

# ANNEXURE B – SCOPE OF WORKS (SOW) INCLUDING PRICING SCHEDULE

REQUEST FOR PROPOSAL [RFP] No: TNPA/2025/02/0016/89905/RFP

#### FOR THE PROVISION OF

HEALTH AND SAFETY AGENT/S ON THE PORT ELIZABETH (PE) CIVIL BULK INFRASTRUCTURE UPGRADE (FOR A PERIOD OF THIRTY-SIX (36) MONTHS), MARINE INFRASTRUCTURE UPGRADE FOR A PERIOD OF TWENTY-FOUR (24) MONTHS AND NATIONAL FIRE SERVICES INFRASTRUCTURE EQUIPMENT UPGRADE PHASE 2A (FOR A PERIOD OF FIFTEEN (15) MONTHS)

# **Pre-qualification:**

- Proof of good standing with SACPCMP within the category of PrCHSA.
- Proof of attendance at compulsory briefing session (refer section 2 of the RFP document for proof required).

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### 1. SPECIFICATIONS AND SCOPE OF WORKS:

## 1.1. Background and purpose

Transnet National Ports Authority (TNPA) is responsible for the safe, effective, and efficient economic functioning of the national port system, which is managed in a landlord capacity. In line with the provisions of the National Ports Act (Act no. 12 of 2005), the core functions of TNPA are to plan, provide, maintain, and improve port infrastructure as mandated under Section 11(1).

The Port of Port Elizabeth (PoPE), through the capital delivery programme, has initiated various projects to meet TNPA's mandate and strategic objectives. Three (3) of the capital projects are in the detailed design and execution phases of the project lifecycle process, which therefore requires the involvement of a professionally registered Construction Health and Safety Agent(s) (PrCHSA).

# 1.1.1. Civil Infrastructure Upgrade

The PoPE originated in the early 1900s and was formalized in 1935 when operations started at the Charl Malan Quay. Further major expansions included the reclamation during the containerization of the Charl Malan Quay, completed in 1978. It can therefore be estimated that the oldest sections of the port are approximately 90 years old whilst the newest sections are 50 years old. As these expansions occurred, additions were made to the potable water and sewer networks, to service the new sections of the port.

The sewer and water networks have reached their serviceable lifespans indicated by frequent breakdowns which leave port users without essential services to conduct business. This has also resulted in the port having an under-recovery of approximately 42% of revenue due to water loss through

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undetected leaks, water theft, or unbilled tenants. Furthermore, the port's" firefighting supply is connected to the potable water network, which does not comply with SANS 10105-2, as the pressure and flow rate do not meet the minimum requirements.

The pre-feasibility study was conducted in 2019 wherein the following was recommended:

- Replacement of the water network with PVC-O pipes ranging from 75mm to 200mm diameters. Additional cover, up to a meter, and encasement with concrete at road crossings. Smart meters to be installed at various points to assist with tenant billing and leak detection.
- Replacement of the sewer network with PVC-U pipes. Decommissioning and bypassing of the existing pumps including the two (2) which are difficult to access. Implementation of smart systems to detect pump failure. Connection of portions of the port, previously using a septic tank system, to the waterborne system.

#### 1.1.2. Marine Infrastructure Upgrade

The Old Tug Jetty Sheetpile wall, located in the fishing precinct in the PoPE was constructed in the mid-1970's and consists of steel interlocking 'U' sheet pile sections together with dead man anchors and a concrete capping beam. The sheet piles have severely corroded with large holes visible in the tidal zone. These holes have caused the leaching of backfill material resulting in the subsidence of the back of the quay area.

A pre-feasibility study was conducted in 2019 which concluded the following:

The current deterioration of the sheet pile is ongoing and will get progressively worse;



- Given the advanced deterioration, the ability of the structure to perform its functional requirements has become questionable;
- Doing nothing would eventually result in the abandoning or condemning of the quay due to safety concerns; and
- Replacement is the only practical solution that would provide certainty concerning the future life span of the facility.

Based on the current condition of the structure and the results of the optioneering and multi-criteria analysis, a counterfort wall and deck-on-pile hybrid solution has been recommended as the preferred option for rehabilitation.

### 1.1.3. National Fire Services Infrastructure and Equipment Upgrade

In 2012 a study was conducted to assess the existing capabilities of the TNPA Fire and Emergency Services at the Ports of Cape Town, East London, Ngqura, Port Elizabeth, Richards Bay, and Saldanha. The study was undertaken by the Fire Protection Association of Southern Africa (FPASA) in accordance with the International Code for the Maritime Transport of Dangerous Goods (IMDG). The assessment findings emphasized the space limitation and response time posed by the current location of the fire station within the Port of Port Elizabeth. The need to upgrade the infrastructure of the Fire Services Department at Port of Port Elizabeth arises mainly from the current inadequate operational space, because:

- The current infrastructure does not meet the requirements for proper firefighting, as the current building is too small, and it is shared with other service providers in the port.
- The facility does not provide storage for the new fire services equipment that will be procured under Phase 2B of this project.
- The building does not have training facilities.

