



13 January 2026

McLaren Titanium Project Pre-Feasibility Study

Mineral exploration company, McLaren Minerals Limited (ASX: MML) ("McLaren" or "Company"), is pleased to announce the outcomes of its Pre-Feasibility Study ("PFS" or "Study") for its 100% owned McLaren Titanium Project ("the Project").

The PFS has confirmed the McLaren project (100% owned by McLaren Minerals and located in Western Australia) will be a straightforward and long life, globally competitive Titanium project, set to generate A\$2.78bn in Total Revenue and A\$899.7m in EBITDA over an initial 15.9 year mine life, with a payback of 3.7 years.

Highlights

- Pre-Feasibility Study completed.
- Expanded Mineral Resource Estimate (MRE) of 529Mt @4.5%HM (Indicated and Inferred), including a substantial Indicated portion totalling 249Mt@ 4.7% HM.
- High-Level Conceptual Pit containing 185.7Mt @ 5.85%HM estimated by IHC Mining, giving an initial mine life of 15.9 years.¹
- Base Case pricing assumptions, supported by an independent market report from Specialised Mineral Services, conservatively estimate:
 - Ilmenite Concentrate price of US\$250 FOB per dry metric tonne (DMT); and
 - Non-Magnetic Concentrate price of US\$366 per DMT.
- Strong financial outcomes under conservative Base Case assumptions, delivering:
 - Pre-tax NPV₈ of A\$252.2m
 - Pre-tax IRR of 26.0%
 - LoM Net Revenue of A\$2.60bn
 - Average Annual EBITDA of ~A\$56.5m
 - Average EBITDA margin of A\$129/dry tonne of finished product
- Low technical and execution risk supported by:
 - The Engineering Study carried out by IHC that developed a simplified flowsheet utilising traditional mineral sands separation equipment.
 - Bulk mining by proven Dry Mining Unit, also providing economies of scale.
 - Test work during PFS improved and validated the slimes management and Codisposal methods to be used at McLaren, again using tried and true methodology.
- More than 60% of the Total Resource remains unmined in this case, providing valuation upside, flexibility and further opportunities to evaluate in the Bankable Feasibility Study.

¹ The study work concluded here is of high-level, and not sufficient to support the estimation of an Ore Reserve, but highlights priority areas for additional drilling and optimisation work in the next study phase.



Simon Finnis, Managing Director, commented:

"Given we set out our PFS and development strategy in our very first presentation after acquiring McLaren, we are very pleased with the results, which have validated and derisked the Project.

Our updated MRE vastly exceeded our expectations and provides opportunities that will be studied during the Bankable Feasibility stage, which is due to commence shortly.

These outcomes should provide shareholders with confidence that McLaren is not only viable, but a very robust project, driven by our approach to minimising upfront capital while maximising returns.

I look forward to progressing a more detailed study to build on this work and assess the opportunities presented by the Resource upgrade."

Strong Economic Fundamentals – Key Metrics

Metric	UoM	PFS
Life of Mine	Years	15.9
Tonnes mined (ore)	Mt	186
Ore Grade	%HM	5.85
Processing Rate	Mtpa	11.8
Ilmenite Concentrate production (LoM)	Dry Kt	6,477
Ilmenite Concentrate production (average Annual)	Dry Ktpa	407
Non-magnetic Concentrate production (LoM)	Dry Kt	511
Non-magnetic Concentrate production (average Annual)	Dry Ktpa	32.1
Pre-production Capital (including Contingency)	A\$m	179.3
Deferred Capital	A\$m	16.9
Sustaining Capital (LoM)	A\$m	64.1
Revenue (LoM net of royalties)	A\$m	2,598
Revenue (average Annual net of Royalties)	A\$m	163
EBITDA (LoM)	A\$m	899
EBITDA (average Annual)	A\$m	56.5
Operating Costs (LoM)	A\$m	1,699
Operating Costs (average Annual)	A\$m	106.7
Operating Costs (per DMT finished product loaded into vessels)	A\$m	243.1
EBITDA Margin (per DMT finished product loaded into vessels)	A\$m	128.7
EBITDA Margin (per DMT finished product loaded into vessels)	%	34.6

NPV₈	A\$m	252.2
IRR	%	26.0
Payback	Years	3.7



Project and Pre-Feasibility Study Overview

The McLaren Titanium Project is located within the western margin of the Eucla Basin and centred some 150km east of Norseman and 40km west of the Balladonia Roadhouse in southern Western Australia, adjacent to the Eyre Highway. It comprises two tenements, E69/2386 and E69/2388 totalling 197 km² and 136 km² respectively.

