

	REQUEST FOR BID ENGINEERING PROCUREMENT AND CONSTRUCTION / TURNKEY	Form No: RW SCM 00048 F Revision No: 07 Effective Date:
---	---	---

BID NUMBER: RW10397140/22

**TENDER FOR THE CONSTRUCTION AND UPGRADE OF VARIOUS
PALMIET SYSTEM INFRASTRUCTURE PROJECTS AT PALMIET
PUMPING STATION AND SURROUNDING AREAS – PACKAGE 6: SUB-
PACKAGE 8**

MINIMUM CIDB CONTRACTOR GRADING FOR THIS BID: 9 CE

ISSUE DATE:	THURSDAY, 12 JANUARY 2023	
NON-COMPULSORY BRIEFING SESSION DATE:	Briefing Presentation is attached with the annexure on the documents link	N/A
BRIEFING SESSION VENUE:	N/A	
CLOSING DATE:	FRIDAY, 28 APRIL 2023	AT 12 :00 pm
SITE VIEWING DATE/S:	REFER TO T1.1 BID NOTICE AND INVITATION	

BIDDER INFORMATION				
BIDDER NAME				
POSTAL ADDRESS				
STREET ADDRESS				
TELEPHONE NUMBER	CODE		NUMBER	
CELLPHONE NUMBER				
E-MAIL ADDRESS 1				
E-MAIL ADDRESS 2				
VAT REGISTRATION NUMBER			CIDB GRADING	
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		CENTRAL SUPPLIER DATABASE No:	MAAA.....
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS SWORN AFFIDAVIT (EMEs and QSEs)	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:	
E-MAIL ADDRESS (Submissions must be made to this address)	iepenquiries@randwater.co.za

TABLE OF CONTENTS

SECTION A: BID	3
PART T1: BIDDING PROCEDURES.....	3
T1.1. BID NOTICE AND INVITATION TO BID.....	3
T1.2. BID DATA.....	5
T1.3. EVALUATION CRITERIA	9
PART T2: RETURNABLE DOCUMENTS.....	18
T2.1. LIST OF RETURNABLE DOCUMENTS	18
T2.2. RETURNABLE SCHEDULES.....	21
SECTION B: CONTRACT	70
PART C1: AGREEMENT AND CONTRACT DATA.....	70
C1.1. FORM OF OFFER AND ACCEPTANCE.....	70
C1.2. CONTRACT DATA.....	74
PART C2: PRICING DATA.....	94
C2.1. PRICING ASSUMPTIONS	94
C2.2. PREAMBLE TO ACTIVITY SCHEDULES.....	95
C2.3. ACTIVITY SCHEDULES	96
PART C3: SCOPE OF WORK.....	97
SCOPE OF WORK	105
Mechanical Scope of Work.....	105
CIVIL SCOPE OF WORK.....	105
AUTOMATION SCOPE OF WORK.....	105
ARCHITECTURE SCOPE OF WORK.....	106
SCOPE OF WORK	107
C3.3. LAND SERVICES	110
C3.4. SEQUENCE OF IMPLEMENTATION OF PROJECTS	112
C3.5. CONTRACT SKILLS DEVELOPMENT REQUIREMENTS	113
C3.6 PROJECT APPROACH	114
C3.7 SPECIFICATION.....	121
PART C4: SITE INFORMATION	122
C4. SITE INFORMATION	122

SECTION A: BID

PART T1: BIDDING PROCEDURES

T1.1. BID NOTICE AND INVITATION TO BID

<p>Rand Water invites bids for the TENDER FOR CONSTRUCTION AND UPGRADE OF VARIOUS PALMIET SYSTEM INFRASTRUCTURE PROJECTS AT PALMIET PUMPING STATION AND SURROUNDING AREAS – PACKAGE 6: SUB-PACKAGE 8.</p> <p>The technical requirements for the <i>works</i> are fully stated in the employers' requirement / bid documentation.</p>	
Minimum Contractor CIDB Grading Required	<p>Grade 9CE</p> <p>Contractors shall have a Contractor grading equal to or higher than a contract grading designated above.</p>
Contracting Strategy	EPC / Turnkey
Classification	Complex work
Procurement Procedure	Rand Water uses a single volume approach.
Awarding Strategy	<p>The maximum number of suppliers to be awarded this bid is 1. Rand Water reserves the right to award to more than one supplier.</p> <p><i>Where the award is made to more than one supplier, Rand Water shall negotiate with the highest ranking pre-determined number of suppliers in order to normalise the prices, prior to award.</i></p>
Access to the Bid Documents	<p>The bid documents are downloadable on the National Treasury e-Tender Publication portal which can be accessed through the following link: http://www.etenders.treasury.gov.za.</p> <p>No bid documents will be issued to Contractors at site meetings. Please ensure that bid documents have been downloaded from the National Treasury e-Tender Publication portal prior to the site meeting date.</p> <p>Bids shall only be submitted on the bid documentation that is issued by the Employer. This bid document (as issued through the National Treasury e-Tender Publication portal) must be submitted in full together with the returnable documents.</p>
Bid Clarifications	<p>Bidders can seek clarification by no later than fifteen (15) calendar days before the bid closing date.</p> <p>Rand Water will provide a final response on clarifications by no later than ten (10) calendar days before the closing date.</p>
Bid Addenda	<p>Rand Water shall issue addenda, where applicable, by no later than ten (10) calendar days before the closing date. Bid addenda will be published on the eTender Publication Portal.</p>

Bid Location	<p>Bids must be submitted before or on closing date and time at the following address:</p> <p>Rand Water Head Office, 522 Impala Road, Glenvista, Main Reception Area, Monday to Friday from 08:00am to 16:00pm</p>
Bid Validity	<p>To be valid for 180 days after closing date</p> <p>Rand Water reserves the right to extend the validity period for a period reasonable for business requirements.</p>
Subcontracting	<p>Bidders must utilise the National Treasury's Central Supplier Database (CSD) for identification of potential subcontractors from the pool of EMEs or QSEs to advance designated groups.</p> <p>The responsibility to subcontract with competent and capable subcontractors rests with the main contractor/ supplier.</p> <p>As far as possible, the bidder must consider subcontractors from the area/s where the project will be taking place.</p> <p>Where CIDB related works are subcontracted, each Subcontractor must also be registered with the appropriate CIDB grading in accordance with the value of the work to be undertaken by that Subcontractor.</p>
Rotation of Suppliers	<p>In the spirit of providing equal opportunities to potential suppliers and in view of not supporting monopolies, Rand Water shall apply rotation of suppliers to ensure equitable share in Rand Water's awarded contracts.</p>
Site Viewing Date/s, Time and Venue	<p>The timetable for sites views will be issued on or before the 31st January 2023.</p>

T1.2. BID DATA

The conditions of this bid are the Standard Conditions of Tender as contained in the document CIDB Standard for Uniformity in Engineering and Construction Works Contracts (August 2019) Annexure C and may be obtained from the CIDB.

The Standard Conditions of Tender for Procurement make several references to the Bid Data for details that apply specifically to this bid. The Bid Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

The contractor shall achieve in the performance of the contract the Contract Skills Development Goal (CSDG) established in the Standard for Developing Skills through Infrastructure Contracts (published in GN 43495 of 20 March 2020).

Each item of data given below is cross-referenced to the Clause in the CIDB Standard Conditions of Tender to which it mainly applies.

CLAUSE NUMBER (CIDB)	BID DATA
C.1.1	The Employer is Rand Water.
C.1.2	The bid documents issued by the Employer are detailed on the contents page of this bid document.
C.1.4	The <i>Bid</i> Employer's Representative/s is stated on the cover page of this bid document.
C.1.6.3	The Employer shall evaluate this bid in accordance with the evaluation criteria stated in this bid.
C.2.1	<p>Only those Bidders who are registered with the cidb, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a 9CE class of construction work, are eligible to have their tenders evaluated.</p> <p>Joint ventures are eligible to submit bids provided that:</p> <ol style="list-style-type: none"> every member of the joint venture is registered with the cidb; the lead partner has a contractor grading designation in the 9CE class of construction work; or not lower than one level below the required grading designation in the class of works construction works under considerations and possess the required recognition status. the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a or 9CE class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations.

C.2.7	The arrangement for a non-compulsory site meeting (where applicable) is as stated in the Notice and Invitation to Bid.
C.2.8	The due date for seeking clarification is as stated in the Bid Notice and Invitation to Bid.
C.2.12	<p>In addition to the information appearing in C2.12 of the CIDB Standard Conditions of Tender, the following statements shall apply:</p> <ul style="list-style-type: none"> • Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative bid offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. • Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. • Pricing Data must reflect all assumptions in the development of the pricing proposal. • The pricing of the alternative bid offer may not exceed the pricing of the main bid offer. <p>Acceptance of an alternative bid offer will mean acceptance in principle of the offer. In the event that the alternative bid offer is accepted, it will be a contractual obligation for the Bidder to accept full responsibility and liability that the alternative bid offer complies in all respects with the Employer's standards and requirements.</p>
C.2.13.5 C.2.13.7	<p>Bidders must submit one (1) copy of the bid document and returnable documents <u>AND</u> <i>Compact disc (CD) or USB flash drive with pdf format of the bid document and returnable documents.</i></p> <p>The Employer's address for delivery of the bid offers is stated in the Bid Notice and Invitation to Bid.</p> <p>The bid submission must be sealed and endorsed with both the bid number and the description of the bid, as it appears on the front cover of this bid.</p>
C.2.13.9	Telephonic, telegraphic, telex, facsimile or e-mailed bid offers will not be accepted.
C.2.15	The closing time for submission of bid offers is as stated in the Bid Notice and Invitation to Bid.
C.2.16	<p>The bid offer validity period is as stated in the Bid Notice and Invitation to Bid.</p> <p>No bid substitutions will be allowed after the closing date and time.</p>
C.2.23	See 2.1 List of Returnable Documents for a comprehensive list of certificates and additional documents required for submission with this bid.
C.3.4	Rand Water will make available the names, prices and preference points for submissions to interested parties who make request for such information, at least one

	(1) week after the closing date. (CIDB Best Practice Guideline #A3 Evaluation tenders offers, February 2008)																						
C.3.11	<p>Rand Water's evaluation process comprises of the following steps. Specific criteria to be utilised for this bid are contained in <u>T1.3 Evaluation Criteria</u></p> <p>a) Pre-qualifiers Refer to the criteria as stated in T1.3 of this bid document. All pre-qualifiers must be met in order for the bid submission to be considered further.</p> <p>b) Functionality evaluation Refer to the criteria as stated in T1.3 of this bid document. A minimum score of 70 percent must be obtained for the bid submission to be considered further.</p> <p>c) Price i. Price Analysis Rand Water uses a Financial Tolerance Range in order to assess how reasonable the market response prices are. These ranges will assist with eliminating bid prices that are deemed to be excessively high or low to complete the works. The higher limit ensures that Rand Water does not pay more than it believes the value of service or goods is worth, and the lower limit ensures that Rand Water is not exposed to risk of work not being completed or prices increasing subsequent to the award because the award price was too low to complete said scope.</p> <p>d) Preference Points</p> <p>WHERE PROCUREMENT VALUE IS R0 < R50 000 000 (INCL. VAT):</p> $P_s = 80 * \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$ <p>The following table will be used to calculate the score out of 20 for BBBEE:</p> <table border="1"> <thead> <tr> <th>B-BBEE Status Level of Contributor</th><th>Number of Points</th></tr> </thead> <tbody> <tr><td>1</td><td>20</td></tr> <tr><td>2</td><td>18</td></tr> <tr><td>3</td><td>14</td></tr> <tr><td>4</td><td>12</td></tr> <tr><td>5</td><td>8</td></tr> <tr><td>6</td><td>6</td></tr> <tr><td>7</td><td>4</td></tr> <tr><td>8</td><td>2</td></tr> <tr><td>Non-compliant contributor</td><td>0</td></tr> <tr><td></td><td></td></tr> </tbody> </table>	B-BBEE Status Level of Contributor	Number of Points	1	20	2	18	3	14	4	12	5	8	6	6	7	4	8	2	Non-compliant contributor	0		
B-BBEE Status Level of Contributor	Number of Points																						
1	20																						
2	18																						
3	14																						
4	12																						
5	8																						
6	6																						
7	4																						
8	2																						
Non-compliant contributor	0																						

WHERE PROCUREMENT RAND VALUE IS >= R50 000 000 (INCL. VAT):

$$P_s = 90 * \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

The following table will be used to calculate the points out of 10 for BBEE:

B-BBEE Status Level of Contributor	Number of Points
1	10
2	9
3	6
4	5
5	4
6	3
7	2
8	1
Non-compliant contributor	0

Where:

Ps = Points scored for comparative price of bid or offer under consideration

Pt = Comparative price of bid or offer under consideration

Pmin = Comparative price of lowest acceptable bid or offer.

Rand Water does not bind itself to accept the bid with the lowest price

BBEE STATUS (P_P = 10/20 maximum)

Quantification of procurement contribution to B-BBEE

Points will be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of point (90/10 system)	Number of point (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6

	7	2	4
	8	1	2
	Non-compliant contributor	0	0
	<p>Bidders will not be disqualified from the bidding process for not submitting a certificate substantiating the B-BBEE status level of contribution or is a non-compliant contributor. Such a bidder will score zero (0) out of maximum of 10 for B-BBEE</p> <p>SUMMARY</p> <p>The total number of functionality/ quality (P_F) shall be the sum total of the product of quality criteria by weight allocated.</p> <p>The total number of adjudication points (P_T) shall equal the sum of the bid price points (P_s) and the BBBEE status points (P_P) i.e. P_T = P_s + P_P</p> <p>Rand Water does not bind itself to accept the bid with the highest number of adjudication points.</p>		
C.3.17	The number of paper copies of the signed contract to be provided by the Employer is 1 (one).		

T1.3. EVALUATION CRITERIA

T1.3.1. PRE-QUALIFIERS

1. Completed and Signed Form of Offer.
2. Letter of Good Standing from the Department of Labour or an Accredited Institution.
3. The use of correction fluid or any other similar substance to make corrections is not permitted.
4. Bidder must subcontract a minimum of 30% of the value of the contract to a QSE/s or EME that is a minimum 51% black owned.

The following evidence must be submitted:

 - a. Subcontracting agreement stipulating the percentage to be subcontracted
 - b. CSD report/s for Subcontractor/s
 - c. CIDB Registration for Subcontractor/s, where CIDB related works are subcontracted Where CIDB related works are subcontracted, each Subcontractor must also be registered with the appropriate CIDB grading in accordance with the value of the work to be undertaken by that Subcontractor. Where the CIDB requirement for subcontracted work is not met, this pre-qualifier has not been met.
 - d. Proof of B-BBEE status for Subcontractor/s
5. Bidders must be registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading

designation determined in accordance with the CIDB grading of this bid; in accordance with the CIDB prescripts.

6. Fully completed Local Content Declaration *SBD 6.2 and Annexure C* Forms for each of the designated sectors as provided and minimum stipulated thresholds for this bid, as outlined in Schedule T2.2.1. However, all applicable items as per the designated sectors, will be informed by the Bidder's proposal as listed in Table 2.2.14 and/or further/separate submission. Therefore, the Bidder shall indicate in table SBD 6.2 the applicable items as per the designated sectors in line with the Bidder's proposal.
7. Submission of Socio-Economic Development (SED) proposal in accordance with Rand Water's requirements and targets in T2.2.9 and the signing of the SED schedule in its entirety.
8. The bidding entity must have the ability to execute all required Engineering Consulting services in accordance with the Engineering Act of SA, Engineering Profession Act 46 of 2000. Proof of employment or signed contract agreement with the relevant Engineering Consultant or Consulting company must be submitted with the tender.
9. In the case of a Joint Venture, Consortium or a similar entity, a signed agreement or letter of intent between members/partners must be submitted together with the bid. It is a condition of this bid that Joint Ventures, Consortium or similar entities must, upon award, incorporate its entities within a prescribed time period (per the conditions precedents contained in the bid document).

T1.3.2. FUNCTIONALITY EVALUATION

Bid submissions will be evaluated on the criteria outlined in items (A-J) below. Each Item (A to J) has an assigned "Weight" and "Rating" scale. During the evaluation process, Bidders shall be assigned a "Rating" for each item in A to J.

The maximum "Score" that a Bidder can achieve will be equal to the "Weight" for a particular item. The Total Scores of each functionality criterion will be multiplied by its weight and then the total score summed up to a total score out of 100.

A detailed description of the "Rating" scales and associated adjudication documentation are as follows:

	<h1 style="text-align: center;">REQUEST FOR BID</h1> <h2 style="text-align: center;">ENGINEERING PROCUREMENT AND CONSTRUCTION / TURNKEY</h2>	Form No: RW SCM 00048 F Revision No: 07 Effective Date:
---	--	---

Table T1.1: Functional Evaluation Requirements

CRITERION	RETURNABLE SCHEDULE REFERENCE	WEIGHT	RATING SCALE			
			GOOD (100%)	MODERATE (66.7%)	WEAK (33.33%)	NONE (0%)
A. RECORD OF PREVIOUS EXPERIENCE: (15)	Experience must be relevant to the current scope/ work (with contactable client ref.) This is based on contractor history and managing projects of a similar nature and size to this bid. The reference must be written confirmation from clients and may include a completion certificate.					
A.1 Designs	T2.2.10	5	Minimum of three project completion certificates and/or referee letter which include experience on designs of multidisciplinary projects	Minimum of two project completion certificates and/or referee letter which include experience on designs of multidisciplinary projects	Minimum of one project completion certificates and/or referee letter which include experience on designs of multidisciplinary projects	No submission or submission that does not at least meet weak requirements.
A.2 Construction / Installation	T2.2.10	10	Minimum of three project completion certificates and/or referee letter of projects of a similar nature and size to this bid.	Minimum of two project completion certificates and/or referee letter of projects of a similar nature and size to this bid.	Minimum of one project completion certificates and/or referee letter of projects of a similar nature and size to this bid.	No submission or submission that does not at least meet weak requirements.
B. HUMAN RESOURCE CAPACITY (25)	Adjudicated based on Human Resource Capacity Schedule (including company's Project Team vs. Company Organogram; Project Team Member List including CV's, resource allocation). The purpose is to establish an overall picture of the company's human resource capacity and ability to undertake the work. Proof of employment such as valid three months bank statement / Payslips and signed contract for each and every key resource/personnel must be submitted over and above the requirements below (B.1. and B.11).(The three months refers to three months preceding Bid closing date, which means the resource must have been employed by the company/JV/consortium for a minimum of three months at Bid submission date). The resource must be South African or must be in possession of a SAQA accredited qualification equivalent to the required qualification with associated proof and must be in possession of a valid working permit.					
B.1. Construction Manager	T2.2.11	3	B.Sc., B.Eng. Or B.Tech. Certificate in built environment and 10 years project and construction management work experience with SACPCMP professional registration as Pr.CM or Pr. CPM	B.Sc., B.Eng. Or B.Tech. Certificate in built environment and 9 years project and construction management work experience with SACPCMP professional registration as Pr.CM or Pr. CPM	B.Sc., B.Eng. Or B.Tech. Certificate in built environment and 8 years project and construction management work experience with SACPCMP professional registration as Pr.CM or Pr. CPM	No submission or submission that does not at least meet weak requirements.
B.2. Construction Supervisor	T2.2.11	2	National Diploma in built environment certificate with a minimum of 10 years construction supervision experience and registered with SACPCMP as a Candidate PrCM	National Diploma in built environment certificate with a minimum of 9 years construction supervision experience and without registration SACPCMP as a Candidate PrCM	National Diploma in built environment certificate with a minimum of 8 years construction supervision experience and without registration with SACPCMP as a Candidate PrCM	No submission or submission that does not at least meet weak requirements.

CRITERION	RETURNABLE SCHEDULE REFERENCE	WEIGHT	RATING SCALE			
			GOOD (100%)	MODERATE (66.7%)	WEAK (33.33%)	NONE (0%)
B.3. Construction Health and Safety Officer	T2.2.11	3	SHE Diploma or SAMTRAC or equivalent qualification with 6 years SHE Officer construction working experience and registered with SACPCMP as CHSO / CHSM.	SHE Diploma or relevant technical or SAMTRAC or equivalent with 4-5 years SHE Officer construction working experience and registered with SACPCMP as CHSO / CHSM.	SHE Diploma or relevant technical or SAMTRAC or equivalent with 1 - 3 years SHE Officer construction working experience and registered with SACPCMP as CHSO / CHSM.	No submission or submission that does not at least meet weak requirements.
B.4. Quality Officer	T2.2.11	3	National Diploma / Certificate in Engineering and built environment with 5 years quality management experience on Construction projects and accreditation certificates i.e. SAIW / NACE	National Diploma / Certificate in Engineering and built environment with 4 years quality management experience on Construction projects and accreditation certificates i.e. SAIW / NACE	National Diploma / Certificate in Engineering and built environment with 3 years quality management experience on Construction projects and accreditation certificates i.e. SAIW / NACE	No submission or submission that does not at least meet weak requirements.
B.5. Environmental Officer	T2.2.11	2	National Diploma in Environmental Sciences or BSc in Environmental Management or equivalent, with 5 years appropriate Environmental Control Officer experience and in-field experience with monitoring of Construction types of projects	National Diploma in Environmental Sciences or BSc in Environmental Management or equivalent, with 4 years appropriate Environmental Control Officer experience and in-field experience with monitoring of Construction types of projects	National Diploma in Environmental Sciences or BSc in Environmental Management or equivalent, with 3 years appropriate Environmental Control Officer experience and in-field experience with monitoring of Construction types of projects	No submission or submission that does not at least meet weak requirements.
B.6. Civil Engineer/ Technologist (Water)	T2.2.11	2	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 10 years water engineering experience in particular big diameter pipelines	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 9 years water engineering experience in particular big diameter pipelines	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 8 years water engineering experience in particular big diameter pipelines	No submission or submission that does not at least meet weak requirements.
B.7. Civil Engineer/ Technologist (Transport)	T2.2.11	3	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 10 years road engineering experience	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 9 years road engineering experience	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 8 years road engineering experience	No submission or submission that does not at least meet weak requirements.

