

Scope of Work

The Fire Hall No.2 Building is located at 553 Kingstone Road, Pickering, Ontario. The facility was constructed in 1977 and needs interior space renovation and addition of roof access ladder. The interior renovation includes switching the existing living/common area with the existing kitchenette. This project will be phased due to being operation 24/7.

Schedule

1. The following major milestones shall be adhered to by the contractor:

Item	Date
Commencement & Mobilization	One Week after award
Substantial Performance	Within 12 weeks of award
Total Completion and Demobilization	No more than 1 week after substantial completion

2. The Contractor shall, within one (1) week of contract award, provide the following detailed schedule(s) to the City:
 - a. Construction Progress Schedule
 - b. Submittal Schedule(s) for Shop Drawings, Product Data and Samples
 - c. Product Delivery Schedule for long-lead items
3. If the Contractor cannot reasonably meet any agreed upon milestone date, the Contractor shall provide written notification to the City as soon as possible, but no less than one (1) week before the given milestone. The City and Contractor shall decide upon a course of action which may include allowing rescheduling of the milestone, or requiring the Contractor to seek extra resources, at their cost, to achieve the milestone. Each occurrence shall be agreed to on a case-by-case basis. If dates are re-scheduled, the Contractor shall provide to the City with a revised construction progress schedule within three (3) business days.
4. The Contractor shall provide to the City and Consultant a schedule of submittals for all long lead time delivery products and equipment, within ten (10) business days of award and prior to ordering, for review and comment.

Unless otherwise noted or specified, submittals for this Work shall include items in accordance with Section 01 33 00- Submittal Procedure including but not limited to below items:

- a. Demolition drawings and schedule in accordance with requirement of Section 02 41 19 – Selective Demolition
 - b. Construction Waste Management Plan including demolition and removal procedures under provisions of Section 01 74 19
 - c. Proposed dust and dust-control measures
 - d. Shop drawings and product samples where required and identified in technical specification
 - e. Quality assurance submittals
 - f. Concrete mix design report followed by test reports in accordance with requirement of Section 03 30 00 Cast-In-Place Concrete
 - g. Material Data Safety Sheets (MSDS) and Product Data for all products in accordance with the requirement of technical Specification
 - h. Material test reports in accordance with technical specifications
 - i. Lighting fixtures
 - j. Plumbing fixtures
 - k. Controls
 - l. Colour selection charts and samples for all finishes and products.
 - m. Paint drawdowns
5. The Contractor shall, immediately prior to construction and upon notification, attend where directed by the City, a pre-construction meeting along with representatives of major subcontractors.
 6. Site meetings and task-specific pre-construction meetings will be held at the request of the City or Contractor, on an as-needed basis, at no additional cost.

General Requirements

1. It is understood that the Contractor, by executing the Contract, unequivocally acknowledges that it is the “constructor” within the meaning of the OHSWA and amendments thereto, as applicable to the scope of work outlined in the Bid Document and Contract, with complete control for health and safety matters over all persons who may be present at the site, whether such persons are members of the Contractor’s own forces, employees of the City, utility companies or other sub-contractors or are third parties present at the site. **The City shall not be the constructor and the Contractor hereby confirms that it assumes responsibility as the constructor for all purposes**
2. In order to successfully complete the proposed renovation and alterations while minimizing the disruption to the occupants the work must be phased and each area of work must be enclosed to accommodate the renovation and protect the occupants from inconvenience and injury although access and egress of the

building must be maintained at all times. The renovations are to be performed in Two (2) phases as below:

- **Phase 1: Alteration of existing living area to kitchenette.**
 - **Phase 2: Alteration of exiting kitchen and lounge to a new washroom and living area**
3. The contractor shall include and carry all cost to remove and relocate items such as furniture, lockers, appliances, beds etc. during the phasing of construction as deemed necessary. Items may need to be relocated a few times until construction is completed.
 4. The Contractor shall provide all labour, material and equipment required to meet the schedule.
 5. Provide certificates to the City confirming the safe disposal of any hazardous wastes and recycling of equipment and materials in accordance with applicable legislation.
 6. The Contractor shall warranty all work and materials for a period of two (2) years, effective as of the certified date of Substantial Performance.

