

**REQUEST FOR QUOTATION FOR RESIDENT ENGINEERS OF OLIFANTSPOORT AND
EBENEZER REFUBISHMENT PHASE 1A – MECHANICAL ENGINEERING**



YOU ARE HEREBY INVITED TO QUOTE

CLOSING DATE: 14 JUNE 2024

CLOSING TIME: 14H00

NAME OF SERVICE PROVIDER:

.....

Project Title : Olifantspoort And Ebenezer Refurbishment Phase 1A: Olifantspoort
and Ebenezer Water Supply Scheme Refurbishment

LNW Contract Number : RFQ 44448

Services Required : PSP Resident Engineers in Mechanical Engineering

Revision : 01

Date of Issue : 10 June 2024

Closing Date : 14 June 2024 at 14H00

Project Location : Olifantspoort and Ebenezer Water Supply Schemes

Site Inspection date : N/A

Technical inquiries : Mr Gundo Motsoare gundom@lepelle.co.za

**REQUEST FOR QUOTATION FOR RESIDENT ENGINEERS OF OLIFANTSPOORT AND
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email only

**REQUEST FOR QUOTATION FOR RESIDENT ENGINEERS OF OLIFANTSPOORT AND
EBENEZER REFUBISHMENT PHASE 1A – MECHANICAL ENGINEERING**

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REQUEST FOR QUOTATION FOR RESIDENT ENGINEERS OF OLIFANTSPOORT AND EBENEZER REFUBISHMENT PHASE 1A – MECHANICAL ENGINEERING

1. PURPOSE

The purpose of this specification is to request Supply Chain Management Unit to procure the Service Provider to conduct inspection services (ECSA stage 5) of the Olifantspoort-Ebenezer phase 1A: Olifantspoort and Ebenezer Water Supply Scheme Refurbishment.

PROJECT BACKGROUND

The Olifantspoort Water Scheme and the Ebenezer Water Scheme are the two main sources of potable bulk water for Polokwane City and areas that are located within the vicinity of the bulk transmission pipelines from each treatment works towards Polokwane City.

Since commissioning in the early 1970s, none of the two schemes has undergone major refurbishment or upgrading works and most components do not have sufficient capacity to meet the current and projected future water needs. Most components of the potable bulk water supply infrastructure are in a poor state of repair, which leads to frequent breakdowns.

Due to the potable bulk water supply infrastructure capacity and non-reliability of potable bulk water supply to Polokwane City, Polokwane Local Municipality declared a moratorium on new property development within the Polokwane City in May 2013.

In July 2015, Lepelle Northern Water (LNW) commissioned a project for the upgrading of the Olifantspoort and Ebenezer Water Schemes.

On 30 September 2015, the then Department of Water and Sanitation issued a ministerial directive to LNW, which directed LNW to develop strategic interventions that will address the potable bulk water supply challenges within Polokwane City and its immediate surrounds.

The Olifantspoort Water Scheme currently supplies, on average, 60Mℓ/d to six regional water schemes, including the Polokwane Local Municipality. Raw water released from Flag Boshielo is abstracted from the Olifantspoort Weir and conveyed to the Olifantspoort Water Treatment Works for treatment.

Olifantspoort Water Treatment Works comprise of two treatment modules, each with a treatment capacity of 30Mℓ/d and a 10Mℓ/d packaged treatment plant, totalling 70Mℓ/d treatment capacity.

PS1 Pump Station, located at the Olifantspoort Water Treatment Works, is a high lift pump station conveying potable water from the treatment works to the ON7 and Specon Command Reservoirs. The rising main from PS1 to Specon Command Reservoir is an 800mm ND steel pipeline, approximately 29km long.

As part of the planning phase for the upgrading of the Olifantspoort and Ebenezer Water Schemes, LNW undertook various investigations to obtain an understanding of the potable bulk water supply infrastructure and the state of repair of the infrastructure. One of the investigations undertaken was the metal loss detection along the PS1 to Specon rising main.

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The detailed metal loss assessment identified a 4.4km long portion of the PS1 to Specon rising main as having suffered severe metal loss. This portion is located approximately 19km downstream of the Olifantspoort Water Treatment Works. The severe metal loss results in frequent pipe bursts, leading to huge water losses, disruption of operational services and the inability of LNW, Capricorn District Municipality and Polokwane Local Municipality to deliver water supply services to their respective residents. The LNW maintenance team has reported that on average, the pipe used to burst at least once a week, and repairs take at least six hours to complete. This section of the pipeline has been identified as a portion of the project requiring emergency intervention.

In November 2018, LNW completed the replacement of the first 2km of the severely eroded section of the PS1 to Specon rising main. Furthermore, another 2,4km section of the pipeline was replaced in 2021 October. The remaining 7km section of the pipeline, which is the subject of this project, requires replacement and diversion from the current route to further reduce the frequency of pipe bursts, and subsequently water losses. The diversion of the route is to also address the servitude encroachment by residents within the area. The replacement of this portion will also reduce downtime of PS1 Pump Station, which will improve water supply to Polokwane City and supply areas along the Olifantspoort Water Scheme bulk transmission pipelines.