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The building does not have adequate change room facilities, parking
garages for equipment, control rooms, lecture rooms, and a suitable
staff kitchen.

The building is not centrally located and does not meet the required response time to service the Port.

# 1.2. Scope of Work

These three (3) projects requires the appointment of a qualified professionally registered Construction Health and Safety Agent(s) as required by the Construction Regulations 2014 that will, but is not limited to: have oversight, perform audits, attend project meetings and workshops on safety and health matters as well as mentor TNPA health and safety personnel involved in the projects, during the detailed design, construction, and close-out phases of the projects.

The employer seeks to acquire the services of Construction Health and Safety Agent(s) registered as a PrCHSA to oversee the detailed design, participate in Gate Review (Transnet's project lifecycle processes), and execution of three (3) projects at the Port of Port Elizabeth as follows:

- Civil Infrastructure Upgrade for a period of 36 months for detailed design, construction, and close-out phases.
- Marine Infrastructure Upgrade for a period of 24 months for detailed design, construction, and close-out phases.
- National Fire Services Infrastructure and Equipment Upgrade for a period of 15 months pre-construction, construction, and close-out phases.

The appointed PrCHSA will oversee full compliance of either one (1) or two (2) or all three 3) projects named above, but not limited to, the Occupational Health and Safety Act (Act 85 of 1993), all applicable regulations, standards, and by-laws.



# 1.2.1. Responsibilities during pre-execution and execution for all three (3) projects

- Evaluate the designs in terms of health and safety.
- Review, provide input into, and sign off all required health and safety documents.
- Prepare and submit the construction work permit application (CWP) to the
   Department of Employment and Labour.
- Assume overall responsibility for the effective implementation and administration of all health and safety compliances during pre-execution, execution, and close-out of the project.
- Compile or review the employer's current Health and Safety Specification and Baseline Risk Assessment and ensure that it is made available to the Principal Contractor and appointed Contractors.
- Undertake inspections of the project site to ensure compliance with the
   *Employer's* specifications and Principal Contractor's and Contractor's Health
   and Safety Plan in terms of the outlined specifications as set out in these
   documents.
- Keep a register of all incidents (spills, injuries, complaints, legal transgressions, etc.) and other documentation.
- Implement recommendations of internal and/or external audits.
- Ensure that construction staff are trained in accordance with requirements of the Health and Safety Plan.
- Implement recommendations for incidents of non-compliance.
- Ensure that health and safety issues receive adequate attention during the site induction training.
- Conduct monthly Health and Safety audits on the project on behalf of the Employer.
- Monitor the Contractor's compliance on the project.

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- Ensure that all required and applicable health and safety monitoring
   programmes (sampling, measuring, recording etc. when specified) are carried
   out in accordance with protocols and schedules.
- Maintain site documentation related to health and safety management (permits, method statements, risk assessments, reports, audits, monitoring results, etc.). Documentation to be maintained on the relevant site Document Control System.
- Attendance at scheduled Health and Safety meetings and project coordination meetings and workshops.
- Report, investigate and close out all Health and Safety incidents and ensure corrective actions arising from investigations are implemented.
- Keep a regular photographic record of all Health and Safety incidents as well as non-compliances to legislative and other applicable requirements.
- Implementation of Health and Safety related actions arising out of the minutes from scheduled meetings.
- Management of complaints register.
- Review and sign off all required Health and Safety documents such as, but not limited to, Method Statements, Risk Assessments, Safe Work Procedures, Health and Safety Plans, Fall Protection Plans etc., as prepared by Principle Contractors and Contractors.
- Collate information received, including monitoring results into a monthly report to the Construction Manager indicating progress against targets.
- Sign off all project-specific Health and Safety documentation and the sign-off implies that the PrCHSA is satisfied and approves the contents of the documents as covering Health and Safety risks and legal exposures before submission to the Employer.
- The appointed Health and Safety Agent must monitor and ensure the project complies with the statutory requirements under the Occupational Health and Safety Act and applicable regulations, all other identified applicable legislation SANS codes, policies, procedures, by-laws pertaining to the project.

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# N.B. The appointed PrCHSA will be expected to mentor TNPA Health and Safety Specialist throughout all the phases of the mentioned projects.

