1. **GENERAL**
   1. **Section Includes**
      1. Administrative procedures preceding preliminary and final inspections of Work.
      2. As-built drawings, material overages, and specifications.
      3. Equipment and systems.
      4. Product data and related information.
      5. Spare parts, special tools and special/unique maintenance materials.
      6. Final site survey.
      7. Cleaning.
      8. Closeout submittals.
   2. **Related Sections**
      1. Section 01 33 00 Submittal Procedures.
      2. Section 01 44 00 Quality Assurance.
      3. Section 01 78 23 Operations and Maintenance Data.
      4. Section 01 78 39 Project Record Documents.
      5. Section 01 78 45 Spare Parts and Maintenance Materials.
      6. Section 01 79 00 Demonstration and Training.
   3. **Project Close Out Form for Consultants**
      1. Consultants to contact their BCIT liaison for a copy of the *Project Close Out Form for Consultants*.
2. **INSPECTION and DECLARATION**
   1. **Contractor Inspection**
      1. Contractor and all sub-contractors shall conduct an inspection of Work, identify deficiencies and defects, and repair as required to conform to Contract Documents. Upon satisfactory completion:
         1. Notify *Consultant* in writing of satisfactory completion of Contractor's Inspection and that corrections have been made.
         2. Request *Consultant* Inspection.
   2. **Consultant Inspection**
      1. Owner, Consultant and Contractor will perform inspection of Work to identify obvious defects or deficiencies. Contractor shall correct Work accordingly.
   3. **Procedure for Turnover of New Buildings**
      1. Operations and Maintenance Manuals.
      2. Demonstration and training sessions – see 01 79 00.
      3. Performance Testing where applicable.
   4. **Completion**
      1. Submit written certificate that 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. A list of deficiencies shall be sent to the *Owner* and Consultant.
         4. Equipment and systems have been tested, adjusted, balanced, commissioned and are fully operational.
         5. Certificates required by Boiler Inspection Branch and Authority Fire Department have been submitted.
         6. Operation of systems has been demonstrated to *Owner's* personnel.
         7. Work is complete and ready for Final Inspection.
   5. **Final Inspection**
      1. When items noted above are completed, request final inspection of Work by *Owner*, Consultant and Contractor. If Work is deemed incomplete by *Owner* and Consultant, complete outstanding items and request re-inspection.
3. **CLEANING**
   1. **Project Cleanliness**
      1. Maintain Work in tidy condition, free from accumulation of waste products, debris and dust, including that incidentally caused by Owner or other Contractors, and similarly notify Owner’s forces or other Contractors carrying out work. Control dust migrating to occupied areas and isolate ventilation systems during renovations.
      2. Remove waste materials from site at regularly scheduled times, or dispose of as directed by Owner’s Representative. Do not burn waste materials on site.
      3. Clear snow and ice from access to building, bank/pile snow in designated areas only.
      4. Provide on-site dump containers for collection of waste materials and debris. BCIT waste containers are **not** to be utilized by Contractors.
      5. Provide and use clearly marked separate bins for recycling.
      6. Remove waste material and debris from site and deposit in waste container at end of each working day.
      7. Dispose of waste materials and debris off site.
      8. Clean interior areas prior to start of finishing work, and maintain areas free of dust and other contaminants during finishing operations.
      9. Store volatile waste in covered metal containers, and remove from premises at end of each working day.
      10. Provide adequate ventilation during use of volatile or noxious substances. Use of building ventilation systems is not permitted for this purpose.
      11. Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.
      12. Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall on wet, newly painted surfaces nor contaminate building systems.
   2. **Final Cleaning**
      1. At completion of the Work, just prior to final inspection and takeover by the Owner, a general cleaning of the areas affected shall be carried out by the Contractor's forces as follows:
         1. The Contractor shall employ skilled workers for final cleaning.
         2. Clean and polish glass, hardware, stainless steel, chrome, baked enamel, plastic laminate, mechanical, and electrical fixtures. Replace broken, scratched or disfigured items.
         3. Remove stains, spots, marks and dirt from decorative work, electrical and mechanical fixtures, walls and floors.
         4. Make a thorough inspection of all finishes, fitments and equipment to ensure proper workmanship.
         5. Examine and adjust all doors, sash and hardware; leave all in perfect working order, cleaned and polished.
         6. Vacuum clean and dust all building interiors, behind grilles, louvres, and screens.
         7. Wash and wax all resilient floor finishes, and as specified for all floors in individual specifications.
         8. The Contractor shall clear roof, grounds and exterior paved areas and walks of all construction debris, dirt and dust and shall replace any damaged grass or landscaping, leave in condition to the satisfaction of the Consultant and the Owner.
         9. Prior to final completion, or Owner occupancy, the Contractor shall conduct an inspection of sight-exposed interior and exterior surfaces, and all work areas, to verify that the entire work is clean.
   3. **Cleaning Materials**
      1. Use products which minimize environmental impact, including indoor air quality.
      2. Avoid VOC’s (Volatile Organic Compounds) or give preference to Low VOC’s whenever possible.
      3. Obtain recommendations for cleaning:
         1. New materials affected: from manufacturers of product installed.
         2. Existing materials affected: from BCIT Custodial Services, through the Owner’s Representative.
4. **CLOSE OUT SUBMITTALS**
   1. **Reference**
      1. 01 78 39 Project Record Documents
   2. **Site Documents**
      1. In addition to requirements in General Conditions, maintain at the site for Consultant and Owner one record copy of:
         1. Contract Drawings.
         2. Specifications.
         3. Addenda.
         4. Change Order and other modifications to the Contract.
         5. Reviewed shop drawings, product data, and samples.
         6. Field test records.
         7. Inspection certificates.
         8. Manufacturer’s certificates.
      2. Store record documents and samples in field office apart from documents used for construction. Provide files, racks, and secure storage.
      3. Label record documents and file in accordance with Section number listings in List of Contents of this Project Manual. Label each document "PROJECT RECORD" in neat, large, printed letters.
      4. Maintain record documents in clean, dry and legible condition. Do not use record documents for construction purposes.
      5. Keep record documents and samples available for inspection by Consultant.
   3. **Actual Site Conditions**
      1. Record information on set of black line opaque drawings.
      2. Provide felt tip marking pens, maintaining separate colours for each major system, for recording information.
      3. Record information concurrently with construction progress. Do not conceal Work until required information is recorded.
      4. Contract Drawings and shop drawings: legibly mark each item to record actual construction, including:
         1. Measured depths of elements of foundation in relation to finish first floor datum.

