1 ADDENDUM #4

ALL CLAUSES SET FORTH IN THE BIDDING DOCUMENTS, CONTRACT DOCUMENTS AND GENERAL REQUIREMENTS OF THE ORIGINAL CONTRACT DOCUMENTS SHALL APPLY TO AND GOVERN THIS WORK. THE ADDENDUM REFERS TO CHANGES AND ADDITIONS TO THE ORIGINAL CONTRACT DOCUMENTS AND IS TO BE READ IN CONJUNCTION WITH THE SAME. ALL OTHER PARTS OF THE ORIGINAL CONTRACT DOCUMENTS ARE TO BE CONSIDERED AS APPLYING TO THE WORK OF THIS CONTRACT WITH THE EXCEPTIONS AND CHANGES AS NOTED BELOW.

1.1 ADDENDUM

.1 Reference Addendum #3, Drawing Item 1.4.3.1.1:
- .1 Delete wording “35W” and replace with “350W”.

1.2 SPECIFICATIONS (VOLUMES 1 & 2)

.1 Reference Section 00 01 18 - List of Appendices:
- .1 Reference New Paragraph 1.1.4:
  - .1 Add new Paragraph 1.1.4 as follows:

".4 ***APPENDIX 'D'***
Signage Schedule"

Clarification: Attached and forming part of this addendum is Appendix 'D' - Signage Schedule, dated April 21, 2022.

.2 Reference Section 00 73 00 - Supplementary Conditions:
- .1 Reference Paragraph 1.18.6: Delete this Paragraph and subparagraph in their entirety.
  - .1 Delete this Paragraph and sub-paragraphs in their entirety.

.3 Reference Section 08 11 13 - Steel Doors and Frames
- .1 Reference Paragraph 2.2.5:
  - .1 ***Clarification:*** Locations of temperature rise steel doors are as noted in the specifications.
- .2 Reference Paragraph 2.6.3.4:
  - .4 Locations: Room designated as ‘SAFE RM’ in the “Abbreviated Room Name” of Door Schedule.
- .3 Reference Paragraphs 2.5.1.1, 2.5.1.2 & 2.5.1.3:
  - .1 Delete Paragraphs 2.5.1.1 , 2.5.1.2 & 2.5.1.3 in their entirety.

.4 Reference Section 08 14 16 – Flush Wood Core Doors
- .1 Reference Paragraph 2.2.5:
  - .1 ***Clarification:*** Steel edges and astragals between pairs of double door are to be provided as specified.
- .2 Reference Paragraph 2.4.9 as follows:
  - .1 Delete paragraph as written and replace with the following:
    - .9 Basis-of-Design: “Model No. 7600-ME” by Baillargeon Doors or approved equivalent.

.3 Reference Paragraph Paragraph 2.6.1.2:
.1 Delete paragraph as written and replace with the following:
.2 Colours and Finishes (P. LAM-01): “10776-60 – Kensington Maple” by Wilsonart or approved equivalent by one of the following:
.1 Formica Inc.; www.formica.com
.2 Nevamar Company, LLC; www.nevamar.com

.5 Reference Section 10 11 00 – Visual Display Boards
.1 Reference Paragraph 2.1.1:
.1 Add new paragraph .4 as follows:
".4 Canadian Blackboard Company”

.6 Reference New Section 10 14 00 - Signage:
.1 Attached and forming part of this addendum is new specification Section 10 14 00 - Signage.

.7 Reference New Section 10 25 13 - Patient Bed Service Walls:
.1 Attached and forming part of this addendum is new specification Section 10 25 13 - Patient Bed Service Walls:.

.8 Section 10 26 00 - Wall Protection:
.1 Add new paragraph 3.6 as follows:
"3.6 CORNER GUARD HEIGHT SCHEDULE:
.1 Typical Height: 2200 mm above finished floor.
.2 Where corner guard is adjacent to screens in Waiting (and new Security), and Charting corridor walls, the height must match top of screen frame.
.3 When corner guard is located at bumper railing that rounds a corner, extend corner guard to underside of railing.".
.2 ***Clarification:***
.1 2200mm AFF is typical.
.2 Where adjacent to screens in Waiting (and new Security), and Charting corridor walls, the height is to match the top of the screen frame.
.3 Where at corners with handrails rounding the corner, extend to the underside of the railing.

.9 Reference Section 10 51 13 – Metal Lockers:
.1 Reference Paragraph 2.1.21:
.1 Delete paragraph in its entirety.

.10 Reference Section 10 95 00 – Miscellaneous Specialties:
.1 Reference new Paragraph 2.2.1.3 as follows:
.3 Diameter: 457 mm (18 inches)

.11 Reference New Section 12 23 14 - Manual Roller Window Shades:
.1 Attached and forming part of this addendum is new specification Section 12 23 14 - Manual Roller Window Shades.

.12 Reference Section 12 24 00 - Motorized Roller Window Shades
.1 Delete Section in its entirety.

.13 Reference Section 22 42 00 - Commercial Plumbing Fixtures:
.1 Reference Paragraph 2.2.3.2.2:
.1 Append the following wording: "Krowne".

.14 Reference Section 22 42 01 - Plumbing Specialties and Accessories:
.1 Reference Paragraph 2.6.1.1:
Append the following wording: "MiFab".
.2 Reference Paragraph 2.8:
.1 Add new paragraph .4 as follows:
".4 Acceptable Material: Beeco, Watts, Zurn, Crane, JR Smith, Enpoco.".

.15 Reference Section 23 31 14 - Pre-Insulated Outdoor HVAC Ductwork:
.1 Reference New Paragraph 1.9 as follows:
"1.9 Approved Equals
.1 Qduct, Thermaduct, Koolduct."

.2 Reference Paragraph 2.1.7.1:
.1 Delete as written and replace with the following:
"R-12: dual panel, 2.50” wall thickness: + additional R-8.6 Sloped Roof Insulation."

.16 Reference Section 23 33 15 - Dampers - Operating:
.1 Reference New Paragraph 1.4 as follows:
"1.4 Approved Equals
.1 Nailor, Titus, Ruskin, Ventex."

.17 Reference Section 23 33 16 - Dampers - Fire and Smoke:
.1 Reference Paragraph 2.4:
.1 ***Clarification:*** Smoke dampers shall be electric actuation activated by fire alarm panel through BAS, as is currently provided within the existing hospital. Separate smoke control system is not required.

.18 Reference Section 23 36 00 - Air Terminal Units:
.1 Reference Paragraph 2.2.5.1:
.1 ***Clarification:*** Controls contractor shall provide for field mounting of the controller. Factory installation not required.

.19 Reference Section 23 37 20 - Louvres, Intakes and Vents:
.1 Reference New Paragraph 1.6 as follows:
"1.6 Approved Equals
.1 Ventex, Nailor, Ruskin, EH Price, Carnes, Titus, Arrow Louver and Damper, Construction Specialties."

.20 Reference Section 23 83 16 - Radiant Heating Hydronic Piping:
.1 Reference New Paragraph 1.9 as follows:
"1.9 Approved Equals
.1 Uponor, Viega, Rehau, CalPex."

.2 Reference Paragraph 2.2.2:
.1 ***Clarification:*** Telestats are to be supplied by Division 23 (supplied with heating manifolds). Wiring of telestats is to be performed by Division 25. Telestats are four (4) wire 24 VAC On/Off with end switch (status) Uponor A3010552 or equal.

.21 Reference Section 25 10 01 - EMCS - Local Area Network (LAN):
.1 Delete section in its entirety from the Scope of Work.
.2 ***Clarification:*** LAN to be as per existing including all supervisory engines and switches needed for this project.

.22 Reference Section 25 10 02 - EMCS - Operator Work Station (OWS):
.1 ***Clarification:*** Controls Contractor to re-use existing hardware and software on this project. A new HMI to be provided as indicated on the plans with a GUI to allow nursing staff to adjust room temperatures. Controls Contractor to provide UPS on Building Equipment Controllers and Supervisor Engines.

.23 Reference Section 25 30 01 - EMCS - Building Controllers:
.1 Delete all references to dial-up communication.
Clarification: Communications shall be on MSTP RS485 and Cat 5 IP.

.24 Reference Section 25 30 02 - EMCS - Field Control Devices:
.1 Reference Paragraph 2.22:
.1 ***Clarification:*** Actuator to be supplied and installed by Division 25. Damper supplied and installed by Division 23.
.2 Reference Paragraph 2.30:
.1 ***Clarification:*** Johnson Controls Inc (JCI)to be an approved equal. Monitor will be located outdoors under a sheltered enclosure with a large opening on one end. Consideration will be given to NEMA 1 Enclosures, where appropriate actions are taken to protect the equipment from the elements, such as housing the sensors in a Splash Guard NEMA 4 Enclosure - Honeywell Analytics / Vulcain ECLAB or Equal.

.25 Reference Section 25 30 03 - EMCS - Variable Frequency Drives (to 600 Volts):
.1 ***Clarification:*** Johnson Controls Inc (JCI) to be an approved equal. All power wiring to be by Division 26. Mounting of the drives by Division 25.

1.3 ARCHITECTURAL DETAIL BOOK (VOLUME 3)

.1 Reference New Architectural Detail Drawings:
.1 Attached and forming this addendum are the following new Architectural Detail Drawings:
.1 AD080 - Door Signage
.2 AD081 - Door Signage
.3 AD082 - Misc. Signage
.4 AD322 - Typical Truss Enclosure @ GL-1a
.5 AD323 - Guy Wire Anchor
.6 AD324 - Ventilated Roof Thimble and Flashing for Exhaust Hood Stacks (Rectangular, Typ.)

.2 Reference Detail Drawing AD022:
.1 Delete Detail Drawing AD022 as previously and replaced with Detail Drawing AD022r1, attached and forming part of this addendum.

1.4 DRAWINGS (VOLUMES 4 & 5)

.1 Reference Drawing A100 – Renovated Floor Plan – Level 100:
- .1 See note “Remove and replace concrete block course at floor, full width of wall.” at East wall of Outdoor Equip. Storage 1905.
  Refer to photos attached and forming part of this addendum, for clarification on extent of work.

.2 Reference Drawing A502 - Blow-Up Plans and Interior Elevations:
- .1 Reference Detail 4b - Soiled East:
  - .1 Delete Detail 4b and replace with Detail 1/ASK-004 as per sketch ASK-004 attached and forming part of this addendum.

.3 Reference Drawing A510 - WR Blow-Up Plans and Interior Elevations:
- .1 Reference Detail 13 - Grab Bar Size and Mounting Heights.
  - .1 Refer to new clouded dimensions on sketch ASK-006, attached and forming part of this addendum.

.4 Reference Drawing A605 - Full Height Cabinets and Stainless Steel Millwork Details:
- .1 Reference Detail 1 - Soiled Utility Sink and Work Surface Assembly (SUSU):
  - .1 Detail Detail 1 and replace with Detail 2/ASK-004 - “SUSU Details” Section ‘B’ (append elevation clouded info), as per sketch ASK-004 attached and forming part of this addendum.

.5 Reference Drawing S007 - Sections, Details & Notes:
- .1 Reference Details 1/S009, 2/S009, 3/S009, 1/S010:
  - .1 ***Clarification:*** Reinforcing detail for topping slab on Level 2 is as per Drawing Note 6.
    "6. REINFORCE ALL STEEL DECK CONCRETE TOPPING WITH 152 X 152 X MW18.7 X MW18.7 WWM."

.6 Reference Drawing M201 - Level 200 Heating – In-Floor:
- .1 Reference Detail 1:
  - .1 Add the following Note:
    "In-slab sensors to be supplied and installed by Division 25, wired through DDC system, see sequence of operation. Sensor to be 10k thermistor or approved equal with 22 gauge wire, and protective housing. Provide PVC conduit for protection of sensor wire at transition to from in-slab to wall."

.7 Reference Drawing M210 - Heating & Cooling Details:
- .1 Reference Detail 1:
  - .1 Add the following Note:
    "Controls contractor to provide for disconnect and reconnect of freezestat as required for removal and re-installation of cooling coil. All remaining control valves, and sensors to remain as existing. Cooling coil is a like for like replacement with existing.".

.8 Reference Drawing M302 - Level 200 Ventilation – Return Air:
- .1 Reference General Ventilation Notes, Note 12:
  - .1 Append the following wording to Note 12: "Penthouse is located Plan West of Gridline Ca".

