



**SPECIFICATIONS FOR**

**TENDER # 0171-1805**

**Repair/Modification  
to Two (2) Trane Cooling Towers  
Model BAC VLT550A S/N 72-3034/5C  
A**

**CLOSING DATE: February 6<sup>th</sup> , 2018**

**CLOSING TIME: 2:00 PM (Newfoundland Time)**



## **Invitation to Tender for Three Humidifier**

### **1.0 General Provisions**

#### **1.1 Intent**

This invitation to Tender is intended to obtain a qualified Contractor to do Repairs and Modifications to two Trane Cooling Towers at Western Memorial Regional Hospital in Corner Brook, NL. The work to be done is as per the specifications in Section 2 of this tender document.

#### **1.2 Client Background**

Western Regional Health Authority (Western Health) was established in 2005 by the Government of Newfoundland and is responsible for the delivery of Health and Community Services in the Western Region.

#### **1.3 Vendor Response**

1.3.1 Vendor's tender must contain an Executive Summary which shall contain:

- a. A brief description of the product being quoted.
- b. The name, title and address of the Vendor's representative responsible for the preparation of the Tender.

1.3.2 All prices quoted for goods and services must be specified in Canadian dollars, FOB Western Health. All Tenders will be held to be valid for ninety (90) days following the Tender closing date.

1.3.3 Tenders must be received in full on or before the exact closing time and date indicated. **TENDERS RECEIVED AFTER THAT TIME WILL NOT BE CONSIDERED.**

1.3.4 All costs relating to the work and materials supplied by the Vendor in responding to this Invitation to Tender must be done by the Vendor.

## 1.4 Release of Information

### 1.4.1 While Tender is Open:

Amendments may be made to the tender documents and posted to the Western Health web site. It will be the responsibility of any vendor who places a bid to ensure they check for amendments prior to the closing. Questions concerning the tendering process or the product specifications must be forwarded in reasonable amount of time before closing to permit a reply.

Potential bidders must make every effort to ensure they know the full requirements of the products or services for the intended use and to only bid products or services that fully meet the specifications. Bidders can schedule a site visit with the Western Health Facilities Manager, Kirby Ryland ([kirbyryland@westernhealth.nl.ca](mailto:kirbyryland@westernhealth.nl.ca).)

### 1.4.2 At Tender Opening:

1. The names of the bidders, and overall bid price(s) will be read out.
2. Where the overall bid price(s) cannot be readily determined, no pricing will be released.

### 1.4.3 After Tender Opening:

1. No further information will be released until after the contract is awarded.
2. After award, only the name and bid price of the successful bidder will be made available.
3. Information will be made available for a 90 day period only.
4. Successful Awards will be posted on Web Site.

## 1.5 Communication during Tendering

- 1.5.1 All communications with Western Health with respect to this invitation to Tender must be directed in writing to the attention of:

Mr. Paul Wight  
Regional Director of Materials Management  
Western Health  
1 Brookfield Avenue  
Corner Brook, Newfoundland  
A2H 6J7  
Tel: (709) 637-5386  
Fax: (709) 634-2649  
Email: [paulwight@westernhealth.nl.ca](mailto:paulwight@westernhealth.nl.ca)

- 1.5.2 Western Health may, during the assessment period, request meetings with the Vendors to clarify points in the Tender. No changes by the Vendor will be permitted after the Tender closing date.
- 1.5.3 Faxed Tender responses will be accepted with the condition that the original Tender documents are received at Western Health's Materials Management Department no later than **Five** working days following the Tender closing date.
- 1.5.4 All bids must be sent in a sealed envelope clearly marked with **Tender Name and Number**  
**Materials Management Department, Western Health,**  
**Western Memorial Regional Hospital, First Floor,**  
**Corner Brook, NL A2H 6J7.**
- 1.5.5 Bids submitted by electronic transmission (e-mail) will not be accepted.
- 1.5.6 Companies submitting fax Tenders are doing so at their own risk and the fax Tender must be at the public opening as specified in the Tender information. This Authority will not be responsible for in-house courier services if companies submit quotations by fax machine. The time stated on the fax Tender will become null and void since it is the responsibility of the company placing the Tender to have their Tender at the public opening, therefore, this Authority will not be responsible for any damages or liabilities.
- 1.5.7 In order to contribute to waste reduction and promote environmental protection, the Western Health will endeavour to acquire goods and services that support these principles, therefore, product(s) quoted should include:
- maximum level of post-consumer waste and/or recyclable content
  - minimal packaging
  - minimal environmental hazards
  - maximum energy efficiency
  - potential for recycling
  - disposal costs
  - must not reduce the quality of the product required or affect the intended use of the product
  - must not significantly impact the acquisition cost

## 1.6 Tender Acceptance

- 1.6.1 Any acquisitions resultant from this invitation to Tender shall be subject to the Public Tendering Act.
- 1.6.2 The Tenders shall be opened in the Purchasing Department meeting room on the First Floor at The Western Memorial Regional Hospital on the scheduled date and time. Anyone wishing to attend the opening should come to the Purchasing Department shortly before the opening.
- 1.6.3 Any Tender may be accepted in whole or in part. The lowest Tender may not necessarily be accepted and Western Health reserves the right to cancel the Tender call. Western Health shall not be held responsible or liable for the payment of any costs that are incurred by the bidder in preparing a Tender in response to this invitation to Tender.

