1 GENERAL

1.01 RELATED REQUIREMENTS

.1 Division 1 – General Requirements

.2 Section 09 03 61 Historic Repainting

1.02 REFERENCES

.1 Canadian General Standards Board (CGSB)
  .1 CAN/CGSB-12.2-M91, Flat, Clear Sheet Glass.
  .2 CAN/CGSB-12.3-M91, Flat, Clear Float Glass.

.2 Environmental Choice Program (ECP)
  .1 CCD-045-95(R2005), Sealants and Caulking Compounds.

.3 Glass Association of North American (GANA)
  .1 GANA Glazing Manual - 2008.
  .2 GANA Laminated Glazing Reference Manual - 2009.

1.03 ADMINISTRATIVE REQUIREMENTS

.1 Pre-Installation Meetings:
  .1 Convene pre-installation meeting 2 weeks prior to beginning work of this Section and on-site installation, with Contractor's in accordance with Section 01 31 19 - Project Meetings to:
    .1 Verify project requirements.
    .2 Review installation and substrate conditions.
    .3 Co-ordination with other building subtrades.
    .4 Review manufacturer's written installation instructions and warranty requirements.

1.04 ACTION AND INFORMATIONAL SUBMITTALS

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

.2 Shop Drawings:
  .1 Submit drawings stamped and signed by professional engineer registered or licensed in Province of Nova Scotia, Canada.

.3 Samples:
  .1 Submit for review and acceptance of each unit.
  .2 Submit 100 mm size samples of sealant material.

.4 Certificates: submit product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

.5 Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.
  .1 Submit testing and analysis of glass under provisions of Section 01 45 00 - Quality Control.
  .2 Submit shop inspection and testing for glass.

.3 Test reports to Lantern indicate glass is rated for costal Atlantic conditions in accordance with the NBC and design criteria.

1.05 CLOSEOUT SUBMITTALS

.1 Submit in accordance with Section 01 78 00 - Closeout Submittals.

.2 Operation and Maintenance Data: submit operation and maintenance data for glazing for incorporation into manual.

1.06 QUALITY ASSURANCE

.1 Mock-ups:
- .1 Construct lantern glass mock-ups in accordance with Section 01 45 00 - Quality Control.
- .2 Construct mock-up to include glass glazing, and perimeter seal.
- .3 Lantern Mock-up will be used:
  - .1 To judge quality of work, substrate preparation, operation of equipment and material application.
- .4 Locate where directed.
- .5 Allow 72 hours for inspection of mock-up before proceeding with work.
- .6 When accepted, mock-up will demonstrate minimum standard of quality required for this work. Approved mock-up may remain as part of finished work.

1.07 DELIVERY, STORAGE AND HANDLING

.1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and 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 Storage and Handling Requirements:
- .1 Store materials off ground and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
- .2 Store and protect glazing and frames from nicks, scratches, and blemishes.
- .3 Replace defective or damaged materials with new.

.4 Packaging Waste Management: reuse of pallets, crates, padding, and packaging materials as specified in Construction Waste Management Plan.

1.08 AMBIENT CONDITIONS

.1 Ambient Requirements:
- .1 Install glazing when ambient temperature is 10 degrees C minimum. Maintain ventilated environment for 24 hours after application.
- .2 Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

2 PRODUCTS

2.01 MATERIALS

.1 Design Criteria:
  .1 Size glass to withstand wind loads, dead loads and positive and negative live loads acting normal to plane of glass to design pressure of 300 kPa.
  .2 Limit glass deflection to flexural limit of glass with full recovery of glazing materials.

.2 Lantern Glass:
  .1 Laminated low iron glass. 10 mm thick.

.3 Wood Window Glass:
  .1 Existing to be reused.

.3 Sealant: in accordance with Section 07 92 00 - Joint Sealants.
  .1 VOC limit 250 g/L maximum to SCAQMD Rule 1168.
    .1 VOC limit: 5 % maximum by weight to CCD-045.
    .2 Ensure sealant does not contain chemical restrictions to CCD-045.

2.02 ACCESSORIES

.1 Setting blocks: neoprene hardness to ASTM D 2240, length of 25 mm for each square meter of glazing to suit glazing method, glass light weight and area.

.2 Spacer shims: neoprene, 50-60 Shore A durometer hardness to ASTM D 2240, 75 mm long x one half height of glazing stop x thickness to suit application. Self-adhesive on one face.

.3 Gasket: Neoprene. Full perimeter of lantern windows.

3 EXECUTION

3.01 EXAMINATION

.1 Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contracts are acceptable for glazing installation in accordance with manufacturer's written instructions.
  .1 Verify that openings for glazing are correctly sized and within tolerance.
  .2 Verify that surfaces of glazing channels or recesses are clean, free of obstructions, and ready to receive glazing.
  .3 Visually inspect substrate in presence of Departmental Representative.
  .4 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
  .5 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.

3.02 PREPARATION

.1 Clean contact surfaces with solvent and wipe dry.

.2 Seal porous glazing channels or recesses with substrate compatible primer or sealer.

.3 Prime surfaces scheduled to receive sealant.

3.03 INSTALLATION: EXTERIOR

.1 Perform work in accordance with GANA Glazing Manual and GANA Laminated Glazing Reference Manual for glazing installation methods.

3.04 CLEANING

.1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
- .1 Leave Work area clean at end of each day.
  - .1 Remove traces of primer, caulking.
  - .2 Remove glazing materials from finish surfaces.
  - .3 Remove labels.
  - .4 Clean glass using approved non-abrasive cleaner in accordance with manufacturer's instructions.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment 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 - Construction/Demolition Waste Management and Disposal.
- .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

3.05 PROTECTION

.1 Protect installed products and components from damage during construction.

.2 After installation, mark each light with an "X" by using removable plastic tape or paste.

.3 Repair damage to adjacent materials caused by glazing installation.

3.06 SCHEDULE

.1 New Lantern glazing refer to schedule on Aa100 drawing for sizes.

END OF SECTION