



**SPECIFICATIONS FOR**

**TENDER # 0371-1627**

**SUPPLY OF 4 NURSE CALL SYSTEMS  
FOR WESTERN HEALTH**

**SUPPLY OF 2 NURSE CALL SYSTEMS  
FOR LABRADOR GRENFELL HEALTH**

**SUPPLY OF 1 NURSE CALL SYSTEM  
FOR CENTRAL HEALTH**

**SUPPLY OF 2 NURSE CALL SYSTEMS  
FOR EASTERN HEALTH**

**CLOSING DATE:     November 21, 2016**

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



## **Invitation to Tender for Nurse Call Systems**

### **1.0 General Provisions**

#### **1.1 Intent**

This invitation to Tender is intended to obtain four (4) Nurse Call Systems for the Western Regional Health Authority (Western Health) in Burgeo (Calder Health Centre), Stephenville Crossing (Bay St. George Long Term Care), Norris Point (Bonne Bay Health Centre), and Port Saunders (Rufus Guinchard Health Centre).

Labrador Grenfell Health requires (2) Nurse Call Systems for St. Anthony at (CCMH and JM Gray).

Central Health requires (1) Nurse Call system for Harbour Breton.

Eastern Health requires (2) Nurse Call System for St. John's (Glenbrook Lodge and St. Patrick's Mercy Home).

This Tender is concerned with the acquisition of the seven (7) nurse call systems with consideration of 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 and including 31 December 2018. Other Regional Health Authorities (RHA) within Newfoundland and Labrador will have the right to Avail of this Tender with written notice being provided to the Successful vendor.

#### **1.2 Client Background**

Western Health was established in 2005 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 to each site listed in 1.1. 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:**

The names of individuals or companies who have picked up the tender documents will **not** be released.

#### 1.4.2 **At Tender Opening:**

Only the names of the bidders will be read out.

#### 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.

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

While bidders are welcome to attend the public opening, please be advised that it is not our policy to release bid information. Only the names of the bidders will be released.

## 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, Materiel's Management  
Western Health  
1 Brookfield Ave.  
Corner Brook, Newfoundland  
A2H 6J7  
Tel: (709) 637-5000 ext 6429  
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 Materiel's 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: Materiel's Management Department, Western Health, Western Memorial Regional Hospital, Lower Level, P.O. Box 2005, 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 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 as per Appendix A bid pricing. 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 Tender Surety and Bonding per RHA**

- 1.7.1 The bid bond shall be at least ten percent (10%) of the tendered amount per RHA.  
No bidding security will be required for a tendered amount of less than \$25,000 unless specifically called for elsewhere in the tender document. An approved certified cheque may be substituted in lieu of the bid bond. The bidding security will be returned upon receipt of the Performance and Labour and Materials Bonds.

The terms of the bid security will be invoked and the amount retained by the Owner if the Bidder fails to enter into an agreement when notified of the award of the work within the tender validity period; or fails to provide the Performance and Labour and Materials Bonds in the amount and within the period specified.

- 1.7.2 Performance Bond per RHA  
A Performance Bond will be required in the amount of fifty percent (50%) of the contract price per RHA. The Performance Security is to be received not later than two (2) weeks after the award of the contract by the letter of intent and prior to the formal execution of the agreement. No work is to be undertaken until the Performance Security has been received. Performance Security will not be required for a contract value of less than \$25,000.  
In lieu of the Performance Bond, the Owner may accept at its sole discretion an approved certified cheque for ten percent (10%) of the tendered amount. The cheque will be retained until satisfactory completion of the work including the guarantee period, after which this amount will be returned to the Contractor together with the accrued interest thereon at the current bank rate.

## 1.8 **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 2-year warranty on the complete system. The Vendor agrees to provide free of charge all parts and labor necessary to repair the system during the first two (2) years of operation. All individual components of the nurse call system must be warranted for a period of not less than five (5) years.

All regular and warranty work performed on the nurse call system, must be done by manufacturer certified technicians / technologists. Proof of certification may be requested.

## 2.0 **Product Specifications**

1. Nurse call system and components shall be UL-1069 listed and components must meet CSA C22.1 standards and be certified by a body accredited by the Standards Council of Canada.

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

2. The supplier of the nurse call equipment must be a manufacturer's authorized distributor

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

3. Nurse call system must consist of at least the following bedside / room station capabilities.

Please state all types of available call stations and price for each type of station.

- |  |          |
|--|----------|
| a. Single patient call with audio                      | \$ _____ |
| b. Double patient call with audio                      | \$ _____ |
| c. Waterproof bathroom / shower station with pull cord | \$ _____ |
| d. Staff assist  | \$ _____ |
| e. Code Blue   | \$ _____ |
| f. Security Patient station with audio                 | \$ _____ |
| g. Security Washroom station                           | \$ _____ |

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

4. Patient stations must incorporate a cable breakaway system to prevent damage to the station or call cord.

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

5. Call cord stations must accept either be ¼" phono, 8 pin, or 15 pin nurse call cords.

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

6. Patient stations must have the capability to interface with patient beds. Please state what interface possibilities exist for these connections.

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

7. System must incorporate a clinical staff console that is user programmable for clinical staff / patient assignments.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
8. System must incorporate a clinical staff console that displays each call station on the floorplan of the coverage area. This display must a color touchscreen interactive panel at least 17" in size.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
9. System must incorporate a clinical staff console that is able to have full functionality in the event of a power loss. Vendor is responsible for the supply and installation of a UPS system(s) if required to maintain full system functionality in the event of AC power loss. These UPS system(s) must be part of the vendors warranty on the nurse call system. If a site has an enterprise UPS and the system has capacity, the vendor shall be responsible for connection of the nurse call system to this UPS.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
10. All communications between the clinical staff console and patient stations with audio must be full duplex  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
11. Clinical staff console must incorporate both a speaker and handset for full duplex communications between console and room stations with audio  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
12. Consoles must be able to swing coverages to other predetermined areas with minimal key strokes. Ideally it would be a one button selection on the clinical staff console.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
13. Regular patient calls must be able to be reset through staff console or peripheral devices such as Spectralink phones or Vocera.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
14. Emergency bathroom and shower calls can only be reset at that emergency station.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
15. Staff assist calls must be able to be reset at the clinical staff console as well at the staff assist station.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
16. Clinical staff consoles must have the ability to call patient and staff stations that have audio and the communications must be full duplex.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
17. Clinical staff consoles must have the ability to adjust the audio for both the speaker and ring volumes  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

18. System must have the capability to interface with an RFID system to acknowledge when a staff carrying an RFID tag enters the room, and have the capability of cancelling regular calls upon entry.

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

19. System must have the ability to interface with an RFID system that has a staff call feature to indicate on the room dome light as well as staff console when a staff is in duress.

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

20. System must have the ability to interface with the following external communication systems

- a. Portable phones (see section on interfacing for telephone specifications)
- b. Portable Wi-Fi communication devices such as Vocera
- c. Pocket pagers using TAP transfer protocol

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

21. System must have the capability to transfer coverage areas to other clinical staff consoles

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

22. System must automatically update system time from an external source. Please list your time refresh capabilities. Must change in accordance with daylight savings time changes.

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

23. System must be able to interface with marquee displays that will show room number and bed.

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

24. System must incorporate varying levels of call priority that is customizable and programmable.

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

25. System must be a hardwire configuration from bedside to dome to central communication head end.

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

26. Where possible, the vendor shall use existing nurse call conduits to minimize construction work. All costs associated with installation of additional conduit, boxes, and electrical supply shall be the responsibility of the vendor. (Appendix A will allow for pricing without wiring and conduit)

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

27. System must be able to receive and send information to hospital systems via HL7 / ADT interface.

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_



28. System must be programmable from an external PC that can be accessed onsite or remotely via Ethernet connection. Any interface devices required to support this such as serial to Ethernet interfaces are to be supplied and installed by the vendor and be included with system warranty. PC for such programming must be supplied with the system and be covered by the system warranty terms.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
29. System must be able to accommodate a minimum of five simultaneous full duplex conversation paths.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
30. System must have the capability to address a minimum of 1000 devices. Please state the maximum number of devices that the system can control.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
31. System must have capability of escalating a call to another device or clinical staff console in event of a non-answered call. This time period must be configurable within the service software.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
32. All user programmable functions and system settings must be stored in non-volatile memory that does not require a battery backup.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
33. System must have the capability of answering calls out of sequence without affecting other calls in the queue.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
34. System room numbers and names must be programmable by the service user.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
35. System wiring should be supervised to indicate faults in wiring.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
36. System should indicate when a loss in communication occurs with integrated systems such as telephone system, hospital network, etc..  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
37. Corridor dome lights should have a minimum of 4 lamps to indicate
- a. Regular call - Yellow
  - b. Emergency call - Red
  - c. Code call - Blue
  - d. Nurse in room – Green
  - e. Cord out - White
- Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

38. Flash rate of lamps must be user programmable

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

39. Head end controllers must be installed in service user accessible cabinets

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

40. System must have call cords available for at least the following special circumstances. Please list all available call types and pricing.

- |                               |          |
|-------------------------------|----------|
| a. Breath type call           | \$ _____ |
| b. Momentary touch plate type | \$ _____ |
| c. Pneumatic pad type         | \$ _____ |
| d. Pneumatic ball type        | \$ _____ |

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

41. System must alarm for a cord out or cord broken

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

42. System must be able to accommodate hot swapping of patient stations without having to remove system power or shutting down local controller.

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

43. System must not be adversely affected by a shorted nurse call cord and other stations on the system must maintain full functionality in such a condition.

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

44. System must be able to accommodate patient exit devices

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

45. System must have dummy plugs or alternate method available for when cords are removed intentionally to keep system from alarming for cord out or cancel alarm when cord out (a dummy plug would not be required)

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

46. System must incorporate software to record all calls and systems errors. Software must be able to generate reports with date and time for

- a. Room calls
- b. Emergency calls
- c. Answered calls and how cancelled
- d. Time from call placed until call answered
- e. Error codes

This software must also be available via computers not directly connected to the nurse call network. Please state type of available reporting software configurations.

Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

47. A call cord must accompany every patient call station, one cord per patient station  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
48. System must have tamper proof stations for special installations such as mental health and protective areas. The call stations must be push button type.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
49. System must be capable of accepting external alarms from systems with dry contact outputs.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
50. System must be capable of accepting external alarms from systems such as patient wandering systems, infant security systems, staff duress system.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
51. The system must have the capability of changing a regular patient bedside call to a priority call through simple programming at the clinical staff console. It should be able to be changed back to regular call status in the same manner.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
52. Construction schedule must be approved by and coordinated with the site manager for each site. All construction must be completed in a manner to minimize dust and the vendor must adhere to CSA standard CSA Z317.13-12 at all times.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
53. A work safe plan accompanied by contractor and subcontractor and staff contacts must be supplied to each site before work begins, and shall be posted at each workplace during construction.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
54. Any areas requiring painting and plastering from work required to facilitate the installation of the nurse call system shall be the responsibility of the vendor unless otherwise agreed upon by awarding RHA. Such areas must be painted to match existing color and be low VOC paint such as Dulux Lifemaster 59211 base and 20051 Dulux primer.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
55. Vendor and contractors must adhere to all RHA policies such but not limited to work safe practices, electrical hot work, infection control, and confidentiality.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_
56. Please list all approved chemicals for disinfection of nurse call system components such as call cord and patient station.
57. Vendor shall confirm there will not be any additional charges for orders or set a low order limit on replacement parts.  
Yes \_\_\_\_\_ No \_\_\_\_\_ Comment \_\_\_\_\_

### **Site specific information (Western Health 3.1 – 3.5)**

- 2.1 Port Saunders – Rufus Guinchard Health Center  
Replacement of the existing Dukane Procure 2000 nurse call system.  
This system currently utilizes a room home run wiring configuration with a common run power supply. Site visits while the tender is open must be coordinated through the Facilities site manager. Pdf drawings of the new nurse call layout can be obtained through Western Health Materials Management. The fee for the drawing package is \$50.00 for all 4 sites.
- 2.2 Norris Point – Bonne Bay Health Center  
Replacement of the existing Rauland 3000 nurse call system.  
This system currently utilizes a room home run wiring configuration with a common run power supply. Site visits while the tender is open must be coordinated through the Facilities site manager. Pdf drawings of the new nurse call layout can be obtained through Western Health Materials Management. The fee for the drawing package is \$50.00 for all 4 sites.
- 2.3 Stephenville Crossing – Bay St. George Senior Citizens Home  
Replacement of the existing Edwards nurse call system.  
This system currently utilizes a room home run wiring configuration and may require additional conduit to facilitate system installation. If any conduit has to be surface installed, it must be painted to match existing color and be low VOC paint such as Dulux Lifemaster 59211 base and 20051 Dulux primer. Site visits while the tender is open must be coordinated through the Facilities site manager. Pdf drawings of the new nurse call layout can be obtained through Western Health Materials Management. The fee for the drawing package is \$50.00 for all 4 sites.  
Some areas for this site may contain asbestos. Asbestos remediation will be the responsibility of the owner and remediation will be coordinated between the owner and nurse call supply vendor.
- 2.4 Burgeo – Calder Health Center  
Replacement of the existing Dukane Procure 2000 nurse call system.  
This system currently utilizes a room home run wiring configuration with a common run power supply. Site visits while the tender is open must be coordinated through the Facilities site manager. Pdf drawings of the new nurse call layout can be obtained through Western Health Materials Management. The fee for the drawing package is \$50.00 for all 4 sites.
- 2.5 Western Health phone system integration specifications  
  
Proposed Western Health Nurse Call system would need to Integrate with existing wireless phone infrastructure. The wireless phone infrastructure works on an in house industry standard Wi-Fi system manufactured by Cisco and consists of redundant AP controllers to automate both availability and WI-FI configurations of AP's. The telco systems at major Acute care sites consists of Mitel 3300 IP based PBX which in turn communicates through in house WI-Fi with Spectralink SIP based WI-FI phones models

8020 in both 2.4 and 5 Ghz bands. These Phones use industry non-proprietary 802.11 B,G,N.

Sites have an existing Mitel 3300 IP system. The wireless phone system would consist of Spectralink 8020 phones using SIP communications through the building wireless 802.11 infrastructure which registers the phones as sets in a Mitel 3300 call server. The Spectralink phones are independent of nurse call systems and a part of Western Health's internal networks, wireless and wired. Current deployments consist of a Telco interface via an analog trunk to a device within nurse call system (a PLI) that rings out on a copper wired loop start analog trunk within the Mitel 3300 system ASU. The integration would require the vendor to design and supply an integration device that can-

1. Activate remote independent phones systems wired or wireless through a Mitel system
2. Provide trunk and / or line specification that has been approved and tested within a Mitel environment other than Western Health current systems
3. Provide digital ID information sending calling room information to the display of Spectralink 8000 series SIP wireless phones
4. Provide 2 way communications between the calling room station and Spectralink 8000 series SIP wireless phones
5. Allows automatic cancelation of a normal room call upon answer from any Spectralink 8000 series SIP wireless phone that has been activated via Nurse Call
6. Provide a method of overflow to handle multiple calls or stacking method when attempting to activate from multiple rooms to call Spectralink 8000 series SIP wireless phones.
7. Allow for zones and those zones can be applied to different groups of Spectralink phones to be called

Vendor may propose an integration appliance as opposed to an interface device making truck calls for integration between proposed Nurse call systems and a Mitel 3300 PBX.

