WIN METALS

BUTCHERS CREEK GOLD PROJECT SCOPING STUDY

Scoping Study confirms the technical and financial viability of developing a standalone gold operation in the Kimberley region of Western Australia with significant opportunities for upside identified

WIN Metals Managing Director and CEO, Mr Steve Norregaard, commented:

"Butchers Creek Scoping Study demonstrates the significant value in this project. It is a game changer for WIN as a significant milestone in our company's journey, only 12 months since acquisition this study signals the first steps in establishing a new gold operation in the heart of the Kimberley. The numbers speak for themselves, robust projected cashflow and a long life of mine, underpinned by a high confidence resource with substantial upside.

What excites us most is the scale of the opportunity ahead. A 9-year mine plan with peak production forecast at 37,000 ounces of gold per year, ongoing exploration at both Butchers Creek and Golden Crown that could take this project to an entirely new level. Every additional drill hole has the potential to drive resource growth, extend the life of mine and increase cashflow for years to come.

This is a transformational milestone for WIN. We are entering the next phase at Butchers Creek with strong momentum and energy, moving swiftly to establish our licence to operate, advance feasibility studies, and progress toward project delivery. Butchers Creek is set to generate lasting value for shareholders, stakeholders and deliver meaningful economic benefits to the Kimberley region as a whole. The WIN team is excited to lead this new chapter of growth and development for our company."

Cautionary Statement

The Scoping Study ("Study") referred to in this announcement has been undertaken by WIN Metals Ltd (WIN or the Company) for the purposes of demonstrating a business case to support the development of standalone open pit and underground gold mine with associated processing facility at WIN's Butchers Creek Gold Project (BCGP, Project or Butchers Creek) in Western Australia.

This Study is a preliminary technical and economic study of the potential viability of the Project. It is based on low level technical and economic assessments that are not sufficient to support the estimation of ore reserves. A level of accuracy of +/-40% is applicable in accordance with Scoping Study level of accuracy. Further exploration and evaluation work and appropriate studies are required before WIN will be in a position to estimate any ore reserves or to provide any assurance of an economic development case.

The Study is based on JORC 2012 Code Indicated and Inferred Mineral Resources defined within the Project, with a production target comprising indicated (96%) and Inferred (4%) Mineral Resources over the life of the mine. Investors are cautioned that there is low level of geological confidence in Inferred Mineral Resources and moderate confidence in the indicated resources and there is no certainty that further drilling will result in the determination of Measured or Indicated Mineral Resources, or that the production target will be realised.

Of the Mineral Resource tonnages scheduled for extraction in this Study's production target plan during the first four years, approximately 98% is classified as Indicated and 2% as Inferred, incorporating the projected 3.5 year payback period. WIN has concluded that the financial viability of the project is not dependent on the inclusion of the Inferred Resources and WIN has concluded that is has reasonable grounds for disclosing a production target which includes Inferred Mineral Resource Material.

The Study is based on the material assumptions outlined in this announcement, including assumptions about the availability of funding in the order of approximately $142 million. WIN considers all the material assumptions to be based on reasonable grounds. However, Investors should note that there is no certainty that WIN will be able to raise this funding when required. It is also possible that said funding may only be available on terms that may be dilutive to or otherwise effect the value of WIN's shares. It is also possible that WIN could pursue other value realisation or funding strategies such as forward gold sales, royalty streaming, gold prepay options, a sale, partial sale or joint venture of the Project. This could materially reduce WIN's proportionate ownership of the Project. While WIN considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Study will be achieved.

Notwithstanding many components of this study, such as pit shell design, underground mine design, capital costs, processing operating costs and other amounts may be more accurate than +/- 40%, WIN has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes it has a 'reasonable basis' to expect it will be able to complete the development of the Project as outlined in the attached Study.

This announcement has been prepared in compliance with the JORC Code 2012 Edition (JORC 2012) and the ASX Listing Rules. All material assumptions on which the forecast financial information is based have been provided in this announcement and are also outlined in the attached JORC 2012 table disclosures.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of this Scoping Study.

WIN Metals Ltd (ASX: WIN) ("**WIN**" or "the **Company**") is pleased to announce the completion of a Scoping Study for the Butchers Creek Gold Project, located 30km south-east of Halls Creek in Western Australia (Figure 1). The Study confirms the technical and financial viability of developing a standalone operation with both open pit and underground mining operations.

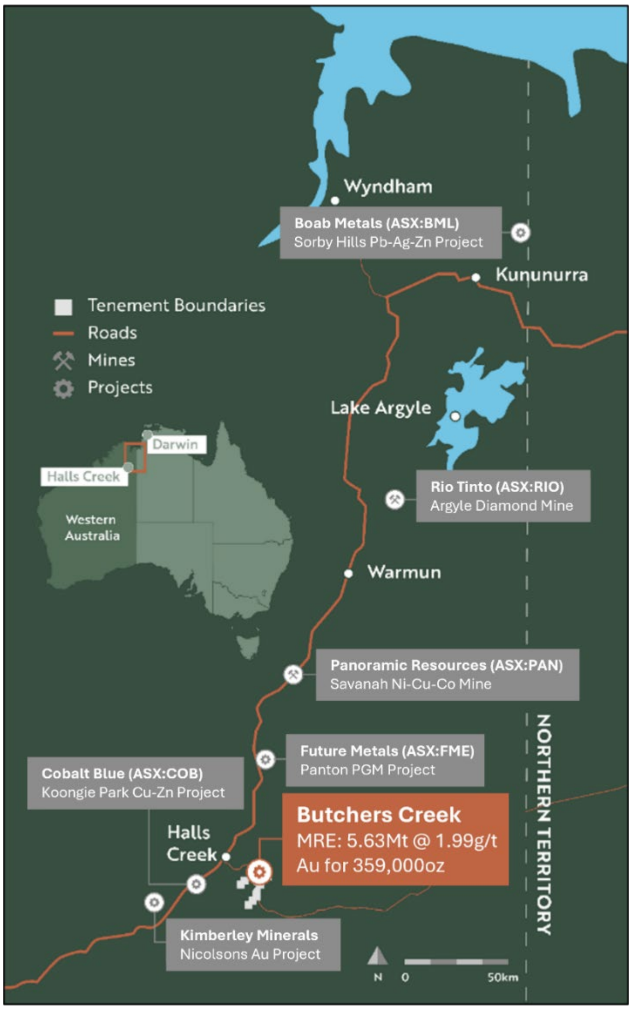

Figure 1: Butchers Creek Gold Project Location

Butchers Creek Gold Project – Scoping Study Highlights:

- Proposed operation includes open pit cutback, underground mine, 600ktpa CIL Processing Plant, and associated infrastructure.
- Life of Mine (LoM) 9 years, processing 3.29Mt @ 2g/t Au for 200koz of gold recovered
- Full production profile averaging 33kozpa (years 5 to 8)
- Peak annual gold production of 37koz in Year 5
- Pre-production capital cost is estimated at A$142 million inclusive of:
    - Processing plant - A$70 million
    - Mining and supporting infrastructure
    - Pre-production mining and general administration costs
- Scoping Study demonstrates robust financial outcomes, based on a gold assumption of A$5,385oz
    - Free cash flow - A$288 million
    - Net Present Value (8%) – A$143 million
    - Internal Rate of Return – 25%
    - Payback Period – 3.5 years
    - C1 (Direct Operating Cost) – A$2,592 per ounce

  - All In Sustaining Cost (AISC) - A$3,032 per ounce
- Scoping Study based on the Mineral Resources defined at Butchers Creek deposit only.
- Significant upside potential from ongoing exploration at Butchers Creek targeting resource growth and the inclusion of the nearby Golden Crown gold deposit as a potential future satellite ore source.

Key Study Outcomes and Summary

WIN Metals evaluated multiple development scenarios for the Butchers Creek Gold Project. The construction of a 600,000 tonne per annum Carbon-in-Leach (CIL) processing plant and associated infrastructure onsite at Butchers Creek has been identified as delivering the most favourable financial outcome for the Project.

The financial model for the Project was undertaken on a 100% ownership basis and incorporates the principal assumptions presented in Table 1 below.

Table 1: Key Physical Assumptions

Assumptions	Unit of Measure	
Open Pit Mine Duration	years	0.9
Underground Mine Duration	years	7.75
Processing Duration	years	7.25
Open Pit Waste Mined	kt	1,446
Open Pit Ore Mined	kt	123
Open Pit Strip Ratio		11.8
Open Pit Grade	g/t Au	2.04
Open Pit Mined Ounces	koz	8
Underground Waste Mined	kt	541
Underground Ore Mined	kt	3,165
Underground Grade	g/t Au	2.00
Underground Mined Ounces	koz	203
Mine Production Target		
Total Ore Mined	kt	3,288
Grade	g/t Au	2.00
Mined Ounces	koz	211
Processing Physicals		
Tonnes Processed	kt	3,288
Grade	g/t Au	2.00
Ounces Recovered	koz	200

The financial model for the Study applied a gold price of A$5,385 per ounce, which is below the prevailing spot price observed between 1 September 2025 and 1 November 2025. Based on these assumptions, the Project is forecast to deliver an undiscounted pre-tax cash flow of A$288 million, a pre-tax NPV at 8% of A$143 million, and a pre-tax, unleveraged IRR of 25%.

Financial Summary for the Project is outlined below in Table 2.

Table 2: Scoping Study financial assumptions and results

Key Financial Assumptions		
Gold Price	A$/oz	5,385
Discount Rate	%	8
Diesel Price	A$/litre	1.75
Cement Price	A$/t	587
Processing Plant Gold Recovery	%	94.6
Unit Power Cost	A$/kWhr	0.37
Refining Cost (incl. Transport)	A$/oz	15
Capital Expenditure		
Pre Production Capex	A$M	113
Pre Production Cost	A$M	29
Sustaining Capex	A$M	50
Post Production Capex Mining	A$M	67
Total Capex (including Pre Production cost)	A$M	259
Unit Costs		
Unit Operating Costs (C1)	A$/t Processed	158
Unit Mining Operating Costs (Inc Power)	A$/t Processed	46
Unit OP Mining Operating Costs (Inc Power)	A$/t Processed	103
Unit UG Mining Operating Costs (Inc Power)	A$/t Processed	84
Unit All in Sustaining Costs	A$/t Processed	184
Unit All in Costs	A$/t Processed	228
Operating Expenditure		
Total Operating Costs	A$M	518
Total Past Mine Gate Costs (Refining, Transport, Royalties)	A$M	41
Project Returns		
Total Net Revenue (Minus Past Mine Gate)	A$M	1,036
Total Cumulative Cashflow (Pre Tax)	A$M	288
Net Present Value (NPV 8%)	A$M	143
Internal Rate of Return (IRR)	%	25
Payback Period (Pre-Tax from start of gold production)	Years	3.5
All in Sustaining Costs (AISC)	A$/oz	3,032
Comparative C1 Cash Cost	A$/oz	2,592

Production Target

Total recoverable gold production target for the life of the Project is estimated at approximately 200koz. The gold production schedule, by resource classification, is presented in Figure 2.

Importantly, 96% of gold production during the first four years is sourced from Indicated Resources, with only 4% classified as Inferred. This strong weighting towards Indicated material provides confidence in the Project's ability to repay pre-development capital within the forecast payback period of approximately 3.5 years. This ratio remains consistent across the life of mine, with Indicated Resources contributing 96% to the cumulative production target.

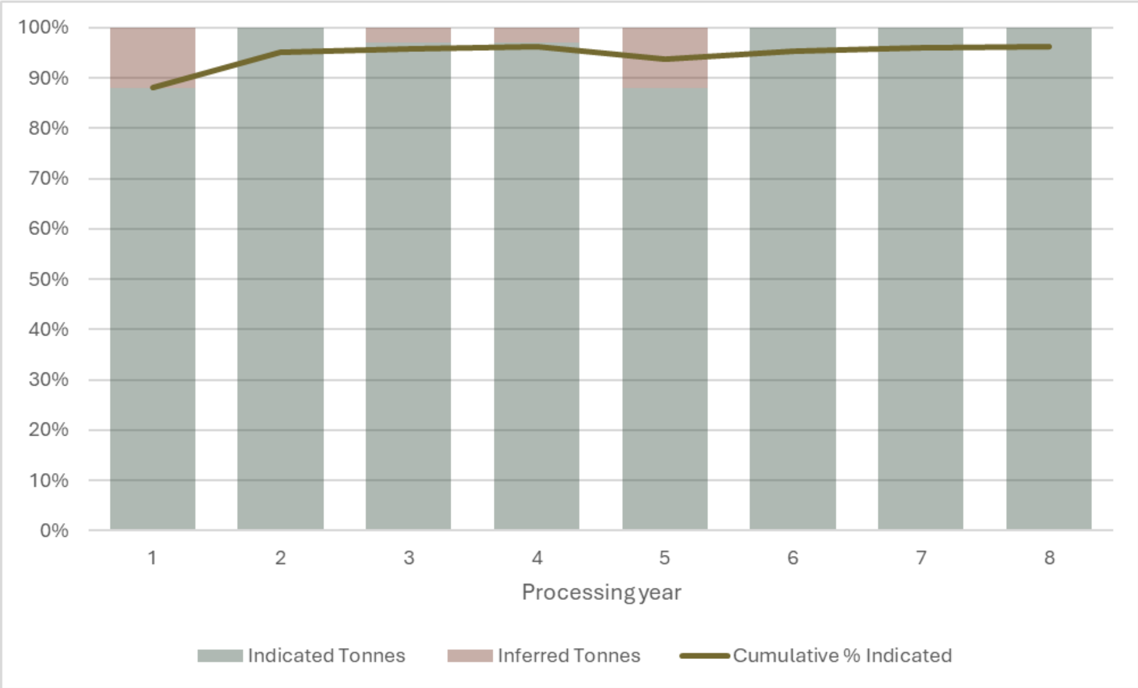

Figure 2: Production profile by resource classification for the life of the Project

Across the LOM, average annual gold production is projected at 25koz. This includes an initial three year ramp up as underground operations are established, after which annual output is expected to increase to average approximately 33koz for years 4 to 7. Production is then forecast to taper in the final year, with annual output of approximately 16koz.

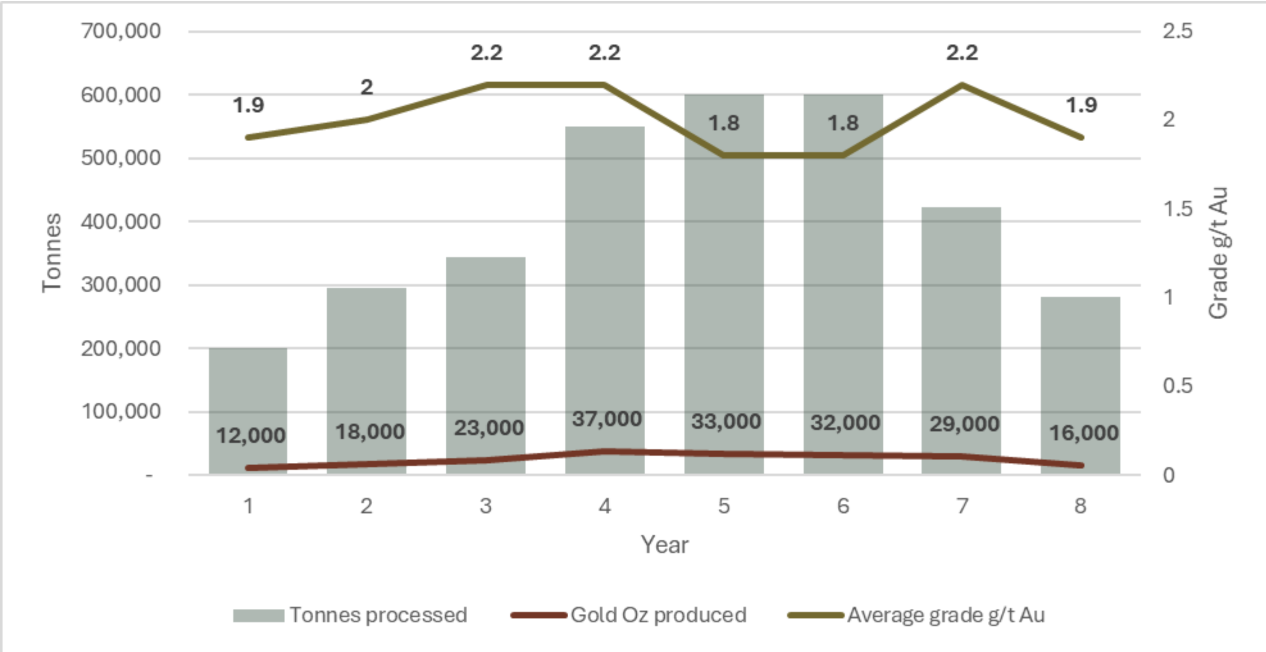

Figure 3: Annual LoM processing target

Open Pit Design

The primary objective of the Butchers Creek open cutback is to enhance pit stability and establish safe, practical locations for developing underground mine access portals. A pit optimisation study, utilising a gold price of A$4,400 per ounce and applying geotechnical stability constraints derived from existing pit data, resulted in a targeted cutback along the southern section of the west wall.

This design not only optimises pit resources but also allows for the construction of a new 12m wide single lane haul ramp providing direct access to the two proposed underground portal sites (refer Figure 4). The open pit production target is approximately 123kt at 2.0g/t Au for 8koz with 99% of the mined ore classified as indicated resource.

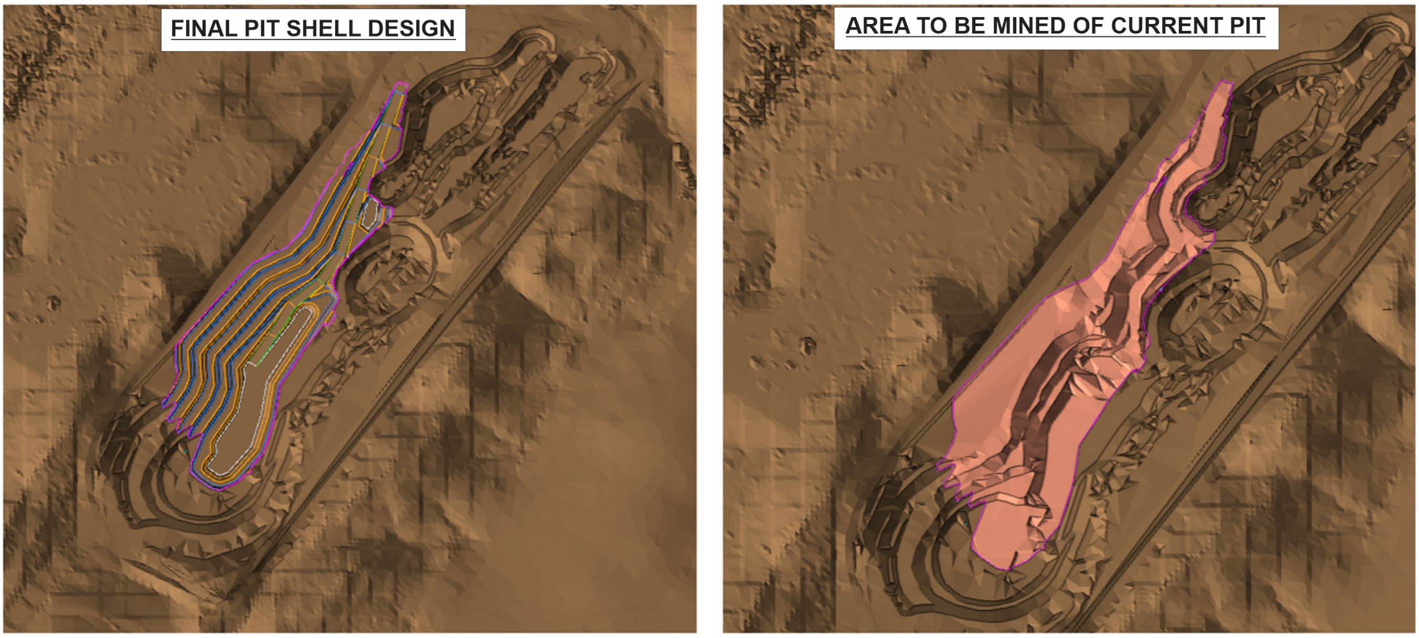

Figure 4: Butchers Creek open pit cut back design

Underground Mine Design

Access to the underground orebody will be achieved via a conventional decline commencing from the Butchers Creek open pit cutback. The underground layout incorporates two portals, one dedicated to equipment access and the other to ventilation. The main decline follows a figure of eight configuration and features a compact profile enabling efficient haulage and faster development compared to typical modern declines.

Underground mining will utilise a bottom up, panel long hole stoping method, employing both waste rock and cemented rock fill to maximise ore recovery and maintain ground stability (see Figure 5). The underground production target was calculated using a 1.0g/t Au cut-off during the stope optimisation process, with adjustments made for dilution, recovery, and practical mining considerations for each stope panel. This work has defined a production target of approximately 3.2Mt at 2.0g/t Au, containing 203koz of gold.

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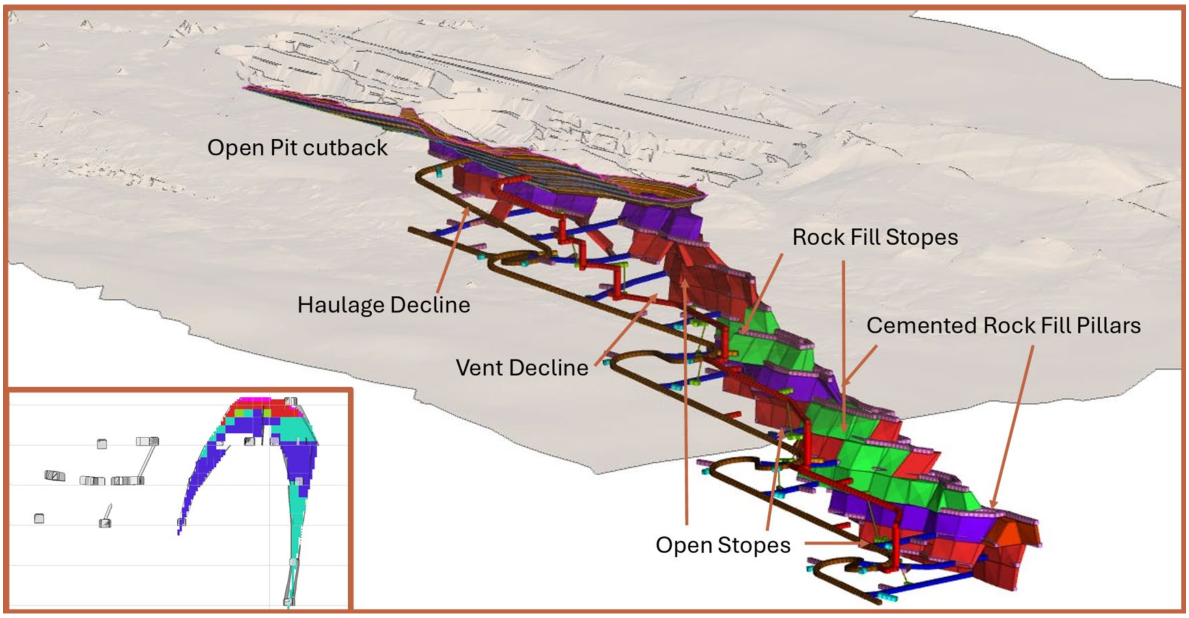

Figure 5: Butchers Creek underground mine deign

Processing Plant Design

MACA Interquip Mintrex (MACA) has been engaged to design and quote a 600,000 tonne per annum carbon-in-leach (CIL) processing facility for the Project. The proposed flowsheet is outlined below:

Mined ore will be delivered to a run-of-mine bin and undergo primary and secondary crushing before being transferred to a fine ore storage bin, which regulates consistent plant feed rates. Ore from the storage bin is then ground in a ball mill to achieve a particle size of 80% passing 75 microns. The resulting slurry is processed through cyclones and a vibrating trash screen prior to entering the CIL circuit.

A portion of the cyclone underflow is diverted to a Knelson gravity concentrator for gravity gold recovery. Gravity concentrates are treated in an Acacia leach reactor, while coarse material is recirculated to the ball mill for further grinding.

Gold recovery in the CIL circuit is conducted in six tanks, providing approximately 24 hours of residence time for efficient cyanide leaching and gold adsorption. The circuit comprises one leach tank followed by five adsorption tanks. Activated carbon is introduced at the final tank and pumped counter current to the slurry, optimising gold recovery efficiency.

Loaded carbon from the first adsorption tank is processed through a pressure elution circuit using hydrochloric acid, hot cyanide, and caustic to strip gold into solution. Gold from both the elution and Acacia circuits is subsequently recovered via electrowinning onto stainless steel cathodes, followed by calcining and smelting to produce gold doré bars. Plant tailings will be pumped to a dedicated tailings storage facility.

Site Layout

The site layout, illustrated in Figure 6, has been carefully designed to efficiently support all aspects of mining operations. Key features include integrated open pit and underground mine access, a modern accommodation camp for up to 200 personnel, fully equipped workshops and storage areas, administration offices, electrical infrastructure, processing plant, and run-of-mine ore (ROM) pads. Existing infrastructure includes waste dumps, a tailings dam, and a dedicated mine and process water lake.

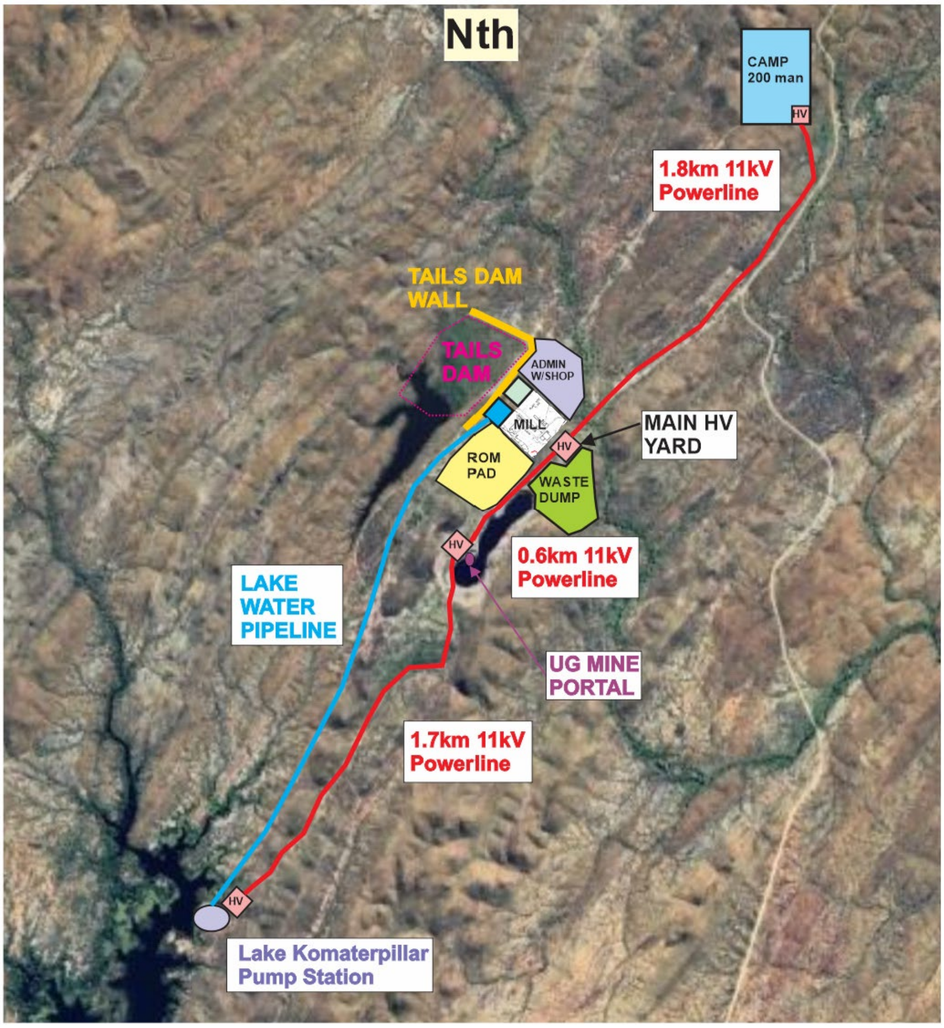

Figure 6: Site Layout

Sensitivity Analysis

Movements in the Australian dollar gold price, primarily influenced by fluctuations in the US dollar gold price and the AUD:USD exchange rate have a direct impact on project revenue and forecast cash flows. Table 3 below sets out the projected effect on key financial metrics under various Australian dollar gold price scenarios, clearly illustrating the Project's sensitivity to changes in market conditions. The base case scenario for this Study applies an Australian gold price of $5,385 per ounce.

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Table 3: Project Financial Sensitivity Analysis

Gold Price	A$/oz	$ 3,846	$ 4,615	$ 5,385	$ 6,154	$ 6,923
Payback first gold production	Month	N/A	56	**41**	35	32
Max negative cashflow	A$M	-164	-142	**-142**	-142	-142
Free cash flow	A$M	-9	131	**288**	436	585
NPV 8% pre-finance, pre-tax	A$M	-54	45	**143**	241	339
IRR pre-tax	%	N/A	14	**25**	34	42

Capital Costs

Project capital costs have been determined wherever possible from recent pricing, obtained within the last six months, from reputable suppliers and contractors experienced in the Kimberley region of Western Australia. These estimates cover both pre-production capital outlays and sustaining capital required for the mine's full operational life.

Key capital costs are summarised below:

Table 4: Capital cost estimate

Pre-Production	Source	A$M
Processing facility and supporting infrastructure	MACA	71
Admin capital + G&A	Inhouse/MACA	25
Underground mining	In house	16
Open pit mining	In house	1
Pre Production Cost	In house	29
Total		142
Post Production		**A$M**
Sustaining	In house	50
Post Production Capex (Underground)	In house	67
Total		117
Total LoM Capital		259

Operating Costs

Operating cost estimates for the Project have been constructed utilising recent quotations secured within the past six months from qualified vendors and contractors experienced in the Kimberley region of Western Australia. The cost model comprehensively addresses the core operational components required for sustainable mine performance over the life of the project.

The key operating cost categories are as follows:

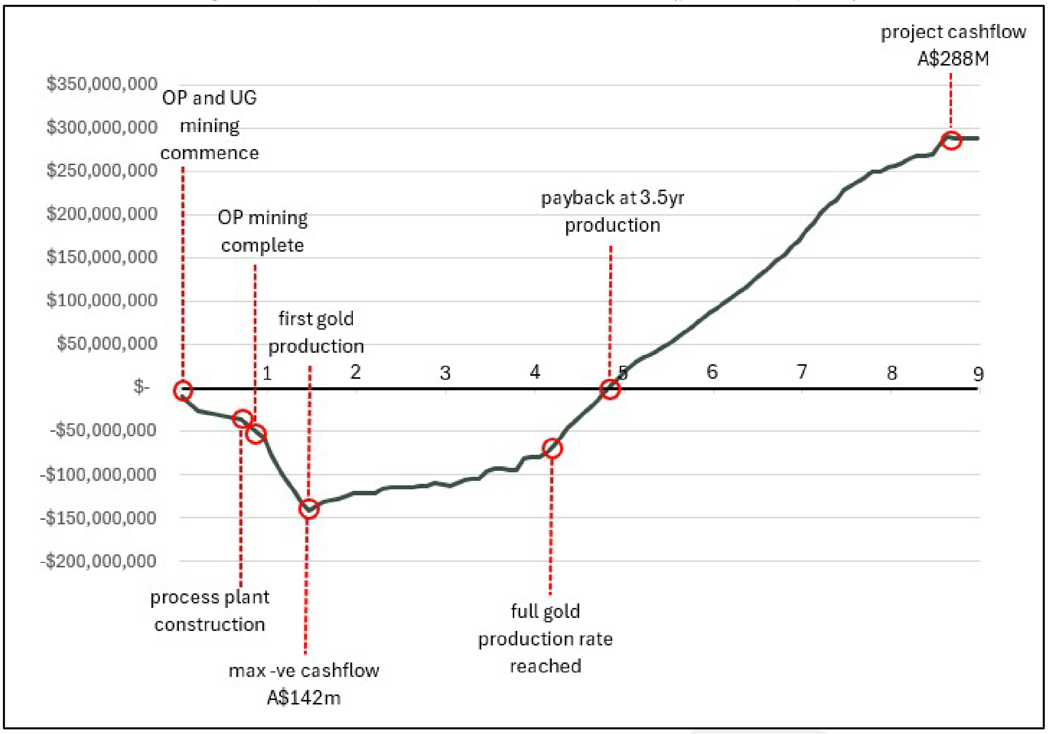
Figure 7: Operating cost estimate

Operating Cost	A$M	$/t Milled	A$/oz
Processing Facility and Supporting Infrastructure	152	$ 46	$ 758
Admin Capital + G&A	87	$ 27	$ 437
Underground Mining	266	$ 81	$ 1,333
Open Pit Mining	13	$ 4	$ 64
C1 Cash Cost	518	$ 158	$ 2,592
Royalties	37	$ 11	$ 189
Sustaining Capital	50	$ 15	$ 252
All in Sustaining Cost (ASIC)	606	$ 184	$ 3,032

Project Cumulative Cashflow

The financial model demonstrates that the maximum negative cashflow exposure for the Project is A$142 million, corresponding with the pre-production capital investment phase. Over the LOM the Project is forecast to generate a cumulative, undiscounted pre-tax cashflow of A$288 million, based on an Australian gold price of $5,385 per ounce.

Figure 8: Project cumulative cashflow timeline (production years)



Funding

The Scoping Study estimates that total project funding of approximately A$142 million will be required to cover capital and operating costs from the commencement of plant construction through to the completion of commissioning and the start of gold production. WIN does not currently have funding in place and would need to undertake further significant capital raise(s) to

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fund the Project's development following completion of further economic studies and once a final investment decision is made. It is anticipated that this funding will be sourced via a combination of debt and equity, to be secured prior to the commencement of project construction. It is also possible that WIN could pursue other value realisation or funding strategies such as forward gold sales, royalty streaming, gold prepay options, a sale, partial sale or joint venture of the Project. The Company believes there is a reasonable basis to assume project funding will be available as required, supported by the following:

- The Project's robust technical and economic fundamentals indicate the potential for attractive returns on capital and generation of substantial free cash flow, even at conservative gold price assumptions, providing a strong platform for securing debt and equity funding.

- The Company has an established track record of raising equity finance to support the exploration and evaluation of the Butchers Creek Gold Project having completed two oversubscribed placement raisings (refer ASX announcements "WIN Completes Strongly Supported $A3.6 Million Placement" 9 September 2024" and "WIN to Accelerate Drill Program at Radio Following Placement" 21 August 2025) since acquisition of the Project.

However, investors are advised that there is no certainty that the Company will be able to raise the funding when required. Typical project development financing is expected to involve a mix of debt and equity, and it is possible that such funding may only be accessible on terms that could be dilutive to, or otherwise impact the value of, the Company's existing shares.

Development and Production Timelines

At Scoping Study stage no timeframe for commencement of Project development has been set. Further economic studies are required to improve the current level of accuracy of +/-40% applicable to the Scoping Study level of accuracy which in turn will lead in to a Project development schedule.

WIN has already commenced the process of scoping the requisite development approvals from the relevant stakeholder groups and governmental bodies. It is anticipated that these approvals will be received over the course of WIN completing the further economic studies on the Project and before a final investment decision is made.

The Company estimates completion of exploration lease and prospecting lease conversions to mining leases to take up to 18 months to complete which would be the earliest a Project final investment decision could be made.

The Company anticipates drilling its Golden Crown resource during the next field season, this deposit contemplated as being a contributor to the overall Project for which we anticipate economic studies to be completed by the end of 2026.

Pricing of costs within the body of the study are based upon Q3 2025 costs. Readers should be cautioned that escalation in costs is outside the control of the Company and may at the time of development lead to the Project being materially different in terms of viability. Costs in subsequent economic studies will be refined further increasing the levels of accuracy using up to date estimates at that time.

Conclusions and Recommendations

The Butchers Creek Gold Project (BCGP) demonstrates robust potential as a standalone, economically viable operation, based on a production target of approximately 3.3Mt at 2.0g/t Au for 211koz, with an estimated 96% of material classified as Indicated. The nearby Golden Crown deposit (located 4km north and not included in this Study) could further enhance project economics in future evaluations, subject to additional drilling to improve confidence levels in the currently Inferred Mineral Resource of approximately 400kt at 3.1g/t Au for 38koz[3].

It is recommended that the Company initiate competitive tendering with mining contractors to refine cost assumptions and optimise operational efficiency. Further opportunities to reduce operating costs may include sourcing key consumables directly from Indonesia rather than Perth. Given the significance of power as an operating expense, the adoption of renewable energy solutions is expected to deliver net savings for the project.

Ongoing metallurgical testwork has the potential to enhance process design and gold recoveries, with results expected in the coming months. While capital expenditure requirements remain material and consistent with industry benchmarks, the evaluation of suitable dormant processing plants, both locally and offshore, could provide pathways to lower upfront costs. Moreover, increasing throughput by integrating additional ore from nearby deposits may further reduce capital intensity and operating costs, enhancing the overall robustness of project economics.

Following finalisation of updated Mineral Resource estimates, the mine plan, project schedule, and financial model should be revised to incorporate any extensions at Butchers Creek and Golden Crown. This will support the definition of a JORC compliant Ore Reserve and reinforce the foundation for long-term project viability.

Given the regulatory environment in Western Australia, it is strongly recommended to commence the permitting process and establish a permitting framework as a high priority. Comprehensive details and all supporting data are provided in the full November 2025 Scoping Study Report, included in the appendices to this announcement.

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About WIN Metals

WIN Metals (ASX: WIN) is a mineral exploration company holding 350km^2 of granted tenure in the Southern Goldfields and Kimberley regions of Western Australia. WIN's mineral endowment includes gold, nickel and lithium resources within the Company's extensive tenure.

The Mt Edwards Nickel and Faraday-Trainline Lithium Projects are situated near Widgiemooltha, approximately 80km south of the regional centre of Kalgoorlie-Boulder and 30km south of Kambalda. The Mt Edwards Nickel Project is a collection of eleven (11) nickel deposits with a total mineral resource of 12.7Mt @ 1.43% Ni for 180,900t of contained nickel[1]. The Faraday-Trainline Lithium Project has a reported mineral resource of 1.96 Mt at 0.69% Li_2O[2].

The Butchers Creek Gold Project is located 30km southeast of Halls Creek in the Kimberley region of Western Australia. It is a historic gold production centre hosting a global mineral resource of 5.6Mt at 1.98g/t Au for 359,000oz[3] of gold. Previous mining operations at Butchers Creek produced 52,000 ounces of gold between 1995 and 1997.

WIN recently acquired the Radio Gold Project in September 2025, located 8km north of Bullfinch, approximately 38km northwest of Southern Cross and about 400km east of Perth in the Yilgarn region of Western Australia. Over its production life, the Radio mine has produced approximately 71,000 ounces at an exceptionally high grade of 38g/t Au.

Table 5: WIN Metals Butchers Creek Gold Mineral Resource Estimates

Deposit	Last Update	Resource Classification	Tonnes (Mt)	Au g/t	Contained Gold (Oz)
Butchers Creek	Apr-25	Indicated	3.58	2.24	258,000
		Inferred	1.65	1.18	63,000
Golden Crown	Jun-21	Inferred	0.40	3.10	38,000
Total		**Indicated + Inferred**	**5.63**	**1.98**	**359,000**

Note: Butchers Creek figures are rounded and reported at 0.5g/t Au cut-off to 150m below surface (open pit) and 0.8g/t Au cut-off below 150m of surface. Golden Crown figures are rounded and reported above a 0.8g/t Au cut-off.

Table 6: WIN Metals Mt Edwards Nickel Mineral Resource Estimates

Deposit	Indicated		Inferred		TOTAL Resources		
	Tonne (Mt)	Nickel (%)	Tonne (Mt)	Nickel (%)	Tonne (Mt)	Nickel (%)	Nickel Tonnes
Gillett*	2.27	1.35	0.87	1.16	3.14	1.30	40,770
Widgie 3*	0.51	1.34	0.22	1.95	0.73	1.53	11,200
Widgie Townsite*	1.65	1.60	0.85	1.38	2.50	1.53	38,260
Armstrong*	0.95	1.45	0.01	1.04	0.96	1.44	13,820
132N	0.03	2.90	0.43	1.90	0.46	2.00	9,050
Cooke			0.15	1.30	0.15	1.30	2,000
Inco Boundary			0.46	1.20	0.46	1.20	5,590
McEwen			1.13	1.35	1.13	1.35	15,340

[1] ASX:WIN "Sale of non-core assets yield $1.4M for WIN to advance gold Assets" Released 1 July 2025
[2] ASX:WIN "375% Growth in Faraday-Trainline Lithium Mineral Resource" Released 8 November 2023
[3] ASX:WIN "WIN advances Butchers Creek towards development following resource update" Released 16 April 2025

Deposit	Indicated		Inferred		TOTAL Resources		
	Tonne (Mt)	Nickel (%)	Tonne (Mt)	Nickel (%)	Tonne (Mt)	Nickel (%)	Nickel Tonnes
McEwen Hangingwall			1.92	1.36	1.92	1.36	26,110
Mt Edwards 26N			0.87	1.43	0.87	1.43	12,400
Zabel	0.27	1.94	0.05	2.04	0.33	1.96	6,360
TOTAL	**5.68**	**1.48**	**6.97**	**1.39**	**12.66**	**1.43**	**180,900**

All Resources reported at 1.0% Ni cut-off except for WTS, Widgie 3, Gillett and Armstrong which are reported at 0.7% Ni cut- off. Tonnes and grade have been rounded to reflect the relative uncertainty of the estimates.

Table 7: WIN Metals Mt Edwards Lithium Mineral Resource Estimates

Deposit	Measured		Indicated		Inferred		TOTAL Resources		
	Tonne (kt)	Li_2O (%)	Tonne (kt)	Li_2O (%)	Tonne (kt)	Li_2O (%)	Tonne (kt)	Li_2O (%)	Li_2O Tonnes
Faraday	550	0.75	250	0.66	220	0.61	1,020	0.7	7,100
Trainline	-	-	780	0.69	160	0.63	940	0.68	6,300
TOTAL	**550**	**0.75**	**1,020**	**0.68**	**390**	**0.62**	**1,960**	**0.69**	**13,500**

Reported above a cut-off grade of 0.30% Li_2O to a depth of 310mRL (65m below surface) and 0.50% Li_2O below 310mRL to 250mRL. Tonnes and grade have been rounded to reflect the relative uncertainty of the estimates.

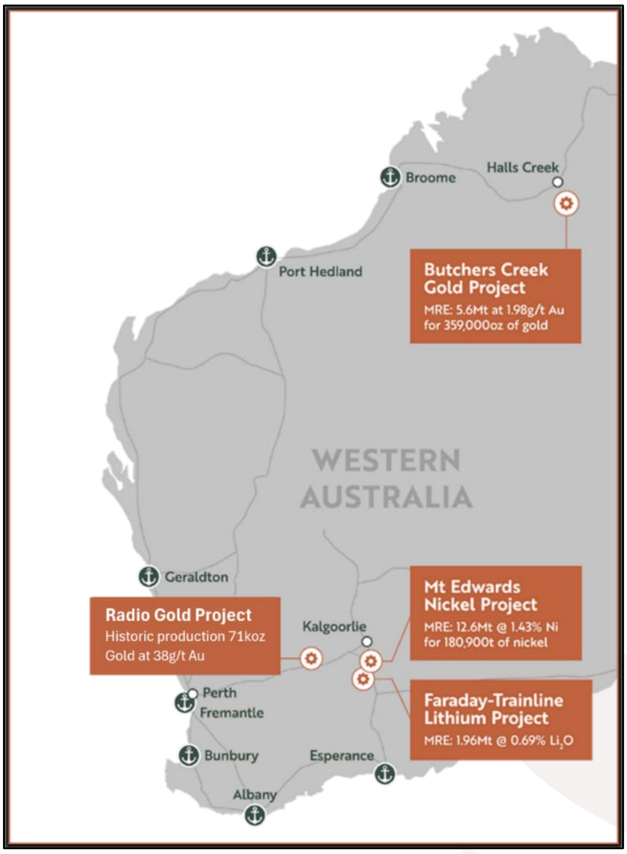


Figure 9: WIN's Gold, Nickel and Lithium Project Locations

Competent Person Statements:

Exploration Results and Mineral Resources

The information in this announcement that relates to mineral resource estimates and exploration results is based on information reviewed, collated and fairly represented by Mr William Stewart, who is a full-time employee of WIN Metals Ltd. Mr Stewart is a member of the Australian Institute of Metallurgy and Mining (Member No. 224335). Mr Stewart has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Stewart consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Additionally, Mr Stewart confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report.

Mining

The information in this announcement that relates to Mining and Financial Analysis based on information compiled by independent consulting Mining Engineer Mr Simon Krebs (FAusIMM, B.Eng (WASM)Mining). Mr Krebs is a Member of AusIMM. He is self-employed by RCI Mining and Project Development Services. Mr Krebs has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which is undertaken, to qualify as a Competent Person as defined in the JORC 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Krebs consents to the inclusion in the announcement of the matters based on the information made available to him, in the form and context in which it appears.

Forward Looking Statements

This announcement includes forward-looking statements that are only predictions and are subject to known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of WIN Metals Ltd, the directors and the Company's management. Such forward-looking statements are not guarantees of future performance.

Examples of forward-looking statements used in this announcement include use of the words 'may', 'could', 'believes', 'estimates', 'targets', 'expects', or 'intend' and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of announcement, are expected to take place.

Actual values, results, interpretations or events may be materially different to those expressed or implied in this announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward-looking statements in the announcement as they speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, WIN Metals Ltd does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement or any changes in events, conditions or circumstances on which any such forward-looking statement is based.

Compliance Statement

The Company confirms it is not aware of any new information or data that materially affects the information included in the original market announcement(s), and in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcement.

Reasonable Basis for Forward-Looking Statements

No Ore Reserve has been declared. This ASX announcement has been prepared in compliance with the JORC Code (2012) and the ASX Listing Rules. All material assumptions on which the Scoping Study production target and projected financial information are based have been included in this announcement and disclosed in the Scoping Study. Consideration of Modifying Factors in the format specified by JORC Code (2012), Section 4 within the appendices of this Study report.

Summary Information

This announcement has been prepared by WIN and includes information regarding WIN's disclosure of results to the ASX.

This announcement should also be read in conjunction with WIN's other periodic and continuous disclosure announcements lodged with the ASX, which are available at www.asx.com.au and available on WIN's website at www.winmetals.com.au.

Table 8: Reference documents included in this announcement

Number	Announcement Date	Company	Announcement Title
1	1-Jul-25	WIN	Sale of non-core assets yield $1.4M for WIN to advance gold Assets
2	8-Nov-23	WIN	375% Growth in Faraday-Trainline Lithium Mineral Resource
3	16-Apr-25	WIN	WIN advances Butchers Creek towards development following resource update

Appendices

BUTCHERS CREEK GOLD PROJECT SCOPING STUDY - NOVEMBER 2025

Reasonable Basis for Forward Looking Assumptions

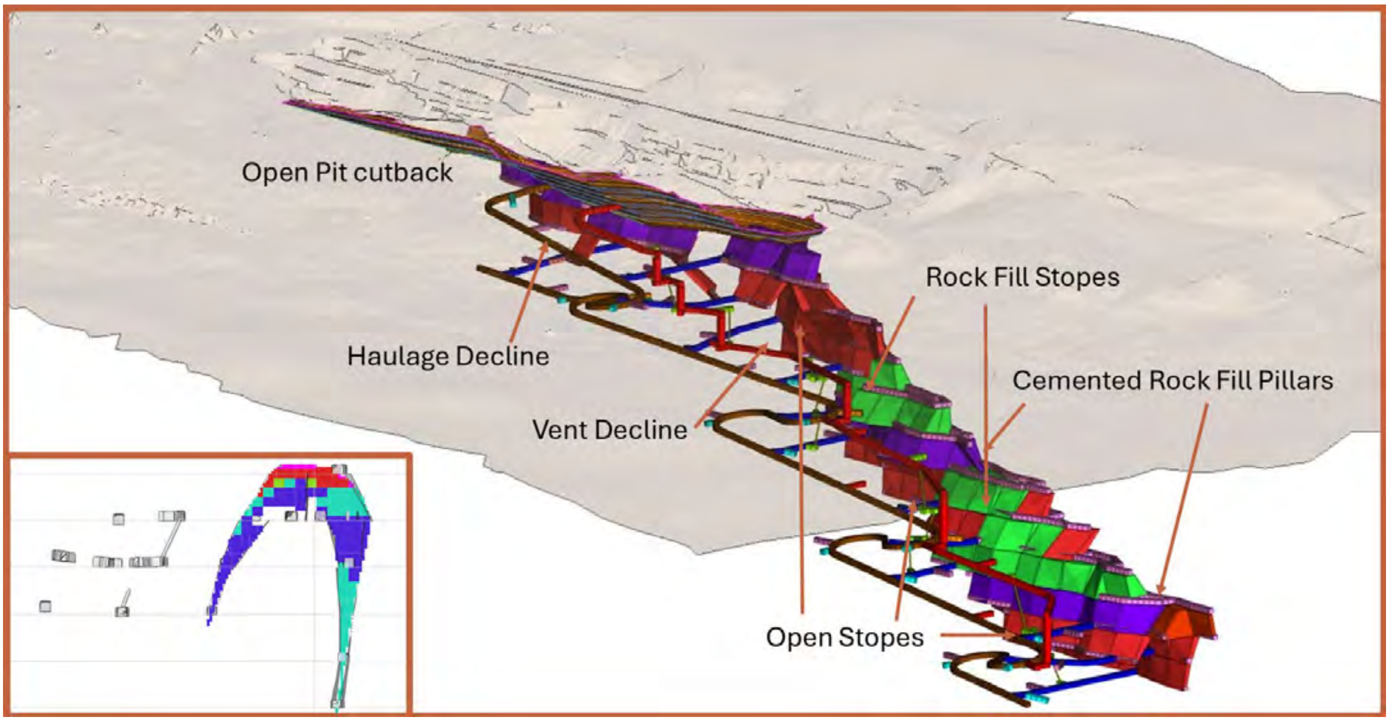
No Ore Reserve has been estimated or declared for the Project. This document has been prepared in compliance with the JORC Code (2012) and the ASX Listing Rules. All material assumptions on which the Scoping Study production target and projected financial information are based have been included in this release and disclosed in the table below. The level of study does not support the estimation of Ore Reserves or provide any assurance that the Project will go ahead or be realised. The scoping study strongly supports progress to the next level of study being a preliminary feasibility study.

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	The Mineral Resource Estimate (MRE) on which the Scoping Study is based was announced to the ASX on 16th April 2025. No Ore Reserve has been declared as part of the Scoping Study.
Site visits	William Stewart, the Competent Person for the reporting of exploration results and Estimation and Reporting of Mineral Resources is Geology Manager for WIN Metals and conducts regular site visits.
Study status	No Ore Reserve has been declared. The Study is a Scoping Study.
Cut-off parameters	Cut-off grade parameters are based on operating costs and site overheads.
Metallurgical factors or assumptions	Refer to the Metallurgy and Processing Section of this report.
Environmental	Refer to the Environmental Section of this report. Refer to the Permitting Section of this report.
Infrastructure	Butchers Creek is located approximately 30 kilometres south east of Halls Creek in the East Kimberley Region of Western Australia. Butchers Creek is accessible via the partially sealed Duncan Road. Halls Creek has suitable accommodation and other services (hospital and airstrip) for required activities. Given the Project's location, suitable labour is available from Perth, Kununurra and Darwin for required activities. Sufficient land is available within the Mining Leases to accommodate the infrastructure contemplated by this Scoping Study. Power and water requirements are discussed in this report.
Costs	**Capital costs:** Project capital costs for the processing plant and non-process infrastructure were provided at ± 40% by experienced constructors for a 600ktpa process plant option. For the tailings storage facility, capital costs have been provided by experienced constructors, based on the mining and processing schedules. For all other capital costs including infrastructure and mining related costs have been estimated from similar Western Australian mining operations. **Operating Costs:**

ABN 77 648 687 094
Level 4, 220 St Georges Tce
Perth, WA 6000
PO BOX 7713
Cloisters Square WA 6850
T: +61 8 6381 7250
F: +61 8 6381 7299
info@winmetals.com.au
www.winmetals.com.au
ASX:WIN

Criteria	Commentary
	Operating costs have been provided by experienced contractors for the planned scope of operations, with items estimated by WIN's personnel derived from first principles and/or supplier quotes. **Deleterious Elements:** No allowance has been made for deleterious elements content on the basis that no deleterious elements have been detected. **Exchange Rates:** All costs were estimated in Australian dollars (AUD). **Transportation Charges:** It is assumed that gold doré will be transported from site for refining in Perth with no other transport costs applicable. **Treatment and Refining:** Treatment and refining charges in the financial model are based on market observations for similar products where available. **Royalties:** The state government royalty of 2.5% and Private Royalty has been applied in the economic analysis.
Revenue factors	The derivation of feed grades comes from the Mineral Resource estimates with the application of dilution modifying factors as outlined above. The product to be sold is gold in the form of doré bars produced on site. The gold price assumed is AUD$5,385 per ounce.
Market assessment	Gold doré bars will be sold at spot price.
Economic	Refer to economic analysis, which assumes a discount rate of 8% and nil inflation. Economic analysis includes a sensitivity analysis on gold price scenarios.
Social	The Project is granted on approved and pending mining leases and coupled with a positive stakeholder engagement process being undertaken by the Company, there are no issues expected around forming agreements with key stakeholders, if so required, to complete the works as planned.
Other (incl Legal and Governmental)	No Ore Reserve has been declared. No naturally occurring risks have been identified. The project is majority owned by Butchers Creek Metals Pty Ltd which is a wholly owned subsidiary of WIN Metals Ltd, and there are no marketing arrangements in place. Please refer to the body of the announcement. 3% of M80/0106 and M80/0315 is registered to a third party interest. All of the working area in the study are on approved or pending mining leases with no outstanding issues or requirements with DMPE.
Classification	No Ore Reserve has been declared.
Audits or reviews	No Ore Reserve has been declared.
Discussion of relative accuracy/ confidence	No Ore Reserve has been declared. Metallurgical recoveries have been based on testwork data and confirmed through previous production history as being reasonable. Costs have been derived from both recent industry data and estimations from independent consultants and suppliers. Cost estimate accuracy for the Scoping Study is considered to be in the order of ±40%.

BUTCHERS CREEK GOLD PROJECT SCOPING STUDY - NOVEMBER 2025



1 Executive Summary

WIN Metals Ltd (ASX:WIN) commissioned this Scoping Study for the purpose of carrying out a preliminary assessment of the technical and financial viability of a standalone gold mining operation at Butchers Creek. The proposed Butchers Creek Gold Project (BCGP) is planned for construction on the Company's tenement packages located around the Butchers Creek deposit within Mining Leases M80/106, M80/315, M80/418, E80/4874 and Prospecting License P80/1839 that is under application for mining lease conversion.

This Scoping Study covers various aspects of the proposed operation inclusive of mine design, comprehensive construction plan, metallurgical process test work, process flowsheet and HV power distribution designs culminating in a full cost estimate with recently sourced market costs to show a detailed financial model.

The Butchers Creek Gold Project (BGCP) is situated approximately 30km southeast of Halls Creek, within the East Kimberley region of Western Australia. The site is accessible by Duncan Road, which connects to both the local township and the Great Northern Highway.

The Halls Creek region heralded Western Australia's first gold rush in the 1890's but has been largely limited to small scale mining at Golden Crown, Mt Bradley and alluvial across the region until the 1990's. Gold production from the Butchers Creek open pit with total production of 761,000t @ 2.09g/t Au for 52,000oz of gold produced until the operation was closed in late 1997. The Butchers Creek mine site and processing plant has since been decommissioned and rehabilitated.

The latest Mineral Resource Estimate (MRE) for the Butchers Creek resource was completed by WIN Metals in April 2025[1]. This MRE update increased the total Mineral Resource to 321,000oz of gold at 1.91g/t Au, with 3.58Mt @ 2.24g/t Au for 258koz of contained gold classified as Indicated available for economic studies for project development.

The mining plan in this Scoping Study focusses on only the Butchers Creek Gold Deposit. The proposed operation consists of an open pit extension providing access for an underground mine, a 600ktpa CIL Gold Processing Plant and associated infrastructure, a 200-room accommodation village, a new 11kV HV Yard, site offices/workshops, a central administration office complex and a core yard facility. The operations will mine gold ore from both open pit and underground for onsite processing into gold ore suitable for transport and further refining offsite.

The underground mine will require the development of two mine portals with one for mobile machine access and the other to provide a suitable mine exhaust. The Main Access Decline is planned with a Figure of eight style decline access for efficient mining and services installation. The mine design utilises a relatively small dimension haulage decline of 5.2mH x 5.0mW suitable for 40t payload ejector trucks. This machinery type is important for the operation given the quantities of required waste and cemented rock backfill in the mining schedule. These smaller declines also allow for faster development rates relative to the current standard modern decline dimensions 5.8mH x 5.5mW used. The proposed smaller declines require less blast holes, less ground support and less waste rock removal.

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[1] *ASX:WIN "WIN advances Butchers Creek towards development following resource update" Released 16 April 2025*

Mine planning has incorporated full main infrastructure engineering designs for HV power, ventilation, pumping, water supply, compressed air and secondary means of egress for the underground mine. The main underground mining method to be employed is best described as a bottom-up panel long hole stoping method with waste rock fill (WRF) or cemented rock fill (CRF).

The production target assessment process has used the current resource model and applied a 1g/t gold grade cut-off during the Mine Stope Optimiser (MSO) stope selection process. This approach provides a raw mining volume estimate for each resource. Further mining dilution and recovery factors have then been applied along with practical economics for each individual stoping panel. This process has estimated a production target of 4.22Mt grading 1.88g/t containing 255koz of gold for the Project. The total ore production target estimated for the Project of 3.16Mt comprising 96% classified as indicated and 4% as inferred mineral resources.

The focus of the first year of the mine plan is mining the open pit extension (11 months). This pre-production stage of the operation plan incorporates an open pit cutback mined to establish portals developed in conjunction with the construction of a HV powerline, concrete batch plant, main administration complex, processing plant, Lake Komaterpillar pump station and accommodation village. Completion of the accommodation village is scheduled for the end of month 3, energising of the main HV circuit and commissioning of the processing plant month 18. The Underground mine is scheduled for commencement at the start of month 13 with economic production rates from the underground mine achieved in month 25 (13 months from commencement of the underground mine).

Monthly underground mine ore production for the Project after ramp-up averages 38.1kt with peak production of 76.8kt in month 56. Lateral mine development commences in month 13 and is completed in month 65 and averages 242m per month. In total there is 2.39km of main haulage way development and 12.82km of total mine development to be completed. This support the requirement for 1 jumbo development crew being required over the life of the underground operation. During the life of the Project 1.23Mt of waste rock fill (WRF) and 0.68Mt of cemented rock fill (CRF) required to be placed in stope voids. In total there is 10.9Mtkm of trucking material movement. The maximum load and haul fleet size consists of 3 loaders and 3 trucks. The mining workforce including mobile maintenance during the Project averages 69 persons with a peak of 88 persons in month 51.

The proposed processing flowsheet consists of a 200t/hr 3 stage crushing circuit producing crushed material to minus 12mm 80% passing. The crushed material then proceeds to a 280m3 fine ore bin before being dosed with lime and then fed into a 100t/hr ball mill circuit. The ball mill will operate in closed circuit with a cluster of hydrocyclones and will grind the ore to a product size of 80% passing 75µm. Cyclone overflow will report via a vibrating trash screen to the carbon-in-leach (CIL) circuit.

A split of the cyclone underflow will report to a gravity screen with the gravity screen undersize reporting to a QS30 Knelson gravity concentrator. The Knelson tailings and gravity screen oversize report back to the ball mill for further grinding. Generated gravity concentrates report to an Acacia CS500 intensive leach reactor.

The CIL circuit will consist of six tanks to provide a nominal residence time of 24hr (at 600ktpa) for the ore slurry, allowing the gold contained to be leached by cyanidation. Carbon will be introduced to the final tank and pumped counter-current to the flow of ore, adsorbing the dissolved gold. Loaded carbon from the first adsorption tank will be pumped to the pressure Zadra elution circuit which will use hydrochloric acid, hot cyanide and caustic to remove the gold into solution. The eluted gold and leached gold from the Acacia will be recovered by electrowinning onto stainless steel cathodes, which will then be calcined and smelted to produce gold doré.

The tailings from the CIL circuit are planned to be sent to a dedicated detoxification tank where sodium metabisulfite (SMBS), air and lime are added to destruct residual cyanide in solution. Plant tailings will be pumped to the tailings storage facility.

When in full production the maximum milling rate applied for the study is 50kt per month with average monthly through put of 38kt, gold production of 200koz and an average mill recovery rate of 94.6%. The average process plant availability has been assumed as 92.5% with the full nominal power draw of the plant estimated at 2.40MWhr.

The Project operations will utilise a Fly in/Fly out workforce with accommodation provided by a 200 room onsite accommodation village. Transport to and from the Project has been costed utilising three 3 charter flights per month per person flying from Perth to the Halls Creek airport. Full manning levels for the operation averages 134 over the life of the project with a peak of 161 in year 4. Average non mining workers for full production is 69 with the main contributor being the 39 persons allocated for the processing plant. Average onsite personnel for the Project is 89 persons leaving sufficient spare rooms for mill relines and future additional project expansions or new mine development. During the initial village construction period an existing accommodation facility in Halls Creek will be utilised and has been costed as such.

The Project operations are scheduled to reach full commercial production in month 19 with the estimated pre-production capital cost being $142M. When in full production the average monthly operating costs for the operation is $6.6M. During this period capital costs per month average $1.2M, fluctuating between $586k up to $3.4M. The estimated total unit operating costs over the life of the Project is $158/t milled with total calculated capital costs of $230M.

The total unit operating costs were calculated as $103 per mined ore tonne for open pit mining, $84 per mined ore tonne for underground mining, $46 per tonne processed for milling (including power) with other ancillary costs being $26.6/t. Annual power costs at commercial production average $11.7M with an average unit power cost of $0.37/kWhr.

The Project is estimated to generate $288M free cash over a 105 month period with a maximum negative cashflow of $142M in month 18 at a US$3,500/oz gold price applying an exchange rate 0.65 AUD/USD. The estimated production unit cash cost is A$2,592/oz and All In Sustaining Cost (ASIC) A$3,032. Total past mine gate costs have been estimated at $41M which includes all third-party royalties and $27M in Western Australian State royalties. The calculated NPV at an 8% discount rate for the Project is $143M achieving an internal rate of return of 25%.

