CONTENTS

Page

1. INTRODUCTION 3

2. SUPPORTING CLAUSES 3

2.1 SCOPE 3
2.1.1 Purpose 4
2.1.2 Applicability 4
2.2 NORMATIVE/INFORMATIVE REFERENCES 4
2.2.1 Normative 4
2.2.2 Informative 4
2.3 DEFINITIONS 4
2.3.1 Classification 4
2.4 ABBREVIATIONS 5
2.5 ROLES AND RESPONSIBILITIES 5
2.6 PROCESS FOR MONITORING 5
2.7 RELATED/SUPPORTING DOCUMENTS 5

3. TENDER TECHNCIAL EVALUTION STRATEGY 5

3.1 TECHNICAL EVALUATION METHOD 5
3.2 TECHNICAL EVALUATION THRESHOLD 6
3.3 TET MEMBERS 7
3.4 MANDATORY TECHNICAL EVALUATION CRITERIA 8
3.5 QUALITATIVE TECHNICAL EVALUATION CRITERIA 9
3.6 TET MEMBER RESPONSIBILITIES 19
3.7 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS 20
3.7.1 Risks 20
3.7.2 Exceptions / Conditions 20

4. AUTHORISATION 22

5. REVISIONS 22

6. DEVELOPMENT TEAM 22

7. ACKNOWLEDGMENTS 22

LIST OF TABLES

Table 1: TET Members 7
Table 2: Mandatory Technical Evaluation Criteria 8
Table 3: Qualitative Technical Evaluation Criteria 9
Table 4: TET Member Responsibilities 19
Table 5: Acceptable Technical Risks 20
Table 6: Unacceptable Technical Risks 20
Table 7: Acceptable Technical Exceptions / Conditions 20
Table 8: Unacceptable Technical Exceptions / Conditions 21

LIST OF FIGURES

Figure 1: Plan view of effluent neutralization sump 3

CONTROLLED DISCLOSURE

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

1. INTRODUCTION

Lethabo Power Station Water Treatment Plant (WTP) uses reinforced concrete sumps to collect dirty regen effluents from demineralized and condensate polishing regeneration plants for neutralization. The two (2) Ash Conditioning Sumps (ACS), the Submerged Scraper Conveyor Sump (SSCS) and the Effluent Neutralization Sump (ENS) have deteriorated and need to be repaired to ensure full functionality and to extend its life span to the end of station life in 2041.

To conduct a thorough damage assessment and execute the necessary repairs a long-term outage will be required on the sumps. However, due to operational requirements, it is not possible to take the sumps out of service for an extended period. Therefore, a temporary bypass system will need to be designed and constructed. Figure 1 illustrated the location of the effluent neutralization sump.

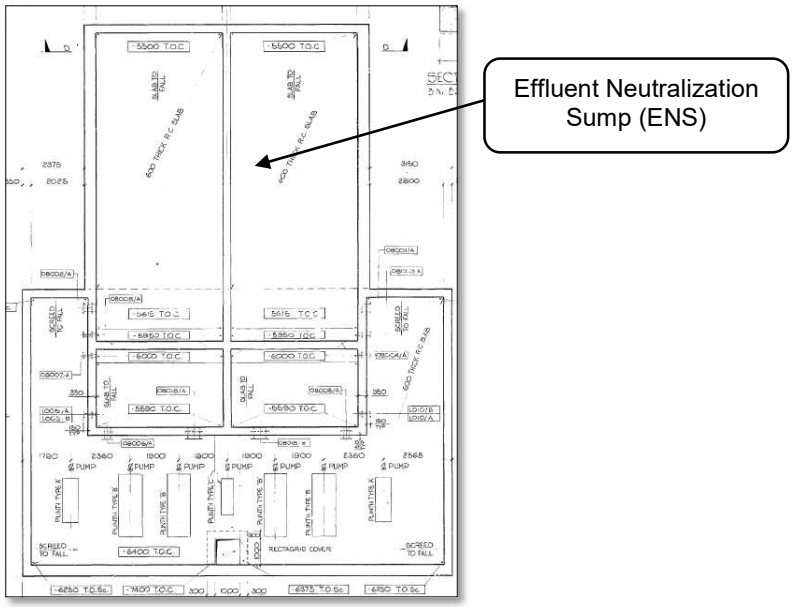


Figure 1: Plan view of effluent neutralization sump

2. SUPPORTING CLAUSES

2.1 SCOPE

This document provides the tender technical evaluation strategy relating to the design, manufacture, and construction and installation of the temporary bypass system for the ENS within the water treatment plant. The technical evaluation requirements consist of mandatory and qualitative evaluation criteria

Once the Technical Evaluation Strategy is authorised, no changes will be made to the evaluation criteria without appropriate authorisation.

