

Part 1 General

1.1 WORK COVERED BY CONTRACT DOCUMENTS

- .1 Work of this Contract is comprised of tasks at the Agriculture Canada Research Facility located at 5000 Wascana Parkway, Regina, Saskatchewan. All Work to be completed in accordance to these specifications and in compliance with all relevant codes, guidelines, standards, criteria, Acts and regulations.

Existing UST Systems

- .1 Remove and dispose the existing UST fuel systems (4500 L gasoline and 4500 L diesel) including concrete pad, bollards, island, pumps, piping, vent lines, disconnect of all wiring and associated accessories, as shown on drawing M1 and as per applicable acts and regulations.
- .2 The existing tanks are to be removed from the site.
 - .1 The existing tanks have already been permanently put out of service in accordance with the applicable federal regulation: the Canadian Environmental Protection Act (CEPA 1999, SOR/2008-197).
- .3 A certificate of destruction will be required from the contractor to prove that the tanks are not useable for containing any liquid.
- .4 Environmental consultant to test for contaminants of concern (COCs) in the excavation, including petroleum hydrocarbons (PHCs) fractions F1-F4, benzene, toluene, ethylbenzene and total xylenes (BTEX).
- .5 All soil removed will only be returned to the excavation if clean and will be disposed of otherwise at a certified facility. Only clean material, including stripped top soil, will be put in the excavation.
 - .1 It is anticipated that 140 m³ of excavated soil will be disposed of at a certified facility.
- .6 Backfill the excavation and compact as detailed in the specifications.
 - .1 Reinstatement the site with gravel, stripped top soil and any confirmed clean excavated materials. Minimal amount of excess gravel to be placed on top of backfilled area following compaction.
- .7 Groundwater infiltration into excavation is not anticipated.
 - .1 If necessary, contractor to be responsible for removal and disposal of any contaminated groundwater that infiltrates excavation.

Refer to attached photographs for a depiction of existing USTs and surrounding area.

Existing Clean AST System

- .8 Remove and dispose of existing clean AST located adjacent to the 'herbicide chemistry and biological control building'.
 - .1 The tank system is being stored on site, is not connected to anything and does not contain any fuel.
 - .2 Refer to attached photographs for a depiction of tank.

EA Mitigation Measures

- .9 Refer to the attached Environmental Assessment Report for a summary of mitigation measures to be included as a part of this Contract.

1.2 CONTRACT METHOD

- .1 Construct Work under lump sum plus unit price bid contract, as per unit bid price table attached

1.3 CONTRACTOR USE OF PREMISES

- .1 Limit use of premises for Work, for storage, and for access, to allow:
 - .1 Owner occupancy.
 - .2 Work by other contractors.
 - .3 Public usage.
- .2 Co-ordinate use of premises under direction of Departmental Representative.
- .3 Remove or alter existing work to prevent injury or damage to portions of existing work which remain.
- .4 At completion of operations condition of existing work: equal to or better than that which existed before new work started.

1.4 OWNER OCCUPANCY

- .1 Owner will occupy premises during entire construction period for execution of normal operations.
- .2 Co-operate with Departmental Representative in scheduling operations to minimize conflict and to facilitate Owner usage.

1.5 EXISTING SERVICES

- .1 Conduct utility locates prior to any construction work.
- .2 Notify Departmental Representative and utility companies of intended interruption of services and obtain required permission. If work requires breaking into or connecting to existing services, the contractor will submit a request to the Departmental Representative a minimum of 48 hours prior to the event. The contractor will not proceed until approval has been granted. Departmental Representative will make every effort to accommodate the request; however, Departmental Representative will NOT accept delay charges should the request not be accepted
- .3 Provide alternative routes for personnel and vehicular traffic.
- .4 Establish location and extent of service lines in area of work before starting Work. Notify Departmental Representative of findings. Delineate the critical systems.
- .5 Provide adequate bridging over trenches to permit normal traffic.