Further additional existing gold resources at the nearby Golden Crown (400kt @ 3.1g/t) as well as extensions to the Butchers Creek resource both down dip and to the north could provide future further additional process plant feed. Incorporating these nearby potential future resource extensions may may provide feed to fill the mill early in the project life where the facility operates at half capacity or potentially extend the life of the project past the current scheduled 9 years.

Table 1.1 - Project Study Outcomes Summary

PARAMETER	UNIT	PROJECT TOTAL
KEY ASSUMPTIONS		
Gold Price (US$)	**USD$/tonne**	**3,500**
Exchange Rate	AUD:USD	0.65
Gold Price (AUD$)	AUD$/tonne	5,385
Diesel Price	AUD$/litre	1.75
Cement Price	AUD$/tonne	587
Discount Rate	%	8
Process Plant Recovery - Au	%	94.6
Unit Power Cost	AUD$/kWhr	0.37
DORE Refining Cost (inc Transport)	AUD$/oz	15
PRODUCTION		
Life of Mine	Months	105
Total Ore Mined	Tonnes	3,288,903
Mined Grade - Au	g/t	2.00
Contained Gold	oz	211,376
Total Ore Milled	dmt	3,288,903
Average Feed Grade	% Ni	2.00
Recovered Gold	**oz**	**199,962**
FINANCIALS		
Total Operating Costs	AUD$	518,222,257
Total Capital Costs	AUD$	230,039,460
Pre Production Capex	AUD$	141,936,874
Max Negative Cashflow (Month 16)	AUD$	141,936,874
Total Past Mine Gate Costs	AUD$	40,684,595
(Refining, Transport, Royalties)		
Total Net Revenue (Minus Past Mine Gate)	AUD$	1,036,034,374
Total Cumulative Cashflow (Pre Tax)	**AUD$**	**287,772,657**
Discounted Cashflow (@ 8%) - NPV8	AUD$	142,754,045
Internal Rate of Return	%	25.3
UNIT COSTS		
Unit Operating Costs (C1)	AUD$/t milled	157.57
Unit Mining Operating Costs (Inc Power)	AUD$/t mined	46.10
Unit OP Mining Operating Costs (Inc Power)	AUD$/t milled	103.21
Unit UG Mining Operating Costs (Inc Power)	AUD$/t milled	84.19

PARAMETER	UNIT	PROJECT TOTAL
Unit All in Sustaining Costs	AUD$/t milled	184
Unit All in Costs	AUD$/t milled	228
All in Sustaining Costs (AISC)	AUS$/oz	3032
Comparative C1 Cash Cost	**AUS$/oz**	**2,592**

2 Introduction

2.1 Overview

WIN commissioned this Scoping Study for the purpose of carrying out a preliminary assessment of the technical and financial viability of a standalone gold mining operation. The proposed Butchers Creek Gold Project is planned for construction on the Company's tenement packages located in the Butchers Creek deposit is within Mining Leases M80/106, M80/315, M80/418, E 80/4874 and P80/1839.

This Study covers various aspects of the proposed operation, mine designs, comprehensive construction plan, metallurgical process test work, ore process flowsheet, HV power distribution designs, full cost estimate with recently sourced market costs culminating in a detailed financial model.

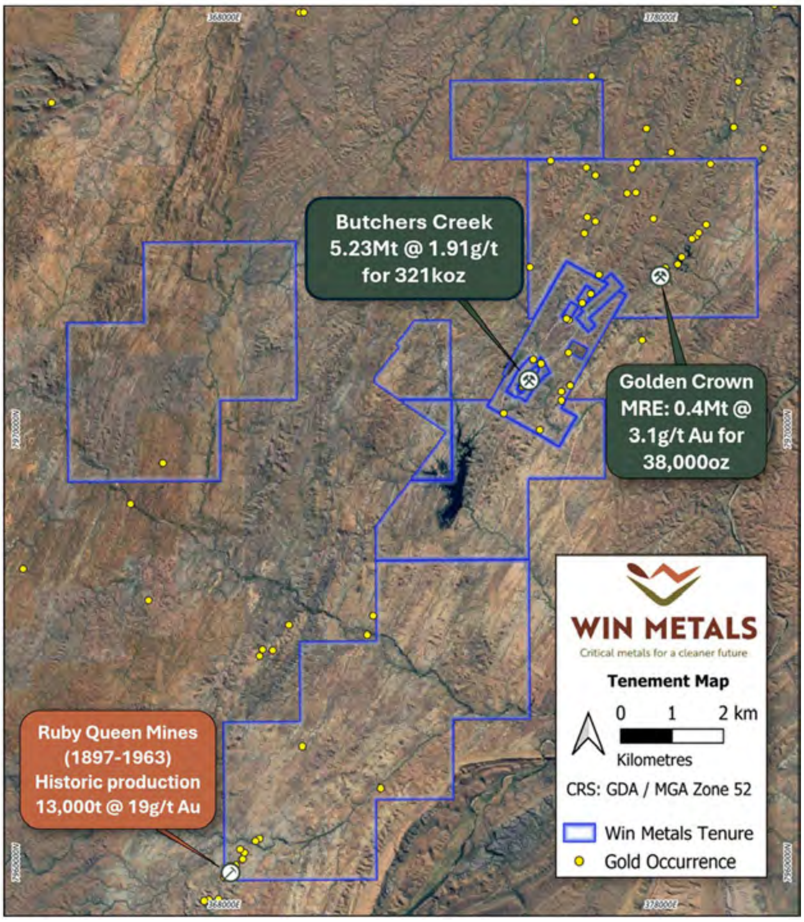


Figure 2.1 - Butchers Creek Gold Project Tenements

2.2 Location

The BGCP is located approximately 30km southeast of Halls Creek, within the East Kimberley region of Western Australia. The site is accessible by Duncan Road, which connects to both the local township and the Great Northern Highway.

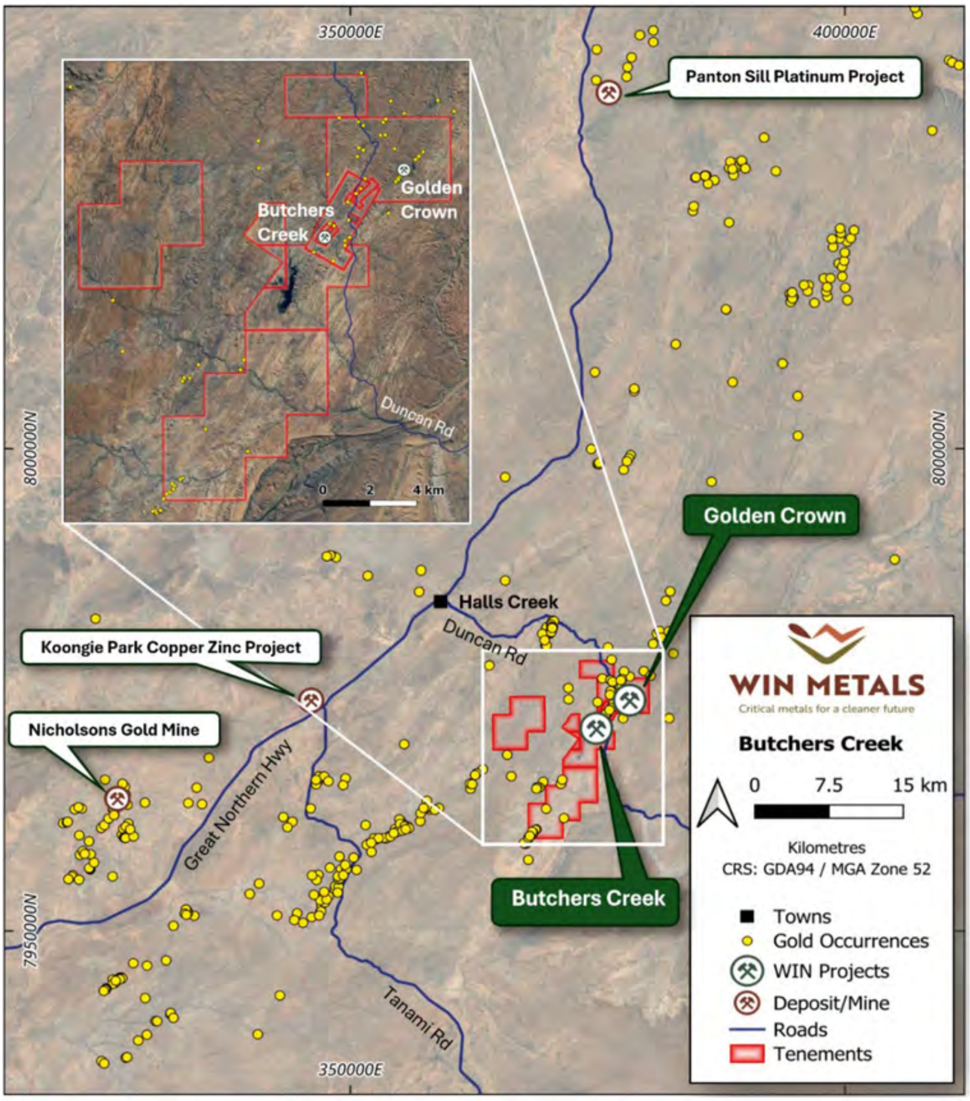


Figure 2.2 - Butchers Creek Gold Project Location

2.3 Project History

The Halls Creek region heralded Western Australia's first gold rush in the 1890's the area surrounding the BGCP was Western Australia's first proclaimed goldfield. Largely limited to small scale mining at Golden Crown, Mt Bradley and alluvial operations across the region until the 1990's.

More recent gold production from the Butchers Creek open pit commenced in 1995 with the construction of a 500ktpa conventional carbon in pulp gold ore processing plant, a 5Mt tails storage facility, diesel power station and a 75-person accommodation camp and offices (Figure 2.3). Total production from Butchers Creek open pit is recorded as 761,000t @ 2.09g/t Au for 52,000oz of contained gold until the operation was closed in late 1997 due to the low gold price at the time. The

Butchers Creek 500ktpa processing plant has since been decommissioned and the mine site rehabilitated.

Post closure of the mining operation in 1997, various public and private entities held the tenure with exploration drilling in the ensuing period mostly carried out by Northern Star Resources in 2004 at Golden Crown and MEI between 2020 and 2022 at Butchers Creek. WIN Metals acquired the project late in 2024 with its maiden drilling campaign informing the 2025 Butchers Creek MRE update.

Figure 2.3 - Butchers Creek Gold Processing Plant 1996

Figure 2.4 - Butchers Creek Open Pit May 2024

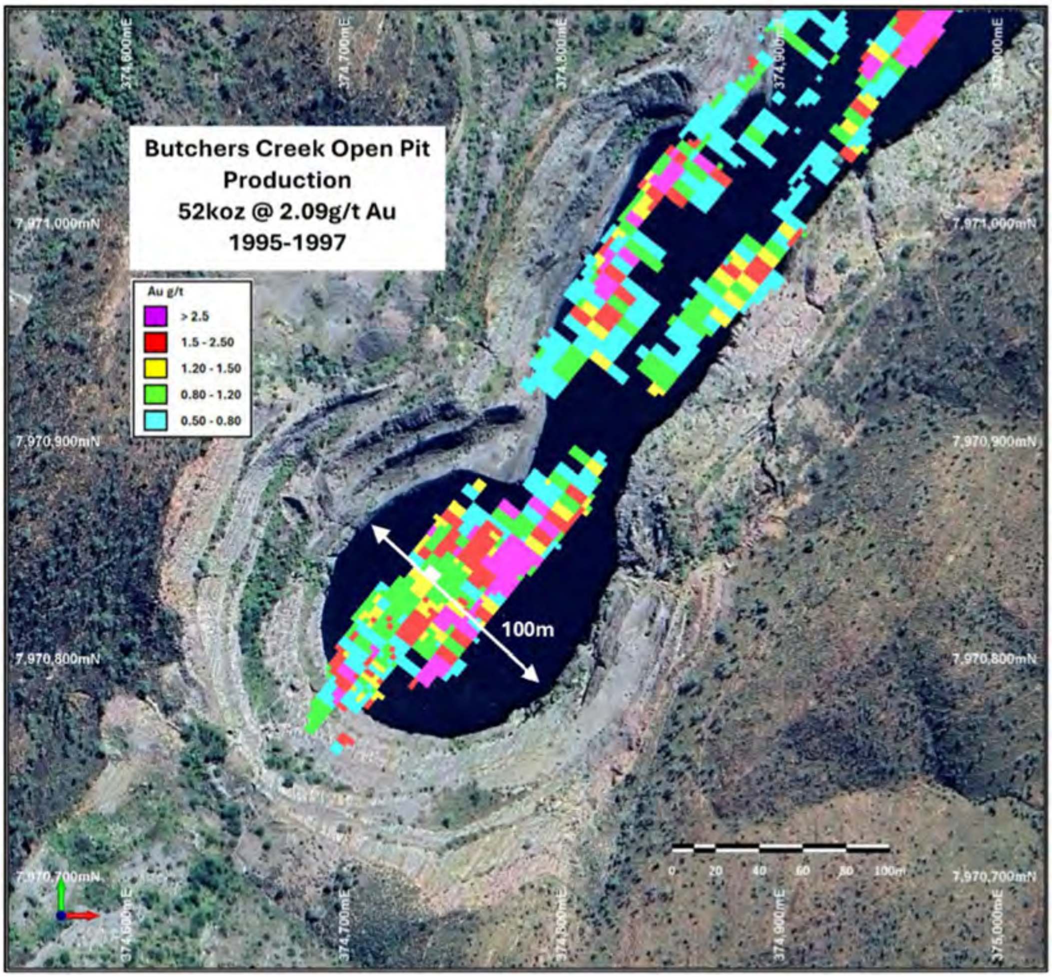


Figure 2.5 – Aerial Image of Butchers Creek Open Pit and Historic Production

2.4 Tenement Status

The Butchers Creek Gold Project tenement package which is a collective of 3 granted mining leases, 5 granted exploration licences, 3 granted prospecting licences. and 2 pending prospecting licences. Mining activities are planned on M80/106, M80/315, M80/418 and P80/1839. WIN is in the process of converting prospecting license P80/1839 into a mining lease with pending mining lease M80/651.

Table 2.1 – WIN Tenements

Licence Name	Type	Status	WIN %	Grant Date	End Date	Area (Ha)
M80/106	Mining Lease	Granted	97	24/07/1986	23/07/2028	38.8
M80/315	Mining Lease	Granted	97	22/08/1990	21/08/1932	511.6
M80/418	Mining Lease	Granted	100	6/09/1995	5/09/2037	6.8
E80/4856	Exploration License	Granted	100	15/09/2015	14/09/2025	3176.6
E80/4874	Exploration License	Granted	100	15/09/2015	14/09/2025	1135.3
E80/4976	Exploration License	Granted	100	7/02/2017	6/02/2027	1778

Licence Name	Type	Status	WIN %	Grant Date	End Date	Area (Ha)
E80/5059	Exploration License	Granted	100	26/07/2017	25/07/2027	3246.2
E80/5584	Exploration License	Granted	100	21/02/2022	20/02/2027	112.8
P80/1839	Prospecting License	Granted	100	6/02/2017	5/02/2025	5.8
P80/1854	Prospecting License	Granted	100	25/08/2017	24/08/2025	8
P80/1855	Prospecting License	Granted	100	25/08/2017	24/08/2025	44
M80/0651	Mining Lease	Pending				
P80/1884	Prospecting License	Pending				
E80/5660	Exploration License	Pending				
E80/6085	Exploration License	Pending				
E80/6086	Exploration License	Pending				
M80/655	Mining Lease	Pending				
M80/656	Mining Lease	Pending				
M80/653	Mining Lease	Pending				
M80/654	Mining Lease	Pending				
E80/6171	Exploration License	Pending				

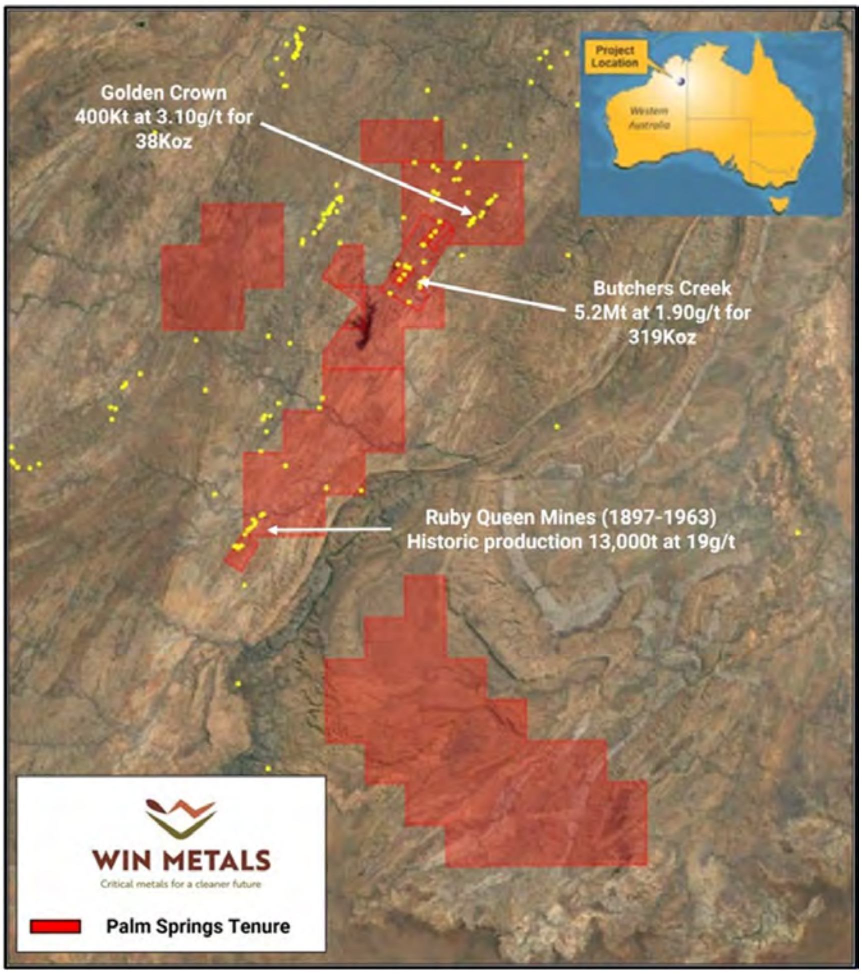


Figure 2.6 - Butchers Creek Gold Project Tenure

3 Geology, Mineralisation & Resources

3.1 Mineral Resource Status

The latest Mineral Resource update for BCGP was reported to the ASX by WIN in April 2025. This MRE reported a total MRE for Butchers Creek of 5.23Mt @ 1.90g/t Au for 321koz of gold containing 3.58Mt @ 2.24g/t Au for 258koz of gold classified as Indicated.

Table 3.1 - Current Butchers Creek MRE

Deposit	Resource Classification	Tonnes (Mt)	Au g/t	Contained Gold (Oz)
Butchers Creek	Indicated	3.58	2.24	258,000
	Inferred	1.65	1.18	63,000
Total	**Indicated + Inferred**	**5.23**	**1.91**	**321,000**

Note: Figures are rounded and reported at 0.5g/t cut-off to 150m below surface (open pit) and 0.8g/t below 150m of surface

This MRE update reflects the successful conversion of 119koz at 2.24g/t Au of previously inferred into the Indicated resource category representing an increase of 86% in the Indicated ounces compared to the 2021 MRE as demonstrated in Figure 3.1 below.

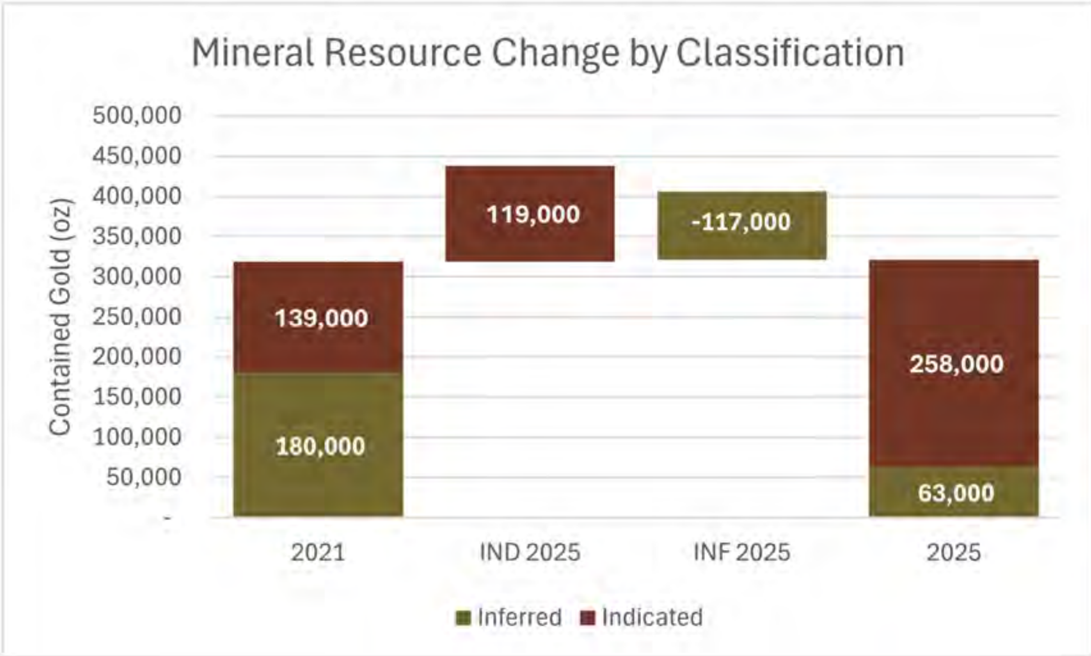


Figure 3.1 – Recent Mineral Resource Update Changes

The grade tonnage curve for the current Butchers Creek MRE is shown below in Figure 3.2. The reported resource comprises 4.8Mt at 2.0g/t gold, above a cut-off of 0.7g/t Au.

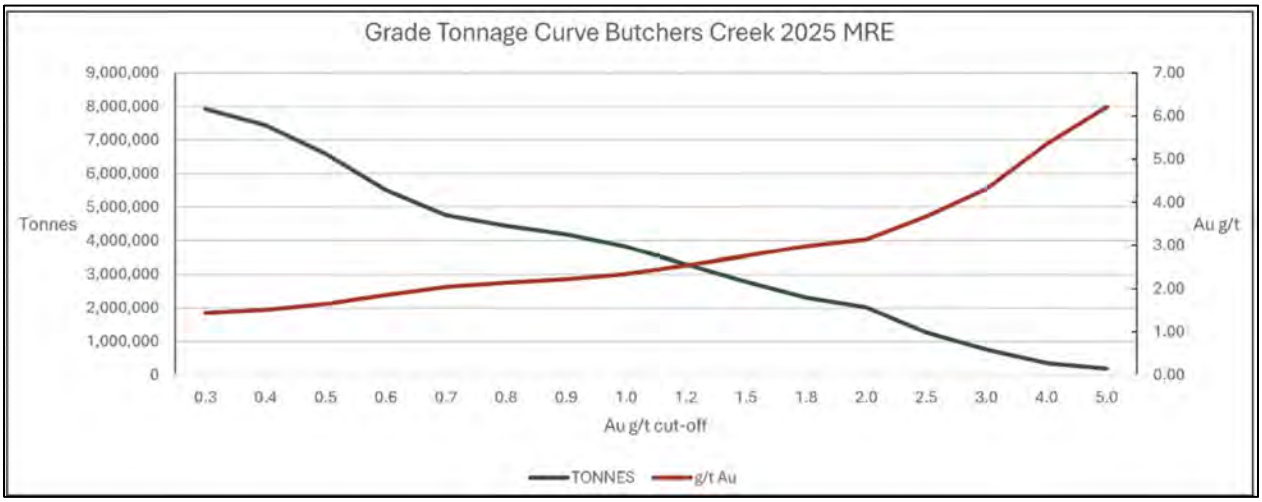


Figure 3.2 - Butchers 2025 MRE Grade Tonnage Curve

The Global Mineral Resource for the BCGP, which incorporates both the Butchers Creek and Golden Crown deposits, is currently estimated at 5.63Mt at 1.98g/t Au for a total of 359koz. Notably 72% of these ounces are classified as Indicated resource, reflecting a high level of geological confidence.

Table 3.2 - Butchers Creek Gold Project (BCGP) Global Resource

Deposit	Last Update	Resource Classification	Tonnes (Mt)	Au g/t	Contained Gold (Oz)
Butchers Creek	Apr-25	Indicated	3.58	2.24	258,000
		Inferred	1.65	1.18	63,000
Golden Crown	Jun-21	Inferred	0.40	3.10	38,000
Total		**Indicated + Inferred**	**5.63**	**1.98**	**359,000**

Note: Butchers Creek figures are rounded and reported at 0.5g/t Au cut-off to 150m below surface (open pit) and 0.8g/t Au cut-off below 150m of surface. Golden Crown figures are rounded and reported above a 0.8g/t Au cut-off.

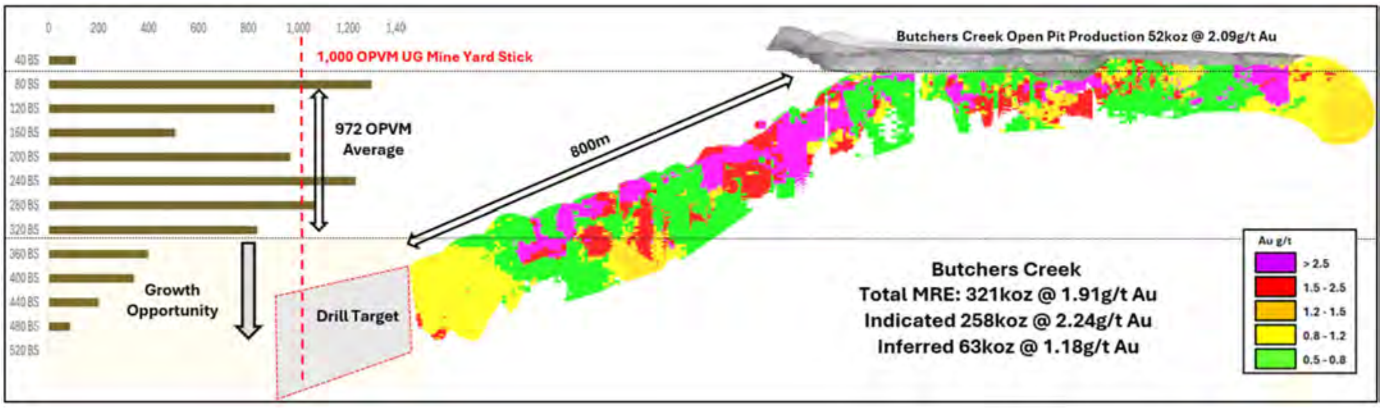


Figure 3.3 - Butchers Creek Resource (OVM) Long Section (Looking NW)

Butchers Creek MRE is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

Figure 3.3 illustrates Butchers Creek gold endowment from below the existing open pit to 500m vertically below surface. Ounces Per Vertical Metres (OPVM) averages 972 at the base of the open pit to 320m below surface, with the resource remaining open at depth only constrained by lack of drilling.

Drilling from the 2024 field season was designed to increase confidence in the 2021 Butchers Creek MRE, primarily by converting Inferred material to the Indicated Resource category. In addition, the program successfully extended the mineralisation envelope by 250m to the south of the 2021 MRE. The 2025 geological interpretation also incorporates the Western Synform mineralisation, a previously unrecognised folded repeat of the western limb (Figure 3.4). This structural interpretation presents an opportunity to define a new exploration target for potential additional mineralisation. The comparison shown below in Fig 3.4 demonstrates the volume variance between the 2021 and 2025 MRE models and the improved grade constraint within the 2025 model.

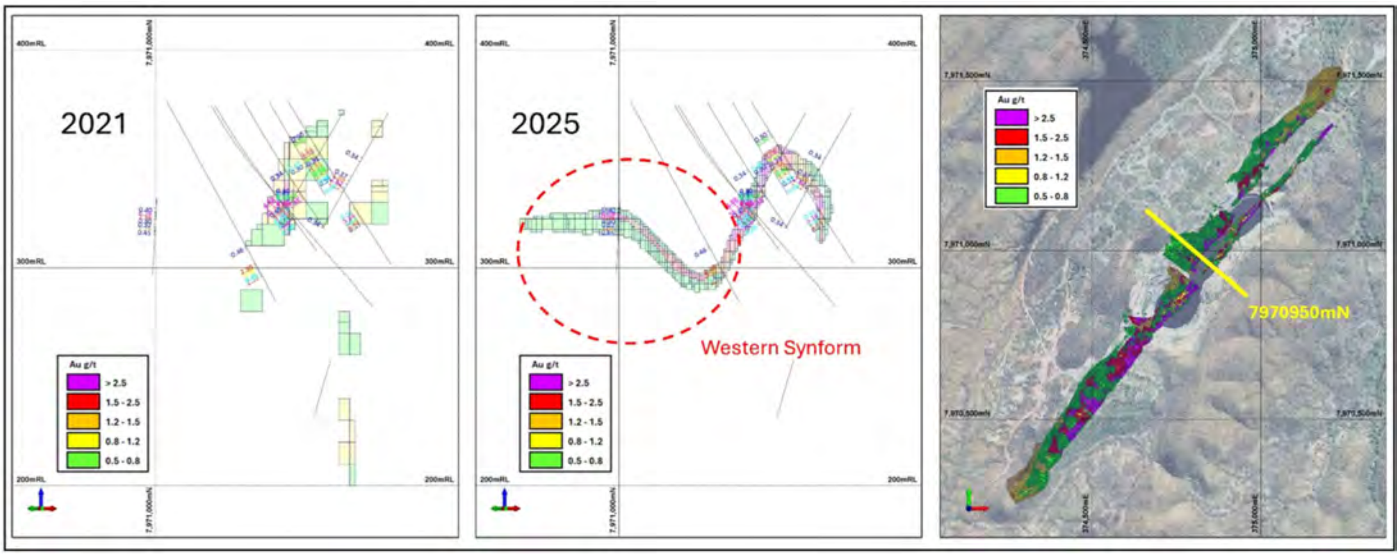


Figure 3.4 - 2021 MRE (left), 2025 MRE (right) Comparison

The 2025 Butchers Creek MRE update includes data from an additional thirteen (13) reverse circulation (RC) and 2 diamond holes (DD) completed during the 2024 field season and 15 drill holes completed by Meteoric Resources (MEI) after the release of the 2021 MRE. The mineralisation domains have been re-modelled using all available drill data, albeit the estimate has only been informed by DD and RC drill holes to ensure sampling error/grade smearing has not been introduced by percussion or rotary air blast (RAB) drilling methods related primarily to open pit mining activities. In total 2,996 composites were used to inform the 2025 MRE estimate.

The 2025 MRE has been reported as 'open pit' and 'underground' resources with cut-off grades of 0.5g/t Au (to 150m below surface) and 0.8g/t Au used below 150m at a nominated level of 220mRL as illustrated in (Table 3.3) below.

Table 3.3 - Butchers Creek MRE Split OP & UG

Deposit	Mining	Cut-Off Grade	Resource Classification	Tonnes (Mt)	Au g/t	Contained Gold (Oz)
Butchers Creek	OP	0.5	Indicated	1.50	1.99	96,000
			Inferred	0.56	0.99	18,000
	UG	0.8	Indicated	2.08	2.42	162,000
			Inferred	1.09	1.27	45,000
	Total Indicated			3.58	2.24	258,000
	Total Inferred			1.65	1.18	63,000
	Total			**5.23**	**1.91**	**321,000**

Note: Butchers Creek figures are rounded and reported at 0.5g/t Au cut-off to 150m (+220mRL) below surface (370m RL) for open pit "OP" and a 0.8g/t Au cut-off below 150m (-220mRL) of surface (370mRL) for underground "UG".

The 2025 MRE model has increased the Indicated resource to the south and north under the existing pit. The Indicated resource component has increased by 86% to 3.58Mt at 2.24g/t for 258koz which is available for conversion into Ore Reserves following completion of the planned economic studies. Figure 3.5 below illustrates MRE classification types with the Indicated Resource (Green) and Inferred (Red).

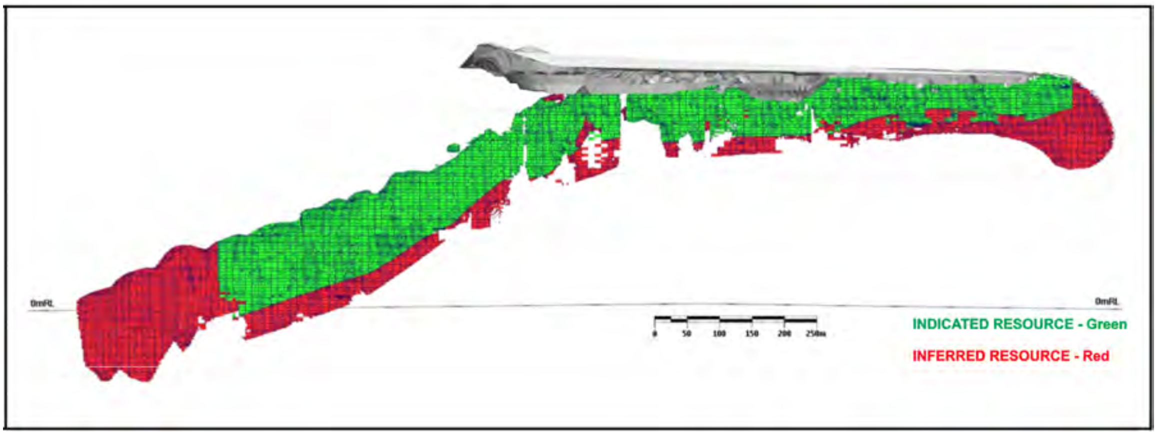


Figure 3.5 - Butchers Creek 2025 MRE Resource Classification

3.2 Regional Geology

BCGP is within the northeast-trending Halls Creek Orogen, comprising Paleoproterozoic sediments, volcanics and intrusive rocks. The gold mineralisation at BCGP occurs along the eastern zone of the orogen within the Butchers Gully Member of the Olympio Formation as illustrated in Figure 3.6 below.

The Halls Creek Group geosynclinal sequence was deposited over the East Kimberley in the Lower Proterozoic, the stratigraphy was then tightly folded, metamorphosed to greenschist facies and subsequently invaded by basic sills and dykes. More intense folding was accompanied by higher-grade metamorphism in the western part of the region, which formed the Tickalara Metamorphics. Gneissic granite formed at the same time by melting during metamorphism. Late stage batholiths intruded at the end of the Lower Proterozoic. This phase was accompanied by vast eruptions of acid volcanics. Intense deformation and minor intrusions occurred within the mobile zone after the Lower Proterozoic.

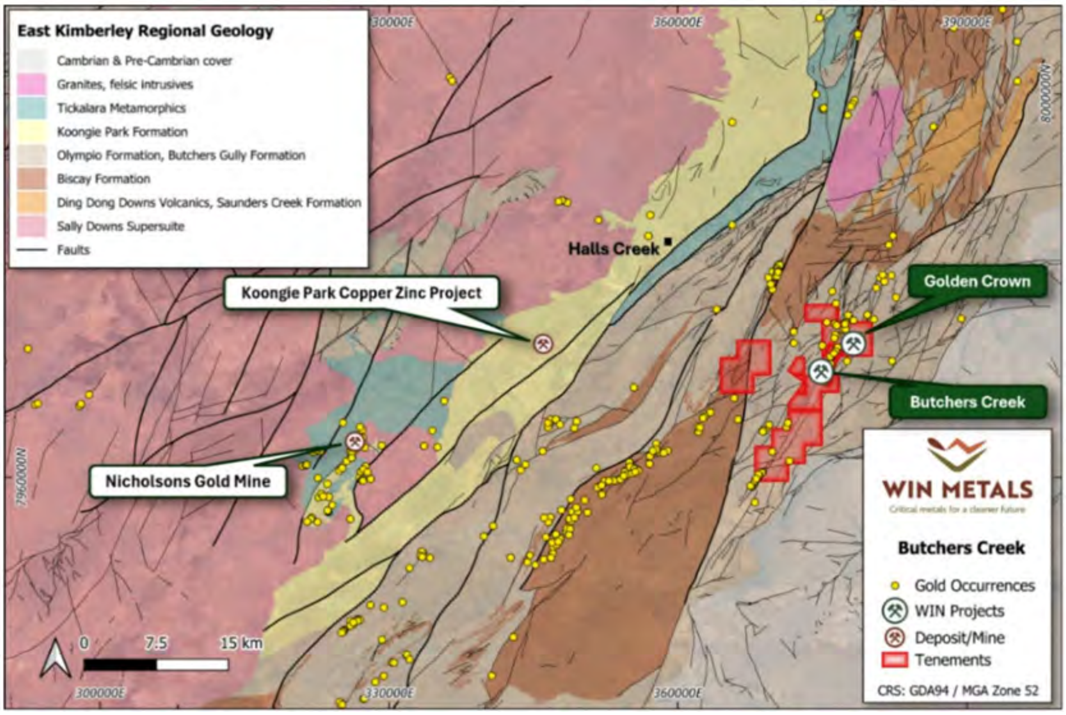


Figure 3.6 – Map of Regional Geology of East Kimberley

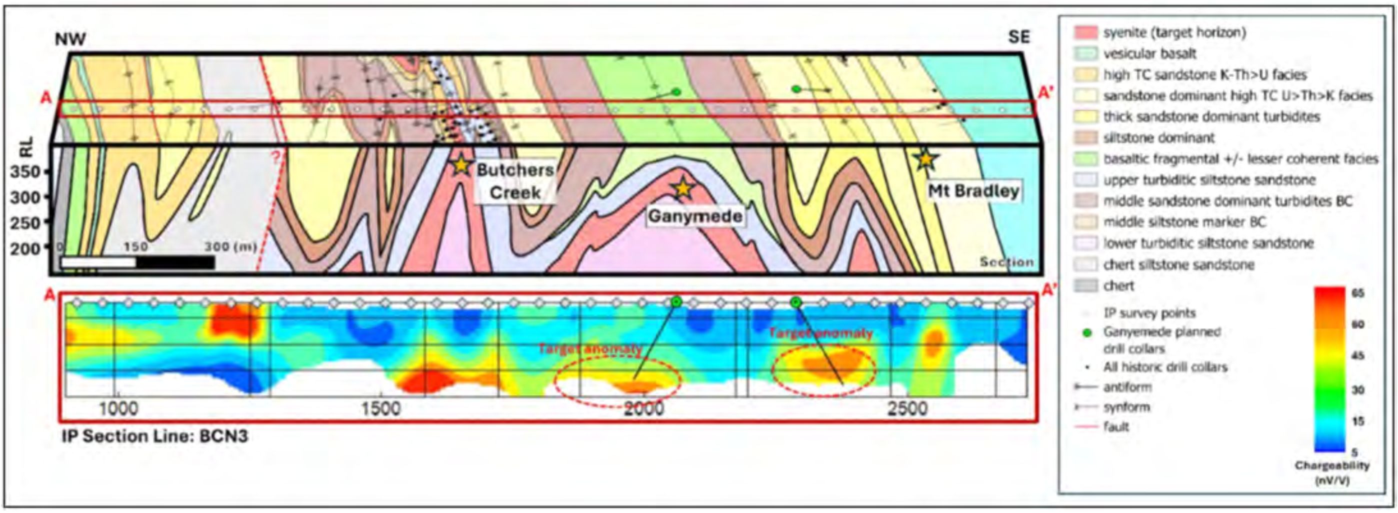


Figure 3.7 – Cross Sectional View of the BGCP Folded Geology

3.3 Local Geology

Butchers Creek deposit is found within the Butchers Gully Member that comprises metamorphosed andesitic to trachytic volcanic flows, subvolcanic sills and domes, and associated volcaniclastic rocks, with a carbonate-rich matrix interlayered by chert and ferruginous chert. Volcanic units display both leucocratic (light-coloured, trachytic and amygdaloidal) and mesocratic (intermediate coloured, trachytic, pillowed or massive) textures and may have scoriaceous tops or interflow breccia beds. Amygdales are commonly filled with secondary minerals such as limonite, calcite, biotite, quartz, and fluorite. Subvolcanic sills and dykes ranging from 1–150m in thickness intrude the lava flows. Volcaniclastic beds frequently show a facies trend from crystal-rich zones and pumiceous textures (proximal to vent) to volcanic metasandstone in more distal facies, reflecting heterogeneity in eruptive styles and depositional environments.

Two distinct styles of gold mineralisation are observed in the Project area:

- **Stratabound Mineralisation in Syenite Hosts**: At the Butchers Creek and Golden Crown deposits, gold is hosted in syenite intrusions and is typically associated with pervasive potassic alteration, along with sulphide-bearing quartz veins within the syenite body.

- **Shear-Hosted Mineralisation in Sedimentary Rocks:** At prospects such as Mt Bradley, Ruby Queen North, and Emjay, gold is found in sulphide-bearing quartz veins that are hosted within sheared sedimentary rocks, with the mineralisation often accompanied by disseminated and vein sulphides.

Mineralisation at Butchers Creek is stratabound, predominantly located within the hinge zone of a tightly folded antiform developed in a syenite intrusion. This syenite underwent significant strain partitioning during orogenic events and is enveloped by metasedimentary rocks, including sandstones, siltstones, and shales. Structural mapping indicates the antiform plunges 20°–25° southwest, traceable over 1.4 to 1.5 kilometres and to vertical depths approaching 400 metres, with the down-plunge continuity of high-grade mineralisation confirmed by drilling results. High-grade mineralisation remains open down plunge, suggesting further resource potential at depth. The geometry of the Butchers Creek deposit is illustrated in Figure 3.8 below.

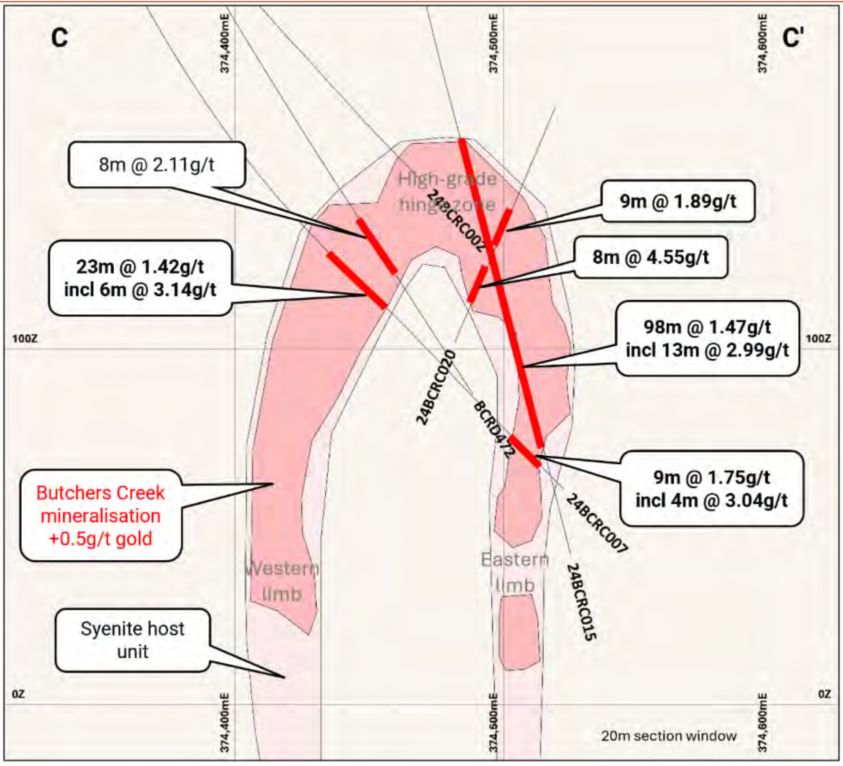


Figure 3.8 – Schematic Section of Butchers Creek Deposit Antiformal Geometry

3.4 Mineralisation Interpretation

Since drilling was completed in 2024, WIN's geologists have remodeled the Butchers Creek gold deposit utilising newly acquired drill data focusing on the gold distribution within the syenite host. In total 8 mineralisation domains were modelled within the syenite host to honor the spatial grade populations within the geometry of the folded system. This ensures grade smearing is reduced between the high-grade fold hinge and lower grade limbs of the fold.

The modelled mineralisation extends from the original pre-mining topography. Mineralisation interpretations were informed by drill holes, comprising reverse circulation (RC), diamond drilling (DD) and percussion (for interpretation only) drilling using Micromine software. In total 8 mineralisation domains have been modelled within the syenite host. Of these 5 using a 0.3g/t Au cut-off grade, and 3 high grade domains above 1g/t Au.

No weathering surfaces have been modelled as the mineralisation below the existing open pit was considered to be fresh in nature.

3.4.1 Drilling Techniques

Historic Drilling prior to 2020

RAB (BCRB*) drilling was used to test low priority areas east of the open cut.

PERCUSSION (BCP*) drilling used a 5.5' hammer with a variety of rigs used including: Warman 1000 and Warman 750.

REVERSE CIRCULATION (BCRC) drilling was mostly carried out between 1993-1994. A 5" inch face sampling hammer was used. A variety of rigs were utilised, including a Schramm 685 and Warman 1000.

DIAMOND (BCD*) drilling was mostly NQ diameter core in earlier exploration (pre-1993) and mostly HQ diameter core thereafter. Core was oriented by a Van Ruth 'spear'.

MEI Drilling 2020-2022

RC drilling was carried out using a McCulloch DR950 with a 5.7/8' face sampling hammer.

DD drilling was completed using a McCulloch DR950 drilling rig which produced HQ3 diameter core. The core was oriented using the TruCore UPIX tool and structural measurements were collected in zones of mineralisation and/or zones of interest.

WIN Drilling 2024

RC Drilling was carried out by Raglan Drilling utilising a truck mounted Schramm 685 with a Sullair compressor and Air Research auxiliary booster compressor with a 5.625' face sampling hammer. Down hole surveys were carried out utilising a Reflex north seeking gyro tool.

DD drilling was carried out by Terra Drilling utilising a truck mounted Boart Longyear KWL 1600 producing NQ2 and HQ3 core. Core was orientated using an AXIS "Champ Ori" Orientation tool and continuous down hole surveys were carried out using an Axis North Seeking "Champ Gyro" tool.

3.4.2 Database

The drill hole database for Butchers Creek and Golden Crown has been managed by multiple companies. In 2020 MEI assumed control of the project with WIN Metals subsequently acquiring this from MEI as announced in August 2024.

WIN has an internal database manager responsible for all data uploads and the exports relating to the Butchers Creek database. This includes QAQC data compilation for the purposes of analysis.

Drill hole data was extracted directly from the company's Microsoft Access database which includes internal data validation protocols.

Table 3.4 – Number of Drill Holes Informing the Butchers Creek MRE 2025

Hole Type	Count
DD	55
PERC	87
RAB	54
RC	289
RCDD	33

Historic PERC and RAB drilling were excluded from the dataset used for estimation. In addition, some 29 drill holes were excluded from the estimate due to collar location uncertainty and/or missing samples.

3.4.3 Bulk Density

Bulk density values for the Butchers Creek deposit have been derived from 150 measurements from all fresh diamond drill core utilising the industry standard water immersion technique. A total of 122 measurements were made by WIN in fresh mineralisation returning an average of 2.73 t/m3 and 28 in fresh syenite and sediment waste samples returning an average of 2.73 t/m3.

3.4.4 Estimation Methodology

The estimation was completed in Micromine by Ordinary Kriging. Exploratory Data Analysis (EDA) and variography were completed in Micromine and Supervisor. Domaining was completed via implicit modelling in Micromine. The estimation was constrained within geology-grade based domains. The domains consist of a low-grade envelope with an internal higher-grade subdomain.

Data was composited to 2m intervals. Capping thresholds were reviewed on composites by domains via log probability plots, histograms and other relevant charts. Thresholds chosen were reviewed in 3D to ensure they were not representing a separate high-grade population that could be domained out. In addition to global capping applied to the composites, distance-based capping was applied during estimation. The results are presented in Table 3.7 below.

Variography was completed on normal score transformed capped composites and then back transformed to complete the estimation. To allow for enough data support, the high-grade and low-grade domains were merged for the variography. The nugget for each variogram was then adjusted to match the high-grade and low-grade domain distribution respectively. In addition, due to the folded nature of the deposit, the domains listed above were split along their interpreted axial plane and variography was conducted on each limb independently.

A dynamic anisotropy search was used to complete the estimation. Search ellipsoid orientations were coded directly into each block of the block model based on the domain orientation. For domain 4000 and 5000 a constant search ellipsoid orientation was used as these represent an “isolated limb” with one main orientation. The orientations chosen include dip 66, dip direction 313 and pitch 15 for domain 4000 and dip 44, dip direction 259 and pitch 15 for domain 5000.

The internal high-grade domains were modelled with a hard boundary. Only data within these domains were used in estimating block grades. Only data within the low-grade domains were used in estimating block grades in the low-grade envelopes.

A parent block size of (5m x 10m x 5m) was used for grade estimation with sub-blocks of (1.25m x 2.5m x 1.25m) applied to define domain and surface volumes. The model was rotated by 39 degrees clockwise (azimuth N39) to honour the mineralisation strike direction.

The model was validated visually against the composites used in the estimate via swath plots and a global metal check (mean grade of estimate vs. mean grade of composite). The results are deemed satisfactory.

3.4.5 Mineral Resource Classification

Classification was based on several criteria, primarily drill spacing and geological continuity. The area immediately beneath the pit and to the southwest of the pit has been classified as Indicated based on the close-spaced drilling (majority 30m to 40m) demonstrating good grade and geology continuity.

3.4.6 Butcher Creek MRE Cut off Grades

The cut-off grades used are based on typical cut-off grades applied to open pit mining or bulk underground stoping scenarios. The reported cut-off grade of 0.50g/t Au is for resources amenable to open pit mining with 0.80g/t Au applied to resources below 150m vertical metres that would be more typically be extracted via wide span underground mining methods as the mineralisation is up to 60m wide in places.

3.4.7 Assessment of Reasonable Prospects for Eventual Economic Extraction

The Butchers Creek MRE is located within Mining Leases M80/106, M80/418, M80/318, Exploration Licence E80/4874 and Prospecting License P80/1839. The process to convert P80/1839 to a Mining Lease (M80/651) has commenced.

The Butchers Creek MRE was assessed for Reasonable Prospects of Eventual Economic Extraction (RPEE) for both open pit and underground mining methods within the fresh domains. An open pit cut-off grade of 0.50g/t Au has been selected due to expected low strip ratios (11:1) to 150m vertical depth which is in line with industry peers. An underground cut-off grade of 0.80g/t Au has been selected due to the geometry of the underground resource, lending itself to a high degree of mechanisation and thus lower-cost exploitation. No Mineable Shape Optimisations (MSO) or open pit optimisation has been carried out.

3.4.8 Mining and Depletion

Open pit mining of Butchers Creek was carried out between 1995 and 1997 by Precious Metals Australia (PMA). The final surveyed pit with a 3D Digital Terrain Model (DTM) has been used to deplete the 2025 MRE. Surface stockpiles have been discounted and have not been included in the MRE.

3.4.9 Metallurgical Factors

Butchers Creek open pit material was processed via a conventional three stage crushing, milling and leaching and absorption via a carbon in pulp (CIP) circuit with recoveries reported at 95%. MEI conducted metallurgical test work on core samples that returned 95-96.4%gold recovery within 24 hours of leaching. This body of test work and historical processing records demonstrate the mineralisation is free milling and non-refractory in nature, thus amenable to conventional carbon in leach (CIL) processing. The physical characteristics of the mineralisation indicate soft to medium hardness, which is amenable to conventional comminution (crushing and grinding) equipment.

3.4.10 Comparison to Previous Models

The 2021 Butchers Creek MRE was globally reported above 0.80g/t Au. For a like for like comparison, the 2021 MRE was reported using the same parameters as the 2025 MRE. The 2021 MRE had a significantly greater volume modelled at a lower grade that could not be replicated with the data used for the 2025 MRE update. This is seen with the 2021 MRE reporting an additional 1.5Mt at a significantly reduced grade than the 2025 MRE. An example of the volume discrepancy is seen in (Figure 3.9) below where the 2021 model is less geologically constrained and extends into the lower-grade sections of the drill holes.

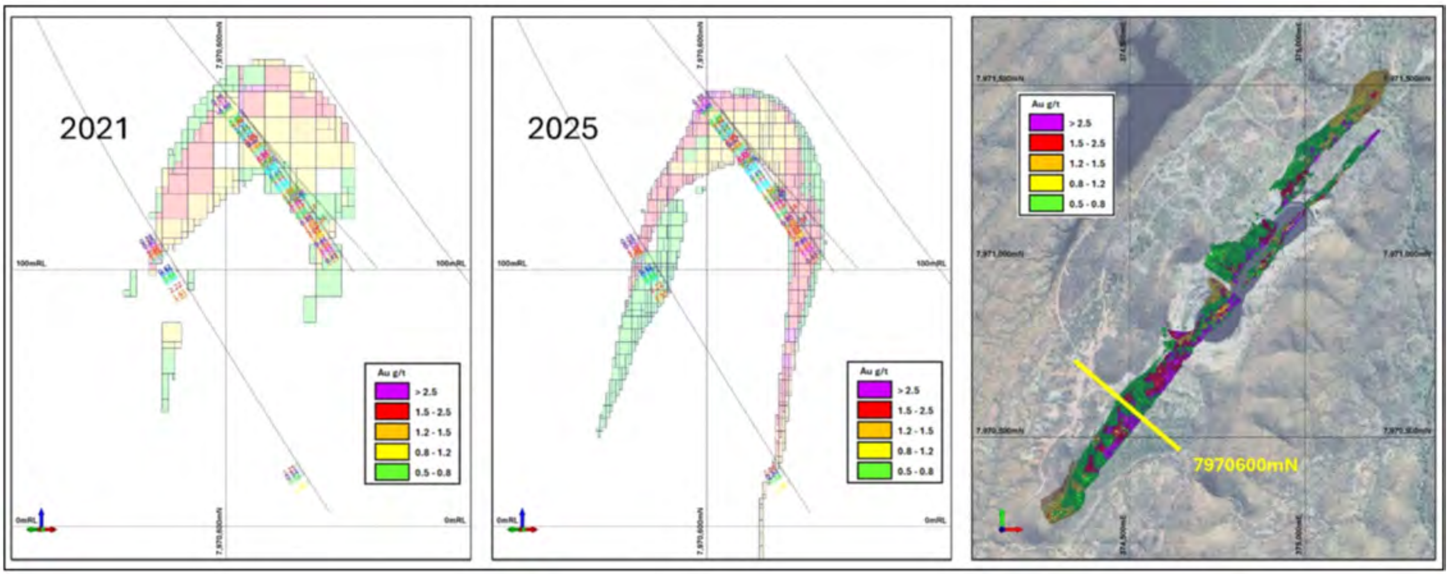


Figure 3.9 – Butchers Creek Resource Comparison 2021 to 2025

The higher 2025 MRE resource grade can be attributed in part to the use of hard boundary domain modelling and grade estimation of the high-grade and low-grade mineralisation within the syenite host unit. By comparison, the 2021 MRE mineralisation was largely unconstrained within a broader mineralisation envelope with minimal use of higher-grade sub-domains, therefore smoothing grades between high and low-grade zones within the modelled resource.

The 2021 MRE comprised 46% Indicated resource compared to 80% Indicated in the 2025 MRE. This material increase is partly due to uncertainty of the final pit DTM used in 2021 with the mineralisation below the pit downgraded to Inferred as depletion of the resource could not be accurately determined. The final pit DTM was sourced in 2022 without an update or re-release of the 2021 MRE classification. Subsequent to release of the 2025 MRE a bathymetric survey of the open pit lake has confirmed the final pit DTM as being correct.

An additional 28 drill holes were drilled following the 2021 MRE which has increased data density and resource confidence.

Table 3.5 - Comparison of Butchers Creek MRE Figures 2021 to 2025

Model	Classification	Tonnes (Mt)	Au g/t	Contained Gold (Oz)
2021 MRE*	Indicated	2.67	1.84	158,000
	Inferred	4.07	1.43	187,000
	Total	**6.74**	**1.59**	**345,000**
2025 MRE	Indicated	3.58	2.24	258,000
	Inferred	1.65	1.18	63,000
	Total	**5.23**	**1.91**	**321,000**

4 Geotechnical Assessment

4.1 Introduction

WIN engaged MineGeoTech (MGT) for the Geotechnical Assessment for the resource. The Project includes an open pit cutback to the west for the extraction of ore and establishing portal locations followed by underground mining. As a part of this project an empirical analysis has been carried out for the ground support design, Stope sizing and CRF and CAF strength recommendations for vertical and horizontal exposure.

MGT undertake geotechnical studies in line with recommended Read and Stacey (2009) study parameters. This criterion is widely used in the mining industry to gauge the level of geotechnical inputs required for the different stages of a mining study.

4.2 Hydrology

4.2.1 Climate

Halls Creek has a tropical semi-arid climate due to its location between the wetter northern regions of the Kimberley and the arid Great Sandy Desert to the south. There are two distinct seasons. The "wet", usually from December to March when 80% of the annual rain falls, and the "dry", usually from May to October when it is typically dry for very long periods.

Two transitional periods are also recognised. One before the onset of the "wet" called the "buildup" and another before the "dry" called the "change" when rain and cloud become less frequent as the monsoons retreats to more northerly latitudes.

The annual average rainfall for Halls Creek is 561mm though there can be considerable variation from year to year due to the variable strength of the monsoon.

The highest recorded rainfall is 1,198mm in the year 2000 and the lowest 203mm in 1989. During the wet season the days are hot +35°C+ and the nights warm +23°C+.

Cloud typically builds up during the day and sometimes culminates in evening thunderstorms with heavy showers and spectacular lightning displays. Rain also comes from tropical lows that can develop into cyclones if the low moves over warm seas surrounding the Kimberley.

Halls Creek is sufficiently distant from the coast to be safe from the destructive winds associated with cyclones, although very strong gusts can be generated by thunderstorms. The highest wind gust recorded at the Halls Creek Meteorological Office was 143km/h on 27th January 1983.

It has been observed that February exhibits the highest relative humidity, with a percentage of 55%. On the other hand, September experiences the lowest relative humidity at an approximate rate of 20%. According to the data, January is observed as the month with maximum rainy 13 days while August has recorded zero rainfall.

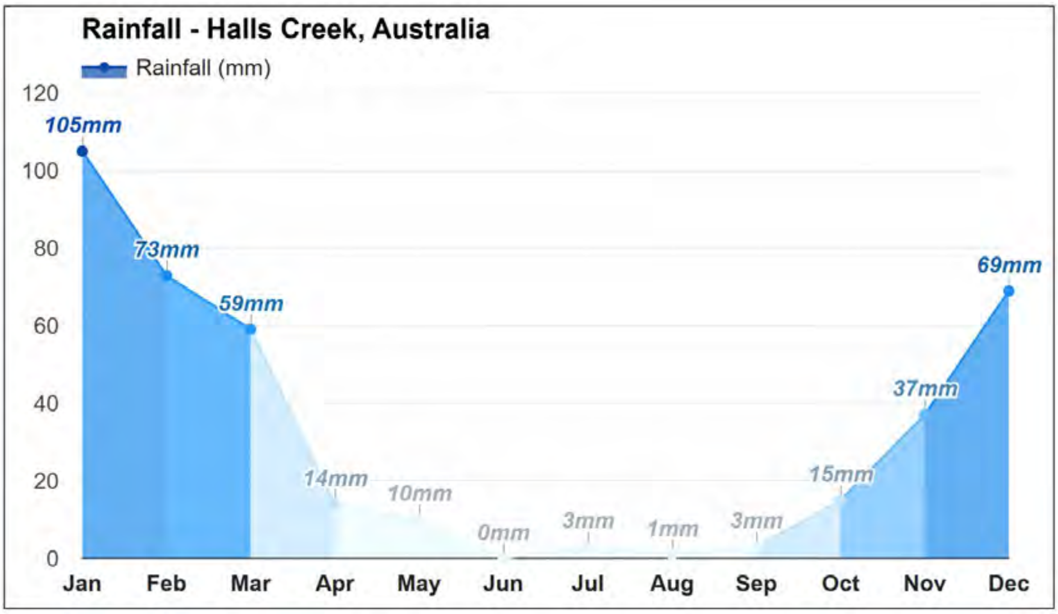


Figure 4.1 - Hall Creek Average Rainfall (mm)

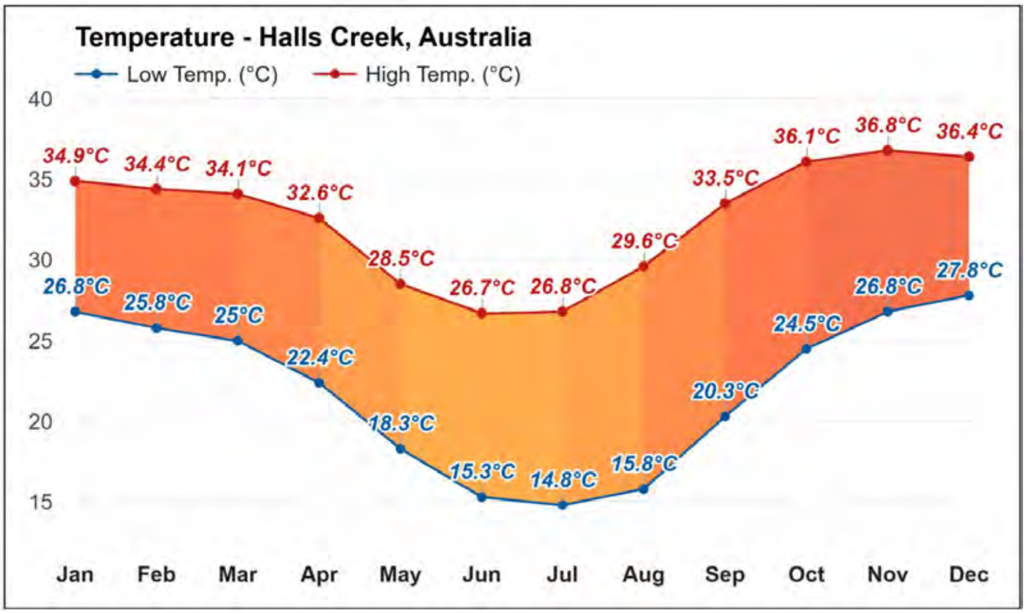


Table 4.1 - Halls Creek Temperature Averages

4.2.2 Ground Water

An assessment of ground water availability has been made with data obtained from exploration drill hole logs and geological maps.

Intersected ground water seems to be associated with the permeable mineralised zones which are bounded by rocks of lower permeability. The Water Table appears to decrease to the south of the project area which is consistent with the dip of the ore body.

