APPENDIX U: FINANCIAL PROVISION AND CLOSURE STUDY

REHABILITATION, DECOMMISSIONING AND MINE CLOSURE PLAN FOR

JINDAL IRON ORE MINE

EIA – PHASE 1

FY2023

[GNR 1147 – APPENDIX 4]

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CLIENT:	**JINDAL IRON ORE (Pty) Ltd**
Contact Person:	Kate Hamilton - SLR Consulting
Contact Number:	+27 11 467 0945
Email Address:	khamilton@slrconsulting.com>
CONSULTANT:	**E-TEK Consulting (Pty) Ltd**
Contact Person:	Leon Koekemoer (Project Manager)
Contact Number:	+27 (0) 18 294 3652
Email Address:	admin@etekconsulting.co.za
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AUTHOR/S:	Jeanette Erasmus – Environmental Manager Leon Koekemoer – Senior Estimator Christelle Pauw – Environmental Consultant Joani Taljaard – Quantity Surveyor
REVIEWER/S:	Jeanette Erasmus – Environmental Manager

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		NAME	DESIGNATION	
0	Draft Report	Kate Hamilton	SLR Sr. Environmental Consultant	10 February 2023
F	Final Report	Kate Hamilton	SLR Sr. Environmental Consultant	18 March 2023

DETAILS OF PRACTITIONERS

NAME	EXPERIENCE / PROFESSIONAL REGISTRATION
Jeanette Erasmus *Director & Environmental Manager*	Jeanette obtained her B.Sc. Honours degree in Geography and Environmental studies in 2005, during that time, she worked as a Research Assistant at the Research Focus Area for Environmental Science and Management at the North-West University. She obtained her M.Sc. degree in Environmental Management, Cum Laude, in 2006 while working as an Environmental Consultant. Since then, she is working as an Environmental Manager. Jeanette is a member of the Land Rehabilitation Society of Southern Africa (LaRSSA) and is registered as a Professional Natural Scientist with the South African Council for Natural Scientific Professions (SACNASP). Her key experience includes the compilation of closure plans, risk assessments and gap analyses for closure planning as well as the project management of projects for mine closure planning, rehabilitation and remediation of disturbed areas. She also assists clients with facilitation of onsite workshops and training in understanding the mine closure planning process and management of associated liabilities.
Leon Koekemoer *Director & Senior Estimator* *ASAQS – 29649790*	Leon has a National Diploma in Building (N.Dip. Building) and is an Associate Member of the Association of South African Quantity Surveyors (ASAQS), registration no. 29649790 and a member of the Land Rehabilitation Society of Southern Africa (LaRSSA). He was a Senior Project Manager for Beckers Building Contractors from 2005 – 2011, where his key roles included project management, cost control and quality control. Leon specialises in the development of closure liabilities and models as well as assisting and advising in the closure planning process for mining and industrial sites. His key experience includes the calculation of environmental liabilities and the representation thereof in closure models. His expertise allows him to address all categories associated with liabilities such as closure liability cash flows, rehabilitation cash flows, auditing of liabilities and operational closure costing.
Christelle Pauw *Environmental Consultant*	Christelle Pauw obtained her Btech degree in Conservation in 2019 and is currently researching Soil Moisture for her Msc in Natural Sciences, Christelle has 20 years' experience in biodiversity conservation, mine related rehabilitation, and compiling of specialist

NAME	EXPERIENCE / PROFESSIONAL REGISTRATION
	reports. She is in the process of enrolling with SACNASP and was actively involved with the Land Rehabilitation Society of Southern Africa up until 2022. She is employed by E-TEK Consulting as an Environmental Consultant and assists the Environmental Manager with the compilation of reports.
Joani Taljaard *Quantity Surveyor* *ASAQS - 59952331*	Joani Taljaard graduated with a B.Sc Quantity Surveying (Hons) (Cum Laude) in 2015 from the University of Pretoria. She is an Associate Member of the Association of South African Quantity Surveyors (ASAQS), registration no. 59952331. She was a student Quantity Surveyor at Matla Quantity Surveyors (Pretoria) from 2014 to 2015, a junior Quantity Surveyor at Tronkon Construction (Potchefstroom) from 2016 to 2018 and a Candidate Quantity Surveyor at QS Africa Construction Consultants (Klerksdorp) from 2018 to 2021 where she managed the Potchefstroom office. She worked on a wide range of projects, including commercial developments, residential dwellings, health facilities, educational facilities, and insurance claims. She obtained experience from a construction and professional perspective in the six stages of a construction process: inception, concept and viability, design development, documentation and procurement, construction, and close out. She was employed by E-TEK Consulting in 2021 where she focusses on the calculation of closure liability estimates for scheduled and unscheduled closures as well as the annual updating of the liability estimates.
Deon Slabbert Civil Engineering Technician SAICE - 2011457	Deon Slabbert is a Senior Civil Engineering Technician with 14 years' experience in the Civil Engineering Consulting Industry, 4 years in the Civil Contractor Industry and 4 years in Project Management. Deon holds a National Diploma in Civil Engineering and is an Associate Member of SAICE (Registration no. 2011457). Deon has been employed by E-TEK Consulting in 2022, where he is responsible for Rehabilitation Designs, Detailing and Specifications for various mining facilities. He is also responsible for improving dumping strategies, and the modeling of designs to determine the rehabilitation cost and associated quantities. Deon is also involved in the on-site implementation and supervision aspects of these projects., management and maintenance of pertinent geospatial data for project databases for use by E-TEK and clients.

NAME	EXPERIENCE / PROFESSIONAL REGISTRATION
Marcel Kruger GIS Intern	Marcel Kruger obtained his B.Sc degree in Zoology and Geography in 2022. He joined E-TEK Consulting in 2022 as a GIS Intern where he assists in GIS, estimating and mine closure liability related work. He aims to complete his B.Sc Honours in Environmental Sciences in 2023.

NEMA (ACT NO. 107 OF 1998): FINANCIAL PROVISIONING REGULATIONS, 2015 (NO. R. 1147) & REFERENCED IN THIS DOCUMENT

THE REGULATIONS APPENDIX 4	DESCRIPTION OF MINIMUM REQUIRED CONTENT	SECTION IN THIS DOCUMENT
(a)(i) (a)(ii)	Detail of Practitioner/s which compiled the Plan, including professional registrations, qualifications, and experience	**Pages ii - iv**
(b)	The context of the project	**1 and 2**
(b)(i)	Material information and issues that have guided the development of the plan	
(b)(ii)	An overview of: (aa) environmental and (bb) social context That may influence, or be influenced by, the closure activities and post mining land use	**4**
(b)(iii)	Stakeholder issues and comments that have informed the plan	**9**
(b)(iv)	The mine plan and schedule for the full approved operations, which includes: (aa) appropriate description of the mine plan; (bb) drawings and figures to indicate how the mine develops; (cc) what areas are disturbed; and (dd) how infrastructure and structures develops during operations	**2**
(c)	Findings of an environmental risk assessment leading to the most appropriate closure strategy, including:	**8**
(c)(i)	A description of the risk assessment methodology including risk identification and quantification (all areas)	

THE REGULATIONS APPENDIX 4	DESCRIPTION OF MINIMUM REQUIRED CONTENT	SECTION IN THIS DOCUMENT
(c)(ii)	An identification of indicators that are most sensitive to potential risks and the monitoring of such risks (to inform rehabilitation and remediation activities)	
(c)(iii)	An identification of conceptual closure strategies to avoid, manage and mitigate the impacts and risk	
(c)(iv)	Reassessment of the risks to determine whether, after the implementation of the closure strategy, the latent or residual risk has been avoided and / or how it has resulted in avoidance, rehabilitation and management of impacts and whether this is acceptable to the mining operation and stakeholders;	
(c)(v)	An explanation of changes to the risk assessment results, as applicable in annual updates to the plan	
(d)	Design principles	**7**
(d)(i)	The legal and governance framework and interpretation of these requirements for the closure design principles;	**3**
(d)(ii)	Closure vision, objectives and targets, which must reflect the local environmental and socio-economic context and reflect regulatory and corporate requirements and stakeholder expectations;	**5**
(d)(iii)	Description and evaluation of alternative closure and post closure options (where these exist, that are practicable within which the operation is located)	**7**
(d)(iv)	A motivation for the preferred closure action within the context of the risks and impacts that are being mitigated;	
(d)(v)	A definition and motivation of the closure and post closure period, taking cognisance of the probable need to implement post closure monitoring and maintenance for a period sufficient	

THE REGULATIONS APPENDIX 4	DESCRIPTION OF MINIMUM REQUIRED CONTENT	SECTION IN THIS DOCUMENT
	to demonstrate that relinquishment criteria have been achieved;	
(d)(vi)	Details associated with any on-going research on closure options;	
(d)(vii)	A detailed description of the assumptions made to develop closure actions (in absence of detailed knowledge on site conditions, potential impacts, material availability, stakeholder requirements and other factors for which information is lacking)	
(e)	A proposed final post mining land use which is appropriate, feasible and possible of implementation, including:	**6**
(e)(i)	Descriptions of appropriate and feasible final post mining land use for the overall project and per infrastructure or activity and a description of the methodology used to identify final post mining land use, including the requirements of the operations stakeholders;	
(e)(ii)	A map of the proposed final post mining land use;	
(f)	Closure actions, including:	**7**
(f)(i)	The development and documenting of a description of specific technical solutions related to infrastructure and facilities for the preferred closure option or options, which must include all areas, infrastructure, activities and aspects both within the mine lease area and off of the mine lease area associated with mining for which the mine has the responsibility to implement closure actions;	
(f)(ii)	The development and maintenance of a list and assessment of threats and opportunities and any uncertainties associated with the preferred closure option, which list will be used to identify and define any additional work that is needed to reduce the level of uncertainty;	

THE REGULATIONS APPENDIX 4	DESCRIPTION OF MINIMUM REQUIRED CONTENT	SECTION IN THIS DOCUMENT
(g)	A schedule of actions for final rehabilitation, decommissioning and closure	10
(g)(i)	Scheduled to be linked to the mine works programme, if greenfields, or to the current mine plan, if brownfields;	
(g)(ii)	Schedule to include assumptions and schedule drivers;	
(g)(iii)	Including a spatial map or schedule, showing planned spatial progression throughout operations;	
(h)	An indication of the organisational capacity that will be put in place to implement the plan, including:	
(h)(i)	Organisational structure as it pertains to the plan;	
(h)(ii)	Responsibilities;	
(h)(iii)	Training and capacity building that may be required to build closure competence;	
(i)	An indication of gaps in the plan, including an auditable action plan and schedule to address the gaps;	7
(j)	Relinquishment criteria for each activity or infrastructure in relation to environmental aspects with auditable indicators;	
(k)	Closure cost estimation procedure, which ensures that identified rehabilitation, decommissioning, closure and Post Closure costs, whether ongoing or once-off, are realistically estimated and incorporated into the estimates, on condition that:	11
(k)(i)	Cost estimates for operations, or components of operations that are more than 30 years from closure will be prepared as conceptual estimates with an accuracy of ± 50 per cent. Cost estimates will have an accuracy of ± 70 per cent for operations, or components of operations, 30 or less years (but more than	

THE REGULATIONS APPENDIX 4	DESCRIPTION OF MINIMUM REQUIRED CONTENT	SECTION IN THIS DOCUMENT
	ten years) from closure and ± 80 per cent for operations, or components of operations ten or less years (but more than five years) from closure. Operations with 5 or less years will have an accuracy of ± 90 per cent. Motivation must be provided to indicate the accuracy in the reported number and as accuracy improves, what actions resulted in an improvement in accuracy;	
(k)(ii)	The closure cost estimation must include: (aa) an explanation of the closure cost methodology; (bb) auditable calculations of costs per activity or infrastructure; (cc) cost assumptions;	
(k)(iii)	The closure cost estimate must be updated annually during the operation's life to reflect known developments, including changes from the annual review of the closure strategy assumptions and inputs, scope changes, the effect of a further year's inflation, new regulatory requirements and any other material developments;	
(l)	Monitoring, auditing and reporting requirements (which relates to the risk assessment, legal requirements and knowledge gaps as a minimum) and must include:	**12**
(l)(i)	A schedule outlining internal, external, and legislated audits of the plan for the year, including: (aa) the person responsible for undertaking the audit(s); (bb) the planned date of audit and frequency of audit; (cc) an explanation of the approach that will be taken to address and close out audit results and schedule;	
(l)(ii)	A schedule of reporting requirements providing an outline of internal and external reporting, including disclosure of updates of the plan to stakeholders;	

THE REGULATIONS APPENDIX 4	DESCRIPTION OF MINIMUM REQUIRED CONTENT	SECTION IN THIS DOCUMENT
(I)(iii)	A monitoring plan which outlines: (aa) parameters to be monitored, frequency of monitoring and period of monitoring; (bb) an explanation of the approach that will be taken to analyse monitoring results and how these results will be used to inform adaptive or corrective management and/or risk reduction activities;	
(m)(i)	Motivations for any amendments made to the final rehabilitation, decommissioning and mine closure plan, given the monitoring results in the previous auditing period and the identification of gaps as per 2(i).	**12**

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TERMS AND ABBREVIATIONS

TERMS & ABBREVIATIONS	DESCRIPTION
BoQ	Bill of Quantities
Closure	This involves the application for closure certificate and initiation of transfer of on-going care and maintenance to third parties
DEA	Department of Environmental Affairs
DMR	Department of Mineral Resources
DP	Development Plan
DWS	Department of Water and Sanitation
EIA	Environmental Impact Assessment
EIS	Ecological Importance and Sensitivity (EIS)
EMPr	Environmental Management Programme
EMP	Environmental Management Plan
E-TEK	E-TEK Consulting (Pty) Ltd
GDP	Gross Domestic Product
GG	Government Gazette
ICMM	International Council on Mining and Metals
I&APs	Interested and Affected Parties
KPIs	Key Performance Indicators
LoM	Life of Mine or Scheduled closure that happens at the planned date and/or time horizon
Post Closure	The period after mine closure
Premature or Un-scheduled Closure	Immediate closure of a site, representing decommissioning and reclamation of the site in its present state
PPP	Public Participation Process
Rehabilitation	The return of a disturbed area to its original state, or as close as possible to this state

TERMS & ABBREVIATIONS	DESCRIPTION
SANBI	South African National Biodiversity Institute
SEP	Stakeholder Engagement Plan
SLP	Social and Labour Plan
SOE	State of Environment
SWMP	Stormwater Management Plan
The Regulations	The Financial Provisioning Regulations, 2015, published under Government Notice No. R. 1147 of 20 November 2015
WHO	World Health Organisation
WRD	Waste Rock Dump
WUL	Water Use License
ZOI	Zones of Influence

EXECUTIVE SUMMARY

Project Description

E-TEK Consulting (Pty) Ltd (E-TEK) was appointed by SLR Consulting (Pty) Ltd (SLR) to assist Jindal MIOP (Pty) Ltd (Jindal) with the necessary documentation to guide their closure planning process for the proposed consolidation of the Prospecting Rights for the North and South blocks into a single Mining Right and integrate it as part of the future operational and rehabilitation activities at the Jindal MIOP Project (MIOP).

The Jindal MIOP site is located approximately 16k to 25 km southeast of Melmoth, within the Mthonjaneni Local Municipality in the KwaZulu-Natal Province. Jindal is owned by Jindal Steel and Power (Mauritius) Limited (74%) and South African BBBEE partner Mr. Thabang Khomo (Pty) Ltd (26%). Jindal holds two Prospecting Rights over the project site. The prospecting rights are referred to as North Block (PR 10644) and South Block (PR 10652) and have a total combined area of 20 170, 0666 ha.

Purpose and Approach

Jindal's intent is to consolidate the Prospecting Rights for the North and South blocks into a single Mining Right. The South Block is divided in **South West Block** and **South East Block.** Development of the mine and mining infrastructure will be undertaken in a phased approach with mining currently **only proposed to be undertaken** in the **South East Block** where the iron ore resource has been defined. Infrastructure would be developed to support this mining operation (Jindal Iron Ore (Pty) Ltd, 2022).

The main purpose is to provide the Jindal MIOP with a document that can act as a guideline document during operational and rehabilitation activities and thereby assist them in its closure planning process and managing of the liability estimate.

The development of this plan is mainly guided by:

- Section 3: Statutory and Corporate related requirements to ensure legal compliance;
- Section 4: The State and context of the surrounding Bio-Physical - and Social Environment in which the operations are located;
- Section 5: Closure vision and underlying principles
- Section 6: Post mining land use/s;
- Section 7: Design principles, Closure activities and Technical solutions (Rehabilitation and Closure criteria);

- Section 8: Closure Risk assessment (following a risk-based approach)

Closure Objectives and Post Mining Land Use

No feasibility study was conducted to determine a sustainable post mining land use. It is recommended that stakeholder engagements, specialist studies and land capability studies be conducted with regards to this issue to assess the most feasible land use Post Closure.

The local community should be involved in the development of the closure vision and development of Post Closure land use. Community participation is critical to ensure the local community's ownership of the results. Mining companies should guide conversations and provide examples of realistic options for Post Closure land use, considering both technical and economic feasibility. The timing of the engagement will also shape discussions – assessments are less likely to be in depth in early stages of engagement (ICMM, 2020).

Rehabilitation and Closure Criteria & Risk Assessment

All potential risks, associated with the closure of the Jindal MIOP operations, were identified during desktop studies of the site, as well as discussions with SLR and mine personnel. Rehabilitation and Closure criteria or mitigation measures were established for each of these risks.

The risks were individually evaluated in terms of a risk matrix and ranked for the closure scenarios before and after implementation of the Rehabilitation and Closure criteria or mitigation measures. Refer to Section 7 for the Rehabilitation and Closure criteria sheet and Section 8 and APPENDIX C for the detailed Closure Risk Assessment.

Current and Post Closure Monitoring

Current Monitoring Points for all aspects of the monitoring programme, mainly focused on the **South East Block** where operational processes and construction will be undertaken. These monitoring points will need to be reviewed by specialists to ensure that monitoring points are relevant to the purpose of the monitoring programme. Closure liability / costs are not included for this document. Only Care and Maintenance is included for this liability.

Closure Cost Estimation

The financial provision has been compiled to support the minimum requirements of Government Notice Regulation (GNR 1147). This report provides the financial provision required for a 10-year closure forecast. The following table presents a list of all the proposed closure components, and which represents the liability:

Table 1: List of Closure Components

CLOSURE COMPONENTS		APPLICABLE
1	INFRASTRUCTURAL ASPECTS	
1.1	Plant and Related Structures	Yes
1.2	Shafts, Adits and Declines	No
1.3	Supporting Infrastructure	Yes
1.4	Underground Infrastructure	No
1.5	Social Infrastructure	No
1.6	Off-Site Infrastructure	Yes
1.7	Linear Items	Yes
1.8	Waste Disposal	Yes
1.9	River Diversion	No
2	MINING ASPECTS	
2.1	Opencast / Pit Areas	Yes
2.2	Waste Rock Dumps - Overburden and Spoils	Yes
2.3	Coarse Residue Deposits - Processing Waste	No
2.4	Fine Residue Deposits - Processing Waste	No
3	BIO-PHYSICAL CLOSURE ASPECTS	
3.1	Water Resources	No
3.2	Climate Change	No
3.3	Sensitive Habitats and Biodiversity	No
3.4	Land Use and Land Capability	No
3.5	Soil	No
3.6	Other; Air Quality and Topography	No
4	SOCIAL CLOSURE ASPECTS	
4.1	Employees	No
4.2	Interested and Affected Parties	No
4.3	Government	No
5	GENERAL ASPECTS	
5.1	General Surfaces	Yes
5.2	Post Closure Monitoring and Maintenance	Yes
5.3	Specialist Studies	No

The following should be noted:

- A dedicated site visit was conducted to understand the current on-site conditions and the relevant closure criteria for the proposed activities.

- All relevant information supporting the financial provision was sourced from SLR and rates were obtained from E-TEK's existing database and in consultation with demolition and earthworks contractors. These rates represent market conditions for Y2023.
- The costing model that has been utilized to calculate the financial provision, is aligned to the **closure components** as set out in Table 1.
- The financial provision for the Jindal proposed activities were calculated based on the requirements of Appendix 4 of GNR 1147. The requirements of GNR 1147 indicates that the financial provision should be for the greatest number out of the 10 Year forecast. Table 2 indicates the calculated 1–10-year closure forecast which is based on the following timelines:
    - Year 1 – 10 Closure Forecast (FY2023 – FY2032).

Based on the calculations it was determined that Jindal will be required to financially provide for **FY2032 out of the closure forecast.** The closure forecast considers the following factors:

- Current proposed mine works program;
- Pit growth design; and
- Waste rock dump design.

The total **financial provision required** for the Jindal proposed activities (including P&G's, Contingencies and value added tax (VAT)) has been estimated to be **R 241 753 945.22** (Refer to APPENDIX E for the detail cost breakdown per component and closure forecast).

The following graph presents the liability makeup for the 5 main closure components for Jindal for FY2032:

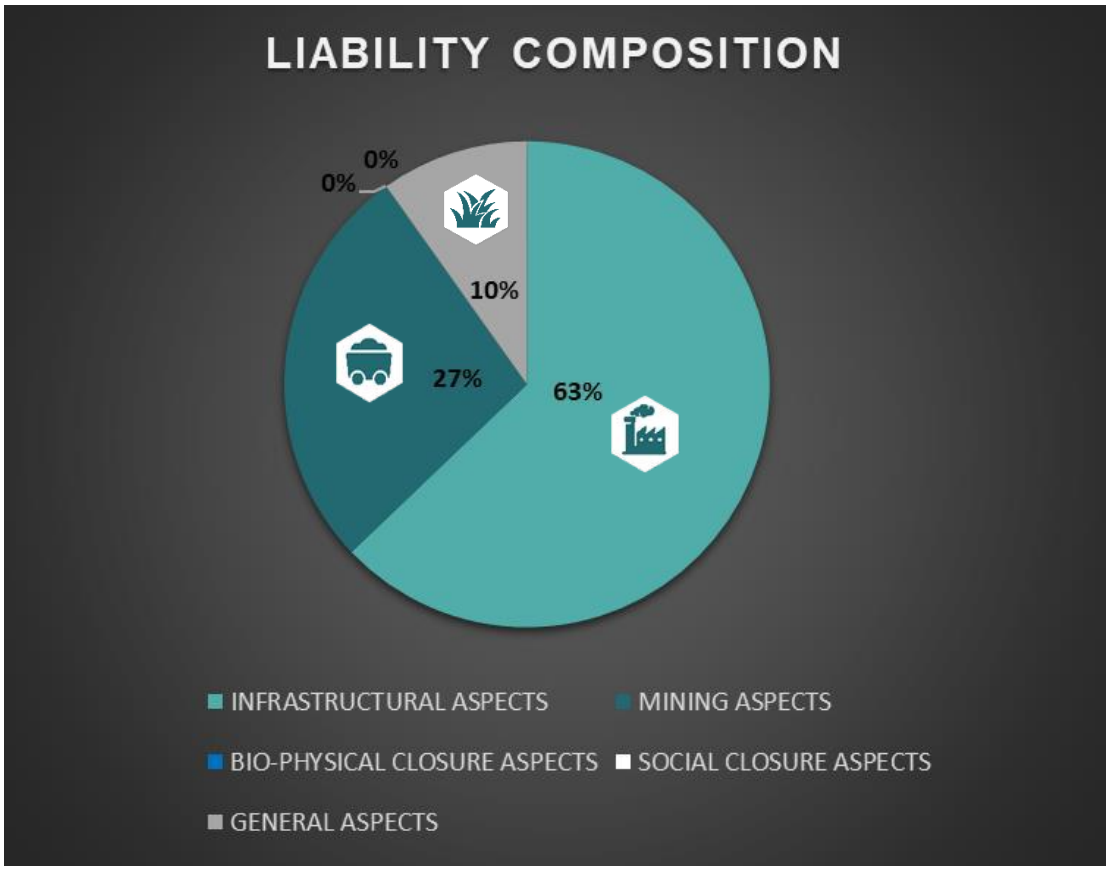

Figure 1: Liability Composition for Jindal FY2032

Table 2: Financial Provision Summary

JINDAL MELMOTH IRON ORE FINANCIAL PROVISION SUMMARY											
ESTIMATED CLOSURE COST ESTIMATES (INCLUDES P&G'S, CONTINGENCIES AND VAT AND EXCLUDES ESCALATION)		Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast
CLOSURE COMPONENTS		Y2023	Y2024	Y2025	Y2026	Y2027	Y2028	Y2029	Y2030	Y2031	Y2032
1	**INFRASTRUCTURAL ASPECTS**	**R 2 486 584,82**	**R 109 709 668,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**
1,1	PLANT AND RELATED STRUCTURES	R -	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15
1,2	SHAFTS, ADITS AND DECLINES	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
1,3	SUPPORTING INFRASTRUCTURE	R 989 967,00	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39
1,4	UNDERGROUND INFRASTRUCTURE	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
1,5	SOCIAL INFRASTRUCTURE	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
1,6	OFF-SITE INFRASTRUCTURE	R -	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95
1,7	LINEAR ITEMS	R 1 298 834,19	R 7 187 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59
1,8	WASTE DISPOSAL	R 197 783,63	R 9 340 081,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99
1,9	RIVER DIVERSION	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
2	**MINING ASPECTS**	**R -**	**R -**	**R 10 866 575,65**	**R 25 859 432,85**	**R 26 052 711,28**	**R 35 320 099,70**	**R 36 776 031,13**	**R 42 415 930,55**	**R 45 498 997,98**	**R 49 561 051,40**
2,1	OPENCAST / PIT AREAS	R -	R -	R 8 156 350,22	R 20 438 982,00	R 17 922 035,00	R 24 479 198,00	R 23 224 904,00	R 26 154 578,00	R 26 527 420,00	R 27 879 248,00
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS	R -	R -	R 2 710 225,43	R 5 420 450,85	R 8 130 676,28	R 10 840 901,70	R 13 551 127,13	R 16 261 352,55	R 18 971 577,98	R 21 681 803,40
2,3	COARSE RESIDUE DEPOSITS - PROCESSING WASTE	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
2,4	FINE RESIDUE DEPOSITS - PROCESSING WASTE	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3	**BIO-PHYSICAL CLOSURE ASPECTS**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**
3,1	WATER RESOURCES	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,2	CLIMATE CHANGE	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,3	SENSITIVE HABITATS & BIODIVERSITY	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,4	LAND USE & LAND CAPABILITY	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,5	SOIL	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,6	OTHER: AIR QUALITY & TOPOGRAPHY	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
4	**SOCIAL CLOSURE ASPECTS**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**
4,1	EMPLOYEES	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
4,2	INTERESTED AND AFFECTED PARTIES	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
4,3	GOVERNMENT	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
5	**GENERAL ASPECTS**	**R 16 266 046,25**	**R 16 266 046,25**	**R 16 468 622,00**	**R 16 671 197,75**	**R 16 873 773,50**	**R 17 076 349,25**	**R 17 278 925,00**	**R 17 481 500,75**	**R 17 684 076,50**	**R 17 886 652,25**
5,1	GENERAL SURFACES	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25
5,2	POST CLOSURE MONITORING AND MAINTENANCE	R 7 093 415,00	R 7 093 415,00	R 7 295 990,75	R 7 498 566,50	R 7 701 142,25	R 7 903 718,00	R 8 106 293,75	R 8 308 869,50	R 8 511 445,25	R 8 714 021,00
5,3	SPECIALIST STUDIES	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
	SUB-TOTAL 1	**R 18 752 631,07**	**R 125 975 714,31**	**R 141 563 065,71**	**R 156 758 498,66**	**R 157 154 352,84**	**R 166 624 317,01**	**R 168 282 824,19**	**R 174 125 299,36**	**R 177 410 942,54**	**R 181 675 571,71**
	Weighted Preliminary and General 6%	R 699 552,96	R 7 132 937,96	R 8 056 024,50	R 8 955 595,93	R 8 967 192,64	R 9 523 235,94	R 9 610 591,83	R 9 948 985,79	R 10 133 969,84	R 10 377 693,04
	Weighted Contingencies 10%	R 1 875 263,11	R 12 597 571,43	R 14 156 306,57	R 15 675 849,87	R 15 715 435,28	R 16 662 431,70	R 16 828 282,42	R 17 412 529,94	R 17 741 094,25	R 18 167 557,17
	SUB-TOTAL 2 FOR P&G's AND CONTINGENCIES	**R 2 574 816,07**	**R 19 730 509,39**	**R 22 212 331,07**	**R 24 631 445,80**	**R 24 682 627,92**	**R 26 185 667,64**	**R 26 438 874,25**	**R 27 361 515,73**	**R 27 875 064,09**	**R 28 545 250,21**
	SUB-TOTAL 3	**R 21 327 447,15**	**R 145 706 223,70**	**R 163 775 396,78**	**R 181 389 944,46**	**R 181 836 980,76**	**R 192 809 984,66**	**R 194 721 698,43**	**R 201 486 815,09**	**R 205 286 006,63**	**R 210 220 821,93**
	VAT 15%	R 3 199 117,07	R 21 855 933,56	R 24 566 309,52	R 27 208 491,67	R 27 275 547,11	R 28 921 497,70	R 29 208 254,77	R 30 223 022,26	R 30 792 900,99	R 31 533 123,29
	GRAND-TOTAL	**R 24 526 564,22**	**R 167 562 157,26**	**R 188 341 706,29**	**R 208 598 436,13**	**R 209 112 527,87**	**R 221 731 482,36**	**R 223 929 953,20**	**R 231 709 837,36**	**R 236 078 907,63**	**R 241 753 945,22**

1. INTRODUCTION

Regulations Reference: (b) & (b)(i)	This Section deals with the context of the project, as well as the material information and issues that have guided the development of the plan.

1.1. PROJECT DESCRIPTION AND CONTEXT

The Jindal MIOP Project (MIOP) site is located approximately 16k to 25 km southeast of Melmoth, within the Mthonjaneni Local Municipality in the KwaZulu-Natal Province. Jindal Iron Ore (Pty) Ltd (Jindal), is owned by Jindal Steel and Power (Mauritius) Limited (74%) and South African BBBEE partner Mr. Thabang Khomo (Pty) Ltd (26%). Jindal holds two Prospecting Rights over the project site. The prospecting rights are referred to as North Block (PR 10644) and South Block (PR 10652) and have a total combined area of 20 170, 0666 ha.

Jindal's intent is to consolidate the Prospecting Rights for the North and South blocks into a single Mining Right. South Block is divided into **South West Block** and **South East Block.** Development of the mine and mining infrastructure will be undertaken in a phased approach with mining currently only **proposed to be undertaken in the South East Block** where the iron ore resource has been defined. Infrastructure would be developed to support this mining operation (Jindal Iron Ore (Pty) Ltd, 2022).

1.2. APPROACH AND CLOSURE PLANNING

Jindal is committed to implementing standards and statutory requirements pertaining to Mine Closure Planning and the associated Financial Provision. As a way of complying with all the drivers, the need is to compile current Rehabilitation and Closure plans for all operations.

E-TEK Consulting (Pty) Ltd was requested by SLR Consulting (SLR) to conduct a liability assessment for the proposed project at the proposed Jindal Iron Ore Mine. The closure liability assessment needs to comply with the National Environmental Management Act No 107 of 1998 General Notice Regulation 1147 (GNR 1147), previously governed by the Mineral Petroleum Resources Development Act (MPRDA).

The detail of the approach may be different for diverse operations / mines and are most likely influenced by:

- legislative and corporate requirements;
- opportunities and constraints; and
- needs and expectations of stakeholders

Documentation will need to be aligned and compiled towards identifying the most appropriate post mining land use/s and closure-related performance objectives to guide the transition of operations within the expanded mining areas to closure as seamlessly as possible.

It should also ensure compliance to the Legal framework for mine closure in South-Africa. Refer to the applicable sections in this plan, for the detailed information that has guided the development of this plan.

The following are key drivers:

- Section 3: Statutory and Corporate related requirements to ensure legal compliance;
- Section 4:The State and context of the surrounding Bio-Physical - and Social Environment in which the mine is located;
- Section 6: Post mining land uses;
- Section 7: Design principles, closure activities and technical solutions;
- Section 8: Closure Risk assessment

The Mine Closure Planning approach included the following process steps:

- Information gathering and review through:
  - A comprehensive literature review of all the applicable rehabilitation and closure documentation for the operation, including:
    - Specialist studies;
    - Mine plans; and
    - Onsite investigations;
- Aspects informing the closure objectives and end land use:
  - Regulatory requirements including:
    - Relevant South African legislation;
    - Relevant land planning frameworks applicable to the region;
    - Relevant guidelines including International Council on Mining and Metals' (ICMM) Integrated Mine Closure Good Practice Guide (2nd ed.)

Identify the basic closure expectations and gather baseline information on the biophysical environment and socio-economic environments in which the operation is situated (broad state of the environment). Outputs from the State of the Environment Report (SOER) assessment including:

- Bio-physical aspects; and
- Socio-Economic aspects

2. MINE SITE CONTEXT

Regulations Reference: (b)(iv)	**This Section describes the regional and local setting of the mine, as well as the site description and mine plan for the full approved operations.**

2.1. REGIONAL AND LOCAL SETTING

The Jindal MIOP site is located approximately 16 to 25 km east and south of Melmoth, within the Mthonjaneni Local Municipality in the KwaZulu-Natal Province. Jindal holds two Prospecting Rights over the project site. The prospecting rights are referred to as **North Block** (PR 10644) and **South Block** (PR 10652) (divided into **South East Block** and **South West Block**) and have a total combined area of 20 170 ha refer to Figure 2 and Figure 3 for the regional and local settings (Jindal Iron Ore (Pty) Ltd, 2022).

2.2. SITE DESCRIPTION AND MINE PLAN

Jindal MIOP is located approximately 16 to 25 km east and south of the town of Melmoth ("Melmoth Town") and approximately 70 km southwest of the deep water port at Richards Bay, KwaZulu-Natal, South Africa ("the Project"). Melmoth Town is the main commercial and administrative centre located in the Mthonjaneni Local Municipality which falls within the King Cetshwayo District Municipality (formerly Uthungulu District Municipality). The Mthonjaneni Municipality consists of thirteen wards covering a geographical area of approximately 1,086 km^2. Melmoth Town constitutes Wards 2 and 3 of the municipality; and is located along the R66/R34 primary road corridor. (Department Mineral Resources , 2019).

The South Block is divided into two exploration blocks, namely the **South East Block** and the **South West Block.** The target exploration was carried out on the **South East Block** and mining is planned on the same block. An open pit mining operation is proposed to be developed in the south-eastern section of the South Block. Approximately 800 million tonnes of ore are expected to be mined from the pit over its lifetime (estimated to be approximately 25 years) generating approximately 32 million tonnes per annum (mtpa) of iron ore. Waste rock will be stripped from the pit at a ratio of approximately 0.5 tonnes of waste rock per 1 tonne of ore. The waste rock will be disposed of onto a Waste Rock Dump (WRD). This is to be located within the Mining Right Area. Drilling and blasting techniques will be used to excavate the iron ore. The excavated iron ore will be loaded onto trucks and transported to a Run-of-Mine (ROM) ore stockpile area before being transferred to the processing plant for

milling and magnetic separation. The processing plant will produce iron ore concentrate and a tailings slurry. The approximately 7.5 mtpa of iron ore concentrate (consisting of 67% Fe) will be transported to the Richards Bay Port via either rail or pipeline (still to be determined). The concentrate will be exported as there are limited local markets. The tailings will be disposed of into a Tailings Storage Facility (TSF) (subject to a separate application process). Associated infrastructure to support the mine will include access and haul roads, electrical transmission lines and sub-stations, raw water abstraction and pipelines, stormwater management infrastructure, tailings pipelines, concentrate pipelines, offices, change house, workshops, and perimeter fencing (amongst others).

Some of the infrastructure required for the mine (e.g., the access road, pipelines and TSF) may be located outside of the Mining Right Area. While the access road and water supply pipelines are part of this application to the Department of Mineral Resources and Energy, certain other infrastructure will be subject to separate application, assessment, and approval processes, as required by the applicable legislation.

The South West Block is yet to be explored to find additional economically viable mineral resources for the Project (Department Mineral Resources , 2019).
The following high-level schedule is proposed (Urban-Econ, 2022):

- 2022/2023: MR application and ESIA submission. Bankable Feasibility Study to be completed by May 2022.
- 2023: MR and EIA licenses Competent Authority decision making.
- 2023/ 2024 Water Use Licence completed and submitted.
- 2023/2024 detailed design completed sufficiently for civil and steel structural work to commence.
- 2024/ 2025: Complete construction of the first two parallel production lines and achieve first production.
- 2025: Operations ramp up to 85% production capacity.
- 2026: Ramp up to 100% total production capacity.

The combined area of the two Prospecting Rights is 20 170 0666 hectares (“ha”), of which the South Block Prospecting Right totals 11,703.0775 ha and the North Block Prospecting Right totals 8,466.9891 ha (Department Mineral Resources , 2019).

For the South East Pit, the conventional open pit mining with shovel and dumper combination is considered, with no backfilling. The hydraulic face shovel with a bucket capacity of 16.5 m^3 with Caterpillar 785 off highway trucks, having a nominal payload of 150 tons will be used for

removal of overburden and mineralization. Track mounted 171 mm drills will be used to make the blast holes for drilling and blasting operation for overburden and iron ore. For ancillary activities to mining, D10T and D9 track dozers are used at waste rock dumps and run-of-mine (RoM) stockpiles, a front-end loader FEL CAT 992 is used for rehandling of the RoM and the motor graders, compacters and water tankers are used to construct and maintain the haul roads. (Department Mineral Resources , 2019).

Physical closure components relevant to Mine Closure Planning at Jindal Iron Ore Mine include the following:

1. Infrastructural aspects:

- Plant and related structures;
- Supporting infrastructure;
- Off-site infrastructure;
- Linear items;
- Waste disposal

2. Mining aspects:

- Open Pit area;
- Waste rock dump

Bio-physical and Socio-economic closure components relevant to Mine Closure Planning at the proposed Jindal Iron Ore Mine include the aspects as outlined in Section 4 and the State of the Environment (SOE):

3 Bio-Physical closure aspects:

- Water resources (Surface- and Groundwater);
- Sensitive Habitats and Biodiversity;
- Land use and Land capability;
- Other: Air quality and Topography

3 Social closure aspects:

- Employees;
- Interested and Affected parties;
- Government

Refer to the Mine Site Layout plan in APPENDIX A for the detail of the site and future planned operations.

2.3. DETAILS OF MINE OWNER AND MINING AUTHORISATION HOLDER

Jindal Iron Ore (Pty) Ltd (Jindal), is owned by Jindal Steel and Power (Mauritius) Limited (74%) and South African BBBEE partner Mr. Thabang Khomo (Pty) Ltd (26%). Jindal holds two Prospecting Rights over the project site. The prospecting rights are referred to as North Block (PR 10644) and South Block (PR 10652) and have a total combined area of 20 170, 0666 ha. (Jindal Iron Ore (Pty) Ltd, 2022)

Name and Address of Jindal Iron Ore (Pty) Ltd:

Postal Address: Jindal Iron Ore (Pty) Ltd
Postnet Suite 200
Private Bag x 75
Bryanston
2021
Phone: 011 706 8420

General Manager Details:

The following are the details for the General Manager at the time of compilation of this closure plan

Name Mr. Shaitan Chouhan:

Email shaitan.chouhan@jindalafrica.com

Phone: 011 706 8420

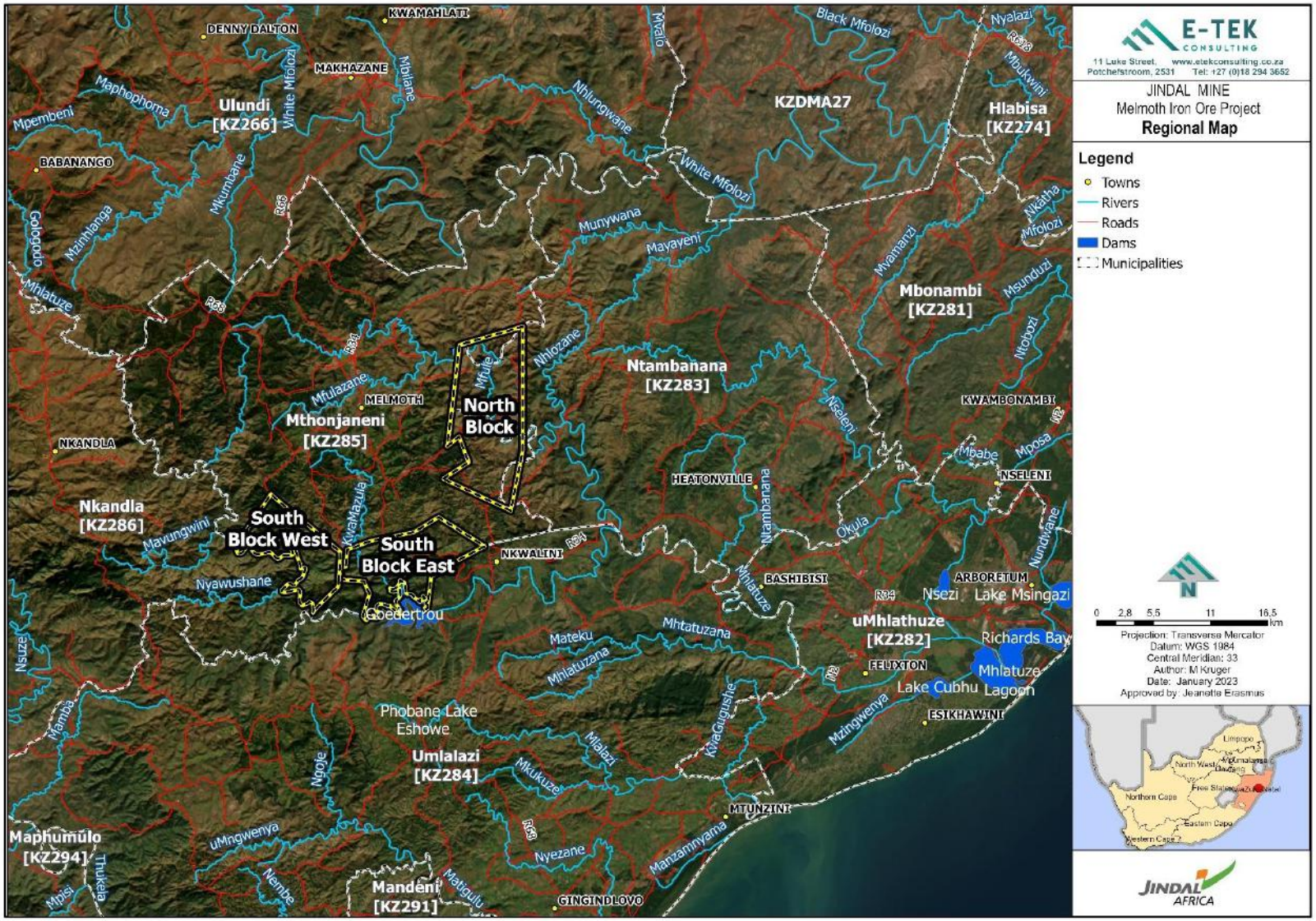

Figure 2: Jindal Iron Ore Regional Setting

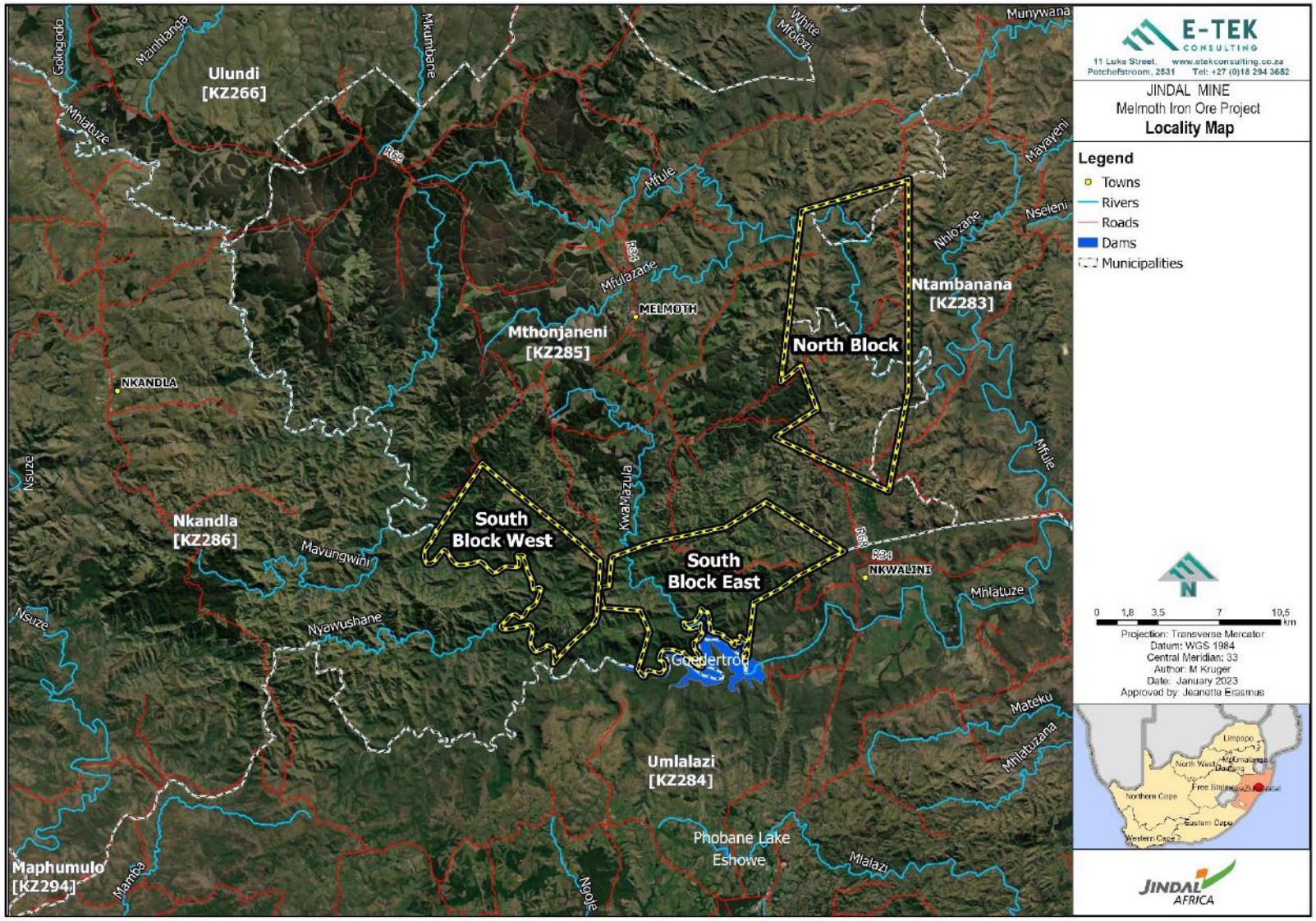

Figure 3: Jindal Iron Ore Local Setting

3. STATUTORY AND CORPORATE RELATED REQUIREMENTS

Regulations Reference: (b), (b)(i) & (d)(i)	**This Section deals with the context of the project, as well as the material information and issues that have guided the development of the plan.** **It also outlines the Legal and Governance framework and interpretation of the requirements for the closure design principles.**

3.1. JINDAL IRON ORE RELATED CONTEXT

3.1.1. Mine Lease Agreement

Jindal was granted Prospecting Rights by the then Department of Mineral Resources (DMR) on 26 August 2011 for the **North Block** (PR 10644) and **South Block** (PR 10652) (Divided into Block (**South West and South East Blocks**) and have a total combined area of 20 170, 0666 ha (Jindal Iron Ore (Pty) Ltd, 2022).

Currently Jindal's intent is to consolidate the Prospecting Rights for the North and South blocks into a single Mining Right. Development of the mine and mining infrastructure will be undertaken in a phased approach with mining currently only proposed to be undertaken in the south eastern section of the South Block (**South East Block**) where the iron ore resource has been defined. Infrastructure would be developed to support this mining operation (Jindal Iron Ore (Pty) Ltd, 2022).

Jindal Iron Ore (Pty) Ltd (Jindal), is owned by Jindal Steel and Power (Mauritius) Limited (74%) and South African BBBEE partner Mr. Thabang Khomo (Pty) Ltd (26%).

In 2013 Jindal appointed Golder Associates Africa (Pty) Ltd. (Golder) as the independent Environmental Assessment Practitioner (EAP), responsible for managing the EIA and the supporting Public Participation Process (PPP). Golder submitted a Final Scoping Report to the Department of Economic Development, Tourism and Environmental Affairs (EDTEA) under Jindal Iron Ore (for the mining EIA) (Jindal Iron Ore (Pty) Ltd, 2022).

In June 2015 the Scoping Report was returned to Jindal with comments from the EDTEA requesting more clarity on various aspects of the project, company structure and further engagement with Interested and Affected Parties (I&APs).

In January 2021 Jindal appointed SLR as the independent EAP to undertake a new EIA and PPP and prepare all documentation for a Mining Right Application (MRA). Jindal has also appointed consultants to produce a Bankable Feasibility Study for the Jindal MIOP (Jindal Iron Ore (Pty) Ltd, 2022).

3.1.2. Environmental Management Programme

The Environmental Management Programme (EMPr) should include but will not be limited to monitoring of:

- groundwater,
- surface water,
- air quality; and
- biodiversity / ecosystems,

Monitoring points should be determined through specialist studies and should include points relevant to the proposed mining activities and surrounding communities. This will create a baseline to assess the effects of the mining activities over a period of time. Monitoring programs should be adapted according to the development of the mine and proposed mining activities throughout Life of Mine and relevant monitoring points should be included in the Post Closure monitoring programmes to ensure the effective monitoring of possible impacts occurring after mine closure.

3.2. SOUTH AFRICAN LAWS AND REGULATIONS

Table 3: South African laws and regulations applicable to mine closure

LEGISLATION	OBJECTIVE AND RELEVANCE TO CLOSURE
Acts of parliament: **Constitution of the Republic of South Africa of 1996**	Provides inter *alia* for the right to an environment that is not harmful to human health or wellbeing, and to secure ecologically sustainable development.
Companies Act 71 of 2008	Deals inter alia with registration and liquidation of companies and thus the regulation of mining company rights and liabilities with regards to mine closure
National Environmental Management Act 107 of 1998	Framework law giving effect to the constitutional environmental right. Provides the framework for regulatory tools in respect of environmental impacts, including mining and mine closure.

LEGISLATION	OBJECTIVE AND RELEVANCE TO CLOSURE
Minerals Act 50 of 1991	Repealed by the MPRDA below, however, still relevant as holders of old order rights issued in terms of this act are still haled liable for ensuring sustainable mine closure and rehabilitation.
Minerals and Petroleum Resources Development Act 28 of 2002, as amended	Main legislative provision for the granting of mineral rights. Also, the relinquishment of such rights and associated closure liabilities after successful closure and rehabilitation. Introduces the various financial vehicles which may be used to provide for closure and rehabilitation funding.
Mineral and Petroleum Resources Development Act 49 of 2008	Amendment of the above act, which started to align environmental and mining law provisions so as to avoid duplication and to allow for one system of regulation and authorisation.
Income Tax Act 58 of 1962	Regulates the payment of taxes by inter *alia* mining companies. Relevant in respect of the financial provisions required by the MPRDA above so as to ensure that sufficient funds are available to rehabilitate and close mining operations as well as providing for certain tax exemptions in respect of funds related to rehabilitation.
National Water Act 36 of 1998	Regulates the protection of the water resources and the use of water on *inter alia* mining areas. Furthermore, contains provisions relevant to mine closure with regard to water resource protection form pollution and environmental degradation.
Water Services Act 108 of 1997	Deals with the provision of *inter alia* drinking water services and quality to people, and furthermore regulates the situations where mines have undertaken to provide such services. Relevant in terms of mine closure as such services are often required despite closure of a specific site.
Mine Health and Safety Act 29 of 1996	Deals with the health and safety of employees throughout the entire mining life cycle including closure and rehabilitation operations.

LEGISLATION	OBJECTIVE AND RELEVANCE TO CLOSURE
Nuclear Energy Act 46 of 1999	Regulates the management and safety of nuclear or radioactive sources including naturally occurring radioactive matter, e.g. certain tailings facilities as well as contaminated mining plant and equipment.
Hazardous Substances Act of 1973 (Group IV Hazardous Substances)	Regulates the management and safety of sealed nuclear sources throughout the entire mining life cycle, including decommissioning and disposal at the time of closure.
National Environmental Management: Waste Act 59 of 2008 as amended by the	Regulates *inter alia* the generation, storage, management, transport and disposal of waste including mining waste such as residue deposits and residue stockpiles. Furthermore, regulates the rehabilitation of contaminated land and waste disposal facilities including mining waste facilities.
National Environmental Management Laws Amendment Act 26 of 2014	Introduces amendments in line with the MPRDA amendment act above to align the regulation and authorisation of mining activities between different acts and government departments such as the Department of Environmental Affairs and Department Mineral Resources.
National Environmental Management: Biodiversity Act 10 of 2004	Regulates the protection of biodiversity and the use of alien and invasive species on mining sites
National Environmental Management: Protected Areas Act 57 of 2003	Prohibits mining in certain protected areas.
National Environmental Management: Air Quality Act 39 of 2004	Regulates activities which may have a detrimental effect on ambient air quality including certain processes and dust generating activities such as tailings deposition.
Conservation of Agricultural Resources Act 43 of 1983	Regulates the eradication of weeds and invader plants on mining sites
National Heritage Resources Act 25 of 1999	Regulates the protection and conservation of the country's heritage resources, including mining related heritage where applicable.

LEGISLATION	OBJECTIVE AND RELEVANCE TO CLOSURE
Other legal measures **Land Use Planning Ordinances (provincial government level).**	Regulates the zoning of land for mining purposes, as well as the re-zoning of mining land post closure
Local by-laws (local municipality level).	Regulates a variety of issues on mine sites in terms of local regulations
Common law/case law.	Regulates issues such as nuisance, neighbour law, and all possible issues which may emanate from mine closure processes.
Regulations **GNR 1147 in Government Gazette (GG) 39425, 20 November 2015. Regulations pertaining to the financial provision for prospecting, exploration, mining or production operations.**	The primary regulations pertaining to the provisions of finances for the closure and rehabilitation of mine sites, throughout the lifecycle of the mine.
GNR 982, 983, 984 and 985 in GG 38282 of 4 December 2014. Environmental Impact Regulations and Listed Activities.	Lists certain activities which require an environmental assessment and authorisation before they may be undertaken. Mine closure is specifically listed and is thus subject to an environmental assessment and the issuance of an environmental authorisation with approved closure plan.
GNR 632 in GG 39020 of 24 July 2015. Regulations for the management of residue deposits and residue stockpiles.	Sets out the regulatory framework for the management of residue deposits and stockpiles as well as the closure and rehabilitation of such facilities.
MPRDA: GNR 527 in GG 26275, 23 April 2004. Chapter 2: 'Mineral and Petroleum, Social and Environmental Regulations'.	Provided for the substantive regulations to give effect to the provisions of the Mineral and Petroleum Resources Act. Included several provisions relating to mine closure and rehabilitation
GNR 704 in GG 20119 of 4 June 1999, "Regulations of Use of Water for Mining and Related Activities	Regulates the use of water on mining areas and introduces controls to prevent and mitigate the pollution of water resources within mining areas.

LEGISLATION	OBJECTIVE AND RELEVANCE TO CLOSURE
aimed at the Protection of Water Resources".	Also regulates the management of residue deposits and residue stockpiles so as to prevent water resource pollution.
GNR 331 in GG 37603, 2 May 2014 "National Norms and Standards for the Remediation of Contaminated Land and Soil Quality".	Regulates the remediation of contaminated land including land contaminated by mining activities.
Regulations 847, 848 of 1994 of the Nuclear Energy Act 46 of 1999.	To be read with the Nuclear Energy Act above.
Other measures: accords, policies and strategies: **The 1970 Fanie Botha Accord stated that mines that closed before 1956 are the responsibility of government, with those that closed afterwards to be remediated by the responsible company (Johannesburg Inner City Business Coalition (JCBC), undated).**	The accord has for all intents and purposes been negated by the promulgation of the 2008 amendments to the Mineral and Petroleum resources act, which infers liability for closure to historic sites despite the 1956 cut off.
A Strategic Framework for Implementing Sustainable Development in the South African Minerals Sector: Towards Developing Sustainable Development Policy and Meeting Reporting Commitments (DME, 2007 & DME, 2009).	[Self-explanatory]
White Paper: A Minerals and Mining Policy for South Africa (the Minerals White Paper) N 2359/1998 in Government Gazette No 19344, 20 October 1998).	Sets out government policy for the exploitation of minerals in the country with specific focus on sustainability and equity.

LEGISLATION	OBJECTIVE AND RELEVANCE TO CLOSURE
White Paper on Environmental Policy for South Africa (The CONNEP White Paper) (Department of Environment Affairs and Tourism, 1997).	Government policy regarding the achievement of South Africa's environmental right and the regulation of activities which may have a detrimental impact on the environment, which by implication includes mining and mine closure.
White Paper on Integrated Pollution and Waste Management for South Africa: A Policy on Pollution Prevention, Waste Minimisation, Impact Management and Remediation March 2000. GN R227 GG 20978 of 17 March 2000 (DEAT, 2000).	Commits South Africa to a regulatory approach which implements inter alia the waste management hierarchy, and by implication applies to mining waste which includes residue deposits and residue stockpiles.
Water Conservation and Water Demand Management Strategy for the Industry, Mining and Power Generation Sector, August 2004.	[Self-explanatory]
National Water Resource Strategy II of 2013.	South Africa's strategy for the integrated management of the country's water resources, including the protection of water resources form pollution sources such as mine sites.

3.3. GOVERNMENT/INDUSTRY GUIDELINES AND PRACTICES

Table 4: Closure specific guidelines, Policies and Best practices

DOCUMENT DESCRIPTION	OBJECTIVE AND RELEVANCE TO CLOSURE
Environmental protection and rehabilitation • Evaluation of the Quantum of Closure-Related Financial Provision Provided by a Mine, • DME Guideline document 2004 available at http://www.dmr.gov.za/publications/summary/21-mineral-policy/588-guideline-document-for-the-evaluation-of-the-quantum-of-closure.html. • Handbook of Guidelines for Environmental Protection, Chamber of Mines (CEM (SA)) (Chamber of Mines of South Africa, 1979) Volume 1/1983: The design, operation and closure of metalliferous and coal residue deposits. • Volume 2/1979: The vegetation of residue deposits against water and wind erosion • Volume 3/1981: The rehabilitation of land disturbed by surface coal mining in South Africa. • Volume 5/1982: The Chamber of Mines erosion tester (comet) instrument (for determining the erodibility of slime). • Volume 7: Statutory requirements for environmental management. • Guidelines for the Rehabilitation of Mined Land (DMR: Chamber of Mines and Coaltech Research Association, 2007). • Template guide for: “Environmental Management Plan for Small-Scale Mining”. (DMR, 1998). • Mine Residue – Code of Practice (SABS 0286:1998).	Several guidelines have been published in South Africa relating to the protection of the environment as well as mine site rehabilitation. Although not being law these guidelines provide for substantive considerations which may be used by either regulators or mines in pursuing sustainable mine closure and rehabilitation.
Soil, waste and biodiversity • Framework for the Management of Contaminated Land DEA 2010. • Minimum Requirements for Waste Disposal by Landfill; Handling, Classification and Disposal of	As above, these guidelines pertain to particular aspects of protection of the environment relevant to mine site rehabilitation.

DOCUMENT DESCRIPTION	OBJECTIVE AND RELEVANCE TO CLOSURE
Hazardous Waste; Water Monitoring at Waste Management Facilities (DWAF, 1998). • Mining and Biodiversity Guideline – Mainstreaming biodiversity into the mining sector of 2013 (DEA, DMR, CM, South African Mining and Biodiversity Forum and South African National Biodiversity Institute, 2013).	
Water • Water Conservation and Water Demand Management (WC/WDM) Guideline for the Mining Sector in South Africa, June 2011 (DWA, 2011). • Guideline Document for the implementation of Regulations on use of water for Mining and related activities aimed at the protection of Water Resources, Second Edition, May 2000. • Best Practice Guidelines for Water Resource Protection in the South African Mining Industry (Department of Water Affairs, 2006): • Series A: Best Practice (BP) Guideline A1.1: Small Scale Mining Practices, Aug. 2006. • Series A: BP Guideline A1: Small Scale Mining, Aug. 2006. • Series A: BP Guideline A2: Water Management for Mine Residue Deposits, Jul. 2008 • Series A: BP Guideline A3: Hydrometallurgical Plants, Jul. 2007 • Series A: BP Guideline A4: Pollution Control Dams, Aug. 2007 • Series A: BP Guideline A5: Water Management for Surface Mines, Jul. 2008 • Series A: BP Guideline A6: Water Management for Underground Mines, Jul. 2008. • Series G: BP Guideline G1: Storm Water Management, Aug. 2006. • Series G: BP Guideline G2: Water and Salt Balances, Aug. 2006.	A series of guidelines drafted by the Department of Water Affairs with several relating specifically to mining and mine closure activities. The aim behind the guidelines being to ensure practices consistent with the National Water Act and the National Water Resource Strategy discussed above and in so doing ensuring protection of the water resource.

DOCUMENT DESCRIPTION	OBJECTIVE AND RELEVANCE TO CLOSURE
• Series G: BP Guideline G3: Water Monitoring Systems, Jul. 2007. • Series G: BP Guideline G4: Impact Prediction, Dec. 2008. • Series G: BP Guideline G5: Water Management Aspects for Mine Closure, Dec. 2008 • Series H: BP Guideline H1: Integrated Mine Water Management, Dec. 2008. • Series H: BP Guideline H2: Pollution Prevention & Minimization of Impacts, Jul. 2008. • Series H: BP Guideline H3: Water Reuse & Reclamation, Jun. 2006. • Series H: BP Guideline H4: Water Treatment, Sep. 2007.	
Socio-economic • Guideline Document for the Evaluation of the Quantum of Closure Related Financial Provision Provided by a Mine (DME/DMR, 2005). • The Socio Economic Aspects of Mine Closure and Sustainable Development: Guideline for the Socio- Economic Aspects of Closure of 2010 (see Stacey *et al.*, 2010).	Socio economic guidelines for the closure of mines, providing substantive guidance on mine closure costing and socio-economic impact mitigation for closure.

3.4. THE LEGAL FRAMEWORK APPLICABLE TO MINE CLOSURE IN SOUTH AFRICA.

Historically, the MPRDA[1] obligated the holder of rights or permits (here after the holder) to rehabilitate the environment to: its natural state; or a predetermined state; or a land use which conforms to the generally accepted principle of sustainable development (South Africa, 2002: Swart, 2003). It also states that 'the holder is responsible for any environmental damage, pollution or ecological degradation inside and outside of its boundaries.'[2] It is also required that holders of rights must: 'give effect to the general objectives of integrated environmental management laid down in Chapter 5 of National Environmental Management Act'; and 'must

[1] Section 38(d) of the Minerals and Petroleum Resources Development Act 28 of 2002

[2] Section 38(e) of the Minerals and Petroleum Resources Development Act 28 of 2002

consider, investigate, assess and communicate the impact of the mining activity on the environment in terms of s. 24(7) of NEMA'[3].

Notwithstanding the relevant provisions of NEMA, mining companies were at the time required by the MPRDA to conduct an Environmental Impact Assessment (EIA), and to submit an EMPr for approval by the DMR.[4] The EMPr must have included the environment, socio-economic conditions and cultural heritage affected by the prospecting or mining operations, as well as baseline information to determine protection and mitigation measures (Limpitlaw, 2005:Joughin, 1997). [5] Additionally, the EMPr had to describe "…the manner in which the holder intends to: (i) modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation; (ii) contain or remedy the cause of pollution or degradation and migration of pollutants; and (iii) comply with any prescribed waste standard or management standards or practices."[6] The EMPr furthermore had to include the environmental objectives and goals for mine closure rehabilitation as well as a closure plan as outlined in GNR 527 regulation 62;[7] management of identified environmental risks and liabilities and financial provision, i.e. both the methods of determining the provision and the quantum thereof [8].

In theory, the estimation of financial provisions, as provided for in the MPRDA,[9] should have been in sync with the EMP and may have been based either on rehabilitation and closure cost estimation models developed by the mining concern or the DMR guidelines (DMR, 2005). Methods of financial provision for the rehabilitation, management, and remediation of negative environmental impacts included: an approved contribution to a trust fund; a financial guarantee from a South African registered bank, or any other bank, or financial institution approved by the Director-General; a deposit into the account specified by the Director-General; and any other methods as the Director-General may determine.[10] Mining companies were required to annually assess their environmental liability and increase their financial provision in line with such an assessment.[11]

[3] Section 38(a)-(b) of the Minerals and Petroleum Resources Development Act 28 of 2002

[4] Section 39(1) of the Minerals and Petroleum Resources Development Act 28 of 2002

[5] Section 39(a)-(b) of the Minerals and Petroleum Resources Development Act 28 of 2002

[6] Section 39(3d) of the Minerals and Petroleum Resources Development Act 28 of 2002

[7] Reg 62 in GN R527 in GG 26275 of 1 May 2004

[8] Reg 52 in GN R527 in GG 26275 of 1 May 2004

[9] Section 41 of the Minerals and Petroleum Resources Development Act 28 of 2002

[10] Reg 53(1) in GN R527 in GG 26275 of 1 May 2004

[11] Section 41(3) of the Minerals and Petroleum Resources Development Act 28 of 2002

Ministerial powers to recover costs in event of urgent remedial measures, and to remedy environmental damage were and are still provided for.[12] Finally, if a permit renewal was needed, the MPRDA[13] obligates the holder to report his or her environmental performance, rehabilitation to be completed and estimated cost thereof. In July 2013 s38-42 were repealed pending the much-anticipated move of the regulation of environmental considerations across to the NEMA dispensation. This created a temporary lacunae in the law, yet these sections were at the time still implemented as if still in force by the regulator.[14] Some months later in 2013 it was revealed that NEMA s24 (discussed below) would cater for these provisions.

At present the application for closure of a mine is regulated predominantly by the provisions contained within the MPRDA s43[15] along with those contained in NEMA[16] as discussed below. Mindful of the proposed amendments to s43 as contained within the MPRDA amendment Bill 2013, the current regulation of mine closure is discussed. [17] In terms of the MPRDA mine closure is largely regulated by section 43 as stated above. Section 43 provides an outline of the process which should be followed by regulatory bodies to grant closure certificates. Section 43(1) states that the holder of a mining right remains responsible for any environmental liability, pollution or ecological degradation, and the management thereof, until the Minister has issued a closure certificate. Section 43(4) of the MPRDA outlines the requirements which should be adhered to when applying for mine closure, as well as the submission process. Fundamentally, section 43(5) of the MPRDA stipulates that no closure certificate may be issued unless the Chief Inspector and each government department charged with the administration of any law which relates to any matter affecting the environment have confirmed in writing that the provisions pertaining to health and safety and management of potential pollution to water resources, the pumping and treatment of extraneous water and compliance to the conditions of the environmental authorisation have been addressed.

In assisting the Department of Water Affairs and Sanitation (DWS, previously DWA) in reaching such confirmation, the Best Practice (BP) Guidelines as listed above have been published (DWS, 2006). The above provisions of the MPRDA as amended, have extended the scope of the original section 43(1). These extended liabilities included in s43(1) now state

[12] Section 45-46 of the Minerals and Petroleum Resources Development Act 28 of 2002

[13] Section 24(2) of the Minerals and Petroleum Resources Development Act 28 of 2002

[14] National Environmental Management Act No 107 of 1998

[15] Section 43 of the Minerals and Petroleum Resources Development Act 28 of 2002

[16] National Environmental Management Act No 107 of 1998

[17] Minerals and Petroleum Resources Development Amendment Bill in GG 36523 of 31 May 2013

that the holder of inter alia a mining right, remains responsible, apart from the original provisions relating to health, safety and water pollution for any: environmental liability; pollution; ecological degradation; the pumping and treatment of extraneous water; compliance to the conditions of the environmental authorisation, and; the management and sustainable closure thereof, until the Minister has issued a closure certificate in terms of the MPRDA. Inter alia the Department of Environmental Affairs has to be approached for comment as per the dictum of section 43(1).[18] This is a departure from the original prescription that only the DMR and the DWS be consulted with regard to mine closure. The MPRDA also requires that the Council of Geoscience confirms in writing that all requisite reports in terms of section 21(1) have been compiled and submitted before a closure certificate is issued.[19]As noted above, the 8th of December 2014 saw a shift in terms the regulation of environmental impacts emanating from mining activities. Accordingly, provisions relating to the closure of mines are now contained within NEMA, specifically section 24 and accompanying regulations. At present all environmental considerations and impacts on mines are regulated in terms of the NEMA. The regulating authority, however, still remains DMRE, albeit that they now have to apply the NEMA rules. In accordance with section 24(n) of NEMA, an EMPr is required for any EIA submitted in relation to mining activities 24N(1A). Such an EMPr must contain measures regulating responsibilities for any environmental damage, pollution, pumping and treatment of extraneous water or ecological degradation as a result of prospecting or mining operations or related mining activities which may occur inside and outside the boundaries of the operations in question. In effect giving credence to the requirements of the MPRDA as discussed above.

Similar to the provisions contained within the repealed MPRDA sections, these requirements serve to hold mines liable for environmental pollution and degradation emanating from their mining activities. In order to ensure that such liabilities can be covered by the mine in question, section 24(o) of NEMA prescribes that when considering an application, the competent authority must consider the applicants ability to comply with the prescribed financial provisions.[20] The financial provision referenced in section 24(o) is detailed in section 24(p) of NEMA, which requires that an applicant for an authorisation pertaining to mining or related activities must comply with the prescribed financial provision for the rehabilitation, closure and on-going post decommissioning management of negative environmental impacts.[21] This

[18] Section 43(1) of the Minerals and Petroleum Resources Development Act 28 of 2002

[19] Section 21(1) of the Minerals and Petroleum Resources Development Amendment Act no 49 of 2008. The MPRDAA deals with data in respect of reconnaissance and prospecting, as well as the keeping of records, and submission of information relating thereto to the Council of Geoscience.

[20] Section 24O1(b)(iiiA) of the National Environmental Management Act No 107 of 1998

[21] Section 24P(1) of the National Environmental Management Act No 107 of 1998

financial provision must be annually assessed on the basis of the mines environmental liability to the satisfaction of the minister of mineral resources. An annual independent audit is furthermore required in order to illustrate the adequacy of the financial provision.[22] Such a financial provision has to be maintained until such time as the minister issues a mine with a closure certificate.[23] The minister does, however, maintain the prerogative to retain any part of the financial provisions as is deemed fit so as to rehabilitate the closed mining or prospecting operation in respect of latent or residual environmental impacts. Further provisions with regard to the financial provisions for mine closure in terms of NEMA are contained within the regulations pertaining to the financial provision for the rehabilitation, closure and post closure of prospecting, exploration, and mining or production operations.[24] Section 24(r) of NEMA deals with environmental liabilities and states that the holder of a right, holder of and old order right, or holder of works (the listing of the different types of rights spanning the history of mining rights in South Africa, thus implying retrospectively of this section) remains responsible for any environmental liability, pollution, or ecological degradation, the pumping and treatment of extraneous water, the management and sustainable closure thereof, until the minister of mineral resources has issued a closure certificate in terms of the MPRDA. In effect, 24(r) applies a retrospective liability on mines, even those which were closed before the enactment of the MPRDA. This liability is also contained within section 28 of NEMA, albeit indirectly. In gearing up for the implementation of the NEMA provisions in so far as they relate to mining, and particularly mine closure, the DEA have drafted several regulations to flesh out the regulatory provisions as discussed above. These regulations deal with inter alia the financial provision for mine closure, as discussed above, and the management of residue deposits and residue stockpiles.[25] This provision, namely 24(r), read in accordance with the proposed perpetual liability amendment provision as contained in section 43 of the MPRDA bill 2013,[26]

One of the most significant changes to the regulatory regime is the requirement as of December 2014 for mines to conduct an EIA for closure. A closure certificate is thus required in terms of s43 of the MPRDA, along with an Environmental Authorisation in terms of s24 of

[22] Section 24P(3) of the National Environmental Management Act No 107 of 1998

[23] Section 24P(5) of the National Environmental Management Act No 107 of 1998

[24] GNR 1147 in GG 39425 of 20 November 2015.

[25]The Regulations Regarding the Planning and Management of Residue Stockpiles and Residue Deposits from a Prospecting, Mining, Exploration or Production Operation were published in GNR 632 of 24 July 2015 in GG 39020.

[26] Section 43 of the Minerals and Petroleum Resources Development Amendment Bill in GG 36523 of 31 May 2013

NEMA before a mine is deemed to have closed. The result being two authorisations, issued by the same ministry, along with approval from all other ministries related to the environment as discussed above.

It is against this background that the following closure plan has been drafted in accordance with GNR 1147 and the requirements stipulated therein for closure plans.

3.5. JINDAL AFRICA ENVIRONMENTAL POLICY

Jindal Africa recognises that it occupies a unique position in respect of care for the environment. Jindal Africa is committed to incorporating good environmental management practices into everyday activities and liaising with regulatory bodies to achieve set goals.

The common goal is to continually improve Jindal Africa's environmental management activities and performance through the implementation of environmental management systems by developing and maintaining sustainable environmental, health and safety programs with commitments to (Jindal Africa, 2022):

- Assess the environmental consequences of its operations on the local environment to reduce possible negative impacts;
- Operating in a safe manner to prevent pollution avoiding: Spills, leaks or accidental discharges of polluting material;
- Limiting the quantities of waste and other discharges by handling them in a responsible manner that is not detrimental to the environment; and
- Complying with all legal obligations as set out by relevant environmental laws.

Jindal Africa will also seek to continually improve by (Jindal Africa, 2022):

- Considering the environmental impact of all its activities;
- Set environmental objectives and targets that are understood and followed at all levels throughout the company;
- Train employees to carry out their work with due respect and care for the environment;
- Ensure that contractors follow the company's environmental practices in performing their work;
- Investigate and analyse all environmental incidents to prevent recurrences; and
- Perform a regular audit of compliance against the company's commitments.

4. STATE OF THE ENVIRONMENT

Regulations Reference: (b)(ii)	**This Section gives an overview of the environmental and social context that may influence, or be influenced by, the closure activities and post mining land use.**

4.1. BIO-PHYSICAL ENVIRONMENT

This section of the Rehabilitation and Closure Plan gives a broad description of the regional state of the environment within which the mine will be developed and will be closed. It should therefore be read within the context of mine closure.

The description of environmental and social aspects allows for proactive decisions to be made in line with sustainability principles while also keeping closure in mind.

4.1.1. Geology and Soils

4.1.1.1. Regional

The geology of the Project is dominated by the metasediments of the Nondwezi Group of the Ilangwe Greenstone Belt. These metasediments are characterised by banded metacherts, quartzites and Banded Iron Formation (BIF) (The Mineral Corporation, 2016).

The geology of the Ilangwe Greenstone Belt conforms to the general description of greenstones in that they are generally lenticular in shape with widths of between 10 – 50 km and lengths between 100 – 300 km. Composed largely of extrusive mafic rocks with some ultramafic and felsic rocks. Greenstone belts were previously understood to display with basal ultramafic rocks becoming more evolved rocks towards the top, now understood to not always be the case. Most of the belts exhibit strong tectonism with possible duplication and elimination of the original succession.

The greenstone belts are infolded into grey granitic gneisses composed of tonalities, trondhjemites or granodiorites of banded to migmatitic varieties. The contact between the gneisses and the greenstone is either tectonic or intrusive, the latter displaying evidence of assimilation of greenstone material within the gneiss close to the contact. Within the Kaapvaal Craton, there are several locations of preserved greenstone belts infolded into granitoid gneiss with the ages ranging from 3 500 to 2 700 Ma. Refer to Figure 4. (Jindal Iron Ore (Pty) Ltd, 2022).

4.1.1.2. Local

The study area lies within the Ilangwe Greenstone Belt, which is separated from various granitoids to the north and south by major tectonic contacts. The rocks of Ilangwe Greenstone Belt belong to the Nondweni Group, which is divided into the lower Umhlathuze Subgroup (a suite of mafic-ultramafic meta- volcanic rocks) and upper Nkandla Subgroup, a meta-sedimentary suite. Both units host banded iron formation (BIF), which is the iron resource at Melmoth (Figure 4) The ore mineralisation is hosted in the Matshansundu Formation of the Umhlatuze Subgroup and Entembeni Formation of the Nkandla Subgroup. The ore body occurs as BIF, which consists of alternating bands (on a millimetre scale) of magnetite and cherty quartz. Hematite and minor K-feldspar, stilpnomelane, grunerite and chlorite are also present. The mineralisation is most likely of an Algoma-type deposit due to its association with an Archaean greenstone belt metavolcanics (Jindal Iron Ore (Pty) Ltd, 2022).