- .6 Where unknown services are encountered, immediately advise Departmental Representative within 48 hours and confirm findings in writing.
- .7 Protect, relocate or maintain existing active services. When inactive services are encountered, cap off in manner approved by authorities having jurisdiction.
- .8 Record locations of maintained, re-routed and abandoned service lines. Delineate the critical systems.

1.6 DOCUMENTS REQUIRED

- .1 Maintain at job site, one copy each document as follows:
 - .1 Contract Drawings.
 - .2 Specifications.
 - .3 Addenda.
 - .4 Meeting Minutes.
 - .5 Reviewed Shop Drawings.
 - .6 List of Outstanding Shop Drawings.
 - .7 Change Orders.
 - .8 Other Modifications to Contract.
 - .9 Field Test Reports // Demonstration Test reports.
 - .10 Copy of Approved Work Schedule.
 - .11 Health and Safety Plan and Other Safety Related Documents including records of daily safety meetings/tailgate safety meetings etc.
 - .12 WCB notice of project.
 - .13 Inspector reports.
 - .14 Other documents as specified by Departmental Representative.

Part 2 Products

2.1 NOT USED

- .1 Not used.

Part 3 Execution

3.1 NOT USED

- .1 Not used.

END OF SECTION

Part 1 General

1.1 USE OF SITE AND FACILITIES

- .1 Execute work with least possible interference or disturbance to normal use of premises.
- .2 Contractors will be able to drop off equipment and supplies with 48 hours advanced notice given to the Departmental Representative.
- .3 Maintain existing services to site facilities and provide for personnel and vehicle access.
- .4 Sanitary facilities for work force to be provided by Contractor in accordance with governing regulations and ordinances.

1.2 EXISTING SERVICES

- .1 Notify Departmental Representative of intended interruption of services and obtain required permission.
- .2 Where Work involves breaking into or connecting to existing services, give the Departmental Representative 48 hours of notice for necessary interruption of fuel availability, mechanical or electrical service throughout course of work.
- .3 Disrupted power must be as minimal and localized as possible. Every effort should be made to de-energize only applicable related equipment. If other power must be shut down, at least 48 hours advanced notice must be given and the time of shut down agreed upon with the Departmental Representative.
- .4 Construct barriers in accordance with Section 015600 - Temporary Barriers and Enclosures.

1.3 SPECIAL REQUIREMENTS

- .1 Ensure that Contractor personnel employed on site become familiar with and obey regulations including safety, fire, traffic and security regulations.
- .2 Keep within limits of work and avenues of ingress and egress.

1.4 BUILDING SMOKING ENVIRONMENT

- .1 Comply with smoking restrictions. Smoking is prohibited within the Work site.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 START-UP MEETING

- .1 Departmental Representative to schedule a start-up meeting following award of contract.
 - .1 Start-up meeting to take place via teleconference (as organized by Departmental Representative).
 - .2 Preside at meeting.
 - .3 Meeting minutes to be prepared by Departmental Representative.
- .2 Contractor must attend the following meetings:
 - .1 Start-up meeting to take place via teleconference (as organized by Departmental Representative).
 - .2 Daily safety meetings.
 - .3 Update meetings (as required and requested by Departmental Representative).
 - .4 Site closure / final walk-over inspection meeting.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 DEFINITIONS

- .1 Activity: element of Work performed during course of Project. Activity normally has expected duration, and expected cost and expected resource requirements. Activities can be subdivided into tasks.
- .2 Bar Chart (GANTT Chart): graphic display of schedule related information. In typical bar chart, activities or other Project elements are listed down left side of chart, dates are shown across top, and activity durations are shown as date placed horizontal bars. Generally Bar Chart should be derived from commercially available computerized project management system.
- .3 Baseline: original approved plan (for project, work package, or activity), plus or minus approved scope changes.
- .4 Construction Work Week: Monday to Friday, inclusive, will provide five day work week and define schedule calendar working days as part of Bar (GANTT) Chart submission.
- .5 Duration: number of work periods (not including holidays or other nonworking periods) required to complete activity or other project element. Usually expressed as workdays or workweeks.
- .6 Milestone: significant event in project, usually completion of major deliverable.
- .7 Project Schedule: planned dates for performing activities and the planned dates for meeting milestones. Dynamic, detailed record of tasks or activities that must be accomplished to satisfy Project objectives. Monitoring and control process involves using Project Schedule in executing and controlling activities and is used as basis for decision making throughout project life cycle.
- .8 Project Planning, Monitoring and Control System: overall system operated by Departmental Representative to enable monitoring of project work in relation to established milestones.

