

The following revisions are herewith incorporated into the Tender Documents and shall be included in the Tender Price. Where a revision is called for in one drawing or section of the Specification, it shall be considered revised for all related drawings and sections of the Specification. This Addendum shall be returned with other Tender Documents at the time of submission.

This addendum (61 pages) shall form a part of and be included in the Contract Documents for the above titled project and no consideration will be entertained for extras to the Contract due to failure of the contractor to become thoroughly familiar with this addendum.

Signify that Addendum has been received by listing the Addendum number and date in the appropriate spaces on the Tender Form.

## **GENERAL**

### **FRONT END SPECIFICATION REVISIONS**

- .1 Refer to Section 01 21 00 – Allowances.
  - .1 Add paragraph 1.2.17 Cash Allowance No. 17 – Masonry Repair – Thompson General Hospital as follows:
    - .1 This cash allowance for exterior brick masonry repairs at North Staff Entrance, South Staff Entrance, and East Loading Dock Areas.
- .2 Refer to Section 00 80 00 Pricing Form – Stipulated Price
  - .1 Refer to attached revised Section Section 00 80 00 Pricing Form – Stipulated Price with changes shown in red.

## **CIVIL**

- .1 Refer to attached Civil Addendum No.1 (2 pages).

## **ARCHITECTURAL**

- .1 Refer to attached Architectural Addendum AD03 (5 pages).

## **STRUCTURAL**

- .1 Refer to attached Thompson General Hospital PFLS Renovations Masonry Repairs Addendum CK-01 (9 pages).
  - .2 Refer to attached PFLS Lynn Lake, Gillam, and Thompson Sites Addendum 02 (3 pages).
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## MECHANICAL

### MECHANICAL SPECIFICATION REVISIONS

- .1 Refer to Section 22 10 10 – Plumbing Pumps
  - .1 Add paragraph 2.1.4 Fire Water Main Recirculation Pump PP 1-03
    - .1 Capacity: 0.63 L/s against total differential head of 30 kPa.
    - .2 Construction: closed-coupled, in-line centrifugal, all bronze construction, stainless steel shaft, stainless steel or bronze shaft sleeve, two oil lubricated bronze sleeves or ball bearings. Maximum operating conditions of 1206 kPa and 107 degrees C continuous service.
    - .3 Motor: 1/2 hp, drip-proof, with thermal overload protection.
    - .4 Supports: provide as recommended by manufacturer.
  - .2 Add paragraph 2.1.3 Municipal Water Recirculation Pump PP 1-04
    - .1 Capacity: 0.69 L/s against total differential head of 225 kPa.
    - .2 Construction: closed-coupled, in-line centrifugal, all bronze construction, stainless steel shaft, stainless steel or bronze shaft sleeve, two oil lubricated bronze sleeves or ball bearings. Maximum operating conditions of 1206 kPa and 107 degrees C continuous service.
    - .3 Motor: 1/2 hp, drip-proof, with thermal overload protection.
    - .4 Supports: provide as recommended by manufacturer.
- .4 Add Section 23 33 53 – Duct Liners. Refer to attached.
- .5 Refer to Section 23 80 10 – Air Distribution
  - .1 Add paragraph 2.6 Motorized Fire/Smoke Dampers as follows:
    - .1 Provide ULC labelled fire/smoke dampers as shown on drawings (marked FSD), and where otherwise required by authorities having jurisdiction. Fire/smoke dampers shall be tested and approved by ULC or other Testing Agency recognized by authorities having jurisdiction.
    - .2 Depending on rating of fire separation, based on architectural drawing and specifications, the rating, construction and testing shall meet the following:
      - .1 N.B.C.
      - .2 ULC S 112
      - .3 N.F.P.A.
      - .4 Authorities having jurisdiction
    - .3 Motorized fire/smoke dampers shall be type A, blades within air stream, with electrical operator configuration, c/w factory fabricated collar.

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- .4 Manufacturer to supply and install, at factory, approved operators. All operators shall be product of single manufacturer. Factory test all dampers for proper operation. Operators to be externally mounted. Make allowance for field adjustments. Refer to specification detail.
  - .5 All fire/smoke dampers to be factory set for normally open or normally closed operation during non-emergency periods as described in clause 'Fire Alarm System', Division 26. Refer to drawings.
  - .6 Provide end switches to indicate damper position.
- .2 Add paragraph 2.7 Diffusers, Registers and Grilles as follows:
- .1 Type A Ceiling Return Grille – 12 mm x 12 mm x 12 mm extruded aluminium grid type, 45 degree angled grid core, mount type to suit ceiling with lay-in for T-bar and surface mounted for gypsum board ceiling, grille to be connected to ductwork, white enamel finish.
- .5 Refer to Section 25 10 10 Control – General Requirements
- .1 Revise paragraph 1.2.3 as follows:
    - .3 Control equipment to be product of one manufacturer and be fully integrated with existing controls system for each site. Existing controls are as follows:
      - .1 Lynn Lake Hospital – Ainsworth
      - .2 Gillam Hospital – Ainsworth
      - .3 Northern Spirit Manor – Siemens
      - .4 Thompson General Hospital - Delta
- .6 Refer to Section 25 30 10 – Controls – Sequences of Operations
- .1 Add paragraph 1.7 Fire Main Recirculation Pump PP 1-03 as follows:
    - .1 Pump shall operate continuously.
    - .2 Provide wiring, panel, and indicator for alarm points at nurse’s station and maintenance office for the following points:
      - .1 Pump status
      - .2 Pump failure alarm
  - .2 Add paragraph 1.8 Domestic Cold Water Supply Recirculation Pump PP 1-04 as follows:
    - .1 Pump shall operate continuously.
    - .2 Provide wiring, panel, and indicator for alarm points at nurse’s station and maintenance office for the following points:
      - .1 Pump status
      - .2 Pump failure alarm
-

### MECHANICAL DRAWING REVISIONS

- .1 Refer to drawing M1-111 Crawlspace Plan – Mechanical – Demolition
  - .1 Delete drawing M1-111 Crawlspace Plan – Mechanical – Demolition. Existing fire hose cabinet system to remain.
- .2 Refer to drawing M1-121 Main Floor Plan Plan – Mechanical – Demolition. Existing fire hose cabinets to remain
  - .1 Delete drawing M1-121 Main Floor Plan Plan – Mechanical – Demolition. Existing fire hose cabinet system to remain.
- .3 Refer to attached drawing M1-222 Fire Pumphouse Plan & Details – Fire Protection – New Construction with clouded revisions.
  - .1 Sprinkler service main recirculation line and associated pump PP 1-03 added.
  - .2 Domestic cold water supply recirculation line and associated pump PP 1-04 added.
- .4 Refer to attached drawing M1-223 Section & Schematics – Fire Protection – New Construction with clouded revisions.
  - .1 Schematics clarified to include recirculation pumps.
  - .5 Refer to attached new drawing for Lynn Lake Hospital M1-321 Main Floor Plan - Mechanical - New Construction

### ELECTRICAL

### ELECTRICAL SPECIFICATION REVISIONS

- .1 Refer to Section 26 52 01 – Unit Equipment for Emergency Lighting
  - .1 Refer to clause 2.2.1. Revise acceptable manufacturers list to also include: “*BeLuce*”.
- .2 Refer to Section 26 53 00 – Exit Signs
  - .1 Refer to clause 2.2.1. Revise acceptable manufacturers list to also include: “*BeLuce*”.

### ELECTRICAL SCHEDULE REVISIONS

- .1 Refer to drawing E1-301 Partial Single Line Diagram – New Construction and Electrical Schedules
  - .1 Refer to Luminaire Schedule:
    - .1 Refer to type ‘SA’. Provide additional manufacturers and part numbers for approved equal fixtures to read as:
      - .1 Manufacturer:
        - .1 Cooper
        - .2 Columbia Lighting

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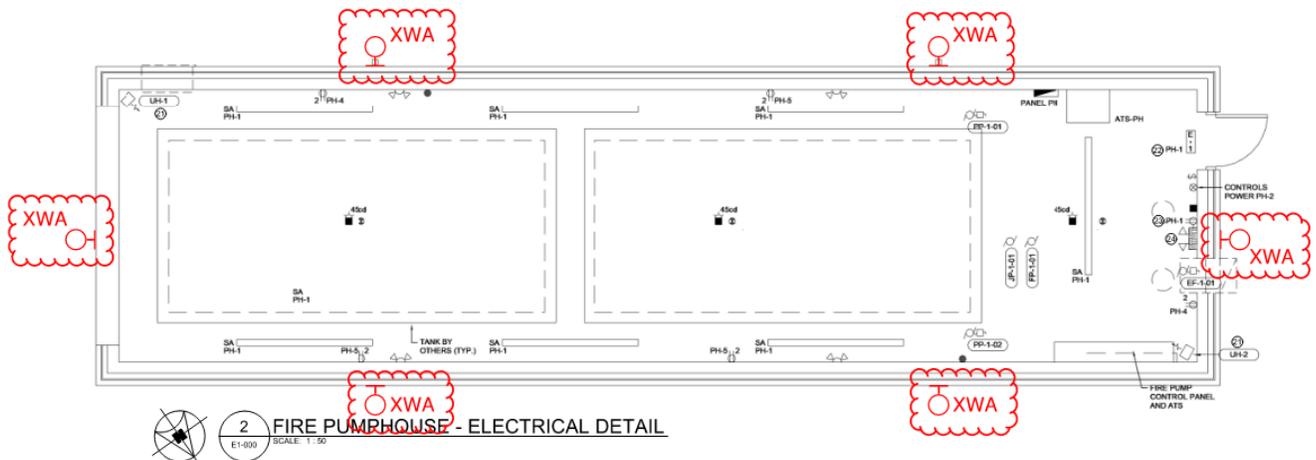
- .2 Specified Model Number:
    - .1 8SLSTPSLC-NUV // ACY-CHAIN/SET
    - .2 CSL8-A-LSCS
  - .2 Provide new entry to read as:
    - .1 Type: XWA
    - .2 Input Watts: 36W
    - .3 Voltage: 120V
    - .4 Description: *Surface mounted LED wall pack, switchable lumens (5277LM), switchable CCT (3000K), 80CRI. Includes integral photocell from manufacturer.*
    - .5 Location: *Pumphouse Exterior.*
    - .6 Lamp: *LED*
    - .7 Finish: *Black*
    - .8 Manufacturer(s): *Lithonia, Cooper*
    - .9 Specified Model Number: *TWR1 LED ALO SWW2 UVOLT PE DDBTXD (Lithonia), WPSLED15S (Cooper).*
  - .2 Refer to Motor Schedule:
    - .1 Provide new entry to read as:
      - .1 Motor: *CL-1*
      - .2 Name: *Chlorination System*
      - .3 Location: *Fire Pumphouse*
      - .4 H.P. (kW): *1kW*
      - .5 Volts: *120V/1Ø*
      - .6 Circuit: *PH-6*
      - .7 Starter Location: *N/A*
      - .8 Feeder: *2#12*
      - .9 Time Delay Relay: *N/A*
      - .10 Fire Alarm Shut Down: *N/A*
      - .11 Remarks: *Requires receptacle connection.*
    - .2 Provide new entry to read as:
      - .1 Motor: *EF-1-01*
      - .2 Name: *Exhaust Fan*
      - .3 Location: *Fire Pumphouse*
      - .4 H.P. (kW): *0.25HP*
      - .5 Volts: *120V/1Ø*
      - .6 Circuit: *PH-7*
      - .7 Starter Location: *N/A*
      - .8 Feeder: *2#12*
      - .9 Time Delay Relay: *N/A*
      - .10 Fire Alarm Shut Down: *N/A*
      - .11 Remarks: *Provide local disconnect.*
    - .3 Provide new entry to read as:
      - .1 Motor: *FAC-1-01*
      - .2 Name: *Air Compressor*
      - .3 Location: *Mechanical Mezzanine*
      - .4 H.P. (kW): *0.5HP*
      - .5 Volts: *120V/1Ø*
-

- .6 Circuit: *E-68*
  - .7 Starter Location: *N/A*
  - .8 Feeder: *2#12*
  - .9 Time Delay Relay: *N/A*
  - .10 Fire Alarm Shut Down: *N/A*
  - .11 Remarks: *Provide local disconnect.*
  - 4 Provide new entry to read as:
    - .1 Motor: *PP-1-01*
    - .2 Name: *Reservoir Tank Fill Pump*
    - .3 Location: *Fire Pumphouse*
    - .4 H.P. (kW): *0.5HP*
    - .5 Volts: *120V/1Ø*
    - .6 Circuit: *PH-8*
    - .7 Starter Location: *N/A*
    - .8 Feeder: *2#12*
    - .9 Time Delay Relay: *N/A*
    - .10 Fire Alarm Shut Down: *N/A*
    - .11 Remarks: *Provide local disconnect.*
  - 5 Provide new entry to read as:
    - .1 Motor: *PP-1-02*
    - .2 Name: *Reservoir Tank Circulation Pump*
    - .3 Location: *Fire Pumphouse*
    - .4 H.P. (kW): *0.5HP*
    - .5 Volts: *120V/1Ø*
    - .6 Circuit: *PH-9*
    - .7 Starter Location: *N/A*
    - .8 Feeder: *2#12*
    - .9 Time Delay Relay: *N/A*
    - .10 Fire Alarm Shut Down: *N/A*
    - .11 Remarks: *Provide local disconnect.*
  - .6 Provide new entry to read as:
    - .1 Motor: *PP-1-03*
    - .2 Name: *Fire Main Recirculation Pump*
    - .3 Location: *Mechanical / Electrical 73*
    - .4 H.P. (kW): *0.5HP*
    - .5 Volts: *120V/1Ø*
    - .6 Circuit: *E-70*
    - .7 Starter Location: *N/A*
    - .8 Feeder: *2#12*
    - .9 Time Delay Relay: *N/A*
    - .10 Fire Alarm Shut Down: *N/A*
    - .11 Remarks: *Provide local disconnect.*
  - .7 Provide new entry to read as:
    - .1 Motor: *PP-1-04*
    - .2 Name: *Domestic Cold Water Supply Recirculation Pump*
    - .3 Location: *Fire Pumphouse*
    - .4 H.P. (kW): *0.5HP*
-

- .5 Volts: 120V/1Ø
  - .6 Circuit: PH-19
  - .7 Starter Location: N/A
  - .8 Feeder: 2#12
  - .9 Time Delay Relay: N/A
  - .10 Fire Alarm Shut Down: N/A
  - .11 Remarks: Provide local disconnect.
- .3 Refer to Panel PH Schedule.
- .1 Revise Panel PH to 42 circuit, rather than 24 circuit.
  - .2 Provide 20A-1P breaker for CL-1 (PH-6).
  - .3 Provide 15A-1P breaker for EF-1-01 (PH-7).
  - .4 Provide 20A-1P breaker for PP-1-01 (PH-8).
  - .5 Provide 20A-1P breaker for PP-1-02 (PH-9).
  - .6 Provide 15A-1P breaker for exterior lighting (PH-10).
  - .7 Provide 20A-1P breaker for PP-1-04 (PH-19).
  - .8 Revise spare 20A-3P breaker to 30A-3P.
  - .9 Provide two (2) additional 15A-1P breakers for a total of four (4).
  - .10 Revise 'Fed From' source to ATS-PH, rather than CDP Panel 1.
  - .11 Provide 100A-3P breaker to sub-feed Panel G, refer to single line diagram.

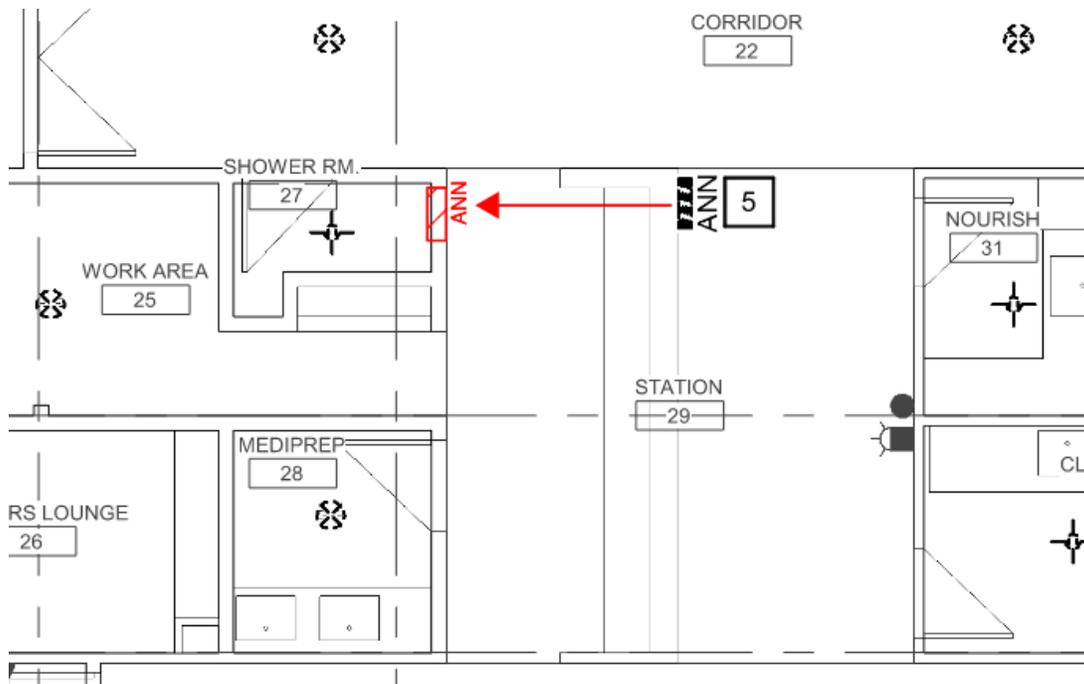
**ELECTRICAL DRAWING REVISIONS**

- .1 Refer to drawing E1-000 – Drawing List, Symbol Legend, General Notes and Electrical Details (addendum #2):
- .1 Provide new general note 'Q', to read as: *“Provide patching and painting as required to repair surfaces impacted by the electrical demolition and new construction, to restore surfaces to their pre-construction condition. Provide new ceiling tiles to replace damaged existing impacted by the electrical demolition and new construction.”*
  - .2 Refer to Detail 2 – Fire Pumphouse – Electrical Detail. Provide exterior lighting according to the below layout:



Refer to luminaire schedule revisions on E1-301 for type XWA specs. Wire and connect exterior lighting to new panel PH within pumphouse building, provide new dedicated circuit and 15A-1P breaker for exterior lighting. Exterior lighting to be controlled by integral photocells.

- .3 Provide 20A, 120V single receptacle on new dedicated circuit, for connection of new chlorination system, CL-1. Refer to mechanical drawing for equipment location.
- .2 Refer to drawing E1-111 – Basement/Crawlspace Plan – Electrical – Demolition:
  - .1 Revise demolition key note #1 as below. Provide new additional wording as underlined:  
“Demolish existing fire alarm initiating device. Retain existing initiating loop for ~~re-use~~ connection of new crawlspace pull stations. Demolish all unnecessary wiring and conduit back to source. Refer to new construction plan for further information.”
- .3 Refer to drawing E1-121 – Main Floor Plan – Electrical – Demolition:
  - .1 Existing fire alarm annunciator at nurse station 29 is installed behind nurse’s desk, see below sketch for clarification:

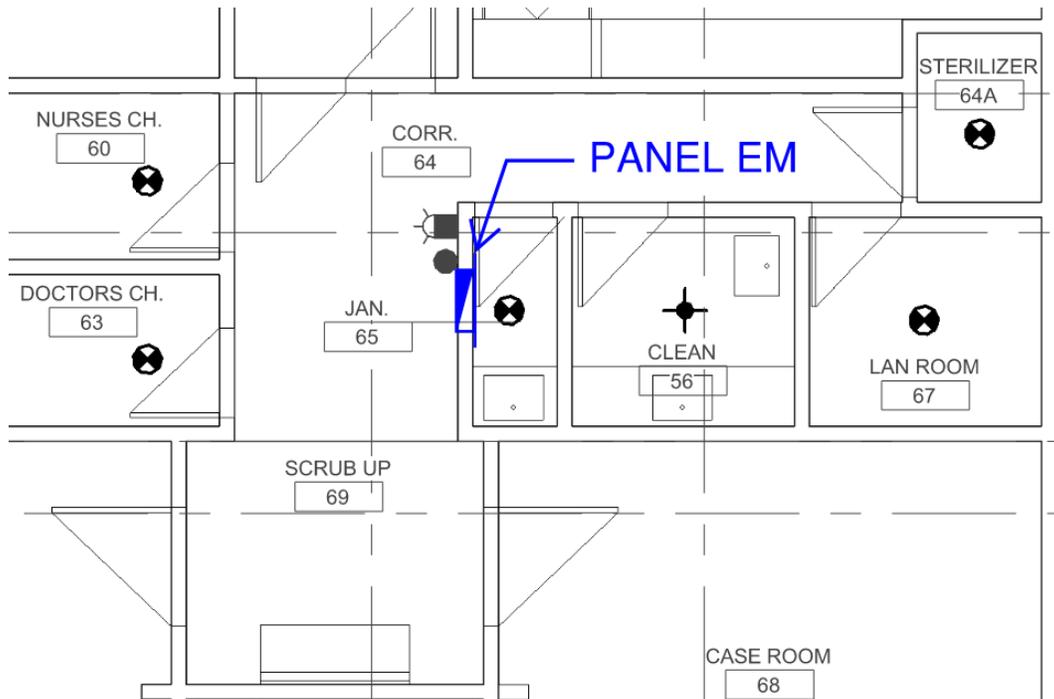


- .4 Refer to drawing E1-211 – Basement/Crawlspace Plan – Electrical – New Construction:
  - .1 Remove all new heat detectors from scope of work (crawlspace fire detection to be provided by new sprinkler system).
  - .2 Delete key note #1.

.5 Refer to drawing E1-221 – Main Floor Plan – Electrical – New Construction:

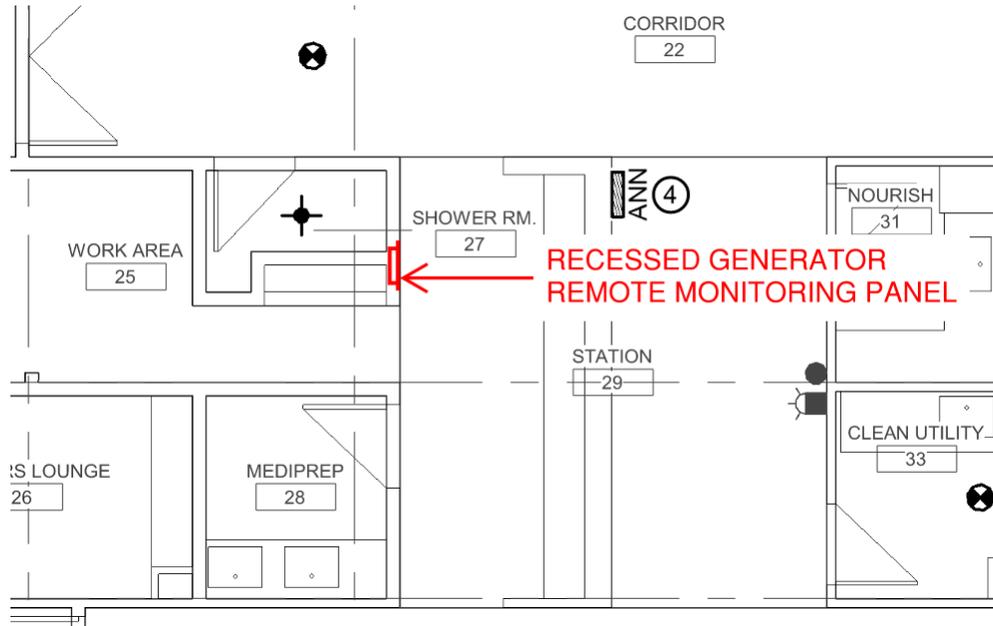
- .1 Wire and connect new fire shutter at pass through opening between Waiting Room 03 and Admitting Room 23. Wire and connect associated raise/lower control on wall adjacent to pass through opening. Refer to architectural drawing for exact location.