# 1.3. Scope Summary

# **Civil Infrastructure Upgrade**

The Civil Infrastructure Upgrade project objective is to replace and upgrade all existing water and sewer networks in the port, ensuring efficient and reliable supply through the installation of an optimized and sustainable system. The scope of work includes:

- Geotechnical Investigations.
- Underground Service Detection and Mapping.
- Removal of existing water reticulation, supply, and installation of a new network.
- Removal of existing sewer reticulation, supply, and installation of a new network
- Installation of smart meters and Supervisory Control and Data Acquisition (SCADA).

#### **Marine Infrastructrure Upgrade**

The Marine Infrastructure Upgrade project proposes the rehabilitation of the Old Tug Jetty Sheetpile wall through the construction of a counterfort and deck-on-pile hybrid solution. The implementation of the proposed solution will encase the existing structure, mitigating the risks associated with the current condition of the infrastructure. The Old Tug Jetty Sheetpile wall, which spans for a distance of two hundred and fourty two meters (242 m), consists of interlocking 'U' section sheet pile

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units, driven to approximately minus six meters Chart Datum (-6m CD), capped with a concrete beam together with deadman anchors.

# **National Fire Services and Infrastructure Upgrade**

The National Fire Services Infrastructure (2-storey building) and Equipment Upgrade project is aimed at constructing and providing new infrastructure, furniture, equipment, etc. for the TNPA Fire and Emergency Services at the PoPE The proposed development will occupy a footprint of approximately eight hundred and seventy eight square meters (878m²) and will include provision for, but not limited to, two (2) fire engine rooms (2 apparatus bays), a workshop, an equipment and control room, offices with kitchen and ablution facilities, a gym, and a parking area.

# 1.4. General for all three projects

#### STUDY DELIVERABLES & FORMATS

All prospective bidders are required to submit the following documentation, over and above other tender documents. These will form part of the technical evaluation and should be in line with the scope of work:

- Registered PrCHSA to submit complete CV indicating post registration experience,
- Completion Certificates
- List of construction work permits (CWP) successfully obtained in the name of the tendered PrCHSA, from the Department of Employment and Labour (DoEL).

#### 1.5. Location of site and access

The site locations of the various projects are as illustrated below.

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Figure 1: Project locality

The Civil Infrastructure Upgrade project includes the water and sewer network throughout the port. The site is therefore encompassed by the entire perimeter of the PoPE.

The Marine Infrastructure Upgrade site, as indicated in Figure 1, is located in the fishing precinct of the port adjacent to the Old Tug Jetty. The northern portion of the site is used for fishing operations such as berthing of fishing vessels and transshipment, whilst the southern section is used for the staging of small craft for maintenance and repair.

The site for the National Fire Services Infrastructure and Equipment Upgrade is located adjacent to Baakens Road, next to the Flemming Street harbor entrance, as indicated in Figure 1. The area earmarked for development is a brownfield area with existing structures that will be demolished and replaced by a new double-storey building, complete with a parking area. The site was preferred due to the time it takes to respond to a fire emergency within the port boundary. The site is central to all potential risks that may arise within the port.

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- Access to the port can be via Green Street or Jetty Street.
- A compulsory site visit shall be arranged by TNPA Procurement, and TNPA Civil Engineer(s) is to be present during the site visit.

#### **Working hours** 1.6.

- The working hours shall be from 08h00 to 16h00, Monday to Friday.
- The working hours must not be changed without a written agreement between TNPA PoPE and the appointed Service Provider.

#### **1.7. Compliance**

The Service Provider shall ensure that all the current statutory laws and future legislation. Work shall comply with all applicable legislation, codes of practice, local, regional, provincial, national authorities' requirements.

#### 1.8. **Parking & vehicles**

Parking will be at any open parking. Vehicles used for people and equipment transportation must be easily identifiable as that belonging to the contractor.

#### 1.9. **General pricing instruction**

Pricing assumptions mean the criteria as set out below, read together with all parts of this specifications document, will be assumed in the contract that the tenderer has taken into consideration when developing their rates and prices.



# 2. PRICING SCHEDULE

This pricing schedule should be completed only after reading the scope of works and pricing instructions.

Item no.	Description	Unit	Qty	Rate (R)	Total amount (R)	
1	CIVIL BULK INFRASTRUCTURE UPGRAMONTHS)	DE (FOR A	PERIOD	OF THIRTY	-SIX (36)	
1.1	Pre-Execution					
1.1.1	Compile and/or Review and approval of Health and Safety Specifications	Sum	1			
1.1.2	Compile and/or Review of Baseline Health and Safety Risk Assessment	Sum	Sum	Sum 1		
	Compile and/or review Risk Register					
1.1.3	Compile and/or Review detailed design report and drawings	Sum	1			
1.1.4	Input into Gate Review documents	Sum	1			
1.2	Project Execution					
1.2.1	Construction Kick-off Meeting	Sum	1			
1.2.2	Application of construction work permit, compilation, submission, follow-ups and amendments to DoEL	Sum	1			
1.2.3	Review and acceptance of Health and Safety File	Sum	1			
1.2.4	Ensure Health and Safety compliance through document review of all contractors on site during construction.	Months	36			
1.2.5	Conduct monthly site audits with all necessary reports, etc.	Months	36			
1.2.6	Attendance and input into Construction Progress Meetings, Risk workshops, monthly reports, any other sessions/meetings as deemed required.	Months	36			