Analysis of ground water indicates a salinity range of 170 to 1,860 mg/l TDS with an average value of 820 mg/l TDS. Previous water samples taken have tested PH ranges between 6.8 to 7.4.

4.2.3 Surface Water

A nearby water dam named Lake Komaterpillar is located 1.5km south. Constructed in the 1980's this facility retains water throughout the year. During the rainfall season the reservoir rapidly increases in depth from the western edge and at a point 70m from the shore with an average depth measured at 6m. The dam will however be shallower at the edges where the impounded water fills small creek valleys. The facility has a spillway feature which regularly overtops during the wet season, limiting capacity whilst protecting the integrity of the main dam wall.

The existing tailings storage facility has an additional, not insignificant, supernatant water body for initial processing requirements.

There are no other significant natural permanent bodies of water within the project area other than the previously mined open pit. Butchers Creek is a major drainage channel traversing the tenements to the immediate north of the existing open pit. This runs intermittently after heavy rains and hosts ephemeral pools for short periods.

Other water catchments within the project area are generally small and shed all incident rainfall within hours.

A bathymetric survey from September 2025 provided water volume estimates for Butchers Creek Open Pit of 2.9ML and Lake Komaterpillar of 286ML of water resource.

4.2.4 Hydrogeology

A hydrogeology study work was completed by Rock Water Pty Ltd in 1993. The report primarily focused on assessing the dewatering requirements for the proposed open pit and water supply for the planned processing plant (500kt/yr). The data collected included reverse circulation drillhole logs, climatic records, geological maps, photographs, and other anecdotal information.

From this work it was noted ground water intersection from drill hole logs appeared to be associated with quartz veins, slightly to moderate weathered andesite, and carbonaceous shale. Mineralised zones were recorded as being permeable and included quartz veins, pyrite and sheared andesite. The log records suggest the aquifers mainly extended from about 70m to 100m below ground level with some recorded as deep as 130m. From 10500N there are some shallower aquifers, commonly at 50m to 70m in depth (10500M to 10600N). Overall, there appears to be an increase in aquifer depth to the south consistent with the plunge of the Butchers Creek deposit.

Five wet areas were delineated from the information given in the drillhole logs (Figure 4.2). They may in fact be interconnected. Many of the logs of holes drilled prior to 1993 do not include any information on water intersections with most of these holes likely also not drilled deep enough. The wet areas are possibly truncated by cross-cutting faults between 10200N and 10450N.

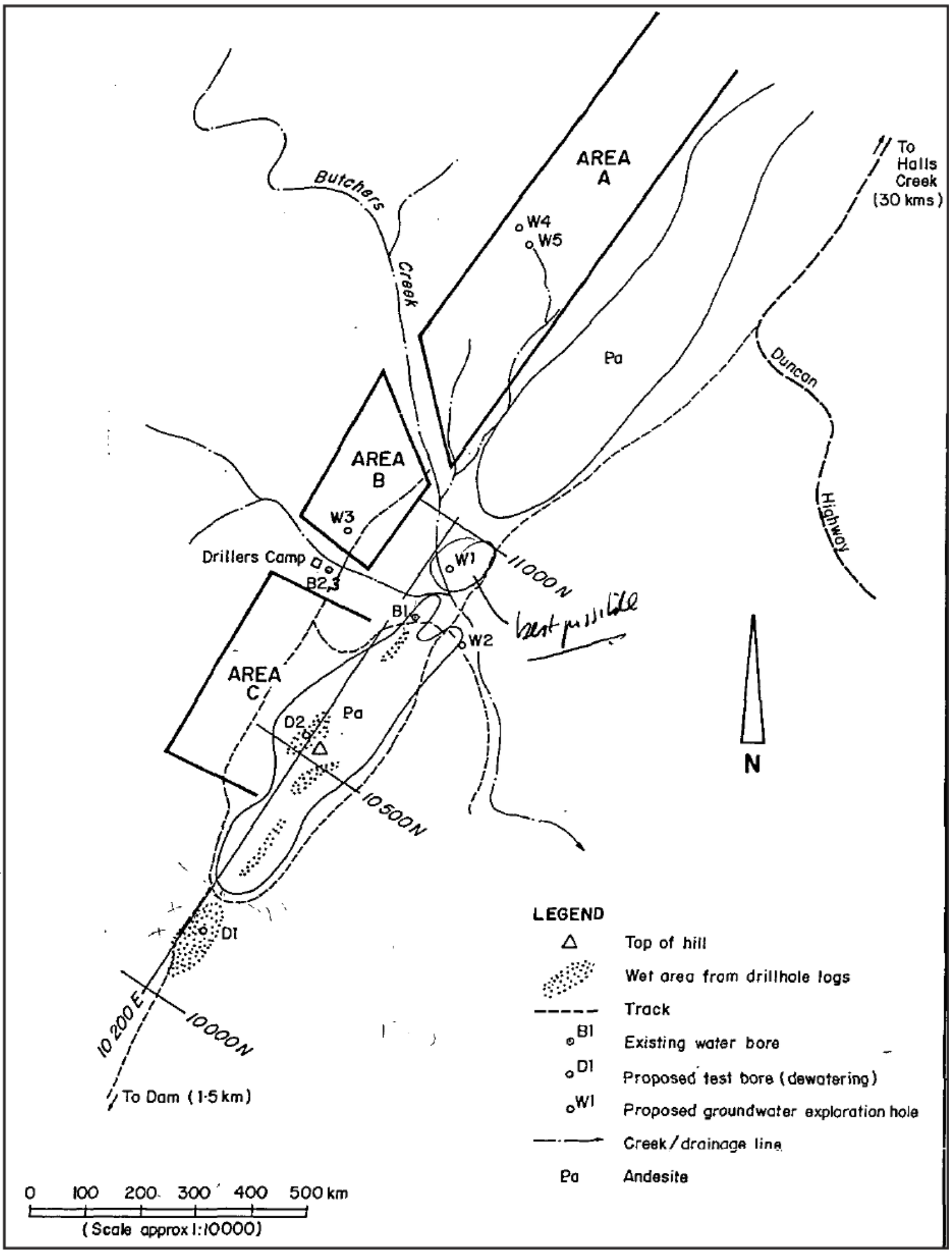


Figure 4.2 - Butchers Creek Ground Water Map 1993

BFP 1996 report indicates that groundwater was not intersected during mining of the pits to levels of approximately 60 m below surface (330-320mRL).

2024 drilling comments from the WIN database shows minor inflow of water through the drill cyclone at different depths (mostly between ~25m to ~60m below surface) indicating the presence of a possible water table at approximately 340 – 320mRL. Groundwater and rainfall have filled the pit to the 345mRL.

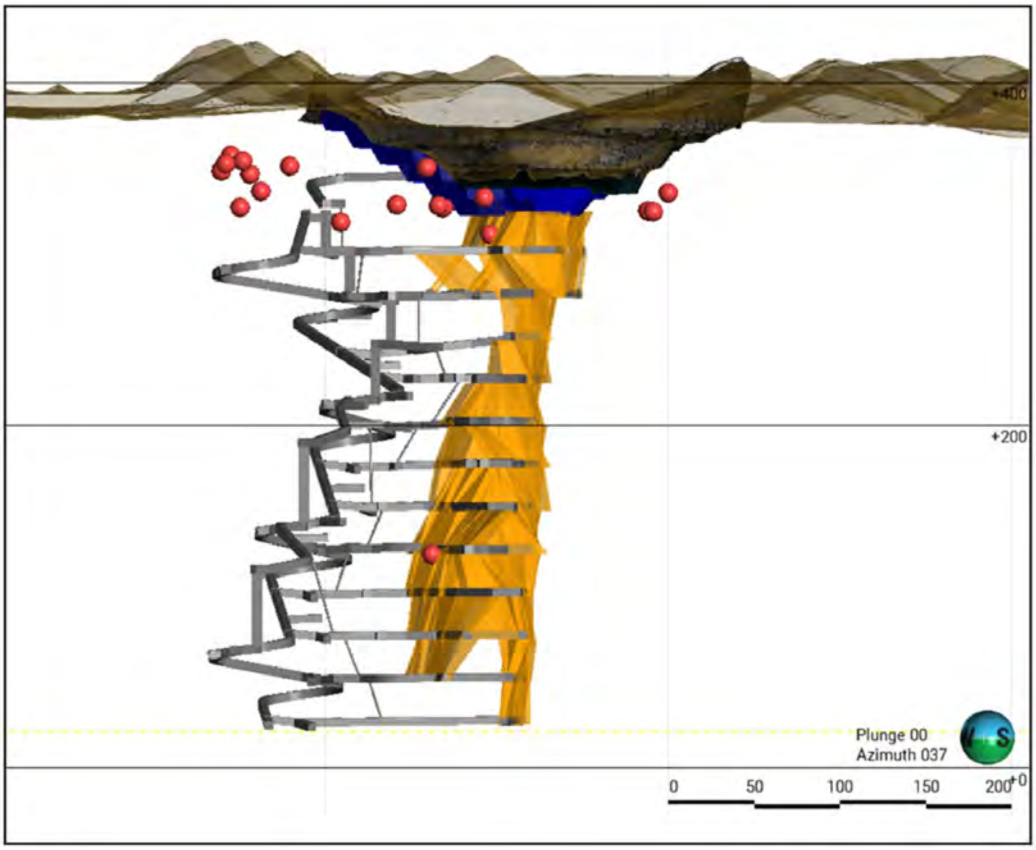


Figure 4.3 - Location of Water Intercepts WIN Drilling 2024

4.3 Insitu Stress and Seismicity

4.3.1 Insitu Stress

No in-situ stress measurements have been recorded at the Butchers Creek project site to date.
The Australian regional stress map is shown in Figure 4.4. This shows the likely principal horizontal stress orientation in the region of Western Australia is North East-South West. This could be near parallel to the orientation of the orebody. Experience with other sites in the area suggest the stress magnitudes will be in the region of ~2 times the vertical stress. An assumed k-ratio of 1.7 was selected as average value for A-factor input during stope sizing analysis.

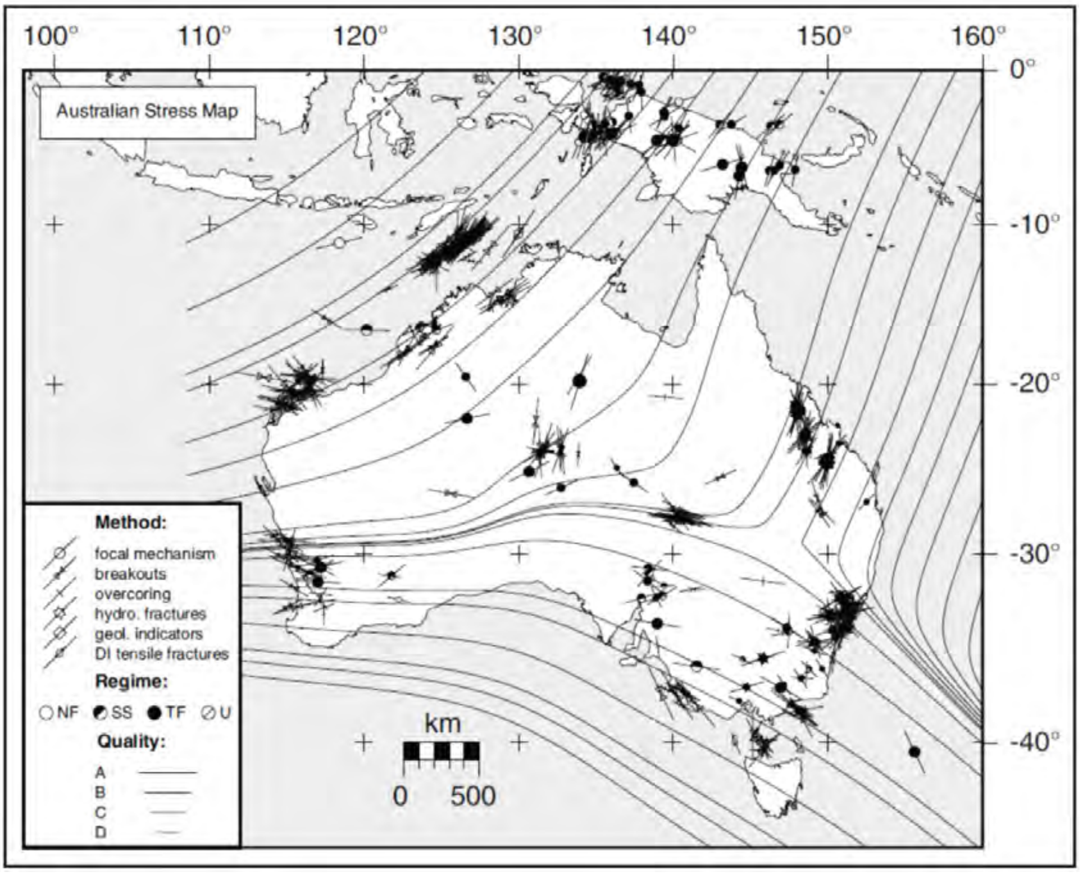


Figure 4.4 - Mean Stress Orientation in Australian Stress Provinces

4.3.2 Insitu Stress Outcomes

Seismic risk at the planned mining depths is considered low, from both earthquake and mining induced seismicity.

Possible Stress changes may occur in the lowest level of the mine, the mining method of bottom up filled stopes will assist in decreasing stress induced stability issues given the proposed mining depths planned.

4.4 Earthquake Loading

Ground motions due to earthquake loading have not been considered in this study, as it was not part of the scope of works.

To capture for future studies, Figure 4.5 shows the approximate seismic risk of the project area. The map provides the Geosciences Australia (2018) ground motion of 0.04 with a 10% probability in 50 years of being exceeded.

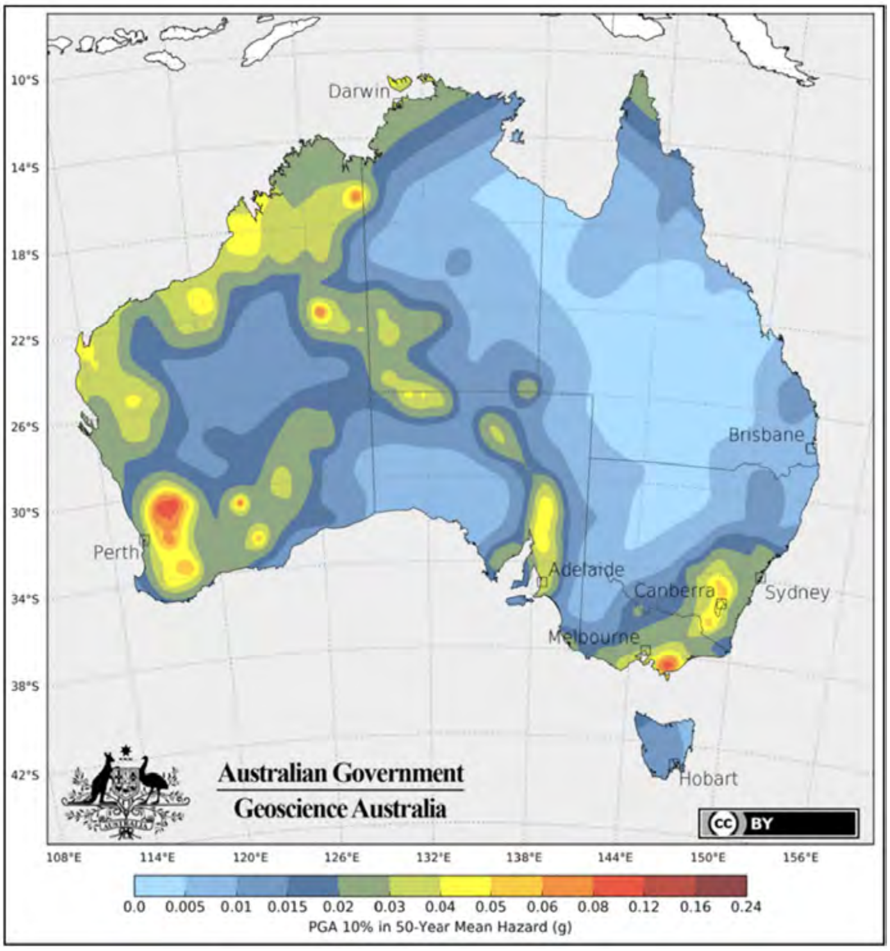


Figure 4.5 - Earthquake Risk Map Australia

4.5 Geotechnical Setting

4.5.1 Open Pit Weathering

As per BFP (1996) the depth of weathering has a variable profile, generally the first 20m of depth in west wall is comprised of mostly highly weathered material.

Based on drillholes information, a planar surface was constructed to delineate the boundary between the highly weathered material and the moderately weathered transitional domain. This surface has a lower confidence near the pit as only one data point was used shown in Figure 4.6 below.

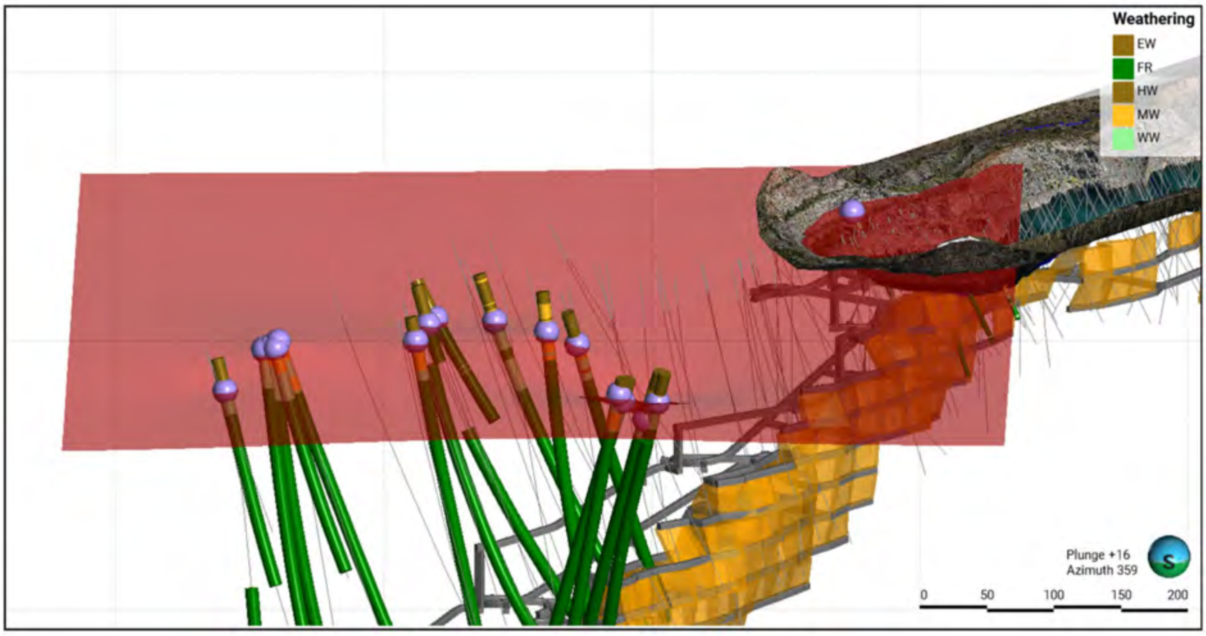


Figure 4.6 - Butchers Creek Open Pit Weathering Material Boundary

Based on the high-weathering boundary and the wireframe for the top of fresh, the first proposed pit bench (and second in some areas) will sit within highly weathered material, while the next two to three benches will be cut in moderately weathered material, transitioning to fresh rock below in Figure 4.7.

The highly weathered zone extends to down to approximately 370-365mRL, below which transitional material is expected to be encountered down to 345-340mRL.

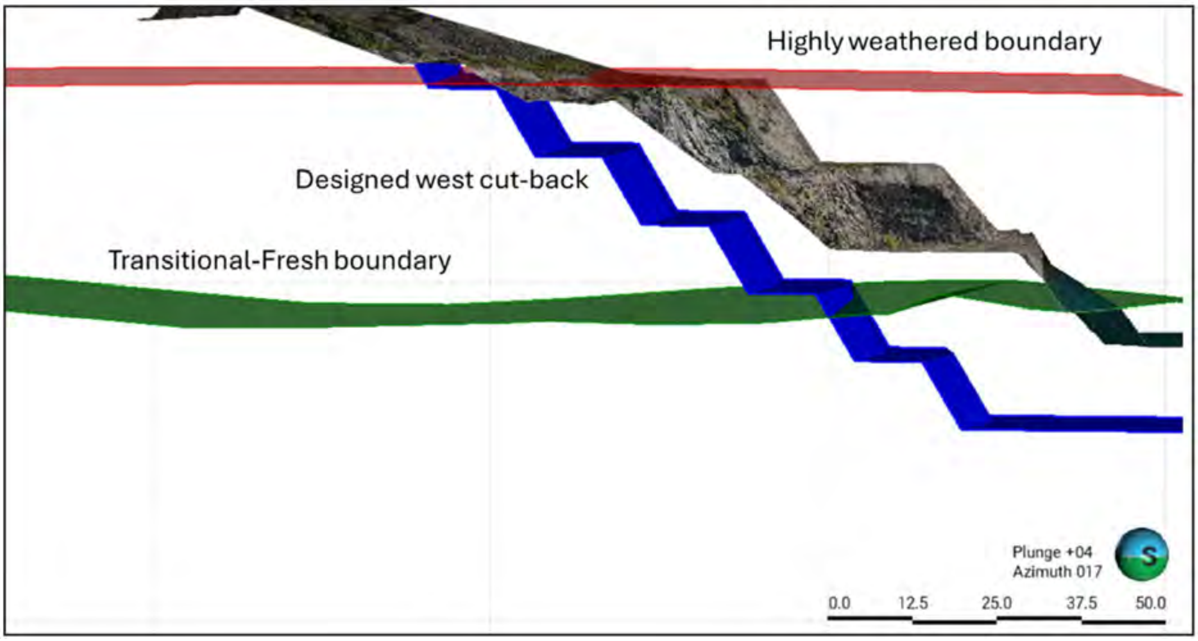


Figure 4.7 – Section of Proposed Cut Back with Weathering Boundaries

4.5.2 Underground Mine Weathering

The portal is planned at 335mRL in fresh rock mass, whilst the exhaust drive portal sits in moderately weathered rock mass slightly higher in elevation. Figure 4.8 shows the boxcut sliced with weathering profile and the designed drives near surface color-coded based on the weathering profile provided.

The initial 70m of development of the exhaust drive shown in Figure 4.8 in orange is expected to be in moderately to slightly weathered rock, then ~30/40m will have weathered rock at around 6m from the backs. The main access decline portal will also have slightly weathered rock above at around 10m shown in Figure 4.8 as Yellow.

A separate study should be completed for the portal support design and the first section of the two drives, for budgeting purposes has assumed the use of fibrecrete, mesh and solid bolts for the first 70m of each drive.

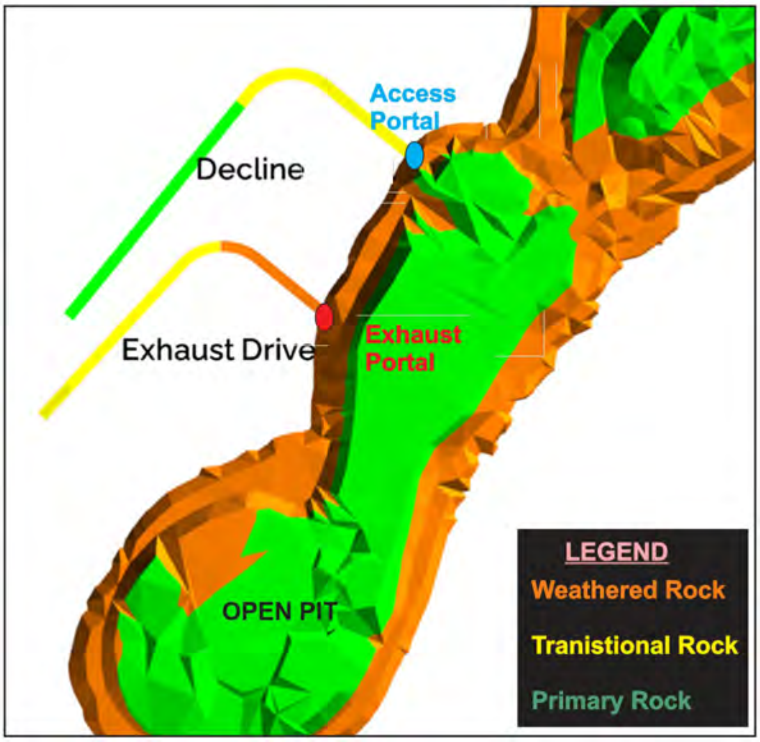


Figure 4.8 - Underground Mine Weathering Profile

4.5.3 Geotechnical Domains

With the historic data the geology has been largely bulk logged as sediments, for this study however SGW (greywacke) has been kept separate from SBS (black shale) and SMS (mudstone). Previous generations of logging used the code IVA for andesite, whereas the WIN 2024 logging used IIU for syenite, these two codes represent the same lithology.

Due to distance from the mineralised zone as show in Figure 4.9, and the overall lack of strength data, the lithologies Mg, Mv, Mvb, Tuff and Vqzt were ignored from structure logging and strength results for the purpose of this Study.

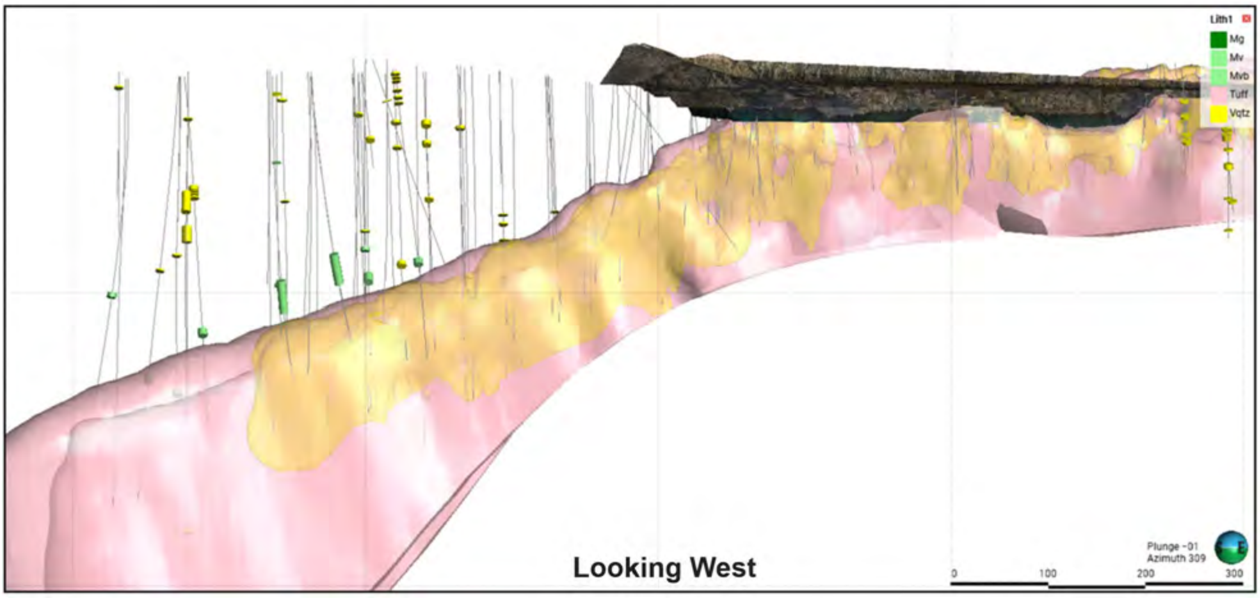


Figure 4.9 - Butchers Creek Deposit Lithology Long Section

Hence the geotechnical domains are defined as:

- Open Pit – Transitional West Wall
- Open Pit – Transitional East Wall
- Underground – Transitional – decline access
- Underground – Host – Fresh shales and mudstones (SBS & SMS)
- Underground – Host – Fresh greywacke (SGW)
- Underground – Ore Zone – Fresh Syneite

4.5.4 Rock Mass Classification

Rock mass classification is a method to characterise the rock mass quality of the geotechnical domain which is then used for stability analysis and numerical modelling. Data used for this is from geotechnical logging.

Geological Strength Index (GSI) is used in the calculation of the rock mass strength for numerical modelling using the Hoek-Brown failure criterion (Hoek et al, 2002). GSI has a range of 0-100. The quantification of GSI is based on RQD and defect condition and shown in Figure 4.10. The formula used to derive GSI from core logged parameters is from Hoek et al (2013) and is:

$$GSI = \frac{52 * \left({}^{Jr}/_{Ja}\right)}{1 + ({}^{Jr}/_{Ja})} + \frac{RQD}{2}$$

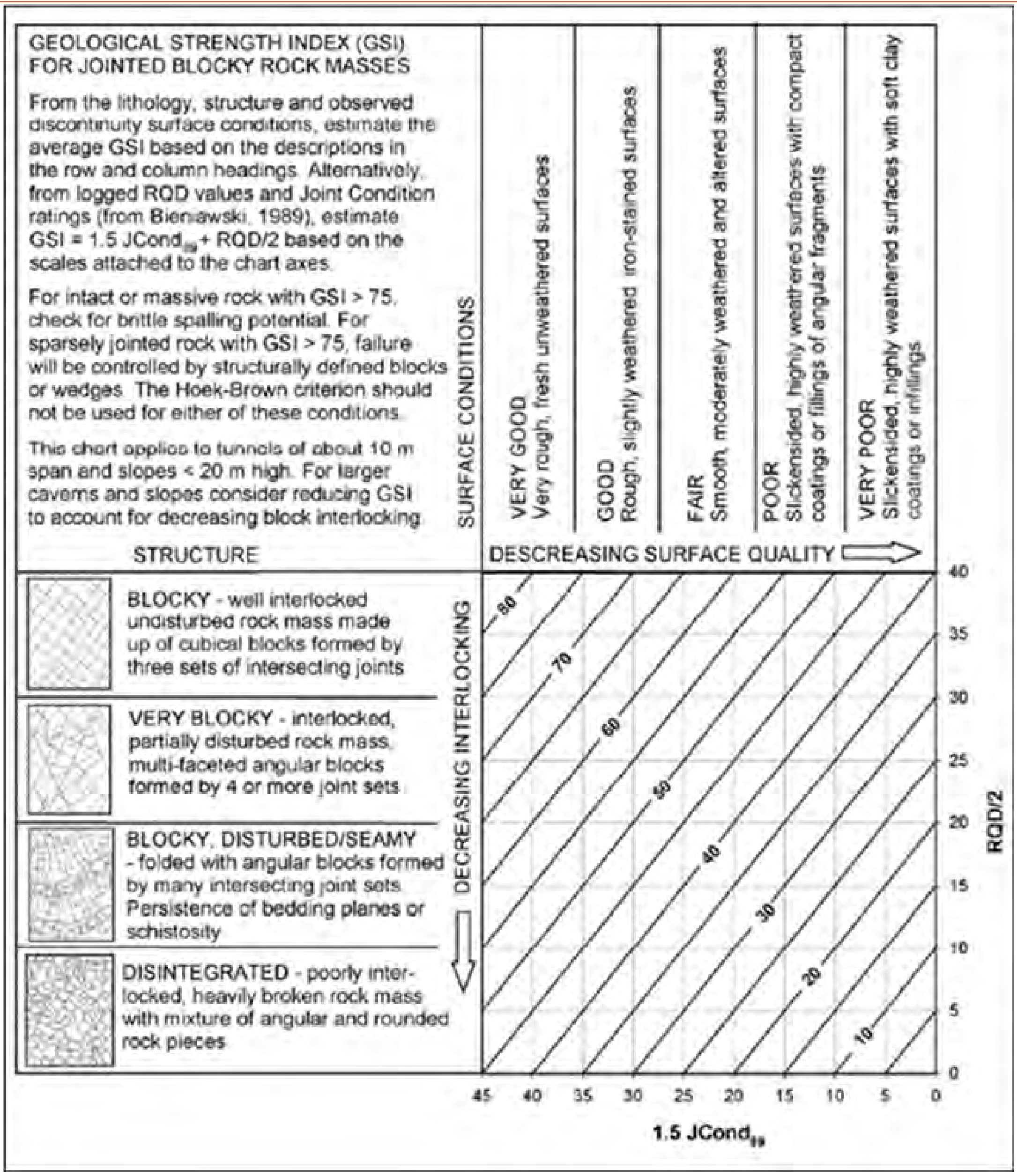


Figure 4.10 - Quantification of GSI by Joint Condition and RQD

4.5.5 Rock Mass Quality Summary Underground

Rock mass statistics was obtained from geotechnical logging using in-house MGT software. Table 4.2 and Table 4.3 show the statistical analysis of the logged drillholes in sediments while Table 4.4 shows the statistical analysis for the syenite.

Table 4.2 - Rock Mass Data of Fresh SGW

Category	RQD	Jn	Jr	Ja	Q'	GSI	RMR89
Count	157	157	157	157	157	157	157
Sum of Weights	321.7	321.7	321.7	321.7	321.7	321.7	321.7
Minimum	0	0.5	1.5	0.8	0.5	22	47.5
Maximum	100	15	4	4	1066.7	94	92
10th Percentile	76	1	2	1	28.7	73	69.5
1st Quartile	91	3	2	1	55.3	80	74.5
Median	98	3	3	1	66.7	85	76.5
3rd Quartile	100	3	3	1	100	89	79.5
90th Percentile	100	6	3	1	300	89	84.5
Mean	91	3.4	2.6	1.1	117	82.4	76.3
Variance	333.9	5.2	0.4	0.2	22935.7	99.1	46.3
Standard Deviation	18.3	2.3	0.6	0.4	151.4	10	6.8

Table 4.3 - Rock Mass Data of Fresh SBS-SMS

Category	RQD	Jn	Jr	Ja	Q'	GSI	RMR89
Count	142	142	142	142	142	142	142
Sum of Weights	279.9	279.9	279.9	279.9	279.9	279.9	279.9
Minimum	0	0.5	1.5	1	0.8	17	42.5
Maximum	100	20	4	4	800	92	89.5
10th Percentile	40	1	2	1	10	57	62.5
1st Quartile	83	3	2	1	31.7	75	70.5
Median	94	3	2	1	62.7	83	74.5
3rd Quartile	100	6	3	1	98	87	79.5
90th Percentile	100	6	3	1	200	89	84.5
Mean	83.1	4.3	2.4	1	85.9	78	73.8
Variance	666.5	10.5	0.4	0.03	9671.4	183.5	67.5
Standard Deviation	25.8	3.2	0.6	0.2	98.3	13.5	8.2

Table 4.4 - Rock Mass Data of Fresh Syenite

Category	RQD	Jn	Jr	Ja	Q'	GSI	RMR89
Count	87	87	87	87	87	87	87
Sum of Weights	203.3	203.3	203.3	203.3	203.3	203.3	203.3
Minimum	0	0.5	2	0.8	2	39	62.5
Maximum	100	15	4	1	1066.7	173	95.8
10th Percentile	96	1	3	1	91	87	84.5
1st Quartile	99	1	3	1	99	89	84.5
Median	100	3	3	1	100	89	84.5
3rd Quartile	100	3	3	1	300	89	89.5
90th Percentile	100	3	4	1	400	92	90.8
Mean	98.4	2.6	3.1	1	191	89.8	86.8
Variance	38.6	2.3	0.1	0.002	36297.9	115.5	13.4
Standard Deviation	6.2	1.5	0.4	0.04	190.5	10.7	3.7

4.6 Material Strength

4.6.1 Historical Lab Data – Open Pit

A total of 34 tests were conducted in 1996 by Western Geotechnics, 14 of which were UCS and 20 were Direct Shear tests on open structure displayed below Figure 4.11.

Direct shear test resulted in cohesion and friction angles for the transitional bedding and joints and the first part of the fresh material, all transitional UCS samples failed along discrete structures/foliation, only two fresh syenite samples had a composite failure.

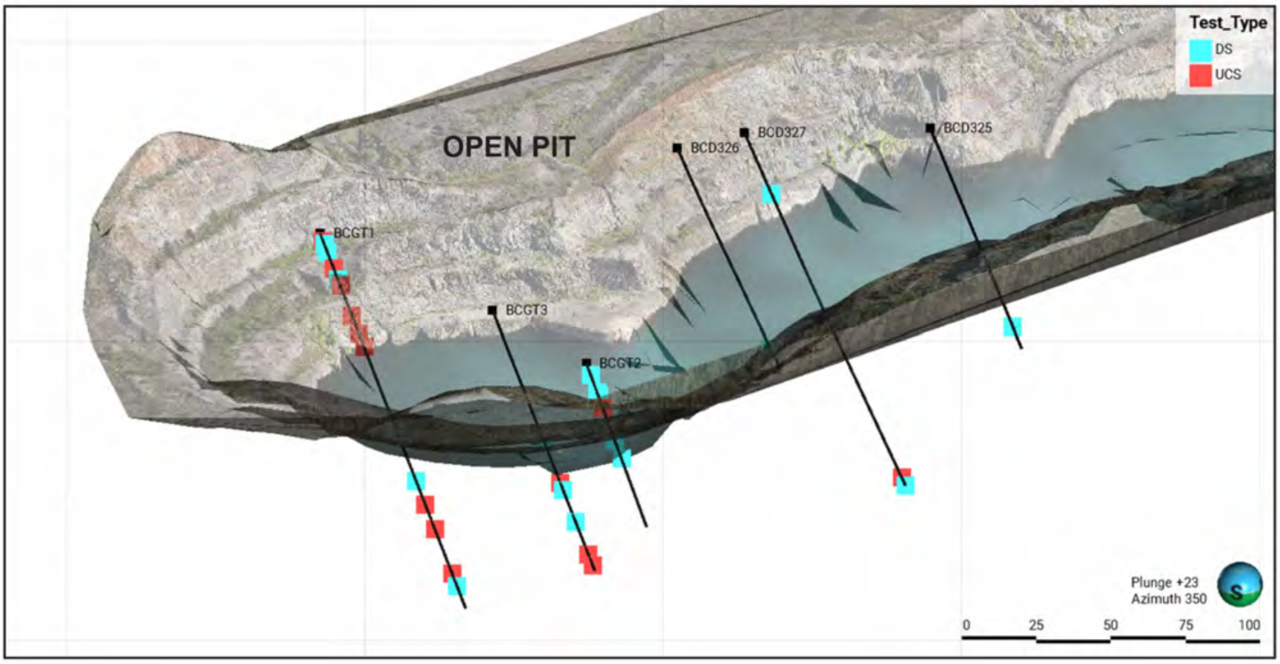


Figure 4.11 - Sample Location for 1996 Rock Properties Testing

4.6.2 Transitional Intact Strength – Open Pit

Of the 14 UCS testing completed for BFP (1996) study only 2 samples were logged as transitional SBS-SMS and 2 samples were logged as transitional SGW.

Given the low number of samples for the transitional lithologies the confidence in the material strength is considered low. SGW and SBS-SMS exhibited anisotropic behaviour along bedding during testing.

4.6.3 Transitional Joint Strength – Open Pit

Shear strengths were determined in BFP (1996) from direct 20 direct shear tests, of these 11 were logged as SS and 4 as SGW, the samples exhibited dilation during testing suggesting an undulating profile for bedding planes.

4.6.4 Recent Lab Data – Underground Mine

Two laboratory testing programs were undertaken on samples to represent the underground geotechnical domains. Testing was undertaken on recent core at the E-Precision Laboratory, Perth, Western Australia. 63 Single Stage Hoek Cell Triaxial testing and 25 Brazilian Indirect Tensile Strength Testing were completed in 2024 and 12 Single Stage Hoek Cell Triaxial testing and 4 Brazilian Indirect Tensile Strength Testing in 2025 on rock samples from the fresh domains.

As shown in Figure 4.12, most samples do not cover the majority of the proposed mining area.

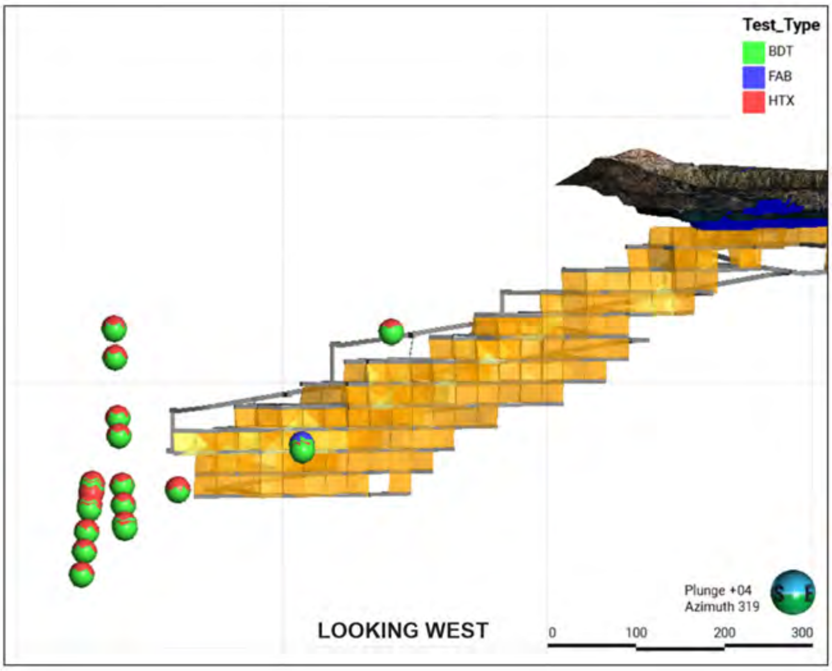


Figure 4.12 - Long Section of UG Sample Locations for Rock Properties

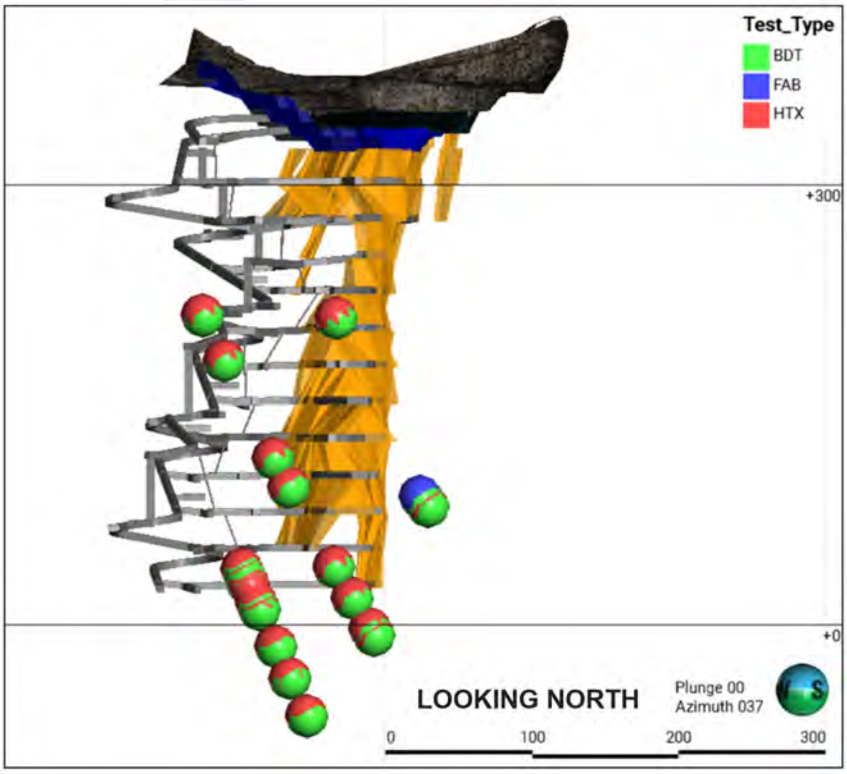


Figure 4.13 - Cross View of UG Sample Locations for Rock Properties

4.6.5 Fresh Intact Strength – Underground Mine

Only one wireframe for syenite was available, therefore, the samples have been divided based on geological logging.

Testing of the rock domains report Hoek-Brown intact strength parameters of UCS and mi.

The modulus of the rock mass has been determined from potentiometer measurement of the triaxial sample deformation during testing prior to failure. The modulus recorded for samples at higher confinement have been adjusted to allow for the stiffening effect due to confinement. The modulus from potentiometer measurements cannot be compared to the modulus recorded by strain gauges glued to intact rock property test samples.

4.6.6 Fresh Fabric Strength – Underground Mine

Rock domains report cohesion and friction angle when failure on structure has been determined for SBS-SMS. All 26 Triaxial test were reported to fail along structure, with many specifically along foliation.

The type and mode of failure of the samples were analysed, with further classifications to increase confidence in the dataset. This included identifying if the failure of the rock sample went through the ends of the cylinder or not, in this case only failure that end through the walls of the cylinder and not the ends were considered.

4.6.7 Results and Confidence

Table 4.5 summarises the results of lab test analysis of Butchers Creek geotechnical samples conducted in 2024 and 2025 it also contains the results used for the transitional domains in BFP (1996).

Results are colour coded to show level of confidence for intact strength properties based on number of samples, where green is high, orange is medium, and red is low. To achieve a high level of confidence there needs to be at least 12 triaxial tests in the domain with a consistent set of results for the analysed failure mode (intact failure or structural failure).

Geotechnical Domain	Number of samples accepted for intact failure (UCS or TRX+BDT)	Density (t/m³)	Modulus (GPa)	Peak Strength		Shear Strength		
				Uniaxial Compressive Strength (UCS) (MPa)	Hoek-Brown m_i-value	Cohesion (kPa)	Friction Angle (deg)	Equivalent UCS (MPa)
Transitional SGW	2 UCS	2.49		8-20		30	27.5	
Transitional Shale	2 UCS	2.34		8-20		30	27.5	
Fresh Syenite	13+8	2.9 (+/-0.09)	27.6	95 (15.4)	9	-	-	-
Fresh SGW	9+7	2.72 (+/-0.08)	39.9	170 (20)	18	-	-	-
Fresh SBS-SMS	10	2.85 (+/-0.08)	20.9	-	-	12,200 (+/- 3.5)	26.6	39.6 (+/- 10)

Note: Standard Deviation in brackets (+/- 1 std dev, 2 std dev range)
Equivalent UCS Equation 4.16 (Brady and Brown, 1985)

Red	Poor confidence. Domain has up to 100m of wall exposure in the lower levels of the pit and only one suite of test data is available. Thus, impact is material
Orange	Medium confidence. Domain has low or uncertain exposure on pit wall and material property testing is appropriate for preliminary design. Thus, impact is not material
Green	High confidence data where an appropriate data set has been established for design work.

Table 4.5 - Summary of Rock Strength Laboratory Test Work.

4.7 Major Structural Features

4.7.1 Faulting

Fault Wireframes were not provided, a complex fault system along and across the fold axis is described in previous reports BFP 1996 and Mattinson 1999.

Faulting in the area was identified from surface mapping with an approximate strike direction of 350° and 260° cutting across the trend of the deposit as per Figure 4.14.

The coordinates for this fault system were not retrievable from the reports as the maps did not have a coordinate grid, fault locations were inferred using scale from one of the maps and using the tailings dam as a reference point.

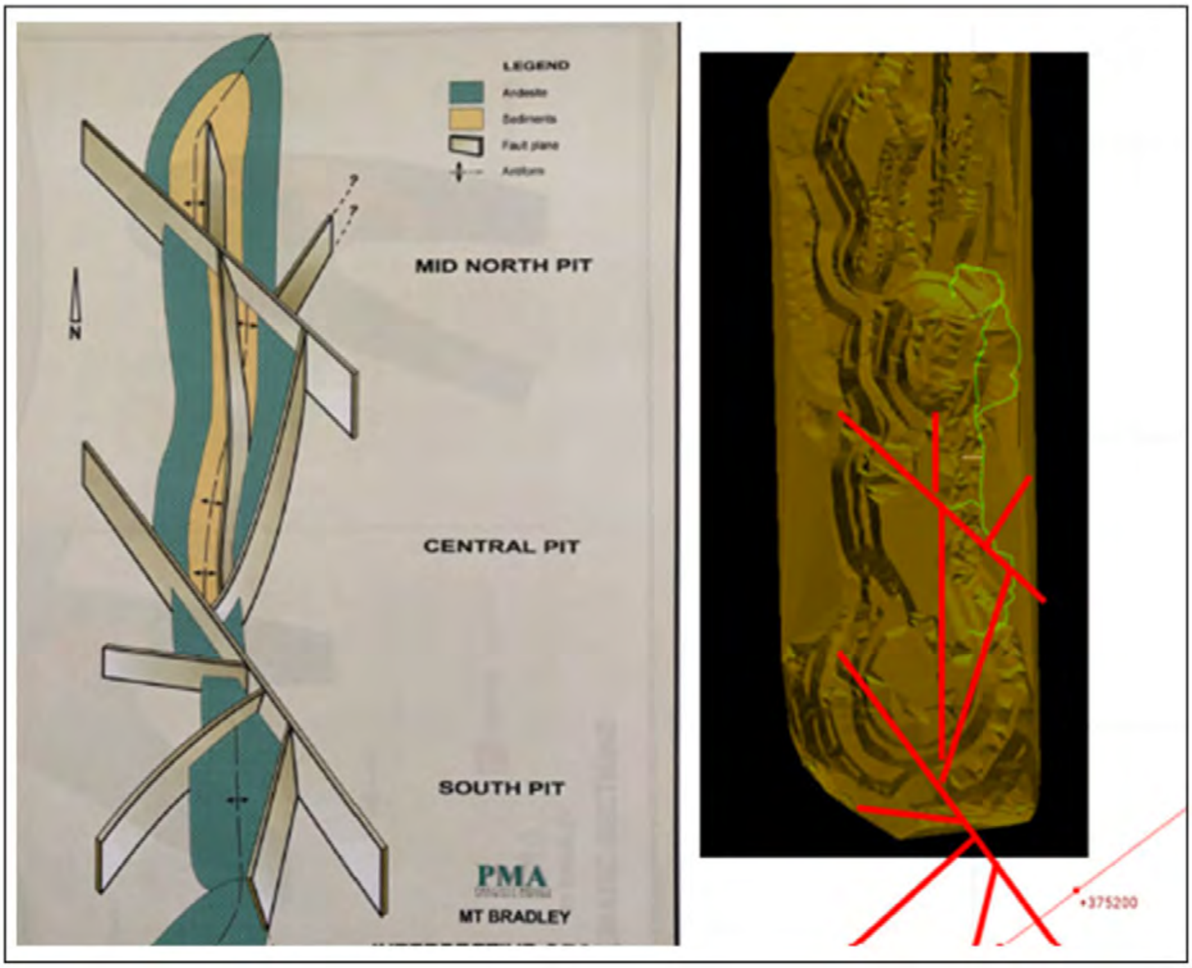


Figure 4.14 - Interpreted Fault Locations Along Open Pit with Local Grid

A shear zone (Ruby Queen) is a regional structure sub-parallel to the deposit at 70m East from the anticline axis. It hosts other deposits to the south and is reported as geotechnical weak structure.

4.7.2 Folding

As per the wireframe provided, a tightly folded asymmetric anticline plunging southward at about 20-30 degrees, with the western limb dipping ~70 degrees West and the eastern limb dip overturning to 80-90 degrees west. The syenite lithology of the fold is shown in Figure 4.15, Figure 4.18 and Figure 4.20.

4.8 Open Pit Minor Structural Features

This data is shown in Figure 4.15 and is compiled from the photogrammetry taken in the pit in 2025 processed using Shapemetrix software (Blue), of core (Orange) and 1996 pit mapping (Red). Historical geotechnical logging results were used to confirm structural orientations.

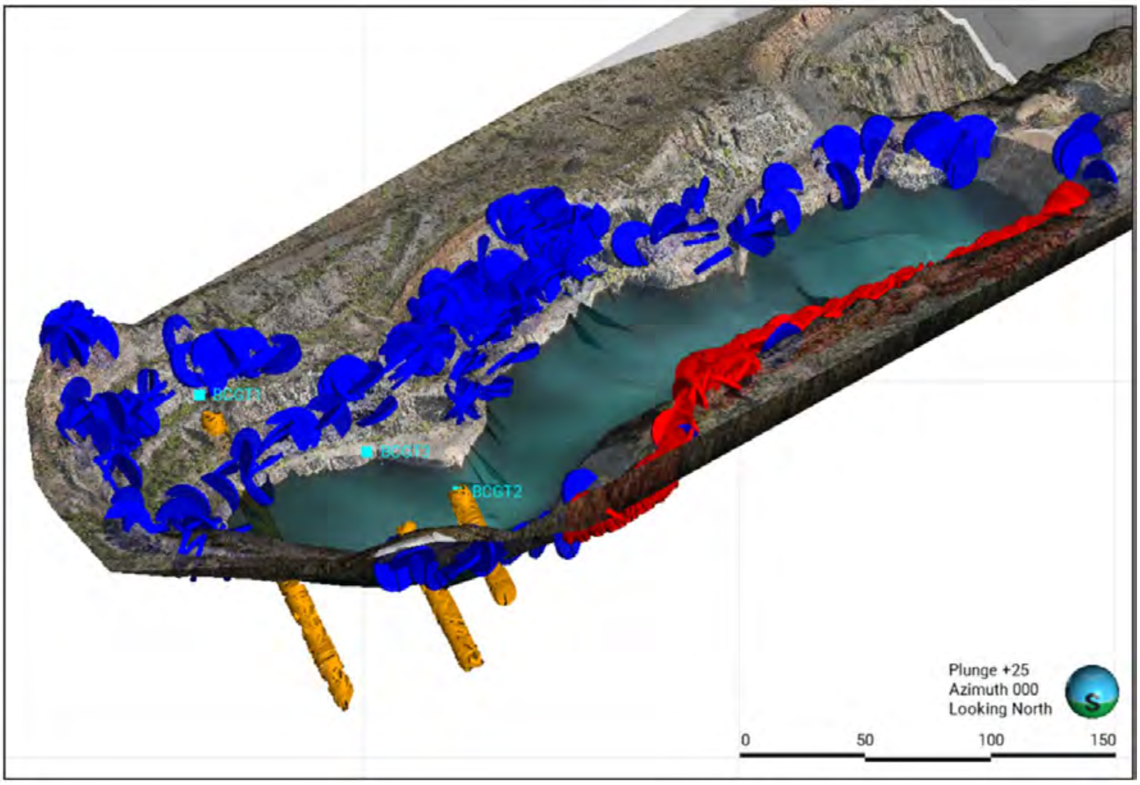


Figure 4.15 - Mapped Structures in Butchers Creek Open Pit

The structures are concordant with the fold geometry with a main bedding plane dipping ~70/80 degrees into the slope and oblique to the pit wall as shown in Figure 4.16. Photogrammetry mapping obtained a minimum spacing of ~0.5m (smaller spacing could have been hidden by scale factor).

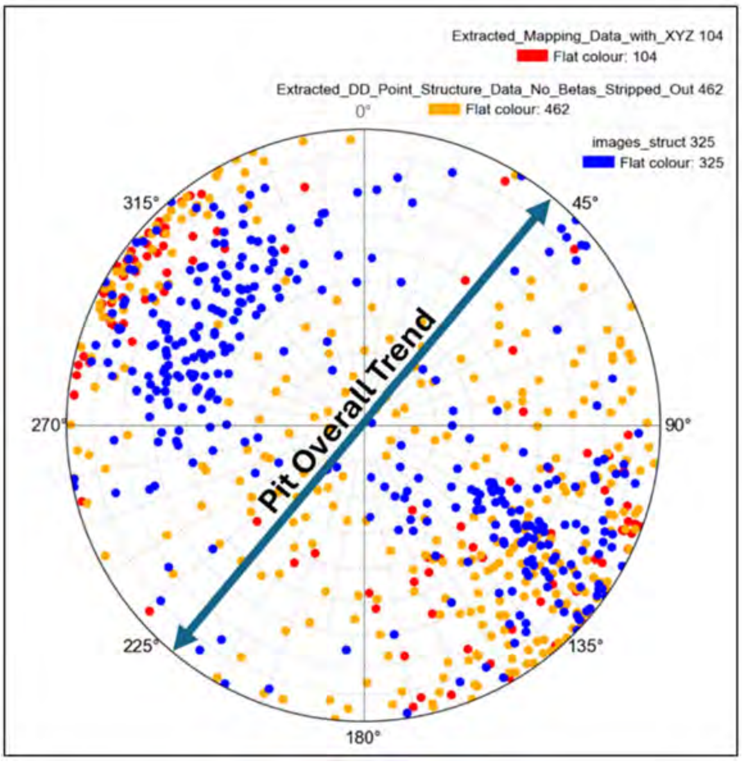


Figure 4.16 - Structures Used in Open Pit Toppling Analysis

DIPS (Rocscience, 2025a) analysis made evident a second set of structures highlighted by Figure 4.17. these structures have been filtered against the Open Pit and are shown in Figure 4.18, ~50 degrees (+/- 10) dipping structures mainly into Western wall, non-bedding in the Eastern Wall, these may be possible joints parallel to faults.

Two additional secondary sets were recognised in the West Wall through DIPS analysis of 2025 photogrammetry data and have been confirmed from BFP (1996) report, such sets are not common.

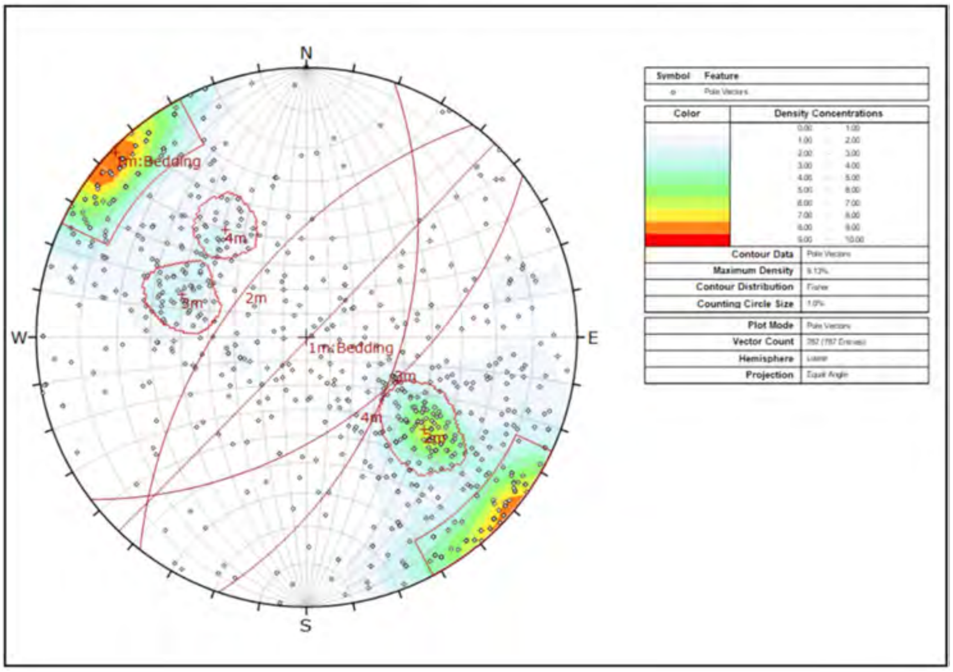


Figure 4.17 - Stereonet Showing Two Major Sets of Structures

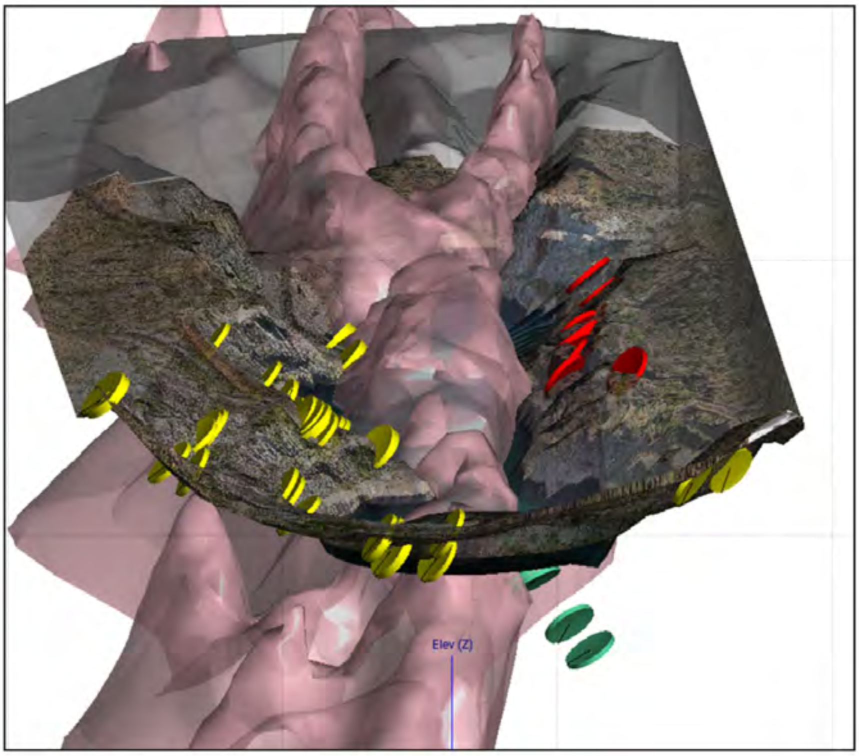


Figure 4.18 - Filtered ~50 Degrees Structures

Table 4.6 shows the main sets divided by wall, both walls are mostly dominated by bedding following the fold with little variance between NW side, SE side and the Hinge Zone.

Table 4.6 - Orientation of Structures Near BC Open Pit

	West Wall			
Structural Sets	Set 1	Set 2	Set 3	Set 4
Dip	70-80	50-55	52	53
Dip Direction	310	305	109	143
	East Wall			
Structural Sets	Set 1	Set 2		
Dip	80-90	50-55		
Dip Direction	130	305		

A high fractured zone more susceptible to weathering called "Zebra Shale" unit was highlighted in BFP 1996. The zone is ~10m thick and could influence slope stability at the toe of the slope.

No proper location for the "Zebra Shale" was extracted from previous reports or geotechnical data, Figure 4.19 shows however that it is expected to outcrop at approximately the 320-300mRL.

