Architectural General Notes:

All Divisions

1. All Work shall conform to requirements of the latest editions of all applicable building and health safety codes and regulations governing construction projects.
2. By entering into an agreement, the General Trades Contractor and all Sub-Contractors warrant that they have visited the site and have fully examined all areas exposed for view by the Owner.
3. Failure to inform the Owner of discrepancies between the tender documents and actual exposed conditions shall not relieve the General Trades Contractor and all Sub-Contractors from having to perform the Work at no additional cost to the Owner where such discrepancies could have been brought to the attention of the Owner at time of tender
4. The General Trades Contractor shall not substitute any materials or products or change any method of construction as set out in the Specifications without the written permission of the Owner.
5. The General Trades Contractor will confirm all finishes, materials, fittings, fitments, etc., with the Owner through the Project Manager prior to purchase and installation.
6. The General Trades Contractor will seek clarification or further information on any details or Specification from the designer, through the Owner prior to commencing the Work.
7. All requests for clarification shall be in the form of written, numbered and dated Requests For Information; it is the General Trades Contractor's sole responsibility to follow up any verbal instruction or clarification with a written request.
8. Substantial Completion shall be determined by the Owner as the date that the Work is accepted as being complete for their takeover and full use.
9. Deficiencies and rejected Work shall be promptly rectified by the General Trades Contractor at no cost of penalty in time to the Owner, including Work not in conformance with the Specifications, poor workmanship, damage during construction.

   The General Trades Contractor shall be responsible for all costs for removals and replacement including Work of all Sub-Trades affected by the defective or rejected Work.
10. Warranties shall be as specified by Division or as otherwise noted following the date of Substantial Completion:

    - General Trades 1 year
    - Carpentry 5 years
    - Millwork 5 years
    - Hollow Metal Doors & Frames5 years
    - Aluminum Screens, Glazing & Doors 5 years
11. The General Trades Contractor warrants that the Work is free from all inherent defects of materials and workmanship and shall rectify any such defects promptly and a t no cost to the Owner for the period specified.
12. The General Trades Contractor shall provide the Owner with proper copies of extended warranties for all items listed in a form acceptable to the Owner prior to final payment.

Mechanical & Electrical

1. The Contractor to refer to Division 15 - Mechanical and Division 16 - Electrical Drawings and Specifications for all technical information regarding fixtures, fittings, equipment, etc.