1.2 REQUIREMENTS

- .1 Ensure Detail Schedules are practical and remain within specified Contract duration.
- .2 Ensure that it is understood that Award of Contract or time of beginning, rate of progress, Interim Certificate and Final Certificate as defined times of completion are of essence of this contract.

1.3 SUBMITTALS

- .1 Provide submittals in accordance with Section 013300 - Submittal Procedures.
- .2 Submit to Departmental Representative within 5 working days of Award of Contract Bar (GANTT) Chart as Detailed Project Schedule for planning, monitoring and reporting of project progress.

- .3 Re-Submit Project Schedule to Departmental Representative within 5 working days of receipt of acceptance with changes as requested.

1.4 PROJECT SCHEDULE

- .1 Ensure detailed Project Schedule includes activity types as follows:
 - .1 Award.
 - .2 Shop Drawings, Samples.
 - .3 Mobilization.
 - .4 Excavation.
 - .5 Backfill.
 - .6 Electrical.
 - .7 Piping.
 - .8 Controls.

1.5 PROJECT SCHEDULE REPORTING

- .1 Update Project Schedule on weekly basis reflecting activity changes and completions, as well as activities in progress, as required.

Part 2 Products

2.1 NOT USED

- .1 Not used.

Part 3 Execution

3.1 NOT USED

- .1 Not used.

END OF SECTION

Part 1 General

1.1 ADMINISTRATIVE

- .1 Submit to Departmental Representative submittals listed for review. Submit promptly and in orderly sequence to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .2 Do not proceed with Work affected by submittal until review is complete.
- .3 Present shop drawings, product data, samples in SI Metric units.
- .4 Where items or information is not produced in SI Metric units converted values are acceptable.
- .5 Review submittals prior to submission to Departmental Representative. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and co-ordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and considered rejected.
- .6 Notify Departmental Representative, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
- .7 Verify field measurements and affected adjacent Work are co-ordinated.
- .8 Contractor's responsibility for errors and omissions in submission is not relieved by Departmental Representative's review of submittals.
- .9 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Departmental Representative review.
- .10 Keep one reviewed copy of each submission on site.

1.2 SHOP DRAWINGS AND PRODUCT DATA

- .1 The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are to be provided by Contractor to illustrate details of a portion of Work.
- .2 Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of Work.
- .3 Allow 3 business days for Departmental Representative's review of each submission.
- .4 Adjustments made on shop drawings by Departmental Representative are not intended to change Contract Price. If adjustments affect value of Work, state such in writing Departmental Representative prior to proceeding with Work.

- .5 Make changes in shop drawings as Departmental Representative may require, consistent with Contract Documents. When resubmitting, notify Departmental Representative in writing of revisions other than those requested.
- .6 After Departmental Representative's review, distribute copies.
- .7 Submit 3 prints and 1 electronic copy of shop drawings for each requirement requested in specification Sections and as Departmental Representative may reasonably request.
- .8 Delete information not applicable to project.
- .9 Supplement standard information to provide details applicable to project.
- .10 If upon review by Departmental Representative, no errors or omissions are discovered or if only minor corrections are made, 2 copies will be returned and fabrication and installation of Work may proceed. If shop drawings are rejected, noted copy will be returned and resubmission of corrected shop drawings, through same procedure indicated above, must be performed before fabrication and installation of Work may proceed.
- .11 The review of shop drawings by Departmental Representative is for sole purpose of ascertaining conformance with general concept.
 - .1 This review shall not mean that Departmental Representative approves detail design inherent in 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 requirements of construction and Contract Documents.
 - .2 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 sub-trades.

