

INVITATION TO BID

Construction, Refurbishment and Extension of Portable Water Systems

ITB No.: ITB/2020/001

Project: REDUCING VULNERABILITY FROM CLIMATE CHANGE IN THE FOOTHILLS,

LOWLANDS AND THE LOWER SENQU RIVER BASIN PROJECT (RVCC)

Country: LESOTHO

Issued on: 16 November 2020

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Section 1. Letter of Invitation

The United Nations Development Programme (UNDP) hereby invites you to submit a Bid to this Invitation to Bid (ITB) for the above-referenced subject.

This ITB includes the following documents and the General Terms and Conditions of Contract which is inserted in the Bid Data Sheet:

Section 1: This Letter of Invitation Section 2: Instruction to Bidders Section 3: Bid Data Sheet (BDS) Section 4: Evaluation Criteria Section 5: Schedule of Requirements and Technical Specifications Section 6: Returnable Bidding Forms • Form A: Bid Submission Form • Form B: Bidder Information Form

- Form C: Joint Venture/Consortium/Association Information Form
- Form D: Qualification Form
- Form E: Format of Technical Bid
- Form F: Price Schedule
- Form G: Bid Security Declaration
- Form H: PERFORMANCE SECURITY

If you are interested in submitting a Bid in response to this ITB, please prepare your Bid in accordance with the requirements and procedure as set out in this ITB and submit it by the Deadline for Submission of Bids set out in Bid Data Sheet.

Please acknowledge receipt of this ITB by sending an email to <u>rethabile.thipe@undp.org</u> indicating whether you intend to submit a Bid or otherwise. You may also utilize the "Accept Invitation" function in eTendering system, where applicable. This will enable you to receive amendments or updates to the ITB. Should you require further clarifications, kindly communicate with the contact person/s identified in the attached Data Sheet as the focal point for queries on this ITB.

UNDP looks forward to receiving your Bid and thank you in advance for your interest in UNDP procurement opportunities.

Issued by

Rethabile Huipe

Name: Rethabile Thipe-Maope Title: Procurement Associate Date: **November 16, 2020** Approved by:

Phiera Mafithe

Name: Pheea Mafethe Title: Operations Analyst Date: **November 16, 2020**

Section 2. Instruction to Bidders

GEN	GENERAL PROVISIONS				
1.	Introduction	1.1	Bidders shall adhere to all the requirements of this ITB, including any amendments made in writing by UNDP. This ITB is conducted in accordance with the UNDP Programme and Operations Policies and Procedures (POPP) on Contracts and Procurement which can be accessed at <u>https://popp.undp.org/SitePages/POPPBSUnit.aspx?TermID=254a9f96-b883-476a-8ef8-e81f93a2b38d</u>		
		1.2	Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of the Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this ITB.		
		1.3	UNDP reserves the right to cancel the procurement process at any stage without any liability of any kind for UNDP, upon notice to the bidders or publication of cancellation notice on UNDP website.		
		1.4	As part of the bid, it is desired that the Bidder registers at the United Nations Global Marketplace (UNGM) website (<u>www.ungm.org</u>). The Bidder may still submit a bid even if not registered with the UNGM. However, if the Bidder is selected for contract award, the Bidder must register on the UNGM prior to contract signature.		
	Fraud & Corruption, Gifts and Hospitality	2.1	UNDP strictly enforces a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical or unprofessional practices, and obstruction of UNDP vendors and requires all bidders/vendors observe the highest standard of ethics during the procurement process and contract implementation. UNDP's Anti-Fraud Policy can be found at http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_andinvestigation.html#anti		
		2.2	Bidders/vendors shall not offer gifts or hospitality of any kind to UNDP staff members including recreational trips to sporting or cultural events, theme parks or offers of holidays, transportation, or invitations to extravagant lunches or dinners.		
		2.3	In pursuance of this policy, UNDP:		
			(a) Shall reject a bid if it determines that the selected bidder has engaged in any corrupt or fraudulent practices in competing for the contract in question; (b) Shall declare a vendor ineligible, either indefinitely or for a stated period, to be awarded a contract if at any time it determines that the vendor has engaged in any corrupt or fraudulent practices in competing for, or in executing a UNDP contract.		
		2.4	All Bidders must adhere to the UN Supplier Code of Conduct, which may be found at <u>http://www.un.org/depts/ptd/pdf/conduct_english.pdf</u>		
3. 1	Eligibility	3.1	A vendor should not be suspended, debarred, or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization. Vendors are therefore required to disclose to UNDP		

	2.2	whether they are subject to any sanction or temporary suspension imposed by these organizations.
	3.2	It is the Bidder's responsibility to ensure that its employees, joint venture members, sub-contractors, service providers, suppliers and/or their employees meet the eligibility requirements as established by UNDP.
4. Conflict of Interests	4.1	Bidders must strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. Bidders found to have a conflict of interest shall be disqualified. Without limitation on the generality of the above, Bidders, and any of their affiliates, shall be considered to have a conflict of interest with one or more parties in this solicitation process, if they:
		 a) Are or have been associated in the past, with a firm or any of its affiliates which have been engaged by UNDP to provide services for the preparation of the design, specifications, Terms of Reference, cost analysis/estimation, and other documents to be used for the procurement of the goods and services in this selection process; b) Were involved in the preparation and/or design of the programme/project related to the goods and/or services requested under this ITB; or c) Are found to be in conflict for any other reason, as may be established by,
	4.2	or at the discretion of UNDP. In the event of any uncertainty in the interpretation of a potential conflict of interest, Bidders must disclose to UNDP, and seek UNDP's confirmation on whether or not such conflict exists.
	4.3	Similarly, the Bidders must disclose in their Bid their knowledge of the following:
		 a) If the owners, part-owners, officers, directors, controlling shareholders, of the bidding entity or key personnel who are family members of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving goods and/or services under this ITB; and b) All other circumstances that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices. Failure to disclose such an information may result in the rejection of the Bid or Bide affected by the page disclosure.
	4.4	Bids affected by the non-disclosure. The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP's further evaluation and review of various factors such as being registered, operated and managed as an independent business entity, the extent of Government ownership/share, receipt of subsidies, mandate and access to information in relation to this ITB, among others. Conditions that may lead to undue advantage against other Bidders may result in the eventual rejection of the Bid.
B. PREPARATION O	FBID	S
5. General Considerations	5.1	In preparing the Bid, the Bidder is expected to examine the ITB in detail. Material deficiencies in providing the information requested in the ITB may result in rejection of the Bid.
	5.2	The Bidder will not be permitted to take advantage of any errors or omissions in the ITB. Should such errors or omissions be discovered, the Bidder must notify

			the UNDP accordingly.
6.	Cost of Preparation of Bid	6.1	The Bidder shall bear all costs related to the preparation and/or submission of the Bid, regardless of whether its Bid is selected or not. UNDP shall not be responsible or liable for those costs, regardless of the conduct or outcome of the procurement process.
7.	Language	7.1	The Bid, as well as any and all related correspondence exchanged by the Bidder and UNDP, shall be written in the language (s) specified in the BDS.
8.	Documents Comprising the Bid	8.1	The Bid shall comprise of the following documents and related forms which details are provided in the BDS:
			 a) Documents Establishing the Eligibility and Qualifications of the Bidder; b) Technical Bid; c) Price Schedule; d) Bid Security, if required by BDS; e) Any attachments and/or appendices to the Bid.
9.	Documents Establishing the Eligibility and Qualifications of the Bidder	9.1	The Bidder shall furnish documentary evidence of its status as an eligible and qualified vendor, using the Forms provided under Section 6 and providing documents required in those forms. In order to award a contract to a Bidder, its qualifications must be documented to UNDP's satisfaction.
10.	Technical Bid Format and Content	10.1	The Bidder is required to submit a Technical Bid using the Standard Forms and templates provided in Section 6 of the ITB.
		10.2	Samples of items, when required as per Section 5, shall be provided within the time specified and unless otherwise specified by the Purchaser, at no expense to the UNDP. If not destroyed by testing, samples will be returned at Bidder's request and expense, unless otherwise specified.
		10.3	When applicable and required as per Section 5, the Bidder shall describe the necessary training programme available for the maintenance and operation of the equipment offered as well as the cost to the UNDP. Unless otherwise specified, such training as well as training materials shall be provided in the language of the Bid as specified in the BDS.
		10.4	When applicable and required as per Section 5, the Bidder shall certify the availability of spare parts for a period of at least five (5) years from date of delivery, or as otherwise specified in this ITB.
11.	Price Schedule	11.1	The Price Schedule shall be prepared using the Form provided in Section 6 of the ITB and taking into consideration the requirements in the ITB.
		11.2	Any requirement described in the Technical Bid but not priced in the Price Schedule, shall be assumed to be included in the prices of other activities or items, as well as in the final total price.
12.	Bid Security	12.1	A Bid Security, if required by BDS, shall be provided in the amount and form indicated in the BDS. The Bid Security shall be valid for a minimum of thirty (30) days after the final date of validity of the Bid.

		The Bid Security shall be included along with the Bid. If Bid Security is required by the ITB but is not found in the Bid, the offer shall be rejected.
		f the Bid Security amount or its validity period is found to be less than what is equired by UNDP, UNDP shall reject the Bid.
	а	n the event an electronic submission is allowed in the BDS, Bidders shall include copy of the Bid Security in their bid and the original of the Bid Security must be sent via courier or hand delivery as per the instructions in BDS.
		he Bid Security may be forfeited by UNDP, and the Bid rejected, in the event of ny, or combination, of the following conditions:
	ab) If the Bidder withdraws its offer during the period of the Bid Validity specified in the BDS, or;) In the event the successful Bidder fails: i. to sign the Contract after UNDP has issued an award; or ii. to furnish the Performance Security, insurances, or other documents that UNDP may require as a condition precedent to the effectivity of the contract that may be awarded to the Bidder.
13. Currencies	V	Il prices shall be quoted in the currency or currencies indicated in the BDS. Where Bids are quoted in different currencies, for the purposes of comparison of all Bids:
	а) UNDP will convert the currency quoted in the Bid into the UNDP preferred currency, in accordance with the prevailing UN operational rate of exchange on the last day of submission of Bids; and
	b	In the event that UNDP selects a Bid for award that is quoted in a currency different from the preferred currency in the BDS, UNDP shall reserve the right to award the contract in the currency of UNDP's preference, using the conversion method specified above.
14. Joint Venture, Consortium or Association	V B yo jo a tl d	f the Bidder is a group of legal entities that will form or have formed a Joint Venture (JV), Consortium or Association for the Bid, they shall confirm in their Bid that : (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the JV, Consortium or Association bintly and severally, which shall be evidenced by a duly notarized Agreement mong the legal entities, and submitted with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and between UNDP and the lesignated lead entity, who shall be acting for and on behalf of all the member entities comprising the joint venture.
	t	After the Deadline for Submission of Bid, the lead entity identified to represent he JV, Consortium or Association shall not be altered without the prior written onsent of UNDP.
	S	The lead entity and the member entities of the JV, Consortium or Association hall abide by the provisions of Clause 9 herein in respect of submitting only one bid.
	c d	The description of the organization of the JV, Consortium or Association must learly define the expected role of each of the entities in the joint venture in lelivering the requirements of the ITB, both in the Bid and the JV, Consortium or Association Agreement. All entities that comprise the JV, Consortium or

		Association shall be subject to the eligibility and qualification assessment by UNDP.
	14.5	A JV, Consortium or Association in presenting its track record and experience should clearly differentiate between:
		a) Those that were undertaken together by the JV, Consortium or Association; and
		b) Those that were undertaken by the individual entities of the JV, Consortium or Association.
	14.6	Previous contracts completed by individual experts working privately but who are permanently or were temporarily associated with any of the member firms cannot be claimed as the experience of the JV, Consortium or Association or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials
	14.7	JV, Consortium or Associations are encouraged for high value, multi-sectoral requirements when the spectrum of expertise and resources required may not be available within one firm.
15. Only One Bid	15.1	The Bidder (including the individual members of any Joint Venture) shall submit only one Bid, either in its own name or as part of a Joint Venture.
	15.2	 Bids submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the following: a) they have at least one controlling partner, director or shareholder in common; or b) any one of them receive or have received any direct or indirect subsidy from the other/s; or c) they have the same legal representative for purposes of this ITB; or d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Bid of another Bidder regarding this ITB process; e) they are subcontractors to each other's Bid, or a subcontractor to one Bid also submits another Bid under its name as lead Bidder; or some key personnel proposed to be in the team of one Bidder participates in more than one Bid received for this ITB process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Bid.
16. Bid Validity Period	16.1	Bids shall remain valid for the period specified in the BDS, commencing on the Deadline for Submission of Bids. A Bid valid for a shorter period may be rejected
		by UNDP and rendered non-responsive.
	16.2	
17. Extension of Bid Validity Period	16.2	by UNDP and rendered non-responsive. During the Bid validity period, the Bidder shall maintain its original Bid without any change, including the availability of the Key Personnel, the proposed rates

	change to the original Bid.
17.3	The Bidder has the right to refuse to extend the validity of its Bid, in which case, the Bid shall not be further evaluated.
18.1	Bidders may request clarifications on any of the ITB documents no later than the date indicated in the BDS. Any request for clarification must be sent in writing in the manner indicated in the BDS. If inquiries are sent other than specified channel, even if they are sent to a UNDP staff member, UNDP shall have no obligation to respond or confirm that the query was officially received.
18.2	UNDP will provide the responses to clarifications through the method specified in the BDS.
18.3	UNDP shall endeavour to provide responses to clarifications in an expeditious manner, but any delay in such response shall not cause an obligation on the part of UNDP to extend the submission date of the Bids, unless UNDP deems that such an extension is justified and necessary.
19.1	At any time prior to the deadline of Bid submission, UNDP may for any reason, such as in response to a clarification requested by a Bidder, modify the ITB in the form of an amendment to the ITB. Amendments will be made available to all prospective bidders.
19.2	If the amendment is substantial, UNDP may extend the Deadline for submission of Bid to give the Bidders reasonable time to incorporate the amendment into their Bids.
20.1	Unless otherwise specified in the BDS, alternative Bids shall not be considered. If submission of alternative Bid is allowed by BDS, a Bidder may submit an alternative Bid, but only if it also submits a Bid conforming to the ITB requirements. Where the conditions for its acceptance are met, or justifications are clearly established, UNDP reserves the right to award a contract based on an alternative Bid.
20.2	If multiple/alternative bids are being submitted, they must be clearly marked as "Main Bid" and "Alternative Bid"
21.1	When appropriate, a pre-bid conference will be conducted at the date, time and location specified in the BDS. All Bidders are encouraged to attend. Non- attendance, however, shall not result in disqualification of an interested Bidder. Minutes of the Bidder's conference will be disseminated on the procurement website and shared by email or on the e-Tendering platform as specified in the BDS. No verbal statement made during the conference shall modify the terms and conditions of the ITB, unless specifically incorporated in the Minutes of the Bidder's Conference or issued/posted as an amendment to ITB.
	18.1 18.2 18.3 19.1 19.2 20.1

