

Design, Supply, Installation, Testing & Commissioning of High-Rate Thickener System

Tender no: **FTP /24/MN**

Cost Code: PC3013550

Revision¹: **1** see legend at bottom of page

Revised date: 20/02/2024

NAME	TITLE	Empl. no	SIGNATURE	DATE
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COMPILED - RECOMMENDATION



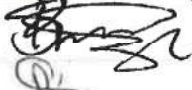

Mansoor Basha Pinjari	Projects Manager	504802		20/2/24
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COMPREHENSION AND ACCEPTANCE BY CLIENT

The Client warrants that he/she reviewed the Scope of Works and that this Tender and related documents and that the Scope of Works comply to Production requirements and the outcome of the work as agreed between parties.

Kurt Brinkhuis	Process Engineer Operational Excellence	10125		21/2/24
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APPROVAL TO PROCEED

Ntsikelelo Lukope	Senior Manager Operational Excellence	503496		21/2/2024
Sagie Moodley	Senior Manager Phosphoric Acid Production	504583		21.2.24
Blessing Mbuyazi	Senior Manager Projects	504427		21/02/2024
Sam Mbuyazi	General Manager Acid	500441		21/02/2024

¹ Revision Legend:

0.n = Draft,

1= Final version

Thus first draft = 0.1, second draft = 0.2, etc, and final approved = 1.0

Should the final be revised for whatever reason the revision would be 1.1 etc.

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Definitions:

For the purpose of this document the following definitions/abbreviations will apply:~

Foskor

- Shall only mean and refer to Foskor (Pty) Ltd.

Tenderer

- Shall mean a business company, organization or person who undertake to conduct such works as described in the Scope of Work section of this document and as submitted by means of return Tender.

Contractor

- Shall mean a business company, organization or person who undertake to conduct such works as described in the Scope of Work section of this document. Unless otherwise specified, the Tenderer and the Contractor will be deemed to be one and the same.

He/His/Himself

- Shall also refer to the opposite gender as well or a company of individuals or combination of persons of different genders as applicable to the Tenderer.



Section A: INVITE AND TENDER INSTRUCTIONS

A.1 Invitation to Tender

A.1.1 Tenderers are invited to submit a tender in accordance with this Tender Document.

The Works consists of the **Design, Supply, Installation, Testing & Commissioning of High-Rate Thickener System.**

The tender Instructions are to be found in **Section A.**

The Contract Works Forms of Tender is stipulated in **Section B.**

The detailed Scope of Work and Specifications are to be found in **Section C.**

The Conditions of Contract are stipulated by **Foskor (Pty) Ltd, Procurement Department.**

A.1.2 At the time of tendering, any queries and/or doubts within the scope, specifications or drawings shall be referred to:

Designation	Category Buyer Projects
For the attention of	Mphumeleli Ngqulunga
Telephone	035 902 3115
Fax	035 797 3941
Cell no	
Email	phumen@foskor.co.za

A.2 Return of Tender Documents

A.2.1 One copy of this document, duly completed and signed by the Tenderer, shall be delivered in a plain sealed envelope, distinctly marked as follows:

TENDER		
Tender No.	FTP /24/MN	The Manager Procurement
Contract Title:	Design, Supply, Installation, Testing & Commissioning of High-Rate Thickener System	FOSKOR LIMITED
		21 John Ross Parkway
		Richards Bay
Closing date & time:		

A.2.2 Tenders shall be placed in the **Tender Box at Foskor Richards Bay Main Administration Reception** no later than **12h00 noon** on the closing date

A.2.3 A tender sent by fax shall not be accepted.

- In case of Tenderers not being local, and not being in a position to hand deliver tender documents to the above-mentioned location, Tenderers may use an approved document courier for the



purpose of delivering the tender document to Foskop (Pty) Ltd. This would be subject to auditable proof of dispatch from the Courier Company (including time and date of dispatch).

- Such proof shall be faxed and confirmed as addressed to **Strategic Sourcing & Category Lead, FOSKOR (PTY) LTD, 21 John Ross Parkway, Richards Bay**, facsimile number as indicated under item A.1.3 before the closing time and date of the tender.
- Foskop shall take no responsibility for lost courier documents – prior to opening of tenders - and onus rests on Tenderer to keep duplicate of Tender Submission.
- In this case the sealed envelope shall remain addressed as per paragraph A.2.1, and shall be placed in a sealed courier bag with the following street address delivery instructions:

FOSKOR (PTY) LIMITED - (TENDER BOX)
21 John Ross Parkway
Richards Bay
3900

- A.2.4 Tenders will not be opened in public and under no circumstances will the price(s) at which any Contract was awarded be divulged to any person.
- A.2.5 In the event that the Tenderer did not submit a tender or if his tender was unsuccessful, the Tenderer shall return the Enquiry Document and Drawings within **14 days** to the **Strategic Sourcing & Category Lead**.

A.3 Site Inspection

An official Site inspection shall be held at the **Foskop, Richards Bay** site in order for the Tenderer to fully acquaint himself with prevailing site and works conditions. In so doing you are to ensure that you fully understand the context and extent of the works (refer B.5 – Site Inspection Certificate).

Date of Site Visit

Time of Site Visit

Meeting Venue

From : To :

Report at Main Security Entrance

Please wear the following protective clothing that are as per Foskop specification:

Overalls (Acid Proof),
Hard Hat
Safety Shoes
Safety Glasses
Hearing protection
Gloves

Yes

Yes

Yes

Yes

Yes

No



IMPORTANT

- Please note that a Safety Induction is **MANDATORY** and all Tenderers to allow for at least **30 minutes** before the Site Meeting start, to complete the induction.
- The Site Visit / Inspection is **COMPULSORY**.

A.4 Examination and Completion of Documents

- A.4.1 The Tenderer shall examine all documents forming part of the Tender and submit his tender accordingly. All drawings, addendums, annexures received with the Tender documents must be returned with your company stamp and/or signature, as a comprehensive part of your Tender Submission. Failure to do so may result in disqualification from tender. Tender in accordance with this format and submit documents as specified below.
- A.4.2 The Sections of this document shall not be separated in any way nor shall any pages be detached therefrom.
- A.4.3 The Tenderers submission is to include all Financial and Contractual detail and be signed (by authorized person) and/or company-stamped together with tender submission.
- A.4.3.1 Schedule of rates of Costs in detailed Breakdown or Labour Rates for the Works or Breakdown per Bill of Quantities
- A.4.3.2 Initial Project Program of Works, Work Methodology, and Cash Flow (structured similarly to payment terms)
- A.4.3.3 Schedule of Key Personnel on the Project
- A.4.3.4 Schedule of Similar Contracts Undertaken
- A.4.3.5 Site Inspection Certificate – signed by Tenderer as proof of attendance

A.5 Contract Documents Priority

The eventual Contract shall comprise the documents as stated in this tender document, your Tender submission by which you agree and the Foskor (Pty) Ltd Terms and Conditions, which shall be interpreted in accordance with the order of priority stated in the said Conditions.

A.6 Alterations by Tenderer

- A.6.1 Should the Tenderer propose any departures or modifications from the Conditions of Contract, Specifications, or to qualify his tender in any way, he/she shall set out his/her proposals clearly in the covering letter attached to this Tender with reference to the particular section of the document, failing which the tender will be deemed to be unqualified. Any proposed technical departures from Foskor (Pty) Ltd's Requirements or Specifications shall only be considered if submitted in writing together with a detailed motivation for such departures.
- A.6.2 The Tenderer shall include in respect of each proposed alteration the following :
- a) Reason for proposed exception;



- b) Suggested re-wording;
- c) Any effect on the tender price;
- c) Any effect on the execution of the scope of supply;
- d) Any effect on Foskor's overall program objectives.