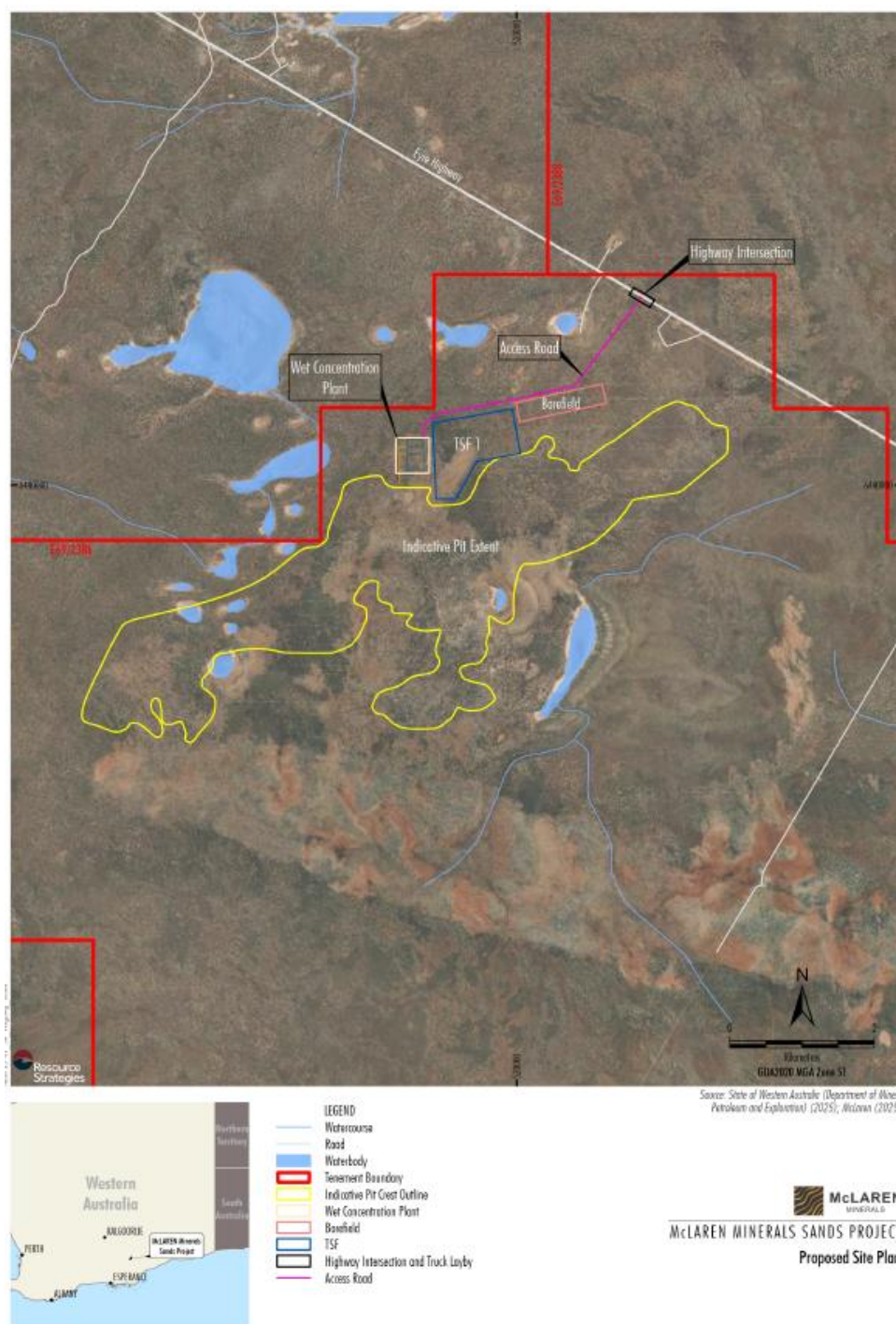


Figure 1: Site Layout displaying major components of the McLaren Titanium Project.



The Company is proposing to develop the McLaren Titanium Mineral Sand Project, and the PFS is an important step in the pre-development phase.

The project is primarily Ilmenite driven with a non-magnetic product also made during the process.

The mining unit plant will utilise dry mining techniques, the field assets shall include slurry booster pumps, and the wet processing plant shall utilise gravity and magnetic separation techniques.

IHC Mining (previously IHC Robbins) completed metallurgical test work on a 14 tonne sample of McLaren deposit material as part of the 2018 Scoping Study. Resulting from this test work, a process flowsheet was developed and slimes management was identified as a project risk. The deposit has significant slime content so developing a tailings management program has been a focus area of this study to ensure effective design for operation of the mine. As such, an additional 3-5 tonne sample, representative of average grade material in the McLaren deposit was sent to IHC Mining's Yatala Laboratory to enable slimes and tails handling test work to be completed between IHC Mining and SciDev. This allowed for an effective tails and slimes management handling system to be developed which effectively de-risked this aspect of the project. The outcomes of this test work included:

- Confirmation that slimes can be effectively thickened, dewatered and co-disposed using conventional mineral sands techniques;
- Water conditioning with low-grade gypsum delivered the best settling, dewatering and clarification outcomes;
- Thickened slimes showed pumping and rake performance characteristics acceptable to design standards;
- Test results supported the co-disposal of 100% of slimes with coarse tails.

The results of the test work program were announced to the market on 9 July 2025.



Estimate Type, Accuracy and Basis

IHC Mining have developed preliminary design inputs in accordance with the expected accuracy range for an AusIMM Class 4 estimate, which is equivalent to a Pre-Feasibility Study estimate.

The Basis of Estimate summary is included below:

Table 1 – Basis of Estimate

Basis Classification	Input
AusIMM	Class 4
Level of definition: (expressed as a percentage of complete engineering using appropriate indicators; i.e. % of EPCM, % of engineering cost)	10 - 15% of engineering definition
Typical PFS accuracy range:	±20 to ±25%
PFS accuracy range achieved: (based on engineering effort completed for this assignment).	-15% to +28.6%
Quotations/tenders supporting the estimates:	Equipment quotes and benchmark material supply rates and construction rates.

All cost estimates are presented in Australian dollars (AUD) and reflect actual project expenditures as of Q3 2025.

Capital Cost Estimate Summary²

Pre-production Capital

Area Description	Cost Estimate (Direct & Indirect) (A\$m)	Contingency Allowance (A\$m)	Sub Totals (A\$m)	% of Total
Site Civils & Non-Process Infrastructure	21.9	3.1	25.0	13.9%
Mining Support Equipment, Field Assets (incl. ore & Tails boosters)	13.3	1.6	14.9	8.3%
Wet Concentrator Plant	80.9	9.8	90.7	50.6%
Co-Disposal Plant	19.3	2.3	21.6	12.0%
Plant Utilities / Process Infrastructure	18.2	2.2	20.4	11.4%
Fire Water System	1.6	0.2	1.8	1.0%
Accommodation Camp	4.4	0.5	5.0	2.8%
Total Pre-production Capital	159.5	19.8	179.3	

² The sum of individual tabulated cost estimates may vary from the total cost figures, and this is due to rounding of individual costs to one decimal place.



