged prior to blasting.

Individual Blast Management Plans and appropriate Blast Exclusion Zones are developed and implemented for each individual blast, as required by relevant Regulations.

Blasting times will be consistent with those approved for WA410, i.e. to the period from 10:00 am to 4:00 pm Monday to Friday, and all neighbours are engaged prior to blasting.

Individual Blast Management Plans and appropriate Blast Exclusion Zones are developed and implemented for each individual blast, as required by relevant Regulations.

The compliance standards for this risk treatment plan are:

- Fly rock: no fly rock to leave the Blast Exclusion Zone or impacting people or infrastructure.
- As far as reasonably practicable strive for ground vibration (peak particle velocity) below 5 mm/s in at least 95 per cent of cases in a 12-month period and must not exceed 10 mm/s at any time, as measured at any sensitive site, or as otherwise limited by standards applied by ERR, the Council or other regulatory authority.
- As far as reasonably practicable strive for Airblast overpressure below 115 dB(L) in at least 95 per cent of cases in a 12-month period and must not exceed 120 dB(L) at any time, as measured at any sensitive site, or as otherwise limited by standards applied by ERR, the Council or other regulatory authority.
- Blast Management Plans in accordance with Section 131 of the Dangerous Goods (Explosives) Regulations 2022 and Appendix 2 of AS 2187.2-2006 Explosives – Storage and Use: Use of Explosives.
- Sensitive site: includes any land within 10m of a residence, hospital, school, or other premises in which people could reasonably expect to be free from undue annoyance and nuisance caused by blasting.

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- No fly rock leaving Blast Exclusion Zone
- No fly rock impacting people or infrastructure
- No blasting related issues / complaints experienced by nearby sensitive sites

Control measures to address hazards

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Each shot designed and documented by a licensed Shot Firer and reviewed by Quarry Manager, with adaptation as necessary based on blast monitoring results.	Shot Firer and Quarry Manager review blast layout, drawing on experience and advice from drilling contractor and explosive supplier, document in the Blast Management Plan
2.	Blasting orientation for each shot designed to minimise the airblast and fly rock risks by ensuring, where possible, that blasts face away from the nearest sensitive sites and minimise any Blast Exclusion Zones extending beyond WA boundaries.	Shot Firer and Quarry Manager review blast layout, drawing on experience and advice from drilling contractor and explosive supplier, document in the Blast Management Plan
3.	Establish "Controlled Blasting Zones" within 200m transitioning to 400m in front of the blast face of adjacent public roads where blast designs are modified to limit fly rock, with blasts facing away from WA boundary, and temporary closure of the public roads and posting of Blast Guards / Sentries at time of shot.	"Controlled Blast Zones" documented on the Site Layout Plan and in the Blast Management Plan. Shot Firer and Quarry Manager review all blasts monitoring records / blast design for compliance to Blast Management Plan with closure of adjacent public roads (ie Blast Exclusion Zones)
4.	All blasts within the Controlled Blasting Zones monitored for fly rock, ground vibration and airblast and reviewed by the Quarry Manager.	Shot Firer to include records of blast design review in the Blast Records.

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
5.	All blasts within the Asset Protection Zones monitored for fly rock, ground vibration and airblast and reviewed by the Quarry Manager.	Shot Firer to include records of blasting design review in the Blast Records.
6.	Documented blast hole layout plan, including any special notes (ie hole depth, burden, sub-drill) distributed to Shot Firer, Quarry Manager, Driller	Shot Firer and Quarry Manager review blast layout for compliance to Blast Management Plan
7.	Notify nearby residences / occupiers within the Blast Exclusion Zone boundary in accordance with *Part 10 Consultation and Communication* of this plan	Quarry Manager to contact relevant receptors, and document on the relevant form/checklist, as per Blast Management Plan.
8.	Notify nearby residences / occupiers outside the Blast Exclusion Zone boundary in accordance with *Part 10 Consultation and Communication* of this plan	Quarry Manager to contact relevant receptors, and document on the relevant form/checklist, as per Blast Management Plan.
9.	Blast hole check / pre-shot inspection (documented evidence of hole depth, clearance, water, face, toe, front row burden)	Quarry Manager and Shot Firer review blast hole check, modify explosive charge mass / stemming as required to ensure compliance to Blast Management Plan
10.	Review explosives, primer, detonator, delay inventory	Shot Firer to ensure adequate explosives (bulk, primers, detonators, delays, etc) available
11.	On the morning of the blast, notify nearby residences indicating the planned time of blast	Quarry Manager to contact relevant receptors, and document on the relevant form/checklist, as per Blast Management Plan.
12.	Blasting times will be restricted to 10:00am to 4:00pm Monday to Friday. No blasting on weekends or public holidays.	Compliance to Work Plan and Blast Management Plan
13.	Initiate Blast Day protocols, ie establishment of a Blast Exclusion Zone, comprising signage on day of blast, to restrict access to the blast area and work area whilst loading shot, and other safety and pre-shot requirements	Shot Firer to review Blast Exclusion Zone area and signage to ensure safe loading of shot as per any SOPs, checklists and Blast Management Plan
14.	Prime and load all blast holes in accordance with design and any modification from pre-shot inspection	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
15.	Stem all holes and tie-in detonators, adding surface delays as required	Shot Firer to confirm delay sequence is as per design and any additional stemming as per pre-shot inspection report
16.	Clear the Blast Exclusion Zone of all equipment and non-essential personnel, adding any additional signage as required, posting Blast Guards / Sentries at critical access points, directing all non-essential personnel to designated safe areas, and ensuring all mobile equipment is in designated safe areas.	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
17.	Conduct all pre-blast checks, continuity, exploder, delays, etc, and connect exploder	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
18.	Check video equipment is set up and operational, and if additional monitoring is required	All shots videoed, with files stored on a remotely accessible server
19.	If required, confirm ground vibration and airblast monitoring equipment is set up and operational	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
20.	Initiate Blasting Protocols, ie final visual inspection of blast area, confirmation of safety of non-relevant personnel from Blast Guards / Sentries, blast siren sequence, blast initiation.	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
21.	Initiate Post-Blast Protocols, i.e. observation of shot for NO_2, inspection of shot, the muck profile, the Blast Exclusion Zone, sound “all clear” or initiate mis-fire protocols, as appropriate	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
22.	No explosives or detonators to be kept on site	Compliance to Work Plan and Blast Management Plan

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
1.	Excessive Ground Vibration at closest receptors	C, O	Unlikely	Moderate	MEDIUM
2.	Excessive Airblast at closest receptors	C, O	Unlikely	Moderate	MEDIUM
3.	Blasts resulting in fly rock impacting members of the public	C, O	Rare	Critical	HIGH
4.	Blasts resulting in fly rock impacting infrastructure	C, O	Rare	Major	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Fly rock	Every blast videoed; files stored on remotely accessible server.
2.	Airblast	Monitoring for airblast overpressure will be conducted as required or directed, but at least once per year. Monitoring Location: most practical location near the closest sensitive sites Copy of blast monitoring report emailed to Quarry Manager
3.	Ground Vibration	Monitoring for ground vibration will be conducted as required or directed, but at least once per year. Monitoring Location: most practical location near the closest sensitive sites Copy of blast monitoring report emailed to Quarry Manager

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Blast Management Plan Template in the Construction Materials Industry (CMPA)	CMPA website
2.	Appendix 2 of AS 2187.2-2006 Explosives – Storage and Use, Part 2: Use of Explosives	

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Blast Management Plans	Site Office
2.	Approved Work Plan & Risk Management Plan	Site Office
3.	Site Layout Plan	Work Plan
4.	Work Plan / Work Authority Conditions	Site office

Security

The Explosives Contractor is responsible for ensuring the safe deployment of explosives for all onsite blasting activities.

The Shotf Firer is responsible for maintaining a safe and secure blast area that will include but is not limited to blast signs, blast cones, flagging and stand-off areas for working equipment.

The Quarry Manager is responsible for ensuring a safe and secure quarry site and ensuring all site personnel are aware of any blasting activities.

The only site access is via the main quarry access, ie the site is fully fenced with alternate/stock gate access. Blast Guards are placed at appropriate locations immediately prior to, during and immediately after the shot. Blast Guards are in direct communication with each other and the Shot Firer. If a Blast Exclusion Zone is to extend beyond the boundary of the Work Authority the adjacent landowner / land manager will be notified, and Blast Guards posted at the boundary either side of the exclusion zone (see below).

The close proximity of some of the sensitive receptors results in the possibility of them being within the Blast Exclusion Zone (dependent on the quarry face to be blasted). As part of the blast design, blast exclusion zones will be prepared based on the blast face based on 400m ahead of the blast and 100m behind the blast. Superimposing the blast zone template onto a scaled aerial image will identify the people who require protection by vacating in the case of buildings or barred from traveling in the case of roads.

There are no explosives stored on the site. There are no Magazines on the site.

15. Capital Plant and Equipment

All vehicles, tools or other equipment used in the preparation and/or firing of the shot must be safe and maintained to company standards. The use of old or defective equipment on a shot is extremely dangerous and will result in disciplinary action.

16. Traffic Management & Signage

On the morning before a blast, signage is placed at the entrance to the Work Authority and the Site Office (see the red line in the figure below), as well as all entry points to the Blast Exclusion Zone. Signage is in accordance with explosives regulations. This signage is to notify people of blasting operations on site as well as notifying employees/contractors upon entering a Blast Exclusion Zone.

The site office is the control point for all persons entering the site where they will be notified of blast operations and restricted access areas. Any unauthorised entry to the Blast Exclusion Zone will be monitored by the Shot Firer or responsible person with unauthorised persons to be removed from the area and reported to the Quarry Manager.

Where the Blast Exclusion Zone extends onto neighbouring property, sufficient signage will be adopted as required to adequately identify the area and will be regularly inspected to ensure it is still visible.

On site vehicles moving explosives around site are to be signed and have appropriate placard indicating type of explosives being carried. All signage and vehicle standards must comply to explosives transport Regulations.

17. Blast Exclusion Zone

Given the limited number of employees, the small scale of the operation, the buffer distance/isolation from receptors and the general layout of the site a "universal" Blast Exclusion Zone is generally adopted that closes the quarry on the day of the blast to all people not involved directly with the blast. This includes employees, sales trucks, visitors, contractors etc not directly involved in the shot.

The size of the Blast Exclusion Zone is such that all fly rock and associated debris are contained within the zone and that impastc to nearby receptors is maintinaed at an acceptable level.

Given the proximity to receptors, the the Blast Exclusion Zone used for Coleraine is conservative and comprises 400m buffer in front of and 200m behind the face to be blasted. Typical (calculated) Blast Exclusion Zones are in the order of 250m in front of the and 100m behind the face to be blasted. The standard practice for Coleraine Quarry is for all personnel not involved in the blast, to evacuate the pit and processing area to the designated evacuation posts along Templeton Street, Pitcher Street and Gray Street depending on the blast facing direction. The blast facing direction will be managed to ensure that an ample clearance distance is always maintained between any blast and site personnel or the public.

Note: Specific Blast Exclusion Zones will be developed for each shot, and documented by the shot firer.

The Blast Exclusion Zone is comprised of an inner zone (the blast area) which will be cordoned off with flags, signs, hazard blast cones or other suitable means to restrict unauthorised entry.

The Shot Firer may remain in the Blast Exclusion Zone, at a pre-determined protected location during firing. All other persons on site will be directed to a nominated site blast shelter before the firing sequence can commence.

Management of the Blast Exclusion Zones will be coordinated by the Shot Firer and Quarry Manager within the requirements of Appendix L, Exclusion Zones, of *AS 2187.2-2006 Explosives – Storage and Use: Use of Explosives*.

Sensitive Receptors within the Blast Exclusion Zone: The Shot Firer is responsible for ensuring that the land within the Blast Exclusion Zone is unoccupied at the time of the blast. This responsibly is performed by the Blast Guards. Blast Guards are positioned at a safe distance to maintain the Blast Exclusion Zone immediately prior to, during and after the firing process. Safe areas will be identified outside the Blast Exclusion Zone where both employees (including contractors) and evacuated neighbours can access and wait until the blast is initiated and the 'all clear' signal has been sent. Typically, these safe areas will be outside the Blast Exclusion Zone boundary adjacent to the positions where the blast guards are posted on Pitcher Street and Templeton Street.

Prior to firing, the Shot Firer and Blast Guards are to conduct a visual inspection of the Blast Exclusion Zone and any adjoining properties. If any persons are observed by the Shot Firer or Blast Guards, they will be advised of the blasting activities and firing will be delayed until they have retreated to a safe location. The blast facing direction will be managed to minimise the extent to which any Blast Exclusion Zone will intrude onto neighbouring land.

18. Surroundings and Environment

Blast designs will be planned to minimise impacts to the public, infrastructure, flora and fauna by adhering to Earth Resources Regulation blasting limits (listed in Section 26, Monitoring Protocols) and adjusting charge mass as appropriate.

19. Environmental Conditions

Weather

Weather forecasts are checked by the Quarry Manager several days out prior to ordering the explosives and again on the day before the shot.

In the case of unexpected poor weather on the day of a blast, all persons must comply with the risk assessment and safe work procedures as directed by the Shot Firer.

Where explosives are involved, all emergency procedures should follow Section 5 of *AS 2187.1-1998 Explosives – Storage, Transport and Use: Storage*.

As per *Dangerous Goods (Explosives) Regulations 2022*, if an electrical storm, thunderstorm or dust storm approaches a site where blasting operations are being conducted—

(a) all persons must withdraw to a safe distance from any explosive, including those explosives contained in a magazine, blast hole or in the course of transport on the blasting site and must not return until the storm has passed; and

(b) the Shot Firer or, in the Shot Firer's absence, a person authorised by the Shot Firer must keep the blasting site under observation from a safe distance.

Fire

In case of a wildfire, all persons are to follow the site's fire management plan, Fire Response and Readiness Plan.

Due to the considerable risk to fire-fighters, fires in general proximity to loaded shots should not be fought, with all personnel removed to a safe location and access secured.

If a fire threatens a loaded shot, the Quarry Manager will declare an emergency situation and all personnel will be evacuated to a safe location outside the Blast Exclusion Zone.

There is no magazine on the site (explosives are not stored on the site), so the risk of fire to stored explosives is not present.

Operating Parameters

20. Record of Blast

The *Shot Firer's Report Book* must be completed and approved by the Quarry Manager and Shot Firer for every shot. This document will cover all shot specific requirements of the shot which are not covered within this BMP. This includes specifying:

- Name and Address of Client
- Telephone
- Blast Date and Time
- Designated Shot Firer's details
- Address or location of blast site
- Permits
- Description of Blasting Work
- Explosives to be used
- Name of the person responsible for blast design
- Names and details of all other people involved in loading the blast and their roles

21. Management of Explosives

Approved explosives products

The Quarry Manager is responsible for approval of bulk explosives and all other consumables required for the blast.

Ordering Explosives

The Quarry Manager, in conjunction with Hamilton, is responsible for organising the delivery of bulk explosives and all other consumables required for the blast.

Explosives supplied by Beetaloo Mining Services.

Accepting Explosives onto Site

The Shot Firer is responsible for inspecting the explosives and other consumables to ensure they are sufficient and appropriate for the blast.

Storing and Handling Explosives

It is this site's policy that explosives will only be delivered to site as required on the day of blasting.

Theft of Explosives

Any evidence of attempted forced entry to or theft of explosives from a supply truck or unaccountable stock discrepancy shall be immediately reported to the police. In addition, such thefts shall be reported to WorkSafe Victoria on 13 23 60.

22. Blast Hole Management

Terminal Profile Blasting

Terminal profile blasting may require pre-split holes and / or trim holes to reduce the likelihood of back break and overhang. Consult the Ground Control Management Plan to determine if these types of controls are required, and if so, the location, orientation, spacing and charge mass of any pre-split and / trim holes, and incorporate into the drilling and shot plan.

Surveying / Profiling

The Shot Designer, Shot Supervisor, the Quarry Manager, and the Shot Firer shall visually inspect the blast face, consult the bore hole tracking records and check the front row for correct burden and toe, with any re-stemming noted on the blast design report.

Drilling

The driller's log is consulted, and all blast holes are checked for depth and any obstructions prior to loading, with any comments / instruction noted on the blast hole report.

Approval for loading

Approval for loading will be given by the Quarry Manager after consultation with the driller and Shot Firer.

23. Blast Parameters

Spacing, Burden, Face Height

The typical design spacing of shot holes on a staggered pattern at this site, when using **full strength bulk explosive** in an **89mm** diameter drill hole is nominated in the table below:

Face Height	Minimum Burden	Minimum Spacing	Front row Burden	Maximum toe Burden	Sub Drill Depth	Min Stemming
12m	2.3m	2.5m	2.3m	2.5m	0.3	2.0m

Note; This table will not apply if a different strength explosive or a different diameter drill hole is used.

Any deviation in excess of 15% from the above values will be reviewed and signed off by an appropriately qualified and experienced blasting consultant before designing the shot.

Stemming

Stemming material is 10-14mm aggregate for a 89mm diameter blast hole.

Modified / Controlled Blast Designs

As above, modifications to the blast design in excess of 15% of the typical blast parameters must be sent to ***an appropriately qualified and experienced blasting consultant*** for approval of the blasting operation.

Refer to Section 16 regarding management of Blast Exclusion Zones, including the blast facing direction for blasts, to ensure that an ample clearance distance is always maintained between any blast and site personnel or the public, and to minimise the number of occasions a Blast Exclusion Zone may extend beyond the Work Authority boundary. The blast facing direction can also minimise any airblast impacts at the nearest residence, to the north within the Work Authority, when extraction approaches the northern end of the pit expansion. Noting that specific blast facing directions and Blast Exclusion Zones must be developed for each shot.

Final Wall Blasting

The shot layout for each final wall blast must be accurately located by survey to ensure that the final pit walls (terminal batters) remain consistent with the approved design. Poorly controlled formation of terminal benches can lead, cumulatively, to an over-steepening of the terminal batter, which could potentially compromise the long-term pit stability.

Suitable controlled blasting techniques may need to be employed to minimise the blast-induced slope damage to final pit walls (terminal batters), and then followed up with an increased scaling effort to remove the exfoliated rock mass from the terminal faces. This may be necessary to ensure that the desired minimum bench widths are retained on final pit walls, consistent with the terminal slope design and the Ground Control Management Plan. Depending on variable rock conditions around the final pit walls, a range of blast designs and blasting techniques (e.g. contour, pre-split or trim blasting) may need to be applied adaptively to minimise deviations from the design criteria for the terminal slope design.

If special activities require the blasting of a face so small that it will not allow the minimum stemming, the design of the shot must be sent to ***an appropriately qualified and experienced blasting consultant*** for approval of the blasting operations.

24. Charging Shot

Blast Charging Procedure

Requirement	Example Guide

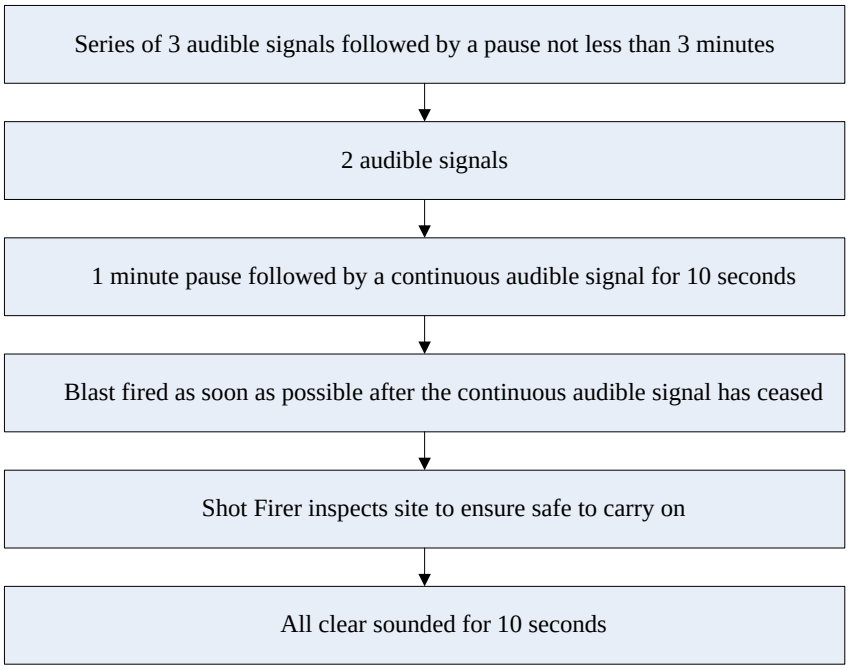
1. Define the blast area	Ensure a 10m clearance beyond any blast holes requiring charging.
2. Blast barricading	Signs and barricades are appropriately placed at all access ways to the blast site.
3. Visually inspect the blast face	Ensure that the blast face is consistent with any blast data that has been provided.
4. Check access/ egress	Ensure all vehicle access / ramps are safe for use.
5. Shot Firer's planning meeting	All personnel assisting on the blast must be made aware of how to do each task safely.
6. Laying out stemming	Ensure appropriate stemming material (10mm clean aggregate) is placed at locations around the blast to suit manual or mechanical handling.
7. Label all blast holes	Blastholes must be labelled according to the loading chart.
8. Blasthole check	Provide evidence of actual blasthole depths i.e.: Driller's logs, dipping charts. Check actual burden against design using fishing pole method and/or Laser Profiling and Bore tracking methods.
9. Identify all exception holes	Ensure all blastholes that require special loading techniques are clearly identified for all personnel assisting on the blast.
10. Dip blastholes and record actual drill depths	Compare the actual depth of all blastholes against the design depth. Backfill if necessary and record any short depth blastholes.
11. Lay out the boosters and downlines	Work systematically to ensure that no blastholes are missed. Carefully place the booster and downline or leadwire at the blasthole collar to avoid any boosters, downlines or leadwires disappearing beneath drillings or down to the blastholes.
12. Assemble primers and lower into blastholes	Carefully insert the detonator into the booster according to the procedure and lower the primer into the blasthole.
13. Determine the appropriate explosives	Use ANFO or a dry bulk explosive in dry blastholes only. Use packaged or a water resistant bulk explosive in wet and dry blastholes.
14. Secure the downline while loading the blast hole.	Anchor the downline or leadwires with a rock or place your foot over it to prevent losing the downline or leadwires into the blasthole.
15. Ensure that the explosive column is rising	If cavities or voids are present the explosive column may slump which may then require air decking or the placement of a solid deck.
16. Check the explosive column	Use a measuring tape or a non ferrous measuring pole to check that the collar heights do not exceed their design.

17. Secure the downline while stemming the blast hole	Slowly tip the stemming material into the blastholes and make sure not to disturb or destroy the blasthole collar, stemming must be sufficient to prevent fly rock.
18. Check the initiation timing plan	Check the initiation timing plan to ensure it is a true representation of the actual blast pattern.
19. Connect initiating explosive system	Connect the downlines or leadwires according to the design.
20. Check the tie-up	Walk the shot and check that all blastholes are connected properly to the surface initiating system.
21. Securing the blast area	Determine all access ways into the blasting area and ensure the site procedures are adequate.
22. Blast Guards	Determine the positions of Blast Guards or road blocks.
23. Communication	Ensure that any Blast Guards have a method of communication and understand the firing siren sequence and their meaning.
24. Firing position	The firing position must be at a safe distance from the blast site to be out of range of any flybrock.
25. Sequence check	Confirm the firing sequence with the appropriate site personnel.
26. Clear the blast area	Manage the clearance of personnel and mobile plant from the blast area.
27. Blast area check	Final check to ensure the blast area is clear of people and safe to fire.
28 Connect the blast initiation system	Connect the blast initiation system,\ at appropriate time.
29. Blast firing	Get to the firing position, ensure the siren sequence conforms to legislation then initiate the blast.
30. Post blast inspection	Inspect the blast when safe, for any misfires.
31. All clear	Communicate all clear if all the blastholes have been fired successfully.
32 Complete documentation	Complete the mandatory bookwork

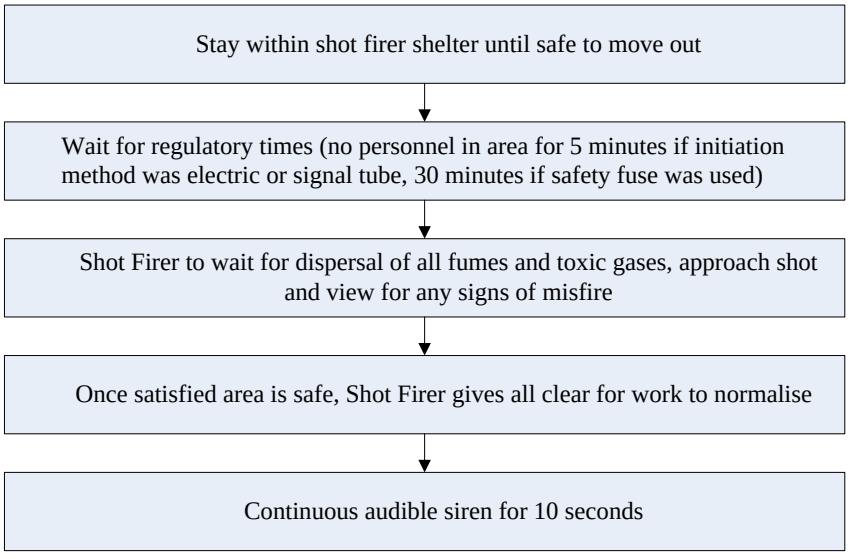
25. Warning & Firing Protocol

Before firing a shot:

Once the Shot Firer has tested the circuit (if electric), the following warning sequence will occur:



Confirming all clear following the firing of the blast:



26. Blasting Method

Blasting methods will be continually reviewed and revised based on blast monitoring and performance. Face heights, face orientation, sub drill, hole diameter, hole angle, blasting patterns, explosive types, loading techniques, stemming height, initiation type and firing sequences will be determined to meet blast design parameters governed by the site's acceptable environmental limits, source rock geology, type and size of loading tool and fragmentation required to meet crushing plant size and feed rate needs.

Blasting may be conducted using non-electric initiation or electric initiation with non-electric the preferred method. Where possible the overall size of the blast will take into account cost savings provided by suppliers for using full truckloads of bulk explosive.

All the above-mentioned aspects of blast design may be reviewed over time as new products and technology becomes available, or if source rock geology or environmental limits change.

27. Monitoring Protocols

Airblast Overpressure & Ground Vibration

Blasting has been conducted at this site since operations commenced in the late 1990's. Monitoring has previously been conducted, with no impacts recorded at sensitive sites. Future monitoring for vibration and air blast overpressure will be conducted as required or directed.

Earth Resources Regulation allowable levels (as measured in the vicinity of sensitive sites in accordance with *AS 2187.2-2006 Explosives – Storage and Use: Use of Explosives*) are as follows:

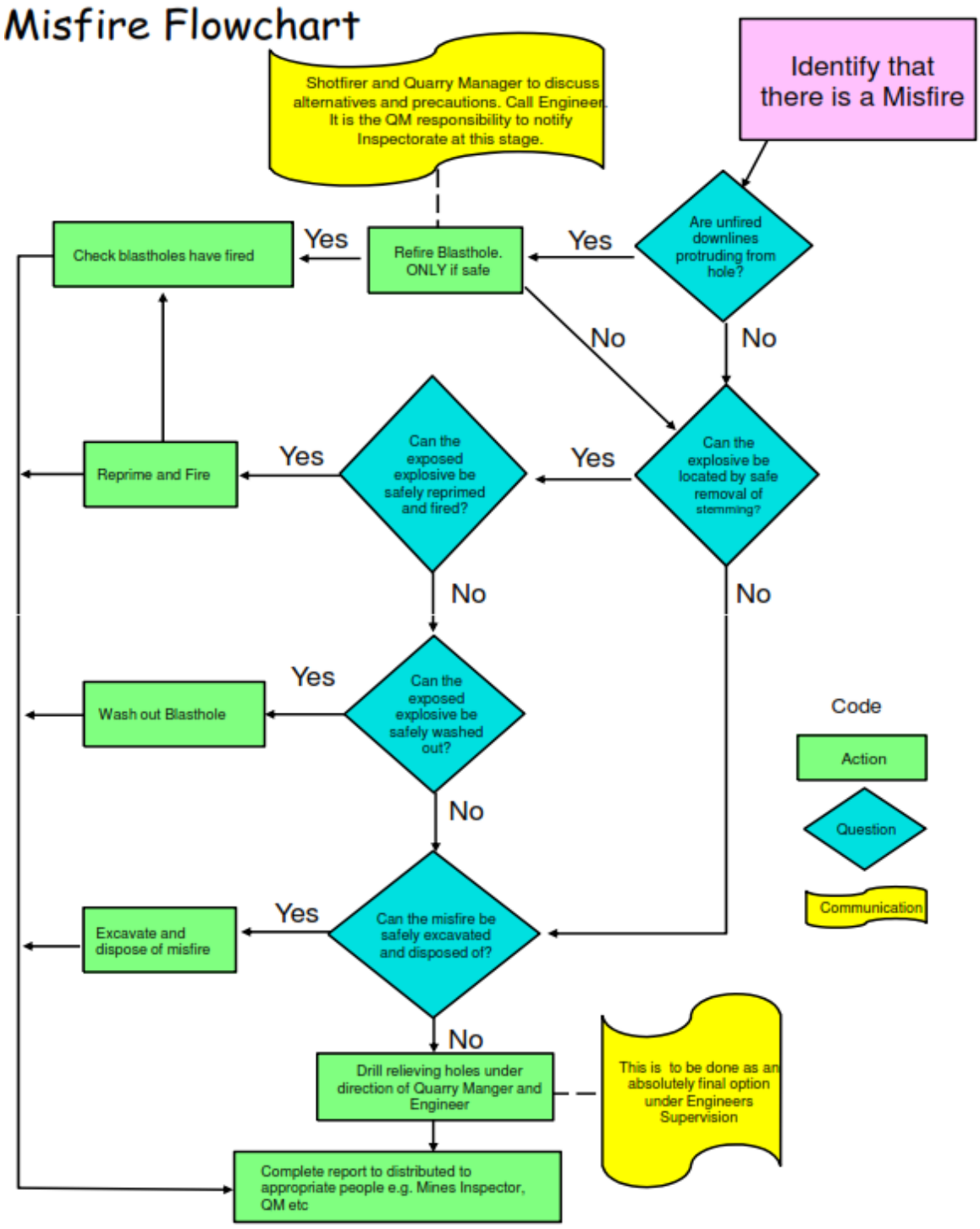
Issue	Level	Allowable exceedance
Airblast overpressure	115 dB (Lin Peak)	5% of the total number of blasts over a 12 month period
	120 db (Lin Peak)	Nil
Ground vibration	5 mm/s	5% of the total number of blasts over a 12 month period
	10 mm/s	Nil

Note: The inherent close proximity of some receptors means that the prescribed limits are unlikely to be met at the houses within the Blast Exclusion Zone. The three dwellings within the WA authority to the south are owned by the Coleraine Quarry are derelict and unoccupied and will be demolished.

Fly Rock

All blasts will be videoed to keep a record of the blast and to assist in analysis/investigation of any fly rock events. Any unusual level of fly rock generated by blasting, i.e. rock ejected outside of the inner exclusion zone (the blast area), with the potential to cause a safety risk will be noted and the cause investigated by the blasting contractor and Quarry Manager. This information will be used to continually re-assess the adequacy of blast design controls in reducing the generation of fly rock. This information will also be used to re-assess the size of the Blast Exclusion Zone.

28. Handling Misfires



29. Assessment prior to a post-blast inspection

Before proceeding to the blast site to carry out inspection, the Shot Firer or other competent person shall make an assessment to ascertain if it is safe to do so. The assessment shall include but not necessarily limited to, consideration of the following factors:

a) Whether fume dispersal has occurred.

b) Whether dust dispersal/settlement has occurred.

c) The identification of any apparently unstable ground.

d) The stability of buildings and other structures.

e) The safety and suitability of access and egress.

f) Aspects of the blast that may indicate that not all of the charges have been initiated.

g) In the case of a misfire, or a suspected misfire, whether the minimum waiting time has been observed. (no personnel in area for 5 minutes if initiation method was electric or signal tube, 30 minutes if safety fuse used)

h) The availability of a competent person to inspect for safety, ground or material that did not move as it was intended.

30. Post-Blast Inspection

The purpose of a post-blast inspection is to ascertain if it is safe for personnel to return to the blast site and for routine operations to resume.

The extensive variables associated with not only the type of blasting operation but also the location of the operations would necessitate specific rather than general post-blast procedures to be included. The procedures for consideration should include but not limited to the following:

a) Whether there is a need for more than one person to return to the shot for inspection.

b) Procedures to be adopted if the inspection reveals that the “all clear” into the Blast Exclusion Zone cannot be given, including the communications of the “all clear” or otherwise.

c) Continuous inspection procedures during the approach to the post-blast site that might identify unusual or abnormal results indicating possible hazards.

d) Identify a misfire or butt and the means of clearly marking misfires or butts.

Recording and Auditing

31. Record Keeping

Blast Design

Bore Hole Tracking (Front Row)

Shot Firer’s Report Book

Blast Report

Monitoring Results

Evacuated residents Head Count Checklist

Blast Notification Letters to Residents

References

- *Mineral Resources (Sustainable Development) Act 1990*
- *Dangerous Goods (Explosives) Regulations 2022*
- *Dangerous Goods (Storage and Handling) Regulations 2022*
- Australian Standard *AS 2187.1-1998 Explosives – Storage, Transport and Use, Part 1: Storage*
- Australian Standard *AS 2187.2-2006 Explosives - Storage and Use, Part 2: Use of Explosives*
- *Issue Resolution Form* [CMPA 1325]
- *Magazine Management Safety Checklist* [CMPA 1343]
- *Shot Firer's Report Book* [CMPA 1340]
- Hamiltons Standard Operating Procedures

Hamiltons, Blasting Contractors –

Blast Details (Client's Copy) typical shot attached for reference

Rigby Brothers & Co Pty Ltd

WATER MANAGEMENT PLAN

for

Extractive Industry Work Authority WA410

Coleraine Quarry

August 2024

WA410 – Coleraine Quarry
26 Templeton Street
COLERAINE VIC 3315

Project No. R21_001
August 2024

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COLERAINE QUARRY

WA410 – Coleraine Quarry Water Management Plan

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Document Control / Authorisation

The preparation of this Water Management Plan has been a collaborative effort between BCA Consulting and Rigby Brothers Quarries, for implementation at their Coleraine Quarry, WA410.

Revision history

Revision	Description	Date	Originator	Reviewer	Approver
00	Draft for comment	14 July 2024	TF	CLB	SR
01	Draft for comment	1 Sep 2024	TF	CLB	SR

Distribution

Report Status	No. of copies	Format	Distributed to	Date
Draft for Comment	1	PDF	Rigby Brothers Pty Ltd	14 August 2024

Review

As a minimum, this Water Management Plan will be reviewed within 2 years of being approved.

NEXT REVIEW DATE: August 2026

COLERAINE QUARRY

1. PURPOSE OF THE WATER MANAGEMENT PLAN

The Water Management Plan (WMP) is an adaptive tool for managing both the risks posed by water flows and the potential risks posed by the operation to beneficial uses of water.

This document is to be used in conjunction with the Risk Management Plan component of the Work Plan for the quarry. It allows for the adaptive application of a range of control measures to manage the risks posed by differing hazards. This Water Management Plan is included as a key control in the Risk Treatment Plans for the following hazards in the Risk Management Plan:

- Surface Water Flows
- Erosion and Sedimentation
- Ground Disturbance (Impacts to groundwater)
- Ground Instability
- Process Water and Storages

This initial Water Management Plan that is provided with the Work Plan will typically demonstrate water management for the current and future extraction, showing both internal water management and the onsite management of surface water flows to minimise offsite impacts. The key water management features for managing offsite impacts of surface water flows will are shown on Figure 3, Site Layout Plan, and any of these features retained at closure are shown on Figure 4, Rehabilitation Landform. A Water Management System Schematic drawing is also included in this plan to illustrate the site water management and usage practices in a simple way for operational personnel to use.

As quarry development progresses this Water Management Plan will be adapted and continue to evolve to maintain effective risk management, in accordance with the objectives, compliance standards and acceptance criteria set out in the Risk Treatment Plans. Compliance with the Work Plan, including the overarching risk management and control measures, will be maintained throughout the life of the quarry.

The Water Management Plan is designed to be easy-to-follow, non-technical, and can be used by anyone who needs to understand the management of water on the site at any point during the life of the quarry, in respect of both the risks posed by water flows and the potential risks posed by the operation to beneficial uses of water.

The Quarry Manager is responsible for implementing this Water Management Plan and can seek assistance from the General Manager and specialists as required, particularly if there are incidents due to water related hazards. This Water Management Plan requires that the Quarry Manager inspects the quarry operations for water related hazards on a regular basis. Hazards are to be reported in Coleraine Quarry risk management system.

2. ROLES AND RESPONSIBILITIES

2.1. General Manager

Development, resourcing, implementation and review of the WMP is the responsibility of the Rigby Brothers General Manager/Operations Manager. It is the General Manager/Operations Manager's responsibility to ensure that:

- A WMP is developed, resourced, implemented and reviewed.
- Personnel and environment are not exposed to hazards arising from uncontrolled water conditions during normal operations or while conducting monitoring or remedial works.
- Only competent in-house personnel or competent persons or organisations experienced in the identification and management of water related risks in mines or quarries conduct water impact studies and review and make recommendations on risk management controls.
- The work at the Quarry is compliant with all applicable current statutory and regulatory requirements.
- The WMP and all subsequent revisions are approved.
- Deviations between operating plans and the WMP are approved.

The General Manager may delegate duties under the WMP and to suitable WA410 operations personnel.

2.2. Quarry Manager

The Quarry Manager is responsible for implementing the WMP, specifically:

- Ensuring compliance with the WMP requirements through routine and regular audits
- Developing, documenting and implementing controls to manage water related risks.
- Routine inspections for water related hazards.
- Documenting and reporting water hazards, and changes in conditions.
- Developing the pit in accordance with the pit surface water design.
- Maintaining all water management assets.
- Reviewing and implementing changes to water management controls impacted by any changes to infrastructure.
- Review of the WMP as described in Section 6 of this plan.
- Communicating hazards and controls to workers and making sure that workers comply with the controls.
- Managing emergencies that involve water related hazards, in accordance with the recommendations in this Plan.

2.3. Production Manager and Quarry Supervisor

The Production Manager and Quarry Supervisor are responsible for:

- Ensuring that the WMP is implemented and complied with.
- SWPs are implemented and monitored to ensure compliance.
- The quarry pit, waste/overburden dumps and stockpile faces are routinely inspected for water related hazards and observations documented.
- All unexpected or uncontrolled water occurrences are recorded and documented.
- Any problems with the functioning of water management asset such as pumps, storage, pipes, and sediment dams are reported and rectified.
- Regular and routine inspection and supervision of the quarry work area for water related hazards is carried out.

2.4. All Quarry Personnel

It is the responsibility of all quarry personnel to:

- Perform all work in accordance with standard operating procedures that exist to meet the requirements of this WMP.

- Monitor ground conditions during the shift for the occurrence of unexpected or uncontrolled water flows.
- Monitor surface drains along roads and benches for any blockages (sediment buildups) or failures.
- Report water related hazards and ineffective controls.

3. COMPONENTS OF THE WATER MANAGEMENT PLAN

The main components of the Water Management Plan are:

- Water Management System Schematic drawing – showing all the key elements of the water management system including water inflows, water storage, water transport, water usages, water treatment and water outflows. This drawing is included in Appendix A of this management plan.
- Trigger Action Response Plans (TARPs) – setting out the trigger events that will initiate adaptive management processes for adverse or unexpected conditions.

Trigger Action Response Plans are included for:

- Water Storages / Sediment Dams
- Rainfall / Storm Events
- Groundwater Monitoring (unexpected interception of groundwater)

4. MONITORING AND REPORTING

The monitoring in relation to each hazard is set out in the individual Risk Treatment Plans and will provide the necessary alerts for the triggers identified in the TARPs.

Reporting on the effectiveness of the control measures in the Risk Management Plan, including this Water Management Plan, and any adverse events will be as documented in the individual Risk Treatment Plans.

5. TRIGGER ACTION RESPONSE PLANS (TARPS)

A water related Trigger Action Response Plan is a policy of planned responses to trigger events. The purpose of this procedure is to define a range of trigger levels and the associated response protocols to be initiated in the event of a trigger level being exceeded. The TARP for Coleraine Quarry is presented in Appendix B.

The TARP communicates the planned responses to water related triggers (hazard levels) such that the required responses to set triggers for all personnel / roles are planned and well understood.

The Quarry Manager must review the water hazard inspection data to assess the current status of the effectiveness of the pit water management plan to determine the current Trigger level and communicate these as per the TARP requirements.

6. EMERGENCY PROCEDURES

There are broadly three types of emergency situations involving water hazards:

- Emergencies that are caused by uncontrolled water hazards that may impact on ground stability, for example the engulfment of operating plant due to collapse of a stockpile or operating face.
- Emergencies that are caused by discharge of water outside the work authority that does not meet quality requirements and/or exceeds licence flow rates and significantly impacts the environment.
- Emergencies that are caused by unexpected groundwater interception.

Regardless, Rigby Brothers Quarries standard operating emergency procedures must be followed. If the emergency is caused by or requires consideration of geotechnical hazards as part of the response, the Quarry Manager may request assistance from an external geotechnical engineer.

7. REVIEW

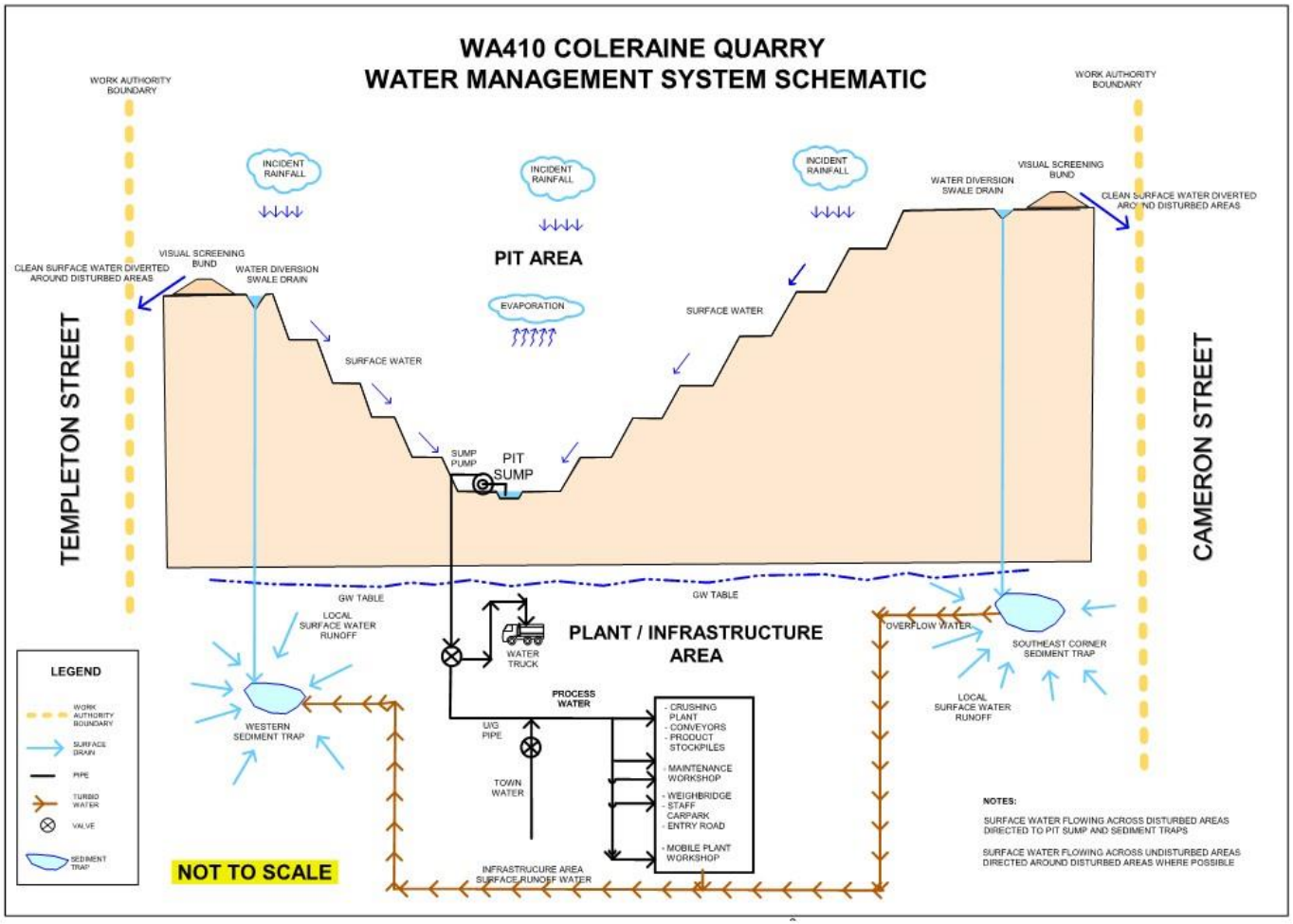
The Water Management Plan will be reviewed regularly against the control measures adopted at the site for water management. The minimum review frequency is listed inside the cover page, however other triggers to review the Water Management Plan include:

- prior to progressing to a new quarry extraction stage that requires revised water management
- within two years of the last approval, and sooner if:
- an unexpected inrush of water or inundation occurs; or
- surface water diversion causes unintended impacts offsite; or
- excessive erosion due to flows of water; or
- turbid water is discharged offsite or could potentially be discharged offsite; or
- flow of water leading to unexpected ground instability; or
- an unexpected inflow of groundwater; or
- an unexpected overflow or instability of water storage / sediment dam; or
- the approved Work Plan is to be varied; or
- if new risk management methods are implemented.

APPENDIX A

COLERAINE WATER MANAGEMENT SYSTEM SCHEMATIC DRAWING

COLERAINE QUARRY



APPENDIX B

COLERAINE TARPS

COLERAINE QUARRY – TRIGGER ACTION RESPONSE PLAN

TARP Trigger Levels

Coleraine uses visual observation of conditions to identify water related hazards including surface water and groundwater. Measures to control the risk posed by these hazards are designed to be effective under normal conditions. It is important that the controls are monitored and maintained for effectiveness.

However, under adverse conditions, signs of the water management plan not performing to design are often visual. Examples are drains blocking and overflowing, settlement dams filling with sediments and overflowing, pumps not operating, excessive erosion and water contamination. These are often signs of control measure failures or ineffectiveness.

Unexpected interception of groundwater

A groundwater bore was drilled in March 1983 (GS01, on Figure 3 Site Layout Plan) and it is reported that it encountered trachyte to the end of hole at 70 metres depth. It was reported that no groundwater was found in this drill hole. On the basis of this and the observation that there is no inflow of groundwater into the current pit (floor at AHD72m), the groundwater level in the vicinity of the WA area is expected to be at or below AHD23m. The VVG website suggests groundwater in the range of 20-50m about the excavation, which puts the GW level at between AHD60-30 m at the base of the quarry. Anecdotally, groundwater is not evident, and no groundwater dewatering is required.

However, a trigger response is set out below for the unlikely event of intercepting groundwater.

Single Trigger Action Response Plan for Interception of Groundwater

Actions are:

- Monitor situation as required.
- Contact ERR, Southern Rural Water, follow recommendations.
- Increase awareness / inspection for water in extraction faces.
- Fortnightly groundwater monitoring.
- Engage groundwater specialist to review data, investigate additional groundwater monitoring bore locations as per advice.
- Initiate / undertake any remedial actions as necessary (ie backfilling areas, removing equipment from low areas, barricades to suspect areas.
- Source additional groundwater data from neighbouring landowner/quarry or install monitoring wells as directed.
- Prepare to instruct evacuation of the pit impacted areas if required.

Full Trigger Action Response Plans are presented for:

- Water Storages / Sediment Dams
- Rainfall / Storm Events

COLERAINE QUARRY – TRIGGER ACTION RESPONSE PLAN

WA410 – WATER STORAGES / SEDIMENT DAMS/TRAPS

Responses	Condition Green (TARP 1)	Condition Yellow (TARP 2)	Condition Red (TARP 3)
Triggers	Minimum 1m of freeboard in water storages	• Dumping into water or mud • Between 1m and 0.5m of freeboard in water storages	Less than 0.5m of freeboard in water storages
Quarry Manager **(QM)**	Normal Operating Condition • Free draining conditions • Drainage infrastructure operating within design parameters.	• Monitor situation as required. • Daily review local weather conditions, BOM website • Develop draft incident management plan in conjunction with PM/PS in preparation should it go to TARP 3. • Prepare to instruct evacuation of the pit impacted areas if required. • Update risk register	• Notify corporate of red condition. • Monitor situation as required. • Notify ERR • Notify WorkSafe if required. • Initiate / undertake any remedial actions necessary.
Production Manager/Pit Supervisor **(PM/PS)**	Normal Operating Condition • Free draining conditions • Drainage infrastructure operating within design parameters.	• Communicate results to QM. • Increased monitoring of water inflows. • Inspect affected area as required. • Check start pumps. • Review condition of downstream sediment control fences • if required, increase out flows to plant, dust suppression, quarry sump or irrigation. • Increase monitoring levels till at least 1m freeboard in water storages. • Remedial action to overflow drains / control structures as required. • Assist in developing draft incident management plan in conjunction with QM in preparation should go to TARP 3 • Prepare to instruct evacuation of the pit impacted areas if required	• Start pump(s) and discharge to quarry sump. • Check downstream sediment control fences in place and operational in case of over topping. • Increase monitoring frequency / site vigilance. • As much as possible, divert incoming water directly to the excavation / quarry sump. • Hourly monitoring frequency until satisfied water level is dropping. • Hourly check of pumps and diversion structures to ensure water level in water storages is not rising. • If water level in water storages is still rising (ie above actions cannot reduce the water level) evaluate potential for the occurrence of site discharge. If necessary, initiate process of emergency discharge of water with EPA. • Coordinate evacuation plan. • Communicate results to the QM. • Assist in developing a recovery plan.
All other personnel	Normal Operating Condition • Free draining conditions • Drainage infrastructure operating within design parameters.	• Look for and report any changes in work area conditions to supervisors.	• Follow Emergency Response Plan • Park up machinery in safe location and await instruction

COLERAINE QUARRY – TRIGGER ACTION RESPONSE PLAN

WA410 – RAINFALL / STORM EVENTS

Responses	Condition Green (TARP 1)	Condition Yellow (TARP 2)	Condition Red (TARP 3)
Triggers	As measured at the rain gauge at the site office A) Less than 5mm in 24hr B) More than 5mm but less than 10mm in 24h or less than 10mm in 8hrs	As measured at the rain gauge at the site office • More than 10mm but less than 30mm in 24hrs, or • More than 10mm but less than 20mm in 8hrs	As measured at the rain gauge at the site office • More than 30mm in 24hrs or • More than 20mm in 8hrs
Quarry Manager **(QM)**	Normal Operating Condition • Free draining conditions • Storage infrastructure operating within design parameters.	• Notify corporate of yellow condition. • Continue with normal operation. • Frequent visits to BOM web site / news outlets for trends in local conditions • Develop draft incident management plan in conjunction with PM/PS in preparation should it go to TARP 3. • Prepare to instruct evacuation of the pit impacted areas if required. • Update risk register	• Notify corporate of red condition. • Monitor situation as required. • Notify ERR • Notify WorkSafe if a safety issue. • Initiate / undertake any remedial actions necessary. • If required, contact senior management to initiate emergency discharge process with EPA. • If required, remedial action on rehabilitated slopes, as per Rehabilitation Plan • Continual monitoring until satisfied water levels are dropping.
Production Manager/Pit Supervisor **(PM/PS)**	Normal Operating Condition • Free draining conditions • Storage infrastructure operating within design parameters.	• Communicate results to QM. • Conduct a site inspection of waterway diversion, drains and bunds to ensure integrity and levels in water storages / sediment dams to ensure minimum freeboard is maintained. • Conduct inspection of water storages / sediment dams to ensure minimum freeboard maintained. • Check of pumps to ensure they start. • Inspect and report on operational / terminal batters and rehabilitated slopes for signs of erosion and instability. • Assist in developing draft incident management plan in conjunction with QM in preparation should go to TARP 3 • Prepare to instruct evacuation of the pit impacted areas if required	• Constant site presence monitoring effectiveness of actions and weather conditions. • Immediate on-site inspection and vigilance. • Monitoring of freeboard in water storages / sediment dams, integrity of waterway diversion, drains and bunds. • Start pumps to reduce freeboard in water storages / sediment dams. • Move any plant /equipment to higher ground. • Inspect and report on operational / terminal batters and rehabilitated slopes for signs of erosion and instability. • Conduct hourly or as needed site inspection of waterway diversion, all drains, bunds and water storages / sediment dams. • Instruct evacuation of pit affected areas if required. • Communicate results to the QM. • Assist in developing a recovery plan.
All other personnel	Normal Operating Condition	• Look for and report any changes in work area conditions to supervisors.	• Follow Emergency Response Plan • Park up machinery in safe location and await instruction

Imported Materials Management Plan

Coleraine Quarry – WA410

Rigby Brothers & Co. Pty Ltd

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Revision History

Document Date	Version	Description	Issued By	Reviewed By	Approved By
Jan 2023	1	For WP Variation	BCA Consulting	JR	JR
Jul 2024	2	Minor changes based on ERR feedback	BCA Consulting	JR	JR
Sept 2024	3	Minor changes based on ERR feedback	BCA Consulting	AF	MS

1. Background

This Imported Materials Management Plan (IMPP) has been prepared to meet the requirements of the *Imported Materials Management Guidelines for Mines and Quarry Operations*, published by Earth Resources Regulation (ERR), and provides the framework to manage 'clean fill' materials (uncontaminated soil, including gravel and rock), mulch and recycled aggregates (processed solid inert waste) / solid inert waste (recyclable materials) that is imported to the Coleraine Quarry site.

It is emphasised that the site does not currently import material, and that importing material is not required for achieving the rehabilitation outcome. This Imported Materials Management Plan is incorporated with the 2023 Work Plan Variation to formalise the previously held opinions that extractive industries can import "clean fill" without triggering a future Work Plan Variation.

Clean fill (or 'Fill Material' as defined by the EPA) must meet the contaminant thresholds set out in EPA Publication 1828.2 *Waste Disposal Categories – Characteristics and Thresholds*. These materials, or any other solid inert wastes, brought to the site for reuse / recycling would need to meet a classification of 'industrial waste (non-priority)', as per EPA Publication 1968.1 *Guide to Classifying Industrial Waste*. Such materials could also potentially be processed into engineered fill / structural fill. Other processed or extracted raw sand / rock may also be brought to the site for blending with sand / rock extracted onsite to achieve product specifications, but such imported sand / rock is not classified as 'waste' under EPA legislation.

This IMMP documents and formalises the process of receiving any clean fill materials, as well as any recycled aggregates (solid inert waste), or mulch that are brought onto the Work Authority (the site) for the purposes of constructing hardstand areas, roadways and other works or for site rehabilitation. If necessary, there may be short-term stockpiling of material for rehabilitation until rehabilitation opportunities arise, as well as any solid inert waste or suitable organic waste brought to site for recycling. The site has the capacity to receive these materials, with the clean fill materials typically consisting of uncontaminated spoil from construction projects and earthworks, such as soil and 'paddock rock'.

Imported uncontaminated soil and other clean fill materials, as well as engineered fill / structural fill derived from recycled inert materials, may be used as backfill, along with mulch, to supplement rehabilitation in worked out areas of the quarry and will always be consistent with the site's Rehabilitation Plan.

It is acknowledged that if solid inert waste is accepted onto the site for reprocessing and recycling into saleable products then separate planning permission may be required, as a 'materials recycling' use is regulated by Council.

2. Objectives

The objectives of this IMMP are to:

- Define the types of material that may be imported to the site during the extractive industry operation
- Document the procedures to be implemented for a new source of imported material to confirm the classification of the imported material prior to importation
- Document the procedures to be implemented at the site to check that only the material that the site is authorised to receive is imported to the site

3. Waste Classification

The *Environment Protection Act 2017* defines 'Industrial waste' as all "waste arising from commercial, industrial or trade activities or from laboratories" or as prescribed. Waste being defined as any "matter that

is discarded, rejected, abandoned, unwanted or surplus, irrespective of any potential use or value" and includes matter "intended for, or is undergoing, resource recovery". Under this broad definition 'industrial waste' includes 'clean fill' (or 'Fill Material' as defined by the EPA) that may be brought to the site for construction of hardstands, etc. or for rehabilitation purposes. This definition does not include processed or extracted raw sand / rock that may be brought to the site for blending with product produced on site.

The *Environment Protection Act 2017* requires that any producer of industrial waste, or those in management or control of industrial waste, must classify the waste in accordance with the Act and the *Environment Protection Regulations 2021*.

The industrial waste must be classified before it is received at the site or if it is to be transported offsite. However, if it is soil from contaminated land sourced onsite (i.e. would classify as a 'priority waste'), then it must be classified as soon as practicable after sourcing the soil. Classification enables you to identify whether the waste is a 'priority waste' or 'reportable priority waste', and if additional waste duties or regulatory controls apply.

The *Environment Protection Act 2017* requires that anyone who is transporting industrial waste, must before relinquishing management or control of that waste, take all reasonable steps to ensure that it will be delivered to a site that is authorised to receive that waste. This requirement ensures that relevant information is passed on through the waste supply chain, so it can be determined where the waste can be lawfully taken for resource recovery, reuse or disposal, and those receiving the waste can manage any associated risks.

Waste classification involves:

- **determining the relevant waste code or codes** (Schedule 5 of the *Environment Protection Regulations 2021*)
- **determining the waste type** – 'industrial waste (non-priority)', 'priority waste' or 'reportable waste', and if any additional waste duties or regulatory controls apply
- for soil that is 'priority waste' or for priority waste consigned for disposal to landfill, **determining which priority waste category or disposal category applies (Category A, B, C or D)**.

Materials that may typically be accepted at quarry sites, such as 'clean fill', solid inert wastes or mulches, are all classified as 'industrial waste (non-priority)'. However, the particular waste code must also be determined.

It is an offence under the *Environment Protection Act 2017* for a person who has the management or control of industrial waste to provide false or misleading information or documents in connection with the type, properties and classification of the industrial waste, or to conceal such information or documents.

Waste classified as 'priority waste' must not be blended, mixed or diluted to change the waste classification without first obtaining an EPA designation in relation to that particular blending, mixing or diluting process.

Having classified the industrial waste, the *Environment Protection Act 2017* requires that it be taken to a 'lawful place', being a place or premises 'authorised to receive industrial waste' (for that type of industrial waste). Refer to the Definitions section for a detailed explanation of 'authorised to receive industrial waste' and related terms. Further information is provided in EPA Publication 1946.1 *How to Establish Lawful Place*.

4. Receiving Waste and EPA Permissions

Transporting and receiving industrial wastes must be in accordance with the *Environment Protection Regulations 2021*. Whether a site is authorised to receive waste and whether any EPA permission is required, and the level of such permission (Registration, Permit or Licence), will depend on the type of waste materials involved and the scale of the operation.

EPA Determinations: Some waste materials (e.g. clean fill / fill material) are considered innocuous enough for a site to be automatically authorised to receive that waste, subject to an EPA Determination published in the Government Gazette, as long as they do not require an EPA permission otherwise. A 'Declaration of Use' form (see below) is not required for such waste materials when received and used in accordance with the specifications and conditions set out in the relevant EPA Determination.

Declaration of Use: If waste materials received at the site meet certain criteria then a self-assessed declaration may be all that is required to be 'authorised to receive industrial waste'. This declaration is prepared by the producer/supplier of the waste materials and co-signed by the site operator/receiver. The Definitions section provides the full set of requirements for a declaration of use but can be summarised as follows:

- the waste materials must be for immediate use on the site, e.g. in backfill, site rehabilitation, or blending with quarry products.
- a declaration of use can apply if an EPA permission is not otherwise required, e.g. imported engineered fill that is not being stockpiled and processed on site.
- the declaration of use must be in the form approved by the EPA, but does not need to be formally approved by the EPA, however the EPA can impose conditions or cancel the declaration of use
- a declaration of use may have effect for a specific consignment or for a period of up to 12 months
- both the producer/supplier and site operator/receiver must retain copies for 2 years.

Importation of clean fill: the importation of clean fill (i.e. 'fill material') for use in site rehabilitation or blending with quarry product does not require a Declaration of Use to be completed. Clean fill is not a 'priority waste', the importation of clean fill for use on site does not require an EPA permission (as it does not meet the definition of resource recovery – see below) and there is an EPA Determination in place automatically authorising sites to receive such waste.

A Declaration of Use form is attached, partially completed for a case of importing excavated material or engineered fill for use in construction of hardstands, etc., blending with quarry product or backfilling / site rehabilitation and (the second form) uncontaminated organic waste materials for use in site rehabilitation. This form is available from the EPA website (www.epa.vic.gov.au/about-epa/publications/f1022) and includes detailed explanatory notes.

Waste and Resource Recovery Permissions: Receiving, storing or processing waste generated at another site for the purposes of resource recovery, or off-site transfer or disposal, may be a 'prescribed permission activity' under Schedule 1 of the *Environment Protection Regulations 2021*, and therefore require an EPA permission (Registration, Permit or Licence). However, the Regulations do authorise a site to receive, store and process waste of not more than $5m^3$ at any one time without an EPA permission, as long as it does not classify as 'priority waste'.

Note: the importation of clean fill (i.e. 'fill material') for use in site rehabilitation or blending with quarry product does not meet the definition of 'resource recovery' under the *Environment Protection Act 2017*, and is not for off-site transfer or disposal, therefore the following would not apply.

Additionally, receiving, storing and reprocessing of greater than $5m^3$ of materials for waste and resource recovery may also require separate planning permission. The EPA permission requirements for 'waste and resource recovery' activities, excluding 'reportable priority waste (transport)' that requires transport permission, are summarised in Figure 1 and set out in detail below.

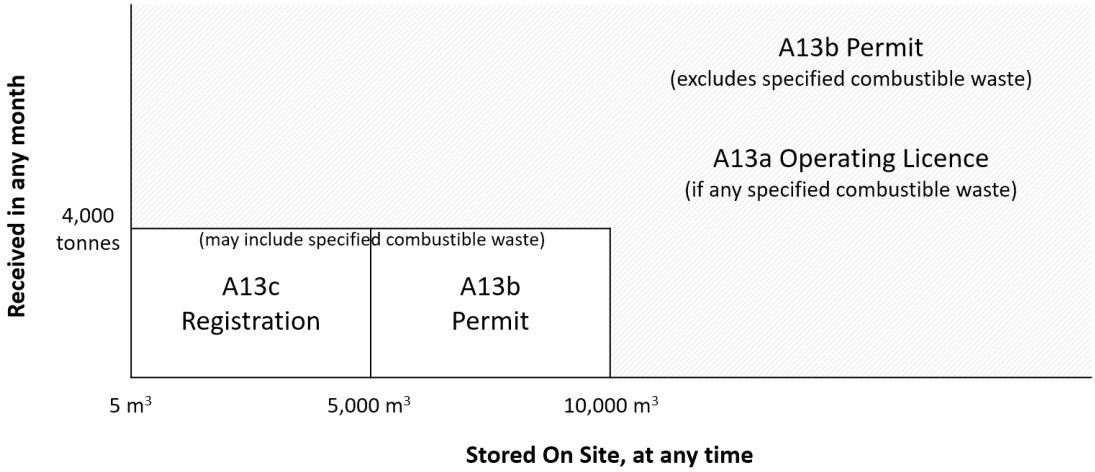


Figure 1: Required A13 permissions for waste and resource recovery activities.

Registrations: Smaller scale resource recovery activities at a quarry site may require an A13c Registration (see Figure 1). Registrations are automatically granted upon application but may include standard conditions or a requirement to notify or report to EPA in certain circumstances. A Registration may be revoked if EPA is not satisfied with the site operator's compliance. Registrations must be renewed after 5 years.

Having an A13c Registration means the site is unambiguously 'authorised to receive industrial waste', which means that producers and transporters of waste can easily meet their duty to take waste to a 'lawful place'.

Activity types A13a (large) and A13b (medium):

- if ≥ 4,000 tonnes of industrial waste is received in any month, or ≥ 10,000m^3 of industrial waste is stored on the site at any time, then EPA permit is required (A13b), or, when 'specified combustible recyclable and waste material' is included, EPA operating licence is required (A13a)
- if between 5,000m^3 and 10,000m^3 of industrial waste, which may include 'specified combustible recyclable and waste material', is stored on the site at any time, but less than 4,000 tonnes of industrial waste is received in any month, then EPA permit is required (A13b)
- no materials classified as 'reportable priority waste (transport)' are allowed (not usual for quarries)
- any site undertaking A13a or A13b 'waste and resource recovery' activities will also need to enter into an EPA 'financial assurance' for site remediation (i.e. a bond).

Activity type A13c (small):

- sites undertaking 'waste and resource recovery' activities on a small scale, i.e. less than 4,000 tonnes of industrial waste is received in any month and less than 5,000m^3 of industrial waste is stored on the site at any time, generally only require an EPA Registration.
- if ≥ 5,000m^3 of industrial waste is stored on the site at any time then an EPA permit or licence will be required (activity type A13a or A13b)
- no materials classified as 'reportable priority waste (transport)' are allowed (not usual for quarries).

5. Types of Imported Material

Types of imported material that could potentially be accepted by the quarry include the following categories.

5.1. Clean Fill Material

Consists of uncontaminated waste soil, being any combination of clay, silt, sand, gravel and/or rock of naturally occurring materials (except asbestos). The waste soil material is classified as 'Fill Material' where it is free from other industrial wastes, such as masonry materials (e.g. bricks), and has contaminant levels below those specified in the EPA Publication 1828.2 *Waste Disposal Categories – Characteristics and Thresholds*.

Classification: 'waste code' – N122, being "Excavated material or engineered fill including fill material" under Schedule 5 (Waste Classification) of the *Environment Protection Regulations 2021*, but this excludes any such material that exceeds the specified contaminant levels or qualifies as actual or potential acid sulfate soil.

Excavated material or engineered fill including fill material are pre-classified as 'industrial waste (non-priority)'.

Clean fill is accepted at this site.

Note: In accordance with *EPA Determination – Specifications acceptable to the Authority for receiving fill material* (gazetted 18 June 2021), **sites are automatically authorised to receive 'Fill Material' (as defined by the EPA)**. Provided that it is not contaminated, every consignment is inspected and recorded, and if the material is from a contaminated land site then it is accompanied by evidence for the classification.

As clarified in section 4, a Declaration of Use or an EPA permission is not required to import clean fill when received and used in accordance with the specifications and conditions set out in the EPA Determination for 'Fill Material', being uncontaminated waste soil.

In addition to uncontaminated waste soil, imported clean fill may include engineered fill (or structural fill), which is material that has been processed to a particular engineering specification, e.g. those produced by VicRoads, or to a specification that is performance-based and can be assessed against an engineering standard. This activity may require a Declaration of Use form to be completed by the producer/supplier of the material and the site operator – see partially completed form attached for importing excavated material or engineered fill for use in construction of hardstands, etc., blending with quarry product or backfilling / site rehabilitation.

5.2. Solid Inert Waste

Solid inert waste includes, but is not limited to, concrete, bricks, asphalt or ceramics. For this type of material to be accepted on to the site, it must meet the classification as 'industrial waste (non-priority)', refer to EPA Publication 1968.1 *Guide to Classifying Industrial Waste*. The solid inert waste must be fit for purpose and either suitable for reprocessing and recycling into engineered fill / structural fill for use on the site, or suitable for recycling into saleable products where it can be demonstrated that a market exists for those products.

Classification: "Masonry materials" brought to the site are subdivided (with 'waste codes') into bricks (Y100), concrete (Y110), rubble (Y120), plaster board & cement sheeting (Y130), and asphalt (Y140), in Schedule 5 (Waste Classification) of the *Environment Protection Regulations 2021*.

Masonry materials are all pre-classified as 'industrial waste (non-priority)'.

Notes: Additionally, in accordance with *EPA Determination – Specifications acceptable to the Authority for receiving recycled aggregates* (gazetted 18 June 2021), **sites are automatically authorised to receive recycled aggregates, being a mix of industrial wastes that comprise of concrete, brick, glass, asphalt, natural rock or ceramics**. Under the *Environment Protection Regulations 2021* a site can also have up to 5m^3 of industrial waste on the site at any time that has been brought to the site for processing and disposal offsite, as long as it does not classify as priority waste.

Recycled aggregates of solid inert waste are accepted at this site.

Recycled aggregates imported to the site, without requiring further processing, can be used directly for construction of hardstands, etc., in site rehabilitation or for blending with quarry products. This activity may require a Declaration of Use form to be completed, by the producer/supplier of the material and the site operator, where the recycled aggregates do not meet all the specifications and limitations set out in the EPA Determination for recycled aggregates. However, importation under such a Declaration of Use is only allowable when that material would not otherwise require an EPA Permission (e.g. the material must not contain any 'priority waste').

5.3. Organic Materials

Organic materials (putrescible/green waste or mulches) consists of organic matter derived from domestic or commercial gardens (not containing any food waste), landscaping works, timber (including sawdust), forestry residuals, or other natural organic fibrous wastes. Organic materials brought to the site must be fit for purpose and free from contamination, and suitable for use on the site (e.g. as mulch or processed organic waste).

Classification: Uncontaminated organic materials brought to the site would be either 'waste code' K300, being "Commercial garden & landscaping organics that does not contain any physical or chemical contamination", or 'waste code' K310-NH, being "Untreated timber, including sawdust", under Schedule 5 (Waste Classification) of the *Environment Protection Regulations 2021*.

Such materials are pre-classified as 'industrial waste (non-priority)'.

Uncontaminated organic materials for mulch, or processed organic waste (i.e. pasteurised material), may be accepted at this site.

Notes: There is no restriction on processing organic waste that is generated onsite and retained onsite. Also, under the *Environment Protection Regulations 2021* a site can also have up to 5m^3 of organic waste stored on the site at any time that has been brought to the site for processing and disposal offsite. In accordance with *EPA Determination – Specifications acceptable to the Authority for receiving processed organics* (gazetted 16 December 2021), **sites are automatically authorised to receive processed organics (pasteurised material)**.

While processed organic waste (i.e. pasteurised material) can be imported to the site and used directly in site rehabilitation, importing other organic waste to the site for mulches would require a Declaration of Use form to be completed by the producer/supplier of the material and the site operator – see partially completed form attached for importing uncontaminated organic waste materials for use in site

Organic waste is NOT accepted at this site for aerobic or anaerobic biological conversion **and offsite disposal**.

5.4. Excess Wet Concrete

Returned concrete, plastic concrete free from excessive liquid.

Classification: Excess wet concrete brought to the site will set and qualify under "Masonry materials", which includes concrete (waste code: Y110), in Schedule 5 (Waste Classification) of the *Environment Protection Regulations 2021*.

Such materials are pre-classified as 'industrial waste (non-priority)'.

Note: Under the *Environment Protection Regulations 2021* a site can have up to 5m^3 of industrial waste on the site at any time that has been brought to the site for processing and disposal offsite, as long as it does not classify as priority waste.

Excess wet concrete and concrete truck washout is NOT accepted at this site.

5.5. Other

Processed or extracted raw sand / rock brought to the site for blending with sand / rock extracted onsite to achieve product specifications.

Classification: Processed or extracted raw sand / rock brought to the site does not meet the definition of 'waste' under *Environment Protection Act 2017* and is therefore not an industrial waste.

Processed and extracted raw sand / rock is accepted at this site.

6. Markets and End Use

Imported materials for use in site rehabilitation will generally be clean fill material, with mulch material (if required), but potentially could also include solid inert waste processed into engineered fill / structural fill or recycled aggregates (solid inert waste). Such imported materials may be placed directly into rehabilitation areas or short-term stockpiles while awaiting use in site rehabilitation.

Any appropriate materials that are brought onto the site for the purposes of constructing hardstand areas, roadways and other works or for blending with quarry products will be used directly for those purposes or placed in short-term stockpiles while awaiting use. Such materials could potentially include solid inert waste processed into engineered fill / structural fill or recycled aggregates (solid inert waste).

Other solid inert waste to be reprocessed on site and recycled for sale can only be accepted once any necessary planning permission and required EPA permissions are obtained, and it can be demonstrated that a market or suitable purpose exists for the recycled material. The stockpiling of any such imported material for reprocessing will be kept separate from imported or processed material suitable for direct use as engineered fill / structural fill or in site rehabilitation.

If unsuitable imported materials are delivered to the site or an authorisation is not in place to accept the materials, then the materials must be removed and instead deposited at a site that is authorised to accept those materials.

Depositing, dumping, discarding or abandoning industrial waste or permitting industrial waste to be dumped, deposited, discarded or abandoned at a site that is not a 'lawful place', or at a 'lawful place' without the knowledge or consent of the person in management or control of that place or premises, is an offence under the *Environment Protection Act 2017*. Where non-compliance is detected, the EPA can issue a clean-up notice requiring the removal of the material or undertake further enforcement action as necessary.

7. Quantities of Imported Material

Imported materials, if required, will be used directly in site rehabilitation works where possible, but if short-term stockpiling is required, until rehabilitation opportunities arise, then the stockpiles will be located within the approved disturbance area for the quarry. Any such imported material stockpiles may also be graded (sorted, blended, etc.). The quantity of imported material required for rehabilitation works on this small site will be relatively low.

Imported materials brought to the site for site rehabilitation, for construction of hardstands, etc., or for blending with quarry products, will be used directly for that purpose, where possible, but if short-term stockpiling is required while awaiting use, then the stockpiles will be located within the approved disturbance area for the quarry. The imported material stockpiles may also be graded (sorted, blended, etc.). The maximum volume of imported materials classifying as 'waste' that may be stockpiled by the site is set at a maximum of 5,000 cubic metres at any point in time. Less than 4,000 tonnes of waste is received in any given

month and there will be no 'specified combustible recyclable and waste material' included in the stockpiled material. The current designated stockpile areas could adequately handle approximately 5,000 cubic metres of imported material, with any excess stockpiled on the quarry floor (i.e. there is no plan to alter or any need to increase the approved disturbance area).

If imported solid inert waste is to be reprocessed on site and recycled for sale, the material will be stockpiled within the approved disturbance area for the quarry. Some of this reprocessed material, where suitable, will be used in site rehabilitation or blended with quarry product, in which case it will be used directly after processing. If undertaking this activity, the maximum volume of imported materials classifying as 'waste' that may be stockpiled by the site will be increased to a maximum of 50,000 cubic metres at any point in time. There will be no 'specified combustible recyclable and waste material' included in the stockpiled material, so an EPA Operating Licence is not required. The current designated stockpile areas could adequately handle approximately 50,000 cubic metres of imported material, with any excess stockpiled on the quarry floor (i.e. there is no plan to alter or any need to increase the approved disturbance area).

Imported material acceptance will be continually monitored to ensure the site's capacity to accept material (i.e. designated stockpile areas) is not exceeded

Processed or extracted raw sand / rock brought to the site for blending with sand / rock extracted onsite will be stockpiled, if necessary, within the approved disturbance areas of the site, but will be quickly utilised in the ongoing production of quarry products.

8. Validation of Imported Materials

The validation of imported materials includes:

1) Classification of the imported materials at the Source Site, see EPA *Declaration of Use* form or *Clean Fill Declaration* form attached (as relevant).
2) Tracking of the imported materials from the Source Site to this Site, see *Delivery Driver Checklist* form attached
3) Checking of imported materials as they enter this Site to ensure it is consistent with the stated classification for the imported materials, see *Acceptance Checklist for Site Personnel* form attached

These steps are described in further detail below.

8.1. Classification of Imported Materials at the Proposed Source Site

Any location/company that will potentially produce/supply waste materials (clean fill, recycled aggregates/solid inert waste, or uncontaminated organic waste) for importation to this site will be assessed for its suitability. The producer/supplier of the materials is responsible for classifying the waste in accordance with EPA Publication 1968.1 *Guide to Classifying Industrial Waste* and the *Environment Protection Regulations 2021*. Classification requires a determination of both the EPA 'waste code' and the waste type (i.e. 'industrial waste (non-priority)').

Where an EPA *Declaration of Use* form is required, this document will formally capture the declaration of the producer/supplier regarding the nature of the waste and the site operator's acceptance of that class of waste. The attached copies of this form are partially completed for a typical case/s of importing excavated material or engineered fill for use in construction of hardstands, etc., blending with quarry product or backfilling / site rehabilitation and for importing uncontaminated organic waste materials for use in site rehabilitation. An EPA *Declaration of Use* form is only valid for either one consignment or for a period of up to 12 months.

For longer term arrangements with producers/suppliers of imported materials, or where the EPA *Declaration of Use* form is not required, the attached *Clean Fill Declaration* form can be used. A new declaration is required for each source site.

In addition to meeting EPA waste classification requirements, materials that are imported specifically for use in the construction of fill batters or embankments, hardstand areas, roadways, etc., i.e. clean fill or solid inert waste processed into engineered / structural fill or recycled aggregates, must be geotechnically and geochemically suitable for that use. Particularly for constructed features that will be retained long-term as part of the rehabilitated landform. Such materials will be assessed for their suitability prior to importation to ensure they will be geotechnically sound, with appropriate material properties, and geochemically stable (i.e. suitable shear strength properties, not dispersive, not potentially acid forming, etc.).

Ideally the information in the following sections will be collected on a checklist, but given the low frequency of deliveries, it may be just a diary note/work book.

8.2. Materials Tracking from the Proposed Source Site

All materials imported to this site must be accompanied by a *Delivery Driver Checklist*, or similar docket, that contains at least the following information:

- Date of delivery
- Truck/vehicle registration
- Driver's name
- Transport company name (if different to the sourcing company)
- Company sourcing the material for delivery
- Source site description, including address
- Type of material
- EPA waste classification (as per EPA guidelines and regulations)
- Quantity in current load
- Total estimated quantity or number of additional loads expected

8.3. Checking of Imported Materials as they Enter the Site

All imported materials must be checked upon arrival at the site to ensure it is consistent with the stated classification for the materials, and the attached *Acceptance Checklist for Site Personnel* can be used for this purpose.

8.3.1. Primary Check

All imported materials are inspected on site and prior to tipping. Additionally, on arrival at the site, the following information is collected by the site personnel.

- Confirm details provided by the driver
- Delivery driver checklist filled out adequately
- Source of material (Company and source site description)
- Are records available to confirm origin of material and contamination status (if required)?
- Type of material, including any accompanying sampling/analysis results
- EPA waste classification (as per EPA guidelines and regulations)
  (*not applicable to processed or extracted raw sand / rock*)
- Authorisation for site to receive the materials
  (*not applicable to processed or extracted raw sand / rock*)
- Visual inspection of the imported material conducted
- Check for any contamination in load (e.g. plastic, metal, ceramics, etc.)

- Check for any priority or reportable waste visible (e.g. asbestos) or other unacceptable waste (e.g. putrescible waste)
- Based on assessment, are materials in load suitable to accept on site?

Any load observed to contain materials that do not fall within the scope of this Imported Materials Management Plan will be rejected. Rejected loads are refused access to the tipping area and the driver/truck instructed to leave.

8.3.2. Secondary Check

A secondary check is conducted by site personnel at the tip point to ensure no unauthorised materials potentially hidden in the load are left on the site. This inspection is conducted as the load is tipped and when the tipped material is pushed up.

If any unauthorised materials are suspected or observed the entire load will be removed from the stockpile and spread out on the ground surface to a thickness of approximately 300mm, through the use of a front-end loader or excavator, to enable thorough inspection of the load contents. If any unauthorised materials are observed, they will be removed and stockpiled separately, and the delivery truck driver/company contacted to organise removal.

8.3.3. Incidental Waste

Incidental waste (steel, wood, ceramic, plastic, etc.) that might be contained in the imported materials is separated at the processing stage, sorted into common classes, and the delivery truck driver/company contacted to organise removal, or if suitable, incorporated into the site's general waste strategy.

9. Definitions

The following definitions are included to avoid confusion as to the type material accepted at the site and the type of operation conducted.

'**Authorised to Receive Industrial Waste**', in relation to a person or a place or premises, as defined in the *Environment Protection Act 2017*, means any of the following—

(a) authorised by a permission to receive that type of industrial waste;

(b) exempt from a requirement to obtain a permission to receive that type of industrial waste;

(c) emergency authorisation for storage / use by EPA to receive that type of industrial waste;

(d) specified by a determination published in the Government Gazette as not required to obtain a permission to receive that type of industrial waste;

(e) authorised by the regulations, or in accordance with a process prescribed by the regulations, to receive that type of industrial waste;

Further, the *Environment Protection Regulations 2021* prescribe the following (amongst others) for the purposes of (e) above—

(a) if there is a 'declaration of use' in effect for that type of waste that applies to the place or premises (see definition below); or

(b) if the industrial waste is received and used in accordance with specifications acceptable to the EPA set out in a determination (published in the Government Gazette) made in relation to receiving industrial waste; or

(c) in relation to not more than $5m^3$ of industrial waste that is not priority waste, where receipt of that waste at the place or premises is not a permission activity and not for application of the waste to land; or

(d) in relation to not more than $5m^3$ of the following types of priority waste, where receipt of that waste at the place or premises is not a permission activity—

  (i) timber treated with hazardous substances, including sawdust;

  (ii) tyres, including tyre pieces greater than 250mm in size measured in any dimension;

  (iii) e-waste, excluding batteries; or

(e) in relation to waste tyres, for use in accordance with specifications acceptable to the EPA set out in a determination (published in the Government Gazette) in relation to the use of waste tyres; or

(f) for receipt at a laboratory for the purposes of analysis.

'**Clean Fill**' means waste material that consists of soil (being clay, silt and/or sand), gravel and rock of naturally occurring materials (except asbestos), which must not exceed EPA specified contaminant levels. This is an industry term that is equivalent to the EPA term 'Fill Material' (see below).

'**Composting**' means the process whereby organic materials are microbiologically transformed under controlled aerobic conditions to achieve pasteurisation and a specified level of maturity.

'**Declaration of Use**' means a self-assessed declaration made, in relation to a place or premises at which industrial waste is to be received, by both a person in management or control of industrial waste and a person in management or control of that place or premises to receive the waste, for any of the following purposes—

(a) the immediate use of—

(i) the waste for resource recovery, other than application of the waste to land; or

(ii) the waste (other than soil) for use as a substitute for an input or raw material in a commercial, industrial, trade or laboratory activity, other than for application of the waste to land;

(b) the application of waste to land—

(i) commercial garden and landscaping organics that does not contain any physical or chemical contamination;

(ii) untreated timber, including sawdust;

(iii) natural organic fibrous waste.

A 'declaration of use' is not necessary to receive Fill Material, or any other industrial waste that is in accordance with the specifications acceptable to the EPA set out in a determination (published in the Government Gazette) in relation to receiving industrial waste.

A 'declaration of use' must not be made in relation to the receipt of 'reportable priority waste (transport)' at the place or premises, or if receipt of the waste at the place or premises would require an EPA permission.

A 'declaration of use' must be in the form approved by the EPA and include the specified information (forms available on the EPA website). The EPA does not need to approve the 'declaration of use' but may at any time impose conditions on a 'declaration of use' or cancel the 'declaration of use'.

A 'declaration of use' may have effect for a specific consignment of industrial waste, or for a period of time specified in the declaration up to a maximum of 12 months. A copy of any 'declaration of use' must be retained for 2 years from the date it was made.

'**Fill Material**', as defined in the *Environment Protection Regulations 2021*, is industrial waste that is soil —

(a) with contaminant concentrations not exceeding the upper limit for fill material contaminant concentrations specified in the *Waste Disposal Categories – Characteristics and Thresholds* (EPA Publication 1828.2); and

(b) that does not contain asbestos.

'**Industrial Waste**' as defined in the *Environment Protection Act 2017*, means—

(a) waste arising from commercial, industrial or trade activities or from laboratories; or

(b) waste prescribed to be industrial waste for the purposes of this definition;

Further, the *Environment Protection Regulations 2021* prescribe the following for the purposes of (b) above—

(a) waste from any source received at a place or premises which stores or handles waste generated at another site for the purpose of resource recovery or off-site transfer or disposal;

(b) waste transported for fee or reward, other than the collection of kerbside waste by or on behalf of a council or a Waste and Resource Recovery Group.

'**Material**' is anything that serves as crude or raw matter to be used or developed

'**Materials Recycling Facility**' means land used to collect, dismantle, treat, process, store, recycle, or sell used or surplus materials

'Priority Waste' is any waste, including municipal waste and industrial waste, that is prescribed to be priority waste by the Regulations for the purposes of eliminating or reducing risks of harm to human health or the environment, ensuring the priority waste is managed in accordance with the Regulations, and facilitating waste reduction, resource recovery and resource efficiency. Materials typically accepted at quarry sites, such as 'clean fill', solid inert wastes or mulches, are not priority wastes.

'**Recycling**' is a term used to cover a range of activities, including collection, sorting, reprocessing and manufacturing into new products

'Reportable Priority Waste (Transport)' is priority waste (see above) transported for fee or reward that is prescribed in Schedule 5 of the Regulations as 'reportable priority waste (transport)', which requires transport permission. This does not generally apply to materials received at, or transported from, quarry sites.

'**Resource**' means a material or waste that can be reprocessed or remanufactured into a new product

'**Resource Recovery**', in relation to waste, as defined in the *Environment Protection Act 2017*, means—

(a) preparation for reuse of the waste;
(b) recycling the waste;
(c) reprocessing the waste;
(d) recovering energy or other resources from the waste;
(e) anything prescribed to be resource recovery in relation to waste—

but does not include anything prescribed not to be resource recovery in relation to waste.

'**Solid inert waste**' is classified as hard waste that has a negligible activity or effect on the environment, such as concrete, brick, glass, asphalt, natural rock or ceramics.

'**Specified combustible recyclable and waste material**' is paper, cardboard, wood, plastic, rubber, tyres, tyre-derived waste, textiles, e-waste, metal and other materials with combustible contaminants, combustible by-products of metal processing activities and refuse-derived fuel.

'**Transfer station**' is land used to collect, consolidate, temporarily store, sort or recover, refuse or used materials from offsite before transfer for disposal or use elsewhere. It does not include processing or recycling.

