



Public Services and Procurement Canada

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Specifications for
Rodent Contamination Abatement

Canada Border Service Agency, Pacific Highway Border Crossing

Project No. R.081579.00^{TS}₂ September 1, 2016

APPROVED BY: <u>[Signature]</u> Regional Manager ES	<u>22 November 2016</u> <u>+ Sept 2016</u> (TS)
<u>[Signature]</u> Construction Safety Coordinator	<u>2016-09-02</u> Date
TENDER: <u>[Signature]</u> Project Manager	<u>22 November 2016</u> <u>1. Sept 2016</u> (TS)
	Date

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APPENDICES

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Reports

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Appendix B

Issued for Tender Drawings

Drawing 1 – Floor Plan Showing Ceiling Type – Traffic Operations First Floor

Drawing 2 – Floor Plan Showing Ceiling Type – Commercial Operations First Floor

Drawing 3 – Floor Plan Showing Work Area Availability – Traffic Operations First Floor

Drawing 4 – Floor Plan Showing Work Area Availability – Commercial Operations First Floor

END OF SECTION

Division 1 General Requirements

Section 01 01 50 General Instructions

Summary of Work

1.1 WORK LOCATIONS

- .1 Work of this Contract will be conducted at the following location:
 - .1 Pacific Highway Border Crossing, Traffic and Commercial Operations Building – 26 176th Street, Surrey, BC

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- .1 Work of this Contract consists of removal of rodent waste contamination within the ceiling spaces of the above-noted site, further identified as the Work, and summarized as follows:
 - .1 Create partitions, window coverings or other effective means to isolate work areas from view of occupants and the public.
 - .1 Viewing of work and work areas must still be available for Commissionaires and Departmental Representative, through installation of viewing windows in controlled locations.
 - .2 Prepare areas and/or create enclosures as specified in the contract documents, to isolate specified work areas to allow for safe removal of rodent waste contamination from various surfaces, including:
 - .1 Surfaces above Paraline ceilings (locations of ceiling types indicated on Drawings 1 and 2):
 - .1 Remove sufficient ceiling materials to access ceiling spaces while maintaining function of existing fixtures (e.g. closed circuit television cameras, lighting, alarms, fire sprinklers, air supply diffusers/return grilles, etc.) and to allow for removal of rodent waste from and cleaning/disinfecting of:
 - .1 The top-side of Paraline ceiling panels
 - .2 Surfaces of materials within the ceiling space
 - .2 Surfaces above “T-bar” ceilings with acoustic ceiling tiles (locations of ceiling types indicated on Drawings 1 and 2):
 - .1 Remove and dispose of ceiling tiles throughout (“T-bar” grid to remain).
 - .1 Exceptions may be provided for ceiling tiles that cannot reasonably be removed without removing or altering security-related electronic items (e.g. closed circuit television cameras). Cleaning/disinfecting of these tiles in-

place will be sufficient, upon approval of Departmental Representative.

- .2 Existing fixtures (e.g. closed circuit television cameras, lighting, alarms, fire sprinklers, air supply diffusers/return grilles, etc.) are to remain and be un-installed, cleaned and/or re-installed as necessary
- .2 Remove rodent waste from, and clean and disinfect horizontal surfaces above ceilings, including “T-bar” grid.
- .3 Replace removed ceiling tiles with new tiles to reasonably match existing, reinstalling existing fixtures (e.g. closed circuit television cameras, lighting, alarms, fire sprinklers, air supply diffusers/return grilles, etc.) where present. Refer to Section 02 85 00 Rodent Contamination Removal Procedures and Section 09 51 13 - Acoustic Ceilings.
- .4 Where re-occupancy of work areas will occur between contractor shifts, new ceiling tiles are to be installed at the end of each shift, where contaminated tiles are removed. The contractor is only to remove tiles from an area that they can reasonably manage to clean and reinstate (with new tiles) before the area is re-occupied by CBSA personnel.
- .3 Surfaces above “hard” ceilings (e.g. drywall, plaster, other – locations of ceiling types indicated on Drawings 1 and 2):
 - .1 Remove rodent waste from and clean and disinfect top-side of ceilings and other surfaces throughout the ceiling space.
 - .2 Access to be gained through existing hatches, or through removal of either paraline or acoustic ceiling tiles in adjacent rooms.

1.3 OCCUPANCY

- .1 Some areas within the buildings will remain occupied and operational during the Work, as indicated in the Project Specifications.
- .2 Co-operate with Departmental Representative and the scheduling requirements indicated in the Project Specifications in scheduling operations to minimize conflict and to facilitate Canada Border Services Agency (CBSA) usage of premises, where applicable.

1.4 CONTRACTOR’S USE OF PREMISES

- .1 Contractor will have access to site as necessary to complete the Work as follows, with scheduling notes indicated on Drawings 3 and 4:
 - .1 Traffic Operations Building First Floor – Bus Area
 - .1 Work is to be initiated at 0700 hrs on a Monday, and completed in a period of four (4) consecutive days, with completion no later than that same week’s Thursday at 23:59
 - .2 Traffic Operations Building First Floor – Traffic Area (except Superintendent’s Area)

- .1 Work is to be initiated at 0700 hrs on the Friday that follows the completion of the work in the Bus Area, and completed in a period of ten (10) consecutive days, with completion no later than 23:59 on the 10th day.
- .3 Traffic Operations Building First Floor – Superintendent’s Area
 - .1 Work is to be initiated and completed in this area in a maximum of two (2) consecutive days (0700 hrs on Day 1 through to 0700 hrs on Day 3), either before or after the work in the Traffic Area and the Bus Area.
- .4 Commercial Operations Building First Floor
 - .1 Work is to be completed within 3 weeks of initiation, with work being conducted only during the following hours:
 - .1 1800 hrs to 0700 hrs weekdays (evening/graveyard shift), with materials, waste, equipment, personnel and any related items removed subsequent to each work shift
 - .2 1800 hrs Friday to 0700 hrs Monday (weekends), with materials, waste, equipment, personnel and any related items removed by 0700 Monday
 - .1 Where statutory holidays are included in a weekend, **these** days can be incorporated into the schedule as available days for work (e.g. 1800 hrs Thursday to 0700 hrs Monday; or, 1800 hrs Friday to 0700 hrs Tuesday)
 - .2 Contractor will require Commissionaire escort for any and all work. Commissionaires to be arranged and paid for by CBSA.

1.5 DOCUMENTS REQUIRED:

- .1 Maintain at job site, one copy of each document as follows, where applicable:
 - .1 Contract Drawings.
 - .2 Specifications.
 - .3 Addenda.
 - .4 Change Orders.
 - .5 Other Modifications to Contract.
 - .6 Field Test Reports.
 - .7 Copy of Approved Work Schedule.
 - .8 Health and Safety Plan and Other Safety Related Documents.
 - .9 Environmental Protection Plan, relevant environmental permits and other environment related documents, if applicable
 - .10 Other documents as specified.

Part 2 Work Restrictions

- .1 Execute work with least possible interference or disturbance to normal use of premises.
- .2 Accept liability for damage and safety of equipment.

- .3 Construct barriers in accordance with Temporary Barriers and Enclosures clause.
- .4 Security Requirements: refer to Section 01 14 10 - Security requirements.
- .5 Hours of work:
 - .1 Perform work in accordance with the provisions of Paragraph 1.4 of this Section. Provide schedule for prior approval of Departmental Representative.

Part 3 Construction Work Schedule

- .1 Commence work associated with planning and logistics immediately upon official notification of acceptance of offer and complete the work in a maximum of five (5) weeks from initiation of work on-site.
- .2 Ensure that it is understood that Award of Contract or time of beginning, rate of progress, Substantial Certificate and Final Certificate as defined times of completion are of essence of this contract.
- .3 Submittals:
 - .1 Refer to Section 01 33 00 Submittal Procedures.
- .4 Project Scheduling Reporting:
 - .1 Update Project Schedule on weekly basis reflecting activity changes and completions, as well as activities in progress.
 - .2 Include as part of Project Schedule, narrative report identifying Work status to date, comparing current progress to baseline, presenting current forecasts, defining problem areas, anticipated delays and impact with possible mitigation.
- .5 Project Meetings:
 - .1 Discuss Project Schedule at weekly site meetings with Departmental Representative, identify activities that are behind schedule and provide measures to regain slippage. Activities considered behind schedule are those with projected start or completion dates later than current approved dates shown on baseline schedule.
 - .2 Before submitting first progress claim submit breakdown of Contract price in level of detail as directed by Departmental Representative. After approval by Departmental Representative cost breakdown will be used as basis for progress payments.

Part 4 Health and Safety

- .1 Specified in Section 01 35 33 - Health and Safety Requirements.

Part 5 Environmental Procedures

- .1 Specified in Section 01 35 43 – Environmental Procedures
- .2 Fires and burning of rubbish on site not permitted.
- .3 Do not dispose of waste or volatile materials such as oil, paint thinner or mineral spirits into waterways, storm or sanitary systems.
- .4 Under no circumstances dispose of rubbish or waste materials on property or CBSA waste bins.

Part 6 Regulatory Requirements

6.1 REFERENCES AND CODES:

- .1 Perform Work in accordance with the following:
 - .1 National Building Code of Canada (NBCC2010) including all amendments up to tender closing date and other codes of territorial or local application provided that in case of conflict or discrepancy, more stringent requirements apply.
 - .2 The BC Occupational Health and Safety Regulations
 - .3 Meet or exceed requirements of:
 - .1 Contract documents.
 - .2 Specified standards, codes and referenced documents.

Part 7 Quality Control

7.1 INSPECTION:

- .1 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.
- .2 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.
- .3 Departmental Representative may order any 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.

7.2 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.

Part 8 Temporary Utilities

8.1 TEMPORARY VENTILATION:

- .1 Ventilating:
 - .1 Prevent accumulations of dust, fumes, mists, vapours or gases in areas occupied during abatement.
 - .2 Provide local exhaust ventilation to prevent harmful accumulation of hazardous substances into atmosphere of occupied areas.
 - .3 Dispose of exhaust materials in manner that will not result in harmful exposure to persons.
 - .4 Continue operation of ventilation and exhaust system for time after cessation of work process to assure removal of harmful contaminants.
- .2 Maintain strict supervision of operation of temporary ventilating equipment to:
 - .1 Conform with applicable codes and standards.
 - .2 Enforce safe practices.
 - .3 Prevent abuse of services.
 - .4 Prevent damage to finishes.

