



**SPECIFICATIONS FOR**

**TENDER #0271-1726**

**Digital Radiography Systems**

***CLOSING DATE & TIME: December 20<sup>th</sup>, 2017 2:00PM***

# **Invitation to Tender for Diagnostic Digital Radiography Systems (DDR)**

## **1.0 General Provisions**

### **1.1 Intent**

This invitation to Tender is intended to obtain the supply and installation of dual detector Radiography Systems for:

- Bonne Bay Health Centre site in Norris Point, NL
- Health Sciences Centre, St. John's, Newfoundland

Three single detector Radiography systems for Labrador Grenfell Health sites:

- The Strait of Belle Isle Health Centre Flowers's Cove, NL
- The White Bay Health Centre Roddickton, NL
- The Labrador South Health Centre Forteau, NL  
(PLEASE GIVE AN OPTION FOR A CEILING SUSPENDED X-RAY TUBE FOR FLOWER'S COVE HEALTH CENTRE).

Optional turnkey installation will be considered for Bonne Bay Health Centre, and Labrador Grenfell Health Sites.

This Tender is concerned with the acquisition and installation of the DDR systems that will meet the all the specifications listed in this tender document. The RHA's clinical management teams will review all submissions and will determine which proposal best meets the requirements for the needs of each site. Consideration will also be given to the following:

- Ongoing service and maintenance support.
- All manuals, documents and initial supplies.
- The right to reproduce any printed materials supplied with the product for the purpose of using the product.
- Training and training manuals.
- Future enhancement availability.

1.1.1 Western Health reserves the right to order additional units at the same price for a period up to twenty four months from the closing date. Other Regional Health authorities within Newfoundland will have the right to buy from this Tender with written notice to the successful vendor.

## 1.2 Client Background

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 should 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 Regional Health Authority Sites. 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 borne by the Vendor.

## 1.4 Release of Information

### 1.4.1 While Tender is Open:

Amendments may be posted to the tender documents before the closing time and potential bidders will be responsible to check the web site for any amendments. An extension to the closing time may also be posted if deemed necessary to provide adequate time to vendors to review any changes posted.

### 1.4.2 At Tender Opening:

The names of the bidders and total amount bid will be read out. However no official award will be made until a full review of the

bids is done and a Purchase Order or written award letter is issued.

#### 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 Western Health's Web Site.

#### 1.4.4 **FYI, Statements that are included as part of our Tender calls:**

Bidders are welcome to attend the public opening. Please note it is our policy to read out only the bid total pricing at the opening. Awarding of any contracts will be subject to full review of all bid information after the opening.

#### 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, Materials Management  
Western Health  
1 Brookfield Ave.  
Corner Brook, Newfoundland  
A2H 6J7  
Tel: (709) 637-5511  
Fax: (709) 634-2649  
Email: 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 to:

Materials Management Department, Western Health,  
Western Memorial Regional Hospital, first floor,  
1 Brookfield Ave., Corner Brook, NL  
A2H 6J7. (709) 637-5000 ext 5511

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 received (vendors should allow plenty of time to avoid problems and also call to ensure their fax was received) as specified in the Tender information. Western Health Tender Authority will not be responsible for any damages or liabilities for faxed tenders that are not received on time. Vendors must also submit original signed documents which must be received within 5 working days of the closing time.

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 Private Dining Room at The Western Memorial Regional Hospital on the scheduled date and time.

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.

**1.7 Warranty**

The Vendor shall warrant that the product supplied to Western Health shall equal the published specifications.

The Vendor shall provide no less than a 1-year warranty on the system. The Vendor agrees to provide free of charge all parts, labour, and travel necessary to repair the system during the first year of operation.

**2.0 Product Specifications for Western Health and Eastern Health  
Direct Digital Radiography System**

Specifications for the supply and installation (without any infrastructure renovations):

- One Dual Detector Direct Digital Radiography system for the Bonne Bay Health Centre, Norris Point, Newfoundland and Labrador. Purchase orders and scheduling of delivery to be agreed upon with designated Western Health Staff
- One Dual Detector Direct Digital Radiography unit for the Health Sciences Centre, St. John's, Newfoundland and Labrador as per the specifications herein. Purchase orders and scheduling of delivery to be agreed upon with designated Eastern Health Staff.

All features necessary to support the systems and meet required operating specifications must be listed and the cost included in the quote. Optional turnkey installation pricing must also be submitted for Bonne Bay Health Centre and Labrador Grenfell Health Sites. A decision of whether or not to avail of the turn key option will be made after reviewing of costs.

Responses to this tender must reflect the current capability of the equipment and all features must be presently available for delivery. Bidders must respond to all questions as printed. All bidders must explicitly address each point in the spaces

provided and give details where appropriate. Failure to do so and/or vagueness in responses **will be** interpreted as not meeting the required specifications. Any item not specifically identified, as an option will be considered to be part of the purchase price quoted. It is the vendor's responsibility to clarify each section.

The proposed equipment **must** be able to be accommodated into the existing space with minimal renovations.

**Basic Specifications**

1. The System must be capable of performing all general radiographic examinations of adults and children.

Compliance: Yes   No  
Comment \_\_\_\_\_

2. The System must be configured with a fully integrated table and wall stand detector combination with auto detector tracking.

Compliance: Yes  No  Comment \_\_\_\_\_

3. The system must have the ability to capture a “low-energy” image and a “high energy” image during a single examination. (Dual Energy Chest Imaging) or bone suppression technology to transform conventional chest x-ray image into an enhanced soft tissue image without bone overlay.

Compliance: Yes  No  Comment \_\_\_\_\_

4. The system must incorporate wireless detectors.

Compliance: Yes  No  Comment \_\_\_\_\_

5. The System must incorporate a tilting wall stand.

Compliance: Yes  No  Comment \_\_\_\_\_

6. The system must be configured with a fully integrated ceiling suspended x-ray tube.

Compliance: Yes  No   
Comment \_\_\_\_\_

7. The system must be configured with removable grids. Please state the grids included with the system.

Compliance: Yes  No   
Comment \_\_\_\_\_

8. Any necessary cooling components for x-ray detectors and x-ray tube must be included with the system.

Compliance: Yes  No   
Comment \_\_\_\_\_

9. The system must include flat screen monitors for the operators' Console / acquisition review workstations.

Compliance: Yes  No   
Comment \_\_\_\_\_

10. The system must have programmable automatic exposure control.

Compliance: Yes  No  Comment \_\_\_\_\_

11. The vendor must provide a proposed layout of the system along with mechanical, electrical, and HVAC requirements with the proposal.

Compliance: Yes  No  Comment \_\_\_\_\_

12. The system must have a minimum KVP range 40 to 150 kv.

Compliance: Yes  No  Comment \_\_\_\_\_

13. The system must have tube overload protection.

Compliance: Yes  No  Comment \_\_\_\_\_

14. All available uninterruptible power supply units and line voltage regulators must be included with the system. (Operators console only)

Compliance: Yes  No  Comment \_\_\_\_\_

15. The Vendor will be responsible for the removal and disposal of one TosRad system at Bonne Bay Health Centre if Western Health opts for a turnkey solution.

