

Specifications

Singing Sands Raised Boardwalk

August 2017

BACKGROUND:

Singing Sands is a very popular day use area with approximately 90,000 people visiting this site in 2016. It is located at the entrance of Dorcas Bay Road, Tobermory, on the Lake Huron side of the peninsula. A significant portion of visitors are drawn to the safe shallow beach experience at the entrance to the site, while the larger Singing Sands area is described as a naturalist's paradise being situated on a fragile ecosystem with many species at risk.

The purpose of this raised boardwalk is to provide visitors with an opportunity to enjoy and learn about the fen and dune area without damaging its delicate ecosystem. This will encourage a “beyond the beach” experience that will help families feel supported and excited to explore the area, and gain a lasting sense of appreciation for and a connection to the special beauty of Singing Sands. Wayside extensions to the trails will feature non-personal exhibits interpreting the unique ecology and geology of the area as well as restoration and ongoing conservation efforts. The fen boardwalk will be wheelchair accessible and be railed to define the trail experience and prevent social trails into the sensitive fen.

PARKS CANADA AGENCY MANDATE

On behalf of the people of Canada, we protect and present nationally significant examples of Canada's natural and cultural heritage, and foster public understanding, appreciation and enjoyment in ways that ensure their ecological and commemorative integrity for present and future generations.

Division 1**General Requirements**

| | |
|-------------|---|
| 01 11 00 | Summary of Work |
| 01 29 00 | Payment Procedures |
| 01 29 83 | Payment Procedures for Testing Laboratory Services |
| 01 31 00 | Project Management and Coordination |
| 01 33 00 | Submittal Procedures |
| 01 35 00.06 | Special Procedures for Traffic Control |
| 01 35 29.6 | Health and Safety Requirements |
| 01 35 43 | Environmental Procedures |
| 01 45 00 | Quality Control |
| 01 52 00 | Construction Facilities |
| 01 56 00 | Temporary Barriers and Enclosures |
| 01 61 00 | Common Product Requirements |
| 01 74 00 | Cleaning and Waste Management |
| 01 74 19 | Construction/Demolition Waste Management and Disposal |
| 01 78 00 | Closeout Submittals |

Part 1 General

1.1 SECTION INCLUDES

- .1 Title and description of work.
- .2 Work by others.
- .3 Work sequence.
- .4 Contractor use of premises.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- .1 Work covered by this Contract is for the supply and installation of approximately 340m raised boardwalk. Please refer to the Boardwalk location plan and location map.
- 2 The following design considerations shall be implemented into the boardwalk construction. Design considerations may be discussed in person with the Departmental Representative.
 - .1 310m of 2.1m wide raised boardwalk with a minimum clearance of 500mm above existing ground, except where terminals require a lower elevation, or approved by Departmental Representative.
 - .2 30m of 3.0m wide raised boardwalk with a minimum clearance of 200mm above existing ground, except where terminals require a lower elevation, or approved by Departmental Representative.
 - .3 Bridge spanning 5m. (Constructed to match the 2.1m boardwalk including railing.)
 - .4 Five wayside extensions (1.5 x 4m) to the boardwalk for viewing & seating
 - .5 Boardwalk decking to be Eastern White Cedar. (Aesthetically pleasing).
 - .6 Boardwalk surface to be suitable for two-way wheelchair traffic.
 - .7 Boardwalk piling to consist of helical piles, sized and designed per company standards, loading requirements and site conditions. Refer to Ground Penetrating Radar report.
 - .8 Construct the boardwalk to support load of machinery and equipment used during construction.
 - .9 Helical piles, and if applicable, screw piles to have factored design capacity of 50KN.
 - .10 All 2.1m wide boardwalk to be railed and compliant with OBC/NBC. (See location plan for railing design. No railings are required for the 3.0m wide boardwalk.)
 - .11 All seen wood dimension to be nominal rough sawn lumber with consistent dimension. (Up to 1/8" tolerance for discrepancies)
 - .12 Any unseen wood material to be pressure treated or cedar.
 - .13 All deck and railing fasteners to be high structural and shear strength and galvanized.
 - .14 Any metal components (plates, bolts, saddle) to be galvanized and where applicable, have welded connection or field bolt. Welded connections to be coated with zinc rich paint or bituminous paint.

1.3 WORK BY OTHERS

- .1 Not Applicable

1.4 LOCATION OF THE SITE

- .1 The Project Site is located at 120 Dorcas Bay Road, Tobermory ON, N0H 2R0.
- .2 The Site, is 'Singing Sands' and is located in the Bruce Peninsula National Park.
- .3 The Bruce Peninsula National Park is located on the Lake Huron side of the Peninsula, which is accessed off Highway 6.

1.5 SITE ACCESS

- .1 The site can only be accessed from land. Please refer to the Location Map Plan for specific site access details and access to staging areas.

1.6 WORK SEQUENCE

- .1 The installation shall be completed by **December 1st 2017**
- .2 The Singing Sands site will be closed to visitors, however, other contractors will be accessing the area during this construction contract. The contractor will be responsible for closing off designated staging area and closing only the immediate section of boardwalk that is under construction.
- .3 Clean all machinery off-site prior to use on-site to reduce the risk of transfer of invasive species.
- .4 Use the boardwalk as a platform during construction, with no machinery on the fen surface.
- .5 To be constructed in an environmentally conscious manner, with as little damage done to the fen as possible.
- .6 Cut all material off-site or in a designated location on site.
- .7 Remove existing bridge just prior to constructing replacement bridge.

