

## ANNEXURE C3.2: Scope of Work

Rand Water seeks to appoint a suitably qualified Service Provider to carry out planned and unplanned plumbing maintenance and repairs to various sites.

### SCOPE OF WORKS

The project comprises the following but not limited to, main works:

- Repairs to soil and wastewater drainage
- Rainwater disposal systems
- Sanitaryware and fittings
- Solar water heating systems
- Servicing of Septic tanks
- Maintenance of canteen fat trapping equipment
- Supply of plumbing materials and parts as per BoQ in item 2.2.13
- The scope also includes a 24hr, 7 days a week standby service.

#### 3.1.1 Maintenance references

- All plumbing Maintenance and repairs shall be in accordance with the following standards:
  - OHS Act 85 of 1993
  - National Building Regulations
  - SANS10252-1 and 10254

#### 3.1.2 Safety and provision of materials

- The service provider shall be responsible for supply of all materials required to maintain and repair all faults as per job cards.
- All material shall be of high standard.
- Material rate shall be deemed to include the cost, handling, admin, profit, delivery and offloading to site

#### 3.1.3 Quality of workmanship

- Poor quality of work shall not be accepted and will not be signed by the Building Foreman and Rand Water reserves the right to hold payment until work is corrected.
- All manufactured materials supplied shall be new materials unless the contrary is specified. All materials specified in accordance with SANS Specifications.

#### 3.1.4 Protection of furniture and equipment

- Most of the work to be done inside buildings and residential accommodation will be carried out where there is furniture and other equipment.
- The Service Provider shall be responsible for moving the furniture and equipment in order to provide working space for his/her personnel. The movement of furniture

and equipment shall be kept to the very minimum and the Service Provider shall be solely responsible for any damage to furniture or equipment arising from its removal and/or replacement

3.1.5 Response times

- For emergencies – within 1(one) hour
- For urgent work – 24 hours
- Non- urgent work – 48hours

3.1.6 Supply of plumbing materials and spares

- The supplier must provide/supply all necessary plumbing material and spares as, but not limited to the list provided in BoQ item 2.2.13
- The Service Provider shall attach to his/her accounts original supplier's tax invoices for new parts, components and materials to be used or that were used for repair work requiring non-scheduled items The full description similar to that required to order an item from a supplier, i.e. Make, model, serial number, size, capacity, etc. shall be listed on the account.

3.1.7 General requirements.

- In order to undertake work a written instruction must be received from the Building Manager or Building manager.
- For all work before and after pictures (date stamped) must be supplied. These together with assessment report must be submitted for all work together with the invoice. Failure to do so will result in delays.
- A minimum of 12months guarantee must be offered for all workmanship as well as parts and fittings.
  - Monthly meetings with Facilities management will be required. Where no work has been undertaken for a month and nothing planned for the next month the meeting could be waived.

## 4. TECHNICAL SPECIFICATIONS

### 4.1 Repair work to the soil and wastewater drainage

- (a) Replacement of damaged, broken, leaking, corroded above-ground and underground pipework and fittings;
- (b) Replacement of damaged, broken and missing gully gratings,
- (c) Initial unblocking and cleaning of all drainage pipework, traps and gullies;
- (d) Repair of sewerage system where necessary;

- (e) At the discretion of the Building Foreman, video surveying of underground drainage pipework may be required to establish root ingress, damaged pipework, fat build-up, blockages, incorrect falls, sagging and as-built information. This survey shall be utilised to establish the extent of repair and upgrade work to be executed;
- (f) The drainage system shall be tested according to the specifications laid down by the NBR. This test shall be carried out in the presence and to the satisfaction and approval of the Building Foreman.
- (g) Pipe couplings: Repair sections shall be joined utilising existing pipe sockets and collars where possible. Repair couplings shall be used with the approval of the Building Foreman to match existing pipework.
- (h) Repairing of leaks: Where leaks occur at pipe sockets or collars the affected section will be cut from the pipeline and repaired using repair couplings. Where obvious leaks occur due to displaced sealing rubbers they will be replaced if the replacement can be done economically by lifting adjacent pipes.
- (i) Cleaning of sewerage network entails the removal of silt, debris and vegetation from within the pipelines and manholes and the general cleaning of areas where leakage has occurred. This can be done either mechanically or chemically according to the more appropriate method as specified by the Contracts Manager. Material removed from the pipe system or culverts shall be disposed of to a suitable spoil site.

#### **4.2 Rainwater Disposal Systems**

Maintenance work to the rainwater disposal system shall include but not be limited to the following:

- (a) Maintenance of damaged, broken, leaking and corroded pipework and fittings;
- (b) Maintenance of damaged, broken and missing rainwater outlets,
- (c) Initial unblocking and clearing of all rainwater down pipes and gutters;
- (d) Realign and fix gutters to correct falls where necessary, including additional brackets where required.

#### **4.3 Sanitaryware and fittings**

- (a) All cisterns are to be cleaned out and filling and flushing mechanisms shall be serviced and repaired. Where beyond repair status, these items shall be replaced with items of equal specification or approved alternatives.
- (b) Unserviceable flush valves to be repaired utilizing the manufacturers repair kits only. Valves that are worn or damaged beyond repair shall be replaced with valves of equal specification. The design of the valve shall be of such type that all working components can be replaced or repaired without the necessity of changing the valve body – wear and tear must not affect the body of the valve. Brushed chrome concealed type with integral vacuum breaker, non-hold open feature and shut off device. Chrome plated vandal resistant pushbutton activation, “Through Wall” guide tube, wall fixing and captive linkage rod assembly. Valve to be of either piston type or diaphragm type with replaceable working cylinder and piston or diaphragm.