C. SUBMISSION AND OPENING OF BIDS				
22. Submission	22.1	The Bidder shall submit a duly signed and complete Bid comprising the documents and forms in accordance with requirements in the BDS. The Price Schedule shall be submitted together with the Technical Bid. Bid can be delivered either personally, by courier, or by electronic method of transmission as specified in the BDS.		
	22.2	The Bid shall be signed by the Bidder or person(s) duly authorized to commit the Bidder. The authorization shall be communicated through a document evidencing such authorization issued by the legal representative of the bidding entity, or a Power of Attorney, accompanying the Bid.		
	22.3	Bidders must be aware that the mere act of submission of a Bid, in and of itself, implies that the Bidder fully accepts the UNDP General Contract Terms and Conditions.		
Hard copy (manual) submission	22.4	Hard copy (manual) submission by courier or hand delivery allowed or specified in the BDS shall be governed as follows:		
		a) The signed Bid shall be marked "Original", and its copies marked "Copy" as appropriate. The number of copies is indicated in the BDS. All copies shall be made from the signed original only. If there are discrepancies between the original and the copies, the original shall prevail.		
		 (b) The Technical Bid and Price Schedule must be sealed and submitted together in an envelope, which_shall: Bear the name of the Bidder; Be addressed to UNDP as specified in the BDS; and Bear a warning not to open before the time and date for Bid opening as specified in the BDS. 		
		If the envelope with the Bid is not sealed and marked as required, UNDP shall assume no responsibility for the misplacement, loss, or premature opening of the Bid.		
Email and eTendering	22.5	Electronic submission through email or eTendering, if allowed as specified in the BDS, shall be governed as follows:		
submissions		a) Electronic files that form part of the Bid must be in accordance with the format and requirements indicated in BDS;		
		b) Documents which are required to be in original form (e.g. Bid Security, etc.) must be sent via courier or hand delivered as per the instructions in BDS.		
	22.6	Detailed instructions on how to submit, modify or cancel a bid in the eTendering system are provided in the eTendering system Bidder User Guide and Instructional videos available on this link: <u>http://www.undp.org/content/undp/en/home/operations/procurement/busine</u> <u>ss/procurement-notices/resources/</u>		
23. Deadline for Submission of Bids and Late Bids	23.1	Complete Bids must be received by UNDP in the manner, and no later than the date and time, specified in the BDS. UNDP shall only recognise the actual date and time that the bid was received by UNDP		

	23.2	UNDP shall not consider any Bid that is received after the deadline for the submission of Bids.
24. Withdrawal, Substitution, and	24.1	A Bidder may withdraw, substitute or modify its Bid after it has been submitted at any time prior to the deadline for submission.
Modification of Bids	24.2	Manual and Email submissions: A bidder may withdraw, substitute or modify its Bid by sending a written notice to UNDP, duly signed by an authorized representative, and shall include a copy of the authorization (or a Power of Attorney). The corresponding substitution or modification of the Bid, if any, must accompany the respective written notice. All notices must be submitted in the same manner as specified for submission of Bids, by clearly marking them as "WITHDRAWAL" "SUBSTITUTION," or "MODIFICATION"
	24.3	eTendering: A Bidder may withdraw, substitute or modify its Bid by Cancelling, Editing, and re-submitting the Bid directly in the system. It is the responsibility of the Bidder to properly follow the system instructions, duly edit and submit a substitution or modification of the Bid as needed. Detailed instructions on how to cancel or modify a Bid directly in the system are provided in the Bidder User Guide and Instructional videos.
	24.4	Bids requested to be withdrawn shall be returned unopened to the Bidders (only for manual submissions), except if the bid is withdrawn after the bid has been opened.
25. Bid Opening	25.1 25.2	UNDP will open the Bid in the presence of an ad-hoc committee formed by UNDP of at least two (2) members. The Bidders' names, modifications, withdrawals, the condition of the envelope labels/seals, the number of folders/files and all other such other details as UNDP may consider appropriate, will be announced at the opening. No Bid shall be rejected at the opening stage, except for late submissions, in which case, the Bid shall be returned unopened to the Bidders.
	25.3	In the case of e-Tendering submission, bidders will receive an automatic notification once the Bid is opened.
D. EVALUATION OF	BIDS	
26. Confidentiality	26.1	Information relating to the examination, evaluation, and comparison of Bids, and the recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process, even after publication of the contract award.
	26.2	Any effort by a Bidder or anyone on behalf of the Bidder to influence UNDP in the examination, evaluation and comparison of the Bids or contract award decisions may, at UNDP's decision, result in the rejection of its Bid and may subsequently be subject to the application of prevailing UNDP's vendor sanctions procedures.
27. Evaluation of Bids	27.1 27.2	UNDP will conduct the evaluation solely on the basis of the Bids received. Evaluation of Bids shall be undertaken in the following steps: a) Preliminary Examination including Eligibility
		b) Arithmetical check and ranking of bidders who passed preliminary

	 examination by price. c) Qualification assessment (if pre-qualification was not done) a) Evaluation of Technical Bids b) Evaluation of prices Detailed evaluation will be focussed on the 3 - 5 lowest priced bids. Further higher priced bids shall be added for evaluation if necessary
28. Preliminary Examination	28.1 UNDP shall examine the Bids to determine whether they are complete with respect to minimum documentary requirements, whether the documents have been properly signed, and whether the Bids are generally in order, among other indicators that may be used at this stage. UNDP reserves the right to reject any Bid at this stage.
29. Evaluation of Eligibility and Qualification	29.1 Eligibility and Qualification of the Bidder will be evaluated against the Minimum Eligibility/Qualification requirements specified in the Section 4 (Evaluation Criteria).
	 29.2 In general terms, vendors that meet the following criteria may be considered qualified: a) They are not included in the UN Security Council 1267/1989 Committee's list of terrorists and terrorist financiers, and in UNDP's ineligible vendors' list; b) They have a good financial standing and have access to adequate financial resources to perform the contract and all existing commercial commitments, c) They have the necessary similar experience, technical expertise, production capacity, quality certifications, quality assurance procedures and other resources applicable to the supply of goods and/or services required; d) They are able to comply fully with the UNDP General Terms and Conditions of Contract; e) They do not have a consistent history of court/arbitral award decisions against the Bidder; and f) They have a record of timely and satisfactory performance with their clients.
30. Evaluation of Technical Bid and prices	30.1 The evaluation team shall review and evaluate the Technical Bids on the basis of their responsiveness to the Schedule of Requirements and Technical Specifications and other documentation provided, applying the procedure indicated in the BDS and other ITB documents. When necessary, and if stated in the BDS, UNDP may invite technically responsive bidders for a presentation related to their technical Bids. The conditions for the presentation shall be provided in the bid document where required.
31. Due diligence	31.1 UNDP reserves the right to undertake a due diligence exercise, aimed at determining to its satisfaction, the validity of the information provided by the Bidder. Such exercise shall be fully documented and may include, but need not be limited to, all or any combination of the following:
	 a) Verification of accuracy, correctness and authenticity of information provided by the Bidder; b) Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team; c) Inquiry and reference checking with Government entities with jurisdiction on the Bidder, or with previous clients, or any other entity that may have done business with the Bidder;

		 d) Inquiry and reference checking with previous clients on the performance on on-going or completed contracts, including physical inspections of previous works, as deemed necessary; e) Physical inspection of the Bidder's offices, branches or other places where business transpires, with or without notice to the Bidder; f) Other means that UNDP may deem appropriate, at any stage within the selection process, prior to awarding the contract.
32. Clarification of Bids	32.1	To assist in the examination, evaluation and comparison of Bids, UNDP may, at its discretion, request any Bidder for a clarification of its Bid.
	32.2	UNDP's request for clarification and the response shall be in writing and no change in the prices or substance of the Bid shall be sought, offered, or permitted, except to provide clarification, and confirm the correction of any arithmetic errors discovered by UNDP in the evaluation of the Bids, in accordance with the ITB.
	32.3	Any unsolicited clarification submitted by a Bidder in respect to its Bid, which is not a response to a request by UNDP, shall not be considered during the review and evaluation of the Bids.
33. Responsiveness of Bid	33.1	UNDP's determination of a Bid's responsiveness will be based on the contents of the bid itself. A substantially responsive Bid is one that conforms to all the terms, conditions, specifications and other requirements of the ITB without material deviation, reservation, or omission.
	33.2	If a bid is not substantially responsive, it shall be rejected by UNDP and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.
34. Nonconformities, Reparable Errors and Omissions	34.1	Provided that a Bid is substantially responsive, UNDP may waive any non- conformities or omissions in the Bid that, in the opinion of UNDP, do not constitute a material deviation.
	34.2	UNDP may request the Bidder to submit the necessary information or documentation, within a reasonable period, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
	34.3	For the bids that have passed the preliminary examination, UNDP shall check and correct arithmetical errors as follows:
		a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of UNDP there is an obvious misplacement of the decimal point in the unit price; in which case, the line item total as quoted shall govern and the unit price shall be corrected;
		b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
		c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an

		arithmetic error, in which case the amount in figures shall prevail.
	34.4	If the Bidder does not accept the correction of errors made by UNDP, its Bid shall be rejected.
E. AWARD OF CON	TRAC	r
35. Right to Accept, Reject, Any or All Bids	35.1	UNDP reserves the right to accept or reject any bid, to render any or all of the bids as non-responsive, and to reject all Bids at any time prior to award of contract, without incurring any liability, or obligation to inform the affected Bidder(s) of the grounds for UNDP's action. UNDP shall not be obliged to award the contract to the lowest priced offer.
36. Award Criteria	36.1	Prior to expiration of the period of Bid validity, UNDP shall award the contract to the qualified and eligible Bidder that is found to be responsive to the requirements of the Schedule of Requirements and Technical Specification, and has offered the lowest price.
37. Debriefing	37.1	In the event that a Bidder is unsuccessful, the Bidder may request for a debriefing from UNDP. The purpose of the debriefing is to discuss the strengths and weaknesses of the Bidder's submission, in order to assist the Bidder in improving its future Bids for UNDP procurement opportunities. The content of other Bids and how they compare to the Bidder's submission shall not be discussed.
38. Right to Vary Requirements at the Time of Award	38.1	At the time of award of Contract, UNDP reserves the right to vary the quantity of goods and/or services, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.
39. Contract Signature	39.1	Within fifteen (15) days from the date of receipt of the Contract, the successful Bidder shall sign and date the Contract and return it to UNDP. Failure to do so may constitute sufficient grounds for the annulment of the award, and forfeiture of the Bid Security, if any, and on which event, UNDP may award the Contract to the Second highest rated or call for new Bids.
40. Contract Type and General Terms and Conditions	40.1	The types of Contract to be signed and the applicable UNDP Contract General Terms and Conditions, as specified in BDS, can be accessed at http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
41. Performance Security	41.1	A performance security, if required in the BDS, shall be provided in the amount specified in BDS and form available at <u>https://popp.undp.org/ layouts/15/WopiFrame.aspx?sourcedoc=/UNDP POPP</u> <u>DOCUMENT LIBRARY/Public/PSU Solicitation Performance%20Guarantee%20</u> <u>Form.docx&action=default</u> within a maximum of fifteen (15) days of the contract signature by both parties. Where a performance security is required, the receipt of the performance security by UNDP shall be a condition for rendering the contract effective.
42. Bank Guarantee for Advanced Payment	42.1	Except when the interests of UNDP so require, it is UNDP's standard practice to not make advance payment(s) (i.e., payments without having received any outputs). If an advance payment is allowed as per the BDS, and exceeds 20% of

	the total contract price, or USD 30,000, whichever is less, the Bidder shall submit a Bank Guarantee in the full amount of the advance payment in the form available at <u>https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Contract%20Management%20Payment%20</u> <u>and%20Taxes_Advanced%20Payment%20Guarantee%20Form.docx&action=de_fault</u>
43. Liquidated Damages	43.1 If specified in the BDS, UNDP shall apply Liquidated Damages for the damages and/or risks caused to UNDP resulting from the Contractor's delays or breach of its obligations as per Contract.
44. Payment Provisions	44.1 Payment will be made only upon UNDP's acceptance of the goods and/or services performed. The terms of payment shall be within thirty (30) days, after receipt of invoice and certification of acceptance of goods and/or services issued by the proper authority in UNDP with direct supervision of the Contractor. Payment will be effected by bank transfer in the currency of the contract.
45. Vendor Protest	45.1 UNDP's vendor protest procedure provides an opportunity for appeal to those persons or firms not awarded a contract through a competitive procurement process. In the event that a Bidder believes that it was not treated fairly, the following link provides further details regarding UNDP vendor protest procedures: <u>http://www.undp.org/content/undp/en/home/procurement/business/protest-and-sanctions.html</u>
46. Other Provisions	 46.1 In the event that the Bidder offers a lower price to the host Government (e.g. General Services Administration (GSA) of the federal government of the United States of America) for similar goods and/or services, UNDP shall be entitled to the same lower price. The UNDP General Terms and Conditions shall have precedence. 46.2 UNDP is entitled to receive the same pricing offered by the same Contractor in contracts with the United Nations and/or its Agencies. The UNDP General Terms and Conditions shall have precedence. 46.3 The United Nations has established restrictions on employment of (former) UN staff who have been involved in the procurement process as per bulletin ST/SGB/2006/15 http://www.un.org/en/ga/search/view_doc.asp?symbol=ST/SGB/2006/15&refereer

Section 3. Bid Data Sheet

The following data for the goods and/or services to be procured shall complement, supplement, or amend the provisions in the Invitation to Bid In the case of a conflict between the Instructions to Bidders, the Bid Data Sheet, and other annexes or references attached to the Bid Data Sheet, the provisions in the Bid Data Sheet shall prevail.