If any of the above information is not supplied, the Tender may be regarded as non-compliant.

A.7 General

- A.7.1 Foskor (Pty) Ltd reserves the right to adjust arithmetical or obvious errors in the Tender. Such adjustments made by Foskor (Pty) Ltd will be communicated to the Tenderer prior to the acceptance of his Tender.
- A.7.2 The Tenderer (whether his Tender is accepted or not) shall treat the details of the Tender as private and confidential and no copies shall be made thereof without the permission of Foskor (Pty) Ltd.
- A.7.3 Foskor (Pty) Ltd is not bound to accept the lowest or any other Tender it may receive, nor to assign a reason for the rejection or acceptance of any Tender, and Foskor (Pty) Ltd has the right, after Tenders are opened, and before a Contract is awarded, to enter into negotiations and discussions with one or more Tenderers short-listed on a price, programme or technical basis, with a view to the clarification, improvement or amendment of any particular Tender.
- A.7.4 All Tenderers tender at their own risk and Foskor (Pty) Ltd is not bound to accept any Tender and under no circumstances whatsoever will be responsible for any costs incurred by any Tenderer in compiling or submitting the tender.
- A.7.5 Furthermore, Foskor reserves the right to accept only a part of the Tender, with due communication and agreement of the Tenderer.
- A.7.6 The Tenderer is required to submit a 'bona fide' Tender, intended to be competitive and not to fix or adjust the amount of the Tender by or under or in accordance with any agreement or arrangement with any third party. The Tenderer is also obliged to ensure that it has not and will not at any time before the hour and date for the lodging of this Tender do any of the following acts:
 - a) Communicate to any person¹ the amount or approximate amount of the proposed Tender except where the disclosure, in confidence, of the amount of this Tender was necessary for the preparation of the Tender.
 - b) Enter into any agreement or arrangement with any third party that shall disqualify from or that Foskor shall refrain from using.
 - c) Commit any act or omission that would be contrary to the Maintenance and Promotion of Competition Act 96 of 1979 and notices and regulations published in terms of that Act, especially the notice published in the Government Gazette of 2 May, 1986 or contrary to the Harmful Business Practices Act 71 of 1988.



Section B: FORMS OF TENDER TO BE SUBMITTED

B.1 Schedule of Rates or Summary of Bill of Quantities

	From Bill of Quantities –if applicable or →	qty	x rate =	ZAR	
1.0	SUB TOTALS:				
1.01	Preliminary & General				A1
1.02	Design of High Rate Thickener System				A2
1.03	Manufacture & Supply				A3
1.04	Installation, Testing & Commissioning				A4
1.05	Guarantee Trial Run (Performance Test)				A5
	Sub Totals Sum (Excluding VAT)				A6
2.0	Add: VAT	15%			A7
3.0	Total Tender Sum (Including VAT)				A8

- B1.1 In the event of their being any obvious errors of pricing, extensions or additions in the priced Schedule of Quantities attached, we agree to their being corrected, and the contract amount altered accordingly.
- B1.2 We further undertake that this tender cannot be withdrawn or retracted for **90** (ninety) days from the closing date.
- B1.3 Notwithstanding that, this tender is submitted by invitation, it is clearly understood and agreed that there is no obligation upon Foskor to accept the lowest or any tender.
- B1.4 The tendered prices are fixed and firm for the duration of the contract, and unless otherwise agreed to in writing a **10% Retention** (*held for 12 months, unless otherwise specified*) shall be deducted on all payments made for the Liability Period as defined in B.2. This clause also refers to 'Handover' as specified in **B 2.1**. WE AGREE TO A 10% RETENTION and 12 MONTHS OF OPERATION OR 18 MONTHS FROM HANDOVER WHICHEVER IS EARLIER. The 10% retention period will apply for each repair or task completed separately and will be referred to as work packages.
- B1.5 Unless or until a formal agreement is prepared and signed, this tender, shall serve as your written acceptance and constitute a binding contract between Foskor and Yourself.

Amount In Words:

Signed aton.....

Signature
For and on behalf of the Tenderer(duly authorized)

.....
Company Stamp


Foskor Official



B.2 Initial Project Programme of Works, Work Methodology and Cash Flow

(This is a workable schedule and the Contractor is in no way obligated to these dates. An obligatory final programme will only be required once the tender is awarded)

Commencement Date (Immediate)

2 Weeks from order award

Completion of Works/ Final Handover (Guide: Project duration)

Within 5 Months from official order receipt

Snagging/Modification List Date

Within 2 Weeks after Successful Commissioning and Guarantee Test Run

Defects Liability Period Applicable (Start from Project handover)

12 Months from Practical Completion

Retention Payment 10%

12 Months from Handover

TO BE SUBMITTED WITH THIS TENDER

The Tenderer shall submit with this Tender:

- 1 Initial programme (Bar Chart/Gantt Chart)
- 2 Milestones
- 3 Indicative Cash Flow / Invoicing
- 4 Record of experience and recent references
- 5 Proof of professional registration for the Works to be completed in the time allowed.

OTHER IMPORTANT NOTES

- **'Defects Liability Period'** shall be that period in force for Foskor to call upon the Contractor/Consultant to rectify at no cost to Foskor (Pty) Ltd any defects of workmanship, quality or practice; and shall remain in force **in parallel with the Retention Period** and any other duration agreed to.
- The Tenderer is to list and motivate any deviations in terms of Project Program and/or time allowed and this is subject to approval by the Foskor (Pty) Ltd Engineer.
- It would be expected, in the event of critical work and/or work behind programme/schedule, should such be attributable to the Contractor, to make up the time and work and complete the work at no cost to Foskor (Pty) Ltd.
- The Tenderer shall within **7 (seven)** days of contract award submit a **final detailed** work methodology and **final detailed** programme, and the final work methodology shall be verified and approved by Foskor (Pty) Ltd.



- The Tenderer is welcome to propose alternatives work methodology or approach to work, that may be of mutual benefit. This would be submitted in the form of an Alternative (clearly marked), however the Tenderer is **still to submit a tender in the form specified** in this tender.
- The Tenderer shall submit a Work Breakdown Structure (WBS) and compile a programme (use MS Projects or MS Excel to compile the Project Program).
- If the Tenderer is partially or wholly responsible for the design or design drawings according to which construction is specified, any corrections to design/design drawings shall remain for the Tenderers account for a period of 6 months (or as otherwise agreed) after project completion. This is to ensure that poor design or inaccuracy of designs is rectified at no cost to Foskop.

B.2.1 Project Completion and Handover; Retention

Unless otherwise agreed, Project Completion (handover), shall be deemed to be from date of Foskop issuing a Project Complete/Handover Certificate to the Contractor. This should be expected to be received within seven (7) days from date of receipt by Foskop of the complete Data Pack in its acceptably certifiable form (refer Section C of this document, **Quality Control**). Once the project has reached completion as defined by this scope, onus rests on the Tenderer to request from Foskop a Project Complete/Handover Certificate, which receipt shall define and signify the commencement of Retention Period (if applicable).

B.2.2 Initial Programme to be Submitted

The interim and final project completion dates, as indicated in the above table should be used as the guideline for the Tenderer to compile the detail project schedule.

