NOTE:

.1 The contractor is responsible to obtain all necessary permits, licenses and authorizations required for this proposed project. Any and all stipulations outlined by federal, provincial, or municipal authorities and/or their officers must be strictly followed including, but not limited to, those referenced in Section 1.2. Federal departments are not bound by provincial or municipal legislation, however, as a best practice the most stringent standards are used where applicable. Any discrepancies must be successfully resolved before the pertinent work may begin.

1.1 REFERENCES

.1 .1 WHMIS: Workplace Hazardous Materials Information System, Health Canada.
.1 TDGA: Transportation of Dangerous Goods Act. Transport Canada
.2 CEPA: Canadian Environmental Protection Act, Environment Canada
.3 MBCA: Migratory Birds Convention Act, Environment Canada
.4 Fisheries Act, Department of Fisheries and Oceans
.5 EPA: Environmental Protection Act, Prince Edward Island, Department of Energy, Environment and Forestry
.6 Species at Risk Act, SARA, Environment Canada
.7 Federal and Provincial Wetland Policies
.8 Canadian Wildlife Act
.9 Summary of Hazardous Materials Buildings 7, 10, 14, 17 and 18 (Stantec, 2013)included as Appendix.
.10 Lead-Based Paint Sampling - AAFC Crops and Livestock Research Centre, 440 University Ave, Charlottetown, PEI, Buildings 7 and 18 (Stantec, 2013) included as Appendix.
.11 Hazardous Building Materials Survey Agriculture and Agri-Food Canada Crops and Livestock Research Centre, 440 University Avenue, Charlottetown, PEI, Buildings 7, 10, 14, 17 and 18 (LVM 2013) included as Appendix.
.12 Contractor Responsibilities Under The Federal Halocarbon Regulations included as Appendix.

2.1 RELATED SECTIONS

.1 Section 02 41 16 Structure Demolition
.2 Section 02 82 00.01 Asbestos Abatement - Minimum Precautions
.3 Section 02 82 00.02 Asbestos Abatement - Intermediate Precautions

.4 Section 02 82 00.03 Asbestos Abatement - Maximum Precautions
.5 Section 02 83 10 Lead - Based Paint Abatement
.6 Section 02 85 00.02 Mould Remediation
.7 Appendix A4 - Contractor Responsibilities Under The Federal Halocarbon Regulations.

3.1 DEFINITIONS

.1 Hazardous Material: Product, substance, or organism that is used for its original purpose; and that is either dangerous goods or a material that may cause adverse impact to the environment or adversely affect health of persons, animals, or plant life when released into the environment.

.2 Wetlands: land where the water table is at, near or above the surface or which is saturated for a long enough period to promote such features as wet-altered soils and water tolerant vegetation. Wetlands include organic wetlands or "peatlands", and mineral wetlands or mineral soil areas that are influenced by excess water but produce little or no peat.

4.1 FIRES

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

5.1 TRANSPORTATION

.1 Transport hazardous materials and hazardous waste in compliance with Federal Transportation of Dangerous Goods Act.

.2 Do not overload trucks when hauling material. Secure contents against spillage.

.3 Maintain trucks clean and free of mud, dirt and other foreign matter.

.4 Avoid potential release of contents and of any foreign matter onto highways, roads and access routes used for the Work. Take extra care when hauling material and other hazardous materials. Immediately clean any spillage and soils.

.5 Before commencement of work, advise the Departmental Representative of the existing roads and temporary routes proposed to be used to access work areas and to haul material to and from the site.

.6 All excavated soil and building materials will be carefully loaded into dump trucks at the site. The trucks will not be overloaded with soil, and all trucks

will be properly tarped to prevent dispersion of soil and materials during transit. Truck beds will not be allowed to have any holes through which soil and building materials may fall out. Truck gates will be tightly closed.

6.1 HAZARDOUS MATERAL HANDLING

.1 Handle and store hazardous materials on site in accordance with WHMIS procedures and requirements.

.2 Store all hazardous liquids in location and manner to prevent their spillage into the environment.

.3 Maintain written inventory of all hazardous materials kept on site. List product name, quantity and storage date.

.4 Keep MSDS data sheets on site for all items.

.5 Store and handle flammable and combustible materials in accordance with National Fire Code.

