



SPECIFICATIONS

MAAQTUSIIS HARBOUR HEAVY EQUIPMENT SUPPLY, DIVING AND WASTE DISPOSAL 2022-2023

**FISHERIES AND OCEANS CANADA
SMALL CRAFT HARBOURS – PACIFIC REGION**

**200 – 401 Burrard Street
Vancouver, British Columbia
V6C 3S4**

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Part 1 General

1.1 COMMENCEMENT AND COMPLETION

- .1 Work may commence **Upon Award**; however, mobilization is subject to **minimum 2 week notice** to the Owner and Harbour Authority and the contractor must complete the work within British Columbia marine/estuary timing windows for the protection of fish and fish habitat; the first round to be completed between July 1st and September 1st, and the second round to be completed between December 1st and February 15th.

- 1.2 **All work including clean-up and demobilization must be completed by February 15th, 2022.**

1.3 NOTIFICATION

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

1.4 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.

1.5 CONSTRUCTION WORK SCHEDULE

- .1 The Contractor shall work whatever shifts while abiding to the noise-by-law 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 Within 14 days of award the Contractor shall supply the schedule of work including time periods during which each operation involved in work will be undertaken. At time of submission of schedule, meet with the Departmental Representative to review schedule.
- .4 The Contractor must notify the Owner immediately whenever a variation from the construction schedule is expected to occur.

1.6 INSPECTION OF SITE

- .1 It is the responsibility of each bidder to obtain all necessary information pertaining to local site conditions and existing works, beyond the information provided in this Specification and accompanying drawing(s).



1.7 PERMITS, CERTIFICATES, LAWS AND ORDINANCES

- .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. He 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.
- .2 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.
- .3 All work to be done in accordance with Work Safe BC regulations.
- .4 The Contractor shall comply with Federal and Provincial laws, orders and regulations concerning the control and abatement of water and air pollution.
- .5 The Contractor shall comply with the requirements of any local or other Noise By-Laws.

1.8 MINIMUM STANDARDS

- .1 In the absence of other standards specified in the contract documents, all work is to conform to, or exceed, the minimum standards of the Canadian Government Specifications Boards, the Canadian Standards Association, the American Society for Testing of Materials, or the National Building Code of Canada, whichever is applicable.
- .2 All work to be done in accordance with Work Safe BC regulations.
- .3 Configuration of lifting of material must meet minimum safety requirements.

1.9 INTERFERENCE WITH OPERATION

- .1 The Contractor shall obey all navigation regulations and conduct operations so as to interfere as little as possible with the use of berthing spaces, fairways and passages. Install and maintain any and all protection to navigation as may be required by any properly constituted authority or by the Owner. 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.

1.10 COMPLIANCE WITH STANDARD SPECIFICATIONS CODES AND REGULATIONS

- .1 Unless expressly stated to the contrary, all materials, equipment and articles furnished by the Contractor shall comply with the applicable provisions of the standards of the Canadian Standards Association (CSA) or the Canadian Government Specification Board (CGSB) with the applicable provisions of the American Society for Testing Materials



(ASTM), National Dredging Association (NFPA), American Concrete Institute (ACI) and the American Water Works Association (AWWA).

- .2 The Contractor shall follow all regulations in accordance with the Fisheries Act. Care shall be taken not to release any deleterious materials to fish habitat, into the water.
- .3 All work to be done in accordance with Work Safe BC regulations.

1.11 CONTRACTOR'S PERSONNEL

- .1 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.

1.12 RESPONSIBILITY TO PERSONNEL

- .1 The Contractor shall have full responsibility for the board, lodging and transportation of his personnel and subcontractors. The cost for this shall be incorporated into his unit prices. He shall comply with all labor requirements, and Worker's Compensation regulations.

1.13 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.