8.2 TEMPORARY POWER AND LIGHT:

- .1 Existing 110 volt/15 amp electrical power and lighting may be used for abatement and purposes at no extra cost as directed by the Departmental Representative, provided that electrical components used for temporary power are replaced when damaged. Provide own electrical lines from source.

8.3 TEMPORARY COMMUNICATION FACILITIES:

- .1 Conform to Section 01 14 10 Security Requirements.

8.4 FIRE PROTECTION:

- .1 Provide and maintain temporary fire protection equipment during performance of Work required by governing codes, regulations and bylaws.

Part 9 Construction Facilities

9.1 LIFTING EQUIPMENT

- .1 Where required, provide, operate and maintain lifting equipment and manpower required for moving of heavy products.

9.2 SITE STORAGE/LOADING:

- .1 Confine work and operations of employees to areas specified in 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.

9.3 CONSTRUCTION PARKING:

- .1 Parking will be made available on-site for contractor vehicles and bins, as directed by the Departmental Representative.

9.4 CONTRACTOR'S SITE OFFICE:

- .1 Provide office as required to accommodate Contractor's operations.
- .2 Provide a clearly marked and fully stocked first-aid case in a readily available location in accordance with provincial requirements.

9.5 EQUIPMENT AND TOOLS STORAGE:

- .1 Provide and maintain, in a clean and orderly condition, lockable secure lock box for storage of tools and materials.

9.6 SANITARY FACILITIES:

- .1 Contractor may use sanitary facilities at each building, provided they are left in a clean and sanitary condition after each use.
 - .1 Contractor's option to provide their own sanitary facilities.

9.7 CONSTRUCTION SIGNS:

- .1 If signage is requested or required, format, location and quantity of site signs and notices to be approved by Departmental Representative.
- .2 Signs and notices for safety or instruction to be in English language, or commonly understood graphic symbols.
- .3 Maintain signboards, signs and notices for duration of project. Remove and dispose of signs off site when directed by Departmental Representative.

- .4 Remove signs from site at completion of project or as directed by Departmental Representative.

Part 10 Temporary Barriers and Enclosures

10.1 ENCLOSURE OF WORK AREA:

- .1 Provide temporary dust barriers around work areas where rodent waste contamination is being disturbed, as described in the Project Specifications. Exhaust dust and vapours to exterior.
- .2 In all areas where work is to take place, enclosures are to be constructed to isolate work areas from view of occupants and the public.
 - .1 Viewing of work and work areas must still be available for Commissionaires and Departmental Representative, through installation of viewing windows in controlled locations.
 - .2 Provide enclosure plan for prior approval of Departmental Representative.

Part 11 Cleaning

11.1 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 Departmental Representative.
- .3 Provide and use clearly marked separate bins for recycling. Refer to Section 01 74 21 – Waste Management And Disposal.
- .4 Store volatile waste in covered metal containers, and remove from premises at end of each working day.
- .5 Provide adequate ventilation during use of volatile or noxious substances.
- .6 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.
- .7 Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall on wet, newly painted surfaces nor contaminate building systems.

11.2 FINAL CLEANING:

- .1 Conduct cleaning in accordance with Section 01 74 11 – Cleaning.
- .2 When Work is Substantially Performed, remove surplus products, tools, construction machinery and equipment not required for performance of remaining Work.

- .3 Remove waste products and debris other than that caused by others, and leave Work clean and suitable for occupancy.
- .4 Remove waste products from site.

Part 12 Closeout Procedures

12.1 INSPECTION AND DECLARATION:

- .1 Contractor's Inspection: Conduct an inspection of Work with all subcontractors, identify deficiencies and defects, and repair as required to conform to Contract Documents.
- .2 Notify Departmental Representative in writing of satisfactory completion of Contractor's Inspection and that corrections have been made.
- .3 Request Departmental Representative's Inspection.

12.2 INSPECTION:

- .1 Departmental Representative and Contractor will perform inspection of Work to identify obvious defects or deficiencies. Contractor shall correct Work accordingly, at no cost to the Owner.

12.3 COMPLETION:

- .1 Submit written certificate that the following have been performed:
 - .1 Work has been completed and inspected for compliance with Contract Documents.
 - .2 Defects have been corrected and deficiencies have been completed.
 - .3 Work is complete and ready for Final Inspection.

12.4 FINAL INSPECTION:

- .1 When items noted above are completed, request final inspection of Work by Departmental Representative. If Work is deemed incomplete by Departmental Representative, complete outstanding items and request re-inspection.

END OF SECTION

Section 01 11 00 Summary of Work

Part 13 General

13.1 RELATED SECTIONS

- .1 Section 01 56 00 - Temporary Barriers and Enclosures.

13.2 WORK COVERED BY CONTRACT DOCUMENTS

- .1 Work of this Contract consists of removal of rodent contamination within the ceiling spaces as follows and further identified as the Work:
 - .1 Pacific Highway Border Crossing – abatement (removal and disposal) of rodent contamination within ceiling spaces of the Traffic Building First Floor and Commercial Operations Building.

13.3 CONTRACT METHOD

- .1 Relations and responsibilities between Contractor and subcontractors are as defined in Conditions of Contract. Assigned Subcontractors must, in addition:
 - .1 Furnish to Contractor, bonds covering faithful performance of subcontracted work and payment of obligations thereunder when Contractor is required to furnish such bonds to Owner.
 - .2 Purchase and maintain liability insurance to protect from claims for not less than limits of liability which Contractor is required to provide to Owner.

13.4 WORK BY OTHERS

- .1 Co-operate with other Contractors in carrying out their respective works and carry out instructions from Departmental Representative.
- .2 Co-ordinate work with that of other Contractors. If any part of work under this Contract depends for its proper execution or result upon work of another Contractor, report promptly to Departmental Representative in writing, any defects which may interfere with proper execution of Work.

13.5 EXISTING SERVICES

- .1 Owner will occupy premises during entire construction period for execution of normal operations, unless otherwise stated herein.
- .2 Cooperate with Owner in scheduling operations to minimize conflict and to facilitate Owner usage.
- .3 Notify Departmental Representative and utility companies of intended interruption of services and obtain required permission.

- .4 Temporary services to maintain critical building and tenant systems are not required, but may be deemed necessary by the Contractor, to complete the work.
- .5 Where unknown services are encountered that may require disturbance, immediately advise Departmental Representative and confirm findings in writing.
- .6 Construct barriers in accordance with Section 01 56 00 - Temporary Barriers and Enclosures.
- .7 Although access to power will be provided by the site, the Contractor should plan to provide power to be self-sufficient, if necessary.
- .8 Although access to potable water will be provided by the site, the Contractor should plan to supply potable water to be self-sufficient, if necessary.
- .9 Site will allow for access to the existing sanitary facilities, provided they are left in clean and sanitary condition after each use.
 - .1 Contractor's option to provide their own sanitary facilities.

13.6 DOCUMENTS REQUIRED

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

Part 14 Products

14.1 NOT USED

- .1 Not used.

Part 15 Execution

15.1 NOT USED

- .1 Not used.

END OF SECTION

Section 01 14 00 Work Restrictions

Part 16 General

16.1 RELATED REQUIREMENTS

- .1 Section 01 56 00 - Temporary Barriers and Enclosures.

16.2 ACCESS AND EGRESS

- .1 Design, construct and maintain temporary "access to" and "egress from" work areas, independent of finished surfaces and in accordance with relevant municipal, provincial and other regulations.

16.3 USE OF SITE AND FACILITIES

- .1 Execute work with least possible interference or disturbance to normal use of premises. Make arrangements with Departmental Representative to facilitate work as stated.
- .2 Maintain existing services to building as require to facilitate the Work, and provide for personnel and vehicle access.
- .3 Contractor may use sanitary facilities at each building, provided they are left in a clean and sanitary condition after each use.
 - .1 Contractor's option to provide their own sanitary facilities.
- .4 Closures: protect work temporarily until permanent enclosures are completed.

16.4 ALTERATIONS, ADDITIONS OR REPAIRS TO EXISTING BUILDING

- .1 Execute work with least possible interference or disturbance to site operations, public and normal use of premises. Arrange with Departmental Representative to facilitate execution of work.
- .2 Repair any damages to existing buildings that are caused by the Contractor through completion of the Work, at no additional cost to the Owner.

16.5 EXISTING SERVICES

- .1 Notify Departmental Representative and utility companies of intended interruption of services and obtain required permission.
- .2 Construct barriers in accordance with Section 01 56 00 - Temporary Barriers and Enclosures.

16.6 SPECIAL REQUIREMENTS

- .1 Ensure Contractor's personnel employed on site become familiar with and obey regulations including safety, fire, traffic and security regulations.

- .2 Keep within limits of work and avenues of ingress and egress.

16.7 SECURITY

- .1 Where security has been reduced by Work of Contract, provide temporary means to maintain security.

16.8 BUILDING SMOKING ENVIRONMENT

- .1 Comply with smoking restrictions. Smoking is not permitted.

Part 17 Products

17.1 NOT USED

- .1 Not Used.

Part 18 Execution

18.1 NOT USED

- .1 Not Used.

END OF SECTION

Section 01 14 10 Security Requirements

Purpose

- .2 To ensure that the abatement project and the border crossing operations may proceed without undue disruption or hindrance at all times.

Part 19 Definitions

- .1 "Commercial Vehicle" means any motor vehicle used for the shipment of material, equipment and tools required for the abatement project.
- .2 "Abatement employees" means persons working for the general contractor, the sub-contractors, equipment operators, material suppliers, testing and inspection companies and regulatory agencies.
- .3 "Departmental Representative" means the Public Works and Government Services Canada representative.
- .4 "Abatement limits" means the area, as indicated in the contract documents, that the contractor will be allowed to work". Limits to be confirmed at abatement start-up meeting.

Part 20 Preliminary Proceedings

- .1 At abatement start-up meeting:
 - .1 Discuss the nature and extent of all activities involved in the Project.
 - .2 Establish mutually acceptable security procedures in accordance with each site and each sites particular requirements.

Part 21 Contractor Employees

- .1 The Contractor personnel requiring access to PROTECTED information, assets or sensitive work site(s) must EACH hold a valid RELIABILITY STATUS, granted or approved by Canadian Industrial Security Directorate (CISD), **Public Services and Procurement Canada (PSPC)**.
- .2 The Contractor MUST NOT remove any PROTECTED information or assets from the identified work site(s), and the Contractor must ensure that its personnel are made aware of and comply with this restriction.
- .3 Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of CISD/PSPC.
- .4 The Contractor must comply with the provisions of the:

- .1 Security Requirements Check List:
<http://ssi-iss.tpsgc-pwgsc.gc.ca/gvrnmnt/cs-sc-eng.html#SRCL>
- .2 Industrial Security Manual (Latest Edition).
- .5 Any person employed on the abatement site will be subject to immediate removal from CBSA Property if they:
 - .1 appear to be under the influence of alcohol, drugs or narcotics.
 - .2 behave in an unusual or disorderly manner.

