



Environnement
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CONTRACT SPECIFICATIONS

Module 5 VRF System

at

**335 River Road
Ottawa, Ontario
K1V 1C7**

Solicitation No: K4A22-14-0048

**Technical Services
Real Property Management Division
Environment Canada**

Project No: RR-072-J8062

**Issued for Tender
28 Nov 2014**

GENERAL CONDITIONS

1. SUMMARY OF WORK

1. The Contractor shall:
 - Provide all necessary labor, materials, and equipment required to installation of a vrf (variable refrigerant flow) heating and cooling system to four (4) labs in Module 5 as per working drawings, and specifications. This includes, but is not limited to, demolition, removals, equipment, architectural, mechanical, controls, sprinklers, and electrical elements at 335 River Road in Ottawa.
2. The work on this contract includes coordination and cooperation with other contractors and building personnel working on the site.

2. TIME OF COMPLETION

1. Commence work in accordance with notification of acceptance of your tender submission and complete the work including rectification of deficiencies within 16 weeks.

3. HOURS OF WORK

1. Work for which power shutdown is not required shall be carried out Monday to Friday from 07:00hrs to 18:00hrs.
2. Work requiring power shutdown and/or Lock-Out (LOTO) work shall be completed off-hours Monday through Friday from 18:00hrs to 06:00hrs and/or on weekends from 07:00hrs to 18:00hrs.
3. Shutdown, bypassing or isolating any initiating device or zone on the fire alarm system or the fire sprinkler system shall be undertaken after hours Monday through Friday from 18:00hrs to 06:00hrs or on weekends from 07:00hrs to 18:00hrs.
4. Provide an implementation strategy in writing three (3) weeks prior to the first shutdown which clearly lists which activities require after hours work, the sequence of shutdowns, and the maximum length of each shutdown, to insure the owner can organize the shutdown of lab equipment.
5. The Contractor shall not permit his personnel to work alone on this project when the following activities are undertaken;
 1. Work assessment determines that the potential health & safety risk is high;
 2. Work requiring entry into or work within a Confined Space;
 3. Work requiring Lock-Out and Tag-Out;
 4. Work requiring use of fall arrest equipment;
 5. Work on scaffolding;
 6. Work requiring supplied air respirators or similar equipment;
 7. Hot Work and/or Hot Tap activities;
 8. Work involving cranes or hoisting;
 9. Work or work situations identified by the Engineer.
6. Staff training and demonstrations shall be scheduled during regular business hours Monday to Friday. The Contractor shall obtain approvals from the Engineer on the training schedule prior to the scheduled training date and time.

GENERAL CONDITIONS

4. SCHEDULING

1. Within one week of contract award, submit a bar chart construction schedule for the work, indicating anticipated progress stages within time of completion. Minimum stages include mobilization, shop drawing submittal, order and delivery of major components and equipment, major approvals stages, interim and final inspection times, commissioning timeframes, final deficiency corrections and demobilization. When schedule has been reviewed and approved by the Departmental Representative take necessary measures to complete work within scheduled times. Do not change schedule without written approvals from the Departmental Representative. Contractor must confirm the required power shutdowns required and the activities for each shutdown and have these in his schedule.
2. In order to minimize disruption to on-going work in the laboratories, the majority of the work is envisioned to be performed in phases during pre-planned shutdown intervals and will entail both regular and off-hour work. A major one week duration shutdown is to be planned for lab 159 and 165 in order to permit uninterrupted implementation of the HVAC above the labs as well as other new associated equipment and distribution in the lab vicinity. Regular hour and off hour work will be allowed to occur unimpeded during this period. Additional two or three day weekend intervals involving purely off-hour work may be scheduled as deemed necessary in order to accommodate full completion of the work as well. All of these planned phases are to be established in the overall construction schedule above.

5. CONTRACT DOCUMENTS

1. Drawings and specifications are complementary, items shown or mentioned in one and not in the other are deemed to be included in the contract work.
2. Any questions that arise in relation to the design shall be brought to the attention of the Engineer. Failure to comply with this procedure may necessitate amendments and other layout modifications as required to complete the Work, costs of which shall be solely the responsibility of the Contractor.
3. Study all documents, which describe, or are related to any operation before commencement of that operation. Report discrepancies discovered between existing conditions and documentation. Obtain ruling on required interpretation before commencing work
4. Any changes to the scope of work are to be confirmed in writing by the Engineer and Contract value changes approved, prior to start of said work.
5. The cost of any additional work to the Owner shall be the actual cost of the work plus ten percent (10%) overhead and ten percent (10%) profit on the actual cost of the work.

