



TECHNICAL SPECIFICATIONS

Steveston Harbour, BC

Building 25 Demolition

Fisheries and Oceans Canada

Small Craft Harbours – Pacific Region

October 2021

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Part 1 General

1.1 DEFINITIONS

- .1 **Contractor:** The party accepted by the Owner with whom a formal contract is entered to complete the work of this project.
- .2 **Contract Document:** Includes all Sections herein, as well as, attached drawings and appendices referenced in the Technical Specification Index.
- .3 **Engineer/Departmental Representative:** Employee(s) that represents the Owner who act as the Engineer and Technical Authority for the project.
- .4 **Owner:** Small Craft Harbours Program of the Department of Fisheries and Oceans, Vancouver, BC.
- .5 **Site:** 12740 Trites Road, Richmond, British Columbia.

1.2 GENERAL DESCRIPTION OF WORK

- .1 The work under this contract shall include the supply of equipment, labour and materials for the performance of all work as required by the Contract Documents.
- .2 The work generally consists of, but is not limited to the following items:
 - .1 Abatement and removal of hazardous materials per specifications and regulatory requirements.
 - .2 Deconstruction including removal, disposal, salvage, and recycle super structure building 25.
 - .3 Demobilization and site clean up.
- .3 All demolition debris, hazardous material and waste material shall be disposed by the contractor in strict accordance with provincial, local, and municipal regulations and Part 8 of the National Building Code and with the Canadian Construction Safety Code.

1.3 BUILDING INFORMATION SUMMARY

- .1 Address: 12740 Trites Road, Richmond, British Columbia.
- .2 Size – Approximate 1,511.19 square meter gross floor area.
- .3 Building – Warehouse, single level
- .4 Year of construction - ~1970s
- .5 Construction –Timber frame
- .6 HVAC – none



- .7 Basement – None
- .8 Flooring – Mainly Hardwood, ceramic tile for the washroom
- .9 Foundation – Creosote piles (demolition and removal by others)
- .10 Interior wall system – Wood Panel
- .11 Exterior Finish – Metal Cladding
- .12 Window type – Aluminium/Vinyl
- .13 Roofing – Metal Cladding
- .14 Attic Insulation - None

1.4 COMMENCEMENT AND COMPLETION

- .1 The building will be ready for demolition work from February 16th, 2022 onwards.
- .2 Complete contract work must be before March 31st 2022.

1.5 DESCRIPTION UNIT PRICE TABLE

- .1 Mobilization and Demobilization
 - .1 The lump sum cost for the movement of plant and labour to site including any other items not specifically listed as specified in Section 01 50 00.
 - .2 The lump sum for the removal of all labour and plant from the site and completion of all submittals required as specified in Section 01 50 00.
- .2 Hazardous Materials Abatement and Removal
 - .1 The cost plus item for cost incurred for hazardous material abatement and removal as specified in Section 02 81 00 – Hazardous Materials.
 - .2 Example for a tendered 10% markup, extended amount would be $\$15,000 + 10\% = \$16,500$. \$15,000 is an estimated amount and actual amount is reflected on actual cost incurred proven by documents.
- .3 Structure Demolition – Building 25
 - .1 The lump sum cost for the complete demolition and removal of building 25 as specified in Section 02 41 16 up to the floor decking.
 - .2 All utility services will be disconnected by others prior to demolition work.
 - .3 The lump sum for this item shall include all sorting, handling and hauling to landfill or recycling facilities. Materials that can be recycled must be send to recycling facility.
- .4 Disposal – Tipping Fee



- .1 The cost plus item for cost incurred for tipping fees resulted from Structure Demolition as specified in Section 02 41 13.
- .2 Example for a tendered 10% markup, extended amount would be $\$30,000 + 10\% = \$33,000$. \$30,000 is an estimated amount and actual amount is reflected on actual cost incurred proven by documents.

1.6 WORK EXCLUSION (OUTSIDE SCOPE OF WORK)

- .1 Removal and disposal of electrical and fire sprinkler system.
- .2 Disconnection of electrical and water.
- .3 Substructure not included (decking and below (pile cap, stringers and piles))
- .4 Relocation of waste oil bin by others.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION



Part 1 General

1.1 MEASUREMENT AND PAYMENT

- .1 Measurement and payment for work completed to Departmental Representative's satisfaction will be made as stipulated in the relevant technical Section of the Specification for that work item and the Unit Price Table.

