THE BID DOCUMENTS, CONDITIONS OF CONTRACT, DRAWINGS AND SPECIFICATIONS ARE HEREBY AMENDED, AS FOLLOWS:

Amendment 1

Architectural Specifications

1.1 Add the following specification sections, issued herewith:
- 07 81 16 – Fireproofing
- 08 56 88 – Interior Glazed Systems
- 10 22 19 – Demountable Partitions

1.2 Replace the following sections, issued previously, with revised versions, issued herewith:
- 00 01 10 – Table of Contents
- 00 20 00 – Bid Form
- 01 21 00 – Allowances
- 08 14 16 – Wood Doors
- 08 80 00 – Glazing

Amendment 2

Architectural Drawings

2.1 Replace the following Architectural drawings, issued previously, with revised versions, issued herewith:
- A204 – Ground & Second Floor Plan – Renovation
  - Additional door to be provided in Ex. Mechanical Room
- A205 – Roof Plan
  - Additional door to be provided in Ex. Mechanical Room
- A301 – Building Elevations
  - Additional door to be provided in Ex. Mechanical Room
- A304 – Window & Interior Screen Elevation
  - Skylight details added.
- A601 – Interior Elevations & Door Schedule
  - Additional door to be provided in Ex. Mechanical Room
- A702 – Reflected Ceiling Plan Second Floor
  - Skylight details added.

Amendment 3

Mechanical Addendum

3.1 "Mechanical Addendum M-3", dated April 23, 2024, by Quasar Consulting Group, is issued herewith.

Amendment 4

Q & A

4.1 Please refer to the following Q&A for responses to Contractor questions:

Questions & Responses:

Question 1:

> "Drawing L3 shows an exterior concrete pad at the 2 outdoor classrooms, gazebo, 2 childcare sheds and the precast concrete shed. Please provide the structural details for these pads as nothing is shown."
>
> **Response:** Provide 200mm deep concrete slab with 15m @ 300 top and bottom in these locations.

Question 2:

> "You have asked for a separate price to replace the existing skylight. Please provide details for this work as nothing has been provided."
>
> **Response:** Please refer to architectural details provided per amendment 2.

Question 3:

> "There are multiple areas on the drawings where you show fireproofing. No specs have been provided for this work."
>
> **Response:** Section provided per amendment 1.

Question 4:

> "Would you have any as-built drawings of the existing school? In order to properly price the demolition work for this project more details on the existing structure are required."
>
> **Response:** As-built drawings of the existing school are incomplete but are provided herewith for information.

Question 5:

> "Stair D has a glass guardrail / balustrade. The glazing type / hardware details do not appear to be defined in the specifications. Please advise."
>
> **Response:** Section provided per amendment 1.

Question 6:

> "In order to occupy the new addition will those zones of the sprinkler system need to be operational in order to achieve occupancy."
>
> **Response:** Yes.

Question 7:

"During the site visit we noticed that the school buses use the existing parking area and driveway loop to offload and load the kids. This parking area will be the main entrance for all construction equipment and vehicles involved with the project. This will include personal vehicles, cranes, concrete trucks, concrete pumps, tractor trailers etc. This space will be a high traffic area for construction activity and will be a major safety issue for both the school board and contractors. Would you allow the GC to relocate the existing portables somewhere one the school property and complete the new parking area and school bus lane in the Summer of 2024. This would allow the staff to park in the new parking area and the buses to use the new drop off and pick up lane for the duration of the project."

Response: Unfortunately, construction of the new parking and school bus lanes cannot be completed in the Summer of 2024. Tree and vegetation removal in the area where the new bus loop is to connect to First Avenue can only begin in October due to natural heritage concerns. There are also concerns that one of the existing portables may not be able to be moved without destroying it.

Question 8:

"Details 15-17/A610 refer to a "300mm long 15M dowel through steel angle bracket" for the wood bench bracket supports. What is the purpose of this dowel? Is the dowel welded to the bracket? What if the dowel interferes with the stud spacing? Please advise."

Response: Dowel is not required at bench brackets in stud walls.

Question 9:

"Please confirm which set of drawings correctly portray the amount of concrete barrier curb? Architectural Dwg A102 or Civil Drawings SG-1 and SG-2."

Response: Refer to civil drawings for extent of barrier curbs. Refer to architectural drawings for locations of barrier curb cuts.

Question 10:

"Addendum 04 received, thank you. We are being flooded with calls that a 96-page addendum is not manageable a week before closing. The state of the market currently and time of year makes competitive bidding more difficult: we recommend extending closing AGAIN to Tues. May 7th, and limiting further addenda - thank you."

Response: Tender extended per Addendum 5. There are no plans to extend further.

Question 11:

"Drawing A601: 'Childcare' Door & Frame Schedule' is indicating that various wood doors are to have a PLAM finish, while the specification 08 14 16 indicates the finish for wood doors to be a "minimum 0.8mm birch veneer finished in accordance with Section 09 91 00". Upon review of section 09 91 00 as indicated, neither 'wood veneer' nor

'plam' is mentioned for door finishes. Can you please clarify which facing should be used on the wood doors, and if it is birch veneer throughout, please provide the specifics of the veneer required, specifically the cut and match required."

Response: Wood doors to have a PLAM finish. Revised section attached per Amendment 1.

Question 12:

"Spec section 08 70 00: please provide the hardware schedule as noted as being amended to this spec section and as listed as being referred to throughout the Door & Frame Schedules on drawing A601. It is known that the finish door hardware is to be included in the "overall" Base Bid Cash Allowance, but some instances of doors/ frames preparations for the associated hardware rely on the hardware information. Please advise."

Response: A hardware schedule is not currently available. The specific instances mentioned above will be addressed at that time.

Amendment 5

Handling and Disposal of Contaminated Soils

5.1 Costs for the handling, or handling and disposal, of contaminated soil are to be paid through the cash allowance. The bid form has been revised to request Unit rates at various quantities for the excavation, handling and disposal of contaminated soils exceeding table 1, and table 2 or 3. These unit rates will be used to draw from the cash allowance on an as needed basis as directed by the testing and inspection company.

END OF ADDENDUM 6

1 General

1.1 **SECTION INCLUDES**

.1 Labour, Products, equipment and services necessary for spray applied fireproofing work in accordance with the Contract Documents.

1.2 **REFERENCES**

.1 CAN/ULC S101, Standard Methods of Fire Endurance Test of Building Construction and Materials.

.2 CAN/ULC S102, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.

.3 Technical Manual 12-A, Standard Practice for the Testing and Inspection of Field Applied Sprayed Fire-Resistive Materials by Association of the Wall and Ceiling Industry (AWCI).

.4 UL 1479, Standard Method of Fire Tests of Through-Penetrations.

1.3 **DESIGN REQUIREMENTS**

.1 Design fireproofing for structural members, floor/ceiling assemblies, and floor/roof assemblies as unrestrained unless otherwise specifically noted as restrained on the structural drawings.

1.4 **SUBMITTALS**

.1 Product data:
  .1 Submit copies of manufacturer's Product data in accordance with the Conditions of the Contract indicating:
    .1 Performance criteria, compliance with appropriate reference standard, characteristics, limitations.
    .2 Product transportation, storage, handling and installation requirements.

.2 Certification:
  .1 Submit certified documentation for each worker performing Work of this Section, to substantiate 5 years minimum of experience in sprayed fireproofing installation.
  .2 Submit installer's and Product manufacturer's certification verifying compliance with Contract Documents.
  .3 For assemblies not tested and rated in accordance with CAN/ULC S101 and CAN/ULC S102, submit proposals based on related designs using accepted fireproofing design criteria.
  .4 Submit manufacturer's inspection reports and verification/certification that work has been correctly installed.

1.5 **QUALITY ASSURANCE**

.1 Qualifications: Execute work of this Section by manufacturer-approved, skilled, qualified, and experienced workers, trained in installation of work of this Section.

.2 Regulatory Requirements: Be responsible for securing approval of materials and installation of work from authority having jurisdiction:
- .1 Perform work in compliance with ULC or cUL listed designs for the required fire resistance ratings.
- .2 Submit signed engineering proposals to Authority having Jurisdiction for acceptance if there are no listed designs that match project conditions.
- .3 Perform tests required by Authorities having Jurisdiction.

.3 Manufacturer's Site Inspection: Manufacturer's technical representative shall inspect work at suitable intervals during application and at conclusion of work of this Section, to ensure work is correctly installed. Inspection reports shall be submitted with 3 days.

1.6 **SITE CONDITIONS**

.1 Maintain a 5^0C air and substrate temperature for 24 hours before, during, and 24 hours after application in accordance with manufacturer's instructions.

.2 Ventilate to dry fireproofing. In enclosed areas circulate interior air and exhaust to the exterior.

.3 Protect adjacent surfaces and equipment around application areas from overspray, marring or damage. Clean, polish or replace materials damaged to acceptance of Consultant.

2 Products

2.1 **MATERIALS**

.1 All materials under work of this Section, including but not limited to, primers, adhesives, paints, and sealers are to have low VOC content limits.

.2 Primer: As recommended by spray fireproofing manufacturer.

.3 Spray fireproofing: CAN/ULC S101, Spray applied, cementitious fireproofing with a minimum density of 240 kg/m^3:
- .1 'Blaze-Shield II' by Cafco Industries Ltd.
- .2 'Southwest Type 5GP' by A/D Fire Protection Systems Inc.
- .3 Or approved alternative by Carboline.

.4 Sealer: As recommended by spray fireproofing manufacturer qualified for use in specified design.

.5 Metal Lath: Expanded metal lath fabricated from material of weight, configuration, and finish required to comply with fire resistance designs acceptable to Authority having Jurisdiction and fire resistive material manufacturer's written recommendations. Include clips, lathing accessories, corner beads, and other anchorage devices required to attach lath to substrates and to receive sprayed fire-resistive material.

.6 Water: Clean, free from organic and mineral impurities which would be harmful to application.

2.2 **MIXING**

.1 Mix Products in accordance with manufacturer's instructions.

3 Execution

3.1 **EXAMINATION**

.1 Verify condition and dimensions of previously installed Work upon which this Section depends. Report defects to Consultant. Commencement of work of this Section means acceptance of existing conditions.

.2 Verify that substrates are compatible and have suitable bonding characteristics to receive fireproofing.

.3 Ensure written confirmation is received from steel fabricators of the specific surface preparation procedures and primers used to ascertain compatibility with work of this Section.

.4 Ensure that items required to penetrate fireproofing are placed before installation of fireproofing.

.5 Ensure that ducts, piping, equipments, or other items which would interfere with application of fireproofing are not positioned until fireproofing is completed.

3.2 **PREPARATION**

.1 Prime substrates where required by ULC or by sprayed fireproofing material manufacturer, unless compatible shop primer has been applied and is in satisfactory condition to receive work.

.2 Clean surfaces of steel members free of dust, dirt, oil, grease, loose paint, mill scale, rust and other foreign matter in accordance with manufacturers written instructions which would interfere with bond of fireproofing. Steel to receive fireproofing should have no primers or coatings applied to the surface prior to application.

.3 Install metal lath where required to comply with fire resistance ratings and fireproofing manufacturer's written recommendations for conditions of exposure and intended use. Securely attach lath to substrate in position required for support and reinforcement of fire-resistive material. Use anchorage devices of type recommended in writing by sprayed fire-resistive material manufacturer. Attach lathing accessories where indicated or required for secure attachment to substrate.

.4 Coat substrates with bonding adhesive where required to achieve fire resistance rating or as recommended in writing by spray fireproofing manufacturer for material and application indicated.

.5 Use temporary enclosures to prevent spray from contaminating air beyond application area. Protect adjacent surfaces and equipment from damage by overspray, fall-out, and dusting of fireproofing material. Protect walls, windows, floors and other surfaces around areas to be fireproofed, from marring or damage.

3.3 APPLICATION

.1 Apply fireproofing in separate coats in accordance with the manufacturer's written instructions to total thickness required to achieve fire ratings shown on the Contract Drawings. Comply with accepted ULC or Intertek Testing Services design.

.2 Maintain continuity of fireproofing without gaps or voids.

.3 Water tamping: Provide low pressure spray to finished surface of fireproofing to provide dense, medium smooth surface.

.4 Apply sealer to surfaces of fireproofing in accordance with the manufacturer's instructions after tamping.

.5 Repair fireproofing damaged by other trades, to acceptance of Consultant.

3.4 FIELD QUALITY CONTROL

.1 Perform field tests as required by Authorities having Jurisdiction. Tests to be carried out as outlined in Technical Manual 12-A by AWCI and UL 1479.

3.5 CLEANING UP

.1 Clean exposed wall, ceiling or other surfaces of fireproofing materials to the acceptance of Consultant.

END OF SECTION

1 General

1.1 **SECTION INCLUDES**

.1 Design, labour, Products, tool, equipment and services necessary for interior glazed system work in accordance with the Contract Documents.

1.2 **REFERENCES**

.1 ASTM A167, Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip.

.2 ASTM A276, Specification for Stainless and Heat-Resisting Steel Bars and Shapes.

.3 ASTM C920, Specification for Elastomeric Joint Sealants.

.4 ASTM F738M, Specification for Stainless Steel Metric Bolts, Screws, and Studs.

.5 CAN/CGSB 12.20-M, Structural Design of Glass for Buildings.

.6 CSA-A500, Building Guards.

1.3 **DESIGN REQUIREMENTS**

.1 Design the entire interior glazed system, including framing and supports as required.

.2 Design glass balustrade systems to CSA-A500, CAN/CGSB-12.20-M and CSA-S157/S157.1. Perform stress analysis. Design units to accommodate live, dead, lateral, wind, seismic, handling, transportation, and erection loads.

.3 Prevent deflection and permanent or progressive glazing displacement. Restrict horizontal and vertical mullion deflection to less than L/175 (under uniformly distributed positive design wind load), and 10 mm maximum regardless of span.

.4 Design anchorage inserts for installation as part of other Sections of Work. Design anchorage assemblies with a minimum safety factor of 2.0.

.5 Design members to withstand dead load and live loads calculated in accordance with OBC and applicable local regulations, to maximum allowable deflection of 1/360 of span.

1.4 **SUBMITTALS**

.1 Shop Drawings:
  .1 Submit Shop Drawings in accordance with the Conditions of the Contract indicating:
    .1 Plans, sections, details, type of extrusions, profiles, thicknesses, seals, finishes, panels, operating components, related flashings, closures, fillers, and end caps, and sealants.
    .2 Products and glazing types.
    .3 Anchorage inserts, system installation tolerances.
    .4 Section and hardware reinforcement, anchorage, assembly fixings.

.5 Detailing, locations, and allowances for movement, expansion, contraction.

.2 Samples:
.1 Submit two samples of following in accordance with the Conditions of the Contract.
.1 250 mm long samples of each type of extrusion and finish.
.2 250 x 200 mm samples of glass.

.3 Reports/Certificates:
.1 Submit documentation to substantiate ten years of experience in glazed partition manufacture and installation.
.2 Submit written manufacturer's certificate certifying compliance with the specifications.

.4 Close-out submittals: Submit data for incorporated into the Operations and Maintenance Manual as part of the Conditions of the Contract.

1.5 QUALITY ASSURANCE

.1 Retain a licensed Professional Engineer, registered in Province of Ontario, to perform following services for interior glazed system work:
.1 Design of interior glazed systems.
.2 Review, stamp, and sign Shop Drawings.
.3 Conduct on-Site inspections and prepare and submit inspection reports.

1.6 DELIVERY, STORAGE, AND HANDLING

.1 Handle glazed partition work in accordance with AAMA CW-10.

.2 Protect surfaces with strippable coating. Do not use adhesive papers or sprayed coatings which bond when exposed to sunlight or weather. Do not remove before final cleaning of building.

1.7 EXTENDED WARRANTY

.1 Submit an extended warranty for interior glazed system work in accordance with General Conditions, except that warranty period is extended to 5 years.
.1 Warrant against failure to meet the design criteria and requirements.
.2 Coverage: Complete replacement including affected adjacent work.

2 Products

2.1 ACCEPTABLE MANUFACTURER(S) AND SYSTEM(S)

.1 Glazed balustrade system (standoffs):
.1 Stainless steel standoff fittings with rectangular backplate and six anchor points: 'RS0B20 Glass Rail Standoff Fittings' by C.R. Laurence or approved alternative by Inkan Limited or Richelieu. Provide sizing as required to suit glass sizing and weight.

.2 Glass mounted handrail: Glass mounted handrail with bracket, fabricated from 38 diameter tubing; 'HRS Newport Series Handrails' by C.R. Laurence or approved alternative by Inkan Limited or Richelieu.

.3 Finish: Type 316 stainless steel with brushed finish.

2.2 MATERIALS

.1 General: All materials under work of this Section, including but not limited to, sealants and coatings are to have low VOC content limits.

.2 Stainless steel shapes: ASTM A276, Type 316. Sizes and shapes as shown.

.3 Reinforcements and anchors: ASTM A167, Type 316. Size as shown.

.4 Glass and glazing materials: In accordance with Section 08 80 00.

.5 Glazing gasket: EPDM roll-in glazing gasket.

.6 Frame sealant: Type as recommended by the interior glazed system work manufacturer.

.7 Glazed work sealant: ASTM C920; Single-Component, silicone sealant; 'Spectrem 1' by Tremco or '790 Silicone Building Sealant' by Dow Corning Corporation. Colour as selected by Engineer.

.8 Joint backing: Closed cell foam polyethylene rod, outsized minimum 30-50% larger than joint width and compatible with joint sealant. Product as recommended by sealant manufacturer.

.9 Anchors, clips, and angles: Stainless steel.

.10 Flashings, closures and trim: 1 mm minimum stainless steel sheet to match framing.

.11 Screws, bolts and other fasteners: ASTM F738M; Stainless Steel Type 316.

2.3 FABRICATION

.1 Fabricate sections true to detail, free from defects impairing appearance, strength and durability. Fabricate extrusions with sharp, well defined corners.

.2 Fabricate, fit, and secure framing joints and corners accurately, with flush surfaces, and hairline joints. Apply frame sealant at joints for weatherproof seams.

.3 Conceal anchors, reinforcement and attachments from view. Fabricate reinforcement in accordance with design requirements.

.4 Do not expose manufacturer's identification labels on interior glazed system assemblies.

.5 Fabricate continuous sill flashings with intermediate anchor clips, and joint reinforcing, form to profile shown. Fabricate filler and closure pieces as necessary for a complete and weather tight installation.

.6 Fabricate interior glazed system work closures and trim from stainless steel sheet.

3 Execution

3.1 **EXAMINATION**

.1 Verify condition and dimensions of previously installed Work upon which this Section depends. Report defects to Consultant. Commencement of work of this Section means acceptance of existing conditions.

3.2 **INSTALLATION**

.1 Install interior glazed system work in accordance with reviewed Shop Drawings, manufacturer's written instructions.

.2 Install work of this Section securely, in correct location, level, square, plumb, at proper elevations, free of warp or twist.

.3 Install flashings, closures, and trim pieces.

.4 Install sills in maximum lengths possible. For sills over 1200 mm in length, maintain 3 mm to 6 mm space at each end.

.5 Refer to Contract Drawings for glazing type locations. Install glazing in accordance with Section 08 80 00.

.6 Adjust operable parts for correct function.

.7 Install glass in balustrades properly centred with uniform bite and face and edge clearance, free from twist, warp or other distortion likely to develop stress.

.8 Remove damaged or unacceptable Products and assemblies from Site and replace to Engineer's acceptance.

.9 Install glass presence markers, in two cross stripes extending from diagonal corners. Maintain markers until final clean-up.

3.3 **ERECTION TOLERANCES**

.1 Tolerances: Non-cumulative.
- .1 Maximum variation from plumb: 1.5 mm/3 m non-cumulative or 12 mm/30 m, whichever is less.
- .2 Maximum misalignment of two adjoining members abutting in plane: 0.8 mm.
- .3 Vertical and horizontal positions: +/- 3 mm.
- .4 Racking of face: 6 mm, nil in elevation.
- .5 Operable components: Consistent with smooth operation and weatherproof performance.
- .6 Maximum perimeter sealant joint between interior glazed system and adjacent construction: 12 mm.

3.4 JOINT BACKING AND GLAZED WORK SEALANT

.1 Prepare substrate surface and mask as recommended by sealant manufacturer.

.2 Install joint backing and sealant at interior glazed system work and perimeter joints for sound tight installation in accordance with sealant manufacturer's instructions. Tool sealant. Remove excess sealant.

3.5 CLEANING

.1 Maintain interior glazed system work, inside and outside, in clean condition throughout construction period.

.2 Remove labels, protective material, and glass presence markers from prefinished surfaces.

.3 Wash interior glazed system work with solution of mild detergent in warm water, with particular attention to recesses and corners. Wipe surfaces clean and dry.

END OF SECTION

1 General

1.1 **SECTION INCLUDES**

.1 Design, labour, Products, equipment and services necessary for demountable partition work in accordance with the Contract Documents.

1.2 **REFERENCES**

.1 AAMA 611, Voluntary Standards for Anodized Architectural Aluminum.

.2 AAMA CW-10, Care and Handling of Architectural Aluminum from Shop to Site.

.3 ANSI, H35.1M Alloy and Temper Designation Systems for Aluminum (Metric).

.4 ASTM A653/A653M, Specification for Steel Sheet, Zinc-coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvanealed) by the Hot-Dip Process.

.5 ASTM B209M, Specification for Aluminum and Aluminum-Alloy Sheet and Plate.

.6 ASTM B221M, Specification for Aluminum-Alloy Extruded Bars, Rods, Wires, Shapes and Tubes.

.7 ASTM C1396, Specification for Gypsum Board.

.8 ASTM C645, Specification for Non-Load Bearing (Axial) Steel Studs, Runners (Tracks), and Rigid Furring Channels for Screw Application of Gypsum Board.

.9 ASTM E90, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.

.10 ASTM F738M, Specification for Stainless Steel Metric Bolts, Screws, and Studs.

1.3 **DESIGN REQUIREMENTS**

.1 Demountable partition system to be 89 mm wide, with flush joints, system components, door frames, wood doors, glazed openings, and all trim components.

.2 Design partition system to provide an STC of 35 when tested in accordance with ASTM E90.

.3 Design partition system to allow for all panels to be point accessible without affecting adjoining panels.

1.4 **SUBMITTALS**

.1 Product data:
  .1 Submit copies of manufacturer's Product data in accordance with the Conditions of the Contract indicating:
    .1 Performance criteria, compliance with appropriate reference standard, characteristics, and limitations.

.2 Product transportation, storage, handling and installation requirements.

.2 Shop drawings:
.1 Submit shop drawings in accordance with the Conditions of the Contract indicating:
.1 Location, construction, adjacent construction, elevations, sections, panel sizes, interior structure and/or reinforcement, door and glazing modules, frame details, trim, connection to ceiling grid system, details, anchorages, dimensions, thickness, joints, and finishes.

.3 Samples:
.1 Submit following samples in accordance with the Conditions of the Contract.
.1 Two 300 x 300 mm samples of finishes applied to gypsum board.
.2 One 300 mm long sample of door frames, glazing framing and trim.
.3 One of each component used in the partition system i.e. ceiling fixing device and other component parts.

1.5 QUALITY ASSURANCE

.1 Installers qualifications: Perform work of this Section by a company that has a minimum of five years proven experience in the installation of demountable partition systems of a similar size and nature and that is approved by manufacturer. Submit to Consultant, applicator's current certificate of approval by the material manufacturer as proof of compliance.

.2 Mock-up:
.1 Construct a mock-up of at least 4 panels in location acceptable to Consultant.
.2 Arrange for Consultant's review and acceptance, allow 48 hours after acceptance before proceeding with work.
.3 Mock-up may remain as part of Work if accepted by Consultant. Remove and dispose of mock-ups which do not form part of Work.
.4 Upon acceptance, mock-up shall serve as a minimum standard of quality for the balance of the work of this Section.

1.6 SITE CONDITIONS

.1 Do not begin work of this Section until:
.1 Floor and ceiling finishes are complete.
.2 Substrate and ambient temperature is above 15^0C.
.3 Relative humidity is below 80 %.

.2 Install temporary protection and facilities to maintain Product manufacturer's, and above specification, environmental requirements 48 h before, during, and 48 h after installation.

1.7 DELIVERY, STORAGE, AND HANDLING

.1 Handle aluminum in accordance with AAMA CW-10.

.2 Protect aluminum surfaces with strippable coating. Do not use adhesive papers or sprayed coatings which bond when exposed to sunlight or weather. Do not remove before final cleaning of building.

2 Products

2.1 **ACCEPTABLE PRODUCT(S) AND MANUFACTURER(S)**

.1 'Elite Glazing Wall System' by PC350 or approved alternative.

2.2 **MATERIALS**

.1 Galvanized steel sheet: ASTM A653/A653-M, Z275; cold rolled, galvanized steel sheet.

.2 Aluminum extrusions: ASTM B221 and ANSI H35.1 AA6063 alloy, T5 temper.

.3 Aluminum sheet: ASTM B209 and ANSI H35.1 AA1100 aluminum alloy, H14 temper, minimum 3.0 mm thick.

.4 Top track: ASTM C645; cold rolled channels, formed from galvanized steel sheet, designed to accept snap-on trim from either side of wall.

.5 Bottom track: ASTM C645; roll formed from galvanized steel sheet, with 38 mm high legs.

.6 Steel studs and runners: ASTM C645; 'U' shape, roll formed from galvanized steel sheet, 0.6 mm thick minimum, pre-punched openings for system elements, configured to meet panel system requirements, depth as indicated on Contract Drawings.

.7 Cross locking Channels: ASTM C645; 3350 mm long, roll formed from galvanized steel channels.

.8 Sliding doors: Standard profile extruded aluminum frame with 6 mm thick glazing, hardware to provide smooth, gentle soft close glide and come with braking mechanism and seal, in size shown on drawings. Door pull handle to be selected by Consultant.

.9 Glazing frames: Extruded aluminum, complete with snap-on glazing stops and neoprene gaskets for setting glass.

.10 Glazing: In accordance with Section 08 80 00.

.11 Finish hardware: In accordance with Section 08 70 00.

.12 Trim: Aluminum, colour to match frames.

.13 Fasteners: ASTM F738M; Stainless Steel Type 304.

2.3 **FINISHES**

.1 Aluminum finish: Clear anodized to AAMA 611 per Aluminum Association Designation System for Aluminum Finishes AA-M12C22A41.

3 Execution

3.1 **EXAMINATION**

.1 Verify condition and dimensions of previously installed Work upon which this Section depends. Report defects to Consultant. Commencement of work of this Section means acceptance of existing conditions.

3.2 **INSTALLATION**

.1 Install demountable partition system in accordance with reviewed Shop Drawings and manufacturer's written instructions.

.2 Install partition system on top of floor finish and accurately fitting to suspended ceiling.

.3 Erect partitions plumb, square, straight, rigid, and with horizontal lines level. Accurately fit and fasten to abutting surfaces.

.4 Provide reinforcement and bracing wherever necessary to assure lateral stability.

.5 Coordinate with mechanical and electrical trades for all services required to be built into partition system.

.6 Fasten runners to floors, ceiling and abutting vertical surfaces at 600 mm o.c. At ceilings, use fasteners that rigidly support partition without damaging or defacing ceiling panels or grid members. At carpets, use fasteners that rigidly support partition without damaging or defacing carpet.

.7 Fasten floor track to substrate at both sides of door frames.

.8 Install continuous light/sound seal at junction between partition system and ceilings, floors, and adjacent abutting surfaces.

.9 Install studs vertically in floor and ceiling track at 600 mm. Install three cross channels per stud.

.10 Install panel clips and hang panels on framework taking care to seat all panel clips on cross channels.

.11 Glaze partition system in accordance with Section 08 80 00.

.12 Install finish hardware in accordance with Section 08 70 00.

.13 Install ceiling trims, base moulding, corners, and other trim to provide a complete system.

.14 The complete installation shall be free of exposed screws or other fasteners, with surfaces free of tool marks, scratches or any other marred surface detrimental to appearance.

3.3 CLEANING

.1 Upon completion of work of this section, remove strippable coatings, clean surfaces, and adjust doors for proper operation.

END OF SECTION

SECTION NO. TITLE NO. OF PAGES

DIVISION 07 THERMAL AND MOISTURE PROTECTION

DIVISION 08 DOORS AND OPENINGS

DIVISION 09 FINISHES

DIVISION 10 SPECIALTIES

DIVISION 33 UTILITIES

APPENDIX

END OF SECTION

Tender No.: T-2024-PPS02

BID FORM

Submitted to:	Algonquin & Lakeshore Catholic District School Board	**PROJECT:**	J.J. O'Neill Catholic Elementary School
	151 Dairy Avenue		Napanee, ON
	Napanee Ontario	**PROJ. NO.:**	22026
	K7R 4B2		
	ATT: Brad Hurdis, Capital Projects Manager	**DATE:**	_____

1. Bidder

Name: _____

Address: _____

_____

Email: _____

Fax: _____

2. Bid Price

Having examined the Place of Work and bid documents for J.J. O'Neill Catholic Elementary School, to perform the Work required by the documents as prepared by Salter Pilon Architecture Inc. and consultants including addenda listed herein, inclusive, we hereby offer to enter into a Contract to perform the Work required by the documents for the Stipulated price of:

_____ dollars. ($ _____)

in Canadian Funds, which price excludes HST.

Prices are free of escalation clauses.

This offer is valid for a period of **sixty (60)** days from close of bidding.

Should either party fail to make payments as they become due under the terms of the Contract, interest at one percent (1 %) per annum above the Bank Rate on such unpaid amounts shall also become due and payable until payment. Such interest shall be compounded on a monthly basis. The Bank Rate means the bank rate established by the Bank of Canada as the minimum rate at which the Bank of Canada makes short term advances to the Chartered Banks.

3. Addenda

The following Addenda have been received. The modifications to the Contract Documents noted therein have been considered and all costs thereto are included in the Bid Price.

Addendum # ..... Dated .....

Addendum # ..... Dated .....

Addendum # ..... Dated .....

Addendum # ..... Dated .....

Addendum # ..... Dated .....

4. Schedule:

The Contractor hereby declares that they will commence work immediately upon award of Contract and attain Substantial Performance of the Work by _____ (completion date or number of weeks)

5. Cash Allowances:

A Cash Allowance, with a value of $545,000.00, as outlined in Section 01 21 00 is included as part of the Base Bid Price and shall cover the following (in general):

.1 Finish Hardware: Supply and Install for wood and HM doors. Supply of finish hardware for aluminum doors – installation by others. Supply of finish hardware for teacher's and storage closet doors – installation by others.

.2 Pin mounted cast aluminum signage

.3 Hydro Utility – supply and install of the primary terminations. Connection at the supply point at street and pad mounted transformer. Utility service connection fees.

.1 Note: The Electrical Contractor shall be responsible for coordinating a servicing agreement and all associated work with the electrical company.

.4 Testing and Inspection.

.5 Security Alarm Systems – Supply and install as per Division 26 Sections,

.6 A/V systems – supply and install in gymnasium.

.7 Gas meter upgrades by Utility provider.

.8 Unexpended amounts of Cash Allowances may be reallocated to other work at the sole discretion of the Consultant and Owner.

6. Unit Prices

The Bidder shall perform any additional work that may be required and supply whatever additional articles, materials, or equipment which may be necessary at the unit prices or adjusted unit prices set out below in strict conformance with all terms and conditions of the Contract. The unit price for deductions shall be 90% that for additions.

Trade or Material	**Additional Cost**	**/unit**
Rock Removal (machine) – Includes removal & disposal	_____	/m^3
Engineering Fill Granular B Placed	_____	/m^3
Removal of Contaminated Soils (include excavation, haulage, and disposal) exceeding table 1, and in the range of 1-100 tonnes (to be paid by cash allowance).	_____	**/tonne**
Removal of Contaminated Soils (include excavation, haulage, and disposal) exceeding table 1, and in the range of 101-500 tonnes (to be paid by cash allowance).	_____	**/tonne**
Removal of Contaminated Soils (include excavation, haulage, and disposal) exceeding table 1, and greater than 500 tonnes (to be paid by cash allowance).	_____	**/tonne**
Removal of Contaminated Soils (include excavation, haulage, and disposal) exceeding tables 2 or 3, and in the range of 1-100 tonnes (to be paid by cash allowance).	_____	**/tonne**
Removal of Contaminated Soils (include excavation, haulage, and disposal) exceeding tables 2 or 3, and in the range of 101-500 tonnes (to be paid by cash allowance).	_____	**/tonne**
Removal of Contaminated Soils (include excavation, haulage, and disposal) exceeding tables 2 or 3, and greater than 500 tonnes (to be paid by cash allowance).	_____	**/tonne**

7. Bidder's Alternatives

I/We the undersigned propose the following alternatives:

Product Specified	Proposed Substitution	Deduct from Bid Price
1		$
2		$
3		$

(Add extra lines or pages if necessary)

8. Declarations:

We hereby declare that no person, firm, or corporation other than the undersigned has any interest in this Bid or in the proposed Contract for which this Bid is made.

9. Signatures:

Signed and Submitted for and on behalf of:

Seal:

name of bidder

signature

print name and title of person signing

Witness:

signature

print name and title of person signing

signature

print name and title of person signing

Date:

Note: this Bid form must be signed in one of the following ways:
For a corporation: minimum of one signing officer. Corporate seal to be affixed.
For a Partnership: two Partners must sign.
For a Sole Proprietorship: The Owner plus one witness must sign.

END

1 GENERAL

.1 Include all allowances listed below in the Bid Price.

.2 Expend Cash Allowances as directed by the Consultant.

.3 Each Cash Allowance will be adjusted to actual cost as defined hereunder and Contract Price will be amended accordingly by written order.

.4 Progress payments for work and material authorized under Cash Allowances will be made in accordance with GC 5.3 of the Contract.

.5 Where costs under a cash allowance exceed amount of allowance, Contractor will be compensated for excess incurred and substantiated plus allowance for overhead and profit as set out in Contract Documents.

.6 Include progress payments on accounts of Work authorized under cash allowances in Consultant's monthly certificate for payment.

.7 Prepare schedule jointly with Consultant and Contractor to show when items called for under cash allowances must be authorized by Consultant for ordering purposes so that progress of Work will not be delayed.

.8 Cash allowances do not include H.S.T.

2 MATERIAL ALLOWANCES (SUPPLY ONLY)

.1 Material cash allowance shall include and provide payment for:
- .1 Net cost of material.
- .2 Applicable duties and taxes.
- .3 Delivery to the Place of the Work.

.2 Include in the Bid Price, in addition to the material cash allowance, costs for the following:
- .1 Handling at the Place of the Work, including unloading, uncrating, storage and hoisting.
- .2 Protection from damage by elements or otherwise.
- .3 Labour for installation and finishing.
- .4 Other expenses required to complete installation.
- .5 Overhead and profit.

3 ASSEMBLY ALLOWANCES (SUPPLY AND INSTALL)

.1 Assembly cash allowance shall include and provide payment for:
- .1 Net cost of material.
- .2 Applicable duties and taxes.
- .3 Delivery to the Place of the Work.
- .4 Assembly contractors'/suppliers' only, expenses relating to the following:
  - .1 Handling at site, including unloading, uncrating, storage and hoisting.
  - .2 Protection from damage by elements or otherwise.
  - .3 Labour installation and finishing.
  - .4 Other expenses required to complete installation.
  - .5 Overhead and profit.

.2 Include in the Bid Price any overhead and profit or related General Contractor costs.

4 TESTING & LABORATORY SERVICES

.1 Testing & Laboratory Services allowances shall include and provide payment for:
- .1 Transportation costs to and from the Place of the Work,
- .2 Personnel & equipment required to perform tests or inspections,
- .3 Costs of shipping & handling samples to laboratory for testing,
- .4 Applicable duties and taxes.

5 ALLOWANCE AMOUNTS

.1 The Total Cash Allowance to be included in the Stipulated Price is ~~$545,000~~ ***$745,000*** in Canadian funds.

.2 The Cash Allowance shall cover the following (in general):
- .1 Finish Hardware – supply and installation of all finish hardware for wood and hollow metal doors. Supply of finish hardware for aluminum doors - installation by others. Supply of finish hardware for teacher's closet doors - installation by others.
- .2 Pin mounted cast aluminum signage on exterior of building.
- .3 Hydro Utility - supply and install of the primary terminations. Connection at supply point at street and pad mounted transformer. Utility service connection fees.
  - .1 Note: The Electrical Contractor shall be responsible for coordinating a servicing agreement and all associated work with the electrical company.
- .4 Testing and Inspection.
- .5 Security Alarm Systems -- Supply and install as per Division 26 Sections.
- .6 A/V systems -- supply and install in gymnasium?
- .7 Gas meter upgrades by Utility provider.
- .8 Unexpended amounts of Cash Allowances may be reallocated to other work at the sole discretion of the Consultant and Owner.
- ***.9 Handling or handling and disposal of contaminated soils.***

END OF SECTION

1 General

1.1 **SECTION INCLUDES**

.1 Labour, Products, equipment and services necessary for the wood doors Work in accordance with the Contract Documents.