.8 Project Schedule

| Deliverable | Date | Comments |
|---|-----------------------------|---|
| Contractor & Departmental Rep to conduct an initial site visit | October 2, 2017 | Departmental Representative to have routing staked prior to site visit. Contractor to collect all field data required to comply with construction considerations. |
| Preparation Period | October 2 – October 10 2017 | Contractor to provide detailed boardwalk layout confirming code compliant slope for wheelchairs. (A second site visit may be required upon the request of the Departmental Representative). |
| Contractor to Submit: Product data sheets Cost break down Health & Safety Plan | October 5, 2017 | Submitted via email. |
| Construction Window | Oct 10 – Dec 1, 2017 | |
| Project Close Out | December 20, 2017 | |

1.7 CONTRACTOR USE OF PREMISES

- .1 Contractor has unrestricted use of the construction site until Substantial Performance.
- .2 Contractor shall limit use of premises for Work, to allow:
 - .1 Partial owner occupancy.
 - .2 Work by other contractors.
- .3 Disturbance to natural features shall be minimized.
- .4 Coordinate use of the premises under direction of Departmental Representative (Parks Canada).
- .5 Obtain and pay for use of additional storage or work areas needed for operation under this Contract.
- .6 Departmental Representative (Parks Canada) will occupy premises during the entire construction period for the execution of normal operations.
- .7 Disturbed areas shall be reinstated to existing condition or better.
- .8 The site will be closed to visitors.

1.8 REFERENCES AND CODES

- .1 National Building Code of Canada (NBC) 2010 including all amendments up to closing date.
- .2 Ontario Provincial Standard Specifications (OPSS) including all amendments up to the closing date.
- .3 Perform work in accordance with National Building Code of Canada (NBC) and other codes of provincial or local application provided that in case of conflict or discrepancy, more stringent requirements apply.
- .4 Meet or exceed requirements of:
 - .1 Contract documents.
 - .2 Specified standards, codes and referenced documents.

1.9 BUILDING SMOKING ENVIRONMENT

- .1 Smoking is prohibited in all workplaces within Parks Canada buildings.
- .2 Although smoking is not permitted in hazardous areas, care must still be exercised in the use of smoking materials in non-restricted areas.

END OF SECTION

Part 1 General

1.1 RELATED SECTIONS & DOCUMENTS

- .1 Section 01 29 83 Payment Procedures for Laboratory Testing
- .2 Section 01 33 00 Project Management and Coordination
- .3 Section 01 78 00 Closeout Submittals
- .4 Section 01 79 00 Demonstration & Training
- .5 Government of Canada's Supply Manual
- .6 Government of Canada's Standard Acquisition Clauses and Conditions (SACC) Manual

1.2 SECTION INCLUDES

- .1 This section specifies the administrative and procedural requirements governing the following:
 - .1 Payment
 - .2 Schedule of Values

1.3 PAYMENT

- .1 Method of Payment
 - .1 The supply of materials, labour tools, equipment, protection, transportation, customs, administrative costs, profits, financing, etc. as necessary to perform the work of this contract are included with the items listed on the tender form, unless otherwise indicated.
 - .2 Costs associated with work for Division 1 and mobilization & demobilization, shall be included in the costs for the items identified on the tenderform.
 - .3 All items in this contract to be paid by costs included in the lump sum items.
 - .4 The Lump Sum Items presented on the bid form are for
 - .1 The supply and installation of the raised boardwalk, including all requirements laid out in Division 01 11 00, Section 1.2.

1.4 SCHEDULE OF VALUES

- .1 Submit the schedule of values to the Departmental Representative prior to the first progress claim.

END OF SECTION

Part 1 General**1.1 RELATED REQUIREMENTS SPECIFIED ELSEWHERE**

- .1 Particular requirements for inspection and testing to be carried out by testing laboratory designated by the Departmental Representative are specified under various sections.

1.2 APPOINTMENT AND PAYMENT

- .1 The Departmental Representative will appoint and pay for services of testing laboratory except as follows:
 - .1 Inspection and testing required by laws, ordinances, rules, regulations or orders of public authorities.
 - .2 Inspection and testing performed exclusively for Contractor's convenience.
 - .3 Testing, adjustment and balancing of conveying systems, mechanical and electrical equipment and systems.
 - .4 Mill tests and certificates of compliance.
 - .5 Tests specified to be carried out by Contractor under the supervision of the Departmental Representative.
 - .6 Additional tests specified in the following paragraph.
- .2 Where tests or inspections by designated testing laboratory reveal Work not in accordance with contract requirements, Contractor to pay costs for additional tests or inspections as required by the Departmental Representative to verify acceptability of corrected work.

1.3 CONTRACTORS RESPONSIBILITIES

- .1 Provide labour, equipment and facilities to:
 - .1 Provide access to Work to be inspected and tested.
 - .2 Facilitate inspection and tests.
 - .3 Make good Work disturbed by inspection and test.
- .2 Notify the Departmental Representative sufficiently in advance of operations to allow for assignment of laboratory personnel and scheduling of test.
- .3 Where materials are specified to be tested, deliver representative samples in required quantity to testing laboratory.
- .4 Pay costs for uncovering and making good Work that is covered before required inspection or testing is completed and approved by the Departmental Representative.

END OF SECTION

Part 1 General**1.1 PROJECT MEETINGS**

- .1 One (1) meeting is required to confirm the limits of construction and the designated path.
- .2 The Departmental Representative (Parks Canada) will arrange for additional project meetings as required, and assume responsibility for setting times and recording and distributing minutes.

1.2 ON-SITE DOCUMENTS

- .1 Maintain at job site, one copy each of the following:
 - .1 Contract drawings.
 - .2 Specifications.
 - .3 Addenda.
 - .4 Reviewed shop drawings.
 - .5 Change orders.
 - .6 Other modifications to Contract.
 - .7 Field test reports.
 - .8 Manufacturer's installation and application instructions.

