16 July 2024

MT BEVAN MAGNETITE JOINT VENTURE

COMPLETION OF PREFEASIBILITY STUDY

HIGHLIGHTS

- Financial analysis has determined a mid point NPV of $A M of 1,674, within a range of (A$740 M) to A$3,634 M; this range is highly sensitive to the model's assumptions for long-term iron ore benchmark and premium pricing.
- Capital investment is estimated at AUD $5B (USD $3.3B)
- C1 operating costs of AUD $99/DMT (USD $64/DMT) for a 12mtpa operation.
- According to metallurgical testing, the Project can achieve a Direct Reduction Iron (DRI) product grade of >70% Fe, <2.5% Si at 45µm grind size with the potential to obtain a significant premium.
- Study incorporates recently announced total Mineral Resource Estimate (MRE) of 1,291 Mt
- A detailed summary of the project can be found later in this release

Legacy Iron Ore Limited (ASX: LCY, Legacy Iron) and Hawthorn Resources Limited (ASX: HAW, Hawthorn) are pleased to announce the completion of a Pre-feasibility Study (PFS) for a 12Mtpa high grade magnetite project at their Mt Bevan Iron Ore Joint Venture project (Project) in the Central Yilgarn of Western Australia.

The Project is a Joint Venture between Legacy, Hawthorn and Hancock Magnetite Holdings Pty Ltd (Hancock), a wholly-owned subsidiary of Hancock Prospecting Pty Ltd, and is managed by Hanroy Iron Ore Projects Pty Ltd.

Following completion of the PFS, the JV ownership is Hancock (51%), Legacy (29.4%) and Hawthorn (19.6%).

The PFS incorporated:

- Resource Drilling of a total of 41 drill holes for 9,008m including 31 RC holes (6,361m), 4 diamond holes (864m) and 6 RC with diamond tails (1,783m).
- Baseline environmental and heritage surveys
- Comprehensive metallurgical testwork program
- Development of a 25-year Mine Plan
- Process plant and infrastructure design to support a Class 4 Cost Estimate
- 3rd Party engagement with Arc Infrastructure and Southern Ports for transport Logistics

Following the results of the PFS, the Joint Venture partners have committed to commence a Forward Works Plan to further define, optimise and de-risk the project including:

- Acquiring tenure to support water exploration and service corridors.
- Continuing heritage and environmental surveys for approvals.
- Investigate other optimisation avenues including:
  - Further assessment of transport options
  - Further investigation of power supply alternatives

Commenting on the release of the PFS at the Mt Bevan project, Legacy Iron CEO Rakesh Gupta noted "*this is a significant development in the advancement of the Mt Bevan magnetite project with the release of the study showing real economics of the project, and further highlights the significant skills brough to the joint venture by Hancock. The project is truly world-class with a grade of 70%Fe making it attractive to end users. We look forward to the ongoing development of this project with our Joint Venture partners."*

Commenting on the successful completion of the PFS, Hawthorn's Managing Director and CEO Brian Thornton, complimented "*Hancock and their team for their professionalism in delivering a very complex PFS for a green fields, next generation iron ore project. Our commitment as joint venture partners in Mt Bevan, has been to unlock the potential of what*

is one of Australia's highest grade in situ magnetite deposits for the benefit of our shareholders and the nation. At a beneficiated DRI product grade of 70% Fe, Mt Bevan magnetite will be a key ingredient for DRI in future steel making and result in a "cleaner greener steel" assisting in our universal goal of Net Zero economic development.

Hancock noted *"The completion of the Mt Bevan Magnetite Project PFS is a significant milestone for the Joint Venture and reflects the hard work of Hancock, Legacy Iron and Hawthorn Resources. The technical outcomes from the work done are positive and further work is being undertaken to optimise the design and costs for supply of power, transport of iron ore product from mine site to a port for export of the product and identification of water sources required for processing and production of the concentrates. However, Australian government tape and the approvals process in Australia add uncertainty to the project, despite its technical merit.*

This announcement has been authorised for release by the Board of Legacy Iron Ore Ltd and the Board of Hawthorn Resources Ltd.