1.2 NOTIFICATION

- .1 The Contractor shall give the Departmental Representative **minimum 2 week notice** prior to mobilization to site.

1.3 HOURS OF WORK

- .1 Normal work hours are between 0700 hrs to 1700 hrs Monday through Friday not including statutory holidays.
- .2 Contractor may request to work outside the above-mentioned normal work hours. Submit written request to Departmental Representative to work outside of the normal work hours a minimum of forty (48) hours in advance.

1.4 CONSTRUCTION WORK SCHEDULE

- .1 The Contractor shall work whatever shifts while abiding to the noise-bylaw required in order to ensure the work meets regulatory windows and is completed by the completion date of the contract.
- .2 The Contractor shall normally perform all work within daylight hours, except in instances where the Contractor has requested and received approval for shift changes from the Owner.
- .3 Time lost by the Contractor due to stoppage on account of adverse weather conditions may be allowed, at the discretion of the Departmental Representative, as an extension of time for the completion of the work over and above the date of completion specified in the contract agreement.
- .4 Contractor shall provide a schedule and sequence for all construction/demolition activities associated with this work.

1.5 HEALTH AND SAFETY

- .1 Specified in Section 01 35 29.06

1.6 ENVIRONMENTAL PROCEDURES

- .1 Specified in Section 01 35 43



1.7 REGULATORY REQUIREMENT

- .1 The Contractor must, at his own expense, procure all permits, certificates and licenses required of him by law for the execution of his work under this contract.
- .2 The Contractor shall comply with all Federal, Provincial or Municipal laws, ordinances or rules and regulations relating to the performance of his work and in force during the duration of this contract.
- .3 The Contractor is required to give all required notices, comply with all local, municipal, provincial, and federal laws, ordinances, codes, by-laws, rules and regulations relating to the work.
- .4 All work to be done in accordance with Work Safe BC regulations.
- .5 The Contractor shall comply with Federal and Provincial laws, orders and regulations concerning the control and abatement of water and air pollution.

1.8 EXECUTION REQUIREMENTS

- .1 The Contractor is expected to familiarize themselves with the site, facilities and amenities within.
- .2 The Contractor's representative on site shall be completely familiar with the method of work to be employed. Such personnel shall remain on site for the duration of the work.
- .3 The Contractor shall protect all finished work from injury, defacement, unauthorized entry, or trespass until such time as the work described in the contract documents is substantially complete.
- .4 The site shall be left in a safe condition at the completion of each work day.

1.9 INSPECTION

- .1 Allow Departmental Representative access to the Work. If part of the Work is in preparation at locations other than Place of Work, allow access to such Work whenever it is in progress.
- .2 Departmental Representative will order part of Work to be examined if Work is suspected to be not in accordance with Contract Documents.

1.10 INTERFERENCE WITH OPERATION

- .1 During the course of construction and clean-up, do not dispose of surplus, waste or demolished materials in navigable waters.
- .2 The Contractor shall upon instruction of the Owner or Engineer, promptly remove any of the Contractor's equipment located outside the specified work area and obstructing any harbour operation.



1.11 BARRIERS, LIGHTS AND WATCHING

- .1 The Contractor shall provide all requisite barriers, fences, warning signs, lights and watching for the protection of persons and property on or adjacent to the site.

1.12 SITE ACCESS

- .1 General site access shall be coordinated with the Owner.
- .2 The Contractor shall maintain routes of travel, with the Owner being the sole judge as to what may be deemed reasonable.

1.13 CONSTRUCTION AREA

- .1 The Contractor shall not enter on nor occupy with men, tools, equipment or material, any ground outside the property of the Harbour Authority without the written consent of the party owning such ground. Other Contractors or employees or representatives of the Department may, for all necessary purposes, enter upon the work and premises used by the Contractor, and the Contractor shall conduct his work so as not to impede unnecessarily any work being done by others nor adjacent to the site.
- .2 The Contractor shall regulate construction traffic on public areas and comply with all local ordinances in connection therewith, including load limitation and removal of debris.
- .3 The Contractor shall confine his operations on the site to those areas actually required for the work including routes and regulations approved by the Owner for haulage of materials.