01210 - Materials & Equipment

1. **General**
   - .1 All products supplied for the Work shall be new except as noted otherwise.
   - .2 All products shall be supplied in accordance with the Contract requirements, in accordance with the Specifications.
   - .3 Products and appliances will not be supplied by the Owner unless so stated.
   - .4 Description of products and Work in the Contract Documents which have well known technical or trade meanings shall be held to denote that all related recognized standards apply.
   - .5 Material Safety Data Sheets must be provided for all materials used on the project and shall be provided to the Owner prior to use on the Job Site.
   - .6 All materials and equipment to be installed in strict conformance with the manufacturer's Specifications and recommendations and industry best practice.
   - .7 All materials and products furnished are subject to the approval of the Designer who shall have the right to reject same and to direct correction of defective Work at no cost to the Owner.
2. **Handling**
   - .1 Arrange for receiving area with General Contractor.
   - .2 Schedule material delivery so as to keep storage at the site to the absolute minimum, but without causing delays due to late delivery. Before delivery arrange for receiving at site.
   - .3 Handle and store materials in accordance with manufacturer's instructions to prevent damage to materials, structure and finishes. Avoid undue loading stresses in materials and shock during transport, handling and storage. Do not overload floors of areas used for storage.
   - .4 All packaged materials must be in original, unopened and undamaged containers with manufacturer's labels and seals intact.
   - .5 Store material that will be damaged by weather in suitable dry accommodation. Provide ventilation. Keep daily records of temperature and relative humidity where these factors are critical in material storage.
   - .6 Do not store material and equipment detrimental to finished surfaces within areas of the building where finishing has commenced or has been completed. Material storage within the building is subject to relocation as directed.
   - .7 Store highly combustible or volatile materials separately from other materials and under no circumstances within the building. Protect against open flame and other fire hazards. Limit volume of supply of such materials, on the site, to minimum required for one (1) day's operations.
   - .8 Products supplied by the Owner and installed under this Contract will be delivered to the site during normal Working hours. Unload, transport within the site and store, if necessary, all such products at no additional cost to the Owner providing that such delivery is not made inconsistent with the agreed progress schedule.
   - .9 Damaged materials or materials otherwise deemed defective, including any suspected contamination by mould, mildew or other contaminants will be rejected for use and thereupon shall be removed immediately from site. The Contractor shall provide the Owner with a written statement that no such materials have been used.
   - .10 If defective materials are found to have been incorporated into the Work, they shall be removed and replaced with new, undamaged materials at the direction of the Consultant at no cost to the Owner and no extension of contract time.
3. **Conformance**
   - .1 Units of multiple unit products shall have same characteristics and shall be of same manufacturing run, dye lots, etc., wherever this may result in inconsistency in appearance. Materials or manufactured products with manufacturer's specific instructions for application or installation shall be used in strict accordance with such instructions.
   - .2 When material or equipment is composed of various components, components shall conform to the manufacturer's and other relevant Specifications.
   - .3 Materials and fixtures specified shall be subject to the approval of the Consultant, but where materials or fixtures named by brand, size and quality in the Drawings and Specifications, such materials may be used without further reference to the Consultant.

01340 - Shop Drawings & Submittals

1. The General Trades Contractor shall prepare and submit through the Contractor, all Product Data, Shop Drawings, fixture cuts, erection diagrams, etc. in PDF format including a Transmittal letter identify each item with specification reference included. Submittal shall include all details for fabrication showing thicknesses, materials, colours, finishes, anchorage and any other information required for the following:
   - Sealants, Barriers
   - Hollow Metal Doors & Frames
   - Aluminum Screens & Glazing
   - Hardware
   - All other items as may be requested by the consultants
2. Consultant Review
   - .1 Review of the Shop Drawings by the Consultant is for the sole purpose of ascertaining conformance with general design concepts.
   - .2 Review shall not mean that the Consultant approves detail design inherent in the Shop Drawings, responsibility for which shall remain with the Contractor submitting same and such reviews shall not relieve the Contractor of the responsibility for errors or omissions in the Shop Drawings or of the responsibility for meeting all requirements of the Contract Documents.
   - .3 The Contractor is responsible for dimensions and quantities to be confirmed and correlated at the job site and for information that pertains solely to fabrication processes or to techniques of construction of the Work of all Sub-Trades.
   - .4 Review of any Drawing and/or any notes added to it, does not constitute authorization to proceed with any Work which, in the Contractor's or Supplier's opinion will involve extra cost to the Owner.
3. Ensure that all Shop Drawings for structural elements have been stamped and signed by a professional engineer licensed to practice in the Province of Ontario.

01705 - Regulatory Requirements

1. **Regulatory Documents**
   - .1 Nothing contained in the Drawings or Specifications shall be so construed as to be in conflict with any law, by-law or regulation of the municipal, provincial or other authorities having jurisdiction. Work shall be performed in conformity with all such laws, by-laws and regulations.
   - .2 The Contractor and their supervisory personnel are to be knowledgeable about the requirements of the Building Code and shall, in the event of finding any variance between the Work as shown in the Documents and the OBC, bring any questions concerning such variances to the notice of the Architect.
   - .3 Contract forms, codes, Specifications, standards, manuals and installations, referred to in these Specifications are of the latest published editions at the date of signing the Contract.
2. **Safety Acts & Codes**
   - .1 Prior to commencement of the Work, the General Trades Contractor shall submit to the General Contractor:
     - a) Documentation of a valid Workplace Safety and Insurance Board clearance certificate and confirmation of the Contractor's WCB CAD-7 performance rating.
     - b) Documentation of insurance coverage.
     - c) Documentation of the General Trades Contractor's in-house safety related programs.