Compliance: Yes  No  Comment \_\_\_\_\_

**Table**

1. The system must include a digital, table detector.

Compliance: Yes  No  Comment \_\_\_\_\_



2. The table must be equipped with collision protection.

Compliance: Yes  No  Comment \_\_\_\_\_

3. The x-ray table must include a 4-way floating table top that is height adjustable.

Compliance: Yes  No  Comment \_\_\_\_\_

4. The table must have easy access from both sides (for patient transfer purposes and cross table imaging).

Compliance: Yes  No  Comment \_\_\_\_\_

5. The proposed equipment must have a minimum 600 lbs. table load capacity.

Compliance: Yes  No  Comment \_\_\_\_\_

6. The x-ray table must be equipped with foot control pedals to allow for easy hands free positioning and equipped with safety locks.

Compliance: Yes  No  Comment \_\_\_\_\_

7. The proposed equipment must include the following:

a) Patient Hand Grips

Compliance: Yes  No  Comment \_\_\_\_\_

b) Compression Band

Compliance: Yes  No  Comment \_\_\_\_\_

c) Lateral Cassette Holder

Compliance: Yes  No  Comment \_\_\_\_\_

**Specify the following:**

1. Specify range of detector movement in the table: \_\_\_\_\_

2. Specify grid ratio and focus range of the removable grid/s: \_\_\_\_\_

3. Specify the range of table lateral movement: \_\_\_\_\_

4. Specify the table longitudinal movement: \_\_\_\_\_

### **Tilting Wall Bucky**

1. The system must include a fully digital, tilting wall bucky. (Must tilt to horizontal)

Compliance: Yes  No  Comment \_\_\_\_\_

2. The wall bucky must have Automatic Exposure Control.

Compliance: Yes  No  Comment \_\_\_\_\_

### **X-ray Tube**

1. The overhead tube assembly must be equipped with a high capacity dual focus X-ray tube.

Compliance: Yes  No  Comment \_\_\_\_\_

2. The X-ray tube must have both small and large focal spot.

Compliance: Yes  No  Comment \_\_\_\_\_

3. Specify maximum tube rating \_\_\_\_\_ Kw

4. Tube assembly must be ceiling mounted and offer multi-positional versatility to support a variety of procedures and applications including:

- table radiography
- upright radiography
- emergency trauma radiography
- stretcher and bed radiography
- radiography of patients in wheelchair
- cross table laterals

Compliance: Yes  No  Comment \_\_\_\_\_

5. The proposed equipment must include integrated tracking for tube/detector movements.

Compliance: Yes  No  Comment \_\_\_\_\_

6. The overhead tube assembly must have a collimator display of SID and collimator parameters with light activation when initiating table and collimation controls.

Compliance: Yes  No  Comment \_\_\_\_\_

7. Provide X-ray tube Specifications and expected tube life.

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8. Specify anode heat storage capacity: \_\_\_\_\_ kHU

**Generator**

1. The system must be a high frequency inverter with a minimum power output of 60 kW.

Compliance: Yes  No  Comment \_\_\_\_\_

2. The radiographic mA range must be 0 - 800 mA.

Compliance: Yes  No  Comment \_\_\_\_\_

3. The system must have selectable mAs capable of at least 5 mS exposures.

Compliance: Yes  No   
Comment \_\_\_\_\_

4. The system must have selectable kVp range of 40 -150 kVp in 1 kVp increments.

Compliance: Yes  No   
Comment \_\_\_\_\_

5. The system must have programmable techniques.

Compliance: Yes  No   
Comment \_\_\_\_\_

6. The system must include method of measuring and recording patient absorbed dose.

Compliance: Yes  No   
Comment \_\_\_\_\_

7. The system must have a method of recording repeat/reject analysis.

Compliance: Yes  No   
Comment \_\_\_\_\_

**Specify the following:**

Please describe the method of reporting repeat/reject analysis data and images.

Comment: \_\_\_\_\_

**Operator's Console/ Imaging processing and display**

1. The system must have a secure log on and log off feature.

Compliance: Yes  No  Comment \_\_\_\_\_

2. The system must include an HIS/RIS interface for patient demographic input and also allow for manual demographic input.

Compliance: Yes  No  Comment \_\_\_\_\_

3. The system must have programmable x-ray technique factors for each exam view with manual override.

Compliance: Yes  No  Comment \_\_\_\_\_

4. The high contrast, high resolution flat panel displays must be at least 19" in size.

Compliance: Yes  No  Comment \_\_\_\_\_

5. Minimum monitor resolution must be 1024 x 1024; state highest resolution available.

Compliance: Yes  No  Comment \_\_\_\_\_

6. State if system has head to toe display reversal for any patient position.

Compliance: Yes  No  Comment \_\_\_\_\_

7. State if system has A/P to Prone display reversal for any patient position.

Compliance: Yes  No  Comment \_\_\_\_\_

8. The system must incorporate soft and hard tissue equalization algorithms.

Compliance: Yes  No  Comment \_\_\_\_\_

9. The system must incorporate automated, image based, and technique independent method of determining brightness and contrast.

Compliance: Yes  No  Comment \_\_\_\_\_

**Detector**

1. The active pixel dimensions of the flat panel detector must not exceed 200µm.

Compliance: Yes  No  Comment \_\_\_\_\_

2. State the table detector size(s). \_\_\_\_\_

3. Specify the spatial resolution of the detector. \_\_\_\_\_

4. State the wireless technology used to transmit data, please include transmission range. \_\_\_\_\_

5. Can the detectors be interchanged between the table and wall bucky.

Compliance: Yes  No  Comment \_\_\_\_\_

**Network/Workstation(s):**

1. The system must be PACS/DICOM compatible/compliant. It must include the following DICOM interfaces (describe in detail):

a) The system must have DICOM Verification Service Class (VSC).

Compliance: Yes  No  Comment \_\_\_\_\_

b) The system must have DICOM Storage Service Class (Both SCU & SCP).

Compliance: Yes  No  Comment \_\_\_\_\_

c) The system must have DICOM Storage Commitment Service Class (Storage Commitment SC).

Compliance: Yes  No  Comment \_\_\_\_\_

d) The system must have DICOM Print Management Service Class (PM SC).

Compliance: Yes  No  Comment \_\_\_\_\_

e) The system must have DICOM Modality Worklist Management Service Class (MWM SC).

Compliance: Yes  No  Comment \_\_\_\_\_

f) The system must be capable of interfacing with Meditech HIS/RIS.

Compliance: Yes  No  Comment \_\_\_\_\_

g) The system must be able to fully integrate with GE PACS Centricity 4.0.

Compliance: Yes  No  Comment \_\_\_\_\_

h) Vendor must provide DICOM conformance statement upon request.

Compliance: Yes  No  Comment \_\_\_\_\_

i) Vendor must provide IHE integration Statement for the quoted system.

Compliance: Yes  No  Comment \_\_\_\_\_

j) The system must have the capability of residing on each respective RHA's data network?

Compliance: Yes  No  Comment \_\_\_\_\_

k) The system must use true TCP/IP for system communications, must be able to run in an IP routed environment and must not depend on bridging traffic between sites.

Compliance: Yes  No  Comment \_\_\_\_\_

l) Identify the number of IP addresses and network drops required by the system.

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- m) If remote access into WRHA network is required to provide support for the system it must have strong security controls. Describe the network requirements and security mechanisms used for remote access (outside the Corporate WAN).

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**Options**

1. Specify price for a 80 kW high frequency generator cost: \_\_\_\_\_

2. Please list other available options and accessories with pricing

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**Service**

The Vendor must confirm in writing that Parts and Labour will be available for the quoted system for not less than seven (7) years after the warranty period.