1.2 **REFERENCES**

.1 ANSI A208.1, Particleboard.

.2 Architectural Woodwork Standards (AWS) - Quality Standards for Architectural Woodwork.

.3 CSA O112 Series, Wood Adhesives.

.4 CAN4 S104-M, Standard Method for Fire Tests of Door Assemblies.

.5 NFPA 80, Standard for Fire Doors and Other Opening Protectives.

1.3 **SUBMITTALS**

.1 Shop drawings: Submit shop drawings of wood doors in accordance with the Conditions of the Contract indicating detail thicknesses, core construction, veneers, finish, door sizes, quantities, fastenings and finishes.

.2 Samples: Submit the following samples in accordance with the Conditions of the Contract:
.1 Two minimum 300 x 300 mm door samples for each type of finish and cut-a-way corners showing construction and materials.

1.4 **QUALITY ASSURANCE**

.1 Perform Work in accordance with requirements of AWS, Quality Standards for Architectural Woodwork, Premium Grade, except as indicated otherwise.

.2 Regulatory Requirements For Fire Rated Doors:
.1 Fire Rating & Labeling: Fire rated doors shall be labelled and listed by an organization accredited by Standards Council of Canada in conformance with CAN4-S104 for ratings specified or indicated.
.2 Provide fire doors for stairwell enclosures that will limit maximum transmitted temperature to door surface on opposite fire side of door to less than 232°C above ambient temperature after 30 minutes of fire exposure.

1.5 **DELIVERY, STORAGE, AND HANDLING**

.1 Deliver, store, and handle wood doors in accordance with the AWS Quality Standards amended as follows:
.1 Wrap wood doors individually in protective wrapping for shipment and Site storage.

.2 Handle wood doors carefully to prevent damage; replace damaged doors.
.3 Store doors flat on a dry, level surface. Ventilate and maintain recommended relative humidity before, during and after installation.

1.6 **EXTENDED WARRANTY**

.1 Provide a Warranty certificate from the door manufacturer which binds the manufacturer to replace all doors found to have defects in factory workmanship or materials, or which warp more than 6mm out of plane, under normal use, for a minimum of five (5) years from the Date of Substantial Performance. Replacement doors shall bear same warranty from date of replacement.

.2 "Replace" as used herein, does not include hanging, installation or field finishing. This work shall be performed by the Contractor for the warranty period stipulated in the General Conditions of the Contract. If doors were originally supplied factory finished, manufacturer must supply replacement doors with same finish.

2 Products

2.1 **ACCEPTABLE MANUFACTURERS**

.1 Baillergeon.

.2 Lambton Doors.

2.2 **MATERIALS**

.1 General: All materials under Work of this Section, including but not limited to, adhesives are to have low VOC content limits.

.2 Wood doors (solid core):
.1 5 ply wood door: As manufactured by Baillargeon Doors Inc. or Lambton Doors.
.2 Core: To ANSI A208.1, minimum density 513 kg/m^3 minimum, sanded faces, of thickness to fill void. Extruded particle board cores with voids are not permitted.
.3 Rails:
.1 Top: 35 mm structural composite lumber.
.2 Bottom: 35 mm structural composite lumber.
.4 Stiles
.1 16 mm hardwood laminated to 19 mm structural composite lumber.
.2 Edge detail: AWMAC No.2.
.5 Crossbanding: Minimum 2.2 mm thick minimum wood based composite.
.6 Door facing: ~~Minimum 0.8 mm paint grade birch Veneer finished in accordance with Section 09 91 00~~***Plastic laminate***.

.3 Wood doors (fire rated):
.1 'Fire Door Series' by Baillargeon Doors Inc. or 'Fire Door' by Lambton Doors.
.2 Core: Fire rated mineral core. Density of 28-32 lbs per cubic foot.
.3 Internal blocking: AWS Option #3; Manufacturers' standard fire resistant blocking.

.4 Top and Bottom Rails: 85 mm laminated strand lumber bonded with type1 water-resistant adhesive as per ASTM-D1037 and ASTM-D198.
.5 Stiles: 107 mm including 85 mm laminated strand lumber bonded with type 1 water-resistant adhesive as per ASTM-D1037 and ASTM-D198.
.6 Crossbanding: Minimum 2.2 mm thick HDF composite.
.7 Door facing: ~~Minimum 0.8 mm birch veneer finished in accordance with Section 09 91 00~~***Plastic laminate***.

.4 Edge finish: To match door facings.

.5 Adhesive: CSA O112 Series, Type I; Waterproof.

.6 Door frames: Metal door frames in accordance with Section 08 11 13.

.7 Glass and glazing: In accordance with Section 08 80 00.

.8 Door Hardware: To be supplied and installed under Cash Allowance.

2.3 FABRICATION

.1 Fabricate doors to sizes indicated on drawings.

.2 Fabricate doors square, true, and free from distortion waves, ridges or core ghost lines. Factory machine doors for finish hardware and flooring.

.3 Fabricate doors using hot press construction technology. Bond stiles and rails to core using adhesive. Sand for uniform thickness. Laminate door facing and trim, to assembled core in hot press.

.4 Cut and bevel stile edges as follows:
.1 Lock side: 3 mm in 50 mm.
.2 Hinge side: 1.5 mm in 50 mm.

.5 Finish wood doors in factory and deliver to site ready for hanging.

2.4 FIRE RATED DOORS

.1 Fabricate and label fire rated wood doors with plate label indicating fire protection rating as indicated on door schedule.

3 Execution

3.1 EXAMINATION

.1 Verify condition and dimensions of previously installed Work upon which this Section depends. Report defects to Consultant. Commencement of Work means acceptance of existing conditions.

3.2 INSTALLATION

.1 Install doors plumb, rigid, square, clear of floor finishes, and with correct rebate opening for door installation.

.2 Conform to requirements of AWS Quality Standard, for wood door installation.

3.3 FIRE RATED DOORS

.1 Install fire rated doors in accordance with the requirements of ULC and NFPA 80.

3.4 ADJUSTING AND CLEANING

.1 Replace the following wood doors:
- .1 Warped more than 3 mm, measured at any point on door, relative to perfectly flat surface.
- .2 Core telegraphing visible at 1500 mm distance, under final Site lighting conditions.

.2 Adjust doors for smooth and balanced door movement.

END OF SECTION

1 General

1.1 **SECTION INCLUDES**

.1 Design, labour, Products, equipment, tools, and services necessary for glass and glazing Work in accordance with the Contract Documents.

1.2 **REFERENCES**

.1 ASTM C1048, Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass.

.2 ASTM D2240, Test Method for Rubber Property - Durometer Hardness.

.3 CAN/CGSB-12.1-M, Tempered or Laminated Safety Glass.

.4 CAN/CGSB-12.8, Insulating Glass Units.

.5 Glass Association of North America (GANA) Glazing Manual.

.6 ULC CAN4 S104-M, Standard Method for Fire Tests of Door Assemblies.

.7 ULC CAN4 S106-M, Standard Method for Fire Tests of Window and Glass Block Assemblies.

1.3 **DESIGN REQUIREMENTS**

.1 Glass Design:
- .1 Design glass using a probability of breakage of 8 lites per 1000 at the first application of design load.
- .2 Perform stress analysis. Design units to accommodate live, dead, lateral, wind, seismic, handling, transportation, and erection loads.
- .3 Perform a thermal stress analysis on each glass unit with Low-E coating and provide heat strengthening and/or tempered units as necessary to prevent thermal breakage.
- .4 Perform a thermal stress analysis on each insulating thermal unit and provide heat strengthening and/or tempered units as necessary to prevent thermal breakage.
- .5 Where required, design glazing units so as not to allow thermal stress fracture due to heat build-up behind insulating units.

.2 Limit glass deflection to flexural limit of glass with full recovery of glazing materials.

.3 Utilize inner light of multiple light sealed units for continuity of air and vapour seal.

1.4 SUBMITTALS

.1 Shop drawings:
- .1 Submit shop drawings in accordance with the Conditions of the Contract indicating as a minimum:
  - .1 Fabrication and erection of glazing elements indicating materials, thicknesses, finishes, connections, joints, method of anchorage, number of anchors, supports, reinforcement, details, and accessories.
  - .2 To sealant manufacturer for their review and approval of tensile bead contact/bite dimension and thickness.

.2 Samples:
- .1 Submit following samples in accordance with the Conditions of the Contract.
- .2 Submit one sample of each type of glass.
  - .1 300 x 300 mm of each type of insulating glass unit, complete with each different Low-E coating.
  - .2 300 x 300 mm of each colour of spandrel glass.

.3 Certificates: Submit manufacturer's certification that glass and glazing materials are compatible.

.3 Reports:
- .1 Submit compatibility and adhesion test reports from sealant manufacturer indicating that glazing materials were tested for compatibility and adhesion with glazing sealants. Include sealant manufacturer's interpretation of test results relative to sealant performance and recommendations for primers and substrate preparation needed for adhesion.
- .2 Compatibility test report from manufacturer of insulating glass edge sealant, indicating that glass edge sealants were tested for compatibility with other glazing materials including sealants, setting blocks, edge blocks and any other material that contacts or can affect the edge seal.

.4 IGMA Compliance Audit: Submit in accordance with the Conditions of the Contract, a written certification of successful completion of a Compliance Audit within the last six months.

1.5 QUALITY ASSURANCE

.1 Insulating glass unit fabricators shall be a certified member of the Insulating Glass Manufacturer's Alliance (IGMA). IGMA members must participate in the certification program and shall have successfully passed a Compliance Audit within the last six months.

.2 Installers qualifications: Perform Work of this Section by a company that has a minimum of five years proven experience in the installation of glazing units of a similar size and nature.

.3 Fire Protective Rated Glass: Each lite shall bear permanent, nonremovable label of ULC certifying it for use in tested and rated fire protective assemblies.

1.6 **SITE CONDITIONS**

.1 Glaze with compounds, sealants, or tapes only when glazing surfaces are at temperatures over 4°C, and when positive that no moisture is accumulating on them from rain, mist, or condensation.

.2 When temperature of glazing surfaces is below 4°C, obtain from Consultant approval of glazing methods and protective measures which will be used during glazing operations.

1.7 **EXTENDED WARRANTY**

.1 In accordance with Section 08 51 13.

2 Products

2.1 **ACCEPTABLE MANUFACTURERS**

.1 Glass manufacturers:
- .1 AGC Flat Glass.
- .2 Cardinal Glass Industries.
- .3 Guardian Industries.
- .4 PPG Industries Ltd.
- .5 Viracon Inc.

2.2 **MATERIALS**

.1 All materials under Work of this Section, including but not limited to, primers, coatings, sealers, sealants, adhesives and cleaners are to have low VOC content limits.

.2 Tempered glass **(TG)**: CAN/CGSB-12.1-M, Type 2, Class B, Category II, clear, minimum 6 mm thick.

.3 Fire rated glass **(FRGL)**: 20 min. to 90 min. fire rating tested to ULC CAN4 S104-M and ULC CAN4 S106-M, 5 mm thick or as otherwise noted on Door Schedule with appropriate labelling stating fire rating and approval, clear polished glass. Firelite by Nippon Electric Glass Company Ltd. or approved alternative.

.4 Spandrel glass **(SGL)**: ASTM C1048, Condition B, 6 mm thick heat strengthened or tempered glass, with water-based silicone emulsion coating applied to backside, 'Opaci-Coat 300' by ICD High Performance Coatings or approved alternative. Colour: To match PT-5, PT-6, PT-7, PT-8, PT-9, and PT-10 per room finish and colour schedule.

.5 Insulating glass units: To CAN/CGSB-12.8-M and IGMA requirements utilizing approved non-metallic PVC or Fibreglass edge spacer in black. Dual seal with a PIB primary seal and silicone secondary seal.

.6 Argon gas: 90% argon and 10% air mixture. Argon gas to be used to fill air space at all insulated glass units.

.7 Low-E coating: High performance sputtered low-E coating. Provide insulating glass units with low-E coating edge deletion and low-E coating. Apply low-E coating to second surface unless otherwise indicated. 'EnergySelect 36' by AGC Flat Glass, 'Cardinal LoE-270' by Cardinal Glass Industries, 'SN 68' by Guardian Industries or 'Solarban 60' clear by PPG Industries Inc.

.8 Glazing types:
- .1 GL-1: Clear TG exterior lite with low-E coating, argon filled air space, clear TG interior lite. Standard throughout unless noted otherwise. 25 mm overall thickness.
- .2 GL-2: 6 mm clear TG used at interior glass lites in non-rated doors and screens.
- .3 GL-3: 5 mm FRGL used at interior fire-rated doors and screens.

.9 Glazing and rebate primers, sealants, sealers, and cleaners: Compatible with each other. Type as recommended by glass manufacturer.

.10 Glazing sealant: Silicone sealant as recommended by glazing manufacturer. Verify compatibility with insulating glass unit secondary sealant.

.11 Heel & toe bead: Silicone sealant as recommended by glazing manufacturer.

.12 Glazing gasket: 'Visionstrip' by Tremco Ltd., extruded composite glazing seal, size as recommended by manufacturer.

.13 Glazing tape: 'Polyshim II' glazing tape EPDM shim.

.14 Glazing tape (fire rated glass): Closed cell polyvinyl chloride (PVC) foam, coiled on release paper over adhesive on two sides, maximum water absorption by volume of 2 percent. Glass panels that exceed 1,393 sq. inches for 90-minute ratings must be glazed with fire-rated glazing tape supplied by manufacturer.

.15 Glazing splines: EPDM or neoprene, extruded shape to suit glazing channel retaining slot, colour as selected.

.16 Setting blocks (regular): EPDM, 80 - 90 Shore A durometer hardness to ASTM D2240, sized to suit glazing method, glass unit weight and area.

.17 Edge blocks: EPDM, 60-70 Shore A Durometer hardness, sized with 3 mm clearance from glass edge and spanning glass thickness(es). Capable of withstanding weight of glass unit, self adhesive on face.

.18 Silicone Sealant (fire rated glazing): One-part neutral curing silicone, medium modulus sealant, Type S; Grade NS; Class 25 with additional movement capability of 50 percent in both extension and compression (total 100 percent):
- .1 Dow Corning 795 - Dow Corning Corp.
- .2 Silglaze-II 2800 - General Electric Co.
- .3 Spectrem 2 - Tremco Inc.

.19 Glass presence markers: Easily removable, non-residue depositing.

.20 Screws, bolts and fasteners: Type 304 stainless steel.

2.3 **FABRICATION**

.1 Verify glazing dimensions on Site.

.2 Clearly label each glass lite with maker's name and glass type. Ensure labels are easily removable, non-residue depositing type. Do not remove labels until after Work is accepted by Consultant.

.3 Fabricate glazing not less than 3 mm smaller than rebate size in either dimension; allow for edge spacers, shims, and setting blocks as necessary.

.4 Work shall have smooth finished surfaces free from distortion and defects detrimental to appearance and performance.

.5 Carefully make and fit details. Take special care with exposed finished Work to produce a neat and correct appearance to the Consultant's acceptance.

.6 Fabricate argon filled thermal units with air space filled minimum 90% with argon gas.

3 Execution

3.1 **EXAMINATION**

.1 Verify condition and dimensions of previously installed Work upon which this Section depends. Report defects to Consultant. Commencement of Work means acceptance of existing conditions.

.2 Verify that openings for glazing are correctly sized and within tolerance.

.3 Verify that surfaces of glazing channels or recesses are clean, free of obstructions, and ready to receive glazing.

.4 Laminated glass edges shall be completely covered by tape to protect against sealants and water if required by Manufacturer.

3.2 **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.

3.3 **INSTALLATION**

.1 Provide glazing in accordance with IGMA recommendations. Provide continuous contact between glazing tapes and gasket to the glazing.

.2 Install glazing to the Work of Sections 08 11 13, 08 14 16, 08 44 00, 08 51 13***, 08 56 88*** and 10 22 19.

.3 Provide neat, straight sight lines. Trim excess glazing material flush with top of stops and fixed leg of frames.

.4 Remove protective coatings, glazing stops, clean rebate and glass contact surfaces with solvent, wipe dry.

.5 Apply primer/sealer to contact surfaces, prior to glazing.

.6 Apply glazing tape as per manufacturer's instructions including recommended corner sealant.

.7 Use setting blocks at 1/4 points and spacers to centre glass unit in frame.

.8 Install glazing in accordance with reviewed shop drawings and manufacturer's written instructions. Install glazing with full contact and adhesion at perimeter. Maintain edge clearance recommended by glass manufacturer.

.9 Apply a continuous heel bead of sealant around perimeter of inboard lite of the sealed unit and the metal framing.

.10 Re-install glazing stops ensuring continuous contact and rattle-free installation. Do not distort glass. Trim tape protruding more than 2 mm above stop.

.11 Install glazing gasket in accordance with manufacturer's recommendations.

.12 Do not cut or abrade tempered, heat treated, or coated glass.

.13 Install glass presence markers in two cross stripes extending from diagonal corners. Maintain markers until final clean-up.

.14 Remove, dispose of, and replace broken, cut, abraded glass, and defective glass including but not limited to production dimples, 'tiger-stripping', chips, cracks, etc.

.15 Exterior glass: Glaze units with gasket on exterior side and glazing tape on interior side. Seal gap between glazing and stop with sealant to depth equal to bite of frame. Apply cap head of sealant along void between stop and glazing, to uniform line, flush with sight line. Tool or wipe sealant surface smooth.

.16 Interior glass: Glaze interior glass using glazing gasket glazing tape.

.17 Fire rated glass:

- .1 Place setting blocks located at quarter points of glass with edge block no more than 150 mm from corners.
- .2 Cut glazing tape to length and set against permanent stops, flush with sight lines to fit openings exactly, with stretch allowance during installation.
- .3 Glaze vertically into labeled fire-rated metal frames or partition walls with same fire rating as glass and push against tape for full contact at perimeter of pane or unit.
- .4 Place glazing tape on free perimeter of glazing in same manner described above.
- .5 Install removable stop and secure without displacement of tape.

.6 Install so that appropriate ULC markings remain permanently visible.

3.4 CLEANING

.1 Immediately remove sealant and compound droppings from finished surfaces.

.2 Remove labels, protective material, and glass presence markers from prefinished surfaces.

.3 Clean glass surfaces with cleaning agents and methods in accordance with Manufacturer's written instructions.

END OF SECTION

Algonquin & Lakeshore Catholic District School Board

Ontario Builds

EXISTING SINGLE STOREY KINDERGARTEN WING RENOVATED TO CHILD CARE AFTER NEW ADDITION IS OCCUPIED

2 / A204 Level 2 Floor Plan - Renovation
1 : 125

1 / A204 Level 1 Floor Plan - Renovation
1 : 125

3 / A204 1 : 10

4 / A204 1 : 10

5 / A204 1 : 10

No.	Revision	Date
12	Issued for Addendum No. 6	04-25-2024
11	Issued for Tender & Permit	03-26-2024
10	Issued for Client Review	12-11-2023
9	Issued for Costing	10-02-2023
8	Issued for Coordination	08-16-2023
7	Issued for 90% CD	07-31-2023
6	Issued for 50% CD	07-04-2023
5	Issued for 100% DD	05-29-2023
4	Issued for SD 100%	02-24-2023
3	Issued for Client Review	02-14-2023
2	Issued for Review	02-06-2023
1	Issued for Client Review	01-17-2023

Orientation

PROJECT NORTH

Seal

ONTARIO ASSOCIATION OF ARCHITECTS GERRY P. PILON LICENCE 5042

salterpilon architecture

151 Ferris Lane, Suite 400 Barrie, Ontario L4M 6C1
salterpilon.com t: 705.737.3530

Project Information

J.J. O'Neill Catholic Elementary School - Addition / Renovation

240 Marilyn Ave., Napanee, ON K7R 2L4

For

Algonquin and Lakeshore Catholic District School Board

Drawing Title

Ground & Second Floor Plan - Renovation

Date	Project No	Drawing No
04-25-2024	22026	A204
Drawn by: AB, JJ		
Scale: As indicated		

BIM 360://22026 - JJ O'Neill CES/22026 - JJ O'Neill CES.rvt
2024-04-25 4:02:08 PM

GLASS SPANDREL PANEL LEGEND:

1 GSP-1	2 GSP-2
3 GSP-3	4 GSP-4
5 GSP-5	6 GSP-6

GENERAL NOTES:

1. ALL EXISTING BRICK REMOVED FOR NEW OPENINGS IS TO BE CAREFULLY REMOVED AND STORED FOR FUTURE INFILLS AS INDICATED ON ELEVATION, FLOOR PLANS AND DEMOLITION PLANS.

2. ALL EXISTING GREEN CONCRETE SURROUNDS TO BE PATCHED, CLEANED AND PAINTED AS PER COLOUR SCHEDULE.

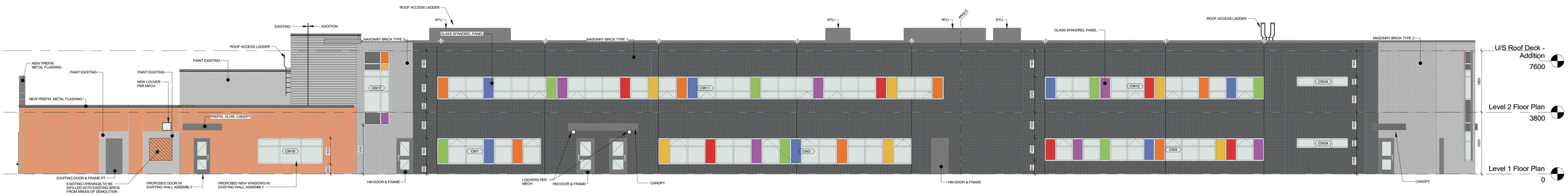
3. FOUNDATION WALL & FOOTINGS ARE PER THE STRUCTURAL DRAWINGS, REFER TO THE STRUCTURAL DRAWINGS FOR THE REQUIRED DEPTHS, SIZE, REINFORCING ETC.

4. LOCATIONS OF ALL MECHANICAL AND ELECTRICAL ITEMS MUST BE COORDINATED WITH THE MECHANICAL AND ELECTRICAL DRAWINGS. (ie. HOSEBIBS, GRILLES, LIGHTS ETC.) ON SITE WITH ALL TRADES INVOLVED IN THE WORK.

CJ - CONTROL JOINT LOCATIONS, REFER TO DETAIL 2/A203

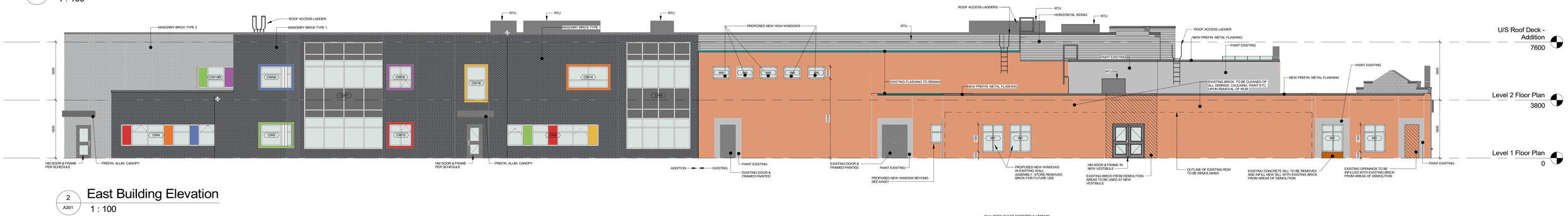
Algonquin & Lakeshore Catholic District School Board

Ontario Builds



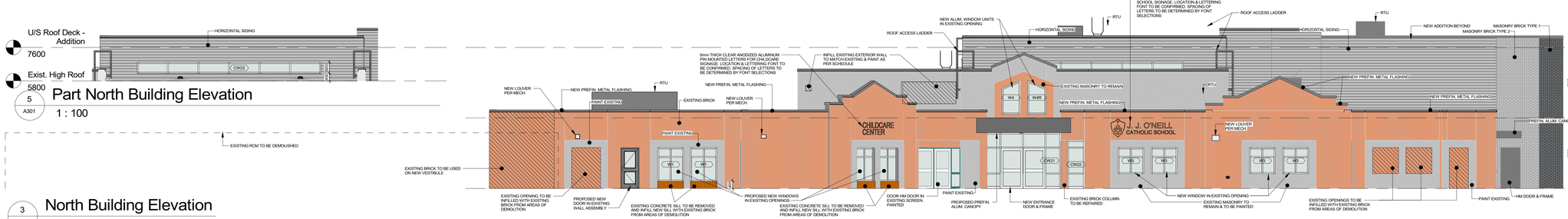
1 / A301 **West Building Elevation**

1 : 100



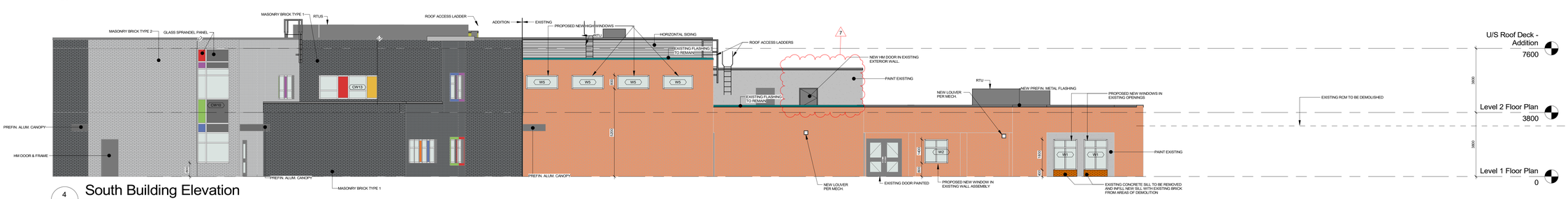
2 / A301 **East Building Elevation**

1 : 100



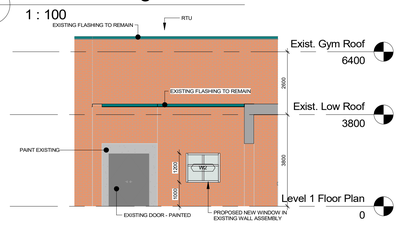
3 / A301 **North Building Elevation**

1 : 100



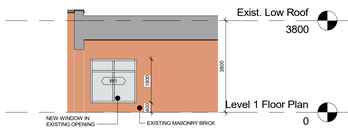
4 / A301 **South Building Elevation**

1 : 100



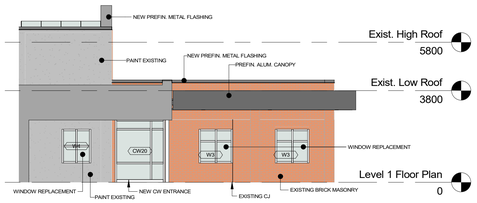
6 / A301 **Part East Building Elevation**

1 : 100



7 / A301 **Part West Elevation**

1 : 100



8 / A301 **Part East Elevation**

1 : 100

No.	Revision	Date
7	Issued for Addendum No. 6	04-25-2024
6	Issued for Tender & Permit	03-26-2024
5	Issued for Client Review	12-11-2023
4	Issued for Costing	10-02-2023
3	Issued for Coordination	08-16-2023
2	Issued for 90% CD	07-31-2023
1	Issued for SPA	07-17-2023

Orientation

Seal

ONTARIO ASSOCIATION OF ARCHITECTS
GERRY P. PILON
LICENCE
5042

salterpilon architecture

151 Ferris Lane, Suite 400 Barrie, Ontario L4M 6C1
salterpilon.com t: 705.737.3530

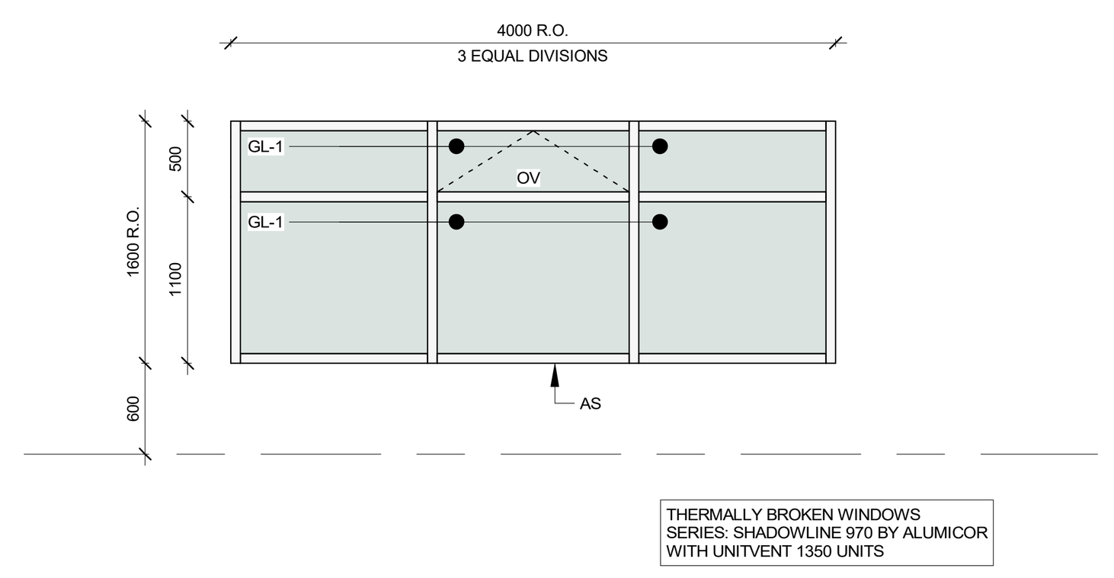
Project Information

J.J. O'Neill Catholic Elementary School - Addition / Renovation
240 Marilyn Ave., Napanee, ON K7R 2L4

For
Algonquin and Lakeshore Catholic District School Board

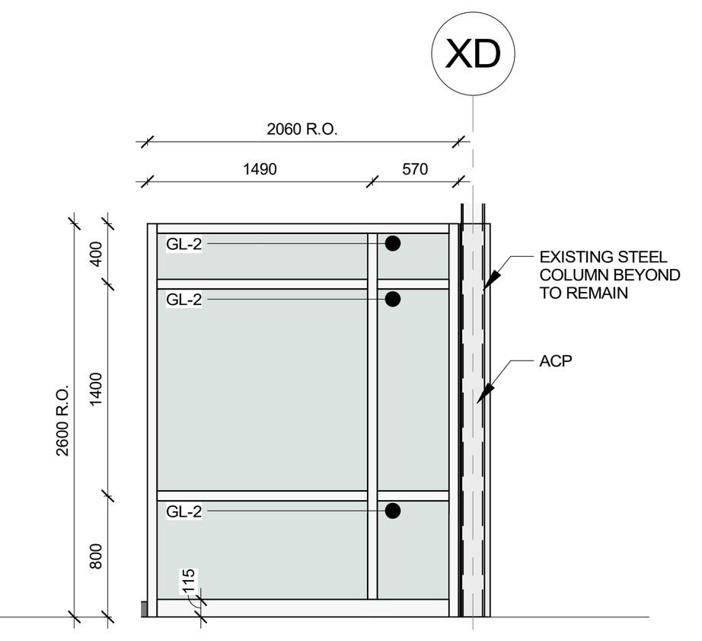
Drawing Title
Building Elevations

Date	Project No	Drawing No
04-25-2024	22026	A301
Drawn by: AB, JJ		
Scale: As indicated		



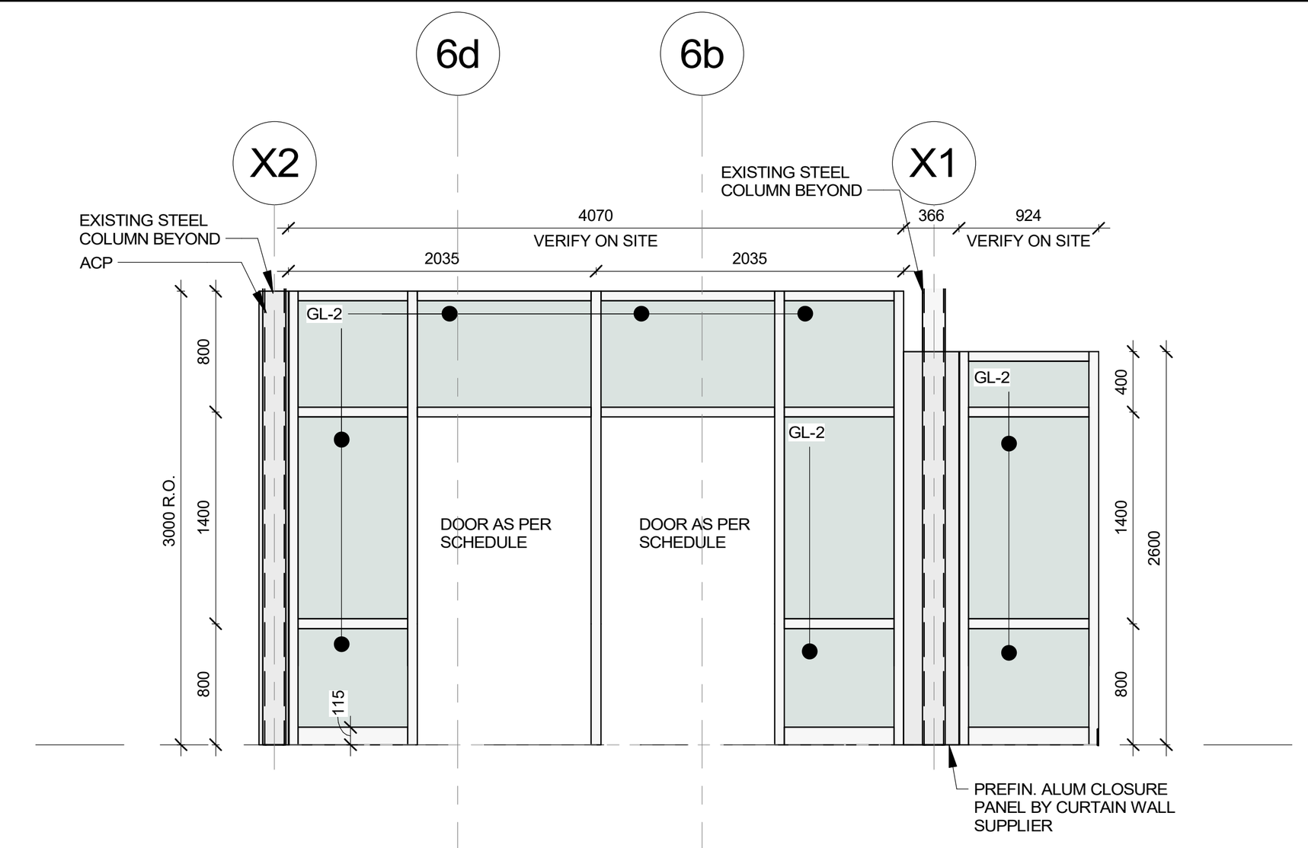
THERMALLY BROKEN WINDOWS
SERIES: SHADOWLINE 970 BY ALUMICOR
WITH UNITVENT 1350 UNITS