## 2.6 **Eastern Health**

Eastern Health requires 2 nurse call system(s) at the following sites.

Glenbrook Lodge

St. Patrick's Mercy Home

Site specific information for system requirements and site viewing can be obtained from Mark Rice. [Mark.Rice@easternhealth.nl.ca](mailto:Mark.Rice@easternhealth.nl.ca) 709-752-8707

## 2.7 **Central Health**

Central Health requires 1 nurse call system(s) at the following sites.

Harbour Breton

Site specific information for system requirements can be obtained from Appendix C. Site contact is Glenn King. [Glenn.King@centralhealth.nl.ca](mailto:Glenn.King@centralhealth.nl.ca)

## 2.8 **Labrador Grenfell Health**

Labrador Grenfell Health requires 2 nurse call systems at St. Anthony (JM Gray and CCMH)

Site specific information for system requirements and site viewing can be in Appendix B.

Site contact is Randy Cull for system and installation specific information.

[Randy.Cull@lghealth.ca](mailto:Randy.Cull@lghealth.ca)

## 3.0 **Presentation / Training / Service**

### 4.1 **Presentation**

A presentation of the Tender and / or a demonstration of the product / system shall be provided, if requested, at the Vendor's expense to each RHA.

### 4.2 **Training**

The Vendor shall provide on-site training to staff in the use of the **Nurse Call System**. All costs associated with this training shall be included in the total Tender price. The length of such training shall be what is reasonably required to train the users of the equipment and shall be documented. This must be a minimum of one session per staff shift rotation.

The Vendor shall provide factory training to Biomedical Technologists / Facilities staff employed by each respective RHA. Such training shall be the same training as supplied to the manufacturers or vendors staff, and include all information for installing and maintaining the system. Trained staff will have full access to factory 24 hr technical support equivalent to vendor staff. Full service manuals with a full list of service codes and service software shall be included for each technologist. All costs including course costs, all airfare and ground transportation, accommodation costs, and meal costs are to be included with the training.

Please state the cost of training per technologist on the bid form in Appendix A.

### 4.3 **Service**

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

4.3.2 The Vendor shall provide as an option, pricing for service models for when the labor warranty ends and for when the parts and labor warranty ends. Please state the price for a one (1) year model and a five (5) year model.

4.3.3 The Vendor shall provide all Service and Parts manuals required to service the equipment with a minimum of one complete set per system per site. An electronic pdf copy in addition to paper copies is required. All final electrical riser diagrams must be provided after installation.

- 4.3.4 Any special service keys, software, or specialty tools required to service the system must be supplied to each technologist for the duration that each RHA operates the system and the technologist is employed by the RHA. Any costs associated with such service keys, software, or specialty tools must be included with the cost in this tender bid.

#### **4.4 Installation**

- 4.4.1 During installation the contractor and or supplier must keep site clean as per CSA Z317.13-12. All debris must be removed after the end of each shift and disposed of by the installer. It is up to the supplier to obtain their copy of the CSA Z317.13-12 standard and be familiar with the aspects of the policy. Contractors may be required to attend an OH&S session at an RHA site at no additional cost to the RHA.
- 4.4.2 Installation and programming must only be done by qualified individuals who are certified to do so by the equipment manufacturers. Proof of certification may be required.
- 4.4.3 Full system installation and commissioning must be completed within the negotiated time at the time of award per RHA.
- 4.4.4 Each RHA will be responsible for reviewing the quality of work during and after the installation. If any work is deemed to be substandard by the RHA, repairs must be completed by the supplier at no additional cost to the RHA.
- 4.4.5 Vendor / installer must be familiar with and sign all documents related to RHA policies before starting construction work. Each RHA will provide the information on policies before work starts.
- 4.4.6 Vendor must demonstrate full functionality of all features of the system and the system must meet all the owner's needs as per the tendered specifications before full commissioning and final payment.

#### **4.0 Product History and Vendor Reputation**

- 4.1 The Vendor shall provide a list of three (3) organizations where a similar Unit has been installed. Include a contact person for each organization.

#### **5.0 Financial Considerations**

- 5.1 All applicable taxes shall be indicated in the Tender.
- 5.2 The cost for installation, initial set-up and programming shall be included in the Tender price.
- 5.3 RTLS and Wireless phone systems to be priced separately as per bid form.

#### **5.4 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.



**Vendor Confirmation** (please sign)

I confirm that our Tender response 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 \_\_\_\_\_

**Tender Price**

**Please see Appendix A for site specific pricing**

**Please include pricing for ALL individual components for the system for additions to the tender or replacements.**

## **TENDER CHECKLIST**

**TENDER #0571-1605**

### **DID YOU INCLUDE**

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

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

## APPENDIX A – BID PRICING

### TENDER FORM – Western Health Calder Health Center

#### APPENDIX "A" TENDER PRICE TABLE

Sections	Description	Amount (\$)
<b>C1</b>	<b>Base Tender</b>	
<b>C2</b>	<b>Separate Prices</b>	
	1 Real Time Location Services System and integration	
	2 Wireless Phone System installation and integration	
	3 Delete installation of wiring (RHA to supply and install wiring and boxes only)	
	4 Factory Training (per technologist with all expenses included)	
	<b>Subtotal Separate Prices</b>	

Unit	Quantity	Unit Price (\$)	
<b>C3</b>	1 Wireless Phone Handset	ea	
	2 RTLS Badge	ea	
	3 8' to 10' Nurse Call Cord	ea	
	<b>Subtotal Unit Prices</b>		
<b>C4</b>	Service Contract (after initial 2 year system warranty)1 yr labor only 5 yr labor only (after 5 year parts warranty)1 yr parts and labor 5 yr parts and labor 1 yr parts only 5 yr parts only		
<b>C5</b>	<b>Cash Allowances</b>		
	1 No Cash Allowances requested for this project		
	<b>Subtotal Cash Allowances</b>		
<b>C6</b>	<b>SubTotal Tender Prices</b> (Sum of Sections C1-C4)		
<b>C7</b>	<b>Harmonized Sales Tax (HST)</b> (Multiply Section C5 by 15%)		
<b>C8</b>	<b>TOTAL TENDER AMOUNT</b> (Add Sections C5 + C6 and transfer this amount to Section 1 on page 1 of the Tender		

Notes:

- For the purposes of the Public Tender Act and the evaluation of tenders received, the bid shall be the Total Tender Amount.
- Work associated with the Separate Prices may be deleted at the sole discretion of the Owner at the time of contract award and a deduction(s) will be made to the Total Tender Amount equal to the amount(s) in C2 of the Tender Price Table.
- Costs associated with the Unit Price work will vary depending upon the quantities authorized by the Engineer/Architect during the course of construction and the final contract amount will be adjusted accordingly, upwards or downwards, based upon the quoted unit rate.

# Bay St. George Long Term Care

## APPENDIX "A"

### TENDER PRICE TABLE

Sections		Description	Amount (\$)
C1	Base Tender		
C2	Separate Prices		
	1	Real Time Location Services System and integration	
	2	Wireless Phone System installation and integration	
	3	Delete installation of wiring (RHA to supply and install wiring and boxes only)	
	4	Factory Training (per technologist with all expenses included)	
	Subtotal Separate Prices		

<b>Unit</b>	<i>Quantity</i>	<i>Unit Price (\$)</i>		
<b>C3</b>	1	Wireless Phone Handset	ea	
	2	RTLS Badge	ea	
	3	8' to 10' Nurse Call Cord	ea	ea
	Subtotal Unit Prices			
<b>C4</b>	Service Contract (after initial 2 year system warranty) 1 yr labor only 5 yr labor only (after 5 year parts warranty) 1 yr parts and labor 5 yr parts and labor 1 yr parts only 5 yr parts only			
<b>C5</b>	<b>Cash Allowances</b>			
	1	No Cash Allowances requested for this project		
	Subtotal Cash Allowances			
<b>C6</b>	<b>SubTotal Tender Prices</b> (Sum of Sections C1-C4)			
<b>C7</b>	<b>Harmonized Sales Tax (HST)</b> (Multiply Section C5 by 15%)			
<b>C8</b>	<b>TOTAL TENDER AMOUNT</b> (Add Sections C5 + C6 and transfer this amount to Section 1 on page 1 of the Tender)			

Notes:

4. For the purposes of the Public Tender Act and the evaluation of tenders received, the bid shall be the Total Tender Amount.
5. Work associated with the Separate Prices may be deleted at the sole discretion of the Owner at the time of contract award and a deduction(s) will be made to the Total Tender Amount equal to the amount(s) in C2 of the Tender Price Table.
6. Costs associated with the Unit Price work will vary depending upon the quantities authorized by the Engineer/Architect during the course of construction and the final contract amount will be adjusted accordingly, upwards or downwards, based upon the quoted unit rate.

## APPENDIX "A"

### TENDER PRICE TABLE

Sections		Description	Amount (\$)
<b>C1</b>	<b>Base Tender</b>		
<b>C2</b>	<b>Separate Prices</b>		
	1	Real Time Location Services System and integration	
	2	Wireless Phone System installation and integration	
	3	Delete installation of wiring (RHA to supply and install wiring and boxes only)	
	4	Factory Training (per technologist with all expenses included)	
	Subtotal Separate Prices		

<b>Unit</b>	<i>Quantity</i>	<i>Unit Price (\$)</i>	
<b>C3</b>	1	Wireless Phone Handset	ea
	2	RTLS Badge	ea
	3	8' to 10' Nurse Call Cord	ea
	Subtotal Unit Prices		
<b>C4</b>	Service Contract (after initial 2 year system warranty)1 yr labor only 5 yr labor only (after 5 year parts warranty)1 yr parts and labor 5 yr parts and labor 1 yr parts only 5 yr parts only		
<b>C5</b>	<b>Cash Allowances</b>		
	1	No Cash Allowances requested for this project	
	Subtotal Cash Allowances		
<b>C6</b>	<b>SubTotal Tender Prices</b> (Sum of Sections C1-C4)		
<b>C7</b>	<b>Harmonized Sales Tax (HST)</b> (Multiply Section C5 by 15%)		
<b>C8</b>	<b>TOTAL TENDER AMOUNT</b> (Add Sections C5 + C6 and transfer this amount to Section 1 on page 1 of the Tender		

Notes:

7. For the purposes of the Public Tender Act and the evaluation of tenders received, the bid shall be the Total Tender Amount.
8. Work associated with the Separate Prices may be deleted at the sole discretion of the Owner at the time of contract award and a deduction(s) will be made to the Total Tender Amount equal to the amount(s) in C2 of the Tender Price Table.
9. Costs associated with the Unit Price work will vary depending upon the quantities authorized by the Engineer/Architect during the course of construction and the final contract amount will be adjusted accordingly, upwards or downwards, based upon the quoted unit rate.

# TENDER FORM – Western Health Rufus Guinchard Health Center

## APPENDIX "A"

### TENDER PRICE TABLE

Sections		Description	Amount (\$)
<b>C1</b>	<b>Base Tender</b>		
<b>C2</b>	<b>Separate Prices</b>		
	1	Real Time Location Services System and integration	
	2	Wireless Phone System installation and integration	
	3	Delete installation of wiring (RHA to supply and install wiring and boxes only)	
	4	Factory Training (per technologist with all expenses included)	
	Subtotal Separate Prices		

<b>Unit</b>	<i>Quantity</i>	<i>Unit Price (\$)</i>	
<b>C3</b>	1   Wireless Phone Handset	ea	
	2   RTLS Badge	ea	
	3   8' to 10' Nurse Call Cord	ea	
	Subtotal Unit Prices		
<b>C4</b>	Service Contract (after initial 2 year system warranty)1 yr labor only 5 yr labor only (after 5 year parts warranty)1 yr parts and labor 5 yr parts and labor 1 yr parts only 5 yr parts only		
<b>C5</b>	<b>Cash Allowances</b>		
	1   No Cash Allowances requested for this project		
	Subtotal Cash Allowances		
<b>C6</b>	<b>SubTotal Tender Prices</b> (Sum of Sections C1-C4)		
<b>C7</b>	<b>Harmonized Sales Tax (HST)</b> (Multiply Section C5 by 15%)		
<b>C8</b>	<b>TOTAL TENDER AMOUNT</b> (Add Sections C5 + C6 and transfer this amount to Section 1 on page 1 of the Tender		

Notes:

10. For the purposes of the Public Tender Act and the evaluation of tenders received, the bid shall be the Total Tender Amount.
11. Work associated with the Separate Prices may be deleted at the sole discretion of the Owner at the time of contract award and a deduction(s) will be made to the Total Tender Amount equal to the amount(s) in C2 of the Tender Price Table.
12. Costs associated with the Unit Price work will vary depending upon the quantities authorized by the Engineer/Architect during the course of construction and the final contract amount will be adjusted accordingly, upwards or downwards, based upon the quoted unit rate.

# TENDER FORM – Labrador Grenfell Health CCMH

## APPENDIX "A" TENDER PRICE TABLE

Sections	Description	Amount (\$)
<b>C1</b>	<b>Base Tender</b>	
<b>C2</b>	<b>Separate Prices</b>	
	1 Real Time Location Services System and integration	
	2 Wireless Phone System installation and integration	
	3 Delete installation of wiring (RHA to supply and install wiring and boxes only)	
	4 Factory Training (per technologist with all expenses included)	
	<b>Subtotal Separate Prices</b>	

Unit	Quantity	Unit Price (\$)	
<b>C3</b>	1 Wireless Phone Handset	ea	
	2 RTLS Badge	ea	
	3 8' to 10' Nurse Call Cord	ea	
	<b>Subtotal Unit Prices</b>		
<b>C4</b>	Service Contract (after initial 2 year system warranty)1 yr labor only 5 yr labor only (after 5 year parts warranty)1 yr parts and labor 5 yr parts and labor 1 yr parts only 5 yr parts only		
<b>C5</b>	<b>Cash Allowances</b>		
	1 No Cash Allowances requested for this project		
	<b>Subtotal Cash Allowances</b>		
<b>C6</b>	<b>SubTotal Tender Prices</b> (Sum of Sections C1-C4)		
<b>C7</b>	<b>Harmonized Sales Tax (HST)</b> (Multiply Section C5 by 15%)		
<b>C8</b>	<b>TOTAL TENDER AMOUNT</b> (Add Sections C5 + C6 and transfer this amount to Section 1 on page 1 of the Tender)		

**Notes:**

13. For the purposes of the Public Tender Act and the evaluation of tenders received, the bid shall be the Total Tender Amount.
14. Work associated with the Separate Prices may be deleted at the sole discretion of the Owner at the time of contract award and a deduction(s) will be made to the Total Tender Amount equal to the amount(s) in C2 of the Tender Price Table.
15. Costs associated with the Unit Price work will vary depending upon the quantities authorized by the Engineer/Architect during the course of construction and the final contract amount will be adjusted accordingly, upwards or downwards, based upon the quoted unit rate.