4.1.1.3. Soils

The North Block consists of seven different land types and the South Block consists of 9 different land types. These land types belong to four main groups i.e. Ac land types, Ab land types, Fa land types and Fb land types. The Ab land types, yellow soils occupy less than 10% of the area while dystrophic and/or mesotrophic soils occupy a larger area than high base status red-yellow apedal soils. Ac (red and yellow dystrophic and/or mesotrophic) indicates land with red and yellow soils each of which covers more than 10% of the area while dystrophic and/or mesotrophic soils occupy a larger area than high base status red-yellow apedal soils. Fa land types refer to land in which lime in the soil is not encountered regularly in any part of the landscape. Fb land types indicate land where lime occurs regularly in one or more valley bottom soils (Jindal Iron Ore (Pty) Ltd, 2022).

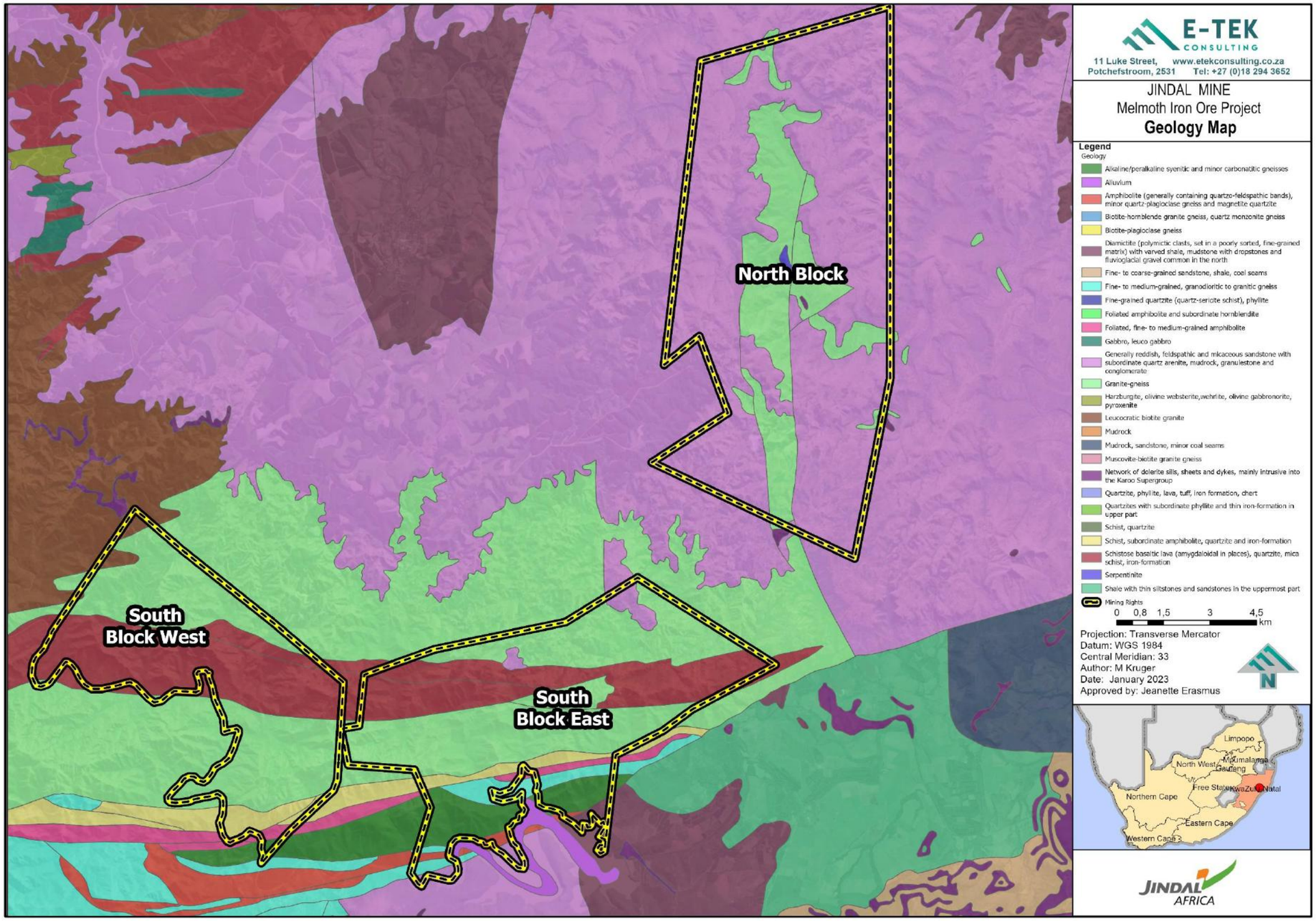

Figure 4: Regional Geology

4.1.2. Water Resources

According to the Department of Water Affairs (DWA 2012), freshwater is becoming scarcer due to unsustainable use, climate change, resource pollution, increased demand and wastage. The increase in water abstraction has also led to the decline in biodiversity and ecosystem productivity in certain areas. Wetland areas are being destroyed and some rivers are drying up, contributing to the increase in endangered fish species. Settlements, mining, agriculture and industrial activities all have the potential to negatively affect the surface and ground water quality, it is therefore important to monitor and maintain water resources (Department of Water Affairs, 2012).

The mining operations will require water for the processing plant, dust control, for vehicle wash down and for the change house and office use. The conceptual design is for water to be recycled from the Tailings Storage Facility (TSF) and the concentrate filters thereby minimising daily water usage. There will be a need for makeup water to replace water losses from seepage, evaporation, and interstitial. It is anticipated that the makeup water would be acquired from the KZN bulk water supply authority (SLR, 2022). As part of the Jindal MIOP and ESIA process, a water supply analysis will be undertaken, to determine water supply and demand. Water requirements are likely to reduce as the pit deepens due to the reuse of water that collects within the pit (Jindal Iron Ore (Pty) Ltd, 2022).

4.1.2.1. Surface water

North Block

The North Block falls between quaternary catchments (QC) W12B, W12C and W12D and is drained by the perennial Mfule River and its tributaries flowing in a southeast direction to join the Mhlatuze River. In the South Block, a total of 599 river/ stream units and 22 wetland units were identified and classified in the study area. In the North Block a total of 331 river/ stream units and 63 wetland units were identified and classified (Jindal Iron Ore (Pty) Ltd, 2022) .

South Block

The South Block spans over QC W12B and W12D and is drained by the perennial Mhlatuze, KwaMazula, Nyawushane and Mavungwini rivers. QC W12D is drained by the Mfule and Ntambanana rivers flowing in a south-east direction to join the Mhlatuze River. The water quality results were compared against the DWA (Department of Water Affairs) guidelines for irrigation, livestock watering and aquatic ecosystems and for drinking water. The water quality results were mainly within the water guidelines range except for a few exceedances which

may be attributed to the project area's geology and agricultural runoff. Refer to Figure 5 for the catchment areas (Jindal Iron Ore (Pty) Ltd, 2022).

Six surface water quality samples were collected by SLR on the 10th of May 2021, refer to Table 5. Data from eight additional water monitoring points were also obtained from the DWS water quality database, refer to Table 6. The DWA water quality guidelines for irrigation, aquatic ecosystems, livestock watering and drinking water standards (SANS 241) were used to assess the water quality status. It should be noted that many of the values identified related to the DWS irrigation guidelines adopt a conservative approach by specifying the potentially most sensitive crops (SLR, 2022).

The water quality results were compared against the DWA guidelines for Targeted Water Quality Guidelines (TWQR); guidelines for irrigation, livestock watering and aquatic ecosystems, including the SANS241 guidelines for drinking water. The water quality results were mainly within the water guidelines range except for a few exceedances (Jindal Iron Ore (Pty) Ltd, 2022).

Table 5: SLR Surface Water Quality Monitoring Points

Surface Water Quality Monitoring Localities SLR		
Name	South	East
SW2	-28,7178	31,274721
SW3	-28,7727	31,368183
SW5	-28,6532	31,407021
SW7	-28,5403	31,503128
SW8	-28,6317	31,567029
SW9	-28,7153	31,509862

Table 6: Surface Water Monitoring Points DWA

Surface Water Quality Monitoring Localities DWA		
Name	South	East
W12_103330	-28,7724	31,46878
W12_102826	-28,7725	31,46667
W12_102825	-28,7725	31,46667
W12_102820	-28,7725	31,46667
W12_102819	-28,5522	31,15833
W12_102814	-28,7017	31,65139
W12_102808	-28,7725	31,46667
W12_102807	-28,5717	31,39278

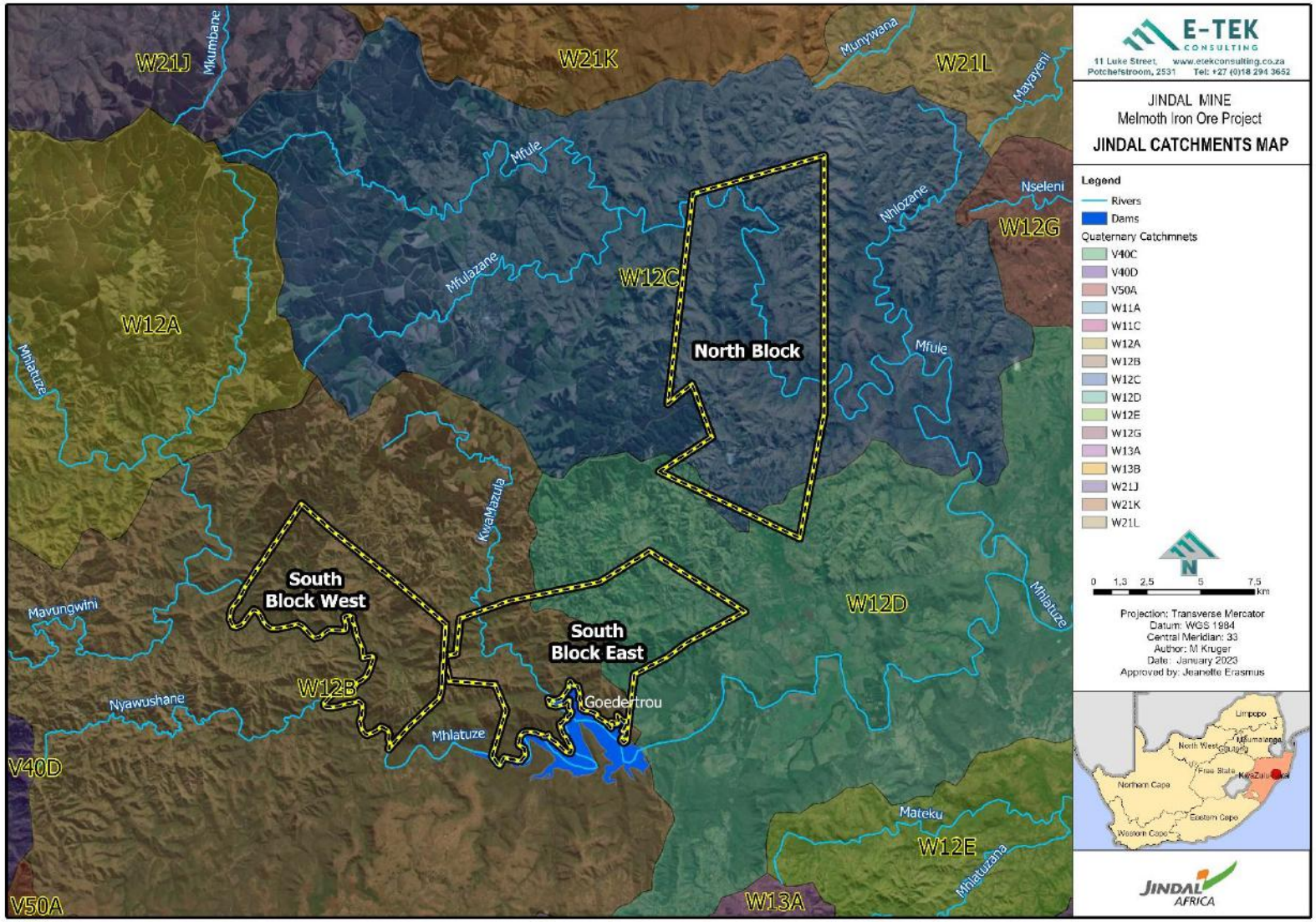

Figure 5: Jindal Iron Ore Catchments Areas

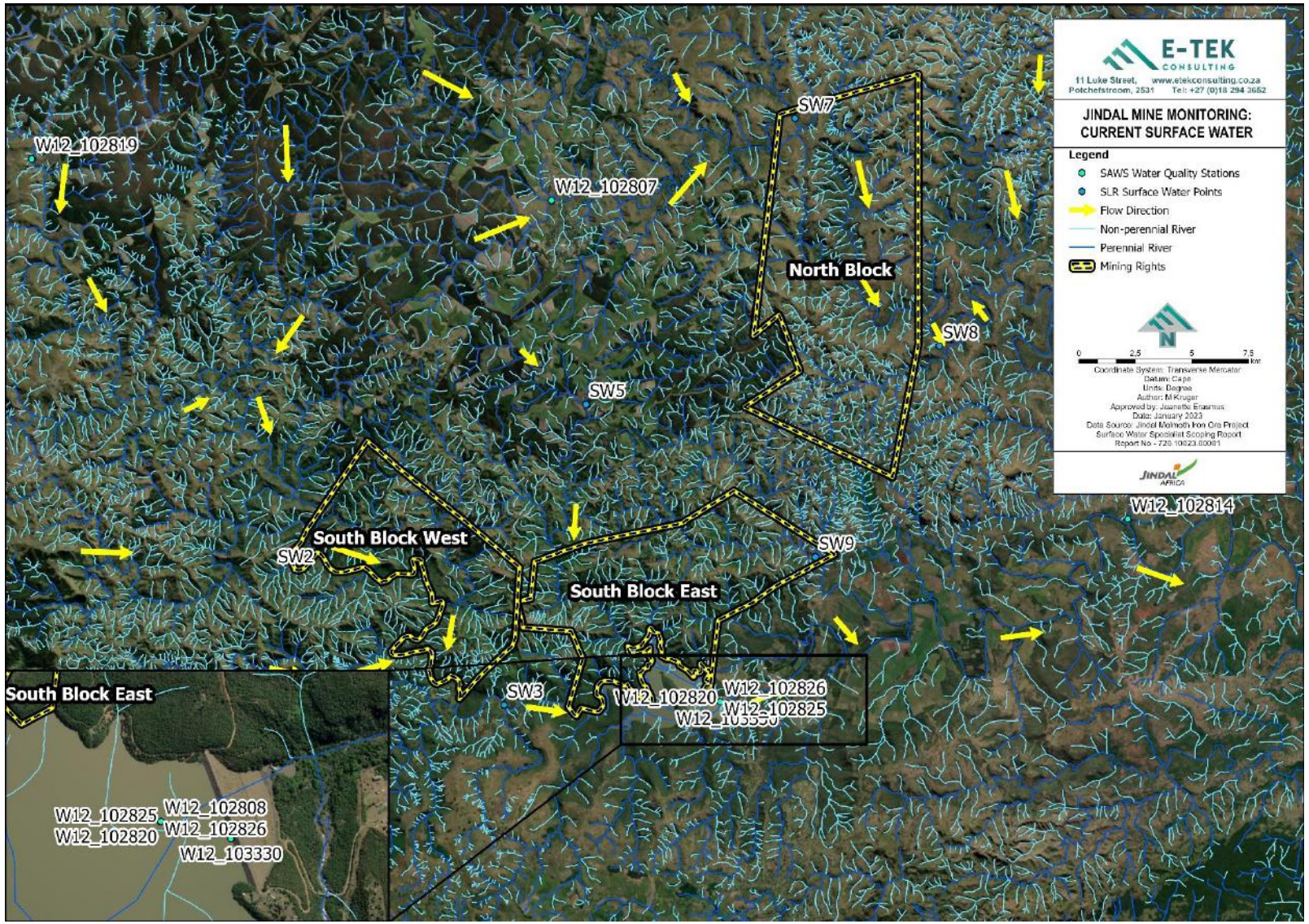

Figure 6: Surface Water Monitoring Points

Surface Water results:

Exceedances in Aluminium (Al), Copper (Cu), Mercury (Hg), and pH were recorded in all sampling points when compared to the Aquatic Ecosystems Guidelines. Electrical Conductivity (EC) was also in exceedance in all the six water sampling points sampled by SLR.

From the DWS Database, exceedances have been recorded in pH and EC in all monitoring points compared to targeted water quality guidelines and SANS241 guidelines. The exceedances in some metals may be attributed to the project area's geology, and these metals may be introduced to rivers through weathering of rocks that subsequently reached the watercourses through erosion. The site is rich in iron ore which could also be a source of other metals that have exceeded the guidelines. Even though iron ore mining has not started, there is a possibility of weathered material being washed into streams. The exceedances in EC may be attributed to agricultural runoff as the catchments around the project site are used for intensive agricultural activities (SLR, 2022).

4.1.2.2. Hydrology

Regional and Local Hydrology North Block

The North Block falls between quaternary catchments (QC) W12B, W12C and W12D. These three QCs fall within the Pongola-Mtavuna Water Management Area (WMA) and within the Usuthi-Mhlathuze Catchment Management Agency (CMA). The natural drainage systems in these QCs flow in an eastern direction towards the outlet flowing into the Indian Ocean. The area around North Block is drained by the perennial Mfule River and its tributaries Mfulazane and the Nhlozane rivers flowing in a southeast direction to join the Mhlatuze River (Jindal Iron Ore (Pty) Ltd, 2022).

Regional and Local Hydrology - South Block

The natural drainage systems in these QCs flow in an eastern direction towards the outlet flowing into the Indian Ocean. QC W12B is drained by the perennial Mhlatuze, KwaMazula, Nyawushane and Mavungwini rivers. QC W12D is drained by the Mfule and Ntambanana rivers flowing in a south-east direction to join the Mhlatuze River. The natural drainage systems flow in an eastern direction towards the outlet flowing into the Indian Ocean. The Usuthi-Mhlathuze CMA is characterised by quite large areas of formal and informal agricultural practices. These agricultural activities obtain water from the Goedertrouw Dam which divides the Mhlatuze River into two. The Goudertrouw Dam also supplies water to the Richards Bay Town and various industries.

The water uses of the Goedertrouw Dam and nearby watercourses for agricultural and bulk water supply services mean that the water resources are sensitive and need to be protected against activities that will compromise all water uses (Jindal Iron Ore (Pty) Ltd, 2022).

Hydrogeological data

Hydrogeological data was sourced from the published 1:500 000 Hydrogeological Map Series of the Republic of South Africa – Sheet 2730 (Vryheid) and previous studies for the site. In 2016 Golder completed an interim hydrogeological study for the South Block area and made the following conclusion relating to aquifer characteristics and general groundwater conceptual understanding (SLR, 2022)

The aquifer is classified as intergranular and fractured;

- The Ilangwe Greenstone Belt borehole yielding potential of the aquifer is classified as d3, which implies an average borehole yield varying between 0.5 and 2.0 L/s.
- The rocks surrounding the Ilangwe Greenstone Belt are composed of Archean granites and gneisses
- the borehole yielding potential of the aquifer is classified as d2, which implies an average borehole yield varying between 0.1 and 0.5 L/s.
- Hydrogeological boreholes have water strikes at depths between 94 - 241 metres below ground level (mbgl).
- The drilling yields of the water strikes ranged from dry to 6.6 l/s.
- The estimated T values range from 7.3 - 53 m2/d.

4.1.2.3. Groundwater

Groundwater is defined as water found beneath the ground surface between rock/soil pores and/or fractures (IUCN, 2016). The permeable layer (including the rock/soil pores and/or fractures) which transports the groundwater are referred to as aquifers (Monroe, Wicander, & Hazlett, 2007). The polluting of groundwater resources through for example the handling of hazardous waste can lead to losses to both the environment as well as third party users. Future dewatering due to mining may also lead to a decrease in the available water in the neighbouring areas (SLR, 2021).

Borehole and groundwater data captured within the DWS National Groundwater Archive within 5 km of the project site were evaluated. A total of 37 boreholes were identified within a 5 km radius of the site, with 17 groundwater levels recorded. Groundwater levels ranged between 2.1 mbgl to 56.4 mbgl. (SLR, 2021)

Groundwater levels were measured in 2016 by Golder, during a hydrocensus investigation as part of a baseline study and after site diamond core drilling. A total of 28 boreholes with groundwater levels were identified. Groundwater levels ranged from artesian to 178.50 mbgl measured from the hydrocensus, diamond drilling and hydrogeological boreholes. Average groundwater levels were 45 mbgl. The regional groundwater movement was found to be from west to east, but Golder (2016) noted that locally the groundwater movement could vary. (Jindal Iron Ore (Pty) Ltd, 2022).

Geochemistry

A scoping-level geochemical assessment was undertaken by SLR (2021) in terms of Acid Rock Drainage (ARD) and Metal Leaching Potential (MLP) risks to groundwater from extractive and waste materials generated by the proposed mining process. SLR (2021) found that there is the potential for contamination from the mine WRD and proposed tailings storage facility (which is not part of this assessment) if they are not sufficiently lined. A waste classification and Acid Base Accounting (ABA) analysis of proposed waste streams were reported in the MIOP Project: Geochemical Characterisation report, and thereafter, a kinetic humidity cell test was undertaken on a composite waste rock sample to gain insight into the acid generation and leachate potential of the waste materials over a 20-week period (SLR, 2021).

Geochemistry results

The results from the static geochemical analysis included the following (SLR, 2021)

- Potential constituents of concern in waste rock, ore and tailings include arsenic, antimony, barium, bismuth, caesium, chromium, copper, iron, lead, manganese, molybdenum, mercury, tellurium, tungsten, and silver. However, most of these elements are not likely to be leachable at Melmoth as shown by short term leach results.
- The risk for ARD from the waste rock dump is expected to be low due to the generally low sulphur content and high neutralisation potential of the different rock units – the bulk of the waste rock is non-acid generating. Seepage from the WRD is likely to be near-neutral to alkaline with potentially elevated concentrations of aluminium, arsenic and iron, mercury, manganese, and molybdenum.
- Quartzite (QTZT) and quartz-amphibolite gneiss (QAG) lithologies were classified as Type 2 waste based on total lead and arsenic concentrations, respectively. All the other waste and ore rock units were classified as Type 3 based on average total

concentrations of arsenic, barium, cobalt, copper, manganese, lead, nickel, and vanadium, as well as leachable concentrations of arsenic (QAG).

The kinetic cell test reported the following (SLR, 2021):

- The pyrite in the waste rock composite weathered much more slowly than the neutralising minerals, with the result that neutralisation capacity was exhausted faster than the available pyrite in the long-term, although based upon the short-term rates the neutralisation potential will last longer. However, due to the relatively low sulphide content of the waste rock (0.26%), overall acidic drainage is not predicted.

Groundwater Quality

The current groundwater monitoring points focussed on areas designated for operations and should be reviewed and adapted by the specialist to become more relevant to the Groundwater Monitoring Programme. Twelve groundwater samples from existing and new boreholes were submitted for chemical analyses in 2016. The results were analysed for physical parameters, macro elements and a full scan of trace metals. Groundwater quality analyses at the time were compared against the South African Water Quality Guidelines (SAWQG), Volume 1: Domestic Use (1998) and/or the WHO (2011) Drinking Water Guidelines.

The groundwater quality results show that all the sites tested were well below drinking water guidelines in terms of pH and salinity. The samples were classed as Sodium – Magnesium (Na (Mg))-bicarbonate water (a mix between recently recharged and normal aquifer water). Samples were relatively enriched in silicon, with an average value of 19mg/L. Silicon enrichment is associated with granitic formations and with lower-than-normal pH. The formations had relatively high Calcium (Ca)- bicarbonate alkalinity to counter the effects of a low pH.

A complete Inductively Coupled Plasma (ICP) scan was completed to test for trace elements and metals and Aluminium (Al), Arsenic Metalloid (As), Iron (Fe), Manganese (Mn), Zinc (Zn) and Fluorine (F) exceeded Domestic Use Guidelines (DWAF (1998) Domestic Use SAWQG) (Jindal Iron Ore (Pty) Ltd, 2022).

The composition of groundwater is dependent on natural factors (geological, topographical, meteorological, hydrological and biological) in the aquifer and catchment area. These natural factors are the source of the dissolved cation and anions in groundwater, however, if there are disturbances in the hydrogeological system (i.e. sources of pollution, over abstraction) these naturally occurring compounds can be enriched or depleted compared to the natural

groundwater quality. Therefore, these compounds can indicate whether the system is affected by mining or other anthropogenic activities. From the results obtained at that time all parameters measured were well below the Domestic Use Guidelines, rendering the groundwater a potable water source (Jindal Iron Ore (Pty) Ltd, 2022).

4.1.2.4. Biomonitoring

Biomonitoring can be defined as biologically orientated measurements with the aim of protecting, preserving, and correcting the biological integrity of natural systems. Biological integrity is in turn defined as “the maintenance of community structure and function characteristic of a particular locale” (de Zwart, 1995).

North Block

A total of 331 river / stream units and 63 wetland units were identified and classified in the North Block study area. This included watercourses of the following classifications (Jindal Iron Ore (Pty) Ltd, 2022):

Rivers and Streams:

- Mountain Headwater Streams – 253 units
- Mountain Streams – 62 units
- Transitional Rivers – 12 units
- Upper Foothill Rivers – 2 units
- Lower Foothill River (Mfule River) – 1 unit
- Lowland River (Mfule River) – 1 unit

Wetlands:

- Seep Wetlands – 23 units
- Unchanneled Valley Bottom Wetlands – 40 units

A high-level river and aquatic health assessment for the North Block indicates that the sub-quaternary reach of the Mfule River that runs through the Block is largely in a natural condition with Ecological Importance and Sensitivity (EIS) rated as high. Most watercourses in this area are rivers and streams, with some unchanneled valley bottom wetlands and seeps also being identified. The baseline assessment for the North Block could be used to guide mine layout planning. It would, however, be necessary to update the desktop baseline assessment information with field verified delineation and baseline data as part of any future EIA or WUL applications (Eco-Pulse Environmental Consulting Services, 2023).

The activities highlighted as potentially impacting the health of the system are rural settlements, invasive alien plant encroachment and abandoned agricultural lands (Jindal Iron Ore (Pty) Ltd, 2022).

South Block:

A total of 599 river / stream units and 22 wetland units were identified and classified in the South Block study area. This included watercourses of the following classifications (Jindal Iron Ore (Pty) Ltd, 2022):

Rivers and Streams:

- Mountain Headwater Streams – 431 units
- Mountain Streams – 154 units
- Transitional Rivers – 10 units
- Upper Foothill Rivers – 3 units
- Lowland River (Mhlatuze River) – 1 unit

Wetlands:

- Seep Wetlands – 11 units
- Unchanneled Valley Bottom Wetlands – 12 units

A river and aquatic health assessment was undertaken for the whole of South Block. The baseline assessment for the South Block revealed that most watercourses in this area are rivers and streams. The rivers and streams ranged from a D (Poor Condition) to A (Natural Condition) ecological category. Most were Low to Moderate EIS, with the exception being the assessed reach of the Mhlatuze River, which was assessed as being of High EIS. A total of twenty-three (23) wetland units were mapped within the South Block. This consisted of eleven (11) unchanneled valley bottom wetlands and twelve (12) seeps. These ranged from a D (Poor Condition) to C (Fair Condition) ecological category and from Low to Moderate EIS. The rivers and streams assessed in the study area are considered ‘Least Threatened’ and are not considered Freshwater Ecosystem Priority Areas (FEPAs). These river systems do, however, have the potential to host M. caudisquamatus, O.mossambicus and E. gurneyi which are classified as Endangered on the IUCN List. In addition, the high level of connectivity of habitat of the Mhlatuze River serves as an important wildlife corridor (Eco-Pulse Environmental Consulting Services, 2023)..

Given the early planning stage of this project key information required to accurately assess potential impacts and risks to freshwater ecosystems is not available (Eco-Pulse Environmental Consulting Services, 2023).

4.1.3. Climate and Climate Change

The Mthonjaneni Local Municipality (LM) has a warm and humid subtropical climate, which is favourable for the extensive agricultural activity in the region. Mthonjaneni LM experiences average daily temperatures of between 16℃ and 20℃, and average rainfall of between 2 000 mm and 2 400 mm per annum. This allows the production of sugarcane and largescale forestry activities. Mthonjaneni Local Municipality experiences average daily temperatures of between 16℃ and 20℃, and average rainfall of between 2 000 mm and 2 400 mm per annum (Promethium, 2021). The project site climate data was obtained from the Water Resources Study (WR2012) (WRC, 2021), which documents the climatic and catchment information of each quaternary catchment (QC) in South Africa. The average hydro-meteorological parameters were calculated for quaternary catchments W12B and W12D.

The site's Mean Annual Precipitation (MAP) for quaternary catchments W12B and W12D are 932 mm and 848 mm, respectively. The Mean Annual Evaporation (MAE) for the two quaternary catchments are 1 400 mm and 1 350 mm. The evaporation in the area is relatively higher than the amount of rainfall than this catchment receives (Jindal Iron Ore (Pty) Ltd, 2022).

4.1.4. Land Capability and Usage

North Block:

The land capability classes within and around the North Block area according to the Department of Agriculture, Land Reform and Rural Development (DALRRD) (2016) raster data, range between High - Very High (Class 12) to Low – Very low (Class 02) (Figure 7-12). The largest part of the North Block area has land capability that is Low-Moderate (Class 06) to Low – Very low (Class 02). These areas have lower land capability as a result of the steeper slope of the terrain and the hilly nature of the landscape. Other contributing factors to the land capability classification is the high risk of soil erosion and the shallower soil profiles of the steep mid-slopes and crests of the hills. Land capability of Class 07 or lower is considered suitable for livestock farming, with certain limitations and management requirements, depending on the constraining factors. The flatter areas within the North Block, located along sections of the Mfule River as well as alongside the R66 road, have higher land capability ranging from Low-Moderate (Class 07) to High – Very high (Class 12). A larger area of the higher land capability classes is also present west and south-west of the south-western corner of the North Block. There are also smaller areas of Moderate (Class 08) to Moderate-High (Class 10) land capability along the banks of the Mfulazane and Nhlozane Rivers and south-east of the south-eastern corner of the North Block. These areas have higher land capability

as a result of deeper soil profiles and flatter terrain where crop cultivation under rainfed conditions is possible (Refer to Figure 7) (Jindal Iron Ore (Pty) Ltd, 2022).

South Block:

The South Block area has land capability that is Low-Moderate (Class 07) to Low – Very low (Class 02). These areas have lower land capability as a result of the steeper slope of the terrain and the hilly nature of the landscape. Other contributing factors to the land capability classification is the high risk of soil erosion and the shallower soil profiles of the steep mid-slopes and crests of the hills. Land capability of Class 07 or lower is considered suitable for livestock farming, with certain limitations and management requirements, depending on the constraining factors.

Only small areas along the Mhlatuze River (that forms the southern boundary of the South Block) have higher land capability consisting of Moderate (class 08) and Moderate-High (Class 09) land. Very small areas in-between the hilly terrain of the rest of the South Block areas, also have land capability of Class 08 and Class 09. These areas have higher land capability as a result of deeper soil profiles and flatter terrain in valley bottoms where crop cultivation under rainfed conditions are possible. The areas with the highest land capability (High – Very High or Class 13) are located approximately 10 km south of the southern boundary of the South Block Areas. Another area where a relatively large area has the capability for rainfed crop production (Refer to Figure 7) (Jindal Iron Ore (Pty) Ltd, 2022)..

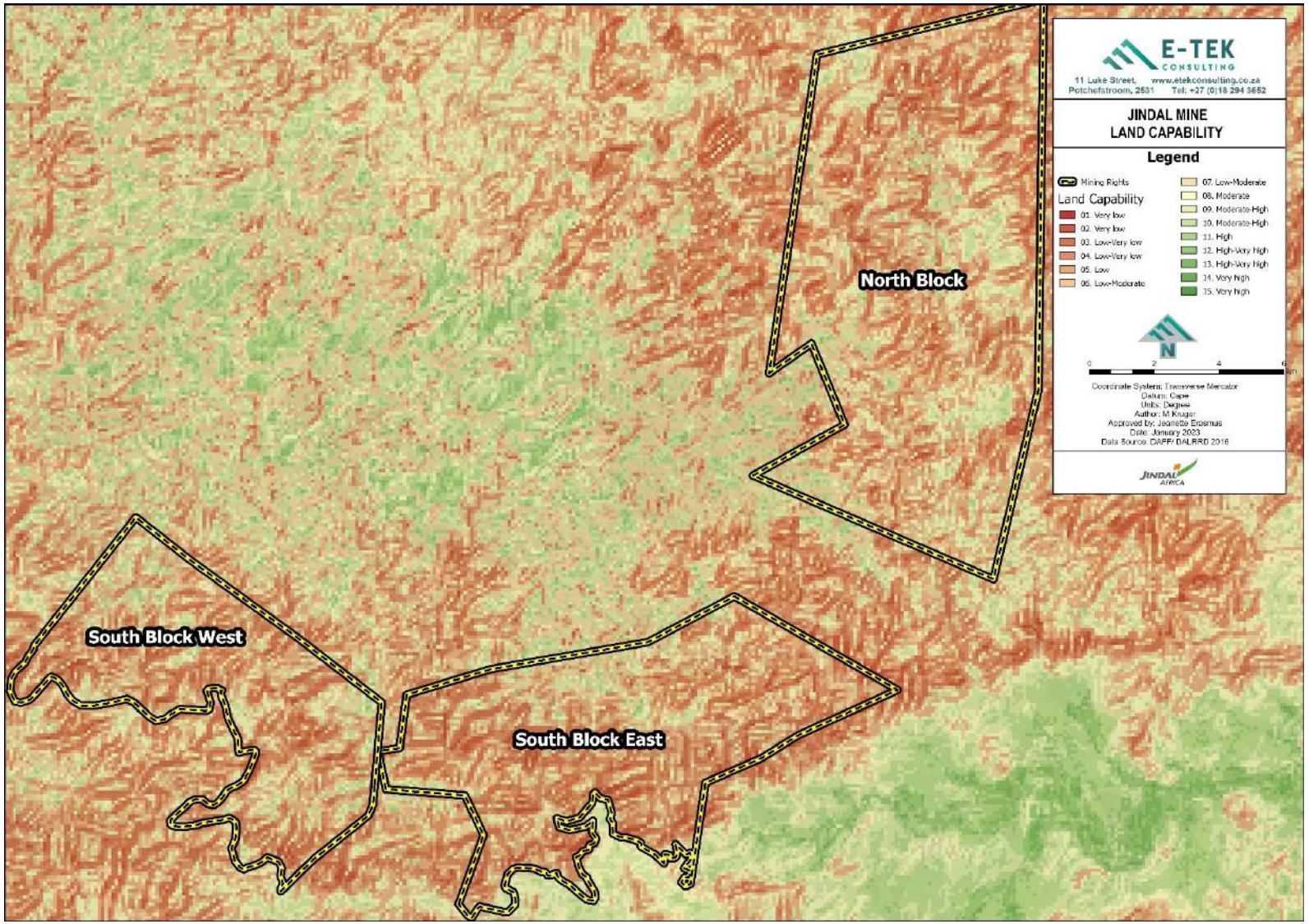

Figure 7: Land Capability

4.1.5. Biodiversity

4.1.5.1. Regional

The proposed Jindal MIOP site is a 'greenfield' site and outcomes from biodiversity studies have indicated that the project area identified for the placement of the Jindal MIOP is associated with some species of conservation concern (SCC) (Refer to Figure 8). The expansion of the South East Pit and WRD could result in the loss of Moist Coast Hinterland Grassland (Endangered) and Dry Coast Hinterland Grassland (Vulnerable) (Jindal Iron Ore (Pty) Ltd, 2022).

Melmoth falls within the Maputoland-Pondoland floristic region and an important centre of plant endemism. Areas of Critical Biodiversity (CBA) and Ecological Support Areas (ESA) are present within the North and South Blocks of the study area. (Jindal Iron Ore (Pty) Ltd, 2022)

Following the initial site inspection five distinct terrestrial vegetation communities were identified in the (Eco-pulse Environmental Consulting Services, 2022):

***South Block*:**

- Ngongoni Veld/Eastern Valley Bushveld Open Savannah;
- Eastern Valley Bushveld Thicket/Ngongoni Veld Closed Woodland;
- Degraded Ngongoni Veld/Eastern Valley Bushveld Open Savannah;
- Degraded Eastern Valley Bushveld Thicket/Ngongoni Veld Closed Woodland; and
- Secondary Open Savannah/Thicket/Closed Woodland.

North Block:

An additional five vegetation communities were identified for the North Block, including:

- Ngongoni Veld/Northern Zululand Sourveld Open Savannah;
- Scarp Forest /Northern Zululand Sourveld Thicket/Ngongoni Veld Closed Woodland;
- Degraded Ngongoni Veld Closed Woodland/Northern Zululand Sourveld Thicket;
- Degraded Ngongoni Veld/Northern Zululand Sourveld Open Savannah; and
- Secondary Open Savannah/Thicket/Closed Woodland.

4.1.5.2. Local

Melmoth falls within an important centre of plant endemism namely the Maputoland-Pondoland floristic region. Within the North and South Blocks of the study area, areas of

Critical Biodiversity (CBA) and Ecological Support Areas (ESA) are present. (Jindal Iron Ore (Pty) Ltd, 2022)

A desktop Potential Occurrence (POC) assessment of flora and fauna of conservation concern was also undertaken for the project to inform the need for any further species-specific assessments (Eco-pulse Environmental Consulting Services, 2022).

The following were identified:

Flora

Two floral Species of Conservation Concern (SCC) were identified on site (Eco-pulse Environmental Consulting Services, 2022):

- *Stangeria eriopus* (Cycad) – This is a vulnerable species, protected by NEMPA and it has a restricted range No further loss of habitat is recommended.
- *Moraea graminicola subsp. Graminicola* - The species is only known from 10 – 20 remaining locations and as above occurs
    - Within a threatened ecosystem on-site and
    - Within an area required for conservation in terms of the KZN SCA and
    - Within an area that has additional ecological sensitives i.e., other threatened plant species, no further habitat loss is essential

An additional 24 floral SCC either have a high or moderate possibility of occurring on site.

Fauna

Conservation important mammal species are unlikely to occur given the lack of suitable habitat, although nine mammal species may potentially utilise the more intact thicket/closed woodland, open savannah and grassland patches on site.

Mammals: Blue duiker (Vulnerable), Maquassie Musk Shrew (Vulnerable), Serval (Near Threatened), Water Rat (Near Threatened), African Striped Weasel - (Near Threatened), Cape Clawless Otter (Near Threatened), Leopard (Vulnerable), Swamp Musk Shrew (Near Threatened), Samango Monkey (Endangered).

Birds: Tawny Eagle (Endangered), African marsh-harrier (Endangered), European Roller (Near Threatened), Lanner Falcon (Vulnerable), Southern Bald Ibis (Vulnerable), Martial Eagle (Endangered), Secretary bird (Vulnerable) Crowned Eagle (Vulnerable).

Reptiles: Southern African Python (Least Concern – Protected).

Amphibians: Three frog SCC may occur within specific freshwater habitats on site, they

include Bilbo's Rain Frog (Vulnerable), the Natal Cascade Frog (Not red-listed), and the Shovel-Nosed Frog (Vulnerable).

Invertebrates: Very few formal surveys of invertebrates have been carried out in the study area. A review of available online/desktop databases highlighted 17 species that could potentially (Eco-pulse Environmental Consulting Services, 2022).

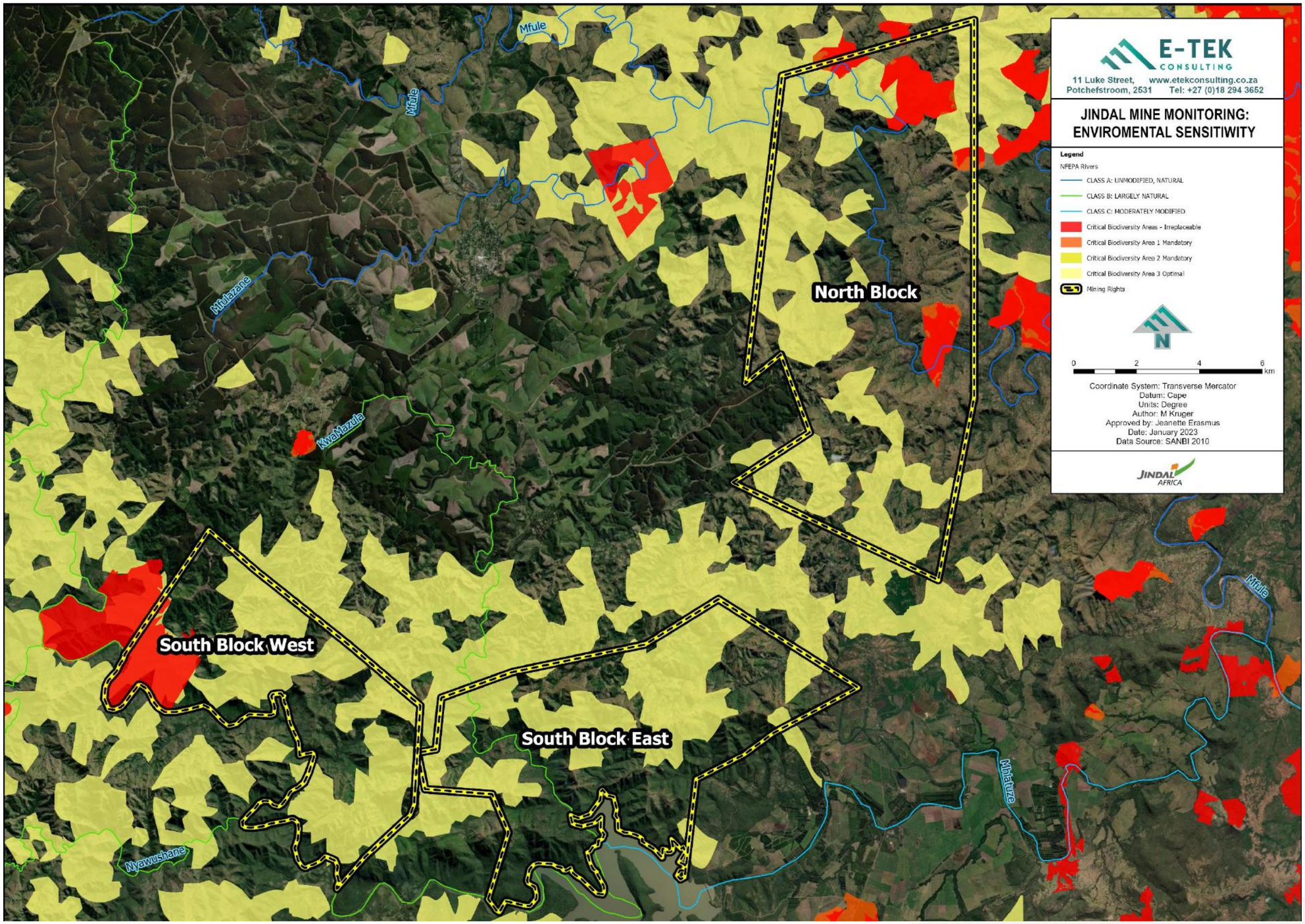

Figure 8: Environmental Sensitivity

4.1.6. Air Quality

4.1.6.1. Regional

Particulate matter is the main pollutant of concern which may affect human health negatively. Exposure to elevated levels of particulate matter (PM10) can lead to cardiovascular and respiratory problems and have been correlated with a reduction in life expectancy (Aneja, Isherwood, & Morgan, 2012).

The total suspended particulate (TSP) matter as well as “particles with an equivalent aerodynamic diameter less than 10 µm (PM_{10})” can be released into the atmosphere due to mining activities. This can lead to increased mortality rates in addition to decreasing the visibility and impacting plants and animals in the area (Andrade, da Luz, Campos, & de Lima, 2016). It is, therefore, important to monitor the particulate matter being released to be able to make predictions and to mitigate the negative impacts (Chaulya, et al., 2003).

The following sources and activities contribute to the baseline pollutant concentrations (Jindal Iron Ore (Pty) Ltd, 2022):

- Agricultural activities: most of the commercial farms in the region produce sugarcane, timber and citrus.
- Land clearing and ploughing in preparation of fields for sowing can generate a significant amount of dust. Sugarcane burning results in products of combustion, with pollutants of concern including particulate matter (PM) as well as CO and NO_2 emissions.
- Biomass: biomass burning is considered as the incomplete combustion of natural plant matter with PM, CO, and NO_2 being emitted during the process. Crop residue burning and wildfires represent significant sources of combustion-related emissions associated with agricultural areas.
- Domestic fuel burning: the rural households within the vicinity of the site are anticipated to rely on wood burning for space heating and cooking purposes. Emissions from these activities are expected to have an impact on air quality. More so during the winter months due to the increased demand for space heating.
- Vehicle emissions: air pollution generated from vehicle emissions may be evaluated as primary and secondary pollutants.

Primary pollutants are those emitted directly to the atmosphere as tail-pipe emissions whereas, secondary pollutants are formed in the atmosphere as a result of atmospheric chemical reactions. Given the low population density residing in the region it is anticipated that

vehicle exhaust emissions will be limited and therefore relatively insignificant. The nearest major road is the R34 which is located to the north and east of the Project site. The R34 is a long provincial route that connects Vryburg with Richards Bay via Kroonstad and Newcastle.

Unpaved roads and exposed areas: the quantity of dust emissions from unpaved roads vary based on the volume of traffic. Dust is generated by the loosened material lifted from the road surface by turbulent air currents created when the vehicle is moving. Given the rural nature of the project site, dust generated by vehicles on unpaved roads is likely to be a source of PM, however, it is expected to be limited due to low traffic volumes. The highest impacts are expected to be limited to the areas immediately adjacent to the roads (within 200m) (Jindal Iron Ore (Pty) Ltd, 2022).

4.1.6.2. Air quality results

A total of seven locations were included near the Project area for the dust fallout monitoring. (Refer to Figure 9) All locations are classified as residential; therefore, the applicable Dust Fallout Rate (D) standard is less than 600 milligram per square metre per day (mg/m2/day).No fatal flaws were identified from an air quality perspective. Due to the scale at which the above activities are likely to be occurring within the region as well as the rural nature of the surrounding environment, the ambient air quality is likely to be reflective of a rural environment.

The Project site is located in an area that is currently inhabited, and at this stage the extent of potential relocations has not yet been established. It is expected that there will be resettlement associated with the Project which will increase the distance between the mine and the nearest sensitive receptors, thereby lowering potential impacts. Based on the findings there are potential exceedances of the short-term AAQS near the site, however exceedances of the long-term standards are not predicted (with exception of SR7 at the entrance gate). In terms of impacts to community health, long term exposure to air pollution is of greater concern than short term exposure. Long term exceedances are not predicted at the bulk of the SR locations. When considering impacts to nearby agricultural activities (commercial and subsistence) from dust fallout, the model values suggest that the bulk of the TSP will settle near the Project site (i.e., within 500 m exclusion zone). Blasting activities are considered to have a temporary and localized effect on the environment (WKC, 2022).

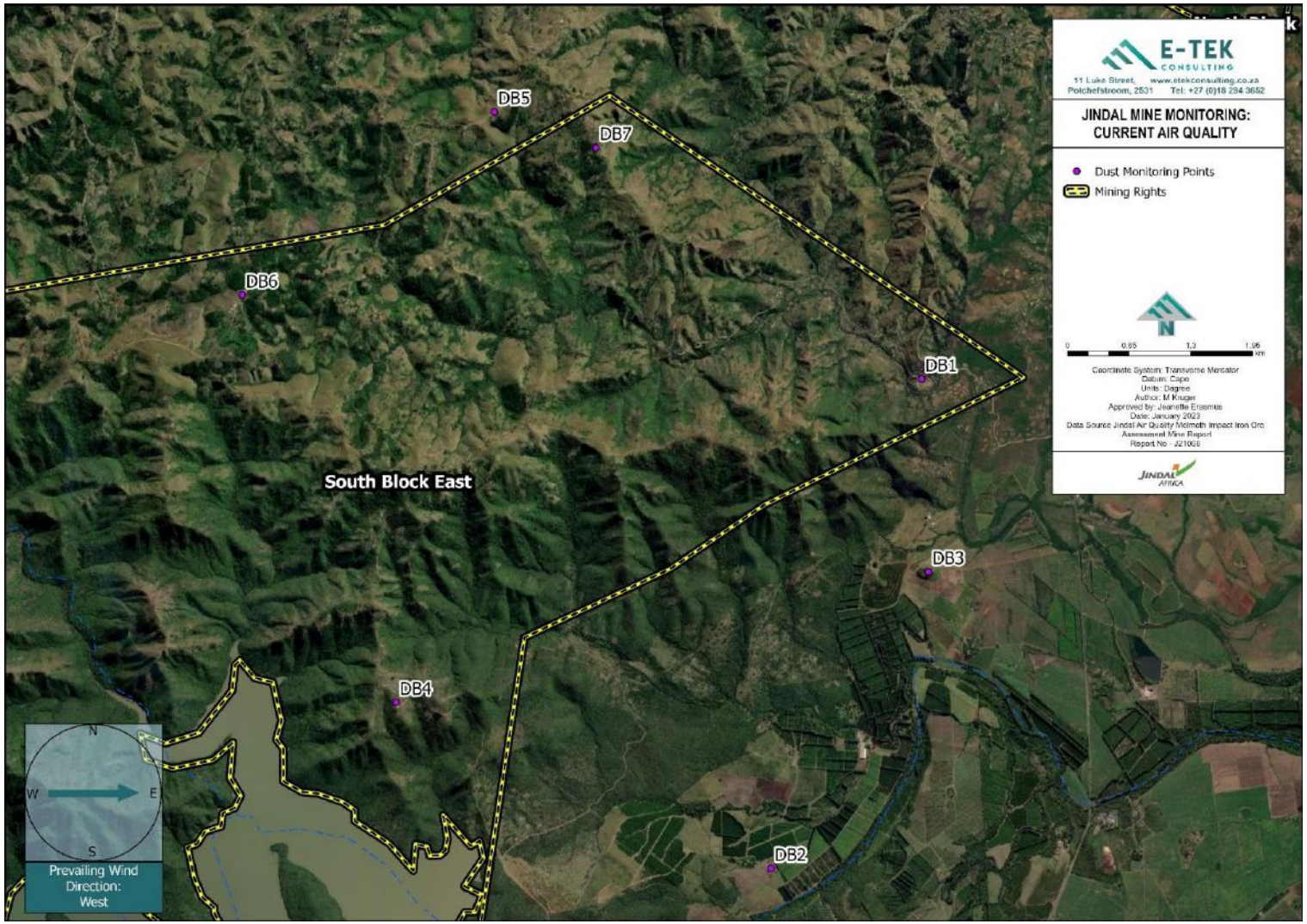

Figure 9: Air Quality Monitoring

4.1.7. Topography, Visual Environment and Heritage

Topography

The topography of the area is determined by the type of bedrock underlying the soils, the geology of the area and the dissection of the streams flowing in the area. Melmoth is 800 metres above sea level (mamsl) and is surrounded by low sandstone mountains and mudstone valleys. The regional geology of the area has given rise to a considerable diversity of relief, from gently rolling slopes to hilly and severely incised slopes found along drainage ways and stream valleys. This topography gives the area its aesthetic appeal and makes it conducive for agricultural practises (Jindal Iron Ore (Pty) Ltd, 2022).

Heritage

The banded ironstone of the Mhlathuze Formation (has long been known to geologists. There has been a long history of prospecting and assaying of banded ironstone formations in and around the Project area during the 20th Century. While most of the Zululand banded ironstone is of poor quality, this deposit shows some surface enrichment. These deposits are known to have been extensively worked in precolonial times with evidence of Early Iron Age settlements along the Mhlathuze riverbanks. These settlements were some of the earliest farming communities in the region c. 750-1050 AD.

As far as archaeologists have been able to determine, it is these iron deposits that were targeted for iron smelting in the 18th and early 19th Centuries by the Shezi blacksmiths of the Cube clan. The Shezi were the sought after and appointed blacksmiths to both Kings Shaka and Dingaan in their accessions to power and expansion of the Zulu Kingdom. Shallow mining pits and smelting and smithing furnaces have been the subject of archaeological investigation from the Project area and westwards to Qa-Qa-Lensirnbi (Iron Ridge), on the middle reaches of the Mhlathuze River. The early 20th Century surveyed farms within the Project area were amalgamated as Trust farms for incorporation into the newly established KwaZulu Homeland in 1979. These Trust farms were subsequently placed under the jurisdiction of the regional Inkosi Mhlaba Sam Zulu and local amakhosi Biyela and Zulu. Agradual but systematic settlement expansion of the Project area took place from the 1980’s and accelerated post 1994. These nucleated family homesteads are all likely to contain ancestral burial sites and will be further assessed during the Heritage Impact Assessment.

Zulu people have occupied the Melmoth region for some 200 years. Traditional culture is observed by many residents and community social structures remain strong. Grave sites, artefacts and cultural heritage resources are likely to be present across the site. Homesteads have remained within families for many generations and many residents have strong ties to

the land. A full Heritage Study is planned whereby all potentially affected homesteads will be consulted and all graves and heritage feature documented. (Jindal Iron Ore (Pty) Ltd, 2022)

4.2. SOCIO-ECONOMIC ENVIRONMENT

All socio-economic aspects should be considered with closure in mind. Jindel Iron Ore should be aware of the impacts of closure on the socio-economic environment and should plan, and investigate sustainable options Post Closure and limit dependency on the mine.

4.2.1. Population, Demography & Settlement Patterns

Both municipalities show a slight potential decrease in population over the next 30 years which is likely due to people leaving the area in search of job opportunities in nearby urban areas, such as Empangeni and Richards Bay (Jindal Iron Ore (Pty) Ltd, 2022)..

Between 2001 and 2011, in both uMlalazi LM and Mthonjaneni LM, there was a notable decline in the proportion of the adult population over the age of 20 with no access to formal education, and a corresponding significant increase the population with at least a National Senior Certificate (Jindal Iron Ore (Pty) Ltd, 2022)

There is evidence that the improving education levels has resulted in young professionals leaving the family home to find work elsewhere. The bulk of the population (55% Mthonjaneni; 58% uMlalazi) falls within the working age (15-64). However, this is still a low ratio and creates a significant dependency burden in the area. It is important in this scenario that job opportunities are available that will support households with a single breadwinner and many dependents. (Jindal Iron Ore (Pty) Ltd, 2022)The average household is more than 4 people per house.

Mthonjaneni LM ward 6 and ward 8 fall within the boundary of the South-eastern portion of the South Block and will be considered as the primary Mine Community and will therefore be the geographic focal point for the LED interventions and plan (Jindal Iron Ore (Pty) Ltd, 2022).

4.2.2. Socio-economics

4.2.2.1. Economy and Education

Both the Mthonjaneni and uMlalazi Local Municipalities have economies that are currently strongly dependent on the agriculture, manufacturing and mining sectors. In these two municipalities most job seekers have a matric (Jindal Iron Ore (Pty) Ltd, 2022). The agriculture, forestry and fishing sector is the largest source of employment in the project area, providing almost 30% of all employment in Umlalazi LM and over 35% of employment in Mthonjaneni LM. This is followed by the Wholesale and retail trade, catering and accommodation sector, which accounts for the majority of tourism activity. Tourism is a cross-cutting sector with large employment multipliers (Jindal Iron Ore (Pty) Ltd, 2022). Employment rate is higher in

Mthonjaneni at 69.8% compared to uMlalazi at 59.9%. However, the average annual household is classified as a low income category, with an annual income of less than R40 000 (Jindal Iron Ore (Pty) Ltd, 2022).

4.2.3. Health and Wellness

4.2.3.1. Overall

The life expectancy in South Africa for 2020 was estimated at 62.5 years for men and 68.5 years for woman with the infant mortality rate being 23.6 per 1000 live births. In South Africa, the overall HIV prevalence rate is estimated at 13.0% of the population, the total number is approximately 7.8 million people in 2020. Adults (aged between 15-49 years) living with HIV is estimated at 18.7% of the population (Statistics SA, 2020).

In the KwaZulu Natal Province, both men and women HIV/AIDS was the leading cause of death (41.5%), followed by cardiovascular disease (15%), infectious and parasitic diseases excluding HIV/AIDS (9%), intentional injuries (5%) and unintentional injuries (4%), perinatal conditions (4%) and respiratory infections (4%). (SAMRC, 2000).

4.2.4. General Infrastructure and Services

Within the two municipalities, less than half of the households have access to municipal water. Access to basic levels of sanitation is also poor in both municipalities with almost half of the households not having access to flushing toilets. The high dependency on pit latrines is a concern as poor sanitation can be a vector for disease. Just over one third of households has access to refuse removal services supplied by the municipalities. Less than 20% of the population has access to electricity within their households. The remaining households rely on paraffin for cooking and lighting (Jindal Iron Ore (Pty) Ltd, 2022).

5. CLOSURE VISION AND UNDERLYING PRINCIPLES

Regulations Reference: (d)(ii)	**This Section describes the Closure vision, objectives and targets, which take into account the local environmental and socio-economic context, regulatory and corporate requirements as well as stakeholder expectations, where applicable for this plan.**

5.1. METHODOLOGY

"The aims of the closure plan are set out through its underlying vision, principals and objectives" according to the ICMM's Integrated Mine Closure Good Practice Guide (2nd ed.).

The ICMM's Integrated Mine Closure Good Practice Guide (2nd ed.) further states that "while the closure vision provides direction for closure, and the principals offer a general framework, the closure objectives provide concrete, site-specific, and typically measurable statements.

Both the closure vision and closure objectives should be informed by the knowledge base, particularly the mine's zone of influence (ZoI), socio-economic and environmental context, stakeholder relationships, country-specific requirements and other external drivers. These factors should lead to a closure vision and closure objectives that are aligned with the characteristics of the corporation and the mine and appropriate to the socio-economic setting".

The aforementioned was therefore considered when formulating the closure vision and closure objectives and targets for Jindal Iron Ore Mine.

5.2. CLOSURE VISION

By using the outcome of the closure workshops, consultations and applicable guidelines and policies (Refer to section 3.5) as well as considering the specific commitments and targets of Jindal Iron Ore, the Closure Vision will be formulated and updated with the next update of this document, currently:

> ***"Jindal Africa is committed to incorporating good environmental management and practices into everyday activities and liaising with regulatory bodies to achieve set goals (*** (Jindal Africa, 2022)***"***
>
> ***"Jindal Iron Ore is committed to implementing standards and statutory requirements pertaining to Mine Closure Planning and the associated Financial Provision.*** (Jindal Africa, 2022) ***"***

5.3. CLOSURE OBJECTIVES AND TARGETS

This closure plan is prepared in terms of GNR 1147 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).

5.3.1. Principles for Sustainability

The following **principles for sustainability** as set out in this Act were considered and can be used as a guideline with mine closure in mind:

(4)(a)(i) “That the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied;

(4)(a)(ii) That pollution and degradation of the environment are avoided or, where these cannot be altogether avoided are minimised and remedied;

(4)(a)(iii) That the disturbance of landscapes and sites that constitute the nation’s cultural heritage is avoided, or when it cannot be altogether avoided; is minimised and remedied;

(4)(a)(iv) That waste is avoided; or, where it cannot be altogether avoided; minimised and re-used or recycled where possible and otherwise disposed of in a responsible manner;

(4)(a)(v) That the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;

(4)(a)(vi) That the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their Integrity is jeopardised;

(4)(a)(vii) That a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions;

(4)(a)(viii) That negative impact on the environment and on people’s environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied;

(4)(b) Environmental management is integrated acknowledging that all elements of the environment are linked and interrelated, and it takes into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option;

(4)(c) Environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person particularly vulnerable and disadvantaged persons;

(4)(d) Equitable access to environmental resources, benefits and services to meet basic human needs and ensure human well-being must be pursued and special measures may be taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination;

(4)(e) Responsibility for the environmental health and safety consequences of a policy, programme, project, product, process, service or activity exists throughout its life cycle;

(4)(f) The participation of all interested and affected parties in environmental governance must be promoted and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured;

(4)(g) Decisions must take into account the Interests, needs and values of all interested and affected parties, and this includes all forms of knowledge, including traditional and ordinary knowledge;

(4)(h) Community well-being and empowerment must be promoted through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means;

(4)(i) The social, economic and environmental impacts of activities, including costs and benefits are considered, assessed and evaluated, and decisions are appropriate in the light of such consideration and assessment;

(4)(j) The right of workers to refuse work that is harmful to human health or the environment and to be informed of dangers must be respected and protected;

(4)(k) Decisions are taken in an open and transparent manner, and access is provided to information in accordance with the law;

(4)(l) There is intergovernmental co-ordination and harmonisation of policies, legislation and actions relating to the environment;

(4)(m) Actual or potential conflicts of interest between organs of state should be resolved through conflict resolution procedures;

(4)(n) Global and international responsibilities relating to the environment must be discharged in the national interest;

(4)(o) The environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as people's common heritage;

(4)(p) The costs of remedying pollution, environmental degradation and consequent adverse, health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects are paid for by those responsible for harming the environment;

(4)(q) The vital role of women and youth in environmental management and development must be recognised and their full participation therein must be promoted; and

(4)(r) Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure".

5.3.2. Mineral and Petroleum Resources Development Act (MPRDA 28 of 2002)

It is also important to take section 43(3) (d) of the MPRDA into account as it includes the following **objectives for closure:**

- "Rehabilitate disturbed areas, excluding the tailings dam and return water dam, to their pre-mining land capability and use potentials. The rehabilitation of disturbed land will be to the extent that it is within compliance of current national environmental quality objectives;
- Limit the short- and longer-term impacts of pollution on surface and ground water and related biodiversity;
- Control the further generation of dust;
- Minimize the visual impact of the permanent features at the mine e.g. tailings dam;
- Ensure that people and animals are not harmed by falling off or into hazardous excavations or steep slopes. The management objectives for these are to minimize safety risks to the public and livestock;
- Limit the impact on staff whose positions become redundant on closure of the mine;
- Keep relevant authorities informed of the progress of the decommissioning phase;
- Submit monitoring data to the relevant authorities; and
- Build and maintain meaningful relations with all stakeholders (I&AP's)".

6. POST MINING LAND USE/S

Regulations Reference: (e), (e)(i) & (e)(ii)	**This Section describes the proposed final post mining land use which is appropriate, feasible and possible of implementation for the overall project and per infrastructure or activity.** **It also gives a description of the methodology used to identify the final post mining land use, including the requirements of the operations stakeholders, where applicable for this plan.**

6.1. METHODOLOGY

It should be noted that at this stage of the project, no consultation with stakeholders or feasibility study, has taken place with regards to possible post mining land use/s. It is recommended that these consultations take place to ensure a sustainable end land use, benefitting the community post closure.

To identify a post mining land use, NEMA (Act No. 107 of 1998): Financial Provisioning Regulations, 2015 (No. R. 1147), is stating that you should have:

- A proposed final post mining land use which is appropriate, feasible and possible of implementation;
- Descriptions of appropriate and feasible final post mining land use for the overall project and per infrastructure or activity and a description of the methodology used to identify final post mining land use, including the requirements of the operations stakeholders; and
- A map of the proposed final post mining land use.

The post mining land use will be influenced by a few aspects, as described throughout this plan and can be improved through a typical tool, such as conducting a SWOT Analysis session (strength, weakness, opportunity, threat) between the mine owner and the landowner. Thereafter they will be better able to work together towards planning for mine closure and the post mining land use.

- It will assist in understanding both the internal strengths and weaknesses of the mine, and the external opportunities and threats posed by the environment.
- The closure plan should be directed at exploiting the major strengths and opportunities, while avoiding or overcoming the threats and weaknesses.

The post mining land use will be determined, taking into consideration the State of the Environment for Jindal Iron Ore as well as the Closure Vision and underlying closure objectives.

6.2. PROPOSED POST MINING LAND USE/S

No feasibility study has been conducted at this stage to determine a sustainable end land use post closure. It is recommended that stakeholder engagements, specialist studies and land capability studies be conducted with regards to this issue, to assess the most feasible land use Post Closure.

It is recommended that the studies be implemented as soon as possible and that recurring consultations with the community and stakeholders be held, over time, as mining activities increase and as the mine nears closure The local community should be involved in the development of the Closure Vision and development of a post closure land use. Community participation is critical to ensure the local community's ownership of the results. Mining companies should guide conversations and provide examples of realistic options for post closure land use, considering both technical and economic feasibility. The timing of the engagement will also shape discussions. Assessments are less likely to be in depth in early stages of engagement (ICMM, 2020).

The post mining landscape will not be returned to the original state, as it was, before any mining activities commenced and other options should be investigated further as part of the update of these closure planning documents.

7. DESIGN PRINCIPLES, CLOSURE ACTIVITIES AND TECHNICAL SOLUTIONS

Regulations Reference: **(d), (d)(iii), (d)(iv), (d)(v), (d)(vi), (d)(vii)** **(f), (f)(i), (f)(ii)** **(i)** **(j)**	**This Section describes the Design principles, Closure activities and Technical solutions for all areas, infrastructure, activities and aspects both, within the mine lease area and off of the mine lease area associated with mining, for which the mine has the responsibility to implement closure actions.** **Alternative closure and post closure options are described, where practicable, within which the operation is located, as well as the preferred closure action within the context of the risks and impacts that are being mitigated.** **Any potential gaps in the plan are linked to an auditable action plan and schedule to address the gaps. Therefore, associated ongoing research is highlighted, as well as all assumptions made to develop closure actions (in absence of detailed knowledge on site conditions, potential impacts, material availability, stakeholder requirements and other factors for which information may be lacking). The Gap analysis can be used to identify and define any additional work that is needed to reduce the level of uncertainty for any applicable closure aspect.** **It also deals with the definition and motivation of the closure and post closure period, taking cognisance of the probable need to implement post closure monitoring and maintenance for a period sufficient to demonstrate that relinquishment criteria have been achieved.**

7.1. CLOSURE CRITERIA METHODOLOGY

A Closure Criteria sheet was compiled to list the design principles, closure activities and technical solutions for all current closure components. Refer to APPENDIX B for the detailed Closure Criteria actions, this should be read in conjunction with the costing sheets in APPENDIX E.

This document excludes bio-physical and socio-economic aspects, and only includes the Mining, Infrastructural and General Aspects for the proposed Jindal Iron Ore Mine. Separate

rehabilitation plans and/ or concurrent rehabilitation plans were not compiled, and all assumptions and actions are captured in this section, as well as the applicable appendices.

The bio-physical and socio-economic aspects do not currently have any possible cost implications, other than that already covered in the Infrastructural, Mining and General Aspects. Should there be any additional cost implications, it should be included in the Closure Criteria sheets in future.

No additional monitoring is required in terms of the consolidation project, only 10 years Post Closure Care and Maintenance is included.

To reduce socio-economic risks and the impact of closure on local communities, socio-economic aspects and related risks should be managed throughout the operational phase.

The Closure Criteria are based on the following:

- Comprehensive understanding of the site conditions;
- Technical reports; and
- Knowledge and experience of similar projects.

7.2. ALTERNATIVE CLOSURE AND POST CLOSURE OPTIONS

The potential alternative closure options are dependent on the applicable Statutory and Corporate related requirements, as outlined in Section 3 of this document and includes current mine lease agreements and expectations from the landowner. It is important to note that the specific sections below will also influence any closure and post closure alternatives to be considered:

- Section 4: the environment in which the project is located;
- Section 6: the feasible and practical post mining land uses;
- Section 8: the risks associated with such an alternative option (a cost-benefit analysis may also be needed in future if there are any alternatives being considered);
- Section 9: the expectations from external stakeholders, if any (other than the landowner or government).

8. RISK ASSESSMENT

Regulations Reference: (c), (c)(i), (c)(ii), (c)(iii), (c)(iv) & (c)(v)	**This Section describes the findings of the environmental risk assessment, leading to the most appropriate closure strategy.** **It also deals with the risk assessment methodology, identification of indicators that are most sensitive to potential risks and the monitoring of such risks.** **The conceptual closure strategies are described to avoid, manage and mitigate the impacts and risk. Reassessment of the risks are done to determine whether, after the implementation of the closure strategy, the latent or residual risk has been avoided and / or how it has resulted in avoidance, rehabilitation and management of impacts and whether this is acceptable to the mining operation and stakeholders.**

8.1. CLOSURE RISK WORKSHOPS

All potential risks, associated with the closure of the Jindal Iron Ore were identified, only focussing on the proposed South Block ad North Block areas planned to be consolidated.

The following information, where available, was considered as part of the process to compile the worksheets:

- Legislative / statutory and corporate requirements;
- Existing mine closure objectives, closure visions and land use opportunities post closure;
- Mine closure options and scenarios;
- The baseline information which describes the current state of the environment (SOE);
- Existing mine closure plans and previously identified impacts; and
- Stakeholder engagement outcomes.

8.2. CLOSURE RISK MATRIX

A risk matrix is a matrix that is used during risk assessment to define the level of risk by considering the category of probability or likelihood against the category of consequence

severity. The identified risks were captured in the worksheets that reflect all the respective risks for each closure component.

Methodology

Risks were individually evaluated in terms of a risk matrix and ranked for the closure scenarios before and after implementation of the mitigation measures / rehabilitation and closure criteria. Refer to APPENDIX C for the Risk Matrix and Closure Risk Assessment. The following tables explain the risk matrix and methodology used.

The identified risks were rated according to “probability / likelihood” and “consequence of occurrence” as described in the table below.

Table 7: Criteria to Determine Probability

PROBABILITY / LIKELIHOOD		
ALMOST CERTAIN 1yr	**5**	The unwanted event has occurred frequently: Occurs in order of one or more times per year & is likely to reoccur within 1 year.
LIKELY 3yrs	**4**	The unwanted event has occurred infrequently; Occurs in order of less than once per year & is likely to reoccur within 3 years.
POSSIBLE 10yrs	**3**	The unwanted event has happened at some time; Or could happen within 10 years.
UNLIKELY 30yrs	**2**	The unwanted event has happened at some time; Or could happen within 30 years.
RARE >30yrs	**1**	The unwanted event has never been known to occur; Or it is highly unlikely that it will occur within 30 years.

To determine the possible consequence, different criteria were used for each of the following disciplines or areas of responsibility to mitigate risks and impacts:

- Safety;
- Occupational Health;
- Environment;
- Financial;
- Legal and Regulatory;
- Social / Community; and
- Reputation

Table 8: Criteria to Determine the Consequence of Safety Impacts

CONSEQUENCE FOR SAFETY	
1 INSIGNIFICANT	First aid case.
2 MINOR	Medical treatment case.
3 MODERATE	Lost time injury.
4 HIGH	Permanent disability or single fatality.
5 MAJOR	Numerous permanent disabilities or multiple fatalities.

Table 9: Criteria to Determine the Consequence of Health Impacts

CONSEQUENCE FOR OCCUPATIONAL HEALTH	
1 INSIGNIFICANT	Exposure to health hazard resulting in temporary discomfort.
2 MINOR	Exposure to health hazard resulting in symptoms requiring medical intervention and full recovery (no loss time).
3 MODERATE	Exposure to health hazards/ agents (over the OEL) resulting in reversible impact on health (with lost time) or permanent change with no disability or loss of quality of life.
4 HIGH	Exposure to health hazards/ agents (significantly over the OEL) resulting in irreversible impact on health with loss of quality of life or single fatality.
5 MAJOR	Exposure to health hazards/ agents (significantly over the OEL) resulting in irreversible impact on health with loss of quality of life of a numerous group/ population or multiple fatalities.

Table 10: Criteria to Determine the Consequence of Environmental Impacts

CONSEQUENCE FOR ENVIRONMENT	
1 INSIGNIFICANT	Lasting days or less. Limited to small area (metres). Receptor of low significance/ sensitivity (industrial area).
2 MINOR	Lasting weeks. Reduced area (hundreds of metres).

CONSEQUENCE FOR ENVIRONMENT	
	No environmentally sensitive species/ habitat).
3 MODERATE	Lasting months. Impact on an extended area (kilometres). Area with some environmental sensitivity (scarce/ valuable environment).
4 HIGH	Lasting years. Impact on sub-basin. Environmentally sensitive environment/ receptor (endangered species/ habitats).
5 MAJOR	Permanent impact. Effects a whole basin or region. Highly sensitive environment (endangered species, wetlands, protected habitats).

Table 11: Criteria to Determine the Consequence of Financial Impacts

CONSEQUENCE FOR FINANCIAL	
1 INSIGNIFICANT	No disruption to operation/ Less than 1% of current liability estimate.
2 MINOR	Brief disruption to operation/ 1% to less than 3% of current liability estimate.
3 MODERATE	Partial shutdown of operation / 3% to less than 10% of current liability estimate.
4 HIGH	Partial loss of operation / 10% to less than 30% of current liability estimate.
5 MAJOR	Substantial or total loss of operation / 30% or higher of current liability estimate.

Table 12: Criteria to Determine the Consequence of Legal and Regulatory Impacts

CONSEQUENCE FOR LEGAL & REGULATORY	
1 INSIGNIFICANT	Technical non-compliance. No warning received. No regulatory reporting required.
2 MINOR	Breach of regulatory requirements. Report/involvement of authority. Attracts administrative fine.

CONSEQUENCE FOR LEGAL & REGULATORY	
3 MODERATE	Minor breach of law. Report/investigation by authority. Attracts compensation/ penalties/ enforcement action.
4 HIGH	Breach of the law. May attract criminal prosecution, penalties/ enforcement action. Individual licence temporarily revoked.
5 MAJOR	Significant breach of the law. Individual or company lawsuits. Permit to operate substantially modified or withdrawn.

Table 13: Criteria to Determine the Consequence of Social/Community Impacts

CONSEQUENCE FOR SOCIAL / COMMUNITY	
1 INSIGNIFICANT	Minor disturbance of culture/ social structures.
2 MINOR	Some impacts on local population, mostly repairable. Single stakeholder complaint in reporting period.
3 MODERATE	Ongoing social issues. Isolated complaints from community members/ stakeholders.
4 HIGH	Significant social impacts. Organized community protests threatening continuity of operations.
5 MAJOR	Major widespread social impacts. Community reaction affecting business continuity. “License to operate” under jeopardy.

Table 14: Criteria to Determine the Consequence of Reputational Impacts

CONSEQUENCE FOR REPUTATION	
1 INSIGNIFICANT	Minor impact. Awareness/ concern from specific individuals.
2 MINOR	Limited impact. Concern/ complaints from certain groups/ organizations (e.g. NGOs).
3 MODERATE	Local impact. Public concern/ adverse publicity localised within neighbouring communities.
4 HIGH	Suspected reputational damage. Local/ regional public concern and reactions.

CONSEQUENCE FOR REPUTATION	
5 **MAJOR**	Noticeable reputational damage. National/ international public attention and repercussions.

The risk rating matrix was coupled to the criteria discussed in the above tables for probability / likelihood and consequence. The matrix was applied, taking into consideration the site-specific risks, in accordance with the area of assessment. The classification of the identified risks was presented in terms of the following risk ratings and risk levels:

Table 15: Risk Ratings and Levels

RISK RATING	RISK LEVEL
21 to 25	H - High
13 to 20	S - Significant
6 to 12	M - Medium
1 to 5	L - Low

8.3. RISK ASSESSMENT SUMMARY

Refer to APPENDIX C for the comprehensive Closure Risk Assessment, indicating all sensitive receptors and risk specific closure strategies.

9. SOCIAL CLOSURE PLANNING AND CLOSURE CONSULTATION

Regulations Reference: (b)(iii)	This Section describes the Stakeholder issues and comments that have informed the plan, where applicable.

9.1. STAKEHOLDER ENGAGEMENT PLAN AND APPROACH

Stakeholder engagement aims to achieve comprehensive consideration and understanding of the views of the various stakeholders to the closure planning process. Stakeholder engagement will ensure that the views, concerns, and proposals of those affected by, or having an interest in the mining operations of the company are addressed.

The following public participation has been undertaken so far (SLR, 2021):

- Pre-application meeting with the DMRE and approval of a Stakeholder Engagement Plan.
- Regular engagement with the Zulu-Entembeni Traditional Authority.
- Development and continuous update of an Interested and Affected Party (I&AP) database; Notification to I&APs, including landowners, government and traditional authorities;
- Distribution of a Background Information Document (BID), in English and isiZulu, since 17 June 2021;
- Publication of advertisements:
  - The Mercury, 15 June 2021, English;
  - Eyethu Baywatch - 16 June 2021, English;
  - Isolezwe - 18 June 2021, isiZulu; and o Zululand Observer - 21 June 2021, English
- Erection of site notices at various locations in Melmoth, Eshowe and the South Block;
- Public Information Meetings in Melmoth (18 August 2021) and on MS Teams (6 July 2021);
- 24 stakeholder meetings with traditional leaders and their communities, farmers, local business and authorities (held between June and August 2021; and
- Radio advertisements: o Icora 100.40 fm – 15 to 19 June 2021; and o Izwi Lomzansi 98.0 fm – 21 to 23 June 2021.