CONTROLLED DISCLOSURE

When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

2.1.1 Purpose

The purpose of this tender technical evaluation strategy is to define the Mandatory Evaluation Criteria, Qualitative Evaluation Criteria and TET member responsibilities for tender technical evaluation. The technical evaluation strategy serves as a basis for the tender technical evaluation process.

2.1.2 Applicability

This document applies to Lethabo Power Station only.

2.2 NORMATIVE/INFORMATIVE REFERENCES

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

[1] 240-48929482: Tender Technical Evaluation Procedure

[2] ISO 9001 Quality Management Systems

[3] 32-1034 Eskom Procurement Policy

[4] 375-172829: Lethabo Power Station Effluent Neutralisation Sump Temporary Bypass System Technical Specification

2.2.2 Informative

[5] 240-53113685: Design Review Procedure

[6] 240-53114026: Project Engineering Change Management Procedure

[7] 240-53114002: Engineering Change Management Procedure

2.3 DEFINITIONS

Definition	Description
Contractor/Tenderer	Refers to the company/supplier appointed to perform the works
Datasheet	A document providing the specifications for a particular product.
Employer	Refers to Eskom Holdings State Owned Company
Product number	Product number or Part number is a unique number assigned by the manufacturer to identify the exact product or part.
Specification	The document/s forming part of the contract in which the methods of executing the various items of work to be done is described, as well as the nature and quality of the materials to be supplied and it includes technical schedules and drawings attached thereto as well as all samples and patterns
The Client	The end user will be Eskom who will be represented by Lethabo Power Station throughout the duration of the Project.

2.3.1 Classification

Controlled Disclosure: Controlled Disclosure to external parties (either enforced by law, or discretionary).

CONTROLLED DISCLOSURE
When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

2.4 ABBREVIATIONS

Abbreviation	Description
C&I	Control and Instrumentation
CV	Curriculum Vitae
D&S	Design and Specification
ECSA	Engineering Council of South Africa
ENS	Effluent Neutralisation Sump
NEC	New Engineering Contract
OPE	Outside Plant Engineer
O&M	Operations and Maintenance
pH	Potential of Hydrogen
TET	Technical Evaluation Team

2.5 ROLES AND RESPONSIBILITIES

As per Tender Technical Evaluation Procedure [1].

2.6 PROCESS FOR MONITORING

N/A

2.7 RELATED/SUPPORTING DOCUMENTS

N/A

3. TENDER TECHNCIAL EVALUTION STRATEGY

3.1 TECHNICAL EVALUATION METHOD

The basic steps for a technical evaluation must be followed as per the Tender Technical Evaluation Procedure [1].

A two stage Technical Evaluation Strategy is set out.

Stage 1: Mandatory Technical Evaluation Criteria (gatekeepers) are ‘must meet’ criteria. These criteria shall not be weighted or point scored, but shall be assessed on a Yes/No basis as to whether or not the criteria are met. An assessment of ‘No’ against any criterion shall technically disqualify the tenderer and the tenderer shall not be further evaluated against Qualitative Criteria.

Stage 2: Qualitative Technical Evaluation Criteria are weighted evaluation criteria used to identify the highest technically ranked tenderer after determining that all the Mandatory Evaluation Criteria have been met. The Qualitative Evaluation Criteria are weighted to reflect the relevant importance of each criterion.

The evaluation of the tender submission will be based on the tenderer’s ability to meet the technical requirements for the project. A weighted scorecard approach is used to evaluate the technical compliance of the tenders against the specifications.

CONTROLLED DISCLOSURE
When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

The scoring method will be as follows:

SCORE	PERCENTAGE	DESCRIPTION
5	100	**COMPLIANT** • Meet technical requirement(s) AND; • No foreseen technical risk(s) in meeting technical requirements.
4	80	**COMPLIANT WITH ASSOCIATED QUALIFICATIONS** • Meet technical requirement(s) with; • Acceptable technical risk(s) AND/OR; • Acceptable exceptions AND/OR; • Acceptable conditions.
2	40	**NON-COMPLIANT** • Does not meet technical requirement(s) AND/OR; Unacceptable technical risk(s) AND/OR; • Unacceptable exceptions AND/OR; • Unacceptable conditions.
0	0	**TOTALLY DEFICIENT OR NON-RESPONSIVE**

The evaluation scores will be weighted as follows:

Engineering (100%)	
General	10%
Civil & Structural Engineering	20%
Mechanical Engineering	25%
Electrical Engineering	25%
C&I Engineering	20%
TOTAL (100%)	
Overall minimum threshold for qualification (70%)	

3.2 TECHNICAL EVALUATION THRESHOLD

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 70%.