After the contract agreement is accepted (by signature of an agreement or acceptance of a Purchase Order) the dates shall be fixed and shall be applicable to the penalty clause as per agreement.

ATTACH GANT CHART AND/OR BAR CHART TO THIS PAGE

B.2.3 Table with Milestones to be Submitted

Using the critical path items from the programme compile related Milestone Dates. Thus, the items/actions/ activities to be met that is critical towards the completion of the project

WBS ref	MILESTONES	To be Completed on



B.3 Schedule of Key Personnel on the Project

The Tenderer shall:

1. Complete schedule B.6.1 below concerning the Key Personnel on the project, indicating also if the person is employed by the Tenderer, a sub-contractor or temporary employed person.
2. Submit a project organogram showing the relationships and authority.

Key Personnel	Name and Surname	Full/Part Time on site, off-site?	Employed, Sub-Contractor or Temp?	Years Related Experience	Years Post Professional Registration
Project Manager / Owner					
Site Manager/ Contracts Manager					
Quality Assurance and Control					
Document Control and Accounts					
Safety Officer					

These persons shall not be substituted without prior consultation with and approval from Foskor (Pty) Ltd.

Failure to submit this information at the time of tender could lead to disqualification of the tender.



B.4 Schedule of Similar Contracts Undertaken

Please provide a list of work done on contract of which the Scope of Works that are similar to the one described in this document (or attach references)

[illegible]

B.5 Schedule of Labour Rates for the Works

The rates for labour indicated below shall be the Total Cost to the Company (Contractor). It shall include for all the Contractor's profits, overheads, wages, accommodation, travelling, subsistence and other costs relative to the employment by the Contractor of the personnel detailed, and for hand and portable electric or pneumatic tools and consumables normal to the trade of the respective personnel.

However, it will exclude indirect supervision as same are deemed to be included under the costs relating to the Conditions of Contract i.e. non-productive supervisors are deemed to be included in the rate.

The rates detailed herein shall **not** be subject to escalation.

The Contractor's rates per hour are based on a normal **9 hours per day**.

The application and use of these rates shall be at the sole discretion and subject to the prior approval of the Foskop designate representative.

Item No.	Category	Rate per Hour in Rands		
		Normal	Overtime	Sundays and PPH



B.6 Schedule of Equipment for the Works

The Contractor must list below all the items of major equipment, which he guarantees will be provided on site in perfect working order to complete the work. The lists of items of equipment shall provide the Contractor's warranty of ownership of such equipment unless specifically endorsed in this Annexure to the contrary as "hired" or "hire purchase equipment."

The rates for Equipment detailed below shall include all overheads, profits, and maintenance and running costs including the provision of drivers/operators where necessary.

Contractor's rates per day are based on **9 hours per day**.

The rates detailed herein shall not be subject to escalation. No payment in respect of standing time shall be paid for items of equipment not listed below.

This Schedule must be accurately completed. Phrases such as "adequate equipment will be provided" will not be accepted. The application and use of these rates shall be at the sole discretion and subject to the prior approval of the Engineer.

Item	Description	Rate/hr	Rate/Day	Standing Time/Hour



B.7 Site Inspection Certificate – To be signed by Tenderer

This is to **CERTIFY**, that we.....
(Name(s) in CAPITAL LETTERS) (Referred to on the Form as "We")

representing and being duly authorized by :

.....
(Name of Company and Address) (Referred to on the Form as "We")

1. Visited the SITE on (date);
2. Received the TENDER Documents (including all attachments and subsequent correspondence related to this tender);
3. Carefully examined the SITE and made ourselves familiar with all local conditions likely to influence the WORKS and the cost thereof;

We further CERTIFY that we are satisfied with the description of the WORKS and explanations given by Foskor (Pty) Ltd and that we fully understand the nature of this TENDER.

I/We are,

Yours faithfully

SIGNATURE: _____

ON BEHALF OF: _____

DATE: _____

AS WITNESS: _____



Section C: SCOPE OF WORKS

C.1. Background, Present Situation and Proposed Solution

C.1.1 Background

This project supports Foskor's turnaround plan with regards to P2O5 production and efficiency improvement initiatives by installing a sludge recovery system. Foskor (Pty) Ltd primary purpose is the production of phosphoric acid. When phosphoric acid is stored inside the tanks it matures and precipitates solids. The bulk of the solids is removed in the clarification section of the plant but due to limited residence time some solids post-precipitate in the final acid tanks. Due to high production rates, the accumulation of solids in the final acid tanks is unavoidable. The solids in the tanks cause several operational challenges for the company ranging from jamming of agitators, minimising storage capacity, premature decommissioning of tanks and tank damages caused by physical cleaning of tanks. After cleaning the solids in the tank P2O5 losses are incurred (efficiency loss) and contaminated sludge disposal challenges are experienced.

C.1.2 Present Situation

Foskor has 50,000 installed tons of P2O5 capacity for final product handling and of the capacity only 50% is available. The main objective of the project is to reduce solids content in saleable acid to less than 0.5%. Recover 24,000 tons of solids per annum (75% w/w of solids in the sludge).

C.1.3 Proposed Solution: Reason for this Tender

Foskor invites suitably experienced and capable Suppliers for the Design, Supply, Installation, Testing & Commissioning of High-Rate Thickener System to be fit for purpose and on a turnkey basis and as per the required latest applicable Standards & Codes.

C.2. Legislation, Standards and Codes of Practice

Latest revisions or amendments of the listed codes and specification are applicable to this contract:

Number	Title / Description	Revision
COP6	Control of Construction Work	Latest
Act 85 of 1993	Occupational Health and Safety (OHS Act)	Latest
SABS 1200	Civil Construction Work	Latest
S28 NEMA (1998)	Duty and care of environmental degradation	Latest



SANS 10400-L	South African National Building Regulations (NBR): Part L	Latest
SANS 1062	The Structural Use of Steel	Latest
API650	Design of Storage Tanks	Latest
AWSD1.1	Structural steel	Latest
API620	Design and Construction of Large, Welded, Low Pressure Storage Tanks	Latest
API653	Tank Inspection and Repair	Latest
API651	Cathodic Protection for Aboveground Storage Tanks	Latest
API579	Assessments of Vessels – Fitness for Service	Latest

All work listed in this scope of work shall be completed in accordance with the specifications and codes as listed above. It is the responsibility of the Tenderer to be in possession of the latest standards and codes as listed above in the execution of this project.

C.3. Foskor Specifications

All work listed in this scope of work shall be completed in accordance with the specifications listed below.

Those specifically applicable to this Tender is **marked with "YES"**, **however** it does not exclude other specification listed or implied, and it remains the Tenderer's responsibility to ensure that work execution and tender prepared is in line and meets the requirements of all standards indicated or not.