9.2. SUMMARY OF ISSUES RAISED

All inputs from the internal stakeholder consultation, with mine personnel, were taken into consideration in this plan and its supporting documentation. All future stakeholder issues, concerns and comments should further inform the update of this Closure Plan.

To ensure a bottom-up approach in both the review and implementation of the community economic development projects, community engagements will be facilitated in both the host and labour-sending areas. The Local Economic Development (LED), Enterprise Development as well as infrastructure projects that will be consolidated, will be earmarked for implementation from year four (4) onwards, once the Mine is anticipated to be operational and generating revenue. The progress of project implementation will be reported on an annual basis to the DMRE (Jindal Iron Ore (Pty) Ltd, 2022).

Jindal has engaged with the Mthonjaneni Local Municipality and the Provincial Department of Agriculture and Rural Development (KZN DARD) to identify suitable LED projects which can be supported by the company. At the municipal level, the relevant Integrated Development Plan (IDP) does not contain LED projects developed to an appropriate level of detail for inclusion in the Social and Labour Plan (SLP). Jindal undertakes to continue engaging with the Mthonjaneni LM to mutually negotiate and develop projects and said undertaking has been endorsed by the Mthonjaneni LM (Jindal Iron Ore (Pty) Ltd, 2022).

Three engagements have been undertaken to date to identify and define LED projects and budget provision for their implementation. However, the following high-level opportunities for Community Development and LED interventions have been identified through (Jindal Iron Ore (Pty) Ltd, 2022):

- A review of the Mthonjaneni LM IDP, specifically the identified projects and community needs; and
- Consultation with the community and stakeholders

The projects identified constitute a preliminary list of interventions in the local economy and are aligned with Jindal's interests and objectives. Further engagement with the affected communities, traditional leadership, and Mthonjaneni Local Municipality will be undertaken to refine the project details and assign implementation timeframes and budgetary requirements (see attached undertaking by Jindal and endorsed by the Mthonjaneni LM).

Through engagement with KZN DARD, the following four projects have been identified for support by Jindal. (Jindal Iron Ore (Pty) Ltd, 2022):

- Mthonjaneni Aloe Project;
- Cabangisisa Goats Company Pty (Ltd);
- Ekwandeni Piggery Project; and
- Sogawu Goats Cooperative Project

Jindal has taken cognisance of the targets in the Mining Charter III (Republic of South Africa, 2018) and is committed to aligning itself with the requirements. Human dignity and privacy of mineworkers are the hallmarks to enhance productivity and expedite transformation in the mining industry in terms of housing and living conditions. In this regard the company will implement measures to improve the standards of housing and living conditions for mineworkers as follows (Jindal Iron Ore (Pty) Ltd, 2022):

- Convert or upgrade hostels into family units;
- Attain the occupancy rate of one person per room; and
- Facilitate home ownership options for all employees in consultation with organised labour.

According to the Mthonjaneni IDP (Mthonjaneni Local Municipality, 2021), housing is a key development priority for the municipal area, with rural housing demand estimated to be at least 3 928 units (70% of housing demand) and a planned development pipeline of at least 5 500 units included in the IDP, across all 13 wards (Mthonjaneni Local Municipality, 2021).

Once the future workforce of the mine is employed, an audit of current housing and living conditions will be undertaken, an implementation plan developed, and annual reports prepared for submission to DMRE, using the required format on the following page. At this stage, it is not envisaged that hostel accommodation will be required because the future mine workforce already resides in the area in which the mine will be located. Any interventions required in the provision of housing will be determined in consultation with the relevant municipal officials, recognised/ authorised representatives for the community and organised labour (Jindal Iron Ore (Pty) Ltd, 2022).

10. WORK BREAKDOWN STRUCTURE AND CLOSURE SCHEDULE

Regulations Reference: **(g), (g)(i), (g)(ii), (g)(iii)** **&** **(h), (h)(i), (h)(ii), (h)(iii)**	**This Section describes the schedule of actions for final rehabilitation, decommissioning and closure and link with the current mine plan where possible. All assumptions and schedule drivers are described.** **The spatial map or schedule is linked with Appendix 3 of GNR1147 and shows the planned spatial progression throughout the operations.** **The organisational capacity, structure and responsibilities to implement the plan are indicated, where applicable. If necessary to build closure competence, the required training and capacity building are described in this section.**

This section should be updated with future reviews of the closure plan for Jindal Iron Ore.

A gap analysis should be done as part of the site wide Closure Criteria. The gap analysis includes an auditable action plan and schedule to address the gaps. These aspects, are linked to a Work Breakdown Structure that captures the following:

- The specific **action** requiring additional or further investigation;
- **Priority Level**, indicating the timeframe linked to it (e.g. Immediate, within next financial year or only Long term – 10 years before closure);
- A specific **Responsible Person** is linked to each of these actions (e.g. Environmental Manager or Processing); and
- **Completion Status**, e.g. to indicate whether the specific action should still be initiated, if it is in progress or completed.

The Closure schedule should be refined with the update of this closure plan, the inclusion of the mine plan and the compilation of a Concurrent Rehabilitation Plan.

11. CLOSURE COST ESTIMATION

Regulations Reference: **(k), (k)(i), (k)(ii), (k)(iii)**	**This Section describes the closure cost estimation procedure, which ensures that identified rehabilitation, decommissioning, closure and post closure costs, whether ongoing or once-off, are realistically estimated and incorporated into the estimates.** **Cost estimates for operations, or components of operations that are more than 30 years from closure will be prepared as conceptual estimates with an accuracy of ± 50 percent. Cost estimates will have an accuracy of ± 70 percent for operations, or components of operations, 30 or less years (but more than ten years) from closure and ± 80 percent for operations, or components of operations ten or less years (but more than five years) from closure. Operations with 5 or less years will have an accuracy of ± 90 percent. Motivation must be provided to indicate the accuracy in the reported number and as accuracy improves, what actions resulted in an improvement in accuracy.** **The closure cost estimation includes an explanation of the closure cost methodology, auditable calculations of costs per activity or infrastructure and cost assumptions.** **The closure cost estimate must be updated annually during the operation's life to reflect known developments, including changes from the annual review of the closure strategy assumptions and inputs, scope changes, the effect of a further year's inflation, new regulatory requirements and any other material developments.**

11.1. CLOSURE COST ESTIMATION PROCEDURE AND METHODOLOGY

11.1.1. Liability Model Methodology

The following approach was applied to determine the financial provision:

- The costing model used was developed to address all requirements set out in GNR 1147 and is aligned with all closure components identified;
- The costing model provides the following output:
  - Executive Summary (Summary of all closure components and associated costs where applicable);
  - Preliminary & General (Allocation of P&G's per components and provides weighted P&G's as certain P&G's allowances can vary per component);
  - Contingencies (Allocation of Contingencies per components and provides weighted Contingencies as certain Contingency allowances can vary per component);
  - Closure Components Summary (Provides a summary of all costs per closure component). The five main closure components have been identified namely:
    - Infrastructural Aspects;
    - Mining Aspects;
    - Biophysical Closure Aspects;
    - Social Closure Aspects; and
    - General Aspects.
  - Closure Components (Breakdown of the five main closure components); and
  - Rates Table (Unit rates for various actions required).
- The following information is captured for each closure component where applicable:
  - Reference Map (Reference map number representing the associated closure component);
  - Geographical (GEO) Reference (Reference number for each closure component as represented on the reference map);
  - Year Captured (When each component was captured into the model or updated);
  - Cost Component (Name of closure component captured);

- Description (Breakdown of the properties per cost component);
- Supporting Documentation (Source of supporting information such as drawings, designs or Bill of Quantities);
- Liable (Yes or No, indication if the mine is liable for the component or not);
- Rate Code (Assigned rate code from the rates table);
- Quantity (Quantity per component captured);
- Unit (Unit of measurement);
- Unit Rate (Rate assigned from the rate code aligned to the activity);
- Unit Total (Total amount for each component);
- Liable Value (Presentation of the total amount liable for per component); and
- Notes (Captures any assumptions or dedicated information).

11.1.2. Assessment Methodology

The approach followed with the determination of the closure costs could be summarized as follows:

- Review of available information, identification of infrastructure that would need to be decommissioned at closure;
- Gathering of relevant data which forms the basis of the calculation;
- Infrastructural quantities were assessed based on the available layout drawings;
- All proposed activities were assigned with a reference number which can be referenced directly to the costing model;
- Quantification of infrastructural and civil works relating to mining and general surface are measured according to the requirements of:
  - Standard system of measuring building work;
  - SANS 1200; and
  - Industry standards and norms.
- Reference maps included in APPENDIX F were updated for all areas, all infrastructure was numbered and referenced back to the closure costing spreadsheet and forms part of the geographic database;
- Determination of the various components that are demolition or rehabilitation related to each structure and/or area;
- Compilation of a Bill of Quantities capturing the quantities and actions relating to closure of the different closure aspects (Microsoft excel format); and

- Update of unit rates to be aligned with the current market-related conditions were determined through:
  - Consultation with reputable civil and demolition contractors within E-TEK's database;
  - Consultation with external specialists specialising in soil, water treatment and environmental monitoring;
  - Internal calculation models developed by E-TEK; and
  - Benchmarking of unit rates whereby activities such as rehabilitation and reclamation is carried out on other mine sites where E-TEK is directly involved.

11.2. AUDITABLE CALCULATIONS OF COSTS

Please refer to APPENDIX E (Closure Liability Model) for the detailed cost breakdown per closure component including unit rates. All relevant items have been itemised and referenced as required by GNR 1147.

11.3. ASSUMPTIONS FOR THE CLOSURE COST ESTIMATION

The following general and site-specific cost assumptions and qualifications are described below:

11.3.1. General Costing Assumptions

- The closure costs were determined and presented in terms of E-TEK's understanding of the currently applicable requirements of GNR 1147;
- Currency of estimate: South African Rands (ZAR);
- Based on the output required a 1–10-year closure forecast cost was calculated based on the following timelines:
  - Year 1 – 10 Closure Forecast (FY2023 – FY2032).
- Quantities and volumes calculated as part of the closure forecast were obtained from the Mine Works Program, pit design, WRD design and associated drawings;
- Costing was based on current value and no allowance was made for future value escalation as per the legislative requirements;
- As per GNR 1147 no allowance was made to offset the value of scrap steel and or salvageable equipment to the liability;
- It was accepted that all information used to support the costing supplied by Jindal Iron Ore was accurate and true; this report only addresses the decommissioning and reclamation costs, equating to an outside (third party) contractor establishing on-site and conducting reclamation-related work;

- Other components such as staffing of the site after decommissioning, the infrastructure and support services (e.g. power supply, etc.) for this staff as well as workforce matters such as separation packages, re- training /re-skilling, etc. are outside the scope of this report;
- Based on the above, dedicated contractors would be commissioned to conduct the demolition and reclamation work on the site. This would inter alia require establishment and overhead costs for the contractors and hence, the allowance for P&Gs in the cost estimate;
- Allowance has also been made for third party contractors and consultants to conduct Post Closure care and maintenance work as well as compliance monitoring;
- The financial provision calculated represents the financial requirements to implement the closure criteria identified and agreed upon as part of the closure plan; and
- Weighted percentages for P&Gs and Contingencies have been applied VAT is also included:
    - P&G's – 6% Overall Allowance.
    - Contingencies – 10% Overall Allowance; and
    - VAT – 15% Overall Allowance.

11.3.2. Site Specific Costing Assumptions

11.3.2.1. Infrastructural Aspects

- Structural assumptions were made for infrastructure with no supporting drawings, documents or information, for example single storey buildings, medium or heavy plant structures, etc. Refer to the notes columns in APPENDIX E for detail on all the infrastructural assumptions;
- Main access road and perimeter fence to remain post closure; and
- The construction of the infrastructural aspects was scheduled according to the Project Schedule in the Mine Works Program.

11.3.2.2. Mining Aspects

- Waste Rock Dump (WRD):
  - The WRD is designed and constructed at an 18° angle and will be reshaped during the deposition phase.
  - The increase in volumes in the WRD will be 5% per year.

11.3.2.3. General Aspect

- General surface rehabilitation:
  - Amelioration specifications were adapted to analysis conducted on growth medium soils. Unit rates were adapted to reflect the application requirements.
- Monitoring and Maintenance:
  - Post closure monitoring requirements were updated as per specified closure criteria.
  - Unit rates for post closure care and maintenance of rehabilitated areas were updated based on updated criteria.

11.3.3. Financial Provision Exclusions

11.3.3.1. Infrastructural Aspects

- No allowance was made for the Eskom yard. This will be Eskom's responsibility as confirmed by Wood PLC.
- No allowance was made for the Contractor yard. This will be the applicable contractor's responsibility.
- No allowance for radioactive material and equipment to be removed, transported and disposed of at a registered radioactive waste disposal facility.
- No allowance was made for the removal of waste tyres as it is assumed that the contractor in charge of the mining operations will be responsible for the removal of the waste tyres.

11.3.3.2. Mining Aspects

- No allowance has been made for concurrent rehabilitation activities.

11.3.3.3. Biophysical Aspects (Water Resources)

- No allowance was made for any post closure water treatment due to limited information available at this stage. This should be investigated and included in future liability updates.

11.3.3.4. General Aspects

- No general surface reclamation for topsoil stockpiles was allowed due to limited information available at this stage.
- No P&G's allowance for post closure monitoring and maintenance as allowance is already made within the unit rate.

11.4. FINANCIAL PROVISION MODEL

Refer to APPENDIX E for the detail closure cost estimate sheets and APPENDIX F for the Reference maps that are linked to the costing sheets.

12. MONITORING, AUDITS AND REPORTING

Regulations Reference: **(d)(v)** **&** **(l), (l)(i), (l)(ii), (l)(iii)**	**This Section takes cognisance of the probable need to implement post closure monitoring and maintenance for a period sufficient to demonstrate that relinquishment criteria have been achieved.** **The Monitoring, auditing, and reporting requirements (which relates to the risk assessment, legal requirements and knowledge gaps as a minimum) include:** **A schedule outlining internal, external and legislated audits of the plan for the year, Including the person responsible for undertaking the audit(s); the planned date of audit and frequency of audit as well as an explanation of the approach that will be taken to address and close out audit results and schedule.** • **A schedule of reporting requirements providing an outline of internal and external reporting, including disclosure of updates of the plan to stakeholders, where necessary.** • **A monitoring plan which outlines parameters to be monitored, frequency of monitoring and period of monitoring.** • **An explanation of the approach that will be taken to analyse monitoring results and how these results will be used to inform adaptive or corrective management and/or risk reduction activities.**

The Monitoring Plan and applicable Key Performance Indicators (KPIs) should be included in the update of this closure plan and with the compilation and support of the Rehabilitation Plan.

12.1. DEMONSTRATION OF REHABILITATION PERFORMANCE

No additional monitoring is required in terms of the consolidationroject, only ten years Post Closure Care and Maintenance is included. It is envisaged that a ten-year demonstration period will be required to confirm the success of rehabilitation.

Following the completion of earthworks and vegetation establishment, a visual inspection will be undertaken to inform corrective action required if needed. Thereafter ongoing monitoring and corrective actions are envisaged at the time of compiling this plan.

Figure 10 illustrates the overview of the process for the Rehabilitation Plan roll out and performance monitoring, starting with the baseline site performance assessment, towards the final site performance assessment. It is described in the sections below.

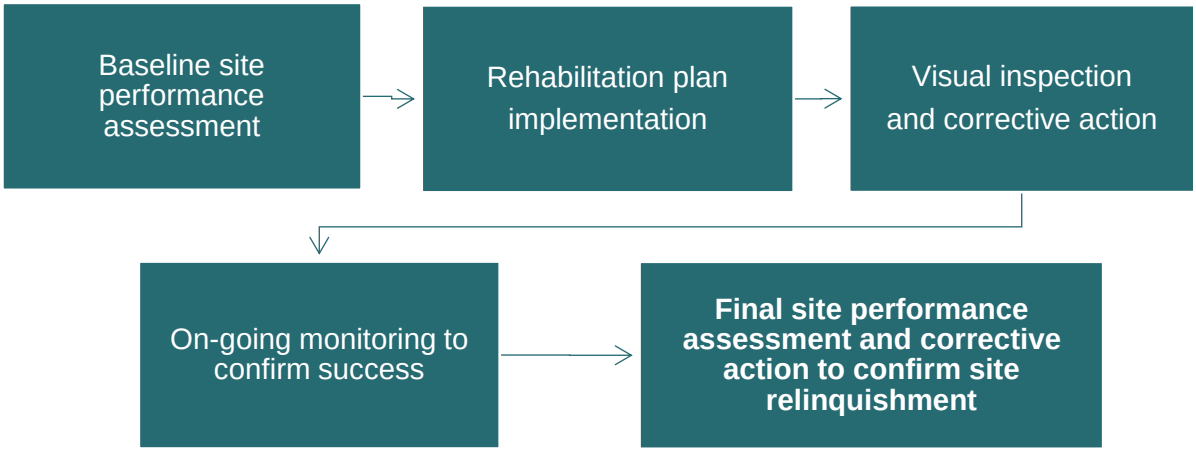

Figure 10: Illustration of the Rehabilitation plan roll out and Performance monitoring.

12.1.1. Baseline Environmental Site Performance Assessment

A baseline site performance assessment (largely based on existing information and supplemented by a dedicated site walkover) must be conducted prior to rehabilitation implementation. This is to ensure that a baseline of existing conditions have been measured before rehabilitation commences, and that there is information available to assess the success of the rehabilitation once implemented.

The aim of the environmental site performance assessment is to establish the status quo/baseline and knowledge base against which results of monitoring conducted after rehabilitation will be measured. Additionally, this will support the environmental permitting for decommissioning of the site in terms of the provisions of NEMA.

12.1.2. Monitoring and Corrective Action

The rehabilitation performance/ progress should be documented in a dedicated annual rehabilitation performance report to be submitted to Jindal Iron Ore, until relinquishment criteria have been achieved. The report should reflect on the outcome of monitoring undertaken, rehabilitation performance and corrective action required.

The monitoring objectives, network, sampling routine and analysis for specific bio-physical closure aspects should always be refined with each updated version of this plan.

12.1.3. Final Site Performance Assessment

Following completion of rehabilitation and/or the demonstration period of ten years (to be confirmed and updated in future and as the mine gets closer to closure) a final performance assessment should be undertaken to document the success of rehabilitation and the corrective action undertaken. The final site performance assessment will be used to document the success of rehabilitation.

The Rehabilitation Monitoring and Measurements listed in Table 16 indicate the general requirements for closure to be met as aligned with the approved EMPr and the relevant regulatory objectives listed in Section 5.3. It is recommended that these criteria are to be included in the proposed amendment of the EMPr and to be applied site wide These criteria are also to be refined with subsequent updates of this Closure Plan.

Table 16 Rehabilitation Monitoring and Measurement

COMPONENT/ASPECT		MONITORING		PERFORMANCE/SUCCESS CRITERIA	CORRECTIVE ACTION
		METHODOLOGY	FREQUENCY/DURATION		
WATER RESOURCES	Surface water quality (forms part of ongoing site-wide operational monitoring)	Undertake monitoring of the surface water quality during the operational period according to approved monitoring programmes.	Monthly during the operational period.	• Acceptable threshold levels of salts, metals and other potential contaminants are maintained; and • The applicable thresholds do not pose a threat to surrounding aquatic ecosystems, land uses or land users.	As reflected in relevant Integrated Water and Waste Management Plan (IWWMP)
	Groundwater (forms part of ongoing site-wide operational monitoring)	Undertake ongoing monitoring of the ground water quality during the operational period according to existing monitoring programmes.	Quarterly during the operational period.	• Acceptable threshold levels of salts, metals and other potential contaminants are maintained; and • The applicable thresholds do not pose a threat to surrounding land uses or land users (groundwater users for domestic or agricultural purposes).	Implement commitments in IWWMP.

COMPONENT/ASPECT		MONITORING		PERFORMANCE/SUCCESS CRITERIA	CORRECTIVE ACTION
		METHODOLOGY	FREQUENCY/DURATION		
SENSITIVE HABITAT AND BIODIVERSITY	Vegetation establishment	Determine whether concurrently established vegetation provides an effective cover and aids in controlling erosion, by undertaking the following: • Inspect rehabilitated areas to assess vegetation establishment and early detection of erosion in recently planted/seeded areas (for 3 months); and • Assess rehabilitated areas by means of field inspections. During these assessments measurement of growth performance should be made of: ○ Species present and abundance; ○ Estimates of average plant basal cover, vegetation	Planting should be undertaken at the start of the rainy season and monitoring undertaken as follows: • After 1 month continue monitoring twice more for first quarter, • Quarterly for the rest of the year and then, • Annually thereafter.	• No evidence of significant erosion is present; • Self-sustaining vegetation establishment occurs; and • Presence of exotic invasive species as well as bush encroachment species is effectively controlled.	• Re-vegetate poorly established rehabilitated areas; • Re-seed bare patches, as required; and • Apply additional fertiliser and/or organic matter, depending on the condition of the vegetation and the initial organic material application.

COMPONENT/ASPECT		MONITORING		PERFORMANCE/SUCCESS CRITERIA	CORRECTIVE ACTION
		METHODOLOGY	FREQUENCY/DURATION		
		canopy and ground cover heights; ○ Distribution, densities, growth, and survival of woody species; ○ Dominant plant species (woody and herbaceous); ○ Presence of exotic invasive species; and ○ Occurrence of erosion, noting aspects such as type, severity, degree of sediment build-up.			
: AIR QUALITY & TOPOGRAPHY	Air Quality	Undertake monthly dust monitoring programme according to American Society for Testing and Materials International standard method (ASTM)	Monthly	As required by ASTM International standard	• Review success of rehabilitation techniques • Adjust/improve accordingly.

COMPONENT/ASPECT		MONITORING		PERFORMANCE/SUCCESS CRITERIA	CORRECTIVE ACTION
		METHODOLOGY	FREQUENCY/DURATION		
	Topography and erosion	• Conduct a visual assessment to determine areas of potential erosion; • Identify incidences of rill and gully erosion and/or excessive siltation in a specific area; and • Rehabilitate impacted areas in terms of at least progressive in-filling of voids, shaping, top soiling and grassing.	Monthly during the operational period.	• Concurrent surface rehabilitation that is aligned to rehabilitation planning; • Implemented landform is aligned to designed landform; and • Self-sustaining vegetation establishment occurs.	• Adjust earthworks and construction practices to achieve and maintain the desired slopes; • Improve vegetation coverage where erosion occurs; • Install energy dissipation measures if improved vegetation is not sufficient/achieved; • At excessive slope lengths and signs of sheet erosion, construct contour drainage berms that intercept the overland flow; and • In areas of runoff concentration, create dedicated surface runoff pathways that are

COMPONENT/ASPECT		MONITORING		PERFORMANCE/SUCCESS CRITERIA	CORRECTIVE ACTION
		METHODOLOGY	FREQUENCY/DURATION		
					appropriately vegetated.

12.2. MONITORING AND MANAGEMENT OF IMPACTS

The South Block is divided into two exploration blocks, namely the South East Block and the South West Block. The target exploration was carried out on the South East Block and mining is planned on the same block. The South West Block and North Block is yet to be explored to find additional economically viable mineral resources for the Project (Department Mineral Resources , 2019)

For the purpose of this document, Post Closure monitoring will focus on the South East Block where exploration has been completed and mining is planned. This document should be updated as mining activities expand and further exploration is completed.

12.3. PROPOSED POST CLOSURE MONITORING PROGRAMMES

The objective of monitoring programmes is to assess to what extent the closure criteria is being achieved during rehabilitation and closure and to identify corrective actions in situations where the closure criteria is not being achieved or the progress towards achievement is not satisfactory. These programmes are thus directly aligned with the criteria. The programmes shall comprise the following and it is the responsibility of a suitably qualified and experienced person to ensure that these requirements are adhered to:

- Ensure that relevant financial resources are made available;
- Documented procedures are in place which provide step by step instructions on how monitoring should be undertaken;
- Appoint appropriately qualified specialists to undertake the monitoring in a timeous manner to ensure work can be carried out to acceptable standards;
- Make use of appropriately calibrated equipment and where samples require analysis, they shall be preserved according to laboratory specifications;
- Make use of an independent and accredited laboratory to analyse samples and/or internal laboratory results to periodically be checked by independent and accredited laboratories;
- Interpret monitoring data and trends of the data, and communicate to all relevant internal and external stakeholders, taking into consideration requirements of any licences; and
- Maintain monitoring records for at least 50 years post monitoring events.

Jindal's intent is to consolidate the Prospecting Rights for the North and South blocks into a single Mining Right. For the purpose of this document the South Block is divided into **South East Block** and the **South West Block**. Development of the mine and mining infrastructure will be undertaken in a phased approach with mining currently **only proposed to be undertaken in the South East Block** where the iron ore resource has been defined. Infrastructure would be developed to support this mining operation (Jindal Iron Ore (Pty) Ltd, 2022)

For this reason, the proposed post closure monitoring programmes will **only focus on** the area already set out for mining activities and mine infrastructure (**South East Block**), which has been accounted for in the liability estimate and forecast. This document will remain a living document, to be updated as mining activities increase and expand, to include relevant monitoring points for each section as discussed below.

12.3.1. Surface water monitoring

Post Closure monitoring will focus on the **South East Block** where mining activities and infrastructure are currently being planned. The Surface Water monitoring programme will be adapted and updated as mining progresses and the mining activities expand.

The following post closure Surface Water Monitoring Points are proposed; (Refer to Table 17 and Figure 11), however, specialist studies will need to confirm that these points will be relevant to the purpose of the monitoring of the Surface Water Monitoring Programme. From the existing monitoring points 2 points will be allocated for post closure Surface Water Monitoring points. The proposed monitoring points need to be investigated to see if it could be integrated into the operational monitoring points to assist with forming a baseline for further monitoring. Refer to section 4.1.2.1.

Table 17: Proposed Post Closure Surface Water Monitoring Points

Surface Water Quality Monitoring Post Closure		
Name	South	East
Ne w Proposed Points		
P1	-28,740389	31,435025
P2	-28,746468	31,489865
P3	-28,733299	31,552767
Existing Operational Points		
SW5	-28,653209	31,407021
SW9	-28,715301	31,509862

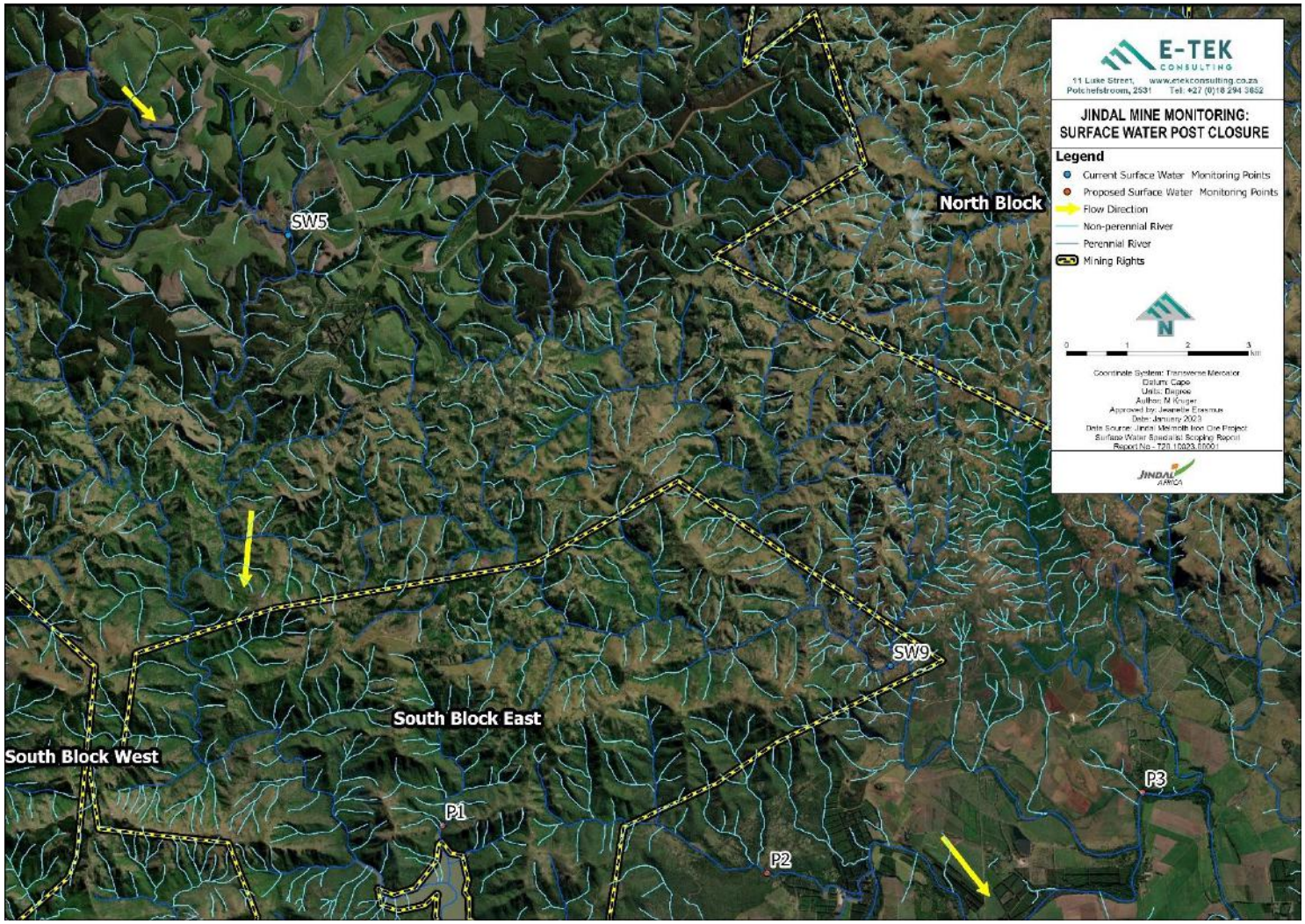

Figure 11: Proposed Post Closure Surface Water Monitoring Points

12.3.2. Groundwater monitoring

Post Closure monitoring will focus on the **South East Block** where mining activities and infrastructure are being planned. The current Groundwater monitoring points focused on the operations planned at Jindal Ore Mine and should be reviewed and adapted by groundwater specialists. For the purpose of this document the following post closure monitoring points are being proposed (Refer to Table 18 and Figure 12) but it is recommended that a Groundwater Specialist review these points and adapt where necessary.

Table 18: Proposed Post Closure Groundwater Monitoring Points

Proposed Post Closure Groundwater Monitoring Localities		
Name	**South**	**East**
Proposed Points		
P1	-28,741714	31,474617
P2	-28,735962	31,49134
P3	-28,727579	31,508208
P4	-28,710911	31,463552
P5	-28,714439	31,441486
Current Points		
MWGA02	-28,709432	31,496258
MWGA03	-28,721327	31,498837
MWGA07	-28,716534	31,479255

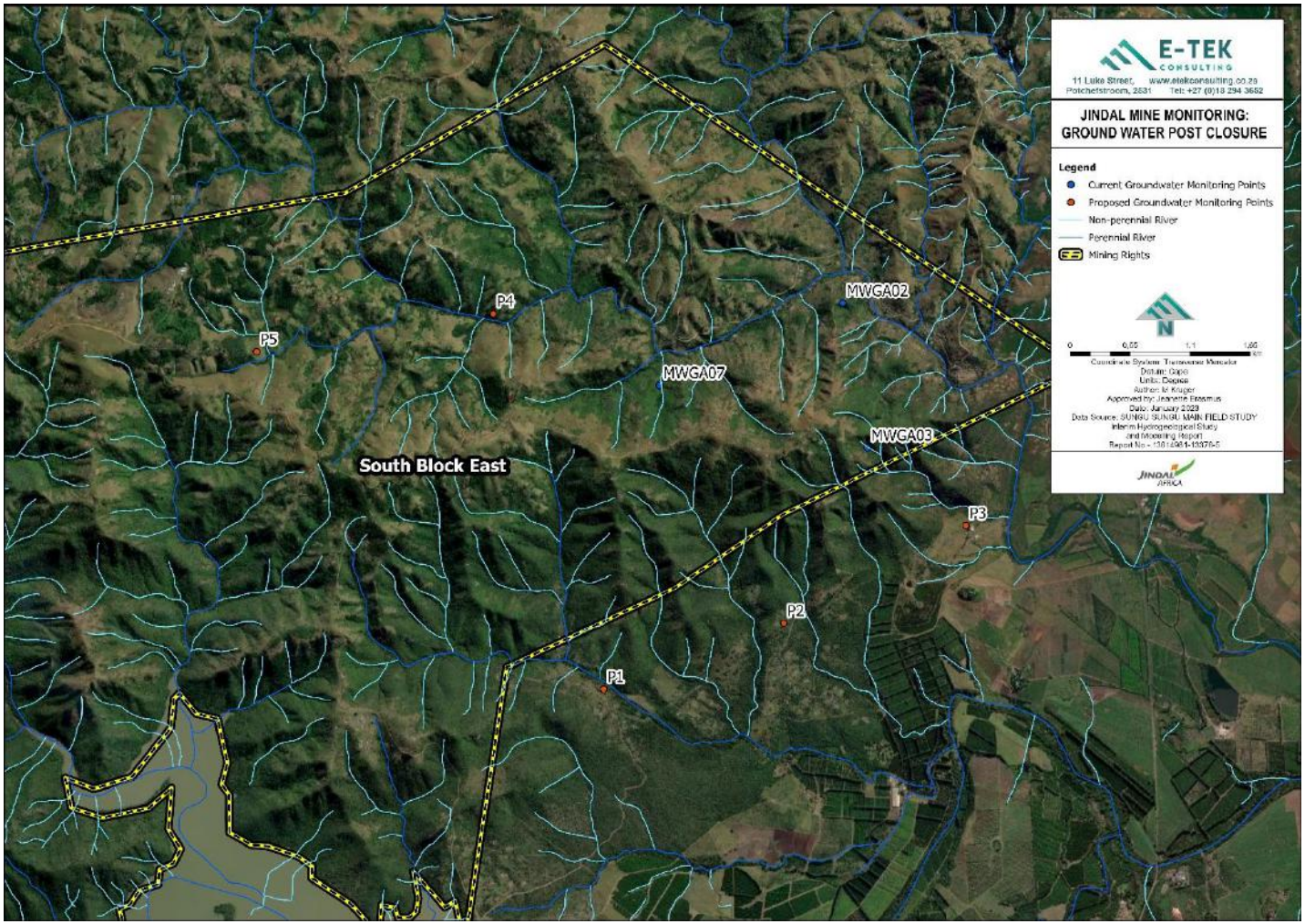

Figure 12: Proposed Post Closure Groundwater Monitoring Points

12.3.3. Biodiversity Monitoring

Interrogation of SANBI's online New Plants of Southern Africa (POSA) species database and the EIA online screening tool highlighted the potential occurrence of numerous protected, endemic and threatened species within the study area. Review of the habitat preference of threatened species against vegetation communities recorded within the study area highlighted the potential presence of twenty-six (26) species which are considered Endangered, Vulnerable, Near Threatened, Data Deficient, Rare and/or Endemic out of a possible 32 species flagged by online databases.

Biodiversity offsets are typically required in certain situations to compensate for residual impacts to ecosystems and biodiversity once all other forms of mitigation have been considered. Given this project is still in an early scoping phase with development footprints still to be finalised, specialist studies will be required as the mine plan develops, to determine where offset areas are possible and which areas should be monitored as part of the biodiversity monitoring programme post closure.

12.3.4. Air Quality

Post Closure monitoring will focus on the South East Block where mining activities and infrastructure are being planned. The current Air Quality monitoring points focused on the operations planned at Jindal Ore Mine in relation to sensitivite receptors and should be reviewed and adapted by Air Quality specialists. For this document the following post closure monitoring points are being proposed (Refer to Table 19 and Figure 13). It is possible that the sensitivity receptors will change as communities are relocated to accommodate the planned mining activities.

Table 19:Proposed Post Closure Air Quality Monitoring Points

Proposed Post Closure Air Quality Monitoring Points		
Name	South	East
DB1	-28,7147306	31,50768095
DB2	-28,76149994	31,49255495
DB3	-28,73302777	31,50887496
DB4	-28,7464647	31,45182083
DB5	-28,69022123	31,46110293
DB6	-28,70809903	31,43437031
DB7	-28,69341445	31,47212015

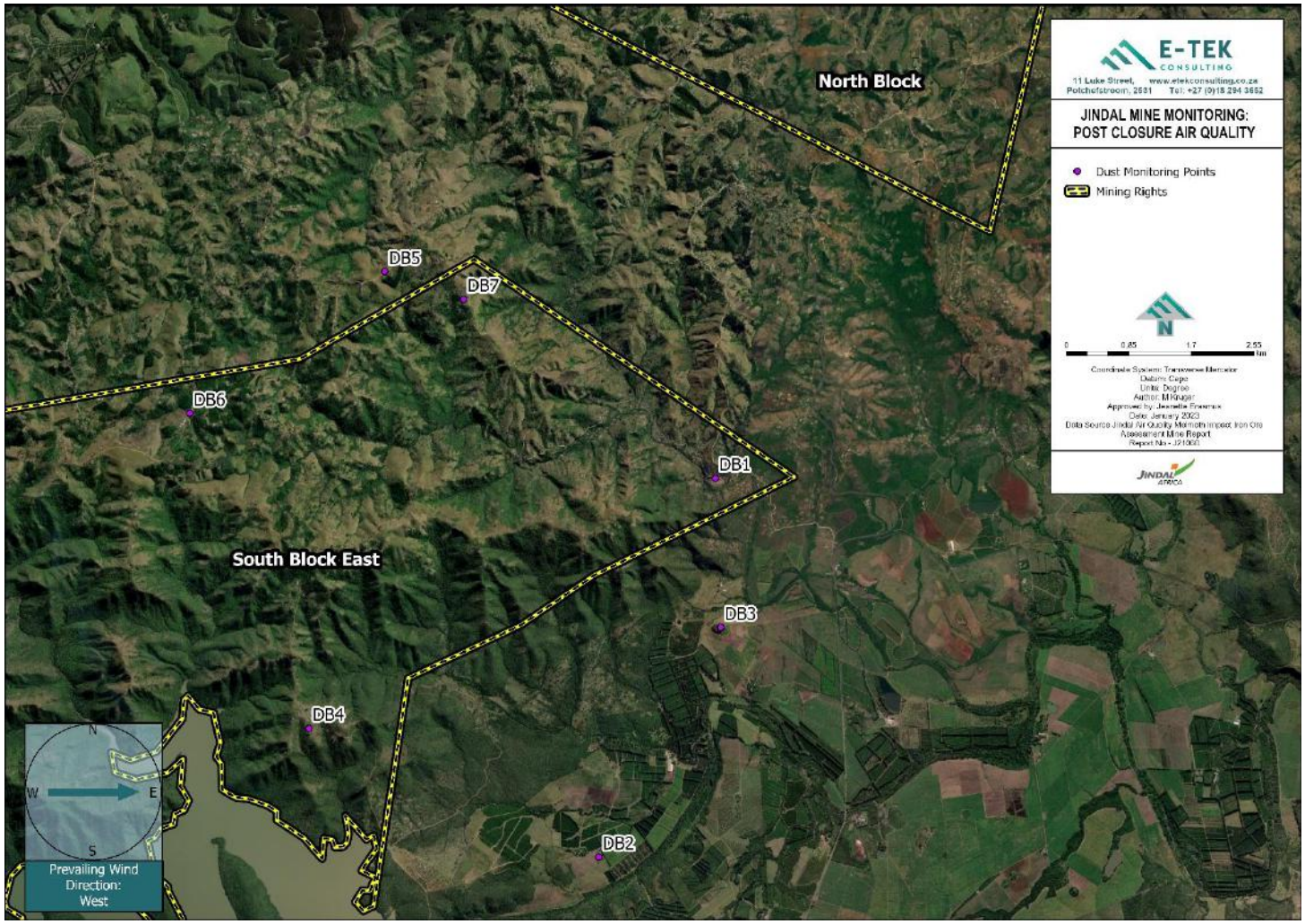

Figure 13: Proposed Post Closure Air Quality Monitoring Points

13. GAPS AND FURTHER ACTIONS

The current groundwater monitoring points referenced in this document focus on the South East Block within the area where operational processes are proposed. These monitoring points will not be feasible throughout Life of Mine or post closure, as some of these points will be destroyed during the operational phase and are not relevant to the baseline needed to assess the impacts from mining activities throughout Life of Mine and post closure.

Current surface water monitoring points need to be reassessed to ensure that unnecessary repetition of monitoring points is avoided and that the surface water monitoring points are situated in such manner to assess all relevant sites possibly impacted on by mining activities.

Biodiversity offset areas need to be discussed and determined to ensure that current and post closure monitoring can take place effectively throughout Life of Mine and post closure.

Current Air Quality Monitoring points are designated according to current sensitive receptors. These sensitive receptors will change as communities are being relocated. It is therefore necessary to reassess the air quality monitoring points as the operational phase expands, and as local communities are being relocated, to ensure that the air quality monitoring points are relevant during both the operational phase and post closure.

No Feasibility Study has yet been conducted to determine a sustainable end land use post closure. It is recommended that stakeholder engagements, additional specialist studies and land capability studies be conducted with regards to this issue, to assess the most feasible land use post closure.

14. CONCLUSION

Regulations Reference:	
(m)(i)	• **This Section includes the motivations for any amendments made to the final rehabilitation, decommissioning and mine closure plan, given the monitoring results in the previous auditing period and the identification of gaps, where applicable.**

Refining the closure planning process for Jindal Iron Ore is an on-going process and therefore the Rehabilitation, Decommissioning and Mine Closure Plan should be seen as a working document which is based on the best, and most recent available information. It is important to note that any deviation from the current Rehabilitation and Closure Criteria, which is used for costing purposes, may have a significant impact on future liability estimates.

The Jindal Iron Ore Rehabilitation, Decommissioning and Mine Closure Plan and all its supporting documentation (Appendices) are the product of a dynamic approach and should therefore be reviewed regularly to ensure that all aspects and associated costs are taken into consideration. Furthermore, it is important that all the information be incorporated into all mining strategies, planning and operational processes. This will ensure that the objectives set out within the plan are reached and will also provide potential opportunities to reduce closure costs.

Notwithstanding the assumptions made and certain gaps that remain, if the closure measures are implemented as envisaged, the reflected costs provide a good indication of the closure liability estimates and should provide a good basis for making the required financial provision. The biophysical and physical closure costs calculated are applicable to closure situations as well as concurrent rehabilitation during the operational phase (when applicable).

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APPENDICES

APPENDIX A: MINE SITE LAYOUT PLAN

APPENDIX B: CLOSURE CRITERIA

APPENDIX C: RISK ASSESSMENT

APPENDIX D: CLOSURE CONSULTATIONS

APPENDIX E CLOSURE COST

APPENDIX F: REFERENCE MAPS

DOCUMENT SIGN-OFF

CONSULTANT SIGNATORIES:

[INSERT SIGNATURE]

Leon Koekemoer

Director/Senior Estimator

[INSERT SIGNATURE]

Jeanette Erasmus

Director/Environmental Manager

CLIENT SIGNATORIES:

[INSERT SIGNATURE]

NAME AND SURNAME

DESIGNATION

[INSERT SIGNATURE]

NAME AND SURNAME

DESIGNATION

[INSERT SIGNATURE]

NAME AND SURNAME

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[INSERT SIGNATURE]

NAME AND SURNAME

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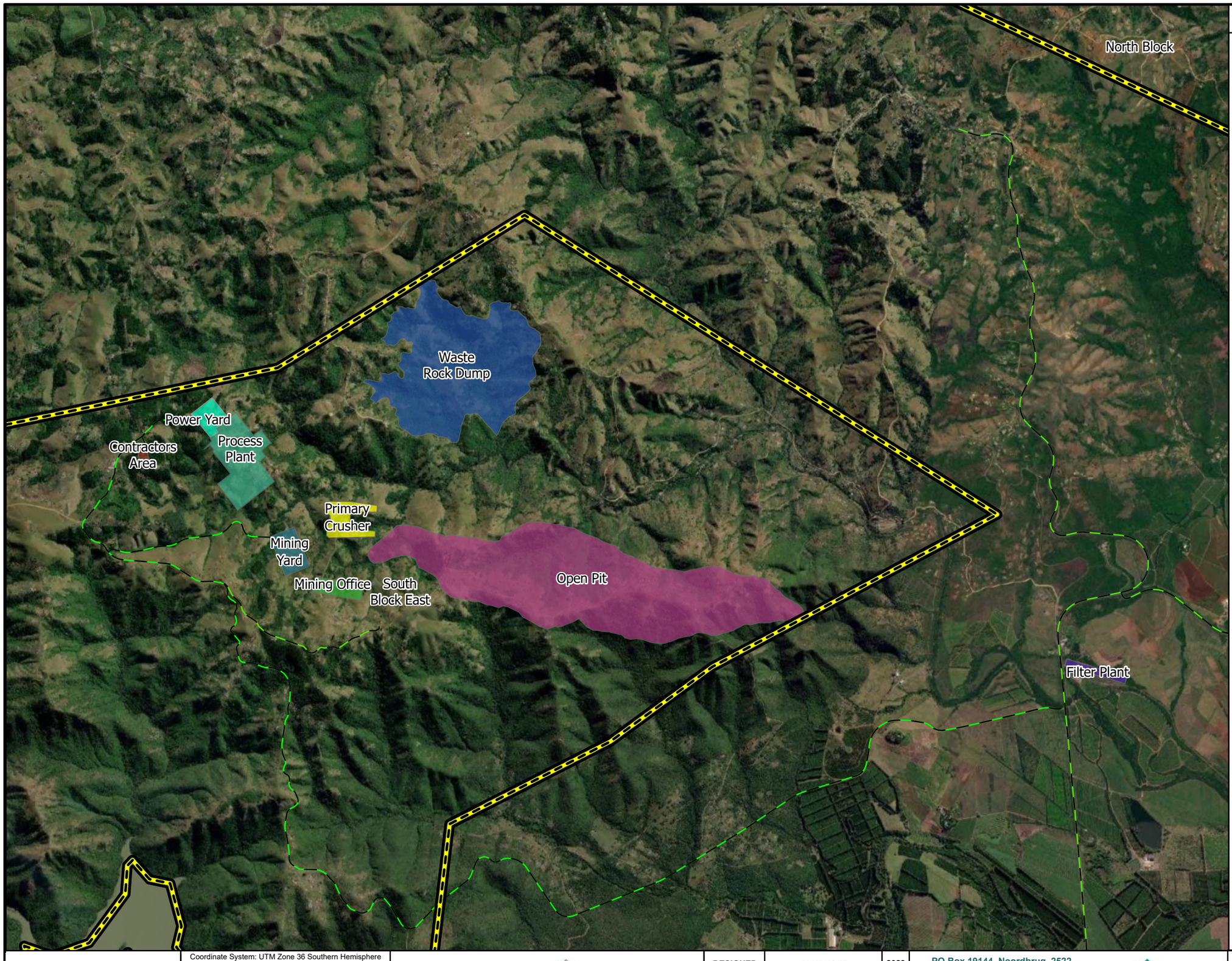

LEGEND

- Main Road

Area

- Contractors Area
- Filter Plant
- Mining Office
- Mining Yard
- Open Pit
- Primary Crusher
- Process Plant
- Waste Rock Dump
- Power Yard
- Mining Rights

JINDAL AFRICA

Coordinate System: UTM Zone 36 Southern Hemisphere
Projection: Transverse Mercator
Datum: WGS84
false easting: 500 000,0000
false northing: 10 000 000,0000
central meridian: 33,0000
scale factor: 0,9996
latitude of origin: 0,0000
Units: Meter
Date: 2023/03/06

N

DESIGNED	M KRUGER	2023
DRAWN	M KRUGER	2023
CHECKED	LM KOEKEMOER	2023
	NAME	DATE

PO Box 19144, Noordbrug, 2522
11 Luke Str, Potchefstroom, 2531

Cell: +27 76 730 3983
Tel: +27 18 294 3652
Fax: +27 86 685 5473

Website: www.etekconsulting.co.za

E-TEK CONSULTING

CLIENT NAME : JINDAL MINE
PROJECT DESCRIPTION : JINDAL EIA
PROJECT NO : PN100519

DRAWING NO : 00 - GENERAL LAYOUT

Jindal Iron Ore Mine

Closure Criteria

Introduction

The Closure Criteria focusses on identifying and prioritising the required actions to achieve the agreed upon standards that must be met to facilitate lease relinquishment, or otherwise known as success criteria. The Closure Criteria aids the identification of the outstanding scope of work in updating the current mine closure plan. The Closure Criteria discussed in these sheets take into account two closure scenarios namely Premature/Unscheduled Closure and Life of Mine (LoM).

Closure criteria is defined as the following: ""Agreed sequential steps that must be undertaken as part of closure including physical, biophysical and socio-economic parameters defined through engagement with regulators and other external stakeholders. The Closure Criteria forms the basis of the closure liability cost estimate.""

Each closure aspect has been divided into separate closure components and management areas, where each of these areas have corresponding Rehabilitation and Closure Criteria (Controls / Mitigation Measures) as well as assumptions (where applicable) for each criteria aspects. Where a knowledge gap or opportunity has been identified for a management area or closure component, the gap as well as further actions or additional assessments needed were listed.

The gaps identified within the Closure Criteria have also been listed within the Action Plan as well as the Gap Analysis Evaluation sections. Additionally, significant and high latent or residual risks identified during the Closure Risk Assessment have also been incorporated within the Closure Criteria as an action that needs to be addressed to achieve the planned success criteria.

JINDAL IRON ORE MINE - REHABILITATION AND CLOSURE CRITERIA -								LINKED TO MASTER ACTION PLAN [TO BE REFINED AS MINE MOVES CLOSER TO CLOSURE]	
1. PHYSICAL CLOSURE COMPONENTS ASSOCIATED WITH INFRASTRUCTURAL ASPECTS									
	CLOSURE COMPONENTS	ITEM DESCRIPTION		REHABILITATION & CLOSURE CRITERIA [CONTROLS / MITIGATION MEASURES]		ASSUMPTIONS / NOTES		KNOWLEDGE GAPS OR POSSIBLE OPPORTUNITIES	FURTHER ACTIONS / ADDITIONAL ASSESSMENTS (incl. specialist studies)
	1.1 PLANT & RELATED STRUCTURES	**MINE SURFACE AREA STRUCTURES:** **Conveyors** **Processing Area incl.:** - Process Substation - Compressor house - Primary Crusher - Secondary Crusher - Substations - Conveyors & Transfer Towers - Stockpile feeder - Water Treatment Plant	**Premature**							
			i	Dismantle and remove all plants and related infrastructure	• The depth of the removal of the foundations and structures sub-surface, is dependent on the post mining land use and will change accordingly in future, if the post mining land use changes • Eskom yard and sewage treatment plant are excluded and falls under supporting infrastructure • No allowance has been made for transporting salvageable equipment off site. • Current quantity of salvageable equipment is unknown. Final as built drawing and bill of quantities to be kept on record for future liability updates.	1	CLE includes for the steel scrap and salvageable equipment to be stockpiled onsite - no provision to transport offsite.	Investigate altering demolition contracts to include cutting steel to manageable sizes during the demolition process.
			ii	Remove and stockpile salvageable equipment onsite (i.e. steel and re-useable material) (Soft strip all buildings)		2	Uncertainty regarding the scrap steel value. The current salvage value outweighs the transport cost of steel and equipment by 50%.	Investigate feasibility of leaving salvageable material on-site for reclamation purposes or re-sale
			iii	Remove foundations and structures up to 1m sub-surface		3	Classification of structures	Confirm classification of structures composition once constructed
			iv	General surface rehabilitation of footprint areas (Refer to General Surfaces component)					
			v	All linear items (i.e. pipelines, power lines and conveyers) will be removed (Refer to Linear items component)					
			vi	Allowance for disposal of waste (Refer to Waste Disposal)					
			LoM						
			i	Same as Premature		All linear items (i.e. pipelines, power lines and conveyers) will be removed			
	1.2 SHAFTS ADITS & DECLINES	*** Not applicable, therefore no criteria**				(Refer to Linear items component)			

	1.3 SUPPORTING INFRASTRUCTURE	**MINING RELATED SUPPORTING BUILDINGS INCLUDING:**
		
		- Canteen
		- First Aid Office
		- Laboratories
		- Weighbridge
		- Wash bay
		- Warehouse
		- Sewerage Treatment Plant
		- Stores and offices
		- Storage areas
		  - Diesel storage areas
		  - Wash bay Explosives magazine
		- Dams
			Premature							

			i	Dismantle and demolish all infrastructure	• No beneficial reuse has been allowed for any of the surface infrastructure • All contractors on-site are responsible to remove their own infrastructure • The depth of the removal of the foundations and structures sub-surface, is dependent on the post mining land use and will change accordingly in future, if the post mining land use changes • No allowance has been made for transporting salvageable equipment off site. • Current quantity of salvageable equipment is unknown. Final as built drawing and bill of quantities to be kept on record for future liability updates.	1	Disposal of fixed and mobile assets assumed to be the specific contractor's responsibility.	Ensure contracts with contractors specify how waste streams are handled by contractors
			ii	Remove and stockpile salvageable equipment onsite (i.e. steel and re-useable material) (Soft strip all buildings)		2	Delineation of contaminated areas should be conducted and captured to ensure all pollution has been captured at closure.	Undertake a mine-wide contaminated land assessment before surface rehabilitation is implemented.
			iii	Remove foundations and structures up to 1m sub-surface		3	Potentially not having an understanding of the reagents and chemicals that may have the possibility of not being returned to the suppliers at closure.	Control and ensure inventories of chemicals, reagents and hydrocarbon products during mine decommissioning are up to date (continuously updated operationally).
			iv	All linear (i.e pipelines, powerlines and conveyors) will be removed (Refer to linear items component		4	Potential post-mining use of infrastructure uncertain.	Determine potential post-mining use of supporting infrastructure.
			v	General surface rehabilitation of footprint areas (Refer to General Surfaces component)		5	Classification of structures	Confirm classification of structures composition once constructed
			vi	Allowance for disposal of waste (Refer to Waste Disposal)					
			SEWAGE TREATMENT PLANT						
			i	Same as for other infrastructure	No additional information available for				
			ESKOM YARD						
			i	No Allowance was made	• Eskom Yard will remain the responsibility of Eskom as confirmed by Wood PLC • Contractors Yard will remain the responsibility of Contractors as confirmed by Wood PLC				
			DAMS						
			i	Bulk excavation of sediment from dam basins (assume 300mm thick layer	• Includes: - Pollution Control Dam - Return Water Dam - Process Water Dam • Assumed 100% of footprint will require reshaping • Allowance made for Soil Amelioration, cultivation and seeding actions.				
			ii	Load and haul sediment 5km to TSF for disposal					
			iii	Remove single HDPE layer					
			iv	Breach dam wall and doze material into dam void					
			v	Shape and level disturbed area, leaving area free draining					
			vi	Establish vegetation					
	1.4 UNDERGROUND INFRASTRUCTURE	*** Not applicable, therefore no criteria**							
	1.5 SOCIAL INFRASTRUCTURE	*** Not applicable, therefore no criteria**							
	1.6 OFF-SITE INFRASTRUCTURE	**Filter plant**	i	Dismantle and remove all plants and related infrastructure	• The depth of the removal of the foundations and structures sub-surface, is dependent on the post mining land use and will change accordingly in future, if the post mining land use changes • No allowance has been made for transporting salvageable equipment off site. • Current quantity of salvageable equipment is unknown. Final as built drawing and bill of quantities to be kept on record for future liability updates.	1	CLE includes for the steel scrap and salvageable equipment to be stockpiled onsite - no provision to transport offsite.	Investigate altering demolition contracts to include cutting steel to manageable sizes during the demolition process.
			ii	Remove and stockpile salvageable equipment onsite (i.e. steel and re-useable material) (Soft strip all buildings)		2	Uncertainty regarding the scrap steel value. The current salvage value outweighs the transport cost of steel and equipment by 50%.	Investigate feasibility of leaving salvageable material on-site for reclamation purposes or re-sale
			iii	Remove foundations and structures up to 1m sub-surface		3	Classification of structures	Confirm classification of structures composition once constructed
			iv	General surface rehabilitation of footprint areas (Refer to General Surfaces component)					
			v	All linear items (i.e. pipelines, power lines and conveyers) will be removed (Refer to Linear items component)					
			vi	Allowance for disposal of waste (Refer to Waste Disposal)					
			LoM						
			i	Same as Premature					

JINDAL IRON ORE MINE - REHABILITATION AND CLOSURE CRITERIA -									
1. PHYSICAL CLOSURE COMPONENTS ASSOCIATED WITH INFRASTRUCTURAL ASPECTS								LINKED TO MASTER ACTION PLAN [TO BE REFINED AS MINE MOVES CLOSER TO CLOSURE]	
	CLOSURE COMPONENTS	ITEM DESCRIPTION	REHABILITATION & CLOSURE CRITERIA [CONTROLS / MITIGATION MEASURES]		ASSUMPTIONS / NOTES			KNOWLEDGE GAPS OR POSSIBLE OPPORTUNITIES	FURTHER ACTIONS / ADDITIONAL ASSESSMENTS (incl. specialist studies)
	1.7 LINEAR ITEMS	**Powerlines**	**Premature**						
			i	All overhead powerlines inside the outer perimeter fence will be removed.	Eskom will be responsible for their own linear infrastructure	1	Potential post-mining use of linear infrastructure uncertain.	Determine potential post-mining use of infrastructure.	
		Conveyors, - Overland Conveyors	i	All conveyors inside the outer perimeter fence will be removed.	Assumed to be overland conveyors	2	Used conveyor belts can potentially be used, recycled or upcycled instead of disposing usable materials post-closure.	Investigate upcycling and selling used conveyor belts for a variety of environmentally friendly next uses.	
		Fencing, including: - Security fencing & stock fencing - Perimeter Fencing	i	All fencing inside the outer perimeter fence will be removed.	The outer perimeter fence will remain intact post closure				
		Pipelines and associated infrastructure, including: - Water Pipelines - Tailings Delivery Pipelines	i	All overland pipelines will be removed.	• All inspection manholes part of the pipeline will be removed. • All pipelines 1m below ground level will be left insitu. • Assume HDPE pipes				
		Tar Roads, including: -Tar roads inside and outside mine's security perimeter	i	Removal of all tar surfaces and correct disposal of waste.	• Assume all tar roads inside the mine's security perimeter will be removed. • Assume main access road to remain post closure to sustain the end land use				
			ii	Place 100mm topsoil over the disturbed area					
			iii	Rip Area					
			iv	Ameliorate and revegetate					
		Haul Roads, including major gravel roads with engineered surfaces	i	Rip the road surface					
			ii	Place a 100mm thick layer of topsoil over the ripped surface					
			iii	Establish vegetation, which includes cultivation, amelioration and seeding actions					
			LoM						
			i	Same as Premature					
		WATER MANAGEMENT STRUCTURES: **Storm water channels & culverts**	i	Demolish all infrastructure and concrete works related to channels and culverts.					
			ii	General surface rehabilitation of footprint areas (Refer to General Surfaces component)					
		Stormwater Diversion Trench at Waste rock dump	i	No criteria	Diversion trench at WRD will remain post closure				
	1.8 WASTE DISPOSAL	**All waste relevant to closure, including:** **- Inert building demolition waste and/or Industrial Waste** **- Waste tyres** **- Domestic and General Waste** (incl. food waste, paper, glass, tins/cans, plastic, other waste derived from offices and kitchens, and garden refuse) - **Hazardous Waste** (incl. medical waste, tar, hydrocarbons, spillages at sewage plant) - **Radio-active waste**	**Premature**						
			i	• A 5% allowance of total demolition cost allowed for decontamination of waste and salvageable equipment	• All domestic **or non-inert** waste will be disposed off at licensed facilities (Local Landfill) • All inert waste will be disposed of onsite	1	Not yet approved or authorised to dispose off inert demolition waste onsite.	Conduct negotiations with relevant statutory departments to obtain authorisation / permits to dispose of inert demolition waste onsite at decommissioning and closure (at dedicated areas as per the rehabilitation plan and provision in the liability estimate).	
			ii	A 2.5% allowance of the total demolition cost for infrastructure was made for the sorting and screening of waste	• Waste management measures for Hazardous Waste are implemented - disposed off at authorised disposal sites • Hazardous waste include medical waste, tar, hydrocarbons, ash from incinerators, spillages at sewage plant.				
			iii	No criteria for radioactive waste.	No allowance for radioactive material and equipment to be removed, transported and disposed of at a registered radioactive waste disposal facility	2	Quantities of possible radioactive material unknown	Annually update radioactive material register which includes all radioactive material and instrumentation containing such material.	
						3	Potential uncertainty on whether registered radioactive waste disposal facility will have sufficient capacity	Initiate and conduct early and proactive negotiations with relevant authorities and registered radioactive waste disposal facilities on available capacity for LoM closure.	
						4	• Current assumption is that all radioactive material and equipment will have been removed operationally. • Lack of clear agreements with responsible contractors could lead to radioactive material and equipment be left behind and become an issue at LoM closure.	Ensure third party agreements are in place for removal of radioactive material prior to LoM closure	
			iv	No criteria for removal of tyres.	No allowance was made for the removal of waste tyres as it is assumed that the contractor in charge of the mining operations will be responsible to remove the waste tyres.				
			LoM						
			i	Same as for premature closure					
	1.9 RIVER DIVERSION	*** Not applicable, therefore no criteria**							

JINDAL IRON ORE MINE - REHABILITATION AND CLOSURE CRITERIA 2. PHYSICAL CLOSURE: MINING ASPECTS							LINKED TO MASTER ACTION PLAN [TO BE REFINED AS MINE MOVES CLOSER TO CLOSURE]		
	CLOSURE COMPONENTS	ITEM DESCRIPTION	REHABILITATION & CLOSURE CRITERIA [CONTROLS / MITIGATION MEASURES]		ASSUMPTIONS / NOTES		KNOWLEDGE GAPS OR POSSIBLE OPPORTUNITIES		FURTHER ACTIONS / ADDITIONAL ASSESSMENTS (incl. specialist studies)
	2.1 OPEN PIT AREAS	Open Pit	**Premature**						
			i	No backfilling of the open pit	• The pit void will remain post-closure, as it is not economically feasible to backfill the pit. • Reshaping of the pit high walls will not address access and stability risks sufficiently to warrant cost.	1	Leaving the pit as is and only restricting access may not be accepted as a suitable post-mining land use.	Investigate alternative opportunities for post-mining land use for the open pit.
			ii	Enviroberm around the pit perimeter. • Enviroberm dimensions: ±3m high, 3m crest width, slopes 1(v):2(h) (27m^3/m). • Enviroberm to be constructed outside the break back distance.	• Enviroberm purpose: Visual barrier, stormwater control, access barrier for vehicles. • Assume a volume of 27m^3/m constructed of competent WR material. • Profile berm and cross walls to design requirements. • Material sourced from WRD at a 1km load and haul distance.	2	Uncertainty of the effect of the break back zone on the rehabilitation and Mining Right boundary.	Break back zone to be determined through further studies.
			iii	Stormwater control by constructing cross walls every 30 meters perpendicular to the enviroberm on the upstream side (2m^3/m). 117 cross walls in total.	• Stormwater control: Paddock the area to prevent accumulated runoff forming deep ponding. • Paddock walls should increase the evaporation area where all storm water cannot be diverted away from the bund wall (depending on the final storm water plan)	3	Storm water management plan required and should include risks and mitigation measures on surface water flow to the open pit.	Update storm water management plan to include post-closure scenario for the open pit.
			iv	Erect fencing outside the enviroberm, approximately 20m from the toe.	2,4m Clearview fencing placed on the outside of the Environberm, 20m from the toe.			
			v	Warning and notification signage	Signage to be placed in 50m intervals outside enviroberm			
			vi	Construct a 4m wide service road outside the security fence				
			LoM					
			i	Same as for premature closure.	• Operational cost after pit mining has seized: Implement closure requirements as per premature closure except: - Avoid double handling of waste rock as far as practically possible - It was assumed that no construction of the enviroberm will be possible during the operational phase of the open pit.	1	Uncertainty on the post-mining open pit access requirements (i.e. where access is needed for either post-closure monitoring or end land use).	Investigate post-mining open pit access requirements.
						2	Uncertainty on the potential integration of post-mining open pit accessibility and the waste rock dump (WRD).	Determine final alignment of the enviroberm and volumes to be load and hauled for enviroberm construction.
	2.2 WASTE ROCK DUMPS - Overburden and spoils	Waste rock dumps	**Premature**						
			i	No closure criteria for reshaping of side slopes of the facility.	No Reshaping required - Slope is designed and constructed at an ≤18° angle and will be shaped during the deposition phase.	1	Uncertainty if concurrent rehabilitation will be done.	Concurrent rehabilitation plan to be conducted and taken into consideration for future updates of the closure plan and associated liabilities.
			ii	Placement of 300mm thick topsoil over entire facility on top surface and side slopes.				
			iii	Ripping entire facility on contour to alleviate compaction	Rip site to a minimum depth of ≥500mm and tine spacing ≤1.1m. Ripping required to alleviate compaction, improve moisture penetration, incorporate topsoil into profile and improve surface roughness to combat erosion			
			iv	Stormwater control: • Contour paddock alignment: - WRD top surface: Contour paddocks along the dump crests (Top parapet) (12m3/m) - Contour paddock on top surface flat areas and sloped surface after reshaping shaped at ≤40m intervals (4m3/m)	<u>Stormwater control</u> • All paddocks are to be designed to contain runoff from a 1:200 yr. design flood. • The paddocks are not always level. Cross walls are required in the paddocks to shorten the paddock to prevent of water movement which could result in overtopping at the lowest point. • Long single slope			
			v	Seed with indigenous vegetation species.	<u>Vegetation</u> • Establish indigenous grass species on the entire facility. • Establish indigenous grass species and woody species on the benches.			
			LoM					
			i	Same as for premature closure.				
	2.3 COARSE RESIDUE DEPOSITS	Not Applicable						
	2.4 FINE RESIDUE DEPOSITS	Not Applicable						

JINDAL IRON ORE MINE - REHABILITATION AND CLOSURE CRITERIA 5. GENERAL CLOSURE ASPECTS							LINKED TO MASTER ACTION PLAN [TO BE REFINED AS MINE MOVES CLOSER TO CLOSURE]	
CLOSURE COMPONENTS		ITEM DESCRIPTION		REHABILITATION & CLOSURE CRITERIA [CONTROLS / MITIGATION MEASURES]	ASSUMPTIONS / NOTES		KNOWLEDGE GAPS OR POSSIBLE OPPORTUNITIES	FURTHER ACTIONS / ADDITIONAL ASSESSMENTS (incl. specialist studies)
	3.1 WATER RESOURCES	Refer to General Aspects for Monitoring Criteria		**Surface Water**				
				Premature				
			i	No Allowance made. Refer to General Aspects for post-closure monitoring	• Annual monitoring will continue operationaly and post closure • Exceedances in EC may be attributed to agricultural runoff • Current montoring points only focusses on the South Block and may not be sufficient to monitor all possible variables influencing water quality • Mining operations will currently focus on South Block East	1	Unknown how geology and agricultural practices are influencing surface water quality.	Conduct surface water specialist studies to determine relevant points to conduct surface water monitoring at closure.
				LoM				
				Same as Premature				
				Groundwater				
				Premature				
			i	No Allowance made. Refer to General Aspects for post-closure monitoring	• Annual monitoring will continue operationaly and post-closure • Mining operations will currently focus on South Block East • Groundwater studies only focused on areas set out for mining operations	1	No groundwater monitoring points sittuated outside mining operations boundary at South Block East.	Conduct groundwater specialist studies to determine the relevant groundwater monitorng points operationally and post closure. Include relevant Groundwater monitoring points in post closure monitoring program.
				LoM				
				Same as Premature				
	3.2 CLIMATE CHANGE			**Premature**				
				No Allowance Made	No existing closure criteria			
				LoM				
				Same as Premature				
	3.3 SENSITIVE HABITATS AND BIODIVERSITY	Refer to General Aspects for Monitoring Criteria		**Premature**				
			i	No Allowance made for senstive areas	No existing closure criteria	1	Unknown how many individual species of the vulnerable *Stangeria eriopus* and endangered *Moraea graminicola subsp. Graminicola* is currently on site.	Conduct specialist studies to determine the number of individual species occuring on site.
						2	Unknown if the Mine operations will fall within the area of occurance of the vulnerable Stangeria eriopus and endangered Moraea graminicola subsp. Graminicola.	Conduct Assesment to determine if the Mine operations will impact these species negatively. Involve the relevant authorities to determine if there are any permit requirements with regards to the management of these species. Design and Implement Action Plan to relocate these species where needed. Involve specialists to develop a monitoring program for operational phase and post-closure.
				LoM				
				Same as Premature				
	3.4 LAND USE AND LAND CAPABILITY			**Premature**				
			1	No Alowance made.	No existing closure criteria	1	No postclosure land use plan available	Conduct stakeholder engagements to determine the needs of the community Conduct Specialist studies and feasibility studies to determine possible suistainable post closure land use options
				LoM				
				Same as Premature				
	3.5 SOIL			**Premature**				
				No allowance made	No existing closure criteria			
				LoM				
				Same as Premature				
	3.6 OTHER: AIR QUALITY & TOPOGRAPHY	Refer to General Aspects for Monitoring Criteria		**Air Quality**				
				Premature				
				No allowance made. Refer to General Aspects Monitoring	• Assumed that monitoring will continue post closure	1	• Current Monitoring is based on sensitive receptors	
						2	Sensitive recoptors might change as communities are relocated	Conduct specialist studies to determine the relevant monitoring points once final sensitive receptors are established
				LoM				
				Same as Premature				
				Topography				
				Premature				
				No allowance made. Refer to General Aspects Monitoring	No existing closure criteria	1	• Final Topography will influence post closure land use	Conduct studies to include proposed final topography layout in post closure land use plan.
						2	• Final topography layout might not be acceptable to local community	Conduct specialist studies to determine the needs of the community.
				LoM				
				Same as Premature				

JINDAL IRON ORE MINE - REHABILITATION AND CLOSURE CRITERIA 5. GENERAL CLOSURE ASPECTS					LINKED TO MASTER ACTION PLAN [TO BE REFINED AS MINE MOVES CLOSER TO CLOSURE]	
CLOSURE COMPONENTS		ITEM DESCRIPTION	REHABILITATION & CLOSURE CRITERIA [CONTROLS / MITIGATION MEASURES]	ASSUMPTIONS / NOTES	KNOWLEDGE GAPS OR POSSIBLE OPPORTUNITIES	FURTHER ACTIONS / ADDITIONAL ASSESSMENTS (incl. specialist studies)
	4.1 EMPLOYEES		**Premature**			
			Not Yet Applicable			
			LoM			
			Same as Premature			
	4.2 INTERESTED AND AFFECTED PARTIES		**Premature**			
			Not Yet Applicable			
			LoM			
			Same as Premature			
	4.3 GOVERNMENT		**Premature**			
			Not Yet Applicable			
			LoM			
			Same as Premature			

JINDAL IRON ORE MINE - REHABILITATION AND CLOSURE CRITERIA 5. GENERAL CLOSURE ASPECTS						LINKED TO MASTER ACTION PLAN [TO BE REFINED AS MINE MOVES CLOSER TO CLOSURE]	
CLOSURE COMPONENTS	ITEM DESCRIPTION	REHABILITATION & CLOSURE CRITERIA [CONTROLS / MITIGATION MEASURES]		ASSUMPTIONS / NOTES		KNOWLEDGE GAPS OR POSSIBLE OPPORTUNITIES	FURTHER ACTIONS / ADDITIONAL ASSESSMENTS (incl. specialist studies)
5.1 GENERAL SURFACES	**Infrastructural footprint areas**	**Premature**					
		i	Shape level and fill voids leaving the areas free draining.	• It was assumed that 100% of all footprints will require reshaping. • Most areas are terraced in a cut to fill action. • Material will be loaded and hauled within a 3 km distance • Rehabilitation depends on the relevant end land use			
		ii	Fill voids and make the area free draining				
		iii	Allowance is made to place a 100mm thick layer of topsoil over the total disturbed areas /footprints.				
		iv	Rip 500 mm deep				
		v	Establish vegetation, including cultivation, amelioration and seeding actions.				
		LoM					
		i	Same as Premature				
	Plants: -Process Plant, -Filter Plant **Dams:** -Pollution Control Dams -Process Water Dam	**Premature**					
		i	Removal of HDPE Liner	• Assumed that Sediment from dam basin is 300mm thick. • Load and Haul of sediment (3km Distance)			
		ii	Excavate sediment from dam basins (assume 300mm thick layer)				
		iii	Load and haul sediment to TSF facility for disposal				
		iv	Breach dam wall and doze material into dam void				
		v	Shape and level disturbed area, leaving area free draining				
		vi	Establish vegetation				
		LoM					
		i	Same as Premature				
	General Surface Reclamation: - Plant Engineered Terrace - Mining Office Engineered Terrace - Contractors Engineered Terrace, - Stormwater Infrastructure	**Premature**					
		i	Shape and level disturbed area, leaving area free draining	• Assumed 100mm will be from local stockpiles • Assumed that stormwater dam will also act as a desilting dam			
		ii	Place 100mm of growth medium over disturbed area				
		iii	Load and haul for 3km				
		iv	Rip areas to alleviate compaction 500mm deep				
		v	Establish vegetation				
		LoM					
		i	Same as Premature				
5.2 POST CLOSURE MONITORING & MAINTENANCE	Post Closure Monitoring is further discussed in the Jindal Iron Ore Closure Plan FY 2023	**Premature**					
		Surface water monitoring					
		i	Allowance for monitoring of 5 surface water monitoring points on a quarterly basis	• Monitoring points should be part of the EMP and Rehabilitation plan for the decommissioning of any of the water use activities listed in the IWUL, that will be submitted to the Provincial Head before decommissioning (Covered under Water resources).	1	The post-closure Water Monitoring Programme should cover all potential changes and ongoing projects onsite.	Ensure that post-closure monitoring and maintenance relevant to surface water monitoring is updated as new information becomes available and mine operations expand.
		iii	Allowance made for a period of 10 years post closure				
		Groundwater monitoring					
		i	Allowance for monitoring of 8 groundwater monitoring points on a quarterly basis	• Some additional monitoring points / boreholes will be needed when looking at post-closure monitoring needs as current monitoring points are currently positioned in the area meant for operations.	1	Proposed Monitoring points are included in the closure plan but should be reviewed by specialist to determine feasibility.	Specialist studies are required to determine groundwater monitoring points relevant to post closure.
	Refer to Jindal Iron Ore Closure Plan FY2023	**Vegetation (rehabilitation) monitoring**					
		i	Monitoring to be done as follows: Year 1 - 4: Annual monitoring (year 1 would be baseline) Year 6 - 10: Monitoring to be done every 2 years (Year 6, 8 and 10)		1		Investigate conducting rehabilitation trials operationally on remaining facilities where possible to test success of proposed rehabilitation criteria.
		Biodiversity and ecological monitoring					
		i	Monitoring to be done as follows: Year 1 - 4: Annual monitoring (year 1 would be baseline) Year 5 - 10: Monitoring to be done every 2 years (Year 6, 8 and 10)	• Assume that operational biodiversity monitoring will continue post-closure	1	The location and number of endangered species *Stangeria eriopus (Cycad) and Moraea graminicola subsp. Graminicola* in relation to the mining operations is currently unknown	Determine the location of the endangered *Stangeria eriopus* (Cycad) and *Moraea graminicola subsp. Graminicola* and develop an action plan to relocate these species, should they occur in areas where mining operations will have an impact on them
		ii	Allowance made for a period of 10 years post closure				
		Air quality					
		i	Allowance was made for 7 post closure monitoring points.	• Current reports and results do not show any significant impact in terms of dust monitoring. • Other air emissions will not be applicable at closure. • Data should however continuously be analysed and confirmed that no allowance for air quality post-mining are aligned to the success of the concurrent rehabilitation measures.	1		
		Stability surveillance					
		i	Allowance for 10 year monitoring post closure.	• It is assumed that operational stability monitoring will be done on all rehabilitation facilities (i.e. WRD) as per the current available documentation. • This gives time to gain confidence in the rehabilitation success by closure.	1	Uncertainty on the stability, the effect of erosion on vegetation .	Conduct further testing of the effectiveness of the criteria on the WRD. Erosion modelling should be considered as a further study.
		Care and Maintenance					
		i	An allowance is made for site wide care and maintenance over a 10 year period	Area within the enviroberm, towards the pit is excluded.			
		LoM					
		i	Same as Premature				
5.3 SPECIALIST STUDIES	Refer to Jindal Iron Ore Closure Plan FY2023	**Premature**					
		i	No additional closure cost provision for specific specialist studies.	Refer to Action Plan for all closure components and what should be done according to the priority level.			
		LoM					
		i	Same as Premature				

Jindal Iron Ore Mine

Closure Risk Assessment

Introduction

The Closure Risk Assessment assists in identifying closure criteria and identifies those areas requiring further investigation where residual or latent risk is at an unacceptable level (broadly defined as where residual risk is rated as significant or high). It also assesses the effectiveness of the selected closure criteria and clearly demonstrates the business case for the inclusion of each closure activity (either based on reducing an unacceptable risk to an acceptable level or optimising an opportunity).