'**Waste**', as defined in the *Environment Protection Act 2017*, includes any of the following—

(a) matter, including solid, liquid, gaseous or radioactive matter, that is deposited, discharged, emitted or disposed of into the environment in a manner that alters the environment;
(b) a greenhouse gas substance emitted or discharged into the environment;
(c) matter that is discarded, rejected, abandoned, unwanted or surplus, irrespective of any potential use or value;
(d) matter prescribed to be waste;
(e) matter or a greenhouse gas substance referred to in paragraph (a), (b), (c) or (d) that is intended for, or is undergoing, resource recovery.

WA410 – CLEAN FILL DECLARATION

To ensure compliance with our obligations under the *Environment Protection Act 2017* and the *Environment Protection Regulations 2021*, in relation to the acceptance of clean fill material to our site, could you please complete and sign this declaration before delivery to acknowledge that the material you are delivering complies with current EPA requirements and guidelines. A new form is required for each source site of clean fill.

The declarations can be returned to:

Jason Rigby
Rigby Brothers & Co Pty Ltd
03) 5575 2564
rigby.bros.quarry@gmail.com

I _____
(Insert name)

of

_____

_____

_____
(Insert company or address)

declare that the site from which this material originates is

_____

_____
(Insert address of site)

and meets the following criteria:

a) the originating site has not been previously used for any of the activities listed on page 2, and is not known, or could not be reasonably expected to be known, to be contaminated;

b) the material is soil, being any combination of clay, silt, sand, gravel and/or rock of naturally occurring materials (except asbestos);

c) the material has a waste classification of '**industrial waste (non-priority)**', as per EPA guidelines;

OR

Clean fill certification has been forwarded to:

_____

I declare that the clean fill material is not contaminated, in accordance with EPA guidelines

Signature: ._____

Date: . _____

High Risk Sites	Medium Risk Site
Abattoirs Abrasive blasting Airports Asbestos production / disposal Asphalt manufacturing Automotive repair / engine works Battery manufacturing / recycling Bitumen manufacturing Boatbuilding / distilleries Brickworks Chemical manufacturing / storage / blending Cement manufacturing Ceramic works Coke works Compost manufacturing Concrete batching Council works depot Defence works Drum reconditioning facility Dry cleaning Electrical component manufacturing Electricity generation / power station Electroplating Explosive industry Fibreglass-reinforced plastic manufacturing Foundry Fuel storage depot Gasworks Glass manufacture Iron and steelworks Landfill sites / waste disposal Lime works Metal coating Metal finishing and treatment Mining and extractive industries Oil or gas production / refining Pest control depots Printing shops Pulp or paper works Railway Yards Shooting or gun clubs Scrap metal recovery Service station / fuel storage Sewage treatment plants Shipbuilding / breaking yards Stock dipping sites Spray painting Tanneries (and associated trades) Textile operations Timber preserving / treatment Tyre manufacturing Underground storage tanks Utility depots Waste treatment / incineration / disposal Woolscouring	Land used for the following purposes, some of which may be incidental to the site's primary activity, has a medium potential for contamination. Chemical storage Fuel storage Underground storage tank (if recently installed and no evidence of leaks) Market gardens Waste disposal Filling (imported soil) Other industrial activities (such as warehousing of chemicals that may be split during loading or unloading) **Low Risk Sites** Land not used for the purposes listed above is likely to have low potential for contamination.

WA410 – IMPORTED MATERIALS
Delivery Driver Checklist

#	Requirement	Details	Information supplied Y/N/NA
1	Date of Delivery		
2	Truck / vehicle registration number		
3	Driver's name		
4	Transport company name (*if different to the sourcing company*)		
5	Company sourcing the material for delivery		
6	Source site description including address		
7	Is the delivered material Clean Fill? *(being any uncontaminated combination of clay, silt, sand, gravel and/or rock of naturally occurring materials; not including asbestos)*		
8	Description of material being delivered *(including EPA Waste Code – other than processed or extracted raw sand / rock)*		
9	EPA waste classification (*e.g. 'industrial waste (non-priority)')* *Not applicable to processed or extracted raw sand / rock*		
10	Quantity in current load		
11	Number of additional loads expected		
12	Any sampling / analysis results attached		

Note: it is an offence under the *Environment Protection Act 2017* for a person who has the management or control of industrial waste, including those transporting the waste, to provide false or misleading information or documents in connection with the type, properties and classification of the industrial waste, or to conceal such information or documents.

WA410 – IMPORTED MATERIALS
Acceptance Checklist for Site Personnel

Checklist Aspect	Details
Delivery / Docket No.:	Date: ..... Company: .....
Confirm details provided by the driver	Material Type: ..... EPA Waste Code: ..... Quantity: ..... Sample result (if required): .....
Is the delivery driver checklist filled out adequately?	☐ Yes ☐ No
Are the records available to confirm origin of material and contaminated status (if required, e.g. Declaration of Use)?	☐ Yes ☐ No
Type of material ***Clean Fill*** *being any uncontaminated combination of clay, silt, sand, gravel and/or rock of naturally occurring materials (not including asbestos).*	☐ Clean Fill ☐ Mulch organics or Processed organic waste ☐ Recycled aggregates (solid inert wastes) ☐ Concrete ☐ Bricks or Ceramics ☐ Other (please specify) .....
EPA waste classification	☐ Industrial waste (non-priority) ☐ Other (priority waste) .....
Is the site authorised to receive this type of material?	☐ Yes ☐ No
Has a visual inspection of the imported material been conducted?	☐ Yes ☐ No
Can you observe any contamination in the load (e.g. plastic, metal, ceramics, etc.)?	☐ No ☐ Yes If Yes, what type is the contamination: ..... Estimated % of contamination: .....
Any reportable priority waste visible (e.g. asbestos) or other unacceptable waste (e.g. putrescible waste)?	☐ Yes ☐ No
Based on assessment, is the load suitable to accept on site?	☐ Yes ☐ No

Declaration of Use form

Environment Protection Act 2017
Environment Protection Regulations 2021, regulation 64(4)

Publication F1022 June 2021

This is a declaration by a waste producer and waste receiver for lawful receipt (epa.vic.gov.au/for-business/new-laws-and-your-business/manage-waste/lawful-place) of a specific industrial waste. The waste producer completes this form and both producer and receiver must sign it. You cannot use this form if your waste is a reportable priority waste (transport) (publication 1967) (epa.vic.gov.au/about-epa/publications/1967) or the activity is a permissioned activity (epa.vic.gov.au/determinations). Please refer to explanatory notes from page 4.

Part A – Applicability to make a DoU						
1.	Is your waste a reportable priority waste that requires a transport permission?		Yes ☐	**You cannot use a DoU.** How to establish lawful place.	No ☒	Go to step 2
2.	Is your receiving activity a permissioned activity?		Yes ☐		No ☒	Go to step 3
3.	Does your waste and activity meet the specifications of a determination?		Yes ☐	You don't need a DoU.	No ☒	Go to step 4
4.	What is the intended use of the waste?	☒ immediate use for:	☐ resource recovery		Excavated material or engineered fill imported for use in construction of hardstands, roadways, etc., and/or blending with quarry product and/or site rehabilitation	
			☒ use as a substitute for an input or raw material in a commercial, industrial, trade or laboratory activity, other than soil			
		☐ application to land for:	☐ commercial garden and landscaping organics that does not contain any physical or chemical contamination			
			☐ untreated timber, including sawdust			
			☐ natural organic fibrous waste			
		☐ other			**You cannot use a DoU**	
5.	Have you completed a Commodity Vendor Declaration for the waste and activity?		Yes ☐		Complete Part C, and Parts E - H of this form only.	
			No ☒		Complete all parts of this form	

Part B – Producer details			
Business name		ABN	
Contact name		Business address	
Telephone		Email	

Part C – Receiver details			
Business name		ABN	
Contact name		Business address	
Telephone		Email	

Declaration of Use form

Part D – Waste details			
Waste description	Excavated material or engineered fill	Waste code	N122
Detailed description	Uncontaminated inert materials that have been excavated and/or processed to a specification (a performance-based specification and/or assessable against an engineering standard)		
Producing address	Address where waste was generated/produced		
Receiving address	Address where waste will be received/deposited		

Part E – Consignment details (i.e. movement and volume of the waste)				
Consignment period?	☐ One-off consignment			☐ From dd/mm/yyyy to dd/mm/yyyy <up to a maximum of 12 months
Volume, when known?	Estimated amount	Units	Choose an item.	☐ Per load ☐ Total

Part F: Potential risks of harm		Where relevant, please include details in attachment e.g. safety data sheet
Any risks to human health from using the waste?	Yes ☐ No ☒	
Any risks to the environment from using the waste?	Yes ☒ No ☐	Low risk of undetected contaminants in imported fill materials impacting on the environment

Part G: Risk mitigation		Details
Are there any control measures required for addressing any risks of harm?	Yes ☒ No ☐	- Producer/supplier of imported material vetted for reputability - All deliveries of imported materials accompanied by a delivery driver checklist, docket or similar - Confirm the EPA waste classification on delivery of the imported materials - Visual inspection of inbound deliveries prior to accepting on site, and again when load is tipped - Incidental waste that may later be discovered in imported materials are separated, sorted and removed from site
Are there any supporting documents for managing any risks of harm?	Yes ☒ No ☐	Imported Materials Management Plan Delivery driver checklists, dockets or similar

Part H: Signed declaration The DoU is not valid until both the waste producer and receiver have signed the form	
Waste producer	Waste receiver
I [insert name] declare that…	I [insert name] declare that…
• I am the person in management or control of the industrial waste. • All information related to the risks of harm to human health and the environment from the industrial waste and how to minimise those risks, so far as reasonably practicable, has been provided. • The waste is not reportable priority waste (transport). • The receipt of the waste at the place or premises is not a permissioned activity.	• I am the person in management or control of the place or premises at which the industrial waste is to be received. • The place or premises at which the waste is to be received is suitable to use the waste, as specified in this form. • The waste is not reportable priority waste (transport). • The receipt of the waste at the place or premises is not a permissioned activity.
Signed	Signed
Date	Date

Explanatory notes

What a Declaration of Use is

A Declaration of Use (epa.vic.gov.au/for-business/new-laws-and-your-business/manage-waste/declaration-of-use) (DoU) is a tool to allow a producer to lawfully transfer or sell on specific types of industrial waste to a receiver, in accordance with the *Environment Protection Act 2017* (the Act) and regulation 64(4) of the Environment Protection Regulations 2021 (the Regulations). It supports the safe use, storage and recovery of materials from low-risk waste.

How to make a DoU

There are two options for making a DoU:

1. Complete this form.
2. Develop your own DoU form that includes all the mandatory manner and form criteria, which is set out on the DoU webpage (epa.vic.gov.au/for-business/new-laws-and-your-business/manage-waste/declaration-of-use).

What this form is for

This form is used to make a DoU. It is a self-assessed declaration by a producer and receiver. It requires no tracking, notification, assessment or approval from EPA.

When to use this form

You must comply with the Act and Regulations, including the general environmental duty (GED) (epa.vic.gov.au/for-business/new-laws-and-your-business/general-environmental-duty).

All industrial waste must go to a lawful place (epa.vic.gov.au/for-business/new-laws-and-your-business/manage-waste/lawful-place). One pathway to establish lawful place (epa.vic.gov.au/about-epa/publications/1946-1) is by making a DoU. You can use this form in specific scenarios, for (regulation 64(1)):

- immediate use of:
    - waste for resource recovery
    - waste other than soil to substitute for raw material; a commercial, industrial, trade or laboratory activity.
- application to land for:
    - commercial garden and landscaping organics that do not contain any physical or chemical contamination
    - untreated timber, including sawdust
    - natural organic fibrous waste.

When not to use this form

You MUST NOT complete this form if your receiving activity is a permissioned activity (epa.vic.gov.au/for-business/new-laws-and-your-business/permissions). You must instead apply for the appropriate permission. You also MUST NOT complete this form if the waste is a reportable priority waste (epa.vic.gov.au/for-business/new-laws-and-your-business/manage-waste/reportable-priority-waste) that requires a transport permission.

If a determination (epa.vic.gov.au/determinations) applies, then a DoU is not required. A DoU may be used where a determination is not applicable if the intention of use is within the confines listed in regulation 64(1).

Who needs to fill in this form

You should only complete this form if you are the person in the management or control of the waste (i.e. a producer or accredited consigner (epa.vic.gov.au/for-business/new-laws-and-your-business/manage-waste/accredited-consigners). Ensure that you answer all questions accurately and that you understand all elements of the declaration and these explanatory notes.

Who needs to sign this form

The producer (or accredited consigner) and the receiver must sign this form.

Record keeping requirements

Both the producer and receiver must retain a copy of the completed and signed form for 2 years from the date on which it was made. Penalties apply for non-compliance.

When circumstances change

If after signing the form you become aware of any change in circumstance that makes the DoU inaccurate, then you must as soon as practicable notify the other signed party of the change. You will need to complete a new DoU form. Penalties apply for non-compliance.

Declaration of Use form

If EPA provides written notice

EPA may cancel a DoU or impose conditions on it by providing written notice to each person who made the declaration. A DoU has no effect from the time EPA provides written notice of the cancellation in accordance with regulation 64(9).

Part A - Applicability to make a DoU

Follow the checklist to determine if you are able to use a DoU for your circumstance. If you tick 'Yes' for questions 1-3, or 'other' for question 4 than you cannot use this form. Please refer to How to establish lawful place (publication 1946.1) (epa.vic.gov.au/about-epa/publications/1946-1) for options on meeting your lawful place requirements.

Tick what the intended use of the waste material is, as per the regulation 64(1). If your intended use is not listed, you cannot use this form. Please refer to How to establish lawful place (publication 1946.1) (epa.vic.gov.au/about-epa/publications/1946-1) for options on how to establish lawful place. Provide further information on the details of the use. For example, untreated timber being processed into bark chips. Where relevant, explain what the waste material cannot be used for.

If you have a Commodity Vendor Declaration (www.mla.com.au/globalassets/mla-corporate/meat-safety-and-traceability/documents/commodity-vendor-declaration.pdf) for your waste and activity then you only need to complete Part C, and Parts E - H of this form.

Part B – Producer details

Provide the producer's business name, ABN, contact details and address.

Part C – Receiver details

Provide the receiver's business name, ABN, contact details and address (if different to receiving location).

Part D – Waste details

Provide the Waste Description and Waste Code as per Waste code transition to Environment Protection Regulations 2021 (publication 1967.2) (epa.vic.gov.au/about-epa/publications/1967-2). Provide the addresses of where the waste is being produced and received.

Provide a detailed description of the waste, which includes information on (where relevant):

- waste type (e.g. sawdust, grass, leaves, coffee grounds etc.)
- physical form (i.e. liquid, solid, sludge or powder etc.) and appearance (e.g. colour, viscosity etc.)
- any odour characteristics
- solubility and chemical stability
- mobility
- burning characteristics.

Part E – Consignment details

Specify whether the consignment of the waste is a one-off consignment or over a period of time. Specify the estimated amount of waste being consigned. If it is for a period of time, specify the date range. The maximum consignment period is 12 months. After 12 months, you will need to review and sign a new form.

Part F: Risks of harm

List any risks of harm to human health and the environment associated with the use of the waste material. Refer to Assessing and controlling risk: A guide for business (publication 1695.1) (epa.vic.gov.au/about-epa/publications/1695-1) for guidance on identifying and
assessing risks.

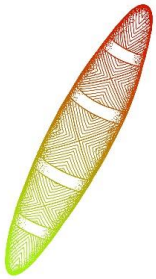
Part G: Risk mitigation

Tick where appropriate, any control measures for mitigating the risks of harm. Refer to Assessing and controlling risk: A guide for business (publication 1695.1) (epa.vic.gov.au/about-epa/publications/1695-1) for guidance on implementing control measures. Also tick and provide details on any supporting documentation.

Part H: Signed Declaration

Both the waste producer (or accredited consigner) and the waste receiver must sign this form. Signing this declaration has legal significance. Penalties apply for non-compliance and the other signed party may seek damages if information is incorrect. Before signing you must be absolutely satisfied you understand all elements of the document and these explanatory notes.

Declaration of Use form



EPA acknowledges Aboriginal people as the first peoples and Traditional custodians of the land and water on which we live, work and depend.
We pay respect to Aboriginal Elders, past and present.

As Victoria's environmental regulator, we pay respect to how Country has been protected and cared for by Aboriginal people over many tens of thousands of years.

We acknowledge the unique spiritual and cultural significance of land, water and all that is in the environment to Traditional Owners, and recognise their continuing connection to, and aspirations for Country.

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Declaration of Use form

Environment Protection Act 2017
Environment Protection Regulations 2021, regulation 64(4)

Publication F1022 June 2021

This is a declaration by a waste producer and waste receiver for lawful receipt (epa.vic.gov.au/for-business/new-laws-and-your-business/manage-waste/lawful-place) of a specific industrial waste. The waste producer completes this form and both producer and receiver must sign it. You cannot use this form if your waste is a reportable priority waste (transport) (publication 1967) (epa.vic.gov.au/about-epa/publications/1967) or the activity is a permissioned activity (epa.vic.gov.au/determinations). Please refer to explanatory notes from page 4.

Part A – Applicability to make a DoU						
1.	Is your waste a reportable priority waste that requires a transport permission?		Yes ☐	**You cannot use a DoU.** How to establish lawful place.	No ☒	Go to step 2
2.	Is your receiving activity a permissioned activity?		Yes ☐		No ☒	Go to step 3
3.	Does your waste and activity meet the specifications of a determination?		Yes ☐	You don't need a DoU.	No ☒	Go to step 4
4.	What is the intended use of the waste?	☐ immediate use for:	☐ resource recovery		Uncontaminated organic waste materials imported for use in site rehabilitation	
			☐ use as a substitute for an input or raw material in a commercial, industrial, trade or laboratory activity, other than soil			
		☒ application to land for:	☒ commercial garden and landscaping organics that does not contain any physical or chemical contamination			
			☒ untreated timber, including sawdust			
			☒ natural organic fibrous waste			
		☐ other			**You cannot use a DoU**	
5.	Have you completed a Commodity Vendor Declaration for the waste and activity?		Yes ☐		Complete Part C, and Parts E - H of this form only.	
			No ☒		Complete all parts of this form	

Part B – Producer details			
Business name		ABN	
Contact name		Business address	
Telephone		Email	

Part C – Receiver details			
Business name		ABN	
Contact name		Business address	
Telephone		Email	

Declaration of Use form

Part D – Waste details			
Waste description	Uncontaminated organic wastes	Waste code	K300 and/or K310-NH
Detailed description	Garden and landscaping organics, untreated timber (including sawdust), natural organic fibrous waste, or forestry residuals – without any physical or chemical contamination		
Producing address	Address where waste was generated/produced		
Receiving address	Address where waste will be received/deposited		

Part E – Consignment details (i.e. movement and volume of the waste)				
Consignment period?	☐ One-off consignment			☐ From dd/mm/yyyy to dd/mm/yyyy <up to a maximum of 12 months
Volume, when known?	Estimated amount	Units	Choose an item.	☐ Per load ☐ Total

Part F: Potential risks of harm		Where relevant, please include details in attachment e.g. safety data sheet
Any risks to human health from using the waste?	Yes ☐ No ☒	
Any risks to the environment from using the waste?	Yes ☒ No ☐	Low risk of undetected contaminants in imported fill materials impacting on the environment

Part G: Risk mitigation		Details
Are there any control measures required for addressing any risks of harm?	Yes ☒ No ☐	- Producer/supplier of imported material vetted for reputability - All deliveries of imported materials accompanied by a delivery driver checklist, docket or similar - Confirm the EPA waste classification on delivery of the imported materials - Visual inspection of inbound deliveries prior to accepting on site, and again when load is tipped - Incidental waste that may later be discovered in imported materials are separated, sorted and removed from site
Are there any supporting documents for managing any risks of harm?	Yes ☒ No ☐	Imported Materials Management Plan Delivery driver checklists, dockets or similar

Part H: Signed declaration The DoU is not valid until both the waste producer and receiver have signed the form	
Waste producer	Waste receiver
I [insert name] declare that…	I [insert name] declare that…
• I am the person in management or control of the industrial waste. • All information related to the risks of harm to human health and the environment from the industrial waste and how to minimise those risks, so far as reasonably practicable, has been provided. • The waste is not reportable priority waste (transport). • The receipt of the waste at the place or premises is not a permissioned activity.	• I am the person in management or control of the place or premises at which the industrial waste is to be received. • The place or premises at which the waste is to be received is suitable to use the waste, as specified in this form. • The waste is not reportable priority waste (transport). • The receipt of the waste at the place or premises is not a permissioned activity.
Signed	Signed
Date	Date

Explanatory notes

What a Declaration of Use is

A Declaration of Use (epa.vic.gov.au/for-business/new-laws-and-your-business/manage-waste/declaration-of-use) (DoU) is a tool to allow a producer to lawfully transfer or sell on specific types of industrial waste to a receiver, in accordance with the *Environment Protection Act 2017* (the Act) and regulation 64(4) of the Environment Protection Regulations 2021 (the Regulations). It supports the safe use, storage and recovery of materials from low-risk waste.

How to make a DoU

There are two options for making a DoU:

3. Complete this form.
4. Develop your own DoU form that includes all the mandatory manner and form criteria, which is set out on the DoU webpage (epa.vic.gov.au/for-business/new-laws-and-your-business/manage-waste/declaration-of-use).

What this form is for

This form is used to make a DoU. It is a self-assessed declaration by a producer and receiver. It requires no tracking, notification, assessment or approval from EPA.

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Declaration of Use form

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Part A - Applicability to make a DoU

Follow the checklist to determine if you are able to use a DoU for your circumstance. If you tick 'Yes' for questions 1-3, or 'other' for question 4 than you cannot use this form. Please refer to How to establish lawful place (publication 1946.1) (epa.vic.gov.au/about-epa/publications/1946-1) for options on meeting your lawful place requirements.

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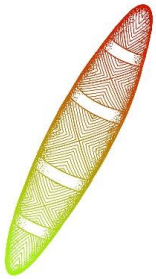
Declaration of Use form



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Fire Response and Readiness Plan

Coleraine Quarry – WA410

Rigby Brothers & Co Pty Ltd

24 Hour Emergency Contacts

Contact	Phone Number	Function
Jason Rigby, Quarry Manager	0437 564 222 0438 752 385	Designated Chief Fire Warden, to co-ordinate bushfire or emergency response
Emergency Police Fire Ambulance	000	To report a new bushfire or emergency.
53 Read Street Coleraine CFA District 05 **SOUTH WEST FIRE BAN DISTRICT** Fire Duty Officer (RFDO) Vic Emergency Hotline	(03) 5551 1500 1800 240 667 1800 226 226	To share information on emergency incidents and liaise with the Quarry Manager and Fire Duty Officer. The site may respond to requests from the FDO about resourcing requirements for standby, prescribed burns and bushfires across the State.
CFA Headquarters (9am-5pm) 8 Lakeside Drive Burwood East 3151	9262 8444	Bushfire information and advice
VicEmergency Hotline	1800 226 226	www.emergency.vic.gov.au

Jason Rigby
Quarry Manager,
Rigby Brothers & Co Pty Ltd
M: 0438 752 385
E: rigby.bros.quarry@gmail.com

February 2024

Coleraine Quarry – WA410

Coleraine Quarry – WA410

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Revision History

Document Date	Description
Jan 2024	V02 Updated to reflect new fire ratings

Quarry Manager: **Jason Rigby**
Mobile: 0438 752 385
Email: rigby.bros.quarry@gmail.com

Coleraine Quarry – WA410

1. Introduction

This Fire Response and Readiness Plan details the actions to be taken in the event of a fire at the site. This plan is appropriate for either an infrastructure/machine /plant fire or a wildfire.

This Fire Response and Readiness Plan is not a standalone document, and must be read in the context of the approved Work Plan for the site.

2. Objectives

The primary objective of this Fire Response and Readiness Plan (FRRP) for the Coleraine Quarry is the protection of human life and the safety of all people working, visiting and living in the vicinity of the site.

Secondary objective include:

- The protection of property, assets and the local environment
- Minimising the potential risk of a wildfire starting on the site through preventative controls

3. Potential Causes and Impacts

The wildfire danger period, or 'bushfire season', in Victoria generally occurs from mid to late November through to late March of the following year. There are numerous factors that influence the bushfire season, including but not limited to, the prevailing conditions, forecast weather conditions, fuel loads, ground and vegetation moisture contents, and local land uses.

Climatic conditions, such as low humidity, can contribute to the severity of a fire season and very severe conditions usually result from:

- Wet, late summer and autumn promoting heavy fuel growth / accumulation;
- Dry springs and the early onset of summer conditions;
- Lower than average annual rainfall, especially throughout the winter and spring seasons; and
- The occurrence of extended drought conditions.

The quarry extraction and processing operations may have the potential to increase the risk of fires, but the site also potentially acts as an effective fire break, providing areas of refuge. Disturbed ground and product stockpiles provide large areas of non-combustible material and non-flammable barriers.

Should a fire occur and be allowed to continue unchecked within either of the site and/or adjoining land, it will pose a threat to:

- The safety, property and assets of neighbouring landowners;
- Quarrying fixed plant, mobile equipment, site infrastructure and other company assets;
- Flora and fauna habitat; and
- Land uses in the vicinity, including grass cover, exposing land to soil erosion and reduced surface water quality.

The potential for an active local wildfire to spread into the site needs to be carefully monitored.

To assist with monitoring, fire danger ratings, bans and early warnings, the the Quarry Manager and the Site Supervisor each has the VicEmergency App downloaded to their mobile phones with the site registered as a 'Watch Zone'. The VicEmergency App notifies of bushfire 'incidents' within a 20km radius of the site and provides detailed information on the incident, including colour coded warning areas, i.e. Yellow – ADVICE, Orange – WARNING (Watch and Act), or Red – EMERGENCY WARNING, with associated 'action statements', which may include "Prepare to Evacuate" or "Evacuate Immediately".

4. Bushfire Management Measures

Three factors must be present for a bushfire to occur and there are several other factors which may occur that will affect the progress of a bushfire.

For a fire to occur there must be oxygen, fuel and an ignition source. The progress of a bushfire will be affected by fuel availability (including type and amount), terrain and weather (including winds, humidity and air temperature).

4.1. Managing Bushfire Risks

4.1.1. Oxygen

It is not feasible to restrict oxygen to manage risks associated with ignition of a bushfire.

4.1.2. Fuel

Fuel loads within the site will be managed in conjunction with the site's obligations under the Planning and Environment Act and native vegetation removal guidelines.

Site vegetation with the potential to exacerbate the bushfire hazard will be maintained with the purpose to ensure there is a reduction of bushfire fuels between the potential bushfire hazard and any infrastructure, fixed operating plant, mobile operating plant, site roads / tracks and actively engaged personnel.

The buffer zones will be maintained by use of the following measures:

- Overhanging tree limbs and shrubs will be pruned, or maintained in such a manner that the vegetation is neither continuous, nor presents a hazard;
- Grass and other fine fuel load will be slashed, harrowed, or maintained to below a non-hazardous height, e.g. 10cm; and
- Where required, crushed rock will be used to maintain both site access and fuel reduction.

Identify and control hazard trees:
A hazard tree is a tree which has the potential to fall onto or come into contact with an electricity line. Hazard trees will be identified and controlled as required using the following criteria:

- The size of the tree suggests that it is likely to come into contact with the electricity line, as it appears to be encroaching or growing into the line clearance space.
- There is an excessive lean on the tree, or branches hanging off the tree, and the tree is in proximity to an electricity line.
- The size or appearance of the tree suggests it could come into contact with the electricity line, including under foreseeable local conditions such as a strong wind.

The clearing of any native vegetation for fire reduction will only be undertaken when directed by the CFA.

4.1.3. Ignition Sources

Sources of ignition are likely to fall into one of four source categories:

- Quarry-related activities;
- External ignition sources, e.g. embers from a nearby bushfire;
- Electricity transmission lines; and
- Lightning.

The only ignition source the site has any control over is the first source. The following management measures will be implemented to minimise the risk of quarry-related activities providing such a bushfire ignition source.

Mobile Plant Operations

- No earthmoving equipment will be used to clear vegetation during periods of Total Fire Bans.
- Mobile equipment working in vegetated areas will not be left unattended with the engine running.
- Mobile equipment working in a vegetated area of the site will be inspected to ensure that it does not pose a risk of igniting a bushfire; this will include inspection of exhaust and electrical systems.
- All other quarry-related activities will be undertaken in cleared areas (within the extraction areas, hardstand area, processing plant, stockpiling, sales loading, Workshop, weighbridge, etc.) once the limited and progressive site vegetation clearing is not in operation, i.e. has ceased.
- All mobile equipment (earthmoving and haul trucks) will be maintained in good working order with appropriate exhaust and fire suppression / extinguishing systems.
- The refuelling of mobile equipment will be undertaken within the cleared areas of the site.
- All vehicles and mobile plant will be turned off during refuelling.
- Appropriate capacity ABE Dry Powder Fire Extinguishers will be installed and maintained as fully serviced within site vehicles, mobile plant and designated fixed plant, workshop and ancillary infrastructure (administration / amenities) locations.
- The water cannon or spray bar on the site Water Truck / Cart will be regularly inspected and tested to ensure it remains fully operational and effective. The CFA compatible fitting will also be checked for integrity.
- All mobile equipment will be equipped with appropriate and operationally effective site communications equipment, including UHF radios and/or mobile telephones.

Other Operations

- Continue to ensure the “No Smoking” policy is enforced across all other operating areas of the Quarry Site, e.g. Workshop, Processing Plant, Laboratory, Sales Loading Area, etc.
- As far as practicable, welding, cutting and grinding operations will be confined to and conducted within the Workshop area; however, if unavoidable, these operations will only be conducted within a cleared area of the Quarry Site and in accordance with the ‘Hot Work Permit’ procedure; with fire extinguishing resources on watch and at the ready. Note there will be no “Hot Work” on declared Total Fire Ban days.
- Quarry management will maintain a focus on good housekeeping to avoid the build-up of fuel loads and/or potential fire hazards.
- All site operating work areas will have access to suitable fire extinguishers and their locations indicated by appropriate signage.
- Hydrocarbons will only be stored on the site within an appropriately constructed and bunded hydrocarbon storage area within the Workshop with suitable fire extinguishers and appropriate signage in the immediate storage area.
- All fire extinguishers will be serviced six monthly with service records tagged to each extinguisher.

4.1.4. Weather

The daily Fire Danger Rating (FDR) is an assessment of the potential fire behaviour, the difficulty of suppressing a fire and the potential impact on the community should a bushfire occur on a given day – refer to Attachment 1.

Note that a new rating system, the Australian Fire Danger Rating System (AFDRS) was introduced in September 2022 for national consistency. This system also includes a 'No Rating' category, indicated by the white bar at the left, for days where there is minimal risk.

The FDR is based on the Fire Behaviour Index (FBI) which is a combination of air temperature, relative humidity, wind speed, drought factor and vegetation type. An FBI of 0-11 (No Rating) means that a fire will not burn, or will burn so slowly that it will be easily controlled, whereas an FBI in excess of 100 (Catastrophic) means that a fire will burn so fast and so hot that it will be uncontrollable.

The Quarry Manager and/or Site Supervisor are required to check the daily FDR in the local area of the site, on-line via the VicEmergency App or website, on a daily basis during the bushfire season.

Should the daily FDR be Extreme or Catastrophic and when a Total Fire Ban has been declared, the Quarry Manager and/or Site Supervisor will:

- Notify site personnel of the heightened bushfire risk and stress to personnel the need to be vigilant in managing potential ignition sources;
- Regularly check vulnerable areas of the site and the horizon for evidence of local smoke; and
- Regularly check and be aware of Incidents and Warnings on the VicEmergency App for the site's 'Watch Zone', on their mobile phone, or using the VicEmergency website.

4.2. Managing Bushfire Hazard

4.2.1. Preparation for Managing Active Bushfires

The following measures will be implemented to enable appropriate management of active bushfires:

- Incorporate the Fire Response and Readiness Plan into the overarching Emergency Response Plan for the site;
- Provide for the use of available water sources, e.g. pumps, hoses and the water cannon or spray bar on the water truck / cart, to manage ember attack on the site
- Ensure all UHF radios and/or mobile phone communications equipment is fully charged and working on all mobile equipment, ensuring ready communications to all personnel;
- Establish at least two CFA compatible connection points (Attachment 2) from the site's water infrastructure to ensure accessibility of these water sources to firefighting equipment, including that of the local CFA equipment;
- Maintain the Site Access Road to ensure safe access and egress from the site in the event evacuation is required/called;
- All active Haul Roads and Fire Access Tracks will be regularly checked and cleared of all obstructions and debris to enable safe ingress and egress of personnel to and from various areas of the site;
- Fire breaks, some of which double as Fire Access Tracks, established within and around the perimeter of the site will also be maintained to reduce fuel load, in order to also ensure ingress and egress for firefighting vehicles and personnel; and
- Fire management and awareness training will be provided to all site personnel, while firefighting training, specific to tasks and procedures, will be provided to the required personnel.

4.2.2. Managing Active Bushfires

Following the identification of an imminent bushfire threat, the following fire management measures will be implemented:

- Human life is the most important asset and the key objective for protection. Only if it is safe to do so, will property be considered for protection as a secondary asset;

- The bushfire will be reported to the CFA Fire Duty Officer, or by calling "000", at the earliest opportunity by the Quarry Manager, or the Site Supervisor;
- If a fire, or a small bushfire has started in close proximity to an operational work area within the site and both resources and facilities are on-hand to put it out and it is safe to do so, then it should be contained and extinguished as quickly as possible; if necessary, in conjunction with the CFA if they have been requested to attend;
- If a wildfire is not in close proximity and it is determined to be safe to do so, the Quarry Manager, or Site Supervisor, can decide that quarry operations will continue with the following provisions:
    - Fire-fighting equipment, including the Water Truck / Cart, fire extinguishers and suitable earthmoving equipment, e.g. Bulldozer, and/or Grader will be brought close-to-hand, i.e. be immediately ready and available;
    - UHF radio and local AM radio (ABC – 774) will be monitored for bushfire updates; and
    - The Quarry Manager, or Site Supervisor, will make regular checks to determine if the fire front is moving closer to the site, or is increasing in its threat to Quarry personnel and the site.
- In the event of a local wildfire beyond the site boundary, all personnel on the site would be directed to assemble at the 'Emergency Assembly Area' on the Plant Hardstand Area. A head count would be undertaken to confirm all site personnel, contractors and visitors are accounted for. At this time, instructions as to specific procedures to be followed, i.e. site protection, or site evacuation, would be issued by the Quarry Manager, or Site Supervisor, in accordance with this plan as part of the broader Emergency Management Plan (EMP).

5. Potential Ignition Sources / Risks Likelihood

Risk Event	Likelihood
There are **NO EXPLOSIVES** stored on the site	**Rare**
Cigarette Smoking, Arson, Lightning Strike, are possible fire ignition sources	**Rare**
Dangerous Goods on site: There are oxy acetylene bottles in the Workshop, and hydrocarbon stores adjacent to the workshop.	**Rare**
Diesel / Grease & Oil may be stored on site: There is permanent underground Diesel tank and a Grease & Oil Store adjacent to the Workshop.	**Rare**
Adjoining farmland is a risk when pasture / crops / windbreaks dry out (generally around harvest time, note the site was burnt out in the ??? fires).	**Possible**
Mobile plant fire, is a potential ignition source at the quarry.	**Unlikely**
Electrical failure is a potential ignition source at the quarry.	**Unlikely**
Low Voltage Power Line: There is potential for arcing from the powerline dissecting the site.	**Rare**

6. Controls

The control measures for the prevention and control of wildfires within or threatening the site and adjoining land are detailed below.

They include (but are not limited to):

- Where possible and/or necessary, grazing of pastures to minimise fuel build-up;
- Slashing of grass areas surrounding the quarry access road, site plant and other infrastructure areas, haul road surrounds and designated fire trails;
- Vegetation (overhanging hazardous trees) maintenance around infrastructure, especially electric power lines and the quarry access road;
- Regular service and maintenance of fire-fighting equipment, including the water truck / cart, portable extinguishers, fire-hoses and fire-blankets; and
- Regular communication and site inspection visits from the CFA, including by the local CFA District Duty Officer.

Some of these preventative measures are aimed at reducing the severity of a bushfire by reducing the amount of fuel available to burn, should a bushfire occur. This will make any such bushfire easier to control and minimises the level and/or extent of fire damage.

Control measures such as the establishment of defined 'Fire Access Trails' will consider the impact on and protection of native vegetation across the site. Any unavoidable requirement to clear any native vegetation for such a control measure will only be undertaken at the direct instruction of the CFA Duty Officer.

The site has a 5,000L water truck / cart that is capable of use for fire-fighting purposes. The water truck / cart is also equipped with a CFA compatible fitting (CFA male end Pt. No. Se.03.074 – refer to Attachment 2), enabling it to be used to supply water to CFA fire units.

Water is available from any of the of dams or sumps on the site, however the sump is the major source of water, it is located in an easily accessible (non-vegetated) location and equipped to pump water to the water truck / cart. It currently performs this role for site dust suppression.

The table below summarises the control measures, personnel responsible for management of the control measure and the timing, or frequency, of the control measure.

Coleraine Quarry – WA410

6.1. Control Measures

#	Details of controls being used	Responsibility	Timing/Frequency
1)	All new employees and contractors attend a site induction prior to commencement of work on the site. Inductions will ensure awareness and understanding of Fire Response and Readiness Plan (FRRP) and Emergency Management Plan (EMP) policy and procedures	All staff & Contractors	Prior to starting work on the site
2)	An Emergency (Bushfire) Response Team will be established and led by the Quarry Manager, supported by the Site Supervisor. A number of Quarry personnel will comprise the balance of the response team on a volunteer basis and be provided with appropriate training, especially in bushfire prevention and firefighting. The CFA will be the major training resource.	Quarry Manager	Ongoing
3)	The most important objective is the protection of human life and the safety of all personnel on the site. Procedures outlined in this FRRP are directed to the protection of human life and thereafter to the protection of plant, building and equipment assets. Only attempt to control and extinguish a bushfire, or other type of fire, when it is possible to do so **– Do NOT place yourself or others at risk of injury, or in a life-threatening situation**	Quarry Manager	Ongoing
4)	Where possible, pasture in the site buffer zones, non-disturbed areas and surrounding the Site Access Road, will either be grazed, or regularly slashed to avoid the build-up of excessive fire fuel load. This activity includes the spraying of noxious and herbaceous weeds, along with 'good housekeeping' especially in areas surrounding the Workshop, the Processing Plant, the Office / Amenities and Weighbridge building and the Plant Hardstand Area more generally	Quarry Manager	Annual or as Required
5)	All 'hot work activities' on site, e.g. welding, steel cutting and/or grinding, etc., will whenever possible, be undertaken in the Workshop or associated hardstand area. The 'Hot Work Permit' procedure will be used to manage and approve any hot works performed outside of the workshop. No welding, steel cutting and/or grinding will be authorised or undertaken on days of Total Fire Ban.	Quarry Manager / Site Supervisor	Ongoing
6)	Currently approved fire control systems and equipment (including site UHF communications, portable fire extinguishers, water truck / cart and other equipment) will be serviced and maintained. Appropriate signage shall be in-place and of good condition. The availability and access to water sources for firefighting purposes will also be inspected and maintained in an appropriate condition.	Quarry Manager / Site Supervisor	Six monthly or as Required

Coleraine Quarry – WA410

#	Details of controls being used	Responsibility	Timing/Frequency
7)	The 'Emergency Response Team' will provide initial assessment and if determined appropriate (controllable), will provide service/response to bushfire, or other fire at the site. The CFA Duty Officer will be contacted as a priority.	Quarry Manager / Site Supervisor	As Required
8)	All fires on the site and adjoining land during the 'bushfire danger season' will be reported to 000 or the CFA Fire Duty Officer	Quarry Manager / Site Supervisor	As Required
9)	The site offices and the quarry sump will be used as 'Emergency Assembly Areas' if site evacuation is required. CFA fire assistance will be directed to these access point and thereafter accompanied into the site	Quarry Manager / Site Supervisor All Staff, Contractors & Visitors	As Required
10)	The Sales Loading Area near the office will be used as the main site 'staging and 'Emergency Assembly Area'. The Plant Hardstand is approx. 1.4 ha in size, inclusive of plant and infrastructure, and devoid of any vegetation (fuel), of which about 0.9 ha is available 'free space' for the assembly and/or mustering of human resources and mobile plant. The Plant Hardstand also has unimpeded access and egress via the site entrance to the north in the event of site evacuation	Quarry Manager / Site Supervisor All Staff, Contractors & Visitors	As Required
11)	Annual inspections will be made prior to the 'bushfire danger season' to ensure the adequacy of fire control measures, including firefighting equipment. adequacy of fire control measures and emergency information	Quarry Manager / Site Supervisor	Annually (July/August)
12)	Annual review of flammable and combustible liquids, or materials stored on site, including updated MSDSs for Dangerous Goods (classification and storage conditions) to ensure the adequacy of fire control measures and emergency information	Quarry Manager	Annually (July/August)
13)	Annual management review of FRRP and EMP Policies and Procedures to ensure controls are effective, relevant and respond adequately to changed Quarry Site operating conditions.	Quarry Manager	Annually
14)	Review roles and responsibilities for managing bushfire, other types of fire and/or emergency situations at the Quarry Site. Document and amend both FRRP & EMP as required	Quarry Manager	Annually
15)	Ongoing two-way communication with Site personnel in relation to the FRRP & EMP through the Toolbox Meetings system.	Quarry Manager	As required
16)	Ongoing communications and liaison will be maintained with the CFA Duty Officer and local CFA volunteer station staff during the bushfire danger season	Quarry Manager	As required

7. Personnel and Training

7.1. Roles and Responsibilities

The table below presents the roles and responsibilities of the site's key personnel for the implementation of this Fire Response and Readiness Plan

Roles and Responsibilities for the Fire Response and Readiness Plan

ROLES	RESPONSIBILITIES
Managing Director (Work Authority Holder)	• Ensuring overarching legal responsibility for compliance to the Fire Response and Readiness Plan by all site personnel, contractors and site visitors to the Quarry Site; and • Oversight of bushfire management training (incl. firefighting equipment & techniques).
Quarry Manager	• Ensuring compliance to the Fire Response and Readiness Plan by ALL personnel, contractors and site visitors to the Quarry Site; • Monitor the daily Fire Danger Rating (FDR) and ensure all works are suspended on high fire risk days; • Training of the Quarry Site personnel in bushfire management (as required) to ensure the FRRP Objectives are achieved, e.g. the protection of human life; • Conduct inductions for all new site personnel and contractors; • Maintaining a Dangerous Goods Register that is available to the CFA; and • Conduct Reviews, Liaise with Quarry Site personnel, Senior Management, Emergency Service Responders and Report on implementation of the FRRP.
Site Supervisor	• Assist and support the Quarry Manager as required in the execution of their responsibilities under the FRRP; • Operate as 'second-in-charge' to the Quarry Manager in the implementation of the FRRP; and • In the absence of the Quarry Manager, assume full responsibility for implementation of the FRRP as required.
All Personnel	• Be fully aware of the Site FRRP • Comply with all control measures outlined in the FRRP, e.g. No Smoking Policy • Respond positively to instructions from Quarry Manager / Site Supervisor in relation to the implementation of the FRRP.

7.2. Roles Competence and Training

All site personnel, including site contractors and their employees, will undergo a site-specific Fire Response and Readiness Plan induction prior to them commencing work at the Quarry Site. This induction will include, but not be limited to:

- The FRRP Objectives, i.e. the protection of human life as the primary objective, and to not place yourself or others at risk of injury and only attempt to extinguish a fire when it is possible to do so;

- Awareness of the location and operation of firefighting equipment and resources, e.g. Fire Extinguishers, the Water Truck / Cart and Water Resources for filling of the Water Truck / Cart;
- Awareness of the emergency response procedures and the 'Emergency Assembly Areas'; and
- The roles and Responsibilities of Quarry Site personnel for implementation of the FRRP in the event of a wildfire, other type of fire, or Quarry Site emergency situation.

The Quarry Manager will source and arrange for the delivery of appropriate wildfire (and other types of fire) management training courses for those site personnel who volunteer to be a member of the 'Emergency Response Team' in the event of a wildfire (or other fire) threatening the site. The bushfire management training will include, but not be limited to:

- Use of the correct type of fire extinguisher for the type of fire;
- Most effective technique(s) in the use of a fire extinguisher, e.g. direct extinguisher stream to base of the flame, not at smoke, use a side-to-side, sweeping motion over the burning surface, sweep from front edge to rear, then upwards, etc.
- Once fire is extinguished, pull apart burnt areas to further extinguish any 'hot spots';
- Operation of the Water Truck / Cart, including filling operations; and
- If a wildfire / fire gets out-of-control, retreat to protect from injury and risk of life.

7.3. Key Actions for Fire Fighting

Do Not Place Yourself or Others at Risk Of Injury.

Only attempt to extinguish a fire if you are confident in your own ability and when it is possible to do so

- The person discovering the fire should immediately notify the Quarry Manager or whoever is in charge of the quarry at the time
- The 'person in charge' shall immediately investigate the situation, take control and arrange for electrical supply to be switched off to the area, delegate somebody to telephone the CFA Fire Duty Officer, or call 000 and request the Fire Brigade, and then decide whether to attack the fire or order an evacuation of the quarry.
- If the decision is to fight the fire, the 'person in charge' shall muster all available resources using extinguishers and the water truck / cart (where applicable) until the CFA / Fire Brigade arrives. The 'person in charge' shall delegate somebody to await the arrival of the CFA / Fire Brigade at the quarry entrance, inform them of the situation, and guide them to the fire. If chemicals are involved, a copy of the Material Safety Data Sheet should be provided to the CFA / Fire Brigade.
- If the decision is taken to evacuate, the 'person in charge' should ensure that all personnel including visitors and contractors leave the area of any onsite fire, and muster in the 'Emergency Assembly Area'. The 'person in charge' should also take a first aid kit to the muster area.
- The 'person in charge' must notify the Quarry Manager of the situation and await instruction.
- Upon leaving the site, no one should return to the quarry until approved to do so by the CFA / Fire Brigade.

Using a fire extinguisher

- Make sure you are using the correct extinguisher for the type of fire
- Keep an emergency exit between you and the fire
- Stay low to avoid heat and smoke
- Direct extinguisher stream at the base of the flame, not at the smoke
- Use a side to side sweeping motion over the burning surface
- Sweep from front edge to the rear, then up a vertical surface

Coleraine Quarry – WA410

- After the fire is extinguished, pull apart the burnt area to get to hot spots
- If fire gets out of control, retreat. If in a building, close the door to prevent an oxygen supply to the fire.

8. Monitoring, Reporting and Review

8.1. Monitoring

The annual Fire Response and Readiness Plan Checklist will be conducted in July / August, i.e. well in advance of the declared bushfire season, to ensure the adequacy of fire control measures before the impending bushfire season. A copy of the Fire Response and Readiness Plan Checklist is included as Attachment 3.

Ongoing maintenance of wildfire controls will be carried out as required and as an outcome of regular operating inspections by the Quarry Manager and/or the Site Supervisor and feedback received from Quarry Personnel and neighbours.

8.2. Reporting

The annual Fire Response and Readiness Plan Checklist (Attachment 3) provides a summary of the site's performance in relation to wildfire management issues. This checklist along with any other actions arising throughout the year will be reviewed at least annually by senior management.

Any matters of wildfire management significance requiring amendment to this FRRP will be distributed to relevant site personal and CFA Duty Officer.

The Key Objectives of the FRRP will be achieved if:

- Fire fuel reduction and hazard control are carried out on a regular basis;
- No wildfire, or other types of fire is initiated on the site;
- Any wildfire encountered from neighbouring land, is successfully controlled on the site;
- No injuries, or loss of human life occurs with site personnel (including contractors, their staff and site visitors) as a consequence of fire; and
- Consultation and engagement with the CFA, other emergency service responders, regulators, Council and local landowners / land managers is maintained.

8.3. Review

The FRRP will be reviewed annually and updated as required. Additionally, this FRRP will also be reviewed following any incidents, improvements / changes in procedures, or the findings of an annual inspection and management review.

The annual FRRP review will include an assessment of the effectiveness of the established wildfire controls and their performance against the stated FRRP Objectives.

As industry information and processes improve in relation to wildfire management the FRRP will be amended as required. Site personnel will be updated and where necessary, trained in respect of the FRRP changes.

9. Consultation

This Fire Response and Readiness Plan will be discussed / reviewed as necessary with the CFA District Fire Safety Office. Informal consultation has taken place in the past and will continue on a more formal basis to be ongoing with long-standing local businesses and residents in the vicinity of the site.

Coleraine Quarry – WA410

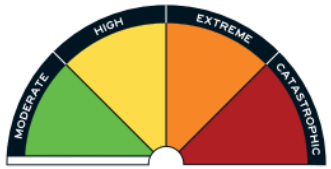
Emergency exits, refuge area

Coleraine Quarry – WA410

ATTACHMENT 1 Know Your Daily Fire Danger Rating

Coleraine Quarry – WA410

Know Your Daily Fire Danger Rating



Stay aware of the fire danger rating and know what to do.

Fire Danger Ratings tell you how dangerous a fire could be if one started. The higher the rating the more dangerous the conditions. Fire Danger Ratings feature in weather forecasts during the fire season.

Everyday you should:

- Monitor conditions and official sources for warnings.
- If a fire starts near you, take action immediately to protect your life.
- Do not wait for a warning.
- Adhere to local regulations governing fire activity.
- Ensure any industrial and agricultural activities adhere to relevant guidelines.

To check your district's daily Fire Danger Rating, visit **cfa.vic.gov.au**, download the **VicEmergency App** or call **1800 226 226**.

	What does it mean?	What should I do?
CATASTROPHIC	**If a fire starts and takes hold, lives are likely to be lost.** » These are the most dangerous conditions for a fire.	**For your survival, leave bushfire risk areas.** » Your life may depend on the decisions you make, even before there is a fire. » For your survival, do not be in bushfire risk areas. » Stay safe by going to a safer location early in the morning or the night before. » Homes cannot withstand fires in these conditions. You may not be able to leave and help may not be available.
EXTREME	**Fires will spread quickly and be extremely dangerous.** » These are dangerous fire conditions. » Expect hot, dry and windy conditions.	**Take action now to protect your life and property** » Check your bushfire plan and that your property is fire ready » If a fire starts, take immediate action. If you and your property are not prepared to the highest level, go to a safer location well before the fire impacts. » Reconsider travel through bushfire risk areas. » Leaving bushfire risk areas early in the day is your safest option.
HIGH	**Fires can be dangerous.**	**Be ready to act.** » There's a heightened risk. Be alert for fires in your area. » Decide what you will do if a fire starts. » If a fire starts, your life and property may be at risk. The safest option is to avoid bushfire risk areas.
MODERATE	**Most fires can be controlled.**	**Plan and prepare.** » Stay up to date and be ready to act if there is a fire.

Monitor conditions and official sources for warnings by going to **cfa.vic.gov.au**, **emergency.vic.gov.au** or call the VicEmergency Hotline on **1800 226 226**

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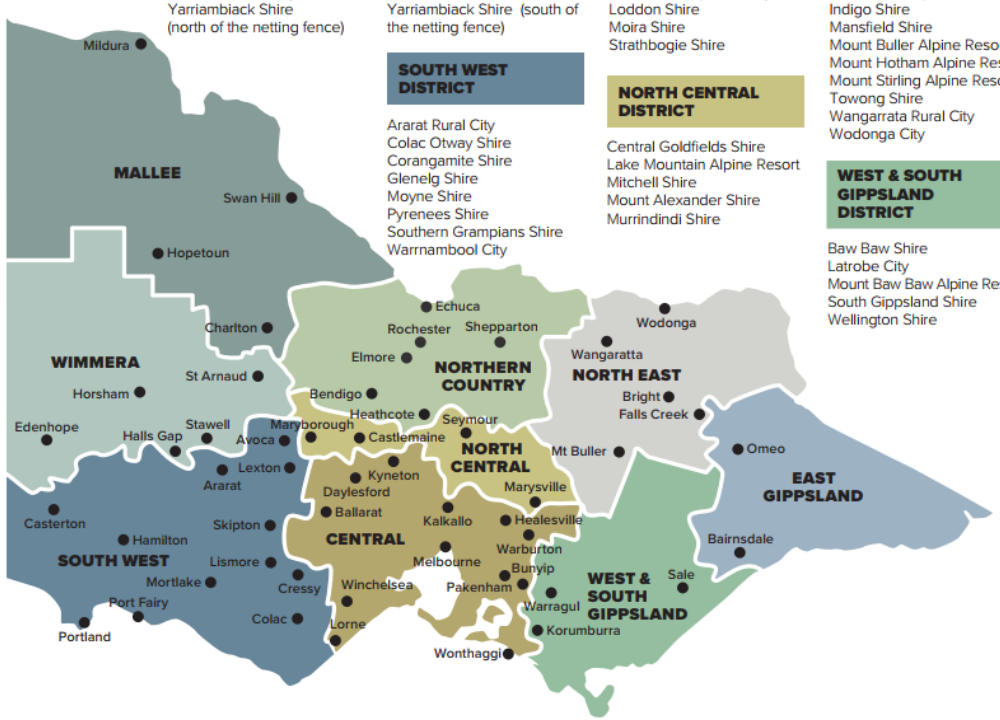
Coleraine Quarry – WA410

Know Your Total Fire Ban District



MALLEE DISTRICT

Buloke Shire
Gannawarra Shire
Mildura Rural City
Swan Hill Rural City
Yarriambiack Shire
(north of the netting fence)

WIMMERA DISTRICT

Hindmarsh Shire
Horsham Rural City
Northern Grampians Shire
West Wimmera Shire
Yarriambiack Shire (south of the netting fence)

SOUTH WEST DISTRICT

Ararat Rural City
Colac Otway Shire
Corangamite Shire
Glenelg Shire
Moyne Shire
Pyrenees Shire
Southern Grampians Shire
Warrnambool City

NORTHERN COUNTRY DISTRICT

Campaspe Shire
Greater Bendigo City
Greater Shepparton City
Loddon Shire
Moira Shire
Strathbogie Shire

NORTH CENTRAL DISTRICT

Central Goldfields Shire
Lake Mountain Alpine Resort
Mitchell Shire
Mount Alexander Shire
Murrindindi Shire

NORTH EAST DISTRICT

Alpine Shire
Benalla Rural City
Falls Creek Alpine Resort
Indigo Shire
Mansfield Shire
Mount Buller Alpine Resort
Mount Hotham Alpine Resort
Mount Stirling Alpine Resort
Towong Shire
Wangarrata Rural City
Wodonga City

WEST & SOUTH GIPPSLAND DISTRICT

Baw Baw Shire
Latrobe City
Mount Baw Baw Alpine Resort
South Gippsland Shire
Wellington Shire

EAST GIPPSLAND DISTRICT

East Gippsland Shire

CENTRAL DISTRICT

Ballarat City
Banyule City
Bass Coast Shire
Bayside City
Boroondara City
Brimbank City
Cardinia Shire
Casey City
Darebin City
Frankston City
French Island
Glen Eira City
Golden Plains
Greater Dandenong City
Greater Geelong City
Hepburn Shire
Hobsons Bay City
Hume City
Kingston City
Knox City
Macedon Ranges Shire
Manningham City
Maribyrnong City
Maroondah City
Melbourne City
Melton Shire
Monash City
Moonee Valley City
Moorabool Shire
Moreland City
Mornington Peninsula Shire
Nillumbik Shire
Port Phillip City
Queenscliffe Borough
Stonnington City
Surf Coast Shire
Whitehorse City
Whittlesea City
Wyndham City
Yarra City
Yarra Ranges Shire

TOTAL FIRE BANS

Total Fire Bans are declared by CFA on days when fires are likely to spread rapidly and be difficult to control.

On days of Total Fire Ban there are legal restrictions in force to reduce the likelihood of fires starting.

Victoria is divided into nine Total Fire Ban districts. Total Fire Bans are declared by district and you must know which district you live in. A list of municipalities that are located in each of the districts is shown in the coloured boxes.

For more information on Total Fire Bans and fire restrictions please call the VicEmergency Hotline on **1800 226 226** or via National Relay Service on **1800 555 677** or visit **cfa.vic.gov.au**

For more information please visit the CFA website at cfa.vic.gov.au or phone the VicEmergency Hotline on 1800 226 226 or via National Relay Service on 1800 555 677

July 2022

Coleraine Quarry – WA410

ATTACHMENT 2 CFA – Compatible Fittings

Coleraine Quarry – WA410

CFA – Compatible Fittings for Tanks, Water Supply (Dams, Groundwater sources) Pump Units and Water Trucks / Carts

CFA Fittings

CFA trucks use a special filling to connect to tanks. There needs to be at least one **64mm, 3 thread/25mm x 50 British Standard Pipe round male coupling** (CFA Male End Pt No. SE.03.074).

Consider using a "tee" to allow CFA fitting on one side of the branch and personal fire fighting fittings on the other side of the pipe as shown below.

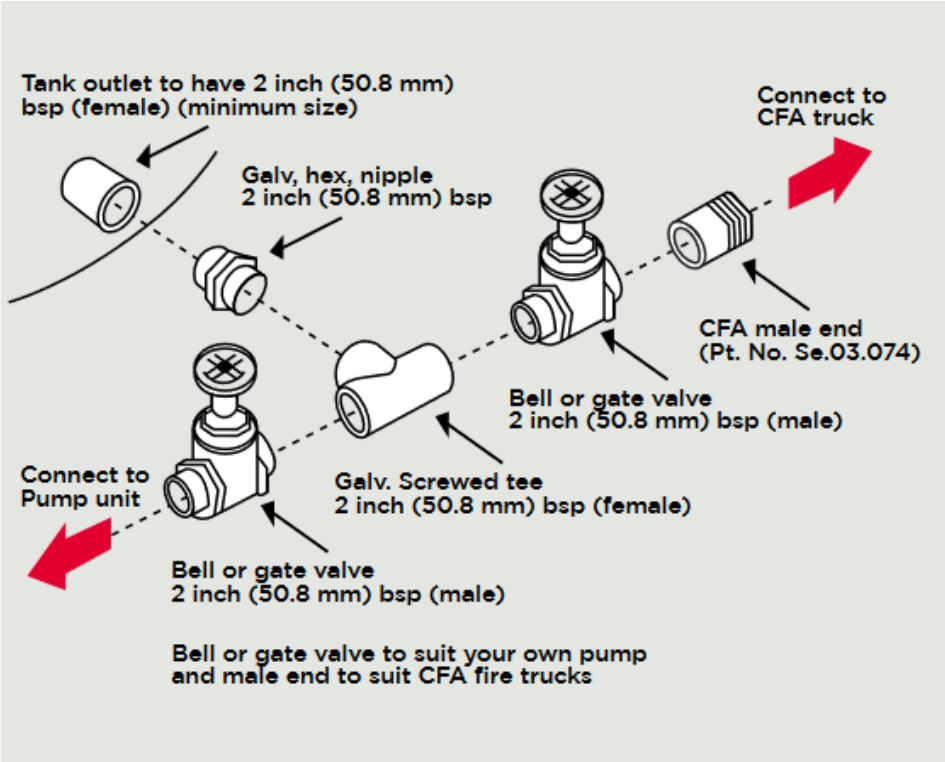


Figure 7: Tank fittings to connect to CFA fire trucks

Coleraine Quarry – WA410

ATTACHMENT 3 Fire Response and Readiness Plan Checklist

Coleraine Quarry – WA410

Fire Response and Readiness Plan Checklist

Date of Inspection: _____

Name(s):	Position:	Signature:

Item	Checklist - Inspect or Review (Description)	Status **S**atisfactory **U**nsatisfactory	Observations / Recommendations /Actions (attach photo)
1)	Weighbridge, Office & Amenities Workshop and ALL sheds - Inspect the site infrastructure for overgrown vegetation, rubbish, any flammable materials (pallets, etc.) to ensure a satisfactory standard of 'housekeeping'		
2)	Inspect Crushing Plant, including Conveyors, Stackers, Laboratory and Buildings for overgrown vegetation, rubbish, any flammable materials (pallets, etc.) to ensure a satisfactory standard of 'housekeeping'		
3)	Inspect Plant Hardstand Area - Sales Loading Area - for signage, safety conditions and adequacy of area for emergency assembly and staging purposes		
4)	Inspect All “EMERGENCY ASSEMBLY AREAS” for signage, safety conditions and adequacy of area for emergency assembly and staging purposes		
5)	Inspect Flammable Liquid stores and Fuel Bowser (refuelling) Area		
6)	Inspect for storage of any Dangerous Goods		
7)	Inspect Water Truck / Cart(s) for effective operation and working condition of fittings, incl. CFA fire truck compatible coupling		
8)	Inspect Water Pumps (incl. back-up pumps) at Stored Water Sources for effective operation and condition of fittings, incl. CFA fire truck compatible coupling		
9)	Inspect Portable Fire Extinguishers - Review location, type and service tags		

Coleraine Quarry – WA410

10)	Inspect Fire Hoses - Review location, condition and operation		
11)	Inspect Site Entrance including operation of gates, vegetation and signage.		
12)	Inspect Haul Roads for condition and use in the event of a wildfire, or other type of emergency		
13)	Inspect condition of designated 'Fire Access Tracks' and 'Fire Breaks' - Overgrown vegetation, or overhanging tree branches		
14)	Review all Fire Suppression Equipment service inspection dates and ensure they are current (up-to-date)		
15)	Inspect and review to ensure 'Backup systems' for Water Pumps, Power, etc., that may be required to supply water for Emergency Services (CFA) are in good working condition and available for use, e.g. Generator(s)		
16)	Review the validity of the 'Hot Work Permit' and Safe Work Method Statement (SWMS) templates for use at Quarry Site		
17)	Review 24 Hour Emergency Contact Details and ensure they are current (up-to-date)		
18)	Review validity of Site Induction, Fire Response and Readiness Plan (FRRP) and Emergency Management Plan (EMP)		

Additional Comments or Recommendations

Southern Grampians
SHIRE COUNCIL

Business Centre:
Brown Street, Hamilton 3300
Telephone: (03) 5573 0444
Facsimile: (03) 5572 2910
TTY: (03) 5573 0458

Address all correspondence to:
Locked Bag 685, Hamilton, Vic, 3300
council@sthgrampians.vic.gov.au
www.sthgrampians.vic.gov.au

D/21/31388
F/16/162

15 April 2021

Mr Andrew Natoli
Director
Equipe Lawyers
8 Gold Street
Collingwood VIC 3066

Dear Mr Natoli,

RE: Proposal for rezoning – Rigby Brother Quarry – 26 Templeton Street Coleraine

Thank you for your email seeking Council's advice for extension of the quarry at 26 Templeton St, Coleraine. You have advised that the operation occupies land in the Farming zone with remainder of the operation spread across industrial and low density residential zoned land.

I understand that rezoning land with a sec 96A permit application under the *Planning and Environment Act 1987* might be seen as an appropriate course of action to enable the quarry expansion for your client. At this stage Council officers would be supportive of working with you to develop a combined planning scheme amendment and sec 96A permit application.

To do this we would require some additional information before we would be able to update councillors of the proposal to enable the formal support you seek.

Can you provide the following details to expand our understanding of:

- the expected life of the quarry;
- the ultimate size of the exhausted void;
- the proposed rehabilitation of the void, crushing and other operational elements of the quarry;
- advice regarding the range of uses on the industrially zoned land;
- advice on any preliminary discussion held with Gunditj Mirring Traditional Owners Aboriginal Corporation;

Council has a number strategic projects before it. For example Council officers have also been working on the development of a small town strategy for a number of townships in the Southern Grampians Shire, Coleraine being one of these townships.

A proposal that 'cleaned up' the zoning in the area while also providing a greater understanding of the longer term use of the land could be viewed more positively by Council.

In this we look forward to working with you, so your client can develop the amendment detail further.

Yours sincerely,

Andrew Goodsell
Director Planning and Development

EQUIPE
LAWYERS

Our Ref: AN: EQ20000290
Contact: Andrew Natoli
Phone: 9853 5000 / 0417 101 236
Email: andrew.natoli@equipelawyers.com.au

17 March 2021

Southern Grampians Shire Council
Attention: Parvesh Siroha
1 Market Place
Hamilton VIC 3124
By email: PSiroha@sthgrampians.vic.gov.au

Dear Mr Siroha

Proposal for rezoning
Rigby Brother Quarry - Work Authority No. 410
26 Templeton Street, Coleraine

We refer to our recent telephone discussion on 25 February 2021 and confirm that we act for Rigby Brothers Pty Ltd.

As you are aware, our client is the owner and operator of a hard rock quarry situated at 26 Templeton Street, Coleraine (**the Quarry**), which is operated under Work Authority No. 410 (**WA 410**).

The lots on which the Quarry is situated are currently in the Farming Zone (**FZ**).

Our client and related entities own lots adjoining the Quarry Land to the south, which are currently included in the Low Density Residential Zone (**LDRZ**). These lots are identified as Lot Nos. 2 to 5 (inclusive) on the attached aerial photo plan (**the LDRZ Lots**).

Our client and related entities also own lots opposite the LDRZ Lots across Pitcher Street, currently included in the Industrial 1 Zone (IN1Z). These lots are identified as Lot Nos. 7 to 15 (inclusive) on the attached aerial photo plan (**the IN1Z Lots**).

The Quarry Expansion

The Quarry has been operating since 1947, when it was initially established by the Wannon Shire Council.

Our client purchased the Quarry in 1969 and has been operating it since this time.

The Quarry extraction and stockpiling areas have increased over the preceding years. Further development of the Quarry is currently limited by the areas available within WA410 for extraction and the stockpiling of overburden.

In order to secure additional reserves of resource and to secure the future operations of the Quarry, our client proposes to apply to the Earth Resources Regulation Branch of Department of Jobs, Precincts and Regions (**ERR**) for a variation to WA410 and the approved Work Plan to include the LDRZ Lots.

Proposal for a combined permit application and request to rezone the LDRZ Lots to Farming Zone

As you are aware, under the LDRZ, extractive industry is a prohibited use and it is not currently possible for our client to apply for planning permission to expand the Quarry to include the LDRZ Lots.

Our client therefore proposes to rezone the LDRZ Lots to FZ in order to enable a planning permit application for the Work Plan Variation to be applied for. The proposed rezoning is depicted in the enclosed rezoning plan.

In order to vary WA410 and the Work Plan, our client will need to first apply to ERR for statutory endorsement of the Work Plan Variation under section 77TC of the *Mineral Resources (Sustainable Development) Act 1990*.

ERR have advised that, for it to be able to consider the Work Plan Variation, it must be satisfied that it is possible to apply for planning permission for the Work Plan Variation or that Council will consider an application for a planning permit for the Work Plan Variation concurrently with a request to rezone the affected land, pursuant to section 96A of the *Planning and Environment Act 1987* (**the PE Act**).

Specifically, ERR have requested that we seek written confirmation from Council that it would be prepared to assess the Quarry Expansion under this process.

Request for advice

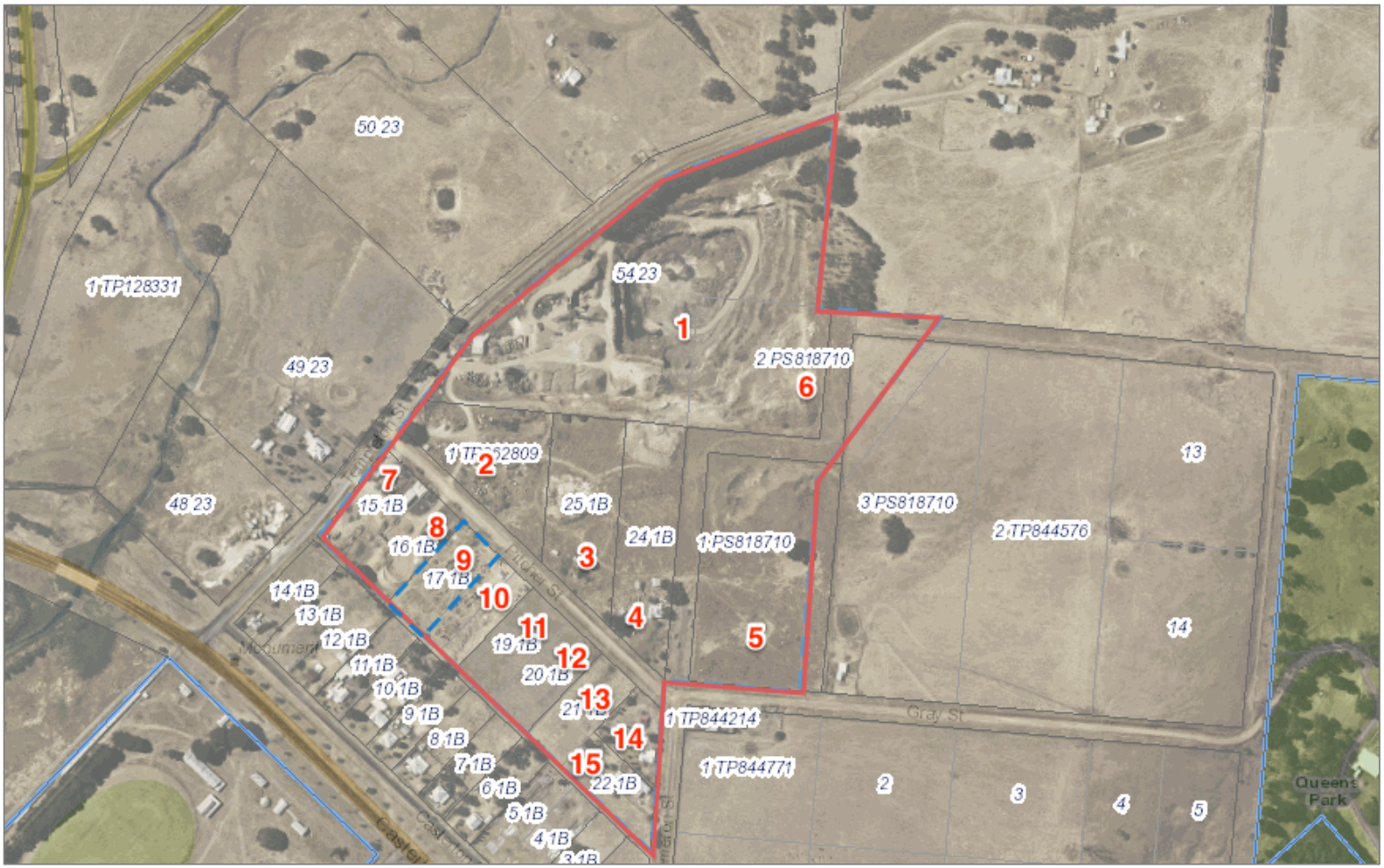
To facilitate the proposed Quarry Expansion, our client would be grateful if Council could provide written confirmation that it would be prepared to consider an application for a planning permit for the Work Plan Variation concurrently with a request to rezone the affected land, pursuant to section 96A of the *Planning and Environment Act 1987*.

Please contact me on 9853 5000 if you have any queries in relation to any aspect of this letter.

Yours faithfully

Andrew Natoli
Director
Equipe Lawyers

Encl.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7
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Grey St
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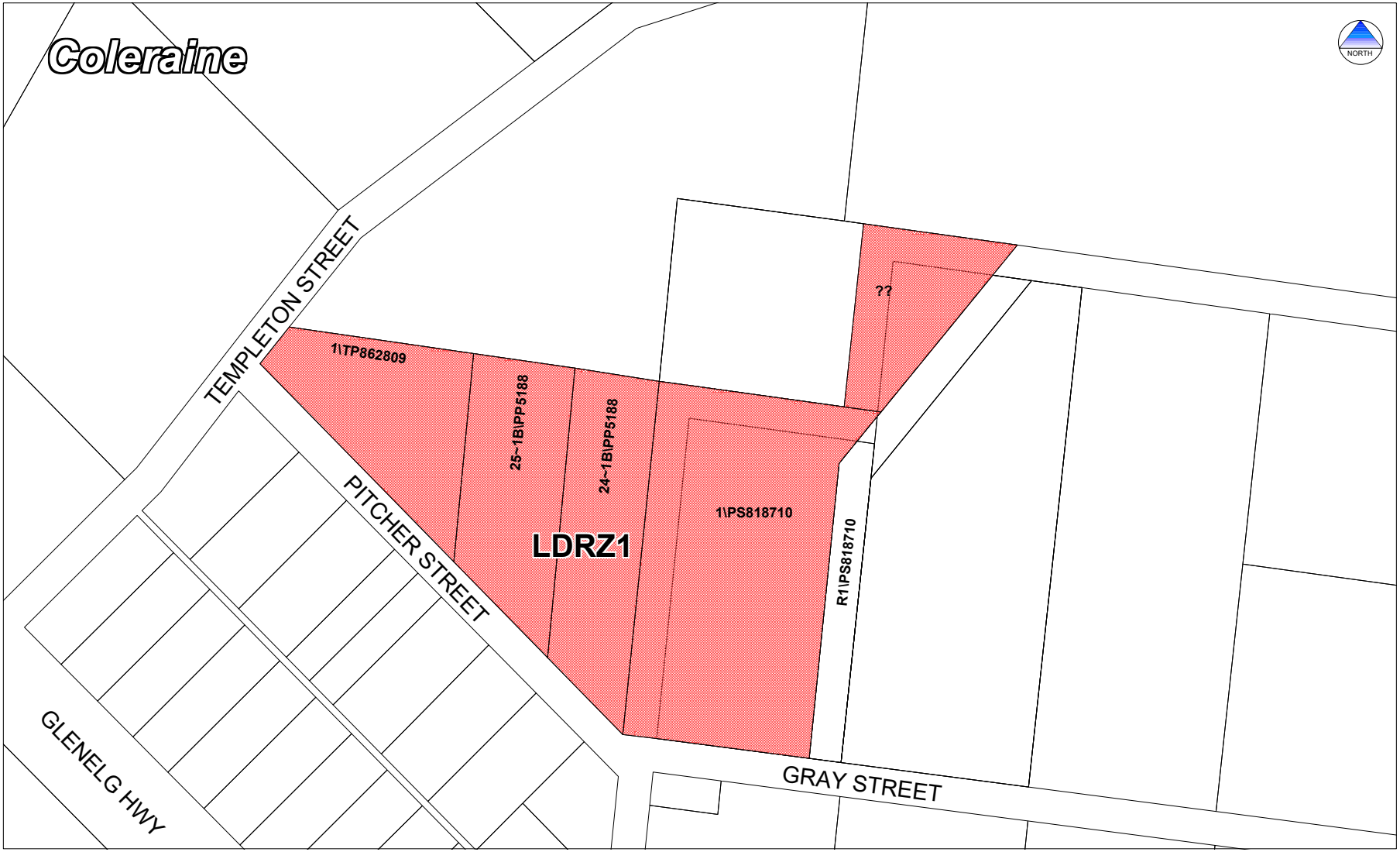
5
Queens Park



Scale: 1:3000

0 50 100 150

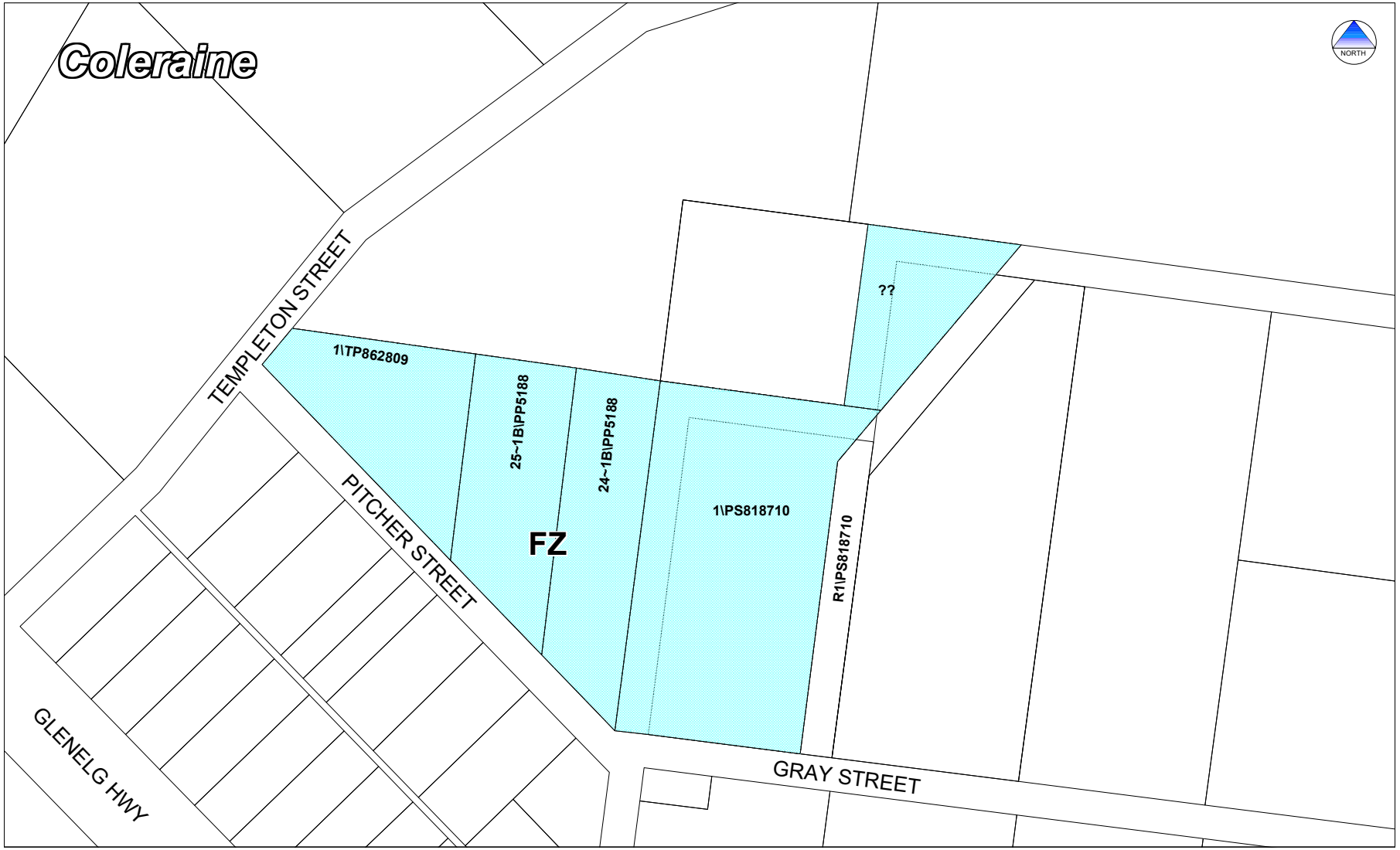
Metres

LDRZ - Low Density Residential

Southern Grampians Planning Scheme

CURRENT ZONES

Drawing: A4-DRAFT A Author: CLB	Project No: R21_001
RigbyBrosReZoningPlans_0221.WOR	Figure: 1
Date: 26 Feb 2021 Draft A	



Scale: 1:3000
0 50 100 150
Metres

FZ - Farming

Southern Grampians Planning Scheme

PROPOSED ZONES

Drawing: A4-DRAFT A Author: CLB	Project No: R21_001
RigbyBrosReZoningPlans_0221.WOR	Figure: 2
Date: 26 Feb 2021 Draft A	

PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

From www.planning.vic.gov.au at 29 April 2024 11:27 AM

PROPERTY DETAILS

Address:	**26 TEMPLETON STREET COLERAINE 3315**
Lot and Plan Number:	**More than one parcel - see link below**
Standard Parcel Identifier (SPI):	**More than one parcel - see link below**
Local Government Area (Council):	**SOUTHERN GRAMPIANS** www.sthgrampians.vic.gov.au
Council Property Number:	**512**
Planning Scheme:	**Southern Grampians** Planning Scheme - Southern Grampians
Directory Reference:	**Vicroads 507 Q8**

This property has 2 parcels. For full parcel details get the free Property report at Property Reports

UTILITIES

Rural Water Corporation:	**Southern Rural Water**
Urban Water Corporation:	**Wannon Water**
Melbourne Water:	**Outside drainage boundary**
Power Distributor:	**POWERCOR**

STATE ELECTORATES

Legislative Council:	**WESTERN VICTORIA**
Legislative Assembly:	**LOWAN**

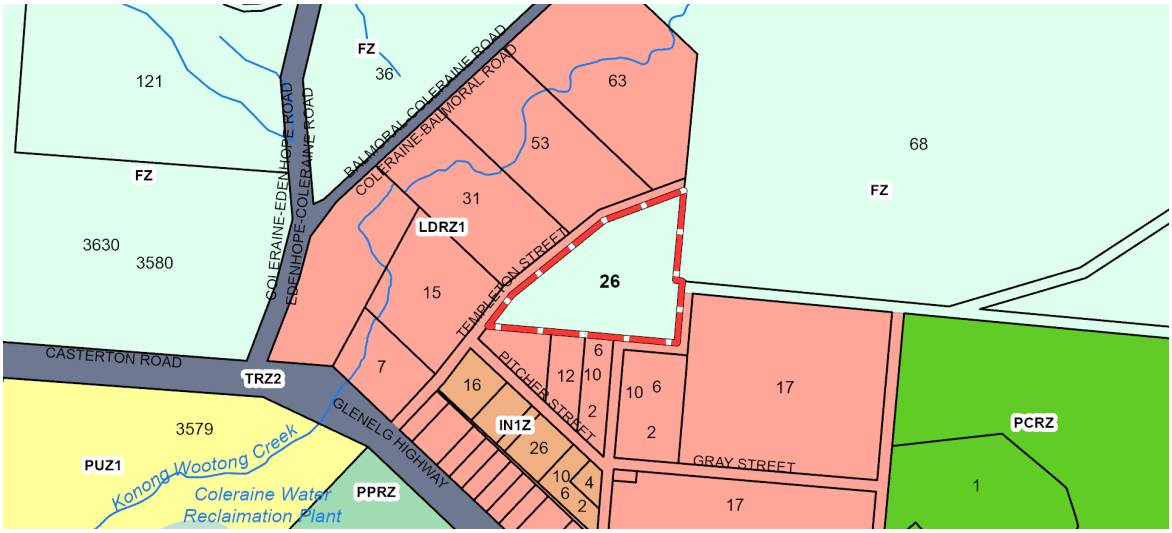
OTHER

Registered Aboriginal Party: **Gunditj Mirring Traditional Owners Aboriginal Corporation**

View location in VicPlan

Planning Zones

FARMING ZONE (FZ)
SCHEDULE TO THE FARMING ZONE (FZ)



FZ - Farming
IN1Z - Industrial 1
LDRZ - Low Density Residential
PCRZ - Public Conservation and Resource
PPRZ - Public Park and Recreation
PUZ1 - Public Use-Service and Utility
TRZ2 - Principal Road Network
Water area
Water course

Note: labels for zones may appear outside the actual zone - please compare the labels with the legend.

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PLANNING PROPERTY REPORT

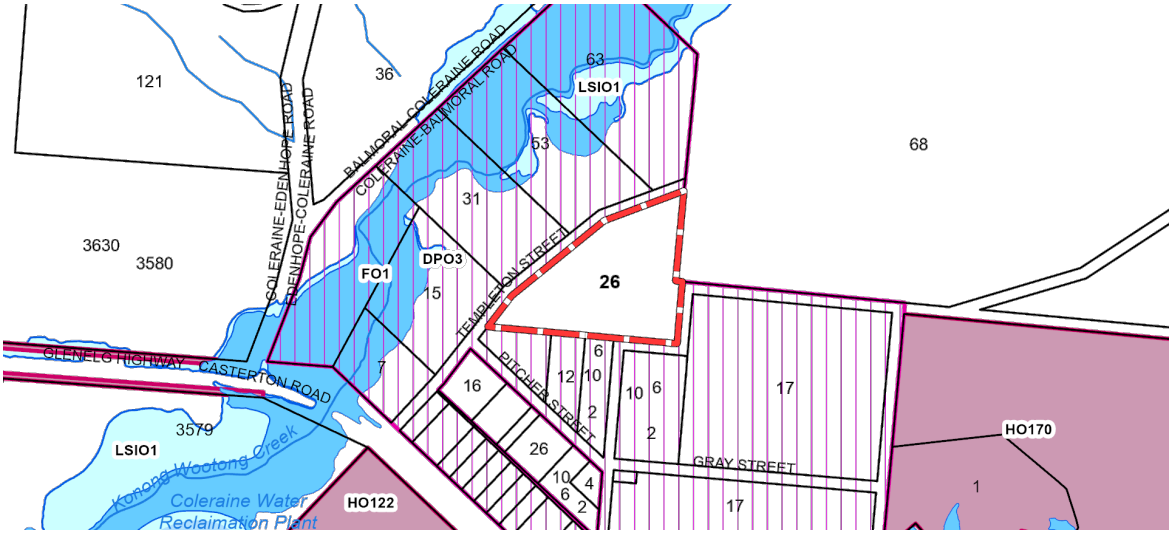
Planning Overlay

None affecting this land - there are overlays in the vicinity

OTHER OVERLAYS

Other overlays in the vicinity not directly affecting this land

DEVELOPMENT PLAN OVERLAY (DPO)
FLOODWAY OVERLAY (FO)
HERITAGE OVERLAY (HO)
LAND SUBJECT TO INUNDATION OVERLAY (LSIO)



Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

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PLANNING PROPERTY REPORT

Areas of Aboriginal Cultural Heritage Sensitivity

All or part of this property is an 'area of cultural heritage sensitivity'.

'Areas of cultural heritage sensitivity' are defined under the Aboriginal Heritage Regulations 2018, and include registered Aboriginal cultural heritage places and land form types that are generally regarded as more likely to contain Aboriginal cultural heritage.