Number	Title / Description	Version	Applicable
OTHER	STANDARDS on this Tender		
APPLICABLE	FOSKOR SPECIFICATION on this Tender		
E003	Industrial Electrical Installations	Latest	Yes
EC1	Installation, Testing and Commissioning of Electrical Equipment	Latest	Yes
FC005	General Earth Works to Plant and Building	Latest	Yes
FD001	Design Criteria for Structures	Latest	Yes
FG001	General Requirements for Projects	Latest	Yes

FL001	Design & Fabrication Criteria for Ladders & Walkways	Latest	Yes
FM001	General Mechanical Specification	Latest	Yes
FM003	Welding of Fabricated Equipment	Latest	Yes
FQ001	General Engineering Quality Requirements	Latest	Yes
FS 001	Specification for the Fabrication & Erection of Structural Steel Work	Latest	Yes
GM5	Pipe Standards Including Auxiliary Equipment	Latest	Yes
GM6/COP9	Engineering Drawing and Document requirements	Latest	Yes
GQ1	Quality Control Procedure for Contractors	Latest	Yes
GS1	Structural Steelwork and Plate Work Fabrication and Erection	Latest	Yes
MC001	Corrosion Protection Colour Coding	Latest	Yes
MC004	General Plant Painting Specification Low Temperature	Latest	Yes
MC006	Repair/Touch-up of Damaged Steelwork	Latest	Yes
MC009	General Plant Protection High Corrosive Areas	Latest	Yes
SS-000000-C-006	General specification for concrete construction	Latest	Yes
SS-000000-C-007	Concrete specification	Latest	Yes
SS-000000-C-012	Grouting	Latest	Yes
SS-000000-Q-001	General quality requirements	Latest	Yes
SS-000000-S-001	Fabrication and erection of structural steelwork	Latest	Yes

It is the responsibility of the Tenderer to be in possession of the latest specifications as listed above or implied in the execution of this project.

The Contractor is referred to the Specification mentioned for full descriptions of materials and methods referred to in these Bills of Quantities/Lump Sum documents, insofar as they apply.

The Contractor is advised to study the referred to specification, before pricing Bills of Quantities/Lump Sum documents.

No claim whatsoever will be allowed in respect of errors in pricing due to brevity of description of items in the Bills of Quantities/Lump Sum documents which are fully described when read in conjunction with the relevant Preambles and/or Specifications.

Suppliers of materials and the like, whose quality systems apply with one or more of the SABS/SANS ISO 9000 Series should be used whenever possible in the absence of a particular SABS/SANS Specification Standard Mark.

The Contractor is hereby informed that where SABS/SANS Specifications are referred to in these Bills of Quantities/Lump Sums documents and Specifications thereto, then **ONLY** the Specification of Work Clauses will apply. The method of measurement and payment clauses will NOT apply to this Contract.



C.4. Project Requirements/Deliverables

The following deliverables are required:

- a. Design, Supply, Installation, Testing & Commissioning of High-Rate Thickener System and handover on a Lump Sum Turnkey (LSTK) contract basis.
- b. Geotechnical Study to be conducted for proceeding with Civil design and construction activities.
- c. Design of Tank by a qualified Tank Design Engineer in accordance to the applicable code/s. Design verifications for Structures.
- d. All feed and discharge Piping requirements.
- e. As built drawings wherever applicable.
- f. Management of all subcontractors by the main Contractor.
- g. Supply of all material, equipment, tools, consumables and trained labour.
- h. Sourcing and supply of transport, scaffolding, craneage, cherry pickers, scissor jacks.
- i. All Foskor Tanks are designed and manufactured as per API 650 specification. The Contractor to supply Tank design Engineer, Mechanical Structural Engineer and NDE (non-destructive evaluation) services. Foskor Resident AIA will be appointed by Foskor to oversee the Project, any re-work will be to the Contractor's account.
- j. For scaffolding, suppliers must consider FOSKOR recommended contractor which is ORAM INDUSTRIALS.
- k. The Contractor to have their own Manufacturing QA to supervise the Contractors manufacturing.
- l. Submission of detailed Quality Control and Assurance information such as data books, quality control plans, design calculations, as built drawings, material identification sheets, material certificates, WPS and PQR, welder qualification certificates, radiographic test reports, liquid penetrant testing, magnetic particle test reports, vacuum box test reports if applicable, NDT qualification procedures, weld maps, API 650 inspection checklists, DFT reports, rubber pull test reports, shore hardness test reports, spark test reports, certificate of fitness.
- m. Provision of nameplates for the equipment.
- n. Compliance at all times to the Foskor SHE requirements and permit systems.

The Contractor will be responsible for the manufactured integrity and detailed design of his supplied equipment/structure. Data Pack to be fully inclusive of all checks and certificates required. (refer C.12.1)

The Contractor shall further ensure that all work is executed with a detailed quantity of work and/or design detail is provided and complies with the specifications as set out in this document.

All detailed designs and specifications are to be approved prior to final acceptance by Foskor (Pty) Ltd Engineer.

C.5. Plant Data

All work listed in the document will be constructed for installation at the **FOSKOR RICHARDS BAY PLANT, 21 JOHN ROSS PARKWAY**



C.6. Drawings and/or Equipment Manuals

The following drawing, data and/or manuals remain the property of Foskor (Pty) Ltd and shall be returned to Foskor (Pty) Ltd on completion of the work.

Drawing No.	Title / Description	Revision
IS-351-800-361-0001	Proposed Underflow solids discharge line Layout	0

All work listed in this Scope of Work shall be completed in accordance with the latest copies of drawings/specifications as listed above and approved by FOSKOR. It is the responsibility of the Tenderer to ensure that the Tenderer has the latest copies of drawings/specifications as listed above for the execution of this project.

It is Tenderers responsibility to conduct site measurement verification and confirm site conditions.

On completion of the project the Contractor must certify all documentation and drawings for correctness and conformance, specifying which standards and regulatory acts these conform to.

C.7 Scope of Work - General

The scope of work includes for the following:

The Contractor to supply as per the complete Bill of Quantities submitted and which includes but not limited to: Tanks designs and design calculations. The supply of any equipment/material that is suggested by the Contractor must be approved by Foskor.

All specialized equipment/material shall be installed as per recommendation by the manufacturer of the supplied material/equipment. Any deviations from Manufacturer recommendations must be suitably justified.

All completed work will be inspected and approved by Foskor. The Contractor shall ensure that all 'acceptance approvals' are received from Foskor (Pty) Ltd before proceeding to the next stage

After completion of installation, the Contractor must allow for final inspection, passing & Handover of the project works with Foskor (Pty) Limited and the nominated Contractor.

The project to be undertaken in terms of the latest revisions and amendments of all relevant legislation, standards and Codes of Practices. The Contractor will complete the Works in accordance with all statutory obligations, municipal regulations and all other relevant requirements. The Consultant is specifically reminded of the requirements in terms of the Occupation Health and Safety Act, Act 85 of 1993 and latest amendments in terms of this project.

The design, selection and supply of all equipment to be supplied by the Contractor shall be approved by Foskor



All work carried out shall be in accordance with the Installation recommended or specified by the manufacturer of the supplied material.

C.7.1 Scope Of Work - Extent

The Contractor understands and shall fully satisfy the scope of required services, as described in the tender **FTP /24/MN** which is generalized as follows:

The works consists of:

- a) Project Management
- b) Design and Engineering
- c) Fitness for Service Assessments
- d) Geotechnical Study, Civil Design and Construction
- e) Tank Design and Construction
- f) Rubber Lining Installation
- g) Equipment Installation
- h) Electrical and Instrumentation Installation
- i) Corrosion Protection
- j) Inspection and Testing
- k) Pre-commissioning, Commissioning
- l) Guarantee Test Run and Handover

We are looking for High Rate Thickener complete Fully Automated System (no agitator/rake arm) to separate solids from concentrated phosphoric acid. It must include flocculant dosing system, Feeding system and Discharge system (both overflow clear acid and underflow solids). Underflow solids discharge transfer to Clarifier which is about 600Meters distance (please refer drawing).