Inspections Permits and Tests

1. The Contractor shall cooperate fully with, and provide assistance to, all outside authorities including Building Inspectors, testing agencies and Consultants, with the inspection of the Work.
2. Any material or work which fails in any way to meet the terms of the contract is subject to rejection or to be paid for on an adjusted price basis in the sole discretion of the City.
3. Unless otherwise specified, the City of Pickering shall obtain and pay for all costs associated with permits, inspections or testing of any material or work. Permit has been issued.

Work Restrictions

1. The facility will remain operational for the duration of this Work. The Contractor shall coordinate any require shutdowns or service interruptions with the City at least 7 days in advance. The Contractor shall not initiate shutdowns or service interruptions without written approval.
2. Hours of Operation:
 - a. 7 days a week, 24 hours a day.

3. It is the City's preference for all work to be conducted between 7:00 a.m. and 7:00 p.m., Monday to Friday. Work outside of these hours requires prior approval by the City.

The City's Noise By-Law 6834/08 governs hours of operation for construction equipment. Schedule 2 allows operation of construction equipment **only** between 7:00 am to 7:00 pm (prohibited on Sundays & statutory holidays). Exemptions require written approval from the City.

4. The City reserves the right to order individuals to leave the site if the individual is in violation of any safety requirement or any Act, and any expense incurred will be the responsibility of the Contractor.

Access and Use of the Site

1. All Work shall occur in zones which have been designated. The limits of the work shall be as shown on the project drawings or as directed by the City. Staging of materials and equipment must not interfere with the operation of the facility.
2. All work or materials delivered on the site or premises to form part of the works, shall be considered the property of the Contractor until installed and shall not be removed without consent of the City, but the Contractor shall have the right to and shall remove the surplus material upon final completion the work and acceptance by the City.
3. The Contractor shall remove all waste and construction materials from the site prior to completion. Before the contractor's personnel leave the site, it shall be in a condition which is acceptable to the City.
4. The Contractor shall provide protection to prevent unauthorized personnel from having access to areas of work. Unauthorized personnel shall mean anyone not directly concerned with the execution, supervision or inspection of the work. Maintain access to controls and equipment required for ongoing operation of the facility.
5. The Contractor shall restrict use of existing parking for project layout or workforce to areas designated by the City.
6. The Contractor shall not unreasonably encumber the site with equipment and materials or locate such as to interfere with the operations of the City.
7. The Contractor shall locate waste bins, equipment, material storage and project layout area to area(s) designated by the City.
8. The Contractor is permitted to use existing sanitary facilities as directed by the City, provided this use does not increase regularly required cleaning or maintenance of these facilities, or cause damage to existing property.

9. No smoking will be permitted on the project site, or within 9 metres of building entrances.
10. No signs or advertisements, other than warning signs, are permitted on the site.
11. The City shall, where possible, provide existing electricity, lighting and water necessary for work purposes. When this is not possible, the Contractor shall provide it at no additional cost.
12. Provide all necessary protection, including access routes for the public, to existing facilities at all times.
13. Maintain clear exiting and access to the apparatus bay and training pad at all times.
14. Maintain copies of the following documents on site at all times:
 - a. Contract Drawings
 - b. Permit Drawings
 - c. Specifications
 - d. Addenda
 - e. Reviewed Submittals
 - f. Approved Samples
 - g. Hardware and Colour Schedules
 - h. Change Orders
 - i. Supplemental Instructions
 - j. Requests for Information
 - k. Inspection and Test Reports, including designated substance reports
 - l. MSDS sheets for all products to be used or stored on site
 - m. Meeting Minutes
 - n. All as-built record documents related to the building site and work including drawings provided by the City.
 - o. Contractor's site-specific safety plan
 - p. Contractor's fire safety plan
15. Maintain clear exiting and fire routes at all times. Provide flagmen where required.