1 A304 CW19 - AL
1 : 50



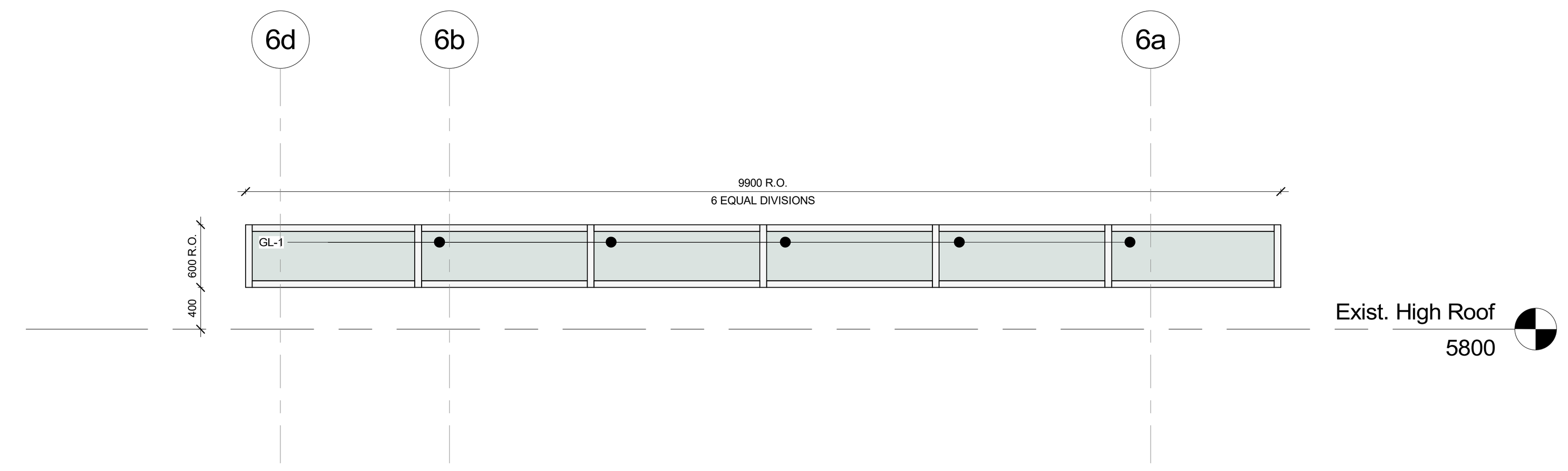
THERMALLY BROKEN FRAMES
SERIES: THERMAWALL 2600 BY
ALUMICOR

2 A304 CW20 - AL
1 : 50



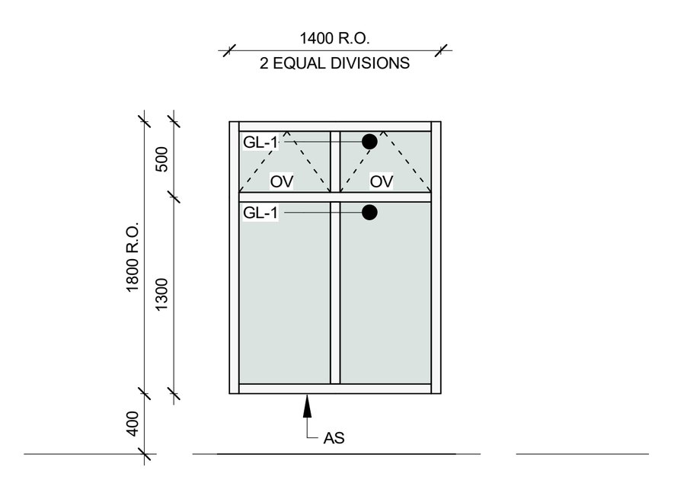
THERMALLY BROKEN FRAMES
SERIES: THERMAWALL 2600 BY
ALUMICOR

3 A304 CW21/22 - AL
1 : 50



THERMALLY BROKEN FRAMES
SERIES: THERMAWALL 2600 BY
ALUMICOR

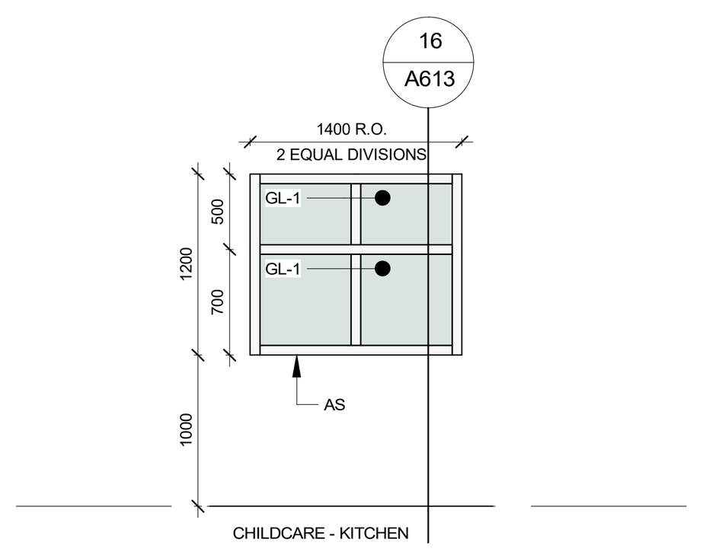
4 A304 CW23 - AL
1 : 50



SITE VERIFY R.O. AT EXISTING WINDOW OPENINGS
CHILDCARE CLASSROOMS

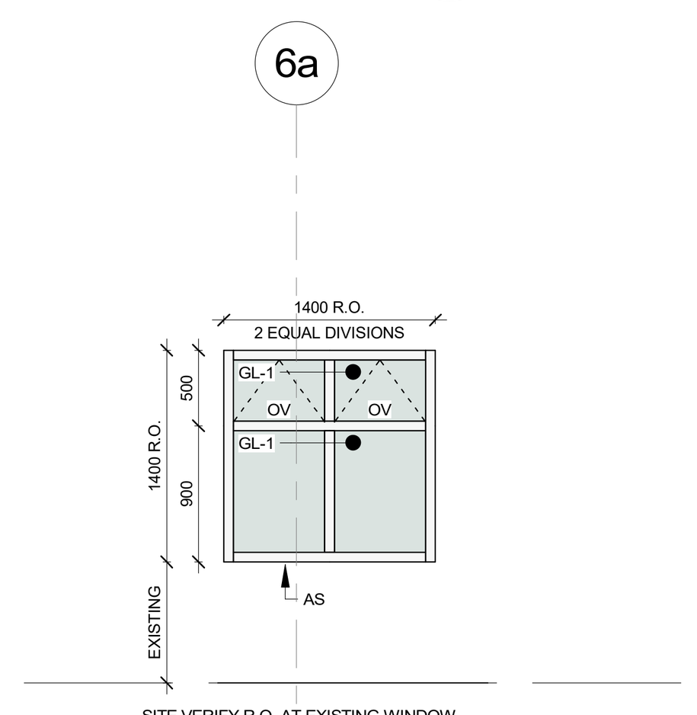
THERMALLY BROKEN WINDOWS
SERIES: RAINBLADE 1970 BY ALUMICOR
WITH UNIVENT 1350 UNITS

5 A304 W1 - AL
1 : 50



THERMALLY BROKEN WINDOWS
SERIES: RAINBLADE 1970 BY ALUMICOR

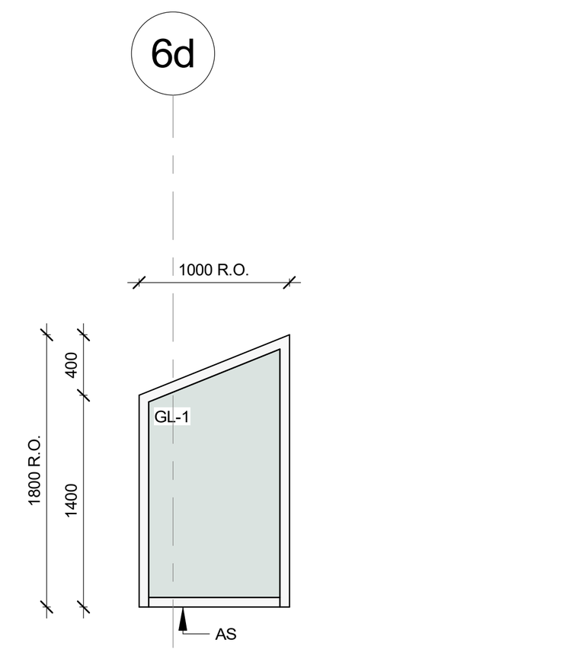
6 A304 W2 - AL
1 : 50



SITE VERIFY R.O. AT EXISTING WINDOW OPENINGS

THERMALLY BROKEN WINDOWS
SERIES: RAINBLADE 1970 BY ALUMICOR
WITH UNIVENT 1350 UNITS

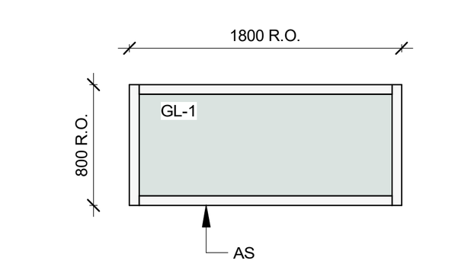
7 A304 W3 - AL
1 : 50



SITE VERIFY R.O. AT EXISTING WINDOW OPENINGS

THERMALLY BROKEN WINDOWS
SERIES: RAINBLADE 1970 BY ALUMICOR

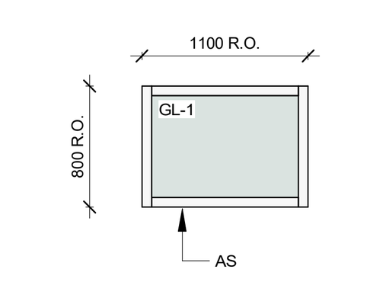
8 A304 W4 - AL
1 : 50



GYMNASIUM

THERMALLY BROKEN WINDOWS
SERIES: RAINBLADE 1970 BY ALUMICOR

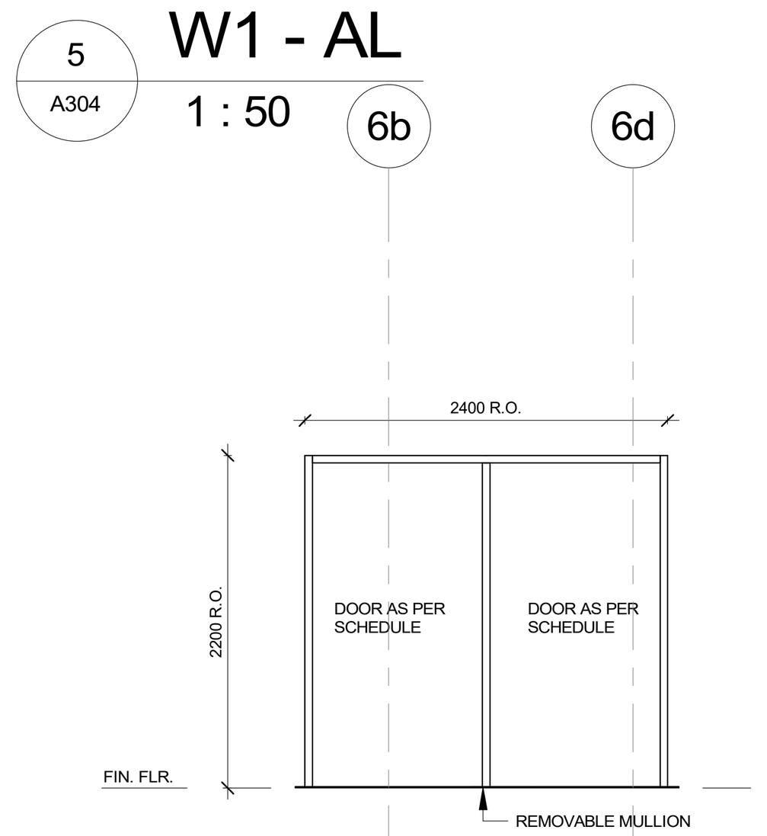
9 A304 W5 - AL
1 : 50



GYMNASIUM
WINDOW LENGTH TO BE CONFIRM WITH SPAN OF EXISTING OWSJ.

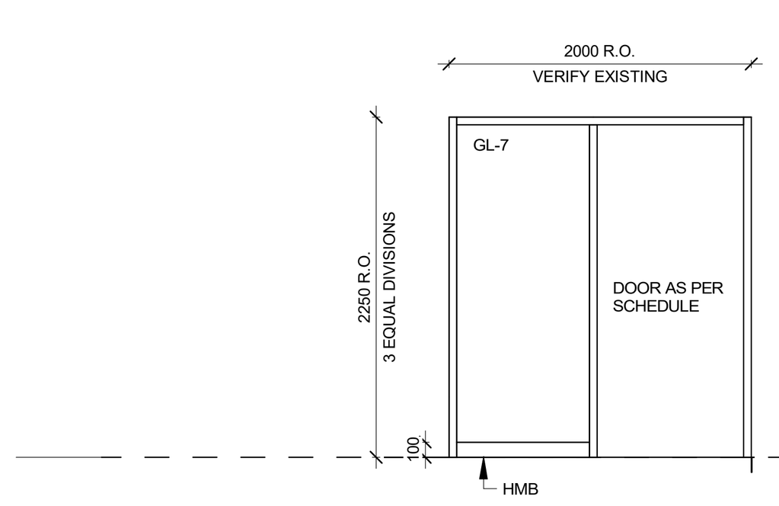
THERMALLY BROKEN WINDOWS
SERIES: RAINBLADE 1970 BY ALUMICOR

10 A304 W6 - AL
1 : 50



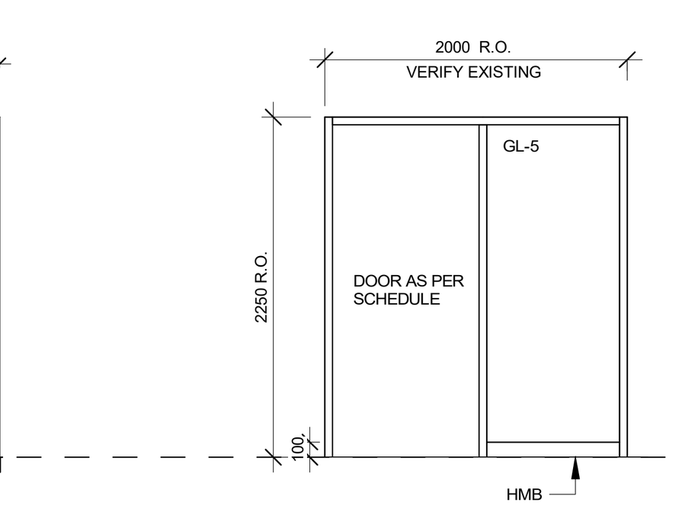
NON-RATED HOLLOW METAL FRAMES

11 A304 S001 - HM
1 : 50

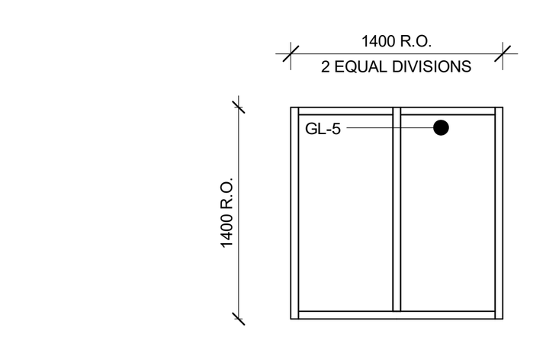


45min. RATED HOLLOW METAL FRAMES

12 A304 S002- HM
1 : 50

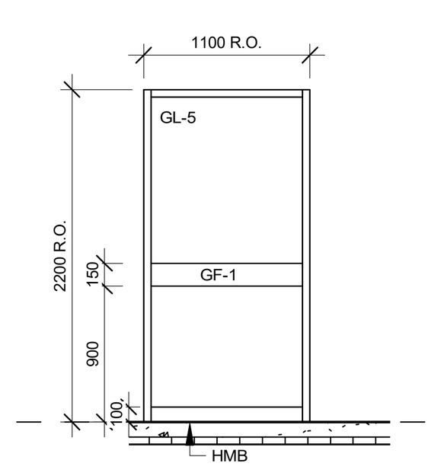


13 A304 S003 - HM
1 : 50



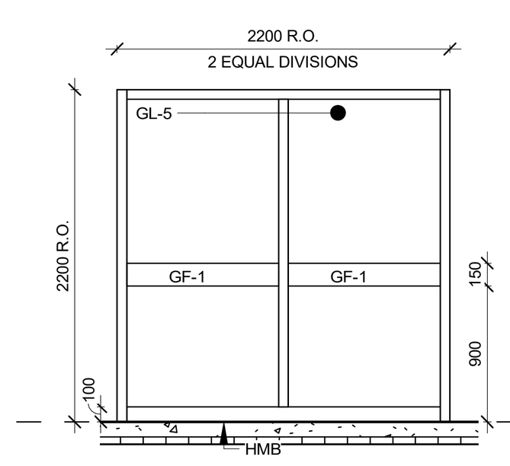
NON-RATED HOLLOW METAL FRAMES

14 A304 S004 - HM
1 : 50



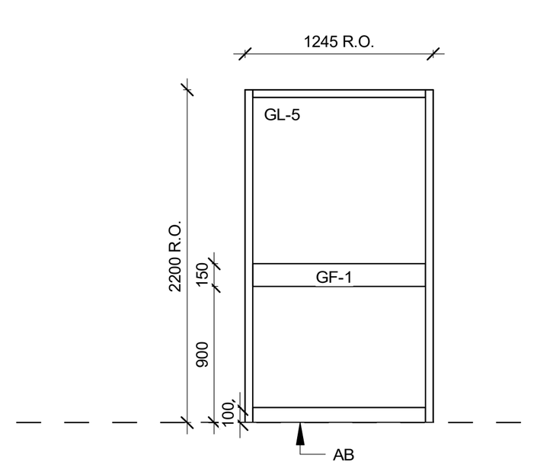
NON-RATED HOLLOW METAL FRAMES

15 A304 S005 - HM
1 : 50



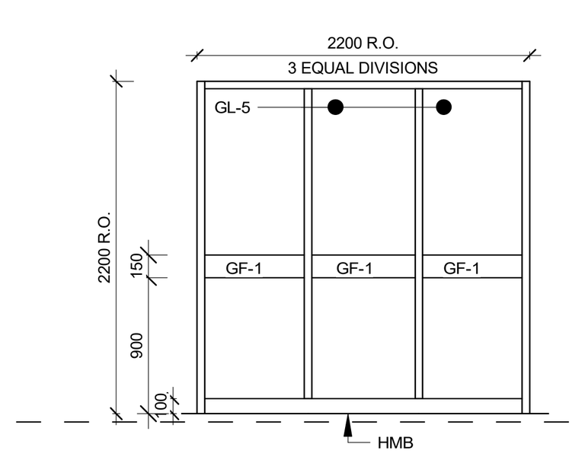
NON-RATED HOLLOW METAL FRAMES

16 A304 S006 - HM
1 : 50



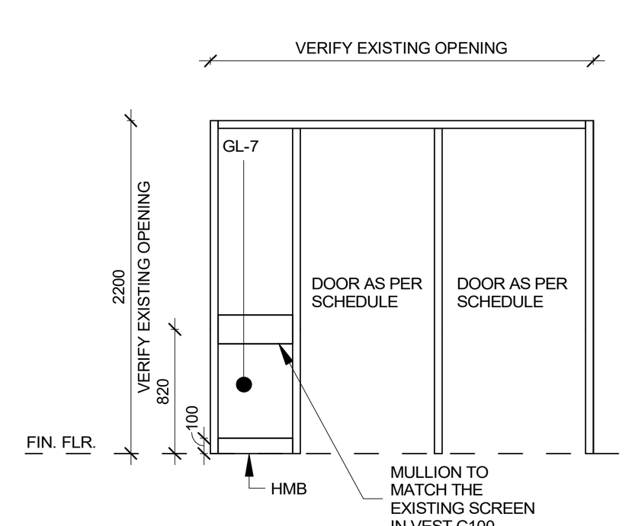
NON-RATED ALUMINUM FRAMES

17 A304 S007- AL
1 : 50



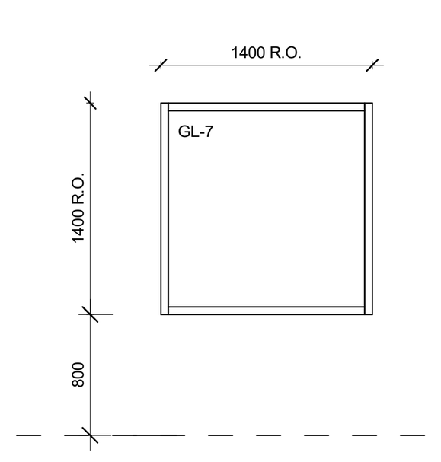
NON-RATED HOLLOW METAL FRAMES

18 A304 S008 - HM
1 : 50



45min. RATED HOLLOW METAL FRAMES

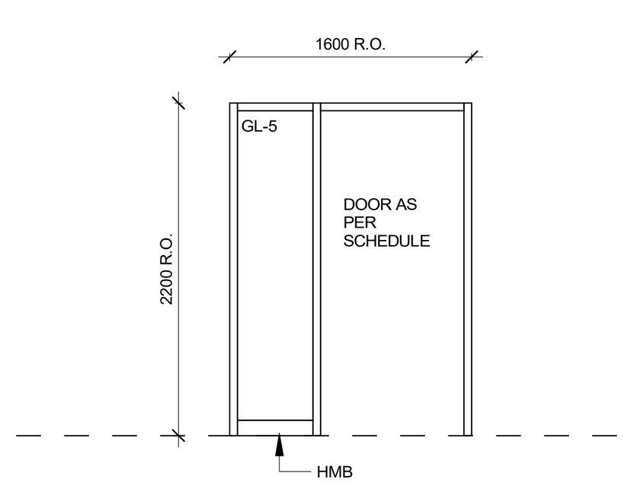
19 A304 SC001 - HM
1 : 50



MAIN OFFICE 101

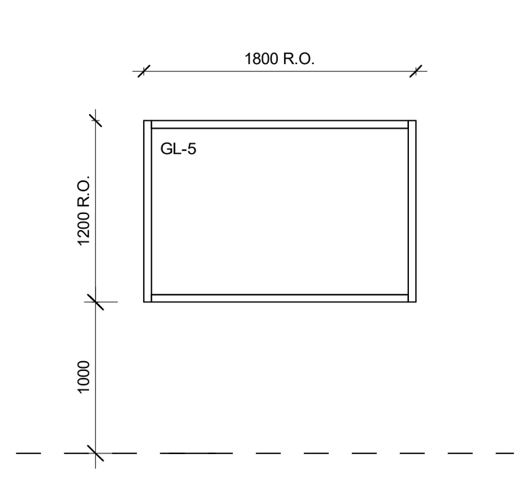
45min RATED HOLLOW METAL FRAME

20 A304 SC002 - HM
1 : 50



NON-RATED HOLLOW METAL FRAMES

21 A304 SC003 - HM
1 : 50

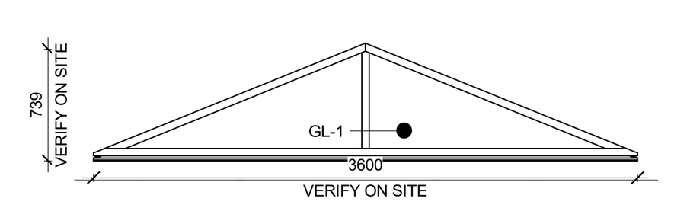


NON-RATED HOLLOW METAL FRAMES

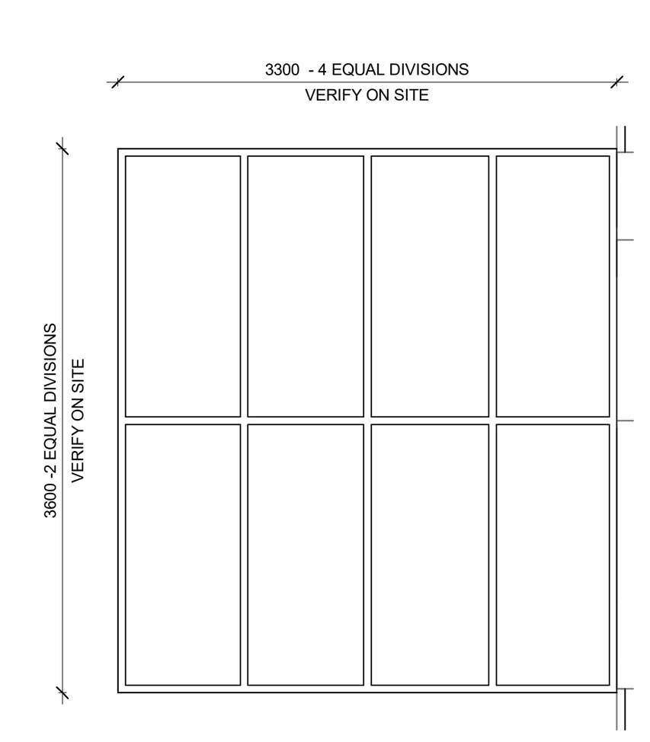
22 A304 SC004 - HM
1 : 50

SKYLIGHT REPLACEMENT TO MATCH EXISTING OPENING AND SHAPE.

6



23 A304 Skylight - Separate Price 1
1 : 50



24 A304 Skylight Plan - Spearate Price 1
1 : 50

PHOTO: EXISTING SKYLIGHT

Algonquin & Lakeshore Catholic District School Board

Ontario Builds

GENERAL NOTES:

1. FULLY SITE MEASURE & SITE VERIFY ALL OPENING DIMENSIONS BEFORE FABRICATION OF ANY UNITS. GC TO COORDINATE FRAME SIZES SHOWN WITH TOLERANCES AND CLEARANCES FOR ROUGH OPENINGS AS SPECIFIED BY THE MANUFACTURER.
2. SECURELY FASTEN THE HEADS OF ALL SCREENS TO THE STRUCTURE PROVIDED.
3. REFER TO FLOOR PLANS & ELEVATIONS FOR ALL LOCATIONS & QUANTITIES.
4. AT ALL IMR & IME LOCATIONS PROVIDE FOR DEFLECTION IN CONNECTION DETAIL.
5. REFER TO SPECIFICATION SECTION 08 44 00 - ALUMINUM WORK, FOR MULLION, EXTRUSION, DOOR, PANEL AND SHEET FINISHES.
6. REFER TO 'SCREEN WALL - SIMILAR TYPE SCHEDULE' FOR SIZES OF SIMILAR SCREEN WALL ASSEMBLIES THAT ARE NOT SPECIFICALLY DEPICTED IN ELEVATION VIEW.
7. REFER TO 'SCREEN WALL - FIRE SEP SCHEDULE' & 'A201 - FIRE SEPARATION KEY PLANS, LEGENDS & DETAILS' FOR REQUIRED FIRE SEPARATION RATINGS FOR THE GLAZED WALL ASSEMBLIES LOCATED WITHIN A FIRE SEPARATION
8. GLAZED WALL ASSEMBLIES LOCATED IN FIRE SEPARATIONS ARE TO BE PROVIDED WITH SPRINKLER PROTECTION (BY OTHERS) FOR THE FULL DURATION OF THE REQUIRED F.R.R.

ABBREVIATIONS:

AB	- ALUMINUM BASE
AL	- ALUMINUM
AP	- ALUMINUM PANEL
AR	- ALUMINUM RAIL
AS	- ALUMINUM SILL
ACP	- ALUMINUM CORNER PANEL
ASP	- ALUMINUM SPANDREL PANEL
DO	- DOOR OPERATOR
DA	- DOOR ADAPTOR
GSP	- GLASS SPANDREL PANEL
HMB	- HOLLOW METAL BASE
HMP	- HOLLOW METAL PANEL
IAP	- INSULATED ALUMINUM PANEL
IME	- INTERNAL MULLION EXTENSION
IMR	- INTERNAL MULLION REINFORCING
OV	- OPENING VENT C/W INSECT SCREEN
RCM	- REMOVABLE CENTER MULLION
RO	- ROUGH OPENING
SSG	- STRUCTURAL SILICONE GLAZING
T	- THERMALLY BROKEN THRESHOLD
VIS	- VISUAL IMPEDIMENT STRIP

REFER TO SPECIFICATION SECTION 08 80 00 --GLAZING FOR GL TYPES.

GLAZING TYPE LEGEND:

GL-1 (TYPICAL INSULATED EXTERIOR):
6mm CLEAR TEMPERED EXTERIOR LITE,
LOW-E COATING ON SURFACE #2,
ARGON FILLED AIR SPACE,
6mm CLEAR TEMPERED INTERIOR LIGHT,
25mm OVERALL THICKNESS.

GL-2 (TYPICAL AT ENTRANCE DOORS)
6mm CLEAR TEMPERED EXTERIOR LITE,
LOW-E COATING ON SURFACE #2,
ARGON FILLED AIR SPACE, 7mm CLEAR
LAMINATED SAFETY GLASS INTERIOR LITE,
25mm OVERALL THICKNESS.

GL-3: 6mm THICK SPANDREL GLASS WITH
GALVANIZED METAL BACK-PAN FILLED
WITH SEMI-RIGID INSULATION.
PROVIDE PREFIN. ALUMINUM PANEL
TO MATCH C.W. FRAMES AT ALL
EXPOSED BACK-PAN LOCATIONS

GL-4: 6mm CLEAR TEMPERED GLASS

GL-5: 6mm CLEAR TEMPERED/LAMINATED GLASS

GL-6: 12mm STRUCTURAL GLASS

GL-7: 5mm FIRE RATED GLASS

No.	Revision	Date
6	Issued for Addendum No. 6	04-25-2024
5	Issued for Tender & Permit	03-26-2024
4	Issued for Client Review	12-11-2023
3	Issued for Costing	10-02-2023
2	Issued for Coordination	08-16-2023
1	Issued for 90% CD	07-31-2023

Orientation

Seal

ONTARIO ASSOCIATION OF ARCHITECTS
GERRY P. PILON
LICENCE
5042

All dimensions to be checked and verified on the job by the Contractor. Any discrepancies are to be reported to the Consultant prior to action. Only the latest approved drawings to be used for construction in conformance with all applicable codes, by-laws and regulations. All drawings remain the property of the Consultant.

salterpilon architecture

151 Ferris Lane, Suite 400
Barrie, Ontario L4M 6C1
salterpilon.com
t: 705.737.3530

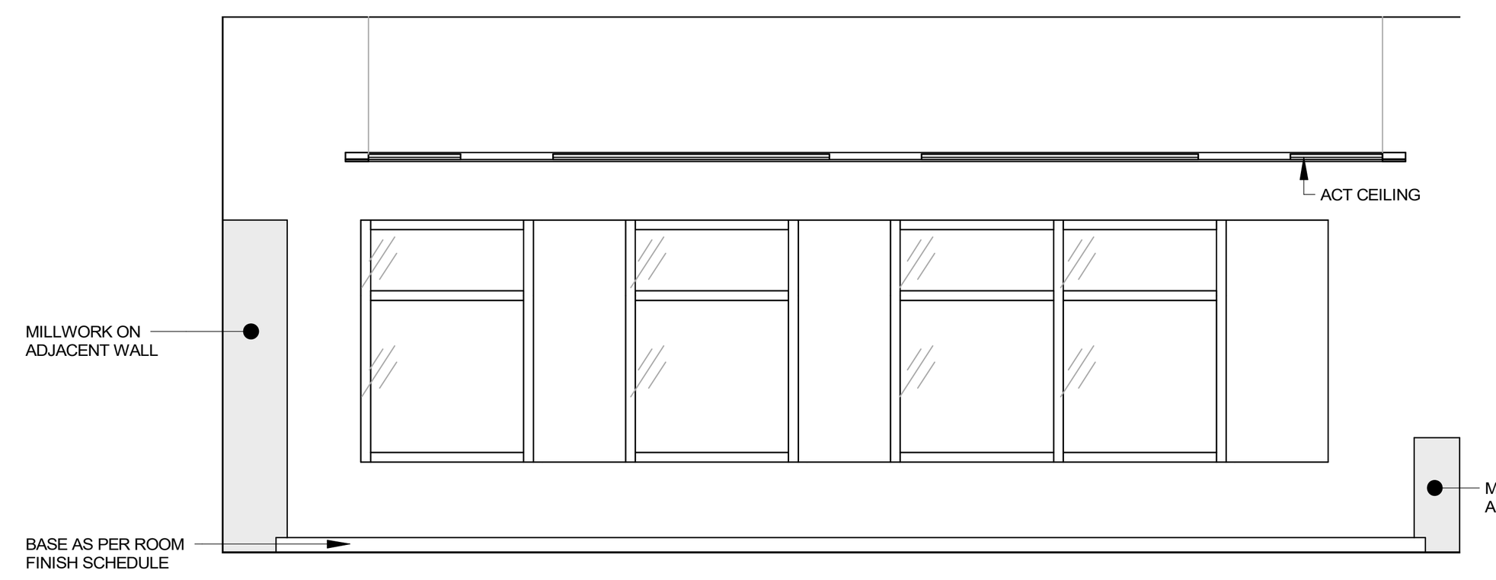
Project Information
J.J. O'Neill Catholic Elementary School - Addition / Renovation
240 Marilyn Ave., Napanee, ON K7R 2L4

For
Algonquin and Lakeshore Catholic District School Board

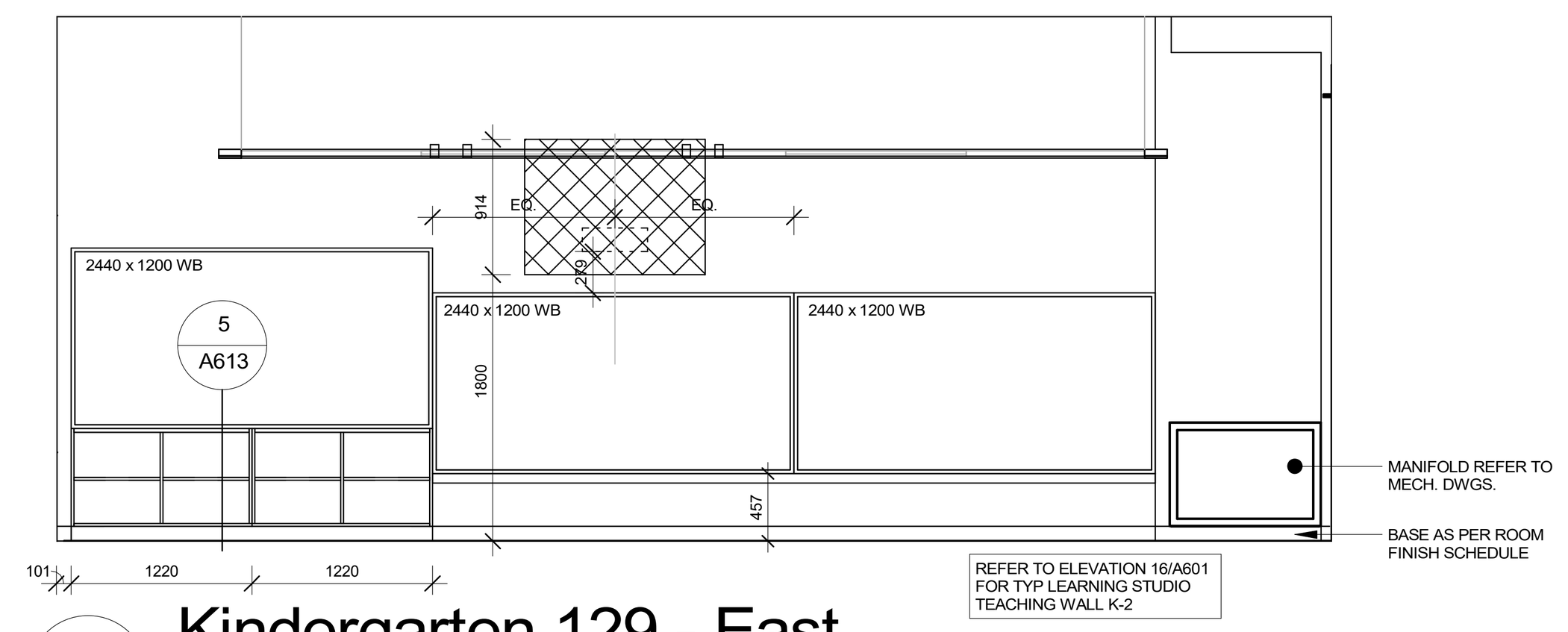
Drawing Title
Window & Interior Screen Elevation

Date	Project No	Drawing No
04-25-2024	22026	A304
Drawn by AB, JJ		
Scale As indicated		