Provide new 120V emergency power circuit from existing Panel EM, and new 15A-1P breaker to match existing. Refer to below sketch for panel location:

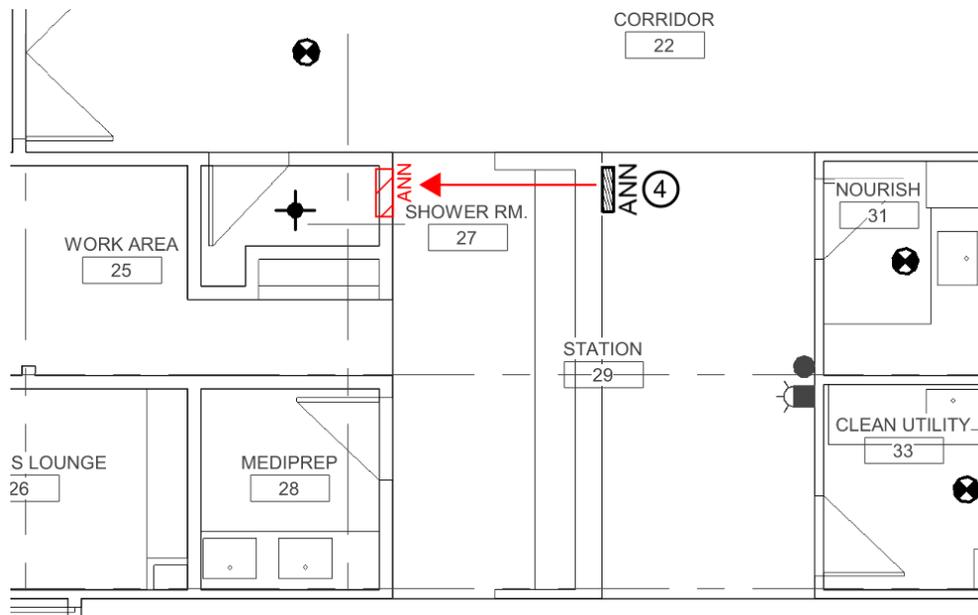


Provide fire alarm relay at fire shutter to close shutter on general fire alarm (stage 2). Wire and connect to existing initiating loop serving area with capacity.

- .2 Wire and connect new sprinkler air compressor, FAC-1-01 on mechanical mezzanine above maintenance office 73A to existing emergency power panel E. Provide 15A-1P breaker to match existing, and local disconnect at equipment location.
- .3 Wire and connect new fire main recirculation pump, PP-1-03 in mechanical / electrical room 73 to existing emergency power panel E. Provide 20A-1P breaker to match existing, and local disconnect at equipment location.
- .4 Provide new recessed remote monitoring panel for new generator at nurse station 29. Confirm wiring type and power requirements with generator manufacturer. Refer to below sketch for approximate location.



- .5 New fire alarm annunciator at nurse station 29 to be installed behind nurse's desk, see below sketch for clarification:



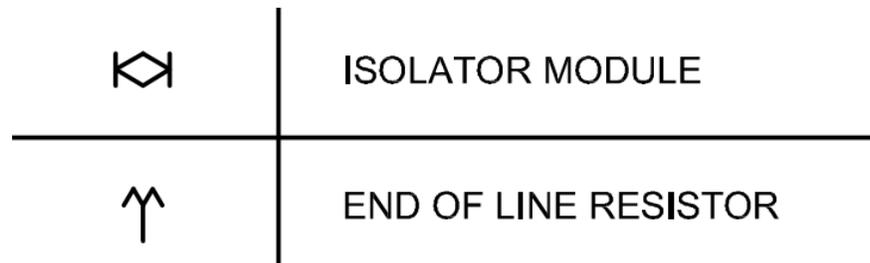
- .6 Refer to drawing E2-000 – Drawing List, Symbol Legend and General Notes (addendum #2):

- .1 Provide new general note 'Q', to read as: *"Provide patching and painting as required to repair surfaces impacted by the electrical demolition and new construction, to restore"*

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surfaces to their pre-construction condition. Provide new ceiling tiles to replace damaged existing impacted by the electrical demolition and new construction.”

- .2 Define the following symbols:



- .7 Refer to drawing E2-001 – Site Plan – Electrical:

- .1 Provide new general note ‘D’ to read as: *“All new underground services entering and exiting generator enclosure shall be installed in HDPE pipe by direction drilling.”*

- .8 Refer to drawing E2-111 – Basement/Crawlspace Plan – Electrical – Demolition:

- .1 Revise demolition key note #7 as below. Provide new additional wording as underlined: *“Disconnect existing jockey pump to be ~~demolished~~ relocated. ~~Remove all associated wiring and conduit back to source~~ Refer to new construction plan for further information.”*

- .9 Refer to drawing E2-211 – Basement/Crawlspace Plan – Electrical – New Construction:

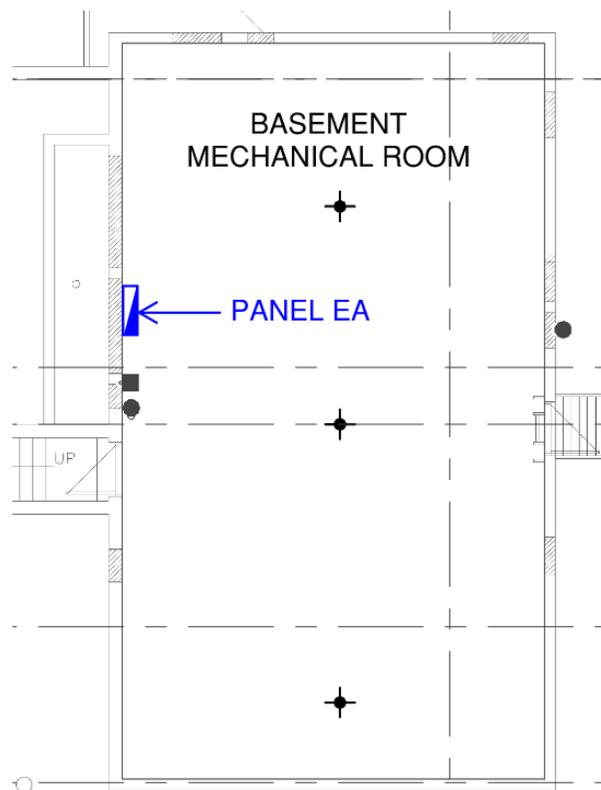
- .1 Revise AC-1 equipment tag to read as “FAC-2-01”  
.2 Revise FP-02-01 equipment tag to read as “FP-2-01”  
.3 Revise JP-02-01 equipment tag to read as “JP-2-01”  
.4 Reconnect existing jockey pump disconnected during demolition in new location on adjacent housekeeping pad (refer to demolition key note #7 on E2-111). Extend wiring and conduit as required.  
.5 Provide Emergency lighting battery bank and 2 x LED remote heads, sized for minimum 120 minutes runtime in the locations noted below. Provide receptacle c/w integral TVSS at high level next to each battery bank to supply battery bank charger, wire and connect to existing normal power lighting circuit serving each respective area. Coordinate exact locations on site:  
.1 Mechanical room B-03, to illuminate new fire pump FP-2-01 transfer switch / controller.  
.2 Electrical room B-04, to illuminate existing ATS.

- .10 Refer to drawing E2-301 – Partial Single Line Diagram – Demolition and New Construction, Fire Alarm Riser Diagram and Motor Schedule:

- .1 Refer to motor schedule:  
.1 Revise AC-1 equipment tag to read as “FAC-2-01”  
.2 Revise FP-02-01 equipment tag to read as “FP-2-01”

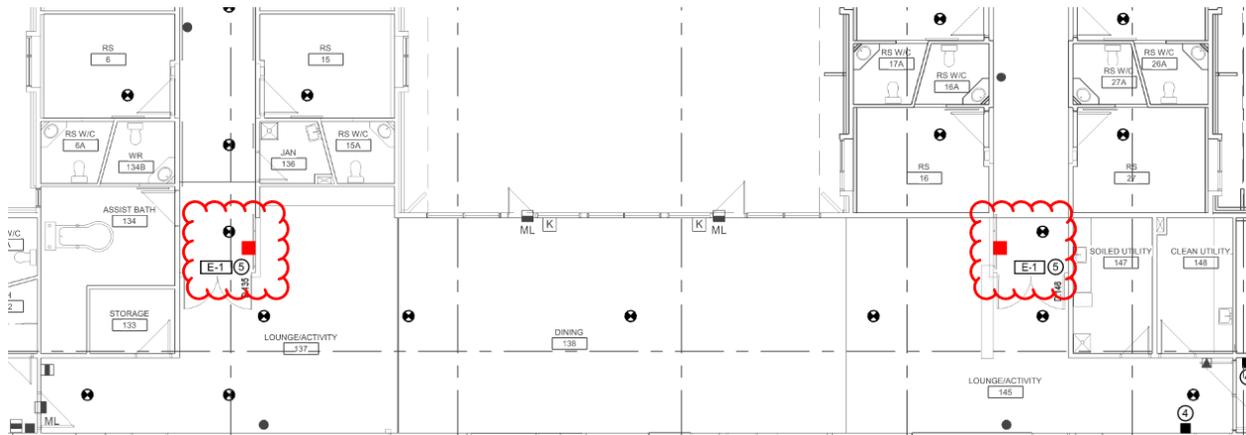
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- .3 Revise JP-02-01 equipment tag to read as “JP-2-01”
- .11 Refer to drawing E3-000 – Drawing List, Symbol Legend and General Notes (addendum #2):
  - .1 Provide new general note ‘M’, to read as: *“Provide patching and painting as required to repair surfaces impacted by the electrical demolition and new construction, to restore surfaces to their pre-construction condition. Provide new ceiling tiles to replace damaged existing impacted by the electrical demolition and new construction.”*
- .12 Refer to drawing E3-211 – Crawlspace Plan – Electrical – New Construction. The following scope shall be considered as an alternate price:
  - .1 Provide the following new sprinkler monitoring devices for new dry zone, refer to mechanical drawings for locations:
    - .1 Tamper switch (1 total).
    - .2 Flow switch (1 total).
    - .3 Pressure switch (1 total).
  - .2 Wire and connect new sprinkler air compressor, FAC-3-01 to existing emergency power panel EA. Refer to mechanical drawings for equipment location, see below sketch for panel location. Provide 15A-1P breaker to match existing, and local disconnect at equipment location.

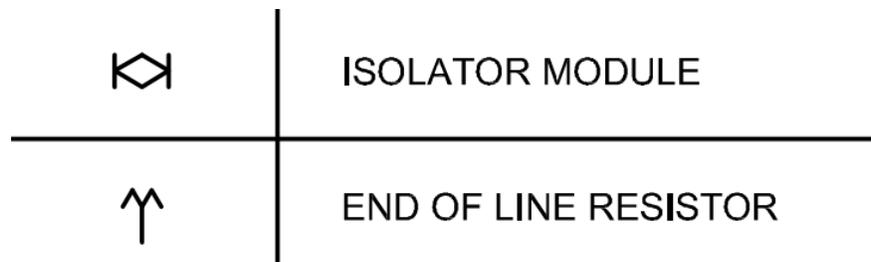


- .13 Refer to drawing E3-221 – Main Floor Plan – Electrical – New Construction:
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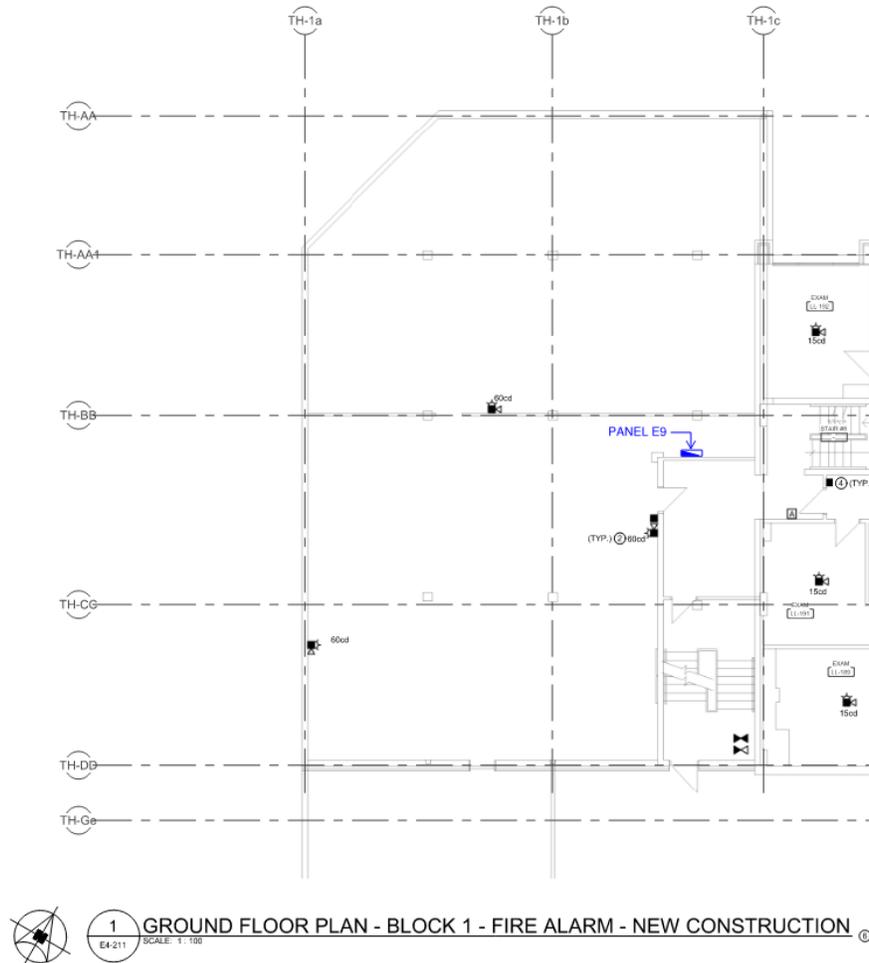
- .1 Wire and connect new magnetic door holders (total of 2) at new doors between corridor 135 and lounge/activity 137. Provide new 120V circuit from nearest existing normal power panel serving area with capacity and new 15A-1P breaker to match existing. Provide fire alarm relay(s) to release new door holders on fire alarm. Refer to fire alarm sequence of operation for further information.
  - .1 Provide new smoke detector within lounge/activity 137. Smoke detector shall be installed on the centre line of the doorway to corridor 135 not more than 1500 mm from the doorway, measured along the ceiling, perpendicular to the doorway.
- .2 Wire and connect new magnetic door holders (total of 2) at new doors between corridor 146 and lounge/activity 145. Provide new 120V circuit from nearest existing normal power panel serving area with capacity and new 15A-1P breaker to match existing. Provide fire alarm relay(s) to release new door holders on fire alarm. Refer to fire alarm sequence of operation for further information.
- .3 Provide two (2) new fire alarm manual pull stations installed on new walls in the locations shown below, next to new doors at the ends of corridors 135 and 146, respectively:



- .14 Refer to drawing E4-000 – Drawing List, Symbol Legend and General Notes (addendum #2):
  - .1 Provide new general note ‘M’, to read as: *“Provide patching and painting as required to repair surfaces impacted by the electrical demolition and new construction, to restore surfaces to their pre-construction condition. Provide new ceiling tiles to replace damaged existing impacted by the electrical demolition and new construction.”*
  - .2 Define the following symbols:

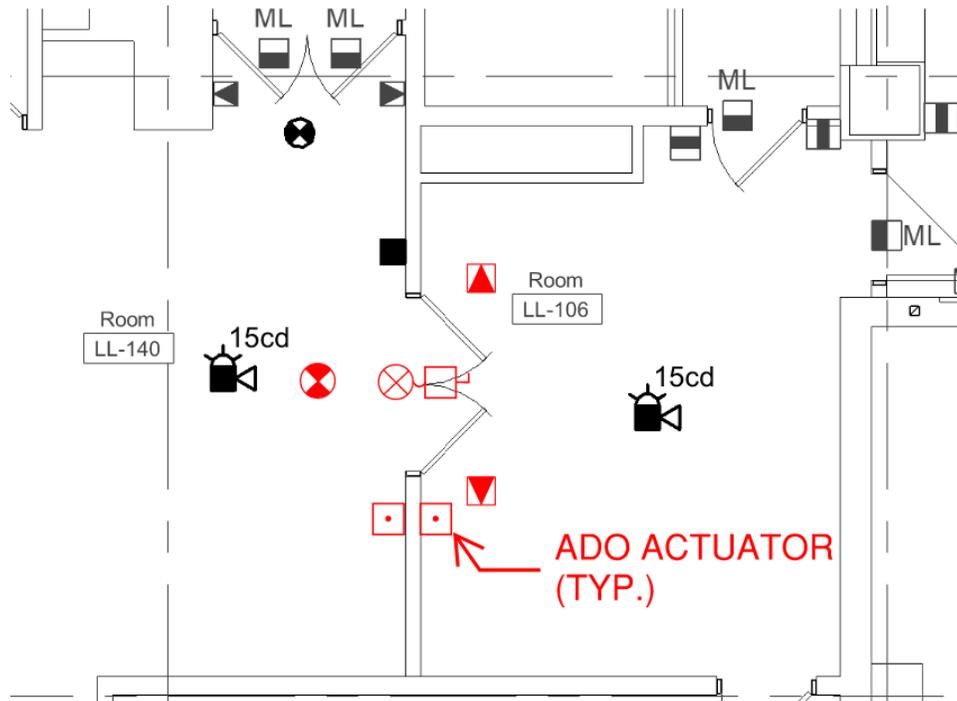


- .15 Refer to drawing E4-201 – Crawlspace Plan – Block 1 – Fire Alarm – New Construction. The following scope shall be considered as an alternate price:
- .1 Provide the following new sprinkler monitoring devices for new dry zone, refer to mechanical drawings for locations:
    - .1 Tamper switch (1 total).
    - .2 Flow switch (1 total).
    - .3 Pressure switch (1 total).
  - .2 Wire and connect new sprinkler air compressor, FAC-4-01 to existing emergency power panel E9. Refer to mechanical drawings for equipment location, see below sketch for panel location. Provide 15A-1P breaker to match existing, and local disconnect at equipment location.



- .16 Refer to drawing E4-213 – Ground Floor Plan – Block 3 – Fire Alarm – New Construction:

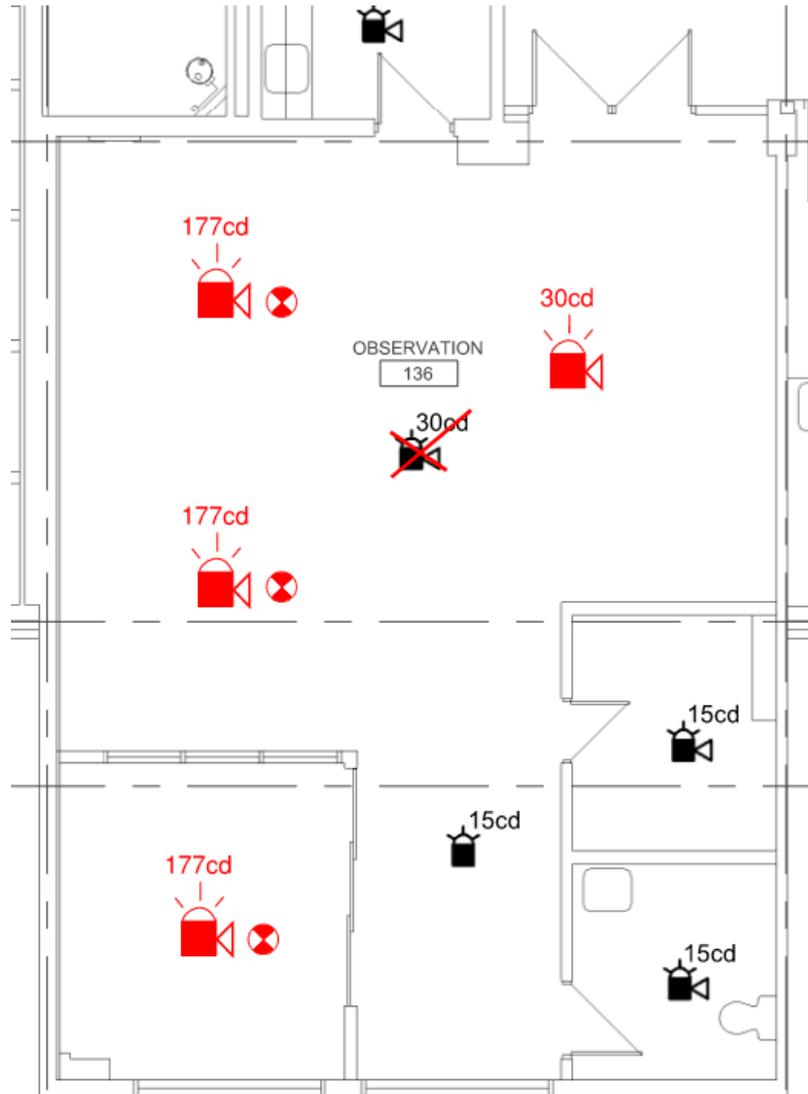
- .1 Wire and connect new automatic door operator (ADO) at doors between LL-140 and LL-106. Provide new 120V circuit from nearest existing normal power panel serving area with capacity and new 15A-1P breaker to match existing. Wire and connect new door operator actuators on either side of wall, see below sketch for location of actuators:



- .2 Wire and connect new magnetic door holders (total of 2) at doors between LL-140 and LL-106. Provide new 120V circuit from nearest existing normal power panel serving area with capacity and new 15A-1P breaker to match existing. Provide fire alarm relay(s) to release new door holders on fire alarm. Refer to fire alarm sequence of operation for further information.
  - .1 Provide smoke detector within room LL-140. Smoke detector shall be installed on the centre line of the doorway to LL-106 not more than 1500 mm from the doorway, measured along the ceiling, perpendicular to the doorway.
- .17 Refer to drawing E4-221 – First Floor Plan – Block 1 – Fire Alarm – New Construction:
  - .1 Refer to observation room 136. Provide carbon monoxide detectors of same manufacturer as the fire alarm system (not standalone), c/w sounder base to provide adequate coverage. CO detectors shall be monitored by the fire alarm system. CO detectors are permitted to be a combination smoke/carbon monoxide detector with sounder base.

Revise fire alarm device layout as below:

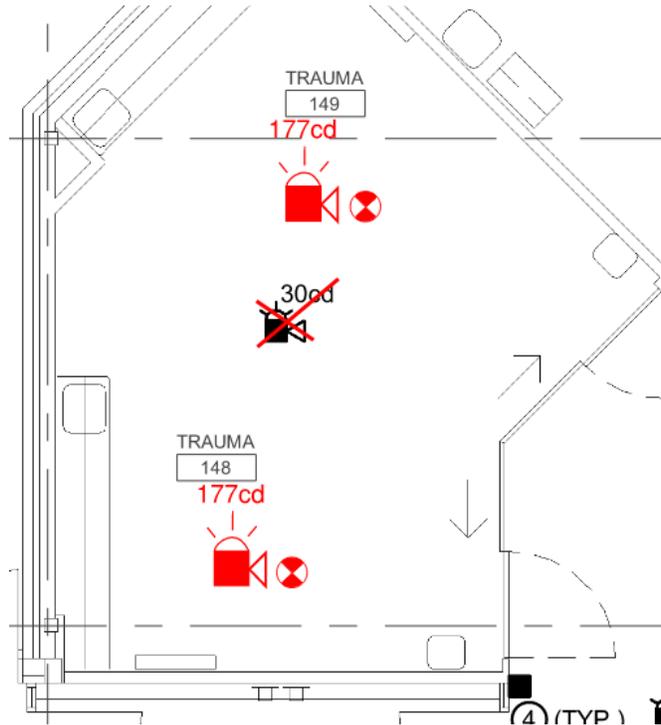
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- .2 Refer to adjoining trauma rooms, 148 and 149. Provide carbon monoxide detectors of same manufacturer as the fire alarm system (not standalone), c/w sounder base to provide adequate coverage. CO detectors shall be monitored by the fire alarm system. CO detectors are permitted to be a combination smoke/carbon monoxide detector with sounder base.