Pump Station 1 (PS1) pumps treated water from Olifantspoort WTW through a 26.3 km long 800mm diameter bulk pipeline to Specon Reservoirs, located in Lebowakgomo. PS1 is equipped with 5 pump sets (4 duty & 1 standby). Water from Specon Reservoirs gravitates through a 790 mm diameter steel pipeline to Pump Station 2 (PS2) located approximately 6 km northeast of Specon Reservoirs. PS2 is equipped with 3 pump sets (2 duty & 1 standby) and feeds the Witkos Reservoir through a 17.5 km long 740mm diameter steel pumping main. PS2 is also equipped with a second set of pumps which supply the Bomplass settlement.

From Witkos reservoir there is 1.6 km long section of 740 mm diameter steel gravity main which feeds PS3 Pump Station located approximately 3 km north of Chuenespoort Dam along the R37 provincial road. PS3 is equipped with 3 pump sets (2 duty & 1 standby) and feeds the Palmietfontein Reservoir located in the vicinity of the Polokwane Smelter) via a 13.2 km long 740 mm diameter pumping main. Palmietfontein Reservoir supplies water to the Polokwane City service reservoirs via an 840 mm diameter steel gravity main, which after 8.3 km splits into two branches:

- 9.1 km long 740 mm diameter steel pipeline to Krugersburg reservoir complex,
- 12.8 km long 690 mm diameter steel main discharging at Doornkraal reservoir, followed by section to Seshego reservoir and terminating at Perskebult reservoir.

One of the major strategic goals for LNW is to reduce water losses from its infrastructure to acceptable levels and to refurbish or replace all dysfunctional valves, pumps and electric motors, install variable speed drives, to improve operational and energy efficiency of all its pump stations.

1.1 THE WORKS – OLIFANTSPOORT PUMP STATIONS: PS1, PS2 & PS3

The nature of works for this project includes, among others, the following activities:

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- a) Site Establishment
- b) Site clearance
- c) Rehabilitation of access road to WTW/Pump Station 1
- d) Refurbishment works within the pump stations (PS 1, 2 and 3) inclusive of:
 - i. Supply and install electronic pressure gauge (positioned after all throttling valves, and conduct pipe system curve verification tests to determine actual system curve when pumping to destination reservoir. The successful bidder shall provide his own instantaneous flowmeter (possibly a clamp on ultrasonic meter) to do this test. The flow meter shall be mounted on the delivery side. Note: Pump duty (for new pump) may require adjustment on completion of this system curve verification exercise.
 - ii. Replacement of all high lift pumps and their associated valves and pipework. All suction and delivery site isolating valves to be electrically actuated.
 - iii. Upgrade of all auxiliary mechanical systems including cooling water pumps (all pump stations), Service water pumps (only in PS 1) and their associated pipe work and valves
 - iv) Maintenance and load testing of lifting equipment.
 - iv. Replacement of all high lift pump motors and installation of variable frequency/speed drives
 - vi) Maintenance and testing of all high lift pump MV switchgear
 - v. Automation of the entire pump station including upgrading existing instrumentation PLC and HMI systems and SCADA systems
 - vi. Upgrading of the telemetry systems
 - vii. Replacement and installation of power and control cables
 - viii. Upgrading of low voltage boards and MCC panels
 - ix. Minor pump station building modifications including painting, small power and lighting
 - xii) Construction of VFD/VSD substation building to house new VFDs/VSD
 - x. Specialist MV protection studies; earthing and lightning protection studies
- e) OH&S
- f) Environmental Management
- g) Community Liaison

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1.1.1 MECHANICAL AND ELECTRICAL WORKS

This portion of the Contract includes the following predominantly mechanical and electrical works defined as follows:

This portion of the Contract includes the mechanical and electrical equipping of the Olifantspoort Pump Stations which are collectively defined as Mechanical and Electrical Works. The Contract includes the following in respect of the Mechanical and Electrical Works for Pump Stations: the design, manufacture, supply, delivery, installation, testing, commissioning, training the Employer's staff in the operation and maintenance thereof, Trial Operation, and upholding during the Defects Notification Period. The Mechanical and Electrical Works for Pump Stations shall be designed to function safely and effectively in conjunction with the infrastructure in this Contract which is designed by the Employer.

The principal features of the design works are described in the specifications, but these cannot indicate every detail necessary to meet the requirements of the Contract because the final design is the Contractor's responsibility. The Contractor shall complete the Works so as to achieve correct operation in a stable, reliable and fail-safe manner, to the approval of the Engineer.