1.3 PROGRESS PHOTOGRAPHS

- .1 Submit progress photographs for all stages of work completed, to be submitted at the completion of each stage.

1.4 CONSTRUCTION PHOTOGRAPHS

- .1 Submit electronic and hard copy of colour digital photography in jpg format, standard resolution.
- .2 Identification: name and number of project and date of exposure indicated.
- .3 Number of viewpoints: determined by Departmental Representative.
- .4 Frequency: weekly with progress statement and at completion of work.
- .5 Quantity: Provide sufficient number of photographs to adequately describe the work activities carried out during the reporting period. A minimum of two photographs taken from two viewpoints are to be provided for each clean-up/construction activity.

- .6 Submit final photographs prior to final progress payment request.

1.5 FEES, PERMITS AND CERTIFICATES

- .1 Apply and pay for all required permits (Electrical, Fuel System etc.)
- .2 Contractor to provide a Notice of Project to the Saskatchewan WCB.
- .3 Provide authorities having jurisdiction with information requested.
- .4 Furnish certificates and permits.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations
- .2 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
- .3 Province of Saskatchewan
 - .1 Occupational Health and Safety Act, 1993, S.S. [2005].

1.2 SUBMITTALS

- .1 Make submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit site-specific Health and Safety Plan: Within 7 days after date of Notice to Proceed and prior to commencement of Work.
 - .1 Health and Safety plan to include On-site Contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations.
- .3 Submit copies of reports or directions issued by Federal and Provincial health and safety inspectors.
- .4 Submit copies of incident and accident reports, within 24 hours of occurrence.
- .5 Departmental Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within 3 days after receipt of plan. Revise plan as appropriate and resubmit plan to Departmental Representative within 3 days after receipt of comments from Departmental Representative.
- .6 Departmental Representative's review of Contractor's final Health and Safety plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.

1.3 REGULATORY REQUIREMENTS

- .1 Do Work in accordance with Section 01 41 00 - Regulatory Requirements.

1.4 RESPONSIBILITY

- .1 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.
- .2 Comply with and enforce compliance by employees with safety requirements of Contract Documents, applicable federal, provincial, and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.

1.5 COMPLIANCE REQUIREMENTS

- .1 Comply with the applicable federal and provincial storage tank regulations, including:
 - .1 Canadian Council of Ministers of the Environment (CCME-PN1326-2004).
 - .2 Canadian Environmental Protection Act (CEPA 1999, SOR/2008-197).
 - .3 National Fire Code of Canada (NFC-2010).
 - .4 Transportation of Dangerous Goods Act (TDGA 1992).
 - .5 Canadian Standards Association Installation Code for Oil-Burning Equipment (CAN/CSA B139-09).
 - .6 Canadian Environmental Assessment Act (CEAA, 2012).
 - .7 Motor Vehicle Transport Act (MVTA, 1985, as amended).
- .2 Comply with the Workers Compensation Act, Workplace Safety Regulation, Saskatchewan (1979).
- .3 Comply with Saskatchewan Occupational Health and Safety Act, 1993, S.S. (2005).
- .4 Comply with Occupational Health and Safety Regulations, 1996.
- .5 Comply with Canada Labour Code, Canada Occupational Safety and Health Regulations.

1.6 UNFORSEEN HAZARDS

- .1 When unforeseen or peculiar safety-related factor, hazard, or condition occur during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Saskatchewan and advise Departmental Representative verbally and in writing within 48 hours.

1.7 HEALTH AND SAFETY CO-ORDINATOR

- .1 Employ and assign to Work, competent and authorized representative as Health and Safety Co-ordinator. Health and Safety Co-ordinator must:
 - .1 Have site-related working experience specific to activities associated with project.
 - .2 Have working knowledge of occupational safety and health regulations.
 - .3 Be responsible for completing Contractor's Health and Safety Training Sessions and ensuring that personnel not successfully completing required training are not permitted to enter site to perform Work.
 - .4 Be responsible for implementing, enforcing daily and monitoring site-specific Contractor's Health and Safety Plan.