1.14 SITE ACCESS

- .1 The Contractor shall provide access to the work for the Owner's inspectors and surveyors as required.
- .2 General site access shall be coordinated with the Owner.
- .3 The Contractor shall maintain routes of travel, with the Owner being the sole judge as to what may be deemed reasonable.
- .4 The Contractor shall erect and maintain barriers, fences, lights, warning devices, and other protective devices as may be required for prevention of theft or damage of goods and protection of the public and workmen, or if so ordered by the Owner.

1.15 CONSTRUCTION AREA

- .1 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.
- .2 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.

1.16 CLEAN-UP

- .1 At all times the Contractor shall keep the site free from accumulation of waste material and debris and leave the site clean and tidy on completion.



1.17 TEMPORARY SERVICES

- .1 On site the Contractor shall make his own arrangements for supply of water and electricity.
- .2 The Contractor shall supply for his own use; sanitary, first aid, and all other temporary services and facilities required for the work.

1.18 PROGRESS REPORT

- .1 The Contractor shall keep a daily record of progress of the work available for inspection by the Engineer.
- .2 The daily record shall include particulars of weather conditions, number of men working, plant and equipment working and work performed.

1.19 ENGINEER'S ACCESS

- .1 The Contractor shall provide access to the work for the Engineer's inspectors and surveyors as required.

1.20 PERMITS AND ROYALTIES

- .1 Permits and licenses required for the Contractors work are the responsibility of the Contractor and shall be for the Contractor's account. The Contractor shall have the appropriate business license.

1.21 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. 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.

1.22 WEATHER

- .1 Time lost by the Contractor due to stoppage on account of adverse weather conditions may be allowed, at the discretion of the Engineer, as an extension of time for the completion of the work over and above the date of completion specified in the contract agreement.

1.23 UTILITIES AND SERVICES

- .1 The Contractor shall be responsible for any damage to overhead, underwater and/or underground utilities and/or services caused by the Contractor's operations and shall repair and make good the repairs at the Contractor's own expense.



- .2 The Contractor shall be responsible, unless otherwise agreed to by the Engineer, for all temporary or construction services and utilities, and first aid facilities.

1.24 DISPOSAL

- .1 Specified in Section 01 74 21

1.25 SETTING OUT OF WORK

- .1 The Contractor is expected to familiarize themselves with the site, facilities and amenities within.
- .2 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.

1.26 SITE SECURITY

- .1 The Contractor is responsible for all materials and equipment either supplied by the Contractor, the Client Department, or the Owner. The Contractor is responsible for the repair and replacement of stolen or damaged items.

1.27 SITEWORK

- .1 All heavy construction equipment shall be free of leaks and cleaned prior to construction.
- .2 The Contractor shall have absorbent pads on site in case of any oil leaks or contaminants entering the water.
- .3 The Contractor shall develop a construction plan that minimizes disruption to harbour operations.
- .4 The site shall be left in a safe condition at the completion of each work day.

1.28 HEALTH AND SAFETY

- .1 Specified in Section 01 35 29.06

1.29 ENVIRONMENTAL PROCEDURES

- .1 Specified in Section 01 35 43

1.30 CLOSEOUT PROCEDURES

- .1 Specified in Section 01 77 00.

END OF SECTION



Part 1 General**1.1 DESCRIPTION**

- .1 Health and safety considerations are required to ensure that Small Craft Harbours/DFO shows due diligence towards health and safety on construction sites, and meets the requirements laid out in PWGSC Departmental Policy DP 073 - Occupational Health and Safety – Construction.

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 Province of British Columbia:
 - .1 Workers Compensation Act. Part 3 Occupational Health and Safety.
 - .2 Occupational Health and Safety Regulation
- .4 Health Canada/Workplace Hazardous Materials Information System (WHMIS):
 - .1 Material Safety Data Sheets (MSDS).

1.4 SUBMITTALS

- .1 Submit site-specific Health and Safety Plan: Within 14 days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must at least 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 Safe work plan.
 - .4 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 if requested.



1.5 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.

1.6 COMPLIANCE WITH REGULATIONS

- .1 PSPC may terminate the Contract without liability to PSPC where Contractor, in the opinion of PSPC, 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.