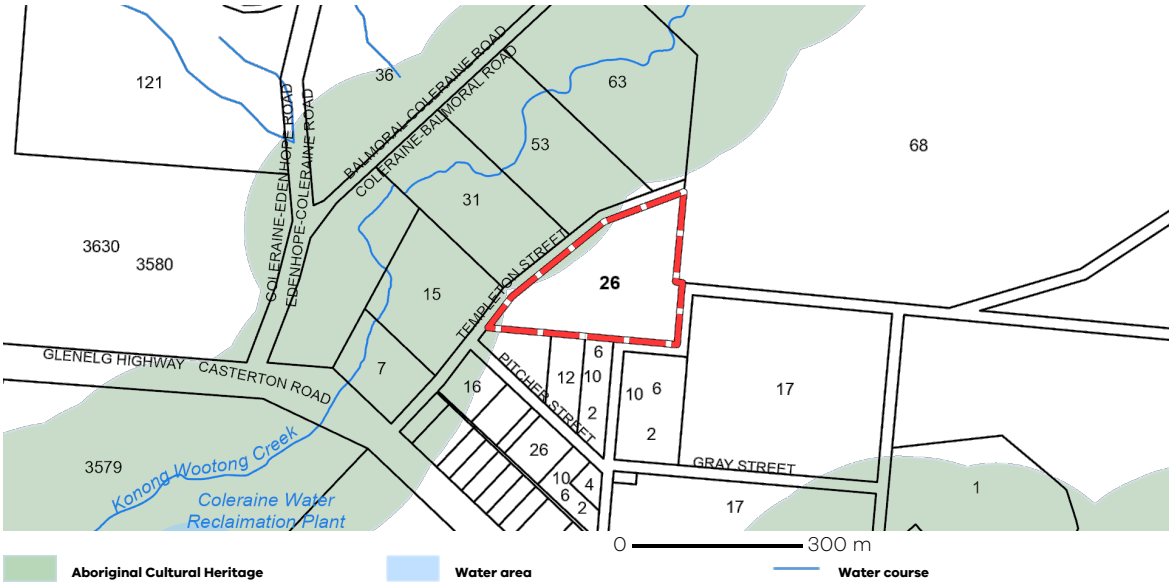
Under the Aboriginal Heritage Regulations 2018, 'areas of cultural heritage sensitivity' are one part of a two part trigger which require a 'cultural heritage management plan' be prepared where a listed 'high impact activity' is proposed.

If a significant land use change is proposed (for example, a subdivision into 3 or more lots), a cultural heritage management plan may be triggered. One or two dwellings, works ancillary to a dwelling, services to a dwelling, alteration of buildings and minor works are examples of works exempt from this requirement.

Under the Aboriginal Heritage Act 2006, where a cultural heritage management plan is required, planning permits, licences and work authorities cannot be issued unless the cultural heritage management plan has been approved for the activity.

For further information about whether a Cultural Heritage Management Plan is required go to http://www.aav.nrms.net.au/aavQuestion1.aspx

More information, including links to both the Aboriginal Heritage Act 2006 and the Aboriginal Heritage Regulations 2018, can also be found here - https://www.aboriginalvictoria.vic.gov.au/aboriginal-heritage-legislation



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PLANNING PROPERTY REPORT

Further Planning Information

Planning scheme data last updated on 7 December 2023.

A **planning scheme** sets out policies and requirements for the use, development and protection of land.
This report provides information about the zone and overlay provisions that apply to the selected land.
Information about the State and local policy, particular, general and operational provisions of the local planning scheme that may affect the use of this land can be obtained by contacting the local council or by visiting https://www.planning.vic.gov.au

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the ***Planning and Environment Act 1987.***
It does not include information about exhibited planning scheme amendments, or zonings that may abut the land.
To obtain a Planning Certificate go to Titles and Property Certificates at Landata - https://www.landata.vic.gov.au

For details of surrounding properties, use this service to get the Reports for properties of interest.

To view planning zones, overlay and heritage information in an interactive format visit https://mapshare.maps.vic.gov.au/vicplan

For other information about planning in Victoria visit https://www.planning.vic.gov.au

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PLANNING PROPERTY REPORT

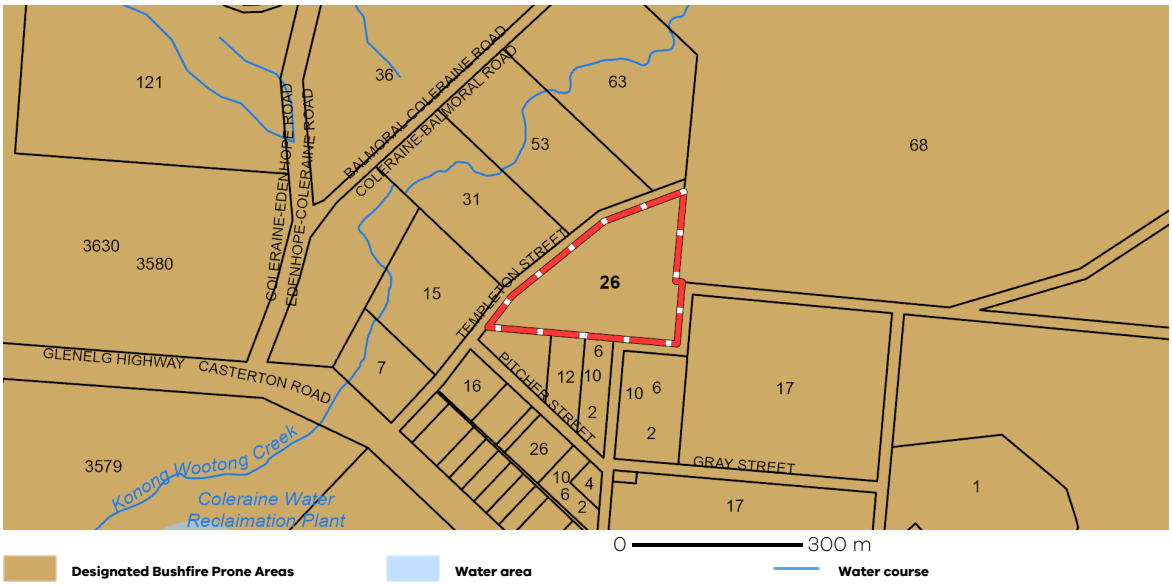
Environment, Land, Water and Planning

Designated Bushfire Prone Areas

This property is in a designated bushfire prone area. Special bushfire construction requirements apply to the part of the property mapped as a designated bushfire prone area (BPA). Planning provisions may apply.

Where part of the property is mapped as BPA, if no part of the building envelope or footprint falls within the BPA area, the BPA construction requirements do not apply.

Note: the relevant building surveyor determines the need for compliance with the bushfire construction requirements.



Designated BPA are determined by the Minister for Planning following a detailed review process. The Building Regulations 2018, through adoption of the Building Code of Australia, apply bushfire protection standards for building works in designated BPA.

Designated BPA maps can be viewed on VicPlan at https://mapshare.vic.gov.au/vicplan/ or at the relevant local council.

Create a BPA definition plan in VicPlan to measure the BPA.

Information for lot owners building in the BPA is available at https://www.planning.vic.gov.au.

Further information about the building control system and building in bushfire prone areas can be found on the Victorian Building Authority website https://www.vba.vic.gov.au. Copies of the Building Act and Building Regulations are available from http://www.legislation.vic.gov.au. For Planning Scheme Provisions in bushfire areas visit https://www.planning.vic.gov.au.

Native Vegetation

Native plants that are indigenous to the region and important for biodiversity might be present on this property. This could include trees, shrubs, herbs, grasses or aquatic plants. There are a range of regulations that may apply including need to obtain a planning permit under Clause 52.17 of the local planning scheme. For more information see Native Vegetation (Clause 52.17) with local variations in Native Vegetation (Clause 52.17) Schedule

To help identify native vegetation on this property and the application of Clause 52.17 please visit the Native Vegetation Information Management system https://nvim.delwp.vic.gov.au/ and Native vegetation (environment.vic.gov.au) or please contact your relevant council.

You can find out more about the natural values on your property through NatureKit NatureKit (environment.vic.gov.au)

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PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

Extractive Industry Work Authorities (WA)

All or parts of this property are within 500 metres of Extractive Industry Work Authorities (current).

On 22 March 2022, Amendment VC219 introduced changes to all planning schemes in Victoria to support the ongoing operation of extractive industry across Victoria and increase amenity protection for nearby accommodation in rural zones.

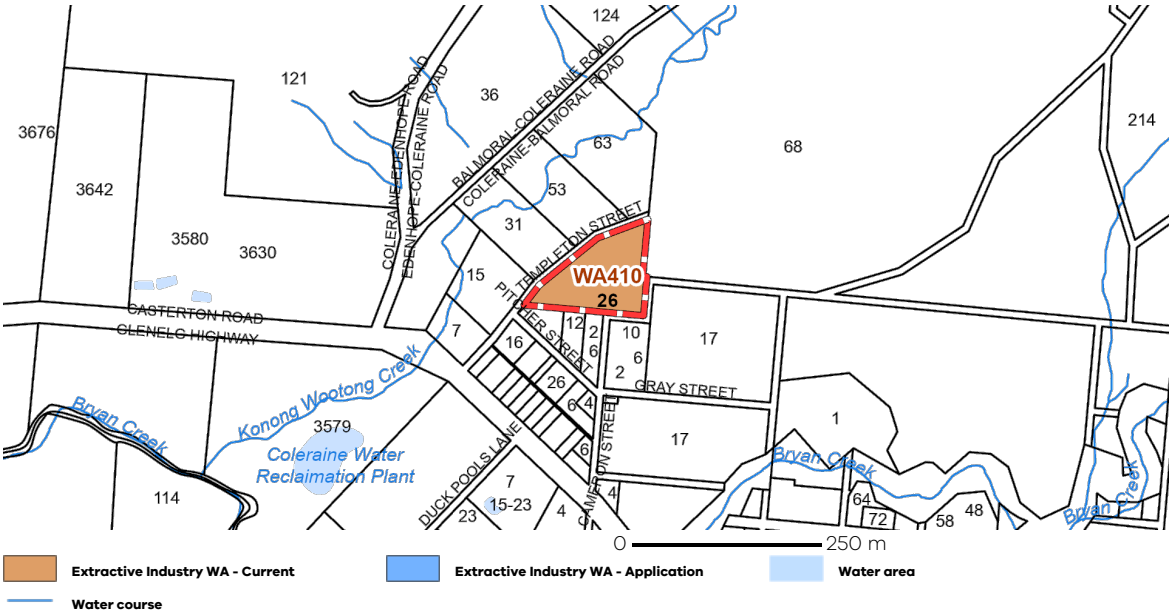
The amendment made changes to the Rural Living Zone, Green Wedge Zone, Green Wedge Zone A, Rural Activity Zone, Farming Zone and Rural Conservation Zone, introducing a permit requirement for accommodation and building and works associated with accommodation that is located within 500 metres from the nearest title boundary of land on which a work authority has been applied for or granted under the Mineral Resources (Sustainable Development) Act 1990 (MRSD Act).

The Amendment also introduced new referral and notice requirements, and decision guidelines.

VicPlan mapping shows property information, including whether a work authority application has been made or approved under the MRSD Act.

Guidance on accessing work authority maps is detailed at the DELWP Extractive Resources (planning.vic.gov.au) webpage.

Further information on extractive and mining activities in Victoria can be found on the (GeoVic - Earth Resources) website which is maintained by the Resources Branch within the Department of Jobs, Precincts and Regions. Limited information is available for unregistered users (anonymous user).



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Imaged Document Cover Sheet

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Document Identification	**PS914025N**
Number of Pages (excluding this cover sheet)	**2**
Document Assembled	**12/06/2024 13:30**

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The Victorian Government acknowledges the Traditional Owners of Victoria and pays respects to their ongoing connection to their Country, History and Culture. The Victorian Government extends this respect to their Elders, past, present and emerging.

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 12505 FOLIO 230 Security no : 124115742390H
Produced 12/06/2024 01:30 PM

LAND DESCRIPTION

Lot 1 on Plan of Subdivision 914025N.
PARENT TITLES :
Volume 03588 Folio 535 Volume 08454 Folio 771
Created by instrument PS914025N 30/09/2023

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
RIGBY BROS & CO PTY LTD of QUARRY ROAD COLERAINE VIC 3315
AX366991Q 19/10/2023

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE AX750075L 20/02/2024
NATIONAL AUSTRALIA BANK LTD

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE PS914025N FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NUMBER		STATUS	DATE
AX750074N (E)	DISCHARGE OF MORTGAGE	Registered	20/02/2024
AX750075L (E)	MORTGAGE	Registered	20/02/2024

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

ADMINISTRATIVE NOTICES

NIL

eCT Control 16089P NATIONAL AUSTRALIA BANK LTD
Effective from 20/02/2024

DOCUMENT END

Delivered by LANDATA®, timestamp 12/06/2024 13:30 Page 1 of 2

PLAN OF SUBDIVISION

EDITION 1

PS914025N

Location of Land

Parish: KONONG WOOTONG
Township: ———
Section: 23
Crown Allotment: 53 & 54
Crown Portion: ———

Title References:
Vol. 3588 Fol. 535
Vol. 8454 Fol. 771

Last Plan Reference: TP349402U & TP354337Y

Postal Address: (at time of subdivision) 26 & 68 TEMPLETON STREET, COLERAINE, VIC., 3315

MGA2020 Co-ordinates: (of approx centre of land in plan) E 560 700 N 5 839 800 Zone 54

Council Name: Southern Grampians Shire Council

Council Reference Number: TPS/4/2023
Planning Permit Reference: Planning permit not required
SPEAR Reference Number: S208580B

Certification

This plan is certified under section 6 of the Subdivision Act 1988

Statement of Compliance

This is a statement of compliance issued under section 21 of the Subdivision Act 1988

Public Open Space

A requirement for public open space under section 18 or 18A of the Subdivision Act 1988 has not been made

Digitally signed by: Anita Watapuluwa for Southern Grampians Shire Council on 18/05/2023

Vesting of Roads or Reserves

Identifier	Council/Body/Person
Nil	Nil

Notations

Staging: This is not a staged subdivision.
Planning Permit No. N/A

Survey: This plan is based on survey.
Connected to MGA2020 Coordinates: YES
Proclaimed Survey Area: NO
Permanent Marks connected to: 16

Depth Limitation: 15·24 METRES BELOW THE SURFACE. APPLIES TO ALL THE LAND IN THIS PLAN.

Notations

THE DIMENSIONS SHOWN UNDERLINED ARE NOT THE RESULT OF THIS SURVEY AND ARE DERIVED FROM TITLE.

THE AREA OF LOT 2 IS OBTAINED BY DEDUCTION FROM TITLE.

THIS IS A SPEAR PLAN.

Easement Information

LEGEND: A - Appurtenant Easement E - Encumbering Easement R - Encumbering Easement (Road)

Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited/In Favour Of
E-1 & E-3	CARRIAGEWAY	10·06	CE C456607	ALLOTMENT 3 SECTION 4 PARISH OF KONONG WOOTONG Vol 7662 Fol 043
E-2 & E-3	POWERLINE	20	THIS PLAN - SECTION 88 OF THE ELECTRICITY INDUSTRY ACT 2000	POWERCOR AUSTRALIA LIMITED

BRAYLEY & HAYES
LAND & ENGINEERING SURVEYORS
85 KENNEDY STREET, HAMILTON, 3300
PHONE: (03) 5571 9171
EMAIL: admin@brayleyandhayes.com.au

SURVEYORS FILE REF: 22095 VER 1 20/02/23

ORIGINAL SHEET SIZE: A3

SHEET 1 OF 2

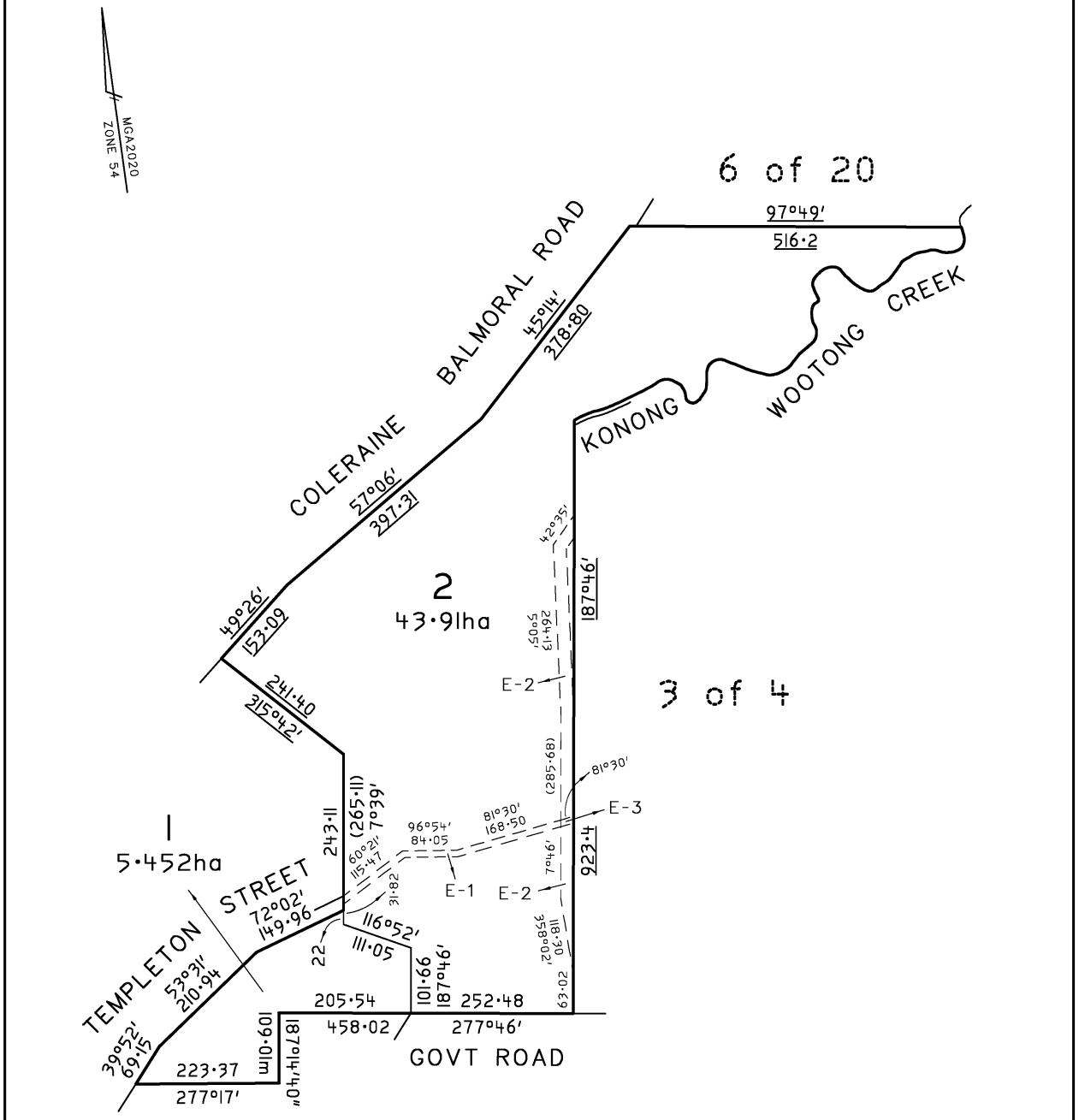
Digitally signed by: Mark Gregory Dore, Licensed Surveyor, Surveyor's Plan Version (1), 22/02/2023, SPEAR Ref: S208580B

PLAN REGISTERED
TIME: 9.52am DATE: 30/09/23

Assistant Registrar of Titles DS

Delivered by LANDATA®, timestamp 12/06/2024 13:30 Page 2 of 2

PS914025N



SURVEYORS FILE REF: 22095 VER 1 20/02/23

BRAYLEY & HAYES LAND & ENGINEERING SURVEYORS 85 KENNEDY STREET, HAMILTON, 3300 PHONE: (03) 5571 9171 EMAIL: admin@brayleyandhayes.com.au	SCALE 1:6000 60 0 120 240 LENGTHS ARE IN METRES	ORIGINAL SHEET SIZE: A3	SHEET 2
	Digitally signed by: Mark Gregory Dore, Licensed Surveyor, Surveyor's Plan Version (1), 22/02/2023, SPEAR Ref: S208580B	Digitally signed by: Southern Grampians Shire Council, 18/05/2023, SPEAR Ref: S208580B	

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REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 12233 FOLIO 838 Security no : 124115742389J
Produced 12/06/2024 01:30 PM

LAND DESCRIPTION

Lot 2 on Plan of Subdivision 818710H.
PARENT TITLES :
Volume 04008 Folio 544
Volume 10136 Folio 818 to Volume 10136 Folio 819
Created by instrument AT439934J 17/07/2020

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
RIGBY BROS. & CO. PTY LTD of 50 THOMPSON STREET HAMILTON VIC 3300
AT439934J 17/07/2020

ENCUMBRANCES, CAVEATS AND NOTICES

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DIAGRAM LOCATION

SEE PS818710H FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NUMBER		STATUS	DATE
AX749975E (E)	DISCHARGE OF MORTGAGE	Registered	20/02/2024
AX773529S (E)	TRANSFER CONTROL OF ECT	Completed	28/02/2024

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

ADMINISTRATIVE NOTICES

NIL

eCT Control 20184W MELVILLE ORTON & LEWIS
Effective from 28/02/2024

DOCUMENT END

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Document Type	**Plan**
Document Identification	**PS818710H**
Number of Pages (excluding this cover sheet)	**2**
Document Assembled	**12/06/2024 13:30**

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PLAN OF SUBDIVISION

Under Section 35 of the Subdivision Act 1988

EDITION 1 | **PS818710H**

Location of Land

Parish: COLERAINE
Township: COLERAINE
Section: ———
Crown Allotments: 10 & 11
& PARTS OF FORMER GOVT. ROAD

Title References:
Vol.4008 Fol.544 (PART)
Vol.9503 Fol.861 Vol.10136 Fol.818

Last Plan Reference: TP381X (Lot 1)
TP845912D (Lot 1)
TP844576X (Lot 1)

Postal Address: (at time of subdivision) GRAY STREET, COLERAINE, VIC., 3315

MGA94 Co-ordinates: (of approx centre of land in plan) E 560 500 N 5 839 200 Zone 54

Council Name: Southern Grampians Shire Council

Council Reference Number: PS/2/2018
Planning Permit Reference: TP/75/2018
SPEAR Reference Number: S126792C

This is a plan under section 35 of the Subdivision Act 1988 which does not create any additional lots.

Certification

This plan is certified under section 6 of the Subdivision Act 1988

Statement of Compliance

This is a statement of compliance issued under section 21 of the Subdivision Act 1988

Digitally signed by: Rhassel Mhasho for Southern Grampians Shire Council on 16/08/2018

Vesting of Roads or Reserves

Roads and reserves vest in the council/body/person named when appropriate vesting date is recorded or transfer registered.

Identifier	Council/Body/Person
ROAD R1	SOUTHERN GRAMPIANS SHIRE COUNCIL

Notations

Staging: This is not a staged subdivision.
Planning Permit No. N/A

Survey: This plan is based on survey.

Connected to MGA94 Coordinates: YES

Proclaimed Survey Area: NO

Permanent Marks connected to: 16 (KONONG WOOTONG), 15, 50 & 81

Depth Limitation: DOES NOT APPLY.

Notations

THIS IS A SPEAR PLAN.

GOVERNMENT GAZETTE PAGE 425 G10 08/03/2018 CLOSES THOSE PARTS OF THE FORMER GOVERNMENT AND SHIRE ROADS WHICH ARE INCORPORATED INTO LOTS 1 AND 2.

PART OF ROAD R1 IS ALSO KNOWN AS PART OF ROAD R1 ON TP381X.

LAND TO BE ACQUIRED : ROAD R1

Easement Information

LEGEND: A - Appurtenant Easement E - Encumbering Easement R - Encumbering Easement (Road)

Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited/In Favour Of
NIL	—	—	—	—

VESTING DATES & TRANSFER REGISTRATION DATES OF ACQUIRED LAND

Land affected	Land acquired by compulsory process prior to certification			Land acquired by compulsory process after registration of plan				Land acquired by agreement	LTO reference of transfers or notification of vesting dates	Assistant Registrar of Titles
	Vesting date	Gov't Gaz. No.	Gov't Gaz. Page	Date of recording of vesting date	Vesting date	Gov't Gaz. No.	Gov't Gaz. Page	Date of registration of transfer		Signature
ROAD R1	8/03/18	10	425							GV

BRAYLEY & HAYES
LAND & ENGINEERING SURVEYORS
85 KENNEDY STREET, HAMILTON, 3300
PHONE: (03) 5571 9171
EMAIL: admin@brayleyandhayes.com.au

SURVEYORS FILE REF: 16034 VER 1 25/06/18

ORIGINAL SHEET SIZE: A3 SHEET 1 OF 2

Digitally signed by: Mark G Dore, Licensed Surveyor, Surveyor's Plan Version (1), 30/07/2018, SPEAR Ref: S126792C

PLAN REGISTERED
TIME: 12:20pm DATE: 22/07/20
Assistant Registrar of Titles G Venn

Amended by: Mark G Dore, Licensed Surveyor 06/07/2020.

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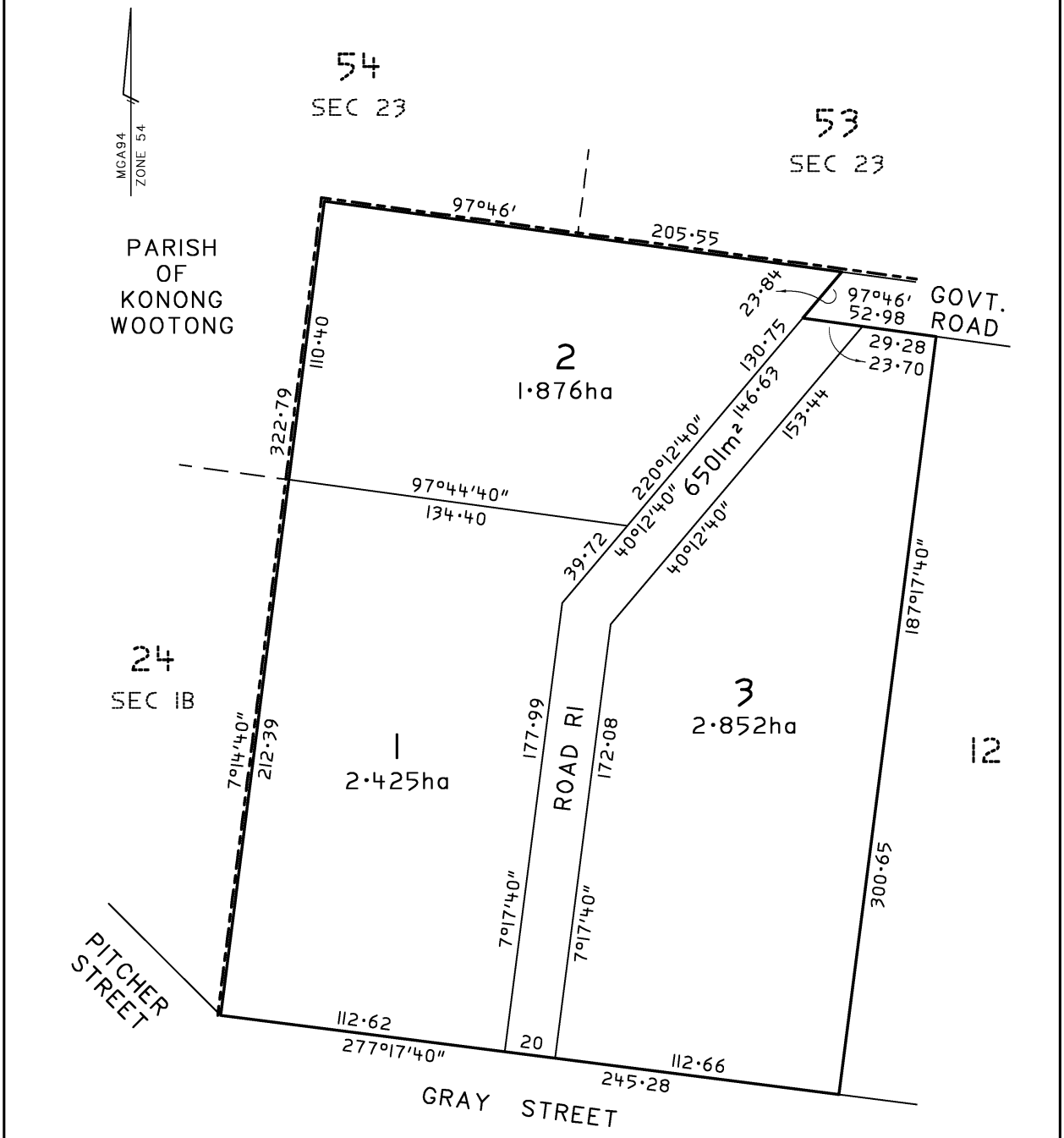
PS818710H



SURVEYORS FILE REF: 16034 VER 1 25/06/18

BRAYLEY & HAYES LAND & ENGINEERING SURVEYORS 85 KENNEDY STREET, HAMILTON, 3300 PHONE: (03) 5571 9171 EMAIL: admin@brayleyandhayes.com.au	SCALE 1:1500 15 0 30 60 LENGTHS ARE IN METRES	ORIGINAL SHEET SIZE: A3	SHEET 2
	Digitally signed by: Mark G Dore, Licensed Surveyor, Surveyor's Plan Version (1), 30/07/2018, SPEAR Ref: S126792C	Digitally signed by: Southern Grampians Shire Council, 16/08/2018, SPEAR Ref: S126792C	

Amended by: Mark G Dore, Licensed Surveyor 06/07/2020.

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REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 05737 FOLIO 230 Security no : 124115743788N
Produced 12/06/2024 01:55 PM

CROWN GRANT

LAND DESCRIPTION

Crown Allotment 24 Section 1B Township of Coleraine Parish of Konong Wootong.

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
STANLEY GORDON RIGBY of COLERAINE
N767157K 13/10/1988

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE V050551T 21/10/1997
NATIONAL AUSTRALIA BANK LTD

Any crown grant reservations exceptions conditions limitations and powers noted on the plan or imaged folio set out under DIAGRAM LOCATION below. For details of any other encumbrances see the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP758273W FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

ADMINISTRATIVE NOTICES

NIL

eCT Control 16089P NATIONAL AUSTRALIA BANK LTD
Effective from 22/10/2016

DOCUMENT END

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Number of Pages (excluding this cover sheet)	**3**
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TITLE PLAN		EDITION 2	TP 758273W

Location of Land

Parish: Koonong Wootong
Township: Coleraine
Section: 1B
Crown Allotment: 24
Crown Portion:

Last Plan Reference:
Derived From: VOL 5737 FOL 230
Depth Limitation: 50 FEET

Notations

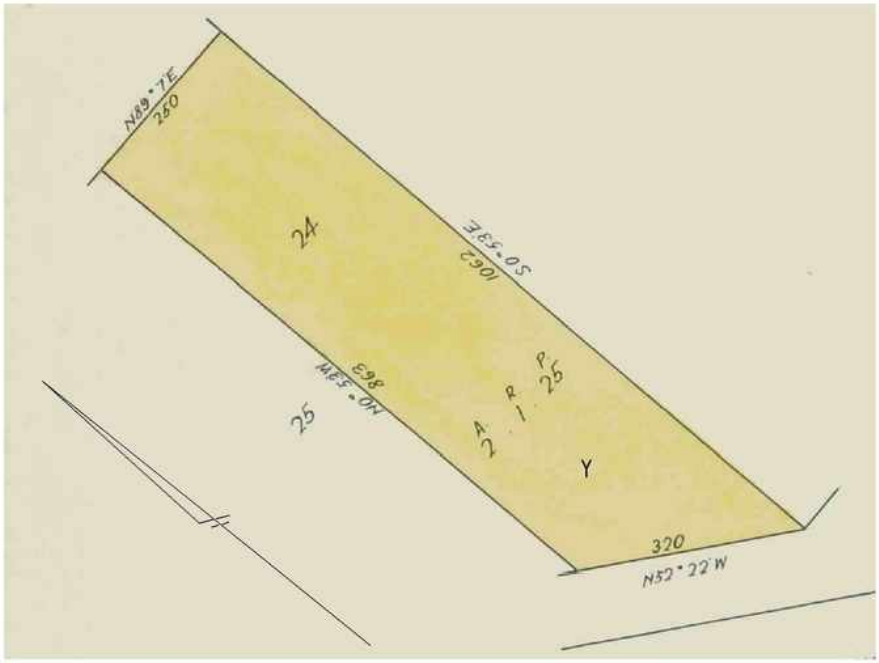
SUBJECT TO THE RESERVATIONS EXCEPTIONS CONDITIONS AND POWERS CONTAINED IN CROWN GRANT VOL. 5737 FOL. 230 AND NOTED ON SHEET 2 OF THIS PLAN

ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN

Description of Land / Easement Information

THIS PLAN HAS BEEN PREPARED FOR THE LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES AS PART OF THE LAND TITLES AUTOMATION PROJECT
COMPILED: 25/11/2002
VERIFIED: BC

COLOUR CODE
Y=YELLOW



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	TITLE PLAN		TP 758273W

LAND DESCRIPTION INCLUDING RESERVATIONS EXCEPTIONS CONDITIONS AND POWERS SHOWN ON THE CROWN GRANT

Section 1B

ALL THAT PIECE OF LAND in the said State containing *two acres one rood and twenty five perches more or less being allotment twenty four* in the Township adjoining the South of Colonnade Parish of Konong Wootong County of Dundas

delineated with the measurements and abuttals thereof in the map drawn in the margin of these presents and therein coloured yellow PROVIDED nevertheless that the grantee shall be entitled to sink wells for water and to the use and enjoyment of any wells or springs of water upon or within the boundaries of the said land for any and for all purposes as though he held the land without limitation as to depth EXCEPTING nevertheless unto Us Our heirs and successors all gold and silver and minerals as defined in the *Mines Act* 1928 in upon or under or within the boundaries of the land hereby granted AND ALSO reserving to Us Our heirs and successors free liberty and authority for Us Our heirs and successors and Our and their licensees agents and servants at any time or times hereafter to enter upon the said land and to search and mine therein for gold silver and minerals as aforesaid and to extract and remove therefrom any such gold silver and minerals and to search for and work dispose of and carry away the said gold silver and minerals lying in upon or under the land hereby granted and for the purposes aforesaid to sink shafts make drives erect machinery and to carry on any works and do any other things which may be necessary or usual in mining and with all other incidents that are necessary to be used for the getting of the said gold silver and minerals and the working of all mines seams lodes and deposits containing such gold silver and minerals in upon or under the land hereby granted

PROVIDED NEVERTHELESS **that the land hereby granted shall not be maintained or used as a site for more than one residence and not more than one building for business purposes.**
AND PROVIDED FURTHER that the said land is and shall be subject to be resumed for mining purposes under Section 168 of the *Land Act* 1928.
AND PROVIDED ALSO that the said land is and shall be subject to the right of any person being the holder of a miner's right or of a mining lease or mineral lease under the *Mines Act* 1928 or any corresponding previous enactment to enter therein and to mine for gold silver or minerals within the meaning of the said Act and to erect and ~~to~~ occupy mining plant or machinery thereon in the same manner and under the same conditions and provisions as those to which such person ~~had at the date of these presents the right~~ *would at the time of entry be entitled* to mine for gold and silver in and upon Crown lands. PROVIDED that compensation shall be paid to the said GRANTEE his heirs executors administrators assigns and transferees by such person for surface damage to be done to such lands by reason of mining thereon such compensation to be determined as provided for the time being by law ~~for the case of land resumed for mining purposes~~ and the payment thereof to be a condition precedent to such right of entry.

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MODIFICATION TABLE

RECORD OF ALL ADDITIONS OR CHANGES TO THE PLAN

PLAN NUMBER

TP758273W

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AFFECTED LAND/PARCEL	LAND/PARCEL IDENTIFIER CREATED	MODIFICATION	DEALING NUMBER	DATE	EDITION NUMBER	ASSISTANT REGISTRAR OF TITLES
LAND HEREIN		RECTIFY CROWN DESCRIPTION	AE395033V		2	RM

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REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 06925 FOLIO 919

Security no : 124115743483U
Produced 12/06/2024 01:50 PM

CROWN GRANT

LAND DESCRIPTION

Crown Allotment 25 Section 1B Township of Coleraine Parish of Konong Wootong.

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
DELMA JOYCE RIGBY of 25 PORTLAND ROAD COLERAINE VIC 3315
AL142794W 11/06/2014

ENCUMBRANCES, CAVEATS AND NOTICES

Any crown grant reservations exceptions conditions limitations and powers noted on the plan or imaged folio set out under DIAGRAM LOCATION below. For details of any other encumbrances see the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP686544Q FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 12 PITCHER STREET COLERAINE VIC 3315

DOCUMENT END

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Document Type	**Plan**
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Number of Pages (excluding this cover sheet)	**3**
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TITLE PLAN		EDITION 2	TP 686544Q

Location of Land

Parish: Koonong Wootong
Township: Coleraine
Section: 1B
Crown Allotment: 25
Crown Portion:

Last Plan Reference:
Derived From: VOL 6925 FOL 919
Depth Limitation: 50 FEET

Notations

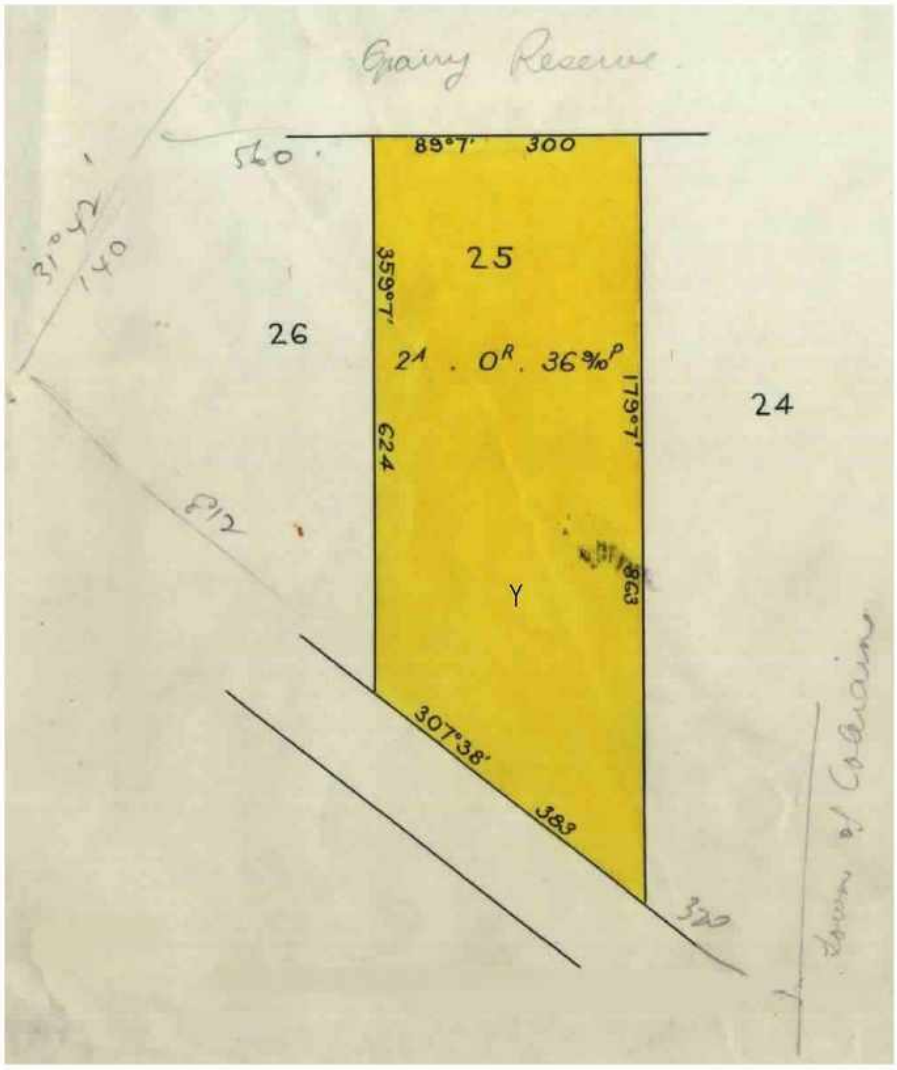
SUBJECT TO THE RESERVATIONS EXCEPTIONS CONDITIONS AND POWERS CONTAINED IN CROWN GRANT VOL. 6925 FOL. 919 AND NOTED ON SHEET 2 OF THIS PLAN

ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN

Description of Land / Easement Information

THIS PLAN HAS BEEN PREPARED FOR THE LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES AS PART OF THE LAND TITLES AUTOMATION PROJECT
COMPILED: 14/11/2000
VERIFIED: MP

COLOUR CODE
Y=YELLOW



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TITLE PLAN		TP 686544Q

LAND DESCRIPTION INCLUDING RESERVATIONS EXCEPTIONS CONDITIONS AND POWERS SHOWN ON THE CROWN GRANT

Section 1B

ALL THAT PIECE OF LAND in the said State containing two acres thirty-six perches and nine-tenths of a perch more or less being Allotment twenty-five in the Township ~~adjoining the Town~~ of Coleraine Parish of Konong Wootong County of Dundas

delineated with the measurements and abuttals thereof in the map drawn in the margin of these presents and therein colored yellow PROVIDED nevertheless that the grantee shall be entitled to sink wells for water and to the use and enjoyment of any wells or springs of water upon or within the boundaries of the said land for any and for all purposes as though he held the land without limitation as to depth EXCEPTING nevertheless unto Us Our heirs and successors all gold and silver and minerals as defined in the *Mines Act* 1928 in upon or under or within the boundaries of the land hereby granted AND reserving to Us Our heirs and successors free liberty and authority for Us Our heirs and successors and Our and their licensees agents and servants at any time or times hereafter to enter upon the said land and to search and mine therein for gold silver and minerals as aforesaid and to extract and remove therefrom any such gold silver and minerals and to search for and work dispose of and carry away the said gold silver and minerals lying in upon or under the land hereby granted and for the purposes aforesaid to sink shafts make drives erect machinery and to carry on any works and do any other things which may be necessary or usual in mining and with all other incidents that are necessary to be used for the getting of the said gold silver and minerals and the working of all mines seams lodes and deposits containing such gold silver and minerals in upon or under the land hereby granted AND ALSO reserving to Us Our heirs and successors—

(i) all petroleum as defined in the *Mines (Petroleum) Act* 1935 on or below the surface of the said land and
(ii) the right of access for the purpose of searching for and for the operations of obtaining such petroleum in any part or parts of the said land and
(iii) rights of way for access and for pipe-lines and other purposes necessary for obtaining and conveying such petroleum in the event of such petroleum being obtained in any part or parts of the said land.

PROVIDED ALWAYS that the said land is and shall be subject to be resumed for mining purposes under Section 168 of the *Land Act* 1928.

AND PROVIDED also that the said land is and shall be subject to the right of any person being the holder of a miner's right or of a mining lease or mineral lease under the *Mines Act* 1928 or any corresponding previous enactment to enter therein and to mine for gold silver or minerals within the meaning of the said Act and to erect and occupy mining plant or machinery thereon in the same manner and under the same conditions and provisions as those to which such person would for the time being be entitled to mine for gold and silver in and upon Crown lands PROVIDED that compensation shall be paid to the said GRANTEE his executors administrators assigns or transferees by such person for surface damage to be done to such land by reason of mining thereon such compensation to be determined as provided for the time being by law and the payment thereof to be a condition precedent to such right of entry.

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MODIFICATION TABLE

RECORD OF ALL ADDITIONS OR CHANGES TO THE PLAN

PLAN NUMBER

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AFFECTED LAND/PARCEL	LAND/PARCEL IDENTIFIER CREATED	MODIFICATION	DEALING NUMBER	DATE	EDITION NUMBER	ASSISTANT REGISTRAR OF TITLES
LAND HEREIN		RECTIFY CROWN DESCRIPTION	AE395033V		2	RM

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REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 05809 FOLIO 730 Security no : 124115744727S
Produced 12/06/2024 02:10 PM

CROWN GRANT

LAND DESCRIPTION

Lot 1 on Title Plan 862809Y (formerly known as Crown Allotment 26 Section 1B Township of Coleraine Parish of Konong Wootong).

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
RIGBY BROS & CO. PTY LTD of QUARRY ROAD COLERAINE 3315
V050545K 21/10/1997

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE V050546G 21/10/1997
NATIONAL AUSTRALIA BANK LTD

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Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP862809Y FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: PITCHER STREET COLERAINE VIC 3315

ADMINISTRATIVE NOTICES

NIL

eCT Control 16089P NATIONAL AUSTRALIA BANK LTD
Effective from 22/10/2016

DOCUMENT END

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Document Type	**Plan**
Document Identification	**TP862809Y**
Number of Pages (excluding this cover sheet)	**2**
Document Assembled	**12/06/2024 14:10**

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TITLE PLAN	EDITION 1	TP 862809Y

Location of Land

Parish : KONONG WOOTONG
Township : COLERAINE
Section : 1B
Crown Allotment: 26
Crown Portion: -

Last Plan Reference : -
Derived From : VOL. 5809 FOL. 730

Depth Limitation : 50 FEET BELOW THE SURFACE

Notations

SUBJECT TO THE RESERVATIONS, EXCEPTIONS, CONDITIONS AND POWERS CONTAINED IN CROWN GRANT VOL 5809 FOL. 730 AND NOTED ON SHEET 2 OF THIS PLAN

ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN

Description of Land/ Easement Information

THIS PLAN HAS BEEN PREPARED BY LAND REGISTRY, LAND VICTORIA FOR TITLE DIAGRAM PURPOSES

COMPILED: Date 20/08/07

VERIFIED: A. DALLAS
Assistant Registrar of Titles

COLOUR CODE
Y = YELLOW

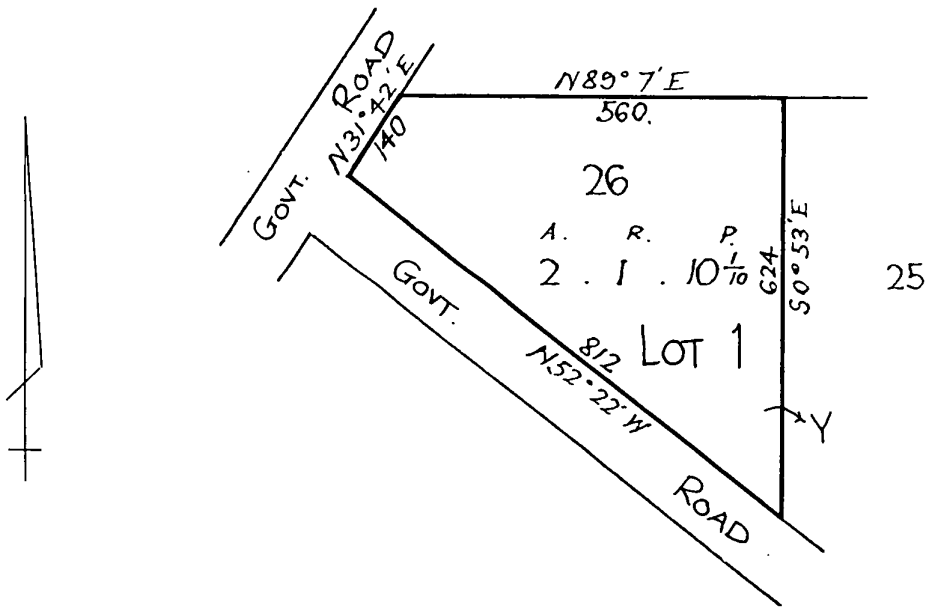

TABLE OF PARCEL IDENTIFIERS
WARNING: Where multiple parcels are referred to or shown on the Title Plan this does Not imply separately disposable parcels under Section 8A of the Sale of Land Act 1962
LOT 1 = C.A.26 SECTION 1B

LENGTHS ARE IN LINKS	Metres = 0.3048 x Feet Metres = 0.201168 x Links	Sheet 1 of 2 Sheets

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TITLE PLAN

TP 862809Y

LAND DESCRIPTION INCLUDING RESERVATIONS, EXCEPTIONS, CONDITIONS AND POWERS AS SHOWN ON THE CROWN GRANT

ALL THAT PIECE OF LAND in the said State containing *four acres one rood six perches and one tenth of a perch more or less being allotment twenty-six in the Township adjoining the South of Kalgoorlie Parish of Kalgoorlie County of Dundas*

delineated with the measurements and abuttals thereof in the map drawn in the margin of these presents and therein coloured yellow PROVIDED nevertheless that the grantee shall be entitled to sink wells for water and to the use and enjoyment of any wells or springs of water upon or within the boundaries of the said land for any and for all purposes as though she held the land without limitation as to depth EXCEPTING nevertheless unto Us Our heirs and successors all gold and silver and minerals as defined in the *Mines Act* 1928 in upon or under or within the boundaries of the land hereby granted AND ALSO reserving to Us Our heirs and successors free liberty and authority for Us Our heirs and successors and Our and their licensees agents and servants at any time or times hereafter to enter upon the said land and to search and mine therein for gold silver and minerals as aforesaid and to extract and remove therefrom any such gold silver and minerals and to search for and work dispose of and carry away the said gold silver and minerals lying in upon or under the land hereby granted and for the purposes aforesaid to sink shafts make drives erect machinery and to carry on any works and do any other things which may be necessary or usual in mining and with all other incidents that are necessary to be used for the getting of the said gold silver and minerals and the working of all mines seams lodes and deposits containing such gold silver and minerals in upon or under the land hereby granted

PROVIDED NEVERTHELESS **that the land hereby granted shall not be maintained or used as a site for more than one residence and not more than one building for business purposes.**
AND PROVIDED FURTHER that the said land is and shall be subject to be resumed for mining purposes under Section 168 of the *Land Act* 1928.
AND PROVIDED ALSO that the said land is and shall be subject to the right of any person being the holder of a miner's right or of a mining lease or mineral lease under the *Mines Act* 1928 or any corresponding previous enactment to enter therein and to mine for gold silver or minerals within the meaning of the said Act and to erect and ~~to~~ occupy mining plant or machinery thereon in the same manner and under the same conditions and provisions as ~~if those~~ to which such person ~~had at the date of these presents the right~~ to mine for gold and silver in and upon Crown lands. PROVIDED that compensation shall be paid to the said

Grantee

~~his~~ heirs executors administrators assigns and transferees by such person for surface damage to be done to such lands by reason of mining thereon such compensation to be determined as provided for the time being by law ~~for the case of land resumed for mining purposes~~ and the payment thereof to be a condition precedent to such right of entry.

LENGTHS ARE IN LINKS	Metres = 0.3048 x Feet Metres = 0.201168 x Links	Sheet 2 of 2 Sheets

Mineral Resources (Sustainable Development) Act 1990

Tenement Number: WA410

Plan Number: PLN000923

Work Plan Variation Statutorily Endorsed

Signed:

Delegate of the Department Head

Date: 30/10/2024

RIGBY BROS & Co Pty. Ltd.

COMMUNITY ENGAGEMENT PLAN

Coleraine Quarry – WA410

WA410 – Coleraine Quarry
26 Templeton Street,
COLERAINE VIC 3315

Rigby Bros & Co Pty Ltd
Stan Rigby
(03) 5575 2564
Rigby.bros.quarry@gmail.com

13 June 2024

Reviewed August 2024

Version Control and Approval

Version No.	Prepared	Reviewed	Approved	Date	Description	Next Revision
0	Debra Farrelly	Stan Rigby Director	Stan Rigby Director	30/9/2020	Initial Plan	Mar 2024
1	Debra Farrelly	Cameron Black	Stan Rigby Director	20 Jan 2023	Review & update	
2	Debra Farrelly	Cameron Black	Stan Rigby Director	21 Feb 2024	Review & update	

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1. Company Representative Statement

The quarry situated at 26 Templeton Street, Coleraine has been operating since 1947, some 70 years and was purchased by Rigby Brothers Co. Pty Ltd (Rigby Bros) in 1969.

Rigby Bros owners and employees are a part of the community surrounding the quarry site and in the larger Coleraine community. We are fully committed to maintaining healthy and enduring relationships with all stakeholders.

We will be proactive in minimising any negative impacts on residences and businesses in close proximity to the quarry operations. Rigby Bros Pty Ltd are committed to minimising the impact of the quarry's operation on the environment and culturally sensitive locations in the local area.

Rigby Bros respects the rights of private landholders, including the residences and businesses, that are located around the quarry site at 26 Templeton Street, Coleraine. We have a close working relationship with local government as we are not only a business in their area but also a supplier for many of their projects and we acknowledge and respect the different roles and requirements of that relationship.

Rigby Bros has a strong history of supporting Coleraine community groups through sponsorship, participation on committees of management and donation of quarry time and resources to various projects. We also provide employment for local people and will continue to proudly support our community. We are a big part of the Coleraine community.

We welcome any feedback, concerns or questions from our community and promise that we will promptly address any concerns and respond to issues raised to our company.

Stan Rigby
Director
Rigby Brothers & Co Pty Ltd

2. Introduction

There has been a quarry of some type on the hill since the late 1800's, and the current quarry has been in operation since 1947 and operates under Work Authority WA410, previously EIL393, with the last updates being in April 1996.

The current approved Work Authority plan covers 5.58 Ha of land and enables the extraction of trachyte rock. The rock is extracted through blasting and then it is crushed to produce aggregate for sale.

Over the past 5 years the quarry has sold, on average, some 35,000 tonnes per annum. This has been sold as aggregate with approximately 40% being sold as Road base Class 1 aggregate, a high value aggregate.

Rigby Bros are applying to the Department of Earth Resources for a Variation to the current Work Authority, which will seek to extend the Work Authority area, however the proposal is to keep blasting activity within the current WA410 boundary.

The proposed changes to the Work Authority include, but are not limited to, rezoning land, moving the office and workshop out of the extractive area, increasing the extent of the pit, consolidating the stockpiles of aggregate, and planting trees for screening along Pitcher Street.

If the Work Authority variation is approved, it is expected that the quarry operations will be extended some 20 years and the development will be undertaken in four stages.

All mining licenses are required to include a Rehabilitation Plan which details the treatment to be undertaken to the mined area and how the land and surrounds will be left when operations cease, taking into account the proposed end use of the land. However due to the age of the license for WA410, there has never been an fully scoped Rehabilitation Plan. Part of the Work Authority Variation request being put forward by Rigby Bros includes a Rehabilitation Plan, which will be implemented in stages and be completed when the quarry operations cease, and the quarry is closed.

This Community Engagement Plan is the framework that Rigby Bros will use to inform, consult with and receive feedback from the community on the request for work authority variation, the stages of development and operation of the site and when operations cease the rehabilitation of the site.

This plan will also form the basis of on-going community engagement with all stakeholders and particularly keeping the sensitive receptors updated and informed of forthcoming blasting activities, as they occur and to formalise a complaints process to deal with any issues or complaints raised by stakeholders or local residents.

The objectives of this Community Engagement Plan are:

- To identify community and stakeholders, and understand their concerns / expectations;
- Provide a framework for effective communications and engagement, including a clear complaint and feedback procedure;
- Develop positive relationships between the quarry and the local community;
- Educate stakeholders about the value of the Rigby Bros Quarry to the area, and about the operational practices undertaken each day on site.

Rigby Brothers & Co Pty Ltd own the land of the current WA410 tenement and

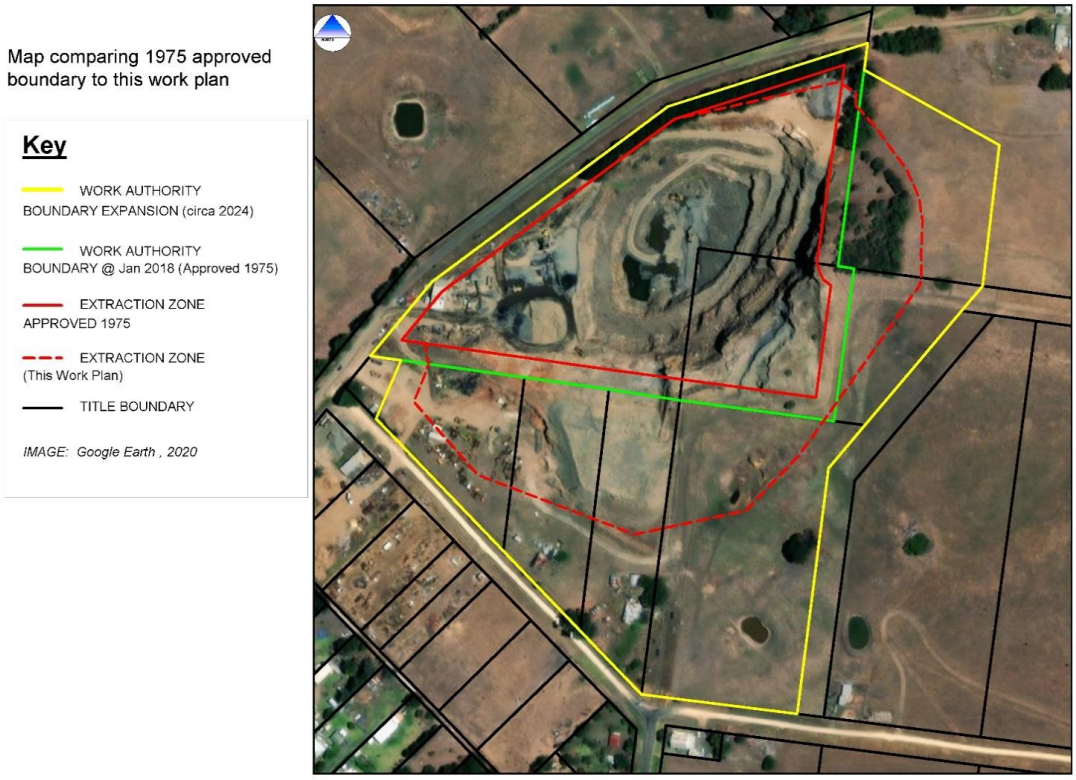


Figure 1 Quarry Site

Rigby Brothers & Co Pty Ltd management continually engage informally with the community to gain an understanding of the potential impacts that the quarry's operation may have and provide the opportunity for communication with stakeholders in the Coleraine area. This Community Engagement Plan formalises this process and outlines the details of that engagement.

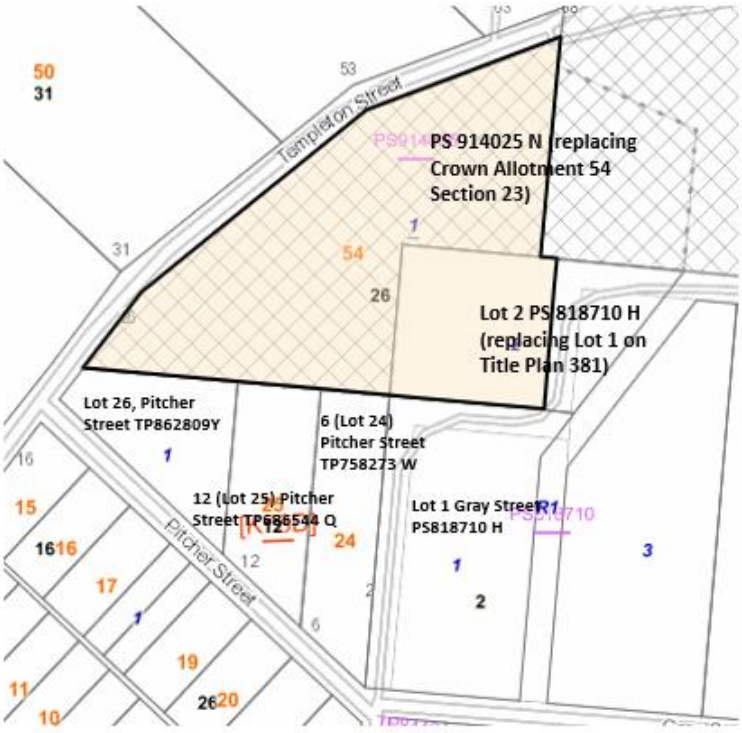
3. Site Description

The quarry is situated at 26 Templeton Street, Coleraine, which is on the western edge of the town, located in western Victoria. The site is 5.8 hectares. The current quarry is developed within two land parcels described as Lot 1 on Title Plan 381 and Crown Allotment 54 Section 23,

The expansion of the Work Authority is a mixture of land added to the two titles above and the following parcels of land:

- Lot 26, Pitcher Street TP862809Y with a depth limit of 50 feet, Low Density Residential Zone, which is owned by Rigby Brothers & Co Pry Ltd. The land was previously used to house animals. Currently used by Rigby Bros to store machinery.
- 12 (Lot 25) Pitcher Street TP686544 Q with a depth limit of 50 feet, Low Density Residential Zone, which is owned by Delma Rigby (shareholder of Rigby Bros) for a house and small paddock for animals, which was abandoned 30 years ago and the house will be demolished. Currently partly used by Rigby Bros to store machinery.
- 6 (Lot 24) Pitcher Street TP758273 W with a depth limit of 50 feet, Low Density Residential Zone, which is owned by Stan Rigby (shareholder of shareholder of Rigby Brothers & Co Pty Ltd) for a house and small paddock for animals. No one has lived in the house for 15 years and the house is not habitable and will be removed.
- Lot 1 Gray Street PS818710 H with no depth limit, Low Density Residential Zone, which is owned by Stan Rigby (shareholder of Rigby Brothers & Co Pty Ltd) which is used for grazing sheep and cattle, never any house on the site.

Below is drawing showing the recent changes to title boundaries, with the current title and boundaries



This site presents several challenges in meeting the current industry guidelines, however it is emphasised that a quarry of some description has been operating at the site and in close proximity to the local community since the late 1800's. More recently the Rigby's have a multi-generational connection to the site. It is acknowledge that if this were a new operation it would face severe challenges to meet the current workplan requirements. It is well known that as residential development (the majority of which is the Rigby family) has grown around the site that the contemporary "guidelines" imposed by the regulators are difficult to meet economically, and that for the site to continue to operate and work towards a more appropriate rehabilitation out come that it will rely heavily on the "***or minimised as far as reasonably practicable"*** clause in the Mineral Resources (Sustainable Development) Act 1990, as amended 1 July 2021)

2 (1) (b) (i)

> *risks posed to the environment, to members of the public, or to land, property or infrastructure by work being done under a licence or extractive industry work authority are identified and are eliminated* ***or minimised as far as reasonably practicable****; and*

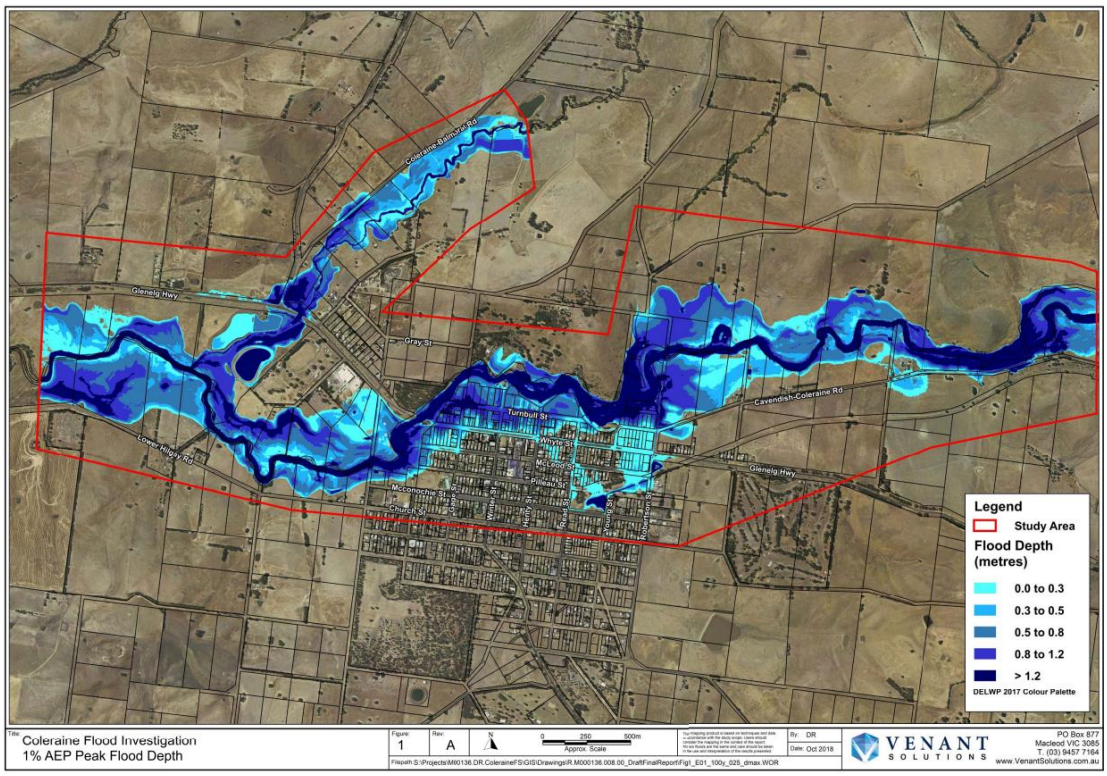
This clause from the MRSDA is reproduced to emphasise to the communitry that the criteria quoted in the relevant guidelines are just that, guidelines.

Following is a description of the sensitive receptors potentially impacted by this operation, i.e. in relation to the environment, any member of the public, or land, property or infrastructure within the vicinity of the work, and a discussion of the more significant hazards that may potentially impact those sensitive receptors.

The Location Plan, presented below, identifies the location of various waterways, residences, commercial and industrial development, public facilities and public infrastructure, such as roads, bridges, pipelines, powerlines and other assets, within 2km of the Work Authority.

There is a Delegated Management Reserve (Tenure ID 0304388, associated with the show grounds) some 300m to the south west,) a Delegated Management Reserve (Tenure ID 0304280, associated with the picnic area, West Park) some 300m to the south, and the sports area (Silvester Oval) some 400m to the east. There is also crown land associated with Bryan Creek, some 730 m to the south

There are no waterways or wetlands within the immediate vicinity of the site. The closest mapped wetlands is associated with the Coleraine water plant, some 450m to the south west. Bryan Creek is some 730 metres to the south and Konong Wootong Creek some 200m to the west. A 2019 Coleraine Flood Investigation Report commissioned by Southern Grampians Shire shows 1%AEP not impacting the quarry. (see screen grab below)



There is no assessable native vegetation removed by this Work Plan. The extension to the south is over land that has already been disturbed by generations of use, and the extension to the north east is through some planted eucalyptus and grazing land, and is not regarded as assessable native vegetation. Rigby's have been advised (as a result of the 2018 site meeting) that a 2018 email from DELWP to ERR (but not available to the applicant) confirms this.

There are 15 houses within 500m of the Work Authority and numerous more within 1000m, as the township of Coleraine is only 750m from the quarry. The township of Coleraine and residences to the east of the quarry are not impacted by the quarry, being on the other side of the significant hill. The closest residence, is on the corner of Cameron Street and Pitcher Street, some 30m from the WA boundary and 160m from the stockpile area.

The Glenelg Highway is approximately 220m from the work Authority

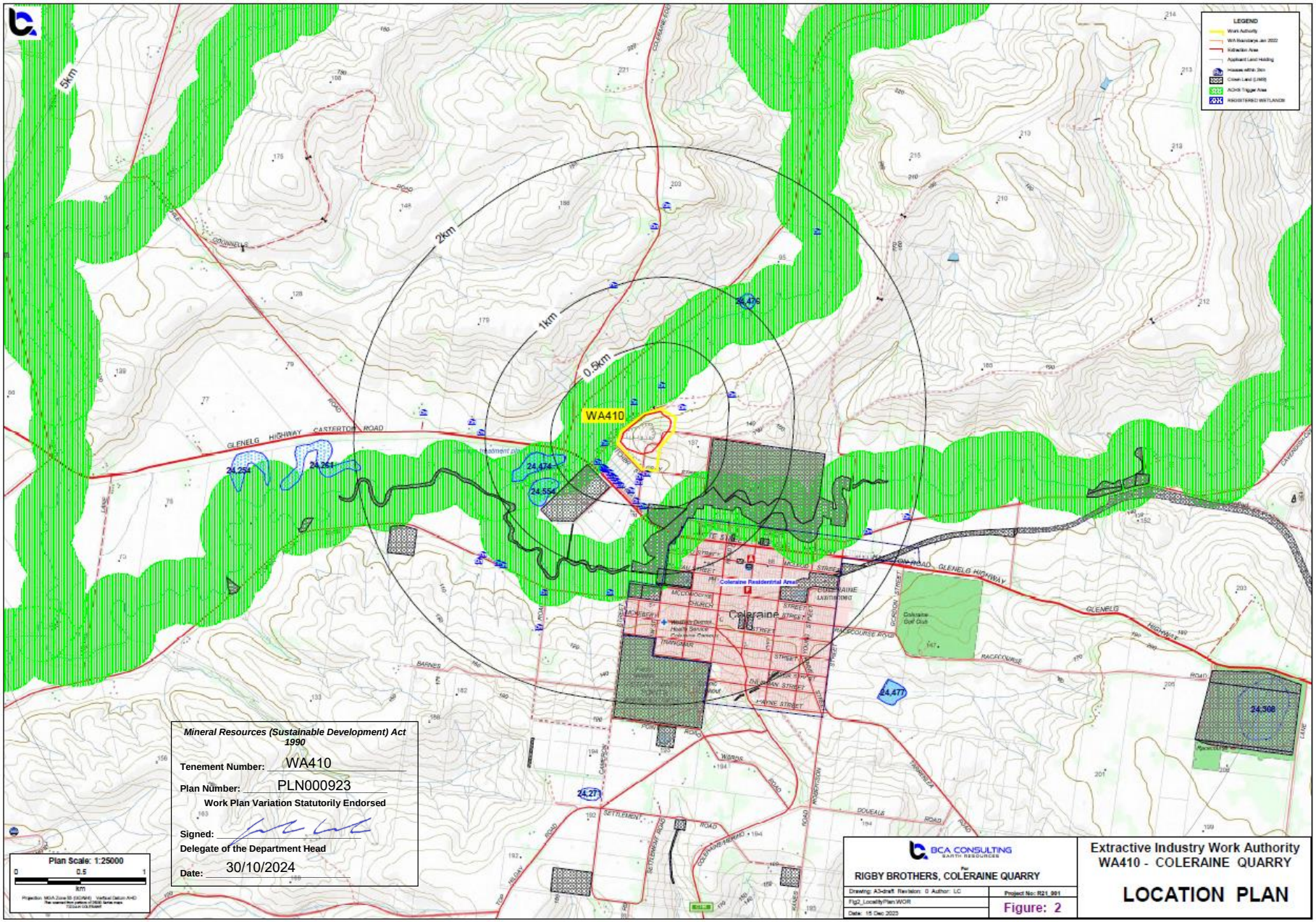
The township of Coleraine is approximately 600 metres from the Work Authority.

There are two bridges on the Glenelg Highway, one over Konong Wootong Creek, approximately 300m south west of the Work Authority and one over Bryan Creek, approximately 500m south east of the Work Authority

There are no high voltage powerlines, pipelines or other linear infrastructure within the vicinity of the quarry. There is a low voltage supply power line on the western boundary of the Work Authority to Templeton street.

There is no known contaminated land, no known slimes storages, and no underground workings on the site.

The plan below (Figure 2 reproduced from the Work Plan) shows the site and its surrounds, and the location of residential and industrial land in the vicinity.


LEGEND
5km
2km
1km
0.5km
WA410
GLENELG HIGHWAY
CASTERTON ROAD
Coleraine
Coleraine Residential Area
24,254
24,261
24,474
24,554
24,477
24,308
24,271
Mineral Resources (Sustainable Development) Act 1990
Tenement Number: WA410
Plan Number: PLN000923
Work Plan Variation Statutorily Endorsed
Signed:
Delegate of the Department Head
Date: 30/10/2024
Plan Scale: 1:25000
0 0.5 1
km
BCA CONSULTING
RIGBY BROTHERS, COLERAINE QUARRY
Figure: 2
Extractive Industry Work Authority
WA410 - COLERAINE QUARRY
LOCATION PLAN

4. Background

The first quarry operations commenced around 1947 and were undertaken by George Riordon until he sold the operations in 1969.

The four Rigby brothers – Arthur, Max, Stan and Doug borrowed money from their parents to form Rigby Brothers Co Pty Ltd and purchase the quarry in 1969.

Their parents and all four brothers and their families have lived or are still living within 500 metres of the quarry and form part of the sensitive receptors group of the quarry. This has placed Rigby Bros Pty Ltd in a unique position of directly knowing the impacts of the quarry operations.

Rigby Bros as sponsors and the brothers individually have been very active community members in the football club, racing club, P & A Society, fire brigade, community hall and many other local activities. Being active in the community has always provided the opportunity to communicate with locals and discuss any concerns about the quarry.

Rather than residents and businesses within 500 metres of the quarry being known as sensitive receptors, Rigby Bros would call them family, neighbors and friends and have welcomed and listened to their feedback. Notification of upcoming blasting has been informal and would generally be provided via a phone call or in person when visiting friends.

Rigby Bros understands that informal discussions and catching up with stakeholders on an irregular basis is no longer in line with general community expectations and does not meet requirements of authorities, such as Earth Resources Regulation Victoria. Therefore, a formal Stakeholder and Community Engagement Plan is required, which will set out aims, objectives that can be measured and timelines for activities to be undertaken.

Prior stakeholder engagement

Formal engagement with relevant government and semi-government stakeholders was undertaken at the first site meeting in 2018, and a subsequent site meeting in 2022. These site meetings discussed planning and regulatory issue for the Work Plan Variation. Past and ongoing consultation with Council and Earth Resources Regulation (Department of Jobs, Precincts and Regions) has occurred throughout the history of the site's operation and in developing previous Work Plans / Work Plan variations.

The table below provides a snapshot summary of prior engagement activities.

Table 1.

Stakeholder	What was discussed	Why were they engaged	When did engagement take place	Outcome
Southern Grampians Shire Council	Zoning issues of land surrounding the WA Road safety	Planning approvals	Numerous	Support of rezoning on endorsement of the Work Plan Reduced speed limits, improved road signage
Earth Resources Regulation (ERR)	Approvals Regulatory compliance	Work Plan approvals Regular site inspections	Various	Work Authority grant and Work Plan approvals Ensuring compliance with regulations
Extended Rigby Family members	Land use / continued access	Work Plan approvals	various	Renewed lease arrangement
Adjacent landowners and residents	Operational activities including blasting, noise and dust	Proximity to activity	Since commencement in 1970	Commitment to ongoing engagement.

5. Legislative Framework

This Community Engagement Plan is subject to the legislative requirements set out in the *Minerals Resource (Sustainable Development) Act 1990* and associated regulations. These are provided below:

Mineral Resource (Sustainable Development) Act 1990

Section 77G(3)(e) – Community Engagement Plan

Section 77K – Extractives industry duty to consult

Mineral Resource (Sustainable Development) (Extractive Industries) Regulations 2019 Reg 12 – A Community Engagement Plan that –

(a) identifies the community likely to be affected by the quarry operations; and

(b) sets out how the extractive industry authority holder will—

(i) identify community attitudes and expectations; and

(ii) share information with the community; and

(iii) receive feedback from the community; and

(iv) analyse community feedback and consider community concerns or expectations; and

(v) register, document and respond to complaints and other communications from members of the community in relation to the quarry operations.

6. Goals and Objectives

Goals

The goals of this Community Engagement Plan are to understand and address community concerns while maintaining and improving Rigby Brothers & Co Pty Ltd standing in the local community through:

- to provide the local community with information about the quarry operations, the opportunity to provide input and feedback on issues that affect them,
- to provide relevant stakeholders with information and the opportunity for them to provide input to and feedback on quarry operations,
- to provide an avenue for stakeholders and the local community to raise complaints in relation to the quarry operations,
- to meet the legislative requirements set out in the Mineral Resources (Sustainable Development) Act 1990 and associated regulations.

Objectives

To achieve the goals of this Community Engagement Plan, the objectives are to:

- to commence a formal and regular communication process with stakeholders and the local community,
- to provide information to stakeholders and the local community on the proposed 2021 Work Authority WA410 Variation request that Rigby Bros will submit to Earth Resources Regulation Victoria,
- provide an opportunity for stakeholders and the local community to provide input and feedback to the proposed 2021 Work Authority WA410 Variation request that Rigby Bros will submit to Earth Resources Regulation Victoria,
- to involve the community in development of a notification process for blasting activities,
- to involve the community in developing and implementing a complaints process for the local community to be able to raise concerns and issues and have them addressed in a timely manner.

7. Stakeholder Analysis

The following stakeholder analysis was compiled from research and analysis as outlined in the *Community Engagement Guidelines for Mining and Mineral Exploration*, published by Earth Resources Regulation.

Table 2.

Stakeholder	Issues (concerns and/or expectations)	Estimated level of impact on the stakeholder	Controls [*what will project do to minimise impact on stakeholder*]
Landowners (Rigby extended family)	Continued farming and access to land for storage Land rehabilitated to viable pasture / cropping	Low	Progressive rehabilitation Frequent discussions with landowner Rehabilitation Plan objectives must be met
Immediately adjacent landowners	Noise, dust, traffic and blasting Heavy haulage	Medium	Noise attenuation enclosure around crusher Water suppression via sprinklers or water carts Reduced speed limits Restriction of Blasting times Restricted road use times Ryans Road local deliveries only with restricted speed limits
Community within vicinity of quarry	Land rehabilitated so that it blends with surrounding land, and does not harbour vermin or weeds	Low	Rehabilitation Plan objectives must be met
Southern Grampians Shire Council	Local road safety, (traffic volumes and road maintenance)	Low	Better road & quarry warning signage Reduced speed limits

8. Communication

A variety of engagement techniques and communications channels will be used to meet the goals and objectives of this Community Engagement Plan. These will include:

- One-on-one engagement, both in person and otherwise, initiated either by the Rigbys or by the community
- The distribution of written information, specifically the Annual Christmas Letter
- Formal and informal meeting/ discussion for groups or individuals including the council.
- The scheduling of specific meetings or forums associated with individual issues, as required
- Responding to enquiries and complaints in a courteous and timely manner
- Notification of all interested parties to blasting

Feedback from all engagement activities will be collected and recorded, with attitudes and expectations regularly reviewed.

The Quarry Manager will be responsible for ensuring feedback is considered in the planning and execution of operational activities.

9. Stakeholder Engagement Plan

The **Spectrum of Public Participation**, by the International Association for Public Participation (IAP2), was designed to assist with the selection of the level of participation that defines the public's role in any public participation process. The Spectrum is used internationally, and is the approach recommended by Earth Resources Regulation for interaction with stakeholders. The table below outlines each of the five levels included within the Spectrum.

Level	IAP2 Goal	Promise
Inform	Provide balanced and objective information to stakeholders and assist their understanding	Keep stakeholders informed
Consult	Obtain stakeholder feedback on analysis, alternatives and/or decisions	Acknowledge stakeholder concerns and provide feedback on how stakeholder input influenced the final decisions
Involve	Work directly with stakeholders throughout the process to measure concerns. Stakeholder aspirations are understood and considered.	Stakeholder concerns directly reflected in alternatives
Collaborate	Partner stakeholders in each aspect of the decision including alternatives and solutions	Incorporate stakeholder advice and recommendations in decisions
Empower	Final decision making in the hands of the public	Implement community decisions

There are several community engagement techniques that are available to Rigby Brothers & Co. Pty Ltd to enable effective and transparent engagement with the local community. These techniques include, but are not limited to Newsletters, Fact Sheets, Company facebook page, Workshops, Advertisements / Public displays, Community notice boards, Community activities, Open houses, Public meetings, Face-to-face meetings and Surveys.

The appropriate community engagement technique is targeted to the individual stakeholder and will be selected based on a review of any changes to operational activities that have the potential to affect that particular stakeholder.

The following stakeholder engagement plan has been developed to respond to the issues identified in the stakeholder issues analysis. This plan has been developed in line with the International Association for Public Participation (IAP2) best practice.

Table 3.

Stakeholder	Issue or concern	Level of engagement (IAP2)	Key message	Method of engagement	Timing (weekly, monthly, as required)
Immediately impacted residents	Blasting Noise Dust	Inform	Noise attenuation measures have been taken Restricted working hours are in place	Face to face meeting Phone calls Email Letterbox drop	As required

			Water is being used to minimise dust		
Southern Grampians Shire Council	Road safety	Inform	Driver education	Face to face meeting Phone calls	As required
Landowner (Rigby Extended Family)	Cooperative Land use Progressive rehabilitation	Involve	Land availability (both for quarrying and/or farming) Fencing / stock runs	Face to face meeting	As required
Colerain Commumity	General information	Inform	Quarry update	Annual Christmas Message	Annually

10. Complaints Management Process

The Regulations require that a process is established to "register, document and respond to complaints and other communications from members of the community in relation to the quarry operations".

Complaints, enquiries and other communications from the community can be directed either to the Quarry Manager directly, with contact details at the Quarry entrance, or directed to Jason Rigby, Quarry Manager.

The Rigby Brothers & Co Pty Ltd complaints process maintains a written record of all complaints and enquiries, including the details of the complaint and the actions taken to address the complaint.

The process includes:

- acknowledging complaints promptly
- assessing complaints and assigning them priority
- planning an investigation if one is needed
- investigating the complaint to determine the facts and options for resolution
- responding to the complainant, including by keeping them informed of progress
- and providing a detailed response

Rigby Brothers & Co Pty Ltd is committed to being accessible and responsive when dealing with complaints. We expect our staff to be respectful, providing clear and reasoned information, and we recognise that people making complaints to us may be stressed, frustrated or upset. However, we do not tolerate behaviour that is offensive, abusive, threatening or consumes disproportionate resources. Where this is the case, we may take steps to reduce any detrimental impact of such behaviour on our staff, our productivity and resources.

11. Evaluation

To ensure compliance against the goals and objectives outlined in Section 6 of this document Rigby Brothers & Co Pty Ltd will review this Community Engagement Plan regularly.

Any changes that are made to operations that have the potential to change the risk profile of a stakeholder will be updated as soon as practicable.

The review will include an assessment of the plan's effectiveness and its performance against objectives. The review will be documented and available as part of any audit or assessment by Earth Resources Regulation.

12. Contact Us

The contacts for Rigby Brothers Co Pty Ltd are as follows:

Main Office address: 26 Templeton Street, Coleraine

Main Office phone number: 03 5575 2564

Rigby Bros main email address: rigby.bros.quarry@gmail.com

Rigby Bros Quarry Director: Stan Rigby
Mobile number: 0437 564 222

Rigby Bros Quarry Manager: Jason Rigby
Mobile number: 0438 752 385

Schedule of Conditions

Part A General Conditions

1. Working in Accordance with the Approved Work Plan

1.1 The Work Authority holder must carry out work in accordance with the Approved Work Plan and any subsequent Approved Work Plan Variations.

1.2 Where any inconsistency occurs between an Approved Work Plan and/or an Approved Work Plan Variation or the associated Approved Work Plan conditions, and the Work Authority conditions and/or regulations, the Work Authority conditions and/or regulations have precedence.

1.3 Where requested by the Department Head, the Work Authority holder must submit a Work Plan Variation.

2. Public Liability Insurance

2.1 Prior to commencing any work, the Work Authority holder must have public liability insurance that covers all work authorised under the Work Authority and ensure the insurance is maintained at all times while work occurs under the Work Authority.

3. Work Authority Boundaries

3.1 The Work Authority holder must erect and maintain posts along the boundary of the Work Authority so that the boundary of the Work Authority is clearly identifiable.

3.2 The Work Authority holder must ensure the posts required at 3.1 meet the following specifications:

(a) the post is not less than one metre high above the ground;

(b) the post is painted white;

(c) the Work Authority number is painted within the top 20cm of the post, is legible and in a contrasting colour to the white post;

(d) the posts must be situated so that each post is clearly visible from each post on either side of that post.

3.3 The Work Authority holder must erect and maintain a legible sign at the entrance to the Work Authority that contains the following information:

(a) the name of the Work Authority holder and the Work Authority number;

(b) the Manager of the Work Authority; and

(c) emergency contact details.

4. Public Safety

4.1 The Work Authority holder must ensure that public safety is maintained within the Work Authority area at all times, including through the use of fencing, gates and signage as required around the work area.

4.2 The Work Authority holder must ensure that all fences are maintained to prevent access to the work site and that all gates are locked when the work site is unattended.

5. Fire Risk Management

5.1 The Work Authority holder must take all reasonable measures to prevent the ignition and spread of fire.

5.2 The Work Authority holder must ensure that all buildings, fixed plant and mobile equipment are fitted with fire-fighting equipment, such as fire extinguishers, fire blankets, knapsack spray pumps and rake-hoes.

5.3 The Work Authority holder must develop and implement a fire response and readiness plan.

6. Designated Parking Areas

6.1 The Work Authority holder must provide designated parking areas for employees and visitors at the work site.

6.2 The Work Authority holder must ensure that the designated parking area is of sufficient size to accommodate the expected number of vehicles that employees and visitors may bring to the work site on a daily basis.

6.3 The Work Authority holder must ensure that designated parking areas are designed and constructed to provide safe access for vehicles and people.

7. Complaints Management

7.1 The Work Authority holder must establish and maintain a complaints register.

7.2 In response to a complaint, the Work Authority holder must record the following information in the complaints register:

(a) the date and time of the complaint;

(b) who the complaint was from;

(c) the specific issue/s raised in the complaint; and

(d) the actions taken to address the specific issue/s raised in the complaint.

8. Non-compliance and Environment Incident Notification

8.1 In the event that the Work Authority holder becomes aware of:

(a) any non-compliance with the conditions of the Work Authority and/or the approved work plan, including the intersection of ground water where dry extraction is proposed, and/or;

(b) an environmental incident that will or is likely to cause, significant harm to the environment;

the Work Authority holder must as soon as is practicably possible notify the relevant Regional Manager of the non-compliance and/or environmental incident.

8.2 The Work Authority holder must also notify any other relevant government department, agency or management authority of the non-compliance and/or incident.

8.3 Where requested to provide a written report on the non-compliance or environmental incident, the Work Authority holder must provide a written report within 5 business days of the request that includes the following information:

(a) the date and time of the non-compliance and/or environmental incident;

(b) the cause, or likely cause of the non-compliance and/or environmental incident;

(c) the impacts, or likely impacts of the non-compliance and/or environmental incident;

(d) the actions that have been taken to prevent, minimise or otherwise manage the impacts, or likely impacts of the non-compliance and/or environmental incident; and

(e) the actions that will be taken to prevent such a non-compliance and/or environmental incident from happening again in the future.