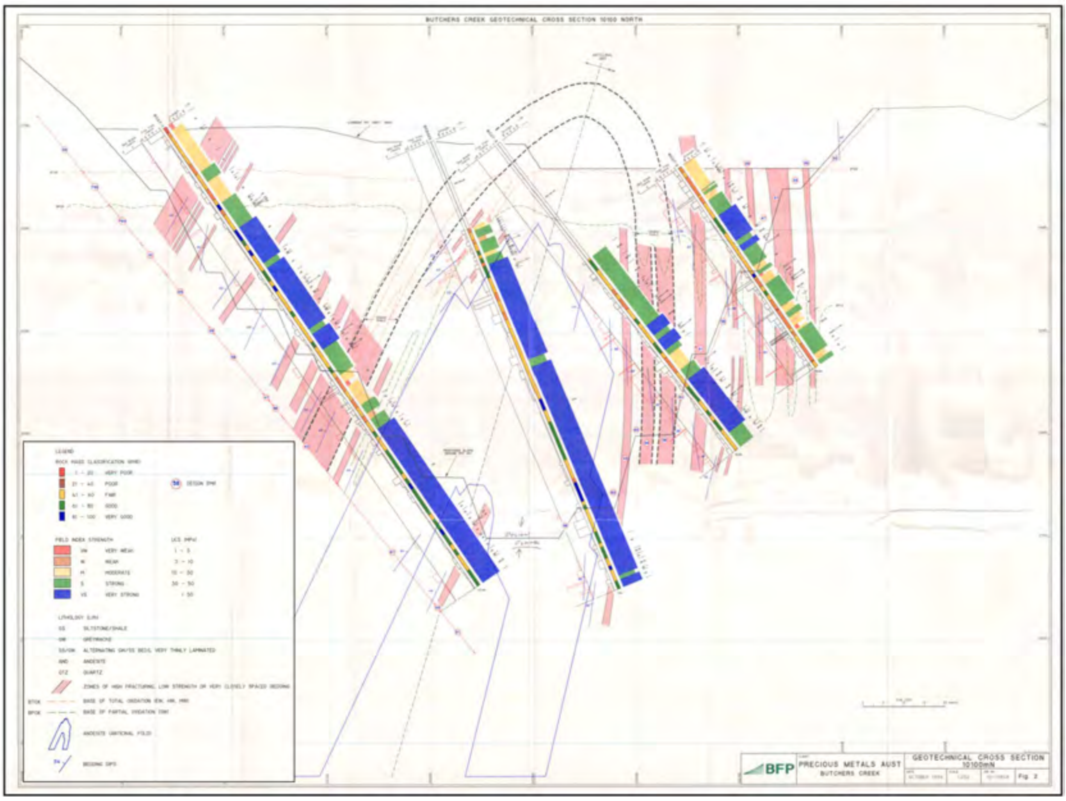


Figure 4.19 - Section View of Existing Pit with Rock Quality

4.9 Underground Minor Structural Features

4.9.1 Drill Hole Bias

To understand the results, a drill hole bias analysis was completed to identify if dominant sets were over-represented and/or there were blind spots highlighting where potential data gaps exist.

The bias analysis was undertaken using the drill hole orientation and logging length. A program called AGWS (2021) was used to review the bias, producing two plots, one applying Terzaghi weighting (TC) and one without.

The colourmap represents the relative sampling weight for each area of the stereonet, with the blind zone considered to be unsampled (Thomas, 2021). Figure 4.20 shows: (a) how an "unbiased" sampling and uniform weighting plots, (b) is a plot of a single drillhole, showing how a "blind zone" is identified and (c) is the same single drillhole plot with Terzaghi Correction (TC) weighting applied.

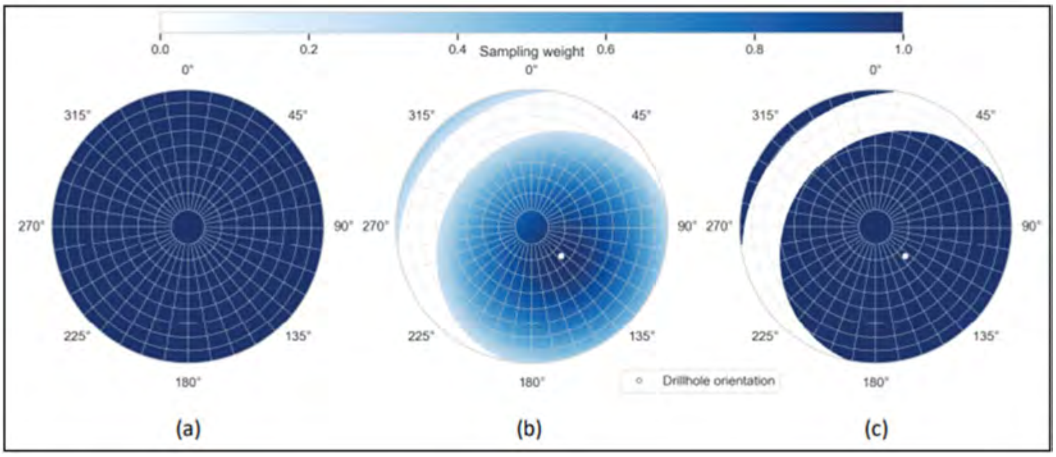


Figure 4.20 -Unbiased Sample Uniform Weighting Plot

Figure 4.21 shows the current dataset Bias plot with a portion of the stereoplot with low confidence as all borehole traverses have similar dip/dip-direction leaving some orientation not covered.

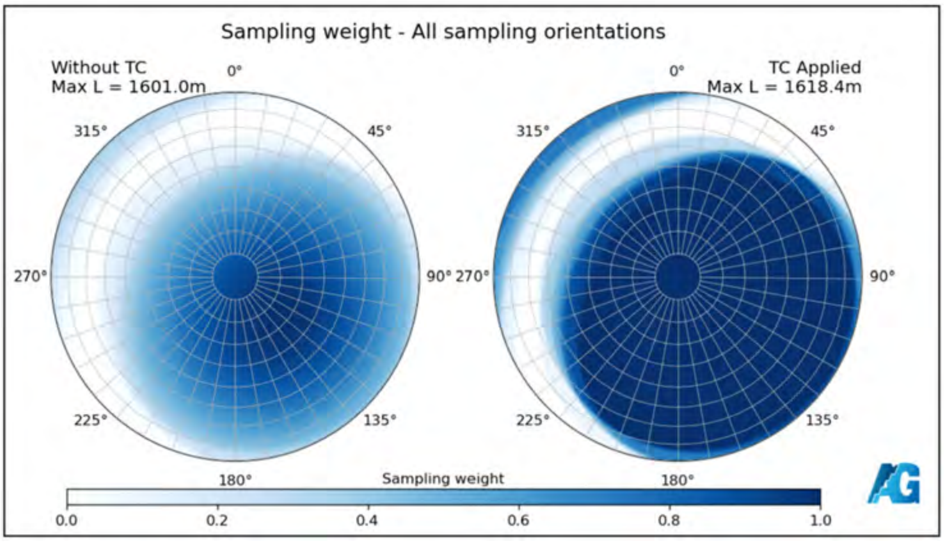


Figure 4.21 - Bias Plot of Current Dataset

4.9.2 Structural Analysis

Structural sets were interpreted using the manual orientation data, identification of open structures for manual logging data uses logged discontinuity types, such as joints, shear zones and faults.
The resulting datasets have been divided into lithological domain and analysed for dominant orientations in DIPS.

Table 4.7 shows the Main sets divided by lithological fresh domain; the structural setting of the sediments, both SGW and SBS-SMS, is mostly dominated by bedding following the fold with little variance between NW side, SE side and the Hinge Zone.

Lithology/Domain	FR_Syenite		FR_SGW	FR_SBS_SMS
Structural Sets	Set 1	Set 2	Set 1	Set 1
Dip	70	17	70	70
Dip Direction	30	108	305	305

Table 4.7 - Underground Structure Sets Divided by Domain

Syenite (Ore zone) is dominated by jointing not correlated to the surrounding sediments bedding, one main sets at 70°/030° and a sub-Horizontal that was also considered at 17°/108°.

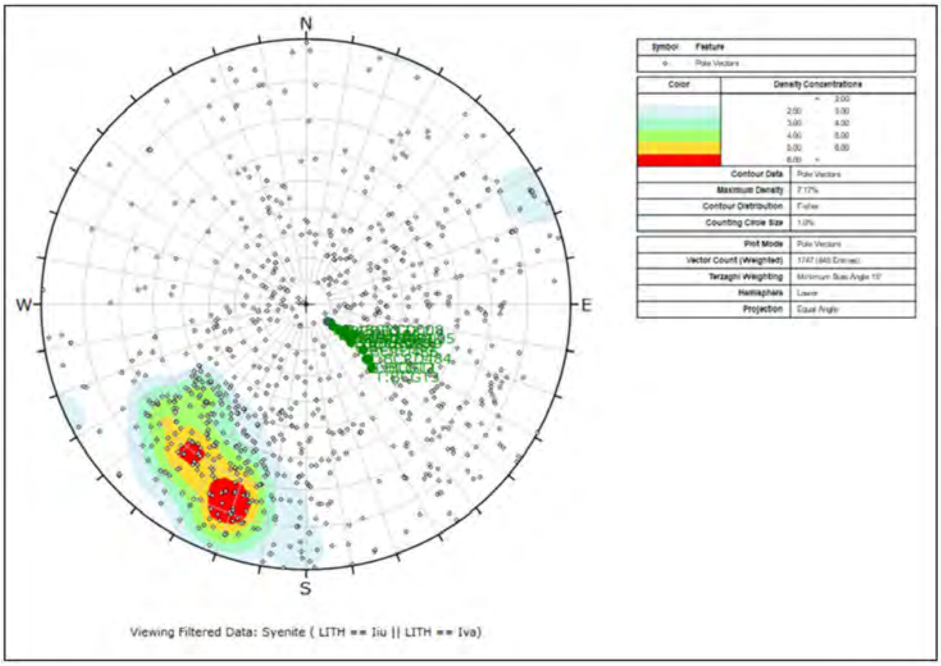


Figure 4.22 - Data of FR Syenite Domain with Average Drill Hole Orientation

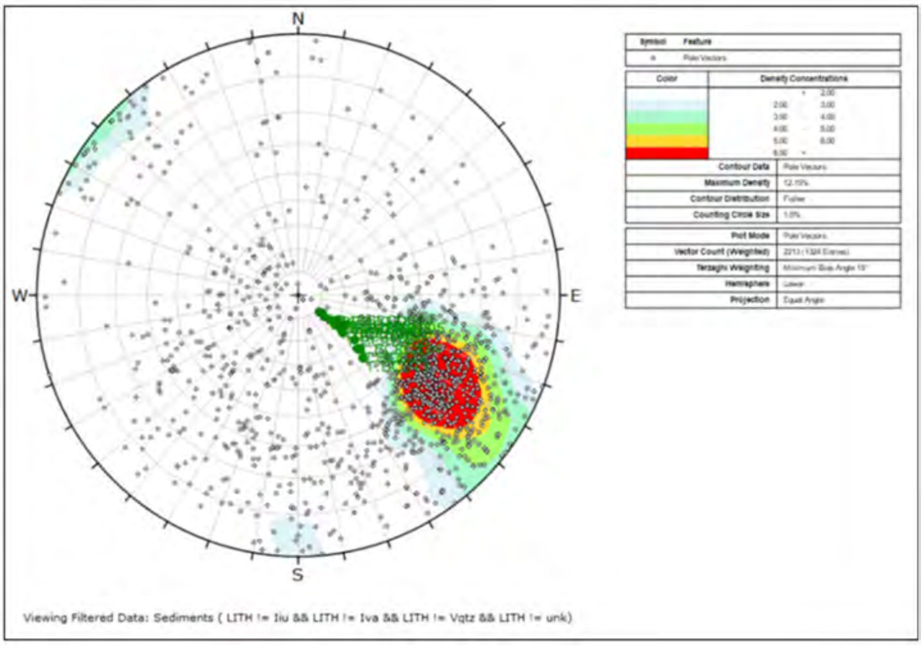


Figure 4.23 - Data of FR Sediments Domain with Average Drill Hole Orientation

4.9.3 Weak Zone Potential "Zebra Shale"

Rock mass data shows series of potentially weak planes that run sub parallel to the bedding, as shown in Figure 4.24, review of core photos shows a significant fracturing along bedding in these intervals Figure 4.25 and Figure 4.26.

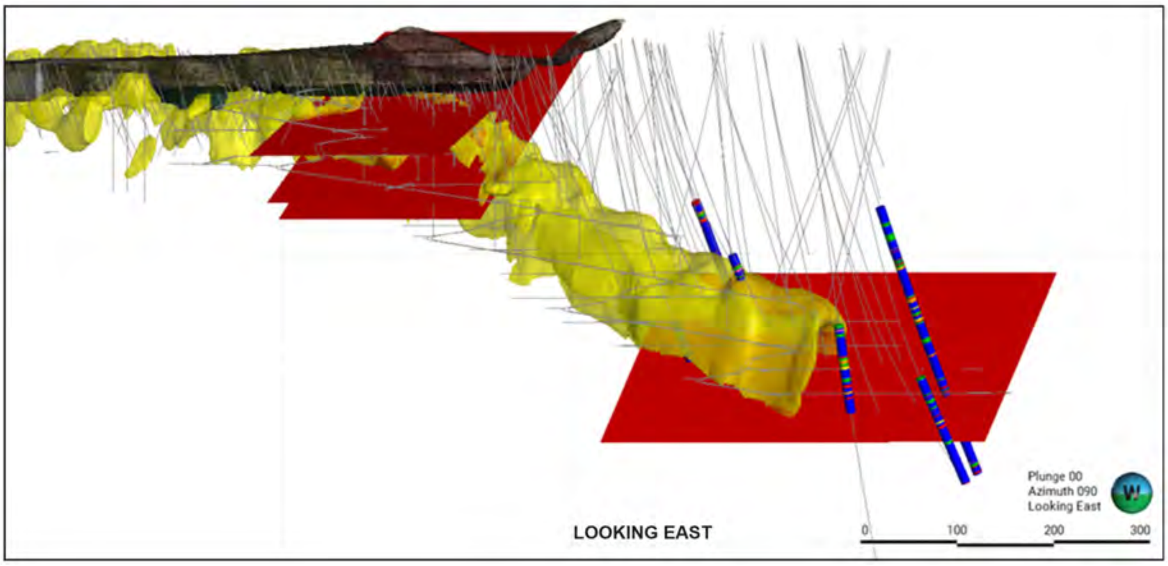


Figure 4.24 - Inferred Weak Planes from Rockmass Logging

As the orientation of these fault and discontinuities is parallel to the ore drives orientations and would a negative influence in kinematics and stope stability dependent on the location. Further assessment is required for a Pre-Feasibility Study and if these represent the proposed "zebra shale" unit from BFP 1996.

Figure 4.25 - BCRD482 Core Photo at 357.8m-361.0m

Figure 4.26 - BCRD483 core photo at 281.8m-284.6m

4.9.4 Unwedge Analysis

Considering the logged lithologies do not have 3 joint sets, a wedge assessment using the RocScience Unwedge software was not undertaken for kinematic stability assessment.

4.10 Open Pit Kinematic Assessment

The objective of the bench scale stability analysis is to establish a base case bench configuration, batter face angle (BFA), bench height, berm width and corresponding inter ramp angle (IRA) accounting for the potential failure mode.

The bench scale stability analysis establishes the kinematic instabilities within the transitional and fresh rock domains. Results are then used to calculate catchment requirements and therefore berm width.

This section summarises the process of kinematic and numerical modelling analysis that was completed to provide bench configuration recommendations. These recommendations were provided to WIN consulting mining engineers to enable mine design.

4.10.1 Failure Mechanism

The collected geotechnical data and pit observation were used to evaluate the main failure mechanisms which will govern analysis. Those typical failure mechanisms considered are summarised within Table 4.8 this has been adapted from Hoek 2000 documented notes.

Table 4.8 - Failure Mechanism Summary Table

Failure Mechanism	Typical Problems	Critical Parameters	Analysis Method
Landslides	Complex failure along a circular or near circular failure surface involving sliding on faults and other structural features as well as failure of intact materials.	• Presence of regional faults. • Shear strength of materials along failure surface. • Groundwater distribution in slope, particularly in response to rainfall or to submergence of slope toe. • Potential earthquake loading.	3D finite-element numerical modelling.
Soil or heavily jointed rock slopes	Circular failure along a spoon-shaped surface through soil or heavily jointed rock masses.	• Height and angle of slope face. • Shear strength of materials along failure surface. • Groundwater distribution in slope. • Potential surcharge or earthquake loading.	3D or 2D finite-element numerical modelling.
Jointed rock slopes	Planar or wedge sliding on the structural feature or along the line of intersection of two structural features.	• Slope height, angle and orientation. • Dip and strike of structural features. • Groundwater distribution in slope. • Potential earthquake loading. • Sequence of excavation and support.	Kinematic analysis, DFN modelling.
Vertically jointed rock slopes	Toppling of columns separated from the rock mass by steeply dipping structural features which are parallel or nearly parallel to the slope face.	• Slope Height, angle and orientation. • Dip and strike of structural features. • Groundwater distribution in slope. • Potential earthquake loading.	3D or 2D finite element numerical modelling, using anisotropic conditions.
Loose boulders on rock slopes	Sliding, rolling, falling and bouncing of loose rocks and boulders on the slope.	• Geometry of slope. • Presence of loose boulders. • Coefficients of restitution of materials forming slope. • Presence of structures to arrest falling and bouncing rocks.	

The major failure mechanisms identified in Table 4.8 from data review which have the potential to cause pit instability are toppling/buckling failure on bedding (~70°-80° in west wall and ~80°-90° in east wall).
Planar and wedge failure may occur along joints on west wall with joint sets highlighted in Table 4.6.

4.10.2 Two Dimensional Finite Element Analysis

Two-dimensional finite element analysis was undertaken using the inelastic finite-element numerical software, RS2, (Rocscience, 2025b).

As Eastern wall failed a back-analysis was conducted to confirm rock properties.

The inputs to the RS2 models include:

- Material strength
- Dry slope for hydraulic conditions
- Lithostatic stress condition

- Joint network obtain from previous report, borehole geotechnical logging, line mapping on pit surface and shapemetrix mapping

The methodology for evaluating stability from the models is as follows:

- Batter is excavated in a single stage at the current design.
- The Strength-Reduction-Factor (SRF) is calculated by means of the Shear-Strength-Reduction methodology (see below)
- If the Model converge (SRF is lower than the acceptance criterion) it confirms that the parameters used against the excavated pit would have resulted in wall failure.
- Further models are run with confirmed parameters with new geometry to avoid failure.
- If the SRF is lower than the acceptance criterion the batter is flattened until the criterion is met

The concept of SSR methodology is as follows:

- The strength parameters of a slope are reduced by a factor (SRF) and the finite-element stress analysis is computed
- This process is repeated for different values of SRF until the model becomes unstable (convergence not achieved)
- This determines the critical SRF, or Factor of Safety (FoS), of the slope

The finite-element software RS2 makes the inherent assumption that the rock/soil mass can be represented by a homogeneous, isotropic, elasto-plastic medium.

The UCS parameters for the transitional material were obtained from BFP (1996). For Joint network properties the Barton-Bandis Slip criterion was used with JCS and JRC assumed as average values for transitional sedimentary rock, values from BFP (1996) report for shear strength were not used due to low number of samples.

Table 4.9 - Rockmass Parameters Used for Toppling Analysis

S.no	Parameters	Transitional
1	UCS (MPa)	20 & 10
2	Modulus(MPa)	330
3	GSI*	30
4	Bedding plane orientation (degrees)**	-80
5	Cross - bedding orientation (degrees)**	8 & 45
6	JCS(MPa)	0.05/0.01
7	JRC	4
8	Water table from surface	30m

4.10.3 Back Analysis Toppling Model

This section considers the construction of the back analysis model and the results from the parametric study. For the model the full slope height is set at 40m, first two benches are 10m high and third and last bench is 20m high, BFAs are 46°, 50° and 55° with IRA of 43°.

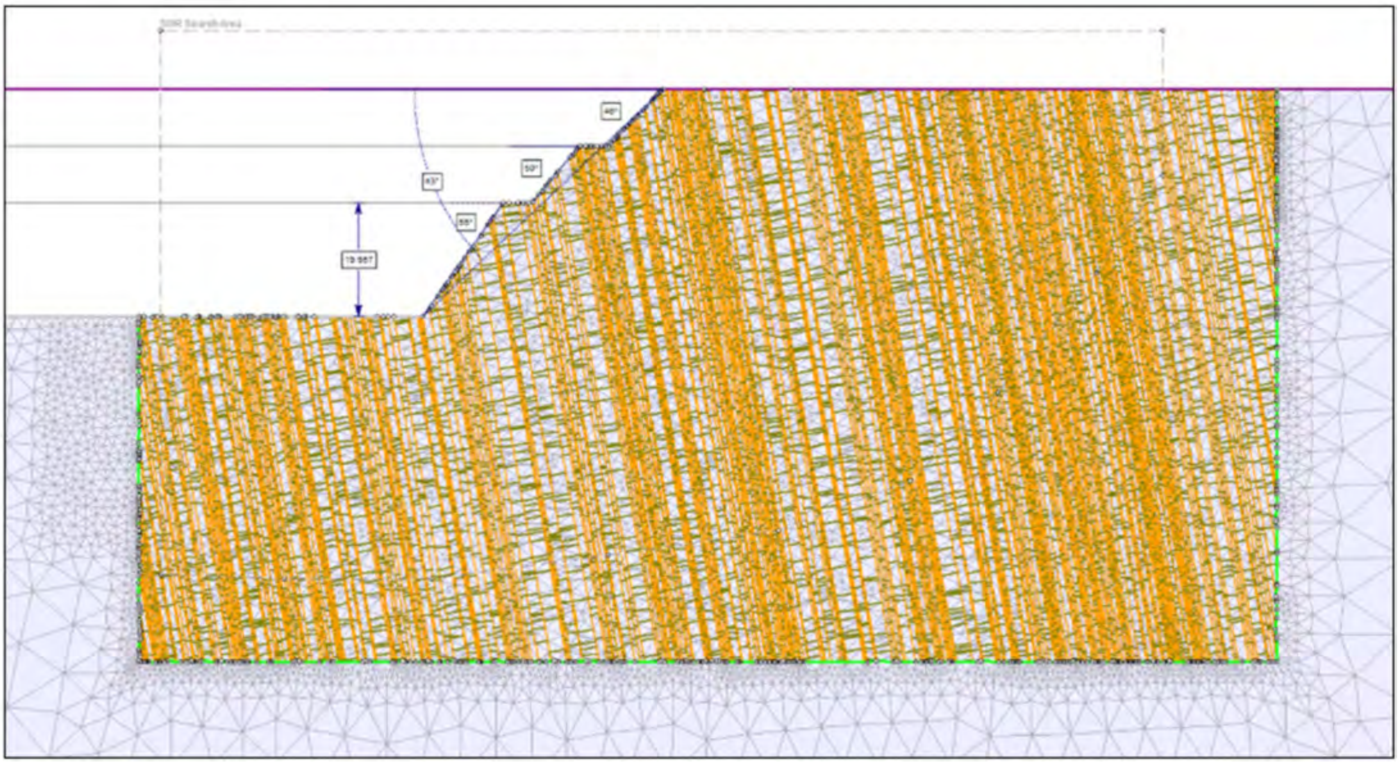


Figure 4.27 - Failed East Wall Geometry

Most models converged to failure or have a low SRF value, in particular a diminishing spacing. The inclusion of a high population of the moderately structure out of the wall and the use of the lower value of UCS results in failure.

While a high population of 45° is unlikely it does exist and drops the SRF from 1.1 to 0.8.

Toppling was most likely a combination of factors not easily captured (cross cutting faults, material strength, bedding spacing, density of the dipping out of wall joints).

Multiple models were run to obtain a convergence that would results in wall failure, summarises in Table 4.10 the results of two-dimensional models from the stages.

Table 4.10 - Results of 2D Modelling Using Various Material Properties.

Scenario	Material	Bedding Dip	Cross-Bedding Dip	Spacing (m)	UCS	SRF	Comment
1	Transitional	-80	8	0.5	20	1.1	SRF low but should not have resulted in failure
2	Transitional	-80	8	0.1	20	1	Convergence occurred in model but not as deep as actual failure
3	Transitional	-80	45	0.5	20	0.8	Unlikely population of Cross-bedding
4	Transitional	-80	8	0.5	10	n/a	Convergence using lowest UCS value for transitional

4.10.4 Designed East Wall Toppling Analysis

A new set of design models was then used with the rock mass parameter to confirm a design slope geometry.

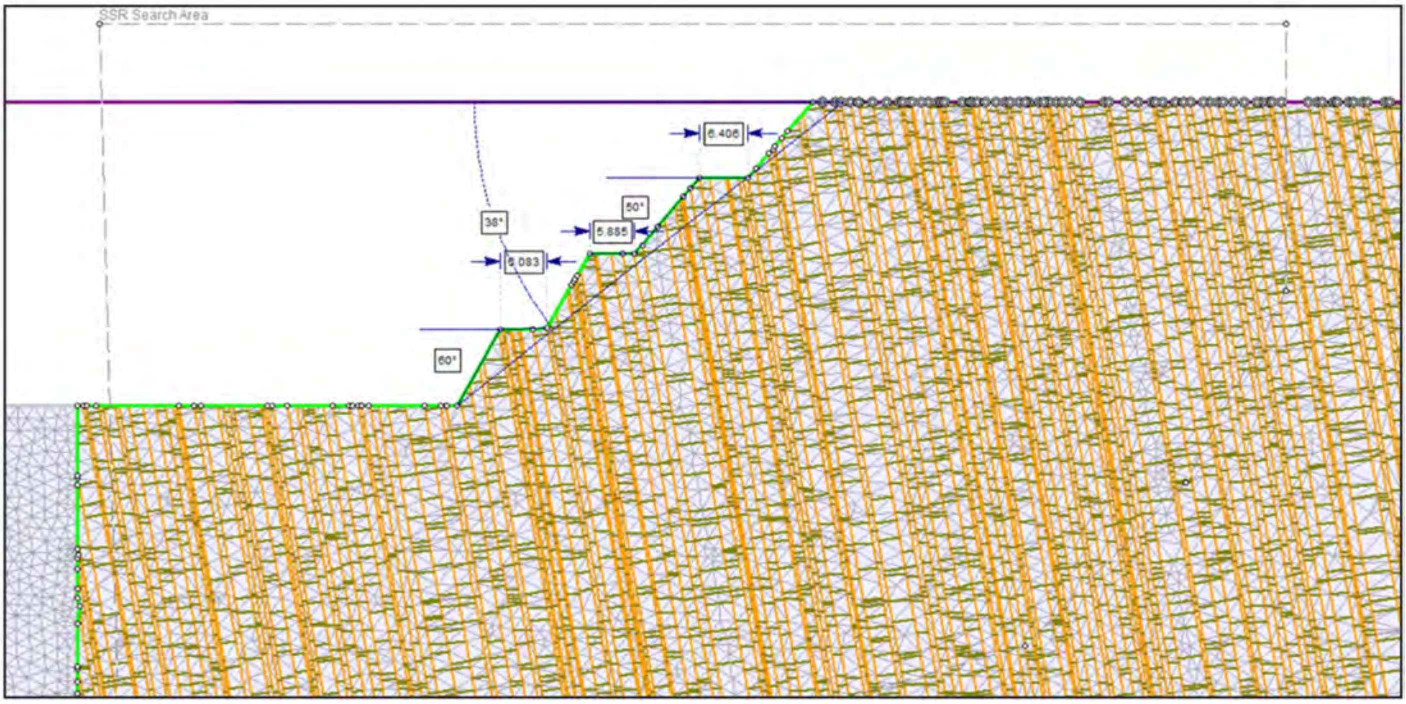


Figure 4.28 - Tested East Wall Geometry

The RS2 East Wall Model tested the East wall design geometry is shown in Figure 4.28 full slope height is set at 40m, all benches are 10m high, first berm width at 6.5m and subsequent berms width at 6m, BFAs are 50° and 60° with IRA for the first two benches at 35° and final IRA at 38°.

By changing the East Wall geometry, the model converge at an SRF of 1.2 (Table 4.11).

Table 4.11 - Results of 2D modelling Using Different Parameters

Scenario	Material	Bedding Dip	Cross-Bedding Dip	Spacing (m)	UCS	SRF	Comment
1	Transitional	-80	8	0.5	20	1.2	
2	Transitional	-80	8	0.1	20	1.2	
3	Transitional	-80	45	0.5	20	1.2	Unlikely population of Cross-bedding

4.10.5 Designed West Wall Toppling Analysis

Tested West wall design geometry full slope height was set at 60m, all benches are 10m high, berm width at 10m, BFAs are 60° with final IRA at 32°.

Main bedding was changed to 70° to reflect the difference in Plunge of the bedding between west and east walls. By assuming the proposed geometry no model converged, implying an overall stable configuration against toppling,

4.11 Underground Empirical Ground Support Scheme Analysis

Rock mass classification is a method to characterise the rock mass quality of the geotechnical domain which is then used for stability analysis. Data used for this is from geotechnical logging.

The initial 100m of development will be in moderately weathered Sedimentary domain, the rock mass statistics for it was not obtained.

4.11.1 NGI Q System

A generalised Q-system assessment was undertaken for the ground support design (Table 4.12) shows the inputs selected and the output from using the Q-system chart. The chart in (Figure 4.29) has the X-axis of Q-value, y-axis of the “span/ESR”. It is for determining the ground support scheme for rock mass control rather than discrete wedges. The ground support scheme is recommended in terms of fibrecrete (termed Sfr on the chart) thickness with the bolt pattern on the upper curve. The bolt spacing on the lower curve is used when mesh is used rather than fibrecrete.

Several assumptions were made for the assessment:

- Joint set number has been adjusted to allow a third set for the Bias zone.
- SRF set to 2.5 for near surface conditions (it may increase to 5 in the Syenite once development continues at depth.
- ESR of 1.3 to allow for a conservative value.
- 25th percentile RQD used, however in foliated rocks there might be uncertainties to which joints should be considered. As schistose surface represents a weakness in the rock and is not necessarily a natural joint.

Table 4.12 - The Q-System Assessment

Field	SGW	SBS_SMS	Syenite
RQD	91 (25th percentile)	83 (25th percentile)	96 (10th percentile)
Jn	9 (3 for 75th percentile but added due to low confidence)	9 (6 for 75th percentile but added due to low confidence)	9 (3 for 75th percentile but added due to low confidence)
Jr	2 (Smooth and undulating for 25th percentile)	2 (Smooth and undulating for 25th percentile)	3 (Rough and undulating for 25th percentile)
Ja	1 (unaltered)	1 (unaltered)	1 (unaltered)
SRF	2.5 (near surface)	2.5 (near surface)	2.5 (near surface)
Jw	1 (dry – drained due to pit affects)	1 (dry – drained due to pit affects)	1 (dry – drained due to pit affects)
Q	8.0	7.3	13.2
ESR	1.3	1.3	1.3
Span/ESR	4	4	4
Resultant Bolt + mesh	1.8'1.8 pattern (20t grouted bolt capacity)	1.8'1.8 pattern (20t grouted bolt capacity)	2'2 pattern (20t grouted bolt capacity)
Resultant Bolt Length	2.4m	2.4m	2.4m

The Excavation Support Ratio of 1.3 has been selected as the rock mass statistical data used is from 8 drillholes. Once mining is established and there is supporting evidence of the rock mass and structural setting a value of 1.6 can be considered for the capital development.

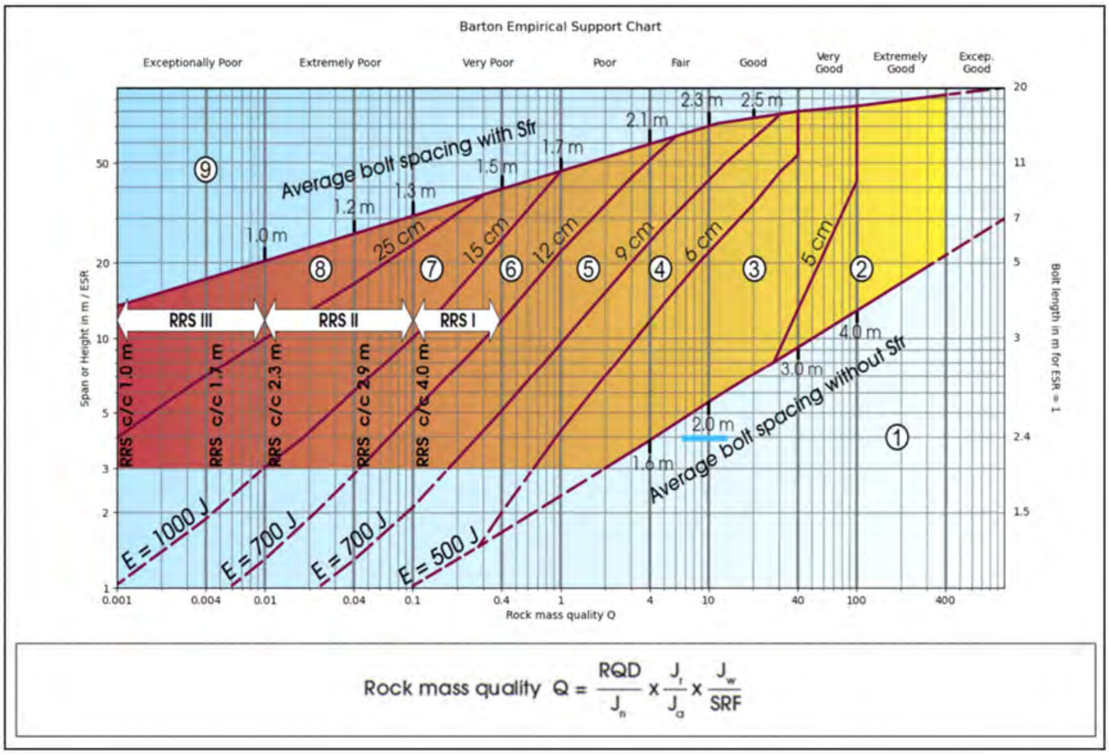


Figure 4.29 - NGI 2015 Ground Support Standard from Q-System.

4.11.2 Potvin Empirical Support Analysis

An analysis was carried out using the empirical support chart from Potvin et al (2019) that is based on a compilation of ground support scheme used in Australian and Canadian underground mining conditions where mining operations self-assessed their rock mass conditions and provided their installed ground support schemes. The chart is shown in Figure 4.29.

This chart is reliant on a consistent form of assessment for the Q-system across multiple practitioners and sites. The recommended bolting pattern is independent of bolt type. The proposed ground support scheme is a summary not consistent for all participants to the survey but rather the typical case.

The planned (1.1m x 1.4m) bolting pattern assessed is a bolt density of 0.65 which is allowed against (Figure 4.30) for the Q-value range of 7.3 to 13.2.

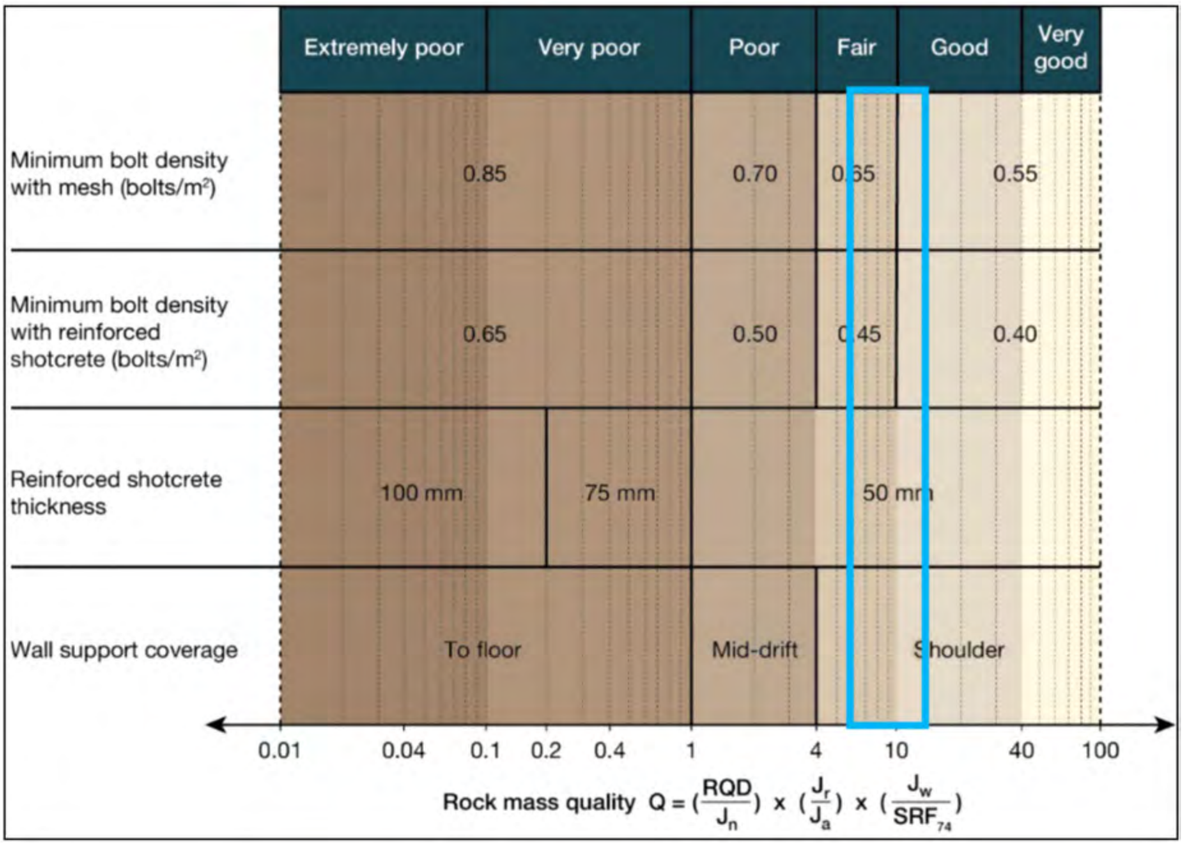


Figure 4.30 - Potvin et al 2019 Ground Support Categories

4.11.3 Cable Bolting

For intersection and brow cable bolt estimations, a standard limit-equilibrium calculation was used. This is based on a parabolic arch equal to one third the height of the diameter of the opening. The results are shown in Table 4.13.

Backs are considered arched, cables are assumed as twin 15.2mm strand cables, plated and tensioned on both strands with a final total capacity of 40t. Plate size is either (200 x 200mm) or (300 x 300mm) depending on the ground conditions. The barrel/wedge interface is to be greased with Molybond Gog to minimise corrosion of the wedges and improve service life.

Table 4.13 - Cable Bolt Requirements

Intersection Span (m)	No. of Cables	Bolt Spacing	Length
Max Span 10m including fillets	8	2.5x2.5m	6m
Max Span 12m including fillets	16	2.2x2.2m	6m

4.12 Empirical Stope Stability Analysis

Empirical stope stability assessment was undertaken to provide guidance on HR values and maximum unsupported span recommendations for proposed stopes within the Fresh domains of syenite, SGW and SBS-SMS which make up the HW, FW and Crown materials.

No numerical modelling was done for this study.

4.12.1 Background Methodology

Stope stability calculations were undertaken using the Modified Stability Number from Hutchinson and Dietrich's (1996).

This method of wall stope stability is an empirical rating system based on back analysis of stability results from a number of mine sites around the world. The process results in an estimated stable hydraulic radius for the given rock mass conditions. It is anticipated that stoping performance will be back analysed and improvements to the design made during the operational stage of the project. The expected rock mass conditions are determined for each critical face of the stope from the equation below.

The modified stability number equation is N' = Q' x A x B x C

Where:

- Q' is the calculation for Q where the effects of stress and water are set to unity
- The Q' value as determined by statistical analysis in Section 5.5 and Table 5-1 to Table 5-3. This analysis was completed using the 25th% value of RQD and Jr from sedimentary domain dataset and 50th% value from syenite, Jn was downgraded to 9 to cover for data biases and low confidence.
- A is a measure of the ratio of intact rock strength to induced stress – "Rock Stress Factor"
- B is a measure of the relative orientation of dominant jointing with respect to the excavation surface, "Joint Orientation Factor"
- C is a measure of the influence of gravity on the stability of the face being considered, "Gravity Adjustment Factor"

A Factor : Due to the shallow nature of the deposit, the mining induced stresses are likely to be low and an A factor of 0.9-1.0. Higher stresses may be encountered in the lower part of the September 2025 mine design but considered unlikely.

B Factor : The structural data shows that there is a bedding structural set parallel to the fold dip in the Sediment domain and two sets in the Syenite domain. Therefore, based on a parallel to stope surface structure in all domains and a sub-horizontal surface structure in the Crown, a B factor of 0.4 has been applied for HW, FW and Crown calculations.

B Factor : The C factor is determined based on the likely failure mechanism, either gravity/slabbing failure or sliding. The C factor is then calculated based on the average dip angle of the stope surface or the main discontinuity set respectively.

4.12.2 Stope Sizing Assumptions

At the time of the preliminary stope sizing assessment no stope shape was received, therefore several assumptions have been made:

- The stope faces orientations have been assumed to be parallel to the Syenite contact for HW and FW, perpendicular to the fold axis for the end walls, and planar for the backs.
- The strength results of the lithologies used are the average UCS.
- The analysis was carried out with a 25m long x 25m wide x 25m high stope size
- Main area were considered for the stope sizing (Figure 4.32), Area 1 for the Hinge of the Syenite, Area 2 and 4 respectively for the upper and lower section of the NW limb, Area 3 and 5 respectively for the upper and lower section of the SE limb.
- No data on k-Ratio, assumed 1.7 for low/medium depths.
- Q' value was measured from 25th Percentile data for Sediments, and 50th Percentile data for Syenite.

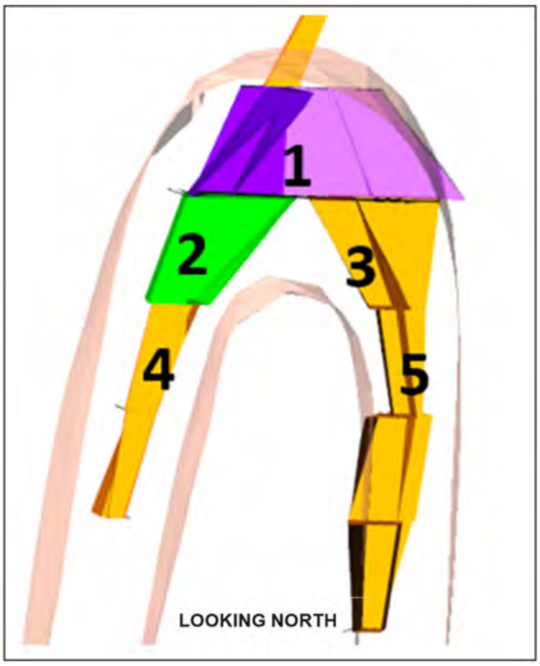


Figure 4.31 - Five Zones with Different HW-FW Orientations

The designed HR for a 25mH x 25mW x 25mL stope are provided in Table 4.14. Once an N' value has been calculated for each domain and surface, the maximum allowable hydraulic radius (HR) can be determined using the equation from Nickson (1992).

Where:

$$HRallowable = 100.573 + 0.338 logN'$$

Given the low confidence of the data, the line used to determine the maximum allowable hydraulic radius (HR) used was from Potvin (1988).

Using the fixed sublevel interval of 25m, the maximum allowable strike length for each surface is determined. These results show that the designed HR allow for stoping without requiring support. Therefore, early stoping in the upper levels can be extracted in 25m lengths by 25m width, this may need to be adjusted as the mining front moves deeper, and the stress field is better understood. This should also be assessed based on stope performance throughout the mine life.

The allowable length of the crown has then been determined based on a strike length of 25m, which suggests stopes up to 25m wide can be successfully excavated.

	ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5
HW-HR	6.7	6.4	6.3	6.4	6.3
FW-HR	6.3	6.3	6.3	6.4	6.3
South Wall-HR	6.3	6.3	6.3	6.3	6.3
North Wall-HR	6.3	6.3	6.3	6.3	6.3
Crown-HR	6.3	6.3	6.3	6.3	6.3

Table 4.14 - Design Stope Hyrdaulic Radius (HR)

4.13 Cemented Backfill Empirical Analysis

Backfilling using Cemented Rock Fill (CRF)/ Cemented Aggregate Fill (CAF) is a common backfill method used in open stoping operations, generally narrow stopes and or where paste fill options are not available. CRF is the cheapest form of stabilised fill with CAF more expensive (dependent on the relative cost of cement to crushing / screening) but is an engineered product and can be developed through.

CRF uses run of mine waste from development activities and is mixed with a cement slurry and at a ratio suited to the requirements for exposure at various geometries. CAF uses crushed waste to create a uniformed aggregate – typically 100 mm nominal upper size.

The cement content is planned to be CRF at 3% for vertical exposure and CRF at 6% for Horizontal exposure.

4.13.1 Exposures

Vertical exposure will be a maximum of 25mL x 25mH based on planned stope shape.

Horizontal exposure will be variable, with an average of 25mL x 5-10mW, for stopes near the hinge of the fold the horizontal exposure will be wider, on level 200-225mRL the maximum exposure for singular stope based on latest planned stope geometry is 25mL x 16.5mW, on Level 100-125mRL two stopes will have a horizontal exposure greater than 20m as shown in (Figure 4.33), one stope in 75-100mRL in particular will expose two differently CRF filled stopes, this will further decrease pillar strength.

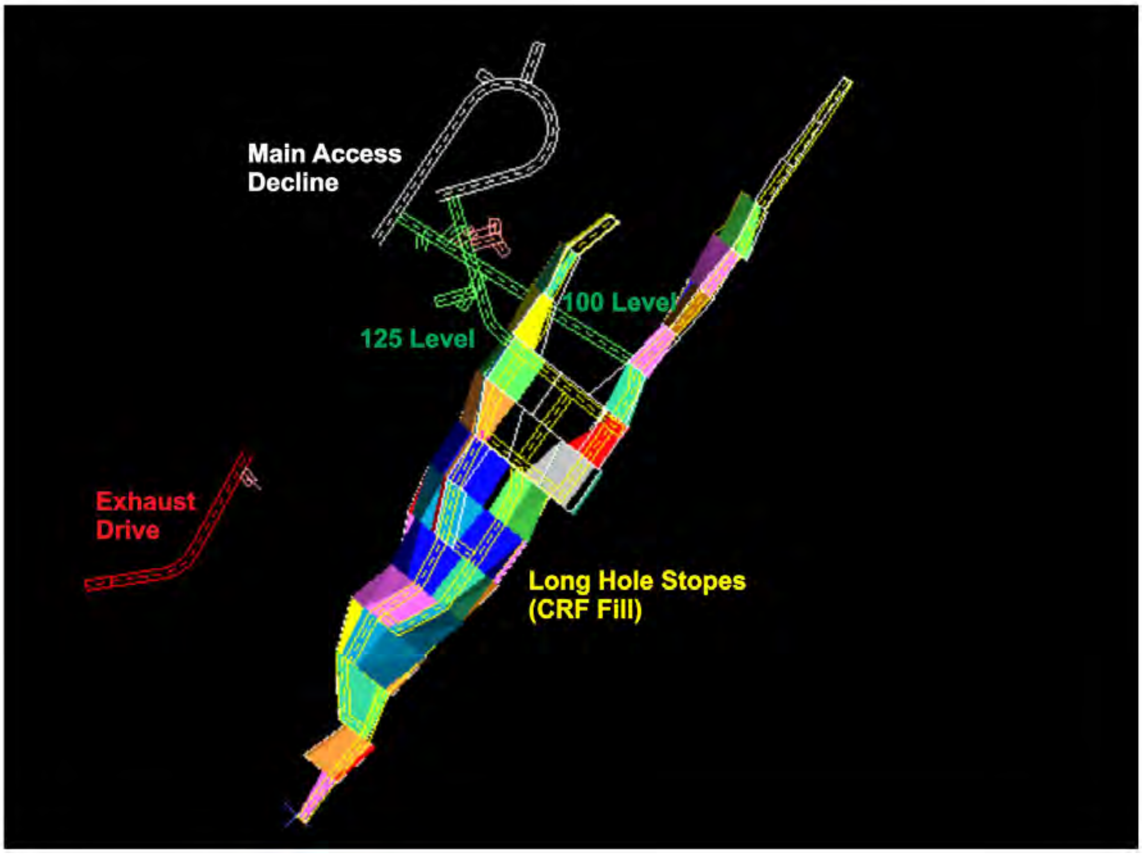


Figure 4.32 – Flitch Plan View From Above of CRF Stopes in 100m-125m RL

Horizontal Exposure

The Mitchell and Roettger (1989) method is commonly used in the mining industry to conduct assessments on backfilling using cement, this includes paste fill, CRF and CAF methods.

The method focuses on assessing the stability of exposed backfilling faces in underground operations. It addresses potential failure modes like sliding, crushing, and flexural failure by considering factors such as the fill's cohesion, friction, and tensile strength, as well as the geometry of the exposed face.

Key aspects of the Mitchell and Roettger method:

- **Failure Modes:**

  The method considers various failure modes, including sliding (due to low frictional resistance), crushing (when induced stress exceeds the fill's strength), and flexural failure (related to low tensile strength).

- **Analytical Solution:**

  They proposed an analytical solution to evaluate the stability of cemented backfill exposed on one side.

- **Practical Application:**

  The solution, often expressed as $\sigma c = 2c = \gamma/(1/H+1/L)$, where σc is the required cohesion, c is the cohesion, γ is the unit weight of the fill, H is the height of the exposed face, and L is the length of the exposed face, has been widely adopted in the mining industry.

- **Adherence Ratio:**

  The method also incorporates the concept of an adherence ratio (rs or rb) to account for the frictional resistance along sidewalls and the back wall.

  In essence, the Mitchell and Roettger method provides a framework for:

1. Determining the required strength of cemented rock fill to ensure stability in stopes.
2. Analysing the potential failure mechanisms of exposed backfill faces.
3. Designing backfill systems that can withstand the stresses and loads imposed by mining operations.

   Further Considerations:

   - The method has been adapted and refined over time, with ongoing research exploring the long-term mechanical behaviour of backfill and the influence of factors like particle size distribution and curing time.
   - Centrifuge model studies are sometimes combined with analytical and numerical modelling to provide a more comprehensive understanding of backfill behaviour.
   - The method's effectiveness relies on accurate characterization of the CRF's mechanical properties (e.g., cohesion, friction angle, tensile strength).

It should be noted that the Mitchell and Roettger method has been found to be generally conservative and that the use of numerical modelling backed up with laboratory testing and industry experience is a more acceptable method of CRF/CAF design.

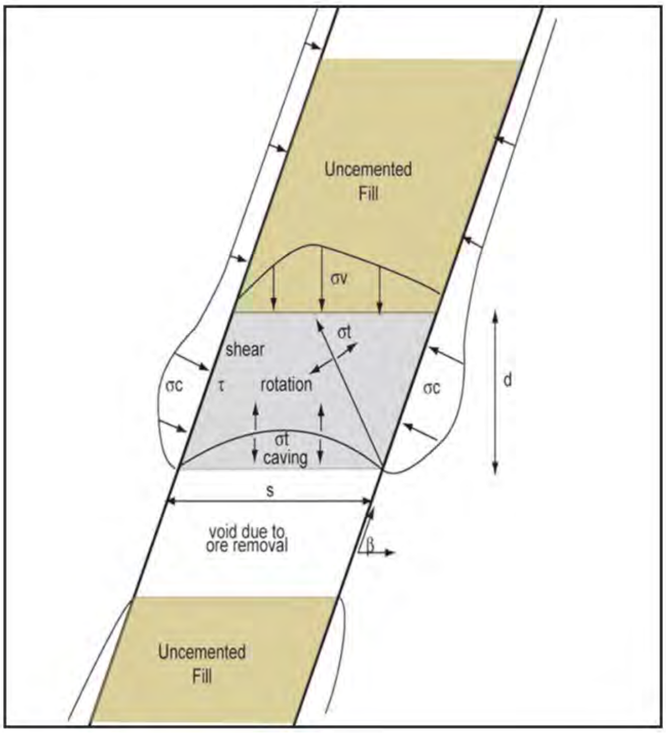


Figure 4.33 - Failure Mechanisms Used by Mitchell and Roettger

Vertical Exposure

Vertical wall exposure has been calculated using the Terzaghi-Bloss 1998 formula rather than the Vertical slope (Mitchell et al, 1982) method as this produces more realistic results.

Terzaghi - Bloss 1998 formulae for maximum stress:

sv = W/N (g - c/W)(1 - e-Nkz tan f/W) / k tan f

Where k is Poisson's Ratio and N in the number of intact rock walls.

These are plotted as boundaries on the stability graph.

4.13.2 Cement Content Inputs

Assumptions for cement content analysis are as follows:

- Stope sizing for vertical exposure is assumed to be a maximum of 25mH x 25mL.
- For the purposes of this study, a UCS of 2.25MPa was selected for the 6% CRF and 0.8MPa for the 3% cement content, the relationship between the UCS and cement content of CRF has been documented by Stone (1993) and is shown in (Figure 4.34).
- 50m of overburden from CAF above the pillar at 3% cement content for horizontal exposure.
- 90 Degrees Dip for horizontal exposure.
- Closure method and the amount of closure used to determine the strength of the required backfill, without numerical modelling closure has been assumed as strain induced at 0.10%.

For the undercut a continuous plug of 25m is considered, with the remaining 50m of filled stopes above considered as loading.

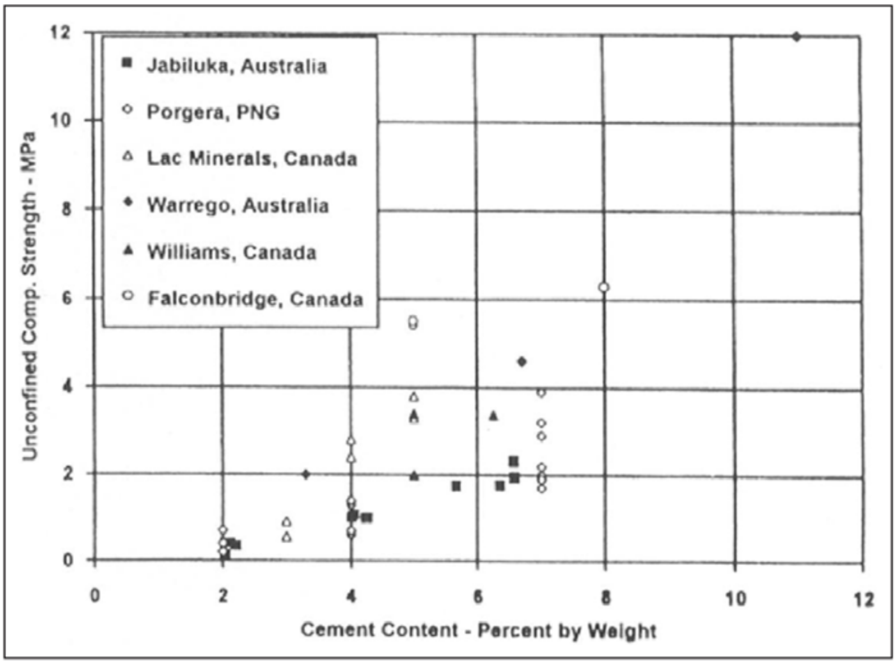


Figure 4.34 - UCS (500mm) for Various CRF Mixes Worldwide

4.13.3 CRF Stability Results

The resulting strength needed for a vertical exposure of 25mL x 25mH are shown in Figure 4.36 and a summary of results is given in Table 4.15 allowing for a FoS of 1.5.

Figure 4.35 - Required UCS for Vertical Exposure of a 25m Long Stope

Results summary			FoS	
Models that DO NOT consider arching			1.5	
	Confined block	258	387	kPa
	Free standing face	515	773	kPa
	Vertical slope	258	387	kPa
Arching models				
	Terzaghi	311	466	kPa

Table 4.15 - Required UCS for Vertical Exposure of a 25mL x 25mW Stope.

The resulting strength needed for a Horizontal exposure of a 25m long undercut with a FoS of 1.5 are shown in Table 4.16. Numbers in green represent values that falls below the average strength of a 6% cemented CRF. The parameters used allow the use of a 25m tall plug with a 6% cement content for stopes with an average width of ~15m, for the wider undercuts a different geometry or a higher cement content may be needed.

Table 4.16 - Required UCS (kPa) for undercut of a 25m long stope with a 25mH Plug

Width	4	6	8	10	12	14	16	18	20	22	25
Depth of Plug	25	25	25	25	25	25	25	25	25	25	25
Minimum UCS CT6	300	450	600	750	890	1,040	1,190	1,690	2,490	3,430	5,130
Minimum UCS CT8	400	600	800	990	1,190	1,390	1,590	2,250	3,310	4,570	6,840
Minimum UCS CT10	500	750	990	1,240	1,490	1,740	1,980	2,810	4,140	5,710	8,550

5 Open Pit Mining

5.1 Open Pit Ore Body Description

The Butchers Creek orebody plunges at 20 to 25 degrees to the southwest and is traceable over 1.5km to a vertical depth of 400m. The open pit resource was estimated using a potential economic cut-off grade of 0.5g/t Au and has a resulting indicated resource of 1.5Mt @ 1.99g/t Au. The main purpose of the Butchers Creek Open Pit works is to improve the stability of the open pit and provide practical safe locations for the development of the underground mine access portals.

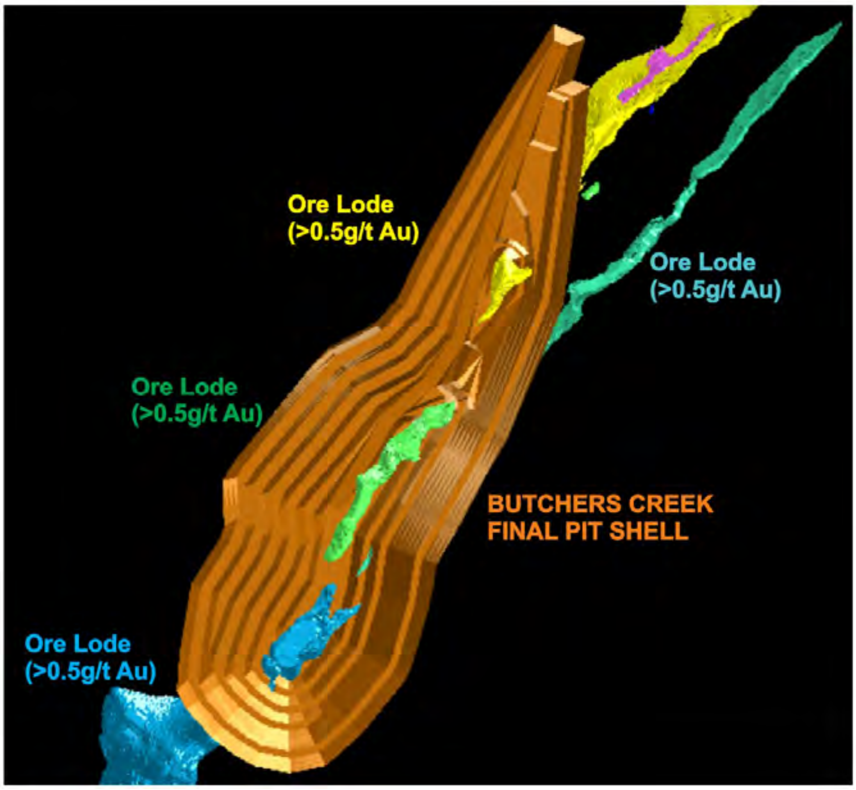


Figure 5.1 - Plan View of Butchers Creek Open Pit Design

5.2 Open Pit Mine Design

Post pit shell analysis showed only a viable pit design to the southern portion of the existing pit. The proposed open pit design predominantly comprises a narrow cutback of the southern portion of the West wall. In addition to pit resources, this cut back facilitates a new 12.0m wide single lane haul ramp and provides access to the two proposed underground portal sites.

The east wall remains untouched, and the pit floor is further taken down to the 322.5m RL. Due to the narrow nature of the wall and the required 2.5m flitches height enabling ore and waste separation, mining advancement is anticipated to the be limited. Total depth is approximately 60m from the existing pit crest. Where possible benches have been combined up to full bench 10m height.

It is anticipated that only single cycle operations will be possible at any given time, e.g. digging or drilling resulting in lower fleet utilisation. It is estimated given the reduced rate of mining with a small open cut fleet completion would take approx. 11months.

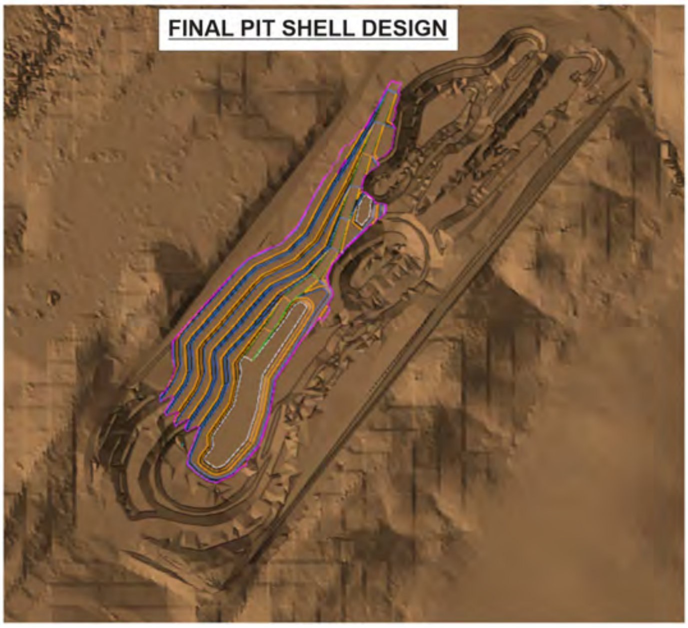
Accordingly, the mining cost per tonne of material has been applied to reflect this. Open pit mining progress is expected to progress akin to smaller scale civil works than true open pit operations.

Wall angle – Geotech recommendations were followed with the West Wall being the focus for the design.

Table 5.1 - Applied Pit Wall Design Criteria

PIT WALL	ROCK TYPE	BFA (Deg)	IRA (Deg)	BENCH HEIGHT (m)	BERM WIDTH (m)
East Wall	Transitional	50	35	10.0	6.5
East Wall	Fresh	60	N/A	10.0	6.0
West Wall	Transitional	60	40	10.0	6.0
West Wall	Fresh	65	48	20.0	8.5

The open pit mine design results in an ore production target of 123kt @ 2.0g/t containing 8koz of gold with the mined ore comprising of 99% indicated resource classification material.