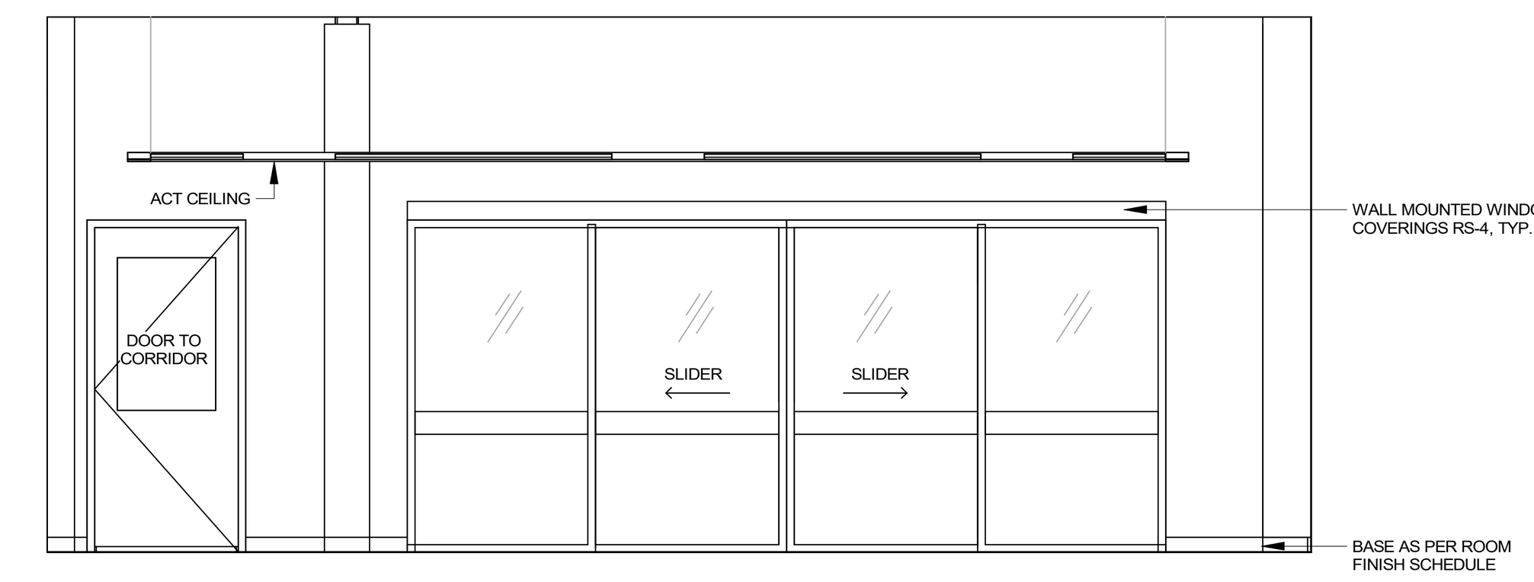
BIM 360://22026 - JJ O'Neill CES/22026 - JJ O'Neill CES.rvt
2024-04-25 4:02:12 PM



