

SCOPE OF WORK

RFQ No.:

Description: Repair and Maintenance of Vibratory Screens, and Relining of Secondary Crusher Components

1. INVITATION TO TENDER

This document outlines the procurement scope of work for the repair and maintenance of vibratory screens and the relining of critical crusher components.

1.2 SCOPE BACKGROUND

The crushing plant circuit at Foskor comprises a total of nine crushers and nine vibratory screens used for processing raw mined materials from the primary section to the fine ore bunkers. These crushers and screens are critical for maintaining robust operations, requiring regular maintenance, refurbishment, and repair. To ensure continuous plant operations, a dedicated contract resource is required to maintain the necessary level of expertise for these tasks. Regular weekly monitoring, inspections, and servicing of screen components are essential to sustain efficient operations.

2. SCOPE OF WORK

2.1 BACKGROUND DOCUMENTATION

The screens utilized at Foskor are Incline Screens, primarily old Hewitt Robins V16-type models. Due to their age, these screens are largely obsolete, prompting Foskor to develop replacement manufacturing drawings and undertake refurbishment over the years. Many of the maintenance processes for these screens involve components fabricated on-site. Some components, such as bearings, pedestals, and frames, may be sourced from Osborne or similar suppliers, with contractors expected to utilize this documentation and any additional data from existing equipment during maintenance activities.

2.2 SCOPE - EXTENT OF WORK OR SERVICE REQUIRED

2.2.1 General Scope Considerations:

Please ensure the appointment of a qualified 2.9.2 Supervisor and 2.6.1 Subordinate Manager to oversee and manage the contractor's quality management.

Part of the 2.9.2 appointee's function will be inventory planning, audit of spare parts required for upcoming jobs, planning and managing of human resources and ensuring that quality and safety is always maintained. The supervisor will also keep track of the number of screens replaced on weekly basis and keep accurate record of such.

The 2.9.2 or competent person will also make sure that the team has the necessary tools and PE to execute the jobs safely and within the allocated time.

In the event of quality system failures, Foskor will request the appointed Supervisor and Subordinate manager's experience and qualifications and if this is not acceptable, it will be expected that the contractor obtain this service at its own cost. Foskor will also require the remedial action of premature failure to be completed at the contractor's own cost, should the failure result from contractor's negligence.

Please allow for a competent person to inspect and monitor the quality and output of the teams. This person will manage and update planning on a weekly basis and present to the Workshop Supervisor/Superintendent/Engineer. It is expected that this planning and management is executed by the contractor. This service will be provided at the contractor's cost, in the event that the contractor cannot execute this planning and reporting to management, it will be expected that the contractor obtains this service at his/her cost.

Scaffolding needs to be arranged by the contractor. It is expected that arrangements will be communicated to the appointed Scaffolding company at least 3days before requirement. Proof of request and arrangements and actual scaffolding installation for Scaffolding to be provided to Foskor on request.

The essential portions of this Scope requirements may not be subcontracted

2.2.2 Project costing and expenses

2.2.2.1 The contractor shall supply all engineering services, materials, labour, transport, supervision, and consumable materials, equipment, tools and each and every item of expense in order for the scope of work to be completed successfully unless otherwise stated taking the following into consideration

2.2.2.2 Disposal of refuse

The Contractor shall be responsible for disposal of refuse and waste generated by his staff on a daily basis. The site is to be kept clean, neat and tidy, by complying to Foskor Waste Management COP.

2.2.2.3 General requirements for commissioning

Commissioning or handover will be conducted as per Foskor procedures or as directed by the Engineer

2.2.2.4 Scope Specific statutory and legislative requirements Legislative requirements

The successful service provider shall ensure that all work is carried out in accordance with the Foskor specifications and COPs as applicable to the task.

All manufacturing done shall be in accordance with drawings and every component manufactured must meet site dimensional tolerances for installation purposes.

2.2.2.5 The successful or appointed service provider shall comply with the latest revisions of the following Foskor CTD's (Critical task Descriptions) (CTD's are available on request):

2.2.2.6 Quality

See Quality File index further down in the document

2.2.2.7 Site Management - focus areas

This focus areas will be done by the Contractor in conjunction with relevant Foskor personnel in accordance with approved COP's and procedures. Any non-conformance will be treated as a serious matter and tasks will be stopped until corrective action has been implemented.

Please ensure the aspect below are considered when costing, planning and executing a project on Foskor site.

1. HIRA

- HIRA to be done
- All Persons authorized in HIRA.
- HIRA Relevant and Mitigation actions clear and documented

- HIRA available at workers on site
- All workers participated in HIRA

2. TMMS

- TMM inspection done and available in TMM.
- Driver authorized for the specific TMM
- TMM clean (No scrap yard on the back of the LDV)
- ROPS for Mining and tailings areas - See COP 59

3. COMMUNICATION

- Proper communication on site regarding activities
- Who oversees what activities - Documented and discussed
- Who coordinate when required (Rigging, different teams, Top vs Bottom, interlinking tasks, etc) Documented and discussed
- Who do what (Ensure persons are competent for specific task Does the team know what they are responsible for and what they must achieve
- Safe work procedures, task steps are communicated and all is informed

4.. BARRICADING -in conjunction with Housekeeping

- Are relevant places barricaded
- Storage areas barricaded and indicated
- Waste or scrap area barricaded and indicated
- Unsafe places barricaded
- Use fixed barricading when dealing with heights or other identified high risks
- Use scaffolding barricading on last resort

5. TOOLS

- All tools inspected and on register
- Not inspected tools and defect tools to be treated as a very serious matter as this indicates the 2.9.2 competence and corrective measure will be taken
- Correct tools for the task
- Rigging equipment inspected and correctly marked
- Confined space- Must have a meter that is calibrated- Certificate available.

6. PPE

- All persons to wear correct PPE for the task

7. HOUSEKEEPING - in conjunction with Barricading

- Keep the site clean.
- Every day or shift must have at least a dedicated cleaning time of 30min. All to participate

8. SUPERVISION (2.9.2 appointment and 2.6.1 appointment)

- Keep the site clean.
- Make sure hazards are continuously identifies and proper steps taken to correct or mitigate
- Ensure tools and equipment are maintained, inspected and operated by competent and authorized workers
- Ensure correct PPE is used by workers and in a good condition
- Understand the method statement

- Understand the risk of the site
- Understand the project schedule and milestone dates
- Know what was tendered for in the BOQ. BOQ forms basis of method statement and risk mitigation
- For shutdown tasks or where shift will be working a full time 2.9.2 appointee will be on site. The 2.6.1 appointee shall visit all shifts to support the 2.9.2 appointee, Site attendance shall be verified via clocking times. 2.9.2
 appointee shall not be shared with any other work - ONLY 8 HOUR SHIFTS IF THE PLAN IS MORE THAN 2 DAYS

NOTE See duties of the supervisor/2.9.2 in the MHSA. If the supervisor/2.9.2 is a worker (Handling Tools or working with tools) then additional supervision /2.9.2 appointee needs to be provided. If he is working, he cannot be responsible for the site and ensure worker safety and a safe environment. Supervisors will not be allowed to do tool work.