Deferred Capital

Area Description	Cost Estimate (Direct & Indirect) (A\$m)	Contingency Allowance (A\$m)	Sub Totals (A\$m)	Timing
Off-path TSF	4.7	0.7	5.4	Year 1
Ore Slurry Booster Pumps (incl. field pipeline & valves)	2.7	0.3	3.1	Year 4/5
Co-disposal Booster Pumps (incl. field pipeline & valves)	2.4	0.3	2.7	Year 4/5
Ore Slurry Booster Pumps (incl. field pipeline & valves)	2.7	0.3	3.0	Year 8/9
Co-disposal Booster Pumps (incl. field pipeline & valves)	2.4	0.3	2.7	Year 8/9
Total Deferred Capital	15.0	1.9	16.9	

Operating Cost Estimate

All figures contained within the Operating cost estimate have been estimated and presented in Australian dollars.

The cost areas considered in developing the operating cost estimate include:

- Mining;
- Labour;
- Diesel;
- Liquid Natural Gas;
- Consumables;
- Electrical power;
- Rehabilitation;
- Logistics;
- Maintenance; and,
- Operating spare parts.



Operating Cost Assumptions:

- The mining function will be carried out by a reputable mining contractor. Costs have been provided.
- The separation plant and all supporting infrastructure will be operated by McLaren Mineral staff. IHC have estimated maintenance and consumables costs.
- The accommodation camp will be managed, operated and maintained by a reputable service provider. Proposals to carry out this function have been received and included in the estimate.
- Haulage, storage and shiploading of finished products has been costed based on a proposal provided by a reputable haulage contractor.
- Moisture of the concentrates has been estimated to be 5%.
- Diesel Fuel costs - \$1.30 per litre – after deduction of fuel levy.
- Gas generated power costs - \$0.2713 per kWh.
- Field and vehicle diesel costs have been calculated based on the fuel burn of the chosen units and a usage rate.
- Plant Maintenance has been based on 3.0% of direct equipment costs, and 5% for mobile machinery
- Operating Spare Parts has been based on 1.5% of direct equipment costs, and 2% for mobile machinery.
- Engineering, maintenance, labour and admin labour has been spread evenly amongst each location.
- Salaries have been estimated by McLaren Minerals based on industry experience with an overhead allowance of 30% of base salary included.

Operating Cost Estimate Summary

Cost Centre	LoM Op Cost (A\$m)	Average Annual Op Cost (A\$m)	% of Total
Mining	471	30	27.7%
Processing	621	39	36.6%
Labour Costs (Admin, Maintenance & Technical)	116	7	6.8%
Administration	50	3	2.9%
Product Transport, storage and shiploading	440	28	25.9%
Totals	1,699	107	100.0%



Marketing & Offtake

A Sulfate Ilmenite Market Report was provided from Specialised Mineral Services Pty Ltd, an expert in this field. The analysis confirms that the concentrate produced at McLaren will be in strong demand as the market pivots towards Sulfate Ilmenite as its preferred feedstock. For further details please refer to the ASX announcement lodged on 18th September 2025.

The main conclusions of the report were:

- Sulfate Ilmenite is a key feedstock for the production of Sulfate Pigment and Titanium Slag;
- This is a growing segment with several ilmenite smelters coming online and quite a few more are under construction.
- These will have a preference for sulfate ilmenite as a feedstock;
- Low impurities are key to both applications with both processes having other distinct key quality considerations;
- One key quality criteria for titanium slag manufacture is the high $\text{TiO}_2 + \text{FeO} + \text{Fe}_2\text{O}_3$ content (>90%). The MML product has a combined content of $\geq 96\%$, well above the industry standard;
- Not all sulfate ilmenites are suitable for both pigment and titanium slag applications but the MML product meets the key criteria for both applications, so the product will be highly desirable in the market;
- Chloride slag has been, and will continue to be, a major contributor to the growth of the chloride pigment sector;
- With chloride pigment identified as the growth area for the production of titanium pigment, and with less natural titanium feedstocks available, the market will require new feedstock.

Marketing has begun - initial interviews with potential customers have taken place in November 2025. A key aspect of the next phase of development will be to secure offtake agreements with consumers of sulfate ilmenite products.

Revenue Assumptions

Concentrate Pricing for this pre-feasibility study is based on market studies by Specialised Mineral Services. There are two final products for which sale prices have been estimated:

Sulfate Ilmenite Concentrate – The price has been estimated by referencing the current Sulfate Ilmenite price and applying a quality discount to account for concentrate quality vs finished product. The sale price used in the financial model is US\$250/DMT FOB;

Non-Magnetic Concentrate - Made up of Zircon, Rutile, Leucoxene and other minerals has been estimated by using a “sum of the parts philosophy” using percentages of valuable minerals contained in the concentrate, current product pricing and applying a discount to “pay” for the further processing stages. The sale price used in the financial model is US\$366/DMT delivered to customer.

Exchange Rate – 0.65 has been used for US\$ to A\$ conversion.

Royalties – the State Royalty (5%) and Vendor Royalty (1.5%) have been included as revenue deductions.



Physicals and Revenue Summary:

Description	LoM Production (DMT)	Average Annual Production (DMT)	LoM Revenue (A\$m)	Average Annual Revenue (A\$m)
Ilmenite Concentrate	6,477,125	406,950	2,491	156.6
Non-Magnetic Concentrate	511,017	32,106	288	18.1
Royalties (State & Vendor)			(181)	(11.3)
Net Revenue			2,598	163.4

Geology and Mineral Resources

The 2025 drilling completed to support the MRE update has confirmed the McLaren deposit as being hosted within the Miocene–Eocene shoreline sands, flanked by paleo channels to the west and displaying variable surface reworking across the main deposit area. Re-interpretation of the geological domain identified a previously unrecognised lower marine unit, enhancing the depth of identified mineral bearing Marine sediments and contributing to the Resource uplift. Mineralisation dominated by ilmenite, rutile, leucoxene and zircon within the sand “Mids” fraction (38 µm – 1 mm) extends ~5 km east–west and ~8.5 km north–south.