6. CONTRACTOR'S USE OF SITE

1. Do not unreasonably encumber site, with material or equipment.
2. Execute the work with the least possible interference or disturbance to the normal use of the exiting premises. Make arrangements with the Engineer to facilitate the work as stated.
3. Maintain existing services to the building and provide for personnel and vehicle access.
4. Maintain a proper solid or chain link security fence c/w suitable locks around work and

GENERAL CONDITIONS

Module 5 VRF System

storage areas at all times.

5. Where security is reduced by the work, provide temporary means to maintain security.
6. Contractor shall utilize assigned washroom facilities and shall maintain them neat and tidy.
7. Contractor to supply their own site trailer, phone, fax, and storage box. No storage will be provided within the building. Accommodation will be made for limited on-site storage at the discretion of the Engineer in area designated by the Engineer.

7. CONTRACTOR PROJECT SUPERINTENDENT

1. The Contractor shall, upon award of contract, designate a Project Superintendent. The Contractor shall provide the name, cellular phone number to the Engineer at the pre-construction meeting. The Project Superintendent shall have full responsibility for the project and shall be authorized to accept and act upon any notice or direction provided by the Engineer. Project Superintendent shall be available on site at all times that work is being performed under this contract.
2. Supervise and direct all person engaged in the work, including all tradesmen and suppliers. Become familiar with the requirements of each trade. Coordinate delivery and work operations. Examine the work of all trades during work operations to ensure compliance with the contract requirements. Expedite all work to maintain the contract schedule.
3. Cooperate with all other contractors working on site in parallel or related projects.
4. Attend coordination and project meetings at the direction of the Engineer.

8. CONTRACTOR and SUB CONTRACTORS

1. The Contractor agrees to employ those sub-contractors proposed by him in writing as listed in the Contractor's tender submission.
2. Do not change or substitute approved sub-contractors without prior authorization from the Engineer.
3. Contractor and sub-contractor personnel shall be qualified as per definitions under the Ontario Trades Qualification and Apprenticeship Acts and as required by regulatory agencies in Ontario.
4. Electrical work shall be carried out by qualified and licensed electrical contractors as per Ontario regulations.
5. Fire alarm work shall be carried out by qualified and accredited personnel as per Ontario regulations.

9. WORKMANSHIP

1. Workmanship shall be the best quality, executed by workers experienced and skilled in the respective duties for which they are employed. Immediately notify the Engineer, if required, if work is such as to make it impractical to produce required results.
 2. Do not employ any person unfit or unskilled in their required duties. The Engineer reserves
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GENERAL CONDITIONS

Module 5 VRF System

the right to require the dismissal from the site, workers deemed incompetent, careless, insubordinate or otherwise objectionable.

3. The Work as covered by the tender documents is intended to comply exactly with the latest rules and regulations of the inspection authorities, and these rules are to be considered an integral part of the tender documents. In case of conflict, any ruling by the Inspection Authority shall be final. All changes and alterations to the Contractor's work required by an authorized inspector or any authority having jurisdiction shall be carried out at the expense of the Contractor.
4. Decisions as to the quality or fitness of workmanship in cases of dispute rest solely with the Engineer, whose decision is final.

10. RECORD DRAWINGS

1. As work progresses, maintain accurate records to show deviations from the contract drawings. Just prior to completion of work, supply to the Engineer one set of white prints with all deviations neatly inked in. Contractor to show actual layouts for underground services including elevations, all mechanical piping and ductwork and all electrical wiring diagrams, locations and sizes of electrical conduits, pull boxes and wiring, circuits etc

11. SHOP DRAWINGS

1. Provide four (4) copies of the shop drawings as listed in the specifications and/or drawings to the Engineer prior to ordering materials. Shop drawings to illustrate details of portion of work specific to the project requirements. Information to clearly indicate the items to be reviewed. Generic drawings are not acceptable. Shop drawings shall be forwarded electronically to the Engineer.
2. Allow two (2) working weeks for Engineer's review of each shop drawing submission.

12. CODES AND STANDARDS

1. The following codes and Standards are in place for work under this contract. The latest edition applicable at the time to be utilized.
 - .1 The National Building Code of Canada
 - .2 The National Fire Code of Canada
 - .3 The Ontario Electrical Safety Code
 - .4 Ontario Plumbing Code
 - .5 Ontario Occupational Health and Safety Act and Regulations for Construction Projects
 - .6 Canada Labour Code Part II and Federal Occupational Health and Safety Policies

13. FEES AND CERTIFICATES

1. Submit a completed Notice of Project Form to the Ontario Ministry of Labour as required by the notification requirements under the Regulations for Construction Projects made pursuant to the Ontario Occupational Health and Safety Act. Provide copy to the Departmental Representative.
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GENERAL CONDITIONS

Module 5 VRF System

2. Submit to the Electrical Inspection Authority the necessary number of working drawings and specifications for examination and approval prior to commencement of work and pay all associated fees.
 - .1 Obtain and pay for all electrical inspection fees.
 - .2 On completion of the work provide copies of the Electrical Inspection Authority inspection approval certificates.

14. CONSTRUCTION SAFETY MEASURES

1. Observe and enforce construction safety measures required by Ontario Occupational Health and Safety Acts and Regulations for Construction Projects, Canada Labour Code Part II, Occupational Health and Safety, Workers' Compensation Board and municipal statutes and authorities and site specific Health and Safety Policies and Directives
2. In the event of conflict between any provisions of above authorities, the most stringent will apply.
3. Provide and maintain guardrails, fences, barricades, lights, signs and other devices required for protection of workmen and public in accordance with the requirements of the Canada Labour Code Part II, Occupational Health and Safety, Ontario Occupational Health and Safety Act and Regulations for Construction Projects and Local by-laws. All signs shall be bilingual or CSA universal pictograms.
4. Ensure the safety of building personnel at all times when performing work.
5. Refer to Specifications Section 01 35 30 Health and Safety for additional requirements

15. FIRE SAFETY REQUIREMENTS

1. Comply with the National Building Code of Canada for fire safety in construction and the National Fire Code of Canada for fire prevention, fire fighting and life safety in building in use.
2. Comply with Human Resources Development Canada (HRDC), Fire Commissioner of Canada (FCC) Standards;
 - .1 No. 301: Standard for Construction Operations
 - .2 No. 302: Standard for Welding and Cutting
 - .3 No. 374: Fire Protection Standard for General Storage (Indoor and Outdoor)
 - .4 available from Fire protection Engineering Services, Labour program, HRDC or following internet site: <http://info.load-otea.hrdc-drhc.gc.ca/~fireweb/standards/fccen.htm>
 - .5 retain all fire safety documents on site.
3. Refer to Section 01 35 30 of this document for further information on Health and Safety

16. WORKPLACE SAFETY AND INSURANCE BOARD

1. Prior to commencing the work, throughout the total performance of the work when requesting payments and prior to receiving final payment, the Contractor shall provide evidence of good standing with Workplace Safety and Insurance Board of Ontario.

17. UTILITIES

1. Water supply is available on site and will be provided for construction usage at no cost.

GENERAL CONDITIONS

Module 5 VRF System

Engineer reserves the right to limit volume of water utilized.

2. Existing electrical services to a maximum of 15 KVA required for the work may be used by the Contractor without charge. Ensure capacity is adequate prior to connecting and imposing additional loads. Connect and disconnect at own expense and responsibility.

18. PROTECTION

1. Protect finished work against damage until take-over.
2. Protect the work and all surrounding equipment, landscape, structures, floors, ceilings, walls, etc., from damage.
2. Make good, at no cost to the Owner, any damage caused.
3. Protect any services, which are uncovered during work.
4. Protect all areas adjacent to the construction areas from dust and debris produced during construction. Use hoarding, solid walls, drop cloths, sealed dust screens and tarps and clean up and vacuum up all debris daily.

19. PRODUCT HANDLING AND STORAGE

1. Deliver materials in original and unopened containers or wrappings with Manufacturers' seals and labels intact and legible.
2. Deliver materials in sufficient quantity to allow continuity of the work. Do not encumber site with unnecessary materials.
3. All unused materials at the end of any working day shall be properly protected from damage.
4. All materials, equipment, etc. to be handled and stored as not to interfere with the operation of the building.
5. All material and equipment to be new unless specified otherwise.
6. Contractors who use controlled products must ensure that their workers are properly trained in the safe use and handling of such products in compliance with the Workplace Hazardous Materials Information System (WHMIS).
7. Comply with all requirements with respect to Controlled products labeling and Material Safety Data Sheets (MSDSs) according to the requirements of WHMIS and the Hazardous Products Act.

20. PRODUCT AVAILABILITY

1. Upon award of contract immediately review product delivery requirements and advise the Engineer of any foreseeable delays.
 2. In the event of failure to notify the Engineer at commencement of the work, the Departmental Representative reserves the right to require the supply of substitute products of equivalent quality at no increase in contract price to ensure adherence to project schedule.
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GENERAL CONDITIONS

21. MATERIALS STANDARDS

1. Materials shall be new and work shall conform to the minimum applicable standards of the Canadian General Standards Board, the Canadian Standards Association, the National Building Code of Canada and all applicable Provincial and Municipal codes. In the case of conflict or discrepancy the most stringent requirements shall apply.
2. Products (materials, equipment and articles) incorporated in work shall be new, not damaged or defective and of best quality compatible with specifications for purpose intended. If requested by the Consultant furnish evidence as type, source, and quality of product.
3. Defective products will be rejected, regardless of previous inspections. Inspection does not relieve responsibility but is a precaution against oversight or error. Remove and replace defective products at own expense and be responsible for delays and expenses caused by rejection.
4. Should any dispute arise as to the quality of fitness of products, the decision shall rest with the Consultant based upon requirements of Contract Documents. Engineer's decisions shall be final.
5. Ensure that materials, equipment, services and labour are brought to site in sufficient quantity and in accordance with requirements of the work schedule.

22. MATERIALS OTHER THAN SPECIFIED

1. Secure in writing, permission from the Consultant to use any materials other than those specified.

23. HAZARDOUS MATERIALS

1. Comply with the requirements of the Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials: and regarding labeling and the provision of Material Safety Data Sheets (MSDS) acceptable to Human Resources Development Canada, Labour Program.

24. REMOVED MATERIALS

1. Unless otherwise specified, materials for removal become the Contractor's property and shall be taken from the site.

25. PROJECT CLEANLINESS

1. Remove waste materials and debris from the site at the end of each day. Leave the work area unencumbered upon completion of each work shift. Store materials and equipment.
 2. Ensure site is clean, orderly and neat at all times during the work shift. Provide additional cleaning as requested by the Engineer.
 3. At the end of the project, remove dirt, dust and other disfigurements from all surfaces affected by the project including, but not limited to ceilings, walls, floors, fixtures and lights. Clean by dusting, damp wiping, washing, waxing and polishing to the satisfaction of the Engineer.
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GENERAL CONDITIONS

Module 5 VRF System

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4. Upon completion, remove scaffolding, temporary protections and surplus materials. Make good any defects noted at this stage.
 5. Clean areas affected under contract, to a condition at least equal to that previously existing and to satisfaction of the Engineer.
 6. Use only cleaning materials recommended by manufacturer of surface to be cleaned.

26. WASTE MANAGEMENT

1. Comply with the Environmental Protection Act, Ontario Regulations O.Reg. 102/94 and O. Reg. 103/94 for waste management programs on construction and demolition projects.

27. EXISTING SERVICES

1. Where work involves breaking into or connecting to existing services, Carry out work at times directed by the Consultant. Connection to existing services shall be after hours and/or on weekends.
2. Before commencing Work, establish location and extent of service lines in area of Work and notify the Consultant of findings.
3. Submit schedule to and obtain approval from the Consultant for any shutdown or closure of active service or Facility. Adhere to approved schedule and provide notice to affected parties. Do not alter schedule without prior written consent of the Engineer.
4. Give the Engineer 96 hours' notice related to each necessary interruption of any mechanical or electrical service throughout the course of the work. Obtain written authorization from the Engineer prior to any interruption. Keep duration of those interruptions to a minimum.
5. Where unknown services are encountered, immediately advise Consultant and confirm findings in writing.
6. Fire alarm shutdowns, re-activation shall be the responsibility of the Contractor. Shutdown, bypassing or isolating any initiating device or zone on the fire alarm system or the sprinkler system shall be undertaken after hours Monday to Friday from 18:00hrs to 06:00hrs or on weekends from 07:00hrs to 18:00hrs. All shutdowns, bypassing or isolation activities on the fire alarm system or the fire sprinkler system must be authorized in writing by the Property Management District 1 Senior Operations Technician prior to initiating work. Approvals for shutdowns, bypassing or isolation activities require a minimum of 96 hours. Contractors shall schedule their request submittals through the Engineer.

28. CUTTING, PATCHING AND MAKING GOOD

1. Cut existing surfaces as required to accommodate new work. Openings shall be neatly cut and dimensioned to fit electrical conduits, mechanical pipes and/or ductwork passing through the surfaces. Obtain the Engineer's approval before cutting into structure. Cutting torches shall not be permitted.
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GENERAL CONDITIONS

Module 5 VRF System

2. Patch and make good cut on both sides of surfaces, damaged or disturbed to match or better existing conditions to the satisfaction of the Engineer.
Note: The Contractor shall patch and make good existing openings when Contractor utilizes the existing openings for his work.
3. Fill voids left around all electrical conduits, mechanical pipes and/or ductwork with appropriate fire-proofing material to maintain fire stop integrity. Finish patching with finishing compounds to the satisfaction of the Engineer.

29. DEMOLITION

1. Except if expressly stated otherwise, materials indicated for removal, become the Contractor's property and shall be promptly taken from the site.

30. EQUIPMENT

1. Provide and maintain equipment such as temporary stairs, ladders, ramps, scaffolds, swing stages, runways, chutes and the like, as required for execution of work
2. Maintain conveying equipment such as cranes, hoists, derricks and the like, as required for execution of work.
3. Assume complete responsibility for construction strength, placing, anchoring and operation of derricks, cranes, hoists and other mechanical contrivances used for work; and ensure that loads carried thereon can be safely supported and be free from accidents to all persons.
4. Have hoist capacities, with regard to anticipated loads, verified by a Professional Engineer registered in the Province of Ontario.
5. Comply with all governing safety regulations in force at the time of construction.
6. Remove immediately such equipment when not required for work.
7. Provide and maintain, on site, suitable fire extinguishers in sufficient quantities, as required by the Safety Code.

31. LOADING

1. Take precautions to prevent the overloading of any part of the structure during the progress of the work. Make good, at no expense to Owner, any damage resulting from such overloading.

32. HOISTING

1. .1 All crane operations are restricted to the following:
 - a) All craning of materials and equipment must be done outside normal building operating hours, ensure interior areas below are kept unoccupied.

33. POWDER ACTUATED GUNS

1. Do not employ powder-actuated guns using explosives, unless expressly permitted by the Consultant. If permitted, comply with requirements of CAN3-Z166.2-M85 (Use and Handling of

GENERAL CONDITIONS

Powder Actuated Tools).

34. TAXES

1. Pay all taxes properly levied by law (including Federal, Provincial and Municipal)
2. The Harmonized Sales Tax (HST) is NOT to be considered an applicable tax for the purposes of this bid. The bidder shall therefore include separately any amount in his bid price for the said HST. In the event the HST does apply, the successful Contractor will indicate on each application for payment as a separate amount the appropriate HST the Owner is legally obliged to pay. The Contractor's HST registration number must be shown on all invoices. This amount will be paid to the Contractor in addition to the amount certified for payment under the contract and will therefore not affect the contract price.

35. SIGNS – ADVERTISING

1. No advertising and/or posting of company signs shall be permitted.
2. Provide common-use signs as related to traffic control, information, instruction, health and safety, use of equipment, public safety devices, in both official languages or by the use of commonly understood graphic symbols to the Engineer's approval.

36. SECURITY CLEARANCES

1. All personnel employed on this project shall be subject to a security check. Obtain the requisite clearance as instructed for each individual required to enter the premises.

37. BUILDING SMOKING ENVIRONMENT

1. Smoking is prohibited in the building and on the roofs. Obey smoking restrictions on building property as directed by the Engineer.

38. GUARANTEE

1. Provide written one (1) year guarantee for all materials and labour provided as part of this Contract. Effective start date shall be date of final completion.
2. The contractor, at own expense, shall correct any defects in the work due to faulty products and/or workmanship appearing within the extended guarantee/warranty periods set out in the individual sections from date of final completion.