Part 22 Vehicles

- .1 All unattended vehicles on CBSA property must have windows closed; fuel caps locked, doors and trunks locked and keys removed. The keys must be securely in the possession of the owner or an employee of the company that owns the vehicle.
- .2 The Departmental Representative may limit at any time the number and type of vehicles allowed on the site.

Part 23 Parking

- .1 The parking area(s) to be used by abatement employees will be designated by the Departmental Representative. Parking in other locations will be prohibited and vehicles may be subject to removal.

Part 24 Work Hours

- .1 In accordance with applicable municipal bylaws and regulations, as approved by the Departmental Representative, and as specified in the Contract Documents.

Part 25 Tools and Equipment

- .1 Store all tools and equipment in approved secure locations.
- .2 Lock all tool boxes when not in use. Keys to remain in the possession of the employees of the Contractor.

END OF SECTION

Section 01 31 19 Project Meetings

General

25.2 RELATED SECTIONS

- .1 Not applicable

25.3 ADMINISTRATIVE

- .1 Project meetings will be scheduled and administered throughout the progress of the Work at the call of the Departmental Representative.
- .2 Meeting minutes will be recorded by the Contractor and distributed by Departmental Representative, if required.
- .3 Representative of Contractor, Subcontractor and/or suppliers attending meetings will be qualified and authorized to act on behalf of the party each represents.

25.4 PRE-COMMENCEMENT MEETING

- .1 Departmental Representative will schedule a pre-commencement meeting.
- .2 Departmental Representative, CBSA Representative and Contractor will be in attendance.
- .3 Agenda to include:
 - .1 Appointment of official representatives of participants in the Work.
 - .2 Schedule of Work: in accordance with schedule stipulated in Contract Documents.
 - .3 Schedule of submissions. Submit submittals in accordance with Section 01 33 00 - Submittal Procedures.
 - .4 Delivery schedule of specified equipment.
 - .5 Site security.
 - .6 Proposed changes, change orders, procedures, approvals required, mark-up percentages permitted, time extensions, overtime, administrative requirements.
 - .7 Owner provided products.
 - .8 Monthly progress claims, administrative procedures, photographs, hold backs.
 - .9 Insurances, transcript of policies.

25.5 PROGRESS MEETINGS

- .1 Progress meetings will be held. Departmental Representative will schedule the meetings and arrange for a meeting location.
- .2 Contractor involved in Work, Departmental Representative and CBSA Representative are to be in attendance.

- .3 Notify parties minimum 2 days prior to meetings.
- .4 Departmental Representative will chair the meeting, and distribute meeting minutes. Contractor will record the meeting minutes and provide within 5 business days.
- .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 Corrective measures and procedures to regain projected schedule.
 - .6 Revision to construction schedule.
 - .7 Progress schedule, during succeeding work period.
 - .8 Review submittal schedules: expedite as required.
 - .9 Maintenance of quality standards.
 - .10 Review proposed changes for effect on construction schedule and on completion date.
 - .11 Other business.

Part 26 Products

26.1 NOT USED

- .1 Not Used.

Part 27 Execution

27.1 NOT USED

- .1 Not Used.

END OF SECTION

Section 01 33 00 Submittal Procedures

Part 28 General

28.1 RELATED REQUIREMENTS

- .1 Not applicable.

28.2 REFERENCES (See Appendix A)

- .1 Information – Site Photographs
- .2 “Indoor Air Quality and Rodent Droppings Assessment – Pacific Highway Border Crossing, Traffic and Commercial Operations Building 26 176th Street, Surrey, BC”, prepared by Stantec Consulting Ltd., dated April, 2016.

28.3 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 documents 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 Contractor's responsibility for errors and omissions in submission is not relieved by Departmental Representative's review of submittals.
- .8 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Departmental Representative review.
- .9 Keep one reviewed copy of each submission on site.

28.4 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 Allow 2 days for Departmental Representative's review of each submission.
- .3 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.
- .4 After Departmental Representative's review, distribute copies.
- .5 Submit electronic copies of shop drawings for each requirement requested in specification Sections and as Departmental Representative may reasonably request.
- .6 Submit 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.
- .7 Delete information not applicable to project.
- .8 If upon review by Departmental Representative, no errors or omissions are discovered or if only minor corrections are made, copies will be returned and 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 Work may proceed.

28.5 PHOTOGRAPHIC DOCUMENTATION

- .1 Submit electronic copies of colour digital photography in ".jpg" format, standard resolution as directed by Departmental Representative.
- .2 Project identification: name and number of project and date of exposure indicated.
- .3 Viewpoints and their location as determined by Departmental Representative.
- .4 Frequency of photographic documentation: as directed by Departmental Representative.
 - .1 Upon completion of Work, and as directed by Departmental Representative.

28.6 CERTIFICATES AND TRANSCRIPTS

- .1 Immediately after award of Contract, submit Workers' Compensation Board (WorkSafeBC) status or clearance letter.
- .2 Submit transcription of insurance immediately after award of Contract.

Products

28.7 **NOT USED**
 .1 Not Used.

Part 29 **Execution**

29.1 **NOT USED**
 .1 Not Used.

END OF SECTION

Section 01 35 33 Health and Safety Requirements

Part 30 General

30.1 REFERENCES

- .1 Government of Canada.
 - .1 Canada Labour Code - Part II
 - .2 Canada Occupational Health and Safety Regulations.
- .2 WorkSafe BC
 - .1 British Columbia's Occupational Health and Safety Regulation (BC Reg. 296/97, including amendments to date of work)
- .3 Canadian Standards Association (CSA) as amended:
 - .1 CSA Z797-2009 Code of Practice for Access Scaffold
- .4 National Fire Code of Canada 2010 (as amended)
 - .1 Part 5 – Hazardous Processes and Operations and Division B as applicable and required.

30.2 RELATED SECTIONS

- .1 Section 01 01 50 – General Instructions
- .2 Section 01 33 00 – Submittal Procedures
- .3 Section 01 51 00 – Temporary Utilities
- .4 Section 01 56 00 – Temporary Barriers and Enclosures

30.3 WORKSAFE BC COVERAGE

- .1 Comply fully with BC Reg. 296/97 and orders made pursuant thereto, and any amendments up to the completion of the work.
- .2 Maintain WorkSafe BC coverage during the term of the Contract, until and including the date that the Certificate of Final Completion is issued.

30.4 COMPLIANCE WITH REGULATIONS

- .1 PWGSC may terminate the Contract without liability to PWGSC where the Contractor, in the opinion of PWGSC, refuses to comply with a requirement of BC Reg. 296/97.
- .2 It is the Contractor's responsibility to ensure that all workers are qualified, competent and certified to perform the work as required by BC Reg. 296/97.

30.5 SUBMITTALS

- .1 Submit to Departmental Representative submittals listed for review (in accordance with Section 01 01 50 General Instructions and 01 33 00 Submittal Procedures).
- .2 Work effected by submittal shall not proceed until review is complete.
- .3 Submit the following:
 - .1 Health and Safety Plan.
 - .2 Copies of reports or directions issued by Federal and Provincial health and safety inspectors.
 - .3 Copies of incident and accident reports.
 - .4 Complete set of Material Safety Data Sheets (MSDS), and all other documentation required by Workplace Hazardous Materials Information System (WHMIS) requirements.
 - .5 Emergency Procedures.
- .4 The Departmental Representative will review the Contractor's site-specific project Health and Safety Plan and emergency procedures, and provide comments to the Contractor within 5 days after receipt of the plan. Revise the plan as appropriate and resubmit to Departmental Representative.
- .5 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 Departmental Representative.
- .6 Submission of the Health and Safety Plan, and any revised version, to the Departmental Representative is for information and reference purposes only. It shall not:
 - .1 Be construed to imply approval by the Departmental Representative.
 - .2 Be interpreted as a warranty of being complete, accurate and legislatively compliant.
 - .3 Relieve the Contractor of his legal obligations for the provision of health and safety on the project.

30.6 RESPONSIBILITY

- .1 Assume responsibility as the Prime Contractor for work under this contract, and appoint a qualified coordinator for the purpose of ensuring the coordination of health and safety activities for the location in accordance with BC Reg. 296/97.
- .2 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.

- .3 Comply with and enforce compliance by employees with safety requirements of Contract documents, applicable Federal, Provincial and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.

30.7 HEALTH AND SAFETY COORDINATOR

- .1 The Health and Safety Coordinator (Registered Occupational Hygienist, Certified Industrial Specified Hygienist, Canadian Registered Safety Professional or other Workers' Compensation Health and Safety Board (WorkSafeBC) recognized Qualified Person) must:
 - .1 Be responsible for completing all health and safety training, and ensuring that personnel that do not successfully complete the required training are not permitted to enter the site to perform work.
 - .2 Be responsible for implementing, daily enforcing, and monitoring the site-specific Health and Safety Plan.
 - .3 Be on site during execution of work.

30.8 GENERAL CONDITIONS

- .1 Provide safety barricades and lights around work site as required to provide a safe working environment for workers and protection for pedestrian and vehicular traffic.
- .2 Ensure that non-authorized persons are not allowed to circulate in designated construction areas of the work site.
 - .1 Provide appropriate means by use of barricades, fences, warning signs, traffic control personnel, and temporary lighting as required.
 - .2 Secure site after working hours in accordance with Section 01 14 10 – Security Requirements.

30.9 PROJECT/SITE CONDITIONS

- .1 Work at site will involve contact with:
 - .1 Rodent droppings.

30.10 REGULATORY REQUIREMENTS

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

30.11 WORK PERMITS

- .1 Not applicable.