1.14 PROTECTION OF EXISTING STRUCTURES

- .1 Existing structures, adjacent marine facilities, roads, services, piping or equipment within the work area which are not to be replaced shall be properly protected from any injury or damage, direct or indirect.
- .2 Any damage that is caused as a result of the operations of the Contractor shall be repaired and made good at the Contractor's expense to the satisfaction of the Engineer.

1.15 EXISTING SERVICES

- .1 Notify Departmental Representative if existing utilities and services are found within the Site and will be treated as extra.

1.16 TEMPORARY SERVICES



- .1 The Contractor shall supply for own use; sanitary, first aid, and all other temporary services such as water and electricity and any other facilities or amenities required for the work.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION



Part 1 General**1.1 DESCRIPTION**

- .1 This section covers the general requirements and procedures for Contractor's submission of all required submittals following award of the Contract.
- .2 Contractor is to provide submittals to Departmental Representative in advance of and throughout the duration of the work.

1.2 MEASUREMENT AND PAYMENT

- .1 Construction submittals and re-submittals shall be considered as incidental to the work.

1.3 SUBMITTALS GENERAL REQUIREMENT

- .1 Submit to Departmental Representative for review submittals listed, including shop drawings, samples, certificates and other data, as specified in other sections of the Specifications.
- .2 Submit with reasonable promptness and in orderly sequence so as to allow for Departmental Representative's review and not cause delay in work.
- .3 Do not proceed with work until relevant submissions are reviewed by Departmental Representative.
- .4 Make changes or revisions to submissions which Departmental Representative may require, consistent with Contract Documents and resubmit as directed by Departmental Representative.

Part 2 Products**2.1 NOT USED****Part 3 Execution****3.1 NOT USED****END OF SECTION**

Part 1 General**1.1 DESCRIPTION**

- .1 Health and safety considerations are required to ensure that the Contractor shows due diligence towards health and safety on construction sites.

1.2 MEASUREMENT AND PAYMENT

- .1 Health and Safety Requirements are considered incidental to the work and will not be measured separately. No separate payment will be made under this Section.

1.3 REFERENCES

- .1 Government of Canada:
 - .1 Canada Labour Code – Part II
 - .2 Canada Occupational Health and Safety Regulations.
- .2 National Building Code of Canada (NBC):
 - .1 Part 8, Safety Measures at Construction and Demolition Sites.
- .3 The Canadian Electric Code
- .4 Canada Standards Association (CSA):
 - .1 CSA S269, Falsework for Construction Purposes.
 - .2 CSA S269.2, Access Scaffolding for Construction Purposes.
 - .3 CSA-S350, Code of Practice for Safety in Demolition of Structures.
 - .4 CSA Z462 – Workplace Electrical Safety Standard.
- .5 National Fire Code of Canada 2010
 - .1 Part 5 – Hazardous Processes and Operations and Division B as applicable and required.
- .6 American National Standards Institute (ANSI):
 - .1 ANSI A10.3, Operations – Safety Requirements for Powder-Actuated Fastening Systems.
- .7 Province of British Columbia:
 - .1 Workers Compensation Act. Part 3 Occupational Health and Safety.
 - .2 Occupational Health and Safety Regulation
- .8 Health Canada/Workplace Hazardous Materials Information System (WHMIS):
 - .1 Material Safety Data Sheets (MSDS).



- .9 Hazardous Materials Assessment Report provided in Appendix A.

1.4 WORKERS COMPENSATION BOARD COVERAGE

- .1 Comply fully with the Workers' Compensation Act, regulations and orders made pursuant thereto, and any amendments up to the completion of the work.
- .2 Maintain Workers' Compensation Board coverage during the term of the Contract, until and including the date that the Certificate of Final Completion is issued.

1.5 COMPLIANCE WITH REGULATIONS

- .1 The Owner may terminate the Contract without liability to the Owner where Contractor, in the opinion of the Owner, refuses to comply with a requirement of the Workers' Compensation Act or the Occupational Health and Safety Regulations.
- .2 It is Contractor's responsibility to ensure that all workers are qualified, competent and certified to perform the work as required by the Workers' Compensation Act or the Occupational Health and Safety Regulations.