Exhibiting strong geological continuity, the presentation of geological setting hosting the mineralising beds, is now open for further assessment allowing strike as mineral hosting sediment termination is yet to be defined. Supported by variography and drill spacing, improved geological understanding of the depositional environment has broader positive implications beyond that of the deposit area.

Drilling Techniques

The deposit is predominantly drilled using aircore (AC) methods, with NQ diameter bits. The 2025 drilling program used sealed RC inner tubes to further support sample quality.

Sampling and Sub-sampling Techniques

Drill samples were collected at intervals of 1 m or 1.5 m over the various drilling programs since 2009. Samples were split with either an on-rig rotary splitter (earlier drill programs) or with a cone splitter as used during the 2025 program.

Sample Analysis Method

Samples were dispatched to Diamantina Laboratory in Western Australia for separation of the sand units into slimes, middlings and oversize. Samples were split to approximately a 150 g sample, then screened to remove the +1 mm fraction (oversize, “OS”); washed in a sieve to remove the -38 micron fraction (“slimes”); the residual sand product (-38µm to 1mm) (“mids”) was put through a heavy liquid “tetrabromoethane, or TBE” to separate the heavy minerals (“HM”) from the siliceous and calcitic sands. The mass of all products was calculated.



Estimation Methodology

The drillhole samples were used to guide the interpretation of the geological model, which was based upon samples with HM% >2%. A block model was constructed incorporating this mineralisation envelope. Slimes, mids, oversize and the HM percentage of the mids was estimated into the block model using ordinary kriging. Mineral assemblage data, being percentages of the various minerals making up the HM assemblage, were estimated into the block model. The mineral assemblage data were derived from a QEMScan analysis of selected drill samples. A dry bulk density of 1.7 t/m³ was applied to the block model.

Cut-Off Grades

The Mineral Resource is reported from blocks within the mineralisation envelope where the HM grade is >2% and where the estimated slimes grade is < 38%. The slimes grade cutoff was determined from a metallurgical test work study from a 3.3 tonne bulk sample carried out by IHC. The test work confirms that all slimes present in the ore can be effectively treated using co-disposal, with testing done up to a fines / coarse tails ratio equivalent to 38% slimes in the sand unit.

Mineral Resource Classification

The Mineral Resource is classified as a combination of Indicated and Inferred, with geological and sampling evidence sufficient to assume geological and grade continuity within the volumes classified as Indicated. The classification levels are based upon an assessment of geological understanding of the deposit, geological and grade continuity, drillhole spacing, quality control results, search and interpolation parameters, quality and quantity of mineral assemblage data, and an analysis of available density information.

The Eyre Highway cuts across the northern edge of the deposit and a 250 m buffer was applied either side of the highway, with no Mineral Resources reported from within this buffer zone.

Mining and Metallurgical Methods

It is anticipated that the deposit will be mined using conventional open cut methods, provisionally dependant upon the reporting of Ore Reserves, which are not reported here.

The upgraded Mineral Resource Estimate was announced to the market on 18 November 2025.

McLaren HM Deposit Mineral Resource, where HM % >2 and Slimes % <38

JORC Classification	Tonnes (Mt)	HM Grade (%)	In-situ HM tonnes (Mt)	Slimes (%)	Ilmenite (% of HM)	Rutile (% of HM)	Leucoxene (% of HM)	Zircon (% of HM)
Indicated	249	4.70	11.8	28.9	29.8	0.7	1.9	0.6
Inferred	280	4.20	11.9	31.3	27.8	0.7	1.8	0.5
Total	529	4.50	23.7	30.1	28.7	0.7	1.8	0.5

Notes:

Due to effects of rounding, the total may not represent the sum of all components

The Mineral Resource is reported from blocks within the >2% HM mineralisation envelope, reported from blocks with >2% HM and <38% slimes.

Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

A dry bulk density value of 1.7 t/m³ was applied to the Mineral Resource.



Production Forecast

A preliminary high-level economic assessment of the updated Mineral Resource Estimate has been completed. The deposit demonstrates strong geological continuity and appears amenable to cost-effective extraction methods, supporting the potential for attractive returns and positive cash flow.

These findings justify advancing the project to the next stage of development. The analysis also highlights priority areas for additional resource drilling and recommends further optimisation of mining rates, sequencing, and pit designs in 2026 to validate robustness under varying economic scenarios.

Overall, the current mining inventory represents a significant opportunity for long-term revenue generation and strategic growth.

The Conceptual Pit options developed during this process, specifically Case 90, along with the mass balances generated during the test-work and engineering studies, were used to estimate a production forecast, which has been used as the basis to generate the variable mining, processing and logistics costs. This production forecast should not be considered definitive, nor should it be considered a Mining Reserve. The detailed study planned for 2026 will incorporate a Life-of-Mine (LoM) design and production schedule, which will form the foundation for the Ore Reserve estimation.