30.12 HEALTH AND SAFETY PLAN

- .1 Conduct a site-specific hazard assessment based on review of Contract documents, required work, and project site. Identify any known and potential health risks and safety hazards.
- .2 Prepare and comply with a site-specific project Health and Safety Plan based on hazard assessment, including, but not limited to, the following:
 - .1 Primary requirements:
 - .1 Contractor's safety policy.
 - .2 Identification of applicable compliance obligations.
 - .3 Definition of responsibilities for project safety/organization chart for project.
 - .4 General safety rules for project.
 - .5 Job-specific safe work, procedures, including work in confined or restricted access spaces.
 - .6 Inspection policy and procedures.
 - .7 Incident reporting and investigation policy and procedures.
 - .8 Occupational Health and Safety Committee/Representative procedures.
 - .9 Occupational Health and Safety meetings.
 - .10 Occupational Health and Safety communications and record keeping procedures.
 - .2 Summary of health risks and safety hazards resulting from analysis of hazard assessment, with respect to site tasks and operations which must be performed as part of the work.
 - .3 List hazardous materials to be brought on site as required by work.
 - .4 Indicate Engineering and administrative control measures to be implemented at the site for managing identified risks and hazards.
 - .5 Identify personal protective equipment (PPE) to be used by workers.
 - .6 Identify personnel and alternates responsible for site safety and health.
 - .7 Identify personnel training requirements and training plan, including site orientation for new workers.
- .3 Develop the plan in collaboration with all subcontractors. Ensure that work/activities of subcontractors are included in the hazard assessment and are reflected in the plan.
- .4 Revise and update Health and Safety Plan as required, and re-submit to the Departmental Representative.
- .5 Departmental Representative's review: the review of Health and Safety Plan by Public Works and Government Services Canada (PWGSC) shall not relieve the Contractor of responsibility for errors or omissions in final Health and Safety Plan or of responsibility for meeting all requirements of construction and Contract documents.

30.13 EMERGENCY PROCEDURES

- .1 List standard operating procedures and measures to be taken in emergency situations. Include an evacuation plan and emergency contacts (i.e. names/telephone numbers) of:
 - .1 Designated personnel from own company.
 - .2 Regulatory agencies applicable to work and as per legislated regulations.
 - .3 Local emergency resources.
 - .4 Departmental Representative.
- .2 Include the following provisions in the emergency procedures:
 - .1 Notify workers and the first-aid attendant, of the nature and location of the emergency.
 - .2 Evacuate all workers safely.
 - .3 Check and confirm the safe evacuation of all workers.
 - .4 Notify the fire department or other emergency responders.
 - .5 Notify adjacent workplaces or residences which may be affected if the risk extends beyond the workplace.
 - .6 Notify Departmental Representative.
- .3 Provide written rescue/evacuation procedures as required for, but not limited to:
 - .1 Work at high angles.
 - .2 Work in confined spaces or where there is a risk of entrapment.
 - .3 Work with hazardous substances.
- .4 Design and mark emergency exit routes to provide quick and unimpeded exit.
- .5 Revise and update emergency procedures as required, and re-submit to the Departmental Representative.

30.14 HAZARDOUS PRODUCTS

- .1 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage and disposal of hazardous materials, and regarding labelling and provision of Material Safety Data Sheets (MSDS) acceptable to the Departmental Representative and in accordance with the Canada Labour Code.
- .2 Where use of hazardous and toxic products cannot be avoided:
 - .1 Advise Departmental Representative beforehand of the product(s) intended for use. Submit applicable MSDS and WHMIS documents as per Section 01 33 00.
 - .2 In conjunction with Departmental Representative, schedule to carry out work during "off hours" when tenants have left the building.
 - .3 Provide adequate means of ventilation in accordance with Section 01 51 00.

30.15 ELECTRICAL SAFETY REQUIREMENTS

- .1 Comply with authorities and ensure that, when installing new facilities or modifying existing facilities, all electrical personnel are completely familiar with existing and new electrical circuits and equipment and their operation.
 - .1 Before undertaking any work, coordinate required energizing and de-energizing of new and existing circuits with Departmental Representative.
 - .2 Maintain electrical safety procedures and take necessary Precautions to ensure safety of all personnel working under this Contract, as well as safety of other personnel on site.

30.16 ELECTRICAL LOCKOUT

- .1 Where required, develop, implement and enforce use of established procedures to provide electrical lockout and to ensure the health and safety of workers for every event where work must be done on any electrical circuit or facility.
- .2 Where required, prepare the lockout procedures in writing, listing step-by-step processes to be followed by workers, including how to prepare and issue the request/authorization form. Have procedures available for review upon request by the Departmental Representative.
- .3 Keep the documents and lockout tags at the site and list in a log book for the full duration of the Contract. Upon request, make such data available for viewing by Departmental Representative or by any authorized safety representative.

30.17 OVERLOADING

- .1 Ensure no part of work is subjected to a load which will endanger its safety or will cause permanent deformation.

30.18 FALSEWORK

- .1 Design and construct falsework in accordance with CSA S269.1- 1975 (R2003).

30.19 SCAFFOLDING

- .1 Design, construct and maintain scaffolding in a rigid, secure and safe manner, in accordance with CSA Z797-2009 and BC Occupational Health and Safety Regulations.

30.20 CONFINED SPACES

- .1 Although not expected to be required as part of the Work, carry out work in confined spaces in compliance with Provincial and Federal regulations (Canada Occupational Health and Safety Regulation, Part XI).

30.21 FIRE SAFETY AND HOT WORK

- .1 Although not expected to be required as part of the Work, obtain Departmental Representative's authorization before any welding, cutting or any other hot work operations can be carried out on site.
- .2 Hot work includes cutting/melting with use of torch, flame heating roofing kettles, or other open flame devices and grinding with equipment which produces sparks.

30.22 FIRE SAFETY REQUIREMENTS

- .1 Store oily/paint-soaked rags, waste products, empty containers and materials subject to spontaneous combustion in ULC approved, sealed containers and remove from site on a daily basis.
- .2 Handle, store, use and dispose of flammable and combustible materials in accordance with the National Fire Code of Canada.

30.23 FIRE PROTECTION AND ALARM SYSTEM

- .1 Fire protection and alarm systems shall not be:
 - .1 Obstructed.
 - .2 Shut off.
 - .3 Left inactive at the end of a working day or shift.
- .2 Do not use fire hydrants, standpipes and hose systems for purposes other than firefighting.
- .3 Be responsible/liable for costs incurred from the fire department, the building owner and the tenants, resulting from false alarms.

30.24 UNFORSEEN HAZARDS

- .1 Should any unforeseen or peculiar safety-related factor, hazard or condition become evident during performance of the work, immediately stop work and advise the Departmental Representative verbally and in writing.

30.25 POSTED DOCUMENTS

- .1 Post legible versions of the following documents on site:
 - .1 Health and Safety Plan.
 - .2 Sequence of work.
 - .3 Emergency procedures.
 - .4 Site drawing showing project layout, locations of the first-aid station, evacuation route and marshalling station, and the emergency transportation provisions.
 - .5 Floor plans or site plans.

- .6 Notice as to where a copy of the BC Occupational Health and Safety Regulation is available on the work site for review by employees and workers.
 - .7 Workplace Hazardous Materials Information System (WHMIS) documents.
 - .8 Material Safety Data Sheets (MSDS).
 - .9 List of names of Joint Health and Safety Committee members, or Health and Safety Representative, as applicable.
- .2 Post all Material Safety Data Sheets (MSDS) on site, in a common area, visible to all workers and in locations accessible to tenants when work of this Contract includes construction activities adjacent to occupied areas.
 - .3 Postings should be protected from the weather, and visible from the street or the exterior of the principal construction site shelter provided for workers and equipment, or as approved by the Departmental Representative.

30.26 MEETINGS

- .1 Attend health and safety pre-construction meeting and all subsequent meetings called by the Departmental Representative.

30.27 CORRECTION OF NON-COMPLIANCE

- .1 Immediately address health and safety non-compliance issues identified by the Departmental Representative.
- .2 Provide Departmental Representative with written report of action taken to correct non-compliance with health and safety issues identified.
- .3 The Departmental Representative may issue a "stop work order" if non-compliance of health and safety regulations is not corrected immediately or within posted time. The General Contractor/subcontractors will be responsible for any costs arising from such a "stop work order".

Part 31 Products

31.1 NOT USED

- .1 Not Used.

Part 32 Execution

32.1 NOT USED

- .1 Not Used.

END OF SECTION

Section 01 35 35 Fire Safety Requirements

Part 33 General

33.1 FIRE DEPARTMENT BRIEFING

- .1 Departmental Representative will co-ordinate arrangements for contractor for briefing on Fire Safety, general site specific “Do’s and Don’ts” in accordance with applicable municipal standards, before work is commenced.

33.2 REPORTING FIRES

- .1 Know location of nearest fire alarm box and telephone, including emergency phone number (911).
- .2 Report immediately fire incidents to the local Fire Department.
- .3 Person calling in the fire alarm box will remain at entrance to direct Fire Department to scene of fire.
- .4 When reporting fire by telephone, give location of fire, address or number of building and be prepared to verify location.

33.3 INTERIOR AND EXTERIOR FIRE PROTECTION AND ALARM SYSTEMS

- .1 Fire hydrants, standpipes and hose systems will not be used for other than fire-fighting purposes unless authorized by Departmental Representative.

33.4 FIRE EXTINGUISHERS

- .1 Supply fire extinguishers necessary to protect work in progress and contractor's physical plant on site.

33.5 BLOCKAGE OF ROADWAYS

- .1 Advise Departmental Representative of work that would impede fire apparatus response. This includes erecting of barricades and digging of trenches.

33.6 SMOKING PRECAUTIONS

- .1 Observe smoking regulations.

33.7 RUBBISH AND WASTE MATERIALS

- .1 Keep rubbish and waste materials at minimum quantities.
- .2 Burning of rubbish is prohibited.
- .3 Removal:

.1 Remove rubbish from work site at end of work day or shift or as directed.

.4 Storage:

.1 Store waste in approved receptacles to ensure maximum cleanliness and safety.

.2 Deposit greasy or oily rags and materials subject to spontaneous combustion in approved receptacles and remove specified.

33.8 FLAMMABLE AND COMBUSTIBLE LIQUIDS

.1 Handling, storage and use of flammable and combustible liquids governed by current National Fire Code of Canada.

.2 Keep flammable and combustible liquids such as gasoline, kerosene and naphtha for ready use in quantities not exceeding 45 litres provided they are stored in approved safety cans bearing Underwriters' Laboratory of Canada or Factory Mutual seal of approval. Storage of quantities of flammable and combustible liquids exceeding 45 litres for work purposes requires permission of Departmental Representative.

.3 Transfer of flammable and combustible liquids is prohibited within buildings or jetties.

.4 Transfer of flammable and combustible liquids will not be carried out in vicinity of open flames or any type of heat-producing devices.

.5 Do not use flammable liquids having flash point below 38 degrees C such as naphtha or gasoline as solvents or cleaning agents.

.6 Store flammable and combustible waste liquids, for disposal, in approved containers located in safe ventilated area. Keep quantities minimum and Local Fire Department is to be notified when disposal is required.