Battery Limits :

FOSKOR – Inlet piping to Acid/Slurry Feeding System of Highrate thickener.

SUPPLIER - Acid/Slurry Feeding System of Highrate thickener, Overflow clear acid transfer system to FOSKOR storage tank, Underflow solids transfer system to FOSKOR Clarifier as shown in piping layout drawing, Flocculant Dosing System, Operation & Control of Highrate thickener system through DCS available at FOSKOR Phosphoric Acid plant control room.

Input Details :

- Material - Phosphoric acid sludge
- Feed Solids Range - 10% to 30%
- Dry Solids - S.G. 2.57
- Dry Tons per Hour – 3.33
- Liquid S.G. – 1.65
- Slurry S.G. – 1.75
- Slurry Flow Rate – 16.70 m³/hour
- Temperature - 40 deg C



- Solids Settling rate – 1.8 m/hr
- pH – 1

Output Requirement :

- Overflow Clarity – 0.20% ppm
- Overflow S.G. - 1650
- % Solids in Underflow – 75.00%

Tentative Details of Vessel :

- About 2M Dia. x 8M Height
- Material of Construction – CSRL (Carbon Steel Rubber Lined)
- Corrosion resistance painting on vessel external surface and structural members.

Design and Drawings :

- Engineering – Design Calculations, Design, P&ID, Operation Philosophy, Detail Drawings etc.
- Supplier is requested to have Site visit and design proposed one accordingly to avoid any space issues at site during erection and congestion in plant.
- To perform pilot trail with the provided samples and submit results from the proposed system. Results to meet the required output conditions proposed by FOSKOR. Highrate thickener System to be designed and developed based on the successful results from pilot test.
- Design of Feeding system, Discharge system (Underflow & Overflow) and Flocculant dosing system.
- Conduct Geotechnical survey and design civil foundations for the equipment and structures.
- Produce and submit for review of Design Calculations for all designs and fabricated equipment.
- Produce and submit for review of complete drawings of all fabricated equipment.
- Supply fabrication Drawings with Bill of Material.
- Obtain Foskop's acceptance comments for Design and Drawings.
- Ensure AIA involvement during Design and Drawings. AIA will be engaged by FOSKOR.
- AIA to ascertain and attest that the Design meets the provision of latest prevailing relevant Engineering, Health and Safety Standards.
- The equipment shall be properly designed taking all relevant factors into account to ensure that the equipment will be safe throughout its intendent life.

Manufacturing

- Procure necessary material based on Design and Drawings approved by Foskop and AIA.
- Prepare and Submit QCP for Fabrication & Installation.
- Prepare and submit the Work Methodology for field Fabrication.
- Submit approved drawings, QCP and Design Calculation documents to third party inspector (AIA) and Foskop Project Leader for final approval before construction start.
- Manufacture of High Rate Thickener along with its required accessories like Pumps, Piping (HDPE), Instruments, Electricals, Control Panel with full automation.



- Manufacturing of Feeding system, Discharge system (Underflow & Overflow) and Flocculant dosing system.
- All operating parameters to be integrated to our Phosphoric acid plant DCS. Operation and control of system from DCS. Existing DCS is of YOKOGAWA make.
- The scope of work includes for the Process and Mechanical design calculations as per latest design codes, General Arrangement Drawings, Fabrication Drawings, Manufacture & Supply. The whole unit complete to be manufactured according to the drawings approved for construction.
- Ensure AIA approvals during fabrication.
- All legally required AIA, NDT, WPS, PQR and QCP etc. to be carried out and issued on completion of fabrication.
- Perform own NDT (Supply own NDT Company).
- The project to be undertaken in terms of the latest revisions and amendments of all relevant legislation, standards and Codes of Practices.
- The Supplier to submit a Data Book, containing Quality Control Plans, Welding Procedures and Non-Destructive Testing and Reports, Inspection reports and Certificates, Material Certificates and As-built drawings.
- All material of construction shall be supplied by the supplier and must comply with the required specification.
- The contractor shall be responsible for the transportation of the completed equipment with accessories to Foskor site.
- The contractor shall ensure that delivery time is stipulated clearly and also the work methodology with risk assessment, detailed schedule (bar chart) prior to commencement of work.
- Material certificates for all materials shall be supplied along with delivery.
- The supplier to submit 3 sets of hard copy and 1 soft copy of Manufacturing Data Pack along with delivery.
- The Supplier shall be responsible for the Shop Test and Field Test.
- As a minimum the Name plate shall consist of the following information:
 - Name of Manufacturer
 - Country of Origin
 - Year of Manufacture
 - Manufacturer's serial number
 - Name, number & date of the Standard/Code of design
 - Design gauge pressure in Pascal
 - Maximum Permissible Operating Pressure in Pascal
 - Operating Temperature
 - Shop Hydro test gauge Pressure in Pascal
 - Site Hydro test gauge Pressure in Pascal
 - Capacity
 - Mark of an Approved Inspection Authority (when required)
 - Purchase order number

Installation and Commissioning

- Supply own Transportation, Rigging Crew and Cranes for collection and delivery.
- All Required Civil jobs.
- All Required Electrical & Instrumentation jobs.



- The Supplier to supply own Scaffolding (FOSKOR recommended)/cherry picker wherever required.
- The Supplier to supply own Crane and Vehicle for material movement wherever required.
- Ensure AIA involvement during Installation.
- Prepare and Submit Installation Plan to FOSKOR to review (Including Rigging Studies where applicable)
- Supply own Labour, tools and consumable for the purpose of installation.
- The Contractor to ensure to comply to all FOSKOR Safety Procedures.
- The Contractor to ensure availability of Safety Officer/Safety Representative and Job Supervisor during onsite Installation.
- Clean and clear working area during work and upon completion.
- Perform Pre-Commissioning Testing in the presence of the AIA.
- Commissioning.
- Guarantee trial run (Performance Test).
- Produce and Submit the Certificate of Conformity (CoC) states that the product meets the required standards and specification.

General :

- Supplier must have previous relevant Turn-key Projects execution experience.
- The proposal must come with the Delivery Schedule, QCP, Work Methodology, Contact Details of Similar Application Clients etc.
- Supply of his/her own skilled Labour, supervision, specialized manpower and other staff to fulfill Scope of Work.
- Supply own tools, special equipment, consumables, transportation and site establishment to fulfill the Scope of Work. FOSKOR will not be held responsible for any losses to the contractor's equipment.
- Ensure AIA involvement during the entire Project Cycle.
- All temporary lighting, Electrical Hand tools, equipment required to complete the work.
- All Equipment, tools, PPE etc., that the Contractor will bring to FOSKOR, will be subjected to review and approval by FOSKOR and shall conform to FOSKOR procedures.
- On completion of the project the Contractor must certify all documentation and drawings for correctness and conformance, specifying which standards and regulatory acts these conform to.
- Until otherwise notified, FOSKOR (Pty) Ltd have designated Mr. Mansoor Basha Pinjari (Project Manager) to act as our representative and is authorized to give instructions and to provide information to you on our behalf.
- We prefer that you submit contact details for a designated 'point of contact' person who will be authorized to receive information and act on your behalf.
- FOSKOR's Health & Safety Representative will deal with all matters relating to the Health & Safety specifications and Construction Regulations relating to this assignment.
- A pre-requisite of this contract is that you confirm that you carry the necessary professional/construction indemnity insurance cover to the extent of the liabilities contemplated.
- The Tenderer should determine the work methodology, its approach and assess risk. However, it is imperative that the outcome of the work meets all the criteria.