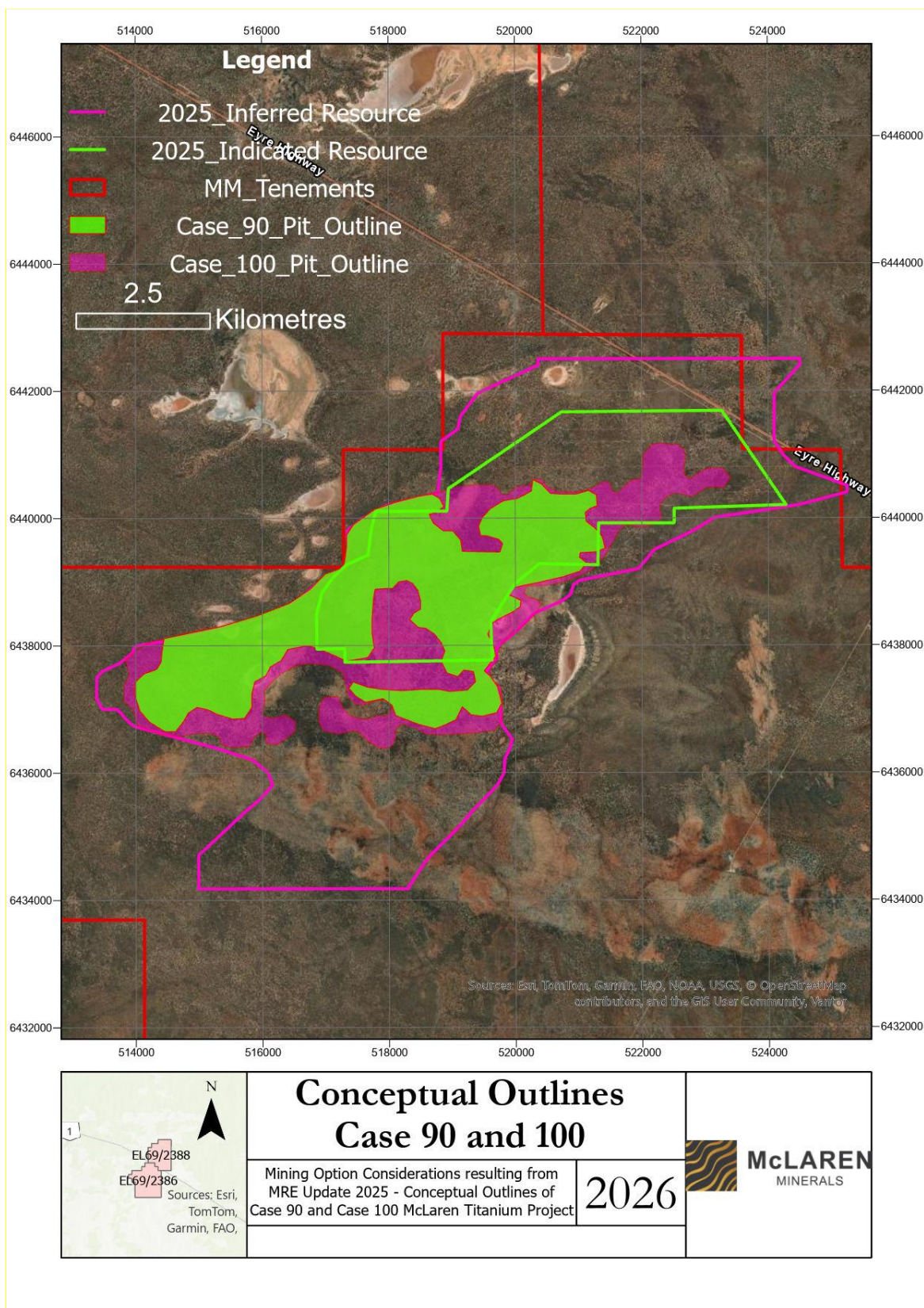


Figure 2 – Conceptual Pit outlines for Cases 90 and 100



Opportunities and Risks

Opportunities

A number of opportunities have been identified during the Pre-Feasibility Study, and they are listed below:

- Prior to commencing the BFS a value engineering exercise should be conducted to tailor specific aspects of the design requirements to the selected Option. The relevant opportunities listed within the Risk & Opportunities Register should also be evaluated and incorporated as part of the value engineering exercise.
- There is an opportunity to design part of the off-path TSF with a HDPE liner, to enable a suitable storage capacity that would offset the large amount of bore water required at plant start-up.
- The CAPEX currently includes a rate for fill material being sourced in Norseman and transported to site. Opportunity to reduce transport costs by sourcing suitable fill material locally to the site.
- Adopt IHC Mining's next generation modular plant design, with an aim to reduce site installation time and construction costs.
- The Gypsum Plant's necessity and/or Feed Hopper design needs further review, particularly taking into account water quality, during the BFS.
- A study to determine whether there is financial benefit to utilising power from the site power station to run the field pumps and facilities should be completed. Essentially this would be a trade-off between capital to construct high-voltage reticulation versus the operating cost to supply fuel to, and maintain, the required field pump units.
- A study to determine the benefits of increasing production now that a more robust MRE has been estimated.

Project Risks

A process Risk Register was developed at the end of the 30% Design Review. Risk workshops were held at the end of each milestone design review (30% & 95%), where the risk register was reviewed and newly identified risks were added and mitigation measures for existing risks were updated.

All risks identified throughout the study were classed as Medium Risks, with Mitigation measures deemed viable.

There were no risk items identified as part of the PFS that scored both a high likelihood and a high consequence.

All mining projects have inherent risks. Key Risks specific to this project that contained either a high likelihood, or a high consequence are tabulated below, with further mitigation work to be carried out during the BFS phase.

Category	Risk	Mitigation
Permitting	Regulatory approval delays or constraints enforced by Regulators	Adherence to WA and Commonwealth Regulations. Early and regular consultation with Regulators. Adherence to accepted environmental standards.