33.9 HAZARDOUS SUBSTANCES

.1 If the Work involves the use of toxic or hazardous materials, chemicals and/or explosives, or otherwise creating hazard to life, safety or health, Work shall be conducted in accordance with National Fire Code of Canada.

.2 When Work is carried out in dangerous or hazardous areas involving use of heat, provide fire watchers equipped with sufficient fire extinguishers. Determination of dangerous or hazardous areas along with level of protection necessary for Fire Watch is at discretion of Departmental Representative. Contractors are responsible for providing fire watch service for work on scale established and in conjunction with Departmental Representative (or alternate) at pre-work conference.

.3 Provide ventilation where flammable liquids, such as lacquers or urethanes are used, eliminate sources of ignition.

33.10 QUESTIONS AND/OR CLARIFICATION

- .1 Direct questions or clarification on Fire Safety in addition to above requirements to Departmental Representative.

33.11 FIRE INSPECTION

- .1 Co-ordinate site inspections through Departmental Representative.
- .2 Allow Departmental Representative unrestricted access to work site.
- .3 Co-operate with Departmental Representative during routine fire safety inspection of work site.
- .4 Immediately remedy unsafe fire situations observed by Departmental Representative (or alternate).

Part 34 Products

34.1 NOT USED

- .1 Not Used.

Part 35 Execution

35.1 NOT USED

- .1 Not Used.

END OF SECTION

Section 01 35 43 Environmental Procedures

General

35.2 RELATED REQUIREMENTS

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

35.3 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 humankind; or degrade environment aesthetically, culturally and/or historically.
 - .2 Environmental Protection: prevention/control of pollution and habitat or environment disruption during construction. Control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.
- .2 Reference Standards:
 - .1 U.S. Environmental Protection Agency (EPA)/Office of Water
 - .1 EPA 832/R-92-005-[92], Storm Water Management for Construction Activities, Chapter 3.

35.4 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Prior to commencing Work activities or delivery of materials to site, provide Environmental Protection Plan for review and approval by Departmental Representative.
- .3 Ensure Environmental Protection Plan includes 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 task[s].
- .5 Include in Environmental Protection Plan:
 - .1 Name[s] of person[s] responsible for ensuring adherence to Environmental Protection Plan.

- .2 Name[s] and qualifications of person[s] responsible for manifesting hazardous waste to be removed from site.
- .3 Name[s] and qualifications of person[s] responsible for training site personnel.
- .4 Descriptions of environmental protection personnel training program.
- .5 Drawings showing locations of proposed material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials on site, if necessary.
- .6 Traffic Control Plans including measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather. Ensure plans include measures to minimize amount of mud transported onto paved public roads by vehicles or runoff.
- .7 Work area plan showing proposed activity in each portion of area and identifying areas of limited use or non-use. Ensure plan includes measures for marking limits of use areas and methods for protection of features to be preserved within authorized work areas.
- .8 Spill Control Plan including procedures, instructions, and reports to be used in event of unforeseen spill of regulated substance.
- .9 Non-Hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including clearing debris.
- .10 Air pollution control plan detailing provisions to assure that dust, debris, materials, and trash, are contained on project site.
- .11 Contaminant Prevention Plan identifying potentially hazardous substances to be used on job site; intended actions to prevent introduction of such materials into air, water, or ground; and detailing provisions for compliance with Federal, Provincial, and Municipal laws and regulations for storage and handling of these materials.
- .12 Waste Water Management Plan identifying methods and procedures for management and/or 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.
- .13 Historical, archaeological, cultural resources, biological resources and wetlands plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources and wetlands.
- .14 Pesticide treatment plan to be included and updated, as required.

35.5 FIRES

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

35.6 POLLUTION CONTROL

- .1 Maintain temporary erosion and pollution control features installed under this Contract.
- .2 Control emissions from equipment to local authorities' emission requirements.

- .3 Prevent sandblasting and other extraneous materials from contaminating air and waterways beyond application area.
 - .1 Provide temporary enclosures where required.
- .4 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.

35.7 NOTIFICATION

- .1 Departmental Representative or Consultant will notify Contractor in writing of observed noncompliance with Federal, Provincial or Municipal environmental laws or regulations, permits, and other elements of Contractor's Environmental Protection plan.
- .2 Contractor: after receipt of such notice, inform Departmental Representative or Consultant of proposed corrective action and take such action for approval by Departmental Representative.
 - .1 Do not take action until after receipt of written approval by Departmental Representative or Consultant.
- .3 Departmental Representative or Consultant will issue stop order of work until satisfactory corrective action has been taken.
- .4 No time extensions granted or equitable adjustments allowed to Contractor for such suspensions.

Part 36 Products

36.1 NOT USED

- .1 Not Used.

Part 37 Execution

37.1 CLEANING

- .1 Clean in accordance with Section 01 74 11 - Cleaning.
- .2 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Waste Management and Disposal.
- .3 Rubbish and waste materials are not to be buried on site
- .4 Ensure public waterways, storm and sanitary sewers remain free of waste and volatile materials disposal.

END OF SECTION

Section 01 41 00 Regulatory Requirements

Part 38 General

38.1 RELATED SECTIONS

- .1 Not applicable.

38.2 REFERENCES AND CODES

- .1 Perform Work in accordance with National Building Code of Canada (NBC) including amendments up to tender closing date and other codes of provincial or local application provided that in case of conflict or discrepancy, more stringent requirements apply.
- .2 Meet or exceed requirements of:
 - .1 Contract documents.
 - .2 Specified standards, codes and referenced documents.
- .3 Comply with all approvals and permits that apply to the Work.
- .4 Contractor shall ensure compliance on its part and on the part of all its Subcontractors with the BC Occupational Health and Safety Regulations.
- .5 All other BC Provincial Laws and Regulations shall apply as appropriate and the Contractor shall comply with the requirements thereof as though they had been specifically named in these specifications.
- .6 Codes, Standards and Regulations are specified in other sections of the specifications and the Work shall be done in accordance with those Codes, Standards and Regulations where applicable.

38.3 HAZARDOUS MATERIAL DISCOVERY

- .1 Asbestos: Notify Consultant if previously un-identified suspected asbestos-containing material is identified during the Work.
- .2 Lead: Notify Consultant if previously un-identified suspected lead-containing materials are identified during the Work, and require alteration/disturbance or removal.
- .3 Polychlorinated Biphenyl (PCB): Notify Consultant if previously un-identified suspected PCBs are identified during the Work, and require alteration/disturbance or removal.
- .4 Ozone-depleting Substances (ODS): Notify Consultant if previously un-identified suspected ODSs are identified during the Work, and require alteration/disturbance or removal.

38.4 BUILDING SMOKING ENVIRONMENT

- .1 Comply with smoking restrictions and municipal by-laws.

Part 39 Products

39.1 NOT USED

- .1 Not Used.

Part 40 Execution

40.1 NOT USED

- .1 Not Used.

END OF SECTION

Section 01 51 00 Temporary Utilities

Part 41 General

41.1 RELATED SECTIONS

- .1 Section 01 33 00 - Submittal Procedures.

41.2 SUBMITTALS

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

41.3 INSTALLATION AND REMOVAL

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

41.4 WATER SUPPLY

- .1 Contractor will be provided with access to each facility's potable water for use.

41.5 TEMPORARY HEATING AND VENTILATION

- .1 Provide temporary heating, if required to facilitate the Work, during construction period, including attendance, maintenance and fuel.
- .2 Construction heaters used inside building must be vented to outside or be non-flameless type.
- .3 Provide temporary heat and ventilation in enclosed areas as required to:
 - .1 Facilitate progress of Work.
 - .2 Protect Work and products against dampness and cold.
 - .3 Prevent moisture condensation on surfaces.
 - .4 Provide ambient temperatures and humidity levels for storage, installation and curing of materials.
 - .5 Provide adequate ventilation to meet health regulations for safe working environment.
- .4 Ventilating:
 - .1 Prevent accumulations of dust, fumes, mists, vapours or gases in areas occupied during work.
 - .2 Provide local exhaust ventilation to prevent harmful accumulation of hazardous substances into atmosphere of occupied areas.

- .3 Dispose of exhaust materials in manner that will not result in harmful exposure to persons.
- .4 Ventilate storage spaces containing hazardous or volatile materials.
- .5 Ventilate temporary sanitary facilities.
- .6 Continue operation of ventilation and exhaust system for time after cessation of work process to assure removal of harmful contaminants.

41.6 TEMPORARY POWER AND LIGHT

- .1 Contractor will be provided with access to each facility's electrical panel(s) for power and light.
- .2 Provide and maintain temporary lighting throughout project, where required and in accordance with applicable Health and Safety standards.

41.7 TEMPORARY COMMUNICATION FACILITIES

- .1 Provide and pay for temporary telephone, fax, data hook up, lines necessary for own use, if required.

41.8 FIRE PROTECTION

- .1 Maintain existing fire protection systems and provide project-specific fire protection equipment in accordance with governing codes, regulations and bylaws.
- .2 Burning rubbish and construction waste materials is not permitted on site.

Part 42 Products

42.1 NOT USED

- .1 Not Used.

Part 43 Execution

43.1 NOT USED

END OF SECTION

Section 01 56 00 Temporary Barriers and Enclosures

Part 44 General

44.1 RELATED SECTIONS

- .1 Section 01 74 21 Waste Management and Disposal

44.2 INSTALLATION AND REMOVAL

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

44.3 VISUAL BARRIERS

- .1 Create visual barriers using opaque poly to limit the view of the interior of work area enclosures from areas outside the enclosure.
 - .1 Viewing of work and work areas must still be available for Commissionaires and Departmental Representative, through installation of viewing windows in controlled locations.

44.4 GUARD RAILS AND BARRICADES

- .1 Provide secure, rigid guard rails and barricades around deep excavations, open shafts, open stair wells, open edges of floors and roofs as necessary
- .2 Provide as required by governing authorities.

44.5 WEATHER ENCLOSURES

- .1 Not applicable

44.6 DUST TIGHT SCREENS

- .1 Provide dust tight screens or partitions to localize dust generating activities, and for protection of workers and public, as required.
- .2 Maintain and relocate protection until such work is complete.

44.7 ACCESS TO SITE

- .1 Provide and maintain access roads, sidewalk crossings, ramps and construction runways as may be required for access to Work.
- .2 Create and maintain a corridor for access to DASCO and Locker Room as indicated on Drawing 3, for the duration of the project.