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The Prefeasibility Study referred to in this ASX release has been undertaken for the purpose of initial evaluation of a potential development option for the Mt Bevan Magnetite Project in Western Australia on Exploration License E29/510. It is a preliminary technical and economic study of the potential viability of the Mt Bevan Magnetite Project, completed to a level of accuracy of notionally +/- 25%. Further work will be required to improve the accuracy and reduce the technical, financial, environmental and stakeholder risks related to this development option.

A financial analysis was completed, based on JORC 2012 Section 39, on the Indicated Mineral Resource (only) based on reasonable assumptions of the Modifying Factors for the purpose of determining if all or part of the Mineral Resource may be converted to an Ore Reserve. This analysis determined that the discounted cash flows from the Indicated Mineral Resource could not offset the capital expenditure and hence was unable to support the reporting of a JORC compliant Ore Reserve. The financial analysis outlined in this ASX Release has considered a range of options and sensitivities, that do not satisfy an Ore Reserve assessment, for the purpose of framing forward works on the project. This analysis utilises all modifying factors as determined in the PFS for Mining, Metallurgical, Environmental, Infrastructure, Revenue and Cost; with the exception of the inclusion of inferred and unclassified material within the "25Yr Mine Plan" in order to achieve 25 years of mining operations. There is a low level of geological confidence associated with inferred and unclassified mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised. This financial analysis is also dependent on the assumption that the metallurgical properties of this additional material is the same as the Indicated Mineral Resource. It is an implicit assumption within this assessment that the Inferred and unclassified materials will be processed under the same flowsheet and hence capital and operating costs and the same product grades will be achieved. With further metallurgical testwork this assumption may be found to be invalid.

1. Project Summary

Item	Description
Mineral Resource	1291Mt (380Mt Indicated + 911Mt Inferred) @ 33.52% Fe
Product	High Grade DR Concentrate Target Grade: >70%Fe, <2.5% SiO2, <0.02% Al2O3, <0.02%P, <0.04% S Grind Size P80 45µm
Material Movements (25 Year Mine Plan*)	TMM 2,069Mt (Ore 757Mt / Waste 1,312Mt) Strip Ratio 1.7
Pre-strip Material	80Mt
Plant ROM Feed (design)	32.9Mtpa(dry)
Nameplate – Concentrate (design)	12Mtpa (dry) 13Mtpa (wet)
Process Flowsheet	Gyratory Crusher – Secondary Crusher – HPGR - Ball Mill – Fine Grinding – S/Si Floats
Plant Mass Recovery (design)	36.4%
Power Supply	Islanded Gas Hybrid System with 63% renewable penetration
Tailings Storage Facility	Wet lined tailings storage.
Water Usage	15 GL/a (initial); 12 GL/a (with TSF Return)
Transport Logistics	New 125km Slurry Pipeline Upgraded Arc Infrastructure Network (Menzies to Esperance) 3rd Party Haulage
Port of Export	Port of Esperance
CAPEX	AUD5,031M
OPEX	AUD99/dmt of Concentrate
NPV – Real, Post-tax	(A$740M) to A$3634M
*The 25 Year Mine Model includes the initial 25 years of mining operations of the Banded Iron Formation within the “Fresh” Geozone with DTR >15% regardless of Mineral Resource Classification. This Mine Model cannot be utilised for assessment of Ore Reserves.	

2. Detailed Project Information

The Mt Bevan Iron Ore Project is located in the Yilgarn Region of Western Australia on Exploration Tenement E29/510-I at the northern end of the Mt Ida Greenstone Belt, approximately 100km west of the Leonora Townsite within the Shire of Menzies.

Figure 1: Project Location

2.1. Geology & Mineral Resource

The infill drilling by Hanroy was completed between September 2022 and December 2022 with a nominal spacing of 400 x 100m to supplement previous drilling conducted by Legacy Iron. Two twin holes to the Legacy Iron's holes were drilled as a validation check, and two extra northern rows were designed to extend the classification of Indicated resources further north along the strike. A total of 41 drill holes with a total of 9,008m depth, were completed before the end of December 2022. These holes comprised of 31 RC holes (6,361m), 4 diamond holes (864m), and 6 RC with diamond tail holes (1,783m). The 4 diamond and 6 RC Diamond tail holes were metallurgical holes and were not used in the resource estimation process.

The cross section of the geology is shown in Figure 2 below.