CRITERION	RETURNABLE SCHEDULE REFERENCE	WEIGHT	RATING SCALE			
			GOOD (100%)	MODERATE (66.7%)	WEAK (33.33%)	NONE (0%)
B.8. Electrical Engineer/Technologist	T2.2.11	2	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 10 years' experience in heavy current application in water related utility	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 9 years' experience in heavy current application in water utility	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 8 years' experience in heavy current application in water utility	No submission or submission that does not at least meet weak requirements.
B.9. Electrical Engineer/Technologist (C&I)	T2.2.11	2	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 10 years' experience in light current application in water related utility	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 9 years' experience in light current application in water utility	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 8 years' experience in light current application in water utility	No submission or submission that does not at least meet weak requirements.
B.10. Mechanical Engineer/Technologist	T2.2.11	3	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 10 years' experience in big diameter pipelines, valves, pumps and other related mechanical equipment.	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 9 years' experience in big diameter pipelines valves and related mechanical equipment.	B.Sc. or B.Eng. or B.Tech. Certificate, Pr. Eng or Pr. Tech. Eng and 8 years' experience in big diameter pipelines valves and related mechanical equipment.	No submission or submission that does not at least meet weak requirements.
C. PLANT AND EQUIPMENT RESOURCE CAPACITY (10)	Adjudicated based on Equipment Resource Capacity (i.e. office space and requisite tools, vehicles and working tools). The purpose is to establish an overall picture of the company's equipment resource capacity and ability to undertake the work. Rand Water will confirm the information submitted when conducting due diligence.					
C.1 Design Phase	T2.2.12	2	Proof of ownership or lease of office space Proof of ownership of design related hardware (high spec computer, plotters, printers, etc) Proof of possession of either hardcopies or electronic copies of the relevant Design Codes, relevant licensed software e.g. AUTOCAD, Prokon, or equivalent and associated hardware capable of running software for 3D designs.	Proof of ownership or lease of office space Proof of lease of design related hardware (high spec computer, plotters, printers, etc) Proof of possession of either hardcopies or electronic copies of the relevant Design Codes, relevant licensed software e.g. AUTOCAD, Prokon, or equivalent and associated	Proof of ownership or lease of office space Proof of lease of design related hardware (high spec computer, plotters, printers, etc) No proof of possession of either hardcopies or electronic copies of the relevant Design Codes, relevant licensed software e.g. AUTOCAD, Prokon, or equivalent and associated hardware capable of running software for 3D designs	No submission or submission that does not at least meet weak requirements.

CRITERION	RETURNABLE SCHEDULE REFERENCE	WEIGHT	RATING SCALE			
			GOOD (100%)	MODERATE (66.7%)	WEAK (33.33%)	NONE (0%)
				hardware capable of running software for 3D designs.		
C.2 Construction Phase	T2.2.12	8	Proof of ownership of plant and equipment relevant to this bid	Proof of lease of plant and equipment relevant to this bid	Proof of letter of intent to lease plant and equipment relevant to this bid	No submission or submission that does not at least meet weak requirements.
D. PROJECT RISK MANAGEMENT (10)	As per risk register provided					
D.1. Response to tender document risks register	T2.2.16	10	Effectively address 100% of risks on the risks register including filling of all the response actions and response strategies for each and every risk. Identification of additional appropriate risks including response actions and strategies	Effectively address 100% of risks on the risks register including filling of all the response actions and response strategies for each and every risk.	Effectively address less than 100% of risks on the risks register including filling of all the response actions and response strategies for each and every risk.	No submission or submission that does not at least meet weak requirements.
E. DETAILED PROJECT PROGRAMME (10)	Aligned with employer's completion dates with the following specifications.					
E.1. Programme Schedule	R1.17	10	Effective, sequential, and integrated level 3 MS project schedule with durations (start and finish dates), indication of critical path. Programme schedule to be aligned to ECSA Stage 1 to Stage 6 or SACPCMP stages	Effective, sequential, and integrated level 2 MS project schedule with durations (start and finish dates), indication of critical path. Programme schedule to be aligned to ECSA Stage 1 to Stage 6 or SACPCMP stages	Effective, sequential, and integrated level 1 MS project schedule with durations (start and finish dates), indication of critical path. Programme schedule to be aligned to ECSA Stage 1 to Stage 6 or SACPCMP stages	No submission or submission that does not at least meet weak requirements.

CRITERION	RETURNABLE SCHEDULE REFERENCE	WEIGHT	RATING SCALE			
			GOOD (100%)	MODERATE (66.7%)	WEAK (33.33%)	NONE (0%)
F. METHOD STATEMENT (15)	Specific method statement in accordance with the scope of work and aligned with Contractual requirements.					
F.1. Designs	R1.18	3	Comprehensive Design and Engineering Plan - logical sequencing of appropriate designs activities across 90% - 100% of applicable engineering disciplines.	Details of Design and Engineering Plan - logical sequencing of appropriate designs activities across 70% - 89% of applicable engineering disciplines.	Details of Design and Engineering Plan - logical sequencing of appropriate designs activities across less than 70% of applicable engineering disciplines.	No submission or submission that does not at least meet weak requirements.
F.2 Equipment and Construction	R1.18	7	Comprehensive Plant, Labour, equipment, and material management plan including list of long lead items. Construction and Equipment Activity plan including sequencing of activities to ensure plant is always running	Plant, Labour, equipment, and material management plan including list of long lead items. Construction and Equipment Activity plan including sequencing of activities to ensure plant is always running	Plant, Labour, equipment, and material management plan including list of long lead items. Construction and Equipment Activity plan <u>excluding</u> sequencing of activities to ensure plant is always running	No submission or submission that does not at least meet weak requirements.
F.3 Quality Control and Assurance	R1.18	3	Detailed methodology on how quality control and assurance will be managed plus sample of QCP	Basic methodology on how quality control and assurance will be managed <u>with</u> a sample of QCP	Basic methodology on how quality control and assurance will be managed <u>without</u> a sample of QCP	No submission or submission that does not at least meet weak requirements.
F.4. Safety Management	R1.18	2	Detailed methodology on how safety will be managed with a sample of typical task-based risk assessment	Detailed methodology on how safety will be managed but without a sample of typical task-based risk assessment	Basic methodology on how safety will be managed but without a sample of typical task-based risk assessment	No submission or submission that does not at least meet weak requirements.
G. SHERQ (5)	Adjudicated based on Contractors Health, Environment, Risks, Safety and Quality Policy, Plan and documentation submitted					

CRITERION	RETURNABLE SCHEDULE REFERENCE	WEIGHT	RATING SCALE			
			GOOD (100%)	MODERATE (66.7%)	WEAK (33.33%)	NONE (0%)
G.1. SHEQ MANAGEMENT SYSTEMS (5)	R1.11	5	ISO 9001, ISO 45001 and ISO 14001 certificates	No ISO but have internal management system for health and safety, quality and environmental, <u>coupled</u> with signed SHEQ Plan, signed SHE Policy and signed Quality Policy	No ISO but have internal management system for health and safety, quality and environmental, <u>without</u> signed SHEQ Plan, signed SHE Policy and signed Quality Policy	No submission or submission that does not at least meet weak requirements.
H. FINANCIAL HEALTH (10)	Financial Health- If an entity will be funding itself, it is to submit valid three years financial statements. In the event that an entity having a funder, a valid stamped letter from the funder indicating that they will fully fund your contract is to be submitted. When the valid three years financial statements are submitted, H1 and H2 will be calculated for scoring. If a valid stamped letter from the funder indicating that they will fully fund your contract is to be submitted the Bidder will obtain full score for H1 & H2.					
H.1. Liquidity	R1.8	2	Current assets / Current liabilities; Current assets - Inventory / Current liabilities ratios both equal to 1 while Cash generated from operations / Debt ratio is greater than 0.4501	Current assets / Current liabilities; Current assets - Inventory / Current liabilities ratios both are equal to 1 while Cash generated from operations / Debt ratio is between 0.21 and 0.4501	Current assets / Current liabilities; Current assets - Inventory / Current liabilities ratios both are less than 1 while Cash generated from operations / Debt ratio is less than 0.21	No submission or submission that does not at least meet weak requirements.
H.2. Debt, gearing and solvency	R1.8	2	Long-term debt / Equity of less than 0,345; Long term debt/EBITDA of less than 1,95 and Total Assets/Total liabilities of more than 1,5	Long-term debt / Equity between 0,345 and 0,505; Long term debt/EBITDA between 1,95 and 3,95 and Total Assets/Total liabilities between 1 and 1,5	Long-term debt / Equity of more than 0,505; Long term debt/EBITDA of more than 3,95 and Total Assets/Total liabilities of less than 1	No submission or submission that does not at least meet weak requirements.
H.3. Financial Management Plan	R1.8	6	Comprehensive Financial Management Plan, including cash flows incorporating all the activities of the contract for its duration.	Basic Financial Management Plan, including cash flows incorporating all the activities of the contract for its duration.	Basic Financial Management Plan, including cash flows not incorporating activities of the contract for its duration.	No submission or submission that does not at least meet weak requirements.

	<p style="text-align: center;">REQUEST FOR BID ENGINEERING PROCUREMENT AND CONSTRUCTION / TURNKEY</p>	Form No: RW SCM 00048 F Revision No: 07 Effective Date:
---	--	---

T1.3.3. PRICE

Rand Water uses a Financial Tolerance Range in order to assess how reasonable the market response prices are. These ranges will assist with eliminating bid prices that are deemed to be excessively high or low to complete the works. The higher limit ensures that Rand Water does not pay more than it believes the value of service or goods is worth, and the lower limit ensures that Rand Water is not exposed to risk of work not being completed or prices increasing subsequent to the award because the award price was too low to complete said scope.

The financial tolerance range for this bid is **-25% to 25%**.

T1.3.4. OBJECTIVE CRITERIA

Rotation of suppliers for bids will be done on the following conditions:

- a. Aggregate value of R250 million (inclusive of all taxes) awarded.
- b. Where an award to be made to the supplier results in the cumulative value exceeding the rotation threshold for bids, that award can be made which will constitute the last award to the supplier in the financial year.
- c. As its objective criteria, Rand Water shall therefore not award to a Bidder that scores the highest points if such Bidder has already exceeded the rotation threshold for bids.
- d. This bid document is one of approximately 48 IEP sub-packages/bids. Therefore, one Director is limited to a maximum of one award of IEP sub-packages/bid/contract. This means, if an Entity has a director/s awarded one IEP contract there will be no award of any other IEP contract to the entity.
- e. However, Rand Water reserves a right to award more than one bid to one entity or Director.
- f. No subcontracting of work to "own entities/subsidiaries"

In making the determination on the aggregate value of work awarded to a supplier, Rand Water shall consider the supplier's relations and as such, where Rand Water had awarded work to entities and/or persons that are related and/or inter-related to the supplier, the value of such awards shall be used as a measure of assessing the aggregate value of the work awarded to the supplier.

PART T2: RETURNABLE DOCUMENTS

T2.1. LIST OF RETURNABLE DOCUMENTS

T2.1.1 All documentation listed in table T2.1 below shall form part of the Contract. *The Bidder must utilise this list as a checklist prior to bid submission.*

T2.1.2 Non-submission of any item listed only under the column “Required for Bid Evaluation” may result in the bid being rejected by the Employer.

T2.1.3 Attach additional pages if more space is required.

Table T2.1 List of Returnable Documents

ITEM	DESCRIPTION OF DOCUMENT TO BE RETURNED	REQUIRED FOR BID EVALUATION	ONLY REQUIRED AFTER BID AWARD
T2	Returnable schedules (supplied with the bid document)		
T2.2.1	Compulsory Enterprise Questionnaire including SBD 4 and 6.1	•	
	<i>SBD 6.2 and Annexure C where local content designation if applicable</i>	•	
T2.2.2	Record of Addenda to Bid Documents	•	
T2.2.3	Proposed Subcontractors	•	
T2.2.4	Alternative Bid	•	
T2.2.5	Qualifications to Bid	•	
T2.2.6	Requirements with regard to fluctuations in the cost of labour and materials	•	
T2.2.7	FOB Prices of imported equipment/materials for which foreign exchange would be required and importing charges	•	
T2.2.8	Declaration of Insurance	•	
T2.2.9	Socio-Economic Development Plan	•	
T2.2.10	Record of Previous Experience, Quality of Workmanship and Safety	•	
T2.2.11	Human Resource Capacity Schedule	•	
T2.2.12	Equipment Resource Capacity (Plant and Equipment)	•	
T2.2.13	Safety, Health, and Environment	•	
T2.2.14	Details of Equipment (including manufacturer's data sheets and technical publications)	•	
T2.2.15	Recommended Spares, Special tools and servicing facilities	•	
T2.2.16	Project Risk Management and Risk Response Plan	•	
T2.2.17	Penalty Table	•	
C1.1	Letter of Bid (Form of Offer and Acceptance)	•	

ITEM	DESCRIPTION OF DOCUMENT TO BE RETURNED	REQUIRED FOR BID EVALUATION	ONLY REQUIRED AFTER BID AWARD
C1.2	Contract Agreement		•
C2.2	Activity Schedule The Bidder is required to submit the following: <ul style="list-style-type: none"> - Excel® format of the completed activity schedule in a compact disc (CD) or USB flash drive. - Printed format and signed version of the completed activity schedule. 	•	
C3.1	Dates for Delivery and Completion NOTE: A DETAILED PROJECT PROGRAMME MUST BE INCLUDED WITH THE BID SUBMISSION	•	
R 1	Required documentation not issued with the bid document:		
R 1.1	Certificate of Contractor Registration issued by CIDB OR A copy of the application form for registration in terms of the CIDB Act	•	
R 1.2	Proof of tax compliance status and a valid SARS Tax PIN	•	
R 1.3	Letter of Good Standing from the Department of Labour or an Accredited Institution	•	
R 1.4	Performance Guarantee / Bond		•
R 1.5	Resolution Letter for the Main Contractor (a letter authorising the person completing the bid to sign on behalf of the company)	•	
R 1.6	Resolution Letter for the Subcontractor/s (a letter authorising the person completing the bid to sign on behalf of the company)	•	
R 1.7	<i>Signed</i> Subcontracting Agreement	•	
R 1.8	<i>3-year financial statements (audited where applicable)</i>	•	
R 1.9	Certified copy of B-BBEE Certificate or Certified copy of Sworn Affidavit for EMEs or QSEs	•	
R1.10	Main Contractor's internal Safety and Health Policy and Project Specific SHE Plan (compliance with the project specific SHE specification)	•	
R 1.11	Comprehensive SHEQ Plan (compliance with SHEQ Specification, including written agreement on Safety, Health and Environmental matters and all documents required for SHEQ compliance)		•
R1.12	Contractors' tools and Equipment Inventory		•
R1.13	Staff list		•
R1.14	Site Clearance Certificate		•
R1.15	Job Creation Report/Statistics (To be submitted Monthly)		•
R1.16	ISO 9001 Certification / proof of In-house Quality Management System (must include proof of a Document Control System and proof of a Non-conformity Management	•	

ITEM	DESCRIPTION OF DOCUMENT TO BE RETURNED	REQUIRED FOR BID EVALUATION	ONLY REQUIRED AFTER BID AWARD
	System) including Sample/template of Quality Control Plan and appointment of Quality Representative		
R1.17	Detailed Project Programme in the following: a) Gantt Chart Format b) Level 3 schedule activities c) Credible and Aligned to Rand Water's Programme d) Resource loaded schedule Monthly cash flows, project to completion.	.	
R1.18	Method Statement: <i>as per requirements under functionality.</i>	.	

T2.2. RETURNABLE SCHEDULES

T2.2.1. COMPULSORY ENTERPRISE QUESTIONNAIRE

The following particulars must be furnished. In the case of a joint venture, separate enterprise questionnaires in respect of each partner must be completed and submitted.

Section 1: Name of enterprise:

Section 2: VAT registration number, if any:

Section 3: CIDB registration number, if any:

Section 4: CSD Number:

Section 5: Particulars of sole proprietors and partners in partnerships:

Name *	Identity Number *	Personal income tax number *

* Complete only if sole proprietor or partnership and attach separate page if more than 3 partners

Section 6: Particulars of companies and close corporations

Company registration Number:	
Close Corporation number:	
Tax reference number:	

Section 7: SBD 4 issued by National Treasury must be completed for this bid.

Section 8: SBD 6.1 issued by National Treasury must be completed for this bid.

Section 8: SBD 6.2 and Annexure C issued by National Treasury must be completed for this bid (if applicable).

I the undersigned, who warrants that he/she is duly authorized to do so on behalf of the enterprise:

- i) authorizes the employer to verify the Bidders tax clearance status from the South African Revenue Services that it is in order;
- ii) confirms that the neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- iv) confirms that I / we are not associated, linked or involved with any other bidding entities submitting bid offers and have no other relationship with any of the Bidders or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and
- v) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Name of Bidder:

Signed by or on
behalf of Bidder:

Official
Capacity:

Date:

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise, employed by the state? **YES/NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:

.....

¹ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

- 2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract?

YES/NO

- 2.3.1 If so, furnish particulars:

.....
.....

3 DECLARATION

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium² will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

² Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

SBD 6.1

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all bids:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2

a) The value of this bid is estimated to exceed R50 000 000 (all applicable taxes included) and therefore the 90/10. preference point system shall be applicable; or

b) The 90/10 preference point system will be applicable to this bid.

1.3 Points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contributor.

1.4 The maximum points for this bid are allocated as follows:

	POINTS
PRICE	90
B-BBEE STATUS LEVEL OF CONTRIBUTOR	10
Total points for Price and B-BBEE must not exceed	100

1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2. DEFINITIONS

- (a) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) **“B-BBEE status level of contributor”** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;

- (c) **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- (d) **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) **“EME”** means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) **“functionality”** means the ability of a Bidder to provide goods or services in accordance with specifications as set out in the bid documents.
- (g) **“prices”** includes all applicable taxes less all unconditional discounts;
- (h) **“proof of B-BBEE status level of contributor”** means:
 - 1) B-BBEE Status level certificate issued by an authorized body or person;
 - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
 - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- (i) **“QSE”** means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

3. POINTS AWARDED FOR PRICE

3.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20 or 90/10

$$P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right) \quad \text{or} \quad P_s = 90 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where

P_s = Points scored for price of bid under consideration

P_t = Price of bid under consideration

P_{\min} = Price of lowest acceptable bid

4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

- 4.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

5. BID DECLARATION

- 5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

6. B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1

- 6.1 B-BBEE Status Level of Contributor: . =(maximum of 10 or 20 points)
 (Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

7. SUB-CONTRACTING

- 7.1 Will any portion of the contract be sub-contracted?

(Tick applicable box)

YES		NO	
-----	--	----	--

- 7.1.1 If yes, indicate:

- i) What percentage of the contract will be subcontracted.....%
- ii) The name of the sub-contractor.....
- iii) The B-BBEE status level of the sub-contractor.....
- iv) Whether the sub-contractor is an EME or QSE

(Tick applicable box)

YES		NO	
-----	--	----	--

- v) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations,2017:

Designated Group: An EME or QSE which is at least 51% owned by:	EME	QSE
	√	√
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

In the case of more than one subcontractors, submit a list of subcontractors with the above details (7.1.1)

8. DECLARATION WITH REGARD TO COMPANY/FIRM

8.1 Name of company/firm:.....

8.2 VAT registration number:.....

8.3 Company registration number:.....

8.4 TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
 - ☐ One person business/sole propriety
 - ☐ Close corporation
 - ☐ Company
 - ☐ (Pty) Limited
- [TICK APPLICABLE BOX]

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

.....

.....

.....

8.6 COMPANY CLASSIFICATION

- ☐ Manufacturer
 - ☐ Supplier
 - ☐ Professional service provider
 - ☐ Other service providers, e.g. transporter, etc.
- [TICK APPLICABLE BOX]

- 8.7 Total number of years the company/firm has been in business:.....
- 8.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:
- i) The information furnished is true and correct;
 - ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
 - iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
 - iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution.

Name of Bidder: _____

Signed by or on
behalf of Bidder: _____

Official
Capacity: _____

Date: _____

SBD 6.2

DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This Standard Bidding Document (SBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2017 (Regulation 8) make provision for the promotion of local production and content.
- 1.2. Regulation 8.(2) prescribes that in the case of designated sectors, organs of state must advertise such bids with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for bids referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

x is the imported content in Rand

y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) on the date of advertisement of the bid as indicated in paragraph 3.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on [http://www.thedti.gov.za/industrial development/ip.jsp](http://www.thedti.gov.za/industrial%20development/ip.jsp) at no cost.