44.8 PUBLIC TRAFFIC FLOW

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

44.9 FIRE ROUTES

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

44.10 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.

44.11 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Waste Management and Disposal.

Part 45 Products

45.1 NOT USED

- .1 Not Used.

Part 46 Execution

46.1 NOT USED

- .1 Not Used.

END OF SECTION

Section 01 74 11 Cleaning

Part 47 General

47.1 RELATED SECTIONS

- .1 Section 01 74 21 - Waste Management and Disposal.

47.2 REFERENCES

- .1 Not applicable.

47.3 PROJECT CLEANLINESS

- .1 Maintain Work in tidy condition, free from accumulation of waste products and debris, other than that caused by Departmental Representative or other Contractors.
- .2 Remove waste materials from site at daily regularly scheduled times or dispose of as directed by Departmental Representative. Do not burn waste materials on site.
- .3 Clear snow and ice from access to building, if necessary.
- .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 marked separate bins for recycling. Refer to Section 01 74 21 - Waste Management and Disposal.
- .7 Dispose of waste materials and debris off site.
- .8 Store volatile waste in covered metal containers, and remove from premises at end of each working day.
- .9 Provide adequate ventilation during use of volatile or noxious substances. Use of building ventilation systems is not permitted for this purpose.
- .10 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.

47.4 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 all waste products and debris.
- .5 Remove waste materials from site at regularly scheduled times or dispose of as directed by Departmental Representative. Do not burn waste materials on site.
- .6 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .7 Broom clean and wash exterior walks, steps and surfaces; rake clean other surfaces of grounds.
- .8 Clean and sweep areaways and sunken wells.
- .9 Sweep and wash clean paved areas.

47.5 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Waste Management and Disposal

Part 48 Products

48.1 NOT USED

- .1 Not Used.

Part 49 Execution

49.1 NOT USED

- .1 Not Used.

END OF SECTION

Section 01 74 21 Waste Management and Disposal

Part 50 General

50.1 WASTE MANAGEMENT GOALS

- .1 Prior to start of Work, conduct meeting with Departmental Representative and Consultant to review and discuss Waste Management Plan and Goals.
- .2 Waste Management Goal: Wood, concrete and metal Project Waste to be diverted from landfill sites unless not safe to do so (e.g. contaminated with rodent waste).

50.2 RELATED SECTIONS

- .1 Section 01 33 00 - Submittal Procedures.

50.3 REFERENCES

- .1 Canadian Environmental Protection Act (CEPA)
 - .1 CCME PN 1326-[2008], Environmental Code of Practice for Aboveground and Underground Storage Tank Systems for Petroleum Products and Allied Petroleum Products.
- .2 CSA International
 - .1 CSA S350-[M1980(R2003)], Code of Practice for Safety in Demolition of Structures.
- .3 Department of Justice Canada (Jus)
 - .1 Canadian Environmental Assessment Act (CEAA), 2012, c. 37.
 - .2 Canadian Environmental Protection Act (CEPA), 1999, c. 33.
 - .1 SOR/2003-2, On-Road Vehicle and Engine Emission Regulations.
 - .2 SOR/2006-268, Regulations Amending the On-Road Vehicle and Engine Emission Regulations.
 - .3 Transportation of Dangerous Goods Act (TDGA), 1992, c. 34.

50.4 DEFINITIONS

- .1 Class III: non-hazardous waste - construction renovation and demolition waste.
- .2 Recyclable: ability of product or material to be recovered at end of its life cycle and re-manufactured into new product for reuse.
- .3 Recycle: process by which waste and recyclable materials are transformed or collected for purpose of being transferred into new products.
- .4 Recycling: process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for purpose of using in altered form. Recycling does not include burning, incinerating, or thermally destroying waste.

- .5 Reuse: repeated use of product in same form but not necessarily for same purpose. Reuse includes:
 - .1 Salvaging reusable materials for resale, reuse on current project or for storage for use on future projects.
 - .2 Returning reusable items including pallets or unused products to vendors.
- .6 Salvage: removal of structural and non-structural materials from deconstruction/disassembly projects for purpose of reuse or recycling.
- .7 Separate Condition: refers to waste sorted into individual types.
- .8 Source Separation: acts of keeping different types of waste materials separate beginning from first time they became waste.

50.5 SUBMITTALS

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

50.6 STORAGE, HANDLING AND PROTECTION

- .1 Store materials to be reused, recycled and salvaged in locations as directed by Departmental Representative or Consultant.
- .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 and Consultant.
- .7 Protect surface drainage, mechanical and electrical from damage and blockage.
- .8 Separate and store materials produced during dismantling of structures in designated areas.
- .9 Prevent contamination of materials to be salvaged and recycled and handle materials in accordance with requirements for acceptance by designated facilities.
 - .1 On-site source separation is recommended.
 - .2 Remove co-mingled materials to off-site processing facility for separation.
 - .3 Provide waybills for separated materials.

50.7 DISPOSAL OF WASTES

- .1 Do not bury rubbish or waste materials.
- .2 Do not dispose of waste, volatile materials, mineral spirits, oil, paint thinner or any other liquid hazardous wastes into waterways, storm, or sanitary sewers.
- .3 Keep records of project 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 abatement work areas as Work progresses.

50.8 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.

50.9 SCHEDULING

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

Part 51 Products

51.1 NOT USED

- .1 Not Used.

Part 52 Execution

52.1 APPLICATION

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

52.2 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.

52.3 DIVERSION OF MATERIALS

- .1 Separate recyclable or reusable 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, recovered, reusable and/or recyclable materials is prohibited.

END OF SECTION

Section 01 77 00 Closeout Procedures

Part 53 General

53.1 RELATED REQUIREMENTS

- .1 Section 01 74 11 – Cleaning.
- .2 Section 01 74 21 - Waste Management and Disposal.

53.2 REFERENCES

- .1 Not applicable.

53.3 ADMINISTRATIVE REQUIREMENTS

- .1 Acceptance of Work Procedures:
 - .1 Contractor's Inspection: Contractor: conduct inspection of Work, identify deficiencies and defects, and repair as required to conform to Contract Documents.
 - .1 Notify Departmental Representative or Consultant in writing of satisfactory completion of Contractor's inspection and submit verification that corrections have been made.
 - .2 Request Departmental Representative/Consultant's inspection.
 - .2 Departmental Representative/Consultant's Inspection:
 - .1 Departmental Representative/Consultant and Contractor to inspect Work and identify defects and deficiencies.
 - .2 Contractor to correct Work as directed.
 - .3 Completion Tasks: submit written certificates in English that tasks have been performed as follows:
 - .1 Work: completed and inspected for compliance with Contract Documents.
 - .2 Defects: corrected and deficiencies completed.
 - .3 Equipment and systems: tested and fully operational.
 - .4 Work: complete and ready for final inspection.
 - .4 Final Inspection:
 - .1 When completion tasks are done, request final inspection of Work by Departmental Representative, Consultant, and Contractor.
 - .2 When Work incomplete according to Departmental Representative, Consultant, complete outstanding items and request re-inspection.
 - .5 Final Payment:
 - .1 When Departmental Representative and Consultant consider final deficiencies and defects corrected and requirements of Contract met, make application for final payment.

53.4 FINAL CLEANING

- .1 Clean in accordance with Section 01 74 11 - Cleaning.
 - .1 Remove surplus materials, excess materials, rubbish, tools and equipment.
- .2 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Waste Management and Disposal

Part 54 Products

54.1 NOT USED

- .1 Not Used.

Part 55 Execution

55.1 NOT USED

- .1 Not Used.

END OF SECTION

Division 2 Sitework

Section 02 81 01 Hazardous Materials

Part 56 General

56.1 RELATED REQUIREMENTS

- .1 Section 01 33 00 - Submittal Procedures
- .2 Section 01 35 33 - Health and Safety Requirements
- .3 Section 01 35 43 - Environmental Procedures
- .4 Section 01 74 11 - Cleaning
- .5 Section 01 74 21 - Waste Management and Disposal

56.2 REFERENCES

- .1 Reports (Appendix A)
 - .1 “Indoor Air Quality and Rodent Droppings Assessment – Pacific Highway Border Crossing, Traffic and Commercial Operations Building 26 176th Street, Surrey, BC”, prepared by Stantec Consulting Ltd., dated April, 2016.
 - .2 Additional Reports Available from Departmental Representative
 - .1 “Hazardous Building Materials Assessment – Four Buildings at the Pacific Highway Border Crossing, BC”, prepared by Stantec Consulting Ltd., dated April, 2016.
 - .2 “Hazardous Building Materials Assessment – Pacific Highway Border Crossing, 28 – 176th Street, Surrey, British Columbia”, prepared by DST Consulting Engineers, dated March, 2014.
- .3 Definitions:
 - .1 Dangerous Goods: product, substance, or organism specifically listed or meets hazard criteria established in Transportation of Dangerous Goods Regulations.
 - .2 Hazardous Material: product, substance, or organism used for its original purpose; and is either dangerous goods or material that will cause adverse impact to environment or adversely affect health of persons, animals, or plant life when released into the environment.
 - .3 Hazardous Waste: hazardous material no longer used for its original purpose and that is intended for recycling, treatment or disposal.
- .4 Reference Standards:
 - .1 Government of Canada.
 - .1 Canada Labour Code - Part II

- .2 Canada Occupational Health and Safety Regulations.
- .2 WorkSafe BC
 - .1 British Columbia's Occupational Health and Safety Regulation (BC Reg. 296/97, including amendments to date of work)
- .3 Canadian Environmental Protection Act,1999 (CEPA 1999)
 - .1 Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations (SOR/2005-149).
- .4 Department of Justice Canada (Jus)
 - .1 Transportation of Dangerous Goods Act, 1992 (TDG Act) [1992], (c. 34).
 - .2 Transportation of Dangerous Goods Regulations (T-19.01-SOR/2001-286).
- .5 Health Canada / Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
- .6 National Research Council Canada Institute for Research in Construction (NRC-IRC)
 - .1 National Fire Code of Canada-[2005].

56.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for hazardous materials and include product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Submit two copies of WHMIS MSDS in accordance with Sections 01 35 33 - Health and Safety Requirements and 01 35 43 - Environmental Procedures to Departmental Representative for each hazardous material required prior to bringing hazardous material on site.
 - .3 Submit hazardous materials management plan to Departmental Representative that identifies hazardous materials, usage, location, personal protective equipment requirements, and disposal arrangements.
 - .4 Construction Waste Management:
 - .1 Submit calculations on end-of-project recycling rates, salvage rates, and landfill rates demonstrating percentage of construction wastes were recycled or salvaged
 - .5 Low-Emitting Materials: submit listing of adhesives and sealants used in building, comply with VOC and chemical component limits or restrictions requirements.

