



*Corporate
Real Estate*

SCOPE OF WORKS

FOR

**APPOINTMENT OF A MECHANICAL ENGINEER
TO ASSESS THE HVAC SYSTEMS**

FOR

THE SOUTH AFRICAN REVENUE SERVICE

AT

ALBERTON CAMPUS BRANCH

**Project Scope:**

SARS wishes to appoint a Mechanical Engineering Design company to generate all specifications necessary for SARS to go on tender to appoint a HVAC maintenance contractor for a three (3) year term contract.

High-Level Requirements:**Initial Requirements:**

Complete site assessment of all HVAC plant & systems currently installed, interpreting the existing HVAC plant and system information provided by SARS and documenting the full end to end system onto typical AutoCAD Plant and HVAC layouts. SARS has limited HVAC information from the original design on AutoCAD to assist in speeding up this process.

Primary Requirements:

Prospective vendors to provide a quotation to be appointed to provide the following:

Schedule A: Initial Requirements

Cost of Full site assessments and documentation. The cost of the assessment is not to exceed 3 weeks in duration and monetary value.

Schedule B: Planned Day to Day Maintenance & Repairs:

Analyse known schedule of SARS costs for day-to-day maintenance as supplied by SARS.

Evaluate age and probable day-to-day maintenance and daily failures based on age for next 3 years.

Provide a cost Schedule to advise budgeting allowances for client of spare parts to be acquired upfront to sustain HVAC equipment for day-to-day maintenance for a period of 3 years.

Produce a detailed Cost Schedule to advise budgeting allowances for client of all on-going day-to-day maintenance to sustain full operation performance of the HVAC plant and systems (Cost Schedule to provide for CPI escalations – not to exceed the published CPI index each year). Cost schedule is to include ALL costs associated to day-to-day maintenance with suggested contingencies for unexpected routine day-to-day failures not predicted in normal day-to-day operational maintenance costs.

Produce a detailed Maintenance contract for all day-to-day maintenance for SARS to go on tender to appoint contractor.



Schedule C: Planned Annual Maintenance - Scheduled and Associated Costs:

Provide a cost schedule for ensuring all plant rooms run on variable speed fan controls.

Considering installed plant equipment and its condition and plant room(s) equipment and their conditions, provide a cost plan for scheduled planned yearly servicing and maintenance.

Include in detailed Maintenance contract for all day-to-day maintenance for SARS to go on tender to appoint contractor.

Schedule D: New HVAC in Block B (Branch Office) with full BMS HVAC functionality:

SARS has appointed a 3rd party mechanical engineer for proposed new 3 pipe VRV HVAC alteration for the new Branch Office in Block B.

The 3rd party engineer is appointed for full Stage 1 to 6 for this portion of the SARS building. The engineer will provide the successful bidder with a full copy of the installation design.

SARS requires the successful bidder to assess the design from a maintenance perspective and include this system in the overall 3 year maintenance contract specification.

Schedule E: New HVAC in Block B (Scanning /Imaging) area with full BMS HVAC functionality:

Provide a cost plan for additional/new HVAC systems in areas not mechanically ventilated estimated at approximately 3200 m² of scanning and imaging space to be converted to standard staff office space to be implemented in the next SARS financial year (April 2016/ March 2017).

Provide detailed HVAC layouts.

Provide BOQ.

Provision to be made for false ceiling as a return duct for the HVAC system

Provide full documentation for SARS to go on separate tender to have new HVAC works commissioned.

Include in detailed Maintenance contract for all day-to-day maintenance for SARS to go on tender to appoint contractor.

Upon completion of the recommended installation by a SARS appointed service provider, the appointed Engineer is required to sign-off the installation.



Schedule F: BMS – Building Management System:

Allow for the HVAC BMS management system to be upgraded to latest version. This includes the costs of PC hardware, software, licensing and any other systems required to ensure that the BMS system is capable of running the plants at optimum efficiency and controlling the office environment at optimum efficiency from both a user comfort level and minimum running costs by optimum configuration and settings.

SARS requires that the existing BMS system be integrated with the National SARS BMS system roll-out, commencing this financial year.

All individual HVAC temperature controllers in offices and open plan areas are to be deactivated and redirected to a centralised HVAC BMS controlled function.

The BMS is to take on the new floor areas covered by the new VRV system in Schedule D.

Schedule G: Reports Required:

Comparison of Existing vs new/latest HVAC Technology Report on how the existing plant infrastructure and design and running costs compares with the latest HVAC plant system designs WRT Green HVAC system technology. The focus on the report is to evaluate the overall efficiency of the design, what green improvements could be implemented and what could be done to reduce operational costs of the existing system. A specific focus needs to be on the electrical consumption of the current plant vs newer HVAC concepts.

Engineering report on status quo of HVAC system, possible problem areas being identified and ratification proposal.

Notes:

A SLA will be entered into between SARS and the appointed maintenance vendor, stipulating the reaction times, penalties and terms and conditions related to the appointment. Design Engineer's quotes are to include extensive time required on SLA development for Maintenance Contract.

Mandatory Requirement:



- Bidder must have experience in the field of plant based chilled water systems and VRV HVAC systems. Provide a minimum of 5 x references (contactable names & numbers) on similar projects completed. Provide a brief description of the work conducted on each of the projects.
- Provide a project plan for the assessment of the HVAC system at Alberton Campus.
- Provide proof of valid registration certificate from ECSA (Engineering Council of South Africa)