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## **PROPOSAL**

### **Mine Planning and Electrical Engineering Support Contract Extension**

Trinity Metals Group

**Proposal Number:** 2023-143-02

**Date:** 25 July 2024



**Bara Consulting (Pty) Ltd**  
PO Box 496  
Cresta  
2118  
South Africa

25 July 2024

**Trinity Metals Group**

PO Box 7149  
Kigali  
Rwanda

**Attention: Mr. Calvin Whitford**

Dear Sir

**RE: Mine Planning and Electrical Engineering Support Contract Extension**

Thank you for considering Bara Consulting to continue to assist you with the mine planning and electrical engineering support. We are pleased submit this proposal for the extension of our contract for your consideration.

We hope that you find this proposal complete and in accordance with your requirements. However, please do not hesitate to contact us, should you wish to discuss any aspect of it in more detail.

Yours faithfully

Clive Brown  
Director

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Directors

A D Pooley (Chairman) – E de Villiers (Managing) – K Lachman (Financial) – C W Brown

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## **1 BACKGROUND**

Trinity Metals Group (Trinity) operate three mines Rutongo, Nyakabingo and Musha in Rwanda. During the last quarter of 2023 and the first half of 2024 Bara consulting have been engaged by Trinity to support the operation both in mine planning and electrical engineering support. The contract for the supply of these services expired at the end of June 2024.

Trinity have identified that they continue to require Bara to support the operations in both mine planning and electrical engineering disciplines. In addition, some aspects of the life of mine planning, which were planned to be completed under the previous contract were delayed and still need to be completed.

Trinity have approached Bara to assist them with the undertaking this work and we are happy to present this proposal for your consideration.

## **2 RECONCILIATION OF WORK COMPLETED AND INVOICED AMOUNTS AGAINST PREVIOUS CONTRACT**

In the mine planning section of the previous scope of work certain aspects were not completed and still require further work. The table below summarises the percentage completion of the line items in the scope of work.

Task No	Project Task	Total cost US\$ (Excl. VAT)	% Complete 22 July 2024
1.0	<b>Project management and administration</b>	5,520	100%
2.0	<b>Musha Mine</b>		
2.1	Level tramping trade-off (railbound vs rubber tyred)	2,568	100%
2.2	Mine design criteria document	580	100%
2.3	Revise mining layouts	940	100%
2.4	Mine Schedule	940	100%
3.0	<b>Nyakabingo Mine</b>		
3.1	Trackless equipment selection	1,848	100%
3.2	Mine design criteria document	580	0
3.3	Mining layout	3,320	75%
3.4	Mine Schedule	3,320	75%
4.0	<b>Rutongo Mine</b>		
4.1	Masoro trade-off study (Haulage to Nyamyumba vs plant vs aerial cableway)		
4.1.1	Capital cost of proceeding with BV33 haulage	1,568	100%
4.1.2	Operating cost of tramping ore via BV33	2,008	100%
4.1.3	Capital and opex cost of preconcentration plant	440	100%
4.1.4	Capital cost of road and infrastructure for truck hauling	1,128	100%
4.1.5	Operating cost of truck hauling	660	100%
4.1.6	Aerial ropeway concept design	2,312	100%
4.1.7	Capital cost and operating cost of aerial ropeway	440	100%
4.1.8	High level implementation schedule for each option	1,760	100%
4.1.9	Cashflow modelling of options	1,760	100%
4.1.10	Trade-off selection matrix	1,760	100%
4.1.11	Reporting Note for record	1,788	50%
4.2	Nyamyumba below BV33 access trade-off (ramp vs shaft)		
4.2.1	Assess capacity of current winder	784	100%
4.2.2	Conceptual shaft design	1,156	100%
4.2.3	Conceptual inclined shaft design	1,046	100%
4.2.4	Conceptual trackless ramp design	1,816	100%
4.2.5	Review of designs to ensure integration with BV33 logistics arrangements	1,320	100%
4.2.6	Shaft capital and opex estimates (Vertical and inclined shaft)	880	100%
4.2.7	Ramp capital and opex estimates	1,100	100%
4.2.8	High level implementation schedule for each option	1,760	100%
4.2.9	Cost summary of all options	1,320	100%
4.2.10	Selection of preferred option	880	100%
4.2.11	Reporting (NFR)	2,256	100%
4.3	Mine design criteria document	580	0%
4.4	Mining layout	5,400	25%
4.5	Mine Schedule	3,600	25%
5.0	<b>Reporting</b>		
5.1	Monthly progress reports	1,380	100%
5.2	Final report	10,392	0
6.0	<b>Site visits</b>		
	3 visits of 6 days (including travel)	15,840	100%
	Disbursements (estimate)		
	Airfares (x3)	6,000	100%
	Airtime, taxis etc (x3)	600	100%
	Administration fee (7%)	6,535	78%
	<b>Total Cost Estimate</b>	<b>99,885</b>	<b>78%</b>

The value invoiced over the term of the contract versus the budget in the previous contract is tabled below.