BDS No.	Ref. to Section.2	Data	Specific Instructions / Requirements
1	7	Language of the Bid	English
2		Submitting Bids for Parts or sub- parts of the Schedule of Requirements (partial bids)	Allowed Bidders can bid for one or more Lots Lot 1, 2 or 3
3	20	Alternative Bids	Shall not be considered
4	21	Pre-Bid conference	Will be Conducted Time: 0830hrs, Lesotho Time Date : November 17, 2020 8:30 AM Venue : Hotel Mount Maluti, in Mohale's Hoek District
5	16	Bid Validity Period	90 days
6	13	Bid Security	Not Required Bidders to complete Bid Security Declaration - Form G attached herein and return with the bid
7	41	Advanced Payment upon signing of contract	Not Allowed
8	42	Liquidated Damages	Will be imposed as follows: Percentage of contract price per day of delay: 0.05% Max. number of days of delay 30, after which UNDP may terminate the contract.
9	40	Performance Security	Required in the amount of 10% of Contract amount Performance Security Template – Form H attached herein

10	12	Currency of Bid	Local currency (LSL) and or USD
11	31	Deadline for submitting requests for clarifications/ questions	3 days before the submission deadline
12	31	Contact Details for submitting clarifications/questions	Focal Person in UNDP: Rethabile Thipe - Maope Address: P. O. Box 301, Maseru 100 E-mail address: <u>rethabile.thipe@undp.org</u>
13	18, 19 and 21	Manner of Disseminating Supplemental Information to the ITB and responses/clarifications to queries	Posted directly to eTendering
14	23	Deadline for Submission	2359hrs, Lesotho Time, 01 December 2019 For eTendering submission - as indicated in eTendering system. Note that system time zone is in EST/EDT (New York) time zone.
14	22	Allowable Manner of Submitting Bids	□ Courier/Hand Delivery □ Submission by email ⊠ e-Tendering
15	22	Bid Submission Address	https://etendering.partneragencies.org BU Code: LSO10 Event ID number: 0000007850
16	22	Electronic submission (email or eTendering) requirements	 Format: PDF files only File names must be maximum 60 characters long and must not contain any letter or special character other than from Latin alphabet/keyboard. All files must be free of viruses and not corrupted. Max. File Size per transmission: 9mb
17	25	Date, time and venue for the opening of bid	Since bids are submitted through the e-Tendering system, bidders will receive an automatic notification once their Bids are opened.
18	27, 36	Evaluation Method for the Award of Contract	Lowest priced technically responsive, eligible and qualified bid.
19		Expected date for commencement of Contract	December 16, 2020

20		Maximum expected duration of contract	4 Months
21	35	UNDP will award the contract to:	One or more Proposers, depending on the following factors: Most Economical, technically compliant Bidder per Lot. Only One bidder per Lot, however if one bidder is the only technically compliant in multiple lots, the bidder may be awarded more than one LOT.
22	39	Type of Contract	Contract for Civil Works http://www.undp.org/content/undp/en/home/procurement/busi ness/how-we-buy.html
23	39	UNDP Contract Terms and Conditions that will apply	UNDP General Terms and Conditions for Works http://www.undp.org/content/undp/en/home/procurement/busi ness/how-we-buy.html
24		Other Information Related to the ITB	[All other instructions and information not yet mentioned so far in this Data Sheet but are relevant to the ITB must be cited here, and any further entries that may be added below this table row]

Section 4. Evaluation Criteria

Preliminary Examination Criteria

Bids will be examined to determine whether they are complete and submitted in accordance with ITB requirements as per below criteria on a Yes/No basis:

General Requirements

- 1) Duly Signed Forms A, B, C, D, E, F, G
- 2) Bid Form Signed by Authorized Person (s)
- 3) Bid Validity
- 4) Self-declaration of not being in UN security council List

Construction Company

- 1) DWRS Category B or C Certificate certified at source
- 2) Certificate of Incorporation (If Company) or Identity Document of Sole Trader
- 3) Trader's License Certified at source
- 4) Tax Clearance Certificate certified at source
- 5) Reference letters from 2 clients where similar services were performed

6) List of Similar Services (Minimum 3 similar Services) performed in the past 5 years, with Contact details of client (contact number and email address)

7) If External Financing will be sourced, attached Declaration from the Legally Recognized financial institution to provide funding to the project. Proposed financing should be above the Bid Amount.

8) Financial Statements submitted to Lesotho Revenue Authority with LRA Stamp in accounting period 2019/2020. Financial Statements should display a quick ratio above 2 to proof sound liquidity.

9) Minimum average annual turnover of LSL 2,000,000.00 accumulated over three years; 2017-2020

Personnel

1) CVs for Construction Supervisor, Site Forman and Manson with clear positions held for the last 3 years

2) Certified Educational Qualifications for Construction Supervisor, Site Forman and Manson

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Equipment

- 1) List of Manson Toolbox, Plumber Set and Standpipe formwork Set
- 2) Confirmation of Availability of 4X4 Pick up Vehicle and attach proof of Ownership.

Minimum Eligibility and Qualification Criteria

Eligibility and Qualification will be evaluated on a Pass/Fail basis.

If the Bid is submitted as a Joint Venture/Consortium/Association, each member should meet the minimum criteria, unless otherwise specified.

Subject	Criteria	Document Submission requirement
ELIGIBILITY		
Legal Status	Vendor is a legally registered entity.	Form B: Bidder Information Form
Eligibility	Vendor is not suspended, nor debarred, nor otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization in accordance with ITB clause 3.	Form A: Bid Submission Form
Conflict of Interest	No conflicts of interest in accordance with ITB clause 4.	Form A: Bid Submission Form
Bankruptcy	Has not declared bankruptcy, is not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against the vendor that could impair its operations in the foreseeable future.	Form A: Bid Submission Form
QUALIFICATION		
History of Non- Performing Contracts ¹	Non-performance of a contract did not occur as a result of contractor default for the last 3 years.	Form D: Qualification Form
Litigation History	No consistent history of court/arbitral award decisions against the Bidder for the last 3 years.	Form D: Qualification Form
Previous Experience	Minimum 5 years of relevant experience; Rural Water Supply Projects (Gravity System, Electrical pumping system and solar pumping system)	Form D: Qualification Form

¹ Non-performance, as decided by UNDP, shall include all contracts where (a) non-performance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Non-performance shall not include contracts where Employers decision was overruled by the dispute resolution mechanism. Non-performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

	Minimum 3 contracts of similar value, nature and complexity implemented over the last 5 years. (For JV/Consortium/Association, all Parties cumulatively should meet requirement).	Form D: Qualification Form
Financial Standing	Minimum average annual turnover of LSL 2,000,000 for the last 3 years or at least up to the total bid amount if less than 3 bids are bided for If External funding will be sources, display credit availability of not less than total bid amount. (For JV/Consortium/Association, all Parties cumulatively should meet requirement).	Form D: Qualification Form
	Bidder must demonstrate the current soundness of its financial standing and indicate its prospective long-term profitability. (For JV/Consortium/Association, all Parties cumulatively should meet requirement).	Form D: Qualification Form
Technical Evaluation	The technical bids shall be evaluated on a pass/fail basis for compliance or non-compliance with the technical specifications identified in the bid document.	Form E: Technical Bid Form
	Bids which fulfil the full requirements of Preliminary shall be considered Substantially Responsive. Only substantially responsive bids will progress to Stage II for Detailed Examination below.	
	 Stage I: Detailed Examination of Bids Compliance with requirements in the BOQ/Statement of works Construction Company Experience Qualification and Experience of Proposed personnel 	
	 Construction Equipment Detail Construction / Work Schedule 	
	Stage II Physical inspection of 2 site where similar works were undertaken.	
Financial Evaluation	Detailed analysis of the price schedule based on requirements listed in Section 5 and quoted for by the bidders in Form F. Price comparison shall be based on the landed price, including transportation, insurance and the total cost of ownership (including spare parts, consumption, installation, commissioning, training, special packaging, etc., where applicable)	Form F: Price Schedule Form
	Financial Examination of Bids and comparison of Bids after Arithmetic checks of the BOQs Comparison with budget/internal estimates.	

Section 5a: Schedule of Requirements and Technical Specifications/Bill of Quantities

1. Background

Climate change is negatively affecting ecosystems and livelihoods of local communities living in rural parts of Lesotho. The objective of the project "Reducing vulnerability from climate change in Foothills, Lowlands and Lower Senqu River Basin" is to mainstream climate risk considerations into the Land Rehabilitation Programme of Lesotho for improved ecosystem resilience and reduced vulnerability of livelihoods to climate shocks. The project supports the integration of climate change adaptation into national and sub-national land use planning and decision-making processes.

The project, is being implemented in three Community Councils in the District of Mohale's hoek, and aims to strengthen the resilience of climate-vulnerable communities by: i) enhancing the capacity of government institutions and local communities to mainstream climate change risks into policies, strategies, plans and programmes (outcomes 1&2); ii) implementing climate-smart ecosystem rehabilitation and management measures using a community/household based approach (outcome 3); and iii) mainstreaming climate change adaptation into local and national development planning and finance (outcomes 4&5).

In pursuit of Outcomes 2 and 3, as informed by the baseline consultancy findings and recommendations, community council meetings, consultations with LRP voluntary groups; the project and the IPs have proposed to support water harvesting using different methods including earth dams, roof water tanks and portable water systems as a response mechanism towards preparation for anticipated water scarcity in the coming years due to climate change as outlined in climate change scenario modeling final report.

2. Justification

The project and the implementing partners aim at motivating the community endeavors towards climate change adaptation and sustainable land management practices. The climate change scenario modeling report has highlighted that there will be reduction in rainfall and an increase in surface temperature. These scenarios will have adverse impacts on the households' livelihoods and access to water for household use, crop and livestock production. Considering that the main livelihood means of the participating community council is land-based, water shortages may further escalate vulnerability of the communities. As per findings of the studies undertaken, different interventions have been recommended that include some of the appropriate technologies that might be considered to combat land degradation and promote sustainable livelihoods. As part of improving on livelihoods, the project embark on assisting communities portable waters in 2018. The projects' support with new constructions, refurbishment and extensions of portable water is intended to reduce vulnerability of the rural communities from water shortage in priority areas identified by the Community Councils and Department of Rural Water Supply (DRWS). It is important to note that the support of RVCC in this initiative goes beyond water supply for domestic use alone but aims to further support diversification of livelihoods and sustainable production during dry periods. The project will further support

communities to manage water sources including wetlands and springs to protect them as important sources of water for domestic use.

3. Objective

- To increase the number of households with access to clean water for household consumption and other uses.
- To facilitate an increase in the number of households across three Community Councils adopting climate-smart land rehabilitation (Output 3.2) towards achievement of project targets of supporting 7,000 households and managing 50,000 ha of land.

4. Expected output

- Increased number of households with access to clean water for household and livelihood diversification.
- Improved households' resilience against projected water shortages caused by extreme weather patterns and land degradation.

5. EXPERIENCE OF CONSTRUCTION COMPANY

The Bidding Construction Company must meet the following general requirements:

- a) The Company must meet Lesotho Department of Rural Water Supply (DRWS) Category B & C Contractor Classification Standards.
- b) The Company should be legally registered under the Laws of Lesotho.
- c) The Company should possess a Legal Traders Licence
- d) The Construction Company must have a minimum of 5 years Rural Water Supply Projects (Gravity System, Electrical pumping system and solar pumping system)
- e) The Construction Company must have a minimum of 3 contracts of similar value, nature and complexity implemented over the last 5 years
- f) The Construction Company must possess experience in working within an environment that demands active participation of project stakeholders.
- g) The construction Company must possess extensive experience in production of timely progress reports within specified construction program.
- h) The construction Company must have the experience and capacity for setting out and implementing health and safety measures on work sites.
- i) Construction company must be able to assess risks associated with the work being carried out and the mitigations of such risks.
- The Bidding Company must possess experience and track record in producing acceptable finishing reports, and appropriate hand over of facilities, and ensure sustainability thereof.
- k) Minimum average annual turnover of LSL 2,000,000.00 accumulated over three years; 2017-2020

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6. STAFFING

Tenderers should note the requirements to employ adequate, skilled and experienced personnel to perform the work. The following are staffing and management requirements for the works at each Lot.

- 1) Construction Supervisor with the following qualifications:
 - 5 years' experience in supervision of civil works
 - Recognised Certificate in Bricklaying and plastering, Diploma in Civil engineering or related field.
- 2) Site Forman with the following qualifications:
 - 3 years' experience in supervision of civil works, and execution of construction works.
 - Recognised Certificate in Bricklaying and plastering or trade test certificate.
- 3) Mason with the following qualifications:
 - 3 years' experience in bricklaying and plastering, plumbing
 - Recognised Certificate in Bricklaying and plastering and or plumber or trade test certificate.