CONTROLLED DISCLOSURE
When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

3.3 TET MEMBERS

TET number	
TET 1	
TET 2	
TET 3	
TET 4	tation
TET 5	
TET 6	
TET 7	
TET 8	

CONTROLLED DISCLOSURE
When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

3.4 MANDATORY TECHNICAL EVALUATION CRITERIA

Table 2: Mandatory Technical Evaluation Criteria

	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
1	Lead mechanical engineer or technologist, who will be responsible in authorising the designs and construction works, is to be professionally registered with the Engineering Council of South Africa (ECSA). A copy of ECSA registration certificate for lead mechanical engineer or technologist is to be submitted. If the lead mechanical engineer or technologist is not employed by the main Contractor, then a letter of intent signed by both parties is to be submitted, where the Subcontractor will be used for resources. The letter should be specific on the roles and responsibilities for the resources.	Tender Returnable – Key Resource required for the team	This criteria provides assurance that the design and construction of the works was done by a competent person.

3.5 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Table 3: Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Criteria Weighting (%)	Criteria Sub Weighting (%)	Evaluation Scoring Breakdown			
					0	2	4	5
1.	**General**		**10**					
1.1	List of verifiable project references (minimum of 3 projects) must be provided. The Contractor must submit evidence of reference projects with the minimum following information: ▪ Project Name ▪ Description of work performed ▪ Project start and end date ▪ Name, designation and contact number of the reference person	-		50	No work done on previous projects of similar scope or no submission made	Work conducted on 1 -2 projects of similar scope	Work conducted on 3 projects of similar scope	Work conducted on more than 3 projects of similar scope
1.2	The tenderer to submits a Project Schedule (Level 3) indicating the following as a minimum: ▪ Full scope of work for design phase and construction phase in accordance with Works Information. ▪ Breakdown and linking of all activities.	-		15	No submission made	Project Schedule (Level 3) submitted illustrating less than two of the minimum requirements	Project Schedule (Level 3) submitted illustrating two or more of the minimum requirements	Project Schedule (Level 3) submitted illustrating all the minimum requirements

	▪ Timelines for execution of activities. ▪ Critical path							
1.3	Tenderer to submit a project organogram reflecting the key staff required for the project. Organogram provided should consider the entire project lifecycle (i.e. design and construction phases). As a minimum, the organogram is to illustrate the following key resources: ▪ Lead engineers for the different engineering disciplines ▪ Project Manager ▪ Construction supervisor	-		15	No submission made	Organogram provided but missing 2 or more key resources for the entire project lifecycle.	Organogram provided but missing 1 key resource for the entire project lifecycle.	Organogram provided for the entire project lifecycle.
1.4	Tenderer is to submit a list of deviations (if any) for each engineering disciplines requirements. Note, if there are no deviations to the requirements, the tenderer is to state this in their submission.			20	No written definitive statement provided OR written statement submitted stating 1 or more deviations that will impact the deliverables for the project.	Written statement submitted stating more than 5 deviations that will not impact the deliverables for the project.	Written statement submitted stating 1 or less than 5 deviations that will not impact the deliverables for the project.	Written statement submitted stating 100% compliance to the requirements.

2.	**Civil & Structural Criteria**		**20**					
2.1	**Technical proposal** detailing the design methodology, which is in compliance to the full scope and describes how the scope will be executed: High-level technical proposal for the design and construction illustrating an understanding of the scope and includes the following as a minimum: • Proposed plant, equipment and tools • Methodology related to the design and construction of the temporary effluent sump. • Methodology for the proposed testing and inspection • Foreseen risks and concerns • Required temporary works (if any)			50	No submission made and/or information submitted is not related to the project	Technical proposal reiterates the Employer's scope of works OR Two out of the five minimum points have been discussed.	Technical proposal describes how scope will be met and includes minor details on methodology of approach OR Three and more of the minimum points have been discussed.	Technical proposal details fully how scope will be met and provides comprehensive methodology of approach OR All of the minimum points have been discussed
2.2	Tenderer to submit the CV of the Lead Structural Design Engineer or Technologist as per the project organogram. Lead Structural Design Engineer or Technologist is to have a minimum of 5 years	-		30	No submissions made	Less than 4 years relevant experience for lead structural	4 years relevant experience for lead structural engineer or technologist	5 years or more relevant experience for lead structural engineer or technologist