Compliance:      Yes       No       Comment \_\_\_\_\_

The Vendor must provide a minimum of 2 copies of the Operating Manuals which must accompany the equipment when shipped.

Compliance:      Yes       No       Comment \_\_\_\_\_

The quote must include all mandatory or safety updates for the life of the system at the vendors expense.

Compliance:      Yes       No       Comment \_\_\_\_\_

The vendor must have service personnel in the province of Newfoundland and Labrador.

Compliance:      Yes       No       Comment \_\_\_\_\_

The Vendor must include all special tools required to properly service the system.

Compliance:      Yes       No       Comment \_\_\_\_\_

All diagnostic software licenses and associated costs should be included for the life of the equipment while it is supported by the manufacturer.

Compliance:        Yes         No         Comment \_\_\_\_\_

The quote must include any quality control/ quality assurance software.

Compliance:        Yes         No         Comment \_\_\_\_\_

The Vendor must provide as an option, pricing for a both a one (1) year and a five (5) year full Service Contract, as well as a shared service contract, including all parts, labour and travel costs after initial warranty period ends. Please include proposed service agreements with tender.

Compliance:        Yes         No         Comment \_\_\_\_\_

**Please state the cost of five(5) year post-warranty, service contracts to include all parts (including detectors and x-ray tubes), labor, and all travel costs.**

	Full	Shared
Year 1 \$	_____	\$ _____
Year 2 \$	_____	\$ _____
Year 3 \$	_____	\$ _____
Year 4 \$	_____	\$ _____
Year 5 \$	_____	\$ _____

In your response please include pricing for the following options as separate line items from the price of the system.

**Training:**

1. Factory Training for Biomedical Staff. Please provide the cost of the Biomedical Service training course for one Biomedical Technologist. All costs associated with this course including registration, airfare, accommodations, meals, and ground transportation are to be included.
2. Vendor response must include on-site training for technologists. Training must include at least two visits, initial training of 1 week duration and follow up training, a minimum of 2 days. The vendor will incur all applicable costs for training and travel expenses

Compliance:        Yes         No

Comment: \_\_\_\_\_



**Installation:**

A. Are there utility requirements:

1. Electrical Voltage: \_\_\_\_\_ Amperage: \_\_\_\_\_

2. Drains: Yes  \_\_\_\_\_

3. Water: Yes  \_\_\_\_\_

Other: Yes  \_\_\_\_\_

Specifics: \_\_\_\_\_

B. If the device contains a battery, state the battery type and typical life cycle (hours of operation and charging time). State additional systems or work required to maintain the battery.

\_\_\_\_\_  
\_\_\_\_\_

C. The equipment (except is solely battery operated) must comply with C.S.A. standard No. C22.2-125 (Biomedical), or 114 (Radiology), or 151 (Laboratory), or C22.2 No. 601.0 plus applicable particular standard(s) and be certified by and organization accredited by the Standards Council of Canada.

Yes  No

D. The equipment must be labeled with C.S.A. 125 Risk Class or C.S.A. 601.1 Equipment Type.

Yes  No

E. Equipment that requires on site certification to meet CSA Standards must be completed by an accredited testing organization. The cost of this must be covered by the supplier.

Yes  No

F. Will any site preparation be necessary? Yes No

If yes, explain \_\_\_\_\_

G. All supplies required for the initial startup and/or commissioning of the equipment shall be included.

Yes  No

H. The vendor shall be responsible for the safe receipt of the proposed system at the time of delivery. Will this equipment require any unloading equipment to make safe receipt at time of delivery?

Yes  No

I. If installation is involved; the Vendor shall coordinate the delivery and installation of the equipment with the timing being approved by the respective Health Authority.

Yes  No

**Evaluation:**

Awarding of tender will be based upon the following:

- Price
- Functionality
- Ergonomics

The vendor must provide a listing of three (3) clinical sites where proposed system is located. The listing must include contact names and phone numbers.

Compliance: Yes  No  Comment \_\_\_\_\_

**CAN/CSA-Z317.13-12 INFECTION CONTROL DURING CONSTRUCTION OR  
RENOVATION OF HEALTH CARE FACILITIES**

**ACKNOWLEDGEMENT FORM**

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1. The requirements of CAN/CSA-Z317.13-17 will be followed for the work of this Contract. This standard describes precautionary and remedial measures for preventing exposure to agents and released of augmented because of actions undertaken during health care facility construction, renovation, maintenance and repair work.
  2. Contractors are to acknowledge that they have obtained, reviewed and understand the requirements of CAN/CSA-Z317.13.17 and that all costs associated with these infection control measure have been incorporated into the Tender amount.

Print \_\_\_\_\_  
Authorized Signing Officer Title

Signature \_\_\_\_\_  
Authorized Signing Officer Title

## **BID SHEET**

**Bid Price:**

Please Provide Price of Direct Digital Radiographic system as quoted (excluding taxes).

- Please include descriptive literature with your bid.
- Please provide two copies of the tender response.

Bidders **must** complete and submit the Bid Sheet. Type or legibly print the information required on the Bid Sheet. All questions or areas on the Bid Sheet must be answered, even if it is only to indicate that the referenced item is not available; blank items will be assumed to be unavailable and may result in rejection of the Bid. Where yes/no questions are asked and the space is left blank by the Bidder, the assumption will be that the answer to the question is no.

**Bid Price:**

**Price of dual detectors Direct Digital Radiographic system as quoted:**

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**(excluding taxes).**

- Please include descriptive literature with your bid.
- Please provide two copies of the tender response.

**TOTAL COST OF TURN KEY OPTION RENOVATION FOR TENDER \$ \_\_\_\_\_**

**Please provide a detailed and comprehensive description of “turn-key” deliverables.**

**TENDER FORM**

**Failure to submit this signature page will render the bid NON-COMPLIANT and bid will be disqualified.**

**Required Signature:**

\_\_\_\_\_  
Authorized Company Representative Signature

\_\_\_\_\_  
Date

Vendor Information:

Company Name and Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

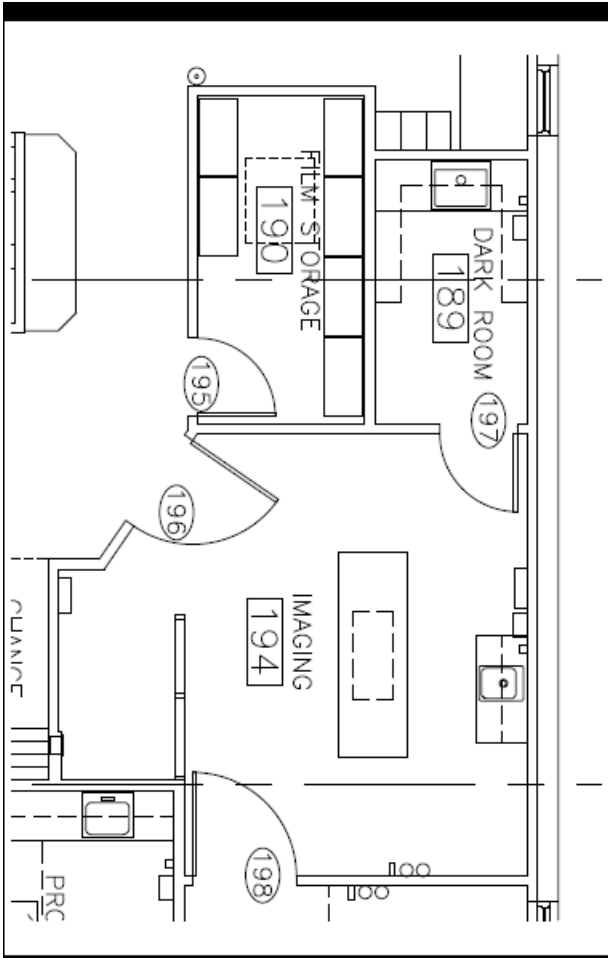
Email: \_\_\_\_\_

Web Address: \_\_\_\_\_

H.S.T. # \_\_\_\_\_

**IN SIGNING THIS PAGE AND SUBMITTING YOUR BID, BIDDER ACKNOWLEDGES HAVING READ, UNDERSTOOD AND AGREED TO THE TERMS AND CONDITIONS IN THIS DOCUMENT.**