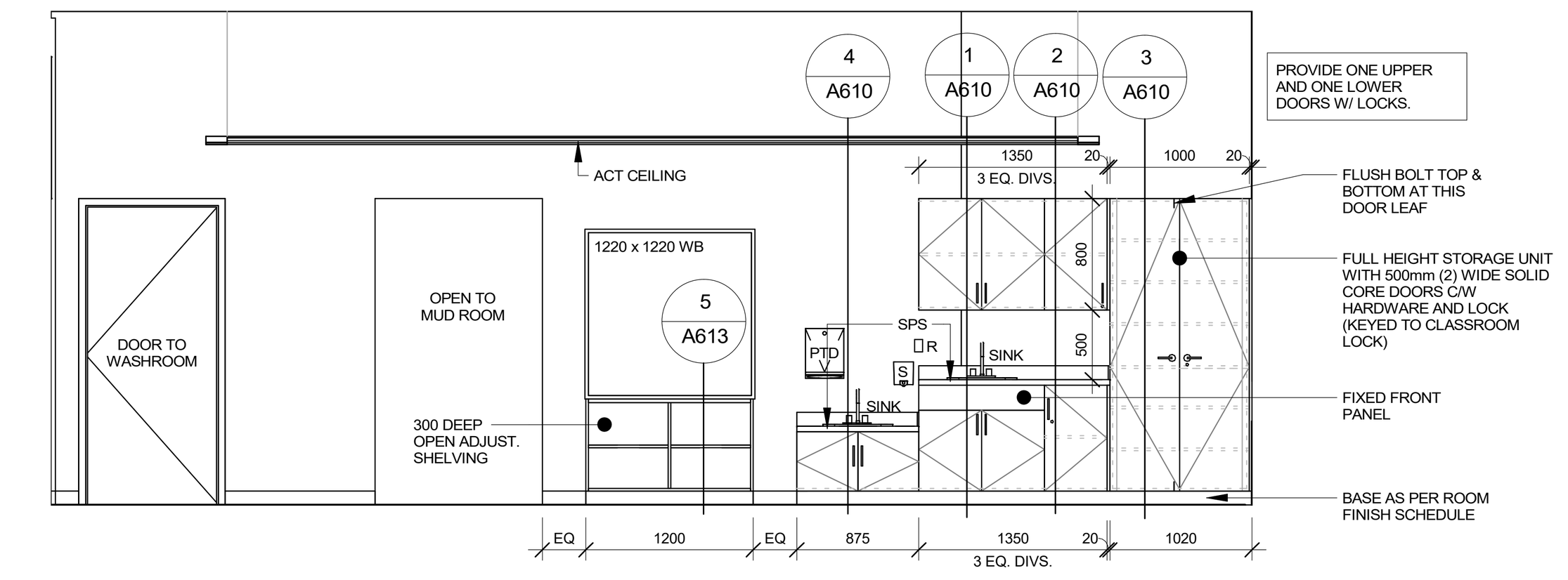
1 A601 Kindergarten 129 - North
1 : 50



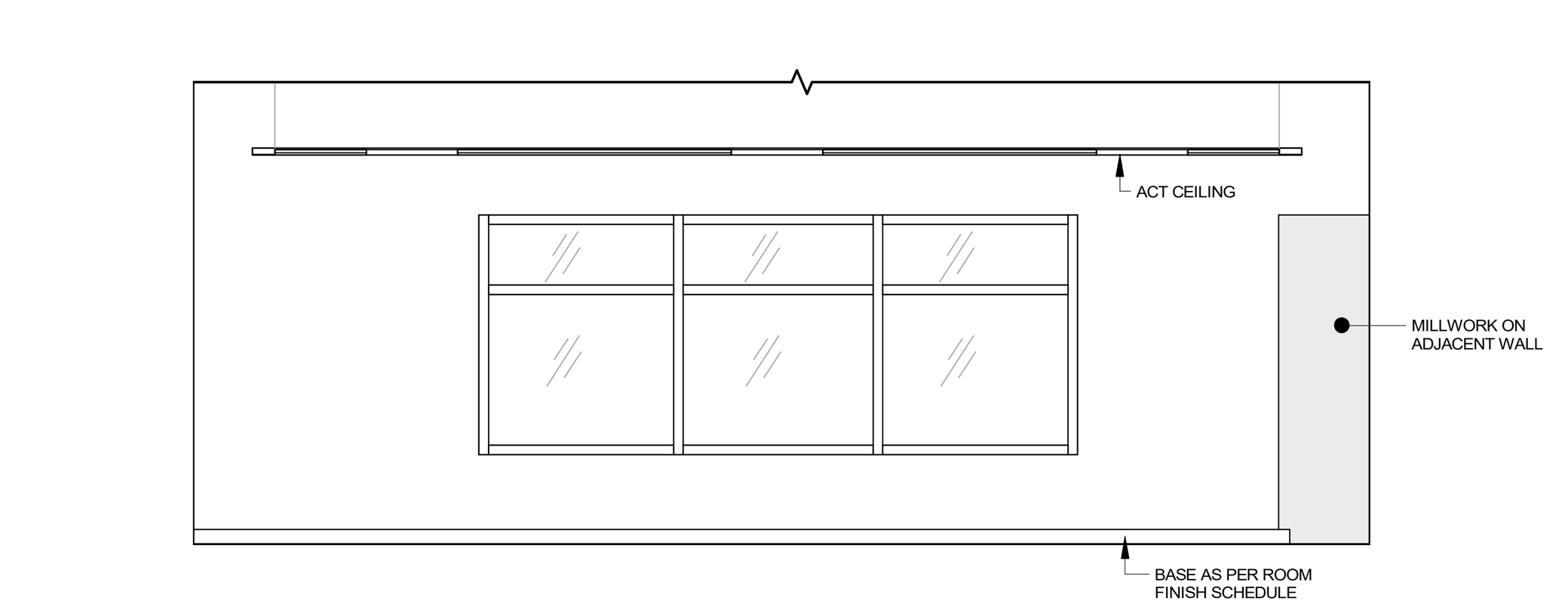
2 A601 Kindergarten 129 - East
1 : 50



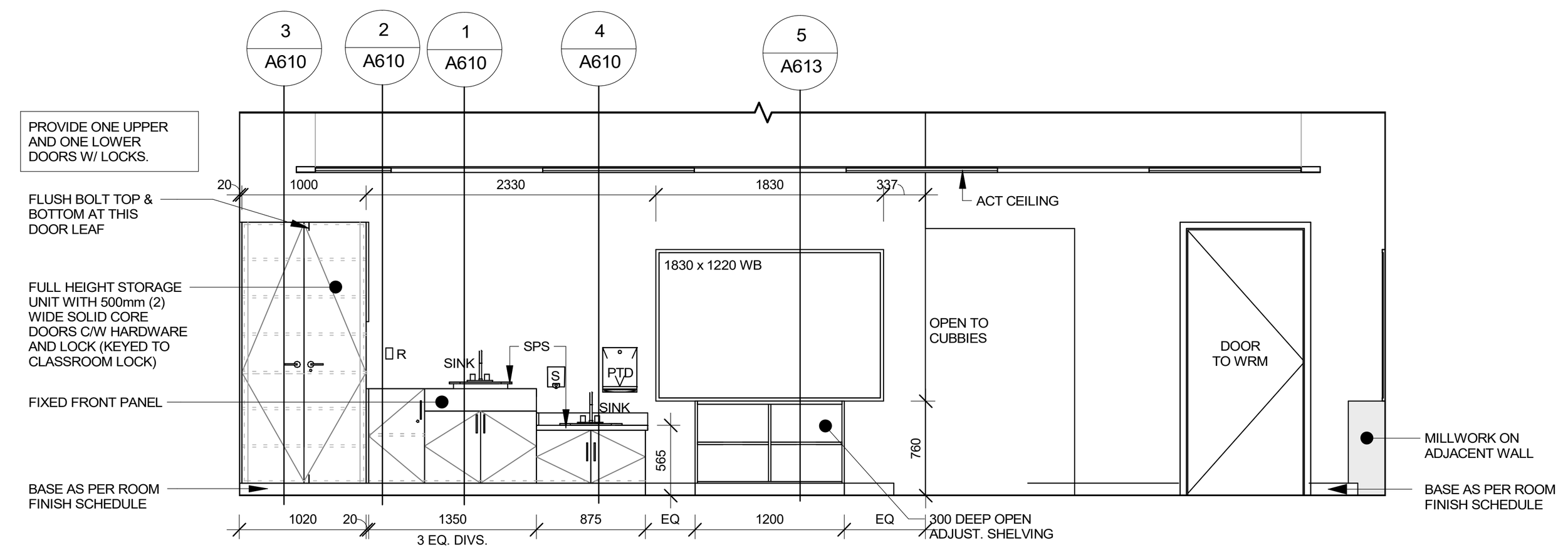
3 A601 Kindergarten129 - South
1 : 50



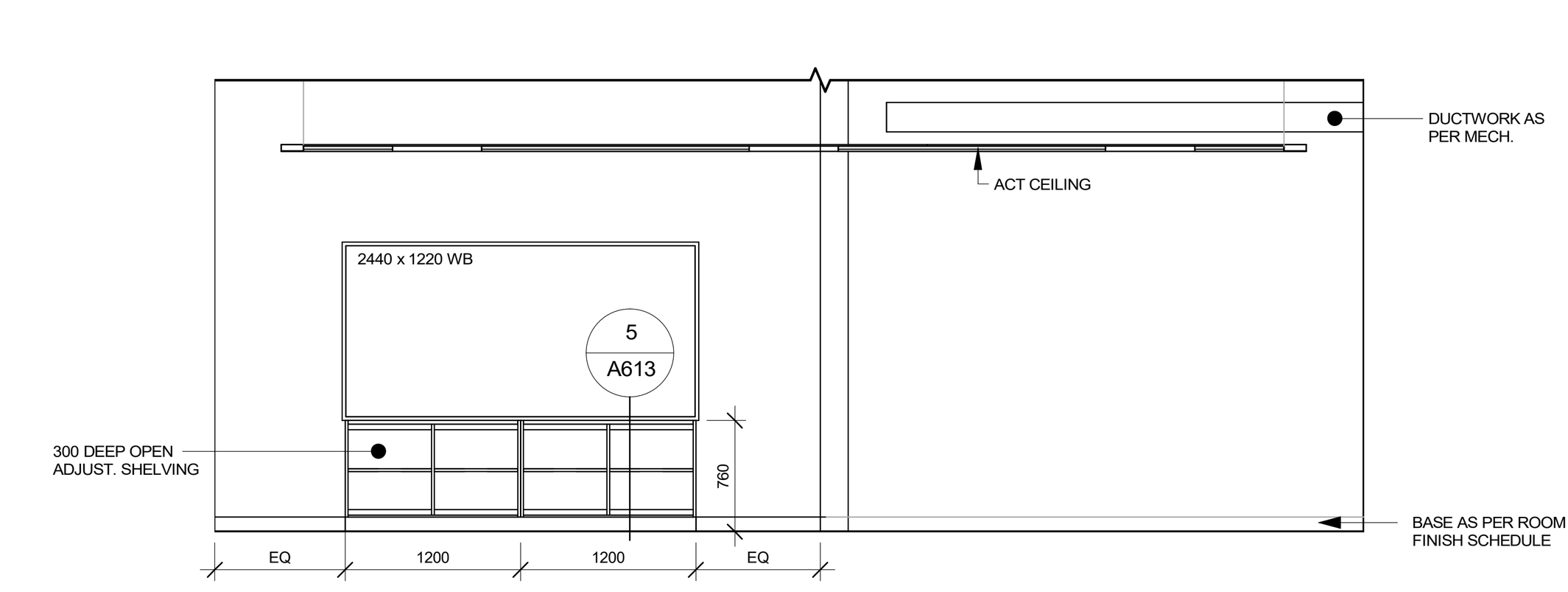
4 A601 Kindergarten 129 - West
1 : 50



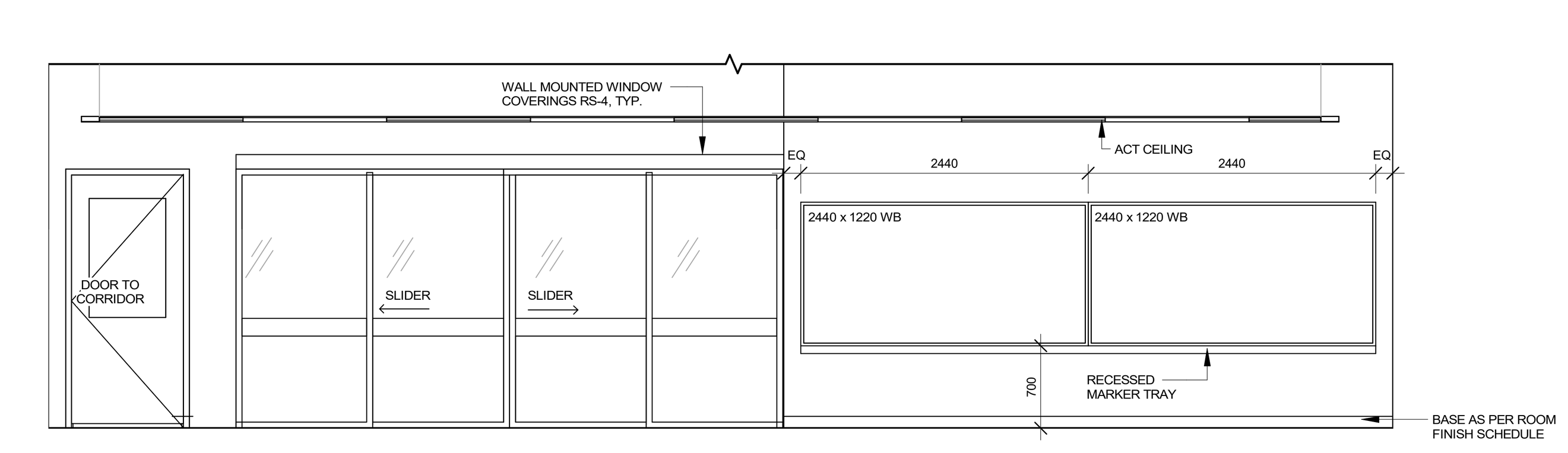
5 A601 Kindergarten 125 - North
1 : 50



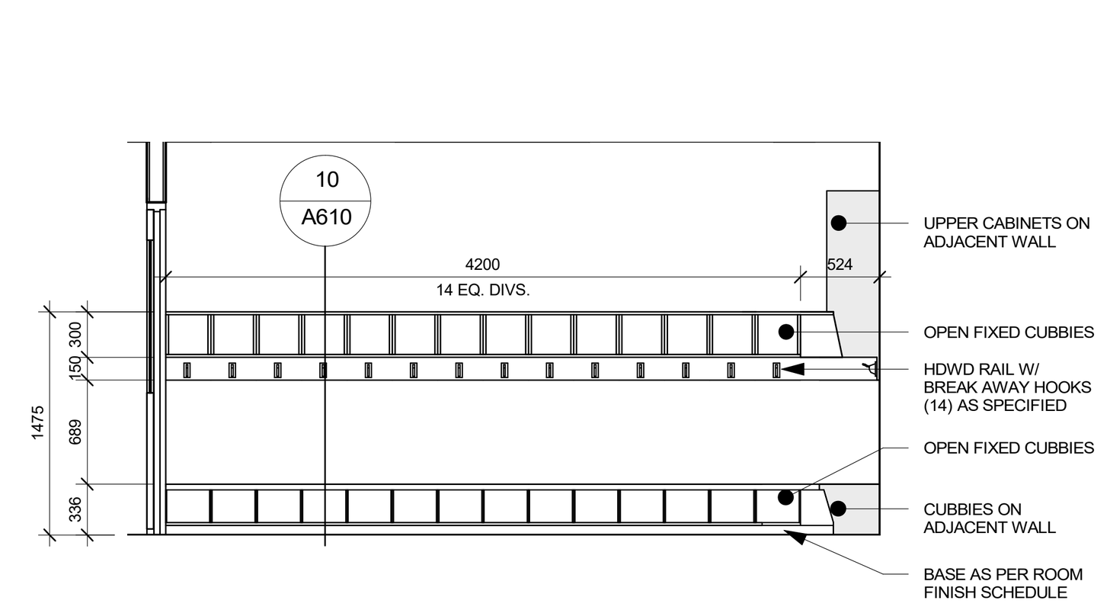
6 A601 Kindergarten 125 - East
1 : 50



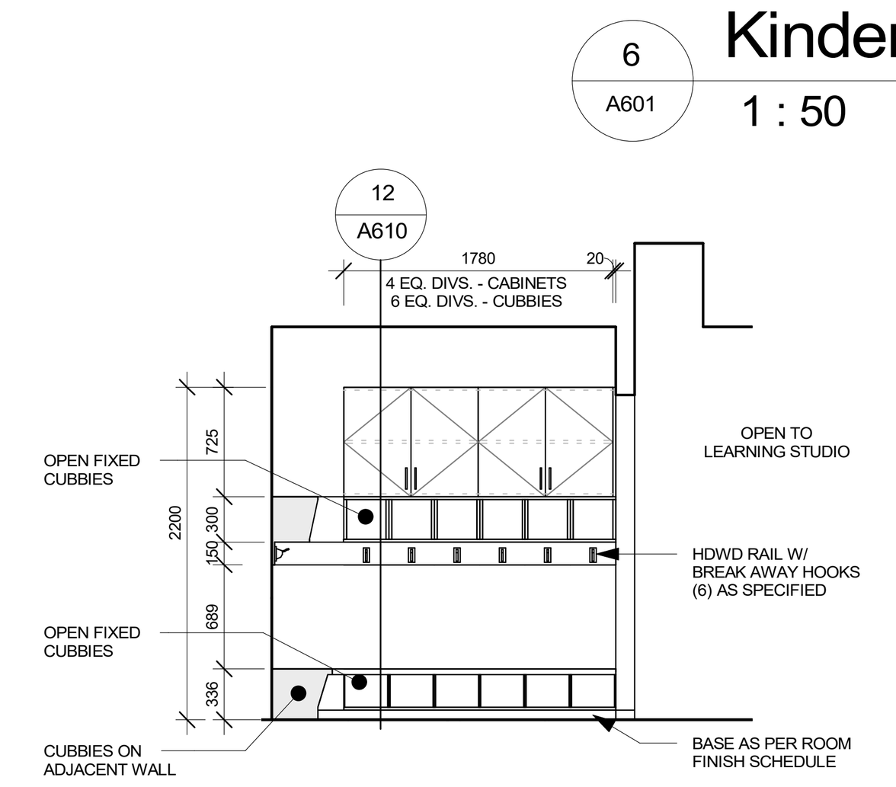
7 A601 Kindergarten 125 - South
1 : 50



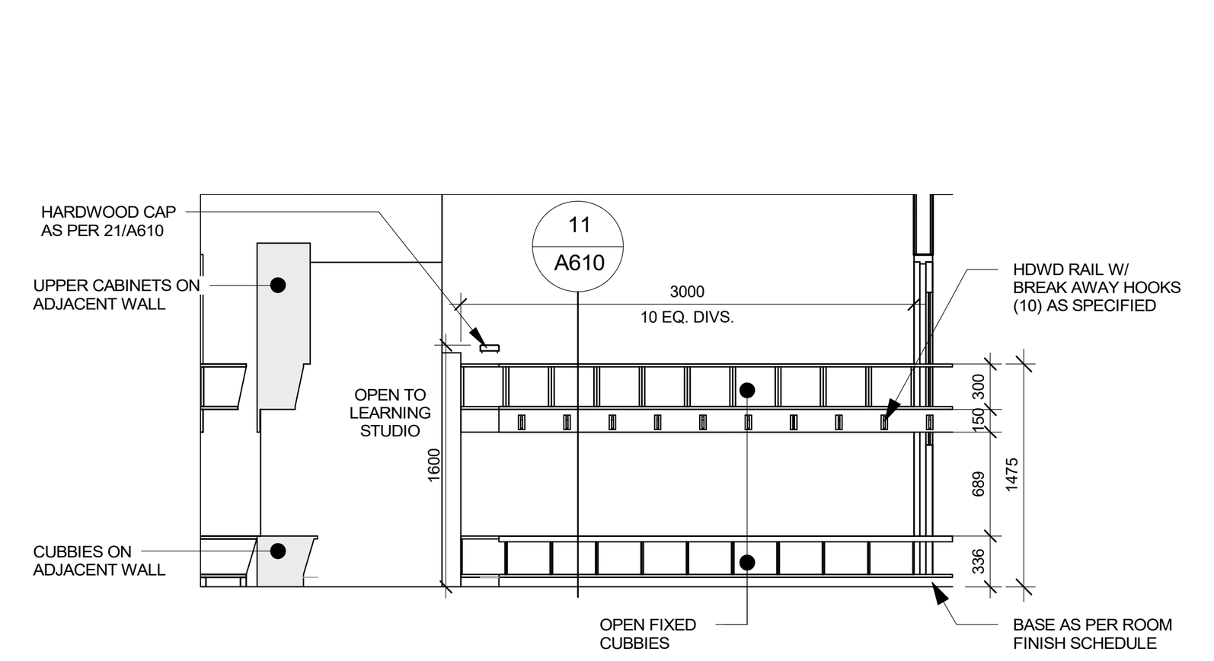
8 A601 Kindergarten 125 - West
1 : 50



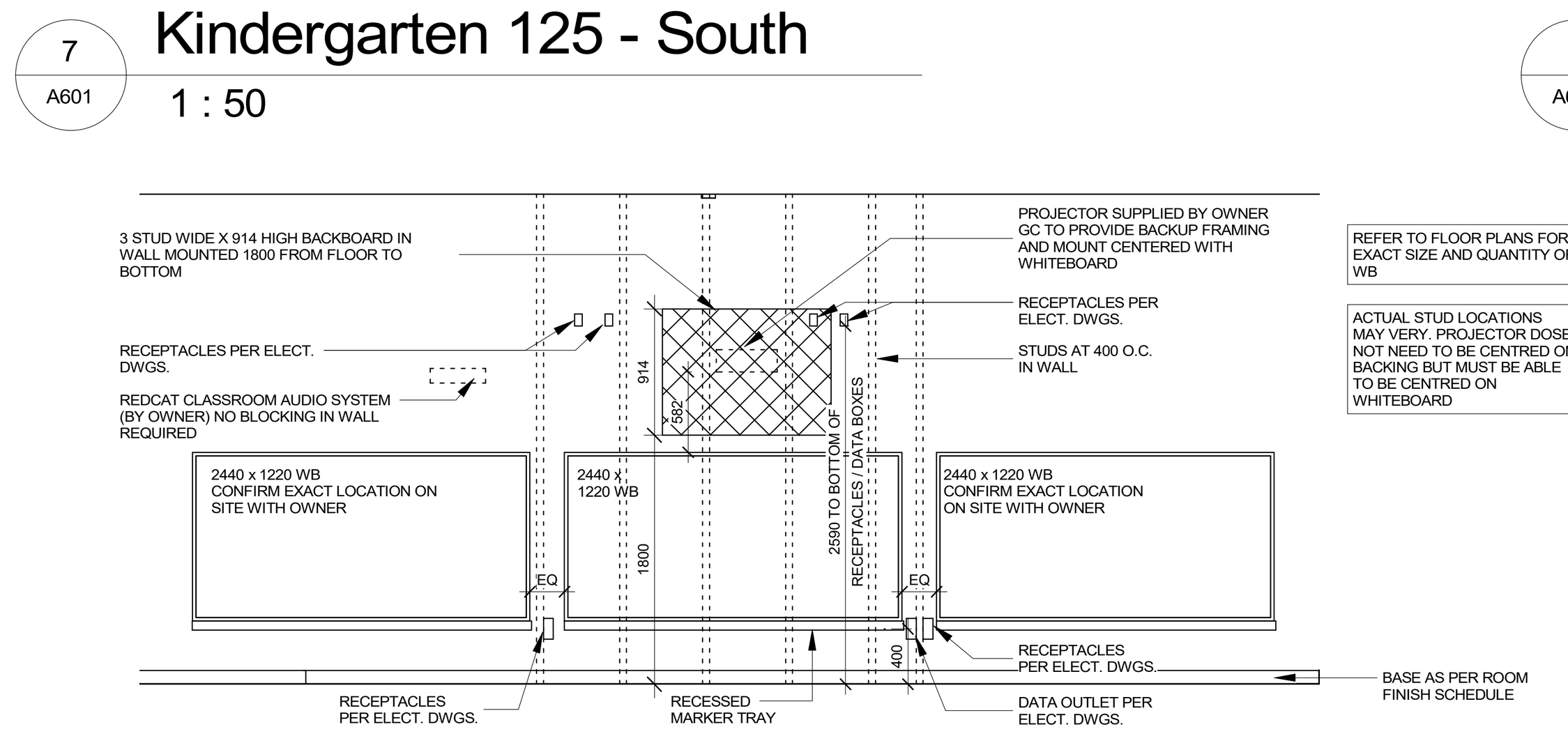
9 A601 Mud Room 125B - East
1 : 50



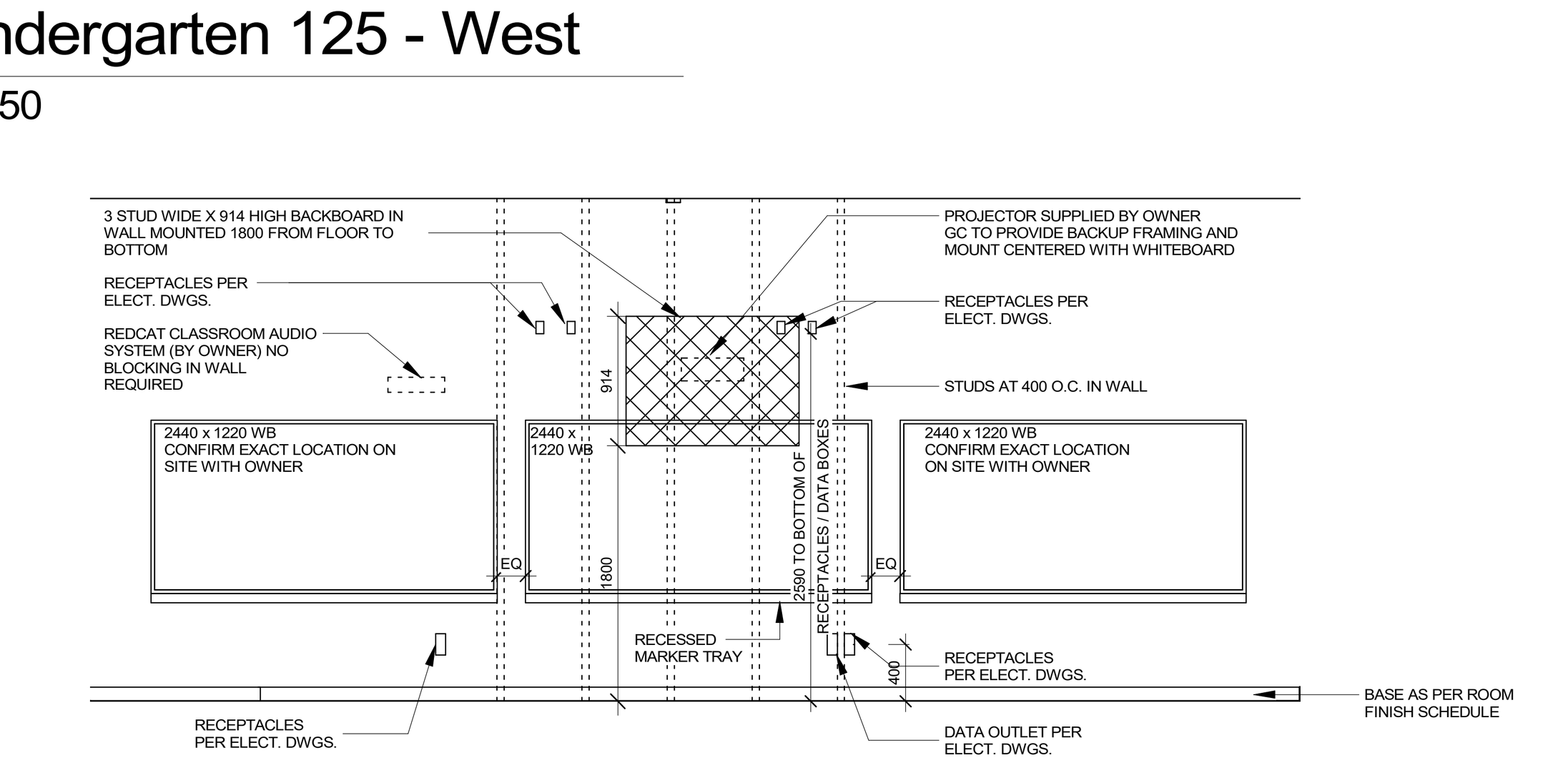
10 A601 Mud Room 125B - South
1 : 50



11 A601 Mud Room 125B - West
1 : 50



16 A601 Learning Studio Teaching Wall K-2
1 : 50



17 A601 Learning Studio Teaching Wall 3-8
1 : 50

9

Door & Frame Schedules Final

Location	NUMBER	Type	Size (WxHXT)	Material	Finish	Glazing	Door F.R.R.	Frame Profile	Frame Finish	Frame Material	Frame F.R.R.	HDWR	REMARKS
	Door Schedule							Frame Schedule					
Exist. Low Roof													
Mechanical to Exterior	201M	B	1000 x 1100 x 45	HM	PT	-	-	6	PT	HM	-	SEE HS	Provide closer, threshold & weather stripping
Level 1 Floor Plan													
Main Vestibule	100A	A1	1000 x 2150 x 57	AL	FF	GL-2	-	1	FF	AL		SEE HS	CW-21, TB DOOR & FRAME, MAIN ENTRANCE DOORS
Main Vestibule	100B	A1	1000 x 2150 x 57	AL	FF	GL-2	-	1	FF	AL		SEE HS	CW-21, BFPB, EXIST. FOB, TB DOOR & FRAME, MAIN ENTRANCE DOORS
Main Vestibule	100C	C	950 x 2150 x 45	HM	PT	GL-5	-	5	PT	HM		SEE HS	BFPB
Main Vestibule	100D	C	1125 x 2150 x 45	HM	PT	GL-5	-	5	PT	HM		SEE HS	SCREEN S001
Main Vestibule	100E	C	1125 x 2150 x 45	HM	PT	GL-5	-	5	PT	HM		SEE HS	SCREEN S001, BFPB
Main Office	101	C	950 x 2150 x 45	HM	PT	GL-7	45 MIN	4A	PT	HM	45 MIN	SEE HS	SCREEN S002, BFPB
Exterior from Office	101A	EX.	EX.	EX.	PT	-		EX.	PT	EX.		EX.	EXIT ONLY
Office	102	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Office	103	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Copy Room	104	-	1500 x 2200 x -	-	-	-	-	-	-	-	-	-	Opening
Sprinkler	105	B	950 x 2150 x 45	HM	PT	-	45 MIN	3	PT	HM	45 MIN	SEE HS	FRR 45
Storage	106	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
Office	107	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Office	108	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
WR	109	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
Electrical	110	B	950 x 2150 x 45	HM	PT	-	45 MIN	4	PT	HM	45 MIN	SEE HS	FRR 45
Principal	111	C	950 x 2150 x 45	HM	PT	GL-5		3/4A	PT	HM		SEE HS	
Seminar/Mtg	112	C	950 x 2150 x 45	HM	PT	GL-5		4A	PT	HM		SEE HS	
Teaching Kitchen	114	E	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Teaching Kitchen	114A	F2	2508 X 2150	AL	FF	GL-5			FF	AL		-	PC350 WITH VISUAL STRIP GF-1
Universal WR	115	B	950 x 2150 x 45	HM	PT	-		4A	PT	HM		SEE HS	
WR	116	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
WR	117	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
Gym	118A	E	2-1000 x 2150 x 45	HM	PT	GL-7	45 MIN	4A	PT	HM	45 MIN	SEE HS	BFPB. FFR 45, REMOVABLE MULLION
Gym	118B	E	950 x 2150 x 45	HM	PT	GL-7	45 MIN	4A	PT	HM	45 MIN	SEE HS	FFR 45
Gym Exterior	118CX	EX.	EX.	EX.	PT	EX.	-	EX.	PT	EX.		EX.	EXISTING DOOR & FRAME, NEW PAINT
Gym Storage	119A	B	2-900 x 2150 x 45	HM	PT	-	-	4A	PT	HM	-	SEE HS	NO MULLION
Gym Storage	119X	EX.	EX.	EX.	PT	EX.	EX.	EX.	PT	EX.		EX.	EXISTING DOOR & FRAME, NEW PAINT
Existing Storage Ext.	120X	EX.	EX.	EX.	PT	EX.	EX.	EX.	PT	EX.		EX.	EXISTING DOOR & FRAME, NEW PAINT
Hall into NEW Addition	122	C	2-900 x 2150 x 45	HM	PT	GL-5	-	4A	PT	HM		SEE HS	HOD, NO MULLION
Elevator	123												Refer to specifications
Elevator Control	124	B	950 x 2150 x 45	HM	PT	-	45 MIN	4	PT	HM		SEE HS	FRR 45
Classroom	125	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
WR	125A	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
Vest.	125B	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Vest. Exterior	125C	C1	950 x 2150 x 45	HM	PT	GL-1		5	PT	HM		SEE HS	EXTERIOR
PC350	125D	F4	4643 x 2150	HM	FF	GL-5			FF	AL			PC350 WITH VISUAL STRIP GF-1
Stair A-1	126	C	2-900 x 2150 x 45	HM	PT	GL-7	45 MIN	4A	PT	HM		SEE HS	
Stair Storage	126A	B	950 x 2150 x 45	HM	PT	-	45 MIN	4	PT	HM		SEE HS	
Stair	126B	C1	950 x 2150 x 45	HM	PT	GL-1		5	PT	HM		SEE HS	EXTERIOR EXIT ONLY
Stair Storage	126C	B	950 x 2150 x 45	HM	PT	-		5					EXTERIOR SERVICE DOOR
Calm	128	D	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	***
Classroom	129	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
WR	129A	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
Vest.	129B	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Vest. Exterior	129C	C1	1000 x 2150 x 45	HM	PT	GL-1		5	PT	HM		SEE HS	EXTERIOR
PC350	129D	F1	5017 x 2150	AL	FF	GL-5			FF	AL			PC350 WITH VISUAL STRIP GF-1
Universal WR	130	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	BFPB, PTLB
Storage	131	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
Group Room	132	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Group Room	133	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
IT	134	B	950 x 2150 x 45	HM	PT	-	45 MIN	3	PT	HM	45 MIN	SEE HS	FRR 45
Prof. Collab	135	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Classroom	136	C	950 x 2150 x 45	HM	-	GL-5		3	PT	HM		SEE HS	
WR	136A	B	950 x 2150 x 45	HM	-	-		3	PT	HM		SEE HS	
Vest.	136B	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Vest. Exterior	136C	C1	950 x 2150 x 45	HM	PT	GL-1		5	PT	HM		SEE HS	EXTERIOR
PC350	136D	F1	5017 x 2150	AL	FF	GL-5			FF	AL			PC350 WITH VISUAL STRIP GF-1
Classroom	138	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
PC350	138A	F1	5017 x 2150	AL	FF	GL-5			FF	AL			PC350 WITH VISUAL STRIP GF-1
Classroom	139	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
PC350	139A	F1	5017 x 2150	AL	FF	GL-5			FF	AL			PC350 WITH VISUAL STRIP GF-1
Group Room	140	C	950 x 2150 x 45	HM	PT	GL-5			PT	HM		SEE HS	
Hall	141	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Cust	141A	B	1000 x 2150 x 45	HM	PT	-	45 MIN	4	PT	HM	45 MIN	SEE HS	FRR 45
WR	141B	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
WR	141C	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
WR	141D	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
Cust	141E	B	1000 x 2150 x 45	HM	PT	-		5	PT	HM		SEE HS	EXTERIOR SERVICE DOOR
Stair	142	B	950 x 2150 x 45	HM	PT	GL-7	45 MIN	4A	PT	HM	45 MIN	SEE HS	
Stair	142A	C1	1000 x 2150 x 45	HM	PT	GL-1		5	PT	HM		SEE HS	
WR BF	143	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
Prof. Collab	145	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Classroom	146	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
PC350	146A	F1	5017 x 2150	AL	FF	GL-5			FF	AL			PC350 WITH VISUAL STRIP GF-1
Group Room	147	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Classroom	148	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
PC350	148B	F1	5017 x 2150	AL	FF	GL-5			FF	AL			PC350 WITH VISUAL STRIP GF-1
Classroom	149	C	950 x 2150 x 45	HM	PT	GL-5		4A	PT	HM		SEE HS	
PC350	149A	F1	5017 x 2150	AL	FF	GL-5			FF	AL			PC350 WITH VISUAL STRIP GF-1
Stair	152	C	950 x 2150 x 45	HM	PT	GL-7		4A	PT	HM		SEE HS	BFPB
Stair	152A	C1	1000 x 2150 x 45	HM	PT	GL-1		5	PT	HM		SEE HS	EXTERIOR, BFPB
Stair	152B	C1	1000 x 2150 x 45	HM	PT	GL-1		5	PT	HM		SEE HS	EXTERIOR, BFPB
Storage	153	B	950 x 2150 x 45	HM	PT	-		5	PT	HM		SEE HS	EXTERIOR
Level 2 Floor Plan													
Hall into NEW Addition	200	C	950 x 2150 x 45	HM	PT	GL-5	45 MIN	5	PT	HM	45 MIN	SEE HS	HOD, FRR 45
Vest.	201A	B	950 x 2150 x 45	HM	PT	-		4	PT	HM		SEE HS	
Vest. Exterior	201B	B	950 x 1650 x 45	HM	PT	-		7/A203	PT	HM		SEE HS	
Sensory	202	D	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Cust	203	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
Hall	204	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	HOD, NO MULLION
Stair	205	C	2-900 x 2150 x 45	HM	PT	GL-7	45 MIN	4A	PT	HM	45 MIN	SEE HS	
WR	207	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
Classroom	208	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
PC350	208A	F1	5017 x 2150	AL	FF	GL-5			FF	AL			PC350 WITH VISUAL STRIP GF-1
Classroom	208B	D	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
WR	209	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
Universal WR	210	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	BFPB, PTLB REFER TO MECH.
Storage	211	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
Group Room	212	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Group Room	212A	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Group Room	213	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Classroom	214	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
PC350	214A	F1	5017 x 2150	AL	FF	GL-5			FF	AL			PC350 WITH VISUAL STRIP GF-1
Classroom	215	C	950 x 2150 x 45	HM	PT	GL-5	-	3	PT	HM		SEE HS	
PC350	215A	F3	3823 x 2150	AL	FF	GL-5			FF	AL			PC350 Barn Door with visual strip GF-1
Prof. Collab	216	C	950 x 2150 x 45	HM	PT	GL-5	-	3	PT	HM		SEE HS	
Classroom	218	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
PC350	218A	F3	3823 x 2150	AL	FF	GL-5			FF	AL			PC350 Barn Door with visual strip GF-1
Classroom	218B	D	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Group Room	219	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Storage	221	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
Hall	222	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
WR	222A	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
WR	222B	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
WR	222C	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
WR BF	223	B	950 x 2150 x 45	HM	PT	-		3	PT	HM		SEE HS	
Stair	224	C	950 x 2150 x 45	HM	PT	GL-7	45 MIN	4A	PT	HM	45 MIN	SEE HS	
Prof. Collab	225	C	950 x 2150 x 45	HM	PT	GL-5	-	3	PT	HM		SEE HS	
Classroom	227	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
PC350	227A	F1	5017 x 2150	AL	FF	GL-5			FF	AL			PC350 WITH VISUAL STRIP GF-1
Classroom	227B	D	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Group Room	228	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
Classroom	229	C	950 x 2150 x 45	HM	PT	GL-5		3	PT	HM		SEE HS	
PC350	229A	F1	5017 x 2150	AL	FF	GL-5			FF	AL			PC350 WITH VISUAL STRIP GF-1
Stair	232	C	950 x 2150 x 45	HM	PT	GL-7		4A	PT	HM	45 MIN	SEE HS	

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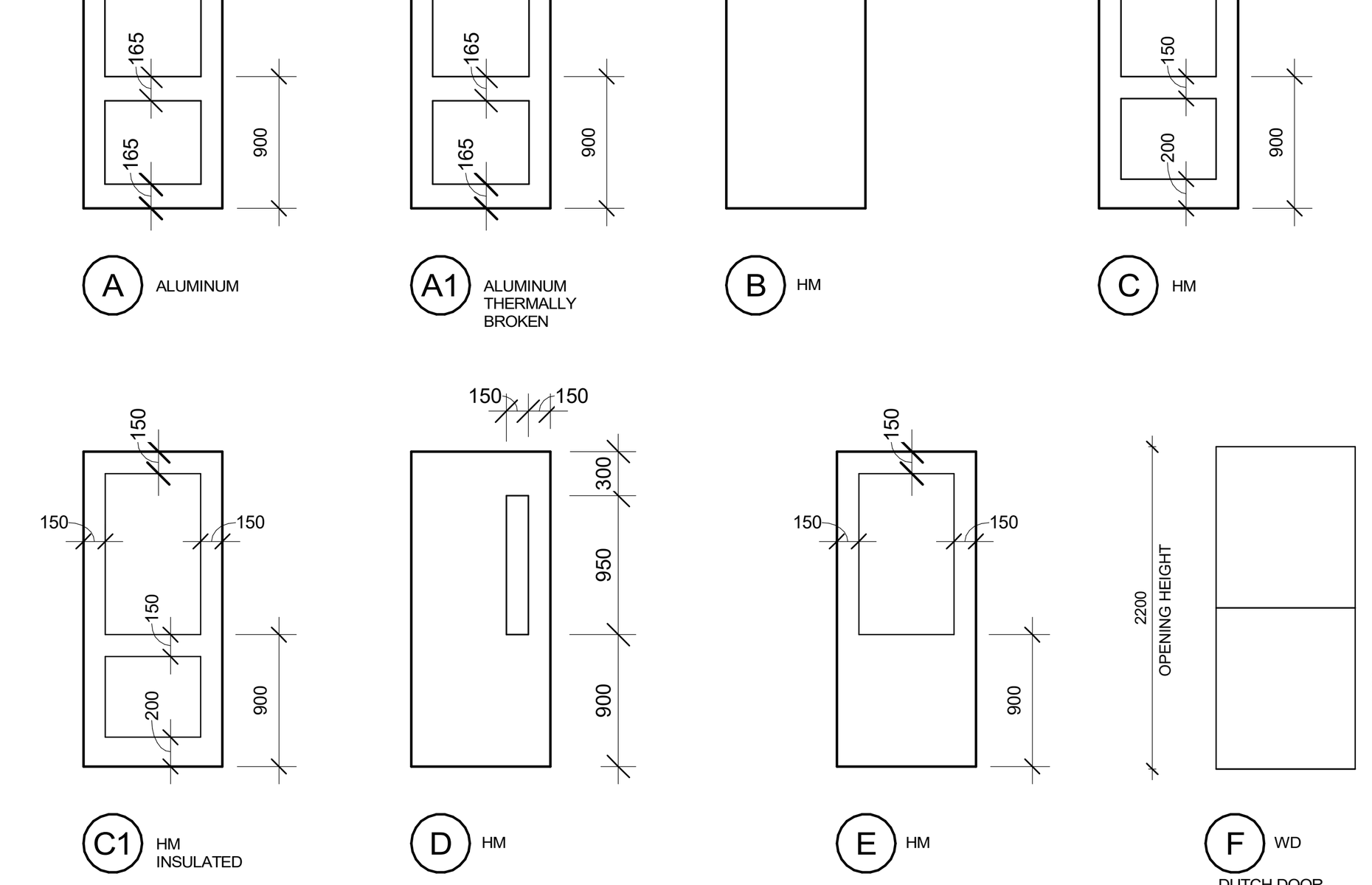
Door & Frame Schedules Final Childcare

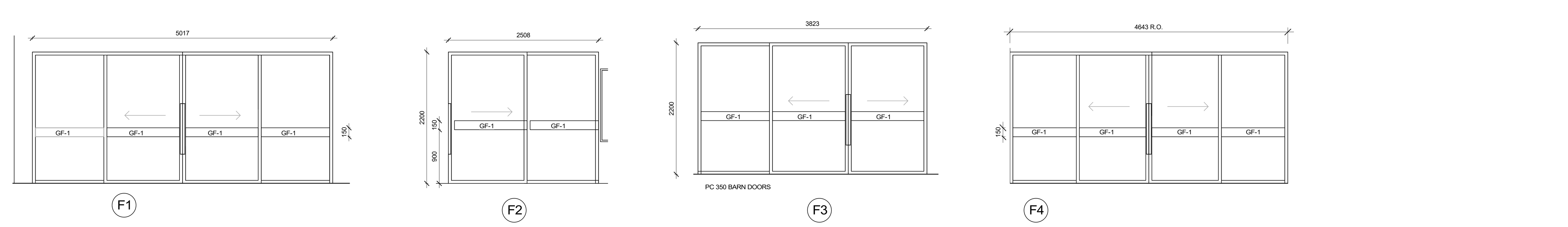
Location	NUMBER	Type	Size (WxHXT)	Material	Finish	Glazing	Door F.R.R.	Frame Profile	Frame Finish	Frame Material	Frame F.R.R.	HDWR	REMARKS
	Door Schedule							Frame Schedule					
Level 1 Floor Plan													
Vest. Exterior	C100AX	C1	MATCH EXISTING	HM	PT	GL-1		EX.	PT	EX.		SEE HS	Replace HM Doors in existing screen,
Vest. Exterior	C100BX	C1	MATCH EXISTING	HM	PT	GL-7		EX.	PT	EX.		SEE HS	Replace HM Doors in existing screen, replace BFPB, Intercom
Corridor to Vestibule	C100C	C	1000 x 2150 x 45	HM	PT	GL-7		4A	PT	HM		SEE HS	HM SCREEN/DOOR WITH NEW BFPB
Corridor to Vestibule	C100D	C	1000 x 2150 x 45	HM	PT	GL-7		4A	PT	HM		SEE HS	
Existing from Heart	C101X	EX.	EX.	EX.	PT	EX.	EX.	EX.	PT	EX.	EX.		EX. HM DOOR/SCREEN
Cust	C102X	EX.	EX.	EX.	PT	EX.		EX.	PT	EX.			EXISTING TYPE D , NEW HARDWARE
Office	C103	C	950 x 2150 x 45	HM	PT	GL-4		4A	PT	HM		SEE HS	
WR	C104	B	950 x 2150 x 45	HM	PT	-		4A	PT	HM		SEE HS	
Corridor to Coat Rm	C105	C	950 x 2150 x 45	HM	PT	GL-4		4A	PT	HM		SEE HS	Single pane GL-4
Coat Rm to Preschool	C106	F	950 x 2150 x 45	WD	PLAM	-		3	PT	HM		SEE HS	Dutch door in Screen SC106
Preschool to WR	C106A	F	950 x 2150 x 45	WD	PLAM	-		3	PT	HM		SEE HS	Dutch door
Preschool to Closet	C106B	B	2-800 x 2150 x 45	WD	PLAM	-		3	PT	HM		SEE HS	
Preschool to Closet	C106C	B	2-800 x 2150 x 45	WD	PLAM	-		3	PT	HM		SEE HS	
Corridor to Laundry	C107	B	950 x 2150 x 45	HM	PT	-	45 MIN	4A	PT	HM	45 MIN	SEE HS	
Corridor to Coat Rm	C108	C	950 x 2150 x 45	HM	PT			4A	PT	HM		SEE HS	Screen SC108
Coat Rm to Infant	C109	F	950 x 2150 x 45	WD	PLAM	-		3	PT	HM		SEE HS	*Dutch door, Screen SC109
Infant to Sleeping	C109A	C	950 x 2150 x 45	WD	PLAM	GL-4		3	PT	HM		SEE HS	Dutch door
Infant to WR	C109B	F	950 x 2150 x 45	WD	PLAM	-		3	PT	HM		SEE HS	*Dutch door
Infant to Ext.	C109C	C1	950 x 2150 x 45	HM	PT	GL-1		5	PT	HM		SEE HS	
Corridor to Coat Closet	C110	-	1000 x 2150 x 0	-	-	-	-	-	-	-	-	-	Opening
Corridor to Toddler	C111	C	950 x 2150 x 45	HM	PT	GL-4		4A	PT	HM		SEE HS	Screen SC111
Toddler to WR	C111A	F	950 x 2150 x 45	WD	PLAM	-	-	3	PT	HM	-	SEE HS	*Dutch door
Toddler to Closet	C111B	B	2-725 x 2150 x 45	WD	PLAM	-	-	3	PT	HM		SEE HS	
Toddler to Closet	C111C	B	2-725 x 2150 x 45	WD	PLAM	-		3	PT	HM		SEE HS	
Corridor to Water Rm	C112X	EX.	EX.	EX.	PT		EX.	EX.	PT	EX.	EX.	EX.	NEW HARDWARE
Corridor to Exist. Elct.	C113X	EX.	EX.	EX.	PT	-	EX.	EX.	PT	EX.	EX.	EX.	NEW HARDWARE
Vestibule to Ext.	C114	C1	1000 x 2150 x 45	HM	PT	GL-1		5	PT	HM		SEE HS	
Corridor to Vestibule	C114A	C	2-900 x 2150 x 45	HM	PT	GL-4		4A	PT	HM		SEE HS	
Corridor to Closet	C115	B	2-725 x 2150 x 45	WD	PLAM			3	PT	HM		SEE HS	
Corridor to Ext.	C115X	EX.	EX.	EX.	PT	EX.		EX.	PT	EX.		EX.	EXIST. EXT
Corridor to Staff Rm	C116	C	950 x 2150 x 45	HM	PT	GL-4	-	4A	PT	HM		SEE HS	Screen SC116
Corridor to Uni.	C117	B	950 x 2150 x 45	HM	PT	-	-		PT	HM		SEE HS	BFPB, PTLB
Corridor to Kitchen	C118	C	950 x 2150 x 45	HM	PT	GL-5			PT	HM		SEE HS	
Corridor to Mech	C119	EX.	EX.	EX.	PT	-	EX.	EX.	PT	EX.	EX.	EX.	EXISTING, NEW PAINT



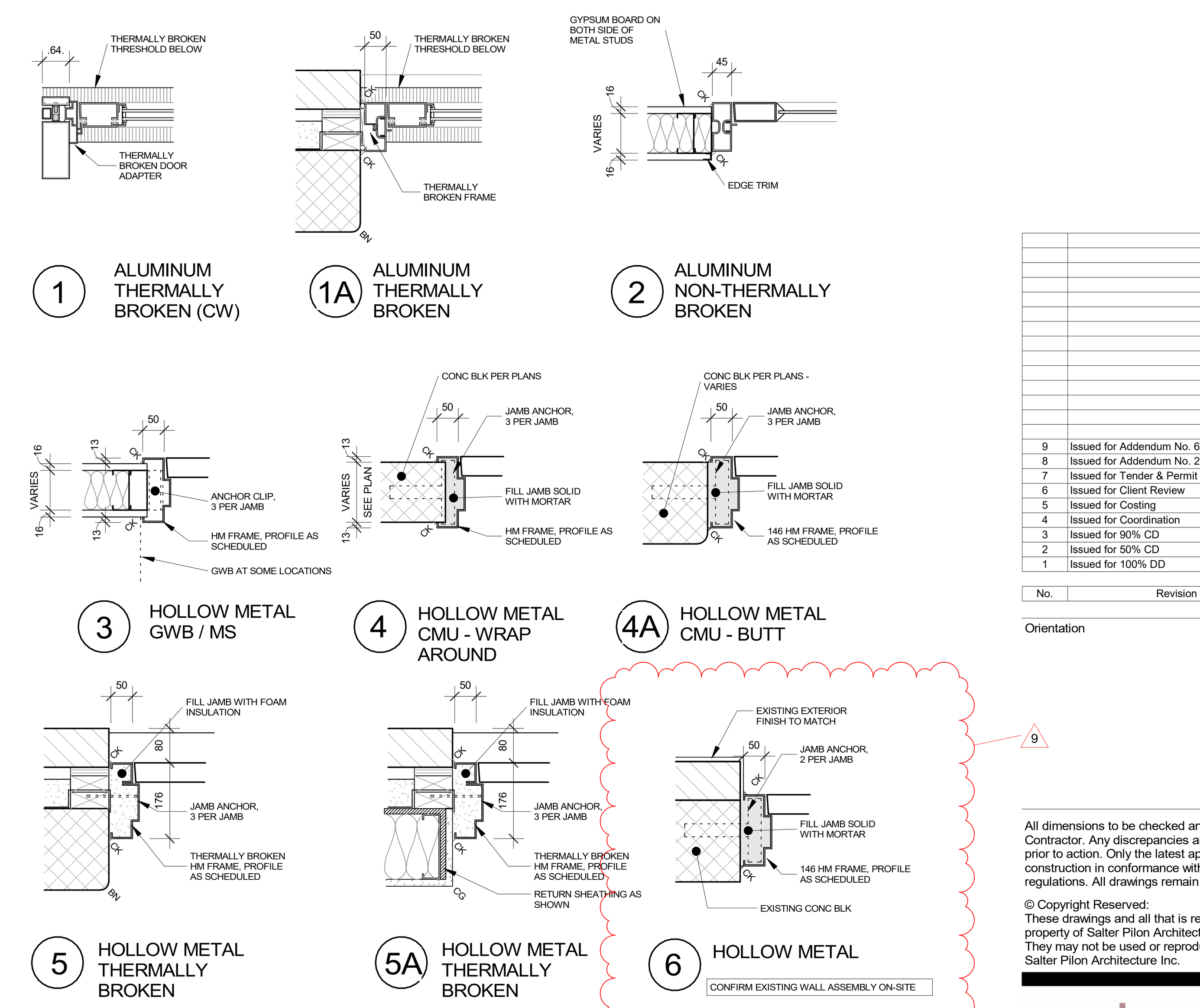
A ALUMINUM
A1 ALUMINUM THERMALLY BROKEN
B HM
C HM
C1 HM INSULATED
D HM
E HM
F WD DUTCH DOOR

GENERAL NOTES:

1. FOR DOOR & FRAME TYPES REFER TO SCHEDULES.
2. FOR TYPICAL CONSTRUCTION DETAILS FOR DOORS REFER TO DRAWINGS.
3. ALL HM FRAMES SET IN MASONRY TO BE FILLED SOLID WITH MORTAR UNLESS NOTED OTHERWISE.
4. ALL EXTERIOR DOORS & FRAMES TO BE FILLED WITH INSULATION AS SPECIFIED.
5. FOR GLASS TYPES REFER TO SCHEDULE.
6. DOOR & GLASS PROFILES & SIZES ARE SHOWN DIAGRAMMATIC ONLY. ACTUAL SIZES TO COMPLY WITH THE MAXIMUM LIMITS AS PERMITTED UNDER THE O.B.C. FOR INDIVIDUAL DOOR REQUIREMENTS.
7. FOR METAL STUD SIZES AND GYPSUM BOARD THICKNESSES, REFER TO WALL TYPES LEGEND AND DETAIL DRAWINGS.
8. FOR DOORS AND SCREENS WITH FULL HEIGHT GLAZING (NO HORIZONTAL MULLIONS) PROVIDE A 50mm WIDE OPAQUE FILM FOR THE WIDTH OF THE GLAZING MOUNTED HORIZONTALLY AT 1350mm - 1500mm ABOVE FLOOR LEVEL PER O.B.C. 3.8.3.3.15.



F1
F2
F3
F4



1 ALUMINUM THERMALLY BROKEN (CW)
1A ALUMINUM THERMALLY BROKEN
2 ALUMINUM NON-THERMALLY BROKEN
3 HOLLOW METAL GWB / MS
4 HOLLOW METAL CMU - WRAP AROUND
4A HOLLOW METAL CMU - BUTT
5 HOLLOW METAL THERMALLY BROKEN
5A HOLLOW METAL THERMALLY BROKEN
6 HOLLOW METAL
9

Algonquin & Lakeshore Catholic District School Board

Ontario Builds

No.	Revision	Date
9	Issued for Addendum No. 6	04-25-2024
8	Issued for Addendum No. 2	04-03-2024
7	Issued for Tender & Permit	03-26-2024
6	Issued for Client Review	12-11-2023
5	Issued for Costing	10-02-2023
4	Issued for Coordination	08-16-2023
3	Issued for 90% CD	07-31-2023
2	Issued for 50% CD	07-04-2023
1	Issued for 100% DD	05-29-2023

Orientation

Seal
ONTARIO ASSOCIATION OF ARCHITECTS
GERRY P. PILON LICENCE 5042

All dimensions to be checked and verified on the job by the Contractor. Any discrepancies are to be reported to the Consultant prior to action. Only the latest approved drawings to be used for construction in conformance with all applicable codes, by-laws and regulations. All drawings remain the property of the Consultant.

salterpilon architecture
151 Ferris Lane, Suite 400 Barrie, Ontario L4M 6C1
salterpilon.com t: 705.737.3530

Project Information
J.J. O'Neill Catholic Elementary School - Addition / Renovation
240 Marilyn Ave., Napanee, ON K7R 2L4

For
Algonquin and Lakeshore Catholic District School Board

Drawing Title
Interior Elevations & Door Schedule

Date	Project No	Drawing No
04-25-2024	22026	A601
Drawn by AB, JJ		
Scale As indicated		

BIM 360://22026 - JJ O'Neill CES/22026 - JJ O'Neill CES.rvt
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Algonquin & Lakeshore Catholic District School Board

Ontario Builds

REFLECTED CEILING PLAN NOTES:

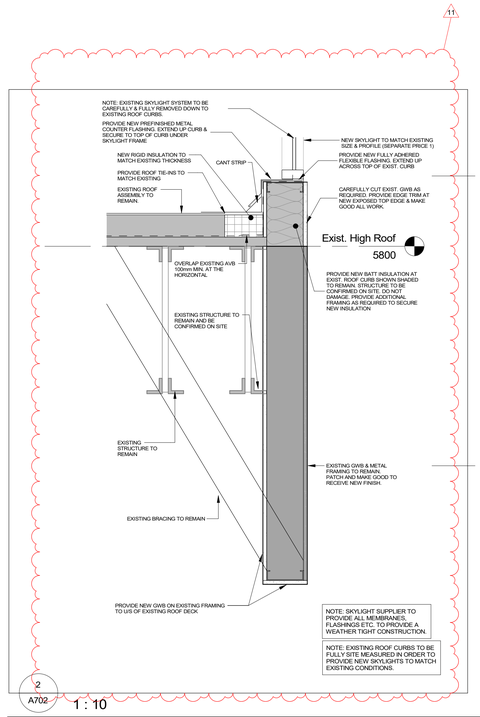
1. CO-ORDINATE FULLY WITH MECHANICAL & ELECTRICAL DRAWINGS & SPECIFICATIONS TO ENSURE PROPER PLACEMENT OF ALL LIGHTS, GRILLES, EXHAUST FANS, DIFFUSERS ETC. RELATING TO THE REFLECTED CEILING PLAN LAYOUT.
2. ENCLOSE ALL EXPOSED STEEL STRUCTURE SUPPORTING FLOOR LOADS WITH (2)+ LAYERS OF 16mm FIRE-RATED GYPSUM WALL BOARD ON METAL FRAMING ASSEMBLY TO PROVIDE A (1)-HOUR FIRE RESISTANCE RATING. ALL DETAILS MUST COMPLY.
3. REFER TO ELECTRICAL DRAWINGS FOR LOCATIONS OF FIXTURES FLUSH WITH GYPSUM WALL BOARD CEILING AND REQUIRE CAREFUL FINISHING.
4. LOCATION OF PAINTED ACT CEILING TILES TO BE COORDINATED WITH OWNER & ARCHITECT ON SITE.
5. ALL EXPOSED STRUCTURE & DECK TO BE PAINTED AS PER COLOUR AND MATERIAL SCHEDULE.

REFLECTED CEILING PLAN LEGEND:

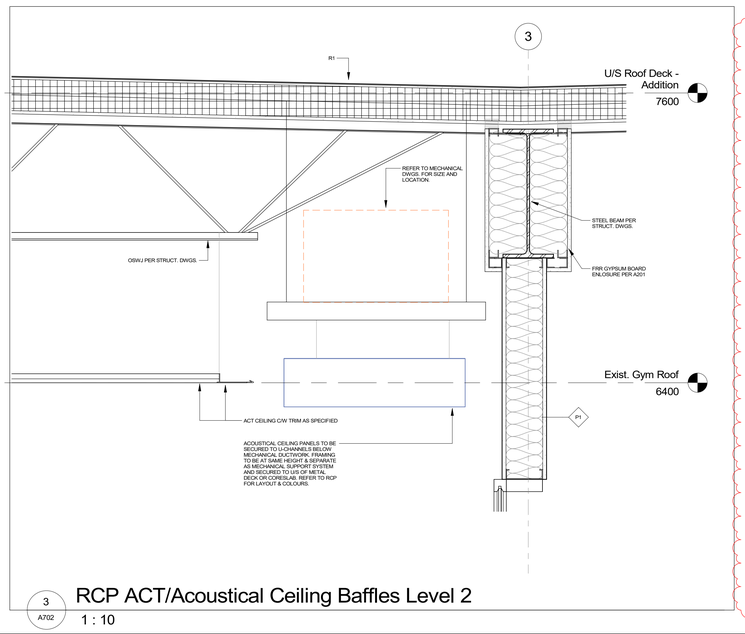
- SUPPLY AIR DIFFUSER AS PER MECH. DWGs
- RETURN AIR DIFFUSER AS PER MECH. DWGs
- EXHAUST GRILLE AS PER MECH. DWGs
- RADIANT CEILING PANELS AS PER MECH. DWGS.
- SURFACE MOUNTED LUMINAIRE AS PER ELEC. DWGs
- RECESSED LUMINAIRE AS PER ELEC. DWGs
- RECESSED LIGHT FIXTURE AS PER ELEC. DWGs
- WALL MOUNTED LIGHT FIXTURE AS PER ELEC. DWGs
- 610 x 1220 LAY-IN CEILING TILE
- ACOUSTICAL CEILING PANELS. REFER TO SPECIFICATION & ROOM FINISH & COLOUR SCHEDULE.
  - ACP-1
  - ACP-2
  - ACP-3
  - ACP-4
  - ACP-5
  - ACP-6
  - ACP-7

1 A702 — **Level 2 Reflected Ceiling Plan**

1 : 100

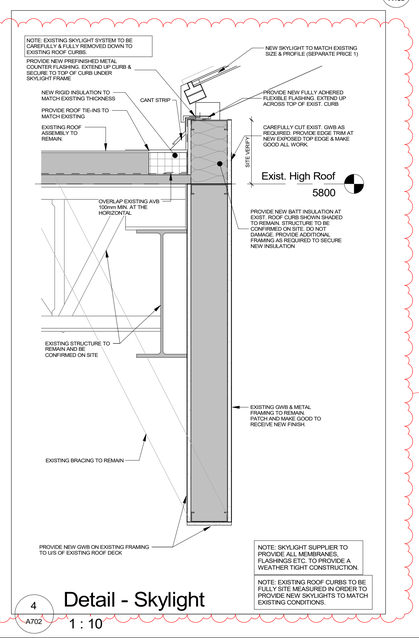


2 A702 — 1 : 10



3 A702 — **RCP ACT/Acoustical Ceiling Baffles Level 2**

1 : 10



4 A702 — **Detail - Skylight**

1 : 10

No.	Revision	Date
11	Issued for Addendum No. 6	04-25-2024
10	Issued for Addendum No. 4	04-18-2024
9	Issued for Addendum No. 2	04-03-2024
8	Issued for Tender & Permit	03-26-2024
7	Issued for Client Review	12-11-2023
6	Issued for Costing	10-02-2023
5	Issued for Coordination	08-16-2023
4	Issued for 90% CD	07-31-2023
3	Issued for 50% CD	07-04-2023
2	Issued for 100% DD	05-29-2023
1	Issued for SD 100%	02-24-2023

Orientation

Seal

ONTARIO ASSOCIATION OF ARCHITECTS — GERRY P. PILON — LICENCE 5042

salterpilon architecture

151 Ferris Lane, Suite 400 Barrie, Ontario L4M 6C1
salterpilon.com t: 705.737.3530

Project Information

J.J. O'Neill Catholic Elementary School - Addition / Renovation
240 Marilyn Ave., Napanee, ON K7R 2L4

For
Algonquin and Lakeshore Catholic District School Board

Drawing Title
Reflected Ceiling Plan Second Floor

Date	Project No	Drawing No
04-25-2024	22026	A702
Drawn by: AB, JJ		
Scale: As indicated		

BIM 360://22026 - - JJ O'Neill CES/22026 - JJ O'Neill CES.rvt
2024-04-25 4:02:15 PM

Project Name:	ALCDSB J.J. O'Neill Catholic School	**Date Issued:**	April 23, 2024
Quasar Project #:	ED-22-764		

Distribution

Quasar Consulting Group.	Michael Hughes	Michael.hughes@quasarcg.com
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Addendum #:	M-3
Revision #:	0

This Addendum forms part of the Contract Specifications and Drawings, and modifies the Bidding Documents, with Amendments and Additions noted below. This Addendum shall be added to the front of the specifications as issued. Bidders shall acknowledge receipt of this Addendum in the space provided in the Bid Form and include in bid amount.

This addendum includes modifications to the drawings and specifications as summarized below. Unless otherwise noted, all drawings and/or specifications listed below are attached herewith.

Answers to Questions:

1. Mechanical Drawings show all zones exposed in the mech/water entry room. Spec section 21 13 00 references zone control riser module cabinets. Will any zones require to utilize these cabinets?
    a. **No, cabinets are not required for zone control riser modules within Sprinkler Room.**
2. Drawing M-707 supervised valve schedule calls for an SV-3 to be a fire pump control valve? is there a requirement for a fire pump?
    a. **No, a fire pump is not required. Supervised valve schedule has been revised as a part of this addendum.**
3. Is there an existing sprinkler system in the building? The drawings are unclear regarding this. Are there any pictures/ drawings of any modifications that need to happen to any existing sprinkler systems?
    a. **No, there is no existing sprinkler system within the building.**
4. Spec section 21 13 00 references window sprinklers. Are there any requirements for a window sprinkler system?
    a. **No, there is no requirement for window sprinklers.**
5. Spec section 21 13 00 references preaction zones and dry pipe zones. Are there any unheated or water sensitive rooms that require either?
    a. **No, there is no requirement for preaction systems.**
6. Spec section 21 13 00 references P.I.V.'s, drawings do not indicate any locations. Is there a requirement for a P.I.V.?
    a. **No, there is no requirement for a P.I.V.**
7. Spec section 21 13 00 references a 6" engraved laminate tags for the loss of pressure switch and flow alarm switches. Please be advised that a 6" tag will not fit onto a ps 10/ps 120 switch. Are these indeed required?
    a. **Laminated tags are required. Size of tags are to be suitable for devices.**
8. Spec section 21 13 00 references alarm check valves and excess pressure pumps. Can riser manifolds be used instead? The use of water motor gongs would be omitted if riser manifolds are used. The use of Excess pressure pumps would be omitted if riser manifolds are used. Will this be accepted?
    a. **This is acceptable.**
9. The use of low pressure switches would be omitted if riser manifolds are used. Will this be accepted?
    a. **This is acceptable.**

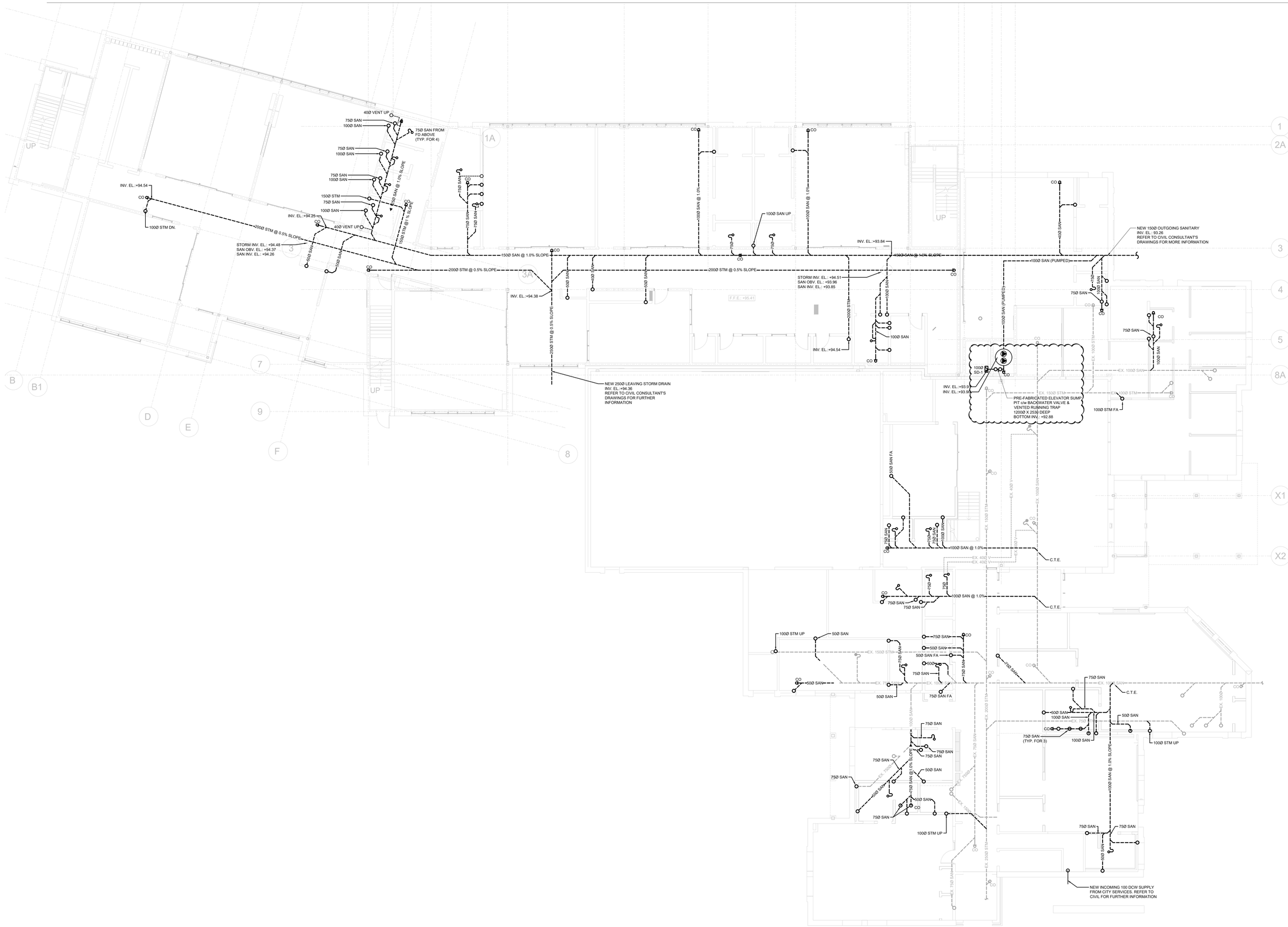
Changes to Drawings:

1. M-250– PLUMBING NEW WORK – UNDERGROUND
    a. Revised elevator sump pit to be pre-fabricate sump pit.
2. M-707– FIRE PROTECTION SCHEMATIC
    a. Revised Supervised Valve Schedule as shown.
3. M-803– MECHANICAL TYPICAL DETAILS IV
    a. Revised detail of Elevator Sump Pump & Pit Sanitary Discharge to show pre-fabricated sump pit.
4. M-901– MECHANICAL SCHEDULES II
    a. Revised Schedule of Rooftop Units to account for revised model numbers.