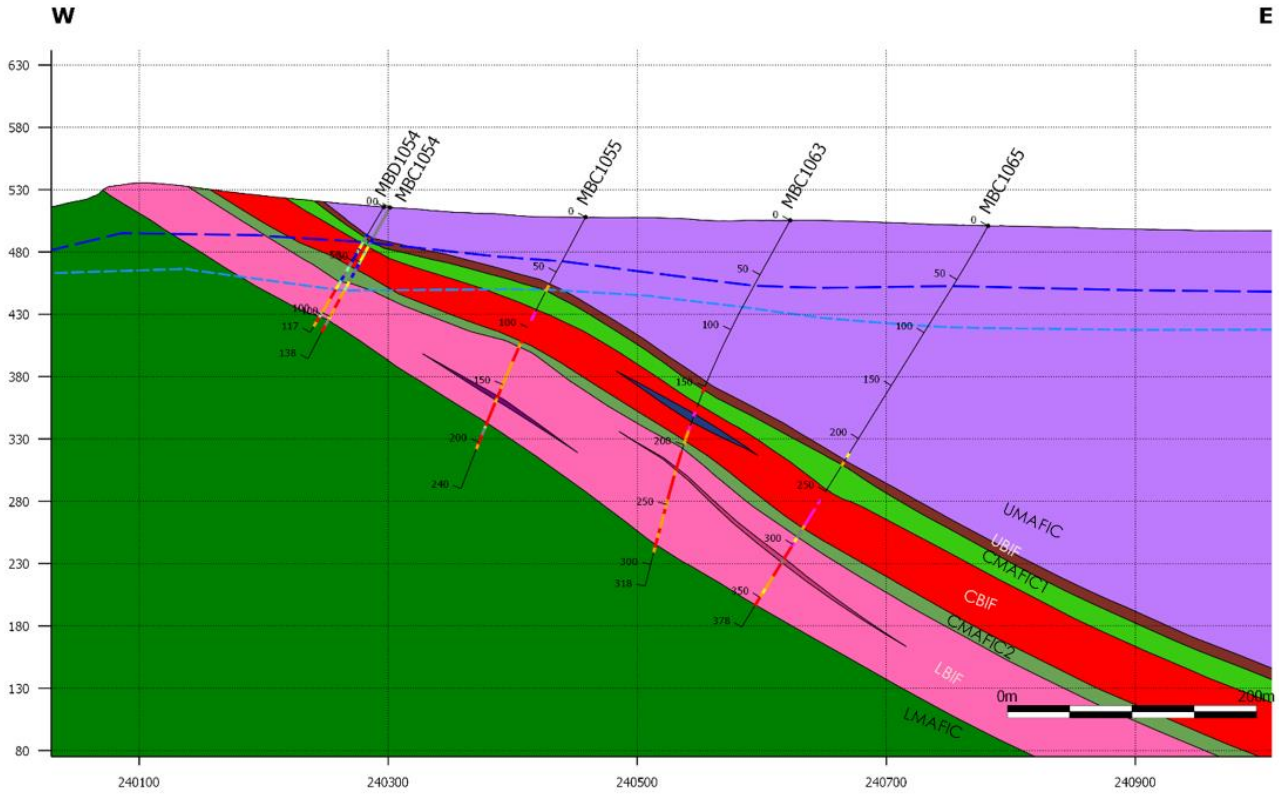

Figure 2: Cross section of Mt Bevan block model Section North 6,780,900

The PFS has increased the Mineral Resource by 10% as announced on 1 July 2024. The Mineral Resource estimate was completed by Atlas Iron Pty Ltd and reviewed by Cube Consulting Pty Ltd. Mineral Resources are shown in Table 1 below along with a comparison to the last Mineral Resource Estimate completed by SRK Consulting for Legacy Iron Ore in December 13 ,2013.

Table 1: Mineral Resource Estimate

	Resource Classification	MT	Fe (%)	DTR (%)	Fe_C (%)
Mt Bevan May 2023	Indicated	380	33.9	43.1	67.9
	Inferred	911	33.3	44.2	67.2
	Total	**1,291**	**33.5**	**43.9**	**67.4**
Mt Bevan Dec 2013	Indicated	322	34.7	44.2	68.0
	Inferred	848	35.0	45.7	67.5
	Total	**1,170**	**34.9**	**45.3**	**67.7**
Difference	Actual diff	120	-1.4	-1.4	-0.2
	% diff	**10.3%**	**-4.0%**	**-3.0%**	**-0.3%**

(The Company confirms that it is not aware of any new information or data that materially affects the information included in that announcement of 1 July 2024 and, in relation to the estimates of the Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the 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 that announcement.)