1.6 SUBMITTALS

- .1 Submit site-specific Health and Safety Plan: Within 7 days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must include:
 - .1 Results of site specific safety hazard assessment.
 - .2 Results of safety and health risk or hazard analysis for site tasks and operation found in work plan.
 - .3 Risk Management and Safety Procedure for possible events including but not limited to storm, fire, and fall.
 - .4 WHMIS MSDS - Material Safety Data Sheets if requested.
 - .5 On-site Contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations
- .2 The Engineer 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.
- .3 Submit copies of incident and accident reports to Department Representative whenever an unforeseen incident and/or accident occurred.

1.7 RESPONSIBILITY

- .1 Assume responsibility as the Prime Contractor for work under this Contract.



- .2 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.
- .3 Comply with and enforce compliance by employees with safety requirements of contract documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.
- .4 Report all safety and environmental incident to the Department Representative as soon as it happened.

1.8 BARRICATION

- .1 Provide safety barricades around work site as required to provide a safe working environment for workers and protection for pedestrian traffic.
- .2 Ensure that non-authorized persons are not allowed to circulate in designated construction areas of the work site.
 - .1 Provide appropriate means by use of barricades, fences, and warning signs as required.
 - .2 Secure site at night time as deemed necessary to protect site against entry.

1.9 REGULATORY REQUIREMENTS

- .1 Comply with specified codes, acts, bylaws, standards and regulations to ensure safe operations at the Contractor's Work Site.
- .2 In event of conflict between any provision of the above authorities, the most stringent provision will apply. Should a dispute arise in determining the most stringent requirement, Departmental Representatives will advise on the course of action to be followed.

1.10 FILING OF NOTICE

- .1 File Notice of Project with Provincial authorities prior to beginning of Work.
- .2 Provide copies of all notices to Departmental Representative.

1.11 SAFETY ASSESSMENT

- .1 Perform site specific safety hazard assessment related to project.
- .2 Develop written site-specific Health and Safety Plan based on hazard assessment prior to beginning site Work and continue to implement, maintain, and enforce plan until final demobilization from site.
- .3 Schedule and administer Health and Safety meeting prior to commencement of Work.



1.12 FIRE SAFETY REQUIREMENTS

- .1 Store oily / paint-soaked rags, waste products, empty containers and materials subject to spontaneous combustion in ULC approved, sealed containers and remove from site on a daily basis.
- .2 Handle, store, use and dispose of flammable and combustible materials in accordance with the National Fire Code of Canada.
- .3 Do not use fire hydrants, standpipes and hose systems for purposes other than fire fighting.

1.13 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 Province having jurisdiction and advise Engineer verbally and in writing.

1.14 POSTING OF DOCUMENTS

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

1.15 CORRECTION OF NON-COMPLIANCE

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by the Engineer.
- .2 Provide the Engineer with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 The Engineer may stop Work if non-compliance of health and safety regulations is not corrected.
- .4 Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule consideration for Work.

1.16 ASBESTOS HAZARD

- .1 Carry out any activities involving asbestos in accordance with applicable Provincial / Federal Regulations, and Section 02 81 00 – Hazardous Materials.
- .2 Removal and handling of asbestos will be in accordance with applicable Provincial / Federal Regulations.

1.17 PCB REMOVALS

- .1 Mercury-containing fluorescent tubes and ballasts which contain polychlorinated biphenyls (PCBs) are classified as hazardous waste.
- .2 Remove, handle, transport and dispose of as required by provincial and federal requirements, and Section 02 81 00 – Hazardous Materials.

1.18 REMOVAL OF LEAD-CONTAINING PAINTS

- .1 All paints containing TCLP lead concentrations above 5 ppm are classified as hazardous.
- .2 Carry out demolition and/or remediation activities involving lead-containing paints in accordance with Worksafe BC Regulations, and Section 02 81 00 – Hazardous Materials.
- .3 Dry Scraping/Sanding of any materials containing lead is strictly prohibited.
- .4 The use of Methylene Chloride based paint removal products is strictly prohibited.

1.19 SILICA

- .1 Carry out work in accordance with Worksafe BC regulations.