1.3 CLOSEOUT PROCEDURES

- .1 Notify the Departmental Representative (Parks Canada) when Work is considered ready for Substantial Performance.
- .2 Accompany the Departmental Representative (Parks Canada) on preliminary inspection to determine items listed for completion or correction.
- .3 Comply with the Departmental Representative's (Parks Canada) instructions for correction of items of Work listed in executed Certificate of Substantial Performance and for access to Owner-occupied areas.
- .4 Notify the Departmental Representative (Parks Canada) of completion of items of Work determined in the Departmental Representative's final inspection.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Shop drawings and product data.
- .2 Samples.

1.2 ADMINISTRATIVE

- .1 Submit to the Departmental Representative (Parks Canada) submittals listed for review. Submit with reasonable promptness and in orderly sequence so as not to cause delay in Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .2 Work affected by submittal shall not proceed until review is complete.
- .3 Present shop drawings, product data, samples and mock-ups 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 the Departmental Representative (Parks Canada). This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and coordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and shall be considered rejected.
- .6 Notify the Departmental Representative (Parks Canada), 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 coordinated.
- .8 Contractor's responsibility for errors and omissions in submission is not relieved by the Departmental Representative's (Parks Canada) review of submittals.
- .9 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by the Departmental Representative's (Parks Canada) review.
- .10 Keep one reviewed copy of each submission on site.

1.3 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. Where article or equipment attach or connect to other articles or equipment,

indicate that such items have been coordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross references to design drawings and specifications.

- .3 Allow 5 working days for the Departmental Representative's (Parks Canada) review of each submission.
- .4 Adjustments made on shop drawings by Reviewer are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to the Departmental Representative (Parks Canada) prior to proceeding with Work.
- .5 Make changes in shop drawings as the Departmental Representative (Parks Canada) may require, consistent with Contract Documents. When resubmitting, notify the Departmental Representative (Parks Canada) in writing of any revisions other than those requested.
- .6 Delete information not applicable to project.
- .7 Accompany submissions with transmittal letter containing:
 - .1 Date.
 - .2 Project title and number.
 - .3 Contractor's name and address.
 - .4 Identification and quantity of each shop drawing, product data and sample.
 - .5 Other pertinent data.
- .8 Submissions shall include:
 - .1 Date and revision dates.
 - .2 Project title and number.
 - .3 Name and address of:
 - .1 Subcontractor.
 - .2 Supplier.
 - .3 Manufacturer.
 - .4 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
 - .5 Details of appropriate portions of Work as applicable:
 - .1 Fabrication.
 - .2 Layout, showing dimensions, including identified field dimensions, and clearances.
 - .3 Setting or erection details.

- .4 Capacities.
 - .5 Performance characteristics.
 - .6 Standards.
 - .7 Operating weight.
 - .8 Wiring diagrams.
 - .9 Single line and schematic diagrams.
 - .10 Relationship to adjacent work.
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- .9 Submit minimum of 7 prints of shop drawings for each requirement requested in specification Sections and as the Departmental Representative (Parks Canada) may reasonably request with the understanding the Departmental Representative (Parks Canada) will retain 3 copies of the reviewed submission
 - .10 Submit minimum of 7 copies of product data sheets or brochures for requirements requested in specification Sections and as requested by the Departmental Representative (Parks Canada) where shop drawings will not be prepared due to standardized manufacture of product, with the understanding the Departmental Representative (Parks Canada) will retain 3 copies of the reviewed submission.
 - .11 Supplement standard in formation to provide details applicable to project.
 - .12 If upon review by the Departmental Representative (Parks Canada), no errors or omissions are discovered or if only minor corrections are made, 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.
 - .13 The review of shop drawings by the Departmental Representative (Parks Canada) is for sole purpose of ascertaining conformance with the general concept. This review shall not mean that the Departmental Representative (Parks Canada) approves detail design inherent in shop drawings, responsibility for which shall remain with the Contractor submitting same, and such review shall not relieve Contractor of responsibility for errors or omissions in shop drawings or of responsibility for meeting all requirements of construction and Contract Documents. Without restricting generally the 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 coordination of Work of all sub-trades.
 - .14 After the Departmental Representative's (Parks Canada) review, distribute copies.

1.4 SAMPLES

- .1 Submit for review samples as requested in respective specification Sections. Label samples with origin and intended use.
- .2 Notify the Departmental Representative (Parks Canada) in writing at time of submission of deviations in samples from requirements of Contract Documents.
- .3 Where colour, pattern or texture is criterion, submit full range of samples.
- .4 Adjustments made on samples by the Departmental Representative (Parks Canada) are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to the Departmental Representative (Parks Canada) prior to proceeding with Work.
- .5 Make changes in samples which the Departmental Representative (Parks Canada) may require, consistent with Contract Documents.
- .6 Reviewed and accepted samples will become standard of workmanship and material against which installed Work will be verified.

1.5 MOCK-UPS

- .1 Erect mock-ups in accordance with 01 45 00 – Quality Control.

1.6 PROPOSAL

- .1 The Contractor shall prepare a brief proposal to carry out the work including the proponents general understanding of the project requirements, a boardwalk design profile and the building method outlining: stockpiling needs, machinery required for build, and building technique to avoid impact on fen.

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 Ontario
 - .1 Occupational Health and Safety Act and Regulations for Construction Projects, R.S.O. [latest version].

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. 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.
- .3 Submit 2 copies of Contractor's authorized representative's work site health and safety inspection reports to the Departmental Representative (Parks Canada) weekly for information and record purposes only.
- .4 Submit copies of reports or directions issued by Federal, Provincial and Territorial health and safety inspectors.
- .5 Submit copies of incident and accident reports.
- .6 Submit WHMIS MSDS – Material Safety Data Sheets.
- .7 The Departmental Representative (Parks Canada) will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within 5 days after receipt of plan. Revise plan as appropriate and resubmit plan to the Departmental Representative (Parks Canada) within 5 days after receipt of comments from the Departmental Representative (Parks Canada).
- .8 The 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.
- .9 Medical Surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of Work, and

submit additional certifications for any new site personnel to the Departmental Representative (Parks Canada).