9. PROGRESS REPORT

A progress report needs to be submitted workshop supervisor and engineer of the work at hand on a weekly basis. This will form the basis for invoice certificates and invoice approvals in conjunction with the relevant Bill of Quantities. No invoice shall be approved without the BOQ and Month report

PROGRESS REPORT INDEX – Typical but not limited to

1. SHREQ
 - Safety issues, Environmental, Incidents, etc
 - Legal Appointees
 - Work Permit Expiry date
 - Letter of Good standing Expiry date
2. Compliment
 - Trades, Qty, Hours, etc
 - Equipment on site
3. Progress
 - Planned versus actual
 - Activities completed or milestones
4. Activities
 - Task completed, milestones
 - Technical issues
5. Quality
6. Drawings
 - Drawing issued
 - Drawing issues
7. Delays
8. Commercial / Financial
9. General

2.3 SCOPE

2.3.1 Training and authorisations - Summarised - Typical but not limited to

1. Basic Health and Safety – Training
2. First aid - Training
3. HIRA – Training and Authorisation
4. TMM – Foskop driving licence, open pit licence and Authorisation
5. Confined space – Training and Authorisation
6. Working at Heights – Training and Authorisation
7. Hot Work- Training and Authorisation
8. Conveyors - Authorisation
9. Electrical – Relevant training and Authorisation
10. Lifting and rigging – Training and Authorisation
11. Overhead crane - Training and Authorisation
12. Fire - Training

2.3.2. Basic Requirement

- Obtain work permit
- All work includes all tool, labour, equipment, Transport, Supervision., Quality management, Project communication, Administration, Sundries, Management, etc
- Provide competent crew for the execution of the scope in 2.3.3
- Map out the equipment as is for records keep (Drawings required)
- Provide a detailed BOQ for the proposal

2.3.3. Scope of Work Details

2.3.3.1 Screen Maintenance

- The supply of all Supervision, labour, PPE, transport and equipment to successfully carry out the required tasks.
- Ten (10) workers and one (01) supervisor are needed to change screens in the crusher plant two (02) days per week. These people must be specialised, trained to know how and when the screens must be changed to avoid standing time.
- Care should be paid to the following aspects of screen maintenance, such as hot work, work at heights, confined spaces and duly trained and authorised personnel be used. Also, particular attention should be paid to poor ergonomics during the execution of tasks and mitigation measures be put in place by the supervisor.
- It is envisaged that on a weekly basis the team will determine the number of screens to be replaced based on wear and tonnages produced and execute such tasks.
- The task will include replacing worn/defective screen cloths, replacing and torquing screen clamps, installing nosing rubbers, inspecting all cross members and fiat bars, checking and adjusting screen pedestal springs and tensioning members and checking/replacing V-belts.
- On weekly basis, check that bearings are property lubricated and inspect running temperatures. Bring any concerns to the attention of the supervisor. It is especially important to note dirt ingress into the bearings through holed barrel pipes.
- Ensure that sufficient tensioning is applied on screen cloths to avoid premature failure.
- New tension bolts should be applied every time a screen cloth is replaced. All bolts shall be inspected and damaged/worn ones replaced.
- Ensure that each hole position on the clamp is utilised.
- Inspect rubber lined members for wear and replace promptly before tensioning of screen cloth is negatively affected. Clamping plates are checked and those that are worn out and have oval holes are promptly replaced before premature

- failure. Make sure that camping bars are not warped, or worn to the point that they cannot provide even and tight tension.
- Install material cushioning (conveyor rubber) at the discharge portion to protect accelerated wear and avoid stones hitting directly on wire.
 - Inspect equipment for balance and excessive vibration. Unbalanced machines can cause premature cloth failures.
 - Installed screen cloths must not overlap to cause accelerated wear on the edges.
 - Generally, screen media shall be installed in such a way that they can last between intervals of services (which can be up to 14 days depending on production)
 - To avoid premature failures, a crew should be provided to retention the installed screen after 8hrs of operation to take up any stretch that may be incurred.
 - All screen cloths will be freed issued by Foskor, and all necessary consumables to go along with the installation and repairs. It is the contractor's responsibility to ensure that adequate supplies of all maintenance items are kept on site for the maintenance day.
 - Free issued screens shall be inspected for poor quality/manufacturing defects such as a loosely woven cloth and report to the supervisor. Contractor to take care not to install defective screen media as it will affect the performance of the plant
 - The Supervisor or his designate must do inspections on every vibrating screen for cracks and defects and must keep full records on these inspections. Reports must be submitted to the Foskor Official on the conditions of these screens.
 - A team of welders and their TO's will also be needed per week to do repair working in the undersize and oversize chutes of the screens, were worn liners must also be replaced.
 - The contractor shall manufacture and always maintain sufficient stock of screen clamping plates to sustain the services.
 - A standby crew shall be made available for screen breakdowns, especially over weekends where premature failure was not due to the contractor's negligence.
 - Periodic audits of the screen maintenance regime will be conducted by the section responsible supervisors and engineers, and deviations will be shared with contractor for rectification. It is expected that the contractor shall react to such audit findings or otherwise risk contract breach and termination.
 - This contract shall include the execution of screen replacements, screen bed changes out and any such repairs as per above during the Foskor Annual Shutdowns, which duration usually up to 5days

2.3.3.2. Fabrication of Screen Beds and Associated Components

- Fabricate complete vibrating screen beds as per drawing
 - M16 double deck as drawing nr 015C - 095/096/097 to 125 which includes two side frames with 22 crosses members and bearing housing.
 - V16 double deck as drawing nr 015C- 117 to 123 which Includes two side frames with 20 cross members and bearing housing.
 - V16 single deck as drawing nr 015C -119 to 124 two side frames with 14 cross members and bearing housing.
 - Ali holes must be precise, and edges must be chamfered and grinded to prevent cracking. Cross members must be machined to size.
 - Inspections shall be done on all parts prior to assembly; the assigned report must be submitted to the Foskor Official on these inspections.
 - All screen beds will be huck-bolted and painted to Foskor specifications GM-3 Rev 7- orange
- Foskor shall be responsible for free issue of materials such as flat bars, normalized plates, bolts, angles, barrel pipes, flanges, bearing housings etc. for the fabrication of the screen beds
- It is the contractor's responsibility to ensure that all materials are economically used with minimum wastage and all mistakes made by the contractor during the fabrication shall be for their own cost to replace such spoiled

materials.

- Quality control plan for the fabrication shall be submitted for approval which incorporate the necessary hold points as agreed
- The contractor shall be responsible for the rubber lining of all cross members and corrosion protection as per Foskor's specifications.
- The contractor will be responsible for the replacement of screen beds or planned, or breakdown basis labour rates agreed upon.

2.3.3.3 Relining and repair of critical components

For this aspect of the scope, the contractor will need to demonstrate that a competent crew can be provided which has demonstrated knowledge in the relining methods and techniques for both Symons Crushers and Alis Charmers Crushers used in the Crushers and Extension 8 departments

The demonstratable proof shall be in the form of specific training undertaken from an OEM on crusher maintenance. Foskor in-house provided training shall be considered, however a plan to upskill the workforce with OEM specific training shall be presented as part of this bid, and compliance with the plan executed within the first 4months of the contract. The tasks associated with this part of the scope are as follows:

Reline 84-inch AC crusher and 7foot Symons crusher's mantle

- Remove old liner by means of cutting or lancing. Take care not to damage the main parts.
- Ensure that skilled and trained lancers are assigned the task
- Prepare all parts for relining and removing all oil, grease, scale, dirt etc.
- Coat al surfaces not to be bonded with a release agent
- Assembling the mating parts, observing the manufactures recommendations and specifications
- Caulk and pour backing material, install split ring and tighten nut and locks as per OEM specification

Reline 84-inch AC crusher and 7-foot Symons crusher's bowl (Top Shell)

- Remove the liner
- Clean bowl assembly, fit and caulk liner.
- Tighten bolts and nuts
- Pour backing material as per OEM specification.
- Install al arm liners as required
- Ensure that a new spider bush, scraper and seals are installed on each relining. All parts to be lubricated as required. Repair any damaged holes, remove studs on defective bowl
- Observe all required tolerances and dimensions as directed by OEM instructions/manual. Concaves must be evenly installed, not causing interference during assembly of crusher.