56.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Transport hazardous materials and wastes in accordance with Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable provincial regulations.
- .4 Storage and Handling Requirements:
 - .1 Co-ordinate storage of hazardous materials with Departmental Representative and abide by internal requirements for labelling and storage of materials and wastes.
 - .2 Store and handle hazardous materials and wastes in accordance with applicable federal and provincial laws, regulations, codes, and guidelines.
 - .3 Store and handle flammable and combustible materials in accordance with National Fire Code of Canada requirements.
 - .4 Keep no more than 45 litres of flammable and combustible liquids such as gasoline, kerosene and naphtha for ready use.
 - .1 Store flammable and combustible liquids in approved safety cans bearing the Underwriters' Laboratory of Canada or Factory Mutual seal of approval.
 - .2 Storage of quantities of flammable and combustible liquids exceeding 45 litres for work purposes requires the written approval of the Departmental Representative.
 - .5 Transfer of flammable and combustible liquids is prohibited within buildings.
 - .6 Transfer flammable and combustible liquids away from open flames or heat-producing devices.
 - .7 Solvents or cleaning agents must be non-flammable or have flash point above 38 degrees C.
 - .8 Store flammable and combustible waste liquids for disposal in approved containers located in safe, ventilated area. Keep quantities to minimum.
 - .9 Observe smoking regulations, smoking is prohibited in areas where hazardous materials are stored, used, or handled.
 - .10 Storage requirements for quantities of hazardous materials and wastes in excess of 5 kg for solids, and 5 litres for liquids:
 - .1 Store hazardous materials and wastes in closed and sealed containers.
 - .2 Label containers of hazardous materials and wastes in accordance with WHMIS.
 - .3 Store hazardous materials and wastes in containers compatible with that material or waste.
 - .4 Segregate incompatible materials and wastes.

- .5 Ensure that different hazardous materials or hazardous wastes are stored in separate containers.
- .6 Store hazardous materials and wastes in secure storage area with controlled access.
- .7 Maintain clear egress from storage area.
- .8 Store hazardous materials and wastes in location that will prevent them from spilling into environment.
- .9 Have appropriate emergency spill response equipment available near storage area, including personal protective equipment.
- .10 Maintain inventory of hazardous materials and wastes, including product name, quantity, and date when storage began.
- .11 When hazardous waste is generated on site:
 - .1 Co-ordinate transportation and disposal with Departmental Representative.
 - .2 Comply with applicable federal, provincial and municipal laws and regulations for generators of hazardous waste.
 - .3 Use licensed carrier authorized by provincial authorities to accept subject material.
 - .4 Before shipping material obtain written notice from intended hazardous waste treatment or disposal facility it will accept material and it is licensed to accept this material.
 - .5 Label containers with legible, visible safety marks as prescribed by federal and provincial regulations.
 - .6 Only trained personnel handle, offer for transport, or transport dangerous goods.
 - .7 Provide photocopy of shipping documents and waste manifests to Departmental Representative.
 - .8 Track receipt of completed manifest from consignee after shipping dangerous goods. Provide photocopy of completed manifest to Departmental Representative.
 - .9 Report discharge, emission, or escape of hazardous materials immediately to Departmental Representative and appropriate provincial authority. Take reasonable measures to control release.
- .12 Ensure personnel have been trained in accordance with Workplace Hazardous Materials Information System (WHMIS) requirements.
- .13 Report spills or accidents immediately to Departmental Representative and Consultant. Submit a written spill report to Departmental Representative within 24 hours of incident.

Part 57 Products

57.1 MATERIALS

.1 Description:

- .1 Bring on site only quantities hazardous material required to perform Work.
- .2 Maintain MSDS in proximity to where materials are being used. Communicate this location to personnel who may have contact with hazardous materials.

END OF SECTION

Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 01 33 00 - Submittal Procedures
- .2 Section 01 35 33 - Health and Safety Requirements
- .3 Section 01 35 43 - Environmental Procedures
- .4 Section 01 56 00 - Temporary Barriers and Enclosures
- .5 Section 01 74 11 - Cleaning
- .6 Section 01 74 21 - Waste Management and Disposal
- .7 Section 09 51 13 - Acoustic Ceilings

1.2 REFERENCES

- .1 Reports (Appendix A)
 - .1 "Indoor Air Quality and Rodent Droppings Assessment – Pacific Highway Border Crossing, Traffic and Commercial Operations Building 26 176th Street, Surrey, BC", prepared by Stantec Consulting Ltd., dated April, 2016.
- .2 Issued for Tender Drawings (Appendix B)
- .3 Reference Standards:
 - .1 WorkSafeBC publication "A Hantavirus Exposure Control Program For Employers and Workers" (2006)

1.3 DEFINITIONS:

- .1 Cleaning solution: detergent solution.
- .2 Competent person: individuals who can demonstrate that hazardous materials remediation training has been obtained, is capable of identifying existing hazards in workplace and selecting appropriate control strategy for exposure.
- .3 Contractor: contractor providing abatement services as defined in specification.
- .4 Fibre reinforced polyethylene sheet (FRPS): rip-proof fibre reinforced polyethylene sheet sheeting with added fibre reinforced adhesive tape along edges.
- .5 HEPA vacuum: High Efficiency Particulate Air filtered vacuum equipment with filter system capable of collecting and retaining particles greater than 0.3 microns in any direction at 99.97% efficiency.
- .6 HVAC: heating ventilating and air-conditioning systems which serve occupied areas. Includes but is not limited to air handling units, duct work, terminal boxes and vents.
- .7 Work Area Enclosure: specific area or location where actual work is being performed or such other areas of a facility where it has been determined that it may be hazardous to public health as result of remediation.
- .8 Occupied Area: areas of building or work site that is outside of the Work Area Enclosure.
- .9 PPE: Personnel Protection Equipment.
- .10 Sprayer: garden reservoir type sprayer or airless spray equipment capable of producing

mist or fine spray.

1.4 REGULATORY REQUIREMENTS

- .1 Comply with regulations in effect at time work is performed.
- .2 In case of conflict between regulatory requirements and these specifications, the more stringent requirement applies.
- .3 If no regulations exist, follow guidelines most widely accepted by recognized professional organizations such as occupational hygienists, health professionals or environmental engineers as listed in paragraph 1.2.3 Reference Standards.

1.5 CLOSEOUT SUBMITALS

- .1 Maintain general log to provide permanent record of project. Maintain logs and other required documentation as part of permanent project file.

1.6 INSTRUCTION AND TRAINING

- .1 Before commencing work, provide to Departmental Representative satisfactory proof that every worker has had instruction and training in potential health hazards of rodent contamination exposure, handling of hazardous materials, and in use of disposable respirators and protective clothing.
- .2 Instruction and training must be provided by designated construction safety advisor.

1.7 WORKER PROTECTION

- .1 Minimum: Disposable filter-type respirator of type P100, suitable for protection against rodent contamination and acceptable to Provincial Authority having jurisdiction.
- .2 Gloves and eye protection.
- .3 Disposable coveralls.
- .4 No person required to enter the Work Area Enclosure to have facial hair that affects seal between respirator and face.
- .5 Eating, drinking and chewing are not permitted in the Work Area Enclosure.
- .6 Before leaving the Work Area Enclosure, dispose of protective clothing as waste as specified.
- .7 Ensure workers wash hands and face before leaving the Work Area Enclosure.

1.8 MATERIALS

- .1 Drop Sheets: 0.15 mm thick woven fibre reinforced fabric bonded both sides with fibre reinforced polyethylene sheet.
- .2 Disposal bags: dust-tight 0.15 mm polyethylene waste bags.

- .3 Wetting Agent: water to mist contaminated materials, as necessary.
- .4 Cleaning solution: detergent solution for damp wipe and/or mop.
- .5 Fibre reinforced adhesive tape: used in sealing joints of fibre reinforced polyethylene sheets and for attachment of fibre reinforced polyethylene sheet to finished and unfinished surfaces. Fibre reinforced adhesive tape must be capable of adhering under both dry and wet conditions.

1.9 TOOLS AND EQUIPMENT

- .1 Tools and equipment: suitable for use with rodent contamination and must be able to withstand de-contamination.
- .2 Personnel protective equipment (protective clothing, respirators): provided in sufficient quantities for duration of project.
- .3 Vacuum cleaners: equipped with HEPA filters.
- .4 Ladders and/or scaffolds: adequate length, strength and sufficient quantity to support work schedule.

Part 2 EXECUTION

2.1 PREPARATION OF WORK AREA

- .1 Cover objects within the proposed Work Area Enclosure and/or beneath areas where abatement will take place in ceiling spaces with 0.15 mm fibre reinforced polyethylene drop sheets.
- .2 Remove visible dust from surfaces in the Work Area Enclosure where dust is likely to be disturbed during the course of work. Use HEPA vacuum and damp wipe area.
- .3 Do not use compressed air to clean up or remove dust from surfaces.
- .4 Use 0.15 mm fibre reinforced polyethylene drop sheets tightly sealed with fibre reinforced adhesive tape over flooring in the Work Area Enclosure.
- .5 Where work is to be conducted only during certain hours, with re-occupancy between abatement work-shifts, only prepare an area that can be reasonably abated during the given work shift, such that equipment, materials and personnel can be removed by the end of the shift, new ceiling materials (e.g. tiles) can be re-instated, and the area re-occupied by facility workers.

2.2 REMEDIATION

- .1 Perform work in a manner to reduce dust creation to lowest levels practicable.
- .2 Porous materials (ceiling tiles) to be removed, discarded and replaced.
- .3 Non-porous materials (metal Paralene panels) to be cleaned and disinfected.

- .4 Surfaces above Paralane ceilings (locations of ceiling types indicated on Drawings 1 and 2):
 - .1 Remove sufficient ceiling materials to access ceiling spaces while maintaining function of existing fixtures (e.g. closed circuit television cameras, lighting, alarms, fire sprinklers, air supply diffusers/return grilles, etc.) and to allow for removal of rodent waste from and cleaning/disinfecting of:
 - .1 The top-side of Paralane ceiling panels
 - .2 Surfaces of materials within the ceiling space
- .5 Surfaces above "T-bar" ceilings with acoustic ceiling tiles (locations of ceiling types indicated on Drawings 1 and 2):
 - .1 Remove and dispose of ceiling tiles throughout ("T-bar" grid to remain).
 - .1 Exceptions may be provided for ceiling tiles that cannot reasonably be removed without removing or altering security-related electronic items (e.g. closed circuit television cameras). Cleaning/disinfecting of these tiles in-place will be sufficient, upon approval of Departmental Representative.
 - .2 Existing fixtures (e.g. closed circuit television cameras, lighting, alarms, fire sprinklers, air supply diffusers/return grilles, etc.) are to remain and be un-installed, cleaned and/or re-installed as necessary.
 - .3 Existing ceiling tiles are of two types, as pictured below:
 - .1 Type 1 – ceiling tile present in Commercial Area.