As per the Good Practice for Integrated Mine Closure by the International Council on Mining and Metals (ICMM), the risk assessment process will highlight gaps in the knowledge base and allow prioritisation of studies and activities to fill these gaps. If combined with a closure cost evaluation, the risk assessment can focus attention not only on understanding the main risks, but also on identifying and quantifying risks driving the overall closure cost.

The usefulness of the assessment will depend on the quality of the information used. The risk assessment process will highlight gaps in the knowledge base and allow prioritisation of studies and activities to fill these gaps. If combined with a closure cost evaluation, the risk assessment can focus attention not only on understanding the main risks, but also on identifying and quantifying risks driving the overall closure cost.

In the absence of country-specific mine closure regulations, mining companies should consider applying requirements for closure that are consistent with good practices in more mature regulatory environments. Companies should engage regulators early in the process to improve alignment on expectations, understand regulator objectives and communicate mine closure processes and objectives to reduce uncertainty.

This risk assessment should consider several different types of risk, associated with various categories of consequences. As per the ICMM, categories typically used in current practice may include the following (refer to the Closure Risk Matrix):

- ***Health and Safety*** *- impacts on the well-being of people (injuries, loss of life, as well as benefits such as better access to medical care, improved contractor safety practices, etc).*
- ***Legal and regulatory*** *- consequences associated with non-compliance with regulatory statutes, including warnings, fines, legal actions and imprisonment.*
- ***Environmental*** *- impacts on air, soil, water, and ecosystems, as well as opportunities such as habitat creation and biodiversity improvements.*
- ***Social*** *- impacts on the well-being of the communities within the zone of influence of the mine, including the workforce and cultural heritage, as well as the business risk associated with workforce uncertainties (i.e. safety and financial liability impacts).*
- ***Financial*** *- impacts on the mining company measured in financial terms, including opportunities for cost savings/offsets.*
- ***Reputational*** *- impacts on the reputation of the mining company, including the social licence to operate at the site in question and other sites, and opportunities to leave a positive legacy post-mining.*

When undertaking the risk assessment, cumulative impacts or risks should be considered, along with opportunities.

**Note: Climate change impacts should be considered during the closure risk assessment process.*

The following key actions must form part of developing risk-based closure criteria:

- *Identify the key risk that needs to be assessed (e.g. erosion from waste rock dump batters, visual impact of tailings dam, local economic impact of mine closure);*
- *Once the key risks have been identified, list the most appropriate closure criteria;*
- *Evaluate the acceptability of a reduced risk compared to the associated cost of the implementation of the closure criteria;*
- *Assess the effectiveness of the selected closure criteria to mitigate the risk;*
- *The business case for the inclusion of every closure criteria should be demonstrated. If you are not reducing an unacceptable risk to an acceptable level, the cost of implementing the closure criteria may not be justified.*

Once the Risk Assessment has been completed, outputs from the Closure Risk Assessment needs feed into the refinement of the remaining deliverables including the Success Criteria, Gap Analysis and Master Action Plan (see Action Plan per aspect as well as separate Master Action Plan).

As per the Good Practice for Integrated Mine Closure by the International Council on Mining and Metals (ICMM), a knowledge base gap analysis should be undertaken at regular intervals throughout the mine life (at least once per closure plan update) to identify further studies, research or trials that may be required, as informed by the risk assessment.

JINDAL IRON ORE MINE CLOSURE RISKS FOR EXPANSION PROJECTS			BEFORE / PRE-MITIGATION																										POST-MITIGATION RISKS																							
				SAFETY			OCCUPATIONAL HEALTH			ENVIRON-MENTAL			FINANCIAL			LEGAL & REGULATORY			SOCIAL / COMMUNITY			REPUTATION				SAFETY			OCCUPATIONAL HEALTH			ENVIRON-MENTAL			FINANCIAL			LEGAL & REGULATORY			SOCIAL / COMMUNITY			REPUTATION			
CLOSURE COMPONENTS	NOTES		ASSOCIATED ACTIVITY / RISKS	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	CONTROLS / MITIGATION MEASURES [REHABILITATION & CLOSURE CRITERIA]	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking
SURFACE WATER	Jindal Melmoth Iron Ore Project Surface Water Specialist Scoping Report 2022	i	Deterioration of water quality as a result of the following: •Discharge of excess water from the PCDs •Pollution of water resources through sediment transport and other chemical parameters from runoff from the WRD and TSF waste and plant areas. •Removal and handling of hazardous waste onsite This will have a **negative Environmental, Financial, Regulatory and Reputational** effect			#N/A			#N/A	4	5	24 (H)	4	5	24 (H)	4	5	24 (H)			#N/A	4	5	24 (H)	A Stormwater Management Plan will be developed for the site where 'dirty' and 'clean' contributing catchments will be discretised based on topography. Based on the discrete catchments, the required stormwater management drainage elements (including channels, pipes, berms, and pollution control dams) will be sized to ensure appropriate stormwater management according to the management principles outlined in the GN704 and Best Practice Guidelines (BPGs).			#N/A			#N/A	2	3	9 (M)	2	4	14 (S)	2	4	14 (S)			#N/A	2	3	9 (M)
	Jindal Melmoth Iron Ore Project Surface Water Specialist Scoping Report 2022	ii	Alteration of the Natural Flow through: A reduction in runoff to the surface water resources system due to the construction of stormwater management measures. Potential reduction of water resources as a result of water abstraction for mine use is anticipated. This impact will be informed by the water balance assessment. Potential need for discharge of excess water to the environment after processing to be informed by the water balance. The excess water discharge could result in alteration of flow regime of the streams. This will have a negative E**nvironmental, Financial, Regulatory and Reputational** effect			#N/A			#N/A	4	5	24 (H)	4	5	24 (H)	4	5	24 (H)			#N/A	4	5	24 (H)	•A dynamic water balance associated with the mine will be developed using Goldsim, based on a Process Flow Diagram (PFD) developed in conjunction with the Client. The PFD will indicate sources and movement of water within the mine and projected volumes. The salt balance calculations will be based on the volumes calculated within the water balance and salts obtained from water quality results. • A detailed impact and mitigation assessment will be undertaken for planning and construction, operational and decommissioning phases. The impact assessment will be informed by the mine plan layout, baseline hydrology, design specifications for the storm water management measures, flood line assessment and the water balance results, mainly to pinpoint the potential impacts of the proposed activities on surface water receptors. Various mitigation measures will be recommended.			#N/A			#N/A	3	4	18 (S)	3	4	18 (S)	3	4	18 (S)			#N/A	3	4	18 (S)
	Jindal Melmoth Iron Ore Project Surface Water Specialist Scoping Report 2022	iii	During heavy floods, depending on the location of the infrastructure in relation to watercourses, flooding may occur due to increased runoff from hard surfaces. Flooding may result in various environmental instabilities such as soil erosion, sedimentation and disturbance of the riverbanks. This will have a **negative Environmental** impact			#N/A			#N/A	4	5	24 (H)			#N/A			#N/A			#N/A			#N/A	• Flood lines will be undertaken around the proposed mine infrastructure. Flood lines inundation will be mapped against the proposed infrastructure in order to identify the possibility of encroachment. • A detailed impact and mitigation assessment will be undertaken for planning and construction, operational and decommissioning phases. The impact assessment will be informed by the mine plan layout, baseline hydrology, design specifications for the storm water management measures, flood line assessment and the water balance results, mainly to pinpoint the potential impacts of the proposed activities on surface water receptors. Various mitigation measures will be recommended.			#N/A			#N/A	3	4	18 (S)			#N/A			#N/A			#N/A			#N/A
	Jindal Melmoth Iron Ore Project Surface Water Specialist Scoping Report 2022	iv	Removal of waste storage facilities such as WRD, stockpiles and any hazardous storage containers, might result in water quality deterioration. This will have a **negative Environmental, Social and Reputational** impact			#N/A			#N/A	3	3	13 (S)			#N/A			#N/A	3	3	13 (S)	3	3	13 (S)	• Decommissioning of surface infrastructure must be undertaken during dry season to avoid washing away of hazardous material to nearest water bodies. • Progressive rehabilitation of disturbed land should be undertaken to minimize erosion of bare soils.			#N/A			#N/A	2	3	9 (M)			#N/A			#N/A	2	2	5 (L)	2	2	5 (L)
	Jindal Melmoth Iron Ore Project Surface Water Specialist Scoping Report 2022	v	There is uncertainty about what the water demand will be. There will be a need for makeup water to replace water losses from seepage, evaporation, and interstitial. It is anticipated that the makeup water would be acquired from the KZN bulk water supply authority. This could have a negative **Environmental, Financial and Legal impact**			#N/A			#N/A	3	4	18 (S)	4	5	24 (H)	4	5	24 (H)			#N/A			#N/A	• A water supply analysis will be undertaken as part of this Project which will determine water demand and where water would come from. Water requirements are likely to reduce as the pit deepens due to the reuse of water that collects within the pit. • In addition, water management infrastructure will be required including dirty water dams, pollution control dams and storm water management. The location and design of these will be identified as the Project progresses.			#N/A			#N/A	2	4	14 (S)	2	3	9 (M)	2	2	5 (L)			#N/A			#N/A
	Jindal Iron Ore Mine Closure Plan 2023	vi	Surface water monitoring points are repeating and not positioned in a manner to effectively monitor surface water quality operationally and post closure. This could result in the ineffective monitoring of impacts on surface water, allowing for contaminated surface water to reach communities utilizing this water source. This will have a **negative, Health Environmental Financial, Legal , Social and Reputational impact**			#N/A	4	5	24 (H)	4	5	24 (H)	4	5	24 (H)	4	5	24 (H)	4	4	21 (H)	4	4	21 (H)	It is recommended that specialist studies be conducted to eliminate repetition of surface water monitoring points at the same localities. Specialist studies need to confirm the surface water points relevant to the monitoring of surface water quality and the variables impacting on the surface water quality. Monitoring points need to be adapted for operational monitoring as well as be included in the post closure monitoring program. Further more, should those monitoring points reflect a undesirable outcome, mitigation measures should be implemented as recommended by specialists.			#N/A	3	3	13 (S)	3	4	18 (S)	3	3	13 (S)	2	3	9 (M)	2	3	9 (M)	2	3	9 (M)
GROUNDWATER	Jindal Melmoth Iron Ore Project Specialist Scoping Report - Hydrogeology 2021	i	There is the potential for contamination from the mine WRD and proposed tailings storage facility if they are not sufficiently lined. Potential health impacts could occur where these water resources are used by third party users for extended periods of time. Impacts could extend beyond the site boundary to these water users and could extend beyond closure. This will have a **negative**, **Health Environmental Financial, Legal and Reputational impact**			#N/A	3	4	18 (S)	4	5	24 (H)	4	5	24 (H)	4	4	21 (H)			#N/A	4	4	21 (H)	A waste classification and Acid Base Accounting (ABA) analysis of proposed waste streams were reported in the Melmoth Iron Ore Project: Geochemical Characterisation report (Golder 2015), and thereafter, a kinetic humidity cell test was undertaken on a composite waste rock sample to gain insight into the acid generation and leachate potential of the waste materials over a 20-week period (Golder 2016). The additional geochemical work required to address this issue			#N/A	2	3	9 (M)	3	4	18 (S)	3	3	13 (S)	2	2	5 (L)			#N/A	2	3	9 (M)
	Jindal Melmoth Iron Ore Project Specialist Scoping Report - Hydrogeology 2021	ii	The pumping of water that seeps into the active mining area will cause dewatering of the surrounding aquifers and an associated decrease in groundwater level within the zone of influence of the dewatering cone. This will have a **negative, Health Environmental Financial, Legal and Reputational impact**			#N/A	3	4	18 (S)	4	5	24 (H)	4	5	24 (H)	4	4	21 (H)			#N/A	4	4	21 (H)	A hydrocensus investigation to identify private groundwater users and establish baseline groundwater level and quality will be undertaken during the EIA phase of the project. A detailed hydrogeological investigation is recommended to be conducted during the EIA phase of the project to determine groundwater levels and quality on site and to calculate aquifer hydraulic properties for use in a numerical groundwater model. The calibrated numerical groundwater model will be constructed and used to predict the influence of the mine dewatering on the surrounding aquifer water levels during different stages of the Life-of-Mine (LoM).			#N/A	3	3	13 (S)	3	4	18 (S)	3	3	13 (S)	2	2	5 (L)			#N/A	2	2	5 (L)
	Jindal Iron Ore Mine Closure Plan 2023		Current groundwater monitoring points are located within the areas intended for mining operations. There are no relevant groundwater monitoring points outside the mine operations' boundary. This will result in the ineffective monitoring of groundwater resources resulting in the possibility of contaminated groundwater reaching the communities utilizing this water source. This will have a **negative, Health Financial, Legal, Social and Reputational impact**			#N/A	4	5	24 (H)	5	5	25 (H)	4	5	24 (H)	4	5	24 (H)	4	4	21 (H)	4	5	24 (H)	It is recommended that specialist studies be conducted to allocate groundwater monitoring points relevant to groundwater flow direction, to monitor possible negative impacts from mining activities effectively. Monitoring points need to be adapted for operational monitoring as well as be included in the post closure monitoring program. Further more, should those monitoring points reflect a undesirable outcome, mitigation measures should be implemented as recommended by specialists.			#N/A	3	4	18 (S)	3	4	18 (S)	3	3	13 (S)	3	2	8 (M)	3	3	13 (S)	3	3	13 (S)

JINDAL IRON ORE MINE CLOSURE RISKS FOR EXPANSION PROJECTS				BEFORE / PRE-MITIGATION																						CONTROLS / MITIGATION MEASURES [REHABILITATION & CLOSURE CRITERIA]	POST-MITIGATION RISKS																						
					SAFETY			OCCUPATIONAL HEALTH			ENVIRON-MENTAL			FINANCIAL			LEGAL & REGULATORY			SOCIAL / COMMUNITY			REPUTATION				SAFETY			OCCUPATIONAL HEALTH			ENVIRON-MENTAL			FINANCIAL			LEGAL & REGULATORY			SOCIAL / COMMUNITY			REPUTATION		
CLOSURE COMPONENTS	NOTES		ASSOCIATED ACTIVITY / RISKS	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking		Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking
OPEN PIT AREAS	Closure Plan FY 2023	i	areas intended for mining operations. There are no relevant	4	4	21 (H)	4	4	21 (H)			#N/A	3	3	13 (S)	3	3	13 (S)	4	4	21 (H)	4	3	17 (S)	Install safety measures to ensure that no unauthorised access at the open pit can be obtained	1	2	3 (L)	1	2	3 (L)			#N/A	1	1	1 (L)	1	1	1 (L)	1	2	3 (L)	1	1	1 (L)
	Physical slope stability & Post-mining Land use (Professional opinion and past experiences)	ii	groundwater monitoring points outside the mine operations'	4	4	21 (H)	4	4	21 (H)	4	4	21 (H)	4	3	17 (S)	3	3	13 (S)	4	4	21 (H)	4	4	21 (H)	Risks will be assessed as progress is made and discussed with DMR, mitigation measures will be discussed and implemented as project evolves. Criteria will be developed once design is final.	1	1	1 (L)	1	2	3 (L)	1	2	3 (L)	1	2	3 (L)	1	1	1 (L)	1	2	3 (L)	1	2	3 (L)
	Post-mining Land use (Professional opinion and past experiences)	iii	boundary. This will result in the ineffective monitoring of			#N/A			#N/A	4	4	21 (H)	4	2	12 (M)	4	3	17 (S)	4	4	21 (H)	4	4	21 (H)	Determine a sustainable Land use through feasibility studies and implement monitoring, mitigating impacts as they arise			#N/A			#N/A	2	2	5 (L)	2	1	2 (L)	2	1	2 (L)	1	2	3 (L)	1	2	3 (L)
		iv	Open pit will not be backfilled This will have **a negative, Safety Environmental Financial, Legal, Social and Reputational impact**	4	4	21 (H)			#N/A	4	5	24 (H)	3	2	8 (M)	4	4	21 (H)	4	3	17 (S)	3	3	13 (S)	Open Pit will remain open and no backfilling will take place. Current closure criteria should be refined through updates of the closure planning process.	4	4	21 (H)			#N/A	4	5	24 (H)	3	2	8 (M)	4	4	21 (H)	4	3	17 (S)	4	3	17 (S)
WASTE ROCK DUMPS	Physical slope stability (Professional opinion and past experiences)	i	contaminated groundwater reaching the communities utilizing	4	3	17 (S)	4	2	12 (M)	4	3	17 (S)	4	2	12 (M)	3	3	13 (S)	4	3	17 (S)	5	3	20 (S)	• Assumed remaining waste rock dump has been reshaped down to 18 degrees as material is utilised for backfilling of the pit. • Place 400mm thick layer of topsoil over profiled waste rock dump. • Rip on contour 500mm deep. • Establish vegetation which includes soil amelioration and cultivation actions.	1	2	3 (L)	1	1	1 (L)	2	2	5 (L)	3	1	4 (L)	2	2	5 (L)	2	2	5 (L)	2	2	5 (L)
	Uncontrolled access (Professional opinion and past experiences)	ii	this water source.	4	4	21 (H)	4	4	21 (H)			#N/A	3	3	13 (S)	3	3	13 (S)	4	3	17 (S)	4	3	17 (S)	• Controlled access to areas of concern with security measures in place, such as security fencing . • Rehabilitation of slopes as soon as possible with monitoring of rehabilitation to ensure that early mitigation takes place should a problem occur	2	3	9 (M)	2	3	9 (M)			#N/A	2	2	5 (L)	1	2	3 (L)	2	2	5 (L)	2	2	5 (L)
	Post-mining Land use (Professional opinion and past experiences)	iii	This will have a negative, Health Financial, Legal, Social			#N/A			#N/A	4	3	17 (S)	3	2	8 (M)	3	2	8 (M)	4	3	17 (S)	4	3	17 (S)	• Implement rehabilitation best practice guidelines • Vegetate using species adapted to the site. • Stabilize slopes using expert opinion and guidance,			#N/A			#N/A	2	2	5 (L)	2	1	2 (L)	2	1	2 (L)	2	2	5 (L)	2	2	5 (L)
	Surface and groundwater Expert Opinion	iv	and Reputational impact			#N/A	4	3	17 (S)	5	3	20 (S)	4	2	12 (M)	4	3	17 (S)	4	4	21 (H)	4	4	21 (H)	• Implement storm water management designed to steer any surface runoff from the WRD away from clean water systems			#N/A	2	2	5 (L)	2	2	5 (L)	2	1	2 (L)	2	2	5 (L)	2	2	5 (L)	2	2	5 (L)
	Aesthetic value of the landscape (Professional opinion and past experiences)	v	Visual impact / aesthetically not aligned to the adjacent landscape character and land use. This will have a negative, **Financial, Legal, Social and Reputational** impact			#N/A			#N/A			#N/A	3	2	8 (M)			#N/A	4	4	21 (H)	4	3	17 (S)	• Conduct visual impact assessment studies as mine reached LOM, • Communicate with I&AP to assess what their needs are and their concerns			#N/A			#N/A			#N/A	1	1	1 (L)			#N/A	2	3	9 (M)	2	2	5 (L)
	WRD Comparison Aug- Nov 2022 PDF	vi	The current layout of the WRD is close to the proposed South Block mining right boundary. Once rehabilitation commences the levelling of the WRD top surface will encroach over the boundary. This will have a **negative Environmental, Financial, Legal and Reputational** impact			#N/A			#N/A	5	3	20 (S)	5	5	25 (H)	5	5	25 (H)			#N/A	5	5	25 (H)	Reconsider the design of the WRD. Apply to extend the mining right boundary if the design of the WRD cannot be altered.			#N/A			#N/A	2	3	9 (M)	2	3	9 (M)	2	2	5 (L)			#N/A	2	2	5 (L)
	Air Quality (Professional opinion and past experiences)	vii	Dust fallout (quantity) from rehabilitated areas resulting in nuisance and/or health effects to surrounding landowners/communities. This will have a negative, **Safety Health, Environmental Financial, Legal, Social and Reputational** impact	4	3	17 (S)	4	4	21 (H)	3	2	8 (M)	3	2	8 (M)	4	2	12 (M)	4	3	17 (S)	4	3	17 (S)	• Conduct a dust monitoring/ air quality monitoring programme and implement mitigation measures should a negative impact occur	2	2	5 (L)	2	2	5 (L)	2	1	2 (L)	2	1	2 (L)	2	1	2 (L)	2	2	5 (L)	2	2	5 (L)
TOPSOIL DUMPS	Soil as a resource to re-establishing post-closure land capability. (Professional opinion and past experiences)	i	Topsoil loss due to mismanagement This will have a negative, **Environmental Financial, Legal, and Reputational** impact			#N/A			#N/A	4	3	17 (S)	4	2	12 (M)	3	2	8 (M)			#N/A	3	3	13 (S)	• Implementation of soil management procedures, control guideline and rehabilitation procedures throughout operational phase.			#N/A			#N/A	2	2	5 (L)	1	1	1 (L)	1	1	1 (L)			#N/A	2	2	5 (L)
		ii	Insufficient rehabilitation of topsoil dumps resulting in potential ponding and negatively affecting next land use This will have a negative, **Environmental Financial, Legal, Social and Reputational** impact			#N/A			#N/A	4	3	17 (S)	3	2	8 (M)	3	2	8 (M)	4	3	17 (S)	4	3	17 (S)	• Assumed footprint will be left shaped and levelled as material is removed. • Rip footprint area 500mm deep to alleviate any compaction. • Establish vegetation which includes soil amelioration and cultivation actions			#N/A			#N/A	2	2	5 (L)	2	1	2 (L)	2	1	2 (L)	2	2	5 (L)	1	2	3 (L)
RUN OF MINE (ROM) AND PRODUCT FOOTPRINT	Assumption that RoM stockpiles will be reprocessed at closure, only footprint rehabilitation to remain.(Professional opinion and past experiences)	i	Deterioration of vegetation on rehabilitated areas due to incorrect plant species selection. This will have a negative, **Environmental Financial, Legal, Social and Reputational** impact			#N/A			#N/A	3	2	8 (M)	3	2	8 (M)	3	3	13 (S)	3	2	8 (M)	3	2	8 (M)	• Ameliorate growth medium based on soil analysis. • Indigenous species adapted to the site to be used (harvesting to be done in the surrounding area of the mine or equivalent species purchased/sourced).			#N/A			#N/A	2	1	2 (L)	2	1	2 (L)	2	3	9 (M)	2	1	2 (L)	2	1	2 (L)
TOP-UP STOCKPILE AREAS (AT WEIGHBRIDGE)	Assumption that RoM stockpiles will be reprocessed at closure, only footprint rehabilitation to remain. (Professional opinion and past experiences)	i	Deterioration of vegetation on rehabilitated areas due to incorrect plant species selection. This will have a negative, **Environmental Financial, Legal, Social and Reputational** impact			#N/A			#N/A	3	1	4 (L)	3	1	4 (L)	3	3	13 (S)	3	2	8 (M)	3	2	8 (M)	• Ameliorate growth medium based on soil analysis. • Indigenous species adapted to the site to be used (harvesting to be done in the surrounding area of the mine or equivalent species purchased/sourced).			#N/A			#N/A	2	1	2 (L)	2	1	2 (L)	2	3	9 (M)	2	1	2 (L)	2	1	2 (L)
LINEAR INFRASTRUCTURE (PIPELINE)	Underground pipeline. (Professional opinion and past experiences)	i	Possibility of pipeline becoming derelict and not having a post closure use - falling in a state of disrepair and having safety implications. This will have a negative, **Safety, Financial, Legal, Social and Reputational** impact	3	2	8 (M)			#N/A			#N/A	3	1	4 (L)	3	2	8 (M)	3	2	8 (M)	3	1	4 (L)	• Remove exposed pipeline valves and connection points. • Remaining infrastructure (pipeline) underground will be left post-closure.	2	2	5 (L)			#N/A			#N/A	2	1	2 (L)	2	2	5 (L)	2	2	5 (L)	2	1	2 (L)
BIODIVERSITY AND SENSITIVE AREAS	Jindal Mine Terrestrial Biodiversity Assessment Draft 2022	i	Scoping report did not include detailed site-based assessments of cryptic species, this could have permit implications, should relocation of species be required, or this could influence the general design of the Mine Site Layout. This could have a **negative Environmental, Financial, Legal and Reputational Impact**			#N/A			#N/A	4	5	24 (H)	4	4	21 (H)	4	5	24 (H)			#N/A	4	5	24 (H)	Construct detailed site-based investigations to determine the occurrence of cryptic biodiversity species, and design monitoring programs to assess the impact of mining activities on these species where relocation is not feasible			#N/A			#N/A	3	4	18 (S)	3	3	13 (S)	3	2	8 (M)			#N/A	3	4	18 (S)
	Jindal Mine Terrestrial Biodiversity Assessment Draft 2022	ii	The project area falls within Ngoni Veld which is listed as a vulnerable ecosystem, This will have authorisation implications in terms of NEMA and EIA If not complied to this could have **negative Environmental, Financial, Legal and Reputational impacts**			#N/A			#N/A	4	5	24 (H)	4	4	21 (H)	5	5	25 (H)			#N/A	4	5	24 (H)	Ensure that all related aspects to the Ngoni Veld is investigated and reported to the authorities and ensure that all regulations are adhered to according to NEMA and the EIA			#N/A			#N/A	3	4	18 (S)	2	2	5 (L)	2	3	9 (M)			#N/A	3	2	8 (M)

JINDAL IRON ORE MINE CLOSURE RISKS FOR EXPANSION PROJECTS		BEFORE / PRE-MITIGATION																												CONTROLS / MITIGATION MEASURES [REHABILITATION & CLOSURE CRITERIA]	POST-MITIGATION RISKS																											
				SAFETY			OCCUPATIONAL HEALTH			ENVIRON-MENTAL			FINANCIAL			LEGAL & REGULATORY			SOCIAL / COMMUNITY			REPUTATION				SAFETY			OCCUPATIONAL HEALTH			ENVIRON-MENTAL			FINANCIAL			LEGAL & REGULATORY			SOCIAL / COMMUNITY			REPUTATION			
CLOSURE COMPONENTS	NOTES	ASSOCIATED ACTIVITY / RISKS		Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking		Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking	Probability	Consequence	Ranking				
MONITORING AND MAINTENANCE	(Professional opinion and past experiences)	i	Insufficient monitoring and maintenance techniques and therefore not achieving planned final post-closure use. This will have a negative, **Financial, Legal, Social and Reputational** impact			#N/A			#N/A			#N/A	3	2	8 (M)	3	3	13 (S)	3	2	8 (M)	3	2	8 (M)	• Refining of monitoring and maintenance techniques during the operational phase. • Post-closure period of 5 years to conduct care and maintenance of rehabilitated areas			#N/A			#N/A			#N/A	2	1	2 (L)	2	3	9 (M)	2	2	5 (L)	2	2	5 (L)			
SOCIAL	Jindal Iron Ore Social and Labour Plan 2019	i	Negative Impact on culture and heritage due to exhumation and relocation of burial sites This will have a negative, **Social and Reputational** impact			#N/A			#N/A			#N/A			#N/A			#N/A	4	5	24 (H)	5	5	25 (H)	Manage the socio-economic impacts of the project, while focusing on community development and ensuring that the communities around the mine benefit from its operations should enhance the positive dimension of the impacts on community livelihoods and lifestyles by creating avenues for social mobility and upliftment			#N/A			#N/A			#N/A			#N/A			#N/A	2	3	9 (M)	2	2	5 (L)			
	Jindal Iron Ore Social and Labour Plan 2020	ii	Negative Impact on community due to population displacement and resettlement This will have a negative, **Social and Reputational** impact			#N/A			#N/A			#N/A			#N/A			#N/A	5	5	25 (H)	5	5	25 (H)				#N/A			#N/A			#N/A			#N/A			#N/A	2	3	9 (M)	2	3	9 (M)			
	Jindal Iron Ore Social and Labour Plan 2021	iii	Negative impact on communities due to disturbances from mining activities, including but not limited to: Noise disturbance, Vibrations, Visual impacts, Environmental impacts, loss of land. This will have a negative, **Social and Reputational** impact			#N/A			#N/A			#N/A			#N/A			#N/A	4	4	21 (H)	4	5	24 (H)	Involve specialists to consider how these infrastructure related impacts can be mitigated. Such measures may include vegetative barriers to limit noise and visual intrusion, regular monitoring of houses to check for cracks, geo-technical engineering solutions to limit dust and water quality impacts, investment in road infrastructure to limit accidents and traffic congestion, and self-generation of power form low carbon fuel source to reduce the burden on the electricity system.			#N/A			#N/A			#N/A			#N/A			#N/A	2	3	9 (M)	2	2	5 (L)			
	Jindal Iron Ore Social and Labour Plan 2022	iv	Negative Impact on communities due to in-migration of jobseekers. This will have a negative, **Social and Reputational** impact			#N/A			#N/A			#N/A			#N/A			#N/A	5	5	25 (H)	4	4	21 (H)	Ensuring that any job opportunities advertised are first filled by the local community could help to alleviate the impact of in-migration, while providing decent family housing for workers could reduce tensions placed on the household unit. Due to increased absenteeism from the home for those working on the mine			#N/A			#N/A			#N/A			#N/A			#N/A	1	2	3 (L)	1	2	3 (L)			

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

JINDAL MELMOTH IRON ORE FINANCIAL PROVISION SUMMARY											
ESTIMATED CLOSURE COST ESTIMATES (INCLUDES P&G'S, CONTINGENCIES AND VAT AND EXCLUDES ESCALATION)		Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast
CLOSURE COMPONENTS		Y2023	Y2024	Y2025	Y2026	Y2027	Y2028	Y2029	Y2030	Y2031	Y2032
1	**INFRASTRUCTURAL ASPECTS**	**R 2 486 584,82**	**R 109 709 668,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**
1,1	PLANT AND RELATED STRUCTURES	R -	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15
1,2	SHAFTS, ADITS AND DECLINES	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
1,3	SUPPORTING INFRASTRUCTURE	R 989 967,00	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39
1,4	UNDERGROUND INFRASTRUCTURE	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
1,5	SOCIAL INFRASTRUCTURE	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
1,6	OFF-SITE INFRASTRUCTURE	R -	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95
1,7	LINEAR ITEMS	R 1 298 834,19	R 7 187 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59
1,8	WASTE DISPOSAL	R 197 783,63	R 9 340 081,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99
1,9	RIVER DIVERSION	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
2	**MINING ASPECTS**	**R -**	**R -**	**R 10 866 575,65**	**R 25 859 432,85**	**R 26 052 711,28**	**R 35 320 099,70**	**R 36 776 031,13**	**R 42 415 930,55**	**R 45 498 997,98**	**R 49 561 051,40**
2,1	OPENCAST / PIT AREAS	R -	R -	R 8 156 350,22	R 20 438 982,00	R 17 922 035,00	R 24 479 198,00	R 23 224 904,00	R 26 154 578,00	R 26 527 420,00	R 27 879 248,00
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS	R -	R -	R 2 710 225,43	R 5 420 450,85	R 8 130 676,28	R 10 840 901,70	R 13 551 127,13	R 16 261 352,55	R 18 971 577,98	R 21 681 803,40
2,3	COARSE RESIDUE DEPOSITS - PROCESSING WASTE	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
2,4	FINE RESIDUE DEPOSITS - PROCESSING WASTE	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3	**BIO-PHYSICAL CLOSURE ASPECTS**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**
3,1	WATER RESOURCES	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,2	CLIMATE CHANGE	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,3	SENSITIVE HABITATS & BIODIVERSITY	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,4	LAND USE & LAND CAPABILITY	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,5	SOIL	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,6	OTHER: AIR QUALITY & TOPOGRAPHY	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
4	**SOCIAL CLOSURE ASPECTS**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**
4,1	EMPLOYEES	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
4,2	INTERESTED AND AFFECTED PARTIES	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
4,3	GOVERNMENT	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
5	**GENERAL ASPECTS**	**R 16 266 046,25**	**R 16 266 046,25**	**R 16 468 622,00**	**R 16 671 197,75**	**R 16 873 773,50**	**R 17 076 349,25**	**R 17 278 925,00**	**R 17 481 500,75**	**R 17 684 076,50**	**R 17 886 652,25**
5,1	GENERAL SURFACES	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25
5,2	POST CLOSURE MONITORING AND MAINTENANCE	R 7 093 415,00	R 7 093 415,00	R 7 295 990,75	R 7 498 566,50	R 7 701 142,25	R 7 903 718,00	R 8 106 293,75	R 8 308 869,50	R 8 511 445,25	R 8 714 021,00
5,3	SPECIALIST STUDIES	R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
	SUB-TOTAL 1	**R 18 752 631,07**	**R 125 975 714,31**	**R 141 563 065,71**	**R 156 758 498,66**	**R 157 154 352,84**	**R 166 624 317,01**	**R 168 282 824,19**	**R 174 125 299,36**	**R 177 410 942,54**	**R 181 675 571,71**
	Weighted Preliminary and General 6%	R 699 552,96	R 7 132 937,96	R 8 056 024,50	R 8 955 595,93	R 8 967 192,64	R 9 523 235,94	R 9 610 591,83	R 9 948 985,79	R 10 133 969,84	R 10 377 693,04
	Weighted Contingencies 10%	R 1 875 263,11	R 12 597 571,43	R 14 156 306,57	R 15 675 849,87	R 15 715 435,28	R 16 662 431,70	R 16 828 282,42	R 17 412 529,94	R 17 741 094,25	R 18 167 557,17
	SUB-TOTAL 2 FOR P&G's AND CONTINGENCIES	**R 2 574 816,07**	**R 19 730 509,39**	**R 22 212 331,07**	**R 24 631 445,80**	**R 24 682 627,92**	**R 26 185 667,64**	**R 26 438 874,25**	**R 27 361 515,73**	**R 27 875 064,09**	**R 28 545 250,21**
	SUB-TOTAL 3	**R 21 327 447,15**	**R 145 706 223,70**	**R 163 775 396,78**	**R 181 389 944,46**	**R 181 836 980,76**	**R 192 809 984,66**	**R 194 721 698,43**	**R 201 486 815,09**	**R 205 286 006,63**	**R 210 220 821,93**
	VAT 15%	R 3 199 117,07	R 21 855 933,56	R 24 566 309,52	R 27 208 491,67	R 27 275 547,11	R 28 921 497,70	R 29 208 254,77	R 30 223 022,26	R 30 792 900,99	R 31 533 123,29
	GRAND-TOTAL	**R 24 526 564,22**	**R 167 562 157,26**	**R 188 341 706,29**	**R 208 598 436,13**	**R 209 112 527,87**	**R 221 731 482,36**	**R 223 929 953,20**	**R 231 709 837,36**	**R 236 078 907,63**	**R 241 753 945,22**

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JINDAL MELMOTH IRON ORE P&G's FOR FINANCIAL PROVISION							
ESTIMATED CLOSURE COST ESTIMATES (EXCLUDES CONTINGENCIES, ESCALATION AND INCLUDES P&G's)		CLOSURE PLAN EXL P&G's	P&G's ALLOWANCE	P&G's PER CATEGORY		CLOSURE PLAN INCL P&G's	
CLOSURE COMPONENT							
1	**INFRASTRUCTURAL ASPECTS**	**R 2 486 584,82**	**6%**	**R 149 195,09**		**R 2 635 779,91**	
1,1	PLANT AND RELATED STRUCTURES	R -	6%	R -		R -	
1,2	SHAFTS, ADITS AND DECLINES	R -	6%	R -		R -	
1,3	SUPPORTING INFRASTRUCTURE	R 989 967,00	6%	R 59 398,02		R 1 049 365,02	
1,4	UNDERGROUND INFRASTRUCTURE	R -	0%	R -		R -	
1,5	SOCIAL INFRASTRUCTURE	R -	0%	R -		R -	
1,6	OFF-SITE INFRASTRUCTURE	R -	0%	R -		R -	
1,7	LINEAR ITEMS	R 1 298 834,19	6%	R 77 930,05		R 1 376 764,24	
1,8	WASTE DISPOSAL	R 197 783,63	6%	R 11 867,02		R 209 650,65	
1,9	RIVER DIVERSION	R -	0%	R -		R -	
2	**MINING ASPECTS**	**R -**	**6%**	**R -**		**R -**	
2,1	OPENCAST / PIT AREAS	R -	6%	R -		R -	
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS	R -	6%	R -		R -	
2,3	COARSE RESIDUE DEPOSITS - PROCESSING WASTE	R -	6%	R -		R -	
2,4	FINE RESIDUE DEPOSITS - PROCESSING WASTE	R -	6%	R -		R -	
3	**BIO-PHYSICAL CLOSURE ASPECTS**	**R -**	**6%**	**R -**		**R -**	
3,1	WATER RESOURCES	R -	0%	R -		R -	
3,2	CLIMATE CHANGE	R -	0%	R -		R -	
3,3	SENSITIVE HABITATS & BIODIVERSITY	R -	0%	R -		R -	
3,4	LAND USE & LAND CAPABILITY	R -	6%	R -		R -	
3,5	SOIL	R -	0%	R -		R -	
3,6	OTHER: AIR QUALITY & TOPOGRAPHY	R -	0%	R -		R -	
4	**SOCIAL CLOSURE ASPECTS**	**R -**	**0%**	**R -**		**R -**	
4,1	EMPLOYEES	R -	0%	R -		R -	
4,2	INTERESTED AND AFFECTED PARTIES	R -	0%	R -		R -	
4,3	GOVERNMENT	R -	0%	R -		R -	
5	**GENERAL ASPECTS**	**R 9 172 631,25**	**6%**	**R 550 357,88**		**R 9 722 989,13**	
5,1	GENERAL SURFACES	R 9 172 631,25	6%	R 550 357,88		R 9 722 989,13	
5,2	POST CLOSURE MONITORING AND MAINTENANCE	R 7 093 415,00	0%	R -		R 7 093 415,00	
5,3	SPECIALIST STUDIES	R -	0%	R -		R -	
		Total excl P&G's	**Weighted P&G's**	**Total P&G's**		**Grand Total for Closure Plan incl P&G's**	
		R 11 659 216,07	**6%**	**R 699 552,96**		**R 12 358 769,04**	

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JINDAL MELMOTH IRON ORE CONTINGENCIES FOR FINANCIAL PROVISION					
ESTIMATED CLOSURE COST ESTIMATES (EXCLUDES CONTINGENCIES, ESCALATION AND INCLUDES P&G's)		CLOSURE PLAN EXL CONTINGENCIES	CONT. ALLOWANCE	CONTINGENCIES PER CATEGORY	CLOSURE PLAN INCL CONTINGENCIES
CLOSURE COMPONENT					
1	**INFRASTRUCTURAL ASPECTS**	**R 2 486 584,82**	**10%**	**R 248 658,48**	**R 2 735 243,31**
1,1	PLANT AND RELATED STRUCTURES	R -	10%	R -	R -
1,2	SHAFTS, ADITS AND DECLINES	R -	10%	R -	R -
1,3	SUPPORTING INFRASTRUCTURE	R 989 967,00	10%	R 98 996,70	R 1 088 963,70
1,4	UNDERGROUND INFRASTRUCTURE	R -	0%	R -	R -
1,5	SOCIAL INFRASTRUCTURE	R -	0%	R -	R -
1,6	OFF-SITE INFRASTRUCTURE	R -	0%	R -	R -
1,7	LINEAR ITEMS	R 1 298 834,19	10%	R 129 883,42	R 1 428 717,61
1,8	WASTE DISPOSAL	R 197 783,63	10%	R 19 778,36	R 217 562,00
1,9	RIVER DIVERSION	R -	0%	R -	R -
2	**MINING ASPECTS**	**R -**	**10%**	**R -**	**R -**
2,1	OPENCAST / PIT AREAS	R -	10%	R -	R -
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS	R -	10%	R -	R -
2,3	COARSE RESIDUE DEPOSITS - PROCESSING WASTE	R -	10%	R -	R -
2,4	FINE RESIDUE DEPOSITS - PROCESSING WASTE	R -	10%	R -	R -
3	**BIO-PHYSICAL CLOSURE ASPECTS**	**R -**	**10%**	**R -**	**R -**
3,1	WATER RESOURCES	R -	10%	R -	R -
3,2	CLIMATE CHANGE	R -	0%	R -	R -
3,3	SENSITIVE HABITATS & BIODIVERSITY	R -	0%	R -	R -
3,4	LAND USE & LAND CAPABILITY	R -	10%	R -	R -
3,5	SOIL	R -	0%	R -	R -
3,6	OTHER: AIR QUALITY & TOPOGRAPHY	R -	0%	R -	R -
4	**SOCIAL CLOSURE ASPECTS**	**R -**	**0%**	**R -**	**R -**
4,1	EMPLOYEES	R -	0%	R -	R -
4,2	INTERESTED AND AFFECTED PARTIES	R -	0%	R -	R -
4,3	GOVERNMENT	R -	0%	R -	R -
5	**GENERAL ASPECTS**	**R 16 266 046,25**	**10%**	**R 1 626 604,63**	**R 17 892 650,88**
5,1	GENERAL SURFACES	R 9 172 631,25	10%	R 917 263,13	R 10 089 894,38
5,2	POST CLOSURE MONITORING AND MAINTENANCE	R 7 093 415,00	10%	R 709 341,50	R 7 802 756,50
5,3	SPECIALIST STUDIES	R -	0%	R -	R -
		Total excl Contingencies	**Weighted Contingencies**	**Total Contingencies**	**Grand Total for Closure Plan incl Contingencies**
		R 18 752 631,07	**10%**	**R 1 875 263,11**	**R 20 627 894,18**

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SUMMARY - INFRASTRUCTURAL ASPECTS												
1	INFRASTRUCTURAL CLOSURE COMPONENTS		Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast
ID	COMPONENT		Y2023	Y2024	Y2025	Y2026	Y2027	Y2028	Y2029	Y2030	Y2031	Y2032
1,1	PLANT AND RELATED STRUCTURES		R -	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15	R 81 053 620,15
1,2	SHAFTS, ADITS AND DECLINES		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
1,3	SUPPORTING INFRASTRUCTURE		R 989 967,00	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39	R 6 128 999,39
1,4	UNDERGROUND INFRASTRUCTURE		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
1,5	SOCIAL INFRASTRUCTURE		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
1,6	OFF-SITE INFRASTRUCTURE		R -	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95	R 5 999 694,95
1,7	LINEAR ITEMS		R 1 298 834,19	R 7 187 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59	R 11 595 271,59
1,8	WASTE DISPOSAL		R 197 783,63	R 9 340 081,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99	R 9 450 281,99
1,9	RIVER DIVERSION		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
	SUB-TOTAL 1		**R 2 486 584,82**	**R 109 709 668,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**	**R 114 227 868,06**

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INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2023	
1,1	PLANT AND RELATED STRUCTURES														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										-				R -	Construction to commence in Y2024 as per Mine Works Program
2	1	A1	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		No	3.2.1	-	m²	R 855,00	R -	R -	Assume single storey building
3	1	A2	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		No	3.2.1	-	m²	R 855,00	R -	R -	Assume single storey building
4	1	A3	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		No	3.2.1	-	m²	R 855,00	R -	R -	Assume single storey building
5	1	A4	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		No	3.2.1	-	m²	R 855,00	R -	R -	Assume single storey building
6	1	A8	Y2023	Compressor House	5m – 10m high	1600F3-2700-DD30-GAD-0014-Rev C		No	3.6.2	-	m²	R 570,50	R -	R -	8650mm High as per design drawings
7	1	A19	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		No	5.1.2	-	m	R 414,50	R -	R -	Assume overland conveyor
8	1	A20	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		No	5.1.2	-	m	R 414,50	R -	R -	Assume overland conveyor
9	1	A21	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		No	5.1.2	-	m	R 414,50	R -	R -	Assume overland conveyor
10	1	A22	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		No	5.1.2	-	m	R 414,50	R -	R -	Assume overland conveyor
11	1	A23	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		No	5.1.2	-	m	R 414,50	R -	R -	Assume overland conveyor
12	1	A24	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		No	5.1.2	-	m	R 414,50	R -	R -	Assume overland conveyor
13	1	A25	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		No	5.1.2	-	m	R 414,50	R -	R -	Assume overland conveyor
14	1	A26	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		No	5.1.2	-	m	R 414,50	R -	R -	Assume overland conveyor
15	1	A27	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		No	5.1.2	-	m	R 414,50	R -	R -	Assume overland conveyor
16	1	A29	Y2023	Secondary Crusher	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		No	2.3.3	-	m²	R 2 786,00	R -	R -	Assume medium/heavy plant structure
17	1	A31	Y2023	Coarse Ore Stockpile Feeder	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		No	2.3.2	-	m²	R 1 254,00	R -	R -	Assume footprint & medium plant structure
18	1			Coarse Ore Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0002-PrelimA		No	4,3	-	m³	R 643,00	R -	R -	Assume 150mm thick concrete stockpile footprint
19	1	A32	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)									
20	1			Superstructure	Medium concrete, thickness between 250 and 750mm			No	4,2	-	m³	R 981,00	R -	R -	Assume concrete thickness, wall sizes & heights
21	1			Steel Structure	Medium plant structures			No	2.3.2	-	m²	R 1 254,00	R -	R -	Steel structure and footprint assumed
22	1	A33	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		No	3.2.1	-	m²	R 855,00	R -	R -	Assume single storey building
23	1	A34	Y2023	Tailings Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 30)									
24	1			Superstructure	Medium concrete, thickness between 250 and 750mm			No	4,2	-	m³	R 981,00	R -	R -	Assume concrete thickness, wall sizes & heights
25	1			Steel Structure	Medium plant structures			No	2.3.2	-	m²	R 1 254,00	R -	R -	Steel structure & footprint assumed
26	1	A35	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		No	3.2.1	-	m²	R 855,00	R -	R -	Assume single storey building
27	1	A36	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		No	3.1.1	-	m²	R 461,00	R -	R -	Assume single storey building
28	1	A37	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)									
29	1			Superstructure	Medium concrete, thickness between 250 and 750mm			No	4,2	-	m³	R 981,00	R -	R -	Assume concrete thickness, wall sizes & heights
30	1			Steel Structure	Medium plant structures			No	2.3.2	-	m²	R 1 254,00	R -	R -	Steel structure & footprint assumed
31	1	A38	Y2023	TMF Feed Tank & Concentrate Transfer Tank:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 33 & 35)									
32	1			Concrete Platform	Light concrete, thickness less than 250mm			No	4,3	-	m³	R 643,00	R -	R -	Assume 250mm thick concrete platform
33	1			Medium Tanks	Medium steel tanks			No	2.5.2	-	no	R 23 492,50	R -	R -	Tank sizes assumed
34	1			Large Tanks	Large steel tanks			No	2.5.3	-	no	R 43 854,00	R -	R -	Tank sizes assumed
35	1	A39	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		No	3.2.1	-	m²	R 855,00	R -	R -	Assume single storey building
36	1	A40	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		No	3.2.1	-	m²	R 855,00	R -	R -	Assume to form part of the Water Treatment Plant Assume single storey building
37	1	A41	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		No	3.2.1	-	m²	R 855,00	R -	R -	Assume to form part of the Water Treatment Plant Assume single storey building
38	1	A42	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		No	3.2.1	-	m²	R 855,00	R -	R -	Assume to form part of the Water Treatment Plant Assume single storey building
39	1	A43	Y2023	Secondary Screening Plant	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 24)		No	2.3.3	-	m²	R 2 786,00	R -	R -	Assume medium/heavy plant structure
40	1	A44	Y2023	HPGR Screening	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 27)		No	2.3.3	-	m²	R 2 786,00	R -	R -	Assume medium/heavy plant structure
41	1	A45	Y2023	Primary Bay Mills	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 37)		No	2.3.2	-	m²	R 1 254,00	R -	R -	Assume medium plant structure
42	1	A46	Y2023	Regrind Bay Mill	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 38)		No	2.3.2	-	m²	R 1 254,00	R -	R -	Assume medium plant structure
43	1	A47	Y2023	HPGR Crushing	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		No	2.3.3	-	m²	R 2 786,00	R -	R -	Assume medium/heavy plant structure
44	1	A48	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		No	2.3.2	-	m²	R 1 254,00	R -	R -	Assume to from part of HPGR Crushing & assume medium plant structure
45	1	A49	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		No	2.3.2	-	m²	R 1 254,00	R -	R -	Assume to from part of HPGR Crushing & assume medium plant structure
46	1	A50	Y2023	Low Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 39)		No	2.3.2	-	m²	R 1 254,00	R -	R -	Assume medium plant structure
47	1	A51	Y2023	Wet Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 40)		No	2.3.2	-	m²	R 1 254,00	R -	R -	Assume medium plant structure
48	1	A52	Y2023	Main Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 15)		No	3.2.1	-	m²	R 855,00	R -	R -	Assume single storey building
49	1	A53	Y2023	CMS	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 41)		No	2.3.2	-	m²	R 1 254,00	R -	R -	Assume medium plant structure
50	1	A54	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		No	3.2.1	-	m²	R 855,00	R -	R -	Assume single storey building
51	1	A55	Y2023	Central/Primary Control Room	Single storey building	1600F3-2700-DD30-GAD-0012-Rev C		No	3.1.1	-	m²	R 461,00	R -	R -	
52	3	A57	Y2023	Primary Crusher:		1600F3-1800-DD11-LYD-0001-Rev A									
53	3			Engineered Terrace	Major gravel roads with engineered surfaces			No	8,2	-	m²	R 38,00	R -	R -	
54	3			Primary Crusher	Heavy plant structures			No	2.3.4	-	m²	R 4 179,50	R -	R -	Assume heavy plant structure
55	3			Earth Retaining Walls	Medium concrete, thickness between 250 and 750mm			No	4,2	-	m³	R 981,00	R -	R -	Assume Loffestein concrete blocks Assume 25m high as per contours
						SUB-TOTAL 1								R -	
						Preliminaries and General	6%							R -	
						Contingency	10%							R -	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R -	
						GRAND-TOTAL								R -	

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INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2024	
1,1	PLANT AND RELATED STRUCTURES														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										16 593,47				R 81 053 620,15	
2	1	A1	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R 213 750,00	R 213 750,00	Assume single storey building
3	1	A2	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R 213 750,00	R 213 750,00	Assume single storey building
4	1	A3	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R 213 750,00	R 213 750,00	Assume single storey building
5	1	A4	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R 213 750,00	R 213 750,00	Assume single storey building
6	1	A8	Y2023	Compressor House	5m – 10m high	1600F3-2700-DD30-GAD-0014-Rev C		Yes	3.6.2	288,00	m²	R 570,50	R 164 304,00	R 164 304,00	8650mm High as per design drawings
7	1	A19	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R 414,50	R 62 175,00	R 62 175,00	Assume overland conveyor
8	1	A20	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R 414,50	R 62 175,00	R 62 175,00	Assume overland conveyor
9	1	A21	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R 414,50	R 62 175,00	R 62 175,00	Assume overland conveyor
10	1	A22	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	200,00	m	R 414,50	R 82 900,00	R 82 900,00	Assume overland conveyor
11	1	A23	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	380,00	m	R 414,50	R 157 510,00	R 157 510,00	Assume overland conveyor
12	1	A24	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	610,00	m	R 414,50	R 252 845,00	R 252 845,00	Assume overland conveyor
13	1	A25	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	1 400,00	m	R 414,50	R 580 300,00	R 580 300,00	Assume overland conveyor
14	1	A26	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	130,00	m	R 414,50	R 53 885,00	R 53 885,00	Assume overland conveyor
15	1	A27	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	140,00	m	R 414,50	R 58 030,00	R 58 030,00	Assume overland conveyor
16	1	A29	Y2023	Secondary Crusher	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	2.3.3	2 044,00	m²	R 2 786,00	R 5 694 584,00	R 5 694 584,00	Assume medium/heavy plant structure
17	1	A31	Y2023	Coarse Ore Stockpile Feeder	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	2.3.2	3 000,00	m²	R 1 254,00	R 3 762 000,00	R 3 762 000,00	Assume footprint & medium plant structure
18	1			Coarse Ore Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	4,3	1 966,80	m³	R 643,00	R 1 264 652,40	R 1 264 652,40	Assume 150mm thick concrete stockpile footprint
19	1	A32	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)									
20	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R 981,00	R 3 061 946,25	R 3 061 946,25	Assume concrete thickness, wall sizes & heights
21	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R 1 254,00	R 627 000,00	R 627 000,00	Steel structure and footprint assumed
22	1	A33	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.2.1	580,00	m²	R 855,00	R 495 900,00	R 495 900,00	Assume single storey building
23	1	A34	Y2023	Tailings Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 30)									
24	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R 981,00	R 3 061 946,25	R 3 061 946,25	Assume concrete thickness, wall sizes & heights
25	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R 1 254,00	R 627 000,00	R 627 000,00	Steel structure & footprint assumed
26	1	A35	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.2.1	580,00	m²	R 855,00	R 495 900,00	R 495 900,00	Assume single storey building
27	1	A36	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.1.1	580,00	m²	R 461,00	R 267 380,00	R 267 380,00	Assume single storey building
28	1	A37	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)									
29	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R 981,00	R 3 061 946,25	R 3 061 946,25	Assume concrete thickness, wall sizes & heights
30	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R 1 254,00	R 627 000,00	R 627 000,00	Steel structure & footprint assumed
31	1	A38	Y2023	TMF Feed Tank & Concentrate Transfer Tank:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 33 & 35)									
32	1			Concrete Platform	Light concrete, thickness less than 250mm			Yes	4,3	300,00	m³	R 643,00	R 192 900,00	R 192 900,00	Assume 250mm thick concrete platform
33	1			Medium Tanks	Medium steel tanks			Yes	2.5.2	2,00	no	R 23 492,50	R 46 985,00	R 46 985,00	Tank sizes assumed
34	1			Large Tanks	Large steel tanks			Yes	2.5.3	1,00	no	R 43 854,00	R 43 854,00	R 43 854,00	Tank sizes assumed
35	1	A39	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	600,00	m²	R 855,00	R 513 000,00	R 513 000,00	Assume single storey building
36	1	A40	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	80,00	m²	R 855,00	R 68 400,00	R 68 400,00	Assume to form part of the Water Treatment Plant Assume single storey building
37	1	A41	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	515,00	m²	R 855,00	R 440 325,00	R 440 325,00	Assume to form part of the Water Treatment Plant Assume single storey building
38	1	A42	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	370,00	m²	R 855,00	R 316 350,00	R 316 350,00	Assume to form part of the Water Treatment Plant Assume single storey building
39	1	A43	Y2023	Secondary Screening Plant	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 24)		Yes	2.3.3	1 900,00	m²	R 2 786,00	R 5 293 400,00	R 5 293 400,00	Assume medium/heavy plant structure
40	1	A44	Y2023	HPGR Screening	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 27)		Yes	2.3.3	2 510,00	m²	R 2 786,00	R 6 992 860,00	R 6 992 860,00	Assume medium/heavy plant structure
41	1	A45	Y2023	Primary Bay Mills	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 37)		Yes	2.3.2	6 850,00	m²	R 1 254,00	R 8 589 900,00	R 8 589 900,00	Assume medium plant structure
42	1	A46	Y2023	Regrind Bay Mill	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 38)		Yes	2.3.2	6 850,00	m²	R 1 254,00	R 8 589 900,00	R 8 589 900,00	Assume medium plant structure
43	1	A47	Y2023	HPGR Crushing	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.3	1 245,00	m²	R 2 786,00	R 3 468 570,00	R 3 468 570,00	Assume medium/heavy plant structure
44	1	A48	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.2	240,00	m²	R 1 254,00	R 300 960,00	R 300 960,00	Assume to from part of HPGR Crushing & assume medium plant structure
45	1	A49	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.2	113,00	m²	R 1 254,00	R 141 702,00	R 141 702,00	Assume to from part of HPGR Crushing & assume medium plant structure
46	1	A50	Y2023	Low Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 39)		Yes	2.3.2	2 160,00	m²	R 1 254,00	R 2 708 640,00	R 2 708 640,00	Assume medium plant structure
47	1	A51	Y2023	Wet Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 40)		Yes	2.3.2	2 160,00	m²	R 1 254,00	R 2 708 640,00	R 2 708 640,00	Assume medium plant structure
48	1	A52	Y2023	Main Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 15)		Yes	3.2.1	500,00	m²	R 855,00	R 427 500,00	R 427 500,00	Assume single storey building
49	1	A53	Y2023	CMS	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 41)		Yes	2.3.2	1 900,00	m²	R 1 254,00	R 2 382 600,00	R 2 382 600,00	Assume medium plant structure
50	1	A54	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	2 300,00	m²	R 855,00	R 1 966 500,00	R 1 966 500,00	Assume single storey building
51	1	A55	Y2023	Central/Primary Control Room	Single storey building	1600F3-2700-DD30-GAD-0012-Rev C		Yes	3.1.1	145,00	m²	R 461,00	R 66 845,00	R 66 845,00	
52	3	A57	Y2023	Primary Crusher:		1600F3-1800-DD11-LYD-0001-Rev A									
53	3			Engineered Terrace	Major gravel roads with engineered surfaces			Yes	8,2	12 600,00	m²	R 38,00	R 478 800,00	R 478 800,00	
54	3			Primary Crusher	Heavy plant structures			Yes	2.3.4	2 055,00	m²	R 4 179,50	R 8 588 872,50	R 8 588 872,50	Assume heavy plant structure
55	3			Earth Retaining Walls	Medium concrete, thickness between 250 and 750mm			Yes	4,2	1 312,50	m³	R 981,00	R 1 287 562,50	R 1 287 562,50	Assume Loffestein concrete blocks Assume 25m high as per contours
							SUB-TOTAL 1							R 81 053 620,15	
							Preliminaries and General	6%						R 4 863 217,21	
							Contingency	10%						R 8 105 362,02	
							SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							R 12 968 579,22	
							GRAND-TOTAL							R 94 022 199,37	

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INFRASTRUCTURAL ASPECTS																	
1,1	PLANT AND RELATED STRUCTURES						Closure Forecast							Y2025			
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers	LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total		LIABLE VALUE		Notes	
1									16 593,47					R	81 053 620,15		
2	1	A1	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)	Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building	
3	1	A2	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)	Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building	
4	1	A3	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)	Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building	
5	1	A4	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)	Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building	
6	1	A8	Y2023	Compressor House	5m – 10m high	1600F3-2700-DD30-GAD-0014-Rev C	Yes	3.6.2	288,00	m²	R 570,50	R	164 304,00	R	164 304,00	8650mm High as per design drawings	
7	1	A19	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor	
8	1	A20	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor	
9	1	A21	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor	
10	1	A22	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	200,00	m	R 414,50	R	82 900,00	R	82 900,00	Assume overland conveyor	
11	1	A23	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	380,00	m	R 414,50	R	157 510,00	R	157 510,00	Assume overland conveyor	
12	1	A24	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	610,00	m	R 414,50	R	252 845,00	R	252 845,00	Assume overland conveyor	
13	1	A25	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	1 400,00	m	R 414,50	R	580 300,00	R	580 300,00	Assume overland conveyor	
14	1	A26	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	130,00	m	R 414,50	R	53 885,00	R	53 885,00	Assume overland conveyor	
15	1	A27	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	140,00	m	R 414,50	R	58 030,00	R	58 030,00	Assume overland conveyor	
16	1	A29	Y2023	Secondary Crusher	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	2.3.3	2 044,00	m²	R 2 786,00	R	5 694 584,00	R	5 694 584,00	Assume medium/heavy plant structure	
17	1	A31	Y2023	Coarse Ore Stockpile Feeder	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	2.3.2	3 000,00	m²	R 1 254,00	R	3 762 000,00	R	3 762 000,00	Assume footprint & medium plant structure	
18	1			Coarse Ore Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	4,3	1 966,80	m³	R 643,00	R	1 264 652,40	R	1 264 652,40	Assume 150mm thick concrete stockpile footprint	
19	1	A32	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)											
20	1			Superstructure	Medium concrete, thickness between 250 and 750mm		Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights	
21	1			Steel Structure	Medium plant structures		Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure and footprint assumed	
22	1	A33	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	3.2.1	580,00	m²	R 855,00	R	495 900,00	R	495 900,00	Assume single storey building	
23	1	A34	Y2023	Tailings Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 30)											
24	1			Superstructure	Medium concrete, thickness between 250 and 750mm		Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights	
25	1			Steel Structure	Medium plant structures		Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure & footprint assumed	
26	1	A35	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	3.2.1	580,00	m²	R 855,00	R	495 900,00	R	495 900,00	Assume single storey building	
27	1	A36	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	3.1.1	580,00	m²	R 461,00	R	267 380,00	R	267 380,00	Assume single storey building	
28	1	A37	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)											
29	1			Superstructure	Medium concrete, thickness between 250 and 750mm		Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights	
30	1			Steel Structure	Medium plant structures		Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure & footprint assumed	
31	1	A38	Y2023	TMF Feed Tank & Concentrate Transfer Tank:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 33 & 35)											
32	1			Concrete Platform	Light concrete, thickness less than 250mm		Yes	4,3	300,00	m³	R 643,00	R	192 900,00	R	192 900,00	Assume 250mm thick concrete platform	
33	1			Medium Tanks	Medium steel tanks		Yes	2.5.2	2,00	no	R 23 492,50	R	46 985,00	R	46 985,00	Tank sizes assumed	
34	1			Large Tanks	Large steel tanks		Yes	2.5.3	1,00	no	R 43 854,00	R	43 854,00	R	43 854,00	Tank sizes assumed	
35	1	A39	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)	Yes	3.2.1	600,00	m²	R 855,00	R	513 000,00	R	513 000,00	Assume single storey building	
36	1	A40	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)	Yes	3.2.1	80,00	m²	R 855,00	R	68 400,00	R	68 400,00	Assume to form part of the Water Treatment Plant Assume single storey building	
37	1	A41	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)	Yes	3.2.1	515,00	m²	R 855,00	R	440 325,00	R	440 325,00	Assume to form part of the Water Treatment Plant Assume single storey building	
38	1	A42	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)	Yes	3.2.1	370,00	m²	R 855,00	R	316 350,00	R	316 350,00	Assume to form part of the Water Treatment Plant Assume single storey building	
39	1	A43	Y2023	Secondary Screening Plant	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 24)	Yes	2.3.3	1 900,00	m²	R 2 786,00	R	5 293 400,00	R	5 293 400,00	Assume medium/heavy plant structure	
40	1	A44	Y2023	HPGR Screening	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 27)	Yes	2.3.3	2 510,00	m²	R 2 786,00	R	6 992 860,00	R	6 992 860,00	Assume medium/heavy plant structure	
41	1	A45	Y2023	Primary Bay Mills	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 37)	Yes	2.3.2	6 850,00	m²	R 1 254,00	R	8 589 900,00	R	8 589 900,00	Assume medium plant structure	
42	1	A46	Y2023	Regrind Bay Mill	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 38)	Yes	2.3.2	6 850,00	m²	R 1 254,00	R	8 589 900,00	R	8 589 900,00	Assume medium plant structure	
43	1	A47	Y2023	HPGR Crushing	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)	Yes	2.3.3	1 245,00	m²	R 2 786,00	R	3 468 570,00	R	3 468 570,00	Assume medium/heavy plant structure	
44	1	A48	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)	Yes	2.3.2	240,00	m²	R 1 254,00	R	300 960,00	R	300 960,00	Assume to from part of HPGR Crushing & assume medium plant structure	
45	1	A49	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)	Yes	2.3.2	113,00	m²	R 1 254,00	R	141 702,00	R	141 702,00	Assume to from part of HPGR Crushing & assume medium plant structure	
46	1	A50	Y2023	Low Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 39)	Yes	2.3.2	2 160,00	m²	R 1 254,00	R	2 708 640,00	R	2 708 640,00	Assume medium plant structure	
47	1	A51	Y2023	Wet Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 40)	Yes	2.3.2	2 160,00	m²	R 1 254,00	R	2 708 640,00	R	2 708 640,00	Assume medium plant structure	
48	1	A52	Y2023	Main Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 15)	Yes	3.2.1	500,00	m²	R 855,00	R	427 500,00	R	427 500,00	Assume single storey building	
49	1	A53	Y2023	CMS	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 41)	Yes	2.3.2	1 900,00	m²	R 1 254,00	R	2 382 600,00	R	2 382 600,00	Assume medium plant structure	
50	1	A54	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)	Yes	3.2.1	2 300,00	m²	R 855,00	R	1 966 500,00	R	1 966 500,00	Assume single storey building	
51	1	A55	Y2023	Central/Primary Control Room	Single storey building	1600F3-2700-DD30-GAD-0012-Rev C	Yes	3.1.1	145,00	m²	R 461,00	R	66 845,00	R	66 845,00		
52	3	A57	Y2023	Primary Crusher:		1600F3-1800-DD11-LYD-0001-Rev A											
53	3			Engineered Terrace	Major gravel roads with engineered surfaces		Yes	8,2	12 600,00	m²	R 38,00	R	478 800,00	R	478 800,00		
54	3			Primary Crusher	Heavy plant structures		Yes	2.3.4	2 055,00	m²	R 4 179,50	R	8 588 872,50	R	8 588 872,50	Assume heavy plant structure	
55	3			Earth Retaining Walls	Medium concrete, thickness between 250 and 750mm		Yes	4,2	1 312,50	m³	R 981,00	R	1 287 562,50	R	1 287 562,50	Assume Loffestein concrete blocks Assume 25m high as per contours	
														R	81 053 620,15		
						SUB-TOTAL 1								R	81 053 620,15		
						Preliminaries and General	6%							R	4 863 217,21		
						Contingency	10%							R	8 105 362,02		
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R	12 968 579,22		
						GRAND-TOTAL								R	94 022 199,37		

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INFRASTRUCTURAL ASPECTS																	
1,1	PLANT AND RELATED STRUCTURES																
								Closure Forecast							Y2026		
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate		Unit Total	LIABLE VALUE		Notes
1										16 593,47					R	81 053 620,15	
2	1	A1	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
3	1	A2	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
4	1	A3	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
5	1	A4	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
6	1	A8	Y2023	Compressor House	5m – 10m high	1600F3-2700-DD30-GAD-0014-Rev C		Yes	3.6.2	288,00	m²	R 570,50	R	164 304,00	R	164 304,00	8650mm High as per design drawings
7	1	A19	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor
8	1	A20	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor
9	1	A21	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor
10	1	A22	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	200,00	m	R 414,50	R	82 900,00	R	82 900,00	Assume overland conveyor
11	1	A23	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	380,00	m	R 414,50	R	157 510,00	R	157 510,00	Assume overland conveyor
12	1	A24	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	610,00	m	R 414,50	R	252 845,00	R	252 845,00	Assume overland conveyor
13	1	A25	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	1 400,00	m	R 414,50	R	580 300,00	R	580 300,00	Assume overland conveyor
14	1	A26	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	130,00	m	R 414,50	R	53 885,00	R	53 885,00	Assume overland conveyor
15	1	A27	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	140,00	m	R 414,50	R	58 030,00	R	58 030,00	Assume overland conveyor
16	1	A29	Y2023	Secondary Crusher	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	2.3.3	2 044,00	m²	R 2 786,00	R	5 694 584,00	R	5 694 584,00	Assume medium/heavy plant structure
17	1	A31	Y2023	Coarse Ore Stockpile Feeder	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	2.3.2	3 000,00	m²	R 1 254,00	R	3 762 000,00	R	3 762 000,00	Assume footprint & medium plant structure
18	1			Coarse Ore Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	4,3	1 966,80	m³	R 643,00	R	1 264 652,40	R	1 264 652,40	Assume 150mm thick concrete stockpile footprint
19	1	A32	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)											
20	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights
21	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure and footprint assumed
22	1	A33	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.2.1	580,00	m²	R 855,00	R	495 900,00	R	495 900,00	Assume single storey building
23	1	A34	Y2023	Tailings Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 30)											
24	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights
25	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure & footprint assumed
26	1	A35	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.2.1	580,00	m²	R 855,00	R	495 900,00	R	495 900,00	Assume single storey building
27	1	A36	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.1.1	580,00	m²	R 461,00	R	267 380,00	R	267 380,00	Assume single storey building
28	1	A37	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)											
29	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights
30	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure & footprint assumed
31	1	A38	Y2023	TMF Feed Tank & Concentrate Transfer Tank:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 33 & 35)											
32	1			Concrete Platform	Light concrete, thickness less than 250mm			Yes	4,3	300,00	m³	R 643,00	R	192 900,00	R	192 900,00	Assume 250mm thick concrete platform
33	1			Medium Tanks	Medium steel tanks			Yes	2.5.2	2,00	no	R 23 492,50	R	46 985,00	R	46 985,00	Tank sizes assumed
34	1			Large Tanks	Large steel tanks			Yes	2.5.3	1,00	no	R 43 854,00	R	43 854,00	R	43 854,00	Tank sizes assumed
35	1	A39	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	600,00	m²	R 855,00	R	513 000,00	R	513 000,00	Assume single storey building
36	1	A40	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	80,00	m²	R 855,00	R	68 400,00	R	68 400,00	Assume to form part of the Water Treatment Plant Assume single storey building
37	1	A41	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	515,00	m²	R 855,00	R	440 325,00	R	440 325,00	Assume to form part of the Water Treatment Plant Assume single storey building
38	1	A42	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	370,00	m²	R 855,00	R	316 350,00	R	316 350,00	Assume to form part of the Water Treatment Plant Assume single storey building
39	1	A43	Y2023	Secondary Screening Plant	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 24)		Yes	2.3.3	1 900,00	m²	R 2 786,00	R	5 293 400,00	R	5 293 400,00	Assume medium/heavy plant structure
40	1	A44	Y2023	HPGR Screening	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 27)		Yes	2.3.3	2 510,00	m²	R 2 786,00	R	6 992 860,00	R	6 992 860,00	Assume medium/heavy plant structure
41	1	A45	Y2023	Primary Bay Mills	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 37)		Yes	2.3.2	6 850,00	m²	R 1 254,00	R	8 589 900,00	R	8 589 900,00	Assume medium plant structure
42	1	A46	Y2023	Regrind Bay Mill	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 38)		Yes	2.3.2	6 850,00	m²	R 1 254,00	R	8 589 900,00	R	8 589 900,00	Assume medium plant structure
43	1	A47	Y2023	HPGR Crushing	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.3	1 245,00	m²	R 2 786,00	R	3 468 570,00	R	3 468 570,00	Assume medium/heavy plant structure
44	1	A48	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.2	240,00	m²	R 1 254,00	R	300 960,00	R	300 960,00	Assume to from part of HPGR Crushing & assume medium plant structure
45	1	A49	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.2	113,00	m²	R 1 254,00	R	141 702,00	R	141 702,00	Assume to from part of HPGR Crushing & assume medium plant structure
46	1	A50	Y2023	Low Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 39)		Yes	2.3.2	2 160,00	m²	R 1 254,00	R	2 708 640,00	R	2 708 640,00	Assume medium plant structure
47	1	A51	Y2023	Wet Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 40)		Yes	2.3.2	2 160,00	m²	R 1 254,00	R	2 708 640,00	R	2 708 640,00	Assume medium plant structure
48	1	A52	Y2023	Main Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 15)		Yes	3.2.1	500,00	m²	R 855,00	R	427 500,00	R	427 500,00	Assume single storey building
49	1	A53	Y2023	CMS	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 41)		Yes	2.3.2	1 900,00	m²	R 1 254,00	R	2 382 600,00	R	2 382 600,00	Assume medium plant structure
50	1	A54	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	2 300,00	m²	R 855,00	R	1 966 500,00	R	1 966 500,00	Assume single storey building
51	1	A55	Y2023	Central/Primary Control Room	Single storey building	1600F3-2700-DD30-GAD-0012-Rev C		Yes	3.1.1	145,00	m²	R 461,00	R	66 845,00	R	66 845,00	
52	3	A57	Y2023	Primary Crusher:		1600F3-1800-DD11-LYD-0001-Rev A											
53	3			Engineered Terrace	Major gravel roads with engineered surfaces			Yes	8,2	12 600,00	m²	R 38,00	R	478 800,00	R	478 800,00	
54	3			Primary Crusher	Heavy plant structures			Yes	2.3.4	2 055,00	m²	R 4 179,50	R	8 588 872,50	R	8 588 872,50	Assume heavy plant structure
55	3			Earth Retaining Walls	Medium concrete, thickness between 250 and 750mm			Yes	4,2	1 312,50	m³	R 981,00	R	1 287 562,50	R	1 287 562,50	Assume Loffestein concrete blocks Assume 25m high as per contours
															R	81 053 620,15	
							Preliminaries and General	6%							R	4 863 217,21	
							Contingency	10%							R	8 105 362,02	
							SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R	12 968 579,22	
							GRAND-TOTAL								R	94 022 199,37	

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INFRASTRUCTURAL ASPECTS																	
1,1	PLANT AND RELATED STRUCTURES																
								Closure Forecast							Y2027		
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate		Unit Total	LIABLE VALUE		Notes
1										16 593,47					R	81 053 620,15	
2	1	A1	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
3	1	A2	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
4	1	A3	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
5	1	A4	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
6	1	A8	Y2023	Compressor House	5m – 10m high	1600F3-2700-DD30-GAD-0014-Rev C		Yes	3.6.2	288,00	m²	R 570,50	R	164 304,00	R	164 304,00	8650mm High as per design drawings
7	1	A19	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor
8	1	A20	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor
9	1	A21	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor
10	1	A22	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	200,00	m	R 414,50	R	82 900,00	R	82 900,00	Assume overland conveyor
11	1	A23	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	380,00	m	R 414,50	R	157 510,00	R	157 510,00	Assume overland conveyor
12	1	A24	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	610,00	m	R 414,50	R	252 845,00	R	252 845,00	Assume overland conveyor
13	1	A25	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	1 400,00	m	R 414,50	R	580 300,00	R	580 300,00	Assume overland conveyor
14	1	A26	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	130,00	m	R 414,50	R	53 885,00	R	53 885,00	Assume overland conveyor
15	1	A27	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	140,00	m	R 414,50	R	58 030,00	R	58 030,00	Assume overland conveyor
16	1	A29	Y2023	Secondary Crusher	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	2.3.3	2 044,00	m²	R 2 786,00	R	5 694 584,00	R	5 694 584,00	Assume medium/heavy plant structure
17	1	A31	Y2023	Coarse Ore Stockpile Feeder	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	2.3.2	3 000,00	m²	R 1 254,00	R	3 762 000,00	R	3 762 000,00	Assume footprint & medium plant structure
18	1			Coarse Ore Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	4,3	1 966,80	m³	R 643,00	R	1 264 652,40	R	1 264 652,40	Assume 150mm thick concrete stockpile footprint
19	1	A32	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)											
20	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights
21	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure and footprint assumed
22	1	A33	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.2.1	580,00	m²	R 855,00	R	495 900,00	R	495 900,00	Assume single storey building
23	1	A34	Y2023	Tailings Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 30)											
24	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights
25	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure & footprint assumed
26	1	A35	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.2.1	580,00	m²	R 855,00	R	495 900,00	R	495 900,00	Assume single storey building
27	1	A36	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.1.1	580,00	m²	R 461,00	R	267 380,00	R	267 380,00	Assume single storey building
28	1	A37	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)											
29	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights
30	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure & footprint assumed
31	1	A38	Y2023	TMF Feed Tank & Concentrate Transfer Tank:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 33 & 35)											
32	1			Concrete Platform	Light concrete, thickness less than 250mm			Yes	4,3	300,00	m³	R 643,00	R	192 900,00	R	192 900,00	Assume 250mm thick concrete platform
33	1			Medium Tanks	Medium steel tanks			Yes	2.5.2	2,00	no	R 23 492,50	R	46 985,00	R	46 985,00	Tank sizes assumed
34	1			Large Tanks	Large steel tanks			Yes	2.5.3	1,00	no	R 43 854,00	R	43 854,00	R	43 854,00	Tank sizes assumed
35	1	A39	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	600,00	m²	R 855,00	R	513 000,00	R	513 000,00	Assume single storey building
36	1	A40	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	80,00	m²	R 855,00	R	68 400,00	R	68 400,00	Assume to form part of the Water Treatment Plant Assume single storey building
37	1	A41	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	515,00	m²	R 855,00	R	440 325,00	R	440 325,00	Assume to form part of the Water Treatment Plant Assume single storey building
38	1	A42	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	370,00	m²	R 855,00	R	316 350,00	R	316 350,00	Assume to form part of the Water Treatment Plant Assume single storey building
39	1	A43	Y2023	Secondary Screening Plant	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 24)		Yes	2.3.3	1 900,00	m²	R 2 786,00	R	5 293 400,00	R	5 293 400,00	Assume medium/heavy plant structure
40	1	A44	Y2023	HPGR Screening	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 27)		Yes	2.3.3	2 510,00	m²	R 2 786,00	R	6 992 860,00	R	6 992 860,00	Assume medium/heavy plant structure
41	1	A45	Y2023	Primary Bay Mills	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 37)		Yes	2.3.2	6 850,00	m²	R 1 254,00	R	8 589 900,00	R	8 589 900,00	Assume medium plant structure
42	1	A46	Y2023	Regrind Bay Mill	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 38)		Yes	2.3.2	6 850,00	m²	R 1 254,00	R	8 589 900,00	R	8 589 900,00	Assume medium plant structure
43	1	A47	Y2023	HPGR Crushing	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.3	1 245,00	m²	R 2 786,00	R	3 468 570,00	R	3 468 570,00	Assume medium/heavy plant structure
44	1	A48	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.2	240,00	m²	R 1 254,00	R	300 960,00	R	300 960,00	Assume to from part of HPGR Crushing & assume medium plant structure
45	1	A49	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.2	113,00	m²	R 1 254,00	R	141 702,00	R	141 702,00	Assume to from part of HPGR Crushing & assume medium plant structure
46	1	A50	Y2023	Low Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 39)		Yes	2.3.2	2 160,00	m²	R 1 254,00	R	2 708 640,00	R	2 708 640,00	Assume medium plant structure
47	1	A51	Y2023	Wet Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 40)		Yes	2.3.2	2 160,00	m²	R 1 254,00	R	2 708 640,00	R	2 708 640,00	Assume medium plant structure
48	1	A52	Y2023	Main Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 15)		Yes	3.2.1	500,00	m²	R 855,00	R	427 500,00	R	427 500,00	Assume single storey building
49	1	A53	Y2023	CMS	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 41)		Yes	2.3.2	1 900,00	m²	R 1 254,00	R	2 382 600,00	R	2 382 600,00	Assume medium plant structure
50	1	A54	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	2 300,00	m²	R 855,00	R	1 966 500,00	R	1 966 500,00	Assume single storey building
51	1	A55	Y2023	Central/Primary Control Room	Single storey building	1600F3-2700-DD30-GAD-0012-Rev C		Yes	3.1.1	145,00	m²	R 461,00	R	66 845,00	R	66 845,00	
52	3	A57	Y2023	Primary Crusher:		1600F3-1800-DD11-LYD-0001-Rev A											
53	3			Engineered Terrace	Major gravel roads with engineered surfaces			Yes	8,2	12 600,00	m²	R 38,00	R	478 800,00	R	478 800,00	
54	3			Primary Crusher	Heavy plant structures			Yes	2.3.4	2 055,00	m²	R 4 179,50	R	8 588 872,50	R	8 588 872,50	Assume heavy plant structure
55	3			Earth Retaining Walls	Medium concrete, thickness between 250 and 750mm			Yes	4,2	1 312,50	m³	R 981,00	R	1 287 562,50	R	1 287 562,50	Assume Loffestein concrete blocks Assume 25m high as per contours
															R	81 053 620,15	
															R	4 863 217,21	
															R	8 105 362,02	
															R	12 968 579,22	
															R	94 022 199,37	