Bonne Bay Health Centre Diagnostic Imaging



## **TURN KEY RENOVATION AND INSTALLATION**

### **WESTERN HEALTH**

Quotes must include, as an option, the cost for “turn-key” equipment installation and renovations. The design of the renovated space must meet both system and operational specific requirements. The turnkey proposal must include an acceptable functional plan for a complete Direct Digital Radiography (DDR) suite and must be able to be accommodated in the existing space within the Diagnostic Imaging Department at Bonne Bay health Centre without compromising functionality or patient flow. The rooms that are available for installation are 189, 190, and 194. Acceptance of the physical space configuration will be determined by the customer based upon functional and construction requirements. Due to the complexity of the “turnkey” project, it is **recommended that vendors take the following action prior to responding to the tender.**

1. Meet with stakeholders to gain a comprehensive understanding of space and functional requirements for each piece of equipment.
2. Tour proposed installation space for equipment to confirm space dimensions and electrical, mechanical and structural layout.
3. Acquire structural and mechanical drawings of proposed space
4. Acquire floor plan of proposed space.
5. In consultation with the customer, draft a proposed design and layout of the area for “approval in principle by the customer” The vendor must be responsible for ensuring the proposed layout is compliant with the latest edition of the National Building Code

#### **SCOPE OF WORK:**

Place the DDR system in the identified space located in the Diagnostic Imaging Department Bonne Bay Health Centre together with all required building and building services modifications to accommodate the new installation. **A preliminary layout drawing of the proposed imaging suite must be included in the tender response**

- Remove and dispose of existing X-Ray system and all related components in accordance with all local regulations.

In addition to the scope of work as detailed, the vendor is required to identify and quote the cost of any additional work or hardware that is required to accommodate an optimally functioning system:

- Supply and installation of transformer, disconnects and fusible protection, if required, and all other electrical modifications as required. A transformer is installed for the existing radiography suite; existing transformer specifications are as follows  
Type: E.V.I. Dry – Type Transformer  
Cat Number CDTA0075VRA6XXBB  
Mod Number CDTA0075VRA6XXBB  
75 KVA 3 Phase  
Serial # DKB-0358-143040

The site would like to use the existing transformer installed, if possible.

Supply and install new x-ray control booth for shielding. Design of control booth

- Reviewed and approved by customer.
- Supply and installation of a UPS if required.
- The additional heat loads imposed by the new equipment must be determined, and if required, air conditioning equipment of sufficient capacity must be supplied and installed to condition space to acceptable occupant comfort and equipment operating parameters.
- Two complete sets of engineered “As Built” drawings to be provided upon completion of the project and turned over to the Facility Management group for record keeping.
- Replacement of flooring, if required
- C.S.A. latest infection control measures must be adhered to.

#### **DESIGN/BUILD SCOPE OF WORK:**

General Requirements:

- Building, electrical, and mechanical permits.
- Liability, builders risk, and workers compensation insurance
- Site superintendent



- Level 4 Infection Control
- Set up, maintenance and removal of hoarding and infectious control measures

#### Site work:

- Disposal bin
- Removal and repair of fire proofing materials on the building structure.
- Demolition of exist walls, ceilings, flooring, doors, windows and millwork as required.
- Removal of demolished materials from the site to an approved disposal area.

#### Concrete:

- Cutting and patching for new services. – in-fill the concrete floor etc. as required

#### Wood and Plastics:

- Millwork as agreed upon by vendor and customer

#### Thermal and Moisture Protection:

- Supply and install fire stopping at all new penetrations of fire rated assemblies.
- Chalk around all new door frames, as required.

#### Doors and Windows:

- Relocate existing doors, frames, and hardware as required.
- Supply and install new doors, frames, and hardware as required.
- Paint all new and relocated doors as required

#### Finishes:

- Supply and install walls of 4" metal studs, 5/8" lead lined gypsum board as required. Lead equivalency to be determined.
- Supply and install ceiling as required
- Supply and install solid wood doors c/w welded frame and hardware as required
- Apply one coat of primer and two coats of epoxy paint to all new and existing wall surfaces within the work area.

Mechanical:

- Install new ventilation system / duct, if required
- Adjust existing ventilation distribution system to suit the new layout.
- Adjust the elevation of sprinkler piping where necessary and relocate sprinkler heads where required.
- Air balancing and report

Electrical:

- Remove and reinstate electrical services in area as required
- Supply and install all new electrical services as required
- Supply and install all interconnecting conduit, duct work, boxes
- Supply and install new emergency off/on button
- Equipment ground
- IT drops as required
- Telephone drops as required
- Supply and install receptacles - new and relocated
- Supply and install switches- new and relocated

**CONSIDERATIONS:**

Scope of work and pricing is subject to final SIGNED layout design. Structural, electrical, mechanical sign-off will be the responsibility of the vendor.

During construction, if any savings are found they will be credited to Western Health's account.

Any additional costs incurred during construction will be the responsibility of the vendor unless a change order has been issued and signed by Western Health.

- **PLEASE PROVIDE TOTAL COST OF TURN KEY RENOVATION FOR TENDER**  
(See Schedule B)

**Please provide a detailed and comprehensive description of "turn-key" deliverables.**

- **WESTERN HEALTH CONTRACTORS**

Maintaining a healthy and safe environment for patients, staff and visitors is a priority for Western Health. This involves a commitment from all divisions and extends to outside agencies having occasion to come to any of our hospitals to conduct business. This project will be subject to third party safety inspection. This will result in routine site visits to the construction project by an independent safety inspector. The inspector will have the authority to suspend work when and where safety regulations are not being followed.

The following regulations will apply to all work undertaken by contractors and service personnel in any hospital property.

- **REGULATIONS, CODES AND STANDARDS**

Contractors and service personnel must be familiar and abide by provisions of safety regulations, codes and standards applicable to work being performed.

Strict adherence must be required to the Provincial Occupational Health and Safety Regulations, Fire Safety Regulations and, applicable sections of the National Building Code.

- **General Safety Regulations:**

- Construction may involve work in close proximity to patients, staff and visitors. Contractors and service agencies must ensure that patients, staff and visitors are not endangered by any work in which they may be engaged. Work areas must be properly barricaded and if any dust or fumes are generated, enclosures must be erected to contain any such emissions.
- No material must be stored in any way as to obstruct walkways or exists or to impede pedestrian traffic.
- Protection must be provided to prevent materials from falling from scaffolding or elevated areas. Barricades must be used where materials are being loaded or offloaded. Appropriate warning signs are to be posted where and when necessary.
- Work access(es) must be kept reasonably clean and free from debris that could create a fire hazard.