- 1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation;

2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid the local content declaration minimum requirement indicated below is for the items known to Rand Water at the present moment, however, given that this is a turnkey contract, once the activity schedule has been broken into more details as more information becomes available, the Contractor will then be required to provide a detailed declaration with all items listed. However, that declaration will not form part of pre-qualifiers and will be done post pre-qualifier evaluation.

Table SBD 6.2

	Description of services, works or goods	Stipulated minimum threshold (%)
•	Steel products and components for Construction	100
•	Electrical and telecom cables	90
•	Valves products and actuators	70
•	Conveyance Pipes	80-100
•	Transformers and Shunt Reactors	
	Class 0	90%
	Class 1	70%
	Class 2	70%
	Class 3	45%
	Class 4	10%
	Components and conversion activities	50% – 100%
•	Plastic Pipes	100
•	Cem I to Cem V or Masonry Cement types	100

3. Does any portion of the goods or services offered have any imported content?
 (Tick applicable box)

YES		NO	
-----	--	----	--

- 3..1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on www.resbank.co.za

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	

Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

- Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the AO/AA provide directives in this regard.

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO. RW10397140/22

ISSUED BY: RAND WATER

NB

- The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thedti.gov.za/industrial_development/ip.jsp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names),
 do hereby declare, in my capacity as
 of(name of bidder entity), the
 following:

- The facts contained herein are within my own personal knowledge.
- I have satisfied myself that:
 - the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and

- (c) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above.

The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E.

- (d) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

Name of Bidder: _____

Signed by or on
behalf of Bidder: _____

Official
Capacity: _____

Date: _____

(C1)	Tender No.
(C2)	Tender description:
(C3)	Designated product(s)
(C4)	Tender Authority:
(C5)	Tendering Entity name:
(C6)	Tender Exchange Rate:
(C7)	Specified local content %

Note: VAT to be excluded from all calculations

Pula EU GBP

Calculation of local content								Tender summary			
Tender item no's	List of items	Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
								(C20) Total tender value	R 0		
								(C21) Total Exempt imported content	R 0		
								(C22) Total Tender value net of exempt imported content	R 0		
								(C23) Total Imported content		R 0	
								(C24) Total local content		R 0	
								(C25) Average local content % of tender			

Signature of tenderer from Annex B _____

Date: _____

(C20) Total tender value R 0

(C21) Total Exempt imported content R 0

(C22) Total Tender value net of exempt imported content R 0

(C23) Total Imported content R 0

(C24) Total local content R 0

(C25) Average local content % of tender

T2.2.2. RECORD OF ADDENDA TO BID DOCUMENT

We acknowledge receipt of communications from the Employer amending the bid document before the submission of this bid offer. We confirm that these amendments have been taken into account in this bid offer.

Notice Number	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Name of Bidder: _____

Signed by or on
behalf of Bidder: _____

Official

Capacity: _____

Date: _____

T2.2.3. PROPOSED SUBCONTRACTORS

We notify the Employer that it is our intention to employ the following Subcontractors for work in this contract.

If we are awarded a contract, we agree that this notification does not change the requirement for us to submit the names of proposed Subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then on official award of Contract by the Employer to us, this list duly signed below shall be binding between us.

The appointment of the proposed Subcontractors shall be subject to the approval of the Employer.

Please note it is compulsory to declare the percentage of work to be completed by the Subcontractor.

Name and Address of Proposed Subcontractor	Nature and Extent of Work	Previous Experience with Subcontractor	CIDB Grading
1)			
2)			
3)			
4)			
5)			

Name of Bidder: _____

Signed by or on
behalf of Bidder: _____

Official
Capacity: _____

Date: _____

T2.2.4. ALTERNATIVE BID

- T2.2.4.1. Alternative bids will be accepted on the conditions described in [T1.2 Bid Data](#) (CIDB Clause C2.12)
- T2.2.4.2. Should the Bidder wish to submit an alternative bid he shall set out his proposals clearly hereunder or alternatively state them in a covering letter attached to his bid and referred to hereunder, failing which the bid will be deemed to be unqualified.
- T2.2.4.3. If no departures or modifications are described, the schedule shall be marked NIL and signed by the Bidder.

Page	Item	Proposed alternative	Price saving (if any) to the Employer if proposal is accepted

Name of Bidder: _____

Signed by or on
behalf of Bidder: _____

Official
Capacity: _____

Date: _____



Should the Bidder wish to qualify any aspect of the bid (e.g. limitations, assumptions, limited liability, etc.), he shall set out his terms clearly hereunder or alternatively state them in a covering letter attached to his bid and referred to hereunder, failing which the bid will be deemed to be unqualified.

If no qualifications are made, the schedule shall be marked NIL and signed by the Bidder.

[illegible]

Official Capacity:

T2.2.6. REQUIREMENTS WITH REGARD TO FLUCTUATIONS IN THE COST OF LABOUR AND MATERIALS

T2.2.6.1. The Bidder shall delete whichever of the following statements are not applicable to the bid. *Where the Bidder has not indicated the applicability of fluctuations, Rand Water shall regard the fluctuations as not applicable.*

FLUCTUATIONS IN - Wages and allowances:	*TO APPLY/NOT TO APPLY
Price of materials:	*TO APPLY/NOT TO APPLY

* Delete whichever is not applicable.

FORMULAE OR BASIS FOR THE ADJUSTMENT OF THE BID PRICE

If firm prices are not quoted the Bidder shall supply the following information:

T2.2.6.2. Formula by which the bid price is to be multiplied in order to arrive at the adjusted price:

.....
.....

T2.2.6.3. Definition of all symbols used in the above formula:

.....
.....
.....
.....

T2.2.6.4. Any special materials or equipment to be excluded from the application of the formula stating the method and basis of price variation to be applied to such materials or equipment:

.....
.....
.....

RECORDING OF WEATHER AND ABNORMAL RAINFALL

If during the time for completion of the works or any extension thereof abnormal rainfall or wet conditions shall occur then an extension of time in accordance hereof shall be granted by the Employer calculated in accordance with the formula given below for each calendar month or part thereof.

$$V = (Nw - Nn) + ((Rw - Rn)/X)$$

V	Extension of time in calendar days in respect of the calendar month under consideration.
Nw	Actual number of days during the calendar month on which a rainfall of Y mm or more has been recorded.
Nn	Average number of days, as derived from existing rainfall records, on which a rainfall of Y mm or more has been recorded for the calendar month.
Rw	Actual rainfall in mm recorded for the calendar month under consideration.
Rn	Average rainfall in mm for the calendar month as derived from existing rainfall records.

For purposes of the contract Nn, Rn, X and Y shall have those values assigned to them in the Contract Data and/or the Specification. The total extension of time shall be the algebraic sum of all monthly totals for the period under consideration, but if the total is negative the time for completion shall not be reduced due to subnormal rainfall. Extensions of time for part of a month to be calculated using pro rata values of Nn and Rn. This formula does not take account of flood damage that could cause further or concurrent delays and will be treated separately as far as extension of time is concerned.

The factor (Nw-Nn) shall be considered to represent a fair allowance for variations from the average number of days during which rainfall exceeds Y mm. The factor (Rw-Rn)/X shall be considered to represent a fair allowance for variations from the average in the number of days during which the rainfall did not exceed Y mm but wet conditions prevented or disrupted work.

The following average rainfall figures are applicable:

INFORMATION SOURCE: South African Weather Service
 Pretoria, Tel.: 082 233 8484

Y = 10 mm/24 hour day; X = 20 mm

STATISTICAL INFORMATION: MEYERTON 439/00 STATION: 1993 - 2020		
Month	RAINFALL	
	Nn = Average number of days during the calendar months in which a rainfall of more than Y-mm has been received	Rn = Average monthly rainfall
January	3.1	83.6
February	3.2	105.5
March	2.8	91.8
April	1.4	34.5
May	0.9	23.0
June	0.1	6.8
July	0.0	0.0
August	0.1	4.2
September	0.4	12.5
October	3.3	92.4
November	3.5	96.0
December	4.3	142.9
Total	23.1	693.2

The Contractor shall be permitted to take his own rainfall measurements on site subject to the Employer's representative approval, but access to the measuring gauge(s) shall be under the Employer's Representative 's control. The Contractor is to provide and install all the necessary equipment for accurately measuring the rainfall as well as to provide, erect and maintain a security fence plus gate, padlock and keys at each measuring station, all at his own cost.

Name of Bidder: _____

Signed by or on
behalf of Bidder: _____

Official
Capacity: _____

Date: _____

T2.2.7. F O B PRICES OF IMPORTED EQUIPMENT/MATERIALS FOR WHICH FOREIGN EXCHANGE WOULD BE REQUIRED AND IMPORTING CHARGES

- T2.2.7.1. The Bidder shall complete each schedule listing the F O B value of all items of equipment/materials for which foreign exchange would be required.
- T2.2.7.2. Bidders based on the supply of locally manufactured equipment and/or materials priced competitively, will be given preference by the Employer provided such equipment and/or materials, and the manufacture thereof, are of sufficiently high standard to meet the Employer's requirements.
- T2.2.7.3. If no items are to be imported or if firm prices are submitted the relevant section of the schedule shall be marked NIL. If the equipment contains imported equipment/materials then the Bidder shall complete the schedule listing the F O B value of all items of equipment/materials, which have been or are to be imported. Prices tendered for this imported equipment/material shall be quoted in **currency of origin**. It will therefore be the responsibility of the employer (Rand Water) to take out a Forward Cover for this imported equipment/material, when and if deemed prudent. All charges for the Employer's account referred to in the General Conditions of Contract and any changes in the rates of exchange will only be paid or allowed by the Employer in respect of items listed in this schedule. Bidder shall be expected to provide full documentation (i.e. Invoice, Bill of Lading, etc.) supporting foreign currency requirements for this imported equipment/material to support the Employer application to the SARB for the exchange control approval.
- T2.2.7.4. The Bidder shall sign each schedule.
- T2.2.7.5. For evaluation purposes, the prices of imported equipment/material sourced directly from outside South Africa quoted in currency of origin will be converted to Rand using the closing rate exchange rate published by SARB on the date, one week (7 day calendar days) prior to the closing date for the Bidder.

"Imported content" means that portion of the price represented by the cost of components, parts or materials which have been, or are still to be imported (whether by the Bidder or his suppliers or Subcontractors) and which cost includes the overseas cost plus direct importation costs, such as freight, all landing charges, dock dues, import duties and the like at the South African port of entry, as well as inward transportation and handling to the factory in the Republic where the equipment offered is produced, manufactured, processed, assembled, packed or otherwise prepared.

The Bidder shall state in the appropriate column the F O B values of equipment/materials, which have already been imported, and which still have to be imported.

Item	Description and country of origin	Rate of exchange	F O B value	
			Already imported	To be imported
			R	R
Total F O B values				

Table T2.2.7.1: F O B Prices

The exchange rate to be used for conversion of the foreign content to local content shall be the closing exchange rate published by South African Reserve Bank (SARB) on the date, one week (7-day calendar days) prior to the closing date of the Bid.

IMPORT PERMIT: The Bidder shall state what arrangements have been or are to be made to obtain the necessary import permit(s).

.....

.....

Item	Rate	Total
PORT OF LANDING	R	R
Freight on tons at		
Insurance on R		
Customs duty on R		
Landing charges on tons at		
Wharfage on tons at		
Forwarding and agency on tons at		
Railage on kg at		
Sundry importing charges		
.....		
TOTAL:		

Table T2.2.7.2: F O B Prices

Guaranteed date of shipping

Guaranteed date of delivery to railway authority

Name of Bidder: _____

Signed by or on _____ Official
 behalf of Bidder: _____ Capacity: _____

Date: _____

T2.2.8. DECLARATION OF INSURANCES

I/We hereby declare that the insurance policies enumerated below have been effected by me/us in accordance with the Contract Data.

Cover effected	Insurer	Policy	Expiry date
COID			
Unemployment Insurance			
Employer's Liability			
Motor Vehicle Liability			
Contractor's Equipment			
Manufacturing/Fabrication Premises			
Professional Indemnity	as applicable		

Table T2.2.8: Declaration of Insurance

Copies of the abovementioned policies are attached.

In respect of COID, a copy of the current receipt and letter of good standing is attached.

Name of Contractor: _____

Signed by or on _____ Official
 behalf of Contractor: _____ Capacity: _____

Date: _____

NOTE: This schedule shall be completed and submitted to Rand Water within 14 days from the commencement date of the contract and will serve as a condition precedent. The Contractor shall ensure that all policies are in place for the full period under the contract, and where policies need to be renewed and/or any changes effected, Rand Water is to be provided with the renewal confirmation and/or details of changes within 14 days of such renewal or changes.

T2.2.9. SOCIO-ECONOMIC DEVELOPMENT

Rand Water intends to achieve the objective of promoting an environment that is health, safe, efficient, productive, harmonious, free from disruption and localises opportunities for communities in close proximity to the project. Such an environment will assist contractors in implementing the projects successfully. All contractors, subcontractors (including SMMEs) and site service providers within the project have a role and responsibility in achieving this objective. Accordingly, the Main Contractor is wholly responsible in ensuring the provision, implementation and maintenance of the required socio-economic deliverables, as approved by Rand Water.

The Bidder shall submit a plan with regard to SED targets set by Rand Water for each respective SED element during the Request for Bid (RFB) phase. Bidders have to submit SED plans as part of their proposals in reaction to the RFB. Bidders are required to demonstrate through their SED plans how the involvement of black persons and historically disadvantaged individuals (HDIs) will be secured, as well as their commitment to the respective SED elements.

Rand Water regards the **local-to-site area** as historically disadvantaged areas in the district municipality. In areas that are not demarcated according to district municipalities, the historically disadvantaged areas in the metropolitan municipalities shall be regarded as local-to-site areas.

Key performance areas and deliverables on SED are outlined as follows:

ITEM NO.	KEY PERFORMANCE AREAS	DELIVERABLES
1.	Participation of Local Enterprises	<ul style="list-style-type: none"> The Bidder must ensure that in the project implementation plan the following target is prioritized and this must be clearly outlined in the declaration of intent: <ul style="list-style-type: none"> Work allocation to local enterprises A minimum of 5% of the total work will be allocated to local black owned enterprises. The Bidder must specify in the SED plan the work items to be allocated to local enterprises that are minimum 51% black owned. This plan must also indicate the Rand value and the scope of work. Rand Water's Database of Local Business for the target area/s will be availed.
2.	Job Creation	<ul style="list-style-type: none"> The Bidder's workforce in the project must consist of locals (historically disadvantaged) as follows: <ul style="list-style-type: none"> Unskilled Labourers: 100% (50% women, 50% youth) Semi-skilled: a minimum of 30% (50% women, 50% youth) Skilled: a minimum of 25% (50% women, 50% youth) The method of recruitment must be pre-approved by Rand Water. It is acknowledged that people will be employed on a part-time basis in many instances. It is however required that employees who were employed at the unskilled level exit with a certificate of completion of accredited training.

ITEM NO.	KEY PERFORMANCE AREAS	DELIVERABLES
		<ul style="list-style-type: none"> A recruitment plan must be submitted which will indicate how the employment of local labour will be achieved versus the Bidder's existing (permanent) and seconded labour which will be assigned to the project.
3.	Skills Development	<ul style="list-style-type: none"> The Bidder must submit a proposed skills development programme targeting the following levels: <ul style="list-style-type: none"> Unskilled to Semi-skilled (50% Youth, 50% Women) Undergraduate (50% Youth, 50% Women) Graduate (50% Youth, 50% Women) The proposed programmes must be accredited, giving credit value to the beneficiaries. The programmes must incorporate workplace learning and/or on-the-job training with the theoretical knowledge provided. Programmes can only be implemented once approval has been provided by Rand Water.
4.	Social Responsibility	<ul style="list-style-type: none"> A programme must be structured to ensure effective delivery to address identified community needs in a significant and sustainable manner. The Bidder must submit proposed social responsibility initiative/s which could be rolled out across the project duration and must have impact beyond the project implementation. Examples may include Cooperative Development, NGO Support, School Support Programmes can only be implemented once approval has been provided by Rand Water.
5.	Social Facilitation	<ul style="list-style-type: none"> A key component in aiding the realisation of the SED objectives is effective community liaison with all the relevant role-players, structures, civic organisations and the community at large. Provision must be made for a Community Liaison Officer (CLO) for the duration of the project. The CLO must be sourced locally.

The Bidder agrees to adhere to the Rand Water's SED requirements.

Name of Bidder: _____

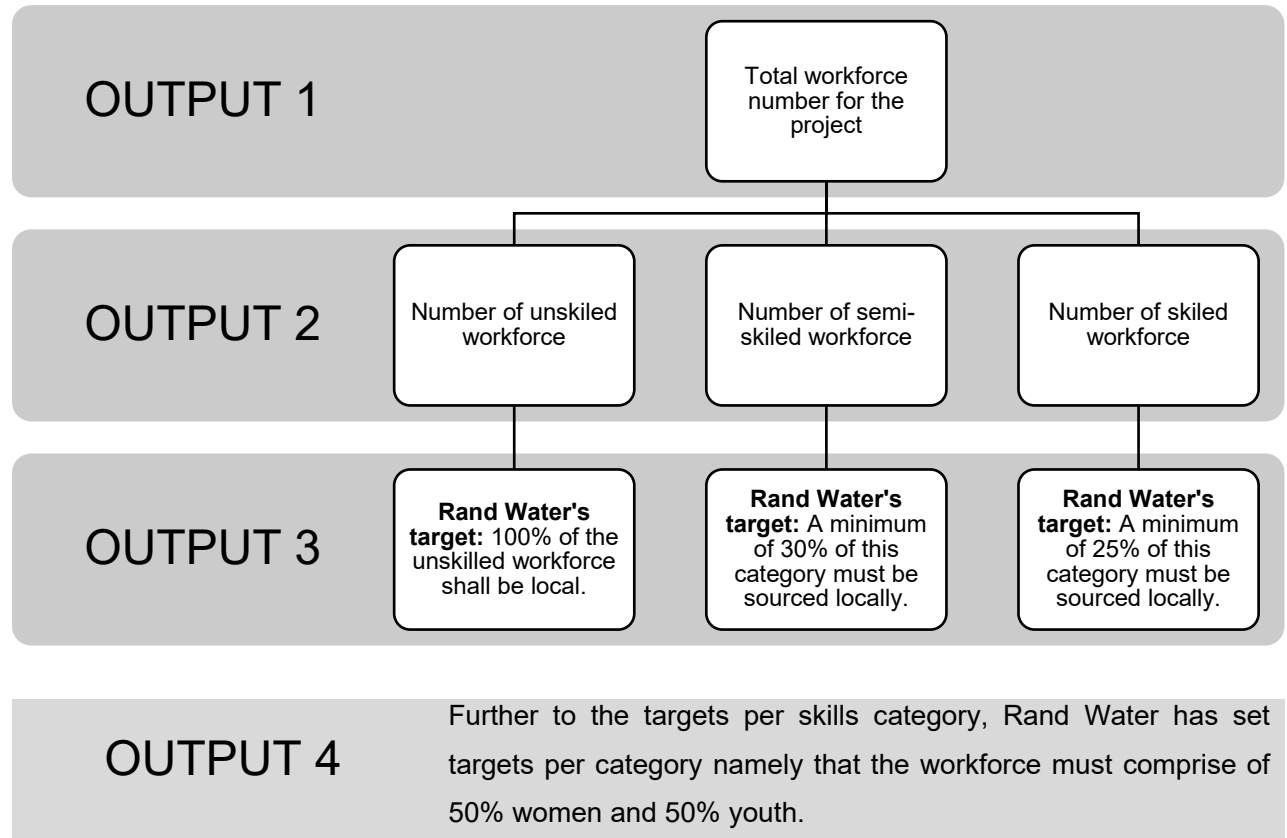
Signed by or on
behalf of Bidder: _____

Official
Capacity: _____

Date: _____

T2.2.9.1. JOB CREATION REQUIREMENT

The Bidder's recruitment plan must indicate the following information:



The Bidder must ensure that the required recruitment plan adheres to the requirements of this section and must also include a proposed method of recruitment.

The Bidder agrees to adhere to the Rand Water's SED requirements.

Name of Bidder: _____

Signed by or on
behalf of Bidder: _____

Official
Capacity: _____

Date: _____

T2.2.9.2 SED MATRIX

KEY PERFORMANCE AREA	INDICATOR	MEASURE	TARGET	QUANTITY	COST	TIMELINE			COMMENTS
						START	END	DURATION	
Job Creation <i>Total workforce number for the project:</i> <i>(insert)</i> 	Employment: Unskilled Insert Rate:	Percentage of total projected workforce in the skills category	100%						
	Employment: Semi-skilled Insert Rate:	Percentage of total projected workforce in the skills category	Minimum 30%						
	Employment: Skilled Insert Rate:	Percentage of total projected workforce in the skills category	Minimum 25%						
Skills Development	Accredited Training Programmes: Unskilled (MANDATORY)	Rand Value	Rand value of Schedule M, 1.1.1 in the Activity Schedule						
		Number of unskilled people trained on accredited training	Number of unskilled indicated in the Bidder's recruitment plan						
	Work Integrated Learning: Undergraduates	Rand Value	Rand value of Schedule M, 1.1.1 in the Activity Schedule						
		Number of undergraduates trained and provided workplace experience	Number of unskilled indicated in the Bidder's recruitment plan						
	Professionalisation Programmes: Graduates	Rand Value	Rand value of Schedule M, 1.1.1 in the Activity Schedule						

KEY PERFORMANCE AREA	INDICATOR	MEASURE	TARGET	QUANTITY	COST	TIMELINE			COMMENTS
						START	END	DURATION	
		Number of graduates trained and provided workplace experience	Number of unskilled indicated in the Bidder's recruitment plan						
Social Responsibility	Community development initiatives	Rand value	Rand value of Schedule M, 1.5.1 in the Activity Schedule						
Social Facilitation	Appointment of CLOs	Rand value	Rand value of Schedule M, 1.3.1 in the Activity Schedule						
Participation of Local Enterprises	Work allocated to local enterprises that are 51% black owned	Rand value	Rand value in Schedule M, 1.4.1 in the Activity Schedule						
	Procurement of non-core services and materials from local enterprises that are a minimum 51% black owned	Rand value	100%						
TOTALS					The Bidder must indicate the total cost				

Rand Water will commence the monitoring of SED implementation three (3) months after the acceptance of the letter of award by the successful Bidder. The Bidder agrees to adhere to the Rand Water's SED requirements.