.9 Reference Drawing M303 – Penthouse & Roof Plan:
- .1 Reference Exhaust Fan Schedule:
  - .1 Reference Tag EF-1, Notes Column:
    Add the following wording:
    "Standard of Acceptance: Cook.
    Approved Equal: Hartzell A03U0-10-BU100BNFCGK
    (Note: Fan is a backward incline utility set requiring a different ducting layout)."
  - .2 Reference Tag EF-2, Notes Column:
    Add the following wording:
    "Standard of Acceptance: Cook.
    Approved Equal Hartzell A03-0-241BC100STFCLL
    (Note: will accept no loss stack option GV251152-I in place of Drawing M310 Detail 17)."

.10 Reference Drawing M500 - Control Details:
- .1 Reference Detail 1:
  - .1 Add the following Note:
    "Provide for discharge air temperature sensor with each CV box.".
- .2 Reference Detail 4:
  - .1 Add the following Note:
    "All line voltage and low voltage wiring of smoke dampers shall be by Division 25. Division 26 to provide power circuits required for connection and extension by Division 25."

.11 Reference Drawing E700 - Access Control Details:
- .1 Safe Room Doors 5664.A1, 5664.A2, 5664.B1 & 5664.B2 shown with high security electromagnetic locks in the associated Access Control Detail and on Drawing E500, are instead to be provided with electromechanical locks by Division 08. Provide for wiring of Division 08 supplied wiring harness to electromechanical door hardware through conduit and associated door frame as indicated in Division 08 Door Hardware Schedule. Reference Hardware Groups 18.0 and 19.0 in Addendum #2 for additional information.

1.5 GENERAL CLARIFICATIONS

.1 ***Question:*** Addendum # 1-Item 1.1.4 (Bariatric Safety Bars)-2.4; - GRB10a (460mm); GBR10b (610mm); GBR10e(1067mm); GRB13e (Size to be Confirmed? 1067mm or 1220mm); Elevation 10-A510 in relation to 13-A510 have the GRB10b behind the Water Closets in the Patient Washrooms (Anti-Ligature); Elevation 10-A510 in relation to 13-A510 have the GRB10a behind the Water Closets in the Bariatric Washrooms (Anti-Ligature)
- .1 **Answer:** GRB-13e is 1067mm in length. GRB-10a length has been corrected to 760mm wide in 13/A510 and used in bariatric WCs for more length than other WCs (to be issued with this addendum). These are listed in the Accessory Schedule on pages AD072 & AD074.

.2 ***Question:*** Addendum # 1-Item 1.1.5 (Standard Grab Bars)-2.5; - GRB11 (610mm)- Bobrick B-6806.99 x 610mm; Are we to take this as standard 610mm Grab Bars behind the Water Closets for Staff Washrooms 5673 & 5676? Note: With that said what Standard L-Shaped Grab Bar type are we to use on the adjacent walls? Bobrick B-6898.99 760mm x 760mm; Note : TPD-1 changed to TPD-2C (ASI Model: 110-13) per Addendum #1 1.1.8- 2.17
- .1 **Answer:** GRB-11 is the standard, behind the toilets, only in staff WCs 5673 & 5676. GRB-17 is shown as 760x760 size, as noted in 13/A510. TPD-1 does not switch to TPD-2c. TPD-1 is only in staff WCs 5673 & 5676. TPD-2c is only in WC

5644C (shown in 3/A510).

.3 ***Question:*** Addendum # 1-Item 1.1.6 (L-Shaped Grab Bars)-2.8; GRB17a (760mm x 760mm)- KG279 760mm x 760mm (Attached) Question: Are we not utilizing the Anti-Ligature L-Shaped Grab Bars KG279 on this project? Location: WC-5601; WC5644C; WC5633; WC5661;

.1 **Answer:** GRB-17a is ligature resistant model (Kingsway KG279, as noted in specs 10 28 00) Location: WC-5601; WC5633; WC5661 (WC5644C does not exist).

.4 ***Question:*** Re: Section: 10 51 13 Metal Lockers; Item 2.1.2 Substitution Limitations - Denotes two(2) different models by ASI. Standard Duty & Heavy Duty. Which type is to be used on this project as no reference to types on drawings have been assigned?

.1 **Answer:** “Heavy duty” for lockers as issued with this addendum.

.5 ***Question:*** Lockers are assigned to 5611a(2); 5641a(5); 5644(11); Laundry 5641a on the finished drawing denotes 4 Tier Lockers (OSCI). Should this be CSCI? Staff Lockers 5644 has a bench detail as CSCI/CSVI. Can you confirm what is meant by CSVI. Question: Is the bench to be supplied with the locker per Section 105113?

.1 **Answer:** Designation has been clarified in recent addendum.

.6 ***Question:*** Section: 109500 Miscellaneous Specialties; Item 2.2.1 Convex Mirrors. (See Attached); PVVH90 & PVVH 180 denotes Model/Angle but no size has been assigned?

.1 **Answer:** Security mirrors mounting should be 18 inches.

.7 ***Question:*** Item 2.2.8 Laundry Chute (Specified 1040 Series); Note: Model 1040 is too small for this use. I suggest the Model 1705 Face Plate; See links below as well as attached shop drawing of the Model 1700, the Model 1705 is the face plate only (left side of the drawing) for your review.

.1 **Answer:** Please keep as mail/laundry chute **model 1040.**

END OF SECTION

This page intentionally left blank

1 General

1.1 RELATED WORK

.1 Section 09 91 00 - Painting.

1.2 SUBMITTALS

.1 Make submittals in accordance with Division 01 - General Requirements.
.2 Product Data:
  .1 Submit catalogue literature indicating materials and finishes of signs.
.3 Shop Drawings:
  .1 Submit separate drawings indicating overall dimensions of signs, dimensions and style of lettering, numerals and graphics as applicable, and layout of lettering, numerals and graphics for each sign type.
.4 Samples:
  .1 Submit duplicate samples of each type of signage of sufficient size to enable Consultant to review for construction, finish and other pertinent features.
  .2 Style and color of lettering will be selected by Consultant from manufacturer's standard range.

1.3 GENERAL STANDARDS

.1 Paint finish: where paint finish is indicated it shall be applied using the following procedures and materials.
  .1 Sand entire surface of anodized aluminum with fine sandpaper, roughening surface evenly, to ensure bond of primer coat.
  .2 Apply one (1) coat of aluminum primer.
  .3 Apply four (4) coats of automotive paint to color indicated, with "Gripguard" or "Gripeze", sanding between coats as required to ensure proper bond.
.2 Vinyl film: use cast vinyl only, calendered vinyl NOT acceptable.
.3 Aluminum: all aluminum architectural quality alloy 6063T5.

1.4 WASTE MANAGEMENT AND DISPOSAL

.1 Collect and separate for disposal waste material generated by this Section.
.2 Place in appropriate on-site bins in accordance with Waste Management Plan.

2 Products

2.1 TYPE 1 - ROOM NUMBER SIGN

.1 Colors:
  .1 Black plastic with white background.
.2 Construction:
  .1 3 mm thick laminated plastic, matte finish, with square corners, letters accurately aligned and machine engraved into core.
.3 Sizes:
  .1 35 x 100mm sign size, 1 line, 20mm number height.
.4 Locations:
  .1 Top right corner of door frame as indicated on drawings.
  .2 Where room does not have a door (opening only) apply to wall above opening. Right justify sign parallel to right side of opening. Allow 50mm between top of opening and bottom of sign.
  .3 Quantity: allow for lettering as per "Door and Room Numbering and Naming Schedule" plus 5% additional.

2.2 TYPE 2 - ACCESSIBLE SYMBOL

.1 Colors:
  .1 Black plastic with white background.
.2 Construction:
  .1 3mm laminated plastic, matte finish, with rounded corners, letters accurately aligned and machine engraved into core.
.3 Size:
  .1 200 x 200mm sign size, 150mm high symbol size
.4 Location:
  .1 Centered on door as indicated on drawings
  .2 Quantity: allow one (1) per washroom as indicated on drawings.

2.3 TYPE 3 - ROOM IDENTIFICATION

.1 38mm high x 2mm thickness, gloss, cast vinyl film with clear permanent acrylic adhesive, "Helvetica Medium" type face. One (1) color throughout, white
.2 Acceptable Material:
  .1 Arlon "Calon" cast vinyl film.
.3 Quantity: allow for lettering as per Signage Schedule, plus 5% additional characters.
.4 Confirm wording prior to ordering letters.
.5 Room Names and Locations:
  .1 Install on door frame head at typical location shown on drawings, at doors listed on Signage Schedule, bound into specification.

2.4 TYPE 4 - REPLACEABLE BLADE SIGNS

.1 Main Directory Signage
.2 Blade type signage, install new blade in existing sign board, to match existing. .
.3 "Helvetica Medium" type face. One (1) color throughout, white.
.4 25mm high lettering.
.5 Acceptable Material:
  .1 Nexus Modular Sign System.

2.5 TYPE 5 - ALARMED EXIT DOOR SIGNAGE

.1 20mm high letters.
.2 Adhesive backed vinyl film label.
.3 Digital or screen printed with UV ink.
.4 One (1) French and one (1) English sign per door leaf.
.5 "Helvetica Light" type face.
.6 One color throughout, red.
.7 Door Locations:
  .1 Door #'s: 5620, 5640.1, 5640.2, 5645A, 5660.
.8 Acceptable Material"
  .1 Arlon "Calon", cast vinyl film.
.9 Wording:
  "PUSH UNTIL ALARM SOUNDS
  DOOR CAN BE OPENED IN 15 SECONDS
  POUSSER POUR DÉCLENCHER L'ALARME
  LA PORTE SE DÉVERROUILLERA DANS 15 SECONDES"

2.6 TYPE 6 - FIRE DOOR SIGNAGE

.1 20mm high letters.
.2 Adhesive backed vinyl film label.

.3 Digital or screen printed with UV ink.
.4 Helvetica Light" type face.
.5 One color throughout, red.
.6 Apply to doors on both sides, both leafs on double doors.
.7 Door Locations:
.1 Door #'s: 1905a, 1905.1, 1901, 5641A, 5645A, 5646, 5658
.8 Acceptable Material"
.1 Arlon "Calon" cast vinyl film.
.9 Wording:
"FIRE DOOR KEEP CLOSED
IT IS AN OFFENSE TO WEDGE DOOR OPEN"

2.7 TYPE 7 - FIRE DOOR, MAGNETIC HOLD OPEN

.1 20mm high letters.
.2 Adhesive backed vinyl film label.
.3 Digital or screen printed with UV ink.
.4 Helvetica Light" type face.
.5 One color throughout, red.
.6 Apply to doors on both sides, both leafs on double doors.
.7 Door Locations:
.1 Door #5600.
.8 Acceptable Material"
.1 Arlon "Calon" cast vinyl film.
.9 Wording:
.1 "FIRE DOOR/DO NOT BLOCK/WILL CLOSE ON ALARM"

2.8 TYPE 8 - HANGING SIGN

.1 6mm thick, size as shown.
.2 Cast vinyl letters, 50mm.
.3 Double sided.
.4 Suspended with stainless steel wires from ceiling grid.
.5 Location: Provide two (2). Final location to be determined on site by Owner.

3 Execution

3.1 INSTALLATION

.1 Confirm numbers and names with Consultant before application.
.2 Confirm all mounting heights and locations with Consultant before installing signage
.3 Ensure all signage is level and, where applicable, centered on door or wall panel, unless noted or directed otherwise.
.4 Mount all signage to walls using appropriate fastener/adhesive.
.5 Apply PVC signage to doors using adhesive as recommended by sign manufacturer.
.6 Apply vinyl names, in accordance with manufacturer's recommendations.

END OF SECTION

This page intentionally left blank

1 - GENERAL

1.1 SUMMARY

.1 Work Included: Provide factory fabricated pre-piped and pre-wired patient bed service wall units including but not limited to following:

.1 recessed console units (patience service strips)

.2 Related Requirements: Specifications throughout entirety of Divisions of this Project are directly applicable to this Section, and this Section is directly applicable to them.

1.2 REFERENCES

.1 Definitions:

.1 Post-Disaster Building: This facility is classified as post disaster as defined in the National Building Code of Canada. Post-disaster building means a building that is essential to provision of services in event of a disaster.

.2 Operational and Functional Component (OFC): Components within building which are directly associated with the function and operation of the facility. OFCs consist of architectural components, building services components, and building contents. Items specified herein may be designated as OFCs and may need to be designed in accordance with performance requirements specified herein and in Section 13 48 50.

.2 Reference Standards: Latest published editions of reference standards listed in this Section in effect as of Bid Closing Deadline of the Project, including any amendments adopted, are applicable unless otherwise indicated.