1.8 POSTING OF DOCUMENTS

- .1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of Saskatchewan, and in consultation with Departmental Representative.

1.9 CORRECTION OF NON-COMPLIANCE

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by Departmental Representative.

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- .2 Provide Departmental Representative with written report of action taken to correct non-compliance of health and safety issues identified.
 - .3 Departmental Representative may stop Work if non-compliance of health and safety regulations is not corrected.

1.10 WORK STOPPAGE

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

Part 2 Products

2.1 NOT USED

- .1 Not used.

Part 3 Execution

3.1 NOT USED

- .1 Not used.

END OF SECTION

Part 1 General

1.1 DEFINITIONS

- .1 Environmental Pollution and Damage: presence of chemical, physical, biological elements or agents which adversely affect human health and welfare; unfavourably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade environment aesthetically, culturally and/or historically.
- .2 Environmental Protection: prevention/control of pollution and habitat or environment disruption during construction. Control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2 ENVIRONMENTAL ASSESSMENT MITIGATION MEASURES

- .1 Refer to the attached Environmental Assessment Report for a summary of mitigation measures to be included as a part of this Contract.

.1 *“Environmental Assessment – Fuel Storage Tank Replacements, Regina Research Facility, Regina, Saskatchewan” prepared by PWGSC for AAFC, March 2012.*

1.3 SUBMITTALS

- .1 Submittals: in accordance with Section 013300 - Submittal Procedures.
- .2 Prior to commencing construction activities or delivery of materials to site, submit Environmental Protection Plan for review and approval by Departmental Representative. Allow 3 days for Departmental Representative to review. Environmental Protection Plan is to present comprehensive overview of known or potential environmental issues which must be addressed during construction.
- .3 Address topics at level of detail commensurate with environmental issue and required construction tasks.

1.4 DISPOSAL OF WASTES

- .1 The Contractor is to plan for the proper disposal of all waste materials.
- .2 Do not bury rubbish and waste materials on site unless approved by Departmental Representative.
- .3 Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.

1.5 DRAINAGE

- .1 Provide temporary drainage and pumping as necessary to keep excavations and site free from water.

- .2 Do not pump water containing suspended materials or contaminants into or drainage systems.
- .3 Visually inspection excavation water for any product sheen. If product sheen is observed, do not pump water into sewer or drainage systems.
- .4 Control disposal or runoff of water containing suspended materials, sheen or other harmful substances in accordance with local authority requirements.
- .5 Contractor to be responsible for removal and disposal of any contaminated groundwater that infiltrates excavation.

1.6 SITE CLEARING

- .1 Minimize stripping of topsoil and vegetation.

1.7 POLLUTION CONTROL

- .1 Contaminated soil is anticipated during this project.
- .2 Equipment and vehicle staging areas, material storage, waste storage and work space, will be designated prior to work commencing;
- .3 Stockpiled soil is to be stored properly, away from the ground (on a liner or within drums/containers, as approved by Departmental Representative).
- .4 Stockpiled soil is to be stored away from drainage swales or ditches, each protected using filter covering to prevent entry of sediment-laden surface runoff;
- .5 Collect waybills, analytical results, or bills of landing to verify the approved location for fill material and hazardous material waste removed from the site; and
- .6 All stockpiled materials left onsite longer than 24 hours require approval of stockpile locations by the Departmental Representative and will be contained with erosion control measures to protect catch basins and water bodies from sediment loading.

1.8 NOTIFICATION

- .1 Departmental Representative will notify Contractor in writing of observed noncompliance with Federal, Provincial or Municipal environmental laws or regulations, permits, and other elements of Contractor's Environmental Protection plan.
- .2 Contractor: after receipt of such notice, inform Departmental Representative of proposed corrective action and take such action for approval by Departmental Representative.
- .3 Departmental Representative will issue stop order of work until satisfactory corrective action has been taken.
- .4 No time extensions granted or equitable adjustments allowed to Contractor for such suspensions.

Part 2 Products

2.1 NOT USED

.1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.