Name of Bidder: _____

Signed by or on behalf of Bidder: _____

Official Capacity: _____

Date: _____

T2.2.9.3. SED CHECKLIST

All items in this checklist must be completed. If any of the items are not addressed as required (i.e. indicated as "No" or no attachment where an attachment is required), the Bidder's submission will be deemed non-responsive.

	ITEM	REQUIREMENT	YES	NO
1.	Job Creation	Attach the Recruitment Plan (refer to T2.2.9.1)		
2.	Skills Development	Attach a comprehensive proposal for training programmes for unskilled, undergraduate and graduate, as applicable. The provision of accredited training for the unskilled group is a mandatory requirement.		
3.	Social Responsibility	Attach a comprehensive proposal for local community development.		
4.	Participation of Local Enterprises	<ul style="list-style-type: none"> The work highlighted for Participation of Local Enterprises is work that must be issued to local enterprises that are a minimum 51% black owned. This is a minimum. The Bidder must ensure that the work to be allocated to local enterprises amounts to a minimum of 5% of the whole work. This must be indicated clearly in the Bidder's SED plan. The sourcing of local enterprise shall be be a competitive process. The method of sourcing must be pre-approved by Rand Water. Attach a procurement plan for non-core services and materials required. Rand Water's target is that the Bidder must procure 100% of these services and materials from local enterprises that are a minimum 51% black owned. 		
5.	Social Facilitation	The Bidder must provide the costing with reference to Schedule M, 1.2.1 in the Activity Schedule		

The Bidder agrees to adhere to the Rand Water's SED requirements.

Name of Bidder: _____

Signed by or on
behalf of Bidder: _____

Official

Capacity: _____

Date: _____

T2.2.10. RECORD OF PREVIOUS EXPERIENCE, QUALITY OF WORKMANSHIP AND SAFETY

The Bidder shall provide details of **completed** works (similar to the work set out in this bid). Individuals listed as references must be contactable and willing to provide information relating to the performance of the Bidder (in terms of safety and health, workmanship, documentation, timeous completion, etc.). In order to verify the quality of workmanship, an inspection of the works may also be undertaken should Rand Water deem it necessary.

The Bidder must take into cognisance the functionality criteria in providing the record of previous experience. Information must be provided in the following format:

Description of Works	
Project Title :	
High level project description:	
Client :	
Contract No. :	
Contract Value (excl. VAT) :	
Role ^(Note 1) :	
Award Date :	
Completion Date :	
Location of Works :	
Project Manager :	
Construction Manager :	
Contact Details of Reference at Client Company	
Name :	
Position Held :	
Tel :	Cell :
Fax :	email :
<small>Note 1 – Role refers to the Contractor's responsibility w.r.t. the claimed experience. For example Single Contractor, Main Contractor but with electrical sub – contractor, Sub – contractor for civil construction etc.</small>	

Name of Bidder:

Signed by or on
behalf of Bidder:

Official
Capacity:

Date:

T2.2.11. HUMAN RESOURCE CAPACITY SCHEDULE

The aspects covered by T2.2.11.1, T2.2.12.2 and T2.2.12.3 will be viewed in conjunction with each other to establish an overall picture of the Bidder's capacity and ability to undertake the work specified in this document.

T2.2.11.1. Project Team Organogram vs. Company Organogram

The Bidder shall detail in the block below their company organogram and the Resources dedicated to this contract must be clearly indicated. In addition, sub-contractor and Joint-Venture arrangements must be clearly indicated:

cont.



T2.2.11.2. Proposed Team Member List (Internal & External)

[illegible]

cont...

T2.2.11.3. List of Current Contracts (Workload)

Contract or Work Title	Client	Contract Value (excl. VAT)	Role ^{NOTE 1}	Progress
				Award Date: Completion Date: % Complete: Stage ^{NOTE2} :
				Award Date: Completion Date: % Complete: Stage ^{NOTE2} :
				Award Date: Completion Date: % Complete: Stage ^{NOTE2} :
				Award Date: Completion Date: % Complete: Stage ^{NOTE2} :
				Award Date: Completion Date: % Complete: Stage ^{NOTE2} :

NOTES

1. Role refers to the Contractor's responsibility w.r.t. the claimed experience for example Single Contractor, Main Contractor but with Electrical subcontractor, Sub-contractor for civil construction etc.
2. Stage refers to the current stage of the work (example design, procurement, construction, installation, commissioning, handed over, in Defects Liability Period etc.)
3. Attach additional signed copies of this schedule if insufficient space is available.

Name of Bidder: _____

Signed by or on
behalf of Bidder: _____

Official
Capacity: _____

Date: _____

T2.2.12. EQUIPMENT RESOURCE CAPACITY (PLANT AND EQUIPMENT)

The following are lists of major items of relevant equipment that are presently owned / leased / hired or planned to be purchased / leased / hired and will be available for this contract if the bid is accepted:

Qty	Equipment Description (including capacity/size etc)	Currently Own / Currently Lease or Hire / Plan to Purchase / Plan to Lease or Hire	% Utilisation	
			On other Contracts / Work	On this Contract/ Work

I, the Bidder, guarantee that all the above listed plant and equipment is readily available and/or will be provided when required on the works and maintained on the site in good condition and working order.

Name of Bidder: _____

Signed by or on
behalf of Bidder: _____

Official
Capacity: _____

Date: _____

T2.2.13. SAFETY, HEALTH, AND ENVIRONMENT

1. Safety and Health Policy

Bidders shall submit a copy of their company's internal Safety and Health Policy.

2. Safety, Health and Environment (SHE) Plan

Bidders shall submit the project specific SHE plan as per the project specific SHE Specification

3. Safety, Health and Environment (SHE) Risk assessment

Bidders shall submit the project specific SHE risk assessment.

4. Construction Health and Safety Manager / or Officer

Bidders shall submit the details of the name and particulars of the person proposed to be appointed as the Construction Health and Safety Manager/or Officer (include proof of registration with SACPCMP).

5. DIFR Status

Bidders shall furnish their DIFR Status for 2 years in the table below, based on the following formula.

$$DIFR \text{ (annual)} = \frac{(\text{Number of Disabling Injuries})(200000)}{(\text{Number of Hours Worked})}$$

Number of Hours Worked (annual) = Total Number of Employees x Average Hours Worked per Employee per Year

	Current Year	Last Year
Number of Disabling Injuries		
Total Number of Employees		
Average Hours Worked per Employee per Year		
Number of Hours Worked per Year		
Calculated DIFR		

Table T2.2.17: Safety, Health, and Environment

Name of Bidder: _____

Signed by or on
behalf of Bidder: _____

Official
Capacity: _____

Date: _____

[illegible]

Official Capacity:

T2.2.15. RECOMMENDED SPARES, SPECIAL TOOLS AND SERVICING FACILITIES

Number recommended	Description	Price each
		R

SERVICING FACILITIES (Name and address of depot and available facilities).

.....

Special tools provided

.....

Name of Bidder:

Signed by or on
 behalf of Bidder:

Date:

Official
 Capacity:

T2.2.16. PROJECT RISK MANAGEMENT

PROJECT RISK MANAGEMENT REGISTER FOR CONTRACT Please fill in the blank columns labelled Response Strategy and Response Action for each Risk Event listed in the table below:									
RISK IDENTIFICATION						QUALITATIVE RISK ASSESSMENT		RISK RESPONSE PLAN	
#	RISK CATEGORY	RISK EVENT	CAUSE	EFFECT	THREAT OR OPPORTUNITY	PROBABILITY	IMPACT	RESPONSE STRATEGY	RESPONSE ACTIONS
1	Feasibility stage	Delays in land / servitude, working strip acquisition process	Non agreement for the evaluation of land to be acquired and signing of Infrastructure Agreement	Land required for the project site location or routes is not acquired in time	Threat Site cannot be accessed to start construction. Delays to project and increased costs.	High	High		
2	Feasibility Stage	Delays in approval of the WULA	Lack of adequate information submitted to DWS and DEA Long Process of Basic Assessment Process	Regulatory Compliance required for the project to commence may not be acquired in time	Project may not go ahead. Or increase in project costs or delays in commencement	Medium	Medium		

PROJECT RISK MANAGEMENT REGISTER FOR CONTRACT Please fill in the blank columns labelled Response Strategy and Response Action for each Risk Event listed in the table below:									
RISK IDENTIFICATION						QUALITATIVE RISK ASSESSMENT		RISK RESPONSE PLAN	
#	RISK CATEGORY	RISK EVENT	CAUSE	EFFECT	THREAT OR OPPORTUNITY	PROBABILITY	IMPACT	RESPONSE STRATEGY	RESPONSE ACTIONS
3	Feasibility Stage	Interested and Affected parties	Stiff Opposition from I and A parties to project implementation	Regulatory Compliance required for the project to commence may not be acquired in time	Project may not go ahead. Or increase in project costs or delays in commencement	Medium	High		
4	Design Phase	Poor Performance of newly constructed assets, not able to perform their functional requirements	Lack of Design Experience for the Design Team	Incomplete Designs	Threat	Medium	Medium		
5	Design Phase	Intellectual property of the Organisation sitting with third party individuals	Lack of Non-Disclosure agreement at the start of the project	Loss of project information since the contractor will be handling bulk of the designs	Threat	Low	Medium		

PROJECT RISK MANAGEMENT REGISTER FOR CONTRACT Please fill in the blank columns labelled Response Strategy and Response Action for each Risk Event listed in the table below:									
RISK IDENTIFICATION						QUALITATIVE RISK ASSESSMENT		RISK RESPONSE PLAN	
#	RISK CATEGORY	RISK EVENT	CAUSE	EFFECT	THREAT OR OPPORTUNITY	PROBABILITY	IMPACT	RESPONSE STRATEGY	RESPONSE ACTIONS
6	Design Phase	Extended Design Review Period	Submission of poor design reports and packages by the contractor	Extension of time to complete the project Cost Overrun	Threat	Low	Medium		
7	Design Phase	Lack of integration across disciplines and across other linked projects	Submission of incoherent design reports and packages by the contractor	Re-work of the design to accommodate impact of design changes in one discipline.	Threat	Low	Medium		
8	Design Phase	Inadequacy of information	Lack of adequate existing information such as as-built, surge reports, service detection,	Extended time during site verification, scoping of the works compilation	Threat	Medium	Medium		

PROJECT RISK MANAGEMENT REGISTER FOR CONTRACT Please fill in the blank columns labelled Response Strategy and Response Action for each Risk Event listed in the table below:									
RISK IDENTIFICATION						QUALITATIVE RISK ASSESSMENT		RISK RESPONSE PLAN	
#	RISK CATEGORY	RISK EVENT	CAUSE	EFFECT	THREAT OR OPPORTUNITY	PROBABILITY	IMPACT	RESPONSE STRATEGY	RESPONSE ACTIONS
			geotechnical studies						
9	Implementation Phase	Delay in obtaining Construction Permits from Dept of Labour	Lack of adequate information required by the Dept	Extended construction period	threat	Medium	Medium		
10	External	Community strike	Non agreement with local community requirements	Project delayed	Threat	Medium	Very High		
11	External	Community strike	Lack of proper communication	Delays, work stoppages Riots/strikes, vandalism, risk to property and personnel	Threat	Medium	Very High		

PROJECT RISK MANAGEMENT REGISTER FOR CONTRACT Please fill in the blank columns labelled Response Strategy and Response Action for each Risk Event listed in the table below:									
RISK IDENTIFICATION						QUALITATIVE RISK ASSESSMENT		RISK RESPONSE PLAN	
#	RISK CATEGORY	RISK EVENT	CAUSE	EFFECT	THREAT OR OPPORTUNITY	PROBABILITY	IMPACT	RESPONSE STRATEGY	RESPONSE ACTIONS
12	Construction	Community strike	Contractor damages Rand Water infrastructure during construction	Project cost increase	Threat	Medium	Very High		
13	Construction	Delay in delivery of equipment and machinery	Long lead times	Project delay	Threat	High	High		
14	Construction	Differing site conditions / underground conditions	Unexpected services encountered construction/ unknown conditions	Increase cost	Threat	High	Medium		
15	Construction	Damage to the works	Flooding of the works due to major rainfall events/leaking pipelines	Damage to the bedding to backfilling collapsing of trench walls, negative time impact due to re-work	Threat	Medium	High		

PROJECT RISK MANAGEMENT REGISTER FOR CONTRACT Please fill in the blank columns labelled Response Strategy and Response Action for each Risk Event listed in the table below:									
RISK IDENTIFICATION						QUALITATIVE RISK ASSESSMENT		RISK RESPONSE PLAN	
#	RISK CATEGORY	RISK EVENT	CAUSE	EFFECT	THREAT OR OPPORTUNITY	PROBABILITY	IMPACT	RESPONSE STRATEGY	RESPONSE ACTIONS
16	Construction	Interfacing with live plant	Lack of availability / ensuring plant availability		Threat	Medium	Medium		
17	Construction	Damage to property	Contractor damages Rand Water infrastructure during construction	Project cost increase	Threat	High	High		
18	Construction	Adverse weather conditions	Rain fall, winds and extreme cold weather	Delay	Threat	Medium	High		

PROJECT RISK MANAGEMENT REGISTER FOR CONTRACT Please fill in the blank columns labelled Response Strategy and Response Action for each Risk Event listed in the table below:									
RISK IDENTIFICATION						QUALITATIVE RISK ASSESSMENT		RISK RESPONSE PLAN	
#	RISK CATEGORY	RISK EVENT	CAUSE	EFFECT	THREAT OR OPPORTUNITY	PROBABILITY	IMPACT	RESPONSE STRATEGY	RESPONSE ACTIONS
19	Construction	Breakdown of critical equipment	Poor maintenance, quality of equipment, suitability of equipment	Negative time impact	Threat	Low	Medium		
20	Construction	Delays in approval of Wayleaves, expiring / renewals and adhering to Conditions	Lack of dedicated personnel to undertake the submission of wayleaves and site monitoring	Extended construction period	Threat Project will be delayed to non-approval of wayleaves. This in turn will affect construction and increased project costs.	High	High		
21	Human Resources	Key staff resign	Working conditions, work pressure, remuneration	Negative time impact	Threat	Low	Medium		

PROJECT RISK MANAGEMENT REGISTER FOR CONTRACT Please fill in the blank columns labelled Response Strategy and Response Action for each Risk Event listed in the table below:									
RISK IDENTIFICATION						QUALITATIVE RISK ASSESSMENT		RISK RESPONSE PLAN	
#	RISK CATEGORY	RISK EVENT	CAUSE	EFFECT	THREAT OR OPPORTUNITY	PROBABILITY	IMPACT	RESPONSE STRATEGY	RESPONSE ACTIONS
22	Human Resources	Strike action by labour force	Union strike, site working conditions	Negative time impact	Threat	Medium	High		
23	Safety	Life threatening / other injury to personnel	Not adhering to Safety Plan and/or OH & S Act or Construction Regulations	Loss of life, site closed	Threat	High	High		
24	Safety	Employees falling into trenches	Floods/ Insufficient PPE/ Unsafe Work area	Work disruption	Threat	Medium	High		
25	Safety	Moving Equipment injuring personnel	Construction Machinery moving Not adhering to the traffic plan	Loss of life, injury to personnel, site closed	Threat	High	High		

PROJECT RISK MANAGEMENT REGISTER FOR CONTRACT Please fill in the blank columns labelled Response Strategy and Response Action for each Risk Event listed in the table below:									
RISK IDENTIFICATION						QUALITATIVE RISK ASSESSMENT		RISK RESPONSE PLAN	
#	RISK CATEGORY	RISK EVENT	CAUSE	EFFECT	THREAT OR OPPORTUNITY	PROBABILITY	IMPACT	RESPONSE STRATEGY	RESPONSE ACTIONS
26	Safety	Drowning		Loss of life, injury to personnel, site closed	Threat	Medium	High		
27	Sub-Contracting	Delay of construction activities	None or delayed payment to sub-contractors	Schedule overrun	Threat	Medium	High		

PROJECT RISK MANAGEMENT REGISTER FOR CONTRACT									
Please fill in the blank columns labelled Response Strategy and Response Action for each Risk Event listed in the table below:									
RISK IDENTIFICATION						QUALITATIVE RISK ASSESSMENT		RISK RESPONSE PLAN	
#	RISK CATEGORY	RISK EVENT	CAUSE	EFFECT	THREAT OR OPPORTUNITY	PROBABILITY	IMPACT	RESPONSE STRATEGY	RESPONSE ACTIONS

Name of Bidder: _____

Signed by or on
behalf of Bidder: _____

Official
Capacity: _____

Date: _____

T2.2.17. PENALTY TABLE

The Bidder is required to acknowledge the penalty table by signing this schedule.

PENALTY TABLES					
DELAYS ON ITEMS ATTRACTING PENALTIES	Value of Contract (Excl VAT.) in millions R				
	<1	≥1<5	≥5<20	≥20<50	≥50
PROGRAMME AND PRELIMINARY DOCUMENTS (Rand's per day delay)	1 000	5 000	10 000	10 000	10 000
DRAWINGS AND DESIGN PACK (Rand's per day delay)	2 500	10 000	15 000	20 000	25 000
SECTIONAL COMPLETION	1% of the value of the outstanding work/ week				
OVERALL COMPLETION	1% of the value of the outstanding work/ week				
COMMISSIONING (Rand's per day delay)	5 000	10 000	15 000	20 000	25 000
REMEDYING OF DEFECTS					
a) Critical to asset functioning/ running (Rand's per day delay)	5 000	25 000	50 000	50 000	50 000
b) Not critical to asset functioning/ running (Rand's per day delay)	500	2 500	5 000	5 000	5 000
SHERQ					
a)SHERQ non conformances, corrective and preventative actions not resolved within the agreed target dates	500	2 500	5 000	5 000	5 000
Agreed target dates exceeding 5 working days					
b)Non-reporting of SHERQ incidents and statistics within the required timeframe	500	2 500	2 500	5 000	5 000
Within a shift / Within 24 hrs					
c) Repeat SHERQ non conformances	1 000	5 000	10 000	10 000	10 000
d) Overtime Work without the required approvals during Construction phase (Rands)	1 000	5 000	10 000	10 000	10 000
SED Implementation					
Failure to implement SED objectives (Rands per day delay)	1 000	5 000	10 000	10 000	10 000

Name of Bidder:

Signed by or on behalf of Bidder: _____ Official Capacity: _____

Date: _____

SECTION B: CONTRACT

PART C1: AGREEMENT AND CONTRACT DATA

C1.1. FORM OF OFFER AND ACCEPTANCE

C1.1.1. LETTER OF BID

LETTER OF BID

DESCRIPTION: TENDER FOR CONSTRUCTION AND UPGRADE OF VARIOUS PALMIET SYSTEM INFRASTRUCTURE PROJECTS IN PALMIET PUMPING STATION AND SURROUNDING AREAS: PACKAGE 6 – SUB-PACKAGE 8

BID NO: RW10397140/22

TO: The Bid Submission Box
 Rand Water Head Office
 522 Impala Road
 Glenvista
 Johannesburg
 Attention: Semakaleng Mangoali

We have examined the Conditions of Contract, Specifications, Drawings, Schedules, the attached Appendix and Addenda No.'s for the execution of the above named Works. We offer to execute and complete the Works and remedy any defects therein in conformity with this Bid which includes all said documents, for the total sum of in South **African Rand** (ZAR _____)

(_____)

Amount in Words inclusive of all taxes) or such other sum as may be determined in accordance with the Conditions of Contract.

The total ZAR value quoted above, to include the sum of imported equipment/material sourced directly from outside South Africa. The applicable currency of origin/s must be converted to South African Rand (ZAR) using the closing rate of exchange as published by SARB on the date, one week (7 day calendar days) prior to the closing date for the Bid.

The Bidder shall further complete the offer/letter and stipulate the sum in the currency of origin (i.e. Euro, USD, GBP or any other currency) as noted below.

for the sum of in **Euro** (€ _____)
 (_____ **Amount in Words inclusive of all taxes*)**

or such other sum as may be determined in accordance with the Conditions of Contract.

for the sum of in **USD** (\$ _____)
 (_____ **Amount in Words inclusive of all taxes**
 *)

or such other sum as may be determined in accordance with the Conditions of Contract.

for the sum of in **GBP** (£ _____)
 (_____ **Amount in Words inclusive of all taxes**
 *)

or such other sum as may be determined in accordance with the Conditions of Contract.

for the sum of in **any other currency** _____
 (_____ **Amount in Words inclusive of all taxes** *)

or such other sum as may be determined in accordance with the Conditions of Contract.