Part B Activity based Conditions

9. Ground Disturbance

9.1 The Work Authority holder must minimise the area of ground disturbance throughout the life of the quarry operation.

9.2 The Work Authority holder must not open up any area for quarrying and ancillary operations except where approved in the Approved Work Plan.

10. Topsoil Management

10.1 At the commencement of excavation, the Work Authority holder must ensure that topsoil to a depth of 150mm below the natural surface is removed and placed in stockpiles not exceeding 2m in height.

10.2 The Work Authority holder must ensure that topsoil stockpiles are protected from erosion and compaction.

11. Erosion, Drainage and Discharge Controls

11.1 The Work Authority holder must design, install and maintain erosion and sediment controls to prevent erosion of areas of disturbed land and sedimentation of waterways.

11.2 Where quarry activities are being conducted in waters or on the banks of waterways with water in them, the Work Authority holder must ensure that sedimentation of the water in the water way is minimised to an acceptable level.

11.3 The Work Authority holder must prevent contaminated runoff from entering receiving waterways.

12. Water Dams

12.1 The Work Authority holder must ensure that the location, design, construction, operation and safety management of water dams on the Work Authority area are undertaken in accordance with the Approved Work Plan.

13. Vegetation Management and Buffer Zones

13.1 The Work Authority holder must avoid, minimise and/or offset the removal and disturbance of native vegetation.

13.2 The Work Authority holder must erect and maintain posts or star pickets painted yellow to stand not less than 0.75 metres in height around the final approved limits of extraction, or as agreed in writing with the DJPR Inspector.

13.3 Extraction limit posts as required at 13.2 must be situated so that each post is clearly visible from each adjacent post.

13.4 The Work Authority holder must not undertake any excavation work, or remove any vegetation, whether in part or in whole, within any buffer zone shown on the approved work plan.

13.5 The Work Authority holder must maintain the buffer zone to ensure that an effective screen is provided between the relevant quarry works and surrounding land and/or buildings.

13.6 Unless otherwise agreed, the Work Authority holder must use species that are Indigenous to the area and are appropriate to the work authority area's Ecological Vegetation Class (EVC) when establishing plants within the buffer zone.

14. Noxious Weeds and Pests

14.1 The Work Authority holder must establish and implement a program to control and/or eradicate noxious weeds and pest animals within the Work Authority area.

14.2 The Work Authority holder must take measures to prevent the spread of declared noxious weeds, pest animals and plant diseases within the Work Authority area.

14.3 The Work Authority holder must ensure that all mobile machinery is thoroughly cleaned prior to coming onto or leaving a work area affected by noxious weeds and plant diseases.

14.4 The Work Authority holder must ensure that all soil that is imported into and exported out of the Work Authority area is free of disease and noxious weeds.

15. Dust Emissions

15.1 The Work Authority holder must prevent a dust release that causes adverse impacts to the surrounding area and residents.

16. Noise Emissions

16.1 The Work Authority holder must ensure that noise emissions are minimised as far as is practicable and comply with the requirements of the approved Work Plan.

16.2 The Work Authority holder must avoid causing unacceptable noise.

17. Visual Amenity

17.1 The Work Authority holder must take ensure that the colour of fixed plant and buildings do not cause an unwarranted negative impact on surrounding visual amenity.

17.2 The Work Authority holder must consult with the relevant Inspector and the Crown Land manager or the responsible authority on private land prior to painting any fixed plant and/or buildings.

18. Heritage Sites

18.1 The Work Authority holder must ensure that no work is carried out, without appropriate consent, within 100 metres laterally of a registered Aboriginal place recorded in the Victorian Aboriginal Heritage Register, or within 100 metres below that place.

18.2 The Work Authority holder must ensure that no work is carried out, without appropriate consent, within 100 metres laterally of an archaeological site on the Heritage Inventory or a place or object included in the Heritage Register or within 100 metres below that site, place or object.

19. Hazardous Materials Management

19.1 The Work Authority holder must prevent contamination of the environment by the release of fuels, lubricants and/or hazardous materials.

19.2 The Work Authority holder must ensure that all fuels, lubricants and/or hazardous materials are stored in accordance with the relevant requirements of the current Australian Standards for the Storage and Handling of Flammable and Combustible Liquids.

19.3 The Work Authority holder must ensure that any drainage from an area where fuels, lubricants and/or hazardous materials are stored, and/or used is directed to a sump or interceptor trap.

19.4 The Work Authority holder must ensure that spill prevention and clean up equipment is readily available in the vicinity of all plant and machinery, including mobile and fixed fuel storages.

19.5 The Work Authority holder must ensure that spills of fuels, lubricants and/or hazardous materials are cleaned up as quickly as practicable. Such spillage must not be cleaned up by hosing, sweeping or otherwise releasing such contaminant into waterways. Equipment and soil contaminated by fuels, lubricants, hazardous materials and clean up substances which cannot be salvaged must be disposed of in an approved waste facility.

20. Slope Stability

20.1 The Work Authority holder must ensure that all slopes/batters including excavations, roadways, stockpiles and dumps must be designed, constructed and maintained to ensure stability.

20.2 If there is a significant slope failure event, the Work Authority holder must cease all operations, notify the relevant Regional Manager and not recommence operations until authorised to do so by the relevant Regional Manager.

21. Internal Roads

21.1 The Work Authority holder must consult with the relevant Inspector, the Crown Land manager or private landowner/occupier prior to establishing any roads and access ways on the Work Authority area.

21.2 The Work Authority holder must construct any roads on the Work Authority area in accordance with the direction provided by the Inspector, the Crown Land manager or private landowner/occupier.

21.3 The Work Authority holder must ensure that an internal road is only used by:

(a) employees of, or persons authorised by, the relevant Crown land manager, or persons engaged in fire control where the Work Authority covers Crown land; or

(b) the landowners or their agent/s where the Work Authority covers private land.

21.4 The Work Authority holder must ensure that all roads on the Work Authority area are properly formed, surface treated, drained and maintained to provide for the safe operation of the road.

22. Derelict and Redundant Plant

22.1 The Work Authority holder must ensure that all derelict and redundant plant, vehicles, machinery and equipment be removed from the Work Authority area and deposited at an appropriate waste disposal site or otherwise stored or disposed of in accordance with the Approved Work Plan.

23. Rehabilitation

23.1 The Work Authority holder must ensure that progressive rehabilitation of disturbed land is carried out as soon as possible.

23.2 The Work Authority holder must ensure that, as required, Indigenous species used in rehabilitation must be sourced from the local area, be of local provenance and be appropriate to the site's Ecological Vegetation Class (EVC).

23.3 The Work Authority holder must ensure that final rehabilitation is in accordance with the Approved Work Plan.

24. Working Hours

24.1 The work authority holder must conduct all works in accordance with the working hour requirements of the planning consent or the Approved Work Plan or Work Plan Variation or Work Plan Conditions. Where any inconsistency occurs between the planning consent and the Approved Work Plan or an Approved Work Plan Variation or Work Plan Conditions, the working hour requirements of the planning consent have precedence.

25. Slimes Production and Management

If authorised under the approved work plan or an approved work plan variation

25.1 The work authority holder is subject to Conditions 25.2 and 25.3 if the Work Plan or Work Plan Variation details slimes as part of the work on site.

25.2 The work authority holder must take all reasonable measures to minimise the generation of slimes material.

25.3 The work authority holder must ensure that the location, design, construction, operation and safety management of slimes dams on the work authority area are undertaken in accordance with the Approved Work Plan.

26. Airblast and Ground Vibration Limits

If authorised under the approved work plan or an approved work plan variation

26.1 The work authority holder is subject to Conditions 26.2 and 26.3 if the Work Plan or Work Plan Variation details blasting as part of the work on site.

26.2 The work authority holder must ensure that the peak particle velocity resulting from blasting operations, as measured in the vicinity of any sensitive location in accordance with the current Australian Standards for Explosives - Storage and Use - Use of Explosives, does not exceed 5mm/s on more than 5% of blasts fired in a 12 month period and 10mm/s at any time unless otherwise approved in a Work Plan or Work Plan Variation.

26.3 The work authority holder must ensure that the airblast overpressure from blasting operations, as measured in the vicinity of any sensitive location in accordance with the current Australian Standards for Explosives - Storage and Use - Use of Explosives, does not exceed 115 dB(L) on more than 5% of blasts fired in a 12 month period, and 120 dB(L) at any time unless otherwise approved in a Work Plan or Work Plan Variation.

DUST MANAGEMENT PLAN

for

Extractive Industry Work Authority WA410

Coleraine Quarry

August 2024

WA410 – Coleraine Quarry
26 Templeton Street
COLERAINE VIC 3315

Project No. R21_001
August 2024

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WA410 – Coleraine Quarry Dust Management Plan

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August 2024

Document Control / Authorisation

The preparation of this Dust Management Plan has been a collaborative effort between BCA Consulting and Stan Rigby of Rigby Brothers, for implementation at their Coleraine Quarry, WA410

Revision history

Revision	Description	Date	Originator	Reviewer	Approver
00	Draft for comment	5 Nov 2024	CLB	FN	

Distribution

Report Status	No. of copies	Format	Distributed to	Date
Draft for Comment	1	PDF	Jason Rigby Stan Rigby	15 August 2024

Review

As a minimum, this Dust Management Plan will be reviewed within 3 years of being approved.

NEXT REVIEW DATE: August 2028

1. PURPOSE OF THE DUST MANAGEMENT PLAN

1.1. Introduction:

The Dust Management Plan is an adaptive management tool for managing both the risks posed by dust generated by quarrying activities and the potential risks posed by the operation to the environmental values of air quality and the public.

This document is to be used in conjunction with the Risk Management Plan component of the Work Plan for the quarry. The Risk Management Plan describes the dust hazard and risks associates with sensitive receptors at the time of drafting and includes the application of a range of control measures to manage the risks posed by dust generated by different quarry activities. This adaptive Dust Management Plan allows for the adaptive application of monitoring and control measures to manage the risks posed by potential changes to dust generating sources over time, ie as the quarry develops or as new equipment is introduced. This adaptive Dust Management Plan is included as a key component in the overall management of this hazard and ensuring the stated controls in the Risk Treatment Plans and any additional controls that might be required by the Earth Resources Regulator or other agencies are captured and continually reviewed to ensure their effectiveness.

This Dust Management Plan is for the following hazard in the Risk Management Plan:

- 2.3 Dust
- 2.17 Vehicle Sediment Transport

The Dust Management Plan is designed to be easy-to-follow, non-technical, and used by anyone who needs to understand the management of airborne dust generated on the site from any number of sources on the site and at any point during the life of the quarry, in respect of both the risks posed by dust emissions and the potential risks posed by the operation activities to emit dust.

The Quarry Manager is responsible for implementing this Dust Management Plan and can seek assistance from the General Manager and specialists as required, particularly if there are incidents due to dust related hazards. This Dust Management Plan requires that the Quarry Manager inspects the quarry operations for dust related hazards on a regular basis. Hazards are to be reported in the Coleraine Quarry risk management system.

Rigby Brothers strive to ensure that dust management measures on the site achieve ongoing compliance with all relevant requirements. The current objectives, relevant compliance criteria and requirements and acceptance criteria are set out below.

1.2. Respirable Crystalline Silica Risk

The resource quarried is a trachyte, and it has been confirmed that it contains negligible silica content. A full discussion is included in the Dust Risk Treatment Plan

1.3. Objectives:

- Manage and minimise offsite dust impacts on all sensitive land uses and environments
- Apply dust controls at the source to, the extent practicable; and
- Minimise impacts on local amenity and the environment and protect the environmental values of the air as defined in the Environment Reference Standards (ERS)

1.4. Relevant compliance criteria and requirements:

- EPA Victoria's (EPAV's) Air Pollution Assessment Criteria (APAC), which apply at nearby sensitive uses, are set out in the following table.

Indicator	Includes Background Dust Component	Averaging period	Criterion, µg/m³
PM_{10}	Yes	24 hours	50
		annual	20
$PM_{2.5}$	Yes	24 hours	25
		annual	8
RCS (as $PM_{2.5}$)	Yes	annual	3

- The APACs do not include a dust deposition criterion; however, an "insoluble solids" deposition rate of 4 g/m2.month (no more than 2 g/m2.month above background) represents a useful guideline for assessing whether dustfall (nuisance dust) is likely to impact on local amenity.
- The General Environmental Duty (GED) defined in Part 3.2 of the Environment Protection Act 2017 requires that a person who is engaging in an activity that may give rise to risk of human health or the environment from pollution or waste must minimise those risks, so far as reasonably practicable.

1.5. Acceptance criteria:

- No nuisance dust complaints from nearby residences or the immediate community.
- Management of dust emissions to minimise risks to sensitive receptors, as far as reasonably practicable, in accordance with the GED; and
- No complaints from local road users regarding sealed road conditions within the immediate vicinity of the quarry.

2. ROLES AND RESPONSIBILITIES

Responsibilities and accountability for the implementation of this Dust Management Plan at the Coleraine Quarry are outlined below.

2.1. General Manager

Development, resourcing, implementation and review of the Dust management Plan is the responsibility of the Rigby Brothers Quarries General Manager/Operations Manager. It is the General Manager/Operations Manager's responsibility to ensure that:

- A Dust Management Plan is developed, resourced, implemented and reviewed.
- Personnel and environment are not exposed to hazards arising from uncontrolled dust conditions during normal operations or while conducting monitoring or remedial works.
- Only competent in-house personnel or competent persons or organisations experienced in the identification and management of dust related risks in mines or quarries conduct dust impact studies and review and make recommendations on risk management controls.
- The work at the Quarry is compliant with all applicable current statutory and regulatory requirements.
- The Dust management Plan and all subsequent revisions are approved.
- Deviations between operating plans and the Dust management Plan are approved.

The General Manager may delegate duties under the Dust management Plan and to suitable WA410 operations personnel.

2.2. Quarry Manager

The Quarry Manager is responsible for implementing the Dust management Plan, specifically:

- Ensuring compliance with the Dust management Plan requirements through routine and regular audits
- Developing, documenting and implementing controls to manage dust related risks.
- Routine inspections for dust related hazards.
- Documenting and reporting dust hazards, and changes in conditions.
- Developing the pit in accordance with the extraction dust control design.
- Maintaining all dust management assets.
- Reviewing and implementing changes to dust management controls impacted by any changes to infrastructure.
- Review of the Dust management Plan as described in Section 6 of this plan.
- Communicating hazards and controls to workers and making sure that workers comply with the controls.
- Managing emergencies that involve dust related hazards, in accordance with the recommendations in this Plan.
- Ensuring that all new site personnel are familiarised with relevant sections of the Dust management Plan during the site induction process and that a copy of the Dust management Plan is available in a location which is readily accessible by all site personnel.

2.3. Quarry Supervisor

The Production Manager and Quarry Supervisor are responsible for:

- Ensuring that the Dust management Plan is implemented and complied with.
- Safe Working Procedures are implemented and monitored to ensure compliance.
- The quarry pit, waste/overburden dumps and stockpile faces are routinely inspected for dust related hazards and observations documented.

- All unexpected or uncontrolled dust occurrences are recorded and documented.
- Any problems with the functioning of dust management asset such as water pumps and sprays, water storage, pipes, and water trucks are reported and rectified.
- Regular and routine inspection and supervision of the quarry work area for dust related hazards is carried out.

2.4. All Quarry Personnel

It is the responsibility of all quarry personnel to:

- Perform all work in accordance with standard operating procedures that exist to meet the requirements of this Dust management Plan.
- Monitor site conditions during the shift for the occurrence of unexpected or uncontrolled dust plumes.
- Monitor airborne dust from site haul roads, benches hardstand areas and stockpiles for excess dust emissions.
- Report dust related hazards and ineffective controls.

3. COMPONENTS OF THE DUST MANAGEMENT PLAN

3.1. Potential Impacts of Dust

3.1.1. General

Dust emissions have the potential to cause health, amenity and vegetation impacts.

3.1.2. Health Impacts

Coleraine Quarry recognises the health effects associated with nuisance dust.

Coleraine Quarry is therefore committed to treating health impacts seriously and to ensure that the potential for impacts upon health are controlled as far as reasonably practicable.

3.1.3. Amenity Impacts

Coleraine Quarry is aware that dust emission can be significant in terms of the social and economic welfare of a community. The stress associated with sustained amenity impacts may also lead to secondary health impacts.

Coleraine Quarry is therefore committed to treating amenity impacts seriously and to ensure that the potential for impacts upon amenities are controlled as far as reasonably practicable.

3.1.4. Vegetation Impacts

Dust emissions are not expected to result in any significant native vegetation impacts due to the buffer zone surrounding the process area and lack of native vegetation. Despite this, and to protect all vegetation within the vicinity of the quarry, Coleraine Quarry is aware that high dust emissions over a sustained period can form a physical barrier on vegetation to restrict natural processes such as photosynthesis.

Coleraine Quarry is therefore committed to treating vegetation impacts and to ensure that the potential for impacts upon vegetation are controlled as far as reasonably practicable.

3.2. Identification of Dust Generating Activities and Acceptable Controls

A site audit has been conducted on the various work activities to identify potential sources of airborne dust hazards. A risk assessment was performed for each of these hazards and the most effective controls were adopted as far as reasonably practicable.

Higher order controls such as elimination, substitution and engineering controls were considered as well as administrative and PPE controls. The adopted controls for each activity are as follows:

Drilling:

- Provision of water for drillers dust suppression
- Wetting down of access roads and work area

Load and Haul:

- Water cannon as required on shot rock prior to load and haul
- Regular application of water on haul roads

- Minimise vehicle movements
- Reduce onsite vehicle speeds, particularly in dry and windy conditions

Crushing, Screening and Conveying Materials:

- Water sprays on conveyor discharges from jaw crusher and both hammermill crushers
- Water sprays on drop points from conveyor head drums
- Minimise the fall height of materials from conveyors to stockpile
- Screens enclosed with covers where practical
- Minimise material spillage from conveyors, particularly at transfer points
- Ensure aggregates surfaces are damp, but not so wet as to cause blockages in screens and chutes
- Ongoing visual monitoring of plant to identify areas where dust is generated

Stockpiling:

- Use water cannons, sprinklers for small stockpiles
- Maintain stockpile height to reduce fall heights on materials such as 20mm and 60mm crushed rock that contains a high percentage of fines

Mobile Equipment General Operations:

- Doors and windows of equipment are closed at all times
- Air conditioning installed within equipment cabins
- Cabins regularly cleaned using wet wiping
- Do not use compressed air to blow out cabins or filters

Traffic Areas:

- Regular application of water on traffic areas
- Minimise vehicle movements
- Ensure speed limits are maintained at a level to minimise dust generation

Sales Loading:

- Regular application of water on areas where loading from and surrounding traffic routes
- Ensure stockpiles being loaded from are wet down prior to loading using water cannon or sprinklers
- Truck drivers to remain in cabins whilst being loaded with windows closed
- Vehicles transporting dusty materials will be covered, or the loads wetted, to minimise dust generation
- The deposition of mud and fine material onto the site access road and public roads by departing sales trucks will be minimised by requiring them to use the wheel wash, clean loose dust/sediment from truck side rails, tailgates and draw bars (such material can be a significant dust source during dry weather).

Maintenance/Housekeeping:

- Wash down dusty areas well before performing maintenance work; taking into account you may create slip and fall hazards in doing so
- Use dust extraction systems in restricted or confined areas
- Ensure spillage on catwalks, under conveyors and transfer points is removed on a daily basis

Disturbed Surface Areas:

- Minimising the extent of potentially erodible areas
- Topsoil stripping operations will be suspended if dust drifts towards nearby sensitive receptors (within 500m)
- Excavated material will be wetted, as required, during hot, dry windy conditions

3.3. Particulate And Meteorological Monitoring

Three types of airborne dust monitoring are currently or will be undertaken by Rigby Brothers:

1. Visual dust monitoring
2. Onsite dust monitoring
3. Offsite sensitive receptor dust monitoring

Visual monitoring can make a valuable contribution to the dust control strategy on site as it provides a constant review of operational dust impacts. In the first instance, the appearance of excess airborne dust should be investigated, the source of the dust identified, and the incident recorded. If the hazard cannot immediately be controlled, work is to cease until the issue is rectified.

Benefits of visual monitoring for the Coleraine Quarry include:

- Quick and simple, and proportional to the scale of the operation.;
- Ability to respond to complaints promptly;
- Review of dust controls;
- Identifying the occurrence of acute dust events;
- Monitoring compliance with Work Authority;
- Demonstration of proactive approach and vigilance to authorities.

Dust disposition monitoring is also done on site and outside the Work Authority boundary as required.

The Quarry Manager monitors the weather forecasts on the Bureau of Meteorology (BOM) website for adverse conditions and uses this information to prepare for adverse wind conditions to minimise the impact of wind on generating airborne dust and determining the direction and extent which the dust may travel.

All details of dust monitoring are recorded in a dust management diary or a dust management data base.

4. Adopted Control and Monitoring Measures

Note: The controls listed below include all standard controls stated in the Approved Risk Management Plan and any additional control identified.

4.1. Controls

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Minimise exposed / disturbed areas	Compliance to maximum disturbed area at any given time
2.	Stripping tasks restricted to areas within 250m from nearby sensitive receptor (nearest residence) // Stripping tasks halted whenever dust generated will drift toward a nearby residence(s) located at <250m from the WA boundary	Stripping confined to approved disturbance areas // Stripping activity stopped if wind speed and direction generate dust drifting toward a nearby residence at <250m
3.	Water cart / sprays used on exposed areas, roads, hardstand areas and stockpiles	Water cart and ample supply of water available on forecast hot, dry days or during extended dry periods when inherent moisture content is reduced
4.	Water sprays at critical location on any mobile and fixed processing plant	Ample supply of water available on forecast hot, dry days or during extended dry periods when inherent moisture content is reduced
5.	Crushing plant, screen boxes and conveyors are enclosed. Conveyor transfer points are fitted with dust suppression water systems (water mist and fog).	Dust suppression devices fitted to all operating dust- generating plant. Ample supply of water available for dust suppression water systems.
6.	Minimising exposure between conveyor discharge and top of stockpile	Conveyor and stockpile monitored and adjusted, as necessary, to minimise exposure
7.	Dry excavated material to be wetted in hot, dry, windy conditions or whenever dust generation requires	Quarry Manager's discretion based on weather forecast, visual observation or stakeholder engagement
8.	Minimise vehicle movements (restrict to designated areas) and limit vehicle speeds, adjusting speed as necessary to conditions	Speed / traffic management signs maintained at critical locations, and drivers trained to drive to conditions so as to minimise dust generation
9.	Suspension of potentially dusty operations (including blasting) during hot, dry, high wind conditions or whenever dust generation requires	Quarry Manager's discretion based on weather forecast, visual observation or stakeholder engagement
10.	Cover vehicles carrying dusty materials when transferring material from the site or treat with water to minimise dust	All dusty loads covered at weighbridge or sprayed with water prior to leaving site to transfer materials
11.	Contour, vegetate and stabilise screening bunds, as soon as practicable, and also topsoil / overburden stockpiles to be retained more than 3 months, as well as buffer areas	Screening bunds and topsoil / overburden stockpiles vegetated and stabilised within 3 months of construction. Planted vegetation maintained
12.	Progressively contour and vegetate topsoil stockpiles and overburden dumps to be retained more than 6 months, as well as outer faces of raised pads and rehabilitated landforms	Topsoil stockpiles and overburden dumps vegetated and stabilised within 6 months of construction. Stockpiles located and size minimised, as far as practicable, to reduce dust generation. Planted vegetation maintained
13.	Establish initial pasture on progressively rehabilitated landforms (cut or backfill), as soon as practicable.	Topsoiled and planted pasture on cut or backfill batters awaiting rehabilitation within 3 months. Pasture to be fully established within 12 months. Planted vegetation maintained
14.	Dust suppression equipment maintenance regime in accordance with manufacturer specifications.	All plant and equipment maintained as per manufacture specification to maximise dust suppression
15.	Continual visual monitoring by all staff for dust leaving the site, throughout operations, and notification to the Quarry Manager promptly for remedial action	No nuisance dust impacts to sensitive receptors

4.2. Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Ongoing visual monitoring of dust generated on site by all staff	Visual monitoring for dust leaving the site Hourly assessment of dust on hot, dry or windy days
2.	Weather forecast and onsite conditions for potential adverse dust generating conditions	Monitor for likely adverse dust generating conditions that may lead to nuisance dust impacts to sensitive receptors
3.	Surface condition of exposed areas, roads, hardstand areas and stockpiles	Visual observation during regular inspections and informally by mobile plant operators and truck drivers
4.	Functionality of crushing plant's dust suppression systems	Plant pre starts – preventative maintenance cycle
5.	Complaints and observations / comments from sensitive receptors	Complaints and comments recorded

5. DAILY ACTION PLAN (includes adverse weather conditions)

Rigby Brothers have developed an action plan to manage dust emissions from the site throughout the day including during adverse weather conditions (refer to Attachment 'Dust Control – Daily Actions').

Dust complaints from employees are to be actioned through the site's issue resolution procedure. Community complaints will be actioned through the community complaints management process in the Community Engagement Plan. Where a satisfactory outcome is not achieved between the complainant and Rigby Brothers, the issue will be reported to the relevant authority ie WorkSafe, in regard to an employee complaint and ERR in regard to a resident's complaint.

6. REVIEW OF THE DUST MANAGEMENT PLAN

The Dust Management Plan will be reviewed regularly against the control measures adopted at the site for dust management.

The minimum review frequency is listed inside the cover page, however other triggers to review the Dust Management Plan include:

- prior to progressing to a new quarry extraction stage that requires revised dust management
- when new plant is introduced to the site – mobile or fixed
- when complaints are made by nearby residents
- with the introduction of new dust management controls

ATTACHMENT

Rigby Bros & Co Pty Ltd - Quarry

Dust Control – Daily Actions

Morning

Potential Dust Source	Action Required	Person Responsible
Wind direction can impact on amount of dust blown around	Check wind direction – use a flag or wind sock to confirm direction, use appropriate measures to lower impact of wind on dust movement	Quarry Manager (Jason Rigby)
Check all Tracks to see if ground is wet or dry	If tracks are dry – run water tanker over all tracks to wet down the tracks	Quarry Manager (Jason Rigby)
Check Stockpiles to see if dust is being blown from them	If visible dust being blown from stockpiles then use water cannon to reduce dust	Quarry Manager (Jason Rigby)
Crushing Plant Operating	Ensure water sprays are operational and ensure stockpile is not low. Ensure cabin seals are in good order and air-conditioner is operating and ensure door is closed while crusher is operating. Remove spillage on catwalks, under conveyors and transfer points	Crushing Plant Operator on the day.

Midday

Potential Dust Source	Action Required	Person Responsible
Wind direction can impact on amount of dust blown around	Check wind direction compared to morning check – use a flag or wind sock to confirm direction, use appropriate measures to lower impact of wind on dust movement	Quarry Manager (Jason Rigby)
Check all Tracks to see if ground is wet or dry	If tracks are dry – run water tanker over all tracks to wet down the tracks	Quarry Manager (Jason Rigby)
Check Stockpiles to see if dust is being blown from them	If visible dust being blown from stockpiles then use water cannon to reduce dust	Quarry Manager (Jason Rigby)

End of Day

Potential Dust Source	Action Required	Person Responsible
Check if rocks will be crushed the following day	Wet down rocks to be crushed the following day,	Quarry Manager (Jason Rigby)
Check wind strength and if dust is being blown around and out of the quarry	Wet down areas that are causing dust to be blown around eg tracks, stockpiles	Quarry Manager (Jason Rigby)

**Note – in times of extreme winds, Quarry Manager will consider shutting down operation of the crushing plant and cease other activities that may be causing extreme dust conditions.

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ACOUSTIC REPORT
for
RIGBY BROTHERS QUARRY, COLERAINE, VICTORIA

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1 Introduction

Rigby Brothers Quarry is located north-west of the township of Coleraine, at 26 Templeton Street. The site of the quarry is a basalt rich hill, which is surrounded by generally flat or gently undulating land.

An aerial view of the locality is shown in Figure 1.

Figure 1 – Quarry locality, aerial view *(Google Satellite image)*

The Quarry normally operates 5 days a week, Monday to Friday, during daytime hours, 7:30 to 17:00.

There are a number of residences in the vicinity. The four closest to the Quarry are located on 'farm' land, whilst the other residences are on more conventional, generously sized, residential blocks on the outskirts of Coleraine.

CET Group was commissioned to undertake noise measurements at noise sensitive locations in the vicinity, with the Quarry in operation.

2 Noise Sources

A view of the Quarry vicinity is shown in Figure 2.1. From a noise generation perspective, the Quarry can be considered to be in three parts:

1. The Pit or quarry face, where the raw stone is dug from the ground and is loaded by excavator into the tray of a haul truck. The truck then hauls the load up mine road(s) to the Crushing and Screening Plant. Noise is generated by the diesel powered excavating machines and haul trucks; the noise is produced all the time the machines are operating but the noise levels rise and fall frequently as the engines power up or down. The Pit is now well below the surrounding ground level, so this noise is contained somewhat.
2. The Crushing and Screening Plant (C&SP), where the raw stone is crushed and separated into stockpiles of specific particle size. This is the major noise source for the Quarry and its location is marked in Figure 2 by a red star. The Screening Plant (including secondary milling) is located at the normal ground level, whilst the primary crusher is located at a higher level, so that the raw material can be dropped in by gravity. The noise is generated from the crushing of the stone

and from the rattling of the screens that separate the product into specific particle sizes; this noise is fairly steady whilst the plant is operating. The noise level peaks when a haul truck approaches the tipping station, above the primary crusher. The roadway up to the tipping station is relatively steep and the heavily laden haul truck runs at full power to make the climb. Once at the top, the haul truck then reverses up the tipping station and tips out the load of rock. Typically, a haul truck arrives about every 6 to 7 minutes.

3. The Overburden areas, where excess unusable material is placed, for later restoration work. Noise is generated from diesel powered excavating machines and haul trucks. This work is periodic in nature, being only necessary when removing waste material from the Pit area or for opening up a new quarrying zone. On the day that noise measurements were taken, some of this activity was taking place, on the side of the Quarry closest to Location 5.

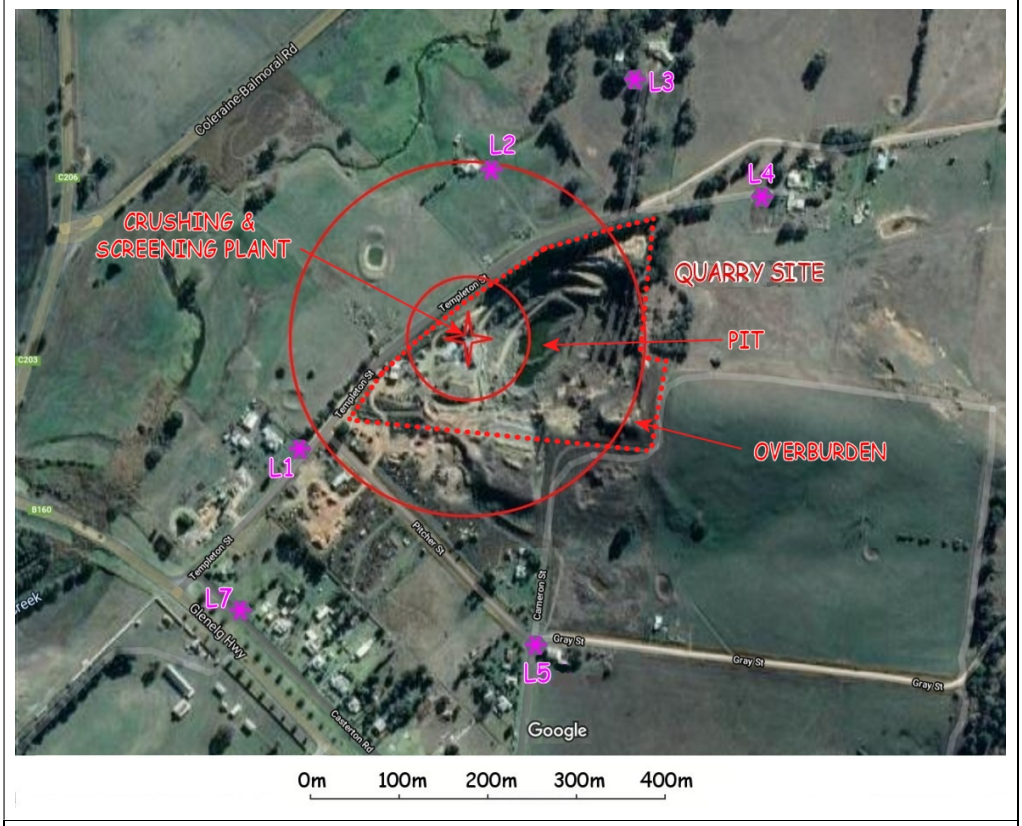

Figure 2.1 – Quarry and vicinity. Nearest noise sensitive locations are marked (L1 to L7). *(Google Satellite image)*

The noise sensitive locations nearby the Quarry are also shown in Figure 2.1, marked L1 to L7.

A photograph of the Crushing and Screening Plant is shown in Figure 2.2. Photographs from nearby locations looking toward the Quarry are included as Figures 2.3. 2.4 & 2.5.

Figure 2.2 – Crushing & Screening Plant

Figure 2.3 – View of the Quarry from Location L1

Figure 2.4 – View of the Quarry from Location L2

Figure 2.4 – View of the Quarry from Location L5

Note: The photographs have been enhanced so that the vehicles / equipment are more apparent in the landscape.

3 Permissible Noise Levels (PNL)

The Victorian EPA publication 1826.4, known as the **Noise Limit & Assessment Protocol,** provides guidance for acceptable noise levels for a variety of situations. The section of the protocol relevant to this Quarry is:

Part I: Commercial, industrial and trade premises,
Section 2. Noise limits - Rural Area Method

Noise levels based on zoning

Reference Cl. 2.7 Noise limits in rural areas for **earth resources** (includes quarries).

The Protocol provides that Section 2.7 be used to determine the noise limits for earth resources premises where the noise sensitive area is in a rural area - this is the case for this Quarry. The protocol provides noise level limits for four categories, namely:

- Where the noise sensitive area is zoned GWAZ, RCZ or RLZ;
- Where the noise sensitive area is zoned IN3Z or SUZ;
- Where the noise sensitive area is zoned IN1Z or IN2Z;
- In all other situations.

In this case, the noise sensitive locations are all in zone Low Density Residential (LDRZ1), so the fourth category (dot point) applies.

The applicable noise limits are:

Item	Period	Hours	Noise level limit
i.	Day	**0700—1800 Monday—Friday** 0700—1300 Saturdays	**46 dB(A)**
ii.	Evening:	1800—2200 all days 1300—1800 Saturdays 0700—1800 Sundays and public holidays	41 dB(A)
iii.	Night:	2200—0700	36 dB(A).

Background noise levels

The Protocol also allows for the background noise level to taken into account, in determining the noise limits. In this case, the background noise levels are considered to be neutral, so no adjustment applies.

Specific variations for mines, quarries and landfills

The Protocol also allows for variations to the noise limit for activities that occur occasionally, rather than as part of routine operations. These are defined in Section 5. Table 4.

The fourth row of Table 4 considers **Necessary unshielded work**, for example occasional work that is necessary but cannot practicably be shielded by barriers, landforms or natural topography. This category allows that, for the Day period, the noise limit may be increased by up to **10 dB.** This is applicable to the work that was being undertaken on the side of the Quarry closest to Location 5.

Permissible Noise Levels

The Quarry only operates during the **Day** period, so only Day period limits apply.

The permissible noise limits are summarised as follow:

- **Routine operations: 46 dB(A);**
- **Occasional operations: 56 dB(A);**

4 Noise Levels Recorded

On the day that site measurements were taken, the weather was fine and the breeze was negligible.

The noise level measured at each location is the average noise level over the measurement period (nominally 15 mins), with the 'A' weighted correction - this is identified by the notation L_{Aeq}

Noise level readings were taken over octave bands from 63 Hz to 8 kHz, as well as overall dB(A) readings. The maximum noise level readings are also included for comparison, 'though they are not relevant to the assessment. Full details of the data are included in Appendix 2.

For simplicity, the following summary references the average dB(A) readings ($\mathbf{L_{Aeq}}$) and the maximum dB(A) readings ($\mathbf{L_{Amax}}$) for each location.

Table 4.1 – Noise Level Data

Loc'n N°	Description	Dominant Noise	Approx Dist m	Mode	Overall dB(A)	PNL dB(A)	Diff'ce dB(A)
L1	Outside Residence at 15 Templeton St. Line of sight to Tipping Station.	*Crushing & Screening Plant mainly; Intermittent noise ex overburden work*	230	$\mathbf{L_{Aeq}}$	**52.0**	**46**	**+6**
				L_{AMax}	69.6		
L2	Outside Residence at 53 Templeton St. Line of sight to Tipping Station.	*Crushing & Screening Plant mainly; Some audible noise ex Pit.*	195	$\mathbf{L_{Aeq}}$	**50.8**	**46**	**+7**
				L_{AMax}	65.0		
L3	Outside Residence at 63 Templeton St. Line of sight to Tipping Station.	*Crushing & Screening Plant audible; Distant trucks, birds etc.*	350	$\mathbf{L_{Aeq}}$	**45.5**	**46**	**0**
				L_{AMax}	62.4		
L4	Outside Residence at 68 Templeton St. No sightline to any work activity.	*Crushing & Screening Plant audible; Distant trucks, birds close by.*	370	$\mathbf{L_{Aeq}}$	**45.3**	**46**	**-1**
				L_{AMax}	69.5		

L5	Outside Residence at 1 Gray St. Line of sight to overburden works. C&SP not visible.	*Overburden work dominant . Crushing & Screening Plant not audible.*	270#2 350#2	**L_{Aeq}**	**52.2**	**56**	**-4**
				L_{AMax}	65.8		
L7	Outside Residence at 34 Casterton Rd. Hill visible, C&SP not visible.	*Location on main road. Traffic noise dominant. Quarry only just audible during lulls in traffic noise.*	400	**L_{Aeq}**	**54.2**	**N/A#1**	**N/A#1**
				L_{AMax}	72.1		

Notes:
#1. Quarry noise effectively inaudible at this location, so noise limit for Quarry is not applicable.
#2. Approx 270 m from overburden work & 350 m from C&SP.

5 Conclusion

The Quarry only operates during the **Day** period, so only Day period limits apply.

The applicable permissible noise limits are:

- **Routine operations: 46 dB(A);**
- **Occasional operations: 56 dB(A);**

It is apparent from the results that, with regard to noise from the Quarry:

- The noise levels at Locations 1 & 2, the two locations closest to the C&SP, exceed the applicable limit [46 dB(A)];
- The noise level at Location 5 is significant, but due to the nature of the work it is within the applicable limit [56 dB(A)];
- The noise levels at all other locations are within the applicable limit [46 dB(A)].

The noise levels exceed the applicable limits at two locations, but at these two locations the background noise is generally relatively low, which makes the Quarry noise quite distinct.

It is noted that the noise levels recorded at these two locations, due to the Quarry, are less than those experienced at the nearby main road, due to passing traffic.

Further, it is noted that the residences at locations L1 to L4 are largely surrounded by farming land. On the day that measurements were taken, it was apparent that whilst the areas are generally quiet, there other significant sources of noise from time to time, such as tractors, chainsaws, heavy trucks and even cattle bellowing.

6 Further action

It is for the Quarry proprietors to consider any further action.

It is noted that for the Crushing & Screening Plant, it would likely be difficult and expensive to either treat the noise at source or screen off the noise from the surrounds, particularly given the prominent location of the primary crusher and the associated tipping station.

There has been some discussion about re-locating the Crushing & Screening Plant, as part of extending the quarrying operations to access additional parts of the resource.

APPENDIX 1 – Zoning

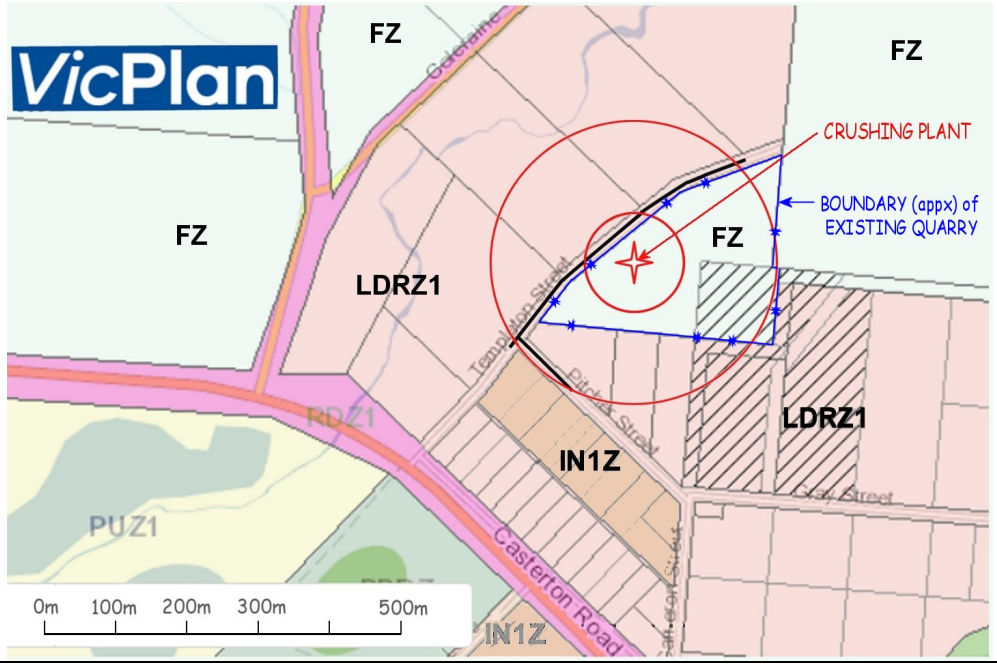

Figure A1 - Zoning for the locality (VicPlan map)

One might expect that the site of the Quarry itself would be an industrial area, however, it is zoned Farming (FZ).

The area surrounding the Quarry site is zoned mostly as Low Density Residential (LRDZ1); there is a section of land adjacent to the east side that is also zoned Farming (FZ).

There is an area to the south of the Quarry, but not directly adjacent to it, that is zoned Industrial (IN1Z). This land is largely vacant except for three residences at the south eastern end of the zone.

APPENDIX 2 – Noise Measurement Data

Noise levels recorded are tabulated below, with explanatory notes.

Rigby Bros Quarry, Coleraine
Noise measurement data
Date of readings: November 1st., 2021

Loc'n №	File №	Location	Description of noise(s)	Start Time	Dur'n (mins)		Octave Band Centre Fregency (Hz) 63	125	250	500	1000	2000	4000	8000	dB(A) O'all
L0	R190	Crusher Plant , 25m dist	Crushing & screening noise	9:00	18.0	L_{Aeq}	54.1	64.7	67.1	73.2	79.2	78.4	73.4	64.4	**83.0**
						L_{Amax}	63.8	79.2	75.1	83.7	85.5	87.5	85.5	73.1	91.0
L1	R191	Outs. Residence @ 15 Templeton	Quarry Audible - Crushing & O'burden. Also passing cars, distant trucks, cows birds	9:30	17.1	L_{Aeq}	32.6	38.5	47.3	44.6	45.5	44	39.7	30.8	**52.0**
						L_{Amax}	46.1	50.1	67.8	63.8	62.8	62.6	61.2	54.1	69.6
L1	R192	Outs. Residence @ 15 Templeton	Background 1. Distant trucks, birds, cows, 2 vehicles	10:00	15.1	L_{Aeq}	32.1	34	41.1	36.5	39.3	37.1	36.1	29.3	**46.0**
						L_{A90}	19.1	21.6	21.3	22.3	24.6	23.9	23.4	16.2	**32.8**
L2	R193	Outs. Residence @ 53 Templeton	Background 1. Distant trucks, birds, geese	10:25	3.7[#1]	L_{Aeq}	29.7	33.3	36.1	38.6	40.2	38.3	35.7	27.4	**45.5**
						L_{A90}	24.5	25.5	21.2	22.1	25.4	24.9	22.8	14.6	**34.1**
L2	R197	Outs. Residence @ 53 Templeton	Quarry quite Audible - Crushing Plant. Distant trucks, birds, geese	10:35	22.5	L_{Aeq}	40.8	42.6	36.2	38.6	44.7	44.9	42.5	30.5	**50.8**
						L_{Amax}	55.3	59.5	48.3	55.5	64.2	62.2	64.3	52.3	65.0
L3	R198	Outs. Residence @ 63 Templeton	Quarry Audible - Crushing Plant. Distant trucks, birds	11:00	21.2	L_{Aeq}	34.8	36.2	28.7	32.2	39.3	40.4	38	30.1	**45.5**
						L_{Amax}	50.4	49.2	39.7	47.4	52.9	56.6	61.9	53.8	62.4
L4	R199	Outs. Residence @ 68 Templeton	Quarry Audible. Distant trucks, magpies close by	11:30	13.7[#2]	L_{Aeq}	33.2	33.4	32.6	34.1	40.4	46.6	39.7	30.3	**45.3**[#2]
						L_{Amax}	49.7	43.2	46.8	52.2	58.6	69.4	63.8	56.5	69.6
L5&6	R200	Outs. Residence @ 1 Gray St.	Quarry Audible - only O'burden; Crushing not discernable Also passing cars, distant trucks	11:50	8.9[#3]	L_{Aeq}	35.8	38.1	39.8	41.2	47	45.5	41	37.5	**51.3**
						L_{Amax}	46.4	55.5	63.5	57.9	64.1	60.3	57.2	58.3	65.6
L5&6	R202	Outs. Residence @ 1 Gray St.	Background 1 (Lunch brk). 4 vehicles passed by	12:05	16.2	L_{Aeq}	30.7	36.4	37.1	40.4	45.3	40.6	37.3	33.8	**48.7**
						L_{A90}	18.9	23	24	23.7	28.9	26.6	20.6	14.7	**34.4**
						L_{Amax}	45.4	53.5	55.8	58.3	63.5	61.6	63.3	56.6	67.2
L2	R205	Outs. Residence @ 53 Templeton	Background 2. Distant trucks, birds, geese	12:25	16.3	L_{Aeq}	31.3	34.2	32	32.4	35.7	35.6	36.6	26.1	**42.9**
						L_{A90}	28.1	27.6	19.7	20.1	26.2	26.6	23.1	15.2	**35.8**
						L_{Amax}	43.2	49.8	50.7	49.4	54.9	54.3	59.7	47	59.8
L1	R206	Outs. Residence @ 15 Templeton	Background 2. Distant trucks, birds, cows, 6 vehicles	12:45	16.1	L_{Aeq}	30.9	34.5	45.3	42.8	45.7	42.1	37.7	31.4	**50.6**
						L_{A90}	18.3	20.2	20.7	23.2	27.5	25	22.3	15.3	**33.6**
						L_{Amax}	50.9	55	68.1	61.3	68.3	64.9	57.9	52.2	69.5
L7	R207	Outs. Residence @ 34 Casterton Rd	On the main rd. Noise mostly from passing trucks, cars Crushing Plant barely audible, only in lulls	01:10	16.1	L_{Aeq}	44.3	45.2	47.5	45.9	48.1	46.2	42.2	33.2	**54.4**
						L_{A90}	19.6	21.1	20.6	24.7	30.1	28	26.9	17.4	**37.3**
						L_{Amax}	65.2	63	65.7	64.5	64.2	67	70.6	59	72.1
L5 (&6)	R208	Outs. Residence @ 1 Gray St.	Quarry Audible - only O'burden; Crushing not discernable	02:00	3.5[#4]	L_{Aeq}	36.5	36.9	38.8	47.2	47.8	45	38.9	30.1	**52.2**
						L_{Amax}	45.7	47.5	57.3	64.6	63.5	58.6	52.5	48.5	65.8
L5 (&6)	R209	Outs. Residence @ 1 Gray St.	Crushing Plant barely audible. Overburden work halted No passing vehicles in this set	02:10	16	L_{Aeq}	29.4	29.7	28	30	33.7	32.7	31	32.2	**40.2**
						L_{A90}	22.7	23	23.3	25.7	28.8	27.1	22.1	14.6	**35.1**
						L_{Amax}	43.3	42.9	44	48.5	56	53.3	52.3	58	58.6

Notes

1 Reading R193. Reading was short duration, as Plant re-started after break.
2 Reading R199. Reading was steady at 45.3 +/- 0.1, till a chainsaw was started in the mid distance. Then reading shot up to 48.7 before stopped. (Octave readings include chainsaw)
3 Reading R200 Ceased early when Operators stopped for lunch.
4 Reading R208 Ceased after 3.5 mins - Operators asked to stop to allow taking L209

Unusable readings: R194, R195, R196, R201, R203, R204

Figure A2 - Noise Measurement Data

NOISE MANAGEMENT PLAN

for

Extractive Industry Work Authority WA410

COLERAINE QUARRY

August 2024

WA410 – Coleraine Quarry
26 Templeton Street
COLERAINE VIC 3315

Project No. R21_001
August 2024

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WA410 Coleraine Quarry
Noise Management Plan

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August 2024

Document Control / Authorisation

The preparation of this Noise Management Plan has been a collaborative effort between BCA Consulting and Jason Rigby of Rigby Brothers, for implementation at their Coleraine Quarry, WA410

Revision history

Revision	Description	Date	Originator	Reviewer	Approver
00	Draft for comment	5 August 2024	TF	FN	

Distribution

Report Status	No. of copies	Format	Distributed to	Date
Draft for Comment	1	PDF		15 Aug 2024

Review

As a minimum, this Noise Management Plan will be reviewed within 3 years of being approved.

NEXT REVIEW DATE: August 2028

1. PURPOSE OF THE NOISE MANAGEMENT PLAN

1.1. Introduction:

The Noise Management Plan is an adaptive management tool for managing both the risks posed by noise generated by quarrying activities and the potential risks posed by the operation to the environmental values of air quality and the public.

This document is to be used in conjunction with the Risk Management Plan component of the Work Plan for the quarry. The Risk Management Plan describes the noise hazards and risks associates with sensitive receptors at the time of drafting and includes the application of a range of control measures to manage the risks posed by the various noise sources generated by different quarry activities. This adaptive Noise Management Plan allows for the adaptive application of monitoring and control measures to manage the risks posed by potential changes to noise generating sources over time, ie as the quarry develops or as new equipment is introduced.. This adaptive Noise Management Plan is included as a key component in the overall management of this hazard and ensuring the stated controls in the Risk Treatment Plans and any additional controls that might be required by the Earth Resources Regulator or other agencies are captured and continually reviewed to ensure their effectiveness.

This Noise Management Plan is for the following hazard in the Risk Management Plan:

- 2.3 Noise
- 2.8 Blasting

The Noise Management Plan is designed to be easy-to-follow, non-technical, and used by anyone who needs to understand the management of Noise generated on the site from any number of sources on the site and at any point during the life of the quarry, in respect of both the risks posed by noise emissions and the potential risks posed by the operation activities to emit noise.

The Quarry Manager is responsible for implementing this Noise Management Plan and can seek assistance from the General Manager and specialists as required, particularly if there are incidents due to noise related hazards. This Noise Management Plan requires that the Quarry Manager inspects the quarry operations for noise related hazards on a regular basis. Hazards are to be reported in the Coleraine Quarry risk management system.

Coleraine Quarries strives to ensure that noise management measures on the site achieve ongoing compliance with all relevant requirements. The current objectives, relevant compliance criteria and requirements and acceptance criteria are set out below.

1.2. Objectives:

- Manage and minimise offsite noise impacts on all sensitive land uses and environments
- Apply noise controls at the source to the extent practicable; and
- Minimise impacts on local amenity, employees and the environment and protect the environmental values of the air as defined in the Environment Reference Standards (ERS)

1.3. Relevant compliance criteria and requirements:

- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Publication 1823.1, June 2021: Mining and Quarrying – Guide to preventing harm to people and the environment
- EPA Publication 1254.2, May 2021: Noise Control Guidelines
- EPA Publication 1826.4, May 2021: Noise Limit and Assessment Protocol for the Control of Noise from Commercial, Industrial and Trade Premises and Entertainment Venues.

- EPA Publication 1834.1, September 2023: Civil Construction, Building and Demolition Guide; Chapter 4 – Noise and vibration.
- WorkSafe Victoria Occupational Health and Safety Act 1994
- WorkSafe Victoria Occupational Health and Safety Regulations 2017
- Your Health and Safety Guide to Noise Edition No. 1 June 2007- WorkSafe Victoria

Worker Noise Exposure Standard:

Equivalent 8-hour Exposure Noise Levels	
Duration of Exposure (in hours)	LAeq Noise Level, in dBA
12	83
10	84
8	85
4	88
2	91
1	94
0.5	97
0.25	100

- Noise levels well above 85 dBA are acceptable under the OH&S (Noise) Regulations as long as the duration of the noise at the worker's ears is sufficiently short and hearing protection devices are being used.
- However, to be prudent it is recommended that workers should not be exposed to noise levels greater than 85 dBA, LA eq for any length of time. The General Environmental Duty (GED) defined in Part 3.2 of the Environment Protection Act 2017 requires that a person who is engaging in an activity that may give rise to risk of human health or the environment from pollution or waste must minimise those risks, so far as reasonably practicable.

Applicable Environmental Noise Limits:

Period	Hours	Noise Level Limit
Day	0700 – 1800 Monday -Friday 0700 – 1300 Saturdays	46 dB(A)
Evening	000 – 1800 Monday -Friday 0700 – 1300 Saturdays	41 dB(A)
Night	2200 - 700	36 dB(A)

1.4. Acceptance criteria:

The acceptance criteria for this risk treatment plan are:

- No noise complaints are received
- Noise is managed to minimise risks to sensitive receptors, as far as reasonably practicable, in line with the General Environmental Duty, and no unreasonable noise is experienced at sensitive receptors.

2. ROLES AND RESPONSIBILITIES

Responsibilities and accountability for the implementation of this Noise Management Plan at the Coleraine Quarry are outlined below.

2.1. General Manager

Development, resourcing, implementation and review of the Noise Management Plan is the responsibility of the Rigby Brothers General Manager/Operations Manager. It is the General Manager/Operations Manager's responsibility to ensure that:

- A Noise Management Plan is developed, resourced, implemented and reviewed.
- Personnel and environment are not exposed to hazards arising from uncontrolled noise conditions during normal operations or while conducting monitoring or remedial works.
- Only competent in-house personnel or competent persons or organisations experienced in the identification and management of noise related risks in mines or quarries conduct noise impact studies and review and make recommendations on risk management controls.
- The work at the Quarry is compliant with all applicable current statutory and regulatory requirements.
- The Noise Management Plan and all subsequent revisions are approved.
- Deviations between operating plans and the Noise Management Plan are approved.
- Purchase decisions of new plant include an assessment of noise hazards and that adequate controls have been engineered to reduce noise emissions as far as reasonably practicable.

The General Manager may delegate duties under the Noise Management Plan and to suitable WA410 operations personnel.

2.2. Quarry Manager

The Quarry Manager is responsible for implementing the Noise Management Plan, specifically:

- Ensuring compliance with the Noise Management Plan requirements through routine and regular audits.
- Developing, documenting and implementing controls to manage noise related risks.
- Routine noise monitoring for noise related hazards.
- Documenting and reporting noise hazards, and changes in conditions.
- Operating plant in accordance with the accepted noise controls.
- Drilling and blasting in accordance with noise management practices.
- Air blast overpressure monitoring, recording and reporting – modify blasting practices if required
- Maintaining all equipment noise control assets.
- Reviewing and implementing changes to noise management controls impacted by any changes to infrastructure.
- Review of the Noise Management Plan as described in Section 5 of this plan.
- Communicating hazards and controls to workers and making sure that workers comply with the controls.
- Respond to any public noise related complaints.
- Ensuring that all new site personnel are familiarised with relevant sections of the Noise Management Plan during the site induction process and that a copy of the Noise Management Plan is available in a location which is readily accessible by all site personnel.
- Compliance to approved operating hours as Hours as specified in the Work Plan or Planning Permit. Unless stated elsewhere, hours are:
  - Extraction and processing 7am to 6pm Monday to Saturday
  - No work on Sundays and Public Holidays

2.3. Quarry Supervisor

The Production Manager and Quarry Supervisor are responsible for:

- Ensuring that Noise Management Plan is implemented and complied with.
- Safe Working Procedures are implemented and monitored to ensure compliance.
- Plant identified as a source of excess noise are routinely inspected for the effectiveness of noise controls and appropriate actions taken if noncompliant.
- All unexpected or uncontrolled noise occurrences are recorded and documented.
- Any problems with the functioning of noise management assets such as noise attenuation barriers, plant mufflers and crushing and screening noise barriers are rectified.
- Regular and routine inspection and supervision of the quarry work area for noise related hazards is carried out.
- Ensure suitable noise PPE is available for use and that it is stored appropriately and workers are trained to use the PPE.

2.4. All Quarry Personnel

It is the responsibility of all quarry personnel to:

- Perform all work in accordance with standard operating procedures that exist to meet the requirements of this Noise Management Plan.
- Monitor and report site conditions during the shift for the occurrence of unexpected or uncontrolled noise.
- Monitor and report noise from site haul roads, benches hardstand areas and stockpiles for excess noise emissions.
- Monitor and report noise from fixed and mobile plant for excess noise emissions
- Report noise related hazards and ineffective controls.
- Use appropriate PPE in accordance with safe operating procedures as required.

3. COMPONENTS OF THE NOISE MANAGEMENT PLAN

3.1. Potential Impacts of Noise

3.1.1. General

Noise emissions have the potential to cause public nuisance and loss of amenity as well as cause health impacts such as loss of hearing.

3.1.2. Sensitive Receptors

Coleraine Quarry recognises and complies with its duty of care as an employer under the Victorian SafeWork legislation to provide and maintain a working environment that is safe and free of risks to health, so far as is reasonably practicable for employees. The term 'employees' includes workers, contractors and visitors.

Although there are a number of residential properties within the immediate vicinity of the quarry, a formal Noise Impact Assessment has not been conducted, with the site opting instead to undertake targeted noise monitoring as presented in the Jans 2024 Report by CET, as discussed in the Noise Risk Treatment Plan. This site, given its long history, its proximity to receptors and its aspect severely tests the "as far as reasonably practicable" "proportionality" aspect of both the MRSDA and EPA Acts It is emphasised that a quarry with associated extractive activities has been operational at the site or in the immediate vicinity of WA410 since the late 1800's. Due to its proximity to the township of Coleraine, the site is (always has been) highly visible and accountable. The primary crusher identified as a principal source of noise from the site has been in its current location since the mid 1970's and has operated with the knowledge of council and the regulator without issue.

3.1.3. Health Impacts

Coleraine Quarry recognises the health effects associated with excessive noise exposure. The level of hazardous noise impact on hearing can be gradual and is dependent on the level of noise (sound energy) and the length of exposure to the noise. Hazardous noise affects the functioning of the inner ear, which may cause temporary hearing loss. After a period of time away from noise, hearing may be restored. With further exposure to hazardous noise, the ear will gradually lose its ability to recover and the hearing loss will become permanent.

Permanent hearing loss results from the destruction of hair cells in the inner ear. These cells cannot be replaced or repaired by any presently known medical treatments or technology.

Usually, hazardous noise first affects the ability to hear high-frequency (high-pitched) sounds. This means that even though a person can still hear some sounds, conversation will start to sound 'muffled' and a person may find it difficult to understand what is being said.

Coleraine Quarry is therefore committed to treating health impacts seriously and to ensure that the potential for impacts upon health are controlled as far as reasonably practicable.

3.1.4. Amenity, Fauna and Community Health Impacts

Environmental noise can have a negative impact on the sensitive receiver including hearing impairment, hypertension, elevated stress levels, general annoyance and sleep disturbance. Some studies conclude that environmental noise at night can also affect directly or indirectly the health of the cardiovascular system of persons exposed.

Community health is not only extremely important to the community as it can have a direct impact on their lifestyle and general ambience, but it is also vital to the sustainability of our industry. Working quarries are

known to be a repository for wildlife and, as has been done so by quarries in the past, consideration should be where practicable given to wildlife such as nesting birds.

Coleraine Quarry is aware that noise emission can be significant in terms of the social and economic welfare of a community. The stress associated with sustained amenity impacts may also lead to secondary health impacts.

Coleraine Quarry is therefore committed to treating amenity impacts seriously and to ensure that the potential for impacts upon amenities are controlled as far as reasonably practicable.

3.2. Identification of Noise Generating Activities and Acceptable Controls

A preliminary acoustic assessment has been conducted on the various work activities to identify potential sources of noise hazards impacting external sensitive receptors (refer to Acoustic Report by CET Group). The assessment found that the dominant noise emitting activity is the crushing and screening activity.

Rigby Brothers performed a noise hazard identification and risk assessment for each of the identified noise hazards and the most effective controls were adopted as far as reasonably practicable. A noise hazard audit checklist is attached as Appendix A and is used in conjunction with Appendix B during subsequent routine audits to check the effectiveness of controls and to identify any new noise hazards.

Higher order controls such as elimination, substitution and engineering controls were considered as well as administrative and PPE controls. The adopted controls for each activity are as follows:

Drilling and Blasting:

- Selection of working hours to reduce impact on public
- Shot designed to minimise blast overpressure levels

Load and Haul (Resource and Waste):

- Regular maintenance of road surfaces
- Minimise vehicle movements
- Reduce onsite vehicle speeds

Crushing, Screening and Conveying Materials:

- Use of earth bunds to screen noise from crushing and screening plant
- Use plant fitted with noise abatement barriers where practical
- Compliance to approved operating hours
- Noise warning signage in place where required
- Screens and conveyors enclosed with covers where practical
- Ongoing visual monitoring of plant to identify areas where noise is generated

Stockpiling:

- Maintain stockpile height so as to reduce mobile plant noise exposure beyond work area

Mobile Equipment General Operations:

- Doors and windows of equipment are closed at all times
- Use mobile equipment fitted with noise abatement barriers where practical
- Minimise engine revving to reduce engine noise emissions

- Use suitable audible reversing devices
- Park mobile equipment in areas which have earth shielding where possible

Traffic Areas:

- Minimise vehicle movements
- Ensure speed limits are maintained at a level to minimise noise generation

Maintenance/Housekeeping:

- Minimise use of compressors and ensure that compressors are enclosed within sound attenuation barriers
- Use of power tools with low noise emissions rating where possible
- Use of appropriate hearing protection PPE
- Ensure spillage on catwalks, under conveyors and transfer points is removed on a daily basis to reduce the need for machinery. Ideally, spillage to be minimised and controlled by the use of serviceable conveyor scrapers and skirting

Disturbed Surface Areas:

- Minimising the extent of disturbed areas

4. Adopted Control and Monitoring Measures

Note: The controls listed below include all standard controls stated in the Approved Risk Management Plan and any additional control identified.

4.1. Controls

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	pliance to approved operating hours (Within PA 'Day Period' hours)	Hours as stipulated in the Work Plan or Planning Permit (or as otherwise amended by the planning permission) Extraction and processing EPA 'Daylight Hours' Monday to Friday No work on Saturday, Sundays and Public Holidays
2.	No noisy activities (earthworks, truck loading, haulage) permitted onsite within 250m of residences close to EPA 'night period hours'.	No onsite activities during and EPA 'night period' hours No exceedances of noise limits at residences during EPA 'night period' hours
3.	Establishment of screening bund, with initial segments constructed opposite the nearest residences	Compliance to Site Layout Plan and EPA noise limits

4.	Limitations on initial construction activities (e.g. bunds, haulage routes, crushing and screening) to be carried out in accordance with adherence to EPA noise limits.	Initial Construction Activities: EPA 'Daylight Hours' Monday to Friday Construction activities managed as outlined above.
5.	Extraction sequencing, equipment orientation and position to take advantage of shielding from bunds, vegetation, topography, stockpiles or other constructed features	Compliance to Site Layout Plan Locations with noise generating activities effectively screened from noise sensitive receptors.
6.	Screening operational areas from noise sensitive receptors: • Locate site access roads away from sensitive receptors; • Use of existing features (i.e. topography, vegetation) and stockpiles / bunds or other constructed features as noise barriers.	Compliance to Site Layout Plan Locations of noise generating activities effectively screened from noise sensitive receptors.
7.	Maintain access roads and site tracks in good condition	Roads and access tracks graded as required to minimise corrugations and potholes
8.	Minimise noise generated from plant operation, including vehicle speeds limits, quiet material unloading, minimise engine revving, etc.	Speed / traffic management signs maintained at critical locations, and drivers trained to operate plant so as to minimise noise generation and to report atypical noise.
9.	Reversing squawkers fitted to appropriate mobile plant	Squawkers fitted and operational to all mobile equipment
10.	Equipment selection and maintenance regime in accordance with manufacturer specifications.	All plant and equipment chosen and maintained as per manufacture specification to minimise noise emission
11.	Engineered noise abatement for grizzlies, crushers, conveyors, vibrating screens, stacking conveyors, pumps (only for pumping sediment dam) • Damping system encompassing the lining of the crusher bins with rubber matting or similar	Noise abatement devices fitted and maintained as per manufacture specification

4.2. Monitoring

Three types of noise monitoring are / will be undertaken by Rigby Brothers. Note that these include Personal Noise Monitoring for Occupational Health and Safety Compliance.:

1. Personal noise monitoring
2. Workplace environment noise monitoring
3. Offsite sensitive receptor noise monitoring

#	Aspect to be monitored	Details of monitoring
1.	Offsite Noise at sensitive receptors	Periodic noise monitoring will be undertaken to verify equipment noise levels, to ensure noise management measures remain effective and the operation is not emitting unreasonable noise. Complaints, as well as other community engagement activities, and any resulting actions will be documented. Where monitoring is directed by EPA or ERR, monitoring will be in accordance with the regulatory agencies' requirements. The adequacy of control measures against the GED will be assessed through the periodic monitoring, general observation as part of routine site inspections and feedback through community engagement.

In most situations the use of a hand-held integrating sound level meter will produce the most useful information for choosing appropriate noise control measures. In situations where workers are highly mobile or access for the person taking the measurement is difficult or unsafe, it may be more appropriate to use personal sound exposure meters also known as dose meters.

Similarly, hand-held sound level metres can be used to measure noise levels emitted by various machinery and plant to determine the workplace environment level of noise.

The preliminary external acoustic assessment measured noise levels at seven external locations and found the three locations to the south of the quarry (L1, L5 and L7) as receiving the highest noise levels.

5. REVIEW OF THE NOISE MANAGEMENT PLAN

The Noise Management Plan will be reviewed regularly against the control measures adopted at the site for noise management.

The minimum review frequency is listed inside the cover page, however other triggers to review the noise Management Plan include:

- prior to progressing to a new quarry extraction stage that requires revised noise management
- when new plant is introduced to the site – mobile or fixed
- when complaints are made by nearby residents
- with the introduction of new noise management controls

ATTACHMENT A

Rigby Bros & Co Pty Ltd - Quarry

General Noise Hazard Identification Checklist

Site		Conducted by	
Site Location		Date	

Yes, to any of the following indicates the need to carry out a further assessment potentially inclusive of a noise assessment if exposure to the noise cannot be immediately controlled.

Hazard Identification Questions	Yes	No	Noise Controls
Is a raised voice needed to communicate with someone about one metre away?			
Do your workers notice a reduction in hearing over the course of the day? (This may only become noticeable after work, for example, needing to turn up the radio on the way home)			
Are your workers using noisy powered tools or machinery?			
Are there noises due to impacts (such as hammering, pneumatic impact tools) or explosive sources (such as explosive powered tools, detonators)?			
Are personal hearing protectors used for some work?			
Do your workers complain that there is too much noise or that they can't clearly hear instructions or warning signals?			
Do your workers experience ringing in the ears or a noise sounding different in each ear?			
Do any long-term workers appear to be hard of hearing?			
Have there been any workers' compensation claims for noise induced hearing loss?			
Does any equipment have manufacturer's information (including labels) indicating noise levels equal or greater than any of the following: (a) 80 dB(A) LAeq,T (T= time period over which noise is measured)? (b) 130 dB(C) peak noise level? (c) 88 dB(A) sound power level?			
Do the results of audiometry tests indicate that past or present workers have hearing loss?			
Have the site received any complaints from neighbours or receptors?			

ATTACHMENT B

Rigby Bros & Co Pty Ltd - Quarry

Noise Control Effectiveness Checklist

Work Area	`e.g. Sales Area	**Conducted by**	
Work Activity	e.g. Loader Operator	**Date**	

Note: Noise level measurements taken at the worker's location.

Plant Specification:

Plant Type and Model	Komatsu WA420 Front End Loader	Comments
Noise Emissions Specifications	Does any equipment have manufacturer's information (including labels) indicating noise levels equal or greater than any of the following: (a) 80 dB(A) LAeq,T (T= time period over which noise is measured)? (b) 130 dB(C) peak noise level? (c) 88 dB(A) sound power level?	

Activity	Noise Controls	Effective*	Actions
Loader Tramming	▪ Engine bay sound proofing ▪ Cabin sound proofing ▪ Cabin door and window seals ▪ Hearing protection		
Loader maintaining stockpile floor	▪ Engine bay sound proofing ▪ Cabin sound proofing ▪ Cabin door and window seals ▪ Hearing protection		
Safety Devices such as reversing alarms			
Loading truck	▪ Engine bay sound proofing ▪ Cabin sound proofing ▪ Cabin door and window seals ▪ Hearing protection		

* In determining the effectiveness of the controls, consider the following:
- Are the control measures working effectively in both their design and operation?
- Are all noisy activities being identified?
- Have new work methods or new plant made the work quieter?
- Has instruction and training provided to workers been successful?
- Have new requirements or information indicated that current controls are no longer the most effective?
- Is an alteration planned to any structure, plant or process that is likely to result in a worker being exposed to hazardous noise?
- Has an incident occurred as a result of a worker being exposed to hazardous noise? and
- Have any audiometric tests revealed changes in hearing threshold levels?

Department of Energy, Environment and Climate Action

Earth Resources Regulator
GPO Box 500
Melbourne, Victoria 3001
Telephone: 1300 136 186
www.resources.vic.gov.au

Rigby Brothers & Co Pty Ltd
c/o Basil Natoli
BCA Consulting Earth Resources
Unit 29, 41-49 Norcal Road
NUNAWADING VIC 3131
By email: admin@bcaconsulting.com.au

Dear Basil,

WORK AUTHORITY WA410 – WORK PLAN VARIATION - NOTICE OF STATUTORY ENDORSEMENT

I refer to the work plan variation application (PLN-000923) for the above current extractive industry at 26 Templeton Street, Coleraine, VIC 3315 first lodged on 7 May 2024 and finally submitted on 30 August 2024.

As delegate of the Department Head, I hereby give Rigby Brothers & Co Pty Ltd notice of my decision pursuant to section 77TD of the *Mineral Resources (Sustainable Development) Act 1990* (Act) that the work plan variation application (PLN-000923) including work plan specific conditions, was found to be satisfactory and is statutorily endorsed.

Referrals have been undertaken under section 77TE of the Act. A list of the referral authorities who have been given a copy of the work plan variation application is included in the enclosed referral consultation checklist.

Application for planning permission should now be made and include the following documents:

- This notice
- Statutory endorsement information for Council
- The referral checklist
- Agency referral responses (if no response included then none was received)
- An unaltered stamped and signed version of the statutorily endorsed work plan variation, including any work plan specific conditions, as determined by Earth Resources Regulation / and as requested by referral authorities under section 77TD(3) of the Act.

Approval of the work plan variation is sought by making application to the Department following the issue of the planning permit. Please complete and return the applicant checklist for the approval of a work plan variation and the specified required information with the application.

After the work plan variation is approved, you will be advised of the remaining requirements for the grant of the extractive industry work authority / the variation to the boundary of the extractive industry work authority.

The current rehabilitation bond for the work authority may be subject to review in consideration of the varied extractive industry activities. You will be contacted by the Earth Resources Regulation Rehabilitation Liability Assessments and Bonds team regarding a review of the bond if required.

An update to the Schedule of Conditions for the work authority is required. You and Southern Grampians Shire Council will be consulted by the Licensing team at Earth Resources Regulation regarding the intention to replace the existing conditions for work authority WA410 tenement number with the new standard Schedule of Conditions. A draft copy is provided for your and Council's information.

A copy of the statutorily endorsed work plan variation will be made available for download on the Resource Rights Allocation Management (RRAM) portal.

Please be advised that it is an offence to operate without the required permit/s, approvals and consents.

Enquiries on this matter may be directed to Ben Seamons, Senior Assessments Officer on 0427 809 055 or by email ben.seamons@deeca.vic.gov.au.

Yours sincerely

Leonardo Guaraldo
Delegate of the Department Head
Assistant Director Assessments
Earth Resources Regulator

30 October 2024

Enc:
Statutory endorsement information for council
Statutorily endorsed work plan variation, with attached work plan specific conditions (if any)
Endorsement of work plan - statement of reasons
Referral checklist
Agency referral responses
Applicant checklist for the approval of work plan variation
Cultural Heritage Management Plan declaration form
Schedule of conditions

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EARTH RESOURCES REGULATOR
REFERRAL CONSULTATION CHECKLIST - WORK PLAN VARIATION

TENEMENT ID:	WA410.
APPLICANT NAME(S):	Rigby Brothers & Co Pty Ltd.
ADDRESS (correspondence):	29 Templeton Street Coleraine Victoria 3315 Australia.
SITE MEETING:	☒ Yes Date: ☐ No ☐ NA Comment: On-site meeting preferable.
APPLICATION TYPE:	WORK PLAN VARIATION / WORK AUTHORITY VARIATION.
MUNICIPALITY/SHIRE:	Southern Grampians Shire Council.
LAND STATUS:	☐ Crown ☒ Private ☐ Crown & Private *(If Crown Land - Has proponent been informed of NT issues?)*
ADDRESS (site):	26 Templeton Street, Coleraine, 3315.
PROPERTY PARCEL REF:	**Existing:** CA 54, Section 23, Parish of Konong Wootong and part of PS818710 Lot 2 Parish of Konong Wootong. **Proposed:** Expansion to TP862809 Lot 1 Parish of Konong Wootong, Allotment 25 Section 1B Parish of Konong Wootong, Allotment 24 Section 1B Parish of Konong Wootong, and part of Lot 1 PS818710 parish of Konong Wootong.
PLANNING REQUIREMENT:	☐ No Change ☐ Secondary Consent ☐ Amendment ☐ New (existing use rights applied previously) ☒ New (Proposed expansion includes property parcels not on the current planning permit) ☐ To be determined* (planning status advice not provided) *Planning status must be determined prior to submission of the work plan variation as it determines the type of approval process and requirements. If an amendment of an existing permit or a new permit is required, the approval process must include

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	statutory endorsement. Comment:

Agencies may elect to provide a desktop response and not attend the initial site meeting. This is acceptable where the management of any issues is not required or is not complex.

If agencies determine that there is no requirement or elect to provide a desktop response. The advice must be given before the initial site meeting and tabled on the day for discussion and comment.

Please note that if the process is known to be statutory (amendment or new planning permit required) or undetermined there will be a combination of Victorian Planning Provision referral requirements (Use and Development, Zones and Overlays referrals) and other referral requirements selected.

If the process is known to be non-statutory (no change to the planning permit or secondary consent) only other referral requirements will be selected.

If EES criteria have been listed, please determine if an EES is required.

MRSDA S.77TE (1) – *Planning and Environment Act 1987*

USE AND DEVELOPMENT REFERRALS

Tick If Applicable ✓	Tick if Referred under the VPP CLAUSE ✓	AGENCY	VPP REFERRAL TRIGGER
		EPA	**Clause 66.02-1** Use or development requiring any of the following: – A Development Licence or Operating Licence in accordance with Part 4.4 of the *Environment Protection Act 2017* – Amendment of a licence in accordance with Part 4.3 of the *Environment Protection Act 2017*. N/A offsite discharge not required.
		DEECA – PEA	**Clause 66.02-2** Native Vegetation – (Refer to parameters provided in cl66.02-2 of the VPP) – To remove, destroy or lop native vegetation in the Detailed Assessment Pathway as defined in the *Guidelines for the removal, destruction or lopping of native vegetation* (Department of Environment, Land, Water and Planning, 2017). – includes clearing of 0.5 hectare or more – To remove, destroy or lop native vegetation if a property vegetation plan applies to the site.

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			– To remove, destroy or lop native vegetation on Crown land which is occupied or managed by the responsible authority. N/A proposal does not entail removal of 0.5 hectares or more of native vegetation. See non-statutory DELWP reference.
		INSERT RELEVANT ELECTRICITY TRANSMISSION AUTHORITY	**Clause 66.02-4** Works within 60 metres of a major electricity transmission line (220 Kilovolts or more), or transmission easement. N/A no mapped transmission lines.
		INSERT RELEVANT WATER BOARD OR WATER SUPPLY AUTHORITY	**Clause 66.02-5** Special Water Supply Catchment Area as listed in Schedule 5 of the *Catchment & Land Protection Act 1994* (refer to GeoVic). N/A not in a Declared catchment.
✓	✓	HV	**Clause 66.02-8** Extractive Industry – *Heritage Act 2017* – (Not CHMP issues). Statutory Process - Automatic referral for work authorities / quarries. No heritage inventory or registered sites in the vicinity.
		DEECA – PEA	**Clause 66.02-8** Extractive Industry – Crown Land or land abutting Crown land, other than a government road. N/A no Crown land on or abutting the site apart from government roads.
		DEECA – PEA	**Clause 66.02-8** Extractive Industry – Special Areas declared under Section 27 *Catchment and Land Protection Act 1994* (refer to GeoVic). – Removal or destruction of native vegetation if total area to be cleared is 10 hectares or greater. – Land identified in the planning scheme as being subject to high erosion risk or areas identified as being subject to salinity management. N/A - no EMO, no SMO, no native vegetation clearance >10ha.
		DEECA – PEA	**Clause 66.02-8** Extractive Industry – In areas with communities or taxa listed or critical habitat determined under the *Flora and Fauna Guarantee Act 1988*. – On land which has been identified in the planning scheme as containing sites of flora or fauna significance.

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			N/A - no FFG species mapped nor ESO.
		DEECA – PEA	**Clause 66.02-8** Extractive Industry On land which has been identified in the planning scheme as flood prone. *N/A - no LSIO.*
		EPA	**Clause 66.02-8** Extractive Industry – where the land is intended to be used for land fill at a future date. *N/A - landfill not proposed.*
ZONES AND OVERLAYS REFERRALS			
Tick If Applicable ✓	**Tick if Referred under the VPP CLAUSE** ✓	**AGENCY**	**VPP REFERRAL TRIGGER**
		INSERT RELEVANT FLOODPLAIN MANAGEMENT AUTHORITY	**Clause 37.03-5** Urban Floodway Zone (UFZ). *N/A.*
		DEECA – PEA	**Clause 44.02-8** Salinity Management Overlay (SMO). *N/A.*
		INSERT RELEVANT FLOODPLAIN MANAGEMENT AUTHORITY	**Clause 44.03-6** Floodway Overlay (FO or RFO). *N/A.*
		INSERT RELEVANT FLOODPLAIN MANAGEMENT AUTHORITY	**Clause 44.04-7** Land Subject to Inundation (LSIO). *N/A.*
		INSERT RELEVANT FLOODPLAIN	**Clause 44.05-6** Special Building Overlay (SBO).

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		MANAGEMENT AUTHORITY	*N/A.*
		INSERT RELEVANT AUTHORITY AS PER SCHEDULE TO CLAUSE	**Clause 44.07-4** State Resource Overlay (SRO). *N/A.*
		INSERT THE REFERRAL AUTHORITY RESPONSIBLE FOR ACQUIRING THE LAND	**Clause 45.01-3** Public Acquisition Overlay (PAO). *N/A.*
		INSERT RELEVANT AUTHORITY AS PER SCHEDULE TO cl66.04	**Clause 66.04** Referral of Permit Applications Under Local Provisions *Indicate relevant Overlay and Schedule to Overlay (if applicable).* *N/A.*
MRSDA S.77TE (1A) – *Environment Protection Act 2017*			
Tick If Applicable ✓	**Tick if Referred under the MRSDA** ✓	**AGENCY**	**REFERRAL TRIGGER**
		EPA	Mining work plan or work plan variation on a Mining Licence. Automatic referral agency even in the absence of Development Licence or Operating Licence requirements (VPP 66.02-1). *N/A.*
OTHER REFERRALS			
Tick If Applicable ✓	**Tick if referred for comment** ✓	**AGENCY**	**REFERRAL TRIGGER**
		INSERT RELEVANT WATER BOARD OR WATER SUPPLY AUTHORITY Non-statutory process ONLY	**Declared Catchment Management.** *N/A not within a Declared catchment.*

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		INSERT RELEVANT CATCHMENT MANAGEMENT AUTHORITY	**Floodplains / Catchment Health / Waterways Protection & Management.** *N/A no work proposed within 100m of a waterway.*
		INSERT RELEVANT WATER AUTHORITY	**Groundwater / Water Use Management.** *Note SRW has been previously engaged regarding this proposal. SRW noted that they are not required to attend the site meeting, however will provide general conditions when the work plan is formally referred. "I have spoken with Stan Rigby (quarry owner) who told me that a test drill to a depth of 100m did not intercept a water table. The maximum depth of the quarry will be 50m. As such it is unlikely that ground water will be interecepted."*
		INSERT RELEVANT ELECTRICITY TRANSMISSION AUTHORITY Non-statutory process ONLY	**Transmission Network Infrastructure Protection and Management.** – Works within 60 metres of a major electricity transmission line (220 Kilovolts or more), or transmission easement. *N/A, no transmission lines in the vicinity.*
		INSERT RELEVANT AUTHORITY	**Distribution Network (Power / Gas / Water / Communications) - Infrastructure Protection & Management.** *N/A no infrastructure easements.*
		HV Non-statutory process ONLY	**Archeological Site/s & Object/s Protection & Management.** N/A - no heritage inventory or registered areas nearby.
		INSERT RELEVANT FP- SR REGION	**Cultural Heritage Protection and Management.** ***N/A*** *The decision was made to exclude the ACHS area from the WA Variation, and the words and RTP adjusted accordingly. Refer to the Figure 3 Site Layout Plan inset which shows that the western corner of the new WA boundary has been modified to avoid the Aboriginal Cultural Heritage Sensitivity (Note points 11, 12 and1 of the WA boundary).* ***Previous Trigger 30 May 2022.*** *From the initial proposal: 'It is noted that the Work Authority is partially impacted by an area of Aboriginal Cultural Heritage Sensitivity associated with Konong Wootong Creek. All of the*

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			sensitivity area has been impacted, and it is planned that an agreement with the local RAP can be reached to accept that the area has been significantly disturbed and no CHMP trigger is activated, otherwise this area will be removed from the Work Authority application.' *Note the proposed work authority expansion encroaches onto an area of cultural heritage sensitivity to the southwest. This area has been previously disturbed as part of quarry operations without approval. Advice is sought as to if this area has been subject to significant ground disturbance or if the proposed activities in this area qualify as high impact activities.*
		INSERT RAP	**Cultural Heritage Protection and Management.** ***N/A*** *The decision was made to exclude the ACHS area from the WA Variation, and the words and RTP adjusted accordingly. Refer to the Figure 3 Site Layout Plan inset which shows that the western corner of the new WA boundary has been modified to avoid the Aboriginal Cultural Heritage Sensitivity (Note points 11, 12 and1 of the WA boundary).* ***Previous Trigger 30 May 2022.*** *From the initial proposal: 'It is noted that the Work Authority is partially impacted by an area of Aboriginal Cultural Heritage Sensitivity associated with Konong Wootong Creek. All of the sensitivity area has been impacted, and it is planned that an agreement with the local RAP can be reached to accept that the area has been significantly disturbed and no CHMP trigger is activated, otherwise this area will be removed from the Work Authority application.'* *Note the proposed work authority expansion encroaches onto an area of cultural heritage sensitivity to the southwest. This area has been previously disturbed as part of quarry operations without approval. Advice is sought as to if this area has been subject to significant ground disturbance or if the proposed activities in this area qualify as high impact activities.*
		Department of Transport	**Declared Road / Site Access Design.** *N/A.*
✓	NA	Council OR DEECA - PEA	**Government Road (made/unmade) - Site Design / Road Use.** Government road abuts the proposed area - Pitcher St.