END OF SECTION

Part 1 General

1.1 REFERENCES AND CODES

- .1 Perform Work in compliance with all relevant codes, guidelines, standards, criteria, Acts and regulations, including the Canadian Council of Ministers of the Environment (CCME-PN1326-2004), National Fire Code of Canada (NFC-2010), Canadian Environmental Protection Act (CEPA) - Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations, Canada Gazette Part II (SOR/2008-197, June 12, 2008), Transportation of Dangerous Goods Act (TDGA 1992), Canadian Standards Association Installation Code for Oil-Burning Equipment (CAN/CSA B139-09), the Canadian Environmental Assessment Act (CEAA, 2012), the Motor Vehicle Transport Act (MVTA, 1985, as amended), including amendments up to tender closing date and other regulations of provincial or local application provided that in case of conflict or discrepancy, more stringent requirements apply, as well as best practices
- .2 Meet or exceed requirements of:
 - .1 Contract documents.
 - .2 Specified standards, codes and referenced documents.

1.2 HAZARDOUS MATERIAL DISCOVERY

- .1 Asbestos: demolition of spray or trowel-applied asbestos is hazardous to health. Stop work immediately when material resembling spray or trowel-applied asbestos is encountered during demolition work. Notify Departmental Representative.
- .2 PCB: Polychlorinated Biphenyl: stop work immediately when material resembling Polychlorinated Biphenyl is encountered during demolition work. Notify Departmental Representative.
- .3 Mould: stop work immediately when material resembling mould is encountered during demolition work. Notify Departmental Representative.

1.3 BUILDING SMOKING ENVIRONMENT

- .1 Smoking is prohibited on the work site.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 INSTALLATION AND REMOVAL

- .1 Provide temporary utilities (electricity and water) in order to execute work expeditiously.
- .2 Remove from site all such work after use.

1.2 DEWATERING

- .1 Provide temporary drainage and pumping facilities to keep excavations and site free from standing water.

1.3 FIRE PROTECTION

- .1 Provide and maintain temporary fire protection equipment during performance of Work required by governing codes, regulations and bylaws.
- .2 Burning rubbish and construction waste materials is not permitted on site.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

END OF SECTION

Part 1 General

1.1 INSTALLATION AND REMOVAL

- .1 Prepare site plan indicating proposed location and dimensions of area to be fenced and used by Contractor, number of trailers to be used, avenues of ingress/egress to fenced area and details of fence installation. Site plan to be submitted to Departmental Representative 7 days prior to on-site work commencing.
- .2 Indicate use of supplemental or other staging area.
- .3 Remove from site all such work after use.

1.2 SITE STORAGE/LOADING

- .1 Confine work and operations of employees within approved work area. Do not encumber premises with products.
- .2 Do not load or permit to load any part of Work with weight or force that will endanger Work.

1.3 CONSTRUCTION PARKING

- .1 Parking will be permitted on site as required.
- .2 Provide and maintain adequate access to project site.

1.4 OFFICES

- .1 Provide marked and fully stocked first-aid case in a readily available location.

1.5 SANITARY FACILITIES

- .1 Sanitary facilities for work force to be provided by Contractor in accordance with governing regulations and ordinances.

1.6 CONSTRUCTION SIGNAGE

- .1 No other signs or advertisements, other than warning signs, are permitted on site.
- .2 Signs and notices for safety and instruction in both official languages Graphic symbols to CAN/CSA-Z321.
- .3 Maintain approved signs and notices in good condition for duration of project, and dispose of off site on completion of project or earlier if directed by Departmental Representative.

1.7 CLEAN-UP

- .1 Remove construction debris, waste materials, packaging material from work site daily.
- .2 Clean dirt or mud tracked onto paved or surfaced roadways.

- .3 Store materials resulting from decommissioning activities that are salvageable.
- .4 Stack stored new or salvaged material not in construction facilities.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION

Part 1 General

1.1 INSTALLATION AND REMOVAL

- .1 Provide temporary controls in order to execute Work expeditiously.
- .2 Remove from site all such work after use.