Standard of Work

1. Existing conditions shall be inspected, and any defects shall be reported in writing to the Contract Administrator by the Contractor. The commencement of work or any part of it, shall be deemed to mean the acceptance of the work upon which work or that part of it which has been applied depends.
2. The Contractor shall coordinate all sections of the Work. The responsibility as to which subcontractor or supplier provides labor, material, equipment or services rests solely with the Contractor.
3. The Contractor shall take all necessary job measurements for proper execution of the work. Assume complete responsibility for accuracy and completeness thereof. Verify field measurements and affected adjacent Work are coordinated.
4. The Contractor shall ensure that all work is performed by competent tradespeople, licensed and skilled in the respective work being completed. Only first-class quality of work will be accepted, not only with regard to safety, efficiency and durability, but also with regard to neatness and accuracy of detail.
5. The work shall be executed with regards to safety, efficiency, and neatness to detail using quality products.
6. The Contractor must notify the City immediately of any unsafe and dangerous site conditions that exist.
7. The Contractor shall provide safeguards and protection against fire in accordance with current fire codes, and regulations. Fire extinguishers in good working condition, and for a type appropriate to the work being performed, must be present and immediately accessible while performing any hot work on site.
8. The Contractor shall protect surrounding private and public property from damage as a result of the Work and be responsible for damages incurred.
9. The Contractor shall be responsible for the protection of all utilities. No claims will be considered which are based on delays or inconvenience resulting from relocation or repair due to the Contractor failing to provide adequate protection.
10. The Contractor shall pay any charges levied by utilities or authorities for work carried out by them in connection with the Work, unless specified otherwise.
11. The Contractor shall fill and patch voids and gaps around openings and penetrations and at the perimeter of assemblies. Maintain continuity of fire separations and produce a fire-resistant smoke-tight seal.
12. All parts/materials must be applicable under their respective Canadian codes, must be CSA (Canadian Standards Association) or ULC approved products list and comply with the requirements of the Ontario Building Code. All work shall conform

to the most current rules, regulations and definitions of their applicable Canadian Code and all local authorities having jurisdiction.

13. Products, materials, equipment and articles incorporated into the Work shall be new, not damaged or defective, and of best quality for purposes intended. If requested, furnish evidence as to type, source and quality of products provided.
14. Defective products, whenever identified prior to completion of Work, 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.
15. The Contractor shall unless specified otherwise, maintain uniformity of manufacture for any particular or like item throughout the Work.
16. If, in the sole opinion of the City, the Contractor fails to conform to the manufacturers' installation procedures/practices, the City may require the Contractor to complete corrective work at no additional charge to the City, to the satisfaction of the City.
17. The Contractor shall ensure that work is inspected and tested before being concealed.
18. The Contractor shall prevent electrolytic action between dissimilar metals and materials. Use non-corrosive hot dip galvanized steel fasteners and anchors for securing exterior work, unless stainless steel or other material is specifically requested.
19. The Contractor shall provide all forms, templates, anchors, sleeves, inserts and accessories required to be fixed or inserted in the work and set in place or instruct the related trades as to their locations. Pay the cost of extra work caused by and make up time lost as the result of failure to provide the necessary cooperation, information or items to be fixed to or built in.
20. The Contractor shall comply with Federal, Provincial and Municipal regulations pertaining to waste, air, solid waste, chemical waste, sanitary waste, sediment and noise pollution.
21. The Contractor shall prevent oily or other hazardous substances from entering the ground, drainage areas, or local bodies of water.
22. The Contractor shall immediately report all spills or discharges of pollutants or contaminants under the control of the Contractor, and spills or discharges of pollutants or contaminants that are a result of the Contractor's operations that cause or are likely to cause adverse effects shall forthwith be reported to the City and Consultant. This reporting will not relieve the Contractor of his legislated responsibilities regarding such spills or discharges.