Contractor shall include for all costs involved in carrying out the work described in design works, including programming to accomplish this work during the contract period in conjunction with the Contractor's other duties. PS9 Engineering: The Mechanical and Electrical Works for Pump Stations, specifies this portion of the Works and associated detailed requirements, as well as references to other sections of C3: Scope of Works and Volume 5: Drawings where further requirements concerning the associated items of the Works are specified.

- Olifantspoort Pump Station 1
- Olifantspoort Pump Station 2
- Olifantspoort Pump Station 3

1.1.2 CIVIL WORKS

This portion of the Contract includes the following civil construction work, defined as the Civil Works:

- Setting out of the Works
- The construction of a Variable Speed Drives Room
- Construction of reinforced concrete plinths for pumps and motors, and general civil repair works inside the pump station

1.1.3 GENERAL WORKS

In accordance with Sub-Clause 4.1.1 of the General Conditions of Contract, the Contractor is responsible for the following, applicable to the Mechanical, Electrical Works and Civil Works:

- Environmental management of the construction area during construction.
- Compliance with the requirements of the OHS Act and health and safety specifications.
- The liaison with the ward councillors of the local communities.
- All Temporary works required to construct the Permanent Works

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1.1.4 THE WORKS EBENEZER WATER TREATMENT WORKS AND HIGH LIFT PUMP STATION

The nature of works for this project includes, among others, the following activities:

- a) Site Establishment.
- b) Site clearance
- c) Water Treatment Works and High Lift Pump Station :
 - i. Replacement of lime dosing system, refurbishment of polyelectrolyte dosing system, construction of rapid mix/flocculation channel, installation of actuators on filter valves, partial replacement of filter media, construction of a supernatant sump and pump station at the sludge dam, refurbishment of chlorine house
 - ii. Upgrade of WTW control and instrumentation equipment including programmable logic controllers (PLCs), human machine interface unit (HMI), Remote IO cards, metering equipment and SCADA system.
 - iii. Replacement of all high lift pumps and their associated valves and pipework. All suction and delivery site isolating valves to be electrically actuated.
 - iv. Upgrade of all auxiliary mechanical systems including cooling water pumps (all Water Treatment Plant and High Lift Pump Station), service water pumps (only in the pump station) and their associated pipe work and valves
 - v. Maintenance, refurbishment, and load testing of gantry
 - vi. Replacement of all high lift pump motors and installation of variable frequency/speed drives
 - vii. Automation of the entire pump station including upgrading existing control and instrumentation equipment including programmable logic controllers (PLCs), human machine interface unit (HMI), Remote IO cards, metering equipment and SCADA system.
 - viii. Upgrading of the telemetry systems
 - ix. Replacement and installation of power and control cables
 - x. Upgrading of low voltage boards and MCC panels
 - xi. Minor pump station building modifications including painting, small power and lighting
 - xii. Specialist MV protection studies; earthing and lightning protection studies
 - xiii. Supply and installation of power and control cabling and cable supports.
- d) OH&S
- e) Environmental Management
- f) Community Liaison

This Contract includes all of the following works only applicable to Ebenezer Water Treatment Plant and High Lift Pump Station, and Rustfontein Reservoir:

1.1.5 MECHANICAL AND ELECTRICAL WORKS

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This portion of the Contract includes the following predominantly mechanical and electrical works

defined as follows:

- a) This portion of the Contract includes the mechanical and electrical equipping of the Ebenezer Water Treatment Plant and High Lift Pump Station which are collectively defined as Mechanical and Electrical Works. The Contract includes the following in respect of the Mechanical and Electrical Works for Water Treatment Plant and High Lift Pump Station: the design, manufacture, supply, delivery, installation, testing, commissioning, training the Employer's staff in the operation and maintenance thereof, Trial Operation, and upholding during the Defects Notification Period. The Mechanical and Electrical Works for Ebenezer Water Treatment Plant and High Lift Pump Station shall be designed to function safely and effectively in conjunction with the infrastructure in this Contract which is designed by the Employer.
- b) The principal features of the design works are described in the specifications, but these cannot indicate every detail necessary to meet the requirements of the Contract because the final design is the Contractor's responsibility. The Contractor shall complete the Works so as to achieve correct operation in a stable, reliable and fail-safe manner, to the approval of the Engineer.
- c) The Contractor shall include for all costs involved in carrying out the work described in design works, including programming to accomplish this work during the contract period in conjunction with the Contractor's other duties.
- d) PS9 Engineering: The Mechanical and Electrical Works for Water Treatment Plant and High Lift Pump Station, specifies this portion of the Works and associated detailed requirements, as well as references to other sections of C3: Scope of Works and Drawings where further requirements concerning the associated items of the Works are specified.
 - i. Ebenezer Water Treatment Works
 - ii. Ebenezer High Lift Pump Station
 - iii. Rustfontein Reservoirs

1.1.6 CIVIL WORKS

This portion of the Contract includes the following civil construction work, defined as the Civil Works:

- Setting out of the Works
- Minor civil works and refurbishment of chlorine room, lime storage building,

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- Construction of reinforced concrete plinths for pumps and motors, and general civil repair works inside the pump station
- Construction of Flocculation channel, Sump & Valve Chamber and Raising of filter walls
- Modification of Sludge Dam

1.1.7 SPECON PIPELINE REPLACEMENT

A project layout plan is attached as part of the Project Drawings showing the work required for the construction of a 7 km long 800 mm ND steel pipeline to replace a section of the existing rising main from Pump Station PS1 to Specon Reservoirs which has deteriorated over the years due to severe metal loss and is now prone to very frequent pipe bursts. The scope of work for this work package includes the following activities:

- Excavation to expose existing 800mm ND continuously welded steel pipelines, cutting into pipelines, recovery, loading and transportation of recovered pipes to PS2 Pump Station in Lebowakgomo.
- Demolishing existing reinforced concrete air and scour valve chambers and recovery and transportation to PS2 Pump Station in Lebowakgomo of recovered fittings. Disposal of rubble at approved dumping sites.
- Excavation, bedding, supplying, laying, jointing, testing and back filling continuously welded 800mm ND Grade X42 steel pipes with 6 mm wall thickness and 8 mm wall thickness at river and road crossings.
- Installation of pipe sleeves across a provincial road.
- Construction of reinforced concrete valve chambers complete with all valves and pipe specials as indicated on construction drawings:
 - Air Valve Chambers: 150 mm ND PN25 double orifice, dual action air release / vacuum break valves to be installed at locations indicated on construction drawings.
 - Scour Chambers: 350 mm ND PN25 wedge gate valves complete with pipe fittings as indicated on drawings.
 - Non-Return Valve: 600 mm ND PN25 Nozzle Type complete with complete with pipe fittings as indicated on drawings.
- Connection to the existing infrastructure.
- Refurbishment of existing critical valve chambers at Specon Reservoirs, Witkos Reservoirs and outside Pump Station 4

1.1.8 REFURBISHMENT OF THE OLIFANTSPOORT WATER TREATMENT WORKS (WTW)

The work package involves the refurbishment of the existing Olifantspoort WTW which is located on the Olifants River, approximately 30 km south-east of Lebowakgomo, in Lepelle Nkumpi Local Municipality (LM), Limpopo Province. The project entails the modification of the existing works to enable an increased flow throughput while maintaining acceptable water quality standards. The refurbishments include the following:

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- Installation of a lime dosing system to achieve pH_s (saturation pH in terms of calcium carbonate) quality of the final water and thereby protect downstream infrastructure.
- The upgrading of the polyelectrolyte dosing station.
- Modification of the rapid mix / flocculation channel on module 1 to achieve floc development at a higher flow rate.
- Modification of the sedimentation basin in Module 1 to achieve higher flow rates and improved clarification. Replacement of sludge discharge valves.
- Modification of the sedimentation basin on Module 2 to support an increased through flow.
- Upgrading of all the filter valves to actuator operation.
- Replacement of 50% of the filter sand with anthracite media requiring the raising of the filter overflow walls by 250 mm.
- Refurbishment of the post-chlorination dosing system.
- Upgrading of the WTW Control & Instrumentation system to facilitate improved operator controls and measurement.
- Construction of administration block and repairs and refurbishment of existing buildings, including staff residential quarters.
- Installation of security lighting mast at Specon Reservoirs, Pump Stations 2 and Pump Station 3

1.1.9 REHABILITATION OF MEGORING AND THAKGALANG RIVER CROSSINGS

The scope of work involves the rehabilitation of gravity mains, fed from the Rustfontein reservoir complex, at two river crossings. The sections of the pipelines were exposed due to severe soil erosion and face imminent danger of collapse.

Megoring River Crossing

The two 600 mm ND LNW gravity pipelines run parallel to a Polokwane LM raw water main from Dap Naude Dam, with sections of LNW pipeline dangerously exposed over a gully. The Polokwane M pipeline is not exposed, but the construction activities to rehabilitate LNW pipelines must be carefully executed to avoid compromising the Polokwane LM pipeline.

Thakgalang River Crossing

A section of LNW 600 mm ND gravity main between chambers GA95 and GA96 and the Polokwane LM raw water pipeline crossing the Thakgalang River are exposed due to damaged concrete encasement in the river bed.

The scope of work for this work package involves the following construction activities:

- Collection (including handling and loading) 18.3m long x 800 mm ND steel pipes, 10mm wall thickness, epoxy lined and metal primer base coated bypass pipes, fittings and precast concrete pedestals from PS2 Pump Station in Lebowakgomo, transport to site and offloading.
- Cut ends of 800 mm ND steel pipes and fittings (which were cut using cutting torches

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during dismantling of previous temporary bypasses) and prepare them for jointing, supply of additional fittings and installation of temporary bypasses on precast concrete pedestals as indicated on drawings. Joining of the pipes will be by welding or fully restrained mechanical couplings. The mechanical couplings from previous LNW projects will be used. Contractors will be required to replace missing or damaged bolts, nuts and rubber seals where required.