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✓	✓	DEECA ERR/PEA MoU	**Environment / Biodiversity Protection and Management.** *The red boundary included in the 'site plan' in the north-east will be the revised extraction limit. Existing vegetation may be removed to batter back the working faces in this area for rehabilitation.* *EVC: 'Damp sands herb-rich woodland' (vulnerable).*
✓	✓	DEECA ERR/EPA MoU & Other	**Discharge / Noise / Environmental Impacts.** *Extraction limits are approximately 30,000-40,000 tonnes/yr. However the operation includes blasting, and sensitive receptors appear to be within 200m of the existing quarry. Blasting is conducted between 9 am to 3 pm Monday to Friday. Work authority will be extended to incorporate stockpiling and processing area (however extraction limit will not be extended) in close proximity (less than 100m) to dwellings.*
		WorkSafe MoU	**Workers Safety.** *N/A.*
		INSERT RELEVANT AUTHORITY AS PER SCHEDULE TO cl66.06	**Notice of Permit Applications Under Local Provisions Clause 66.06 of planning scheme.** *Indicate relevant Overlay and Schedule to Overlay (if applicable).* *N/A.*
		CFA	**Fire Protection and Management.** The site includes a BMO or WMO and operations include treatment of waste materials. *N/A.*
		Victorian Planning Authority	**Land Use – UGZ Metro.** A Precinct Structure Plan (PSP) is in place or in development, **WITHIN** Melbourne's urban growth boundary. *N/A.*
		DEECA – PEA	**Land Use – UGZ Outside Metro.** A Precinct Structure Plan (PSP) is in place or in development, **OUTSIDE** Melbourne's urban growth boundary. *N/A.*
		INSERT ANY OTHER RELEVANT AUTHORITY	**Public Infrastructure Protection and Management.** – Railways / Wind Turbines / Bridges / Reservoir Dam Walls etc. *N/A.*

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✓	NA	DEECA – ERR Assessments	Earth resources development approval and regulatory matters.
✓	NA	DEECA – ERR Technical Services	Earth resources development approval and regulatory matters.
✓	NA	DEECA – ERR Compliance	Earth resources development approval and regulatory matters.
	NA	DEECA – ERR Stakeholder Engagement	*N/A.*
✓	NA	Southern Grampians Shire Council	**Planning Permissions / Site Access / Traffic Management.** *The application is statutory. Refer to letter from Southern Grampians Shire Council dated 20 December 2021 regarding rezoning of the property parcels proposed to be included in this application.*
✓	NA	Land Owner &/OR Representative	**Site Access / Rehabilitation.** *Only parcel not owned by Rigby family is 68 Templeton St, where the work authority boundary will be extended to (northeast). Landowner must be consulted regarding rehabilitation of the land.*
	NA	Crown Land Manager	**Any work proposed under a licence on restricted Crown land.** Licensee to be made aware and provide advice regarding the consent requirement. s.44 Particular consent etc. required. *N/A.*
	NA	INSERT MELBOURNE WATER CORPORATION OR AUTHORITY	**Any work proposed under a licence on land that is owned, vested, managed or controlled by Melbourne Water Corporation or an authority under the Water Act 1989.** Licensee to be made aware and provide advice regarding the consent requirement. s.44 Particular consent etc. required. *N/A.*
	NA	Mineral Tenement Holder	**A current minerals licence* covers part or all of the site** Licensee to be made aware and provide advice regarding the consent requirement. s.77S MRSDA - Land Subject to a licence under Part 2 An applicant must seek consent from a minerals licence holder

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			(EL, RL, MIN). *N/A.*
EES REFERRAL			
Tick If Applicable ✓	**Tick if EES is not required** ✓	**AGENCY**	**REFERRAL CRITERIA**
		DTP - IAU	**Criteria Type – Individual.** *N/A.*
		DTP - IAU	**Criteria Type – Combination (2 or more).** *N/A.*

ACRONYM	**Description**
DEECA PEA	Department of Energy, Environment and Climate Action – Planning and Environment Assessment
DEECA ERR	Department of Energy, Environment and Climate Action – Earth Resources Regulator
DTP IAU	Department of Transport and Planning – Impacts Assessment Unit
EES	Environmental Effects Statement
EPA	Environment Protection Authority
FP-SR	First People – State Relations
HV	Heritage Victoria
RAP	Registered Aboriginal Party
VPP	Victorian Planning Provisions

Department of Energy, Environment and Climate Action

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AGENCY COMMENT REFERRAL WORK PLAN VARIATION PLN-00923 FOR WORK AUTHORITY WA410
RIGBY BROTHERS &CO PTY LTD: AMENDMENT OF WORK AUTHORITY BOUNDARY
26 TEMPLETON STREET, COLERAINE, 3315

Thank you for your letter dated and received on 25 September 2024, requesting agency comments for the above work plan variation.

A copy of the work plan variation (PLN-00923) was given to the Department of Energy, Environment, and Climate Action (DEECA), Planning and Environment Assessment (PEA) for comment in accordance with the *Memorandum of Understanding for Earth Resources Industries Approvals and Other Obligations and Responsibilities* between the Department of Jobs, Precincts and Regions and the Department of Environment, Land, Water and Planning (DELWP) dated 13 September 2021 and Schedule 1.3 dated 22 June 2022

DEECA PEA team previously advised the applicant regarding this Work Plan variation via email on July 18, 2024.

I provide this response under delegation from the Secretary to the Department of Energy, Environment and Climate Action.

DEECA PEA has assessed the documentation provided and supports Work Plan Variation. The following advice in relation to suggested changes and conditions is recommended for your consideration.

Comments

No go areas

The Work Plan indicates that no assessable native vegetation is being removed as a part of this variation. To ensure this, DEECA recommends the attachment titled 'Figure 3 Site Layout' be updated to:

1. Reflect the mapped trees to be retained as indicated in site Layout Plan Draft E sent to DEECA PEA on the 11/07/2024. the current documentation provided does not accurately reflect the trees to be retained.
2. Show the 'no go zones' around vegetation to be retained as described in the Risk Register.
3. The No Go Zones should include mapped Tree Protection zones which include fencing around the trees to be retained in line with the below:
    a. 12 times the diameter of the tree trunk at 130 cm above ground level (to a maximum distance of 15 metres) but no less than 2 metres from the base of the trunk, and

Any personal information about you or a third party in your correspondence will be protected under the provisions of the *Privacy and Data Protection Act 2014*. It will only be used or disclosed to appropriate Ministerial, Statutory Authority, or departmental staff in regard to the purpose for which it was provided, unless required or authorized by law. Enquiries about access to information about you held by the Department should be directed to foi.unit@delwp.vic.gov.au or FOI Unit, Department of Energy, Environment and Climate Change, PO Box 500, East Melbourne, Victoria 8002.

b. be constructed of visible materials and remain in place until all works are completed to the satisfaction of Earth Resources Regulator.

The Work Plan should also specify that none of the following may occur in the Tree Protection Zones Vehicular or pedestrian access, trenching or soil excavation

c. Storage or dumping of tools, equipment or waste
d. Construction of entry and exit pits for underground services

If you have any questions regarding this matter, please contact Mia Ifergan at mia.ifergan@deeca.vic.gov.au .

Yours sincerely

Mia Ifergan, Senior Planning Officer, Major and State Projects – Planning and Environment Assessment

22 October 2024

23/10/2024

Leonardo Guaraldo
Earth Resources Regulation
GPO Box 500
Melbourne, Victoria 3001
Via email: Workplan.Approvals@deeca.vic.gov.au

EPA ref: REQ005805

Dear Leonardo,

RE: Work Authority WA410 – Work Plan Variation Rigby Brothers & Co Pty Ltd

Thank you for your correspondence in relation to WA410, referred to EPA on 25/09/2024. The Work Plan Variation relates to an increase of Work Authority boundary to 12.55 hectares. The extraction area is currently 5.58 hectares, this will increase to 7.8 hectares. The resource being extracted is trachyte, the site uses both traditional drill and blast method as well as excavator/dozer techniques.

EPA understand that your request for agency comment is made under the Memorandum of Understanding (MoU) between EPA and ERR, based on the referral triggers outlined therein. In this instance ERR are seeking EPA's comments on the environmental impacts of Air Quality. ERR have requested consideration and comment on the appropriateness of the assessment and management of the risks associated with dust in minimising harm as far as reasonably practicable. Noting that there are sensitive receptors within 500m from the buffer and/or limit of extraction.

The comments EPA make in this letter are based on the information provided and our understanding of the operation.

EPA reviewed the specific sections of the referral documents supplied as part of the referral including:

- The background provided in the submitted Work Plan Description document and the 'Quarrying Considerations' section and table of Sensitive Receptors included within the submitted Risk Treatment Plan for Dust.
- The tables of 'Control measures to address hazard', 'Monitoring' and 'Reporting' that is included within the submitted Risk Treatment Plan for Dust.
- The background provided in the submitted Work Plan Description document and the 'Quarrying Considerations' section of the submitted Risk Treatment Plan for Dust, including the low level of activity for this quarry, the implementation of standard industry controls, the lack of any need for specialised risk management for dust, and an explanation of the lack of a fugitive respirable crystalline silica risk.

EPA Provides the following response:

Environment Protection Act 2017

The Environment Protection Act 2017 (EP Act 2017) has been in force since 1 July 2021. Subordinate legislation supporting the EP Act 2017 includes the Environment Protection Regulations 2021

(regulations), the Environment Reference Standard (ERS) and associated guidelines (all of which are amended or replaced from time to time). A key feature of the EP Act 2017 is the general environmental duty (GED), which requires a person engaging in an activity that may give rise to risks of harm to human health or the environment from pollution or waste to minimise those risks, so far as reasonably practicable. The GED is relevant to all activities undertaken as part of the proposal. EPA notes that additional mitigation measures may be required to minimise the risk of harm to human health or the environment so far as reasonably practicable under the GED. These additional measures may evolve overtime as the 'state of knowledge' evolves.

Why Managing Risk is Important
Effective risk prevention/mitigation helps to ensure that the environment, human health and Traditional Owner cultural values are protected. Assessing and identifying risk of harm is the first important step in this process. Demonstrating, through actions undertaken (when a use/development has commenced) that risks are being mitigated/prevented is the obligation of the duty holder. Failure to do so, could result in compliance action under the Environment Protection Act 2017.

Air

EPA has a key role in protecting Victoria's air quality. The Guideline for assessing and minimising air pollution in Victoria (EPA publication 1961) provides a framework for assessing risks to human health and the environment from air emissions and the management and monitoring required to maintain effective risk controls (refer to section 8 of the guideline). The framework described within this guideline can be used to inform the air quality management and monitoring practices for the construction and operational phases of the quarry.

Air pollution through the generation of dust is a potential impact from earthworks during construction, operation, rehabilitation, and closure. Airborne dust consists of particles suspended in air, whilst deposited dust is that which has settled from air onto surfaces and structures. All dust has the potential to impact health and wellbeing, local amenity, visibility, and ecosystems.

EPA has reviewed the email provided on 25/09/2024 to describe where the information to satisfy a Level 1 Assessment is located within various documentation and has reviewed the sections of the documents requested. EPA provides the following feedback:

The approach of the risk assessment is appropriate. The assessment reported a medium risk with the application of controls & management practices currently and/or proposed in line with the low level of quarry activity and the area of where the rock processing activity is undertaken.

EPA's dust risk impact assessment was determined to be **Moderate**-Dust impacts only likely to occur on rare occasions. The assessment was based on the methodology and guidance specified in *EPA Publication 1943*- Guidance for assessing nuisance dust.

The proposed approach to prevent and reduce dust in minimising harm is adequate. The dust management plan is well structured, includes the key issues and components required and is generally consistent with the current practices employed in quarries to manage dust.

Risk of Respirable crystalline silica is low based on analysis of rock samples undertaken by quarry (AED 2021) and is consistent with WorkSafe guidance on dust containing crystalline silica in the extractive industry.

EPA recommend ERR request AED 2021 analysis report be provided in package of reports for evidence.

If you would like any further information, please contact Nicole Porter at Nicole.porter@epa.vic.gov.au or 03 9194 5594.

Yours sincerely,

Jo Coupar
Team Leader, Development and Earth Resources Advisory
Development Advisory Unit
EPA Victoria

HERITAGE VICTORIA

PO Box 500
East Melbourne, Victoria 8002
Australia

Ref: WA410

Leonardo Guaraldo
Assistant Director, Assessments
Earth Resources Regulation
Department of Energy, Environment and Climate Action
Level 9, 8 Nicholson Street
EAST MELBOURNE VIC 3002
By email: workplan.approvals@deeca.vic.gov.au

Dear Leonardo

STATUTORY ENDORSEMENT REFERRAL OF VARIATION PLN-00923

Thank you for referring this work plan to Heritage Victoria.

Our records indicate that there are no places currently included in the Victorian Heritage Register (VHR) or Heritage Inventory (VHI) within the subject area.

Heritage Victoria does not object to statutory endorsement of the variation to the approved work plan WA410.

Please note the VHI is not a comprehensive list of all historical archaeological sites in the state. The absence of sites in the VHI is not necessarily reflective of the distribution of archaeological sites on the ground, and the *Heritage Act 2017* provides blanket protection for all historical archaeological sites in Victoria. If archaeological deposits are identified at any stage during works, this office must be notified immediately. Please be aware that consent from this office is required for any works that will impact on any historical archaeological sites.

Should you have any queries, please contact Nicole Smith or Natasha McLaurin at Heritage Victoria on 03 7022 6390 or email heritage.victoria@transport.vic.gov.au.

Yours sincerely

Steven Avery
Executive Director
Heritage Victoria

2/10/2024

VICTORIA State Government

BCA CONSULTING
EARTH RESOURCES

Mineral Resources (Sustainable Development) Act 1990

Tenement Number: WA410

Plan Number: PLN000923

Work Plan Variation Statutorily Endorsed

Signed:

Delegate of the Department Head

Date: 30/10/2024

Risk Management Plan

for

Extractive Industry Work Authority WA410

RRAM Designation:- PLN-000923

Rigby Bros & Co Pty Ltd – Coleraine Quarry

WA410 – Coleraine Quarry
26 Templeton Street
COLERAINE VIC 3315

Project No. R21_001
September 2024

Rigby Bros & Co Pty Ltd
(03) 5575 2564
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Revision History

Document Date	Description
24 April 2024	1st draft of Risk Management Plan
23 Aug 2024	2ndSubmission – addressing June 2024 RFI

1. RISK MANAGEMENT PLAN

1.1. Introduction

This Risk Management Plan (RMP) is submitted with Work Plan (PLN-000923) and relates to WA410, known as the Coleraine Quarry. The application is for expanding the current tenement WA410 to enable further extraction of Trachyte within the current WA410 Work Plan. The Work Plan Variation also includes a brief description of the processing and associated ancillary activities which are already covered by existing approvals.

The current operation was approved in 1975 and is nearing the end of its easily accessible resource. A viable resource has been identified at depth, which requires the south and east extents to be pushed back to both allow the deeper extraction and to meet post July 2021 rehabilitation requirements.

The operation is located at 26 Templeton Street, Coleraine, Victoria on the western edge of Coleraine in western Victoria, see attached Figure 1 Regional Plan. This quarry has been in operation since the late 1800s with blasting introduces in the 1930's and modern quarrying practices implemented from 1947.

The Work Authority is on land owned by Rigby Brothers & Co Pty Ltd. The Work Plan describes the extraction, processing and sales activities occurring on WA410. The resource is Trachyte used for a range of road construction activities within the local area.

A Cultural Heritage Management Plan is not required for the Work Authority Variation, as the area impacted within 26 Templeton Street (the original Work Authority Area) which has been subject to significant ground disturbance and that the granting of the work authority pre- dates current legislation. T he extension of WA410 into Lot 12 Pitcher Street has been designed to avoid the small area of Aboriginal Cultural Heritage Sensitivity, thereby protecting this area from any extractive industry activity and avoiding the requirement to undertake a Cultural Heritage Management Plan

Bryan Creek is some 730 metres to the south and Konong Wootong Creek some 200m to the west of the site.

There is no proposed change to the current level of activity at the quarry and therefore no change to trucking movements. Operating hours are be aligned to the standard EPA 'day period' hours and will at all times be in accordance with any Council requirements. Additionally, it should be noted that this quarry is a 'low tonnage' operation with infrequent blasting (2 to 3) times per year.

A full description of the works at the site can be found in Work Plan Description document.

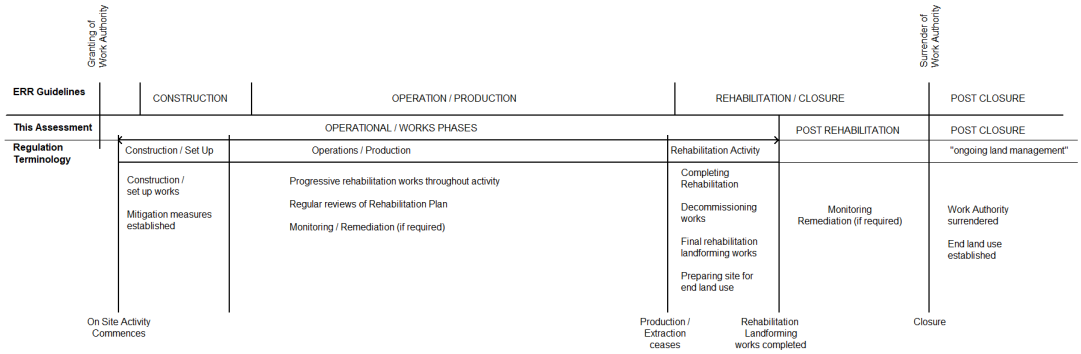
1.2. Description of Risk Assessment Process

This Risk Management Plan, including the Risk Register, for WA410 has been developed by BCA Consulting in conjunction with Rigby Brothers & Co Pty Ltd Quarries key personnel, Stan Jason & Anne Rigby & Debra Farrelly (nee Rigby).

The methodology adopted in this document is to consider the hazards that may be present, and the risks they pose, in association with the extractive industry. The Risk Management Plan focusses on the hazards present during its Operational / Works phases (i.e. during major works, including construction, production and rehabilitation activities). As distinct from the Post Rehabilitation phase, as it relates to any particular part of the site, i.e. after completion of rehabilitation activities

(apart from any necessary follow-up monitoring and maintenance), or after closure of the site (Post Closure), which are a focus of the Rehabilitation Plan.

The hazard identification and risk assessment process adopted for the site is in the context of the quarry life as represented in the schematic below, showing the indicative sequence of phases as it relates to any particular part of the site. Note: the term “closure” is not a term commonly used in the extractive industries, and not used in the applicable Regulations, but is used here to align with the Earth Resources Regulator’s guidelines and defined as the point in time, subsequent to completion of all rehabilitation works, when the Work Authority can be surrendered and the rehabilitation bond returned.



The discussion of the hazards, and the assessment of the risks they pose, adopts extractive industry accepted norms that do not always “neatly” fit the requirements of the various Earth Resources Regulator’s guidelines. With the primary aim of satisfying the Regulations and being a functional Work Plan for the quarry operator.

As a starting point for developing this Risk Management Plan, a table of standard quarrying and rehabilitation hazards were presented to Rigby Brothers & Co Quarry personnel, then reviewed and discussed, both on site and more recently via virtual meetings. This review considered standard control measures and their relevance / effectiveness in meeting applicable standards and acceptance criteria, including whether they addressed the EPA’s General Environmental Duty (further detail below). Where it was considered necessary, extra proportionate control measures were implemented.

These discussions focused on:

- Identifying the hazards that may arise from all site-based activities throughout the Operational / Works phases that might result in risk events.
- Identifying sensitive receptors within the vicinity of the site, in relation to the environment, any member of the public or to land, property or infrastructure; including a review of any previous complaints or feedback received from the community or stakeholders.
- Identifying individual risk events that the identified hazards may pose to the sensitive receptors.
- Reviewing the applicability of standard industry control measures and effectiveness of existing control measures.
- Reviewing the proposed control measures, including any site-specific control

measures that might be required.

- The implementation of the necessary control measures and the resultant residual risk of individual risk events.
- The monitoring and management systems that may be required to ensure the control measures continue to meet relevant performance standards.

Additionally, as a basis for the Rehabilitation Plan, the discussion of hazards considered:

- Identification of any hazards that may be associated with the rehabilitated land that could potentially pose long-term risks to the environment, members of the public, or to land, property or infrastructure after closure of the site and surrender of the Work Authority (i.e. Post Closure).
- A review of any potential long-term risks posed by the rehabilitated land to identify those risks that may require monitoring, maintenance, treatment or other ongoing land management activities after closure. If any are identified, consideration of how these risks could be eliminated or minimised to such a low level that no ongoing risk management would be necessary after closure.

The risk assessments presented in this Work Plan Variation are qualitative risk assessments as the nature of the industry and inherent variability means that there is simply not enough information available to undertake quantitative risk assessments. The risk assessments utilise the risk matrix adopted by the Earth Resources Regulator (ERR), as presented below. A full description of the likelihood and consequence ratings is contained in the ERR document Preparation of Work Plans and *Work Plan Variations, Guideline for Extractive Industry Projects*, December 2020.

Likelihood						
	Almost Certain	Medium	High	Very High	Very High	Very High
	Likely	Medium	Medium	High	Very High	Very High
	Possible	Low	Medium	Medium	High	Very High
	Unlikely	Low	Low	Medium	High	High
	Rare	Low	Low	Medium	Medium	High
		Insignificant	Minor	Moderate	Major	Critical
		Consequence				

NOTE: As of December 2020, ERR has directed that the consequence ratings for risks associated with Fire must be critical.

Environment Protection Legislation

As of July 2021, the *Environment Protection Act 2017*, as amended by the *Environment Protection Amendment Act 2018*, identifies that all businesses can cause pollution and waste and that the combined effect can have an impact on human health and the environment. The General Environmental Duty (GED) is at the centre of the amended *Environment Protection Act 2017* and focuses on prevention of environmental impact rather than managing the impacts after they have occurred and is based on a person or business's duty to protect human health and the environment from pollution and waste.

Industry-specific guidance on the general requirements of this legislation is provided in EPA Publication 1823.1, *Mining and Quarrying – Guide to preventing harm to People and the environment*. The GED is defined within the *Environment Protection Act 2017* and it is stipulated that "a person who is engaging in an activity that may give rise to risks of harm to human health or the environment from pollution or waste must minimise those risks, so far as reasonably practicable".

Determining what is deemed 'reasonably practicable' is explained within EPA Publication 1856, *Reasonably Practicable*, and relates to the implementation of control measures that are proportionate to the potential risk. This is based on the potential for harm to occur, the potential impacts on the environment, and considers what control measures are available to reduce the risk, as well as their associated costs.

It is deemed the responsibility of the operator, the 'duty holder', to understand and assess the risks which their operations may pose on human health or the environment, and once understood, implement proportionate control measures to mitigate or minimise the risk of harm.

The definition of harm within the *Environment Protection Act 2017* introduces the concept of what is deemed 'unreasonable', with numerous guidelines and protocols offering definitions or examples of what is considered unreasonable.

The risk assessments and risk management documented within the individual Risk Treatment Plans that follow, for hazards that are also subject to EPA regulation, are developed in consideration of EPA guidance and compliance standards

Risk Register

The Risk Register provides an overview of the assessment and management of the risks associated with each identified hazard during the quarry's Operational / Works Phases and is attached separately.

1.3. Hazards Considered

In developing the Risk Management Plan and the Risk Register for this site, the hazards that are typically associated with extractive industries and rehabilitation activities (both progressive rehabilitation and final rehabilitation works), are listed in the table below, were discussed and considered with regard to the sensitive receptors. Where such hazards are identified in relation to the proposal, individual Risk Treatment Plans are provided below with a detailed assessment of risks posed to sensitive receptors by the hazards, along with detailed risk management. If the hazard is not applicable at the site, then it is marked as such in the table below.

Note: The only access to the Work Authority will be from the existing Templeton Street entrance. Other than emergency vehicle access, there will be no quarry access from either Pitcher Street or Cameron Street.

While the identified hazards may be present, the level of risk posed by these hazards to sensitive receptors and the level of risk management that is appropriate must be determined. The application and implementation of the documented control measures presented in the Risk Treatment Plans below aim to reduce as far as practicable the likelihood, and where applicable, the consequence, of the identified hazards where they pose a risk to the identified sensitive receptors. As operators of the current WA410 at Coleraine Rigby Brothers & Co have several decades of quarrying experience in the local community and have detailed knowledge of the necessary risk

management and control measures required for the safe operation of this site without unduly impacting sensitive receptors.

This site presents several challenges in meeting the current industry-imposed guidelines, however it must be understood that a quarry of some description has been operating at the site and in close proximity to the local community since the late 1800's. More recently the Rigby's have a multi-generational connection to the site. It is acknowledged that if this were a new operation it would face severe challenges to meet the current workplan requirements. No amount of impact

assessments around noise, blasting and visual amenity will provide any new insight, as it is well known that as residential development (the majority of which is the Rigby family) has grown around the site and that the contemporary "guidelines" espoused by the regulators are not being consistently met. For the site to continue to operate and to work towards a more appropriate rehabilitation outcome it will rely heavily on the "or minimised as far as reasonably practicable" clause in the Mineral Resources (Sustainable Development) Act 1990, as amended 1 July 2021).

2 (1) (b) (i)

> *risks posed to the environment, to members of the public, or to land, property or infrastructure by work being done under a licence or extractive industry work authority are identified and are eliminated* ***or minimised as far as reasonably practicable****; and*

This clause from the MRSDA is reproduced to emphasise to future regulators that the criteria quoted in the relevant guidelines are just that, guidelines.

This Risk Management Plan, which includes individual Risk Treatment Plans and a Risk Register, introduces numerous modern controls and criteria to addresses in detail the assessment and management of the risks associated with all the quarrying and rehabilitation hazards relevant to this operation. The introduction of and adherence to these contemporary controls, will results in a significant reduction of the impact from the quarrying hazards, emphasising the as far as reasonably practicably aspect of the MRSDA.

To further emphasise the *as far as reasonably practicable*, aspect of the MRSDA, this is a small country quarry, producing 30-40,000 tonnes per annum, therefore a very modest income stream, and it is our opinion that the imposition of copious impact assessments to satisfy the regulator will not provide any clearer understanding of the risks to sensitive receptors, or how to mitigate them.

In the past the site has not undertaken any monitoring, specifically around blasting, noise dust, as there has been no requirement to or direction to. Recent monitoring has demonstrated the site does not meet the current guidelines, and changes to blasting practices, machinery maintenance, dust suppression systems etc have been made, and will continue to be made.

The control measures to be implemented for the Operations / Production phase are considered adequate for any new works, i.e. Construction phase, so are not considered separately. The Rehabilitation Activities column in the table shows the hazards associated with undertaking the rehabilitation works, however the associated risks are often being managed along with the Operations / Production risks as the activities are occurring at the same time for most of the quarry life, as part of progressive rehabilitation. The risk assessments for these hazards have identified that the control measures to mitigate the risks from Operations / Production and Rehabilitation Activities are essentially identical in most cases, with the only variable being timing.

		OPERATIONAL / WORKS PHASES		
HAZARD	**COMMENT**	**PRODUCTION & CONSTRUCTION**	**REHABILITATION ACTIVITIES**	**POST CLOSURE**
Altered visual amenity		YES	YES	NO
Noise		YES	YES	NO
Dust		YES	YES	NO
Surface water flows		YES	YES	YES
Erosion and sedimentation		YES	YES	YES
Ground disturbance		YES	YES	NO
Ground instability		YES	YES	YES
Blasting		YES	YES	NO
Process water and storages		YES	YES	YES
Slimes storage	NOT APPLICABLE	NO	NO	NO
Imported materials		YES	YES	NO
Unauthorised site access		YES	YES	NO
Fuel, lubricants, other hazardous materials		YES	YES	NO
Weeds, pests and diseases		YES	YES	NO
Rubbish / general waste		YES	YES	NO
Fire		YES	YES	NO
Soil biological activity		YES	YES	NO
Vehicle sediment transport		YES	YES	NO

To provide a complete overview of the applicable hazards, the table also identifies hazards potentially associated with the rehabilitated land (post closure), where they relate to the extractive industry use, that may pose long-term risks to the environment, members of the public, or to land, property or infrastructure. These post closure hazards are discussed in detail in the Rehabilitation Plan.

While the identified post closure hazards may be present, it needs to be determined whether such hazards would actually pose any risks that require ongoing management. As detailed in the Rehabilitation Plan, there will not be any 'relevant risks' (post closure) posed by the hazards associated with the rehabilitated land that would require monitoring, maintenance, treatment or any other ongoing land management activities.

Elimination of Risks: In determining the residual risk it is often the case that, with the application of effective control measures, the residual risk is LOW, which is the lowest risk rating in the December 2020 ERR risk matrix. In some instances, it might be argued that the residual risk is so low that it has effectively been eliminated, however quarry managers believe they need to be conscious of all quarrying and rehabilitation hazards (and their associated risks) that exist on the

site, no matter how small the risk might be. As they must consider their obligations under all relevant legislation (i.e. OH&S, Heritage, etc.) and not just the *Mineral Resources (Sustainable Development) Act 1990* (MRSDA).

1.4. Accountable Personnel

The following table outlines the roles and responsibilities of the various personnel within the organisation for the successful implementation and management of the Risk Management Plan. These personnel are accountable for the identification and allocation of resources, as well as the implementation, management and review of this Risk Management Plan.

Role	Responsibilities
Work Authority Holder	Identification and allocation of resources
General Manager / Business Owner	Identification and allocation of resources
Quarry Manager	Distribution of resources, co-ordination, implementation
Site Supervisor	Implementation

2. RISK TREATMENT PLANS

Risk Treatment Plan abbreviations

The following abbreviations are used throughout the Risk Treatment Plans:

RTP Risk Treatment Plan
C Construction / Set-up phase of the operation
O Operations / Production phase of the operation
R Rehabilitation Activities phase of the operation

2.1. Altered Visual Amenity

Scope

This risk treatment plan is to assess and manage the potential visual impacts to sensitive receptors during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Crown Allotment 54 Section 23)	Eastern boundary	Potential to impact amenity by seeing site operation	Proximity to site
2.	12 (Lot 25) Pitcher Street	Southern boundary	Potential to impact amenity by seeing site operation	Proximity to site
3.	6 (Lot 24) Pitcher Street	Southern boundary	Potential to impact amenity by seeing site operation	Proximity to site
4.	Lot 1 Gray Street	Southern boundary	Potential to impact amenity by seeing site operation	Proximity to site
5.	Pitcher Street	Southern boundary	Potential to impact amenity by seeing site operation	Proximity to site
6.	Templeton Street	Western boundary	Potential to impact amenity by seeing site operation	Proximity to site
7.	Cameron Street	Northern boundary	Potential to impact amenity by seeing site operation	Proximity to site
8.	Users of road network west of the quarry	Western sightlines	Impact to amenity by seeing site operations	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
1.	Plant, operations or exposed faces visible from residences	C, O, R	Likely	Minor	MEDIUM
2.	Plant, operations or exposed faces visible from public roads	C, O, R	Likely	Minor	MEDIUM

Quarrying Considerations

A quarry with associated extractive activities has been at the site or in the immediate vicinity of WA410 since the late 1800's. Due to its proximity to the township of Coleraine, the site is (always has been) highly visible, especially from any western vantage point for several decades. This extension will not increase the visual impact. The extension of the quarry to the east and south east allows the most visual faces to be laid back to a more suitable geometry, and allows for vegetation to be established. As vegetation is progressively established, it will soften (reduce, but not completely remove) the visual impact of the quarry. In addition, this Work Plan describes a northern, eastern and a southern bund, that will also be vegetated with trees and shrubs to further assist in screening the operation from immediate neighbours (receptors). A secondary function of these bunds will be to act as a collector / diversion structure for surface water management.

Lot 6 and Lot 12 Pitcher Street are not included as sensitive receptors as they are both uninhabitable, unoccupied and planned to be removed.

As outlined in the Work Plan document, an increase in the visual impact has not been identified.

Objectives

The key objectives of this risk treatment plan are to:

- Minimise as far as reasonably practicable the visibility of the site from nearby residences and public roads and public access Crown land areas
- Ensure that progressive rehabilitation works minimise visual amenity impacts as soon as practicable

Compliance standards

The compliance standards for this risk treatment plan is:

- Positive engagement and feedback from nearby residences

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- A reduction in the visibility of the site operations when viewed from residences or public roads
- No complaints related to visual amenity from nearby residences or other members of the public

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Construction of bunding with vegetation and landscaping along the Templeton Street, Pitcher Street and Cameron Street boundaries. As well as progressively establishing the bund as development extends to the south and east.	Landscaping maintained in neat and orderly condition, in compliance to Work Plan / Site Layout Plan
2.	Maintenance (and if necessary, re-planting) of any screening vegetation	Screening vegetation established, and healthy, in compliance to Work Plan / Site Layout Plan
3.	Progressively establish vegetation on topsoil stockpiles and overburden dumps to be retained more than 6 months, as well as outer faces of raised pads and rehabilitated landforms	Topsoil stockpiles and overburden dumps vegetated and stabilised within 6 months of construction. Stockpiles located and size minimised, as far as practicable, to reduce visual amenity impacts. Planted vegetation maintained.
4.	Establishing vegetation and trees on rehabilitated batters as soon as practicable, initially with grasses/shrubs whilst waiting for trees to grow	Progressive rehabilitation in accordance with Rehabilitation Plan
5.	Rehabilitation as early as practicable of terminal crest batters and upper terminal berms	Progressive rehabilitation in accordance with Rehabilitation Plan with established and healthy vegetation (shrubs and trees)
6.	Locating processing plant and stockpiles in accordance with approved layout	Crushing operations remain out of visual range of both nearby sensitive receptors and public roads – compliance to Site Layout Plan
7.	Site infrastructure and stockpiling areas maintained in a neat and tidy appearance – including administration office, amenities, weighbridge, light vehicle parking area, workshop, hydrocarbon stores, all associated buildings and containers, roads and tracks, overburden mounds, and product / imported materials / waste rock stockpiles.	Areas of site infrastructure and stockpiling visible to the public have a neat and tidy appearance

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
1.	Plant, operations or exposed faces visible from residences	**C,** O, R	Possible	Minor	MEDIUM
2.	Plant, operations or exposed faces visible from public roads	**C**, O, R	Possible	Minor	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Vegetation and landscape establishment on bund	The establishment and maintenance of screening vegetation and trees on upper batters, overburden dumps and stockpiles will be monitored 3 monthly until vegetation established and erosion minimised, and then 6 monthly. Additional planting and/or replanting will be done to remediate slow or failed vegetation growth.
2.	Progressive rehabilitation of upper terminal batters undertaken as soon as practicable	Timing of rehabilitation of segments of the terminal crest batters and upper berms.
3.	Effectiveness of screening vegetation and vegetation on upper batters, overburden dumps and stockpiles in limiting visual impact	12 monthly inspections from outside the quarry boundary will be used to check the effectiveness of screening vegetation and vegetation on upper batters, overburden dumps and stockpiles.
4.	Amenity impact	Complaints and comments raised through community engagement will be handled through the normal engagement process.

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Vegetation and landscape establishment	Annual review of rehabilitation works on upper batters, vegetation establishment monitoring, screening vegetation (trees) effectiveness (including photos as required) will be recorded by the Quarry Manager and reported to quarry management, to the community through community engagement activities and to Regulatory agencies as required.	To allow quarry management to assess performance and to identify any necessary remedial actions. To inform the community To inform management of future works.
2.	Progressive rehabilitation		
3.	Screening vegetation effectiveness		
4.	Amenity impact	Complaints reported through CEP	Complaint management

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	N/A	

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site Office
4.	Planning Permit Conditions	Site Office

2.2. Noise

Scope

This risk treatment plan is to assess and manage the potential noise impacts to sensitive receptors during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Crown Allotment 54 Section 23)	Eastern boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
2.	12 (Lot 25) Pitcher Street	Southern boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
3.	6 (Lot 24) Pitcher Street	Southern boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
4.	Lot 1 Gray Street	Southern boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
5.	Pitcher Street	Southern boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
6.	15 Templeton Street	Southern boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
7.	53 Templeton Street	North / West Boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
8.	63 Templeton Street	North / West Boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
9.	68 Templeton Street	North / West Boundary	Potential to impact amenity with excessive or elevated noise	Proximity to site
10.	34 Casterton Road	Southern	Potential to impact amenity with excessive or elevated noise	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
3.	Excessive noise at any sensitive receptors from vehicle movements (loaders, haul trucks)	C, O, R	Likely	Minor	MEDIUM
4.	Excessive noise at any sensitive receptors from processing plant (incl. fixed and mobile crushers)	C, O, R	Likely	Moderate	HIGH
5.	Excessive noise at any sensitive receptors from blast hole drilling equipment (drill rig)	C, O, R	Likely	Minor	MEDIUM
6.	Excessive noise at any sensitive receptors from excavating equipment (dozer, loader, excavator)	C, O, R	Likely	Minor	MEDIUM

Quarrying Considerations

A quarry with associated extractive activities has been at the site or in the immediate vicinity of WA410 since the late 1800's. Due to its proximity to the township of Coleraine, the site is (always has been) highly visible. The primary crusher, a principle source of noise from the site has been in its current location since the mid 1970's and has operated with the knowledge of council an the regulator without issue. This extension will not increase the noise impact. The extension of the quarry to the east and south east will marginally increase the distance to receptors to the west (from drilling, load and haul equipment) and as vegetation is progressively established, will soften (reduce, but not completely remove) the impact of noise from the quarry. In addition, this Work Plan describes a northern, eastern and a southern bund, that will also be vegetated with trees and

shrubs to further assist in screening the operation from immediate neighbours (receptors). Additionally, the activity area is surrounded by rural agriculture which assists in "diluting" noise attenuation.

Lot 6 and Lot 12 Pitcher Street are not included as sensitive receptors as they are both uninhabitable, unoccupied and planned to be removed.

Several residences are located within 1000m of the Work Authority boundary, the closest being a residence 150m to the North of the WA boundary on Templeton Street, with remainder of the residences 'skirting' the Pitcher Street and Templeton Street boundaries. There is a potential for site generated noise emissions to impact on these residences, as identified in the Acoustic Report prepared by CET titled "ACOUSTIC REPORT for RIGBY BROTHERS QUARRY, COLERAINE, VICTORIA" dated 12 January 2024. The report identifies the need for further measure to ameliorate noise at proximate sensitive receptors which are outlined below. The prime source of noise is the primary crusher, which has been in operation since 1978. The acoustic reports makes some recommendation re noise mitigation which will be implemented. It is emphasisied that both the MRSDA and the EPA GED both talk of ".. as far as reasonably practicable.." This site will surely test this interpretation, as it is argued that local all receptors (they cannot argue they did not know a quarry was in the area!) have been aware of the quarry and, by choosing to live in close proximity to the quarry, have a higher tolerance for noise impacts than a typical "urban" receptor.

The screening bund as designed and operations staying within the proposed 'daylight' operating hours are not expected to result in an increase in noise impacts. This work plan variation does not describe any increase in output, no increase in blasting frequency and no increase of other activities that will adversely impact noise generated from the site. More stringent traffic control and realignment of the haul road will marginally improve noise attenuation from quarry traffic as the perimeter bunds are constructed and vegetation established. The screening bund will be constructed in segments with the initial construction opposite the nearest residences. Additionally, no site activities will be undertaken8 from 6am to 7am (within the EPA 'night period'). The progressive construction of the screening bund and transition from initial surface extraction the noise impacts will reduce over time.

The screening bund and vegetation provide additional control measures to ensure operations, particularly overburden removal and drilling at the southern end of the site, are shielded from the residences to the south.

The fixed plant will eventually be relocated to the southern extension area, where it can take advantage of noise attenuation to the south and east by being located in the cutting, below natural ground, as well as the perimeter bund to the south and east, and stockpiles to the west. Mobile crushing and screening will also be introduced, which provides greater flexibility in locating plant. In the meantime, the current crushing and screening activities will incorporate a noise damping system, most likely consisting of rubber matting or similar to reduce the likelihood of intermittent noise exceedances during boot tipping activities, a significant but intermittent noise source. Overburden placed in the southern section of the site, will be shielded by the screening bund and vegetation. There is no planned change to the current operating hours and align with the current EPA 'day period'.

Drill and blast activity is infrequent, with an expected 2 to 3 blasts per year approximately.

The above outlined actions demonstrate as far as reasonably practicable, that the activity can significantly improve on past performance and not adversely increase impact the nearby receptors, and with the proposed control measures and monitoring, as documented below, the risks

associated with noise from the operation will be minimised as far as reasonably practicable. Therefore, compliance with the EPA General Environmental Duty can be expected.

A Noise Management Plan has been implemented which identifies the noise creating activities and adopted controls as well as roles and responsibilities of employees.

Objectives

The key objectives of this risk treatment plan are to:

- Manage and minimise offsite noise impacts on nearby sensitive receptors, including members of the public, residential land uses and other sensitive land uses and environments
- Reduce noise generation from onsite activities and materials handling to the extent practicable
- Eliminate or reduce noise related complaints from residences
- Noise experienced by nearby sensitive receptors is within limits set by EPA

Compliance standards

The compliance standards for this risk treatment plan are:

- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Publication 1823.1, June 2021: Mining and Quarrying – Guide to preventing harm to people and the environment
- EPA Publication 1254.2, May 2021: Noise Control Guidelines
- EPA Publication 1826.4, May 2021: Noise Limit and Assessment Protocol for the Control of Noise from Commercial, Industrial and Trade Premises and Entertainment Venues.

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- No noise complaints are received.
- Noise is managed to minimise risks to sensitive receptors, as far as reasonably practicable, in line with the General Environmental Duty

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Compliance to approved operating hours (Within the EPA 'Day Period' hours)	Hours as stipulated in the Work Plan or Planning Permit (or as otherwise amended by the planning permission) Extraction and processing EPA 'Daylight Hours' Monday to Friday No work on Saturday, Sundays and Public Holidays
2.	No noisy activities (earthworks, truck loading, haulage) permitted onsite within 250m of residences close to EPA 'night period hours'.	No onsite activities during and EPA 'night period' hours No exceedances of noise limits at residences during EPA 'night period' hours
3.	Establishment of screening bund, with initial segments constructed opposite the nearest residences	Compliance to Site Layout Plan and EPA noise limits
4.	Limitations on initial construction activities (e.g. bunds, haulage routes, crushing and screening) to be carried out in accordance with adherence to EPA noise limits.	Initial Construction Activities: EPA 'Daylight Hours' Monday to Friday Construction activities managed as outlined above.

5.	Extraction sequencing, equipment orientation and position to take advantage of shielding from bunds, vegetation, topography, stockpiles or other constructed features	Compliance to Site Layout Plan Locations with noise generating activities effectively screened from noise sensitive receptors.
6.	Screening operational areas from noise sensitive receptors: • Locate site access roads away from sensitive receptors; • Use of existing features (i.e. topography, vegetation) and stockpiles / bunds or other constructed features as noise barriers.	Compliance to Site Layout Plan Locations of noise generating activities effectively screened from noise sensitive receptors.
7.	Maintain access roads and site tracks in good condition	Roads and access tracks graded as required to minimise corrugations and potholes
8.	Minimise noise generated from plant operation, including vehicle speeds limits, quiet material unloading, minimise engine revving, etc.	Speed / traffic management signs maintained at critical locations, and drivers trained to operate plant so as to minimise noise generation and to report atypical noise.
9.	Reversing squawkers fitted to appropriate mobile plant	Squawkers fitted and operational to all mobile equipment
10.	Equipment selection and maintenance regime in accordance with manufacturer specifications.	All plant and equipment chosen and maintained as per manufacture specification to minimise noise emission
11.	Engineered noise abatement for grizzlies, crushers, conveyors, vibrating screens, stacking conveyors, pumps (only for pumping sediment dam) • Damping system encompassing the lining of the crusher bins with rubber matting or similar	Noise abatement devices fitted and maintained as per manufacture specification

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
3.	Excessive noise at any sensitive receptors from vehicle movements (loaders, haul trucks)	C, O, R	Possible	Minor	MEDIUM
4.	Excessive noise at any sensitive receptors from processing plant (incl. mobile plant, screens, stackers)	C, O, R	Possible	Minor	MEDIUM
5.	Excessive noise at any sensitive receptors from blast hole drilling equipment (drill rig)	C, O, R	Possible	Minor	MEDIUM
6.	Excessive noise at any sensitive receptors from excavating equipment (dozer, loader, excavator)	C, O, R	Possible	Minor	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Noise at sensitive receptors	Periodic noise monitoring will be undertaken to verify equipment noise levels, to ensure noise management measures remain effective and the operation is not emitting unreasonable noise. Complaints, as well as other community engagement activities, and any resulting actions will be documented. Where monitoring is directed by EPA or ERR, monitoring will be in accordance with the regulatory agencies' requirements. The adequacy of control measures against the GED will be assessed through the periodic monitoring, general observation as part of routine site inspections and feedback through community engagement.

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Incidents of noise complaints	Internally/ On Event	Use information to confirm presence of any noise issues, and identify key noise generating activities and necessary remedial actions, in addition to those in site layout plan.
2.	Reportable Events under MRSDA (non-compliance with approval, for noise impacts)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	CMPA Noise Management Guidelines	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Noise Management Plan	Site Office
4.	Work Plan / Work Authority Conditions	Site Office
5.	Planning Permit Conditions	Site Office

2.3. Dust

Scope

This risk treatment plan is to assess and manage the potential dust impacts to sensitive receptors during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Crown Allotment 54 Section 23)	Eastern boundary	Potential to impact amenity with excessive or elevated dust	Proximity to site
2.	12 (Lot 25) Pitcher Street	Southern boundary	Potential to impact amenity with excessive or elevated dust	Proximity to site
3.	6 (Lot 24) Pitcher Street	Southern boundary	Potential to impact amenity with excessive or elevated dust	Proximity to site
4.	Lot 1 Gray Street	Southern boundary	Potential to impact amenity with excessive or elevated dust	Proximity to site
5.	Pitcher Street	Southern boundary	Potential to impact amenity with excessive or elevated dust	Proximity to site
6.	Templeton Street	Western boundary	Potential to impact amenity with excessive or elevated dust	Proximity to site
7.	Cameron Street	Northern boundary	Potential to impact amenity with excessive or elevated dust	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
7.	Excessive dust from vehicle movements on all access roads, site roads and hardstands impacting sensitive receptors	C, O, R	Possible	Moderate	MEDIUM
8.	Excessive dust from processing plant and equipment impacting sensitive receptors	C, O, R	Likely	Moderate	HIGH
9.	Excessive dust from blast hole drilling & blasting impacting sensitive receptors	C, O, R	Possible	Moderate	MEDIUM
10.	Excessive dust from overburden dumps (construction & maintenance) impacting sensitive receptors	C, O, R	Possible	Moderate	MEDIUM
11.	Excessive dust from stockpiles impacting sensitive receptors	C, O, R	Possible	Moderate	MEDIUM
12.	Excessive dust when stripping impacting sensitive receptors	C, O	Likely	Moderate	HIGH
13.	Excessive dust during rehabilitation impacting sensitive receptors	O, R	Likely	Moderate	HIGH

Quarrying Considerations

Several residences are located within 1000m of the Work Authority boundary, the closest being a residence 150m to the North of the WA boundary on Templeton Street, with remainder of the residences 'skirting' the Pitcher Street and Templeton Street boundaries. There is a potential for site generated dust emissions to impact on these residences.

Lot 6 and Lot 12 Pitcher Street are not included as sensitive receptors as they are both uninhabitable, unoccupied and planned to be removed.

The low level of activity for this quarry means that the impacts will be relatively minor, for this operation, hence standard industry control measures are implemented for these hazards, which will be sufficient to minimise any risks posed. These hazards do not require specialised risk

management at this site. A Dust Management Plan has been implemented which identifies the dust generating activities and adopted controls as well as dust monitoring and a daily action plan.

Soil and overburden stripping will be avoided on hot, windy days, or as much as possible after extended dry periods where the inherent moisture content is reduced. There will be ample water (supply and storage) on site to manage dust through traditional methods, i.e. water carts and water sprays, sprinkler systems, etc. Mains water is available if required to supplement on-site water supply.

The above control measures demonstrate that the proposed activity can comply with EPA air pollution limits, without the need for formal monitoring. As documented below, the risks associated with dust generated on site will be minimised as far as reasonably practicable. Therefore, compliance with the EPA General Environmental Duty can be expected.

Respirable Crystalline Silica Risk

The AED Consulting Group report titled 'Analysis of Rock Samples for Rigby Bros Quarry' dated 12 March 2021 confirmed the lack of respirable silica within the resource. This operation does not pose a risk to the public from any fugitive respirable crystalline silica dust leaving the site, as the rock is a trachyte with negligible to no crystalline silica content, and therefore it is not possible to generate any respirable crystalline silica dust that could be carried off site, refer to AED (2021) report. WorkSafe Victoria recognises that the crystalline silica contents in Basalt is less than 1%, and trachyte has a similar low level of crystalline silica and not considered a 'crystalline silica substance' under the Occupational Health and Safety Regulations 2017 (OH&S Regulations). WorkSafe Victoria has advised that such operations do not need to comply with the OH&S Regulations relating to a 'crystalline silica process'. As no risk is posed to the health of onsite workers from respirable crystalline silica dust, the operation cannot possibly produce fugitive respirable crystalline silica dust that could pose a risk to the public.

Objectives

The key objectives of this risk treatment plan are to:

- Manage and minimise offsite dust impacts on all nearby sensitive receptors including members of the public, residential land uses, and other sensitive land uses or environments
- Control dust at the source. Reduce or prevent dust generated from onsite activities and materials transport, to the extent practicable
- Minimise the impact to the local environment and amenity, to protect the environmental values of the air as defined in the Environment Reference Standard

Compliance standards

The compliance standards for this risk treatment plan are:

- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Environment Reference Standard 2022 (ERS), or as amended, and National Environment Protection Measure (Ambient Air Quality) (NEPM AAQ)
- EPA Publication 1518, March 2013: Recommended Separation Distances for Industrial Residual Air Emissions
- EPA Publication 1823.1, June 2021: Mining and Quarrying – Guide to preventing harm to people and the environment
- EPA Publication 1961, Feb 2022: Guideline for Assessing and Minimising Air Pollution in Victoria

- EPA Publication 1894, September 2020: Managing Soil Disturbance – Guidance sheet
- EPA Publication 1895, September 2020: Managing Stockpiles – Guidance sheet
- EPA Publication 1897, Sept 2020: Managing Truck and Other Vehicle Movement – Guidance sheet

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- No nuisance dust related complaints
- Dust emissions are managed to minimise risks to sensitive receptors, as far as reasonably practicable, in line with the General Environmental Duty

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Minimise exposed / disturbed areas	Compliance to maximum disturbed area at any given time
2.	Stripping tasks restricted to areas within 250m from nearby sensitive receptor (nearest residence) // Stripping tasks halted whenever dust generated will drift toward a nearby residence(s) located at <250m from the WA boundary	Stripping confined to approved disturbance areas // Stripping activity stopped if wind speed and direction generate dust drifting toward a nearby residence at <250m
3.	Water cart / sprays used on exposed areas, roads, hardstand areas and stockpiles	Water cart and ample supply of water available on forecast hot, dry days or during extended dry periods when inherent moisture content is reduced
4.	Water sprays at critical location on any mobile and fixed processing plant	Ample supply of water available on forecast hot, dry days or during extended dry periods when inherent moisture content is reduced
5.	Crushing plant, screen boxes and conveyors are enclosed. Conveyor transfer points are fitted with dust suppression water systems (water mist and fog).	Dust suppression devices fitted to all operating dust-generating plant. Ample supply of water available for dust suppression water systems.
6.	Minimising exposure between conveyor discharge and top of stockpile	Conveyor and stockpile monitored and adjusted, as necessary, to minimise exposure
7.	Dry excavated material to be wetted in hot, dry, windy conditions or whenever dust generation requires	Quarry Manager's discretion based on weather forecast, visual observation or stakeholder engagement
8.	Minimise vehicle movements (restrict to designated areas) and limit vehicle speeds, adjusting speed as necessary to conditions	Speed / traffic management signs maintained at critical locations, and drivers trained to drive to conditions so as to minimise dust generation
9.	Suspension of potentially dusty operations (including blasting) during hot, dry, high wind conditions or whenever dust generation requires	Quarry Manager's discretion based on weather forecast, visual observation or stakeholder engagement
10.	Cover vehicles carrying dusty materials when transferring material from the site or treat with water to minimise dust	All dusty loads covered at weighbridge or sprayed with water prior to leaving site to transfer materials
11.	Contour, vegetate and stabilise screening bunds, as soon as practicable, and also topsoil / overburden stockpiles to be retained more than 3 months, as well as buffer areas	Screening bunds and topsoil / overburden stockpiles vegetated and stabilised within 3 months of construction. Planted vegetation maintained
12.	Progressively contour and vegetate topsoil stockpiles and overburden dumps to be retained more than 6 months, as well as outer faces of raised pads and rehabilitated landforms	Topsoil stockpiles and overburden dumps vegetated and stabilised within 6 months of construction. Stockpiles located and size minimised, as far as practicable, to reduce dust generation. Planted vegetation maintained
13.	Establish initial pasture on progressively rehabilitated landforms (cut or backfill), as soon as practicable.	Topsoiled and planted pasture on cut or backfill batters awaiting rehabilitation within 3 months. Pasture to be fully established within 12 months. Planted vegetation maintained
14.	Dust suppression equipment maintenance regime in accordance with manufacturer specifications.	All plant and equipment maintained as per manufacture specification to maximise dust suppression

15.	Continual visual monitoring by all staff for dust leaving the site, throughout operations, and notification to the Quarry Manager promptly for remedial action	No nuisance dust impacts to sensitive receptors

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
7.	Excessive dust from vehicle movements on all access roads, site roads and hardstands impacting sensitive receptors	C, O, R	Unlikely	Moderate	MEDIUM
8.	Excessive dust from processing plant and equipment impacting sensitive receptors	C, O, R	Possible	Moderate	MEDIUM
9.	Excessive dust from blast hole drilling & blasting impacting sensitive receptors	C, O, R	Unlikely	Moderate	MEDIUM
10.	Excessive dust from overburden dumps (construction & maintenance) impacting sensitive receptors	C, O, R	Unlikely	Moderate	MEDIUM
11.	Excessive dust from stockpiles impacting sensitive receptors	C, O, R	Unlikely	Moderate	MEDIUM
12.	Excessive dust when stripping impacting sensitive receptors	C, O	Possible	Moderate	MEDIUM
13.	Excessive dust during rehabilitation impacting sensitive receptors	O, R	Possible	Moderate	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Ongoing visual monitoring of dust generated on site by all staff	Visual monitoring for dust leaving the site Hourly assessment of dust on hot, dry or windy days
2.	Weather forecast and onsite conditions for potential adverse dust generating conditions	Monitor for likely adverse dust generating conditions that may lead to nuisance dust impacts to sensitive receptors
3.	Surface condition of exposed areas, roads, hardstand areas and stockpiles	Visual observation during regular inspections and informally by mobile plant operators and truck drivers
4.	Functionality of crushing plant's dust suppression systems	Plant pre starts – preventative maintenance cycle
5.	Complaints and observations / comments from sensitive receptors	Complaints and comments recorded

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Occurrences of dust leaving the site	Quarry Manager / On Event	Use data to confirm presence of any dust issues, and identify key dust generating activities and necessary remedial actions
2.	Excessive visible dust being generated by activities on site	Quarry Manager / On Event	To identify key dust generating activities and investigate any need for remedial actions to reduce dust generation
3.	Incidents of dust related complaints and comments	Quarry Manager / On Event	To identify dust related impacts to sensitive receptors and any targeted remedial actions necessary to rectify the issue
4.	Reportable Events under MRSDA (non-compliance with approval, for dust impacts)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	EPA guidance sheets (publications 1894, 1895, 1897)	https://www.epa.vic.gov.au/about-epa/publications
2.	CMPA Dust Management Guidelines	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site office
2.	Site Layout Plan	Work Plan
3	Dust Management Plan	Site office
4	Work Plan / Work Authority Conditions	Site office
5	Planning Permit Conditions	Site Office

2.4. Surface Water Flows

Scope

This risk treatment plan is to assess and manage the potential impacts of surface water flows (including storm events) into and through the site, or surface water flows diverted around the site, where the environment or sensitive receptors may be affected during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Note that all risks associated with erosion and sedimentation that may result from such surface water flows are addressed in the separate risk treatment plan for erosion and sedimentation.

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Surface water and environment	Waterway (Konong Wootong Creek 200m to the west) and three (3) DELWP mapped wetlands to the south of Work Authority	Potential to be impacted by modified flows from the catchment area	Downslope of site
2.	Neighbouring properties	Adjacent land downstream of Work Authority	Potential to be impacted by modified flows from the catchment area	Downslope of site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequences	Inherent Risk Rating
14.	Diverted surface flows impacting downstream environments	C, O, R	Unlikely	Minor	MEDIUM
15.	Storm water overwhelming water management infrastructure leading to flooding of the quarry and causing impacts to the adjacent land or environment	C, O, R	Unlikely	Minor	LOW

Quarrying Considerations

There are no waterways or drainage lines within the Work Authority that would require diversion and minimal risk of any diverted surface flows impacting any waterways. The closest mapped wetlands are associated with the water plant, some 450m to the southwest. Bryan Creek is some 730 metres to the south and Konong Wootong Creek some 200m to the west of the site.

The site water management strategy includes diversion of surface water flows away from disturbed areas across undisturbed ground, collecting and distributing it around the works, and to direct and collect incident rainfall and surface water flows on disturbed ground into sediment traps and sumps in the base of the excavation, below natural ground. If necessary, these sumps will be drained with pumps and the water used to irrigate rehabilitated areas or the surrounding pasture, and as a contingency the water can be directed to the sediment dam in the southeast corner of the Work Authority. The key water management features for managing any offsite impacts of surface water flows are also shown on Figure 3, Site Layout Plan, and any of these features retained at closure are shown on Figure 4, Rehabilitation Landform.

A Water Management Plan has been developed which describes the various water management features and a Trigger Action Response Plan (TARP) that responds to any water related events outside the standard water management controls.

The disturbance area will be enclosed with bunds / cut-off drains that divert clean water away from the disturbed area and return the surface flows back to their natural pathways. The principal purpose of the perimeter bunding is to create a visual screen and so will be far larger (in the order of 4m high) than the design required to divert surface water flows even at in consideration of the most extreme peak flows during storm events.

Objectives

The key objectives of this risk treatment plan are to:

- Protect the environmental values of the local water environment as defined in the Environment Reference Standard
- Manage and minimise the impact of any diversion of surface water flows required by the operation
- Manage and minimise the impact to onsite infrastructure, and resulting offsite impacts, due to storm events

Compliance standards

The compliance standards for this risk treatment plan are:

- Water Act (1989)
- Catchment and Land Protection Act (1994).
- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Environment Reference Standard 2022 (ERS), or as amended

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Storm water runoff and diverted flows are managed to minimise risks to downstream environments, as far as reasonably practicable, in line with the General Environmental Duty
- No detrimental effects to downstream environments due to diverted flows
- No storm water flooding / inundation of site infrastructure with subsequent offsite impacts.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Install diversion drainage structures (visual screening bunds, swales, etc) up-gradient of working areas to prevent clean surface water from entering the excavation / disturbance area.	Surface water diversion structures installed and effectively intercepting surface water before it reaches operating areas, as per the site layout plan. (Figure 3)
2.	Rain fall checked hourly on BoM website during significant rainfall events.	Daily records of rainfall, time and date maintained.
3.	Discharge points of diverted surface water flows direct water toward natural flow paths	Surface water flows diverted around the site returned to original flow paths, as far as practicable, as per the site layout Plan.
4.	Construct internal roads / tracks with sufficient diversion drains and culverts to manage stormwater flows.	Drainage structures associated with internal roads / tracks effectively manage stormwater flows.
5.	Where not part of a visual screening bund, diversion drains typically 1m wide and 0.4m deep adequate to accommodate the water flows from storm events (ie 5% AEP)	Diversion drains capable of handling major (5% AEP) storm event
6.	Maintain a sump in base of the excavation	Compliance to Work Plan, Water Management Plan and Site Layout Plan

7.	Maintenance of appropriate freeboard on all water storages / sediment dams / sumps to control offsite discharge	Freeboard levels maintained to prevent uncontrolled offsite discharge

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequences	Residual Risk Rating
14.	Diverted surface flows impacting downstream environments	C, O, R	Unlikely	Minor	LOW
15.	Storm water overwhelming water management infrastructure leading to flooding of the quarry and causing impacts to the	C, O, R	Rare	Minor	LOW

#	Details of the Risk Event	Phase	Likelihood	Consequences	Residual Risk Rating
	adjacent land or environment				

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Effectiveness of diversion drainage structures (pipes, bunds, swales, etc)	3 monthly inspection of diversion drainage structures to check performance, and remedial actions taken as necessary
2.	Effectiveness of storm water culverts and discharge points	Inspect drainage structures and discharge points after storm events to assess performance
3.	Retention of stormwater in sediment traps and sumps	Inspect for residence time of collected stormwater runoff
4.	Storage capacity / freeboard in all water storages, sediment dams and sumps	Storage capacity / freeboard to manage rainfall events – checking if sediment dams or sumps require clearing of sediment

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Effectiveness of diversion drainage structures	Internal reporting for site management after significant rainfall event or three monthly	To identify any necessary remedial actions required for diversion drainage structures, and for reviewing performance of the site's water management
2.	Effectiveness of stormwater culverts and discharge points	Internal reporting for site management after significant rainfall event or three monthly	To identify any necessary remedial actions required for stormwater culverts and discharge points, and for reviewing performance of site's water management
3.	Storage capacity / freeboard in all water storages, sediment dams and sumps	Internal reporting for site management after significant rainfall event or three monthly	To identify any necessary remedial actions, and/or modifications to maintain capacity / freeboard
4.	Reportable Events under MRSDA (non-compliance with approval, in managing impacts of surface water flows)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Guidelines for the Management of Water in Mines and Quarries (Earth Resources Regulator)	https://earthresources.vic.gov.au/legislation-and-regulations/guidelines-and-codes-of-practice/guidelines-management-of-water-in-mines-and-quarries
2.	CMPA Water Management Guidelines	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site Office
4.	Planning permit conditions	Site Office

2.5. Erosion and Sedimentation

Scope

This risk treatment plan is to assess and manage the potential impacts from erosion mobilising sediment, due to water flows on and across the site, and that sediment being carried offsite and affecting the environment or sensitive receptors during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Surface water and environment	Waterway (Konong Wootong Creek 200m to the west) and three (3) DELWP mapped wetlands to the south of Work Authority	Potential to be impacted by turbid water leaving the site	Downslope of site
2.	Neighbouring properties and public roadways	Adjacent land downstream of Work Authority	Potential to be impacted by turbid water leaving the site	Downslope of site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
16.	Erosion from stockpiles (product and other) resulting in silt laden run-off	C, O, R	Likely	Minor	MEDIUM
17.	Erosion from screening bunds resulting in silt laden run-off	C, O, R	Likely	Minor	MEDIUM
18.	Erosion from hardstand areas resulting in silt laden run-off	C, O, R	Likely	Minor	MEDIUM
19.	Erosion from roads and other disturbed areas resulting in silt laden run-off	C, O, R	Likely	Minor	MEDIUM
20.	Silt laden water discharged to the environment from a water dam overtopping	C, O, R	Possible	Minor	MEDIUM

Quarrying Considerations

Uncontrolled surface water flows across disturbed areas may cause erosion to take place, transporting sediment from extraction areas, stockpiles, constructed embarkments, natural slopes and rehabilitated landforms. Sediment deposition may affect land within the Work Authority area or neighbouring lands and waterways. There are no waterways or drainage lines within the Work Authority that could be affected. The closest mapped wetlands are associated with the water plant, some 450m to the southwest. Bryan Creek is some 730 metres to the south and Konong Wootong Creek some 200m to the west of the site.

WA410 is an existing, operating extractive operation with extraction and processing activities. The proposed expansion of the extraction area will result in the extraction moving to the east and south of the existing pit, as well as deeper. Stockpiles, both product and topsoil, and waste dumps as well as hardstand and other disturbance areas will be created. Whilst the development will not impact any drainage lines uncontrolled runoff / surface water flows may cause erosion to take place from extraction areas, stockpiles, constructed bunds, natural slopes and rehabilitated landforms. Sediment deposition may affect the Work Authority area or neighbouring lands.

The topographic constraints on the northeastern side of the extraction area will necessitate the diversion of some surface water flows into the pit. For the remainder of the site, the surface water

management strategy is to divert surface water flowing across undisturbed ground and distributing it around the works, where possible, by the strategic location of swale drains, bunding, sediment traps and sumps to ensure this water does not leave the site and is instead directed to the sediment dam within the extraction area.

The dams have been in place for decades. Sediment laden water from overtopping of the dams will be contained within the WA boundary by the screening bund and be directed to the pit sump.

An assessment of the erosion potential of the terminal batters on the upper benches has been undertaken (see attached Geotechnical Assessment). This assessment concludes that the risks associated with the erosion hazard on the upper batters can be adequately managed through batter design, revegetation and, where necessary, additional short-term erosion control measures until vegetation is established.

It is demonstrated that the steepest proposed batter design (1V:3H) can achieve the criteria of the Commonwealth of Australia (2016) guidelines within 2 years, with the short-term erosion control measures minimising the initial erosion within this period.

The measures adopted when disturbing new ground will be consistent with EPA guidelines and overburden and topsoil stockpiles will be contoured and vegetated as necessary or otherwise stabilised to manage erosion. Acceptance criteria are provided below to define the upper limit for erosion from earthworks on rehabilitated terminal batters (cut or backfill) that have not yet been stabilised to control erosion. Obtaining a quantitative measure of erosion is difficult, therefore the stated acceptance criteria for erosion are based on a qualitative (visual) assessment. Refer to Section 4.1 of the Rehabilitation Plan for discussion of suitable erosion criteria.

Objectives

The key objectives of this risk treatment plan are to:

- Prevent erosion and sediment runoff from onsite activities
- Manage and minimise offsite impacts of erosion and sediment run-off on surrounding environments
- Protect the environmental values of the local water environment as defined in the Environment Reference Standard
- Minimise the risk of failure of onsite infrastructure or rehabilitated areas due to erosion

Compliance standards

The compliance standards for this risk treatment plan are:

- Catchment and Land Protection Act (1994).
- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Environment Reference Standard 2022 (ERS), or as amended
- EPA Publication 1823.1, June 2021: Mining and Quarrying – Guide to preventing harm to people and the environment
- EPA Publication 1893, September 2020: Erosion, Sediment and Dust: Treatment Train –
- Guidance sheet
- EPA Publication 1894, September 2020: Managing Soil Disturbance – Guidance sheet
- EPA Publication 1895, September 2020: Managing Stockpiles – Guidance sheet

- EPA Publication 1896, September 2020: Working Within or Adjacent to Waterways – Guidance sheet

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Erosion and sedimentation are managed to minimise risks to downstream environments, as far as reasonably practicable, in line with the General Environmental Duty
- No delivery of sediment to land or waterways outside the Work Authority area
- No unmanaged areas of active soil erosion within the Work Authority area or adjacent areas due to site discharges
- Erosion: on rehabilitated terminal batters (cut or backfill) that have not yet been stabilised, including interim batters between stages, no erosion channels greater than 200mm deep and/or wide
- Erosion: on rehabilitated terminal batters (cut or backfill) that have not yet been stabilised, including interim batters between stages, no more than 5 erosion channels greater than 150mm deep and/or wide within a 20m wide area

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Surface water management and sediment controls maintained, and adapted as required, around all ground disturbing activities	Surface water management and sediment control structures effective in limiting / controlling erosion and sedimentation, and in accordance with the site layout plan.
2.	Construction of erosion and sediment control features consistent with EPA guidance	All works consistent with EPA guidance
3.	Maintain compliance to any EPA standards regarding management of any potential offsite discharge	Compliance to Work Plan Conditions and any EPA permission
4.	Design of all quarry faces, bund embankments and mounds to incorporate swales or catch drains as necessary.	All works in accordance with design to minimise erosion, as per site layout Plan
5.	Divert surface water away from disturbed areas with swale drains and bunds.	Minimal surface flows over disturbed areas with diversion structures, as per site layout plan
6.	Planning vegetation clearing and earthworks to limit, as far as practicable given operational requirements, the total erodible surfaces exposed at any one time. The screening bund will be used as temporary diversion structures during stripping, contoured and grassed to limit erosion	The total area of exposed erodible surfaces including the screening bund will be minimised.
7.	Construct all internal roads and tracks with sufficient diversion drains and culverts to ensure that stormwater is diverted away from roads.	Roads and tracks designed to minimise erosion and, where necessary, employ surface treatment to reduce erosion.
8.	Drainage off roads to be directed to vegetated areas through erosion protection structures	Side and angled drains off collection drains protected against erosion.
9.	Ensure that the gradient and orientation of tracks do not cause runoff to be fast flowing	Maintenance of tracks to minimise erosion.
10.	Strategic location of the sediment traps / dams.	Sediment traps / dams located as per site layout plan
11.	Clear sediment traps / dams and sumps of sediment, as necessary, to maintain sediment holding capacity	Functionality of sediment traps / dams and sumps maintained as per site layout plan
12.	Runoff from designated processing areas will be directed to the in pit water storage sump.	Runoff from all processing areas is directed to the in pit water storage sump.
13.	Overburden / top soil stockpiles, if located outside drained hardstands, have a contour drain at the base to intercept sediment-laden runoff and direct into the in pit sump or sediment dam.	Sediment-laden water draining from overburden / top soil stockpiles prevented from discharging from disturbance areas.

14.	Contour, vegetate and stabilise the visual screening bunds., which will be retained at closure to be retained more than 6 months	Screening bund stabilised when retained more than 6 months from construction. Planted vegetation maintained
15.	Progressively contour and vegetate topsoil stockpiles and overburden dumps to be retained more than 6 months, as well as outer faces of raised pads and rehabilitated landforms	Topsoil stockpiles and overburden dumps vegetated and stabilised within 6 months of construction. Planted vegetation maintained.
16.	Establish initial pasture on upper terminal batters in erodible materials, as soon as practicable.	Progressive rehabilitation to topsoil and plant pasture on upper terminal batters awaiting rehabilitation within 3 months and interim batters inactive for greater than 12 months. Pasture to be fully established within 12 months. Any erosion on rehabilitated upper terminal batters that are not yet stabilised is within erosion acceptance criteria (above). Planted vegetation maintained and remedial action taken if erosion criteria exceeded
17.	Erosion to be minimised in erodible materials on rehabilitated terminal batters (cut or backfill) that have not yet been stabilised, including interim batters, with early revegetation of grasses to reduce surface flows and erosion.	Progressive rehabilitation in accordance with Rehabilitation Plan. Any erosion on rehabilitated terminal batters that are not yet stabilised is within erosion acceptance criteria (above). Planted vegetation maintained and remedial action taken if erosion criteria exceeded.
18.	Establish initial vegetation on upper terminal batters in erodible materials and the screening bund, as soon as practicable, and also interim batters left inactive for more than 12 months	Progressive rehabilitation in accordance with Rehabilitation Plan. Topsoiled and planted grasses on upper terminal batters awaiting rehabilitation within 3 months and interim batters inactive for greater than 12 months. Grasses to be fully established within 12 months. Any erosion on rehabilitated upper terminal batters and the screening bund that are not yet stabilised is within erosion acceptance criteria (above). Planted vegetation maintained and remedial action taken if erosion criteria exceeded.
19.	Longitudinal swale drains on terminal faces awaiting rehabilitation and working faces after 12 months of inactivity	Treatment of terminal faces awaiting rehabilitation and working faces inactive for greater than 12 months. Remedial action taken if erosion criteria (above) exceeded.

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
16.	Erosion from stockpiles (product and other) resulting in silt laden run-off	C, O, R	Unlikely	Minor	LOW
17.	Erosion from bunds resulting in silt laden run-off	C, O, R	Unlikely	Minor	LOW
18.	Erosion from hardstand areas resulting in silt laden run-off	C, O, R	Unlikely	Minor	LOW
19.	Erosion from roads and other disturbed areas resulting in silt laden run-off	C, O, R	Unlikely	Minor	LOW
20.	Silt laden water discharged to the environment from a water dam overtopping	C, O, R	Unlikely	Minor	LOW

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Water management structures (drains, bunds, sediment traps and Dam, etc) evaluated for performance	Inspection of all water management structures after each significant rainfall event, remedial works as required.
2.	Sediment holding capacity of all sediment traps / dams and sumps	Three monthly inspections of sediment accumulation – checking if structures require clearing of sediment
3.	Evidence of erosion and subsequent sediment-laden runoff	Monthly inspections will be conducted of the site, as well as following significant rainfall events, which will include overburden and topsoil stockpiles, surface water management structures (including sedimentation dams), and potential receiving drainage lines. Inspections, and any required monitoring and remedial actions documented in site record book.

4.	Surface water quality	Regular surface water quality monitoring is not proposed but may be undertaken for specific investigations or if directed by the ERR.

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Surface water management structure performance in preventing offsite turbid discharge	Internally after three monthly inspections and after significant rainfall events.	To identify any necessary remedial actions required to maintain performance of surface water management features
2.	Sediment holding capacity of all sediment traps / dams and sumps	Internal reporting for site management after significant rainfall event or three monthly	To identify any necessary remedial actions, and/or modification of TARP (Water Storages / Sediment Dams), required to maintain sediment holding capacity
3.	Erosion from long-term stockpiles and rehabilitated terminal batters	Internally after monthly inspections and after significant rainfall events. Level of erosion on topsoil / overburden stockpiles retained more than 6 months. Level of erosion on rehabilitated terminal batters.	To identify any necessary remedial actions required to minimise erosion and generation of sediment-laden runoff.
4.	Surface water quality	The results of any required monitoring will be reported to ERR / EPA, and to other stakeholders through the community engagement process.	If necessary, water quality monitored to ensure it is in line with EPA requirements prior to discharge, and for reviewing performance of the site's water management process
5.	Reportable Events under MRSDA (non-compliance with approval, in managing impacts of erosion and sedimentation)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	EPA guidance sheets (publications 1893, 1894, 1895)	https://www.epa.vic.gov.au/about-epa/publications
2.	Guidelines for the Management of Water in Mines and Quarries (Earth Resources Regulator)	https://earthresources.vic.gov.au/legislation-and-regulations/guidelines-and-codes-of-practice/guidelines-management-of-water-in-mines-and-quarries
3.	CMPA Water Management Guidelines	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site office
4.	Planning Permit Conditions	Site office

2.6. Ground Disturbance

Scope

This risk treatment plan is to assess and manage the potential impacts resulting from ground disturbing activities occurring within the site, where the environment or sensitive receptors may be affected during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

However, all risks associated with the impact of ground disturbance on ground instability, surface water flows or any resulting erosion and sedimentation are addressed in separate risk treatment plans.

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Aboriginal cultural heritage	Aboriginal Cultural Heritage Sensitivity (ACHS) area in proximity to Lot 26 Pitcher Street south of Work Authority boundary.	Potential for Aboriginal cultural heritage to be impacted by ground disturbing activities within WA	Increased potential for Aboriginal cultural heritage to be discovered in operations
2.	Ecological values of native vegetation	Native vegetation within and adjacent to disturbance area	Potential to be impacted by ground disturbing activities within the WA	Proximity to site
3.	Ecological values of DELWP mapped wetland and waterways	Konong Wootong Creek and three DELWP mapped wetlands 24472 and 24554 to the southwest and 24476 to the east of the WA	Potential to be impacted by ground disturbing activities within the WA	Proximity to site
4.	Groundwater	Groundwater well below quarry floor Water within aquifers below ground	Potential to be impacted by ground disturbing activities within the WA	Visualising Victoria's Groundwater website
5.	Nearby residences	2 residences are located in proximity to the site with the closest being 150m from the WA boundary	Potential to be impacted by ground disturbing activities within the WA	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
21.	Ground disturbing works inadvertently destroy historical heritage	C, O, R	Unlikely	Minor	LOW
22.	Ground disturbing works impacting on ecological values of retained native vegetation	C, O, R	Possible	Minor	MEDIUM
23.	Ground disturbing works resulting in impact to Konong Wootong Creek three DELWP mapped wetlands	C, O, R	Unlikely	Minor	LOW
24.	Ground disturbing works impacting on groundwater	C, O, R	Unlikely	Minor	LOW
25.	Ground disturbing works impacting residences in and public roadways	C, O	Possible	Moderate	MEDIUM

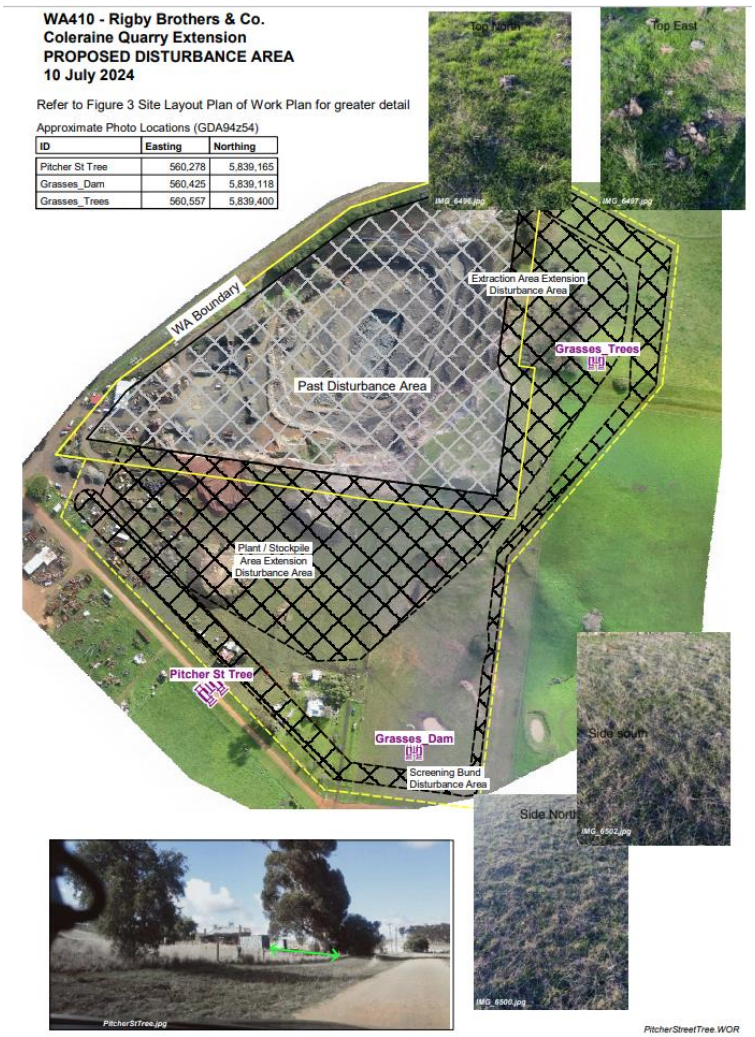
Quarrying Considerations

Aboriginal Cultural Heritage Sensitivity: An Aboriginal Cultural Heritage Sensitivity (ACHS) trigger area now encroaches the Work Authority along the Templeton Street Boundary, and also the western extremity of Lot 12 Pitcher Street (see Figure 3 Site Layout Plan). The 1978 approved Work Authority Area is exempt from any further investigation, citing either prior approval, ie the granting

of the Work Authority before the 2010 AHA or significant ground disturbance (it has been quarried out). More accurately, the WA was approved prior to the introduction of the 2010 AHA. The small area of ACHS impacting the Pitcher Street - Templeton Street Corner allotment has been removed from the Work Authority to minimise the risk to aboriginal heritage. This decision was taken after receiving conflicting advice from two Registered Aboriginal Parties, a local RAP representative, an Elder of the Boandik – Gunditjmara, who visited the site and did a cultural walk over and advised there was no cultural objects of aboriginal significance, and a representative of the Gunditj Mirring Traditional Owners Aboriginal Corporation (GMTOAC), who advised via a phone call that a mandatory CHMP would be required in any area of aboriginal cultural heritage is impacted by the activity. The conflicting advice was presented to a heritage consultant, who strongly advised "just remove the area". The Boandik – Gunditjmara Elder Letter of Advice is attached. There is no documented advice from GMTOAC or from the heritage advisor.

Heritage Victoria: There are no sites of historic heritage in the vicinity listed on either the Victorian Heritage Inventory or the Victorian Heritage Register or shown on any Heritage Overlay under the Planning Scheme. This has been confirmed by Heritage Vitoria via email.

Accessible Native Vegetation: The extraction area is predominantly in the current pit area with the trachyte resource extracted to a greater depth. There is some small increase in extraction into the paddocks that have been planted out with trees (northeast area), farmed, cropped and grazed (east and southeast area) or used as equipment / mobile plan storage (south) for several generations. A stand of planted eucalyptus trees to the northeast will be removed as part of this work plan, with DELWP agreeing (in 2017) that these trees are not assessable native vegetation as defined by the 2017 Guidelines for removal, destruction or lopping of native vegetation. As no native vegetation is being removed, and no vegetation offsets are required, a formal ecological assessment has not been undertaken.



Given the time lag from this original advice, and the lack of any formally documented advice from DELWP, further advice and clarification was

obtained from DEECA-PEA, which is included as 'Native Vegetation Advice'. This advice confirms that there is no accessible native vegetation being removed as a result of this Work Plan Variation.

Konong Wootong Creek 200m to the west and three DELWP mapped wetlands within 2km of the quarry, 24472 and 24554 to the southwest and 24476 to the northeast, which are defined as native vegetation. This work plan does not describe any drainage line diversion or intersection, and the perimeter bunding and visual screening ensures overland flows from outside the Work Authority are diverted around any disturbed ground, and will not impact these wetlands. Although, the site is relatively small, and the perimeter bunding that will be established on approval of the work plan, a separate Water Management Plan has been prepared. All the surface water management infrastructure is shown of Figure 3 Site Layout Plan.

Groundwater has not been encountered in the current excavation and is not expected to be intercepted within the extension area. The Visualising Victoria's Groundwater database suggests the depth to groundwater is approx. 15m or greater below the surface in the general area, this is confirmed by the 1980's bore located to the south of the WA. The geotechnical assessment has also concluded that ground water "is not anticipated to significantly influence pit wall stability" As no groundwater is expected to be intercepted, a formal groundwater assessment has not been undertaken.

Objectives

The key objectives of this risk treatment plan are to:

- Minimise potential for ground disturbing works to impact on heritage values, ecological values, environmental values of groundwater and proximate residences, due to exposed materials.

Compliance standards

The compliance standards for this risk treatment plan are:

- Aboriginal Heritage Act (2006)
- Heritage Act (2017)
- Guidelines for the Removal, Destruction or Lopping of Native Vegetation (DELWP, 2017)
- Catchment and Land Protection Act (1994)
- EPA Environment Reference Standard 2022 (ERS), or as amended, as it relates to groundwater

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- The discovery of any Aboriginal cultural heritage is managed in accordance with the Aboriginal Heritage Act
- The discovery of any historical heritage is managed in accordance with the Heritage Act
- No unauthorised impacts on ecological values of native vegetation
- No adverse impacts on the environmental values of groundwater in the vicinity as a result of ground disturbing works
- No turbid runoff and water within pit lake, as a result of ground disturbing works.
- No impact to proximate residences and roads

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Quarry Manager aware of requirements of Aboriginal Heritage Act 2006 and contingency measures for the discovery of any artefacts.	Monitoring for heritage artefacts during all soil and subsoil removal activities Compliance to Work Authority and Work Plan conditions
2.	Quarry Manager aware of requirements of Heritage Act 2017 and the contingency measures for the discovery of any artefacts.	Monitoring for heritage artefacts during all soil and subsoil removal activities Compliance to Work Authority and Work Plan conditions
3.	Operator training, operating procedures and supervision regarding discovery of Aboriginal or historic artefacts.	Standard Operating Procedures (SOPs)
4.	Maintaining agreed buffer zones.	Compliance to Work Plan and Site Layout Plan
5.	Fencing and signage of "no-go" areas, including native vegetation to be retained.	Suitable / effective fencing and signage in place.
6.	Maintain planted vegetation to ensure continued viability.	Compliance to Work Plan and Site Layout Plan
7.	All extraction will take place above the groundwater level	Regular monitoring for any groundwater inflow.
8.	Maintain compliance to any conditions of Rural Water Authority and/or EPA regarding management of groundwater impacts	Compliance to Work Plan Conditions and any EPA permission
9.	Visual monitoring of extraction area for presence of groundwater inflows.	Cease extraction if groundwater intercepted and report to relevant Water Authority.
10.	Appropriate signage and alerts near proximate residences and public roadways.	Standard Operating Procedures (SOPs)

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
21.	Ground disturbing works inadvertently destroy historical heritage	C, O, R	Rare	Minor	LOW
22.	Ground disturbing works impacting on ecological values of retained native vegetation	C, O	Rare	Minor	LOW
23.	Ground disturbing works resulting in impact to three DELWP mapped wetlands	C, O, R	Rare	Minor	LOW
24.	Ground disturbing works impacting on groundwater	C, O, R	Rare	Minor	LOW
25.	Ground disturbing works impacting residences in and public roadways	C, O	Possible	Moderate	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Aboriginal and historic heritage	Monitoring for heritage artefacts during all soil and subsoil removal activities, with contingency management measures in place.
2.	Unauthorised impacts on native vegetation	Native vegetation condition visually monitored and accidental damage to be reported to Quarry Manager. Fencing and buffer zone security and maintenance will be monitored through regular inspections.
3.	Condition of planted vegetation	Monitor for continued viability and maintain as necessary
4.	Groundwater inflows	The extraction area will be continually monitored for the presence of groundwater inflows during extraction activities.

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?

1.	Aboriginal Cultural Heritage Sensitivity self-assessment	Aboriginal Cultural Heritage Sensitivity self-assessment declaration have been completed and attached.	Identification of works that would require approval of a mandatory Cultural Heritage Management Plan (CHMP)
2.	Heritage impacts	Reporting as required under contingency measures and the Aboriginal Heritage Act and Heritage Act to all relevant authorities and indigenous stakeholders.	Mandatory reporting to regulator
3.	Groundwater inflows / infiltration	The presence of any groundwater within the extraction area will be reported to both the relevant Water Authority and ERR	To trigger a cessation of work in that area and the application for appropriate licensing arrangements.
4.	Groundwater impacts	The results of any required groundwater monitoring will be reported to ERR and/or the relevant Water Authority, and to other stakeholders through the community engagement process.	To identify any impacts to groundwater and, if impacted, identify any necessary targeted remedial actions and/or modification of
5.	Reportable Events under MRSDA (non-compliance with approval, in managing impacts of ground disturbance)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Guidelines for the Management of Water in Mines and Quarries (Earth Resources Regulator)	https://earthresources.vic.gov.au/legislation-and-regulations/guidelines-and-codes-of-practice/guidelines-management-of-water-in-mines-and-quarries
2.	Guidelines for the Removal, Destruction or Lopping of Native Vegetation (DELWP, 2017)	https://www.environment.vic.gov.au/native-vegetation/native-vegetation
3.	Applicant's Guide – Applications to Remove, Destroy or Lop Native Vegetation (DELWP, 2018)	https://www.environment.vic.gov.au/native-vegetation/native-vegetation

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site Office
4.	Planning Permit Conditions	Site Office

2.7. Ground Instability

Scope

This risk treatment plan is to assess and manage the potential hazard of ground instability within the site, where the environment or sensitive receptors may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Crown Allotment 54 Section 23)	Eastern boundary	Potential to be impacted by batter failure	Proximity to site
2.	12 (Lot 25) Pitcher Street	Southern boundary	Potential to be impacted by batter failure	Proximity to site
3.	6 (Lot 24) Pitcher Street	Southern boundary	Potential to be impacted by batter failure	Proximity to site
4.	Lot 1 Gray Street	Southern boundary	Potential to be impacted by batter failure	Proximity to site
5.	Pitcher Street	Southern boundary	Potential to be impacted by batter failure	Proximity to site
6.	15 Templeton Street	Southern boundary	Potential to be impacted by batter failure	Proximity to site
7.	53 Templeton Street	North / West Boundary	Potential to be impacted by batter failure	Proximity to site
8.	63 Templeton Street	North / West Boundary	Potential to be impacted by batter failure	Proximity to site
9.	68 Templeton Street	North / West Boundary	Potential to be impacted by batter failure	Proximity to site
10.	34 Casterton Road	Southern	Potential to be impacted by batter failure	Proximity to site
11.	Templeton Street & Pitcher Street	Western & Southern Boundary	Potential to be impacted by batter failure	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
26.	Batter failure impacting buffer zone or beyond WA boundary	O, R	Possible	Moderate	MEDIUM
27.	Localised (single bench) failure / Localised failure of upper batter in diggable material	O, R	Possible	Minor	MEDIUM
28.	Excessive erosion compromising stability and impacting buffer zone or beyond WA boundary	O, R	Possible	Moderate	MEDIUM

Quarrying Considerations

Lot 6 and Lot 12 Pitcher Street are not included as sensitive receptors as they are both uninhabitable, unoccupied and planned to be removed.