2.2. Mining

The mining method considered is a bulk open pit operation, with mining fleet, operating under a standard drill, blast, load and haul model, using rigid rear-dump haul trucks (296 tonne payload) and diggers (800 tonne). Mining is proposed to be owner operated. The mining scope includes:

- Personnel, mining fleet, equipment, infrastructure and diesel fuel
- Clear and grubbing, topsoil stripping and stockpiling
- Construction of haul roads and the Run of Mine [ROM] pad utilising mine waste
- Supply of mine waste for the construction of the tailings storage facility
- Drilling and blasting
- Load and haul utilising 800t diggers and 296t autonomous haul trucks
- Haul of mine waste to waste dumps
- Haul of ore to the ROM pad and either placed on fingers or on the overflow stockpile
- Primary crusher is fed material utilising front end loaders
- Dewatering with bores and in-pit sump pumps
- Rehabilitation

The ROM pad and overflow stockpile have been located centrally to the ultimate pit (Figure 3). The ROM pad has five 12m tall fingers, 60m wide and 115m long with 900kt of capacity. The Overflow stockpile can store 10,000kt of ore. Three waste dumps have also been designed to accommodate the mine waste produced throughout the life of the project.

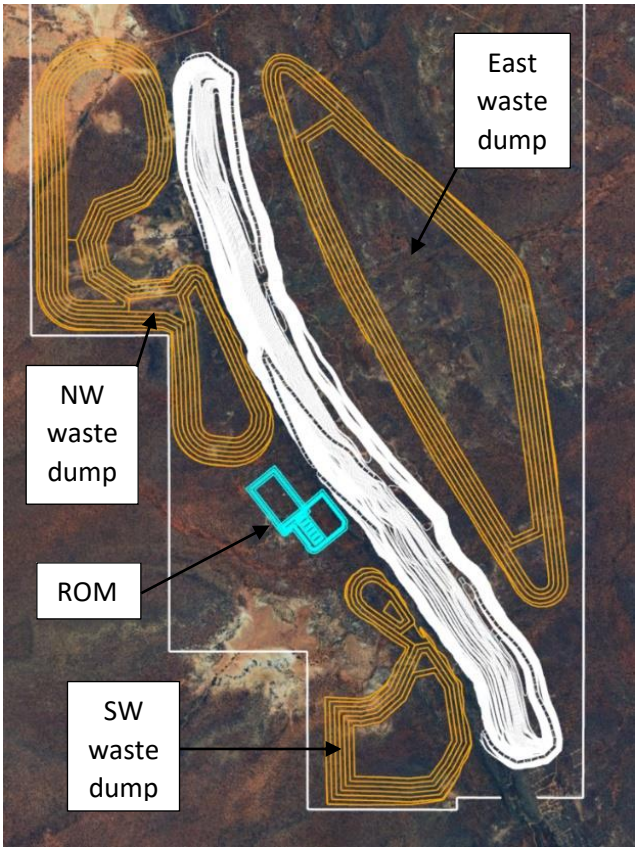

Figure 3: Mining Layout

2.3. Mineral Processing

2.3.1. Metallurgical Testing

The metallurgical testwork program utilised four diamond HQ holes, six RC with diamond tail holes and 31 RC holes to produce 27 HQ composite samples and 71 RC composite samples.

The majority of the testwork program was undertaken at Independent Metallurgical Operations [IMO]. A summary of the testwork conducted is as below:

- Variability composites
  - Comminution parameters
  - Grind liberation
  - Magnetic separation and flotation
  - Mineralogy
  - Dewatering testing
- Master Composites
  - Validation of process flowsheet
  - Investigation of dry low intensity magnetic separation

The Master Composite blend representing the average characteristics of the ore body, achieved the Product Grades summarised in Table 2, in the benchscale testwork program simulating the PFS Process flowsheet.