1.3 ADMINISTRATIVE REQUIREMENTS

.1 Pre-Installation Meetings:

.1 Prior to starting work of this Section, convene a pre-installation meeting at Project site to review Project requirements and site conditions with pertinent parties. Conform to requirements of Division 01.

1.4 SUBMITTALS

.1 Product Data: Submit manufacturer's literature and data sheets for each type of material provided under this Section for *Project* in accordance with requirements of Division 01. Ensure data sheets provide required information including detailed instructions for installing as well as maintaining, preserving and keeping materials in clean and safe conditions. Provide adequate warning of maintenance practices or cleaning agents detrimental to specified materials.

.2 Safety Data Sheets (SDS): Submit SDS for inclusion in Operation and Maintenance Manual specified in Division 01, for adhesives, sealants and any other material designated by Consultant.

.3 *Shop Drawings*: Submit *Shop Drawings* of the work of this Section in accordance with Division 01.

.1 Include sufficient information, clearly presented, to determine compliance with construction documents.

.2 Include electrical ratings, dimensions, mounting details, front view, side view, equipment and device arrangement, wiring diagrams, material, and connection diagrams.

.3 Submit configuration drawings showing devices, including nurse call, medical gases, electrical receptacles and switches.

.4 In addition to minimum requirements indicate following:

.1 Medical gas connection layout and termination.
.2 Electrical connection layout.

.4 Certifications: Submit in accordance with Division 01.

.1 Submit certification by manufacturer that equipment conforms to requirements of *Contract Documents*.

.2 Submit certification by installer that equipment has been properly installed, adjusted, and tested in accordance with manufacturer's recommendations.

.3 Submit certificate validating seismic assessment and field review of this part of The Work

.5 Regulatory Requirements Submittals: Submit following in accordance with Division 01:

.1 Submit system testing and inspection reports as specified.

.2 Submit CSA Certification or Local Hydro approvals for site wiring of systems as specified.

.3 Submit written test results and certification of medical gas systems tests as specified.

.6 Samples: Submit samples in accordance with Division 01. Submit following samples in sizes indicated:

.1 Aluminum extrusions minimum 300 mm (12") long.

.2 Plastic laminates minimum 300 mm (12") square.

.7 Closeout Submittals: Prior to the final inspection, deliver four (4) copies of the following to *Owner*:

.1 Complete maintenance and operating manuals including wiring diagrams, technical data sheets, and information for ordering replacement parts:

.2 Include complete "As built" diagrams indicating all items of equipment, their interconnecting wiring and interconnecting piping.

.3 Include complete diagrams of the internal wiring for each of the items of equipment, including "As built" revisions of the diagrams.

.4 Identify terminals on the wiring diagrams to facilitate installation, maintenance and operation.

1.5 QUALITY ASSURANCE

.1 Qualifications:

.1 Manufacturers: Provide Products for Work of this Section by manufacturer with minimum 10 years' experience in the manufacture of such materials.

.2 Installers: Provide work of this Section executed by competent installers with minimum 5 years' experience in the application of Products, systems and assemblies specified and with approval and training of the Product manufacturers.

.2 Welding:

.1 Provide welding in accordance with CSA W59-M performed by a fabricator and mechanics fully approved by the Canadian Welding Bureau as specified herein.

.2 Ensure fabricator is fully certified by Canadian Welding Bureau for fusion welding of steel structures to CSA W47.1 and for fusion welding of aluminum to CSA W47.2.

.3 Licensed Professionals: Employ a professional structural engineer carrying a minimum $2,000,000.00 professional liability insurance and registered in the Province of Prince Edward Island in accordance with requirements of Division 01 to:

.1 design components of The Work of this Section requiring structural reinforcement for seismic requirements.

.2 be responsible for full assemblies and connections

.3 be responsible for determining sizes, joint spacing to allow thermal movement and loading of components in accordance with applicable codes and regulations.

.4 be responsible for production and review of Shop Drawings.

.5 inspect work of this Section during fabrication and erection.

.6 stamp and sign each Shop Drawing.

.7 Provide site administration and inspection of this part of The Work.

.4 Inspection and Testing: Refer to Division 01 for following items and services supplied as part of a cash allowance:

.1 Inspection and testing of medical gas systems.

.5 Mock-Ups:

.1 Conform to requirements of Division 01. Submit 1 transportable *Mock-Up* in accordance with following requirements:

.1 Minimum Size: 300 mm x 300 mm x 300 mm (12" x 12" x12")
.2 Maximum Size: 450 mm x 450 mm x 450 mm (18" x 18" x18")

.2 Prior to production, construct 1 site *Mock-Up* for *Consultant's* review and acceptance and *Install* where directed by *Consultant*.

.1 one patient strip headwall unit.

.6 Single Source Responsibility: Ensure primary materials provided in this Section are obtained from 1 source by a single manufacturer and secondary materials are obtained from sources recommended by primary materials manufacturers.

2 - PRODUCTS

2.1 MANUFACTURERS

.1 *Products* of following manufacturers are acceptable subject to conformance to requirements of *Drawings*, Schedules and *Specifications*:

.1 Amico Corporation; www.amico.com

.2 Medical Design; www.medicaldesign.ca

.3 Interspec Systems Limited.; www.interspecsystems.com

.2 Substitution Limitations: This Specification is based on Amico's *Products*. Comparable Products from manufacturers listed herein offering functionally and aesthetically equivalent products in Consultant's opinion, and subject to Consultant's review, will be considered provided they meet the requirements of this Specification.

2.2 DESCRIPTION

.1 Regulatory Requirements:

.1 Fire-Test-Response Characteristics: Flame-spread index shall be in accordance with National Building Code of Canada requirements when tested according to CAN/ULC-S102.

.2 Design and Performance Requirements:

.1 *Provide* units complete with structural frames, access panels, electrical outlets, electrical back boxes, light switches, wiring, grounding, medical gas lines and medical gas outlets, vacuum, medical air and oxygen outlets.

.2 Make provision (i.e. rough-in boxes and conduits) for communication stations (nurse calls), accessory rails, monitor mounting rails, blank for future service and data device and wire. Provide rough-in boxes and conduit.

.3 Ensure patient bed service wall system is listed by UL and ULC. Provide Products conforming to following standards and regulations:

.1 CSA Z7396.1,
.2 NFPA-99c,
.3 CSA C22
.4 NFPA 70

.4 Connections:

.1 Provide patient bed service wall system with integrated raceways and single area connection for electrical wiring for each electrical outlet or device (critical, emergency normal, low voltage/communication etc.) as well as dimmer switches.
.2 Locate electrical termination as indicated on *Drawings*. Ensure connections are factory installed and manifolded for single-point connection to building services as indicated on reviewed Shop *Drawings*.
.3 Provide medical gas piping hard-piped and brazed to single point of connection.
.4 Provide data wiring connected to device junction box via conduit or raceway.
.5 Coordinate with electrical trades for provision and wiring of communication station device (if required).

.5 Fascia: Where required, *Provide* removable type at all location to provide access for easy installation and maintenance of headwall services.

.6 Welding of any structural component related to work of this Section shall be executed by a fabricator having certification in accordance with Division 3, CSA W47.1.

2.3 MATERIALS

.1 Aluminum Sheet: ASTM B209 (ASTM B209M), Alloy 6061-T6.

.2 Aluminium Extrusions: ASTM B221 (ASTM B221M), Alloy 6063-T5.

.3 Structural Shapes, Plates, Etc.: New material conforming to CSA G40.20 and CSA G40.21, Grade 300W.

.4 Uncoated, Cold-Rolled Steel Sheet: ASTM A1008/A1008M, structural steel, Grade 170, new material, unless another grade is required by design loads; exposed.

.5 Steel studs: ASTM C645, minimum base-metal thickness, 43 mils (0.0428" – 1.087 mm – 18 ga – Yellow)

.6 Medium Density Fibreboard (MDF):

.1 Minimum density: 770 kg/m^3 (48 lb. /cu ft.)

.2 Surface characteristics: In accordance with ANSI/NPA A208.2

.3 Grade: Minimum 155.

.4 Finish and Texture: To match Consultant's sample

.7 Plastic Laminate (PLAM): HPDL, type VGS - 0.7 mm (0.028"), conforming to ANSI/NEMA LD3 and ANSI/NEMA LD3.1a

.1 Colours and Finishes: To be selected by Consultant at a later date from plastic laminate manufacturer's full colour range including solid and woodgrain patterns with ability to offer cross-grain patterns and printed patterns in suede or matte finishes.

.2 Acceptable Manufacturers:

.1 Arborite; www.arborite.com/en
.2 Formica Inc.; www.formica.com/
.3 Nevamar Company, LLC; www.nevamar.com
.4 Wilsonart Canada; www.wilsonart.com

.3 Maximum number of colours and patterns: 5

2.4 MANUFACTURED UNITS

.1 Console Units

.1 Mounting: Recessed

.2 Sizes: As indicated on Drawings

.3 *Provide* console units with removable front assembly. *Provide* console supported by galvanized steel bracket attached to structural wall by means of screws.

.4 Fascia: extruded, clear anodized aluminum with moulded plastic end caps.

.5 Back box: galvanized sheet steel, minimum 1.5 mm (0.060") thick.

.6 Ensure all specified devices are factory installed in console backbox with single cutout dimension for all accessories (outlets & electrical devices) to meet design requirements and as recommended by manufacturer.

.1 Provide blank provision placed between medical gas outlets and vacuum bottle slide holders and between 2 communication devices.
.2 Low Voltage Data Provisions: connected to device junction box via conduit or raceway. Provide pull cord extending from junction box to service provision. Refer to Division 26 for additional wiring requirements.

.7 Basis-of-Design: "Recessed Console – Alert 1 Series" by Amico or approved equivalent

2.5 COMPONENTS

.1 Ensure components specified in this Section are factory installed and tested.

.2 Medical Gas Piping and Medical Gas Outlets: Location, style and type as recommended by manufacturer. Ensure each outlet, piping and manifold are factory-tested to pass a 24 hour standing pressure test.

.1 Medical Gas piping: Type L copper pipe.

.2 Medical Gas Manifold: Medical gas distribution supplied by pipe drops to single point connection above unit as indicated on reviewed *Shop Drawings*. *Provide* all medical gas outlets and piping brazed and tested in accordance with CSA Z7396.1 and NFPA 99c.

.3 Electrical Requirements:

.1 Wiring: Wire for standard and critical branch power circuits: #10 or #12 (as specified) type RW90 stranded copper wire, 600 volt, with heat resistant thermoplastic insulation for hot (black) and neutral (white).

.2 Grounds: #10 RW90 stranded copper wire (green).

.3 Grounding and Bonding: All ground conductors to be installed in conduit or raceway. Each power receptacle to have a ground conductor connected to a grounding screw. Where electrical terminations are located inside headwall, install grounding bus for each type of power, to ensure grounding of complete power system.

.4 Low Voltage Data Provisions: connected to device junction box via conduit or raceway. Provide pull cord extending from junction box to service provision. Refer to Division 26 for additional wiring requirements.

.5 Switching:

.1 Pass & Seymour industrial grade 120 or 277 volt, 15 or 20 amps. SPST, 3 way or momentary type as indicated on reviewed Shop *Drawings*.
.2 Low-voltage switching: 0-12 volts, 15 amps unless otherwise indicated.
.3 All switches to be provided pre-installed and pre-wired by manufacturer.

.6 Electrical Receptacles: All receptacles to be Pass & Seymour Hospital Grade 15 or 20 amp, 120 or 277 volt, U.L listed and marked "Hospital Grade". Quantity and type as shown on reviewed Shop *Drawings*. Ensure compatibility of plug on accessory equipment to be used with these devices.

.1 Duplex and Simplex receptacles: NEMA style 5-15R or 5-20R.
.2 Safety Receptacles: duplex type, NEMA style 5-15R or 5-20R. Ensure receptacles limited proper access to energized contacts and accept both 2 wire and 3 wire plugs.
.3 Colours: Ivory for use on normal (standard) circuits and red for use on emergency (critical) circuits, unless otherwise indicated.

.4 Provisions:

.1 Provide accessories indicated on Drawings by manufacturer to ensure compatibility.

.2 Ensure patient bed service walls can accommodate provisions including, but not limited to, nurse call equipment, monitoring equipment, data jacks, phone jacks, lighting, etc.

.3 *Provide* factory-installed required EMT or flexible metal conduit runs to appropriate termination point at junction box.

.4 *Provide* cover plates and trim plates for all provisions unless indicated otherwise.