Quasar Consulting Group

Michael Hughes

Team Lead, P. Eng.



14	ISSUED FOR ADDENDUM M-3	2024-04-23
13	ISSUED FOR ADDENDUM M-2	2024-04-12
12	ISSUED FOR ADDENDUM M-1	2024-04-02
11	ISSUED FOR TENDER & PERMIT	2024-03-26
10	ISSUED FOR TENDER REVIEW	2023-03-15
9	ISSUED FOR COORDINATION REVIEW	2023-02-28
8	ISSUED FOR SITE PLAN APPLICATION	2023-11-21
7	ISSUED FOR COSTING	2023-10-03
6	ISSUED FOR 100%CD	2023-08-23
5	ISSUED FOR 90%CD	2023-07-31
4	ISSUED FOR 50%CD	2023-07-05
3	ISSUED FOR COORDINATION	2023-06-29
2	ISSUED FOR 100% DD	2023-05-30
1	ISSUED FOR SITE PLAN APPLICATION	2023-05-03

No.	Revision	Date

Orientation

PROJECT NORTH

Seal

QUASAR CONSULTING GROUP

250 ROWNTREE DAIRY RD, WOODBRIDGE, ON
TEL: 905-507-0800
WEB: WWW.QUASARCG.COM

QUASAR PROJECT No.: ED-22-069

Project Information

J.J. O'Neill Catholic Elementary School - Addition / Renovation

240 Marilyn Ave., Napanee, Ontario K7R 2L4

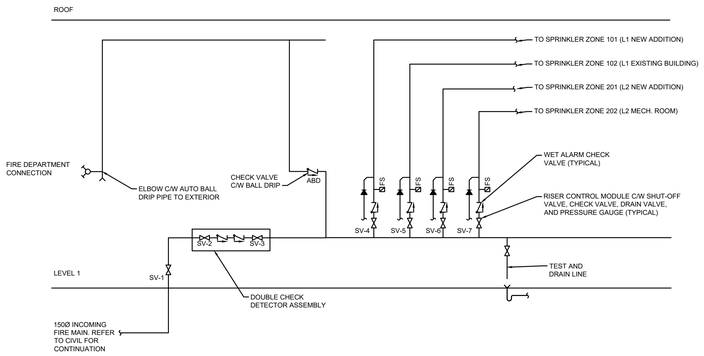
For

Algonquin and Lakeshore Catholic District School Board

Drawing Title

PLUMBING NEW WORK-UNDERGROUND

Date	Project No	Drawing No
MAY 2023	22-206	M-250
Drawn by: B.O		
Scale: 1:100		



SUPERVISED VALVE SCHEDULE

VALVE NO.	VALVE LOCATION	SERVICE
SV-1	INCOMING MECHANICAL & SPRINKLER ROOM	INCOMING FIRE WATER MAIN ISOLATION
SV-2	INCOMING MECHANICAL & SPRINKLER ROOM	SPRINKLER DOUBLE CHECK ISOLATION
SV-3	INCOMING MECHANICAL & SPRINKLER ROOM	SPRINKLER DOUBLE CHECK ISOLATION
SV-4	INCOMING MECHANICAL & SPRINKLER ROOM	L1 CONTROL VALVE (WET ZONE 1)
SV-5	INCOMING MECHANICAL & SPRINKLER ROOM	L1 CONTROL VALVE (WET ZONE 2)
SV-6	INCOMING MECHANICAL & SPRINKLER ROOM	L2 CONTROL VALVE (WET ZONE 1)
SV-7	INCOMING MECHANICAL & SPRINKLER ROOM	L2 CONTROL VALVE (WET ZONE 2)

NOTES:
1. VERTICAL BACKFLOW PREVENTION ASSEMBLY INSTALLATION ONLY PERMITTED PER LISTING.

2. PIPE UPSTREAM OF BACKFLOW PREVENTION SHALL BE DUCTILE IRON.

3. CONTRACTOR SHALL PROVIDE PROVISIONS FOR TESTING THE DOUBLE CHECK VALVE ASSEMBLY TO ACCOMMODATE THE LARGEST SYSTEM DEMAND

4. FIRE DEPARTMENT DRY PIPE TO EXTERIOR SHALL BE GALVANIZED.
VALVES AND GAUGES SHALL BE INSTALLED WITHIN ACCESSIBLE HEIGHT (MAX 1.8M AFF).

No.	Revision	Date
12	ISSUED FOR ADDENDUM M-3	2024-04-23
11	ISSUED FOR TENDER & PERMIT	2024-03-26
10	ISSUED FOR TENDER REVIEW	2023-03-15
9	ISSUED FOR COORDINATION REVIEW	2023-02-28
8	ISSUED FOR SITE PLAN APPLICATION	2023-11-21
7	ISSUED FOR COSTING	2023-10-03
6	ISSUED FOR 100%CD	2023-09-23
5	ISSUED FOR 90%CD	2023-07-31
4	ISSUED FOR 50%CD	2023-07-05
3	ISSUED FOR COORDINATION	2023-06-29
2	ISSUED FOR 100% DD	2023-05-30
1	ISSUED FOR SITE PLAN APPLICATION	2023-05-03

Orientation

PROJECT NORTH

Seal

QUASAR CONSULTING GROUP
250 ROWNTREE DAIRY RD, WOODBRIDGE, ON
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QUASAR PROJECT No.: ED-22-069

Project Information

J.J. O'Neill Catholic Elementary School - Addition / Renovation

240 Marilyn Ave., Napanee, Ontario K7R 2L4

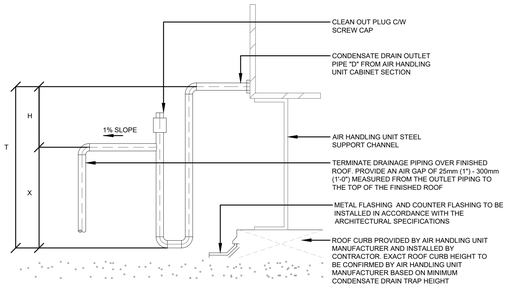
For

Algonquin and Lakeshore Catholic District School Board

Drawing Title

FIRE PROTECTION SCHEMATIC

Date	Project No	Drawing No
MAY 2023	22-206	M-707
Drawn by: B.O		
Scale: N.T.S.		



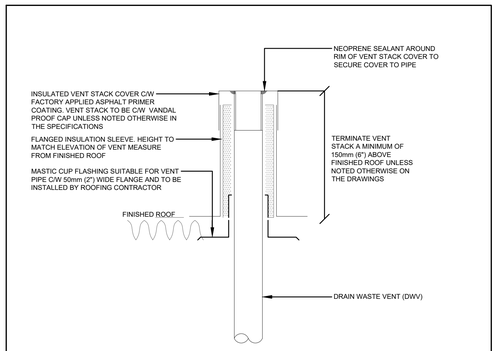
REQUIRED CONDENSATE DRAIN TRAP HEIGHT				
	NEGATIVE STATIC PRESSURE		POSITIVE STATIC PRESSURE	
DIAMETER "D"	STATIC PRESSURE	T (MINIMUM)	STATIC PRESSURE	T (MINIMUM)
20mm (3/4")	248 Pa (-1" W.C.)	104mm (4.1")	248 Pa (1" W.C.)	104mm (4.1")
	497 Pa (-2" W.C.)	142mm (5.6")	497 Pa (2" W.C.)	129mm (5.1")
25mm (1")	248 Pa (-1" W.C.)	114mm (4.5")	248 Pa (1" W.C.)	114mm (4.5")
	497 Pa (-2" W.C.)	152mm (6.0")	497 Pa (2" W.C.)	140mm (5.5")
	747 Pa (-3" W.C.)	190mm (7.5")	747 Pa (3" W.C.)	165mm (6.5")
32mm (1-1/4")	248 Pa (-1" W.C.)	135mm (5.3")	248 Pa (1" W.C.)	135mm (5.3")
	497 Pa (-2" W.C.)	173mm (6.8")	497 Pa (2" W.C.)	160mm (6.3")
	747 Pa (-3" W.C.)	211mm (8.3")	747 Pa (3" W.C.)	185mm (7.3")

T = TOTAL TRAP HEIGHT = X + H + (1.5"D)

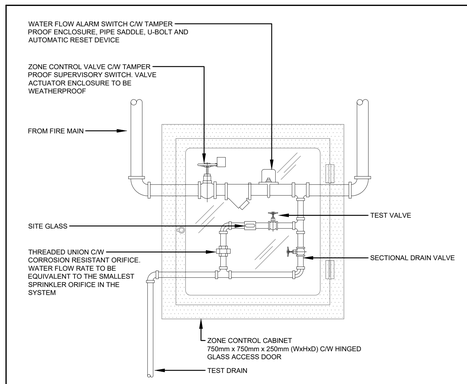
NEGATIVE STATIC PRESSURES:
- X = 0.75"H (MINIMUM)
- H = 25mm (1") + UNIT STATIC PRESSURE IN AIR HANDLING UNIT CABINET SECTION (MINIMUM)
- D = PIPE DIAMETER

POSITIVE STATIC PRESSURES:
- X = 25mm (1") + UNIT STATIC PRESSURE IN AIR HANDLING UNIT CABINET SECTION (MINIMUM)
- H = 25mm (1") (MINIMUM)
- D = PIPE DIAMETER

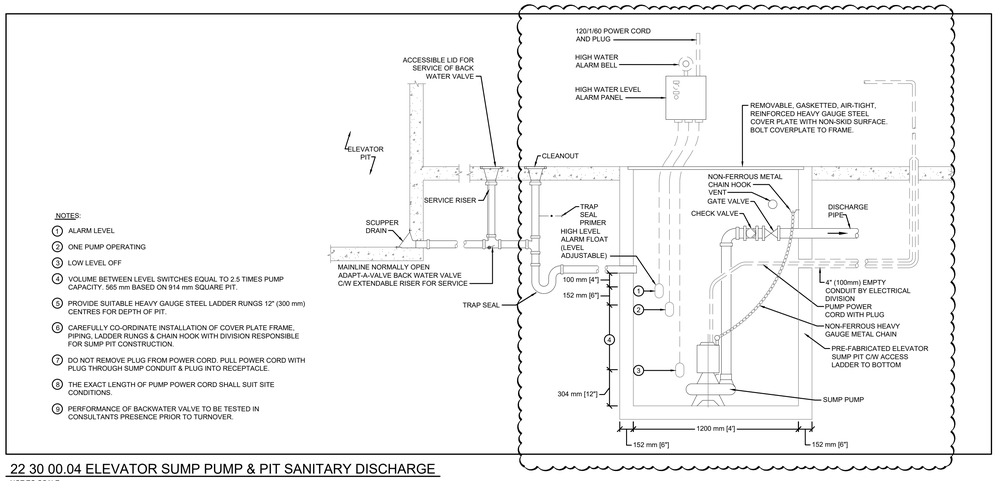
CONDENSATE DRAIN TRAP HEIGHT - OUTDOOR AIR HANDLING UNIT
NOT TO SCALE



22 13 00.01 DWV ROOF PENETRATION & VENT CAP COVER
NOT TO SCALE

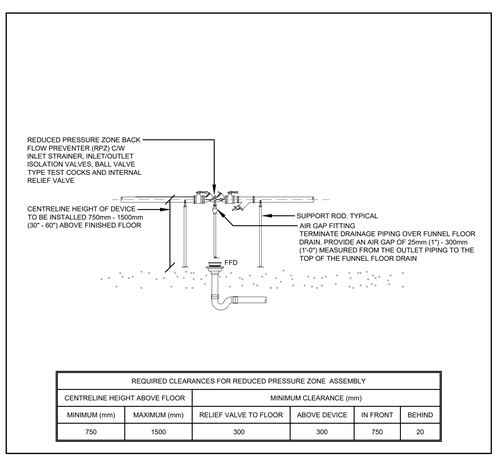


21 13 00.02 SPRINKLER ZONE CONTROL VALVE
NOT TO SCALE



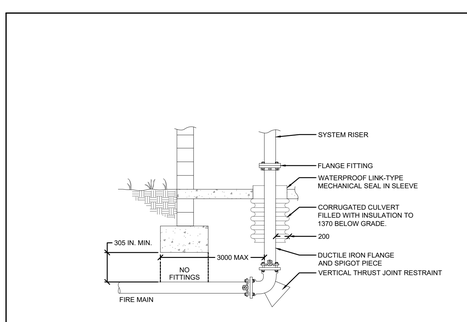
NOTES:
1. ALARM LEVEL
2. ONE PUMP OPERATING
3. LOW LEVEL OFF
4. VOLUME BETWEEN LEVEL SWITCHES EQUAL TO 2.5 TIMES PUMP CAPACITY. 565 mm BASED ON 914 mm SQUARE PIT.
5. PROVIDE SUITABLE HEAVY GAUGE STEEL LADDER RUNGS 12" (300 mm) CENTRES FOR DEPTH OF PIT.
6. CAREFULLY CO-ORDINATE INSTALLATION OF COVER PLATE FRAME, PIPING, LADDER RUNGS & CHAIN HOOK WITH DIVISION RESPONSIBLE FOR SUMP PIT CONSTRUCTION.
7. DO NOT REMOVE PLUG FROM POWER CORD. PULL POWER CORD WITH PLUG THROUGH SUMP CONDUIT & PLUG INTO RECEPTACLE.
8. THE EXACT LENGTH OF PUMP POWER CORD SHALL SUIT SITE CONDITIONS.
9. PERFORMANCE OF BACKWATER VALVE TO BE TESTED IN CONSULTANTS PRESENCE PRIOR TO TURNOVER.

22 30 00.04 ELEVATOR SUMP PUMP & PIT SANITARY DISCHARGE
NOT TO SCALE



REQUIRED CLEARANCES FOR REDUCED PRESSURE ZONE ASSEMBLY					
CENTRELINE HEIGHT ABOVE FLOOR		MINIMUM CLEARANCE (mm)			
MINIMUM (mm)	MAXIMUM (mm)	RELIEF VALVE TO FLOOR	ABOVE DEVICE	IN FRONT	BEHIND
750	1500	300	300	750	20

22 11 00.01 REDUCED PRESSURE ZONE ASSEMBLY
NOT TO SCALE



21 13 00.05 UNDERGROUND FIRE MAIN
NOT TO SCALE

No.	Revision	Date
12	ISSUED FOR ADDENDUM M-3	2024-04-23
11	ISSUED FOR TENDER & PERMIT	2024-03-26
10	ISSUED FOR TENDER REVIEW	2023-03-15
9	ISSUED FOR COORDINATION REVIEW	2023-02-28
8	ISSUED FOR SITE PLAN APPLICATION	2023-11-21
7	ISSUED FOR COSTING	2023-10-03
6	ISSUED FOR 100%CD	2023-08-23
5	ISSUED FOR 90%CD	2023-07-31
4	ISSUED FOR 50%CD	2023-07-05
3	ISSUED FOR COORDINATION	2023-06-29
2	ISSUED FOR 100% DD	2023-05-30
1	ISSUED FOR SITE PLAN APPLICATION	2023-05-03

Orientation

Seal

QUASAR CONSULTING GROUP
250 ROWNTREE DAIRY RD, WOODBRIDGE, ON
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QUASAR PROJECT No.: ED-22-069

Project Information

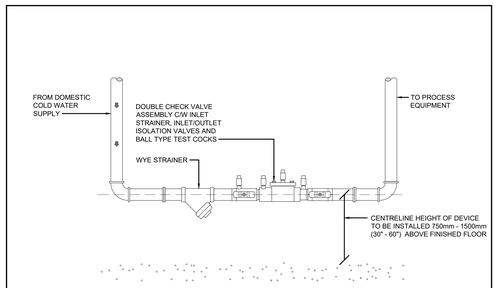
J. J. O'Neill Catholic Elementary School - Addition / Renovation
240 Marilyn Ave., Napanee, Ontario K7R 2L4

For
Algonquin and Lakeshore Catholic District School Board

Drawing Title

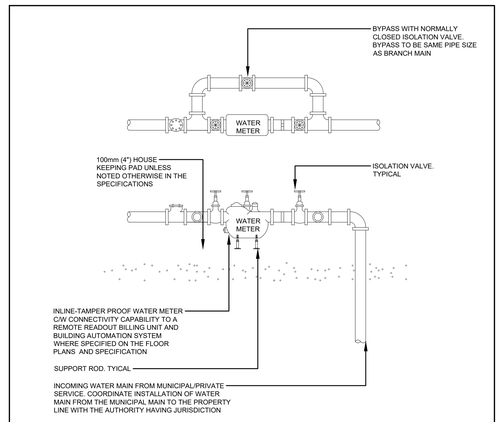
MECHANICAL TYPICAL DETAILS IV

Date	Project No	Drawing No
MAY 2023	22-206	M-803
Drawn by: B.O		
Scale: N.T.S.		

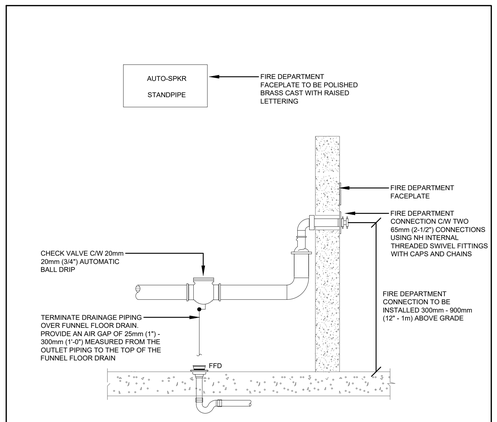


REQUIRED CLEARANCES FOR DOUBLE CHECK VALVE ASSEMBLY				
CENTRELINE HEIGHT ABOVE FLOOR	MINIMUM CLEARANCE (mm)			
MINIMUM (mm)	MAXIMUM (mm)	ABOVE DEVICE	IN FRONT	BEHIND
750	1500	300	750	20

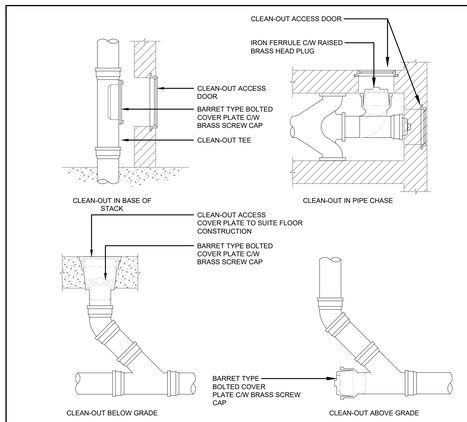
22 11 00.02 DOUBLE CHECK VALVE ASSEMBLY
NOT TO SCALE



22 11 00.03 MUNICIPAL/PRIVATE WATER METER
NOT TO SCALE



21 13 00.01 FIRE DEPARTMENT CONNECTION
NOT TO SCALE



22 13 00.02 SANITARY & STORM WATER CLEANOUTS
NOT TO SCALE

ROOFTOP UNITS

UNIT TAG	MANUFACTURER	MODEL	LOCATION	SERVICE	SUPPLY FAN				EXHAUST FAN			ASSOCIATED ENERGY RECOVERY WHEEL	COOLING						HEATING						FILTER	EFFICIENCY	ELECTRICAL				REMARKS
					AIRFLOW (L/S)	E.S.P. (KPA)	OUTDOOR AIRFLOW (L/S)	VARIABLE SPEED WITH VFD	AIRFLOW (L/S)	E.S.P (KPA)	VARIABLE SPEED WITH VFD		REFRIGERANT	CAPACITY		AIR PRESSSURE DROP (KPA)	COOLING PERFORMANCE				HEATING FLUID	CAPACITY (kW)	AIR PRESSSURE DROP (KPA)	GLYCOL FLOW (L/S)	GLYCOL PRESSURE DROP (KPA)	HEATING PERFORMANCE			EER	FLA (A)	MCA (A)	MFS (A)	V/PH/HZ	
														GROSS TOTAL (kW)	GROSS SENSIBLE (kW)		E.A.T. - D.B. (°C)	E.A.T. - W.B. (°C)	S.A.T. - D.B. (°C)	S.A.T. - W.B. (°C)					E.A.T. - D.B. (°C)	O.A.T. - D.B. (°C)						
RTU-1	TRANE	OADN012	ROOF	CHILDCARE	2100	250	685	YES	2100	185	YES	ERW-1	R-410A	42.5	32.9	132.5	24.4	17.8	11.8	11.7	50% PROP. GLYCOL	73.9	110	1.77	6.3	19.3	48	MERV-13	15.2	68.3	73.4	90	208/3/60	
RTU-2	TRANE	OADN015	ROOF	GYM	1950	250	800	YES	-	-	-		R-410A	58.7	32.5	145	29.0	23.0	15.4	15.2	50% PROP. GLYCOL	146.2	88	3.47	23.1	-22	40	MERV-13	12.7	26.5	29.0	35	575/3/60	C/W SIDE DISCHARGE CURB
RTU-3	TRANE	OABD048A5-C1B401KG-JSJ00AL9004002C0C1A0	ROOF	OFFICES	920	375	500	YES	-	-	-	-	R-410A	57.4	37.8	83	29.0	23	18.9	18.4	50% PROP. GLYCOL	65.7	97.5	1.57	22.5	-22	37.2	MERV-13	12	9.5	10.8	15	575/3/60	
RTU-4	TRANE	OADN010	ROOF	HEART & TEACHING KITCHEN	1050	250	630	YES	-	-	-	-	R-410A	37.1	19.6	43	29.0	23.0	13.2	13.2	50% PROP. GLYCOL	103.3	22.5	2.46	10.5	-22	43.3	MERV-13	12	17.8	19.5	25	575/3/60	
RTU-5	TRANE	OAKD240A5-D1C400JT-JSJ00AL6JL4B42C0B400	ROOF	LEVEL 1 SOUTH CLASSROMS	3700	300	1850	YES	3700	185	YES	ERW-5	R-410A	72.1	55.8	195	25.4	18.7	12.9	12.9	50% PROP. GLYCOL	112.2	272.5	2.68	13.8	15.6	40.3	MERV-13	14.2	42.9	45.7	50	575/3/60	
RTU-6	TRANE	OADN020	ROOF	LEVEL 1 NORTH CLASSROOMS	3250	300	1600	YES	3250	185	YES	ERW-6	R-410A	69.3	51.1	103	25.2	18.5	11.9	11.9	50% PROP. GLYCOL	103.1	220	2.48	11.7	16.2	42.2	MERV-13	14.2	37.8	40.6	50	575/3/60	
RTU-7	TRANE	OADN020	ROOF	LEVEL 2 NORTH CLASSROOMS	3270	250	1430	YES	3270	185	YES	ERW-7	R-410A	68.8	51.1	103	24.7	18.1	12.3	12.2	50% PROP. GLYCOL	98.9	225	2.37	10.8	18.1	42.8	MERV-13	16.1	37.2	40.0	50	575/3/60	
RTU-8	TRANE	OAKD300A5-D1C400JT-JSJ00AL6JL4B42C0B400	ROOF	LEVEL 2 SOUTH CLASSROOMS	3625	250	1530	YES	3625	185	YES	ERW-8	R-410A	86.0	61.3	88	25	18.3	11.0	10.9	50% PROP. GLYCOL	107.2	265	2.56	12.6	17	41.2	MERV-13	13.5	49.7	53.3	60	575/3/60	

NOTES:
1. 600MM HIGH ROOF CURB.
2. HEATING PERFORMANCE BASED ON ENTERING GLYCOL TEMPERATURE OF 79°C AND LEAVING GLYCOL TEMPERATURE OF 68°C.
3. ROOFTOP UNIT SHALL HAVE SINGLE POINT POWER FEED , AND 120V/1Ø/60Hz FIELD WIRED RECEPTACLE. RECEPTACLE SHALL BE 20A, GFI PROTECTED AND INSTALLED WITHIN WEATHERPROOF ENCLOSURE.
4. EACH UNIT SHALL BE IN CONFORMANCE WITH ASHRAE 90.1 - 2010 EFFICIENCY.

ENERGY RECOVERY WHEELS

UNIT TAG	MANUFACTURER	MODEL	SERVICE	HEAT WHEEL SUMMER PERFORMANCE										HEAT WHEEL WINTER PERFORMANCE											REMARKS
				E.A.T. - D.B. (°C)	E.A.T. - W.B. (°C)	O.A.T. - D.B. (°C)	O.A.T. - W.B. (°C)	S.A.T. - D.B. (°C)	S.A.T. - W.B. (°C)	R.A.T. - D.B. (°C)	R.A.T. - W.B. (°C)	SENSIBLE CAPACITY (KW)	SENSIBLE EFFECTIVENESS (%)	TOTAL CAPACITY (KW)	TOTAL EFFECTIVENESS (%)	E.A.T. - D.B. (°C)	E.A.T. - W.B. (°C)	O.A.T. - D.B. (°C)	O.A.T. - W.B. (°C)	S.A.T. - D.B. (°C)	S.A.T. - W.B. (°C)	R.A.T. - D.B. (°C)	R.A.T. - W.B. (°C)	SENSIBLE EFFECTIVENESS (%)	LATENT EFFECTIVENESS (%)	MOTOR POWER (KW)	HEATING CAPACITY RECOVERED (KW)	
ERW-1	TRANE	ERC-4634C	RTU-1	33.3	24.3	35.0	25.6	24.5	18.8	23.9	17.2	7.7	85.0	19.9	82.0	-9.7	-9.7	-22.2	-22.2	15.5	10.8	21.1	14.4	25.8	72.0	37.5	75.0	
ERW-5	TRANE	ERC-4634C	RTU-5	31.7	23.2	35.0	25.6	26.9	20.0	23.9	17.2	17.1	71.0	44.3	69.0	-4.6	-4.7	-22.2	-22.2	9.9	7.1	21.1	14.4	58.2	61.0	84.3	63.0	
ERW-6	TRANE	ERC-4634C	RTU-6	32.1	23.5	35.0	25.6	26.7	19.8	23.9	17.2	15.4	74	39.8	72.0	-5.6	-5.7	-22.2	-22.2	11.1	7.9	21.1	14.4	52.1	63.0	75.6	65.0	
ERW-7	TRANE	ERC-4634C	RTU-7	30.9	22.6	35.0	25.6	25.8	19.2	23.9	17.2	15.3	82	39.2	78.0	-2.0	-2.1	-22.2	-22.2	14.2	9.8	21.1	14.4	52.1	68.0	104.6	70.0	
ERW-8	TRANE	ERC-4634C	RTU-8	32.1	23.6	35.0	25.6	26.6	19.7	23.9	17.2	15.0	75	38.8	73.0	-5.8	-5.9	-22.2	-22.2	11.3	8.1	21.1	14.4	50.1	64.0	73.62	66.0	

NOTES:
1. ENERGY RECOVERY WHEEL SHALL BE PROVIDED WITH VFD FOR MODULATION OF WHEEL.

MISCELLANEOUS FANS

UNIT TAG	MANUFACTURER	MODEL	LOCATION	SERVICE	AIRFLOW (L/S)	S.P. (Pa)	NOMINAL RPM	ELECTRICAL			WEIGHT (KG)	SONES	REMARKS
								INPUT WATTS (W)	NAMEPLATE AMPS (A)	V/PH/HZ			
EF-1	COOK	GNVF-180	C109B WR	C109B WR	60	100	1060	23	1.2	115/1/60	7	3.0	1,2
EF-2	COOK	GNVF-500	C111 WR	WRs C111A, C104, C117	160	150	1701	94	1.2	115/1/60	15	5.5	1, 2
EF-3	COOK	GNVF-500	C106 PRESCHOOL	WR C106A	120	110	1370	45	1.2	115/1/60	15	3.5	1,2
EF-4	COOK	70C15DH	ROOF	C100, C102, C107	70	85	1550	83	-	115/1/60	9	5.1	2,3
EF-5	COOK	90C15DL	ROOF	WRs 115, 116, 117	140	85	1487	80	-	115/1/60	11	6.1	2,3
EF-6	COOK	90C15DL	ROOF	119, 119A GYM STORAGE	130	85	1715	93	-	115/1/60	10	7.8	2,3
EF-7	COOK	90C15DH	ROOF	105 SPRINKLER	212	75	1366	95	-	115/1/60	11	7.0	3
EF-8	COOK	90C15DL	ROOF	109, 125A, 130	120	115	1506	78	-	115/1/60	11	5.7	3
EF-9	COOK	GN-148	129B MUD ROOM	129A WR	40	110	924	38	0.417	115/1/60	6	2.0	1, 2
EF-10	COOK	GN-148	129B MUD ROOM	129A WR	40	110	924	38	0.417	115/1/60	6	2.0	1, 2
EF-11	COOK	GN-622	2ND FLOOR	203, 207, 209, 210	189	115	1400	125	1.42	115/1/60	12	3.0	1,2
EF-12	COOK	120C13D	ROOF	222C, 222B, 222A, 223, 221, 111A	508	125	1300	117	-	115/1/60	14	8.9	2,3
EF-13	COOK	GN-166	1ST FLOOR	120	58	115	1100	48	0.443	115/1/60	5	3.0	1,4
KH-1, KH-2	BROAN	EW4830SS	C118 KITCHEN	RANGE EXHAUST	162	75	-	0.25	-	120/1/60	-	7.5	
SF-1	COOK	100SQN	MECH PENTHOUSE	PENTHOUSE SUPPLY	235	125	1500	149	-	115/1/60	27	7.9	1
BF-1	REVERSOMATIC	RI-250	C107 LAUNDRY	DRYER EXHAUST BOOSTER FAN	76	125	2550	85	-	115/1/60	-	-	2,5

NOTES:
1. VIBRATION ISOLATION HANGERS.
2. GRAVITY BACKDRAFT DAMPER.
3. 600MM ROOF CURB.
4. REVERSE-ACTING THERMOSTAT.
5. PROVIDE WITH REVERSOMATIC MODEL DAS-200 AMP SENSOR FAN CONTROL AND LT-300-45 LINT TRAP.

EXPANSION TANK SCHEDULE

UNIT TAG	MANUFACTURER	MODEL	SERVICE	TANK VOLUME (L)	ACCEPTANCE VOLUME (L)	MAX OPERATING PRESSURE (KPa)	RELIEF PRESSURE (KPa)	MAX OPERATING TEMPERATURE (°C)	WEIGHT (KG)	REMARKS
ET-1	AMTROL	EXTROL 200-L	HEATING WATER	200	200	862	414	116	86	
ET-2	AMTROL	EXTROL 130-LBC	GLYCOL HEATING	128	102	862	414	116	61	
ET-3	WATTS	DETA 30	SCHOOL DOMESTIC HOT WATER	56	37.3	1000	690	116	23	
ET-4	WATTS	DETA 30	DAYCARE DOMESTIC HOT WATER	56	37.3	1000	690	116	23	

GRILLES, REGISTERS AND DIFFUSERS SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	SIZE	FINISH	MAX NC	REMARKS
A	EH PRICE	SCD	SQUARE CONE DIFFUSER	600x600MM	PER ARCH	30	REFER TO FLOOR PLANS FOR NECK SIZE
B	EH PRICE	RCD	ROUND CONE DIFFUSER	600MM Ø	PER ARCH	30	PROVIDE WIRE GUARD AND SAFETY CHAIN. REFER TO FLOOR PLANS FOR NECK SIZE.
C	EH PRICE	80	EGG CRATE RETURN	300MMX300MM	PER ARCH	<20	REFER TO FLOOR PLANS FOR NECK SIZE
D	EH PRICE	80	EGG CRATE RETURN	600MMX300MM	PER ARCH	<20	NON-DUCTED RETURNS
E	E PRICE	520	LOUVRED FACE RETURN GRILLE	400x200	PER ARCH	40	DUCT MOUNTED
F	EH PRICE	96	GYM RETURN GRILLE	650x600	PER ARCH	40	3/4" BLADE SPACING, 45° DEFLECTION

NOTES:
1. REFER TO SPECIFICATIONS AND DETAILS FOR MORE INFORMATION.

SPLIT SYSTEM AIR CONDITIONING UNITS

INDOOR TERMINAL UNIT											OUTDOOR CONDENSING UNIT							
SYSTEM TAG	MANUFACTURER	MODEL NO.	LOCATION	COOLING CAPACITY (KW)	AIRFLOW - HI SETTING - DRY (L/S)	AIRFLOW - HI SETTING - WET (L/S)	WEIGHT (KG)	ELECTRICAL			SYSTEM TAG	LOCATION	MODEL NO.	AIRFLOW RATE (L/S)	WEIGHT (KG)	ELECTRICAL		
								V/PH/HZ	SEER (%)	EER (%)						V/PH/HZ	MCA (A)	MCOP (A)
AC-1	MITSUBISHI ELECTRIC SALES CANADA INC	MSY-GL12NA	134 IT	3.52	152	135	10	208/1/60	23.1	13.0	OCU-1	ROOFTOP	MUY-GL12NA	580	37	230/1/60	7.0	15
AC-2	MITSUBISHI ELECTRIC SALES CANADA INC	MSY-GL12NA	124 ELEVATOR CONTROL	3.52	152	135	10	208/1/60	23.1	13.0	OCU-2	ROOFTOP	MUY-GL12NA	580	37	230/1/60	7.0	15
AC-3	MITSUBISHI ELECTRIC SALES CANADA INC	MSY-GL12NA	110 ELECTRICAL	3.52	152	135	10	208/1/60	23.1	13.0	OCU-3	ROOFTOP	MUY-GL12NA	580	37	230/1/60	7.0	15
AC-4	MITSUBISHI ELECTRIC SALES CANADA INC	MSY-GL12NA	C113 EXIST. ELECTRICAL/IT	3.52	152	135	10	208/1/60	23.1	13.0	OCU-4	ROOFTOP	MUY-GL12NA	580	37	230/1/60	7.0	15
AC-5	MITSUBISHI ELECTRIC SALES CANADA INC	MSY-GL12NA	213 IT	3.52	152	135	10	208/1/60	23.1	13.0	OCU-5	ROOFTOP	MUY-GL12NA	580	37	230/1/60	7.0	15

NOTES:
1. REFRIGERANT SHALL BE R410A.
2. INDOOR UNIT SHALL COME WITH INTEGRAL DRAIN PUMP.
3. PROVIDE A LOW AMBIENT TEMPERATURE KIT.
4. PROVIDE ROOF MOUNTING STAND EQUAL TO ECO FOOT "ECO FRAME" TO RAISE CONDENSING UNITS MINIMUM 450MM ABOVE ROOF.

VARIABLE AIR VOLUME BOXES

TAG	MANUFACTURER	MODEL	QUANTITY	VAV SIZE	INLET SIZE (MM)	MIN. AIRFLOW (L/S)	MAX AIRFLOW (L/S)	DISCHARGE NC	RADIATED NC	ATTENUATOR LENGTH (MM)	AIR PRESSURE DROP (Pa)	REMARKS
VAV-6	EH PRICE	SDV-6	14 UNITS	6	150	30	233	27	31	900	125	VERIFY QTY BEFORE PURCHASE
VAV-8	EH PRICE	SDV-8	17 UNITS	8	200	59	467	27	31	900	125	VERIFY QTY BEFORE PURCHASE
VAV-10	EH PRICE	SDV-10	15 UNITS	10	250	99	764	28	30	900	125	VERIFY QTY BEFORE PURCHASE
VAV-12	EH PRICE	SDV-12	3 UNITS	12	300	141	1104	30	32	900	125	VERIFY QTY BEFORE PURCHASE
VAV-14	EH PRICE	SDV-14	1 UNIT	14	350	207	991	20	21	900	125	VERIFY QTY BEFORE PURCHASE

NOTES:
1. DDC CONTROLLER/ACTUATOR SHALL BE SUPPLIED BY CONTROLS MANUFACTURER AND INSTALLED BY V.A.V. BOX MANUFACTURER.