Table 2: Product Grade Summary

Fe (%)	SiO2 (%)	Al2O3 (%)	P (%)	S (%)	LOI_1000 (%)
70.6	2.32	0.01	0.01	0.02	-3.24

2.3.2. Process Selection

Various flow sheets options were assessed to optimise the product grade and minimise power use. The selected process (See _Figure 4 – PFS Flowsheet) was developed to produce a concentrate with a target grade of >70% Fe, <2.5% SiO_2, <0.05% S at 45µm and <8.5% moisture.

The process steps are primary and secondary crushing of the ROM material to a size suitable for further grinding with dry High Pressure Grinding Rolls [HPGR]. After HPGR, material undergoes the first stage of wet magnetic separation, then two stages of wet comminution (ball mill and vertical tower mill) with magnetic separation after each stage.

Flotation is used on the Cleaner Magnetic Separator concentrate to achieve target grade. A flotation regrind mill (vertical tower mill) and a scavenger float increase the process yield. The concentrate is thickened and pumped as a slurry to the filter plant where it is filtered, washed with potable water and then dewatered to reduce moisture content to <8.5% for transport.

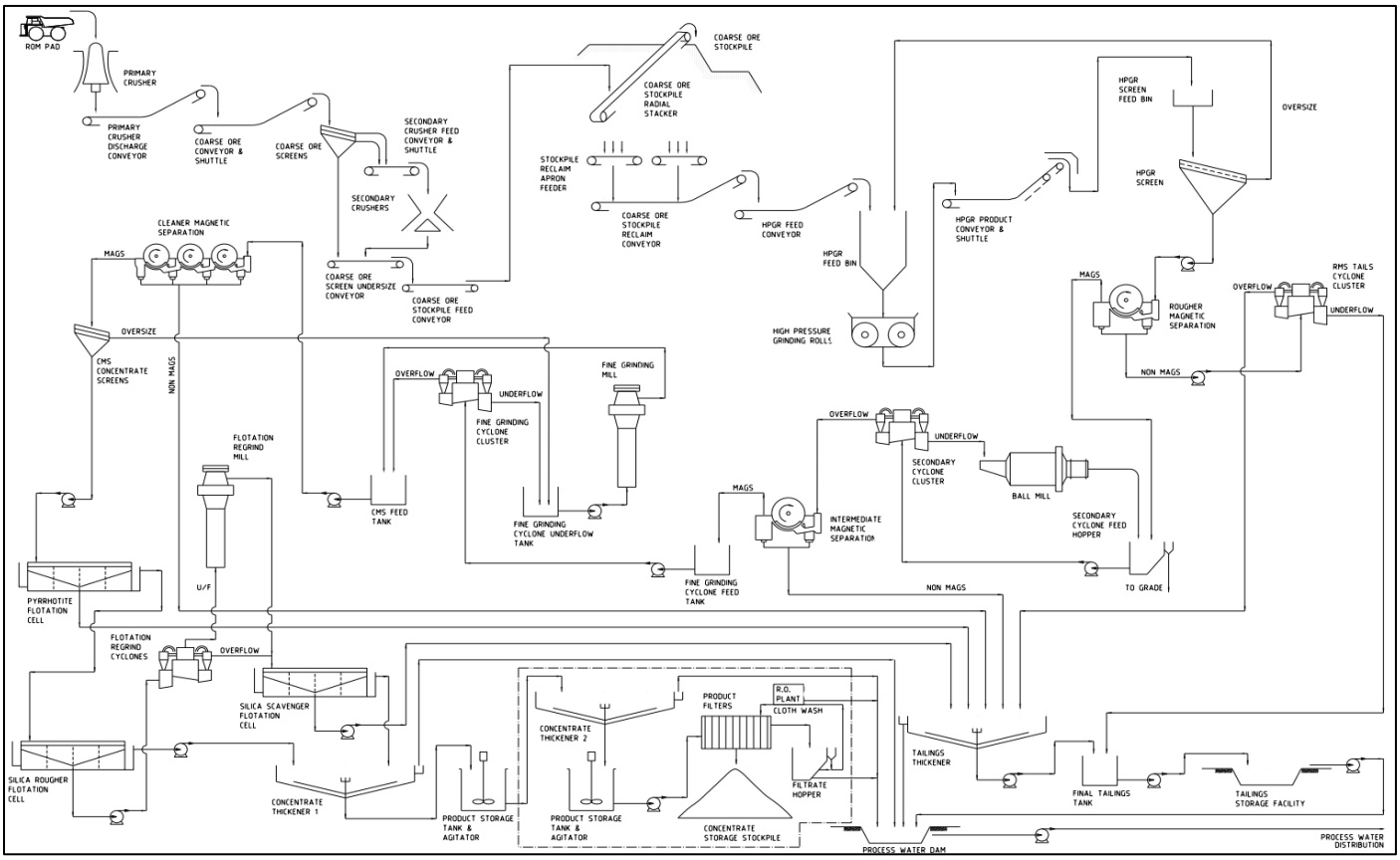

Figure 4: PFS flowsheet (HPGR-Ball mill)

2.4. Waste

The main source of waste for the project, other than waste rock, will be wet tailings from the process plant. Wet tailings are generated from the magnetic separators (rougher, intermediate and cleaner) and flotation cells (sulphur, silica and scavenger floats). The proposed tailings management strategy is to store the wet tailings at a tailings storage facility adjacent to the process plant. At 12Mtpa concentrate production approximately 21Mtpa of tailings will be produced.

The TSF is approximately 4km x 3km and located to the west of the process plant. The starter embankment will have sufficient capacity for five years until the embankment will be raised 5m to accommodate another four years of tailings storage. The final raise will be required in the eighteenth year of operations to store a total of 463 MT of tailings.

2.5. Power

The Mt Bevan processing plant has a connected load of 150 MW. The proposed power solution is an islanded gas hybrid system (gas reciprocating engines, wind turbine generation, solar and battery energy storage system) with a renewable penetration of 63%. The filter plant will have its own gas hybrid system owing to the distance from the main process plant.

Power for the airfield, TSF, ANFO storage yard and the borefields will be provided by standalone hybrid solar/diesel generators.

2.6. Water

The mine and processing plant has an annual water demand of 15 GLpa in the initial years prior to efficient decant water return. The water demand will reduce to 12 GLpa once the TSF decant water return stabilises.