2.6 ACCESSORIES

.1 Provide accessories indicated on reviewed Shop Drawings. Accessories shall be selected at a later date in consultation with Owner and may include, but are not limited to: LED lighting, LCD mounts, wash stations etc.

.2 Unless indicated otherwise on Drawings, provide units with the following:

.1 One (1) O2

.2 One (1)Vac

.3 Three (3) Duplex electrical

.4 One (1) Nurse Call (to the Inpatient Nurse Desk)

.5 One (1)Code Blue

.6 One (1) Communications Connection

2.7 FINISHES

.1 Steel: Hot-dip galvanized after fabrication, ASTM A123 or ASTM A653

.2 Aluminum: Class I, clear anodic finish; complying with AAMA 611

3 - EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

.1 Comply with manufacturer's written recommendations, including product technical bulletins, handling, storage and installation instructions, and datasheets.

3.2 EXAMINATION

.1 Site Verification of Conditions:

.1 Verify actual site dimensions and location of adjacent materials prior to commencing work. Notify Consultant in writing of any conditions which would be detrimental to the installation. Commencement of work implies acceptance of previously completed work.

.2 Inspect and verify that walls and areas in which work is to be performed are acceptable for headwall installation in accordance with manufacturer’s published recommendations and all applicable Sections.

.3 Proceed with installation only after discrepancies and unacceptable conditions have been remedied.

3.3 PREPARATION

.1 Coordinate headwall installation with work of other trades for proper sequence to avoid delays. Coordinate service connection work with electrical, piping, and communication Subcontractors.

3.4 INSTALLATION

.1 *Install* headwall units in accordance with manufacturer's instructions and in accordance with NFPA 70, NFPA 99 and local authorities having jurisdiction requirements. Install and make connections as required for a complete and operational patient bed service wall system for each unit.

.2 Coordinate the work of this Section with other trades adjacent to work of this Section in particular Section 06 40 00 and Section 09 21 16.

.3 Anchor all fixed components securely, square, level, and plumb at heights indicated on drawings.

.4 Align slots in vertical support elements to ensure hanging units are level.

3.5 INSPECTION AND TESTING

.1 Inspect installation for proper installation in accordance with the CSA C22 requirements.

.2 Submit 2 written reports on the results of the ground leakage testing and the installation inspection authored by equipment manufacturer's technician.

.3 Arrange and pay for CSA and Hydro inspection, testing and approvals required for site wired headwall unit and associated systems electrical work.

.4 Medical Gas System Testing:

.1 Medical gas system testing and submission of an associated report by an independent inspection consultant will be paid as part of the inspection and testing cash allowance.

.2 Arrange for testing and submit written test results and certification of medical gas piping systems and outlets in accordance with CAN/CSA-Z305.1.

3.6 FIELD QUALITY CONTROL

.1 Manufacturer’s Services: Provide manufacturer's field services consisting of product use recommendations and periodic site visits for inspection of product installation in accordance with manufacturer's instructions. Report any inconsistencies from manufacturer’s recommendations immediately to Consultant.

.2 Obtain field reports within three days of review and submit immediately to Consultant.

3.7 DEMONSTRATION

.1 Arrange and *Provide* a demonstration of the systems in a series of tests for the *Owner's* and *Consultant's* verification.

3.8 CLEANING

.1 Clean all surfaces to remove all marks, soil, and foreign matter immediately after installation and adjustment are complete.

.2 Recheck all components and perform any necessary additional cleaning just prior to substantial completion.

.3 Remove surplus materials, debris, tools, and equipment upon completion.

.4 Adjust headwall and service column components for easy, non-binding operation.

.5 Remove and dispose of protective finishes and clean exposed surfaces.

3.9 PROTECTION

.1 Protect installed headwall from damage during remaining construction work.

END OF SECTION

This page intentionally left blank

1 GENERAL

1.1 SUMMARY

.1 Work Included: Provide manually operated roller window sun control shades including but not limited to following:

.1 Spring operated roller window shade assembly complete with translucent and blackout shades.

.2 Related Requirements: Specifications throughout entirety of Divisions of this Project are directly applicable to this Section, and this Section is directly applicable to them.

1.2 REFERENCES

.1 Definitions:

.1 Post-Disaster Building: This facility is classified as post disaster as defined in the National Building Code of Canada. Post-disaster building means a building that is essential to provision of services in event of a disaster

.2 Reference Standards: Latest published editions of reference standards listed in this Section in effect as of Bid Closing Deadline of the Project, including any amendments adopted, are applicable unless otherwise indicated.

1.3 ADMINISTRATIVE REQUIREMENTS

.1 Pre-Installation Meetings:

.1 Prior to starting work of this Section, convene a pre-installation meeting at Project site to review Project requirements and site conditions with pertinent parties. Conform to requirements of Division 01.

1.4 SUBMITTALS

.1 Product Data: Submit manufacturer's literature and data sheets for each type of material provided under this Section for Project in accordance with requirements of Division 01. Ensure data sheets provide required information including detailed instructions for installing as well as maintaining, preserving and keeping materials in clean and safe conditions. Provide adequate warning of maintenance practices or cleaning agents detrimental to specified materials.

.2 Safety Data Sheets (SDS): Submit SDS for inclusion in Operation and Maintenance Manual specified in Division 01, for adhesives, sealants and any other material designated by Consultant.

.3 Shop Drawings: Submit Shop Drawings for Work of this Section in accordance with Division 01.

.1 Submit Shop Drawings which clearly indicate shade sizes, locations, operation, methods of attachment, and description of components. Indicate each component, size, shape, material, thickness, gauge, finish, methods of joining, joint locations, fastening devices, anchorage components, methods of attachment and relationship with adjacent components and construction.

.2 Submit reflected ceiling plans, drawn to scale, showing following items coordinated with each other, based on input from installers of items involved:

.1 Ceiling suspension system members and attachment to building structure.

.2 Ceiling-mounted or penetrating items including light fixtures, air outlets and inlets, speakers, sprinklers, recessed shades, and special moldings at walls, column penetrations, and other junctures of acoustical ceilings with adjoining construction.
.3 Shade mounting assembly and attachment.
.4 Size and location of access to shade operator and adjustable components.

.3 Field Measurements: Take field measurements prior to preparation of Shop Drawings and fabrication to ensure proper fitting of work. Do not fabricate work until Shop Drawings have been reviewed.

.4 Samples: Submit samples in accordance with Division 01. Submit following samples in sizes indicated:

.1 Submit sample shade fully representing shades to be provided complete with head rail, end caps, gears, sprocket wheels, Springs, brackets and similar ccessories.

.2 Submit samples of fabrics complete with edge reinforcing and finish colours for selection and approval. Do not order material until colour samples have been approved. Fabric sample: minimum 300 mm (12") square.

.5 Maintenance Instructions: Submit maintenance instructions in accordance with Division 01. Indicate methods for maintaining roller shades and finishes; precautions about cleaning materials and methods that could be detrimental to fabrics, finishes, and performance and operating hardware.

1.5 QUALITY ASSURANCE

.1 Qualifications:

.1 Manufacturers: Provide Products for Work of this Section by manufacturer with minimum 10 years' experience in the manufacture of such materials.

.2 Installers: Provide work of this Section executed by competent installers with minimum 5 years' experience in the application of Products, systems and assemblies specified and with approval and training of the Product manufacturers.

.2 Single Source Responsibility: Ensure primary materials provided in this Section are obtained from 1 source by a single manufacturer and secondary materials are obtained from sources recommended by primary materials manufacturers.

.3 Mock-ups: Provide Mock-ups in locations designated by Consultant and as required to demonstrate quality of workmanship. Maintain Mock-ups during construction in an undisturbed condition as a standard for judging completed work. Reviewed Mock-up may form part of final installation if undisturbed at time of Substantial Performance of the Work.

1.6 DELIVERY, STORAGE AND HANDLING

.1 Deliver materials to site only when work of this Section can be started.

.2 Before delivery to site verify each assembly for proper operation. Clean each assembly of marks and smudges prior to providing wrap up protective covering.

.3 Provide necessary crating and bundling for shipment of components to site including protection against weather likely to impair adequacy or appearance of material in finished assembly.

.4 Remove and replace damaged units at no additional cost to Owner.

1. WARRANTY

.1 Warrant Work of this Section for period of 5 years from Substantial Performance of the Work against defects and/or deficiencies in accordance with General Conditions of the Contract. Promptly correct any defects or deficiencies which become apparent within warranty period, to satisfaction of Consultant and at no expense to Owner. Defects include but are not limited to: deformation of members, mechanical failure, and failure of system to operate as designed.

2 PRODUCTS

2.1 MANUFACTURERS

.1 Products of following manufacturers may be acceptable subject to conformance to requirements of Drawings, Schedules and Specifications:

.1 Basis-of-Design: This Specification is based on “Sunproject Line Deko SafeGuard S-70 - Square Cassette Lite Lift” by Altex; www.altex.ca or approved equivalent.

.2 Comparable Products from manufacturers listed herein offering functionally and aesthetically equivalent products in Consultant’s opinion, and subject to Consultant’s review, will be considered provided they meet the requirements of this Specification.

2.2 DESCRIPTION

.1 Regulatory Requirements:

.1 Flammability: Ensure fabric meets National Building Code of Canada flammability requirements and CNAN/ULC S109 Small Scale vertical burn requirements when tested by independent testing and inspecting agency acceptable to authorities having jurisdiction.

.2 Light fastness: AATCC Method 16A exceeding 60 hours. Class 5.

.3 Antibacterial and antifungal resistance:

.1 AATC Test Method 147: Pass
.2 AATC Test Method 30: Pass

.2 Design and Performance Requirements:

.1 Provide factory assembled roller window shade units consisting of surface mounted roller shade units on face of mullions or at ceiling with two end brackets, complete with shade roller tube, extruded fascia, hembar, fabric, fastenings, anchorages and accessories specified and required. Ensure units comply with requirements of WCMA A100.1.

.2 Operation:

.3 Roller Shades shall be pressure-operated system utilizing a multi-layer coil spring system. The drive system must be reversible for future alterations and on-site maintenance.

.4 Factory settings will balance the spring to allow for finger-tip raising or lowering of the shade by a gentle upward push on the bottom bar or a gentle downward pull on the bottom bar.

.5 Internal Tension Idler (I.T.I.) limiter automatically adjusts and controls the amount of torque and speed ratio in order to provide a constantly smooth operation of the shade system regardless of width and height.

.6 The drive sprocket must contain non-locking integrated pressure springs for increased operational performance.

.7 The system shall be capable of smoothly raising and lowering the shade to any desired height and maintaining that position without slippage.

.8 The system must allow for the ability to lower the shade by pulling on the hembar.

.9 The system must allow for the ability to raise the shade by pushing upon the hembar.

.10 The system shall provide for a maximum fabric gap of 42mm total of both sides.

.11 The clutch must brake at the point of pull release, shades that slide to a stop will not be accepted.

.12 Seismic Performance: Design materials specified in this Section to withstand the effects of earthquake motions determined according to National Building Code of Canada and CAN/CSA S832 requirements.

.13 Design manually spring operated roller window shade system with side and bottom channels for easy lifting, finger tip control, with infinite positioning so that shade is capable of stopping and holding at any position within window opening.

.14 Provide assemblies to suit adjacent ceilings and finishes. Ensure removal does not require disassembly of shade unit. Provide left or right hand operative option as required to suit design requirements.

.15 Fabric Performance Requirements:

- .1 Provide shade fabric capable of hanging flat without buckling or distortion easy to clean and wipeable.
- .2 Window coverings will allow control of exterior light entering room during daylight hours and provide privacy during daylight and non-daylight hours.
- .3 Provide black-out window coverings where indicated on Drawings, provide materials, tracks, seals, and operation suited to that purpose.
- .4 Use window coverings manufactured from materials and mechanisms that minimize cleaning and maintenance operations and maximize infection prevention and control.
- .5 Consider colour of window coverings and the impact this will have on mechanical system.
- .6 Ensure edge when trimmed, hangs straight without raveling with unguided roller shade cloth rolling true and straight without shifting sideways more than + 3 mm (1/8") in either direction due to wrap distortion or weave design.
- .7 Fabric will be inherently anti-static, flame retardant, fade and stain resistant, light filtering, room darkening, & blackout fabrics providing openness factors specified herein. Fabric containing fiberglass, PVC, polyester, acrylic or vinyl laminates.

2.3 MATERIALS

.1 Formed Aluminum: ASTM B209M, Aluminum alloy 6063 - T5. Ensure surfaces are free from defects impairing appearance, strength and durability.