SUB-TOTAL 1
Preliminaries and General 6%
Contingency 10%
SUB-TOTAL 2 (P&G's AND CONTINGENCIES)
GRAND-TOTAL

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

INFRASTRUCTURAL ASPECTS																		
1,1	PLANT AND RELATED STRUCTURES																	
								Closure Forecast							Y2028			
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate		Unit Total	LIABLE VALUE		Notes	
1										16 593,47					R	81 053 620,15		
2	1	A1	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R	855,00	R 213 750,00	R	213 750,00	Assume single storey building	
3	1	A2	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R	855,00	R 213 750,00	R	213 750,00	Assume single storey building	
4	1	A3	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R	855,00	R 213 750,00	R	213 750,00	Assume single storey building	
5	1	A4	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R	855,00	R 213 750,00	R	213 750,00	Assume single storey building	
6	1	A8	Y2023	Compressor House	5m – 10m high	1600F3-2700-DD30-GAD-0014-Rev C		Yes	3.6.2	288,00	m²	R	570,50	R 164 304,00	R	164 304,00	8650mm High as per design drawings	
7	1	A19	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R	414,50	R 62 175,00	R	62 175,00	Assume overland conveyor	
8	1	A20	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R	414,50	R 62 175,00	R	62 175,00	Assume overland conveyor	
9	1	A21	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R	414,50	R 62 175,00	R	62 175,00	Assume overland conveyor	
10	1	A22	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	200,00	m	R	414,50	R 82 900,00	R	82 900,00	Assume overland conveyor	
11	1	A23	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	380,00	m	R	414,50	R 157 510,00	R	157 510,00	Assume overland conveyor	
12	1	A24	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	610,00	m	R	414,50	R 252 845,00	R	252 845,00	Assume overland conveyor	
13	1	A25	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	1 400,00	m	R	414,50	R 580 300,00	R	580 300,00	Assume overland conveyor	
14	1	A26	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	130,00	m	R	414,50	R 53 885,00	R	53 885,00	Assume overland conveyor	
15	1	A27	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	140,00	m	R	414,50	R 58 030,00	R	58 030,00	Assume overland conveyor	
16	1	A29	Y2023	Secondary Crusher	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	2.3.3	2 044,00	m²	R	2 786,00	R 5 694 584,00	R	5 694 584,00	Assume medium/heavy plant structure	
17	1	A31	Y2023	Coarse Ore Stockpile Feeder	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	2.3.2	3 000,00	m²	R	1 254,00	R 3 762 000,00	R	3 762 000,00	Assume footprint & medium plant structure	
18	1			Coarse Ore Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	4,3	1 966,80	m³	R	643,00	R 1 264 652,40	R	1 264 652,40	Assume 150mm thick concrete stockpile footprint	
19	1	A32	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)												
20	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R	981,00	R 3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights	
21	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R	1 254,00	R 627 000,00	R	627 000,00	Steel structure and footprint assumed	
22	1	A33	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.2.1	580,00	m²	R	855,00	R 495 900,00	R	495 900,00	Assume single storey building	
23	1	A34	Y2023	Tailings Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 30)												
24	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R	981,00	R 3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights	
25	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R	1 254,00	R 627 000,00	R	627 000,00	Steel structure & footprint assumed	
26	1	A35	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.2.1	580,00	m²	R	855,00	R 495 900,00	R	495 900,00	Assume single storey building	
27	1	A36	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.1.1	580,00	m²	R	461,00	R 267 380,00	R	267 380,00	Assume single storey building	
28	1	A37	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)												
29	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R	981,00	R 3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights	
30	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R	1 254,00	R 627 000,00	R	627 000,00	Steel structure & footprint assumed	
31	1	A38	Y2023	TMF Feed Tank & Concentrate Transfer Tank:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 33 & 35)												
32	1			Concrete Platform	Light concrete, thickness less than 250mm			Yes	4,3	300,00	m³	R	643,00	R 192 900,00	R	192 900,00	Assume 250mm thick concrete platform	
33	1			Medium Tanks	Medium steel tanks			Yes	2.5.2	2,00	no	R	23 492,50	R 46 985,00	R	46 985,00	Tank sizes assumed	
34	1			Large Tanks	Large steel tanks			Yes	2.5.3	1,00	no	R	43 854,00	R 43 854,00	R	43 854,00	Tank sizes assumed	
35	1	A39	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	600,00	m²	R	855,00	R 513 000,00	R	513 000,00	Assume single storey building	
36	1	A40	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	80,00	m²	R	855,00	R 68 400,00	R	68 400,00	Assume to form part of the Water Treatment Plant Assume single storey building	
37	1	A41	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	515,00	m²	R	855,00	R 440 325,00	R	440 325,00	Assume to form part of the Water Treatment Plant Assume single storey building	
38	1	A42	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	370,00	m²	R	855,00	R 316 350,00	R	316 350,00	Assume to form part of the Water Treatment Plant Assume single storey building	
39	1	A43	Y2023	Secondary Screening Plant	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 24)		Yes	2.3.3	1 900,00	m²	R	2 786,00	R 5 293 400,00	R	5 293 400,00	Assume medium/heavy plant structure	
40	1	A44	Y2023	HPGR Screening	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 27)		Yes	2.3.3	2 510,00	m²	R	2 786,00	R 6 992 860,00	R	6 992 860,00	Assume medium/heavy plant structure	
41	1	A45	Y2023	Primary Bay Mills	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 37)		Yes	2.3.2	6 850,00	m²	R	1 254,00	R 8 589 900,00	R	8 589 900,00	Assume medium plant structure	
42	1	A46	Y2023	Regrind Bay Mill	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 38)		Yes	2.3.2	6 850,00	m²	R	1 254,00	R 8 589 900,00	R	8 589 900,00	Assume medium plant structure	
43	1	A47	Y2023	HPGR Crushing	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.3	1 245,00	m²	R	2 786,00	R 3 468 570,00	R	3 468 570,00	Assume medium/heavy plant structure	
44	1	A48	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.2	240,00	m²	R	1 254,00	R 300 960,00	R	300 960,00	Assume to from part of HPGR Crushing & assume medium plant structure	
45	1	A49	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.2	113,00	m²	R	1 254,00	R 141 702,00	R	141 702,00	Assume to from part of HPGR Crushing & assume medium plant structure	
46	1	A50	Y2023	Low Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 39)		Yes	2.3.2	2 160,00	m²	R	1 254,00	R 2 708 640,00	R	2 708 640,00	Assume medium plant structure	
47	1	A51	Y2023	Wet Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 40)		Yes	2.3.2	2 160,00	m²	R	1 254,00	R 2 708 640,00	R	2 708 640,00	Assume medium plant structure	
48	1	A52	Y2023	Main Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 15)		Yes	3.2.1	500,00	m²	R	855,00	R 427 500,00	R	427 500,00	Assume single storey building	
49	1	A53	Y2023	CMS	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 41)		Yes	2.3.2	1 900,00	m²	R	1 254,00	R 2 382 600,00	R	2 382 600,00	Assume medium plant structure	
50	1	A54	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	2 300,00	m²	R	855,00	R 1 966 500,00	R	1 966 500,00	Assume single storey building	
51	1	A55	Y2023	Central/Primary Control Room	Single storey building	1600F3-2700-DD30-GAD-0012-Rev C		Yes	3.1.1	145,00	m²	R	461,00	R 66 845,00	R	66 845,00		
52	3	A57	Y2023	Primary Crusher:		1600F3-1800-DD11-LYD-0001-Rev A												
53	3			Engineered Terrace	Major gravel roads with engineered surfaces			Yes	8,2	12 600,00	m²	R	38,00	R 478 800,00	R	478 800,00		
54	3			Primary Crusher	Heavy plant structures			Yes	2.3.4	2 055,00	m²	R	4 179,50	R 8 588 872,50	R	8 588 872,50	Assume heavy plant structure	
55	3			Earth Retaining Walls	Medium concrete, thickness between 250 and 750mm			Yes	4,2	1 312,50	m³	R	981,00	R 1 287 562,50	R	1 287 562,50	Assume Loffestein concrete blocks Assume 25m high as per contours	
							SUB-TOTAL 1								R	81 053 620,15		
							Preliminaries and General	6%							R	4 863 217,21		
							Contingency	10%							R	8 105 362,02		
							SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R	12 968 579,22		
							GRAND-TOTAL								R	94 022 199,37		

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

INFRASTRUCTURAL ASPECTS																	
1,1	PLANT AND RELATED STRUCTURES							Closure Forecast							Y2029		
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total		LIABLE VALUE		Notes
1										16 593,47					R	81 053 620,15	
2	1	A1	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
3	1	A2	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
4	1	A3	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
5	1	A4	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
6	1	A8	Y2023	Compressor House	5m – 10m high	1600F3-2700-DD30-GAD-0014-Rev C		Yes	3.6.2	288,00	m²	R 570,50	R	164 304,00	R	164 304,00	8650mm High as per design drawings
7	1	A19	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor
8	1	A20	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor
9	1	A21	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor
10	1	A22	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	200,00	m	R 414,50	R	82 900,00	R	82 900,00	Assume overland conveyor
11	1	A23	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	380,00	m	R 414,50	R	157 510,00	R	157 510,00	Assume overland conveyor
12	1	A24	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	610,00	m	R 414,50	R	252 845,00	R	252 845,00	Assume overland conveyor
13	1	A25	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	1 400,00	m	R 414,50	R	580 300,00	R	580 300,00	Assume overland conveyor
14	1	A26	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	130,00	m	R 414,50	R	53 885,00	R	53 885,00	Assume overland conveyor
15	1	A27	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	140,00	m	R 414,50	R	58 030,00	R	58 030,00	Assume overland conveyor
16	1	A29	Y2023	Secondary Crusher	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	2.3.3	2 044,00	m²	R 2 786,00	R	5 694 584,00	R	5 694 584,00	Assume medium/heavy plant structure
17	1	A31	Y2023	Coarse Ore Stockpile Feeder	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	2.3.2	3 000,00	m²	R 1 254,00	R	3 762 000,00	R	3 762 000,00	Assume footprint & medium plant structure
18	1			Coarse Ore Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	4,3	1 966,80	m³	R 643,00	R	1 264 652,40	R	1 264 652,40	Assume 150mm thick concrete stockpile footprint
19	1	A32	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)											
20	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights
21	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure and footprint assumed
22	1	A33	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.2.1	580,00	m²	R 855,00	R	495 900,00	R	495 900,00	Assume single storey building
23	1	A34	Y2023	Tailings Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 30)											
24	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights
25	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure & footprint assumed
26	1	A35	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.2.1	580,00	m²	R 855,00	R	495 900,00	R	495 900,00	Assume single storey building
27	1	A36	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.1.1	580,00	m²	R 461,00	R	267 380,00	R	267 380,00	Assume single storey building
28	1	A37	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)											
29	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights
30	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure & footprint assumed
31	1	A38	Y2023	TMF Feed Tank & Concentrate Transfer Tank:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 33 & 35)											
32	1			Concrete Platform	Light concrete, thickness less than 250mm			Yes	4,3	300,00	m³	R 643,00	R	192 900,00	R	192 900,00	Assume 250mm thick concrete platform
33	1			Medium Tanks	Medium steel tanks			Yes	2.5.2	2,00	no	R 23 492,50	R	46 985,00	R	46 985,00	Tank sizes assumed
34	1			Large Tanks	Large steel tanks			Yes	2.5.3	1,00	no	R 43 854,00	R	43 854,00	R	43 854,00	Tank sizes assumed
35	1	A39	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	600,00	m²	R 855,00	R	513 000,00	R	513 000,00	Assume single storey building
36	1	A40	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	80,00	m²	R 855,00	R	68 400,00	R	68 400,00	Assume to form part of the Water Treatment Plant Assume single storey building
37	1	A41	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	515,00	m²	R 855,00	R	440 325,00	R	440 325,00	Assume to form part of the Water Treatment Plant Assume single storey building
38	1	A42	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	370,00	m²	R 855,00	R	316 350,00	R	316 350,00	Assume to form part of the Water Treatment Plant Assume single storey building
39	1	A43	Y2023	Secondary Screening Plant	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 24)		Yes	2.3.3	1 900,00	m²	R 2 786,00	R	5 293 400,00	R	5 293 400,00	Assume medium/heavy plant structure
40	1	A44	Y2023	HPGR Screening	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 27)		Yes	2.3.3	2 510,00	m²	R 2 786,00	R	6 992 860,00	R	6 992 860,00	Assume medium/heavy plant structure
41	1	A45	Y2023	Primary Bay Mills	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 37)		Yes	2.3.2	6 850,00	m²	R 1 254,00	R	8 589 900,00	R	8 589 900,00	Assume medium plant structure
42	1	A46	Y2023	Regrind Bay Mill	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 38)		Yes	2.3.2	6 850,00	m²	R 1 254,00	R	8 589 900,00	R	8 589 900,00	Assume medium plant structure
43	1	A47	Y2023	HPGR Crushing	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.3	1 245,00	m²	R 2 786,00	R	3 468 570,00	R	3 468 570,00	Assume medium/heavy plant structure
44	1	A48	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.2	240,00	m²	R 1 254,00	R	300 960,00	R	300 960,00	Assume to from part of HPGR Crushing & assume medium plant structure
45	1	A49	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.2	113,00	m²	R 1 254,00	R	141 702,00	R	141 702,00	Assume to from part of HPGR Crushing & assume medium plant structure
46	1	A50	Y2023	Low Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 39)		Yes	2.3.2	2 160,00	m²	R 1 254,00	R	2 708 640,00	R	2 708 640,00	Assume medium plant structure
47	1	A51	Y2023	Wet Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 40)		Yes	2.3.2	2 160,00	m²	R 1 254,00	R	2 708 640,00	R	2 708 640,00	Assume medium plant structure
48	1	A52	Y2023	Main Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 15)		Yes	3.2.1	500,00	m²	R 855,00	R	427 500,00	R	427 500,00	Assume single storey building
49	1	A53	Y2023	CMS	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 41)		Yes	2.3.2	1 900,00	m²	R 1 254,00	R	2 382 600,00	R	2 382 600,00	Assume medium plant structure
50	1	A54	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	2 300,00	m²	R 855,00	R	1 966 500,00	R	1 966 500,00	Assume single storey building
51	1	A55	Y2023	Central/Primary Control Room	Single storey building	1600F3-2700-DD30-GAD-0012-Rev C		Yes	3.1.1	145,00	m²	R 461,00	R	66 845,00	R	66 845,00	
52	3	A57	Y2023	Primary Crusher:		1600F3-1800-DD11-LYD-0001-Rev A											
53	3			Engineered Terrace	Major gravel roads with engineered surfaces			Yes	8,2	12 600,00	m²	R 38,00	R	478 800,00	R	478 800,00	
54	3			Primary Crusher	Heavy plant structures			Yes	2.3.4	2 055,00	m²	R 4 179,50	R	8 588 872,50	R	8 588 872,50	Assume heavy plant structure
55	3			Earth Retaining Walls	Medium concrete, thickness between 250 and 750mm			Yes	4,2	1 312,50	m³	R 981,00	R	1 287 562,50	R	1 287 562,50	Assume Loffestein concrete blocks Assume 25m high as per contours
															R	81 053 620,15	
							Preliminaries and General	6%							R	4 863 217,21	
							Contingency	10%							R	8 105 362,02	
							SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R	12 968 579,22	
							GRAND-TOTAL								R	94 022 199,37	

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

INFRASTRUCTURAL ASPECTS																		
1,1	PLANT AND RELATED STRUCTURES																	
								Closure Forecast							Y2030			
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate		Unit Total		LIABLE VALUE		Notes
1										16 593,47						R	81 053 620,15	
2	1	A1	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R	855,00	R 213 750,00		R	213 750,00	Assume single storey building
3	1	A2	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R	855,00	R 213 750,00		R	213 750,00	Assume single storey building
4	1	A3	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R	855,00	R 213 750,00		R	213 750,00	Assume single storey building
5	1	A4	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R	855,00	R 213 750,00		R	213 750,00	Assume single storey building
6	1	A8	Y2023	Compressor House	5m – 10m high	1600F3-2700-DD30-GAD-0014-Rev C		Yes	3.6.2	288,00	m²	R	570,50	R 164 304,00		R	164 304,00	8650mm High as per design drawings
7	1	A19	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R	414,50	R 62 175,00		R	62 175,00	Assume overland conveyor
8	1	A20	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R	414,50	R 62 175,00		R	62 175,00	Assume overland conveyor
9	1	A21	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R	414,50	R 62 175,00		R	62 175,00	Assume overland conveyor
10	1	A22	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	200,00	m	R	414,50	R 82 900,00		R	82 900,00	Assume overland conveyor
11	1	A23	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	380,00	m	R	414,50	R 157 510,00		R	157 510,00	Assume overland conveyor
12	1	A24	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	610,00	m	R	414,50	R 252 845,00		R	252 845,00	Assume overland conveyor
13	1	A25	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	1 400,00	m	R	414,50	R 580 300,00		R	580 300,00	Assume overland conveyor
14	1	A26	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	130,00	m	R	414,50	R 53 885,00		R	53 885,00	Assume overland conveyor
15	1	A27	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	140,00	m	R	414,50	R 58 030,00		R	58 030,00	Assume overland conveyor
16	1	A29	Y2023	Secondary Crusher	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	2.3.3	2 044,00	m²	R	2 786,00	R 5 694 584,00		R	5 694 584,00	Assume medium/heavy plant structure
17	1	A31	Y2023	Coarse Ore Stockpile Feeder	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	2.3.2	3 000,00	m²	R	1 254,00	R 3 762 000,00		R	3 762 000,00	Assume footprint & medium plant structure
18	1			Coarse Ore Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	4,3	1 966,80	m³	R	643,00	R 1 264 652,40		R	1 264 652,40	Assume 150mm thick concrete stockpile footprint
19	1	A32	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)												
20	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R	981,00	R 3 061 946,25		R	3 061 946,25	Assume concrete thickness, wall sizes & heights
21	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R	1 254,00	R 627 000,00		R	627 000,00	Steel structure and footprint assumed
22	1	A33	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.2.1	580,00	m²	R	855,00	R 495 900,00		R	495 900,00	Assume single storey building
23	1	A34	Y2023	Tailings Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 30)												
24	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R	981,00	R 3 061 946,25		R	3 061 946,25	Assume concrete thickness, wall sizes & heights
25	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R	1 254,00	R 627 000,00		R	627 000,00	Steel structure & footprint assumed
26	1	A35	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.2.1	580,00	m²	R	855,00	R 495 900,00		R	495 900,00	Assume single storey building
27	1	A36	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.1.1	580,00	m²	R	461,00	R 267 380,00		R	267 380,00	Assume single storey building
28	1	A37	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)												
29	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R	981,00	R 3 061 946,25		R	3 061 946,25	Assume concrete thickness, wall sizes & heights
30	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R	1 254,00	R 627 000,00		R	627 000,00	Steel structure & footprint assumed
31	1	A38	Y2023	TMF Feed Tank & Concentrate Transfer Tank:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 33 & 35)												
32	1			Concrete Platform	Light concrete, thickness less than 250mm			Yes	4,3	300,00	m³	R	643,00	R 192 900,00		R	192 900,00	Assume 250mm thick concrete platform
33	1			Medium Tanks	Medium steel tanks			Yes	2.5.2	2,00	no	R	23 492,50	R 46 985,00		R	46 985,00	Tank sizes assumed
34	1			Large Tanks	Large steel tanks			Yes	2.5.3	1,00	no	R	43 854,00	R 43 854,00		R	43 854,00	Tank sizes assumed
35	1	A39	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	600,00	m²	R	855,00	R 513 000,00		R	513 000,00	Assume single storey building
36	1	A40	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	80,00	m²	R	855,00	R 68 400,00		R	68 400,00	Assume to form part of the Water Treatment Plant Assume single storey building
37	1	A41	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	515,00	m²	R	855,00	R 440 325,00		R	440 325,00	Assume to form part of the Water Treatment Plant Assume single storey building
38	1	A42	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	370,00	m²	R	855,00	R 316 350,00		R	316 350,00	Assume to form part of the Water Treatment Plant Assume single storey building
39	1	A43	Y2023	Secondary Screening Plant	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 24)		Yes	2.3.3	1 900,00	m²	R	2 786,00	R 5 293 400,00		R	5 293 400,00	Assume medium/heavy plant structure
40	1	A44	Y2023	HPGR Screening	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 27)		Yes	2.3.3	2 510,00	m²	R	2 786,00	R 6 992 860,00		R	6 992 860,00	Assume medium/heavy plant structure
41	1	A45	Y2023	Primary Bay Mills	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 37)		Yes	2.3.2	6 850,00	m²	R	1 254,00	R 8 589 900,00		R	8 589 900,00	Assume medium plant structure
42	1	A46	Y2023	Regrind Bay Mill	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 38)		Yes	2.3.2	6 850,00	m²	R	1 254,00	R 8 589 900,00		R	8 589 900,00	Assume medium plant structure
43	1	A47	Y2023	HPGR Crushing	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.3	1 245,00	m²	R	2 786,00	R 3 468 570,00		R	3 468 570,00	Assume medium/heavy plant structure
44	1	A48	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.2	240,00	m²	R	1 254,00	R 300 960,00		R	300 960,00	Assume to from part of HPGR Crushing & assume medium plant structure
45	1	A49	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.2	113,00	m²	R	1 254,00	R 141 702,00		R	141 702,00	Assume to from part of HPGR Crushing & assume medium plant structure
46	1	A50	Y2023	Low Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 39)		Yes	2.3.2	2 160,00	m²	R	1 254,00	R 2 708 640,00		R	2 708 640,00	Assume medium plant structure
47	1	A51	Y2023	Wet Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 40)		Yes	2.3.2	2 160,00	m²	R	1 254,00	R 2 708 640,00		R	2 708 640,00	Assume medium plant structure
48	1	A52	Y2023	Main Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 15)		Yes	3.2.1	500,00	m²	R	855,00	R 427 500,00		R	427 500,00	Assume single storey building
49	1	A53	Y2023	CMS	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 41)		Yes	2.3.2	1 900,00	m²	R	1 254,00	R 2 382 600,00		R	2 382 600,00	Assume medium plant structure
50	1	A54	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	2 300,00	m²	R	855,00	R 1 966 500,00		R	1 966 500,00	Assume single storey building
51	1	A55	Y2023	Central/Primary Control Room	Single storey building	1600F3-2700-DD30-GAD-0012-Rev C		Yes	3.1.1	145,00	m²	R	461,00	R 66 845,00		R	66 845,00	
52	3	A57	Y2023	Primary Crusher:		1600F3-1800-DD11-LYD-0001-Rev A												
53	3			Engineered Terrace	Major gravel roads with engineered surfaces			Yes	8,2	12 600,00	m²	R	38,00	R 478 800,00		R	478 800,00	
54	3			Primary Crusher	Heavy plant structures			Yes	2.3.4	2 055,00	m²	R	4 179,50	R 8 588 872,50		R	8 588 872,50	Assume heavy plant structure
55	3			Earth Retaining Walls	Medium concrete, thickness between 250 and 750mm			Yes	4,2	1 312,50	m³	R	981,00	R 1 287 562,50		R	1 287 562,50	Assume Loffestein concrete blocks Assume 25m high as per contours
							SUB-TOTAL 1									R	81 053 620,15	
							Preliminaries and General	6%								R	4 863 217,21	
							Contingency	10%								R	8 105 362,02	
							SUB-TOTAL 2 (P&G's AND CONTINGENCIES)									R	12 968 579,22	
							GRAND-TOTAL									R	94 022 199,37	

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Financial Provision FY2023

INFRASTRUCTURAL ASPECTS																		
1,1	PLANT AND RELATED STRUCTURES																	
								Closure Forecast							Y2031			
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate		Unit Total	LIABLE VALUE		Notes	
1										16 593,47					R	81 053 620,15		
2	1	A1	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R	855,00	R 213 750,00	R	213 750,00	Assume single storey building	
3	1	A2	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R	855,00	R 213 750,00	R	213 750,00	Assume single storey building	
4	1	A3	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R	855,00	R 213 750,00	R	213 750,00	Assume single storey building	
5	1	A4	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	250,00	m²	R	855,00	R 213 750,00	R	213 750,00	Assume single storey building	
6	1	A8	Y2023	Compressor House	5m – 10m high	1600F3-2700-DD30-GAD-0014-Rev C		Yes	3.6.2	288,00	m²	R	570,50	R 164 304,00	R	164 304,00	8650mm High as per design drawings	
7	1	A19	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R	414,50	R 62 175,00	R	62 175,00	Assume overland conveyor	
8	1	A20	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R	414,50	R 62 175,00	R	62 175,00	Assume overland conveyor	
9	1	A21	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	150,00	m	R	414,50	R 62 175,00	R	62 175,00	Assume overland conveyor	
10	1	A22	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	200,00	m	R	414,50	R 82 900,00	R	82 900,00	Assume overland conveyor	
11	1	A23	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	380,00	m	R	414,50	R 157 510,00	R	157 510,00	Assume overland conveyor	
12	1	A24	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	610,00	m	R	414,50	R 252 845,00	R	252 845,00	Assume overland conveyor	
13	1	A25	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	1 400,00	m	R	414,50	R 580 300,00	R	580 300,00	Assume overland conveyor	
14	1	A26	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	130,00	m	R	414,50	R 53 885,00	R	53 885,00	Assume overland conveyor	
15	1	A27	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	5.1.2	140,00	m	R	414,50	R 58 030,00	R	58 030,00	Assume overland conveyor	
16	1	A29	Y2023	Secondary Crusher	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	2.3.3	2 044,00	m²	R	2 786,00	R 5 694 584,00	R	5 694 584,00	Assume medium/heavy plant structure	
17	1	A31	Y2023	Coarse Ore Stockpile Feeder	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	2.3.2	3 000,00	m²	R	1 254,00	R 3 762 000,00	R	3 762 000,00	Assume footprint & medium plant structure	
18	1			Coarse Ore Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	4,3	1 966,80	m³	R	643,00	R 1 264 652,40	R	1 264 652,40	Assume 150mm thick concrete stockpile footprint	
19	1	A32	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)												
20	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R	981,00	R 3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights	
21	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R	1 254,00	R 627 000,00	R	627 000,00	Steel structure and footprint assumed	
22	1	A33	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.2.1	580,00	m²	R	855,00	R 495 900,00	R	495 900,00	Assume single storey building	
23	1	A34	Y2023	Tailings Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 30)												
24	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R	981,00	R 3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights	
25	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R	1 254,00	R 627 000,00	R	627 000,00	Steel structure & footprint assumed	
26	1	A35	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.2.1	580,00	m²	R	855,00	R 495 900,00	R	495 900,00	Assume single storey building	
27	1	A36	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.1.1	580,00	m²	R	461,00	R 267 380,00	R	267 380,00	Assume single storey building	
28	1	A37	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)												
29	1			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	3 121,25	m³	R	981,00	R 3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights	
30	1			Steel Structure	Medium plant structures			Yes	2.3.2	500,00	m²	R	1 254,00	R 627 000,00	R	627 000,00	Steel structure & footprint assumed	
31	1	A38	Y2023	TMF Feed Tank & Concentrate Transfer Tank:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 33 & 35)												
32	1			Concrete Platform	Light concrete, thickness less than 250mm			Yes	4,3	300,00	m³	R	643,00	R 192 900,00	R	192 900,00	Assume 250mm thick concrete platform	
33	1			Medium Tanks	Medium steel tanks			Yes	2.5.2	2,00	no	R	23 492,50	R 46 985,00	R	46 985,00	Tank sizes assumed	
34	1			Large Tanks	Large steel tanks			Yes	2.5.3	1,00	no	R	43 854,00	R 43 854,00	R	43 854,00	Tank sizes assumed	
35	1	A39	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	600,00	m²	R	855,00	R 513 000,00	R	513 000,00	Assume single storey building	
36	1	A40	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	80,00	m²	R	855,00	R 68 400,00	R	68 400,00	Assume to form part of the Water Treatment Plant Assume single storey building	
37	1	A41	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	515,00	m²	R	855,00	R 440 325,00	R	440 325,00	Assume to form part of the Water Treatment Plant Assume single storey building	
38	1	A42	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)		Yes	3.2.1	370,00	m²	R	855,00	R 316 350,00	R	316 350,00	Assume to form part of the Water Treatment Plant Assume single storey building	
39	1	A43	Y2023	Secondary Screening Plant	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 24)		Yes	2.3.3	1 900,00	m²	R	2 786,00	R 5 293 400,00	R	5 293 400,00	Assume medium/heavy plant structure	
40	1	A44	Y2023	HPGR Screening	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 27)		Yes	2.3.3	2 510,00	m²	R	2 786,00	R 6 992 860,00	R	6 992 860,00	Assume medium/heavy plant structure	
41	1	A45	Y2023	Primary Bay Mills	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 37)		Yes	2.3.2	6 850,00	m²	R	1 254,00	R 8 589 900,00	R	8 589 900,00	Assume medium plant structure	
42	1	A46	Y2023	Regrind Bay Mill	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 38)		Yes	2.3.2	6 850,00	m²	R	1 254,00	R 8 589 900,00	R	8 589 900,00	Assume medium plant structure	
43	1	A47	Y2023	HPGR Crushing	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.3	1 245,00	m²	R	2 786,00	R 3 468 570,00	R	3 468 570,00	Assume medium/heavy plant structure	
44	1	A48	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.2	240,00	m²	R	1 254,00	R 300 960,00	R	300 960,00	Assume to from part of HPGR Crushing & assume medium plant structure	
45	1	A49	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)		Yes	2.3.2	113,00	m²	R	1 254,00	R 141 702,00	R	141 702,00	Assume to from part of HPGR Crushing & assume medium plant structure	
46	1	A50	Y2023	Low Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 39)		Yes	2.3.2	2 160,00	m²	R	1 254,00	R 2 708 640,00	R	2 708 640,00	Assume medium plant structure	
47	1	A51	Y2023	Wet Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 40)		Yes	2.3.2	2 160,00	m²	R	1 254,00	R 2 708 640,00	R	2 708 640,00	Assume medium plant structure	
48	1	A52	Y2023	Main Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 15)		Yes	3.2.1	500,00	m²	R	855,00	R 427 500,00	R	427 500,00	Assume single storey building	
49	1	A53	Y2023	CMS	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 41)		Yes	2.3.2	1 900,00	m²	R	1 254,00	R 2 382 600,00	R	2 382 600,00	Assume medium plant structure	
50	1	A54	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)		Yes	3.2.1	2 300,00	m²	R	855,00	R 1 966 500,00	R	1 966 500,00	Assume single storey building	
51	1	A55	Y2023	Central/Primary Control Room	Single storey building	1600F3-2700-DD30-GAD-0012-Rev C		Yes	3.1.1	145,00	m²	R	461,00	R 66 845,00	R	66 845,00		
52	3	A57	Y2023	Primary Crusher:		1600F3-1800-DD11-LYD-0001-Rev A												
53	3			Engineered Terrace	Major gravel roads with engineered surfaces			Yes	8,2	12 600,00	m²	R	38,00	R 478 800,00	R	478 800,00		
54	3			Primary Crusher	Heavy plant structures			Yes	2.3.4	2 055,00	m²	R	4 179,50	R 8 588 872,50	R	8 588 872,50	Assume heavy plant structure	
55	3			Earth Retaining Walls	Medium concrete, thickness between 250 and 750mm			Yes	4,2	1 312,50	m³	R	981,00	R 1 287 562,50	R	1 287 562,50	Assume Loffestein concrete blocks Assume 25m high as per contours	
															R	81 053 620,15		
							Preliminaries and General	6%							R	4 863 217,21		
							Contingency	10%							R	8 105 362,02		
							SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R	12 968 579,22		
							GRAND-TOTAL								R	94 022 199,37		

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INFRASTRUCTURAL ASPECTS																	
1,1	PLANT AND RELATED STRUCTURES						Closure Forecast							Y2032			
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers	LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total		LIABLE VALUE		Notes
1									16 593,47					R	81 053 620,15	
2	1	A1	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)	Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
3	1	A2	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)	Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
4	1	A3	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)	Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
5	1	A4	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)	Yes	3.2.1	250,00	m²	R 855,00	R	213 750,00	R	213 750,00	Assume single storey building
6	1	A8	Y2023	Compressor House	5m – 10m high	1600F3-2700-DD30-GAD-0014-Rev C	Yes	3.6.2	288,00	m²	R 570,50	R	164 304,00	R	164 304,00	8650mm High as per design drawings
7	1	A19	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor
8	1	A20	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor
9	1	A21	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	150,00	m	R 414,50	R	62 175,00	R	62 175,00	Assume overland conveyor
10	1	A22	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	200,00	m	R 414,50	R	82 900,00	R	82 900,00	Assume overland conveyor
11	1	A23	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	380,00	m	R 414,50	R	157 510,00	R	157 510,00	Assume overland conveyor
12	1	A24	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	610,00	m	R 414,50	R	252 845,00	R	252 845,00	Assume overland conveyor
13	1	A25	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	1 400,00	m	R 414,50	R	580 300,00	R	580 300,00	Assume overland conveyor
14	1	A26	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	130,00	m	R 414,50	R	53 885,00	R	53 885,00	Assume overland conveyor
15	1	A27	Y2023	Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	5.1.2	140,00	m	R 414,50	R	58 030,00	R	58 030,00	Assume overland conveyor
16	1	A29	Y2023	Secondary Crusher	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	2.3.3	2 044,00	m²	R 2 786,00	R	5 694 584,00	R	5 694 584,00	Assume medium/heavy plant structure
17	1	A31	Y2023	Coarse Ore Stockpile Feeder	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	2.3.2	3 000,00	m²	R 1 254,00	R	3 762 000,00	R	3 762 000,00	Assume footprint & medium plant structure
18	1			Coarse Ore Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	4,3	1 966,80	m³	R 643,00	R	1 264 652,40	R	1 264 652,40	Assume 150mm thick concrete stockpile footprint
19	1	A32	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)										
20	1			Superstructure	Medium concrete, thickness between 250 and 750mm		Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights
21	1			Steel Structure	Medium plant structures		Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure and footprint assumed
22	1	A33	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	3.2.1	580,00	m²	R 855,00	R	495 900,00	R	495 900,00	Assume single storey building
23	1	A34	Y2023	Tailings Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 30)										
24	1			Superstructure	Medium concrete, thickness between 250 and 750mm		Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights
25	1			Steel Structure	Medium plant structures		Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure & footprint assumed
26	1	A35	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	3.2.1	580,00	m²	R 855,00	R	495 900,00	R	495 900,00	Assume single storey building
27	1	A36	Y2023	Control Room	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	3.1.1	580,00	m²	R 461,00	R	267 380,00	R	267 380,00	Assume single storey building
28	1	A37	Y2023	Concentrate Thickener:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 34)										
29	1			Superstructure	Medium concrete, thickness between 250 and 750mm		Yes	4,2	3 121,25	m³	R 981,00	R	3 061 946,25	R	3 061 946,25	Assume concrete thickness, wall sizes & heights
30	1			Steel Structure	Medium plant structures		Yes	2.3.2	500,00	m²	R 1 254,00	R	627 000,00	R	627 000,00	Steel structure & footprint assumed
31	1	A38	Y2023	TMF Feed Tank & Concentrate Transfer Tank:		1600F3-0000-DE10-LYD-0002-PrelimA (Nr 33 & 35)										
32	1			Concrete Platform	Light concrete, thickness less than 250mm		Yes	4,3	300,00	m³	R 643,00	R	192 900,00	R	192 900,00	Assume 250mm thick concrete platform
33	1			Medium Tanks	Medium steel tanks		Yes	2.5.2	2,00	no	R 23 492,50	R	46 985,00	R	46 985,00	Tank sizes assumed
34	1			Large Tanks	Large steel tanks		Yes	2.5.3	1,00	no	R 43 854,00	R	43 854,00	R	43 854,00	Tank sizes assumed
35	1	A39	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)	Yes	3.2.1	600,00	m²	R 855,00	R	513 000,00	R	513 000,00	Assume single storey building
36	1	A40	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)	Yes	3.2.1	80,00	m²	R 855,00	R	68 400,00	R	68 400,00	Assume to form part of the Water Treatment Plant Assume single storey building
37	1	A41	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)	Yes	3.2.1	515,00	m²	R 855,00	R	440 325,00	R	440 325,00	Assume to form part of the Water Treatment Plant Assume single storey building
38	1	A42	Y2023	Water Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 18)	Yes	3.2.1	370,00	m²	R 855,00	R	316 350,00	R	316 350,00	Assume to form part of the Water Treatment Plant Assume single storey building
39	1	A43	Y2023	Secondary Screening Plant	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 24)	Yes	2.3.3	1 900,00	m²	R 2 786,00	R	5 293 400,00	R	5 293 400,00	Assume medium/heavy plant structure
40	1	A44	Y2023	HPGR Screening	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 27)	Yes	2.3.3	2 510,00	m²	R 2 786,00	R	6 992 860,00	R	6 992 860,00	Assume medium/heavy plant structure
41	1	A45	Y2023	Primary Bay Mills	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 37)	Yes	2.3.2	6 850,00	m²	R 1 254,00	R	8 589 900,00	R	8 589 900,00	Assume medium plant structure
42	1	A46	Y2023	Regrind Bay Mill	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 38)	Yes	2.3.2	6 850,00	m²	R 1 254,00	R	8 589 900,00	R	8 589 900,00	Assume medium plant structure
43	1	A47	Y2023	HPGR Crushing	Medium / Heavy plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)	Yes	2.3.3	1 245,00	m²	R 2 786,00	R	3 468 570,00	R	3 468 570,00	Assume medium/heavy plant structure
44	1	A48	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)	Yes	2.3.2	240,00	m²	R 1 254,00	R	300 960,00	R	300 960,00	Assume to from part of HPGR Crushing & assume medium plant structure
45	1	A49	Y2023	HPGR Crushing	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 28)	Yes	2.3.2	113,00	m²	R 1 254,00	R	141 702,00	R	141 702,00	Assume to from part of HPGR Crushing & assume medium plant structure
46	1	A50	Y2023	Low Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 39)	Yes	2.3.2	2 160,00	m²	R 1 254,00	R	2 708 640,00	R	2 708 640,00	Assume medium plant structure
47	1	A51	Y2023	Wet Intensity Magnetic Separation	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 40)	Yes	2.3.2	2 160,00	m²	R 1 254,00	R	2 708 640,00	R	2 708 640,00	Assume medium plant structure
48	1	A52	Y2023	Main Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 15)	Yes	3.2.1	500,00	m²	R 855,00	R	427 500,00	R	427 500,00	Assume single storey building
49	1	A53	Y2023	CMS	Medium plant structures	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 41)	Yes	2.3.2	1 900,00	m²	R 1 254,00	R	2 382 600,00	R	2 382 600,00	Assume medium plant structure
50	1	A54	Y2023	Process Substation	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 36)	Yes	3.2.1	2 300,00	m²	R 855,00	R	1 966 500,00	R	1 966 500,00	Assume single storey building
51	1	A55	Y2023	Central/Primary Control Room	Single storey building	1600F3-2700-DD30-GAD-0012-Rev C	Yes	3.1.1	145,00	m²	R 461,00	R	66 845,00	R	66 845,00	
52	3	A57	Y2023	Primary Crusher:		1600F3-1800-DD11-LYD-0001-Rev A										
53	3			Engineered Terrace	Major gravel roads with engineered surfaces		Yes	8,2	12 600,00	m²	R 38,00	R	478 800,00	R	478 800,00	
54	3			Primary Crusher	Heavy plant structures		Yes	2.3.4	2 055,00	m²	R 4 179,50	R	8 588 872,50	R	8 588 872,50	Assume heavy plant structure
55	3			Earth Retaining Walls	Medium concrete, thickness between 250 and 750mm		Yes	4,2	1 312,50	m³	R 981,00	R	1 287 562,50	R	1 287 562,50	Assume Loffestein concrete blocks Assume 25m high as per contours
														R	81 053 620,15	
						SUB-TOTAL 1								R	81 053 620,15	
						Preliminaries and General	6%							R	4 863 217,21	
						Contingency	10%							R	8 105 362,02	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R	12 968 579,22	
						GRAND-TOTAL								R	94 022 199,37	

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INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2023	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										-				R 989 967,00	Plant construction to commence in Y2024 as per Mine Works Program
2	1	A5	Y2023	Canteen	Single storey building	1600F3-2700-DD30-GAD-0002-Rev C		No	3.1.1	-	m²	R 461,00	R -	R -	
3	1	A6	Y2023	Weightbridge	Medium concrete, thickness between 250 and 750mm	1600F3-2700-DD30-GAD-0015-Rev C		No	4,2	-	m³	R 981,00	R -	R -	
4	1			Office	Single storey building	1600F3-2700-DD30-GAD-0015-Rev C		No	3.1.1	-	m²	R 461,00	R -	R -	
5	1	A7	Y2023	First Aid Building	Single storey building	1600F3-2700-DD30-GAD-0004-Rev C		No	3.1.1	-	m²	R 461,00	R -	R -	
6	1	A9	Y2023	Warehouse	10m – 15m high	1600F3-2700-DD30-GAD-0008-Rev C		No	3.6.3	-	m²	R 642,00	R -	R -	11750mm High as per design drawings
7	1			Office & Stores	Single storey building	1600F3-2700-DD30-GAD-0008-Rev C		No	3.1.1	-	m²	R 461,00	R -	R -	
8	1	A10	Y2023	Store & Offices	5m – 10m high	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 11)		No	3.6.2	-	m²	R 570,50	R -	R -	Assume 10m high
9	1	A11	Y2023	Sewage Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr26)		No	3.2.1	-	m²	R 855,00	R -	R -	Assume single storey building
10	1	A12	Y2023	Administration & Training Offices	Single storey building	1600F3-2700-DD30-GAD-0001-Rev C		No	3.1.1	-	m²	R 461,00	R -	R -	
11	1	A13	Y2023	Washbay	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		No	3.1.1	-	m²	R 461,00	R -	R -	Assume as per DWG layer Assume single storey building
12	1	A14	Y2023	Diesel Storage Area	Light concrete, thickness less than 250mm	1600F3-2700-DD30-GAD-0016-Rev C		No	4,3	-	m³	R 643,00	R -	R -	
13	1			Diesel Tanks	Medium steel tanks	1600F3-2700-DD30-GAD-0016-Rev C		No	2.5.2	-	no	R 23 492,50	R -	R -	
14	1	A15	Y2023	Gas Bottle Storage & Chiller Enclosure	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C		No	3.1.1	-	m²	R 461,00	R -	R -	
15	1	A16	Y2023	Analytical Laboratory	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C		No	3.1.1	-	m²	R 461,00	R -	R -	
16	1				Double storey building	1600F3-2700-DD30-GAD-0009-Rev C		No	3.1.2	-	m²	R 782,50	R -	R -	
17	1	A17	Y2023	Primary Security Gate House	Single storey building	1600F3-2700-DD30-GAD-0005-Rev C		No	3.2.1	-	m²	R 855,00	R -	R -	
18	1	A18	Y2023	Change House & Laundry	Single storey building	1600F3-2700-DD30-GAD-0011-Rev C		No	3.1.1	-	m²	R 461,00	R -	R -	
19	1	A28	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0002-PrelimA									
21				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			No	9.2.1	-	m³	R 24,50	R -	R -	No sediment available at this stage.
22				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			No	9.6.6	-	m³/km	R 67,00	R -	R -	No sediment available at this stage.
20				HDPE Liner	Removal of single HDPE liner			No	6,4	-	m²	R 10,75	R -	R -	Assume 1 x HDPE Liner
23				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
24				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,80	ha	R 70 214,50	R 56 171,60	R 56 171,60	Assumed 100% of footprint will require shaping
25				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,80	ha	R 26 037,50	R 20 830,00	R 20 830,00	Includes soil amelioration, cultivation and seeding actions
26	1	A30	Y2023	Return Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA									
28				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			No	9.2.1	-	m³	R 24,50	R -	R -	No sediment available at this stage.
29				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			No	9.6.6	-	m³/km	R 67,00	R -	R -	No sediment available at this stage.
27				HDPE Liner	Removal of single HDPE liner			No	6,4	-	m²	R 10,75	R -	R -	Assume 1 x HDPE Liner
30				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
31				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,50	ha	R 70 214,50	R 35 107,25	R 35 107,25	Assumed 100% of footprint will require shaping
32				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,50	ha	R 26 037,50	R 13 018,75	R 13 018,75	Includes soil amelioration, cultivation and seeding actions
33	1	A56	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA									
35				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			No	9.2.1	-	m³	R 24,50	R -	R -	No sediment available at this stage.
36				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			No	9.6.6	-	m³/km	R 67,00	R -	R -	No sediment available at this stage.
34				HDPE Liner	Removal of single HDPE liner			No	6,4	-	m²	R 10,75	R -	R -	Assume 1 x HDPE Liner
37				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	500,00	m	R 301,00	R 150 500,00	R 150 500,00	
38				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	2,50	ha	R 70 214,50	R 175 536,25	R 175 536,25	Assumed 100% of footprint will require shaping
39				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	2,50	ha	R 26 037,50	R 65 093,75	R 65 093,75	Includes soil amelioration, cultivation and seeding actions
40	3	A58	Y2023	Explosive Magazines	Single storey building	Xref Plant DWG		No	3.2.1	-	m²	R 855,00	R -	R -	Assume single storey building
41				Concrete Walls	Light concrete, thickness less than 250mm	Xref Plant DWG		No	4,3	-	m³	R 643,00	R -	R -	Assume concrete walls
42	2	A74	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0003-Rev A									
44				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			No	9.2.1	-	m³	R 24,50	R -	R -	No sediment available at this stage.
45				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			No	9.6.6	-	m³/km	R 67,00	R -	R -	No sediment available at this stage.
43				HDPE Liner	Removal of single HDPE liner			No	6,4	-	m²	R 10,75	R -	R -	Assume 1 x HDPE Liner
46				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
47				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
48				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
49	2	A76	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 16)									
51				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	-	m³	R 24,50	R -	R -	
52				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	-	m³/km	R 67,00	R -	R -	
50				HDPE Liner	Removal of single HDPE liner			No	6,4	-	m²	R 10,75	R -	R -	Assume 1 x HDPE Liner
53				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
54				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,20	ha	R 70 214,50	R 14 042,90	R 14 042,90	Assumed 100% of footprint will require shaping
55				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,20	ha	R 26 037,50	R 5 207,50	R 5 207,50	Includes soil amelioration, cultivation and seeding actions
56	3	A99	Y2023	Pollution Control Dam Mining Yard:		1600F3-1800-DD11-LYD-001-1/1-A									
58				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			No	9.2.1	-	m³	R 24,50	R -	R -	No sediment available at this stage.
59				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			No	9.6.6	-	m³/km	R 67,00	R -	R -	No sediment available at this stage.
57				HDPE Liner	Removal of single HDPE liner			No	6,4	-	m²	R 10,75	R -	R -	Assume 1 x HDPE Liner
60				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	
61				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
62				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
63	1	A98	Y2023	Waste Area and Skips	Single storey building	1600F3-2700-DD30-GAD-0006-Rev C		No	3.1.1	-	m²	R 461,00	R -	R -	
64	3	A100	Y2023	Pollution Control Dam Mining Office		1600F3-1800-DD11-LYD-001-1/1-A									
66				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			No	9.2.1	-	m³	R 24,50	R -	R -	No sediment available at this stage.
67				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			No	9.6.6	-	m³/km	R 67,00	R -	R -	No sediment available at this stage.
65				HDPE Liner	Removal of single HDPE liner			No	6,4	-	m²	R 10,75	R -	R -	Assume 1 x HDPE Liner
68				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2023	
1,3		SUPPORTING INFRASTRUCTURE													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
69				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
70				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
71		A108	Y2023	Eskom Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Eskom's responsibility as confirmed by Wood PLC
72		A112	Y2023	Contractors Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Contractor's responsibility as confirmed by Wood PLC
						SUB-TOTAL 1								**R 989 967,00**	
						Preliminaries and General	6%							R 59 398,02	
						Contingency	10%							R 98 996,70	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 158 394,72**	
						GRAND-TOTAL								**R 1 148 361,72**	

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INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2024	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers	LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1									2 557,24				R 6 128 999,39	
2	1	A5	Y2023	Canteen	Single storey building	1600F3-2700-DD30-GAD-0002-Rev C	Yes	3.1.1	475,00	m²	R 461,00	R 218 975,00	R 218 975,00	
3	1	A6	Y2023	Weightbridge	Medium concrete, thickness between 250 and 750mm	1600F3-2700-DD30-GAD-0015-Rev C	Yes	4,2	66,53	m³	R 981,00	R 65 269,46	R 65 269,46	
4	1			Office	Single storey building	1600F3-2700-DD30-GAD-0015-Rev C	Yes	3.1.1	25,50	m²	R 461,00	R 11 755,50	R 11 755,50	
5	1	A7	Y2023	First Aid Building	Single storey building	1600F3-2700-DD30-GAD-0004-Rev C	Yes	3.1.1	73,00	m²	R 461,00	R 33 653,00	R 33 653,00	
6	1	A9	Y2023	Warehouse	10m – 15m high	1600F3-2700-DD30-GAD-0008-Rev C	Yes	3.6.3	1 202,00	m²	R 642,00	R 771 684,00	R 771 684,00	11750mm High as per design drawings
7	1			Office & Stores	Single storey building	1600F3-2700-DD30-GAD-0008-Rev C	Yes	3.1.1	252,00	m²	R 461,00	R 116 172,00	R 116 172,00	
8	1	A10	Y2023	Store & Offices	5m – 10m high	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 11)	Yes	3.6.2	1 670,00	m²	R 570,50	R 952 735,00	R 952 735,00	Assume 10m high
9	1	A11	Y2023	Sewage Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr26)	Yes	3.2.1	145,00	m²	R 855,00	R 123 975,00	R 123 975,00	Assume single storey building
10	1	A12	Y2023	Administration & Training Offices	Single storey building	1600F3-2700-DD30-GAD-0001-Rev C	Yes	3.1.1	504,00	m²	R 461,00	R 232 344,00	R 232 344,00	
11	1	A13	Y2023	Washbay	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	3.1.1	95,00	m²	R 461,00	R 43 795,00	R 43 795,00	Assume as per DWG layer Assume single storey building
12	1	A14	Y2023	Diesel Storage Area	Light concrete, thickness less than 250mm	1600F3-2700-DD30-GAD-0016-Rev C	Yes	4,3	76,10	m³	R 643,00	R 48 932,30	R 48 932,30	
13	1			Diesel Tanks	Medium steel tanks	1600F3-2700-DD30-GAD-0016-Rev C	Yes	2.5.2	2,00	no	R 23 492,50	R 46 985,00	R 46 985,00	
14	1	A15	Y2023	Gas Bottle Storage & Chiller Enclosure	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.1	49,00	m²	R 461,00	R 22 589,00	R 22 589,00	
15	1	A16	Y2023	Analytical Laboratory	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.1	396,00	m²	R 461,00	R 182 556,00	R 182 556,00	
16	1				Double storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.2	150,00	m²	R 782,50	R 117 375,00	R 117 375,00	
17	1	A17	Y2023	Primary Security Gate House	Single storey building	1600F3-2700-DD30-GAD-0005-Rev C	Yes	3.2.1	67,00	m²	R 855,00	R 57 285,00	R 57 285,00	
18	1	A18	Y2023	Change House & Laundry	Single storey building	1600F3-2700-DD30-GAD-0011-Rev C	Yes	3.1.1	514,00	m²	R 461,00	R 236 954,00	R 236 954,00	
19	1	A28	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
21				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	2 400,00	m³	R 24,50	R 58 800,00	R 58 800,00	
22				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	2 400,00	m³/km	R 67,00	R 160 800,00	R 160 800,00	
20				HDPE Liner	Removal of single HDPE liner		Yes	6,4	7 300,00	m²	R 10,75	R 78 475,00	R 78 475,00	Assume 1 x HDPE Liner
23				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
24				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,80	ha	R 70 214,50	R 56 171,60	R 56 171,60	Assumed 100% of footprint will require shaping
25				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,80	ha	R 26 037,50	R 20 830,00	R 20 830,00	Includes soil amelioration, cultivation and seeding actions
26	1	A30	Y2023	Return Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
28				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	1 500,00	m³	R 24,50	R 36 750,00	R 36 750,00	
29				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	1 500,00	m³/km	R 67,00	R 100 500,00	R 100 500,00	
27				HDPE Liner	Removal of single HDPE liner		Yes	6,4	4 900,00	m²	R 10,75	R 52 675,00	R 52 675,00	Assume 1 x HDPE Liner
30				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
31				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,50	ha	R 70 214,50	R 35 107,25	R 35 107,25	Assumed 100% of footprint will require shaping
32				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,50	ha	R 26 037,50	R 13 018,75	R 13 018,75	Includes soil amelioration, cultivation and seeding actions
33	1	A56	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
35				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	7 500,00	m³	R 24,50	R 183 750,00	R 183 750,00	
36				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	7 500,00	m³/km	R 67,00	R 502 500,00	R 502 500,00	
34				HDPE Liner	Removal of single HDPE liner		Yes	6,4	24 800,00	m²	R 10,75	R 266 600,00	R 266 600,00	Assume 1 x HDPE Liner
37				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	500,00	m	R 301,00	R 150 500,00	R 150 500,00	
38				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	2,50	ha	R 70 214,50	R 175 536,25	R 175 536,25	Assumed 100% of footprint will require shaping
39				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	2,50	ha	R 26 037,50	R 65 093,75	R 65 093,75	Includes soil amelioration, cultivation and seeding actions
40	3	A58	Y2023	Explosive Magazines	Single storey building	Xref Plant DWG	Yes	3.2.1	25,00	m²	R 855,00	R 21 375,00	R 21 375,00	Assume single storey building
41				Concrete Walls	Light concrete, thickness less than 250mm	Xref Plant DWG	Yes	4,3	30,00	m³	R 643,00	R 19 290,00	R 19 290,00	Assume concrete walls
42	2	A74	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0003-Rev A								
44				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,75	m³	R 24,50	R 18 393,38	R 18 393,38	
45				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,75	m³/km	R 67,00	R 50 300,25	R 50 300,25	
43				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 100,00	m²	R 10,75	R 22 575,00	R 22 575,00	Assume 1 x HDPE Liner
46				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
47				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
48				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
49	2	A76	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 16)								
51				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	600,00	m³	R 24,50	R 14 700,00	R 14 700,00	
52				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	600,00	m³/km	R 67,00	R 40 200,00	R 40 200,00	
50				HDPE Liner	Removal of single HDPE liner		Yes	6,4	1 970,00	m²	R 10,75	R 21 177,50	R 21 177,50	Assume 1 x HDPE Liner
53				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
54				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,20	ha	R 70 214,50	R 14 042,90	R 14 042,90	Assumed 100% of footprint will require shaping
55				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,20	ha	R 26 037,50	R 5 207,50	R 5 207,50	Includes soil amelioration, cultivation and seeding actions
56	3	A99	Y2023	Pollution Control Dam Mining Yard:		1600F3-1800-DD11-LYD-001-1/1-A								
58				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
59				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
57				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
60				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	
61				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
62				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
63	1	A98	Y2023	Waste Area and Skips	Single storey building	1600F3-2700-DD30-GAD-0006-Rev C	Yes	3.1.1	42,00	m²	R 461,00	R 19 362,00	R 19 362,00	
64	3	A100	Y2023	Pollution Control Dam Mining Office :		1600F3-1800-DD11-LYD-001-1/1-A								
66				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
67				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
65				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
68				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2024	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
69				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
70				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
71		A108	Y2023	Eskom Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Eskom's responsibility as confirmed by Wood PLC
72		A112	Y2023	Contractors Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Contractor's responsibility.
						SUB-TOTAL 1								**R 6 128 999,39**	
						Preliminaries and General	6%							R 367 739,96	
						Contingency	10%							R 612 899,94	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 980 639,90**	
						GRAND-TOTAL								**R 7 109 639,29**	

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2025	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers	LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1									2 557,24				R 6 128 999,39	
2	1	A5	Y2023	Canteen	Single storey building	1600F3-2700-DD30-GAD-0002-Rev C	Yes	3.1.1	475,00	m²	R 461,00	R 218 975,00	R 218 975,00	
3	1	A6	Y2023	Weightbridge	Medium concrete, thickness between 250 and 750mm	1600F3-2700-DD30-GAD-0015-Rev C	Yes	4,2	66,53	m³	R 981,00	R 65 269,46	R 65 269,46	
4	1			Office	Single storey building	1600F3-2700-DD30-GAD-0015-Rev C	Yes	3.1.1	25,50	m²	R 461,00	R 11 755,50	R 11 755,50	
5	1	A7	Y2023	First Aid Building	Single storey building	1600F3-2700-DD30-GAD-0004-Rev C	Yes	3.1.1	73,00	m²	R 461,00	R 33 653,00	R 33 653,00	
6	1	A9	Y2023	Warehouse	10m – 15m high	1600F3-2700-DD30-GAD-0008-Rev C	Yes	3.6.3	1 202,00	m²	R 642,00	R 771 684,00	R 771 684,00	11750mm High as per design drawings
7	1			Office & Stores	Single storey building	1600F3-2700-DD30-GAD-0008-Rev C	Yes	3.1.1	252,00	m²	R 461,00	R 116 172,00	R 116 172,00	
8	1	A10	Y2023	Store & Offices	5m – 10m high	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 11)	Yes	3.6.2	1 670,00	m²	R 570,50	R 952 735,00	R 952 735,00	Assume 10m high
9	1	A11	Y2023	Sewage Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr26)	Yes	3.2.1	145,00	m²	R 855,00	R 123 975,00	R 123 975,00	Assume single storey building
10	1	A12	Y2023	Administration & Training Offices	Single storey building	1600F3-2700-DD30-GAD-0001-Rev C	Yes	3.1.1	504,00	m²	R 461,00	R 232 344,00	R 232 344,00	
11	1	A13	Y2023	Washbay	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	3.1.1	95,00	m²	R 461,00	R 43 795,00	R 43 795,00	Assume as per DWG layer Assume single storey building
12	1	A14	Y2023	Diesel Storage Area	Light concrete, thickness less than 250mm	1600F3-2700-DD30-GAD-0016-Rev C	Yes	4,3	76,10	m³	R 643,00	R 48 932,30	R 48 932,30	
13	1			Diesel Tanks	Medium steel tanks	1600F3-2700-DD30-GAD-0016-Rev C	Yes	2.5.2	2,00	no	R 23 492,50	R 46 985,00	R 46 985,00	
14	1	A15	Y2023	Gas Bottle Storage & Chiller Enclosure	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.1	49,00	m²	R 461,00	R 22 589,00	R 22 589,00	
15	1	A16	Y2023	Analytical Laboratory	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.1	396,00	m²	R 461,00	R 182 556,00	R 182 556,00	
16	1				Double storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.2	150,00	m²	R 782,50	R 117 375,00	R 117 375,00	
17	1	A17	Y2023	Primary Security Gate House	Single storey building	1600F3-2700-DD30-GAD-0005-Rev C	Yes	3.2.1	67,00	m²	R 855,00	R 57 285,00	R 57 285,00	
18	1	A18	Y2023	Change House & Laundry	Single storey building	1600F3-2700-DD30-GAD-0011-Rev C	Yes	3.1.1	514,00	m²	R 461,00	R 236 954,00	R 236 954,00	
19	1	A28	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
21				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	2 400,00	m³	R 24,50	R 58 800,00	R 58 800,00	
22				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	2 400,00	m³/km	R 67,00	R 160 800,00	R 160 800,00	
20				HDPE Liner	Removal of single HDPE liner		Yes	6,4	7 300,00	m²	R 10,75	R 78 475,00	R 78 475,00	Assume 1 x HDPE Liner
23				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
24				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,80	ha	R 70 214,50	R 56 171,60	R 56 171,60	Assumed 100% of footprint will require shaping
25				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,80	ha	R 26 037,50	R 20 830,00	R 20 830,00	Includes soil amelioration, cultivation and seeding actions
26	1	A30	Y2023	Return Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
28				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	1 500,00	m³	R 24,50	R 36 750,00	R 36 750,00	
29				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	1 500,00	m³/km	R 67,00	R 100 500,00	R 100 500,00	
27				HDPE Liner	Removal of single HDPE liner		Yes	6,4	4 900,00	m²	R 10,75	R 52 675,00	R 52 675,00	Assume 1 x HDPE Liner
30				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
31				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,50	ha	R 70 214,50	R 35 107,25	R 35 107,25	Assumed 100% of footprint will require shaping
32				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,50	ha	R 26 037,50	R 13 018,75	R 13 018,75	Includes soil amelioration, cultivation and seeding actions
33	1	A56	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
35				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	7 500,00	m³	R 24,50	R 183 750,00	R 183 750,00	
36				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	7 500,00	m³/km	R 67,00	R 502 500,00	R 502 500,00	
34				HDPE Liner	Removal of single HDPE liner		Yes	6,4	24 800,00	m²	R 10,75	R 266 600,00	R 266 600,00	Assume 1 x HDPE Liner
37				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	500,00	m	R 301,00	R 150 500,00	R 150 500,00	
38				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	2,50	ha	R 70 214,50	R 175 536,25	R 175 536,25	Assumed 100% of footprint will require shaping
39				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	2,50	ha	R 26 037,50	R 65 093,75	R 65 093,75	Includes soil amelioration, cultivation and seeding actions
40	3	A58	Y2023	Explosive Magazines	Single storey building	Xref Plant DWG	Yes	3.2.1	25,00	m²	R 855,00	R 21 375,00	R 21 375,00	Assume single storey building
41				Concrete Walls	Light concrete, thickness less than 250mm	Xref Plant DWG	Yes	4,3	30,00	m³	R 643,00	R 19 290,00	R 19 290,00	Assume concrete walls
42	2	A74	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0003-Rev A								
44				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,75	m³	R 24,50	R 18 393,38	R 18 393,38	
45				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,75	m³/km	R 67,00	R 50 300,25	R 50 300,25	
43				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 100,00	m²	R 10,75	R 22 575,00	R 22 575,00	Assume 1 x HDPE Liner
46				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
47				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
48				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
49	2	A76	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 16)								
51				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	600,00	m³	R 24,50	R 14 700,00	R 14 700,00	
52				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	600,00	m³/km	R 67,00	R 40 200,00	R 40 200,00	
50				HDPE Liner	Removal of single HDPE liner		Yes	6,4	1 970,00	m²	R 10,75	R 21 177,50	R 21 177,50	Assume 1 x HDPE Liner
53				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
54				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,20	ha	R 70 214,50	R 14 042,90	R 14 042,90	Assumed 100% of footprint will require shaping
55				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,20	ha	R 26 037,50	R 5 207,50	R 5 207,50	Includes soil amelioration, cultivation and seeding actions
56	3	A99	Y2023	Pollution Control Dam Mining Yard:		1600F3-1800-DD11-LYD-001-1/1-A								
58				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
59				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
57				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
60				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	
61				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
62				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
63	1	A98	Y2023	Waste Area and Skips	Single storey building	1600F3-2700-DD30-GAD-0006-Rev C	Yes	3.1.1	42,00	m²	R 461,00	R 19 362,00	R 19 362,00	
64	3	A100	Y2023	Pollution Control Dam Mining Office :		1600F3-1800-DD11-LYD-001-1/1-A								
66				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
67				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
65				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
68				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2025	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
69				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
70				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
71		A108	Y2023	Eskom Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Eskom's responsibility as confirmed by Wood PLC
72		A112	Y2023	Contractors Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Contractor's responsibility.
						SUB-TOTAL 1								**R 6 128 999,39**	
						Preliminaries and General	6%							R 367 739,96	
						Contingency	10%							R 612 899,94	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 980 639,90**	
						GRAND-TOTAL								**R 7 109 639,29**	

Jindal Melmoth Iron Ore - EIA
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INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2026	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers	LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1									2 557,24				R 6 128 999,39	
2	1	A5	Y2023	Canteen	Single storey building	1600F3-2700-DD30-GAD-0002-Rev C	Yes	3.1.1	475,00	m²	R 461,00	R 218 975,00	R 218 975,00	
3	1	A6	Y2023	Weightbridge	Medium concrete, thickness between 250 and 750mm	1600F3-2700-DD30-GAD-0015-Rev C	Yes	4,2	66,53	m³	R 981,00	R 65 269,46	R 65 269,46	
4	1			Office	Single storey building	1600F3-2700-DD30-GAD-0015-Rev C	Yes	3.1.1	25,50	m²	R 461,00	R 11 755,50	R 11 755,50	
5	1	A7	Y2023	First Aid Building	Single storey building	1600F3-2700-DD30-GAD-0004-Rev C	Yes	3.1.1	73,00	m²	R 461,00	R 33 653,00	R 33 653,00	
6	1	A9	Y2023	Warehouse	10m – 15m high	1600F3-2700-DD30-GAD-0008-Rev C	Yes	3.6.3	1 202,00	m²	R 642,00	R 771 684,00	R 771 684,00	11750mm High as per design drawings
7	1			Office & Stores	Single storey building	1600F3-2700-DD30-GAD-0008-Rev C	Yes	3.1.1	252,00	m²	R 461,00	R 116 172,00	R 116 172,00	
8	1	A10	Y2023	Store & Offices	5m – 10m high	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 11)	Yes	3.6.2	1 670,00	m²	R 570,50	R 952 735,00	R 952 735,00	Assume 10m high
9	1	A11	Y2023	Sewage Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr26)	Yes	3.2.1	145,00	m²	R 855,00	R 123 975,00	R 123 975,00	Assume single storey building
10	1	A12	Y2023	Administration & Training Offices	Single storey building	1600F3-2700-DD30-GAD-0001-Rev C	Yes	3.1.1	504,00	m²	R 461,00	R 232 344,00	R 232 344,00	
11	1	A13	Y2023	Washbay	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	3.1.1	95,00	m²	R 461,00	R 43 795,00	R 43 795,00	Assume as per DWG layer Assume single storey building
12	1	A14	Y2023	Diesel Storage Area	Light concrete, thickness less than 250mm	1600F3-2700-DD30-GAD-0016-Rev C	Yes	4,3	76,10	m³	R 643,00	R 48 932,30	R 48 932,30	
13	1			Diesel Tanks	Medium steel tanks	1600F3-2700-DD30-GAD-0016-Rev C	Yes	2.5.2	2,00	no	R 23 492,50	R 46 985,00	R 46 985,00	
14	1	A15	Y2023	Gas Bottle Storage & Chiller Enclosure	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.1	49,00	m²	R 461,00	R 22 589,00	R 22 589,00	
15	1	A16	Y2023	Analytical Laboratory	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.1	396,00	m²	R 461,00	R 182 556,00	R 182 556,00	
16	1				Double storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.2	150,00	m²	R 782,50	R 117 375,00	R 117 375,00	
17	1	A17	Y2023	Primary Security Gate House	Single storey building	1600F3-2700-DD30-GAD-0005-Rev C	Yes	3.2.1	67,00	m²	R 855,00	R 57 285,00	R 57 285,00	
18	1	A18	Y2023	Change House & Laundry	Single storey building	1600F3-2700-DD30-GAD-0011-Rev C	Yes	3.1.1	514,00	m²	R 461,00	R 236 954,00	R 236 954,00	
19	1	A28	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
21				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	2 400,00	m³	R 24,50	R 58 800,00	R 58 800,00	
22				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	2 400,00	m³/km	R 67,00	R 160 800,00	R 160 800,00	
20				HDPE Liner	Removal of single HDPE liner		Yes	6,4	7 300,00	m²	R 10,75	R 78 475,00	R 78 475,00	Assume 1 x HDPE Liner
23				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
24				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,80	ha	R 70 214,50	R 56 171,60	R 56 171,60	Assumed 100% of footprint will require shaping
25				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,80	ha	R 26 037,50	R 20 830,00	R 20 830,00	Includes soil amelioration, cultivation and seeding actions
26	1	A30	Y2023	Return Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
28				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	1 500,00	m³	R 24,50	R 36 750,00	R 36 750,00	
29				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	1 500,00	m³/km	R 67,00	R 100 500,00	R 100 500,00	
27				HDPE Liner	Removal of single HDPE liner		Yes	6,4	4 900,00	m²	R 10,75	R 52 675,00	R 52 675,00	Assume 1 x HDPE Liner
30				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
31				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,50	ha	R 70 214,50	R 35 107,25	R 35 107,25	Assumed 100% of footprint will require shaping
32				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,50	ha	R 26 037,50	R 13 018,75	R 13 018,75	Includes soil amelioration, cultivation and seeding actions
33	1	A56	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
35				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	7 500,00	m³	R 24,50	R 183 750,00	R 183 750,00	
36				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	7 500,00	m³/km	R 67,00	R 502 500,00	R 502 500,00	
34				HDPE Liner	Removal of single HDPE liner		Yes	6,4	24 800,00	m²	R 10,75	R 266 600,00	R 266 600,00	Assume 1 x HDPE Liner
37				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	500,00	m	R 301,00	R 150 500,00	R 150 500,00	
38				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	2,50	ha	R 70 214,50	R 175 536,25	R 175 536,25	Assumed 100% of footprint will require shaping
39				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	2,50	ha	R 26 037,50	R 65 093,75	R 65 093,75	Includes soil amelioration, cultivation and seeding actions
40	3	A58	Y2023	Explosive Magazines	Single storey building	Xref Plant DWG	Yes	3.2.1	25,00	m²	R 855,00	R 21 375,00	R 21 375,00	Assume single storey building
41				Concrete Walls	Light concrete, thickness less than 250mm	Xref Plant DWG	Yes	4,3	30,00	m³	R 643,00	R 19 290,00	R 19 290,00	Assume concrete walls
42	2	A74	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0003-Rev A								
44				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,75	m³	R 24,50	R 18 393,38	R 18 393,38	
45				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,75	m³/km	R 67,00	R 50 300,25	R 50 300,25	
43				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 100,00	m²	R 10,75	R 22 575,00	R 22 575,00	Assume 1 x HDPE Liner
46				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
47				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
48				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
49	2	A76	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 16)								
51				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	600,00	m³	R 24,50	R 14 700,00	R 14 700,00	
52				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	600,00	m³/km	R 67,00	R 40 200,00	R 40 200,00	
50				HDPE Liner	Removal of single HDPE liner		Yes	6,4	1 970,00	m²	R 10,75	R 21 177,50	R 21 177,50	Assume 1 x HDPE Liner
53				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
54				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,20	ha	R 70 214,50	R 14 042,90	R 14 042,90	Assumed 100% of footprint will require shaping
55				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,20	ha	R 26 037,50	R 5 207,50	R 5 207,50	Includes soil amelioration, cultivation and seeding actions
56	3	A99	Y2023	Pollution Control Dam Mining Yard:		1600F3-1800-DD11-LYD-001-1/1-A								
58				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
59				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
57				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
60				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	
61				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
62				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
63	1	A98	Y2023	Waste Area and Skips	Single storey building	1600F3-2700-DD30-GAD-0006-Rev C	Yes	3.1.1	42,00	m²	R 461,00	R 19 362,00	R 19 362,00	
64	3	A100	Y2023	Pollution Control Dam Mining Office :		1600F3-1800-DD11-LYD-001-1/1-A								
66				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
67				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
65				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
68				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2026	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
69				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
70				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
71		A108	Y2023	Eskom Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Eskom's responsibility as confirmed by Wood PLC
72		A112	Y2023	Contractors Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Contractor's responsibility.
						SUB-TOTAL 1								**R 6 128 999,39**	
						Preliminaries and General	6%							R 367 739,96	
						Contingency	10%							R 612 899,94	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 980 639,90**	
						GRAND-TOTAL								**R 7 109 639,29**	