7. REQUIRED CONSTRUCTION EQUIPMENT

The Bidder must observe the minimum equipment requirements, which must be in good working condition and appropriately licensed below.

ltem	Equipment	Minimum Equipment Requirements per Lot
1.	Mason Toolbox	1
2.	Plumber Set	1
3	Standpipe formwork Set	1
4	Wheelbarrow	1
5	Transport – 4X4 or 2X4 Pick up Vehicle	1

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Government of the Kingdom of Lesotho

Ministry of Natural Resources

Department of Rural Water Supply

Technical Unit



DRWS Construction Specification

CONSTRUCTION SPECIFICATIONS

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PART B - Description of Work

A.1.CONCRETE

A.1.1 CEMENT

Cement used for water supply structures shall conform to SABS 471 or alternatively Portland Cement according to SABS 197-1 (Strength 42.5).

Cement shall be delivered in fifty (50) Kg bags. When delivered to the site the bags shall be in perfect condition and shall not be more than three (3) months old at the time of delivery. The cement shall be properly stored in a dry place and shall not be more than (6) months old when used.

Any torn bags and bags showing evidence of dampness or caking shall not be accepted and shall be removed from the site.

A.1.2 AGGREGATES

Course aggregate used for concrete shall be crushed dolerite, which is 19millimeters in size. Coarse river sand is not accepted as aggregate for concrete.

Sand used for concrete and for mortar shall be rough river sand, clean, free of soil and silt and shall contain no more than 5% of clay. The grains shall be of a maximum size of five (5) mm.

An alternative to the sand shall be the crushed rock sand being used for the construction of the Katse and Mohale dams in the Highlands water schemes of the country.

Aggregates shall be stored in such a way that the different sizes are separately stored and in such a way that segregation is minimised and intermixing of different materials and contamination by foreign matter is prevented.

A.1.3 WATER

Water used for mixing of concrete shall be clean, free of oil and grease and shall have no turbidity. The Ph shall be between 6 and 8.

A.1.4 REINFORCEMENT

Reinforcement mesh shall be REF 193 only and shall conform to SABS 1024. Mesh shall be delivered in sheets of $14.4m^2$.

Mild steel bars shall be eight (8) mm diameter bars conforming to SABS 920. Bars shall be delivered in lengths of 6m.

Reinforcement shall be stacked off the ground to prevent distortion and dirt or rust.

A.2. BRICKS AND STONES

Bricks shall conform to SABS 227 and shall have a minimum strength of 41 Mpa and shall have a maximum water absorption of 5% when immersed in water for 15 hours. The size of bricks shall be length 225 mm (+/- 3 mm), breadth 107 mm (+/- 2 mm) and height 75.5 mm (+/- 2.5 mm). Bricks from Loti Brick classified as 'Mohokare', 'Loti Rust' and 'Heart' fulfil the specifications. Bricks of other classifications shall be tested prior to delivery to site.

Sandstone used for building structures shall be non-porous and hard.

Dolerite stone can also be used for the construction of structures where the natural shape allows since it is difficult to shape dolerite stone.

A.3. PIPES AND FITTINGS

A.3.1 GALVANIZED STEEL PIPES AND FITTINGS

<u>Pipes:</u> Galvanised steel pipes are medium duty unless specifically specified light or heavy duty. The pipes and fittings shall comply with SABS 62. Pipes shall be delivered in lengths of 6m with length tolerance of 0 to + 50mm. Minimum wall thickness shall be as follows:

Pipe Size	Light Duty	Medium Duty	Heavy Duty
20 mm	2.1 mm	2.3 mm	2.8 mm
25 mm	2.4 mm	2.8 mm	3.5 mm
32 mm	2.4 mm	2.8 mm	3.5 mm
40 mm	2.6 mm	2.8 mm	3.5 mm
50 mm	2.6 mm	3.2 mm	3.9 mm
65 mm	3.0 mm	3.2 mm	3.9 mm
80 mm	3.0 mm	3.5 mm	4.2 mm
100 mm	3.3 mm	3.9 mm	4.7 mm

Pipes shall be tested to 5Mpa. Pipes shall be supplied with a galvanised steel socket in one end and a protective plastic cap in the other end. Alternatively the pipes can be supplied with protective caps on both ends and the sockets supplied separately.

<u>Fittings:</u> Pipe fittings shall conform to SABS 509 'Standard Specification for Malleable Cast Iron Pipe Fittings'. All pipes and fittings shall be for screwed joints with taper male and female threads in accordance with SABS 1109. Pipes and fittings shall be galvanised inside and outside in accordance with SABS 763.

Maximum pressure for cast iron fittings is 140 m and special high-pressure steel fittings shall be used for pipe sections with pressure above 140 m.

A.3.2 BRASS FITTINGS

Bib cocks shall conform to SABS 226. They shall be light pattern plain bib tap cobra no. 200 rough brass. The size shall be 20mm.

Gate valves shall be cobra no.1002/125cast brass full gate valve, class 8, with bonnet type head, non-rising spindle and guided wedge. Taper-thread female-end connections.

Check valves shall be cobra no. 1022 cast brass swing type check with female ends.

Float valves shall be cast brass valves with copper/brass ball.

Globe valves shall be cobra no.121 cast brass valve, heavy pattern SABS 226 – 1987 – class1.

The SABS stamp shall be clearly marked on any brass fittings accepted by DRWS.

Water meters shall Kent PSM cold potable water meters or of a similar or better quality.

A.4. MANHOLE FRAME AND COVER

Manhole frame and cover over water surfaces shall conform to SABS 10111. The size shall be 45cm by 60cm.

Manhole covers over pump installation chambers shall be fabricated from mild steel according to the drawing for 'Lockable Manhole Cover, DRWS'. The frame shall be made of 75mm x 50mm x 6mm unequal angle iron. The lid shall be made from 6 mm mild steel plate 1140mm x 900mm. The manhole cover shall be painted with corrosion protection paint.

A.5.FENCING MATERIALS

A.5.1 PUMP INSTALLATION SECURITY FENCE

The fence shall be 1.8m high. All materials used for the fence shall be galvanised. The corner posts shall be 76.5mm diameter, 2.4 m long with 45cm overhang and 2 stays. Intermediate posts shall be 50mm diameter, 2.4 m long with 45cm overhang. The diamond mesh shall be 2.5mm diameter with 75mm square openings. The plain wire used to support the diamond mesh shall be 4mm in diameter mounted at 30 cm interval vertically. Razor wire shall be installed in one loop on the 45cm overhang.

Gates for vehicle access shall be double gates 1.8m high, total 3.0 m wide, which shall be placed on the borehole side of the pump house. The vehicle gates shall be mounted on corner posts supported by stays. The gate for pedestrian access shall be 1.8m high and 1.2m wide and shall be placed on the side opposite the vehicle access gate. The pedestrian gate shall be mounted on intermediate posts. All to be locked with 100mm heavy duty Viro padlocks.

The standard size pump installation security fence consists of:

- 6 corner posts;
- 12 stays;
- 10 intermediate posts;
- One roll of 30 m length and 1.8m height of diamond wire mesh;
- One roll of 30 m razor wire;
- 280 m of 4 mm plain galvanised wire;
- 5 kg of binding wire;
- vehicle access double gate total 3.0m wide and 1.8m high;
- pedestrian gate 1.8m high and 1.2m wide.

A.5.2 SPRING CATCHMENT FENCE

Spring Catchment fence shall be post and barbed wire fence, 1.2 m high. Corner posts shall be 5" cresolite poles 1.8m long. Standards shall be Y shaped iron standards with holes for fastening the wire. Droppers shall be 1.2m long iron droppers. Barbed wire shall be galvanised standard barbed wire in 50 kg rolls. Bailing wire shall be 1.5mm galvanised wire.

A6. DIESEL ENGINE HOUSE DOORS AND WINDOWS

A.6.1 DOORS

The door for the diesel engine pump house shall be one 9" steel doorframe with two doors. The outside door shall be type A with AV vent opening size 81.5 cm x 203 cm opening outside with a special pad lock protection as shown on Drawing B 10 B.

The inside door shall be a security door lockable from inside with a 200mm shooter-bolt for pad lock. The security door shall be made of a 20mm square mild steel tube (wall thickness 2mm) placed vertically at 100mm interval and one horizontal tube at the level of the lock. The two padlocks shall be 100mm heavy duty Viro padlocks.

Frames and doors shall be painted with corrosion protection paint after welding.

A.6.2 WINDOWS

For each diesel engine house there shall be two W1 type windows, which shall be louvered window type ALV/BLV of size 158 by 74.5 cm.

A.7.GABIONS

The gabions are fabricated to SABS 1200 D.K. standard. The gabions are made from 2.7 mm galvanised wire to SABS 675 Class A. The mesh has 80 mm x 100 mm openings. The sizes are $2m \times 1m \times 0.5m$ or $2m \times 1m \times 1m$.

A.8.TIMBER AND NAILS

Timber shall be SA Pine of good quality. Timber shall be straight with maximum tolerances of 10 mm per metre.

Nails shall be wire nails of specified length.

A.9. DICING OIL AND THREAD-SEALING TAPE

Dicing oil shall be un-used and delivered in 5 liter sealed containers. The dicing oil shall be of a quality approved for drinking water supplies.

Thread-sealing tapes are standard plastic based thread-sealing tapes in rolls of approximately 30 m.

A.10. WATER-MINDER TOOL BOX

The water- minder toolbox shall be a PROSTWARE BOX of type toolbox collapse/3TRAY code 3302. It shall supplied with a 50mm medium duty Viro padlock.

The contents of the box shall be:

- One 18 inches rigid pipe wrench
- One 12 inches rigid pipe wrench
- One Geodore 12 inches shifting spanner
- Two thread sealing tapes in rolls of approximately 30 m in length.

CONSTRUCTION SPECIFICATIONS

PART B - Description of Work

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A. B.1. Pipework

B.1.1 Excavation and Back-filling

The minimum cover over any pipeline is either 60cm of soil or 20cm of stone masonry build on top of the pipe.

Excavation for pipelines in soil shall have a width of 40 cm and either a depth adequate for covering the pipeline with 60 cm of soil or excavated to a solid rock surface.

Back-filling of soil over the pipeline shall be done in layers of 20 cm and compacted manually between the layers. The first layer over and around the pipeline shall be free of stones larger than 5 cm in diameter.

In places where a depth of the trench of 60cm cannot be reached because of rock, the rock shall be excavated to a depth of 30 cm if the rock is soft and can be excavated using hand tools such as crowbar, hammer & chisel, pickaxes etc. After laying the pipe, the trench in rock shall be back-filled with broken rock or stones and cement-sand mortar mixed 1:4.

Only in places where the rock is too hard to be excavated by hand, the pipeline shall be laid on the rock surface and a stonemasonry wall with the dimension 40cm wide and 20cm above the pipeline shall be constructed using cement-sand mortar mixed 1:4.

Any trench in soil above the stone masonry pipe cover shall be back-filled and compacted.

B.1.2 Pipe laying

HDPE Pipes:

uPVC Pipes:

GI Pipes:

Before laying and joining, all soil and other matter shall be removed from inside of the pipe by holding it vertically upwards. Clean the threads with a steel brush before applying five (5) layers of thread sealing tape to make a watertight joint between pipes. The connection of pipes is made using fittings. Bends and elbows shall be installed at changes in direction of the pipeline. Bending of pipes to form bends is not permitted.

When a pipe has to be cut and threaded, the lengths of the threads for the various pipe diameters shall be:

- 20mm pipe: 15mm thread
- 25mm pipe: 17mm thread

- 32mm pipe: 19mm thread
- 40mm pipe: 21mm thread
- 50mm pipe: 24mm thread
- 65mm pipe: 27mm thread
- 80mm pipe: 30mm thread

B.1.3 Washouts

Washouts shall be installed on positions marked on the site plan. The washouts shall be constructed at the low points so as to permit draining of the pipelines and flushing of sediments. Unless otherwise specified, washouts shall be constructed with a tee on the pipeline facing down, M&F bend and a pipe sloping down with a length so that the end of the pipe is above ground level. The end of the pipe is closed with a plug, and shall be protected with stone masonry according to the ground conditions, typically of a size of 0.5 m x 0.5 m x 0.5 m.

B.1.4 Air vents

Pipelines shall be laid so that high points occur at natural air release points such as standpipes or service connections. Air-vents shall be installed at highpoints in accordance with the layout plan. Air-vents shall normally be a tee facing up and closed with a plug to be opened manually, or where the pressure allows, a vent pipe shall be installed. The air-vent shall be protected with stone masonry according to the ground conditions, typically of a size of $0.5 \text{ m} \times 0.5 \text{ m}$.

If an air-release valve is specified, a valve chamber 45 cm x 60 cm shall be constructed to protect the valve.

B.1.5 Pipe sleeves

Where the normal cover of the pipeline is not possible, the pipeline shall be sleeved. The diameters of the sleeves to the different pipe diameters shall be:

- 40mm for 20mm and 25 mm pipe,
- 50mm for 32mm pipe,
- 65mm for 40mm pipe,
- 80mm for 50mm pipe and
- 100mm for 65mm pipe.

The ends of the sleeve pipe shall always be anchored in a concrete foundation minimum 40 cm x 40 cm x 40 cm.

B.1.6 Road crossings

Where possible road crossings shall be through an existing road culvert. The water pipe shall be placed in the culvert in a way that it does not obstruct the flow in through the culvert. If it is not

possible to cross the road through an existing culvert, the Ministry of Works/ Roads Department/ Rural Roads Department shall be contacted before excavation in constructed roads.

Pipelines crossing a road shall be sleeved. The sleeve shall extend 2 meters from the drain on both sides of the road.

B.1.7 Donga crossing

Pipelines can cross dongas either as a suspended pipeline or under the bottom of the donga and protected by gabions or other form of strong cover. Reference to drawing D-04.