***Applies to international suppliers that are registered for all taxes in South Africa**

We accept your suggestions for the appointment of the DAB,

We agree to abide by this Bid for a period of *180* days from the Submission Date and Time for Bids and it shall remain binding upon us and may be accepted at any time before that date. We acknowledge that the Appendix forms part of this Letter of Bid.

If this offer is accepted, we will provide the specified Performance Security, commence the Works as soon as is reasonably practicable after the Commencement Date, and complete the Works in accordance with the above-named documents within the Time for Completion.

Unless and until a formal Agreement is prepared and executed this Letter of Bid, together with your written acceptance thereof, shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Signature..... in the capacity of.....

duly authorized to sign bids for and on behalf of.....

Address:

Date:.....

Signature of Witness: _____

Signature of Witness: _____

Name of Witness: _____

Name of Witness: _____

Date: _____ Date : _____

C1.1.2. CONTRACT AGREEMENT

This Agreement made on the _____ day of (month) _____ (year) _____
between

RAND WATER
(hereinafter called “the Employer”)

And

(hereinafter called “the Contractor”).

Whereas the Employer desires that the Works known as **tender for construction and upgrade of various palmiet system infrastructure projects in palmiet pumping station and surrounding areas: package 6 – sub-package 8** should be executed by the Contractor, and has accepted a bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement:
 - a. The Letter of Award
 - b. The Letter of Bid
 - c. The Conditions of Contract
 - d. The Employer’s Requirements
 - e. The Returnable Schedules
 - f. The Contractor’s Proposal
 - g. The Bid Addenda (where applicable)

h. Additional Information Provided by Contractor (where applicable)

3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein, in conformity with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price at the times and in the manner prescribed by the Contract.

Authorised signature of Employer

Authorised signature of Contractor

 for and on behalf of the Employer

 for and on behalf of the Contractor

Name:

Name:

Designation: **CHIEF EXECUTIVE**

Designation:

Date:

Date:

In the presence of the undersigned witnesses:

Name:

Name:

Signature:

Signature:

Date:

Date:

C1.2. CONTRACT DATA

PART 1: PREAMBLE:

This Engineering Procurement Construction (“EPC”) template has been created for the purpose of providing a standardized document to be used in the sourcing of the Turnkey Contractor (s) for the execution of the Infrastructure deliver sourcing model namely: Integrated Execution Programme;

Rand Water as the Employer uses a Red and Yellow Book as their conditions of contracts for infrastructure projects, however for the implementation of the Integrated Execution, the contracting strategy has changed as influenced by the complexity and the size of projects to be executed;

The Conditions of Contract are the “General Conditions” which form part of the “Conditions of Contract for EPC/Turnkey Projects (“Silver book”) Second edition 2017” published by the Federation Internationale Des Ingenieurs – Conseils (FIDIC) and the “Particular Conditions” will be applicable and shall be used;

The Employer shall appoint a single contractor (meaning on contractor, a joint venture, or consortium) a turnkey contract, where an employer hands full responsibility over to the contractor for all design, engineering and construction. This approach expects the employer to “wait for the keys” and to have little day-to-day management of the project as work progresses;

Now therefore, it is recorded as that the following approach to the procurement of Works has been adopted and should be recorded therein

- (i) where the Contractor is to take total responsibility for the design and execution of building or engineering works,
- (ii) At the onset, it is worth noting that the Employer's Requirements shall include an outline design for the Works, in that some of the packages have a significant amount of design work that has been done by the Employer from concept, preliminary to detailed design;
- (iii) In such circumstances, the Employer aver and notwithstanding the fact that this is a turnkey contract, the Employer elects to issue the aforementioned designs to the Contractor during the tender stage with the proviso that the Contractor shall be:
 - deemed to have scrutinized, verified and satisfied him/herself with the accuracy of the information;
 - shall take on full responsibility for such design; the contractor being responsible both for the integration of the design and the construction of the works.
 - the contractor shall make necessary amendments to the aforementioned designs as professionals;
 - the Employer shall not be responsible for any error, inaccuracy or omission of any kind in the Employer's Requirements and shall not be deemed to have given any representation of accuracy and completeness of data;
 - Full accountability and responsibility passes to the Contractor;

NB

PART 2 –

Joint Ventures / Consortiums:

- Bidder shall be a firm that is a private entity or a company or any combination of such entities in the form of a Joint Venture / Consortiums or a similar entity. In this case, a signed Joint Venture agreement or a letter of intent must be submitted as part of the returnable documents.
- Bidders who submit as a combined entity must ensure that they incorporate a Joint Venture upon award to ensure that the contract is executed by an entity with a legal *persona* (*Please see conditions precedents below*). There is no limit on the number of members in a JV.

- During the bidding process, the employer will accept unincorporated entities in the form of JV and Consortiums. However, signed agreements or a letter of intent must be submitted with the bid.
- In the case of a Joint Venture or Consortiums or similar entity, all members/partners shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms.
- The member/partners shall nominate a Representative who shall have the authority to conduct all business for and on behalf of all the members of the Joint Venture or Consortium or similar entity during the Bidding process.

CONDITIONS PRECEDENTS

- It is the employers' requirements that, in the event the Joint Venture, Consortium or similar entity is awarded the Contract, it shall within 30 days from the date of issuance of the letter of award, submit the following:
 1. In case of entities which only submitted letters of intent, bidders must submit signed agreements;
 2. Bidders must further submit proof of incorporation of the entity confirming incorporation either as Joint Venture, Consortium or similar entity.
- Failure to incorporate shall forthwith render the appointment and or award null and void and Rand Water shall terminate the agreement with immediate effect.

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

General Conditions (GC)

- a) This Section refers to the "General Conditions" which form part of the "Conditions of Contract for EPC/Turnkey Projects ("Silver book") "Second Edition 2017" published by the *Fédération Internationale des Ingénieurs-Conseils* (FIDIC). **The text of the certain identified clauses of these General Conditions shall be modified to align with business operations of the Employer.**
- b) **The appointed Contractor must obtain** an original copy of the above FIDIC "*Conditions of the Contract for EPC/Turnkey Projects*".

Particular Conditions (PC)

The following Particular Conditions shall supplement the General Conditions. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions.

Particular Conditions

Part A - Contract Data

Conditions	Sub-Clause	Data
<i>1.1 Definitions</i>		
Contract Agreement	1.1.8	<p><i>Delete the whole contents and replace with:</i></p> <p><i>means the Contract Agreement, the Letter of Acceptance, the Letter of Tender, these Conditions, the Employer's Requirements, the Schedules, the Contractor's Proposal, and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance.</i></p>
Insert new Clause.	1.1.8 (a)	<p><i>"Contractor's Proposal" means the document entitled Proposal, which the Contractor submitted with the Letter of Tender, as included in the Contract. Such document may include the Contractor's preliminary design.</i></p>
Employer	1.1.27	<p><i>Delete the whole contents and replace with:</i></p> <p><i>"Employer"</i> means Rand Water which is a body corporate established in terms of Section 83 of the Water Services Act 107 of 1997. Notwithstanding that Rand Water is the Employer.</p> <p><u>Notwithstanding that Rand Water is the Employer.</u></p> <p><u>Rand Water shall delegate and name a person who shall be referred to as the Employer within 42 days after acceptance of the award.</u></p>
Employer's Representative	1.1.30	<p><u>To delete the words" the person named by the Employer in the Contract Data and replace with "The name is of the Employer's Representative shall be made known to the Contract within 14 days of accepting the award.</u></p> <p><u>OR</u></p> <p><u>Rand Water officially appointed personnel's, who shall be appointed as and when needed.</u></p>
JV Undertaking	1.1.40	<p><i>To substitute the definition with:</i></p>

Conditions	Sub-Clause	Data
		<p><i>means a Letter of Intention to incorporate a company within 30 days after award.</i></p> <p><i>The intention to incorporate must be signed in terms of the delegated authority / passed resolution.</i></p>
Site	1.1.67	<i>[Describe any other places as forming part of the Site]</i>
Time for Completion	1.1.76	<p><i>To add the following words:</i></p> <p><i>'the time for completion of the whole of the Works and the time for completion of sections, if applicable'.</i></p> <p><i>Time for completion shall be as per the officially approved project programme, by the Employers Representative.</i></p>
Works	1.1.79	<p>To insert the following:</p> <p>means all design, engineering, procurement, construction, erection, installation, testing <i>commissioning, put into operation</i>, training, and activities and services necessary for a complete and operable Asset/ Facility as per the terms of this Agreement or as implied by the Agreement,</p> <p>and includes all activities and services which (although not mentioned in the Contract) are necessary for stability or for the completion, or safe and proper operation, of the Works.</p>
Add the following clause: Milestones	1.1.81	<i>Milestone are control points in the project that help to chart progress. They are used as signal posts for a project's start or end date. Milestones may correspond to the completion of a key deliverable, allowing the next phase of the work to begin.</i>
Add the following definition: Cession	1.1.82	<i>Shall mean a bilateral juristic act whereby rights and/ obligations are being transferred from the cedent (the person transferring the rights) in favour of the Cessionary (the one who accepts transfer of personal rights and becomes the</i>

Conditions	Sub-Clause	Data
		<i>holder of that rights and the corresponding obligation(s)</i>
1.3 Notices and Other Communications		
Electronic transmission system	1.3 (a)(ii)	<i>Accepted electronic system by Employer, include email, electronic document may be shared through electronic storage devices viz. Compact Discs (CD), Flash Drives, electronic documentation sharing platforms viz WeTransfer, DropBox</i>
Address of Employer for communications	1.3 (d)	<i>The physical address is noted, but since communication is done electronically it should therefore be directed to the electronic address provided by the engineer officially, through employer's notices.</i>
Address of Employer's Representative for communications	1.3 (d)	To be given once the Employer's Representative is named or appointed.
Address of Contractor for communications	1.3 (d)	<i>The electronic address too should be communicated through official communication from officially appointment contractor personnel.</i>
1.4 Law and Language		
Governing Law	1.4	<i>At the end of the following paragraph "The Contract shall be governed by the law of the country (or other jurisdiction) stated in the Contract Data (if not stated, the law of the Country), excluding any conflict of law rules." add The Contractor shall also at all times conform in all respects with the provisions of any Act of Parliament, Regulations, Bye-law of any Local or any other Statutory Authority or other Enactment having the force of law which may be applicable to the performance of its obligations under the Contract and shall indemnify, and keep indemnified the Employer, against damages that it may suffer as a result of any breach by the Contractor, its agents or employees, including any hired labour, of any such Act, Regulation, Bye-law or other Enactment and including all legal costs on the attorney and client scale which may be payable as a result of any claims or proceedings in respect of the Contract."</i>

Conditions	Sub-Clause	Data
Ruling language	1.4	English
Language for communications	1.4	English
1.6 Contract Agreement		
Time for the Parties to sign a Contract Agreement	1.6	48 days after receipt of letter of acceptance
1.8 Care and Supply of Documents		
Number of additional paper copies of Contractor's Documents	1.8	One original document.
1.14 Limitations of liability		
Total liability of the Contractor to the Employer under or in connection with the Contract	1.14	Shall not exceed the contract value/price.
2.1 Right of Access to the Site		
Time for access to the Site	2.1	<p><i>To delete the clause and replace with:</i></p> <p><i>the right of access to and possession of all parts of the Site shall be given by "No later than the 42 days after Commencement Date"</i></p> <p><i>The contractor must meet all the site access requirements before being granted site access, these include permits, safety files, securities, insurances, approval by engineer of completion date (programme). Employer has no reason not granting site access except during construction such as plant shutdowns etc.</i></p> <p><i>[If it is not practical or feasible to give the right of access to and possession of all parts of the Site by the Commencement Date as per, Sub-Clause 2.1:</i></p> <p><i>The Employer shall give right of access within reasonable time as may be required to enable the Contractor to proceed in accordance with the</i></p>

Conditions	Sub-Clause	Data
		<p><i>Program or, if there is no Program at that time, the initial program submitted under Sub-Clause 8.3 [Program”]</i></p> <p><i>In the instances where the Employer is aware of any reason(s) that may potentially delay the issuing of site on time as required, the Employer shall notify the Contractor within reasonable time before the actual date of expected Site Access Date. Upon receiving this notice, the contractor shall not be entitled to any delay damages”</i></p>
Employers Administration		
Employer’s Representative	3.1	<p>The words “full authority” in paragraph 2 of the clause is deleted and replaced by:</p> <p>“The authority vested in the Employer’s Representative expressly excludes the authority to issue variations of the Works as provided for in Sub-Clause 13.1 [Right to Vary].”</p>
Engineer’s Duties and Authority	3.1(b)(ii)	<p>Variations resulting in an increase of the Accepted Contract Amount more than _20% shall require approval of the Employer.</p>
	4.2	Performance Security
Contractors Obligation(s)	4.2.1	<ul style="list-style-type: none"> In the second paragraph of this Sub-Clause to add the following word”. <p>“The Contractor shall deliver the performance security/ guarantee in the form of a “demand guarantee” or “performance bond” issued by a reputable financial Services Provider”.</p> <p>“The Contractor shall ensure that the performance guarantee shall remain valid and enforceable until the Issuance of the Completion or Takeover certificate</p>

Conditions	Sub-Clause	Data
	4.2.1.1	<p>has been issued and the works have been certified to have been completed”.</p> <p>“The Guarantor hereby unconditionally and irrevocably guarantees to pay the Employer from time to time any or all monies due and owing to the Employer from the Contractor under the Agreement arising out of the default or non-performance by Contractor of its obligations thereunder, of which the Employer shall be the sole judge, provided that the liability thereto shall not exceed the sum equivalent to <i>10% of the contract value/ Amount</i>”.</p> <p>“Should the Contractor fail to provide the said security within the specified time the Employer, in his sole discretion, shall either:-</p> <p>(a) Withhold payment from the Contractor until the amount withheld is equivalent the required 10% value of Accepted Contract Amount, or</p> <p>(b) Proceed to terminate the contract forthwith.</p>
4.4 Subcontractors		
Maximum allowable accumulated value of work subcontracted (as a percentage of the Contract Price)	4.4(a)	30%
<i>Parts of the Works for which subcontracting is not permitted</i>	4.4(b)	None
4.19 Temporary Utilities		
Period of payment for temporary utilities	4.19	<i>As per general payment terms (As per Preliminary and General, that are fixed, and time based)</i>
4.20 Progress Reports		
Number of additional paper copies of progress reports	4.20	<i>One paper copy for the Engineer</i>

Conditions	Sub-Clause	Data
5.1 General Design Obligations		
General Design Obligations	5.1	<p>(a) insert at the end of the sentence the following:</p> <p>“they shall be registered with the Engineering Council of South Africa in their respective area of expertise and disciplines.</p> <p>(b) Substitute the Clause with “comply with the Design Procedures and Processes as stated in the Employer’s Requirements; and</p>
Design Obligations <i>conti</i>	5.1	<p>The paragraph of the subsection starting with the following word: However, the Employer shall be responsible for the correctness...amend the aforesaid by adding sub-paragraph (e).</p> <p>(e) Instance where outline technical information has been provided the Contractor shall use such information as Employer’s requirement.</p>
5.4 Contractor's Undertaking		
Contractor's Undertaking	5.3	<p>Insert sub-paragraph (c):</p> <p>(c) the works meet the performance criteria for testing.</p> <p>(d) <i>provide risk management through early warning process, through notifying the Employer of risks in reasonable time before they occur.</i></p>
5.5 Training		
Training	5.5	<p>Delete the Clause in its entirety and replace same with the following new Clause(s):</p> <p>5.5.1</p> <p>The Contractor shall carry out the training of Employee’s of the Employer in the operation and maintenance of the Works, and any other aspect</p>

Conditions	Sub-Clause	Data
		<p>of the Works to the extent specified in the Employer's Requirements.</p> <p>5.5.2</p> <p>If the Contract specifies training which is to be carried out before taking-over, the Works shall not be FIDIC Particular Conditions of Contract 14 considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections] until this training has been completed.</p>
5.6 As-Built Records		
As - Built Records	5.6	<p>To add the following at the end of the paragraph:</p> <p>"The Contractor shall obtain the consent of the Engineer as to their size, the referencing system, and other relevant details.</p> <p>Prior to the issue of any Taking-Over Certificate, the Contractor shall supply to the Engineer the specified numbers and types of copies of the relevant as-built drawings, in accordance with the Employer's Requirements. The Works shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections] until the Engineer has received these documents".</p>
6.5 Working hours		
Normal working hours	6.5	
8.1		
Commencement of Works	8.1	<p>Insert the words "design and" before the word "execution" (Third paragraph)</p>
8.3 Programme		
Number of additional paper copies of program: 8.3 as will be determined by the Engineer		
8.8 Delay Damages		

Conditions	Sub-Clause	Data
Delay Damages payable for each day of delay	8.8	<p><i>To add at the end of the paragraph:</i></p> <p><i>Proven identified and proven actual costs incurred for that work (excluding profit) less estimated cost for the project.</i></p> <p><i>The penalty table in the tender document @page 71 shall be used to determine the applicable % to be imposed per day,</i></p>
Maximum amount of Delay Damages	8.8	<i>Not exceeding 10% of the Accepted Contract Amount, less provisional sum.</i>

13.4 Provisional Sums

Percentage rate to be applied to Provisional Sums for overhead charges and profit	13.4(b)(ii)	10 %
---	-------------	------

14.2 Advance Payment

Total Advance Payment	14.2	<i>Delete advance payment does not apply.</i>
Period of payment of Advance Payment to the Contractor	14.2.2	<i>Delete</i>
Repayment of Advance Payment	14.2.3	<i>Delete</i>

14.3 Application for Interim Payment

Application for Interim Payment:	14.3	<p>The Clause is amended by deleting of the words “<i>end of the period of payment</i>” in the first sentence of the Clause and replace the words with “25th day of each month.”</p> <p>And by Addition of the following wording at the end of the Sub-Clause:</p> <p>“In the event that the Contractor fails to submit a Statement by end of business day on the 25th day of the month. The submission shall be regarded as late submission and any late submission will only be evaluated in the following month.”</p> <p><i>Rand Water shall endeavour to make payment within 30 days from date of monthly statement, date of the aforesaid monthly statement should reflect the last day of the month wherein the services being invoiced were rendered.</i></p> <p>The rest of the Sub-Clauses will remain unchanged.</p>
Number of additional paper copies of Statements	14.3(b)	
Percentage of retention	14.3(iii)	<ul style="list-style-type: none"> <i>To the extent to which monies are to be retained by the Employer. A maximum 5% of the contract value or amount shall be retained and a portion of the retention money (2.5%) will be released on achieving practical completion / issuance of Takeover certificate.</i> <i>and the balance (2.5%) shall be payable after the relevant defect's notification period has expired.</i>
Limit of Retention Money (as a percentage of Accepted Contract Amount)	14.3(iii)	5%
14.5 Plant and Materials intended for the Works		
Plant and Materials	14.5(b)(i)	<p>If Sub-Clause 14.5 applies:</p> <p>Plant and Materials for payment when shipped <i>Package/ Project specific [list]</i>.</p>

	14.5(c)(i)	If Sub-Clause 14.5 applies: Plant and Materials for payment when delivered to the Site: <i>Applicable to all Material on Site (MOS), subject to approval by Engineer [list].</i>
--	------------	---

14.7: Payment

Minimum amount of interim payment	14.7 (a)	To be deleted. Advance payments are not applicable.
-----------------------------------	----------	---

--	--	--

14.7 Payment: To add the following words

Any payment due and payable to the contractor shall be made in accordance with Clause 14.3 above.

14.8 Delayed Payment

Financing charges for delayed payment (percentage points above the average bank short-term lending rate as referred to under sub-paragraph (a))	14.8	<i>Delete</i>
---	------	---------------

14.9 Release of Retention Money

Release of Retention Money	14.9	<p>Deletion of the Sub-Clause and substitute with the following:</p> <p>The retention amount to be deducted from the submitted payment certificate shall be 5%, and shall be released as follows:</p> <ul style="list-style-type: none"> <i>The two and half percent (2.5%) cash retention shall remain be released at the issuance of the takeover certificate.</i> <i>The remaining two and a half percent (2.5%) retention of money shall be released after the expiry date of the defect's notification period.</i> <p>In the first paragraph, add after the words "issued for the Works," the following words:</p> <p>"the Works have passed all specified tests (including the Tests after Completion, if any)"</p>
-------------------------------	------	---

17.2 Liability for Care of the Works

Forces of nature, the risks of which are allocated to the Contractor	17.2(d)	<p>Force Majeure Event:</p> <p><i>"If either party is prevented from performing any of its obligations in terms of this contract as a result of any event beyond its control including war, riots, earthquakes, hurricanes and or encroachments it shall not be liable for any failure to perform its obligations while such event persists and either party shall have the right to terminate the contract if the event persists for a period in excess of 30 days."</i></p> <p><i>upon invoking force majeure at the time of its occurrence, the contract is suspended for the duration of the force majeure event with a commensurate extension of the delivery schedule.</i></p>
--	---------	---

Sub-Clause 17.5: Indemnities

fourth paragraph add: construction or execution of the Works, (ii) the use of the Contractor's Equipment, or (iii) the proper use of he Works.