Revise fire alarm device layout as below:

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- .3 Revise combination horn/strobe candela ratings to 177cd for the following rooms:
    - .1 Gynecology 151
    - .2 Treatment 153
    - .3 Treatment 154
    - .4 Treatment 155
  - .4 Provide smoke detectors in the following areas:
    - .1 Gynecology 151
    - .2 Treatment 153
    - .3 Treatment 154
    - .4 Treatment 155
  - .5 Provide carbon monoxide detectors of same manufacturer as the fire alarm system (not standalone), c/w sounder base in the following areas. CO detectors shall be monitored by the fire alarm system:
    - .1 Gynecology 151
    - .2 Treatment 153
    - .3 Treatment 154
    - .4 Treatment 155

CO detectors are permitted to be a combination smoke/carbon monoxide detector with sounder base.
  - .18 Refer to drawing E4-223 – First Floor Plan – Block 3 – Fire Alarm – New Construction:
    - .1 Revise combination horn/strobe candela ratings to 177cd for the following rooms:
      - .1 Room M-205
      - .2 Room M-210
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- .3 Room M-211
  - .4 Room M-212
  - .5 Room M-213
  - .6 Room M-214
  - .7 Room M-215
  - .8 Room M-217
  - .9 Room M-218
  - .10 Room M-219
  - .2 Provide smoke detectors in the following areas:
    - .1 Room M-205
    - .2 Room M-210
    - .3 Room M-211
    - .4 Room M-212
    - .5 Room M-213
    - .6 Room M-214
    - .7 Room M-215
    - .8 Room M-217
    - .9 Room M-218
    - .10 Room M-219
  - .3 Provide carbon monoxide detectors of same manufacturer as the fire alarm system (not standalone), c/w sounder base in the following areas. CO detectors shall be monitored by the fire alarm system:
    - .1 Room M-205
    - .2 Room M-210
    - .3 Room M-211
    - .4 Room M-212
    - .5 Room M-213
    - .6 Room M-214
    - .7 Room M-215
    - .8 Room M-217
    - .9 Room M-218
    - .10 Room M-219

CO detectors are permitted to be a combination smoke/carbon monoxide detector with sounder base.
  - .19 Refer to drawing E4-224 – First Floor Plan – Block 4 – Fire Alarm – New Construction:
    - .1 Wire and connect new magnetic door holder at new door in corridor 125, near clean utility room 124. Refer to revised architectural drawing A4-224, addendum #3 (dated November 13, 2025) for exact location. Provide new 120V circuit from nearest existing normal power panel serving area with capacity and new 15A-1P breaker to match existing. Provide fire alarm relay to release new door holder on fire alarm. Refer to fire alarm sequence of operation for further information.
      - .1 Provide additional new smoke detector on west side of new door. Relocate new smoke detector shown on east side of new door. Both smoke detectors shall be installed on the centre line of the doorway not more than 1500 mm from the doorway, measured along the ceiling, perpendicular to the doorway.
-

- .20 Refer to drawing E4-231 – Second Floor Plan – Block 1 – Fire Alarm – New Construction:
- .1 Wire and connect new magnetic door holders (total of 2) at corridor fire doors, east end of corridor 2-307, adjoining corridor 2-306. Refer to architectural drawing for exact location. Utilize circuit made available from demolished existing door holders. Provide fire alarm relay(s) to release new door holders on fire alarm. Refer to fire alarm sequence of operation for further information.
- .21 Refer to drawing E4-232 – Second Floor Plan – Block 2 – Fire Alarm – New Construction:
- .1 Wire and connect new magnetic door holders (total of 2) at equipment alcove, adjoining corridor 2-306. Refer to architectural drawing for exact location. Provide new 120V circuit from nearest existing normal power panel serving area with capacity and new 15A-1P breaker to match existing. Provide fire alarm relay(s) to release new door holders on fire alarm. Refer to fire alarm sequence of operation for further information.
    - .1 Provide smoke detector within equipment alcove. Smoke detector shall be installed on the centre line of the doorway not more than 1500 mm from the doorway, measured along the ceiling, perpendicular to the doorway.
- .22 Refer to drawing E4-233 – Second Floor Plan – Block 3 – Fire Alarm – New Construction:
- .1 Revise combination horn/strobe candela ratings to 177cd for the following rooms:
    - .1 Secure room 2-209
    - .2 Secure room 2-211
    - .3 Psych 2-213
    - .4 Psych 2-214
    - .5 Psych 2-215
    - .6 Psych 2-216
    - .7 Psych 2-217
    - .8 Psych 2-218
    - .9 Psych 2-219
  - .2 Provide smoke detectors in the following areas:
    - .1 Secure room 2-209
    - .2 Secure room 2-211
    - .3 Psych 2-213
    - .4 Psych 2-214
    - .5 Psych 2-215
    - .6 Psych 2-216
    - .7 Psych 2-217
    - .8 Psych 2-218
    - .9 Psych 2-219
  - .3 Provide carbon monoxide detectors of same manufacturer as the fire alarm system (not standalone), c/w sounder base in the following areas. CO detectors shall be monitored by the fire alarm system:
    - .1 Secure room 2-209
    - .2 Secure room 2-211
    - .3 Psych 2-213
-

- .4 Psych 2-214
- .5 Psych 2-215
- .6 Psych 2-216
- .7 Psych 2-217
- .8 Psych 2-218
- .9 Psych 2-219

CO detectors are permitted to be a combination smoke/carbon monoxide detector with sounder base.

- .23 Refer to drawing E4-301 – Fire Alarm Riser Diagram:
- .1 Provide typical class A loop(s) from new fire alarm control panel (Vending 108) to initiating devices on ground floor, c/w isolator modules at floor crossing. Wire and connect new initiating devices on ground floor including (not limited to):
    - .1 Monitor modules (tamper, flow and pressure switches, sprinkler solenoid valves, etc.).
    - .2 Relays (electromagnetic locks, door hold opens, fan shut downs, etc.).
    - .3 Manual pull stations.
    - .4 Smoke detectors.
    - .5 Duct smoke detectors.
    - .6 Heat detectors.
  - .2 Provide typical class B circuit(s) from new fire alarm control panel (Vending 108) to notification devices on ground floor, c/w end of line device. Provide booster (NAC) power supply with 120V circuit as required. Wire and connect new notification devices on ground floor including:
    - .1 Strobes
    - .2 Combination horn/strobes
  - .3 Fiber optic cabling installed for the fire alarm system shall be supplied from one of the following manufacturers:
    - .1 Corning Optical Communications.
    - .2 Belden Fiber Optic Cabling.
    - .3 Commscope Fiber Optic Cabling.
    - .4 Panduit Fiber Optic Cabling.
    - .5 Leviton Fiber Optic Cabling.

The installation contractor shall be certified by the cable vendor / manufacturer. Provide testing and certification of fiber optic cabling system after installation, in accordance with manufacturer's standard practices.



Mechanical Engineer's Seal



Electrical Engineer's Seal



**Part 1            General**

**1.1                BIDDER'S INFORMATION – PRICING FORM**

Date \_\_\_\_\_

Submitted by: \_\_\_\_\_  
(name of bidder)

\_\_\_\_\_  
(address)

To:                SMS Engineering Ltd. (as per Section 00 21 13)

Project:          Provincial Fire and Life Safety Project- Lynn Lake, Gillam, and Thompson Sites

Locations:       Lynn Lake Hospital  
64 Camp Street  
Lynn Lake, MB, R0B 0W0

Gillam Hospital  
115 Gillam Drive  
Gillam, MB, R0B 0L0

Northern Spirit Manor Personal Care Home  
879 Thompson Drive  
Thompson, MB, R8N 0A9

Thompson General Hospital  
871 Thompson Drive South  
Thompson, MB R8N 0C8

**OFFER**

.1                Having examined all matters referred to in the Instructions to Bidders and the Contract Documents prepared by the Consultant, and having attended the mandatory site visit or having otherwise ascertained the full extent of the Work, we, the undersigned, hereby offer to enter into a contract using CCDC 2, 2008 Contract form with Supplementary Conditions, to perform the Work for the price of:

.2                Lynn Lake Hospital – I/O 23-001-22

\$ \_\_\_\_\_  
dollars, in lawful money of Canada (the Base Bid).

---

Value Added Tax (GST): the following is the amount of Value Added Tax (GST), payable in the Province of Manitoba, on our Base Bid listed above. This amount for Value Added Tax is not included in our Base Bid.

\$ \_\_\_\_\_

Applicable Provincial Sales Tax (PST/RST) and payable in Manitoba is included in the Bid Price.

Cash Allowances described in Appendix F – Cash Allowances are included in the Base Bid.

.3 Gillam Hospital – I/O 25-001-16

\$ \_\_\_\_\_

dollars, in lawful money of Canada (the Base Bid).

Value Added Tax (GST): the following is the amount of Value Added Tax (GST), payable in the Province of Manitoba, on our Base Bid listed above. This amount for Value Added Tax is not included in our Base Bid.

\$ \_\_\_\_\_

Applicable Provincial Sales Tax (PST/RST) and payable in Manitoba is included in the Bid Price.

Cash Allowances described in Appendix F – Cash Allowances are included in the Base Bid.

.4 Northern Spirit Manor Personal Care Home – I/O 25-001-17

\$ \_\_\_\_\_

dollars, in lawful money of Canada (the Base Bid).

Value Added Tax (GST): the following is the amount of Value Added Tax (GST), payable in the Province of Manitoba, on our Base Bid listed above. This amount for Value Added Tax is not included in our Base Bid.

\$

---

Applicable Provincial Sales Tax (PST/RST) and payable in Manitoba is included in the Bid Price.

Cash Allowances described in Appendix F – Cash Allowances are included in the Base Bid.

.5 Thompson General Hospital – I/O 25-001-18

\$

---

dollars, in lawful money of Canada (the Base Bid).

Value Added Tax (GST): the following is the amount of Value Added Tax (GST), payable in the Province of Manitoba, on our Base Bid listed above. This amount for Value Added Tax is not included in our Base Bid.

\$

---

Applicable Provincial Sales Tax (PST/RST) and payable in Manitoba is included in the Bid Price.

Cash Allowances described in Appendix F – Cash Allowances are included in the Base Bid.

## 1.2 TIME

.1 Refer to Section 00 21 13 – Instructions to Bidders, Paragraph 1.18 Duration of Offer for the time that the bids must remain open after the bid closes.

## 1.3 PRICING FORM SUBMISSIONS

.1 The following documents (1-5) are to be included in the submission of this PRICING Form:

.1 Pricing Form Submission:

.1 Section 00 80 00 – Pricing Form – Stipulated Price.

.2 Appendix C –1: List of Sub Contractors: Lynn Lake Hospital

.3 Appendix C –2: List of Sub Contractors: Gillam Hospital

.4 Appendix C –3: List of Sub Contractors: Northern Spirit Manor Personal Care Home

- .5 Appendix C –4: List of Sub Contractors: Thompson General Hospital
- .6 Appendix D – Itemized Values
- .7 Appendix E – Approved Substitutions
- .8 Appendix F – Cash Allowances
- .9 Appendix G – Unit Prices.
- .10 Appendix H – Alternate Prices

**1.4 SIGNATURE(S)**

\_\_\_\_\_, by its authorized signing officers,  
(Name of Bidder)

have signed this Bid on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Authorized signing officer (print name and sign) Title

\_\_\_\_\_  
Authorized signing officer (print name and sign) Title

**Appendix C-1**  
**List of Sub Contractors – Lynn Lake Hospital**

Project: Provincial Fire and Life Safety Project – Lynn Lake Hospital

Bidder: \_\_\_\_\_

The following is the list of Subcontractors that the Bidder intends to engage, and the amount of each subcontract. The subcontract amounts do not include the GST, but do include any applicable PST.

Division or Section of Work	Name of Subcontractor	Value (\$)
General Conditions		
Infection Control (CSA 317.13)		
Asbestos Abatement		
Selective Demolition		
Rough Carpentry		
Finish Carpentry		
Firestopping and Smoke Seals		
Joint Sealants		
Doors and Frames		
Door Hardware		
Steel Stud and Gypsum Board		
Painting and Coating		
Div 21 – Fire Suppression		
Div 22 - Plumbing		
Div 23 - HVAC		
Div 26 – Electrical		
Generator including all distribution, pad and site work and all cabling.		
Div 28 – Safety & Security		
Integrated Life Safety Testing Coordinator		
Civil work		

**Appendix C-2  
 List of Sub Contractors – Gillam Hospital**

Project: Provincial Fire and Life Safety Project – Gillam Hospital

Bidder: \_\_\_\_\_

The following is the list of Subcontractors that the Bidder intends to engage, and the amount of each subcontract. The subcontract amounts do not include the GST, but do include any applicable PST.

Division or Section of Work	Name of Subcontractor	Value (\$)
General Conditions		
Infection Control (CSA 317.13)		
Asbestos Abatement		
Selective Demolition		
Rough Carpentry		
Finish Carpentry		
Firestopping and Smoke Seals		
Joint Sealants		
Doors and Frames		
Door Hardware		
Steel Stud and Gypsum Board		
Painting and Coating		
Div 21 – Fire Suppression		
Div 22 - Plumbing		
Div 23 - HVAC		
Div 26 – Electrical		
Generator including all distribution, pad and site work and all cabling.		
Div 28 – Safety & Security		
Integrated Life Safety Testing Coordinator		
Civil work		

**Appendix C-3**  
**List of Sub Contractors – Northern Spirit Manor Personal Care Home**

Project: Provincial Fire and Life Safety Project – Northern Spirit Manor Personal Care Home

Bidder: \_\_\_\_\_

The following is the list of Subcontractors that the Bidder intends to engage, and the amount of each subcontract. The subcontract amounts do not include the GST, but do include any applicable PST.

Division or Section of Work	Name of Subcontractor	Value (\$)
General Conditions		
Infection Control (CSA 317.13)		
Asbestos Abatement		
Selective Demolition		
Rough Carpentry		
Finish Carpentry		
Firestopping and Smoke Seals		
Joint Sealants		
Doors and Frames		
Door Hardware		
Steel Stud and Gypsum Board		
Painting and Coating		
Div 21 – Fire Suppression		
Div 22 - Plumbing		
Div 23 - HVAC		
Div 26 – Electrical		
Div 28 – Safety & Security		
Integrated Life Safety Testing Coordinator		

**Appendix C-4  
 List of Sub Contractors – Thompson General Hospital**

Project: Provincial Fire and Life Safety Project – Thompson General Hospital

Bidder: \_\_\_\_\_

The following is the list of Subcontractors that the Bidder intends to engage, and the amount of each subcontract. The subcontract amounts do not include the GST, but do include any applicable PST.

Division or Section of Work	Name of Subcontractor	Value (\$)
General Conditions		
Infection Control (CSA 317.13)		
Asbestos Abatement		
Selective Demolition		
<b>Masonry</b>		
Rough Carpentry		
Finish Carpentry		
Firestopping and Smoke Seals		
Joint Sealants		
Doors and Frames		
Door Hardware		
Steel Stud and Gypsum Board		
Painting and Coating		
Div 21 – Fire Suppression		
Div 22 - Plumbing		
Div 23 - HVAC		
Div 26 – Electrical		
Div 28 – Safety & Security		
Integrated Life Safety Testing Coordinator		



**Appendix E  
 Approved Alternatives**

Project: Provincial Fire and Life Safety Project – Lynn Lake, Gillam, and Thompson Sites

Bidder: \_\_\_\_\_

The following are Approved Alternatives, which were approved by the Prime Consultant in accordance with Substitution Procedures 00 26 00. The amounts indicated are an addition to, a deletion from, or no change to the Base Bid. Identify the project by the I/O number provided in Section 00 23 13, Paragraph 1.1

Amounts do not include the GST, but do include any applicable PST.

Description of Approved Alternative (refer to Section 00 26 00)	Effect on Base Bid (\$)		
	Addition	Deletion	No Change
(If no Approved Alternatives, put "Not Applicable" and initial bottom of page)			

**Appendix F  
 Cash Allowances**

Project: Provincial Fire and Life Safety Project – Lynn Lake, Gillam, and Thompson Sites

Bidder: \_\_\_\_\_

Any additional work will be issued through the Change Order system in accordance with the CCDC 2 Contract General Conditions. The Stipulated Price includes the Contractor's overhead and profit.

Indicate the Cash Allowance on the Contractor monthly Progress Claim, listed after the totals, indicating the Contract Amount, Completed to Date, Percent Complete, Previously Progressed and Amount This Progress. Review with the Consultant prior to this first progress billing.

Amounts do not include the GST, but do include any applicable PST.

Include all Cash Allowances in the base bid.

Description of Item	Amount (\$)
Cash Allowance No. 1 – Additional Fire Stopping – Lynn Lake Hospital	\$10,000.00
Cash Allowance No. 2 – Asbestos Air Sample Testing - Lynn Lake Hospital	\$119,000.00
Cash Allowance No. 3 – Integrated Systems Testing – Trade time on Site – Lynn Lake Hospital	\$5,000.00
Cash Allowance No. 4 – Additional Fire Stopping – Gillam Hospital	\$10,000.00
Cash Allowance No. 5 – Asbestos Air Sample Testing – Gillam Hospital	\$65,000.00
Cash Allowance No. 6 – Integrated Systems Testing – Trade time on Site – Gillam Hospital	\$5,000.00
Cash Allowance No. 7 – Additional Fire Stopping – Northern Spirit Manor Personal Care Home	\$5,000.00
Cash Allowance No. 8 – Asbestos Air Sample Testing – Northern Spirit Manor Personal Care Home	\$5,000.00
Cash Allowance No. 9 – Integrated Systems Testing – Trade time on Site – Northern Spirit Manor Personal Care Home	\$5,000.00
Cash Allowance No. 10 – Additional Fire Stopping – Thompson General Hospital	\$15,000.00
Cash Allowance No. 11 – Asbestos Air Sample Testing – Thompson General Hospital	\$100,000.00
Cash Allowance No. 12 – Integrated Systems Testing – Trade time on Site – Thompson General Hospital	\$10,000.00
Cash Allowance No. 13 – Additional Drywall Patching and Access Doors – Lynn Lake Hospital	\$15,000.00
Cash Allowance No. 14 – Additional Drywall Patching and Access Doors – Gillam Hospital	\$15,000.00
Cash Allowance No. 15 – Additional Drywall Patching and Access Doors – Northern Spirit Manor	\$15,000.00

Cash Allowance No. 16 – Additional Drywall Patching and Access Doors – Thompson General Hospital	\$15,000.00
Cash Allowance No. 17 – Masonry Repair – Thompson General Hospital	\$25,000.00

**Appendix G  
 Unit Prices**

Project: Provincial Fire and Life Safety Project – Lynn Lake, Gillam, and Thompson Sites

Bidder: \_\_\_\_\_

The following are our UNIT PRICES for the Units of Work listed hereunder. The Unit Prices apply to performing the Units of Work only during the time schedule for such work in the project schedule.

Amounts do not include the GST, but do include any applicable PST.

Unit Price	Amount (\$)
Site Supervisor Hourly Rate during Integrated Life Safety Systems Testing(\$/hr)	
Fire Alarm Contractor Hourly Rate during Integrated Life Safety Systems Testing (\$/hr)	
Mechanical Contractor Hourly Rate during Integrated Life Safety Systems Testing (\$/hr)	
Electrician Hourly Rate during Integrated Life Safety Systems Testing (\$/hr)	
Repointing of mortar joint in brick veneer construction at Thompson General Hospital, repair method 'A1' (\$/lf)	
Deep Repointing of mortar joint in brick veneer construction at Thompson General Hospital, repair method 'A2' Hospital (\$/lf)	
Local rebuild of brick veneer construction at Thompson General Hospital, repair method 'B' (\$/sf wall surface)	

**Appendix H  
 Alternative Prices**

Project: Provincial Fire and Life Safety Project – Lynn Lake, Gillam, and Thompson Sites  
 Bidder: \_\_\_\_\_

We, the above-named bidder, offer below the requested alternative prices. The amount to be added to, or deducted from, our base bid price (as entered in the Bid Form) is entered for each requested alternative.

All alternative prices exclude Value Added Taxes. If there is no change to the base bid price for an alternative we have so indicated. It is understood that:

1. The Owner may accept any of the alternatives and corresponding alternative prices in any order or combination, including all or none,
2. The lowest bidder will be determined solely from the base bid, without considering any alternative prices,
3. Alternatives and alternative prices are open for acceptance by the owner for the same period as the base bid price,
4. The Work of the Contract and the Contract Price will reflect the alternatives and alternative prices, if any, accepted by the Owner at the time of contract award, and
5. Acceptance of any alternatives will not affect the base bid contract completion time, unless we have specifically indicated an increase or decrease in time, in number of days, on account of a particular alternative.

Alternative No. 1 – Lynn Lake – Fire Rate  
 Underside Floor Assembly

**Effect on Base Bid Price**

	<b><u>Add</u></b>	<b><u>Deduct</u></b>
1. Provide spray-applied fire resistive material (SFRM) onto U/S of existing deck and steel joists, conforming UL Design No. I800 (similar), to achieve a minimum .75 hr fire resistance rating. Refer to Architectural Plans.	\$ _____	\$ _____

Alternative No. 2 – Lynn Lake - New Wall  
 Insulation

**Effect on Base Bid Price**

	<b><u>Add</u></b>	<b><u>Deduct</u></b>
1. Install new mineral wool insulation boards to achieve minimum R-26 at wall above ACT ceiling. Approximately 6000mm x 500mm. Refer to Architectural Plans.	\$ _____	\$ _____

Alternative No. 3 – Northern Spirit Manor –  
 Replace Existing Glycol Sprinkler System  
 Serving Outdoor Activity Area

**Effect on Base Bid Price**

	<b><u>Add</u></b>	<b><u>Deduct</u></b>
1. Disconnect and remove existing	\$ _____	\$ _____

glycol mix sprinkler system  
serving Outdoor Activity area  
and provide new dry system  
complete with new zone valving  
routed from main in crawlspace.  
Refer to mechanical drawings

Alternative No. 4 – Thompson General  
Hospital – Underside Floor Repair

**Effect on Base Bid Price**

1. Cover the opening at the underside of the floor above with type “X” gypsum board (1 h). Patch and make good (total area = 4 sm). Refer to architectural drawings.

	<b><u>Add</u></b>	<b><u>Deduct</u></b>
	\$ _____	\$ _____

Alternative No. 5 – Thompson General  
Hospital – Replace Existing Glycol Sprinkler  
System Serving Ambulance Garage

**Effect on Base Bid Price**

1. Disconnect and remove existing glycol mix sprinkler system serving Ambulance Garage and provide new dry system complete with new zone valving routed from main in crawlspace. Refer to mechanical drawings.

	<b><u>Add</u></b>	<b><u>Deduct</u></b>
	\$ _____	\$ _____

**END OF SECTION**

## **1.0 CIVIL ADDENDUM NO. 1**

### **1.1 General**

- .1 This Addendum is issued prior to Tender closing and shall become an integral part of the Tender, Specifications, Drawings and Contract Documents for this project.
- .2 In the event of the conflicts between the various Contract Documents, the order of precedence shall be as stipulated in the General Conditions of the Contract, except that this Addendum shall take overall precedence.

### **1.2 SITE SERVICING**

- .1 Refer to C1-200, Revision 1, dated November 6, 2025:
  - Add 38 mm HDPE pre-insulated recirculation water line with heat trace in common trench with 150 HDPE watermain fire service between pump house and hospital building.
  - Add minimum heat trace rating for 25 mm and 38 mm water service piping of 3 watts per foot for each.
  - Add 25 WM curb stop at the connection to the municipal watermain return.