     The General Trades Contractor hereby represents and warrants to all parties that appropriate health and safety instruction and training have been provided and will be provided to the General Trades Contractor's employees, Suppliers and anyone for whom the General Trades Contractor is responsible, before the Work is commenced and agrees to provide, if requested, proof of such instruction and training.

01715 - Layout & Dimensions

1. **Setting Out**
   - .1 Layout the Work from indicated verified reference points.
   - .2 Protect and preserve reference points. Inform the Consultant immediately if reference points are disturbed or damaged by any Work and pay for their repair and/or replacement.
   - .3 Locate and fix grid lines and location of walls, partitions, shafts and all parts of the construction, as the Work proceeds.
   - .4 Verify grade, lines, levels and dimensions indicated and report any variances to the Consultant before commencing the Work. Confirm job dimensions at once to allow prompt checking of Shop Drawings and other Drawings.
2. **Dimensions**
   - .1 Ensure that necessary job dimensions are taken and trades are coordinated for the proper execution of the Work. The Sub-Contractor shall assume complete responsibility for the co-ordination, accuracy and completeness of such dimensions.
   - .2 Verify that Work, as it proceeds, is executed in accordance with dimensions and positions indicated which maintain levels and clearances to adjacent Work, as set out by requirements of the Drawings and ensure that the Work installed in error is rectified before construction continues.
   - .3 Check and verify dimensions referring to the Work and interfacing of services. Dimensions, when pertaining to the Work of other trades, shall be verified with the trade concerned.
   - .4 Do not scale directly from the Drawings. If there is ambiguity or the General Trades Contractor believes there is insufficient information to make a decision, immediately inform the Contractor and await instructions before proceeding. The General Trades Contractor shall be fully responsible for rectifying, altering or re-doing any Work resulting from disregarding this clause.
   - .5 Ensure that all details and measurements of any Work which is to fit or to conform with any other Work installed shall be taken at the Site.

01720 - Co-Ordination

1. **Project Co-Ordination**
   - .1 Ensure co-ordination, scheduling and co-operation of all general trades and with the Owner's own forces and all other trades.
   - .2 Ensure that the flow of information and materials and the availability of work forces is adequate for the satisfactory and expeditious completion of the Work
   - .3 Employ a qualified Superintendent and trades people.
   - .5 Responsibility as to which sub-trade provides the required Work to be built-in or supplied rests entirely with the Contractor. Differences in interpretation of the Specifications or Drawings as to which trade shall provide certain Work shall not be grounds for payment of extras.
   - .6 Co-ordinate use of construction plant and equipment including cranes, hoists, ladders, scaffolds and similar items with the Work of the various trades. Cost of such use is subject to whatever arrangement exists between the Contractor and Trades.
   - .7 Include all costs with respect to construction plant and equipment required for general trades in the Contract Price, until contract completion.
   - .8 Pay for all costs relating to use of the Owner's elevator for movement of materials or debris.
   - .9 The Owner and their Project Manager and the Consultants shall have access to all areas of the Work at all times for purposes of review.