- Pipes for the temporary bypass pipelines laid above ground will be laid on precast concrete plinths to be collected from PS2 Pump Station in Lebowa kgomo. The Contractor is required to collect and transport the plinths from PS2 Pump Station in Lebowa kgomo to site, offload and install the plinths, including the required excavations and the supply of a 6mm thick neoprene membrane below the pipes to protect the pipe surfaces that will be in direct contact with the precast concrete plinths.
- Dismantling of temporary bypasses, loading, delivery of temporary 18.3m long x 800 mm ND steel pipes, 10mm wall thickness, epoxy lined and metal primer base coated bypass pipes, fittings and precast concrete pedestals to, and offloading at PS2 Pump Station in Lebowa kgomo.
- Excavation to expose existing 600mm ND continuously welded steel pipelines, cutting into pipelines, recovery, loading and transportation of recovered pipes to PS2 Pump Station in Lebowa kgomo.
- Demolishing existing reinforced concrete air and scour valve chambers and recovery and transportation to PS2 Pump Station in Lebowa kgomo of recovered fittings. Disposal of debris at approved dumping sites.
- Excavation, bedding, encasement in concrete, supplying, laying, jointing, testing and back filling for approximately 420m in length of 600 mm ND continuously welded Class X42 steel pipes with 8 mm wall thickness:
 - The pipes shall be internally lined with Cement Mortar lining (CML) in accordance to DWS 9900
 - Refer to Particular specifications PSCL for the external coating options:
 - Construction of the of the following reinforced concrete valve chambers:
 - Air Valve Chambers: 100 mm ND PN25 and PN40 double orifice, dual action air release / vacuum break valves
 - Scour Valve Chambers: 200mm ND flanged PN25 and PN40 wedge valves and 400mm ND flanged PN25 and PN40 double eccentric butterfly valves.
- Connection to the existing infrastructure
- Provision of soil erosion measures by means of gabions and mattresses.

1.1.10 NEW SUCTION PIPELINE FROM WITKOS RESERVOIR TO PS3 PUMP STATION

The scope of work for this work package includes the following activities:

- Excavation, bedding, supplying, laying, jointing, testing and back filling of approximately 1.68 km of continuously welded 1 500mm ND Grade X42 steel pipes with 10 mm wall

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thickness and 12 mm wall thickness at river and road crossings.

- Construction of reinforced concrete valve chambers complete with all valves and pipe specials as indicated on construction drawings:
 - Air Valve Chambers: 150 mm ND PN25 double orifice, dual action air release / vacuum break valves to be installed at locations indicated on construction drawings.
 - Scour Chambers: 350 mm ND PN25 wedge gate valves complete with pipe fittings as indicated on drawings.
- Connection to the existing infrastructure.

2. SPECIFICATIONS, TYPICAL SCOPE OF WORKS & DELIVERABLES

Quotations are hereby invited from registered professional service providers for conducting contract administration and inspection services in accordance with ECSA guidelines.

The professional Services Provider (PSP) shall be required to provide hourly rates, these shall be fixed, and be utilized for all his engagements throughout the period of the contract.

The key deliverables depending on the engagement by LNW shall be as per the Engineering Council of South Africa (ECSA) guidelines of 2021, Government Gazette RSA Vol 669 of 26th March 2021 No 44333, which is summarized as per Table 1 below.

STAGE 5. Contract Administration and Inspection Services		
Typical Activities	Typical Deliverables	
1 Issue construction documentation in accordance with the documentation schedule including, in the case of structural engineering, reinforcing bending schedules and detailing, and specifications of structural steel sections and connections.	• schedules of predicted cash flow • construction documentation • drawing register • estimates for proposed variations • contract instructions • financial control reports • valuations for payment certificates • progressive and draft final accounts • practical completion and defects list	
2 Carry out contract administration procedures in terms of the contract.		
3 Prepare schedules of predicted cash flow.		
4 Prepare pro-active estimates of proposed variations for client decision-making.		
5 Attend regular site, technical and progress meetings.		
6 Inspect the works for conformity to contract documentation as described under Clause 3.3.2.		
7 Review the outputs of quality assurance procedures and advise the contractor and client on adequacy and need for additional controls, inspections and testing.		