Item	Mine planning	Electrical support	Total contract
Budget	99,885	18,639	118,523
Invoiced	43,211	14,374	57,585
Remaining Budget	56,674	4,265	60,939

An amount of US\$60,939 remains unspent on the previous contract.

### **3 SCOPE OF WORK**

#### **3.1 Project management**

Bara will appoint a project manager to take overall responsibility for the administration and coordination of the consulting team, ensuring timeous delivery of the design work within the project budget. The project manager will be the key contact in respect to the work and will report to the directly to Trinity.

#### **3.2 Mine planning**

##### **3.2.1 Operational support**

Trinity have requested that Bara make a mining engineer available to provide operational support to the operations for a maximum of three days per month. This operational support will include, but is not limited to:

- Attending meetings and workshops
- Review of mine plans, layouts and schedules
- Training on mining engineering and mine planning

Bara will only invoice for the time used which will be a maximum of three days (24 hours) per month for this support.

##### **3.2.2 Life of mine layouts and schedules**

The life of mine plan layouts and schedules for Musha, Nyakabingo and Rutongo were not completed by end of June 2024. Work will continue on these plans over the coming months as the required data, including the geological resource models and processing plans, become available.

### 3.2.3 Ventilation plans

All three mines require ventilation plans to be completed as they are all developing below the lowest adit level and can no longer rely on natural ventilation. In addition, the use of larger diesel powered mining equipment will increase the quantity of ventilation required in the mines and requires a plan to provide and reticulate this ventilation.

Bara will prepare ventilation plans for the mine which will include:

- Design of the ventilation circuit
- Specification of the primary and secondary fans
- Typical ventilation layouts for development and production activities
- Specification of the electrical reticulation to supply the fans, including starter panels and cabling

### 3.2.4 Underground pumping designs

All three mines require a design for dewatering of the underground workings. All three mines have advanced below the lowest adit level and the current development workings are the lowest point in the mines. All water entering the mine needs to be captured and removed from the mine to avoid flooding of the workings. Water reporting below the lowest adit will need to be pumped out of the mine. Engineering designs need to be completed which will include:

- Specification of pumps including face pumps and main pumps
- Specification of piping for the pumping of underground water
- Layouts and designs for sumps, pump stations and dams
- General arrangement drawings of required pump stations will be provided.
- Specification of the electrical reticulation for the pump stations, including motor control centres, cabling and control equipment

### 3.2.5 Life of mine plan report

A life of mine plan report will be prepared which describes the work done during the life of mine planning including all assumptions made, calculations and descriptions of the work. This task was originally planned for completion during the previous contract period but was delayed due to the delay in completing the plans.

### 3.2.6 Site visits

Bara have provided for a site visit by a mining engineer to Rwanda once every three months (quarterly). Six days has been allowed for the site visit including travelling time. The purpose of the site visit is to:

- Present long term (LOM) planning work completed.
- Follow up on progress on ongoing projects.
- Review plans and production performance.
- Spend time discussing mining engineering and planning issues with mining production, technical services and management teams.
- Conduct limited training on mine planning and mining engineering issues.

Bara will only invoice for the visits conducted and will be guided by Trinity on the frequency and timing of visits.

### 3.3 Electrical Engineering Support

#### 3.3.1 Operational support

Trinity have requested that Bara make an electrical engineer available to provide operational support to the operations for a maximum of three days per month. This operational support will include, but is not limited to:

- Attending meetings and workshops
- Review of designs, calculations and plans
- Training on electrical engineering issues
- Limited design and engineering work limited to three days per month.

Bara will only invoice for the time used which will be a maximum of three days (24 hours) per month for this support. It is noted that the time required for electrical designs for the ventilation and dewatering systems is included within those sections.

#### 3.3.2 Site visits

Bara have provided for a site visit by an electrical engineer to Rwanda once every three months (quarterly). Six days has been allowed for the site visit including travelling time. The purpose of the site visit is to:

- Follow up on progress on ongoing projects.
- Review plans and electrical engineering issues.
- Spend time discussing electrical engineering issues with mining engineering, technical services and management teams.
- Conduct limited training on electrical engineering issues.

Bara will only invoice for the visits conducted and will be guided by Trinity on the frequency and timing of visits.

#### 4 EXCLUSIONS

In addition to any work not specifically mentioned in the scope of work above, Bara specifically notes the following important exclusions;

- Engineering design and drawings other than those specified in the scope of work above.
- Client or third part costs

Bara can, however, provide work packages or assistance in these areas as may be required.

We cannot take responsibility for the performance of any party other than our own staff and sub-contractors but will endeavour to obtain full cooperation of others in accordance with our mandate.

#### 5 STAFFING

It is proposed that the key specialists listed below be deployed to undertake this scope of work. Additional senior and junior engineering staff will be used in execution of the mandate. We reserve the right to nominate substitute engineers as deemed in the best interest of the project.