Insurance: Clause 19:

19.1 General Requirements

To add the following to the
 Clause on General
 Requirements

19.1

- Notwithstanding anything to the contrary in this **Clause 19 [Insurance]** (and notwithstanding the definitions and other terms of the Contract), the scope and extent of insurance cover provided by the Employer as the Insuring Party, and the Employer's obligations as the Insuring Party under this Sub-Clause, are subject to the terms of the Employers Insurance policies and in particular as reference in paragraph **C1.2.3. EMPLOYER'S INSURANCE MANUAL of the Tender document.**
- Without derogating from the foregoing, the obligations of the Employer as Insuring Party provided thereto and or in this Sub-Clause are specifically subject to the provisions of the said policies. The Clause shall be read in conjunction with the Employers Insurance Manual. Where there is conflict, the manual shall take precedence.

21 Disputes and Arbitration

The Employer shall establish a panel of independent adjudicators and Arbitrators to deal with the dispute avoidance and determinations as provided for in clause 3.5 and other related matters. The clauses dealing with Disputes and Arbitration will be amended, customized and a harmonised Edition will be issued as an Appendix to this Contract.

Cession And Assignment

imitation of Cession	New Clause	<p>CESSION AND ASSIGNMENT.</p> <p><i>Assignments of contracts:</i></p> <p>(a) <i>In line with National Treasury PFMA SCM INSTRUCTION NO. 8 OF 2022/2023 the assignment of contract is prohibited.</i></p> <p>(b) <i>The appointed bidder shall not <u>assign</u>, <u>abandon</u> or <u>transfer</u> any of its <u>rights</u> and/or <u>obligations</u> in <u>terms of this Agreement</u> (whether in part or in whole) or <u>delegate</u> any of its obligations in terms of this Agreement.</i></p> <p>(c) <i>National Treasury avers that action of assigning one's rights and obligations to another party is contrary to the prescript of section 217 of the Constitution.</i></p> <p><i>Cession Agreement:</i></p> <p>(a) <i>As per the Instruction Note 8 of 2022/2023 Cession of rights is only permissible wherein, the service provider cedes (transfer) its right to be paid for the services it rendered in terms of the contract to a third party.</i></p> <p><i>The Cession of right to be paid for services rendered is permissible on condition that the supplier is ceding to a Financial Services Provider (FSP) or a State Institution.</i></p>
----------------------	------------	--

Table 2: Summary of Milestones (if any) as provided for in sub-clause 1.1.85 (New)

Description of a part of the Works that shall be designated a Milestone for the purposes of the Contract (Sub-Clause 1.1.85)	Time for Completion	Delay Damages (as a percentage of final Contract Price per day of delay)
	_____ days	_____ %
	_____ days	_____ %
	_____ days	_____ %

Maximum amount of Delay damages for Milestones (percent of final Contract Price): _____ %

C1.2.3. EMPLOYER'S INSURANCE MANUAL

PRINCIPAL CONTROLLED INSURANCE CLAUSES - FOR USE WITH THE EMPLOYER'S CONTRACTS

PARTICULAR CONDITION 18

18.1 Insurance Effected by the Employer.

18.1.1 Notwithstanding anything elsewhere contained in this Contract and without limiting the obligations liabilities or responsibilities of the Contractor in any way whatsoever (including but not limited to any requirement for the provision by the Contractor of any other insurances) the **Employer** shall effect and maintain as appropriate in the joint names of the **Employer** the Contractor and where relevant subcontractors the following insurances which are subject to the terms limits exceptions and conditions of the Policy:

- a) **CONTRACT WORKS** Insurance - which will provide cover against accidental physical loss of or damage to the Works including temporary works, Plant and Materials intended to form part of the Permanent Works
- b) **SASRIA SPECIAL RISKS** Insurance - in respect of riot and associated risks of damage to the Works, including temporary works, Plant and Materials intended to form part of the Permanent Works.
- c) **PUBLIC LIABILITY** Insurance - which will provide indemnity against the insured parties legal liability in the event of accidental death of or injury to third party persons and/or accidental loss of or damage to third party property arising directly from the execution of the contract on or about the Site and occurring during the period of insurance with a limit of indemnity of R250,000,000 in respect of all claims arising from any one occurrence or series of occurrences consequent on or attributable to one source or original cause.

18.1.2 The **Employer** shall pay any premium due in connection with the insurance effected by the **Employer**. All of the aforementioned policies are renewed on an annual basis and are thus applicable for the year they are placed, that is, a 12-month period commencing 01 July and ending 30 June of the ensuing year. In terms of all details contained hereunder, they are thus applicable until 30 June. Policy terms, conditions and deductibles may change on the 01 July depending on the outcome of the renewal. This will thus be the case for every ensuing year of insurance.

18.1.3 The Contractor shall not include any premium charges for this insurance except to the extent that he may deem necessary in his own interests to effect supplementary insurance to the insurance effected by the **Employer**. The **Employer** reserves the right to call for full information regarding insurance costs included by the Contractor.

18.1.4 Any further clarification of the scope of cover provided by the Policies arranged by the **Employer** should be obtained from the **Employer**:

Mr. Bafana Gamede
 Tel: 011 682 0362
 Fax: 011 682 0765
 Email: bgamede@randwater.co.za

OR
 Ms. Lerato Mosweu

Tel: 011 682 0709
 Fax: 011 682 0765
 Email: mmosweu@randwater.co.za

18.1.5 In the event of any occurrence which is likely to or could give rise to a claim under the insurances arranged by the **Employer** the Contractor shall:

- a) In addition to any statutory requirement or other requirements contained in the Contract immediately notify the **Employer** by telephone and or e-mail giving the circumstances nature and an estimate of the loss or damage or liability.
- b) Complete a Claims Advice Form available from the **Employer** to whom the form must be returned without delay.
- c) Negotiate the settlement of claims with the Insurers through the **Employer's** Insurance Brokers and shall when required to do so obtain the **Employers** approval of such settlement.

The **Employer** and Insurers shall have the right to make all and any enquiries on the site of the Works or elsewhere as to the cause and results of any such occurrence and the Contractor shall co-operate in the carrying out of such enquiries.

18.1.6 The Contractor will be liable for the amount of the Deductible (First Amount Payable) in respect of any claim made by or against the Contractor or Subcontractors under the insurances effected by the **Employer**.

18.1.7 The Contractor will be liable for the amount of the Deductible (First Amount Payable) in respect of any claim made by or against the Contractor or Subcontractors under the insurances effected by the **Employer**.

Insured Contracts

All contracts undertaken by the Insured involving Design, Construction, Testing, Commission in respect of new works, capital expenditure, Upgrade, modification, retrofitting, or alteration and/or additions to existing facilities undertaken by the Insured or other Insured Parties acting on their behalf but excluding.

- i) Projects with an estimated period exceeding 36 months (excluding Defects Liability period)
- ii) Projects exceeding R500 million at inception
- iii) Contracts involving Tunnelling

All Sums Insured inclusive of VAT.

Where more than one Contractor is involved in the same claim the Deductible will be borne in pro-rata amounts by each Contractor in proportion to the extent of each Contractor's admitted claim.

The Deductibles (First Amount Payable) for which the Contractors are responsible and which are applicable in respect of each and every occurrence or series of occurrences attributable to one source or original cause giving rise to loss or damage or liability indemnifiable are as follows:

- a) Under the **Contract Works Insurance** in respect of loss or damage
 - Wet Risks:
 - 10% of the claim with a minimum R10,000 and a maximum of R 500,000
 - Maintenance:
 - 10% of the claim with a minimum R10,000 and a maximum R500,000
 - Other contracts:
 - 10% of the claim with a minimum of R10,000 and maximum of R250,000
- b) Under the **Sasria** (Special Risks) Insurance:

0.10% of the Contract Value in respect of loss by theft following an insured peril subject to a minimum of R2,500 and a maximum of R25,000
- c) Under the Public Liability Insurance

in respect of loss of or damage to property R 25,000
- d) Under any other insurances shall be as specified in such insurance policy.

- 18.1.7 Any amount which becomes payable to the Contractor or any of his Subcontractors as a result of a claim under the Contract Works Insurance shall if required by the **Employer** be paid net of the Deductible to the **Employer** who shall pay the Contractor from the proceeds of such payment upon rectification repair or reinstatement of the loss or damage but this provision

shall not in any way affect the Contractor's obligations liabilities or responsibilities in terms of the Contract.

In respect of any amount which becomes payable as a result of a claim under any Public Liability Insurances the Contractor or his Subcontractors shall be required to pay the amount of the Deductible to the Insurer to facilitate settlement of such claim.

18.2 Insurance Effected by the Contractor.

18.2.1 Without in any way detracting from any requirements contained elsewhere in this contract the Contractor and Subcontractors shall where applicable provide as a minimum the following:

- a. Insurance of Contractors Equipment (including tools offices and other temporary structures and contents) and other things (except those intended for incorporation into the Works) brought onto the Site for a sum sufficient to provide for their replacement.
- b. Insurance in terms of the provisions of the Social Security Act as may be amended or in terms of any similar Workers Compensation and Unemployment Insurance enactment's in the Contractors' or Sub Contractor's operational, manufacturing or assembly locations.
- c. Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger Liability indemnity.
- d. Where the Contract involves manufacturing and/or fabrication of the Works or parts thereof at premises other than at the Site the Contractor shall satisfy the **Employer** that all Plant and Materials for incorporation in the Works are adequately insured during manufacture and/or fabrication. In the event of the **Employer** having an insurable interest in such Works during manufacture or fabrication then such interest shall be noted by endorsement to the relevant Policies of Insurance.

Special Condition

- e. **Only applicable if contracts works involves elements of design**

PROFESSIONAL INDEMNITY Insurance – of not less than R 1 000 000 for a period of insurance commencing on the date of award of the Contract. The Insurance shall include Retroactive cover to the date of Conceptual Design commencement and should be in effect for a period of 12 months after completion of the works.

Notwithstanding the required limit as set out above, "Professional Indemnity" the contractor will be liable for the full amount of

the claim arising out of their errors and omission.

18.2.2 The insurances to be provided by the Contractor and his Sub-contractor shall

- a) Be effected with Insurers and on terms approved by the **Employer** – these terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause
- b) Be maintained in force for whatever period the perils to be insured by the Contractor are at risk (including any Defects Notification Period during which the Contractor is responsible for the care of the Works)
- c) Within the respective periods stated in the ~~Appendix to~~ Bid document submit to the **Employer** the relevant Policy or Policies of Insurance or evidence acceptable to the Employer that such insurances have been effected.

18.2.3 In the event that the Contractor or his Subcontractor receives any notice of cancellation or restrictive

modification to the insurance provided to them they shall immediately notify the **Employer** in writing of such cancellation or restriction and shall advise what action the Contractor or his Sub-contractor will take to remedy such action.

If the Contractor fails to effect and keep in force the insurances referred to then the **Employer** may effect and keep in force any such insurances and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount paid by the **Employer** from any monies due or which may become due to the Contractor or recover same as a debt from the Contractor.

18.3 **Subcontractors.**

The Contractor shall:

- a) Ensure that all potential and appointed Subcontractors are aware of the whole contents of this clause, and
- b) Enforce the compliance by Subcontractors with this clause where applicable.

APPENDIX

DECLARATION OF INSURANCE

I hereby declare that the Insurances enumerated below have been effected in accordance with Conditions of Contract applicable to **Bid Number: RW10397140/22**

I further declare that all premiums in respect of the insurances are fully paid up to date and that the insurances shall not be amended and/or cancelled without the prior knowledge and consent of the Employer.

Cover Effected	Clause No	Insurer and Policy Number	Expiry Date
a) Contractors Equipment	PC 18.2.1a)		
b) COIDA	PC 18.2.1b)		
c) Motor Vehicle Liability	PC 18.2.1c)		
d) Manufacturing/Fabrication Premises	PC 18.2.1d)		
e) Professional Indemnity (Where Applicable)	PC 18.2.1e)		

N.B.: This Declaration of insurance must be completed and signed by

- i) The Contractor and.
- ii) The Insurer or Insurance Broker appointed by the Contractor

and returned to the Employer together with a letter of good standing from the Workman's Compensation Commissioner in respect of Item b) above.

SIGNED:

- i) For and on behalf of the Contractor

.....

Official Capacity:.....

SIGNED:

- ii) For and on behalf of the Insurer / Broker (delete whichever is not applicable)

.....

Official Capacity:.....

PART C2: PRICING DATA

C2.1. PRICING ASSUMPTIONS

1. The Activity Schedules (C2.2) shall be used to assist both parties in administering and agreeing any changes/variations, which may arise during the course of the Contract.
2. These Activity Schedules shall be used to calculate the value of work completed in the evaluation of interim/final payments.
3. The Contractor is deemed to have allowed opposite each item contained in these Activity Schedules whatever costs and charges it may consider necessary for the carrying out, complying with and due observance of the provisions, conditions and requirements set out in the Contract.
4. No claim whatsoever will be entertained in respect of errors or omissions in pricing due to the brevity of a description of any item contained in these Activity Schedules which items are fully described or can reasonably be inferred when read in conjunction with the relevant clauses provided for in the Conditions of Contract, Specifications, Drawings or other relevant documentation.
5. Any item left un-priced will be deemed to be provided for elsewhere and no claim for any extras arising out of the Contractor's omission to price any item will be entertained.
6. *The contractor shall determine the contract skills participation goals, expressed in Rand, which shall not be less than the contract amount multiplied by a percentage (%) factor given in Table 2 in the Standard for Developing Skills through Infrastructure Contracts for the applicable class of construction works.*

a. Payment to the contractor to accommodate Part/Full Occupational qualification and Trade qualifications

- i. The contractor shall apportion the learners in the different construction activities based on the scope of work. The cost of accommodating learners will be determined by using Table 3 in the Standard for Developing Skills through Infrastructure Contracts and this cost will be used to determine the value in Rand and will be added to the provision for training as provided for in the Preliminary and General section in the Bill of Quantities/Pricing schedules/Activity schedule.*

b. Payment to the contractor to accommodate Work Integrated Learners and Candidates for professional registration

- i. The contractor shall apportion the cost of accommodating work integrated learners (P1 and P2 learners) and candidates for professional registration by using Table 3 in the Standard for Developing Skills through Infrastructure*

Contracts and this cost will be used to determine the value in Rand and will be added to the provision for training as provided for in the Preliminary and General section in the Bill of Quantities/Pricing schedules/Activity schedule.

c. Payment to the contractor for supervision and mentoring Part/Full Occupational qualification and Trade qualifications learners

- i. The employer shall make no provision for an additional payment item for the payment of the supervisor and/or mentors for the provision of training as provided for in the Preliminary and General section in the Bill of Quantities/Pricing schedules/Activity schedule for the training of part/full time occupational learners and/or trade qualification learners.*

d. Payment to the contractor for mentoring Work Integrated Learners and Candidates for professional registration

- i. The contractor shall apportion the cost of mentoring work integrated learners (P1 and P2 learners) and candidates for professional registration by using Table 3 in the Standard for Developing Skills through Infrastructure Contracts and will form part of the cost as provided for in the Preliminary and General section in the Bill of Quantities/Pricing schedules/Activity schedule for training.*

C2.2. PREAMBLE TO ACTIVITY SCHEDULES

1. The contractor shall refer to the engineering construction specifications and any other applicable specifications.
2. The contractor shall only price for the specified scope of work in full. Thus, any price omissions will be on the service provider's account. Payment shall only be limited to the specified scope of work and no additional claims shall be entertained.
3. Payment Schedules shall be used to assist both parties in administering and agreeing any changes/variations, which may arise during the course of the Contract.
4. Post award, the tenderer must submit a priced and detailed breakdown of the design BOQ. This BOQ shall be used to determine the value of work and payment of the various completed components / stages of design.
5. Tenderer must submit a detailed priced BOQ for the construction work on completion of the design phase. The BOQ will then be used for interim / final payments to the service provider.
6. The Contractor is deemed to have allowed a price for each item contained in these Payment Schedules, whatever costs and charges it may consider necessary for the carrying out, complying with and due observance of the provisions, conditions and requirements set out in the Contract.
7. Dates for Submission of Interim Payment Certificate Application:

Application must be submitted not later than the 20th day of the month with associated supporting documents.

C2.3. ACTIVITY SCHEDULES

The Bidder must refer to **Annexure C2.2: Activity Schedules** provided with this bid document.

In relation to in the Standard for Developing Skills through Infrastructure Contracts (published in GN 43495 of 20 March 2020):

Payment to the contractor to accommodate Part/Full Occupational qualification and Trade qualifications learners

- a. *Should the contractor select Part/Full Occupational qualification and/or Trade qualifications, then the employer shall make provision for payment to the contractor as indicated in Table 3 in the Standard for Developing Skills through Infrastructure Contracts as provided in the Preliminary and General section in the Bill of Quantities/Pricing schedules/Activity schedule for training.*

2. Payment to the contractor to accommodate Work Integrated Learners and Candidates for professional registration

- a. *Should the contractor select Work Integrated Learners and/or Candidates for professional registration, then the employer shall make provision for payment to the contractor as indicated in Table 3 in the Standard for Developing Skills through Infrastructure Contracts as provided in the Preliminary and General section in the Bill of Quantities/Pricing schedules/Activity schedule for training.*

3. Payment to the contractor for Mentors to accommodate Work Integrated Learners and Candidates for professional registration

- a. *Should the contractor select Work Integrated Learners and/or Candidates for professional registration, then the employer shall make provision for payment to the contractor as indicated in Table 3 in the Standard for Developing Skills through Infrastructure Contracts as provided in the Preliminary and General section in the Bill of Quantities/Pricing schedules/Activity schedule for training.*

The Bidder is required to submit the following:

- **Excel® format of the completed activity schedule in a compact disc (CD) or USB flash drive.**
- **Printed format and signed version of the completed activity schedule.**

PART C3: SCOPE OF WORK

C3.1. DATES FOR DELIVERY AND COMPLETION

1. It is estimated that the Contract will be placed on or before **01 August 2023** access to undertake work will only become available after the issue of the Site Access Certificate.
2. The Bidder shall state the proposed start date based on (1) above and the completion date based on the (4) below.
3. The Bidder shall simultaneously fill in the period required to complete the work in days or weeks from the date of acceptance of the offer by the Employer. This shall be used to adjust dates should the Contract placement date vary.
4. All equipment and plant shall be handed over by **01 June 2028** and the Bidder's programme shall comply with this requirement by the Employer.

Item	Start Date	Completion Date	Working Period
Stage 1 - Inception			
Stage 2 – Concept and Viability (often called preliminary design)			
Stage 3 – Design Development (also termed detailed design)			
Stage 4 – Procurement of equipment, materials required for construction, chemicals for commissioning etc.			
Stage 5 – Contract Administration and Inspection			
Stage 6 – Close-Out Fulfil and complete the project close-out, including necessary documentation to facilitate effective completion, handover and operation of the project.			

Table C3.1: Dates for delivery and completion

C3.1.1. DATES FOR DELIVERY AND COMPLETION – (P.04457) UPGRADE SUCTION AND DELIVERY HEADERS AT PALMIET PUMPING STATION AND (P.05439) INSTALLATION OF AIR VALVES

Item	Start Date	Completion Date	Working Period
Stage 1 - Inception			
Stage 2 – Concept and Viability (often called preliminary design)			
Stage 3 – Design Development (also termed detailed design)			
Stage 4 – Procurement of equipment, materials required for construction, chemicals for commissioning etc.			
Stage 5 – Contract Administration and Inspection			
Stage 6 – Close-Out Fulfil and complete the project close-out, including necessary documentation to facilitate effective completion, handover and operation of the project.			

Table C3.1.1 dates for delivery and completion – P.04457 upgrade suction and delivery headers at palmiet pumping station and (P.05439) installation of air valves

C3.1.2. DATES FOR DELIVERY AND COMPLETION – (P.04476) UPGRADING OF COMPRESSED AIR SYSTEM FOR ANTI-HAMMER PLANT AND (P.05469) INSTALLATION OF PRESSURISED AIR VESSEL AT PALMIET PUMPING STATION

Item	Start Date	Completion Date	Working Period
Stage 1 - Inception			
Stage 2 – Concept and Viability (often called preliminary design)			
Stage 3 – Design Development (also termed detailed design)			
Stage 4 – Procurement of equipment, materials required for construction, chemicals for commissioning etc.			
Stage 5 – Contract Administration and Inspection			
Stage 6 – Close-Out Fulfil and complete the project close-out, including necessary documentation to facilitate effective completion, handover and operation of the project.			

Table C3.1.2 dates for delivery and completion – (P.04476) upgrading of compressed air system for anti-hammer plant and (P.05469) installation of pressurised air vessel at palmiet pumping station

C3.1.3. DATES FOR DELIVERY AND COMPLETION – (P.04710) RE-ROUTING OF RESERVOIR No.1 OVERFLOW CHANNEL AND (P.05134) DIVERSION OF OVERFLOW AND CONSTRUCTION OF PERMANENT ACCESS ROADS AT PALMIET PUMPING STATION

Item	Start Date	Completion Date	Working Period
Stage 1 - Inception			
Stage 2 – Concept and Viability (often called preliminary design)			
Stage 3 – Design Development (also termed detailed design)			
Stage 4 – Procurement of equipment, materials required for construction, chemicals for commissioning etc.			
Stage 5 – Contract Administration and Inspection			
Stage 6 – Close-Out Fulfil and complete the project close-out, including necessary documentation to facilitate effective completion, handover and operation of the project.			