	relevant design experience in reinforced concrete related projects.					engineer or technologist		
2.3	Lead civil engineer or technologist, who will be responsible in authorising the designs and construction works, is to be professionally registered with the Engineering Council of South Africa (ECSA). A valid copy of ECSA registration certificate for lead civil engineer or technologist is to be submitted. If the lead civil engineer or technologist is not employed by the main Contractor, then a letter of intent signed by both parties is to be submitted, where the Subcontractor will be used for resources. The letter should be specific on the roles and responsibilities for the resources. Note; if the submitted letter of intent is not signed by both parties, the tenderer will score a zero (0) for this criterion.			20	No submissions made or letter of intent is not signed by both parties.	-	-	Valid copy of ECSA registration certificate submitted for lead civil engineer or technologist
3.	**Mechanical**		**25**					
3.1	Tenderer has submitted a high-level technical proposal for the mechanical design and			50	No submission made and/or	Technical proposal reiterates	Technical proposal describes how	Technical proposal details fully

	installation of the pumping station/system illustrating an understanding of the scope and includes the following as a minimum: • Proposed plant, equipment and tools. • Methodology related to the design and construction of the temporary pumping station. • Methodology for the proposed testing and inspection • Foreseen risks and concerns • Required temporary works (if any)				information submitted is not related to the project	the Employer's scope of works OR Two out of the five minimum points have been discussed.	scope will be met and includes minor details on methodology of approach OR Three and more of the minimum points have been discussed with acceptable level of risk identified.	how scope will be met and provides comprehensive methodology of approach OR All of the minimum points have been discussed with no level of risk identified.
3.2	Submit CV of Mechanical Professional ECSA registered engineer/technologist with sufficient experience on pumping system design.			34	Submitted CV of ECSA Registered person but No Relevant experience even if ECSA registered or no CV submitted.	Submitted CV of ECSA Registered person with less than 1 year experience in the relevant field.	Submitted CV of ECSA registered person with relevant experience of more than 1 year but less than 6 years relevant experience.	Submitted CV of ECSA registered person with 6 years or more, relevant experience.
3.3	Tenderer has Submitted technical data sheets for the **isolation valves**, proposed for the project scope.			4	None compliance/Nothing submitted.	Technical data sheet submitted, but not in line with the technical specification.	Technical data sheet submitted, and in line with the technical specification with some level of risk identified	Technical data sheet submitted acceptable, with no level of risk identified.

3.4	Tenderer has Submitted technical data sheets for the **Non-return valves**, proposed for the project scope.			4	None compliance/Nothing submitted.	Technical data sheet submitted, but not in line with the technical specification.	Technical data sheet submitted, and in line with the technical specification with some level of risk identified	Technical data sheet submitted acceptable, with no level of risk identified.
3.5	Tenderer has Submitted technical data sheets for the **pump**, proposed for the project scope.			4	None compliance/Nothing submitted.	Technical data sheet submitted, but not in line with the technical specification.	Technical data sheet submitted, and in line with the technical specification with some level of risk identified	Technical data sheet submitted acceptable, with no level of risk identified.
3.6	Tenderer has Submitted technical data sheets for the **process pipes**, proposed for the project scope.			4	None compliance/Nothing submitted.	Technical data sheet submitted, but not in line with the technical specification.	Technical data sheet submitted, and in line with the technical specification with some level of risk identified	Technical data sheet submitted acceptable, with no level of risk identified.
4.	**Electrical**		**25**					
4.1	Tender to submit documentation for the following resources: **Lead Electrical Engineer or Technologist:** ▪ ECSA registration certificate			50	No documents submitted	Some of the documents submitted with experience of less than 3 years	All documents submitted with experience of less than 3 years	All documents submitted with experience of 4 years and more.