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8 Adjudicate and resolve financial claims by contractors. 9 Assist in the resolution of contractual claims by the contractor. 10 Establish and maintain a financial control system. 11 Clarify details and descriptions during construction as required. 12 Prepare valuations for payment certificates to be issued by the principal agent. 13 Witness and review of all tests and mock-ups carried out on site. 14 Check and approve contractor drawings for compliance with contract documents. 15 Update and issue drawings register. 16 Issue contract instructions as and when required. 17 Review and comment on operation and maintenance manuals, guarantee certificates and warranties. 18 Inspect the works and issue practical completion and defects lists. 19 Arranging for the delivery of all test certificates, including any Certificates of Compliance, statutory and other approvals, and record drawings and operating manuals. Carry out contract administration procedures in terms of the contract.	• all statutory certification and certificates of compliance as required by the local and other statutory authorities.
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Table 1 : Scope of work (ECSA Stages)

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3. PRICING SCHEDULE

A. Time Based Fees

Note : Estimated time-based rates over-all 512 hours - (4 months @ 8 hours per day on a 4-days per week)

ID	KEY STAFF	FIXED HOURLY RATE (Excl VAT)	QTY Estimated (Hours)	AMOUNT
1.	Project Engineer Mechanical Engineering (Pr. Eng or Pr. Tech Eng.)		256	
2.	Site Technician Mechanical Engineering		256	

Table 1 : Time based fees

B. Disbursements

NB: All reimbursable expenses shall be claimed a per the latest rates for reimbursable expenses published by Department of Public Works & Infrastructure (DPWI) travelling from Polokwane - 1 Landros Mare Street to the various site.

ID	DESCRIPTION	QTY	RATE	AMOUNT
3.	Allowance for disbursements (Travelling time, travel cost, printing, typing, flights, accommodation, and subsistence)	1	R 150 000.00	R150 000.00

Table 2 : Disbursements

C. Summary of Pricing Schedule

ID	DESCRIPTION	AMOUNT
4.	Time based Fees (Table 2)	
5.	Disbursements (Table 3)	R150 000.00
Subtotal (Excl VAT)		
VAT (@15%)		
Grand Total (Incl VAT)		

Table 3 : Summary of Fees + Disbursements

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4. PROCUREMENT PROCESS

The normal LNW process will be followed in line with the company's SCM policy and procedures with no deviations from the normal anticipated at this stage.

CIDB Grading Required	: N/A
Validity of Tender	: 90 Days
Contract Period	: Four (4) Month
Closing date of Advert	: 14 JUNE 2024 at 14:00
Site Inspection date	: N/A
Submission via email	: e-mail - SCM to belindam@lepelle.co.za
Technical inquiries'	: Mr Gundo Motsoare gundom@lepelle.co.za
SCM inquiries'.	: Ms Belinda Mojela belindam@lepelle.co.za

5. EVALUATION CRITERIA

Preferential Points System will be used to evaluate this bid in line with the Preferential Procurement Policy Framework 2022. Bidders will be evaluated and pre-qualified on mandatory requirements first, and only those qualifying will be evaluated for functionality followed by administrative requirements. Bidders will further be evaluated on price and preference as the final stage.

The following shall be the tender evaluation criteria:

1. Prequalification (Mandatory)
2. Functionality
3. Price and Preferential point system
4. Administrative compliance

THIS BID WILL BE EVALUATED AND ADJUDICATED ACCORDING TO THE FOLLOWING CRITERIA:

1. Relevant specifications
2. Value for money
3. Capability to execute the contract
4. LNW SCM Policy
5. PPPFA & associated regulations

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5.1 Pre- Qualification (Mandatory Requirements)

NB: Mandatory requirements – Only bidders who have adhered or submitted the following documents will be considered for further evaluation, namely:

- a) Professional Indemnity (PI) of at least R 5 000 000.00 or above (Submit proof of cover, not letter of intent of PI). PI to comply with the legislative framework (e.g FAIS – Financial Advisory and Intermediary Services Act of 2022)
- b) Proof of registration with the Central Supplier Database (CSD)
- c) The JV agreement for JV partners to be submitted indicating percentage split up to 100% for partners to render agreement valid if applicable.
- d) Failure to use the provided CV template will also result in disqualification.
- e) Late submissions after 14:00 am of the closing date or hand-deliveries will be disqualified.

5.2 Functionality Evaluation

EVALUATION PROCESS. All bids duly lodged will be evaluated on functionality as Pre-qualifying criteria. The evaluation criteria and weighting for measuring functionality are indicated. Criterion	Weighting (Points)
C.V of a qualified Professional Project Engineer – Mechanical Engineering (Pr. Eng or Pr. Tech Eng.) – 5 years post registration with experience of at least three (3) Bulk Water Infrastructure related projects to a minimum of R10 million (VAT Incl) construction cost in the role of Engineer. Professional Mechanical Engineer: ▪ <i>Criteria above not fully met (qualifications and ECSA)= (0) points,</i> ▪ <i>Less than three (3) relevant projects worth at least R 10 million = (0) points,</i> ▪ <i>Three (3) or more relevant projects in the role of engineer = (5) points.</i>	

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- A minimum points to be scored is 5 points out of 5 points (100%) will be required to pass functionality.
- Online verification will be conducted on the professional registrations which should be aligned to the required qualification.