Failure of operating, terminal or rehabilitated quarry faces could impact on adjoining properties or community assets (roads) outside the WA boundary. The max terminal depth will be 65m, a combination of 6m (in the upper batters) and 12m benches (in the lower batters within the 'fresh' material) will be incorporated as part of the design. The depth of 65m will be achieved on the Cameron Street (East) side of the proposed extraction area. The Templeton Street side of the pit will be approximately 35m in depth.

Terminal faces will be re-profiled within the overburden material, to form a stable, a minimum 1V:3H rehabilitated batter. The current terminal faces in the fresh trachyte (at WA410) have been shown to be stable in excess of 30 to 40 years. The currently proposed pit geometry, resulting in an overall slope of 1V:1H consisting of individual bench heights of between 10m to 15m in the moderately weather to fresh material respectively couple with a final rehabilitation profile of 1v:3h in the overburden, and the WA buffer provides an adequate separation distance to any proximate receptors. This geometry results in a Factor of Safety (FoS) of 1.6 for the terminal batters and > 2.0 for the final (rehabilitated profile) batters.

Noting that general practice is for working faces to be blasted at an angle of 75-80 degrees, but once the expected levels of back break and subsequent final wall scaling, with controlled blasting techniques, as necessary, are factored in the terminal face will be at a maximum angle of 70 degrees. Once the terminal faces in rock are established, the likelihood of small failures and rock falls at the bench scale will be significantly reduced, and after an initial settling period the likelihood will further reduce with time.

The terminal bench design incorporates berm widths that match the minimum bench widths derived in the Geotechnical Assessment but are actually in addition to the backbreak and scaling that is already accounted for in establishing the terminal faces. The Geotechnical Assessment demonstrates that, in the event of any bench scale failure impacting these berms on terminal faces, the berm widths are sufficient to prevent such failures propagating up the slope and to catch the debris of any such failures and rock falls.

Regionally, the quarry is located within the Jurassic Den Hill Formation comprising volcanic domes and laccoliths of trachyte, phonolite and microsyenite. Surrounding the site is Quaternary aged alluvium to the north and Carboniferous to Permian Bacchus Marsh Formation. The Bacchus Marsh Formation comprises glacial deposits.

The trachyte resource ranges from moderately weathered to fresh. The moderately weathered trachyte, locally referred to as ‘Salamander’, has red-brown staining and extends to a depth of approximately ten metres from the top of the eastern wall, and seven metres (one bench height) on the western and southern walls. The slightly weathered to fresh trachyte is pale grey in colour and extends to the current pit floor and will extend to the proposed terminal pit associated with the work plan variation.

The geological / geotechnical model developed from the field investigation programs has been used in designing the extraction and rehabilitation sequence outlined in this proposal. In particular a crucial aspect of stability is the structural (geology) control on the respective faces. This deposit has strong structural on most walls, in particular the eastern and western walls. This is evident in the existing faces in WA410, as shown below:

Above – Typical the extraction area at WA410 showing strong structural control on existing pit batters

The groundwater level was identified in the resource drilling and the extraction floor will be approximately 15 metres below the planned terminal pit depth.

Blasting is routinely conducted as part of the extraction works. Blast management planning ensures blasting impacts, including back-break, are considered in blast design along with production rates and size profiles.

There are no other on-site or adjoining activities that would impact on the stability of the excavation.

There are no apparent faults in the pit, nor is there any history of seismic activity. As noted above the designed pit floor will be above groundwater.

There has been no record of slope failures or face instability due to ground movement at this site.

A geotechnical analysis of the proposed terminal slopes (see attached Geotechnical Assessment by CMQ Geotechnics). Additionally, CMQ has undertaken an assessment of erosion for the weathered zone (included in Geotechnical Assessment). Slope stability analysis determined Factors of Safety in excess of the nominated design criteria, and CMQ found that the residual risk to external receptors was assessed to be “Low”.

A Ground Control Management Plan (GCMP) for the site had also been developed by BCA and has been subsequently updated see (attached). The GCMP discusses and details the management and monitoring requirements which will be adopted at the site, which may include, but are not limited to, blast management, bench scaling and visual inspections, as well as periodic review of the GCMP document.

In support of the GCMP the site layout plan sets out the site water management strategy. This includes diversion of surface water flows, where possible, away from disturbed areas across undisturbed ground and, in particular, the localised management of surface water flows above pit crests, to ensure stability of upper weathered units. This approach will act to minimise erosion and ensure the upper batters in diggable / erodible material are vegetated and stabilised as soon as practicable. The key water management features for managing any offsite impacts of surface water flows are also shown on Figure 3, Site Layout Plan, and any of these features retained at closure are shown on Figure 4, Rehabilitation Landform.

The excavation will not intersect groundwater, with the interpreted groundwater table being some 15m below the surface.

Objectives

The key objectives of this risk treatment plan are to:

- Minimise potential for ground slips / failures to impact beyond the extraction limit

Compliance standards

The compliance standards for this risk treatment plan are:

- Geotechnical Guideline for Terminal and Rehabilitated Slopes – Extractive Industry Projects (ERR)
- CMPA Working Safely with Geotechnical Risk in Quarries

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- No ground slips / failure impacting beyond Extraction Boundary.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Marking out extraction boundary	Extraction Boundary marked with Yellow Posts
2.	Maintain buffer zones to Work Authority boundary	Compliance to Work Plan / Site Layout Plan
3.	Compliance to design of all quarry faces, embankments and mounds.	Compliance to Work Plan / Site Layout Plan / Ground Control Management Plan
4.	Stability assessment, as / if triggered by Ground Control Management Plan to confirm material strength parameters and slope design.	Review triggered and undertaken once a suitable depth of material / geological features are exposed, in accordance with Ground Control Management Plan, and performed by a suitably qualified and experienced person
5.	Undertake minimum five-yearly stability reviews after initial stability assessment, and other reviews, in accordance with geotechnical review triggers.	Reviews undertaken in accordance with Ground Control Management Plan and performed by a suitably qualified and experienced person
6.	Screening bunds max 4m high without benching. If bund higher bund heights become necessary, these will be formed in accordance with GCMP. No side slopes steeper than 1V:3H.	Compliance to Work Plan and Ground Control Management Plan
7.	Divert surface water away from cut batters / embankments with swale drains and bunds.	Compliance to Work Plan / Site Layout Plan Surface water controls designed to minimise erosion on upper terminal batters, as per site layout Plan
8.	Dewatering of batters and berms, with surface drainage controls in place ensuring long-term pooling of water is avoided.	Compliance to Work Plan / Site Layout Plan / Ground Control Management Plan Minimal surface water flows toward extraction areas and diversion structures in place above pit crests, and flows into the pit are carried to pit floor without long-term pooling on berms, as per Water Management Plan.
9.	Maintain terminal batters consistent with approved design by utilising blast site surveying, final wall scaling and, as necessary, controlled blasting techniques (e.g. contour, pre-split or trim blasting). Terminal benches cleared of loose rock, as necessary, following final wall scaling.	Terminal batters remain consistent with the design criteria in the Work Plan / Site Layout Plan, including overall slope angle, and are developed in accordance with Ground Control Management Plan.
10.	Site inspections at least monthly, before (if possible) and immediately after forecast significant rainfall events, and after completion of rehabilitation works.	Compliance to Work Plan / Site Layout Plan / Ground Control Management Plan Compliance to Rehabilitation Plan (Monitoring schedule)
11.	Investigation of any localised bench failures for evidence of potential larger or propagating failure.	Compliance to Work Plan / Site Layout Plan / Ground Control Management Plan Compliance to Rehabilitation Plan (Monitoring schedule)

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
26.	Batter failure impacting buffer zone or beyond WA boundary	O, R	Rare	Moderate	MEDIUM
27.	Localised (single bench) failure / Localised failure of upper batter in diggable material	O, R	Rare	Minor	LOW
28.	Excessive erosion compromising stability and impacting buffer zone or beyond WA boundary	O, R	Unlikely	Minor	LOW

Monitoring

#	Aspect to be monitored	Details of monitoring

1.	Slope stability	Regular Inspections will be conducted of extraction faces (both operating and rehabilitated), extraction pit perimeter and site surface water management structures in accordance with Ground Control Management Plan. Standard operating procedures require all operators to report changes in ground conditions. Inspections, reports and any remedial actions will be documented in site record book. Geological / geotechnical mapping, rockfall recording, materials testing, survey pin / prism and/or crack monitoring, as necessary, in accordance with the Ground Control Management Plan Results of site inspection and any remediation works recorded in the site record book.
2.	Surface water management	Inspections minimum monthly and after rain events will be conducted and include all surface water management structures. Inspections and any required remedial actions documented in site record book.
3.	Groundwater inflow	The extraction area will be continually monitored for the presence of groundwater inflows during extraction activities

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Slope stability	Internal reporting on performance of slopes and stability monitoring, at least annually, in line with Ground Control Management Plan. The results of any investigations of localised face failures, excessive surface cracking or other signs of instability will be documented under the site's Ground Control Management Plan. As appropriate, results also reported to ERR and any potentially impacted stakeholders.	Management intervention and, where necessary, for redesign of terminal batters, in accordance with Ground Control Management Plan. Data will be utilised in reviews under the Ground Control Management Plan.
2.	Groundwater	The presence of any groundwater within the extraction area will be reported to both the relevant Water Authority and ERR	Where necessary, triggering cessation of work in that area and the application for appropriate licensing arrangements. Data will be utilised in reviews under the Ground Control Management Plan.
3.	Surface water management	Internal reporting on performance of surface water management structures, for site management, after significant rainfall event or three monthly	To identify any necessary remedial actions required for surface water management features, and for reviewing performance of the site's water management
4.	Reportable Events under MRSDA (unexpected slope failure, progressive slope collapse, failure of slope stability control measures)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Geotechnical Guideline for Terminal and Rehabilitated Slopes – Extractive Industry Projects (Earth Resources Regulator)	https://earthresources.vic.gov.au/legislation-and-regulations/guidelines-and-codes-of-practice
2.	Guidelines for the Assessment of Geotechnical Risks in Open Pit Mines and Quarries (Earth Resources Regulator)	https://earthresources.vic.gov.au/legislation-and-regulations/guidelines-and-codes-of-practice/guidelines-assessment-of-geotechnical-risks-in-open-pit-mines
3.	CMPA Working Safely with Geotechnical Risk in Quarries	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Ground Control Management Plan	Site Office

4.	Site layout Plan	Site Office
5.	Work Plan / Work Authority Conditions	Site Office
6.	Planning Permit Conditions	Site Office

2.8. Blasting

Scope

This risk treatment plan is to assess and manage the potential impacts from blasting activities conducted on the site, where sensitive receptors may be affected during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Crown Allotment 54 Section 23)	Eastern boundary	Potential to be impacted by excessive blasting nuisances	Proximity to site
2.	Lot 1 Gray Street	Southern boundary	Potential to be impacted by excessive blasting nuisances	Proximity to site
3.	Pitcher Street	Southern boundary	Potential to be impacted by excessive blasting nuisances and flyrock	Proximity to site
4.	15 Templeton Street	Southern boundary	Potential to be impacted by excessive blasting nuisances and flyrock	Proximity to site
5.	53 Templeton Street	North / West Boundary	Potential to be impacted by excessive blasting nuisances and flyrock	Proximity to site
6.	63 Templeton Street	North / West Boundary	Potential to be impacted by excessive blasting nuisances and flyrock	Proximity to site
7.	68 Templeton Street	North / West Boundary	Potential to be impacted by excessive blasting nuisances	Proximity to site
8.	10 Residents along Casterton Road (street numbers 4, 6, 14, 22, 24, 26, 28, 30, 32, 34/36).	Southern	Potential to be impacted by excessive blasting nuisances	Proximity to site
9.	Coleraine Sports Park	550m Southwest of WA	Potential to be impacted by excessive blasting nuisances	Proximity to site
10.	Coleraine Showgrounds	350m Southwest of WA	Potential to be impacted by excessive blasting nuisances	Proximity to site
11.	Glenelg Highway	South of WA	Potential to be impacted by excessive blasting nuisances and flyrock	Proximity to site
12.	Casterton Road	South of WA	Potential to be impacted by excessive blasting nuisances	Proximity to site
13.	Coleraine Balmoral Road	North of WA	Potential to be impacted by excessive blasting nuisances	Proximity to site
14.	Coleraine Edenhope Road	North of WA	Potential to be impacted by excessive blasting nuisances	Proximity to site
15.	Powerline	Low voltage above ground powerline, adjacent to Templeton Road (south side)	Potential to be impacted by flyrock	Proximity to site
16.	Two bridges on the Glenelg Highway	South and Southwest of the WA	Potential to be impacted by excessive blasting nuisances	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
29.	Excessive ground vibration at closest receptors	C, O, R	Likely	Moderate	HIGH
30.	Excessive airblast at closest receptors	C, O, R	Likely	Moderate	HIGH

31.	Blasts resulting in fly rock impacting members of public	C, O, R	Possible	Critical	VERY HIGH
32.	Blasts resulting in fly rock impacting infrastructure	C, O, R	Possible	Moderate	HIGH

Quarrying Considerations

Lot 6 and Lot 12 Pitcher Street are not included as sensitive receptors as they are both uninhabitable, unoccupied and planned to be removed.

Blasting is a highly regulated activity with very prescriptive legislation and regulations. A specific Blast Management Plan is developed and documented before, during and after each individual blast, as per regulatory requirements. This includes the establishment of an appropriate Blast Exclusion Zone for each blast. All blasting associated activities are undertaken by appropriately trained and, where required, licensed individuals or contractors. Blast Management Plans will be continually updated, based on monitoring results, to meet the requirements set out in Section 131 of the Dangerous Goods (Explosives) Regulations 2022 and Appendix 2 of AS 2187.2-2006

Explosives – Storage and Use, Part 2: Use of Explosives, and any specific requirements of the Earth Resources Regulator, and are in general alignment with the CMPA Blast Management Plan Template in the Construction Materials Industry. The Blast Management Plan includes blast design, initiation sequence and the site-specific procedures for exclusion zones, notifying neighbours and any other protocols that are required, as well as any monitoring locations that are required.

The Earth Resources Regulator guidance defines sensitive sites, with respect to ground vibration and airblast, as including any land within 10m of a residence, hospital, school, or other premises in which people could reasonably expect to be free from undue annoyance and nuisance caused by blasting. The closest residence (to the north of Templeton Street) is approximately 150m and there are several other residences with 300m of potential blast locations. Blasting impacts at the closest residences will be managed with appropriate blast design.

Blasting has been conducted at WA 410 since the 1930's, and even today is infrequent, with 2 to 3 blasts per every 1 to 2 years (the site only sells approx. 30-40,000 tpa). The Rigbys have been conducting their own blasting since the mid 1960's and have a sound understanding of the grounds behaviour and how the rock structure behave with blasting and the extension area is not anticipated to present new challenges for Shot Firers and blast designers familiar with the regional geology.

Ground vibration and airblast are controlled by designing all shots to minimise impacts as far as reasonably practicable at the nearest sensitive sites and susceptible infrastructure and to meet the prescribed limits. All shots are videoed and where necessary the shots will also be monitored and the results recorded to inform subsequent designs with the goal of demonstrating compliance with the ground vibration and airblast overpressure limits and fly rock occurrences. The blast facing orientations will always be designed to minimise the airblast and fly rock risks by ensuring that blasts face away from the nearest sensitive sites, as far as practicable. The proposed direction of working shown in Figure 3 Site Layout is designed to achieve this outcome.

A Controlled Blasting Zone is to be established within 200m of WA boundary. Within this zone blast designs will be modified to further limit the potential for fly rock impacts to members of the public

Each blast within this zone will have its own specifically designed Blast Exclusion Zone that includes Blast Guards / Sentries on the public roads.

Blasting has been shown numerous times to have low or negligible impacts to native fauna and/or livestock in the vicinity of quarries. The infrequent effects of blast noise and airblast overpressure experienced by nearby stock / native fauna being likened to that of a single, brief thunderclap, to

which stock and fauna are accustomed. Therefore, it is not considered that any credible risk is posed to stock or native fauna from blasting activities on the site.

There will be no storage of explosives, primers, detonators, delays or other such explosive materials on site in excess of the minimums set by WorkSafe. Otherwise, all material required for the blast will be delivered on the day of the blast, with all excess material removed the same day.

Blasting times will be consistent with those approved for the adjacent WA410, i.e. to the period from 10:00 am to 4:00 pm Monday to Friday, and all neighbours are engaged prior to blasting.

Individual Blast Management Plans and appropriate Blast Exclusion Zones are developed and implemented for each individual blast, as required by relevant Regulations.

Objectives

The key objectives of this risk treatment plan are to:

- Minimise potential for excessive ground vibration and airblast at sensitive sites.
- Minimise potential of fly rock to cause harm.

Compliance standards

The compliance standards for this risk treatment plan are:

- As far as reasonably practicable strive for ground vibration (peak particle velocity) below 5 mm/s in at least 95 per cent of cases in a 12-month period and must not exceed 10 mm/s at any time, as measured at any sensitive site, or as otherwise limited by standards applied by ERR, the Council or other regulatory authority.
- As far as reasonably practicable strive for Airblast overpressure below 115 dB(L) in at least 95 per cent of cases in a 12-month period and must not exceed 120 dB(L) at any time, as measured at any sensitive site, or as otherwise limited by standards applied by ERR, the Council or other regulatory authority.
- Fly rock: no fly rock to leave the Blast Exclusion Zone or impacting people or infrastructure.
- Blast Management Plans in accordance with Section 131 of the Dangerous Goods (Explosives) Regulations 2022 and Appendix 2 of AS 2187.2-2006 Explosives – Storage and Use: Use of Explosives.
- Sensitive site: includes any land within 10m of a residence, hospital, school, or other premises in which people could reasonably expect to be free from undue annoyance and nuisance caused by blasting.

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- No fly rock leaving Blast Exclusion Zone
- No fly rock impacting people or infrastructure
- No blasting related issues / complaints experienced by nearby sensitive sites

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*

1.	Each shot designed and documented by a licensed Shot Firer and reviewed by Quarry Manager, with adaptation as necessary based on blast monitoring results.	Shot Firer and Quarry Manager review blast layout, drawing on experience and advice from drilling contractor and explosive supplier, document in the Blast Management Plan
2.	Blasting orientation for each shot designed to minimise the airblast and fly rock risks by ensuring that blasts face away from the nearest sensitive sites and minimise any Blast Exclusion Zones extending beyond WA boundaries.	Shot Firer and Quarry Manager review blast layout, drawing on experience and advice from drilling contractor and explosive supplier, document in the Blast Management Plan
3.	Establish "Controlled Blasting Zones" within 200m of adjacent public roads where blast designs are modified to limit fly rock, with blasts facing away from WA boundary, and temporary closure of the public roads and posting of Blast Guards / Sentries at time of shot.	"Controlled Blast Zones" documented on the Site Layout Plan and in the Blast Management Plan. Shot Firer and Quarry Manager review all blasts monitoring records / blast design for compliance to Blast Management Plan with closure of adjacent public roads (ie Blast Exclusion Zones)
4.	All blasts within the Controlled Blasting Zones monitored for fly rock, ground vibration and airblast and reviewed by the Quarry Manager.	Shot Firer to include records of blast design review in the Blast Records.
5.	All blasts within the Asset Protection Zones monitored for fly rock, ground vibration and airblast and reviewed by the Quarry Manager.	Shot Firer to include records of blasting design review in the Blast Records.
6.	Documented blast hole layout plan, including any special notes (ie hole depth, burden, sub-drill) distributed to Shot Firer, Quarry Manager, Driller	Shot Firer and Quarry Manager review blast layout for compliance to Blast Management Plan
7.	Notify nearby residences / occupiers at least 48 hours before the planned blast, indicating the day and planned time of blast	Quarry Manager to contact relevant receptors, and document on the relevant form/checklist, as per Blast Management Plan.
8.	Blast hole check / pre-shot inspection (documented evidence of hole depth, clearance, water, face, toe, front row burden)	Quarry Manager and Shot Firer review blast hole check, modify explosive charge mass / stemming as required to ensure compliance to Blast Management Plan
9.	Review explosives, primer, detonator, delay inventory	Shot Firer to ensure adequate explosives (bulk, primers, detonators, delays, etc) available
10.	On the morning of the blast, notify nearby residences indicating the planned time of blast	Quarry Manager to contact relevant receptors, and document on the relevant form/checklist, as per Blast Management Plan.
11.	Blasting times will be restricted to 10:00am to 4:00pm Monday to Friday. No blasting on weekends or public holidays.	Compliance to Work Plan and Blast Management Plan
12.	Initiate Blast Day protocols, ie establishment of a Blast Exclusion Zone, comprising signage on day of blast, to restrict access to the blast area and work area whilst loading shot, and other safety and pre-shot requirements	Shot Firer to review Blast Exclusion Zone area and signage to ensure safe loading of shot as per any SOPs, checklists and Blast Management Plan
13.	Prime and load all blast holes in accordance with design and any modification from pre-shot inspection	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
14.	Stem all holes and tie-in detonators, adding surface delays as required	Shot Firer to confirm delay sequence is as per design and any additional stemming as per pre-shot inspection report
15.	Clear the Blast Exclusion Zone of all equipment and non-essential personnel, adding any additional signage as required, posting Blast Guards / Sentries at critical access points, directing all non-essential personnel to designated safe areas, and ensuring all mobile equipment is in designated safe areas.	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
16.	Conduct all pre-blast checks, continuity, exploder, delays, etc, and connect exploder	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
17.	Check video equipment is set up and operational, and if additional monitoring is required	All shots videoed, with files stored on a remotely accessible server
18.	If required, confirm ground vibration and airblast monitoring equipment is set up and operational	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
19.	Initiate Blasting Protocols, ie final visual inspection of blast area, confirmation of safety of non-relevant personnel from Blast Guards / Sentries, blast siren sequence, blast initiation.	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist
20.	Initiate Post-Blast Protocols, i.e. observation of shot for NO_2, inspection of shot, the muck profile, the Blast Exclusion Zone, sound "all clear" or initiate mis-fire protocols, as appropriate	Compliance to SOPs and Blast Management Plan, completion of all relevant checklist

21.	No explosives or detonators to be kept on site	Compliance to Work Plan and Blast Management Plan

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
29.	Excessive ground vibration at closest receptors	C, O, R	Possible	Moderate	MEDIUM
30.	Excessive airblast at closest receptors	C, O, R	Possible	Moderate	MEDIUM
31.	Blasts resulting in fly rock impacting members of public	C, O, R	Rare	Critical	HIGH
32.	Blasts resulting in fly rock impacting infrastructure	C, O, R	Rare	Major	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Fly rock	Every blast videoed; files stored on remotely accessible server.
2.	Airblast	The actual Monitoring Location will be dependent upon the location of the blast and closest sensitive site, and documented on the monitoring record. At least 5 consecutive blast monitored for airblast overpressure, then if all compliant, at least 1 per 12 month period or as per ERR request. All blasts within Controlled Blasting Zones monitored for airblast. Copy of blast monitoring report emailed to Quarry Manager
3.	Ground Vibration	The actual Monitoring Location will be dependent upon the location of the blast and closest sensitive site, and documented on the monitoring record. At least 5 consecutive blasts monitored for ground vibration, then if all compliant, at least 1 per 12 month period or as per ERR request. All blasts within Controlled Blasting Zones monitored for ground vibration. Copy of blast monitoring report emailed to Quarry Manager

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Airblast, Ground Vibration and Fly rock	Monitoring results retained on site and made available to ERR on request	Shots monitored and subsequent design adjusted to ensure compliance
2.	Reportable Events under MRSDA (exceedance of ERR conditioned limits, damage to property/infrastructure, injury to public, fly rock ejected beyond area considered in approval, misfires, explosives theft)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Blast Management Plan Template in the Construction Materials Industry (CMPA)	CMPA website
2.	Appendix 2 of AS 2187.2-2006 Explosives – Storage and Use, Part 2: Use of Explosives	

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Blast Management Plans	Site Office
2.	Approved Work Plan & Risk Management Plan	Site Office
3.	Site Layout Plan	Work Plan
4.	Work Plan / Work Authority Conditions	Site office

5.	Planning Permit Conditions	Site office

2.9. Process Water and Storages

Scope

This risk treatment plan is to assess and manage the potential hazard associated with process water and storages on the site, where the environment or sensitive receptors may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Surface water and environment	Waterway (Konong Wootong Creek 200m to the west) and three (3) DELWP mapped wetlands to the south of Work Authority	Potential to be impacted by uncontrolled release / overtopping of water storages	Downslope of site
2.	Neighbouring properties and public roadways	Adjacent land downstream of Work Authority	Potential to be impacted by uncontrolled release / overtopping of water storages	Downslope of site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
33.	Discharge from overtopping of water storage dam to surface waterways and the environment.	O, R	Possible	Minor	MEDIUM
34.	Failure of process water infrastructure resulting in discharge to surface waterways and the environment.	O, R	Possible	Minor	MEDIUM
35.	Failure of a water storage resulting in discharge to surface waterways and the environment.	O, R	Possible	Moderate	MEDIUM

Quarrying Considerations

There will be a sediment dam located within the south easter portion of the extraction area during all stages of the development, then as additional area is opened up to the south, water will be stored in quarry sumps within the excavation and below natural ground level. Excess water from water storages, sediment dams or sumps will be pumped out and used to irrigate rehabilitated areas or the surrounding pasture. There is a risk of water being released from the small sediment dam and escaping to the environment during quarry operations. Otherwise, the design will prevent the release of water from the site.

The topographic constraints on the northeastern side of the extraction area will necessitate the direction of some surface water flows into the pit. For the remainder of the site, the surface water management strategy is to divert surface water flowing across undisturbed ground and distributing it around the works, where possible, by the strategic location of swale drains, bunding, sediment traps and sumps to ensure this water does not leave the site and is instead directed to the sediment dam within the extraction area.

Potential impacts of process water impacting the Konong Wootong Creek and the three DELWP mapped wetlands is considered low and negligible with the standard controls in place, based on the distance from the quarry to these water features.

Objectives

The key objectives of this risk treatment plan are to:

- Manage and minimise the risk of discharge of process water or water from storages that may impact the environment and waterways
- Protect the environmental values of the local water environment as defined in the Environment Reference Standard

Compliance standards

The compliance standards for this risk treatment plan are:

- Water Act (1989)
- Catchment and Land Protection Act (1994)
- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Environment Reference Standard 2022 (ERS), or as amended
- EPA Publication 1823.1, June 2021: Mining and Quarrying – Guide to preventing harm to people and the environment

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Ongoing integrity of process water infrastructure and water storages
- No unauthorised discharge of process water into the environment and waterways
- Process water and storages are managed to minimise risks to downstream environments, as far as reasonably practicable, in line with the General Environmental Duty.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Regular inspection of dam wall integrity	Checklists completed and remedial action documented
2.	Regular inspection of process water infrastructure	Checklists completed and remedial action documented
3.	Strategic location of quarry sumps	Compliance to Work Plan and Site Layout Plan
4.	Maintenance of appropriate freeboard on all water storages / sediment dams to ensure storage integrity	Integrity of water storages / sediment dams maintained through management of freeboard levels
5.	Excess water in water storages / sediment dams / sumps will be irrigated to rehabilitated areas or surrounding pasture, and as a contingency, the water will be directed to the sediment dam.	No water stored at more than maximum freeboard level and no standing water outside of quarry sumps

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
33.	Discharge from overtopping of water storage dam to surface waterways and the environment.	O, R	Unlikely	Minor	LOW
34.	Failure of process water infrastructure resulting in discharge to surface waterways and the environment.	O, R	Unlikely	Minor	LOW
35.	Failure of a water storage resulting in discharge to surface waterways and the environment.	O, R	Unlikely	Moderate	MEDIUM

Monitoring

No water quality monitoring is proposed

#	Aspect to be monitored	Details of monitoring
1.	Integrity of process water infrastructure	Monthly inspection

2.	Integrity of dam walls	Monthly inspection
3.	Storage capacity / freeboard in all water storages and sediment dams	Rainfall events and storage freeboard

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Process water infrastructure integrity	Internally after monthly Inspections	To identify any necessary remedial actions required to maintain infrastructure integrity
2.	Dam wall integrity	Internally after monthly Inspections	To identify any necessary remedial actions required to maintain dam wall integrity
3.	Storage capacity / freeboard in all water storages and sediment dams	Internal reporting for site management after significant rainfall event or three monthly	To identify any necessary remedial actions, and/or modification Storages / Sediment Dams, required to maintain capacity / freeboard
4.	Reportable Events under MRSDA (unexpected/abnormal inrush of water or other fluid, escape/leakage of potentially harmful slurry/substance)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	CMPA Water Management Guidelines	CMPA website
2.	CMPA Working Safely with Geotechnical Risk in Quarries	CMPA website
3.	Your Dam: Your Responsibility – A Guide to Managing the Safety of Small Dams (DELWP, 2018)	https://www.water.vic.gov.au/managing-dams-and-water-emergencies/dams/guidance-notes

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site layout plan	Site Office
3.	Work Plan / Work Authority Conditions	Site office
4.	Planning Permit Conditions	Site office

2.10. Imported Materials

Scope

This risk treatment plan is to assess and manage the potential hazard associated with the importation of materials, e.g. 'clean fill' (uncontaminated soil, including gravel and rock), mulch or recyclable materials (solid inert wastes), for processing, product blending or use in site rehabilitation, where the environment or sensitive receptors may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Surface water	Waterway (Konong Wootong Creek 200m to the west) and three (3) DELWP mapped wetlands to the south of Work Authority	Potential to be impacted by contaminated material imported to the site	Proximity to site
2.	Groundwater	Groundwater well below quarry floor Water within aquifers below ground	Potential to be impacted by contaminated material imported to the site	Visualising Victoria's Groundwater website
3.	Ecological values of land	Surrounding land (onsite and offsite)	Potential to be impacted by contaminated material imported to the site	Proximity to site
4.	Adjoining land uses	Neighbouring properties	Potential to be impacted by contaminated material imported to the site	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
36.	Impacts on surface water and groundwater from imported material containing contaminants	C, O, R	Possible	Minor	MEDIUM
37.	Polluting waste being imported to the site	C, O, R	Possible	Minor	MEDIUM
38.	Introducing weeds or soil-borne diseases	C, O, R	Possible	Minor	MEDIUM

Quarrying Considerations

It is emphasised that the site does not need to import material to fulfil its rehabilitation commitments, and that importing material (under an Imported Material Management Plan) may be undertaken to supplement income.

The site has the capacity to accept large quantities of material for blending and to supplement rehabilitation. This risk treatment plan addresses the risks associated with the importation of 'clean fill' to assist in rehabilitation and for the ongoing activity of blending materials and conditioning soil. 'Clean fill' consists of waste soil (being clay, silt and/or sand), gravel or rock (e.g. 'paddock rock') that is made up of naturally occurring materials. The soil material being classified as 'Fill Material' by the EPA, i.e. it is free from other industrial wastes.

Additionally, other processed or extracted rock will be brought to the site for blending with material extracted onsite to achieve product specifications, however such imported is not classified as 'waste' under EPA legislation.

Any material imported as part of the Work Authority's operations will be handled in accordance with the Imported Materials Management Plan. There is no intention to dispose of any imported waste materials within the backfill deposited in the pit.

Potential impacts of imported materials impacting the Konong Wootong Creek and the three DELWP mapped wetlands is considered low and negligible with the standard controls in place, based on the distance from the quarry to these water features.

Objectives

The key objectives of this risk treatment plan are to:

- Manage imported materials and prevent contamination of the site due to importing hazardous materials or soils carrying seeds of declared weeds or infested with soil-borne plant diseases
- Prevent unlicensed importation and storage of domestic or industrial wastes and hazardous materials

Compliance standards

The compliance standards for this risk treatment plan are:

- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Publication 1823.1, June 2021: Mining and Quarrying – Guide to preventing harm to people and the environment
- EPA Publication 1968.1, August 2021: Guide to classifying industrial waste
- EPA Publication 1828.2, July 2021: Waste disposal categories – characteristics and thresholds
- EPA Publication 1624: Industrial Waste Fact Sheet
- Catchment and Land Protection Act (1994)
- Planning and Environment Act (1987)

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- The management of imported materials does not adversely impact the environmental values of soil, surface water or groundwater, as defined in the Environment Reference Standard, within the Work Authority or its vicinity
- Importation and management of imported materials fully complies with applicable legislative and regulatory requirements
- Imported materials are managed to minimise risks to sensitive receptors, as far as reasonably practicable, in line with the General Environmental Duty.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Implementation of "Imported Materials Management Plan" prior to bringing any soil / fill material, mulch, solid inert waste /rock for blending to the site.	Imported Materials Management Plan in place before the importation of any material, consistent with relevant guidelines and EPA legislation.

2.	Source / supplier of imported material vetted for reputability.	Imported Materials Management Plan in place and all records / checklists up to date.
3.	Imported soils not to be sourced from areas of known declared weed infestation or areas known or suspected to contain Phytophthora cinnamomi.	Vetting procedures in place and followed to ensure soil is not sourced from areas with known weed infestations or known or suspected Phytophthora cinnamomi presence.
4.	All deliveries of imported materials accompanied by a 'Delivery Driver Checklist', or similar docket.	Imported Materials Management Plan in place and all records / checklists up to date.
5.	Confirm the EPA waste classification of the imported materials and confirm that the site is authorised to receive that material, and the importation meets all other EPA / ERR requirements	Imported Materials Management Plan in place and all records / checklists up to date.
6.	Visual inspection of all inbound deliveries prior to accepting on site, and again at point of dumping - rejected loads immediately removed from site.	Imported Materials Management Plan in place and all records / checklists up to date.
7.	Incidental waste that may later be discovered in imported materials are separated, sorted and removed from site.	Imported materials managed in accordance with the Imported Materials Management Plan.
8.	No imported materials in short-term stockpiles outside of approved disturbance area	No short-term stockpiles of imported materials outside of approved disturbance area.
9.	Monitor imported material volumes	Imported material volumes monitored to ensure limits are not exceeded, and in accordance with any EPA permission limits
10.	Maintain compliance to any EPA conditions regarding management of any imported waste materials	Compliance to Work Plan Conditions and any required EPA permission.

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
36.	Impacts on surface water and groundwater from imported material containing contaminants	C, O, R	Unlikely	Minor	LOW
37.	Polluting waste being imported to the site	C, O, R	Unlikely	Minor	LOW
38.	Introducing weeds or soil-borne diseases	C, O, R	Unlikely	Minor	LOW

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Source and characteristics of any imported materials	The Imported Materials Management Plan requires documentation and records of material type, EPA waste classification, tonnages, source / suppliers, inspections and any subsequent remedial action or rejection.
2.	Volumes of imported material received and stored on site	Volumes of imported material stored on site at any one time, as well as monthly volumes received, to ensure compliance with limits set in Imported Materials Management Plan and any EPA permission limits.

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Operation and adequacy of Imported Materials Management Plan	Internally after monthly inspections	To identify any necessary remedial actions, and/or modification of Imported Materials Management Plan.
2.	Importation of non-conforming materials	Report to Quarry Manager on detection / event	Removal / disposal of non-conforming materials.
3.	Reportable Events under MRSDA (non-compliance with approval, in managing impacts of imported materials)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Imported Materials Management Guideline for Mine and Quarry Operations (Earth Resources Regulator)	https://earthresources.vic.gov.au/legislation-and-regulations/guidelines-and-codes-of-practice

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site office
2.	Imported Materials Management Plan	Site office, when developed
3.	Work Plan / Work Authority Conditions	Site office
4.	Planning Permit conditions	Site office

2.11. Unauthorised Site Access

Scope

This risk treatment plan is to assess and manage the potential hazard associated with unauthorised access to the site, where members of the public may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Members of the public	Site accessed from Public Roads	Potential for unauthorised visitors to harm themselves	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
39.	Unauthorised access to quarry faces and operating equipment	C, O, R	Possible	Major	HIGH

Quarrying Considerations

The Work Authority is in a rural residential / farming area, with approximately 13 residences within 500m, with the closest residence, some 150m to the north of the Work Authority Boundary. The Work Authority is bounded with a combination of well-maintained fencing, standard multi-stranded stock proof fencing and vegetated screening bund to all boundaries. There is appropriate signage at the front gate and critical locations on the fences around the site warning of steep high faces. The site is only accessible from Templeton Street (the main access) and a locked farm gate to Pitcher Street.

Objectives

The key objectives of this risk treatment plan are to:

- Provide for the safety of members of the public when accessing a work authority area
- Prevent unauthorised access to the work authority area by members of the public

Compliance standards

The compliance standards for this risk treatment plan are:

- Safety on Public Land Act (2004)
- Work Authority Schedule of Conditions

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Boundary of Work Authority area is appropriately marked and secured to minimise chances of unauthorised entry
- Safety signage is clearly visible around the boundary and at all access points

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Work Authority boundary delineated and site enclosed with appropriate fencing: • Standard multi-stranded stock proof fencing on remainder of boundary	Fencing and boundary posts in place
2.	Gates and fences of suitable design and standard. Access gates to be locked when site unattended	Fencing and gates in place and secured
3.	Signage on fencing warning of operations and high faces	Signage installed
4.	Equipment locked and secured when not in use.	Equipment locked when not in use
5.	Design and construct onsite roads to safely accommodate the size and type of vehicles accessing and travelling within the site. Separate any general traffic from any internal haul routes.	Traffic management implemented
6.	Visitor supervision	Visitor parking near site entrance and visitors record book maintained

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
39.	Unauthorised access to quarry faces and operating equipment	C, O, R	Rare	Major	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Boundary signage and site fence integrity	Annual inspection of all site boundary fencing, signage and gates.
2.	Site visitors	Visitors record book entries completed
3.	Unauthorised entries	Records kept of unauthorised entries

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Boundary and site fence integrity	Annual inspection, outcomes reported internally	To identify any necessary remedial actions, which will be documented in site record book.
2.	Visitor entries	Internal reporting.	Ensure all visitors have exited site prior to end of operating hours.
3.	Unauthorised entries (site security breaches)	Internally reported to site management on event and regulatory authority as required	To improve site security to limit unauthorised site access.
4.	Reportable Events under MRSDA (injury to member of public due to unauthorised access)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	CMPA Traffic Management Guidelines	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Work Plan / Work Authority Conditions	Site office
3.	Planning Permit Conditions	Site office

2.12. Fuel, Lubricants and other Hazardous Materials

Scope

This risk treatment plan is to assess and manage the potential hazards associated with the use and handling of fuel, lubricants and hazardous materials on and across the site, where the environment or sensitive receptors may be affected during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Surface waters	Waterway (Konong Wootong Creek 200m to the west) and three (3) DELWP mapped wetlands to the south of Work Authority	Hydrocarbon and/or chemical release to surface waters	Proximity to site
2.	Groundwater	Groundwater approx. 15m below quarry floor Water within aquifers below ground	Hydrocarbon and/or chemical seepage into groundwater	Visualising Victoria's Groundwater website
3.	Ecological values of adjacent land	Surrounding farmland (onsite and offsite)	Hydrocarbon and/or chemical release to environment	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
40.	Spills / discharges whilst refuelling	C, O, R	Possible	Minor	MEDIUM
41.	Fuel / oil leakage from equipment (mechanical failure, accident)	C, O, R	Possible	Minor	MEDIUM
42.	Spills / damage from hazardous materials storages	C, O, R	Possible	Moderate	MEDIUM

Quarrying Considerations

The operation of the quarry will require the use and storage of hydrocarbons (fuel / oil / grease), dust suppressants, and other chemicals, as well as industrial gases associated with steel cutting (oxy-acetylene and other gases). Other than hydrocarbons and industrial gases, there will only be limited use of hazardous chemicals at the site if or when conditions require (such as herbicides or pesticides). Dust suppressants, and potential flocculants for erosion management, are industry proven and accepted environmentally safe products. There are no hazardous materials / chemicals contained within the resource to be excavated. No acid water is generated by the development. There are no known acid sulphate materials in the resource.

Potential impacts of hazardous matetrials impacting the Konong Wootong Creek and the three DELWP mapped wetlands is considered low and negligible with the standard controls in place, based on the distance from the quarry to these water features.

MSDS sheets for flocculants, dust suppressants, and any other chemicals used or stored on site will be maintained in the site office. All hydrocarbons will be stored or transported in commercially produced, fully compliant containments or tanks.

All hydrocarbon, industrial gas and chemical storage will be compliant to Australian Standards and the Earth Resources Regulator's requirements, and in accordance with EPA guidance.

Whilst explosives are used at the site, there are no bulk explosives stored on the site and the majority of blasting components will be brought to site on blast days.

Objectives

The key objectives of this risk treatment plan are to:

- Manage and minimise the risk of fuels, lubricants and other hazardous materials being released into the environment through leaks and spills

Compliance standards

The compliance standards for this risk treatment plan are:

- AS1940 – Storage and Handling of Flammable and Combustible Liquids
- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Publication 1823.1, June 2021: Mining and Quarrying – Guide to preventing harm to people and the environment
- EPA Publication 1698, June 2018: Liquid Storage and Handling Guidelines

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Fuels, lubricants and other hazardous materials are stored appropriately and are not leaking or discharging
- Fuels, lubricants and other hazardous materials are managed to minimise risks to sensitive receptors, as far as reasonably practicable, in line with the General Environmental Duty.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Hydrocarbon storage in accordance with AS 1940 (The Storage and Handling of Flammable and Combustible Liquids) and the Dangerous Goods (Storage and Handling) Regulations 2022	Fuel storage always in compliance with standard
2.	A contaminants spill kit available at all times when any refuelling, servicing and/or maintenance tasks are undertaken on site.	Spill kits available
3.	No major servicing / repairs conducted outside of workshop	Major services conducted at workshop, with installed triple interceptor trap
4.	Any areas where refuelling / servicing activities are being undertaken are drained to ensure no water leaves the site without first going through interceptor trap	Surface water management controls, directing to an interceptor trap, in place and effective
5.	MSDS sheets readily available for all dust suppressants, industrial gases, flocculants, herbicides, pesticides and any other chemicals used or stored on site	MSDS sheets for all chemicals used or stored on site maintained in the site office
6.	All chemicals stored in accordance with the EPA Liquid Storage and Handling Guidelines and relevant Australian Standards	Chemical storage in accordance with the guidelines, MSDS sheets and relevant standards

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
40.	Spills / discharges whilst refuelling	C, O, R	Unlikely	Minor	LOW
41.	Fuel / oil leakage from equipment (mechanical failure, accident)	C, O, R	Unlikely	Minor	LOW
42.	Spills / damage from hazardous materials storages	C, O, R	Rare	Moderate	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Integrity of fuel and chemical storages	Monthly site inspections
2.	Pollution controls and surface drainage effective and maintained.	Monthly site inspections

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Performance of fuel and chemical storages and surface drainage controls	Internally reported following monthly inspections	To identify any necessary remedial actions, which will be documented in site record book.
2.	Reportable Events under MRSDA (escape/leakage of potentially harmful substance)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	AS1940 – Storage and Handling of Flammable and Combustible Liquids	
2.	MSDS sheets for chemicals used or stored on site	

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site office
4.	Planning Permit conditions	Site office

2.13. Weeds, Pests and Diseases

Scope

This risk treatment plan is to assess and manage the potential hazard of weeds, pest animals and/or soil-borne disease on and across the site, where the environment or sensitive receptors may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

All risks associated with weeds / pathogens contained within materials that are imported onto the site are addressed in the risk treatment plan for Imported Materials.

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Ecological values of land	Surrounding land (onsite and offsite)	Potential to harbour weeds, pest animals and diseases that impact the site and adjoining land	Proximity to site
2.	Adjoining land uses	Neighbouring properties	Weeds / pests species introduced or allowed to spread	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
43.	Allowing weeds to spread from the site to neighbouring properties	C, O, R	Possible	Moderate	MEDIUM
44.	Harbouring pest animals	C, O, R	Possible	Minor	MEDIUM
45.	Unsanitised plant / equipment introducing weeds / diseases	C, O, R	Possible	Moderate	MEDIUM

Quarrying Considerations

Any weeds, pest animals and/or soil-borne disease present on the site, or introduced to the site by environmental factors or unsanitised plant / equipment, will be monitored and managed on an ongoing basis throughout the quarry life, to satisfy the requirements of both the Earth Resources Regulator and the Environment arm of the Department of Energy, Environment and Climate Action.

The primary objective is to ensure that weed, pest animal and/or soil-borne disease problems do not develop and spread into adjoining land. Control measures will be carried out in accordance with relevant guidelines and standards, using approved treatment methods. Any herbicide or pesticide use will be in accordance with the manufacturer's recommendations, including the most appropriate time to ensure effective control. The revegetation of progressively rehabilitated areas will also be regularly monitored for weeds and pest animals, ensuring that the rehabilitation objectives are achieved in accordance with the Rehabilitation Plan.

The site, which is located on farming land, is actively managed to identify and mitigate the presence of weeds and pest animals.

Objectives

The key objectives of this risk treatment plan are to:

- Protect ecological values associated with the Work Authority area

- Prevent site activities contributing to the spread or proliferation of weeds, pest animals or soil-borne disease, on and off the Work Authority area

Compliance standards

The compliance standards for this risk treatment plan are:

- Catchment and Land Protection Act (1994)
- Planning and Environment Act (1987)

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Site operator complies with legislative requirements relating to the control and management of declared noxious weeds and pest animals
- The extractives operation does not contribute to the spread or proliferation of weeds, pest animals or soil-borne disease

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Engage appropriately licensed personnel to conduct any required herbicide or pesticide application to control weeds or pest animals.	Only licensed personnel are permitted to apply herbicides or pesticides.
2.	Eradicate or manage any declared noxious weeds or established pest animals, including identified habitats, present on the Work Authority area.	Infestations of declared noxious weeds and established pest animals are eradicated or controlled. Any herbicide or pesticide use is in accordance with manufacturer's recommendations, including the most appropriate time to ensure effective control.
3.	Clean equipment moved from areas of known weed infestation to remove weed seeds.	Cleaning procedures are in place and followed in areas with known weed infestations.
4.	Limit vegetation clearing and surface disturbance activities to the minimum required operationally.	In accordance with Work Plan and Site Layout Plan

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
43.	Allowing weeds to spread from the site to neighbouring properties	C, O, R	Unlikely	Moderate	MEDIUM
44.	Harbouring pest animals	C, O, R	Unlikely	Minor	LOW
45.	Unsanitised plant / equipment introducing weeds / diseases	C, O, R	Unlikely	Moderate	MEDIUM

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Site flora and fauna for weeds and pest animals.	6 Monthly site inspections (Spring & Autumn)

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Site flora and fauna for any weeds and pest animals	6 Monthly inspections reported internally.	To review and revise adequacy of control measures and identify any necessary remedial actions.

2.	Reportable Events under MRSDA (non-compliance with approval, in managing weeds, pest animals and/or soil-borne disease)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	CMPA Noxious Weeds and Pest Animals Control Plan, Guideline and Template	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site office
4.	Planning permit conditions	Site office

2.14. Rubbish / General Waste

Scope

This risk treatment plan is to assess and manage the potential hazard associated with domestic rubbish and/or general waste generated on and across the site, where the environment or sensitive receptors may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Adjoining land uses	Neighbouring properties	Potential for amenity loss or to pollute / impact the adjacent land uses	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
46.	Uncontrolled handling of domestic rubbish and general waste resulting in pollution of waterways and/or adjacent land	C, O, R	Possible	Minor	MEDIUM
47.	Loss of amenity through the poor handling of redundant plant and equipment	C, O, R	Possible	Minor	MEDIUM

Quarrying Considerations

The site will generate a small amount of domestic rubbish and general waste. Domestic rubbish includes office waste, food scraps, packaging and paper waste from contractors or employees. Note the site currently operates a portable toilet system, there are no septic tanks on site. General waste may include redundant / discarded equipment, discarded conveyor belting, discarded screen decks, discarded tyres, discarded grease cartridges, discarded oil drums and oily rags. These materials will all be collected and periodically removed by contractors authorised to receive the wastes.

Objectives

The key objectives of this risk treatment plan are to:

- Manage and prevent domestic rubbish and general waste generated by site activities from adversely affecting soil, water or other aspects of the environment
- Protect the environmental values of water and soil, as defined in the Environment Reference Standard

Compliance standards

The compliance standards for this risk treatment plan are:

- Environment Protection Act 2017, or as amended (including General Environmental Duty)
- EPA Environment Reference Standard 2022 (ERS), or as amended
- EPA Publication 1741.1, October 2020: Industry guidance: supporting you to comply with the general environmental duty.

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Soil, water and air within and near the Work Authority area are not detrimentally affected by the storage and/or management of domestic rubbish or general waste generated by site activities
- Domestic rubbish and general waste generated by site activities are managed to minimise risks to sensitive receptors, as far as reasonably practicable, in line with the General Environmental Duty.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Provide covered bins for temporary on-site storage of domestic rubbish and/or general waste at selected work sites.	Sealed bins provided at selected work sites.
2.	Redundant / discarded oil, grease rags, etc stored in sealed drums until removed	"Full" waste oil / grease, etc drums will not be stockpiled on site.
3.	Redundant plant, tyres and equipment stored onsite to be located where it cannot be seen from outside the site.	Redundant plant and equipment stored on site not visible to the public.
4.	No on-site disposal (or burning) of domestic rubbish or general waste generated from site activities. Use of off-site services / facilities authorised to receive the wastes generated, for recycling or disposal.	No domestic rubbish or general waste disposed on-site.
5.	No general waste or redundant equipment retained onsite for extended periods. Limit the volume and permitted timeframe for general wastes to be stored onsite.	General waste materials and redundant equipment not held on-site for extended periods.
6.	Protect any temporary waste storage areas from rainfall and stormwater or flood ingress and locate away from areas of protected habitat and/or waterways	Covered temporary waste storage areas and/or bins, that are away from protected areas and waterways.

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
46.	Uncontrolled handling of domestic rubbish and general waste resulting in pollution of environment	C, O, R	Rare	Minor	LOW
47.	Potential contamination of the amenity / environment through the poor handling of redundant plant and equipment	C, O, R	Rare	Minor	LOW

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Wastes stored on site	Quantities, types and location of wastes stored on site as part of monthly site inspection and review
2.	Disposal of waste to sites authorised to receive that waste	Register of contractors with appropriate authorisation

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Wastes stored on site	Monthly internal reporting	To improve waste management and ensure appropriate collection cycles
2.	Reportable Events under MRSDA (non-compliance with approval, in managing domestic rubbish and general waste)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Nil	

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site office
4.	Planning Permit Conditions	Site office

2.15. Fire

Scope

This risk treatment plan is to assess and manage the potential hazard of fires igniting on-site and potentially escaping the site, and also any onsite activity that may exacerbate a wildfire that burns onto the site, where the environment or sensitive receptors may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Ecological values of adjoining land	Surrounding farm land (onsite and offsite)	Potential to initiate / exacerbate fire that harms local environment	Proximity to site
2.	Members of the public	Nearby residences	Potential to initiate / exacerbate fire that harms local environment	Proximity to site
3.	Private property	Nearby properties, amenities	Potential to initiate / exacerbate fire that harms local environment	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
48.	Plant / machinery / hot works igniting a fire and potentially escaping the site	C, O, R	Possible	Critical	VERY HIGH
49.	Wildfire entering the site and danger being exacerbated by onsite activities	C, O, R	Unlikely	Critical	HIGH

Quarrying Considerations

The site is surrounded by farmed / cropped land. Wildfire can be an issue in the height of summer and an active Fire Response and Readiness Plan is maintained by the site. There is a risk that onsite works could ignite a fire that then initiates a wildfire through adjacent properties. Site management will be frequently communicating with the CFA or checking online fire danger alerts on days of Extreme or Catastrophic Fire Danger Rating, and when a Total Fire Ban has been declared. The quarry extraction areas and stockpile areas are well protected from fire and provide good emergency assembly areas for employees, contractors as well as the general public in an extreme fire event. The quarry sump, settlement dams and other water storages are available for firefighting purposes as required.

There are no activities occurring on this Work Authority that could exacerbate a wildfire that entered onto the site.

Objectives

The key objectives of this risk treatment plan are to:

- Control potential sources of fire ignition and activities that could lead to fire ignition and escape on days of elevated fire danger
- Manage onsite activities so that the danger posed by any wildfires burning onto the Work Authority area is not increased

Compliance standards

The compliance standards for this risk treatment plan are:

- Country Fire Authority Act and Regulations
- Planning and Environment Act (1987)
- EPA Publication 1667.3, June 2021: Management and storage of combustible recyclable and waste materials – guideline

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- Any fire initiating within the Work Authority area is contained within the site
- The risk of onsite activities exacerbating the danger of wildfires burning onto the Work Authority area is minimised

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Fire Response and Readiness Plan (FRRP) in place and its detailed controls implemented.	FRRP in place, as required by ERR, documented and implemented
2.	All new site personnel and contractors attend a site induction prior to commencement of work, to ensure awareness and understanding of Fire Response and Readiness Plan	All those working on site aware of and understand their obligations under the Fire Response and Readiness Plan
3.	All vehicles well maintained and fitted with spark arrestors and fire extinguishers	Vehicles suitably equipped with serviceable fire extinguishers / knapsack spray packs as appropriate.
4.	No 'hot works on days of Total Fire Ban without written approval of CFA	No 'hot works' ignition sources (welding, steel cutting / grinding) on Total Fire Ban Days
5.	Refuelling and minor servicing to be conducted in cleared areas within the extraction area.	All refuelling and vehicle servicing in accordance with procedures
6.	Monitor Vic Emergency app / website, or similar, on days of extreme or catastrophic fire danger rating, or total fire ban days.	Record of engagement with agencies
7.	Liaising with CFA in times of extreme or catastrophic fire danger rating.	Record of engagement with agencies
8.	Flammable and combustible substances stored securely in accordance with relevant standards	Flammable and combustible substances stored in accordance with Fire Response and Readiness Plan.
9.	Flammable and combustible wastes are removed from the site as soon as practicable	No flammable waste is stockpiled onsite
10.	Establish and maintain fire breaks around site boundaries in high-risk fire areas	Fire breaks installed and maintained. Audit before high-risk season

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
48.	Plant / machinery / hot works igniting a fire and potentially escaping the site	C, O, R	Rare	Critical	HIGH
49.	Wildfire entering the site and danger being exacerbated by onsite activities	C, O, R	Rare	Critical	HIGH

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Site fire preparedness	Annual inspections prior to the wildfire danger season will include an assessment of the site's preparedness for fire and be recorded in the Manager's Report Book.
2.	Total Fire Ban days	Quarry Manager and/or Site Supervisor monitors Radio and CFA warnings (via VicEmergency app / website, or similar)
3.	Fire / weather warnings	Liaising with CFA in times of Extreme or Catastrophic Fire Danger Rating.

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Site fire preparedness	Internally following annual inspections	To identify any necessary remedial actions, and/or modification of Fire Response and Readiness Plan.
2.	Ignition / fire	The CFA will be informed of any uncontrolled fire on site or adjoining land	Emergency services response
3.	Reportable Events under MRSDA (outbreak of fire or explosion arising from work)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	CMPA Bushfire Response and Readiness Plan Template	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Fire Response and Readiness Plan	Site office
2.	Approved Work Plan & Risk Management Plan	Site Office
3.	Site Layout Plan	Work Plan
4.	Work Plan / Work Authority Conditions	Site office
5.	Planning permit conditions	Site office

2.16. Loss of Soil Biological Activity

Scope

This risk treatment plan is to assess and manage the potential hazard of loss of biological activity in soil stored in stockpiles, thus reducing its value for rehabilitation purposes, where the land involved may be impacted during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Biodiversity of soil	On-site soils	Potential for soil biological viability to be lost	DEECA Advice

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
50.	Unsuccessful rehabilitation due to loss of soil biological activity	C, O, R	Likely	Minor	MEDIUM

Quarrying Considerations

Soil stockpiled inappropriately (i.e. buried too deeply, too long in adverse locations, etc) can lose viability requiring additional treatment before used in rehabilitation. The top 200mm (approximately) will be stripped and stored separately as topsoil in stockpiles with a maximum height of 2m. Soil stockpiles will be pushed up with a dozer ahead of overburden stripping, with the outer face profiled to a maximum 1V:3H batter to aid in vegetation establishment.

Viable / good quality soil will be stored separately to degraded / poor quality soil. Given the timeframe from initial soil stockpiling to use in rehabilitation it may be necessary to undertake some soil rejuvenation activities when inherent soil viability is considered inadequate. Soil may be imported under the control of the Imported Materials Management Plan to facilitate soil rejuvenation or to supplement soil profiles.

Objectives

The key objectives of this risk treatment plan are to:

- Protect existing soil structure, nutrient levels and biological activity in onsite soils
- Facilitate the rehabilitation of the quarry site by maintaining biological activity in stockpiled soils.

Compliance standards

The compliance standards for this risk treatment plan are:

- Catchment and Land Protection Act (1994).

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- The health of biologically active soil is maintained while it is stockpiled and reused in rehabilitation.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	If possible do not strip soil when it is very dry or saturated.	Condition of soil maintained.
2.	Minimise height of soil stockpiles.	Stockpiles ≤ 2m in height.
3.	Stabilise soil stockpiles (e.g. seeded / roughened / mulched) if they will not be disturbed for an extended period.	Soil stockpiles are stabilised within 3 months if not used in progressive rehabilitation.
4.	Soil layers, including any surface organic matter and any woody debris segregated and stockpiled separately	Topsoil and woody debris stockpiled separately
5.	Any imported soil checked / verified for weeds and soil-borne disease (via Imported Materials Management Plan).	Imported soils do not compromise onsite soils with weeds and soil-borne disease

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
50.	Unsuccessful rehabilitation due to loss of soil biological activity	C, O, R	Unlikely	Minor	LOW

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Maintenance of soil stockpiles.	6 Monthly site inspections will be conducted and will include any topsoil stockpiles, and any required monitoring and remedial actions documented in site record book.

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Maintenance of soil stockpiles	Internally after 6 monthly inspections	To identify any necessary remedial actions

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	Nil	

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3.	Work Plan / Work Authority Conditions	Site Office
4.	Planning permit conditions	Site Office

2.17. Vehicle Sediment Transport

Scope

This risk treatment plan is to assess and manage the potential hazard associated with the carriage offsite of dust, clay (mud) or gravel by vehicles leaving the site, and subsequent deposition onto public roads, where members of the public or sensitive receptors may be affected during quarry operations (i.e. set up / construction, operations / production and rehabilitation activities).

Key sensitive receptors

The key sensitive receptors associated with this hazard include:

#	Details of the Sensitive Receptor	Location and proximity to site	How hazard may harm or damage Sensitive Receptor	Evidence to support assessment
1.	Public roads and amenity	Public roads	Potential to be impacted by nuisance dust / sediment from quarry traffic	Proximity to site

Risk Events

#	Details of the Risk Event	Phase	Likelihood	Consequence	Inherent Risk Rating
51.	Excessive dust, mud or gravel carried onto public roads	C, O, R	Likely	Minor	MEDIUM

Quarrying Considerations

Templeton Street is a Council maintained, sealed local road, comprising a two-lane, 6m wide carriageway with a 80km/h speed limit. There are numerous unsealed access roads, driveways and industries / activities in the vicinity that also use Templeton Street. There is potential that in unmanaged conditions dust and/or sediment from traffic leaving the site, or spillage from road trucks, could be deposited on the road and create nuisance to other road users.

The site access includes a section of purpose constructed and well-maintained gravel road between the extraction / processing area and the entry / exit onto Templeton Street. Management controls are in place to limit as much as possible the carriage of dust, mud or sand/gravel onto the sealed road.

Objectives

The key objectives of this risk treatment plan are to:

- Minimise the carriage of dust, clay (mud) or gravel by vehicles leaving the Work Authority
- Prevent road safety issues from hazards associated with the deposition of dust, clay (mud) or gravel onto external roads by traffic from the Work Authority

Compliance standards

The compliance standards for this risk treatment plan are:

- Planning and Environment Act 1979
- EPA Publication 1897, Sept 2020: Managing Truck and Other Vehicle Movement – Guidance sheet
- Planning Permit Conditions

Acceptance criteria

The acceptance criteria for this risk treatment plan are:

- No complaints from local road users regarding road conditions
- Minimal dust, clay (mud) or gravel carried by vehicles beyond the boundary of the Work Authority.

Control measures to address hazard

The controls for this risk treatment plan are:

#	Details of controls being used	Performance standards/measures *(specifying how the control is being implemented –if not implicit in the control)*
1.	Main access road well-formed and maintained with high quality material	Sales vehicles use main access road, which is kept clean and free of excess material, and constructed of high-quality road base to minimise sediment pick up
2.	Minimise use of wheel wash or hoses to wash vehicle tyres Wastewater and sediment captured and reused on site	Use of wheel wash or hoses to wash vehicle tyres minimised with all wastewater / sediment captured
3.	Water cart used on access road	Employ water cart on high temperature / windy days, or in response to complaints
4.	Internal traffic management (speed, no-go areas, etc)	Driver instruction and training
5.	Road truck loads properly covered / secured before leaving site and/or not over-filled, to prevent spillage	Driver instruction and training
6.	Management of sediment transport to public roads consistent with EPA guidance	Sediment transport offsite consistent with EPA guidance

Residual Risk Assessment

#	Details of the Risk Event	Phase	Likelihood	Consequence	Residual Risk Rating
51.	Excessive dust, mud or gravel carried onto public roads	C, O, R	Unlikely	Minor	LOW

Monitoring

#	Aspect to be monitored	Details of monitoring
1.	Dust, mud or gravel deposition on surrounding roads	Daily observation
2.	Community complaints / concerns regarding spillage on roads	Complaints management / Community Engagement Plan

Reporting

#	Aspect being reported	Who will the information be reported to and at what frequency?	How will it be used?
1.	Dust, mud or gravel deposition on surrounding roads	Monthly internal reports	To assess improvements required and to identify any necessary remedial actions
2.	Community complaints	Management and community through the Community Engagement process	To assess improvements required and to identify any necessary remedial actions
3.	Reportable Events under MRSDA (non-compliance with approval, in managing sediment transport onto public roads)	ERR / On Event	Mandatory reporting to regulator

Relevant industry publications

#	Document	Source (e.g. URL, appendix number)
1.	CMPA Traffic Management Guidelines	CMPA website

Operator's reference documents

#	Document	Location (e.g. work plan appendix number)
1.	Approved Work Plan & Risk Management Plan	Site Office
2.	Site Layout Plan	Work Plan
3	Dust Management Plan	Site Office
4	Work Plan / Work Authority Conditions	Site Office
5	Planning permit conditions	Site Office

Department of Energy, Environment and Climate Action

Earth Resources Regulator

STATUTORY ENDORSEMENT INFORMATION FOR COUNCIL

APPLICANT NAME(S): (Tenement holder name)	Rigby Brothers & Co Pty Ltd.
LAND STATUS: ☐ **Crown** ☒ **Private** ☐ **Crown & Private**	
SITE/PIT NAME: WA410.	**MUNICIPALITY/SHIRE:** Southern Grampians Shire Council.
PHYSICAL ADDRESS OF SITE/LOCALITY (local area name) and Property Parcel Reference: **Address:** 26 TEMPLETON STREET COLERAINE 3315. **Existing:** CA 54, Section 23, Parish of Konong Wootong and part of PS818710 Lot 2 Parish of Konong Wootong. **Proposed:** Expansion to TP862809 Lot 1 Parish of Konong Wootong, Allotment 25 Section 1B Parish of Konong Wootong, Allotment 24 Section 1B Parish of Konong Wootong, and part of Lot 1 PS818710 parish of Konong Wootong.	

A copy of the draft work plan variation has been given to the referral authorities identified on the attached referral consultation checklist. The referral authorities have provided consent to statutory endorsement of the work plan variation.

The statutorily endorsed work plan variation includes information that addresses all the conditions and comments made by referral authorities. No work plan specific conditions apply.

Additional agency comments were provided in response to the referral which were endorsed as work plan specific conditions, these can be referenced in the agency referral responses attached for your information.

In accordance with the requirements of Clause 66 of the Victorian Planning Provisions, the responsible authority is advised that the Department (in its capacity as a Determining Authority under Section 55 of the *Planning & Environment Act* 1987) has considered the proposal within the last three months prior to the date of this letter and **does not object to the grant of a planning permit** subject to the following condition:

1. Any planning permit conditions imposed do not duplicate or copy the requirements contained within the attached Statutorily Endorsed Work Plan Variation and accompanying conditions.

VICTORIA State Government

Southern Grampians SHIRE COUNCIL

Council Policy

COUNCILLOR GIFT POLICY		
	Date Adopted:	XX XX 2025
	Adopted By:	Council
	Review Due:	XX XX 2029
	Responsible Officer:	Governance Coordinator
	Directorate:	People and Performance
	SharePoint:	

PURPOSE

This policy has been developed to ensure transparency and the principles of good governance and accountability are practised by Councillors when being offered gifts, benefits and hospitality in the course of their duties.

A Councillor Gift Policy is required under section 138 of the *Local Government Act 2020* and states that a Councillor gift policy must include procedures for the maintenance of a gift register.

DEFINITIONS

Council	means Southern Grampians Shire Council
Councillor	means an elected official of the Council
Act	means the *Local Government Act 2020*

APPLICATION AND SCOPE

This policy applies to all Councillors of Southern Grampians Shire Council.

GENERAL PROVISIONS

The Southern Grampians Shire Council is committed to being open and transparent in its operations.

Councillors must:

- Be ethical, fair and honest in the conduct of their official duties;
- Be aware that anonymous gifts are not to be accepted, as per section 137 of the *Local Government Act 2020*;
- Be fully accountable and responsible for their actions and ensure that the methods and processes they use to arrive at decisions are beyond reproach and can withstand audit and risk processes and proper scrutiny;
- Not seek, solicit, or use their position with Council to obtain gifts or benefits from external organisations or individuals;

- Ensure that a person, company or organisation is not placed in a position in which they feel obliged to offer gifts or hospitality in order to secure or retain Council business; and
- Report any incidences where a bribe and / or cash is offered.

LEGISLATION

Local Government Act 2020

Definitions

disposition of property means any conveyance, transfer, assignment, settlement, delivery, payment, gift or other alienation of property including—

a) the allotment of shares in a company;

b) the creation of a trust in property;

c) the grant or creation of any lease, mortgage, charge, servitude, licence, power, partnership or interest in property;

d) the release, discharge, surrender, forfeiture or abandonment, at law or inequity, of any debt, contract or chose in action, or of any interest in property;

e) the exercise by a person of a general power of appointment of property in favour of any other person;

f) any transaction entered into by any person with intent thereby to diminish, directly or indirectly, the value of the person's own property and to increase the value of the property of any other person;

gift means any disposition of property otherwise than by will made by a person to another person without consideration in money or money's worth or with inadequate consideration, including—

a) the provision of a service (other than volunteer labour); and

b) the payment of an amount in respect of a guarantee; and

c) the making of a payment or contribution at a fundraising function;

legislated gift disclosure threshold means $500 or a higher amount or value prescribed by the regulations;

Whilst there is a legislated gift disclosure threshold applicable to Councillors of $500 or above, Southern Grampians Shire Council Councillors, in accordance with this policy, will disclose all gifts or offers of gifts, regardless of value.

Section 127 General Conflict of Interest

(1) Subject to Section 129, a relevant person has a general conflict of interest in a matter if an impartial, fair-minded person would consider that the person's private interests could result in that person acting in a manner that is contrary to their public duty.

Section 128 Material Conflict of interest

(1) Subject to section 129, a relevant person has a material conflict of interest in respect of a matter if an affected person would gain a benefit a benefit or suffer a loss depending on the outcome of the matter.
Section 128 states an affected person includes a person from whom the relevant person has received a disclosable gift.

A disclosable gift means one or more gifts with a total value of, or more than, $500 or if an amount is prescribed for the purposes of this subsection, the prescribed amount, received from a person in the 5 years preceding the decision on the matter –

(a) if the relevant person held the office of Councillor, was a member of Council staff or was a member of a delegated committee at the time the gift was received; or

(b) if the gift was, or gifts were or will be, required to be disclosed as an election campaign donation-

But does not include the value of any reasonable hospitality received by the relevant person at an event or function that the relevant person attended in an official capacity as a Councillor, member of Council staff or member of a delegated committee.

Section 135 Summary of Personal Interests

The Chief Executive Officer must prepare a summary of the personal interests information disclosed. The summary must include:

a) Town or suburb, but not the address or street number of the land that is the place of residence of a person as disclosed in the personal interests return
b) Matters prescribed by the regulations
c) Exclude matters required by the regulations
d) Be prepared in accordance with the regulations.

Local Government (Governance and Integrity) Regulations 2020

A personal interest return must include the details of any gift received by the specified person, the value of which equals or exceeds $500 or the threshold amount fixed by the Secretary, including gifts in the form of goods or services and multiple gifts that together equal or exceed that amount, which was received at any time since the specified person lodged the preceding initial or biannual personal interests return including:

- A description of the gift;
- The monetary value of the gift;
- The name of the person who gave the gift
- If the gift was given on behalf of another person or body, the name of that person or body.

Standards of Conduct

(1)Treatment of others

(2) Performing the role of Councillor

(3) Compliance with Good Governance Measures

(4) Councillor must not discredit or mislead Council or public

(5) Standards do not limit robust debate

GIFTS, BENEFITS AND HOSPITALITY PROCESS

Councillors

Councillors must avoid situations giving rise to the appearance that a person or body, through the provision of gifts, benefits or hospitality of any kind, is attempting to gain favourable treatment from an individual Councillor or from the Council.

Councillors must take all reasonable steps to ensure immediate family members do not receive gifts or benefits that give rise to the appearance of being an attempt to gain favourable treatment.

Councillors must not accept gifts in their roles as Councillors or where it could be perceived to influence their role as a Councillor except:

- Where the gift would generally be regarded as only have a token value and could not be perceived to influence actions.
- Where refusal may cause offence or embarrassment, in which case the gift can be accepted on behalf of the Council and the gift then becomes the property of the Council. For transparency and accountability purposes, these gifts will be recorded in the Councillors Gifts Register with a notation that it is the property of the Council.

Councillors must recognise that gifts equal to or above the gift disclosure threshold received in twelve months prior to election from a person or body that has a direct interest in a matter may give rise to an indirect interest because of receipt of an applicable gift.

GIFT REGISTER

Council's register is a record of all declarable gifts, benefits and hospitality offered to Councillors.

The register records sufficient information for identifying trends and key risks and forms the basis of risk-based monitoring. Council will maintain a gift register for Councillors and will include the following information:

- Name of person who accepted / declined the gift
- Date the gift was accepted / declined
- Name of individual / company / group providing / offering the gift
- The nature of the gift and its estimated value
- The reason given for making the offer
- Any legitimate business reason for accepting the gift
- Whether the offer is a ceremonial gift;
- Any actual, potential or perceived conflicts of interest or reputational risks (to the individual or Council) that the offer raises;
- If the offer was accepted or declined;
- The record number of the completed '*Disclosure of Gift, Benefit and Hospitality Form'*

Council will consider its requirements under relevant privacy legislation, including the Information Privacy Principles under the *Privacy and Data Protection Act 2014* (PDP Act), when recording items in the register and when publishing their register online. These requirements include:

Reasonable steps to protect the personal information collected and held by Council. Access to registers should be restricted to relevant persons within Council.

IMPLEMENTATION

This policy will be made available on the Council website.

CHARTER OF HUMAN RIGHTS COMPLIANCE

It is considered that this policy is compatible with the relevant human rights identified in the *Charter of Human Rights and Responsibilities Act 2006 (Vic).*

GENDER EQUALITY COMPLIANCE

It is considered that this policy is compatible with the relevant gender equality principles identified in the *Gender Equality Act 2020.*

Is a Gender Impact Assessment required?

☐ Yes

☒ No

REVIEW

Council's gift policy was required to be adopted within 6 months of section 138 coming into operation, being 24 April 2021.

This Policy was subsequently reviewed:

- 22 April 2025

This Policy must be reviewed a minimum of every four years or in-line with legislative change.

END

Southern Grampians
SHIRE COUNCIL

DISCLOSURE OF GIFT & HOSPITALITY

Councillor Name:

Date gift/hospitality received:

Name of individual/ company/group providing gift:

Nature of gift or consideration:
(please provide a brief description)

Approximate value of gift: $ _____

NOTE: All gifts/benefits/hospitality must be declared.

Action taken (tick all applicable):

- ❑ Accepted
- ❑ Declined
- ❑ Returned
- ❑ Retained by recipient
- ❑ Retained by department
- ❑ Donated to a third party

Other (state):

Additional comments (i.e. reason for gift, promotion etc):

Councillor's Signature: **Date:**

Chief Executive Officer Signature: **Date:**

Please forward this form to the Governance Coordinator
Form last updated May 2025

FINANCE REPORT

1 July 2024 - 31 March 2025

Southern Grampians
SHIRE COUNCIL

Financial Report Executive Summary

REPORT SUMMARY

The Finance Report is prepared for Council each quarter and is a requirement set out in the Local Government Act 2020. Following the end of the financial year, the annual financial statements are prepared and included in the Annual Report.

The Finance Reports set out actual results compared to Budget for the first nine months of the 2024/25 financial year and contain the Standard Statements, namely:

· Comprehensive Income Statement,
· Balance Sheet,
· Statement of Cash Flows, and
· Statement of Capital Works.

The Report also includes information on cash, debtors, creditors and loans.

Narratives accompany each of the statements for major variances and key data has been included in graphs and ratios, such as the debt commitment ratio.

Impacts on the Financial Report to 31 March 2025

Comprehensive Income Statement

The Comprehensive Income Statement result for the nine months to 31 March is a surplus of $8.639m and the forecasted result for the same period was a surplus of $9.652m The actual and forecasted result for the period is aided from the recognition of the full year rates that are raised in the first quarter, which means that 99% of the annual forecasted rates revenue is recognised in this period.

During the March quarter there was total revenue recognised of $5.090m while the total expenditure for the three months was $11.459m.

The main variances within the report are identified with an explanation provided for what has transpired, which includes:

1. REVENUE

- Reimbursement of rate pensioner concessions 155k forecast in the first half of year is not yet received. Donations received not budgeted 417k. Capital Grants not yet received 1.406m.

- The major variance for the quarter was the reduction in asset sales from lakes edge and miscellaneous property of 5.142m in 2024/25 with this being forecast into the 2025/26 budget.

2. EXPENDITURE

- Fringe Benefits Tax payments are a quarterly contribution based on tax office estimates, final cost are calculated and confirmed in the last quarter;

- contributions to community groups was lower than expected for the first half of the year with higher expenditure expected for January to June 2025;

- Plant and fleet operations is the net cost and includes internal hire (allocation) of Council owned fleet usage to projects. Plant usage for operating activities are higher until the November to April period which is when the majority of capital works is undertaken and plant is utilised for capital rather than operating. The finanical result of the plant and fleet operations is expected to improve up until April and capital works are completed;

- Utility cost are higher than budgeted, largely due to increased gas prices.

Carry Forward items from 2023/24

Forecast details have been updated to include items and projects not completed in 2023/24 with financial balances carried forward to the 2024/25 financial year. The impact of carry forwards can be summarised as:
Increase to operational expenses - $841k
Increase to operational revenue $7.876m
Increase to capital works expenditure - $11.001m.

The total impact on the cash position from carry forward items is $3.965m which is in large part offset by the difference of $3.466 in the opening budgeted cash position compared to the actual opening cash position.

Balance Sheet

Cash and investments at 31 March is a total of $7.563m which is a decrease of $7.205m compared to the balance at 31 December. The forecast cash and investments total at 31 March was $10.718m.

Debt servicing and debt commitment ratios are both strong, being well below the acceptable maximum level which is due to the low level of borrowings.

Capital Works

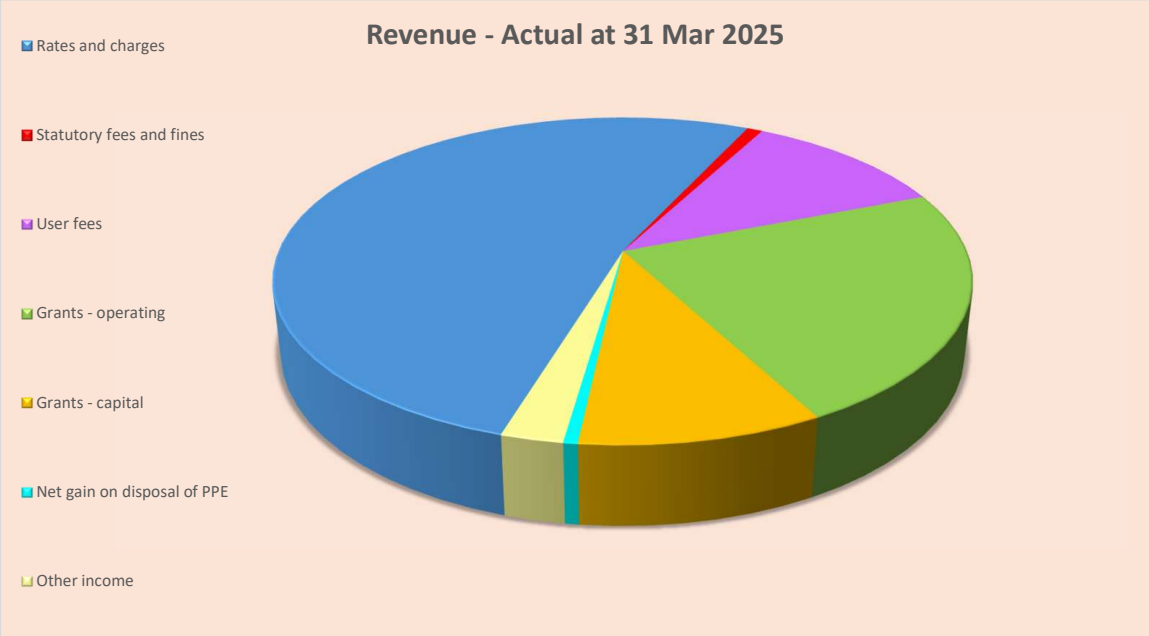
Detailed reports on the financial progress of the capital works and major projects are also provided for information. Capital works for the YTD to March were $17.001m completed compared to a YTD forecast of $19.266. The capital works carried forward from 2023/24 was a total net amount of $10.986m. Expenditure incurred included progression of the works at Melville Oval of $5.521m, Hamilton-Chatsworth road works $1.299m, Vic Point Road $826k, Gallie Road $572k, Hamilton Pool works $460 along with Pedrina Park works of $372k.
The capital expenditure for the December to March quarter was a total amount of $7.059m to increase the year to date expenditure to $17.001 compared to the $9.942m spent at 31 December 2025.

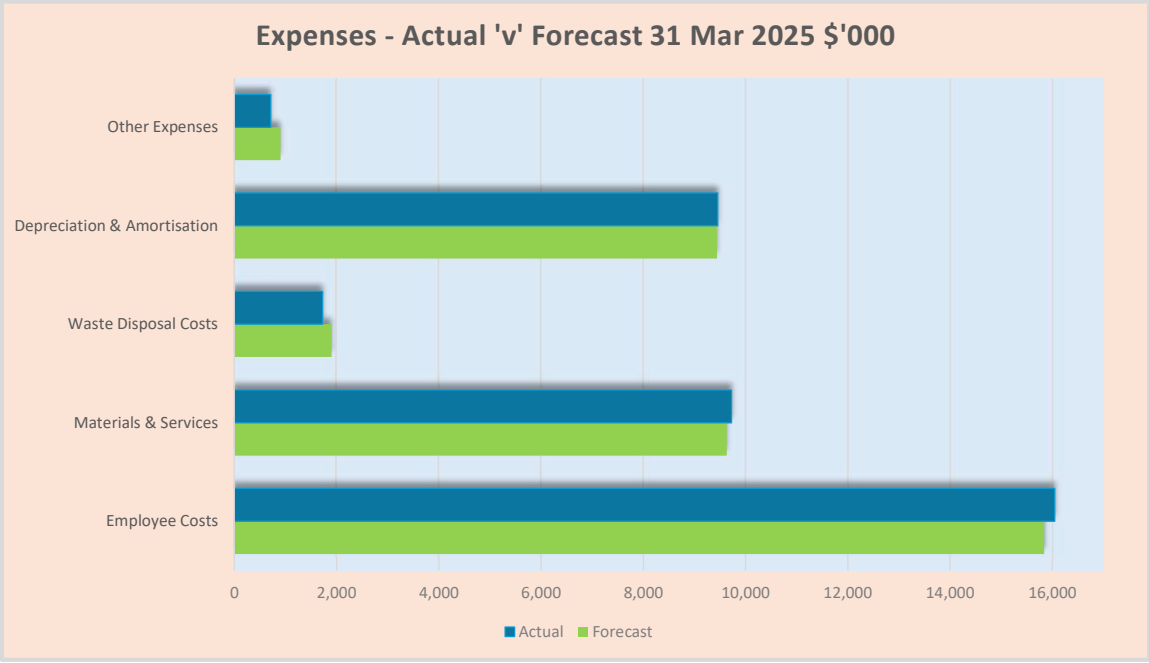
1. Comprehensive Income Statement

	Budget 30 Jun 2025 $'000	Forecast 30 Jun 2025 $'000	% Forecast Diff to Budget	YTD Forecast 31 Mar 2025 $'000	Actual 31 Mar 2025 $'000	% of YTD Forecast	Note
Operating Revenue							
Rates and charges	(24,054)	(24,497)	102%	(24,397)	(24,140)	99%	
Statutory fees and fines	(469)	(474)	101%	(356)	(390)	110%	
User fees	(6,281)	(6,455)	103%	(5,140)	(5,203)	101%	
Contributions - cash	0	(105)	0%	(27)	(70)	259%	1
Grants - operating	(10,720)	(11,623)	108%	(10,813)	(10,686)	99%	
Grants - capital	(3,000)	(10,198)	340%	(5,830)	(4,424)	76%	2
Net gain on disposal of PPE	(5,640)	(498)	9%	(273)	(258)	95%	
Other income	(852)	(762)	89%	(534)	(1,133)	212%	3
	(51,016)	**(54,612)**	107%	**(47,370)**	**(46,302)**	**98%**	
Operating Expenses							
Employee benefits							
Wages and Salaries	17,874	17,733	99%	13,830	13,762	100%	
Superannuation	1,984	1,984	100%	1,461	1,687	115%	
Workcover	475	510	107%	506	523	103%	
Fringe Benefits Tax	55	57	103%	43	72	169%	4
Materials and services							
External Works (Contractors)	2,768	3,255	118%	2,746	2,604	95%	
Support Service and Supplies	3,646	3,631	100%	2,736	2,615	96%	
Community Grants	555	556	100%	431	314	73%	5
Utilities	1,134	1,148	101%	860	1,018	118%	6
Office Administration	437	583	133%	434	468	108%	
Information Technology	1,193	1,391	117%	887	896	101%	
Insurance	611	618	101%	558	504	90%	
Consultants	332	548	165%	407	362	89%	
Plant and Fleet Operations	523	702	134%	573	946	165%	7
Waste Disposal Costs	2,683	3,032	113%	1,903	1,727	91%	
Depreciation and amortisation	12,608	12,588	100%	9,441	9,458	100%	
Finance costs	21	21	100%	16	28	178%	
Other expenses	1,051	1,277	121%	887	680	77%	
	47,950	**49,632**	104%	**37,718**	**37,663**	**100%**	
(Surplus) Deficit resulting from operations	**(3,066)**	**(4,980)**		**(9,652)**	**(8,639)**		

Notes:

1. Contributions for Pedrina Park Cricket Nets 36k and Botanic Gardens 34k.
2. Timing of grant payments for Melville Oval, awaiting grant installment forecast in March.
3. Art Gallery Donation 417k not budgeted.
4. Fringe Benefits Tax payments are a quarterly contribution based on tax office estimates, final cost are calculated and confirmed in May.
5. Contributions to community groups was lower than expected for the three quarters however expenditure is expected to reach full year budget by year end.
6. Utility cost are higher than budgeted, largely due to increased gas prices.
7. Internal plant usage higher than YTD budget.