Category	Risk	Mitigation
Commercial/Economic	Revenue – adverse market conditions impact product pricing/saleability	Mature and growing market. Early and extensive engagement with potential offtake partners. Quality of McLaren products is attractive to consumers. Experienced marketing and management team. Conservative pricing used as PFS assumptions.
Commercial/Economic	Cost Escalation	Allowance of contingencies in capital estimate. Favourable project location to assist with competitive pricing from providers. Experienced project delivery team and procurement specialists to be used.
Mining	Adverse mining conditions encountered	More drilling planned for BFS phase. Experienced mining contractor to be appointed.
Mining	Resource Model does not reconcile with grade control or mining.	Further variability, density and other drilling to be carried out during BFS phase. Mining Reserve to be delineated.
Separation/Processing	Plant doesn't perform as planned.	Significant test work already carried out with more planned for BFS. Experienced flowsheet and engineering design team.
Separation/Processing	Slimes management processes do not perform as designed.	Significant successful test work already carried out. Further work planned for BFS phase.
Separation/Processing	Water supply or quality doesn't meet operational requirements	Water bores to be drilled and pump tests carried out during the BFS phase. Back-up water supply plans to be developed if/as required.
Separation/Processing	Potential for inter-stage sizing screens binding during plant operation	Review screen maintenance/cleaning regimes during next phase.
Human Resources	Unable to attract high-quality employees	Utilise experienced and reputable construction firms with high success rates of project delivery. Develop recruitment and retention plan for operations ensuring competitive remuneration, rosters and working conditions. Ensure high quality Accommodation camp compared to peers.



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About McLaren Minerals Limited

McLaren Minerals is an exploration company focused on the future development of our high-value McLaren titanium project in the Eucla Basin of Western Australia, and has recently added the Zircon rich Barossa Project to its portfolio. Titanium is considered a critical mineral and is essential for aerospace, defence and energy technologies.

This announcement has been authorised by the Board.

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This announcement contains references to prior announcements lodged on the ASX. The Company confirms that there is no new information or data that materially affects these announcements, and that all assumptions underpinning them 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 market announcement.

Disclaimers

General

This announcement has been prepared by McLaren Minerals based largely on a Pre-Feasibility Report (the Report) by IHC Mining (IHC) which included test work and engineering studies to develop a flowsheet, enabling the estimation of a capital cost and process/maintenance operating costs. It is based on assumptions as identified throughout the text, in Appendix 1, and upon information and data supplied by others.

The announcement is to be read in the context of the methodology, procedures and techniques used, IHC assumptions and the circumstances and constraints under which the announcement was written. The announcement is to be read as a whole, and sections or parts thereof should therefore not be read or relied upon out of context.

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Cautionary Statement

The Mineral Resources underpinning the Conceptual Pit have been prepared by a competent person in accordance with the requirements of the JORC Code (2012). The Competent Person's Statement is found in the ASX release dated 18 November 2025. For full details of the Mineral Resources estimate, please refer to this ASX release, McLaren Delivers Outstanding Resource Upgrade to 529Mt, dated 18 November. McLaren confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that release continue to apply and have not materially changed.

This release contains a series of forward-looking statements. Generally, the words "expect," "potential", "intend," "estimate," "will" and similar expressions identify forward-looking statements. By their very nature forward-looking statements are subject to known and unknown risks and uncertainties that may cause our actual results, performance or achievements, to differ materially from those expressed or implied in any of our forward-looking statements, which are not guarantees of future performance. Statements in this release regarding McLaren's business or proposed business, which are not historical facts, are forward-looking statements that involve risks and uncertainties, such as Mineral Resource estimates, market prices of finished products, capital and operating costs, changes in project parameters as plans continue to be evaluated, continued availability of capital and financing and general economic, market or business conditions, and statements that describe McLaren's future plans, objectives or goals, including words to the effect that McLaren or management expects a stated condition or result to occur. Forward-looking statements are necessarily based on estimates and assumptions that, while considered reasonable by McLaren, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements. Investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date they are made.

McLaren has concluded that it has a reasonable basis for providing these forward-looking statements and the forecast financial information included in this release. This includes a reasonable basis to expect that it will be able to fund the development of the McLaren Titanium Project upon successful delivery of key development milestones as and when required. The detailed reasons for these conclusions are outlined throughout this ASX release. While McLaren considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the outcomes indicated by the Pre-Feasibility Study will be achieved and are considered preliminary in nature.

No Ore Reserve has been declared. This ASX release has been prepared in compliance with the current JORC Code (2012) and the ASX Listing Rules. All material assumptions, including sufficient progression of all JORC modifying factors, on which the production forecast and financial information are based have been included in this ASX release.



Appendix 1 – Basis of the Pre-Feasibility Study

IHC Scope of the Study

Deliverables and activities undertaken during this Pre-Feasibility Study include:

- Results for tailings and slimes generation and processing as completed in the Metallurgical Test Work;
- Development of a slimes management & co-disposed tails strategy;
- Process, Mechanical, Structural, Piping and Electrical Design Criteria;
- Prepare preliminary requests for information (RFI's);
- Development of a Block Flow Diagram (BFD) outlining high level plant Interaction;
- Development of Process Flow Diagrams (PFD's);
- Compiling mass and water balances;
- Undertaking preliminary engineering calculations sufficient to compile a Class 4 estimate;
- Completing preliminary equipment selections;
- Preparing mechanical equipment list with power draw;
- Facility layout drawings;
- General arrangement drawings;
- Mechanical equipment list including Pump schedule (preliminary);
- Multi-discipline engineering schedules and/or material take offs (MTO's), derived from preliminary engineering for all Mechanical Equipment, piping, hoses & valves, Structural Steel, Electrical Equipment, Instrumentation & Control, Mechanical Platework, Civil components, Civil Bulk Earthworks & Concrete scope including all foundations and slabs;
- Factored estimates for selected scope, including (but not limited to); Workshop Detailing, Local Freight, International Freight, EPCM, Construction Contractor Indirects.
- Historical estimate data for various items, including (but not limited to); Selected Mechanical Equipment scope, Off-shore Structural Steel & Platework Fabrication, Selected Process Infrastructure scope, Selected Non-Process infrastructure Scope, Local WA Piping & hose & Valves scope, SMP installation (based on well established "Man hours per tonne" data) and dust collection scope.
- Navisworks 3D model demonstrating design;
- Overall Mine Site Layout Drawings, including surface contours.
- Equipment request for quotation (RFQ) packages;
- Control room general arrangement drawing;
- Electrical Switch room general arrangement drawing;
- Electrical Single Line Diagrams (SLD's) for low voltage;
- Electrical equipment list (preliminary);