# TENDER FORM – Labrador Grenfell Health JM Gray

## APPENDIX "A" TENDER PRICE TABLE

Sections	Description	Amount (\$)
<b>C1</b>	<b>Base Tender</b>	
<b>C2</b>	<b>Separate Prices</b>	
	1 Real Time Location Services System and integration	
	2 Wireless Phone System installation and integration	
	3 Delete installation of wiring (RHA to supply and install wiring and boxes only)	
	4 Factory Training (per technologist with all expenses included)	
	Subtotal Separate Prices	

Unit	Quantity	Unit Price (\$)	
<b>C3</b>	1 Wireless Phone Handset	ea	
	2 RTLS Badge	ea	
	3 8' to 10' Nurse Call Cord	ea	
	Subtotal Unit Prices		
<b>C4</b>	Service Contract (after initial 2 year system warranty)1 yr labor only 5 yr labor only (after 5 year parts warranty)1 yr parts and labor 5 yr parts and labor 1 yr parts only 5 yr parts only		
<b>C5</b>	<b>Cash Allowances</b>		
	1 No Cash Allowances requested for this project		
	Subtotal Cash Allowances		
<b>C6</b>	<b>SubTotal Tender Prices</b> (Sum of Sections C1-C4)		
<b>C7</b>	<b>Harmonized Sales Tax (HST)</b> (Multiply Section C5 by 15%)		
<b>C8</b>	<b>TOTAL TENDER AMOUNT</b> (Add Sections C5 + C6 and transfer this amount to Section 1 on page 1 of the Tender)		

**Notes:**

16. For the purposes of the Public Tender Act and the evaluation of tenders received, the bid shall be the Total Tender Amount.
17. Work associated with the Separate Prices may be deleted at the sole discretion of the Owner at the time of contract award and a deduction(s) will be made to the Total Tender Amount equal to the amount(s) in C2 of the Tender Price Table.
18. Costs associated with the Unit Price work will vary depending upon the quantities authorized by the Engineer/Architect during the course of construction and the final contract amount will be adjusted accordingly, upwards or downwards, based upon the quoted unit rate.



# TENDER FORM – Central Health Harbour Breton

## APPENDIX "A" TENDER PRICE TABLE

Sections	Description	Amount (\$)
<b>C1</b>	<b>Base Tender</b>	
<b>C2</b>	<b>Separate Prices</b>	
	1 Real Time Location Services System and integration	
	2 Wireless Phone System installation and integration	
	3 Delete installation of wiring (RHA to supply and install wiring and boxes only)	
	4 Factory Training (per technologist with all expenses included)	
	<b>Subtotal Separate Prices</b>	

Unit	Quantity	Unit Price (\$)	
	1 Wireless Phone Handset	ea	
	2 RTLS Badge	ea	
	3 8' to 10' Nurse Call Cord	ea	
	<b>Subtotal Unit Prices</b>		
<b>C4</b>	Service Contract (after initial 2 year system warranty)1 yr labor only 5 yr labor only (after 5 year parts warranty)1 yr parts and labor 5 yr parts and labor 1 yr parts only 5 yr parts only		
<b>C5</b>	<b>Cash Allowances</b>		
	1 No Cash Allowances requested for this project		
	<b>Subtotal Cash Allowances</b>		
<b>C6</b>	<b>SubTotal Tender Prices</b> (Sum of Sections C1-C4)		
<b>C7</b>	<b>Harmonized Sales Tax (HST)</b> (Multiply Section C5 by 15%)		
<b>C8</b>	<b>TOTAL TENDER AMOUNT</b> (Add Sections C5 + C6 and transfer this amount to Section 1 on page 1 of the Tender)		

**Notes:**

19. For the purposes of the Public Tender Act and the evaluation of tenders received, the bid shall be the Total Tender Amount.
20. Work associated with the Separate Prices may be deleted at the sole discretion of the Owner at the time of contract award and a deduction(s) will be made to the Total Tender Amount equal to the amount(s) in C2 of the Tender Price Table.
21. Costs associated with the Unit Price work will vary depending upon the quantities authorized by the Engineer/Architect during the course of construction and the final contract amount will be adjusted accordingly, upwards or downwards, based upon the quoted unit rate.

# TENDER FORM – Eastern Health Glenbrook Lodge

## APPENDIX "A" TENDER PRICE TABLE

<i>Sections</i>	<i>Description</i>	<i>Amount (\$)</i>
<b>C1</b>	<b>Base Tender</b>	
<b>C2</b>	<b>Separate Prices</b>	
	1 Real Time Location Services System and integration	
	2 Wireless Phone System installation and integration	
	3 Delete installation of wiring (RHA to supply and install wiring and boxes only)	
	4 Factory Training (per technologist with all expenses included)	
	Subtotal Separate Prices	

<b>Unit</b>	<i>Quantity</i>	<i>Unit Price (\$)</i>	
<b>C3</b>	1 Wireless Phone Handset	ea	
	2 RTLS Badge	ea	
	3 8' to 10' Nurse Call Cord	ea	
	Subtotal Unit Prices		
<b>C4</b>	Service Contract (after initial 2 year system warranty)1 yr labor only 5 yr labor only (after 5 year parts warranty)1 yr parts and labor 5 yr parts and labor 1 yr parts only 5 yr parts only		
<b>C5</b>	<b>Cash Allowances</b>		
	1 No Cash Allowances requested for this project		
	Subtotal Cash Allowances		
<b>C6</b>	<b>SubTotal Tender Prices</b> (Sum of Sections C1-C4)		
<b>C7</b>	<b>Harmonized Sales Tax (HST)</b> (Multiply Section C5 by 15%)		
<b>C8</b>	<b>TOTAL TENDER AMOUNT</b> (Add Sections C5 + C6 and transfer this amount to Section 1 on page 1 of the Tender)		

**Notes:**

22. For the purposes of the Public Tender Act and the evaluation of tenders received, the bid shall be the Total Tender Amount.
23. Work associated with the Separate Prices may be deleted at the sole discretion of the Owner at the time of contract award and a deduction(s) will be made to the Total Tender Amount equal to the amount(s) in C2 of the Tender Price Table.
24. Costs associated with the Unit Price work will vary depending upon the quantities authorized by the Engineer/Architect during the course of construction and the final contract amount will be adjusted accordingly, upwards or downwards, based upon the quoted unit rate.

## APPENDIX "A"

### TENDER PRICE TABLE

Sections		Description	Amount (\$)
C1	Base Tender		
C2	Separate Prices		
	1	Real Time Location Services System and integration	
	2	Wireless Phone System installation and integration	
	3	Delete installation of wiring (RHA to supply and install wiring and boxes only)	
	4	Factory Training (per technologist with all expenses included)	
	Subtotal Separate Prices		

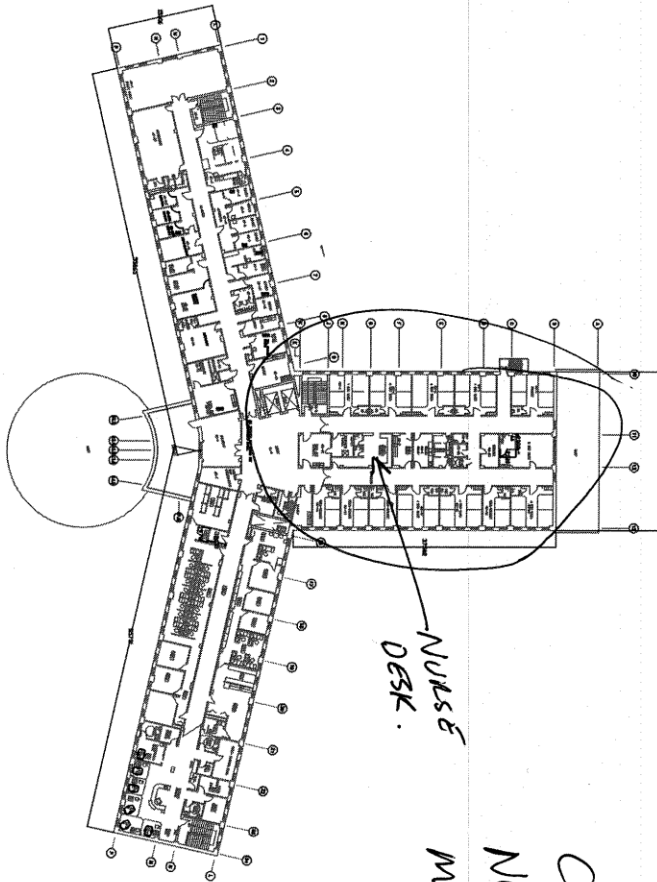
<b>Unit</b>	<i>Quantity</i>	<i>Unit Price (\$)</i>	
<b>C3</b>	1   Wireless Phone Handset	ea	
	2   RTLS Badge	ea	
	3   8' to 10' Nurse Call Cord	ea	
	Subtotal Unit Prices		
<b>C4</b>	Service Contract (after initial 2 year system warranty)1 yr labor only 5 yr labor only (after 5 year parts warranty)1 yr parts and labor 5 yr parts and labor 1 yr parts only 5 yr parts only		
<b>C5</b>	<b>Cash Allowances</b>		
	1   No Cash Allowances requested for this project		
	Subtotal Cash Allowances		
<b>C6</b>	<b>SubTotal Tender Prices</b> (Sum of Sections C1-C4)		
<b>C7</b>	<b>Harmonized Sales Tax (HST)</b> (Multiply Section C5 by 15%)		
<b>C8</b>	<b>TOTAL TENDER AMOUNT</b> (Add Sections C5 + C6 and transfer this amount to Section 1 on page 1 of the Tender		

Notes:

25. For the purposes of the Public Tender Act and the evaluation of tenders received, the bid shall be the Total Tender Amount.
26. Work associated with the Separate Prices may be deleted at the sole discretion of the Owner at the time of contract award and a deduction(s) will be made to the Total Tender Amount equal to the amount(s) in C2 of the Tender Price Table.
27. Costs associated with the Unit Price work will vary depending upon the quantities authorized by the Engineer/Architect during the course of construction and the final contract amount will be adjusted accordingly, upwards or downwards, based upon the quoted unit rate.

**Appendix B**  
Labrador Grenfell Health

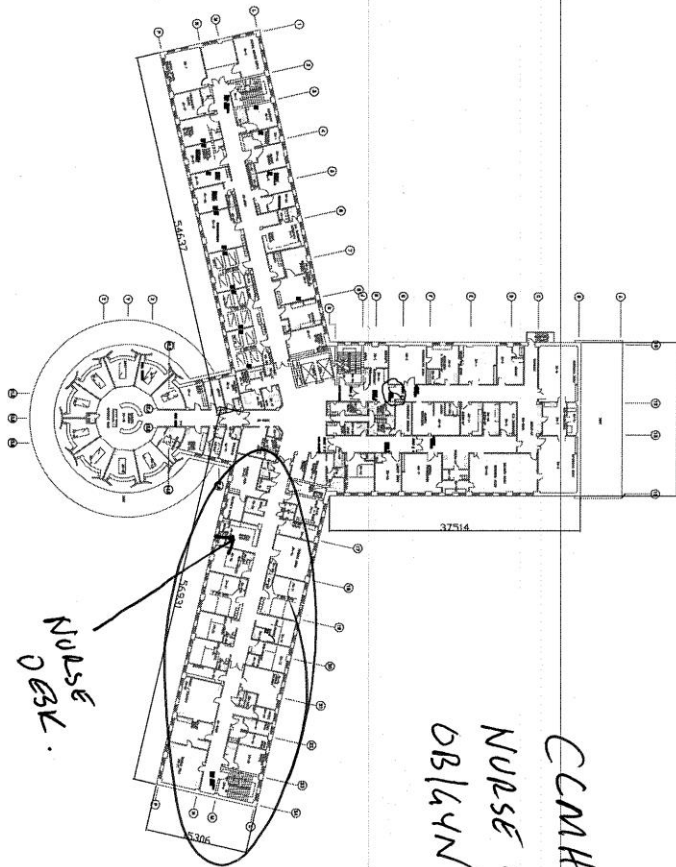
SECOND FLOOR PLAN - LEVEL 4

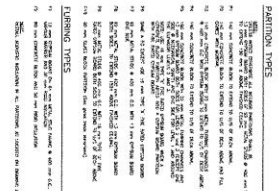


NURSE  
DESK.