2.3.3.4 Shutdown Standby and breakdown requirements on vibrato screen and relining

- Artisans and labourers to help on 12 hrs. shifts to repair a crusher component or replace a vibrating screen on a breakdown basis.
- All personal protective clothing and equipment for the team who will be working on Foskor premises.
- Upon completion of a tasks the site must be cleared of all rubble and other redundant material.
- Screen maintenance execution on al screens during annual shutdown on a 12hr straight shift basis for 5days, including 1 weekend preparatory work.
- All work to be carried out in accordance with all the latest revisions of Foskor's General Engineering and Safety specs.

3. PROJECT URGENCY

Project urgency is defined below:

This is a Project that impacts production and safety, it will need to be commence as soon as possible for the contract period awarded (normally 3yrs but could be changed by DPC)

4. DELIVERY OF MATERIALS AND EQUIPMENT

It is the responsibility of the Contractor to take delivery, off-load, store and move into their permanent position all equipment and materials covered under this Scope. The Contractor shall, at his own expense, be responsible for the delivery to the Site of imported plant and equipment, materials and Contractor's plant and equipment in connection with the execution of the works, including but not limited to securing of permits and customs clearances, and payment of handling costs, storage costs, releasing costs, transportation costs, and duties, taxes, imposts, excise and charges of any kind that may be imposed by the South African Government, or any of its agencies and political subdivisions relating to the supply and delivery to the site of the imported plant and equipment, materials and Contractor's plant and equipment.

TAKE NOTE - Foskor pays for material delivered to Foskor site only!

NB: The contractor/consultant must clearly state in his tender submission if there is an exclusion on the Foskor scope (As per the site meeting procurement scope and site meeting minutes) Failure to state the exclusion will mean that the full Foskor scope is still applicable.

5. BATTERY LIMITS – INCLUSIONS AND EXCLUSIONS

List the boundaries in terms of equipment (Foskor plant specific). Up to where is it Foskor's responsibility and where/what is the contractor's responsibility.

WHO WILL SUPPLY THE FOLLOWING?					
N/A = NOT APPLICABLE C = CONTRACTOR FF = FOSKOR, FREE OF CHARGE FC = FOSKOR, AT COST TO CONTRACTOR					
1.Sanitary –		2.Transport		3.Electrical	
1.1 Water on site and toilet facilities / janitorial services	C	2.1 Labour	C	3.1 Generators	C
1.2 Potable connection point	C	2.2 Materials	C	3.2 Electrical Extensions	C
1.3 Connection to construction water supply	C	2.3 Equipment	C	3.3 COC Site Establishment	C
1.4 Change rooms	C	2.4 All TMMS	C	3.4 Temporary lighting	C
				3.5 Electrical connection point	FF
				3.6 Connection to Electrical supply	C
				3.7 Electric panel + distributing wiring	C

WHO WILL SUPPLY THE FOLLOWING?					
N/A = NOT APPLICABLE C = CONTRACTOR FF = FOSKOR, FREE OF CHARGE FC = FOSKOR, AT COST TO CONTRACTOR					
				3.8 Power for tools on site for existing Foskor electrical supply point (Welding plugs and 220v plugs)	C
				Electrical and Instrumentation Installation	FF
4. Quality –		5. Security		6. Lifting and Rigging	
4.1 Plan, Management, QA, QC	C	5.1 Site Security	C	6.1 All rigging equipment (Slings, Chain blocks, turfers, etc)	C
4.2 All quality test Civil, Paint, Mechanical, etc	C	5.2 Foskor ID Card	C	6.2 Rigger	C
4.3 Sampling and laboratory testing	C			6.3 Mobile cranes	C
7. Medicals -		8. Communication devices – All communication devices like laptops, computers, networks, radios, cellphones, etc.	C	9. PPE	
7.1 Entry and Exit	C			9.1 Supply, Issue, inspect and manage	C
7.2 First aid box at place of work	C				
10 Site Surveys	C	11. Safety File - Foskor will issue template	FF	12 Training & Authorizations	
		Ensure file conform/populate to Foskor standards	C	12.1 All Required Training	C
				12.2 Authorisation - As per Foskor COP	FF
13. Site Establishment		14. Waste management on site		15. Painting - All Equipment and tools paint, labour, etc	C
13.1 Site office/s with suitable facilities for daily “Green Area” meetings, and lunch area	C	14.1 Transport all waste to Foskor designated waste sites	C		
13.2 Site establishment space	FF				
16 Scaffolding		17 Labour		18. Compressed air	
16.1 Scaffolding Supply & Erect	FF	17.1 All labour as per Scope of Work to	C	18.1 Sandblasting or flash blast	C

WHO WILL SUPPLY THE FOLLOWING?					
N/A = NOT APPLICABLE C = CONTRACTOR FF = FOSKOR, FREE OF CHARGE FC = FOSKOR, AT COST TO CONTRACTOR					
		execute task including management			
16.2	Scaffolds be managed by the Contractor	C		18.2	Compressor C
16.3	Cherry Picker's – only if and when available by pre-booking	FF		18.3	Air for power tools - If available FF
16.4	Cherry Picker's Driver– Trained and authorized driver	C			
19	Fuel		20. Storage and inventory control		21 Consumables
19.1	Fuel Supply	C	20.1 Protective coverings/tarpaulins	C	21.1 Welding rods C
19.2	Fuel storage	C	20.2 Storage area and inventory control	C	21.2 Bolts & Nuts C
19.3	Fuel fire protection	C			21.3 Ect C
19.4	Refuelling	C			
22	Tools & Equipment		23 Certificates -		24 Training
22.1	All Portable electrical Equipment	C	Supply All certificates as required		All required training and training manuals as required to ensure that Foskor can train its workforce and operate the plant / equipment safely C
22.2	Hot Work Equip as per Foskor COP - Welding Machines, Gas Cutting, Grinding, Gauging, etc	C			All manuals and related documents to be supplied to project Eng and Foskor Drawing office for safe keeping C
22.3	Tools as required to execute task	C			
					25 Mechanical

6. AS BUILT DRAWINGS

As built drawing requirement is defined below

As built drawings are to be compiled after completion.

Note! – All drawings to be delivered in Autocad electronic format. All drawings to be detail engineering drawings

7. QUALITY

- i. The service provider must provide the necessary quality management systems and plans to ensure that the quality of his work complies with the requirements of this scope of work.
- ii. The service provider shall during all phases of construction comply with the Foskor approved Quality Assurance Plan
- iii. The service provider shall be responsible for all the resources required for executing the Quality Management System including but not limited to, developing the Quality Assurance Plan & performing the Quality Control measures to ensure that the deliverables comply to the specifications & standards mentioned in the scope of work
- iv. Any change requests /additional work resulting due to inadequate quality management system will be to the account of the service provider
- v. Foskor might appoint a third party for Quality Control Inspections
- vi. The Service provider will have to provide an approved quality system for all work executed
- vii. This will include the following but is not limited to
 - a. Quality plan
 - b. Quality compliance - Performance and reports
 - c. Quantity surveying
 - d. Quality Assurance
 - e. Quality Authorization matrix - part of Quality pain
 - f. Quality control
 - g. Quality administration. - All documents, checks, measurements, reports, variances, analysis, Corrective actions, etc. needs to be properly filed and available on request at any time. The file will require an index
 - h. Includes all test work, laboratories, Filing, etc.
 - i. Survey and survey verifications
 - j. Construction versus design -Any Deviations from the approved "Construction Drawings"
 - k. Quality communication - What needs to be reported to whom and at what frequency
- viii. Foskor envisage a complete quality System driven by the Service provider and this system / plan will be approved
by Foskor and the appointed designer (if applicable) before construction/fabrication will be started
- ix. Compliance to this plan will be measured and failure to adhere to the quality plan will result in the stopping of
Construction activities until concerns have been addressed. The cost for this delay will be for the service providers account.
- x. Foskor may appoint a third part to measure and control Foskor's interest in the terms of quality in this contract and
the service provider is expected to work in conjunction with this company
- xi. Hold points will be discussed and finalized with the successful service provider based on the approved Quality plan

The Quality plan will only be compiled and signed off after the Method Statement and WBS* have been compiled Quality on Shutdown type tasks will be included in the Scope of Works but the service provider will have to submit proof of an experienced quality assurer or relevant qualifications. If the service provider does not have this, it will be required that this service be hired in by the service provider at his cost.