* + - 1. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.

* + - 1. Measured locations of internal utilities and appurtenances, referenced to visible and accessible features of construction.
      2. Field changes of dimension and detail.
      3. Changes made by change orders.
      4. Details not on original Contract Drawings.
      5. References to related shop drawings and modifications.
  1. **Final Survey**
     1. Submit final site survey certificate in accordance with Section 01 78 39 Project Record Documents - Preparation, certifying that elevations and locations of completed Work are in conformance, or non-conformance with Contract Documents.
  2. **Materials and Finishes**
     1. Building Products, Applied Materials, and Finishes:
        1. Include product data, with catalogue number, size, composition, and colour and texture designations. Provide information for re-ordering custom manufactured products.
        2. Include instructions for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
     2. Moisture-protection and Weather-exposed Products:
        1. Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
     3. Additional Requirements: as specified in individual specifications sections.
  3. **Spare Parts**
     1. Refer to 01 78 45 Spare Parts and Maintenance Materials.
  4. **Special Tools**
     1. Refer to 01 78 23 Operations and Maintenance Data.
     2. Provide special tools, in quantities specified in individual specification section.
     3. Provide items with tags identifying their associated function and equipment.
     4. Receive and catalogue all items. Submit inventory listing to Owner’s Representative. Include approved listings in Maintenance Manual.
  5. **Warranties and Bonds**
     1. Refer to 01 78 36 Warranties

\*\*\* END OF **CLOSE OUT PROCEDURES** SECTION \*\*\*