1.7 RESPONSIBILITY

- .1 Assume responsibility as the Prime Contractor 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.
- .5 Contractor responsible for safety of workers, public, equipment and infrastructure during the lifting of materials.

1.8 BARRICADES

- .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 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.

1.13 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.

CORRECTION OF NON-COMPLIANCE

- .2 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by the Engineer.
- .3 Provide the Engineer with written report of action taken to correct non-compliance of health and safety issues identified.
- .4 The Engineer may stop Work if non-compliance of health and safety regulations is not corrected.

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 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 Environmental degradation arising from construction activities shall be prevented, abated, controlled, and minimized by complying with all applicable federal, provincial, and local laws and regulations concerning environmental pollution control and abatement, as well as the specific requirements in the Project Permits.
- .3 Contractor shall comply with all permit conditions. Although provincial laws and municipal by-laws generally do not apply on federal lands, Contractor will respect provincial laws and municipal bylaws and rules at the Site.
- .4 Contractor is responsible for environmental protection during all construction 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 an Environmental Protection Plan that outlines the methods and measures to address requirements of these tender documents and applicable legislation. The Environmental Protection Plan will be submitted to the Departmental Representative for review and acceptance within fourteen (14) calendar days following Contract Award.
- .2 Contractor shall submit a Spill Response Emergency Plan for review and acceptance by Departmental Representative within fourteen (14) calendar days following Contract Award.

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 Follow all Departmental Representative instructions and policies, practices, and procedures established by Departmental Representative with respect to the environment that are communicated by Departmental Representative to Contractor from time to time.



- .3 Adhere to requirements set forth in any regulatory document (e.g., legislation), and all contract requirements, to ensure the contractors work activities follow the environmental requirements of the contract and applicable legislation;
- .4 Undertake effective communication with work crews and sub-contractors such that environmental responsibilities and requirements are understood prior to the commencement of work and are implemented during the work;
- .5 Use equipment and implementing work procedures and controls to prevent or reduce work-related disturbance to environmental resources;
- .6 Implement preventative and corrective measures in response to non-conformance with stated criteria, regulatory documents and the contract requirements including this EMP.
- .7 Be observant for, and immediately notifying Departmental Representative of, any environmental problems that develop at the Work Site. Report and document all environmental incidents. Respond immediately to emergencies and incidents.
- .8 Incorporate environmental protection strategies into planned work practices, including but not limited to spill prevention and response procedures.
- .9 Correct deficiencies and non-compliance issues as soon as they are informed, stopping works if necessary.
- .10 Conduct routine visual checks on vehicles, fuels storage areas, and equipment at the start of each day to identify potential equipment leaks.
- .11 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.
- .12 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.
- .13 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.
- .14 Ensure that workers and supervisory staff are knowledgeable with the provisions of the proposed Spill Emergency Response Plan and are adequately trained to implement the measures contained therein.
- .15 Waste removal should be conducted during favourable weather conditions and avoid periods of heavy rainfall (e.g., in excess of 25mm/24 hour period).
- .16 The Contractor will be responsible for adhering to best practice to avoid negative interactions marine animals. Be advised that operations must cease until the animal(s) move out of the zone of influence, this includes boats and other self-propelled



equipment. If work is suspended, activities will not resume until the marine mammal is outside the applicable zone, or if a minimum of 30 minutes has elapsed since the animal was last sighted. Contractor will be required to report any interactions of project personnel, materials, or equipment with wildlife regardless of whether harm, suspected or actual, occurred.

- .1 Juvenile Salmon within 10m of works;
 - .2 Killer whales (Orcas) within 400m of work;
 - .3 Cetaceans other than Killer Whales within 200m of works;
 - .4 Pinnipeds within 50m of works
- .17 Interactions with fish and aquatic wildlife are to be avoided.
 - .18 Should any species at risk (SAR) be observed where works are occurring, the Project Manager will be notified immediately, and management actions will be taken (e.g., suspend work, notify DFO, and adhere to DFO protocols for species recovery).
 - .19 The Contractor and all staff are responsible for immediately notifying the Departmental Representative of any cetacean observations and any pinniped observations within their respective zones of influence;
 - .20 If aggregations of juvenile salmon are observed any time within or near the work area, the Departmental Representative must be notified immediately.
 - .21 Any motile organisms living on or within the debris shall be salvaged and release prior to the removal of the debris from water (e.g., sea stars).