Consideration must be given to fire safety in any hospital. Flammable/combustible materials must be kept from sources of ignition. Where sources of open flame may be used such as burning or welding, appropriate safety measures must be

adhered to. Care must be taken to prevent the activation of fire alarm detection devices.

- Contractors must wear protective equipment appropriate for the work and meet compliance with the Provincial Occupational Health and Safety Act and Regulations.
- Do not disturb any materials containing asbestos (unless it is an agreed part of the work process). Should suspect materials be encountered, contact the Infrastructure Support Manager applicable to that site. There is an Asbestos Management Plan for this site – the contractor must familiarize himself with it prior to commencing work.
- Should chemicals be used for work purposes, Material Safety Data Sheets (MSDS) must be available. All such chemicals must be appropriately labeled. Contractor’s employees handling such material must be fully trained in WHMIS and the safe use, storage and disposal of the chemical.
- Smoking is not permitted in the hospital or on the job.
- Use of cellular telephones is not permitted within the hospital.
- Depending on conditions or circumstances, additional safety procedures may be applied. Generally, contractors and service agencies are required to perform their work in a professional and safe manner.
- The Infrastructure Support Manager has the responsibility of ensuring that all regulations are complied with and the authority to suspend work when and where the regulations are not being followed.
- A contractor must promptly notify Infrastructure Support of any accident which resulted or could have resulted in any injury or property damage and will assist Western Health in any resulting investigation.

Successful bidder must acknowledge agreement to this document by signing and returning concurrently with bonding and/or insurance.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Position

\_\_\_\_\_  
Date

- 
- **CAN/CSA-Z317.13-17 INFECTION CONTROL DURING CONSTRUCTION OR RENOVATION OF HEALTH CARE FACILITIES**

## **ACKNOWLEDGEMENT FORM**

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1. The requirements of CAN/CSA-Z317.13-17 will be followed for the work of this Contract. This standard describes precautionary and remedial measures for preventing exposure to agents and released of augmented because of actions undertaken during health care facility construction, renovation, maintenance and repair work.
2. Contractors are to acknowledge that they have obtained, reviewed and understand the requirements of CAN/CSA-Z317.13.17 and that all costs associated with these infection control measure have been incorporated into the Tender amount.

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Authorized Signing Officer

Title

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Authorized Signing Officer

Title

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## **SCHEDULE “B” BID SHEET – WESTERN HEALTH**

Bidders **must** complete and submit the Bid Sheet. Type or legibly print the information required on the Bid Sheet. All questions or areas on the Bid Sheet must be answered, even if it is only to indicate that the referenced item is not available; blank items will be assumed to be unavailable and may result in rejection of the Bid. Where yes/no questions are asked and the space is left blank by the Bidder, the assumption will be that the answer to the question is no.

- **Bid Price:**

**Price of Supply and Installation for Direct Digital Radiographic system with dual detectors:**

- 
- Please include descriptive literature with your bid.
  - Please provide two copies of the tender response.

- **COST OF TURN KEY RENOVATION PORTION FOR TENDER:**

- 
- **Please provide a detailed and comprehensive description of “turn-key” deliverables.**

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*Section 3.0*  
**SPECIFICATIONS FOR**

**TENDER #0271-1726**

**3 (THREE) DIGITAL RADIOGRAPHY (DR) SINGLE DETECTOR, FLOOR MOUNTED X-RAY TUBE, GENERAL X-RAY SYSTEMS 1 (ONE) FOR:**

**THE STRAIT OF BELLE ISLE HEALTH CENTRE FLOWER'S COVE  
THE WHITE BAY CENTRAL HEALTH CENTRE RODDICKTON  
THE LABRADOR SOUTH HEALTH CENTRE FORTEAU  
(PLEASE GIVE AN OPTION FOR A CEILING SUSPENDED X-RAY TUBE  
FOR FLOWER'S COVE HEALTH CENTRE)**

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## SPECIFICATIONS

Labrador Grenfell Health invites interested vendors to provide bids for the supply of and installation of 3 (Three) Digital Radiography (DR) Single Detector General X-ray Systems with Floor Mounted X-ray Tubes for the X-ray Departments at the following 3(Three) Health Centres:

- Strait of Belle Isle Health Centre Flower's Cove,
- White Bay Central Health Centre in Roddickton,
- Labrador South Health Centre in Forteau.

(With an option for a Ceiling Mounted X-ray Tube for Flower's Cove)

If Labrador Grenfell Health requires further purchases and Central Health, Western Health or Eastern Health would like to participate in this contract will you protect your pricing and allow any of the 4(four) Health Regions to opt into this contract within the next three (3) year period will your company protect your pricing for that period and will the Terms and Conditions remaining unchanged as per this bid response?    Yes     No

Bidders must respond to all questions as printed. All bidders must explicitly address each point in the spaces provided and give details where appropriate. **Failure to do so and/or vagueness in responses will be interpreted as not meeting the required specifications.** Any item not specifically identified as an option will be considered to be part of the purchase price quoted. It is the vendor's responsibility to clarify each section.

**GENERAL SPECIFICATIONS/APPLICATIONS**  
**CLINICAL AND TECHNICAL REQUIREMENTS**

The system **must** meet the (three) 3 sites electrical and site specifications listed in this table:

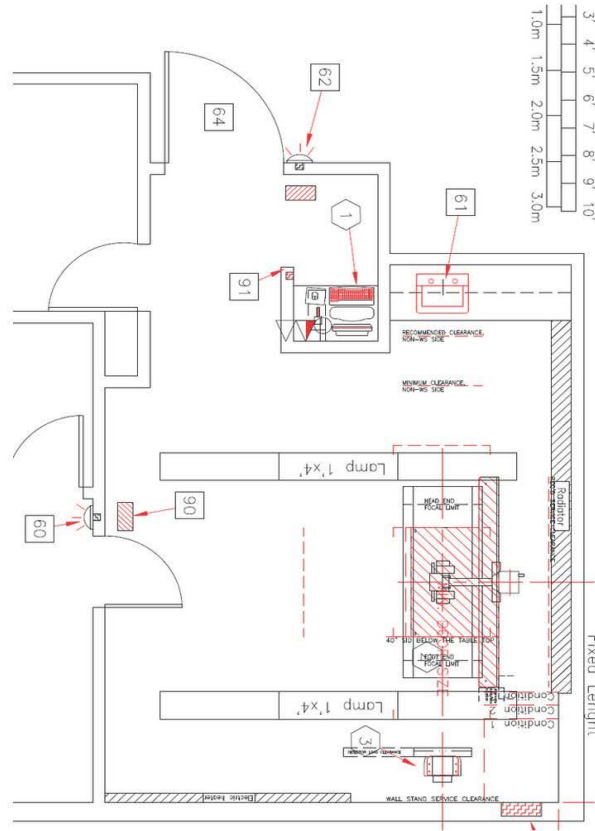
	<b><u>TRANSFORMER</u></b> <b><u>/KVP/VOLTAGE</u></b>	<b><u>CEILING - FLOOR</u></b> <b><u>HEIGHT</u></b>
<b><u>STRAITE OF BELLE</u></b> <b><u>ISLE HEALTH CENTRE</u></b> <b><u>FLOWER'S COVE</u></b>	<b>480 V/3P/75KVA</b>	<b>2608 MM</b>
<b><u>LABRADOR SOUTH</u></b> <b><u>HEALTH CENTRE</u></b> <b><u>FORTEAU</u></b>	<b>480V/3P/112.5 KVA</b>	<b>2387 MM</b>
<b><u>WHITE BAY CENTRAL</u></b>		