CCMH  
NURSE CALL 4  
MED-SURG

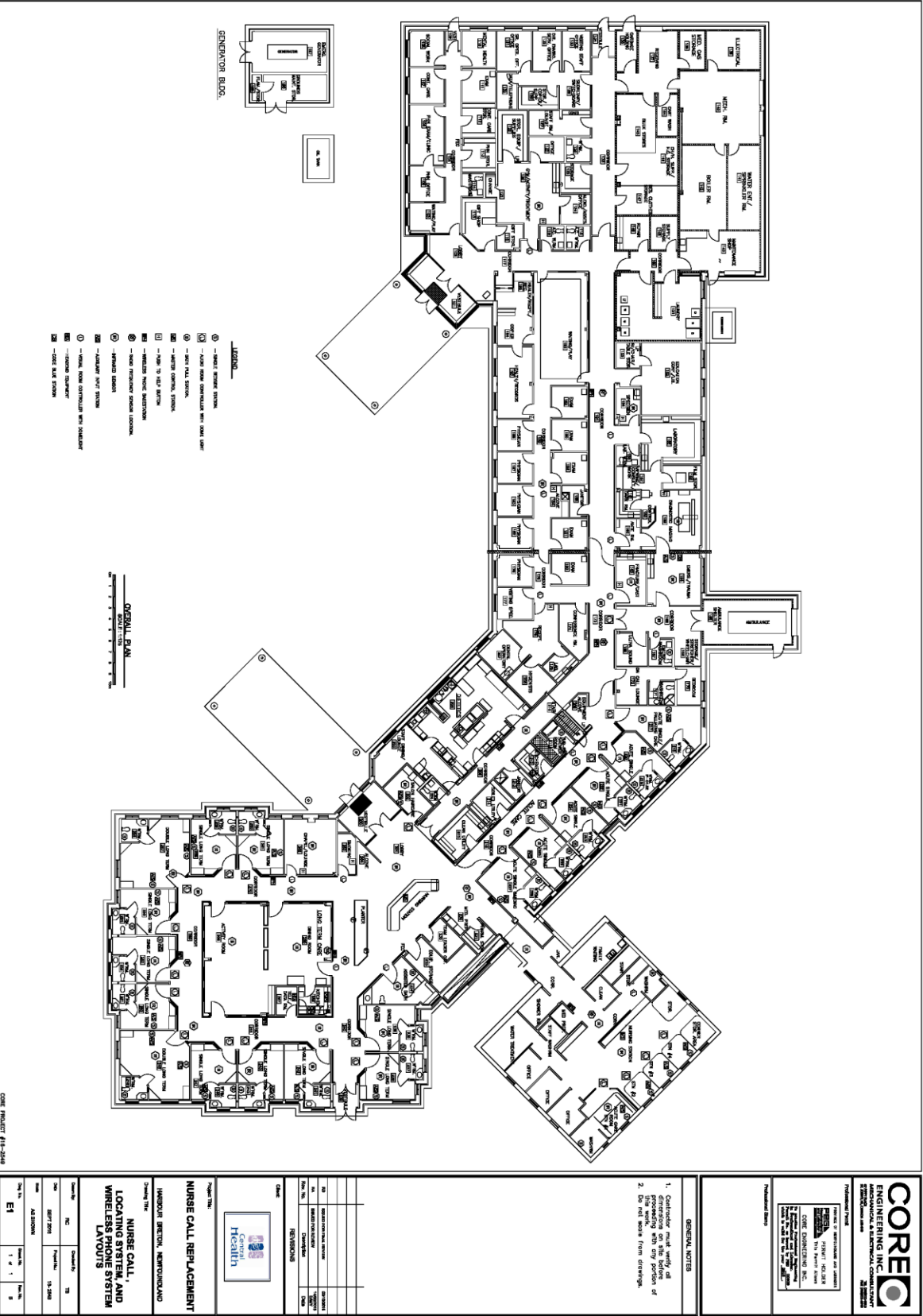
FIRST FLOOR PLAN - LEVEL 3



[illegible]

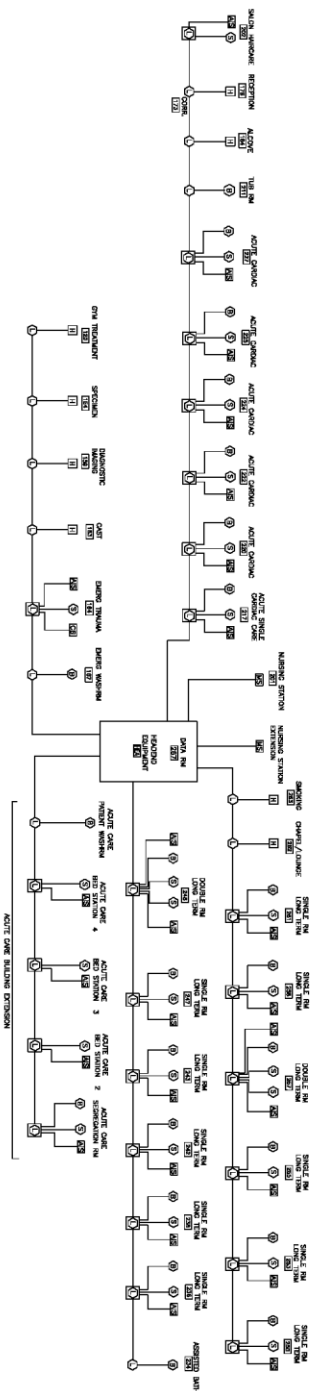


Appendix C: Central Health







[illegible]

## **Appendix D: Terms and Conditions**

### Section 01 11 00 Summary of Works

#### **PART 1 GENERAL**

##### **1.1 SECTION INCLUDES**

- .1 Title and description of Work.
- .2 Contractor use of premises.
- .3 Owner occupancy.

##### **1.2 WORK COVERED BY CONTRACT DOCUMENTS**

- .1 Work of this Contract comprises the replacement of the Nurse Call System complete with the addition of integrated Real Time Location Service (RTLS) and Wireless Phones and all associated works as outlined in the tender documents, located at 9 sites in NL. Scope includes but is not limited to supply, installation, testing and commissioning of all devices, wiring, equipment, etc unless otherwise identified.
- .2 All new wiring to be supplied by this Contractor and installed by contractor or owners forces as determined by award. All equipment and device installations and terminations by this Contractor.
- .3 All cutting, patching and re-painting by owners forces.
- .4 This contractor to allow sufficient time to permit the owners forces to complete their work including allowances for delay due to operational issues, and any scheduling conflicts by owners forces.
- .5 This Contractor shall advise owner regarding installation of wiring between equipment and devices.
- .6 This Contractor shall inform the owner in writing of the power requirements for head end equipment and allow the owner sufficient time to install.
- .7 Demolition of existing system and installation of new shall occur in such a way to allow continuous service of the nurse call system throughout the duration of the project. The general intent is to install all new head end equipment and systems while existing or temporary system is running. This Contractor shall coordinate with owners staff to coordinate taking a number of beds out of service in a phased approach. During this time, the Contractor shall remove existing nurse call devices at those bed locations and install, test, commission and put into operation the new. Once all existing devices have been removed and new made operational, the existing head equipment shall be removed.
- .8 Commission and test all systems to ensure all systems are fully operational and functioning to the design intent and detailed requirements of these documents.

##### **1.3 CONTRACTOR USE OF PREMISES**

- .1 Contractor has restricted use of site.
- .2 Coordinate use of premises under direction of Owner's Representative.
- .3 Obtain and pay for use of additional storage or work areas needed for operations under this Contract.
- .4 Remove or alter existing work to prevent injury or damage to portions of existing work which remain.
- .5 Repair or replace portions of existing work which have been altered during construction operations to match existing or adjoining work, as directed by Owner's Representative.
- .6 Contractor to coordinate all work and use of site with approval from Central Health and Facility management staff. The building and areas of work will remain operational and occupied during the work.

##### **1.4 OWNER OCCUPANCY**

- .1 Owner will occupy premises during entire construction period for execution of normal

- operations.
- .2 Cooperate with Owner in scheduling operations to minimize conflict and to facilitate owner usage.

#### **1.5 RELATED WORK**

- .1 The following specification sections are referenced to indicate work responsibilities as specified and carried in other versions.
  - .1 Section 26 05 00 – Common Work Results – Electrical.

#### **1.6 ON-SITE DOCUMENTS**

- .1 Maintain at job site documents as indicated in Section 01 31 00 – Project Management and Coordination.

**END OF SECTION**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- .1 Connecting to existing services.
- .2 Special scheduling requirements.

**1.2 RELATED SECTIONS**

- .1 Section 01 32 00 – Construct Progress Documentation.

**1.3 EXISTING SERVICES**

- .1 Notify Owner's Representative of intended interruption of any existing services and obtain required permission.
- .2 Where Work involves breaking into or connecting to existing services, give Owner's Representative 72 hours of notice for necessary interruption of mechanical or electrical service throughout course of work. Keep duration of interruptions minimum. Carry out interruptions in conjunction with owner's direction.

**1.4 PHASING**

- .1 Facility will be occupied. Contractor is to schedule/carry out work in a manner such that does not affect facility operation.
- .2 Contractor to phase all work such that the Nurse Call system is operational at all times.
- .3 Owner is to be consulted at all times on areas/systems that will be affected by construction and has the right to refuse work until acceptable work plan is provided.

**1.5 OWNERS REQUIREMENTS**

- .1 Refer to owners policies attached with specification, see list below. All owners Policies are to be adhered too at all times and are to form an integral part of the contract documents.
  - .1 Oath- Affirmation of Confidentiality
  - .2 Health Information Management and Privacy
  - .3 Letter of Notification
  - .4 Information for Contractors and Vendors
  - .5 Smoke Free Properties
  - .6 Contractor Safety Handbook
  - .7 General Specifications Construction – Renovations
  - .8 Infection Prevention and Control
  - .9 Other policies as supplied

**END OF SECTION**

## Section 01 31 00 – Project Management and Coordination

### **PART 1        GENERAL**

#### **1.1        SECTION INCLUDES**

- .1        Coordination work with other contractors and subcontractors under administration of owner's Representative.
- .2        Schedule project meetings.

#### **1.2        RELATED SECTIONS**

- .1        Section 01 11 00 - Summary of Work.

#### **1.3        DESCRIPTION**

- .1        Coordination of progress schedules, submittals, use of site, temporary utilities, construction facilities, and construction Work, with progress of Work of owners forces, other contractors and subcontractors under instructions of Owner's Representative.

#### **1.4        PROJECT MEETINGS**

- .1        Project meetings to be held at times and locations as determined by owner's representative.
- .2        Owner's Representative will arrange project meetings and record and distribute minutes.

#### **1.5        CONSTRUCTION ORGANIZATION AND START-UP**

- .1        Within 10 days after award of Contract, request a meeting of parties in contract to discuss and resolve administrative procedures and responsibilities.
- .2        Establish time and location of meetings and notify parties concerned minimum 5 days before meeting.
- .3        Agenda to include following:
  - .1        Appointment of official representative of participants in Work.
  - .2        Schedule of Work, progress scheduling in accordance with Section 01 32 00 - Construction Progress Documentation.
  - .3        Schedule of submission of shop drawings, samples, colour chips in accordance with Section 01 33 00 - Submittal Procedures.
  - .4        Requirements for temporary facilities, site sign, offices, storage sheds, utilities, fences in accordance with Section 01 51 00 - Temporary Utilities.
  - .5        Delivery schedule of specified equipment in accordance with Section 01 32 00 - Construction Progress Documentation.
  - .6        Proposed changes, change orders, procedures, approvals required, mark-up percentages permitted, time extensions, overtime, and administrative requirements.
  - .7        Record drawings in accordance with Section 01 78 00 - Closeout Submittals.
  - .8        Maintenance manuals in accordance with Section 01 78 00 - Closeout Submittals.
  - .9        Take-over procedures, acceptance, and warranties in accordance with Section 01 77 00 - Closeout Procedures and 01 78 00 - Closeout Submittals.
  - .10       Monthly progress claims, administrative procedures, photographs, and holdbacks.
  - .11       Appointment of inspection and testing agencies or firms in accordance with Section 01 45 00 - Quality Control.
  - .12       Insurances and transcript of policies.
- .4        Comply with Owner's Representative's allocation of mobilization areas of site; for field offices and sheds, for access, traffic, and parking facilities.

- .5 During construction coordinate use of site and facilities through Owner's Representative's procedures for intra-project communications: Submittals, reports and records, schedules, coordination of drawings, recommendations, and resolution of ambiguities and conflicts.
- .6 Comply with instructions of Owner's Representative for use of temporary utilities and construction facilities.

## **1.6 ON-SITE DOCUMENTS**

- .1 Maintain at job site, one copy each of the following:
  - .1 Contract drawings.
  - .2 Specifications.
  - .3 Addenda.
  - .4 Reviewed shop drawings.
  - .5 List of outstanding shop drawings.
  - .6 Change orders.
  - .7 Other modifications to Contract.
  - .8 Field test reports.
  - .9 Copy of approved Work schedule.
  - .10 Health and Safety Plan and other Safety related documents.
  - .11 Manufacturers' installation and application instructions.
  - .12 Labour conditions and wage schedules.
  - .13 Other documents as specified.

## **1.7 SCHEDULES**

- .1 Submit preliminary construction progress schedule in accordance with Section 01 32 00 - Construction Progress Documents to Owner's Representative coordinated with Owner's Representative's project schedule. Schedule to show anticipated progress stages and final completion of work within time period required by contract documents.
- .2 After review, revise and resubmit schedule to comply with project schedule requirements.
- .3 During progress of Work revise and resubmit at project progress meetings or as directed by Owner's Representative.

## **1.8 SUBMITTALS**

- .1 Make submittal to Owner's Representative for review.
- .2 Submit preliminary shop drawings, product data and samples in accordance with Section 01 33 00 – Submittal Procedures for review for compliance with Contract Documents; for field dimensions and clearances, for relation to available space, and for relation to Work of other contracts. After review, revise and resubmit for transmittal to Owner's Representative.
- .3 Submit requests for payment for review to Owner's Representative.
- .4 Submit requests for interpretation of Contract Documents, and obtain instructions through Owner's Representative.
- .5 Process change orders through Owner's Representative.
- .6 Deliver closeout submittals for review by Owner's Representative.

## **1.9 COORDINATION DRAWINGS**

- .1 Provide information required by Owner's Representative for preparation of coordination drawings.
- .2 Review and approve revised drawings for submittal to Owner's Representative.
- .3 Owner's Representative may furnish additional drawings for clarification. These additional drawings have same meaning and intent as if they were included with plans referred to in contract documents.

#### **1.10 CLOSEOUT PROCEDURES**

- .1 Notify Owner's Representative when Work is considered ready for Substantial Performance.
- .2 Accompany Owner's Representative on preliminary inspection to determine items listed for completion or correction.
- .3 Comply with Owner's Representative's instructions for correction of items of Work listed in executed certificate of Substantial Performance and for access to Owner-occupied areas.
- .4 Notify Owner's Representative of instructions of items of Work determined in Owner's Representative's final inspection.

**END OF SECTION**



## Section 01 32 00 – Construction Progress Documentation

### **PART 1        GENERAL**

#### **1.1       RELATED SECTIONS**

- .1       Section 01 77 00 - Closeout Procedures.

#### **1.2       SCHEDULES REQUIRED**

- .1 Submit schedules as follows:
  - .1 Construction Progress Schedule.
  - .2 Submittal Schedule for Shop Drawings and Product Data.
  - .3 Product Delivery Schedule.
  - .4 Shutdown or closure activity.

#### **1.3 FORMAT**

- .1       Prepare schedule in form of a horizontal bar chart.
- .2       Provide a separate bar for each major item of work, trade or operation.
- .3       Split horizontally for projected and actual performance.
- .4       Provide horizontal time scale identifying first work day of each week.
- .5       Format for listings: chronological order of start of each item of work.
- .6       Identification of listings: By Systems description.

#### **1.4 SUBMISSION**

- .1       Submit initial format of schedules within 15 working days after award of Contract.
- .2       Submit schedules in electronic format, forward on disc as PDF files.
- .3       Submit one opaque reproduction, plus 2 copies to be retained by Owner's Representative.
- .4       Owner's Representative will review schedule and return review copy within 10 days after receipt.
- .5       Resubmit finalized schedule within 7 days after return of review copy.
- .6       Submit revised progress schedule with each application for payment.
- .7       Distribute copies of revised schedule to:
  - .1       Job site office.
  - .2       Subcontractors.
  - .3       Other concerned parties.
- .8       Instruct recipients to report to Contractor within 10 days, any problems anticipated by timetable shown in schedule.