5.3 Evaluation Based on Preferential Point System

NB: NO BIDDER WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE (see definition on SBD 6.1 attached).

Specific Goals	Means of verification	80/20 Points	90/10 Points
Disability (Minimum of 1 shareholder ownership in the company)	CSD Report	5	2,5
Black women (100% Black women ownership in the company)	CSD Report	5	2,5
Black ownership (100% black ownership in the company)	CSD Report	5	2,5
Black Youth (Minimum of 1 shareholder Black youth ownership in the company)	CSD Report	5	2,5
Total points		20	10

The 80/20 Preferential Point System will be used to evaluate the bid.

Financial offer and Preferential Point System:

- a) Score RFQ evaluation points for financial offer.
- b) Confirm that bidders are eligible for the Preference points claimed, and if so, score tender evaluation points.
- c) Calculate total quotation evaluation points.
- d) Rank quotations offers from the highest number of RFQ evaluation points to the lowest.
- e) Recommend quotation with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

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GENERAL CONDITIONS

The following preference point systems are applicable to invitations to tender:

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

- a) The applicable preference point system for this tender is the 80/20 preference point system.
- b) The 80/20 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	
SPECIFIC GOALS	
Total points for Price and SPECIFIC GOALS	100

Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

DEFINITIONS

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- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

POINTS AWARDED FOR PRICE

THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

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

80/20	or	90/10
$Ps = 80 \left(1 - \frac{Pt - Pmin}{Pmin} \right)$	or	$Ps = 90 \left(1 - \frac{Pt - Pmin}{Pmin} \right)$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

Note to tenderers: The tenderer must indicate how they claim points for each preference point system on SBD 6.1

5.4 Administrative Compliance

These documents shall be required only from the preferred bidder. Failure to submit within 48 hours of confirmed acknowledgment of receipt shall lead to disqualification and LNW shall consider the next preferred bidder who qualifies.

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- a) Attached proof of Company or Shareholders Municipal Rates or Lease agreement with statement or a dated stamped letter from tribal authority. (Proof not more than six (6) months old from advert date)
- b) Certified ID copies of the company shareholders (copied not more than 6 months)
- c) Certified ID copies for key personnel (proof not more than six (6) months)
- d) Complete all SBD forms.
- e) Company registration documents
- f) SARS Tax pin

Notes:

- ***All the documents under item 4 will become mandatory within 48 hours to the recommended bidder and failure to submit will lead to automatic disqualification.***
- ***LNW reserves the right to appoint more than one bidder for this project and/ or to reduce the scope by more than 50%.***
- ***The service provider will be expected to act diligently and use such skills in the execution of the project also in terms of the ECSA code of conduct.***
- ***No costs for support staff such as PA, CEO, company overhead costs, draught person and driver etc., shall be accepted for this contract.***

6. CONTRACT CONDITIONS

The successful service provider shall enter into the professional services contract with Lepelle Northern Water (LNW) which is the STANDARD PROFESSIONAL SERVICES CONTRACT (July 2009) (Third Edition of CIDB document 1014). A copy of this document may be obtained from the CIDB's website www.cidb.org.za

The following contracts data are applicable to this contract:

CLAUSE.	DATA
3.4 and 4.3.2	The Employer is Lepelle Northern Water
3.4 and 4.3.2	The authorized and designated representative of the Employer is: The Project Manager as assigned by the Chief Executive of LNW

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CLAUSE.	DATA
3.4 and 4.3.2	The address for receipt of communications is: 01 Landros Mare Street Polokwane 0700
1	The project: REQUEST FOR QUOTATION – PSP RESIDENT ENGINEERS OLIFANTS – EBENEZER PHASE 1 MECHANICAL ENGINEERING
1	The Period of Performance (i.e. work allocation) is only for 4 calendar months , from date Contract is in effect.
1	The Start Date is the date when the Service Provider receives his formal copy of the signed Contract from the Employer.
3.5	The location for the performance of the Project is the construction sites of Olifantspoort and Ebenezer Water Treatment Schemes
3.12.1	Add to clause; The Service Provider shall note that his service provision forms an integral part of the total service delivery scope of the Employer, and that any delay, non-provision or negligent provision thereof may seriously affect the provision of the other related-services and contracts. Additionally, this Contract also constitutes either a near-long-term or long-term contract in terms of the Supply Chain Management Regulations. Both these factors require that the Employer establish important performance criteria to ultimately ensure full-service delivery to his customers. Therefore failure, on the part of the Service Provider, to deliver any part or the total service correctly and timeously shall result in the application of a performance penalty, per offence. The penalty shall be R 100,000.00 or equal to actual losses incurred on other related services/contracts plus 10% whichever is greater per day for non -performance subject to a maximum amount of R200,000.00 per offence, after which the Employer reserves the right to terminate either the Works Order(s) or Contract agreement with the Service Provider. The employer may also claim from the professional indemnity any losses incurred; either due to poor planning or designs and lack of due diligence.