07900 - Sealants, Caulking, Gaskets & Barrier Membranes

1. **Sealants:**
   - .1 **Vertical Joint Sealant:** Epoxidized, polyurethane, terpolymer type conforming to CAN/CSGB 19.24-M80. Acceptable Product: Tremco "Dymeric" or approved equivalent. Exterior joint between window and door frames and adjacent building components and between dissimilar materials as required to make building weathertight.
   - .2 **Horizontal Joint Sealant:** Modified self-leveling urethane conforming to CAN/CGSB 19.24-M80 (example concrete floor joints) Acceptable Product: Tremco "THC 900" or approved equal.
   - .3 **Painted Joint Sealant:** Joints which will require painting, one-part silicone rubber conforming to CAN/CGSB 19.18-M87. Acceptable Product: Dow Corning 8644 Paintable Silicone Rubber Sealant or approved equal. Interior joints between window and door frames and adjacent building components around perimeter.
   - .4 **Washroom Areas:** Mildew resistant silicone sealant, one-part silicone conforming to CAN/CGSB 19.18-M87. Acceptable Product: Dow Corning 786 Mildew Resistant Silicone Sealant or approved equal.
   - .8 **Glazing Tape:** 100% solid, cross-linked butyl performed sealant (non-shimmed).
   - .9 **Backer Rod:** Extruded closed cell foam backer rod, oversized 30% to 50% wider than joint with Shore A hardness and tensile strength of 138 kPa to 207 kPa. Acceptable Manufacturer: Dow Chemical Company of Canada Limited or approved equal.
2. **Preparation:** Ensure that joint surfaces are structurally sound, free from contaminants which may adversely affect the adhesion of the sealing materials. Clean surfaces with a solvent or cleaner and prime as recommended by the sealant manufacturer.
3. **Colour of Sealant:** To the Owner's later selection, to match adjacent surface from manufacturers standard colour range.

08100 - Steel Doors And Frames (Hollow Metal)