#### **1.5 SUBMITTALS SCHEDULE**

- .1       Include schedule for submitting shop drawings, product data, and samples.
- .2       Indicate dates for submitting, review time, resubmission time, last date for meeting fabrication schedule.

### **END OF SECTION**

## **PART 1 GENERAL**

### **1.1 SECTIONS INCLUDE**

- .1 Shop drawings and product data.
- .2 Samples.
- .3 Certificates and transcripts.

### **1.2 RELATED SECTIONS**

- .1 Section 01 32 00 – Construction Progress Documentation.
- .2 Section 01 45 00 – Quality Control
- .3 Section 01 78 00 – Closeout Submittals

### **1.3 ADMINISTRATIVE**

- .1 This section specifies general requirements and procedures for contractor's submissions of shop drawings, product data, samples and mock-ups to Owner's Representative for review. Submit promptly and in orderly sequence to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .2 Do not proceed with work until relevant submissions are reviewed by Owner's Representative.
- .3 Present shop drawings, product data, samples and mock-ups in SI Metric units.
- .4 Where items or information is not produced in SI Metric units converted values are acceptable.
- .5 Review submittals prior to submission to Owner's Representative. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and co-ordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and shall be considered rejected.
- .6 Notify Owner's Representative, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
- .7 Verify field measurements and affected adjacent Work are coordinated.
- .8 Contractor's responsibility for errors and omissions in submission is not relieved by Owner's Representative's review of submittals.
- .9 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Owner's Representative review of submission, unless Owner's Representative gives written acceptance of specific deviations.
- .10 Make any changes in submissions which Owner's Representative may require consistent with Contract Documents and resubmit as directed by Owner's Representative. When resubmitting, notify Owner's Representative in writing of revisions other than those requested.
- .11 Notify Owner's Representative, in writing, when resubmitting, of any revisions other than those requested by Owner's Representative.
- .12 Keep one reviewed copy of each submission on site.

### **1.4 SUBMITTALS**

- .1 The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are to be provided by Contractor to illustrate details of a portion of Work.
- .2 Coordinate each submission with requirements of work and Contract Documents. Individual submissions will not be reviewed until all related information is available.

- .3 Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of Work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been coordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross references to design drawings and specifications.
- .4 Allow 10 days for Owner's Representative review of each submission.
- .5 Adjustments made on shop drawings by Owner's Representative are not intended to change contract price. If adjustments affect value of Work, state such in writing to Owner's Representative immediately after receipt of approval of shop drawings. If value of work is to change a change order must be issued prior to proceeding with work.
- .6 Accompany submissions with transmittal letter, containing:
  - .1 Date.
  - .2 Project title and number.
  - .3 Contractor's name and address.
  - .4 Identification and quantity of each shop drawing, product data and sample.
  - .5 Other pertinent data.
- .7 Submissions shall include:
  - .1 Date and revision dates.
  - .2 Project title and number.
  - .3 Name and address of:
    - .1 Subcontractor.
    - .2 Supplier.
    - .3 Manufacturer.
  - .4 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
  - .5 Details of appropriate portions of Work as applicable:
    - .1 Fabrication.
    - .2 Layout, showing dimensions, including identified field dimensions, and clearances.
    - .3 Setting or erection details.
    - .4 Capacities.
    - .5 Performance characteristics.
    - .6 Standards.
    - .7 Operating weight.
    - .8 Wiring diagrams.
    - .9 Single line and schematic diagrams.
    - .10 Relationship to adjacent work.
- .8 After Owner's Representative review, distribute copies.
- .9 Submit one electronic copy in PDF format of shop drawings for each requirement requested in specification Sections and as Owner's Representative may reasonably request.
- .10 Submit electronic copy in PDF format of product data sheets or brochures for requirements requested in Specification Sections and as requested by Owner's Representative where shop drawings will not be prepared due to standardized manufacture of product.
- .11 Delete information not applicable to project.
- .12 Supplement standard information to provide details applicable to project.
- .13 Cross-reference product data information to applicable portions of Contract Documents.
- .14 If upon review by Owner's Representative, no errors or omissions are discovered or if only minor corrections are made, copies will be returned and fabrication and installation

of work may proceed. If shop drawings are rejected, noted copy will be returned and resubmission of corrected shop drawings, through same procedure indicated above, must be performed before fabrication and installation of work may proceed.

- .15 Samples: examples of materials, equipment, quality, finishes, workmanship. Label samples with origin and intended use.
- .16 Notify Owner's Representative in writing, at time of submission of deviations in samples from requirements of contract documents.
- .17 Where colour, pattern or texture is criterion, submit full range of samples.
- .18 Adjustments made on samples by Owner's Representative are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Owner's Representative prior to proceeding with Work.
- .19 Make changes in samples, which Owner's Representative may require, consistent with Contract Documents.
- .20 Reviewed and accepted samples will become standard of workmanship and material against which installed Work will be verified.

## **1.5 PROGRESS PHOTOGRAPHS**

- .1 Progress photograph to be electronically formatted and labelled as to location and view.

## **1.6 SHOP DRAWINGS REVIEW**

- .1 The review of shop drawings by Owner's Representative is for the sole purpose of ascertaining conformance with the general concept. This review shall not mean that Owner's Representative approves the detail design inherent in the shop drawings, responsibility for which shall remain with the Contractor submitting same, and such review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of responsibility for meeting all requirements of the construction and contract documents. Without restricting the generality of the foregoing, the Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains to fabrication processes or to techniques of construction and installation and for co-ordination of the work of all sub-trades.

**END OF SECTION**

## **PART 1 GENERAL**

### **1.1 REFERENCES**

- .1 Canadian Standards Association (CSA)
  - .1 CAN/CSA-Z259.1 Body Belts and Saddles for Work Positioning and Travel Restraint.
  - .2 CAN/CSA-Z259.10 Full body Harnesses.
  - .3 CAN/CSA-Z259.11 Energy Absorbers and Lanyards.
  - .4 CAN/CSA-Z259.2.1 Fall Arresters, Vertical Lifelines and Rails.
  - .5 FCC No. 301 Standard for Construction Operations.
  - .6 CSA Z275.2 Occupational Safety Code for Diving Operations.
  - .7 CSA Z275.4 Competency Standard for Divers Operations.
  - .8 CSA Z797, Code of Practice for Access Scaffold.
- .2 FCC No. 302 Standard for Welding and Cutting.
- .3 Transportation of Dangerous Goods Act Regulations.
- .4 Newfoundland Occupational Health and Safety Act, Amended
- .5 Consolidated Newfoundland and Regulations 1149 WMIS Regulations Under the Occupational Health and Safety Act
- .6 Consolidated Newfoundland and Regulations Occupational Health and Safety Regulations under the Occupational Health and Safety Act.
- .7 Canada Labour Code, Part 2.
- .8 National Building Code of Canada.
- .9 RHA site specific safety policies

### **1.2 RELATED SECTIONS**

- .1 Section 01 33 00 - Submittal Procedures.
- .2 Section 01 41 00 - Regulatory Requirements.

### **1.3 SUBMITTALS**

- .1 At least 10 (ten) working days prior to commencing any site work: submit to Owner's Representative copies of:
  - .1 A complete Site Specific Health and Safety Plan.
- .2 Acceptance of the Site Specific Health and Safety Plan and other submitted documents by the Owner's Representative shall only be viewed as acknowledgement that the contractor has submitted the required documentation under this specification section.
- .3 Owner's Representative makes no representation and provides no warranty for the accuracy, completeness and legislative compliance of the Site Specific Health and Safety Plan and other submitted documents by this acceptance.
- .4 Responsibility for errors and omissions in the Site Specific Health and Safety Plan and other submitted documents is not relieved by acceptance by Owner's Representative.

### **1.4 OCCUPATIONAL HEALTH AND SAFETY (SITE SPECIFIC HEALTH AND SAFETY PLANS)**

- .1 Conduct operations in accordance with latest edition of the Newfoundland Occupational Health and Safety (OH&S) Act and Regulations, with specific reference to codes and standards referenced therein, and the Department of Transportation and Works Occupational Health and Safety Manual ([http://www.tw.gov.nl.ca/publications/ohs\\_full.pdf](http://www.tw.gov.nl.ca/publications/ohs_full.pdf)).
- .2 Prepare a detailed Site Specific Health and Safety Plan that shall identify, evaluate and

control job specific hazards and the necessary control measures to be implemented for managing hazards.

- .3 Provide a copy of the Site Specific Health and Safety Plan upon request to Occupational Health and Safety Branch, Services NL, Province of Newfoundland and Labrador and the Owner.
- .4 The written Site Specific Health and Safety Plan shall incorporate the following:
  - .1 Hazard assessment results.
  - .2 Engineering and administrative demonstrative controls (work-practices and procedures) to be implemented for managing identified and potential hazards, and comply with applicable federal and provincial legislation and more stringent requirements that have been specified in these specifications.
  - .3 An organizational structure which shall establish the specific chain of command and specify the overall responsibilities of contractor's employees at the work site.
  - .4 A comprehensive workplan which shall:
    - .1 define work tasks and objectives of site activities/operations and the logistics and resources required to reach these tasks and objectives.
    - .2 establish personnel requirements for implementing the plan, and
  - .5 A personal protected equipment (PPE) Program which shall detail PPE:
    - .1 Selection criteria based on site hazards.
    - .2 Use, maintenance, inspection and storage requirements and procedures.
    - .3 Decontamination and disposal procedures.
    - .4 Inspection procedures prior to during and after use, and other appropriate medical considerations.
    - .5 Limitations during temperature extremes, heat stress and other appropriate medical consideration.
  - .6 An emergency response procedure, refer to Clause 1.5 Supervision and Emergency Response Procedure of this section for requirements.
  - .7 A hazard communication program for informing workers, visitors and individuals outside of the work area as required. This will include but not be limited to a visitor safety and orientation policy and program that will include education on hazards, required PPE and accompaniment while on site.
  - .8 A hearing conservation program in accordance with the OHS Regulations.
  - .9 A recent (current year) inspection form for all powered mobile equipment that will be used in fulfilling the terms of the contract. The inspection form shall, at a minimum, state that the equipment is in a safe operating condition.
  - .10 A complete listing of employee names, their driver's license classification, expiry date, endorsements and the type of equipment that they are qualified to operate for the complete scope of work for this project. The Driver's License Number should not be provided as this is confidential information. Provision of the License Number may breach *PIPEDA* - the Personal Information Protection and Electronic Documents Act. (Federal Act) or *ATIPPA* - *Access to Information and Protection of Privacy Act* - Part IV. (Provincial Act of Newfoundland and Labrador). This shall also include documentation where required of certification in power line hazards.
  - .11 An acceptable parking policy for all powered mobile equipment to be used on this project. The policy shall, at a minimum, be based on a hazard assessment that considers factors such as equipment type, potential for roll over, load capacity of the parking area, pedestrian and vehicular traffic, and potential for equipment tampering, equipment energy, and equipment contact with power lines.
  - .12 A health and safety training program which includes a safety training matrix.
  - .13 General safety rules.

- .5 Periodically review and modify as required each component of the Site Specific Health and Safety Plan when a new hazard is identified during completion of work and when an error or omission is identified in any part of the Site Specific Health and Safety Plan.
- .6 Review the completeness of the hazard assessment immediately prior to commencing work, when a new hazard is identified during completion of work and when an error or omission is identified.
  - .1 Be solely responsible for investigating, evaluating and managing any report of actual or potential hazards.
  - .2 Clearly define accident incident investigation procedures.
  - .3 Clearly define policy and processes for early and safe return to work.
  - .4 Retain copies of all completed hazard assessments at the project site and make available to the Owner's Representative immediately upon request.
- .7 Implement all requirements of the Site Specific Health and Safety Plan.
  - .1 Ensure that every person entering the project site is informed of requirements under the Site Specific Health and Safety Plan.
  - .2 Take all necessary measures to immediately implement any engineering controls, administrative controls, personal protective equipment required or termination of work procedures to ensure compliance with the Site Specific Health and Safety Plan.

## **1.5 SUPERVISION AND EMERGENCY RESCUE PROCEDURE**

- .1 Carry out work under the direct supervision of competent persons responsible for safety by ensuring the work complies with the appropriate section of OH&S Act and Regulations
- .2 Assign a sufficient number of supervisory personnel to the work site.
  - .1 Any person assigned to supervisory duties shall not conduct significant work in relation to the contract that inhibits them from the ability to properly supervise the work site.
- .3 Provide a suitable means of communications and check-in for workers required to work alone.
- .4 Develop an emergency rescue plan for the job site and ensure that supervisors and workers are trained in the emergency rescue plan.
- .5 The emergency response plan shall address, as a minimum:
  - .1 Pre-emergency planning.
  - .2 Personnel roles, lines of authority and communication.
  - .3 Emergency recognition and prevention.
  - .4 Safe distances and places of refuge.
  - .5 Site security and control
  - .6 Evacuation routes and procedures
  - .7 Decontamination procedures which are not covered by the site specific safety and health plan.
  - .8 Emergency medical treatment and first aid.
  - .9 Emergency alarm, notification and response procedures including procedures for reporting incidents to local, provincial and federal government departments.
  - .10 PPE and emergency equipment.
  - .11 Procedures for handling emergency incidents.
  - .12 Site specific emergency response training requirements and schedules.
- .6 The emergency response procedures shall be rehearsed regularly as part of the overall training program.
- .7 Provide adequate first aid facilities for the jobsite and ensure that a minimum number of workers are trained in first aid in accordance with the First Aid Regulations.