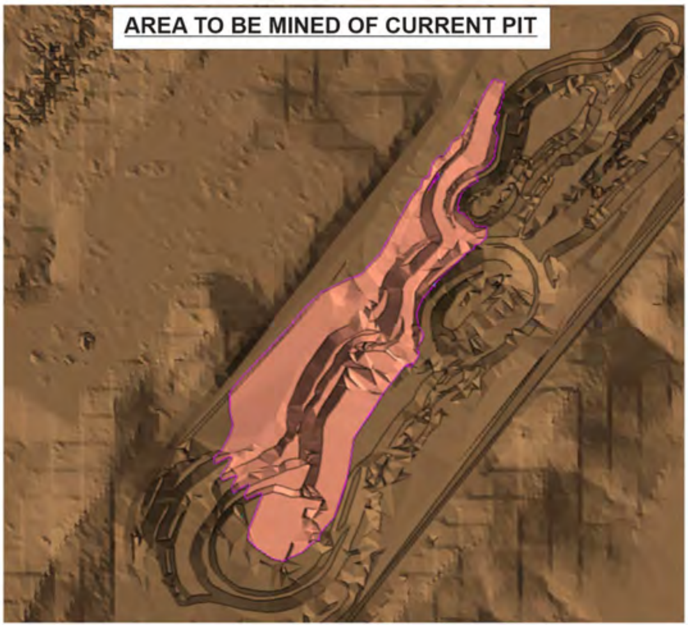


Figure 5.2 - Butchers Creek Open Pit Design

6 Underground Mining

6.1 Underground Ore Body Description

The gold mineralisation at the Butchers Creek is stratabound within a tightly folded antiformal hinge zone of an intrusive syenite host. This is bound within a sedimentary package of sandstones, siltstones and shales. The antiform hosting the mineralised syenite plunges at 20°-25° to the southwest and is traceable over 1.5km to a vertical depth of 400m, with the down plunge extent of the deposit limited by drilling. The current underground resource (2025) was estimated at 3.14Mt @ 2.20g/t Au applying a 0.8g/t Au Cut Off Grade.

The orebody comprises of both a West and East limb which can up to 20m wide with the top hinge widening out to 55m across. From the current drilling the higher grades appear to be contained in the top hinge. On the horizontal the strike length extends out to 400m on the 100mRL with the northern area thinning to 3m wide at the furthest extent. The East limb predominantly hosts more material and extends further both north and south in strike extent.

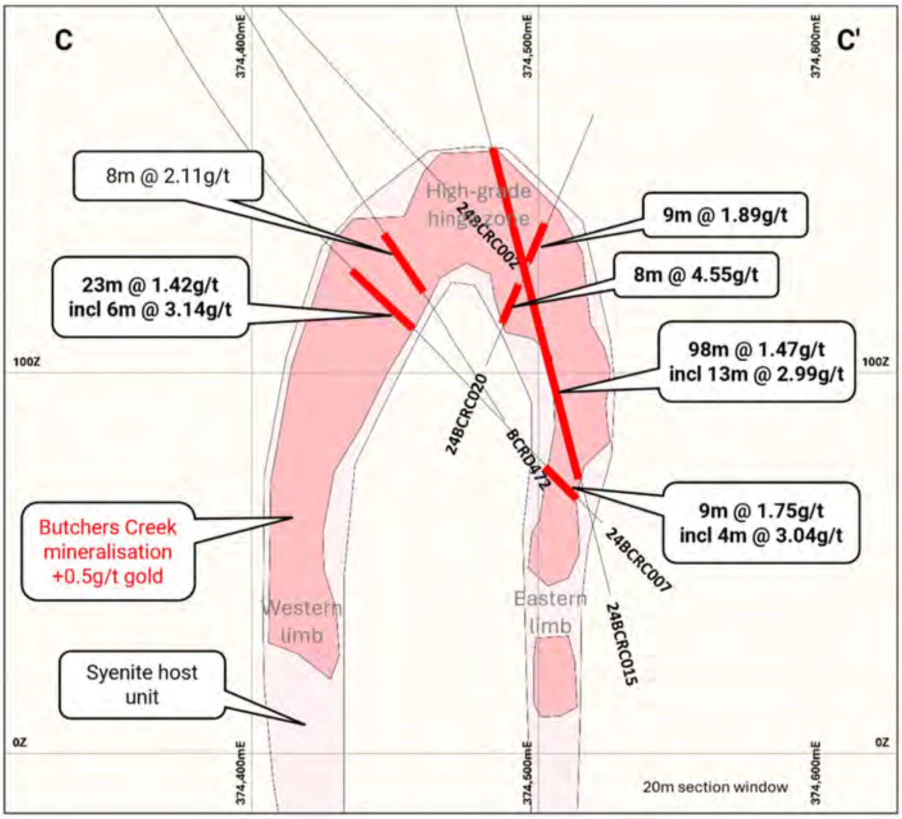


Figure 6.1 – Typical Cross Section Through Butchers Creek Orebody

6.2 Underground Mine Design

For access to the orebody it is planned a conventional decline access will be developed from the within the footprint of the designed Butchers Creek open pit extension. The underground mine is planned with both a Main Access Portal at 335mRL and an Exhaust Portal at 343mRL.

Planned dimensions for the main access decline and mine exhaust is 5.2mH x 5.0mW allowing for the use of 40t capacity ejector trucks. The selected grade of the main decline is 1:7 down in line with industry standard gradients for modern mining machinery.

The first leg of the Butchers Creek Decline from the 335mRL to the 300mRL has been designed to be developed from the Butchers Creek open pit newly created west wall. It then settles on a south–north strike following the plunge of the orebody down dip allowing for a minimum distance of 80m to the orebody.

The majority of the main access decline is a figure of eight design with level spacing at 25m floor to floor and minimum turning radius of 22.5m. Regular stockpiles are designed at 150m spacing and sumps positioned to allow effective management of mine water.

The mine exhaust is planned be developed from a second portal also located in the newly formed Butchers Creek open pit west wall. The exhaust portal is designed 127m south from the main access portal and at a vertical elevation of 8m from that of the main portal to ensure no airflow recirculation.

The mine exhaust development underground has been positioned where possible out in front of the main access decline to allow this development to be used for efficient infill drilling of the orebody ahead of ore development. Whilst current drill density has been sufficient for mineral resource definition, it is deemed insufficient for detailed ore definition and determining stope geometry. This study assumes RC drilling ahead of level development will define mineralisation on a closer spacing to better define boundaries. The style of mineralisation lends itself to better definition by RC drilling where sample size increases rather than diamond drilling. The study assumes a drill density of 10m by 10m in defining mineralisation for grade control purposes. A total of 104km of grade control drilling has been designed and proposed for stope definition purposes see figure 6.2 below.

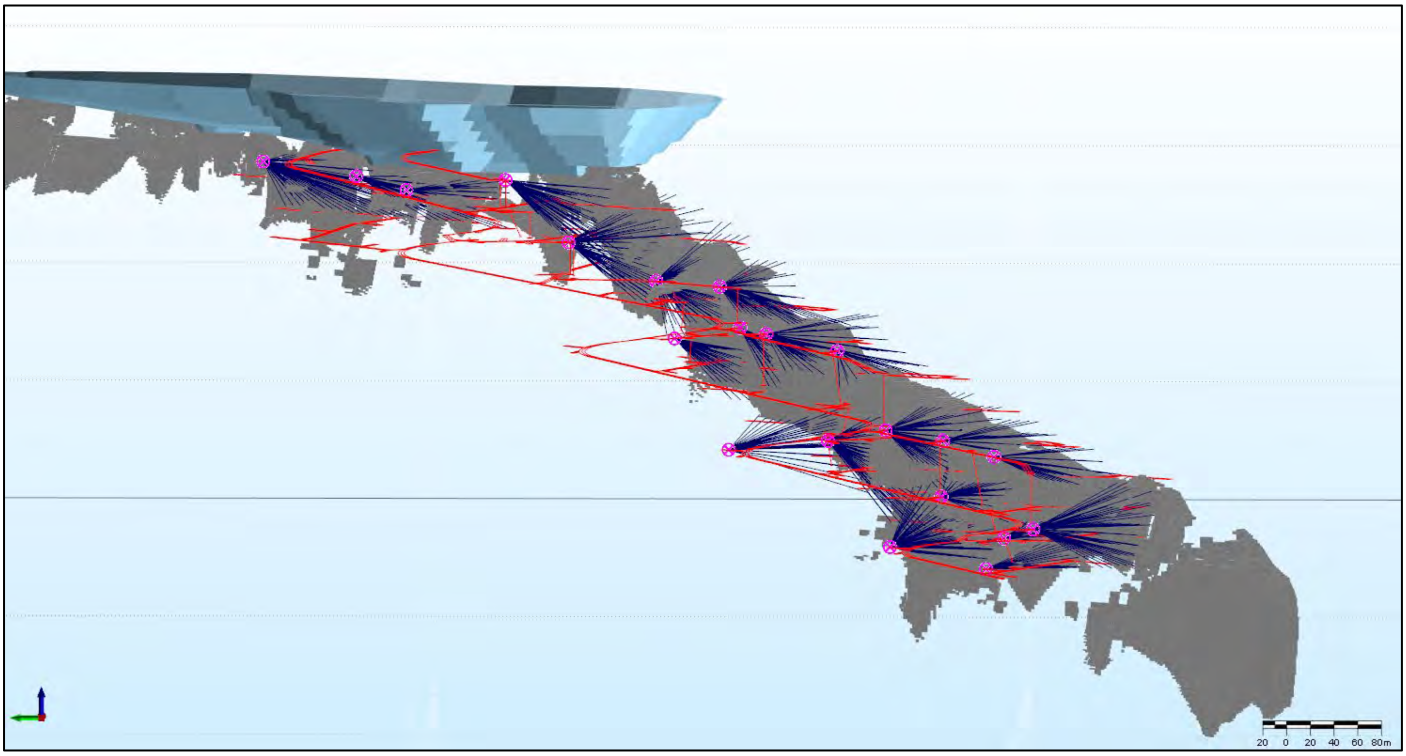


Figure 6.2 – Proposed Grade Control Drilling Required at Butchers Creek Mine in Blue

All mine exhaust development has been designed with drive dimensions of 5.2mH x 5mW with planned extension rises of dimensions of 6m x 4m. The mine exhaust will also serve as the secondary means of egress and pathway for mine services and electrics.

All level access development cosscuts contain a sump and stock pile to allow for efficient mining and management of broken material. Level stockpiles are positioned at least 40m from the main access decline to allow for the use of laser barricades for safe operation of remote loaders.

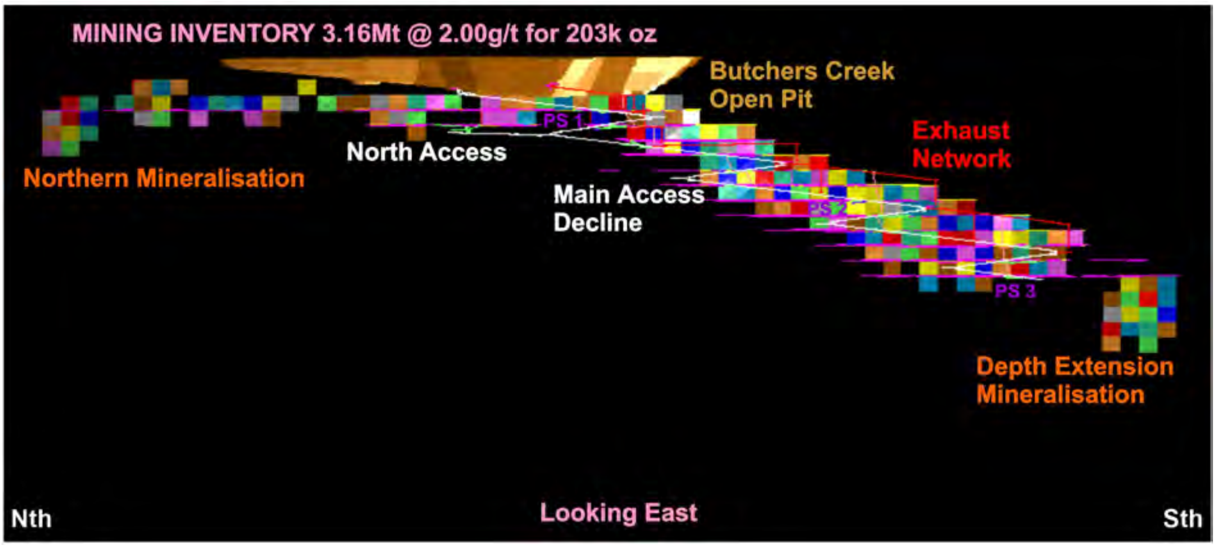


Figure 6.3 - BC Underground Mine (Long Section)

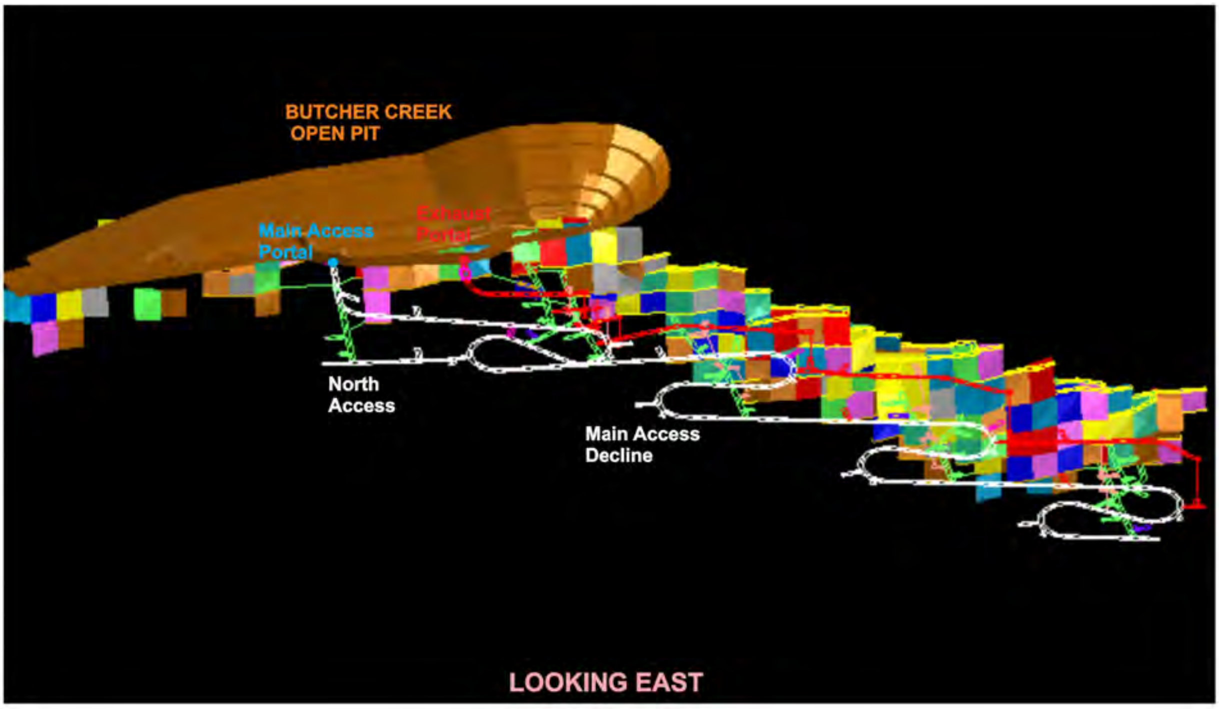


Figure 6.4 - Butchers Creek UG Mine (Isometric View)

The Butchers Creek mine plan comprises of 12 production levels making up 3 stoping blocks with full 25m high CRF pillars planned at the 200mRL and the 100mRL facilitating a high ore extraction ratio. There is also a smaller mining area to the north, exploiting shallower mineralisation to be extracted through conventional bottom up long hole stopes.

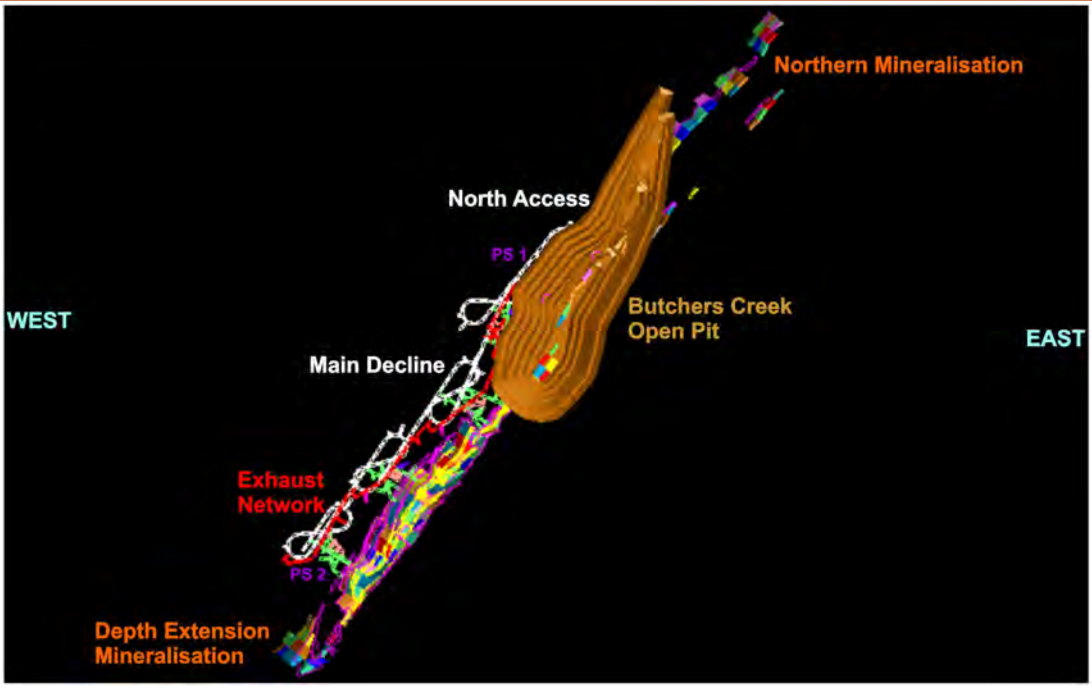


Figure 6.5 - Butchers Creek UG Mine (Plan View)

6.3 UG Lateral Mine Development

The selected dimension for the main Access Declines is 5.2mH x 5.0mW which is suitable for modern electric hydraulic development drills as well as diesel powered loaders and trucks. The lateral exhaust development for the mine also is planned at 5.2mH x 5.0mW. Access for the levels in most cases is planned at 5.0mH x 5.0mW to allow room for a level sump and stockpile.

Further level development towards the ore body in most cases has been planned at 5.0mH x 5.0mW. Lateral strike development has been mostly planned at 5.0mW x 5.0mH with some smaller 4.5mH x 4.5mW drives also incorporated in the design. A standard development size allows all vehicles to traverse the mine without limitation

Table 6.1 - UG Mine Lateral Development Summary

TYPE	DIMENSIONS	CAPITAL (m)	OPERATING (m)
MAIN ACCESS DECLINE	(5.2mH x 5.0mW)	2,204	
NORTH ACCESS	(5.2mH x 5.0mW)	141	
EXHAUST DRIVES	(5.0mH x 5.0mW)	1,229	
DECLINE STOCK PILES	(5.0mH x 5.0mW)	140	
DECLINE SUMPS	(5.0mH x 5.0mW)	52	
PUMP STATIONS	(5.0mH x 5.0mW)	60	
SUB STATION CUDDY	(5.0mH x 5.0mW)	60	

TYPE	DIMENSIONS	CAPITAL (m)	OPERATING (m)
LEVEL ACCESS	(5.0mH x 5.0mW)	1,666	
LEVEL STOCK PILES	(5.0mH x 5.0mW)	260	
LEVEL SUMPS	(5.0mH x 5.0mW)	120	
ORE DRIVES	(5.0mH x 5.0mW)		1,442
WASTE STRIKE DRIVE	(5.0mH x 5.0mW)		3,444
ORE DRIVES	(4.5mH x 4.5mW)		544
WASTE STRIKE DRIVE	(4.5mH x 4.5mW)		1,458
TOTAL		**5,932**	**6,888**

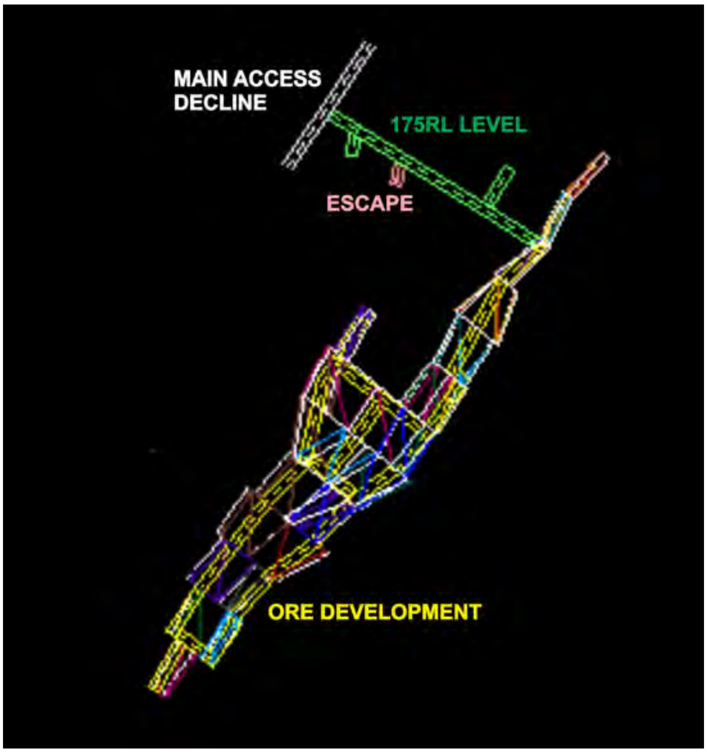


Figure 6.6 - Typical Level Development 175mRL

6.4 UG Vertical Mine Development

The mine design requires capital vertical development for both the mine ventilation systems as well as to provide a required secondary means of egress. It is crucial that these excavations are completed as fast as possible with the lateral development to ensure mine development targets can be achieved.

Internal ventilation exhaust rises are planned to be excavated with dimensions of 6m x 4m and various vertical heights dependent on level spacing. The majority of these excavations will be completed first by installing a 1.5m raise bore hole with a contractor provided raise drill rig. This initial hole will then be stripped out to the final excavation size by drilling and firing 89mm blast holes.

Escapeway rises are required to complete the essential secondary means of egress network. These rises will be installed using a raise bore machine and fitted with caged escapeway ladders. These rises are also designed just off vertical to make the ladderways easier to install and climb.

Stope slots will be vertical winzes (3m x 3m) for the bottom up stopes, and blind 760mm up holes for upholes stopes bored using a ROGER V 30 (gang hammer) reaming head fitted to the RC capable ITH rig.

Table 6.2 - UG Mine Vertical Development Summary

TYPE	DIMENSIONS	NUMBER	CAPITAL (m)	OPERATING (m)
RAISE BORE - ESCAPEWAY	(1.5m)	12	325	
RAISE BORE - EASER	(1.5m)	6	184	
LHR EXHAUST	(6.0m x 4.0m)	6	184	
STOPE WINZE	(3.0 x 3.0m)	68		1,360
UPHOLE SLOT	(760mm)	58		1,160
TOTAL		**150**	**693**	**2,520**

6.5 UG Stoping Methods

A brief description of the selected mining methods which is the basis for the mine designs is given below:

(1) **TDLHS** – Top-down long hole stoping with rib pillars (upholes). Slots provided by box hole excavations for each mining panel.

(2) **BULHSWRF** - Bottom-up single pass long hole stoping with WRF (downholes). Slots provided by down hole winzes only required to start each level.

(3) **BULHSCRF** – Bottom-up single pass long hole stoping with CRF (downholes). Slots provided by down hole winzes required for each panel as CRF fill is used.

(4) **DPBULHS -** Bottom-up dual pass long hole stoping. Slots provided by downhole winzes with slots required to start each level as well as for each CRF filled panel.

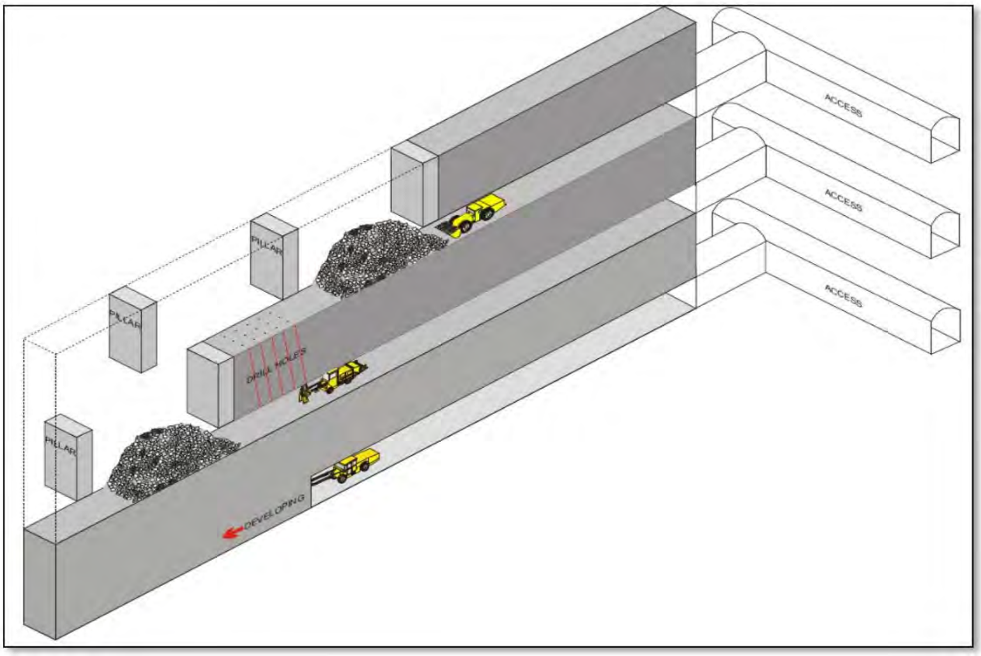


Figure 6.7 - Top Down Hole Stoping with Pillars (TDLHS)

Figure 6.6 above depicts a TDLHS mining method showing multiple levels in production and rib pillars being left to support each stoping panel. This mining method will require an uphole slot to be installed for each mining panel commenced after the pillars. The selected average stope size is (20mL x 25mH) with the maximum strike span being 25m.

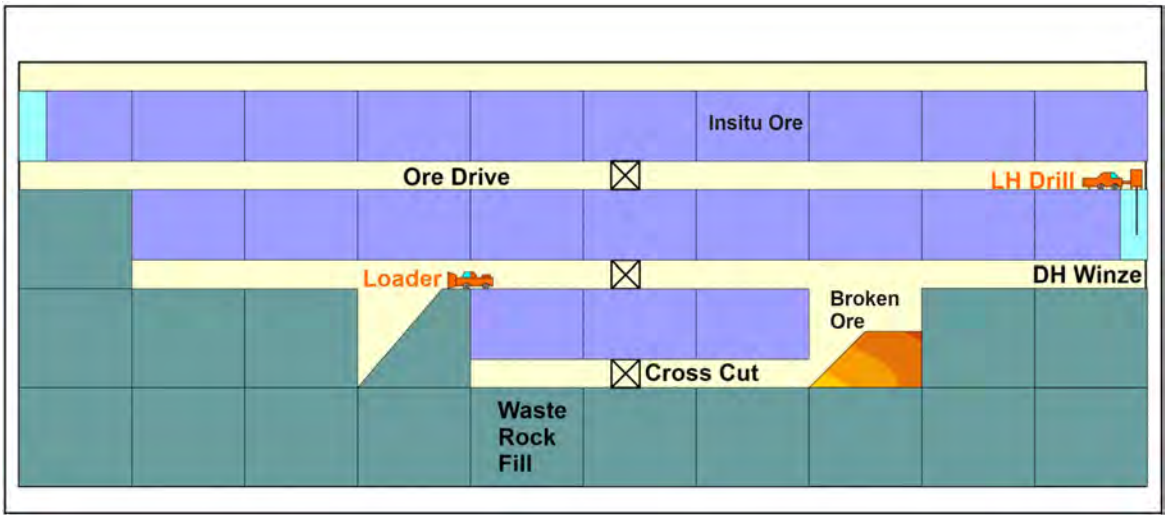


Figure 6.8 - Bottom-Up Long Hole Stoping with WRF (BULHSWRF)

Figure 6.7 above depicts the BULHSWRF mining method showing multiple levels in production with waste fill being installed to support completed stoping panels. This mining method will require a down hole winze slot to be installed at the end of each level. Once each individual panel is filled some waste will be drawn prior to firing the next panel acting as the relief slot. The selected average stope size is 20m in strike length with the maximum utilised strike span being 25m. This will be the dominant mining method.

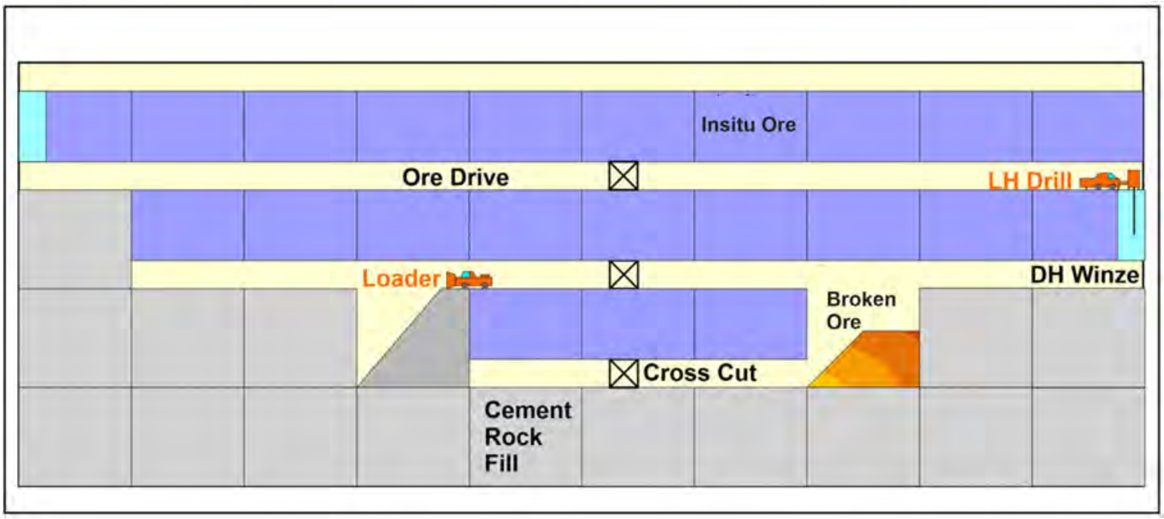


Figure 6.9 - Bottom Up Long Hole Stoping with CRF (BULHSCRF)

Figure 6.8 above depicts the BULHSCRF mining method showing multiple levels in production with cemented rock fill being installed to support completed stoping panels. This mining method will require a down hole winze slot to be installed for each stoping panel to provide a relief mining slot as once placed the cement rock fill (CRF) cannot be removed. The selected average stope size is 20m in strike length with the maximum utilised strike span being 25m.

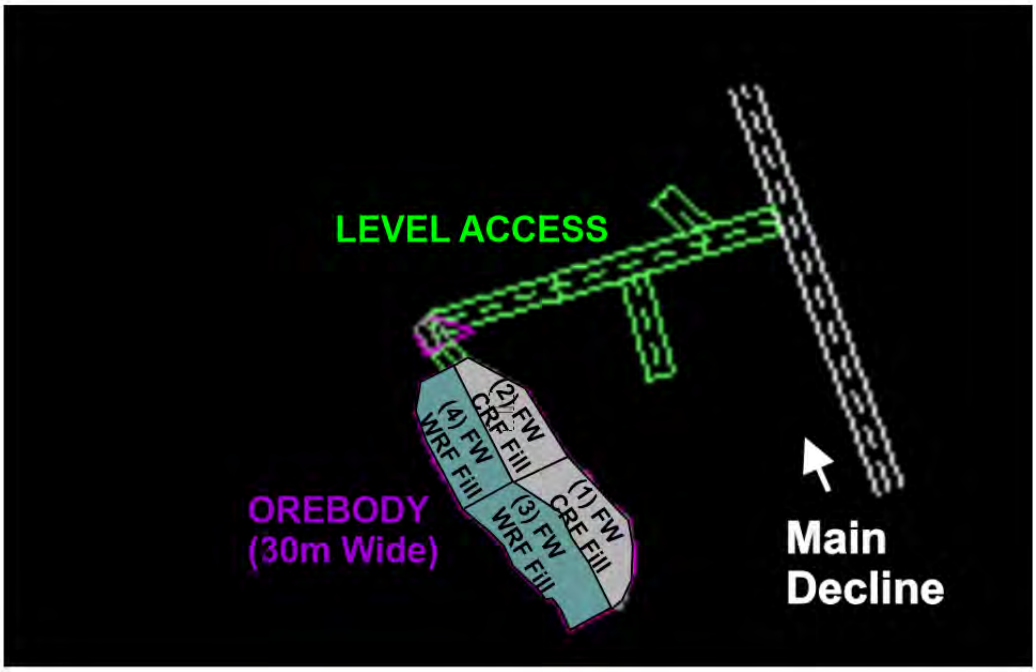


Figure 6.10 - Double Pass BU Long Hole Stoping with CRF & WRF (DPBULHS)

Figure 6.9 above depicts the DPBULHS mining method showing a planned single level. For each panel the foot wall side of the ore body is mined first using down holes with a starting downhole winze for each stope. The hanging wall side of the ore body is then developed adjacent to the cemented rock fill and then stopped out second and subsequently filled with waste rock fill. The selected average stope size is 20m in strike length with the maximum utilised strike span being 25m and widest stopes mined out to 30m.

All production drilling at the mine is planned to utilise 89mm blast holes. Blast hole pattern burden/spacing will be varied depending on the diameter of the blast holes used and width of the ore. Expected average burden/spacing will be between 2m to 2.4m with some dice 5 patterns utilising easer holes for the narrow stopes < 2.5m wide.

Stope ore bogging will be carried out where required on tele remotes. Manual bogging is permitted to occur until the stope brow is cracked for each firing. Back filling of stopes will only occur using an engineered edge stop to prevent loaders or trucks falling into stope voids until a rolling bund is established. Ore Drives will have cable bolts installed in both the back s and side walls prior to stoping to ensure the condition of the upper drive is maintained for backfill access. Cable bolts will also be installed at stope brows for each individual stope firing when upholes are utilised.

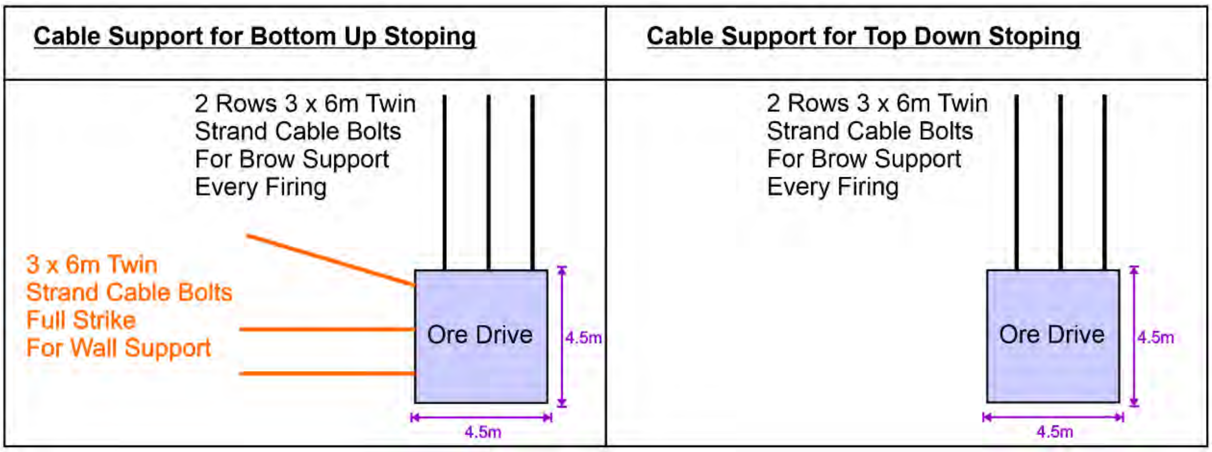


Figure 6.11 - Cable Bolting Designs

6.6 Stoping Sequence

For each mining sequence it is important to maintain an efficient and productive stoping cycle to ensure the number of stoping fronts is balanced with the backfilling along with the production drilling. Keeping all activities active in parallel will balance resource requirements keeping the machinery and manning levels stable.

The mine plan has production activities occurring simultaneously in 3 separate mining stages. These stages are divided by 2 Main CRF Pillars. Stage 1 has mining activities occurring on the smaller northern mining area where there is future possible additional ore to be mined. Where possible stopes are planned to be extracted utilising a bottom-up mining approach to maximise ore extraction and minimise stope dilution.

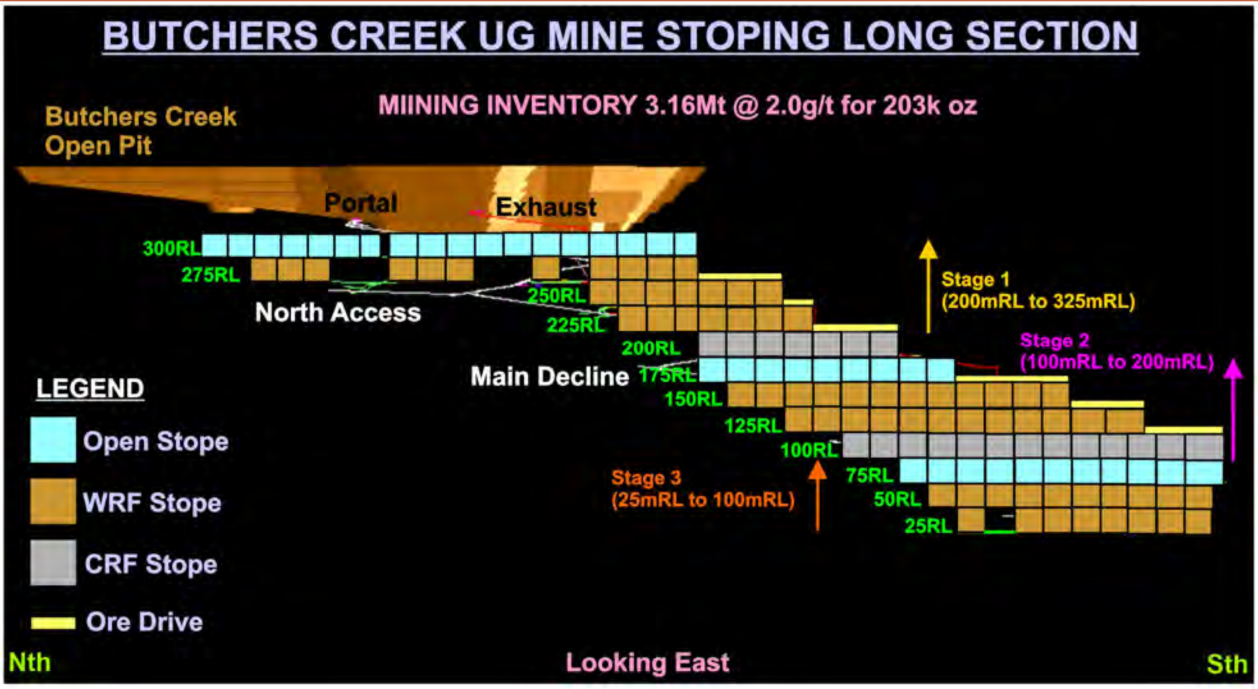


Figure 6.12 - Butchers Creek Stoping Long Section

A description of the mining sequence for each of the 3 stages is set out below:

Northen Area : The North Access Area stopes are planned to be mined bottom up first from the 275mRL to the 300mRL and filled with WRF after the extraction of each panel. Once completed then the 300mRL upholes stopes can be mined leaving rib pillars cut by 760mm uphole slots installed for each panel.

Stage 1 : The majority is to be first mined bottom up from the 200mRL to the 225mRL and filled with CRF after the extraction of each panel forming a crown pillar. After that 3 progressive levels from the 225mRL to the 300mRL are to also be mined bottom up filled with mostly WRF after the extraction of each panel is completed. The final section is to then to be mined with uphole stopes from the 300mRL leaving rib pillars cut by 760mm uphole slots installed for each panel. There will be some additional uphole stopes to mine on the 225mRL, 250mRL, and 275mRL levels also requiring upholes slots to be installed. In wide sections some stopes will also require dual side by side extraction requiring additional CRF fill.

Stage 2 : The majority is to be first mined bottom up from the 100mRL to the 125mRL and filled with CRF after the extraction of each panel forming a crown pillar. After that 2 progressive levels from the 125mRL to the 175mRL are to also be mined bottom up filled with mostly WRF after the extraction of each panel is completed. The final section is to then mine the uphole stopes from the 175mRL under the 200mRL crown CRF Pillar. The 175mRL level stopes will be extracted by installing 760mm uphole slots and drilling production upholes for each panel cutting rib pillars under the 200mRL CRF Crown. There will be some additional upholes stopes to mine on the 100mRL, 125mRL, and 150mRL levels also requiring 760mm upholes slots to be installed. In wide sections some stopes will also require dual side by side extraction requiring additional CRF fill.

Stage 3 : The majority is to be first mined bottom up from the 25mRL to the 50mRL and filled with WRF after the extraction of each panel. After that another level from the 50mRL to the 75mRL is to also be mined bottom up filled with mostly WRF after the extraction of each panel is completed. The final section is to then mine the uphole stopes from the 75mRL under the 100mRL crown CRF Pillar. The

75mRL level stopes will be extracted by installing 760mm uphole slots and drilling production upholes for each panel cutting rib pillars under the 100mRL CRF Crown. There will be some additional upholes stopes to mine on the 25mRL, 50mRL, 75mRL levels also requiring 760mm upholes slots to be installed. In wide sections some stopes will also require dual side by side extraction requiring additional CRF fill.

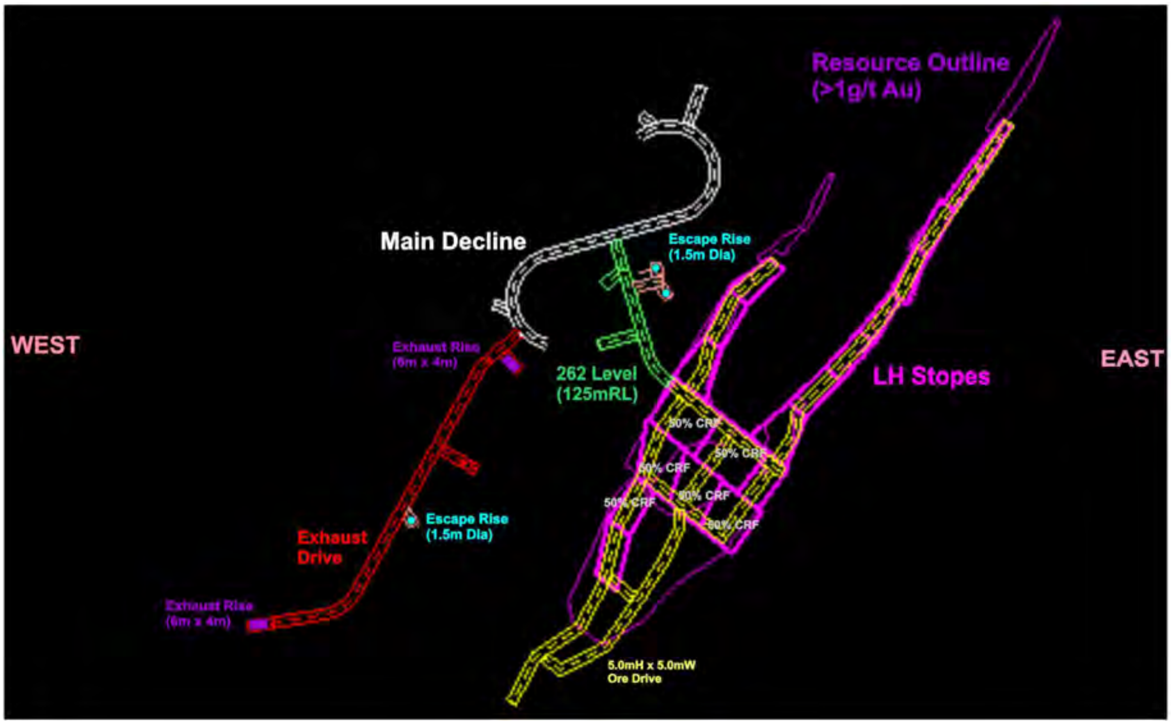


Figure 6.13 - Underground Mine 125mRL Stoping Layout

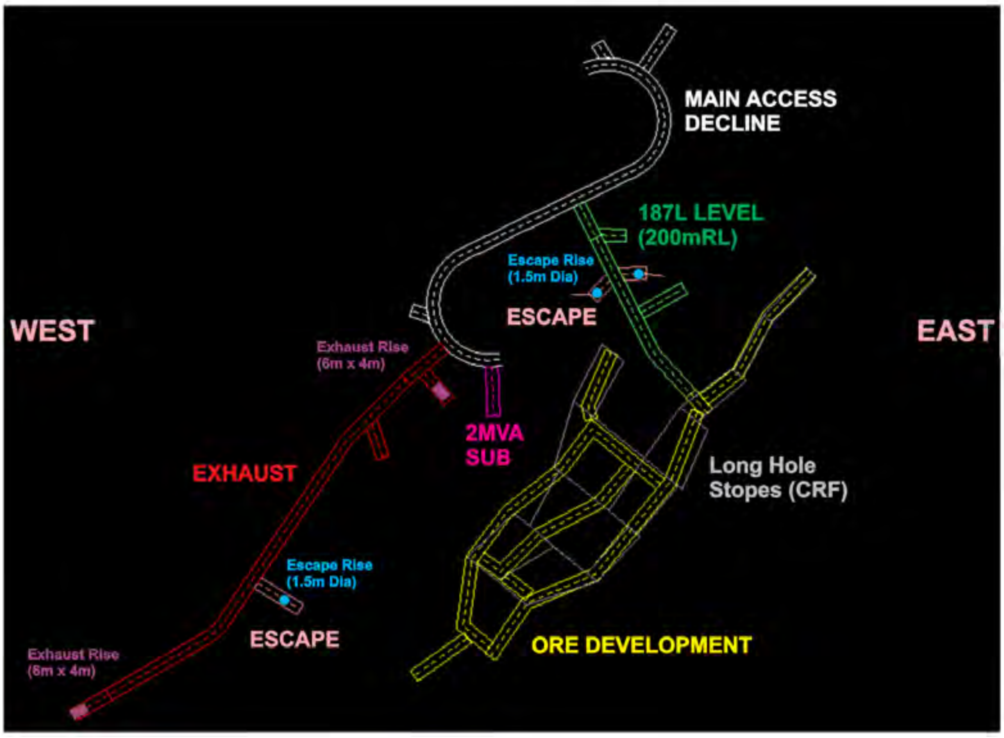


Figure 6.14 - Underground Mine 200mRL Stoping Layout

7 Underground Mine Infrastructure

7.1 Mine Ventilation

7.11 Primary Ventilation

The Butchers Creek primary ventilation circuit is designed as a series of circuits where the intake air supply is initially introduced from the main access decline portal (335mRL) via a 2 stage 220kW secondary fan. The primary exhaust is to also be developed as a portal (342mRL) located in the Butchers Creek open pit west wall. The mine exhaust circuit will then be linked to the underground workings via an exhaust rise from the 325mRL to 300mRL.

The Butcher Creek ventilation system will be a 'pull' type system with primary fans installed in underground headings through single return RAR's, generating enough pressure to provide ventilation throughout the underground workings from single air sources via main portal.

The mines primary ventilation power will be provided by the installation of 2 x 400kW axial flow fans to be installed inside the exhaust portal at the 343mRL. This intermediate primary ventilation circuit will allow the mine to be continuously developed with the exhaust system extended at depth with the mine workings.

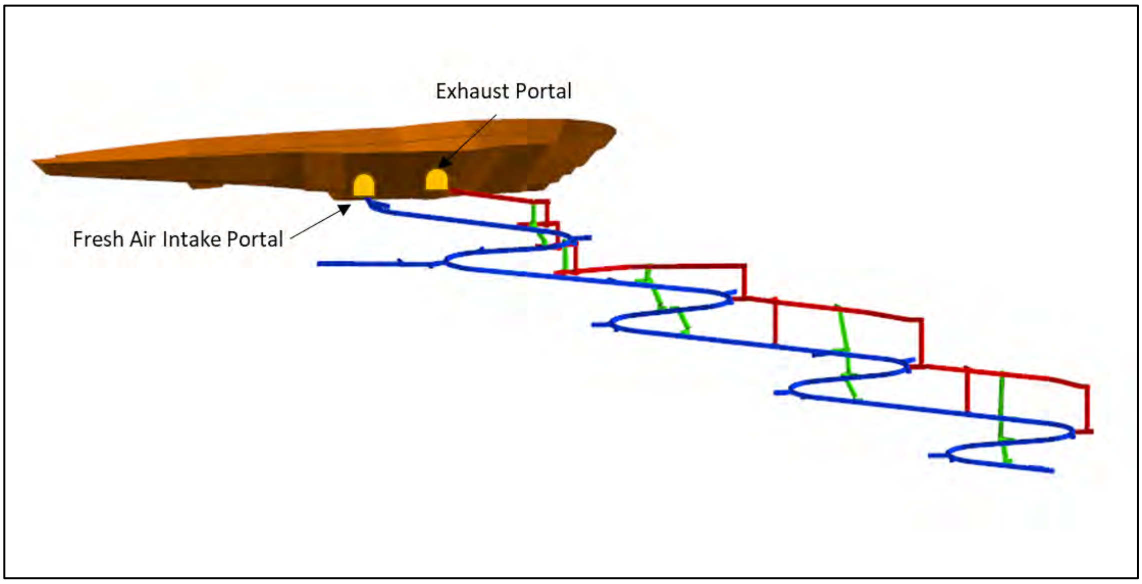


Figure 7.1 - Long Section Showing BC UG Primary Vent Circuit

7.12 Primary Ventilation Requirements

Air volume requirements are calculated to ensure safe working areas within the mine. The amount of air required is largely determined by the number and size of diesel equipment operating underground, as well as the ventilation needs of infrastructure, such as pump stations and electrical sub stations. The air volume supplied must be sufficient to dilute and remove dust, noxious gases, and diesel particulate matter generated by the use of such equipment. Under the Western Australia WHS (Mines) Regulations 2022, airflow requirements are specified to mitigate the impact of diesel exhaust emissions. The regulations stipulate that a minimum of $0.05m^3/s$ of airflow is required per kilowatt (kW) of rated diesel engine power.

For primary underground infrastructure, the quantity of air supplied will be sufficient to:

- Accommodate the ventilation demands of anticipated diesel equipment operating within the designated area.
- Implement effective fugitive dust control measures.
- Provide sufficient air volume to support the respiratory requirements of all personnel present in the active work area.
- A contingency of 15% is applied to the final calculated air volume to account for potential leakages between mining levels and transient system inefficiencies.

- **Table 7.1 – BC UG Mine Primary Ventilation Airflow Requirement**

Unit	Make	Model	Engine power (kW)	Required (m^3/s)	# of units	Utilisation	Req Airflow (m^3/s)
Electric/Hydraulic Jumbo	Sandvik	Axera D07	119	6.0	1	90%	5.4
Electric/Hydraulic LH Rig	Sandvik	DL431	119	6.0	1	90%	5.4
Electric/Hydraulic ITH Rig	Sandvik	DU431	119	6.0	1	50%	3.0
517 Loader (8m^3)	Sandvik	LH517	269	13.5	3	100%	40.4
40t Haul Truck	CAT	AD49	446	22.3	3	100%	66.9
Agitator Truck (10m^3)	Elphinstone	WR820	180	9.0	1	100%	9.0
Integrated Tool Carrier	Volvo	L90	128	6.4	2	100%	12.8
Charge Machine	Normet	12H	121	6.1	1	100%	6.1
Grader	CAT	12H	118	5.9	1	100%	5.9
Light Vehicles	Toyota	Landcruiser	150	7.5	4	80%	24.0
SUB TOTAL							**178.7**
Base Leakage						15%	17.9
Total Required Airflow (m^3/s)							**196.6**

As defined in the design criteria, 0.05m^3/sec airflow will be supplied per diesel kW. The size and number of diesel equipment units are based on the mine schedule requirements. Further utilisation factors have been estimated for each piece of equipment, dependent on the type of equipment and its expected diesel operating time per shift. The list of equipment and its utilisation are tabulated in Table 7.1 which also shows the estimated airflow required to ventilate each piece of diesel equipment.

The mining fleet is scheduled to peak at 1 jumbo, 1 Production Drill, 1 ITH Drill, 3 loaders, and 3 underground trucks. Thus, to provide the minimum ventilation for the diesel fleet as a whole (including 15% contingency), a total airflow of 197m^3/s is required.

The modelled performance of the selected primary ventilation fans is 228m^3/s so more than sufficient.

7.1.3 Primary Ventilation Circuit Modelling

The ventilation system for the Butchers Creek Mine was modelled using Ventsim Visual™ Advanced (Figure 7.2). This software provides three-dimensional visualisation of a network and uses a form of the Hardy- Cross method for the ventilation network calculations.

The ventilation network for the Butchers Creek underground mine was analysed by importing the mine design from the Surpac mine design program and then applying attributes for each of the airways relative to their dimensions, frictional resistance, length, etc.

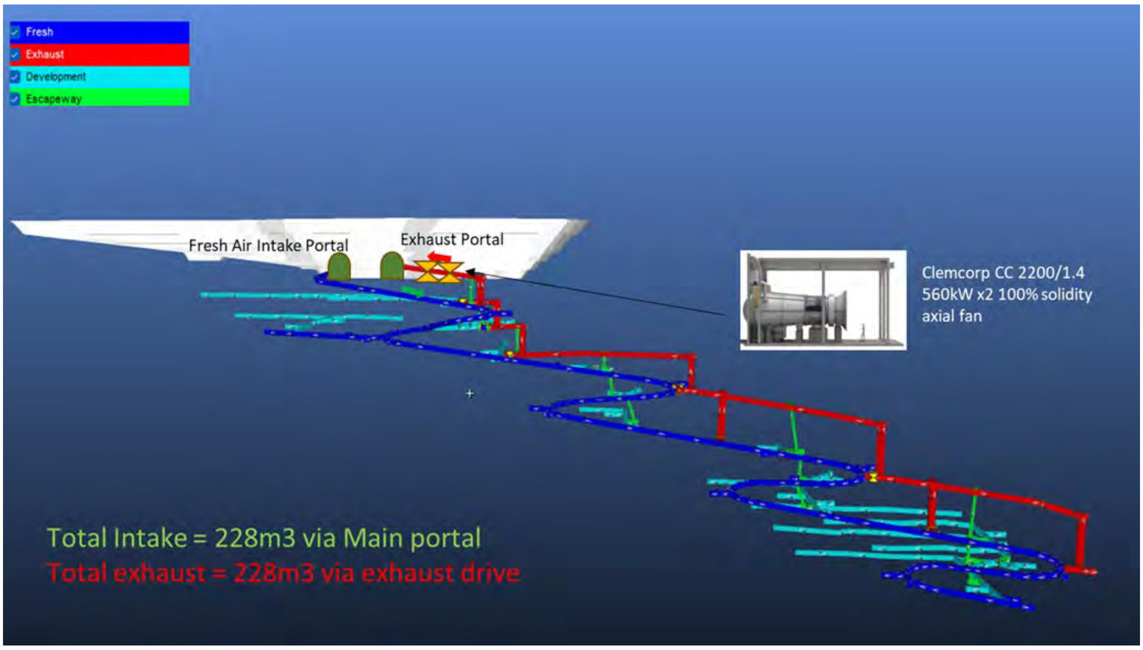


Figure 7.2 - Butchers Creek Primary Vent Circuit Model

7.1.4 Main Primary Fans

The mine's primary ventilation system will utilise an exhaust portal axial fan configuration for a strategic and cost effective solution. One of the key advantages of this approach is the ease of access to fan blades and hubs for maintenance. The fan system incorporates soft starter to reduce the inrush of high voltage during starts and stops and protects motor and mechanical systems. It can also reduce mechanical wear and extend equipment life.

The fans are engineered to provide optimal airflow throughout the underground workings, supporting the safe and efficient operation of all diesel-powered equipment in both development and production areas. Designed to deliver the required volumetric flow rates and static pressures under a wide range of operating conditions, the system also includes built-in contingency capacity. This ensures the ventilation network can accommodate temporary surges in demand, maintaining a stable and safe underground environment at all times.

The selected primary power is to be provided by two Clemcorp 2200/1.4 400kW axial flow fans in parallel installed in the mine Exhaust Access portal. These fans are designed to deliver 228m^3/s of airflow at a Fan Total Pressure (FTP) of 2,440Pa. These fans are planned to be mounted horizontally in a bulkhead station within the underground workings.

The above duty point is derived directly from the Ventsim model, which accounts for automatic fan losses. A sufficient buffer is available to ensure the required airflow can still be achieved in the event of increased fan losses. At a peak mine resistance of 2,440Pa, both fans at full operation will nominally draw approximately 746kW of electrical power.

These fans feature adjustable pitch impellers, allowing for power draw reduction at shallower pitch angles ideal for the early stages of mine development when lower air volumes are sufficient. The current pitch angle is set at 54 degrees, but it can be detuned to reduce airflow and associated energy consumption. This flexibility makes the fans highly suitable for deepening operations in the future, where higher pressures and volumes will be required. At peak operation with both fans running the total power demand is 746 kWh, resulting in an estimated annual energy cost of approximately A$2.4M.

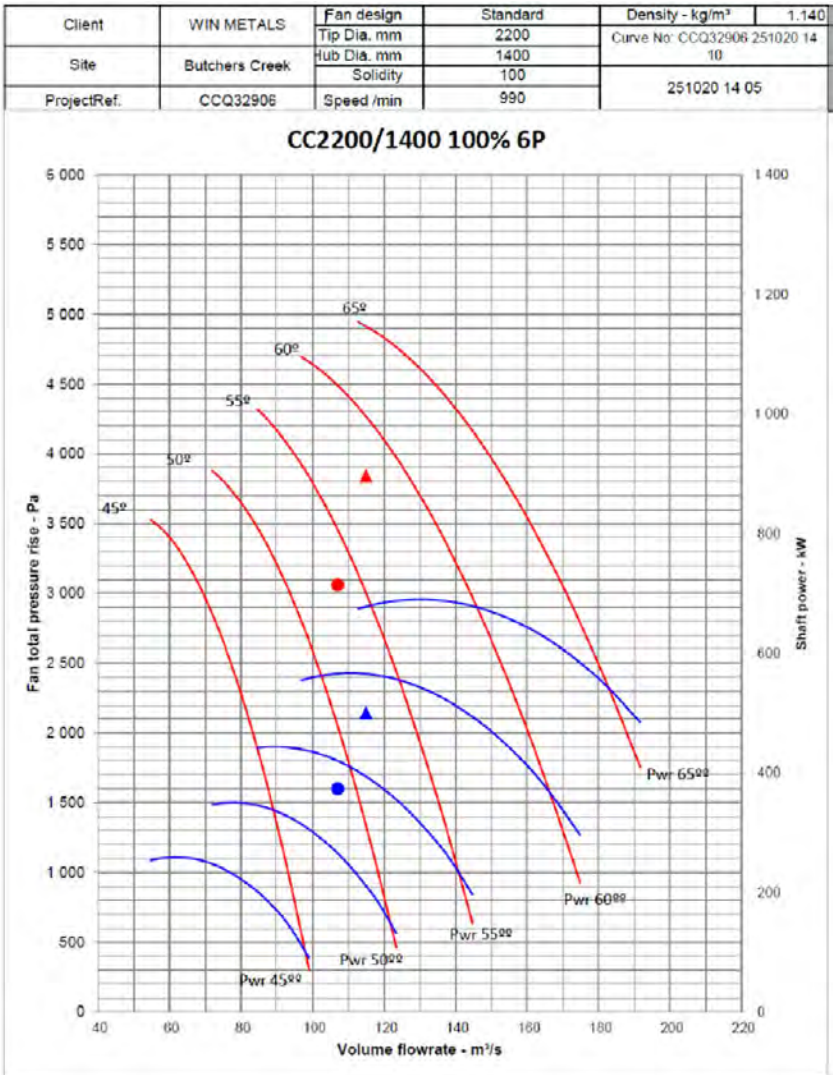


Figure 7.3 – Fan Curve Clemcorp 2200/1.4 400 kW Fans

7.1.5 Secondary Ventilation

Secondary ventilation will be provided to all levels through fans installed on the decline above the level access using ventilation ducting to blow air into the work areas. This air will then flow back through the level and exhaust from the level access onto the decline re-joining the primary airflow. A combination of 220kW (Twin stage 110kW) and 180kW (Twin stage 90kW) secondary fans will be used depending on the strike length of each level. Ventilation ducting will be used to provide secondary ventilation to the lower Mine Access Decline face with air supplied by a 220kW fan positioned just above the lowest mine exhaust access.

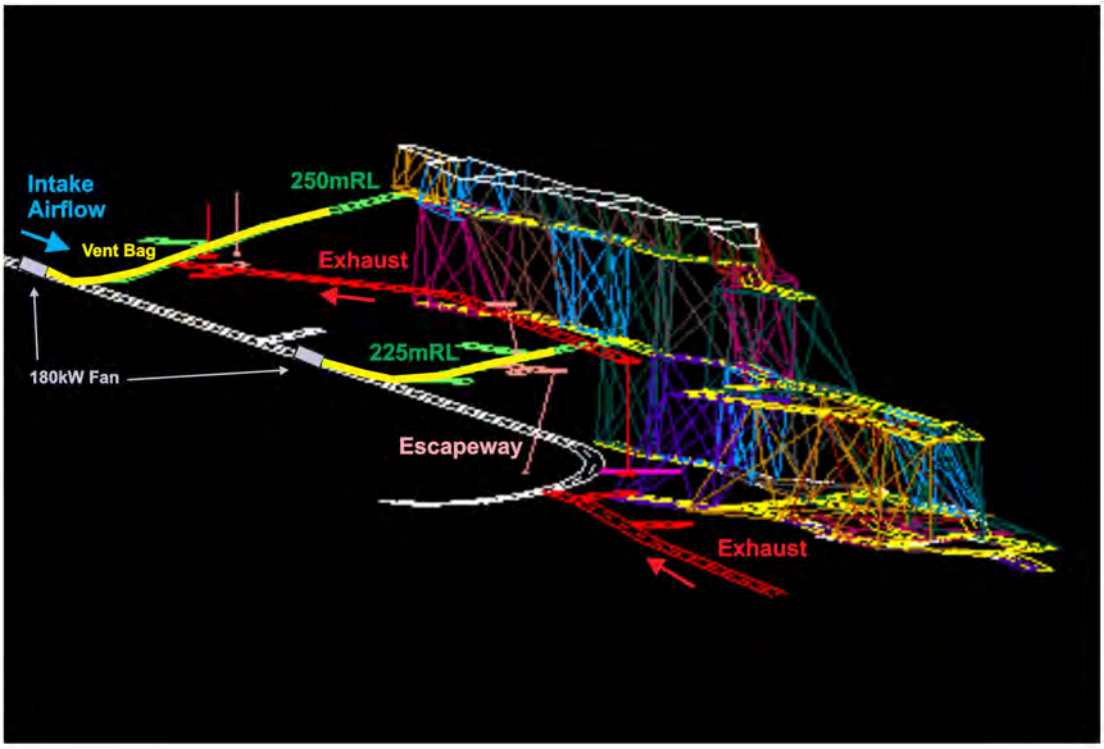


Figure 7.4 – BC Secondary Ventilation (225mRL to 250mRL)

Typical airflow from a 180kW fan will be approximately 50m^3/s from the outlet of fan and will decrease as the length of vent bag increases. Typical airflow from a 220kW fan will be approximately 58m^3/s from outlet of fan and decreasing as the length of vent bag increases.