C.7.2 Site Conditions

The site is located on the Foskor (Pty) Ltd Richards Bay Plant, approximately 500 meters from the main entrance, at the section of the plant known as the Export Tank Farm. The Tenderer is deemed to have viewed the site and to have thoroughly acquainted himself with the extent, nature and conditions affecting the work to be done before submitting his tender.

Access to the area is free of obstructions, however the Contractor must take note that unexpected leaks if any will take priority for containing of these and returning to a safe working condition.

It would be imperative for the successful Tenderer to liaise with the Foskor (Pty) Ltd's Designate to ensure safety whenever site access is required.

Full acid resistant PPE (personal protective equipment/clothing) must be used at all times.

Be cautious of vehicles and machines working in the area at all times.

As it will be deemed that the prevailing conditions have been taken into account when tendering, no claims for extras arising from failure to observe all site conditions will be admitted.

C.7.3 Services which are known to exist on the site

The following services exist on the site:

- Water and air pipes.
- Phosphoric acid and Sulphuric acid pipes alongside on pipe bridges and racks.
- Electrical cables and racking.
- Other Storage Tanks.



1. Foskor Supplied Services

Foskor (Pty) Ltd shall be responsible for:		Applicable:
1	Supply a copy of the relevant Foskor Procedure Specification(s).	refer C.3
2	Supply a copy of reference drawings if required.	refer C.6
4	Provide access to electricity connection points <ul style="list-style-type: none"> Any connection and consumption will be monitored by Tenderer and verified by Foskor on defined intervals (usually at the beginning and end of contract) 	YES
5	Provide access to potable water <ul style="list-style-type: none"> Connection and consumption would need to be monitored by Successful Tenderer (Contractor) and verified by Foskor on intervals (usually at the beginning and end of contract) defined by Foskor 	YES
6	Provide a suitable area for site establishment for Successful Tenderer (Contractor). <ul style="list-style-type: none"> Successful Tenderer to formally in writing motivate, request and define the area and services it deems necessary for site establishment. Foskor will at its own discretion (if request is approved) allocate a site establishment area, however Foskor can should it deem necessary retract or re-define its approval by giving reasonable notice to the successful Tenderer 	ON REQUEST
7	Provide access to ablutions facilities. (not change rooms) <ul style="list-style-type: none"> Successful Tenderer (Contractor)'s workers to be fully dressed in required PPE when coming on site. The successful Tenderer to ensure that its workers/subcontractors/ supplier that are making use of facilities, do so in an orderly and well-mannered way. Successful Tenderer is not allowed to make use of Foskor's change room or tearoom facilities unless agreed to in writing. The successful Tenderer might be called on to assist with the maintenance and cleaning of ablutions, should Foskor at its discretion be of the opinion that it be necessary. Cost associated with such cannot be claimed from Foskor (Pty) Ltd. 	YES
8	Assist in issuing of work clearances	YES

2. Successful Tenderer (Contractor) Responsibilities

The successful Tenderer (Contractor) shall be responsible for (inter alia):		Applicable:
1	Supply of own labour , supervision , equipment , specialized manpower and other staff to fulfill the scope of work	YES
2	Supply suitable (approved) personal protective equipment (PPE)	YES



The successful Tenderer (Contractor) shall be responsible for (inter alia):		Applicable:
3	To ensure that all work is reviewed by designated Foskor (Pty) Ltd representative at all stages and/or agreed milestones of the project. All work completed needs to be inspected and approved by the designated Foskor representative (.eg. Project Supervisor/ Manager)	YES
4	After installation/construction and commissioning the successful Tenderer shall conduct final inspection of all work together with designated Foskor (Pty) Ltd representative to compile SNAG list.	YES
5	To ensure that all acceptance approvals as per the Quality Control Policy (QCP) are received before work is finally handed over.	YES

Note that concerning above:

- No claims towards losses will be accommodated;
- All items that the Successful Tenderer will bring to Foskor (Pty) Ltd, will be subjected to review and approval by Foskor (Pty) Ltd and shall conform to Foskor procedures

C.7.4 Certification by Recognized Bodies

Only Tenderers registered with the relevant Board (e.g. Electrical, National Building, ECSA, etc) of South Africa in accordance with the Regulations of the Occupational Health and Safety Act will be accepted and permitted to do work under this contract.

C.7.5 Requirement for the termination, diversion, or maintenance of existing services

Only Applies if/where electrical conductors, pipe conduits, electrical transmitters, ducting or ventilation services are affected. Unless identified as part of the scope, the Contractor must immediately bring to Foskor's attention any previously unspecified or obstructing services existing in his area of work and without terminating/diverting/hindering such services.

C.7.6 Nominated Sub-Tenderers

Should the tenderer anticipate using Subcontractors for any part of the scope, these must be specified below.

The following Sub-Tenderers are nominated:

Contractor	Concerning Works	Contact

C.7.7 Invoicing and Payment

Payment will be made by Foskor (Pty) Ltd, after approval (with consideration for the construction, completion and defects corrections of the Works) by the Foskor (Pty) Ltd's Project Representative (i.e. Engineer, Project Supervisor) of the submitted Payment Certificate to the Tenderer within **30 (thirty)** days from the date of the Tenderers approved invoice.

The invoice shall be approved in accordance with the provisions of Foskor (Pty) Ltd's terms and conditions.

The invoice submitted is to be in a format acceptable to the Foskor (Pty) Ltd's Project Representative and need to contain the following minimum information:

- Company details, registration no and VAT registration no
- Purchase Order no & Date of Invoice
- Detail description of work done to date
- Value of the current claim and work done (excl. VAT)
- VAT charged

C.7.8 Standing Time

Standing time is defined as a period of time measured in hours, when the Contractor's normal operational cycle is affected by causes caused by Foskor (Pty) Ltd and results in normal stoppage or major disruption to the regular progress of the Works.

Payment to the Contractor for standing time will be certified only where, in Foskor (Pty) Ltd's opinion, the delay was clearly beyond the reasonable control of the Contractor and the Contractor further took all reasonable measures to avoid or reduce such delay and such delay imposed direct costs to the Contractor.

C.7.9 Progress of Works

Should Foskor (Pty) Ltd at any time be of the opinion that the rate of progress of the Works or any part thereof is too slow to ensure the completion of the Works or any part thereof by the Completion Date, Foskor (Pty) Ltd shall so notify the Contractor in writing, with specific reference to this Clause, and the Contractor shall thereupon, subject to the approval of Foskor (Pty) Ltd take such steps as are necessary to expedite progress so as to complete the Works or the said part thereof by the Due Completion Date.

C.7.10 Penalty

If the Contractor shall, by the Due Completion Date, fail to complete the Works to the extent which entitles him to receive a Certificate of Practical Completion, the Contractor shall be liable to Foskor



(Pty) Ltd for an amount of **0.1% for every Calendar Day** that the works is late or such portion of the contract price as is associated with that part of the Works.

The imposing of such penalty shall not relieve the Contractor from the obligation to complete the Works or from his obligations and liabilities under the Contract.