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Item no.	Description	Unit	Qty	Rate (R)	Total amount (R)
1.3	Project Closeout				
1.3.1	Health and Safety close-out report (all aspects happened on site, lesson learnt, etc.)	Sum	1		
1.3.2	Final Health and Safety project register and documentation (all the Files from the principal contractor and contractors)	Sum	1		
	Sub-total				
	Add 15% VAT				
	TOTAL Carried to Summary Table				
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Item no.	Description	Unit	Qty	Rate (R)	Total amount (R)	
2	MARINE INFRASTRUCTURE UPGRADE (FOR A PERIOD OF TWENTY-FOUR (24) MONTHS)					
2.1	Pre-Execution					
2.1.1	Compile and/or Review and approval of Health and Safety Specifications	Sum	1			
2.1.2	Compile and/or Review of Baseline Health and Safety Risk Assessment Compile and/or review Risk Register	Sum	1			
2.1.3	Compile and/or Review detailed design report and drawings	Sum	1			
2.1.4	Input into Gate Review documents	Sum	1			
2.2	Project Execution					
2.2.1	Construction kick-off meeting	Sum	1			
2.2.2.	Application of construction work permit, compilation, submission, follow-ups and amendments to Department of Employment and Labour.	Sum	1			
2.2.3	Review and acceptance of Health and Safety File	Sum	1			
2.2.4	Ensure Health and Safety compliance through document review of all contractors on site during construction.	Months	24			
2.2.5	Conduct monthly site audits with all necessary reports, etc.	Months	24			
2.2.6	Attendance and input into Construction Progress Meetings, Risk workshops, monthly reports, any other sessions/meetings as deemed required.	Months	24			

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Item no.	Description	Unit	Qty	Rate (R)	Total amount (R)
2.3	Project Closeout				
2.3.1	Health and Safety close-out report (all aspects happened on site, lesson learnt, etc.)	Sum	1		
2.3.2	Final Health and Safety project register and documentation (all the files from the Principal Contractor and Contractors)	Sum	1		
	Sub-total				
	Add 15% VAT				
	TOTAL Carried to Summary Table				



Item no.	Description	Unit	Qty	Rate (R)	Total amount (R)
3	NATIONAL FIRE SERVICES INFRASTE 2A (FOR A PERIOD OF				DE PHASE
3.1	Pre-Execution				
3.1.1	Review and approval of Health and Safety Specifications	Sum	1		
3.1.2	Review of Baseline Health and Safety Risk Assessment Review Risk Register	Sum	1		
3.1.3	Review detailed design report and drawings	Sum	1		
3.2	Project Execution				
3.2.1	Construction Kick-off Meeting	Sum	1		
3.2.2	Application of construction work permit, compilation, submission, follow-ups and amendments to DoEL	Sum	1		
3.2.3	Review and acceptance of Health and Safety File	Sum	1		
3.2.4	Ensure Health and Safety compliance through document review of all contractors on site during construction.	Months	15		
3.2.5	Conduct monthly site audits with all necessary reports, etc.	Months	15		
3.2.6	Attendance and input into Construction Progress Meetings, Risk workshops, monthly reports, any other sessions/meetings as deemed required.	Months	15		

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Item no.	Description	Unit	Qty	Rate (R)	Total amount (R)
3.3	Project Closeout				
3.3.1	Health and Safety close-out report (all aspects happened on site, lesson learnt, etc.)	Sum	1		
3.3.2	Final Health and Safety project register and documentation (all the Files from the principal contractor and contractors)	Sum	1		
	Sub-total				
	Add 15% VAT				
	TOTAL Carried to Summary Table				



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# **Summary of Costs:**

Item no.	Description	Total carried Forward (Including VAT)
1	CIVIL BULK INFRASTRUCTURE UPGRADE	
2	(FOR A PERIOD OF THIRTY-SIX (36) MONTHS)  MARINE INFRASTRUCTURE UPGRADE	
_	(FOR A PERIOD OF TWENTY-FOUR (24) MONTHS)	
3	NATIONAL FIRE SERVICES INFRASTRUCTURE EQUIPMENT UPGRADE PHASE 2A (FOR A PERIOD OF FIFTEEN (15) MONTHS)	
	TOTAL CONTRACT VALUE CARRIED FORWARD TO MASTER SERVICES AGREEMENT	