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2027	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										2 557,24				R 6 128 999,39	
2	1	A5	Y2023	Canteen	Single storey building	1600F3-2700-DD30-GAD-0002-Rev C		Yes	3.1.1	475,00	m²	R 461,00	R 218 975,00	R 218 975,00	
3	1	A6	Y2023	Weightbridge	Medium concrete, thickness between 250 and 750mm	1600F3-2700-DD30-GAD-0015-Rev C		Yes	4,2	66,53	m³	R 981,00	R 65 269,46	R 65 269,46	
4	1			Office	Single storey building	1600F3-2700-DD30-GAD-0015-Rev C		Yes	3.1.1	25,50	m²	R 461,00	R 11 755,50	R 11 755,50	
5	1	A7	Y2023	First Aid Building	Single storey building	1600F3-2700-DD30-GAD-0004-Rev C		Yes	3.1.1	73,00	m²	R 461,00	R 33 653,00	R 33 653,00	
6	1	A9	Y2023	Warehouse	10m – 15m high	1600F3-2700-DD30-GAD-0008-Rev C		Yes	3.6.3	1 202,00	m²	R 642,00	R 771 684,00	R 771 684,00	11750mm High as per design drawings
7	1			Office & Stores	Single storey building	1600F3-2700-DD30-GAD-0008-Rev C		Yes	3.1.1	252,00	m²	R 461,00	R 116 172,00	R 116 172,00	
8	1	A10	Y2023	Store & Offices	5m – 10m high	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 11)		Yes	3.6.2	1 670,00	m²	R 570,50	R 952 735,00	R 952 735,00	Assume 10m high
9	1	A11	Y2023	Sewage Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr26)		Yes	3.2.1	145,00	m²	R 855,00	R 123 975,00	R 123 975,00	Assume single storey building
10	1	A12	Y2023	Administration & Training Offices	Single storey building	1600F3-2700-DD30-GAD-0001-Rev C		Yes	3.1.1	504,00	m²	R 461,00	R 232 344,00	R 232 344,00	
11	1	A13	Y2023	Washbay	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.1.1	95,00	m²	R 461,00	R 43 795,00	R 43 795,00	Assume as per DWG layer Assume single storey building
12	1	A14	Y2023	Diesel Storage Area	Light concrete, thickness less than 250mm	1600F3-2700-DD30-GAD-0016-Rev C		Yes	4,3	76,10	m³	R 643,00	R 48 932,30	R 48 932,30	
13	1			Diesel Tanks	Medium steel tanks	1600F3-2700-DD30-GAD-0016-Rev C		Yes	2.5.2	2,00	no	R 23 492,50	R 46 985,00	R 46 985,00	
14	1	A15	Y2023	Gas Bottle Storage & Chiller Enclosure	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C		Yes	3.1.1	49,00	m²	R 461,00	R 22 589,00	R 22 589,00	
15	1	A16	Y2023	Analytical Laboratory	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C		Yes	3.1.1	396,00	m²	R 461,00	R 182 556,00	R 182 556,00	
16	1				Double storey building	1600F3-2700-DD30-GAD-0009-Rev C		Yes	3.1.2	150,00	m²	R 782,50	R 117 375,00	R 117 375,00	
17	1	A17	Y2023	Primary Security Gate House	Single storey building	1600F3-2700-DD30-GAD-0005-Rev C		Yes	3.2.1	67,00	m²	R 855,00	R 57 285,00	R 57 285,00	
18	1	A18	Y2023	Change House & Laundry	Single storey building	1600F3-2700-DD30-GAD-0011-Rev C		Yes	3.1.1	514,00	m²	R 461,00	R 236 954,00	R 236 954,00	
19	1	A28	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0002-PrelimA									
21				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	2 400,00	m³	R 24,50	R 58 800,00	R 58 800,00	
22				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	2 400,00	m³/km	R 67,00	R 160 800,00	R 160 800,00	
20				HDPE Liner	Removal of single HDPE liner			Yes	6,4	7 300,00	m²	R 10,75	R 78 475,00	R 78 475,00	Assume 1 x HDPE Liner
23				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
24				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,80	ha	R 70 214,50	R 56 171,60	R 56 171,60	Assumed 100% of footprint will require shaping
25				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,80	ha	R 26 037,50	R 20 830,00	R 20 830,00	Includes soil amelioration, cultivation and seeding actions
26	1	A30	Y2023	Return Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA									
28				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	1 500,00	m³	R 24,50	R 36 750,00	R 36 750,00	
29				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	1 500,00	m³/km	R 67,00	R 100 500,00	R 100 500,00	
27				HDPE Liner	Removal of single HDPE liner			Yes	6,4	4 900,00	m²	R 10,75	R 52 675,00	R 52 675,00	Assume 1 x HDPE Liner
30				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
31				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,50	ha	R 70 214,50	R 35 107,25	R 35 107,25	Assumed 100% of footprint will require shaping
32				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,50	ha	R 26 037,50	R 13 018,75	R 13 018,75	Includes soil amelioration, cultivation and seeding actions
33	1	A56	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA									
35				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	7 500,00	m³	R 24,50	R 183 750,00	R 183 750,00	
36				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	7 500,00	m³/km	R 67,00	R 502 500,00	R 502 500,00	
34				HDPE Liner	Removal of single HDPE liner			Yes	6,4	24 800,00	m²	R 10,75	R 266 600,00	R 266 600,00	Assume 1 x HDPE Liner
37				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	500,00	m	R 301,00	R 150 500,00	R 150 500,00	
38				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	2,50	ha	R 70 214,50	R 175 536,25	R 175 536,25	Assumed 100% of footprint will require shaping
39				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	2,50	ha	R 26 037,50	R 65 093,75	R 65 093,75	Includes soil amelioration, cultivation and seeding actions
40	3	A58	Y2023	Explosive Magazines	Single storey building	Xref Plant DWG		Yes	3.2.1	25,00	m²	R 855,00	R 21 375,00	R 21 375,00	Assume single storey building
41				Concrete Walls	Light concrete, thickness less than 250mm	Xref Plant DWG		Yes	4,3	30,00	m³	R 643,00	R 19 290,00	R 19 290,00	Assume concrete walls
42	2	A74	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0003-Rev A									
44				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	750,75	m³	R 24,50	R 18 393,38	R 18 393,38	
45				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	750,75	m³/km	R 67,00	R 50 300,25	R 50 300,25	
43				HDPE Liner	Removal of single HDPE liner			Yes	6,4	2 100,00	m²	R 10,75	R 22 575,00	R 22 575,00	Assume 1 x HDPE Liner
46				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
47				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
48				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
49	2	A76	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 16)									
51				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	600,00	m³	R 24,50	R 14 700,00	R 14 700,00	
52				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	600,00	m³/km	R 67,00	R 40 200,00	R 40 200,00	
50				HDPE Liner	Removal of single HDPE liner			Yes	6,4	1 970,00	m²	R 10,75	R 21 177,50	R 21 177,50	Assume 1 x HDPE Liner
53				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
54				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,20	ha	R 70 214,50	R 14 042,90	R 14 042,90	Assumed 100% of footprint will require shaping
55				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,20	ha	R 26 037,50	R 5 207,50	R 5 207,50	Includes soil amelioration, cultivation and seeding actions
56	3	A99	Y2023	Pollution Control Dam Mining Yard:		1600F3-1800-DD11-LYD-001-1/1-A									
58				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
59				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
57				HDPE Liner	Removal of single HDPE liner			Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
60				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	
61				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
62				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
63	1	A98	Y2023	Waste Area and Skips	Single storey building	1600F3-2700-DD30-GAD-0006-Rev C		Yes	3.1.1	42,00	m²	R 461,00	R 19 362,00	R 19 362,00	
64	3	A100	Y2023	Pollution Control Dam Mining Office :		1600F3-1800-DD11-LYD-001-1/1-A									
66				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
67				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
65				HDPE Liner	Removal of single HDPE liner			Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
68				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2027	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
69				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
70				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
71		A108	Y2023	Eskom Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Eskom's responsibility as confirmed by Wood PLC
72		A112	Y2023	Contractors Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Contractor's responsibility.
						SUB-TOTAL 1								**R 6 128 999,39**	
						Preliminaries and General	6%							R 367 739,96	
						Contingency	10%							R 612 899,94	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 980 639,90**	
						GRAND-TOTAL								**R 7 109 639,29**	

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2028	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers	LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1									2 557,24				R 6 128 999,39	
2	1	A5	Y2023	Canteen	Single storey building	1600F3-2700-DD30-GAD-0002-Rev C	Yes	3.1.1	475,00	m²	R 461,00	R 218 975,00	R 218 975,00	
3	1	A6	Y2023	Weightbridge	Medium concrete, thickness between 250 and 750mm	1600F3-2700-DD30-GAD-0015-Rev C	Yes	4,2	66,53	m³	R 981,00	R 65 269,46	R 65 269,46	
4	1			Office	Single storey building	1600F3-2700-DD30-GAD-0015-Rev C	Yes	3.1.1	25,50	m²	R 461,00	R 11 755,50	R 11 755,50	
5	1	A7	Y2023	First Aid Building	Single storey building	1600F3-2700-DD30-GAD-0004-Rev C	Yes	3.1.1	73,00	m²	R 461,00	R 33 653,00	R 33 653,00	
6	1	A9	Y2023	Warehouse	10m – 15m high	1600F3-2700-DD30-GAD-0008-Rev C	Yes	3.6.3	1 202,00	m²	R 642,00	R 771 684,00	R 771 684,00	11750mm High as per design drawings
7	1			Office & Stores	Single storey building	1600F3-2700-DD30-GAD-0008-Rev C	Yes	3.1.1	252,00	m²	R 461,00	R 116 172,00	R 116 172,00	
8	1	A10	Y2023	Store & Offices	5m – 10m high	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 11)	Yes	3.6.2	1 670,00	m²	R 570,50	R 952 735,00	R 952 735,00	Assume 10m high
9	1	A11	Y2023	Sewage Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr26)	Yes	3.2.1	145,00	m²	R 855,00	R 123 975,00	R 123 975,00	Assume single storey building
10	1	A12	Y2023	Administration & Training Offices	Single storey building	1600F3-2700-DD30-GAD-0001-Rev C	Yes	3.1.1	504,00	m²	R 461,00	R 232 344,00	R 232 344,00	
11	1	A13	Y2023	Washbay	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	3.1.1	95,00	m²	R 461,00	R 43 795,00	R 43 795,00	Assume as per DWG layer Assume single storey building
12	1	A14	Y2023	Diesel Storage Area	Light concrete, thickness less than 250mm	1600F3-2700-DD30-GAD-0016-Rev C	Yes	4,3	76,10	m³	R 643,00	R 48 932,30	R 48 932,30	
13	1			Diesel Tanks	Medium steel tanks	1600F3-2700-DD30-GAD-0016-Rev C	Yes	2.5.2	2,00	no	R 23 492,50	R 46 985,00	R 46 985,00	
14	1	A15	Y2023	Gas Bottle Storage & Chiller Enclosure	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.1	49,00	m²	R 461,00	R 22 589,00	R 22 589,00	
15	1	A16	Y2023	Analytical Laboratory	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.1	396,00	m²	R 461,00	R 182 556,00	R 182 556,00	
16	1				Double storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.2	150,00	m²	R 782,50	R 117 375,00	R 117 375,00	
17	1	A17	Y2023	Primary Security Gate House	Single storey building	1600F3-2700-DD30-GAD-0005-Rev C	Yes	3.2.1	67,00	m²	R 855,00	R 57 285,00	R 57 285,00	
18	1	A18	Y2023	Change House & Laundry	Single storey building	1600F3-2700-DD30-GAD-0011-Rev C	Yes	3.1.1	514,00	m²	R 461,00	R 236 954,00	R 236 954,00	
19	1	A28	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
21				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	2 400,00	m³	R 24,50	R 58 800,00	R 58 800,00	
22				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	2 400,00	m³/km	R 67,00	R 160 800,00	R 160 800,00	
20				HDPE Liner	Removal of single HDPE liner		Yes	6,4	7 300,00	m²	R 10,75	R 78 475,00	R 78 475,00	Assume 1 x HDPE Liner
23				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
24				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,80	ha	R 70 214,50	R 56 171,60	R 56 171,60	Assumed 100% of footprint will require shaping
25				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,80	ha	R 26 037,50	R 20 830,00	R 20 830,00	Includes soil amelioration, cultivation and seeding actions
26	1	A30	Y2023	Return Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
28				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	1 500,00	m³	R 24,50	R 36 750,00	R 36 750,00	
29				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	1 500,00	m³/km	R 67,00	R 100 500,00	R 100 500,00	
27				HDPE Liner	Removal of single HDPE liner		Yes	6,4	4 900,00	m²	R 10,75	R 52 675,00	R 52 675,00	Assume 1 x HDPE Liner
30				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
31				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,50	ha	R 70 214,50	R 35 107,25	R 35 107,25	Assumed 100% of footprint will require shaping
32				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,50	ha	R 26 037,50	R 13 018,75	R 13 018,75	Includes soil amelioration, cultivation and seeding actions
33	1	A56	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
35				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	7 500,00	m³	R 24,50	R 183 750,00	R 183 750,00	
36				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	7 500,00	m³/km	R 67,00	R 502 500,00	R 502 500,00	
34				HDPE Liner	Removal of single HDPE liner		Yes	6,4	24 800,00	m²	R 10,75	R 266 600,00	R 266 600,00	Assume 1 x HDPE Liner
37				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	500,00	m	R 301,00	R 150 500,00	R 150 500,00	
38				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	2,50	ha	R 70 214,50	R 175 536,25	R 175 536,25	Assumed 100% of footprint will require shaping
39				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	2,50	ha	R 26 037,50	R 65 093,75	R 65 093,75	Includes soil amelioration, cultivation and seeding actions
40	3	A58	Y2023	Explosive Magazines	Single storey building	Xref Plant DWG	Yes	3.2.1	25,00	m²	R 855,00	R 21 375,00	R 21 375,00	Assume single storey building
41				Concrete Walls	Light concrete, thickness less than 250mm	Xref Plant DWG	Yes	4,3	30,00	m³	R 643,00	R 19 290,00	R 19 290,00	Assume concrete walls
42	2	A74	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0003-Rev A								
44				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,75	m³	R 24,50	R 18 393,38	R 18 393,38	
45				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,75	m³/km	R 67,00	R 50 300,25	R 50 300,25	
43				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 100,00	m²	R 10,75	R 22 575,00	R 22 575,00	Assume 1 x HDPE Liner
46				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
47				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
48				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
49	2	A76	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 16)								
51				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	600,00	m³	R 24,50	R 14 700,00	R 14 700,00	
52				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	600,00	m³/km	R 67,00	R 40 200,00	R 40 200,00	
50				HDPE Liner	Removal of single HDPE liner		Yes	6,4	1 970,00	m²	R 10,75	R 21 177,50	R 21 177,50	Assume 1 x HDPE Liner
53				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
54				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,20	ha	R 70 214,50	R 14 042,90	R 14 042,90	Assumed 100% of footprint will require shaping
55				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,20	ha	R 26 037,50	R 5 207,50	R 5 207,50	Includes soil amelioration, cultivation and seeding actions
56	3	A99	Y2023	Pollution Control Dam Mining Yard:		1600F3-1800-DD11-LYD-001-1/1-A								
58				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
59				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
57				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
60				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	
61				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
62				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
63	1	A98	Y2023	Waste Area and Skips	Single storey building	1600F3-2700-DD30-GAD-0006-Rev C	Yes	3.1.1	42,00	m²	R 461,00	R 19 362,00	R 19 362,00	
64	3	A100	Y2023	Pollution Control Dam Mining Office :		1600F3-1800-DD11-LYD-001-1/1-A								
66				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
67				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
65				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
68				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2028	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
69				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
70				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
71		A108	Y2023	Eskom Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Eskom's responsibility as confirmed by Wood PLC
72		A112	Y2023	Contractors Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Contractor's responsibility.
						SUB-TOTAL 1								**R 6 128 999,39**	
						Preliminaries and General	6%							R 367 739,96	
						Contingency	10%							R 612 899,94	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 980 639,90**	
						GRAND-TOTAL								**R 7 109 639,29**	

Jindal Melmoth Iron Ore - EIA
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INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2029	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers	LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1									2 557,24				R 6 128 999,39	
2	1	A5	Y2023	Canteen	Single storey building	1600F3-2700-DD30-GAD-0002-Rev C	Yes	3.1.1	475,00	m²	R 461,00	R 218 975,00	R 218 975,00	
3	1	A6	Y2023	Weightbridge	Medium concrete, thickness between 250 and 750mm	1600F3-2700-DD30-GAD-0015-Rev C	Yes	4,2	66,53	m³	R 981,00	R 65 269,46	R 65 269,46	
4	1			Office	Single storey building	1600F3-2700-DD30-GAD-0015-Rev C	Yes	3.1.1	25,50	m²	R 461,00	R 11 755,50	R 11 755,50	
5	1	A7	Y2023	First Aid Building	Single storey building	1600F3-2700-DD30-GAD-0004-Rev C	Yes	3.1.1	73,00	m²	R 461,00	R 33 653,00	R 33 653,00	
6	1	A9	Y2023	Warehouse	10m – 15m high	1600F3-2700-DD30-GAD-0008-Rev C	Yes	3.6.3	1 202,00	m²	R 642,00	R 771 684,00	R 771 684,00	11750mm High as per design drawings
7	1			Office & Stores	Single storey building	1600F3-2700-DD30-GAD-0008-Rev C	Yes	3.1.1	252,00	m²	R 461,00	R 116 172,00	R 116 172,00	
8	1	A10	Y2023	Store & Offices	5m – 10m high	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 11)	Yes	3.6.2	1 670,00	m²	R 570,50	R 952 735,00	R 952 735,00	Assume 10m high
9	1	A11	Y2023	Sewage Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr26)	Yes	3.2.1	145,00	m²	R 855,00	R 123 975,00	R 123 975,00	Assume single storey building
10	1	A12	Y2023	Administration & Training Offices	Single storey building	1600F3-2700-DD30-GAD-0001-Rev C	Yes	3.1.1	504,00	m²	R 461,00	R 232 344,00	R 232 344,00	
11	1	A13	Y2023	Washbay	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	3.1.1	95,00	m²	R 461,00	R 43 795,00	R 43 795,00	Assume as per DWG layer Assume single storey building
12	1	A14	Y2023	Diesel Storage Area	Light concrete, thickness less than 250mm	1600F3-2700-DD30-GAD-0016-Rev C	Yes	4,3	76,10	m³	R 643,00	R 48 932,30	R 48 932,30	
13	1			Diesel Tanks	Medium steel tanks	1600F3-2700-DD30-GAD-0016-Rev C	Yes	2.5.2	2,00	no	R 23 492,50	R 46 985,00	R 46 985,00	
14	1	A15	Y2023	Gas Bottle Storage & Chiller Enclosure	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.1	49,00	m²	R 461,00	R 22 589,00	R 22 589,00	
15	1	A16	Y2023	Analytical Laboratory	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.1	396,00	m²	R 461,00	R 182 556,00	R 182 556,00	
16	1				Double storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.2	150,00	m²	R 782,50	R 117 375,00	R 117 375,00	
17	1	A17	Y2023	Primary Security Gate House	Single storey building	1600F3-2700-DD30-GAD-0005-Rev C	Yes	3.2.1	67,00	m²	R 855,00	R 57 285,00	R 57 285,00	
18	1	A18	Y2023	Change House & Laundry	Single storey building	1600F3-2700-DD30-GAD-0011-Rev C	Yes	3.1.1	514,00	m²	R 461,00	R 236 954,00	R 236 954,00	
19	1	A28	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
21				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	2 400,00	m³	R 24,50	R 58 800,00	R 58 800,00	
22				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	2 400,00	m³/km	R 67,00	R 160 800,00	R 160 800,00	
20				HDPE Liner	Removal of single HDPE liner		Yes	6,4	7 300,00	m²	R 10,75	R 78 475,00	R 78 475,00	Assume 1 x HDPE Liner
23				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
24				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,80	ha	R 70 214,50	R 56 171,60	R 56 171,60	Assumed 100% of footprint will require shaping
25				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,80	ha	R 26 037,50	R 20 830,00	R 20 830,00	Includes soil amelioration, cultivation and seeding actions
26	1	A30	Y2023	Return Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
28				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	1 500,00	m³	R 24,50	R 36 750,00	R 36 750,00	
29				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	1 500,00	m³/km	R 67,00	R 100 500,00	R 100 500,00	
27				HDPE Liner	Removal of single HDPE liner		Yes	6,4	4 900,00	m²	R 10,75	R 52 675,00	R 52 675,00	Assume 1 x HDPE Liner
30				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
31				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,50	ha	R 70 214,50	R 35 107,25	R 35 107,25	Assumed 100% of footprint will require shaping
32				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,50	ha	R 26 037,50	R 13 018,75	R 13 018,75	Includes soil amelioration, cultivation and seeding actions
33	1	A56	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
35				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	7 500,00	m³	R 24,50	R 183 750,00	R 183 750,00	
36				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	7 500,00	m³/km	R 67,00	R 502 500,00	R 502 500,00	
34				HDPE Liner	Removal of single HDPE liner		Yes	6,4	24 800,00	m²	R 10,75	R 266 600,00	R 266 600,00	Assume 1 x HDPE Liner
37				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	500,00	m	R 301,00	R 150 500,00	R 150 500,00	
38				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	2,50	ha	R 70 214,50	R 175 536,25	R 175 536,25	Assumed 100% of footprint will require shaping
39				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	2,50	ha	R 26 037,50	R 65 093,75	R 65 093,75	Includes soil amelioration, cultivation and seeding actions
40	3	A58	Y2023	Explosive Magazines	Single storey building	Xref Plant DWG	Yes	3.2.1	25,00	m²	R 855,00	R 21 375,00	R 21 375,00	Assume single storey building
41				Concrete Walls	Light concrete, thickness less than 250mm	Xref Plant DWG	Yes	4,3	30,00	m³	R 643,00	R 19 290,00	R 19 290,00	Assume concrete walls
42	2	A74	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0003-Rev A								
44				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,75	m³	R 24,50	R 18 393,38	R 18 393,38	
45				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,75	m³/km	R 67,00	R 50 300,25	R 50 300,25	
43				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 100,00	m²	R 10,75	R 22 575,00	R 22 575,00	Assume 1 x HDPE Liner
46				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
47				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
48				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
49	2	A76	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 16)								
51				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	600,00	m³	R 24,50	R 14 700,00	R 14 700,00	
52				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	600,00	m³/km	R 67,00	R 40 200,00	R 40 200,00	
50				HDPE Liner	Removal of single HDPE liner		Yes	6,4	1 970,00	m²	R 10,75	R 21 177,50	R 21 177,50	Assume 1 x HDPE Liner
53				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
54				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,20	ha	R 70 214,50	R 14 042,90	R 14 042,90	Assumed 100% of footprint will require shaping
55				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,20	ha	R 26 037,50	R 5 207,50	R 5 207,50	Includes soil amelioration, cultivation and seeding actions
56	3	A99	Y2023	Pollution Control Dam Mining Yard:		1600F3-1800-DD11-LYD-001-1/1-A								
58				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
59				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
57				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
60				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	
61				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
62				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
63	1	A98	Y2023	Waste Area and Skips	Single storey building	1600F3-2700-DD30-GAD-0006-Rev C	Yes	3.1.1	42,00	m²	R 461,00	R 19 362,00	R 19 362,00	
64	3	A100	Y2023	Pollution Control Dam Mining Office :		1600F3-1800-DD11-LYD-001-1/1-A								
66				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
67				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
65				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
68				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	

INFRASTRUCTURAL ASPECTS								Closure Forecast							Y2029	
1,3	SUPPORTING INFRASTRUCTURE															
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate		Unit Total	LIABLE VALUE	Notes
69				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50		R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
70				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50		R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
71		A108	Y2023	Eskom Yard	Not Applicable			No	1,1	-	na	R -		R -	R -	Eskom's responsibility as confirmed by Wood PLC
72		A112	Y2023	Contractors Yard	Not Applicable			No	1,1	-	na	R -		R -	R -	Contractor's responsibility.
						SUB-TOTAL 1									**R 6 128 999,39**	
						Preliminaries and General	6%								R 367 739,96	
						Contingency	10%								R 612 899,94	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)									**R 980 639,90**	
						GRAND-TOTAL									**R 7 109 639,29**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2030	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										2 557,24				R 6 128 999,39	
2	1	A5	Y2023	Canteen	Single storey building	1600F3-2700-DD30-GAD-0002-Rev C		Yes	3.1.1	475,00	m²	R 461,00	R 218 975,00	R 218 975,00	
3	1	A6	Y2023	Weightbridge	Medium concrete, thickness between 250 and 750mm	1600F3-2700-DD30-GAD-0015-Rev C		Yes	4,2	66,53	m³	R 981,00	R 65 269,46	R 65 269,46	
4	1			Office	Single storey building	1600F3-2700-DD30-GAD-0015-Rev C		Yes	3.1.1	25,50	m²	R 461,00	R 11 755,50	R 11 755,50	
5	1	A7	Y2023	First Aid Building	Single storey building	1600F3-2700-DD30-GAD-0004-Rev C		Yes	3.1.1	73,00	m²	R 461,00	R 33 653,00	R 33 653,00	
6	1	A9	Y2023	Warehouse	10m – 15m high	1600F3-2700-DD30-GAD-0008-Rev C		Yes	3.6.3	1 202,00	m²	R 642,00	R 771 684,00	R 771 684,00	11750mm High as per design drawings
7	1			Office & Stores	Single storey building	1600F3-2700-DD30-GAD-0008-Rev C		Yes	3.1.1	252,00	m²	R 461,00	R 116 172,00	R 116 172,00	
8	1	A10	Y2023	Store & Offices	5m – 10m high	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 11)		Yes	3.6.2	1 670,00	m²	R 570,50	R 952 735,00	R 952 735,00	Assume 10m high
9	1	A11	Y2023	Sewage Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr26)		Yes	3.2.1	145,00	m²	R 855,00	R 123 975,00	R 123 975,00	Assume single storey building
10	1	A12	Y2023	Administration & Training Offices	Single storey building	1600F3-2700-DD30-GAD-0001-Rev C		Yes	3.1.1	504,00	m²	R 461,00	R 232 344,00	R 232 344,00	
11	1	A13	Y2023	Washbay	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA		Yes	3.1.1	95,00	m²	R 461,00	R 43 795,00	R 43 795,00	Assume as per DWG layer Assume single storey building
12	1	A14	Y2023	Diesel Storage Area	Light concrete, thickness less than 250mm	1600F3-2700-DD30-GAD-0016-Rev C		Yes	4,3	76,10	m³	R 643,00	R 48 932,30	R 48 932,30	
13	1			Diesel Tanks	Medium steel tanks	1600F3-2700-DD30-GAD-0016-Rev C		Yes	2.5.2	2,00	no	R 23 492,50	R 46 985,00	R 46 985,00	
14	1	A15	Y2023	Gas Bottle Storage & Chiller Enclosure	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C		Yes	3.1.1	49,00	m²	R 461,00	R 22 589,00	R 22 589,00	
15	1	A16	Y2023	Analytical Laboratory	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C		Yes	3.1.1	396,00	m²	R 461,00	R 182 556,00	R 182 556,00	
16	1				Double storey building	1600F3-2700-DD30-GAD-0009-Rev C		Yes	3.1.2	150,00	m²	R 782,50	R 117 375,00	R 117 375,00	
17	1	A17	Y2023	Primary Security Gate House	Single storey building	1600F3-2700-DD30-GAD-0005-Rev C		Yes	3.2.1	67,00	m²	R 855,00	R 57 285,00	R 57 285,00	
18	1	A18	Y2023	Change House & Laundry	Single storey building	1600F3-2700-DD30-GAD-0011-Rev C		Yes	3.1.1	514,00	m²	R 461,00	R 236 954,00	R 236 954,00	
19	1	A28	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0002-PrelimA									
21				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	2 400,00	m³	R 24,50	R 58 800,00	R 58 800,00	
22				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	2 400,00	m³/km	R 67,00	R 160 800,00	R 160 800,00	
20				HDPE Liner	Removal of single HDPE liner			Yes	6,4	7 300,00	m²	R 10,75	R 78 475,00	R 78 475,00	Assume 1 x HDPE Liner
23				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
24				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,80	ha	R 70 214,50	R 56 171,60	R 56 171,60	Assumed 100% of footprint will require shaping
25				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,80	ha	R 26 037,50	R 20 830,00	R 20 830,00	Includes soil amelioration, cultivation and seeding actions
26	1	A30	Y2023	Return Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA									
28				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	1 500,00	m³	R 24,50	R 36 750,00	R 36 750,00	
29				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	1 500,00	m³/km	R 67,00	R 100 500,00	R 100 500,00	
27				HDPE Liner	Removal of single HDPE liner			Yes	6,4	4 900,00	m²	R 10,75	R 52 675,00	R 52 675,00	Assume 1 x HDPE Liner
30				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
31				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,50	ha	R 70 214,50	R 35 107,25	R 35 107,25	Assumed 100% of footprint will require shaping
32				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,50	ha	R 26 037,50	R 13 018,75	R 13 018,75	Includes soil amelioration, cultivation and seeding actions
33	1	A56	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA									
35				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	7 500,00	m³	R 24,50	R 183 750,00	R 183 750,00	
36				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	7 500,00	m³/km	R 67,00	R 502 500,00	R 502 500,00	
34				HDPE Liner	Removal of single HDPE liner			Yes	6,4	24 800,00	m²	R 10,75	R 266 600,00	R 266 600,00	Assume 1 x HDPE Liner
37				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	500,00	m	R 301,00	R 150 500,00	R 150 500,00	
38				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	2,50	ha	R 70 214,50	R 175 536,25	R 175 536,25	Assumed 100% of footprint will require shaping
39				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	2,50	ha	R 26 037,50	R 65 093,75	R 65 093,75	Includes soil amelioration, cultivation and seeding actions
40	3	A58	Y2023	Explosive Magazines	Single storey building	Xref Plant DWG		Yes	3.2.1	25,00	m²	R 855,00	R 21 375,00	R 21 375,00	Assume single storey building
41				Concrete Walls	Light concrete, thickness less than 250mm	Xref Plant DWG		Yes	4,3	30,00	m³	R 643,00	R 19 290,00	R 19 290,00	Assume concrete walls
42	2	A74	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0003-Rev A									
44				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	750,75	m³	R 24,50	R 18 393,38	R 18 393,38	
45				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	750,75	m³/km	R 67,00	R 50 300,25	R 50 300,25	
43				HDPE Liner	Removal of single HDPE liner			Yes	6,4	2 100,00	m²	R 10,75	R 22 575,00	R 22 575,00	Assume 1 x HDPE Liner
46				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
47				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
48				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
49	2	A76	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 16)									
51				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	600,00	m³	R 24,50	R 14 700,00	R 14 700,00	
52				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	600,00	m³/km	R 67,00	R 40 200,00	R 40 200,00	
50				HDPE Liner	Removal of single HDPE liner			Yes	6,4	1 970,00	m²	R 10,75	R 21 177,50	R 21 177,50	Assume 1 x HDPE Liner
53				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
54				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,20	ha	R 70 214,50	R 14 042,90	R 14 042,90	Assumed 100% of footprint will require shaping
55				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,20	ha	R 26 037,50	R 5 207,50	R 5 207,50	Includes soil amelioration, cultivation and seeding actions
56	3	A99	Y2023	Pollution Control Dam Mining Yard:		1600F3-1800-DD11-LYD-001-1/1-A									
58				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
59				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
57				HDPE Liner	Removal of single HDPE liner			Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
60				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	
61				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
62				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
63	1	A98	Y2023	Waste Area and Skips	Single storey building	1600F3-2700-DD30-GAD-0006-Rev C		Yes	3.1.1	42,00	m²	R 461,00	R 19 362,00	R 19 362,00	
64	3	A100	Y2023	Pollution Control Dam Mining Office :		1600F3-1800-DD11-LYD-001-1/1-A									
66				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation			Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
67				Load and haul sediment to TSF for disposal	Load and haul for 5km distance			Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
65				HDPE Liner	Removal of single HDPE liner			Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
68				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5			Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2030	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
69				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
70				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
71		A108	Y2023	Eskom Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Eskom's responsibility as confirmed by Wood PLC
72		A112	Y2023	Contractors Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Contractor's responsibility.
						SUB-TOTAL 1								R 6 128 999,39	
						Preliminaries and General	6%							R 367 739,96	
						Contingency	10%							R 612 899,94	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 980 639,90	
						GRAND-TOTAL								R 7 109 639,29	

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2031	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers	LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1									2 557,24				R 6 128 999,39	
2	1	A5	Y2023	Canteen	Single storey building	1600F3-2700-DD30-GAD-0002-Rev C	Yes	3.1.1	475,00	m²	R 461,00	R 218 975,00	R 218 975,00	
3	1	A6	Y2023	Weightbridge	Medium concrete, thickness between 250 and 750mm	1600F3-2700-DD30-GAD-0015-Rev C	Yes	4,2	66,53	m³	R 981,00	R 65 269,46	R 65 269,46	
4	1			Office	Single storey building	1600F3-2700-DD30-GAD-0015-Rev C	Yes	3.1.1	25,50	m²	R 461,00	R 11 755,50	R 11 755,50	
5	1	A7	Y2023	First Aid Building	Single storey building	1600F3-2700-DD30-GAD-0004-Rev C	Yes	3.1.1	73,00	m²	R 461,00	R 33 653,00	R 33 653,00	
6	1	A9	Y2023	Warehouse	10m – 15m high	1600F3-2700-DD30-GAD-0008-Rev C	Yes	3.6.3	1 202,00	m²	R 642,00	R 771 684,00	R 771 684,00	11750mm High as per design drawings
7	1			Office & Stores	Single storey building	1600F3-2700-DD30-GAD-0008-Rev C	Yes	3.1.1	252,00	m²	R 461,00	R 116 172,00	R 116 172,00	
8	1	A10	Y2023	Store & Offices	5m – 10m high	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 11)	Yes	3.6.2	1 670,00	m²	R 570,50	R 952 735,00	R 952 735,00	Assume 10m high
9	1	A11	Y2023	Sewage Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr26)	Yes	3.2.1	145,00	m²	R 855,00	R 123 975,00	R 123 975,00	Assume single storey building
10	1	A12	Y2023	Administration & Training Offices	Single storey building	1600F3-2700-DD30-GAD-0001-Rev C	Yes	3.1.1	504,00	m²	R 461,00	R 232 344,00	R 232 344,00	
11	1	A13	Y2023	Washbay	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	3.1.1	95,00	m²	R 461,00	R 43 795,00	R 43 795,00	Assume as per DWG layer Assume single storey building
12	1	A14	Y2023	Diesel Storage Area	Light concrete, thickness less than 250mm	1600F3-2700-DD30-GAD-0016-Rev C	Yes	4,3	76,10	m³	R 643,00	R 48 932,30	R 48 932,30	
13	1			Diesel Tanks	Medium steel tanks	1600F3-2700-DD30-GAD-0016-Rev C	Yes	2.5.2	2,00	no	R 23 492,50	R 46 985,00	R 46 985,00	
14	1	A15	Y2023	Gas Bottle Storage & Chiller Enclosure	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.1	49,00	m²	R 461,00	R 22 589,00	R 22 589,00	
15	1	A16	Y2023	Analytical Laboratory	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.1	396,00	m²	R 461,00	R 182 556,00	R 182 556,00	
16	1				Double storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.2	150,00	m²	R 782,50	R 117 375,00	R 117 375,00	
17	1	A17	Y2023	Primary Security Gate House	Single storey building	1600F3-2700-DD30-GAD-0005-Rev C	Yes	3.2.1	67,00	m²	R 855,00	R 57 285,00	R 57 285,00	
18	1	A18	Y2023	Change House & Laundry	Single storey building	1600F3-2700-DD30-GAD-0011-Rev C	Yes	3.1.1	514,00	m²	R 461,00	R 236 954,00	R 236 954,00	
19	1	A28	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
21				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	2 400,00	m³	R 24,50	R 58 800,00	R 58 800,00	
22				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	2 400,00	m³/km	R 67,00	R 160 800,00	R 160 800,00	
20				HDPE Liner	Removal of single HDPE liner		Yes	6,4	7 300,00	m²	R 10,75	R 78 475,00	R 78 475,00	Assume 1 x HDPE Liner
23				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
24				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,80	ha	R 70 214,50	R 56 171,60	R 56 171,60	Assumed 100% of footprint will require shaping
25				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,80	ha	R 26 037,50	R 20 830,00	R 20 830,00	Includes soil amelioration, cultivation and seeding actions
26	1	A30	Y2023	Return Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
28				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	1 500,00	m³	R 24,50	R 36 750,00	R 36 750,00	
29				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	1 500,00	m³/km	R 67,00	R 100 500,00	R 100 500,00	
27				HDPE Liner	Removal of single HDPE liner		Yes	6,4	4 900,00	m²	R 10,75	R 52 675,00	R 52 675,00	Assume 1 x HDPE Liner
30				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
31				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,50	ha	R 70 214,50	R 35 107,25	R 35 107,25	Assumed 100% of footprint will require shaping
32				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,50	ha	R 26 037,50	R 13 018,75	R 13 018,75	Includes soil amelioration, cultivation and seeding actions
33	1	A56	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
35				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	7 500,00	m³	R 24,50	R 183 750,00	R 183 750,00	
36				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	7 500,00	m³/km	R 67,00	R 502 500,00	R 502 500,00	
34				HDPE Liner	Removal of single HDPE liner		Yes	6,4	24 800,00	m²	R 10,75	R 266 600,00	R 266 600,00	Assume 1 x HDPE Liner
37				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	500,00	m	R 301,00	R 150 500,00	R 150 500,00	
38				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	2,50	ha	R 70 214,50	R 175 536,25	R 175 536,25	Assumed 100% of footprint will require shaping
39				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	2,50	ha	R 26 037,50	R 65 093,75	R 65 093,75	Includes soil amelioration, cultivation and seeding actions
40	3	A58	Y2023	Explosive Magazines	Single storey building	Xref Plant DWG	Yes	3.2.1	25,00	m²	R 855,00	R 21 375,00	R 21 375,00	Assume single storey building
41				Concrete Walls	Light concrete, thickness less than 250mm	Xref Plant DWG	Yes	4,3	30,00	m³	R 643,00	R 19 290,00	R 19 290,00	Assume concrete walls
42	2	A74	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0003-Rev A								
44				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,75	m³	R 24,50	R 18 393,38	R 18 393,38	
45				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,75	m³/km	R 67,00	R 50 300,25	R 50 300,25	
43				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 100,00	m²	R 10,75	R 22 575,00	R 22 575,00	Assume 1 x HDPE Liner
46				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
47				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
48				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
49	2	A76	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 16)								
51				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	600,00	m³	R 24,50	R 14 700,00	R 14 700,00	
52				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	600,00	m³/km	R 67,00	R 40 200,00	R 40 200,00	
50				HDPE Liner	Removal of single HDPE liner		Yes	6,4	1 970,00	m²	R 10,75	R 21 177,50	R 21 177,50	Assume 1 x HDPE Liner
53				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
54				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,20	ha	R 70 214,50	R 14 042,90	R 14 042,90	Assumed 100% of footprint will require shaping
55				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,20	ha	R 26 037,50	R 5 207,50	R 5 207,50	Includes soil amelioration, cultivation and seeding actions
56	3	A99	Y2023	Pollution Control Dam Mining Yard:		1600F3-1800-DD11-LYD-001-1/1-A								
58				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
59				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
57				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
60				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	
61				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
62				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
63	1	A98	Y2023	Waste Area and Skips	Single storey building	1600F3-2700-DD30-GAD-0006-Rev C	Yes	3.1.1	42,00	m²	R 461,00	R 19 362,00	R 19 362,00	
64	3	A100	Y2023	Pollution Control Dam Mining Office :		1600F3-1800-DD11-LYD-001-1/1-A								
66				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
67				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
65				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
68				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2031	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
69				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
70				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
71		A108	Y2023	Eskom Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Eskom's responsibility as confirmed by Wood PLC
72		A112	Y2023	Contractors Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Contractor's responsibility.
						SUB-TOTAL 1								**R 6 128 999,39**	
						Preliminaries and General	6%							R 367 739,96	
						Contingency	10%							R 612 899,94	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 980 639,90**	
						GRAND-TOTAL								**R 7 109 639,29**	

Jindal Melmoth Iron Ore - EIA
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INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2032	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers	LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1									2 557,24				R 6 128 999,39	
2	1	A5	Y2023	Canteen	Single storey building	1600F3-2700-DD30-GAD-0002-Rev C	Yes	3.1.1	475,00	m²	R 461,00	R 218 975,00	R 218 975,00	
3	1	A6	Y2023	Weightbridge	Medium concrete, thickness between 250 and 750mm	1600F3-2700-DD30-GAD-0015-Rev C	Yes	4,2	66,53	m³	R 981,00	R 65 269,46	R 65 269,46	
4	1			Office	Single storey building	1600F3-2700-DD30-GAD-0015-Rev C	Yes	3.1.1	25,50	m²	R 461,00	R 11 755,50	R 11 755,50	
5	1	A7	Y2023	First Aid Building	Single storey building	1600F3-2700-DD30-GAD-0004-Rev C	Yes	3.1.1	73,00	m²	R 461,00	R 33 653,00	R 33 653,00	
6	1	A9	Y2023	Warehouse	10m – 15m high	1600F3-2700-DD30-GAD-0008-Rev C	Yes	3.6.3	1 202,00	m²	R 642,00	R 771 684,00	R 771 684,00	11750mm High as per design drawings
7	1			Office & Stores	Single storey building	1600F3-2700-DD30-GAD-0008-Rev C	Yes	3.1.1	252,00	m²	R 461,00	R 116 172,00	R 116 172,00	
8	1	A10	Y2023	Store & Offices	5m – 10m high	1600F3-0000-DE10-LYD-0002-PrelimA (Nr 11)	Yes	3.6.2	1 670,00	m²	R 570,50	R 952 735,00	R 952 735,00	Assume 10m high
9	1	A11	Y2023	Sewage Treatment Plant	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA (Nr26)	Yes	3.2.1	145,00	m²	R 855,00	R 123 975,00	R 123 975,00	Assume single storey building
10	1	A12	Y2023	Administration & Training Offices	Single storey building	1600F3-2700-DD30-GAD-0001-Rev C	Yes	3.1.1	504,00	m²	R 461,00	R 232 344,00	R 232 344,00	
11	1	A13	Y2023	Washbay	Single storey building	1600F3-0000-DE10-LYD-0002-PrelimA	Yes	3.1.1	95,00	m²	R 461,00	R 43 795,00	R 43 795,00	Assume as per DWG layer Assume single storey building
12	1	A14	Y2023	Diesel Storage Area	Light concrete, thickness less than 250mm	1600F3-2700-DD30-GAD-0016-Rev C	Yes	4,3	76,10	m³	R 643,00	R 48 932,30	R 48 932,30	
13	1			Diesel Tanks	Medium steel tanks	1600F3-2700-DD30-GAD-0016-Rev C	Yes	2.5.2	2,00	no	R 23 492,50	R 46 985,00	R 46 985,00	
14	1	A15	Y2023	Gas Bottle Storage & Chiller Enclosure	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.1	49,00	m²	R 461,00	R 22 589,00	R 22 589,00	
15	1	A16	Y2023	Analytical Laboratory	Single storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.1	396,00	m²	R 461,00	R 182 556,00	R 182 556,00	
16	1				Double storey building	1600F3-2700-DD30-GAD-0009-Rev C	Yes	3.1.2	150,00	m²	R 782,50	R 117 375,00	R 117 375,00	
17	1	A17	Y2023	Primary Security Gate House	Single storey building	1600F3-2700-DD30-GAD-0005-Rev C	Yes	3.2.1	67,00	m²	R 855,00	R 57 285,00	R 57 285,00	
18	1	A18	Y2023	Change House & Laundry	Single storey building	1600F3-2700-DD30-GAD-0011-Rev C	Yes	3.1.1	514,00	m²	R 461,00	R 236 954,00	R 236 954,00	
19	1	A28	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
21				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	2 400,00	m³	R 24,50	R 58 800,00	R 58 800,00	
22				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	2 400,00	m³/km	R 67,00	R 160 800,00	R 160 800,00	
20				HDPE Liner	Removal of single HDPE liner		Yes	6,4	7 300,00	m²	R 10,75	R 78 475,00	R 78 475,00	Assume 1 x HDPE Liner
23				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
24				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,80	ha	R 70 214,50	R 56 171,60	R 56 171,60	Assumed 100% of footprint will require shaping
25				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,80	ha	R 26 037,50	R 20 830,00	R 20 830,00	Includes soil amelioration, cultivation and seeding actions
26	1	A30	Y2023	Return Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
28				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	1 500,00	m³	R 24,50	R 36 750,00	R 36 750,00	
29				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	1 500,00	m³/km	R 67,00	R 100 500,00	R 100 500,00	
27				HDPE Liner	Removal of single HDPE liner		Yes	6,4	4 900,00	m²	R 10,75	R 52 675,00	R 52 675,00	Assume 1 x HDPE Liner
30				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	300,00	m	R 301,00	R 90 300,00	R 90 300,00	
31				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,50	ha	R 70 214,50	R 35 107,25	R 35 107,25	Assumed 100% of footprint will require shaping
32				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,50	ha	R 26 037,50	R 13 018,75	R 13 018,75	Includes soil amelioration, cultivation and seeding actions
33	1	A56	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0002-PrelimA								
35				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	7 500,00	m³	R 24,50	R 183 750,00	R 183 750,00	
36				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	7 500,00	m³/km	R 67,00	R 502 500,00	R 502 500,00	
34				HDPE Liner	Removal of single HDPE liner		Yes	6,4	24 800,00	m²	R 10,75	R 266 600,00	R 266 600,00	Assume 1 x HDPE Liner
37				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	500,00	m	R 301,00	R 150 500,00	R 150 500,00	
38				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	2,50	ha	R 70 214,50	R 175 536,25	R 175 536,25	Assumed 100% of footprint will require shaping
39				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	2,50	ha	R 26 037,50	R 65 093,75	R 65 093,75	Includes soil amelioration, cultivation and seeding actions
40	3	A58	Y2023	Explosive Magazines	Single storey building	Xref Plant DWG	Yes	3.2.1	25,00	m²	R 855,00	R 21 375,00	R 21 375,00	Assume single storey building
41				Concrete Walls	Light concrete, thickness less than 250mm	Xref Plant DWG	Yes	4,3	30,00	m³	R 643,00	R 19 290,00	R 19 290,00	Assume concrete walls
42	2	A74	Y2023	Process Water Dam:		1600F3-0000-DE10-LYD-0003-Rev A								
44				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,75	m³	R 24,50	R 18 393,38	R 18 393,38	
45				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,75	m³/km	R 67,00	R 50 300,25	R 50 300,25	
43				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 100,00	m²	R 10,75	R 22 575,00	R 22 575,00	Assume 1 x HDPE Liner
46				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
47				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
48				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
49	2	A76	Y2023	Pollution Control Dam:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 16)								
51				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	600,00	m³	R 24,50	R 14 700,00	R 14 700,00	
52				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	600,00	m³/km	R 67,00	R 40 200,00	R 40 200,00	
50				HDPE Liner	Removal of single HDPE liner		Yes	6,4	1 970,00	m²	R 10,75	R 21 177,50	R 21 177,50	Assume 1 x HDPE Liner
53				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	185,00	m	R 301,00	R 55 685,00	R 55 685,00	
54				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,20	ha	R 70 214,50	R 14 042,90	R 14 042,90	Assumed 100% of footprint will require shaping
55				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,20	ha	R 26 037,50	R 5 207,50	R 5 207,50	Includes soil amelioration, cultivation and seeding actions
56	3	A99	Y2023	Pollution Control Dam Mining Yard:		1600F3-1800-DD11-LYD-001-1/1-A								
58				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
59				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
57				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
60				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	
61				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
62				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
63	1	A98	Y2023	Waste Area and Skips	Single storey building	1600F3-2700-DD30-GAD-0006-Rev C	Yes	3.1.1	42,00	m²	R 461,00	R 19 362,00	R 19 362,00	
64	3	A100	Y2023	Pollution Control Dam Mining Office :		1600F3-1800-DD11-LYD-001-1/1-A								
66				Excavate sediment from dam basins (assume 300mm thick layer)	Bulk Excavation		Yes	9.2.1	750,00	m³	R 24,50	R 18 375,00	R 18 375,00	
67				Load and haul sediment to TSF for disposal	Load and haul for 5km distance		Yes	9.6.6	750,00	m³/km	R 67,00	R 50 250,00	R 50 250,00	
65				HDPE Liner	Removal of single HDPE liner		Yes	6,4	2 350,00	m²	R 10,75	R 25 262,50	R 25 262,50	Assume 1 x HDPE Liner
68				Breach dam wall and doze material into dam void	Breach dam wall & reshape 1:5		Yes	10.1.5	150,00	m	R 301,00	R 45 150,00	R 45 150,00	

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2032	
1,3	SUPPORTING INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
69				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)			Yes	10.1.1	0,25	ha	R 70 214,50	R 17 553,63	R 17 553,63	Assumed 100% of footprint will require shaping
70				Establish vegetation	Establishment of vegetation (general)			Yes	10.4.1	0,25	ha	R 26 037,50	R 6 509,38	R 6 509,38	Includes soil amelioration, cultivation and seeding actions
71		A108	Y2023	Eskom Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Eskom's responsibility as confirmed by Wood PLC
72		A112	Y2023	Contractors Yard	Not Applicable			No	1,1	-	na	R -	R -	R -	Contractor's responsibility.
						SUB-TOTAL 1								R 6 128 999,39	
						Preliminaries and General	6%							R 367 739,96	
						Contingency	10%							R 612 899,94	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 980 639,90	
						GRAND-TOTAL								R 7 109 639,29	

Jindal Melmoth Iron Ore - EIA
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INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2023	
1,6	OFF-SITE INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										-				R -	Construction to commence in Y2024 as per Mine Works Program
2	2	A63	Y2023	Substation	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 5)		No	3.2.1	-	m²	R 855,00	R -	R -	Assume single storey building
3	2	A68	Y2023	Transfer Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0003-Rev A (Nr 11)		No	5.1.2	-	m	R 414,50	R -	R -	Assume overland conveyor
4	2	A69	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		No	2.3.2	-	m²	R 1 254,00	R -	R -	Assume medium plant structure
5	2	A70	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		No	2.3.2	-	m²	R 1 254,00	R -	R -	Assume medium plant structure
6	2	A71	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		No	2.3.2	-	m²	R 1 254,00	R -	R -	Assume medium plant structure
7	2	A72	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		No	2.3.2	-	m²	R 1 254,00	R -	R -	Assume to form part of Filter Press
8	2	A73	Y2023	Thickener:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 10)									
9	2			Superstructure	Medium concrete, thickness between 250 and 750mm			No	4,2	-	m³	R 981,00	R -	R -	Assume concrete thickener Wall sizes, heights and thicknesses assumed
10	2			Steel Structure	Medium plant structures			No	2.3.2	-	m²	R 1 254,00	R -	R -	Steel structure and footprint assumed
11	2	A75	Y2023	Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0003-Rev A (Nr 14)		No	4,3	-	m³	R 643,00	R -	R -	Assume 150mm thick concrete stockpile footprint
12	2	A60	Y2023	Control Room - Rail Load Out	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 3)		No	3.1.1	-	m²	R 461,00	R -	R -	Assume single storey building
13	2	A61	Y2023	Amenities Building	Single storey building	1600F3-0000-DD30-GAD-0003-Rev C		No	3.1.1	-	m²	R 461,00	R -	R -	
14	2	A62	Y2023	Office	Single storey building			No	3.1.1	-	m²	R 461,00	R -	R -	Assume description Assume single storey building
15	2	A64	Y2023	Workshop & Stores	5m – 10m high	1600F3-0000-DE10-LYD-0003-Rev A (Nr 6)		No	3.6.2	-	m²	R 570,50	R -	R -	Assume 10m high
16	2	A65	Y2023	Pump House	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 8)		No	3.2.1	-	m²	R 855,00	R -	R -	Assume single storey building
17	2	A66	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		No	2.5.2	-	no	R 23 492,50	R -	R -	Assume medium steel tank
18	2	A67	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		No	2.5.2	-	no	R 23 492,50	R -	R -	Assume medium steel tank
19	2	A77	Y2023	Load Out Bin	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A (Nr 17)		No	2.3.2	-	m²	R 1 254,00	R -	R -	Assume medium plant structure
							SUB-TOTAL 1							R -	
							Preliminaries and General	6%						R -	
							Contingency	10%						R -	
							SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							R -	
							GRAND-TOTAL							R -	

Jindal Melmoth Iron Ore - EIA
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INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2024	
1,6	OFF-SITE INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										5 693,23				R 5 999 694,95	
2	2	A63	Y2023	Substation	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 5)		Yes	3.2.1	140,00	m²	R 855,00	R 119 700,00	R 119 700,00	Assume single storey building
3	2	A68	Y2023	Transfer Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0003-Rev A (Nr 11)		Yes	5.1.2	340,00	m	R 414,50	R 140 930,00	R 140 930,00	Assume overland conveyor
4	2	A69	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
5	2	A70	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
6	2	A71	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
7	2	A72	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	240,00	m²	R 1 254,00	R 300 960,00	R 300 960,00	Assume to form part of Filter Press
8	2	A73	Y2023	Thickener:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 10)									
9	2			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	814,55	m³	R 981,00	R 799 073,55	R 799 073,55	Assume concrete thickener Wall sizes, heights and thicknesses assumed
10	2			Steel Structure	Medium plant structures			Yes	2.3.2	200,00	m²	R 1 254,00	R 250 800,00	R 250 800,00	Steel structure and footprint assumed
11	2	A75	Y2023	Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0003-Rev A (Nr 14)		Yes	4,3	4 290,00	m³	R 643,00	R 2 758 470,00	R 2 758 470,00	Assume 150mm thick concrete stockpile footprint
12	2	A60	Y2023	Control Room - Rail Load Out	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 3)		Yes	3.1.1	60,00	m²	R 461,00	R 27 660,00	R 27 660,00	Assume single storey building
13	2	A61	Y2023	Amenities Building	Single storey building	1600F3-0000-DD30-GAD-0003-Rev C		Yes	3.1.1	66,40	m²	R 461,00	R 30 610,40	R 30 610,40	
14	2	A62	Y2023	Office	Single storey building			Yes	3.1.1	6,00	m²	R 461,00	R 2 766,00	R 2 766,00	Assume description Assume single storey building
15	2	A64	Y2023	Workshop & Stores	5m – 10m high	1600F3-0000-DE10-LYD-0003-Rev A (Nr 6)		Yes	3.6.2	820,00	m²	R 570,50	R 467 810,00	R 467 810,00	Assume 10m high
16	2	A65	Y2023	Pump House	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 8)		Yes	3.2.1	360,00	m²	R 855,00	R 307 800,00	R 307 800,00	Assume single storey building
17	2	A66	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
18	2	A67	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
19	2	A77	Y2023	Load Out Bin	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A (Nr 17)		Yes	2.3.2	115,00	m²	R 1 254,00	R 144 210,00	R 144 210,00	Assume medium plant structure
						SUB-TOTAL 1								**R 5 999 694,95**	
						Preliminaries and General	6%							R 359 981,70	
						Contingency	10%							R 599 969,50	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 959 951,19**	
						GRAND-TOTAL								**R 6 959 646,14**	

Jindal Melmoth Iron Ore - EIA
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INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2025	
1,6	OFF-SITE INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										5 693,23				R 5 999 694,95	
2	2	A63	Y2023	Substation	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 5)		Yes	3.2.1	140,00	m²	R 855,00	R 119 700,00	R 119 700,00	Assume single storey building
3	2	A68	Y2023	Transfer Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0003-Rev A (Nr 11)		Yes	5.1.2	340,00	m	R 414,50	R 140 930,00	R 140 930,00	Assume overland conveyor
4	2	A69	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
5	2	A70	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
6	2	A71	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
7	2	A72	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	240,00	m²	R 1 254,00	R 300 960,00	R 300 960,00	Assume to form part of Filter Press
8	2	A73	Y2023	Thickener:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 10)									
9	2			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	814,55	m³	R 981,00	R 799 073,55	R 799 073,55	Assume concrete thickener Wall sizes, heights and thicknesses assumed
10	2			Steel Structure	Medium plant structures			Yes	2.3.2	200,00	m²	R 1 254,00	R 250 800,00	R 250 800,00	Steel structure and footprint assumed
11	2	A75	Y2023	Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0003-Rev A (Nr 14)		Yes	4,3	4 290,00	m³	R 643,00	R 2 758 470,00	R 2 758 470,00	Assume 150mm thick concrete stockpile footprint
12	2	A60	Y2023	Control Room - Rail Load Out	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 3)		Yes	3.1.1	60,00	m²	R 461,00	R 27 660,00	R 27 660,00	Assume single storey building
13	2	A61	Y2023	Amenities Building	Single storey building	1600F3-0000-DD30-GAD-0003-Rev C		Yes	3.1.1	66,40	m²	R 461,00	R 30 610,40	R 30 610,40	
14	2	A62	Y2023	Office	Single storey building			Yes	3.1.1	6,00	m²	R 461,00	R 2 766,00	R 2 766,00	Assume description Assume single storey building
15	2	A64	Y2023	Workshop & Stores	5m – 10m high	1600F3-0000-DE10-LYD-0003-Rev A (Nr 6)		Yes	3.6.2	820,00	m²	R 570,50	R 467 810,00	R 467 810,00	Assume 10m high
16	2	A65	Y2023	Pump House	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 8)		Yes	3.2.1	360,00	m²	R 855,00	R 307 800,00	R 307 800,00	Assume single storey building
17	2	A66	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
18	2	A67	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
19	2	A77	Y2023	Load Out Bin	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A (Nr 17)		Yes	2.3.2	115,00	m²	R 1 254,00	R 144 210,00	R 144 210,00	Assume medium plant structure
						SUB-TOTAL 1								**R 5 999 694,95**	
						Preliminaries and General	6%							R 359 981,70	
						Contingency	10%							R 599 969,50	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 959 951,19**	
						GRAND-TOTAL								**R 6 959 646,14**	

Jindal Melmoth Iron Ore - EIA
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INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2026	
1,6	OFF-SITE INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										5 693,23				R 5 999 694,95	
2	2	A63	Y2023	Substation	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 5)		Yes	3.2.1	140,00	m²	R 855,00	R 119 700,00	R 119 700,00	Assume single storey building
3	2	A68	Y2023	Transfer Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0003-Rev A (Nr 11)		Yes	5.1.2	340,00	m	R 414,50	R 140 930,00	R 140 930,00	Assume overland conveyor
4	2	A69	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
5	2	A70	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
6	2	A71	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
7	2	A72	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	240,00	m²	R 1 254,00	R 300 960,00	R 300 960,00	Assume to form part of Filter Press
8	2	A73	Y2023	Thickener:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 10)									
9	2			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	814,55	m³	R 981,00	R 799 073,55	R 799 073,55	Assume concrete thickener Wall sizes, heights and thicknesses assumed
10	2			Steel Structure	Medium plant structures			Yes	2.3.2	200,00	m²	R 1 254,00	R 250 800,00	R 250 800,00	Steel structure and footprint assumed
11	2	A75	Y2023	Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0003-Rev A (Nr 14)		Yes	4,3	4 290,00	m³	R 643,00	R 2 758 470,00	R 2 758 470,00	Assume 150mm thick concrete stockpile footprint
12	2	A60	Y2023	Control Room - Rail Load Out	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 3)		Yes	3.1.1	60,00	m²	R 461,00	R 27 660,00	R 27 660,00	Assume single storey building
13	2	A61	Y2023	Amenities Building	Single storey building	1600F3-0000-DD30-GAD-0003-Rev C		Yes	3.1.1	66,40	m²	R 461,00	R 30 610,40	R 30 610,40	
14	2	A62	Y2023	Office	Single storey building			Yes	3.1.1	6,00	m²	R 461,00	R 2 766,00	R 2 766,00	Assume description Assume single storey building
15	2	A64	Y2023	Workshop & Stores	5m – 10m high	1600F3-0000-DE10-LYD-0003-Rev A (Nr 6)		Yes	3.6.2	820,00	m²	R 570,50	R 467 810,00	R 467 810,00	Assume 10m high
16	2	A65	Y2023	Pump House	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 8)		Yes	3.2.1	360,00	m²	R 855,00	R 307 800,00	R 307 800,00	Assume single storey building
17	2	A66	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
18	2	A67	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
19	2	A77	Y2023	Load Out Bin	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A (Nr 17)		Yes	2.3.2	115,00	m²	R 1 254,00	R 144 210,00	R 144 210,00	Assume medium plant structure
						SUB-TOTAL 1								**R 5 999 694,95**	
						Preliminaries and General	6%							R 359 981,70	
						Contingency	10%							R 599 969,50	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 959 951,19**	
						GRAND-TOTAL								**R 6 959 646,14**	

Jindal Melmoth Iron Ore - EIA
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INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2027	
1,6	OFF-SITE INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										5 693,23				R 5 999 694,95	
2	2	A63	Y2023	Substation	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 5)		Yes	3.2.1	140,00	m²	R 855,00	R 119 700,00	R 119 700,00	Assume single storey building
3	2	A68	Y2023	Transfer Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0003-Rev A (Nr 11)		Yes	5.1.2	340,00	m	R 414,50	R 140 930,00	R 140 930,00	Assume overland conveyor
4	2	A69	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
5	2	A70	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
6	2	A71	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
7	2	A72	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	240,00	m²	R 1 254,00	R 300 960,00	R 300 960,00	Assume to form part of Filter Press
8	2	A73	Y2023	Thickener:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 10)									
9	2			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	814,55	m³	R 981,00	R 799 073,55	R 799 073,55	Assume concrete thickener Wall sizes, heights and thicknesses assumed
10	2			Steel Structure	Medium plant structures			Yes	2.3.2	200,00	m²	R 1 254,00	R 250 800,00	R 250 800,00	Steel structure and footprint assumed
11	2	A75	Y2023	Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0003-Rev A (Nr 14)		Yes	4,3	4 290,00	m³	R 643,00	R 2 758 470,00	R 2 758 470,00	Assume 150mm thick concrete stockpile footprint
12	2	A60	Y2023	Control Room - Rail Load Out	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 3)		Yes	3.1.1	60,00	m²	R 461,00	R 27 660,00	R 27 660,00	Assume single storey building
13	2	A61	Y2023	Amenities Building	Single storey building	1600F3-0000-DD30-GAD-0003-Rev C		Yes	3.1.1	66,40	m²	R 461,00	R 30 610,40	R 30 610,40	
14	2	A62	Y2023	Office	Single storey building			Yes	3.1.1	6,00	m²	R 461,00	R 2 766,00	R 2 766,00	Assume description Assume single storey building
15	2	A64	Y2023	Workshop & Stores	5m – 10m high	1600F3-0000-DE10-LYD-0003-Rev A (Nr 6)		Yes	3.6.2	820,00	m²	R 570,50	R 467 810,00	R 467 810,00	Assume 10m high
16	2	A65	Y2023	Pump House	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 8)		Yes	3.2.1	360,00	m²	R 855,00	R 307 800,00	R 307 800,00	Assume single storey building
17	2	A66	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
18	2	A67	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
19	2	A77	Y2023	Load Out Bin	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A (Nr 17)		Yes	2.3.2	115,00	m²	R 1 254,00	R 144 210,00	R 144 210,00	Assume medium plant structure
						SUB-TOTAL 1								**R 5 999 694,95**	
						Preliminaries and General	6%							R 359 981,70	
						Contingency	10%							R 599 969,50	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 959 951,19**	
						GRAND-TOTAL								**R 6 959 646,14**	

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2028	
1,6	OFF-SITE INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										5 693,23				R 5 999 694,95	
2	2	A63	Y2023	Substation	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 5)		Yes	3.2.1	140,00	m²	R 855,00	R 119 700,00	R 119 700,00	Assume single storey building
3	2	A68	Y2023	Transfer Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0003-Rev A (Nr 11)		Yes	5.1.2	340,00	m	R 414,50	R 140 930,00	R 140 930,00	Assume overland conveyor
4	2	A69	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
5	2	A70	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
6	2	A71	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
7	2	A72	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	240,00	m²	R 1 254,00	R 300 960,00	R 300 960,00	Assume to form part of Filter Press
8	2	A73	Y2023	Thickener:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 10)									
9	2			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	814,55	m³	R 981,00	R 799 073,55	R 799 073,55	Assume concrete thickener Wall sizes, heights and thicknesses assumed
10	2			Steel Structure	Medium plant structures			Yes	2.3.2	200,00	m²	R 1 254,00	R 250 800,00	R 250 800,00	Steel structure and footprint assumed
11	2	A75	Y2023	Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0003-Rev A (Nr 14)		Yes	4,3	4 290,00	m³	R 643,00	R 2 758 470,00	R 2 758 470,00	Assume 150mm thick concrete stockpile footprint
12	2	A60	Y2023	Control Room - Rail Load Out	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 3)		Yes	3.1.1	60,00	m²	R 461,00	R 27 660,00	R 27 660,00	Assume single storey building
13	2	A61	Y2023	Amenities Building	Single storey building	1600F3-0000-DD30-GAD-0003-Rev C		Yes	3.1.1	66,40	m²	R 461,00	R 30 610,40	R 30 610,40	
14	2	A62	Y2023	Office	Single storey building			Yes	3.1.1	6,00	m²	R 461,00	R 2 766,00	R 2 766,00	Assume description Assume single storey building
15	2	A64	Y2023	Workshop & Stores	5m – 10m high	1600F3-0000-DE10-LYD-0003-Rev A (Nr 6)		Yes	3.6.2	820,00	m²	R 570,50	R 467 810,00	R 467 810,00	Assume 10m high
16	2	A65	Y2023	Pump House	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 8)		Yes	3.2.1	360,00	m²	R 855,00	R 307 800,00	R 307 800,00	Assume single storey building
17	2	A66	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
18	2	A67	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
19	2	A77	Y2023	Load Out Bin	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A (Nr 17)		Yes	2.3.2	115,00	m²	R 1 254,00	R 144 210,00	R 144 210,00	Assume medium plant structure
						SUB-TOTAL 1								**R 5 999 694,95**	
						Preliminaries and General	6%							R 359 981,70	
						Contingency	10%							R 599 969,50	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 959 951,19**	
						GRAND-TOTAL								**R 6 959 646,14**	

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2029	
1,6	OFF-SITE INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										5 693,23				R 5 999 694,95	
2	2	A63	Y2023	Substation	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 5)		Yes	3.2.1	140,00	m²	R 855,00	R 119 700,00	R 119 700,00	Assume single storey building
3	2	A68	Y2023	Transfer Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0003-Rev A (Nr 11)		Yes	5.1.2	340,00	m	R 414,50	R 140 930,00	R 140 930,00	Assume overland conveyor
4	2	A69	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
5	2	A70	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
6	2	A71	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
7	2	A72	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	240,00	m²	R 1 254,00	R 300 960,00	R 300 960,00	Assume to form part of Filter Press
8	2	A73	Y2023	Thickener:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 10)									
9	2			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	814,55	m³	R 981,00	R 799 073,55	R 799 073,55	Assume concrete thickener Wall sizes, heights and thicknesses assumed
10	2			Steel Structure	Medium plant structures			Yes	2.3.2	200,00	m²	R 1 254,00	R 250 800,00	R 250 800,00	Steel structure and footprint assumed
11	2	A75	Y2023	Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0003-Rev A (Nr 14)		Yes	4,3	4 290,00	m³	R 643,00	R 2 758 470,00	R 2 758 470,00	Assume 150mm thick concrete stockpile footprint
12	2	A60	Y2023	Control Room - Rail Load Out	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 3)		Yes	3.1.1	60,00	m²	R 461,00	R 27 660,00	R 27 660,00	Assume single storey building
13	2	A61	Y2023	Amenities Building	Single storey building	1600F3-0000-DD30-GAD-0003-Rev C		Yes	3.1.1	66,40	m²	R 461,00	R 30 610,40	R 30 610,40	
14	2	A62	Y2023	Office	Single storey building			Yes	3.1.1	6,00	m²	R 461,00	R 2 766,00	R 2 766,00	Assume description Assume single storey building
15	2	A64	Y2023	Workshop & Stores	5m – 10m high	1600F3-0000-DE10-LYD-0003-Rev A (Nr 6)		Yes	3.6.2	820,00	m²	R 570,50	R 467 810,00	R 467 810,00	Assume 10m high
16	2	A65	Y2023	Pump House	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 8)		Yes	3.2.1	360,00	m²	R 855,00	R 307 800,00	R 307 800,00	Assume single storey building
17	2	A66	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
18	2	A67	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
19	2	A77	Y2023	Load Out Bin	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A (Nr 17)		Yes	2.3.2	115,00	m²	R 1 254,00	R 144 210,00	R 144 210,00	Assume medium plant structure
						SUB-TOTAL 1								**R 5 999 694,95**	
						Preliminaries and General	6%							R 359 981,70	
						Contingency	10%							R 599 969,50	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 959 951,19**	
						GRAND-TOTAL								**R 6 959 646,14**	

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2030	
1,6	OFF-SITE INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										5 693,23				R 5 999 694,95	
2	2	A63	Y2023	Substation	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 5)		Yes	3.2.1	140,00	m²	R 855,00	R 119 700,00	R 119 700,00	Assume single storey building
3	2	A68	Y2023	Transfer Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0003-Rev A (Nr 11)		Yes	5.1.2	340,00	m	R 414,50	R 140 930,00	R 140 930,00	Assume overland conveyor
4	2	A69	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
5	2	A70	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
6	2	A71	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
7	2	A72	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	240,00	m²	R 1 254,00	R 300 960,00	R 300 960,00	Assume to form part of Filter Press
8	2	A73	Y2023	Thickener:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 10)									
9	2			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	814,55	m³	R 981,00	R 799 073,55	R 799 073,55	Assume concrete thickener Wall sizes, heights and thicknesses assumed
10	2			Steel Structure	Medium plant structures			Yes	2.3.2	200,00	m²	R 1 254,00	R 250 800,00	R 250 800,00	Steel structure and footprint assumed
11	2	A75	Y2023	Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0003-Rev A (Nr 14)		Yes	4,3	4 290,00	m³	R 643,00	R 2 758 470,00	R 2 758 470,00	Assume 150mm thick concrete stockpile footprint
12	2	A60	Y2023	Control Room - Rail Load Out	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 3)		Yes	3.1.1	60,00	m²	R 461,00	R 27 660,00	R 27 660,00	Assume single storey building
13	2	A61	Y2023	Amenities Building	Single storey building	1600F3-0000-DD30-GAD-0003-Rev C		Yes	3.1.1	66,40	m²	R 461,00	R 30 610,40	R 30 610,40	
14	2	A62	Y2023	Office	Single storey building			Yes	3.1.1	6,00	m²	R 461,00	R 2 766,00	R 2 766,00	Assume description Assume single storey building
15	2	A64	Y2023	Workshop & Stores	5m – 10m high	1600F3-0000-DE10-LYD-0003-Rev A (Nr 6)		Yes	3.6.2	820,00	m²	R 570,50	R 467 810,00	R 467 810,00	Assume 10m high
16	2	A65	Y2023	Pump House	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 8)		Yes	3.2.1	360,00	m²	R 855,00	R 307 800,00	R 307 800,00	Assume single storey building
17	2	A66	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
18	2	A67	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
19	2	A77	Y2023	Load Out Bin	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A (Nr 17)		Yes	2.3.2	115,00	m²	R 1 254,00	R 144 210,00	R 144 210,00	Assume medium plant structure
						SUB-TOTAL 1								**R 5 999 694,95**	
						Preliminaries and General	6%							R 359 981,70	
						Contingency	10%							R 599 969,50	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 959 951,19**	
						GRAND-TOTAL								**R 6 959 646,14**	

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2031	
1,6	OFF-SITE INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										5 693,23				R 5 999 694,95	
2	2	A63	Y2023	Substation	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 5)		Yes	3.2.1	140,00	m²	R 855,00	R 119 700,00	R 119 700,00	Assume single storey building
3	2	A68	Y2023	Transfer Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0003-Rev A (Nr 11)		Yes	5.1.2	340,00	m	R 414,50	R 140 930,00	R 140 930,00	Assume overland conveyor
4	2	A69	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
5	2	A70	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
6	2	A71	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
7	2	A72	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	240,00	m²	R 1 254,00	R 300 960,00	R 300 960,00	Assume to form part of Filter Press
8	2	A73	Y2023	Thickener:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 10)									
9	2			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	814,55	m³	R 981,00	R 799 073,55	R 799 073,55	Assume concrete thickener Wall sizes, heights and thicknesses assumed
10	2			Steel Structure	Medium plant structures			Yes	2.3.2	200,00	m²	R 1 254,00	R 250 800,00	R 250 800,00	Steel structure and footprint assumed
11	2	A75	Y2023	Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0003-Rev A (Nr 14)		Yes	4,3	4 290,00	m³	R 643,00	R 2 758 470,00	R 2 758 470,00	Assume 150mm thick concrete stockpile footprint
12	2	A60	Y2023	Control Room - Rail Load Out	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 3)		Yes	3.1.1	60,00	m²	R 461,00	R 27 660,00	R 27 660,00	Assume single storey building
13	2	A61	Y2023	Amenities Building	Single storey building	1600F3-0000-DD30-GAD-0003-Rev C		Yes	3.1.1	66,40	m²	R 461,00	R 30 610,40	R 30 610,40	
14	2	A62	Y2023	Office	Single storey building			Yes	3.1.1	6,00	m²	R 461,00	R 2 766,00	R 2 766,00	Assume description Assume single storey building
15	2	A64	Y2023	Workshop & Stores	5m – 10m high	1600F3-0000-DE10-LYD-0003-Rev A (Nr 6)		Yes	3.6.2	820,00	m²	R 570,50	R 467 810,00	R 467 810,00	Assume 10m high
16	2	A65	Y2023	Pump House	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 8)		Yes	3.2.1	360,00	m²	R 855,00	R 307 800,00	R 307 800,00	Assume single storey building
17	2	A66	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
18	2	A67	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
19	2	A77	Y2023	Load Out Bin	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A (Nr 17)		Yes	2.3.2	115,00	m²	R 1 254,00	R 144 210,00	R 144 210,00	Assume medium plant structure
						SUB-TOTAL 1								**R 5 999 694,95**	
						Preliminaries and General	6%							R 359 981,70	
						Contingency	10%							R 599 969,50	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 959 951,19**	
						GRAND-TOTAL								**R 6 959 646,14**	

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2032	
1,6	OFF-SITE INFRASTRUCTURE														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										5 693,23				R 5 999 694,95	
2	2	A63	Y2023	Substation	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 5)		Yes	3.2.1	140,00	m²	R 855,00	R 119 700,00	R 119 700,00	Assume single storey building
3	2	A68	Y2023	Transfer Conveyor	Overland conveyor - medium	1600F3-0000-DE10-LYD-0003-Rev A (Nr 11)		Yes	5.1.2	340,00	m	R 414,50	R 140 930,00	R 140 930,00	Assume overland conveyor
4	2	A69	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
5	2	A70	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
6	2	A71	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	160,00	m²	R 1 254,00	R 200 640,00	R 200 640,00	Assume medium plant structure
7	2	A72	Y2023	Filter Press	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A		Yes	2.3.2	240,00	m²	R 1 254,00	R 300 960,00	R 300 960,00	Assume to form part of Filter Press
8	2	A73	Y2023	Thickener:		1600F3-0000-DE10-LYD-0003-Rev A (Nr 10)									
9	2			Superstructure	Medium concrete, thickness between 250 and 750mm			Yes	4,2	814,55	m³	R 981,00	R 799 073,55	R 799 073,55	Assume concrete thickener Wall sizes, heights and thicknesses assumed
10	2			Steel Structure	Medium plant structures			Yes	2.3.2	200,00	m²	R 1 254,00	R 250 800,00	R 250 800,00	Steel structure and footprint assumed
11	2	A75	Y2023	Stockpile Platform	Light concrete, thickness less than 250mm	1600F3-0000-DE10-LYD-0003-Rev A (Nr 14)		Yes	4,3	4 290,00	m³	R 643,00	R 2 758 470,00	R 2 758 470,00	Assume 150mm thick concrete stockpile footprint
12	2	A60	Y2023	Control Room - Rail Load Out	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 3)		Yes	3.1.1	60,00	m²	R 461,00	R 27 660,00	R 27 660,00	Assume single storey building
13	2	A61	Y2023	Amenities Building	Single storey building	1600F3-0000-DD30-GAD-0003-Rev C		Yes	3.1.1	66,40	m²	R 461,00	R 30 610,40	R 30 610,40	
14	2	A62	Y2023	Office	Single storey building			Yes	3.1.1	6,00	m²	R 461,00	R 2 766,00	R 2 766,00	Assume description Assume single storey building
15	2	A64	Y2023	Workshop & Stores	5m – 10m high	1600F3-0000-DE10-LYD-0003-Rev A (Nr 6)		Yes	3.6.2	820,00	m²	R 570,50	R 467 810,00	R 467 810,00	Assume 10m high
16	2	A65	Y2023	Pump House	Single storey building	1600F3-0000-DE10-LYD-0003-Rev A (Nr 8)		Yes	3.2.1	360,00	m²	R 855,00	R 307 800,00	R 307 800,00	Assume single storey building
17	2	A66	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
18	2	A67	Y2023	Slurry Tank	Medium steel tanks	1600F3-0000-DE10-LYD-0003-Rev A (Nr 7)		Yes	2.5.2	1,00	no	R 23 492,50	R 23 492,50	R 23 492,50	Assume medium steel tank
19	2	A77	Y2023	Load Out Bin	Medium plant structures	1600F3-0000-DE10-LYD-0003-Rev A (Nr 17)		Yes	2.3.2	115,00	m²	R 1 254,00	R 144 210,00	R 144 210,00	Assume medium plant structure
						SUB-TOTAL 1								**R 5 999 694,95**	
						Preliminaries and General	6%							R 359 981,70	
						Contingency	10%							R 599 969,50	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 959 951,19**	
						GRAND-TOTAL								**R 6 959 646,14**	