C.7.11 Claims: Extension of Time for Completion, Additional Payments or Compensation

C.7.11.1 Claims Procedure

The following provisions shall apply:

- i. Claims are to be submitted in writing within **7 days** after the circumstances, event, act or omission giving rise to such claim has arisen or occurred to the Foskor (Pty) Ltd Project Representative
- ii. Submit **written notice** to the Foskor (Pty) Ltd Project Representative of the intention to claim within **7 days** after the circumstances, event, act or omission giving rise to such claim has arisen or occurred. The Notice and subsequent claim to set out:
 - a. Particulars of the circumstance, event, act or omission giving rise to the claim concerned;
 - b. Provisions of the portion of the contract on which he intends to making the claim;
 - c. Length of extension of time, if any, claimed and the basis of calculation thereof, and
 - d. The Price Adjustment, if any, claimed and the basis of calculation thereof.
- iii. If the Contractor cannot reasonably comply with any of the provision above within the said period 14 days, he shall:
 - a. Notify the Foskor (Pty) Ltd Project Representative in writing of his intention to make the claim and comply with such requirements as he reasonable can;
 - b. Deliver additional information in writing that is reasonably required by Foskor (Pty) Ltd; and
 - c. Comply as soon as practical with such requirements as described above in this clause, within a time agreed to by the Foskor (Pty) Ltd Project Representative.
- iv. In the event of failure to comply to any of the provisions, the claim would not be accommodated and Foskor (Pty) Ltd would be discharged of all liability in connection with the claim.

C.7.11.2 Extension of Time for Completion

The whole works shall be completed within the time agreed upon.

If any circumstances of any kind whatsoever may occur and as such, fairly entitle the Contractor to any extension of time for the completion of the works or portion thereof, then the Foskor (Pty) Ltd Project Representative will consider a claim duly submitted.

C.7.12 Cancellation of the Contract by Foskor (Pty) Ltd

If:



- (a)
 - (i) The estate of the Contractor shall be sequestrated (provisionally or finally), or
 - (ii) The Contractor shall publish a notice of surrender of his estate as insolvent, or
 - (iii) The Contractor, being a company or a close corporation, shall go into liquidation (provisionally or finally), or
 - (iv) The Contractor shall assign the Contract without the consent in writing of Foskor (Pty) Ltd having first been obtained, or
 - (v) The Contractor shall enter into a compromise with the general body of his creditors, or
 - (vi) The Contractor shall have an execution levied on his goods, or
- (b) the Foskor (Pty) Ltd Project Representative shall certify in writing to Foskor (Pty) Ltd, and to the Contractor/Consultant, with specific reference to this Clause, that in his opinion the Contractor/Consultant:
 - (i) has abandoned or repudiated the Contract, or
 - (ii) has, without reasonable excuse, failed to commence the Works in terms of the time allowed and agreed to, or
 - (iii) has suspended the progress of the Works without due cause, or
 - (iv) has failed to proceed with the Works with due diligence, or
 - (v) is not executing the Works in accordance with the Contract, or
 - (vi) has, without the approval of the Foskor (Pty) Ltd Project Representative, subcontracted any part of the Contract, or
 - (viii) has failed to provide the Surety ship, Professional Indemnity within the time stipulated and for 14 days after receiving a written notice from the Foskor (Pty) Ltd Project Representative, referring specifically to the default concerned and to this Clause, failed to remedy the default,

Foskor (Pty) Ltd may, by written notice to the Contractor, terminate the Contract and withhold any payments due until further notice.

C.7.13 Urgent remedial work

All designs changes or remedial action must be communicated to the Foskor Engineer or the authorized Foskor Designate. Approval of such must be sought and received as early as not to impose undue costs and delays. Should there however be remedial work necessary, the Contractor shall, upon approval from the Foskor Engineer/Designate, effect these with care, accuracy and speed, so as not to impose undue extension of time and /or cost.

If any work as done by Foskor (Pty) Ltd is work which the Contractor was liable to do at his own expense under the Contract, all costs incurred by Foskor (Pty) Ltd in so doing shall be determined by Foskor (Pty) Ltd or its agent and shall on demand be paid by the Contractor to Foskor (Pty) Ltd.

C.8. Foskor Safety Documents to be submitted, Environmental and Site Management

C.8.1 SHREQ Requirements

The successful Tenderer will be required to comply and ensure continuous compliance with Foskor standards and national regulations:



- Compliance with COP6 (Contractor Management).
- Compliance and signing of Section 37(2) Agreement in terms of the OHSAct at the Foskor (Pty) Ltd Safety Department.
- Submission of a SHE Plan for approval to the Safety Department prior to commencement of work on site.
- Compliance with Legislation requirements which includes the OHSAct, NEMA (National Environment Management Act) and other relevant applicable Legislation.
- Copy of requirements available from Foskor SHREQ Department.

C.8.2 Environmental Management Specifications

In order to ensure that the construction works is designed for an environmentally sensitive area, strict compliance to the Environmental Management Plan (EMP) guidelines is required.

The EMP shall be part of the terms of reference for all contractors/consultants, sub-contractors/consultants and suppliers.

A copy of the EMP requirements is available from Foskor (Pty) Ltd SHREQ department.

All MSDS's to be submitted to Foskor (Pty) Ltd.

Waste disposal needs to comply to Foskor (Pty) Ltd Waste Management Plan.

C.9 OHS 1993 Health and Safety Specification

This specification covers the health and safety requirements to be met by the successful Tenderer (Contractor) to ensure a continued safe and healthy environment for all workers, employees and subcontractors/consultants and for all other persons entering the site of works.

This specification shall be read with the Occupational Health and Safety Act (Act No 85 and amendment Act No 181) 1993, and the corresponding Construction Regulations 2003, and all other safety codes and specifications referred to in the said Construction regulations.

C.9.1 Health and Safety Induction

The successful Tenderer (Contractor) shall ensure that all employees under his control, including the subcontractors/consultants and their employees, undergo a health and safety induction training course by a Foskor competent person before entering site.

- a. The Contractor shall ensure all his/her personnel have attended the Safety Induction, by Foskor (Pty) Ltd before they enter site.
- b. The Contractor on entering site, must wear Foskor minimum required PPE at all times namely safety glasses, acid resistant overalls, safety harnesses (on heights), safety boots or steel cap gumboots, ear protection and **gas masks (Halfmask double filter – screw type with filter type A1B1E1K1 or similar approved product) and goggles (Uvex ultravision – W1663459B – DIN CE 0196) preferably in a pouch.** Should a Contractor be found on site without the above-mentioned safety clothing, he will be removed from site and will not be allowed to return. FFP3 dust mask fitted with an exhalation valve must be used when working in dust in on the B&D Store.



- c. **Overalls must be Blue Sweet Orr overall (80% Ployester 20% Viscose Rayon Acid repellent) with Company names either on front of jacket or back OR Blue Acid/Flame overall (Flame retardant acid resistant anti-static ATPV 5.4CAL/CM2) with company names either on front of jacket or back and fluorescent reflective strips to be stitched onto sleeves and on the knees.**
- d. The Contractor shall demarcate the relevant work area. The Contractor shall supply and erect an appropriate name board with all relevant information and contact details at the work area.
- e. The job risk assessment shall be carried out at the start of each shift. This risk assessment shall cover all activities planned for the relevant shift. The risk assessment shall be submitted to Foskor (Pty) Ltd at the start of each day shift and each night shift.
- f. The Contractor must take safety precautions when working on site.
- g. The Contractor must remove all their equipment within 48 hours after project completion/closure.
- h. A complete safety file to be submitted to Foskor (Pty) Ltd Safety Department before any work commences.
- i. The Contactor's vehicle when entering the Plant must have rotating orange lights on at all times.
- j. **The Contractor and their employees must undergo a full medical at either Foskor (Pty) Ltd's Clinic or Caredoc Richards Bay or ther approved by Foskor (Pty) Ltd. A full lung function test must be done. If a project is longer than twelve months, then a complete medical including lung function tests must be done again and thereafter the lung function test. Medical certificates are valid for one year only. For medical costs and bookings please contact Clinic Sister at Foskor (Pty) Ltd Clinic on 035 902 3287.**
- k. A once-off fee is also required for access cards from Foskor Security. Please contact the Foskor (Pty) Ltd Security Reception at 035 902 3267 for information.
- l. No access to elevated platforms, roof and scaffolding will be allowed during rainy days.