1.5 FIRES

- .1 Fires and burning of rubbish on Site is not permitted.

1.6 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 An Environmental Incident Report shall be prepared for any spills.
- .5 Further information on dangerous goods emergency cleanup and precautions including a list of companies performing this work can be obtained from the Transport Canada 24-hour number (613) 996-6666 collect.
- .6 Spill kits will be kept at the Work Site at all times.



- .7 Deleterious substances such as polycyclic aromatic hydrocarbons (PAHs) may be mobilized when removing debris such as boat hulls or disturbing the benthos. Any sheen resulting from disturbed sediment or debris will be treated as a spill and will be contained, cleaned, or reported accordingly.
- .8 The Contractor shall take due care to ensure no deleterious materials, including sediment, paints, coatings, preservatives, fuel, or oil enters the marine environment;
- .9 Do not refuel or service equipment within 30 m of any watercourse or surface water drainage unless appropriate spill prevention and control measures are in place;
- .10 Equipment shall not be washed within the Project Area without proper containment;
- .11 Equipment and machinery must be regularly inspected by the Contractor to confirm they are free of leaks, excess oil and grease;
- .12 Any equipment remaining on-site overnight shall have appropriately placed drip pans or other spill/leak containment measures and must be placed as far away from the marine environment as possible;
- .13 All stored materials that have the potential to negatively impact the environment, or human health must be appropriately labelled following WHMIS protocols, including the product name, first aid information, and personal protective equipment (PPE) requirements;
- .14 Materials must be stored in storage areas that are suitable for the materials (e.g., protected from the weather, ventilated if necessary);
- .15 Short-term storage and working areas must be clearly labelled and located away from pathways to any watercourse on impervious surfaces protected from the weather; and
- .16 All materials must be secured appropriately during transport.

1.7 NOISE AND LIGHT CONTROL

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

1.8 ENVIRONMENTAL MONITOR

- .1 The Owner may retain a third party environmental monitor for the project.
- .2 The Owner may retain a third party environmental consultant to perform a side scan sonar prior to construction.
- .3 The environmental monitor will follow requirements in the Environmental Monitoring Plan and assess the effectiveness of the measures and standards put in place.



1.9 NOTIFICATION

- .1 The 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 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**

- .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 covers 2 mobilizations and 2 demobilizations for the work at Maaqtusiis Harbour.

1.2 MEASUREMENT AND PAYMENT

- .1 Mobilization and Demobilization will be paid for the lump sum tendered price for MOBILIZATION AND DEMOBILIZATION.
- .2 Mobilization and demobilization will not be measured for payment.
- .3 Mobilization will be paid for at the Lump Sum price tendered for MOBILIZATION. Payment shall include for all costs in connection with mobilization as described in Clause 1.4.1 of this Section. The Lump Sum tendered for Mobilization shall be paid on completion of all applicable items listed in Clause 1.4.1 to the satisfaction of Departmental Representative.
- .4 Demobilization will be paid for at the Lump Sum price tendered for DEMOBILIZATION. Payment shall include for all costs in connection with demobilization as described in Clause 1.4.2 of this Section. The Lump Sum tendered for Demobilization shall be paid on completion of all applicable items listed in Clause 1.4.2 to the satisfaction of Departmental Representative.

1.3 SUBMITTALS

- .1 Submit heavy equipment or plant specifications and/or drawings upon request.

