

Part 1 General**1.1 WORK UNDER THIS CONTRACT**

- .1 Works under this contract include the traffic area optimization at Sept-Iles airport, which includes without limitation to;
 - .1 The construction of a new roadway structure paved with bituminous concrete,
 - .2 The grading and seeding of the necessary adjacent surfaces,
 - .3 The modification of the existing configuration and installation of new elevated runway light,
 - .4 The adding of a new projector head on an existing mast,
 - .5 Modification of the existing marking of the apron and the repaint of all the marking of the apron,
 - .6 All other related work as indicated to the plans and estimates.

1.2 WORK SCHEDULING

- .1 Construct Work in stages in the order and within the time specified in specification. The duration must be considered as the maximum time allowed for completion of the work.
- .2 Co-ordinate Progress Schedule with the airport operation and as per modality's of section 01 35 13.13 - Special project procedures for airports facilities and co-ordinate with the Departmental Representative.
- .3 Construct Work in stages to provide for continuous airport operator usage. Do not close off public usage of facilities until use of one stage of Work will provide alternate usage.
- .4 Maintain fire access/control.

1.3 CONTRACTOR USE OF PREMISES

- .1 Limit use of premises for Work.
- .2 Co-ordinate use of premises under direction of Departmental Representative.
- .3 At completion of operations condition of existing work: equal to or better than that which existed before new work started.

1.4 OCCUPANCY BY THE DEPARTMENTAL REPRESENTATIVE

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

1.5 EXISTING UTILITY SERVICES

- .1 Notify Departmental Representative and utility companies of intended interruption of services and obtain required permission.

- .2 Where Work involves breaking into or connecting to existing services, give Departmental Representative 48 hours notice for necessary interruption of mechanical or electrical service throughout course of work. Minimize duration of interruptions. Carry out work at times as directed by governing authorities with minimum disturbance to airport operations.
- .3 Provide alternative routes for pedestrian and vehicular traffic.
- .4 Establish location and extent of service lines in area of work before starting Work. Notify Departmental Representative of findings.
- .5 Where unknown services are encountered, immediately advise Departmental Representative and confirm findings in writing.
- .6 Protect, relocate or maintain existing active services. When inactive services are encountered, cap off in manner approved by authorities having jurisdiction.
- .7 Record locations of maintained, re-routed and abandoned service lines.

1.6 REQUIRED DOCUMENTS

- .1 Maintain at job site, one copy each document as follows:
 - .1 Contract Drawings.
 - .2 Specifications.
 - .3 Addenda.
 - .4 Reviewed Shop Drawings.
 - .5 List of Outstanding Shop Drawings.
 - .6 Change Orders.
 - .7 Other Modifications to Contract.
 - .8 Field Test Reports.
 - .9 Copy of Approved Work Schedule.
 - .10 Health and Safety Plan and Other Safety Related Documents.
 - .11 Other documents as specified.

1.7 TYPE OF CONTRACT

- .1 Tenders will be made on a unit and/or a lump sum price to include labour, materials, equipment and all other cost pertaining to the work or as set forth in the contract.
- .2 All expenses incurred to meet the requirements of the present contract and non covered by item of payment of the unit price table will have to be included in the overheads of the contractor and distributed proportionally on the different items of tender.
- .3 The Contractor when submitting his tender agrees that he is fully informed regarding all the conditions affecting the work to be done, the labour, materials, equipment plant he is to supply and the means of access to the site and that his information was obtained by personal investigation on the site by himself or his authorized representative and not from verbal information given to him by representatives of this Department.

- .4 While the drawings and specifications indicate the general nature of the work to be performed, it must be distinctly understood that the Department reserves the right to alter the alignment grades or the extent of the work as may be found desirable without in any way invalidating the conditions of the contract.

1.8 CODES

- .1 The works must be executed in a manner to satisfied at all exigency:
 - .1 Of contractual documents.
 - .2 Regulations and specified Codes and all other document referred to.
 - .3 Local authority.
- .2 In any case of conflict or discrepancy, the more stringent requirements shall apply.

1.9 WORK SCHEDULE

- .1 Provide within 5 working days after Contract award, a schedule showing anticipated progress stages and final completion of work within time period required by Contract documents.
- .2 Interim reviews of real work progress based on work schedule will be done as required by the Departmental Representative. Schedule updates will be carried out by the Contractor with the collaboration and approval of the Departmental Representative.
- .3 The approval of the revised schedule by the Departmental Representative does not free the Contractor from his responsibility relative to all consequences resulting from a non respect of the original calendar requirements.

1.10 REGULATED ZONE

- .1 The work of the present contract is located in part inside the regulated zone of the airport. It is the responsibility of the contractor to know the requirements for airport security and safety. See the requirement of section 01 35 13.13 Special procedures; airports in use.

1.11 ADDITIONAL DRAWINGS

- .1 The Departmental Representative may furnish additional drawings for clarification. These additional drawings have same meaning and intent as if they were included with the plans referred to in Contract documents.

1.12 SCHEDULE TO COMPLETE ALL WORKS

- .1 All works must be completed at least 30 calendar days after the reception of the contract award.

1.13 PARTICULAR CONDITIONS

- .1 The works must be executed as per the modality's of the section 01 35 13.13 Special procedures; airports in use.
- .1 As describe in section 01 35 13.13 Special procedures; airports in use, the taxiway BRAVO will be closed for general aircraft circulation for the duration of the work. Small

aircraft towed by a mule and engine closed will be authorized to circulate face of the works on taxiway BRAVO.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION

Part 1 General**1.1 CASH ALLOWANCES**

- .1 Include in Contract Price specified cash allowances.
- .2 Cash allowances, unless otherwise specified, cover net cost to Contractor of services, products, construction machinery and equipment, freight, handling, unloading, storage and other authorized expenses incurred in performing Work.
- .3 Contract Price, and not cash allowance, includes Contractor's overhead and profit in connection with such cash allowance.
- .4 Contract Price will be adjusted by written order to provide for excess or deficit to each cash allowance.
- .5 Where costs under a cash allowance exceed amount of allowance, Contractor will be compensated for excess incurred and substantiated plus allowance for overhead and profit as set out in Contract Documents.
- .6 Include progress payments on accounts of work authorized under cash allowances in Departmental representative monthly certificate for payment.
- .7 Amount of each allowance, for Work specified in respective specification Sections is as follows:
 - .1 Section 01 35 13.13 Special procedures for airport facilities include allowance of \$ 30 000 for the purchase of escorts for airport services.

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 RELATED REQUIREMENTS**

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

1.2 APPOINTMENT AND PAYMENT

- .1 Departmental Representative will appoint and pay for services of testing laboratory except 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 supervision of Departmental Representative.
 - .6 Additional tests specified as follows:
- .2 Where tests or inspections by designated testing laboratory reveal Work not in accordance with contract requirements, pay costs for additional tests or inspections as required by Departmental Representative to verify acceptability of corrected work.

1.3 CONTRACTOR'S RESPONSIBILITIES

- .1 Provide labour, equipment and facilities to:
 - .1 Provide access to Work for inspection and testing.
 - .2 Facilitate inspections and tests.
 - .3 Make good Work disturbed by inspection and test.
 - .4 Provide storage on site for laboratory's exclusive use to store equipment and cure test samples.
- .2 Notify Departmental Representative 48 hour's minimum 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 Departmental Representative.

Part 2 Products NOT USED

Part 3 Execution NOT USED

END OF SECTION

Part 1 General

1.1 PRECONSTRUCTION MEETING

- .1 Within 15 days after award of Contract, request a meeting of parties in contract to discuss and resolve administrative procedures and responsibilities.
- .2 Departmental Representative, Contractor, major Subcontractors, field inspectors and supervisors will be in attendance.
- .3 Departmental Representative will Establish time and location of meeting and notify parties concerned minimum 5 days before meeting.
- .4 Incorporate mutually agreed variations to Contract Documents into Agreement, prior to signing.
- .5 Agenda to include:
 - .1 Appointment of official representative of participants in the Work.
 - .2 Schedule of Work, Construction Progress Schedule - Bar (GANTT) Chart.
 - .3 Schedule of submission of shop drawings, samples, colour chips. Submit submittals in accordance with Section 01 33 00 - Submittal Procedures.
 - .4 Requirements for temporary facilities, site sign, offices, storage sheds, utilities, fences in accordance with Section 01 52 00 - Construction Facilities.
 - .5 Delivery schedule of materials.
 - .6 Proposed changes, change orders, procedures, approvals required, mark-up percentages permitted, time extensions, overtime, administrative requirements.
 - .7 Record drawings in accordance with Section 01 33 00 - Submittal Procedures.
 - .8 Monthly progress claims, administrative procedures, photographs, hold backs.
 - .9 Appointment of inspection and testing agencies or firms.
 - .10 Insurances, transcript of policies.

1.2 PROGRESS MEETINGS

- .1 The departmental representative will establish calendar of meeting during course of Work and 1 weeks prior to project completion.
- .2 Contractor, major Subcontractors involved in Work and departmental representative are to be in attendance.
- .3 The departmental representative will notify parties' minimum 5 days prior to meetings.
- .4 Departmental representative will record minutes of meetings and circulate to attending parties and affected parties not in attendance within 3 days after meeting.
- .5 Agenda to include the following:
 - .1 Review, approval of minutes of previous meeting.
 - .2 Review of Work progress since previous meeting.
 - .3 Field observations, problems, conflicts.
 - .4 Problems which impede construction schedule.

- .5 Review of off-site fabrication delivery schedules.
- .6 Corrective measures and procedures to regain projected schedule.
- .7 Revision to construction schedule.
- .8 Progress schedule, during succeeding work period.
- .9 Review submittal schedules: expedite as required.
- .10 Maintenance of quality standards.
- .11 Review proposed changes for affect on construction schedule and on completion date.
- .12 Other business.

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 RELATED REQUIREMENTS

- .1 Section 03 30 00.01 – Cast in place concrete short form.
- .2 Section 32 11 23 – Aggregate base courses.
- .3 Section 32 12 13.15 – Asphalt tack and prime coat
- .4 Section 32 12 16 –Asphalt paving.
- .5 Section 32 17 23 –Pavement markings
- .6 Section 32 92 19.13 –Mechanical seeding.

1.2 ADMINISTRATIVE

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

1.3 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 Submit drawings stamped and signed by professional engineer registered or licensed in Province of Quebec, Canada.

- .3 Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of Work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been co-ordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross references to design drawings and specifications.
- .4 Allow 10 days for Departmental Representative's review of each submission.
- .5 Adjustments made on shop drawings by Departmental Representative are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Departmental Representative prior to proceeding with Work.
- .6 Make changes in shop drawings as Departmental Representative may require, consistent with Contract Documents. When resubmitting, notify Departmental Representative in writing of revisions other than those requested.
- .7 Accompany submissions with transmittal letter, in duplicate paper or electronic media, 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 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.
- .9 After Departmental Representative review, distribute copies.
- .10 Submit [one transparency] [on plastic film] [electronic copy] [[6] prints] of shop drawings for each requirement requested in specification Sections and as Departmental Representative may reasonably request.
- .11 Submit 1 electronic copies of product data sheets or brochures for requirements requested in specification Sections and as requested by Departmental Representative where shop drawings will not be prepared due to standardized manufacture of product.
- .12 Submit 1 electronic copies of test reports for requirements requested in specification Sections and as requested by Departmental Representative.
 - .1 Report signed by authorized official of testing laboratory that material, product or system identical to material, product or system to be provided has been tested in accord with specified requirements.
 - .2 Testing must have been within [3] years of date of contract award for project.
- .13 Submit 1 electronic] copies of certificates for requirements requested in specification Sections and as requested by Departmental Representative.
 - .1 Statements printed on manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements.
 - .2 Certificates must be dated after award of project contract complete with project name.
- .14 Submit 1 electronic copies of manufacturers instructions for requirements requested in specification Sections and as requested by Departmental Representative.
 - .1 Pre-printed material describing installation of product, system or material, including special notices and Material Safety Data Sheets concerning impedances, hazards and safety precautions.
- .15 Submit 1 electronic copies of Manufacturer's Field Reports for requirements requested in specification Sections and as requested by Departmental Representative.
- .16 Documentation of the testing and verification actions taken by manufacturer's representative to confirm compliance with manufacturer's standards or instructions.
- .17 Submit 1electronic copies of Operation and Maintenance Data for requirements requested in specification Sections and as requested by Departmental Representative.
- .18 Delete information not applicable to project.
- .19 Supplement standard information to provide details applicable to project.
- .20 If upon review by Departmental Representative, 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.
- .21 The review of shop drawings by Public Works and Government Services Canada (PWGSC) is for sole purpose of ascertaining conformance with general concept.

- .1 This review shall not mean that PWGSC approves detail design inherent in shop drawings, responsibility for which shall remain with Contractor submitting same, and such review shall not relieve Contractor of responsibility for errors or omissions in shop drawings or of responsibility for meeting requirements of construction and Contract Documents.
- .2 Without restricting generality of foregoing, Contractor is responsible for dimensions to be confirmed and correlated at job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for co-ordination of Work of sub-trades.

1.4 SAMPLES

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

1.5 PHOTOGRAPHIC DOCUMENTATION

- .1 Submit electronic copy of colour digital photography in jpg format, fine resolution weekly with progress statement and as directed by Departmental Representative.
- .2 Project identification: name and number of project and date of exposure indicated.
- .3 Number of viewpoints: 2 locations.
 - .1 Viewpoints and their location as determined by Departmental Representative.
- .4 Frequency of photographic documentation: weekly and as directed by Departmental Representative.

1.6 CERTIFICATES AND TRANSCRIPTS

- .1 Immediately after award of Contract, submit Workers' Compensation Board status.
- .2 Submit transcription of insurance immediately after award of Contract.

Project R.080608.001

Part 2 Products

2.1 NOT USED

.1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.

END OF SECTION

Part 1 General

1.1 DEFINITIONS

- .1 Restricted or secured area; any area on airport property to which access is restricted by sign and/or monitored is a secured or restricted area.
- .2 Movement area; Airport surfaces used for movement of aircrafts including apron, taxiways and runways.

1.2 CONTRACTOR'S RESPONSIBILITY

- .1 The Contractor shall familiarize himself with the airport security regulations, the « Airport Traffic Regulations» and with the specific to this Project Exploitation plan during Construction (PEC) and give appropriate instructions to his employees and sub-contractors.
- .2 The departmental representative will supply a copy of the Project Exploitation plan during Construction (PEC) approved by the competent authority.
- .3 Rules and regulations are available at the following address:
<http://www.tc.gc.ca/eng/acts-regulations/acts-air.htm> under Government Property Traffic Act.
- .4 Be responsible for construction, personnel and vehicles employed and sub-contractors participating on the project and requiring access to restricted areas.
- .5 Supply to departmental representative a list of the responsible personal, including subcontractor and escort responsible who, in case of emergency, can be contacted after work shift.
- .6 Designate from among its employees, a person who will maintain constant contact with the airport escort. This person must have an Restricted Operator's Certificate and remain in constant contact with the flight service station to airport.

1.3 MEASUREMENTS FOR PAYMENTS

- .1 The contractor will have to pay the airport operator directly for the expenses associated with escort services. These services are subject to an allowance included in the contract price and will be reimbursed as described in section 01 21 00 – Allowances.
- .2 All others costs associated with meeting the requirements of this section of the specifications shall be included in the Contractor overhead and profit for the different items of the tender.

1.4 ESCORTS

- .1 The airport operator will provide the airport escort services. The airport operator will also supply the escort vehicles and the radio with the flight station services (FSS) frequency.

- .2 Every vehicle or person entering the restricted area must be escorted and every vehicle must be equipped with an amber rotary beacon.
- .3 The Contractor and his employees must instantly observe orders given by the escort.
- .4 The contractor will advise the airport operator at least 12 hours in advance of any schedule or program modifications when escorts are required. This requirement is necessary to organize the escort's working schedules.
- .5 Contractor will supply radios needed for the communications between the contractor, departmental representative and the escort officer.

1.5 MOVEMENT OF EQUIPMENT AND PERSONNEL

- .1 In areas of airport not closed to aircraft traffic:
 - .1 Obtain Departmental Representative's approval on scheduling of Work.
 - .2 Control movements of equipment and personnel as directed by Departmental Representative.
 - .3 The Contractor and his employees must instantly observe orders given by the escort.
 - .4 Contractor will supply radios needed for the communications between the contractor, the departmental representative and the Transport Canada officer. See section 01 52 00 – Construction facilities.

1.6 GENERAL PROTECTION

- .1 Do not disrupt airport business except as permitted by Departmental Representative.

1.7 DAILY SECURITY

- .1 On the apron area, no torch work, fire or smoking will be tolerated under penalty of fine to the person infringing airport regulations. This is because of ever present motor-fuel conduits and vapour.
- .2 Ensure that the gate is properly locked and no breaches are present in the perimeter fence of the airport at each end of working days.

1.8 TEMPORARY MARKERS FOR CLOSED MOVEMENT AREAS

- .1 The contractor must supply highly visible danger markings by day and red lights by night at the location indicated on drawings. The markers type should be TR-V-7.
- .2 The contractor shall install, maintain, keep in working condition and move as works progress the temporary markers to delimit night and day the areas made dangerous or unserviceable for aircraft circulation and the construction site.
- .3 Open flames and flammable fuels are not permitted.
- .4 Park equipment not in use as least 30m from taxiway centerline.
 - .1 Install red lights at the top of embankment materials as per departmental representative indication.

- .5 Dismantle the markers at the end of the works with the approval of the departmental representative.

1.9 WORK SCHEDULE

- .1 Inform Departmental representative of work schedule and all modification in work shift.

1.10 MAINTENANCE OF AIR TRAFFIC

- .1 The taxiways ALPHA AND BRAVO will be closed for general aircraft circulation for the duration of the work. For some cases of airport operation requiring the passage of a large aircraft on taxiway ALPHA and BRAVO, the contractor shall, after 1 hour prior notice, level the adjacent surface of the taxiway in a manner to not exceed 300mm in elevation of the taxiway edge and move his personals and equipment's at least 12m of the edge of taxiway BRAVO.
- .2 At the end of each work shift, the contractor shall level the adjacent surface of the taxiway in a manner to not exceed 300mm in elevation of the taxiway edge.
- .3 Small aircraft towed by a mule and engine closed will be authorized to circulate face of the works on taxiway BRAVO without contractor intervention.
- .4 Install the markers as indicated on drawings and as directed by departmental representative. Face of the work site on taxiway BRAVO, install markers at 1 meter of the edge inside the taxiway BRAVO and as indicated on drawings.
- .5 The milling work on the part of the taxiway BRAVO shall be executed just before the installation of the bituminous concrete and with the approval of the departmental representative. Move the markers line in consequence at 4 meter of the edge inside the taxiway BRAVO.
- .6 No materials embankment or equipment's will be tolerated on taxiway BRAVO outside of the markers line.
- .7 The marking on the apron will be executed under the direction of the airport escort and the departmental representative.

1.11 TRENCHING

- .1 Obtain Departmental Representative's written permission to undertake trenching that could not be completely backfilled and sealed within 1 working day.

1.12 AIRPORT FACILITIES

- .1 The departmental representative will approximately indicate the location of public's underground utility services of the airport (cable, conduits, canalisation etc.). The contractor must identified on site, by exploratory hand digging if necessary, the exact location of buried utilities services.
- .2 Advise the departmental representative 48 hours in advance of the of the location of the works to be executed, that to allow the time to investigate the underground public's services.

Part 2 Product. NOT USED

Part 3 Execution NOT USED

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 Canada Labour Code - Part II, Canadian Occupational Safety and Health Regulations.
- .2 Canadian Standards Association (CSA)
- .3 Workplace Hazardous Materials Information System (WHMIS)
- .4 Act Respecting Occupational Health and Safety, R.S.Q. Chapter S-2.1.
- .5 Construction Safety Code, S-2.1, r.4.

1.2 SUBMITTALS

- .1 Submit the documents required according to section 01 33 00 Documents and samples to be submitted.
- .2 Submit to Departmental Representative, the CSST and at the Association paritaire en santé et sécurité du secteur de la construction (ASP Construction)] the site-specific safety program, as outlined in 1.8 at least 10 days prior to start of work. The Contractor must review his program during the course of the project if any change occurs in work methods or site conditions. The Departmental Representative may, after receiving the program or at any time during the project, ask the Contractor to update or modify the program in order to better reflect the reality of the construction site and activities. The Contractor must make the required changes before work begins.
- .3 Submit to Departmental Representative the site inspection sheet, duly completed, at the intervals indicated in 1.13.1.
- .4 Submit to Departmental Representative within 24 hours a copy of any inspection report, correction notice or recommendation issued by federal or provincial inspectors.
- .5 Submit to Departmental Representative within 24 hours an investigation report for any accident involving injury and any incident exposing a potential hazard.
- .6 Submit to Departmental Representative all safety data sheets for hazardous material to be used at the site at least three days before they are to be used.
- .7 Submit to Departmental Representative copies of all training certificates required for application of the safety program, in particular:
 - .1 General construction site safety and health courses;
 - .2 Safety officer attestations;
 - .3 First aid in the workplace and cardiopulmonary resuscitation;
 - .4 Work likely to release asbestos dust;
 - .5 Work in confined spaces;
 - .6 Lockout procedures;
 - .7 Wearing and fitting of individual protective gear;

- .8 Forklift truck;
- .9 Positioning platform;
- .10 Any other requirement of Regulations or the safety program.
- .8 Medical examinations: Wherever legislation, regulations, directives, specification or a safety program require medical examinations, Contractor must:
 - .1 Prior to start-up, submit to Departmental Representative certificates of medical examination for all concerned supervisory staff and employees who will be on duty when the site opens.
 - .2 Thereafter, submit without delay certificates of medical examination for any newly hired concerned personnel as and when they start work at the site.
- .9 Emergency plan : The emergency plan, as defined in 1.8.3, shall be submitted to Departmental Representative at the same time as the site-specific safety program.
- .10 Notice of site opening : Notice of site opening shall be submitted to the Commission *de la santé et de la sécurité du travail* before work begins . A copy of such notice shall be submitted to Departmental Representative at the same time and another posted in full view at the site. During demobilization, a notice of site closing shall be submitted to the CSST, with copy to Departmental Representative.
- .11 Plans and certificates of compliance : Submit to the CSST and to Departmental Representative a copy signed and sealed by engineer of all plans and certificates of compliance required pursuant to the Construction Safety Code (S-2.1, r. 6), or by any other legislation or regulation or by any other clause in the specifications or in this contract. Copies of these documents must be on hand at the site at all times.
- .12 Certificate of compliance delivered by the CSST: The certificate of compliance is a document delivered by the CSST confirming that the contractor is in rule with the CSST, i.e. that he had pay out all the benefits concerning this contract. This document must be delivered to Departmental Representative at the end of the work.

1.3 HAZARDS ASSESSMENT

- .1 The contractor must identify all hazards inherent in each task to be carried out at the site.
- .2 The contractor must plan and organize work so as to eliminate hazards at source or promote mutual protection so that reliance on individual protective gear can be kept to a minimum. Where individual protection against falling is required, workers shall use safety harness that meets standard Can - CSA- Z-259.10 - M90. Safety belts shall not be used as protection against falling.
- .3 Equipment, tools and protective gear which cannot be installed, fitted or used without compromising the health or safety of workers or the public shall be deemed inadequate for the work to be executed.
- .4 All mechanical equipment shall be inspected before delivery to the site. Before using any mechanical equipment, submit to Departmental Representative a certificate of compliance signed by a qualified mechanic. Whenever he suspects a defect or accident risk, Departmental Representative may at any time order the immediate shut-down of equipment and require a new inspection by a specialist of his own choosing.

1.4 MEETINGS

- .1 Contractor decisional representative must attend any meetings at which site safety and health issues are to be discussed
- .2 Set up a site safety committee, and convene meetings in accordance with the Construction Safety Code (S-2.1, r.4).

1.5 LEGAL AND REGULATORY REQUIREMENTS

- .1 Comply with all legislation, regulations and standards applicable to the site and its related activities.
- .2 Comply with specified standards and regulations to ensure safe operations at site containing hazardous or toxic materials.
- .3 Regardless of the publication date shown in the construction safety code, always use the most recent version.

1.6 SITE-SPECIFIC CONDITIONS

- .1 At the site, the contractor must take account of the following specific conditions:
 - .1 Evening and night works.

1.7 SAFETY AND HEALTH MANAGEMENT

- .1 Acknowledge and assume all the tasks and obligations which customarily devolve upon a principal Contractor under the terms of the Act Respecting Occupational Health and Safety (R.S.Q., chapter S-2.1) and the Construction Safety Code (S-2.1, r.4).
- .2 Develop a site-specific safety program based on the hazards identified and apply it from the start of project work until close-out is completed. The safety program must take account of all information appearing in 1.7 and must be submitted to all parties concerned, in accordance with the provisions set forth in 1.3. At a minimum, the site-specific safety program must include :
 - .1 Company safety and health policy.
 - .2 A description of the work, total costs, schedule and projected workforce curve.
 - .3 Flow chart of safety and health responsibility.
 - .4 The physical and material layout of the site.
 - .5 First-aid and first-line treatment standards.
 - .6 Identification of site-specific hazards.
 - .7 Risk assessment for the tasks to be carried out, including preventive measures and the procedures for applying them.
 - .8 Training requirements.
 - .9 Procedures in case of accident/injury
 - .10 Written commitment from all parties to comply with the prevention program.
 - .11 A site inspection schedule based on the preventive measures.

- .3 The contractor must draw up an effective emergency plan based on the characteristics and constraints of the site and its surroundings. Submit the emergency plan to all parties concerned, pursuant to the provisions of 1.3. The emergency plan must include:
 - .1 Evacuation procedure;
 - .2 Identification of resources (police, firefighters, ambulance services, etc.);
 - .3 Identification of persons in charge at the site;
 - .4 Identification of those with first-aid training;
 - .5 Training required for those responsible for applying the plan;
 - .6 Any other information needed, in the light of the site characteristics.

1.8 RESPONSIBILITIES

- .1 No matter the size of the construction site or how many workers are present at the workplace, designate a competent person to supervise and take responsibility for health and safety. Take all necessary measures to ensure the health and safety of persons and property at or in the immediate vicinity of the site and likely to be affected by any of the work.
- .2 Take all necessary measures to ensure application of and compliance with the safety and health requirements of the contract documents, applicable federal and provincial regulations and standards as well as the site-specific safety program, complying without delay with any order or correction notice issued by the Commission de la santé et de la sécurité du travail.
- .3 Take all necessary measures to keep the site clean and in good order throughout the course of the work

1.9 COMMUNICATIONS AND POSTING

- .1 Make all necessary arrangements to ensure effective communication of safety and health information at the site. As they arrive on site, all workers must be informed of their rights and obligations pertaining to the site specific safety program. The Contractor must insist on their right to refuse to perform work which they feel may threaten their own health, safety or physical integrity or that of other persons at the site. The Contractor must keep and update a written record of all information transmitted with signatures of all affected workers.
- .2 The following information and documents must be posted in a location readily accessible to all workers:
 - .1 Notice of site opening;
 - .2 Identification of principal Contractor;
 - .3 Company OSH policy;
 - .4 Site-specific safety program;
 - .5 Emergency plan;
 - .6 Data sheets for all hazardous material used at the site;
 - .7 Minutes of site committee meetings;
 - .8 Names of site committee representatives;
 - .9 Names of those with first-aid training;

- .10 Action reports and correction notices issued by the CSST.

1.10 UNFORESEEN CIRCUMSTANCES

- .1 Whenever a source of danger not defined in the specifications or identified in the preliminary site inspection arises as a result of or in the course of the work, immediately suspend work, take appropriate temporary measures to protect the workers and the public and notify Departmental Representative, both verbally and in writing. Then the Contractor must modify or update the site specific safety program in order to resume work in safe conditions.

1.11 INSPECTION OF SITE AND CORRECTION OF HAZARDOUS SITUATIONS

- .1 Inspect the work site and complete the site inspection sheet at least once a week.
- .2 Immediately take all necessary measures to correct any lapses from legislative or regulatory requirements and any hazards identified by a government inspector, by the Departmental Representative, by the site safety and health coordinator or during routine inspections.
- .3 Submit to Departmental Representative written confirmation of all measures taken to correct lapses and hazardous situations.
- .4 Give the safety officer or, where there is no safety officer, the person assigned to safety and health responsibilities, full authority to order interruption and resuming of work as and when deemed necessary or desirable in the interests of safety and health. This person should always act so that the safety and health of the public and site workers and environmental protection take precedence over cost and scheduling considerations.
- .5 Without limiting the scope of sections 1.8 and 1.9, Departmental Representative may order cessation of work if, in his/her view, there is any hazard or threat to the safety or health of site personnel or the public or to the environment.

1.12 BLASTING

- .1 Blasting and other use of explosives are forbidden unless authorized in writing by Departmental Representative.
- .2 Any operation involving explosives must be carried out under the supervision of a qualified shot firer.
- .3 The purchase, carriage, storage and use of explosives must comply with all applicable federal and provincial legislation:
- .1 Canada: Explosives Act (E-17)1, Explosives Regulations (C.R.C. CH. 599), Standard for Storage of Blasting Charges and Detonators, Transportation of Dangerous Goods Act and Regulations.
 - .2 Quebec: Explosives Act (E-22), Explosives Regulations (E-22, r.1), Safety Code for the Construction Industry (S-2.1, r.4), Transportation of Dangerous Goods Regulations.
-

- .4 Contractor shall obtain all permits required pursuant to the legislation and regulations referred to above and keep copies on hand at the site.
- .5 Contractor shall facilitate inspection of the site, stored explosives and vehicles used to transport explosives by any government representatives or police officers whose jurisdiction encompasses explosives.

END OF SECTION

Part 1 General**1.1 RELATED REQUIREMENTS**

- .1 Section 31 05 16 – Aggregate materials.

1.2 REFERENCES

- .1 Definitions:
 - .1 Environmental Pollution and Damage: presence of chemical, physical, biological elements or agents which adversely affect human health and welfare; unfavourably alter ecological balances of importance to human life; affect other species of importance to humans; or degrade environment aesthetically, culturally and/or historically.
 - .2 Environmental Protection: prevention/control of pollution and habitat or environment disruption during construction.
- .2 Reference Standards:
 - .1 Law on environment quality (Loi sur la qualité de l'environnement (RLRQ, chapitre Q-2)).
 - .2 Regulation on quarry and sand pit (Règlement sur les carrières et sablières (Q-2, r. 7)).
 - .3 U.S. Environmental Protection Agency (EPA)/Office of Water
 - .1 EPA 832/R-92-005-92, Storm Water Management for Construction Activities, Chapter 3.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Before commencing construction activities or delivery of materials to site, submit Environmental Protection Plan for review and approval by Departmental Representative.
- .3 Environmental Protection Plan must include comprehensive overview of known or potential environmental issues to be addressed during construction.
- .4 Address topics at level of detail commensurate with environmental issue and required construction tasks.
- .5 Include in Environmental Protection Plan:
 - .1 Names of persons responsible for ensuring adherence to Environmental Protection Plan.
 - .2 Names and qualifications of persons responsible for manifesting hazardous waste to be removed from site.
 - .3 Descriptions of environmental protection personnel training program.
 - .4 Erosion and sediment control plan identifying type and location of erosion and sediment controls to be provided including monitoring and reporting requirements to assure that control measures are in compliance with erosion and

sediment control plan, Federal, Provincial, and Municipal laws and regulations and EPA 832/R-92-005, Chapter 3.

- .5 Drawings indicating locations of proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials on site.
- .6 Spill Control Plan to include procedures, instructions, and reports to be used in event of unforeseen spill of regulated substance.
- .7 Non-Hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including clearing debris.
- .8 Waste Water Management Plan identifying methods and procedures for management discharge of waste waters which are directly derived from construction activities, such as concrete curing water, clean-up water, dewatering of ground water, disinfection water, hydrostatic test water, and water used in flushing of lines.

1.4 FIRES

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

1.5 DISPOSAL OF WASTES

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

1.6 DRAINAGE

- .1 Develop and submit erosion and Sediment Control Plan (ESC) identifying type and location of erosion and sediment controls provided. Plan to include monitoring and reporting requirements to assure that control measures are in compliance with erosion and sediment control plan, Federal, Provincial, and Municipal laws and regulations, EPA 832/R-92-005, Chapter 3.
- .2 Storm Water Pollution Prevention Plan (SWPPP) to be substituted for erosion and sediment control plan.
- .3 Provide temporary drainage and pumping as necessary to keep excavations and site free from water.
- .4 Do not pump water containing suspended materials into waterways, sewer or drainage systems.
- .5 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.

1.7 WORK ADJACENT TO WATERWAYS

- .1 The construction equipment must be operated from the shore of waterways.

- .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 from one side to the other streams.
- .6 Avoid indicates spawning grounds during the construction of culverts or other temporary structures crossing streams.
- .7 Blasting shall be conducted out of the water and at a distance of at least 100 m of the indicated spawning.

1.8 POLLUTION CONTROL

- .1 Maintain temporary erosion and pollution control features installed under this contract.
- .2 Control emissions from equipment and plant to local authorities emission requirements.
- .3 Prevent sandblasting and other extraneous materials from contaminating air beyond application area, by providing temporary enclosures.
- .4 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.

1.9 NOTICE OF NON-COMPLIANCE

- .1 A written notice of noncompliance will be issued to the Contractor by the Departmental Representative will be observed whenever a non-compliance with a law, regulation or a federal permit, provincial or municipal, or any other element of the protection plan environmental implemented by the Contractor.
- .2 After receiving notice of non-compliance, the Contractor must propose corrective measures Departmental Representative and must implement them with the approval of the latter.
 - .1 Contractor must wait for written approval of the Departmental Representative prior to the implementation of the proposed measures.
- .3 Departmental Representative orders work stopped until satisfactory corrective action is taken.
- .4 No additional time or no adjustment will be awarded for the work stoppage.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 CLEANING

- .1 Perform clean in accordance with Section 01 74 11 - Cleaning.
- .2 Waste Management: separate waste materials for reuse / re-use and recycling in accordance with Section 01 74 21 - Management and disposal of construction / demolition waste.
- .3 Burying waste and waste materials on the site only after obtaining the written authorization of the Departmental Representative.
- .4 Make shure that the waterways and public storm and sanitary sewers remain free of waste and volatile material removed

END OF SECTION

Part 1 General**1.1 RELATED SECTIONS**

- .1 Section 02 41 13.14 - Asphalt Paving Removal.
- .2 Section 03 30 00.01 – Cast-in-Place Concrete.
- .3 Section 31 05 16 - Aggregate Materials.
- .4 Section 31 22 14 – Airfield Grading.
- .5 Section 32 11 23 – Aggregate Base Courses.
- .6 Section 32 12 13.15 - Asphalt tack and prime coat.
- .7 Section 32 12 16 - Asphalt paving.

1.2 INSPECTION

- .1 Allow Departmental Representative access to Work. If part of Work is in preparation at locations 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 Departmental Representative 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 Departmental Representative will order part of Work to be examined if Work is suspected to be not in accordance with Contract Documents. If, upon examination such work is found not in accordance with Contract Documents, correct such Work and pay cost of examination and correction. If such Work is found in accordance with Contract Documents, Departmental Representative shall pay cost of examination and replacement.

1.3 INDEPENDENT INSPECTION AGENCIES

- .1 Independent Inspection/Testing Agencies will be engaged by Departmental Representative for purpose of inspecting and/or testing portions of Work. Cost of such services will be borne by Departmental Representative.
- .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, appointed agency will request additional inspection and/or testing to ascertain full degree of defect. Correct defect and

irregularities as advised by Departmental Representative at no cost to Departmental Representative. Pay costs for retesting and reinspection.

1.4 ACCESS TO WORK

- .1 Allow inspection/testing agencies access to Work, off site manufacturing and fabrication plants.
- .2 Co-operate to provide reasonable facilities for such access.

1.5 PROCEDURES

- .1 Notify appropriate agency and [Departmental Representative in advance of requirement 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 orderly sequence to not cause delays 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 Departmental Representative 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 opinion of Departmental Representative it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents, Owner will deduct from Contract Price difference in value between Work performed and that called for by Contract Documents, amount of which will be determined by Departmental Representative.

1.7 REPORTS

- .1 Submit (4) copies of inspection and test reports to Departmental Representative.
- .2 Provide copies to subcontractor of work being inspected or tested.

1.8 TESTS AND MIX DESIGNS

- .1 Furnish test results and mix designs as requested.
- .2 Cost of tests and mix designs beyond those called for in Contract Documents or beyond those required by law of Place of Work will be appraised by Departmental Representative and may be authorized as recoverable.

1.9 MOCK-UPS

- .1 Prepare mock-ups for Work specifically requested in specifications. Include for Work of Sections required to provide mock-ups.
- .2 Construct in locations acceptable to Departmental Representative.
- .3 Prepare mock-ups for Departmental Representative review with reasonable promptness and in orderly sequence, to not cause delays in Work.
- .4 Failure to prepare mock-ups in ample time is not considered sufficient reason for extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .5 If requested, Departmental Representative will assist in preparing schedule fixing dates for preparation.
- .6 Mock-ups may remain as part of Work.

1.10 MILL TESTS

- .1 Submit mill test certificates as requested in the different section of the spec.

Part 2 Products**2.1 NOT USED****Part 3 Execution****3.1 NOT USED**

END OF SECTION

Part 1 General

1.1 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.

1.2 INSTALLATION AND REMOVAL

- .1 Prepare a site plan showing the proposed location and dimensions of the area which must be fenced and used by the Contractor, the number of required construction trailers, the access routes to the fenced area and details of Installation of the fence.
- .2 Identify areas that need to be covered with gravel to prevent sludge deposits.
- .3 Indicate any additional zone or transit zone.
- .4 Supply, implement or develop the construction of facilities necessary for the performance of work in the shortest time.
- .5 Remove from site all such work after use.

1.3 SITE STORAGE/LOADING

- .1 Confine work and operations inside limits indicated in Contract Documents. Do not unreasonably encumber the site with material and equipment.
- .2 Do not load or permit to load any part of Work with a weight or force that will endanger the Work.

1.4 CONSTRUCTION ACCESS ROADS

- .1 Provide and maintain adequate access roads to project site.
- .2 If authorized to use existing roads for access to project site, maintain such roads in good condition for duration of Contract. Repair damage resulting from Contractors' use of roads.
- .3 Clean runways and taxi areas used by Contractor's equipment.

1.5 SECURITY

- .1 If necessary, provide and pay for recognized security personnel to guard site and contents of site after working hours and during holidays.

1.6 COMMUNICATION

- .1 Supply radio and charger (3) to the escort personal for communication between contractor, the escort and the departmental representative.

1.7 CONTRACTOR OFFICES

- .1 As needed, provide an office for the contractor uses and his employees. The departmental representative will indicate where the office can be installed.

1.8 EQUIPMENT, TOOL AND MATERIALS 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 and premises in good sanitary condition.

1.10 POWER

- .1 Arrange, pay for and maintain temporary electrical power supply in accordance with governing regulations and ordinances.

1.11 WATER SUPPLY

- .1 Arrange, pay for and maintain temporary water supply in accordance with governing regulations and ordinances.

1.12 SIGN FOR RESTRICTED AREAS

- .1 Conform to section 01 35 13.13 – Airports In Use, concerning temporary signs during construction.

1.13 TEMPORARY LIGHTNING

- .1 For works executed in night, supply the lightning equipment's in sufficient number and quality to permit the realization of the works and in security.

1.14 CLEANING

- .1 Evacuate daily of the work, debris, garbage and wrapping materials.
- .2 Remove mud and dust off the pavement.
- .3 Store materials recuperated from demolition.
- .4 Do not store on site new or recuperated materials.

1.15 MEASUREMENT FOR PAYMENT

- .1 All costs for this section are included in different tender items.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 TEMPORARY MEANS OF MEANS OF EROSION AND SEDIMENT

- .1 Establish temporary means to fight against erosion as erosion barriers arranged transversely in rivers and foot slope.
- .2 If necessary, arrange upstream sedimentation basins of rivers to intercept airborne particles entrained by runoff surfaces.
- .3 Protect with tarpaulins or other device acceptable to the ministry representative, granular materials deposits exposed to erosion by wind.
- .4 The use of blind calcium chloride-based dust is not allowed.
- .5 Inspect control methods implemented in the maintenance and repair as required until permanent vegetation has established.
- .6 Remove the means to fight at the right time and restore and stabilize areas disturbed during the work.

END OF SECTION

Part 1 General**1.1 PROJECT CLEANLINESS**

- .1 Maintain Work in tidy condition, free from accumulation of waste products and debris, including that caused by Owner or other Contractors.
- .2 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .3 Provide on-site containers for collection of waste materials and debris.
- .4 Remove waste material and debris from site at end of each working day.
- .5 Store volatile waste in covered metal containers, and remove from premises at end of each working day.
- .6 Provide and use marked separate bins for recycling. Refer to Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
- .7 Runway and taxiway used by Contractor must be cleaned. Cleaning operations must be done in continuous for areas used by aircrafts and once a day for others areas.

1.2 FINAL CLEANING

- .1 When Work is Substantially Performed remove surplus products, tools, construction machinery and equipment not required for performance of remaining Work.
- .2 Remove waste products and debris other than that caused by others, and leave Work clean and suitable for occupancy.
- .3 Prior to final review remove surplus products, tools, construction machinery and equipment.
- .4 Remove waste materials from site. Do not burn waste materials on site.
- .5 Take necessary disposition and obtain permit from competent authority about the elimination of debris and garbage materials.
- .6 If construction vehicles are allowed to use movement area, Contractor will keep on site all cleaning equipments needed to maintain movement area cleaned to the departmental representative's satisfaction.
- .7 Broom clean and wash exterior walks, steps and surfaces; rake clean other surfaces of grounds.
- .8 Daily and before re opening movement areas, an inspection will be done with Transport Canada escort .If needed, Contractor will do more cleaning to Transport Canada satisfaction.

1.3 CONSTRUCTION-DEMOLITION WASTE MANAGEMENT

- .1 Separate waste materials for reuse / re-use and recycling in accordance with Section 01 74 21 – Construction-Demolition waste management.

1.4 MEASUREMENT FOR PAYMENT

- .1 All costs for this section will be included in different tender items.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 WASTE MANAGEMENT GOALS

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

1.2 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).

1.3 DOCUMENTS

- .1 Maintain at job site, one copy of following documents:
 - .1 Waste Reduction Workplan.
 - .2 Material Source Separation Plan.

1.4 SUBMITTALS

- .1 Submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Prepare and submit following prior to project start-up:
 - .1 Submit 2 copies of completed Waste Reduction Workplan (WRW): Schedule B.
 - .2 Submit 2 copies of Materials Source Separation Program (MSSP) description.
- .3 Submit before final payment summary of waste materials salvaged for reuse, recycling or disposal.
 - .1 Failure to submit could result in hold back of final payment.
 - .2 Provide receipts, scale tickets, waybills, and show quantities and types of materials reused, recycled or disposed of.
 - .3 For each material reused, sold or recycled from project, include amount in tonnes and the destination.
 - .4 For each material land filled or incinerated from project, include amount in tonnes of material and identity of landfill, incinerator or transfer station.

1.5 WASTE REDUCTION WORKPLAN (WRW)

- .1 Prepare WRW prior to project start-up.
- .2 WRW should include but not limited to:
 - .1 Destination of materials listed.
 - .2 Deconstruction/disassembly techniques and sequencing.
 - .3 Schedule for deconstruction/disassembly.
 - .4 Location.
 - .5 Security.
 - .6 Protection.

- .7 Clear labelling of storage areas.
- .8 Details on materials handling and removal procedures.
- .9 Quantities for materials to be salvaged for reuse or recycled and materials sent to landfill.
- .3 Structure WRW to prioritize actions and follow 3R's hierarchy, with Reduction as first priority, followed by Reuse, then Recycle.
- .4 Describe management of waste.
- .5 Identify opportunities for reduction, reuse, and recycling of materials. Based on information acquired from WA.
- .6 Post WRW or summary where workers at site are able to review content.
- .7 Set realistic goals for waste reduction, recognize existing barriers and develop strategies to overcome these barriers.
- .8 Monitor and report on waste reduction by documenting total volume and cost of actual waste removed from project.

1.6 MATERIALS SOURCE SEPARATION PROGRAM (MSSP)

- .1 Prepare MSSP and have ready for use prior to project start-up.
- .2 Implement MSSP for waste generated on project in compliance with approved methods and as reviewed by Departmental Representative.
- .3 Provide on-site facilities for collection, handling, and storage of anticipated quantities of reusable and recyclable materials.
- .4 Provide containers to deposit reusable and recyclable materials.
- .5 Locate containers in locations, to facilitate deposit of materials without hindering daily operations.
- .6 Locate separated material in area which minimize material damage.
- .7 Collect, handle, store on-site, and transport off-site, salvaged materials in separate condition.
 - .1 Transport to approved and authorized recycling facility.

1.7 STORAGE, HANDLING AND PROTECTION

- .1 Store, materials to be reused, recycled and salvaged in locations as directed by Departmental Representative.
- .2 Unless otherwise waste materials that must be disposed become the property of the Contractor.
- .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 Separate and store materials produced during dismantling of structures in designated areas.
- .6 Supporter works affected by the work. If building security can be compromised, stop work and notify the Ministry Representative immediately.
- .7 Protect drainage works of surface water to prevent them from being damaged or obstructed; protect electrical and mechanical installations.
- .8 Sort and store in designated areas of waste materials generated by the dismantling of structures.
- .9 Prevent contamination of materials to be salvaged and recycled and handle materials in accordance with requirements for acceptance by designated facilities.
 - .1 On-site source separation is recommended.
 - .2 Remove co-mingled materials to off-site processing facility for separation.
 - .3 Provide waybills for separated materials.

1.8 DISPOSAL OF WASTES

- .1 Do not bury rubbish or waste materials.
- .2 Do not dispose of waste, volatile materials, mineral spirits, oil, paint thinner 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 Prepare project summary to verify destination and quantities on a material-by-material basis as identified in pre-demolition material audit.

1.9 USE OF SITE AND FACILITIES

- .1 Execute work with least possible interference or disturbance to normal use of premises.
- .2 Provide temporary security measures approved by Departmental Representative.

1.10 SCHEDULING

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

Part 2 Products NOT USED

Part 3 Execution

3.1 APPLICATION

- .1 Do Work in compliance with WRW.
- .2 Handle waste materials not reused, salvaged, or recycled in accordance with appropriate regulations and codes.

3.2 CLEANING

- .1 Remove tools and waste materials on completion of Work, and leave work area in clean and orderly condition.
- .2 Clean-up work area as work progresses.
- .3 Source separate materials to be reused/recycled into specified sort areas.

3.3 DIVERSION OF MATERIALS

- .1 From following list, 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 Mark containers or stockpile areas.
 - .2 Provide instruction on disposal practices.
- .2 On-site sale of salvaged is not permitted.

.3 Demolition Waste:

Material Type	Recommended Diversion %	Actual Diversion %
Granular from excavation	100%	Re-use at location designated by the departmental representative
Product of asphaltic concrete	100%	Transport to recycling facilities
-Exceeding excavated materials and top soil	100%	Re-used in the slope at location designated by the departmental representative, top soil will be installed as protection in slope.
-Existing electrical cable	100%	Transport to recycling facilities
-Steel	100%	Transport to recycling facilities
-Bituminous residue	100%	Transport to recycling facilities

.4 Construction Waste:

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Material Type	Recommended Diversion %	Actual Diversion %
Cardboard	100%	Transport to recycling facilities
Plastic Packaging	100%	Transport to recycling facilities
Steel	100%	Transport to recycling facilities
Wood (uncontaminated	100%	Transport to recycling facilities
Bridge (wodden)	100%	Transport to VOR site as directed by departmental representative.

END OF SECTION