150 WM	WATERMAIN	150 WM
250 WWS	WASTEWATER	150 WWS
300 LDS	LAND DRAINAGE SEWER	300 LDS
○	HYDRANT ASSEMBLY	●
⊗	GATE VALVE	⊕
⊘	CURB STOP	⊙
⊚	REDUCER	⊛
⊜	MANHOLE	⊝
⊞	CATCH BASIN	⊟
⊠	CATCH PIT	⊡
⊢	TESTHOLE	⊣
⊤	PROPERTY LINE	⊥
⊦	SURVEY BAR	⊧
⊨	SIGN	⊩
⊪	UTILITY POLE	⊫
⊬	UTILITY PREDISTAL	⊭
⊮	HYDRO	⊯
⊰	GAS	⊱
⊲	MTS	⊳
⊴	TREE LINE	⊵
⊶	CULVERT	⊷
⊸	SWALE	⊹
⊺	DIRECTION OF FLOW	⊻
235.380	GROUND ELEVATION	235.38
235.38	DITCH ELEVATION	235.38
Q35-400	ROAD/PAVT ELEVATION	Q35-400
⊘	CHAIN LINK FENCE	⊙
⊚	WOOD FENCE	⊛
⊜	EXISTING	⊝
⊞	LEGEND	⊟
⊠	LEGEND	⊡
⊢	LEGEND	⊣
⊤	LEGEND	⊥
⊦	LEGEND	⊧
⊨	LEGEND	⊩
⊪	LEGEND	⊫
⊬	LEGEND	⊭
⊮	LEGEND	⊯
⊰	LEGEND	⊱
⊲	LEGEND	⊳
⊴	LEGEND	⊵
⊶	LEGEND	⊷
⊸	LEGEND	⊹

1	CIVIL ADDENDUM #1	ML	06/11/25
0	ISSUED FOR CONSTRUCTION	ML	09/10/25
ISSUE / REVISION	DESCRIPTION	BY	DDMMYY

**ENGINEERS GEOSCIENTISTS MANITOBA**  
 Certificate of Authorization  
 Sison Blackburn Consulting Inc.  
 No. 5581

DRAWING ORIGINALLY SEALED BY:  
 M.D. LOEWEN  
 AND DATED:  
 OCTOBER 9, 2025

Certificate of Authorization  
 Engineer's Seal

Project Title  
**PROVINCIAL FIRE AND LIFE SAFETY PROJECT - LYNN LAKE HOSPITAL**

LYNN LAKE MANITOBA

Drawing Title  
**SITE SERVICING PLAN**

Drawn By	Checked By	Approved By
MM	ML	RC
Scale	Date	Project No.
1:300	NOVEMBER 2025	23-001-22

Revision Number Drawing Number

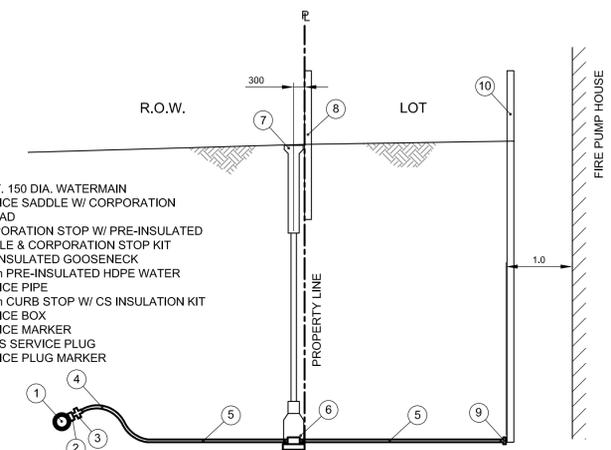
1 C1-200

Sheet Order  
 1 OF 1

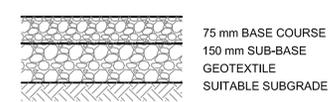
- GENERAL CONSTRUCTION NOTES:**
- ALL CONSTRUCTION AND MATERIALS INCORPORATED IN THE WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANITOBA WATER SERVICES BOARD STANDARD CONSTRUCTION SPECIFICATIONS", UNLESS NOTED OTHERWISE.
  - LOCATIONS OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE, BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE, EXACT LOCATION AND DEPTH OF ALL SERVICES MUST BE OBTAINED BY THE CONTRACTOR FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION. SBC INC. ACCEPTS NO RESPONSIBILITY FOR ACCURACY OR COMPLETENESS OF INFORMATION PROVIDED.
  - NOTIFY THE CONTRACT ADMINISTRATOR OF EXISTING SERVICES, UTILITIES, STRUCTURES AND OBSTRUCTIONS THAT ARE NOT SHOWN ON THE DRAWING OR ARE IN DIFFERENT LOCATIONS THAN SHOWN AND ARE IN CONFLICT WITH THE WORK.
  - LOCATIONS OF PROPERTY LIMITS AND EXISTING AND/OR PROPOSED FEATURES RELATIVE TO THESE LIMITS AS SHOWN DO NOT REPRESENT A LEGAL SURVEY. SBC INC. MAKES NO REPRESENTATION OR GUARANTEE THAT THE PROPERTY LIMIT INFORMATION SHOWN IS ACCURATE, AND ACCEPTS NO RESPONSIBILITY FOR ANY DAMAGES SUFFERED BY ANY THIRD PARTY AS A RESULT OF DECISIONS OR ACTIONS BASED ON THIS DRAWING.
  - CONTRACTOR SHALL MAKE TIMELY APPLICATION TO AUTHORITIES FOR ANY REQUIRED PERMITS BEFORE COMMENCING WORK WITHIN THE TOWN RIGHT-OF-WAY.
  - CONTRACTOR SHALL SUBMIT A WATER SERVICE SHUTDOWN REQUEST FORM TO NORTHERN REGIONAL HEALTH AT LEAST 7 WORKING DAYS PRIOR TO ANY PLANNED WATERMAIN SHUTDOWN.
  - CONTRACTOR SHALL PROVIDE AT LEAST 5 WORKING DAYS NOTICE TO ALL PREMISES AFFECTED BY ANY PLANNED WATERMAIN SHUTDOWNS OR INTERRUPTIONS. CONTRACTOR TO NOTIFY AND COORDINATE SHUTDOWN OF EXISTING SERVICES WITH THE TOWN AND PROVIDE TEMPORARY WATER AND SEWER SERVICE TO ALL AFFECTED CUSTOMERS DURING SHUTDOWN.
  - ALL SURFACES AND ANY EXISTING UTILITIES DAMAGED OR DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO ITS ORIGINAL CONDITION OR BETTER, OR REPLACED, AT THE CONTRACTOR'S EXPENSE.
  - EXCAVATION REQUIRED AT ALL APPURTENANCE AND ENTRY LOCATIONS. COMPACTED SELECT GRANULAR BACKFILL SHALL BE USED. EXISTING PAVEMENT STRUCTURE SHALL BE MATCHED.
  - PIPE INSTALLATION UNDER EXISTING PAVEMENTS SHALL BE COMPLETED WITH TRENCHLESS METHODS. IF GROUND CONDITIONS WONT ALLOW FOR TRENCHLESS METHODS, COMPACTED SELECT GRANULAR BACKFILL SHALL BE USED. EXISTING PAVEMENT STRUCTURE SHALL BE MATCHED.
  - ALL SURFACE RENEWAL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANITOBA TRANSPORTATION AND INFRASTRUCTURE "STANDARD CONSTRUCTION SPECIFICATIONS". CONTRACTOR TO SUBMIT MATERIAL SPECIFICATIONS. EXISTING DRAINAGE PATTERNS TO BE FOLLOWED.

**NOTES:**

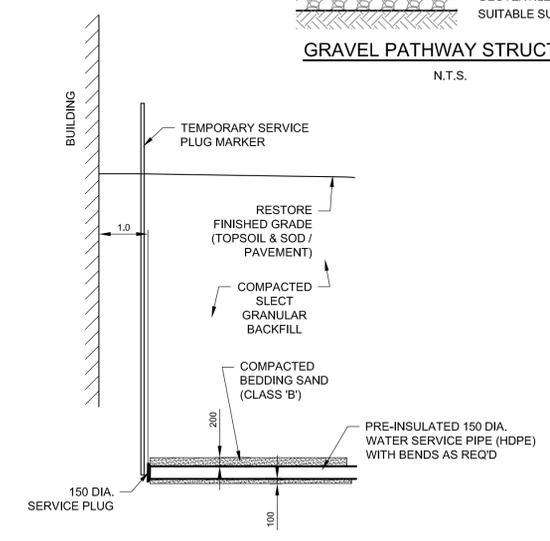
- EXIST. 150 DIA. WATERMAIN
- SERVICE SADDLE W/ CORPORATION THREAD
- CORPORATION STOP W/ PRE-INSULATED SADDLE & CORPORATION STOP KIT
- PRE-INSULATED GOOSENECK
- 50 mm PRE-INSULATED HDPE WATER SERVICE PIPE
- 50 mm CURB STOP W/ CS INSULATION KIT
- SERVICE BOX
- SERVICE MARKER
- BRASS SERVICE PLUG
- SERVICE PLUG MARKER



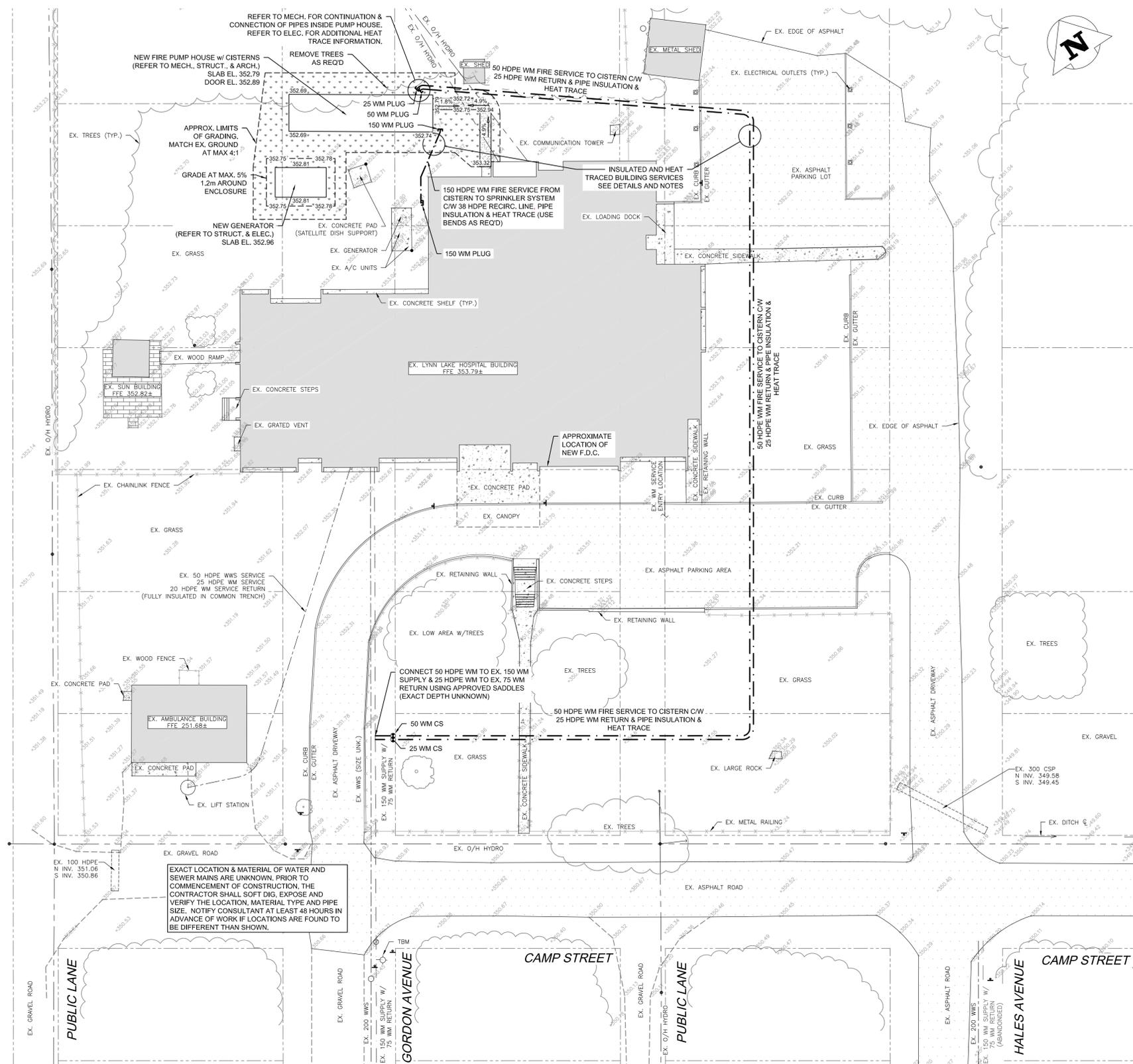
**TYPICAL 50mm WATER SERVICE DETAIL**  
 N.T.S.



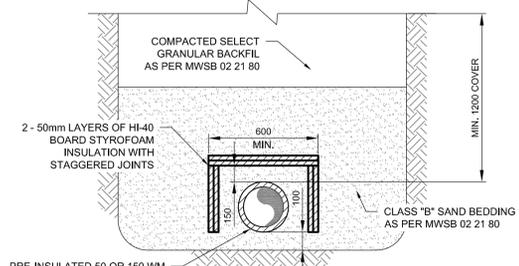
**GRAVEL PATHWAY STRUCTURE**  
 N.T.S.



**TYPICAL 150mm WATER SERVICE DETAIL**  
 N.T.S.



EXACT LOCATION & MATERIAL OF WATER AND SEWER MAINS ARE UNKNOWN, PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL SOFT DIG, EXPOSE AND VERIFY THE LOCATION, MATERIAL TYPE AND PIPE SIZE. NOTIFY CONSULTANT AT LEAST 48 HOURS IN ADVANCE OF WORK IF LOCATIONS ARE FOUND TO BE DIFFERENT THAN SHOWN.



**BEDDING, BACKFILL AND PIPE INSULATION DETAIL**  
 N.T.S.

**SITE SERVICING NOTES:**

- WATER SERVICE PIPE SHALL BE HDPE DR 11 SERIES 160, SIZE AS NOTED, PRE-INSULATED WITH 50mm THICK POLYURETHANE INSULATION AND POLYETHYLENE OUTER PROTECTIVE JACKET c/w HEAT TRACE CONDUIT SUCH AS URECON PRE-INSULATED PIPE, OR APPROVED EQUAL. HEAT TRACE HEATING CABLE SHALL BE URECON THERMO-CABLE, OR APPROVED EQUAL. REFER TO ELECTRICAL FOR ADDITIONAL HEAT TRACE INFORMATION. MINIMUM HEAT TRACE RATINGS SHALL BE:
 

PIPE SIZE	MIN. HEAT TRACE RATING
25	3 WATTS/FOOT
38	3 WATTS/FOOT
50	3 WATTS/FOOT
150	6 WATTS/FOOT
- PIPE SHALL BE INSULATED WITH 100mm THICK HI-40 RIGID POLYSTYRENE BOX INSULATION AS PER THE DETAIL ON THIS DRAWING.
- CONTRACTOR SHALL COORDINATE EXACT ENTRY LOCATION AND DEPTH OF SERVICES AT BUILDINGS WITH PLUMBING CONTRACTOR AND CONSTRUCTION SITE SUPERVISOR PRIOR TO INSTALLATION.

**BEDROCK REMOVAL NOTES:**

- BEDROCK EXCAVATION, AS REQUIRED FOR SITE SERVICING INSTALLATIONS, SHALL BE DONE IN ACCORDANCE WITH MWSB 02 21 80, SECTION 3.4, USING MACHINE DRILLING, RIPPING AND/OR HAMMERING METHODS. BLASTING SHALL ONLY BE PERMITTED IF APPROVED BY CONTRACT ADMINISTRATOR, FACILITY AND TOWN OF LYNN LAKE.
- BEDROCK SHALL BE OVER-EXCAVATED AN ADDITIONAL 150mm BELOW THE UNDERSIDE OF THE REQUIRED BEDDING AND 200mm BEYOND THE OUTSIDE DIMENSIONS OF THE BOX INSULATION.
- ALL EXCAVATED ROCK SHALL BE HAULED AWAY OFF SITE.
- CONTRACTOR SHALL SUBMIT A BEDROCK REMOVAL PLAN AT LEAST TWO WEEKS PRIOR TO START OF WATER SERVICE INSTALLATIONS, TO ILLUSTRATE METHODS OF REMOVAL AND PROPOSED SCHEDULE OF WORK.

**BENCHMARK INFORMATION:**

- TBM #1 = 351.17m
- TOP OF OPERATING NUT ON HYDRANT LOCATED AT THE SOUTHEAST CORNER OF CAMP STREET AND GORDON AVENUE INTERSECTION.
- NOTES:
- TEMPORARY BENCHMARK(S) WERE ESTABLISHED BY SBC INC. ON AUGUST 2024. ELEVATIONS ARE REFERENCED TO THE GEOIDETIC DATUM (CGVD28 HT v2.0) AND ARE DERIVED FROM GNSS OBSERVATIONS.
  - BENCHMARKS MUST BE VERIFIED BY THE USER FOR ACCURACY PRIOR TO USE. ANY RELIANCE ON, OR DECISIONS MADE BASED ON THIS INFORMATION IS THE USER'S RESPONSIBILITY.

**METRIC**  
 WHOLE NUMBERS INDICATE MILLIMETERS,  
 DECIMAL NUMBERS INDICATE METERS.



Architecture  
Landscape  
Interior Design

Suite 200, 300 Waterfront Drive  
Winnipeg, MB Canada R3B 0G5  
t. 204.885.9323 | www.ft3.ca

## ADDENDUM AD 03

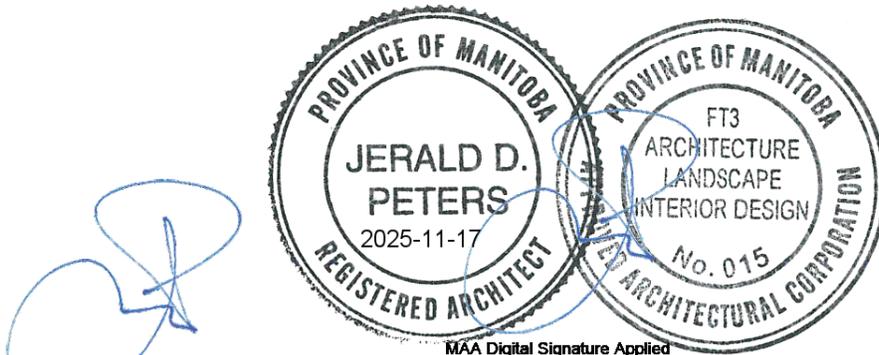
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<b>Project:</b>	Provincial Fire Life Safety – Lynn Lake, Gillam, and Thompson Sites	
<b>Commission Number:</b>	21569.44, 21569.49, 21569.50	SMS Project No.: 25-001-16
<b>Date:</b>	November 18, 2025	
<b>Pages:</b>	2 + 3 attachment/s	

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### GENERAL NOTE

This Addendum (2 pages & 3 attachments) shall form a part of, and be included in the contract documents for the above titled project, and no consideration will be entertained for extras to the contract due to failure of the contractor to become thoroughly familiar with this Addendum.



MAA Digital Signature Applied

Jerald D. Peters Architect AAA AIBC MAA OAA SAA FRAIC LEED® AP  
Principal

Includes:

- A. Drawing Revision

### Distribution List

Jordan Bull	SMS	jbull@smseng.com
Martyn Borovytsky	SMS	mborovytsky@smseng.com

#### PRINCIPALS:

Jerald D. Peters Architect AAA AIBC MAA OAA SAA FRAIC  
Joanne L. McFadden Professional Interior Designer PIDIM IDC  
Rock G. Jerome CET CCCA  
Chantal L. Alary Landscape Architect MALA SALA OALA CSLA  
Adam D. Dubyna Architect AAA MAA SAA MRAIC

A. Drawing Revision

- 1.1 Replace Drawing A1-211 Construction main floor plan with attached revised Drawing A1-211  
Construction main floor plan – Addendum 03
- 1.2 Replace Drawing A4-113 Demolition Ground floor plan Block 3 with attached revised Drawing A4-113  
Demolition Ground floor plan Block 3 – Addendum 03
- 1.3 Replace Drawing A4-213 Construction Ground floor plan Block 3 with attached revised Drawing A4-113  
Construction Ground floor plan Block 3 – Addendum 03

END OF ADDENDUM

Consultant



ISSUE / REVISION	DESCRIPTION	BY	DDMMYY
1	ISSUED WITH ADDENDUM 03	EG/SW	17/11/25
0	ISSUED FOR CONSTRUCTION	EG	09/10/25

Certificate Of Authorization Engineer's Seal

Project Title  
**PROVINCIAL FIRE AND LIFE SAFETY PROJECT - LYNN LAKE, GILLAM, AND THOMPSON SITES**

**LYNN LAKE HOSPITAL**

LYNN LAKE MANITOBA

Drawing Title

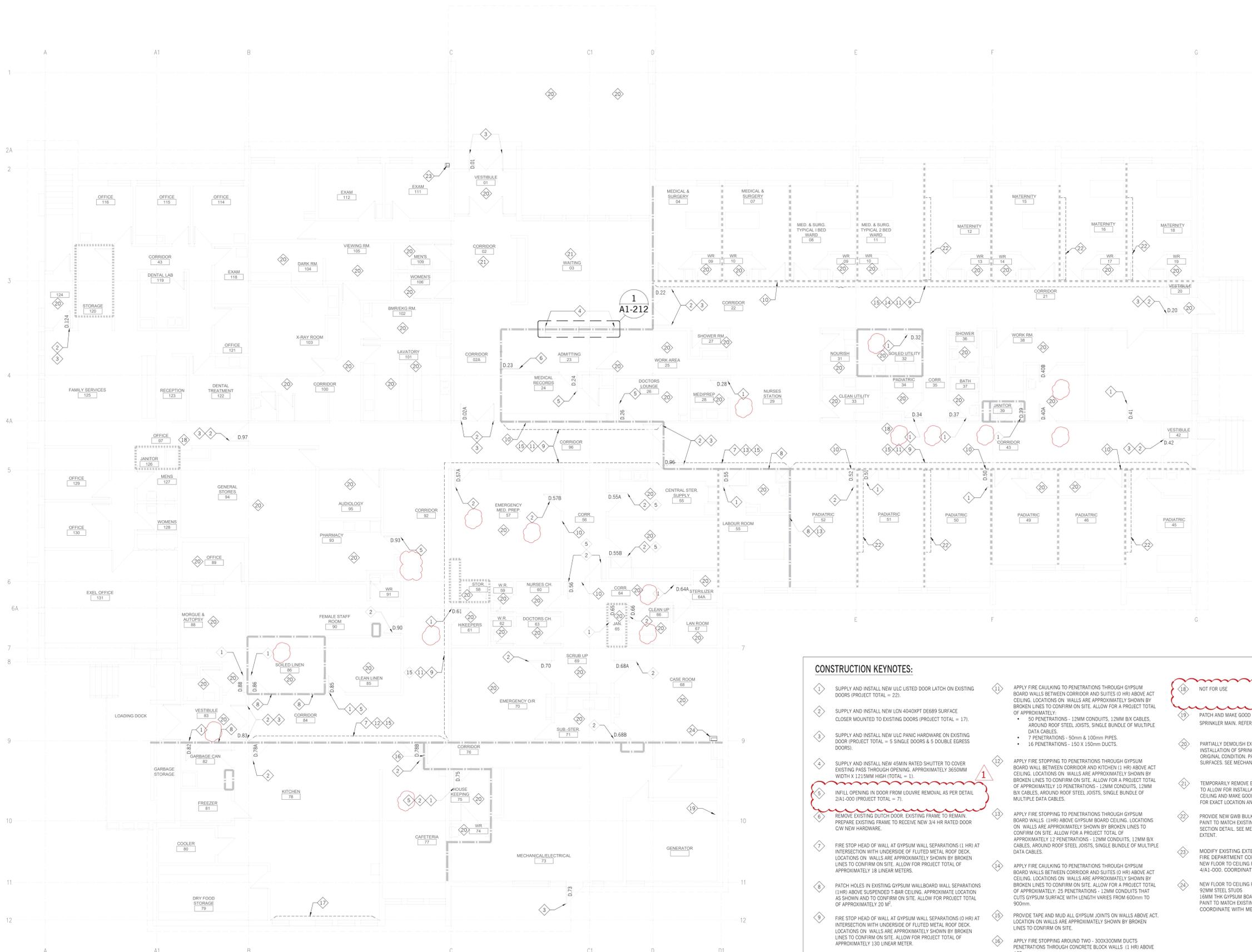
**CONSTRUCTION MAIN FLOOR PLAN**

Drawn By	Checked By	Approved By
EG/HPI/BR	JW	JP
Scale	Date	Project No.
AS NOTED	OCT 2025	23-001-22