1.4 MOBILIZATION & DEMOBILIZATION

- .1 Mobilization shall include the following activities:
 - .1 All pre-construction submittals;
 - .2 Workshops and other temporary facilities, including utility connections;
 - .3 Development and implementation of all environmental protection measures;
 - .4 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;
 - .5 Move all crew and tools to site;
 - .6 Move all crew, equipment and materials on and off site.
 - .7 Move materials, around the site as required to complete the work.
 - .8 Cover all crew expenses such as food and accommodations.
 - .9 Making ready for work; and,
 - .10 The cost of maintaining bonds and insurance as required.
- .2 Demobilization shall include the following activities:
 - .1 Site clean-up daily throughout construction.
 - .2 Project closeout and required closeout submittals;



- .3 Removal of all construction equipment, plant and excess materials from the Steveston Work Site;
- .4 Clean up of the Maaqtusiis Work Site to a condition satisfactory to Departmental Representative at completion of the 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 DESCRIPTION**

- .1 This section describes waste management and disposal procedures.

1.2 MEASUREMENT AND PAYMENT

- .1 No separate measurement for waste management and disposal. It shall cover towing to site, sorting, loading into bins, handling of waste materials and hauling it to disposal/recycling facilities.
- .2 Tipping fee will be paid as a cost plus item. 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.

1.3 GENERAL REQUIREMENT

- .1 Prior to start of Work, conduct meeting with Owner to review and discuss Waste Management Plan and Goals.
- .2 Accomplish maximum control of solid construction waste.
- .3 Preserve environment and prevent pollution and environment damage.

1.4 DEFINITIONS

- .1 Removal: Dismantling, demolition, handling, sorting, and hauling material away from Site.
- .2 Recycle: process by which waste and recyclable materials are transformed or collected for purpose of being transferred into new products.
- .3 Reuse: repeated use of product in same form but not necessarily for same purpose.
- .4 Salvage: removal of structural and non-structural materials from reconstruction/disassembly projects for purpose of reuse or recycling.

1.5 STORAGE, HANDLING AND PROTECTION

- .1 Transport and deliver non-salvageable items to licensed disposal facility.
- .2 Protect existing structural components from movement or damage.
- .3 Protect surface drainage, mechanical and electrical from damage and blockage.
- .4 On-site source separation is recommended.
- .5 Remove co-mingled materials to off-site processing facility for separation.
- .6 Contractor must not bury rubbish or waste materials.
- .7 Contractor must not dispose of waste into waterways, storm, or sanitary sewers.



- .8 Prevent debris (including Styrofoam debris), dust, and any sediment laden waters from reentering any drainage system, water course or marine environment.
- .9 Contractor must not crush the debris or waste in-situ (in water).

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 provides project closeout requirements for post-construction submittals that Contractor is required to submit to Departmental Representative following completion of the work.
- .2 This Section also presents process and requirements for inspection and declaration that the work has been completed as required by the Contract documents. Upon formal review and acceptance of the work by Departmental Representative, the work will be determined to be complete and Contractor shall then demobilize from the Work Site.

1.2 MEASUREMENT AND PAYMENT

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

1.3 INSPECTION AND DECLARATION

- .1 Contractor's Inspection: conduct inspection of Work, identify deficiencies and defects, and repair as required to conform to Contract Documents.
- .2 Notify Owner in writing of satisfactory completion of Contractor's inspection and submit verification that corrections have been made.
- .3 Request inspection by Departmental Representative.
- .4 Departmental Representative, accompanied by Contractor, will inspect the work to identify defects or deficiencies in the work and then compile a deficiency list describing all noted defects and deficiencies.
- .5 Contractor shall correct work accordingly, as advised by Departmental Representative, at no cost to the Owner.
- .6 Final Inspection: When items noted above are completed, request Final Inspection of work by Departmental Representative, accompanied by Contractor. If work is still deemed incomplete by Departmental Representative, complete outstanding items and request re-inspection. Repeat this process until the work is complete to Departmental Representative's satisfaction.

1.4 COMPLETION

- .1 Submit a written certificate that the following actions have been performed:
 - .1 Work has been completed and inspected for compliance with the Contract documents.
 - .2 Defects have been corrected and deficiencies have been addressed.
 - .3 Work is complete and ready for final inspection.