The diameter of sleeves for suspended donga crossings shall be as specified above for sleeve pipes. Supporting pillars and end of sleeves shall be anchored in concrete foundations (PC 250) minimum 40 cm x 40 cm x 40 cm. Supporting pillars shall be constructed outside the water course in the donga.

Gabions are supplied folded. On site they are opened and assembled by wiring together all the corners. Empty units are subsequently joined together along all adjacent edges, both horizontally and vertically. The filling is carried out with hard stones of a size slightly larger than the openings in the mesh. The filling should be done so that the sides of the gabions are straight. The gabion is filled to one half of the volume and bracing wires are placed inside every 50cm. The gabion is then filled to the full volume and bracing wires are placed on top of the stones before closing the gabion.

Foundation for the bottom gabion shall be excavated to a level where the ground is firm and free of topsoil and to at least half of the height of the gabion. The foundation shall be level. A gabion of size 0.5 m x 1 m x 2 m shall be placed in the middle of the donga and normal size gabions 1 m x 1 m x 2 m on the sides so that the water will flow in the middle of the donga. The end of the gabions shall extend a minimum of 2 meters inside the wall of the donga.

B.1.8 Scour Checks

The back filling of trenches on steep slopes needs careful attention. Surface water tends to wash out the back-filled material. To prevent this, scour checks are built in the trench while back filling. The scour check is a stonemasonry walls build inside the trench of a minimum dimension of 60 cm deep and 100 cm long and 20 cm wide, extending into the walls of the trench.

Scour checks are constructed when the slope of the ground is more than 10 degrees. The scour checks are constructed every 5 meters when the slope is between 10 and 20 degrees and every 3 meters when the slope is above 20 degrees.

B.1.9 Pipeline markers

Spring catchments, tees, private connections and ends of pipe sleeves including road crossings shall be clearly marked with a pipe line marker. The pipeline marker is a 1 meter long piece of pipe of a diameter the same as the pipe in the ground. The pipeline marker is embedded 50cm in concrete. The

marker is placed on top of the tee or the end of the sleeve, which it shall mark.

B.1.10 Valves

Valves are installed in brick or stone masonry valve chambers covered with pre-cast slabs according to drawing no S/B-04. Valve chambers at tanks shall be constructed parallel to the tank wall and at a distance between the tank and the valve chamber of 50cm.

B.1.11 Pressure Testing of Pipelines

No pipe shall be covered prior to inspection by the construction supervisor. Pipe joints shall be left un-covered until pressure testing has been performed.

Pressure testing is performed by filling with water the section of the pipe system, which has to be tested. All taps and washouts shall be plugged. All pipe joints shall be inspected for leaks and pipeline re-jointed if leaks appear.

B.1.12 Private connections

Tees (including reducing bush to 20mm and a 20mm plug) shall be installed for private connections during the construction of pipelines in the water distribution system. The tees shall be installed for all connections, which are anticipated within the design period of the water system. The location of the tee shall be marked with a 20mm pipeline marker. The household installing the private connection shall hire a qualified contractor to install the connection from the tee to the yard or house and pay for all materials and labour costs. Only the tee, reducing bush and plug is included in the construction contract for the water system.

B. B.2. Concrete Work

B.2.1 Excavation for foundations for structures

Excavations shall be carried out to a solid level platform free from topsoil. Excavations shall be large enough to allow space for free movement during construction. Unconsolidated or filled material is not accepted under structures. Lean concrete 1:6:10 shall be cast as a base for reinforcement and the concrete slab covering an area 20 cm larger than the size of the structure.

B.2.2 Mixing, placing and compaction

Standard gauge boxes of dimensions in millimetres 300 by 300 by 356 deep shall be used to measure the volumes of the sand and aggregates. This volume is the equivalent of one 50 kilograms bag of cement. Alternatively mortar boxes or other containers can be used to measure both cement, sand and aggregates. If wheelbarrows are used for the measuring of aggregates, the top shall be levelled with a straightedge to ensure that the volumes are accurate.

The concrete must be mixed in suitable quantities sufficient only for that section of the work under construction.

If a mechanical concrete mixer is not used, the following method of hand mixing shall be used:

- The mixing shall be done on a lean concrete platform of PC 100 or mix (1:6:10) and shall be of minimum dimensions 2.0m by 2.0m by 50mm thick.
- The measured quantity of sand and cement are spread out on the mixing platform and mixed dry using a shovel turning the mixture over and over until a uniform colour is achieved.
- The sand cement mix is spread in a uniform layer of 10cm thickness and the measured quantity of course aggregate is spread in an even layer on top. Mix dry using a shovel turning the mixture over and over until the sand cement mixture and the course aggregate is uniformly mixed. The uniform mixture is spread out in the thickness of about twenty (20)cm.
- Water is sprinkled over the mixture and simultaneously turned over. The operation is continued until a uniform homogeneous concrete is obtained. Water in small quantity shall be added by sprinkling towards the end of the mixing to get the required consistency.

Concrete for foundations of major structures (tanks of 15 m^3 and above in volume) shall be vibrated with a mechanical vibrator. Concrete shall be placed in one horizontal layer and compacted using a probe type vibrator. The vibration shall be continued until no air bubbles appear and the surface of the concrete has a glazed appearance.

Concrete in smaller structures shall be compacted by ramming with a clean wooden pole until the concrete is well compacted.

Concrete for major structures (tanks of 15 m^3 and above in volume) shall only be cast in the presence of the construction supervisor or after the written approval of the supervisor to continue with the casting. The contractor shall notify the supervisor three (3) days prior the day of casting concrete, so that the supervisor makes arrangements to be present on the site.

B.2.3 Concrete curing

All concrete shall be protected from rapid drying by covering for at least fourteen (14) days with polyethylene sheets. Protection of the concrete against rapid drying shall start immediately after the concrete is cast.

No building shall start on top of the foundation slabs until the concrete is twenty-four (24) hours old.

B.2.4 Concrete mixtures for DRWS Structures

<u>PC 100 which is mix (1:6:10)</u>: This is lean concrete used for levelling uneven surfaces, concrete mixing platforms etc. The minimum twenty-eight (28) day crushing strength shall be fifteen (15) Newton per square millimetre. The minimum seven (7) day crushing strength shall be eight (8) Newtons per square millimetre.

<u>PC 200 which is a mix (1:3:5)</u>: This mix is used for DRWS structures that are not reinforced. The minimum twenty-eight (28) day crushing strength shall be twenty (20) Newtons per square

millimetre. The minimum seven (7) day crushing strength shall be fourteen (14) Newtons per square millimetre.

<u>PC 250 which is a mix (1:2.5:4)</u>: This mix is used for DRWS structures that are reinforced like foundations, platforms and covering of tanks and siltboxes etc. The minimum twenty-eight (28) day crushing strength shall be twenty-five (25) Newtons per square millimetre. The minimum seven (7) day crushing strength shall be seventeen (17) Newtons per square millimetre.

<u>PC 300 which is a mix (1:2:3)</u>: Used for concrete where a higher strength is required or necessary like the pre-cast slabs used for covering tanks and standpipe pillars. The minimum twenty eight (28) day crushing strength shall be thirty (30) Newtons per square millimetre. The minimum seven (7) day crushing strength shall be twenty-one (21) Newtons per square millimetre.

B.2.5 Reinforcement

Reinforcement shall be positioned accurately according to the drawings. Tolerance for location of reinforcement is 10 mm. Reinforcement rods shall be bound with 1 mm binding wire on all junctions. The reinforcement shall never be placed on the soil surface, but on lean concrete. The side and top cover to the reinforcement in the foundations for structures shall be 15cm.

Spacer blocks shall be provided to ensure the reinforcement is correctly positioned in the works. Spacer blocks shall be 40mm x 40mm x 40mm. Each spacer block shall be made of PC 300 concrete and binding wire shall be securely embedded into each block to permit adequate fastening to the reinforcement.

B.2.6 Concrete testing

The strength of the concrete will be tested by the Construction Supervisor and the Quality Inspector using 'Concrete Test Hammers'.

If the testing shows the strength of the concrete to be less than the specified strength for the particular grade of concrete, the contractor shall, at his own expense remove the defective concrete and reconstruct with fresh concrete.

The contractor shall ensure that the consistency of the concrete remains within acceptable limits. The construction supervisor can require slump tests to be carried out if the consistency is questionable. The contractor will be required to supply the equipment for slump tests. The slump cones shall conform to SABS 863.

B.2.7 Form-work

Form-work shall be sufficiently watertight to prevent any loss of liquid from the concrete. Formwork shall be constructed of materials of such quality and strength as to ensure rigidity through out the placing, vibration, compaction, setting and hardening of the concrete. Before placing any concrete all rubbish and all foreign matter shall be removed from the inside of the form-work and the inside of the form-work shall be thoroughly washed with water. Before re-use all form-work shall be properly re-conditioned and all form surfaces that are to be in contact with the concrete shall be thoroughly cleaned.

Form-work shall at earliest be removed when the concrete is twenty-four (24) hours old. Form-work shall be removed with care so as to avoid injury to the concrete.

C. B.3 Masonry

B.3.1 Brickwork

All DRWS structures shall be build in English bond.

The walls of structures of volume up to 15 cubic meters shall be one (1) brick thick. Structures above 15 cubic meters in volume shall be constructed with walls of one and half brick in thickness.

Horizontal joints shall be an average thickness of 12mm. The vertical joints shall be an average thickness of 10mm. All joints must be completely filled with mortar. Pointing shall be round flush jointing using a plastic tube or similar.

The tolerance in dimensions and plumpness for brick structures shall be 10mm.

All bricks shall be soaked in water before building.

B.3.2 Stonemasonry

Stone structures shall be build in un-coursed rubble stone masonry.

<u>Stone shaping:</u> Stones shall be broken into pieces, which can be carried by one person. The stone shall be cut roughly on all sides, if possible according to the natural shape. No angle between the face and the sides should be greater than 90 deg. The face shall be shaped so that it is straight and even with a tolerance of 10mm. Corner stones are shaped with the face and the reverse face at 90 deg. angles.

<u>Building:</u> Only the cornerstones shall have horizontal joints, all other joints must be irregular. 4 joints should never come together on the face of the wall. Straight joints longer than 2 stones shall be avoided. Every third stone shall be a binder, which is a stone reaching into the wall a minimum $^{2}/_{3}$ of the thickness of the wall. The top of the wall shall be built with shaped stones, which are properly bonded to the rest of the wall. The overlap of the stones shall be a minimum of 10 cm in all directions.

Before building on the foundation, the concrete shall be cleaned with a steel brush and roughened with a chisel if necessary. The corners shall be built first to a height of 1 meter and the wall filled in between. Stones shall be cleaned and wetted before use. The stones shall be laid on a mortar bed and then knocked in the mortar with a hammer. The face and the inside wall shall be built at the same

time. Stiff plastic mortar shall be used. Slurry mortar shall never be used to fill the inside of the wall.

The size of the joints shall be 25mm thick. After building the joints are scraped out to a depth of 2 - 3 cm. The joints are filled with a fine rich mortar 1:2 to a depth of 2-5 mm inside the face of the stone. The joints are carefully smoothened with a pointing trowel.

The tolerances in the dimensions and plumpness shall be twenty (20) millimetres.

B.3.3 Waterproof Plastering

Waterproof plastering shall always consist of four (4) layers:

<u>Spatterdash:</u> This first layer shall be four (4) millimetres thick consisting of mix 1:2 cement to clean rough sand with largest grain size of 4 millimetres. This layer is applied as a slurry to the inside walls. The walls shall be well wetted before the spatterdash is applied. If necessary a second layer may be applied to ensure full coverage and water proofing of the structure. The splatterdash is cured for seven (7) days.

<u>Rendering</u>: The second layer is the rendering layer, which consists of a mix of 1:3 cement to coarse sand with largest grain size of 4 millimetres. This layer should be 10mm thick and shall not be floated.

<u>Setting coat:</u> The setting coat consisting of mix 1:2 cement to clean sand with largest grain size of 2-3mm is applied in the form of slurry as soon as the rendering coat has set. The setting coat is floated to make a smooth surface for the cement paste.

<u>Cement paste</u>: The cement paste consists of a thin paste of cement and water that is applied in a layer of 1mm immediately after the setting coat. The cement paste hardens to form a very smooth hard layer that makes cleaning of the inside of the water retaining structures easy.

B.3.4 Mortar and Topping

The mortar used for building with bricks and stonemasonry shall be mix 1:4 cement to clean sand with the largest grain size of 4mm. The mortar used for floating the surface of concrete shall be mix 1:3 cement to clean sand with the largest grain size of 2-3 mm.

Finishing the surface to concrete cover slabs of siltboxes and tanks shall be performed in one operation. After casting the concrete, the concrete shall be floated adding a small amount of mortar while the concrete is still wet.

B.3.5 Leak test of water retaining structures

After completion of the water retaining structure the interior of the structure shall be cleaned and filled with water. The structure shall be allowed to stand in this full state for seven (7) days.

The Supervisor shall monitor the water level in the structure during these seven days. If the drop of the water level during these 7 days exceeds five (5) millimetres or if there is other evidence of leakage the contractor shall drain the structure and repair the leakage from the inside of the structure.

D. B.4. Water Sources

B.4.1 Spring Catchment

Spring catchments shall be built in a way that no water from the spring is lost and so that no surface water can seep into the spring and contaminate the water.

The excavation is done to the rock surface if possible so that the spring catchment can be constructed on the rock. If this is not possible due to the depth of soil over the rock the excavation shall be done so that the soil cover on top of the spring catchment is a minimum of 2 meters.

The standard spring catchment is constructed as a closed catchment. A wall is build down stream from the eye of the spring. The area inside the wall is filled with clean hard stones and the top is sealed with a concrete slab. The outlet pipe shall be placed lower than the eye of the spring.

Alternative designs of spring catchments shall require prior approval by the DRWS Water Supply Engineer.