Revision Number Drawing Number

**1 A1-211**

Sheet Order  
 4 OF 7



**CONSTRUCTION KEYNOTES:**

<p>1 SUPPLY AND INSTALL NEW ULC LISTED DOOR LATCH ON EXISTING DOORS (PROJECT TOTAL = 22).</p> <p>2 SUPPLY AND INSTALL NEW LCN 4040XPT D689 SURFACE CLOSER MOUNTED TO EXISTING DOORS (PROJECT TOTAL = 17).</p> <p>3 SUPPLY AND INSTALL NEW ULC PANIC HARDWARE ON EXISTING DOOR (PROJECT TOTAL = 5 SINGLE DOORS &amp; 5 DOUBLE EGRESS DOORS).</p> <p>4 SUPPLY AND INSTALL NEW 45MIN RATED SHUTTER TO COVER EXISTING PASS THROUGH OPENING. APPROXIMATELY 3650MM WIDTH X 1215MM HIGH (TOTAL = 1).</p> <p>5 INFILL OPENING IN DOOR FROM LOUVER REMOVAL AS PER DETAIL 2/A1-000 (PROJECT TOTAL = 7).</p> <p>6 REMOVE EXISTING DUTCH DOOR. EXISTING FRAME TO REMAIN. PREPARE EXISTING FRAME TO RECEIVE NEW 3/4 HR RATED DOOR C/W NEW HARDWARE.</p> <p>7 FIRE STOP HEAD OF WALL AT GYPSUM WALL SEPARATIONS (1 HR) AT INTERSECTION WITH UNDERSIDE OF FLUTED METAL ROOF DECK. LOCATIONS ON WALLS ARE APPROXIMATELY SHOWN BY BROKEN LINES TO CONFIRM ON SITE. ALLOW FOR PROJECT TOTAL OF APPROXIMATELY 18 LINEAR METERS.</p> <p>8 PATCH HOLES IN EXISTING GYPSUM WALLBOARD WALL SEPARATIONS (1HR) ABOVE SUSPENDED T-BAR CEILING. APPROXIMATE LOCATION AS SHOWN AND TO CONFIRM ON SITE. ALLOW FOR PROJECT TOTAL OF APPROXIMATELY 20 M<sup>2</sup>.</p> <p>9 FIRE STOP HEAD OF WALL AT GYPSUM WALL SEPARATIONS (0 HR) AT INTERSECTION WITH UNDERSIDE OF FLUTED METAL ROOF DECK. LOCATIONS ON WALLS ARE APPROXIMATELY SHOWN BY BROKEN LINES TO CONFIRM ON SITE. ALLOW FOR PROJECT TOTAL OF APPROXIMATELY 130 LINEAR METER.</p> <p>10 PATCH HOLES IN EXISTING GYPSUM WALLBOARD WALL SEPARATIONS (0HR) ABOVE SUSPENDED T-BAR CEILING. APPROXIMATE LOCATION AS SHOWN AND TO CONFIRM ON SITE. ALLOW FOR PROJECT TOTAL OF APPROXIMATELY 22.5 M<sup>2</sup>.</p>	<p>11 APPLY FIRE CAULKING TO PENETRATIONS THROUGH GYPSUM BOARD WALLS BETWEEN CORRIDOR AND SUITES (0 HR) ABOVE ACT CEILING. LOCATIONS ON WALLS ARE APPROXIMATELY SHOWN BY BROKEN LINES TO CONFIRM ON SITE. ALLOW FOR A PROJECT TOTAL OF APPROXIMATELY:</p> <ul style="list-style-type: none"> <li>• 50 PENETRATIONS - 12MM CONDUITS, 12MM B/X CABLES, AROUND ROOF STEEL JOISTS, SINGLE BUNDLE OF MULTIPLE DATA CABLES.</li> <li>• 7 PENETRATIONS - 50mm &amp; 100mm PIPES.</li> <li>• 16 PENETRATIONS - 150 X 150mm DUCTS.</li> </ul> <p>12 APPLY FIRE STOPPING TO PENETRATIONS THROUGH GYPSUM BOARD WALL BETWEEN CORRIDOR AND KITCHEN (1 HR) ABOVE ACT CEILING. LOCATIONS ON WALLS ARE APPROXIMATELY SHOWN BY BROKEN LINES TO CONFIRM ON SITE. ALLOW FOR A PROJECT TOTAL OF APPROXIMATELY 10 PENETRATIONS - 12MM CONDUITS, 12MM B/X CABLES, AROUND ROOF STEEL JOISTS, SINGLE BUNDLE OF MULTIPLE DATA CABLES.</p> <p>13 APPLY FIRE STOPPING TO PENETRATIONS THROUGH GYPSUM BOARD WALLS BETWEEN CORRIDOR AND SUITES (0 HR) ABOVE ACT CEILING. LOCATIONS ON WALLS ARE APPROXIMATELY SHOWN BY BROKEN LINES TO CONFIRM ON SITE. ALLOW FOR A PROJECT TOTAL OF APPROXIMATELY 25 PENETRATIONS - 12MM CONDUITS THAT CLIPS GYPSUM SURFACE WITH LENGTH VARIES FROM 600mm TO 900mm.</p> <p>14 APPLY FIRE CAULKING TO PENETRATIONS THROUGH GYPSUM BOARD WALLS BETWEEN CORRIDOR AND SUITES (0 HR) ABOVE ACT CEILING. LOCATIONS ON WALLS ARE APPROXIMATELY SHOWN BY BROKEN LINES TO CONFIRM ON SITE. ALLOW FOR A PROJECT TOTAL OF APPROXIMATELY 25 PENETRATIONS - 12MM CONDUITS THAT CLIPS GYPSUM SURFACE WITH LENGTH VARIES FROM 600mm TO 900mm.</p> <p>15 PROVIDE TAPE AND MUD ALL GYPSUM JOINTS ON WALLS ABOVE ACT. LOCATION ON WALLS ARE APPROXIMATELY SHOWN BY BROKEN LINES TO CONFIRM ON SITE.</p> <p>16 APPLY FIRE STOPPING AROUND TWO - 300X300MM DUCTS PENETRATIONS THROUGH CONCRETE BLOCK WALLS (1 HR) ABOVE ACT.</p> <p>17 INSTALL NEW MINERAL WOOL INSULATION BOARDS TO ACHIEVE MINIMUM R-26 AT WALL ABOVE ACT CEILING APPROX. 6000MM X 500MM. (ALTERNATE PRICE NO.2)</p>	<p>18 NOT FOR USE</p> <p>19 PATCH AND MAKE GOOD FLOOR AFFECTED BY INSTALLATION OF NEW SPRINKLER MAIN. REFER TO MECHANICAL FOR EXACT LOCATION.</p> <p>20 PARTIALLY DEMOLISH EXISTING GWB CEILING TO ALLOW INSTALLATION OF SPRINKLER PIPES. RESTORE CEILING TO MATCH ORIGINAL CONDITION. PATCH, PAINT AND MAKE GOOD ALL AFFECTED SURFACES. SEE MECHANICAL FOR EXACT LOCATION AND EXTENT.</p> <p>21 TEMPORARILY REMOVE EXISTING WOOD SLAT CEILING AS REQUIRED TO ALLOW FOR INSTALLATION OF SPRINKLER PIPING. RESTORE CEILING AND MAKE GOOD TO MATCH EXISTING. SEE MECHANICAL FOR EXACT LOCATION AND EXTENT.</p> <p>22 PROVIDE NEW GWB BULKHEAD TO CONCEAL SPRINKLER PIPING. PAINT TO MATCH EXISTING. REFER TO 3/A1.000 TYPICAL BULKHEAD SECTION DETAIL. SEE MECHANICAL FOR EXACT LOCATION AND EXTENT.</p> <p>23 MODIFY EXISTING EXTERIOR WALL TO ACCOMMODATE NEW FIRE DEPARTMENT CONNECTION C/W NEW FLOOR TO CEILING PIPE ENCLOSURE. SEE SECTION DETAIL 4/A1-000. COORDINATE WITH MECHANICAL.</p> <p>24 NEW FLOOR TO CEILING PIPE ENCLOSURE ASSEMBLY: 92MM STEEL STUDS 16MM THK GYPSUM BOARD PAINT TO MATCH EXISTING COORDINATE WITH MECHANICAL.</p>
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FILE NAME AND PATH: I:\2025\1609 Shared Health Fire Life Safety\Projects\Design\3 Schematic Design\21009 A1-Lynn Lake Hospital.rvt  
 LAYOUT: A1-211 LAST SAVED BY: shawna DATE PLOTTED: 17/11/25 11:14 AM

**1 MAIN FLOOR PLAN**  
**A1-211**  
 1:100M  
 north

REFERENCE LINE  
SEE 1/A4-111

REFERENCE LINE  
SEE 1/A4-212

Consultant

**ft3**  
Architecture  
Landscape  
Interior Design

2	ISSUED WITH ADDENDUM 03	EG/SW	17/11/25
1	ISSUED WITH ADDENDUM 01	EG	23/10/25
0	ISSUED FOR CONSTRUCTION	EG	09/10/25
ISSUE / REVISION	DESCRIPTION	BY	DDMMYY

Certificate of Authorization      Engineer's Seal

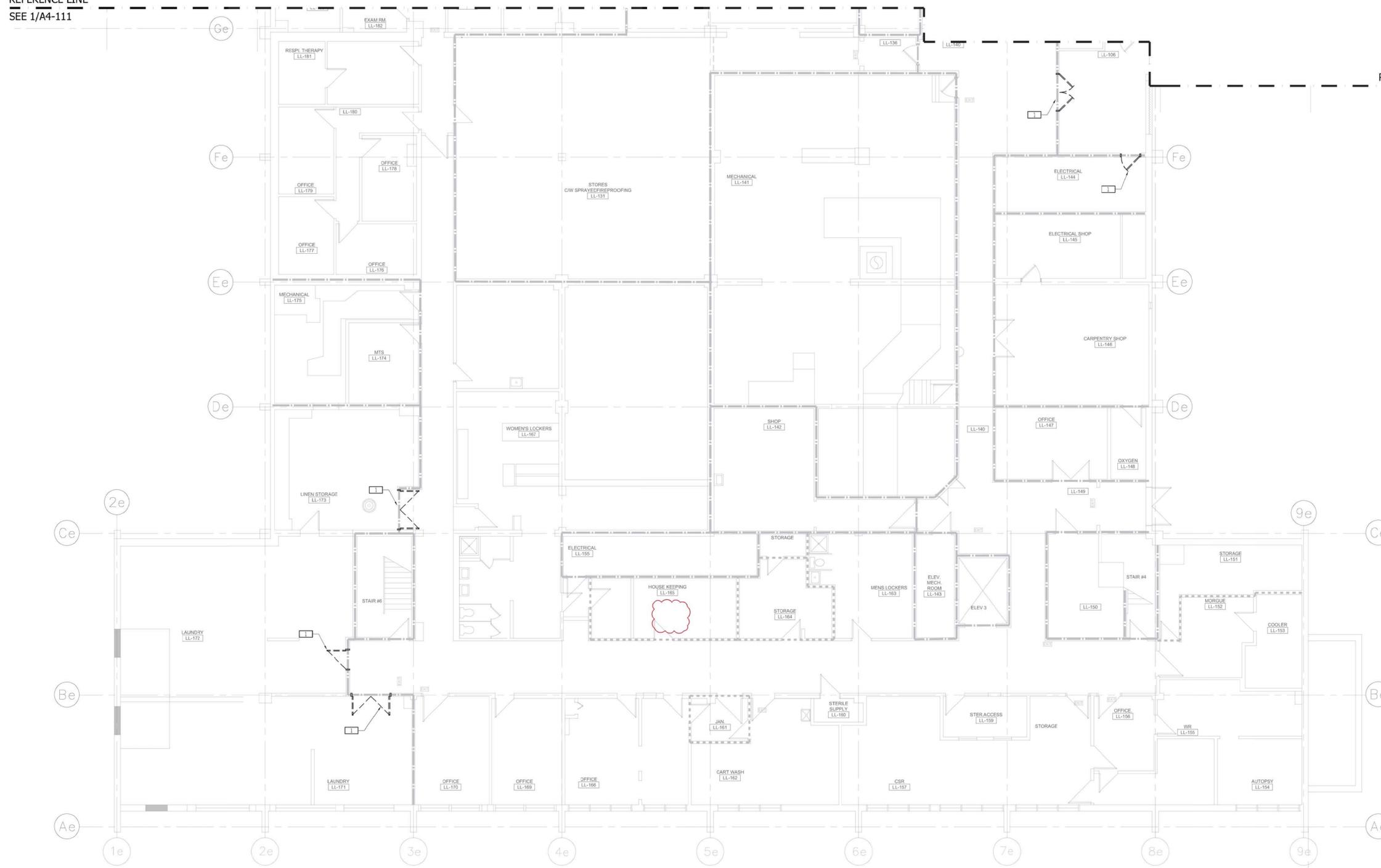
Project Title  
**PROVINCIAL FIRE AND LIFE SAFETY PROJECT - LYNN LAKE, GILLAM, AND THOMPSON SITES**

**THOMPSON GENERAL HOSPITAL**  
THOMPSON      MANITOBA

Drawing Title  
**DEMOLITION GROUND FLOOR PLAN BLOCK 3**

Drawn By BR	Checked By JW	Approved By JP
Scale AS NOTED	Date NOV. 2025	Project No. 25-001-18

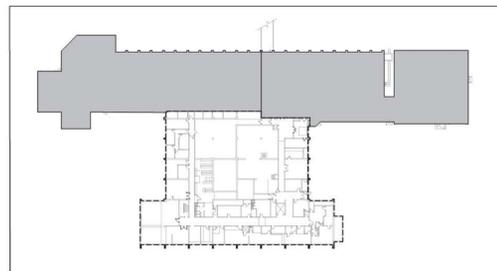
Revision Number <b>1</b>	Drawing Number <b>A4-113</b>
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**1** GROUND FLOOR PLAN - BLOCK 3  
A4-113 1:100M

**DEMOLITION KEYNOTES:**

	DEMOLISH EXISTING DOOR SLAB(S) AND DOOR FRAME AND PREPARE FOR NEW DOOR AND FRAME INSTALLATION. REFER TO DOOR SCHEDULE.
	NOT FOR USE



**BUILDING KEY PLAN**  
1:1000M

FILE NAME AND PATH: H:\2025\11\20251109 Shared Health Fire Life Safety\Submittal\Design\Schematic\Design\2509180 Thompson GH & Northern Spirit Memory PCH.dwg  
LAYOUT: A4-113 LAST SAVED BY: shanna DATE PLOTTED: April 16, 2025 8:15:11 AM



Project: Thompson General Hospital PFLS Renovations Masonry Repairs	Addendum Number: CK-01
Owner: Northern Regional Health Authority	Project Number: 2025-0286
Issued by: Adam J. Kriegl	Date Issued: November 18, 2025
Distribution: SMS Engineering – Gavin Stewart (gstewart@smseng.com) SMS Engineering – Martyn Borovytskyy (mborovytskyy@smseng.com) Crosier Kilgour – Ryan Morphy (ryan.morphy@crosierkilgour.com)	

**PRECEDENCE:** The Addendum forms an integral part of the contract documents describing all aspects of the work and is to be read in conjunction therewith. However, if points arise which are at variance, this Addendum shall take precedence unless otherwise clarified by the Consultant. This Addendum shall be returned with the other Tender Documents at the time of submission.

**ACKNOWLEDGMENT:** Signify that you have received this Addendum by listing the Addendum number in the appropriate space on the third page of the Bid Form.

1. Add Structural Drawing Sheet S1.1, titled “Masonry Repairs” and dated November 18, 2025.
2. Add Specification Section 04 01 01 – “Masonry Restoration.”
3. Contractor to perform masonry repairs, measured on a per-unit basis as outlined below and covered under cash allowance. Repair types are as follows:
  - .1 All labour and materials for Repointing of mortar joint in brick veneer construction at locations identified by Consultant in accordance with Section 04 01 01 and Detail A/S1.1, repair method ‘A1’. Measured per lineal foot.
  - .2 All labour and materials for Deep Repointing of mortar joint in brick veneer construction at locations identified by Consultant in accordance with Section 04 0101 and Detail A/S1.1, repair method ‘A2’. Measured per lineal foot.
  - .3 All labour and materials to locally rebuild brick veneer construction at locations identified by the Consultant in accordance with Section 04 01 01 and Detail B/S1.1, repair method ‘B’. Replacement brick supplied by owner. Measured per square foot of wall surface area.

**END OF ADDENDUM**



2025-11-18

**Part 1            General**

**1.1                SUMMARY**

- .1    Masonry repairs are required at all heights and elevations, including but not limited to:
  - .1        Repointing of mortar joints in existing brick masonry; and
  - .2        Rebuilding, replacement, and/or stabilization of brick masonry.
- .2    Locations, types, and extents of repairs are estimated in the Contract Documents and must be site confirmed.
- .3    The Contractor is responsible for providing access and personnel to facilitate a visual review and repairs to all masonry construction.

**1.2                REFERENCES**

- .1    Canadian Standards Association (CSA)
  - .1        CAN/CSA A165.1-14, Concrete Block Masonry Units.
  - .2        CAN/CSA A179-14, Mortar and Grout for Unit Masonry.
  - .3        CAN/CSA A370-14, Connectors for Masonry.
  - .4        CAN/CSA A371-14, Masonry Construction for Buildings.
  - .5        CAN/CSA A3000-18, Cementitious Materials compendium (consists of A3001, A3002, A3003, A3004 and A3005).

**1.3                SUBMITTALS**

- .1    Submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2    Test Reports:
  - .1        Upon request, submit test reports showing compliance with specified performance characteristics and physical properties.
  - .2        Upon request, submit laboratory test reports certifying compliance of masonry units and mortar with specification requirements.
- .3    Certificates: Product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

**1.4                Mock-ups**

- .1    Construct mock-up in accordance with Section 01 45 00 - Quality Control.
- .2    Construct mock-up at Project site or pre-selected area of building or location approved by Consultant.
- .3    Allow 24 hours for inspection of mock-up by Consultant before proceeding with masonry restoration work.
- .4    When accepted, mock-up will demonstrate minimum standard for this work. Mock-up may remain as part of finished work.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- .1 Comply with Section 01 61 00.
- .2 Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- .3 Store tightly sealed materials off ground and away from moisture, direct sunlight, extreme heat, and freezing temperatures.
- .4 Keep materials in manufacturer's original, unopened containers and packaging until installation.
- .5 Protect materials during storage, handling, and application to prevent contamination or damage.

## 1.6 PROJECT CONDITIONS

- .1 Hot and Cold Weather Requirements: to CSA-A371.
- .2 Environmental Requirements:
  - .1 Maintain temperature of mortar between 5 degrees C and 50 degrees C until batch is used or becomes stable.
  - .2 Ensure that ambient and substrate temperature of masonry work and its constituent materials between 5 degrees C and 50 degrees C and protect site from windchill.
  - .3 Protect freshly laid masonry from drying too rapidly, by means of waterproof, non-staining coverings.
  - .4 Keep masonry dry using waterproof, non-staining coverings that extend over walls and down sides sufficient to protect walls from wind driven rain, until masonry work is completed and protected by flashings or other permanent construction.
  - .5 Spray mortar surface at intervals and keep moist for maximum of three days after installation.

## 1.7 Definitions

- .1 Raking: the removal of loose/deteriorated mortar until sound mortar is reached.
- .2 Repointing: filling and finishing of masonry joints from which mortar has been raked out.
- .3 Tooling: finishing of masonry joints using tool to provide final contour.
- .4 Repair: using adhesives to rebond sections of fractured masonry.
- .5 Consolidation: strengthening masonry units to prevent deterioration (spalling).
- .6 Descaling: the removal of loose portions of the masonry (usually spalled area) through impact with a brush hammer or similar device.

## 1.8 Performance Requiements

- .1 Wind loads (unfactored) for masonry veneer (main floor):  $\pm 0.77$  kPa.

**Part 2 Products**

**2.1 MATERIALS**

- .1 Use same brands of materials and source of aggregate for entire project.
- .2 Cement:
  - .1 Portland Cement: to CAN/CSA-A3000.
  - .2 Masonry Cement: to CAN/CSA-A3002 and CAN/CSA A179.
  - .3 Mortar Cement: to CAN/CSA-A3002 and CAN/CSA A179.
  - .4 Packaged Dry Combined Materials for mortar: to CAN/CSA A179.
- .3 Aggregate: supplied by one supplier. To CAN/CSA A179.
- .4 Water: clean and potable.
- .5 Lime: To CAN/CSA A179.
- .6 Mortar:
  - .1 To CSA A179.
  - .2 Use aggregate passing 1.18mm sieve where 6mm thick joints are indicated.
  - .3 White mortar: use white Portland cement, and white masonry cement to produce mortar type specified.
  - .4 Colour: ground coloured natural aggregates or metallic oxide pigments, use colouring admixture not exceeding 10% of cement content by mass, or integrally coloured masonry cement, to produce coloured mortar to match approved sample.
  - .5 Non-staining mortar: use non-staining masonry cement for cementitious portion of specified mortar type.
  - .6 Mortar type:
    - .1 Non-Loadbearing Walls (masonry veneer): Type N mortar having a compressive strength of 3.5 MPa at 28 days. proportion specifications. Air content 7% to 14%.
  - .7 Pointing Mortar:
    - .1 Prehydrate pointing mortar by mixing ingredients dry, then mix again adding just enough water to produce damp unworkable mix that will retain its form when pressed into a ball. Allow to stand for not less than 1 hour nor more than 2 hours then remix with sufficient water to produce mortar of proper consistency for pointing.
- .7 Grout:
  - .1 To CSA A179.
  - .2 Mix grout to semi-fluid consistency.
  - .3 Do not use calcium chloride or chloride based admixtures.
- .8 Masonry Ties:
  - .1 To CAN/CSA A370.
  - .2 Corrosion resistant.

**Part 3 Execution**

**3.1 Examination**

- .1 Refer to the Contract Documents for estimated repair quantities. Repairs areas will be identified on-site by the Consultant in the presence of and with the assistance of the Contractor. The approximately periphery of the repair will be marked on the surface of the member and the location and extent recorded on drawings
- .2 Allow time in the Schedule for survey and inspection work carried out by the Consultant ahead of repairs. Provide sufficient safe access to enable review of all areas designated for repairs.
- .3 The Contractor shall make available as required throughout the Contract labour to carry out the following under the direction of Consultant:
  - .1 Identification of repairs.
  - .2 Sample chipping and/or drilling.
  - .3 Operators for access equipment.

**3.2 Preparation**

- .1 All necessary measures shall be taken to provide protection to the general public, occupants of the building.
- .2 Remove or protect all surface attachments (e.g. signs, notices, electrical fittings) from the areas to be repaired or from positions that obstruct access or which may be damaged from Work.
- .3 Carefully store items removed during the course of the works. Reinstall when restoration work is complete.
- .4 The Contractor shall make good or rectify any damage caused as a result of insufficient protection.
- .5 Provide temporary access required to facilitate Work.
- .6 The Contractor is responsible for the design, erection, installation, and maintenance of all temporary shoring throughout the course of the work. Costs of shoring to be included in the unit price.