1.20 ELECTRICAL SAFETY REQUIREMENTS

- .1 Contractor is responsible in ensuring electrical system is completely de-energized prior to demolition.
- .2 Any additional de-energization or electrical component removal will be extra.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION



Part 1 General

1.1 DESCRIPTION

- .1 This Section describes environmental procedures that are required for the Contract. Contractor shall be responsible for adhering to these special procedures while completing all work under this Contract.
- .2 Contractor is responsible for environmental protection during all construction/demolition activities at all locations it performs work.

1.2 MEASUREMENT AND PAYMENT

- .1 Environmental Procedures are considered incidental to the work and will not be measured separately. No separate payment will be made under this Section.

1.3 SUBMITTALS

- .1 Contractor shall submit a Environmental Protection Plan (EPP) and Spill Response Emergency Plan for review and acceptance by Departmental Representative at least one (1) week prior to site mobilization.
- .2 Contractor must submit spill incident report if occurred at minimum detailing the timing, the root cause, the spill substance and quantity, the clean up and the implemented preventive action.

1.4 ENVIRONMENTAL RESPONSIBILITY

- .1 Contractor shall demonstrate in the performance of the work that it is environmentally responsible by complying with environmental legislation, regulations, and authorizations.
- .2 Take all reasonable and necessary measures in the performance of the work to avoid causing negative impacts to the environment. Where negative impacts occur, Contractor shall immediately advise Departmental Representative and shall be solely liable to undertake all reasonable and necessary measures to minimize the effect of such negative impacts and restoring the site to pre-impact conditions.
- .3 Maintain key pollution control systems in working condition throughout the project and undertake all works such that there are no unauthorized discharges of liquids or solids to the marine environment, or of gas to the atmosphere.
- .4 Maintain a neat work area free of unnecessary debris, tools, equipment, or materials; dispose of sewage, refuse, and chemical wastes in compliance with the Best Management Practices and applicable federal, provincial, and municipal



or local legislation, regulations, or laws; and remove all tools, equipment, supplies, and wastes from the site upon completion of the work.

1.5 SPILL OR RELEASE OF DELETERIOUS SUBSTANCES

- .1 Contractor shall immediately contain and assess the spill, provide appropriate notifications, and take the necessary steps to prevent further discharge. Contractor is responsible for immediate cleanup of the spill and restoration of the area to the satisfaction of Departmental Representative and other regulatory agencies, where involved.
- .2 All workers shall be fully aware of the spill prevention and response procedures including notification of Departmental Representative.
- .3 Departmental Representative shall be immediately informed of all spills that occur at the Work Site.
- .4 Spill kits will be kept at the Work Site at all times.

1.6 EQUIPMENT MAINTENANCE

- .1 All heavy construction equipment shall be free of leaks and cleaned prior to construction. The Contractor shall have absorbent pads on site in case of any oil leaks or contaminants entering the water.
- .2 Hydraulic machinery shall use environmentally friendly hydraulic fluids (i.e. non toxic to aquatic life and biodegradable).
- .3 Equipment washing, refueling and servicing shall be conducted away from the water (i.e. no closer than 30m from the river).
- .4 Do not refuel any type of equipment within 100m of a waterbody

1.7 WASTE MANAGEMENT

- .1 Accomplish maximum control of solid construction waste.
- .2 Preserve environment and prevent pollution and environment damage.
- .3 Store materials to be reused, recycled and salvaged in locations as directed by Owner. Unless specified otherwise, materials for removal become Contractor's property.
- .4 Transport and deliver non-salvageable items to licensed disposal and/or recycling facility.
- .5 Do not dispose of waste into waterways, storm, or sanitary sewers.

1.8 DRAINAGE



- .1 Do not pump water containing suspended materials into waterways, sewer or drainage systems.

1.9 NOISE AND LIGHT CONTROL

- .1 Ensure that noise control devices (i.e. mufflers and silencers) on construction equipment are properly maintained.
- .2 Contractor shall implement use of lighting shrouds for work to be completed during night-time hours to minimize lighting disruptions to local residents.