.6 Have appropriate emergency spill response equipment and rapid clean-up kit on site located adjacent to hazardous materials storage area. Provide personal protective equipment required for clean-up.

.7 Any materials deemed hazardous should be stored for the shortest time possible in containers that will be used for shipping. The contractor shall ensure that the proper packing and containers are present prior to hazardous material removal.

.1 Project area shall be clearly identified and activities limited to within these boundaries. The Contractor is to ensure good work zone and decontamination practices to prevent cross contamination of unaffected areas. All trucks transporting material must have liquid tight boxes.

.2 Locations for waste disposal containers are to be determined in consultation with the Departmental Representative and AAFC.

.3 Perform a daily clean up to ensure all waste is secured in appropriate containers or prevented from being moved by wind conditions.

7.1 LIMITED HAZARDOUS MATERIAL ABATEMENT

.1 Refer to Appendix A1, A2, A3, A4 and A5 for details on Hazardous Materials and all specification sections including this section for Hazardous Materials Abatement requirements.

.2 Power Washing Petroleum Hydrocarbon Stained Concrete:

Power washing concrete is used in order to

remove oil, fuel and grease from the concrete. The use of a hot water power washer is suggested. A hot water unit is necessary for cement pavement cleaners since the cleaning solutions emulsify oil and grease stains better and faster as the water temperature increases. Use of a power washer capable of producing a pressure of 3000 PSI (or more) and a water flow of 4 GPM is recommended.

Connect the unit to a water supply tank. Pour a heavy-duty degreaser cleaning solution into your chemical tank and start the machine. Spray the surface in an orderly and sequential manner. The best results are achieved if you pressure wash one sequence at a time. Make sure you let the cleaning solution sit on the surface for 5 to 10 minutes. When ready to rinse, use the highest maximum hot water temperature your burner is capable of producing. Also, you should have several inter-changeable tips or nozzles that attach to the wand of your equipment. These tips can act to focus the spray of washer, and if over used on any material, can cut or damage the surface instead of cleaning it. Make sure you know how to use the pressure washer, keeping the nozzle at a 45 degree angle from the floor and at least 1 metre away from the area you are washing. Keep your work area clear of others and ensure that any overspray from the equipment is directed in a safe area and away from unsuspecting persons.

All washwater should be collected and confined to the area you are working away from any floor drains or municipal stormwaters. The wash waster should be vacuumed and removed from the site via a local waste hauler as 'contaminated waste' and disposed at an approved facility. Although most companies that supply degreasers and cleaners claim the product is 'environmentally friendly', the substance you are trying to remove is not. Unless testing confirms the wastewater generated has met the discharge criteria of the city of municipality, assume it needs to be properly transported offsite for disposal.

Wear proper personal protective equipment while using a pressure washer including rubber gloves, apron, boots, face shield and/or

safety goggles. When applying or using chemical-based degreaser, read the MSDS Sheets, and follow the manufacturer instructions including the use of proper PPE.

In some instances, heavy petroleum stains may need to be removed using a surface cleaning foam. These products will create foam using cleaning detergent or soap. When applied to the surface it will stick to it for a longer period of time allowing the detergent to emulsify the stains systematically and thoroughly. Wash and remove the surface cleaner, cleaning tougher spots by going over them several times if necessary.

.3 Mercury Containing Thermostats:

Mercury containing thermostats shall be properly packaged and disposed of through a licensed hazardous waste disposal contractor or recycling facility to prevent uncontrolled release of mercury. Care should be taken as to not release the mercury during handling and transporting.

.4 Polychlorinated Biphenyl (PCB) Containing Fluorescent Lamp Ballasts and Building Materials:

PCB containing lamp ballasts shall be properly packaged and disposed of through a licensed hazardous waste disposal contractor or recycling facility.

PCB contaminated building materials shall be removed and disposed of through a licensed hazardous waste disposal contractor or recycling facility.

.5 Pesticide Contaminated Building Materials:

Pesticide contaminated buildings materials are present in Building 18. The contaminated materials must be disposed of at an approved facility (such as East Prince Waste Management Facility) unless other hazardous materials (lead / mercury paint) are present and require more stringent disposal criteria (off-island disposal).

Given that pesticide contaminated building materials are also contaminated with lead/mercury paint and mould, workers in Building 18 should wear protective equipment outlined in the lead/mercury and mould specifications. In addition, organic vapor (or pesticide) cartridges coupled with high-efficiency particulate (HEPA) filters are also required.