- i. State any specific hold points that is not negotiable here
- ii. State any other quality that is applicable that is not in the "Parameters" section

Method statement - the service provider must list all steps and actions required to complete the work as per the scope of work - typically includes the items listed below:

- I. Key step and stages of the work required
- II. Tools, Equipment, TMMS, etc
- III. Labour requirements, etc
- IV. Spares, resources,
- V. Safety requirements

WBS is a hierarchical and incremental decomposition of the project into phases, deliverables and work packages. It is a tree structure,

which shows a subdivision of effort required to achieve an objective, for example a program, project, and contract.

This includes arrangements, tools, equipment labour, Tasks, Purchase, Quality, Communication, etc

7.1 QUALITY FILE INDEX

The quality file index listed below will be the minimum requirement.

This file must be kept up to date for the duration of the project and will be handed in to the Foskor project engineer on completion of the project.

QUALITY FILE INDEX

File Index

1. Issued for Construction (IFC) drawings – Approved
2. Quality Control Plan (QCP) Approved
3. Competency of People - Welder Qualifications, Trade, Authorization, Certifications, etc
4. Designer/Engineers Instructions, Specifications, Approvals, Concessions applied for & approved. Site instructions, Variations and ECOs'
5. Method statement of contractors-Approved
6. Material orders & Delivery notes
7. Certificates - Material, Data Sheets, Compliance, Certification, etc
8. Test Results - Each Discipline - Test cubes, NDT, etc
9. Request for inspection (RFI)
10. As Built Drawings
11. Reports - Survey, etc
12. Punchlist/Snag list
13. Handover/ Occupations/ Taking over Certificates/Commissioning

7.2 ADDITIONAL QUALITY REQUIREMENTS

Additional Quality requirements

8. **PROJECT DELIVERABLES**

8.1 **The deliverables for this project include:**

Upon completion of the new or upgraded crane installation, the service provider shall be required to inspect and test the crane for conformity and load lifting competence in accordance with the requirements of SANS 4310 Cranes - Test code and procedures.

8.2 **Data Books**

N/A

8.3 **Manuals and Documentation**

8.4 **Format of Documents and Manuals**

N/A

8.5 **Transmittal of Documents and Manuals**

N/A

8.6 **Project completion**

As per contract duration

9. **DOCUMENTS / DRAWINGS ISSUED BY FOSKOR**

Drawing or Document No	Title	Revision
015C-119		0
015C -120		0
015C 12-4		0
SWC- VBR-000101		0
015C -17		0
015C -19		0
015C -123		0
015C -095		0
015C 0-96		0
015C 1-2		0
015C -125		0
Note	Please read your Scope	

10. **ON-SITE SUPERVISION REQUIREMENT**

- A Foskor work permit before commencement of site work.
- A full time 2.9.2 appointed supervisor will be on this site for the entire duration of site work or every shift. No legal appointee allowed to do tool work.
- A 2.6.1 appointed site manager for overall site management
- Appointed SHE Rep for the entire duration of site work

10.1. Additional Requirements

N/A

11. **TENDER DELIVERABLES**

The deliverables will include: -

- Complete Foskor pricing schedule (BOQ)
- Preliminary Project Schedule
- Preliminary method statement to execute the site work
- Company training Matrix indicated minimum training requirement compliance or the tenderer should provide undertaking to comply with Foskor Safety requirements during tendering stage and fulfil the requirements if awarded the work. Any deviation may lead to cancellation of order/contract. Timeframes needs to be attached
- Copy of Certificate of Passing Foskor 2.6.1 and 2.9.2 Legal Exam for the people that is intended to be used in this task /project
- Tax Clearance
- Letter of Good standing (Workman compensation)
- BEE Certificate
- Commercial documents requested by Procurement
- Not submitting the required documentation or not completing the documentation (Pricing Schedule) correctly will lead to a disregard of the tender.
- Take note of the tender evaluation documents that needs to be submitted

12. SAFETY

Service provider to refer to the full and updated Foskor COP's available:

- i. The service provider and subservice providers need to comply with the Mine Health and Safety act at all times. All Foskor COP's Policies and procedures needs to be adhered to.
- ii. A service provider 2.9.2 to be permanently on site.
- iii. Medical, Induction, Foskor ID Card, etc. is approximately R800 per Person. Exit medicals need to be done at termination of contract.
- iv. The Successful tenderer will be required to compile a Foskor Work permit and at least 2 weeks should be allocated for this. The service provider must provide the following appointed persons in terms of the MHSA: 2.6.1; 2.9.2 and Section 29(1) – SHE REP for the duration of the contract
- v. All vehicles and cranes and other TMM's to be inspected before entering Foskor Premises.
- vi. All person competencies to be verified before being allowed to work on Foskor premises for a specific task.
- vii. The service provider must compile a Safety File as per Foskor standard for all service providers and sub-service providers
- viii. Site access will need to be controlled, and all persons must receive site specific induction before entering the site.
- ix. Conduct inspections as per Foskor Safety System. Analyse data and trends and recommend preventative measures where required
- x. Ensure all authorizations are in place as per the Foskor Safety System. Arrangement with Foskor training to be done by the service provider to ensure that authorization and training is conducted. Arrange timeously.
- xi. Ensure all workers competencies are available and have been validated.
- xii. Ensure proper security, sign boards, fencing and barricading is in place on site where applicable
- xiii. The service provider shall in general comply with the FOSKOR General Engineering Specifications, COP's, latest revisions and all relevant regulations
- xiv. The service provider must complete a Baseline Risk Assessment (**COP 01**) before a work permit can be issued for the installation.

- xv. All service providers not in possession of a valid Foskop ID card have to complete the Foskop induction course and have to undergo a medical examination at the Foskop clinic for the service provider's account
- xvi. The service provider shall be responsible for coordinating and integrating his schedule and responsibilities with other FOSKOR appointed contract manager on site for this Scope of Work.
- xvii. All personnel operating mobile equipment including LDV's must have a Foskop driver's permit.
- xviii. An open Pit Licence is required for driving in the mining area's
- xix. All the required PPE and Safety Equipment are for the service provider's account.
- xx. All service providers must ensure that:
 - a. His workers are issued with the correct personal protective equipment free of charge.
 - b. That the workers wear the PPE in accordance with the project area's requirements or as given by the service provider Supervisor.
 - c. Training is provided in the correct use of PPE to workers.
 - d. Daily inspections are done on PPE.
 - e. The registers will be complete at least monthly on findings on PPE. (All PPE must be kept in good condition)
- xxi. All providers of services need be informed of the following minimum training is applicable to all service providers (irrespective of the tasks or scope of work) that will enter Foskop Phalaborwa site with effect from 1 April 2014. This training is not presented by Foskop Training section and service providers must ensure that the training is sourced through accredited external training companies:
 - a. Basic health and safety principles
 - b. HIRA
 - c. First Aid Training
- xxii. All other training requirements must be aligned with the baseline risk assessment. Risks identified in the baseline risk assessment will guide the requirements for training. A summary of the training must be completed as well as status on required authorization as per Foskop COP's.
- xxiii. Training certificate will be accepted if complying to the following:
 - a. Unit Standard Title
 - b. Learner Full name
 - c. Learner ID number
 - d. Competency achieved
 - e. Date of Assessment
 - f. Assessors signature
 - g. Training provider logo
 - h. Training provider registration number and accreditation number.
 - i. Seta logo