**3.3 Mortar Joint Repointing**

- .1 Repoint masonry at locations identified by Consultant. Price to include removal of all caulking placed over mortar joints followed by installation of joint mortar.
- .2 Existing Conditions:
  - .1 Repoint masonry at locations identified by Consultant. Price to include removal of all caulking placed over mortar joints followed by installation of joint mortar.
  - .2 In general, mortar joints will require repointing when:
    - .1 Open Joints: the mortar is deeply eroded (more than one half inch from the face of the masonry), or the mortar has fallen out, or,
    - .2 Cracked Joints: cracks, hairline width or larger, have formed in the mortar, or,

- .3 Separated Joints: the mortar and masonry no longer adhere, resulting in a gap or crack between the two, or the mortar is sitting loosely in the joint, or,
  - .4 Unsound Joints: joint is found to contain voids or weak areas as revealed by hammer-sounding, by raking with an appropriate tool or other approved method to determine score resistance, surface unsoundness or delamination.
- .3 Raking joints:
- .1 Rake unsound joints free of deteriorated and loose mortar, dirt and other undesirable material. Joints should be raked to a minimum depth of 2 to 2.5 times the vertical joint height, but at no point less than 1 inch.
  - .2 Remove mortar without chipping, altering or damaging masonry units.
  - .3 Clean out voids and cavities encountered during raking. Remove mortar cleanly from masonry, leaving square corners and a flat surface at back of cut.
  - .4 Clean by compressed air, surfaces of joints without damaging texture of exposed joints.
  - .5 Flush open joints and voids; clean with low pressure water and if not free draining blow clean with compressed air.
  - .6 Leave no standing water.
  - .7 Before filling joints, any masonry that is loose should be reset. Any pieces that are chipped off while removing old mortar shall be repaired at the contractor's cost.
  - .8 Replace masonry units damaged as a result of careless raking of saw cutting, at no cost to Owner.
- .4 Mixing:
- .1 Mix mortar ingredients in quantities for use in 2 hours.
  - .2 Mix all dry ingredients before adding any water to obtain even colour and remove lumps.
  - .3 Use manual mixing as long as quantities of materials and water are accurately controlled.
  - .4 Operate power driven mixer when fully charged, for minimum of 3 to 5 minutes.
  - .5 Add water slowly while mixing until all lumps are eliminated.
  - .6 Mix to a consistency of soft mush.
  - .7 Retempering or addition more water after the initial mix is prepared is not permitted.
  - .8 Allow mortar to age approximately ½ hour prior to application to reduce shrinkage.
  - .9 Use batching box.
  - .10 Monitor mixing time
- .5 Repointing:
- .1 Masonry to be repointed shall be damp but not wet. Do not allow free standing water. Ensure that dust and debris are removed from joints and wall surfaces prior to repointing.
  - .2 Mortar joints are to be filled in successive layers. Deeper joints shall be filled first compacting new mortar in several layers until back of joint is flat. Several layers (maximum ½" each) will be needed to fill the joint flush with the surface of the

- masonry. Allow each layer to reach thumbprint hardness before the next is applied.
- .3 Keep masonry damp while pointing is being performed.
  - .4 Completely fill joint with mortar. Build-up pointing in layers not exceeding 12 mm in depth.
  - .5 Pack mortar firmly into voids and joints, ensuring full contact with back and sides of joint and leaving no voids. Avoid feathered edges.
  - .6 Allow each layer to set before applying subsequent layers.
  - .7 Maintain joint width.
  - .8 Use bulk caulking gun, or similar, to inject mortar for fine gauged masonry areas where mortar joints are too narrow for tool penetration.
  - .9 Do no pointing in freezing weather unless provisions are in place to protect mortar.
- .6 Tooling:
- .1 Do not finish joint by using trowel to smooth out mortar.
  - .2 Finish joint with slicker narrow enough to be placed inside the joint. Pull the slicker across surface of mortar to compress it.
  - .3 Proper timing of the tooling operation is essential. If mortar is tooled when it is too soft, the colour will be too light and hairline cracks may occur; if mortar is too hard, dark streaks may result and good closure between mortar and stone may be difficult to achieve.
  - .4 Do not feather edge mortar. Joints shall be finished with a slight concave joint profile unless noted otherwise.
- .7 Remove excess mortar from masonry face before it sets.
- .8 Protection and Curing:
- .1 Cover completed and partially completed work not enclosed or sheltered at end of each workday.
  - .2 Provide damp cure for pointing mortars, at a minimum temperature of 10°C.
  - .3 Protect from drying winds. Pay particular attention at corners of structure

### 3.4 MASONRY REPLACEMENT

- .1 Perform restoration work in accordance with CAN/CSA A371-14.
- .2 Remove identified areas for replacement as follows:
  - .1 Install shoring as required. Shoring design by Contractor.
  - .2 Rake out face of mortar joints.
  - .3 Cut through masonry in length not exceeding the length of 2 units, at one time.
  - .4 During removal, protect sound areas to remain. Use mechanical hand methods of removal.
- .3 Clean dust and brick fragments from slot.
- .4 Thoroughly dampen slot's surfaces before applying mortar.
- .5 Apply mortar and lay bricks.

- .6 Lay bricks on full beds of mortar.
- .7 Lay bricks and tool joints in one operation, tooling with jointing tool to provide smooth joints compressed uniformly concave.

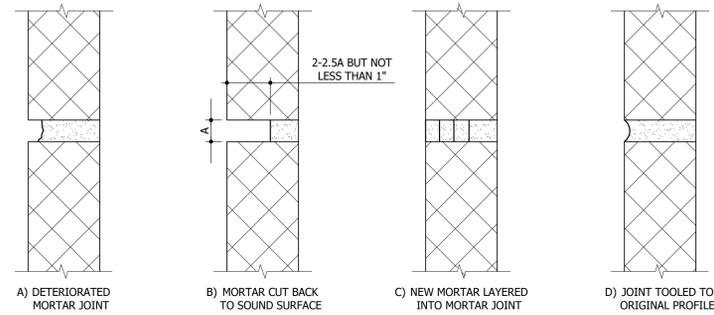
### **3.5 CLEANING**

- .1 Clean surfaces of mortar droppings, stains and other blemishes resulting from work of this contract as work progresses.
- .2 Remove droppings and splashings using clean sponge and water.
- .3 Do further cleaning using stiff natural bristle brushes after mortar has obtained its initial set and has not fully cured.
- .4 Clean masonry with stiff natural bristle brushes and plain water only if mortar has fully cured.
- .5 Clean masonry with low pressure 15 to 45 psi clean water and soft natural bristle brush.
- .6 Obtain approval of Consultant prior to using other cleaning methods for persistent stains.

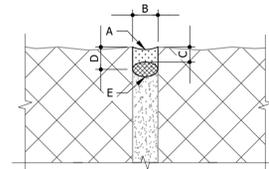
### **3.6 FIELD QUALITY CONTROL**

- .1 Inspection and testing of concrete and concrete materials will be carried out by a Testing Laboratory designated by Consultant.
  - .1 Testing laboratory to be certified in accordance with CSA A283.
- .2 Frequency and Number of Tests:
  - .1 Sampling and testing of mortar: to CAN/CSA-A179.
  - .2 Not less than 1 test consisting of per 25 brick repairs placed and not less than one test for each day of placement.
- .3 Testing agency to submit copies of concrete test reports directly to Consultant.
- .4 Inspection or testing by Consultant will not augment or replace Contractor quality control nor relieve contractual responsibility.

**END OF SECTION**

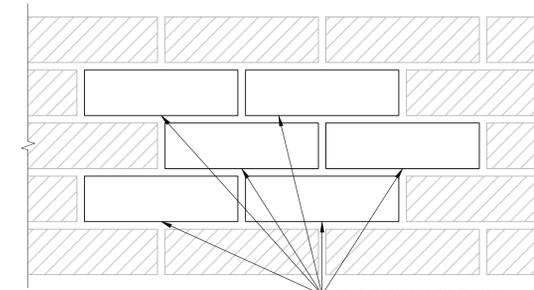


REPAIR METHOD 'A1' AND 'A2': REPOINTING DETAILS



LEGEND:  
 A: SEALANT  
 B: JOINT WIDTH (VARIES)  
 C: SEALANT DEPTH:  
 $C = B/2$  FOR  $B \leq 3/4"$   
 $C = 1/2"$  FOR  $B > 3/4"$   
 $C \geq 1/4"$  FOR ALL JOINT WIDTHS  
 D: CONTACT DEPTH ( $D \geq C$ )  
 E: CLOSED CELL ETHAFOAM BACKER ROD  
 25% LARGER THAN B  
 OR BOND BREAKER TAPE  
 E = BACKER ROD FOR  $B > 5/16"$   
 E = BOND BREAKER ROD TAPE  $B \leq 5/16"$

REPAIR METHOD 'A3': REPOINTING SKYWARD FACING JOINTS



REMOVE LOOSE OR FAILED BRICK UNITS AS DIRECTED BY CONSULTANT SHORING AS REQUIRED. CLEAN ALL SURFACES AND INSTALL BRICK FULLY TOOTHED AND POINTED TO MATCH EXISTING CONSTRUCTION.

LOCALIZED REBUILDING OF

**B** BRICK MASONRY - REPAIR METHOD 'B'  
 (UNIT PRICE)

- REBUILD WITH EXISTING BRICK UNITS UNDER UNIT PRICE PER FT<sup>2</sup> OF WALL SURFACE
- REBUILD WITH NEW BRICK UNITS TO MATCH EXISTING UNIT PRICE PER FT<sup>2</sup> OF WALL SURFACE.
- INCLUDE COST TO SUPPLY AND INSTALL GALVANIZED STEEL BRICK TIES.

NOTE: SUPPLY OF NEW BRICK UNDER SEPARATE UNIT PRICE.

**A** MORTAR JOINT REPOINTING PROCEDURE REPAIR METHOD 'A1', 'A2', 'A3'  
 (S1.1) NTS

REPAIR METHOD 'A1': UP TO 1 1/2" REMOVAL TO SOUND MORTAR (UNIT PRICE)

REPAIR METHOD 'A2': DEEP REPOINT FROM 1 1/2" - 4 1/2" REMOVAL TO SOUND MORTAR (UNIT PRICE)

PROCEDURE:

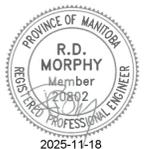
- A. CONSULTANT TO IDENTIFY MORTAR JOINTS FOR REPOINTING UNDER FIXED PRICE WORK. TYPES OF DETERIORATION INCLUDE:
- OPEN JOINTS: THE MORTAR IS DEEPLY ERODED (MORE THAN 1/2" FROM FACE OF MASONRY) OR HAS FALLEN OUT.
  - CRACKED JOINTS: CRACKS OF HAIRLINE WIDTH OR LARGER HAVE FORMED IN MORTAR.
  - SEPARATED JOINTS: MORTAR AND MASONRY DO NOT ADHERE, RESULTING IN A GAP BETWEEN THE TWO, OR MORTAR SITTING LOOSE ON JOINT.
  - TEST FOR VOIDS AND WEAKNESS BY USING HAMMERS OR OTHER APPROVED MEANS.
  - CAULKING HAS BEEN INSTALLED ON OR IN JOINT LINE.
- B. RAKE UNSOUND JOINTS FREE OF DETERIORATED AND LOOSE MORTAR, DIRT AND OTHER UNDESIRABLE MATERIAL. JOINTS SHOULD BE RAKED TO A DEPTH OF 2 TO 2.5 TIMES THE VERTICAL JOINT WIDTH, BUT AT NO POINT LESS THAN 1". FLUSH OPEN JOINTS AND VOIDS CLEAN WITH WATER AND/OR AIR, AND IF NOT FREE DRAINING, BLOW CLEAN WITH COMPRESSED AIR.
- C. MORTAR JOINTS ARE TO BE FILLED IN SUCCESSIVE LAYERS. DEEPER JOINTS SHALL BE FILLED FIRST COMPACTING NEW MORTAR IN SEVERAL LAYERS UNTIL BACK OF JOINT IS FLAT. SEVERAL 1/2" LAYERS WILL BE NEEDED TO FILL THE JOINT FLUSH WITH THE SURFACE OF THE MASONRY. ALLOW EACH LAYER TO REACH THUMBPRINT HARDNESS BEFORE THE NEXT IS APPLIED.
- D. FINISH MASONRY JOINTS TO MATCH EXISTING MORTAR JOINTS. LEAVE EXISTING MASONRY WORK CLEAN AND FREE OF MORTAR DROPPINGS.
- E. BRICK MASONRY TO UTILIZE CSA TYPE 'N' MORTAR (3.5 MPa MIN UNLESS NOTED). ALL STONE MORTAR TO BE CSA TYPE 'N'. SEE SPECIFICATIONS FOR FURTHER DETAILS.
- F. JOINT TO BE FINISHED TO ORIGINAL PROFILE AND COLOUR.

REPAIR METHOD 'A3': REMOVAL OF MORTAR AND INSTALL \_\_\_\_\_ OF SEALANT IN SKYWARD FACING JOINTS (FIXED PRICE)

PROCEDURE:

- REMOVE EXISTING JOINT PRODUCT AND CUT BACK EXISTING MORTAR TO SOUND BACKING AS PER S1.1.
- LEAN & PREPARE JOINT AND ADJACENT STONE FACES.
- INSTALL APPROVED SEALANT IN SKYWARD JOINTS.
- JOINT WIDTH  $\leq 5/16"$ , USE BOND BREAKER TAPE.
- JOINT WIDTH  $\geq 5/16"$ , USE ETHAFOAM BACKER ROD.

Rev	Date	Issuance
A	2025-11-18	ISSUED FOR ADDENDUM #01



Project  
**THOMPSON GENERAL HOSPITAL**  
 MASONRY REPAIRS

877 THOMPSON DRIVE SOUTH  
 THOMPSON, MANITOBA

Sheet Title  
**TYPICAL MASONRY REPAIR DETAILS**

Design	Sheet	
AJK	<b>S1.1</b>	
Drawn		ACG
Project		2025-0286
Revision		A

Project: PFLS Lynn Lake, Gillam, and Thompson Sites	Addendum Number: 02
Owner: PMH	Project Number: 2025-0433
Issued by: SMS	Date Issued: November 14, 2025
Distribution: SMS – Ethan McTavish (emctavish@smseng.com) SMS – Martyn Borovystkyy (mborovystkyy@smseng.com)	

**PRECEDENCE:** The Addendum forms an integral part of the contract documents describing all aspects of the work and is to be read in conjunction therewith. However, if points arise which are at variance, this Addendum shall take precedence unless otherwise clarified by the Consultant. This Addendum shall be returned with the other Tender Documents at the time of submission.

**ACKNOWLEDGMENT:** Signify that you have received this Addendum by listing the Addendum number in the appropriate space on the third page of the Bid Form.

Updated general notes and pumphouse building based on geotechnical report requirements.

1. Refer to S1-001 (attached). In the general notes, updated site classification in earthquake loads section. Updated the foundation capacity and reference to the geotechnical report in the foundation section.
2. Refer to S1-211 (attached). In Section 1 and Section 2, modified the base requirements under the thickened edge slab based on the geotechnical report.

**END OF ADDENDUM**



GENERAL NOTES

- 1. STRUCTURAL DESIGN BASED ON THE MANITOBA BUILDING CODE 2024. ALL CODES AND STANDARDS SHALL BE THE EDITIONS DESIGNATED IN DIVISION B TABLE 1.3.1.2. IMPORTANCE CATEGORY: POST DISASTER
2. DO NOT SCALE DRAWINGS.
3. DO NOT BACKFILL UNTIL GROUND FLOOR STRUCTURE IS IN PLACE AND GROUND FLOOR SLABS HAVE BEEN POURED AND CURED.
4. ALL DIMENSIONS ARE TO BE VERIFIED WITH THE EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION.
5. THESE STRUCTURAL DRAWINGS SHOW THE COMPLETED STRUCTURE AND DO NOT INDICATE ALL COMPONENTS NECESSARY FOR SAFETY DURING CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON AND AROUND THE JOBSITE DURING CONSTRUCTION INCLUDING BUT NOT LIMITED TO ALL TEMPORARY SHORING/BRACING.
6. THE EXISTING BUILDING SUPERSTRUCTURE AND FOUNDATIONS HAVE BEEN REVIEWED AND CAN SUPPORT ALL NEW LOADING CONDITIONS SHOWN ON THESE DRAWINGS IN ACCORDANCE WITH PART 4 OF THE 2020 NATIONAL BUILDING CODE OF CANADA, UNLESS NOTED OTHERWISE.
7. PORTIONS OF THE BASEMENT GROUND FLOOR STRUCTURE CONSIST OF A GRADE-SUPPORTED CONCRETE FLOOR SLAB. DUE TO THE NATURE OF SLABS ON GRADE, DIFFERENTIAL MOVEMENT MAY OCCUR WITH FREEZING AND THAWING OR CHANGES IN MOISTURE CONTENT OF THE UNDERLYING SOILS. POTENTIAL FOR MOVEMENT HAS BEEN IDENTIFIED IN THE GEOTECHNICAL REPORT AND IS A RISK FOR THIS TYPE OF CONSTRUCTION. SUCH MOVEMENT MAY CAUSE DAMAGE TO FINISHES AND MIGHT AFFECT OPERATION OF DOORS AND WINDOWS. BY REVIEWING THESE PLANS, THE OWNER ACCEPTS THE RISK RELATED TO SLAB-ON-GRADE MOVEMENTS AND RESULTING DAMAGE THAT OCCURS.

DESIGN NOTES

- 1. LIVE LOADS
A) SEE NOTES ON PLANS. ALL LOADS ARE UNFACTORED UNLESS NOTED.
2. SNOW LOADS
A) GROUND SNOW LOAD: Ss = 2.4 kPa
B) ASSOCIATED RAIN LOAD: Sr = 0.2 kPa
C) SNOW IMPORTANCE FACTOR, Is = 1.25 (ULS) 0.9 (SLS)
3. WIND LOADS
A) WIND LOADS HAVE BEEN CALCULATED IN ACCORDANCE WITH THE STATIC PROCEDURE OUTLINED IN NBCC 2020 CLAUSE 4.1.7.3.
B) HOURLY WIND PRESSURE, q50 = 0.37 kPa
C) WIND IMPORTANCE FACTOR, Iw = 1.25 (ULS) 0.75 (SLS)
D) EXPOSURE FACTOR, Ce, BASED ON OPEN TERRAIN
4. EARTHQUAKE LOADS

- LYNN LAKE HOSPITAL PCH AND HC
A) THE REPORT PUBLISHED IN APRIL 2020 BY THE NRC ON RECOMMENDATIONS FROM THE JOINT TASK GROUP OF "THE CANADIAN COMMISSION ON BUILDING AND FIRE CODES" AND "THE PROVINCIAL AND TERRITORIAL POLICY ADVISORY COMMITTEE ON CODES", INDICATES THAT WHEN MAINTENANCE, REPAIR, OR REPLACEMENT OF COMPONENTS WITH SIMILAR COMPONENTS IS PERFORMED IN AN EXISTING BUILDING, UPGRADES TO CURRENT CODE REQUIREMENTS SHOULD ONLY BE PERFORMED ON A VOLUNTARY BASIS BY THE BUILDING OWNER. THIS EXEMPTION FROM UPGRADING TO MEET CURRENT CODES APPLIES AS LONG AS THE PERFORMANCE OF THE BUILDING IS NOT REDUCED BY THE MAINTENANCE, REPAIR, OR REPLACEMENT WITH SIMILAR COMPONENTS INTERVENTION BEING CONSIDERED.
B) THE SCOPE OF WORK DOES NOT REDUCE THE ORIGINALLY INTENDED STRUCTURAL PERFORMANCE. THE STRUCTURAL WORK DOES NOT INCLUDE A CHANGE IN BUILDING OCCUPANCY, DOES NOT INCLUDE REMOVAL, RELOCATION, OR AUGMENTATION OF EXISTING HORIZONTAL LOAD BEARING ELEMENTS, AND DOES NOT CONSTITUTE AN ADDITION TO THE BUILDING.
C) CONSIDERING ITEMS A AND B ABOVE THE SEISMIC DESIGN PROVISIONS OF THE 2024 MANITOBA BUILDING CODE DO NOT APPLY TO THE PROPOSED SCOPE OF REPAIRS ON THIS PROJECT AND THEREFORE WERE NOT CONSIDERED IN THE SCOPE OF DESIGN AND CONSTRUCTION.

- FIRE PUMP HOUSE BUILDING
A) EARTHQUAKE IMPORTANCE FACTOR, Ie = 1.0
B) SITE CLASS: A - CONFIRMED BY GEOTECHNICAL REPORT BY TREK GEOTECHNICAL, DATED NOVEMBER 6, 2025.
C) PARAMETERS USED TO REPRESENT SEISMIC HAZARD ARE THE 5% DAMPED HORIZONTAL SPECTRAL ACCELERATIONS THAT HAVE A 2% PROBABILITY OF EXCEEDANCE IN 50 YEARS.
D) SEISMIC HAZARD PARAMETERS FOR NEW STRUCTURES AND NON-STRUCTURAL ELEMENTS - 2% PROBABILITY:
Sa (0.2) = 0.053g
Sa (0.5) = 0.033g
Sa (1.0) = 0.016g
Sa (2.0) = 0.0066g
Sa (5.0) = 0.0013g
Sa (10.0) = 0.0007g
E) THE STRUCTURE IS DESIGNED USING NBCC 2020 CLAUSE 4.1.8.1. 2) TO 15)
F) SEISMIC CATEGORY = SC1
G) FUNDAMENTAL LATERAL PERIOD, Ta = 0.099s
H) THE SEISMIC FORCE RESISTING SYSTEM FOR THIS STRUCTURE IS: CONCRETE ROOF DIAPHRAGM AND REINFORCED MASONRY BLOCK SHEAR WALL. Rs = 1.5.

- 5. STRUCTURAL MOVEMENTS
A) TYPICAL HORIZONTAL ELEMENTS HAVE BEEN DESIGNED SO THAT THE THEORETICAL VERTICAL DEFLECTIONS WILL NOT EXCEED L/360.
B) INTERIOR NON-LOAD BEARING WALLS AND PARTITIONS, INCLUDING MASONRY WALLS AND DRYWALL PARTITIONS ARE TO BE DETAILED TO ACCOMMODATE A MINIMUM OF 25 mm OF VERTICAL MOVEMENT AT THE TOP OF THE PARTITION, UNLESS NOTED OTHERWISE.
C) THE STRUCTURE HAS BEEN DESIGNED TO LIMIT THE MAXIMUM INTERSTORY DRIFT AT THE SERVICEABILITY LIMIT STATE TO H/500 FOR WIND LOADS WHERE 'H' IS THE FLOOR-TO-FLOOR HEIGHT BETWEEN ADJACENT FLOORS.
D) THE STRUCTURE HAS BEEN DESIGNED TO LIMIT THE MAXIMUM INTERSTORY DRIFT AT THE SERVICEABILITY LIMIT STATE TO H/100 FOR EARTHQUAKE LOADS WHERE 'H' IS THE FLOOR-TO-FLOOR HEIGHT BETWEEN ADJACENT FLOORS.
E) NON-STRUCTURAL ELEMENTS SUCH AS THE BUILDING ENCLOSURE, MECHANICAL AND ELECTRICAL SERVICES AND SUPPORTS MUST BE DESIGNED AND DETAILED TO ACCOMMODATE THE ANTICIPATED MOVEMENTS NOTED ABOVE.

FOUNDATIONS

- 1. FOUNDATION DESIGN BASED ON GEOTECHNICAL REPORT BY TREK GEOTECHNICAL, DATED NOVEMBER 6, 2025.
2. NOTWITHSTANDING THE INFORMATION PROVIDED IN THE GEOTECHNICAL REPORT, THE FOUNDATION AND GENERAL CONTRACTORS SHALL SATISFY THEMSELVES AS TO THE PREVAILING CONDITIONS AT THE SITE AS NO EXTRAS SHALL BE GRANTED SHOULD CONDITIONS DIFFER FROM THOSE INDICATED.
3. ALL FOOTINGS / PADS ARE DESIGNED BASED ON CAPACITIES AS FOLLOWS:
A) ULS BEARING CAPACITY OF 1500 kPa THIS BEARING CAPACITY HAS BEEN MULTIPLIED BY A GEOTECHNICAL RESISTANCE FACTOR OF 0.5.
B) SLS BEARING CAPACITY OF 1000 kPa
C) FOOTINGS / PADS SHALL BE POURED ON UNDISTURBED NATIVE SOIL. THE BEARING SURFACE SHOULD BE PROTECTED FROM DISTURBANCE, FREEZING, DRYING OR INUNDATION WITH WATER. IF THESE CONDITIONS OCCUR, THE DISTURBED SOIL SHOULD BE REMOVED.
4. ALL FOUNDATION INSTALLATIONS SHALL BE REVIEWED BY QUALIFIED GEOTECHNICAL PERSONNEL REPORTING TO THE GEOTECHNICAL ENGINEER THAT ISSUED THE SITE-SPECIFIC GEOTECHNICAL REPORT IN ACCORDANCE WITH THE REQUIREMENTS OF PART 4 OF THE MANITOBA BUILDING CODE.
5. TEMPORARY EXCAVATIONS SHALL BE CARRIED OUT IN COMPLIANCE WITH APPROPRIATE REGULATIONS UNDER THE MANITOBA WORKPLACE SAFETY AND HEALTH ACT.
6. DEWATERING OF THE EXCAVATION MAY BE NECESSARY TO PERMIT EXCAVATION TO DESIGN DEPTH. EXPERIENCED DEWATERING CONTRACTORS SHOULD BE CONTACTED TO DEVELOP A DEWATERING PLAN AS REQUIRED.
7. IF A LEVELLING COURSE IS REQUIRED, 50 mm DOWN SAND AND GRAVEL MAY BE PLACED IN LIFTS UP TO 150 mm AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.
8. REMOVAL OF UNSUITABLE MATERIALS, SUBGRADE PREPARATIONS AND COMPACTED GRANULAR FILL FOR ALL SLABS SUPPORTED ON GRADE AS PER SITE-SPECIFIC GEOTECHNICAL REPORT.