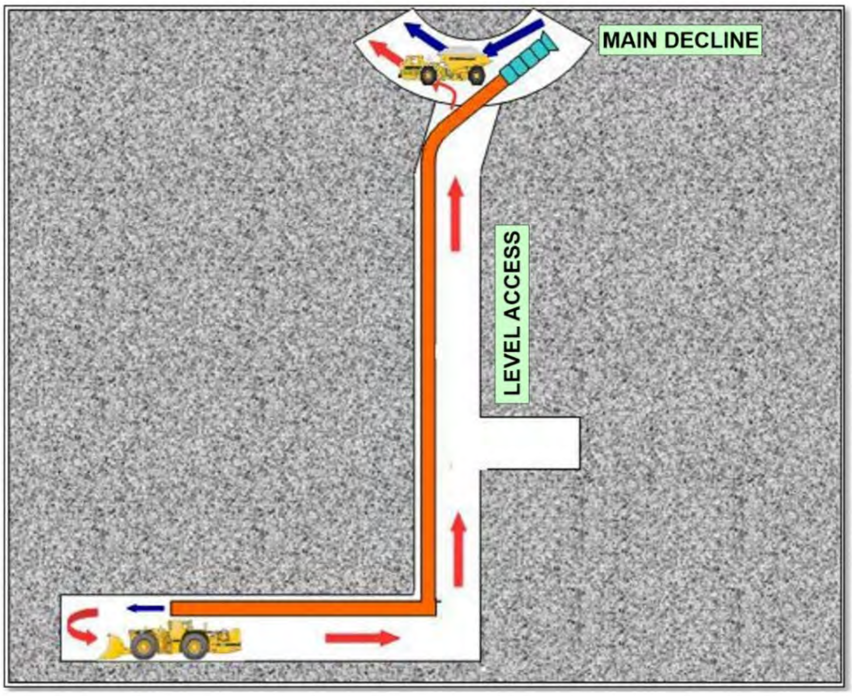


Figure 7.5 – Level Secondary Ventilation System Plan View

Prior to the establishment of the first leg of the primary ventilation circuits a combination of 220kW fans and 180kW fans will be installed outside the portal locations. This will provide the initial ventilation before the first stage primary ventilation circuit links are established for each mine portal.

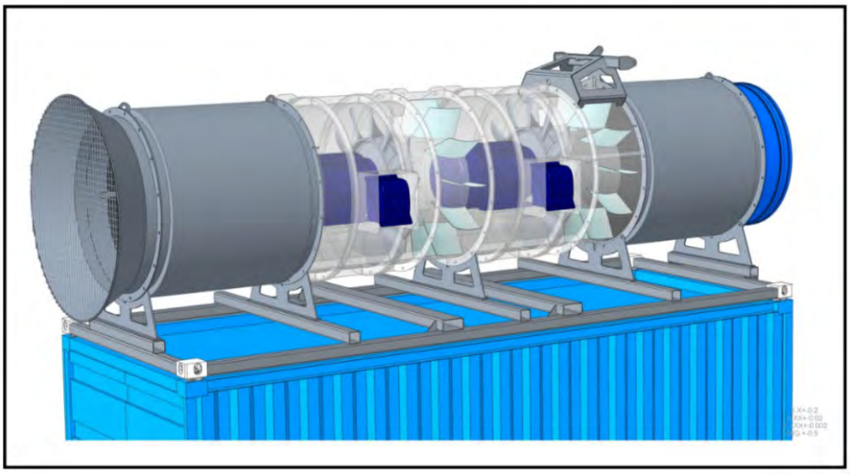


Figure 7.6 – Sea Container Mounting for Portal Secondary Fans

7.1.6 Ventilation Infrastructure and Costs

The major mine ventilation capital costs can be grouped into the following areas:

- Primary Fans
- Ventilation Walls and Doors
- Secondary Fans.

For both mine portals it is initially planned to install portal development fans either 220kW or 180kW. These fans will have starters configured as standard Direct On Line (DOL) as they will be required for continuous operation.

At a later stage in the project development specific secondary Variable Speed Drive (VSD) fans which can be set at optimal speeds using an RFID chip readers for each specific level could be considered. This system will only add full power to the fans when personnel or machinery are operating in the level. This is achieved by each major mobile machine item being fitted with specific RFID chips that are identified by each individual level fan starter when entering a level. It is estimated the secondary VSD fan configurations will reduce power consumption for the level secondary fans by greater than 50% of normal power usage.

Table 7.2 - Underground Mine Ventilation Capital Costs

ITEM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	TOTAL
Primary Vent Fans									
2 x 400kW Axial Flow Fans	$1,400,000								**$1,400,000**
Primary Fan Starters	$60,000								**$60,000**
Primary Fan Install	$55,000								**$55,000**
Vent Walls and Doors									
Wall with Man Door	$50,000	$75,000	$75,000	$75,000	$50,000				**$325,000**
Secondary Vent Fans									
220kW Fans	$110,000	$0	$0	$0	$0	$0	$0	$0	**$110,000**
180kW Fans	$350,000	$210,000	$140,000	$70,000	$0	$0	$0	$0	**$770,000**
220kW Fan Starters	$17,500	$0	$0	$0	$0	$0	$0	$0	**$17,500**
180kW Fan Starters	$65,000	$39,000	$26,000	$13,000	$0	$0	$0	$0	**$143,000**
Total Capital Costs	**$2,107,500**	**$324,000**	**$241,000**	**$158,000**	**$50,000**	**$0**	**0**	**0**	**$2,880,500**

The above ventilation capital costs (Table 7.2) do not include ventilation ducting or other ventilation related minor services. Ongoing operating costs relating to mine ventilation including ventilation ducting is $1.3M (Excluding power costs).

7.2 Secondary Means of Egress

Primary access throughout the mines will be via the main haulage declines. A secondary means of egress for the mine will be established below or in each level prior to the commencement of stope blasting on that level. The secondary means of egress routes are designed as a network of linking 1.5m diameter raise bore holes fitted with certified caged steel ladders. Level development drives forming part of the return airway network will also form part of the secondary means of egress, to be accessed via air-lock man doors.

The primary means of egress from each level will be located in the level in the exhaust access. The secondary means of egress network will be used only in the case of emergencies.

As the primary ventilation circuit will be extended at depth with return airway raises ventilation stoppings will be built at all connections to the decline (except for the lowest connection at any given time) to ensure the escapeway system is maintained in the intake (fresh) air circuit.

The escapeway system for the mine is not planned to be located in the direct fresh air circuit. Fixed refuge chambers will be located throughout the operation for use in the event of a fire underground. Locations for the refuge chambers will be such that all areas of the underground operation will be within 750 metres walking distance of a refuge chamber at all times.

The mine will also have a VHF radio system with a dedicated emergency radio channel that can be used to guide personnel in case of an emergency. Once activated emergency procedures will dictate that underground personnel immediately make their way to the nearest refuge chamber on hearing the emergency call.

In additional to this a secondary stench gas warning system will also be installed at the mine that will enable personnel to be notified of an emergency in the case of no radio communications. Stench gas cannisters will be fitted to the main mine intake at the main access decline portal which will be manually operated.

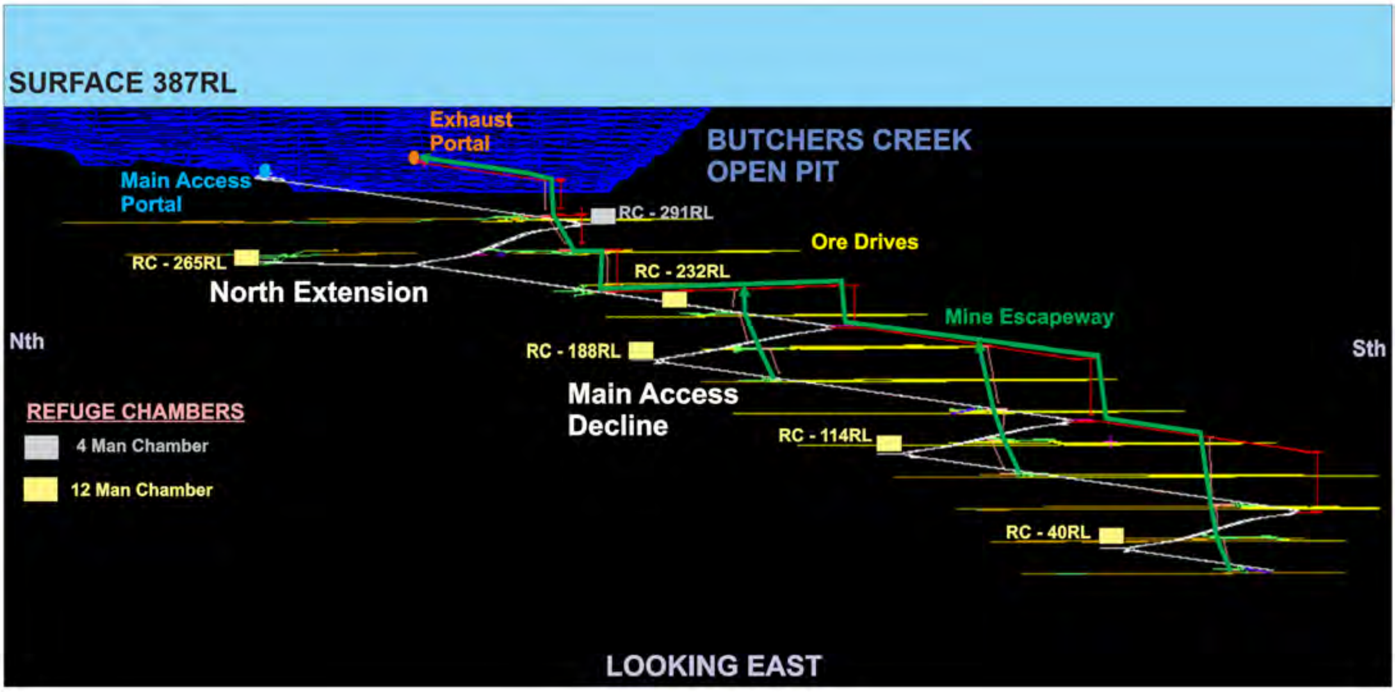


Figure 7.7 - Underground Escapeway System & Refuge Chambers

The designed escape route is displayed in Figure 7.7. In total there are 386m of escape ladders planned. There are also 6 refuge chambers allocated with sufficient capacity for the underground workforce along with a stench gas system.

Table 7.3 - Underground Mine Escapeway & Refuge Capital Costs

ITEM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Total
Escapeway Ladders									
Steel with Cages	$118,000	$58,000	$98,000	$172,000	$52,000				**$498,000**
Refuge Chambers									
4 Person Chambers	$85,000								
12 Person Chamber	$220,000	$220,000	$110,000	$110,000					**$660,000**
Stench Gas									
Portal System	$20,000								**$20,000**
Total Capital Costs	**$443,000**	**$278,000**	**$208,000**	**$282,000**	**$52,000**	**$0**	**0**	**0**	**$1,178,000**

7.3 Underground Mine Power

The underground mine high voltage power supply will be provided by the main project diesel power station with an 11kV overhead line constructed from the main site 11kV switch yard to the underground mine portal substation. This installation will consist of a 2MVA 11kV/1000V transformer/substation. HV power will then be provided to the underground mine through 11kV 95mm HV cables with numerous 2MVA 11kV/1000V transformer/substations installed throughout the mine.

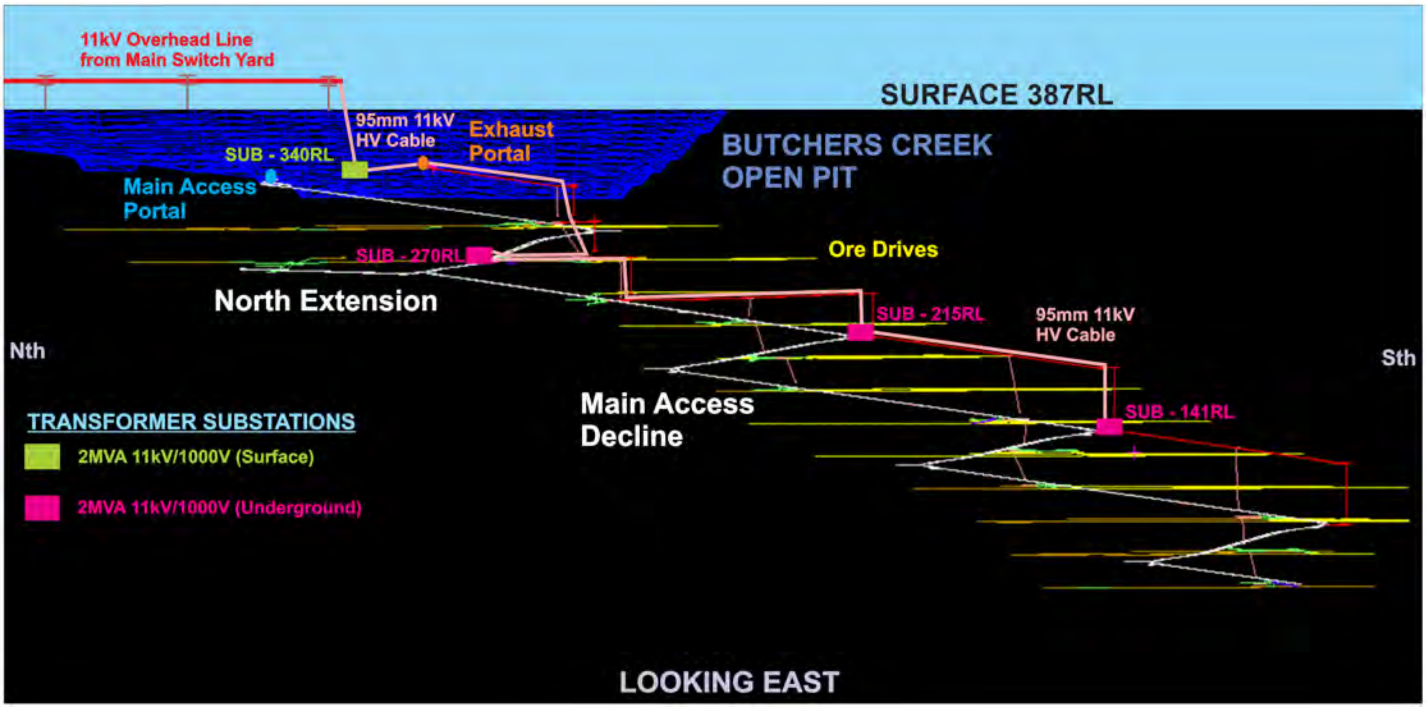


Figure 7.8 - Underground HV Power Network

Once the mine has reach the 250mRL the first underground 2MVA 11kV/1000V transformer/substation will be installed at the 270mRL. The main surface HV feed will be a 95mm 11kV cable run down the mine exhaust network via the exhaust portal to the first underground HV substation located off the main access decline in a substation cuddy (270mRL).

Further required HV power lower in the mine will continue to be reticulated deeper into the mine via the exhaust network using a single line 95mm HV Cable. Additional 2MVA 11kV/1000V transformer/substations are planned for installation at the 215mRL and 141mRL.

7.1.3 HV Power Infrastructure Items & Costs

The major mine electrical works will include the establishment of HV power for the underground mine and the provision of 1000V power for surface and underground related installations. There are some additional site wide electrical items and costs which are covered under the administration and milling sections of this Study. The total HV underground power infrastructure costs estimated for the underground mine is $2.19M.

These costs exclude the site power supply infrastructure which encompasses the site power station and main 11KV HV Switch Yard.

List of the detailed HV infrastructure items required for the underground mine is provided below.

Table 7.4 – Underground Mine HV Infrastructure and Costs

ITEM	Year1	Year2	Year3	Year4	Year5	Year6	Year7	Year8	TOTAL
Stage 1 - Surface									
Power Line to UG Mine - 11kV - 1,000m	$400,000								**$400,000**
Surface 95mm 11KV HV Cable 500m	$42,000								**$42,000**
Surface 95mm 11KV HV Cable 500m	$42,000								**$42,000**
Initial Surface LV Cables	$20,000								**$20,000**
Surface 2MVA 11kV/1000V Substation	$202,500								**$202,500**
Install 4 x 90mm LV Cables - Portal	$53,830								**$53,830**
Electrical Installation Labour	$80,000								**$80,000**
Stage 2 - (270RLSubstation)									
U/G 2MVA 11KV/1000V Substation	$250,000								**$250,000**
95mm 11KV HV Cable 2 x 500m	$100,000								**$100,000**
Install UG Substation and HV Cable	$100,000								**$100,000**
Stage 3 - (215RLSubstation)		$250,000							**$250,000**
U/G 2MVA 11KV/1000V Substation		$100,000							**$100,000**
95mm 11KV HV Cable 2 x 500m		$100,000							**$100,000**
Install UG Substation and HV Cable									
Stage 4 - (141RLSubstation)									
U/G 2MVA 11KV/1000V Substation			$250,000						**$250,000**
95mm 11KV HV Cable 2 x 500m			$100,000						**$100,000**
Install UG Substation and HV Cable			$100,000						**$100,000**
TOTAL CAPITAL COST	**$1,290,330**	**$450,000**	**$450,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$2,190,330**

7.1.3 LV Power Distribution Items & Costs

Low Voltage (LV) power (1000V) will be reticulated for the underground mine to power electrical plant and mining activities. The major items requiring LV mine power are:

- Mining Machines
- Ventilation Fans
- Mine Pumps
- Surface Air Compressors

7.3.1 Mine Power Requirements

Table 7.5 - LV Power Infrastructure Capital Costs

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	TOTAL
LV Cables	$140,000	$55,000	$40,000	$45,000	$15,000				**$295,000**
Extension Cables	$240,000								
LV Distribution Boards	$124,000	$60,000	$40,000	$20,000					**$244,000**
Working Boxes	$228,000	$111,000	$74,000	$37,000					**$450,000**
LV Fan Starters	$142,500	$39,000	$26,000	$13,000					**$220,500**
Pump Station Starters	$44,000	$0	$22,000						**$66,000**
TOTAL CAPITAL COST	**$918,500**	**$265,000**	**$202,000**	**$115,000**	**$15,000**	**$0**	**$0**	**$0**	**$1,275,500**

The electrical power demand for the underground mine will increase as the mine go through the development phase then into full production. Thereafter there will be a small reduction in power usage in the last years after all mine development is completed.

Table 7.6 - Underground Mine Estimated Nominal Power Draw

ITEM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Power Consumption (kWhr)								
220kW Fans	220	220	220	220	220	220	220	220
180kW Fans	180	686	979	1,305	1,350	1,350	1,350	1,350
2 x 220kW Primary Fans #1 (342RL)	293	440	440	440	440	440	440	440
UG Flyght Pumps	52	71	83	92	97	97	97	97
Transfer Pumps (Dams)	20	20	20	20	20	20	20	20
PS #1 - x 103 Monos (2 x 55kW) - 270mRL	31	41	41	41	41	41	41	41
PS #1 - x 103 Monos (2 x 55kW) - 147mRL	28	41	41	41	41	41	41	41
PS #1 - x 103 Monos (2 x 55kW) - 20mRL	0	0	34	41	41	41	41	41
Jumbos (180kW)	126	126	126	126	53	0	0	0
Raise Drills (180kW)	27	45	36	45	0	0	0	0
LH Rigs (160kW)	18	110	110	110	110	110	110	110
Cable Bolt Rig (130kW)	61	91	91	91	46	0	0	0
Drilling ITH (150kW)	50	75	75	75	75	75	75	75
UG Auxilliary	10	10	10	10	10	10	10	10
Compressor (2 x 75kW VSD)	45	45	45	45	45	45	45	45
Office & W/S	30	30	30	30	30	30	30	30
Total Av. Nominal Draw (kWhr)	**1,190**	**2,052**	**2,382**	**2,733**	**2,618**	**2,520**	**2,520**	**2,520**

The above displays estimated average power draw figures for the Butchers Creek underground mines. The peak instantaneous power draw at times could be up to 15% higher.

7.4 Underground Mine Pumping

The previous hydrogeology study work was completed by Rock Water Pty Ltd in 1993. It was noted that some ground water was intersected in the resource drilling. The previous mining of the open pit did intersect significant water with no records found indicating that water had an adverse effect on the mining operation.

It is assumed that most of the mine water that will be required to be pumped will be generated from mining machines during the mining process. Water pumped from the underground mines will be used in water recirculation circuits and sent back underground through mostly a gravity feed systems for water supply. The mine water system will also have a water overflow discharge provision with excess water likely discharged to the mill process water dam.

7.4.1 Mine Pumping System

The current mine plan is to develop the main access decline (335mRL) and the exhaust access (343mRL) into the west wall of the completed Butchers Creek open pit expansion. The current design bottom of the open pit is at the 322.5mRL. A large pit sump will be maintained at the south end of the pit that will also provide a discharge point of the underground mine pumping system to discharge to. The sump will also provide sufficient storage space to prevent a 100 year storm event from flooding the mine workings.

The underground mine pumping system is designed with a capacity of 40l/s well in excess of the calculated maximum water ingress. The pumping system will consist of 3 main pump stations each fitted with 2 x 103 Mono pumps. A set of these pumps will also be used as travelling monos during the mine development works.

Table 7.7 - Estimated Underground Mine Water Ingress

MINE ITEM	Unit Water Generation Rate (litres/second)	Number of Units	Water Ingress (litres/second)
Development Jumbo	2	1	2
Production Drill	2	1	2
Raise Bore Machine	2	2	4
ITH Drill Rig	1	2	2
Stope Bogging	1	2	2
Base Line Ingress	2	1	2
TOTAL MAXIMUM (l/s)			**14**

Pump Station 1 (275mRL) – This permanent pump station is planned to be located in the 275 Level and is designed with 2 x CE103 mono pumps to be fitted with 1000V/55kW motors. Each of these pumps has a designed pumping capacity of 20l/s. This pump station will discharge to a 4” PN20 poly pipe line rising main from the 270mRL out of the main access portal at 335mRL to the pit sump at the south end of the open pit. The designed rising main will be fitted to the ladderways in the mine escapeways and will also have some minor portions located along level sections.

Pump Station 2 (150mRL) – This permanent pump station is planned to be located in the 150 Level and is designed with 2 x CE103 mono pumps to be fitted with 1000V/55kW motors. Each of these pumps has a designed pumping capacity of 20l/s. This pump station will discharge to a 4" PN20 poly pipeline rising main from the 150mRL to the 275mRL where pump station 1 is located. The designed rising main will be fitted to the ladderways in the mine escapeways and will also have some minor portions located along level sections.

Pump Station 3 (25mRL) – This permanent pump station is planned to be located in the 25 Level and is designed with 2 x CE103 mono pumps to be fitted with 1000V/55kW motors. Each of these pumps has a designed pumping capacity of 20l/s. This pump station will discharge to a 4" PN20 poly pipeline rising main from the 25mRL to the 150mRL where pump station 2 is located. The designed rising main will be fitted to the ladderways in the mine escapeways and will also have some minor portions located along level sections.

General mine works pumping will utilise a variety of flygt pumps from 8kW to 20kW. Flygt pumps from the mine headings will pump to the many planned mine sumps. Each level will have a sump that will be fitted with a 20kW flight pump capable of pumping to the next level. Water will then either be pumped from these sumps or dropped down drain holes to reach the nearest main pump station.

The 37kW flygt pump will also be capable of pumping to the lake Komaterpillar as well as the processing plant. A Poly Pipeline (PN20) will also be secured down the open pit batters to the southern pit sump (322mRL) and run to the surface header tanks at the (387mRL). The southern pit sump will be fitted with both a 37kW pump and 20kW pump on floats capable of pumping to both the header tanks. The 37kW flygt pump will also be capable of pumping to the lake Komaterpillar along a 1.5km 4" Poly Pipeline as well as to the processing plant 700m to the north of the portal.

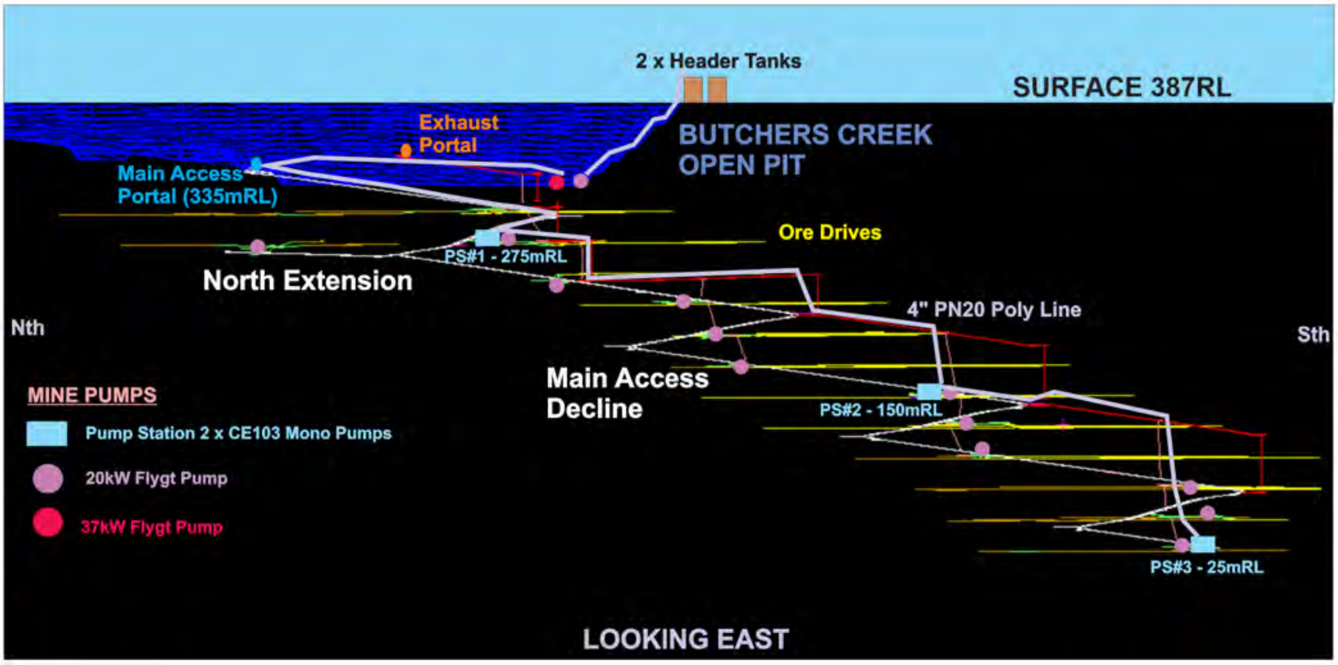


Figure 7.9 - Underground Mine Main Pumping System

Figure 7.10 - Plan View of UG Pumping Layout (180mRL to 120mRL)

7.4.2 Pumping Costs

A summary of the pumping costs the underground mine is presented below (Table 7.8). Capital costs are included for pump stations, rising mains, and Flygt pumps. The quoted pump maintenance costs are operating costs. Electric costs for cables or pump starters required are excluded as these costs are included in the "LV Electric Costs".

Table 7.8 - Underground Mine Pumping Costs

								9 Months	
ITEM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	TOTAL
PUMP STATIONS									
PS#1	$200,000								$200,000
PS#2	$200,000								$200,000
PS#3			$200,000						$200,000
RISING MAIN									
PS#1	$10,000								$10,000
PS#2			$10,000						$10,000
PS#3					$10,000				$10,000
FLYGHT PUMPS									
37kW Pump	$70,000								$70,000
20kW Pump	$160,000	$60,000	$20,000	$40,000					$280,000
8kW Pump	$36,000		$12,000						$48,000
PUMP MAINTENANCE	$120,000	$168,000	$168,000	$168,000	$168,000	$168,000	$168,000	$126,000	$1,254,000
TOTAL COSTS	$796,000	$228,000	$410,000	$208,000	$178,000	$168,000	$168,000	$126,000	$2,282,000

Costs do not include electrics.

7.5 Mine Water Supply

The underground mine is designed to have a re-circulating mine water supply system. The pumped water is planned to be discharged into the southern end of the open pit. Water discharged into the pit will then be transported by float activated pumps to 2 main water supply tanks (80kl) that will feed the mine water supply via 110mm poly pipelines. Engineered pressure reducers will be installed at regular intervals in the mine water supply line. The cost of the poly line and pressure reducers has been allowed for in the main decline face advance costs.

A configuration will be established to also allow for the discharge of excess mine water from the south end of the pit to lake Komaterpillar as well as to the processing plant if necessary. For the mine a total of $212k has been allocated for the surface water tanks, pipe lines, poly fittings and pumps. These costs do not include the electrics, or earth works required for pipelines.

Table 7.9 – Underground Mine Water Supply Costs

ITEM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	TOTAL
Tanks (80kL)	$50,000								**$50,000**
Poly Fittings	$10,000								**$10,000**
Poly Pipe to Min Portal	$20,000								**$20,000**
Poly Pipe to Mill	$30,000								**$30,000**
Poly Pipe to Lake	$60,000								**$60,000**
Floats/Telemetry	$20,000								**$20,000**
Inline Pressure Reducers	$7,500	$5,000	$5,000	$5,000					**$22,500**
TOTAL	**$197,500**	**$5,000**	**$5,000**	**$5,000**	**$0**	**$0**	**$0**	**$0**	**$212,500**

Costs do not include electrics.

7.6 Mine Compressed Air Supply

The underground mine is designed to have compressed air reticulated throughout the workings to provide supply for such activities as:

- Production drills
- Hand held drills
- ANFO charging kettles
- To clear blocked production holes
- Pneumatic portable pumps
- Small air mover fans
- To supply fresh air to refuge chambers.

The underground mine compressed air circuit is planned to be supplied pressurised air by 2 x Atlas Copco GA75L – 110 VSD (110kW Variable Speed Drive) air compressors. These are variable speed compressors which are oil cooled and also fitted with air dryers. The air dyers remove moisture from the compressed air by cooling the air to near freezing point which automatically drains the condensate.

The VSD enables power efficiency and provides 50% energy efficiency over a direct drive unit. The compressed air circuit design containing the 2 x GA75L – 110 VSD compressors can provide over 1000CFM of compressed air more than sufficient for each mining operation.

Table 7.10 - Atlas Copco GA75L-110 VSD Air Compressor Performance Data

Compressor type	Max. working pressure		Capacity FAD* (min-max)			Installed motor power		Noise level**
	bar(e)	psig	l/s	m³/h	cfm	kW	hp	dB(A)
GA 75L VSD*	4	58	47-269	169-967	100-569	75	100	73
	7	102	48-266	172-957	101-563	75	100	73
	9.5	138	58-235	210-847	124-498	75	100	73
	12.5	181	70-194	252-699	149-411	75	100	73

The designed compressed air circuit is planned with 2 x GA75L-110 VSD air compressors on the surface with a 3,000L air receiver which has a maximum pressure of 1,300kPa. Air will then be supplied from the compressor to the mine working via a 110mm PN16 poly pipe run down the pit walls to the portal location. Compressed air lines (110mm) will be run down the main decline with 63mm poly lines run into the operating levels.

Figure 7.11 - 2 x Atlas Copco GA75L–110 VSD Air Compressors

Table 7.11 – Underground Mine Compressed Air Supply Costs

ITEM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	TOTAL
WTS									
ACOM01 - GA75VSD - 569 CFM	$120,000								**$120,000**
ACOM01 - GA75VSD - 569 CFM	$120,000								**$120,000**
Reciever Tank - 3000L	$25,000								**$25,000**
Compressor Pad and Sheeted Cabin	$20,000								**$20,000**
Piping and Valves to Portal	$10,000								**$10,000**
TOTAL	**$295,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$295,000**

8 Underground Mine Stope Optimiser (MSO) Process

8.1 Resource Review and Cut Off Grade

After a review of the Butchers Creek MRE (2025) potential underground mining methods and resulting cut-off grades were assessed. The estimated total unit operating cost for the project from the conceptual model was $160/t. When put through the project conceptual financial model with the average 94.6% mill a break even cut-off grade of 1g/t was determined for stopes and 0.5g/t for incremental ore driving. This process was performed at the project assumed gold price of AUS$5,385/oz.

The estimated generated net revenue per ore tonne for the underground mine (after royalties) after the using the studies financial assumptions is $315/t. The total unit operating cost for the underground mine in the project in the study is $158/t milled so there is a demonstrated operating profit margin to provide return on invested capital.

8.2 MSO Parameters

Table 8.1 - MSO Process Applied Parameters

MSO PARAMETER	Unit	Parameter
Minimum Stope Width	#	3.0
HW Dilution Skin	m	0.25
FW Dilution Skin	m	0.25
Stope Height	m	25.0
Maximum Stope Length	m	25.0
Maximum Stope Width	m	25.0
Cut Off Grade	g/t	1.0

Cube Consulting were engaged to perform an MSO interrogation using the latest available resource model for the deposit using the above parameters in Table 8.1.

8.3 MSO Results

The MSO process created individual stoping panels of strike length 5m for each of the resources analysed. The stope shapes were created in-line with each mine design using the planned vertical floor to floor level spacing. Separate ore drive shapes were later created for each level with the ore drive material then removed from each scheduled stoping panel.

Output data for each stoping panel included:

- Stope number (#)
- Tonnes (t)
- Gold grade (g/t)
- Contained gold (Oz)

Table 8.2 - MSO Process Results

MSO INTERROGATION RESULTS	Unit	Result
Number of Stopes	#	265
Ore Tonnes	t	4,220,178
Gold Grade	g/t	1.88
Contained Gold	Oz	254,979

The resulting total MSO material provides an indication of the economic production target. Each stope was further assessed in conjunction with the mine plan, schedule, practical mining realities, ore processing and resource utilisation factors.

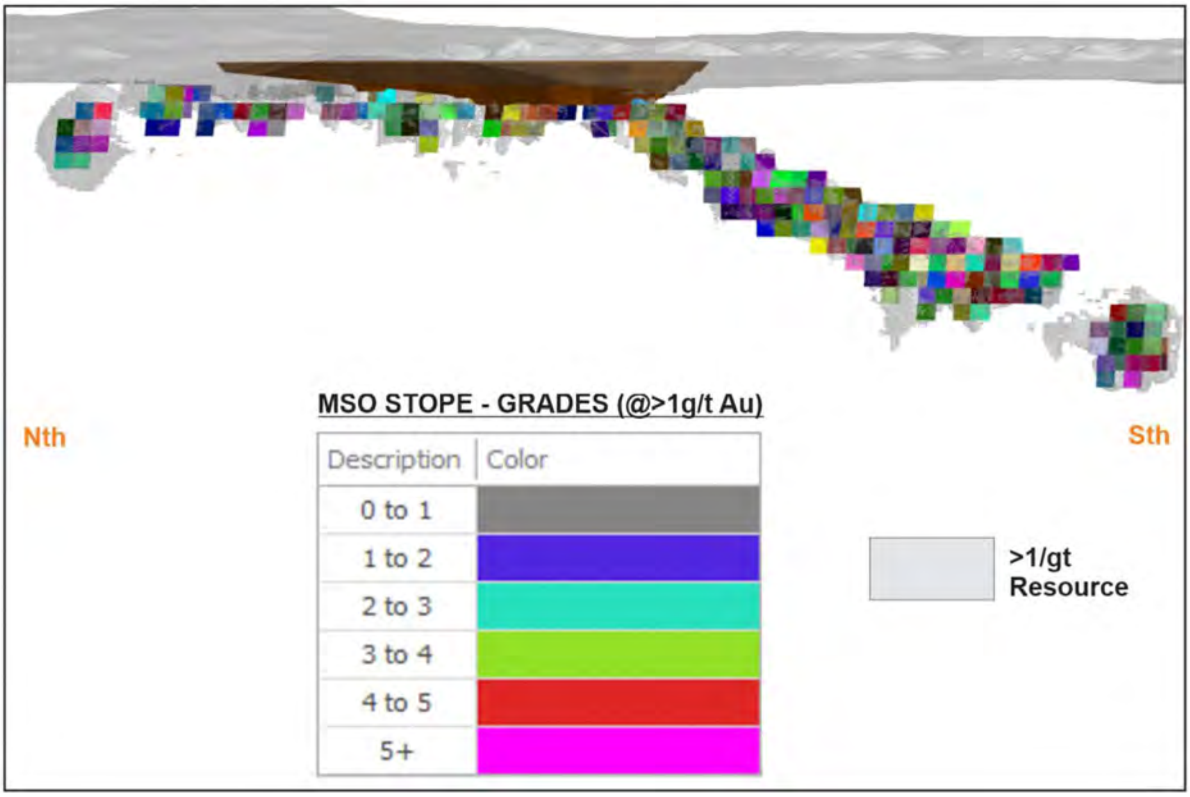


Figure 8.1 - Long Section Facing East Showing Generated MSO Stopes

Table 8.3 - MSO Results per Level

LEVEL RL	Interval	No. Stopes	Tonnes	AU g/t	Gold Au (oz)	TVM	OVM
325	25	24	174,478	1.85	10,379	6,979	**415**
300	25	40	473,008	1.80	27,366	18,920	**1,095**
275	25	24	261,376	1.74	14,593	10,455	**584**
250	25	11	155,169	2.50	12,476	6,207	**499**
225	25	9	124,498	2.46	9,827	4,980	**393**
200	25	11	236,032	2.15	16,281	9,441	**651**
175	25	14	331,664	2.65	28,280	13,267	**1,131**
150	25	18	475,997	1.97	30,151	19,040	**1,206**
125	25	19	423,479	1.80	24,547	16,939	**982**
100	25	20	464,645	1.73	25,888	18,586	**1,036**
75	25	22	407,701	1.83	24,030	16,308	**961**
50	25	16	208,263	1.76	11,758	8,331	**470**
25	25	9	101,717	1.60	5,248	4,069	**210**
0	25	8	126,952	1.09	4,460	5,078	**178**
-25	25	5	68,735	1.14	2,513	2,749	**101**
-50	25	7	98,481	1.23	3,899	3,939	**156**
-75	25	6	71,727	1.19	2,756	2,869	**110**
-100	25	2	16,256	1.01	529	650	**21**
Grand Total	**450**	**265**	**4,220,178**	**1.88**	**254,979**	**9,378**	**567**

9 Production Target Estimate

9.1 Production Target Selection Process

After the completion of the MSO process each individual 5m strike length stoping block was assessed in terms of:

- Location
- Proximity to planned development
- Proximity to other potentially economic blocks
- Potential revenue
- Assessed geotechnical parameters
- Mining practicalities
- Mine schedule

Subsequently a portion of the MSO material was converted into production target. MSO blocks were then combined into stope panels with a minimum strike length of 5m and a maximum of 25m. This is in accordance with the assessed geotechnical hydraulic radius constraints. All panels were then split into stoping and development shapes. In some cases ore drives were required for top drill positions above stopes outside of the generated MSO shapes. In this case additional mineralised material outside of the MSO shapes was added to the ore production target using a cut-off grade of 0.6g/t Au.

Additional mining recovery factors were then applied to each stoping panel before being incorporated into the mining schedule.

Table 9.1 - Additional Applied Mining Factors

Mining Method	Min Width	Cut Off Grade (g/t)	Mining Recovery Factors	
			Tonnes	Grade
Ore Drive	4.5	0.6	100%	100%
L/H Pit Crown	3.0	1.0	80%	100%
L/H UH Top Down	3.0	1.0	80%	100%
L/H UH Blind	3.0	1.0	80%	100%
L/H to CRF Crown	3.0	1.0	80%	100%
L/H BU WRF	3.0	1.0	97%	100%
L/H BU CRF	3.0	1.0	97%	100%

9.2 Production Target Figures

Table 9.2 shows the estimated production target figures for the underground mine consisting of 124 down hole stopes and 58 uphole stopes as well as ore drives.

Table 9.2 - Butchers Creek Underground Production Target Figures

MINING INVENTORY FIGURES	COG (g/t)	ORE TONNES (t)	GRADE (g/t)	CONTAINED GOLD (oz)
Ore Drive Inventory	0.6	312,428	2.02	20,292
Stope Inventory	1	2,852,636	1.99	182,967
Total Mining Inventory		**3,165,064**	**2.00**	**203,259**

10 Underground Mine Schedule

10.1 Underground Mine Schedule Assumptions

Some of the key mine schedule assumptions used in the mining were:

- Maximum main decline advancement rate per month (Month 1 to 6) = 180m
- Maximum main decline advancement rate per month (Month 6 to LOM) = 120m
- Maximum total jumbo rig advancement rate per month = 300m
- Maximum jumbo drill rig drill metres per month = 30,000DRM
- Maximum production rig drill meters (89mm) per month = 8,000 DRM
- Maximum cable bolt drilling (64mm) meters per month = 5,000DRM
- Maximum slot (760mm) ITH rig drill metres per day = 3.5m

- Maximum raise hole (1.5m Dia) raise drill metres per day = 3.5m
- Maximum ITH RC drilling metres per month = 3,000DRM
- Maximum ore stope bog (per loader) per day = 1,500t
- Maximum total back fill (per loader) placed per month = 30,000t
- Maximum tkm per truck per month = 65,000tkm.

These are the maximum monthly productivity criteria not the average.

10.2 Underground Mining Schedules

Table 10.1 - Underground Mine Ore Production Schedule

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	TOTAL
ORE DRIVES									
Tonnes (t)	42,140	61,231	103,431	75,261	30,366				**312,428**
Ore Grade Au (g/t)	1.93	2.54	2.06	1.82	1.47				**2.02**
Conatined Au (oz)	2,614	4999	6836	4412	1432				**20,292**
STOPES									
Tonnes (t)	34,307	232,875	239,217	560,598	631,371	545,503	328,906	279,859	**2,852,636**
Ore Grade Au (g/t)	1.35	1.85	2.28	2.32	1.72	1.78	2.39	1.87	**1.99**
Conatined Au (oz)	1,491	13822	17564	41742	35012	31196	25293	16848	**182,967**
TOTAL									
Tonnes (t)	76,447	294,106	342,648	635,859	661,737	545,503	328,906	279,859	**3,165,064**
Ore Grade Au (g/t)	1.67	1.99	2.21	2.26	1.71	1.78	2.39	1.87	**2.00**
Conatined Au (oz)	4,105	18821	24400	46153	36444	31196	25293	16848	**203,259**
CLASSIFICATION RATIOS									
Measured & Indicated (t)	57,216	292,696	332,273	623,199	558,992	545,503	328,906	279,859	**3,018,645**
Inferred (t)	19,231	1,410	10,375	12,659	102,745				**146,419**
MI & INF Ratio	75%	100%	97%	98%	84%	100%	100%	100%	**95%**

Note Year 1 UG Ore is mined after the open pit ore (123,839t) has been mined with a 99% Indicated ratio.

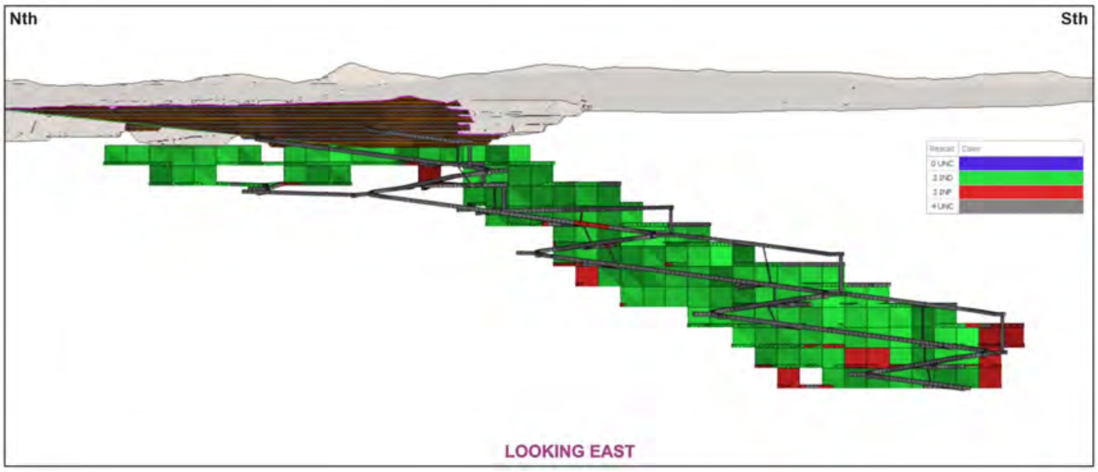


Figure 10.1 – Long Section Showing UG Ore Classification

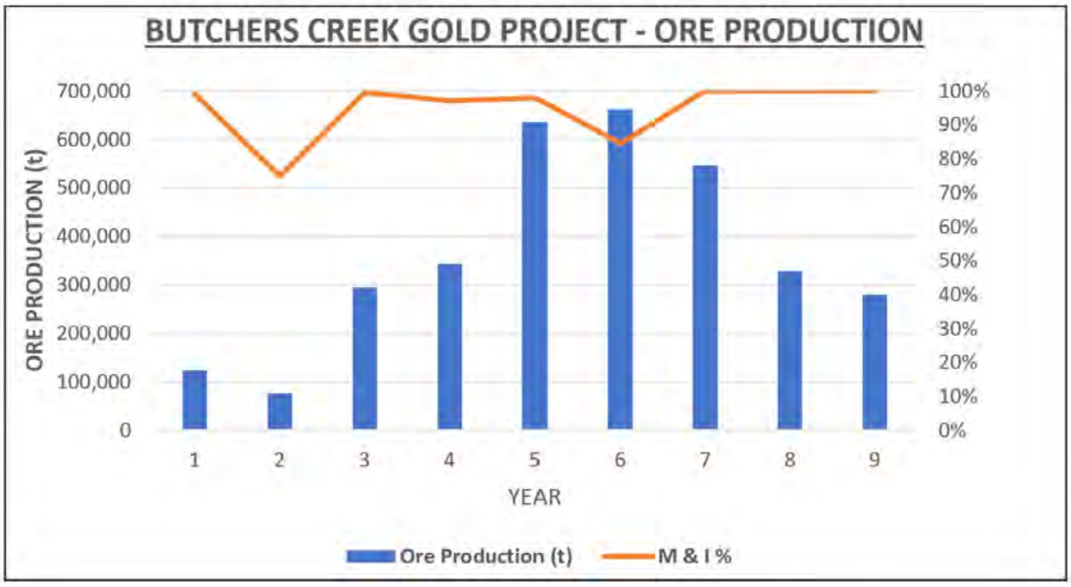


Figure 10.2 - Total Ore Production M & I Ratio

Table 10.2 - Jumbo Development Statistics

MINE	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	TOTAL
Total Dev	**m**	3,013	2,935	3,107	2,769	997	0	0	0	**12,820**
Total Jumbo DRM	**DRM**	291,706	285,607	299,507	266,371	91,017	0	0	0	**1,234,208**
Total Jumbo Months	**#**	12	12	12	12	5	0	0	0	**53**
Max # Jumbos	**#**	1	1	1	1	1	0	0	0	**1**
Average m/mth/Jumbo	**m**	**251**	**245**	**259**	**231**	**199**				**242**
Average DRM/mth/Jumbo	**DRM**	**24,309**	**23,801**	**24,959**	**22,198**	**18,203**	**0**	**0**	**0**	**23,287**

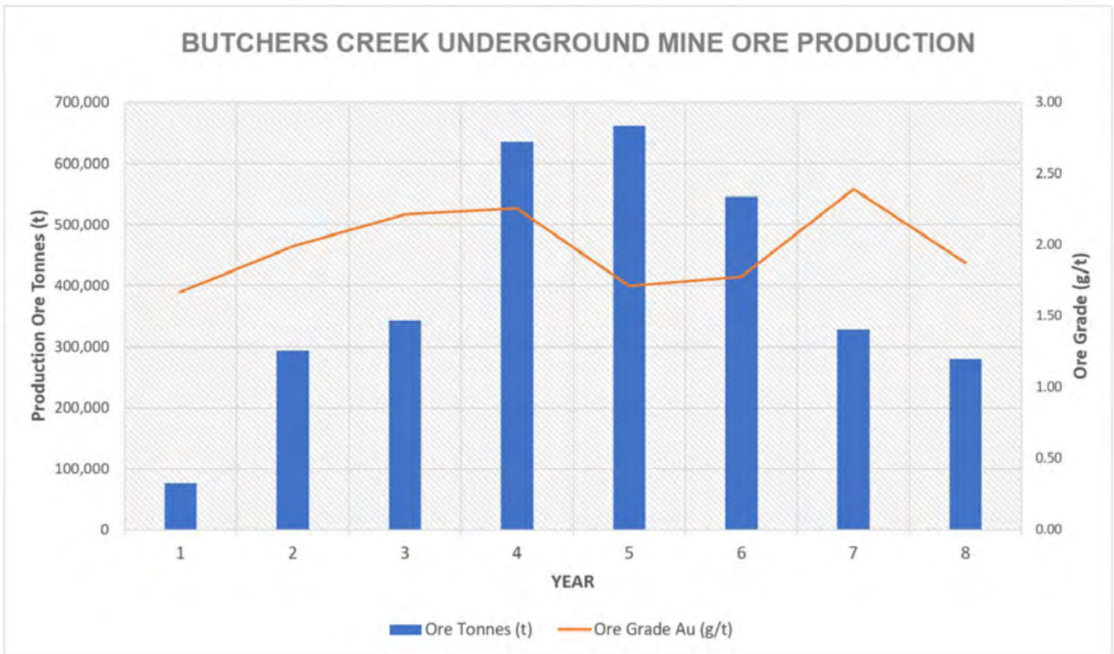


Figure 10.3 - Underground Mine Ore Production Graph

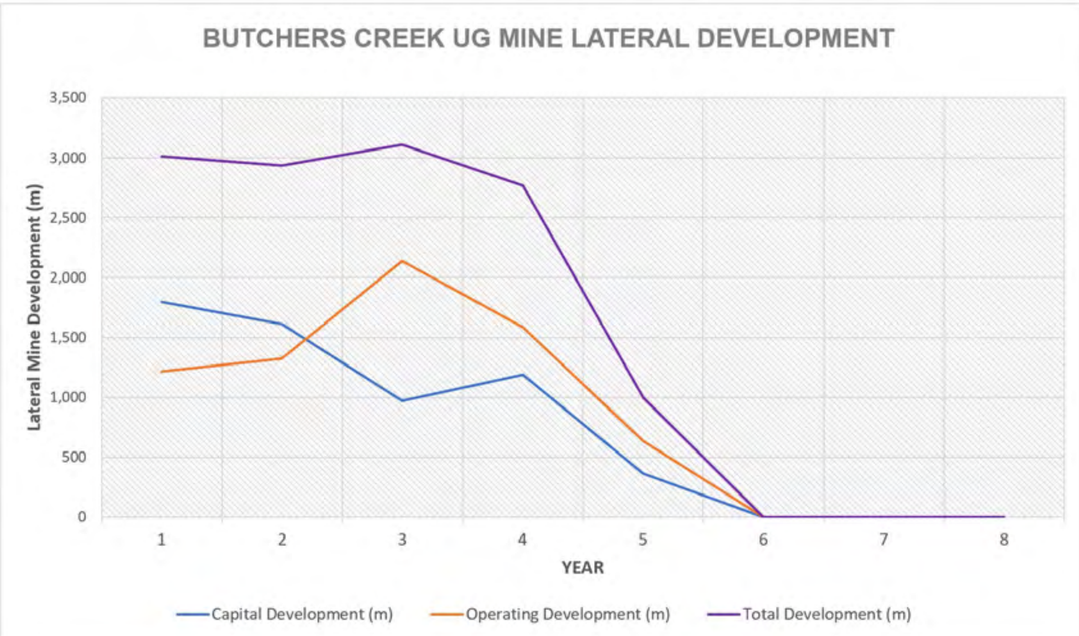


Figure 10.4 – UG Mine Lateral Development Graph

Table 10.3 - Underground Mine Physical Schedule Summary

9 Months

ITEM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	TOTAL
TOTAL MINING PHYSICALS									
Ore Tonnes (t)	76,447	294,106	342,648	635,859	661,737	545,503	328,906	279,859	**3,165,064**
Ore Grade Au (g/t)	1.67	1.99	2.21	2.26	1.71	1.78	2.39	1.87	**2.00**
Conatined Au (oz)	4,105	18,821	24,400	46,153	36,444	31,196	25,293	16,848	**203,259**
Total Mine Produced Waste (t)	156,957	138,708	108,230	107,857	29,283	0	0	0	**541,035**
Total Development (m)	3,013	2,935	3,107	2,769	997	0	0	0	**12,820**
Capital Development (m)	1,796	1,613	972	1,187	364	0	0	0	**5,932**
Operating Development (m)	1,216	1,322	2,135	1,582	633	0	0	0	**6,888**
% Development Capital	60%	55%	31%	43%	36%	0	0	0	**46%**
Haulage Way - 5.2m x 5m (m)	796	552	315	588	137	0	0	0	**2,389**
Raise Bore (1.5m Dia)	91	127	132	158	0	0	0	0	**509**
Long Hole Rise (6m x 4m)	43	55	44	42	0	0	0	0	**184**
Stope Bogging (t)	34,307	232,875	239,217	560,598	631,371	545,503	328,906	279,859	**2,852,636**
Waste Back Fill (t)	12,766	41,080	65,911	160,623	132,994	139,407	7,906	0	**560,688**
Cement Rock Fill (t)		6,100	42,880	53,266	141,242	59,655	7,906	0	**311,049**
Total Jumbo Drilling (DRM)	291,706	285,607	299,507	266,371	91,017	0	0	0	**1,234,208**
Long Hole Drilling 89mm (DRM)	3,431	26,504	24,932	63,566	73,389	58,279	39,231	31,429	**320,760**
ITH Drilling 110mm (DRM)	2,292	4,452	5,692	6,992	9,750	6,654	480	0	**36,312**
Up Hole Slot - 760mm (m)	20	280	0	40	0	71	389	360	**1,160**
D/H Winze - 3m x 3m (m)	60	139	201	256	406	277	20	0	**1,360**
Trucking (tkm) - No Back Haul	221,109	578,635	808,955	1,507,908	1,724,329	1,250,618	662,410	477,047	**7,231,011**
Diesel - Mobile (l)	404,222	1,229,077	1,667,754	3,360,681	4,042,175	3,090,807	1,278,206	972,370	**16,045,292**
UG RC Drilling - Operational (m)	16,470	19,931	20,593	28,304	18,721	0	0	0	**104,019**

(Full detailed mine schedule provided in the project model).

A summary of the underground mine physical schedule is provided above in Table 10.3. The underground mine is schedule to start in month 13 with full production (50kt/mth) reached in month 51 with the planned completion of the process plant construction month 18. The current schedule results in a maximum 208kt ROM stockpile in month 73.

From the current defined production target full operation, mine production can be achieved for 3 years. There is further mineral resource upgrades expected both down dip of the main deposit as well as to the north. There are also further mineral resources close by such as Golden Crown (400kt @ 3.1 g/t Au). These additional resources can be exploited within the current milling schedule as well as any further resource upgrades at Butchers Creek.

10.3 Mining Schedule Description

The underlying strategy for the mine schedule is first mine the open pit material create a recent mined and stable pit from which to commence the underground mine.

The underground mine schedule will focus on developing the main access decline from the portal located at the 335mRL as fast as possible down to the 200mRL. This is where the first stage of major bottom up mining will commence. It is planned for the mine to then subsequently develop the main access decline further down plunge of the resource with the second stage bottom up mining commencing at the 100mRL. The final Stage 3 bottom up mining panel commences at the 25mRL. There are also some small top down stopes available to mine at the top of the mine and in the northern extension area early in the schedule.

11 Metallurgy & Processing

11.1 Introduction

MACA Interquip Mintrex (MIQM) was engaged in 2025 by WIN Metals to complete a desktop study for the Project. The scope of the 2025 study is as follows:

1. Review the existing metallurgical testwork data and previous study works related to Butchers Creek
2. Develop process design criteria for the process plant based on a 600ktpa throughput rate
3. Develop a mass balance for the process plant
4. Develop a block flow diagram for the process plant
5. Develop a process plant layout
6. Provide capital and operating cost estimates (±40%)

11.2 Metallurgy

Butchers Creek has been previously mined and processed during the period 1995 to 1997. From historical records a total of 477,421t @ 2.29g/t of Butchers Creek mineralisation treated in the last full year of operation (up to 30 June 1997) recovering 94.3%.

That said, the metallurgical database for the project is currently limited, providing only a preliminary view of the ore's processing characteristics. The design assumptions have been largely informed by a single metallurgical testwork program completed in 2021 by ALS Metallurgy for Meteoric Resources (Report A22835). This program was sighter in nature, reflecting early-stage amenability testwork, and only two samples were assessed, both of which were fresh ore. Consequently, the representativity of the data is limited, and caution should be applied when extrapolating results across the broader deposit.

In areas where testwork data is missing or incomplete, MIQM has relied on industry-standard assumptions for gold processing of similar deposits. These assumptions have been used to inform process flowsheet selection, circuit sizing, and reagent consumption estimates, but further testwork is required to validate key parameters.

The 2021 program focused on two fresh ore composites generated from halved HQ core and comprised:

- Sample preparation
- Comminution testwork (UCS, Bond CWi, and BWi)
- Comprehensive head analysis, including XRD
- Grind establishment testwork
- Whole ore cyanidation testwork

- Knelson gravity separation/amalgamation
- Gravity/cyanidation testwork
- Gravity/flotation testwork
- Gravity/flotation/cyanidation testwork

Key learnings from the 2021 program include:

Ore Chemistry: The ore contained generally low levels of deleterious elements (Hg, Cd, Te, Sb), with arsenic the notable exception, being elevated. Organic carbon levels were negligible, reducing preg-robbing risk. Sulphide mineralisation was dominated by pyrrhotite and pyrite at ~1% total sulphide.

Comminution Properties: The ore showed contrasting characteristics:

- At coarse sizes, it exhibited relatively low competence, reflected in a low crushed work index (CWi) and unconfined compressive strength (UCS).
- At finer sizes, however, the ore was considerably more competent, with a Bond Ball Work Index (BWi) classified as 'hard'.

Gravity recovery: The assessed samples showed variable gravity-recoverable gold (GRG), ranging from 12.18% to 48.71%.

Gravity/CIL amenability testwork: Sighter testwork achieved overall gold extractions of 92.25% and 97.15% at a grind size of P80 75um and 48 hours leach duration. It is noted that no other grind sizes were assessed in the program.

Leach Kinetics: The ore exhibited rapid leach kinetics however it is noted that leach parameters used in the program are considered aggressive and are atypical of parameters employed by industry.

Reagent consumptions: Lime and cyanide consumptions are considered moderate; however, it is noted that the testwork was completed using Perth tap water and is therefore likely understated compared with reagent consumptions that could be expected in higher TDS water at the Project.

Gravity/Flotation amenability testwork: Overall gold recovery ranged from 76.94% to 87.25%, producing concentrates grading between 6.56 g/t and 16.1 g/t Au.

11.3 Design Process Considerations

The processing plant design has been developed to reflect the client's requirements while incorporating available metallurgical and comminution data. Key parameters and assumptions applied for this study are summarised below.

- The plant is expected to operate at an initial throughput of 600ktpa, consideration for expansion to 750ktpa as stipulated by the client.
- Gold head grade of 2.0g/t, as stipulated by the client.
- Grind size of P80 75µm assumed in the absence of coarser testwork data, with further testwork recommended to confirm the optimal grind size.

- Conventional three-stage crushing and ball mill comminution circuit selected based on available comminution data. Key process equipment (crushers and ball mill) sized for the upgraded 750ktpa duty.
- Conventional gravity/CIL circuit selected based on available metallurgical testwork results.
- Gravity circuit sized based on available testwork data and appropriate scale up factors.
- The CIL circuit has been sized for the upgraded 750ktpa duty, with a nominal leach residence time of ~24 hours based on testwork leach kinetic data.
- Reagent consumptions based on testwork values in the absence of consumption rates of testwork completed in water typical to the Project location.
- Pressure Zadra elution circuit selected due to reduced capital cost.
- Cyanide detoxification via standard SO_2/air process based on typical engineering parameters in the absence of detoxification testwork data.
- Cyanide supplied in the form of solid briquettes due to Project location.

These assumptions provide a sound basis for the current level of Study; however, further testwork is required to confirm design parameters.

11.4 Process Plant Description

The designed processing plant incorporates the following:

- Ore with a nominal top size of 400mm is fed via front end loader into a 30t ROM bin. Ore is reclaimed via an apron feeder into a jaw crusher and is fed to a vibrating double deck sizing screen via a conveyor. Screen oversize reports to the secondary cone crusher, with screen middlings reporting to the tertiary cone crusher. Screen undersize (crusher product) will be delivered by conveyor to a 280m^3 ore storage bin, which will include an overflow to allow excess crushed material to be manually stockpiled. The crusher product has a notional product size of 80% passing 12mm.
- Ore will be reclaimed from the ore bin by feeder, or by loader feeding the emergency reclaim feed hopper. The crushed ore will be delivered by conveyor to the 4.3m diameter by 6.1m length ball mill, with quicklime dosed from a silo on to the conveyor belt. The ball mill will operate in closed circuit with a cluster of hydrocyclones and will grind the ore to a product size of 80% passing 75µm. Cyclone overflow will report via a vibrating trash screen to the carbon-in-leach (CIL) circuit.
- A split of the cyclone underflow will report to a gravity screen with the gravity screen undersize reporting to a QS30 Knelson gravity concentrator. The Knelson tailings and gravity screen oversize report back the ball mill for further grinding. Generated gravity concentrates report to an Acacia CS500 intensive leach reactor.

- The CIL circuit will consist of six tanks to provide a nominal residence time of ~24h (at 750ktpa) for the ore slurry, allowing the gold contained to be leached by cyanidation. This includes a single leach tank followed by five adsorption tanks. The pH of the slurry will be maintained by lime addition to the mill to avoid evolution of toxic cyanide gas.