Part 2 Products

2.1 NOT USED

.1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.

END OF SECTION



APPENDIX A

MSCH – Acoustic Target Catalog



APPENDIX B

Waste and Debris Classification Tables

1. Summary Table of Debris/waste

Class/ Debris description	Estimated Volume (m3)
Class 1 - General Materials (bottles, cans, poles, tarp, mesh frame, misc. garbage)	50
Class 2 – Block Shaped Objects (boxes, square/rectangular objects)	16
Class 3 - Hulls (propellor, boat parts, wreck)	35
Class 4 - Infrastructure (Piling, utilities)	15
Class 5 - Cylindrical Objects (pipes, logs, buckets etc)	9
Small Debris	40
Four Fishing Nets	4
Nine Tires	2



2. Class 1 Debris/Waste - General Materials

Item	Debris Size	Individual Volume (m3)	Estimated Quantity	Volume (m3)
Bottles, cans	Small	0.0005	1500	0.75
Bike	Medium	0.2	2	0.4
Grate	Medium	0.2	1	0.2
Pole	Medium	0.03	2	0.06
Plastic sword	Small	0.005	1	0.005
Plastic recorder	Medium	0.05	1	0.05
PVC Pipes	Medium	0.13	10	1.3
Ropes	Small	0.01	10	0.1
Lines/wires	Medium	0.0628	50	3.14
Plastic Paddle	Medium	0.02	1	0.02
Mesh Frame	Medium	0.5	1	0.5
Mesh Frame	Large	0.75	2	1.5
Buoy	Small	0.5	1	0.5
Rope Segments	Small	0.0628	30	1.884
Fishing Net	Small	1	4	4
Misc. garbage	Small			30
crutch	Medium	0.04	1	0.04
Folding Chair	Large	1	2	2
Crate	Large	1.5	1	1.5
Crab Trap	Medium	1	1	1
Blanket	Medium	0.01	1	0.01
Tarp	Large	0.9	2	1.8

3. Class 2 Debris/Waste – Block Shaped Objects

Item	Debris Size	Individual Volume (m3)	Estimated Quantity	Volume (m3)
Blocks/Block Shaped Objects	large	1	11	11
Cinder Blocks	Medium	0.5	1	0.5
Crate	large	1.5	1	1.5
Box/Chest	medium	0.25	1	0.25
Rectangular Objects	Medium	0.5	2	1
Rectangular Object	large	0.75	2	1.5
Square Object	medium	0.25	1	0.25



4. Class 3 Debris/Waste – Hulls

Item	Debris Size	Individual Volume (m3)	Estimated Quantity	Volume (m3)
Wreck	large		1	0
Part of a railing	large	0.3	1	0.3
Hull	large	2.25	15	33.75
Propellor	large	0.4239	1	0.4239

5. Class 4 Debris/Waste – Infrastructure

Item	Debris Size	Individual Volume (m3)	Estimated Quantity	Volume (m3)
Dock Piling	large	3.375	4	13.5
Cables	large (in length)	0.1	10	1

6. Class 5 Debris/Waste - Cylindrical Objects

Item	Debris Size	Individual Volume (m3)	Estimated Quantity	Volume (m3)
Large diameter Pipes - long	large	0.02355	1	0.02355
Small diameter Pipe - long	small	0.3768	1	0.3768
Paint Can	small	0.00628	2	0.01256
Vertical Pipe	medium	0.0314	2	0.0628
Tire	medium	0.216	9	1.944
Paint Bucket	medium	0.785	2	1.57
Log/cylinder	large	0.272	1	0.272
Log	large	0.7	1	0.7
Round Object	large	1.575	1	1.575
Round Object	medium	2.61248	1	2.61248
Round Object	medium	0.3	1	0.3
Round Object	medium	0.504	1	0.504
Elongated Object	medium	0.234	1	0.234
Pipe segments	medium	0.0314	5	0.157
Pipe	small	0.00785	10	0.0785
Pipe	large	0.1256	2	0.2512