13. LEGISLATIVE REQUIREMENTS – SUMMARY

13.1 Minimum Legislative Requirements:

The successful or appointed service provider shall comply with:

- i. The Mines Health and Safety Act with Regulations (Latest revision)
- ii. The National Road Traffic Act with Regulations (Latest revision)
- iii. All applicable national and international legislative requirements and regulations.
- iv. Foskop (Pty) Ltd. COP (Code of Practise) No. 25 for Service provider Control (Available on request)
- v. Foskop (Pty) Ltd. COP (Code of Practise) No. 59 for Trackless Mobile Machinery (Available on request)
- vi. All Foskop (Pty) Ltd. safety, health, quality and environmental procedures applicable to the successful application of the contract. (Available on request)

- vii. All Foskor procedures and policies applicable to the successful application of the contract. (Available on request)

13.2 Summarised requirements/extracts from Foskor COP's

13.2.1 Before entering and operating a service vehicle (Own vehicle) on the Foskor site, the appointed service provider shall:

- i. Ensure that his driver/s are in possession of a valid national driver's licence for the specific class of vehicle, has been tested by the Foskor mobile equipment training centre and authorised by a Foskor MHSA (Mines Health and Safety Act) regulation 2.13.1 appointee for the class of vehicle to be used on site. (Contact the Foskor mobile equipment training centre on 015 789 2840 to make an appointment for competence testing and authorisations)
- ii. The appointed service provider shall, before entering and operating a vehicle or trailer on the Foskor premises:
 - a. Obtain permission from the Foskor Safety & Security manager to operate his nominated service vehicle/s or trailers on the Foskor site. (Forms will be provided)
 - b. Obtain a certificate of fitness from the Foskor Light Vehicle maintenance workshop supervisor or appointed Foskor inspector for his nominated service vehicle/s. Inspections conducted daily between 08:00 and 08:30 and between 13:30 and 14:00 (Excl Fridays) at the Light Vehicle Maintenance workshop.
 - c. Submit the above permission and COF in at the main security office for issue of a vehicle access disk.
- iii. Ensure that his service vehicles / trailers have been inspected (Daily) in accordance with the Foskor standard (COP 59) to ensure that they are safe and fit for use. (Forms will be provided)
See Foskor COP 59, Trackless Mobile Machinery for details.

13.2.2 Before entering and working on the Foskor site the appointed service provider shall ensure that his workmen are:

- i. Briefed on the required task and have been informed of any abnormal conditions/situations.
- ii. Physically, emotionally and mentally fit to perform their duty.
- iii. Issued with the necessary PPE (Personal Protective Equipment) to safely operate his service vehicles and perform the duty of maintaining, servicing, inspecting and testing earthmoving- and mobile equipment.
- iv. Before commencement of work:
 - a. All tools and equipment shall have been inspected and tested to be in a good and safe working order.
 - b. All workmen have participated in the completion of a standard Foskor site risk assessment (Commonly known as a HIRA or Hazard Identification and Risk Assessment) and taken appropriate actions to mitigate any identified hazards.

13.2.3 Before entering and working on the Foskor site the appointed service provider shall ensure that his portable electrical equipment have been tested and declared safe to use by the Foskor electrical services workshop.

14. PERMIT TO WORK

Before any on-site work under this contract may commence, the appointed or successful service provider shall obtain from Foskor a PERMIT TO WORK. The following guidelines are provided in order to assist the appointed service provider in obtaining a PERMIT TO WORK. (See Foskor COP 28 Permit to work and COP 25 Control of Externally Provided Processes, Products and Services (Service provider Control) for details):

- i. The PERMIT TO WORK can be obtained from- and on completion returned to the Legal Administrator, Foskor Safety department.
- ii. Obtain a contract number from the Foskor procurement or projects department.

- iii. Appoint a subordinate manager in accordance with Regulation 2.6.1 and an on-site supervisor in accordance with Regulation 2.9.2 of the Mines Health and Safety Act.
The appointed subordinate manager and -supervisor shall be required to write and pass the Foskor 2.6.1 and 2.9.2 legal examinations within 30 days after being awarded this contract.
Attend an hour-long legal exam briefing any Thursday between 08:00 and 09:00 at the Security training hall.
Write legal examination any Friday between 07:30 and 10:30 at the Security training hall. (Please book)
- iv. Appoint an on-site SHE-Rep in accordance with section 29(1) of the MHSA to assist the Regulation 2.6.1 and 2.9.2 in the daily on-site management of health, safety and environmental issues.
The designated SHE Rep must have the ability to read, write and express him/herself.
The appointed SHE-Rep shall be required to attend a five day SHE-Rep training course within 30 days after being awarded this contract (Training free of charge). Make booking on 015 789 2531
A pre-requisite for attending the SHE-Rep training course is successful completion of Basic Health & Safety Principals- and HIRA training.
See Foskor's COP 5 Health and Safety Representatives for details.
- v. Provide a name list, including ID numbers, residential and postal addresses and telephone numbers of all of the appointed service providers on-site employees.
- vi. All the appointed service providers on-site employees shall undergo a full medical examination at the Foskor on-site Clinix Clinic. The clinic can be contacted at 015 789 2427 for an appointment. Please note:
All NEW- and employees LEAVING the service of the appointed service provider must undergo a full entry or exit medical examination
Women who are pregnant or suspect that they may be pregnant must notify the examining medical practitioner.
- vii. The appointed service providers designated on-site drivers shall receive competence testing and authorisation to operate vehicles on the Foskor site
- viii. All of the appointed service providers' employees shall receive/have received training in:
 - a. First aid level 1 (Provide own training)
 - b. Working at heights (Provide own training)
 - c. Basic Health & Safety Principals (Provide own training)
 - d. HIRA (Provide own training)
 - e. Basic firefighting. (Provide own- or receive Foskor training, contact 015 789 2531 to book)
 - f. Lock out. (Provide own- or receive Foskor training, contact 015 789 2531 to book)
 All training not provided by Foskor must be verified by the Foskor training superintendent Mr. Johan Fouche. Please contact him on 015 7789 2525 to make an appointment or alternatively email proof of training and certificates to johanfo@foskor.co.za to confirm compliance before requesting his approval on the PERMIT TO WORK.
- ix. All the appointed service providers' on-site employees shall receive the basic Foskor site induction training at the Foskor Security office.
- x. All the appointed service providers' on-site employees shall receive site specific induction training provided by the Foskor area Regulation 2.6.1 appointee/s.
- xi. A BRA (Baseline Risk Assessment) shall be completed for ALL "typical" tasks that will be completed under this contract. The BRA to be approved by the responsible Foskor MHSA 2.13.1 appointee and signed by all of service providers employees. Make use of Foskor's own BRA document, Annexure 1.2, contained in COP 1, Risk and Opportunities Management (Available on request)
- xii. Attach a detailed SCOPE OF WORK describing the required task and -outcome of this contract.
- xiii. All Foskor's appointed MHSA Regulation 2.9.2, 2.6.1, 2.13.1 and 3.1.a managers must undersign/approve the PERMIT TO WORK.
- xiv. Registration and proof of payment under the Compensation for Occupational Injuries and Diseases Act, no. 130 of 1993. Registration number must be provided.

- xv. SARS issued tax clearance certificate.
- xvi. All relevant documentation and/or evidence of compliance must be attached to the PERMIT TO WORK.
- xvii. Upon successful completion and approval of the PERMIT TO WORK the security department will issue the appointed service providers' employees with access ID cards.
- xviii. Any other documents, certificates or records as requested by a Foskor official deemed necessary to ensure that all safety, legislative and administrative requirements have been met must be attached to the PERMIT TO WORK.
- xix. The appointed service provider must allow at least three to ten working days to complete all the PERMIT TO WORK requirements.

15. SAFETY FILE

The appointed contractor must compile a SAFETY FILE specifically for this contract. The SAFETY FILE must at all times be available for inspection by a Foskor official. The following guidelines are provided in order to assist the appointed contractor in compiling a SAFETY FILE:

Before any work may commence, the appointed service provider must, IN CONJUNCTION WITH FOSKOR SAFETY DEPARTMENT, compile a SAFETY FILE specifically for THIS contract. (Contact the area responsible safety representative, Ms Nnete Napo at 015 789 2547 / nneten@foskor.co.za or attend the monthly service providers meeting every 2nd Monday of the month (3rd Monday if 1st or 2nd Monday a public holiday) at 13:30 in the Foskor Plant Training hall)

The SAFETY FILE must always be available for inspection by a Foskor official.

SHE FILE INDEX

Description of item / ISO clause File divider

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Clause 5.1 1

Clause 4.1 Understanding the organisation and its context,

2. Policies

Clause 5.2: OH&S Policies 2

3. COP1: Foskor risk management 3

Clause 6.1.2.1 & 6.1.2.2: Hazard identification, risk assessment and determining controls.

4. COP88: Objectives, targets and management programmes 4

Clause 6.2.1: Planning to achieve OH&S objectives.

Clause 6.2.2: Objectives and programs

5. COP 2: Compliance obligations and appointments 5

COP 5: Health and safety representatives,

Clause 5.1: Leadership and commitment

Clause 6.1.3: compliance obligations/ legal and other requirements

6. COP 15: SHERQ Competency and awareness training 6

Clause 7.2: Competence

Clause 7.3: Training awareness

7. COP 17: Mobile, technical and process training 7

Clause 7.2: Competence

Clause 7.3: Training and awareness

8. COP 6: SHERQ Committees 8

COP 7: Communication (Mini – business communications)

- Clause 7.4: Communication
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- 9. COP 42: Lighting: natural and artificial; 9
- COP 43: MCOP Occupational health programme on thermal stress
- COP 44: Sanitation plant hygiene amenities
- COP 45: MCOP occupational health program on personal Exposure to Air borne Pollutants
- COP 64: Ergonomics
- COP 86: MCOP for Occupation Health Program for noise
- Clause 8.1. Operational health program for noise
- Clause 8.1.1. General
- 10. COP 49: Waste management 10
- COP 58: Hazardous chemical substances and control Hazchem and waste management
- Clause 8.1.2 Eliminating hazards and reducing OH&S risks
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- 12. COP 55: Stair's walkways handrails and Ladders 12
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- 19. COP 63: Hand tools 19
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 - Clause 6.1: Actions to address risks and opportunities/Hazard identification, risk assessment and determining controls.
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Notes:

1. If a COP is not applicable to your section, please complete and attach the “Not Applicable” form in the space of the COP.
1. Always keep your file neat and clean

TYPICAL CONTENTS OF SAFETY FILE:

- i. Title and index cover page
- ii. A copy of the PERMIT OT WORK.
- iii. A copy of the MHSA Regulation 2.6.1 and -2.9.2 and SHE Rep appointment letters.
- iv. A copy of Foskor COP 25, Service provider control.
- v. A copy of LME (Lifting Machine Entity) registration certificate with the Department of Labour.
- vi. Copy of LMI (Lifting Machine Inspector) registration certificate with the Engineering Council of South Africa in the employ of the service provider.
- vii. Base line risk assessment of ALL and ANY POTENTIAL tasks that may be performed on site under this contract. See Foskor COP 26, Critical Task Descriptions for details.
- viii. Copies of critical task descriptions and standard operating/maintenance procedures.
- ix. Copies of the appointed service providers safety, health, environmental, HVI and AIDS, smoking and waste management policies.
- x. Training records of all on-site employees.
- xi. Employee records of actual time worked (Normal and overtime).
- xii. Copy of on-site induction training.
- xiii. Records of inspections of TM (Trackless Mobile Machinery) and trailers. See Foskor COP 59, Trackless Mobile Machinery for details.
- xiv. Records of issues and inspections of PPE (Personal Protective Equipment) and safety equipment. See Foskor COP 65, Personal Protection Equipment for details.
- xv. Records of issues and inspections of PEE (Portable Electrical Equipment). See Foskor COP 60, Portable electrical Equipment for details.
- xvi. Records of daily, weekly and monthly 2.6.1 /SHE Rep safety inspections. See Foskor COP 2, SHE Inspections for details
- xvii. Records of daily green area and safety talk. See For COP 7, Communication for details
- xviii. Any other documents, certificates or records as requested by a Foskor official deemed

COP 25 – CONTRACTORS LEGAL OBLIGATION AND MINIMUM REQUIREMENTS

Contractor must comply to the requirements below within 4 weeks from awarding the contract unless otherwise agreed with 3.1 and SHE Manager within 10 days from the awarding of such contract

Reminder of Risk identification – LIFE SAVING BEHAVIOURS

1. Trackless Mobile Machinery
2. Working at Heights
3. Lock-out
4. Lifting Machinery
5. Working with live electrical installations
6. Confined spaces
7. Machine guarding
8. Conveyors
9. Machine Safety Device

Risk assessment is also on life saving rules – but this is applicable to all jobs and training apply to all that will do physical work!

16. PARAMETERS

16.1 Design parameters

All plant and equipment will be designed to:

- Operate satisfactorily under atmospheric, ambient and other conditions present at the site location

- Ensure interchangeability of units and/or sub parts throughout the plant to reduce spares holding requirements – take old plant equipment into account
- Ensure reliability and maintainability. A minimum availability of 98% is required
- Operate without undue vibration, stresses (temperature and built in) and excessive noise
- Comply with legal requirements in terms of the water license and DWA

16.2 Specifications, Codes, Standards and Regulations

Latest addition of the South African National Standards in effects at the date of projects design shall establish the minimum requirements for design, materials and construction. This should be referenced with the Foskor General Engineering specifications and requirements of the Foskor SHEQ system (COP's)

No work shall be contemplated which is in breach of any Legislation in South Africa – Typically:

- Water license (04/B72K/ACGIJ/962)
- Occupational Health and Safety Act
- South African Mine Health and Safety Acts and regulations (Act 29 of 1996)
- Explosive Acts and Regulations - South Africa
- DWA and the National Water Act.
- Foskor COP's
- Foskor Engineering Specifications
- The latest revisions of the SANS standardized specifications and Foskor Specifications as applicable at the time of quotation shall apply to this contract.

Note! The equipment to be capable of continuous operation 24 hrs/day, 365 days/year with operating availability equal to 100%.

16.3 Site Geography

The plant is located at Phalaborwa, Limpopo, South Africa

16.4 Ambient conditions

- Ambient temperature

Summer	35 Degrees Avg.	50 Degrees Max
Winter	17 Degrees Avg.	2 Degrees Min

- Site Altitude: 380m
- Prevailing wind direction: Generally South Easterly - Maximum design velocity 40m/s (144km/h)
- Very dusty conditions
- Average annual rainfall = 540 mm

16.5 Foskor General Engineering Specifications (should be consulted prior to finalization of any design or specification)

Name	Modified	Modified By
Engineering Specification Index	15 April, 2016	Khayelihle Pepu
GS001 - General Design Information - Rev 1	15 April, 2016	Khayelihle Pepu
GS002 - Engineering Drawings - Rev 0	15 April, 2016	Khayelihle Pepu
GS003 - Quality Control Procedures - Rev 0	15 April, 2016	Khayelihle Pepu
GS005 - Concrete and Formwork - Rev 0	15 April, 2016	Khayelihle Pepu
GS007 - Plate work - Rev 0	15 April, 2016	Khayelihle Pepu
GS008 - Welding procedures - Rev 0	15 April, 2016	Khayelihle Pepu
GS009 - Structural fabrication and erection - Rev 0	15 April, 2016	Khayelihle Pepu
GS011- Piping - Rev 0	15 April, 2016	Khayelihle Pepu
GS012 - Pressure vessels - Rev 0	15 April, 2016	Khayelihle Pepu
GS013M - Painting and Protective Coatings	15 April, 2016	Khayelihle Pepu
GS014 - Rubberlining - Rev 0	15 April, 2016	Khayelihle Pepu
GS015 - Fencing - Rev 0	15 April, 2016	Khayelihle Pepu
GS016 - Roofing and side cladding - Rev 0	15 April, 2016	Khayelihle Pepu
GS017 - Fuel - Rev 0	15 April, 2016	Khayelihle Pepu
GS018 - Lubrication - Rev 0	15 April, 2016	Khayelihle Pepu
GS019 - Liquid containemt bund walls - Rev 0	15 April, 2016	Khayelihle Pepu
GS020 - General purpose valves - Rev 0	15 April, 2016	Khayelihle Pepu
GS021 - Gearboxes - Rev 0	15 April, 2016	Khayelihle Pepu
GS022 - Chainblocks and lever hoists - Rev 0	15 April, 2016	Khayelihle Pepu
GSI-004 - Field Instrumentation Standards	15 April, 2016	Khayelihle Pepu

Service provider /Contrator /Supplier - Please ensure that you have the latest copy of Specifications before any activity is committed.

ELECTRICAL SPECIFICATIONS		
<u>SPECIFICATION NUMBER</u>	REVISION	TITLE
EE-1	Latest Revision	Motor Control Centre & Switchgear
EE-2	Latest Revision	Squirrel Cage Induction & Wound Rotor Motors
EE-11	Latest Revision	Power Factor Correction Equipment
GE-1	Latest Revision	Design Criteria for Electrical Installations
GA-1	Latest Revision	Procedures for Enquiries & Tenders
GD-1	Latest Revision	General Requirements for Design, Project Management & Tenders
GD-2	Latest Revision	Engineering Change Order (E.C.O) Procedure
GM-1	Latest Revision	Mechanical Equipment
GM-5	Latest Revision	Pipe Standards
GM-6	Latest Revision	Engineering Drawing & Document Requirements
GM-8	Latest Revision	Surface Protection
GM-3	Latest Revision	Painting & Surface Protection of Steel
GS-1	Latest Revision	Structural Steel work & Plate work Fabrication & Erection
GQ-1	Latest Revision	Quality Control
GI-1	Latest Revision	General specifications & Procedures
GI-2	Latest Revision	Installation & Commissioning
GI-3	Latest Revision	General Equipment Specification
GI-4	Latest Revision	Field Instrumentation Specification

Service provider/Contractor/Supplier-Please ensure that you have the latest copy of specification before any activity is committed.

17. PROJECT MANAGEMENT - CONTRACTOR

- a) Nominate a single window of communication to Foskor – Typically the appointed contractor 2.6.1
- b) Attend meetings as agreed during the project kick off meeting
- c) Submit Progress reports (Format & interval) as defined in the Kick-off Meeting (Invoicing, Labour, Performance against plan, Contractor purchases, Quality Management, Safety, Etc.
- d) Manage and participate in the “Daily Journal” as part of executing the project
- e) All meetings will be held at FOSKOR offices, unless otherwise stated
- f) The contractor to provide updated project management plans on progress as defined by the Foskor Project Engineer.
- g) If the project is executed based on a shutdown approach the contractor will produce a formal Works Breakdown Structure of the works.

- h) If the contractor cannot produce a proper WBS then the contractor will be required to subcontract this function to produce the WBS and manage the WBS for the duration of the project. This cost must be included in the contractor's price
- i) WBS - **WBS** is a hierarchical and incremental decomposition of the project into phases, deliverables and work packages. It is a tree structure, which shows a subdivision of effort required to achieve an objective, for example a program, project, and contract.
- j) This includes arrangements, tools, equipment, labour, Tasks, Purchase, Quality, Communication, etc
- k) Project progress updates - If the contractor cannot produce proper updates on a WBS then the contractor will be required to subcontract this function to produce the WBS updates for the duration of the project. This cost must be included in the contractor's price

18. LIAISON AND CO-OPERATION WITH OTHERS

- The CONTRACTOR/ SERVICE PROVIDER shall be required to co-operate and liaise with Foskor appointed project manager
- The CONTRACTOR/ SERVICE PROVIDER must note that construction is within an operational plant.
- The CONTRACTOR/ SERVICE PROVIDER may appoint a Foskor approved sub-contractor
- The CONTRACTOR/ SERVICE PROVIDER shall be required to work in conjunction with the Foskor appointed structural-, electrical-, equipment- and instrumentation installation contractor – if applicable.

19. GENERAL CONDITIONS – COMMERCIAL

19.1 Extensions, penalties and retentions

- a) Extension on the promised completion or Milestone date may be requested but needs to be approved by Foskor. The contractor should be in possession of a formal document issued via Foskor Procurement indicating that this request was approved
- b) Any additional works not defined in the order needs to be approved by Foskor in writing before any work commence.

Description	Condition	Duration
Penalties	2% per week	Late Delivery after promised completion date
Performance Bond	0% of Contract Value	0 Year after completion
Retention	0% of Contract value	Release after 3 months
Type of Contract	Foskor General condition of contract	
Tender price validity	3 months	
Escalation	None	None

All delays must be immediately brought under the attention of the section engineer and the responsible party agreed upon immediately.

19.2 After sales service or requirements

Any items of fabrication that fail because of poor quality of the contractor or poor workmanship during installation shall be deemed to be for the contractor's account. The contractor shall repair/replace to the required standard without any charge Foskor.

Any screens that fail prematurely due to the contractor's lack of performance or poor installations will be

rectified on breakdown basis at the cost of the contractor. Generally, screens should last from service to service which is a minimum of 14 days on the new screen regime. Detailed records of screen change-out must be kept and proof thereof supplied during failure investigation and normal audit by the section.

19.3 Invoice due dates

Invoices are due to be submitted before the 15th of the Month.

20. TENDER EVALUATION CRITERIA

- a) As part of the process to assist with the evaluation of the bidder's proposal/quotation and to make an informed decision in the awarding of this tender, the following information is required
- b) The following tender evaluation criteria will be used for adjudicating the Contractor submitted tender.
- c) Please provide the required documentation as requested in the "Proof / documents to be submitted" column. Please be specific when submitting documents by ensuring it answer the item specified.
- d) Please use the annexure number as indicated to identify proof submitted.
- e) Failure to submit the relevant documentation as requested in the Evaluation criteria document may lead to a disregard of the submitted tender.

MANDATORY REQUIREMENTS

Bid submission not meeting the mandatory requirement will result in the bid being disqualified.

Evaluation Criteria (Technical)				
Repair and Maintenance of Vibratory Screens, and Relining of Secondary Crusher Components				
No	Technical Criteria Description	% Contribution	Proof / documents to be submitted	Notes
1	Experience & Team competence -			
a)	Company – Experience in General Plant maintenance, construction and Manufacturing activities in a mining environment. Scoring: No Experience = 0% Less than 3years = 7.5% R2m and above = 15%	15%	Give reference list of purchase orders, with values and contact numbers for verification <u>Annexure A</u>	
b)	Company – Experience in equipment maintenance, particularly crushing and screening (Symons and Allis Chalmers) Scoring: No Experience= 0% Experience = 25%	25%	Give reference sites and purchase orders held in the past, with values, and contact numbers for verification <u>Annexure B</u>	
c)	Team – Qualified artisans (welders/Boilermakers/fitters), and technical assistant, with specialist training in screen technology and crusher OEM training	30%	Give personnel Short CV and provide proof of training, provide a compliance plan to upskill workforce (RPL) to pre-requisite	

Evaluation Criteria (Technical)				
Repair and Maintenance of Vibratory Screens, and Relining of Secondary Crusher Components				
No	Technical Criteria Description	% Contribution	Proof / documents to be submitted	Notes
	<p>Scoring: non-compliant = 0% Partial compliant = 15% Comply= 30%</p>		<p>knowledge with OEM's (partially comply)</p> <p><u>Annexure C</u></p>	
d)	<p>Company- Execute work in accordance with approved procedures. Schedules, WBS</p> <p>Scoring: non-compliant = 0% Comply = 5%</p>	5%	<p>Provide proof of one previous signed off WBS/schedule/critical task procedure</p> <p><u>Annexure D</u></p>	
	<p>Quality planning, quality assurance/control plan, quality control on fabrication projects</p> <p>Scoring: Not provided= 0% Provided = 5%</p>	5%	<p>Provide documentation of one previous signed off plans</p> <p><u>Annexure E</u></p>	
	<p>Team – Capabilities -Provide Organogram indicating names, positions, trades for this project.</p> <p>Scoring: No organogram = 0 % Organogram with some skills = 5% Organogram with all relevant skills = 10% Submit CV with Relevant Design Experience = 25%</p>	10%	<p>Submit organogram with names, positions and skills relevant to this work</p> <p><u>Annexure F</u></p>	
	<p>MQA based Basic Health and safety, First Aid, HIRA</p> <p>Scoring: No Training = 0% Partial Training =2.5% All relevant personnel trained = 5%</p>	5%	<p>Provide proof of compliance or plan indicating how compliance will be achieved</p> <p><u>Annexure G</u></p>	
	<p>Authorisations</p> <ol style="list-style-type: none"> 1. Working at heights 2. Conveyor belts 3. Lock out 4. HIRA 5. Hot work <p>Scoring: No Training = 0% Partial Training =2.5%</p>	5%		

Evaluation Criteria (Technical)				
Repair and Maintenance of Vibratory Screens, and Relining of Secondary Crusher Components				
No	Technical Criteria Description	% Contribution	Proof / documents to be submitted	Notes
	All relevant personnel trained = 5%			
	Total Technical Score	100.00%		
Note: In order for the bid to be considered the bidder needs to score 70% and above, and comply to all mandatory requirements				

21. PRICING SCHEDULE

Description: Repair and Maintenance of Vibratory Screens, and Relining of Secondary Crusher Components
 All items of expense to be included in the Price schedule, including but not limited to:

- a. All labour and supervision, including transport, accommodation, meals, etc.
- b. All expertise, skill and technical support, Supervision, Administration, Safety, etc.
- c. Cost for any subservice providers/service providers used.
- d. Design, supply fabricate and installation of required Scope items.
- e. Cost and supply of all tools and machinery required to successfully instal and commission the OHC.
- f. Wastage/Cut Of to be included in the rates, Sum prices
- g. All consumables required to Execute the work as per the Scope, Pricing Schedule (Bolts, nuts, Welding Rods, Gas Cutting, etc)
- h. All Lighting and electrical extensions requirements to execute the work
- i. Supply and manage all Mobile Cranes required to execute the tasks
- j. Basic Cleaning of Spillages to execute the work
- k. All Supervision, Transport, Site Security, etc
- l. All Safety Related items required to execute the task (Work Permit, PPE, Training, Medicals, etc)

	Description	Qty	Rate	Total
1.0	Vibrating screens maintenance			
1.1	Change vibrating screens and repair screen under/over chutes - East Crew rate	52		
1.2	Change vibrating screens and repair screen under/over chutes - West Crew rate	52		
2.0	Relining Components and Screen Deck Manufacture			
2.1	Build vibrating screen M16 double deck (complete)	6		
2.2	Build vibrating screen V16 double deck (complete)	4		
2.3	Build vibrating screen V16 since deck (complete)	3		
2.4	Fabricate cross members (incl. barrels)	220		
2.5	Rebuild mantle complete (7ft Symons or 84 Inch AC)	9		
2.6	Rebuild bowl complete 7ft Symons or 84-inch AC	9		
2.7	Fabricate C Clamps (7ft Symons or B4 inch AC)	220		
2.8	Rubber lining Screen Build Components per Screen	Lot (13)		
2.9	Manufacture Spring Base holders/Swivels per Screen	Lot (13)		
3.0	LABOUR (Breakdowns and Planned/Unplanned overtime rates)			
3.1	Artisan (Normal time per hour) (2 People)	1440 hrs.		
3.2	Semi-skilled (Normal time per hour) (4 people)	2880 hrs.		

	Description	Qty	Rate	Total
1.0	Vibrating screens maintenance			
3.3	Artisan (Overtime 1.5 time per hour) (2 People).	300 hrs.		
3.4	Semi-Skilled (Overtime 15. time per hour) (4 people).	600 hrs.		
3.5	Artisan (Overtime 2Xtimes per hour), (2 people)	300 hrs.		
3.6	Semi-Skilled (Overtime 2Xtime per hour) (4 people)	600 hrs.		
3.7	Screen repair Standby Team - includes allowance (4 people)	1200 hrs.		
3.8	Other.....Specify e.g.			
4.0	Annual Shutdown Screen Maintenance			
4.1	Artisan (Normal time per hour) (2 People)	45 hrs.		
4.2	Semi-skilled (Normal time per hour) (8 people)	45 hrs.		
4.3	Artisan (Overtime 1.5 time per hour) (2 People)	15 hrs.		
4.4	Semi-skilled (Overtime 1.5 time per hour) (8 people)	15hrs		
4.5	Artisan (Overtime 1.5 time per hour) (2 People)	12 hrs.		
	Semi-skilled (Overtime 2x time per hour) (8 people)	12 hrs.		
	Other.... specify			

All price alterations must be signed for by the bidder confirming that such changes were made by the bidder. **PLEASE NOTE THAT PRICE CHANGES WITHOUT A SIGNATURE WILL LEAD TO THE DISQUALIFICATION OF THE BID SUBMITTED.**

NOTE: The onus lies with the tenderer to make sure that all formulas and calculations are correct. Calculation errors discovered during the evaluation process will be logged as a non-conformance and the tender / quotation will therefore be disregarded

22. REFERENCES

Code of Practice Foskor Risk Assessment (COP 01).
 Quality Management Systems -Requirements (ISO 9001:2015).
 Environmental Management systems- Requirement with guidance for use (ISO 14001:2015)
 Occupational Health and safety systems- (ISO 45001)

23 ANNEXURES

Non