Name	Position
Clive Brown	Project Manager/Principal Mining Engineer
Ed Baldrey	Principal Electrical Engineer

#### 6 INFORMATION REQUIRED

It has been assumed that all relevant information pertaining to conduct of the work will be made available to us free of charge. All such information will remain the property of the Client and will be used confidentially and specifically for the conduct of this work assignment only.

#### 7 COST OF WORK

Based on our understanding of your requirements and the time assumptions made in the table included at the end of this document, our estimate of the cost to complete the scope of work is:

**US\$ 202,850** (Two hundred and two thousand and eight hundred and fifty United States Dollars).

A detailed cost estimate is included at the end of this proposal. Bara will invoice on a rates reimbursable basis, should the work and budget requirements vary the cost will vary accordingly, however, Bara will not exceed the above estimate without the appropriate motivation and your express written permission.

Please note that the cost has been based on the following assumptions:

- The cost does not include Value Added Tax (VAT).
- The cost does not include any withholding tax or tax of any kind that may be applicable. Should any such tax be applicable the cost of this tax will be added to the cost of this proposal.
- We will keep accurate records of work undertaken and will only charge for work completed. Should the contract be terminated prematurely for any reason, no termination fee is payable. However, all work done to the termination date will be invoiced.
- The total cost has been determined on the basis of the following rates. The rates quoted are fixed for the duration of the intended work. After this period, we reserve the right to revise the rates.

STAFF CATEGORY	RATE (US\$/Hour excl. VAT)
Project Manager	115
Principal Engineer	110

- Bara will submit monthly invoices for the work completed during the month. It has been assumed that payment will be made to us within 30 calendar days of invoice. Interest on overdue amounts will be charged at the First National Bank’s ruling prime overdraft rate plus 3 per cent and will be calculated and capitalized on the daily balance outstanding from 30 days after invoice date to the date that payment is reflected in our bank account, both days inclusive.
- Our total liability in terms of the work proposed will be limited to the amount of fees that we are paid. Should you require a higher level of liability cover, then we would be happy to co-operate in obtaining it. The cost of any such higher cover is not however included in the costs presented earlier.
- Ownership of the work will vest in Bara until paid for in full.
- This proposal is presented on the assumption that the Conditions of Agreement as defined in the latest edition of the FIDIC client/consultant model services agreement will apply to the work, except as specifically modified by the terms of this proposal.
- This proposal is confidential to you, and copyright in this proposal vests in Bara Consulting Pty Limited. No part of this proposal, or any appendices to it, may be transmitted to any other party, in whole or in part, without the written permission of Bara.
- This proposal is valid for acceptance for a period of 30 days from the date hereof, provided that the completion date may vary depending on when we are actually commissioned.
- Please note that Bara make no guarantees with respect to the performance or decisions of state or regional authorities and that these may materially affect the program.

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## **8 DURATION OF WORK**

The term of the proposed contract is 12 months. Bara is immediately available to commence this work. To initiate the work we will require a written instruction from yourself which should include a clear instruction to proceed stating the proposal number and date of instruction, or alternatively a purchase order or supply contract, if this is required by your procurement procedures.

**APPENDIX 1 COST ESTIMATE**

Bara Consulting Pty						
2023-143-02 Cost Estimate for Trinity Metals Life of Mine Planning and Electrical Support						
Task No	Project Task		Project Leader	Principal Engineer	Drafting	Total cost US\$ (Excl. VAT)
		Rate/Hour	115	110	62	
		Hours				
1.0	<b>Project management and administration</b>		24			2 760
2.0	<b>Mine Planning</b>					
2.1	Operational Support - 3 days per month for 12 months			288		31 680
2.2	Life of mine plan layouts and schedules (Carry over from original scope)			64		7 040
2.3	Ventilation plans					
2.3.1	Musha		4	48	24	7 228
2.3.2	Nyakabingo		4	48	24	7 228
2.3.3	Rutongo		4	48	24	7 228
2.4	Pumping design					
2.4.1	Musha		4	48	56	9 212
2.4.2	Nyakabingo		4	48	56	9 212
2.4.3	Rutongo		4	48	56	9 212
2.5	LOM plan design report (Carry over from original scope)			48	32	7 264
2.6	Site visits - Mining					
	4 visits of 6 days (including travel)			192		21 120
	Disbursements (estimate)					
	Airfares (x4)					8 000
	Airtime, taxis etc (x3)					800
3.0	<b>Electrical Engineering</b>					
3.1	Operational Support - 3 days per month			288		31 680
3.2	Site visits - 6 days every three months			192		21 120
	Disbursements (estimate)					
	Airfares (x4)					8 000
	Airtime, taxis etc (x3)					800
	Administration fee (7%)					13 271
	<b>Total Cost Estimate</b>		48	1360	272	<b>202 855</b>



## OFFICE LOCATIONS

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