1.10 NOTIFICATION

- .1 The Departmental Representative will notify Contractor of observed noncompliance with Federal, Provincial or Municipal environmental laws or regulations, permits, and other elements of Contractor's Environmental Protection plan.
- .2 The Contractor shall inform the Engineer of proposed corrective action after receipt of such notice, and take such action for approval by the Engineer.
- .3 Departmental Representative will issue stop order of work until satisfactory corrective action has been taken.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION



Part 1 General

1.1 DESCRIPTION

- .1 This Section covers mobilization and demobilization for the work at Steveston Work Site.

1.2 MEASUREMENT AND PAYMENT

- .1 Mobilization and demobilization will be paid for at the Lump Sum price tendered for “Mobilization and Demobilization”. Payment shall include for all costs in connection with mobilization and demobilization as described in Clause 1.4 of this Section.
- .2 Supply and set up of plant and equipment not specifically noted in Clause 1.4 of this Section shall be deemed to be incidental to the work.
- .3 Progress claim upon complete mobilization shall not be more than 60% of this lump sum item. Progress claim for the balance of this lump sum item will be upon complete demobilization.

1.3 SUBMITTALS

- .1 Submit heavy equipment or plant specifications and/or drawings required for the work upon request.
- .2 All pre-construction submittals
- .3 Close-out submittals
- .4 Summary table for all disposal fee listing net tonnage, material type, disposal facility and date of delivery that would be claimed under the cost plus line item “Disposal – Tipping Fee”.

1.4 MOBILIZATION & DEMOBILIZATION

- .1 Mobilization
 - .1 All pre-construction submittals;
 - .2 Establishment of necessary site offices if required by the Contractor;
 - .3 Workshops and other temporary facilities;
 - .4 Development and implementation of all environmental protection measures;
 - .5 All work required to prepare and move to the Work Site the Contractor’s plant and equipment to be used for the above mentioned work tasks;
 - .6 Move all crew and tools to site;
 - .7 Making ready for work; and,
 - .8 The cost of maintaining bonds and insurance as required.



.2 Demobilization

- .1 Project closeout and required closeout submittals;
- .2 Removal of all construction equipment, plant and excess materials from the Steveston Work Site;
- .3 Clean up of the Steveston Work Site to a condition satisfactory to Departmental Representative at completion of the work.
- .4 Items which are not to be included in mobilization / demobilization are any portion of the work covered by a specific Tender item or other incidental work which is specified as being included in a Tender item.

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 DESCRIPTION

- .1 This section specifies methods and procedures for demolishing, salvaging, recycling and removing items designated to be removed in whole or in part.

1.2 DEFINITION

- .1 Removal: Dismantling, demolition, handling, sorting, and hauling material away from Site.
- .2 Superstructure: Portion of the construction of a pier or wharf above deck.
- .3 Recycle: process by which waste and recyclable materials are transformed or collected for purpose of being transferred into new products.
- .4 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.
- .5 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.
- .6 Salvage: removal of structural and non-structural materials from deconstruction/disassembly projects for purpose of reuse or recycling.

1.3 MEASUREMENT AND PAYMENT

- .1 Lump Sum price tendered for “Structure Demolition” for the complete removal of Building 25.
- .2 Tipping fee will be paid as a cost plus. Invoice, receipt, truck weigh slip and any other document showing proof that material comes from this project and the total amount claimed for payment. Payment will be calculated based on cost incurred on tipping fee plus mark up established in the tender unit price table.
- .3 Any material to be salvaged that is instructed by the Department Representative for the owner will be paid as hourly rate tendered out in item 5 “Onsite Additional Hours”. It does not include for materials that the Contractor wishes to salvage for their own use.



1.4 SUBMITTALS

- .1 Proposed work methodology and associated safe work procedures for critical tasks.
- .2 Name and address of waste and recycling facilities.
- .3 Schedule of selective demolition.

1.5 AS BUILT

- .1 No structural or as-built drawing available.

1.6 VIRTUAL TOUR

- .1 Virtual tour <https://my.matterport.com/show/?m=FiBjP3SZsLQ>.
 - .1 Do not scale or use the ruler function as it may not be accurate.

1.7 WASTE REDUCTION

- .1 In part of the waste reduction initiative, Contractor must maximize effort to sort and recycle materials that are recyclable. At the minimum, contractor must recycle the following material;
 - .1 Metal cladding
 - .2 Steel
 - .3 Untreated timber
 - .4 Plastic
- .2 The Departmental Representative has the right to instruct which material requires to be salvaged. Identified salvaged material needs to be carefully disassemble, handle and sorted accordingly.