B.4.2 Protection of area above Springs

The area above the spring must be protected for erosion and pollution of the water source. A surface water diversion drain shall be constructed to divert any rainwater away from the spring area.

When a fence is specified, it must be constructed as a 5 string barbed wire fence. Corners are constructed with 3 vertical wooden poles with horizontal poles and wire crosses between. The Poles are anchored in concrete. Iron standards are placed every 6 meters and anchored in concrete and droppers every 1.5 meters. All 5 wires are tied to droppers and standards with bailing wire.

B.4.3 Protection of Borehole/ Pump Installation

The pump installation and the construction of the pump house shall be set out in a manner that will allow for access to the borehole and the pump installation for a drilling rig and maintenance vehicles.

A security fence shall be constructed around the borehole and pump house or solar panel installation. The fence shall be 2 m from all the sides of the pump house or the solar panel installation. The fence shall have a gate for vehicle access, positioned so that a drilling rig can get access to the borehole. A gate for pedestrian access shall be provided conveniently close to the pump house door or the pump installation.

E. B.5 Water Minder Training

The two water minders appointed by the Village Water Committee must be trained in the maintenance of the water system.

The water minder must know the location of all pipelines and structures in the water supply system, and shall be instructed in how to carry out regular inspections of the system and preventive maintenance such as clean out the pipe system and regular cleaning of tanks and silt boxes.

The water minder must be able to carry out minor repairs such as replace taps and washers, replace valves and repair minor leaks in structures.

The water minder must be instructed in the environmental protection of the area around the spring or the borehole.

Water Minder Training includes the provision of a water minder toolbox as specified above under Part A.10 of this Construction Specifications.

Technical Drawings (Attached)

Bill of Quantities

Lot 1

Ref: Lot1-1

Village Name: Ha-Nts'ibi

39km Road 0km Off-road

Description of Works	Size	Unit	Drg. No	Quantity	Unit
Supply and Install Lightning Arrestors				3	no
Re-Wiring of Solar Modules				1	no
SQF-2.5-2 pump				1	no

Ref: Lot1-2

Village Name: Ha-Mootsinyane

35 KM Road

					. .
				1 Km Off-	
			Drg.	Quantity	Unit
Description of Works	Size	Unit	No		
Valve Chamber	45x60	cm	S-04	2	no
Distribution Chamber			S-02	1	no
Storage Tank Replaster	10	m3	S-05	1	no
Storage Tank	2	m3	S-05	1	no
Waterpoint	2000	1	S-08	1	no
Waterpoint	1000	Ι	S-08	1	no
Standpipe (with washout)				3	no
Standpipe (standard)			C-01	1	no
Globevalve for standpipe				2	no
Washout with Plug	40			1	no
Air-release with plug	40			2	no
Washout with Plug	32			1	no
Spring Catchment			0-1	4	no
Pipelaying	50	mm	GI	18	m
Pipelaying	63	mm	HDPE	150	m
Pipelaying	40	mm	HDPE	400	m
Pipelaying	32	mm	HDPE	200	m
Pipelaying	25	mm	HDPE	1400	m
Excavation trench (Soil)	60	cm	0-4	300	m
Excavation trench (Soil)	40	cm	0-4	1280	m
Excavation trench (Soil)	20	cm	0-4	750	m
Backfilling trench	60	cm	0-4	300	m
Backfilling trench	40	cm	0-4	1280	m
Scourchecks				20	no
Stone wall (40cm wide x 20 cm high)	20	cm	0-4	619	m
Pipe sleeve	50	mm		24	m
Pipe sleeve	65	mm		18	m

Frame for Solar Panel			1	no
GF 100W solar modules + Lightning Arrestors			5	no
SQF-2.5-2 pump			1	no
Supply & Install Float Valve	32	mm	3	no
Supply & Install Bib Cobra for Taps			4	no

Ref: Lot1-3

Village Name: Ha-Ntabanyane

36 KM Road

				0 km Off-road	
			Drg.	Quantity	Unit
Description of Works	Size	Unit	No		
Siltbox	300	I	S-01	1	no
Siltbox	1000	I	S-01	1	no
Valve Chamber	60x95	cm	S-04	1	no
Storage Tank	15	m3	S-05	1	no
Standpipe (with washout)				2	no
Globevalve for standpipe				2	no
Washout with Plug	25			1	no
Air-release with plug	25			1	no
Washout with Plug	40			6	no
Air-release with plug	40			6	no
Spring Catchment with Manhole			0-1	3	no
Pipelaying	50	mm	GI	36	m
Pipelaying	25	mm	HDPE	450	m
Pipelaying	40	mm	HDPE	3000	m
Excavation trench (Soil)	60	cm	0-4	550	m
Excavation trench (Soil)	40	cm	0-4	2074	m
Excavation trench (Soil)	20	cm	0-4	936	m
Backfilling trench	60	cm	0-4	550	m
Backfilling trench	40	cm	0-4	2074	m
Scourchecks				25	no
Stone wall (40cm wide x 20 cm high)	20	cm	0-4	936	m
Pipe sleeve	65	mm		36	m
Donga Crossing	65	mm		4	no
Donga Crossing with Sling	65	mm		1	no
Supply Allumin. Step Ladder 3m				1	no
Supply & Install Bib Cobra for Taps				8	no

Ref: Lot1-4

Village Name: Ha-Nts'eno

25Km Road

	0 Km Off-road						
			Drg.	Quantity	Unit		
Description of Works	Size	Unit	No				
Distribution Chamber			S-02	1	no		
Valve Chamber	45x60	cm	S-04	1	no		
Replastering Storage Tank	10	m3	S-05	1	no		
Standpipe (with washout)				2	no		
Globevalve for standpipe				2	no		
Washout with Plug	40			1	no		
Air-release with plug	40			1	no		
Pipelaying	32	mm	GI	12	m		
Pipelaying	40	mm	HDPE	500	m		
Pipelaying	25	mm	HDPE	1100	m		
Excavation trench (Soil)	60	cm	0-4	962	m		
Excavation trench (Soil)	40	cm	0-4	400	m		
Excavation trench (Soil)	20	cm	0-4	250	m		
Backfilling trench	60	cm	0-4	962	m		
Backfilling trench	40	cm	0-4	400	m		
Scourchecks				19	no		
Stone wall (40cm wide x 20 cm high)	20	cm	0-4	250	m		
Pipe sleeve	65	mm		36	m		
Supply & Install Float Valve	32	mm		2	m		

Lot 2

Ref: Lot2-1

Village Name: Ha-Makoanyane

55 Km Road

	0 Km Off-road							
Description of Works	Size	110:0	Drg.	Quantity	Unit			
Description of Works	Size	Unit	No					
Siltbox	1000		S-01	1	no			
Standpipe (with washout)				1	no			
Globevalve for standpipe				1	no			
Washout with Plug	25			1	no			
Air-release with plug	25			1	no			
Spring Catchment			0-1	1	no			
Pipelaying	50	mm	GI	24	m			
Pipelaying	25	mm	HDPE	926	m			
Excavation trench (Soil)	40	cm	O-4	500	m			
Excavation trench (Soil)	20	cm	O-4	424	m			
Backfilling trench	40	cm	O-4	500	m			
Scourchecks				20	no			
Stone wall (40cm wide x 20 cm high)	20	cm	0-4	424	m			
Pipe sleeve	40	mm		24	m			

Village Name: Bereng-Matsoho

26Km Road

	0Km Off-road						
			Drg.	Quantity	Unit		
Description of Works	Size	Unit	No				
Valve Chamber	60x95	cm	S-04	1	no		
Storage Tank +Step Ladder 3m	7.5	m3	S-05	1	no		
Standpipe (standard)			C-01	2	no		
Standpipe (with washout)				1	no		
Globevalve for standpipe				2	no		
Washout with Plug	32			2	no		
Air-release with plug	32			3	no		
Washout with Plug	50			4	no		
Air-release with plug	50			3	no		
Air-release with plug	50			5	no		
Pipelaying	40	mm	HDPE	500	m		
Pipelaying	32	mm	HDPE	2300	m		
Pipelaying	25	mm	HDPE	3000	m		
Excavation trench (Soil)	60	cm	0-4	800	m		
Excavation trench (Soil)	40	cm	0-4	3045	m		
Excavation trench (Soil)	20	cm	0-4	1555	m		
Backfilling trench	60	cm	0-4	800	m		
Backfilling trench	40	cm	0-4	3045	m		
Scourchecks				15	no		
Stone wall (40cm wide x 20 cm high)	20	cm	0-4	1225	m		
Pipe sleeve	50	mm		36	m		
Pipe sleeve	80	mm		48	m		
Donga Crossing	50	mm	0-4	3	no		
SQF-1.2-3 pump				1	no		
Supply & Install Float Valve	32	mm		3	no		

36 Km Road

Phiera Mafithe

Village Name: Makhabane (Sehlabeng)

0 Km Off-road

			Drg.	Quantity	Unit
Description of Works	Size	Unit	No		
Valve Chamber	45x60	cm	S-04	1	no
Storage Tank	7.5	m3	S-05	1	no
Pipelaying	25	mm	HDPE	50	m
Excavation trench (Soil)	40	cm	0-4	50	m
Backfilling trench	40	cm	0-4	50	m

Village Name: Morobong

39 Km Road

				road	
			Drg.	Quantity	Unit
Description of Works	Size	Unit	No		
Standpipe (with washout)				1	no
Washout with Plug	40			2	no
Air-release with plug	40			1	no
Pipelaying (Class 16)	40	mm	HDPE	800	m
Pipelaying	25	mm	HDPE	300	m
Excavation trench (Soil)	60	cm	0-4	100	m
Excavation trench (Soil)	40	cm	0-4	750	m
Excavation trench (Soil)	20	cm	0-4	150	m
Backfilling trench	60	cm	0-4	100	m
Backfilling trench	40	cm	0-4	750	m
Scourchecks				5	no
Stone wall (40cm wide x 20 cm high)	20	cm	0-4	150	m
Pipe sleeve	80	mm		18	m
Donga Crossing	80	mm		1	no
Ground Cable [16mm2 * 2core]				350	m
Supply and Install Electric pump (SP3A-33)				1	no
Supply and Install Control Box (NIST)				1	no
Supply & Install Gate Valve	40	mm		3	no

Village Name: Meriting

29 Km Road

0 Km Off-road

			Drg.	Quantity	Unit
Description of Works	Size	Unit	No		
Standpipe (standard)			C-01	1	no
Standpipe (with washout)				5	no
Globevalve for standpipe				4	no
Washout with Plug	25			4	no
Air-release with plug	25			4	no
Pipelaying	25	mm	HDPE	3800	m
Excavation trench (Soil)	60	cm	0-4	800	m
Excavation trench (Soil)	40	cm	0-4	2000	m
Excavation trench (Soil)	20	cm	0-4	1000	m
Backfilling trench	60	cm	0-4	800	m
Backfilling trench	40	cm	0-4	2000	m
Scourchecks				30	no
Stone wall (40cm wide x 20 cm high)	20	cm	0-4	1000	m
Pipe sleeve	40	mm		48	m
Donga Crossing	50	mm	0-4	4	no
Supply & Install Float Valve	40	mm		1	no

Lot 3

Ref: Lot3-1

Village Name: Lekhalong (Anone)

53 Km Road

		1	r	0 Km Off-	road
			Drg.	Quantity	Unit
Description of Works	Size	Unit	No		
Valve Chamber	45x60	cm	S-04	1	no
Demolish old Tank and dispose rubble	4	m3	S-05	1	no
Storage Tank	7.5	m3	S-05	1	no
Standpipe (standard)			C-01	1	no
Pipelaying	40	mm	HDPE	350	m
Pipelaying	32	mm	HDPE	300	m
Excavation trench (Soil)	60	cm	0-4	200	m
Excavation trench (Soil)	40	cm	0-4	570	m
Excavation trench (Soil)	20	cm	0-4	500	m
Backfilling trench	60	cm	0-4	200	m
Backfilling trench	40	cm	0-4	570	m
Stone wall (40cm wide x 20 cm high)	20	cm	0-4	500	m
Pipe sleeve	50	mm		30	m
Pipe sleeve	65	mm		24	m
Road Crossing	65	mm		1	no
DB Board + Controll box IO50				1	no
GF 100W solar modules + Lightning Arrestors				8	no
16mm x 2Core Armoured Cable				500	m
Pole & Frame filled with concrete				2	no
SQF-2.5-2 pump with All Accessories				1	no
Devils Fork for Solar Modules				1	no

Ref: Lot3-2

Village Name: Raisa

41Km Road

	I	1	0 Km Off-road					
			Drg.	Quantity	Unit			
Description of Works	Size	Unit	No					
Waterpoint	1000	1	S-01	1	no			
Supply & Install Bib Cobra for Taps				10	no			
Standpipe (with washout)				4	no			
Globevalve for standpipe				3	no			
Washout with Plug	25			3	no			
Air-release with plug	25			3	no			
Spring Catchment			0-1	1	no			
Pipelaying	50	mm	GI	12	m			
Pipelaying	25	mm	HDPE	900	m			
Excavation trench (Soil)	60	cm	O-4	200	m			
Excavation trench (Soil)	40	cm	O-4	500	m			
Excavation trench (Soil)	20	cm	0-4	212	m			
Backfilling trench	60	cm	0-4	200	m			
Backfilling trench	40	cm	O-4	500	m			
Scourchecks				10	no			
Stone wall (40cm wide x 20 cm high)	20	cm	O-4	212	m			
Pipe sleeve	50	mm		36	m			