**White Bay Central Health Centre in Roddickton,**

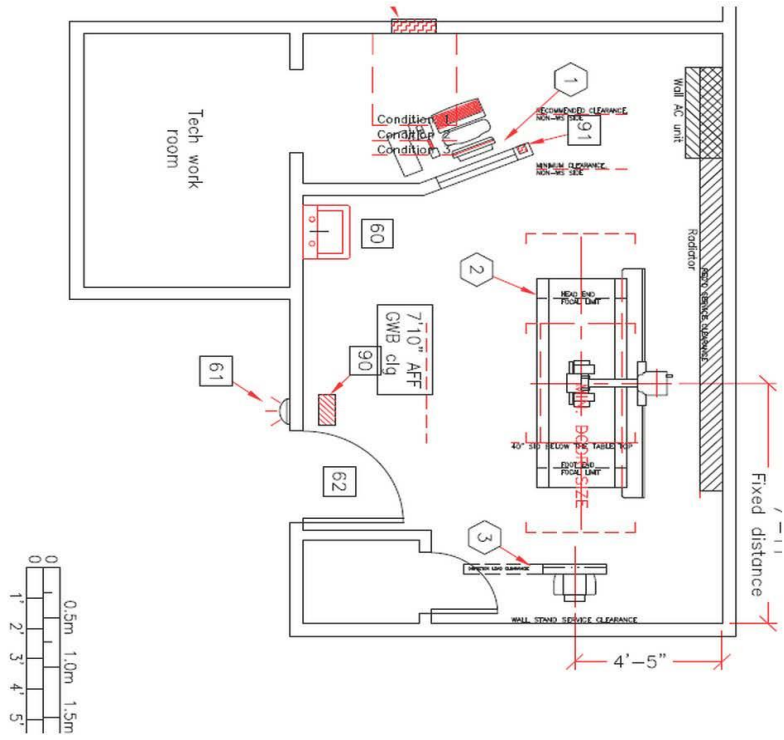
White Bay Central  
XRy Room



Compliance: Yes  No  Comment \_\_\_\_\_

# Labrador South Health Centre in Forteau:

LSCH XRay Room  
Typical



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Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** meet the guidelines, codes and standards with the CSA/RPA 2317-13-12 for a Health Device..

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** provide a general-purpose digital radiographic system to perform basic X-ray imaging and handle all general radiographic applications using a single detector must be included:

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have the functionality to perform, display and process superior imaging for the following procedures:

- General Radiographic Exams
  - Chest
  - Abdominal
  - Vertebral column
  - Scoliosis
  - Upper and lower extremities
  - Decubitus views
  - Cross table views
  - Supine and axial shoulder
  - Lateral cross table hip
  - Tunnel view for knee

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** include all the hardware and software necessary to perform a wide variety of General Radiographic procedures for example:

- |  |     |                          |    |                          |
|--|-----|--------------------------|----|--------------------------|
| • Post Processing of the image                   | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| • Soft tissue and Bone imaging with one exposure | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| • Trauma Stretcher patients                      | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| • Wheelchair patients                            | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |

- 
- Pediatric Patients

Yes  No

Comment \_\_\_\_\_

The system **must** be configured with a fully integrated wall stand with **wireless** flat panel detector combination

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** be configured with a fully integrated floor mounted x-ray tube stand for Forteau and Roddickton sites.

Compliance: Yes  No  Comment \_\_\_\_\_

The system **should** be able to be configured with a ceiling mounted x-ray tube for the Flower's Cove site.

Compliance: Yes  No  Comment \_\_\_\_\_

The system configuration **must** include an uninterruptible power supply and line voltage regulators for the main system and Operators Console.

Compliance: Yes  No  Comment \_\_\_\_\_

The system **should** be configured with removable grids

Compliance: Yes  No  Comment \_\_\_\_\_

Any Necessary Cooling components for x-ray detector and x-ray tube **must** be included with the system.

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** include a minimum 48cm flat screen monitor, (1280 x1024 pixels) for the Operators Console.

Compliance: Yes  No  Comment \_\_\_\_\_

The system **should** have the capability of performing dual energy studies using the wall stand/ flat panel detector combination.

Compliance: Yes  No  Comment \_\_\_\_\_

**ELEVATING TABLE:**

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The system **must** be equipped with Vertical Auto tracking table (the table is the master and floor stand follows the movement).

Compliance: Yes  No  Comment \_\_\_\_\_

The table **should** be equipped with Horizontal Auto and Mechanical tracking

Compliance: Yes  No  Comment \_\_\_\_\_

The table **must** have vertical movement to allow raising and lowering the table.

Compliance: Yes  No  Comment \_\_\_\_\_

The table **must** have full length foot switches along the table base to control table top up/down movement to allow raising and lowering the table:

Compliance: Yes  No  Comment \_\_\_\_\_

The minimum table top to floor height **should** be 50cm (20inches)

Compliance: Yes  No  Comment \_\_\_\_\_

The table height **should be at least** adjustable from 50cm (20inches) to 90cm (36 inches)

Compliance: Yes  No  Comment \_\_\_\_\_

The table **must** have a high weight capacity up to 350 kg or over .

Compliance: Yes  No  Comment \_\_\_\_\_

The table **must** have a grid 40 lines/cm-12:1 ratio Focused at 100cm.

Compliance: Yes  No  Comment \_\_\_\_\_

The tabletop **must** have minimum dimensions 210cm x 80 cm.

Compliance: Yes  No  Comment \_\_\_\_\_

The tabletop **must** have radiographic coverage > 200cm.

Compliance: Yes  No  Comment \_\_\_\_\_

The tabletop **must** be flat, scratch resistant surface, with accessory rails

Compliance: Yes  No  Comment \_\_\_\_\_

**Specify the following:**

Range of table lateral movement: \_\_\_\_\_

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Range of table tube longitudinal movement: \_\_\_\_\_

Range of table tube vertical, (up/down) movement: \_\_\_\_\_

Table top dimensions: \_\_\_\_\_

The system **must** have a radiolucent mattress for the table

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** include electromagnetic brakes for table locks

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** include controls for the electromagnetic brakes for table locks with a full length foot switch along the table base

Compliance: Yes  No  Comment \_\_\_\_\_

The table shall have easy access from both sides (for patient transfer purposes).

Compliance: Yes  No  Comment \_\_\_\_\_

The table **must** have a 4-way floating top:

Compliance: Yes  No  Comment \_\_\_\_\_

The bucky travel **should** be 51 cm Total center-to-center.

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have a compression band for the table.

Compliance: Yes  No  Comment \_\_\_\_\_

**GENERATOR:**

The system **must** have at minimum a 50 kW high frequency generator.

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have automatic exposure control.