.2 Type 2 – ceiling tile type present in Traffic Area



- .2 Remove rodent waste from, and clean and disinfect horizontal surfaces above ceilings, including “T-bar” grid.
- .3 Seal all visible locations of rodent ingress with metal mesh, metal fibres, sealing compound with metal fibres, or other material designed to prevent rodent access.
- .4 Replace removed ceiling tiles with new tiles, reinstalling existing fixtures (e.g. closed circuit television cameras, lighting, alarms, fire sprinklers, air supply diffusers/return grilles, etc.) where present. Refer to Section 09 51 13 - Acoustic Ceilings.
- .5 Where re-occupancy of work areas will occur between contractor shifts, new ceiling tiles are to be installed at the end of each shift, where contaminated tiles are removed. The contractor is only to remove tiles from an area that they can reasonably manage to clean and reinstate (with new tiles) before the area is re-occupied by CBSA personnel.
- .6 Surfaces above “hard” ceilings (e.g. drywall, plaster, other – locations of ceiling types indicated on Drawings 1 and 2):
 - .1 Remove rodent waste from and clean and disinfect top-side of ceilings and other surfaces throughout the ceiling space.
 - .2 Seal all visible locations of rodent ingress with metal mesh, metal fibres, sealing compound with metal fibres, or other material designed to prevent rodent access.
 - .3 Access to be gained through existing hatches, or through removal of either paraline or acoustic ceiling tiles in adjacent rooms.
- .7 Dispose of contaminated building materials as specified.
- .8 During remediation, should the Departmental Representative suspect contamination of areas outside the Work Area Enclosure, contractor to stop remediation work and immediately decontaminate these affected areas. Eliminate causes of such contamination.

Unprotected individuals are prohibited from entering contaminated areas until a visual inspection determines areas are free from contamination.

2.3 CLEAN-UP

- .1 Clean, frequently during work and immediately after completion of work, the Work Area Enclosure using a HEPA vacuum and/or by damp mopping with cleaning solution.
- .2 Leave areas dry and visibly free from contamination, debris and dust.
- .3 Perform final thorough clean-up of work areas and adjacent areas affected by work using HEPA vacuum and/or damp mopping with detergent solution.

2.4 WASTE DISPOSAL

- .1 Place dust and contaminated waste in dust-tight 0.15 mm polyethylene waste bags. Treat drop sheets and disposable protective clothing as waste; fold these items to contain dust, and place in plastic bags. Securely seal bags.
- .2 Clean exterior of each waste-filled bag using damp cloths and cleaning solution or HEPA vacuum prior to removal from the Work Area Enclosure.
- .3 Remove waste bags from site and dispose. There is no special requirements for disposal of rodent contaminated materials, as such they can be disposed of in landfill.

2.5 RE-ESTABLISHMENT OF OBJECTS AND SYSTEMS

- .1 Relocate objects moved to temporary locations to their proper positions. Ensure objects are cleaned before being moved into cleaned areas.
- .2 Remount objects removed to former positions.
- .3 Re-establish mechanical and electrical systems to proper working order.

2.6 FINAL CLEARANCE

- .1 Departmental Representative to conduct thorough visual inspection to detect visible accumulations of dust or bulk materials remaining in work area. Should dust, debris, rodent contamination, or residue be detected repeat cleaning until area meets approval.

END OF SECTION

Division 9 Finishes

Section 09 51 13 Acoustic Ceilings

Part 60 General

60.1 SECTION INCLUDES

- .1 Suspended metal grid ceiling system and perimeter trim.
- .2 Acoustic tile.
- .3 Removal and disposal of ceiling tiles throughout spaces as indicated in drawings. Suspension grid to remain except where replacement, alterations or additions are required during course of work.

60.2 RELATED SECTIONS

- .1 Section 01 33 00 – Submittal Procedures

60.3 REFERENCES

- .1 ASTM C635-04 - Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
- .2 ASTM C636/C636M-06 - Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.
- .3 ASTM E580/E580M-06 - Application of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Requiring Moderate Seismic Restraint.
- .4 ASTM E1264-98(2005) - Classification of Acoustical Ceiling Products.
- .5 CAN/ULC S702-97 - Thermal Insulation Mineral Fibre for Buildings.
- .6 CISCA (Ceilings and Interior Systems Contractors Association) - Acoustical Ceilings: Use and Practice.

60.4 SYSTEM DESCRIPTION

- .1 Suspension System: Rigidly secure acoustic ceiling system including integral mechanical, electrical and security components with maximum deflection of 1:240.

60.5 ADMINISTRATIVE REQUIREMENTS

- .1 Sequencing:
 - .1 Sequence work to ensure acoustic ceilings are not installed until dust generating activities have terminated, and overhead work is completed.

- .2 Install acoustic units after any interior wet work is dry.

60.6 DESIGN REQUIREMENTS

- .1 The work of this Section shall be designed by a qualified professional engineer registered or licensed in Province of B.C.
- .2 Design ceilings to resist safely and effectively all loads and effects of loads in accordance with Part 4.0 of the British Columbia Building Code 2012 Edition.

60.7 SUBMITTALS FOR REVIEW

- .1 Product Data: Provide data on metal grid system components and acoustic units.
- .2 Samples: Submit two (2) samples full size illustrating material and finish of each acoustic unit type.
- .3 Provide sealed shop drawings prepared under supervision of professional engineer registered in the Province of British Columbia. Indicate all necessary grid layout and related dimensioning, junctions with other work or ceiling finishes, seismic bracing, interrelation of mechanical, electrical and security items related to system. Contractor to review site conditions with professional engineer registered in the Province of British Columbia prior to shop drawing submittal to confirm any relevant site conditions or changes necessary to existing ceiling suspension and restraint systems.

60.8 LETTERS OF ASSURANCE

- .1 Have the Engineer responsible for sealing the engineered shop drawings submit to the Department Representative, AIBC Schedule SB.
- .2 Engineer to provide field review of the installation and submit to the Department Representative AIBC Schedule SC.

60.9 MAINTENANCE MATERIAL SUBMITTALS

- .1 Extra Stock Materials:
 - .1 Provide 1 percent of total acoustic unit area of extra tiles to Department Representative.

60.10 QUALITY ASSURANCE

- .1 Conform to CISCA requirements.

60.11 ENVIRONMENTAL REQUIREMENTS

- .1 Maintain uniform temperature of minimum 16 degrees C, and maximum humidity of 40 percent prior to, during, and after acoustic unit installation.

Part 61 Products

61.1 MATERIALS - GRID

- .1 Suspension grid to remain except where replacement, alterations or additions are required during course of work.
- .2 Standard of acceptance: Armstrong Commercial Ceilings, USG, CertainTeed
- .3 15/16" Exposed Tee system with Seismic suspension system
- .4 Colour: Match existing.
- .5 Non-fire Rated Grid: ASTM C635, intermediate duty; exposed T; components die cut and interlocking.
- .6 Support Channels and Hangers: Galvanized steel; size and type to suit application, and ceiling system flatness requirement specified.

61.2 MATERIALS - TILES

- .1 Acoustic Tile, ASTM E1264, conforming to the following:
 - .1 Type 1: Square Edge tile, white
 - .1 Panel size required: 1220 x 610 x 16mm (4' x 2' x 5/8")
 - .2 Noise Reduction Coefficient (NRC): 0.55, CAC: 35
 - .3 Fire Resist/flame Spread Class A (UL);
 - .4 Light Reflectance 0.80 as per ASTM E1477 requirements
 - .5 Standard of acceptance: Armstrong Contractor Series 933 Random Textured
 - .6 Other acceptable manufacturers offering functionally and aesthetically equivalent products to be approved **prior** to bid submission.
 - .2 Type 2: Square Edge tile, white
 - .1 Panel size required: 1220 x 610 x 19mm (4' x 2' x 3/4")
 - .2 Noise Reduction Coefficient (NRC): CAC: 30
 - .3 Fire Resist/flame Spread Class A (UL);
 - .4 Light Reflectance 0.80 as per ASTM E1477 requirements
 - .5 Standard of acceptance: Armstrong Home Style Ceilings 1270 Cascade
 - .6 Other acceptable manufacturers offering functionally and aesthetically equivalent products to be approved **prior** to bid submission.

61.3 ACCESSORIES

- .1 150m trim as required for replacement of any affected existing edge trims, closely match existing.

Part 62 Execution

62.1 EXAMINATION

- .1 Verify that layout of hangers will not interfere with other work.

62.2 INSTALLATION - LAY-IN GRID SUSPENSION SYSTEM

- .1 Suspension grid to remain except where replacement, alterations or additions are required during course of work.
- .2 Install suspension system to manufacturer instructions and ASTM C636, and as supplemented in this section.
- .3 Install system capable of supporting imposed loads to a deflection of 1/240 maximum.
- .4 Locate system on room axis according to existing layout.
- .5 Install after major above ceiling work is complete. Coordinate the location of hangers with other work.
- .6 Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.
- .7 Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
- .8 Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability. Support fixture loads by supplementary hangers located within 150 mm of each corner; or support components independently.
- .9 Do not eccentrically load system, or produce rotation of runners.

62.3 INSTALLATION - ACOUSTIC UNITS

- .1 Fit acoustic units in place, free from damaged edges or other defects detrimental to appearance and function.
- .2 Lay directional patterned units one way with pattern parallel to longest room axis. Fit border trim neatly against abutting surfaces.
- .3 Install units after above ceiling work is complete.
- .4 Install acoustic units level, in uniform plane, and free from twist, warp, and dents.
- .5 Cutting Acoustic Units:
 - .1 Cut to fit irregular grid and perimeter edge trim.
 - .2 Cut square reveal edges to field cut units.

- .3 Double cut and field paint exposed edges of tegular units.
- .6 Lay acoustic insulation for a distance of 1 200 mm either side of acoustic partitions.

62.4 ERECTION TOLERANCES

- .1 Maximum Variation from Flat and Level Surface: 3 mm in 3 m.
- .2 Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.

END OF SECTION

Appendix A – Reports

Appendix B – Issued for Tender Drawings