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2023	
1,7		LINEAR ITEMS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										1 323,99				R 1 298 834,19	
2	1	A59	Y2023	Explosive Magazines Fencing	Dismantling of security fencing	Xref Plant DWG		No	5.5.3	-	m	R 25,00	R -	R -	Assume security fencing
3	1	A78	Y2023	Security Fencing - Plant	Dismantling of security fencing	Xref Plant DWG		No	5.5.3	-	m	R 25,00	R -	R -	Assume 1,8m Security Fencing
4	1	A79	Y2023	Stock Fencing - Plant	Dismantling of stock fencing	Xref Plant DWG		No	5.5.4	-	m	R 12,00	R -	R -	Assume 1,2m Stock Fencing
5	2	A80	Y2023	Security Fencing - Filter Plant	Dismantling of security fencing	Xref Plant DWG		No	5.5.3	-	m	R 25,00	R -	R -	Assume 1,8m Security Fencing
6	3	A81	Y2023	Security Fencing - Mining Yard	Dismantling of security fencing	Xref Plant DWG		No	5.5.3	-	m	R 25,00	R -	R -	Assume 1,8m Security Fencing
7	3	A82	Y2023	Security Fencing - Mining Offices	Dismantling of security fencing	Xref Plant DWG		No	5.5.3	-	m	R 25,00	R -	R -	Assume 1,8m Security Fencing
8	3	A83	Y2023	Pipeline:				No		-					
9				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		No	5.2.6	-	m	R 37,00	R -	R -	Assume HDPE pipes
10				Concentrate Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		No	5.2.6	-	m	R 37,00	R -	R -	Assume HDPE pipes
11				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		No	5.2.6	-	m	R 37,00	R -	R -	Assume HDPE pipes
12				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		No	5.2.6	-	m	R 37,00	R -	R -	Assume HDPE pipes
13				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		No	5.2.6	-	m	R 37,00	R -	R -	Assume HDPE pipes
14				Tailings Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		No	5.2.6	-	m	R 37,00	R -	R -	Assume HDPE pipes
15				Raw Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		No	5.2.6	-	m	R 37,00	R -	R -	Assume HDPE pipes
16	1	A84	Y2023	Plant Road	Remove tar roads including layer works	1600F3-6100-DD11-GAD-0005_rB_P		No	8,1	-	m²	R 53,20	R -	R -	
17	4	A87	Y2023	Storm Water Channel E-SW1	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	66,00	m³	R 981,00	R 64 746,00	R 64 746,00	
18	4	A88	Y2023	Storm Water Channel E-SW2	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	307,06	m³	R 981,00	R 301 225,86	R 301 225,86	
19	4	A89	Y2023	Storm Water Channel E-SW3	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	69,89	m³	R 981,00	R 68 562,09	R 68 562,09	
20	4	A90	Y2023	Storm Water Channel E-SW4	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	82,50	m³	R 981,00	R 80 932,50	R 80 932,50	
21	4	A91	Y2023	Storm Water Channel E-SW5	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	133,00	m³	R 981,00	R 130 473,00	R 130 473,00	
22	4	A92	Y2023	Storm Water Channel E-SW6	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	209,04	m³	R 981,00	R 205 068,24	R 205 068,24	
23	4	A93	Y2023	Storm Water Channel E-SW7	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	250,75	m³	R 981,00	R 245 985,75	R 245 985,75	
24	1	A94	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	30,25	m³	R 981,00	R 29 675,25	R 29 675,25	Assume 250mm thick concrete
25	1	A95	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	25,00	m³	R 981,00	R 24 525,00	R 24 525,00	Assume 250mm thick concrete
26	1	A96	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
27	1	A103	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
28	1	A104	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	50,50	m³	R 981,00	R 49 540,50	R 49 540,50	Assume 250mm thick concrete
29	1	A105	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	27,50	m³	R 981,00	R 26 977,50	R 26 977,50	Assume 250mm thick concrete
30	1	A106	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	37,50	m³	R 981,00	R 36 787,50	R 36 787,50	Assume 250mm thick concrete
31	1	A107	Y2023	Main Access Road	Remove tar roads including layer works			No	8,1	-	m²	R 53,20	R -	R -	Assume to remain post closure to sustain the end land use
32	6	A109	Y2023	Stormwater Diversion Trench at Waste Rock Dump	Not Applicable	2201682-101-RevB		No	1,1	-	na	R -	R -	R -	Diversion trench at WRD will remain post closure
33	3	A110	Y2023	Haul Roads	Major gravel roads with engineered surfaces			No	8,2	-	m²	R 38,00	R -	R -	To be constructed in alignment with the Pit
35	1	A111	Y2023	Power Lines	Major lines			No	5.3.2	1 134,00	m	R 93,00	R 105 462,00	R -	Assume Powerlines from Eskom Yard to substations in Plant
36			Y2023	Perimeter Fencing	Dismantling of security fencing			No	5.5.3	-	m	R 25,00	R -	R -	Assume to remain post closure
							SUB-TOTAL 1							R 1 298 834,19	
							Preliminaries and General	6%						R 77 930,05	
							Contingency	10%						R 129 883,42	
							SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							R 207 813,47	
							GRAND-TOTAL							R 1 506 647,66	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2024	
1,7	LINEAR ITEMS														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										1 323,99				R 7 187 271,59	
2	1	A59	Y2023	Explosive Magazines Fencing	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	90,00	m	R 25,00	R 2 250,00	R 2 250,00	Assume security fencing
3	1	A78	Y2023	Security Fencing - Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	3 800,00	m	R 25,00	R 95 000,00	R 95 000,00	Assume 1,8m Security Fencing
4	1	A79	Y2023	Stock Fencing - Plant	Dismantling of stock fencing	Xref Plant DWG		Yes	5.5.4	70,00	m	R 12,00	R 840,00	R 840,00	Assume 1,2m Stock Fencing
5	2	A80	Y2023	Security Fencing - Filter Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 300,00	m	R 25,00	R 32 500,00	R 32 500,00	Assume 1,8m Security Fencing
6	3	A81	Y2023	Security Fencing - Mining Yard	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 250,00	m	R 25,00	R 31 250,00	R 31 250,00	Assume 1,8m Security Fencing
7	3	A82	Y2023	Security Fencing - Mining Offices	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 150,00	m	R 25,00	R 28 750,00	R 28 750,00	Assume 1,8m Security Fencing
8	3	A83	Y2023	Pipeline:											
9				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
10				Concentrate Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
11				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
12				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
13				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
14				Tailings Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	21 260,00	m	R 37,00	R 786 620,00	R 786 620,00	Assume HDPE pipes
15				Raw Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	8 815,00	m	R 37,00	R 326 155,00	R 326 155,00	Assume HDPE pipes
16	1	A84	Y2023	Plant Road	Remove tar roads including layer works	1600F3-6100-DD11-GAD-0005_rB_P		Yes	8,1	31 047,00	m²	R 53,20	R 1 651 700,40	R 1 651 700,40	
17	4	A87	Y2023	Storm Water Channel E-SW1	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	66,00	m³	R 981,00	R 64 746,00	R 64 746,00	
18	4	A88	Y2023	Storm Water Channel E-SW2	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	307,06	m³	R 981,00	R 301 225,86	R 301 225,86	
19	4	A89	Y2023	Storm Water Channel E-SW3	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	69,89	m³	R 981,00	R 68 562,09	R 68 562,09	
20	4	A90	Y2023	Storm Water Channel E-SW4	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	82,50	m³	R 981,00	R 80 932,50	R 80 932,50	
21	4	A91	Y2023	Storm Water Channel E-SW5	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	133,00	m³	R 981,00	R 130 473,00	R 130 473,00	
22	4	A92	Y2023	Storm Water Channel E-SW6	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	209,04	m³	R 981,00	R 205 068,24	R 205 068,24	
23	4	A93	Y2023	Storm Water Channel E-SW7	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	250,75	m³	R 981,00	R 245 985,75	R 245 985,75	
24	1	A94	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	30,25	m³	R 981,00	R 29 675,25	R 29 675,25	Assume 250mm thick concrete
25	1	A95	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	25,00	m³	R 981,00	R 24 525,00	R 24 525,00	Assume 250mm thick concrete
26	1	A96	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
27	1	A103	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
28	1	A104	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	50,50	m³	R 981,00	R 49 540,50	R 49 540,50	Assume 250mm thick concrete
29	1	A105	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	27,50	m³	R 981,00	R 26 977,50	R 26 977,50	Assume 250mm thick concrete
30	1	A106	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	37,50	m³	R 981,00	R 36 787,50	R 36 787,50	Assume 250mm thick concrete
31	1	A107	Y2023	Main Access Road	Remove tar roads including layer works			No	8,1	-	m²	R 53,20	R -	R -	Assume to remain post closure to sustain the end land use
32	6	A109	Y2023	Stormwater Diversion Trench at Waste Rock Dump	Not Applicable	2201682-101-RevB		No	1,1	-	na	R -	R -	R -	Diversion trench at WRD will remain post closure
33	3	A110	Y2023	Haul Roads	Major gravel roads with engineered surfaces			Yes	8,2	-	m²	R 38,00	R -	R -	To be constructed in alignment with the Pit
35	1	A111	Y2023	Power Lines	Major lines			Yes	5.3.2	1 134,00	m	R 93,00	R 105 462,00	R 105 462,00	Assume Powerlines from Eskom Yard to substations in Plant
36			Y2023	Perimeter Fencing	Dismantling of security fencing			No	5.5.3	-	m	R 25,00	R -	R -	Assume to remain post closure
						SUB-TOTAL 1								R 7 187 271,59	
						Preliminaries and General	6%							R 431 236,30	
						Contingency	10%							R 718 727,16	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 1 149 963,45	
						GRAND-TOTAL								R 8 337 235,04	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2025	
1,7	LINEAR ITEMS														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										1 323,99				R 11 595 271,59	
2	1	A59	Y2023	Explosive Magazines Fencing	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	90,00	m	R 25,00	R 2 250,00	R 2 250,00	Assume security fencing
3	1	A78	Y2023	Security Fencing - Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	3 800,00	m	R 25,00	R 95 000,00	R 95 000,00	Assume 1,8m Security Fencing
4	1	A79	Y2023	Stock Fencing - Plant	Dismantling of stock fencing	Xref Plant DWG		Yes	5.5.4	70,00	m	R 12,00	R 840,00	R 840,00	Assume 1,2m Stock Fencing
5	2	A80	Y2023	Security Fencing - Filter Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 300,00	m	R 25,00	R 32 500,00	R 32 500,00	Assume 1,8m Security Fencing
6	3	A81	Y2023	Security Fencing - Mining Yard	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 250,00	m	R 25,00	R 31 250,00	R 31 250,00	Assume 1,8m Security Fencing
7	3	A82	Y2023	Security Fencing - Mining Offices	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 150,00	m	R 25,00	R 28 750,00	R 28 750,00	Assume 1,8m Security Fencing
8	3	A83	Y2023	Pipeline:											
9				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
10				Concentrate Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
11				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
12				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
13				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
14				Tailings Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	21 260,00	m	R 37,00	R 786 620,00	R 786 620,00	Assume HDPE pipes
15				Raw Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	8 815,00	m	R 37,00	R 326 155,00	R 326 155,00	Assume HDPE pipes
16	1	A84	Y2023	Plant Road	Remove tar roads including layer works	1600F3-6100-DD11-GAD-0005_rB_P		Yes	8,1	31 047,00	m²	R 53,20	R 1 651 700,40	R 1 651 700,40	
17	4	A87	Y2023	Storm Water Channel E-SW1	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	66,00	m³	R 981,00	R 64 746,00	R 64 746,00	
18	4	A88	Y2023	Storm Water Channel E-SW2	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	307,06	m³	R 981,00	R 301 225,86	R 301 225,86	
19	4	A89	Y2023	Storm Water Channel E-SW3	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	69,89	m³	R 981,00	R 68 562,09	R 68 562,09	
20	4	A90	Y2023	Storm Water Channel E-SW4	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	82,50	m³	R 981,00	R 80 932,50	R 80 932,50	
21	4	A91	Y2023	Storm Water Channel E-SW5	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	133,00	m³	R 981,00	R 130 473,00	R 130 473,00	
22	4	A92	Y2023	Storm Water Channel E-SW6	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	209,04	m³	R 981,00	R 205 068,24	R 205 068,24	
23	4	A93	Y2023	Storm Water Channel E-SW7	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	250,75	m³	R 981,00	R 245 985,75	R 245 985,75	
24	1	A94	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	30,25	m³	R 981,00	R 29 675,25	R 29 675,25	Assume 250mm thick concrete
25	1	A95	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	25,00	m³	R 981,00	R 24 525,00	R 24 525,00	Assume 250mm thick concrete
26	1	A96	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
27	1	A103	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
28	1	A104	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	50,50	m³	R 981,00	R 49 540,50	R 49 540,50	Assume 250mm thick concrete
29	1	A105	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	27,50	m³	R 981,00	R 26 977,50	R 26 977,50	Assume 250mm thick concrete
30	1	A106	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	37,50	m³	R 981,00	R 36 787,50	R 36 787,50	Assume 250mm thick concrete
31	1	A107	Y2023	Main Access Road	Remove tar roads including layer works			No	8,1	-	m²	R 53,20	R -	R -	Assume to remain post closure to sustain the end land use
32	6	A109	Y2023	Stormwater Diversion Trench at Waste Rock Dump	Not Applicable	2201682-101-RevB		No	1,1	-	na	R -	R -	R -	Diversion trench at WRD will remain post closure
33	3	A110	Y2023	Haul Roads	Major gravel roads with engineered surfaces			Yes	8,2	116 000,00	m²	R 38,00	R 4 408 000,00	R 4 408 000,00	
35	1	A111	Y2023	Power Lines	Major lines			Yes	5.3.2	1 134,00	m	R 93,00	R 105 462,00	R 105 462,00	Assume Powerlines from Eskom Yard to substations in Plant
36			Y2023	Perimeter Fencing	Dismantling of security fencing			No	5.5.3	-	m	R 25,00	R -	R -	Assume to remain post closure
						SUB-TOTAL 1								R 11 595 271,59	
						Preliminaries and General	6%							R 695 716,30	
						Contingency	10%							R 1 159 527,16	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 1 855 243,45	
						GRAND-TOTAL								R 13 450 515,04	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2026	
1,7	LINEAR ITEMS														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										1 323,99				R 11 595 271,59	
2	1	A59	Y2023	Explosive Magazines Fencing	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	90,00	m	R 25,00	R 2 250,00	R 2 250,00	Assume security fencing
3	1	A78	Y2023	Security Fencing - Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	3 800,00	m	R 25,00	R 95 000,00	R 95 000,00	Assume 1,8m Security Fencing
4	1	A79	Y2023	Stock Fencing - Plant	Dismantling of stock fencing	Xref Plant DWG		Yes	5.5.4	70,00	m	R 12,00	R 840,00	R 840,00	Assume 1,2m Stock Fencing
5	2	A80	Y2023	Security Fencing - Filter Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 300,00	m	R 25,00	R 32 500,00	R 32 500,00	Assume 1,8m Security Fencing
6	3	A81	Y2023	Security Fencing - Mining Yard	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 250,00	m	R 25,00	R 31 250,00	R 31 250,00	Assume 1,8m Security Fencing
7	3	A82	Y2023	Security Fencing - Mining Offices	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 150,00	m	R 25,00	R 28 750,00	R 28 750,00	Assume 1,8m Security Fencing
8	3	A83	Y2023	Pipeline:											
9				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
10				Concentrate Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
11				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
12				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
13				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
14				Tailings Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	21 260,00	m	R 37,00	R 786 620,00	R 786 620,00	Assume HDPE pipes
15				Raw Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	8 815,00	m	R 37,00	R 326 155,00	R 326 155,00	Assume HDPE pipes
16	1	A84	Y2023	Plant Road	Remove tar roads including layer works	1600F3-6100-DD11-GAD-0005_rB_P		Yes	8,1	31 047,00	m²	R 53,20	R 1 651 700,40	R 1 651 700,40	
17	4	A87	Y2023	Storm Water Channel E-SW1	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	66,00	m³	R 981,00	R 64 746,00	R 64 746,00	
18	4	A88	Y2023	Storm Water Channel E-SW2	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	307,06	m³	R 981,00	R 301 225,86	R 301 225,86	
19	4	A89	Y2023	Storm Water Channel E-SW3	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	69,89	m³	R 981,00	R 68 562,09	R 68 562,09	
20	4	A90	Y2023	Storm Water Channel E-SW4	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	82,50	m³	R 981,00	R 80 932,50	R 80 932,50	
21	4	A91	Y2023	Storm Water Channel E-SW5	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	133,00	m³	R 981,00	R 130 473,00	R 130 473,00	
22	4	A92	Y2023	Storm Water Channel E-SW6	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	209,04	m³	R 981,00	R 205 068,24	R 205 068,24	
23	4	A93	Y2023	Storm Water Channel E-SW7	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	250,75	m³	R 981,00	R 245 985,75	R 245 985,75	
24	1	A94	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	30,25	m³	R 981,00	R 29 675,25	R 29 675,25	Assume 250mm thick concrete
25	1	A95	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	25,00	m³	R 981,00	R 24 525,00	R 24 525,00	Assume 250mm thick concrete
26	1	A96	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
27	1	A103	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
28	1	A104	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	50,50	m³	R 981,00	R 49 540,50	R 49 540,50	Assume 250mm thick concrete
29	1	A105	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	27,50	m³	R 981,00	R 26 977,50	R 26 977,50	Assume 250mm thick concrete
30	1	A106	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	37,50	m³	R 981,00	R 36 787,50	R 36 787,50	Assume 250mm thick concrete
31	1	A107	Y2023	Main Access Road	Remove tar roads including layer works			No	8,1	-	m²	R 53,20	R -	R -	Assume to remain post closure to sustain the end land use
32	6	A109	Y2023	Stormwater Diversion Trench at Waste Rock Dump	Not Applicable	2201682-101-RevB		No	1,1	-	na	R -	R -	R -	Diversion trench at WRD will remain post closure
33	3	A110	Y2023	Haul Roads	Major gravel roads with engineered surfaces			Yes	8,2	116 000,00	m²	R 38,00	R 4 408 000,00	R 4 408 000,00	
35	1	A111	Y2023	Power Lines	Major lines			Yes	5.3.2	1 134,00	m	R 93,00	R 105 462,00	R 105 462,00	Assume Powerlines from Eskom Yard to substations in Plant
36			Y2023	Perimeter Fencing	Dismantling of security fencing			No	5.5.3	-	m	R 25,00	R -	R -	Assume to remain post closure
						SUB-TOTAL 1								R 11 595 271,59	
						Preliminaries and General	6%							R 695 716,30	
						Contingency	10%							R 1 159 527,16	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 1 855 243,45	
						GRAND-TOTAL								R 13 450 515,04	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2027	
1,7	LINEAR ITEMS														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										1 323,99				R 11 595 271,59	
2	1	A59	Y2023	Explosive Magazines Fencing	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	90,00	m	R 25,00	R 2 250,00	R 2 250,00	Assume security fencing
3	1	A78	Y2023	Security Fencing - Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	3 800,00	m	R 25,00	R 95 000,00	R 95 000,00	Assume 1,8m Security Fencing
4	1	A79	Y2023	Stock Fencing - Plant	Dismantling of stock fencing	Xref Plant DWG		Yes	5.5.4	70,00	m	R 12,00	R 840,00	R 840,00	Assume 1,2m Stock Fencing
5	2	A80	Y2023	Security Fencing - Filter Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 300,00	m	R 25,00	R 32 500,00	R 32 500,00	Assume 1,8m Security Fencing
6	3	A81	Y2023	Security Fencing - Mining Yard	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 250,00	m	R 25,00	R 31 250,00	R 31 250,00	Assume 1,8m Security Fencing
7	3	A82	Y2023	Security Fencing - Mining Offices	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 150,00	m	R 25,00	R 28 750,00	R 28 750,00	Assume 1,8m Security Fencing
8	3	A83	Y2023	Pipeline:											
9				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
10				Concentrate Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
11				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
12				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
13				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
14				Tailings Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	21 260,00	m	R 37,00	R 786 620,00	R 786 620,00	Assume HDPE pipes
15				Raw Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	8 815,00	m	R 37,00	R 326 155,00	R 326 155,00	Assume HDPE pipes
16	1	A84	Y2023	Plant Road	Remove tar roads including layer works	1600F3-6100-DD11-GAD-0005_rB_P		Yes	8,1	31 047,00	m²	R 53,20	R 1 651 700,40	R 1 651 700,40	
17	4	A87	Y2023	Storm Water Channel E-SW1	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	66,00	m³	R 981,00	R 64 746,00	R 64 746,00	
18	4	A88	Y2023	Storm Water Channel E-SW2	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	307,06	m³	R 981,00	R 301 225,86	R 301 225,86	
19	4	A89	Y2023	Storm Water Channel E-SW3	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	69,89	m³	R 981,00	R 68 562,09	R 68 562,09	
20	4	A90	Y2023	Storm Water Channel E-SW4	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	82,50	m³	R 981,00	R 80 932,50	R 80 932,50	
21	4	A91	Y2023	Storm Water Channel E-SW5	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	133,00	m³	R 981,00	R 130 473,00	R 130 473,00	
22	4	A92	Y2023	Storm Water Channel E-SW6	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	209,04	m³	R 981,00	R 205 068,24	R 205 068,24	
23	4	A93	Y2023	Storm Water Channel E-SW7	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	250,75	m³	R 981,00	R 245 985,75	R 245 985,75	
24	1	A94	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	30,25	m³	R 981,00	R 29 675,25	R 29 675,25	Assume 250mm thick concrete
25	1	A95	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	25,00	m³	R 981,00	R 24 525,00	R 24 525,00	Assume 250mm thick concrete
26	1	A96	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
27	1	A103	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
28	1	A104	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	50,50	m³	R 981,00	R 49 540,50	R 49 540,50	Assume 250mm thick concrete
29	1	A105	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	27,50	m³	R 981,00	R 26 977,50	R 26 977,50	Assume 250mm thick concrete
30	1	A106	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	37,50	m³	R 981,00	R 36 787,50	R 36 787,50	Assume 250mm thick concrete
31	1	A107	Y2023	Main Access Road	Remove tar roads including layer works			No	8,1	-	m²	R 53,20	R -	R -	Assume to remain post closure to sustain the end land use
32	6	A109	Y2023	Stormwater Diversion Trench at Waste Rock Dump	Not Applicable	2201682-101-RevB		No	1,1	-	na	R -	R -	R -	Diversion trench at WRD will remain post closure
33	3	A110	Y2023	Haul Roads	Major gravel roads with engineered surfaces			Yes	8,2	116 000,00	m²	R 38,00	R 4 408 000,00	R 4 408 000,00	
35	1	A111	Y2023	Power Lines	Major lines			Yes	5.3.2	1 134,00	m	R 93,00	R 105 462,00	R 105 462,00	Assume Powerlines from Eskom Yard to substations in Plant
36			Y2023	Perimeter Fencing	Dismantling of security fencing			No	5.5.3	-	m	R 25,00	R -	R -	Assume to remain post closure
						SUB-TOTAL 1								R 11 595 271,59	
						Preliminaries and General	6%							R 695 716,30	
						Contingency	10%							R 1 159 527,16	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 1 855 243,45	
						GRAND-TOTAL								R 13 450 515,04	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2028	
1,7	LINEAR ITEMS														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										1 323,99				R 11 595 271,59	
2	1	A59	Y2023	Explosive Magazines Fencing	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	90,00	m	R 25,00	R 2 250,00	R 2 250,00	Assume security fencing
3	1	A78	Y2023	Security Fencing - Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	3 800,00	m	R 25,00	R 95 000,00	R 95 000,00	Assume 1,8m Security Fencing
4	1	A79	Y2023	Stock Fencing - Plant	Dismantling of stock fencing	Xref Plant DWG		Yes	5.5.4	70,00	m	R 12,00	R 840,00	R 840,00	Assume 1,2m Stock Fencing
5	2	A80	Y2023	Security Fencing - Filter Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 300,00	m	R 25,00	R 32 500,00	R 32 500,00	Assume 1,8m Security Fencing
6	3	A81	Y2023	Security Fencing - Mining Yard	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 250,00	m	R 25,00	R 31 250,00	R 31 250,00	Assume 1,8m Security Fencing
7	3	A82	Y2023	Security Fencing - Mining Offices	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 150,00	m	R 25,00	R 28 750,00	R 28 750,00	Assume 1,8m Security Fencing
8	3	A83	Y2023	Pipeline:											
9				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
10				Concentrate Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
11				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
12				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
13				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
14				Tailings Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	21 260,00	m	R 37,00	R 786 620,00	R 786 620,00	Assume HDPE pipes
15				Raw Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	8 815,00	m	R 37,00	R 326 155,00	R 326 155,00	Assume HDPE pipes
16	1	A84	Y2023	Plant Road	Remove tar roads including layer works	1600F3-6100-DD11-GAD-0005_rB_P		Yes	8,1	31 047,00	m²	R 53,20	R 1 651 700,40	R 1 651 700,40	
17	4	A87	Y2023	Storm Water Channel E-SW1	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	66,00	m³	R 981,00	R 64 746,00	R 64 746,00	
18	4	A88	Y2023	Storm Water Channel E-SW2	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	307,06	m³	R 981,00	R 301 225,86	R 301 225,86	
19	4	A89	Y2023	Storm Water Channel E-SW3	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	69,89	m³	R 981,00	R 68 562,09	R 68 562,09	
20	4	A90	Y2023	Storm Water Channel E-SW4	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	82,50	m³	R 981,00	R 80 932,50	R 80 932,50	
21	4	A91	Y2023	Storm Water Channel E-SW5	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	133,00	m³	R 981,00	R 130 473,00	R 130 473,00	
22	4	A92	Y2023	Storm Water Channel E-SW6	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	209,04	m³	R 981,00	R 205 068,24	R 205 068,24	
23	4	A93	Y2023	Storm Water Channel E-SW7	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	250,75	m³	R 981,00	R 245 985,75	R 245 985,75	
24	1	A94	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	30,25	m³	R 981,00	R 29 675,25	R 29 675,25	Assume 250mm thick concrete
25	1	A95	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	25,00	m³	R 981,00	R 24 525,00	R 24 525,00	Assume 250mm thick concrete
26	1	A96	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
27	1	A103	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
28	1	A104	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	50,50	m³	R 981,00	R 49 540,50	R 49 540,50	Assume 250mm thick concrete
29	1	A105	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	27,50	m³	R 981,00	R 26 977,50	R 26 977,50	Assume 250mm thick concrete
30	1	A106	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	37,50	m³	R 981,00	R 36 787,50	R 36 787,50	Assume 250mm thick concrete
31	1	A107	Y2023	Main Access Road	Remove tar roads including layer works			No	8,1	-	m²	R 53,20	R -	R -	Assume to remain post closure to sustain the end land use
32	6	A109	Y2023	Stormwater Diversion Trench at Waste Rock Dump	Not Applicable	2201682-101-RevB		No	1,1	-	na	R -	R -	R -	Diversion trench at WRD will remain post closure
33	3	A110	Y2023	Haul Roads	Major gravel roads with engineered surfaces			Yes	8,2	116 000,00	m²	R 38,00	R 4 408 000,00	R 4 408 000,00	
35	1	A111	Y2023	Power Lines	Major lines			Yes	5.3.2	1 134,00	m	R 93,00	R 105 462,00	R 105 462,00	Assume Powerlines from Eskom Yard to substations in Plant
36			Y2023	Perimeter Fencing	Dismantling of security fencing			No	5.5.3	-	m	R 25,00	R -	R -	Assume to remain post closure
						SUB-TOTAL 1								R 11 595 271,59	
						Preliminaries and General	6%							R 695 716,30	
						Contingency	10%							R 1 159 527,16	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 1 855 243,45	
						GRAND-TOTAL								R 13 450 515,04	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2029	
1,7	LINEAR ITEMS														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										1 323,99				R 11 595 271,59	
2	1	A59	Y2023	Explosive Magazines Fencing	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	90,00	m	R 25,00	R 2 250,00	R 2 250,00	Assume security fencing
3	1	A78	Y2023	Security Fencing - Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	3 800,00	m	R 25,00	R 95 000,00	R 95 000,00	Assume 1,8m Security Fencing
4	1	A79	Y2023	Stock Fencing - Plant	Dismantling of stock fencing	Xref Plant DWG		Yes	5.5.4	70,00	m	R 12,00	R 840,00	R 840,00	Assume 1,2m Stock Fencing
5	2	A80	Y2023	Security Fencing - Filter Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 300,00	m	R 25,00	R 32 500,00	R 32 500,00	Assume 1,8m Security Fencing
6	3	A81	Y2023	Security Fencing - Mining Yard	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 250,00	m	R 25,00	R 31 250,00	R 31 250,00	Assume 1,8m Security Fencing
7	3	A82	Y2023	Security Fencing - Mining Offices	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 150,00	m	R 25,00	R 28 750,00	R 28 750,00	Assume 1,8m Security Fencing
8	3	A83	Y2023	Pipeline:											
9				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
10				Concentrate Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
11				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
12				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
13				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
14				Tailings Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	21 260,00	m	R 37,00	R 786 620,00	R 786 620,00	Assume HDPE pipes
15				Raw Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	8 815,00	m	R 37,00	R 326 155,00	R 326 155,00	Assume HDPE pipes
16	1	A84	Y2023	Plant Road	Remove tar roads including layer works	1600F3-6100-DD11-GAD-0005_rB_P		Yes	8,1	31 047,00	m²	R 53,20	R 1 651 700,40	R 1 651 700,40	
17	4	A87	Y2023	Storm Water Channel E-SW1	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	66,00	m³	R 981,00	R 64 746,00	R 64 746,00	
18	4	A88	Y2023	Storm Water Channel E-SW2	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	307,06	m³	R 981,00	R 301 225,86	R 301 225,86	
19	4	A89	Y2023	Storm Water Channel E-SW3	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	69,89	m³	R 981,00	R 68 562,09	R 68 562,09	
20	4	A90	Y2023	Storm Water Channel E-SW4	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	82,50	m³	R 981,00	R 80 932,50	R 80 932,50	
21	4	A91	Y2023	Storm Water Channel E-SW5	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	133,00	m³	R 981,00	R 130 473,00	R 130 473,00	
22	4	A92	Y2023	Storm Water Channel E-SW6	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	209,04	m³	R 981,00	R 205 068,24	R 205 068,24	
23	4	A93	Y2023	Storm Water Channel E-SW7	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	250,75	m³	R 981,00	R 245 985,75	R 245 985,75	
24	1	A94	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	30,25	m³	R 981,00	R 29 675,25	R 29 675,25	Assume 250mm thick concrete
25	1	A95	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	25,00	m³	R 981,00	R 24 525,00	R 24 525,00	Assume 250mm thick concrete
26	1	A96	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
27	1	A103	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
28	1	A104	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	50,50	m³	R 981,00	R 49 540,50	R 49 540,50	Assume 250mm thick concrete
29	1	A105	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	27,50	m³	R 981,00	R 26 977,50	R 26 977,50	Assume 250mm thick concrete
30	1	A106	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	37,50	m³	R 981,00	R 36 787,50	R 36 787,50	Assume 250mm thick concrete
31	1	A107	Y2023	Main Access Road	Remove tar roads including layer works			No	8,1	-	m²	R 53,20	R -	R -	Assume to remain post closure to sustain the end land use
32	6	A109	Y2023	Stormwater Diversion Trench at Waste Rock Dump	Not Applicable	2201682-101-RevB		No	1,1	-	na	R -	R -	R -	Diversion trench at WRD will remain post closure
33	3	A110	Y2023	Haul Roads	Major gravel roads with engineered surfaces			Yes	8,2	116 000,00	m²	R 38,00	R 4 408 000,00	R 4 408 000,00	
35	1	A111	Y2023	Power Lines	Major lines			Yes	5.3.2	1 134,00	m	R 93,00	R 105 462,00	R 105 462,00	Assume Powerlines from Eskom Yard to substations in Plant
36			Y2023	Perimeter Fencing	Dismantling of security fencing			No	5.5.3	-	m	R 25,00	R -	R -	Assume to remain post closure
						SUB-TOTAL 1								R 11 595 271,59	
						Preliminaries and General	6%							R 695 716,30	
						Contingency	10%							R 1 159 527,16	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 1 855 243,45	
						GRAND-TOTAL								R 13 450 515,04	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2030	
1,7	LINEAR ITEMS														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										1 323,99				R 11 595 271,59	
2	1	A59	Y2023	Explosive Magazines Fencing	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	90,00	m	R 25,00	R 2 250,00	R 2 250,00	Assume security fencing
3	1	A78	Y2023	Security Fencing - Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	3 800,00	m	R 25,00	R 95 000,00	R 95 000,00	Assume 1,8m Security Fencing
4	1	A79	Y2023	Stock Fencing - Plant	Dismantling of stock fencing	Xref Plant DWG		Yes	5.5.4	70,00	m	R 12,00	R 840,00	R 840,00	Assume 1,2m Stock Fencing
5	2	A80	Y2023	Security Fencing - Filter Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 300,00	m	R 25,00	R 32 500,00	R 32 500,00	Assume 1,8m Security Fencing
6	3	A81	Y2023	Security Fencing - Mining Yard	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 250,00	m	R 25,00	R 31 250,00	R 31 250,00	Assume 1,8m Security Fencing
7	3	A82	Y2023	Security Fencing - Mining Offices	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 150,00	m	R 25,00	R 28 750,00	R 28 750,00	Assume 1,8m Security Fencing
8	3	A83	Y2023	Pipeline:											
9				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
10				Concentrate Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
11				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
12				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
13				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
14				Tailings Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	21 260,00	m	R 37,00	R 786 620,00	R 786 620,00	Assume HDPE pipes
15				Raw Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	8 815,00	m	R 37,00	R 326 155,00	R 326 155,00	Assume HDPE pipes
16	1	A84	Y2023	Plant Road	Remove tar roads including layer works	1600F3-6100-DD11-GAD-0005_rB_P		Yes	8,1	31 047,00	m²	R 53,20	R 1 651 700,40	R 1 651 700,40	
17	4	A87	Y2023	Storm Water Channel E-SW1	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	66,00	m³	R 981,00	R 64 746,00	R 64 746,00	
18	4	A88	Y2023	Storm Water Channel E-SW2	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	307,06	m³	R 981,00	R 301 225,86	R 301 225,86	
19	4	A89	Y2023	Storm Water Channel E-SW3	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	69,89	m³	R 981,00	R 68 562,09	R 68 562,09	
20	4	A90	Y2023	Storm Water Channel E-SW4	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	82,50	m³	R 981,00	R 80 932,50	R 80 932,50	
21	4	A91	Y2023	Storm Water Channel E-SW5	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	133,00	m³	R 981,00	R 130 473,00	R 130 473,00	
22	4	A92	Y2023	Storm Water Channel E-SW6	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	209,04	m³	R 981,00	R 205 068,24	R 205 068,24	
23	4	A93	Y2023	Storm Water Channel E-SW7	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	250,75	m³	R 981,00	R 245 985,75	R 245 985,75	
24	1	A94	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	30,25	m³	R 981,00	R 29 675,25	R 29 675,25	Assume 250mm thick concrete
25	1	A95	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	25,00	m³	R 981,00	R 24 525,00	R 24 525,00	Assume 250mm thick concrete
26	1	A96	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
27	1	A103	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
28	1	A104	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	50,50	m³	R 981,00	R 49 540,50	R 49 540,50	Assume 250mm thick concrete
29	1	A105	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	27,50	m³	R 981,00	R 26 977,50	R 26 977,50	Assume 250mm thick concrete
30	1	A106	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	37,50	m³	R 981,00	R 36 787,50	R 36 787,50	Assume 250mm thick concrete
31	1	A107	Y2023	Main Access Road	Remove tar roads including layer works			No	8,1	-	m²	R 53,20	R -	R -	Assume to remain post closure to sustain the end land use
32	6	A109	Y2023	Stormwater Diversion Trench at Waste Rock Dump	Not Applicable	2201682-101-RevB		No	1,1	-	na	R -	R -	R -	Diversion trench at WRD will remain post closure
33	3	A110	Y2023	Haul Roads	Major gravel roads with engineered surfaces			Yes	8,2	116 000,00	m²	R 38,00	R 4 408 000,00	R 4 408 000,00	
35	1	A111	Y2023	Power Lines	Major lines			Yes	5.3.2	1 134,00	m	R 93,00	R 105 462,00	R 105 462,00	Assume Powerlines from Eskom Yard to substations in Plant
36			Y2023	Perimeter Fencing	Dismantling of security fencing			No	5.5.3	-	m	R 25,00	R -	R -	Assume to remain post closure
						SUB-TOTAL 1								R 11 595 271,59	
						Preliminaries and General	6%							R 695 716,30	
						Contingency	10%							R 1 159 527,16	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 1 855 243,45	
						GRAND-TOTAL								R 13 450 515,04	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2031	
1,7	LINEAR ITEMS														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										1 323,99				R 11 595 271,59	
2	1	A59	Y2023	Explosive Magazines Fencing	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	90,00	m	R 25,00	R 2 250,00	R 2 250,00	Assume security fencing
3	1	A78	Y2023	Security Fencing - Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	3 800,00	m	R 25,00	R 95 000,00	R 95 000,00	Assume 1,8m Security Fencing
4	1	A79	Y2023	Stock Fencing - Plant	Dismantling of stock fencing	Xref Plant DWG		Yes	5.5.4	70,00	m	R 12,00	R 840,00	R 840,00	Assume 1,2m Stock Fencing
5	2	A80	Y2023	Security Fencing - Filter Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 300,00	m	R 25,00	R 32 500,00	R 32 500,00	Assume 1,8m Security Fencing
6	3	A81	Y2023	Security Fencing - Mining Yard	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 250,00	m	R 25,00	R 31 250,00	R 31 250,00	Assume 1,8m Security Fencing
7	3	A82	Y2023	Security Fencing - Mining Offices	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 150,00	m	R 25,00	R 28 750,00	R 28 750,00	Assume 1,8m Security Fencing
8	3	A83	Y2023	Pipeline:											
9				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
10				Concentrate Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
11				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
12				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
13				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
14				Tailings Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	21 260,00	m	R 37,00	R 786 620,00	R 786 620,00	Assume HDPE pipes
15				Raw Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	8 815,00	m	R 37,00	R 326 155,00	R 326 155,00	Assume HDPE pipes
16	1	A84	Y2023	Plant Road	Remove tar roads including layer works	1600F3-6100-DD11-GAD-0005_rB_P		Yes	8,1	31 047,00	m²	R 53,20	R 1 651 700,40	R 1 651 700,40	
17	4	A87	Y2023	Storm Water Channel E-SW1	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	66,00	m³	R 981,00	R 64 746,00	R 64 746,00	
18	4	A88	Y2023	Storm Water Channel E-SW2	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	307,06	m³	R 981,00	R 301 225,86	R 301 225,86	
19	4	A89	Y2023	Storm Water Channel E-SW3	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	69,89	m³	R 981,00	R 68 562,09	R 68 562,09	
20	4	A90	Y2023	Storm Water Channel E-SW4	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	82,50	m³	R 981,00	R 80 932,50	R 80 932,50	
21	4	A91	Y2023	Storm Water Channel E-SW5	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	133,00	m³	R 981,00	R 130 473,00	R 130 473,00	
22	4	A92	Y2023	Storm Water Channel E-SW6	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	209,04	m³	R 981,00	R 205 068,24	R 205 068,24	
23	4	A93	Y2023	Storm Water Channel E-SW7	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	250,75	m³	R 981,00	R 245 985,75	R 245 985,75	
24	1	A94	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	30,25	m³	R 981,00	R 29 675,25	R 29 675,25	Assume 250mm thick concrete
25	1	A95	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	25,00	m³	R 981,00	R 24 525,00	R 24 525,00	Assume 250mm thick concrete
26	1	A96	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
27	1	A103	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
28	1	A104	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	50,50	m³	R 981,00	R 49 540,50	R 49 540,50	Assume 250mm thick concrete
29	1	A105	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	27,50	m³	R 981,00	R 26 977,50	R 26 977,50	Assume 250mm thick concrete
30	1	A106	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	37,50	m³	R 981,00	R 36 787,50	R 36 787,50	Assume 250mm thick concrete
31	1	A107	Y2023	Main Access Road	Remove tar roads including layer works			No	8,1	-	m²	R 53,20	R -	R -	Assume to remain post closure to sustain the end land use
32	6	A109	Y2023	Stormwater Diversion Trench at Waste Rock Dump	Not Applicable	2201682-101-RevB		No	1,1	-	na	R -	R -	R -	Diversion trench at WRD will remain post closure
33	3	A110	Y2023	Haul Roads	Major gravel roads with engineered surfaces			Yes	8,2	116 000,00	m²	R 38,00	R 4 408 000,00	R 4 408 000,00	
35	1	A111	Y2023	Power Lines	Major lines			Yes	5.3.2	1 134,00	m	R 93,00	R 105 462,00	R 105 462,00	Assume Powerlines from Eskom Yard to substations in Plant
36			Y2023	Perimeter Fencing	Dismantling of security fencing			No	5.5.3	-	m	R 25,00	R -	R -	Assume to remain post closure
						SUB-TOTAL 1								R 11 595 271,59	
						Preliminaries and General	6%							R 695 716,30	
						Contingency	10%							R 1 159 527,16	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 1 855 243,45	
						GRAND-TOTAL								R 13 450 515,04	

Jindal Melmoth Iron Ore - EIA
Financial Provision FY2023

INFRASTRUCTURAL ASPECTS								Closure Forecast						Y2032	
1,7	LINEAR ITEMS														
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	Supporting Documentation and Drawing Numbers		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1										1 323,99				R 11 595 271,59	
2	1	A59	Y2023	Explosive Magazines Fencing	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	90,00	m	R 25,00	R 2 250,00	R 2 250,00	Assume security fencing
3	1	A78	Y2023	Security Fencing - Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	3 800,00	m	R 25,00	R 95 000,00	R 95 000,00	Assume 1,8m Security Fencing
4	1	A79	Y2023	Stock Fencing - Plant	Dismantling of stock fencing	Xref Plant DWG		Yes	5.5.4	70,00	m	R 12,00	R 840,00	R 840,00	Assume 1,2m Stock Fencing
5	2	A80	Y2023	Security Fencing - Filter Plant	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 300,00	m	R 25,00	R 32 500,00	R 32 500,00	Assume 1,8m Security Fencing
6	3	A81	Y2023	Security Fencing - Mining Yard	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 250,00	m	R 25,00	R 31 250,00	R 31 250,00	Assume 1,8m Security Fencing
7	3	A82	Y2023	Security Fencing - Mining Offices	Dismantling of security fencing	Xref Plant DWG		Yes	5.5.3	1 150,00	m	R 25,00	R 28 750,00	R 28 750,00	Assume 1,8m Security Fencing
8	3	A83	Y2023	Pipeline:											
9				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
10				Concentrate Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
11				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
12				Tailings Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	17 140,00	m	R 37,00	R 634 180,00	R 634 180,00	Assume HDPE pipes
13				Concentrate Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	14 050,00	m	R 37,00	R 519 850,00	R 519 850,00	Assume HDPE pipes
14				Tailings Return Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	21 260,00	m	R 37,00	R 786 620,00	R 786 620,00	Assume HDPE pipes
15				Raw Water Pipeline	Overland HDPE pipelines on plinths (350-500mm)	1600F3-6100-DD11-GAD-0005_rB_P		Yes	5.2.6	8 815,00	m	R 37,00	R 326 155,00	R 326 155,00	Assume HDPE pipes
16	1	A84	Y2023	Plant Road	Remove tar roads including layer works	1600F3-6100-DD11-GAD-0005_rB_P		Yes	8,1	31 047,00	m²	R 53,20	R 1 651 700,40	R 1 651 700,40	
17	4	A87	Y2023	Storm Water Channel E-SW1	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	66,00	m³	R 981,00	R 64 746,00	R 64 746,00	
18	4	A88	Y2023	Storm Water Channel E-SW2	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	307,06	m³	R 981,00	R 301 225,86	R 301 225,86	
19	4	A89	Y2023	Storm Water Channel E-SW3	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	69,89	m³	R 981,00	R 68 562,09	R 68 562,09	
20	4	A90	Y2023	Storm Water Channel E-SW4	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	82,50	m³	R 981,00	R 80 932,50	R 80 932,50	
21	4	A91	Y2023	Storm Water Channel E-SW5	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	133,00	m³	R 981,00	R 130 473,00	R 130 473,00	
22	4	A92	Y2023	Storm Water Channel E-SW6	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	209,04	m³	R 981,00	R 205 068,24	R 205 068,24	
23	4	A93	Y2023	Storm Water Channel E-SW7	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	250,75	m³	R 981,00	R 245 985,75	R 245 985,75	
24	1	A94	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	30,25	m³	R 981,00	R 29 675,25	R 29 675,25	Assume 250mm thick concrete
25	1	A95	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	25,00	m³	R 981,00	R 24 525,00	R 24 525,00	Assume 250mm thick concrete
26	1	A96	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
27	1	A103	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	17,50	m³	R 981,00	R 17 167,50	R 17 167,50	Assume 250mm thick concrete
28	1	A104	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	50,50	m³	R 981,00	R 49 540,50	R 49 540,50	Assume 250mm thick concrete
29	1	A105	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	27,50	m³	R 981,00	R 26 977,50	R 26 977,50	Assume 250mm thick concrete
30	1	A106	Y2023	Storm Water Culvert	Medium concrete, thickness between 250 and 750mm	1600F3-6100-DD11-GAD-0007-Rev A		Yes	4,2	37,50	m³	R 981,00	R 36 787,50	R 36 787,50	Assume 250mm thick concrete
31	1	A107	Y2023	Main Access Road	Remove tar roads including layer works			No	8,1	-	m²	R 53,20	R -	R -	Assume to remain post closure to sustain the end land use
32	6	A109	Y2023	Stormwater Diversion Trench at Waste Rock Dump	Not Applicable	2201682-101-RevB		No	1,1	-	na	R -	R -	R -	Diversion trench at WRD will remain post closure
33	3	A110	Y2023	Haul Roads	Major gravel roads with engineered surfaces			Yes	8,2	116 000,00	m²	R 38,00	R 4 408 000,00	R 4 408 000,00	
35	1	A111	Y2023	Power Lines	Major lines			Yes	5.3.2	1 134,00	m	R 93,00	R 105 462,00	R 105 462,00	Assume Powerlines from Eskom Yard to substations in Plant
36			Y2023	Perimeter Fencing	Dismantling of security fencing			No	5.5.3	-	m	R 25,00	R -	R -	Assume to remain post closure
						SUB-TOTAL 1								R 11 595 271,59	
						Preliminaries and General	6%							R 695 716,30	
						Contingency	10%							R 1 159 527,16	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 1 855 243,45	
						GRAND-TOTAL								R 13 450 515,04	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS							Closure Forecast						Y2023	
1,8	WASTE DISPOSAL													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1													R 197 783,63	
2			Y2023	Sorting & Screening of Waste	Sorting and screening of waste		Yes	6,1	2 288 801,19	%	2,5% R 57 220,03		R 57 220,03	2.5% of total demolition cost.
3				Decontamination of waste and salvageable equipment	Decontamination of equipment - small projects		Yes	6.3.1	-	%	5,0% R -		R -	5% of total decontamination waste.
4				Load and haul of inert demolition waste	Load and haul for 2km distance		Yes	9.6.3	882,66	m³/km	R 42,00	R 37 071,72	R 37 071,72	Assume 2km for load and haul of 2/3 of total inert waste to be disposed of onsite.
5				Load and haul of non-inert demolition waste	Disposal of inert demolition waste		Yes	6.2.1	441,33	m³/km	R 234,50	R 103 491,89	R 103 491,89	30km for load and haul of 1/3 of demolition waste to be removed to a licensed waste dump at Melmoth in the Mthonjaneni Municipality.
6				Radioactive waste	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance for radioactive material and equipment to be removed, transported and disposed of at a registered radioactive waste disposal facility.
7				Removal of Tyres	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance was made for the removal of waste tyres as it is assumed that the contractor in charge of the mining operations will be responsible to remove the waste tyres.
					SUB-TOTAL 1								**R 197 783,63**	
					Preliminaries and General	6%							R 11 867,02	
					Contingency	10%							R 19 778,36	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 31 645,38**	
					GRAND-TOTAL								**R 229 429,02**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS							Closure Forecast						Y2024	
1,8	WASTE DISPOSAL													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1												R 9 340 081,99	R 9 340 081,99	
2			Y2023	Sorting & Screening of Waste	Sorting and screening of waste		Yes	6,1	100 369 586,08	%	2,5%	R 2 509 239,65	R 2 509 239,65	2.5% of total demolition cost.
3				Decontamination of waste and salvageable equipment	Decontamination of equipment - small projects		Yes	6.3.1	81 053 620,15	%	5,0%	R 4 052 681,01	R 4 052 681,01	5% of total decontamination waste.
4				Load and haul of inert demolition waste	Load and haul for 2km distance		Yes	9.6.3	17 445,28	m³/km	R 42,00	R 732 701,89	R 732 701,89	Assume 2km for load and haul of 2/3 of total inert waste to be disposed of onsite.
5				Load and haul of non-inert demolition waste	Disposal of inert demolition waste		Yes	6.2.1	8 722,64	m³/km	R 234,50	R 2 045 459,44	R 2 045 459,44	30km for load and haul of 1/3 of demolition waste to be removed to a licensed waste dump at Melmoth in the Mthonjaneni Municipality.
6				Radioactive waste	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance for radioactive material and equipment to be removed, transported and disposed of at a registered radioactive waste disposal facility.
7				Removal of Tyres	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance was made for the removal of waste tyres as it is assumed that the contractor in charge of the mining operations will be responsible to remove the waste tyres.
					SUB-TOTAL 1								**R 9 340 081,99**	
					Preliminaries and General	6%							R 560 404,92	
					Contingency	10%							R 934 008,20	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 1 494 413,12**	
					GRAND-TOTAL								**R 10 834 495,11**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS							Closure Forecast						Y2025	
1,8	WASTE DISPOSAL													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total		LIABLE VALUE	Notes
1													R 9 450 281,99	
2			Y2023	Sorting & Screening of Waste	Sorting and screening of waste	Yes	6,1	104 777 586,08	%	2,5%	R 2 619 439,65		R 2 619 439,65	2.5% of total demolition cost.
3				Decontamination of waste and salvageable equipment	Decontamination of equipment - small projects	Yes	6.3.1	81 053 620,15	%	5,0%	R 4 052 681,01		R 4 052 681,01	5% of total decontamination waste.
4				Load and haul of inert demolition waste	Load and haul for 2km distance	Yes	9.6.3	17 445,28	m³/km	R 42,00	R 732 701,89		R 732 701,89	Assume 2km for load and haul of 2/3 of total inert waste to be disposed of onsite.
5				Load and haul of non-inert demolition waste	Disposal of inert demolition waste	Yes	6.2.1	8 722,64	m³/km	R 234,50	R 2 045 459,44		R 2 045 459,44	30km for load and haul of 1/3 of demolition waste to be removed to a licensed waste dump at Melmoth in the Mthonjaneni Municipality.
6				Radioactive waste	Not Applicable	No	1,1	-	na	R -	R -		R -	No allowance for radioactive material and equipment to be removed, transported and disposed of at a registered radioactive waste disposal facility.
7				Removal of Tyres	Not Applicable	No	1,1	-	na	R -	R -		R -	No allowance was made for the removal of waste tyres as it is assumed that the contractor in charge of the mining operations will be responsible to remove the waste tyres.
					SUB-TOTAL 1								R 9 450 281,99	
					Preliminaries and General	6%							R 567 016,92	
					Contingency	10%							R 945 028,20	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 1 512 045,12	
					GRAND-TOTAL								R 10 962 327,11	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS							Closure Forecast						Y2026	
1,8	WASTE DISPOSAL													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1												R 9 450 281,99	R 9 450 281,99	
2			Y2023	Sorting & Screening of Waste	Sorting and screening of waste		Yes	6,1	104 777 586,08	%	2,5%	R 2 619 439,65	R 2 619 439,65	2.5% of total demolition cost.
3				Decontamination of waste and salvageable equipment	Decontamination of equipment - small projects		Yes	6.3.1	81 053 620,15	%	5,0%	R 4 052 681,01	R 4 052 681,01	5% of total decontamination waste.
4				Load and haul of inert demolition waste	Load and haul for 2km distance		Yes	9.6.3	17 445,28	m³/km	R 42,00	R 732 701,89	R 732 701,89	Assume 2km for load and haul of 2/3 of total inert waste to be disposed of onsite.
5				Load and haul of non-inert demolition waste	Disposal of inert demolition waste		Yes	6.2.1	8 722,64	m³/km	R 234,50	R 2 045 459,44	R 2 045 459,44	30km for load and haul of 1/3 of demolition waste to be removed to a licensed waste dump at Melmoth in the Mthonjaneni Municipality.
6				Radioactive waste	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance for radioactive material and equipment to be removed, transported and disposed of at a registered radioactive waste disposal facility.
7				Removal of Tyres	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance was made for the removal of waste tyres as it is assumed that the contractor in charge of the mining operations will be responsible to remove the waste tyres.
					SUB-TOTAL 1								R 9 450 281,99	
					Preliminaries and General	6%							R 567 016,92	
					Contingency	10%							R 945 028,20	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 1 512 045,12	
					GRAND-TOTAL								R 10 962 327,11	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS							Closure Forecast						Y2027	
1,8	WASTE DISPOSAL													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1												R 9 450 281,99		
2			Y2023	Sorting & Screening of Waste	Sorting and screening of waste		Yes	6,1	104 777 586,08	%	2,5%	R 2 619 439,65	R 2 619 439,65	2.5% of total demolition cost.
3				Decontamination of waste and salvageable equipment	Decontamination of equipment - small projects		Yes	6.3.1	81 053 620,15	%	5,0%	R 4 052 681,01	R 4 052 681,01	5% of total decontamination waste.
4				Load and haul of inert demolition waste	Load and haul for 2km distance		Yes	9.6.3	17 445,28	m³/km	R 42,00	R 732 701,89	R 732 701,89	Assume 2km for load and haul of 2/3 of total inert waste to be disposed of onsite.
5				Load and haul of non-inert demolition waste	Disposal of inert demolition waste		Yes	6.2.1	8 722,64	m³/km	R 234,50	R 2 045 459,44	R 2 045 459,44	30km for load and haul of 1/3 of demolition waste to be removed to a licensed waste dump at Melmoth in the Mthonjaneni Municipality.
6				Radioactive waste	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance for radioactive material and equipment to be removed, transported and disposed of at a registered radioactive waste disposal facility.
7				Removal of Tyres	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance was made for the removal of waste tyres as it is assumed that the contractor in charge of the mining operations will be responsible to remove the waste tyres.
						SUB-TOTAL 1							R 9 450 281,99	
						Preliminaries and General	6%						R 567 016,92	
						Contingency	10%						R 945 028,20	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							R 1 512 045,12	
						GRAND-TOTAL							R 10 962 327,11	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS							Closure Forecast						Y2028	
1,8	WASTE DISPOSAL													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1												R	9 450 281,99	
2			Y2023	Sorting & Screening of Waste	Sorting and screening of waste		Yes	6,1	104 777 586,08	%	2,5%	R 2 619 439,65	R 2 619 439,65	2.5% of total demolition cost.
3				Decontamination of waste and salvageable equipment	Decontamination of equipment - small projects		Yes	6.3.1	81 053 620,15	%	5,0%	R 4 052 681,01	R 4 052 681,01	5% of total decontamination waste.
4				Load and haul of inert demolition waste	Load and haul for 2km distance		Yes	9.6.3	17 445,28	m³/km	R 42,00	R 732 701,89	R 732 701,89	Assume 2km for load and haul of 2/3 of total inert waste to be disposed of onsite.
5				Load and haul of non-inert demolition waste	Disposal of inert demolition waste		Yes	6.2.1	8 722,64	m³/km	R 234,50	R 2 045 459,44	R 2 045 459,44	30km for load and haul of 1/3 of demolition waste to be removed to a licensed waste dump at Melmoth in the Mthonjaneni Municipality.
6				Radioactive waste	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance for radioactive material and equipment to be removed, transported and disposed of at a registered radioactive waste disposal facility.
7				Removal of Tyres	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance was made for the removal of waste tyres as it is assumed that the contractor in charge of the mining operations will be responsible to remove the waste tyres.
						SUB-TOTAL 1							R 9 450 281,99	
						Preliminaries and General	6%						R 567 016,92	
						Contingency	10%						R 945 028,20	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							R 1 512 045,12	
						GRAND-TOTAL							R 10 962 327,11	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS							Closure Forecast						Y2029	
1,8	WASTE DISPOSAL													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1												R 9 450 281,99		
2			Y2023	Sorting & Screening of Waste	Sorting and screening of waste		Yes	6,1	104 777 586,08	%	2,5%	R 2 619 439,65	R 2 619 439,65	2.5% of total demolition cost.
3				Decontamination of waste and salvageable equipment	Decontamination of equipment - small projects		Yes	6.3.1	81 053 620,15	%	5,0%	R 4 052 681,01	R 4 052 681,01	5% of total decontamination waste.
4				Load and haul of inert demolition waste	Load and haul for 2km distance		Yes	9.6.3	17 445,28	m³/km	R 42,00	R 732 701,89	R 732 701,89	Assume 2km for load and haul of 2/3 of total inert waste to be disposed of onsite.
5				Load and haul of non-inert demolition waste	Disposal of inert demolition waste		Yes	6.2.1	8 722,64	m³/km	R 234,50	R 2 045 459,44	R 2 045 459,44	30km for load and haul of 1/3 of demolition waste to be removed to a licensed waste dump at Melmoth in the Mthonjaneni Municipality.
6				Radioactive waste	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance for radioactive material and equipment to be removed, transported and disposed of at a registered radioactive waste disposal facility.
7				Removal of Tyres	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance was made for the removal of waste tyres as it is assumed that the contractor in charge of the mining operations will be responsible to remove the waste tyres.
						SUB-TOTAL 1							R 9 450 281,99	
						Preliminaries and General	6%						R 567 016,92	
						Contingency	10%						R 945 028,20	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							R 1 512 045,12	
						GRAND-TOTAL							R 10 962 327,11	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS													Closure Forecast	Y2030	
1,8		WASTE DISPOSAL													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate		Unit Total	LIABLE VALUE	Notes
1														R 9 450 281,99	
2			Y2023	Sorting & Screening of Waste	Sorting and screening of waste		Yes	6,1	104 777 586,08	%		2,5%	R 2 619 439,65	R 2 619 439,65	2.5% of total demolition cost.
3				Decontamination of waste and salvageable equipment	Decontamination of equipment - small projects		Yes	6.3.1	81 053 620,15	%		5,0%	R 4 052 681,01	R 4 052 681,01	5% of total decontamination waste.
4				Load and haul of inert demolition waste	Load and haul for 2km distance		Yes	9.6.3	17 445,28	m³/km	R	42,00	R 732 701,89	R 732 701,89	Assume 2km for load and haul of 2/3 of total inert waste to be disposed of onsite.
5				Load and haul of non-inert demolition waste	Disposal of inert demolition waste		Yes	6.2.1	8 722,64	m³/km	R	234,50	R 2 045 459,44	R 2 045 459,44	30km for load and haul of 1/3 of demolition waste to be removed to a licensed waste dump at Melmoth in the Mthonjaneni Municipality.
6				Radioactive waste	Not Applicable		No	1,1	-	na	R	-	R -	R -	No allowance for radioactive material and equipment to be removed, transported and disposed of at a registered radioactive waste disposal facility.
7				Removal of Tyres	Not Applicable		No	1,1	-	na	R	-	R -	R -	No allowance was made for the removal of waste tyres as it is assumed that the contractor in charge of the mining operations will be responsible to remove the waste tyres.
SUB-TOTAL 1														**R 9 450 281,99**	
Preliminaries and General						6%								R 567 016,92	
Contingency						10%								R 945 028,20	
SUB-TOTAL 2 (P&G's AND CONTINGENCIES)														**R 1 512 045,12**	
GRAND-TOTAL														**R 10 962 327,11**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS							Closure Forecast						Y2031	
1,8	WASTE DISPOSAL													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1												R 9 450 281,99		
2			Y2023	Sorting & Screening of Waste	Sorting and screening of waste		Yes	6,1	104 777 586,08	%	2,5%	R 2 619 439,65	R 2 619 439,65	2.5% of total demolition cost.
3				Decontamination of waste and salvageable equipment	Decontamination of equipment - small projects		Yes	6.3.1	81 053 620,15	%	5,0%	R 4 052 681,01	R 4 052 681,01	5% of total decontamination waste.
4				Load and haul of inert demolition waste	Load and haul for 2km distance		Yes	9.6.3	17 445,28	m³/km	R 42,00	R 732 701,89	R 732 701,89	Assume 2km for load and haul of 2/3 of total inert waste to be disposed of onsite.
5				Load and haul of non-inert demolition waste	Disposal of inert demolition waste		Yes	6.2.1	8 722,64	m³/km	R 234,50	R 2 045 459,44	R 2 045 459,44	30km for load and haul of 1/3 of demolition waste to be removed to a licensed waste dump at Melmoth in the Mthonjaneni Municipality.
6				Radioactive waste	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance for radioactive material and equipment to be removed, transported and disposed of at a registered radioactive waste disposal facility.
7				Removal of Tyres	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance was made for the removal of waste tyres as it is assumed that the contractor in charge of the mining operations will be responsible to remove the waste tyres.
						SUB-TOTAL 1							R 9 450 281,99	
						Preliminaries and General	6%						R 567 016,92	
						Contingency	10%						R 945 028,20	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							R 1 512 045,12	
						GRAND-TOTAL							R 10 962 327,11	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

INFRASTRUCTURAL ASPECTS							Closure Forecast						Y2032	
1,8	WASTE DISPOSAL													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1												R 9 450 281,99		
2			Y2023	Sorting & Screening of Waste	Sorting and screening of waste		Yes	6,1	104 777 586,08	%	2,5%	R 2 619 439,65	R 2 619 439,65	2.5% of total demolition cost.
3				Decontamination of waste and salvageable equipment	Decontamination of equipment - small projects		Yes	6.3.1	81 053 620,15	%	5,0%	R 4 052 681,01	R 4 052 681,01	5% of total decontamination waste.
4				Load and haul of inert demolition waste	Load and haul for 2km distance		Yes	9.6.3	17 445,28	m³/km	R 42,00	R 732 701,89	R 732 701,89	Assume 2km for load and haul of 2/3 of total inert waste to be disposed of onsite.
5				Load and haul of non-inert demolition waste	Disposal of inert demolition waste		Yes	6.2.1	8 722,64	m³/km	R 234,50	R 2 045 459,44	R 2 045 459,44	30km for load and haul of 1/3 of demolition waste to be removed to a licensed waste dump at Melmoth in the Mthonjaneni Municipality.
6				Radioactive waste	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance for radioactive material and equipment to be removed, transported and disposed of at a registered radioactive waste disposal facility.
7				Removal of Tyres	Not Applicable		No	1,1	-	na	R -	R -	R -	No allowance was made for the removal of waste tyres as it is assumed that the contractor in charge of the mining operations will be responsible to remove the waste tyres.
						SUB-TOTAL 1							R 9 450 281,99	
						Preliminaries and General	6%						R 567 016,92	
						Contingency	10%						R 945 028,20	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							R 1 512 045,12	
						GRAND-TOTAL							R 10 962 327,11	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

SUMMARY - MINING ASPECTS												
2	MINING CLOSURE COMPONENTS		Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast
ID	COMPONENT		Y2023	Y2024	Y2025	Y2026	Y2027	Y2028	Y2029	Y2030	Y2031	Y2032
2,1	OPENCAST / PIT AREAS		R -	R -	R 8 156 350,22	R 20 438 982,00	R 17 922 035,00	R 24 479 198,00	R 23 224 904,00	R 26 154 578,00	R 26 527 420,00	R 27 879 248,00
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS		R -	R -	R 2 710 225,43	R 5 420 450,85	R 8 130 676,28	R 10 840 901,70	R 13 551 127,13	R 16 261 352,55	R 18 971 577,98	R 21 681 803,40
2,3	COARSE RESIDUE DEPOSITS - PROCESSING WASTE		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
2,4	FINE RESIDUE DEPOSITS - PROCESSING WASTE		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
	SUB-TOTAL 1		**R -**	**R -**	**R 10 866 575,65**	**R 25 859 432,85**	**R 26 052 711,28**	**R 35 320 099,70**	**R 36 776 031,13**	**R 42 415 930,55**	**R 45 498 997,98**	**R 49 561 051,40**