RADIANT FLOOR HEATING CAPACITY OUTPUT SCHEDULE (Klimatrol Environmental Systems)

TAG	ZONES	Manufacturer Supplier	TOTAL OUTPUT		FLOW		EWT		LWT		FLUID PRESSURE DROP		Pipe Spacing		AREA		OUTPUT PER AREA		MAX SURFACE TEMPERATURE		COMMENTS
			(BTUH)	(WATTS)	(USGPM)	(L/s)	(°F)	(°C)	(°F)	(°C)	(ft.H20)	(kPa)	inches	mm	(FT^2)	(m^2)	(BTUH / FT^2)	(kW / m^2)	(°F)	(°C)	
MF-1	1A TO 1C	Klimatrol	24698	7238	3.1	0.2	110.0	43.3	90.0	32.2	12.00	35.83	9.0	203.2	932.0	86.6	26.5	83.6	86.0	30.0	Ambient 72F
MF-2	2A TO 2C	Klimatrol	17253	5056	2.2	0.1	110.0	43.3	90.0	32.2	12.00	35.83	9.0	203.2	932.6	86.6	18.5	58.4	85.0	29.4	Ambient 72F
MF-3	2D TO 2G	Klimatrol	38640	11324	4.8	0.3	110.0	43.3	90.0	32.2	12.00	35.83	9.0	203.2	1,680.0	156.1	23.0	72.6	85.0	29.4	Ambient 72F
MF-4	3A TO 3E	Klimatrol	41255	12091	5.2	0.3	110.0	43.3	90.0	32.2	12.00	35.83	9.0	203.2	2,230.0	207.2	18.5	58.4	85.0	29.4	Ambient 72F
MF-5	4A TO 4D	Klimatrol	52073	15261	6.5	0.4	110.0	43.3	90.0	32.2	12.00	35.83	9.0	203.2	1,965.0	182.5	26.5	83.6	86.0	30.0	Ambient 72F
MF-6	4E, 5B & 5C	Klimatrol	32485	9520	4.1	0.3	110.0	43.3	90.0	32.2	12.00	35.83	9.0	203.2	1,649.0	153.2	19.7	62.1	85.0	29.4	Ambient 72F
MF-7	5A & 5D TO 5H	Klimatrol	34821	10205	4.4	0.3	112.0	44.4	90.0	32.2	12.00	35.83	9.0	203.2	1,153.0	107.1	30.2	95.3	88.0	31.1	Ambient 72F
MF-8	8A TO AD	Klimatrol	63426	18588	7.9	0.5	115.0	46.1	91.0	32.8	12.00	35.83	9.0	203.2	1,922.0	178.6	33.0	104.1	89.0	31.7	Ambient 72F
MF-9	8E & 9A TO 9C	Klimatrol	50656	14846	6.3	0.4	110.0	43.3	90.0	32.2	12.00	35.83	9.0	203.2	1,765.0	164.0	28.7	90.5	87.0	30.6	Ambient 72F
MF-10	9D TO 9H	Klimatrol	37549	11005	4.7	0.3	115.0	46.1	90.0	32.2	12.00	35.83	9.0	203.2	1,131.0	105.1	33.2	104.7	89.0	31.7	Ambient 72F
MF-11	7C & 7D	Klimatrol	29423	8623	3.7	0.2	110.0	43.3	90.0	32.2	12.00	35.83	9.0	203.2	1,486.0	138.0	19.8	62.5	85.0	29.4	Ambient 72F
MF-12	7A & 7B	Klimatrol	29380	8611	3.7	0.2	110.0	43.3	90.0	32.2	12.00	35.83	9.0	203.2	1,499.0	139.3	19.6	61.8	85.0	29.4	Ambient 72F
MF-13	6A TO 6E	Klimatrol	46462	13617	5.8	0.4	110.0	43.3	90.0	32.2	12.00	35.83	9.0	203.2	2,161.0	200.8	21.5	67.8	85.0	29.4	Ambient 72F

- Klimatrol Environmental Systems Ltd. (905) 454-1742 Is the basis of design. No alternates.
- Supply Klimatrol Hydronic System consisting of - 'ANURAV PANELS' c/w (1/2" Raupex PEXa, Pumps, Manifolds, Cabinets, BACnet Controllers, Mixing Valves, Actuator, Circuit and Transformers, Pipe Ties, Bend Guides,).
- Supplier must rep their provided product and prove 10 years in business experience with proven 10 successfully completed jobs of similar size.
- Secure RAUPEX piping to dedicated circuits to wire mesh grid. Wire mesh and insulation provided by General Contractor.
- Minimum 11/2" concrete covering over the Raupex pipes at 9" o.c.
- Sleeve Raupex across expansion joints and wherever pipe passes out of the slab.
- Install manifolds in serviceable location, ensure cabinets are level and square, purge all air from system when filling
- Only Everloc couplers shall be used if pipe splice is required
- Only as per Klimatrol design. Klimatrol shall provide detailed system Loop Design Shop Drawings for submittal and construction. Contractor shall not deviate from approved drawings.
- Apply a 68 lb air pressure test to manifolds and pipe field for concrete pours and the duration of building construction
- Contact Klimatrol to witness installation and provide inspection report for each area immediately prior to concrete emplacement
- Fluid fill is base building building provided treated water

No.	Revision	Date
14	ISSUED FOR ADDENDUM M-3	2024-04-23
13	ISSUED FOR ADDENDUM M-2	2024-04-12
12	ISSUED FOR ADDENDUM M-1	2024-04-02
11	ISSUED FOR TENDER & PERMIT	2024-03-26
10	ISSUED FOR TENDER REVIEW	2023-03-15
9	ISSUED FOR COORDINATION REVIEW	2023-02-28
8	ISSUED FOR SITE PLAN APPLICATION	2023-11-21
7	ISSUED FOR COSTING	2023-10-03
6	ISSUED FOR 100%CD	2023-08-23
5	ISSUED FOR 90%CD	2023-07-31
4	ISSUED FOR 50%CD	2023-07-05
3	ISSUED FOR COORDINATION	2023-06-29
2	ISSUED FOR 100% DD	2023-05-30
1	ISSUED FOR SITE PLAN APPLICATION	2023-05-03

Orientation

PROJECT NORTH

Seal

All dimensions to be checked and verified on the job by the Contractor. Any discrepancies are to be reported to the Consultant prior to action. Only the latest approved drawings to be used for construction in conformance with all applicable codes, by-laws and regulations. All drawings remain the property of the Consultant.

QUASAR CONSULTING GROUP
250 ROWNTREE DAIRY RD, WOODBRIDGE, ON
TEL: 905-507-0800
WEB: WWW.QUASARCG.COM

QUASAR PROJECT No.: ED-22-069

Project Information

J.J. O'Neill Catholic Elementary School - Addition / Renovation
240 Marilyn Ave., Napanee, Ontario K7R 2L4

For
Algonquin and Lakeshore Catholic District School Board

Drawing Title

MECHANICAL SCHEDULES II

Date	Project No	Drawing No
MAY 2023	22-206	M-901
Drawn by: B.O		
Scale: N.T.S.		

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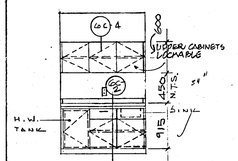
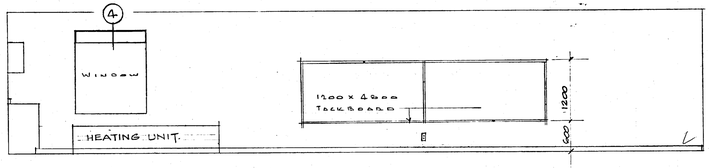


1 HEALTH RM. 150
SOUTH ELEV.



2 KINDERGARTEN 103
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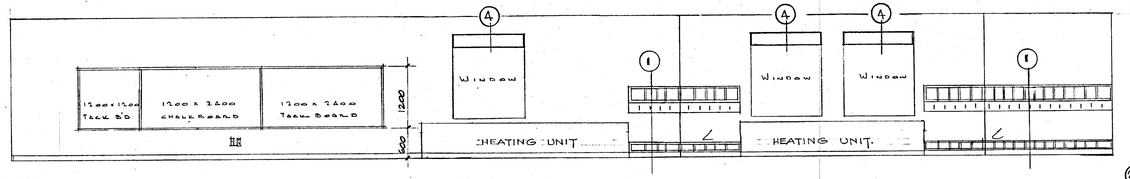
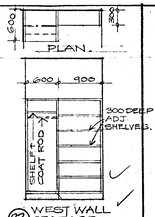
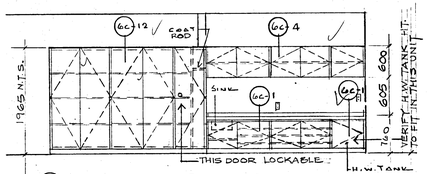


3 KINDERGARTEN 103
NORTH ELEV.

EAST ELEV.



23 WEST WALL STORAGE RM. 149.



4 KINDERGARTEN 103
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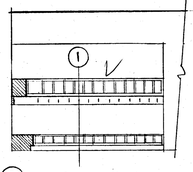

5 COATS RM. 104
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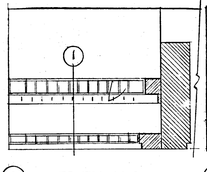
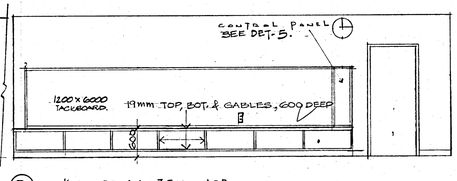
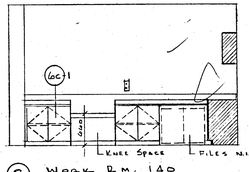


6 COATS RM. 104
SOUTH ELEV.



7 KINDERGARTEN 103
WEST ELEV.



8 WORK RM. 140
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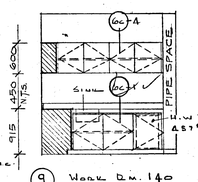

9 WORK RM. 140
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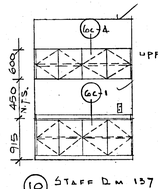
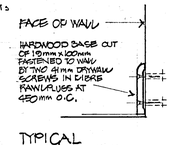
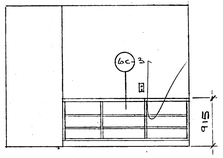


10 STAFF RM 137
EAST ELEV.



TYPICAL BASE DETAIL



11 A.V. STORAGE RM. 143
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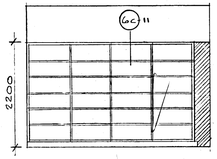
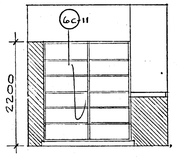
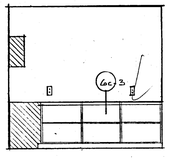


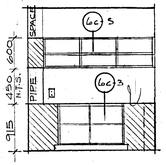
12 A.V. STORAGE RM 143
NORTH ELEV.



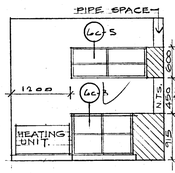
13 A.V. STORAGE RM 143
EAST ELEV.



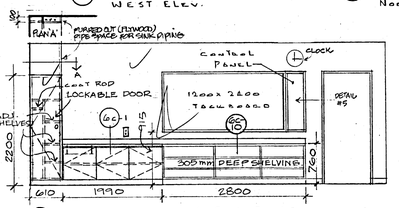
14 MIMEO RM. 147
WEST ELEV.



15 MIMEO RM. 147
SOUTH ELEV

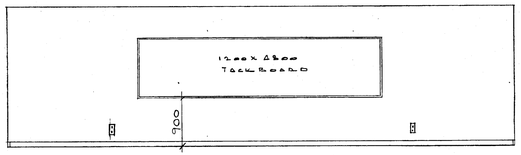


16 MIMEO RM 147
EAST ELEV.

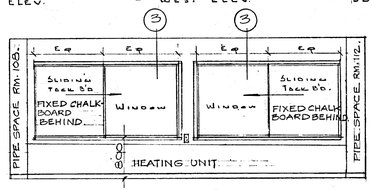


17 CLASS ROOM 108 WEST ELEV.
CLASSRM. 112 EAST WALL SIMILAR BUT HANDED.

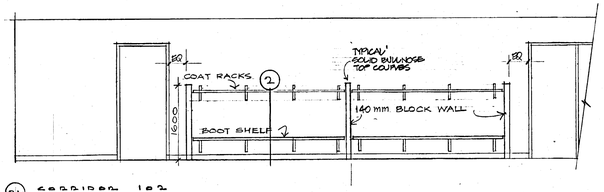
18



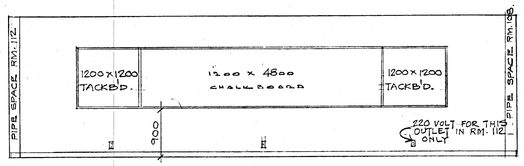
19 CLASSROOM 108 SOUTH ELEV.
112 SOUTH ELEV.



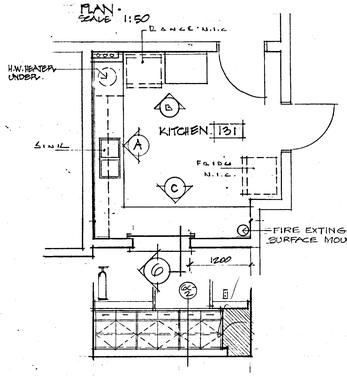
20 CLASSROOM 108 EAST ELEV.
112 WEST ELEV.



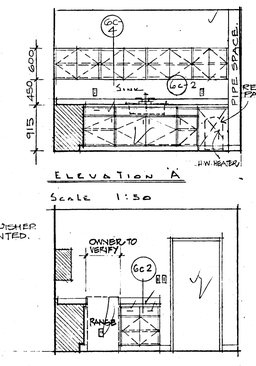
21 CORRIDOR 102
WEST ELEV.



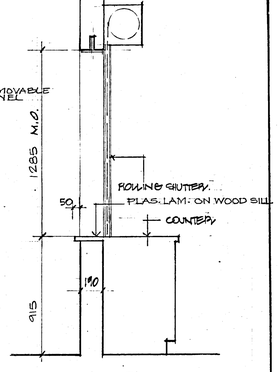
22 CLASSROOM 112 NORTH WALL
CLASSROOM 108 NORTH WALL



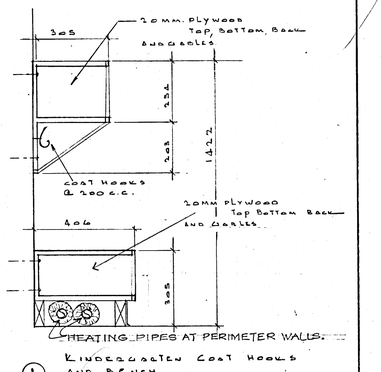
ELEVATION 'C'



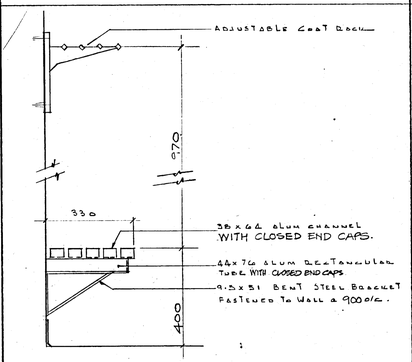
ELEVATION 'B'



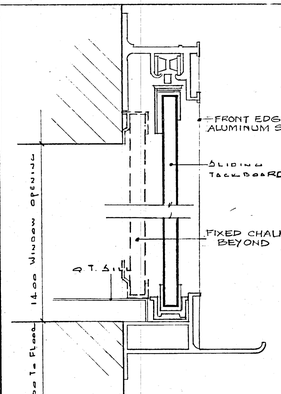
SECTION 6
SCALE 1:20.



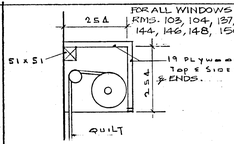
1 KINDERGARTEN COAT HOOKS AND BENCH
SCALE 1:10



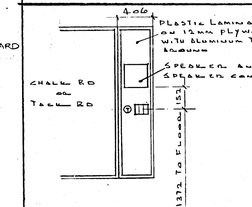
2 CORRIDOR BOOT SHELF AND COAT RACKS.
SCALE 1:10



3 SLIDING TACK BOARD AT WINDOW
SCALE ½ FULL SIZE



4 QUILT VALANCE
SCALE 1:10



5 TYPICAL CONTROL PANEL
NOT TO SCALE

CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS ON THE JOB.

THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS SIGNED BY THE ARCHITECT. H.E.R.

JACKSON YPES & ASSOCIATES
ARCHITECTS ENGINEERS
WILLOWDALE ONTARIO

J.J. O'NEILL SCHOOL
NAPANEE/RICHMOND, ONTARIO.
FRONTENAC-LENNOX AND ADDINGTON COUNTY ROMAN CATHOLIC SEPARATE SCHOOL BOARD

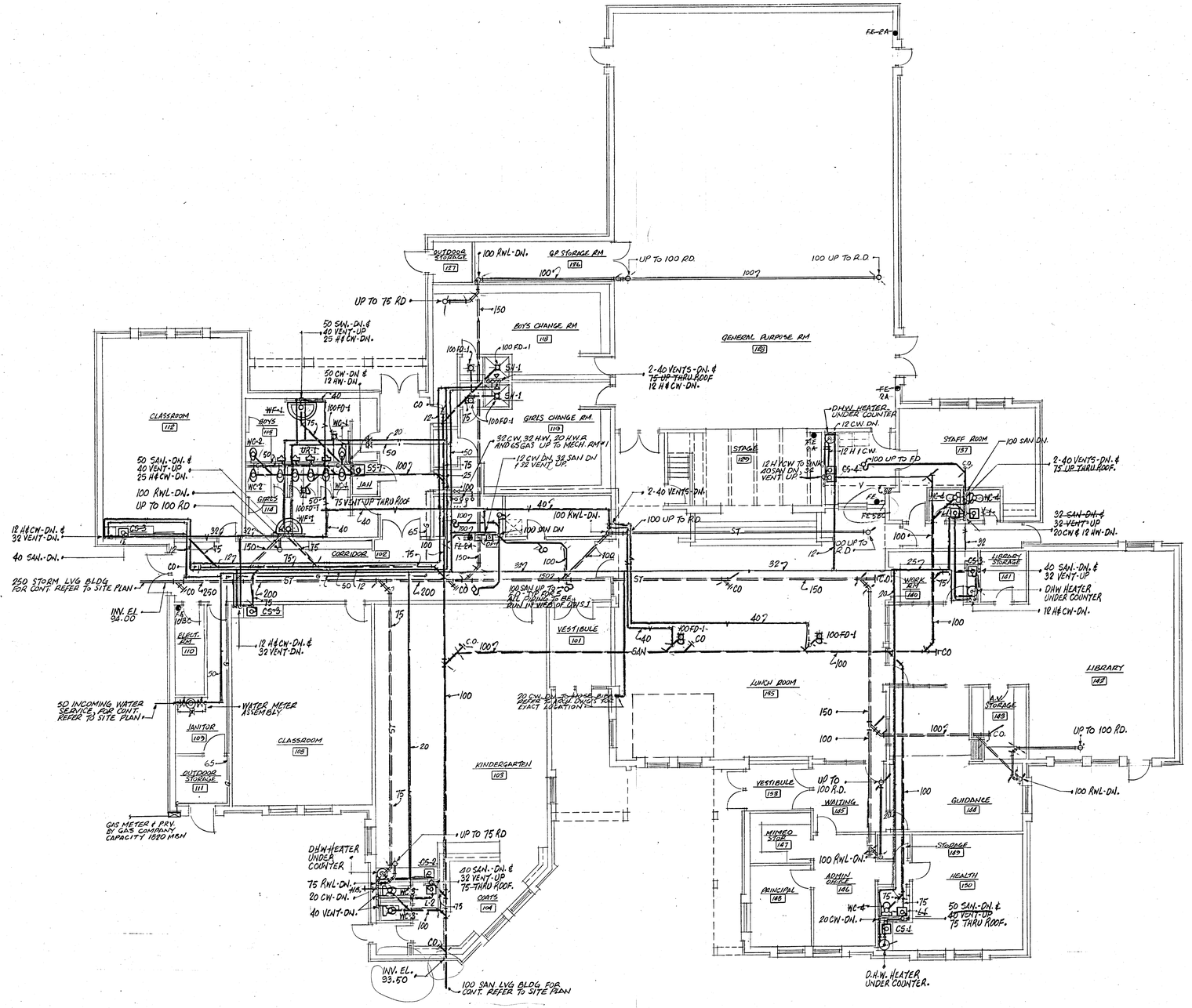
ROOM ELEVATIONS SHOWING FITMENTS.

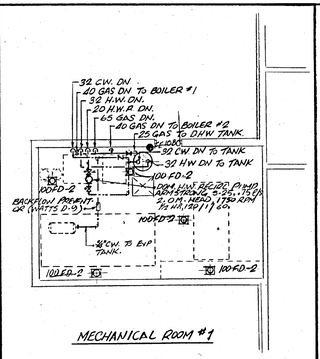
JOB No. 8218

DRAWN D.W. | CHECKED G.E.R. | DWG#

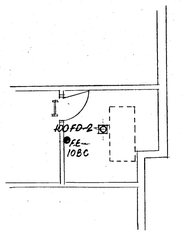
SCALE 1:50 AND AS SHOWN. | DATE FEB. 7 '83

10





MECHANICAL ROOM #1



MECHANICAL ROOM #2

THIS CONTRACTOR SHALL CHECK AND VERIFY THESE DRAWINGS WITH THE ARCHITECTURAL DRAWINGS AND REPORT ANY INCONSISTENCIES TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS ON THE JOB

REGISTERED PROFESSIONAL ENGINEER 2796 E.T.B. HEATHCOTE 564 PROVINCE OF ONTARIO

JACKSON YPES & ASSOCIATES ARCHITECTS ASSOCIATION OF ONTARIO MEMBERS

JACKSON YPES ASSOCIATES

ARCHITECTS ENGINEERS

WILLOWDALE ONTARIO

J.J. O'NEILL SCHOOL
NAPANEE/RICHMOND
FRONTENAC LENNOX AND ADDINGTON COUNTY ROMAN CATHOLIC SEPARATE SCHOOL BRD.

FLOOR PLAN PUMP & DRAINAGE

JOB No. 8218

DRAWN	CHECKED	DWG. NO.
A.V.P.	K.G.	P2
SCALE	DATE	
1 : 100	7 FEB 83	

N TRUE NORTH

LADDER UP TO MECH. RM. #2.

LIGHTING PANEL LP-2L — 2L-32

STAGE/PA AMP

STAGE DIMMING STATION

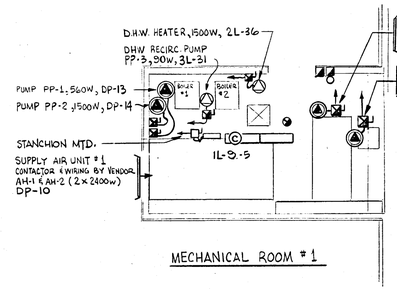
FANS FA-8/FA-9 REVERSING STR. } GYM.
FANS FA-6/FA-7 NON-REV. STR. }

FAN FA-10/FA-17 REVERSING STR. }
FANS FA-11/FA-12 NON REV. STR. } LUNCH RM.

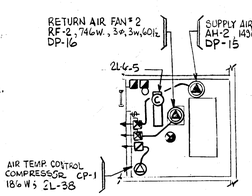
$\$_{dm}$ $\$_{dm}$ $\$_{dm}$ — WEST ARCH BATTEN - CCTS 2L-7, 9, 11
$\$_{dm}$ $\$_{dm}$ $\$_{dm}$ — EAST ARCH BATTEN - CCTS 2L-8, 10, 12
$\$_{dm}$ $\$_{dm}$ $\$_{dm}$ — OFF-STAGE BATTEN - CCTS 2L-14, 16, 18
$\$_{dm}$ $\$_{dm}$ $\$_{dm}$ — HOUSE LIGHTS - CCTS 2L-20, 22-1, 22-2
$\$_{dm}$ $\$_{dm}$ $\$_{dk}$ — HOUSE LIGHTS - CCTS 2L-24, 27-1, 21
KEY-OPERATED SW. (THIS SWITCH ONLY) FOR LUNCHROOM "NIGHTLIGHTS"

STAGE DIMMING STATION
N.T.S.

PART PLAN - STAGE
N.T.S.



MECHANICAL ROOM #1



MECHANICAL ROOM #2

NOTES

1. ELECTRICAL HTR. IN ELECT. P TO BE 1500W, 208V, 1Φ, 60H BASEBOARD TYPE. FPE#H27R c/w THERMOSTAT TYPE# HDT-14 (1219mm Long)
2. PROVIDE 10 - 40mm conduit & FOR 'FUTURE' CONNECTION TO RELOCATABLES AS FOLLOWS.
   6 - 40mm EMT BETWEEN INTERFACE & MAIN SWITCHGEAR DIST. PNL.
   1-40mm EMT BETWEEN INTERFACE & LP-1L (CORRIDOR LTG.)
   1-40 mm EMT. BETWEEN INTERFACE & P/A RACK
   1-40 mm EMT. BETWEEN INTERFACE & FIRE ALARM CONTROL PANEL
   1 SPARE. TO RUN BETWEEN INTERFACE & ELECT. RM.

* PROVIDE JUNCTION/PULL BOX AT TERMINAL END OF CONDUIT (INTERFACE)

THIS CONTRACTOR SHALL CHECK AND VERIFY THESE DRAWINGS WITH THE ARCHITECTURAL DRAWINGS AND REPORT ANY INCONSISTENCIES TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS ON THE JOB.

ONTARIO ASSOCIATION OF ARCHITECTS — MEMBERS

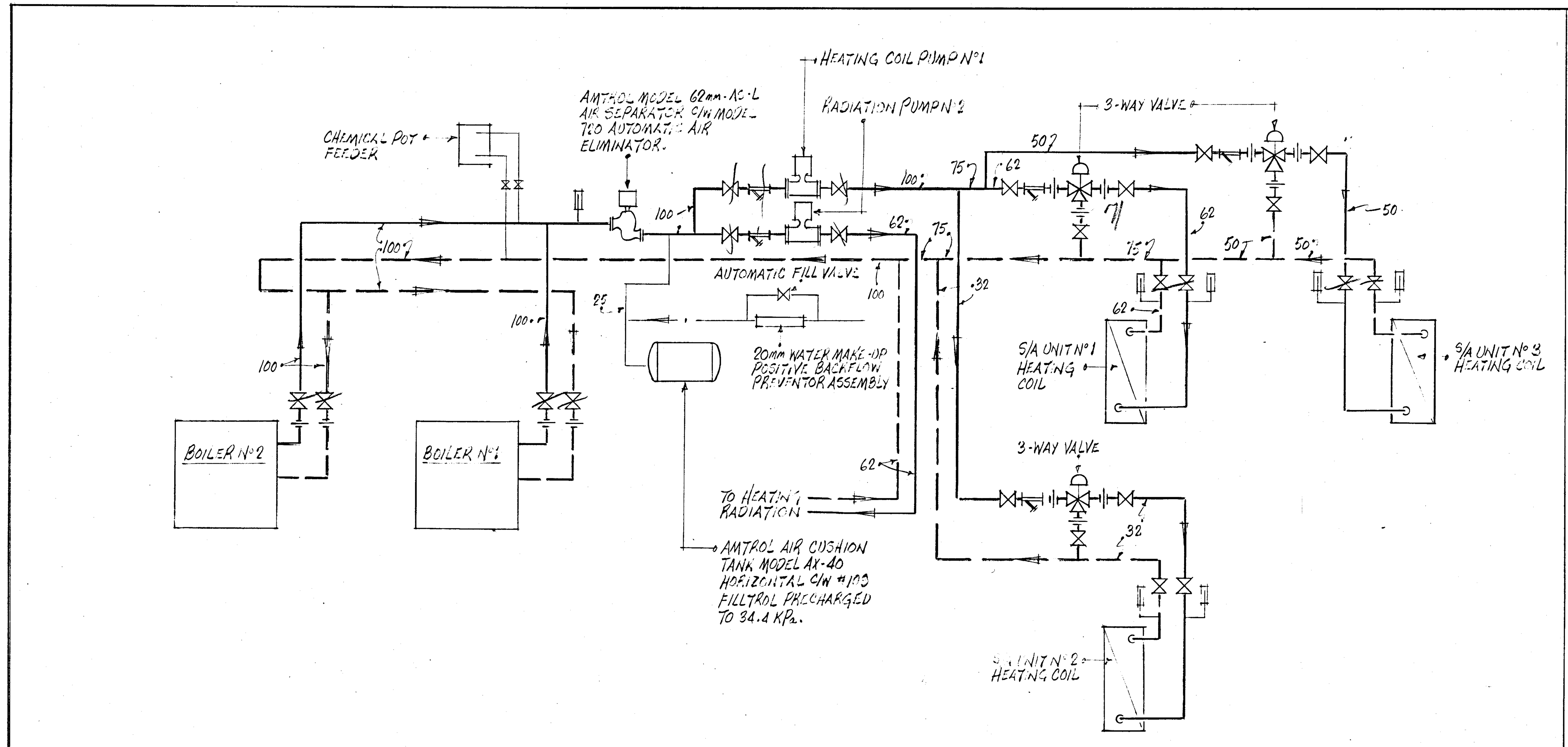
REGISTERED PROFESSIONAL ENGINEERS PROVINCE OF ONTARIO — 2796 J.N. CARTER

JACKSON YPES ASSOCIATES
ARCHITECTS ENGINEERS
WILLOWDALE ONTARIO

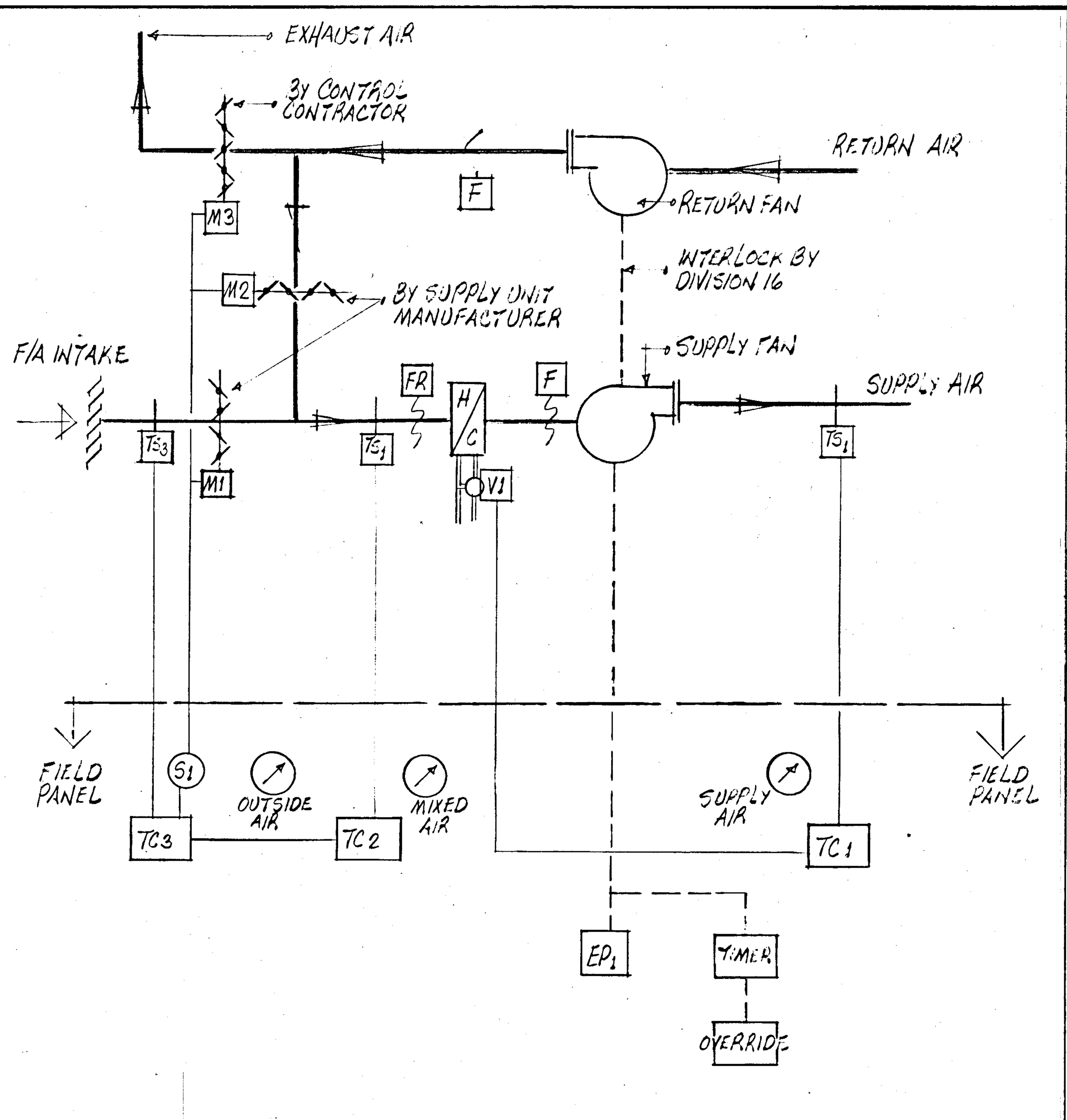
J. J. O'NEILL SCHOOL
NAPANEE/RICHMOND
FRONTENAC LENNOX AND ADDINGTON COUNTY ROMAN CATHOLIC SEPARATE SCHOOL BRD.