1.2 GUARD RAILS AND BARRICADES

- .1 Provide secure, rigid guard rails and barricades around deep excavations .
- .2 Provide barriers to project site.

1.3 ACCESS TO SITE

- .1 Provide and maintain access roads, sidewalk crossings, ramps and construction runways as may be required for access to Work.

1.4 PUBLIC TRAFFIC FLOW

- .1 Provide and maintain competent signal flag operators, traffic signals, barricades and flares, lights, or lanterns as required to perform Work and protect public.

1.5 FIRE ROUTES

- .1 Maintain access to property including overhead clearances for use by emergency response vehicles.

1.6 PROTECTION FOR OFF-SITE AND PUBLIC PROPERTY

- .1 Protect surrounding private and public property from damage during performance of Work.
- .2 Be responsible for damage incurred.

1.7 PROTECTION OF FINISHES

- .1 Provide protection for finished and partially finished building finishes and equipment during performance of Work.
- .2 Provide necessary screens, covers, and hoardings.
- .3 Be responsible for damage incurred due to lack of or improper protection.

1.8 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for reuse and recycling in accordance with Section 017421 - Construction/Demolition Waste Management and Disposal.

Part 2 Products

2.1 NOT USED

.1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.

END OF SECTION

Part 1 General

1.1 SUBMITTALS

- .1 Submittals: in accordance with Section 013300 - Submittal Procedures.

1.2 MATERIALS

- .1 Required for original installation.
- .2 Change in Materials: Submit request for substitution in accordance with Section 013300 - Submittal Procedures.

1.3 PREPARATION

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

1.4 EXECUTION

- .1 Execute cutting, fitting, and patching including excavation and fill, to complete Work.
- .2 Fit several parts together, to integrate with other Work.
- .3 Remove and replace defective and non-conforming Work.
- .4 Provide openings in non-structural elements of Work for penetrations of mechanical and electrical Work.
- .5 Execute Work by methods to avoid damage to other Work, and which will provide proper surfaces to receive patching and finishing.
- .6 Cut rigid materials using masonry saw or core drill. Pneumatic or impact tools not allowed on masonry work without prior approval.
- .7 Restore work with new products in accordance with requirements of Contract Documents.
- .8 Fit Work to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

- .9 Conceal pipes, ducts and wiring in floor, wall and ceiling construction of finished areas except where indicated otherwise.

1.5 CLEANING

- .1 Remove waste and surplus materials, rubbish and construction facilities from the site.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 PROJECT CLEANLINESS

- .1 Maintain Work in tidy condition, free from accumulation of waste products and debris, other than that caused by Owner or other Contractors.
- .2 Remove waste materials from site at daily regularly scheduled times or dispose of as directed by Departmental Representative. Do not burn waste materials on site, unless approved by Departmental Representative.
- .3 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .4 Provide on-site containers for collection of waste materials and debris.
- .5 Provide and use marked separate bins for recycling. Refer to Section 017421 - Construction/Demolition Waste Management and Disposal.
- .6 Dispose of waste materials and debris at designated dumping areas on Crown property off site.
- .7 Store volatile waste in covered metal containers, and remove from premises at end of each working day.
- .8 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.

1.2 FINAL CLEANING

- .1 When Work is Substantially Performed remove surplus products, tools, construction machinery and equipment not required for performance of remaining Work.
- .2 Remove waste products and debris other than that caused by others, and leave Work clean and suitable for occupancy.
- .3 Prior to final review remove surplus products, tools, construction machinery and equipment.
- .4 Remove waste products and debris other than that caused by Owner or other Contractors.
- .5 Remove waste materials from site at regularly scheduled times or dispose of as directed by Departmental Representative. Do not burn waste materials on site, unless approved by Departmental Representative.
- .6 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .7 Inspect finishes, fitments and equipment and ensure specified workmanship and operation.
- .8 Sweep and wash clean paved areas.

1.3 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for reuse and recycling in accordance with Section 017421 - Construction/Demolition Waste Management and Disposal.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 WASTE MANAGEMENT GOALS

- .1 Accomplish maximum control of solid construction waste.
- .2 Preserve environment and prevent pollution and environment damage.