8.1 PETROLEUM, OIL ND LUBRICANTS

.1 Comply with Federal and Provincial laws, regulations, codes and guidelines for the storage of fuel and petroleum products on site.

.2 Do not place fuel storage tanks and store fuel or other petroleum products within a 30 metre buffer zone of watercourses and wetlands. Do not fuel or lubricate equipment within this 30 metre buffer zone. Obtain approval from Departmental Representative of acceptable location on site for fuel storage and equipment service.

.3 Do not dump petroleum products or any other deleterious substances on ground or in the water.

.4 Be diligent and take all necessary precautions to avoid spills and contamination of the soil and water (both surface and subsurface) when handling petroleum products on site and during fueling and servicing of vehicles and equipment.

.5 Maintain on site appropriate emergency spill response equipment consisting of at least one 250-litre (55 gallon) overpack spill kit for containment and cleanup of spills.

.6 Maintain vehicles and equipment in good working order to prevent leaks on site.

.7 In the event of a petroleum spill, immediately notify the Departmental Representative and the Canadian Coast Guard (CCG) at 1-800-565-1633 (24 hour report line). Perform clean-up in accordance with all regulations and procedures stipulated by authority having jurisdiction.

9.1 DISPOSAL OF WASTES

.1 Do not dispose of hazardous waste or volatile materials, such as mineral spirits, paints, thinners, oil or fuel into waterways, storm or sanitary sewers or waste landfill sites.

.2 Dispose of hazardous waste in accordance with applicable federal and provincial laws, regulations, codes and guidelines.

.3 Any construction, soil or demolition debris will be disposed of in a Provincially approved manner (Either a permit or receipts for tippage must be submitted to Departmental Representative by the contractor to verify that the material was disposed of in a provincially approved manner).

10.1 DRAINAGE

.1 Provide temporary drainage and pumping as necessary to keep excavations and site free from water.

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

.3 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with governing regulations and requirements.

.4 Provide control devices such as filter fabrics, sediment traps and settling ponds to control drainage and prevent erosion of adjacent lands. Maintain in good order for duration of work.

11.1 WATER QUALITY

.1 Do not washdown equipment within a 30 metre buffer zone of a wetland, watercourse or other identified environmentally sensitive area.

.2 Any construction debris entering the marine environment will be retrieved.

.3 Any construction material used must be clean and non-toxic (free of fuel, oil, grease, and/or any contaminants).

.4 Water Control will be the responsibility of the contractor. Water will be collected and either disposed of off-site to a facility permitted for treating impacted water and/or treated on-site. Prior to release, the water will require testing to ensure that it meets all applicable by-laws.

12.1 AIR QUALITY

.1 Cover or wet down dry materials and waste to prevent blowing dust and debris. Control dust on all temporary roads.

.2 Ensure that blowing dust is not generated during abatement and demolition activities. Wet down materials as necessary to prevent blowing dust.

.3 Air quality during the demolition will be monitored.

13.1 POLLUTION CONTROL

.1 Maintain temporary erosion and pollution control features installed under this contract.

.2 Control emissions from equipment and plant to local authorities emission requirements.

.3 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads and around entire construction site.

.4 Have appropriate emergency spill response equipment and rapid clean-up kit on site located adjacent to hazardous materials storage area. Provide personal protective equipment required for clean-up.

.5 Report, spills of petroleum and other hazardous materials as well as accidents having potential of polluting the environment to Federal and Provincial Department of the Environment.

.1 Notify Departmental Representative and submit a written spill report to Departmental Representative within 24 hours of occurrence.

14.1 SOCIOECONOMIC RESTRICTIONS

.1 Abide by all Federal, Provincial and Municipal regulations for any restrictions on work performed during dark hours and on flood lighting of the site. Obtain applicable permits.

.1 The permitted hours of work on the site shall be 7:00 AM to 7:00 PM.

.2 Place flood lights in opposite direction of adjacent residential and business areas.

.3 Equip equipment and machinery with purposely designed mufflers to reduce noise on site to lowest possible level. Maintain mufflers in good operating condition at all times.

.4 Adequate signage and safety measures must be supplied during transportation of materials and equipment to the site.