1. **GENERAL**
   - 1.1 **Description**
     - .1 The Work of this Section **as indicated in the Drawings or Specifications** includes:
       - .1 Steels Doors, Frames and Screens.
       - .2 Installation of Doors.
       - .3 Installation of Finish Hardware.
     - .2 Related Work Specified Elsewhere:
       - .1 Section 01630 - Substitutions
       - .2 Section 04220 - Unit Masonry
       - .3 Section 08700 - Finish Hardware
       - .4 Section 09900 - Painting
       - .5 All other Sections and Drawings to be reviewed
   - 1.2 **Quality Assurance**
     - .1 Canadian Steel Door and Frame Manufacturers' Association, 'Manufacturing Standard for Doors and Frames' shall be minimum standard for the Work of this Section.
     - .2 References:
       - .1 ASTM A366/A366M-85 'Standard Specification for Steel Sheet, Carbon, Cold Rolled Commercial Quality'.
       - .2 ASTM A527/A527M-85 'Standard Specification for Steel Sheet, Zinc Coated (Galvanized) by the Hot Dip Process Lock Forming Quality'.
       - .3 CGSB 1-GP-132M 'Primer, Zinc Chromate Low Moisture Sensitivity'.
       - .4 CGSB 31-GP-105M 'Coating, Conversion, Zinc Phosphate, for Paint Base'.
       - .5 CSA A101-M1983 'Thermal Insulation, Mineral Fibre'.
       - .6 CSA W59 'Welded Steel Construction (Metal Arc Welding)'.
       - .7 CSA W47-1-1973 'Certification of Companies for Fusion Welding of Steel Structures'.
   - 1.3 **Delivery & Storage**
     - .1 Prevent rust and other damage to materials during delivery and storage in dry conditions, under cover.
   - 1.4 **Schedules**
     - .1 Check the Door Schedule for door numbers, types, sizes, thickness, frame types and all other relevant information.
     - .2 Refer to the Hardware Schedule for types of hardware to be installed.
     - .3 Door sizes shown on the Door Schedule are nominal only. Make allowance for clearance.
     - .4 Review the Electrical Drawings and prepare doors and frames for electrical hardware.
   - 1.5 **Shop Drawings**
     - .1 Submit the shop drawings showing full details of all specified items noting gauges, anchors, jointing and cores and preparation.
   - 1.6 **Fire Rated Doors & Frames**
     - .1 Supply fire door, frame and screen assemblies to meet fire resistance time rating called for and carry appropriate ULC label.
     - .2 Supply fire door, frame and screen assemblies to meet temperature rise requirements and carry ULC Label.
     - .3 Review Hardware Schedule and advise the Consultant if scheduled hardware fails to comply with ULC requirements.
   - 1.7 **Warranty**
     - .1 Submit a written two (2) year warranty covering labour and materials of hollow metal doors and frames.
2. **PRODUCTS**
   - 2.1 **Materials**
     - .1 **Commercial Quality Cold Rolled Steel**: Stretcher levelled, wipe coated with a minimum zinc coating of .035oz/sq ft (107g/sq m) and conforming to ASTM A527-80 Coating Class A01 by All Steel Doors (www.allsteeldoors.com) or approved alternate.
     - .2 **Gauges** (minimum):
       - .1 All Doors (Hollow Steel Construction): 14ga (1.9mm) with 20ga (.9mm) vertical stiffeners
       - .2 Frames: 16ga (1.5mm)
       - .3 Lock and Strike: 14ga (1.9mm)
       - .4 Hinge: 10ga (3.4mm)
       - .5 Flush Bolt: 16ga (1.5mm)
       - .6 Door Closer or Holder: 12ga (2.7mm)
       - .7 Push Bars: 16ga (1.5mm)
       - .8 T-Strap Anchors: 16ga (1.5mm)
       - .9 Stirrup-Strap Anchors: 2" x 10" x 16ga (50mm x 250mm x 1.5mm)
       - .10 Stud Type Anchors: 18ga (1.2mm)
       - .11 Jamb Floor Anchors: 16ga (1.5mm)
       - .12 Jamb Spreaders: 18ga (1.2mm)
     - .3 **Core**: Loose Fiberglass.
     - .4 **Door Bumpers**: Glynn Johnson rubber type #64 or #52 by Stanley Works of Canada Ltd. or other approved alternate.
     - .5 **Phosphatizing**: CGSB 31-GP-105M
     - .6 **Primers**: CGSB 1-GP-40M and CGSB 1-GP-178M
   - 2.2 **Fabrication**
     - .1 General:
       - .1 Profiles shall be as indicated on the Architectural Drawings.