- Cable schedule (preliminary);
- Preparing selected requests for quotation (RFQ's) for issue to vendors. Liaise with vendors;
- Compiling a Class 4 Capital Budget Estimate (-15 / +28.6% accuracy);
- Compiling a Class 4 Operating Cost Estimate (-15 / +25% accuracy);
- Development of preliminary project execution schedule;
- Preparation of final Summary Study Report.
- Ore Slurry Booster Pump skids, powered by Diesel Generator sets (for pumping of screened ore slurry from the MUP to the Process Plant);
- Ore Slurry field pipeline and overflow Dam;
- Skid-able MUP Field Water Tank and distribution pump / pipework;
- Non Processing Infrastructure (NPI) – as required;
- HV Reticulation at WCP;
- Overall Mine Site Layout Drawings, including surface contours;
- Preliminary investigations into historical costs for typical designs of civil works, access roads and Tailings Storage Facilities.

McLaren Scope of the Study

- Mining Unit Plant & Primary Ore Slurry Pump scope (not capitalized, covered as part of the Mining \$/T OPEX estimate);
- Mining Unit Plant Support Facilities, such as; Control room, crib room, potable water supply & distribution, localized sewerage treatment modular packaged plant (not capitalized, covered as part of the Mining \$/T OPEX estimate);
- Mining Contractor's Facilities, such as; Workshop, Offices, heavy vehicle wash down, refuelling, and water truck filling stand-pipe (not capitalized, covered as part of the Mining \$/T OPEX estimate);
- Mining Start-up Pit (not capitalized, covered as part of the Mining \$/T OPEX estimate);
- Mine review and mine method study;
- Diesel/Gas Generated Power Plant scope, including site diesel storage & distribution to power plant (not capitalized, covered as part of the OPEX estimate).
- Permanent camp, facilities and services (built early to house construction crew);
- Bore field drilling & casing scope;
- Mine Site access tracks from MUP pit to Plant;
- Product Transport Logistics (from gate to customer).
- Financial modelling.



Description of Facilities

The mass and water balance as well as the Process Flow Diagrams were developed based on the material test work programs conducted by IHC. These were developed and used to enable the creation of the Mechanical Equipment list and the selection of equipment and plant design.

The Mineral Processing circuits adopt conventional technology involving ore screening, desliming, gravity separation and magnetic separation. The process plant also aims to reduce water losses through dewatering of product prior to stacking, as well as through recovering water from the co-disposed tailings system.

Mining and Tails Facilities

The Mining Unit Plant (MUP) is as follows:

The MUP scope includes a dozer trap module, screening module and primary ore slurry pump. IHC's study scope was limited to conceptual design and scoping of all supporting equipment, ensuring the MUP is serviced by a relocatable process water tank, scalping screen, process water supply pumps and associated pipework.

The MUP shall be powered by local diesel generator sets and be fed by mine dozers. The MUP will receive feed at the dozer trap module, via a static grizzly screen (to remove large oversize). The mined material will then pass through a trommel screen (to remove >2mm oversize), using internal lifters and spray bars to liberate clays and conglomerates. From there the slurry bin provides additional water injection to control the pumping density for efficient and reliable long distance slurry pumping. The MUP includes a primary ore slurry pump, a 500PN16 pipeline and a primary booster pump.

Facilities to support the MUP include a control room, crib room, potable water supply, potable water storage & distribution and a portable sewerage treatment plant

Off Path Tails Storage Facility

The Off-path Tails Storage Facility (TSF) was investigated jointly by McLaren minerals & IHC and will allow for storage of co-disposed tailings across a period equal to 6 months of operation.

Ore Field Pumping

Overland ore pumping will transfer screened ore material. The booster pumps shall be set up in pairs on draggable skids with power supplied to each skid via a local diesel generator set. The field pumping will supply the fixed feed preparation plant at the wet concentrator plant.

As the distance from mine to wet concentrator plant increases over time additional units will be added.

Wet Concentrator Plant (WCP) – Feed Preparation

The McLaren deposit is classified as a high-slimes and the design case considers 25% of the feed solids to be -38µm, or 'slimes'. Due to this significant quantity of slimes the feed preparation plant consists of a 2 stage deslime circuit and an IHC Constant Density tank to supply a deslimed and density-controlled feed to the Wet Concentrator Plant.



Wet Concentrator Plant – Spiral Plant

The Wet Concentrator Plant (WCP) consists of a four-stage spiral gravity separation circuit with an intermediate sizing screen. The heavy minerals are separated by gravity on the spiral troughs with the lighter particles reporting to the outside of the trough and the heavy particles to the inside of the trough.

The WCP is designed to create a Heavy Mineral Concentrate (HMC) suitable for further processing by the Concentrate Upgrade Plant (CUP). A coarse sand tailings waste stream is generated and disposed via the co-disposal system.

Concentrate Upgrade Plant

The Concentrate Upgrade Plant (CUP) comprises a 4-stage circuit with a stage of Low Intensity Magnetic Separators (LIMS) a stage of Wet High Intensity Magnetic Separators (WHIMS) followed by a Rougher and Cleaner stages of spirals. The CUP aims to produce a Magnetic Product and a Non-Magnetic Product.

Product Dewatering and Stacking

The wet concentrate upgrade process creates a Magnetic (Ilmenite), and a Non-Magnetic bulk product that requires dewatering and stacking prior to transportation.

Two options were investigated by IHC and McLaren chose to utilise finished product dewatering via Hydro-cyclone, followed by stacking.

The Magnetic product is stacked into a covered storage facility while the Non-Magnetic product is stacked in the open.