- Carbon will be introduced to the final tank and pumped counter-current to the flow of ore, adsorbing the dissolved gold. Loaded carbon from the first adsorption tank will be pumped to the pressure zadra elution circuit which will use hydrochloric acid, hot cyanide and caustic to remove the gold into solution. The eluted gold and leached gold from the Acacia will be recovered by electrowinning onto stainless steel cathodes, which will then be calcined and smelted to produce gold doré.
- The tailings from the CIL circuit are sent to a dedicated detoxification tank where sodium metabisulfite (SMBS), air and lime are added to destruct residual cyanide in solution. Plant tailings will be pumped to a tailings storage facility.

11.5 Process Flow Diagram

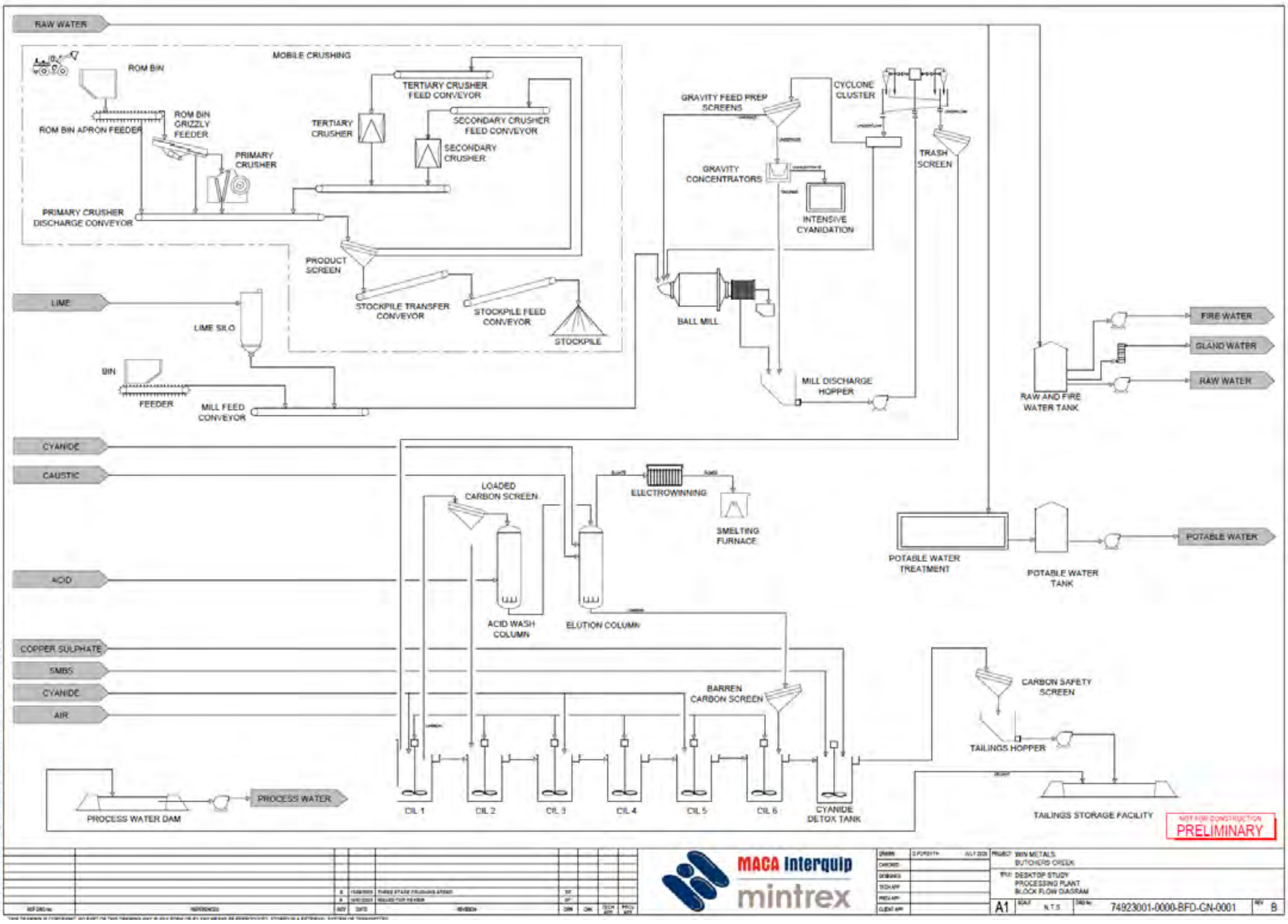


Figure 11.1 - Butchers Creek Plant Process Flow Diagram

11.6 Proposed Process Plant Design

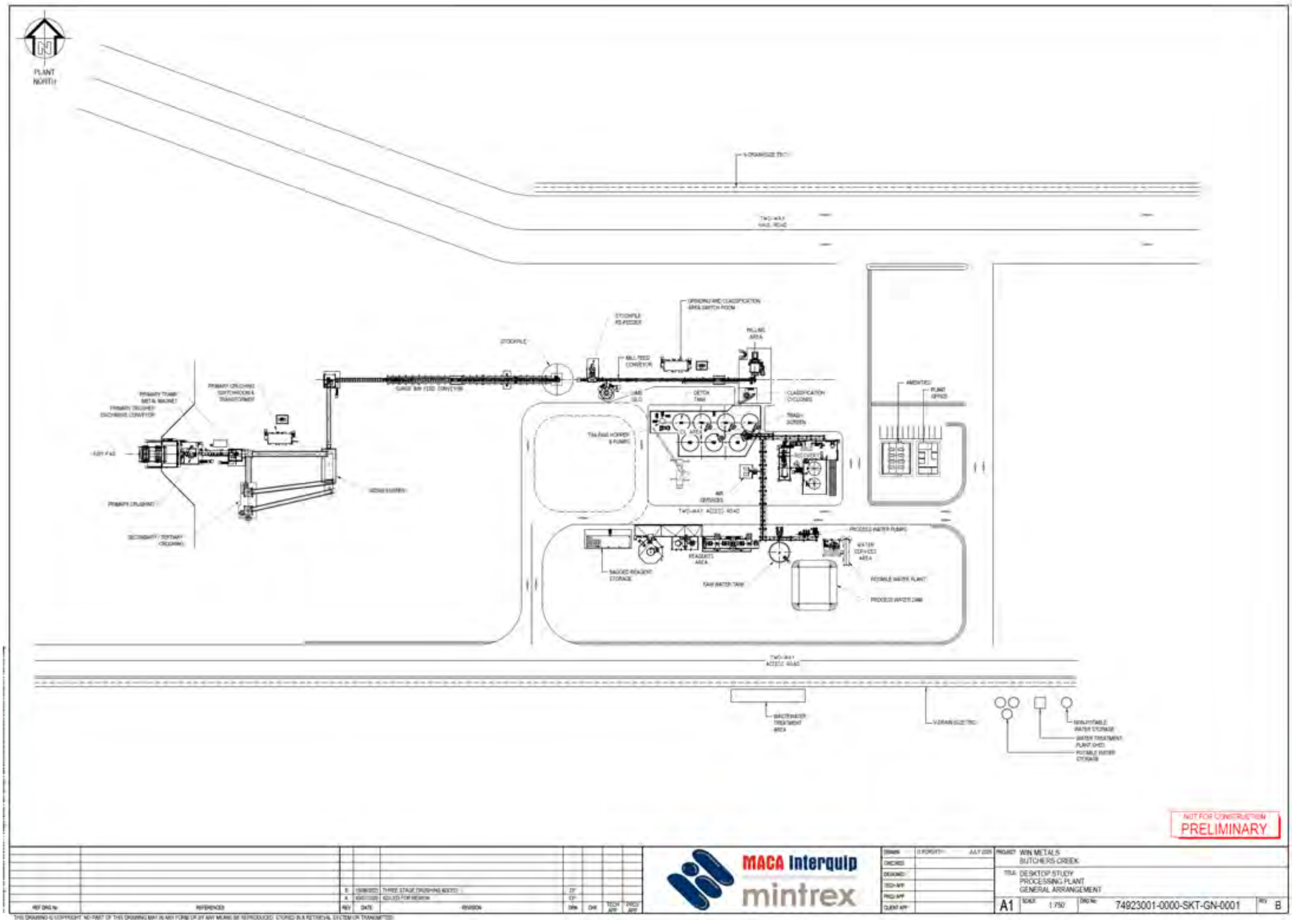


Figure 11.2 – Butchers Creek process plant Floor Print

11.7 Process Plant Operating Costs Estimate

The operating costs have been compiled from a variety of sources, including the following:

- Reagent consumptions based on laboratory testwork and estimates in absence of testwork data.
- Quoted prices or MIQM database of prices for consumables.
- Wages and salaries in-line with MIQM database.
- Shift rosters based on industry standard for this style of operation in Western Australia.
- MIQM's database of costs for similar sized operations.
- Budget pricing for reagents provided by local suppliers.

Operating cost has been estimated in AUD to an accuracy of ±40% in 3rd quarter 2025. Table 11.1 below provides a summary of the estimated cost.

Table 11.1 - Processing Unit Operating Cost Estimate

UNIT OP PROCESING COSTS	Unit	TOTAL
Operating Consumables	AUD$/t	$12.76
Maintenance	AUD$/t	$5.00
Process & Maintenance Labour	AUD$/t	$15.68
Power	AUD$/t	$12.65
TOTAL UNIT OP COSTS	**AUD$/t**	**$46.10**

11.7.1 Processing Cost Estimate Basis

Operating costs for the Project have been estimated based on budget costs and prices prevailing in the Australian minerals industry for 2025.

Power cost has been based on a cost of AUD$0.37 per kWh utilising diesel generators. The power consumption for the plant has been estimated from the mechanical equipment list for the processing plant.

Reagent consumptions have been estimated from the laboratory testwork results. Reagent costs have been sourced from budget quotations and in-house data relating to similar projects. It also includes crushing and grinding wear components, media and general consumables.

Maintenance materials costs for the operation have been factored from the capital cost estimate, using factors from the MIQM database. The allowance covers mechanical spares and wear parts, but excludes crushing and grinding wear components, media and general consumables, which are captured under operating consumables. The maintenance costs exclude all payroll maintenance labour (covered in plant labour).

The labour requirements for the operation have been estimated from MIQM experience. Salaries have been reviewed with an overhead cost of 26.8%. All workers will be housed in an accommodation village near site. An experienced catering company will manage the village.

Site laboratory costs have been included for the processing plant and environmental samples. The allowance includes the costs of external check assays. Laboratory costs are allowed for under General and Administration costs. Mining assay costs have not been included in processing costs.

Mobile equipment costs provide for the fuel and maintenance of the light vehicles, portable generators and other mobile equipment for the processing plant. Leasing costs for mechanical equipment have also been included. The maintenance and leasing costs for mobile equipment are included under maintenance, and the fuel under consumables.

Administration and staff logistics costs have been based on information from historical in-house data for similar operations.

11.7.2 Process Operating Cost Exclusions

The operating cost is exclusive of:

- Head office costs.
- Withholding taxes and other taxes; import duty on consumable cost is included.
- Impact of foreign exchange rate fluctuations.
- Escalation from the date of the estimate.
- Contingency allowance.
- Land or crop compensation costs.
- Rehabilitation or closure costs.
- License fees or royalties.
- ROM stockpile rehandling costs.
- Insurances and fees.
- Local town office costs.
- Handling and shipping of gold dore.
- Necessary sustaining capital costs.

11.8 Process Plant Capital Costs Estimate

The proposed processing plant for the Study is a relatively typical gold plant, with a cyanide detoxification circuit.

The capital cost for the processing plant has been estimated at an accuracy of ±40% at A$69.7M. This cost is inclusive of plant infrastructure buildings but excludes other non-process infrastructure like the tailings storage facility, accommodation camp, water and power supply and mining costs.

11.8.1 Process Plant Capital Cost Summary

The capital cost has been estimated in AUD to an accuracy of ±40% in 3rd quarter 2025.

Table 11.2 - Process Plant Construction Capital Cost Estimate

DESCRIPTION	Unit	CAPITAL COST
DIRECT COSTS		
Construction Overheads	AUD$	$1,390,943
Plant Infrastructure	AUD$	$2,534,216
Construction Plant & Equipment	AUD$	$3,035,208
Flights/Accommodation/Materials manag	AUD$	$5,993,721
Temporary Construction Facilities	AUD$	$284,820
Earthworks	AUD$	$1,212,187
Concrete	AUD$	$5,168,761
Structural	AUD$	$4,994,194
Mechanical	AUD$	$15,527,960
Platework	AUD$	$5,665,167
Piping	AUD$	$3,757,616
Electrical	AUD$	$9,374,374
SUB TOTAL	**AUD$**	**$58,939,167**
INDIRECT COSTS		
DIRECT COSTS		
Project & Construction Management	AUD$	$6,101,506
Engineering & Drafting	AUD$	$4,044,230
Commissioning	AUD$	$656,262
SUB TOTAL	**AUD$**	**$10,801,998**
GRAND TOTAL	**AUD$**	**$69,741,165**

11.8.2 Cost Estimate Basis

The estimate has been based on a hybrid approach to implementation. In this approach, WIN will self-perform early works to establish site access and key infrastructure, including access roads, wastewater treatment, plant water supply, tailings storage facility, power station and HV distribution, mining services infrastructure, accommodation village and communications. These costs have been provided for in the built up power generation cost (14.1.3 & 14.1.4), within workshop and process plant capital estimates or capital cost estimates in relation to the site camp (14.3).

An engineering, procurement and construction (EPC) package will be awarded for the delivery of the process plant and associated infrastructure. The estimate for these works is included in Table 11.2 as a total plant cost.

Quantities for concrete, structural steel and platework were all estimated at a facility level based on similar projects. Rates for each were based on the MIQM database for recent projects of a similar scale. Rates for structural steel are based on supply out of Asia rather than Australia due to the expected cost saving. Rates for platework are based on local Australian supply.

Purchase costs for mechanical equipment items and plant infrastructure have been determined based on recent projects and studies undertaken by MIQM of a similar nature. Where available, package costs have been used to minimize cost and lead time, such as the supply of cyanide and caustic mixing systems.

Installation hours for mechanical equipment and bulk materials were estimated based on MIQM experience. A crew rate has been applied based on typical MIQM rates built up from first principles, including supervision, superannuation, long services leave levy, payroll tax, workers compensation insurance and payroll costs.

Freight was estimated for bulk commodities based on recent projects. Costs to transport mechanical equipment and other materials to site have been estimated as a factored allowance.

The estimate for project management, engineering, procurement, construction management and commissioning services was built up from first principles based on the expected duration of each activity and MIQM rates.

The remaining costs were estimated on a factored basis:

- Electrical supply and installation
- Piping supply and installation
- Site indirect costs
- Temporary construction facilities

A growth allowance of 10% has been included based on the scope described in the Study.

11.8.3 Qualifications and Exclusions

The following qualifications and exclusions apply to the process and infrastructure capital estimate:

- Government duties, taxes, permits and fees.
- Licence fees.
- Land compensation costs.
- Environmental and ecological considerations.
- Mining exploration, further testwork phases up to FID.
- Mine equipment and development.
- Foreign exchange rate exposure.
- Escalation.
- Geotechnical investigations for the mine and plant site.
- Capital, insurance, and operational spares.
- First fills.
- Maintenance tools.
- Training of plant operators and maintainers.
- Finance and interest during construction.
- Working capital.
- Sustaining capital.
- Other non-process infrastructure estimated by others:
    - Tailings storage facility

- Mining Services Area
- Borefield Establishment
- Access roads
- Plant airstrip if required
- High-voltage power generation and reticulation

- Owner's costs:
  - Owner's project management team
  - Consultants
  - Approvals and licenses
  - Operational readiness
  - Training
  - Business systems
  - Pre-production costs
  - Operating/inventory spares

- Owner's contingency to cover:
  - Geotechnical risks
  - Weather delays
  - Industrial action
  - Incident management
  - Contractual risks
  - Foreign exchange risks
  - Scope changes due to unforeseen circumstances

11.9 Tailings Dam

A residual feature from previous mining is the intact tailings dam, located to the immediate west of the open pit. This facility was designed to ultimately accommodate 5Mt of tailings however only 700kt of tails has been deposited to date.

Studies to assess the ongoing efficacy of this facility form part of the permitting process, with the initial desktop work done to date carried out under the supervision of the initial tailings dam engineer, now engaged by WIN, suggesting no issues are evident to conclude it not being suitable for ongoing deposition.

With open pit mining planned in the initial phase should any downstream raising be required to buttress the wall (as in opposition to upstream raising previously assumed) this can be achieved with little extra cost given the material movement has been allowed for elsewhere.

Further raising if required is readily achievable to increase capacity beyond the remit of this study given the simple design and accommodating topography.

12 Milling Schedule

12.1 Milling Schedule Assumptions

Some of the key milling schedule assumptions used in the ore processing model were:

- Maximum milling rate = 75t/hr
- Plant availability = 92.5%
- Maximum milling rate per month = 50,000t
- Average gold recovery rate = 94.6%
- Nominal process plant power draw = 2.40MW

12.2 Milling Schedule & Costs

Table 12.1 - Milling Physical Schedule & Costs

		6 Months							9 Months	
ITEM	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
AV MILL ROM STOCKS											
Stock Ore Tonnes	t	36,813	112,240	24,509	28,554	78,335	157,996	196,880	50,018	31,095	**79,604**
MILL THROUGH PUT											
Tonnes	t	0	200,286	294,106	342,648	549,015	600,000	600,000	422,989	279,859	**3,288,903**
Grade - Au	g/t	0.00	1.90	1.99	2.21	2.24	1.80	1.76	2.27	1.87	**2.00**
Contained Ounces - Au	Oz	0	12,222	18,821	24,400	39,525	34,760	33,966	30,835	16,848	**211,376**
Recovery	%	0	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	**94.6**
Recovered Ounces - Au	Oz	0	11,562	17,804	23,082	37,390	32,883	32,132	29,170	15,938	**199,962**
Tailings Produced	t	0	200,285	294,106	342,647	549,013	599,999	599,999	422,989	279,858	**3,288,896**
Nominal Power Draw	**kWhr**	**0**	**801**	**1,176**	**1,371**	**2,196**	**2,400**	**2,400**	**1,692**	**1,493**	
OPERATING PROCESSING COSTS											
Operating Consumables	AUD$k	$0	$2,562	$3,789	$4,398	$6,986	$7,626	$7,626	$5,406	$3,585	**$41,978**
Maintenance	AUD$k	$0	$1,034	$1,669	$1,851	$2,627	$2,819	$2,819	$2,153	$1,474	**$16,446**
Process & Maintenance Labour	AUD$k	$0	$3,557	$7,113	$7,113	$7,113	$7,113	$7,113	$7,113	$5,335	**$51,573**
Power	AUD$k	$0	$2,535	$3,722	$4,336	$6,947	$7,593	$7,593	$5,353	$3,541	**$41,619**
TOTAL OP COSTS	**AUD$k**	**$0**	**$9,688**	**$16,293**	**$17,699**	**$23,674**	**$25,151**	**$25,151**	**$20,025**	**$13,936**	**$151,616**
START UP CAPITAL COST	AUD$k	$18,000	$51,477	$0	$0	$0	$0	$0	$0	$0	**$71,477**
SUSTAINING CAPITAL COST	AUD$k	$0	$610	$1,159	$1,159	$1,159	$1,159	$1,159	$1,159	$869	**$8,434**
TOTAL COSTS	**AUD$k**	**$18,000**	**$61,775**	**$17,452**	**$18,858**	**$24,833**	**$26,310**	**$26,310**	**$21,184**	**$14,805**	**$231,527**
UNIT OP PROCESING COSTS											
Operating Consumables	AUD$/t	$0	$12.79	$12.88	$12.84	$12.72	$12.71	$12.71	$12.78	$12.81	**$12.76**
Maintenance	AUD$/t	$0	$5.16	$5.67	$5.40	$4.78	$4.70	$4.70	$5.09	$5.27	**$5.00**
Process & Maintenance Labour	AUD$/t	$0	$17.76	$24.19	$20.76	$12.96	$11.86	$11.86	$16.82	$19.06	**$15.68**
Power	AUD$/t	$0	$12.66	$12.66	$12.65	$12.65	$12.66	$12.66	$12.66	$12.65	**$12.65**
TOTAL UNIT OP COSTS	**AUD/t**	**$0.00**	**$48.37**	**$55.40**	**$51.65**	**$43.12**	**$41.92**	**$41.92**	**$47.34**	**$49.80**	**$46.10**

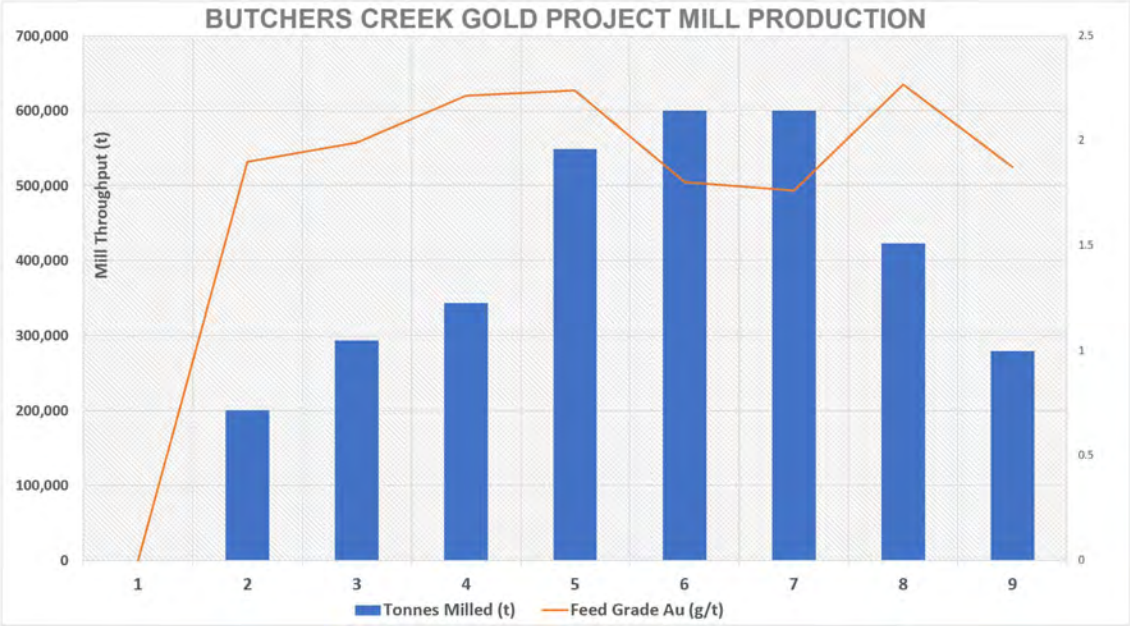


Figure 12.1 - Butchers Creek Processing Plant Feed

12.3 Milling Schedule Description

The processing plant is scheduled for commissioning in month 19 after a 9 month construction period. Mill throughput is scheduled at only 38kt for the first month with only 351kt of ore scheduled for processing in the first 12 months. During project month 53 the mill production peaks at the name plate capacity of 600kt/yr in years 5 to 7. During this period Ore ROM stocks average well above 100kt allowing for mill feed blending options.

Early ROM ore stocks are planned to peak at 153kt in month 18. Mine production peaks in year 6 with ROM stocks peaking at 226kt in month 81. After year 7 ROM stocks then continually deplete with final feed through the plant in month 105.

Life of mine monthly mill tailings production averages 37,803 dmt with total estimated LOM tailings of 3.3M dmt. The total planned tailings dam capacity is 5M dmt.

13 Mobile Machinery & Manpower Schedule

13.1 Open Pit Mining Resources

13.1.1 Mobile Machinery Schedule

Table 13.1 - Open Pit Mobile Machinery Schedule

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL (Av)
Heavy Mobile Machines													
90t Excavator CAT 395	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	**0.9**
Drill / Blast hole rig Epiroc D50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	**0.9**
40t Dump Truck CAT 740/745	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	**1.8**
Track Dozer CAT D8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	**0.9**
Grader CAT 12G	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	**0.9**
Water Cart - Iveco or similar	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	**0.9**
IT/Backhoe	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	**0.9**
TOTAL MAJOR MOBILE	**8.0**	**8.0**	**8.0**	**8.0**	**8.0**	**8.0**	**8.0**	**8.0**	**8.0**	**8.0**	**8.0**	**0.0**	**7.3**
Surface Linght Vehicles	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	**4.6**
TOTAL LV's	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**0.0**	**4.6**

The mine plan has the majority of major open pit mobile plant items and light vehicles being acquired on hire purchase agreements. This results in estimated monthly ownership costs that also include insurance and warranty items. Most of the plant will be depreciated over a 48-month period as per most normal mining operations.

Table 13.2 - Open Pit Mobile Machine Monthly Costs

MINING MACHINE	Ownership Costs Per Month	Material Parts Costs Per Month
LARGE EXCAVATORS		
90t Excavator CAT 395	$20,000	$10,000
BLAST HOLE DRILL		
Drill / Blast hole rig Epiroc D50	$10,000	$4,000
HAUL TRUCKS		
40t Dump Truck CAT 740/745	$15,000	$7,000
40t Dump Truck CAT 740/745	$15,000	$7,000
DOZERS		
Track Dozer CAT D8	$16,000	$12,000
GRADERS		
Grader CAT 12G	$12,000	$5,000
WATER CART		
Water Cart - Iveco or similar	$10,000	$6,000
TOOL CARRIER		
IT/Backhoe	$8,000	$4,000

MINING MACHINE	Ownership Costs Per Month	Material Parts Costs Per Month
FIXED PLANT		
Rockbreaker attachment x 2	$2,000	$500
Lighting Plant_2000W_D&B x 1	$1,200	$500
Genset 150kVA x 2	$2,000	$700
Compressor 375 CFM x 1	$1,000	$700
Welder 600 AMP x 1	$1,000	$300
LIGHT VEHICLES		
LV_Dual Cab 4WD_D&B	$2,500	$1,500
LV_Bomb Ute	$2,500	$1,500
Bus 30-seater	$3,000	$1,500
Mini Manhaul	$2,500	$1,500
LV_Dual Cab 4WD_Maintenance	$2,500	$1,500

13.1.2 Manpower Schedule

Table 13.3 - Open Pit Manpower Resources

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL (Av)
TECH & SUPERVISION													
SSE / Quarry Manager	1	1	1	1	1	1	1	1	1	1	1	0	**0.9**
Alternate QM / Senior Engineer	1	1	1	1	1	1	1	1	1	1	1	0	**0.9**
Mine Geologist	2	2	2	2	2	2	2	2	2	2	2	0	**1.8**
Surveyor	2	2	2	2	2	2	2	2	2	2	2	0	**1.8**
TOTAL	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**0**	**5.5**
MINE OPERATIONS													
Mine Supervisor	2	2	2	2	2	2	2	2	2	2	2	0	**1.8**
Operators	12	12	12	12	12	12	12	12	12	12	12	0	**11.0**
Driller	2	2	2	2	2	2	2	2	2	2	2	0	**1.8**
Shotfirer	2	2	2	2	2	2	2	2	2	2	2	0	**1.8**
Blast Crew	2	2	2	2	2	2	2	2	2	2	2	0	1.8
Dewatering	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**0**	**1.8**
TOTAL	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**0**	**20.2**
MAINTENANCE													
HD Fitter	2	2	2	2	2	2	2	2	2	2	2	0	**1.8**
Technician/s (tyre/elect/servicing)	2	2	2	2	2	2	2	2	2	2	2	0	**1.8**
TOTAL	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**0**	**3.7**
TOTAL OP MINING MANNING	**32**	**32**	**32**	**32**	**32**	**32**	**32**	**32**	**32**	**32**	**32**	**0**	**29.3**

13.2 Underground Mining Resources

13.2.1 Mobile Machinery Schedule

Table 13.4 - Underground Mobile Machine Schedule

ITEM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL (Av)
	None								9 Months	
Heavy Mobile Machines										
Twin Boom Jumbos	0.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0	0.8	0.9
Production Drill - BE58	0.0	0.3	1.0	1.0	1.0	1.0	1.2	1.0	0.8	0.8
Cable Bolt Rig - T38	0.0	0.7	1.0	1.0	1.0	0.5	0.0	0.0	0.0	0.5
Charge Machine	0.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0	0.8	0.9
Agitator Truck	0.0	0.3	1.0	1.0	1.0	1.0	1.2	0.3	0.0	0.6
Small Raise Drill/Box Hole	0.0	0.2	0.4	0.3	0.4	0.0	0.0	0.0	0.0	0.1
Development Loaders	0.0	1.0	1.0	1.0	1.0	0.4	0.0	0.0	0.0	0.5
Stope Loaders	0.0	0.7	2.0	2.0	2.0	2.0	2.4	2.0	1.5	1.6
Haul Trucks	0.0	1.3	2.0	2.0	3.4	3.4	3.3	2.0	1.5	2.1
IT's	0.0	3.0	3.0	3.0	3.0	3.0	3.6	3.0	2.3	2.7
Grader	0.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0	0.8	0.9
Surface Loader	0.0	0.3	1.0	1.0	1.0	1.0	1.2	1.0	0.8	0.8
ITH Rig - RC/Slots	0.0	0.7	1.0	1.0	1.0	1.0	1.2	1.0	0.8	0.8
										0.0
TOTAL HEAVY	**0.0**	**10.4**	**14.4**	**14.3**	**15.8**	**14.3**	**15.3**	**11.3**	**8.3**	**11.6**
Light Vehicles										
UG Workforce LV's	0.0	9.5	11.0	11.0	11.0	11.0	13.2	11.0	8.3	9.6
TOTAL LV's	**0.0**	**9.5**	**11.0**	**11.0**	**11.0**	**11.0**	**13.2**	**11.0**	**8.3**	**9.6**

The mine plan has the majority of major underground mobile plant items and light vehicles being acquired on hire purchase agreements. This results in estimated monthly ownership costs that also include insurance and warranty items. Most of the plant will be depreciated over a 48 month period as per most normal underground mining operations. Underground RC drilling/ITH drilling will be carried out by a dedicated subcontractor with associated rates inclusive of men and machinery supply thus excluded from Table 13.5.

Table 13.5 - Underground Mobile Machine Costs

MINING MACHINE	Ownership Costs Per Month	Material Parts Costs Per Month
JUMBOS		
JB 001 - 2 Boom (Sandvick ADD421 - Cab)	$45,000	$25,000
PRODUCTION DRILLS		
PD 001 - T58 (Sandvick DL431 - Cab) Boom	$45,000	$25,000
CABLE BOLTER		
PD 002 - T38 Drill	$25,000	$15,000
CHARGE MACHINES		
CM 001 - (Normet Charmec) - With Emulsion Kit	$32,000	$15,000

MINING MACHINE	Ownership Costs Per Month	Material Parts Costs Per Month
AGITATOR TRUCK		
AT 001 - (Normet LF700 Agi Truck)	$25,000	$10,000
UNDERGROUND LOADERS		
LD 001 - CAT 1700 (new)	$45,000	$18,000
LD 002 - CAT 1700 (Remotes)	$45,000	$18,000
LD 003 - CAT 1700 (Remotes)	$45,000	$18,000
TRUCKS		
TR 001 - Haul Truck (40t Ejector)	$45,000	$20,000
TR 002 - Haul Truck (40t Ejector)	$45,000	$20,000
TR 003 - Haul Truck (40t Ejector)	$45,000	$20,000
TR 004 - Haul Truck (40t Ejector)	$45,000	$20,000
UTILITIES		
IT 001 - Volvo L120F Toolcarrier	$20,000	$8,000
IT 004 - Volvo L90F Toolcarrier	$15,000	$6,000
IT 005 - Volvo L90F Toolcarrier	$15,000	$6,000
SURFACE LOADERS		
LS 001 - Volvo L220 Toolcarrier	$30,000	$15,000
GRADERS		
GR 001 - Elphinstone UG20M	$18,000	$10,000
LIGHT VEHICLES		
Toyota Wagon - Project Manager	$3,200	$2,500
Toyota PC - OH & S Training 1	$3,200	$2,500
Toyota Ute - Foreman	$3,000	$4,000
Toyota Ute - Shift Boss	$3,000	$4,000
Toyota Ute - Charge Up	$3,000	$4,000
Toyota Ute - Service Crew	$3,000	$4,000
Toyota Ute - Nipper 1	$3,000	$4,000
Toyota Ute - Fitter 1	$3,000	$4,000
Toyota Ute - Elec 1	$3,000	$4,000
Coaster Bus 1	$2,500	$2,500

13.2.2 Manpower Schedule

Table 13.6 - Underground Mine Manpower Schedule

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL (Av)
MINING										
Project Manager	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	**0.9**
Mine Foreman	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	**0.9**
Site Engineer	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	**0.9**
Admin/Stores Officer	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	**0.9**
Site Clerk	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	**0.9**
OH & S Officer	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	**0.9**
Trainer	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	**0.9**
Shift Bosses	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.3	**2.6**
2 Boom Jumbo 1	0.0	3.0	3.0	3.0	3.0	1.3	0.0	0.0	0.0	**1.5**
Production Drill	0.0	1.0	3.0	3.0	3.0	3.0	3.0	3.0	2.3	**2.4**
Cable Bolter Drill	0.0	1.3	2.0	2.0	2.0	1.0	0.0	0.0	0.0	**0.9**
Agi Truck Driver	0.0	0.8	3.0	3.0	3.0	2.5	2.0	0.5	0.0	**1.6**
Development Loader	0.0	3.0	3.0	3.0	3.0	1.3	0.0	0.0	0.0	**1.5**
Stope/Back Fill Loader	0.0	2.0	6.0	6.0	6.0	6.0	6.0	6.0	4.5	**4.7**
Multi Skill	0.0	1.0	2.0	2.0	2.0	0.8	0.0	0.0	0.0	**0.9**
Charge Up/Service Crew	0.0	7.5	9.0	9.0	9.0	7.3	6.0	6.0	4.5	**6.5**
Truck Drivers	0.0	4.0	6.0	6.0	8.8	7.3	6.0	6.0	4.5	**5.4**
Nipper	0.0	3.0	3.0	3.0	3.0	1.3	0.0	0.0	0.0	**1.5**
Grader Driver	0.0	1.2	2.0	2.0	2.0	2.0	2.0	2.0	1.5	**1.6**
TOTAL	**0.0**	**37.8**	**52.0**	**52.0**	**54.8**	**43.6**	**35.0**	**33.5**	**24.8**	**37.0**
MAINTENANCE										
Maintenance Manager	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	**0.9**
Leading Hand Fitter	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.5	**1.7**
Fitters	0.0	8.8	12.0	12.0	12.0	10.3	9.0	9.0	6.8	**8.9**
Boiler Makers	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	**0.9**
Auto Electrician	0.0	1.3	2.0	2.0	2.0	2.0	2.0	2.0	1.5	**1.6**
Electrical Foreman (HV)	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	**0.9**
Electricians	0.0	2.5	3.0	3.0	3.0	2.4	2.0	2.0	1.5	**2.2**
Fitter Assistant	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	**0.9**
TOTAL	**0.0**	**18.6**	**23.0**	**23.0**	**23.0**	**20.7**	**19.0**	**19.0**	**14.3**	**17.8**
CONTRACT MANNING										
Specialists	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
ITH Drillers	0.0	4.0	6.0	6.0	6.0	5.7	4.0	4.0	3.0	**4.3**
Raise Bore	0.0	1.0	1.7	1.3	4.7	0.0	0.0	0.0	0.0	**1.0**
TOTAL	**0.0**	**5.0**	**7.7**	**7.3**	**10.7**	**5.7**	**4.0**	**4.0**	**3.0**	**5.3**
TOTAL UG MINING MANNING	**0**	**61.3**	**82.7**	**82.3**	**88.4**	**69.9**	**58.0**	**56.5**	**42.0**	**60.1**

13.3 Full Operation Resources

13.3.1 Mobile Machinery Schedule

The Full Operation Mobile Machinery Schedule summary is presented below in Table 13.. Heavy machinery plant numbers peak at 23 in year 5 with underground mine still in development and full ore production achieved. The mill at full operation has on average 7 heavy mobile machines and 5 light vehicles. The Administration and Camp requires 5 light vehicles to support the full operation.

Table 13.7 - Operation Mobile Machine Schedule

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL (Av)
HEAVY MOBILE MACHINES										
Open Pit Mining	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
UG Mining	0.0	10.4	14.4	14.3	15.8	14.3	15.3	11.3	8.3	**26.0**
UG Tech Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Milling	0.0	3.5	7.0	7.0	7.0	7.0	7.0	7.0	5.3	**8.3**
Administration	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
TOTAL	**7.3**	**13.9**	**21.4**	**21.3**	**22.8**	**21.3**	**22.3**	**18.3**	**13.5**	**34.2**
LIGHT VEHICLES										
Open Pit Mining	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
UG Mining	0.0	9.5	11.0	11.0	11.0	11.0	13.2	11.0	8.3	**17.7**
UG Tech Services	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	3.8	**8.3**
Milling	0.0	2.5	5.0	5.0	5.0	5.0	5.0	5.0	3.8	**4.1**
Administration	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	3.8	**5.0**
TOTAL	**12.6**	**22.0**	**26.0**	**26.0**	**26.0**	**26.0**	**28.2**	**26.0**	**19.5**	**35.2**

Operation group departments are:

- Open Pit Mining – Direct and Tech mining personnel and resources.
- UG Mining – Direct mining personnel and resources.
- UG Tech Services – UG Mine management and technical services.
- Milling – Ore cartage and processing.
- Administration – Site management, village, surface plant, and site commute costs.

The processing plant will require the below Major Mobile Plant items:

- Volvo L220 ROM Loader 1
- Volvo L220 ROM Loader 2
- Volvo L90 Tool Carrier
- Hitachi Rock Breaker
- Toyota Bob Cat
- Elevated Mobile Work Platform
- Crane 55t

13.3.2 Manpower Schedule

Table 13.8 - Total Operation Manning Schedule

MONTH	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL (Av)
PERSONNEL NUMBERS										
Open Pit Mining	29.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**3.3**
UG Mining	0.0	61.3	82.7	82.3	88.4	69.9	58.0	56.5	56.0	**61.7**
UG Tech Services	0.0	8.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	**7.9**
Milling	6.7	50.3	39.0	39.0	39.0	39.0	39.0	39.0	39.0	**36.7**
Administration	21.5	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	**24.6**
TOTAL (Peak)	58	145	156	155	161	143	131	130	129	**134**
TOTAL ONSITE (Average)	40	101	109	109	113	100	92	91	90	**94**

The largest early demand for manpower is for site construction with the mill, camp and powerline projects being the largest items. Mill construction manpower peaks at 70 persons from months 12 to 15. The camp construction requires 16 people for month 1 to 4. Total manpower numbers peak in year 5 with the underground mine either still in development and at full production.

The estimated total onsite numbers uses a factor of 0.7 to allow for the FIFO workforce roster arrangements. The subsequent selected camp size is 200 rooms which provides enough additional rooms to cover maximum operational requirements such as mill relines or additional expansion projects.

Initial camp facilities are assumed to be accommodated in nearby Halls Creek (30km) with an additional cost of $50/man day (Total of $130/day) added to accommodation costs for this 3month period.

14 Site Infrastructure

14.1 Site Power

The Butchers Creek Gold Project requires power for the underground mining operations, 600ktpa processing facility, administration Offices, 200-man camp, Lake Komaterpillar Pump Station and core yard.

There is no nearby sufficient available grid power or gas supply line. Given the location, scope and length of the operation the initial focus has been on utilising a centralised diesel power station. No provision for renewables has been considered within the current study scope

14.1.1 Site Power Requirements

A detailed assessment of the power consumption for all major components of the project was conducted. Estimated power consumption for these areas was calculated from the electrical plant, provided by the processing plant design requirements, as well as bench marking the proposed project against other similar operations with measured power consumption data.

Table 14.1 - BC Gold Project Estimated Nominal Power Draw

ITEM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Power Consumption (kW)									
Underground Mine	0	1,239	2,358	2,688	2,713	2,306	1,983	1,881	1,461
Mill	0	784	1,152	1,342	2,150	2,350	2,350	1,699	31
Bore Field/Water Supply	0	17	25	29	46	50	50	36	30
Admin Offices	29	29	30	30	30	30	30	30	51
Camp	23	58	62	62	64	57	52	52	50
Other	50	43	50	50	50	50	50	50	0
Spinning Reserve	5	108	184	210	253	242	226	187	172
Total Draw (Nominal)	**107**	**2,278**	**3,860**	**4,410**	**5,306**	**5,085**	**4,741**	**3,935**	**1,796**

14.1.2 Surface HV Infrastructure

Surface High Voltage electrical infrastructure for the project will include :

- A central diesel power station with 415V gensets likely 8 x 1MW.
- A central HV yard that would comprise of 2 x 8MW 415V/11kV transformers and an 11kV switch room for site distribution.
- An 11kV powerline of length 1.8km from the main 11kV switch to the camp 0.5MVa 11kV/415V transformer.
- An 11kV power line of length 600m from the main 11kV switch to the UG mine 11kV switch.
- An 11kV power line of length 1.7km from UG switch to the Lake Komaterpillar pump station 0.3MVa 11kV/415V transformer

Overall in total the site surface HV reticulation design has 4.1km of overhead 11kV HV powerlines.

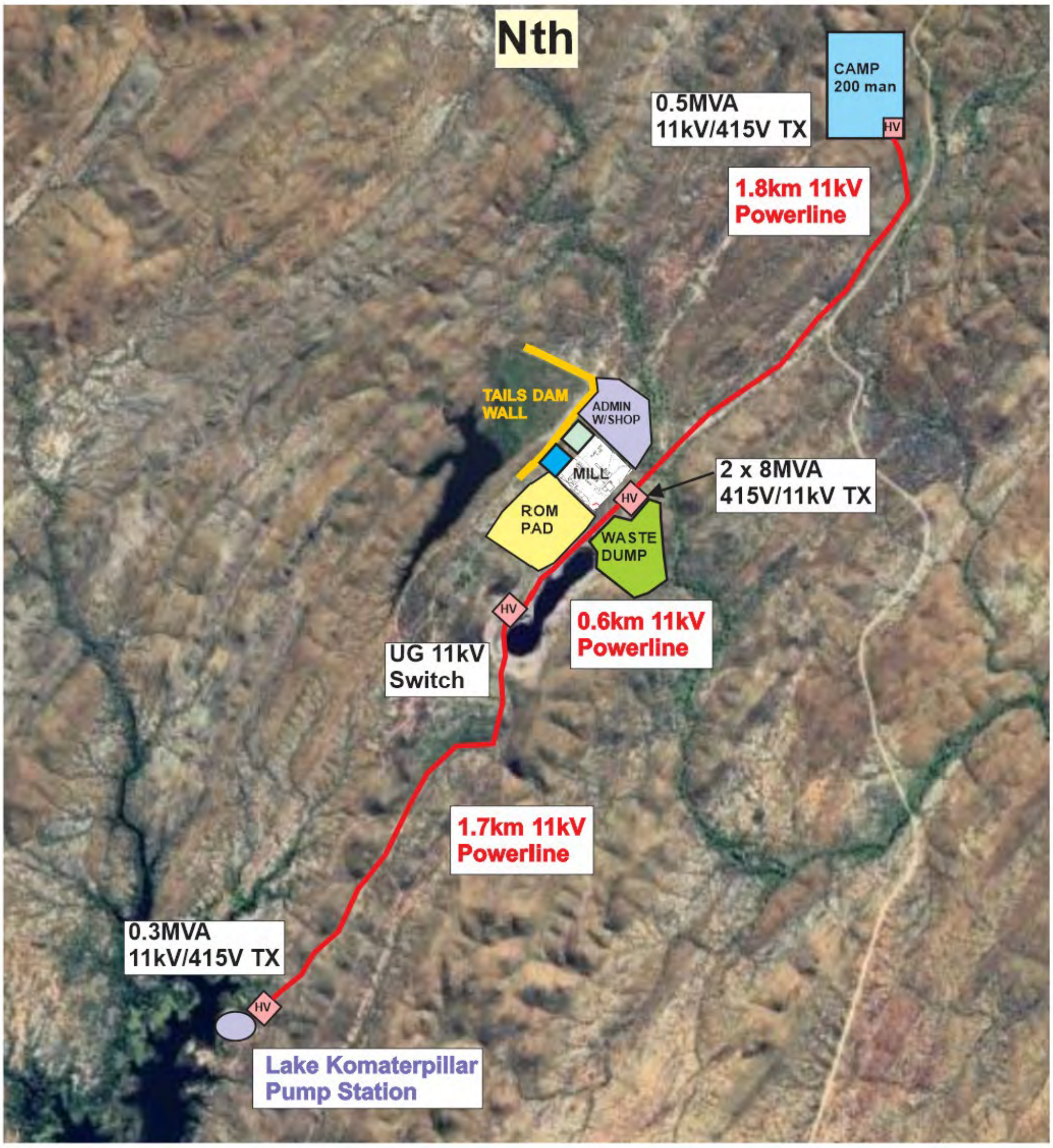


Figure 14.1 - BC Gold Project Surface HV Reticulation

The plan in Figure 14.1 displays the size and scope of the BGCP surface HV Power reticulation works.

14.1.3 Surface HV Infrastructure Costs

The HV surface project costs have been estimated using a fully detailed project schedule and applying current industry costs.

Table 14.2 - BC Gold Project Surface HV Infrastructure Costs

Item #	Description	Engineering Cost	Supply Costs ($)	Installation (Hrs)	Labour Costs ($)	Freight Costs ($)	TOTAL COSTS ($)
1	Main HV 11kV Switch Gear	$50,000	$1,268,818	300	$54,000	$126,882	**$1,500,000**
2	2 x 8MVA 415V/11kV TX	$20,000	$866,227	150	$27,000	$86,623	**$1,000,000**
3	1.8km 11kV OHL (Camp)	$50,000	$300,000	800	$144,000	$30,000	**$524,800**
4	0.5MVA 11kV/415 TX (Camp)	$10,000	$200,000	50	$9,000	$20,000	**$239,050**
5	0.6km 11kV OHL (UG)	$10,000	$177,045	250	$45,000	$17,705	**$250,000**
6	UG 11KV Switch (RMU)	$10,000	$73,591	50	$9,000	$7,359	**$100,000**
7	1.7km 11kV OHL (Camp)	$50,000	$277,455	800	$144,000	$27,745	**$500,000**
8	0.5MVA 11kV/415 TX (Camp)	$10,000	$150,000	50	$9,000	$15,000	**$184,050**
	TOTALS	**$210,000**	**$3,313,136**	**$2,450**	**$441,000**	**$331,314**	**$4,297,899**

14.1.4 Site Unit Power Costs

For this Scoping Study it is assumed that the power station will be provided by a third party with an allocated IPP cost of $0.07/kWhr. This will cover both the provision of the diesel gensets as well as operation, maintenance and margin. The provided power station is assumed to be 8 x 1MVA/415V diesel generators.

It is assumed that the gensets will on average consume 0.24l/kWhr as per most suitable available diesel gensets. An additional 5% of power has also been allocated as an average operating spinning reserve.

Table 14.3 - Project Power Consumption & Costs

ITEM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
SITE POWER COSTS										
Diesel Consumptions (l)	222,320	4,723,723	8,004,666	9,145,364	11,002,442	10,543,530	9,829,916	8,066,413	5,626,040	**67,164,414**
Diesel Cost	$389,060	$8,266,516	$14,008,165	$16,004,387	$19,254,274	$18,451,178	$17,202,353	$14,116,222	$9,845,570	**$117,537,725**
Power Provider Margin	$64,843	$1,377,753	$2,334,694	$2,667,398	$3,209,046	$3,075,196	$2,867,059	$2,352,704	$1,640,928	**$19,589,621**
Diesel Rebate	$114,717	$2,437,441	$4,130,408	$4,719,008	$5,677,260	$5,440,462	$5,072,237	$4,162,269	$2,903,037	**$34,656,838**
Unit Cost ($/kWhr)	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	**$0.37**
POWER COSTS (Area Splits)										
Underground Mine	$0	$3,919,794	$7,459,558	$8,503,158	$8,582,380	$7,293,731	$6,271,881	$5,951,565	$4,321,310	**$52,303,378**
Mill	$0	$2,481,712	$3,644,226	$4,245,702	$6,802,759	$7,434,513	$7,434,513	$5,241,201	$3,467,691	**$40,752,316**
Bore Field/Water Supply	$0	$52,802	$77,537	$90,334	$144,740	$158,181	$158,181	$111,515	$73,781	**$867,071**
Admin Offices	$92,272	$92,272	$94,909	$94,909	$94,909	$94,909	$94,909	$94,909	$71,182	**$825,178**
Camp	$72,581	$182,611	$196,496	$196,075	$203,754	$180,402	$165,359	$163,256	$122,126	**$1,482,659**
Other	$158,181	$134,454	$158,181	$158,181	$158,181	$158,181	$158,181	$158,181	$118,636	**$1,360,358**
Spinning Reserve	$16,152	$343,182	$581,545	$664,418	$799,336	$765,996	$714,151	$586,031	$408,736	**$4,879,548**
TOTAL POWER COSTS	**$339,187**	**$7,206,827**	**$12,212,452**	**$13,952,777**	**$16,786,059**	**$16,085,912**	**$14,997,176**	**$12,306,657**	**$8,583,461**	**$102,470,508**

14.2 Site Water Supply

The BGCP plan requires a reliable water supply for the operation to run the processing plant, provide potable water for offices, ablutions and the camp. The Project also has current significant water resources in the current Butchers Creek open pit of 2.9ML and the nearby Lake Komaterpillar has water reserves of 2,567ML (as of April 2025).

The underground mine will have a water supply recirculation system including 2 surface water tanks. This circuit is assumed to have a slightly negative water balance given all existing information. Unless there is significant additional water capture from storms, or unanticipated additional ground water ingress some water over time may need to be added to these circuits from the current reserves. The underground mine will also be capable of discharging water to the process water dam/TSF.

The processing plant will have two dams built with one as the main feed for the process plant and the other as a transfer dam that can feed water to the underground mine or camp. The main source of water for the plant will be via an overland pipeline from the planned Lake Komaterpillar pump station. The existing tails dam will provide initial water for processing until surplus water stored here is exhausted thereafter supernatant water will be returned to supplement process water from Lake Komaterpillar.

14.2.1 Site Water Requirements

An industry average estimate of 20 litres per second will be required for the process plant based upon 600ktpa capacity. Once the plant has been in production for 3 months and the tailings dam has reached a certain saturation point a percentage of process water can be recirculated for use and pumped from the tails dam to the process water dam. In this study a 20% water recirculation figure has been used after 4 months of plant operation. The current estimated negative water balance for the process plant including tails recirculation and evaporation is 16 litres per second.

The underground mine will be established with a water recirculation circuit. All indications suggest there will be minimum ground water inflow. For water consumption estimates for this study it has been assumed that a 20% water evaporation and water loss factor will be applied for mine water resulting in a minimal 3 litres of second being required.

The operation plan does include 10km of surface roads with including light vehicle roads, carparks and laydown zones. These areas will all require dust suppression particularly during the summer months. A site water truck and operators have been included in the site costs and a notional allocation of 5 litres per second of water has been included for dust suppression use.

Table 14.4 - BC Gold Project Water Consumption Estimate

ACTIVITY	Rate	Description	Gross (Litres/s)	NET CONSUMPTION		
				Recirculation	(Litres/s)	Comment
Ore Processing	600kt/yr	tonne for tonne	20	20%	16	After 4 months
Mining	600kt/yr	Drill/Dust	15	80%	3	From Recirc
Site Dust Supression		All Roads	5	0%	5	No Recirc
Camp (100 Persons)	150l/person	Per man day	0.2	0%	0.35	Potable or RO
Change Rooms (100 Persons)	50l/person	Per man day	0.1	0%	0.12	Potable or RO
TOTAL			**40.3**		**24.5**	

Overall, it is estimated that the operation will require a secure reliable supply of 25l/s of acceptable quality water. Further water supply quantity and quality standards for the operation will be established after the completion of the final detailed process plant design.

14.2.2 Water Discharge

In the first 18 months of the project all excess discharge mine water will be pumped to the proposed tailings dams site. After that one of the process water dams will be designated as the discharge dam. This dam will have the capacity to treat the water such that it can be discharged to Lake Komaterpillar if required.

14.2.3 Environmental Water Reporting

The DIMIRS will require an annual report covering progress with water quality monitoring and rehabilitation to be laid out in the Notice of Intent.

14.3 Site Camp (Workforce Accommodation)

It has been assumed the workforce will be made up primarily of FIFO workers with some Halls Creek residents also possibly in the workforce. For the purposes of this study 100% of the workforce are assumed FIFO

Initial accommodation in months 1 to 3 will be provided for FIFO workers/contractors in Halls Creek with onsite numbers peaking at 38 during that period. There are several accommodation options available in Halls Creek with the Kimberley Motel having 60 available rooms.

From month 4 forward it is scheduled that the 200-person onsite camp will be operational with current maximum onsite numbers for the operation estimated at 107 in month 51. The resulting spare 93 rooms have been included in the camp size to allow accommodation for mill relines, mine exploration, and other potential large future projects. The maximum total workforce size has been estimated at 153 also in Month 51.

The estimated capital cost of the 200-man camp is $18M and the construction period 3 months.
The estimated cost per man day for each worker housed in the onsite camp from month 4 forward is $80/day. There has also been an additional $50k/mth cost applied for fixed running cost of the onsite village.

The cost per man day for each worker housed in Halls Creek during the first 3 months has been estimated as $130/day.

14.4 Workforce Transport

FIFO Employees and Contractors will be offered air transport on chartered flights from Perth Airport to Halls Creek. The Halls Creek Airport has two runways with the main runway is 1,474m in length, width 29m, runs SW to NE (44 deg 224 deg), and is fully sealed in Asphalt. For the study it has been assumed that personnel will fly to site on a combination of charter and commercial flights. The estimated cost per person per flight from Perth to Halls Creek used in this study is $500 one way.

There are 2 onsite buses costed in the study for the transportation of workers the 30km from the Hall Creek airport to the operation camp as well as twice daily from the onsite camp to the work site. Senior mine site personnel will also have access to a number of light vehicles providing additional transport options outside of bus times.

Onsite work rosters will be mostly a combination of 2 week on 2 weeks off, and 2 weeks on 1 week off.

Figure 14.2 - Map of Halls Creek and Airport Location

Table 14.5 - BC Gold Project Accommodation & Flight Costs

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
TOTAL Av WORKFORCE										
WIN Admin	12.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	**12.9**
Cattering Staff	7.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	**9.7**
Additional Visitors	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	**2.0**
Open Pit Mining	29.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**3.3**
WIN UG Management/Tech Services	0.0	8.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	**7.9**
UG Mining	0.0	61.3	82.7	82.3	85.4	69.9	58.0	56.3	56.0	**61.3**
Milling	6.7	50.3	39.0	39.0	39.0	39.0	39.0	39.0	39.0	**36.7**
TOTAL	**57.5**	**144.7**	**155.7**	**155.3**	**158.4**	**142.9**	**131.0**	**129.3**	**129.0**	**133.8**
Onsite Ratio	70%	70%	70%	70%	70%	70%	70%	70%	70%	**70%**
Total Av. Onsite	**40.3**	**101.3**	**109.0**	**108.7**	**110.9**	**100.0**	**91.7**	**90.5**	**90.3**	**93.6**
ACCOMODATION COSTS										
Camp - Fixed Cost (Monthly)	$450,000	$600,000	$600,000	$600,000	$600,000	$600,000	$600,000	$600,000	$450,000	**$5,100,000**
Camp -Operating ($80/manday)	$843,167	$2,808,694	$3,022,505	$3,016,334	$3,076,237	$2,773,848	$2,543,758	$2,511,412	$1,873,544	**$22,469,499**
Halls Creek Premium ($130/manday)	$443,489	$0	$0	$0	$0	$0	$0	$0	$0	**$443,489**
Camp - Other Costs	$12,000	$12,000	$12,000	$12,000	$12,000	$12,000	$12,000	$12,000	$9,000	**$105,000**
TOTAL	**$1,748,655**	**$3,420,694**	**$3,634,505**	**$3,628,334**	**$3,688,237**	**$3,385,848**	**$3,155,758**	**$3,123,412**	**$2,332,544**	**$28,117,987**
FLIGHT COSTS	**$1,035,000**	**$2,604,000**	**$2,802,000**	**$2,796,000**	**$2,851,500**	**$2,572,500**	**$2,358,000**	**$2,328,000**	**$1,741,500**	**$21,088,500**

14.5 Site Roads

The BGCP is accessible from Halls Creek via Duncan Road which is a 30km long gazetted partially sealed road. The Great Northern Highway connect Halls Creek with Port Hedland via a sealed all whether highway of length 1,228km. Necessary freight can also be brought to site via the Darwin Port (1,189km) or Perth via the Great Northern highway (2,659km).

Overall, for the project $700k has been allocated for the building and improvement of site roads.

14.6 Telecommunications

Telephone and internet communications will be required onsite. They will be provided by internet linked services. Both VHF and UHF radio communications will be established at each mine site and a comms hut established. The main administration office will house a communications server room with fibre optic cable being reticulated around site via the powerline system.

Overall $500k has been allocated for the establishment of onsite communications.

14.7 Refuse Disposal

All General and Industrial Refuge is planned to be put into industrial waste bins and removed from site.

15 Surface Construction Costs

15.1 Operation Establishment Costs

Table 15.1 - Operation Construction Capital Costs

YEAR	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	TOTAL
ESTABLISHMENT COSTS										
Batch Plant	AUS$k	$1,000								$1,000
Site Roads and Signs	AUS$k	$500	$200							$700
Onsite Camp (200 Rooms)	AUS$k	$18,000								$18,000
Main Admin Offices	AUS$k	$2,250								$2,250
Onsite Communications	AUS$k	$400								$400
Main HV Switch Yard	AUS$k		$2,500							$2,500
Process Plant Construction	AUS$k		$2,500							$2,500
Lake Komaterpillar Pump Station	AUS$k		$69,477							$69,477
Power Line to UG (11kV)	AUS$k		$350							$350
Main UG Workshop	AUS$k		$914							$914
UG Offices & Changerooms	AUS$k		$480							$480
UG Communications	AUS$k		$100							$100
UG Fuel Station	AUS$k		$260							$260
UG Compressed Air	AUS$k		$295							$295
UG Water Supply	AUS$k		$192							$192
Surface Magazine	AUS$k	$300								$300
TOTAL	AUS$k	$22,450	$77,268	$0	$0	$0	$0	$0	$0	$99,718

16 Site Layouts

16.1 Project Overview Layout

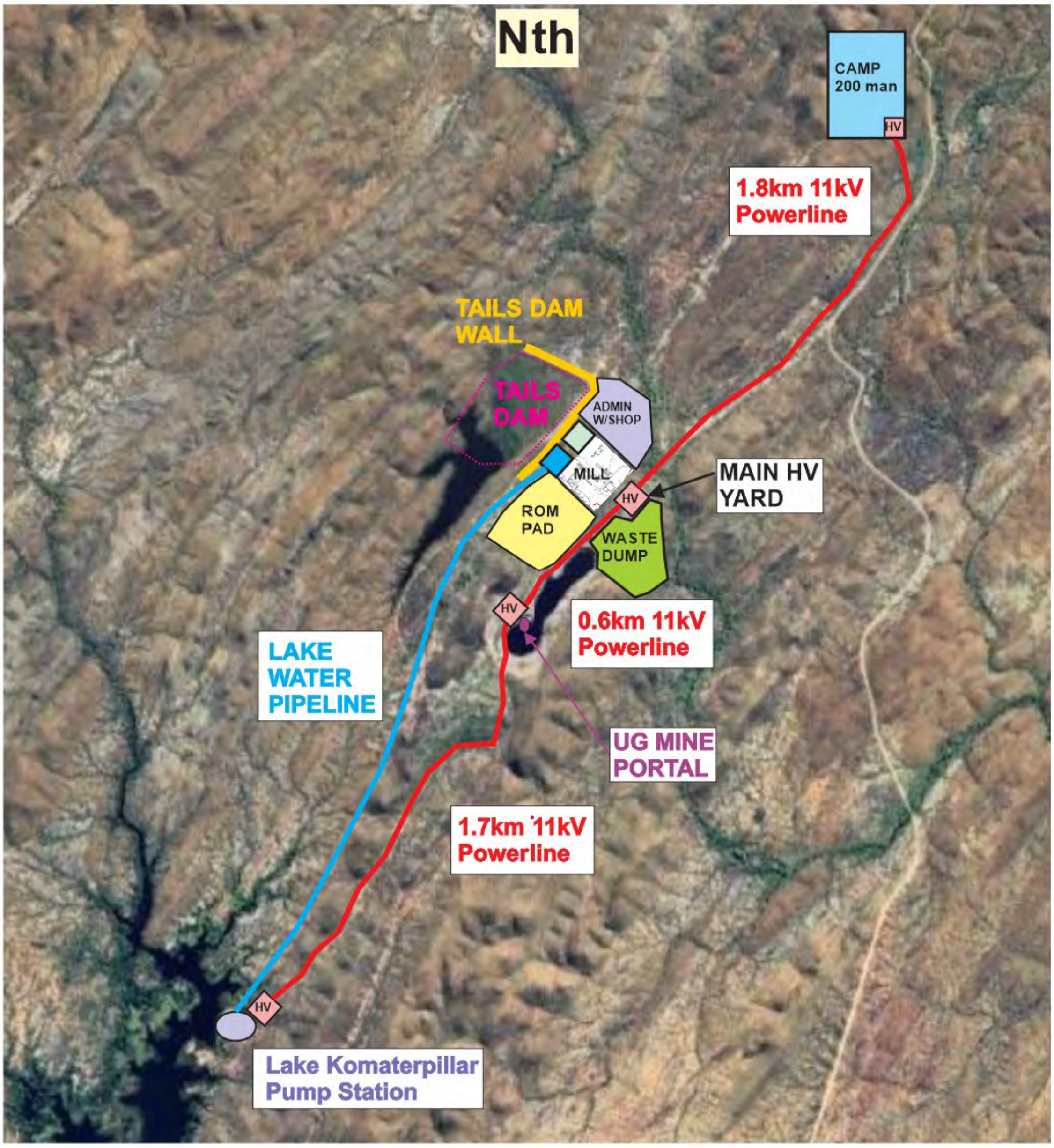


Figure 16.1 – Butchers Creek Gold Project Conceptual Layout

BGCP will require several important central facilities for efficient operations. These common facilities are planned for construction close to the centre of operations. This main centre will host the mill, main administration offices, power station, batch plant, main lay down area, core yard facility the processing plant, main store, surface magazine and maintenance offices with workshop.

A main project office complex is required for site management, mining/maintenance planning, and coordination of the mining operation. These works are scheduled for completion in the first 3 months of the operation.