Bore Water will be supplied to the Mt Bevan Iron Ore Project from two proposed borefield networks to the north and south of the Bevan tenement respectively.

The project is in the process of obtaining tenure for water supply and will then commence further water exploration.

2.7. Non- Process Infrastructure

The non-process infrastructure for the project will include:

- An 800 room permanent village and 700 room temporary construction camp
- A closed charter airport to service both the construction and operations phases
- Site Access Roads
- ANFO Storage
- Water and wastewater treatment plants
- Combined Mine and Process Plant Mine Service Areas

2.8. Product Logistics

A detailed assessment was completed on various options for transport logistics via Geraldton and Esperance utilising combinations of haul trucks, slurry pipelines and rail. The PFS was completed based on:

- Construction of a new 125km slurry pipeline to a new filter plant and rail siding on the Leanora Branch Line [LBL]
- 3rd Party rail haulage to the Port of Esperance

Once loaded the train will depart towards Esperance Port on the LBL, across the Eastern Goldfields Rail [EGR] through Kalgoorlie, cross to the Esperance Branch Line [EBL] and finally to the Port of Esperance. Arc Infrastructure has been engaged and have provided an Indicative Access Pricing (ITAP) that includes capital costs for upgrade of the rail network.

The PFS was based on engaging a rail operator under a full-service agreement to transport the magnetite concentrate to the Port of Esperance. The project has received proposals from rail operators to undertake this task.

The Project engaged with both the Port of Esperance (operated by Southern Port Authority [SPA]) and Port of Geraldton (operated by Mid West Ports Authority). The PFS is based on export via the Port of Esperance. The port capacity and cost of upgrades were assessed relative to the project throughput both with and without existing port throughput from other customers being maintained. The maximum upgrade scope, with current 3rd party throughput maintained, was assessed as the addition of a new car dumper, rail loop, land reclaim, sheds, materials handling network and a new 4th Berth. The project financial assessment is based on current 3rd party throughput reducing significantly prior to the project commencement period and the Project utilising existing infrastructure.

Further work is required to optimise the transport logistics solution for the Project and the Project will continue to engage with Arc Infrastructure, Southern Port Authority and Mid-West Ports Authority to optimise the economics of the project.