## 2.0 Specifications

### **Western Memorial Hospital Corner Brook; Repair/Modification to Two (2) Trane Cooling Towers Model BAC VLT550A S/N 72-3034/5C**

The existing two (2) cooling towers are 1972, Trane, Model BAC VLT550A S/N 72-3034/5C and require the following scope of work.

#### **Scope of Work:**

Supply all materials and labor for a complete and functioning system.

Work to include following:

1. Remove and dispose of the existing drift eliminators and obsolete corrugated steel fill media.
2. Remove the spray systems and set aside.
3. Remove and dispose of all the rusted cold water basin strainers and strainer supports.
4. Mechanically clean all loose rust and paint from cold water basin from the water line down and apply a fast drying epoxy coating to this area.
5. Clean all interior seams and caulk using a polyurethane caulking.

6. Supply and install new high efficiency PVC honeycomb fill media with a surface area of 68 sq.ft/cu.ft. The new fill media shall increase cooling capacity by 25%.
7. Remove all MJ couplings from the spray system headers and supply and install new 3' long sections of 6" PVC schedule 80 pipe glued to the existing PVC header and connected to the existing steel riser pipe with a Victaulic coupling.
8. Supply and install all new spray nozzle bodies and turbulator.
9. Supply and install all new stainless steel cold water strainers and supports.
10. Add an additional support to the drift eliminator supporting system and supply and install new high efficiency PVC eliminators.
11. Supply and install new access door gaskets and install new stainless steel access door hardware.
12. Remove and replace all original fan motor sheaves and bushings and fan shaft sheaves and bushings and vee belts.
13. Remove and replace the inefficient make up water float valves, supply and install two new electronic water level controllers which features a high and low water alarm and allows for accurate water level control at all times. This contractor shall connect this device into the existing building automation system and the level probe can either be mounted inside the cold water basin or externally in a clear stand pipe. A slow closing solenoid valve to be supplied installed on the water make up-line.
14. Power-wash the tower exterior to remove all loose paint and apply two (2) coats of fast drying epoxy coating.
15. Remove and dispose of the existing damper control system and supply and install four 10HP/575V Danfoss VFD drives complete with bypass, each VFD drive will control two 10 HP motors. Remove and replace all 8 x 10HP fan motors with new TEFC inverter duty motors. The VFD's will allow soft start for all mechanicals and will allow straight line temperature control, avoid peak load excursions and reduce operating costs by reducing fan speed.

**16. Chiller-Cooling Tower Optimization:**

The controls provider shall provide controls that calculate the optimal tower set point at any chiller(s) load and ambient wet bulb. The optimization program shall provide as an output a leaving-tower water temperature set point and shall be connected to the existing building management system.

As part of the BMS/ATC Contractor's letter of specification compliance, provide optimal set point and estimated chiller + tower power (kW) for the load and ambient conditions in Table 1: Table 1 Use spreadsheet to calculate Chiller + kW for Trane chillers Chiller-Cooling Tower Optimization program shall be provided

by the controls contractor. As a minimum, the following chiller and tower characteristics shall be used in the optimization routine.

Chiller Characteristics (Per Chiller) Tower Characteristics (per tower)

Tons Water flow rate

Condenser Water Flow Rate Approach temperature

Full load efficiency (kW/ton) Total fan(s) hp

Part load performance (kw/ton) at design entering condenser water temperature. (efficiencies from 100-10% in 10% increments)

Tower Range (difference between entering and leaving water temperatures)

The Chiller-Tower Optimization program shall scan every 5 minutes (adj.) the chiller(s) load and ambient WB temperature. Using these inputs and both the chiller and cooling tower characteristics noted above, the program shall provide optimal chiller plus tower performance.

Optimal performance is defined as the lowest total kW input consumed by both chiller(s) plus cooling tower(s) while maintaining chilled water set point

### 3.0 **Financial Considerations**

3.1 All applicable taxes shall be indicated in the Tender.

### 4.0 **Terms of Payment**

The Authority agrees to pay the full invoiced amount within 30 days following acceptance of the installed system by Western Health. Acceptance testing will be completed within 30 days following the complete installation of the system.

### 5.0 **Vendor Confirmation** (please sign)

I confirm that our Tender meets or exceeds the specifications detailed in this invitation to Tender. I also confirm that all specifications are included in the quoted price. Any items that are optional are noted accordingly.

Signed \_\_\_\_\_

Title \_\_\_\_\_

Company Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

Phone \_\_\_\_\_

Email Address: \_\_\_\_\_

**Total Bid Price which meets all the required specification:**

**\$ \_\_\_\_\_**

**Tax Extra    Yes \_\_\_\_\_ No \_\_\_\_\_**



## TENDER CHECKLIST

TENDER# 0171-1805

DID YOU INCLUDE

- |   |                              |                             |
|---|------------------------------|-----------------------------|
| HAS TENDER SUBMISSION BEEN SIGNED                 | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| COPY OF REQUIRED TENDER DOCUMENTS                 | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| COPY OF BROCHURES (IF REQUESTED)                  | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| COPY OF WCB LETTER OF GOOD STANDING (IF REQUIRED) | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| COPY OF PROOF OF INSURANCE (IF REQUIRED)          | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| AMOUNT OF TAX NOTED ON REQUEST FOR QUOTATION FORM | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| OPTIONAL PRICING FOR TRAINING INCLUDED            | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

**NOTE: TENDER RESPONSES MAY BE REJECTED IF YOU ANSWER "NO" TO ANY OF THE ABOVE QUESTIONS.**