1.2 DEFINITIONS

- .1 Non-hazardous waste - construction renovation and demolition waste.
- .2 Demolition Waste Audit (DWA): relates to actual waste generated from project.
- .3 Inert waste - exclusively asphalt and concrete.
- .4 Materials Source Separation Program (MSSP): consists of series of ongoing activities to separate reusable and recyclable waste material into material categories from other types of waste at point of generation.
- .5 Recyclable: ability of product or material to be recovered at end of its life cycle and re-manufactured into new product for reuse.
- .6 Recycle: process by which waste and recyclable materials are transformed or collected for purpose of being transferred into new products.
- .7 Recycling: process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for purpose of using in altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- .8 Reuse: repeated use of product in same form but not necessarily for same purpose. Reuse includes:
 - .1 Salvaging reusable materials from re-modelling projects, before demolition stage, for resale, reuse on current project or for storage for use on future projects.
 - .2 Returning reusable items including pallets or unused products to vendors.
- .9 Salvage: removal of structural and non-structural materials and equipments from deconstruction/disassembly projects for purpose of reuse or recycling.

1.3 SUBMITTALS

- .1 Submittals in accordance with Section 013300 - Submittal Procedures.
- .2 Submit before final payment summary of waste materials salvaged for reuse, recycling or disposal by project using deconstruction/disassembly material audit form as approved by Department Representative.
 - .1 Failure to submit could result in hold back of final payment.
 - .2 Provide receipts, scale tickets, waybills, and show quantities and types of materials reused, recycled, co-mingled and separated off-site or disposed of.

- .3 For each material reused, sold or recycled from project, include quantities by number, type and size of items and the destination.
- .4 For each material land filled or incinerated from project, include amount of material and identity of landfill, incinerator or transfer station.

1.4 STORAGE, HANDLING AND PROTECTION

- .1 Store, materials to be reused, recycled and salvaged in locations as directed by Departmental Representative.
- .2 Unless specified otherwise, materials for removal do not become Contractor's property.
- .3 Protect, stockpile, store and catalogue salvaged items.
- .4 Separate non-salvageable materials from salvaged items. Transport and deliver non-salvageable items to licensed disposal facility.
- .5 Protect structural components not removed for demolition from movement or damage.
- .6 Support affected structures. If safety of building/structure is endangered, cease operations and immediately notify Departmental Representative.
- .7 Protect surface drainage, mechanical and electrical from damage and blockage.
- .8 Separate and store materials produced during dismantling of structures in designated areas.
- .9 Prevent contamination of materials to be salvaged and recycled and handle materials in accordance with requirements for acceptance by designated facilities.
 - .1 On-site source separation is recommended.
 - .2 Remove co-mingled materials to off-site processing facility for separation.
 - .3 Provide waybills for separated materials.

1.5 DISPOSAL OF WASTES

- .1 Do not bury rubbish or waste materials.
- .2 Do not dispose of waste into storm, or sanitary sewers.
- .3 Keep records of construction waste including:
 - .1 Reused or recycled waste destination.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 CONCRETE

- .1 Dispose of the concrete island, tank pad, apron and bollards off site at an approved facility.

3.2 DISPOSAL OF WASTES

- .1 Remove materials from deconstruction as deconstruction/disassembly work progresses.
- .2 Dispose of the wastes off site at an approved facility.

3.3 DISPOSAL OF TANKS, PIPING AND ASSOCIATED FUEL SYSTEM EQUIPMENT

- .1 All fuel system components to be disposed of at a licensed facility.
- .2 Decommission/destroy the integrity of the tanks prior to disposal.
- .3 All fuel system components are to be removed from the site as soon as possible

END OF SECTION

Part 1 General

1.1 SUBMITTALS

- .1 Submittals: in accordance with Section 013300 - Submittal Procedures.
- .2 Copies of submittals will be returned after final inspections and with Departmental Representative's comments.
- .3 Revise content of documents as required prior to final submittal.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION