

1.1 DESCRIPTION OF WORK

- .1 In general, work of this contract comprises the reconfiguration of the existing space located on the 3rd floor of the Ralston Building to repurpose the existing payment counter area, reduce the number of interview rooms and provide space for the installation of additional work stations. The supply and installation of the furniture is not included as part of this project. The work shall include but is not limited to, the supply and installation of all products, services, labour, materials and equipment required to complete the project.
- .2 The site of work is: Nova Scotia Tax Service Office - Ralston Building, 1557 Hollis Street, Halifax in the province of Nova Scotia.

1.2 SITE FAMILIARIZATION

- .1 Before submitting a bid, it is recommended that bidders visit the site to review and verify the form, nature and extent of the work, materials needed, the means of access and temporary facilities required to perform the work.
- .2 Contact and obtain permission from the Departmental Representative before carrying out such site visit.

1.3 WORK SCHEDULE

- .1 Submit within 5 calendar days after contract award, a construction schedule showing commencement and completion of all work within the time stated in the accepted bid.
- .2 Provide sufficient details in Schedule to clearly illustrate the entire implementation plan to achieve completion of the work on time and to monitor efficient use of resources and the progress of work in relation to established milestones.

- .3 Work Schedule shall include:
 - .1 Bar (Gantt) Chart indicating all work activities, their anticipated duration and planned dates for achieving major milestones and;
 - .2 Written narrative for key elements of work providing sufficient information to demonstrate a reasonable implementation plan.
- .4 Schedule work in cooperation with and to the approval of the Departmental Representative.
- .5 Submit updates when requested by Departmental Representative.

1.4 WORK RESTRICTIONS

- .1 Due to Facility's operational requirements, all work must be carried out between the night time hours of 17:00PM and 07:00AM on weekdays and/or during weekends

1.5 CODES AND STANDARDS

- .1 Perform work in accordance with the National Building Code of Canada (of latest edition as adopted by the province and municipality of the work location) and any other code of provincial or local application, including all amendments up to the bid closing date, provided that in any case of conflict or discrepancy the more stringent requirement shall apply.
- .2 Perform electrical work in accordance with CSA C22.1-2006. Use only licensed electricians to carry out such work.
- .3 Materials and workmanship must meet or exceed requirements of specified standards, codes and referenced documents.

1.6 INTERPRETATION OF DOCUMENTS .1 Supplementary to the General Conditions of the Contract, the Division 01 sections take precedence over the technical specification sections in other Divisions of the Specification Manual.

1.7 TERM ENGINEER .1 Unless specifically stated otherwise, the term Engineer where used in the Specifications and on the Drawings shall mean the Departmental Representative as defined in the General Conditions of the Contract.

1.8 DOCUMENTS REQUIRED .1 Maintain at job site, one copy each of the following:
.1 Contract Drawings and Specifications
.2 Work Schedule
.3 Health and Safety Plan and other safety documents related to the Work.
.4 Shop Drawings.
.5 Change Orders
.6 Field test reports.
.7 Reports received from various inspection authorities.

1.9 PERMITS .1 Obtain and pay for building permit, compliance certificates, licenses and other applicable permits as required by municipal, provincial and federal authorities to perform the Work.
.2 Provide appropriate notifications of project to provincial and other authorities having jurisdiction.
.3 Upon request, submit copy of applications made and permits received to Departmental Representative.

1.10 PROJECT MEETINGS .1 Project meeting will be held every 2 weeks during the course of the work.

.2 Departmental Representative will arrange project meetings and assume responsibility for setting times and recording minutes.

.3 Have Superintendent and subcontractors in attendance.

1.11 SETTING OUT WORK .1 Assume full responsibility for and execute complete layout of work.

1.12 ALTERATIONS TO EXISTING BUILDING .1 Execute work with least possible interference or disturbance to Facility operations, occupants and the Public.

.2 Provide barricades, barriers and warning signs around work areas and adjacent to areas in use by Facility occupants and the Public.
.1 Signage to be professionally made with bilingual message or use internationally recognized graphic symbols.

.3 Separate work areas from other interior areas of the building. Provide dust barriers as specified.

.4 Do not block fire exits and emergency escape routes. Ensure free egress from buildings at all times during the work.

.5 Follow Departmental Representative's directives in meeting above requirements.

1.14 BUILDING SECURITY .1 Refer to Section 01 35 54. See Project Security Requirements.

1.15 TEMPORARY
FACILITIES

- .1 Existing water and power supply may be used for construction at no cost. Departmental Representative will advise of the supply location.
 - .1 Be responsible for transporting such services to work areas.
- .2 Store materials on site only in location(s) as directed by Departmental Representative.
- .3 Enclose work areas with self-supporting 1.2 metre high steel wire mesh fence. Provide bilingual construction warning signs at prominent locations. All signage to be professionally made.
- .4 Dust Barriers:
 - .1 Erect full height dust tight partitions to separate works areas from others areas of the building.
 - .2 Provide additional dust covers as required for major dust generating work to stop propagation of dust beyond work areas.
 - .3 Obtain Departmental Representative's approval beforehand on the proposed dust barrier assembly and location.
- .5 Provide sanitary facilities for work force in accordance with governing regulations and ordinances. Keep in sanitary conditions at all times.
 - .1 Assume that existing facilities at site cannot be used by workers unless directed otherwise by Departmental Representative.

1.16 HEATING AND
VENTILATION

- .1 Maintain existing heating, ventilation and air conditioning system operational within Occupied Areas during the entire course of work.
- .2 Existing heating system may be used for construction purposes.
- .3 Shut-down air distribution system in work areas from remainder of building. Seal

ductwork, exhaust diffusers and grilles in work areas to stop spread of dust and fumes to Occupied areas of Facility.

- .4 Provide suitable equipment and ventilate work areas as required to:
 - .1 Facilitate progress of work.
 - .2 Provide adequate ventilation to meet health regulations for safe working environment.
 - .3 Prevent accumulations of dust, fumes, mists, vapours or gases within building.
 - .4 Prevent harmful accumulation of hazardous substances into atmosphere.
 - .5 Dispose of exhaust materials in manner that will not result in harmful exposure to persons.
- .5 Continue operation of ventilation and exhaust system for time after cessation of work process to assure removal of harmful contaminants.
- .6 Maintain strict supervision of operation of temporary ventilating equipment to:
 - .1 Conform with applicable codes and standards.
 - .2 Enforce safe practices.
 - .3 Prevent abuse of existing services provided by Departmental Representative.

1.17 CUTTING, FITTING AND PATCHING

- .1 Execute cutting fitting and patching required to make work fit properly.
- .2 Where new work connects with existing and where existing work is altered, cut, patch and make good to match existing work.
- .3 Do not cut, bore, or sleeve load-bearing members.
- .4 Make cuts with clean, true, smooth edges. Make patches inconspicuous in final assembly.

- .5 Fit work airtight to pipes, sleeves, ducts, conduits and other services penetrating new or existing condition.
- .6 Openings made in existing fire rated walls, floors and ceilings shall be filled with purpose made, ULC approved, fire stopping materials and smoke seals.

1.18 EXISTING
SERVICES

- .1 Before commencing work, investigate and establish location and extent of concealed and buried service lines in area of work. Notify Departmental Representative of findings.
- .2 Where work involves breaking into, connecting or shutting down of existing services, obtain approval beforehand from Departmental Representative. Schedule and carryout work at time as directed by Departmental Representative with minimum of disturbance to Facility and site operations. Adhere to approved schedule and provide notice to affected parties.
- .3 Comply with electrical safety requirements specified in Section 01 35 26.
- .4 Protect, relocate or maintain existing active services as required. Where inactive services are encountered, cap off in manner approved by authority having jurisdiction over service. Record location of maintained, rerouted and abandoned service lines.

1.19 MATERIALS

- .1 Use new material and equipment unless otherwise specified.
- .2 Select and use products, adhesives and sealants which have:
 - .1 No or very low off-gassing levels.
 - .2 No or very little VOC content.

.3 Are least noxious and emit smallest amount of fumes, gases and strong odours during their cure period.

.4 Minimal chemical, physical or biological elements or agents in their composition which adversely affect human health and welfare or which degrades the environment.

.3 Provide material and equipment of specified design and quality, performing to published ratings and for which replacement parts are readily available.

.4 Use products of one manufacturer for equipment or material of same type or classification unless otherwise specified.

.5 Within 7 days of written request by Departmental Representative, submit following information for any materials and products proposed for supply:

.1 Name and Address of manufacturer.

.2 Trade Name, model and catalogue number.

.3 Performance, descriptive and test data indicating compliance with specified requirements.

.4 Manufacturer's installation or application instructions.

.5 Evidence of arrangements to procure.

.6 Evidence of manufacturer delivery problems or unforeseen delays.

.6 Obtain manufacturer's printed installation instructions and comply by such directives for installation of materials.

.7 Notify Departmental Representative in writing of any conflict between Specifications and manufacturer's instructions, so that Departmental Representative will designate which document is to be followed.

- .8 Deliver, store and protect materials on site against theft, vandalism, soiling and climatic damage. Provide additional suitable cover beyond manufacturer's packaging where required.
- .9 Touch-up factory finishes damaged by the Work. Use touch-up materials to match original. Do not paint over name plates.

1.20 FASTENERS

- .1 Provide metal fastenings and accessories in same texture, colour and finish as base metal in which they occur unless indicated otherwise. Prevent electrolytic action between dissimilar metals.
- .2 Use non-corrosive heavy duty fasteners, anchors and spacers for all fastening conditions. Space fasteners within limits of load bearing or shear capacity. Ensure positive permanent anchorage.

1.21 HAZARDOUS MATERIALS

- .1 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling and storage, and disposal of hazardous materials.
- .2 Do not leave and store flammable and hazardous materials on site. Remove of site at end of each work shift.
- .3 Keep MSDS data sheets for all products brought on site. Provide copy to Departmental Representative.
- .4 Asbestos Discovery: Demolition of spray or trowel-applied asbestos can be hazardous to health. Should material resembling spray or trowel-applied asbestos be encountered in course of work, immediately stop work and notify Departmental Representative. Do not proceed with relevant work until written instructions have been received from Departmental Representative.

1.22 ENVIRONMENTAL
PROTECTION

- .1 Have appropriate emergency spill response equipment and rapid clean-up kit on site. Provide personal protective equipment required for clean-up.
- .2 Report all spills of petroleum, hazardous materials and accidents having potential of polluting the environment to Federal and Provincial Department of the Environment and to the Departmental Representative.

1.23 INSPECTION
AND TESTING

- .1 Give timely notice requesting inspection of work designated for inspections, special tests or approvals by Departmental Representative or by inspection authorities having jurisdiction.
- .2 In accordance with the General Conditions, Departmental Representative may order any part of work to be examined if work is suspected to be not in accordance with Contract Documents.
- .3 Rejected Work: removal and replace defective work, whether result of poor workmanship, use of defective or damaged products and whether incorporated in work or not, which has been identified by Departmental Representative as failing to conform to Contract Documents.
- .4 Tests on materials and equipment, is the responsibility of the Contractor except where specified otherwise.
 - .1 Provide all necessary instruments, equipment and qualified personnel to perform tests.
 - .2 At completion of tests, turn over two sets of fully documented tests reports to the Departmental Representative.
- .5 Unspecified tests may also be made by Departmental Representative. The costs of

these tests will be paid for by the
Departmental Representative.

- .6 Where tests or inspection reveal work not in accordance with the Contract, the Contractor shall bear the cost of additional tests and inspections incurred by Departmental Representative as required to verify the acceptability of corrected work.
- .7 If Contractor covers or permits to be covered work designated for special tests, inspections or approvals before such is made, uncover work until particular inspections or tests have been fully and satisfactorily completed and until such time as Departmental Representative gives permission to proceed. Pay costs to uncover and make good such work.

1.24 CLEANING

- .1 As work progresses, maintain work areas and site in a tidy, clean and dust free condition at all times.
- .2 Provide on-site containers for placement of waste and debris. Loose and scattered waste, debris and materials will not be allowed on site.
- .3 Remove and dispose of waste and debris off site at end of each workday.
- .4 Clean interior of building used by workers and dirtied by work.
 - .1 Wash walls, floors and other surfaces as needed.
 - .2 Vacuum carpets.
 - .3 Dust all furnishings.
- .5 At project completion, conduct final cleaning of areas affected by work.
 - .1 Remove dust and dirt from all surfaces with recommended cleaning agents.
 - .2 Wash and polish finish surfaces.
 - .3 Wash clean pavements, rake clean grassed areas used.

- .6 Use competent persons experienced in commercial cleaning operations.
- .7 Meager attempt at controlling dust and ineffective cleaning will not be tolerated.
 - .1 Failure to provide effective dust control and/or perform proper cleaning by the Contractor will result in the Departmental Representative to proceed and obtain an independent commercial cleaning agency to perform all required cleaning to the satisfaction of the Facility tenant for which the costs will be charged to the Contractor in the form of a financial assessment against the Contract.

1.25 WASTE MANAGEMENT

- .1 Dispose of waste, debris and product packaging in accordance with municipal and provincial laws and regulations.
- .2 Plan work to minimize waste, maximize reuse and recycling of materials and to divert the greatest amount of waste from being disposed into landfill sites.
- .3 Separate waste, debris, leftover material, redundant equipment and product packaging at source, place into pre-planned waste categories during the course of the work and send to recycling facilities to maximum extent possible.
- .4 Store, handle and dispose of hazardous waste in accordance with applicable federal, provincial and municipal laws, regulations, codes and guidelines.
- .5 Upon request, submit written list of items salvaged and sent to recycling facility

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| <p>1.26 COST
<u>BREAKDOWN</u></p> | <p>.1 Before submitting first progress claim, submit a breakdown of the contract price in format and detail as directed by Departmental Representative.</p> |
| <p><u>1.27 ACCEPTANCE</u></p> | <p>.1 Notify Departmental Representative in writing when work is complete and ready for final inspection.
 .1 Make a check of all work and correct all discrepancies, defects and outstanding work before sending notification.</p> <p>.2 Accompany Departmental Representative during final inspection.</p> <p>.3 Rectify all defects, faults and outstanding items identified by Departmental Representative during inspection.</p> |

1.1 SUBMITTALS

- .1 Upon acceptance of bid and prior to commencement of work, submit to Departmental Representative the following work management documents:
 - .1 Work Schedule as specified herein.
 - .2 Shop Drawing Submittal Schedule specified in section 01 33 00
 - .3 Waste Management Plan specified in section 01 74 22
 - .4 Health and Safety Plan specified in section 01 35 29
 - .5 List of workers requiring security clearance and those to be placed on Site Security Control list as specified in section 01 35 54.

1.2 WORK SCHEDULE

- .1 Upon acceptance of bid submit:
 - .1 Detailed work schedule within 14 calendar days of contract award.
- .2 Schedule to indicate all calendar dates from commencement to completion of all work within the time stated in the accepted bid.
- .3 Provide sufficient details in schedule to clearly illustrate entire implementation plan, depicting efficient coordination of tasks and resources, to achieve completion of work on time and permit effective monitoring of work progress in relation to established milestones.
- .4 Detailed Work Schedule:
 - .1 Prepare by use of Critical Path Method (CPM) indicating:
 - .1 Complete and detailed sequence of all construction activities. Show projected start and completion dates for each activity.
 - .2 Number of calendar days required to carryout each activity.

- .3 Critical path items with resulting critical dates, non-critical activities and resulting float time.
- .4 Actual workdays from non-working days such as weekend and statutory days etc...
- .5 Projected and actual percentage of work completed for each major work activity.
- .2 Prepare CPM schedule by use of well recognized and widely used electronic software. Submit copy of schedule in paper format and one electronic version on diskette for each submission.
- .3 Accompany CPM with written narrative as required and in sufficient detail to fully describe work and demonstrate a reasonable implementation plan for completion of project within designated time.
- .5 Work schedule must take into consideration and reflect the work phasing, required sequence of work, special conditions and operational restrictions as specified below and indicated on drawings.
- .6 Schedule work in cooperation with the Departmental Representative.
- .7 Completed schedule shall be approved by Departmental Representative. When approved, take necessary measures to complete work within scheduled time. Do not change schedule without Departmental Representative's approval.
- .8 Ensure that all subtrades and subcontractors are made aware of the work restraints and operational restrictions specified.
- .9 Schedule Updates:

.1 Submit when requested by Departmental Representative.

.2 Provide information and pertinent details explaining reasons for necessary changes to implementation plan.

.3 Identify problem areas, anticipated delays, impact on schedule and proposed corrective measures to be taken.

.10 Departmental Representative will make interim reviews and evaluate progress of work based on approved schedule. Frequency of such reviews will be as decided by Departmental Representative. Address and take corrective measures on items identified by reviews and as directed by Departmental Representative. Update schedule accordingly.

.11 In every instance, change or deviation from the Work Schedule, no matter how minimal the risk or impact on safety or inconvenience to tenant or public might appear, will be subject to prior review and approval by the Departmental Representative.

1.3 PROJECT PHASING

.1 Be aware that Facility and tenants must be kept operational for the full duration of work of this contract. Building services to areas under use by tenants must also be maintained at all times during the Facility's operational hours and as specifically defined in operational restrictions specified in this section.

.2 Perform Work of this contract in one phase.

1.4 OPERATIONAL RESTRICTIONS

.1 The Contractor must recognize that building occupants will be affected by implementation of this contract. The Contractor must perform the work with

utmost regard to the safety and convenience of building occupants and users. All work activities must be planned and scheduled with this in mind. The Contractor will not be permitted to disturb any portion of the building without providing temporary facilities as necessary to ensure safe and direct passage through disturbed or otherwise affected areas.

- .2 Contractor to meet with the Departmental Representative on a weekly basis to identify intended work areas, activities and scheduling for the coming week.
- .3 To assure that construction work may proceed productively without risk to safety of building occupants and the public, and due to the nature of the tenant's operation be aware that all work of this contract must be carried out during "Off-Hours".
- .4 Off Hours: means a period of time which is outside the daily operational hours of the tenants of the Facility. For the purposes of this contract, Off-Hours are defined as follows:
 - .1 Weeknight Off-Hours: between the hours of 17:00 and 07:00 for each weekday Monday to Thursday inclusive.
 - .2 Weekend Off-Hours: between the hours of 17:00 Friday evening to 07:00 Monday morning.
 - .3 Dependent on the nature and location of the construction activity and due to an unanticipated operational requirement of the Tenant, certain off-hour periods may be redefined by adjusting the start and end time periods or cancellation of a specific off-hour workshift during the course of the Work.
- .5 Ensure that all trades are aware of the

"Off-Hour" requirements of this contract and ensure that any extra costs incurred as a result is included in the Contractor's bid price for the work. No extra cost will be paid due to failure by General Contractor or his sub-contractors to recognize the off-hour requirements and other restrictions specified herein and to include all necessary allowances within their bids.

- .6 See section 01 35 54 in regards to:
 - .1 Special security requirements which must be observed in the course of work.
 - .2 Provision of security personnel will be provided by Owner.
- .7 Facility circulation maintained:
 - .1 Ensure that entrances, corridors, stairwells, fire exits and other circulation routes are maintained free and clear providing safe and uninterrupted passage for Facility users and public at all times during the entire work.
 - .2 Maintain those areas clean and free of construction materials and equipment. Provide temporary dust barriers and other suitable enclosures to ensure users are not exposed to construction activities and are protected from exposure to dust, noise and hazardous conditions.
 - .3 Provide temporary corridors, walkways, passageways, access to offices, etc... when required due to nature of work. Such circulation routes must be constructed to barrier free requirements unless approved otherwise by Departmental Representative.
 - .4 Maintain fire escape routes accessible and fire fighting access open all times for the duration of the project.
 - .5 Do not under any circumstances block fire exit doors. Do not leave construction materials or debris in corridors, stairwells building entrances and exits.

.8 Safety Signage:

.1 Provide on site, and erect as required during progress of work, proper bilingual signage, mounted on self-supporting stands, warning the public and building occupants of construction activities in progress and alerting need to exercise caution in proceeding through disturbed areas of the facility, and directing building occupants through any detours which may be required.

.2 Signage to be professionally printed and mounted on wooden backing, coloured and to express messages as directed by the Departmental Representative.

.3 Generally maximum size of sign should be in the order of 1.0 square meters. Number of signs required will be dependent on number of areas in facility under renovation at any one time.

.4 Include costs for the supply and installation of these signs in the bid price.

.9 Dust and Dirt Control:

.1 See section 01 74 11 for dust control and cleaning requirements.

.2 Effectively plan and implement dust control measures and cleaning activities as an integral part of all construction activities. Review all measures with the Departmental Representative before undertaking work, especially for major dust generating activities.

.3 Do not allow demolition debris and construction waste to accumulate on site and contribute to the propagation of dust.

.4 As work progresses, maintain construction areas in a tidy condition at all times. Remove gross dust accumulations by cleaning and vacuuming immediately following the completion of any major dust generating activity.

.5 Immediately remove all debris and

dust from within occupied areas as generated by work therein during a given workshift.

.6 Disconnect and seal-off ductwork of HVAC servicing the construction area to stop spread of dust into other areas of Facility.

.7 Avoid situations and practises which results in dust and dirt being brought from the construction areas or from the exterior and tracked inside the building.

.8 Stop workers with soiled footwear from entering building. This includes roofing mechanics and heavy civil workers.

.9 Inform workers and make them sensitive to the need for dust and dirt control. Stringently enforce rules and regulations, immediately address non-compliance.

.10 Keep access doors to work areas closed at all times. Use only designated doors for entry or egress.

.10 Work in Occupied Areas:

.1 Where work must be carried out in an occupied area beyond the boundaries of the enclosed construction site, perform such work during the non-operational off-hour periods of the Facility.

.2 Ensure that all dust, dirt, debris, construction waste, materials, tools and equipment are completely removed at the end of each workshift. Clean and reinstate area ready for daytime use by tenant.

.3 Provide temporary dust barriers around immediate work areas and place fabric drop sheets over workstations, equipment and other furnishings located immediately adjacent to such work.

.4 Conduct work in such a way as to minimize the creation of dust and to avoid contaminating areas beyond the immediate location.

.5 Discuss and obtain Departmental Representative's approval beforehand on

the type and extent of dust barriers, protective devices and measures needed.

.6 Be responsible for temporarily moving office furnishings, workstations, computer equipment and other objects as needed to gain access and conduct work. Reinstall all dislocated items at end of each workshift making the area operational again.

.7 Disconnect and reconnect any power and communications systems feeding workstations as required.

.8 Clean such areas as well as those corridors and routes used to gain entry and access.

.11 Cleaning of tenant occupied areas used by Contractor:

.1 Clean lobbies, corridors, stairs and other circulation routes used by workers to gain access to work by conducting cleaning, vacuuming and washing of floors, walls and other soiled surfaces.

.2 Meager attempts at controlling dust and ineffective unprofessional cleaning procedures will not be tolerated.

.3 Failure to provide effective dust control, allowing construction dust and dirt to escape beyond construction areas and contaminate occupied areas and building circulation areas will result in Contractor being ordered to immediately provide professional cleaning services without delay to remedy the situation and conduct all cleaning to the extent as determined by Departmental Representative. Alternatively, Departmental Representative may, at certain times and at own discretion, obtain the services of an independent building cleaning agency when cleaning being provided by Contractor is ineffective or tardy in response. Costs of such services will be charged against Contractor in the form of financial penalties or holdback assessments against

the Contract.

- .12 Ensure that all sub-trades are made aware of and abide by the contents of this section and in particular the work restrictions specified herein due to tenant operational requirements.

1.5 PROJECT MEETINGS

- .1 Schedule and administer project meetings, held on a minimum bi-weekly basis, for entire duration of work and more often when directed by Departmental Representative as deemed necessary due to progress of work or particular situation.
- .2 Prepare agenda for meetings.
- .3 Notify participants in writing 5 days in advance of meeting date.
 - .1 Ensure attendance of all subcontractors.
 - .2 Departmental Representative will provide list of other attendees to be notified.
- .4 Hold meetings at project site or where approved by Departmental Representative.
- .5 Preside at meetings and record minutes.
 - .1 Indicate significant proceedings and decisions. Identify action items by parties.
 - .2 Distribute to participants by mail or by facimile within 2 calendar days after each meeting.
 - .3 Make revisions as directed by Departmental Representative.
- .4 Departmental Representative will advise whether submission of minutes by Email is acceptable. Decision will be based on compatibility of software among

participants.

1.6 WORK
COORDINATION

- .1 The General Contractor is responsible for coordinating the work of the various trades and predetermining where the work of such trades interfaces with each other.
 - .1 Designate one person from own employ having overall responsibility to review contract documents and shop drawings, plan and manage such coordination.
- .2 The General Contractor shall convene meetings between trades whose work interfaces and ensure that they are fully aware of the areas and the extent of where interfacing is required.
 - .1 Provide each trade with the plans and specs of the interfacing trade, as required, to assist them in planning and carrying out their respective work.
 - .2 Develop coordination drawings when deemed required illustrating potential interference between work of various trades and distribute to all affected parties including structural trade.
 - .1 Pay particularly close attention to overhead work above ceilings and within or near to building structural elements.
 - .2 Coordination drawings to identify all building elements, services lines, rough-in points and indicate from where various services are coming.
 - .3 Review coordination drawings at purposely called meetings. Have subcontractors sign-off on drawings and publish minutes of each meeting.
 - .4 Plan and coordinate work in such a way to minimize quantity of service line offsets.
 - .5 Submit copy of coordination drawings and meeting minutes to Departmental Representative for information purposes.

- .3 Submission of shop drawings and ordering of prefabricated equipment or prebuilt components shall only occur once coordination meeting for such items has taken place between trades and all conditions affecting the work of the interfacing trades has been made known and accounted for.
- .4 Work Cooperation:
 - .1 Ensure cooperation between trades in order to facilitate the general progress of the work and avoid situations of spatial interference.
 - .2 Ensure that each trade provides all other trades reasonable opportunity for the completion of the work and in such a way as to prevent unnecessary delays, cutting, patching and the need to remove and replace completed work.
- .5 No extra costs to the Contract will be considered by the Departmental Representative as a result of Contractor's failure to effectively coordinate all portions of the Work. Disputes between the various trades as a result of their not being informed of the areas and extent of interface work shall be the sole responsibility of the General Contractor to be resolved at own cost.

1.1 SUBMITTAL
GENERAL REQUIREMENTS

- .1 Submit shop drawings, product data, samples and other items specified for review by Departmental Representative.
- .2 Submit sufficient copies for own use plus 3 copies which will be kept by Departmental Representative.
 - .1 Include additional copies for insertion into the O & M manuals specified in section 01 78 00.
- .3 Accompany data with transmittal letter identifying project name, project number, Contractor's name and address, supplier name, description of items and quantity of drawings/data being submitted.
- .4 Allow 14 calendar days for review of shop drawings by Departmental Representative.
- .5 Do not proceed with work applicable to shop drawing item until relevant submission has been reviewed by Departmental Representative.
- .6 Submit with reasonable promptness and in orderly sequence so as to allow for Departmental Representative's review and not cause delay in Work. Failure to submit in ample time will not be considered sufficient reason for an extension of Contract time and no claim for extension by reason of such default will be allowed.
- .7 Present data, dimensions and engineering values in SI Metric units.
- .8 Review submittals prior to submission. Ensure that all requirements have been addressed, field dimensions and data have been taken and submittal has been checked and coordinated with work of contract documents.

- .9 Stamp and sign each item of submittal certifying contractor's review and verification of submitted data.
- .10 Submittals not stamped and signed will be returned unexamined by Departmental Representative and considered rejected.

1.2 SHOP DRAWINGS

- .1 The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, technical product data, brochures and other data which are to be provided by Contractor to illustrate details of a portion of work.
- .2 Shop Drawings Content:
 - .1 Indicate materials, methods of construction, attachment, connections, explanatory notes and other information necessary for completion of work. Where items attach or connect to other items, confirm that all interrelated work has been coordinated, regardless of section or trade from which the adjacent work is being supplied and installed.
 - .2 Supplement manufacturer's standard drawings and literature with additional information to provide details applicable to project.
- .3 Shop Drawings Format:
 - .1 Opaque white prints or photocopies of original drawings or standard drawings modified to clearly illustrate work specific to project requirements. Maximum sheet size to be 1000 x 707 mm.
 - .2 Product data from manufacturer's standard catalogue sheets, brochures, literature, performance charts and diagrams, used to illustrate standard manufactured products, to be original full colour brochures, clearly marked indicating applicable data and deleting information not applicable to project.

- .3 Non or poorly legible drawings, photocopies or facsimiles will not be accepted and returned not reviewed.
- .4 Delete information not applicable to project on all submittals.
- .5 Adjustments or corrections made on shop drawings by Departmental Representative are not intended to change contract price. If adjustments affect value of work, advise Departmental Representative in writing prior to proceeding with work.
- .6 After Departmental Representative's review, distribute copies.
- .7 The review of shop drawings by Departmental Representative or by a Consultant or designated person so authorized by the Departmental Representative, is for sole purpose of ascertaining conformance with general concept. This review shall not mean that Canada approves the detail design inherent in the shop drawings, responsibility for which shall remain with Contractor submitting same, and such review shall not relieve Contractor of responsibility for errors or omissions in shop drawings or of responsibility for meeting all requirements of the construction and Contract Documents. Without restricting generality of foregoing, Contractor is responsible for dimensions to be confirmed and correlated at job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for co-ordination of Work of all sub-trades.

1.3 SAMPLES

- .1 Submit samples for items specified in trade sections. Label with origin and intended use.

- .2 Deliver samples to Departmental Representative's office. Do not drop off samples at construction site except for special circumstances pre-approved by Departmental Representative.
- .3 Notify Departmental Representative in writing, at time of submission of deviations in samples from requirements of Contract Documents.

1.1 ELECTRICAL
SAFETY

- .1 Ensure electrical power and other source of energy to equipment and electrical facilities are effectively disconnected and locked out before proceeding with work on such items.
- .2 Locate power source, isolate and lockout service feed and provide a guarantee of isolation to worker(s) before commencing any electrical work.
 - .1 Conduct hazard assessment as part of process.
- .3 Develop and implement lockout procedures, complete with the use of lockout tags, to be followed on site to ensure that electrical power and other sources of energy are effectively disconnected and locked out in accordance with Canadian Electrical Code and Provincial and Federal health and safety regulations.
 - .1 Contractor's Superintendent shall issue and control the distribution of lockout tags to workers for each lockout event.
- .4 Submit Contractor's written lockout procedures and sample of lockout tag to be used on project to Departmental Representative.
- .5 Obtain Departmental Representative's approval before disconnecting existing services to ensure minimum disruption to Facility operations.

1.2 FIRE SAFETY

- .1 Abide by National Fire Code of Canada and fire protections standards FCC 301 and FCC 302 published by Fire Protection Services, Labour Program Division of Service Canada.
- .2 FCC standards may be viewed at the following web site:
 - .1 <http://www.hrsdc.gc.ca/en/lp/lo/fp/>

standards/commissioner.shtml

- .3 Obtain approval from Departmental Representative before conducting Hot Work inside or adjacent to building.
- .4 Hot Work defined as:
 - .1 Welding
 - .2 Use of torch or other open flamed device
 - .3 Grinding with equipment which produces sparks
- .5 Approval will be given upon receipt and confirmation that the following procedures shall be carried out by the Contractor:
 - .1 Hazard assessment for each hot work event and location.
 - .2 Fire safety procedures and work practices will be implemented and stringently followed for each event.
 - .3 Use of a hot work permit system, issued by Contractor's Superintendent to worker conducting the hot work.
 - .4 Fire watch by a designated person for a minimum of 1 hour immediately upon completion of the hot work.
- .6 Submit Contractor's written fire safety procedures and practises to be used on project to Departmental Representative.

1.3 FIRE PROTECTION AND ALARM SYSTEMS

- .1 Fire protection and alarm systems shall not be:
 - .1 Obstructed.
 - .2 Shut-off, unless approved by Departmental Representative.
 - .3 Left inactive at the end of a working day or shift.
- .2 Do not use fire hydrants, standpipes and hose systems for purposes other than fire fighting.

- .3 Any costs incurred from the fire department and charged to the Facility owner resulting from negligently setting off false alarms will be transferred to the Contractor in the form of financial holdback assessment against the Contract.

1.4 DOCUMENTS ON SITE

- .1 Keep copy of Lockout tags, Hot Work Permits and Hazard assessment documentation on site for duration of Work.
- .2 Upon request, make available to Departmental Representative or to authorized safety Representative for inspection.

- 1.1 RELATED WORK .1 Section 01 35 26: Electrical and Fire Safety Requirements.
- 1.2 DEFINITIONS .1 COSH: Canada Occupational Health and Safety Regulations made under Part II of the Canada Labour Code.
- .2 Competent Person: means a person who is:
- .1 Qualified by virtue of personal knowledge, training and experience to perform assigned work in a manner that will ensure the health and safety of persons in the workplace, and;
- .2 Knowledgeable about the provisions of occupational health and safety statutes and regulations that apply to the Work and;
- .3 Knowledgeable about potential or actual danger to health or safety associated with the Work.
- .3 Medical Aid Injury: any minor injury for which medical treatment was provided and the cost of which is covered by Workers' Compensation Board of the province in which the injury was incurred.
- .4 PPE: personal protective equipment
- .5 Work Site: where used in this section shall mean areas, located at the premises where Work is undertaken, used by Contractor to perform all of the activities associated with the performance of the Work.
- 1.3 SUBMITTALS .1 Make submittals in accordance with Section 01 33 00.
- .2 Submit site-specific Health and Safety Plan prior to commencement of Work.
- .1 Submit within 15 work days of notification of Bid Acceptance. Provide 3 copies.
- .2 Departmental Representative will review Health and Safety Plan and provide comments.
- .3 Revise the Plan as appropriate and resubmit within 5 work days after receipt of comments.
- .4 Departmental Representative's review and comments made of the Plan shall not be construed as an endorsement, approval or implied warranty of any kind by Canada and does not reduce Contractor's overall responsibility for Occupational Health and Safety of the Work.
- .5 Submit revisions and updates made to the Plan

during the course of Work.

- .3 Submit name of designated Health & Safety Site Representative and support documentation specified in the Safety Plan.
- .4 Submit building permit, compliance certificates and other permits obtained.
- .5 Submit copy of Letter in Good Standing from Provincial Workers Compensation or other department of labour organization.
 - .1 Submit update of Letter of Good Standing whenever expiration date occurs during the period of Work.
- .6 Submit copies of reports or directions issued by Federal, Provincial and Territorial health and safety inspectors.
- .7 Submit copies of incident reports.
- .8 Submit WHMIS MSDS - Material Safety Data Sheets.

1.4 COMPLIANCE REQUIREMENTS

- .1 Comply with Occupational Health and Safety Act for Province of Nova Scotia, and Regulations made pursuant to the Act.
- .2 Comply with Canada Labour Code - Part II (entitled Occupational Health and Safety) and the Canada Occupational Health and Safety Regulations (COSH) as well as any other regulations made pursuant to the Act.
 - .1 The Canada Labour Code can be viewed at:
[www.http://laws.justice.gc.ca/en/L-2/](http://laws.justice.gc.ca/en/L-2/)
 - .2 COSH can be viewed at:
[www.http://laws.justice.gc.ca/eng/SOR-86-304/n e .html](http://laws.justice.gc.ca/eng/SOR-86-304/n_e.html)
 - .3 A copy may be obtained at: Canadian Government Publishing Public Works & Government Services Canada Ottawa, Ontario, K1A 0S9 Tel: (819) 956-4800 (1-800-635-7943) Publication No. L31-85/2000 E or F)
- .3 Observe construction safety measures of:
 - .1 Part 8 of National Building Code
 - .2 Municipal by-laws and ordinances.
- .4 In case of conflict or discrepancy between above specified requirements, the more stringent shall apply.

- .5 Maintain Workers Compensation Coverage in good standing for duration of Contract. Provide proof of clearance through submission of Letter in Good Standing.
- .6 Medical Surveillance: Where prescribed by legislation or regulation, obtain and maintain worker medical surveillance documentation.

1.5 RESPONSIBILITY

- .1 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons and environment adjacent to the site to extent that they may be affected by conduct of Work.
- .2 Comply with and enforce compliance by all workers, sub-contractors and other persons granted access to Work Site with safety requirements of Contract Documents, applicable federal, provincial, and local by-laws, regulations, and ordinances, and with site-specific Health and Safety Plan.

1.6 SITE CONTROL AND ACCESS

- .1 Control the Work and entry points to Work Site. Approve and grant access only to workers and authorized persons. Immediately stop and remove non-authorized persons.
 - .1 Departmental Representative will provide names of those persons authorized by Departmental Representative to enter onto Work Site and will ensure that such authorized persons have the required knowledge and training on Health and Safety pertinent to their reason for being at the site, however, Contractor remains responsible for the health and safety of authorized persons while at the Work Site.
- .2 Isolate Work Site from other areas of the premises by use of appropriate means.
 - .1 Erect fences, hoarding, barricades and temporary lighting as required to effectively delineate the Work Site, stop non-authorized entry, and to protect pedestrians and vehicular traffic around and adjacent to the Work and create a safe environment.
 - .2 Post signage at entry points and other strategic locations indicating restricted access and conditions for access.

.3 Use professionally made signs with bilingual message in the 2 official languages or international known graphic symbols.

.3 Provide safety orientation session to persons granted access to Work Site. Advise of hazards and safety rules to be observed while on site.

.4 Ensure persons granted site access wear appropriate PPE. Supply PPE to inspection authorities who require access to conduct tests or perform inspections.

.5 Secure Work Site against entry when inactive or unoccupied and to protect persons against harm. Provide security guard where adequate protection cannot be achieved by other means.

1.7 PROTECTION

.1 Give precedence to safety and health of persons and protection of environment over cost and schedule considerations for Work.

.2 Should unforeseen or peculiar safety related hazard or condition become evident during performance of Work, immediately take measures to rectify situation and prevent damage or harm. Advise Departmental Representative verbally and in writing.

1.8 FILING OF NOTICE

.1 File Notice of Project with pertinent provincial health and safety authorities prior to beginning of Work.
.1 Departmental Representative will assist in locating address if needed.

1.9 PERMITS

.1 Post permits, licenses and compliance certificates, specified in section 01 10 10, at Work Site.

.2 Where a particular permit or compliance certificate cannot be obtained, notify Departmental Representative in writing and obtain approval to proceed before carrying out applicable portion of work.

1.10 HAZARD ASSESSMENTS

.1 Perform site specific health and safety hazard assessment of the Work and its site.

.2 Carryout initial assessment prior to commencement of Work with further assessments as needed during progress

of work, including when new trades and subcontractors arrive on site.

- .3 Record results and address in Health and Safety Plan.
- .4 Keep documentation on site for entire duration of the Work.

1.11 PROJECT/SITE CONDITIONS

- .1 Following are potential health, environmental and safety hazards at the site for which Work may involve contact with:
 - .1 Existing hazardous substances or contaminated building materials:
 - .1 Asbestos building components.
- .2 Above items shall not be construed as being complete and inclusive of potential health and safety hazards encountered during Work.
- .3 Include above items in the hazard assessment of the Work.
- .4 MSDS Data sheets of pertinent hazardous and controlled products stored on site can be obtained from Departmental Representative.

1.12 MEETINGS

- .1 Attend pre-construction health and safety meeting, convened and chaired by Departmental Representative, prior to commencement of Work, at time, date and location determined by Departmental Representative. Ensure attendance of:
 - .1 Superintendent of Work
 - .2 Designated Health & Safety Site Representative
 - .3 Subcontractors
- .2 Conduct regularly scheduled tool box and safety meetings during the Work in conformance with Occupational Health and Safety regulations.
- .3 Keep documents on site.

1.13 HEALTH AND SAFETY PLAN

- .1 Prior to commencement of Work, develop written Health and Safety Plan specific to the Work. Implement, maintain, and enforce Plan for entire duration of Work and until final demobilization from site.

- .2 Health and Safety Plan shall include the following components:
 - .1 List of health risks and safety hazards identified by hazard assessment.
 - .2 Control measures used to mitigate risks and hazards identified.
 - .3 On-site Contingency and Emergency Response Plan as specified below.
 - .4 On-site Communication Plan as specified below.
 - .5 Name of Contractor's designated Health & Safety Site Representative and information showing proof of his/her competence and reporting relationship in Contractor's company.
 - .6 Names, competence and reporting relationship of other supervisory personnel used in the Work for occupational health and safety purposes.
- .3 On-site Contingency and Emergency Response Plan shall include:
 - .1 Operational procedures, evacuation measures and communication process to be implemented in the event of an emergency.
 - .2 Evacuation Plan: site and floor plan layouts showing escape routes, marshalling areas. Details on alarm notification methods, fire drills, location of fire fighting equipment and other related data.
 - .3 Name, duties and responsibilities of persons designated as Emergency Warden(s) and deputies.
 - .4 Emergency Contacts: name and telephone number of officials from:
 - .1 General Contractor and subcontractors.
 - .2 Pertinent Federal and Provincial Departments and Authorities having jurisdiction.
 - .3 Local emergency resource organizations.
 - .5 Harmonize Plan with Facility's Emergency Response and Evacuation Plan. Departmental Representative will provide pertinent data including name of PWGSC and Facility Management contacts.
- .4 On-site Communication Plan:
 - .1 Procedures for sharing of work related safety information to workers and subcontractors, including emergency and evacuation measures.
 - .2 List of critical work activities to be communicated with Facility Manager which have a risk of endangering health and safety of Facility users.
- .5 Address all activities of the Work including those of subcontractors.

- .6 Review Health and Safety Plan regularly during the Work. Update as conditions warrant to address emerging risks and hazards, such as whenever new trade or subcontractor arrive at Work Site.
- .7 Departmental Representative will respond in writing, where deficiencies or concerns are noted and may request re-submission of the Plan with correction of deficiencies or concerns.
- .8 Post copy of the Plan, and updates, prominently on Work Site.

1.14 SAFETY SUPERVISION

- .1 Employ Health & Safety Site Representative responsible for daily supervision of health and safety of the Work.
- .2 Health & Safety Site Representative may be the Superintendent of the Work or other person designated by Contractor and shall be assigned the responsibility and authority to:
 - .1 Implement, monitor and enforce daily compliance with health and safety requirements of the Work
 - .2 Monitor and enforce Contractor's site-specific Health and Safety Plan.
 - .3 Conduct site safety orientation session to persons granted access to Work Site.
 - .4 Ensure that persons allowed site access are knowledgeable and trained in health and safety pertinent to their activities at the site or are escorted by a competent person while on the Work Site.
 - .5 Stop the Work as deemed necessary for reasons of health and safety.
- .3 Health & Safety Site Representative must:
 - .1 Be qualified and competent person in occupational health and safety.
 - .2 Have site-related working experience specific to activities of the Work.
 - .3 Be on Work Site at all times during execution of the Work.
- .4 All supervisory personnel assigned to the Work shall also be competent persons.
- .5 Inspections:
 - .1 Conduct regularly scheduled safety inspections of the Work on a minimum bi-weekly basis. Record deficiencies and remedial action taken.

- .6 Cooperate with Facility's Occupational Health and Safety representative should one be designated by Departmental Representative.
- .7 Keep inspection reports and supervision related documentation on site.

1.15 TRAINING

- .1 Use only skilled workers on Work Site who are effectively trained in occupational health and safety procedures and practices pertinent to their assigned task.
- .2 Maintain employee records and evidence of training received. Make data available to Departmental Representative upon request.
- .3 When unforeseen or peculiar safety-related 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 Province having jurisdiction and advise Departmental Representative verbally and in writing.

1.16 MINIMUM SITE SAFETY RULES

- .1 Notwithstanding requirement to abide by federal and provincial health and safety regulations; ensure the following minimum safety rules are obeyed by persons granted access to Work Site:
 - .1 Wear appropriate PPE pertinent to the Work or assigned task; minimum being hard hat, safety footwear, safety glasses and hearing protection.
 - .2 Immediately report unsafe condition at site, near-miss accident, injury and damage.
 - .3 Maintain site and storage areas in a tidy condition free of hazards causing injury.
 - .4 Obey warning signs and safety tags.
- .2 Brief persons of disciplinary protocols to be taken for non compliance. Post rules on site.

1.17 CORRECTION OF NON-COMPLIANCE

- .1 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 will stop Work if non-compliance of health and safety regulations is not corrected in a timely manner.

1.18 INCIDENT REPORTING

- .1 Investigate and report the following incidents to Departmental Representative:
 - .1 Incidents requiring notification to Provincial Department of Occupational Safety and Health, Workers Compensation Board or to other regulatory Agency.
 - .2 Medical aid injuries.
 - .3 Property damage in excess of \$10,000.00,
 - .4 Interruptions to Facility operations resulting in an operational lost to a Federal department in excess of \$5000.00.
- .2 Submit report in writing.

1.19 HAZARDOUS PRODUCTS

- .1 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS).
- .2 Keep MSDS data sheets for all products delivered to site.
 - .1 Post on site.
 - .2 Submit copy to Departmental Representative.
 - .3 For interior work in an occupied Facility, post additional copy in one or more publically accessible locations.

1.20 BLASTING

- .1 Blasting or other use of explosives is not permitted on site.

1.21 POWDER ACTUATED DEVICES

- .1 Use powder actuated fastening devices only after receipt of written permission from Departmental Representative.

1.22 CONFINED SPACES

- .1 Abide by occupational health and safety regulations regarding work in confined spaces.

1.23 SITE RECORDS

.1 Maintain on Work Site copy of safety related documentation and reports stipulated to be produced in compliance with Acts and Regulations of authorities having jurisdiction and of those documents specified herein.

.2 Upon request, make available to Departmental Representative or authorized Safety Officer for inspection.

1.24 POSTING OF DOCUMENTS

.1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on Work Site in accordance with Acts and Regulations of Province having jurisdiction.

.2 Post other documents as specified herein, including:
.1 Site specific Health and Safety Plan
.2 WHMIS data sheets

1.1 GENERAL

- .1 Due to nature of this Facility, and client operations therein, security regulations pertaining to site will be in place during the work resulting in need for:
 - .1 Control and limit movement of construction workers inside building;
 - .2 Escort and continuous supervision of workers by security personnel;
 - .3 Workers must undergo a security clearance process;
 - .4 Specific rules and regulations as specified in this section and as directed by the Departmental Representative to be stringently followed.
- .2 It is the Contractor's responsibility to:
 - .1 Submit necessary documentation required and obtain security clearances for all workers;
 - .2 Become familiar with and abide by security rules and regulations;
 - .3 Brief all workers and subcontractors in respect of the security regulations and ensure that they abide by all rules and directives.
- .3 The Departmental Representative will coordinate a pre-construction meeting between Contractor, Facility Management and Security Personnel who will provide details and directives on control and movement on site.
- .4 Any infraction of site security regulations on the part of the Contractor, members of work force or any Subcontractor in his employ, could result in:
 - .1 Financial penalties in the form of progress payment reduction or holdback assessments being levied against the Contractor and;
 - .2 Demand immediate removal of offending party from the site.

1.2 SECURITY
PERSONNEL

- .1 The Owner will obtain and pay for the services of security personnel, employed by the Canadian Corps of Commissionaires to provide escort and security supervision of all workers during the work of this contract.
- .2 Commissionaires employed on this project will have a current Enhanced Security Clearance status issued by PWGSC.
- .3 The Owner will provide minimum of 2 Commissionaire to be on site at all times when work is carried out, having the following responsibilities:
 - .1 Limit movement of workers to within the boundaries established by the Departmental Representative for each work phase;
 - .2 Maintain security control list of workers authorized to be on site as determined by Contractor and the Departmental Representative;
 - .3 Manage the distribution and control of worker ID tags;
 - .4 Escort workers who need to circulate on site beyond the established boundaries of work, including the corridors, stairwells and elevators used for access to and from work areas.
 - .5 Escort and supervise short term visitors who need access to the work site such as for material deliveries or to conduct inspections.
- .4 The Owner will provide additional commissionaires when required to perform supervision or escort function as may be needed due to Contractor's work operations in order that no worker is left unsupervised on site beyond main lobby.
- .5 Commissionaires will be present on site for entire workshift including workbreaks and time period after workshifts until all workers have left site.

- .6 Commissionaires must stay within the actual construction area and provide surveillance of all workers ensuring that security rules and requirements are obeyed and to limit movement to approved work areas of site.
- .7 Commissionaires must also escort workers from approved entrance doors and work area(s).
- .8 Escort and supervision of workers by Commissionaire is required at all times.
- .9 Commissionaire shall report directly to the Departmental Representative and to the Facility security personnel and ensure that site security directives are obeyed by all workers.
 - .1 Commissionaire will have authority to remove any worker deemed non-compliant with security directives.

1.3 SECURITY CLEARANCE REQUIREMENTS

- .1 All persons employed by Contractor or by subcontractors who will be working on site must undergo the following check:
 - .1 Apply for PWGSC personnel security clearance screening and obtain a Reliability Status.
- .2 No workers will not be allowed to circulate freely in restricted areas of site and must be under constant escort and surveillance by security personnel.
 - .1 Restricted area defined as: all interior areas of building beyond the public lobby.

1.4 SECURITY CLEARANCE APPLICATION

- .3 Escort and supervision functions specified herein are still required on the project after workers having obtained security clearance.
- .1 Within 1 week following notification of acceptance of bid, submit application form for all workers who require security clearance.
 - .1 Make application for all workers as one

submission to facilitate processing and minimize delays.

- .2 To obtain the PWGSC Reliability Status clearance, the following information is required for each applicant:
 - .1 "Personnel Screening, Consent and Authorization Form" (Form No. TBS/SCT #330-23E (Rev. 2006/02) completed by each worker.
 - .2 Contractor Declaration to Public Works & Government Services Canada (PWGSC Security Form "A") completed by Contractor attesting to having conducted an assessment of reliability for each worker applicant verifying employment and other reference data.
 - .3 Proof of applicant's identity consisting of a picture ID such as a Canadian Motor Vehicle Driver's License or other similar official ID card.
 - .4 Proof of applicant's Canadian citizenship consisting of a provincial issued birth certificate, baptismal certificate, citizenship certificate or passport.
 - .5 Include both forms along with a clear legible photocopy of the citizenship and identity documents submitted as one complete package for each applicant.
- .3 Fingerprinting will also be required if:
 - .1 Applicant indicates that he/she has a previous criminal conviction on Form #330-23E;
 - .2 Security clearance search process results in two persons with same identity and/or same name/initials, such as having the same name.
- .4 Departmental Representative will provide details as to what procedures, location and time where workers must go should fingerprints are needed.

- .5 Processing Time:
 - .1 The PWGSC departmental processing time to obtain all security clearances is estimated to be 4 weeks from date of receipt of required documentation.
 - .2 To avoid delays, prepare worker documentation as soon as possible, however submit documentation for each applicant as one package and send information for entire workforce as one submission. Ensure forms are fully completed, signed and that all information and photo identification is clear and legible.
 - .3 Be aware that processing time for applicants with criminal convictions may take longer and could extend to 6 months duration.
 - .1 An interview with such applicant may also be required as part of the security clearance process.
- .6 Facilitate workers security clearance process as follows:
 - .1 Prepare comprehensive list of workers who will require security clearance throughout project, including those of subcontractors.
 - .2 Provide copy of list to Departmental Representative.
 - .3 Coordinate and expedite submission of various subcontractors.
 - .4 Brief and assist applicants in preparing and submitting documentation.
 - .5 Review documentation of each applicant for completeness before submission.
 - .6 Have each worker keep a copy of their completed application form in case the initial submission gets lost.
 - .7 Submit documentation in an organized manner with transmittal letter clearly identifying project for which worker clearance is required.
- .7 Send submission(s) directly to Departmental Representative or to the approved mailing address as directed by Departmental Representative.

- .8 Persons who have not been successful in obtaining security clearance, upon documentation review by PWGSC, will not be allowed further access on site and cannot work on project any longer.

1.5 SECURITY PASSES

- .1 Visitor or worker ID Tags are required for all personnel requiring access on site.
- .2 ID Tags will be provided by the Facility Security, issued to Contractor for distribution to authorized workers which shall also be placed on the Security Control List specified below.
- .3 All persons while on site, must wear the ID Tag issued to him regardless of daytime or nighttime work.
- .4 Be responsible to obtain ID Tags before work commences, including those required by subcontractors, and continually control their distribution and use by workers. Submit request for tags as early as possible prior to commencement of work.
- .5 For the duration of this contract, anyone not in possession of the ID Tag will not be allowed access on site.
- .6 At end of project, return to Departmental Representative all tags issued to workers and to subcontractors.
 - .1 The Departmental Representative will levy a financial penalty in the form of a holdback assessment against the Contract for each pass not returned regardless of the reason the pass is not returned.
- .7 Immediately report any lost, stolen or destroyed ID Tags to the Departmental Representative.

1.6 SECURITY
CONTROL LIST

- .1 Provide a list of employee names from workforce and from subcontractors who will be present at site during the course of work.
- .2 List to include each person's name, address and telephone number.
- .3 Submit copy of list to Departmental Representative and to Security Commissionaire for control of workers.
- .4 Update list as work progresses.
- .5 Ensure that each worker can provide proof of identity upon demand, when requested by Facility's Security Personnel, Departmental Representative or by Facility Management.

1.7 BUILDING ACCESS

- .1 Keys and door security access cards necessary for access to restricted areas may be issued at the discretion of the Building Manager and the Departmental Representative. Follow all instructions in regards to use, care and disposition of all keys and access cards so issued.
- .2 Keys and security access cards given to the Commissionaire for his sole possession, as determined by Departmental Representative, shall not under any circumstances be given to any worker or subcontractor.
- .3 Do not, under any circumstances, make or allow workers to make duplicates of keys issued.
- .4 At end of project, return to Departmental Representative all keys and access cards issued. Departmental Representative will deduct from final contract payment, \$25.00 for each item not returned, regardless of the reason.
- .5 Immediately report to Departmental Representative any lost, stolen or destroyed keys and door security access cards.

1.8 SITE SECURITY

- .1 Where work of this contract requires use of a permanently locked door, it is Contractor's responsibility to ensure that door is unlocked and locked after each use or provide a competent security guard, posted at door, when door must remain open for an elongated period of time during a particular workshift.
 - .1 Notify Building Security when security doors will be used and stringently follow all directives to ensure building security is effectively maintained.
- .2 Where work of this contract results in removal of doors or walls (providing security to the exterior or between spaces and suites), erect temporary security hoarding over openings constructed in such a way to provide the same degree of security as doors/walls removed.

1.1 GENERAL

- .1 Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution 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 of building ventilation systems is not permitted for this purpose.

1.2 MATERIALS

- .1 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.

1.3 CLEANING DURING CONSTRUCTION

- .1 Maintain work areas in a tidy condition, free from accumulations of waste material and debris. Clean areas on a daily basis.
- .2 Keep building entrances, corridors, stairwells and tenant occupied areas of building in a clean dust free condition at all times. Conduct thorough cleaning of these areas at end of each workshift when used by workers or affected by the Work.
- .3 Provide on-site containers for collection of waste materials and debris.
- .4 Use separate collection bins, clearly marked as to purpose, for source separation and recycling of waste and debris in accordance with waste management requirements specified.
- .5 Remove waste materials, and debris from site on a daily basis.

- .6 Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall on wet, newly painted surfaces nor contaminate building systems.
- .7 Provide dust barriers, dividers, seals on doors and employ other dust control measures as required to ensure that dust and dirt, generated by work, are not transmitted to other areas of building. Should dust migrate into tenant occupied and public areas of building, employ such means as may be necessary to immediately clean all contaminated surfaces to the satisfaction of the Departmental Representative.
- .8 Immediately clean all dust, dirt, smears, scuffs and soiled surfaces in lobbies, corridors, stairwells and within tenant occupied areas resulting from the Work.
 - .1 Perform cleaning, dusting and washing operations, carpet vaccuming (including shampooing if deemed required by Departmental Representative) and floor washing as necessary to thoroughly clean all soiled surfaces.
- .9 Remove snow and ice from access doors used by workforce

1.4 FINAL CLEANING

- .1 In preparation for acceptance of the completed work perform final cleaning.
- .2 Remove grease, dust, dirt, stains, labels, fingerprints, marks and other foreign materials, from interior and exterior finished surfaces. Clean and polish surfaces including glass, mirrors, hardware, wall tile, stainless steel, chrome, baked enamel, plastic laminate, mechanical and electrical fixtures.

- .3 Replace items with broken pieces, scratches or disfigured.
- .4 Clean lighting reflectors, lenses, and other lighting surfaces.
- .5 Vacuum clean and dust building interiors, behind grilles, louvres and screens.
- .6 Wax, seal, shampoo or prepare floor finishes as recommended by manufacturer.
- .7 Inspect finishes, fitments and equipment. Ensure specified workmanship and operation.
- .8 Broom clean and wash exterior paved surfaces and walks; rake clean other surfaces of grounds.
- .9 Remove debris and surplus materials from crawl areas, roof areas and other accessible concealed spaces.
- .10 Clean equipment, washroom and kitchen fixtures to a sanitary condition. Replace filters of mechanical equipment.

1 DEFINITIONS

- .1 Hazardous Material: Product, substance, or organism that is used for its original purpose, and that is either dangerous goods or a material that may cause adverse impact to the environment or adversely affect health of persons, animals, or plant life when released into the environment.

2 WASTE MANAGEMENT

- .1 Incorporate environmental and sustainable practises in managing waste resulting from work.
- .2 Divert as much waste as possible from landfill.
- .3 Coordinate work of subtrades and subcontractors to ensure all possible waste reduction and recycling opportunities are taken. Follow waste management requirements specified in trade sections of the Specifications.
- .4 Reduce waste during installation of new materials. Undertake practices which will optimize full use of materials and minimize waste.
- .5 Develop innovative procedures to reduce quantity of waste generated by construction such as by delivering materials to site with minimal packaging etc.
- .6 Provide on-site facilities to collect, handle and store anticipated quantities of reusable, salvageable and recyclable materials.
- .7 During demolition and removal work separate materials and equipment at source, carefully dismantling, labelling and stockpiling alike items for the following purposes:
 - .1 Reinstallation into the work where indicated.

.2 Salvaging reusable items not needed in project which Contractor may sell to other parties.

.3 Sending as many items as possible to locally available recycling facility.

.4 Segregating remaining waste and debris into various individual waste categories for disposal in a "non-mixed state" as recommended by waste processing/landfill sites.

.8 Isolate product packaging and delivery containers from general waste stream. Send to recycling facility or return to supplier/manufacturer.

.9 Send leftover material resulting from installation work for recycling whenever possible.

.10 Establish methods whereby hazardous and toxic materials, and their containers used on site are properly handled, stored and disposed in accordance with applicable federal, provincial and municipal laws and regulations.

3 DISPOSAL REQUIREMENTS

.1 Burying or burning of rubbish and waste materials is prohibited.

.2 Disposal of volatile materials, mineral spirits, oil, paint, and other hazardous materials into waterways, storm, or sanitary sewers is prohibited.

.3 Dispose of waste only at approved waste processing facility or landfill sites approved by authority having jurisdiction.

.4 Contact the authority having jurisdiction prior to commencement of work, to determine what, if any, demolition and construction waste materials have been banned from disposal in landfills and at transfer

stations. Take appropriate action to isolate such banned materials at site of work and dispose in strict accordance with provincial and municipal regulations.

- .5 Transport and dispose of waste intended for waste processing plant or landfill facility in separated condition and to Operator's rules and recommendations in support of their effort to recycle, reduce and divert certain waste stream from general landfill.
- .6 Collect, bundle and transport salvaged materials to be recycled in separated categories and condition as directed by recycling facility. Ship materials only to approved recycling facilities.
- .7 Sale of salvaged items by Contractor to other parties not permitted on site.

1.1 SECTION
INCLUDES

- .1 Administrative procedures preceeding inspection and acceptance of Work by Departmental Representative.

1.2 RELATED
SECTIONS

- .1 Section 01 78 00 - Closeout Submittals.

1.3 INSPECTION AND
DECLARATION

- .1 Contractor's Inspection: Coordinate and perform, in concert with subcontractors, an inspection and check of all Work. Identify and correct deficiencies, defects, repairs and perform outstanding items as required to complete work in conformance with Contract Documents.
 - .1 Notify Departmental Representative in writing when deficiencies from Contractor's inspection have been rectified and that Work is deemed to be complete and ready for Departmental Representative's inspection of the completed work.
- .2 Departmental Representative's Inspection: Accompany Departmental Representative during all substantial and final inspections of the Work.
 - .1 Address defects, faults and outstanding items of work identified by such inspections.
 - .2 Advise Departmental Representative when all deficiencies identified have been rectified.
- .3 Note that Departmental Representative will not issue a Certificate of Substantial Performance of the work until such time that Contractor performs following work and turns over the specified documents:
 - .1 Project record as-built documents;
 - .2 Final Operations and Maintenance

manuals;

.3 Maintenance materials, parts and tools;

.4 Compliance certificates from applicable authorities;

.5 Reports resulting from designated tests;

.6 Demonstration and training complete with user manuals;

.7 Manufacturer's Guarantee certificates.

.8 Testing, adjusting and balancing of equipment and systems complete with submission of test reports.

.9 Commissioning of equipment and systems specified.

.4 Correct all discrepancies before
Departmental Representative will issue the
Certificate of Completion.

1.1 GENERAL

- .1 Submit closeout documents specified in this section prior to application for Certificate of Substantial Performance of the Work.
- .2 Submit data in sufficient lead time to allow adequate review by Departmental Representative.
- .3 Make revisions to data as directed by Departmental Representative based on review.

1.2 PROJECT RECORD DOCUMENTS

- .1 Departmental Representative will provide 2 white print copies of contract drawings specifically to record "as-built" conditions.
- .2 Maintain 1 set at site and record actual built conditions.
- .3 Mark each drawing with up-to-date, real time as-built conditions as work progresses.
- .4 Maintain drawings in good condition and make available for inspection by the Departmental Representative whenever requested.
- .5 Record changes in red ink on the prints. Mark only on 1 set of drawings and transfer data to other set at completion of project.
 - .1 Neatly transfer notations to second set also by use of red ink.
 - .2 Stamp all drawings of both sets with the notation "As-Built Drawings". Also sign and date drawings.
 - .3 Indicate all modifications, substitutions and deviations from that shown on the Contract Drawings or in Specifications.
- .6 Record following information:
 - .1 Field changes to dimensions and details;
 - .2 Any additional details produced in the course of the contract by the Departmental Representative to supplement or to change

existing design drawings;

.3 All Change Orders issued, documenting accurately and consistently the changed condition as it applies to all affected drawing details.

.7 Maintain As-built documents current as the contract progresses.

.8 Submit both sets of as-builts drawings.

1.3 OPERATIONS & MAINTENANCE DATA

.1 Submit 2 copies of Operations and Maintenance (O&M) manual(s).

.2 O&M manuals to be hard cover three ring binder for 215 x 280 mm size paper. Each copy shall contain:

.1 Technical data for installation, operations and maintenance of products and systems supplied in project.

.2 Nameplate information for mechanical and electrical equipment.

.3 List of spare parts and tools.

.4 Original or certified copy of warranties and manufacturer's product guarantees.

.5 Reports of any field test.

.6 Complete set of reviewed shop drawings.

.3 Provide cover sheet in each manual with:

.1 Project name and number

.2 Name and address of Contractor and subcontractors

.3 Date of submission

.4 Table of contents

.4 Manuals to be in English.

1.4 TOOLS AND PARTS

.1 Supply special tools, wrenches and spare parts as supplied by manufacturer to disassemble, remove and reinstall components as needed for maintenance purposes.

- .2 Tag all items with name of associated equipment and function.
- .3 Turn items over to Departmental Representative immediately upon completion of work.
- .4 Where required, provide manufacturer's written instructions on intent and method of use.
- .5 Provide name, address and telephone number of nearest supplier.
- .6 Prepare and include complete inventory list of items supplied into the maintenance manuals.