MANDATORY AS ENVISAGED BY SECTION 37(2) OF THE ACT

By the submission of a tender, any tenderer will, if awarded the contract to which this tender document relates, be deemed to be the mandatory as envisaged by Section 37 (2) of the Act.

As a mandatory the successful tenderer will be deemed to be the "principal contractor" and an employer in his/her/their own right with duties as prescribed in the Act and accordingly will be deemed to have agreed to be solely responsible for ensuring that in connection with the service to which this tender document relates, all work will be performed in accordance with the Act.

It is further noted that:-

- a) The Contractor shall comply with all Foskor Regulations and Safety Standards.
- b) The Contractor shall fully comply with the OHS Act (Act 85 of 1993).

IMPORTANT NOTE

The above is a summary of some of matters as defined in the Act. The successful Tenderer (Contractor) is required and advised in his own interest to make a careful study of the Act and the Construction regulations.



Ignorance of the Act and the Regulations will not be accepted in any proceedings, as valid reason if non-conformance to the Act and the Regulations are committed.

C.10. Applicable General Conditions of Contract

Unless expressly otherwise indicated, Foskor General Conditions of Contract and the FIDIC terms of Contract would apply, and is available from the Manager Procurement Foskor Richards Bay.

C.11. Quality Management

The successful Tenderer is to adhere to Foskor (Pty) Ltd's Quality Management System and specifications incorporated in this Tender Document.

To ensure that all installations are carried out in a controlled manner, the Contractor shall demonstrate this by means of the internal quality system, which shall include as a minimum a QCP for each piece of equipment. The QCP must be approved by Foskor before commencement of any work.

C.11.1 Quality Control:

- i. A detailed QCP (Quality Control Plan) shall be submitted within 3 days of contract award.
- ii. Quality of work must be monitored and controlled at a high level at all times. The Contractor shall show proof of this by providing and maintaining a Quality Manufacturing Data-pack (QMD). The QMD file may contain work **Method Statements, clearances, daily site diaries, material certificates, DFT (Dry Film Thickness) tests, AIA (Approved Inspection Authority) certifications, weld certificates, Welder certifications, weld-rod batch no's and product codes, concessions granted, design drawings and "As-Built" drawings, design deviations/notes/drawings and manufacturing specifications.**
- iii. At each hold and witness point all work shall be suspended until the specified inspection has been completed and the QCP updated and signed accordingly by Foskor (Pty) Ltd or its representative.
- iv. At each milestone, the designated Foskor (Pty) Ltd Quality Representative must approve the quality and standard of work being produced.
- v. It shall be the responsibility of the Successful Tenderer (Contractor) to give Foskor (Pty) Ltd timely notice of hold and witness points requiring their intervention.
- vi. In the event that Foskor did not approve the quality of work being produced, the Contractor will have to redo work to a standard that is acceptable to Foskor (Pty) Limited. This will be for the Contractor's account. Foskor (Pty) Ltd will not entertain any claims arising from this.



Section D – DRAWINGS (All drawings as listed in this document)



Section E - Bill of Quantities

<u>S No</u>	<u>Description</u>	<u>Unit</u>	<u>Qty.</u>	<u>Rate</u>	<u>Total Amount (excluding tax)</u>
01	Preliminary & General (to include breakdown)	LS	01		
02	Design of High Rate Thickener System	LS	01		
03	Manufacture & Supply	LS	01		
04	Installation, Testing & Commissioning	LS	01		
05	Guarantee Trial Run (Performance Test)	LS	01		
Total: R					



Section F - Technical Evaluation Criteria



Design, Supply, Installation, Testing & Commissioning of High-Rate Thickener System			
Mandatory Requirements: Bid submission not meeting these requirements will result in bid being disqualified.			
1	Submission of initial high level programme (Bar Chart/Gantt Chart)		
2	Submission of experience record with references, project values and contact numbers for verification		
3	Submission of the CIDB Registration of 5ME or higher for the Installation contractor		
4	Submission of ECSA Registered Pr. Engineer as Competent Person to sign off on all the designs		
5	Submission of correctly completed priced Bill of Quantities (e.g. no omission of unit rate/price) as attached		
Note: 70% will be required to be considered for this tender			
Technical Evaluation Criteria for this Tender which excludes Commercial Evaluation:			
No	Technical Criteria Description	% Contribution	Proof / documents to be submitted
1	Experience & Team competence		
a)	<div>Company - Previous experience in Design, Supply, Installation, Testing & Commissioning of High rate thickeners or similar systems</div> <div>Scoring:</div> <div>5 years and above but less than 10 years = 10%; 10 years and above = 15%</div>	15%	Give reference list of Highrate thickener Projects with values and contact numbers for verification
b)	<div>Company - OEM, Supplier Proof of Affiliation with Relevant Standards</div> <div>Scoring:</div> <div>Not OEM & No proofs - 0%; OEM with relevant proofs - 10%</div>	10%	Provide proof of registration for the relevant governing board of practice. Provide proof of valid certificates.
2	Regulatory / Legal / Licences / Registrations		
a)	<div>Competent Persons (Pr. Eng) to sign-off all Mech, Civil and Structural Designs - Supplier registration with ECSA</div> <div>Scoring:</div> <div>Not Comply = 0%, Comply 10%</div>	10%	Provide proof of certificates
b)	<div>Competent Safety Officer registered with SACPCMP</div> <div>Scoring:</div> <div>Not Comply = 0%, Comply 5%</div>	5%	Provide proof of certificates
c)	<div>API 650 compliance/ knowledge or a proven support system to this effect.</div> <div>Scoring:</div> <div>Not Comply = 0 %; Comply 10%</div>	10%	Provide proof of compliance/ Previous Experience
3	Company Deliverables		
a)	<div>Company Delivery Times - Execute construction according to a pre-approved WBS / Project Schedule/ Milestones/ Bar Chart/Gantt Chart</div> <div>Scoring:</div> <div>No Schedule = 0 %, More than 8 Months = 5%; more than 6 Months to 7 Months = 10%, more than 5 Months to 6 Months = 15%, 5 Months & Less = 20%</div>	20%	Acceptable delivery times/project programme and duration. Refer to B.2 table in Tender Document for duration of Project
4	Scope of Work Compliance		
a)	<div>SOW Compliance: Does the supplier’s submission meet the required flow of work logic and the specifications indicated in the scope of works? Preliminary high level Work Methodology, Risk Assesment with Safety Plan</div> <div>Scoring:</div> <div>Non-Relevant Work Methodology = 0 %, Relevant Work Methodology = 20 %</div> <div>Non-Relevant Risk Assesment with Safty plan = 0 %, Relevant Risk Assesment with Safety plan = 10 %</div>	30%	Relevance will measure the Submitted Preliminary high level Work Methodology that considers scaffolding and rigging requirements, design and construction, rubber lining, Risk Assessment and Safety Plan
	Total Technical Score	100%	