CAST-IN-PLACE CONCRETE

- I CONCRETE
1. ALL CONCRETE TO BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF CSA-A23.1-19 "CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION" AND CSA-A23.2-19 "TEST METHODS AND STANDARD PRACTICES FOR CONCRETE".
2. PROVIDE CERTIFICATION THAT MIX PROPORTIONS SELECTED WILL PRODUCE CONCRETE OF QUALITY, YIELD AND STRENGTH AS SPECIFIED IN CONCRETE MIXES, AND WILL COMPLY WITH CSA-A23.1. CERTIFICATION LETTER TO BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA.
3. PROVIDE CERTIFICATION THAT PLANT, EQUIPMENT, AND MATERIALS TO BE USED IN CONCRETE COMPLY WITH REQUIREMENTS OF CSA-A23.1. CERTIFICATION LETTER TO BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA.
4. CONCRETE TESTING TO BE PERFORMED IN ACCORDANCE WITH CSA-A23.1-19. MINIMUM ONE SET OF TESTS PER POUR. COST OF TESTING TO BE CARRIED BY THE CONTRACTOR.
5. CONCRETE PROPERTIES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

ROOF STRUCTURAL SLAB: 30 MPa MIN. AT 28 DAYS CLASS OF EXPOSURE: F-1 AIR CONTENT CATEGORY: 1 (5% TO 8%) AGGREGATE MAX. 20 mm CURING TYPE: TYPE 2 - ADDITIONAL

GENERATOR PAD: 25 MPa MIN. AT 28 DAYS CLASS OF EXPOSURE: F-1 AIR CONTENT CATEGORY: 1 (5% TO 8%) AGGREGATE MAX. 20 mm CURING TYPE: TYPE 2 - ADDITIONAL

PUMP HOUSE SLABS-ON-GRADE: 30 MPa MIN. AT 28 DAYS CLASS OF EXPOSURE: F-1 AIR CONTENT CATEGORY: 1 (5% TO 8%) AGGREGATE MAX. 20 mm CURING TYPE: TYPE 1 - BASIC

HOUSEKEEPING PAD: 25 MPa MIN. AT 28 DAYS CLASS OF EXPOSURE: N AIR CONTENT CATEGORY: NONE AGGREGATE MAX. 20 mm CURING TYPE: TYPE 1 - BASIC

MASONRY FILL: 20 MPa MIN. AT 28 DAYS CLASS OF EXPOSURE: N AIR CONTENT CATEGORY: NONE AGGREGATE MAX. 14 mm SLUMP: 200 mm ± 40 mm

UNLESS INDICATED OTHERWISE THE CONTRACTOR SHALL SPECIFY CONCRETE SLUMP APPROPRIATE WITH PLACEMENT METHODS AND SITE CONDITIONS. THE CONTRACTOR SPECIFIED SLUMP MUST BE SHOWN ON THE CERTIFICATION LETTER AND CONCRETE DELIVERY TICKET.

- 6. UNLESS NOTED OTHERWISE CONCRETE CURING TO CONFORM TO THE LATEST EDITION OF CSA-A23.1-19 AS FOLLOWS:
A) TYPE 1 - BASIC: 3 DAYS ≥ 10°C AND FOR A TIME NECESSARY TO ATTAIN 40% OF THE SPECIFIED STRENGTH.
B) TYPE 2 - ADDITIONAL: 7 DAYS ≥ 10°C AND FOR A TIME NECESSARY TO ATTAIN 70% OF THE SPECIFIED STRENGTH.
C) TYPE 3 - EXTENDED: 7 DAYS WET CURING ≥ 10°C AND FOR A TIME NECESSARY TO ATTAIN 70% OF THE SPECIFIED STRENGTH.

II REINFORCING STEEL

- 1. ALL REINFORCING STEEL TO CONFORM TO CSA G30.18-09, "CARBON STEEL BARS FOR CONCRETE REINFORCEMENT."
2. ALL REINFORCING STEEL TO BE CSA-G30.18M-M92 GRADE 400R DEFORMED BARS EXCEPT PIER TIES AND BEAM STIRRUPS WHICH SHALL BE GRADE 400W STEEL.
3. ALL REINFORCING IS TO BE DETAILED IN ACCORDANCE WITH THE LATEST EDITION OF THE REINFORCING STEEL INSTITUTE OF CANADA - MANUAL OF STANDARD PRACTICE, EXCEPT OTHERWISE NOTED. ALL LAPPED SPLICES TO BE CLASS B SPLICES, UNLESS NOTED.
4. REINFORCING STEEL COVER TO CONFORM TO CSA A23.3-19 "DESIGN OF CONCRETE STRUCTURES FOR BUILDINGS" AND AS FOLLOWS:

PUMP HOUSE SLAB ON GRADE: EXPOSURE CLASS: N 40 mm TOP 60 mm BOTTOM

ROOF STRUCTURAL SLABS: EXPOSURE CLASS: F-1 40 mm TOP 40 mm BOTTOM

GENERATOR PAD: EXPOSURE CLASS: F-2 40 mm TOP 40 mm BOTTOM

HOUSEKEEPING PADS: EXPOSURE CLASS: N 20 mm TOP 20 mm BOTTOM

- 5. IN SLABS ON GRADE, BARS TO BE LAPPED WITH CLASS A TENSION SPLICES, EXCEPT AS NOTED. REINFORCING STEEL TO BE SECURED USING BAR SUPPORTS AND SPACERS IN ACCORDANCE WITH A23.1.
6. ALL OPENINGS IN CAST-IN-PLACE CONCRETE FLATWORK TO BE TRIMMED WITH 2-15M ALL AROUND ON BOTH FACES, EXCEPT AS NOTED.
7. FOR ALL STRUCTURAL SLABS A MINIMUM OF 50% OF THE BOTTOM STEEL SHALL BE CONTINUED A MINIMUM DISTANCE OF 150 mm INTO ALL SUPPORTING WALLS AND BEAMS. IF KEYS ARE USED AT JOINTS BETWEEN SLABS AND WALLS OR BEAMS, BOTTOM DOWELS EQUAL TO BOTTOM REINFORCEMENT OR 10M AT 300 mm O/C SHALL BE PROVIDED WHICHEVER IS GREATER.
9. ALL MISCELLANEOUS CONCRETE PADS AND CURBS ARE TO BE REINFORCED WITH A MINIMUM OF 10M AT 400 mm O/C EACH WAY, UNLESS NOTED.

III FORMWORK

- 1. UNLESS NOTED OTHERWISE PROVIDE SLIP JOINT ALONG PAVING OR CONCRETE SLABS ON GRADE AGAINST STRUCTURAL MEMBERS WITH 12 mm ASPHALT IMPREGNATED FIBREBOARD.
2. ALL CONSTRUCTION JOINT KEYS ARE TO BE A MINIMUM OF 40 mm DEEP.
3. PLACE 10 MIL POLYETHYLENE UNDER ALL INTERIOR SLABS ON FILL AND OVER TOP OF VOID FORM.

STRUCTURAL STEEL

- 1. THE STRUCTURAL STEEL FABRICATOR'S ENGINEER SHALL BE RESPONSIBLE FOR LOCATING AND DESIGNING PROVISIONS FOR ALL TEMPORARY FALL PROTECTION SYSTEMS REQUIRED DURING CONSTRUCTION TO MEET MANITOBA WORKPLACE HEALTH AND SAFETY REGULATIONS.
2. STRUCTURAL STEEL TO CONFORM TO CSA-G40.21-13 "STRUCTURAL QUALITY STEELS" AND CSA-G40.20-13 "GENERAL REQUIREMENTS FOR ROLLED OR WELDED STRUCTURAL QUALITY STEEL", ASTM A572/A572M "STANDARD SPECIFICATION FOR HIGH-STRENGTH LOW-ALLOY COLUMBIUM-VANADIUM STRUCTURAL STEEL" OR ASTM A992/A992M "STANDARD SPECIFICATION FOR STRUCTURAL STEEL SHAPES".
3. ALL ROLLED OR STEEL STRUCTURAL SECTIONS SHALL BE G40.21-350W, ASTM A992 OR ASTM A572 GRADE 50. ALL HOLLOW STRUCTURAL SECTIONS TO BE G40.21-350W CLASS C. ALL ANGLES, CHANNELS AND PLATES SHALL BE G40.21-300W.
4. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE PERFORMED IN ACCORDANCE WITH CSA S16-19, "DESIGN OF STEEL STRUCTURES".
5. ALL WELDING SHALL CONFORM TO THE LATEST EDITION OF CSA W59, "WELDED STEEL CONSTRUCTION". FABRICATORS SHALL BE PROPERLY CERTIFIED IN ACCORDANCE WITH CSA W47.1, "CERTIFICATION OF COMPANIES FOR FUSION WELDING OF STEEL STRUCTURES".
6. STRUCTURAL STEEL SUPPLIER TO SUBMIT ENGINEERING DRAWINGS BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA COVERING THE DESIGN OF CONNECTIONS, TO THE PROJECT DESIGN ENGINEER FOR REVIEW PRIOR TO FABRICATION. CONNECTION DESIGN TO INCLUDE FOR ALL ADJUSTABLE CONNECTIONS REQUIRED TO SUIT FABRICATION AND ERECTION PROCEDURES AND TOLERANCES. ALL BOLTED CONNECTIONS TO USE A325 HIGH STRENGTH BOLTS. MINIMUM CONNECTION SHALL CONSIST OF 2 BOLTS.
8. ALL STRUCTURAL STEEL TO RECEIVE ONE COAT OF CISC/CPMA 1-73a QUICK DRYING SHOP PRIMER. STEEL RECEIVING FINISH PAINTING TO HAVE ONE COAT OF CISC/CPMA 2-75 QUICK DRYING SHOP PRIMER. STEEL TO BE CLEANED IN CONFORMANCE WITH SSPC-SP7.
9. ALL STRUCTURAL STEEL INDICATED AS GALVANIZED TO BE HOT DIP GALVANIZED IN ACCORDANCE WITH CAN/CSA-G164 "HOT DIP GALVANIZING OF IRREGULARLY SHAPED ARTICLES" WITH A MINIMUM GALVANIZED COATING OF 610 GRAMS PER SQUARE METRE OF SURFACE AREA. ALL FIELD WELDING TO BE TOUCHED UP WITH BRUSH APPLIED ZINC RICH PAINT CONTAINING MORE THAN 92% METALLIC ZINC BY WEIGHT.
10. FABRICATOR TO NOTIFY ENGINEER OF ANY PROPOSED MEMBER SUBSTITUTIONS AND CHANGED CONNECTION DETAILS.
11. THE STRUCTURAL STEEL SUPPLIER SHALL PROVIDE AND BE RESPONSIBLE FOR ALL HOLES IN STEEL SECTIONS REQUIRED BY OTHER TRADES. SECTION SHALL BE STRENGTHENED WHERE REQUIRED TO GUARANTEE THE ORIGINAL STRENGTH OF THE BEAM. ANY CUTTING OF STEEL AT THE JOB SITE SHALL BE DONE ONLY AS DIRECTED AND APPROVED BY THE ENGINEER.
12. STRUCTURAL STEEL WHICH SUPPORTS ARCHITECTURAL FINISHES MUST BE DESIGNED TO BE SUFFICIENTLY ADJUSTABLE TO MEET REQUIRED INSTALLATION TOLERANCES. SEE ARCHITECTURAL FOR REQUIRED FINISH TOLERANCES.

MASONRY

- 1. CONCRETE BLOCKS TO CONFORM TO CSA-A165.1-14 "CONCRETE BLOCK MASONRY UNITS".
A) STANDARD HOLLOW MASONRY UNITS SHALL BE H/15/A/M.
B) STANDARD SOLID MASONRY UNITS SHALL BE SF/15/A/M.
C) LIGHTWEIGHT HOLLOW MASONRY UNITS SHALL BE H/15/C/M.
D) LIGHTWEIGHT SOLID MASONRY UNITS SHALL BE SF/15/C/M. (COMPRESSIVE STRENGTH IS BASED ON NET AREA).
2. EXTERIOR AND LOAD BEARING WALLS TO BE BUILT WITH TYPE 'S' MORTAR HAVING A MINIMUM STRENGTH OF 12 MPa AT 28 DAYS. INTERIOR MASONRY NON-LOAD BEARING WALLS MAY BE BUILT WITH TYPE 'N' MORTAR HAVING A COMPRESSIVE STRENGTH OF 5 MPa AT 28 DAYS. MORTAR SHALL CONFORM TO CSA A179-14, "MORTAR AND GROUT FOR UNIT MASONRY".
3. USE DUR-O-WAL OR EQUAL EVERY SECOND COURSE UNLESS NOTED OTHERWISE. EVERY COURSE FOR STACK BOND.
4. TOP COURSE OF ALL BLOCK WALLS TO BE 'U' BLOCK WITH 2-10M CONTINUOUS CENTERED AND FILLED WITH 20 MPa CONCRETE UNLESS NOTED ON PLAN.
5. ALL MASONRY WALLS TO BE PROPERLY BRACED UNTIL STRUCTURE IS CLOSED IN AND WALL PERMANENTLY SUPPORTED.
6. MASONRY TIES AND ANCHORS SHALL BE DESIGNED IN CONFORMANCE WITH CSA-A370, "CONNECTORS FOR MASONRY". DESIGN WIND PRESSURE FOR TIES IN EXTERIOR WALLS SHALL BE 0.75 kPa.
7. LINTELS IN NON-LOAD BEARING BLOCK WALLS SHALL BE AS FOLLOWS UNLESS NOTED ON DRAWINGS:

UP TO 1200 mm 200 mm HIGH 'U' BLOCK 20 MPa CONCRETE FILL 2-10M BOTTOM
1200 mm TO 2400 mm 400 mm HIGH 'U' BLOCK 20 MPa CONCRETE FILL 2-15M BOTTOM

- 8. MASONRY TIES AND CONNECTORS TO BE STAINLESS STEEL.
9. VERTICAL WALL REINFORCING SHALL BE CENTERED WITHIN WALL, UNLESS OTHERWISE NOTED.
10. CONTRACTOR TO SUBMIT FOR REVIEW ALL CONTROL JOINT LOCATIONS IN BEARING WALLS. CONTROL JOINTS CANNOT BE LOCATED IN COLUMNS, AT EDGE OF OPENINGS OR WITHIN TWO FULL BLOCK CORES NEXT TO OPENINGS, AND BELOW JOIST/BEAM BEARING POINTS.

FILE NAME AND PATH: C:\Users\mshew@pwr.com\OneDrive - Crosier Kilgour & Partners Ltd. \P\LS\Drawings - General\08 Drawings\2025-04\33 LLOH-IFLS.dwg
LAYOUT: 1:001
LAST SAVED BY: mshew@pwr.com
DATE PLOTTED: September 5, 2025 9:10:11 AM



Table with 4 columns: ISSUE / REVISION, DESCRIPTION, BY, DDMMYY. Contains 2 revision entries.

ENGINEERS GEOSCIENTISTS MANITOBA Certificate of Authorization Crosier Kilgour & Partners Ltd. No. 235. Includes Engineer's Seal area.

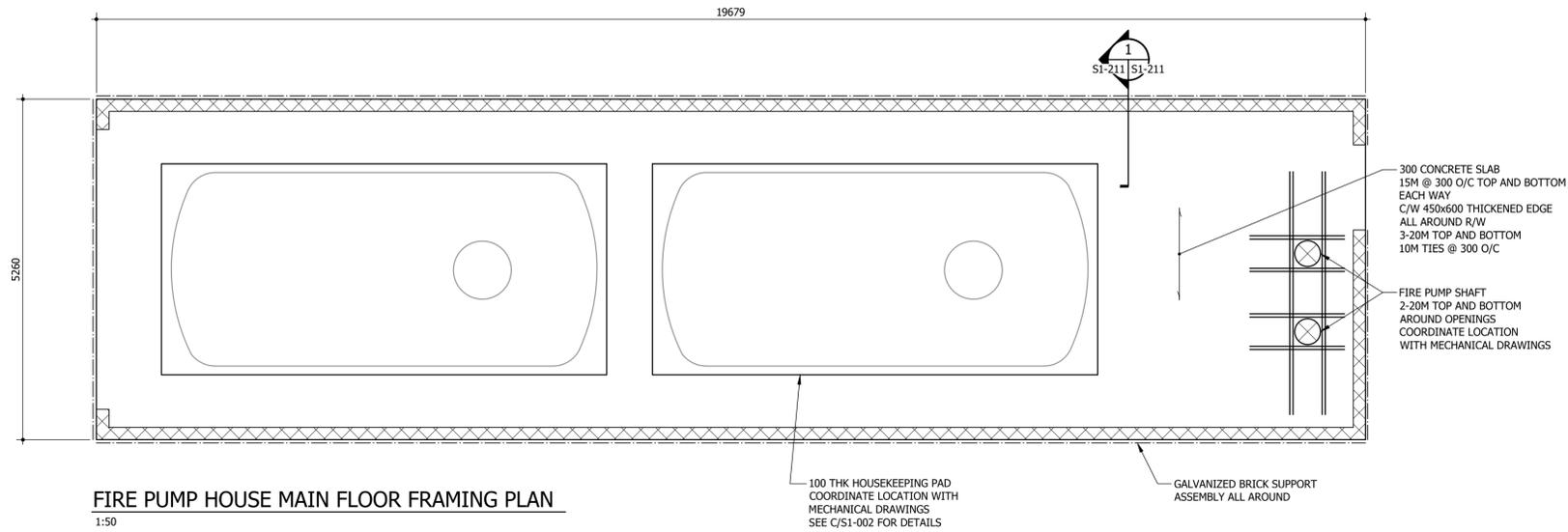
Project Title: PROVINCIAL FIRE AND LIFE SAFETY PROJECT - LYNN LAKE, GILLAM, AND THOMPSON SITES

LYNN LAKE HOSPITAL LYNN LAKE MANITOBA

Drawing Title: GENERAL NOTES

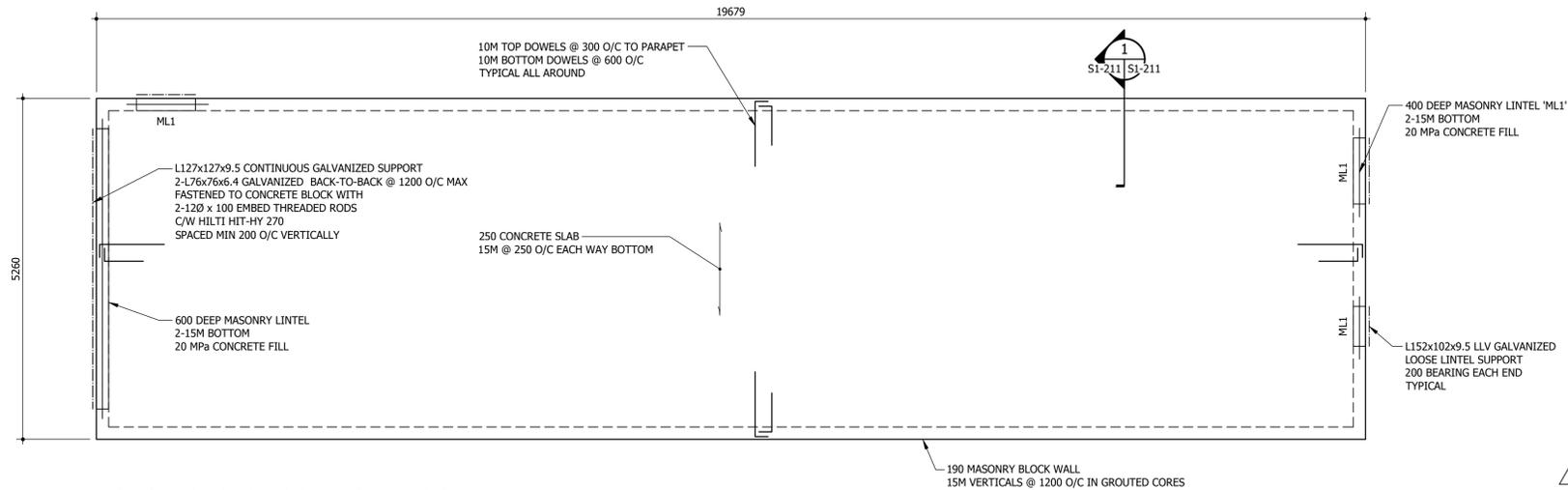
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Revision Number 0 Drawing Number S1-001



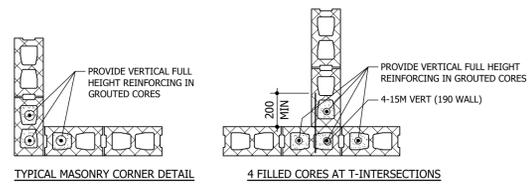
**FIRE PUMP HOUSE MAIN FLOOR FRAMING PLAN**

- 1:50
- CISTERN TOTAL LOAD = 460 kN EACH
- FLOOR NOTES:**
- CONFIRM ALL SLAB OPENING SIZES, LOCATIONS AND DIMENSIONS WITH MECHANICAL, ARCHITECTURAL AND CISTERN TANK MANUFACTURER
  - CONFIRM ALL EQUIPMENT SIZES AND WEIGHTS TO BE SUPPORTED OFF OF THE FLOOR SLAB
  - REFER TO MECHANICAL FOR EXACT SIZE AND LOCATIONS FOR HOUSEKEEPING PADS. REFER TO DETAIL C/S1-002 FOR HOUSEKEEPING PAD CONSTRUCTION DETAILS.