       - .2 Construct in accordance with details and the approved shop Drawings, fully welded construction with no visible seams or joints on faces or vertical edges. Interlock door faces at door edge and fill and tack weld seams.
     - .2 Doors:
       - .1 Assemble interior doors with full sheets laminated to core under pressure.
       - .2 Mortise, reinforce, tap and drill doors and reinforcements to receive hardware, using templates provided by hardware supplier. Mounting heights in accordance with the Hardware Specification.
       - .3 Assemble components by means of spot or arc welding.
       - .4 Close recess, greater than 3/4" (20mm) in top of door, with 18ga (1.6mm) steel channel section, full depth of recess.
       - .5 Provide 1/4" (6mm) bevel at hinge and lock edges.
       - .6 Form meeting stiles of pairs of doors to accommodate astragals.
       - .7 Make provision for glazed panels and door grilles and provide solid bar or channel section stops, mitred at corners, fastened with Phillips head bronze screws.
     - .3 Frames and Screens:
       - .1 Install three (3) bumpers on strike jamb of frame.
       - .2 Protect strike, hinge and overhead concealed door closer reinforcements completely by guard boxes welded to frame. (Not applicable to frames to be installed in drywall partition.)
       - .3 Make provision for glazed panels and provide solid bar or channel section stops, mitred at corners, fastened with Phillips head bronze screws.
       - .4 Weld two (2) channel spreaders per frame to ensure proper frame alignment.
       - .5 Where frames terminate at finish floor, provide floor plates for anchorage to structural slab.
       - .6 Cut mitres accurately and weld continuously on inside of frame.
       - .7 Grind welded corners to a flat plane, fill with metallic paste filler and sand to a uniform smooth finish.
       - .8 Provide five (5) "T" strap adjustable jamb anchors per jamb for frames up to 6'-10" (2100mm) high to be installed in masonry walls.
       - .9 Provide one (1) additional anchor per jamb for each 1'-0" (300mm) increase in height of door frame over 6'-10" (2100mm).
       - .10 Insulate frames for exterior and interior doors with Fiberglass for full height and depth.
   - 2.3 **Finishing**
     - .1 Fill surface depressions and butted joints with metallic paste filler and sand to a uniform finish.
     - .2 Wipe Coated Frames: Touch up areas where wipe coating has been removed.
     - .3 Wipe Coated Doors: Treat as for frames and then apply one (1) full coat of rust inhibitive primer.
3. **EXECUTION**
   - 3.1 **Fitting Hanging Doors**
     - .1 Hang doors on continuous hinge, unless otherwise noted, with 1/16" (1.6mm) clearance at head and jamb. Hang to close fully. Check clearance required at bottom of door for carpet and threshold.
   - 3.2 **Glazing**
     - .1 All door lites to be glazed with 8mm FireLite Plus Premium unless noted as being 6mm tempered glass.
     - .2 Frames and glass shall be free from moisture, frost, dirt, cement, plaster, oil and grease.
     - .3 Centre glass using spacer shims and setting blocks, set at quarter points but no more than 1'-6" (450mm) o.c. unless recommended otherwise by glass manufacturer.
     - .4 Apply glazing tape to fixed leg of frame followed by needle bead of sealant. Set glass on setting blocks and press firmly into place against tape and sealant. Snap in glazing beads and press in compression gaskets. Mitre corners of vision strips.
     - .5 Provide heel bead around perimeter of glass to give complete vapour seal.
   - 3.2 **Finish Hardware**
     - .1 Install hardware and accurately set and adjust in accordance with manufacturer's instructions. Co-ordinate with Section 08700 - Finish Hardware.
     - .2 Obtain necessary templates for drilling, tapping and fastening hardware.
     - .3 Adjust hardware for trouble free operation.