	▪ CV illustrating minimum 4 years relevant working experience **Site Supervisor:** ▪ Technical Qualification NQF level 6 wiremans. ▪ CV illustrating minimum 4 years relevant working experience **2x Electrician**: ▪ NQF level 4 and trade test certificate. ▪ CV illustrating minimum 4 years relevant working experience							
4.2	Tenderer is to complete and submit schedule A&B for the following technical schedules: ▪ 24056227443 Cable ▪ 240 77100923 LV Motors			25	Schedule A&B not filled in	Schedule A&B filled in 50% or less	Schedule A&B filled in 90% or less	Schedule A&B filled in 90 to 100%
4.3	Tenderer is to submit the datasheets as illustrated in the VSD (electrical section)			25	No datasheet supplied	Incorrect datasheet supplied	Partially incorrect datasheet supplied	Correct datasheet supplied
5.	**C&I**		**20**					

5.1	ECSA Registered Engineer/Technologist with relevant experience with control and instrumentation (certified ECSA certificate and CV)			30	No relevant certificate or CV is provided.	Either a relevant certified certificate or CV is provided.	Certified certificate and CV provided. Control & Instrumentation Design Experience – Instrumentation and I/O with a I/O count of ≥50 per project. Less than three project references supplied	Certified certificate and CV provided. Control & Instrumentation Design Experience – Instrumentation and I/O with a I/O count of ≥50 per project. More than three project references supplied
5.2	Completed Instrument Schedule (Instrument Manufacturer, Product number and instrument data sheet reference)			20	No information provided by tender.	Only provided one of the three requirements	Instrument Manufacturer and Product number provided	Instrument Manufacturer, Product number and instrument data sheet reference provided
5.3	Completed drive and actuator schedule (Column D9-D12, D24-D33 and D35)			15	The Tenderer provided less than 50% of the information	The Tenderer provided less than 80% and more than	The Tenderer provided more than 80% of the information	Tenderer provided all the required information

						50% of the information		
5.4	Radar level transmitter datasheet (NOT THE USER MANUAL)			5	The Tenderer did not provide any datasheet or the datasheet does not comply with the *works*	-	-	The Tenderer provided a datasheet that comply with the *works*
5.5	Hydrostatic level transmitter datasheet (NOT THE USER MANUAL)			5	The Tenderer did not provide any datasheet or the datasheet does not comply with the *works*	-	-	The Tenderer provided a datasheet that comply with the *works*
5.6	Cabling datasheets(NOT THE USER MANUAL)			5	The Tenderer did not provide any datasheet or the datasheet does not comply with the *works*	-	-	The Tenderer provided a datasheet that comply with the *works*
5.7	Junction boxes and splitter boxes datasheets			10	The Tenderer did not provide any datasheet or the datasheet does not comply with the *works*	-	-	The Tenderer provided a datasheet that comply with the *works*
5.8	Racking, trunking and conduit datasheets			5	The Tenderer did not provide any datasheet or the	-	-	The Tenderer provided a datasheet that

					datasheet does not comply with the *works*			comply with the *works*
5.9	pH Analyser and Probe datasheets			5	The Tenderer did not provide any datasheet or the datasheet does not comply with the *works*	-	-	The Tenderer provided a datasheet that comply with the *works*
			TOTAL: 100					

3.6 TET MEMBER RESPONSIBILITIES

Table 4: TET Member Responsibilities

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6	TET 7	TET 8
1.			X	X				
Qualitative Criteria Number	**TET 1**	**TET 2**	**TET 3**	**TET 4**	**TET 5**	**TET 6**	**TET 7**	**TET 8**
1.			X	X				
2.	X	X						
3.			X	X				
4.					X	X		
5.							X	X

CONTROLLED DISCLOSURE
When downloaded from the EDMS, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorised version on the system.

3.7 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.7.1 Risks

Table 5: Acceptable Technical Risks

Risk	Description
1.	Proposing Standards and Procedures (motivated in detail) other than the specified Standards and Procedures in the Technical Specifications

Table 6: Unacceptable Technical Risks

Risk	Description
1.	Non-compliance or deviation with sections of the scope of work and standards without adequate explanation or alternatives
2.	Exclusions of scope specified in the Works
3.	The approach is generic and not tailored to address the specific project objectives and requirements. The approach does not consider all the critical characteristics of the works
4.	The Contractor does not show a full understanding of the scope of work
5.	The experience level of the Contractor to perform such works.
6.	Change of Sub-Contractors after Tender award without written consent from the Employer.
7.	Submission of operating manuals instead of specification document.

3.7.2 Exceptions / Conditions

Table 7: Acceptable Technical Exceptions / Conditions

Risk	Description
1.	**N/A**

Table 8: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	Deviations to any part of the technical specifications without providing alternate solutions
2.	The technical proposal/method statement is generic, incomplete and not tailored to address the specific project objectives, scope and constraints. It does not deal with the critical constraints and hazards of the project.