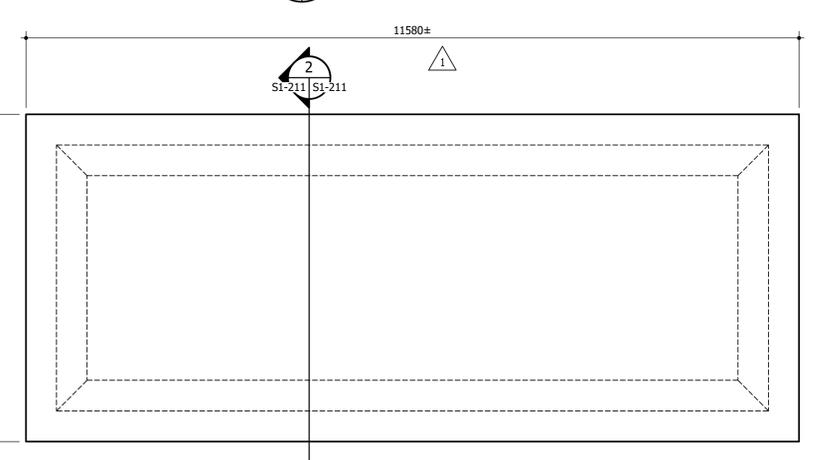
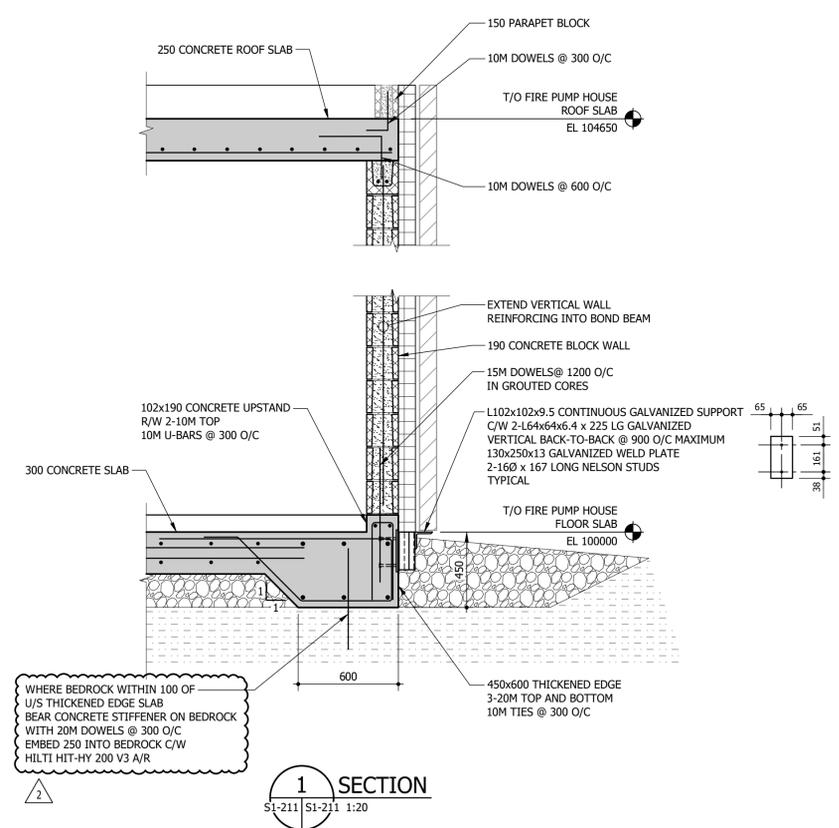
**FIRE PUMP HOUSE ROOF FRAMING PLAN**

- 1:50
- ROOF DESIGN LOADS:**
- SNOW LOAD = 2.12 kPa
  - DEAD LOAD = 6.00 kPa (CONCRETE SELF WEIGHT)
- ROOF NOTES:**
- CONFIRM ALL SLAB OPENING SIZES, LOCATIONS AND DIMENSIONS WITH MECHANICAL, ARCHITECTURAL, AND CISTERN TANK MANUFACTURER.
  - CONFIRM ALL EQUIPMENT SIZES AND WEIGHTS TO BE SUPPORTED FROM THE ROOF SLAB.



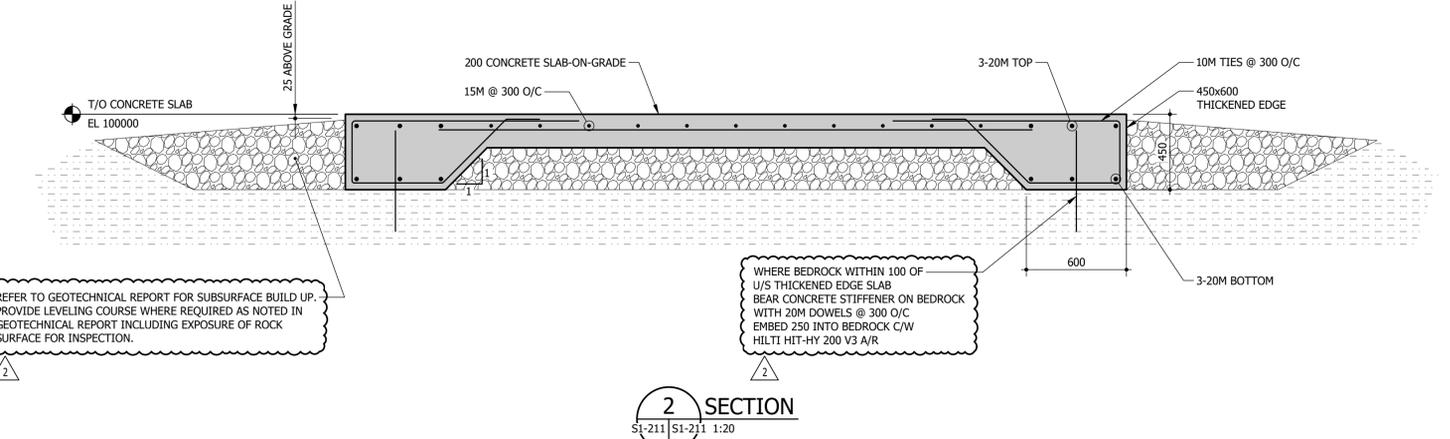
**A TYPICAL MASONRY DETAILS**

- 1:20
- NOTES:**
- PROVIDE 2-15M VERT FULL HEIGHT EACH SIDE OF OPENINGS AND WALL ENDS, IN GROUTED CORES (1-BAR PER CORE).
  - PROVIDE 3-15M VERTICALS FULL HEIGHT IN 3 FILLED CORES (1-15M PER CORE) AT ALL CORNERS.
  - PROVIDE 4-15M VERTICALS FULL HEIGHT IN 4 FILLED CORES (1-15M PER CORE) AT ALL T-INTERSECTIONS.
  - PROVIDE VERTICAL DOWELS FROM TOP OF CONCRETE WALL OR BEAM TO MATCH BLOCK WALL REINFORCING SIZE & SPACING. FOR UNREINFORCED BLOCK WALLS, PROVIDE 15M MINIMUM DOWELS AT 800 O/C. REINFORCING TO EXTEND MIN 600 INTO BLOCK WALL IN GROUTED CORES.
  - PROVIDE STANDARD DUR-O-WALL HORIZONTAL JOINT REINFORCING AT 400 O/C IN ALL BLOCK WALLS, U/N OTHERWISE.
  - ALL GROUT TO BE MIN 20 MPa CONCRETE.
  - PROVIDE 200 DEEP BOND BEAM R/W 2-10M CONT, 20 MPa CONC FILLED AT EACH FLOOR LEVEL.
  - ALL REINFORCING NOTED ABOVE TO HAVE FULL TENSION SPLICE LAPS.



**GENERATOR PAD PLAN**

- 1:50
- NOTES:**
- TOTAL LOAD = 260 kN
  - PAD DIMENSIONS TO BE CONFIRMED WITH CERTIFIED SHOP DRAWINGS. SEE SECTION FOR REINFORCING DETAILS.
  - IF REQUIRED, HOUSEKEEPING PAD IS TO BE EXTENDED MINIMUM 150 BEYOND THE BASE OF THE GENERATOR/FUEL TANK ALL AROUND.
  - SEE MECHANICAL / ARCHITECTURAL FOR EXACT LOCATION.
  - CONFIRM ELEVATION OF TOP OF SLAB ABOVE GRADE WITH MECHANICAL. CONTRACTOR TO PROVIDE SLOPE / CROWN ON TOP OF SLAB TO ENSURE DRAINAGE OFF OF CONCRETE SURFACE



REFER TO GEOTECHNICAL REPORT FOR SUBSURFACE BUILD UP. PROVIDE LEVELING COURSE WHERE REQUIRED AS NOTED IN GEOTECHNICAL REPORT INCLUDING EXPOSURE OF ROCK SURFACE FOR INSPECTION.

WHERE BEDROCK WITHIN 100 OF U/S THICKENED EDGE SLAB BEAR CONCRETE STIFFENER ON BEDROCK WITH 20M DOWELS @ 300 O/C EMBED 250 INTO BEDROCK C/W HILTI HIT-HY 200 V3 A/R

ISSUE / REVISION	DESCRIPTION	BY	DDMMYY
2	ISSUED FOR ADDENDUM 02	RDM	11/12/25
1	ISSUED FOR ADDENDUM 01	RDM	11/07/25
0	ISSUED FOR CONSTRUCTION	RDM	10/09/25

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 No. 235

DRAWING SEALED BY  
 R.D. MORPHY  
 AND DATED  
 2025-10-09

Certificate of Authorization  
 Engineer's Seal

Project Title  
**PROVINCIAL FIRE AND LIFE SAFETY PROJECT - LYNN LAKE, GILLAM, AND THOMPSON SITES**

Drawing Title  
**FIRE PUMP HOUSE FRAMING PLANS, GENERATOR PAD, SECTIONS AND DETAILS**

Drawn By	Checked By	Approved By
MPP	RN	RDM
Scale	Date	Project No.
AS NOTED	OCTOBER 2025	25-001-17

Revision Number  
**0**

Drawing Number  
**S1-211**

Sheet Order  
 05 OF 05

FILE NAME AND PATH: C:\Users\morphe\OneDrive - Crosier Kilgour & Partners Ltd. - OneDrive\Projects\2025-0433 - Lynn Lake Hospital - PLS Renovations - Generator\08 Drawings\0205-0433\_LL01-PLS.dwg  
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 LAST SAVED BY: morphe  
 DATE PLOTTED: September 5, 2025 9:10:01 AM

**Part 1 General**

**1.1 GENERAL**

- .1 All drawings and all sections of the specifications shall apply to and form an integral part of this section.

**1.2 RELATED WORK SPECIFIED ELSEWHERE**

- .1 Section 21 05 01 – Common Work Results for Mechanical  
.2 Section 23 07 13 – Duct Insulation  
.3 Section 23 80 10 – Air Distribution

**Part 2 Products**

**2.1 DUCT LINER**

- .1 General:
- .1 Fabrication to NAIMA or SMACNA standards.
  - .2 Manufacturer's product identification to appear on airstream surface. Marking to indicate compliance with NFPA 90A and 90B.
  - .3 Maximum operating temperature to ASTM C411: 121 degC (250 degF).
  - .4 Duct liner adhesive to conform to ASTM C916.
  - .5 Finished duct system (including all adhesives, fasteners, and joining tapes) to NFPA 90A and NFPA 90B:
    - .1 Flame and smoke spread ratings: tested in accordance with ASTM E84 and CAN/ULC S102.
      - .1 Flame spread index not to exceed 25.
      - .2 Smoke developed index not to exceed 50.
    - .2 Fungi resistance: zero growth when tested to ASTM C1338 and ASTM G21.
    - .3 Bacteria resistance: zero growth when tested to ASTM G22.
  - .6 Finished duct liner system to meet the Greenguard Environmental Institute's indoor air quality standards and product emissions standards for VOC's.
- .2 Closed Cell Duct Liner
- .1 Material:
    - .1 Flexible, fibre free, closed cell elastomeric foam to provide smooth airstream surface.
    - .2 Duct liner products to ASTM C1534.
  - .2 Provide compression joints at all butt joints.
  - .3 Maximum air velocity: 20.3 m/sec (4,000 fpm)
  - .4 Thermal Resistance (minimum, tested to ASTM C177 at 24 degC mean temperature):
    - .1 25mm (1"): 0.74 (m<sup>2</sup>. degC)/W [4.2 hr.ft<sup>2</sup>. degF)/Btu]
    - .2 50mm (2"): 1.41 (m<sup>2</sup>. degC)/W [8.0 hr.ft<sup>2</sup>. degF)/Btu]

- .5 NRC at 25mm (1") thickness (minimum, based on type "A" mounting):0.55
  - .1 Where 50mm (2") thickness is required (minimum, based on type "A" mounting): 0.40
- .6 Acceptable Manufacturers, 25mm (1"): K-Flex, Armacell (AP Coilflex)
- .7 Acceptable Manufacturers, 50mm (2"): K-Flex, Armacell (AP Armaflex FS)

## 2.2 FASTENERS

- .1 Weld pins 2.0 mm (1/16") diameter, length to suit thickness of insulation. Metal retaining clips, 32mm (1¼") square.

## Part 3 Execution

### 3.1 DUCT LINER

- .1 Install in accordance with SMACNA or NAIMA standards and manufacturer's installation instructions.
  - .1 Fasten to interior sheet metal surface with 90% coverage of adhesive to ASTM C916.
  - .2 In addition to adhesive, for rectangular ducts install weld pins not less than 2 rows per surface and not more than 400mm (16") on centres to compress duct liner sufficiently to hold it firmly in place.
  - .3 Projecting fasteners and ends cut off vertically flush.
  - .4 Field or shop fabrication cuts to be coated with adhesive or manufacturer recommended edge treatment on all exposed leading edges and transverse joints.
  - .5 In systems, where air velocities exceed 20.3 m/s (4,000 fpm), install galvanized sheet metal nosing fastened to duct to leading edges of duct liner.
- .2 Dimensions shown on plans are finished inside dimensions. Where lining is required, actual duct dimensions to be increased to allow for thickness of internal insulation.
- .3 Provide 1.6mm U.S.S. prime quality galvanized iron covering on floor of ducts and plenums over insulation to allow servicing of equipment; e.g. where ductwork houses motorized dampers, controls, filters and like.
- .4 Replace damaged areas of liner at discretion of Consultant.
- .5 Location of duct liner:
  - .1 25mm (1") duct liner to be used in the following locations:
    - .1 Return air transfer elbows.
    - .2 Rectangular and round (150mm [6"] and larger) low pressure ducts where indicated to be acoustically lined on the drawings.

### 3.2 JOINTS

- .1 Seal butt joints, exposed edges, weld pin and clip penetrations and damaged areas of liner with joint tape and sealer. Install joint tape in accordance with manufacturer's written recommendations, and as follows:
  - .1 Bed tape in sealer.
  - .2 Apply 2 coats of sealer over tape.

**END OF SECTION**



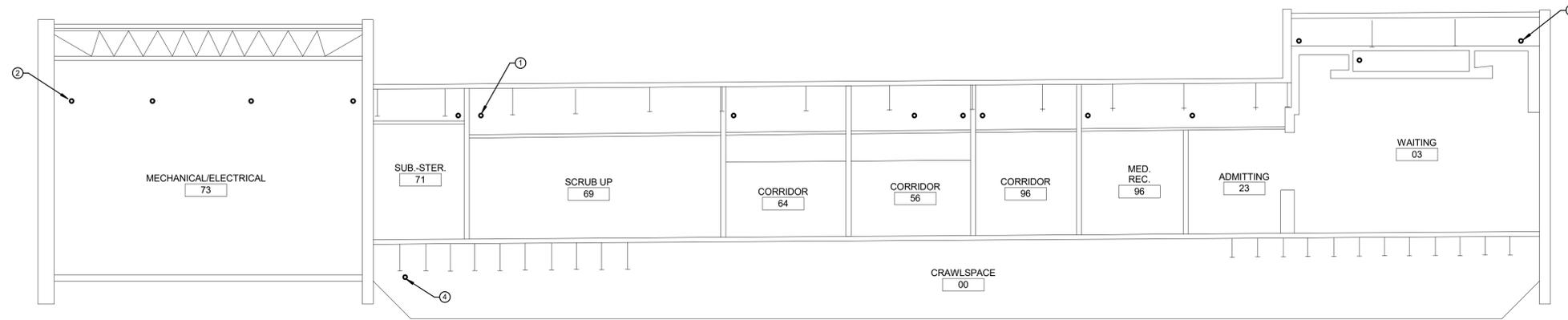
Consultant

**GENERAL NOTES**

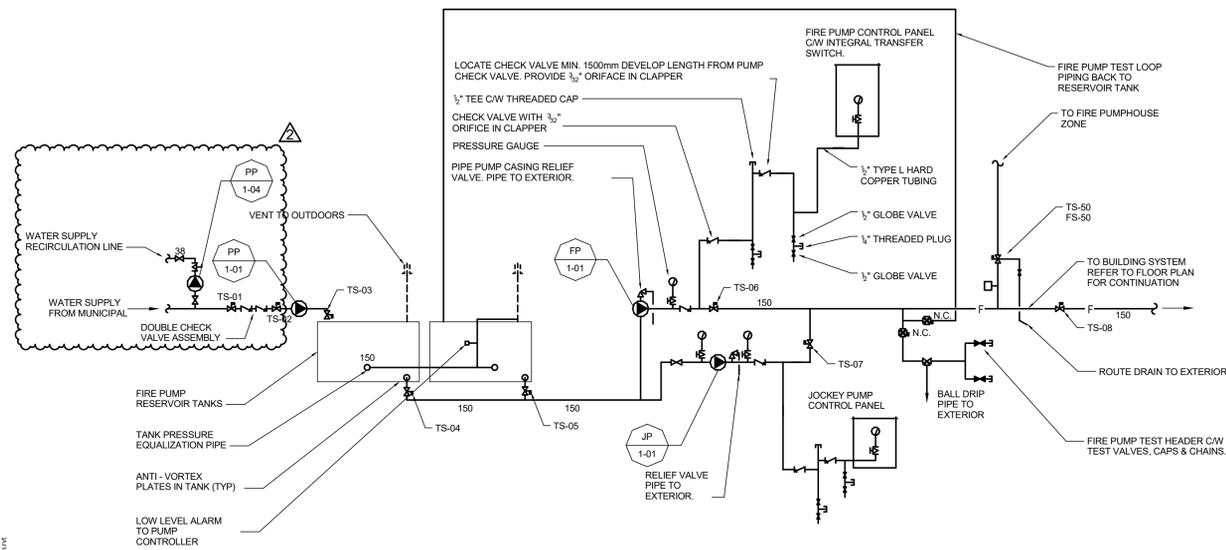
- A. CONFIRM ALL INFORMATION AND DIMENSIONS ON SITE PRIOR TO CONSTRUCTION. RESOLVE ALL DISCREPANCIES BEFORE PERFORMING THE INSTALLATION.
- B. WHERE DISCREPANCIES APPEAR BETWEEN THE DRAWINGS AND SITE CONDITIONS, NOTIFY THE CONSULTANT PRIOR TO PERFORMING ANY WORK. WHERE MODIFICATIONS ARE REASONABLY INCIDENTAL, PERFORM WORK AT NO ADDITIONAL COST TO THE OWNER.
- C. NOTIFY FACILITY MANAGER OF ANY SERVICE INTERRUPTIONS AND COORDINATE WITH THE FACILITY TO CAUSE THE LEAST IMPACT TO BUILDING OPERATION.
- D. PROVIDE SPRINKLER SYSTEM IN ACCORDANCE WITH MANITOBA BUILDING CODE, MANITOBA FIRE CODE, LOCAL BUILDING BY-LAWS, NFPA 13 AND REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
- E. ALL SPRINKLER SPACING AND DISTANCE AGAINST OBSTRUCTIONS TO CONFORM TO NFPA 13.
- F. REFER TO SPECIFICATION FOR PIPING MATERIALS AND FITTINGS.

**KEY NOTES**

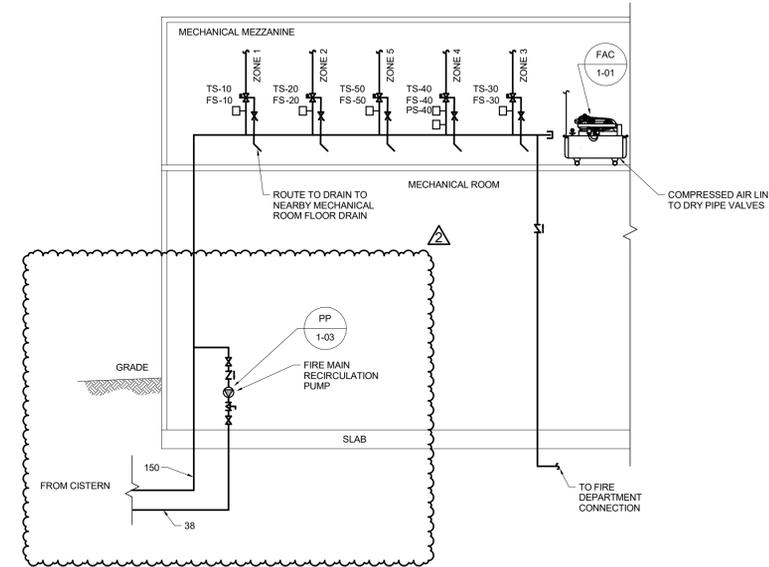
- 1. SPRINKLER PIPING LOCATED WITHIN CEILING SPACE ABOVE ACT OR GWB CEILING. TYPICAL.
- 2. SPRINKLER PIPING ROUTED AT HIGH LEVEL WITHIN MECHANICAL/ELECTRICAL ROOM.
- 3. SPRINKLER PIPING ROUTED ABOVE ARCHITECTURAL FEATURE CEILING IN WAITING ROOM.
- 4. SPRINKLER PIPING ROUTED THROUGH CRAWLSPACE.



**1 BUILDING SECTION**  
 M1-223 SCALE: 1: 25



**3 FIRE PUMP SYSTEM SCHEMATIC**  
 M1-223 SCALE: 1: 100



**2 FIRE PROTECTION SCHEMATIC**  
 M1-223 SCALE: 1: 100

ISSUE / REVISION	DESCRIPTION	BY	DDMMYY
2	ISSUED FOR ADDENDUM 4	MAB	2025-11-18
1	ISSUED FOR ADDENDUM 2	MAB	2025-11-06
0	ISSUED FOR CONSTRUCTION	MAB	2025-10-09

**ENGINEERS  
 GEOSCIENTISTS  
 MANITOBA**  
 Certificate of Authorization  
 SMS Engineering Ltd.  
 No. 166

ORIGINAL  
 CONTRACT DRAWING  
 SIGNED AND SEALED BY  
 J.R. BULL, P. ENG  
 OCTOBER 8, 2025

Project Title  
**PROVINCIAL FIRE AND LIFE  
 SAFETY PROJECT - LYNN  
 LAKE, GILLAM, AND  
 THOMPSON SITES**

**LYNN LAKE HOSPITAL**  
 64 CAMP STREET, LYNN LAKE, MB R0B 0W0

Drawing Title  
**SECTION & SCHEMATICS -  
 FIRE PROTECTION - NEW  
 CONSTRUCTION**

Drawn By	Checked By	Approved By
RP	MAB	JRB
Scale	Start Date	Project No.
AS SHOWN	MAY 2025	23-001-22

Revision Number	Drawing Number
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Consultant

0	ISSUED FOR ADDENDUM 4	MAB	2025-11-17
ISSUE / REVISION	DESCRIPTION	BY	DDMMYY

**ENGINEERS GEOSCIENTISTS MANITOBA**  
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 SMS Engineering Ltd.  
 No. 166



Project Title  
**PROVINCIAL FIRE AND LIFE SAFETY PROJECT - LYNN LAKE, GILLAM, AND THOMPSON SITES**

**LYNN LAKE HOSPITAL**  
 64 CAMP STREET, LYNN LAKE, MB R0B 0W0

Drawing Title  
**MAIN FLOOR PLAN - MECHANICAL - NEW CONSTRUCTION**

Drawn By Author	Checked By Checker	Approved By Approver
Scale AS SHOWN	Start Date	Project No. 23-001-22

Revision Number Drawing Number

**M1-321**



**GENERAL NOTES**

- A. CONFIRM ALL INFORMATION AND DIMENSIONS ON SITE PRIOR TO CONSTRUCTION. RESOLVE ALL DISCREPANCIES BEFORE PERFORMING THE INSTALLATION.
- B. WHERE DISCREPANCIES APPEAR BETWEEN THE DRAWING AND SITE CONDITIONS, NOTIFY THE CONSULTANT PRIOR TO PERFORMING ANY WORK. WHERE MODIFICATIONS ARE REASONABLY INCIDENTAL, PERFORM WORK AT NO ADDITIONAL COST TO THE OWNER.
- C. NOTIFY FACILITY MANAGER OF ANY SERVICE INTERRUPTIONS AND COORDINATE WITH THE FACILITY TO CAUSE THE LEAST IMPACT TO BUILDING OPERATION.
- D. DRAWINGS ARE DIAGRAMMATIC; DO NOT SCALE.
- E. REMOVE ANY ABANDONED DUCTWORK, PIPING, OR DEBRIS IN AREA OF WORK.

**KEY NOTES**

- 1. PROVIDE ACOUSTICALLY LINED TRANSFER ELBOW IN CEILING SPACE. TYPICAL.
- 2. PROVIDE NEW FIRE SMOKE DAMPER IN TRANSFER DUCTWORK. COORDINATE SMOKE DETECTOR REQUIREMENTS WITH ELECTRICAL.

**1 MAIN FLOOR PLAN - MECHANICAL - NEW CONSTRUCTION**  
 M1-321 SCALE: 1:100

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