23. The Contractor shall employ processes that ensure generation of as little waste as possible, including: prevention of damage due to mishandling, improper storage, contamination, inadequate protection or other factors as well as minimizing over packaging and poor quantity estimating.
24. The Contractor shall provide appropriate on-site waste containers and remove waste materials from site at regularly scheduled intervals. Remove waste material from the site and deposit in waste containers at the end of each work day.
25. The Contractor shall store, handle, remove and dispose of hazardous materials in accordance with applicable legislation and provide certificates confirming means, location and accreditation of disposal site.
26. The Contractor shall provide dust control, air pollution control and odour control.
27. The Contractor shall maintain the building in a secure and weatherproof condition at all times during construction.
28. The Contractor shall be responsible for security of site, equipment, tools and materials.
29. The Contractor shall provide and maintain tools, in a clean and orderly condition, lockable weatherproof sheds or containers for storage of tools, equipment and materials. Locate materials not required to be stored in weatherproof sheds or containers on site in a manner to cause the least interference with work activities and in a location assigned by the Contract Administrator.
30. The Contractor shall provide all necessary barricades, fencing, hoarding, guards and railings to protect the work areas and prevent access by unauthorized personnel from entering the site. Provide all necessary safety screens and hoarding to protect pedestrians and vehicles passing through the work area when necessary.
31. The Contractor shall store packed materials in original, undamaged condition with manufacturer's labels and seals intact. Handle and store materials in accordance with manufacturer's recommendations. Replace all damaged material.
32. The Contractor shall store volatile or hazardous materials in approved containers. Store in secure and appropriate condition and locations.
33. The Contractor shall be responsible for removing debris and to keep area clean at all times. The contractor shall not encumber the site with debris resulting from construction activity. All materials, tools, equipment and rubbish resulting from such work shall be removed from the site.
34. The Contractor shall perform a daily cleaning and leave the site in a safe condition at the end of each workday.

35. Spray-application of paint or other finishes is not permitted without written permission from the Contract Administrator.

36. Explosive-actuated fastening devices are not permitted.

Project Commissioning

The Contractor shall provide commissioning services to ensure adherence to the intent of the Contract Documents. The Contractor shall ensure, to the best of their ability, that the installed equipment is functioning within normal parameters as prescribed by the equipment manufacturer.

1. The commissioner shall complete inspections in co-ordination with the Contractor, including one (1) commissioning inspection from which a deficiency list and a commissioning report will be developed; and one (1) final inspection to confirm all deficiencies have been corrected.
2. If additional inspections are required to confirm deficiency correction, the Contractor shall cover the additional costs.
3. Submit adjustment and balancing reports for mechanical, electrical and building equipment systems to the City promptly upon completion.

Submittals, Samples and Mock-Ups

1. The Contractor shall provide submittals to the City for review with reasonable promptness and in orderly sequence so as to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed. Digital copies in PDF format are an acceptable alternate format for submittals, provided all required information is clear and legible.
2. Carefully review submittals prior to submission. This review by the Contractor represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and coordinated with requirements of Work and Contract Documents. The Contractor assumes all responsibility to ensure that work required by the Contract Documents is provided, whether indicated on the reviewed shop drawings or not. Submittals not stamped, signed, dated and identified as to specific project by the General Contractor will be returned without being examined and shall be considered rejected.
3. Contractor's responsibility for errors and omissions in submission or from deviation in submission from the requirements of the Contract Documents is not relieved by Consultant's review.
4. Provide notice, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
5. Adjustments made on shop drawings are not intended to change Contract Price. If

adjustments affect value of Work, state such in writing prior to proceeding with Work.

6. Prepare mock-ups for work specifically requested, to be constructed in location(s) acceptable to the City.
7. Work affected by submittals and mock-ups shall not proceed until review is complete.