Slimes Thickening

The McLaren deposit is high slimes in nature and therefore requires significant infrastructure relating to handling, settling, transferring and replacing of the -38µm fraction.

Slimes is first gathered to the thickener feed box and into the thickener along with reclaimed process water. The feed box supplies two (2) large high-rate thickeners and is then dosed with flocculant to settle the slimes. The settled slimes are then discharged from the thickener and pumped to the co-disposal bin for mixing with the coarse sand tails stream. Any remaining clean process water overflows the thickeners and flows to the process water dam.

Co-Disposal Plant

The Co-Disposal system combines the slimes tailings and the coarser sand tails from the process plant and then deposits them back into the mine void. During normal operations the disposal area is typically built on-path at the rear of the mine pit, however; at start-up the co-disposed tailings is deposited into the Off-path Tailings Storage Facility (TSF).

Co-Disposal Booster Pumping

Overland slurry pumping is employed to transfer the tails co-disposal material back to the mining area. The first 650m horizontal duty is provided by the WCP primary Co-disposal pump, with the remaining duty provided by field booster pumps. The booster pumps shall be set up in pairs and powered by its own local diesel generator. The co-disposal field pumping will supply co-disposed material to the flocculant mixing and switching skids.



As the distance from mine to wet concentrator plant increases over time additional units will be added.

The co-disposed tailings stream is discharged in the field via an open ended pipe, with further diluted flocculant injected into a skid mounted pipe spool, located approximately 150m before the discharge point. This method adopts a proven technology, which is an efficient way of tailings return, and also serves to optimise water recovery.

Process Water System

The WCP Process Water System includes a settling dam and a main Process Water Storage Dam. Water Pumps located at the WCP dam distribute process water to either the MUP field water tank or to the local WCP Process Water tank. The WCP Process Water tank is coupled to several process water pumps for distribution of process water to the WCP.

Gypsum Plant

The test-work proved that the introduction of 3% gypsum water to wet and attrition the ore slurry, greatly reduced the hydration of the clay contained with the ore, thus minimising resultant bulking of the active clays. This is deemed essential in the large scale commercial plant to ensure liberated clays are kept to a minimum, and removed as quickly as possible at the front of the circuit, via the MUP scrubber/trommel.

A gypsum plant is required to dissolve gypsum into solution in the process water system. The Gypsum is supplied in bulk as a back load from the HMC haulage process. The bulk gypsum is then reclaimed via front end loader into the gypsum dosing plant.

Infrastructure & Utilities

The plant will require the following plant infrastructure and utilities:

- Reverse Osmosis (RO) Plant – to meet the needs for potable water for washing product, gland seals and potable water.
- Raw Water Storage – to store water for the RO Plant and Gypsum Plant.
- Potable Water Storage – to feed the various potable water systems.
- Compressed Air Plant – for selected valve and instrument duties.
- Plant Communications - A Telemetry Package for the Plant Communications from Field located equipment to the plant control room.

Portable Buildings

To support operations buildings and offices are required:

- Main Control Room.
- Maintenance Workshop and Store – suitably fitted to support operations and maintenance functions.
- Metallurgical Laboratory – Equipment installed will include sample preparation equipment, assaying Equipment (incl. bench top XRF Analyser) and heavy liquid separation equipment.



Firewater System

At the centralised processing facility, there is a dedicated Firewater System inclusive of fire water tanks and pump skid with control panel, distribution pipework & localized fire detection equipment. Underground distribution pipework delivers fire water to selected fire hydrants, with above ground reticulation up to each level of the WCP spiral banks.

Site-Wide Civils and Non-Process Infrastructure (NPI)

Engineering scoping for this element was based on the following development approach:

- Plant concrete works and related civils – Concrete works including building pads, foundations, mineral drying floors, localized excavations, construction laydown areas.
IHC Mining completed preliminary modelling and design of the plant and facilities and then used these designs and drawings to estimate relevant areas, volumes and quantities of civil and concrete works.
- Site Civil and Bulk Earthworks – Inclusive of access roads, site roads stormwater culverts and dam works. All civil scope has been considered based on execution by a local contractor, including mobilisation, demobilisation, supply of materials, all necessary compaction and all equipment and labour.
Hardstand and access road, base coarse and sub-coarse shall be imported to site from a local suppliers in Norseman.
- High-Voltage (HV) Power Supply – IHC Mining generated electrical load lists and based on that, requests for quotations were made to various packaged electrical generation suppliers. The costs accepted were based on a supplied, installed and managed facility and an electrical usage charge.
- HV Power Distribution - IHC Mining generated electrical load lists by process area and location which enabled design of the plant HV reticulation system and provide cost estimates for the appropriate power distribution equipment.
Where necessary, HV to LV stepdown transformers have been included within the HV power distribution scope.
- Administration Office, Lunch room and Sewage Treatment Plant – All these packages are of modular design and scoped based on staff and user requirements.
- Bore Field and Process Water Supply – IHC calculated the water requirements and requests for quotation were to local suppliers.
- Site Fences and Gates – Adequate fencing and gating, including a gate house package are included.
- Tyre and Vehicle Wash Facility – To be utilised by all vehicles onsite. Based on the design of a heavy vehicle washdown bay, inclusive of minor civils for a 6m x 6m washing bay with a maximum axle load of 60 tonnes.
- Diesel Storage and Distribution (Power Plant) – based on the fuel requirements for the electrical generation package proposals were requested from fuel suppliers for a full autonomous and bundled system. Preferred submissions provided a fully installed system with charges based on fuel consumption.



- Diesel Storage and Distribution (vehicles) – A single 10,000 litre self-bunded diesel storage tank for vehicle refuelling.
- Freight & Logistics – A request for quotation was issued, and costs were provided to haul Magnetic (ilmenite) Concentrate to Esperance Port, store and then load the material onto ocean going vessels. For the Non-Magnetic concentrate haulage costs were received to haul the material to Bunbury.