- .10 On-site contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations.
- .11 The contractor is to sign “ Attestation and Proof of Compliance with Occupational Health and Safety” and submit prior to the start of work. Form to be provided upon award.

1.3 FILING OF NOTICE

- .1 File Notice of Project with Provincial authorities prior to beginning of Work.

1.4 SAFETY ASSESMENT

- .1 Perform the site specific safety hazard assessment related to project.

1.5 MEETINGS

- .1 Schedule and administer Health and Safety meeting with Departmental Representative (Parks Canada) prior to commencement of Work.

1.6 GENERAL REQUIREMENTS

- .1 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. Health and Safety Plan must address project specifications.
- .2 Departmental Representative (Parks Canada) may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.

1.7 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, territorial and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.

1.8 PROJECT / SITE CONDITIONS

- .1 Work at the site may involve contact with:
 - .1 Poison Ivy
 - .2 Silica (sand & aggregate)
 - .3 Massasauga Rattlesnakes

.4 Black Bears

1.9 COMPLIANCE REQUIREMENTS

- .1 Comply with Ontario Health and Safety Act and Regulations for Construction Projects, R.S.O.
- .2 Comply with Occupational Health and Safety Regulations, 1996.
- .3 Comply with Canada Labour Code, Canada Occupational Health and Safety Regulations.

1.10 UNFORSEEN HAZARDS

- .1 When unforeseen peculiar safety-related factor, hazard or condition occurs during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Province having jurisdiction, and advise Departmental Representative (Parks Canada) verbally and in writing.

1.11 HEALTH AND SAFETY COORDINATOR

- .1 Employ and assign to Work, competent and authorized representative as Health and Safety Coordinator. Health and Safety Coordinator must:
 - .1 Have minimum 2 year's site-related working experience specific to activities associated with this 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.
 - .5 Be on site during execution of Work and report directly to, and be under direction of, site supervisor.

1.12 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 the Departmental Representative (Parks Canada).

1.13 CORRECTION OF NON-COMPLIANCE

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by the Departmental Representative (Parks Canada).

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

1.14 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.

END OF SECTION

Part 1 General

1.1 FIRES

- .1 Fires and burning of rubbish on site are not permitted.

1.2 DISPOSAL OF WASTES

- .1 Do not bury rubbish and waste materials on site unless approved by the Departmental Representative (Parks Canada).
- .2 Do not dispose of waste or volatile materials such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.

1.3 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 into waterways, sewer or drainage systems.
- .3 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.

1.4 SITE CLEARING AND PLANT PROTECTION

- .1 Protect trees and plants on site and adjacent properties where indicated. Work shall be completed in a manner to prevent any damage to trees that are to be retained.
- .2 Minimize stripping of topsoil and vegetation.
- .3 Restrict tree removal to areas indicated or designated by the Departmental Representative.

1.5 WORK ADJACENT TO WATERWAYS

- .1 Do not operate construction equipment in waterways without the appropriate sedimentation and pollution control measures in place.
- .2 Do not use waterway beds for borrow material without the Departmental Representative's approval.
- .3 Do not dump excavated fill, waste material or debris in waterways.
- .4 Design and construct temporary crossings to minimize erosion to waterways.
- .5 Do not skid logs or construction materials across waterways.
- .6 Avoid indicated spawning beds when constructing temporary crossings of waterways.
- .7 Do not blast under water or within 100m of indicated spawning beds.

1.6 POLLUTION CONTROL

- .1 Clean all equipment off-site prior to use on site to reduce the risk of transfer of invasive species. Refer to clean equipment protocol outlined in the attached Basic Impact Analysis.
- .2 Maintain temporary erosion and pollution control features installed under this Contract.
- .3 Control emissions from equipment and plant to local authorities' emission requirements.
- .4 Prevent sandblasting and other extraneous materials from contaminating air beyond application area, by providing temporary enclosures.
- .5 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.
- .6 Refuelling shall be completed on hard surfaces and a minimum of 50m from water bodies.
- .7 Equipment shall be maintained in good working order. Equipment and heavy machinery used shall meet or exceed all applicable emission requirements.
- .8 Ensure spill containment equipment is available on site.
- .9 Prevent any and all hydrocarbons from entering the ground.
- .10 Minimize noise levels from construction activities by using proper muffling devices, in addition to appropriate timing and location of these activities to reduce minimize the effect of noise on nearby residents, recreationists and wildlife.

1.7 WILDLIFE PROTECTION

- .1 Fen ecosystem shall not be disturbed aside from limited foot traffic.
- .2 Eastern Massassauga Rattlesnake, Northern Ribbon Snake and Eastern Milksnake are species at risk and cannot be harmed. If they are found on site, please contact the Departmental Representative (Parks Canada) to relocate them away from the site (50m).
- .3 Turtles should not be harmed, and should be carefully relocated to a wetland area.

1.8 DOCUMENT REVIEW

- .1 Contractor shall review the Parks Canada National Best Management Practises: Roadway, Highway, Parkway and Related Infrastructure Document dated July 2015 and ensure that there operations are in conformance with the Best Management Practises.

1.9 SUBMITTALS

- .1 One (1) week prior to commencing construction activities or the delivery of materials to the site, provide an Environmental Protection Plan for the review and approval of the Departmental Representative (Parks Canada). The Environmental Protection Plan shall include a comprehensive overview of known or potential environmental issues to be addressed during construction. The Environmental Protection Plan shall be in conformance with the Best Management Practises document prepared by Parks Canada.