08400 - Aluminum Doors

1. **GENERAL**
   - 1.1 **Description**
     - .1 The Work of this Section **as indicated in the Drawings or Specifications** includes:
       - .1 Aluminum doors, windows and glazing.
       - .2 Curtain wall systems and glazing.
       - .3 Aluminum flashings where related to components specified herein.
     - .2 Related Work Specified Elsewhere:
       - .1 Section 012310 - Alternatives
       - .2 Section 05500 - Metal Fabrications
       - .3 Section 06100 - Rough Carpentry
       - .4 Section 07200 - Insulation
       - .5 Section 07920 - Sealants And Caulking
       - .6 Section 08700 - Finish Hardware
       - .7 Section 08800 - Miscellaneous Glass, Glazing And Mirrors
       - .8 All other Sections and Drawings to be reviewed
   - 1.2 **Quality Assurance**
     - .1 Erection of glazing system shall be by personnel especially trained and experienced in this type of Work. Have a senior qualified representative at the job to direct the various stages of operations.
     - .2 References:
       - .1 ASTM C542-05 (2011) 'Neoprene Blocks'.
       - .2 GANA Glazing Manual 2015.
       - .3 N.B.C. 2010 'Effects of Wind'.
       - .4 CSA G40.20-13 'Steel Framing Grade, 300W'.
       - .5 CAN/CGSB-1.108-M89 'Bituminous Paint, Type 2'.
       - .6 CAN/CGSB-1.132-M90 'Zinc Chromate Primer'
       - .7 CAN/CGSB-12.1-M90 'Glazing'.
       - .8 CAN/CGSB-19.24-M90 'Metal Component Sealant'.
       - .9 CAN/CGSB-19.18-M90 'Glazing Sealant'.
       - .10 CSA W47.1-09 (2014) 'Canadian Welding Bureau'.
   - 1.3 **Shop Drawings**
     - .1 Submit the Shop Drawings to the Architect for review in accordance with Section 013300 - Submittal Procedures.
     - .2 Show details of construction, weatherstripping, blocking, glazing, opening sash, hardware, anchorage and other related work.
   - 1.4 **Delivery & Storage**
     - .1 In accordance with Section 016100 - Common Product Requirements, doors, frames and other materials shall be delivered, handled and stored such that wracking, warping, deformation, discolouration and deterioration is prevented.
   - 1.5 **Samples**
     - .1 Submit samples of aluminum finish in accordance with Section 016100 - Common Product Requirements.
   - 1.6 **Protection**
     - .1 Mark glass immediately after glazing to show its presence.
     - .2 Aluminum members shall be provided with substantial protective coverings which shall remain in place until instructed to be removed by the Architect.
   - 1.7 **Warranty**
     - .1 Submit warranty in accordance with Section 017800 - Closeout Submittals, covering manufacturing defects, leaks, faulty materials and labour, for a period of four (4) years from the end of the standard one (1) year warranty. Total warranty period: five (5) years.
     - .2 Submit warranty in accordance with Section 017800 - Closeout Submittals, for sealed glass units, covering defective seals, for a period of five (5) years from date of acceptance.
2. **PRODUCTS**
   - 2.1 **Materials**
     - .1 **Aluminum Members**: Fabricated of 6063-T5 extrusions only.
       - Window units 517 by Kawneer or approved equal.
       - Curtain Wall 1600 by Kawneer or approved equal.
     - .2 **Screws**: Stainless steel or aluminum. Exposed fasteners will not be permitted.
     - .3 **Clips and Anchor Straps**: Aluminum or hot dipped galvanized steel back painted, cadmium plated where in contact with aluminum.
     - .4 **Anchors**: Steel, hot dipped galvanized after fabrication.
     - .5 **Shimming**: Rigid PVC.
     - .6 **Setting Blocks**: Black neoprene rubber, 85-90 Shore A hardness.
     - .7 **Glazing Tape**: Preshimmed macro-polyisobutylene preformed tape, Tremco Polyshim or approved equal.
     - .8 **Compression Gaskets**: Extruded neoprene, Tremco Polyshim WEJ or approved equal.
     - .9 **Sealant for Glazing**: Acrylic Terpolymer, Tremco Mono or approved equal, conforming to CGSB 19-GP-5M.
     - .10 **Exterior Glass**:
       - .1 **Standard Glass**:
         - **Outer Lite**: 1/4" (6mm) tempered.
         - **Airspace**: 1/2" (12.5mm).
         - **Inner Lite**: 1/4" (6mm) tempered.
     - .11 **Interior Glazing**: 1/4" (6mm) tempered clear glass by PPG.
     - .12 **Doors**: Kawneer 500 Series, powder coat finish at exterior, complete with 5'-0" x 1 1/4" diameter pull, stainless steel brushed finish exterior and interior of the door.
     - .13 **Hardware for Doors**: Hinges and other door hardware by Door Manufacturer.
     - .14 **Windows**: Kawneer "S26 Thermal' series, powder coat finish with operable casements as indicated.
   - 2.2 **Fabrication**
     - .1 Fabricate units from extrusion of general size and profiles shown on the Drawings and specified and formed with clean, sharply defined profiles. Joints shall be accurately machined, assembled and sealed to provide neat weathertight joinery. Frame joints drawn and secured on assembly with corner joint brackets and stainless steel screws or welded on concealed surfaces. Thermal break shall provide full separation between inside and outside for full perimeter of all frames.
     - .2 Fit and assemble the Work in shop, where possible. Execute the Work in accordance with details and the approved Shop Drawings. Assembled units shall be square, true and correct in size and free of all defects or damages.
     - .3 Seal joints before assembly.
     - .4 Use and handle caulking compounds in accordance with the manufacturer's instructions.
     - .5 Aluminum coming in contact with masonry, concrete or dissimilar metals shall be given a heavy coat of bitumastic paint to prevent electrolytic action.
3. **EXECUTION**
   - 3.1 **Examination**
     - .1 Examine job conditions before commencement of the Work.
     - .2 Commencement of the Work will denote acceptance of conditions and surfaces.
     - .3 Faults occurring in installed Work due to acceptance of incorrect conditions will be rectified at no cost to the Owner.
   - 3.2 **Erection**
     - .1 Set aluminum framing plumb, true and square in accordance with the reviewed Shop Drawings.
     - .2 Door frames and frames to screens shall be securely anchored at floor, head and jambs.
     - .3 Assess each component for appearance and colour and consider any variations when arranging components for assembly. Abrupt variations in appearance or colour will not be permitted.
     - .4 Use concealed fastenings. Exposed fastenings, bolt or nut heads will not be permitted.
     - .5 Throughout installation make adequate provision for thermal expansion and contraction.
     - .6 Isolate joints of dissimilar materials with bituminous paint.
     - .7 Hang doors on hardware supplied and fit all other hardware such that doors operate smoothly without friction or juddering.
   - 3.3 **Glazing**
     - .1 Frames and glass shall be free from moisture, frost, dirt, cement, plaster, oil and grease.
     - .2 Centre glass using spacer shims and setting blocks, set at quarter points but no more than 1'-6" (450mm) o.c. unless recommended otherwise by glass manufacturer.
     - .3 Apply glazing tape to fixed leg of frame followed by needle bead of sealant. Set glass on setting blocks and press firmly into place against tape and sealant. Snap in glazing beads and press in compression gaskets. Mitre corners of vision strips.
     - .4 Provide heel bead around perimeter of glass to give complete vapour seal