Revenue - Actual at 31 Mar 2025
Rates and charges
Statutory fees and fines
User fees
Grants - operating
Grants - capital
Net gain on disposal of PPE
Other income


Expenses - Actual 'v' Forecast 31 Mar 2025 $'000
Other Expenses
Depreciation & Amortisation
Waste Disposal Costs
Materials & Services
Employee Costs
0
2,000
4,000
6,000
8,000
10,000
12,000
14,000
16,000
Actual
Forecast

2. Balance Sheet

	Budget 30 Jun 2025 $'000	Forecast 30 Jun 2025 $'000	% Forecast Diff to Budget	YTD Forecast 31 Mar 2025 $'000	Actual 31 Mar 2025 $'000	% of YTD Forecast	Note
Current Assets							
Cash & Cash equivalents	7,608	6,922	91%	2,422	251	10%	1
Trade & Other Receivables	4,179	4,179	100%	8,815	8,203	93%	1
Other Financial Assets	0	0	0%	8,295	7,276	88%	1
Inventories	533	533	100%	533	444	83%	2
Non-Current Assets classified as held for resale	0	0	0%	0	0	0%	
Other Assets (Prepayments & Accrued Income)	505	505	100%	505	370	73%	
	12,825	**12,139**	**95%**	**20,571**	**16,543**	**80%**	
Non Current Assets							
Investments, Trade & Other Receivables	17	17	100%	17	0	0%	
Investment Property	1,700	1,700	100%	1,700	825	49%	3
Property, Infrastructure, Plant & Equipment	522,956	529,060	101%	503,784	508,297	101%	
	524,673	**530,777**	**101%**	**505,501**	**509,122**	**101%**	
Total Assets	**537,498**	**542,916**	**101%**	**526,071**	**525,666**	**100%**	
Current Liabilities							
Trade & Other Payables	(2,853)	(2,853)	100%	(2,853)	(3,394)	119%	4
Trust Funds & Deposits	(387)	(387)	100%	(387)	(507)	131%	
Contract and other liabilities	(71)	(71)	100%	(71)	(482)	679%	
Interest Bearing Loans & Liabilities	(999)	(999)	100%	(999)	(918)	92%	5
Provisions	(4,472)	(4,472)	100%	(4,472)	(4,677)	105%	5
	(8,782)	**(8,782)**	**100%**	**(8,782)**	**(9,978)**	**114%**	
Non Current Liabilities							
Interest Bearing Loans & Liabilities	(5,931)	(5,931)	100%	(931)	(931)	100%	5
Provisions	(1,812)	(1,812)	100%	(1,812)	(1,464)	81%	5
	(7,743)	**(7,743)**	**100%**	**(2,743)**	**(2,395)**	**87%**	
Net Assets	**520,973**	**526,391**	**101%**	**514,546**	**513,293**	**100%**	
Accumulated Surplus	(149,781)	(155,199)	104%	(143,354)	(133,431)	93%	
Asset Revaluation Reserve	(370,621)	(370,621)	100%	(370,621)	(379,265)	102%	
Other Reserves	(571)	(571)	100%	(571)	(597)	105%	
Net Equity	**(520,973)**	**(526,391)**	**101%**	**(514,546)**	**(513,293)**	**100%**	

Notes:

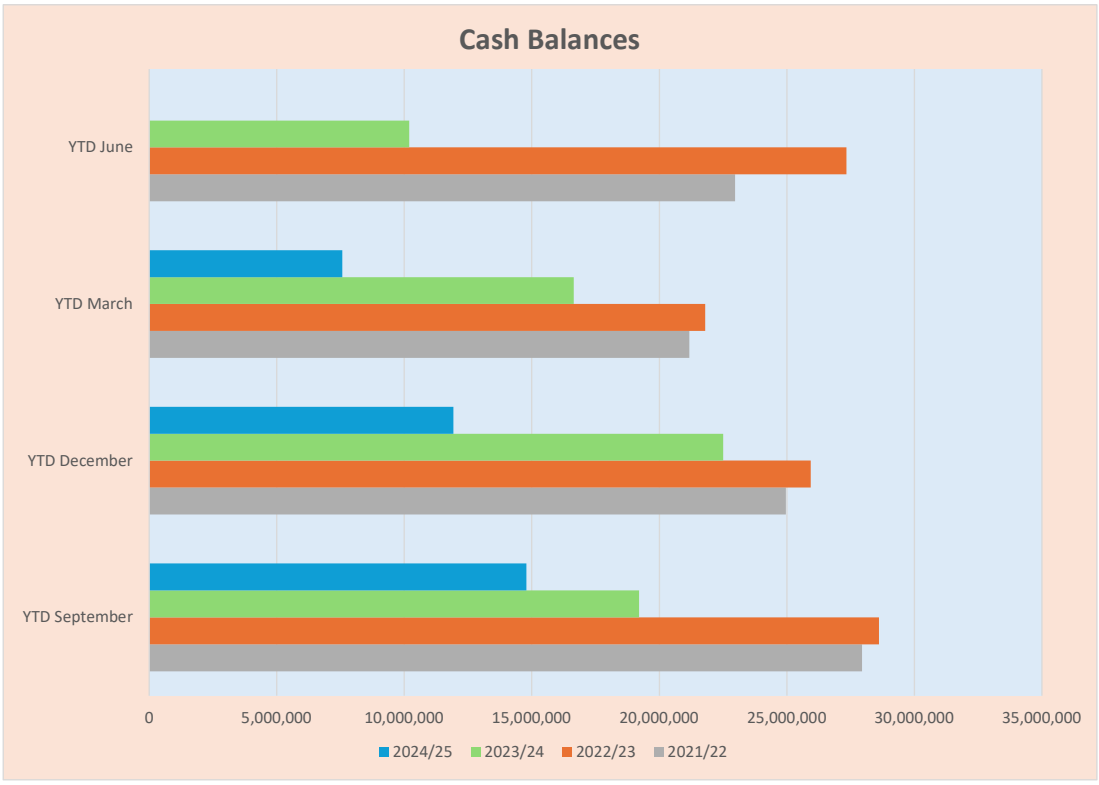
1. The split between cash, receivables and other assets fluctuates during the year however have not materially changed since September.
2. Inventories fluctuate during the year depending on timing of purchases and works allocation.
3. Value has decreased of investment properties with the sale of the property expected late in 2024-25.
4. Trades and Payables fluctuate in line with liabilities as they are recognised during the year.
5. Provisions and interest bearing liabilities have been updated between current and non-current however overall values have not materially changed.

Core Ratios	Prudential Guideline	Adopted Budget	Forecast Budget	YTD Actual
Working Capital Ratio/Liquidity Ratio *(Current Assets/Current Liabilities)*	> 150%	146.0%	138.2%	165.8%
Debt Servicing Ratio (Interest as a % of total Rate Revenue)	< 5%	0.1%	0.1%	0.12%
Debt Commitment Ratio (Interest & Loan repayments as a % of total Rate Revenue)	< 15%	0.9%	0.8%	0.3%

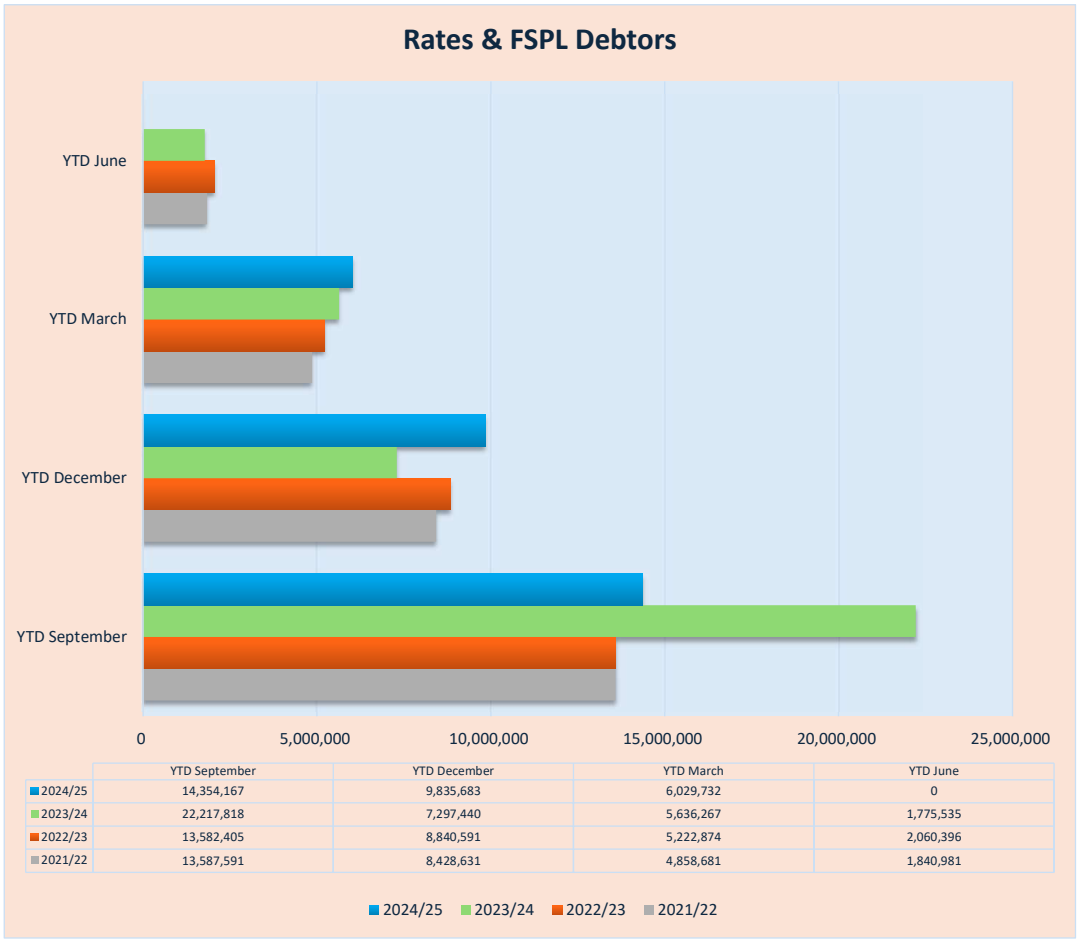
3. Cash Flow Statement

	Budget 30 Jun 2025 $'000	Forecast 30 Jun 2025 $'000	% Forecast Diff to Budget	YTD Forecast 31 Mar 2025 $'000	YTD Actual 31 Mar 2025 $'000	% of YTD Forecast	Note
Cash flows from Operations							
Operating Revenue							
Rates and charges	23,759	24,297	102%	20,059	19,993	100%	
Grants - operating	10,590	11,623	110%	9,823	9,696	99%	
Grants - capital	3,845	7,822	203%	4,048	2,048	51%	1
Interest	505	514	102%	382	324	85%	
User fees	6,204	5,943	96%	4,734	4,914	104%	
Statutory fees and fines	475	562	118%	442	470	106%	
Other revenue	661	203	31%	108	763	707%	2
	46,039	**50,965**	**111%**	**39,596**	**38,209**	**96%**	
Operating Expenses							
Employee benefits	(20,160)	(20,283)	101%	(15,840)	(15,926)	101%	
Materials and consumables	(13,209)	(15,493)	117%	(9,346)	(9,251)	99%	
Other expenses	(1,598)	(1,061)	66%	(796)	(570)	72%	
	(34,967)	**(36,838)**	**105%**	**(25,981)**	**(25,746)**	**99%**	
Net Cash Flows From Operating Activities	**11,072**	**14,127**		**13,614**	**12,462**	**92%**	
Cash Flows From Financing Activities							
Finance Costs	(21)	(21)	100%	(27)	(28)	104%	
Proceeds from Borrowings	5,800	3,800	66%	800	800	100%	
Repayment of Borrowings	(187)	(187)	100%	(148)	(41)	28%	3
Net cash flows from financing activities	**5,592**	**3,592**	**64%**	**625**	**731**	**117%**	
Cash Flows From Investing Activities							
Payments for investing activities	(20,625)	(26,729)	130%	(19,266)	(14,813)	77%	4
Proceeds from Asset Sales	5,640	498	9%	273	258	95%	
Payments from investments	(800)		0%	0	0	0%	
Net Cash Flows From Investing Activities	**(15,785)**	**(26,232)**	**166%**	**(18,994)**	**(14,555)**	**77%**	
Net Cash Flows From Movements in Balance Sheet	**0**	**7,657**		**5,657**	**93**		
Net increase (decrease) in Cash	**879**	**(856)**		**903**	**(1,268)**		
Cash (Overdraft) at the beginning of the period	**6,729**	**1,519**		**1,519**	**1,519**		
Cash (Overdraft) at the end of the period	**7,608**	**663**		**2,422**	**251**		

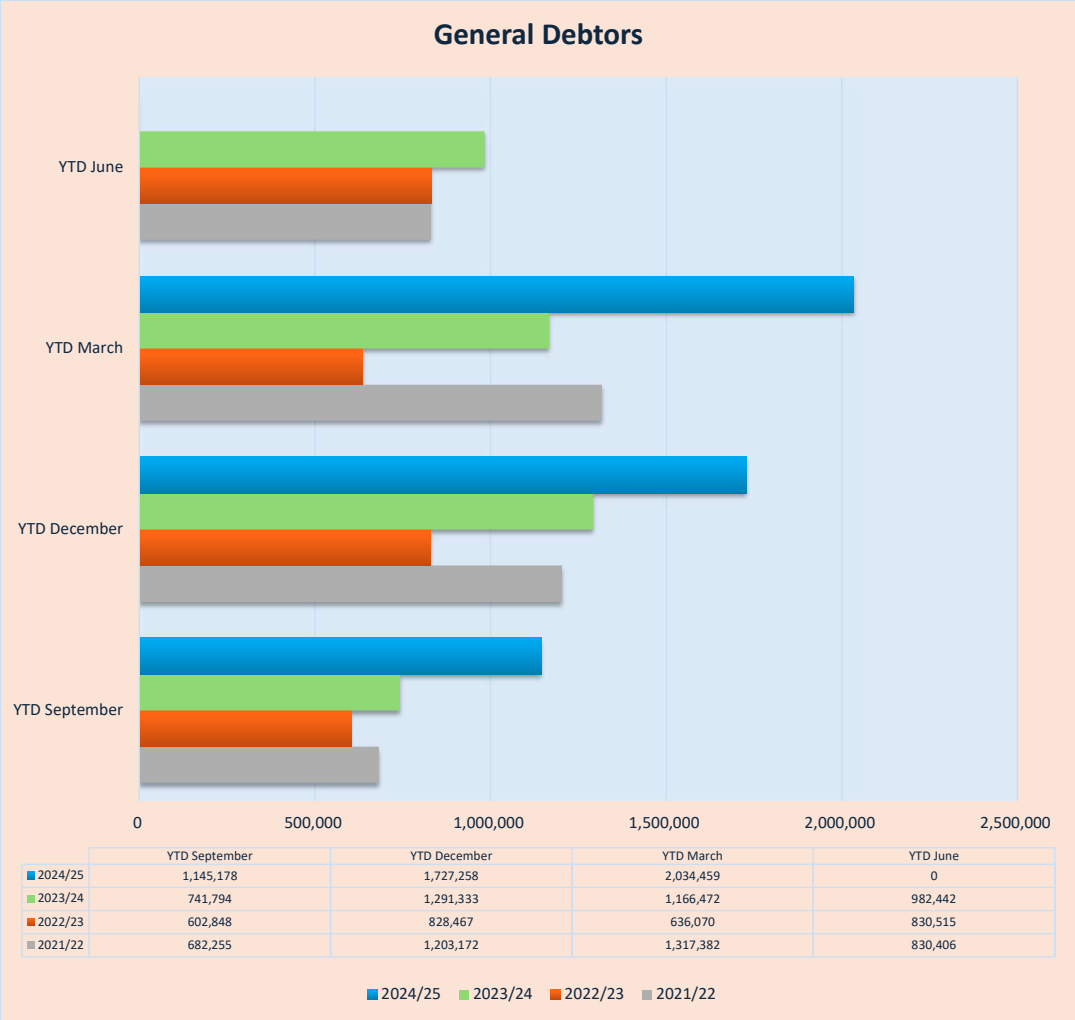
Notes:
1. Capital grants have beenr ecognised that were not yet received at 31 March.
2. Includes Art Gallery donation of $417k that was not expected.
3. Timing of loan repayments varies to forecasted timing.
2. Actual movement for new investment of funds was lower than forecast.



Reconciliation of Cash	Balance B/Fwd 01/07/24	Cumulative Balance 30/09/24	Cumulative Balance 31/12/24	Cumulative Balance 31/03/25	Cumulative Balance 30/06/25
General Account - Working Capital	1,449,578	7,112,255	3,909,203	145,523	
Section 65 Committee Holdings	105,425	105,425	105,425	105,425	
Investment - Unrestricted					
General Account	2,000,000	2,000,000	2,000,000	2,000,000	
Investment - Specific Purpose					
Trusts & Reserves	955,171	955,171	772,188	772,188	
Landfill Rehabilitation	1,100,000	1,100,000	1,100,000	1,100,000	
Defined Benefit Shortfall	1,281,200	0	0	0	
Yatchaw Drainage	39,803	129,599	129,599	129,599	
Investment - Restricted					
Sir Irving Benson Bequest	674,302	674,302	674,302	674,302	
Long Service Leave	2,500,000	2,500,000	2,600,000	2,600,000	
Total Cash & Investments	**10,105,479**	**14,576,752**	**11,290,717**	**7,527,037**	



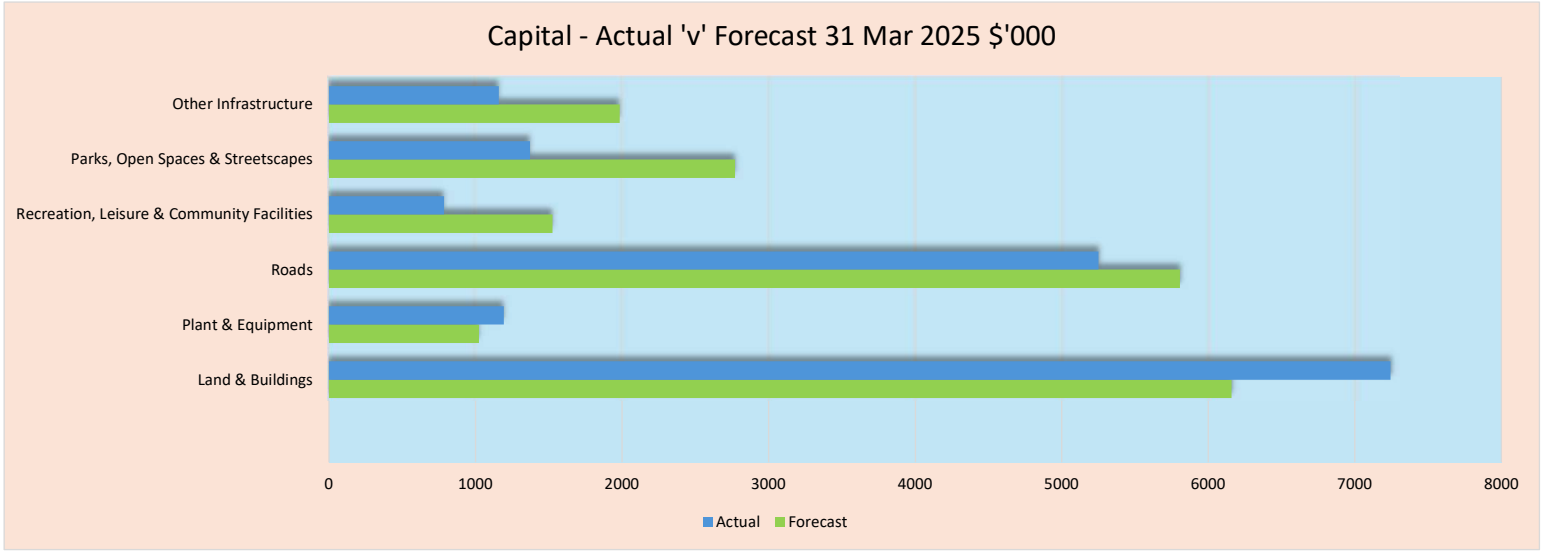
	YTD September	YTD December	YTD March	YTD June
2024/25	14,354,167	9,835,683	6,029,732	0
2023/24	22,217,818	7,297,440	5,636,267	1,775,535
2022/23	13,582,405	8,840,591	5,222,874	2,060,396
2021/22	13,587,591	8,428,631	4,858,681	1,840,981



	YTD September	YTD December	YTD March	YTD June
2024/25	1,145,178	1,727,258	2,034,459	0
2023/24	741,794	1,291,333	1,166,472	982,442
2022/23	602,848	828,467	636,070	830,515
2021/22	682,255	1,203,172	1,317,382	830,406

4. Capital Works

	Budget 30 Jun 2025	Forecast 30 Jun 2025	% Forecast Diff to Budget	YTD Forecast 31 Mar 2025	Actual 31 Mar 2025	% of Annual Forecast
Property						
Land	0	535		364	445	83%
Buildings	6,590	8,003	121%	5,795	6,799	85%
	6,590	**8,538**		**6,159**	**7,244**	
Plant & Equipment						
Plant, Machinery & Equipment	1,500	1,785	119%	916	1,130	63%
Fixtures, Fittings & Furniture		3		3	3	100%
Computers & Telecommunications	50	50	100%	39	21	43%
Library Books	71	71	100%	53	33	46%
Art Collection		15		11	6	42%
	1,621	**1,924**		**1,023**	**1,193**	
Infrastructure						
Roads	5,904	7,086	120%	5,805	5,250	74%
Bridges	246	483	196%	39	28	6%
Footpaths & Cycleways	246	616	250%	474	408	66%
Drainage	400	568	142%	272	179	32%
Recreation, Leisure & Community Facilities	2,239	2,077	93%	1,525	784	38%
Waste Management	89	976	1096%	741	71	7%
Parks, Open Spaces & Streetscapes	3,290	3,790	115%	2,771	1,371	36%
Off Street Carparks	0	455		405	380	84%
Livestock Exchange	0	95		35	35	37%
Other Infrastructure	0	122		17	57	47%
	12,414	**16,268**		**12,084**	**8,564**	
Total	**20,625**	**26,729**	**130%**	**19,266**	**17,001**	**64%**


Capital - Actual 'v' Forecast 31 Mar 2025 $'000
Other Infrastructure
Parks, Open Spaces & Streetscapes
Recreation, Leisure & Community Facilities
Roads
Plant & Equipment
Land & Buildings
0
1000
2000
3000
4000
5000
6000
7000
8000
Actual
Forecast

5. Declaration by CEO

As per Section 97 of the Local Government Act 2020, as soon as practicable after the end of each quarter of the financial year, the Chief Executive Officer must ensure that a quarterly budget report is presented to the Council at a Council meeting which is open to the public.

A quarterly budget report must include a comparison of the actual and budgeted results to date, an explanation of any material variations and any other matters prescribed by the regulations.

Tony Doyle
Chief Executive Officer
12 May 2025

Southern Grampians
SHIRE COUNCIL

Action and Task Progress Report- Standard

Southern Grampians Shire Council

cammsstrategy

Print Date: 14-May-2025

OVERVIEW

ACTION SUMMARY

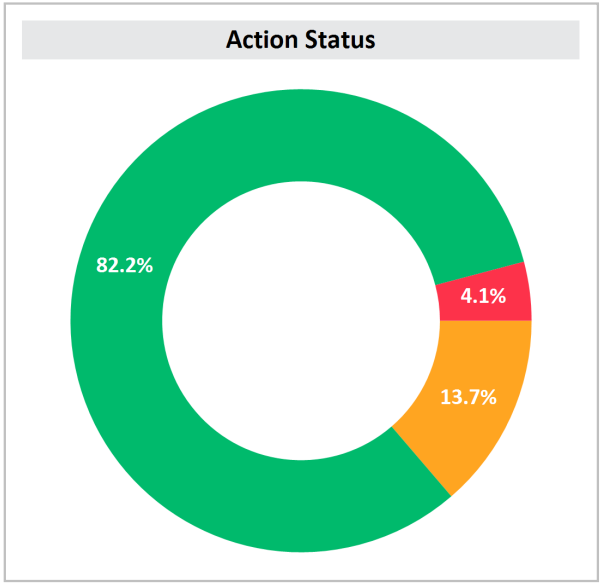
By Performance

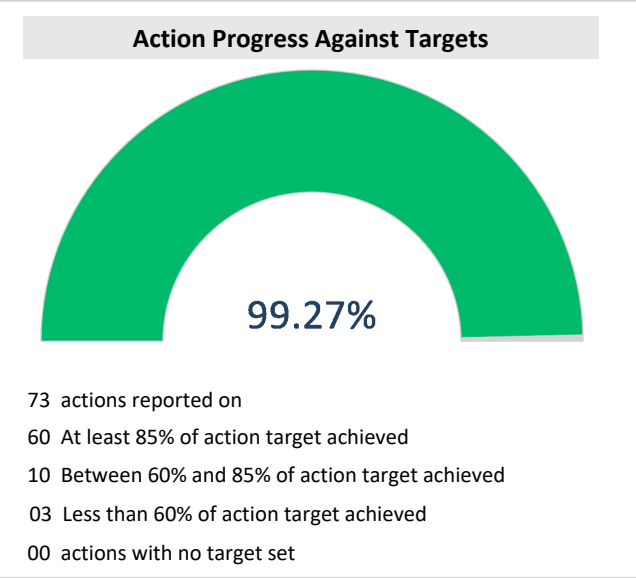
60 On Track

3 Off Track

10 Monitor

0 Not Applicable





ACTION PLANS

GREEN	AMBER	RED	–
At least 85% of action target achieved	Between 60% and 85% of action target achieved	Less than 60% of action target achieved	No target set

* Dates have been revised from the Original dates

1 Support our Community

1.1 An empowered and connected community

1.1.1 Facilitate opportunities for people to participate in community life, through volunteering, civic leadership, social programs, to enable inclusion, social connection and wellbeing

Action Title: 1.1.1.4 Support all new and current volunteers to renew police checks

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Tahlia Homes - Manager People and Culture	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 22/04/2025 - Awaiting full implementation of ELMO system for this item to progress further. All existing volunteers will be supported to complete police and working with children's checks, and new volunteers will be required to have both prior to commencing with Council. Records will be kept in ELMO to inform HR when checks need to be renewed in future.
21/01/2025 - Volunteer records were compiled as a result of an internal audit in 2021. Once ELMO module is implemented (expected timeframe June 2025), People and Culture will renew all police checks. ELMO Recruit is configured to require all new volunteers to go through a HR onboarding process. Volunteers will require Police and Working with Children's checks and will be supported by People and Culture to obtain and keep both current.
15/10/2024 - Work is currently happening to implement Elmo (New HR System) once this up and running, volunteer data will be placed into the system and contact made with all volunteers that have not had a police check done within the past year to help them complete this process.

Last Updated: 01-May-2025

1.1.2 Support the community and other agencies to build resilience and preparedness in planning for emergencies and climate change impacts and mitigation

Action Title: 1.1.2.2 Build community and organisational capacity in assisting community during and after and emergency.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Susannah Milne - Manager Community Wellbeing	In Progress	01-Jul-2023	30-Jun-2025	60%	75.00%	AMBER

Action Progress Comments: 22/04/2025 - Funding agreement been modified and extended to 31 December 2025 to provide more targeted community education and awareness to build

community resilience capacity post Grampians Fires within impacted communities.

21/01/2025 - Since the last reporting period we have had the Grampians Fire, we are in early discussions with ERV to determine if we can expand this funding to deliver the program to the fire impacted area, with an all-hazards approach.

06/12/2024
Deed of variation to funding has been signed to allow an extension of time to complete this project which is grant funded. This project will be assigned to the Coordinator of Community Wellbeing to be completed.

16/07/2024 - this project has not proceeded further as the Community Wellbeing position has been focused on service delivery in response to shortages in the childcare area. It should be noted that this project is funded to the 30 June 2025 and occurs over 2 council plan reporting periods.
16/04/2024 - no further action has occurred during this reporting period. This action can now progress now that the position of Coordinator Wellbeing has been filled, by the end date.
16-01-2024 - Internal training of staff that are involved in response, relief and recovery training conducted on trauma informed awareness which will assist staff to be prepared to respond to flood/emergency events. 30 staff attended externally facilitated session by clinical psychologist David Younger - training delivered in partnership with Emergency Recovery Victoria. 2nd session to be conducted with identified community leaders, first responders and interested community members.

01/10/2023 - Trauma Informed Awareness Training: An introduction to working with and supporting communities post an emergency which will be a facilitated session led by David Younger, Clinical & consultant psychologist specalising in supporting communities through crisis has been arranged for staff who work at the front line with people who are affected by emergencies.

This training will be conducted on the 31 October 2024 and will be repeated in the new year and offered to Community Leaders and other emergency responders.

Last Updated: 22-Apr-2025

1.1.3 Provide opportunities for increased community engagement and participation in Council decision making and activities

Action Title: 1.1.3.6 Implement new online Engagement portal to allow increased community engagement with Council projects, programs and decisions.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Alison Quade - Manager Communications and Engagement	Completed	01-Jul-2024	30-Jun-2025	100%	75.00%	GREEN

Action Progress Comments: 23/01/2025 - EngageHQ launched in November. Currently being used to engage on budget and Cavendish/Coleraine structure plans. Will include Council Plan and CBD Streetscape from next month. 424 people have visited the page in the two months since it launched.

16/10/2024 - EngageHQ platform purchased in late July 2024. Platform integrates into new website and will provide a range of tools for online engagement across an unlimited number of projects/initiatives. Work has been ongoing throughout August/September/October to develop the pages and content, ready to launch with our major projects following the caretaker period.

Last Updated: 23-Jan-2025

Action Title: 1.1.3.7 Create a plan to increase Councillor engagement with outer townships once a new Council has been elected.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %

Alison Quade - Manager Communications and Engagement	In Progress	01-Feb-2025	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 22/04/2025 - Councillors visited and engaged with all outer townships throughout March and Hamilton residents at the CBD shopfront. As part of the discussion on feedback from these sessions, we will discuss a forward program for community engagement with outer towns.
23/01/2025 - Engagement with townships will commence with the Council Plan engagement program. Once this is complete, a discussion can be had about the best way to approach engagement with townships on an ongoing basis.
16/10/2024 - Work will commence on this item once new Council has been elected and briefed on Community Engagement Policy.

Last Updated: 22-Apr-2025

1.1.4 Ensure communication and engagement methods use inclusive practices and processes

Action Title: 1.1.4.4 Ensure engagement on new Council Plan is inclusive and compliant with our engagement policy.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Alison Quade - Manager Communications and Engagement	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 17/04/2025 - Engagement for the Council Plan was undertaken throughout February and March. Sessions were held in each township, in a shopfront in the Hamilton CBD, with many stakeholder groups including internally and online. These sessions used a dotmocracy method which was well received by community. We also had hardcopy surveys available and conducted youth engagement at several places and events across the month. Once feedback has been collated and analysed, it will be released to the public, in line with our commitment to closing the feedback loop with Community on this major piece of work. Community will have further opportunity to be involved in the development of the document once a draft has been created.

23/01/2025 - Councillors were briefed in December on the Council Plan and will be briefed again in late January on the planned approach for engagement. The engagement program will take place through February and March and will include face-to-face session with all townships, a weeklong shopfront engagement in Hamilton CBD, online engagement through EngageHQ and hard copy surveys in customer service points. It will also include targeted engagement sessions with harder to reach stakeholders such as young people, first nations and disability groups.

16/10/2024 - Planning for the Council Plan engagement program has commenced, with a working group established of senior managers and Comms & Engagement team staff. A draft Engagement plan has been discussed at ELT, with a final proposal to presented in the coming weeks. Councillors will be briefed on the proposal once inductions have commenced.

Last Updated: 17-Apr-2025

1.2 Support and promote a healthy community

1.2.1 Provide and advocate for accessible, inclusive and equitable Council services, facilities, activities and participation practices

Action Title: 1.2.1.1 Installation of solar lights around Lake Hamilton

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Bill Scott - Manager Project Management Office	In Progress	01-Jul-2024	30-Jun-2025	80%	75.00%	GREEN

Action Progress Comments: 14/11/2024 - New Senior PM is now on board and has developed the Specification and documentation for the request for tender to be released with the target of awarding in February's Council meeting. Program in place to deliver the project by end of May 2025.

31/12/2024 Tender award scheduled for February Council Meeting with a confirmed program indicating project completion May 2025.

28/4/2025 Works progressing well and still largely on schedule, may push into June due to delays in supply of luminaires however works will be underway in May 2025

Last Updated: 28-Apr-2025

Action Title: 1.2.1.2 Ensure all new and renewal recreation projects include design principles that are accessible, inclusive and equitable.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Susannah Milne - Manager Community Wellbeing	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 22/04/2025 - Since the last reporting period the pump track has been completed and opened. Melville Oval has reached practical completion and has resulted in a development that provides facilities that are inclusive and universally accessible.

21/01/2025 - Since the previous reporting period, works on the Pump track project has commenced and has included the inclusion of accessible footpath to allow greater access to the facility from the car park to the Pump Track/skate park. Also the base for the Pump Track has been changed to concrete which offers a more accessible surface. Works will soon commence on the installation of the Pump Track.

The upgrade to the Hamilton Olympic Swimming Pool, has also been completed.
06/12/2024 - All current Recreation projects have has an accessibility focus applied with respect to new and renewal projects. For example the following projects have taken into consideration accessible aspects:
- Melville Oval - pedestrian access and pathways around and within the new buildings and pathways. Design of an all abilities access players ramp for entry onto the oval.
- Hamilton Olympic Swimming Pool Upgrade - removal and upgrade of access ramp to comply with accessibility requirements and remove entrapment issues.
- HILAC - carpark improvements to line marking, drop off and pick up zones to reduce congestion, improve accessibility and safety.
- Playgrounds working with local organisations to improve inclusive play equipment and access to the All Abilities Playground and Lake Hamilton.

Last Updated: 22-Apr-2025

Action Title: 1.2.1.2 Gender Impact Assessment process is embedded in standard practice within the organisation for all community functions. Documentation is centralised.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Tahlia Homes - Manager People and Culture	In Progress	01-Jul-2024	30-Jun-2025	90%	75.00%	GREEN

Action Progress Comments: 22/04/2025 - Training session has been arranged for Monday 26 May 2025 which will also assist with a Gender Impact Assessment for the new Council Plan. Training is being facilitated by the 'Equality Institute' for all Executive, Managers and selected staf. 21/01/2025 - Councillors will receive training on the Gender Equality Act to ensure they are familiar with Gender Impact Assessment requirements and benefits. Councillor training will ensure they are aware what to look for in briefing papers and can ask informed questions. Once Council Plan is adopted, Governance Coordinator and Manager People and Culture will review actions and create a Gender Impact Assessment schedule to ensure compliance with obligations under the Gender Equality Act. Gender Impact Assessments are reported to the Commission for Gender Equality as part of reporting obligations under the Act.
15/10/2024 - Currently finalising the Policy and Procedure Develpoment Guidelines which has a link to the Gender Impact Assessment. Once this document has been finalised communication with go out to all staff via the Exchange, Teams and on our intranet for them to be able to access the guidelines and link to the Gender Impact Assessment.

Last Updated: 22-Apr-2025

Action Title: 1.2.1.8 Construct new cricket nets at Pedrina Park

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Susannah Milne - Manager Community Wellbeing	In Progress	01-Jul-2024	30-Jun-2025	65%	75.00%	GREEN

Action Progress Comments: 22/04/2025 - Project has commenced and is being managed by the Project Management Office, and is progressing through the project deliverable milestones.

21/12/2025 - Tender process has been completed and the tender awarded, Project Management Office has taken over delivery and Recreation are facilitating an engagement meeting with St Andrews Cricket Club on the 21/12 (today) to finalise location and project timelines.

06/12/2024 - Tender process has been completed and a report will be taken to the Council meeting on the 11 December 2024 to award the tender. This project is being funded through Council, a grant from Cricket Australia and the St Andrews Cricket Club and is an identified priority from the Pedrina Park Master Plan and Pedrina Park User Groups.

Last Updated: 22-Apr-2025

Action Title: 1.2.1.9 Improve access and reduce barriers to women and girls accessing and using Southern Grampians Community Sports Infrastructure.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Susannah Milne - Manager Community Wellbeing	In Progress	01-Jul-2024	30-Jun-2025	62%	75.00%	AMBER

Action Progress Comments: 22/04/2025 - Education and awareness process has commenced on the policy and action plan through regular User Group meetings.

06/12/2024 - Council have adopted the Southern Grampians Fair Access Policy and Action Plan which will now be implemented with the Recreation Services as the lead and in partnership with South West Sports Association.

Last Updated: 22-Apr-2025

1.2.2 Support and encourage participation in quality arts and cultural, education, leisure, recreation and sporting opportunities

Action Title: 1.2.2.1 Review annual implementation plan for the Southern Grampians Arts and Culture Strategy

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Joshua White - Gallery Director	In Progress	01-Jul-2024	30-Jun-2025	76%	75.00%	GREEN

Action Progress Comments: Jan - 2025 Individual teams within the Gallery are reviewing their implementation actions and requirements to deliver over the following 12 months.
April 2025 - Program plan shave been developed for each area, public programs and exhibitions with associated implementation plans. Confirmation is requires of a small number of programs.

Last Updated: 23-Apr-2025

Action Title: 1.2.2.1 Engage outlying townships and community to identify opportunities for access to theatre performances/cinema.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Susannah Milne - Manager Community Wellbeing	In Progress	01-Jul-2024	30-Jun-2025	60%	75.00%	AMBER

Action Progress Comments: 22/04/2025 - 'Hall Stories' has been commissioned for the Dunkeld Community for August.

21/12/2025 - This item has not progressed at this time due to the Christmas and New Year period, it will be explored as a part of the Service Review that has been commissioned to review the operations of the PAC and Cinema.

06/12/2024 - The PAC team worked with Stirling Place to bring a production to the Dunkeld community, unfortunately the show was cancelled due to the lack of ticket sales. The team will work with communities to identify opportunities to take shows to the community or to increase accessibility to shows within the PAC through a consultation process.

Last Updated: 22-Apr-2025

Action Title: 1.2.2.2 Grow membership of Hamilton Library and increase focus on adult programs

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Alison Quade - Manager Communications and Engagement	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 22/04/2025 -

Adult Programs: New library programs were introduced in February with fantastic numbers in attendance. Two author talk events were sold out and 'Giggle and Games', a new trivia and games group for adults, commenced with great success. Regular events like Krafty Krew and 'Ask us How' continued to be well supported. 382 people attended 31 adult programs from 01 February-16 April 2025.
Current membership figures were unavailable at the time of preparing this report.

23/01/2025 -
Active Membership: The library has focused on programming which promotes membership including Big Summer Reads campaign and later in the year Warm Winter Reads. The month of Dec 2024 saw 60 new members join the library versus the Dec 2024, when 35 new members joined. This increase in membership is also reflected in YTD totals for 2024-25 indicating 3418 members vs 2023-24 totals of 3375 membership.
Adult Programs: In February the library will introduce new adult programs including a Seniors board game/triva group and visiting Author events. The library is also planning a strategic focus on reader services which promotes books, reading and benefits of membership through campaigns, promotions and marketing on social media and within the branch. The focus for later this year will be on Mobile library and Home Library membership. Adult program attendance YTD for 2024-25 has seen 489 adults attend 53 programs.

28/10/2024 -
Active Memberships: Our current active membership figure is 10.8% (percentage of municipal population that have been active borrowers of a library collection item in the last 3 years). Our goal is to increase this (to a similar Council average) of 13.6% through a combination of activities, programs, promotions and improvements to library spaces.
Adult Programs: 2023-24 we had 74 Adult programming sessions with 1,129 participants. We have now dedicated a budget to these specific programs allowing us to direct resources towards programs for adult education, connection and personal development. We are working on an itinerary of events for next calendar year including partnered, one-off and ongoing programs and aiming for a 25% increase in number of sessions and participation.

Last Updated: 22-Apr-2025

Action Title: 1.2.2.5 Review the SGSC playground strategy and develop a sustainable funding proposal for the long term renewal and repair of playgrounds within the municipality.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Susannah Milne - Manager Community Wellbeing	In Progress	01-Jul-2024	30-Jun-2025	35%	75.00%	RED

Action Progress Comments: 22/04/2025 - Works has recommenced on this project and will be developed in conjunction with an internal working group who have connection and

understanding of community needs and demands. Project expected to proceed to draft form over the next 4 months.

21/12/2025 - Work on this item has not progressed due to the redirection of resources to assist in the Relief and Recovery activities associated with the Grampians Fires.

06/12/2024- Work has commenced on this strategy with review of existing strategy, legislative requirements and benchmarking with neighboring Councils. Drafting of the strategy has commenced.

Last Updated: 22-Apr-2025

Action Title: 1.2.2.6 Increase participation to HILAC through implementation of the HILAC Service review.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Susannah Milne - Manager Community Wellbeing	In Progress	01-Jul-2024	30-Jun-2025	65%	75.00%	GREEN

Action Progress Comments: 22/04/2025 - A report will be presented to current Council at the May briefing to update on the implementation of the Service Review recommendations which outlines that key recommendations and next steps with respect to the review.
Since the last reporting period the recruitment and community communication has commenced with respect to the introduction of the preputial swim programing and now the team will commence the review of User Gorup fees and space allocation with the view to increase activation and revenue.

21/12/2025 - The Health & Fitness team have been actively engaging members through the offering of new programs, challenged and membership drives to engage community. The next 6 months will be focusing on the planning and implementation of perpetual swim program to increase participation and income. A customer satisfaction monitoring program has also been engaged to get meaningful feedback to inform service delivery and monitor performance.

06/12/2024 - The new structure has been implemented within HILAC to action the recommendations of the service review and the team will now plan the implementation of perpetual swim program and gym marketing program to increase participation and activity at HILAC.

Last Updated: 22-Apr-2025

1.2.3 Partner with community services and agencies to plan for the outcomes outlined in the Public Health and Wellbeing Plan

Action Title: 1.2.3.3 Develop the 2025-2029 Public Health Plan and incorporate it into the new Council Plan.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Susannah Milne - Manager Community Wellbeing	In Progress	01-Jul-2024	30-Jun-2025	65%	75.00%	GREEN

Action Progress Comments: 2204/2025 - Engagement program has been completed throughout identified communities and key stakeholder groups in conjunction with Council planning process. Results of that information will now be reviewed to identify the key focus areas to develop the next Council Plan which will include the Health and Wellbeing Plan in consultation with Councillors.

21/06/2025 - Presentation to Councillors on the proposed pillars and language to be used has been completed and an engagement plan developed to target community consultation.

06/12/2024 - Work has commenced to prepare the new Public Health Plan which will be incorporated into the Council Plan this work in being undertaken by an identified Steering Committee.

Last Updated: 22-Apr-2025

1.3 Grow a diverse and inclusive community

1.3.2 Encourage, support and celebrate a diverse, multicultural community, including celebrating, recognising and respecting our cultural heritage and engaging our Indigenous communities

Action Title: 1.3.2.2 Delivery of diverse performances/exhibitions across multiple disciplines and targeted demographics.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Joshua White - Gallery Director	In Progress	01-Jul-2024	30-Jun-2025	71%	75.00%	GREEN

Action Progress Comments: 5 December 2024 - future plan has occurred for two-year period to obtain specific demographics.
Jan 2025 - Over the last 12 months the Gallery has utilized its program to target a multitude of demographics, particularly to grow tourists and the local families visitations. These demographics have grown and become substantially sustainable, an example is taking our family audience segment from 3% to 27%. In the coming 12 months programing will continue its works in obtaining these demographics and have a strong focus on local students (currently 2%).
April 2025 - Targeting of all demographics across all programs continues. However, students are a key focus. Schools have been engaged through curriculum-based learning programs. Exhibitions have been developed and will open in May in relation to school aged engagement. Teacher nights have also been arranged to better service schools.

Last Updated: 23-Apr-2025

Action Title: 1.3.2.3 Begin implementation of the Reconciliation Action Plan.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Alison Quade - Manager Communications and Engagement	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 22/04/2025 - People & Culture are continuing to embed First Nations information into inductions, as well as creating an online module for staff to complete Cultural Awareness training, this is currently in the reviewing stages.
A Cultural Immersion Tour is being organised with Eastern Maar to increase understanding of First Nations cultures, history, knowledge and rights. We are optimistic about this connection with Eastern Maar.
Soon Council's Procurement Policy will be up for review, with the First Nations Officer to review and explore opportunities for First Nations owned businesses procurement.
Working Group meetings continue to be held quarterly, allowing time between each meeting to make progress with implementation. This will also continue being a guide for our new plan, once created. Most actions have been implemented or are in progress.

23/01/2025 - Reflect RAP has been formally endorsed by Reconciliation Australia in November. People & Culture are committed to embedding First Nations information into staff induction. This will be an extension to the reviewing of cultural learning needs within our organisation, along with making the RAP a mandatory read for staff, in line with the Code of Conduct. We will continue to attend LGPro Special Interest Group Network meetings, which will go with identifying external stakeholders that we can engage with on our reconciliation journey. RAP Working Group meetings continue to oversee the implementation of our RAP actions and to progress to the next stage. The next focus will be identifying existing anti-discriminations provisions and future needs, and a Cultural Protocols policy is under review.

16/10/2024 - As the Reflect RAP is largely internally focused, a large number of actions have already been implemented over the last 12 months, while the document approval process has been under way. Actions completed include: participating in NAIDOC week activities and providing information for staff to raise awareness of the importance of NAIDOC week; Investigating cultural learning opportunities and holding internal discussions regarding including cultural awareness training through inductions and an online training module; Organising SLT Day on Country to be

held in October; Attending and facilitating regular stakeholder meetings and RAP working groups meetings with Traditional Owner groups.

Last Updated: 22-Apr-2025

1.3.3 Support the increase of social, economic and digital connectedness

Action Title: 1.3.3.2 Identify next priority mobile tower black spot location in the Shire and commence advocacy

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Rory Neeson - Director Wellbeing, Planning and Regulation	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 11/10/24
A meeting has been held with Telstra to commence data collection to identify the next priority site within the Shire before future funding becomes available to make an application for a new mobile tower in 2025.

22/01/2025
A new round of mobile blackspot funding is currently open however Council understands that no new projects are proposed from Telstra to be included for potential funding. In light of this and the shutdown of the 3G network, Council will commence its own process to identify new blackspots seeking feedback from the community in 2025 to inform future advocacy with Telstra and the Federal Government.

16/4/2025
Business case prepared to provide detailed data to inform next priority locations in the Shire for mobile blackspot funding application.

Last Updated: 16-Apr-2025

Action Title: 1.3.3.2 Deliver grant writing workshops across the shire and provide access to quality grant writing support.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Alison Quade - Manager Communications and Engagement	Completed	01-Jul-2024	31-Mar-2025	100%	75.00%	GREEN

Action Progress Comments: 22/04/2025 - The second round of grants closed in late February after an additional week was given to apply due to Bushfires. The round closed with 68 applications - our largest ever number. These grants were awarded at the April Council meeting with $176,064.03 of funding being awarded.

23/01/2025 - The second round of grants opened on Monday 13 January 2025 and will close on Monday 17 February.
5 x Grant info sessions taking place throughout Jan and Feb at the Hamilton Library.
6 x Grant info sessions taking place throughout late Jan, early Feb in townships across Shire.

16/10/2024 -
2 x "Let's Get Ready" sessions prior to round one opening, which were attended by 25 community members.
4 x "Time to Apply" sessions during the round, which were attended by 38 community members.
6 x Grants Roadshow sessions in outer townships, which were attended by 34 people.
10 x One-on-One meetings held for this round, assisting 18 community members.
Grants for 2024-2025 closed on 31 July 2024. 38 applications asking $185,150.81 were received and assessed by members of the community partnership grants team.

Last Updated: 22-Apr-2025

1.3.4 Provide, promote and support appropriate and accessible services, facilities and activities for younger residents

Action Title: 1.3.4.2 Review Kindergarten Infrastructure Service Plan to understand the capacity and resources required to meet the funding changes with respect to State Government Kindergarten Reforms

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Susannah Milne - Manager Community Wellbeing	In Progress	01-Jul-2023	30-Jun-2025	64%	0.00%	GREEN

Action Progress Comments: 22/04/2025 - Department of Education has requested a meeting to progress this project, a meeting has been organised to discuss data and review template.

21/01/2025 - No further action has occurred on this over the Holiday period, due to leave and kindergarten providers not operating during the holiday period.

06/12/2024 – Data has been provided from the department but they have not provided the template format to collate the data, this project will be progressed in the next 6 months with assistance from the Asset Team and consultation with Kindergarten providers within our municipality.

17/07/2024 - Funding and timelines have been extended by the Department of Education to reflect the delaying in providing correct data with respect to the revised State Budget Allocation for Pre-prep and Three year old Kindergarten. We are waiting for revised data based on the new funding targets and revised template that the department will request that we use to develop the revised KISP

16/04/2024 - Progression of this action is reliant on the Department of Education to provide correct and updated data on the relation to forecast demand against the supply of the available Kindergarten positions within the Shire, which needed to be reviewed in line the funding announcement around expansion of hours for 4-year-old kindergarten. Initial meetings with the Department have revealed inaccuracy in the data.

10/10/2023 - Review in early stages of development with the Department of Education collating data that will form the basis of the report
16/01/2024 - update figures from the Department of Education were provided prior to end of November 2023 which will allow for the plan to be updated. Discussions will commence February with the department with respect to format and timing of the plan updates in accordance with their funding timelines.

Last Updated: 22-Apr-2025

Action Title: 1.3.4.3 Develop Cinema and PAC programming that engages younger residents for the 24/25 season.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Susannah Milne - Manager Community Wellbeing	In Progress	01-Jul-2024	30-Jun-2025	68%	75.00%	GREEN

Action Progress Comments: 22/04/2025 - Service review has commenced but the team has been working hard to provide a range of performances that provide for our younger residents through normal programing and the school holiday programing. Attendance at both the Cinema and PAC have increased this year comparable to last.

21/01/2025 - This item has not progressed at this time due to the Christmas and New Year period, it will be explored as a part of the Service Review that has been commissioned to review the

operations of the PAC and Cinema.

06/12/2024 - PAC Service Manager has identified shows and programs to engage with our younger demographic.

Last Updated: 22-Apr-2025

Action Title: 1.3.4.3 Increase opportunities for children and young people to engage in and participate in Council's cultural programs

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Joshua White - Gallery Director	In Progress	01-Jul-2024	30-Jun-2025	70%	75.00%	GREEN

Action Progress Comments: 5 December 2024 - Audience strategy being implemented and two years of program designed - including NGV children exhibitions and digital learning exhibitions for families and children.
January 2025 - A strong focus has occurred including children and young people.
An example is the Gallery obtained a grant of almost $260k over two years from state government agency, Education Victoria, to open a creative space in town for students and youth.
A space has been identified and a lease has been signed, activities will commence in the following term.
Running NGV kids, young creatives, HG Play and school group engagement.
April 2025 - School aged engagement has been a focus of the Gallery. This includes During the term HG play (ages 5-11), HG Young Creatives (ages 12-17) and school holiday workshops. An exhibition tilted Children's Sensorium will open in May.

Last Updated: 23-Apr-2025

Action Title: 1.3.4.3 Continue delivery of the Youth Action Plan with set delivery dates.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Alison Quade - Manager Communications and Engagement	In Progress	01-Jul-2024	30-Jun-2025	60%	75.00%	AMBER

Action Progress Comments: 22/04/2025 - Recruitment of the Youth Officer has not been as straightforward as hoped at the process is continuing. A new Youth Survey is being drafted which will inform the actions and activity for the future, as well as a new Youth policy and Charter. This survey will take place in May/June 2025.
23/01/2025 - Actions from the Youth Action Plan continued to December 2024 with the delivery of youth events (the JAM, pool parties, creative workshop, educational programs) which were all well attended and/or sold out. Coordination of Youth Network and Live for life support also continued through to Dec 25. Our Youth Engagement Officer responsible for these tasks has resigned and recruitment is now underway.

28/10/2024 - Actions from the Youth Action Plan continue to be rolled out through the community development team. Actions include coordination and facilitation of the Southern Grampians Youth Network, development of mentor networks through the L2P program, support for the Live4Life program through executive group membership and provision of a Youth Mental Health First Aid trainer, and increasing inclusion and belonging through activities for LGBTIQA+ youth. Plans are in train to convene a Youth Forum for all stakeholder and interested young people in 2025.

Last Updated: 22-Apr-2025

Action Title: 1.3.4.4 Deliver final 6 months of current Freeza funding, working with new and established youth groups to deliver events and activities for 12–25-year-olds in Southern Grampians Shire.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Alison Quade - Manager Communications and Engagement	Completed	01-Jul-2024	31-Dec-2024	100%	75.00%	GREEN

Action Progress Comments: 23/01/2025 - FreeZa funded events have been completed with the final events in Dec/Jan being very well attended. Over 330 people came to HOSP on Thursday 19 Dec for an end of year pool party and a free movie on Friday 20 Dec saw the cinema close to sold out. Free court hire at HILAC has continued throughout the school holidays.

28/10/2024 - A huge range of activities have taken place/are planned for the final months of the current FReeZA funding. Through September school holidays there were:
-Three sold out free movie sessions at Hamilton Cinema
-Free court hire for all sports at HILAC
-Free youth gaming event at PAC attracting over 50 young people
-Youth animation and drawing workshop with Hamilton Gallery
The JAM youth concert was a sell-out event, doubling the attendance from the previous year. Stage build, lighting and entertainment was fully provided by young people from the shire.
The YUMCHA Halloween picnic, a youth pottery workshop series, pool parties and a youth busking comp will round out the activities for 2024.

Last Updated: 23-Jan-2025

1.4 A safe community

1.4.1 Collaborate with law enforcement authorities and other agencies to support community safety and crime prevention

Action Title: 1.4.1.1 Foster established relationships with key emergency agencies. Directors and/or CEO to chair MEMPC meetings to lead and focus Shire priorities

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Daryl Adamson - Manager Shire Strategy and Regulation	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 17/04/2025 - MEMP Committee scheduled and ongoing. Post Grampians bushfires focus and damaged water points within the Shire.
09/12/2024 - MEMP Committee scheduled and ongoing. Fire prevention is the focus for the December period.
23/09/2024 - MEMP Committee scheduled and ongoing.

Last Updated: 17-Apr-2025

1.4.2 Demonstrate leadership in gender equality, cultural diversity and inclusiveness for all

Action Title: 1.4.2.1 Provide opportunities to promote and celebrate inclusion and gender diversity in young LGBTIQA+ people, through the continued facilitation of the YUMCHA Hamilton group.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Alison Quade - Manager Communications and Engagement	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 22/04/2025 - Activities for the YUMCHA group have resumed, however this group is now being led by the team at Headspace. Council continue to play a facilitation role. Young LGBTIQA+ will continue to be supported and celebrated through FReeZA events and IDAHOBIT Day celebrations.

23/01/2025 - YUMCHA group bus trip to Heathmere Queer Music festival in December had 20 young people attend and had a fantastic night. The two officers (one from Council, one from Brophy) who facilitated the YUMCHA group have both resigned so YUMCHA activities may be on hold until we fill those positions, pending discussions with Headspace about their continued

support.

28/10/2024- YUMCHA group continue to meet fortnightly and continue to plan and attend events that celebrate and promote inclusion. In August, 20 young people from Southern Grampians attended the Horsham pride prom as a group which was a fantastic celebration. The YUMCHA Halloween Picnic is happening this week - an event fully planned and carried out by the SG YUMCHA group. There will also be a bus trip in December to a queer youth music festival in Heathmere.

Last Updated: 22-Apr-2025

Action Title: 1.4.2.4 Plan consultation for the development of the 2026 - 2030 Gender Equality Action Plan.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Tahlia Homes - Manager People and Culture	In Progress	06-Jan-2025	30-Jun-2025	70%	75.00%	GREEN

Action Progress Comments: 22/04/2025 - Equality Institue training has been arranged for 26 May 2025, assisting with embedding the actions of the Plan. Planning has commenced for consultation on the new plan, however this won't start until later in 2025 / early 2026 in line with the Commission for Gender Equality reporting dates.
21/01/2025 - Councillor training includes reporting dates and a brief discussion on consultation for the Gender Equality Action Plan 2026. The first priority is the final report for the current plan and then consultation will begin for the 2026 plan in the second half of this year.
02/12/2024 - Planning of consultation will commence when Tahlia Homes, Manger People and Culture returns from leave on the 6 January 2025

Last Updated: 22-Apr-2025

1.4.4 Partner with our community and key agencies and stakeholders to reduce the incidence of domestic and family crime

Action Title: 1.4.4.1 Allocate emergency funding for accommodation on a case by case basis. Continue regular catchup meeting with VicPol to apply a multi agency approach.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Daryl Adamson - Manager Shire Strategy and Regulation	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 17/04/2025 - Council initiated various community support functions during the Grampians bushfires
09/12/2024 - Council continues to carry out is statutory functions and has provided assistance in emergency relief operations.
23/09/2024 - Emergency accommodation provided as determined and requested by external agencies.

Last Updated: 17-Apr-2025

2 Grow our Regional Economy

2.2 Increase our regional profile

2.2.2 Invest in and advocate to the responsible agencies for the improvement and maintenance of the Shire's natural and cultural attractions to improve the visitor experience

Action Title: 2.2.2.1 Commence constuction of new stairs, viewing platform and pedestrian bridge at Nigretta Falls

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %

Bill Scott - Manager Project Management Office	In Progress	01-Jul-2024	30-Jun-2025	66%	75.00%	GREEN

Action Progress Comments: 14/11/2024 - RFT complete with the contract award pending for the December Council meeting. Construction planned for completion by the end of March 2025.

31/12/2024- Supply and construction tender awarded in December 2024 with a confirmed supply and construction program indicating project completed April 2025.

28/4/2025 Practical completion time has slipped out to late June due to Council delays in authorising manufacture while confirming agreed colour schemes for Glenthompson and Nigretta with community groups engaged.

Last Updated: 28-Apr-2025

Action Title: 2.2.2.1 Progress a business case and detailed design for sites as identified in the Volcanic Trail Masterplan

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Rory Neeson - Director Wellbeing, Planning and Regulation	In Progress	01-Jul-2024	30-Jun-2025	65%	75.00%	GREEN

Action Progress Comments: 10/09/2025
A grant application was submitted to the State Government to fund a Volcanic Trail Masterplan with the outcome to be advised later to 2024.

22/01/2025
Council was successful in obtaining a grant through the State Government for $70,000 complemented by a Council contribution of $20,000 to completed a business case for the Volcanic Trail Masterplan. Procurement of a consultant will occur in early 2025 with the project to commence in March.

16/04/2025
Consultant appointed and project has commenced including visit to Shire, meetings with key stakeholders and Councillor briefing. Draft report to now be prepared to be presented to Council later this year.

Last Updated: 16-Apr-2025

2.2.3 Ensure clear and accurate wayfinding for our region including traditional ownership recognition to improve the visitor experience

Action Title: 2.2.3.3 Complete Dunkeld visitor signage project

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Rory Neeson - Director Wellbeing, Planning and Regulation	In Progress	01-Jul-2024	31-Mar-2025	65%	75.00%	GREEN

Action Progress Comments: 11/10/24
Meetings have commenced with Parks Victoria to determine suitable messaging and sites for the signs. Some preliminary concept designs are currently being prepared for the project.

22/01/2025
Draft concepts have been developed to be shared with the local community and other government stakeholders before installation works commence in March-April 2025.

16/04/2025
Final concepts completed to be installed in May 2025.

Last Updated: 16-Apr-2025

2.2.4 Develop strategies that not only attract visitors but encourage them to consider living, learning or investing in the Shire and grow the Visitor Economy

Action Title: 2.2.4.2 Prepare Structure Plans for the Townships of Coleraine and Cavendish

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Rory Neeson - Director Wellbeing, Planning and Regulation	In Progress	01-Jul-2024	30-Jun-2025	65%	75.00%	GREEN

Action Progress Comments: 11/10/24
Myers Planning have been awarded the contract to complete the two projects. Staff have visited both township progress associations to advise them of the timeline of the works which will commence following the Council Elections. Background research for the project has also commenced from the contractor.

22/01/2025
Background reports for this project have been completed for the first round of consultation with the community scheduled to be completed in February 2025.

16/04/2025
Consultation sessions have been held for both projects in March with the consultant now completed follow up engagement and commencing the preparation of the draft structure plans.

Last Updated: 17-Apr-2025

Action Title: 2.2.4.4 Complete the Regional Visitor Services Strategy

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Rory Neeson - Director Wellbeing, Planning and Regulation	Completed	01-Jul-2024	31-Dec-2024	100%	75.00%	GREEN

Action Progress Comments: 11/10/24
The draft strategy has been completed which will be presented to the Grampians Tourism Board for formal endorsement.

22/01/2025
The Regional Visitor Services Strategy has been completed and endorsed by the Grampians Wimmera Malle Tourism Board.

Last Updated: 22-Jan-2025

2.3 Continue to support the development of a skilled workforce

2.3.1 Advocate for educational pathways that provide access to tertiary, vocational, education and career opportunities

Action Title: 2.3.1.2 Support the Hamilton Careers Expo

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %

Rory Neeson - Director Wellbeing, Planning and Regulation	Completed	01-Jul-2024	30-Jun-2025	100%	75.00%	GREEN

Action Progress Comments: 11/10/24
The career expo was held at the Hamilton PAC on 17 July which was supported by Council and saw over 20 businesses attend as well as students from years 9,10 and 11 from all of the schools in our Shire.

Last Updated: 11-Oct-2024

Action Title: 2.3.1.3 Implement Hamilton Gallery Nest Project

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Joshua White - Gallery Director	In Progress	01-Jul-2024	30-Jun-2025	82%	75.00%	GREEN

Action Progress Comments: 5 December 2024 - Location has been determined and lease has been signed, pilot programs for offsite have been delivered though the Gallery and start up equipment has been purchased. Shop front to be fitted out before end of year. This is a two-year project.
January 2025 - Shop fit out to occur within the month, reporting to state government has commenced, branding and educational materials have started to be developed.
April 2025 - The position for an educator for the Nest has been advertised and the first lesson commences on 30th April.

Last Updated: 23-Apr-2025

Action Title: 2.3.1.3 Support funding application for the operation of the Country University in Hamilton

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Rory Neeson - Director Wellbeing, Planning and Regulation	In Progress	01-Jul-2024	30-Nov-2024	75%	75.00%	GREEN

Action Progress Comments: 11/10/24
Council has assisted SW TAFE with a funding application for a Country University in Hamilton with a formal application to the Federal Government to be submitted in October 2024.

10/1/2025.
No update still awaiting outcome of application.

1/05/2025
Application was successful with officers now working with SW Tafe to set up community board and commence the project.

Last Updated: 01-May-2025

2.3.4 Provide support for businesses to adapt to the digital economy

Action Title: 2.3.4.4 Hold training sessions that support businesses to adapt to the digital economy

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Rory Neeson - Director Wellbeing, Planning and Regulation	Completed	01-Jul-2024	30-Jun-2025	100%	75.00%	GREEN

Action Progress Comments: 11/10/24

Two training sessions have been held in Hamiton supporting business to adapt to the digital economy with further sessions planned for early 2025.

10/01/2025
No further update.

1/05/2025
All training sessions have been held which were well attended by local businesses.

Last Updated: 01-May-2025

2.4 Support local business and industry

2.4.1 Support and promote a collaborative approach to marketing and investment

Action Title: 2.4.1.4 Council to engage with businesses to understand SpendMapp data

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Rory Neeson - Director Wellbeing, Planning and Regulation	In Progress	01-Jul-2024	30-Jun-2025	80%	75.00%	GREEN

Action Progress Comments: 11/10/24
Council has been sending out information via local media and directly to businesses throughout the first quarter of 2024 with updates made around the presentation of this messaging to make it easier for business to understand.

10/01/2025
Council continues to complete media and send out updates to local businesses as data become available.

01/05/2025
Council continues to complete media and send out updates to local businesses as data become available. Over the last quarter this has included data relating to the impact of the Grampians Fires.

Last Updated: 01-May-2025

2.4.2 Support and facilitate business development and growth initiatives

Action Title: 2.4.2.2 Complete stage 1 of the Business Facade Improvement Program

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Rory Neeson - Director Wellbeing, Planning and Regulation	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 11/10/24
At the September Council Meeting a report was presented providing grants to 20 business through the first round of the Business Facade Improvement Program.

10/01/2025
Grants have been awarded with many businesses commencing work on undertaking the project they have applied for funding to complete.

01/05/2025
Half the businesses have completed their project and completed acquittals with the remainder currently underway.

Last Updated: 01-May-2025

2.4.3 Streamline services to reduce red tape in approval process

Action Title: 2.4.3.2 Business Facilitation Officer to implement strategies to improve the customer experience

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Daryl Adamson - Manager Shire Strategy and Regulation	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 17/04/2025 - Business facilitation officer has moved into business-as-usual functions. Focus on the business facade program
09/12/2024 - During the Quarter Councils website has been updated to provide up to date information and a better user experience.
23/09/2024 - Business facilitation officer continues to implement strategies with the Planning Team to improve internal processes.

Last Updated: 17-Apr-2025

3 Maintain and Renew our Infrastructure

3.1 Plan and maintain sustainable assets and infrastructure

3.1.1 Review and adopt asset management plans to align with future service levels, environmental and financial sustainability

Action Title: 3.1.1.1 Heat Mapping established

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Daryl Adamson - Manager Shire Strategy and Regulation	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 17/04/2028 - Heat mapping data collected and report being written. Data has been uploaded to POZI (GIS)
09/12/2024 - Heat mapping tender has been awarded.
23/09/2024 - Heat mapping scope of works developed, and tender loaded into Councils tendering system.

Last Updated: 17-Apr-2025

Action Title: 3.1.1.4 Review the Asset Management System

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Aaron Smith - Manager Assets	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 01/05/25 Conquest training completed.

Exploration of Conquest as our Asset Information System has been reviewed. Findings include a lack of User Training, Lack of use of Mobility Tool & General non-upload of Asset Information to the System.

User and Administration training in Conquest to be completed in Q3 24/25.
Data from Building Condition Assessments, Asset Valuations, Road Condition Surveys to be uploaded to Conquest in Q3 24/25.
Partial upload of Stormwater Asset Information (Completed Q2 24/24).
Further Stormwater Asset Information to be added as survey is completed in Q4 24/25.
This represents a significant uplift in our major Asset categories held in Conquest

31/12/2024-Council's current Asset Management System continues to be used with updated asset data with continuous improvement undertaken on updating the asset management system with current data..

Last Updated: 07-May-2025

Action Title: 3.1.1.5 Establish Building Renewal Program for implementation and a 5-year Building Renewal Program.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Aaron Smith - Manager Assets	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 01/05/25 Condition assessments used to develop 2025/26 Budget - Property Strategy to be developed to inform long term financial sustainability and capital pipeline

Building Condition Assessments have been completed; most of our significant building assets have now been captured over the previous 3 years.

Consultation with stakeholders to commence - review of condition information to be incorporated into 5 year building renewal program.

Last Updated: 07-May-2025

3.1.2 Maintain infrastructure to the agreed standard and ensure the principles of sustainability and universal design are considered in the planning and development of infrastructure to support community access and connection meeting the needs of the communities

Action Title: 3.1.2.3 Continued advocacy for external funding to progress Trail developments.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Aaron Smith - Manager Assets	Completed	01-Jul-2024	30-Jun-2025	100%	75.00%	GREEN

Action Progress Comments: Funding secured (Enabling Tourism Fund) for business case and design developments for trails across Southern Grampians

Last Updated: 24-Jan-2025

Action Title: 3.1.2.4 Adopt Hamilton Moves Transport Strategy and develop Programs resulting from the strategy

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Aaron Smith - Manager Assets	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 01/05/2025 Hamilton Moves scheduled for Council Meeting 11 June 2025 for adoption.

Programs resulting from strategy have been identified and in some cases completed or underway already and are defined with the draft strategy for adoption'.

Last Updated: 07-May-2025

3.1.3 Deliver to the Council and the community, a strategic approach to our Arts and Culture infrastructure including progressing the new Hamilton Gallery

Action Title: 3.1.3.4 Stage 1 of the Hamilton Gallery design development to be completed

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Joshua White - Gallery Director	In Progress	01-Jul-2024	30-Jun-2025	77%	75.00%	GREEN

Action Progress Comments: 5 December 2024 - Architects, Angelo Candalepas have been awarded the tender. The first round of engagement sessions has commenced. Concept designs for public review to occur in March.
January 2025 - Angelo and his team have undertaken the first round of co-design. The site analysis is almost complete and the next phase is draft drawings.
April 2025 - ACA have finalised the co design sessions with a wide range of the community including families, children, councillors, gallery staff, council staff and First nations. Site analysis is complete. The concept designs will be complete and presented to council over the coming weeks.

Last Updated: 23-Apr-2025

3.2 Safe and well-maintained transport routes and infrastructure for all modes of travel

3.2.1 Continue to advocate for improved transport services and connections through funding and partnerships with relevant agencies

Action Title: 3.2.1.6 Finalise Hamilton Moves Progress Trails design development to progress project readiness.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Aaron Smith - Manager Assets	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: Completed designs have progressed to intersection treatments on the Hamilton – Coleraine Rail Trail at the Hamilton end of the Trail. Works to be completed March 2025.

Last Updated: 24-Jan-2025

3.2.3 Provide infrastructure that supports a connected and active community

Action Title: 3.2.3.3 Regional Integrated Transport Plan developed

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Aaron Smith - Manager Assets	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: Update 01/05/25 - Documentation supplied to consultant. Regular meetings occurring.

Project consultant appointed. Council briefing in early 2025 to inform regional transport plan.

Last Updated: 08-May-2025

3.3 Attractive Council-owned and managed community and open spaces

3.3.1 Continue to invest in and activate open spaces within Southern Grampians

Action Title: 3.3.1.3 Development of the Southern Grampians Tree Plan

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Trevor Haley - Manager Works	In Progress	01-Jul-2024	30-Jun-2025	60%	75.00%	AMBER

Action Progress Comments: 10/4/25 - Heat mapping has been completed and a working group has been created to finalise the tree plan.

December 2024 - Council is currently completing heat mapping of the Shire that once done will complete the draft of the tree strategy.
Draft is 50% complete waiting on this final piece before consultation begins.

Last Updated: 10-Apr-2025

3.3.2 Increase green infrastructure and canopy cover and consider climate adaptation in our streetscape redevelopments

Action Title: 3.3.2.1 Complete design development for the Hamilton CBD Streetscape project

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Rory Neeson - Director Wellbeing, Planning and Regulation	In Progress	01-Jul-2024	30-Jun-2025	25%	75.00%	RED

Action Progress Comments: 11/10/2024
A meeting was held in Hamilton in mid-September to outline the timeline and present some initial concepts for Gray Street as part of the Hamilton CBD Project. Further design work is now being completed by the consultants to bring more detailed designs back to the community in 2025.

10/01/2025
Council continues to work with consultants to develop the draft concept plans to be presented to Council at a January briefing.

01/05/2025
As at 31 March, consultation with the community on the draft plans has been completed with these to be presented to Council for adoption at the April Council Meeting.

Last Updated: 01-May-2025

Action Title: 3.3.2.3 Complete the Hamilton CBD Streetscape Design Development, which will inform footpath layout, create safe spaces, and improve plant treatments that add to the vibrancy and activation of the streets.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %

Bill Scott - Manager Project Management Office	In Progress	01-Oct-2024	30-Jun-2025	50%	75.00%	AMBER

Action Progress Comments: 14/11/2024 - Now have appointed contracted PM to manage the project, the works have been awarded and the consultant is finalising timeframes and deliverable with the aim to have concept plans ready in December.

31/12/2024 - Design consultant team engaged and design development underway with community engagement scheduled for early 2025.

28/04/2025 - Council decision was not to proceed with the design as presented as such Practical Completion has been delayed while multiple different options are explored to potentially proceed exploring options to retain the current trees against officer and arborist recommendations.

Last Updated: 28-Apr-2025

3.3.3 Improve and provide opportunities for shared community spaces

Action Title: 3.3.3.2 Development of Governance Structure for the Hamilton Showgrounds, that creates opportunity to facilitate better access and management.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Susannah Milne - Manager Community Wellbeing	In Progress	01-Jul-2024	30-Jun-2025	45%	75.00%	AMBER

Action Progress Comments: 22/04/2025 - Engagement of user groups and advisory committee has been completed on the potential governance models for the Showgrounds. A report will be tabled at briefing on the 28 May 2025, this report will recommend options and next steps.

21/01/2024 - No further updates at this reporting period, engagement with current Advisory Committee planed for February.

06/12/2024 - Position paper and background work has commenced on the preparation of this work, which will include engagement with current user groups and the wider community to develop options paper on how best the Hamilton Showgrounds be managed and the who is best to drive the implementation of the Master Plan.

Last Updated: 22-Apr-2025

4 Protect our Natural Environment

4.1 Protect and enhance biodiversity including the health of waterways, wetlands, soil and air

4.1.1 Advocate for, promote and support natural resource management with stakeholders

Action Title: 4.1.1.3 Collaborate with key stakeholders to deliver on ground projects

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Daryl Adamson - Manager Shire Strategy and Regulation	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 17/04/2025 - Development of masterplan along the Grange Burn initiated. Traditional owner consultation underway.
09/12/2024 - Further works have been completed along the Grange Burn in partnership with the GHCMA and local community groups. Regulatory Services continue to work with the rail committee to achieve outcomes. A recent example is removal of dumped rubbish in a section of the rail trail.
23/09/2024 - Continue to work with various community group to deliver on ground projects in our natural reserves. Projects include aeration pump at Penshurst lagoon, Wannon and Nigretta reserves actions.

Last Updated: 17-Apr-2025

4.1.3 Protect endemic flora and fauna species throughout the Shire

Action Title: 4.1.3.3 Implement key recommendations of the 'Plan for Nature' into Planning Scheme Amendments

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Daryl Adamson - Manager Shire Strategy and Regulation	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 17/04/2025 - Draft planning scheme document review received. Inclusion of the 'Planning for Nature' added as a reference document.

09/12/2024 - Desktop review of biodiversity studies provided to Department Transport Planning for review for potential inclusion into the Planning Scheme.

23/09/2024 - Drafted a letter to the Regional Planning Hub to commence support with Department Transport Planning for the Planning Scheme Amendments.

Last Updated: 17-Apr-2025

4.1.4 Liaise with stakeholders to support and promote sustainable agricultural and land management practices

Action Title: 4.1.4.1 Implement 'Hewett Park' Offset site as an example of sustainable land management practices

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Daryl Adamson - Manager Shire Strategy and Regulation	Completed	01-Jul-2024	30-Jun-2025	100%	75.00%	GREEN

Action Progress Comments: 17/04/2025 - Hewett park offset operational

09/12/2024 - Hewett Park offset site has been fully certified during this quarter. This means Council can now offset native vegetation removal for its own projects or sell the credits to developers on the open market.

23/09/2024 - Finalising with DEECA the requirements to make the site active for offsets. Expect the site to be certified in Quarter 2.

Last Updated: 17-Apr-2025

4.2 Balance environmental protection with Council's support for growth

4.2.1 Ensure land use planning balances growth with appropriate levels of environmental stewardship

Action Title: 4.2.1.5 Commence Structure Plans for Cavendish and Coleraine as a key outcome of the Small Towns Strategy

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Daryl Adamson - Manager Shire Strategy and Regulation	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 17/04/2025 - Community consultation has taken place in both Coleraine and Cavendish. Background reports for both townships developed.
09/12/2024 - Tender has been awarded for both Cavendish and Coleraine. Background documents have been reviewed during the caretaker period and community consultation has been scheduled for the next quarter.

23/09/2024 - Tender developed and advertised. Expect to award in the second Quarter.

Last Updated: 17-Apr-2025

Action Title: 4.2.1.6 Implement actions from the Plan for Nature and RLUS strategies						
Responsible Person	**Status**	**Start Date**	**End Date**	**% Complete**	**Target**	**On Target %**
Daryl Adamson - Manager Shire Strategy and Regulation	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 17/04/2025 - Draft planning scheme document review received. Inclusion of the 'Planning for Nature' added as a reference document.
09/12/2024 - Both strategic documents have been nominated for inclusion into the Southern Grampians planning scheme. The planning minister now needs to consider the amendment.
23/09/2024 - Actions from the Plan for Nature are being implemented. The first phase of this is updating the Planning Scheme.

Last Updated: 17-Apr-2025

4.2.2 Plan and advocate for a low carbon economy through renewable energy, manufacturing and carbon farming

Action Title: 4.2.2.2 Roll out of the carbon emission inventory software for Council operations						
Responsible Person	**Status**	**Start Date**	**End Date**	**% Complete**	**Target**	**On Target %**
Juan Donis - Sustainable Community Lead	In Progress	01-Jul-2024	30-Jun-2025	78%	75.00%	GREEN

Action Progress Comments: 09/04/2025 - Trellis errors and data gaps have been fixed, integration with light fleet fuel consumption is completed.
21/01/2025 - Trellis is operational, still showing up minor errors with the data. There is still work in progress to integrate other emission sources to the inventory
25/11/2024 - Trellis is currently fully operational capturing energy and water data for the FY24/25.
08/10/2024 - Trellis has been appointed to develop a carbon inventory emission for Council. Currently, we are in the process of updating the data to the system

Last Updated: 09-Apr-2025

4.3 Sustainable waste management services

4.3.1 Engage and educate the community to decrease waste to landfill

Action Title: 4.3.1.2 Implement community education programs and bin audits to identify contamination issues						
Responsible Person	**Status**	**Start Date**	**End Date**	**% Complete**	**Target**	**On Target %**
Juan Donis - Sustainable Community Lead	In Progress	01-Jul-2024	30-Jun-2025	90%	75.00%	GREEN

Action Progress Comments: 09/04/2025 - Second bind audit has been scheduled for late May to evaluate any reduction on contamination levels
21/01/2025 - Bin audit report has now been completed and educational material been prepared for the roll out during the last quarter of the financial year.
25/11/2024 - Bin audit has been completed and communication strategy to be prepared before the end of the year.
08/10/2024 - Bin audit tender has been completed pending award. The bin audit will be completed before the end of the year.

Last Updated: 09-Apr-2025

4.3.2 Manage waste efficiently to limit costs, reduce waste and grow circular economy

Action Title: 4.3.2.3 Develop an opportunity report for new waste streams received and processed at Council's transfer station

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Juan Donis - Sustainable Community Lead	In Progress	01-Jul-2024	30-Jun-2025	75%	75.00%	GREEN

Action Progress Comments: 09/04/2025 - All three streams are now collected permanently at the Hamilton transfer stations trials for agricultural bulk bags is planned to be conducted during the last quarter of this financial year
21/01/2025 - Bailing twine, cardboard and soft furnishing are currently separate and repurposed at Hamilton transfer station. Business case for an on-site organics processing facility is under development
08/10/2024 - Ongoing trials continues to take place at Hamilton transfer station, with cardboard collection and ongoing bailing twine collection. The future of these trials will depend on the volume of material received.

Last Updated: 09-Apr-2025

4.3.3 Investigate, support and advocate for opportunities in renewable energy sources and re-use of waste streams

Action Title: 4.3.3.2 Develop a feasibility study for an onsite green waste processing facility

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Juan Donis - Sustainable Community Lead	In Progress	01-Jul-2024	30-Jun-2025	91%	75.00%	GREEN

Action Progress Comments: 09/04/2025 - The business case received as result of the tender process will be presented to Council at the May Council meeting for decision.
21/01/2025 - A tender process for the on-site processing of organic waste at Hamilton transfer station has now been completed and business case currently under development for Council consideration.
25/11/2024 - Expression of interest has been completed and progressed to a tender phase for the supply and operation of an organic processing facility at Hamilton Transfer Station.
08/10/2024- Expression of Interest for onsite organic processing has been completed and now we are moving to a tender phase.

Last Updated: 09-Apr-2025

4.3.4 Partner with key agencies to provide an effective regional response to innovative waste management

Action Title: 4.3.4.2 Participate on regional forums to investigate opportunities for Circular Economy and Waste minimisation

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Juan Donis - Sustainable Community Lead	In Progress	01-Jul-2024	30-Jun-2025	76%	75.00%	GREEN

Action Progress Comments: 09/04/2025 - Ongoing support across the region for partnerships with particular interest on organics processing solutions in Hamilton
21/01/2025 - Ongoing work and commitment with neighboring LGAs for opportunities of collaboration within the circular economy and waste minimisation. Staff attended to the Waste conference in Melbourne were opportunities for tyres recycling were explore.
08/10/2024 - Staff attended to the Circular Economy Forum organised by Wannon Water to explore opportunities for collaboration for the region.

Last Updated: 09-Apr-2025

4.4 Mitigate against and adapt to climate change

4.4.1 Investigate opportunities to reduce emissions and waste

Action Title: 4.4.1.2 Deliver the Sustainability School Competition program across the Shire

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Juan Donis - Sustainable Community Lead	In Progress	01-Jul-2024	30-Jun-2025	80%	75.00%	GREEN

Action Progress Comments: 09/04/2025 - Project was completed and evaluation conducted. Planning for the delivering of the wining ideas is underway.
21/01/2025 - School competition event was completed during December 2024 with the wining project to be funded during the last quarter of the 2024/25 financial year.
25/11/2024 - School competition has been finalised with the main event to be on the 2nd December 2024
08/10/2024 - Ideas have been received from all the participant schools, staff is currently finalising the details for the award event which will take place early December 2024

Last Updated: 09-Apr-2025

4.4.2 Increase capability for emergency preparedness, responsiveness and capacity to recover

Action Title: 4.4.2.3 Initiate Shire emergency exercise with key agencies to test capability and responsiveness.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Daryl Adamson - Manager Shire Strategy and Regulation	Completed	01-Jul-2024	30-Jun-2025	100%	75.00%	GREEN

Action Progress Comments: 17/04/2025 - Significant fires in the Grampians experienced over this quarter. There will be no need to conduct further exercises in this reporting period. Training and fire response reviews have been initiated for key lessons learnt during the bushfire response.
09/12/2024 - Council has now moved to operationally supporting external emergency agencies over the fire danger period. Over 300km of roadsides have now been slashed or tilled and water points/bores operationally tested in preparedness for the fire danger period.
23/09/2024 - Commenced joint exercises with external agencies over this period in preparation for the Fire Danger Period.

Last Updated: 17-Apr-2025

4.4.3 Plan for climate resilience in Council and community infrastructure

Action Title: 4.4.3.2 Minimum Sustainability Standard guidelines are being developed for Council use.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Juan Donis - Sustainable Community Lead	Deferred	01-Jul-2024	30-Jun-2025	11%	75.00%	RED

Action Progress Comments: 8/5/25 - Recruitment of staff undertaken, but won't be enough time to deliver this financial year and will be deferred to 2025/2026.
21/01/2024 - Project on hold due to staff vacancies.
08/10/2024 - Sustainability standard guidelines will be commenced after the Sustainability Strategy is endorsed.

Last Updated: 08-May-2025

5 Provide Strong Governance and Leadership

5.1 Transparent and responsible governance

5.1.1 Strengthen the governance role of Councillors by informing, resourcing, skilling and supporting the role

Action Title: 5.1.1.2 Councillor training and induction program developed and implemented.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Darren Barber - Director People and Performance	Completed	01-Jul-2024	30-Jun-2025	100%	75.00%	GREEN

Action Progress Comments: 8/5/2025 - Councillor Induction complete and Councillors signed declarations attesting to its completion on 7 May 2025.

Councillor Induction was completed over November/ December 2024
With only one module Gender Equality and Diversity to be completed on 29th January 2025

Council has also booked Media training for the new Councilors to complete in March 2025

Last Updated: 08-May-2025

5.1.3 Build social policy and strategy to improve equity, inclusion and diversity within the Shire

Action Title: 5.1.3.3 Review and evaluation of key challenges and initiatives for Gender Equity, Inclusion and Diversity

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Tahlia Homes - Manager People and Culture	In Progress	06-Jan-2025	30-Jun-2025	99%	75.00%	GREEN

Action Progress Comments: 22/04/2025 - This action is captured in action 1.4.2.4 and is part of the organisation's reporting requirements to the Commission for Gender Equality
21/01/2025 - This is incorporated with reports to the Commission. Final progress report for current Gender Equality Action Plan is due in late 2025. This will review all initiatives and objectives of the plan and determine what impact the plan has had. A full review of the initiatives is scheduled as part of the reporting requirement later this year.
2/12/2024 - Review and evaluation early in 2025 when Tahlia Homes, Manager People and Culture returns from leave on 6 January 2025

Last Updated: 22-Apr-2025

Action Title: 5.1.3.4 Ongoing implementation of workforce plan initiatives

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Tahlia Homes - Manager People and Culture	In Progress	06-Jan-2025	30-Jun-2025	99%	75.00%	GREEN

Action Progress Comments: 22/04/2025 - Workforce Plan consultation for 2026+ plan will commence in second half of the year.
21/01/2025 - Workforce Plan will be reviewed and consultation to commence for new Workforce Plan in June 2025. Initiatives in the current plan have been either achieved, or goals changed based on Executive consultation and decision. An example of changes to direction is the Workforce plan indicates that Council will support approximately 12 Traineeship positions per year for school leavers and other interested individuals. Council has continued with the successful Traineeships in the Works Department however, due to limited applications received in 2023 and budget review, no longer offers positions such as Certificate III in Business Administration.
2/12/2024 - Review existing Workforce Plan, commence consultation and development of new Plan early in 2025 when Tahlia Homes, Manager People and Culture returns from leave on 6 January 2025

Last Updated: 22-Apr-2025

5.2 Effective advocacy

5.2.1 Continue to explore and participate in regional partnerships

Action Title: 5.2.1.4 Business Systems process mapping will be undertaken during this time by a project officer and will work closely with the three councils to align and improve CORE Systems

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Matthew Tulloch - Manager Business Systems and Transformation	In Progress	01-Jul-2024	30-Jun-2025	50%	75.00%	AMBER

Action Progress Comments: 22/04/2025 - SGSC staff onboarding for this project has been completed, with ongoing support from the Council's IT team. Staff have built a substantial number of process maps related to critical business processes in preparation for process alignment workshops with our partner councils, starting in the second half of this calendar year. Progress has been positive, with staff reporting that the system is easy to use and will provide high-value returns from the time invested.

21/10/2024 - The SGSC process mapping program rollout is currently in progress, with initial target areas set to be onboarded by the end of December. The process mapping software has been successfully set up, and both onboarding and reporting mechanisms are in place. The IT team has already received training and has been using the new system for several weeks. Onboarding for the Finance and People and Performance (HR) departments is scheduled to begin in early November.

31/12/2024 - The initial phase of the process mapping rollout has been completed. Payroll and Finance have finished step two and are now equipped to develop processes independently. The Shire Strategy & Regulation team is scheduled to commence step two in early February. Executive reporting is currently under development.

