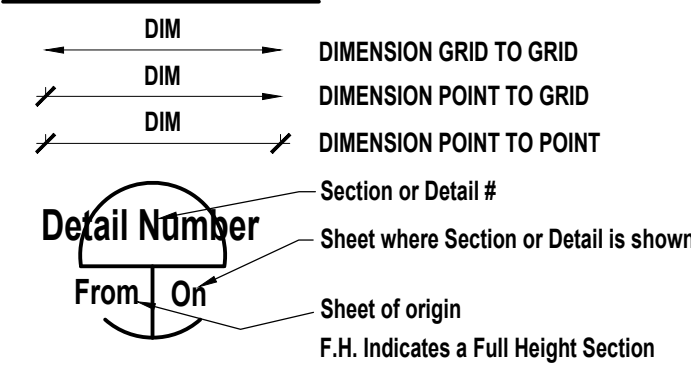


GENERAL NOTES

- DO NOT SCALE DRAWINGS.
- Design live loads shall not be exceeded at any time during construction. For concrete structures, design live loads may only be applied after concrete reaches its design strength.
- Construction loads must not be imposed on structure in excess of specified design live load. Design live loads may only be applied after concrete reached its design strength. The contractor is to verify dimensions, elevations, slopes, details, conditions and other data noted on the structural drawings with conditions on the site, co-ordinate all dimensions with the architectural drawings prior to construction or fabrication of any building component, and is held responsible for reporting any discrepancies that effect structural framing to the engineer before proceeding with the work. Variations and modifications to work shown on the structural drawings shall not be carried out without written permission from the engineer.
- Modifications, alterations or substitutions must be authorized in writing by the Design Engineer.
- The General Contractor shall locate all existing site services prior to construction.
- For openings in slabs, floor, walls, roof, etc. refer to architectural, mechanical, structural and or other pertinent drawings.
- Location of construction joints not indicated on plans is the responsibility of the general contractor but approval must be obtained from the Design Engineer before proceeding.
- The contractor shall be responsible for the design and installation of all necessary shoring, bracing and form work. Form work for new construction shall be bridged over existing services.
- The structure and grade beams shall be braced in all directions to safely withstand all lateral forces which may be encountered during erection. The bracing shall remain in place until all permanent bracing, framing, cladding and backfill are in place.
- All codes referenced in these notes shall be of the latest applicable revision.
- All beams, angles and miscellaneous metals indicated on architectural drawings but not shown on structural drawings, shall be included in the tender price. The contractor is responsible for confirming sizes and locations of these members with both the architect and the engineer prior to tender closing.
- Do not cut or drill any openings into structural members without obtaining written permission from the structural consultant.
- The Contractor shall retain a manufacturer's representative to provide onsite anchor installation training for all of their products specified. The structural engineer of record must receive documented confirmation that the contractors personnel are trained prior to the commencement of installing anchors.

DIMENSIONS & SYMBOLS



DESIGN SPECIFICATIONS

- The building is designed in accordance with the 2011 edition of the Manitoba Building Code,
 - Snow (Roof) 0.8(Ss) + (Sr) = 1.72 kPa (35.9 psf)
 - Wind q(1/50) - 0.45 kPa (9.4 psf)