1.10 NOTIFICATION

- .1 The Departmental Representative (Parks Canada) will notify the Contractor in writing of any observed non compliance with the Environmental Protection Plan, Federal, Provincial or Municipal Environmental laws or regulations, and permits.
- 2 After the receipt of such notification, the Contractor shall inform the Departmental Representative (Parks Canada) of the proposed corrective action and take such action for approval of the Departmental Representative (Parks Canada).
- 3 The Departmental Representative will issue a stop work order until satisfactory corrective action has been taken.
- 4 No time extension will be granted or no equitable adjustments allowed to the Contractor for such suspensions.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Inspection and testing.
- .2 Tests and mix designs.
- .3 Mock-ups.
- .4 Mill tests.
- .5 Equipment and system adjust and balance.

1.2 INSPECTION

- .1 Allow the Departmental Representative (Parks Canada) access to Work. If part of Work is in preparation at location other than Place of Work, allow access to such Work whenever it is in progress.
- .2 Give timely notice requesting inspection if Work is designated for special tests, inspections or approvals by the Departmental Representative (Parks Canada) instructions, or law of Place of Work.
- .3 If Contractor covers or permits to be covered Work that has been designated for special tests, inspections or approvals before such is made, uncover such Work, have inspections or tests satisfactorily completed and make good such Work.
- .4 The Departmental Representative (Parks Canada) may order any part of Work to be examined if Work is suspected to be not in accordance with Contract Documents.

1.3 INDEPENDENT INSPECTION AGENCIES

- .1 Independent Inspection/Testing Agencies will be engaged by the Departmental Representative (Parks Canada) for purpose of inspecting and/or testing portions of Work. Cost of such services will be borne by Owner.
- .2 Provide equipment required for executing inspection and testing by appointed agencies.
- .3 Employment of inspection/testing agencies does not relax responsibility to perform Work in accordance with Contract Documents.
- .4 If defects are revealed during inspection and/or testing, the appointed agency will request additional testing to ascertain full degree of defect. The Contractor shall correct defect and irregularities as advised by the Departmental Representative at no cost to Owner. The Contractor shall pay costs for retesting and re-inspection.

1.4 ACCESS TO WORK

- .1 Allow inspection/testing agencies access to Work, offsite manufacturing and fabrication plants.
- .2 Cooperate to provide reasonable facilities for such access.

1.5 PROCEDURES

- .1 Notify appropriate agency and the Departmental Representative (Parks Canada) in advance of requirements for tests, in order that attendance arrangements can be made.
- .2 Submit samples and/or materials required for testing, as specifically requested in specifications. Submit with reasonable promptness and in an orderly sequence so as not to cause delay in Work.
- .3 Provide labour and facilities to obtain and handle samples and materials on site. Provide sufficient space to store and cure test samples.

1.6 REJECTED WORK

- .1 Remove defective Work, whether result of poor workmanship, use of defective products or damage and whether incorporated in Work or not, which has been rejected by the Departmental Representative (Parks Canada) as failing to conform to Contract Documents. Replace or re-execute in accordance with Contract Documents.
- .2 Make good other Contractor's work damaged by such removals or replacements promptly.
- .3 If in the opinion of the Departmental Representative (Parks Canada) it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents, Owner may deduct from Contract Price difference in value between Work performed and that called for by Contract Documents, amount of which shall be determined by the Departmental Representative (Parks Canada).

1.7 REPORTS

- .1 Submit 4 copies of inspection and test reports to the Departmental Representative (Parks Canada).
- .2 Provide copies to Subcontractor of work being inspected or tested and manufacturer or fabricator of material being inspected or tested.

1.8 TESTS AND MIX DESIGNS

- .1 Furnish mix results and test designs as may be requested.
- .2 The costs of test and mix designs beyond those called for in Contract Documents or beyond those required by law of Place of Work shall be appraised by the Departmental Representative (Parks Canada) and may be authorized as recoverable.

1.9 MOCK-UPS

- .1 Prepare mock-ups for Work specifically requested in specifications. Include for Work of all sections required to provide mock-ups.
- .2 Construct in all locations acceptable to the Departmental Representative (Parks Canada).
- .3 Prepare mock-ups for the Departmental Representative's review with reasonable promptness and in an orderly sequence, so as not to cause any delay in Work.

- .4 Failure to prepare mock-ups in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .5 If requested, the Departmental Representative will assist in preparing a schedule fixing dates for preparation.
- .6 Remove mock-up at conclusion of Work or when acceptable to.
- .7 Mock-ups may remain as part of Work.
- .8 Specification section identifies whether mock-up may remain as part of Work or if it is to be removed and when.

1.10 MILL TESTS

- .1 Submit mill test certificates as requested or required of specification Sections.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Construction aids.
- .2 Office and sheds.
- .3 Parking.
- .4 Project identification.

1.2 REFERENCES

- .1 Canadian Standards Association (CSA International)
 - .1 CAN/CSA-Z321 Signs and Symbols for the Occupational Environment

1.3 INSTALLATION AND REMOVAL

- .1 Provide construction facilities in order to execute work expeditiously.
- .2 Remove from site all such work after use.

1.4 SHORING AND BRACING

- .1 Contractor is responsible for the design, supply, installation and maintenance of any shoring, bracing or similar type systems required during the execution of the Work. Coordinate use with the Departmental Representative (Parks Canada).
- .2 Provide certification of any such shoring, bracing or similar type systems as directed by the Departmental Representative (Parks Canada) or as required by the Ministry of Labour, Ontario.

1.5 SITE STORAGE/LOADING

- .1 Confine work and operations of employees by Contract Documents. Do not unreasonably encumber premises with products.
- .2 Do not load or permit to load any part of Work with a weight or force that will endanger the Work.