.2 Extruded Aluminum: ASTM B209M, Aluminum alloy 6063-XT6 for roll tube; 6060 for horizontal tracks; and 6063-T5 elsewhere

.3 Sheet Steel: ASTM A653/A653M-98, Designation Z275, stretcher levelled commercial quality galvanized steel.

.4 Spring Beads: ASTM A167, Series 300 stainless steel in ANSI No. 10 mirror finish having minimum 0.44 mm (0.017") diameter and with 47 to 48 beads for every 300 mm. (12") Spring to have pull test rating of 400 N. (90 lb.) Plastic bead Spring is not acceptable.

.5 Galvanizing of odd shaped components: ASTM A153/A153M; minimum weight of zinc coating, in ounces per sq ft of surface in accordance with Table 1 of ASTM A153/A153M, for various classes of materials used on Project.

.6 Shading Fabric: Provide vinyl coated polyester yarn. Provide fabric tensioned in finishing range prior to heat setting to keep wrap ends straight and minimize or eliminate weave distortion to keep fabric flat. Ensure fabric is dimensionally stable, non-flammable and moisture, UV, heat and fungi resistant.

.1 Solar Control Fabric (1 openness factor): Following types are acceptable:

.1 Sun Project SC-3400 hospital grade with 1 openness. All fabric to be Bacterial and fungal resistant to ASTM E2180.
.2 Colour to be chosen from Manufacturer's complete range.
.3 Composition: 36 fiberglass, 64 vinyl on fiberglass.

2.4 MANUFACTURED UNITS

.1 Spring Operated Single Roller Window Shades

.1 Provide spring operated single roller shade system with built-in clutch mechanism complete with loaded spring to allow system to be easily raised and lowered.

.2 Shade universal mounting units must be interchangeable from wall to ceiling mount.

.3 Universal Drive-Idler must be free of exposed fasteners or rivets.

.4 All shades to be pre-mounted and be shipped as a fully assembled unit.

.5 T-3 Channels utilizing a wheeled bottom bar are strongly recommended for this system.

.6 System must accommodate regular fabric roll (towards the glazing) or reverse fabric roll (away from the glazing).

.7 End Plug. The idle-end plug must allow for internal rotation of the tube and must lock in place utilizing a square end-pin.

.8 The shade mechanisms and drive units are to be integrated into universal mounting units that prevent unwanted movement and misalignment.

.9 Cassette:

.1 The shade shall be supplied to site fully assembled.
.2 The shade shall be supplied as a two piece extruded aluminum cassette with a bottom closure for regular roll installation measuring 79mm x 80mm.
.3 The shade shall be supplied as a one piece extruded aluminum cassette without a closure for reverse roll installation measuring 79mm x 80mm.
.4 Noise reduction seals must be used for sound isolation of the mechanism.

.10 Hembar: Hem Bar (bottom bar) shall be controlled by a wheel system within a T-3 Channel of extruded aluminum with an integrated recess to secure the wheel system. End plugs shall be screwed securely to the ends showing no exposed aluminum.

.11 Side Channels: Required.

.12 Roller Tube: Roller tubes shall be extruded aluminum in 32mm, 38mm, or 46mm with reinforced internal ribs to provide maximum span without tube deflection. Tube sizes will be determined by the manufacturer dependent on shade size.

2.5 FABRICATION

.1 Do necessary cutting and sewing of fabric to produce finished Product having neat, even appearance and meeting performance requirements specified.

.2 Fabricate shades with no vertical seams, and with a maximum of 2 horizontal seams per shade. Furnish fabric in adequate width to avoid horizontal seams at spacings of less than 1900 mm. (75"). Seams to be straight, even and offer minimum visual obstruction.

.3 Ensure fabric tracks perfectly straight in its movement to within 1 of its width from fully open to fully closed position, and when rolled onto tube, stacks in layers to within 3 mm (1/8") of edge alignment.

.4 Provide clear, 10-12 mm (3/8" - 1/2") wide plastic edge tape reinforcing to prevent ravelling of raw edge of shades having glass fibre cores.

.5 Bottom edge to hang straight and true, with hem weights totally enclosed in extruded hem tube. Heat sealing alone is not acceptable.

.6 All sewing to incorporate heavy denier polyester yarn and machine stitching to be straight and neatly finished with no loose threads visible in finished Work. Heat seaming is not acceptable in areas in which fabric is exposed.

2.6 FINISHES

.1 Cleaning and Shop Painting for Concealed Steel Sheet Finishes: Hot dip galvanized, complying with ASTM A123/A123M.

.2 Aluminum Finish: Architectural Class II; Clear anodized in accordance with Aluminum Association Finish Designation AA-M12-C22-A31.

.3 Dielectric Separator: To Provide die-electric separation between two dissimilar metals and prevent galvanic reaction. Best grade, quick drying non-staining alkali resistant bituminous paint or epoxy resin solution or membrane type acceptable to Consultant.

3 EXECUTION

3.1 EXAMINATION

.1 Site Verification of Conditions:

.1 Verify actual site dimensions and location of adjacent materials prior to commencing work. Notify Consultant in writing of any conditions which would be detrimental to the installation. Commencement of work implies acceptance of previously completed work.

.2 Obtain corrective measures from Consultant prior to fabrication. Ensure suitability of adjacent building components in relationship to Work of this Section.

3.2 INSTALLATION

.1 Coordinate installation and fastenings with trades providing adjacent components. Coordinate location of support framing and blocking for installation of roller window shades.

.2 Provide, as part of Work of this Section, custom trim components including gypsum board and tee bar trim items to accommodate adjacent ceiling systems and finishes to approval of Consultant.

.3 Install shades in accordance with manufacturer's instructions in accordance with reviewed Shop Drawings and as indicated, in true, flat planes.

.4 Securely attach all installation fittings to their mounting surfaces with screws of correct length and type, and with compatible plugs or anchors where required.

.5 Hang shades to substrate in a rigid and secure manner using fastener types and arrangements shown on Shop Drawings. Shades to have 15 mm (5/8") air space at sill unless designated as blackout.

.6 Ensure penetrating fastener do not interrupt continuity of air/vapour barrier integrity.

.7 Ensure shades and their fabrics hang flat at vertical installation without buckling or distortion. Edge when trimmed, to hang straight without curling or ravelling.

.8 Unguided roller shade cloth to roll true and straight without shifting sideways more than 3 mm (1/8") in either direction due to warp distortions or weave design.

3.3 ADJUSTMENT AND CLEANING UP

.1 Adjust shades for smooth operation and correct alignment. Perform system operation, service and replacements methods in presence of Owner’s personnel.

.2 Remove protective coating. Clean shades and remove finger marks and smudges from shades and adjacent surfaces.

.3 Leave shades in raised position at completion of Work of this Section.

.4 Upon completion of The Work of this Section, remove all Products, materials, debris and equipment from the site.

.5 Leave site in a neat and tidy condition, acceptable to Consultant.

.6 Do all touch-up required to satisfaction of Consultant.

END OF SECTION

This page intentionally left blank

APPENDIX 'D'
Signage Schedule

This page intentionally left blank

Queen Elizabeth Hospital
Mental Health & Addictions
Emergency Department & Short Stay Unit
2022-04-21 ***(Issued for Addendum #4)***

SIGNAGE SCHEDULE

#

Contract Room #	Contract Room Name	Applies to Door #	Type 1 Sign Text	Type 2 Sign	Type 3 Sign (Confirm wording prior to fabrication)	Type 8 Sign (Confirm wording prior to fabrication)
5600	Corridor	5600	5600		Corridor	• Mental Health & Addictions Emergency Department & Short Stay Unit – Type 8 sign • Located at entrance, Project South of Central Control B 5116
5601	Washroom	5601	5601	Symbol	Public Washroom, Barrier Free	
5602	Security	5602	5602		Security	
5610	Corridor		5610		Corridor	
5611	Waiting					
5611A	Lockers					
5612	Ward Clerk	5612	5612		Ward Clerk	
5615	Family Consult	5615	5615		Family Consult	
5620	Corridor	5620	5620		Corridor	
5621	Short Stay Room	5621	5621		Short Stay Room 1	
5623	Short Stay Room	5623	5623		Short Stay Room 2	
5625	Bariatric Washroom	5625	5625	Symbol	Patient Washroom, Bariatric	
5626	Short Stay Room	5626	5626		Short Stay Room 3	
5627	Short Stay Room	5627	5627		Short Stay Room 4	
5628A	Kitchenette		5628		Kitchenette / Lounge	
5628B	Lounge					
5630	Corridor		5630		Corridor	
5631	Charting	5631	5631		Charting, Short Stay	
5632	Recliner		5632		Recliner A	
5633	Washroom	5633	5633	Symbol	Patient Washroom, Barrier Free	
5634	Recliner		5634		Recliner B	
5635	Soiled Laundry	5635	5635		Soiled Laundry	
5636	Exam	5636	5636		Exam	
5637	Shower Room	5637	5637		Shower Room	
5638	Meeting Room	5638	5638		Meeting Room	
5639	Telehealth / Psychiatry Office	5639	5639		Office / Telehealth	
5640	Corridor	5640.1	5640		Corridor	
5640	Corridor	5640.2	5640		Corridor	

SIGNAGE SCHEDULE

#

Contract Room #	Contract Room Name	Applies to Door #	Type 1 Sign Text	Type 2 Sign	Type 3 Sign (Confirm wording prior to fabrication)	Type 8 Sign (Confirm wording prior to fabrication)
5641A	Patient Belongings	5641A	5641		Patient Belongings / Laundry	
5641B	Laundry					
5642	Clean	5642	5642		Clean Room	
5644	Staff Lockers					
5645	Corridor	5645A	5645		Corridor	• Mental Health & Addictions Emergency Department & Short Stay Unit – Type 8 sign • Located in Corridor 5285
5646	Soiled	5646	5646		Soiled Utility	
5651	Multipurpose Office	5651	5651		Multipurpose Office	
5652	Assessment / Interview	5652	5652		Assessment / Interview	
5653	Assessment / Interview	5653	5653		Assessment / Interview	
5655	Charting	5655	5655		Charting - Assessment	
5656	Bariatric Washroom	5656	5656	Symbol	Patient Washroom, Bariatric	
5658	Housekeeping	5658	5658		Housekeeping	
5659	Storage	5659	5659		Storage	
5660	Corridor	5660	5660		Corridor	
5661	Washroom	5661	5661	Symbol	Patient Washroom, Barrier Free	
5662	Assessment / Interview	5662	5662		Assessment / Interview	
5663	Assessment / Interview	5663	5663		Assessment / Interview	
5664A	Safe Room	5664A.1 5664A.2	5664A		Safe Room A	
5664B	Safe Room	5664B.1 5664B.2	5664B		Safe Room B	
5664C	Washroom	5664C.1 5664C.2	5664C	Symbol	Patient Washroom, Barrier Free	
5667	Assessment / Interview	5667	5667		Assessment / Interview	
5668	Assessment / Interview	5668	5668		Assessment / Interview	
5669	Assessment / Interview	5669	5669		Assessment / Interview	
5670	Corridor		5670		Corridor	
5671A	Business Center					
5671B	Equipment Alcove					

SIGNAGE SCHEDULE

#

Contract Room #	Contract Room Name	Applies to Door #	Type 1 Sign Text	Type 2 Sign	Type 3 Sign (Confirm wording prior to fabrication)	Type 8 Sign (Confirm wording prior to fabrication)
5672	Observation					
5673	Staff Washroom	5673	5673	Symbol	Staff Washroom, Barrier Free	
5674	Medication Room	5674	5674		Medication Room	
5676	Staff Washroom	5676	5676	Symbol	Staff Washroom, Barrier Free	
5677	Team Room	5677	5677		Team Room	

#
#

Notes:

i. See Section 10 14 00 – Signage for sign type.