2.9. Environment, Heritage and Approvals

The PFS Completed baseline surveys over the mine area, including:

- Ethnographic surveys
- Archaeological surveys
- Soil Sampling
- Materials Characterisation
- Flora and Vegetation
- Vertebrate and short-range endemic fauna
- Subterranean fauna
- Hydrology and hydrogeology

Further works will be completed in subsequent phases over the remaining project footprint.

2.10. Capital Cost

Capital cost estimates were completed at a Prefeasibility study level in accordance with AACEI (Class 4) with an estimate accuracy of +/- 25% and a 15% level of engineering definition.

The capital cost of the project is estimated at AUD5.03B. A summary of the capital cost by area is shown in Table 3.

Table 3: CAPEX Summary by Area

Area	Estimated Cost AUD$M
Mine	$1,046
Processing	$2,048
Rail	$29
Infrastructure and Services	$550
Indirect Costs	$740
Contingency and Escalation	$618

TOTAL	**$5,031**

2.11. Operating Cost

Operating costs estimates were completed at a Prefeasibility study level in accordance with AACEI (Class 4) with an estimate accuracy of +/- 25%. The operating cost of the project is estimated at AUD98.8/dmt concentrate for a 12Mtpa dry concentrate nameplate. A summary of the operating cost by area is shown in Table 4.

Table 4: OPEX Summary by Area

Area	OPEX AUD$/dmt_Conc
Mine	$32.6
Processing Plant	$32.1
Rail	$20.5
Port	$8.1
Infrastructure and Services	$2.6
Owners Costs	$3.0
TOTAL	**AUD$98.8**

2.12. Product Marketing

The proposed product for the Mt Bevan Project is magnetite concentrate with a product specification of 70% Fe, 2.5% SiO2, 0.02% Al2O3, 0.02 P%, 0.04% S, -2.27% LOI and 45µm.

The pricing utilised for the study is below in Table 5.

Table 5: Pricing Table

	Units	JV Low	JV Mid	JV High
62% Fe Fines Benchmark Price	US$, real / dmt, CFR	90	111	125
65% Fe Fines Benchmark Price	US$, real / dmt, CFR	108.0	141.5	168.8
Concentrate Realised Premium	US$, real / dmt, CFR	116.3	152.4	181.7

The concentrate realised premium has been calculated by taking the 65% Fe Fines benchmark price and applying a correction for the additional Fe content of the product (70/65 x 65% benchmark price).

2.13. Financial Analysis

A financial model has been developed utilising the findings from the PFS. The financial model has calculated a NPV valuation range of (A$740M) to A$3,634M with a mid-point of A$1,674M. The valuation is summarised in Table 6 below.

Table 6 – Financial model valuation summary

	Unit	Low Case	Mid Case	High Case
Macro				
62% Fe fines CFR benchmark	US$, real / dmt	90	111	125

FX - rate USD / AUD	USD / AUD	0.65		
Discount Rate	% real	8		
Royalty	% of Revenue	5		
Revenue				
Realised price concentrate	% of benchmark	129	137	145
CFR revenue per tonne	**US$, real / dmt**	**116**	**152**	**182**
Operating cost				
Total cost	**A$/wmt, real**	**(102)**	**(104)**	**(106)**
Capital cost				
Construction capital	A$B, real	5.0		
Sustaining capital	A$B, real	1.4		
Valuation				
NPV	**A$M, real**	**(740)**	**1,674**	**3,634**

3. Forward Works Plan

Hanroy has developed a lower-spend and staged approach to the Forward Works Plan (FWP) to pursue significant opportunities and de-risk the project prior to more significant investment. The feasibility study has been separated into two distinct phases to reduce the risk of the project whilst still advancing long lead areas. Once Stage 1 is completed the feasibility study will continue to the second stage to advance the project to a Financial Investment Decision [FID]. The core objectives of the initial staged works will include:

- Acquisition of project tenure for borefields, infrastructure and service corridors
- Confirmation of water supply and quality constraints through a comprehensive water drilling campaign
- Investigation of optimisation options including:
  - Alternate power supply options
  - Transport logistics
- De-risking activities including:
  - Progress environmental and heritage surveys over the project footprint to de-risk future approvals timeline