- (c) All pillar taps, mixers, sink taps and other taps are to be serviced, utilising repair kits. Where equipment is beyond repair these items shall be replaced with items of equal specification or approved alternatives. Where equipment connections are loose, these shall be properly secured to sanitary ware and other equipment.
- (d) Leaking, corroded, or damaged chromium-plated flush pipes to water closets and urinals are to be replaced upon instruction from the Building Foreman.
- (e) Replace missing and/or damaged shower gratings with gratings of equal specification or approved alternatives.
- (f) Replacement of missing or damaged tap handles with matching handles where possible,
- (g) Readjust all timing mechanisms on flush valves to the correct flushing and flow times.
- (h) Where replacement of damaged or missing basin and/or sink mixer swivel arms is done it shall be with items of equal specification or approved alternative.
- (i) Replace missing or damaged toilet seats and covers with items of equal specification or approved alternatives.
- (j) Service urinal syphonic valves with replacement kits from manufacturer. Where no spares are available or equipment is damaged beyond repair, these items are to be replaced with values of equal specification or approved alternatives upon approval by Contracts Manager.
- (k) Clean out all bottle traps. Bottle traps that are damaged beyond repair are to be replaced with traps of equal specification or approved alternatives.
- (l) Service bath taps and mixers by utilising manufacturer's replacement kits. Where damaged beyond repair, the taps and mixers shall be replaced with items of equal specification or approved alternatives.

## **5. EXISTING INFRASTRUCTURE ON THE WALLS/ UNDERGROUND**

The Supplier to protect and where required make good the existing infrastructure after completion of work i.e electrical wires, mechanical equipment, IT cablings / equipment etc. These will be tested after completion of work and only then can invoices be processed.

## **6. SCHEDULE OF QUANTITIES**

PREAMBLE TO THE SCHEDULE OF QUANTITIES AND RATES

- a) The Standard Commercial Terms and Conditions, The Special Commercial Terms and Conditions, the Specifications (including the Project Specification), and any Drawings are to be read in conjunction with the Schedule of Quantities and Rates.
- b) The Schedule comprises items covering the Service Provider's profit and costs of general liabilities and of the design, manufacture, supply, installation and commissioning of temporary and permanent Works. The Service provider is at liberty to insert a rate of his own choosing for each item in the Schedule and any item against which no quantity (where applicable) or rate is entered will be considered to be covered by other items in the Schedule.
- c) The quantities and rates inserted in the Schedule are to be inclusive prices to the Employer for the work described under the several items. Such prices shall cover all costs and expenses that may be required for the Works, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the Tender is based. All rates and amount shall be nett, exclusive of Value Added Tax (VAT) and shall be carried to the summary page in their nett form. VAT will then be calculated on the total of the nett amounts.
- d) All quantities and rates as set forth and inserted in the Schedule and extended to the totals for each portion of the Schedule, shall be considered as being totally inclusive for the whole of the Works as stipulated, or as can reasonably be inferred from these Documents.
- e) All product guarantees are deemed to be included in the rates, and installation and application rates will include all necessary inspections and approvals to maintain guarantees.
- f) "Complete" as it is used in the Schedule means the complete system or unit as specified in the particular documents.
- g) Each item in the Schedule which is priced, shall be filled in black ink.
- h) All quantities shall be considered as final and sufficient for the work described. The Proposer shall satisfy himself as to the sufficiency of quantities but may not change quantities. Quantities shall be re-measured and payment shall be made according to the adjusted total only.
- i) In case of arithmetical errors in the multiplication of rates and quantities in the Proposal, the amount shall not be changed. In case of incorrect summation of amounts in the Proposal, the Lump Sum total shall remain fixed.

## 7. HEALTH AND SAFETY

Safety during construction is paramount, and the Service Provider must adhere to the statutory construction regulations and other regulatory requirements.

The following serves as a guideline to the access and safety working procedures:

Pre-qualifiers

1. Letter of Good Standing
2. Risk Assessment
3. SHE plan
4. Valid IOPSA membership certificate
5. Company profile
6. Valid CIDB certificate

After bid award/appointment

1. Fall protection plan (working at heights)
2. Induction manual and Induction Training records-Before work could be commenced with.
3. Accident and incident investigation plan
4. Employer's incident reports form (Dept. of Labour form)
5. Emergency preparedness plan
6. Waste management procedure
7. Safe working procedures (method statement)
8. Toolbox talk manual/topics.
9. Valid medical fitness certificate (only from an occupational health/medical practitioner) including Hepatitis A and B.
10. Valid material safety data sheet
11. Health & Safety Inspection checklists
12. List of required personal protective equipment (PPE register)
13. Notification of construction work
14. Mandatory agreement between Principal Service Provider and Sub-Service Provider
15. Organogram
16. Legal appointments (accepted and signed)
17. Competency certificates
18. Valid Occupational Health and Safety Act
19. Policies (signed by relevant stake holders) i.e.
  - SHEQ policy
  - Drug and alcohol abuse policy
  - COVID 19 policy
20. Safety requirements for scaffolding
  - The Service Provider must ensure that the scaffold to be used complies with SANS 10085.

- Competent supervisor for scaffolding work operations.