This page intentionally left blank

ROOM FINISH SCHEDULE_02

Level	Abbreviated Room Name	Const. Room Number	Floor		Wall		Ceiling		Remarks
			Floor Finish	Base Finish	Wall Material	Wall Finish	Ceiling Material	Ceiling Finish	
FFL @ LEVEL 200	CORR	5630	RUB-1	RUB-1	GB/ARGB	PT-1/SWP	GB/ACT-2	PT-1/ -	
FFL @ LEVEL 200	CHARTING	5631	RUB-1	RUB-1	GB	PT-1	ACT-2	-	
FFL @ LEVEL 200	RECLINER	5632	RUB-1	RUB-1	GB/ARGB	PT-1	GB/ACT-2	PT-1/ -	
FFL @ LEVEL 200	WC	5633	SR-1	SR-1	MRGB	PT-1	GB	PT-1	
FFL @ LEVEL 200	RECLINER	5634	RUB-1	RUB-1	GB/ARGB	PT-1	ACT-2	PT-1/ -	
FFL @ LEVEL 200	SOILED LAUNDRY	5635	RUB-1	RUB-1	GB/ARGB	PT-1/SWP	GB	PT-1	
FFL @ LEVEL 200	EXAM	5636	RUB-1	RUB-1	GB/ARGB/ MRGB	PT-1/SWP	GB	-	
FFL @ LEVEL 200	SHOWER	5637	SR-1	SR-1	MRGB	PT-1/HWP	GB	PT-1	
FFL @ LEVEL 200	MEETING RM	5638	RUB-1	RUB-1	GB	PT-1	ACT-2	-	
FFL @ LEVEL 200	TELEHEALTH/ PSYCH OFFICE	5639	RUB-1	RUB-1	GB	PT-1	ACT-1	-	
FFL @ LEVEL 200	CORR	5640	RUB-1	RUB-1	GB	PT-1/SWP	ACT-2	-	
FFL @ LEVEL 200	PT BELONG	5641A	RUB-1	RUB-1	GB/MRGB	PT-1/SWP	ACT-2	-	
FFL @ LEVEL 200	LAUNDRY	5641B	SR-1	SR-1	MRGB	PT-1/SWP	ACT-2	-	
FFL @ LEVEL 200	CLEAN	5642	RUB-1	RUB-1	GB	PT-1/SWP	ACT-2	-	
FFL @ LEVEL 200	STAFF LOCKERS	5644	RUB-1	RUB-1	GB	PT-1/SWP	ACT-2	-	
FFL @ LEVEL 200	CORR	5645	RUB-1	RUB-1	GB/ARGB	PT-1/SWP	ACT-2	-	
FFL @ LEVEL 200	SOILED	5646	SR-1	SR-1	MRGB	PT-1/HWP	ACT-V	-	
FFL @ LEVEL 200	CORR	5650	RUB-1	RUB-1	GB/ARGB	PT-1/SWP	GB	PT-1	

ISSUED FOR ADDENDUM #4

COLES
Architecture + Engineering + Project Management
Suite 201, 85 Fitzroy Street
Charlottetown, P.E.I., Canada, C1A 1R6
Phone: (902) 368-2300
www.colesassoicates.com

PARKIN
ARCHITECTS LIMITED

Client:
Health & Wellness

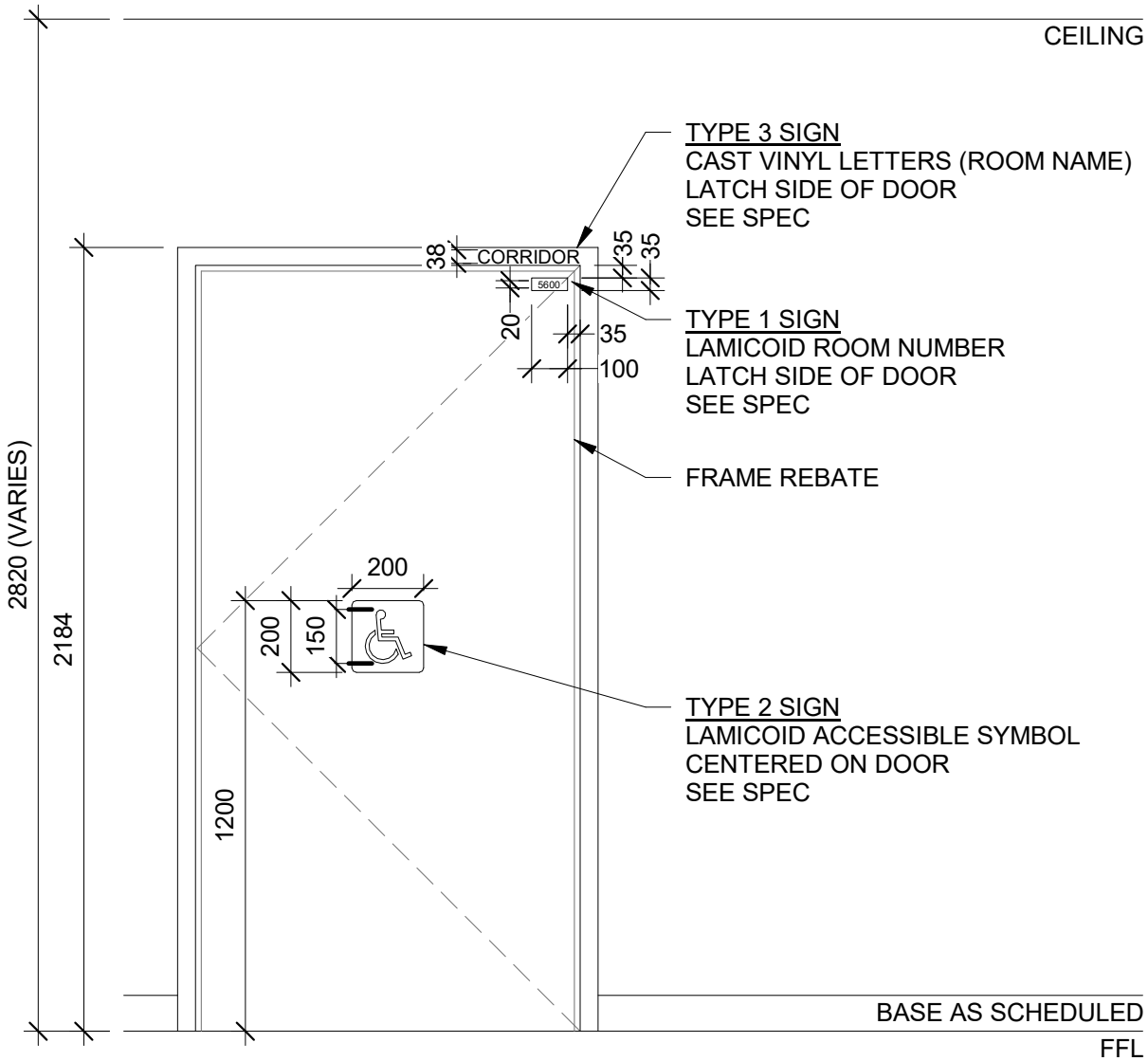
Project Title:
Queen Elizabeth Hospital
Mental Health & Addictions
Emergency Department &
Short Stay Unit

Sheet Title:
ROOM FINISH
SCHEDULE

Date: 2022-04-20
Drn By: JR | Chk By: .

Project Number:
211025

Drawing Number:
AD022 r1



PARKIN
ARCHITECTS LIMITED

Issued for Addendum #4

COLES
Architecture + Engineering + Project Management
Suite 201, 85 Fitzroy Street
Charlottetown, P.E.I., Canada, C1A 1R6
Phone: (902) 368-2300
www.colesassoicates.com

Client: Health & Wellness

Project Title: Queen Elizabeth Hospital Mental Health & Addictions Emergency Department & Short Stay Unit

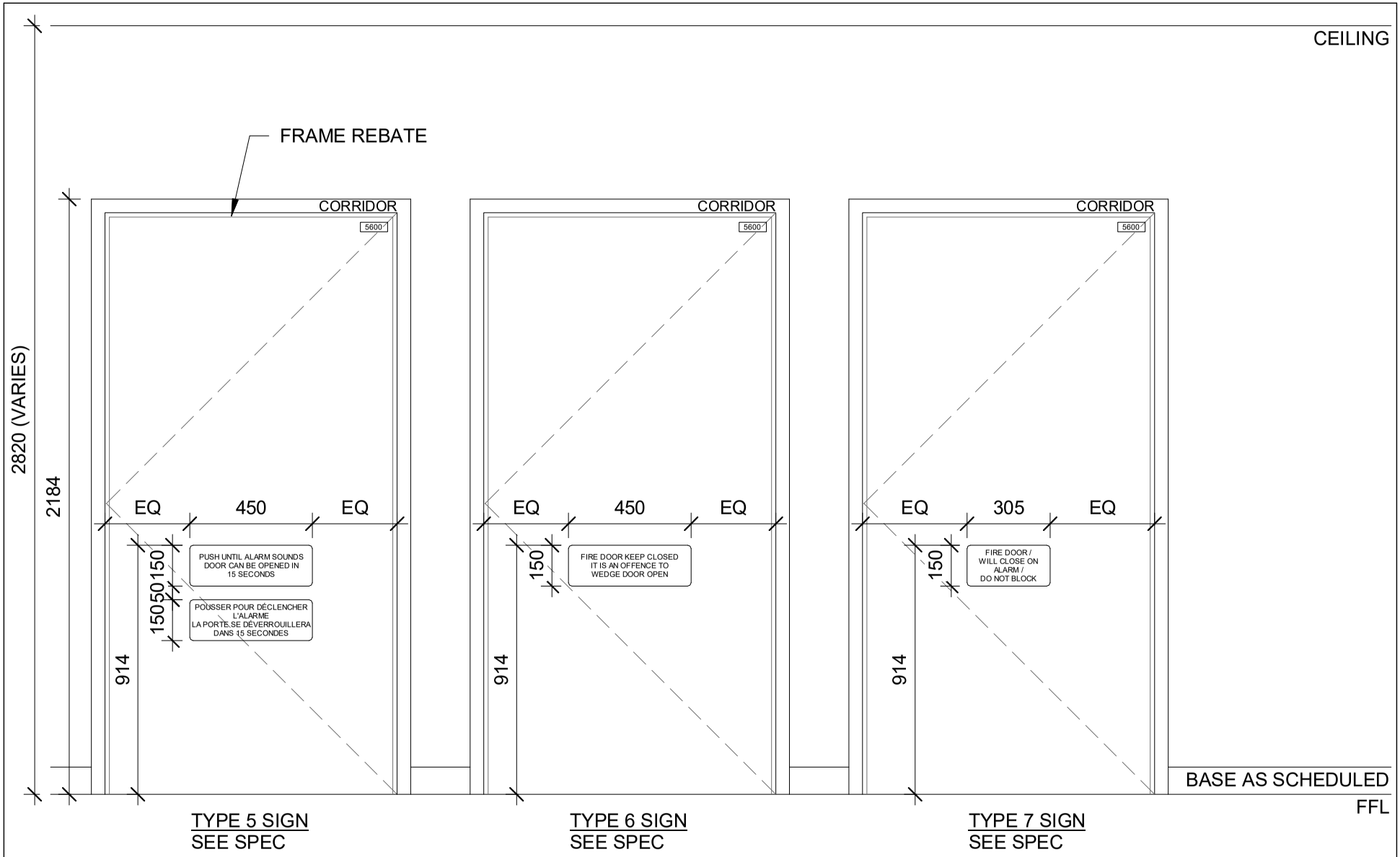
Sheet Title: Door Signage

Date: 2022-04-20 | Scale: 1 : 20

Drn By: ADR | Chk By: SDM

Project Number: 211025

Drawing Number: AD080



Issued for Addendum #4

COLES
Architecture + Engineering + Project Management
Suite 201, 85 Fitzroy Street
Charlottetown, P.E.I., Canada, C1A 1R6
Phone: (902) 368-2300
www.colesassoicates.com