1.8 DISPOSAL

- .1 Contractor must not truck any waste, debris, resulted to any other location than it was proposed and approved preconstruction submittals.
- .2 No payment of work for illegal dumping including waste dump at people's property, public property, or any other location other than the agreed licensed recycling and landfill facilities.
- .3 Contractor must provide proof it goes to authorized facility for payment.
- .4 Contractor is responsible for all waste and debris generated from the Work.

Part 2 Product

2.1 NOT USED



Part 3 Execution

3.1 PREPARATION

- .1 Inspect site and verify extent and location of items designated for removal, disposal, alternative disposal, recycling, salvage and items to remain.
- .2 Contractor is to confirm all utilities are “dead” and all water and sanitary pipe are disconnected, capped, plugged prior to demolition. Notify departmental representative immediately upon discovery of existing utilities and any additional disconnection and removal of utilities required will be treated as extra under line item 5 “Onsite additional Hours”.

3.2 REMOVAL OF HAZARDOUS MATERIAL

- .1 Remove contaminated or dangerous materials defined by authorities having jurisdiction, relating to environmental protection, from site and dispose of in a safe manner to minimize danger at site or during disposal per Section 02 81 00 – Hazardous Materials.

3.3 STRUCTURE DEMOLITION

- .1 No structure demolition to start until completion of the removal and abatement of all hazardous materials.
- .2 Carry out demolition work in accordance with CSA S350.1980 (R.2003) – Safety in Demolition of Structures, unless otherwise specified.
- .3 Completely demolish structure[s] and appurtenances in an orderly and careful manner.
- .4 Removal of timber decking and timber pile foundation is not part of this work.
- .5 Where existing works are to be removed, they shall be removed and salvaged or disposed of to the satisfaction of the Departmental Representative.

3.4 REMOVAL OF DEMOLISHED MATERIAL

- .1 All material, which are not to be salvaged for the Owner, shall become the Contractor's property and the Contractor must remove it from the site.
- .2 It shall be the Engineer's decision as to which material shall be salvaged and which materials shall be disposed of.

3.5 SALVAGE

- .1 Material to be salvaged for the Owner shall be stored as directed by the Engineer. No material is currently identified for salvage.



3.6 SAFETY

- .1 Contractors is responsible for the safety of their crew and the public associated with this work.
- .2 Contractor must provide barriers/barricade to prevent public entering prior to mobilization and must be maintained at all times until completion of work. Must seek approval from the Departmental Representative prior to removal of barriers and barricade.
- .3 Prior to “Structural Demolition” work, Contractor must:
 - .1 Complete abatement and disposal of all hazardous material identified. Contractor to submit written report by a qualified person to confirm hazardous material has been removed.
 - .2 Remove all glass material prior to demolition of structure to avoid glass breaking and glass debris which will pose health and safety concerns.
 - .3 Contractor to confirm all utility services are disconnected and inform the Departmental Representative immediately if found live utility services.
 - .4 Contractor must submit proposed work methodology including detailed safe work procedure to completely disassemble, demolition and dismantling of structure. The Engineer review of Contractor's safe work procedure should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.
- .4 Demolition and dismantling shall begin at the highest point of the structure and work towards the lowest point, unless this procedure would be dangerous to workers.

3.7 HOUSEKEEPING

- .1 Maintain site in a safe manner
- .2 Be prepared to secure loose materials in an event of strong breeze or greater. Must not allow flying projectile which will pose health and safety risk to public and worker.

END OF SECTION



Part 1 General**1.1 DESCRIPTION**

- .1 The presence of hazardous material is identified in the Pre-demolition Hazardous Material Report.
- .2 Contractor must abate, and remove all hazardous material prior to any construction/demolition work.