## **1.6 CONTRACTORS SAFETY OFFICER**

- .1 The contractor shall employ a Contractor's Safety Officer (CSO) who shall have as a minimum:
  - .1 Completed training in hazardous materials management and response/protocols.
  - .2 Completed training in the use, maintenance of fall protection systems certified by WHSCC at a minimum.
  - .3 Completed training in the erection and inspection of scaffolding.
  - .4 Completed training in confined space entry protocols, techniques and rescue plans, certified by WHSCC at a minimum.
  - .5 Completed supervisory training.
  - .6 Completed training in records and statistics.
  - .7 Completed training in hazard identification, inspections, analysis and control.
  - .8 Completed training in WHMIS.
  - .9 Completed training in health and safety program content.
  - .10 Completed training in investigations and reporting.
  - .11 Completed training in occupational health/hygiene.
  - .12 Completed training in employee training and communication.
  - .13 Completed training in Emergency Preparedness and First Aid.
  - .14 A working knowledge of occupational safety and health legislation and regulations (specific to Newfoundland and Labrador).
  - .15 A working knowledge of safe work practices required for execution of the work and operation of equipment specific to the project.
  - .16 A working knowledge of site safety and house keeping.
  - .17 A working knowledge of preventative maintenance program for Construction Site Equipment.
- .2 The CSO shall:
  - .1 Be responsible for implementing, daily enforcement, monitoring and updating of the Site Specific Health and Safety Plan.
  - .2 Be responsible for the delivery of the site safety orientation and ensure that the personnel who have not been orientated are not permitted to enter the site.
  - .3 Report directly to and be under direction of the site superintendent or Contractor's Project Manager.
  - .4 Prior to mobilization on-site, hold an orientation meeting with the contractors, subcontractors and Owner's Representative to review project occupational health and safety. Include but not limit meeting to a review of:
    - .1 Site Specific Health and Safety Plan.
    - .2 Construction Safety Measures.
    - .3 Supervision and Emergency Rescue Procedures.
    - .4 Hazard Assessments
    - .5 Maintain a daily log of inspections, meetings, infractions and mitigating measures. Log is to be filed daily and copied to be the site superintendent and Owner's Representative.

## **1.7 HEALTH AND SAFETY COMMITTEE**

- .1 Establish an Occupational Health and Safety Committee where ten or more workers are employed on the job site as per the OH&S Act and Regulations.

## **1.8 RESPONSIBILITY**

- .1 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.
- .2 Comply with and enforce compliance by employees with safety requirements of



- Contract Documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with Site Specific Health and Safety Plan.
- .3 Where life safety risks exist, the contractor must stop the work until such time as the risk can be mitigated to a safe level.
  - .4 Take appropriate steps to ensure that the hazards are mitigated to a safe level, workers are notified of the hazards and how to protect themselves. As well, workers must be provided with any new safe work practices or information regarding mitigation of the risk.

## **1.9 UNFORSEEN HAZARDS**

- .1 Should any unforeseen or peculiar safety-related factor, hazard, or condition become evident during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Province having jurisdiction. Advise Owner's Representative verbally and in writing.

## **1.10 INSTRUCTION AND TRAINING**

- .1 Workers shall not participate in or supervise any activity on the work site until they have been trained to a level required by this job function and responsibility. Training shall as a minimum thoroughly cover the following:
  - .1 Federal and Provincial Health and Safety Legislation requirements including roles and responsibilities of workers and person(s) responsible for implementing, monitoring and enforcing health and safety requirements.
  - .2 Safety and health hazards associated with working on a contaminated site including recognition of symptoms and signs which might indicate over exposure to hazards.
  - .3 Limitations, use, maintenance and disinfection-decontamination of personal protective equipment associated with completing work.
  - .4 Limitations, use, maintenance and care of engineering controls and equipment.
  - .5 Limitations and use of emergency notifications and response equipment including emergency response protocol.
  - .6 Work practices and procedures to minimize the risk of an accident and hazardous occurrence from exposure to a hazard.
- .2 Provide and maintain training of workers, as required, by Federal and Provincial legislation.
- .3 Provide copies of all training certificates to Owner's Representative for review, before a worker is to enter the work site.
- .4 Authorized visitors shall not access the work site until they have been:
  - .1 Notified of the names of persons responsible for implementing, monitoring and enforcing the Site Specific Health and Safety Plan.
  - .2 Briefed on safety and health hazards present on the site.
  - .3 Instructed in the proper use and limitations of personal protective equipment.
  - .4 Briefed as the emergency response protocol including notification and evacuation process.
  - .5 Informed of practices and procedures to minimize risks from hazards and applicable to activities performed by visitors.
  - .6 Accompanied while on site, and provided with the appropriate PPE.
- .5 All workers will be instructed and trained on the hazards associated with work they will perform and how to protect themselves. This will include a review of all safe work practices, the reporting and documentation of hazards, reporting accidents and injuries as well as, formal training in areas of high risk (i.e. fall protection, power line hazards, traffic control persons training).

- .6 The work site shall have the appropriate number of persons trained in emergency and Standard First Aid according to the First Aid Regulations.

#### **1.11 CONSTRUCTION SAFETY MEASURES**

- .1 Observe construction safety measures of National Building Code, latest edition, Provincial Government, OH&S Act and Regulations, Workplace Health and Safety Compensation Commission and Municipal Authority provided that in any case of conflict or discrepancy more stringent requirements shall apply.
- .2 Administer the project in a manner that will ensure, at all times, full compliance with Federal and Provincial Acts, regulations and applicable safety codes and the Site Specific Health and Safety Plan.
- .3 Provide Owner's Representative with copies of all orders, directions and any other documentation, issued by the Occupational Health and Safety Branch, Services NL, immediately after receipt.

#### **1.12 POSTING OF DOCUMENTS**

- .1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of Province and authority having jurisdiction, and in consultation with Owner's Representative.

#### **1.13 HEALTH AND SAFETY MONITORING**

- .1 Periodic inspections of the contractor's work may be carried out by the Owner's Representative to maintain compliance with the Health and Safety Program. Inspections will include visual inspections as well as testing and sampling as required.
- .2 The contractor shall be responsible for any and all costs associated with delays as a result of contractor's failure to comply with the requirements outlined in this section.

#### **1.14 NOTIFICATION**

- .1 For projects exceeding thirty (30) days or more, the contractor shall, prior to the commencement of work, notify in writing the Occupational Health and Safety Branch, Services NL with the following information:
  - .1 Name and location of construction site.
  - .2 Company name and mailing address of contractor doing the work.
  - .3 The number of workers to be employed.
  - .4 A copy of the Site Specific Health and Safety Plan if requested.

#### **1.15 CORRECTION OF NON-COMPLIANCE**

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by Owner's Representative.
- .2 Provide Owner's Representative with written report of action taken to correct noncompliance of health and safety issues identified.
- .3 Owner's Representative may stop work if non-compliance of health and safety regulations is not corrected.

#### **1.16 WHMIS**

- .1 Ensure that all controlled products are in accordance with the Workplace Hazardous Materials Information System (WHMIS) Regulations and Chemical Substances of the OH&S Act and Regulations regarding use, handling, labelling, storage, and disposal of hazardous materials.
- .2 Deliver copies of relevant Material Safety Data Sheets (MSDS) to job site and the Owner's Representative. The MSDS must be acceptable to Labour Canada and Health and Welfare Canada for all controlled products that will be used in the performance of

- this work.
- .3 Train workers required to use or work in close proximity to controlled products as per OH&S Act and Regulations.
- .4 Label controlled products at jobsite as per OH&S and Regulations.
- .5 Provide appropriate emergency facilities as specified in the MSDS where workers might be exposed to contact with chemicals, e.g. eye-wash facilities, emergency shower.
  - .1 Workers to be trained in use of such emergency equipment.
- .6 Contractor shall provide appropriate personal protective equipment as specified in the MSDS where workers are required to use controlled products.
  - .1 Properly fit workers for personal protective equipment
  - .2 Train workers in care, use and maintenance of personal protective equipment.
- .7 No controlled products are to be brought on-site without prior approved MSDS.
- .8 The MSDS are to remain on site at all times.

#### **1.17 OVERLOADING**

- .1 Ensure no part of work or associated equipment is subjected to loading that will endanger its safety or will cause permanent deformation.

#### **1.18 FALSEWORK**

- .1 Design and construct falsework in accordance with CSA S269.1.

#### **1.19 SCAFFOLDING**

- .1 Design, erect, inspect, operate, modify, and dismantle scaffolding in accordance with CSA Z797, the OH&S Act and Regulations, and the scaffold manufacturer's written instructions.
- .2 Provide trained and certified Competent Scaffold Erectors for all scaffold erection, modification and dismantling.
- .3 Conduct and document daily inspections of scaffolding by trained and certified Competent Scaffold Inspectors or Erectors.
- .4 Provide a scaffold tagging system as described in CSA Z797.
- .5 Ensure that all industry best practices for safe scaffold usage, including fall protection, proper loading, safe access, electrical hazards, exit door management and other concerns are strictly adhered to.

#### **1.20 WORKING AT HEIGHTS**

- .1 Ensure that fall restraint or fall arrest devices are used by all workers working at elevations greater than 3.05 meters above grade or floor level in accordance with CSA Z259, where alternate fall protection systems are not provided in accordance with Occupational Health and Safety Act and Regulations.
- .2 All workers performing work at height and who will be required to utilize a fall arrest system must be trained in a fall protection program certified by the WHSCC.
- .3 Prior to working at height workers shall be instructed in a Contractor SWP for working at height and associated rescue plan for working at height developed specific to the work, locations and risks.

#### **1.21 PERSONAL PROTECTIVE EQUIPMENT**

- .1 Ensure workers on the jobsite use personal protective equipment appropriate to the hazards identified in the Site Specific Health and Safety Plan and those workers are trained in the proper care, use, and maintenance of such equipment.
- .2 PPE selections shall be based on an evaluation of the performance characteristics of the

- PPE relative to the requirements and limitations of the site, task-specific conditions, duration and hazards and potential hazards identified on site.
- .3 Provide workers and visitors to the site with proper respiratory protection equipment.
    - .1 No work shall be performed in an area where an airborne contaminant exceeds recommendations of the ACGIH, do not meet the appropriate standards for the specific contaminants or are not in accordance with the OHS regulations..
    - .2 Respiratory protection shall be provided in accordance with the requirements of the Occupational Health and Safety Branch, Services NL and these specifications.
    - .3 Establish, implement and maintain a respirator inspection and maintenance program in accordance with the CSA standard identified in the OHS Regulations.
    - .4 Copies of all respirator owners' maintenance manuals, shall be kept at all times at the contractor's site office.
  - .4 Provide and maintain a supply of dermal protection equipment to allow visitors and all workers proper dermal protection.
    - .1 Dermal protection shall be sufficient to act as a protective barrier between the skin and an airborne contaminant or hazardous material. Dermal protection shall also be provided for all physical hazards.
    - .2 Dermal protection equipment shall not be used after exceeding 75% of the break through time. The break through time shall be based on the contaminant which requires the least amount of time to break through the protective equipment
    - .3 Copies of all dermal protection user specifications, owners and maintenance manuals shall be kept at all times at the contractor's site office.
    - .4 Establish, implement and maintain air inspection program to ensure proper dermal protection in accordance with CSA, NIOSH, U.S. EPA and manufacturer's requirements.
  - .5 Provide all workers and up to five (5) visitors to the site with proper hearing protection. Workers and visitors shall not be exposed to noise levels greater than 85 dB (A) over an eight hour shift without proper hearing protection, in accordance with the Hearing Conservation Program.
  - .6 Provide all workers and up to five (5) visitors to the site with CSA approved eye protection sufficient to act as a protective barrier between the eye and airborne contaminants, hazardous materials and physical hazard.
  - .7 Provide workers and up to five (5) visitors to the site with CSA approved hard hats meeting the CSA Z94.1.
  - .8 Provide high visibility apparel as defined in Occupational Health and Safety Regulations.
  - .9 Provide CSA approved safety boots meeting CSA Z195.
  - .10 Provide other personal protective equipment, as may be required by the owner, depending on duties being performed.

## **1.22 TRAFFIC CONTROL**

- .1 Provide traffic control measures when working on, or adjacent to, roadways in accordance with the "Traffic Control Manual for Roadwork Operations", Department of Transportation and Works.

## **1.23 HAZARDOUS MATERIALS**

- .1 Should material resembling hazardous materials (e.g. asbestos/mould) not previously identified/documented be encountered during the execution of work and notify Owner's Representative. Do not proceed until written instructions have been received from Owner's Representative.

- .2 Unless otherwise noted the services of a recognized Environmental Consultant to provide all air monitoring and testing services required by regulatory requirements for hazardous materials abatement and repair.

#### **1.24 WORK STOPPAGE**

- .1 Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule considerations of Work.

**END OF SECTION**

**PART 1 GENERAL**

**1.1 REFERENCES AND CODES**

- .1 Perform Work in accordance with National Building Code of Canada (NBC) including all amendments up to tender closing date and other codes of provincial or local application provided that in case of conflict or discrepancy, more stringent requirements apply.
- .2 Meet or exceed requirements of:
  - .1 Contract documents.
  - .2 Specified standards, codes and referenced documents.

**1.2 HAZARDOUS MATERIAL DISCOVERY**

- .1 Asbestos: stop work immediately should materials believed to contain asbestos be encountered in during the execution of the work that is not identified in these documents for abatement and notify Owner's Representative. Do not proceed until written instructions have been received from Owner's Representative.
- .2 Mould: stop work immediately should material resembling mould be encountered during the execution of work and notify Owner's Representative. Do not proceed until written instructions have been received from Owner's Representative.

**1.3 BUILDING SMOKING ENVIRONMENT**

- .1 The property is non-smoking.

**END OF SECTION**

**PART 1 GENERAL**

**1.1 SECTIONS INCLUDE**

- .1 Inspection and testing, administrative and enforcement requirements.
- .2 Equipment and system adjust and balance.

**1.2 RELATED SECTIONS**

- .1 Section 01 33 00 – Submittal Procedures
- .2 Section 01 78 00 – Closeout Submittals

**1.3 INSPECTION**

- .1 Allow Owner's Representative access to Work. If part of Work is in preparation at locations other than Place of Work, allow access to such Work whenever it is in progress.
- .2 Give timely notice requesting inspection if Work is designated for special tests, inspections or approvals by Owner's Representative instructions.
- .3 If Contractor covers or permits to be covered Work that has been designated for special tests, inspections or approvals before such is made, uncover such Work, have inspections or tests satisfactorily completed and make good such Work.
- .4 Owner's Representative may order any part of Work to be examined if Work is suspected to be not in accordance with Contract Documents. If, upon examination such work is found not in accordance with Contract Documents, correct such Work and pay cost of examination and correction. If such Work is found in accordance with Contract Documents, Owner's Representative shall pay cost of examination and replacement.

**1.4 ACCESS TO WORK**

- .1 Allow inspection/testing agencies access to Work, off site manufacturing and fabrication plants.
- .2 Co-operate to provide reasonable facilities for such access.

**1.5 PROCEDURES**

- .1 Notify appropriate agency and Owner's Representative in advance of requirement for tests, in order that attendance arrangements can be made.
- .2 Submit samples and/or materials required for testing, as specifically requested in specifications. Submit with reasonable promptness and in an orderly sequence so as not to cause delay in Work.
- .3 Provide labour and facilities to obtain and handle samples and materials on site. Provide sufficient space to store and cure test samples.

**1.6 REJECTED WORK**

- .1 Remove defective Work, whether result of poor workmanship, use of defective products or damage and whether incorporated in Work or not, which has been rejected by Owner's Representative as failing to conform to Contract Documents. Replace or re-execute in accordance with Contract Documents.
- .2 Make good other Contractor's work damaged by such removals or replacements promptly.
- .3 If in opinion of Owner's Representative it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents, Owner may deduct from Contract Price difference in value between Work performed and that called for by Contract Documents, amount of which shall be determined by Owner's Representative.

**1.7 REPORTS**

- .1 Submit inspection and test reports to Owner's Representative in electronic copy in PDF format.
- .2 Provide copy to Subcontractor of work being inspected or tested, manufacturer or fabricator of material being inspected or tested.
- .3 Include copy of all inspection and test reports in Commissioning Manuals.

**1.8 EQUIPMENT AND SYSTEMS**

- .1 Submit adjustment and balancing reports for mechanical, electrical and building equipment systems.
- .2 Mechanical – coordinate with mechanical division.

**END OF SECTION**



## Section 01 61 00 – Common Product Requirements

### **PART 1        GENERAL**

#### **1.1        SECTION INCLUDES**

- .1        Product quality, availability, storage, handling, protection, and transportation.
- .2        Manufacturer's instructions.
- .3        Quality of Work, coordination and fastenings.

#### **1.2        RELATED SECTIONS**

- .1        Section 01 45 00 – Quality Control.
- .2        Section 01 73 00 – Execution.

#### **1.3        REFERENCES**

- .1        Within text of each specifications section, reference may be made to reference standards. Conform to these reference standards, in whole or in part as specifically requested in specifications.
- .2        Conform to latest date of issue of referenced standards in effect on date of submission of Tenders, except where specific date or issue is specifically noted.

#### **1.4 QUALITY**

- .1        Products, materials, equipment and articles (referred to as products throughout specifications) incorporated in Work shall be new, not damaged or defective, and of best quality (compatible with specifications) for purpose intended. If requested, furnish evidence as to type, source and quality of products provided.
- .2        Defective products, whenever identified prior to completion of Work, will be rejected, regardless of previous inspections. Inspection does not relieve responsibility, but is precaution against oversight or error. Remove and replace defective products at own expense and be responsible for delays and expenses caused by rejection.
- .3        Should any dispute arise as to quality or fitness of products, decision rests strictly with Owner's Representative based upon requirements of Contract Documents.
- .4        Within 7 (seven) days of written request by Owner's Representative, submit following information for material and equipment proposed for supply:
  - .1        Name and address of manufacturer.
  - .2        trade name, model and catalogue number,
  - .3        performance, descriptive and test data,
  - .4        manufacturer's installation or application instructions,
  - .5        evidence of arrangements to procure.
- .5        Use products of one manufacturer for material and equipment of same type or classification unless otherwise specified.
- .6        Permanent labels, trademarks and nameplates on products are not acceptable in prominent locations, except where required for operating instructions, or when located in mechanical or electrical rooms.

#### **1.5        AVAILABILITY**

- .1        Immediately upon signing Contract, review product delivery requirements and anticipate foreseeable supply delays for any items. If delays in supply of products are foreseeable, notify Owner's Representative of such, in order that substitutions or other remedial action may be authorized in ample time to prevent delay in performance of work.
- .2        In event of failure to notify Owner's Representative at commencement of Work and should it subsequently appear that Work may be delayed for such reason, Owner's

Representative reserves right to substitute more readily available products of similar character, at no increase in Contract Price or Contract Time.

#### **1.6 STORAGE, HANDLING AND PROTECTION**

- .1 Handle and store products in manner to prevent damage, adulteration, deterioration and soiling and in accordance with manufacturer's instructions when applicable.
- .2 Store packaged or bundled products in original and undamaged condition with manufacturer's seal and labels intact. Do not remove from packaging or bundling until required in Work.
- .3 Store products subject to damage from weather in weatherproof enclosures.
- .4 Store sheet materials, lumber on flat, solid supports and keep clear of ground. Slope to shed moisture.
- .5 Store and mix paints in heated and ventilated room. Remove oily rags and other combustible debris from site daily. Take every precaution necessary to prevent spontaneous combustion.
- .6 Remove and replace damaged products at own expense and to satisfaction of Owner's Representative.
- .7 Touch-up damaged factory finished surfaces to Owner's Representative satisfaction. Use touch-up materials to match original. Do not paint over name plates.

#### **1.7 TRANSPORTATION**

- .1 Pay costs of transportation of products required in performance of Work.

#### **1.8 MANUFACTURER'S INSTRUCTIONS**

- .1 Unless otherwise indicated in specifications, install or erect products in accordance with manufacturer's instructions. Do not rely on labels or enclosures provided with products. Obtain written instructions directly from manufacturers.
- .2 Notify Owner's Representative in writing, of conflicts between specifications and manufacturer's instructions, so that Owner's Representative may establish course of action.
- .3 Improper installation or erection of products, due to failure in complying with these requirements, authorizes Owner's Representative to require removal and re-installation at no increase in Contract Price or Contract Time.

#### **1.9 QUALITY OF WORK**

- .1 Ensure Quality of Work is of highest standard, executed by workers experienced and skilled in respective duties for which they are employed. Immediately notify Owner's Representative if required Work is such as to make it impractical to produce required results.
- .2 Do not employ anyone unskilled in their required duties. Owner's Representative reserves right to require dismissal from site, workers deemed incompetent or careless.
- .3 Decisions as to standard or fitness of Quality of Work in cases of dispute rest solely with Owner's Representative, whose decision is final.

#### **1.10 CO-ORDINATION**

- .1 Ensure cooperation of workers in laying out Work. Maintain efficient and continuous supervision.
- .2 Be responsible for coordination and placement of openings, sleeves and accessories.

#### **1.11 CONCEALMENT**

- .1 In finished areas, conceal pipes, ducts and wiring in floors, walls and ceilings, except where indicated otherwise.

- .2 Before installation, inform Owner's Representative if there is interference. Install as directed by Owner's Representative.

#### **1.12 REMEDIAL WORK**

- .1 Perform remedial work required to repair or replace parts or portions of Work identified as defective or unacceptable. Coordinate adjacent affected Work as required.
- .2 Perform remedial work by specialists familiar with materials affected. Perform in a manner to neither damage nor put at risk any portion of Work.

#### **1.13 LOCATION OF FIXTURES**

- .1 Consider location of fixtures, outlets, and mechanical and electrical items indicated as approximate.
- .2 Locate equipment, fixtures and distribution systems to provide minimum interference and maximum usable space and in accordance with manufacturer's recommendations for safety, access and maintenance.
- .3 Inform Owner's Representative of conflicting installation. Install as directed.
- .4 Submit field drawings to indicate relative position of various services and equipment when required by Owner's Representative.

#### **1.14 FASTENINGS GENERAL**

- .1 Provide metal fastenings and accessories in same texture, colour and finish as base metal in which they occur. Prevent electrolytic action between dissimilar metals. Use noncorrosive fasteners, anchors and spacers for securing exterior work, unless stainless steel or other material is specifically requested in affected specification section.
- .2 Space anchors within individual load limit or shear capacity and ensure they provide positive permanent anchorage. Wood plugs are not acceptable.
- .3 Conceal fasteners where indicated. Space evenly and lay out neatly.
- .4 Fastenings which cause Spalding or cracking are not acceptable.
- .5 Obtain Owner's Representative's approval before using explosive actuated fastening devices. If approval is obtained comply with CSA Z166.

#### **1.15 FASTENINGS - EQUIPMENT**

- .1 Use fastenings of standard commercial sizes and patterns with material and finish suitable for service.
- .2 Use heavy hexagon heads, semi-finished unless otherwise specified. Use No. 304 stainless steel for exterior areas.
- .3 Bolts may not project more than one diameter beyond nuts.
- .4 Use plain type washers on equipment, sheet metal and soft gasket lock type washers where vibrations occur. Use resilient washers with stainless steel.

#### **1.16 PROTECTION OF WORK IN PROGRESS**

- .1 Prevent overloading of any part of building. Do not cut, drill or sleeve any load bearing structural member, unless specifically indicated without written approval of Owner's Representative.

#### **1.17 SELECTION OF MATERIAL AND EQUIPMENT**

- .1 Material and equipment will be specified in the tender documents, and selected by Contractor, by one or more of the following methods:
  - .1 Specification by reference to a relevant Standard, such as CSA, ASTM, ULC, etc., select any material or equipment that meets or exceeds the specified.
  - .2 Specification by reference to an accepted product evaluation publication, such as

- the CGSB “Qualified Products List”, or CCMC Registry of Product Evaluations”, - select any manufacturer’s product so listed.
- .3 Specification by Prescriptive or Performance specification – select any material or equipment meeting or exceeding specification.
  - .4 Specification by identification of one or more Manufacturer’s specific product(s) as an “Acceptable Product”, along with a listing of other manufacturers who may offer equivalent products – select any product so named, or select from equivalent product(s) of other listed manufacturers.
- .2 “Acceptable Product” is deemed to be a complete and working commodity as described by a manufacturer’s name, catalogue number, trade name, or any combination thereof, and will constitute the minimum standard of acceptance.
- .3 Owner’s Representative will determine acceptability of Contractor’s selection of material and equipment at time of Shop Drawing review.
- .4 When material or equipment is specified by a Standard, Prescriptive or Performance specification, upon request of the Owner’s Representative, obtain from manufacturer an independent laboratory reporting, showing that material or equipment meets or exceeds the specified requirements.

#### **1.18 SUBSTITUTION OF MATERIAL AND EQUIPMENT**

- .1 **Prior to Tender** closing bidders may propose addition of other manufacturer’s names to those listed in the tender documents providing requests are made in writing at least 7 days prior to tender closing date or bid depository where bid depository is used. Owner’s Representative will inform all prospective bidders of decision by addendum, issued at least 5 days prior to the tender closing date.  
Where no manufacturer’s names are listed, the onus is on contractor to provide material and equipment to meet performance specification.
- .2 **After Contract award** substitutions of material or equipment, other than as selected by Contractor from those specified, will be considered by Owner’s Representative only if:
  - .1 material or equipment selected from those specified are not available
  - .2 delivery date of material or equipment selected from those specified would unduly delay completion of the Contract; or
  - .3 alternative material or equipment to those specified, provided they are determined by the Owner’s Representative to be equivalent to or better than those specified, will result in a credit to the Contract amount.
- .3 Requests for substitutions after Contract award must be accompanied by sufficient information in the form of shop drawings, manufacturer’s literature, samples or other data to permit proper investigation of the substitutes used. Requests must also include statements of respective costs of material or equipment originally specified and the proposed substitution.
- .4 Should a proposed substitution be accepted after Contract award either in part or in whole, assume full responsibility and costs when substitution affects other work on Project. Contractor to pay for design or drawing changes required as a result of the substitution.
- .5 Amounts of all credits arising from approval of substitutions after Contract award will be determined by Owner’s Representative and the Contract amount will be reduced accordingly.

**END OF SECTION**

## **PART 1 GENERAL**

### **1.1 SECTION INCLUDES**

- .1 Requirements and limitations for cutting and patching the Work.

### **1.2 RELATED SECTIONS**

- .1 Section 01 11 00 - Summary of Work.
- .2 Section 01 33 00 - Submittal Procedures.

### **1.3 SUBMITTALS**

- .1 Submit written request in advance of cutting or alteration which affects:
  - .1 Structural integrity of any element of Project.
  - .2 Integrity of weather-exposed or moisture-resistant elements.
  - .3 Efficiency, maintenance, or safety of any operational element.
  - .4 Visual qualities of sight-exposed elements.
  - .5 Work of Owner or separate contractor.
- .2 Include in request:
  - .1 Identification of Project.
  - .2 Location and description of affected Work.
  - .3 Statement on necessity for cutting or alteration.
  - .4 Description of proposed Work, and products to be used.
  - .5 Alternatives to cutting and patching.
  - .6 Effect on Work of Owner or separate contractor.
  - .7 Written permission of affected separate contractor.
  - .8 Date and time work will be executed.

### **1.4 PREPARATION**

- .1 Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
- .2 After uncovering, inspect conditions affecting performance of Work.
- .3 Beginning of cutting or patching means acceptance of existing conditions.
- .4 Provide supports to assure structural integrity of surroundings; provide devices and methods to protect other portions of project from damage.
- .5 Provide protection from elements for areas which may be exposed by uncovering work; maintain excavations free of water.
- .6 Obtain Owner's Representative's approval before cutting, boring or sleeving loadbearing members.

### **1.5 EXECUTION**

- .1 Execute cutting, fitting, and patching including excavation and fill, to complete Work.
- .2 Fit several parts together, to integrate with other Work.
- .3 Uncover Work to install ill-timed Work.
- .4 Remove and replace defective and non-conforming Work.
- .5 Provide openings in non-structural elements of Work for penetrations of mechanical and electrical Work.
- .6 Execute Work by methods to avoid damage to other Work, and which will provide proper surfaces to receive patching and finishing.
- .7 Employ original installer to perform cutting and patching for weather-exposed and moisture-resistant elements, and sight-exposed surfaces.
- .8 Cut rigid materials using masonry saw or core drill. Pneumatic or impact tools not

- allowed on masonry work without prior approval.
- .9 Restore work with new products in accordance with requirements of Contract Documents.
- .10 Fit Work to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- .11 Refinish surfaces to match adjacent finishes: For continuous surfaces refinish to nearest intersection; for an assembly, refinish entire unit.
- .12 Conceal pipes, ducts and wiring in floor, wall and ceiling construction of finished areas except where indicated otherwise.
- .13 Make cuts with clean, true, smooth edges.
- .14 Where new work connects with existing, and where existing work is altered, cut, patch And make good to match existing work.

## **1.6 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate waste materials in accordance with Section 01 74 21 – Construction/Demolition Waste Management and Disposal.

**END OF SECTION**

## **PART 1 GENERAL**

### **1.1 GENERAL**

- .1 Conduct cleaning and disposal operations to comply with local ordinances and antipollution laws.
- .2 Store volatile waste in covered metal containers and remove from premises at end of each working day.
- .3 Provide adequate ventilation during use of volatile or noxious substances. Use for building ventilation systems is not permitted for this purpose.

### **1.2 RELATED SECTION**

- .1 Section 01 77 00 - Closeout Procedures.

### **1.3 PROJECT CLEANLINESS**

- .1 Maintain Work in tidy condition, free from accumulation of waste products and debris, other than that caused by Owner or other Contractors.
- .2 Remove waste materials and debris from site at the end of each working day. Do not burn waste materials on site.
- .3 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .4 Provide on-site containers for collection of waste materials and debris.
- .5 Clean interior areas prior to start of finish work, maintain areas free of dust and other contaminants during finishing operations.
- .6 Store volatile waste in covered metal containers, and remove from premises at end of each working day.
- .7 Provide adequate ventilation during use of volatile or noxious substances. Use of building ventilation systems is not permitted for this purpose.
- .8 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.
- .9 Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall on wet, newly painted surfaces nor contaminate building systems.
- .10 Use only cleaning agents approved for use in the RHA facilities.

### **1.4 FINAL CLEANING**

- .1 Refer to General Conditions.
- .2 When Work is Substantially Performed, remove surplus products, tools, construction machinery and equipment not required for performance of remaining Work.
- .3 Remove waste products and debris other than that caused by others, and leave Work clean and suitable for occupancy.
- .4 When the Work is Totally Performed, remove surplus products, tools, construction machinery and equipment. Remove waste products and debris other than that caused by the Owner or other Contractors.
- .5 Remove waste materials from the site at regularly scheduled times or dispose of as directed by the Owner's Representative. Do not burn waste materials on site.
- .6 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .7 Leave the work broom clean before the inspection process commences.
- .8 Clean and polish glass, mirrors, hardware, wall tile, stainless steel, chrome, porcelain enamel, baked enamel, plastic laminate, and mechanical and electrical fixtures. Replace broken, scratched or disfigured glass.

- .9 Remove stains, spots, marks and dirt from decorative work, electrical and mechanical fixtures, furniture fitments, walls, floors and ceilings.
- .10 Vacuum clean and dust building interiors, behind grilles, louvres and screens.
- .11 Inspect finishes, fitments and equipment and ensure specified workmanship and operation.

#### **1.5 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

**END OF SECTION**



## **PART 1        GENERAL**

### **1.1        RELATED SECTIONS**

- .1        Section 01 74 11 - Cleaning.
- .2        Section 01 78 00 - Closeout Submittals.

### **1.2        FINAL INSPECTION AND DECLARATION PROCEDURES**

- .1        Contractor's Inspection: The Contractor and all Subcontractors shall conduct an inspection of Work, identify deficiencies and defects; repair as required. Notify the Owner's Representative in writing of satisfactory completion of the Contractor's Inspection and that corrections have been made. Request an Owner's Representative's Consultant's Inspection.
- .2        Owner's Representative's Inspection: Owner's Representative and the Contractor will perform an inspection of the Work to identify obvious defects or deficiencies. The contractor shall correct Work accordingly.
- .3        Completion: submit written certificate that the following have been performed:
  - .1        Work has been completed and inspected for compliance with Contract Documents.
  - .2        Defects have been corrected and deficiencies have been completed.
  - .3        Equipment and systems have been tested, adjusted and balanced and are fully operational.
  - .4        Certificates required by Fire Commissioner, Utility companies have been submitted.
  - .5        Operation of systems have been demonstrated to Owner's personnel.
  - .6        Work is complete and ready for Final Inspection.
- .4        Final Inspection: When items noted above are completed, request final inspection of Work by the Owner's Representative, representative of Central Health and the Contractor. If Work is deemed incomplete by the Owner's Representative, complete outstanding items and request a re-inspection.
- .5        Declaration of Substantial Performance: When the Owner's Representative considers deficiencies and defects have been corrected and it appears requirements of Contract have been substantially performed, make application for Certificate of Substantial Performance. Refer to General Conditions for specifics to application.
- .6        Commencement of Lien and Warranty Periods: The date of Central Health acceptance of the submitted declaration of Substantial Performance shall be the date for commencement for the warranty period and commencement of the lien period.
- .7        Declaration of Total Performance: When the Owner's Representative considers final deficiencies and defects have been corrected and it appears requirements of the Contract have been totally performed, make application for certificate of Total Performance. Refer to General Conditions for specifics to application. If Work is deemed incomplete by the Consultant, complete the outstanding items and request a re-inspection.

### **1.3 REINSPECTION**

- .1 Should status of work require re-inspection by Owner's Representative due to failure of work to comply with Contractor's claims for inspection, Owner will deduct amount of compensation for re-inspection services from payment to Contractor.

## **END OF SECTION**

## **PART 1 GENERAL**

### **1.1 SECTION INCLUDES**

- .1 As-built, samples, and specifications.
- .2 Equipment and systems.
- .3 Product data, materials and finishes, and related information.
- .4 Operation and maintenance data.
- .5 Spare parts, special tools and maintenance materials.
- .6 Warranties and bonds.

### **1.2 RELATED SECTIONS**

- .1 Section 01 33 00 – Submittal Procedures.
- .2 Section 01 45 00- Quality Control.
- .3 Section 01 77 00 - Closeout Procedures.

### **1.3 SUBMISSION**

- .1 Prepare instructions and data using personnel experienced in maintenance and operation of described products.
- .2 Submit one copy of completed volumes in final form 15 days prior to final inspection.
- .3 Copy will be returned after final inspection, with Owner's Representative's comments.
- .4 Revise content of documents as required prior to final submittal.
- .5 Two weeks prior to Substantial Performance of the Work, submit to the Owner's Representative, two final copies of operating and maintenance manuals.
- .6 Ensure spare parts, maintenance materials and special tools provided are new, undamaged or defective, and of same quality and manufacture as products provided in Work.
- .7 If requested, furnish evidence as to type, source and quality of products provided.
- .8 Defective products will be rejected, regardless of previous inspections. Replace products at own expense.
- .9 Pay costs of transportation.

### **1.4 FORMAT**

- .1 Organize data in the form of an instructional manual.
- .2 Binders: vinyl, hard covered, 3 'D' ring, loose leaf 219 x 279 mm with spine and face pockets.
- .3 When multiple binders are used, correlate data into related consistent groupings. Identify contents of each binder on spine.
- .4 Cover: Identify each binder with type or printed title 'Project Record Documents'; list title of project and identify subject matter of contents.
- .5 Arrange content under Section numbers and sequence of Table of Contents.
- .6 Provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts of equipment.
- .7 Text: Manufacturer's printed data, or typewritten data.
- .8 Drawings: provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- .9 Provide CAD files in DWG format on CD. Also provide electronic files in PDF format.

### **1.5 CONTENTS - EACH VOLUME**

- .1 Table of Contents: provide title of project; names, addresses, and telephone numbers of Consultant and Contractor with name of responsible parties; schedule of products and

- systems, indexed to content of volume.
- .2 For each product or system:
  - .1 List names, addresses and telephone numbers of subcontractors and suppliers, including local source of supplies and replacement parts.
- .3 Product Data: mark each sheet to clearly identify specific products and component parts, and data applicable to installation; delete inapplicable information.
- .4 Drawings: supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams.
- .5 Typewritten Text: as required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions specified in Section 01 45 00 - Quality Control.
- .6 Training: Refer to Section 01 91 13 – General Commissioning (Cx) Requirements.

## **1.6 AS-BUILTS AND SAMPLES**

- .1 In addition to requirements in General Conditions, maintain at the site for Owner's Representative one record copy of:
  - .1 Contract Drawings.
  - .2 Specifications.
  - .3 Addenda.
  - .4 Change Orders and other modifications to the Contract.
  - .5 Reviewed shop drawings, product data, and samples.
  - .6 Field test records.
  - .7 Inspection certificates.
  - .8 Manufacturer's certificates.
- .2 Store record documents and samples in field office apart from documents used for construction. Provide files, racks, and secure storage.
- .3 Label record documents and file in accordance with Section number listings in List of Contents of this Project Manual. Label each document "PROJECT RECORD" in neat, large, printed letters.
- .4 Maintain record documents in clean, dry and legible condition. Do not use record documents for construction purposes.
- .5 Keep record documents and samples available for inspection by Owner's Representative.

## **1.7 RECORDING ACTUAL SITE CONDITIONS**

- .1 Record information on set of blue line opaque drawings, provided by Owner's Representative.
- .2 Provide felt tip marking pens, maintaining red color pens for recording information.
- .3 Record information concurrently with construction progress. Do not conceal Work until required information is recorded.
- .4 Contract Drawings and shop drawings: legibly mark each item to record actual construction, including:
  - .1 Measured depths of elements of foundation in relation to finish first floor datum.
  - .2 Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
  - .3 Measured locations of internal utilities and appurtenances, referenced to visible and accessible features of construction.
  - .4 Field changes of dimension and detail.
  - .5 Changes made by change orders.
  - .6 Details not on original Contract Drawings.
  - .7 References to related shop drawings and modifications.
- .5 Specifications: legibly mark each item to record actual construction, including:
  - .1 Manufacturer, trade name, and catalogue number of each product actually

- installed, particularly optional items and substitute items.
- .2 Changes made by Addenda and change orders.
- .6 Other Documents: submit manufacturer's certifications, inspection certifications, field test records, required by individual specifications sections.
- .7 At completion of project provide all recorded information on print drawings or alternatively transfer to CAD files in DWG format. Submit DWG files, also with electronic files in PDF format as part of the Closeout Submittals..

## **1.8 EQUIPMENT AND SYSTEMS**

- .1 Each Item of Equipment and Each System: include description of unit or system, and component parts. Give function, normal operation characteristics, and limiting conditions. Include performance curves, with engineering data and tests, and complete nomenclature and commercial number of replaceable parts.
- .2 Panel board circuit directories: provide electrical service characteristics, controls, and communications.
- .3 Include installed colour coded wiring diagrams.
- .4 Operating Procedures: include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- .5 Maintenance Requirements: include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- .6 Provide servicing and lubrication schedule, and list of lubricants required.
- .7 Include manufacturer's printed operation and maintenance instructions.
- .8 Include sequence of operation by controls manufacturer.
- .9 Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- .10 Provide installed control diagrams by controls manufacturer.
- .11 Provide Contractor's coordination drawings, with installed colour coded piping diagrams.
- .12 Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- .13 Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- .14 Include test and balancing reports
- .15 Additional requirements: As specified in individual specification sections.

## **1.9 MATERIALS AND FINISHES**

- .1 Building Products, Applied Materials, and Finishes: include product data, with catalogue number, size, composition, and colour and texture designations. Provide information for re-ordering custom manufactured products.
- .2 Instructions for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- .3 Moisture-protection and Weather-exposed Products: include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- .4 Additional Requirements: as specified in individual specifications sections.

## **1.10 S PARE PARTS**

- .1 Provide spare parts, in quantities specified in individual specification sections.
- .2 Provide items of same manufacture and quality as items in Work.
- .3 Deliver to site location as directed; place and store.
- .4 Receive and catalogue all items. Submit inventory listing to Owner's Representative.

- Include approved listings in Maintenance Manual.
- .5 Obtain receipt for delivered products and submit prior to final payment.

#### **1.11 MAINTENANCE MATERIALS**

- .1 Provide maintenance and extra materials, in quantities specified in individual specification sections.
- .2 Provide items of same manufacture and quality as items in Work.
- .3 Deliver to site location as directed; place and store.
- .4 Receive and catalogue all items. Submit inventory listing to Owner's Representative. Include approved listings in Maintenance Manual.
- .5 Obtain receipt for delivered products and submit prior to final payment.

#### **1.12 SPECIAL TOOLS**

- .1 Provide special tools, in quantities specified in individual specification section.
- .2 Provide items with tags identifying their associated function and equipment.
- .3 Deliver to project site place and store.
- .4 Receive and catalogue all items. Submit inventory listing to Owner's Representative. Include approved listings in Maintenance Manual.

#### **1.13 STORAGE, HANDLING AND PROTECTION**

- .1 Store spare parts, maintenance materials, and special tools in manner to prevent damage or deterioration.
- .2 Store in original and undamaged condition with manufacturer's seal and labels intact.
- .3 Store components subject to damage from weather in weatherproof enclosures.
- .4 Store paints and freezable materials in a heated and ventilated room.
- .5 Remove and replace damaged products at own expense and to satisfaction of Owner's Representative.

#### **1.14 WARRANTIES AND BONDS**

- .1 Develop warranty management plan to contain information relevant to Warranties.
- .2 Submit warranty management plan to Owner's Representative's approval.
- .3 Warranty management plan to include required actions and documents to assure that Owner receives warranties to which it is entitled.
- .4 Provide plan in narrative form and contain sufficient detail to make it suitable for use by future maintenance and repair personnel.
- .5 Assemble approved information in binder and submit upon acceptance of work. Organize binder as follows:
  - .1 Separate each warranty or bond with index tab sheets keyed to Table of Contents listing.
  - .2 List subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.
  - .3 Obtain warranties and bonds, executed in duplicate by subcontractors, suppliers, and manufacturers, within ten days after completion of the applicable item of work.
  - .4 Except for items put into use with Owner's permission, leave date of beginning of time of warranty until the Date of Substantial Performance is determined.
  - .5 Verify that documents are in proper form, contain full information, and are notarized.
  - .6 Co-execute submittals when required.
  - .7 Retain warranties and bonds until time specified for submittal.
- .6 Include information contained in warranty management plan as follows:
  - .1 Roles and responsibilities of personnel associated with warranty process,

- including points of contact and telephone numbers within the organizations of Contractors, subcontractors, manufacturers or suppliers involved.
- .2 Listing and status of delivery of Certificates of Warranty for extended warranty items, to include roofs, HVAC balancing, pumps, motors, transformers, and commissioned systems such as fire protection, alarm systems, sprinkler systems, lightning protection systems.
- .3 Provide list for each warranted equipment, item, feature of construction or system indicating:
  - .1 Name of item.
  - .2 Model and serial numbers.
  - .3 Location where installed.
  - .4 Name and phone numbers of manufacturers or suppliers.
  - .5 Names, addresses and telephone numbers of sources of spare parts.
  - .6 Warranties and terms of warranty: include one-year overall warranty of construction. Indicate items that have extended warranties and show separate warranty expiration dates.
  - .7 Cross-reference to warranty certificates as applicable.
  - .8 Starting point and duration of warranty period.
  - .9 Summary of maintenance procedures required to continue warranty in force.
  - .10 Cross-Reference to specific pertinent Operation and Maintenance manuals.
  - .11 Organization, names and phone numbers of persons to call for warranty service.
  - .12 Typical response time and repair time expected for various warranted equipment.
- .4 Procedure and status of tagging of equipment covered by extended warranties.
- .5 Post copies of instructions near selected pieces of equipment where operation is critical for warranty and/or safety reasons.
- .7 Respond in a timely manner to oral or written notification of required construction warranty repair work.
- .8 Written verification will follow oral instructions. Failure to respond will be cause for the Owner's Representative to proceed with action against Contractor.

#### **1.15 WARRANTY TAGS**

- .1 Tag, at time of installation, each warranted item. Provide durable, oil and water resistant tag approved by Owner's Representative.
- .2 Leave date of acceptance until project is accepted for occupancy.
- .3 Indicate following information on tag:
  - .1 Type of product/material.
  - .2 Model number.
  - .3 Serial number.
  - .4 Contract number.
  - .5 Warranty period.
  - .6 Inspector's signature.
  - .7 Construction Contractor.

**END OF SECTION**