Table C3.1.3 dates for delivery and completion – P.04710 Re-routing of reservoir no.1 overflow channel and (P.05134) diversion of overflow and construction of permanent access roads at palmiet pumping station

C3.1.4. DATES FOR DELIVERY AND COMPLETION – P.05013 REPLACEMENT OF THE ENTIRE KLIPRIVIERSBERG- BUTCHERSHILL 1676mm (G25) PRE-STRESSED CONCRETE PIPELINE

Item	Start Date	Completion Date	Working Period
Stage 1 - Inception			
Stage 2 – Concept and Viability (often called preliminary design)			
Stage 3 – Design Development (also termed detailed design)			
Stage 4 – Procurement of equipment, materials required for construction, chemicals for commissioning etc.			
Stage 5 – Contract Administration and Inspection			
Stage 6 – Close-Out Fulfil and complete the project close-out, including necessary documentation to facilitate effective completion, handover and operation of the project.			

Table C3.1.4 dates for delivery and completion – P.05013 replacement of the entire klipriviersberg- butchershill 1676mm (G25) pre-stressed concrete pipeline

C3.1.5. DATES FOR DELIVERY AND COMPLETION – P.05470 DESIGN AND CONSTRUCTION OF ACCESS ROAD AT KLIPRIVIERSBERG RESERVOIR

Item	Start Date	Completion Date	Working Period
Stage 1 - Inception			
Stage 2 – Concept and Viability (often called preliminary design)			
Stage 3 – Design Development (also termed detailed design)			
Stage 4 – Procurement of equipment, materials required for construction, chemicals for commissioning etc.			
Stage 5 – Contract Administration and Inspection			
Stage 6 – Close-Out Fulfil and complete the project close-out, including necessary documentation to facilitate effective completion, handover and operation of the project.			

Table C3.1.5 dates for delivery and completion – P.05470 design and construction of access road at klipriviersberg reservoir

C3.1.6. DATES FOR DELIVERY AND COMPLETION – P.05033 REPLACE ACTUATORS AT PALMIET PUMPING STATION

Item	Start Date	Completion Date	Working Period
Stage 1 - Inception			
Stage 2 – Concept and Viability (often called preliminary design)			
Stage 3 – Design Development (also termed detailed design)			
Stage 4 – Procurement of equipment, materials required for construction, chemicals for commissioning etc.			
Stage 5 – Contract Administration and Inspection			
Stage 6 – Close-Out Fulfil and complete the project close-out, including necessary documentation to facilitate effective completion, handover and operation of the project.			

Table C3.1.6 dates for delivery and completion – P.05033 Replace actuators at Palmiet Pumping Station

NOTE THAT A DETAILED PROJECT PROGRAMME MUST BE INCLUDED WITH THE BID SUBMISSION

Name of Bidder: _____

Signed by or on
behalf of Bidder: _____

Official
Capacity: _____

Date: _____

C3.2. SCOPE OF WORK

C3.2.1 DESCRIPTION OF PROJECTS

This tender consists of 6 projects whose objective is to increase the water supply within Palmiet System as detailed below:

Item No.	Project Description
1	Upgrade suction and delivery headers at palmiet pumping station
	Installation of air valves
2	upgrading of compressed air system for anti-hammer plant at Palmiet pumping station
	Installation of pressurised air vessel at Palmiet pumping station
3	Re-routing of reservoir no.1 overflow channel
	Construct and repair roads at Palmiet pumping station
4	Replacement of the entire klipriviersberg- butchershill 1676mm (G25) prestressed concrete pipeline
5	Design and construction of access road at klipriviersberg reservoir
6	Replace actuators at Palmiet pumping station

C3.2.2 SCOPE OF WORK SUMMARY

C3.2.2.1 – UPGRADE SUCTION AND DELIVERY HEADERS AND INSTALLATION OF AIR VALVES AT PALMIET PUMPING STATION

PROJECT BACKGROUND

Palmiet Pumping Station currently has three Engine Rooms (i.e. Engine Room 1, 2 and 3a and soon to be commissioned engine room 3b) with a combined total of 21 pumpsets post the commissioning of Engine Room 3b. The pumpsets in the engine rooms pump water to the Klipriviersberg Reservoir via the O1 pipeline, Klipfontein Reservoir via the O2 and O5 pipelines, Meyershill Reservoir via the O3 pipeline and Meyersdal Reservoir via the O4 pipeline. The supply of water to Palmiet Pumping Station is from Zuikerbosch Pumping Station delivered through the B4, B6 and soon to be commissioned B17 pipelines and from Vereeniging Pumping Station delivered through the B12 and B13 pipelines.

The Engine Rooms are designed to be isolated independently, however when maintenance work is required to be carried out on an individual pumpset in the engine room, the entire

engine room has to be put out of operation by isolating the common suction header from which the pumpsets draws the water and the common delivery header through which the pumpsets pumps the water. The isolation of the entire engine room poses the risk of not being able to meet the station's base demand crucially during peak periods.

In addition to the existing header isolation valves, new additional isolation valves and cross connection pipes are required to be installed on the existing suction and delivery headers so as to improve the pumping system's flexibility such that at most, half the number of pumpsets are isolated in an engine room when an isolation is required to carry out maintenance work on an individual pumpset. Furthermore, this will ensure increased pumpset utilization during peak periods to guarantee that the station's base demand is always met

SCOPE OF WORK

The proposed scope is for the investigation, assessment, design, manufacture, supply, delivery, installation, commissioning and putting into service of new suction and delivery header isolation valves, control valves and reflux / check valves complete with associated pipework and pipe specials at Rand Water Palmiet Pumping Station.

The isolation valves shall be supplied complete with electrical actuators, gearboxes, actuator extensions, valve supports and shall be housed in reinforced concrete valve chambers fitted with access steelwork for use to gain entry into and exit out of the valve chambers.

The valve chambers shall be provided with electrical lights and a valve chamber drainage system in the form of submersible sump pump systems complete with pipework, fittings, flexible hoses and connections, clamps etc. Furthermore, the scope covers all associated Electrical, Automation and Civil works which are detailed in the discipline specific Scope of Works in the relevant sub-sections that follow.

The appointed contractor shall comply fully with the Volume 4H Design procedure document. The design process shall follow all the phases defined in the prescribed Planning and Design stages of the Volume 4H Design procedure document clause 5. The following stages (phases) are envisaged in the implementation of the project, starting with the planning and design processes which may, due to the nature of the project, overlap with construction activities of other components where these have been approved to proceed by the Engineer:

- a) Inception
- b) Preliminary design

- c) Detailed design
- d) Approval of detail designs and drawings
- e) Construction
- f) Completion and close out

The above stages include stages as prescribed in the ECSA guidelines. These are also described in further detail in the following section.

C3.2.2.2 – UPGRADING OF COMPRESSED AIR SYSTEM FOR ANTI-HAMMER PLANT AND INSTALLTION OF PRESSURISED AIR VESSEL AT PALMIET PUMPING STATION

PROJECT BACKGROUND

The anti-hammer plant at Palmiet Pumping Station provides surge protection to four pipelines. The pipelines supply water to Klipriviersberg, Meyersdal and Klipfontein i.e. O1, O2, O3 and O5 pipelines.

The plant consists of four anti-hammer tanks, four compressors, automation system including the PLC system, solenoid valves, level switches, compressor house, electrical control panel and cabling.

The anti-hammer tanks have a capacity of 45 m³ each. The volume is occupied by 22.5m³ air and 22.5m³ water. The fourth anti-hammer tank was installed with the original pipeline configuration and compressed air system unchanged.

The problem with compressed air system compressors to supply air to the anti-hammer plant at Palmiet Pumping Station is that the operating and/or control philosophy of the compressors is currently semi-automated due to obsolete automation equipment and software program leading to excessive operation of one compressor. This situation gets worse when there is no operator intervention to switch off the compressor and start another compressor.

The operating manual is not very clear on how many hours the compressors should be in operation during normal operation before a changeover to another compressor can be made. Consequently, some compressors run unnecessarily long hours resulting in high wear of internal components and high maintenance cost. This situation makes the whole anti-hammer plant unreliable and puts Rand Water's pipelines at risk should there be power failure.

In addition, most of the automation and electrical equipment are not reliable and obsolete. Generally, the whole plant excluding the four anti-hammer tanks needs upgrading.

SCOPE OF WORK

Mechanical Scope of Work

The mechanical scope of work will comprise of, Design, Construct, Supply, Deliver, Install Commission and put into operation of a 45m³ anti -hammer tank complete with pipes valves. Replacement of compressors with six (6) new 35 bar compressor units completed with piping valves and associated fittings.

CIVIL SCOPE OF WORK

The Civil scope of work shall comprise of the following but not limited to:

- Surveying and setting out of works (including generating survey drawings and supply survey information in native format)
- Services detection (including detecting the location and depth of services)
- Excavation and Earthworks including dealing with water in excavations, as well as confirmation of founding conditions (by an appointed Professionally Registered Geotechnical Engineer)
- Demolishing of existing valve chambers and construction of watertight reinforced concrete chambers

Surge Vessel and Compressor house

- Structural design, detailing and specification and construction of the associated civil/structural elements.

AUTOMATION SCOPE OF WORK

The Automation scope involves design, install, test and commission the instrumentation on all the surge vessels including the new additional surge vessel. Upgrading the existing compressor house PLC to the latest version and linking the PLC to the additional new compressor.

ARCHITECTURE SCOPE OF WORK

The additions and alterations to the existing Compressor Building shall comprise of but not limited to the following:

- Accommodation
functional fit for purpose design layout to accommodate 2 additional compressors and related services and equipment
- Accessibility
maximise plant ease of access with additional roller shutter doors on south façade for each additional compressor.
- Make provision for adequate ergonomic circulation for operating and servicing of plant equipment and safe escape routes.
- Form giving
Building Additions and Alterations to match existing structures form and context
- Materiality
All new building materials, components and fixture to match existing structure, Refurbishment and/or restoration of existing building material and components to match existing structure
- Natural Lighting
Make provision for adequate natural lighting, with diffused or obscured natural lighting on plant equipment.
- Natural Ventilation
Make provision for adequate natural cross-ventilation with additional Louvres on North and east façade and turbine Ventilators.

C3.2.2.3 – DIVERSION OF OVERFLOW AND CONSTRUCTION OF PERMANENT ACCESS ROADS AT PALMIET PUMPING STATION

PROJECT BACKGROUND

Rand Water (RW) Palmiet Pumping Station currently has three Engine Rooms ER (i.e. Engine Room 1, 2, 3a and soon to be commissioned Engine Room 3b an extension of ER 3a). These Engine Rooms supply water to Klipfontein Reservoir via the O5 and O2 pipelines, the Meyersdal Reservoir via the O4 pipeline, the Meyershill Reservoir via the O3 pipeline and the Klipriviersberg Reservoir via the O1 pipeline. The supply of water to Palmiet Pumping Station

is from Zuikerbosch Pumping Station through the B4, B6, B13 and the soon to be commissioned B17 pipeline.

Palmiet Pumping Station's access road from the intersection of Overbury Street into the low point of (Culvert) comprises of asphalt and block paved surfaces. Sections of access road at the low point (i.e. stormwater pipe crossing) has developed potholes with water ponding at all times. These damaged sections of roads have caused vehicle drivers to create detours to access the station and other parts of the plant.

The internal roads after the main gate have been partially excavated due to valve installation resulting in sections of the road to be cordoned off. These sections of the roads have caused vehicle drivers to create informal detours to access the station and other parts of the plant. These detours are not conducive for vehicles to drive on due to confined space to maneuver and poor ground conditions.

Furthermore, overflow water from reservoir 1 that flows to Jackson dam, during an overflow event, has caused social problems with the community that uses the dam for recreation activities and as such presents a bad image for Rand Water.

SCOPE OF WORK

PROPOSED SOLUTIONS

The proposed civil scope of work shall include, but not limited to the following:

- Surveying of site and setting out
- Detection and protection/re-routing of existing services
- Construction of stormwater pipe culverts.
- Design and Construction of the reinforced concrete lined channel as well as precast culverts to divert the flow from Jackson dam
- Design and Construction of a bridge over the channel for vehicular crossing within the station
- The installation of a valve on the stormwater pipe going to Jackson dam for controlled flow when required to replenish the water levels at Jackson dam
- Construction of the access road surface to prevent water from flowing over or ponding on the road
- Construction of the internal access roads
- Construction of new stormwater channels and boxes.

- Inspection of completed access road with associated stormwater prior to internal handover as specified in the tender document.
- Submitting of all required documentation with handover (internal and external) of the project.

C3.2.2.4 - REPLACEMENT OF THE ENTIRE KLIPRIVIERSBERG- BUTCHERSHILL 1676mm (G25) PRE-STRESSED CONCRETE PIPELINE

PROJECT BACKGROUND

The G25 pipeline is primarily a 4.72 km long x 1676 mm internal diameter prestressed concrete gravity pipeline. It starts at the existing Klipriviersberg Command Reservoirs, which are Rand Water's largest service Reservoirs on its network, with a capacity of 650 ML/day each, and traverses within the Rand Water registered servitude, running in close proximity to the Johannesburg South suburbs i.e. Glenanda, Glenvista, Bassonia and Bassonia Rock Estate, parallel to the N12 western bound Provincial Highway in Gauteng Province, and culminating at the Glenanda Township distribution chambers where it becomes the G30 Pipeline to Baragwanath, just before crossing the Kliprivier Drive. It can also be supplied directly from the Palmiet System through the O1 pipeline, by passing the Klipriviersberg Command Reservoirs should it become necessary. It was installed in 1966 and has been in operation for the past fifty-six (56) years as of 2022. It has a design capacity of 200 ML/day.

SCOPE OF WORK

The scope of work entails the removal of the entire distressed 4.72 km length of the existing 1688 mm outside diameter prestressed concrete G25 pipeline and replacement with a 1700mm nominal diameter continuously welded steel pipe, starting approximately at (26°16'24.71"S; 28°04'38.55"E) and ending approximately at (26°16'29.05"S; 28°2'7.98"E) respectively. These co-ordinates are indicative however the Contractor will be expected to verify the exact start and end points of the pipeline.

All associated Mechanical, Automations, Civil and Electrical works form part of the scope; these include but not limited to chambers, pipe specials, tie – ins, valves, etc. The breakdown of the scope according to the different disciplines is provided on the attached full SOW.

C3.2.2.5 - DESIGN AND CONSTRUCTION OF ACCESS ROAD AT KLIPRIVIERSBERG RESERVOIR

PROJECT BACKGROUND

The Klipriviersberg site has two large reservoirs (No.1 and 2), which have capacities of 587.43 Ml/d and 650 Ml/d constructed in 1974 and 1996 respectively to supply potable water to sub-reservoirs (Brakfontein, Klipfontein, Germiston, Meyers Hill and North Ridge) for distribution from Germiston to Pretoria.

Klipriviersberg reservoir site is serviced by existing gravel access road (See figure 1 below) from the boundary fence (Meyersdal Eco Estate and Rand Water) to the Northern side of reservoir No.1(Road concreted on the wheel path) and Western side of reservoir No. 2.

The existing roads have deteriorated and require upgrading to cater for traffic and storm water

SCOPE OF WORK

PROPOSED SOLUTION

The existing Klipriviersberg access road is in a poor condition and requires design and construction of a Concrete paved road from the circle road of the Estate to North of reservoir No1 and to the west of reservoir No.2. The design and construction of this road must improve all unsafe conditions which are:

- Sight distance at the intersection of the roads and the gate of the reservoir site. A clear line of sight is especially important in all weather conditions. Motorists should be able to see 20 to 30 meters up the road for every 16 kilometers of speed.
- Adequate turning radii to accommodate trucks.
- The road should also be wide enough to accommodate all types of vehicles travelling in both directions.

All initial construction work along this section of the route will be undertaken within the existing access road.

The road should also be wide enough to accommodate all types of vehicles travelling in both directions.

C3.2.2.6 - REPLACE ACTUATORS AT PALMIET PUMPING STATION

It is proposed to replace the actuators and install extension bringing the actuators above ground level with power cables below ground level. The actuators shall be compatible with communication requirements of each system.

The proposed scope of work shall comprise of investigation, assessment, designing, supply, delivery installation, commission and put into operation of:

- New valve actuators complete with actuator extensions and fitting
- New ER1 delivery valves, NRV valves, magnetic flow meters, pipe specials housed in concrete chambers complete with associated electrical and control equipment

The implementation plan will entail a program for the installation and commissioning of the actuators. The programme needs to be finalized after consultation with operations - Zwartkopies pumping station so that isolations can be planned accordingly

C3.3. LAND SERVICES

C.3.3.1 Land and Rights

The Bidder will be responsible for the following activities: -

- ✓ Final Route selection
- ✓ Servitude / Property Valuations (New servitudes and Working Strip), including Cathodic Protection
- ✓ Servitude / Property Negotiations (New servitudes and Working Strip), including Cathodic Protection
- ✓ LiDAR Survey of existing and new infrastructure
- ✓ Service Detection of underground services
- ✓ Setting out of pipeline route / infrastructure
- ✓ As-built Survey

C.3.3.2 Wayleaves

- ✓ 3 Submission and approval of Wayleave applications to Authorities
- ✓ Renewal / expired Wayleaves
- ✓ Adhering to Wayleave Conditions from authorities (SP)

C.3.3.3 RESOURCES

LAND SERVICES PROJECT TEAM		
1. Aerial Photography and Lidar Survey	Quantity	Qualifications and experience
1.1 Project Manager/Geospatial Spatial Aerial Mapping Project Manager	1	A bachelor's degree in geography, GIS, remote sensing, land surveying/Geomatics, or other related discipline. Registration with South African Geomatics Council (SAGC) as a Geomatics Practitioner. At least 4 - 6 years Aerial Mapping Experience (Lidar and Photography).
1.2. Aerial Survey Pilot	1	Commercial Pilot License (CPL), Registered with CAA as Pilot. At least 4 - 6 years professional aerial mapping experience as a pilot in command experience to safely conduct flight operations. Certified Instrument Rating (IR), Certified Multi-Engine Rating (MER).
1.3. Airborne Sensor Operator	1	Basic experience of Information Technology with fault finding skills on hardware and software. Computer literacy. Basic experience of electronics. Knowledge of data acquisition methods using Airborne Lidar and Aerial Photography. 5 Years' experience as an Airborne Sensor Operator.
1.4. Data Processor /Draft person/Survey Technician	1	Understanding of basic surveying and topographic mapping concepts. At least 6 years' experience performing post processing (registration) of LiDAR and photogrammetric data, performing GPS post processing, extraction of mapping features from LiDAR and photogrammetry point cloud. Software processing skills (GIS, Microstation, Autocad /related).
2. Services/Utility Detection	Quantity	Qualifications and experience
2.1. Utility Detection Project Manager	1	A bachelor's degree/Diploma in geography, GIS, remote sensing, Geo-Informatics, land surveying/Geomatics, or other related discipline. Registration with SAGC as a Geomatics Practitioner. At least 6 years of Utility Detection and Mapping experience.
2.2. Utility Surveyor/Radar Operator	1	At least 5 years of experience using Ground Penetrating Radar (GPR / C-GPR) for identification of underground utilities. Matric, Error finding skills.
2.3. Survey Technologist	1	BSc /B-Tech in Surveying/Diploma in Geomatics. Registration with SAGC as a Technologist/Professional Surveyor. At least 5 years of experience as a surveyor. Knowledge of GPS and Total Station.
2.4. Survey Assistant	1	At least 3 years of experience as a survey assistant. Knowledge of GPS and total station operation. Knowledge of tape measurements. Matric is essential.
2.5. Drafts Person	1	Matric/relevant. Knowledge of survey drafting application/related software. At least 3 years of experience working a drafts person on survey projects/engineering projects.
3. As Built Survey and Setting out Survey	Quantity	Qualifications and experience
3.1 Survey Manager/Professional Surveyor	1	BSc (Land Surveying/Geomatics)/B-Tech (Surveying)/Diploma in Surveying. Compulsory registration with SAGC as Professional Land Surveyor/Professional Surveyor/Technologist. 6 years' experience as a registered Surveyor. Knowledge of survey related software. Knowledge of survey instruments (GPS, Total station, Digital Level). Project Management skills.
3.2 Survey Technician	1	Diploma in Surveying/Geomatics. Registration with SAGC as a Technician. At least 3 years of Experience as a Survey Technician.
3.3 Survey Assistant	1	At least 2 years of experience as a survey assistant. Knowledge of GPS and total station operation. Knowledge of tape measurements. Matric is essential.
4. Negotiations for Land and Rights	Quantity	Qualifications and experience
4.1 Senior Negotiator	1	National Diploma/Degree in Survey/Land Survey/GIS/Valuations/Town Planning/Property Law. Registration with SAGC, SACPVP and it will be advisable to have certified completion of C100SA from SARWA (South African Rights of Way Association). Senior Negotiator – 5 years' experience.
4.2. Negotiator	1	National Diploma/Degree in Survey/Land Survey/GIS/Valuations/Town Planning/Property Law. 5-year experience for negotiating servitudes, working strips, storage facilities, rights of way. Must have experience with deeds search and tracing of landowners.
5. Outgoing Wayleaves	Quantity	Qualifications and experience

5.1. Wayleave Officer	1	N6 in Civil Engineering/Pipeline (Wayleaves). At least 2-3 years of experience in Pipeline Engineering. Computer Skills. Deadline and time management. Report writing skills.
6. Stakeholder Engagement		
6.1 Stakeholder Engagement Manager x 1		5 years' experience as Stakeholder Engagement Manager, Good interpersonal and networking skills, highly articulate team player, strong project management and people management skills, broader project communications experience and skills desirable.
6.2 Community Stakeholder Engagement Facilitator / Coordinator x 1		2 years working experience as a facilitator/coordinator. Building positive working relationships with key stakeholder including statutory and non-statutory organisations, environmental bodies, industry & community groups, businesses and other affected parties. Demonstrating high level engagement skills in written and oral form.
7. Encroachments (Formal and Informal)		
7.1 Professional Land Surveyor x 1		5 years' experience. BSc Land Surveying/Geomatics. Registered with SAGC as a Professional Land Surveyor.
7.2. Survey Technician / Technologist x 1		3 years of experience. B-Tech/Diploma in Survey. Registration with SAGC as a Technician/Professional Surveyor.
7.3. Survey Drafts Person x 1		NQF 6. Knowledge of survey drafting application/related software. At least 4 years of experience working as a drafts person on survey projects/engineering projects.
7.4. Lawyer/Attorney x 1		LLB degree/Admitted Attorney. 3 years plus post admissions experience dealing with encroachments/property law.
8. Property Valuation	Quantity	Qualifications and experience
8.1. Professional Property Valuer	1	A degree in Real Estate or an undergraduate degree plus a completed National Diploma in Property Valuations. Registered with the SACPV as a Professional Valuer. Minimum of 6 years full time working experience in Property Valuations.