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have programmable techniques

Compliance: Yes  No  Comment \_\_\_\_\_

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The Radiographic mA range **must** be minimum 10 to 600 mA

Compliance: Yes  No  Comment \_\_\_\_\_

Describe dose reduction features of the system:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Does the system have the capability of measuring and recording patient absorbed dose? Yes   
No

If yes comment \_\_\_\_\_

**FLAT PANEL DETECTOR:**

The system **must** be equipped with a single wireless flat panel detector for excellent static imaging, which can be used in the table and in the erect bucky:

Compliance: Yes  No  Comment \_\_\_\_\_

The dimensions of the in table flat panel detector **should be** 35cm X 43cm (14 X 17 inches).

Compliance: Yes  No  Comment \_\_\_\_\_

The in table detector **must** be configured to minimize image distortion and be removable

Compliance: Yes  No  Comment \_\_\_\_\_

The “erect bucky” flat panel detector **must** be removable and wireless

Compliance: Yes  No  Comment \_\_\_\_\_

The wireless detector **must** be light weight for technologist when moving from the wall stand to the table, and using for free exposures

Compliance: Yes  No  Comment \_\_\_\_\_

The wireless detector **must** function in the wall stand and in the table and also function for free exposures

Compliance: Yes  No  Comment \_\_\_\_\_

The wireless detector should be a high-quantum-efficiency CsI scintillator

Compliance: Yes  No  Comment \_\_\_\_\_



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The wireless detector **must** have the wireless data transmission capability.  
Compliance: Yes  No  Comment \_\_\_\_\_

The minimal dimensions of the “erect bucky” wireless flat panel detector **should be** 35cm X 43cm (14 X 17 inches)  
Compliance: Yes  No  Comment \_\_\_\_\_

Specify the quantum efficiency of the detector (DQE)\_\_\_\_\_

Specify the spatial resolution of the detector \_\_\_\_\_

The system **must** have a Lateral detector Holder up to 35cms (14inches) x 43cms (17.2inches)  
Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have a Lateral detector Holder movable on tabletop  
Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have a Lateral detector size on trolley with wheels  
Compliance: Yes  No  Comment \_\_\_\_\_

The system **should** have a grid that clips for attachment to the wireless detector to the outside of the unit.  
Compliance: Yes  No  Comment \_\_\_\_\_

**AUTO-TRACKING WALL STAND BUCKY:**

The system **must** have a Vertical Auto- tracking Wall Stand (Wall Stand is the master and the floor stand follows the vertical movement).  
Compliance: Yes  No  Comment \_\_\_\_\_

The Vertical Wall Stand Bucky travel **should** be 150cm (from 40 cm to 190 cm).  
Compliance: Yes  No  Comment \_\_\_\_\_

The Vertical Wall Stand Bucky **must** have electromagnetic brakes.  
Compliance: Yes  No  Comment \_\_\_\_\_

The Vertical Wall Stand Bucky detector **must** be Left or Right load..  
Compliance: Yes  No  Comment \_\_\_\_\_

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The system **must** have hands support for Wall Stand.

Compliance: Yes  No  Comment \_\_\_\_\_

The Auto Tracking Wall Stand should have a grid 40 lines/cm-12:1 ratio Focused at 150cm.

Compliance: Yes  No  Comment \_\_\_\_\_

**X-RAY TUBE:**

The system **must** have both small and large focal spot (e.g. 0.6 and 1.2mm)

Compliance: Yes  No  Comment \_\_\_\_\_

Specify maximum tube rating \_\_\_\_\_ kW

Specify anode heat storage capacity \_\_\_\_\_ kHU

The system **must** have a floor mounted x-ray tube

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have tube tracking of wall stand height

Compliance: Yes  No  Comment \_\_\_\_\_

The system shall be configured with an x-ray tube with a demonstrated history of low tube failure rate

Compliance: Yes  No  Comment \_\_\_\_\_

Specify the range of table tube angulations: \_\_\_\_\_

The maximum SID for the table x-ray tube **must** be no less than 150 cm (59 inches)

Compliance: Yes  No  Comment \_\_\_\_\_

The system should have auto tracking movement aligned with the tube movement

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** be equipped with centering lights for the x-ray tube.

Compliance: Yes  No  Comment \_\_\_\_\_

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The system should have a measuring chamber for measuring the dose- area product and/or the standardized patient entrance dose.

Compliance: Yes  No  Comment \_\_\_\_\_

**FLOOR MOUNTED TUBE STAND:**

The system **must** be equipped with Manual movement, with fully counter balanced horizontal tube arm and vertical AUTO-TRACKING with Table and Wall Stand.

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have a Longitudinal tube travel 200 cm

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have a Transverse tube travel 30 cm, with detent at table center.

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have a Vertical tube travel 150cms

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have a focal spot – to – floor distance which is variable from 40cms, to 200cms

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have an x-ray tube rotation  $\pm 150^\circ$ (detents at  $+90^\circ, 0^\circ, -90^\circ$ )

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have a Tube stand column rotation  $\pm 180^\circ$ (detents at  $+90^\circ, 0^\circ, -90^\circ$ )

Compliance: Yes  No  Comment \_\_\_\_\_

**COLLIMATOR:**

The system **must** have an Automatic collimator, LED centering bucky light, centering laser beam, timer and meter + integrated DAP/KERMA + motorized filters.

Compliance: Yes  No  Comment \_\_\_\_\_

The system **should** have a lighting timer 30 seconds

Compliance: Yes  No  Comment \_\_\_\_\_

The system **should** have an LED alignment light

Compliance: Yes  No  Comment \_\_\_\_\_

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The system **must** have inherent filtration 2.0mm aluminum (EN 60601-1-3)

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have a retractable measuring tape for SID Measuring

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have Tube Arm console displays SID and tube angle around the horizontal axis.

Compliance: Yes  No  Comment \_\_\_\_\_

**SOFTWARE/HARDWARE:**

The system **must** have an Acquisition Workstation minimum single monitor LCD screen

Compliance: Yes  No  Comment \_\_\_\_\_

The system's Acquisition Workstation **must** be a single flat screen minimum 48cm (1280 x1024 pixels)

Compliance: Yes  No  Comment \_\_\_\_\_

The system's image processing times for a single exposure exams including acquisition and image processing **must** have a minimum :

- Final conditioned image display < 12 seconds

Compliance: Yes  No  Comment \_\_\_\_\_

- Preview image < 10 seconds

Compliance: Yes  No  Comment \_\_\_\_\_

The image display functions **must** have a minimum:

- Window Level Yes  No
- Gray Scale invert Yes  No
- Interpolated zoom with roam Yes  No
- Image flips (horizontal, vertical with automatic indicator) Yes  No
- Image rotation 90 degree increments Yes  No
- Manual shuttering Yes  No
- Free rotation 360 degrees Yes  No
- Please list other functions your system has:

\_\_\_\_\_  
\_\_\_\_\_

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The system **must** have the following minimum features

- Work list Management Yes  No
- Simplified Auto Protocol Yes  No
- Patient Information Management Yes  No
- Radiographic exposure control kV, mA, mAs Yes  No
- AEC/Non –AEC selection Yes  No
- Wall stand and Table mode Yes  No
- Tissue Equalization Yes  No
- Image Push Yes  No
- Image Reprocessing Yes  No
- Image Transfer Yes  No
- DICOM print Yes  No
- Please list any other features your system has:

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The system **must** have the following text annotations with configurable display on/off

- Hospital institution name Yes  No
- Date, Time (hh:mm:ss) of acquisition Yes  No
- Laterality Yes  No
- Scale Yes  No
- Measurements (when activated) Yes  No
- Contrast,brightness values (window,level) Yes  No
- Processing look Yes  No
- Anatomical view Yes  No
- Exposure technique including kVp, mA, mAs,and time Yes  No
- Estimated exposure dose (Dose area product(DAP)read out in dGy-cm2 units)  
Yes  No
- Operator entered annotations Yes  No
- Patient I.D. patient name Yes  No
- Patient Age and date of birth Yes  No
- WW/WL annotations Yes  No
- Edge annotations Yes  No
- Please list any other text annotations your system has:

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The system **should** have a barcode reader for patient data entry can be used for patient selection from the worklist:

Compliance: Yes  No  Comment \_\_\_\_\_

**NETWORKING:**

The system **must** be capable of seamless data management from a single workstation/control

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** be capable of complete network integration for Radiography

Compliance: Yes  No  Comment \_\_\_\_\_

If connectivity licensing fees apply, the Vendor is responsible for payment to GE Healthcare for the licensing fee for connectivity and configurations including the work list.