LIGHTING & POWER LAYOUT — JOB No. 8218

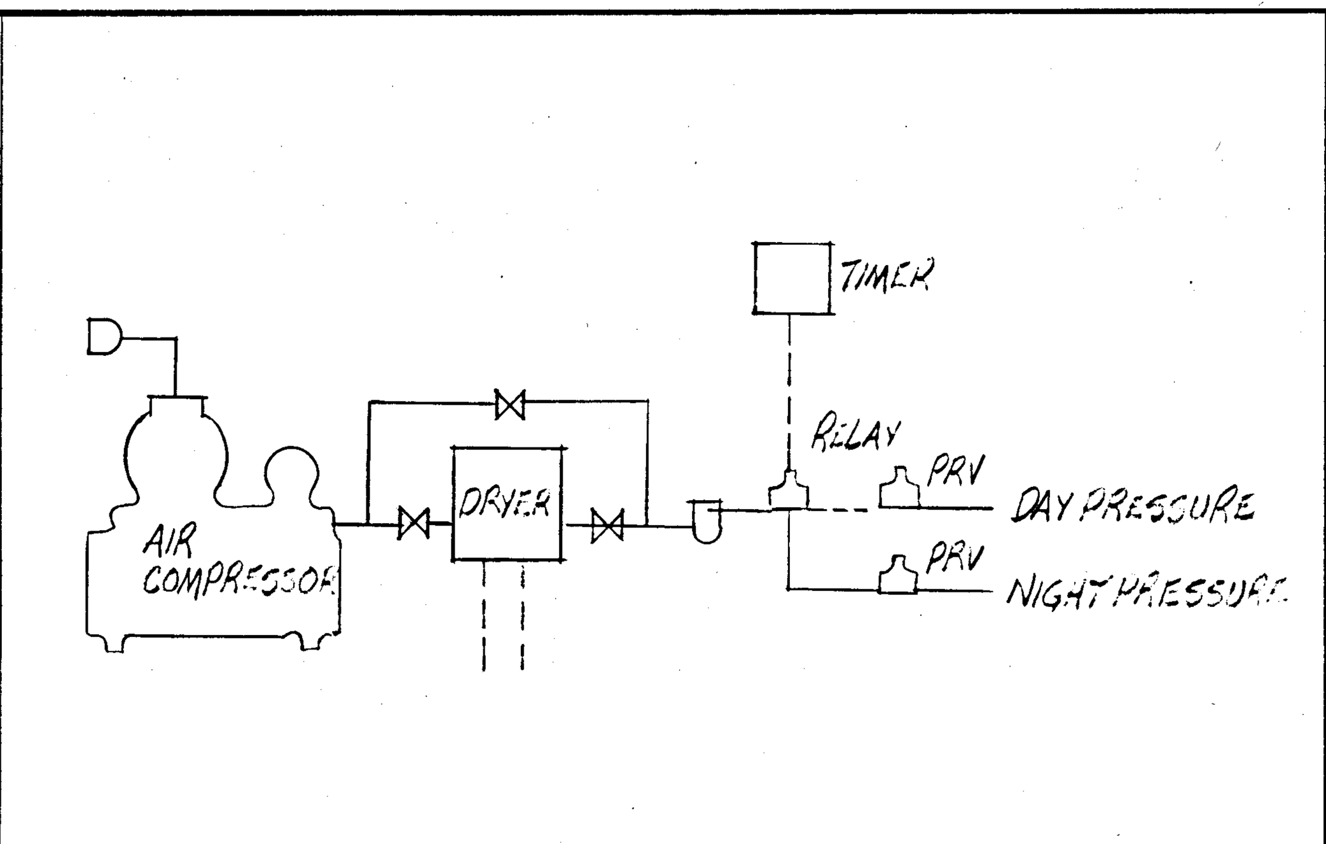
DRAWN	CHECKED	DWG NO
J. ROBERT MARSHALL	N.C.	E3
SCALE 1:100	DATE 7 FEB 83	


HEATING COIL PUMP N°1
AMTROL MODEL 62mm-AS-L AIR SEPARATOR C/W MODEL 720 AUTOMATIC AIR ELIMINATOR.
RADIATION PUMP N°2
CHEMICAL POT FEEDER
3-WAY VALVE
50
75
62
100
AUTOMATIC FILL VALVE
25
32
20mm WATER MAKE-UP POSITIVE BACKFLOW PREVENTOR ASSEMBLY
S/A UNIT N°1 HEATING COIL
S/A UNIT N°3 HEATING COIL
BOILER N°2
BOILER N°1
TO HEATING RADIATION
AMTROL AIR CUSHION TANK MODEL AX-40 HORIZONTAL C/W #109 FILLTROL PRECHARGED TO 34.4 KPa.
HEATING COIL

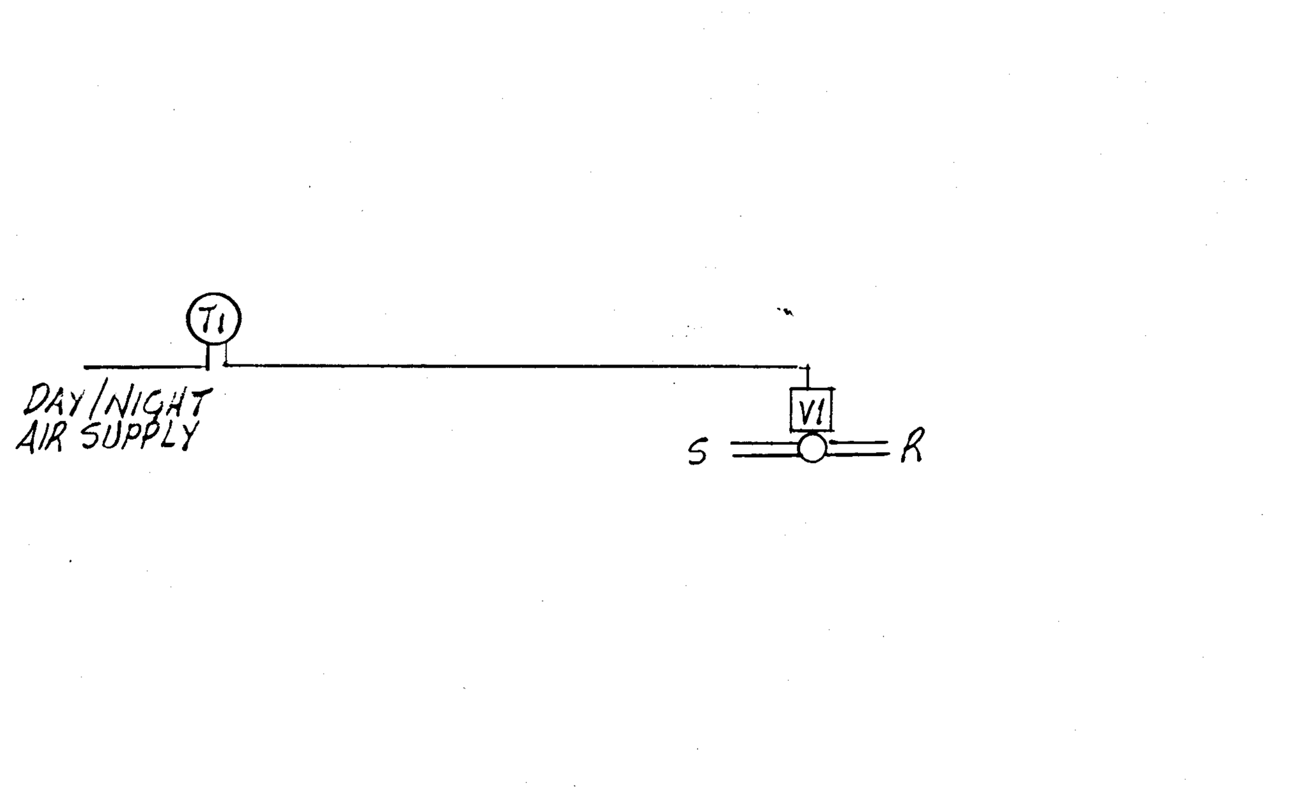
H O T W A T E R H E A T I N G F L O W D I A G R A M N. T. S.


EXHAUST AIR
BY CONTROL CONTRACTOR
RETURN AIR
RETURN FAN
INTERLOCK BY DIVISION 16
BY SUPPLY UNIT MANUFACTURER
SUPPLY FAN
F/A INTAKE
SUPPLY AIR
M3
M2
M1
F
FR
H/C
V1
TS3
TS1
FIELD PANEL
S1
OUTSIDE AIR
MIXED AIR
SUPPLY AIR
TC3
TC2
TC1
EP1
TIMER
OVERRIDE

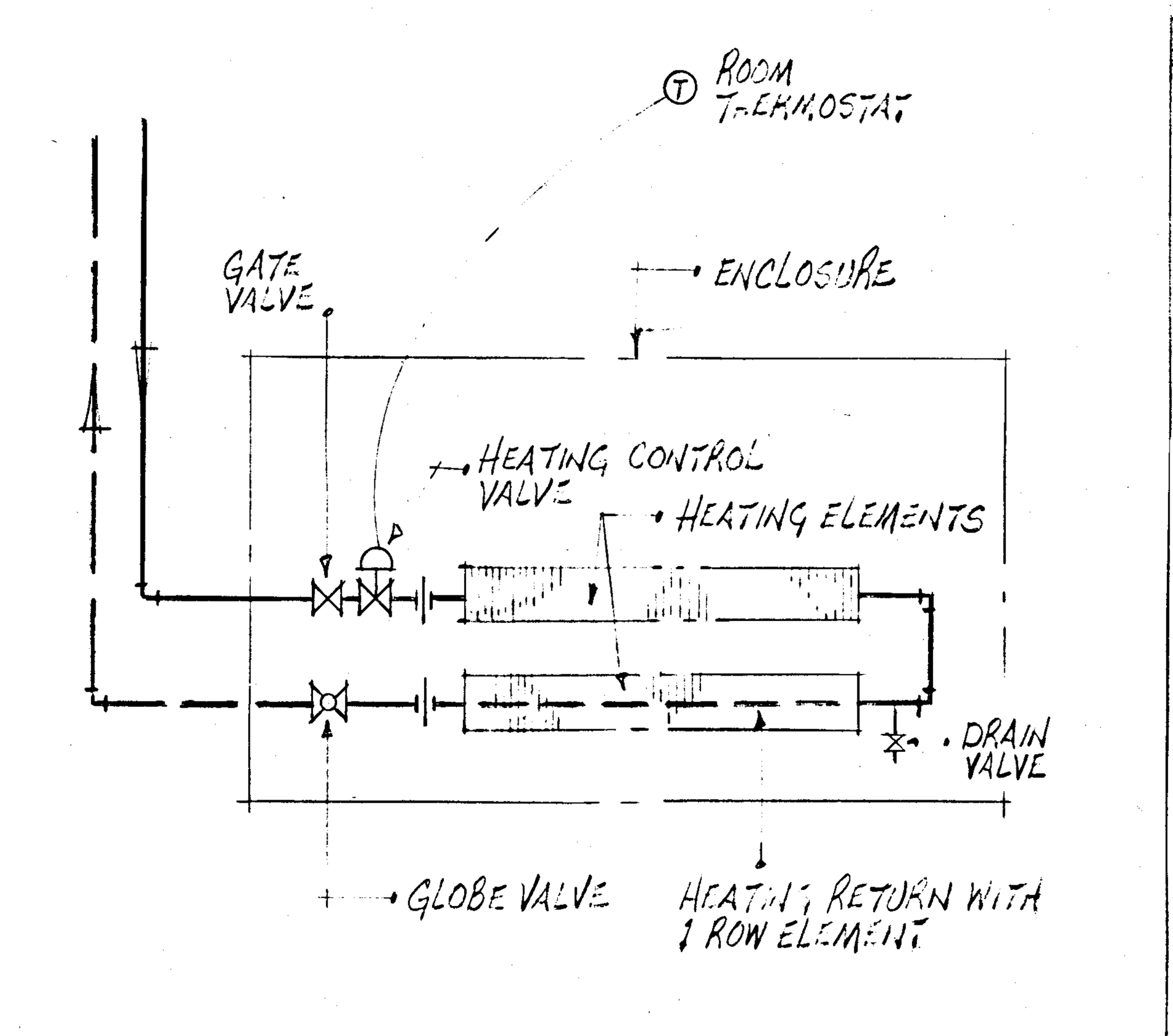
SUPPLY AIR CONTROL SYSEMS FOR S/A UNIT N°2 AND S/A UNIT N°3



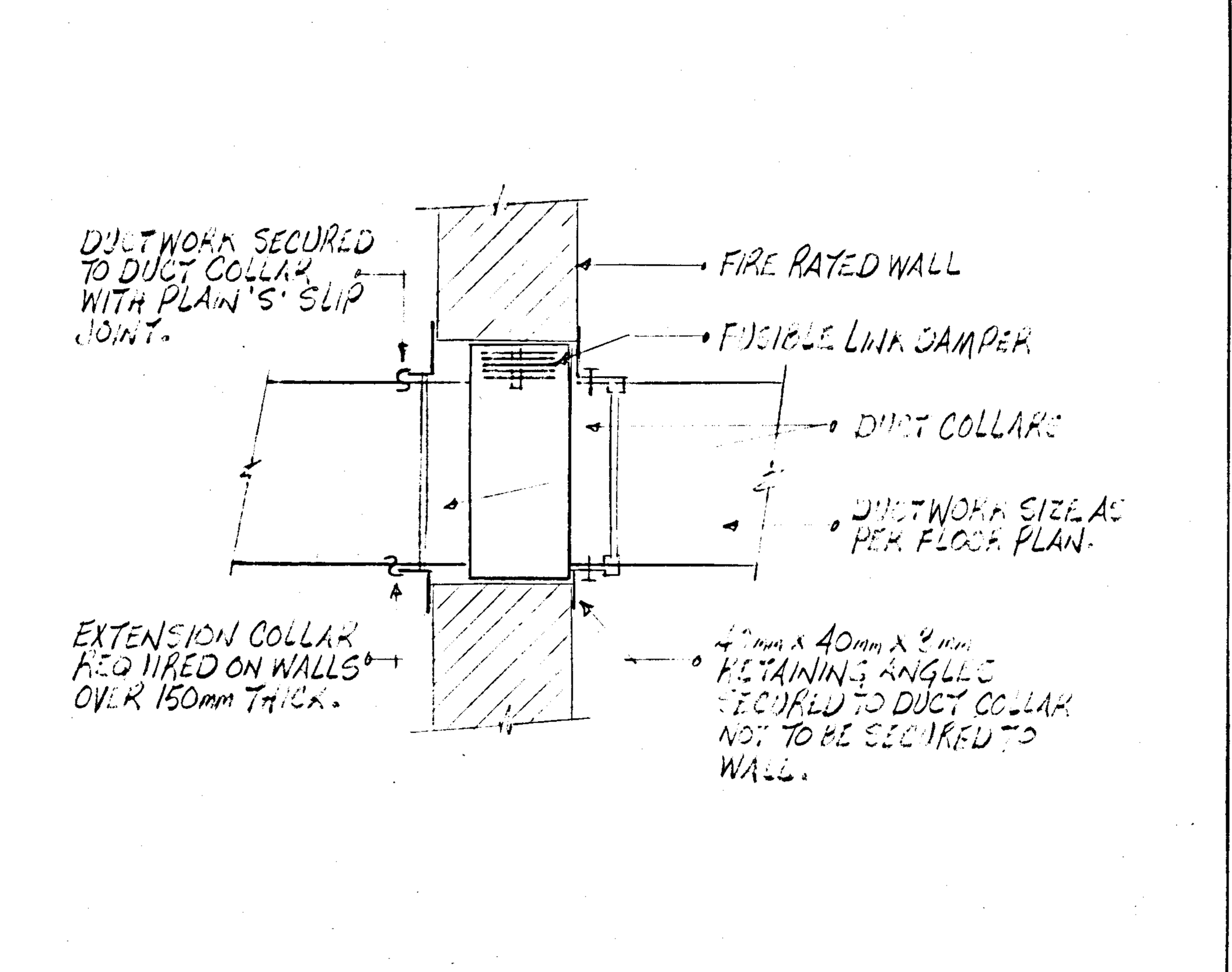
AIR COMPRESSOR AND DRYER SYSTEM



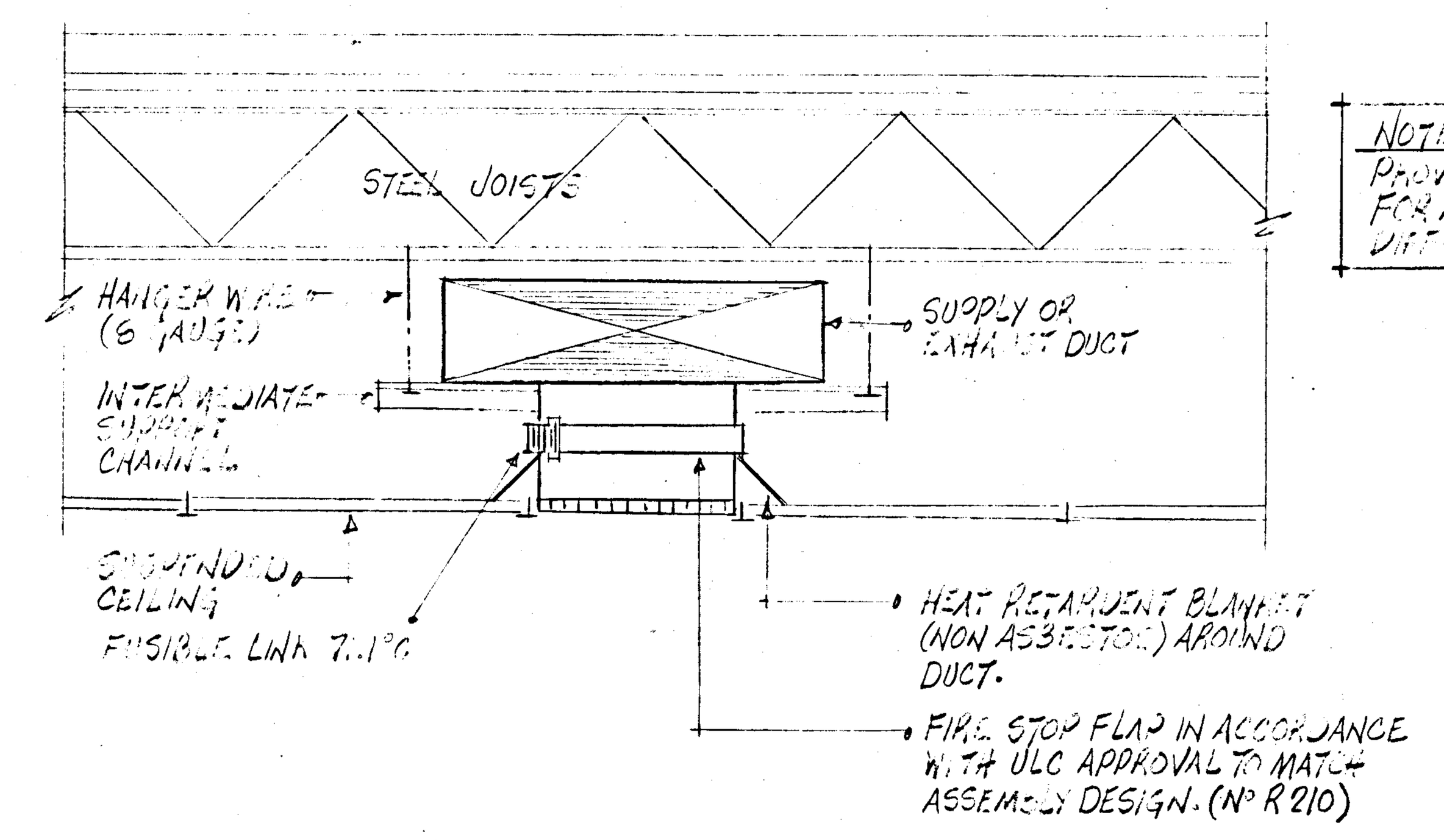
ROOM TEMPERATURE CONTROL SYSTEM



TYPICAL WALL FIN PIPING DIAGRAM N. T. S.

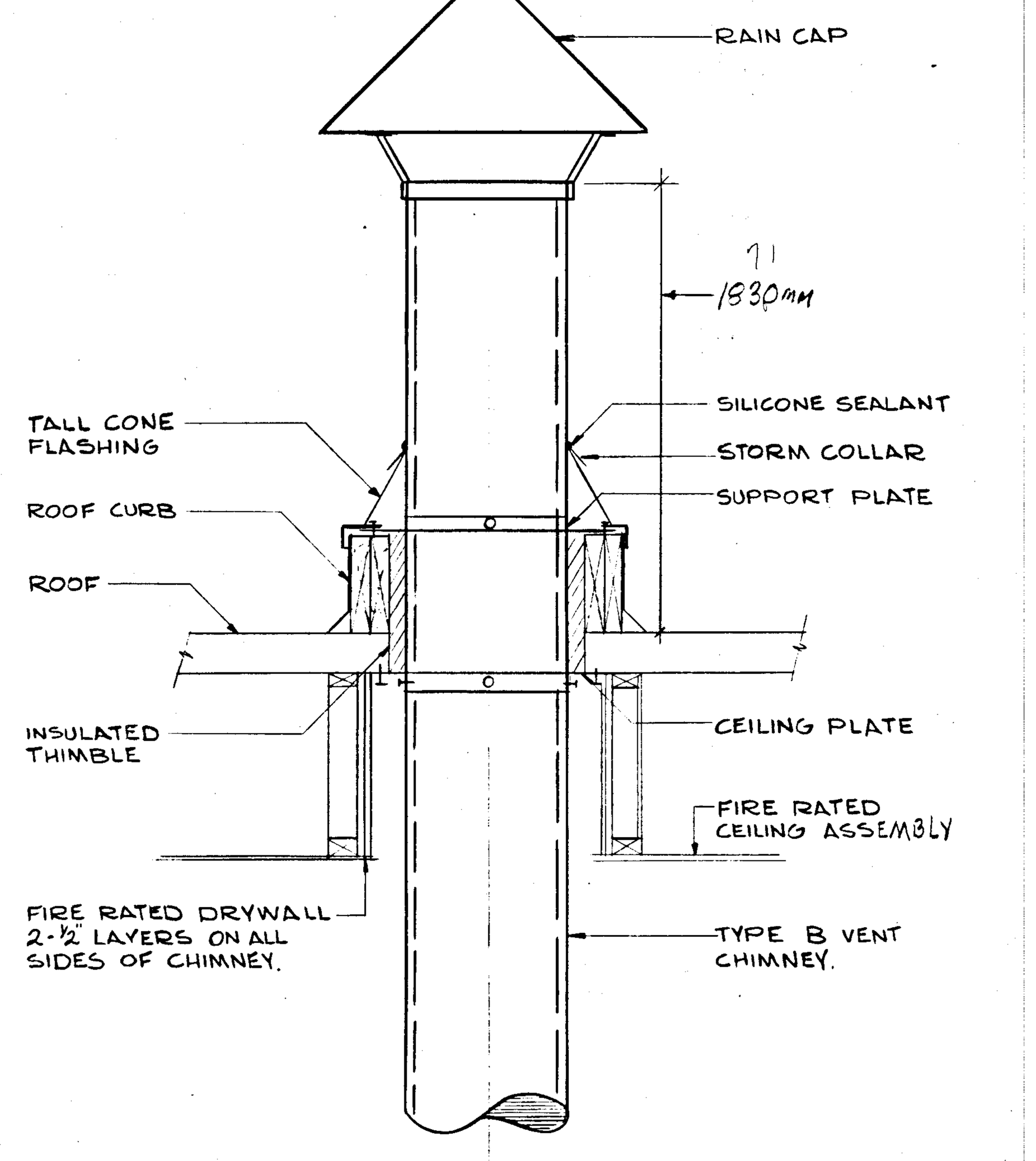

DUCTWORK SECURED TO DUCT COLLAR WITH PLAIN 'S' SLIP JOINT.
FIRE RATED WALL
FUSIBLE LINK DAMPER
DUCT COLLARS
DUCTWORK SIZE AS PER FLOOR PLAN.
EXTENSION COLLAR REQUIRED ON WALLS OVER 150mm THICK.
40mm x 40mm x 3mm RETAINING ANGLES SECURED TO DUCT COLLAR NOT TO BE SECURED TO WALL.

DETAIL OF FIRE DAMPER THRU RATED WALL N. T. S.


STEEL JOISTS
HANGER WIRE (6 GAUGE)
SUPPLY OR EXHAUST DUCT
INTERMEDIATE SUPPORT CHANNEL
SUSPENDED CEILING
FUSIBLE LINK 71°C
HEAT RETARDENT BLANKET (NON ASBESTOS) AROUND DUCT.
FIRE STOP FLAP IN ACCORDANCE WITH ULC APPROVAL TO MATCH ASSEMBLY DESIGN. (N° R 210)

NOTE:
PROVIDE — FIRE STOP FLAPS FOR ALL GRILLES & DIFFUSERS.

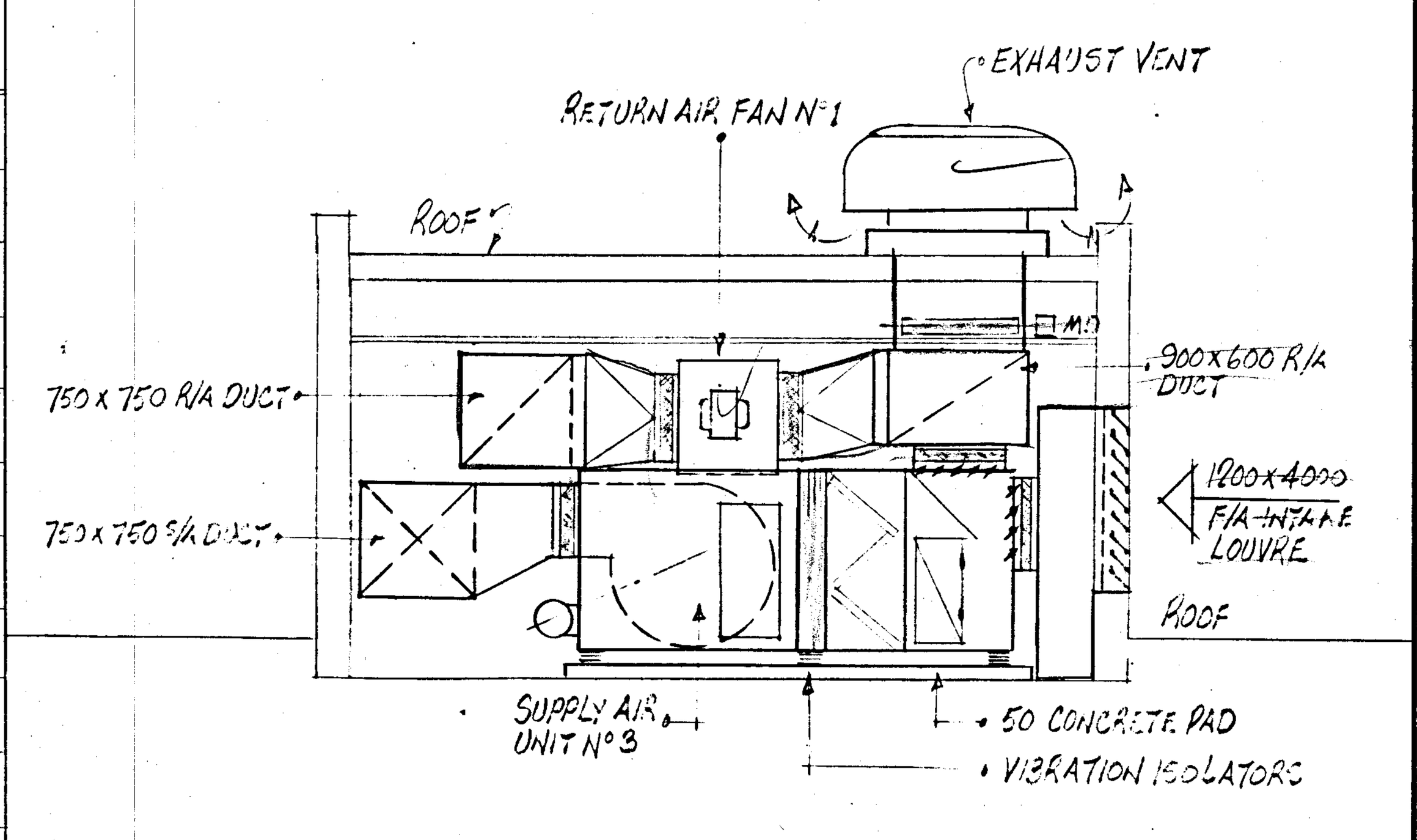
DETAIL OF CEILING GRILLE OR DIFFUSER N. T. S.



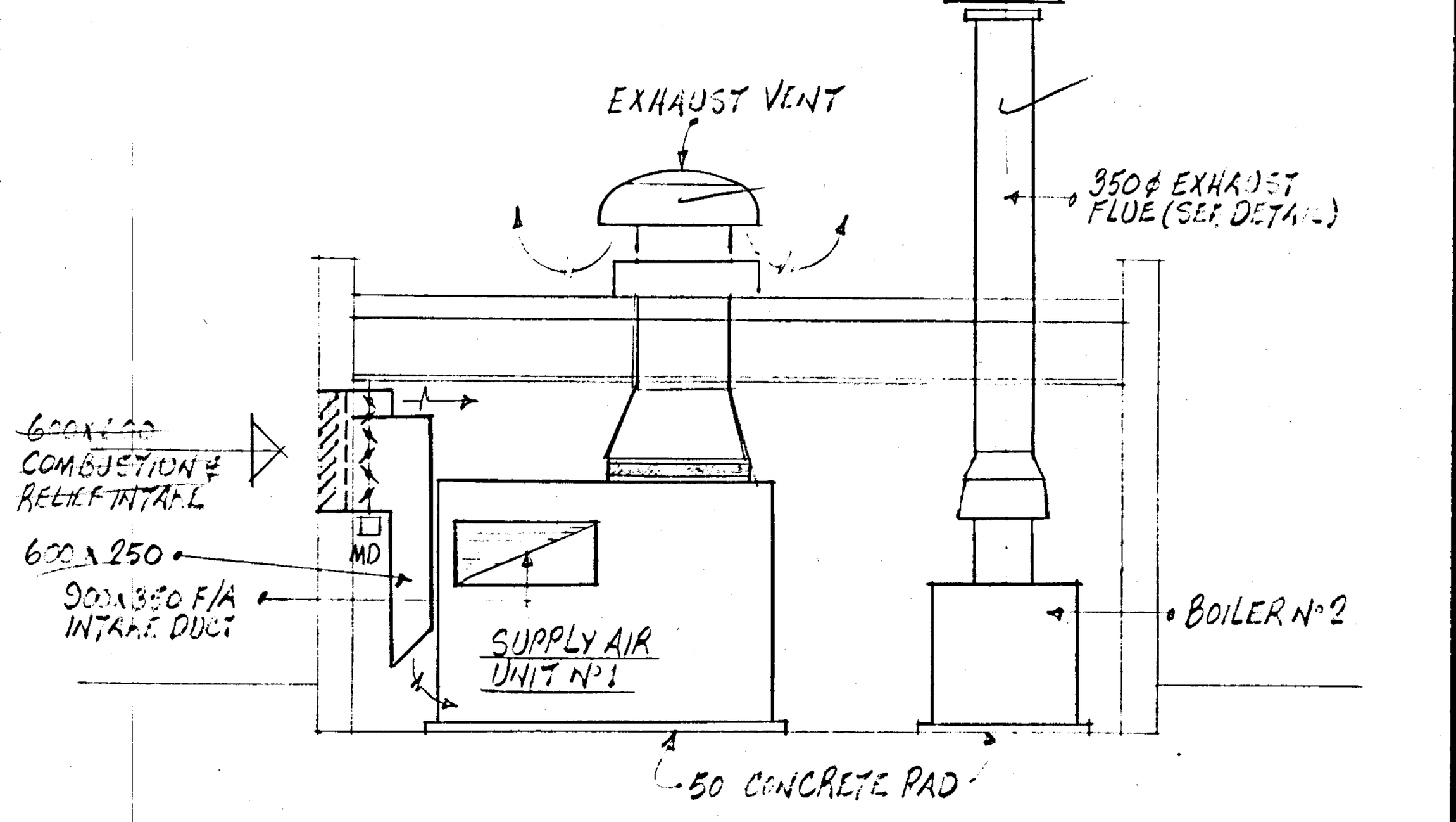
DETAIL OF ROOF CURB FOR CHIMNEY N. T. S.

L E G E N D

SYMBOL	DESCRIPTION
⊠	SUPPLY AIR DIFFUSER
⧄	RETURN AIR OR EXHAUST REGISTER
⊠	SUPPLY AIR DUCT
⧄	RETURN AIR DUCT
BD	BALANCING DAMPER
FSF	FIRE STOP FLAP
FD	FIRE DAMPER
———	HEATING SUPPLY PIPING
— — —	HEATING RETURN PIPING
FFH	FORCE FLOW HEATING.
⋈	GATE VALVE
	STRAINER
	3-WAY VALVE
S/A	SUPPLY AIR
R/A	RETURN AIR
	THERMOMETER
Ⓣ	THERMOSTAT
▨	ACOUSTIC LINING
	PIPE DROP
	PIPE RISE
MD	MOTORIZED DAMPER



S E C T I O N (1) SCALE 1 : 50



S E C T I O N (2) SCALE 1 : 50

REGISTERED PROFESSIONAL ENGINEER
2796
E.T.B. HEATHCOTE
PROVINCE OF ONTARIO

JACKSON YPES ASSOCIATES
ARCHITECTS ENGINEERS
WILLOWDALE ONTARIO

J J O'NEILL SCHOOL
NAPANEE/RICHMOND
FRONTENAC LENNOX
AND ADDINGTON COUNTY
ROMAN CATHOLIC
SEPARATE SCHOOL BRD.

DETAILS AND CONTROL DIAGRAMS		JOB No. 8218
DRAWN A.V. P.	CHECKED K. G.	DWG. NO. M2
SCALE N. T. S.	DATE 7 FEB '83	

PANEL SCHEDULE

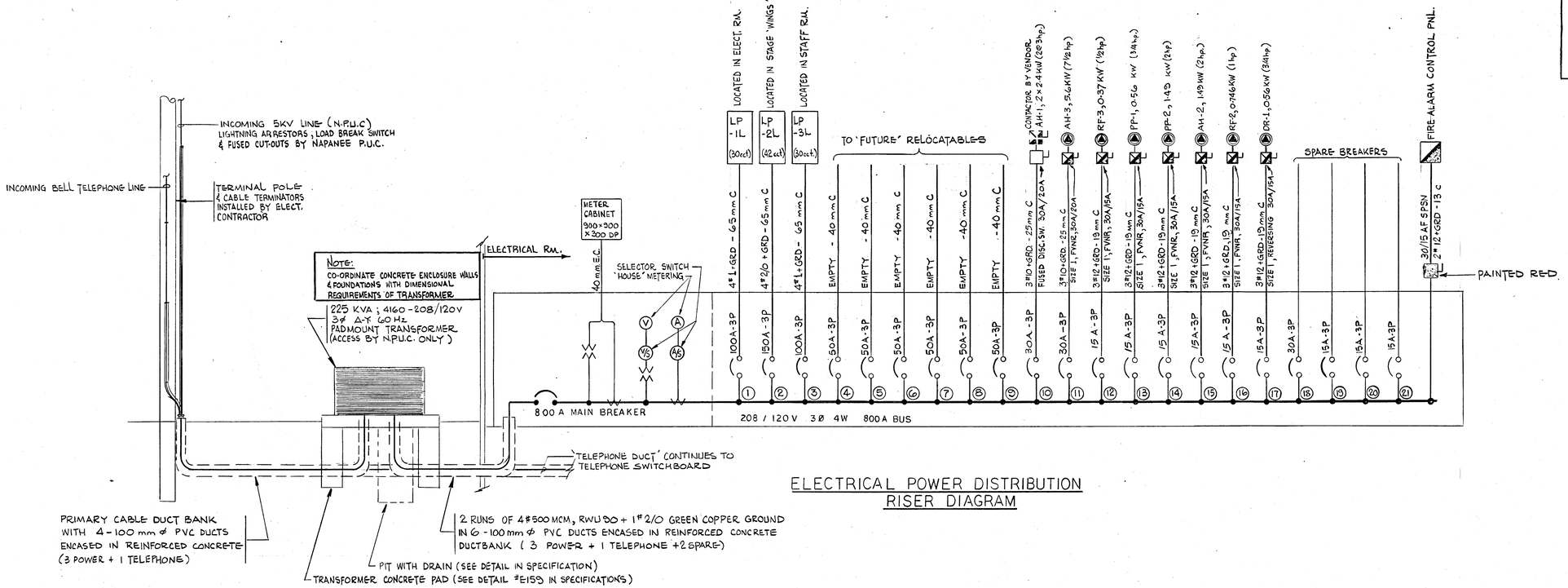
PANEL №	MTG.	MAIN BREAKER	SINGLE POLE 15A	SINGLE POLE 20A	SINGLE POLE OTHER	TWO POLE 15A	TWO POLE 20A	TWO POLE OTHER	THREE POLE 15A	THREE POLE 20A	THREE POLE OTHER	SPACES	TOTAL
LP-1L	S	225A	32	1	—	1	1	1@30A	1	—	—	—	42
LP-2L	F	225A	36	4	1@30A	—	—		3	—	—	—	42
LP-3L	F	225A	40	—	—	—	—	1@30A	—	—	—	—	42

FIRE ALARM ZONE SCHEDULE

ZONE	LOCATION
1	SOUTH WING CLASSROOMS, ELECTRICAL RM. JANITORS' OFFICE & STORAGE RMs.
2	GENERAL PURPOSE ROOM, CHANGE ROOMS, STORAGE, STAGE & KITCHEN
3	LUNCH ROOM, OFFICES, STAFF RM. & LIBRARY
4	MECHANICAL ROOM #1
5	MECHANICAL ROOM #2
6	RELOCATABLE CLASSROOMS
7	SPACE
8	SPACE
9	SPACE
10	SPACE
11	SPACE
12	SPACE

FIRE ALARM MOTOR SHUTDOWN

① PROVIDE DOUBLE VOLTAGE RELAYS FOR FIRE ALARM SHUTDOWN FOR AH-1,-2,-3 ; RF-2,-3 , PP-1,-2,-3, & DR-1,-2 FA-8 & FA-9 , FA-12 & FA-17



ELECTRICAL POWER DISTRIBUTION RISER DIAGRAM

THIS CONTRACTOR SHALL CHECK AND VERIFY THESE DRAWINGS WITH THE ARCHITECTURAL DRAWINGS AND REPORT ANY INCONSISTENCIES TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS ON THE JOB.

JACKSON YPES ASSOCIATES ARCHITECTS ENGINEERS WILLOWDALE ONTARIO

J.N. CARTER 2736 REGISTERED PROFESSIONAL ENGINEER PROVINCE OF ONTARIO

J J O'NEILL SCHOOL
NAPANEE/RICHMOND
FRONTENAC LENNOX AND ADDINGTON COUNTY ROMAN CATHOLIC SEPARATE SCHOOL BRD.

SINGLE LINE RISER DIAGRAM & LEGEND | JOB No. 8218

DRAWN J.R.M. | CHECKED N.C. | E-2

SCALE 1 : 100 | DATE 7 FEB '83