39. TRAINING AND DEMONSTRATION

1. Upon completion of the all installations, provide qualified personnel to train and demonstrate all the installations to the site's operations, and maintenance personnel. Contractor to review newly installed equipment and demonstrate the start/stop and control functions of the installed equipment. Training and demonstration to be for a duration of four (4) hours or, as indicated in the equipment specification section. Training date and time to be coordinated
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GENERAL CONDITIONS

with, and approved by the Engineer.

40. OPERATIONS and MAINTENANCE MANUALS

1. Provide two (2) sets of operations and maintenance manuals with data indexed in vinyl hard covered "D" ring binders. Data to include detailed technical information, documents and records describing operation and maintenance of individual components, copies of all final approved shop drawings, inspection and testing reports, warranties, and all other data specifically requested within the specifications.
2. Each binder shall have a cover sheet listing title, location and project number. Names, addresses and telephone numbers of the Contractor, Sub-Contractors and all suppliers.
3. Each binder shall list all maintenance materials, special tools, and spare parts. This will also include the signed transmittal of receipt by the owner's representatives, or the engineer, of all maintenance materials.
4. Provide two copies, on digital media in PDF format, of the entire Operations and Maintenance Manuals. Vendor literature available from the vendor in native .pdf format shall be included. If vendor literature is not available in .pdf it shall be scanned. All other information shall be scanned into .pdf. An electronic index shall be created which allows for easy navigation through the files.

END OF SECTION

PART 1 - GENERAL

1.1 PRECEDENCE

- .1 For Federal Government projects, Division 1 Sections take precedence over technical specification sections in other Divisions of this Project Manual.

1.2 REFERENCES

- .1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations.
- .2 Health Canada/Workplace Hazardous Materials Information System (WHMIS).
 - .1 Material Safety Data Sheets (MSDS).
- .3 Province of Ontario
 - .1 Occupational Health and Safety Act and Regulations for Construction Projects, R.S.O. [1990 June 2002].

1.3 SUBMITTALS

- .1 Make submittals to Consultant and Owners Representative for review.
- .2 Submit site-specific Health and Safety Plan: Within 7 days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must include:
 - .1 Results of site specific safety hazard assessment.
 - .2 Results of safety and health risk or hazard analysis for site tasks and operation.
- .3 Submit 5 copies of Contractor's authorized representative's work site health and safety inspection reports to Departmental Representative weekly.

Nov 28, 2014

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- .4 Submit copies of reports or directions issued by Federal and Provincial health and safety inspectors.
 - .5 Submit copies of incident and accident report.
 - .6 Departmental Representative will review Contractor's site-specified Health and Safety Plan and provide comments to Contractor. Revise plan as appropriate and resubmit plan to Departmental Representative within 7 days after receipt of comments from Departmental Representative.
 - .7 Departmental Representative's review of Contractor's final Health and Safety plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.
 - .8 Medical Surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of Work, and submit additional certifications for any new site personnel to Departmental Representative.
 - .9 On-site Contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations.
- 1.4 FILING OF NOTICE
- .1 File Notice of Project with Provincial authorities prior to beginning of Work.
- 1.5 SAFETY
- .1 Perform site specified safety hazard

ASSESSMENT

assessment related to project.

1.6 MEETINGS

- .1 Schedule and administer Health and Safety meeting with Departmental Representative prior to commencement of project and prior to each outage.

1.7 REGULATORY REQUIREMENTS

- .1 The Contractor shall comply with the specified standards and regulations to ensure safe operations. The latest editions are applicable.
 - .1 Canada Labour Code Part II.
 - .2 Canada Occupational Safety and Health Regulations.
 - .3 National Building Code Part 8 - Safety Measures at Construction & Demolition Sites.
 - .4 National Fire Code Part 4 - Flammable and Combustible Liquids.
 - .5 National Fire Code Part 5 - Hazardous Processes and Operations.
 - .6 Ontario Occupational Health and Safety Act and Regulations including;
 - .1 Construction Projects (O.Reg.213/91).
 - .2 Occupational Health and Safety Act.
 - .3 Workplace Hazardous Materials Information System (WHMIS).
 - .4 Ontario Trades Qualification and Apprenticeship Act.
 - .5 Ontario Electrical Safety Code (Reg.10/91).

1.8 GENERAL REQUIREMENTS

- .1 Develop written site-specific Health and Safety Plan based on hazard assessment prior to beginning site Work and continue to implement, maintain, and enforce plan until final demobilization from site. Health and Safety Plan must address project specifications.

- .2 Departmental Representative may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.
- 1.9 RESPONSIBILITY .1 The Contractor shall 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.
- 1.10 COMPLIANCE REQUIREMENTS .1 Comply with Ontario Health and Safety Act and Regulations for Construction Projects, R.S.O.
- 1.11 UNFORSEEN HAZARDS .1 When unforeseen or peculiar safety-related factor, hazard, or condition occur during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of the Province of Ontario and advise Departmental Representative verbally and in writing.
- 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 the Province of Ontario, and in consultation with Departmental Representative.

1.13 CORRECTION OF
NON-COMPLIANCE

- .1 The Contractor shall immediately address health and safety non-compliance issues identified by authority having jurisdiction or by Departmental Representative.
- .2 Provide Departmental Representative with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 Departmental Representative may stop Work if non-compliance of health and safety regulations is not corrected.

1.14 DISCIPLINARY
ACTION

- .1 The Contractor's disregard and/or lack of compliance to health and safety measures, procedures and policies may lead to disciplinary action by the Departmental Representative.

1.15 BLASTING

- .1 Blasting or other use of explosives is not permitted without prior receipt of written instruction by Departmental Representative.

1.16 CONTRACTOR
ACCIDENT AND
INCIDENT REPORT

- .1 The Contractor shall advise the Departmental Representative of any accident, injury, near-miss incident, fire, explosion or chemical spill occurring at the Work site and any visit to the site by a governmental enforcement official.

- 1.17 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.
- 1.18 SITE HEALTH AND SAFETY POLICIES AND DIRECTIVES .1 The Contractor shall comply and follow all prescribed site Health and Safety Policies and Directives including but not limited to the following;
- .1 Worker Profile Sheet: The Contractor shall submit to the Departmental Representative a completed Worker Profile Sheet c/w all attachments including copies of licenses, certificates and permits for supporting qualifications to perform required work for a given project for each individual worker requiring access to the site. The completed Worker Profile Sheets are required for each individual worker prior to working on site. Live work is not permitted.
 - .2 2nd Floor Mechanical Space - Mandatory Safe Working Practices: The Contractor shall obtain training from the Departmental Representative on safe working practices and procedures for the 2nd floor mechanical space for each worker requiring access to the 2nd floor mechanical space. The Contractor shall sign-off individual training forms prior to individual workers being authorized access to the 2nd floor mechanical space.
 - .3 Emergency and Fire Evacuation Route: The Contractor shall obtain training on procedures of evacuating the site under emergency and/or fire situations. Contractor training and sign-off is required prior to initiating site work.

Nov 28, 2014

.4 Ontario Trades Qualifications and Apprenticeship Act: The Contractor shall sign-off confirming that the Trades Qualifications and Apprenticeship Act shall be observed and followed. Contractor sign-off is required prior to initiating site work.

1.19 WORKPLACE
SAFETY AND
INSURANCE BOARD

.1 Prior to commencing the work, throughout the total performance of the work when requesting payments and prior to receiving final payment, the Contractor shall provide evidence of good standing with Workplace Safety and Insurance Board of Ontario.

1.20 CONSTRUCTION
SAFETY MEASURES

.1 Observe and enforce construction safety measures required by Ontario Occupational Health and Safety Acts and Regulations for Construction Projects, Canada Labour Code Part II, Occupational Health and Safety, Workers' Compensation Board and municipal statutes and authorities and site specific Health and Safety Policies and Directives.

.2 In the event of conflict between any provisions of above authorities, the most stringent will apply.

.3 Provide and maintain guardrails, fences, barricades, lights, signs and other devices required for protection of workmen and public in accordance with the requirements of the Canada Labour Code Part II, Occupational Health and Safety, Ontario Occupational Health and Safety Act and Regulations for Construction Projects and Local by-laws. All signs shall be bilingual or CSA universal pictograms.

- .4 Ensure the safety of building personnel at all times when performing work.

PART 2 - PRODUCTS

- 2.1 NOT USED .1 Not Used.

PART 3 - EXECUTION

- 3.1 NOT USED .1 Not Used.