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CLAUSE.	DATA
3.15.1	The programme shall be submitted within 2 days of appointment and handover. 1. A programme shall be provided and maintained by the Service Provider throughout the contract duration. 2. In compiling the Works Programme the Service Provider shall note that: a. the working days and hours for staff are Monday to Friday between 08h00 and 17h00. b. Non-working Time: All South African public holidays, weekends and the local traditional annual builder's break shall be incorporated in the programme. c. Familiarize himself with the Employer's Standard Operational Procedures such as shutdown scheduling while formulating the programme.
3.16.1	The indices are those contained in Table A of P0141 CPI for the Limpopo Province CPI for all services published by Statistics South Africa.
4.3.1 (d)	The Service Provider shall assist in the obtaining of all approvals, licenses from state, regional and municipal authorities having jurisdiction over the Project, unless otherwise instructed by the Employer to act on the Employer's behalf in line with Clause 4.6.
5.4.1 and 13.1.3	The Service Provider is required to provide and maintain a minimum Professional Indemnity Insurance as stated in Contract Document.
5.5(c)	The Service Provider is required to obtain the Employer's prior approval in writing before taking any of the following actions: a) Removing Key Persons, whose participation has been approved at tender stage or thereafter, from the Project or its issued Works Order(s). b) Changes and/or alterations made to 'issued for construction documentation' (drawings or schedules or instructions by the designer) where only construction supervision and/or monitoring services is provided by the Service Provider, i.e. design is executed by the Employer or another party contracted by the Employer. c) Changes and/or alterations made to 'issued for construction documentation' that has significant financial implications.
5.4.3	Add New Clause A Performance Fee deduction shall not apply.
8.2.1	The Contract is concluded when the Period of Performance has elapsed. a) The Service Provider shall not be issued new Works Orders, nor shall he accept and commence with any new Works Orders, the day after the

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CLAUSE.	DATA
	conclusion of Period of Performance. Should the Service Provider accept and commence with a new Works Orders in this instance he shall not be entitled to any remuneration for services rendered as per the applicable Work Orders nor shall the Employer be entitled to the usage or copyright of such rendered services. b) Sub-projects that have been issued for implementation by the Employer before the Contract conclusion date, but not completed before the Contract conclusion date shall be completed by the Service Provider, based on the agreed programme and subject to written approval by the employer. c) The Contract is concluded on the Date of the completion of the defects liability period, which is one calendar month after issue of the certificate of final completion.
8.4.3(c)	The period of suspension under clause 8.5.1 is not to exceed 12 months.
9. 1	Copyright of the documents prepared for the Project is vested with the Employer.
12.1	Interim settlement of disputes is to be by amicable settlement, then adjudication if amicable settlement fails.
12.2 and 12.3	Final settlement is by Arbitration then the court of Law in South Africa.
12.3.3	In the event that the parties fail to agree on an arbitrator, the arbitrator is nominated by mutual agreement of both contracting parties.
13.1.4	Add New Clause The Service Provider acknowledges that the approvals of drawings and reports by the Employer does not change the Service Provider's responsibility to provide the Services, nor does it indemnify the Service Provider from any negligence and/or omissions.
15	The interest rate is the prime interest rate of the Employer's bank at the time the amount is due.
4. 7	Add to Clause: Payment shall be made upon: a) The Service Provider submitting a Payment Certificate with a schedule of work completed, to the Employer before or on the date that will be communicated to you by the Employer. b) The payment Certificate being accompanied with an Original Tax Invoice compliant with SARS and the Employer's requirements. c) Submission of a statement outlining all outstanding payments.

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CLAUSE.	DATA
	Payment will be made 30 days from date of statement on the date that will be communicated to you by the Employer. Payment for the Contract shall be by way of electronic bank transfer; thus, the Service Provider shall ensure the Employer at all times has the most updated banking information of the Service Provider. The Employer requires that the Service Provider invoices separately per individual active Contract Works Order.
13.1.4	Add New Clause The Service Provider acknowledges that the approvals of drawings and reports by the Employer does not change the Service Provider's responsibility to provide the Services, nor does it indemnify the Service Provider from any negligence and/or omissions or liability.

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SUMMARY CV FORMAT: PROJECT MECHANICAL ENGINEER

ROLE:

Full Name(s)	
Surname	
ID Number	
ECSA Reg No.	

Employment History (Summary)	Tertiary Qualifications (Highest order)			
1. 2. 3. 4.	1. 2. 3. 4.			
	Professional Affiliation (Most relevant)			
	Category	Organization	Reg. No.	Date

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Relevant Projects Completed Recently

No.	Description Name of Project	Type: Water Infrastructure projects	Name of Client	Start and End dates	Position or role (on the project)
1.					
2.					
3.					

Certification:

I, the undersigned, certify that, to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.

.....
Signature of person named in the schedule

.....
Date