Ref: Lot3-3

Village Name: Ha-Thabo

55 Km Road

		1		0 Km Off-ı	road
			Drg.	Quantity	Unit
Description of Works	Size	Unit	No		
Valve Chamber	45x60	cm	S-04	1	no
Distribution Chamber			S-02	1	no
Washout with Plug	25			1	no
Air-release with plug	25			1	no
Spring Catchment			0-1	2	no
Pipelaying	32	mm	GI	9	m
Pipelaying	63	mm	HDPE	120	m
Pipelaying	25	mm	HDPE	500	m
Excavation trench (Soil)	60	cm	0-4	150	m
Excavation trench (Soil)	40	cm	0-4	300	m
Excavation trench (Soil)	20	cm	0-4	70	m
Backfilling trench	60	cm	0-4	150	m
Backfilling trench	40	cm	0-4	300	m
Scourchecks				12	no
Stone wall (40cm wide x 20 cm high)	20	cm	0-4	170	m
Pipe sleeve	40	mm		18	m
Supply & Install Float Valve				3	no

Ref: Lot3-4

Village Name: Fika-La-Tsoene

36 Km Road

	1	1		0 Km Off-	road
			Drg.	Quantity	Unit
Description of Works	Size	Unit	No		
Siltbox	300	I	S-01	1	no
Pressure Break Tank + Float Valve	300	I	S-03	1	no
Valve Chamber	60x95	cm	S-04	1	no
Storage Tank + Float Valve	5	m3	S-05	1	no
Standpipe (standard)			C-01	4	no
Standpipe (with washout)				2	no
Globevalve for standpipe				5	no
Washout with Plug	25			3	no
Air-release with plug	25			2	no
Washout with Plug	32			4	no
Air-release with plug	32			4	no
Spring Catchment			0-1	1	no
Pipelaying	50	mm	GI	12	m
Pipelaying (Class12)	32	mm	HDPE	415	m
Pipelaying (Class12)	25	mm	HDPE	3481	m
Excavation trench (Soil)	60	cm	0-4	920	m
Excavation trench (Soil)	40	cm	0-4	2253	m
Excavation trench (Soil)	20	cm	0-4	1272	m
Backfilling trench	60	cm	0-4	920	m
Backfilling trench	40	cm	0-4	2253	m
Scourchecks				52	no
Stone wall (40cm wide x 20 cm high)	20	cm	O-4	1537	m
Pipe sleeve	40	mm		54	m
Pipe sleeve	50	mm		24	m
Donga Crossing	65	mm		1	no
Road Crossing	80	mm		4	no
Training of Water Minders incl. toolbox + (1.5m) Step Ladder				1	no

Section 5b: Other Related Requirements

Further to the Schedule of Requirements in the preceding Table, Bidders are requested to take note of the following additional requirements, conditions, and related services pertaining to the fulfillment of the requirements: [check the condition that applies to this ITB, delete the entire row if condition is not applicable to the goods being procured]

Delivery Term [INCOTERMS 2010]	DAP			
(Pls. link this to price schedule)				
Exact Address of Delivery/Installation Location	Click here to enter text.			
		Village	Council	
		Ha-Nts'ibi	Thaba-Mokhele	
		Ha Mootsinyane	Thaba-Mokhele	
		Ha-Ntabanyane	Lithipeng	
		Ha Nts'eno	Lithipeng	
		Ha-Makoanyane	Khoelenya	
		Bereng-Matsoho	Khoelenya	
		Makhabane (Sehlabeng)	Khoelenya	
		Morobong	Khoelenya	
		Meriting	Khoelenya	
	Lekhalong (Anone) Lithipeng		Lithipeng	
		Raisa	Lithipeng	
		Ha-Thabo	Lithipeng	
		Fika-la -tsoene	Lithipeng	
Mode of Transport Preferred	Lan	Land		
Performance Security	Performance Security shall be submitted by the Contractor within 7 days of receipt of the Contract from UNDP for an amount of 10% (ten percent) of the total price of the Contract. The Performance Guarantee shall be valid for a period of (4) calendar months. Form for Performance Security attached as Form H			
Warranty/Defect Liability Period	The Contractor shall be responsible for the maintenance of the subject works for a period of Twelve (12) Months effective from the day of issuance of the Certificate of Substantial Completion of the Works. During the 12 (twelve) months of Defect Liability Period, the contractor is obligated to correct, repair and / or reconstruct any faults as may arise or any items listed in the Certificate of Substantial Completion by UNDP, at the			

	Contractors own cost and within 14 (fourteen) calendar days of notification by UNDP
Payment Terms	50% Payment will be released upon certification on fifty percent completion of work; remaining 40% payment will be released upon completion of 100% work. Retention fee of 10% will be withheld by UNDP and 5% will be released on after 6 months of completion of works, balance of 5% will be released after 12 months of completion of work. Payments will be issued within 30 days of satisfactory certification of completion of works by the Department of Rural Water Supply
Conditions for Release of Payment	 Inspection upon arrival at destination Written Acceptance of Goods based on full compliance with ITB requirements Written Certification by the Department of Rural Water Supply of Satisfactory Completion of Works
All documentations, including catalogues, instructions and operating manuals, shall be in this language	English

Section 6: Returnable Bidding Forms / Checklist

This form serves as a checklist for preparation of your Bid. Please complete the Returnable Bidding Forms in accordance with the instructions in the forms and return them as part of your Bid submission. No alteration to format of forms shall be permitted and no substitution shall be accepted.

Before submitting your Bid, please ensure compliance with the Bid Submission instructions of the BDS 22.

Technical Bid:

Have you duly completed all the Returnable Bidding Forms?	
Form A: Bid Submission Form	
Form B: Bidder Information Form	
Form C: Joint Venture/Consortium/ Association Information Form	
Form D: Qualification Form	
 Form E: Format of Technical Bid/Bill of Quantities 	
 From G: Bid Security Declaration 	
 Risk Matrix 	
Have you provided the required documents to establish compliance with the evaluation criteria in Section 4?	

Price Schedule:

|--|

Form A: Bid Submission Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

We, the undersigned, offer to supply the goods and related services required for [Insert Title of goods and services] in accordance with your Invitation to Bid No. [Insert ITB Reference Number] and our Bid. We hereby submit our Bid, which includes this Technical Bid and Price Schedule.Our attached Price Schedule is for the sum of [Insert amount in words and figures and indicate currency].

We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/Consortium /Association members or subcontractors or suppliers for any part of the contract:

- a) is not under procurement prohibition by the United Nations, including but not limited to prohibitions derived from the Compendium of United Nations Security Council Sanctions Lists;
- b) have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization;
- c) have no conflict of interest in accordance with Instruction to Bidders Clause 4;
- d) do not employ, or anticipate employing, any person(s) who is, or has been a UN staff member within the last year, if said UN staff member has or had prior professional dealings with our firm in his/her capacity as UN staff member within the last three years of service with the UN (in accordance with UN postemployment restrictions published in ST/SGB/2006/15);
- e) have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future;
- f) undertake not to engage in proscribed practices, including but not limited to corruption, fraud, coercion, collusion, obstruction, or any other unethical practice, with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN and we embrace the principles of the United Nations Supplier Code of Conduct and adhere to the principles of the United Nations Global Compact.

We declare that all the information and statements made in this Bid are true and we accept that any misinterpretation or misrepresentation contained in this Bid may lead to our disqualification and/or sanctioning by the UNDP.

We offer to supply the goods and related services in conformity with the Bidding documents, including the UNDP General Conditions of Contract and in accordance with the Schedule of Requirements and Technical Specifications.

Our Bid shall be valid and remain binding upon us for the period specified in the Bid Data Sheet.

We understand and recognize that you are not bound to accept any Bid you receive.

I, the undersigned, certify that I am duly authorized by [Insert Name of Bidder] to sign this Bid and bind it should UNDP accept this Bid.

Name:	
Title:	
Date:	
Signature:	[Stamp with official stamp of the Bidder]

Form B: Bidder Information Form

Legal name of Bidder	[Complete]
Legal address	[Complete]
Year of registration	[Complete]
Bidder's Authorized Representative Information	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]
Are you a UNGM registered vendor?	□ Yes □ No If yes, [insert UGNM vendor number]
Are you a UNDP vendor?	□ Yes □ No If yes, [insert UNDP vendor number]
Countries of operation	[Complete]
No. of full-time employees	[Complete]
Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (If yes, provide a Copy of the valid Certificate):	[Complete]
Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? (If yes, provide a Copy of the valid Certificate):	[Complete]
Does your Company have a written Statement of its Environmental Policy? (If yes, provide a Copy)	[Complete]
Does your organization demonstrate significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues	[Complete]
Is your company a member of the UN Global Compact	[Complete]

	ne and Title: [Complete]
	ephone numbers: [Complete]
rifications during Bid evaluation ase attach the following cuments:	 Pephone numbers: [Complete] ail: [Complete] Company Profile, which should <u>not</u> exceed ten (10) pages, including printed brochures and product catalogues relevant to the goods and/or services being procured DWRS Category B or C Certificate certified at source Certificate of Incorporation (If Company) or Identity Document of Sole Trader Trader's License Certified at source Tax Clearance Certificate certified at source Reference letters from 2 clients where similar services were performed List of Similar Services (Minimum 3 similar Services) performed in the past 5 years, with Contact details of client (contact number and email address) If External Financing will be sourced, attached Declaration from the Legally Recognized financial institution to provide funding to the project. Proposed financing should be above the Bid Amount. Financial Statements submitted to Lesotho Revenue Authority with LRA Stamp in accounting period 2019/2020. Financial Statements should display a quick ratio above 2 to proof sound liquidity. Minimum average annual turnover of LSL 2,000,000.00 accumulated over three years; 2017-2020 CVs for Construction Supervisor, Site Forman and Manson with clear positions held for the last 3 years Certified Educational Qualifications for Construction Supervisor, Site Forman and Manson List of Manson Toolbox, Plumber Set and Standpipe formwork Set Confirmation of Availability of 4X4 Pick up Vehicle and attach

Form C: Joint Venture/Consortium/Association Information Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

To be completed and returned with your Bid if the Bid is submitted as a Joint Venture/Consortium/Association.

No	Name of Partner and contact information (address, telephone numbers, fax numbers, e-mail address)	Proposed proportion of responsibilities (in %) and type of goods and/or services to be performed
1	[Complete]	[Complete]
2	[Complete]	[Complete]
3	[Complete]	[Complete]

Name of leading partner (with authority to bind the JV, Consortium, Association during the ITB process and, in the event a Contract is awarded, during contract execution)	[Complete]
--	------------

We have attached a copy of the below referenced document signed by every partner, which details the likely legal structure of and the confirmation of joint and severable liability of the members of the said joint venture:

Letter of intent to form a joint venture

□ JV/Consortium/Association agreement

We hereby confirm that if the contract is awarded, all parties of the Joint Venture/Consortium/Association shall be jointly and severally liable to UNDP for the fulfillment of the provisions of the Contract.

OR

Name of partner:	Name of partner:
Signature:	Signature:
Date:	Date:
Name of partner:	Name of partner:
Signature:	Signature:
Date:	Date:

Form D: Eligibility and Qualification Form

Name of Bidder:	[Insert Name of Bidder]		Select date
ITB reference:	[Insert ITB Reference Number]		

If JV/Consortium/Association, to be completed by each partner.

History of Non- Performing Contracts

□Non-per	□Non-performing contracts did not occur during the last 3 years			
□ Contract(s) not performed in the last 3 years				
Year	Non- performed portion of contract	Contract Identification	Total Contract Amount (current value in US\$)	
		Name of Client: Address of Client: Reason(s) for non-performance:		

Litigation History (including pending litigation)

🗆 No litiga	tion history for the la	ast 3 years	
Litigation	n History as indicated	d below	
Year of dispute	Amount in dispute (in US\$)	Contract Identification	Total Contract Amount (current value in US\$)
		Name of Client: Address of Client: Matter in dispute: Party who initiated the dispute: Status of dispute: Party awarded if resolved:	

Previous Relevant Experience

Please list only previous similar assignments successfully completed in the last 5 years.

List only those assignments for which the Bidder was legally contracted or sub-contracted by the Client as a company or was one of the Consortium/JV partners. Assignments completed by the Bidder's individual experts working privately or through other firms cannot be claimed as the relevant experience of the Bidder, or that of the Bidder's partners or sub-consultants, but can be claimed by the Experts themselves in their CVs. The Bidder should be prepared to substantiate the claimed experience by presenting copies of relevant documents and

references if so requested by UNDP.

Project name & Country of Assignment	Client & Reference Contact Details	Contract Value	Period of activity and status	Types of activities undertaken

Bidders may also attach their own Project Data Sheets with more details for assignments above.

□ Attached are the Statements of Satisfactory Performance from the Top 2 (two) Clients or more.

Financial Standing

Annual Turnover for the last 3 years	Year Year Year	USD/IsI USD/IsI USD /IsI
Latest Credit Rating (if any), indicate the source		

Financial information (in US\$ equivalent)	Historic information for the last 3 years		
	Year 1	Year 2	Year 3
	Info	ormation from Balance Shee	et
Total Assets (TA)			
Total Liabilities (TL)			
Current Assets (CA)			
Current Liabilities (CL)			
	Inform	nation from Income Statem	pent
Total / Gross Revenue (TR)			
Profits Before Taxes (PBT)			
Net Profit			
Current Ratio			

□ Attached are copies of the audited financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following condition:

- a) Must reflect the financial situation of the Bidder or party to a JV, and not sister or parent companies;
- b) Historic financial statements must be audited by a certified public accountant;
- c) Historic financial statements must correspond to accounting periods already completed and audited. No statements for partial periods shall be accepted.

Form E: Format of Technical Bid

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

The Bidder's Bid should be organized to follow this format of the Technical Bid. Where the bidder is presented with a requirement or asked to use a specific approach, the bidder must not only state its acceptance, but also describe how it intends to comply with the requirements. Where a descriptive response is requested, failure to provide the same will be viewed as non-responsive.