1.6 CONSTRUCTION PARKING

- .1 Parking will be permitted on site provided it does not disrupt performance of Work.
- .2 Provide and maintain adequate access to project site.
- .3 Build or maintain temporary roads where indicated or directed by the Departmental Representative (Parks Canada) and provide snow removal during period of Work.
- .4 If authorized to use existing roads for access to project site, maintain such roads for duration of Contract and make good damage resulting from Contractor's use of roads.

1.7 FIRST AID

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

1.8 EQUIPMENT, TOOL AND MATERIAL STORAGE

- .1 Provide and maintain, in a clean and orderly condition, lockable weatherproof sheds for storage of tools, equipment and materials.
- .2 Locate materials not required to be stored in weatherproof sheds on site in a manner to cause least interference with work activities.

1.9 SANITARY FACILITIES

- .1 Provide sanitary facilities for work force in accordance with governing regulations and ordinances.
- .2 Post notices and take such precautions as required by local health authorities. Keep area clean and premises in sanitary condition.

1.10 CONSTRUCTION SIGNAGE

- .1 Direct requests for approval to erect a Contractor signboard to the Departmental Representative (Parks Canada).
- .2 Signs and notices for safety and instruction shall be in both official languages. Graphic symbols shall conform to CAN3-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 the Departmental Representative (Parks Canada).

1.11 CLEAN-UP

- .1 Remove construction debris, waste materials, packaging material from work site daily.
- .2 Clean or mud tracked onto paved or surfaced roadways.
- .3 Store materials resulting from demolition activities that are salvageable.
- .4 Stack stored new or salvaged material no in construction facilities.

END OF SECTION

Part 1

General

1.1 SECTION INCLUDES

- .1 Barriers.
- .2 Environmental Controls.
- .3 Traffic Controls.
- .4 Fire Routes.

1.2 INSTALLATION AND REMOVAL

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

1.3 HOARDING

- .1 No temporary site enclosures are required by the Departmental Representatives.

1.4 GUARD RAILS AND BARRICADES

- .1 Provide secure, rigid guard rails and barricades around deep excavations.
- .2 Provide as required by governing authorities.

1.5 ACCESS TO SITE

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

1.6 PUBLIC TRAFFIC FLOW

- .1 There will be no public access during this construction contract.

1.7 FIRE ROUTES

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

1.8 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.

1.9 RELICS AND ANTIQUITIES

- .1 Protect relics, antiquities, items of historical or scientific interest such as cornerstones and contents, commemorative plaques, inscribed tablets and similar objects found during course of Work.
- .2 Give immediate notice to the Departmental Representative (Parks Canada) and await the Departmental Representative's written instructions before proceeding with Work in this area.
- .3 Relics, antiquities and items of historical and scientific interest remain her Majesty's property.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Product quality, availability, storage, handling, protection and transportation.
- .2 Manufacturer's instructions.
- .3 Quality of Work, coordination and fastenings.
- .4 Existing facilities.

1.2 QUALITY

- .1 Products, materials, equipment and articles (referred to as products throughout specifications) incorporated in Work shall be new, not damaged or defective, and of best quality, (compatible with specifications) for purpose intended. If requested, furnish evidence as to type, source and quality of products provided.
- .2 Defective products, whenever identified prior to completion of Work, will be rejected, regardless of previous inspections. Inspection does not relieve responsibility, but is precaution against oversight or error. Remove and replace defective products at own expense and be responsible for delays and expenses caused by rejection.
- .3 Should any dispute arise as to quality or fitness of products, decision rests strictly with the Departmental Representative (Parks Canada) based upon requirements of Contract Documents.
- .4 Unless otherwise indicated in specifications, maintain uniformity of manufacture for any particular or like item throughout building.
- .5 Permanent labels, trademarks and nameplates on products are not acceptable in prominent locations, except where required for operating instructions, or when located in mechanical or electrical rooms.

1.3 AVAILABILITY

- .1 Immediately upon signing Contract, review product delivery requirements and anticipate foreseeable supply delays for any items. If delays in supply of products are foreseeable, notify the Departmental Representative (Parks Canada) of such, in order that substitution or other remedial action may be authorized in ample time to prevent delay on performance of Work
- .2 In event of failure to notify the Departmental Representative (Parks Canada) at commencement of Work and should it subsequently appear that Work may be delayed for such reason, the Departmental Representative (Parks Canada) reserves right to substitute more readily available products of similar character, at no increase in Contract Price or Contract Time.

1.4 STORAGE, HANDLING AND PROTECTION

- .1 Handle and restore products in manner to prevent damage, adulteration, deterioration and soiling and in accordance with manufacturer's instructions when applicable.
- .2 Store packaged or bundled products in original and undamaged condition with manufacturer's seal and labels intact. Do not remove from packaging or bundling until required in Work.
- .3 Store products subject to damage in weatherproof enclosures.
- .4 Store cementitious products clear of earth or concrete floors, and away from walls.
- .5 Keep sand, when used for grout or mortar materials, clean and dry. Store sand on wooden platforms and cover with waterproof tarpaulins during inclement weather.
- .6 Store sheet materials and lumber on flat, solid supports and keep clear of ground. Slope to shed moisture.
- .7 Store and mix paints in heated and ventilated room. Remove oily rags and other combustible debris from site daily. Take every precaution necessary to prevent spontaneous combustion.
- .8 Remove and replace damaged products at own expense and to satisfaction of the Departmental Representative (Parks Canada).
- .9 Touch-up damaged factory finished surfaces to the Departmental Representative's (Parks Canada) satisfaction. Use touch-up materials to match original. Do not paint over name plates.

1.5 TRANSPORTATION

- .1 Pay costs of transportation of products required in performance of Work.
- .2 Transportation costs of products supplied by Owner will be paid for by the Departmental Representative (Parks Canada). Unload, handle and store such products.

1.6 MANUFACTURERS INSTRUCTIONS

- .1 Unless otherwise indicated in specifications, install or erect products in accordance with manufacturer's instructions. Do not rely on labels or enclosures provided with products. Obtain written instructions daily from manufacturers.
- .2 Notify the Departmental Representative (Parks Canada) in writing, of conflicts between specifications and manufacturer's instructions, so that the Departmental Representative (Parks Canada) may establish course of action.
- .3 Improper installation or erection of products, due to failure in complying with these requirements, authorizes the Departmental Representative (Parks Canada) to require removal and re-installation at no increase in Contract Price or Contract Time.

1.7 QUALITY OF WORK

- .1 Ensure quality of work is of highest standard, executed by workers experienced and skilled in respective duties for which they are employed. Immediately notify the Departmental Representative (Parks Canada) if required Work is such as to make it impractical to produce required results.
- .2 Do not employ anyone unskilled in their required duties. The Departmental Representative (Parks Canada) reserves right to require dismissal from site, workers deemed incompetent or careless.
- .3 Decisions as to standard or fitness of Quality of Work in cases of dispute rest solely with the Departmental Representative (Parks Canada), whose decision is final.

1.8 COORDINATION

- .1 Ensure cooperation of workers in laying out Work. Maintain efficient and continuous supervision.
- .2 Be responsible for coordination and placement of openings, sleeves and accessories.

1.9 REMEDIAL WORK

- .1 Perform remedial work required to repair or replace parts or portions of Work identified as defective or unacceptable. Coordinate adjacent affected Work as required.
- .2 Perform remedial work by specialists familiar with materials affected. Perform in a manner

1.10 PROTECTION OF WORK IN PROGRESS

- .1 Adequately protect Work completed or in progress. Work damaged or defaced due to failure in providing such protection is to be removed and replaced, as directed by Departmental Representative (Parks Canada), at no increase in Contract Price or Contract Time.

1.11 EXISTING UTILITIES

- .1 When breaking into or connecting to existing services or utilities, execute Work at times directed by local governing authorities, with minimum of disturbance to Work, and/or building occupants and pedestrian and vehicular traffic.
- .2 Protect, relocate or maintain existing active services. When services are encountered, cap off in manner approved by authority having jurisdiction. Stake and record location of capped service.

END OF SECTION

Part 1**General****1.1 SECTION INCLUDES**

- .1 Progressive cleaning.
- .2 Final Cleaning.

1.2 PROJECT CLEANLINESS

- .1 Maintain Work in tidy condition, free from accumulation of waste products and debris.
- .2 Remove waste materials from site at regularly scheduled times or dispose of as directed by the Departmental Representative. Do not burn waste materials on site.
- .3 Clear snow and ice as required and store in designated areas.
- .4 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .5 Provide on-site containers for collection of waste materials and debris.
- .6 Provide and use clearly marked separate bins for recycling.
- .7 Remove debris daily to a designated Landfill Site. The work site must be left clean and tidy upon completion, to the satisfaction of the Departmental Representative.
- .8 Contractors shall adhere to landfill site restrictions and specified dumping areas.

1.3 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 including that caused by the Departmental Representative or other Contractors.
- .5 Separate materials for reuse and recycling.
- .6 Sweep and wash clean paved areas.

END OF SECTION

Part 1 **General**

1.1 **WASTE MANAGEMENT GOALS**

- .1 Prior to start of Work conduct meetings with Departmental Representative to review and discuss PWGSC's Waste Management Plan and Goals.
- .2 PWGSC's Waste Management Goal is 75 percent of total project waste to be diverted from landfill sites. Provide Departmental Representative documentation that waste management, recycling, reuse of recyclable and reusable materials have been extensively practised.
- .3 Accomplish maximum control of solid construction waste.
- .4 Preserve environment and prevent pollution and environment damage.

1.2 **RELATED SECTIONS**

- .1 Section 01 33 00 Submittal Procedures
- .2 Section 01 74 11 Cleaning

1.3 **DEFINITIONS**

- .1 Class III: non-hazardous waste - construction renovation and demolition waste.
- .2 Cost/Revenue Analysis Workplan (CRAW): based on information from WRW, and intended as financial tracking tool for determining economic status of waste management practices.
- .3 Demolition Waste Audit (DWA): relates to actual waste generated from project.
- .4 Inert Fill: inert waste – exclusively asphalt and concrete.
- .5 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.
- .6 Recyclable: ability of product or material to be recovered at end of its life cycle and re-manufactured into new product for reuse.
- .7 Recycle: process by which waste and recyclable materials are transformed or collected for purpose of being transferred into new products.
- .8 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.
- .9 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.
- .10 Salvage: removal of structural and non-structural materials from deconstruction/disassembly projects for purpose of reuse or recycling.
- .11 Separate Condition: refers to waste sorted into individual types.
- .12 Source Separation: acts of keeping different types of waste materials separate beginning from first time they became waste.
- .13 Waste Audit (WA): detailed inventory of materials in building. Involves quantifying by volume/weight amounts of materials and wastes generated during construction, demolition, deconstruction, or renovation project. Indicates quantities of reuse, recycling and landfill. Refer to Schedule A.
- .14 Waste Management Co-ordinator (WMC): contractor representative responsible for supervising waste management activities as well as coordinating related, required submittal and reporting requirements.
- .15 Waste Reduction Workplan (WRW): written report which addresses opportunities for reduction, reuse, or recycling of materials. Refer to Schedule B. WRW is based on information acquired from WA (Schedule A).
- 1.4 DOCUMENTS**
- .1 Not Applicable for this project.
- 1.5 SUBMITTALS**
- .1 Not Applicable for this project
- 1.6 WASTE AUDIT (WA)**
- .1 WA is not applicable for this project.
- 1.7 WASTE REDUCTION WORKPLAN (WRW)**
- .1 WRW is not applicable for this project.
- 1.8 DEMOLITION WASTE AUDIT (DWA)**
- .1 DWA is not applicable for this project
- 1.9 COST/REVENUE ANALYSIS WORKPLAN (CRAW)**
- .1 CRAW is not applicable for this project.
- 1.10 MATERIALS SOURCE SEPARATION PROGRAM (MSSP)**
- .1 MSSP is not applicable for this project

1.11 WASTE PROCESSING SITES

.1 Name: St. Edmunds Landfill, Municipality of Northern Bruce Peninsula.

.1 Contact Name: Troy Cameron.

.2 Telephone: 519-793-3522 ext. 232

.3 Fax: 519-793-3823

1.12 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 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 is endangered, cease operations and immediately notify Departmental Representative.

.7 Protect surface drainage from damage and blockage.

.8 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.

.9 Protective masks / respirators and gloves should be worn when handling asbestos and mould as per Regulation 278/05.

1.13 DISPOSAL OF WASTES

.1 Do not bury rubbish or waste materials.

.2 Do not dispose of waste into waterways, storm, or sanitary sewers.

.3 Keep records of construction waste including:

.1 Number and size of bins.

.2 Waste type of each bin.

.3 Total tonnage generated.

.4 Tonnage reused or recycled.

.5 Reused or recycled waste destination.

.4 Remove materials from deconstruction as deconstruction/disassembly work progresses.

.5 Disposal of asbestos shall conform to Ontario Regulation 278/05.

1.14 USE OF SITE AND FACILITIES

.1 Contractor must supply any power required.

1.15 SCHEDULING

.1 Co-ordinate Work with other activities at site to ensure timely and orderly progress of Work.

Products

Part 2

NOT USED

2.1

Not used

.1

Execution

Part 3

APPLICATION

3.1

Handle waste materials not reused, salvaged, or recycled in accordance with appropriate regulations and codes.

.1

CLEANING

3.2

Remove tools and waste materials on completion of Work, and leave work area in clean. and orderly condition.

.1

Clean-up work area as work progresses.

Source separate materials to be reused/recycled into specified sort areas .

.2

.3

DIVERSION OF MATERIALS

3.3

Separate materials from general waste stream and stockpile in separate piles or containers, as reviewed by Departmental Representative, and consistent with applicable fire regulations.

.1

.1 Mark containers or stockpile areas . .

- .2 On-site sale of salvaged, recovered, reusable or recyclable materials is not permitted.

3.4 CANADIAN GOVERNMENTAL DEPARTMENTS CHIEF RESPONSIBILITY

FOR THE ENVIRONMENT

- .1 Schedule E - Government Chief Responsibility for the Environment:

| | | | |
|---------|---|--|----------------------------|
| Ontario | Ministry of Environment and Energy, 135 St. Clair Avenue West Toronto, ON M4V 1P5 | <u>General Inquiries</u> 416-323-4321 800-565-4923 | <u>Fax</u> 416-323-4682 |
| | Environment Canada Toronto, ON | 416-734-4494 | |

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 As-built, samples and specifications.
- .2 Equipment and systems.
- .3 Product data, materials and finishes, and related information.
- .4 Operation and maintenance data.
- .5 Spare parts, special tools and maintenance materials.
- .6 Warranties and bonds.
- .7 Final site survey.

1.2 SUBMISSION

- .1 Ensure spare parts, maintenance materials and special tools provided are new, undamaged or defective and of same quality and manufacture as products provided in Work. If requested, furnish evidence as to type, source and quality of products provided.
- .2
- .3 Defective products will be rejected, regardless of previous inspections. Replace products at own expense.

1.3 FORMAT

- .1 Drawings: provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.

1.4 AS-BUILTS AND SAMPLES

- .1 In addition to requirements in General Conditions, maintain at the site for the Departmental Representative (Parks Canada) one record copy of:
 - .1 Specifications.
 - .2 Addenda.
 - .3 Change Orders and other modifications to the Contract.
 - .4 Reviewed shop drawings, product data and samples.
 - .5 Field Test Records.
 - .6 Inspection certificates.
 - .7 Manufacturer's certificates.

- .2 Specifications: legibly mark each item to record actual construction, including:
 - .1 Manufacturer, trade name and catalogue number of each product actually installed, particularly optional items and substitute items.
 - .2 Changes made by addenda and Change Orders.
- .3 Other Documents: maintain manufacturer's certifications, inspection certifications, field test records, required by individual specifications and sections.

1.5 FINAL SURVEY

- .1 Not Applicable

1.6 STORAGE, HANDLING AND PROTECTION

- .1 Not Applicable

1.7 WARRANTIES AND BONDS

- .1 A one (1) year warranty shall be included.
- .2 Correct during the one (1) year warranty from the date of commissioning, all defects reported by the Departmental Representative.
- .3 Obtain warranties and bonds, executed in duplicate by subcontractors, suppliers and manufacturers within ten days after completion of the applicable item of work.
- .4 Except for items put into use with Departmental Representative's permission, leave date of beginning of time of warranty until Date of Substantial Performance is determined (Parks Canada).
- .5 Verify that documents are in proper form, contain full information and are notarized.
- .6 Co-execute submittals when required.
- .7 Retain warranties and bonds until time specified for submittal.

2.0 SPARE PARTS

- .1 Not Applicable

2.1 CERTIFICATES

- .1 The contractor and Departmental Representative shall conduct an on-site inspection upon construction completion until no deficiencies are evident. Upon request a certificate of completion can be issued by the departmental representative.

END OF SECTION