Last Updated: 22-Apr-2025

5.3 Committed and skilled staff

5.3.1 Encourage an organisation that values equality, diversity, workplace health, safety and wellbeing

Action Title: 5.3.1.25 Engage with staff to deliver initiatives that meet the mental and physical wellbeing needs of staff.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Tahlia Homes - Manager People and Culture	In Progress	01-Jul-2024	30-Jun-2025	99%	75.00%	GREEN

Action Progress Comments: 242/04/2025 - The Health and Wellbeing Crew continue to deliver initiatives for Council staff. Free skin checks are available to staff on 14, 15 and 16 May 2025. There is a reduction in budget for the 25/26 Financial Year which requires the Health and Wellbeing crew to reassess initiatives and priorities for the second half of 2025.
22/01/2025 - The Health and Wellbeing Committee (named the Health and Wellbeing Crew) are a group of staff who are passionate about enhancing the health and happiness of our workforce through creative and diverse initiatives. The crew is meeting in early February to settle on the iniatives and events for 2025 which includes medical checks, sports afternoons and other health and wellness national days. The 2025 initiatives will be presented to the CEO as executive sponsor of Health and Wellbeing. A brief overview of previous years - 2023 and 2024 initiatives were well received by staff and offered something for everyone. A survey was conducted early 2024 to determine what staff wanted from the Health and Wellbeing Crew for the year and the majority of those initiatives were implemented including 'sit and chat' coffee mornings to encourage mental health discussions and connection, defensive driving, Winter Solstice event with guest speaker Paul Watkins and an international day of happiness 'Expression of Interest' where staff submitted their ideas to bring a little happiness to their workplaces.
15/10/2024 - currently finalising a Health and Wellbeing 2025 calendar, which will highlight important events throughout out each month. The calendar will be sent to all staff and made available on the intranet. Monthly event highlights will happen either in the form of advice / information via the Exchange or an event will be organised for all staff.

Last Updated: 22-Apr-2025

5.4 Customer focused services

5.4.1 Improve the customer experience by delivering accessible and responsive customer service

Action Title: 5.4.1.1 Develop and implement new method/system to measure community satisfaction with Council Customer Service.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Alison Quade - Manager Communications and Engagement	Deferred	01-Jul-2024	30-Jun-2025	50%	75.00%	AMBER

Action Progress Comments: 23/01/2025 - An alternative option was considered for this year however it was determined it needed further investigation and could not be implemented this year. JWS will be used again for the Community Satisfaction Survey. Research will continue into solutions to correctly measure satisfaction with customer service.

16/10/2024 - Research into alternative solutions has commenced and a meeting with potential provider is taking place later this month.

Last Updated: 23-Jan-2025

5.4.2 Ongoing review of service delivery to maximise efficiency and improve outcomes

Action Title: 5.4.2.2 Research and initial development of a community app for Council

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Matthew Tulloch - Manager Business Systems and Transformation	In Progress	01-Jul-2024	30-Jun-2025	60%	75.00%	AMBER

Action Progress Comments: 22/04/2024 - An early version of a Council app has been developed in collaboration with our partnered app developer. Internal consultation has been completed around the feature design and user experience testing, prior to the next stages of development, which will include further feature development and community consultation.

31/12/2024 - Integration with CouncilWISE is in progress. The IT and Communications teams are also analysing the most frequent community interactions with Council to prioritise additional functionality development

21/10/2024 - A potential partner company has been identified, developing a Local Government app that aligns with our desired outcomes. This opportunity is currently under investigation to see if it is a viable option.

Last Updated: 22-Apr-2025

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Southern Grampians
SHIRE COUNCIL

Internal Resolution Procedure – Councillor Model Code of Conduct

Adopted ** June 2025

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INTERNAL RESOLUTION PROCEDURE

Schedule 1A of the Local Government (Governance and Integrity) Amendment Regulations 2024:

1. A Council must implement and adopt an internal resolution procedure that may be followed by Councillors to deal with alleged breaches of the Model Councillor Code of Conduct.
2. The internal resolution procedure of the Council –
   (a) Must include a conciliation process that is to be conducted by –
      i. the Mayor; or
      ii. if the Mayor is party to the matter or is unable to perform the role, functions and duties of the conciliator for any reason, the Deputy Mayor or another person; and
   (b) may include any other process that the Council considers appropriate.
3. The internal resolution procedure of the Council must –
   (a) Detail how a matter that is subject of an alleged breach of the Model Councillor Code of Conduct is to be dealt with, including the circumstances in which the available processes may be used to deal with a matter; and
   (b) Detail how a Councillor can access the internal resolution procedure, including how a Councillor may initiate a request to have a matter dealt with through the available processes; and
   (c) Detail, for the purposes of the conciliation process specified in subclause (2)(a) or any other processes under subclause (2)(b) –
      i. The roles and responsibilities of the parties to a matter; and
      ii. The role, functions and duties of the person responsible for conducting the relevant processes; and
      iii. Any support the Council is to make available to the parties or the person conducting the relevant processes; and
      iv. The form and availability of a record of any agreement, resolution or outcome reaches through the process.

1. Purpose

This Internal Resolution Procedure is adopted under and in accordance with section 140 of the *Local Government Act 2020* (the Act) and regulation 12A of the Local Government (Governance and Integrity) Regulations 2020.

2. Scope

This procedure applies to any disputes between Southern Grampians Shire Council Councillors; including an alleged breach of the Model Councillor Code of Conduct.

It does not apply to disputes between Councillors and staff or between Councillors and members of the public.

Disputes between Councillors and staff will be managed by the Chief Executive Officer in accordance with their responsibilities under section 46 of the *Local Government Act 2020* and in consultation with the Mayor.

Disputes between Councillors and members of the public will be considered or referred to the relevant regulatory body.

3. Internal Resolution Process

The Procedure provides parties to a dispute with support to resolve the matter in a way that enables Councillors to move forward and maintain effective working relationships.

This Procedure is designed to minimise cost and disruption to Council and individual Councillors and where possible, avoid disputes escalating and becoming the subject of internal arbitration.

Some disputes may not be appropriate for internal resolution, for example where the health or safety of any person involved in the internal resolution process would be threatened by engaging in the process. In these circumstances, Councillors should discuss whether internal resolution is an appropriate process with the Mayor or Deputy Mayor, if the Mayor or Deputy Mayor are party to the dispute, the Councillor Conduct Officer.

The following internal resolution steps may be undertaken by Councillors to resolve disputes:

1. Informal discussion between involved parties in an attempt to resolve the dispute.
2. If step one is unsuccessful, application to the Councillor Conduct Officer for a conciliation discussion between the involved parties, to be facilitated by the Mayor or Deputy Mayor.
3. If step one and two are unsuccessful, application to the Councillor Conduct Officer for mediation between the involved Councillors, conducted by an external qualified mediator.

For the purpose of clarity, the Mayor or facilitator can provide guidance as to what stage the resolution process can commence from.

3.1 Requesting Internal Resolution Assistance

An application to the Councillor Conduct Officer for internal resolution assistance must be in writing and contain:

1. The name of all involved Councillors; and
2. A brief summary of the dispute and alleged breach of the Model Councillor Code of Conduct; and
3. A summary of steps previously taken to attempt to resolve the dispute; and
4. Be signed and dated.

Councillors may apply to commence the internal resolution process in respect of disputes to which they are a party only and may not make an application on behalf of other parties.

The Mayor may commence an internal resolution process in accordance with this procedure in relation to any dispute which they become aware of and are not required to be party to that dispute.

3.2 Facilitated Conciliation Discussion

Councillors are obliged to participate in conciliation unless there is an Occupational Health and Safety reason for not participating, in which case, a reason why conciliation is not appropriate must be provided in writing to either the Mayor or applicable facilitator, no more than five (5) business days after receiving notice of conciliation and responses will be kept confidential.

The facilitator of the discussion will be determined as follows:

1. The Mayor will facilitate the conciliation discussion; or
2. If the Mayor is either involved in the party or determines is unable to perform the role of facilitator, then the discussion will be facilitated by an external mediator.

On receipt of an application for a conciliation discussion, the Councillor Conduct Officer will:

1. Provide a copy of the application to:
    a. The facilitator of the discussion; and
    b. The Chief Executive Officer; for information only; and
    c. The other party or parties to the dispute.
2. Seek confirmation from the other party or parties to the dispute; that they will participate in the conciliation process. A response is required within five (5) business days.
3. If all parties consent to the conciliation participation, the Mayor or facilitator must arrange a time, date and appropriate facilities for the holding of the discussion.
4. If a party does not consent to conciliation and provides an Occupational Health and safety reason as to why, the Mayor will determine a way forward.
5. The Councillor Conduct Officer is to provide the Mayor with the administrative support necessary to arrange and conduct the conciliation.

All Councillors are responsible for conducting themselves in a courteous and respectful manner at all times during conciliation.

Council will not provide any substantive guidance or advice about the subject matter of the dispute or pay the costs of legal advice or representation for any Councillor in connection with this Procedure. Parties to a dispute may seek their own legal or other advice at their own cost, if they choose to do so.

Following a conciliation discussion, the facilitator of the discussion will provide the Councillor Conduct Officer with a written summary of the outcome of the conciliation discussion.

The Councillor Conduct Officer will provide a copy of the written summary to:

1. The Chief Executive Officer; for information only; and
2. The parties to the discussion.

The application and written summary of the outcome will not be provided by the Councillor Conduct Officer, Mayor or Chief Executive officer to any person, including other Councillors, who is not a party to the dispute.

If any party considers the conciliation discussion did not resolve the dispute or if any party declined to participate in the conciliation discussion, a party may apply to the Councillor Conduct Officer to commence an external medication process.

4. External Mediation

On receipt of an application for external mediation and in accordance with section 3.1 of this procedure, the Councillor Conduct Officer will:

1. Confirm that an internal resolution discussion has been conducted or attempted in relation to the dispute; and
2. Provide a copy of the application to:
    a) The Mayor and the Chief Executive Officer; for information only; and
    b) The other party or parties to the dispute.
3. Seek confirmation from the other party or parties to the dispute; that they will participate in the external mediation. A response is required within five (5) business days.
4. If all parties consent to external mediation, the Mayor or facilitator must arrange a time, date and appropriate facilities for the holding of the discussion.

5. If a party does not consent to external mediation and provides an Occupational Health and safety reason as to why, the Mayor will determine a way forward.
6. If the other party/parties consent to participation in the external mediation, select and engage the services of a mediator and, with the cooperation of all parties, arrange a time, date and appropriate facilities for holding the mediation.

The mediator selected for the purposes of the external mediation must not be a Councillor or member of Council staff and will be selected at the discretion of the Councillor Conduct Officer.

Following the mediation, the mediator will provide a written summary of the outcome of the mediation to the Councillor Conduct Officer. The Councillor Conduct Officer will provide a copy of the written summary to:

1. The Mayor and Chief Executive Officer; for information only; and
2. The parties to the dispute

The application and written summary of the outcome will not be provided by the Councillor Conduct Officer, Mayor, mediator or Chief Executive Officer to any person, including other Councillors, who is not a party to the dispute.

If any party considers that the external mediation did not resolve the dispute or if any party declined to participate in the external mediation, the parties will amicably move forward and strive to maintain a professional working relationship and comply with the standards of conduct and values as contained within the Model Councillor Code of Conduct.

5. Breaches of the Model Code of Conduct

Where a Councillor or Councillors reasonably believe that the behaviours of another Councillor constitutes a breach of the Model Code of Conduct, an application may be made for a finding of misconduct to the Principal Councillor Conduct Registrar.

It is strongly encouraged that, where possible, the Councillor or Councillors seek to informally resolve the matter by following the process outlined in this Procedure prior to making an application.

6. Roles and Responsibilities of Parties

Councillors who are parties to a dispute are expected to:

1. Participate in the dispute resolution process, to the extent possible.
2. Act genuinely and in good faith in attempting to resolve the dispute.
3. Focus on the issue or topic of the dispute and refrain from using inappropriate language or intimidating behaviour.
4. Respect the principles of natural justice, by raising relevant matters within the dispute and allowing the other party or parties to respond.
5. Protect the confidentiality of the internal dispute resolution process and any documents created in connection with the process.

Facilitators and mediators who participate in the internal resolution process are expected to:

1. Apply the principles of natural justice, by ensuring:

a. Each party has an opportunity to be heard and respond to claims or allegations against them; and
b. Each party is treated fairly and without bias.
c. Act impartially by not taking or appearing to take sides.

d. Help the parties discuss and develop options that may assist to discuss or resolve the dispute. It is not, however, the role of the facilitator or mediator to decide who is right or wrong or impose an outcome or sanction on any party.

e. Help the parties to communicate and keep discussion relevant and respectful

f. Document the outcome of any discussion or mediation and provide a copy to the relevant parties, in accordance with this procedure.

The Councillor Conduct Officer is expected to:

1. Receive applications for internal dispute resolution assistance in accordance with this procedure.
2. Liaise with parties to arrange the time, date and facilities for conciliation discussions or mediations, in accordance with this procedure respectively.
3. Provide support and assistance to parties to disputes to understand and navigate the internal resolution process. It is not the role of the Councillor Conduct Officer to write, review or provide advice on documents created in connection with the internal resolution process (such as applications or discussion outcomes), or on the merits of the dispute.

Each party to a dispute may choose to have one support person present at a discussion or mediation. The support person is present to provide emotional support to the individual. This may be through taking notes, suggesting breaks if required, assisting the individual to understand questions or processes. The support person is not present to act as an advocate or representative, or to speak on behalf of, the individual.

REVIEW

This Internal Resolution Procedure will be reviewed every four years.

AUTHORISED

The Model Councillor Code of Conduct is prescribed under Schedule 1 of the Local Government (Governance and Integrity) Amendment Regulations 2024 and is included for ease of reference.

The Internal Resolution Procedure was adopted by Council XX XX 2025.

END

MODEL COUNCILLOR CODE OF CONDUCT

Schedule 1 of the Local Government (Governance and Integrity) Amendment Regulations 2024.

Definitions

In this Schedule—

discrimination means unfair or unfavourable treatment of a person on the grounds of an attribute specified in section 6 of the *Equal Opportunity Act 2010.*

Standards of Conduct

1. Performing the role of a Councillor

A Councillor must do everything reasonably necessary to ensure that they perform the role of a Councillor effectively and responsibly, including by—

(a) representing the interests of the municipal community by considering and being responsive to the diversity of interests and needs of the municipal community; and

(b) being fit to perform the role of a Councillor when acting in that capacity or purporting to act in that capacity; and

(c) diligently using Council processes to become informed about matters which are subject to Council decisions; and

(d) not performing or purporting to perform any responsibilities or functions of the Chief Executive Officer; and

(e) acknowledging and supporting the Mayor in the performance of the role of the Mayor, including by—

(i) respecting and complying with a ruling of the Mayor as the chair of Council meetings (unless dissenting from the ruling in accordance with the Council's Governance Rules); and

(ii) refraining from making public comment, including to the media, that could reasonably be perceived to be an official comment on behalf of the Council where the Councillor has not been authorised by the Mayor to make such a comment.

2. Behaviours

(1) A Councillor must treat others, including other Councillors, members of Council staff and members of the public, with dignity, fairness, objectivity, courtesy and respect, including by—

(a) not engaging in demeaning, abusive, obscene or threatening behaviour, including where the behaviour is of a sexual nature; and

(b) not engaging in behaviour that intentionally causes or perpetuates stigma, stereotyping, prejudice or aggression against a person or class of persons; and

(c) not engaging in discrimination or vilification; and

(d) supporting the Council, when applying the Council's community engagement policy, to develop respectful relationships and partnerships with Traditional Owners, Aboriginal community-controlled organisations and the Aboriginal community; and

(e) supporting the Council in fulfilling its obligation under the Act or any other Act (including the Gender Equality Act 2020) to achieve and promote gender equality; and

(f) ensuring their behaviours and interactions with children are in line with the Council's policies and procedures as a child safe organisation and obligations under the Child Wellbeing and Safety Act 2005 to the extent that they apply to Councillors.

(2) A Councillor, as an individual at the workplace, must take reasonable care for their own health and safety and take reasonable care that their acts or omissions do not adversely affect the health and safety of other persons by—

(a) adhering to applicable systems and policies put in place by the Chief Executive Officer to manage risks to health and safety in the workplace; and

(b) complying, so far as the Councillor is reasonably able, with any reasonable instruction that is given by the Chief Executive Officer to manage risks to health and safety.

(3) A Councillor must act in accordance with any policies, practices and protocols developed and implemented under section 46 of the Act that support arrangements for interactions between members of Council staff and Councillors.

3. Good governance

A Councillor must comply with the following Council policies and procedures required for delivering good governance for the benefit and wellbeing of the municipal community—

(a) the Council's expenses policy adopted and maintained under section 41 of the Act;

(b) the Council's Governance Rules developed, adopted and kept in force by the Council under section 60 of the Act, including in relation to—

(i) conduct in Council meetings or meetings of delegated committees; and

(ii) requesting and approval of attendance at Council meetings and meetings of delegated committees by electronic means of communication; and

(iii) the Council's election period policy included in the Council's Governance Rules under section 69 of the Act, including in ensuring that Council resources are not used in a way that is intended to influence, or is likely to influence, voting at a general election or by-election;

(c) the Council's Councillor gift policy adopted under section 138 of the Act;

(d) any direction of the Minister given under section 175 of the Act.

4. Integrity

(1) A Councillor must act with integrity, exercise reasonable care and diligence and take reasonable steps to avoid any action which may diminish the public's trust and confidence in the integrity of local government, including by—

(a) ensuring that their behaviour does not bring discredit upon the Council; and

(b) not deliberately misleading the Council or the public about any matter related to the performance of their public duties; and

(c) not making Council information publicly available where public availability of the information would be contrary to the public interest.

Note

See the public transparency principles set out in section 58 of the Act.

(2) A Councillor must not, in their personal dealings with the Council (for example as a ratepayer, recipient of a Council service or planning applicant), expressly or impliedly request preferential treatment for themselves or a related person or entity.

5. The Model Councillor Code of Conduct does not limit robust public debate

Nothing in the Model Councillor Code of Conduct is intended to limit, restrict or detract from robust public debate of issues in a democracy.

Southern Grampians
SHIRE COUNCIL

Planning Committee Minutes

28 May 2025

Held at 10.00 am in the
Martin J Hynes Auditorium
5 Market Place, Hamilton

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1. ATTENDEES

Councillors

Cr Jayne Manning (Chair)
Cr Katrina Rainsford

Officers

Mr Rory Neeson, Director Wellbeing Planning and Regulation
Ms Marg Scanlon Director Infrastructure and Sustainability
Mr Daryl Adamson, Manager Shire Strategy and Regulation
Ms Anita Collingwood, Planning Coordinator
Ms Mindy McCubbin, Senior Statutory Planner
Mr Rhys Oatley, Senior Statutory Planner

Coleraine Residents

Marleene Lee
Lorraine Jeugen
Lyn Boxer
Fran Malone

Applicant

James Course, Gawk (applicant for items 6.1 and 6.2)

Landowner

Warren Butcher, (landowner 7 Ballarat Road Hamilton)

Minutes

Sharon Clutterbuck, Executive Assistant - Director Wellbeing Planning and Regulation

2. WELCOME AND ACKNOWLEDGEMENT OF COUNTRY

3. APOLOGIES

Kerrie Jones, Hayley Rigby, Chris Rigby, Freida Troeth, Paul (no last name given) - Objectors to Item 6.1

4. CONFIRMATION OF MINUTES

Minutes of the Meeting held on 18 December, 2024 have been circulated.

RECOMMENDATION

That the minutes of the meeting held on 18 December, 2024 be confirmed as a correct record.

RESOLUTION

That the minutes of the Planning Committee meeting held on 18 December, 2024 be confirmed as a correct record.

Moved **Rory Neeson**
Seconded **Cr Katrina Rainsford**

Carried

5. DECLARATION OF INTEREST

nil

6. MATTERS FOR DECISION

6.1 TP-09-2025 Gordon Street Coleraine

Executive Summary

Planning application TP-09-2025 seeks a permit under Clause 52.05 (Signs) for the construction and display of externally illuminated major promotional signage. The proposal is consistent with policy objectives related to Urban Design (Clause 15.01-1S), Sign Design (Clause 15.01-1L), the Industrial Zone and 52.05 signage policy. The proposed sign satisfies the application requirements outlined in Clause 52.05- 6 by being designed to complement the existing character of the surrounding area, including its industrial and open landscape features. The applicant has agreed to remove the external illumination from the sign and has provided a landscape plan to show proposed planting around the proposed sign. These can form conditions on any permit issued. The sign has been designed to have minimal visual impact with no other promotional signs exceeding 18 square metres within 200 metres of the subject site. The proposal avoids visual clutter and maintains the area's distinctive character. It is recommended the Planning Committee approve the application for a planning permit.

Proposal

The application proposes:

- A freestanding, double-sided major promotion sign.
- Two 18.26m² display faces.
- Sign dimensions 8.3m x 2.2m, standing at an overall height of 5.15 metres.
- Structure to include a permanent 0.27m² 'Gawk' business identification sign on the skirting board to the left of each display face
- The total advertising area on each side, including the business identification, will measure 18.53m². Total signage area of 37.06m².
- Sign display to feature third-party advertising within the designated advertising space.
- A Catching Pen café sign is also located on the subject site.
- Installation of steel structure in line with engineer's specifications, steel erection via crane (no onsite welding, all bolted together), installation of cladding/display face fixed on to steel structure.
- The proposed sign is to be externally illuminated on both sides. The lighting would be switched off from midnight to 4.00am.

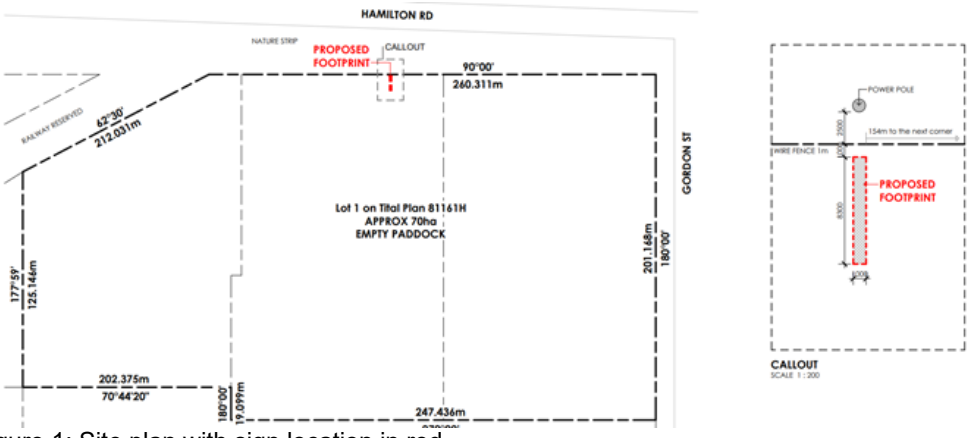


Figure 1: Site plan with sign location in red

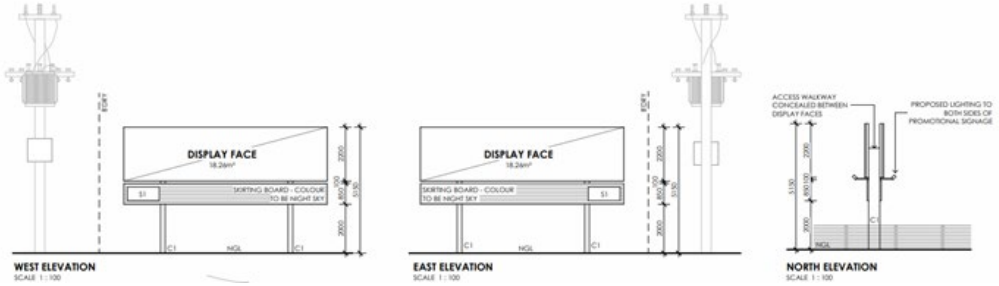


Figure 2: Sign elevation views

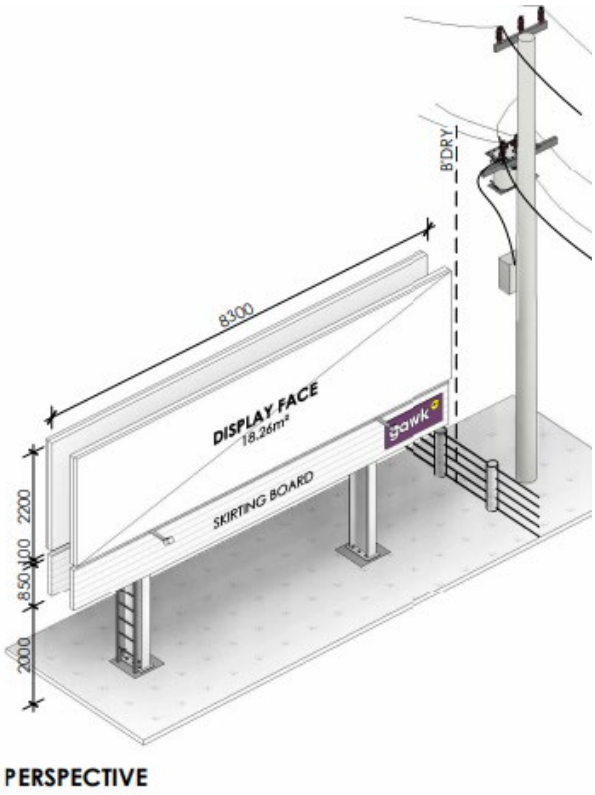


Figure 3: Sign 3D perspective

Subject Site
The site currently comprises of three parcels 6.88 hectares in area with the major promotional signage to be located on the parcel as Lot 1 on Plan of Subdivision 381161H. The lot is rectangular in shape, with the north boundary fronting Hamilton Road. The land is a cleared, vacant block, entirely within the Industrial 1 Zone.

Locality
The land is surrounded by farming zoned land as well as General Residential Zone 2 and Low Density Residential Zone 2 across the road from the subject site. Hamilton Road is a Transport Road Zone 2 (TRZ2). The land is in proximity to Cavendish-Coleraine Road, Glenelg Highway (B160) to the north, Coleraine Racecourse, Racecourse Road to the east, Coleraine Golf Club, B&E Automotive Services, Supportive Solutions, Tarrenlea Road, Robertson Street, McKebery Street to the south, and Coleraine Railway Station, CFA Fire Station, McConochie

Street, Coleraine Railway Reserve to the west. The majority of properties along this part of Glenelg Highway have medium to large sized business identification signage. This signage comes in many forms and sizes, with a mixture of medium-large scale business identification and promotion signage. These signs are a mixture of wall mounted, fascia and freestanding signs.

Figure 4: Zoning map of the subject site and surrounds (Source: Pozi)

Figure 5: Aerial imagery of the subject site and surrounds (Source: Pozi)

There is another major promotion sign along Glenelg Highway situated over 100 metres from the site, which is a previously constructed Gawk Outdoor sign and there is a Mobil service station sign along the highway at 42 Whyte Street Coleraine, over 500 metres away.

Figure 6: Major promotion sign along Glenelg Highway

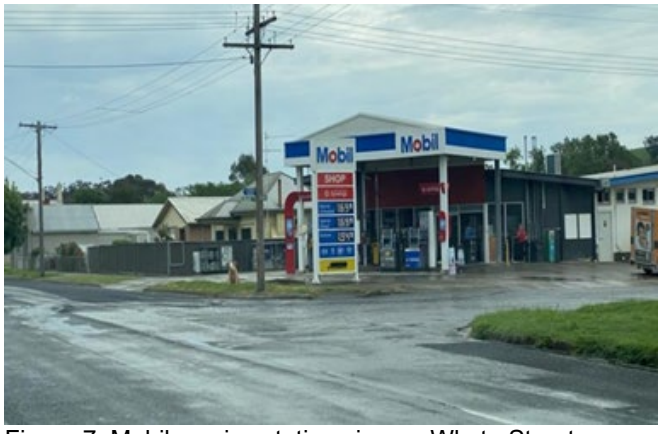


Figure 7: Mobil service station sign on Whyte Street

Site History
There is no relevant site history.

Public Notification

The application underwent a minimum 14-day public notification process, which concluded on 10 April 2025.

Eleven (11) objections were received. The key concerns raised can be summarised as follows (with the Planning Officer's Response in plain text following) –

- *The subject site has sensitive open space and residential interfaces, highly contrary to Clause 52.05-8, notably but not limited to:*
  a. *Coleraine Golf Club (Farming Zone);*
  b. *East Park (PCRZ) to the West; and*
  c. *Low Density Residential directly over the Road.*

  While the site is located near a residential zone, the nearest dwellings are situated over 90 metres from the proposed sign. In regard to the Farming Zone and Public Recreation, there is over 100 metres of separation between these locations and the proposed sign. The Glenelg Highway provides a significant physical and visual buffer between the sign and these areas.
  To further minimise any potential impact on nearby properties a condition on any permit issued could require the removal of external illumination from the sign, reducing the visual impact of the sign, particularly during evening hours.
  A condition on any permit issued should also require the planting of native vegetation around the sign to soften the area around the sign.

- *There is an advertising board already available where events are advertised, a fire danger sign and a 'Coleraine Sign' nearby*
  The existing signs service important community messaging functions and are all small-format structures under five square metres in size directly on the road reserve and are some distance from the proposal. The proposed signage will not dominate this existing signage, nor will it result in a negative cumulative impact.

- *External illumination is excessive in scale to its surroundings and does not have regard to the natural environment, open space or rural setting.*
  A condition on any permit issued should require the removal of external illumination from the sign.

- *External illumination will be distracting to drivers on the highway.*

A condition on any permit issued should require the removal of external illumination from the sign.

- *The sign would have an impact on a driver's line of site to all residents departing and arriving, contrary to Clause 52.05.*
  The proposed sign would have no impact on a driver's line of sight due to the sign display area being raised 2.85 metres above ground level. It is located on industrial land and private property, set back from the road. The sign will not obstruct the road or interfere with visibility for drivers.

- *Residents will have no control over what advertising is shown on the sign*
  All advertising must comply with national standards and codes for design and content, and the intention is to prioritise local businesses as the primary advertisers.

- *Sign will affect the amenity of nearby properties*
  The sign is located on industrial land, set back from the road, and designed to minimise visual intrusion, ensuring it does not unreasonably impact the amenity of nearby residential properties.

- *Size of sign too large*
  The size of the proposed sign is consistent with an existing sign on the opposite side of Coleraine. A sign of this scale is appropriate and in keeping with the visual character of Coleraine and other rural townships.

- *Will spoil views of the countryside and site presents an open rural landscape along the edge of the gateway into town*
  The sign has been carefully sited to minimise visual disruption, and with the potential for framing vegetation, it will help ensure that the proposal integrates with the surrounding open landscape.

- *Would not enhance entry to Coleraine as required by the policy.*
  The sign provides an opportunity by supporting local businesses and economic development in the Southern Grampians Shire.

- *Would not complement the character of the area*
  The character of the surrounding area is mixed, and the advertising signage is appropriate for the context of the site.

- *Land has always been used for farming and agriculture rather than industry*
  While historically used for agriculture, the land is zoned for industrial purposes, and the proposed signage is an acceptable outcome for this zoning. Signs in the Industrial 1 Zone, as per Clause 33.01-5, are in Category 2 – Office and industrial. Clause 52.05-12 of the planning scheme sets out the provisions for signs in this category. There are low limitations for signs in office and industrial areas, with no prohibited sign types.

- *It presents an opportunity for the sign to be graffitied, which has happened to a similar sign in town*
  A condition will be required on any permit condition that signs are to be maintained in good condition to the satisfaction of the Responsible Authority. This is a standard condition of signage permits and would enable Council to compel the landowner to repair or maintain the sign should it be defaced or otherwise damaged.

- *Town will receive no benefit from promotional signage*
  The applicant, Gawk, has commented that the intent of their business is to prioritise local businesses, creating platforms for them to promote their services and reach both local and visitors audiences.

- *Inconsistent with state and local policy outcomes*
  The proposal supports local economic activity and land use zoning objectives, aligning with policy outcomes that encourage appropriate use of industrial land and signage.

- *Not enough information about the sign online*
  The application documents were published on Council's website for the duration of the notice period, including planning report and plans.

- *Difficulty accessing Greenlight to object*
  Council accepts objections in written form, whether submitted online, via email or on paper.

- *Errors in letters being sent to affected properties*
  Letters were sent to surrounding property owners and occupiers in accordance with the *Act*. Site notices were also placed on the subject site to capture properties that may not get advertised to.

Referrals
There are no referral authorities specified in the planning scheme for an application of this type.

Planning Framework

Clause 00 Purpose and Vision
- 02.03-1 – Settlement
- 02.03-6 – Economic Development

Clause 10 Planning Policy Framework
- Clause 15 – Built Environment and Heritage
  - 15.01-1S – Urban Design
  - 15.01-1L – Sign Design

Zone
Clause 33.01 Industrial Zone
The land is located within the Industrial Zone
Advertising sign requirements are at Clause 52.05. This zone is in Category 2.

Overlays
None

Clause 50 Particular Provisions
Clause 52.05 – Signs
Clause 52.05-12: A planning permit is required to construct and display externally illuminated major promotional signage in Category 2.

Clause 60 General Provisions
Clause 65 Decision guidelines
Because a permit can be granted does not imply that a permit should or will be granted. The responsible authority must decide whether the proposal will produce acceptable outcomes in terms of the decision guidelines of this clause.

Other Considerations

Title Restrictions
N/A

Bushfire Prone Area
Yes - The subject site is covered by a Designated Bushfire Prone Area. This overlay identifies the need to prioritise the protection of human life, and the requirements for non-combustible materials to be used in developments.
Generally, this mapped area is relevant to larger scale developments with habitable rooms. However, the proposal uses non-combustible materials and would not adversely affect the surrounding land in the case of a bushfire.

Cultural Heritage
N/A

Assessment
ZONE
Clause 33.01 Industrial Zone
It is the purpose of the zone:
To implement the Municipal Planning Strategy and the Planning Policy Framework.
To provide for manufacturing industry, the storage and distribution of goods and associated uses in a manner which does not affect the safety and amenity of local communities.

Sign requirements are at Clause 52.05. This zone is in Category 2.

The subject site, located at Gordon Street, Coleraine VIC 3315, falls within the Industrial 1 Zone (IN1Z) under the Southern Grampians Planning Scheme. This zoning designation is intended to support manufacturing, storage, and distribution industries in a manner that ensures the safety and amenity of the surrounding community. Promotional signage is generally appropriate in the IN1Z and the proposed sign complements and enhances the character of the area, aligning with the site's industrial surroundings.

PARTICULAR PROVISIONS
Clause 52.05 Signs
Purpose
To regulate the development of land for signs and associated structures.
To ensure signs are compatible with the amenity and visual appearance of an area, including the existing or desired future character.
To ensure signs do not contribute to excessive visual clutter or visual disorder.
To ensure that signs do not cause loss of amenity or adversely affect the natural or built environment or the safety, appearance or efficiency of a road.

Under Clause 52.05, the site falls within Category 2 for advertising signage, which supports signage that is consistent with industrial land use and integrates with the local streetscape without affecting safety or visual amenity. The proposed promotional sign meets these requirements by providing a commercial advertising solution in a prominent location, helping to promote local businesses and support industrial activity.

The decision guidelines of 52.05-8
Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate (with Officer's assessment proceeding the decision guideline consideration in italics.

52.05-8 DECISION GUIDELINE CONSIDERATION	**OFFICER'S ASSESSMENT**
All signs	

The character of the area	**Satisfied** The proposal is consistent with the built form on the Subject Site and surrounding properties.
Impacts on views and vistas	**Satisfied** The signs would not impact any views or vistas as the site is not located near any important views.
Relationship to the streetscape, setting or landscape	**Satisfied** The proposal is in an industrial area adjacent to a main road.
The relationship to the site and building	**Satisfied** N/A- there is no built form on the subject site.
The impact of structures associated with the sign	**Satisfied** The sign structure would be minimal and simple in design.
The impact of any illumination	**Satisfied** A condition on any permit issued would require external illumination to be removed.
The impact of any logo box associated with the sign	**Satisfied** The logo box would have minimal impact and will be appropriate given its size and subordinate placement.
The need for identification and the opportunities for adequate identification on the site or locality	**Not applicable** The sign would be used for advertising purposes rather than business identification purposes, though local businesses could pay to advertise on the sign.
The impact on road safety	**Satisfied** The signs would not impact road safety through the following hazards listed at 52.05-8; Obstructs a driver's line of sight at an intersection, curve or point of egress from an adjacent property. *The proposed sign would have no impact on any line of sight. There is a substantial setback from the property boundary to the carriageway and the sign is raised 2.58m above ground level which is above eye level for drivers of most vehicles.* Obstructs a driver's view of a traffic control device or is likely to create a confusing or dominating background that may reduce the clarity or effectiveness of a traffic control device. *The closest traffic control device is over the other side of the road, so the sign would not be viewed as the background to this sign.* Could dazzle or distract drivers due to its size, design or colouring, or it being illuminated, reflective, animated or flashing. *Strict guidelines apply to the design and coloration of advertising. The sign will not be reflective, animated or have flashing features and a condition on any permit issued can require the external illumination to be removed.* Is at a location where particular concentration is required, such as a high pedestrian volume intersection. *The location is deemed to have no special consideration.* Is likely to be mistaken for a traffic control device, because it contains red, green or yellow lighting, or has red circles, octagons, crosses, triangles or arrows. *The advertising face is reviewed under strict guidelines to ensure no traffic control symbolism exists. The sign itself has a large display area that would not be readily confused with traffic signs which are standardised.*

	Requires close study from a moving or stationary vehicle in a location where the vehicle would be unprotected from passing traffic. *As with other advertising billboards, the proposal would not require a detailed study.* Invites drivers to turn where there is fast moving traffic or the sign is so close to the turning point that there is no time to signal and turn safely. *It is understood that the proposed sign would not have any traffic control symbolism or directional advice to drivers. The nearest intersections would be over 200m from the proposed sign. The sign would not distract the driver from an immediate turn off. A condition on any permit issues would require this.* Is within 100 metres of a rural railway crossing. *The proposal is not within 100m of a rural railway crossing.* Has insufficient clearance from vehicles on the carriageway. *The proposal will not affect the current clearance conditions on the subject site due to the nominated setback.* Could mislead drivers or be mistaken as an instruction to drivers. *Gawk, has commented that the intent of their business is to prioritise local businesses, creating platforms for them to promote their services and reach both local and visitors audiences, which would not mislead drivers or be mistaken as an instruction to drivers. A condition on any permit issues would require this.* Is within 100 metres of a rural railway crossing. *The sign is not within 100 metres of a rural railway crossing.*
Major promotion signs	
The effect of the proposed major promotion signs on:	
Significant streetscapes, buildings and skylines.	**Satisfied** There are no significant streetscapes, buildings or skylines in the immediate area.
The visual appearance of a significant view corridor, view lines, gateway location or landmark site identified in a framework plan or local policy.	**Satisfied** The signs would not be located in a significant view corridor or near a landmark site, signified by the absence of any design or landscape overlays.
Residential areas and heritage places	**Satisfied** The site is not located in an Heritage Overlay and the signage would not create any significant impact on the potential future emerging residential uses of the area.
Open space and waterways	**Not applicable**
When determining the effect of a proposed major promotion sign, the following locational principles must be considered:	
Major promotion signs are encouraged in commercial and industrial locations in a manner that complements or enhances the character of the area.	**Satisfied** The proposed signage would be appropriate in the context of the Transport Road Zone 2. Other major promotional signs are located within proximity to the site along major roads.
Major promotion signs are discouraged along	**Satisfied**

forest and tourist roads, scenic routes or landscaped sections of freeways.	The signage is not considered to be in a sensitive location given that the external illumination would be required to be removed as a condition on any permit issued. The proposed signage is not located within any scenic or tourist locations.
Major promotion signs are discouraged within open space reserves or corridors and around waterways.	**Satisfied** The site is not within a riparian area or other open space reserve or corridor but within privately owned, industrially zoned land at a township gateway.
Major promotion signs are discouraged where they will form a dominant visual element from residential areas, within a heritage place or where they will obstruct significant view lines.	**Satisfied** As per the above comments.
In areas with a strong built form character, major promotion signs are encouraged only where they are not a dominant element in the streetscape and except for transparent feature signs (such as neon signs), are discouraged from being erected on the roof of a building.	**Satisfied** The area does not have a strong built form character and no dominant design features have been identified. The proposed sign is not to be erected on or near any buildings.

The sign would abut Hamilton Road and be over 250 metres from Gordon Street and over 150 metres away from the Hamilton Coleraine Rail Trail. While the site is located near a residential zone, the nearest dwellings are situated over 90 metres from the proposed sign. In regard to the Farming Zone and Public Recreation, there is over 100 metres of separation between these locations and the proposed sign. The Glenelg Highway provides a significant physical and visual buffer between the sign and these areas. To further minimise any potential impact on nearby properties a condition on any permit issued would require the removal of external illumination from the sign, reducing the visual impact of the sign, particularly during evening hours. The height and scale of the sign is consistent with other signage in the region, including a nearby Gawk Outdoor promotional sign on Glenelg Highway over 100 metres away and the Mobil service station sign on Whyte Street, over 500 metres away, both of which contribute to an established local signage context.

MUNICIPAL PLANNING STRATEGY
Clause 2.03-1 – Settlement
It is policy that ineffectively planning for future urban growth, Council will:

- Provide and enforce clear settlement boundaries.
- Plan for and support development that readily accommodates the future extension of sewerage services.
- Plan for and improve services and facilities to meet the needs of local communities.
- Ensure development does not negatively affect environmental values.
- Retain the non-urban break between Hamilton and Tarrington for agricultural uses.
- Support development that contributes to the economic viability and liveability of the Shire's smaller towns, including small-scale light and service industries.

- Facilitate a range of housing types in serviced residential locations, particularly infill development.
- Plan for an ageing population by supporting aged care facilities.
- Attract new residents by encouraging a broad range of housing and lifestyle options.
- Retain the existing low density housing character in Wannon.

The proposed sign on Gordon Street, Coleraine, supports the objectives of Clause 02.03-1 by contributing to the economic sustainability and liveability of Coleraine, recognised as one of the Shire's smaller townships. The sign offers a platform for local businesses, light industry, and service providers to promote their services and is expected to stimulate economic activity and attract both visitors and customers. Consistent with the focus of Clause 02-03-1 on protecting environmental values, the sign has been designed to minimise its environmental impact and complies with relevant planning controls. Its strategic location reinforces the town's character and infrastructure, helping to create new economic opportunities and support the area's long-term prosperity.

Clause 2.03-6 – Economic Development
It is policy that in managing and supporting industrial development, Council will:

- Facilitate new and expanded industry and business offering economic development opportunities.
- Support investment and new employment generating development to diversify the Shire's economic base.
- Plan for suitable sites for industry, especially noxious industry.
- Provide infrastructure for industrial uses, such as roads, drainage, power and sewerage.
- Encourage industrial development that protects residential amenity.
- Facilitate the expansion of mineral sands processing.

The proposed promotional sign on Gordon Street, Coleraine, aligns with the objectives of Clause 02.03-6 by supporting new economic development opportunities within the Shire. Serving as a platform for local businesses to advertise their products and services, the sign is expected to broaden market reach, stimulate business growth, and attract investment contributing to the expansion of Coleraine's economic base. By increasing visibility for commercial and industrial enterprises, the proposal reflects the council's commitment to energising the local economy and enhancing the vibrancy of the region. Located within the Industrial 1 Zone, the sign supports the Shire's strategic direction to encourage industrial growth while safeguarding residential amenity. Its carefully selected position ensures it complements nearby industrial and commercial uses without impacting residential areas.

PLANNING POLICY FRAMEWORK
Clause 15 Built Environment and Heritage
Planning is to recognise the role of urban design, building design, heritage and energy and resource efficiency in delivering liveable and sustainable cities, towns and neighbourhoods.

Planning should ensure all land use and development appropriately responds to its surrounding landscape and character, valued built form and cultural context.

Planning should protect places and sites with significant heritage, architectural, aesthetic, natural, scientific and cultural value.

Planning should incorporate measures to protect culturally significant heritage places in locations exposed to climate related hazards.

Planning must support the establishment and maintenance of communities by delivering functional, accessible, safe and diverse physical and social environments, through the

appropriate location of use and development and through high quality buildings and urban design.

Planning should promote excellence in the built environment and create places that:
- Are enjoyable, engaging, and comfortable to be in.
- Support human health and community wellbeing.
- Accommodate people of all abilities, ages and cultures.
- Contribute positively to local character and sense of place.
- Reflect the particular characteristics and cultural identity of the community.
- Enhance the function, amenity and safety of the public realm.

Planning should promote development that is environmentally sustainable and minimise detrimental impacts on the built and natural environment.

Planning should facilitate development that:
- Is adapted and resilient to climate related hazards.
- Supports the transition to net zero greenhouse gas emissions.
- Minimises waste generation and supports resource recovery.
- Conserves potable water.
- Supports the use of, and access to, low emission forms of transport.
- Protects and enhances natural values.
- Minimises off-site detrimental impacts on people and the environment.

The proposed promotional sign on Gordon Street, Coleraine, supports the objectives of Clause 15 by positively contributing to the local character and reinforcing the area's economic and cultural identity. Its design is sympathetic to the surrounding industrial setting, enhancing public amenity, safety.

Clauses 15.01-1S – Urban Design
Objective
To create urban environments that are safe, healthy, functional and enjoyable and that contribute to a sense of place and cultural identity.

Strategies
The location and design of the proposed sign appropriately address these objectives, with more detailed direction provided under Clause 52.05, the relevant permit trigger that outlines specific signage requirements.
- Require development to respond to its context in terms of character, cultural identity, natural features, surrounding landscape and climate.
- Ensure development contributes to community and cultural life by improving the quality of living and working environments, facilitating accessibility and providing for inclusiveness.
- Ensure the interface between the private and public realm protects and enhances personal safety.
- Ensure development supports public realm amenity and safe access to walking and cycling environments and public transport.
- Ensure that the design and location of publicly accessible private spaces, including car parking areas, forecourts and walkways, is of a high standard, creates a safe environment for users and enables easy and efficient use.
- Ensure that development provides landscaping that supports the amenity, attractiveness and safety of the public realm.
- Ensure that development, including signs, minimises detrimental impacts on amenity, on the natural and built environment and on the safety and efficiency of roads.
- Promote good urban design along and abutting transport corridors.

The siting and design of the proposed sign adequately meets the objectives and strategies of Clause 15.01-1S, with more specific guidance coming from Clause 52.05-08 (see decision guideline considerations above).

15.01-1L – Sign Design
Objective
To ensure that signs are designed to be compatible with the scale, character and appearance of the site and area.

Strategies
Encourage a high standard of design that provides diversity and adds visual interest.
Encourage signs relating to the use of the building as opposed to products.
Ensure that the design, location and appearance of signs does not create a traffic hazard.
Support promotional, floodlit, animated, high wall, panel, pole and sky signs that provide diversity and visual interest and are not detrimental to the character and appearance of the streetscape or individual buildings.

Policy guidelines
Consider as relevant:
- Discourage multiple signs under verandahs, except where:
    - The use occupies a long street frontage.
    - Signs are more than 2.7 metres above the footpath and located more than 750 millimetres from the kerb.
- Discourage promotional signs, except where:
    - No part of the sign projects more than 3.7 metres above ground level.
    - The advertisement area does not exceed 2 square metres.
    - The sign complements the activity carried out on the land.

The proposed promotional sign on Gordon Street, Coleraine, aligns with Clause 15.01-1L by adding visual interest to the streetscape without contributing to clutter. This double-sided, freestanding sign is positioned for visibility for both motorists and pedestrians while avoiding any traffic safety concerns. Its design is well-integrated with the surrounding industrial context, supporting signage that enhances the area's streetscape character and reinforces its functional role. The sign promotes safety, visual variety, and cohesive design, consistent with the clause's objectives, subject to conditions.

GENERAL PROVISIONS
Clause 65 Decision Guidelines
Because a permit can be granted does not imply that a permit should or will be granted. The responsible authority must decide whether the proposal will produce acceptable outcomes in terms of the decision guidelines of this clause. The decision guidelines of that clause include section 60 of the *Planning and Environment Act 1987*, planning policy and decision guidelines among other matters.

Clause 65.01 Approval of an application or plan
Before deciding on an application or approval of a plan, the responsible authority must consider, as appropriate:
The matters set out in section 60 of the Act.
- Any significant effects the environment, including the contamination of land, may have on the use or development.
- The Municipal Planning Strategy and the Planning Policy Framework.
- The purpose of the zone, overlay or other provision.
- Any matter required to be considered in the zone, overlay or other provision.
- The orderly planning of the area.
- The effect on the environment, human health and amenity of the area.
- The proximity of the land to any public land.

- Factors likely to cause or contribute to land degradation, salinity or reduce water quality.
- Whether the proposed development is designed to maintain or improve the quality of stormwater within and exiting the site.
- The extent and character of native vegetation and the likelihood of its destruction.
- Whether native vegetation is to be or can be protected, planted or allowed to regenerate.
- The degree of flood, erosion or fire hazard associated with the location of the land and the use, development or management of the land so as to minimise any such hazard.
- The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.
- The impact the use or development will have on the current and future development and operation of the transport system.

This clause does not apply to a VicSmart applications

The proposed major promotion sign complies with the decision guidelines outlined in Clause 52.05-8, as it is appropriately located within an industrial zone, where it contributes positively to the area's character without causing visual disruption. Positioned along Gordon Street and near the Glenelg Highway, the site is situated away from forested, scenic, or tourist routes, thereby preserving key view lines and visual aesthetics. Additionally, the sign is carefully sited to avoid dominating nearby residential areas or encroaching on heritage precincts. The proposed sign will integrate well with the industrial context and align with local planning objectives while maintaining the area's visual and residential amenity.

MEETING PROCESS

Mindy McCubbin, Senor Statutory Planner

The Senior Statutory Planner outlined details of the application

The application seeks a permit under Clause 52.05 (Signs) for the construction and display of externally illuminated major promotional signage. The proposal is consistent with policy objectives related to Urban Design (Clause 15.01-1S), Sign Design (Clause 15.01-1L), the Industrial Zone and 52.05 signage policy. The proposed sign satisfies the application requirements outlined in Clause 52.05- 6 by being designed to complement the existing character of the surrounding area, including its industrial and open landscape features. The applicant has agreed to remove the external illumination from the sign and has provided a landscape plan to show proposed planting around the proposed sign. These can form conditions on any permit issued. The sign has been designed to have minimal visual impact with no other promotional signs exceeding 18 square metres within 200 metres of the subject site. The proposal avoids visual clutter and maintains the area’s distinctive character. It is recommended the Planning Committee approve the application for a planning permit.

James Course, Gawk

Land is currently zoned appropriately.
Positive form of industrial development

Sign will have no lights and have added extra landscaping.

Objectors

Fran Malone - Coleraine Development Association

Believes sign is too big
Opposite residential homes
No benefit to town
Looking at restructuring land as part of Coleraine Structure Plan
Only benefit is to the landowner

Lorraine Juegen
Believes sign will be a distraction to drivers entering town.

Lyn Boxer

Distraction to drivers
Issues with landowners opposite entering driveways

Marlene Lee

Around 6 local events a year that won't be advertised on the sign.
One person on Racecourse road not notified.

Questions
What sort of signage will be erected? – Answer - sign will be a static one.

Changes to signage expected 4-5 times a year.

What types of advertising were displayed on the Gawk sign on the west side of Coleraine? - Answer – ads included tourism for the Limestone coast, fertiliser, Kelpie festival.

Were any ads for Coleraine businesses advertised? - Answer – no

RECOMMENDATION

That Council having caused notice of Planning Application TP-09-2025 to be given under Section 52 of the Planning and Environment Act 1987 and having considered all the matters required under Section 60 of the Planning and Environment Act 1987 decides to grant a Notice of Decision to Grant a Permit for the construction and display of a major promotion sign at land known as Gordon Street, Coleraine, Lot 1 on Title Plan 381161H in accordance with the endorsed plans, with the application dated 28 January 2025 and subject to conditions set out in Attachment 3.

RESOLUTION

That Council having caused notice of Planning Application TP-09-2025 to be given under

Section 52 of the Planning and Environment Act 1987 and having considered all the matters required under Section 60 of the Planning and Environment Act 1987 decides to issue a Notice of Decision to Refuse to Grant a Permit for the construction and display of a major promotion sign at land known as Gordon Street, Coleraine, Lot 1 on Title Plan 381161H in accordance with the submitted plans, with the application dated 28 January 2025 for the following reasons:

1. The application is contrary Clause 02.03-6 of the Southern Grampians Planning Scheme as the major promotional signage would not support local businesses and the economic development of Coleraine.
2. The application is contrary to Clause 15.01-1L of the Southern Grampians Planning Scheme, because the major promotional sign would not be compatible with the scale, character and appearance of the site and surrounding area of Coleraine.
3. The application is contrary to the purpose of Clause 52.05 of the Southern Grampians Planning Scheme as the signage would have a negative impact on the visual character of Coleraine and would result in an over-saturation of signage on and around the site.

Moved **Cr Katrina Rainsford**
Seconded **Cr Jane Manning**

Carried

6.2 TP-64-2024 7 Ballarat Road Hamilton

Executive Summary

Planning application TP-64-2024 seeks a permit under Clause 52.05 to construct and display a single sided, electronic promotion sign at 7 Ballarat Road Hamilton. The application presents a sign to be located within the front setback, beside the existing building and on the western side of the lot adjacent to the Grange Burn river frontage. The sign would be prominently displayed for traffic travelling on Ballarat Road. The application has been assessed against planning policy at Clause 15.01 of the Southern Grampians Planning Scheme, the sign provisions of Clause 52.05 and decision guidelines of Clause 65 and found to be inconsistent with the objectives and requirements of the Planning Scheme. Specifically, the assessment revealed that the proposed sign would have an adverse amenity impact, particularly on the river front and surrounding landscape character and is not orderly planning for that area. The sign does not relate to the business operating on the land and therefore does not directly support that existing commercial use. It is recommended the Planning Committee refuse the application for a planning permit.

Proposal

The application proposes the construction and display of an electronic promotion sign at the front of the subject site. One corner of the sign abuts the front boundary and angled away from Ballarat Road by 35 degrees. The sign has a total display area of 16.16 square metres (sqm) with dimensions of 8.0m wide, 2.0m high and a depth of 1.0m. The sign is erected on two supporting pylons, setting the sign face itself 3.98m off the natural ground level, and an overall height of 6.0m.

Subject Site and Locality

The site has a total area of 2,279sqm and currently contains:

- A commercial building with driveway and carpark
- Landscaped vegetation within the Grange Burn backdrop.
- Frontage to both Ballarat Road and Jessop Street. The main site/locality characteristics are:
- The Grange Burn river and its surrounding environs (vegetation) is located immediately west of the site.
- The site is on the outbound side of Ballarat Road (from Hamilton CBD).
- The site is within a Commercial 1 Zone pocket to the east of the Grange Burn and is a transition area through to residential areas.

Attachment 1 provides aerial imagery of the subject site and surrounds.

Permit History

The history of the site includes:

- **TP/028/2004** permit issued on 22 April 2007 for land at 7-11 Ballarat Road, Hamilton for the Erection of (a) shed for (a) factory extension.
- **TP/007/2010** permit issued on 2 February 2011 for land at 7-11 Ballarat Road, Hamilton for Buildings and Works to extend an existing industry (Joinery Factory).
- **TP-71-2023** application presented to Planning Committee on 6 May 2024 with Planner recommending refusal. Committee resolution to adopt Planner recommendation. Permit refusal subsequently issued on 6 May 2024 for land at 7 Ballarat Road, Hamilton to Erect and Display Illuminated Promotion Sign.

Public Notification

The application has been advertised pursuant to Section 52 of the Planning and Environment Act 1987, by:

- Sending notices to the owners and occupiers of adjoining land.
- Placing (a) sign(s) on site
- SGSC Website The notification has been carried out correctly.

Council has received no objections to date.

Referrals

The application was referred, in accordance with Clause 52.05-3 (Referral of Applications) Signs, to the Head, Department of Transport for Victoria, under S55 (determining authority). No objection was received, subject to mandatory conditions to be placed on any permit issued.

Details of referral response and proposed conditions found in Attachment 5.

Planning Framework

The following clauses are the most recent to the planning application, particularly within the Municipal Strategic Statement:

- Clause 02.01 Context

  The Shire is located at a major highway junction and has good connections to the southeast of South Australia, as well as to agricultural regions. Primary production and conservation are the main land uses, followed by forestry and extractive industry. The Shire is known for its quality health and education sector, and has strengths in mineral sands processing, cutting tool manufacturing, and agricultural and building materials manufacturing. Fine wool production is famous in the Shire, but large-scale cropping, hay production, and horticulture are now bigger parts of the primary industry sector. Agro-forestry, mining, and renewable energy are expected to grow.

- Clause 02.02 Vision

  The Shire's vision is to be a well-connected, dynamic regional centre, supporting a vibrant, healthy and inclusive community.

The Council Plan (2017-2021) identifies five fundamental priority areas. Those relevant to land use and development are to:

- Develop the regional economy and businesses.
- Plan for the built environment and infrastructure.
- Promote the natural environment.

- Clause 02.03 Strategic directions
  - Clause 02.03-1 Settlement –

    Activity Centres

    Activity centres play a vital role in the settlements of the Shire and local economies. Retailing is the largest service industry, the mainstay of the activity centres, and a key part of the tourism industry. Other important activity centre uses include offices, community services, entertainment and housing.

    The hierarchy of activity centres (refer to the Southern Grampians Shire Council Strategic Framework Plan at Clause 02.04) is:

    - Hamilton (Regional Centre).

  - Clause 02.03-2 Environmental and landscape values

    Biodiversity

    In protecting and preserving biodiversity, Council will:
    - Limit the negative impacts of development on the natural environment.
    - Protect the environmental features and values of the Wannon and Glenelg Rivers and the Grange Burn.

    Landscapes

    In protecting the Shire's landscapes, Council will:
    - Protect the landscape elements that contribute to lifestyle, tourism and amenity.
    - Ensure that development does not adversely impact the landscape, environmental setting or presentation of the Shire.

  - Clause 02.03-5 Built Environment and heritage

    Council will manage its built environment and heritage by:
    - Protecting and enhancing the built environment.
    - Enhancing the presentation of town centres, streetscapes, main streets and town entrances.

- Clause 02.04 Strategic Framework Plan

Figure 1: Strategic Framework Plan

Clause 10 Planning Policy Framework

The following clauses within the Planning Policy Framework are the most relevant to the planning application:

- Clause 11.03-6S Regional and local places - consider the distinctive characteristics and needs of regional and local places in planning for future land use and development.

- Clause 11.03-6L Hamilton

  This policy applies to all land shown in the Hamilton Structure Plan and Hamilton City Centre Urban Design Framework maps (Hansen Partnership, 2011).

Objectives

To cohesively plan for the use and development of land in Hamilton.

To achieve a liveable, beautiful, well planned and sustainable city.

Environmental and landscape values

Encourage new public open spaces or public links as part of development in areas shown as 'green loops'.

Protect and support public use of the Grange Burn and Lake Hamilton, community parkland and heritage buildings.

Provide wildlife corridors through open space and protect vegetation to allow for ease of movement for native species, including the Eastern Barred Bandicoot.

Protect existing canopy trees, particularly in areas with key landscape character such as heritage precincts, the central business district, Hensley Park and Robsons Road.

In planning for land near the Grange Burn:

- Link the key public land areas along the spine of the Grange Burn.
- Ensure new development and streetscape works implement water sensitive urban design.
- Improve the interface with the Grange Burn by encouraging new development to front this area, establishing paths and including private landscaping.

Protect key views and vistas within the city, including visual links from the city centre to the Grange Burn and natural landscape features to the south.

Encourage a high quality, landscaped presentation of private land along the 'inner gateways', 'outer gateways', major city entry avenues, boulevards and tourist-heritage routes.

- Clause 12 Environmental and Landscape Values - Planning should protect, restore and enhance sites and features of nature conservation, biodiversity, geological or landscape value.

- Clause 12.03-1S River and riparian corridors, waterways, lanes, wetlands and billabongs -to protect and enhance waterway systems including river and riparian corridors, waterways, lakes, wetlands and billabongs.
  Strategies include:

  - Protect the environmental, cultural, landscape values of all waterway systems as significant economic, environmental and cultural assets.
  - Sensitively design and site development to maintain and enhance the waterway system and the surrounding landscape setting, environmental assets, and ecological and hydrological systems.
  - Enhance a sense of place and landscape identity by:
    - Protecting existing topographic features and maintaining a sense of naturalness through sensitive design and siting.

  - Retain and enhance the recreation and amenity values along waterway systems by:
    - Planning for surrounding green spaces as recreation and tourism resources without adversely impacting environmental values and flood management capacity.

- Protecting and enhancing parklands for their economic, social and environmental values.

- Design and site development to maintain and enhance the natural environment of waterway systems by:
  - Minimising the visual intrusion of development on the natural landscape views from major roads, bridge crossings, public open space, recreation trails and within waterway systems themselves.
  - Ensuring development is visually subordinate to the local landscape setting, including through the use of vegetation to filter views of development.

Clause 15.01-1S Urban Design – seeks to create urban environments that are safe, healthy, functional and enjoyable and that contribute to a sense of place and cultural identity.

- Strategies:
  - Ensure that development, including signs, minimises detrimental impacts on amenity, on the natural and built environment and on the safety and efficiency of roads.
  - Promote good urban design along and abutting transport corridors.

- Clause 15.01-1L Sign design – aims to ensure that signs are designed to be compatible with the scale, character and appearance of the site and area.

  - Strategies:
    - Encourage a high standard of design that provides diversity and adds visual interest.
    - Encourage signs relating to the use of the building as opposed to products.
    - Ensure that the design, location and appearance of signs does not create a traffic hazard.
    - Support promotional, floodlit, animated, high wall, panel, pole and sky signs that provide diversity and visual interest and are not detrimental to the character and appearance of the streetscape or individual buildings.

  - Policy guidelines
    Consider as relevant:

    Discourage promotional signs, except where:
    - No part of the sign projects more than 3.7 metres above ground level.
    - The advertisement area does not exceed 2 square metres.
    - The sign complements the activity carried out on the land.

Zoning

Commercial 1 Zone

The subject site is within the Commercial 1 Zone. The purpose of this zone includes the following:

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To create vibrant mixed use commercial centres for retail, office, business, entertainment and community uses.
- To provide for residential uses at densities complementary to the role and scale of the commercial centre.

Clause 34.01-9 states that signage within the Commercial 1 Zone is Category 1.

Overlay

The site is within the Environmental Audit Overlay; however, the EAO is not relevant to the planning application as it relates to signage.

No further consideration of the overlay is required.

Particular Provisions

Clause 52.05 Signs

Clause 52.05 applies to the development of land for signs. Its purpose is:

- To regulate the development of land for signs and associated structures.
- To ensure signs are compatible with the amenity and visual appearance of an area, including the existing or desired future character.
- To ensure signs do not contribute to excessive visual clutter or visual disorder.
- To ensure that signs do not cause loss of amenity or adversely affect the natural or built environment or the safety, appearance or efficiency of a road.

Pursuant to Clause 52.05-11 (Category 1 – Commercial areas) a permit is required to display a promotional sign that exceeds 8 square metres.

Clause 52.05-6 includes some application requirements, including information relating to the site context and sign details as appropriate.

Clause 65 Decision Guidelines

Because a permit can be granted does not imply that a permit should or will be granted. The responsible authority must decide whether the proposal will produce acceptable outcomes in terms of the decision guidelines of this clause.

Before deciding on an application or approval of a plan, the responsible authority must consider this Clause 65.01 Approval of an application or plan

Relevant Strategic Documents

Hamilton Structure Plan (prepared by Hansen 2011)

The Hamilton Structure Plan, prepared by Hansen Partnership in 2011, outlines a strategic vision for the development and growth of the town of Hamilton. The plan aims to guide future development, infrastructure investments, and land use decisions in a sustainable and coordinated manner. It addresses various aspects such as housing, transport, commercial areas, community facilities, open spaces, and environmental considerations.

The Hamilton Structure Plan is now located in Clause 11.03-6L of the Southern Grampians Planning Scheme as part of LPPF policy translation to the MPS and PPF restructure.

Relevant to the context of the site and the adjoining Grange Burn the following objectives are relevant:

- Improve the safety and amenity of the public realm.
- Improve the overall presentation of Hamilton, particularly at key 'gateway' locations.
- Ensure development achieves a high level of environmental sustainability.
- Protect key views and vistas within the city.
- Maintain and enhance the natural environment including remnant tree stands, waterways, and native vegetation.
- Ensure development does not compromise the environment, in particular waterways.

Summary of Key Issues

The key issues for consideration are:

- How does the proposal respond to the relevant provisions of the Southern Grampians Planning Scheme including the Planning Policy Framework?
- Does the sign and associated works form an orderly planning outcome for the site?

Assessment

An assessment of this proposal against the relevant provisions of the Southern Grampians Planning Scheme has been undertaken.

Municipal Planning Strategy

The proposal has been assessed against the Municipal Planning Strategy and has been found to be inconsistent with the following objectives:

Clause 02.02 seeks to promote the natural environment. To promote something is to support or actively encourage. The Grange Burn and its surrounding natural environs are widely recognised as one of the most significant within Hamilton. The location and size of the proposed signage result in the obscuring of the Grange Burn environs and actively seeks to distract and draw attention away from the Grange Burn. In this way the proposal fails to promote the natural environment.

Clause 02.03-2 seeks to limit the negative impacts of development on the natural environment. Negative impacts on a natural environment can constitute non-physical impacts, including those that are visual and cultural. Through visually obscuring the natural environment behind, the proposal's bulk and positioning result in a negative impact.

Clause 02.03-2 further seeks specifically to protect the environmental features and values of the Wannon and Glenelg Rivers and the Grange Burn. The signage does not protect the environmental features and values of the Grange Burn. The landscape elements of the Grange Burn contribute to a sense of place in Hamilton and provide for a natural amenity. Development should not adversely impact the landscape setting or presentation of the shire. The location and size of the sign would impact this landscape setting and the presentation of the trees to the public realm, which forms part of a gateway into the Hamilton CBD.

Clause 02.03-5 seeks to Enhance the presentation of town centres, streetscapes, main streets and town entrances. The main gateway boulevard and first impression of the town is of particular importance in the overall presentation of Hamilton. It is vitally important that the streetscape emphasize the best assets of the town, which in this boulevard include the dominant character of generous vegetated areas to the verges and to the central median, culminating in the crossing of the Grange Burn before entering the more developed central city area. The propsoal does not enhance this characteristic of the streetscape and actively seeks to distract from it.

Planning Policy Framework

On balance, the proposal is found to be contrary to the relevant clauses of the Planning Policy Framework.

The planning application cites some VCAT cases which relate to similar promotional signs. Council assess signage applications on a case-by-case basis and considers the importance of context based decision-making. In this instance, the location provides for distinctive characteristics that should not be overlooked (Clause 11.03-6S Regional and local places).

Regarding the Hamilton Structure Plan and the Hamilton City Centre Urban Design Framework (as shown in Attachments 3 and 4), Clause 11.03-6L allows one to make observations about the subject site:

The site is situated on the eastern side of the railway overpass, on the fringe of the Hamilton CBD, and is adjacent to the Grange Burn.

The subject site is located to the immediate east of an identified inner gateway to the Hamilton CBD.

The site is in close proximity to the identified natural open space and 'green loop', which partially follows the Grange Burn.

The site is also located within an entry avenue area. The proposed promotional signage is not compatible with some of these observations, especially within the context of the green loop, Grange Burn, entry avenue and gateway setting.

Key views and vistas and the interface with the Grange Burn are referred to as planning considerations within Clause 11.03-6L. The signage does not contribute towards a high-quality landscaped presentation and has the potential to disrupt existing views of natural landscape features.

The signage location could be improved in order to reduce the potential impact on the above matters. Its current location is not supported, and the application is not supported by the Hamilton Structure Plan (Clause 11.03-6L – Hamilton).

Clause 12 Environmental and Landscape Values
Environmental and Landscape Values, provides some guidance on how to assess development applications where there is the potential for the natural environment to be impacted.

The sign intrudes upon the landscape values of the Grange Burn and its surrounding landscape setting. The signage location and size shown within the application does not maintain a sense of naturalness, seen from Ballarat Road towards the Grange Burn.

Clause 12.03-1S seeks to protect and enhance river and riparian corridors, waterways, lanes, wetlands and billabongs. The proposed signage does not minimise its visual intrusion on the natural landscape views, and is not visually subordinate to the local landscape setting, having a sign area of 17.5 square metres and a maximum height of 7 metres.

The proposal is also inconsistent with Clause 15.01-1S Urban Design, as it proposes signage that does not minimise its impact on the amenity provided by the surrounding natural environment.

The proposal is considered to be inconsistent with Clause 15.01-1L Sign Design. The local signage policy discourages promotional signage, and the proposal does not meet any of the associated guidelines, summarised below:

- The promotional sign projects more than 3.7 metres above ground level.
- The advertising area exceeds the suggested 2 square metre limit by an additional 15 square metres.
- The sign does not complement the activity carried out on the land.

The planning application, including town planning report, does not provide adequate justification to depart from this local policy. The planning report suggests that the sign can be accommodated given the site's context. Officer's view of the application is that the proposal

conflicts with current planning policy. The site's context provides for a natural landscape that has been overlooked by the planning application and the sign is too large and conspicuous to comfortably sit within the site context.

Therefore, the application before Council does not meet the objective of the signage policy, as the sign is not compatible with the character and the appearance of the area.

Clause 52.05 Signs

An assessment was conducted in accordance with the decision guidelines at Clause 52.05-8. Please refer to the table below:

Decision Guideline	Assessment
• The character of the area including: o The sensitivity of the area in terms of the natural environment, heritage values, waterways and open space, rural landscape or residential character. o The compatibility of the proposed sign with the existing or desired future character of the area in which it is proposed to be located. o The cumulative impact of signs on the character of an area or route, including the need to avoid visual disorder or clutter of signs. o The consistency with any identifiable outdoor advertising theme in the area.	Although the subject site is located within a commercial zone, it is adjacent to the Public Park and Recreation Zone, which reflects the Grange Burn surroundings. The interface of the site is considered to be more sensitive than a typical commercial site with highway frontage or within a CBD context. The sign is not in harmony with the natural surroundings of the Grange Burn reserve due to its visual appearance being incompatible with the established vegetation. The proposed sign is a standalone sign and is not considered to cause visual disorder or clutter with other signs, though it is located close to signs on the existing building on-site. Regarding the consistency of the proposed sign with other outdoor advertising themes in the area, within this locality, there are typically only business identification signs or other signs that are relevant to the host site. There is not a prevalence of large promotional signs such as the one proposed. There are plenty of directional signs in the area within the road reserve, such as the directional sign located on the opposite side of Ballarat Road.

• Impacts on views and vistas: o The potential to obscure or compromise important views from the public realm. o The potential to dominate the skyline. o The potential to impact on the quality of significant public views. o The potential to impede views to existing signs.	The views from the public realm include views from pedestrian and vehicle levels from the Ballarat Road reserve. An existing view towards the Grange Burn (and surrounding environs) from this location is shown within Figure 7 above.
• The relationship to the streetscape, setting or landscape: o The proportion, scale and form of the proposed sign relative to the streetscape, setting or landscape. o The position of the sign, including the extent to which it protrudes above existing buildings or landscape and natural elements. o The ability to screen unsightly built or other elements. o The ability to reduce the number of signs by rationalising or simplifying signs. o The ability to include landscaping to reduce the visual impact of parts of the sign structure.	The proposed sign if constructed will form a dominant feature within the landscape. The positioning of the sign to be adjacent to the front title boundary and the height of 6 metres both add to the effect. The surrounding streetscape consistently features single storey built form, inclusive of the subject site, and generally some degree of setback from the front boundary is consistently provided. The proposal will be at odds with this established character. The signage sits above the height of the building on the land and obscures the landscape and natural elements (Grange Burn reserve) behind. The sign does not screen or obscure any other built form or other unsightly elements as it is freestanding in front of vegetation. It is acknowledged that landscaping has been proposed to reduce the impact of the structure of the sign.
• The relationship to the site and building: o The scale and form of the sign relative to the scale, proportion and any other significant characteristics of the host site and host building. o The extent to which the sign displays innovation relative to the host site and host building. o The extent to which the sign requires the removal of vegetation or includes new landscaping.	The buildings on the site are single storey and low set, due to design and topography. The sign is designed to site higher than the building, in order to optimise it's visibility. This in itself reduces its ability to relate to the building on site as it is altering the horizon line. The sign does not necessarily promote products or material relating to the host site or business and is not innovative to the host site or building. As previously mentioned in this report, the promotional sign is inconsistent with local signage policy at Clause 15.01-1L. As there is no connection with the business or host building, the promotional signage is not relevant to the locality and not essential for Hamilton.

	The sign does not require the removal of any significant landscaping or vegetation.
• The impact of structures associated with the sign: o The extent to which associated structures integrate with the sign o The potential of associated structures to impact any important or significant features of the building, site, streetscape, setting or landscape, views and vistas or area.	The proposed structure to support this type of promotion size, given its size is well integrated within the sign.
• The impact of any illumination: o The impact of glare and illumination on the safety of pedestrians and vehicles. o The impact of illumination on the amenity of nearby residents and the amenity of the area. o The potential to control illumination temporally or in terms of intensity.	The sign is proposed to be electronically illuminated. The impact of the electronic illumination on the amenity of vehicles and any nearby residents would be acceptable and able to be managed via planning permit conditions should a permit be granted.
• The impact of any logo box associated with the sign: o The extent to which the logo box forms an integral part of the sign through its position, lighting and any structures used to attach the logo box to the sign. o The suitability of the size of the logo box in relation to its identification purpose and the size of the sign.	The sign includes a logo box of 0.27sqm in area to display the 'Gawk' business name. The logo box is appropriately positioned and designed to be integrated into the overall design of the sign.
• The need for identification and the opportunities for adequate identification on the site or locality.	Businesses and buildings often require signage for various purposes, such as for business identification purposes. There is not an explicit need for this type of signage in this location and it does not necessarily relate to the host site, building or business. The application notes that it is common for these types of signs to display government, emergency or public messaging (or similar) to benefit the public. Given the lack of control over the content of the sign after approval, the point is moot; this cannot be deemed an argument for the signage; however, it is not necessarily an argument against the application either. Clause 15.01-1L Sign Design makes it clear that promotional signage should be

	discouraged above a certain size and if it does not complement other activities on site.
• The impact on road safety. A sign is a safety hazard if the sign: o Obstructs a driver's line of sight at an intersection, curve or point of egress from an adjacent property. o Obstructs a driver's view of a traffic control device, or is likely to create a confusing or dominating background that may reduce the clarity or effectiveness of a traffic control device. o Could dazzle or distract drivers due to its size, design or colouring, or it being illuminated, reflective, animated or flashing. o Is at a location where particular concentration is required, such as a high pedestrian volume intersection. o Is likely to be mistaken for a traffic control device, because it contains red, green or yellow lighting, or has red circles, octagons, crosses, triangles or arrows. o Requires close study from a moving or stationary vehicle in a location where the vehicle would be unprotected from passing traffic. o Invites drivers to turn where there is fast moving traffic or the sign is so close to the turning point that there is no time to signal and turn safely. o Is within 100 metres of a rural railway crossing. o Has insufficient clearance from vehicles on the carriageway. o Could mislead drivers or be mistaken as an instruction to drivers.	Being an electronic sign within 60 metres of an arterial road, the proposal was subject to a mandatory referral requirement to the Head of Transport for Victoria (determining authority. The response received provided no concerns, subject to mandatory conditions to be included on any permit issued. Council also considers that the proposed signage is unlikely to impact on road safety.

Clause 65 Decision Guidelines

Conclusion

After evaluating the application against the relevant provisions of the Southern Grampians Planning Scheme, it has been concluded that the application is not consistent with the following provisions:

- The objectives and strategies of the Planning Policy Framework and Municipal Planning Strategy. Specifically, it does not comply with the local signage policy stated in Clause 15.01-1L Sign Design.
- The purpose and guidelines of Clause 52.05 Signs.
- The decision guidelines of Clause 65.01, particularly as the proposed sign does not produce an orderly planning outcome for the area.

Considering these points, it is recommended that the application for the sign be refused.

MEETING PROCESS

Rhys Oatley, Senior Statutory Planner

The Senior Statutory Planner outlined details of the application

The application seeks a permit under Clause 52.05 to construct and display a single sided, electronic promotion sign at 7 Ballarat Road Hamilton. The application presents a sign to be located within the front setback, beside the existing building and on the western side of the lot adjacent to the Grange Burn river frontage. The sign would be prominently displayed for traffic travelling on Ballarat Road. The application has been assessed against planning policy at Clause 15.01 of the Southern Grampians Planning Scheme, the sign provisions of Clause 52.05 and decision guidelines of Clause 65 and found to be inconsistent with the objectives and requirements of the Planning Scheme. Specifically, the assessment revealed that the proposed sign would have an adverse amenity impact, particularly on the river front and surrounding landscape character and is not orderly planning for that area. The sign does not relate to the business operating on the land and therefore does not directly support that existing commercial use. It is recommended the Planning Committee refuse the application for a planning permit.

Warren Butcher, landowner

Benefit to landowner and community.
60% of turnover in Melbourne and Portsea
Benefit to landowner will assist in further growth for business.

James Course, Gawk

Gawk is now sole provider of signage in regional Victoria. Has a focus on low price point, long term direct deals with local businesses. Three local clients now have arranged advertising on sign on corner of Cox Street and Ballarat Road.
Benefit to having a digital sign that can provide targeted advertising.

Company has long history in town.
Believe application is an acceptable development on a commercial property.

Question – would location work on another site?
Landowner doesn't believe that it would.

RECOMMENDATION

That Council having caused notice of Planning Application TP/64/2024 to be given under Section 52 of the Planning and Environment Act 1987 and having considered all the matters required under Section 60 of the Planning and Environment Act 1987 decides to issue a Notice of Decision to Refuse to Grant a Permit in respect of the land known and described as 7 Ballarat Road, Hamilton for the proposal to erect and display an electronic promotion sign, based on the following grounds:

Grounds of Refusal:

1. The application is contrary to the objectives and strategies of the Planning Policy Framework and Municipal Planning Strategy of the Southern Grampians Planning Scheme.
2. The application is contrary to the purpose and guidelines of Clause 52.05 of the Southern Grampians Planning Scheme.
3. The application is contrary to the decision guidelines of Clause 65.01 Southern Grampians Planning Scheme, particularly with regard to the orderly planning outcome of the area.

RESOLUTION

That Council having caused notice of Planning Application TP/64/2024 to be given under Section 52 of the Planning and Environment Act 1987 and having considered all the matters required under Section 60 of the Planning and Environment Act 1987 decides to issue a Notice of Decision to Refuse to Grant a Permit in respect of the land known and described as 7 Ballarat Road, Hamilton for the proposal to erect and display an electronic promotion sign, based on the following grounds:

Grounds of Refusal:

1. The application is contrary to the objectives and strategies of the Planning Policy Framework and Municipal Planning Strategy of the Southern Grampians Planning Scheme.
2. The application is contrary to the purpose and guidelines of Clause 52.05 of the Southern Grampians Planning Scheme.
3. The application is contrary to the decision guidelines of Clause 65.01 Southern Grampians Planning Scheme, particularly with regard to the orderly planning outcome of the area.

Moved **Marg Scanlon**
Seconded **Cr Jane Manning**

Carried

7. NEXT MEETING

25 June, 2025 (tbc)

8. CLOSE OF MEETING

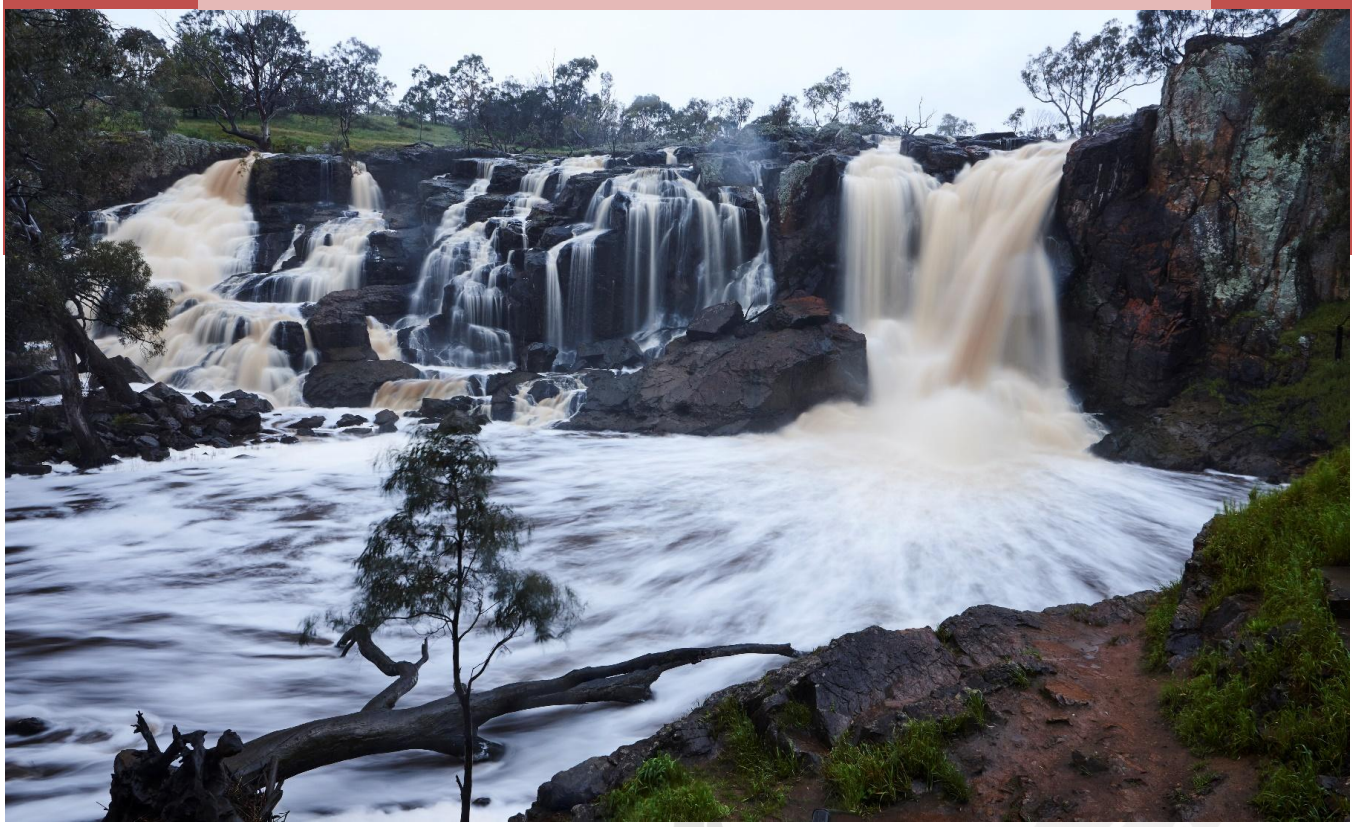
Meeting closed at 11.25am

SOUTHERN GRAMPIANS SHIRE COUNCIL

Audit & Risk Committee Meeting Minutes

Friday 9 May 2025

Held virtually via Teams at 3.00pm



Southern Grampians
SHIRE COUNCIL

1 Membership

Members
Mr Brian Densem – Chair (Independent)
Ms Aisling Cunningham – (Independent)
Mr Bill Millard – (Independent)
Cr Helen Henry
Cr Albert Calvano

Officers
Mr Tony Doyle - Chief Executive Officer
Mr Darren Barber - Director People and Performance

Minutes
Mrs Nadine Rhook – Executive Assistant – Director People & Performance

Guests
Ms Kathie Teasdale – RSD Audit
Mr Paul Harrison – RSD Audit
Mr Daryl Adamson – Manager Shire Services & Regulation
Mrs Pauline Porter – Environmental Health Officer

2 Welcome

The Chair welcomed everyone to the meeting and thanked them for their attendance.

3 Apologies

Nil

4 Committee Secretariat

4.1 Audit and Risk Committee Independent Member Update

Author: Darren Barber (Director People and Performance)
Attachments: Nil

Conclusion and Recommendation

The re-appointment of Ms Aisling Cunningham as Independent Member of the Audit and Risk Committee with an expiry date of 3 September 2026, and appointment of Mr Brian Densem as Independent Member for a three year term expiring on 12 March 2028 and as Chairperson for a two year term expiring on 12 March 2027.

That a report be presented at the Council Meeting on 14 May 2025 to endorse the appointments of Ms Cunningham and Mr Densem.

Mr Millard agreed that the process went well and with a vast amount of applicants with experience and knowledge was exceptional.

NOTED

5 Internal Audit

5.1 Internal Audit - Final Report - Environmental Health

Author: **Pauline Porter (Environmental Health Coordinator)**

Attachments:

1. IA Report - Southern Grampians Shire Council - Environmental Health (Final) [**5.1.1** - 22 pages]

Proposal

The Environmental Health Team worked with RSD Audit representatives to develop an audit scope which was endorsed by the Audit and Risk Committee.

The report from RSD highlights many positive practices and strengths in Southern Grampians Shire Council's environmental health processes, with four (4) key findings accompanied by recommendations.

Overall, the Environmental Health Team has displayed the ability to meet the various legislative requirements (e.g. food safety assessments, food sampling), with improvements that could be made with upgraded systems and resource levels.

Mr Harrison provided an update to the Committee with the overall objective of this review was to ensure that Southern Grampians are meeting its regulatory requirements in relation to environmental health.

Mr Harrison concluded that legislative requirements under the various acts are currently being met, and although Environmental Health is quite a small team, they have the expertise and knowledge in place.

The current processes were also reviewed in relation to food safety to the VAGO performance audit report from 2023 and most of the risk and issues that were raised in that report was addressed by Council. This included how the team manages that legislative compliance requirements and keeping up to date with any changes to legislation and industry updates.

The three findings raised were linked with limitations around the current systems in use and its ability to integrate with the other Council systems and, current reporting limitations.

The one medium rated finding that was raised, related to some Occupational Health and Safety Risk measures around onsite inspections that are conducted often at times by one staff member. There are currently no formal risk assessments occurring prior to staff heading out on site. There are concerns on whether there is a way to log any issues that have arisen in the past that could be checked prior to going out on site. Mr Adamson advised the Committee that staff mark properties in Councilwise and POZI mapping systems that are problematic while keeping privacy.

Overall it was a positive review and Mr Harrison thanked Mrs Porter and Mr Adamson for their assistance throughout the audit process.

Mrs Porter did notify the Committee that they have ordered Duress Alarms which are being sent as we speak. If the alarm is activated, five people will be notified and if the staff member falls those five will also be notified.

Conclusion and Recommendation

RSD Audit will provide an overview of the Environmental Health Services Audit, with recommendations for the Committee to note.

NOTED

6 Next Meeting

The next ordinary meeting is scheduled for 20 May 2025.

Mr Millard advised that he will be an apology from the next meeting along with Ms Teasdale and Mr Harrison from RSD Audit who will be attending all company function.

Meeting closed at 3.16pm.