SECTION 1: Bidder's qualification, capacity and expertise

- 1.1 General organizational capability which is likely to affect implementation: management structure, financial stability and project financing capacity, project management controls, extent to which any work would be subcontracted (if so, provide details).
- 1.2 Relevance of specialized knowledge and experience on similar engagements done in the region/country.
- 1.3 Quality assurance procedures and risk mitigation measures.
- 1.4 Organization's commitment to sustainability.

SECTION 2: Scope of Supply, Technical Specifications, and Related Services

This section should demonstrate the Bidder's responsiveness to the specification by identifying the specific components proposed, addressing the requirements, as specified, point by point; providing a detailed description of the essential performance characteristics proposed; and demonstrating how the proposed bid meets or exceeds the requirements/specifications. All important aspects should be addressed in sufficient detail.

- 2.1 A detailed description of how the Bidder will deliver the required goods and services, keeping in mind the appropriateness to local conditions and project environment. Details how the different service elements shall be organized, controlled and delivered.
- 2.2 Explain whether any work would be subcontracted, to whom, how much percentage of the requirements, the rationale for such, and the roles of the proposed sub-contractors and how everyone will function as a team.
- 2.3 The bid shall also include details of the Bidder's internal technical and quality assurance review mechanisms.
- 2.4 Implementation plan including a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing.
- 2.5 Demonstrate how you plan to integrate sustainability measures in the execution of the contract.

Goods and services to be Supplied and Technical Specifications	Your response					
	Compliance with technical specifications		Delivery Date (confirm that you	Quality Certificate/Exp	Comments	
	Yes, we comply	No, we cannot comply (indicate discrepancies)	comply or indicate your delivery date) etc. (in that a	ort Licenses, etc. (indicate all that apply and attach)	enses, dicate all ply and	
Construction, Refurbishment and Extension of Portable Water Systems Lot 1						
Lot 2						
Lot 3						

Other Related services and requirements	Compliance	with requirements	Details or comments on the related requirements
(based on the information provided in Section 5b)	Yes, we comply	No, we cannot comply (indicate discrepancies)	
Delivery Term			
Bid Security Declaration			
Performance Security			
•			

SECTION 3: Management Structure and Key Personnel

- 3.1 Describe the overall management approach toward planning and implementing the project. Include an organization chart for the management of the project describing the relationship of key positions and designations. Provide a spreadsheet to show the activities of each personnel and the time allocated for his/her involvement.
- 3.2 Provide CVs for key personnel that will be provided to support the implementation of this project using the format below. CVs should demonstrate qualifications in areas relevant to the scope of goods and/or services.

Format for CV of Proposed Key Personnel

Name of Personnel	[Insert]
Position for this assignment	[Insert]
Nationality	[Insert]
Language proficiency	[Insert]
Education/	[Summarize college/university and other specialized education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.]
Qualifications	[Insert]
Professional certifications	 [Provide details of professional certifications relevant to the scope of goods and/or services] Name of institution: [Insert] Date of certification: [Insert]
Employment Record/ Experience	[List all positions held by personnel (starting with present position, list in reverse order), giving dates, names of employing organization, title of position held and location of employment. For experience in last five years, detail the type of activities performed, degree of responsibilities, location of assignments and any other information or professional experience considered pertinent for this assignment.]
	[Insert]
	[Provide names, addresses, phone and email contact information for two (2) references]
References	Reference 1: [Insert]
	Reference 2: [Insert]

I, the undersigned, certify that to the best of my knowledge and belief, the data provided above correctly describes my qualifications, my experiences, and other relevant information about myself.

Signature of Personnel

Date (Day/Month/Year)

RISK MANAGEMENT MATRIX

					Your F	Response
HAZARD	RISK	Likelihood of Occurrence	Impact of Occurrence	CONTROL MEASURES	Yes	If no Indicate counter proposal
Bricklaying	Caustic contamination with mortar Contact with sharp bladed tools	Low	Moderate	Use only trained personnel Safe means of access to be provided Safe/Suitable working platform required where working at height PPE for mortar to include gloves where practicable and goggles/ masks where there is a risk of contamination		
Excavations/ Latrine pits (Working in and around)	Toxic fumes Collapse of trench walls/trapping Falling into excavation Collapse of adjacent structures	Low	Moderate	Deep excavations / monitor air for toxic fumes Protect vehicles/people from falling into excavations – provide barriers (string with bright markers attached), signage, etc. as necessary Beware of undermining of other structures (e.g.: buildings, scaffolds) Record excavation inspections by competent person on daily basis Provide suitable means of access/egress in case of emergency.		
Fire	Injuries to workers, pedestrians, residents, road users, damage to property through fire	Low	High	No littering on site which could become fire hazard, maintain site in clean condition. No fires to be lit on site. Have a working fire extinguisher at hand at all times. No smoking or naked flame near flammable substances or in unauthorised areas Ensure proper storage/use of Petrol/diesel/flammable substances – post warning notices		
Form Work	Collapse of form work	Low	Low	Wear personal protective equipment such as gloves and goggles		

				Your Response		
HAZARD	RISK	Likelihood of Occurrence	Impact of Occurrence	CONTROL MEASURES	Yes	If no Indicate counter proposal
				Formwork must be built by trained person and also be inspected by competent person and results entered into register on site		
Hand tools	Injuries caused by use of hand tool Impact the tool Falls due to access problems Contamination with substance being worked on	Moderate	Moderate	Ensure that tool is correct for job Tool is in good order and suitably sharp Personnel must be competent/instructed in tool usage and tool safely Lighting is sufficient Access is safe, working platform is secure, leading edge is guarded Operative is wearing all necessary PPE		
Hazardous Substances	Injuries to workers through use of hazardous substances, eg: injuries to eyes, skin, etc	Low	High	Use substances in accordance with data sheet, particularly reference protective clothing required (example: gloves, goggles, etc) Know what First Aid measures are Have welfare facilities available for washing of hands, etc		
Manual Handling of General Items	Muscular skeletal injuries if the load is too heavy or awkward Operative falling/ tripping Contamination from the substance being carried Fall of material being carried	Moderate	High	 Personnel should be aware of safe manual handling techniques Personnel to wear Personal Protective Equipment when carrying items, e.g.: safety footwear and gloves. Ensure good housekeeping against tripping/fall hazards. Operative to get assistance if load too heavy-team lift if necessary. Utilise mechanical lifting and carrying aids where possible. Maintain database of nearby healthcare centres Personnel to ensure access equipment, ladders will take weight of operative and load being carried. 		

					Your Response	
HAZARD	RISK		Impact of Occurrence	CONTROL MEASURES	Yes	If no Indicate counter proposal
				Personnel to ensure item being carried is properly bonded or will not be liable to break apart whilst being manually handled.		
Noise and Dust	Breathing in dust can cause long term health problems, noise can damage hearing	Moderate	Low	Wear respiratory and hearing protection Dampen down and minimise dust where possible.		
Plastering	Falling materials Fall from height Contact with materials	Low	Moderate	Ensure standard safety procedures are followed Ensure there is a safe working area Ensure safe access and egress Ensure competent personnel are used		
Plumbing	Falling material Falling from height Fire Burns Exposure to lead fumes	Low	Low	Ensure standard safety procedures are followed at all times Only used trained and competent personnel Ensure there is a safe working area at all times Ensure materials are stored neatly Ensure there is safe access and egress at all times Ensure all personnel wear suitable and sufficient personal protective equipment Consider a hot works permit system prior to commencing any hot works Make sure emergency procedures are in place and ensure all personnel are aware of where to go in case of a fire		
Precast Slab / Unit Laying and Fixing	Falls Falling materials Manual Handling	Moderate	High	Emergency procedures in place and personnel explained details Use competent personnel Ensure suitable and sufficient access and egress is provided Safe place of work must be provided Ensure all personnel wear correct personal protective equipment		

				Your F	Response	
HAZARD	RISK	Likelihood of Occurrence	Impact of Occurrence	CONTROL MEASURES	Yes	If no Indicate counter proposal
				Exclusion zone may be required for protection against risk of falling objects		
Scaffold Erection/ Dismantling	Personnel falling from a height Items of scaffold falling onto personnel Scaffold collapsing onto those below	Medium	Moderate	Ensure: scaffold is designed to take the imposed loads scaffolding is constructed properly scaffold is not overloaded scaffolders are fully trained scaffolding is regularly checked by competent person and record of inspection retained. Written inspections to be recorded on weekly basis scaffolders must adhere to the safe systems of work. all fall arrest equipment to be checked and certified in good working order that ALL understand the safe system of work		
Working at Height	Personnel falling from height Falling debris Those beneath being injured	Low	Moderate	All access equipment is properly constructed (inspections record must be maintained) Only trained personnel construct, dismantle or control the access equipment All access equipment must have full toe boards and guardrails - comply with SABS 085 on erection, use and dismantling of scaffolding No access equipment may be loaded above the level of the guardrail No access equipment to be loaded above its safe working load All fall arrest equipment to be correctly maintained Ensure if ladders are being used for access, they are either footed or tied. Also the ladder must be set at he correct level of 1 in 4 or approximately 75°		

					Your	Response
HAZARD	RISK	Likelihood of Occurrence	Impact of Occurrence	CONTROL MEASURES	Yes	lf no Indicate counter proposal
Soil erosion	Soil Erosion around the tanks and along the pipelines	Moderate	High	Construction of scour checks, rehabilitation and revegetation of affected areas. Planting grass around affected areas(Avoid use of kikuyu grass (Mohloatsepe)in areas considered to be pristine or have high biodiversity		
Construction waste	Disposal of Construction Waste	High	Moderate	Contractors are to consult local authorities for selection of disposal sites for construction waste. The method of disposal should be approved by the DWRS.		
Disputes	Disputes Resolution	Moderate	High	The Community should be continuously informed about developments relating to the project Hiring of unskilled labour within the set village		

FORM F: Price Schedule Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

The Bidder is required to prepare the Price Schedule following the below format. The Price Schedule must include a detailed cost breakdown of all goods and related services to be provided. Separate figures must be provided for each functional grouping or category, if any.

Any estimates for cost-reimbursable items, such as travel of experts and out-of-pocket expenses, should be listed separately.

Price Schedule

LOT 1

Currency of the Bid: [Insert Currency]

ltem #	Village	Total Price
Lot1-1	Ha-Nts'ibi	
Lot1-2	Ha Mootsinyane	
Lot1-3	Ha-Ntabanyane	
Lot1-4	Ha Nts'eno	
	GRAND TOTAL	

Name of Bidder:	
Authorised signature:	
Name of authorised signatory:	
Functional Title:	

FORM F: Price Schedule Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

The Bidder is required to prepare the Price Schedule following the below format. The Price Schedule must include a detailed cost breakdown of all goods and related services to be provided. Separate figures must be provided for each functional grouping or category, if any.

Any estimates for cost-reimbursable items, such as travel of experts and out-of-pocket expenses, should be listed separately.

Price Schedule

LOT 2

	Currency of t	he Bid: [Insert Currer
ltem #	Village	Total Price
Lot 2-1	Ha-Makoanyane	
Lot 2-2	Bereng-Matsoho	
Lot 2-3	Makhabane (Sehlabeng)	
Lot 2-4	Morobong	
Lot 2-5	Meriting	
	GRAND TOTAL	

Name of Bidder:	
Authorised signature:	
Name of authorised signatory:	
Functional Title:	

pM

Currency of the Bid: [Insert Currency]

FORM F: Price Schedule Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	[Insert ITB Reference Number]		

The Bidder is required to prepare the Price Schedule following the below format. The Price Schedule must include a detailed cost breakdown of all goods and related services to be provided. Separate figures must be provided for each functional grouping or category, if any.

Any estimates for cost-reimbursable items, such as travel of experts and out-of-pocket expenses, should be listed separately.

Price Schedule

LOT 3

Currency of the Bid: [Insert Currency]

ltem #	Village	Total Price
Lot 3-1	Lekhalong (Anone)	
Lot 3-2	Raisa	
Lot 3-3	Ha-Thabo	
Lot 3-4	Fika-la-tsoene	
	GRAND TOTAL	

Name of Bidder:	
Authorised signature:	
Name of authorised signatory:	
Functional Title:	

Detailed Price Schedule (Attached in Excel)

FORM G: Bid Security Declaration

[The Bidder shall fill in this Form in accordance with the instructions indicated.]

Date: [insert date]

ITB No.:

To: UNDP Procurement Unit

We, the undersigned, declare that:

We understand that, according to your conditions, tenders must be supported by a Tender- Securing Declaration.

We accept that we will automatically be suspended from being eligible for bidding in any contract with the Procuring Entity for the period of time of TWO YEARS from the date of bid closing, if we are in breach of our obligation(s) under the bid conditions, because:

(a) We withdrawn our Bid during the period of bid validity specified in the Form of Tender; or

(b) Having been notified of the acceptance of our Bid by the Purchaser during the period of bid validity, (i) fail or refuse to execute the Contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the RFQ.

We understand this Bid Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of twenty- eight days after the expiration of our Tender.

Signed: [insert signature of person whose name and capacity are shown] In the capacity of [insert legal capacity of person signing the Bid Securing Declaration]

Name: [insert complete name of person signing the Bid Securing Declaration]

Duly authorized to sign the bid for and on behalf of: [insert complete name of Bidder]

Dated on ______ day of ______, ____ [insert date of signing]

Corporate Seal (where appropriate)

[Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint

Venture that submits the tender.]

FORM H: FORM FOR PERFORMANCE SECURITY

PERFORMANCE SECURITY²

(This must be finalized using the official letterhead of the Issuing Bank. Except for indicated fields, no changes may be made on this template)

To: UNDP

[Insert contact information as provided in Data Sheet]

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract:

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of [*amount of guarantee*] [*in words and numbers*], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of [*amount of guarantee as aforesaid*] without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

This guarantee shall be valid until a date 30 days from the date of issue by UNDP

² If the RFP/ITB requires the submission of a Performance Security, which shall be made a condition to the signing and effectivity of the contract, the Performance Security that the Proposer's Bank will issue shall use the contents of this template