PARKIN
ARCHITECTS LIMITED

Client:
Health & Wellness

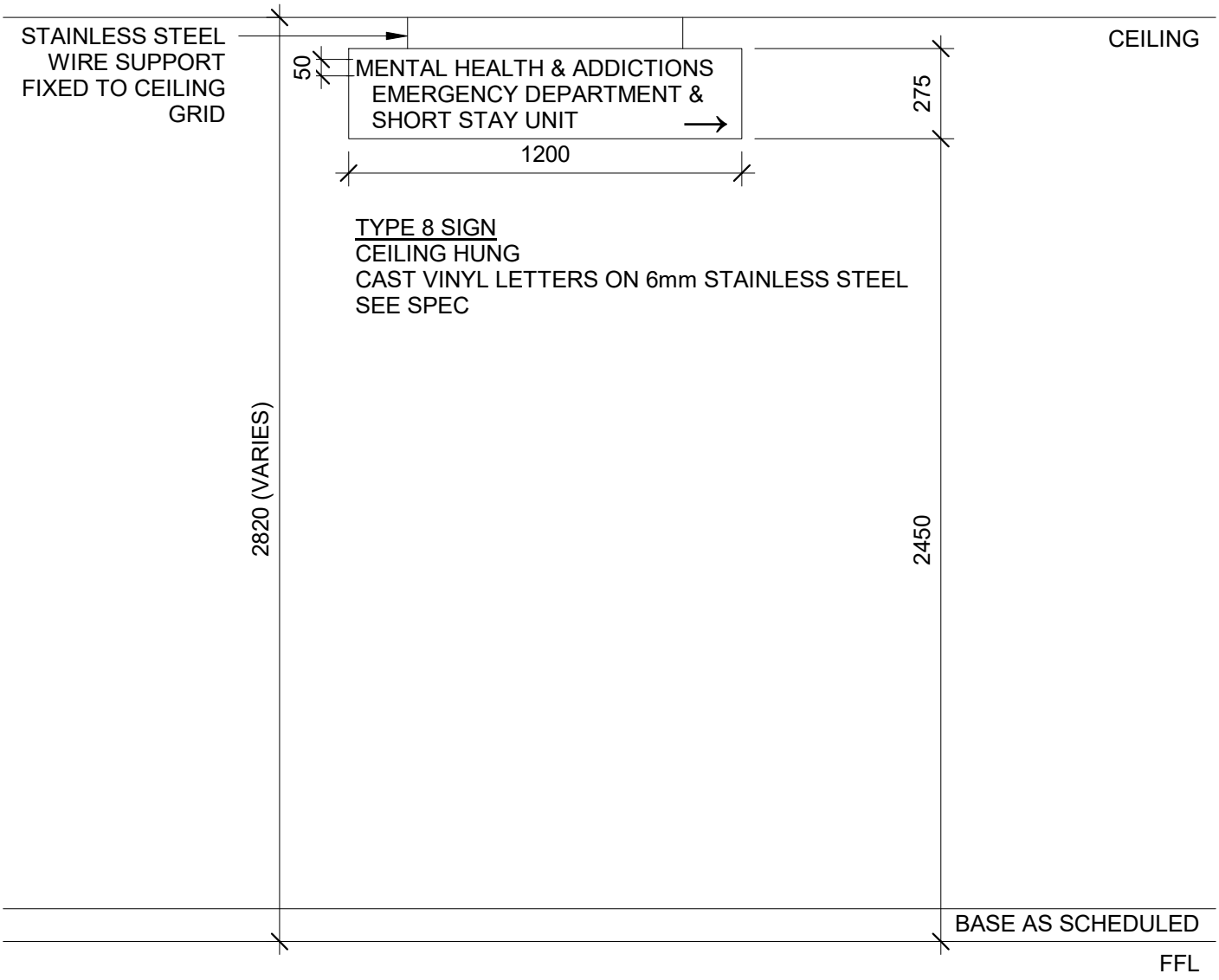
Project Title:
Queen Elizabeth Hospital
Mental Health & Addictions
Emergency Department &
Short Stay Unit

Sheet Title:
Door Signage

Date: 2022-04-20 | Scale: 1 : 20
Dm By: ADR | Chk By: SDM

Project Number:
211025

Drawing Number:
AD081



PARKIN
ARCHITECTS LIMITED

Issued for Addendum #4

COLES
Architecture + Engineering + Project Management
Suite 201, 85 Fitzroy Street
Charlottetown, P.E.I., Canada, C1A 1R6
Phone: (902) 368-2300
www.colesassoicates.com

Client: Health & Wellness

Project Title: Queen Elizabeth Hospital Mental Health & Addictions Emergency Department & Short Stay Unit

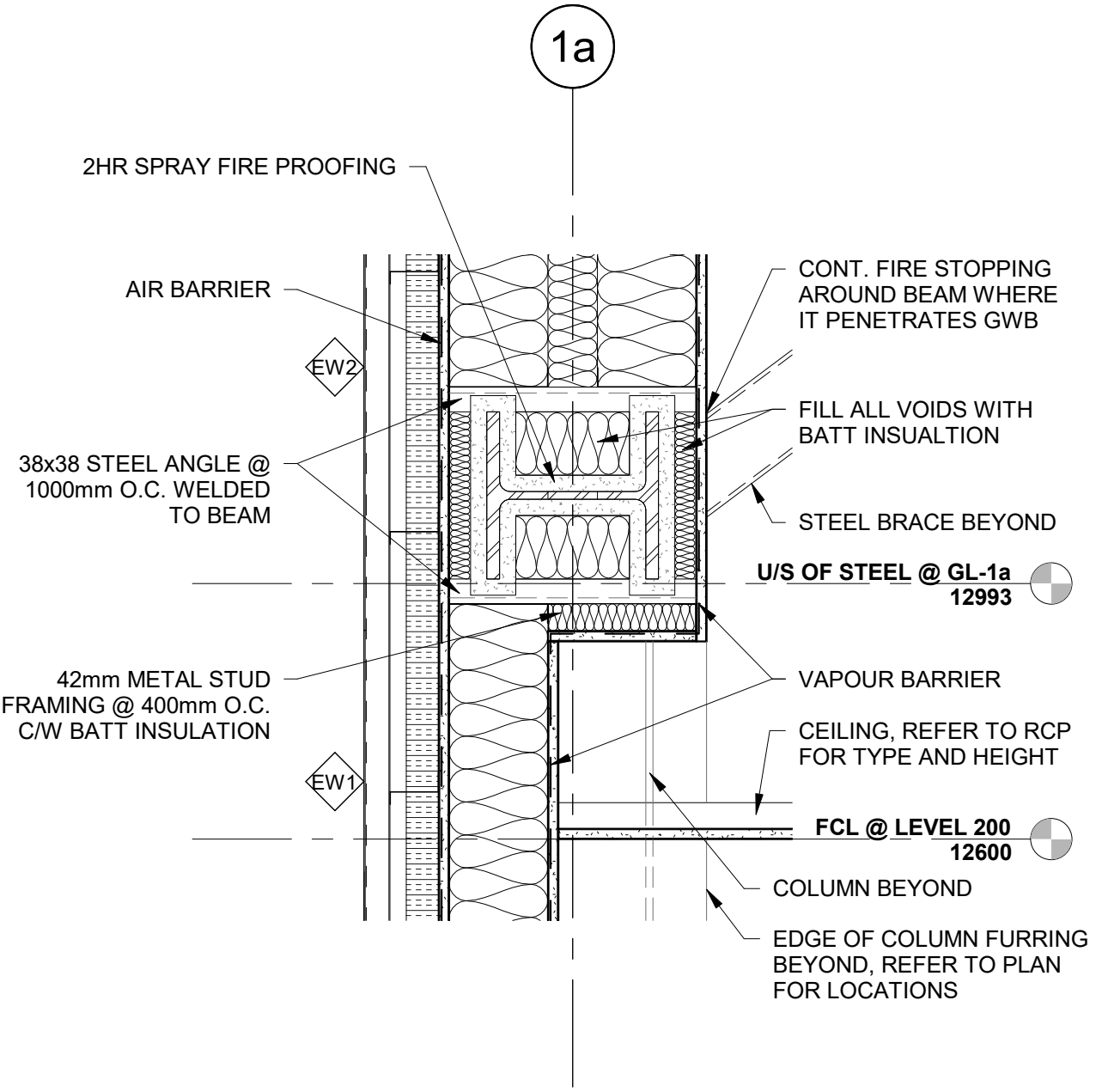
Sheet Title: Misc. Signage

Date: 2022-04-20 | Scale: 1 : 20

Drn By: ADR | Chk By: SDM

Project Number: 211025

Drawing Number: AD082



PARKIN
ARCHITECTS LIMITED

Issued for Addendum #4

COLES
Architecture + Engineering + Project Management
Suite 201, 85 Fitzroy Street
Charlottetown, P.E.I., Canada, C1A 1R6
Phone: (902) 368-2300
www.colesassoicates.com

Client:
Health & Wellness

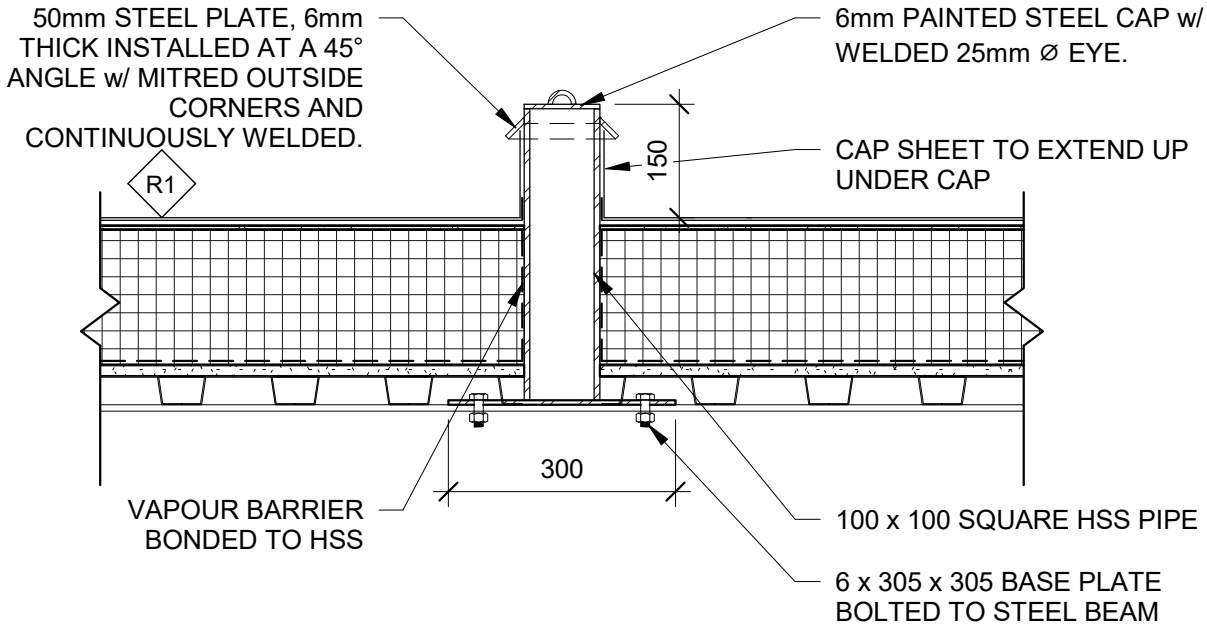
Project Title:
Queen Elizabeth Hospital
Mental Health & Addictions
Emergency Department &
Short Stay Unit

Sheet Title:
Typical Truss Enclosure @ GL-1a

Date: 2022-04-20 | Scale: 1 : 10
Drn By: JLA | Chk By: SDM

Project Number:
211025

Drawing Number:
AD322



PARKIN
ARCHITECTS LIMITED

Issued for Addendum #4

COLES
Architecture + Engineering + Project Management
Suite 201, 85 Fitzroy Street
Charlottetown, P.E.I., Canada, C1A 1R6
Phone: (902) 368-2300
www.colesassoicates.com

Client: Health & Wellness

Project Title: Queen Elizabeth Hospital Mental Health & Addictions Emergency Department & Short Stay Unit