The main administration office complex will consist of :

- Mine rescue and medical facilities.
- Management and tech services offices.
- A main muster area and crib room.
- Both male and female change room and ablution facilities.
- Central store facility.
- Fixed plant and maintenance offices and workshop.

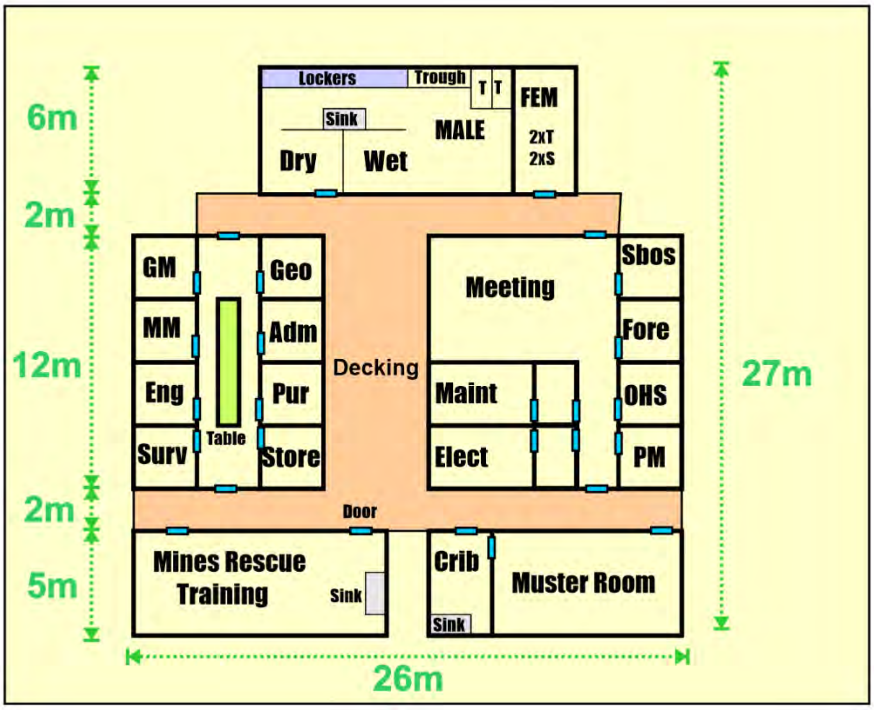


Figure 16.2 - Central Administration Facilities Conceptual Layout.

The mining operation will require a central workshop and store facilities to provide maintenance, inventories, and logistical support. The workshop design provides 2 large work bays (12m x 6m) that are designed with roof dome covers. Store supplies are planned to be provided by 9 large (6m x 3m) shipping containers with shelving and lockable doors. There is also a required concrete wash down pad with sump and oil water separator. Store oils and grease where required will also be supplied with self bunding storage.

The planned workshop area will require significant concrete works (48.4m^3) which is proposed to be constructed by a combination of pre-fabricated concrete slabs as well as some onsite direct concrete pours. A large 2m apron will also be provided by the workshop to ensure minimal contamination from the ground by grease and oils. A designated "Go Bay" for machinery is also planned to provide safe trafficking for heavy mobile plant and light vehicles.

The workshop facility will also have an adjoining site storage area with a designated lay down area for inventory deliveries and item pick-ups. The storage area will be constructed of 3 large (6m x 3m) sea containers with additional colour bond roof sheeting areas.

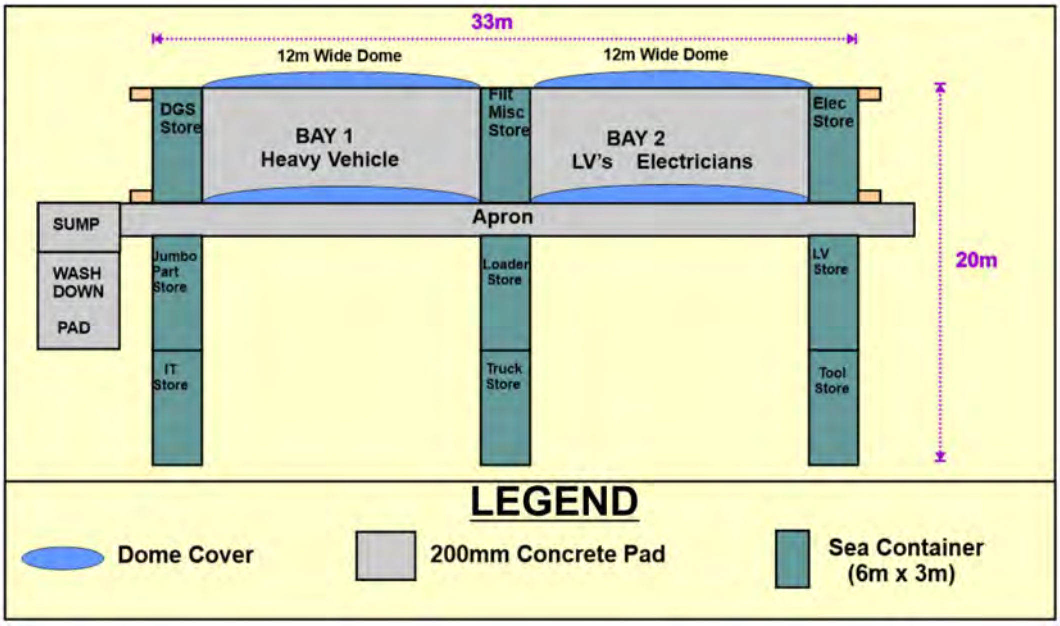


Figure 16.3 - Proposed Main Workshop Layout

17 Environmental & Social

17.1 Environmental Conditions

17.1.1 Flora

The vegetation in the project area forms part of Beard's (9179) Halls Creek Ridges vegetation. The vegetation consists of scattered stunted trees (Eucalyptus brevifolia, and E.dichromophloia and E.terminalis) and hummock grasses as ground cover. The grasses vary according to rock type; Triodia intermedia and T. inutilis occur over sedimentary rocks and T wiseana and T. intermedis over basalt. Other grasses include Aristida inaequigumis, Enneapogon spp. And Tragus Australiensis found between spinifex hummocks (Beard, 1979).

Numerous species of scattered shrubs occur including Acacia bivenosa, A.holosericea, A. monticola, A lysiphloia, Cassia chaterlainiana, Grevillea dimidiate, G. pyramidalis, G.wickhamii and Hakea arborescens.

There has been significant disturbance of natural surfaces and profiles prior to WIN metals activities, resulting from both grazing (cattle, donkeys, horses and camels) as well as previous mining works.

WIN Metals considers it unlikely the future proposed activities will further effect local fauna which has already been previously impacted by grazing and mining activities over the past 120 years.

17.1.2 Fauna

Due to the absence of site specific data, information concerning typical mammal and reptile species for the Halls Creek region has been obtained from the data base of the WA Museum. From observations at Halls Creek, and the Black Elvire River, mammals common to the area are listed below in Table 17.1.

Table 17.1 - Summary of Mammals of the Area

MAMMAL	SCIENTIFIC NAME	STATUS
Sheathtail Bats	Taphozous Georgianus	Common
Kanagroos	Macropus	Abundant
Northern Naitail Wallaby	Onychogalea Unguifera	Common
Northern Brushtail Possum	Trichosurus Arnhemensis	Common
Short-Beaked Echidna	Tachyglossus Aculeatus	Common
Little Cave Eptesicus	Eptesicus Carinus (Bat)	Abundant

There are numerous reptile species recorded for the region, however most do not have common names. The area may have representatives from 9 species of frilled lizards, 5 species of snakes, 8 species of geckos, 4 species of frogs, 3 species of legless lizards, 10 species of skinks, 2 species of blind snakes, and 2 species of monitor lizards recorded.

There are two distinct habitats for fauna in the area. One is the low savanna woodland which will be subject to mining activities. The other is the Komaterpillar Lake area. There are no recorded specific sightings of birds unique to the local area with bird species likely to be typical to the regional Kimberley Division habitat.

The availability of the woodland habitat and management measures at the mining operation and the Komaterpillar Lake area indicate that the impact on fauna will not be significant.

17.1.3 Physical Impact

WIN metals will ensure that no unnecessary clearing of vegetation occurs during the construction and mining operations with the expected footprint replicating that previously in place from earlier mining operations. Exploration and mining activities will be planned to minimize the amount of ground clearing required. Vehicle movement will be controlled and restricted to established roads and tracks where possible.

Every effort will be made to avoid introducing new plant species that are not already well represented in the area. Domestic pets will be prohibited from the area and mining personnel interaction with fauna restricted. All mine workers will be prohibited from possessing and using firearms in the project area.

Table 17.2 - Estimated Area of Project Disturbance

LOCATION	AREA (Ha)
Butchers Creek Open Pit	8
Tailings Dam	8
Waste Dumps	12
Plant Site	5
Offices and Workshops	5
Laydown Area	5
Camp	5
Power Line Coridoors	1
Pipeline Coridors	1
TOTAL	**50**

The total area expected to be disturbed by the planned mining operation is 50 Hectares (Table 17.2).

The major disturbance areas are separate from each other and only affect a small part of the similar environments in the immediate vicinity of these sites. Thus the resulting impact on the local flora and fauna population is considered insignificant.

17.2 General Environment

WIN Metals staff and representative consultants have and will continue to communicate and liaise with various stakeholders including Traditional Owners and those who are recognised as custodians for the land, regulatory bodies, the Halls Creek community, Pastoral lease holders and the Halls Creek Shire Council.

These engagements have involved the likely mining plan and proposed infrastructure layouts and likely timing of events for the construction and operational aspects of the project.

All the study work required to support the approvals, and ongoing management of the Project include:

- Level 2 flora and vegetation studies.
- Level 2 fauna assessments.
- Hydrology and hydrogeology studies to determine the impacts of water abstraction and drawdown, discharge to the environment (open pits and storage ponds) and changes to hydrological regimes associated with mining infrastructure.
- Soil characterisation studies.
- Waste characterisation Studies, including acid generation potential.
- Tailings characterisation studies.

The information gathered by the various studies will be used to update the site environmental management plans and procedures and will be used to ensure the construction, operation and closure of the Project can be done with the highest levels of environmental management and protection. WIN Metals has reasonable grounds to expect that all necessary approvals and contracts will eventuate as required by the project development schedule. No approvals have been sought at this time.

17.3 Social & Community Returns

WIN Metals has formed strong relationships with the local communities near the proposed operation. The Company recognises that contributing to the local community beyond direct operations can build better and stronger communities and enhance the quality of life for those people living and working in the region.

During construction and operations, the project will deliver employment opportunities, increased support for local/regional businesses, and improve the quality of life for those people in the Halls Creek area.

The BCGP is expected to make a significant contribution to the state economy over the Stage 1 LOM. Over the initial 9 year mine life the project is forecast to distribute over $748M into the economy, with the vast majority of all projects spend going to local WA and Australian suppliers/businesses.

This economic value add incorporates:

- Payments to suppliers for goods and services.
- Payment to staff through wages and salaries.
- Taxes and Royalties paid to government (such as corporate tax, payroll, and mineral royalties).
- Third party royalties
- The project is also predicted to offer significant employment opportunities with 240 personnel to be employed during construction and operations of up to 161 persons.

- **Table 17.3 – Project Social & Community Contributions**

ITEM	Unit	Value
Project Life	Years	8.8
Number of Persons Employed - Construction	Persons	155
Number of Persons Employed - Production	Persons	161
Total Economic Spend	AUD$M	$748M
Total Wages	AUD$M	$220M
Total State Mineral Royalties Paid	AUD$M	$26.9M
Estimated Corporate Tax Payments (30% FC)	AUD$M	$86.2M

18 Financial Model

A full financial model has been produced for the project using where possible first principal costs. This model provides transparency and allows flexibility with future project cost options such as whether to adopt an owner mining model, use a main mining contractor, or use a hybrid structure for the mining operation.

18.1 Project Cost Assumptions

Table 18.1 - Project Cost and Revenue Assumptions

PROJECT YEAR	UNIT	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Foreign Exchange Rate ($US to $AUS)	%	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
Diesel Cost ($Aus/litre)	AUD$/Litre	$1.75	$1.75	$1.75	$1.75	$1.75	$1.75	$1.75	$1.75	$1.75
Diesel Rebate ($Aus/litre)	AUD$/Litre	$0.516	$0.52	$0.52	$0.52	$0.52	$0.52	$0.52	$0.52	$0.52
Power Diesel Consumption	litre/kWhr	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Power Provider Excess	$/kWhr	$0.07	$0.07	$0.07	$0.07	$0.07	$0.07	$0.07	$0.07	$0.07
Power Cost ($/kWhr) - Diesel	AUS$/kWhr	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37	$0.37
Cement Cost - PC Bulka Bags	(AUS$/dmt)	$587	$587	$587	$587	$587	$587	$587	$587	$587
Camp Cost	AUS$/man day	$80.00	$80.00	$80.00	$80.00	$80.00	$80.00	$80.00	$80.00	$80.00
Halls Creek Flight Cost	AUS$/person	$500.00	$500.00	$500.00	$500.00	$500.00	$500.00	$500.00	$500.00	$500.00
MILLING										
Raw Mill Rate	dmt/day	1,915	1,915	1,915	1,915	1,915	1,915	1,915	1,915	1,915
Mill Utilisation	%	87%	87%	87%	87%	87%	87%	87%	87%	87%
Max Throughput Per Month	dmt/mth	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Mill Recovery	%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%
REVENUE										
Gold Revenue ($US)										
US$ Gold price per Troy Ounce	(US$/oz)	$3,500	$3,500	$3,500	$3,500	$3,500	$3,500	$3,500	$3,500	$3,500
US$ per gram	(US$/g)	$112.53	$112.53	$112.53	$112.53	$112.53	$112.53	$112.53	$112.53	$112.53
Gold Revenue ($AUS)										
AUS$ Gold price per Troy Ounce	(AUS$/oz)	$5,385	$5,385	$5,385	$5,385	$5,385	$5,385	$5,385	$5,385	$5,385
AUS$ per gram	(AUS$/g)	$173.12	$173.12	$173.12	$173.12	$173.12	$173.12	$173.12	$173.12	$173.12
DORE Refining Cost (inc Transport)	(AUS$/oz)	$15.00	$15.00	$15.00	$15.00	$15.00	$15.00	$15.00	$15.00	$15.00
ROYALTIES										
AUS GOLD Royalty (Au)	%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Other Royalty	%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%

18.2 Project Costs

The project costs where possible have been sourced by recent (less than 6 months) pricing quotes from legitimate suppliers operating in the region. The project costs have been broken down into operating and capital costs. Where possible costs have been further broken down into fixed and variable categories.

The financial model costs have also been grouped into the below cost centres:

- Mining direct costs.
- UG mine tech services costs.

- Milling costs (includes dore transport and refining)
- Administration costs (includes flights, accommodation, and freight).
- Payable royalties.

Power costs have been summarised and then allocated to the related cost centre.

18.2.1 Open Pit Mining Costs

These are the costs associated with all physical mining activities including the drilling, blasting and movement of mined material. These costs also include the services and infrastructure required for the mining activities. All major site related capital items have been included in these costs.

Table 18.2 - Open Pit Mining Fixed Costs

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
FIXED OP MINING COSTS										
Machinery Ownership	$1,388,200									$1,388,200
Mining - Manpower Wages	$5,218,877									$5,218,877
Maintenance - Manpower Wages	$813,633									$813,633
TOTAL OP FIXED COSTS	$7,420,710	$0	$0	$0	$0	$0	$0	$0	$0	$7,420,710

Table 18.3 - Open Mining Variable Costs

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
VARIABLE OP MINING COSTS										
MACHiNE PARTS	$739,200									$739,200
CONSUMABLES										$0
Explosives	$1,186,814									$1,186,814
Drill Consumables	$1,582,418									$1,582,418
Stemming	$79,121									$79,121
GET	$158,242									$158,242
Fuel - Diesel (Minus Rebate)	$585,811									$585,811
Tyres	$395,605									$395,605
PPE	$17,600									$17,600
Geology	$395,605									$395,605
CONTRACTORS	$110,000									$110,000
PUMPING	$110,000									$110,000
TOTAL OP FIXED COSTS	$5,360,415	$0	$0	$0	$0	$0	$0	$0	$0	$5,360,415

Table 18.4 - Open Pit Mining Capital Costs

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
OPENT PIT CAPITAL COSTS										
Surface WorkShop Items	$200,000									$200,000
Surface Magazine	$300,000									$300,000
Sustaining Capital Costs	$157,058									$157,058
Other Capital	$55,000									$55,000
TOTAL OP CAPITAL COSTS	$712,058	$0	$0	$0	$0	$0	$0	$0	$0	$712,058

Table 18.5 - Open Pit Mining Cost Summary

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
OP Mine Ore Production (t)	123,839									123,839
Ore Grade - Au (g/t)	2.04									2.04
Conatined Ounces - Au (oz)	8,117									8,117
Watse Mined (t)	1,446,740									1,446,740
OP MINING OPERATING COSTS	$12,781,125									$12,781,125
OP MINING CAPITAL COSTS	$712,058									$712,058
OP MINING TOTAL COSTS	$13,493,183									$13,493,183
OP UNIT OP COSTS ($/t)	$103.21									$103.21
OP UNIT TOTAL COSTS ($/t)	$108.96									$108.96

18.2.2 Direct Underground Mining Costs

Table 18.6 - Direct UG Mining Fixed Costs

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
DIRECT UG FIXED COSTS										
Mining - Machinery Ownership	$0	$4,503,400	$6,704,400	$6,704,400	$7,469,400	$6,829,400	$5,969,400	$5,314,400	$3,948,300	$47,443,100
Mining - Manpower Wages	$0	$10,345,823	$14,119,180	$14,119,180	$14,572,490	$11,398,263	$8,983,780	$8,666,780	$6,452,535	$88,658,032
Maintenance - Manpower Wages	$0	$4,801,493	$5,921,560	$5,921,560	$5,921,560	$5,329,827	$4,907,160	$4,907,160	$3,680,370	$41,390,690
TOTAL DIRCET UG FIXED COSTS	$0	$19,650,717	$26,745,140	$26,745,140	$27,963,450	$23,557,490	$19,860,340	$18,888,340	$14,081,205	$177,491,822

Table 18.7 - Direct Underground Mining Variable Costs

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
DIRECT UG VARIABLE COSTS										
MACHINE PARTS	$0	$2,372,800	$3,352,800	$3,352,800	$3,692,800	$3,371,800	$2,956,800	$2,676,800	$1,992,600	**$23,769,200**
CONSUMABLES										
Drill Consumables	$0	$863,510	$1,020,006	$1,082,267	$1,317,993	$868,539	$466,235	$313,845	$251,435	**$6,183,829**
Explosives	$0	$964,223	$2,359,741	$2,459,379	$4,637,356	$4,777,247	$3,901,803	$2,283,337	$1,934,838	**$23,317,923**
Poly, Fittings.	$0	$361,503	$352,159	$372,892	$332,221	$119,647	$0	$0	$0	**$1,538,423**
Vent Bag, Coms, Firing Line	$0	$542,255	$528,238	$559,337	$498,332	$179,471	$0	$0	$0	**$2,307,634**
Diesel - Mobile Machines	$0	$498,811	$1,516,681	$2,058,008	$4,147,081	$4,988,044	$3,814,056	$1,577,307	$1,199,905	**$19,799,892**
PPE, Uniforms etc	$0	$124,800	$165,000	$164,400	$169,950	$142,050	$120,600	$117,600	$87,750	**$1,092,150**
Paste Fill - Consumables (inc Walls)	$0	$0	$357,148	$2,510,754	$3,118,865	$8,270,148	$3,492,976	$462,935	$0	**$18,212,825**
Ground Support	$0	$1,504,172	$1,440,672	$1,551,665	$1,435,538	$502,034	$0	$0	$0	**$6,434,080**
Others	$0	$60,000	$60,000	$60,000	$60,000	$60,000	$60,000	$60,000	$45,000	**$465,000**
CONTRACTORS	$0	$1,506,978	$1,980,635	$2,126,808	$2,887,679	$2,361,705	$570,313	$40,400	$0	**$11,474,518**
POWER	$0	$3,919,794	$7,459,558	$8,503,158	$8,582,380	$7,293,731	$6,271,881	$5,951,565	$4,321,310	**$52,303,378**
PUMPING	$0	$120,000	$168,000	$168,000	$168,000	$168,000	$168,000	$168,000	$126,000	**$1,254,000**
TOTAL DIRCET UG VAR COSTS	**$0**	**$12,838,845**	**$20,760,639**	**$24,969,467**	**$31,048,194**	**$33,102,417**	**$21,822,665**	**$13,651,788**	**$9,958,839**	**$168,152,853**

Table 18.8 - Direct Underground Mining Capital Costs

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
MINING CAPITAL COSTS										
Lateral Mine Development	$0	$13,494,010	$15,703,142	$9,641,104	$14,772,917	$4,589,536	$0	$0	$0	**$58,200,709**
Vertical Mine Development	$0	$313,174	$428,799	$418,132	$479,093	$0	$0	$0	$0	**$1,639,198**
Plant Ownership (HP)	$0	$4,503,400	$6,704,400	$6,704,400	$7,469,400	$6,829,400	$5,969,400	$5,314,400	$3,948,300	**$47,443,100**
Portal Establishment	$0	$600,000	$0	$0	$0	$0	$0	$0	$0	**$600,000**
Escapeway Ladders	$0	$118,000	$174,000	$208,000	$172,000	$52,000	$0	$0	$0	**$724,000**
Site Construction	$0	$1,684,000	$0	$0	$0	$0	$0	$0	$0	**$1,684,000**
Site Establishment	$0	$625,000	$0	$0	$0	$0	$0	$0	$0	**$625,000**
Site Fuel	$0	$260,000	$0	$0	$0	$0	$0	$0	$0	**$260,000**
Compressed Air	$0	$295,000	$0	$0	$0	$0	$0	$0	$0	**$295,000**
Mining Tools	$0	$1,277,700	$0	$0	$0	$0	$0	$0	$0	**$1,277,700**
HV Electrical	$0	$1,240,330	$450,000	$450,000	$0	$0	$0	$0	$0	**$2,140,330**
LV Electrical	$0	$970,500	$265,000	$202,000	$115,000	$15,000	$0	$0	$0	**$1,567,500**
Ventilation	$0	$2,085,000	$285,000	$215,000	$145,000	$50,000	$0	$0	$0	**$2,780,000**
Refuge Chambers	$0	$325,000	$220,000	$110,000	$110,000	$0	$0	$0	$0	**$765,000**
AGI Batching Site	$0	$0	$30,000	$0	$0	$0	$0	$0	$0	**$30,000**
UG Water Supply	$0	$197,500	$5,000	$5,000	$5,000	$0	$0	$0	$0	**$212,500**
Pumping	$0	$676,000	$60,000	$242,000	$40,000	$10,000	$0	$0	$0	**$1,028,000**
Surface Workshop Tools	$0	$61,000	$12,000	$12,000	$12,000	$12,000	$12,000	$12,000	$9,000	**$142,000**
Others	$0	$60,000	$60,000	$60,000	$60,000	$60,000	$60,000	$60,000	$45,000	**$465,000**
TOTAL	**$0**	**$28,785,614**	**$24,397,341**	**$18,267,637**	**$23,380,410**	**$11,617,936**	**$6,041,400**	**$5,386,400**	**$4,002,300**	**$121,879,037**

Table 18.9 - Direct Underground Mining Cost Summary

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
UG Mine Ore Production (t)	0	76,447	294,106	342,648	635,858	661,737	545,503	328,906	279,859	**3,165,064**
Ore Grade - Au (g/t)	0.00	1.67	1.99	2.21	2.26	1.71	1.78	2.39	1.87	**2.00**
Conatined Ounces - Au (oz)	0	4,105	18,821	24,400	46,153	36,444	31,196	25,293	16,848	**203,259**
DIRECT UG OPERATING COSTS	$0	$14,492,152	$25,098,237	$35,369,103	$36,769,327	$45,240,971	$35,713,605	$27,225,728	$20,091,744	**$240,000,865**
DIRECT UG CAPITAL COSTS	$0	$28,785,614	$24,397,341	$18,267,637	$23,380,410	$11,617,936	$6,041,400	$5,386,400	$4,002,300	**$121,879,037**
DIRECT UG TOTAL COSTS	$0	$43,277,766	$49,495,577	$53,636,739	$60,149,737	$56,858,907	$41,755,005	$32,612,128	$24,094,044	**$361,879,902**
DIRECT UG UNIT OP COSTS ($/t)	$0.00	$190	$85	$103	$58	$68	$65	$83	$72	**$75.83**
DIRECT UG UNIT TOTAL COSTS ($/t)	**$0.00**	**$566**	**$168**	**$157**	**$95**	**$86**	**$77**	**$99**	**$86**	**$114.34**

18.2.3 UG Mine Tech Services Costs

These are the cost associated with mine management and technical services functions to support the direct underground mining operations. These include wages/salaries for support staff, geological assaying, mines rescue coverage, office items, computer items, light vehicles, and other required equipment.

Table 18.10 - Underground Tech Services Fixed Costs

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
TECH SERVICES FIXED COSTS										
Tech Services - Machinery Ownership	$0	$153,600	$153,600	$153,600	$153,600	$153,600	$153,600	$153,600	$115,200	**$1,190,400**
Tech Services - Manpower Wages	$0	$2,358,480	$2,776,920	$2,776,920	$2,776,920	$2,776,920	$2,776,920	$2,776,920	$2,082,690	**$21,102,690**
Tech Services - Mines Rescue	$0	$60,000	$60,000	$60,000	$60,000	$60,000	$60,000	$60,000	$45,000	**$465,000**
TOTAL TECH SERVICES FIXED COSTS	**$0**	**$2,572,080**	**$2,990,520**	**$2,990,520**	**$2,990,520**	**$2,990,520**	**$2,990,520**	**$2,990,520**	**$2,242,890**	**$22,758,090**

Table 18.11 - Underground Tech Services Variable Costs

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
TECH SERVICES VARIABLE COSTS										
GEOLOGICAL ASSAYS										
Geological Grade Control Drilling Assays	$0	$102,938	$124,569	$128,706	$176,900	$117,006	$0	$0	$0	**$650,119**
Geological Face/Stope Grab Assays	$0	$10,778	$7,729	$11,680	$7,620	$1,918	$0	$0	$0	**$39,726**
INFORMATION TECHNOLOGY										
Courses	$0	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$4,500	**$46,500**
PC/Soft Ware Costs	$0	$48,000	$48,000	$48,000	$48,000	$48,000	$48,000	$48,000	$36,000	**$372,000**
Consultants	$0	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$90,000	**$930,000**
Flights	$0	$18,000	$18,000	$18,000	$18,000	$18,000	$18,000	$18,000	$13,500	**$139,500**
Misc	$0	$12,000	$12,000	$12,000	$12,000	$12,000	$12,000	$12,000	$9,000	**$93,000**
LIGHT VEHICLE MAINTENANCE										
Toyota Wagon - UG Manager	$0	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$18,000	**$186,000**
Toyota PC - Ambulance	$0	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$18,000	**$186,000**
Toyota Ute - Engineering 1	$0	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$18,000	**$186,000**
Toyota Ute - Survey 1	$0	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$18,000	**$186,000**
Toyota Ute - Geology 1	$0	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$24,000	$18,000	**$186,000**
DIESEL (Minus Rebate)	$0	$37,020	$37,020	$37,020	$37,020	$37,020	$37,020	$37,020	$27,765	**$286,905**
OTHERS	$0	$28,800	$28,800	$28,800	$28,800	$28,800	$28,800	$28,800	$21,600	**$223,200**
TOTAL DIRCET UG VAR COSTS	**$0**	**$503,536**	**$522,118**	**$530,206**	**$574,340**	**$508,745**	**$389,820**	**$389,820**	**$292,365**	**$3,710,949**

Table 18.12 - Underground Tech Services Capital Costs

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
UG TECH SERVICES CAPITAL COSTS										
Survey Equipment	$0	$150,000	$0	$0	$0	$0	$0	$0	$0	**$150,000**
Geology Equipment	$0	$20,000	$0	$0	$0	$0	$0	$0	$0	**$20,000**
Office PCs	$0	$30,000	$0	$0	$0	$0	$0	$0	$0	**$30,000**
Office Furniture	$0	$15,000	$0	$0	$0	$0	$0	$0	$0	**$15,000**
Miscellaneous	$0	$18,000	$18,000	$18,000	$18,000	$18,000	$18,000	$18,000	$13,500	**$139,500**
Mines Rescue Gear	$0	$411,000	$12,000	$12,000	$12,000	$12,000	$12,000	$12,000	$9,000	**$492,000**
TOTAL	**$0**	**$644,000**	**$30,000**	**$30,000**	**$30,000**	**$30,000**	**$30,000**	**$30,000**	**$22,500**	**$846,500**

Table 18.13 - Underground Tech Services Cost Summary

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
UG Mine Ore Production (t)	0	76,447	294,106	342,648	635,858	661,737	545,503	328,906	279,859	**3,165,064**
Ore Grade - Au (g/t)	0.00	1.67	1.99	2.21	2.26	1.71	1.78	2.39	1.87	**2.00**
Conatined Ounces - Au (oz)	0	4,105	18,821	24,400	46,153	36,444	31,196	25,293	16,848	**203,259**
UG TECH SERVICES OPERATING COSTS	$0	$3,075,616	$3,512,638	$3,520,726	$3,564,860	$3,499,265	$3,380,340	$3,380,340	$2,535,255	**$26,469,039**
UG TECH SERVICES CAPITAL COSTS	$0	$644,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$22,500	**$846,500**
UG TECH SERVICES TOTAL COSTS	$0	$3,719,616	$3,542,638	$3,550,726	$3,594,860	$3,529,265	$3,410,340	$3,410,340	$2,557,755	**$27,315,539**
UG TS UNIT OP COSTS ($/t)	$0.00	$40	$12	$10	$6	$5	$6	$10	$9	**$8.36**
UG TS UNIT TOTAL COSTS ($/t)	**$0.00**	**$49**	**$12**	**$10**	**$6**	**$5**	**$6**	**$10**	**$9**	**$8.63**

18.2.4 Milling Costs

These are costs associated with onsite ore processing to produce dore for shipment.

Table 18.14 – Milling Cost Summary

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 8	TOTAL
FIXED MILLING COSTS										
Mobile Plant Ownership	$0	$519,600	$1,039,200	$1,039,200	$1,039,200	$1,039,200	$1,039,200	$1,039,200	$779,400	**$7,534,200**
Mill Opetration Wages	$0	$2,180,960	$4,361,920	$4,361,920	$4,361,920	$4,361,920	$4,361,920	$4,361,920	$3,271,440	**$31,623,920**
Maintenance Wages	$0	$1,375,780	$2,751,560	$2,751,560	$2,751,560	$2,751,560	$2,751,560	$2,751,560	$2,063,670	**$19,948,810**
SUB TOTAL	**$0**	**$4,076,340**	**$8,152,680**	**$8,152,680**	**$8,152,680**	**$8,152,680**	**$8,152,680**	**$8,152,680**	**$6,114,510**	**$59,106,930**
	\									
VARIABLE MILLING COSTS										
Mobile Machines Material Parts	$0	$ 281,400	$ 562,800	$ 562,800	$ 562,800	$ 562,800	$ 562,800	$ 562,800	$ 422,100	**$4,080,300**
Lab Items	$0	$ 20,029	$ 29,411	$ 34,265	$ 54,901	$ 60,000	$ 60,000	$ 42,299	$ 27,986	**$328,890**
Reagent Consumables	$0	$ 1,513,760	$ 2,222,854	$ 2,589,734	$ 4,149,452	$ 4,534,800	$ 4,534,800	$ 3,196,954	$ 2,115,173	**$24,857,528**
Environmental	$0	$ 39,000	$ 78,000	$ 78,000	$ 78,000	$ 78,000	$ 78,000	$ 78,000	$ 58,500	**$565,500**
Curshing & Grinding Consumables	$0	$ 869,240	$ 1,276,421	$ 1,487,092	$ 2,382,723	$ 2,604,000	$ 2,604,000	$ 1,835,774	$ 1,214,588	**$14,273,838**
Misc Milling Costs	$0	$ 60,086	$ 88,232	$ 102,794	$ 164,704	$ 180,000	$ 180,000	$ 126,897	$ 83,958	**$986,669**
Diesel Consumption	$0	$ 60,088	$ 94,139	$ 106,010	$ 156,479	$ 168,948	$ 168,948	$ 125,658	$ 85,101	**$965,371**
General Maintenance	$0	$ 150,214	$ 220,580	$ 256,986	$ 411,761	$ 450,000	$ 450,000	$ 317,242	$ 209,894	**$2,466,677**
Crusher Maintenance	$0	$ 334,477	$ 491,157	$ 572,222	$ 916,854	$ 1,002,000	$ 1,002,000	$ 706,392	$ 467,364	**$5,492,468**
Misc Maintenace Costs	$0	$ 268,383	$ 394,102	$ 459,148	$ 735,680	$ 804,000	$ 804,000	$ 566,806	$ 375,011	**$4,407,130**
Power Costs	$0	$ 2,534,514	$ 3,721,763	$ 4,336,036	$ 6,947,499	$ 7,592,694	$ 7,592,694	$ 5,352,716	$ 3,541,471	**$41,619,387**
SUB TOTAL	**$0**	**$6,131,191**	**$9,179,458**	**$10,585,088**	**$16,560,853**	**$18,037,242**	**$18,037,242**	**$12,911,539**	**$8,601,146**	**$100,043,758**
MILLING CAPITAL COSTS										
Machine Ownership	$0	$ 519,600	$ 1,039,200	$ 1,039,200	$ 1,039,200	$ 1,039,200	$ 1,039,200	$ 1,039,200	$ 779,400	**$7,534,200**
Mill Construction	$18,000,000	$ 51,477,165	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$69,477,165**
Water Pipe Line (3.5km) ,Pumps, Pow	$0	$ 1,200,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$1,200,000**
Tails Dam Earth Movement	$0	$ 1,000,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$1,000,000**
Other Capital	$0	$ 90,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 90,000	**$900,000**
SUB TOTAL	**$18,000,000**	**$54,286,765**	**$1,159,200**	**$1,159,200**	**$1,159,200**	**$1,159,200**	**$1,159,200**	**$1,159,200**	**$869,400**	**$80,111,365**
MILLING COSTS SUMMARY										
Ore Milled (t)	0	200,286	294,106	342,648	549,015	600,000	600,000	422,989	279,859	**3,288,903**
Fixed costs (operational)	$0	$ 3,556,740	$ 7,113,480	$ 7,113,480	$ 7,113,480	$ 7,113,480	$ 7,113,480	$ 7,113,480	$ 5,335,110	**$51,572,730**
Variable Costs (operational)	$0	$ 6,131,191	$ 9,179,458	$ 10,585,088	$ 16,560,853	$ 18,037,242	$ 18,037,242	$ 12,911,539	$ 8,601,146	**$100,043,758**
Capital Costs	$18,000,000	$ 54,286,765	$ 1,159,200	$ 1,159,200	$ 1,159,200	$ 1,159,200	$ 1,159,200	$ 1,159,200	$ 869,400	**$80,111,365**
Operating	$0	$ 9,687,931	$ 16,292,938	$ 17,698,568	$ 23,674,333	$ 25,150,722	$ 25,150,722	$ 20,025,019	$ 13,936,256	**$151,616,488**
MILLING TOTAL COSTS	**$18,000,000**	**$63,974,696**	**$17,452,138**	**$18,857,768**	**$24,833,533**	**$26,309,922**	**$26,309,922**	**$21,184,219**	**$14,805,656**	**$231,727,853**
UNIT MILLING COSTS										
Operating Unit Cost (Ex Power) - $/t	$0.00	$35.72	$42.74	$39.00	$30.47	$29.26	$29.26	$34.69	$37.14	**$33.44**
Total Unit Cost (Ex Power) - $/t	$0.00	$306.76	$46.69	$42.38	$32.58	$31.20	$31.20	$37.43	$40.25	**$57.80**
Unit Power Cost - $/t	$0.00	$12.65	$12.65	$12.65	$12.65	$12.65	$12.65	$12.65	$12.65	**$12.65**
Operating Unit Cost (Inc Power) - $/t	$0.00	$48.37	$55.40	$51.65	$43.12	$41.92	$41.92	$47.34	$49.80	**$46.10**
Total Unit Cost (Inc Power) - $/t	$0.00	$319.42	$59.34	$55.04	$45.23	$43.85	$43.85	$50.08	$52.90	**$70.46**

18.2.5 Administration Costs

These are the costs associated with supporting operations and include running the Accommodation Village, flights for a full FIFO Workforce, wages for Management Staff and other operation administration items.

Table 18.15 - Administration Cost Summary

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
ADMINISTRATION COSTS										
FIXED										
Light Vehicles	$97,200	$157,200	$157,200	$157,200	$157,200	$157,200	$157,200	$157,200	$117,900	**$1,315,500**
Admin Wages	$1,382,120	$2,257,040	$2,257,040	$2,257,040	$2,257,040	$2,257,040	$2,257,040	$2,257,040	$1,692,780	**$18,874,180**
Camp Fixed Costs	$450,000	$600,000	$600,000	$600,000	$600,000	$600,000	$600,000	$600,000	$450,000	**$5,100,000**
Other Costs	$198,000	$402,000	$402,000	$402,000	$402,000	$402,000	$402,000	$402,000	$301,500	**$3,313,500**
SUB TOTAL	**$2,127,320**	**$3,416,240**	**$3,416,240**	**$3,416,240**	**$3,416,240**	**$3,416,240**	**$3,416,240**	**$3,416,240**	**$2,562,180**	**$28,603,180**
VARIABLE										
Accommodation and Messing	$843,167	$2,808,694	$3,022,505	$3,016,334	$3,076,237	$2,773,848	$2,543,758	$2,511,412	$1,873,544	**$22,469,499**
Flights	$1,035,000	$2,604,000	$2,802,000	$2,796,000	$2,851,500	$2,572,500	$2,358,000	$2,328,000	$1,741,500	**$21,088,500**
Freight	$42,158	$511,548	$724,471	$903,993	$1,274,687	$1,499,391	$1,085,311	$626,358	$442,412	**$7,110,331**
Other Camp Costs	$19,200	$19,200	$19,200	$19,200	$19,200	$19,200	$19,200	$19,200	$14,400	**$168,000**
Light Vehicle Parts	$60,000	$60,000	$60,000	$60,000	$60,000	$60,000	$60,000	$60,000	$45,000	**$525,000**
Power	$339,187	$752,519	$1,031,131	$1,113,583	$1,252,204	$1,199,487	$1,132,600	$1,002,377	$720,680	**$8,543,767**
Diesel (Minus Rebate)	$18,510	$18,510	$18,510	$18,510	$18,510	$18,510	$18,510	$18,510	$13,883	**$161,963**
SUB TOTAL	**$2,357,222**	**$6,774,471**	**$7,677,817**	**$7,927,619**	**$8,552,338**	**$8,142,937**	**$7,217,380**	**$6,565,857**	**$4,851,418**	**$60,067,059**
CAPITAL										
Camp Construction (200 Room)	$18,000,000	$0	$0	$0	$0	$0	$0	$0	$0	**$18,000,000**
Offices & Store Construction	$2,250,000	$0	$0	$0	$0	$0	$0	$0	$0	**$2,250,000**
Site Communication	$400,000	$0	$0	$0	$0	$0	$0	$0	$0	**$400,000**
Site & Roads Construction	$500,000	$0	$0	$0	$0	$0	$0	$0	$0	**$500,000**
Batch Plant	$1,000,000	$0	$0	$0	$0	$0	$0	$0	$0	**$1,000,000**
Main 11kV Switch Yard	$0	$2,500,000	$0	$0	$0	$0	$0	$0	$0	**$2,500,000**
Machine Ownership	$97,200	$157,200	$157,200	$157,200	$157,200	$157,200	$157,200	$157,200	$117,900	**$1,315,500**
Other Capital	$60,000	$60,000	$60,000	$60,000	$60,000	$60,000	$60,000	$60,000	$45,000	**$525,000**
SUB TOTAL	**$22,307,200**	**$2,717,200**	**$217,200**	**$217,200**	**$217,200**	**$217,200**	**$217,200**	**$217,200**	**$162,900**	**$26,490,500**
COST SUMMARY										
Ore Milled (t)	0	200,286	294,106	342,648	549,015	600,000	600,000	422,989	279,859	**3,288,903**
Fixed costs (operational)	$2,030,120	$3,259,040	$3,259,040	$3,259,040	$3,259,040	$3,259,040	$3,259,040	$3,259,040	$2,444,280	**$27,287,680**
Variable Costs (operational)	$2,357,222	$6,774,471	$7,677,817	$7,927,619	$8,552,338	$8,142,937	$7,217,380	$6,565,857	$4,851,418	**$60,067,059**
Capital Costs	$22,307,200	$2,717,200	$217,200	$217,200	$217,200	$217,200	$217,200	$217,200	$162,900	**$26,490,500**
Operating	$4,387,342	$10,033,511	$10,936,857	$11,186,659	$11,811,378	$11,401,977	$10,476,420	$9,824,897	$7,295,698	**$87,354,739**
TOTAL COSTS	**$26,694,542**	**$12,750,711**	**$11,154,057**	**$11,403,859**	**$12,028,578**	**$11,619,177**	**$10,693,620**	**$10,042,097**	**$7,458,598**	**$113,845,239**
Operating Unit Cost ($/t) - Milled	$0.00	$50.10	$37.19	$32.65	$21.51	$19.00	$17.46	$23.23	$26.07	**$26.56**
Total Unit Cost ($/t) - Milled	$0.00	$63.66	$37.93	$33.28	$21.91	$19.37	$17.82	$23.74	$26.65	**$34.61**

18.2.6 Total Operation Cost Summary

These are the total onsite costs for the operation excluding past mine gate costs such as dore transport, gold refining, royalty costs, corporate costs. or taxation.

Table 18.16 – Total Operation Cost Summary

ITEM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
OPEN PIT ORE PRODUCTION										
Ore Tonnes (t)	123,839									**123,839**
Ore Grade - Au (g/t)	2.04									**2.04**
Contained Ounces - Au (Oz)	8,117									**8,117**
UG ORE PRODUCTION										
Ore Tonnes (t)	0	76,447	294,106	342,648	635,858	661,737	545,503	328,906	279,859	**3,165,064**
Ore Grade - Au (g/t)	0	1.67	1.99	2.21	2.26	1.71	1.78	2.39	1.87	**2.00**
Contained Ounces - Au (Oz)	0	4,105	18,821	24,400	46,153	36,444	31,196	25,293	16,848	**203,259**
MILL PRODUCTION										
Ore Milled Tonnes (t)	0	200,286	294,106	342,648	549,015	600,000	600,000	422,989	279,859	**3,288,903**
Feed Grade - Au (g/t)	0	2	2	2	2	2	2	2	2	**2.00**
Contained Ounces - Au (Oz)	0	12,222	18,821	24,400	39,525	34,760	33,966	30,835	16,848	**211,376**
Gold Recovery (%)	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%	94.6%	**94.6%**
Recovered Metal Au (oz)	**0**	**11,562**	**17,804**	**23,082**	**37,390**	**32,883**	**32,132**	**29,170**	**15,938**	**199,962**
CAPITAL COSTS										
Underground Mining Capital	$0	$29,429,614	$24,427,341	$18,297,637	$23,410,410	$11,647,936	$6,071,400	$5,416,400	$4,024,800	**$122,725,537**
Open Pit Mining Capital	$712,058	$0	$0	$0	$0	$0	$0	$0	$0	**$712,058**
Milling Capital	$18,000,000	$54,286,765	$1,159,200	$1,159,200	$1,159,200	$1,159,200	$1,159,200	$1,159,200	$869,400	**$80,111,365**
Administration Capital	$22,307,200	$2,717,200	$217,200	$217,200	$217,200	$217,200	$217,200	$217,200	$162,900	**$26,490,500**
OPERATING COSTS										
Underground Mining Operating	$0	$17,567,767	$28,610,875	$38,889,829	$40,334,187	$48,740,236	$39,093,945	$30,606,068	$22,626,999	**$266,469,904**
Open Pit Mining Operating	$12,781,125	$0	$0	$0	$0	$0	$0	$0	$0	**$12,781,125**
Milling Operating	$0	$9,687,931	$16,292,938	$17,698,568	$23,674,333	$25,150,722	$25,150,722	$20,025,019	$13,936,256	**$151,616,488**
Administration Operating	$4,387,342	$10,033,511	$10,936,857	$11,186,659	$11,811,378	$11,401,977	$10,476,420	$9,824,897	$7,295,698	**$87,354,739**
TOTAL PROJECT COSTS										
Capital	$41,019,258	$86,433,579	$25,803,741	$19,674,037	$24,786,810	$13,024,336	$7,447,800	$6,792,800	$5,057,100	**$230,039,460**
Operating	$17,168,467	$37,289,209	$55,840,669	$67,775,056	$75,819,898	$85,292,934	$74,721,086	$60,455,984	$43,858,953	**$518,222,257**
TOTAL COSTS	**$58,187,725**	**$123,722,788**	**$81,644,410**	**$87,449,093**	**$100,606,708**	**$98,317,270**	**$82,168,886**	**$67,248,784**	**$48,916,053**	**$748,261,717**
UNIT OPERATING COSTS										
UG Mining ($/t Mined)	$0.00	$229.80	$97.28	$113.50	$63.43	$73.66	$71.67	$93.05	$80.85	**$84.19**
OP Mining ($/t Mined)	$103.21	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$103.21**
Milling ($/t Milled)	$0.00	$48.37	$55.40	$51.65	$43.12	$41.92	$41.92	$47.34	$49.80	**$46.10**
Administration ($/t Milled)	$0.00	$50.10	$37.19	$32.65	$21.51	$19.00	$17.46	$23.23	$26.07	**$26.56**
TOTAL ($/t Milled)	**$0.00**	**$186.18**	**$189.87**	**$197.80**	**$138.10**	**$142.15**	**$124.54**	**$142.93**	**$156.72**	**$157.57**
Average Cash Cost (AUD$/oz)	**$0**	**$3,225**	**$3,136**	**$2,936**	**$2,028**	**$2,594**	**$2,325**	**$2,073**	**$2,752**	**$2,592**
TOTAL UNIT COSTS										
Average Total cost per tonne (Milled)	$0	$618	$278	$255	$183	$164	$137	$159	$175	**$228**
Average Total Cost - Au (AUD$/oz)	$0	$10,701	$4,586	$3,789	$2,691	$2,990	$2,557	$2,305	$3,069	**$3,742**

Costs do not include “Past Mine Gate Costs” i.e. Dore refining/transport, royalties and taxation.

It should be noted that:

- Total project capital costs is A$230M.
- Pre-production capital costs is A$142M.

18.2.7 Applicable Royalty Costs

Table 18.17 - Applicable Royalty Cost Summary

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
Gold Produced (Oz)	0	11,562	17,804	23,082	37,390	32,883	32,132	29,170	15,938	**199,962**
ROYALTY COSTS										
Gold - 2.5% (AUD)	$0	$1,556,438	$2,396,732	$3,107,188	$5,033,308	$4,426,560	$4,325,429	$3,926,764	$2,145,555	**$26,917,974**
Lease Royalty - 1.0% (AUD)	$0	$622,575	$958,693	$1,242,875	$2,013,323	$1,770,624	$1,730,172	$1,570,706	$858,222	**$10,767,190**
Total Royalties ($AUD)	**$0**	**$2,179,014**	**$3,355,425**	**$4,350,064**	**$7,046,631**	**$6,197,183**	**$6,055,601**	**$5,497,469**	**$3,003,777**	**$37,685,164**
Unit Royalty Cost (AUD$/oz)	$0	$188.46	$188.46	$188.46	$188.46	$188.46	$188.46	$188.46	$188.46	**$188.46**

Above are the applicable royalty costs (Table 18.16) in Australian dollars. These costs can be defined as past-mine gate costs in terms of operation unit production costs.

18.2.8 Mine Closure Costs

Mine closure will incur significant costs however, the majority of these costs will only be incurred in a few years of the mine life. The pipelines, powerlines, roads will have to be pulled up and disposed of off site, back filled, ripped and seeded. ROM pads will have the top gravel surface bulldozed into the open pits to remove any trace of oxidizing sulphides, then top soil replaced and seeded. Safety bunds will be required to limit access to the open pit sites. The tails dam with also require sealing and covering with acceptable vegetation.

Ongoing periodic monitoring will be required to ensure no adverse colonising weeds established themselves or erosion channels form.

No allowance has been made for the mine closure cost in the project financial model as the sale of project capital items will more than offset the anticipated closure and rehabilitation costs.

18.3 Project Revenue

The project Gross Revenue was modelled as per the estimated offtake arrangements and applying the study commodity pricing assumptions. The Net Revenue was then the Gross Revenue minus the past mine gate costs of dore refining, dore transport, and applicable royalties.

Table 18.18 - Project Revenue Summary

YEAR	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
Gold Produced (Oz)	0	11,562	17,804	23,082	37,390	32,883	32,132	29,170	15,938	**199,962**
Gold Price (AUD$/Oz)	$5,385	$5,385	$5,385	$5,385	$5,385	$5,385	$5,385	$5,385	$5,385	
Gross Revenue Gold (AUD$)	$0	$62,257,536	$95,869,291	$124,287,539	$201,332,303	$177,062,381	$173,017,173	$157,070,557	$85,822,190	**$1,076,718,969**
DORE Refining Cost (AUD$/oz)	$0	$173,432	$267,064	$346,230	$560,854	$493,245	$481,976	$437,554	$239,076	**$2,999,431**
State Royalty (Au) - 2.5%	$0	$1,556,438	$2,396,732	$3,107,188	$5,033,308	$4,426,560	$4,325,429	$3,926,764	$2,145,555	**$26,917,974**
Other Royalty (Lease Peggers)	$0	$622,575	$958,693	$1,242,875	$2,013,323	$1,770,624	$1,730,172	$1,570,706	$858,222	**$10,767,190**
NET REV FOR CASHFLOW (AUD$)	**$0**	**$59,905,091**	**$92,246,801**	**$119,591,246**	**$193,724,818**	**$170,371,952**	**$166,479,595**	**$151,135,533**	**$82,579,337**	**$1,036,034,374**

18.4 Project Financial Model Results

18.4.1 Project Financial & Cashflow Summary

Table 18.19 – Project Financial & Cashflow Summary

ITEM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	TOTAL
MINE ORE PRODUCTION										
Total Ore Tonnes (t)	123,839	76,447	294,106	342,648	635,858	661,737	545,503	328,906	279,859	**3,288,903**
Ore Grade - Au (g/t)	2.04	1.67	1.99	2.21	2.26	1.71	1.78	2.39	1.87	**2.00**
Contained Gold (oz)	8,117	4,105	18,821	24,400	46,153	36,444	31,196	25,293	16,848	**211,376**
MILL PRODUCTION										
Ore Milled Tonnes (t)	0	200,286	294,106	342,648	549,015	600,000	600,000	422,989	279,859	**3,288,903**
Recovered Gold (oz)	0	11,562	17,804	23,082	37,390	32,883	32,132	29,170	15,938	**199,962**
COST SUMMARY										
Capital	$41,019,258	$86,433,579	$25,803,741	$19,674,037	$24,786,810	$13,024,336	$7,447,800	$6,792,800	$5,057,100	**$230,039,460**
Operating	$17,168,467	$37,289,209	$55,840,669	$67,775,056	$75,819,898	$85,292,934	$74,721,086	$60,455,984	$43,858,953	**$518,222,257**
TOTAL SITE COSTS	**$58,187,725**	**$123,722,788**	**$81,644,410**	**$87,449,093**	**$100,606,708**	**$98,317,270**	**$82,168,886**	**$67,248,784**	**$48,916,053**	**$748,261,717**
OPERATING UNIT COSTS										
UG Mining ($/t Mined)	$0.00	$229.80	$97.28	$113.50	$63.43	$73.66	$71.67	$93.05	$80.85	**$84.19**
OP Mining ($/t Mined)	$103.21	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$103.21**
Milling ($/t Milled)	$0.00	$48.37	$55.40	$51.65	$43.12	$41.92	$41.92	$47.34	$49.80	**$46.10**
Administration ($/t Milled)	$0.00	$50.10	$37.19	$32.65	$21.51	$19.00	$17.46	$23.23	$26.07	**$26.56**
TOTAL ($/t Milled)	**$0.00**	**$186.18**	**$189.87**	**$197.80**	**$138.10**	**$142.15**	**$124.54**	**$142.93**	**$156.72**	**$157.57**
Average Cash Cost (AUD$/oz)	**$0**	**$3,225**	**$3,136**	**$2,936**	**$2,028**	**$2,594**	**$2,325**	**$2,073**	**$2,752**	**$2,592**
TOTAL UNIT COSTS										
Total cost per tonne - Milled (AUD/t)	**$0**	**$618**	**$278**	**$255**	**$183**	**$164**	**$137**	**$159**	**$175**	**$228**
Total Unit Cost (AUD$/oz)	**$0**	**$10,701**	**$4,586**	**$3,789**	**$2,691**	**$2,990**	**$2,557**	**$2,305**	**$3,069**	**$3,742**
REVENUE										
Gross Revenue -NSR (AUD)	$0	$62,257,536	$95,869,291	$124,287,539	$201,332,303	$177,062,381	$173,017,173	$157,070,557	$85,822,190	**$1,076,718,969**
DORE Refining Cost (US$/Au oz)	$0	173431.7088	267064.4536	346229.5737	560854.2713	493245.2038	481976.4097	437553.6932	239076.1007	**$2,999,431**
State Royalty (Au) - 2.5%	$0	$1,556,438	$2,396,732	$3,107,188	$5,033,308	$4,426,560	$4,325,429	$3,926,764	$2,145,555	**$26,917,974**
Other Royalty (Au) 1%	$0	622575.3648	958692.9105	1242875.393	2013323.025	1770623.809	1730171.727	1570705.565	858221.8999	**$10,767,190**
Total Net Revenue - For Cashflow	**$0**	**$59,905,091**	**$92,246,801**	**$119,591,246**	**$193,724,818**	**$170,371,952**	**$166,479,595**	**$151,135,533**	**$82,579,337**	**$1,036,034,374**
Cashflow (Pre Tax)	**-$58,187,725**	**-$63,817,697**	**$10,602,392**	**$32,142,153**	**$93,118,110**	**$72,054,683**	**$84,310,709**	**$83,886,750**	**$33,663,284**	**$287,772,657**
Cumm Cashflow (Pre Tax)	**-$58,187,725**	**-$122,005,423**	**-$111,403,031**	**-$79,260,878**	**$13,857,232**	**$85,911,914**	**$170,222,624**	**$254,109,374**	**$287,772,657**	

18.4.2 Financial Model Results & Gold Price Sensitivity

Table 18.20 - Financial Model Results & Gold Price Sensitivity

GOLD PRICE	USD$/oz	$2,500	$3,000	$3,500	$4,000	$4,500
(AUD:US)		0.65	0.65	0.65	0.65	0.65
	AUD$/oz	$3,846	$4,615	$5,385	$6,154	$6,923
Total Project Term	Month	105	105	105	105	105
First Revenue	Month	19	19	19	19	19
Pay Back Period (Start)	Month	N/A	74	59	53	50
Pay Back Period (From Mill Completion)	Month	N/A	56	41	35	32
Max Negative Cashflow Month	Month	46	18	18	18	18
Maximum Negative Cash Flow	AUD$	-$164.2M	-$141.9M	-$141.9M	-$141.9M	-$141.9M
Total Free Cash Flow (Pre Tax)	AUD$	-$9.1M	$131.3M	$287.8M	$436.2M	$584.6M
Discounted CF 8% - NPV8 (Pre Tax)	AUD$	-$53.7M	$44.5M	$142.8M	$241.0M	$339.2M
Internal Rate of Return (Pre Tax)	%	N/A	14.2	25.3	34.3	41.9

18.4.3 Project Cumulative Cashflow

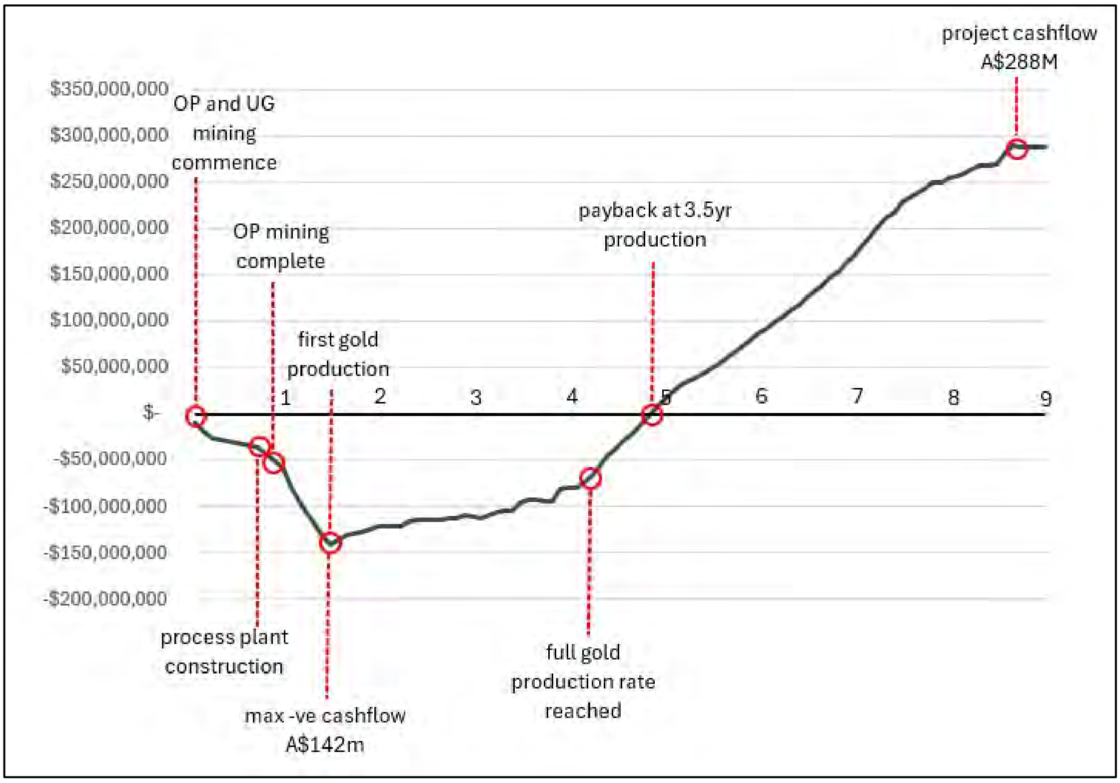


Figure 18.1 - Project Free Cashflow (Pre-Tax) Au @ AUS$5,385/oz

19 Recommendations

This document presents a detailed analysis of the project's potential to support a standalone economic gold project at Butchers Creek. The considered production target of 3.29Mt @ 2.00g/t containing 211koz of gold comprises of 96% indicated material. There is also the nearby (2km) Golden Crown deposit with a current inferred resource estimate of 400kt @ 3.10g/t containing 38,000 ounces of gold which has not been considered as part of this study given its current lower level of geological confidence. With further drilling contemplated in 2026 this represents an immediate additional ore source.

Mining costs represent a significant proportion of overall costs. Confirmation of assumed costs by carrying out a competitive tender process with mining contractors is warranted to determine/confirm if there is any benefit in considering that operating model.

Certain key consumable items identified as part of this study may be able to be procured from Indonesia more cost effectively rather than sourced from Perth.

Power is a key cost driver, the addition of renewables as component of the power mix is expected to lead to net savings for the project.

Further additional Metallurgical test work will continue with new results expected over the next few months. Test work has indicated potential further improvements to the process flow chart as well as processing plant design.

Capital costs are significant reflecting an ongoing trend for new resource projects in Australia. Opportunities exist to consider suitable dormant processing plants and other infrastructure items both within and outside of Australia. A competitive tender process for mill construction may lead to a lower cost. Capital intensity can further be reduced by considering opportunities to expand annual throughput, achieving economies of scale by incorporating feed from other nearby accessible gold deposits. Expanding output and/or mine life will reduce amortisation rates, reduce ongoing operating costs making the project a more robust proposition.

It is recommended that once further new resource estimates are available that an updated mine plan and schedule be completed and the project model updated. This would include the additional material from the extensions to the Butcher Creek resource both to the north and down dip as well as the nearby Golden Crown deposit. The increased amount of indicated resources along with more extensive metallurgical test work will allow for a future JORC compliant mining reserve to be defined for the project.

Permitting processes should now commence and a basic permitting framework for the project established. This should be considered a high priority given the delays currently seen on other projects in the West Australian mining industry.

20 Study Participants

Cube Consulting – Resource Estimation, MSO work, Mine Planning and Scheduling.

METS Engineering – Mine Ventilation Planning and VentSim Modelling.

MineGeotech – Geotechnical Engineering, Ground Support Designs and Stope Stability Designs.

RCI Mining and Project Development Services – Study Management, UG Mine Designs, Infrastructure Engineering and Project Financial Modelling.

MACA Interquip Mintrex – Metallurgical Testwork, Process Flow Sheet Design, Conceptual Process Plant Design, Process Plant Capital and Operating Cost Estimations.

21 Glossary

Term	Meaning
AISC	**All in Sustaining Costs**
BCGP	Butchers Creek Gold Project
BULHSCRF	Bottom-up single pass long hole stoping with CRF (downholes).
BULHSWRF	Bottom-up single pass long hole stoping with WRF (downholes).
CIL	Crabon in Leach
CIP	Carbon in Pulp
CRF	Cement rock fill
Cube Consulting	Cube Consulting Pty Ltd (ABN 84 094 321 829)
DD	Diamond core drilling
DOL	Direct On Line
DPBULHS	Double Pass Bottom Up Long Hole Stoping (downholes)
DTM	Digital Terrain Model
EDA	Exploratory Data Analysis
GSI	Geological Strength Index
HV	High Voltage
JORC	Joint Ore Reserves Committee
LV	Low Voltage
MEI	Meteoric Resources
MineGeoTech or MGT	Mine Geotechnical Pty Ltd (ABN39 092 834 494)
MRE	Mineral Resource Estimate
MSO	Mine Stope Optimiser
NGI Q System	Norwegian Geotechnical Institute Q System
OK	Ordinary Kriging
OVM	Ounces per Vertical Metre
PMA	Precious Metals Australia
QAQC	Quality Assurance Quality Control
RC	Reverse circulation drilling
SBS	Black Shale
SGW	Grey Wacke
SMS	Mudstone
TDLHS	Top down hole stoping with pillars (upholes)
UCS	Uniaxial Compressive Strength

Term	Meaning
AISC	**All in Sustaining Costs**
VHF	Very High Frequency
VSD	Variable Speed Drive
WIN	WIN Metals
WRF	Waste rock fill
WSW	West south westerly