C3.4. SEQUENCE OF IMPLEMENTATION OF PROJECTS

The contractor shall implement this contract as per the following sequence

- First submit a work breakdown structure clearly indicating the interdependences between the different projects within this sub-package.
- The following projects shall be implemented simultaneously
 - Installation of pressurized air vessel
 - Upgrading of anti-hammer tanks compressors
 - Replacing G25 pipeline
 - Construct roads at Klipriviersberg reservoir
- **Suction and delivery Header improvements at Palmiet P.S. and Installation of air valves**
on the delivery projects are dependent on the completion of construction of Palmiet Pumping Station Engine Room 3B project, therefore, they will be executed independently from the rest of the projects. This project will not begin when the four (4) projects above commence. The Contractor shall plan to start the construction of this project in approximately one (1) to two (2) years after the commencement of construction of the above four (4) projects.

- **Diversion of overflow and construction of permanent access roads** construction works shall commence after the completion of major projects in and around Palmiet Pumping Station entrance road and approximately six (6) months after completion of the **Suction and delivery Header improvements at Palmiet P.S. and Installation of air valves on the delivery** projects.

C3.5. CONTRACT SKILLS DEVELOPMENT REQUIREMENTS

One of the objectives of the project is to train (occupational qualifications, trade qualification, work integrated learners – P1 and P2 learners, professional candidates).

1. PROCUREMENT *(in relation to in the Standard for Developing Skills through Infrastructure Contracts (published in GN 43495 of 20 March 2020):*

- a) The successful contractor may employ part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates directly or through a Skills Development Agency (SDA), (A1 - List of cidb accredited SDAs).*
- b) The successful contractor shall ensure that no single method shall contribute more than 75% of the CSDG for the contract.*
- c) The successful contractor may only place 33% employed employees or that of his subcontractors contributing to the CSDG.*
- d) The successful contractor must employ at least 60% of the learners from an FET / TVET college should the contractor select to have part/full occupational qualification learners and trade qualification learners contributing to the CSDG.*
- e) The successful contractor shall employ at least (0.25%) from eligible part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates in the employment of the employer.*

2. MANAGEMENT *(in relation to in the Standard for Developing Skills through Infrastructure Contracts (published in GN 43495 of 20 March 2020):*

- a) The successful contractor must keep site records regarding the part/full occupational qualification learners', trade qualification learners', work integrated learners' or candidates' progress, site attendance, hours worked and other relevant information as required by the Standard.*
- b) The successful contractor shall provide the required number of appropriately qualified mentors to the maximum number of part/full occupational qualification learners, trade qualification learners, work integrated learners in the proportion as specified in the Standard.*

- c) *The successful contractor shall provide a supervisor to manage the training of the part/full occupational qualification learners, trade qualification learners, work integrated learners, candidates.*
- d) *The successful contractor shall submit to the employer's representative a baseline training plan in the specified format (Pro-forma A2) for the part/full occupational qualification learners, trade qualification learners, work integrated learners, candidates within 30 days of start of the contract.*
- e) *The successful contractor shall submit to the employer's representative project interim report in the specified format (Pro-forma A3) on the progress of each of part/full occupational qualification learner, trade qualification learner, work integrated learner, candidate every three months.*
- f) *The successful contractor shall submit to the employer's representative the names and particulars in the specified format (Pro-forma A4) of the supervisor, mentors for the part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates within 30 days of start of the contract.*
- g) *The successful contractor shall keep a daily record of all the part/full occupational qualification learners, trade qualification learners, work integrated learners, candidates on site and their daily activities and shall be made available to the employer's representative on request.*
- h) *The successful contractor shall submit to the employer's representative the reports on the progress and status of the part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates with the monthly invoice for the payment certificate.*
- i) *The successful contractor shall have health and safety inductions for all part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates.*
- j) *The successful contractor shall conduct entry and exit medical tests of all part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates.*

The successful contractor shall provide personal protective equipment (PPE) to all part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates at the start of their employment on site.

C3.6 PROJECT APPROACH

C3.6.1 Methodology for the Design Phase; the proposed sequencing of the design shall be as follows;

- a) Turnkey contractor shall put together a multidisciplinary team lead by a Lead Design Engineer who is competent and professionally registered with ECSA in the main discipline who will work concurrently with the RW Design Lead for the main discipline.
- b) Turnkey contractor shall go through the Tender documents, drawing and specifications, and existing drawings as given at tender stage and understand the SOW.
- c) The turnkey contractor shall conduct Site Investigations- contractor verifies if the tender conditions as specified at stage are still applicable to the site or plant conditions.
- d) If the project is not within an existing site or where route selection is required, or site layout still has to be acquired the contractor may commence to secure land as per the Land Acquisitions Procedure specified in this tender document.
- e) Once the route has been confirmed, contractor may begin the process of acquiring land from land owners and conduct Environmental Impact Assessment processes in the form of applying for the Environmental Authorization, Water Use License Application and Heritage Permits from DEA, DWS and PHRAG (refer to the procedure of managing the environmental authorizations program). For any project i.e. Pipelines, Reservoirs, Buildings etc. it is advisable to commence designs once 90% of the service agreements have been acquired. Land for pipelines shall include the land required for cathodic protection. For reservoirs the land must be secured for the reservoir as well as for the inlet, outlet pipelines and access roads up to the battery limits set within the project.
- f) Service detection and or geotechnical studies may commence once land has been confirmed in the step above. The services detection and geotechnical studies must be done on the land where the servitude has been registered and servitude has been acquired.
- g) Contractor may commence with the preliminary Process or Mechanical designs in projects where mechanical or process equipment is required. Equipment sizing and selection as per the tender specifications maybe concluded in parallel to a geotechnical study if new structure is required.
- h) Power requirements from the load list for the mechanical/ process equipment can be given to the electrical designer to commence the electrical designs.
- i) Automation Design follow once the operational philosophy of how the plant will be run is firmed up.
- j) Contractor verifies if mechanical, process equipment, electrical and automation requirements can fit into architecture building specified in the tender drawings if not contractor adjusts building or designs a new building to house the equipment design requirements taking into cognizance the maintenance requirements of each type of equipment.
- k) Where the architectural designs submitted in the tender are deemed adequate by the contractor and the contractor elects to take over the risk, the same drawings maybe used with the following amendments
 - l) The foundation details must be added onto the revised drawings
 - m) All references to the “engineer details or specification” must be replaced with the structural designs details.
 - n) The generic specification for all schedules must now be updated with the actual products used.
 - o) The architectural drawings must now reference civil structural and small power and lighting drawings.
 - p) A preliminary design review can now be held by the Design Office
 - q) Contractor provides structural designs details for the structure which must include the access roads, storm water drainage.
 - r) The contractor then integrates all disciplines above, ensuring that all drawings talk to each other etc. are signed off by the professionally registered persons registered in their own specialist categories. The contractor shall ensure that all interfaces are managed to deliver a functional project.

- s) Where the projects are within a sub-package the contractor shall design for project dependencies taking into cognizance the sequence of commissioning required.
- t) A detailed design review can be held
- u) Design is frozen
- v) Implementation commences.
- w) Project is commissioned and handed over
- x) Package is completed and handed over.

The scope of work for the “Designer” within the “Turnkey Consortium” **during the design stage shall** follow the stages indicated in the Guideline Professional Fees (*Scope of Services and Tariff of Fees for Persons Registered in terms of the Engineering Profession Act, 46 of 2000*), the applicable latest version. The “Designer” shall remain in place through-out the project lifecycle only terminating upon the project completion

Payment shall be upon a completed accepted deliverable duly approved by the approval process outlined in the contract terms and conditions.

Stage 1 – Inception

Defined as: Establish client requirements and preferences, assess user needs and options, appointment of necessary consultants, establish the project brief including project objectives, priorities, constraints, assumptions aspirations and strategies.

- a) Assist in developing a clear project brief, this shall be formalised into an approved SOW.
- b) Conduct project initiation meetings.
- c) Advise on the rights, constraints, consents and approvals.
- d) Define the scope of services and scope of work required.
- e) Inspect the site and advise on the necessary surveys, analyses, tests and site or other investigations where such information will be required for Stage 2 including the availability and location of infrastructure and services.
- f) Determine the availability of data, drawings and plans relating to the project.
- g) Advise on criteria that could influence the project life cycle cost significantly
- h) Provide necessary information within the agreed scope of the project to other consultants involved.

Deliverables will typically include:

- agreed scope of services and scope of work
- signed agreement
- report on project, site and functional requirements
- schedule of required surveys, tests, analyses, site and other investigations
- schedule of consents and approvals and related timeframes.

Stage 2 – Concept and Viability (often called preliminary design)

Defined as: Prepare and finalise the project concept in accordance with the brief, including project scope, scale, character, form and function, plus preliminary programme and viability of the project.

- a) Attend design and consultants' meetings.
- b) Establish the concept design criteria.
- c) Prepare initial concept design and related documentation.
- d) Advise the client regarding further surveys, analyses, tests and investigations that may

- e) be required.
- f) Establish regulatory authorities' requirements and incorporate into the design.
- g) Refine and assess the concept design to ensure conformance with all regulatory
- h) requirements and consents.
- i) Establish access, utilities, services and connections required for the design.
- j) Participate in coordinated design interfaces with architect or other consultants involved.
- k) Prepare process designs (where required), preliminary designs, and related documentation for approval by authorities and client and suitable for costing.
- l) Provide cost estimates and life cycle costs, as required.
- m) Liaise, co-operate and provide necessary information to the client, principal consultant and other consultants involved.

Deliverables will typically include:

- conceptual designs
- schedule of required surveys, tests and other investigations and related reports
- process design
- preliminary design
- cost estimates, as required.

Stage 3 – Design Development (also termed detailed design)

Defined as: Develop the approved concept to finalise the design, outline specifications, cost plan, financial viability and programme for the project.

- a) Review documentation programme with principal consultant and other consultants involved.
- a) Attend design and consultants' meetings.
- b) Incorporate client's and authorities' detailed requirements into the design.
- c) Incorporate other consultants' designs and requirements into the design.
- d) Prepare design development drawings including draft technical details and specifications.
- e) Review and evaluate design and outline specification and exercise cost control.
- f) Prepare detailed estimates of construction cost.
- g) Liaise, co-operate and provide necessary information to the principal consultant and
- h) other consultants involved
- i) Submit the necessary design documentation to local and other authorities for approval.

Deliverables will typically include:

- design development drawings
- outline specifications
- local and other authority submission drawings and reports
- detailed estimates of construction costs.

Stage 4 – Documentation and Procurement

Defined as: Prepare procurement and construction documentation, confirm and implement the procurement strategies and procedures for effective and timeous procurement of necessary resources for execution of the project.

- a) Attend design and consultants' meetings.
- b) Prepare specifications and preambles for the works.
- c) Accommodate services design.

- d) Check cost estimates and adjust designs and documents, if necessary, to remain within budget.
- e) Formulate the procurement strategy for all plant, labour, equipment, materials and all long lead items required for the projects or projects.
- f) Prepare documentation for contractor procurement for the above items ensuring the requisite financing is in place
- g) Review designs, drawings and schedules for compliance with approved budget ensuring that no additional funds outside of the contract value is required.
- h) Call for tenders and/or negotiation of prices and/or assist the principal consultant or quantity surveyor where relevant.
- i) Liaise, co-operate and provide necessary information to the project team as required.
- j) Evaluate tenders.
- k) Prepare contract documentation for signature.
- l) Assess samples and products for compliance and design intent.
- m) Assist in pricing, documentation and tender evaluation as required when the detailed services for these activities are provided by others.

Deliverables will typically include:

- specifications
- services co-ordination
- working drawings
- budget construction cost
- contractor tender documentation
- contractor tender evaluation report
- contractor tender recommendations
- priced contract documentation.

Stage 5 – Contract Administration and Inspection

Defined as: Manage, administer and monitor the construction contracts and processes including preparation and coordination of procedures and documentation to facilitate practical completion of the works.

- a. Attend site handover.
- b. Issue construction documentation in accordance with the documentation schedule
- c. including, in the case of structural engineering, reinforcing bending schedules and detailing, and specifications of structural steel sections and connections.
- d. Carry out contract administration procedures in terms of the contract.
- e. Prepare schedules of predicted cash flow.
- f. Prepare pro-active estimates of proposed variations for client decision-making.
- g. Attend regular site, technical and progress meetings.
- h. Inspect the works for conformity to contract documentation
- i. Review the outputs of quality assurance procedures and advise the contractor and client on adequacy and need for additional controls, inspections and testing.
- j. Adjudicate and resolve financial claims by contractors.
- k. Assist in the resolution of contractual claims by the contractor.
- l. Establish and maintain a financial control system.
- m. Clarify details and descriptions during construction as required.
- n. Prepare valuations for payment certificates to be issued by the principal agent.
- o. Witness and review of all tests and mock-ups carried out on site.
- p. Check and approve contractor drawings for compliance with contract documents.
- q. Update and issue drawings register.

- r. Issue contract instructions as and when required. Review and comment on operation and maintenance manuals, guarantee certificates and warranties.
- s. Inspect the works and issue practical completion and defects lists.
- t. Arranging for the delivery of all test certificates, including any Certificates of Compliance, statutory and other approvals, and record drawings and operating manuals.

Deliverables will typically include:

- schedules of predicted cash flow
- construction documentation
- drawing register
- estimates for proposed variations
- contract instructions
- financial control reports
- valuations for payment certificates
- progressive and draft final accounts
- practical completion and defects list
- all statutory certification and certificates of compliance as required by the local and
- other statutory authorities.

Stage 6 – Close-Out

Defined as: Fulfil and complete the project close-out, including necessary documentation to facilitate effective completion, handover and operation of the project.

- a. Inspect and verify the rectification of defects.
- b. Receive, comment and approve relevant payment valuations and completion
- c. certificates.
- d. Prepare and/or procure operations and maintenance manuals, guarantees and
- e. warranties.
- f. Prepare and/or procure as-built drawings and documentation.
- g. Conclude the final accounts where relevant.

Deliverables will typically include:

- valuations for payment certificates
- works and final completion lists
- operations and maintenance manuals, guarantees and warranties
- as-built drawings and documentation
- final accounts.

C3.6.2 Additional services

The following services are additional to the normal services provided by the turnkey contractor. The turnkey contractor shall price for these services in his form of offer letter.

Additional services pertaining to all stages of the project:

All services related to defining the scope of work, planning, studies, investigations and assessments, and that are normally paid for on a time and cost basis.

- a) Valuation for purchase, sale or leasing of plant, equipment, material, systems, land or buildings or arranging for such valuation.
- b) Making arrangements for way leaves, servitudes or expropriations.

- c) Negotiating and arranging for the provision or diversion of services and or infrastructure not forming part of the works.
- d) Additional work in obtaining the formal approval of the appropriate government departments or public authorities, including the making of such revisions as may be required as a result of decisions of such departments or authorities arising out of changes in policy, undue delay, or other causes beyond the consulting engineer's control.
- e) Additional work related to monitoring as required by any government departments or authorities to facilitate regulatory approvals and certification (e.g. Mines Health and Safety Act, 29 of 1996).
- f) Topographical and environmental surveys, analyses, tests and site or foundation or other investigations, model tests, laboratory tests and analyses carried out on behalf of the client.
- g) Setting out or staking out the works and indicating any boundary beacons and other reference marks.
- h) Preparation of drawings for manufacture and installation or detailed checking of such for erection or installation fit
- i) Detailed inspection, reviewing and checking of designs and drawings not prepared by the consulting engineer and submitted by any contractor or potential contractor as alternative to those embodied in tender or similar documents prepared by the consulting engineer.
- j) Inspection and testing, other than on site, of materials and plant, including inspection and testing during manufacture.
- k) Preparing and setting out particulars and calculations in a form required by any relevant authority.
- l) Abnormal additional services by or costs to the consulting engineer due to the failure of a contractor or others to perform their required duties adequately and on time.
- m) Executing or arranging for the periodic monitoring and adjustment of the works, after final handover and completion of construction and commissioning, to optimise or maintain proper functioning of any process or system.
- n) Investigating or reporting on tariffs or charges leviable by or to the client.
- o) Advance ordering or reservation of materials and obtaining licences and permits.
- p) Preparing detailed operating, operation and maintenance manuals.
- q) Preparing record drawings on designs done by others or related to alterations to existing works.
- r) Additional services, duties and/or work resulting from project scope changes, alterations and/or instructions by the client, or his duly authorised agents, requiring the consulting engineer to advice upon, review, adapt and/or alter his completed designs and/or any other documentation and/or change the scope of his services and/or duties. Such additional services are subject to agreement in writing between the consulting engineer and the client prior to the execution thereof.
- s) Work and or services related to targeted procurement that could entail, but is not necessarily limited to any or all of the following: Incorporation of any targeted participation goals, the measuring of key participation indicators.
- t) The selection, appointment and administration of participation.
- u) Auditing compliance to the above by any contractors and/or professional consultant.
- v) Exceptional arrangements, communication, facilitation and agreements with any stakeholders other than the client and contractors appointed for the works on which the consulting engineer provides services.
- w) Any other additional services, of whatever nature, specifically agreed to in writing between the consulting engineer and the client.
- x) Building Information Modelling (BIM) compliancy. Where BIM is a specified project requirement, the appointment a BIM manager, the preparation and approval by the client of the BIM Execution Plan and the additional effort over conventional projects to set up the project to be fully BIM compliant as required by the client.

C3.6.3 Construction Monitoring Level 3

Level 3: Full-time Construction Monitoring (full-time staff resident on site for the duration of the works and paid for by the client as an additional service)

The full-time construction monitoring staff must:

(i) maintain a full-time presence on site to constantly review samples of materials and work procedures, for conformity to contract documentation, provide design/ technical clarifications and review completed work prior to covering up, or on completion, as appropriate

(ii) assist with the preparation of as-built records and drawings to the extent required in the agreement with the client

(iii) where the consulting engineer is the sole professional service provider or principal agent, carry out such administration of the project as is necessary on behalf of the client

C3.7 SPECIFICATION

The Bidder must refer to **Annexure C3.2 Specification (including technical specification, Project specification, SHEQ, EMP, QMS specifications where applicable)** provided with this bid document

C3.7.1 TECHNICAL SPECIFICATION

The Employer's Technical Specifications have been included in this document. The Contractor shall comply with all requirements of the technical specifications listed below.

C3.7.2 DESIGN DRAWINGS

Where available, drawings, geotechnical reports, inspection, or condition assessment reports are included in this bid document.

C3.7.3 OCCUPATIONAL HEALTH AND SAFETY

The Employer's Occupational Health and Safety (OH&S) Specifications have been included in this document. The Contractor shall comply with all requirements of the OH&S specifications.

C3.7.4 ENVIRONMENTAL MANAGEMENT PLAN

The Rand Water generic Environmental Management Plan (EMP) is included in this bid document.

C3.7.5 QUALITY REQUIREMENTS

The Contractor shall comply fully with the Employer quality requirements. During execution of the Tender no actions to provide the Works are implemented at any part of the site before the relevant quality control documentation is submitted and the Engineer accepts the procedures.

The Contractor is responsible for the complete quality assurance requirements imposed on his Sub-contractors and suppliers, in terms of SABS ISO 9000 Series.

C3.7.6 LAND SERVICES

- i. Land and Rights Scope of Work
 - a. Servitude / Property Valuations
 - b. LiDAR Survey
 - c. Service Detection
 - d. Setting out of pipeline route
 - e. As-built Survey
- ii. Land and Rights Procedure (Pipelines / Negotiations)
- iii. Land and Rights Route Selection Template
- iv. Pipeline Protection (Wayleaves)
 - a. Process and Procedures for Incoming wayleaves (protect existing/future infrastructure) and Outgoing wayleaves
 - b. Standard conditions (spec to protect existing/future infrastructure)
 - c. Standard letter when applying to other entities

PART C4: SITE INFORMATION

C4. SITE INFORMATION

The projects are at the following sites:

- Palmiet Pumping Station (P.04457; P.05469; P.04476; P.04710; P.05134 and P.03047)

Latitude	S26°18'20.2"
Longitude	E28°05'23.8"
- Klipriviersberg reservoir and G25 Pipeline

Latitude	S26°16'21.0"
Longitude	E28°04'30.7"

The Bidder must refer to **Annexure C4: Site Information** provided with this bid document.