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** be able to connect to existing Meditech RIS/HIS via HL-7 protocol.

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have DICOM Verification Service Class (VSC)

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have DICOM Query/Retrieve Service Class (Q/R SC)

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have DICOM Storage Service Class (Both SCU & SCP)

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** have DICOM Storage Commitment Service Class (Storage Commitment SC)

Compliance: Yes  No  Comment \_\_\_\_\_

Vendor **must** provide DICOM conformance statement upon request

Compliance: Yes  No  Comment \_\_\_\_\_

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All costs associated with connectivity of system to the G.E PACS and HIS /RIS is the responsibility of the vendor (interface, licences, software and hardware)

Compliance: Yes  No  Comment \_\_\_\_\_

The system **must** be able to fully integrate with GE PACS Centricity 3.0

Compliance: Yes  No  Comment \_\_\_\_\_

All PACS integration costs **must** be included in the quoted price

Compliance: Yes  No  Comment \_\_\_\_\_

**TURN KEY /CONSTRUCTION OPTION:**

Please provide a quote for Turn key construction separate from the quote for the supply and installation of the Radiography system.

- The vendor’s response **must** include a complete renovation/construction “ turn key” quotation separate from the equipment and installation quote.
- Electrical Permits, if required, must be included in the price.
- The vendor’s construction team **must** be compliant with Labrador Grenfell Health’s Infection Control regulations, their Contractor /Vendor Policy and Safety Policy, and compliant with the Labrador Grenfell Health OATH of Confidentiality policy.
- The tender response **must** include all equipment installation and construction requirements and costs based upon current building codes.
- The system **must** meet the guidelines, codes and standards with the CSA/RPA 2317-13-12 for a Health Device.
- The design of the space will be agreed upon by the purchaser and LG Health.
- The “Turn-Key” quotation **must** also include, but not be limited to the following:
  - All local building permits Yes  No
  - All lighting ,Electrical, and data wiring Yes  No
  - All ventilation/Air Conditioning requirements Yes  No
  - All matters/cost related to delivery of equipment Yes  No
  - Appropriate repair to hard surface flooring throughout the affected area.  
Yes  No
- Vendors are advised to visit the three sites and meet with stakeholders prior to submitting quotation. Any inaccuracies in site condition that cause additional cost to install the units will not be entertained.
- The response to this tender must include a full and comprehensive scope of work related to the “Turn Key” renovations/construction.

- 
- Acceptance of the “Turn Key” option will be at the discretion of the purchaser.

**Price of Turn Key construction not including taxes  
for each of the listed sites (separately priced):**

- **Strait of Belle Isle Health Centre Flower’s Cove:**

\$ \_\_\_\_\_ (no taxes)

- **White Bay Central Health Centre in Roddickton:**

\$ \_\_\_\_\_ (no taxes)

- **Labrador South Health Centre in Forteau:**

\$ \_\_\_\_\_ (no taxes)

**ERGONOMICS:**

List ergonomic advances of the quoted system:

- Unit Movement \_\_\_\_\_
- Column Movement \_\_\_\_\_
- Technical Controls \_\_\_\_\_
- Locks \_\_\_\_\_
- Other \_\_\_\_\_

**SERVICE:**

- The system **must** have an on board error log that runs continuously and is accessible by service to help diagnose problems.  
Compliance: Yes  No  Comment \_\_\_\_\_
- The system **must** provide an on board modem in order to allow the manufacturer’s service organization to monitor system performance, run diagnostics, and transfer images



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for the purpose of problem identification, resolution and the reduction of down time from a remote location.

Compliance: Yes  No  Comment \_\_\_\_\_

- The manufacturer **must** provide a toll free help service including the ability, via a modem, to allow real time monitoring of user keystrokes from a remote location by the individual providing the help.

Compliance: Yes  No  Comment \_\_\_\_\_

**WARRANTY:**

- The vendor **must** provide one year full warranty including parts and labour.  
Compliance: Yes  No  Comment \_\_\_\_\_

- All software update and enhancements **must** be provided free of charge during the warranty period.

Compliance: Yes  No  Comment \_\_\_\_\_

- State time of delivery after receipt of order: \_\_\_\_\_

- Specify time required to complete installation \_\_\_\_\_

- State the cost of a one year full service contract. \_\_\_\_\_

- State the cost of a five year full service contract. \_\_\_\_\_

**USER SUPPORT AND TRAINING:**

- The manufacturer **must** supply on-site applications training at the time of system delivery and **must** incur all applicable costs for training and travel expenses.

Compliance: Yes  No  Comment \_\_\_\_\_

- Please provide details on the proposed training:

Number of on-site training hours \_\_\_\_\_

Number of hours of follow-up training \_\_\_\_\_

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Please describe additional training packages or opportunities and associated costs

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**BIOMEDICAL TRAINING:**

- Please provide a detail description on available bio-medical training. Provide details on type, amount of time and location of training. Include a total cost with a breakdown of travel related expenses.

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**SYSTEM EVALUATION:**

Awarding of tender will be based upon the following:

- Price
- Functionality
- Ergonomics
- Delivery and Install Date

The Vendor may be required to provide a site visit for up 4 people to evaluate the proposed system. Cost to be stipulated separately.

Compliance: Yes  No  Comment \_\_\_\_\_

The vendor(s) **must** provide four (2) copies of the tender response

Compliance: Yes  No  Comment \_\_\_\_\_

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**OPTIONS:**

- (1) ➤ Please quote and identify any other options not included in this tender response.
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**BID SHEET**

Bidders **must** complete and submit the Bid Sheet. Type or legibly print the information required on the Bid Sheet. All questions or areas on the Bid Sheet must be answered, even if it is only to indicate that the referenced item is not available; blank items will be assumed to be unavailable and may result in rejection of the Bid. Where yes/no questions are asked and the space is left blank by the Bidder, the assumption will be that the answer to the question is no.

**BID PRICE**

1. Price of the system as quoted with each system priced separately :

**Strait of Belle Isle Health Centre, Flower's Cove**

\$ \_\_\_\_\_ (no taxes).

**White Bay Central Health Centre, Roddickton**

\$ \_\_\_\_\_ (no taxes).

**Labrador South Health Centre, Forteau**

\$ \_\_\_\_\_ (no taxes).

2. Price of all (three)3 systems as quoted all priced together

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\$ \_\_\_\_\_ (no taxes).