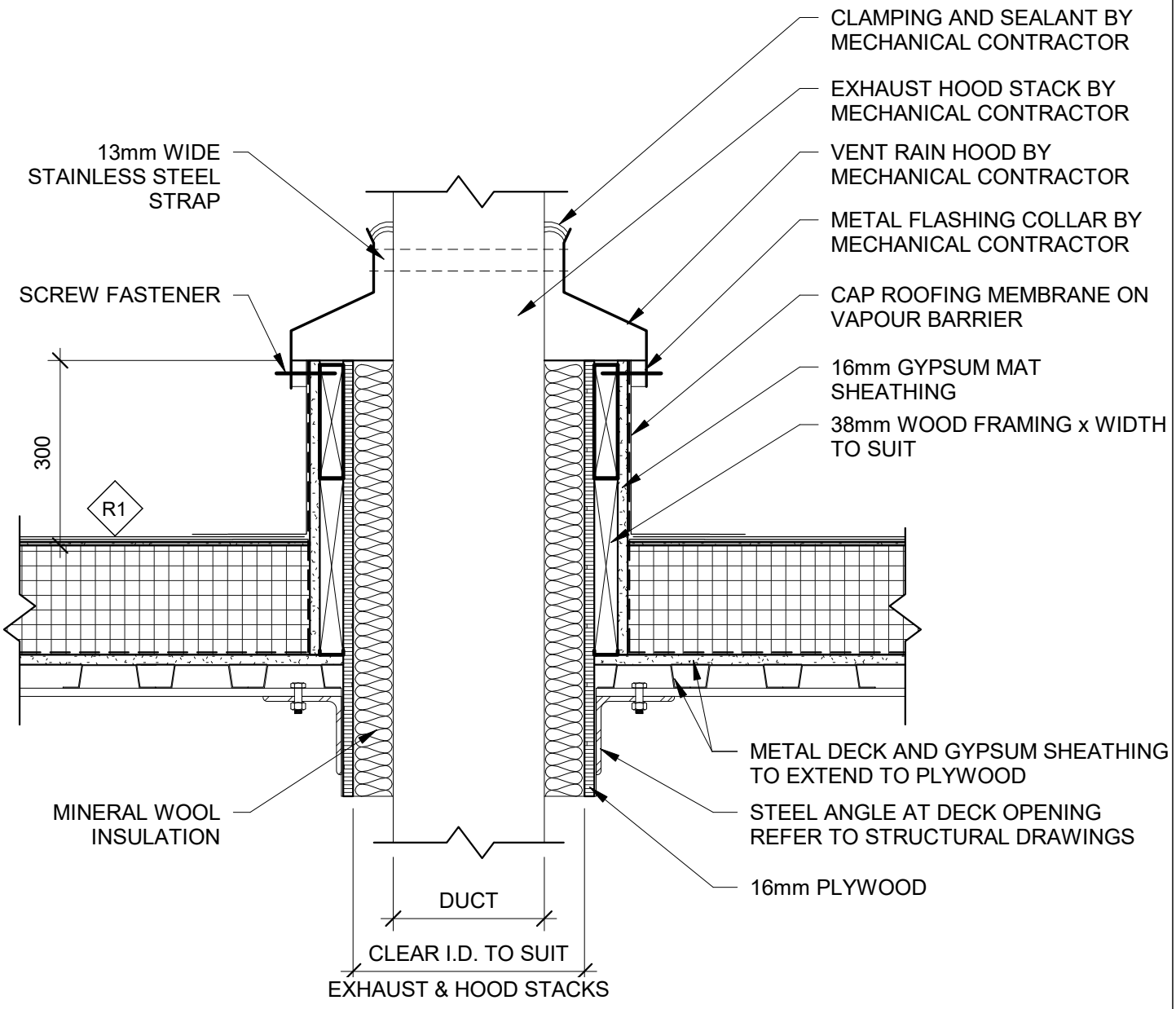
Sheet Title: Guy Wire Anchor

Date: 2022-04-20 | Scale: 1 : 10

Drn By: ADR | Chk By: SDM

Project Number: 211025

Drawing Number: AD323



PARKIN
ARCHITECTS LIMITED

Issued for Addendum #4

COLES
Architecture + Engineering + Project Management
Suite 201, 85 Fitzroy Street
Charlottetown, P.E.I., Canada, C1A 1R6
Phone: (902) 368-2300
www.colesassoicates.com

Client:
Health & Wellness

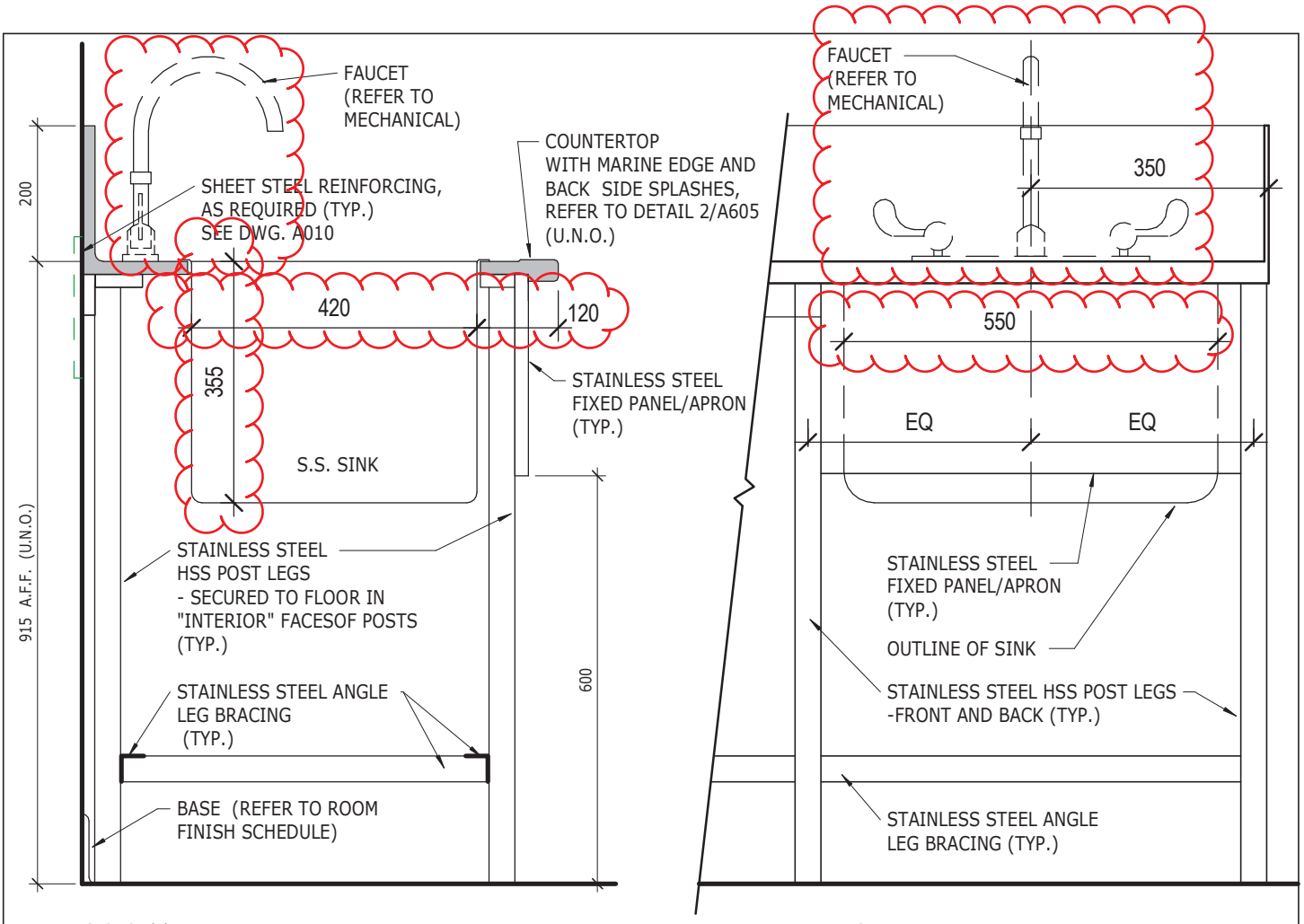
Project Title:
Queen Elizabeth Hospital
Mental Health & Addictions
Emergency Department &
Short Stay Unit

Sheet Title:
Ventilated Roof Thimble and Flashing for Exhaust Hood Stacks (Rectangular, Typ.)

Date: 2022-04-20 | Scale: 1 : 10
Drn By: JLA | Chk By: SDM

Project Number:
211025

Drawing Number:
AD324

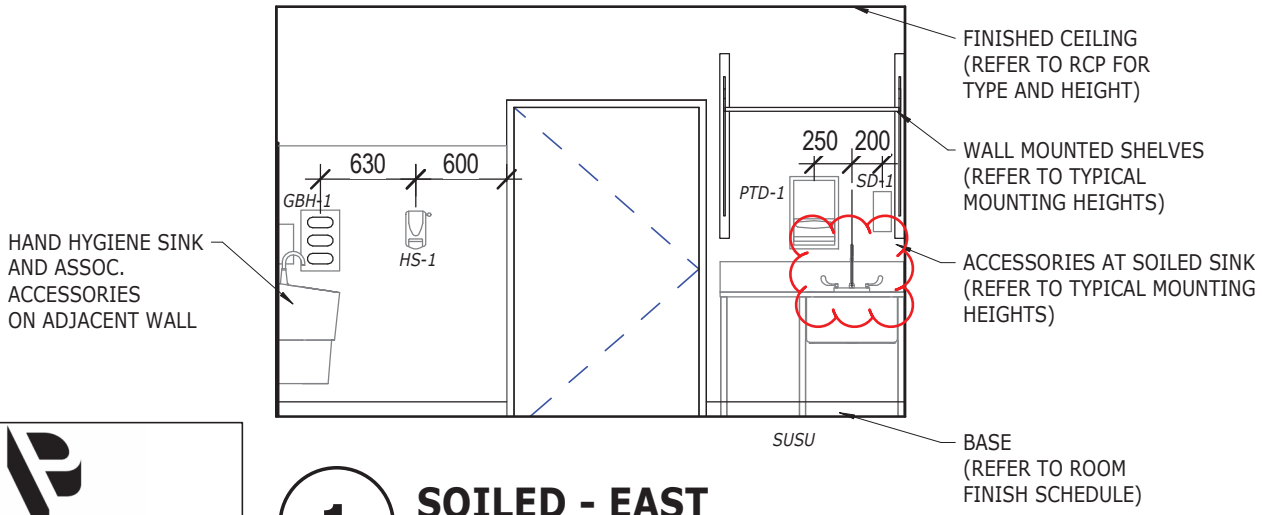


SECTION 'B'

ELEVATION

2 "SUSU" DETAILS

1 : 10



1 SOILED - EAST

1 : 50

Issed for Addendum #4

PARKIN
ARCHITECTS LIMITED

COLES
Architecture + Engineering + Project Management
Suite 201, 85 Fitzroy Street
Charlottetown, P.E.I., Canada, C1A 1R6
Phone: (902) 368-2300
www.colesassoicates.com

Client:
Health & Wellness

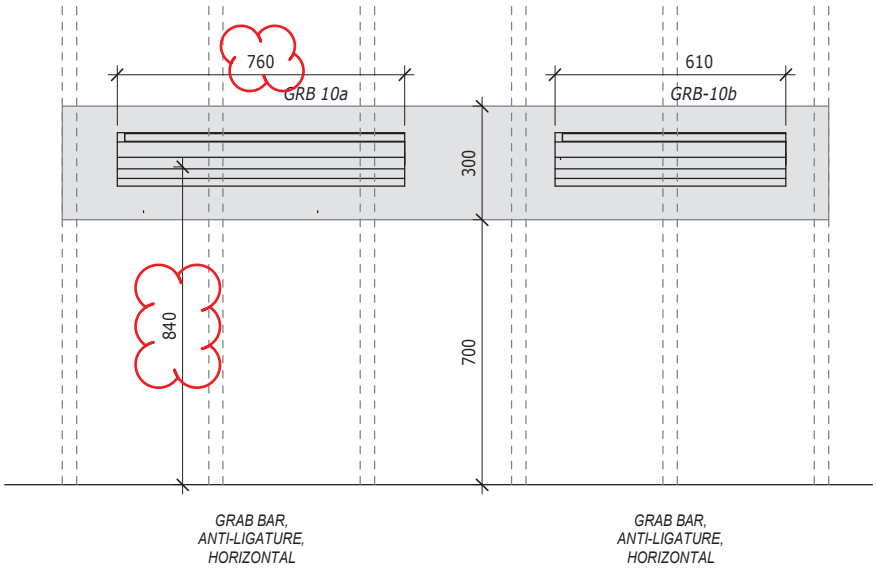
Project Title:
Queen Elizabeth Hospital
Mental Health & Addictions
Emergency Department &
Short Stay Unit

Sheet Title:
REVISED "SUSU" IN
SOILED 5646

Date: APRIL 20/22 Scale: As indicated
Drn By: JR Chk By: .

Project Number:
211025

Drawing Number:
ASK-004



PARKIN
ARCHITECTS LIMITED

TO BE READ IN CONJUNCTION WITH DRAWING 211025-13/A510.

COLES
Architecture + Engineering + Project Management
Suite 201, 85 Fitzroy Street
Charlottetown, P.E.I., Canada, C1A 1R6
Phone: (902) 368-2300
www.colesassoicates.com

Client:
Health & Wellness

Project Title:
Queen Elizabeth Hospital
Mental Health & Addictions
Emergency Department &
Short Stay Unit

Sheet Title:
REVISED GRAB BAR
"GRB-10a" LENGTH AND
MOUNTING HEIGHT

- ISSUED WITH ADD. #4

Date: APR.20/22 | Scale: 1 : 20
Drn By: JR | Chk By: .

Project Number:
211025

Drawing Number:
ASK-006


DCW


DCW


DCW
CAUTION
HIGH NOISE AREA
HEARING PROTECTION
MAY BE REQUIRED


DCW
CAUTION
HIGH NOISE AREA
HEARING PROTECTION
MAY BE REQUIRED
NO
MOKING ON
AL GROUN
VEHICLES
INTERDIT DE
R LES TERRA
HÔPITAL OU
ES VÉHICULES