1.2 REFERENCE

- .1 Pre-demolition Hazardous Material Report by Clearco Environmental Consulting Ltd, dated September 29, 2021 CEPA Export and import of hazardous waste
- .2 WorkSafe BC
 - .1 British Columbia's Occupational Health and Safety Regulation (BC Reg. 296/97, including amendments to date of work)
 - .2 "Safe Work Practices for Handling Asbestos" (latest edition)
 - .3 "Safe Work Practices for Handling Lead" (latest edition)
- .3 British Columbia Hazardous Waste Regulation (BC Reg. 63/88).
- .4 The Federal PCB Regulations (SOR/2008-273).
- .5 The British Columbia Waste Management Act - Ozone Depleting Substances and Other Halocarbons Regulation (BC Reg. 387/99).
- .6 Canadian Construction Association Standard Construction Document CCA 82 "Mould Guidelines for the Canadian Construction Industry" (2004)

1.3 MEASUREMENT AND PAYMENT

- .1 Hazardous Materials Abatement and Removal will be paid as a cost plus. Invoice of abatement and disposal of identified hazardous material and document(s) showing proof that hazardous material comes from this project and the total amount claimed for payment. Payment will be calculated based on cost incurred plus mark up established in the tender unit price table.

1.4 DEFINITION

- .1 Qualified Person: As per WorkSafeBC – "Safe work practices for handling asbestos", qualified means a person who has:
 - .1 Knowledge of the management and control of asbestos hazards through education and training
 - .2 Experience in the management and control of asbestos hazards.



- .2 Hazardous Waste: product, substance, organism, or dangerous goods that no longer used for its original purposes which can cause adverse impact to environment and/or cause adverse affect health of persons, animals or plant life when released into the environment.
- .3 Hazardous Materials Abatement – process of safely handling, containing and removing hazardous material

1.5 SUBMITTALS

- .1 Required Notice of Project to WorkSafeBC 48 hours before hazard material removal work begins.
- .2 Written confirmation of hazardous material removed by a qualified person.
- .3 Contractor’s proposed “qualified” person qualification/certification/resume as per WorkSafeBC “qualified person” definition to perform hazardous material abatement, removal and confirmation report.

1.6 DELIVERY, STORAGE AND HANDLING

- .1 Transport hazardous materials and wastes in accordance with Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable provincial regulations.
- .2 Store and handle hazardous materials and wastes in accordance with applicable federal and provincial laws, regulations, codes, and guidelines.
- .3 Store and handle flammable and combustible materials in accordance with National Fire Code of Canada requirements.
- .4 Observe smoking regulations, smoking is prohibited in areas where hazardous materials are stored, used, or handled.
- .5 Before shipping material obtain written notice from intended hazardous waste treatment or disposal facility it will accept material and it is licensed to accept this material.
- .6 Provide photocopy of shipping documents and waste manifests to Departmental Representative.
- .7 Track receipt of completed manifest from consignee after shipping dangerous goods. Provide photocopy of completed manifest to Departmental Representative.
- .8 Report discharge, emission, or escape of hazardous materials immediately to Departmental Representative and appropriate provincial authority. Take reasonable measures to control release.



- .9 Ensure personnel have been trained in accordance with Workplace Hazardous Materials Information System (WHMIS) requirements.

Part 2 Product

2.1 NOT USED

Part 3 Execution

3.1 HAZARDOUS MATERIAL ABATEMENT

- .1 Abatement shall be conducted to handle, alter, remove and/or dispose of hazardous building materials as identified in the Pre-demolition Report in accordance with applicable regulations, guidelines, standards and/or best practices for such work, where such identified hazardous building materials will be impacted (handled, altered, damaged, removed) by the Work.
- .2 Hazardous material abatement must be done by Qualified Person.

3.2 WASTE MANAGEMENT

- .1 Dispose of hazardous waste materials in accordance with applicable federal and provincial acts, regulations, and guidelines.
- .2 Send hazardous wastes to authorized hazardous waste disposal or treatment facilities.
- .3 Burning, diluting, or mixing hazardous wastes for purpose of disposal is prohibited.
- .4 Disposal of hazardous materials in waterways, storm or sanitary sewers, or in municipal solid waste landfills is prohibited.
- .5 Dispose of hazardous wastes in accordance with applicable federal and provincial regulations.
- .6 Minimize generation of hazardous waste to so all hazardous waste generated daily is packaged in accordance with applicable federal and provincial acts, regulations, and guidelines. Take necessary precautions to avoid mixing clean and contaminated wastes.

END OF SECTION



APPENDIX A - Pre-demolition Hazardous Material Report



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