Closeout Procedures

1. Contractor's Inspection: The Contractor and all Sub-contractors shall conduct an inspection of Work, identify deficiencies and defects, and repair as required to conform to Contract Documents. Submit the deficiency list to the Contract Administrator.
2. Notify the City of satisfactory completion of Contractor's Inspection and that corrections have been made, and request inspection.
3. City's Inspection: The City and Consultant will perform inspection of Work to identify obvious defects or deficiencies. Contractor shall correct Work accordingly.
4. Completion: submit written certificate that following have been performed:
 - a. Work has been completed and inspected for compliance with Contract Documents.
 - b. Defects have been corrected and deficiencies have been completed.
 - c. Equipment and systems have been tested, adjusted and balanced and are fully operational.
 - d. Operation of systems have been demonstrated to City's personnel.
 - e. Work is complete and ready for Final Inspection.
5. Final Inspection: when items noted above are completed, request final inspection of Work by Consultant, and Contractor. If Work is deemed incomplete by the Consultant, complete outstanding items and request re-inspection.
6. Declaration of Substantial Performance: when the Contract Administrator considers deficiencies and defects have been corrected and it appears requirements of Contract have been substantially performed, make application for certificate of Substantial Performance.

Closeout Documentation

1. The Contractor shall provide to the City three (1) hard copies, and one (1) electronic copy (on a USB flash drive) of the operating and maintenance manuals for the installed materials, systems and equipment.

2. The manuals shall be bound in three-ring binders, clearly labeled and organized with a table of contents, and contain the following, as a minimum:
 - a. System operating and maintenance instructions, troubleshooting guidelines and operating log.
 - b. Material Safety Data Sheets
 - c. Equipment Operating and Maintenance Instructions
 - d. Signed Department of Labour Test Data reports, where applicable
 - e. Field test records
 - f. Concrete mix designs
 - g. Inspection certificates
 - h. Manufacturer's certificates
 - i. Disposal/Recycling Certificates for all removed equipment
 - j. Reviewed shop drawings
 - k. As-built drawings
 - l. Specifications
 - m. Addenda
 - n. Change orders and other modifications to the Contract
 - o. Independent specialty engineers sign-off
 - p. Warrantees and bonds, executed in duplicate by subcontractors, suppliers and manufacturers
3. Equipment Operating and Maintenance instructions shall include
 - a. Description of each unit or system
 - b. List of component parts
 - c. Normal operating characteristics
 - d. Limiting conditions
 - e. Performance curves
 - f. Engineering data and tests
 - g. Complete nomenclature and commercial numbers for replaceable parts
 - h. Startup, break-in and normal operating instructions and sequences, including: regulation, control, stopping, shut-down and emergency instructions.
 - i. Routine maintenance procedures, troubleshooting guides, disassembly, repair and re-assembly instructions, alignment, adjusting, balancing and checking instructions
 - j. Servicing schedules

- k. Where equipment shall be placed into service prior to Substantial Performance of the Work, provide operation and maintenance manuals to the Contract Administrator at least two weeks prior to operation of new equipment or systems;
 - l. Arrange and be responsible for demonstration and training for the City's staff by manufacturer's representatives as soon as possible after completion of testing, balancing and acceptance for operation of new or replaced equipment and systems. Allow for multiple training and demonstration sessions, over phased completion of the Work.
4. As-built and shop drawings shall be legibly marked to record actual construction, including:
- a. Any deviation from construction documents;
 - b. Measured locations of utilities and appurtenances, referenced to visible and accessible features of construction;
 - c. Field changes of dimensions and details;
 - d. Changes made by change orders;
 - e. Details not on original contract drawings; and
 - f. References to related shop drawings and modifications.
5. Prior to Substantial Performance, provide copies of signed and stamped engineers review and sign-off letters stating that the work has been built in accordance with their drawings and designs. Conditional or vague letters of sign-off will not be accepted. All specialty design engineers for all sub-contractors and suppliers will be required to review the work in progress at appropriate intervals to ensure compliance with their designs and drawings and shall provide final sign-off letters. Provide copies of all field reports issued by specialty engineers. Carry all costs associated with full compliance with this requirement.
6. A sum of input value shall be withheld from final payments until all record documentation is provided and accepted by the Contract Administrator, including all requirements listed above.
7. Pay costs for production, assembly, transportation and delivery of closeout documents.