Finish Hardware Specification

Continuous Hinges: ANSI A21011B Grade 1, 14 ga. (0.075" = 1.9mm) Type 204 Stainless Steel, US32D Satin Finish. 1/2" (6.3mm) diameter Stainless Steel Pin, Dual ball Nylon bearings between each knuckle, door edge protection lip (both sides). Hager 790-905 or approved equivalent.

Locks & Latchsets: Heavy Duty mortise Schlage 'L' series with 06B lever/rose design with full size interchangeable core or approved equivalent.
Storeroom Lock: L9080R
Passage Set: L9010

Door Operator: Hunter HA-8 Low Energy Operator with 2-6" round 10PBRLL push button actuator or approved equivalent.

Exit Device: Flat bar type: breakaway lever trim feature 992L. #17 lever trim. Von Durpin '98' series exit device - no alternatives.

Door Closer: Heavy Duty. Full rack and pinion hydraulic action. Cast iron cylinder body. Adjustible back check. Full plastic cover. DEL - delayed action, EDA - Extra duty arm. L.C.N. 4011 and 4111 series - no alternates.

Overhead Stop: Glynn Johnson surfae 90 series - no alternatives.

Weatherstripping: Extruded aluminum c/w neoprene insert. Predrill with oblong screw holes for adjustment. Designed to provide continuous weather seal. K.N. Crowder W-20N or equivalent.

Threshold: Extruded aluminum. Width to match door frame. Oversize in length to allow coping around exterior pressed steel frame faces. Expandable threshold to include insert(s) as required to suit frame jamb/sill detailing. K.N. Crowder CT series or equivalent.

Door Sweep: Extruded aluminum extrusion c/w black nylon bristles. K.N. Crowder W-24S or equivalent.

Door Pull: 1" (25mm) round diameter, Standard Metal 'D' series, length as shown on drawings (68" unless noted otherwise).

RONALD AWDE ARCHITECT
1458 ▪ KING ▪ STREET
BETHANY ▪ ONTARIO
705 ▪ 277 ▪ 9490

NOTES

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RONALD A. AWDE
LICENCE
4563

PROJECT

City of Kawartha Lakes Door Replacements

4.0	2018-04-27	Issued for Building Permit
3.0	2018-04-20	Pre-permit review
2.0	2018-04-12	Final Review
1.0	2018-04-04	Coordination
MARK	DATE	ISSUE

PROJECT NO: 2018-06
DRAWN BY: C.C.
CHK'D BY: R.A.

SHEET TITLE
Specifications

DRAWING NO.
A-01