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2023	
2,1	OPENCAST / PIT AREAS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	5	C1	Y2023	**Open Pit**									R -	**Mining to commence in Y2025 as per the Mine Works Program**
2				**Enviroberm:**										
3				Construct Enviroberm around Open Pit	Load and haul 1km		No	9.6.1	-	m³	R 34,00	R -	R -	
4				Stormwater measures: Construction of cross walls to the Environberm	Load and haul 1km		No	9.6.1	-	m³	R 34,00	R -	R -	
5				Shape and Profile Enviroberm	Spread material		No	9.2.4	-	m³	R 9,00	R -	R -	
6				**Fence and Service Road:**										
7				Clearview perimeter fencing	Erect clearview fencing		No	5.5.7	-	m	R 1 075,00	R -	R -	
8				Warning and notification signage	Sum		No	1,2	-	sum	R -	R -	R -	
9				Construct service road	Construction of a service road		No	8,7	-	m²	R 17,50	R -	R -	
				SUB-TOTAL 1									R -	
				Preliminaries and General		6%							R -	
				Contingency		10%							R -	
				SUB-TOTAL 2 (P&G's AND CONTINGENCIES)									R -	
				GRAND-TOTAL									R -	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2024	
2,1	OPENCAST / PIT AREAS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	5	C1	Y2023	**Open Pit**									R -	**Mining to commence in Y2025 as per the Mine Works Program**
2				**Enviroberm:**										
3				Construct Enviroberm around Open Pit	Load and haul 1km		No	9.6.1	-	m³	R 34,00	R -	R -	
4				Stormwater measures: Construction of cross walls to the Environberm	Load and haul 1km		No	9.6.1	-	m³	R 34,00	R -	R -	
5				Shape and Profile Enviroberm	Spread material		No	9.2.4	-	m³	R 9,00	R -	R -	
6				**Fence and Service Road:**										
7				Clearview perimeter fencing	Erect clearview fencing		No	5.5.7	-	m	R 1 075,00	R -	R -	
8				Warning and notification signage	Sum		No	1,2	-	sum	R -	R -	R -	
9				Construct service road	Construction of a service road		No	8,7	-	m²	R 17,50	R -	R -	
					SUB-TOTAL 1								R -	
					Preliminaries and General	6%							R -	
					Contingency	10%							R -	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R -	
					GRAND-TOTAL								R -	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2025	
2,1	OPENCAST / PIT AREAS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	5	C1	Y2023	**Open Pit**									**R 8 156 350,22**	
2				**Enviroberm:**										
3				Construct Enviroberm around Open Pit	Load and haul 1km		Yes	9.6.1	94 419,54	m³	R 34,00	R 3 210 264,36	R 3 210 264,36	Assume a volume of 27m³/m, total length of berm is 3497m, material sourced from WRD at a 1km load and haul distance. Berm is located just outside the service road.
4				Stormwater measures: Construction of cross walls to the Environberm	Load and haul 1km		Yes	9.6.1	1 170,00	m³	R 34,00	R 39 780,00	R 39 780,00	Cross walls placed at 30m intervals with a length of 5m and volume of 2m³/m (117 Cross walls in total).
5				Shape and Profile Enviroberm	Spread material		Yes	9.2.4	95 589,54	m³	R 9,00	R 860 305,86	R 860 305,86	Profile berm and crosswalls to design requirements.
6				**Fence and Service Road:**										
7				Clearview perimeter fencing	Erect clearview fencing		Yes	5.5.7	3 500,00	m	R 1 075,00	R 3 762 500,00	R 3 762 500,00	2,4m Clearview fencing placed on the outside of the Environberm, 20m from the toe.
8				Warning and notification signage	Sum		Yes	1,2	70,00	sum	R 500,00	R 35 000,00	R 35 000,00	Signage to be placed in 50m intervals outside enviroberm
9				Construct service road	Construction of a service road		Yes	8,7	14 200,00	m²	R 17,50	R 248 500,00	R 248 500,00	Construct a 4m wide gravel inspection road outside the security fence.
						SUB-TOTAL 1							**R 8 156 350,22**	
						Preliminaries and General	6%						R 489 381,01	
						Contingency	10%						R 815 635,02	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							**R 1 305 016,04**	
						GRAND-TOTAL							**R 9 461 366,26**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2026	
2,1	OPENCAST / PIT AREAS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	5	C1	Y2023	**Open Pit**									**R 20 438 982,00**	
2				**Enviroberm:**										
3				Construct Enviroberm around Open Pit	Load and haul 1km		Yes	9.6.1	235 764,00	m³	R 34,00	R 8 015 976,00	R 8 015 976,00	Assume a volume of 27m³/m, total length of berm is 8732m, material sourced from WRD at a 1km load and haul distance. Berm is located just outside the service road.
4				Stormwater measures: Construction of cross walls to the Environberm	Load and haul 1km		Yes	9.6.1	2 910,00	m³	R 34,00	R 98 940,00	R 98 940,00	Cross walls placed at 30m intervals with a length of 5m and volume of 2m³/m (291 Cross walls in total).
5				Shape and Profile Enviroberm	Spread material		Yes	9.2.4	238 674,00	m³	R 9,00	R 2 148 066,00	R 2 148 066,00	Profile berm and crosswalls to design requirements.
6				**Fence and Service Road:**										
7				Clearview perimeter fencing	Erect clearview fencing		Yes	5.5.7	8 810,00	m	R 1 075,00	R 9 470 750,00	R 9 470 750,00	2,4m Clearview fencing placed on the outside of the Environberm, 20m from the toe.
8				Warning and notification signage	Sum		Yes	1,2	175,00	sum	R 500,00	R 87 500,00	R 87 500,00	Signage to be placed in 50m intervals outside enviroberm
9				Construct service road	Construction of a service road		Yes	8,7	35 300,00	m²	R 17,50	R 617 750,00	R 617 750,00	Construct a 4m wide gravel inspection road outside the security fence.
					SUB-TOTAL 1								**R 20 438 982,00**	
					Preliminaries and General	6%							**R 1 226 338,92**	
					Contingency	10%							**R 2 043 898,20**	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 3 270 237,12**	
					GRAND-TOTAL								**R 23 709 219,12**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2027	
2,1		OPENCAST / PIT AREAS												
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	5	C1	Y2023	**Open Pit**									**R 17 922 035,00**	
2				**Enviroberm:**										
3				Construct Enviroberm around Open Pit	Load and haul 1km		Yes	9.6.1	206 145,00	m³	R 34,00	R 7 008 930,00	R 7 008 930,00	Assume a volume of 27m³/m, total length of berm is 7635m, material sourced from WRD at a 1km load and haul distance. Berm is located just outside the service road.
4				Stormwater measures: Construction of cross walls to the Environberm	Load and haul 1km		Yes	9.6.1	2 550,00	m³	R 34,00	R 86 700,00	R 86 700,00	Cross walls placed at 30m intervals with a length of 5m and volume of 2m³/m (255 Cross walls in total).
5				Shape and Profile Enviroberm	Spread material		Yes	9.2.4	208 695,00	m³	R 9,00	R 1 878 255,00	R 1 878 255,00	Profile berm and crosswalls to design requirements.
6				**Fence and Service Road:**										
7				Clearview perimeter fencing	Erect clearview fencing		Yes	5.5.7	7 750,00	m	R 1 075,00	R 8 331 250,00	R 8 331 250,00	2,4m Clearview fencing placed on the outside of the Environberm, 20m from the toe.
8				Warning and notification signage	Sum		Yes	1,2	153,00	sum	R 500,00	R 76 500,00	R 76 500,00	Signage to be placed in 50m intervals outside enviroberm
9				Construct service road	Construction of a service road		Yes	8,7	30 880,00	m²	R 17,50	R 540 400,00	R 540 400,00	Construct a 4m wide gravel inspection road outside the security fence.
						SUB-TOTAL 1							**R 17 922 035,00**	
						Preliminaries and General	6%						R 1 075 322,10	
						Contingency	10%						R 1 792 203,50	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							**R 2 867 525,60**	
						GRAND-TOTAL							**R 20 789 560,60**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2028	
2,1	OPENCAST / PIT AREAS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	5	C1	Y2023	**Open Pit**									**R 24 479 198,00**	
2				**Enviroberm:**										
3				Construct Enviroberm around Open Pit	Load and haul 1km		Yes	9.6.1	281 556,00	m³	R 34,00	R 9 572 904,00	R 9 572 904,00	Assume a volume of 27m³/m, total length of berm is 10428m, material sourced from WRD at a 1km load and haul distance. Berm is located just outside the service road.
4				Stormwater measures: Construction of cross walls to the Environberm	Load and haul 1km		Yes	9.6.1	3 480,00	m³	R 34,00	R 118 320,00	R 118 320,00	Cross walls placed at 30m intervals with a length of 5m and volume of 2m³/m (348 Cross walls in total).
5				Shape and Profile Enviroberm	Spread material		Yes	9.2.4	285 036,00	m³	R 9,00	R 2 565 324,00	R 2 565 324,00	Profile berm and crosswalls to design requirements.
6				**Fence and Service Road:**										
7				Clearview perimeter fencing	Erect clearview fencing		Yes	5.5.7	10 588,00	m	R 1 075,00	R 11 382 100,00	R 11 382 100,00	2,4m Clearview fencing placed on the outside of the Environberm, 20m from the toe.
8				Warning and notification signage	Sum		Yes	1,2	209,00	sum	R 500,00	R 104 500,00	R 104 500,00	Signage to be placed in 50m intervals outside enviroberm
9				Construct service road	Construction of a service road		Yes	8,7	42 060,00	m²	R 17,50	R 736 050,00	R 736 050,00	Construct a 4m wide gravel inspection road outside the security fence.
						SUB-TOTAL 1							**R 24 479 198,00**	
						Preliminaries and General	6%						R 1 468 751,88	
						Contingency	10%						R 2 447 919,80	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							**R 3 916 671,68**	
						GRAND-TOTAL							**R 28 395 869,68**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2029	
2,1		OPENCAST / PIT AREAS												
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	5	C1	Y2023	**Open Pit**									**R 23 224 904,00**	
2				**Enviroberm:**										
3				Construct Enviroberm around Open Pit	Load and haul 1km		Yes	9.6.1	268 218,00	m³	R 34,00	R 9 119 412,00	R 9 119 412,00	Assume a volume of 27m³/m, total length of berm is 9934m, material sourced from WRD at a 1km load and haul distance. Berm is located just outside the service road.
4				Stormwater measures: Construction of cross walls to the Environberm	Load and haul 1km		Yes	9.6.1	3 310,00	m³	R 34,00	R 112 540,00	R 112 540,00	Cross walls placed at 30m intervals with a length of 5m and volume of 2m³/m (331 Cross walls in total).
5				Shape and Profile Enviroberm	Spread material		Yes	9.2.4	271 528,00	m³	R 9,00	R 2 443 752,00	R 2 443 752,00	Profile berm and crosswalls to design requirements.
6				**Fence and Service Road:**										
7				Clearview perimeter fencing	Erect clearview fencing		Yes	5.5.7	10 000,00	m	R 1 075,00	R 10 750 000,00	R 10 750 000,00	2,4m Clearview fencing placed on the outside of the Environberm, 20m from the toe.
8				Warning and notification signage	Sum		Yes	1,2	197,00	sum	R 500,00	R 98 500,00	R 98 500,00	Signage to be placed in 50m intervals outside enviroberm
9				Construct service road	Construction of a service road		Yes	8,7	40 040,00	m²	R 17,50	R 700 700,00	R 700 700,00	Construct a 4m wide gravel inspection road outside the security fence.
						SUB-TOTAL 1							**R 23 224 904,00**	
						Preliminaries and General	6%						R 1 393 494,24	
						Contingency	10%						R 2 322 490,40	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							**R 3 715 984,64**	
						GRAND-TOTAL							**R 26 940 888,64**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2030	
2,1		OPENCAST / PIT AREAS												
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	5	C1	Y2023	**Open Pit**									**R 26 154 578,00**	
2				**Enviroberm:**										
3				Construct Enviroberm around Open Pit	Load and haul 1km		Yes	9.6.1	302346	m³	R 34,00	R 10 279 764,00	R 10 279 764,00	Assume a volume of 27m³/m, total length of berm is 11198m, material sourced from WRD at a 1km load and haul distance. Berm is located just outside the service road.
4				Stormwater measures: Construction of cross walls to the Environberm	Load and haul 1km		Yes	9.6.1	3 730,00	m³	R 34,00	R 126 820,00	R 126 820,00	Cross walls placed at 30m intervals with a length of 5m and volume of 2m³/m (373 Cross walls in total).
5				Shape and Profile Enviroberm	Spread material		Yes	9.2.4	306 076,00	m³	R 9,00	R 2 754 684,00	R 2 754 684,00	Profile berm and crosswalls to design requirements.
6				**Fence and Service Road:**										
7				Clearview perimeter fencing	Erect clearview fencing		Yes	5.5.7	11 250,00	m	R 1 075,00	R 12 093 750,00	R 12 093 750,00	2,4m Clearview fencing placed on the outside of the Environberm, 20m from the toe.
8				Warning and notification signage	Sum		Yes	1,2	223,00	sum	R 500,00	R 111 500,00	R 111 500,00	Signage to be placed in 50m intervals outside enviroberm
9				Construct service road	Construction of a service road		Yes	8,7	45 032,00	m²	R 17,50	R 788 060,00	R 788 060,00	Construct a 4m wide gravel inspection road outside the security fence.
						SUB-TOTAL 1							**R 26 154 578,00**	
						Preliminaries and General	6%						R 1 569 274,68	
						Contingency	10%						R 2 615 457,80	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							R 4 184 732,48	
						GRAND-TOTAL							R 30 339 310,48	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2031	
2,1	OPENCAST / PIT AREAS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	5	C1	Y2023	**Open Pit**									**R 26 527 420,00**	
2				**Enviroberm:**										
3				Construct Enviroberm around Open Pit	Load and haul 1km		Yes	9.6.1	304 155,00	m³	R 34,00	R 10 341 270,00	R 10 341 270,00	Assume a volume of 27m³/m, total length of berm is 11265m, material sourced from WRD at a 1km load and haul distance. Berm is located just outside the service road.
4				Stormwater measures: Construction of cross walls to the Environberm	Load and haul 1km		Yes	9.6.1	3 760,00	m³	R 34,00	R 127 840,00	R 127 840,00	Cross walls placed at 30m intervals with a length of 5m and volume of 2m³/m (376 Cross walls in total).
5				Shape and Profile Enviroberm	Spread material		Yes	9.2.4	307 915,00	m³	R 9,00	R 2 771 235,00	R 2 771 235,00	Profile berm and crosswalls to design requirements.
6				**Fence and Service Road:**										
7				Clearview perimeter fencing	Erect clearview fencing		Yes	5.5.7	11 517,00	m	R 1 075,00	R 12 380 775,00	R 12 380 775,00	2,4m Clearview fencing placed on the outside of the Environberm, 20m from the toe.
8				Warning and notification signage	Sum		Yes	1,2	225,00	sum	R 500,00	R 112 500,00	R 112 500,00	Signage to be placed in 50m intervals outside enviroberm
9				Construct service road	Construction of a service road		Yes	8,7	45 360,00	m²	R 17,50	R 793 800,00	R 793 800,00	Construct a 4m wide gravel inspection road outside the security fence.
						SUB-TOTAL 1							**R 26 527 420,00**	
						Preliminaries and General	6%						R 1 591 645,20	
						Contingency	10%						R 2 652 742,00	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							**R 4 244 387,20**	
						GRAND-TOTAL							**R 30 771 807,20**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2032	
2,1	OPENCAST / PIT AREAS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	5	C1	Y2023	**Open Pit**									**R 27 879 248,00**	
2				**Enviroberm:**										
3				Construct Enviroberm around Open Pit	Load and haul 1km		Yes	9.6.1	322 056,00	m³	R 34,00	R 10 949 904,00	R 10 949 904,00	Assume a volume of 27m³/m, total length of berm is 11928m, material sourced from WRD at a 1km load and haul distance. Berm is located just outside the service road.
4				Stormwater measures: Construction of cross walls to the Environberm	Load and haul 1km		Yes	9.6.1	3 980,00	m³	R 34,00	R 135 320,00	R 135 320,00	Cross walls placed at 30m intervals with a length of 5m and volume of 2m³/m (398 Cross walls in total).
5				Shape and Profile Enviroberm	Spread material		Yes	9.2.4	326 036,00	m³	R 9,00	R 2 934 324,00	R 2 934 324,00	Profile berm and crosswalls to design requirements.
6				**Fence and Service Road:**										
7				Clearview perimeter fencing	Erect clearview fencing		Yes	5.5.7	12 000,00	m	R 1 075,00	R 12 900 000,00	R 12 900 000,00	2,4m Clearview fencing placed on the outside of the Environberm, 20m from the toe.
8				Warning and notification signage	Sum		Yes	1,2	238,00	sum	R 500,00	R 119 000,00	R 119 000,00	Signage to be placed in 50m intervals outside enviroberm
9				Construct service road	Construction of a service road		Yes	8,7	48 040,00	m²	R 17,50	R 840 700,00	R 840 700,00	Construct a 4m wide gravel inspection road outside the security fence.
						SUB-TOTAL 1							**R 27 879 248,00**	
						Preliminaries and General	6%						**R 1 672 754,88**	
						Contingency	10%						**R 2 787 924,80**	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							**R 4 460 679,68**	
						GRAND-TOTAL							**R 32 339 927,68**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2023	
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	6	C2	Y2023	**Waste Rock Dump**									R -	**Mining to commence in Y2025 as per the Mine Works Program**
2				**Earthworks:**										
3				Reshape slopes, balance cut to fill	Bulk dozing of material (30m max)		No	9.1.2	-	m³	R 9,50	R -	R -	
4				**Stormwater Structures:**										
5				Contour paddocks	Excavate, place and level material		No	9.2.3	-	m³	R 18,00	R -	R -	
6				**Surface Finishing:**										
7				Rip Top area & Slopes	Ripping of areas to alleviate compaction		No	9.5.1	-	ha	R 16 317,00	R -	R -	
8				Import growth medium	Load and haul for 3km distance		No	9.6.4	-	m³/km	R 50,50	R -	R -	
9				Spread material	Spread material		No	9.2.4	-	m³	R 9,00	R -	R -	
10				Ameliorate and Vegetate	Establishment of vegetation (general)		No	10.4.1	-	ha	R 26 037,50	R -	R -	
					SUB-TOTAL 1								R -	
					Preliminaries and General	6%							R -	
					Contingency	10%							R -	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R -	
					GRAND-TOTAL								R -	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2024	
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	6	C2	Y2023	**Waste Rock Dump**									R -	**Mining to commence in Y2025 as per the Mine Works Program**
2				**Earthworks:**										
3				Reshape slopes, balance cut to fill	Bulk dozing of material (30m max)		No	9.1.2	-	m³	R 9,50	R -	R -	
4				**Stormwater Structures:**										
5				Contour paddocks	Excavate, place and level material		No	9.2.3	-	m³	R 18,00	R -	R -	
6				**Surface Finishing:**										
7				Rip Top area & Slopes	Ripping of areas to alleviate compaction		No	9.5.1	-	ha	R 16 317,00	R -	R -	
8				Import growth medium	Load and haul for 3km distance		No	9.6.4	-	m³/km	R 50,50	R -	R -	
9				Spread material	Spread material		No	9.2.4	-	m³	R 9,00	R -	R -	
10				Ameliorate and Vegetate	Establishment of vegetation (general)		No	10.4.1	-	ha	R 26 037,50	R -	R -	
					SUB-TOTAL 1								R -	
					Preliminaries and General	6%							R -	
					Contingency	10%							R -	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R -	
					GRAND-TOTAL								R -	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2025	
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	6	C2	Y2023	**Waste Rock Dump**									**R 2 710 225,43**	
2				**Earthworks:**										
3				Reshape slopes, balance cut to fill	Bulk dozing of material (30m max)		No	9.1.2	-	m³	R 9,50	R -	R -	No Reshaping required - Slope is designed and constructed at an ≤18° angle and will be shaped during the deposition phase.
4				**Stormwater Structures:**										
5				Contour paddocks	Excavate, place and level material		Yes	9.2.3	5 172,20	m³	R 18,00	R 93 099,60	R 93 099,60	Volume = 4m³/m at ≤40m intervals.
6				**Surface Finishing:**										
7				Rip Top area & Slopes	Ripping of areas to alleviate compaction		Yes	9.5.1	11,85	ha	R 16 317,00	R 193 356,45	R 193 356,45	500mm Deep ripping
8				Import growth medium	Load and haul for 3km distance		Yes	9.6.4	35 550,00	m³/km	R 50,50	R 1 795 275,00	R 1 795 275,00	300mm Thick Topsoil
9				Spread material	Spread material		Yes	9.2.4	35 550,00	m³	R 9,00	R 319 950,00	R 319 950,00	
10				Ameliorate and Vegetate	Establishment of vegetation (general)		Yes	10.4.1	11,85	ha	R 26 037,50	R 308 544,38	R 308 544,38	Includes soil amelioration, cultivation and seeding actions
												SUB-TOTAL 1	**R 2 710 225,43**	
												Preliminaries and General	6% R 162 613,53	
												Contingency	10% R 271 022,54	
												SUB-TOTAL 2 (P&G's AND CONTINGENCIES)	**R 433 636,07**	
												GRAND-TOTAL	**R 3 143 861,49**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2026	
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	6	C2	Y2023	**Waste Rock Dump**									**R 5 420 450,85**	
2				**Earthworks:**										
3				Reshape slopes, balance cut to fill	Bulk dozing of material (30m max)		No	9.1.2	-	m³	R 9,50	R -	R -	No Reshaping required - Slope is designed and constructed at an ≤18° angle and will be shaped during the deposition phase.
4				**Stormwater Structures:**										
5				Contour paddocks	Excavate, place and level material		Yes	9.2.3	10 344,40	m³	R 18,00	R 186 199,20	R 186 199,20	Volume = 4m³/m at ≤40m intervals.
6				**Surface Finishing:**										
7				Rip Top area & Slopes	Ripping of areas to alleviate compaction		Yes	9.5.1	23,70	ha	R 16 317,00	R 386 712,90	R 386 712,90	500mm Deep ripping
8				Import growth medium	Load and haul for 3km distance		Yes	9.6.4	71 100,00	m³/km	R 50,50	R 3 590 550,00	R 3 590 550,00	300mm Thick Topsoil
9				Spread material	Spread material		Yes	9.2.4	71 100,00	m³	R 9,00	R 639 900,00	R 639 900,00	
10				Ameliorate and Vegetate	Establishment of vegetation (general)		Yes	10.4.1	23,70	ha	R 26 037,50	R 617 088,75	R 617 088,75	Includes soil amelioration, cultivation and seeding actions
					SUB-TOTAL 1								**R 5 420 450,85**	
					Preliminaries and General	6%							R 325 227,05	
					Contingency	10%							R 542 045,09	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 867 272,14**	
					GRAND-TOTAL								**R 6 287 722,99**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2027	
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	6	C2	Y2023	**Waste Rock Dump**									**R 8 130 676,28**	
2				**Earthworks:**										
3				Reshape slopes, balance cut to fill	Bulk dozing of material (30m max)		No	9.1.2	-	m³	R 9,50	R -	R -	No Reshaping required - Slope is designed and constructed at an ≤18° angle and will be shaped during the deposition phase.
4				**Stormwater Structures:**										
5				Contour paddocks	Excavate, place and level material		Yes	9.2.3	15 516,60	m³	R 18,00	R 279 298,80	R 279 298,80	Volume = 4m³/m at ≤40m intervals.
6				**Surface Finishing:**										
7				Rip Top area & Slopes	Ripping of areas to alleviate compaction		Yes	9.5.1	35,55	ha	R 16 317,00	R 580 069,35	R 580 069,35	500mm Deep ripping
8				Import growth medium	Load and haul for 3km distance		Yes	9.6.4	106 650,00	m³/km	R 50,50	R 5 385 825,00	R 5 385 825,00	300mm Thick Topsoil
9				Spread material	Spread material		Yes	9.2.4	106 650,00	m³	R 9,00	R 959 850,00	R 959 850,00	
10				Ameliorate and Vegetate	Establishment of vegetation (general)		Yes	10.4.1	35,55	ha	R 26 037,50	R 925 633,13	R 925 633,13	Includes soil amelioration, cultivation and seeding actions
												SUB-TOTAL 1	**R 8 130 676,28**	
						6%						Preliminaries and General	R 487 840,58	
						10%						Contingency	R 813 067,63	
												SUB-TOTAL 2 (P&G's AND CONTINGENCIES)	**R 1 300 908,20**	
												GRAND-TOTAL	**R 9 431 584,48**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2028	
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	6	C2	Y2023	**Waste Rock Dump**									R 10 840 901,70	
2				**Earthworks:**										
3				Reshape slopes, balance cut to fill	Bulk dozing of material (30m max)		No	9.1.2	-	m³	R 9,50	R -	R -	No Reshaping required - Slope is designed and constructed at an ≤18° angle and will be shaped during the deposition phase.
4				**Stormwater Structures:**										
5				Contour paddocks	Excavate, place and level material		Yes	9.2.3	20 688,80	m³	R 18,00	R 372 398,40	R 372 398,40	Volume = 4m³/m at ≤40m intervals.
6				**Surface Finishing:**										
7				Rip Top area & Slopes	Ripping of areas to alleviate compaction		Yes	9.5.1	47,40	ha	R 16 317,00	R 773 425,80	R 773 425,80	500mm Deep ripping
8				Import growth medium	Load and haul for 3km distance		Yes	9.6.4	142 200,00	m³/km	R 50,50	R 7 181 100,00	R 7 181 100,00	300mm Thick Topsoil
9				Spread material	Spread material		Yes	9.2.4	142 200,00	m³	R 9,00	R 1 279 800,00	R 1 279 800,00	
10				Ameliorate and Vegetate	Establishment of vegetation (general)		Yes	10.4.1	47,40	ha	R 26 037,50	R 1 234 177,50	R 1 234 177,50	Includes soil amelioration, cultivation and seeding actions
												SUB-TOTAL 1	**R 10 840 901,70**	
												Preliminaries and General	6% R 650 454,10	
												Contingency	10% R 1 084 090,17	
												SUB-TOTAL 2 (P&G's AND CONTINGENCIES)	**R 1 734 544,27**	
												GRAND-TOTAL	**R 12 575 445,97**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2029	
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	6	C2	Y2023	**Waste Rock Dump**									**R 13 551 127,13**	
2				**Earthworks:**										
3				Reshape slopes, balance cut to fill	Bulk dozing of material (30m max)		No	9.1.2	-	m³	R 9,50	R -	R -	No Reshaping required - Slope is designed and constructed at an ≤18° angle and will be shaped during the deposition phase.
4				**Stormwater Structures:**										
5				Contour paddocks	Excavate, place and level material		Yes	9.2.3	25 861,00	m³	R 18,00	R 465 498,00	R 465 498,00	Volume = 4m³/m at ≤40m intervals.
6				**Surface Finishing:**										
7				Rip Top area & Slopes	Ripping of areas to alleviate compaction		Yes	9.5.1	59,25	ha	R 16 317,00	R 966 782,25	R 966 782,25	500mm Deep ripping
8				Import growth medium	Load and haul for 3km distance		Yes	9.6.4	177 750,00	m³/km	R 50,50	R 8 976 375,00	R 8 976 375,00	300mm Thick Topsoil
9				Spread material	Spread material		Yes	9.2.4	177 750,00	m³	R 9,00	R 1 599 750,00	R 1 599 750,00	
10				Ameliorate and Vegetate	Establishment of vegetation (general)		Yes	10.4.1	59,25	ha	R 26 037,50	R 1 542 721,88	R 1 542 721,88	Includes soil amelioration, cultivation and seeding actions
					SUB-TOTAL 1								**R 13 551 127,13**	
					Preliminaries and General	6%							R 813 067,63	
					Contingency	10%							R 1 355 112,71	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 2 168 180,34**	
					GRAND-TOTAL								**R 15 719 307,47**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2030	
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	6	C2	Y2023	**Waste Rock Dump**									**R 16 261 352,55**	
2				**Earthworks:**										
3				Reshape slopes, balance cut to fill	Bulk dozing of material (30m max)		No	9.1.2	-	m³	R 9,50	R -	R -	No Reshaping required - Slope is designed and constructed at an ≤18° angle and will be shaped during the deposition phase.
4				**Stormwater Structures:**										
5				Contour paddocks	Excavate, place and level material		Yes	9.2.3	31 033,20	m³	R 18,00	R 558 597,60	R 558 597,60	Volume = 4m³/m at ≤40m intervals.
6				**Surface Finishing:**										
7				Rip Top area & Slopes	Ripping of areas to alleviate compaction		Yes	9.5.1	71,10	ha	R 16 317,00	R 1 160 138,70	R 1 160 138,70	500mm Deep ripping
8				Import growth medium	Load and haul for 3km distance		Yes	9.6.4	213 300,00	m³/km	R 50,50	R 10 771 650,00	R 10 771 650,00	300mm Thick Topsoil
9				Spread material	Spread material		Yes	9.2.4	213 300,00	m³	R 9,00	R 1 919 700,00	R 1 919 700,00	
10				Ameliorate and Vegetate	Establishment of vegetation (general)		Yes	10.4.1	71,10	ha	R 26 037,50	R 1 851 266,25	R 1 851 266,25	Includes soil amelioration, cultivation and seeding actions
					SUB-TOTAL 1								**R 16 261 352,55**	
					Preliminaries and General	6%							R 975 681,15	
					Contingency	10%							R 1 626 135,26	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 2 601 816,41**	
					GRAND-TOTAL								**R 18 863 168,96**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2031	
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	6	C2	Y2023	**Waste Rock Dump**									R 18 971 577,98	
2				**Earthworks:**										
3				Reshape slopes, balance cut to fill	Bulk dozing of material (30m max)		No	9.1.2	-	m³	R 9,50	R -	R -	No Reshaping required - Slope is designed and constructed at an ≤18° angle and will be shaped during the deposition phase.
4				**Stormwater Structures:**										
5				Contour paddocks	Excavate, place and level material		Yes	9.2.3	36 205,40	m³	R 18,00	R 651 697,20	R 651 697,20	Volume = 4m³/m at ≤40m intervals.
6				**Surface Finishing:**										
7				Rip Top area & Slopes	Ripping of areas to alleviate compaction		Yes	9.5.1	82,95	ha	R 16 317,00	R 1 353 495,15	R 1 353 495,15	500mm Deep ripping
8				Import growth medium	Load and haul for 3km distance		Yes	9.6.4	248 850,00	m³/km	R 50,50	R 12 566 925,00	R 12 566 925,00	300mm Thick Topsoil
9				Spread material	Spread material		Yes	9.2.4	248 850,00	m³	R 9,00	R 2 239 650,00	R 2 239 650,00	
10				Ameliorate and Vegetate	Establishment of vegetation (general)		Yes	10.4.1	82,95	ha	R 26 037,50	R 2 159 810,63	R 2 159 810,63	Includes soil amelioration, cultivation and seeding actions
					SUB-TOTAL 1								R 18 971 577,98	
					Preliminaries and General	6%							R 1 138 294,68	
					Contingency	10%							R 1 897 157,80	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 3 035 452,48	
					GRAND-TOTAL								R 22 007 030,45	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

MINING ASPECTS							Closure Forecast						Y2032	
2,2	WASTE ROCK DUMPS - OVERBURDEN AND SPOILS													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1	6	C2	Y2023	**Waste Rock Dump**									R 21 681 803,40	
2				**Earthworks:**										
3				Reshape slopes, balance cut to fill	Bulk dozing of material (30m max)		No	9.1.2	-	m³	R 9,50	R -	R -	No Reshaping required - Slope is designed and constructed at an ≤18° angle and will be shaped during the deposition phase.
4				**Stormwater Structures:**										
5				Contour paddocks	Excavate, place and level material		Yes	9.2.3	41 377,60	m³	R 18,00	R 744 796,80	R 744 796,80	Volume = 4m³/m at ≤40m intervals.
6				**Surface Finishing:**										
7				Rip Top area & Slopes	Ripping of areas to alleviate compaction		Yes	9.5.1	94,80	ha	R 16 317,00	R 1 546 851,60	R 1 546 851,60	500mm Deep ripping
8				Import growth medium	Load and haul for 3km distance		Yes	9.6.4	284 400,00	m³/km	R 50,50	R 14 362 200,00	R 14 362 200,00	300mm Thick Topsoil
9				Spread material	Spread material		Yes	9.2.4	284 400,00	m³	R 9,00	R 2 559 600,00	R 2 559 600,00	
10				Ameliorate and Vegetate	Establishment of vegetation (general)		Yes	10.4.1	94,80	ha	R 26 037,50	R 2 468 355,00	R 2 468 355,00	Includes soil amelioration, cultivation and seeding actions
					SUB-TOTAL 1								**R 21 681 803,40**	
					Preliminaries and General	6%							R 1 300 908,20	
					Contingency	10%							R 2 168 180,34	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 3 469 088,54**	
					GRAND-TOTAL								**R 25 150 891,94**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

SUMMARY - BIOPHYSICAL CLOSURE ASPECTS											
3	BIOPHYSICAL CLOSURE COMPONENTS		Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast
ID	COMPONENT		Y2023	Y2024	Y2025	Y2026	Y2027	Y2028	Y2029	Y2030	Y2031	Y2032
3,1	WATER RESOURCES		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,2	CLIMATE CHANGE		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,3	SENSITIVE HABITATS & BIODIVERSITY		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,4	LAND USE & LAND CAPABILITY		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,5	SOIL		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
3,6	OTHER: AIR QUALITY & TOPOGRAPHY		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
	SUB-TOTAL 1		**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

SUMMARY - SOCIAL CLOSURE ASPECTS												
4	SOCIAL CLOSURE COMPONENTS		Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast
ID	COMPONENT		Y2023	Y2024	Y2025	Y2026	Y2027	Y2028	Y2029	Y2030	Y2031	Y2032
4,1	EMPLOYEES		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
4,2	INTERESTED AND AFFECTED PARTIES		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
4,3	GOVERNMENT		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
	SUB-TOTAL 1		**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**	**R -**

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

SUMMARY - GENERAL ASPECTS												
5	GENERAL CLOSURE COMPONENTS		Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast	Closure Forecast
ID	COMPONENT		Y2023	Y2024	Y2025	Y2026	Y2027	Y2028	Y2029	Y2030	Y2031	Y2032
5,1	GENERAL SURFACES		R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25	R 9 172 631,25
5,2	POST CLOSURE MONITORING AND MAINTENANCE		R 7 093 415,00	R 7 093 415,00	R 7 295 990,75	R 7 498 566,50	R 7 701 142,25	R 7 903 718,00	R 8 106 293,75	R 8 308 869,50	R 8 511 445,25	R 8 714 021,00
5,3	SPECIALIST STUDIES		R -	R -	R -	R -	R -	R -	R -	R -	R -	R -
	SUB-TOTAL 1		**R 16 266 046,25**	**R 16 266 046,25**	**R 16 468 622,00**	**R 16 671 197,75**	**R 16 873 773,50**	**R 17 076 349,25**	**R 17 278 925,00**	**R 17 481 500,75**	**R 17 684 076,50**	**R 17 886 652,25**

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS							Closure Forecast						Y2023	
5,1	GENERAL SURFACES													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
													R 9 172 631,25	
1		A85 A86 A112	Y2023	**General Surface & Terrace Reclamation:**										
2				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	56,25	ha	R 70 214,50	R 3 949 565,63	R 3 949 565,63	Assumed 100% of footprint will require shaping
3				Place 100mm of growth medium over disturbed area	Load and haul for 3km distance		Yes	9.6.4	56 250,00	m³/km	R 50,50	R 2 840 625,00	R 2 840 625,00	100mm Thick layer from local stockpiles Assume 3km load and haul distances.
4				Ripping	Ripping of areas to alleviate compaction		Yes	9.5.1	56,25	ha	R 16 317,00	R 917 831,25	R 917 831,25	500mm Deep ripping
5				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	56,25	ha	R 26 037,50	R 1 464 609,38	R 1 464 609,38	Includes soil amelioration, cultivation and seeding actions
						SUB-TOTAL 1							**R 9 172 631,25**	
						Preliminaries and General 6%							R 550 357,88	
						Contingency 10%							R 917 263,13	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							**R 1 467 621,00**	
						GRAND-TOTAL							**R 10 640 252,25**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS							Closure Forecast						Y2024	
5,1	GENERAL SURFACES													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
													R 9 172 631,25	
1		A85 A86 A112	Y2023	**General Surface & Terrace Reclamation:**										
2				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	56,25	ha	R 70 214,50	R 3 949 565,63	R 3 949 565,63	Assumed 100% of footprint will require shaping
3				Place 100mm of growth medium over disturbed area	Load and haul for 3km distance		Yes	9.6.4	56 250,00	m³/km	R 50,50	R 2 840 625,00	R 2 840 625,00	100mm Thick layer from local stockpiles Assume 3km load and haul distances.
4				Ripping	Ripping of areas to alleviate compaction		Yes	9.5.1	56,25	ha	R 16 317,00	R 917 831,25	R 917 831,25	500mm Deep ripping
5				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	56,25	ha	R 26 037,50	R 1 464 609,38	R 1 464 609,38	Includes soil amelioration, cultivation and seeding actions
					SUB-TOTAL 1								**R 9 172 631,25**	
					Preliminaries and General	6%							R 550 357,88	
					Contingency	10%							R 917 263,13	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 1 467 621,00**	
					GRAND-TOTAL								**R 10 640 252,25**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS							Closure Forecast						Y2025	
5,1	GENERAL SURFACES													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
													R 9 172 631,25	
1		A85 A86 A112	Y2023	**General Surface & Terrace Reclamation:**										
2				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	56,25	ha	R 70 214,50	R 3 949 565,63	R 3 949 565,63	Assumed 100% of footprint will require shaping
3				Place 100mm of growth medium over disturbed area	Load and haul for 3km distance		Yes	9.6.4	56 250,00	m³/km	R 50,50	R 2 840 625,00	R 2 840 625,00	100mm Thick layer from local stockpiles Assume 3km load and haul distances.
4				Ripping	Ripping of areas to alleviate compaction		Yes	9.5.1	56,25	ha	R 16 317,00	R 917 831,25	R 917 831,25	500mm Deep ripping
5				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	56,25	ha	R 26 037,50	R 1 464 609,38	R 1 464 609,38	Includes soil amelioration, cultivation and seeding actions
					SUB-TOTAL 1								**R 9 172 631,25**	
					Preliminaries and General	6%							R 550 357,88	
					Contingency	10%							R 917 263,13	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 1 467 621,00**	
					GRAND-TOTAL								**R 10 640 252,25**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS							Closure Forecast						Y2026	
5,1	GENERAL SURFACES													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
													R 9 172 631,25	
1		A85 A86 A112	Y2023	**General Surface & Terrace Reclamation:**										
2				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	56,25	ha	R 70 214,50	R 3 949 565,63	R 3 949 565,63	Assumed 100% of footprint will require shaping
3				Place 100mm of growth medium over disturbed area	Load and haul for 3km distance		Yes	9.6.4	56 250,00	m³/km	R 50,50	R 2 840 625,00	R 2 840 625,00	100mm Thick layer from local stockpiles Assume 3km load and haul distances.
4				Ripping	Ripping of areas to alleviate compaction		Yes	9.5.1	56,25	ha	R 16 317,00	R 917 831,25	R 917 831,25	500mm Deep ripping
5				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	56,25	ha	R 26 037,50	R 1 464 609,38	R 1 464 609,38	Includes soil amelioration, cultivation and seeding actions
					SUB-TOTAL 1								**R 9 172 631,25**	
					Preliminaries and General	6%							R 550 357,88	
					Contingency	10%							R 917 263,13	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 1 467 621,00**	
					GRAND-TOTAL								**R 10 640 252,25**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS							Closure Forecast						Y2027	
5,1	GENERAL SURFACES													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
													R 9 172 631,25	
1		A85 A86 A112	Y2023	**General Surface & Terrace Reclamation:**										
2				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	56,25	ha	R 70 214,50	R 3 949 565,63	R 3 949 565,63	Assumed 100% of footprint will require shaping
3				Place 100mm of growth medium over disturbed area	Load and haul for 3km distance		Yes	9.6.4	56 250,00	m³/km	R 50,50	R 2 840 625,00	R 2 840 625,00	100mm Thick layer from local stockpiles Assume 3km load and haul distances.
4				Ripping	Ripping of areas to alleviate compaction		Yes	9.5.1	56,25	ha	R 16 317,00	R 917 831,25	R 917 831,25	500mm Deep ripping
5				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	56,25	ha	R 26 037,50	R 1 464 609,38	R 1 464 609,38	Includes soil amelioration, cultivation and seeding actions
					SUB-TOTAL 1								**R 9 172 631,25**	
					Preliminaries and General	6%							R 550 357,88	
					Contingency	10%							R 917 263,13	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 1 467 621,00**	
					GRAND-TOTAL								**R 10 640 252,25**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS							Closure Forecast						Y2028	
5,1	GENERAL SURFACES													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
													R 9 172 631,25	
1		A85 A86 A112	Y2023	**General Surface & Terrace Reclamation:**										
2				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	56,25	ha	R 70 214,50	R 3 949 565,63	R 3 949 565,63	Assumed 100% of footprint will require shaping
3				Place 100mm of growth medium over disturbed area	Load and haul for 3km distance		Yes	9.6.4	56 250,00	m³/km	R 50,50	R 2 840 625,00	R 2 840 625,00	100mm Thick layer from local stockpiles Assume 3km load and haul distances.
4				Ripping	Ripping of areas to alleviate compaction		Yes	9.5.1	56,25	ha	R 16 317,00	R 917 831,25	R 917 831,25	500mm Deep ripping
5				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	56,25	ha	R 26 037,50	R 1 464 609,38	R 1 464 609,38	Includes soil amelioration, cultivation and seeding actions
					SUB-TOTAL 1								**R 9 172 631,25**	
					Preliminaries and General	6%							R 550 357,88	
					Contingency	10%							R 917 263,13	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 1 467 621,00**	
					GRAND-TOTAL								**R 10 640 252,25**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS							Closure Forecast						Y2029	
5,1	GENERAL SURFACES													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
													R 9 172 631,25	
1		A85 A86 A112	Y2023	**General Surface & Terrace Reclamation:**										
2				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	56,25	ha	R 70 214,50	R 3 949 565,63	R 3 949 565,63	Assumed 100% of footprint will require shaping
3				Place 100mm of growth medium over disturbed area	Load and haul for 3km distance		Yes	9.6.4	56 250,00	m³/km	R 50,50	R 2 840 625,00	R 2 840 625,00	100mm Thick layer from local stockpiles Assume 3km load and haul distances.
4				Ripping	Ripping of areas to alleviate compaction		Yes	9.5.1	56,25	ha	R 16 317,00	R 917 831,25	R 917 831,25	500mm Deep ripping
5				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	56,25	ha	R 26 037,50	R 1 464 609,38	R 1 464 609,38	Includes soil amelioration, cultivation and seeding actions
					SUB-TOTAL 1								**R 9 172 631,25**	
					Preliminaries and General	6%							R 550 357,88	
					Contingency	10%							R 917 263,13	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 1 467 621,00**	
					GRAND-TOTAL								**R 10 640 252,25**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS							Closure Forecast						Y2030	
5,1	GENERAL SURFACES													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
													R 9 172 631,25	
1		A85 A86 A112	Y2023	**General Surface & Terrace Reclamation:**										
2				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	56,25	ha	R 70 214,50	R 3 949 565,63	R 3 949 565,63	Assumed 100% of footprint will require shaping
3				Place 100mm of growth medium over disturbed area	Load and haul for 3km distance		Yes	9.6.4	56 250,00	m³/km	R 50,50	R 2 840 625,00	R 2 840 625,00	100mm Thick layer from local stockpiles Assume 3km load and haul distances.
4				Ripping	Ripping of areas to alleviate compaction		Yes	9.5.1	56,25	ha	R 16 317,00	R 917 831,25	R 917 831,25	500mm Deep ripping
5				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	56,25	ha	R 26 037,50	R 1 464 609,38	R 1 464 609,38	Includes soil amelioration, cultivation and seeding actions
					SUB-TOTAL 1								**R 9 172 631,25**	
					Preliminaries and General	6%							R 550 357,88	
					Contingency	10%							R 917 263,13	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 1 467 621,00**	
					GRAND-TOTAL								**R 10 640 252,25**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS							Closure Forecast						Y2031	
5,1	GENERAL SURFACES													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
													R 9 172 631,25	
1		A85 A86 A112	Y2023	**General Surface & Terrace Reclamation:**										
2				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	56,25	ha	R 70 214,50	R 3 949 565,63	R 3 949 565,63	Assumed 100% of footprint will require shaping
3				Place 100mm of growth medium over disturbed area	Load and haul for 3km distance		Yes	9.6.4	56 250,00	m³/km	R 50,50	R 2 840 625,00	R 2 840 625,00	100mm Thick layer from local stockpiles Assume 3km load and haul distances.
4				Ripping	Ripping of areas to alleviate compaction		Yes	9.5.1	56,25	ha	R 16 317,00	R 917 831,25	R 917 831,25	500mm Deep ripping
5				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	56,25	ha	R 26 037,50	R 1 464 609,38	R 1 464 609,38	Includes soil amelioration, cultivation and seeding actions
					SUB-TOTAL 1								**R 9 172 631,25**	
					Preliminaries and General	6%							R 550 357,88	
					Contingency	10%							R 917 263,13	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 1 467 621,00**	
					GRAND-TOTAL								**R 10 640 252,25**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS							Closure Forecast						Y2032	
5,1	GENERAL SURFACES													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
													R 9 172 631,25	
1		A85 A86 A112	Y2023	**General Surface & Terrace Reclamation:**										
2				Shape and level disturbed area, leaving area free draining	Shaping, levelling of footprint areas (500mm)		Yes	10.1.1	56,25	ha	R 70 214,50	R 3 949 565,63	R 3 949 565,63	Assumed 100% of footprint will require shaping
3				Place 100mm of growth medium over disturbed area	Load and haul for 3km distance		Yes	9.6.4	56 250,00	m³/km	R 50,50	R 2 840 625,00	R 2 840 625,00	100mm Thick layer from local stockpiles Assume 3km load and haul distances.
4				Ripping	Ripping of areas to alleviate compaction		Yes	9.5.1	56,25	ha	R 16 317,00	R 917 831,25	R 917 831,25	500mm Deep ripping
5				Establish vegetation	Establishment of vegetation (general)		Yes	10.4.1	56,25	ha	R 26 037,50	R 1 464 609,38	R 1 464 609,38	Includes soil amelioration, cultivation and seeding actions
					SUB-TOTAL 1								**R 9 172 631,25**	
					Preliminaries and General	6%							R 550 357,88	
					Contingency	10%							R 917 263,13	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 1 467 621,00**	
					GRAND-TOTAL								**R 10 640 252,25**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS							Closure Forecast						Y2023	
5,2	POST CLOSURE MONITORING AND MAINTENANCE													
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1			Y2023	**Post Closure Monitoring:**									**R 7 093 415,00**	
2	7			Surface Water Quality Monitoring	Surface Water Quality		Yes	12.1.1	10,00	yr	R 71 380,00	R 713 800,00	R 713 800,00	Monitoring of 5 point post closure
3	8			Groundwater Quality Monitoring	Groundwater Quality		Yes	12.1.2	10,00	yr	R 77 450,00	R 774 500,00	R 774 500,00	Monitoring of 8 point post closure
4	9			Air Quality Monitoring	Air Quality		Yes	12.1.3	10,00	yr	R 77 732,00	R 777 320,00	R 777 320,00	Monitoring of 7 point post closure
5				Vegetation Monitoring	Vegetation (rehabilitation) Monitoring		Yes	12.1.8	7,00	yr	R 195 000,00	R 1 365 000,00	R 1 365 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
6				Biodiversity and Ecological Functioning Monitoring	Biodiversity and Ecological Functioning		Yes	12.1.9	7,00	yr	R 60 000,00	R 420 000,00	R 420 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
7				Care and maintenance of reclaimed areas	Stability post closure monitoring of the Pit and MRD's		Yes	12.1.5	10,00	yr	R 200 000,00	R 2 000 000,00	R 2 000 000,00	Allowance for 10 year monitoring post closure.
8				Annual Care and Maintaining of rehabilitated areas	Care and maintenance for a 10 year period		Yes	12.2.1	61,00	ha	R 17 095,00	R 1 042 795,00	R 1 042 795,00	Allowance for 10 year monitoring post closure.
						SUB-TOTAL 1							**R 7 093 415,00**	
						Preliminaries and General	0%						R -	
						Contingency	10%						R 709 341,50	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							**R 709 341,50**	
						GRAND-TOTAL							**R 7 802 756,50**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS														
5,2	POST CLOSURE MONITORING AND MAINTENANCE					Closure Forecast						Y2024		
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description	LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE		Notes
1			Y2023	**Post Closure Monitoring:**								R	7 093 415,00	
2	7			Surface Water Quality Monitoring	Surface Water Quality	Yes	12.1.1	10,00	yr	R 71 380,00	R 713 800,00	R	713 800,00	Monitoring of 5 point post closure
3	8			Groundwater Quality Monitoring	Groundwater Quality	Yes	12.1.2	10,00	yr	R 77 450,00	R 774 500,00	R	774 500,00	Monitoring of 8 point post closure
4	9			Air Quality Monitoring	Air Quality	Yes	12.1.3	10,00	yr	R 77 732,00	R 777 320,00	R	777 320,00	Monitoring of 7 point post closure
5				Vegetation Monitoring	Vegetation (rehabilitation) Monitoring	Yes	12.1.8	7,00	yr	R 195 000,00	R 1 365 000,00	R	1 365 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
6				Biodiversity and Ecological Functioning Monitoring	Biodiversity and Ecological Functioning	Yes	12.1.9	7,00	yr	R 60 000,00	R 420 000,00	R	420 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
7				Care and maintenance of reclaimed areas	Stability post closure monitoring of the Pit and MRD's	Yes	12.1.5	10,00	yr	R 200 000,00	R 2 000 000,00	R	2 000 000,00	Allowance for 10 year monitoring post closure.
8				Annual Care and Maintaining of rehabilitated areas	Care and maintenance for a 10 year period	Yes	12.2.1	61,00	ha	R 17 095,00	R 1 042 795,00	R	1 042 795,00	Allowance for 10 year monitoring post closure.
					SUB-TOTAL 1							R	7 093 415,00	
					Preliminaries and General	0%						R	-	
					Contingency	10%						R	709 341,50	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							R	709 341,50	
					GRAND-TOTAL							R	7 802 756,50	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS														
5,2	POST CLOSURE MONITORING AND MAINTENANCE						Closure Forecast						Y2025	
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1			Y2023	**Post Closure Monitoring:**									**R 7 295 990,75**	
2	7			Surface Water Quality Monitoring	Surface Water Quality		Yes	12.1.1	10,00	yr	R 71 380,00	R 713 800,00	R 713 800,00	Monitoring of 5 point post closure
3	8			Groundwater Quality Monitoring	Groundwater Quality		Yes	12.1.2	10,00	yr	R 77 450,00	R 774 500,00	R 774 500,00	Monitoring of 8 point post closure
4	9			Air Quality Monitoring	Air Quality		Yes	12.1.3	10,00	yr	R 77 732,00	R 777 320,00	R 777 320,00	Monitoring of 7 point post closure
5				Vegetation Monitoring	Vegetation (rehabilitation) Monitoring		Yes	12.1.8	7,00	yr	R 195 000,00	R 1 365 000,00	R 1 365 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
6				Biodiversity and Ecological Functioning Monitoring	Biodiversity and Ecological Functioning		Yes	12.1.9	7,00	yr	R 60 000,00	R 420 000,00	R 420 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
7				Care and maintenance of reclaimed areas	Stability post closure monitoring of the Pit and MRD's		Yes	12.1.5	10,00	yr	R 200 000,00	R 2 000 000,00	R 2 000 000,00	Allowance for 10 year monitoring post closure.
8				Annual Care and Maintaining of rehabilitated areas	Care and maintenance for a 10 year period		Yes	12.2.1	72,85	ha	R 17 095,00	R 1 245 370,75	R 1 245 370,75	Allowance for 10 year monitoring post closure.
					SUB-TOTAL 1								**R 7 295 990,75**	
					Preliminaries and General	0%							R -	
					Contingency	10%							R 729 599,08	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 729 599,08**	
					GRAND-TOTAL								**R 8 025 589,83**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS														
5,2	POST CLOSURE MONITORING AND MAINTENANCE						Closure Forecast						Y2026	
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1			Y2023	**Post Closure Monitoring:**									R 7 498 566,50	
2	7			Surface Water Quality Monitoring	Surface Water Quality		Yes	12.1.1	10,00	yr	R 71 380,00	R 713 800,00	R 713 800,00	Monitoring of 5 point post closure
3	8			Groundwater Quality Monitoring	Groundwater Quality		Yes	12.1.2	10,00	yr	R 77 450,00	R 774 500,00	R 774 500,00	Monitoring of 8 point post closure
4	9			Air Quality Monitoring	Air Quality		Yes	12.1.3	10,00	yr	R 77 732,00	R 777 320,00	R 777 320,00	Monitoring of 7 point post closure
5				Vegetation Monitoring	Vegetation (rehabilitation) Monitoring		Yes	12.1.8	7,00	yr	R 195 000,00	R 1 365 000,00	R 1 365 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
6				Biodiversity and Ecological Functioning Monitoring	Biodiversity and Ecological Functioning		Yes	12.1.9	7,00	yr	R 60 000,00	R 420 000,00	R 420 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
7				Care and maintenance of reclaimed areas	Stability post closure monitoring of the Pit and MRD's		Yes	12.1.5	10,00	yr	R 200 000,00	R 2 000 000,00	R 2 000 000,00	Allowance for 10 year monitoring post closure.
8				Annual Care and Maintaining of rehabilitated areas	Care and maintenance for a 10 year period		Yes	12.2.1	84,70	ha	R 17 095,00	R 1 447 946,50	R 1 447 946,50	Allowance for 10 year monitoring post closure.
						SUB-TOTAL 1							R 7 498 566,50	
						Preliminaries and General	0%						R -	
						Contingency	10%						R 749 856,65	
						SUB-TOTAL 2 (P&G's AND CONTINGENCIES)							R 749 856,65	
						GRAND-TOTAL							R 8 248 423,15	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS														
5,2	POST CLOSURE MONITORING AND MAINTENANCE						Closure Forecast						Y2027	
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1			Y2023	**Post Closure Monitoring:**									**R 7 701 142,25**	
2	7			Surface Water Quality Monitoring	Surface Water Quality		Yes	12.1.1	10,00	yr	R 71 380,00	R 713 800,00	R 713 800,00	Monitoring of 5 point post closure
3	8			Groundwater Quality Monitoring	Groundwater Quality		Yes	12.1.2	10,00	yr	R 77 450,00	R 774 500,00	R 774 500,00	Monitoring of 8 point post closure
4	9			Air Quality Monitoring	Air Quality		Yes	12.1.3	10,00	yr	R 77 732,00	R 777 320,00	R 777 320,00	Monitoring of 7 point post closure
5				Vegetation Monitoring	Vegetation (rehabilitation) Monitoring		Yes	12.1.8	7,00	yr	R 195 000,00	R 1 365 000,00	R 1 365 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
6				Biodiversity and Ecological Functioning Monitoring	Biodiversity and Ecological Functioning		Yes	12.1.9	7,00	yr	R 60 000,00	R 420 000,00	R 420 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
7				Care and maintenance of reclaimed areas	Stability post closure monitoring of the Pit and MRD's		Yes	12.1.5	10,00	yr	R 200 000,00	R 2 000 000,00	R 2 000 000,00	Allowance for 10 year monitoring post closure.
8				Annual Care and Maintaining of rehabilitated areas	Care and maintenance for a 10 year period		Yes	12.2.1	96,55	ha	R 17 095,00	R 1 650 522,25	R 1 650 522,25	Allowance for 10 year monitoring post closure.
					SUB-TOTAL 1								**R 7 701 142,25**	
					Preliminaries and General	0%							R -	
					Contingency	10%							R 770 114,23	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 770 114,23**	
					GRAND-TOTAL								**R 8 471 256,48**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS														
5,2	POST CLOSURE MONITORING AND MAINTENANCE						Closure Forecast						Y2028	
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1			Y2023	**Post Closure Monitoring:**									**R 7 903 718,00**	
2	7			Surface Water Quality Monitoring	Surface Water Quality		Yes	12.1.1	10,00	yr	R 71 380,00	R 713 800,00	R 713 800,00	Monitoring of 5 point post closure
3	8			Groundwater Quality Monitoring	Groundwater Quality		Yes	12.1.2	10,00	yr	R 77 450,00	R 774 500,00	R 774 500,00	Monitoring of 8 point post closure
4	9			Air Quality Monitoring	Air Quality		Yes	12.1.3	10,00	yr	R 77 732,00	R 777 320,00	R 777 320,00	Monitoring of 7 point post closure
5				Vegetation Monitoring	Vegetation (rehabilitation) Monitoring		Yes	12.1.8	7,00	yr	R 195 000,00	R 1 365 000,00	R 1 365 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
6				Biodiversity and Ecological Functioning Monitoring	Biodiversity and Ecological Functioning		Yes	12.1.9	7,00	yr	R 60 000,00	R 420 000,00	R 420 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
7				Care and maintenance of reclaimed areas	Stability post closure monitoring of the Pit and MRD's		Yes	12.1.5	10,00	yr	R 200 000,00	R 2 000 000,00	R 2 000 000,00	Allowance for 10 year monitoring post closure.
8				Annual Care and Maintaining of rehabilitated areas	Care and maintenance for a 10 year period		Yes	12.2.1	108,40	ha	R 17 095,00	R 1 853 098,00	R 1 853 098,00	Allowance for 10 year monitoring post closure.
												SUB-TOTAL 1	**R 7 903 718,00**	
												Preliminaries and General	R -	
						0%						Contingency	R 790 371,80	
						10%						**SUB-TOTAL 2 (P&G's AND CONTINGENCIES)**	**R 790 371,80**	
												GRAND-TOTAL	**R 8 694 089,80**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS														
5,2	POST CLOSURE MONITORING AND MAINTENANCE						Closure Forecast						Y2029	
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1			Y2023	**Post Closure Monitoring:**									**R 8 106 293,75**	
2	7			Surface Water Quality Monitoring	Surface Water Quality		Yes	12.1.1	10,00	yr	R 71 380,00	R 713 800,00	R 713 800,00	Monitoring of 5 point post closure
3	8			Groundwater Quality Monitoring	Groundwater Quality		Yes	12.1.2	10,00	yr	R 77 450,00	R 774 500,00	R 774 500,00	Monitoring of 8 point post closure
4	9			Air Quality Monitoring	Air Quality		Yes	12.1.3	10,00	yr	R 77 732,00	R 777 320,00	R 777 320,00	Monitoring of 7 point post closure
5				Vegetation Monitoring	Vegetation (rehabilitation) Monitoring		Yes	12.1.8	7,00	yr	R 195 000,00	R 1 365 000,00	R 1 365 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
6				Biodiversity and Ecological Functioning Monitoring	Biodiversity and Ecological Functioning		Yes	12.1.9	7,00	yr	R 60 000,00	R 420 000,00	R 420 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
7				Care and maintenance of reclaimed areas	Stability post closure monitoring of the Pit and MRD's		Yes	12.1.5	10,00	yr	R 200 000,00	R 2 000 000,00	R 2 000 000,00	Allowance for 10 year monitoring post closure.
8				Annual Care and Maintaining of rehabilitated areas	Care and maintenance for a 10 year period		Yes	12.2.1	120,25	ha	R 17 095,00	R 2 055 673,75	R 2 055 673,75	Allowance for 10 year monitoring post closure.
					SUB-TOTAL 1								**R 8 106 293,75**	
					Preliminaries and General	0%							R -	
					Contingency	10%							R 810 629,38	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 810 629,38**	
					GRAND-TOTAL								**R 8 916 923,13**	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS														
5,2	POST CLOSURE MONITORING AND MAINTENANCE						Closure Forecast						Y2030	
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1			Y2023	**Post Closure Monitoring:**									**R 8 308 869,50**	
2	7			Surface Water Quality Monitoring	Surface Water Quality		Yes	12.1.1	10,00	yr	R 71 380,00	R 713 800,00	R 713 800,00	Monitoring of 5 point post closure
3	8			Groundwater Quality Monitoring	Groundwater Quality		Yes	12.1.2	10,00	yr	R 77 450,00	R 774 500,00	R 774 500,00	Monitoring of 8 point post closure
4	9			Air Quality Monitoring	Air Quality		Yes	12.1.3	10,00	yr	R 77 732,00	R 777 320,00	R 777 320,00	Monitoring of 7 point post closure
5				Vegetation Monitoring	Vegetation (rehabilitation) Monitoring		Yes	12.1.8	7,00	yr	R 195 000,00	R 1 365 000,00	R 1 365 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
6				Biodiversity and Ecological Functioning Monitoring	Biodiversity and Ecological Functioning		Yes	12.1.9	7,00	yr	R 60 000,00	R 420 000,00	R 420 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
7				Care and maintenance of reclaimed areas	Stability post closure monitoring of the Pit and MRD's		Yes	12.1.5	10,00	yr	R 200 000,00	R 2 000 000,00	R 2 000 000,00	Allowance for 10 year monitoring post closure.
8				Annual Care and Maintaining of rehabilitated areas	Care and maintenance for a 10 year period		Yes	12.2.1	132,10	ha	R 17 095,00	R 2 258 249,50	R 2 258 249,50	Allowance for 10 year monitoring post closure.
					SUB-TOTAL 1								**R 8 308 869,50**	
					Preliminaries and General	0%							R -	
					Contingency	10%							R 830 886,95	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 830 886,95**	
					GRAND-TOTAL								**R 9 139 756,45**	

Jindal Melmoth Iron Ore - EIA

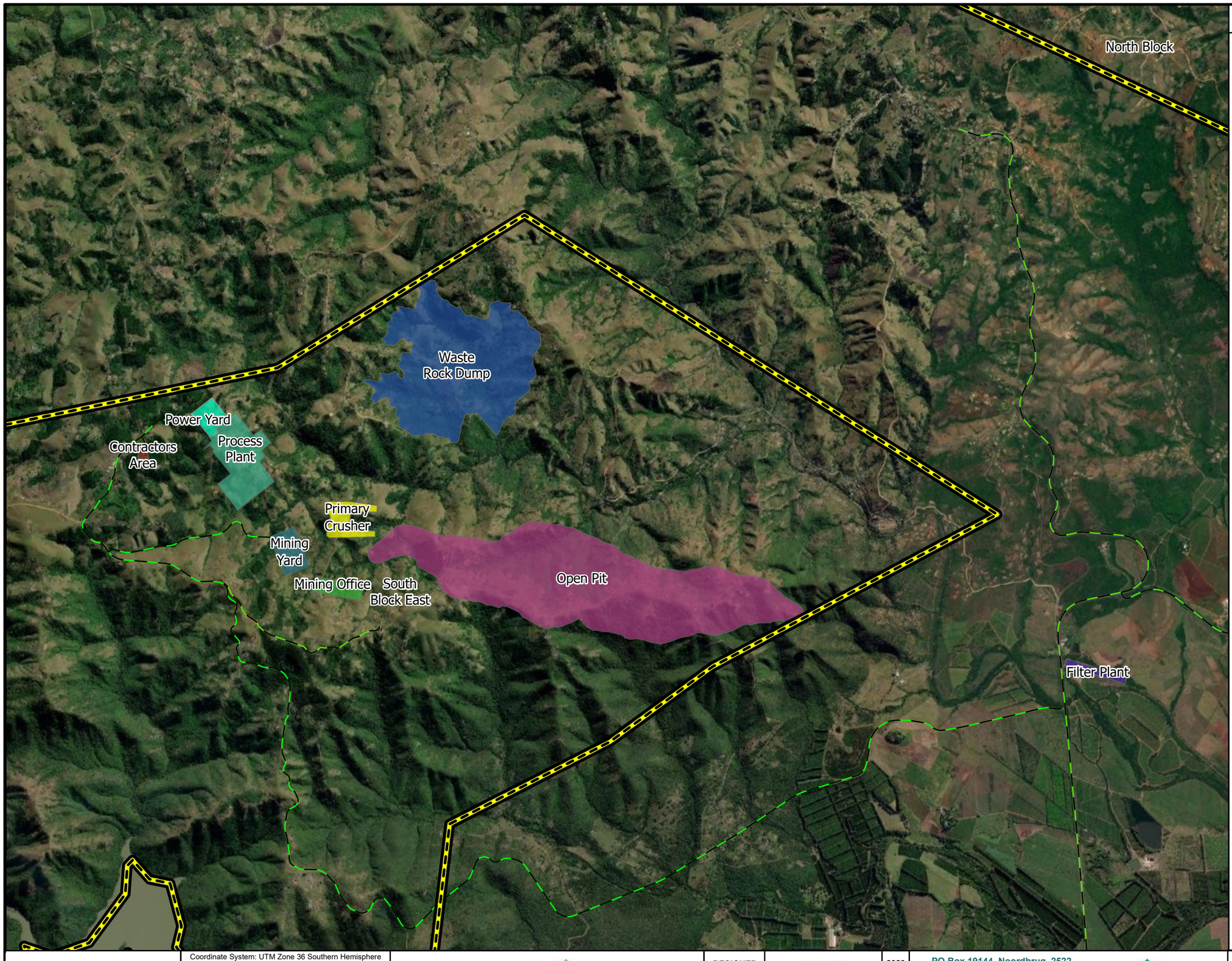
Financial Provision FY2023

GENERAL ASPECTS														
5,2	POST CLOSURE MONITORING AND MAINTENANCE						Closure Forecast						Y2031	
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1			Y2023	**Post Closure Monitoring:**									R 8 511 445,25	
2	7			Surface Water Quality Monitoring	Surface Water Quality		Yes	12.1.1	10,00	yr	R 71 380,00	R 713 800,00	R 713 800,00	Monitoring of 5 point post closure
3	8			Groundwater Quality Monitoring	Groundwater Quality		Yes	12.1.2	10,00	yr	R 77 450,00	R 774 500,00	R 774 500,00	Monitoring of 8 point post closure
4	9			Air Quality Monitoring	Air Quality		Yes	12.1.3	10,00	yr	R 77 732,00	R 777 320,00	R 777 320,00	Monitoring of 7 point post closure
5				Vegetation Monitoring	Vegetation (rehabilitation) Monitoring		Yes	12.1.8	7,00	yr	R 195 000,00	R 1 365 000,00	R 1 365 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
6				Biodiversity and Ecological Functioning Monitoring	Biodiversity and Ecological Functioning		Yes	12.1.9	7,00	yr	R 60 000,00	R 420 000,00	R 420 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
7				Care and maintenance of reclaimed areas	Stability post closure monitoring of the Pit and MRD's		Yes	12.1.5	10,00	yr	R 200 000,00	R 2 000 000,00	R 2 000 000,00	Allowance for 10 year monitoring post closure.
8				Annual Care and Maintaining of rehabilitated areas	Care and maintenance for a 10 year period		Yes	12.2.1	143,95	ha	R 17 095,00	R 2 460 825,25	R 2 460 825,25	Allowance for 10 year monitoring post closure.
					SUB-TOTAL 1								R 8 511 445,25	
					Preliminaries and General	0%							R -	
					Contingency	10%							R 851 144,53	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								R 851 144,53	
					GRAND-TOTAL								R 9 362 589,78	

Jindal Melmoth Iron Ore - EIA

Financial Provision FY2023

GENERAL ASPECTS														
5,2	POST CLOSURE MONITORING AND MAINTENANCE						Closure Forecast						Y2032	
Line No	Reference Map	GEO Reference	Year Captured	COST COMPONENT	Description		LIABLE	Rate Code	QUANTITY	Unit	Unit Rate	Unit Total	LIABLE VALUE	Notes
1			Y2023	**Post Closure Monitoring:**									**R 8 714 021,00**	
2	7			Surface Water Quality Monitoring	Surface Water Quality		Yes	12.1.1	10,00	yr	R 71 380,00	R 713 800,00	R 713 800,00	Monitoring of 5 point post closure
3	8			Groundwater Quality Monitoring	Groundwater Quality		Yes	12.1.2	10,00	yr	R 77 450,00	R 774 500,00	R 774 500,00	Monitoring of 8 point post closure
4	9			Air Quality Monitoring	Air Quality		Yes	12.1.3	10,00	yr	R 77 732,00	R 777 320,00	R 777 320,00	Monitoring of 7 point post closure
5				Vegetation Monitoring	Vegetation (rehabilitation) Monitoring		Yes	12.1.8	7,00	yr	R 195 000,00	R 1 365 000,00	R 1 365 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
6				Biodiversity and Ecological Functioning Monitoring	Biodiversity and Ecological Functioning		Yes	12.1.9	7,00	yr	R 60 000,00	R 420 000,00	R 420 000,00	Monitoring to be done as follows over a period of 10 years: **Year 1 - 4:** Annual monitoring (year 1 would be baseline) **Year 5 - 10**: Monitoring to be done every 2 years (Year 6, 8 and 10)
7				Care and maintenance of reclaimed areas	Stability post closure monitoring of the Pit and MRD's		Yes	12.1.5	10,00	yr	R 200 000,00	R 2 000 000,00	R 2 000 000,00	Allowance for 10 year monitoring post closure.
8				Annual Care and Maintaining of rehabilitated areas	Care and maintenance for a 10 year period		Yes	12.2.1	155,80	ha	R 17 095,00	R 2 663 401,00	R 2 663 401,00	Allowance for 10 year monitoring post closure.
					SUB-TOTAL 1								**R 8 714 021,00**	
					Preliminaries and General	0%							R -	
					Contingency	10%							R 871 402,10	
					SUB-TOTAL 2 (P&G's AND CONTINGENCIES)								**R 871 402,10**	
					GRAND-TOTAL								**R 9 585 423,10**	



LEGEND

- Main Road

Area

- Contractors Area
- Filter Plant
- Mining Office
- Mining Yard
- Open Pit
- Primary Crusher
- Process Plant
- Waste Rock Dump
- Power Yard
- Mining Rights

JINDAL AFRICA

Coordinate System: UTM Zone 36 Southern Hemisphere
Projection: Transverse Mercator
Datum: WGS84
false easting: 500 000,0000
false northing: 10 000 000,0000
central meridian: 33,0000
scale factor: 0,9996
latitude of origin: 0,0000
Units: Meter
Date: 2023/03/06

N

DESIGNED	M KRUGER	2023
DRAWN	M KRUGER	2023
CHECKED	LM KOEKEMOER	2023
	NAME	DATE

PO Box 19144, Noordbrug, 2522
11 Luke Str, Potchefstroom, 2531

Cell: +27 76 730 3983
Tel: +27 18 294 3652
Fax: +27 86 685 5473

Website: www.etekconsulting.co.za

E-TEK CONSULTING

CLIENT NAME : JINDAL MINE
PROJECT DESCRIPTION : JINDAL EIA
PROJECT NO : PN100519

DRAWING NO : 00 - GENERAL LAYOUT

LEGEND

- Fencing
- Pipeline
- Plant Road
- Powerlines
- Infrastructure

REFERENCE LIST

Area A : Mine Surface Infrastructure

A1 Process Substation
A2 Process Substation
A3 Process Substation
A4 Process Substation
A5 Canteen
A6 Weighbridge
A7 First Aid Building
A8 Compressor House
A9 Warehouse
A10 Store & Offices
A11 Sewage Treatment Plant
A12 Administration & Training Offices
A13 Washday
A14 Diesel Storage Area
A15 Gas Bottle Storage & Chiller Enclosure
A16 Analytical Laboratory
A17 Primary Security Gate House
A18 Change House & Laundry
A19 Conveyor
A20 Conveyor
A21 Conveyor
A22 Conveyor
A23 Conveyor
A24 Conveyor
A25 Conveyor
A26 Conveyor
A27 Conveyor
A28 Pollution Control Dam
A29 Secondary Crusher
A30 Raw Water Dam
A31 Coarse Ore Stockpile Feeder
A32 Concentrate Thickener
A33 Control Room
A34 Tailings Thickener
A35 Control Room
A36 Control Room
A37 Concentrate Thickener
A38 TMF Feed Tank & Concentrate Transfer Tank
A39 Water Treatment Plant
A40 Water Treatment Plant
A41 Water Treatment Plant
A42 Water Treatment Plant
A43 Secondary Screening Plant
A44 HPGR Screening
A45 Primary Bay Mills
A46 Regrind Bay Mill
A47 HPGR Crushing
A48 HPGR Crushing
A49 HPGR Crushing
A50 Low Intensity Magnetic Separation
A51 Wet Intensity Magnetic Separation
A52 Main Substation
A53 CMS
A54 Process Substation
A55 Central/Primary Control Room
A56 Prosses Water Dam
A78 Security Fencing
A79 Stock Fencing
A84 Plant Road
A94 Storm Water Culvert
A95 Storm Water Culvert
A96 Storm Water Culvert
A97 Plant Engineered Terrace
A98 Waste Area and Skips
A101 - A106 Storm Water Culvert
A107 Main Access Road
A108 Eskom Yard
A111 Powerlines

JINDAL AFRICA

Coordinate System: UTM Zone 36 Southern Hemisphere
Projection: Transverse Mercator
Datum: WGS84
false easting: 500 000,0000
false northing: 10 000 000,0000
central meridian: 33,0000
scale factor: 0,9996
latitude of origin: 0,0000
Units: Meter
Date: 2023/03/06

DESIGNED	M KRUGER	2023	
DRAWN	M KRUGER	2023	
CHECKED	LM KOEKEMOER	2023	
	NAME	DATE	

PO Box 19144, Noordbrug, 2522
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E-TEK CONSULTING

CLIENT NAME :	JINDAL MINE
PROJECT DESCRIPTION :	JINDAL EIA
PROJECT NO :	PN100519

DRAWING NO : **01 - PROCESS PLANT**

LEGEND

- Fencing
- Pipeline
- Plant Road
- Powerlines
- Infrastructure

REFERENCE LIST

Area A : Mine Surface Infrastructure

A60 Control Room - Rail Load Out
A61 Amenities Building
A62 Office
A63 Substation
A64 Workshop & Stores
A65 Pump House
A66 Slurry Tank
A67 Slurry Tank
A68 Transfer Conveyor
A69 Filter Press
A70 Filter Press
A71 Filter Press
A72 Filter Press
A73 Thickener
A74 Return Water Dam
A75 Stockpile Platform
A76 Pollution Control Dam
A77 Load Out Bin
A80 Security Fencing
A83 Pipeline

JINDAL AFRICA

Coordinate System: UTM Zone 36 Southern Hemisphere
Projection: Transverse Mercator
Datum: WGS84
false easting: 500 000,0000
false northing: 10 000 000,0000
central meridian: 33,0000
scale factor: 0,9996
latitude of origin: 0,0000
Units: Meter
Date: 2023/03/06

DESIGNED	M KRUGER	2023
DRAWN	M KRUGER	2023
CHECKED	LM KOEKEMOER	2023
	NAME	DATE

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E-TEK CONSULTING

CLIENT NAME :	JINDAL MINE
PROJECT DESCRIPTION :	JINDAL EIA
PROJECT NO :	PN100519

DRAWING NO : 02 - FILTER PLANT

LEGEND

- Fencing
- Plant Road
- Pipeline
- Powerlines
- Infrastructure
- Haul Road

REFERENCE LIST

Area A : Mine Surface Infrastructure

A57 Primary Crusher:
A58 Explosive Magazines
A59 Explosive Magazines Fencing
A81 Security Fencing
A82 Security Fencing
A83 Pipeline
A85 Mining Yard Engineered Terrace
A86 Mining Office Engineered Terrace
A99 Pollution Control Dam
A100 Pollution Control Dam
A110 Haul Road
A112 Contractors Engineered Terrace

JINDAL AFRICA

Coordinate System: UTM Zone 36 Southern Hemisphere
Projection: Transverse Mercator
Datum: WGS84
false easting: 500 000,0000
false northing: 10 000 000,0000
central meridian: 33,0000
scale factor: 0,9996
latitude of origin: 0,0000
Units: Meter
Date: 2023/03/06

DESIGNED	M KRUGER	2023
DRAWN	M KRUGER	2023
CHECKED	LM KOEKEMOER	2023
	NAME	DATE

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E-TEK CONSULTING

CLIENT NAME : JINDAL MINE
PROJECT DESCRIPTION : JINDAL EIA
PROJECT NO : PN100519

DRAWING NO : 03 - CRUSHER AND TERRACES

LEGEND

- E-SW1
- E-SW2
- E-SW3
- E-SW4
- E-SW5
- E-SW6
- E-SW7

REFERENCE LIST

Area A : Mine Surface Infrastructure

A87 Storm Water Channel E-SW1
A88 Storm Water Channel E-SW2
A89 Storm Water Channel E-SW3
A90 Storm Water Channel E-SW4
A91 Storm Water Channel E-SW5
A92 Storm Water Channel E-SW6
A93 Storm Water Channel E-SW7
A94 Storm Water Culvert
A95 Storm Water Culvert
A96 Storm Water Culvert

JINDAL AFRICA

Coordinate System: WGS 1984 UTM Zone 36S
Projection: Transverse Mercator
Datum: WGS 1984
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False Northing: 10 000 000,0000
Central Meridian: 33,0000
Scale Factor: 0,9996
Latitude Of Origin: 0,0000
Units: Meter
Date: 2023/03/06

DESIGNED	M KRUGER	2023
DRAWN	M KRUGER	2023
CHECKED	LM KOEKEMOER	2023
	NAME	DATE

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11 Luke Str, Potchefstroom, 2531

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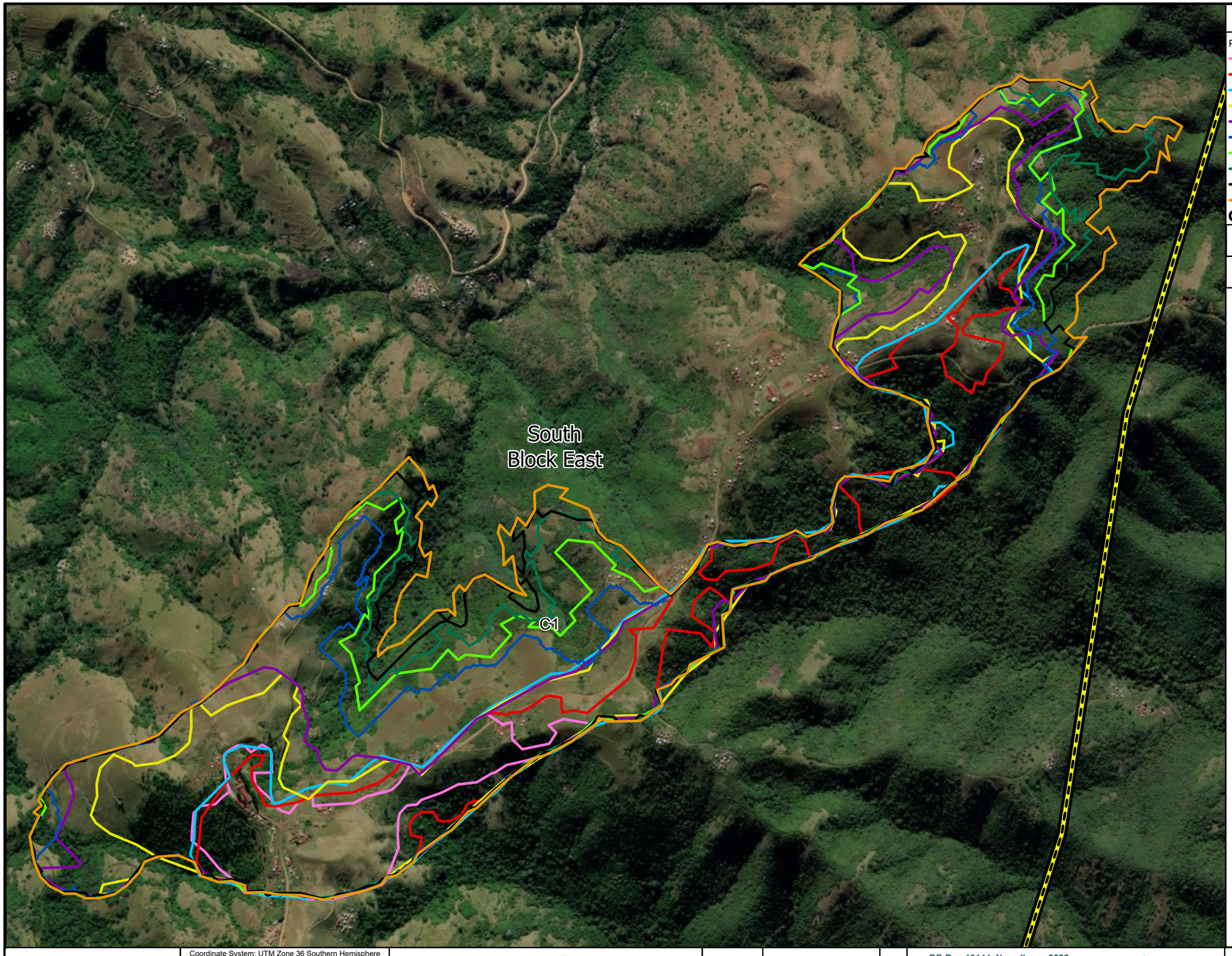
E-TEK CONSULTING

CLIENT NAME : JINDAL MINE
PROJECT DESCRIPTION : JINDAL EIA
PROJECT NO : PN100519

DRAWING NO : 04 - Storm Water Channels



LEGEND

Pit Expansion
- Year 1
- Year 2
- Year 3
- Year 4
- Year 5
- Year 6
- Year 7
- Year 8
- Year 9
- Year 10
- Mining Rights

REFERENCE LIST

Area C : Mining Aspects

C1 Open Pit

JINDAL AFRICA

Coordinate System: UTM Zone 36 Southern Hemisphere
Projection: Transverse Mercator
Datum: WGS84
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false northing: 10,000,000.0000
central meridian: 33.0000
scale factor: 0.9996
latitude of origin: 0.0000
Units: Meter
Date: 3/7/2023

N

DESIGNED	M KRUGER	2023
DRAWN	M KRUGER	2023
CHECKED	LM KOEKEMOER	2023
	NAME	DATE

PO Box 19144, Noordbrug, 2522
11 Luke Str, Potchefstroom, 2531

Cell: +27 76 730 3983
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E-TEK CONSULTING

CLIENT NAME : JINDAL MINE
PROJECT DESCRIPTION : JINDAL EIA
PROJECT NO : PN100519

DRAWING NO : 05 - Open Pit

LEGEND

Waste Rock Dump
Storm Water Trench
Waste Rock Dump
Mining Rights

REFERENCE LIST

Area C : Mining Aspects

C2 Waste Rock Dump
A109 Stormwater Diversion Trench at Waste Rock Dump

JINDAL AFRICA

Coordinate System: UTM Zone 36 Southern Hemisphere
Projection: Transverse Mercator
Datum: WGS84
false easting: 500 000,0000
false northing: 10 000 000,0000
central meridian: 33,0000
scale factor: 0,9996
latitude of origin: 0,0000
Units: Meter
Date: 2023/03/06

DESIGNED	M KRUGER	2023
DRAWN	M KRUGER	2023
CHECKED	LM KOEKEMOER	2023
	NAME	DATE

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11 Luke Str, Potchefstroom, 2531

Cell: +27 76 730 3983
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Website: www.etekconsulting.co.za

E-TEK CONSULTING

CLIENT NAME : JINDAL MINE
PROJECT DESCRIPTION : JINDAL EIA
PROJECT NO : PN100519

DRAWING NO : 06 - Waste Rock Dump

E-TEK CONSULTING
11 Luke Street, Potchefstroom, 2531
www.etekconsulting.co.za
Tel: +27 (0)18 294 3652

JINDAL MINE MONITORING: SURFACE WATER POST CLOSURE

Legend

- Current Surface Water Monitoring Points
- Proposed Surface Water Monitoring Points
- Flow Direction
- Non-perennial River
- Perennial River
- Mining Rights

N

0 1 2 3 km

Coordinate System: Transverse Mercator
Datum: Cape
Units: Degree
Author: M Kruger
Approved by: Jeanette Erasmus
Date: January 2023
Data Source: Jindal Melmoth Iron Ore Project
Surface Water Specialist Scoping Report
Report No - 720.10023.00001

JINDAL AFRICA

Surface Water Quality Monitoring Post Closure		
Name	South	East
Proposed Points		
P1	-28,740389	31,435025
P2	-28,746468	31,489865
P3	-28,733299	31,552767
Current Points		
SW5	-28.653209	31.407021
SW9	-28.715301	31.509862

SW5
North Block
SW9
South Block East
South Block West
P1
P2
P3

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11 Luke Street, Potchefstroom, 2531
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Tel: +27 (0)18 294 3652

JINDAL MINE MONITORING: GROUND WATER POST CLOSURE

Legend

- Current Groundwater Monitoring Points
- Proposed Groundwater Monitoring Points
- Non-perennial River
- Perennial River
- Mining Rights

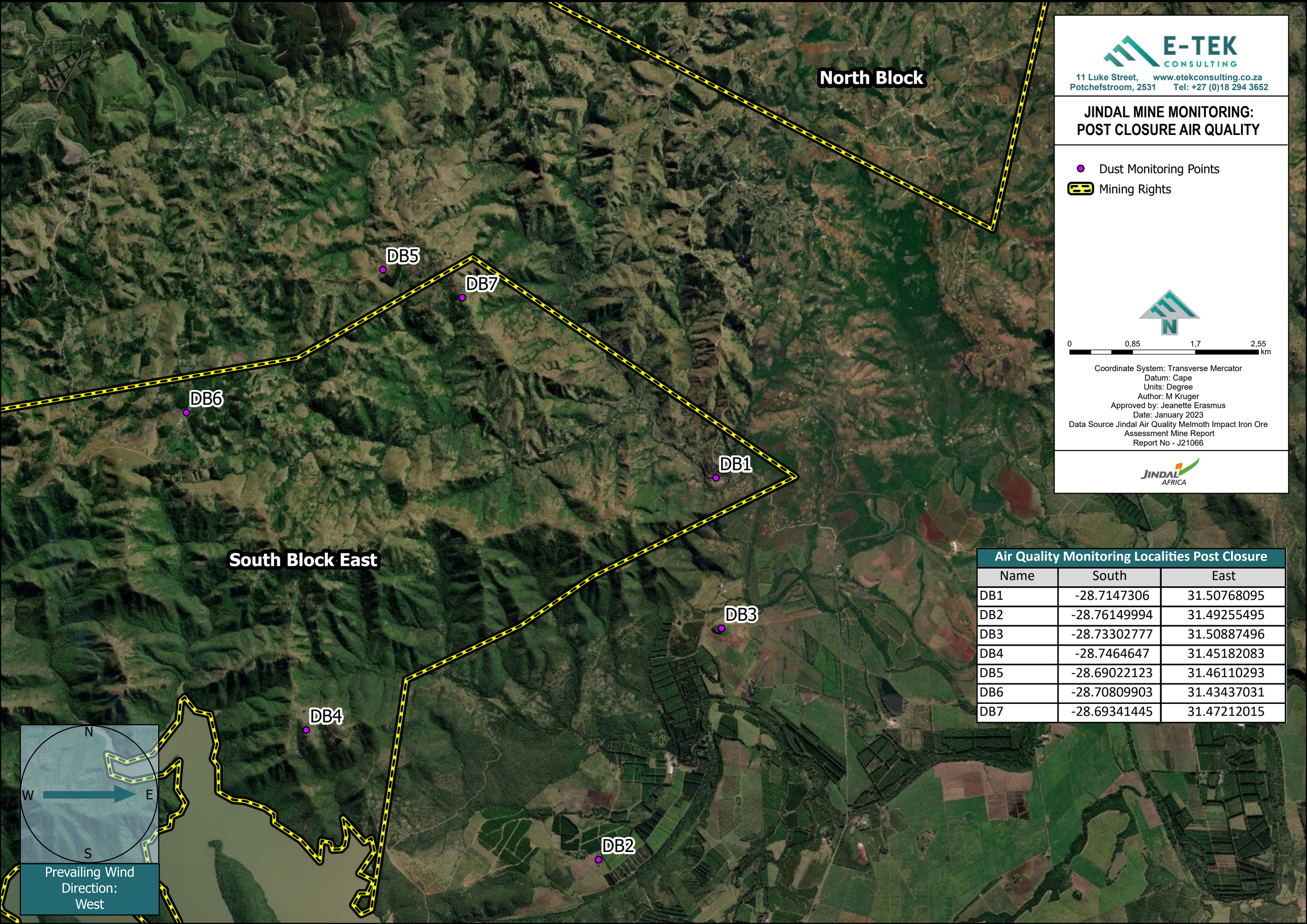
N

0 0,55 1,1 1,65 km

Coordinate System: Transverse Mercator
Datum: Cape
Units: Degree
Author: M Kruger
Approved by: Jeanette Erasmus
Date: January 2023
Data Source: SUNGU SUNGU MAIN FIELD STUDY Interim Hydrogeological Study and Modelling Report
Report No - 13614981-13376-5

JINDAL AFRICA

Ground Water Quality Monitoring Localities Post Closure		
Name	South	East
Proposed Points		
P1	-28,741714	31,474617
P2	-28,735962	31,49134
P3	-28,727579	31,508208
P4	-28,710911	31,463552
P5	-28,714439	31,441486
Current Points		
MWGA02	-28.709432	31.496258
MWGA03	-28.721327	31.498837
MWGA07	-28.716534	31.479255



E-TEK CONSULTING
11 Luke Street, Potchefstroom, 2531
www.etekconsulting.co.za
Tel: +27 (0)18 294 3652

JINDAL MINE MONITORING: POST CLOSURE AIR QUALITY

- Dust Monitoring Points
- Mining Rights

0 0,85 1,7 2,55 km

Coordinate System: Transverse Mercator
Datum: Cape
Units: Degree
Author: M Kruger
Approved by: Jeanette Erasmus
Date: January 2023
Data Source Jindal Air Quality Melmoth Impact Iron Ore Assessment Mine Report
Report No - J21066

JINDAL AFRICA

Air Quality Monitoring Localities Post Closure

Name	South	East
DB1	-28.7147306	31.50768095
DB2	-28.76149994	31.49255495
DB3	-28.73302777	31.50887496
DB4	-28.7464647	31.45182083
DB5	-28.69022123	31.46110293
DB6	-28.70809903	31.43437031
DB7	-28.69341445	31.47212015