STRUCTURAL STEEL

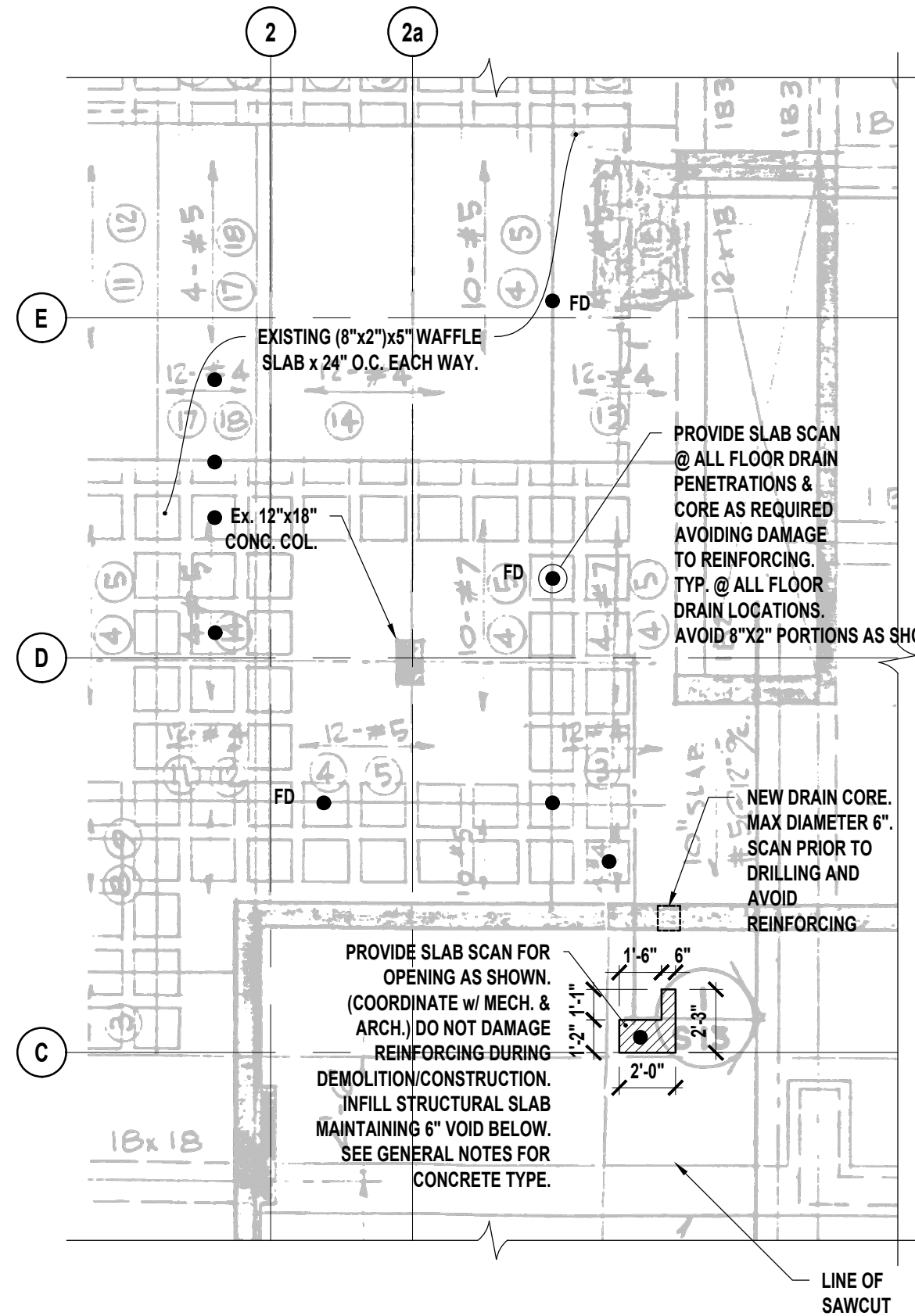
- Fabricate & erect structural steel to CSA Standard CAN/CSA-S16-09
- Structural steel shapes and plates shall conform to CSA Standard CAN/CSA-G40-21, Grade 350W and CAN/CSA-G40.21, Grade 350W for H.S.S., Class C.
- All welding shall be performed by qualified welders fully approved for structural welding by the Canadian Welding Bureau in accordance with CSA Specifications W47 and W59. Unless shown otherwise on the Drawings, connect all flexural members (beams, channels, etc...) at each end for one half of the total uniformly distributed factored load of the laterally supported beam, in addition to the transfer of factored moments, where shown on the Drawings.
- Splicing of members not permitted unless otherwise noted.
- Where beams are continuous over supports, no holes permitted in top flange. Provide 2-3/8" (10mm) welded web stiffener plates each side of beam, aligned with column walls. Column base and cap plates shall be welded to columns. Provide 3/4" (20mm) thick cap plate c/w 4-3/4"Ø (20mm) bolts for all columns supporting cantilevered beams.
- Structural steel erector shall supply and install all temporary guying and bracing necessary to provide stability for the structure as a whole. These shall remain in place until floor slabs are well cured, steel roof deck is fully welded and/or permanent bracing is installed.
- Steel stairs, handrails, guardrails shall be designed by others. Fabricator shall submit shop drawings under the seal of a Professional Engineer registered in the project Province, to the Architect for approval prior to fabrication.
- Structural Steel supplier shall submit shop drawings bearing the seal of a Professional Engineer in the project Province showing all design and fabrication details of connections to the Architect for review prior to fabrication.
- Pipe sections to ASTM A53, minimum yield point 241 MPa (35 ksi).
- Bolts, nuts, and washers to ASTM A325, minimum bolt diameter 3/4" (20mm).
- Anchor bolts to ASTM A307.
- Welding of reinforcing bars to CSA W186-M1990.
- Primer to conform to the requirements of CGSB or CISC/CPMA standards.
- Grout bed under base plates to be 38 MPa non shrink grout.
- All bolted connections shall have a minimum of two bolts in each connected piece and be designed with bearing-type connections with threads included in shear plane, unless noted otherwise.
- Unless noted otherwise on plans provide 3x3x3/8" (75x75x10) angle frame from joist to joist on each side of all steel deck openings over 16" (40mm), and C8x11.5 (C200x17) frame at all mechanical and electrical units that sit on or hang from the roof or floors.
- Provide 6"x5"x1/2" (150x150x13) clip angles x 12" (300mm) long at hollow core column openings. Co-ordinate with hollow contractor to ensure adequate bearing.
- All steel shall receive a shop coat of primer except surfaces to be concreted, welded, light zinc coated or galvanized.
- Clean all field welds after erection and touch up all unpainted surfaces with one coat of primer paint to match shop coat.
- There shall be no cutting of the structural steel members for the work of other trades without prior written approval of the structural consultant.
- Professional Engineer whose seal is on shop drawings shall review construction and provide a letter certifying that connections have been installed in accordance with the approved shop drawings.
- All exposed steel to be galvanized.

CONCRETE

- Concrete, as specified in A23.1-09, shall have the following properties.

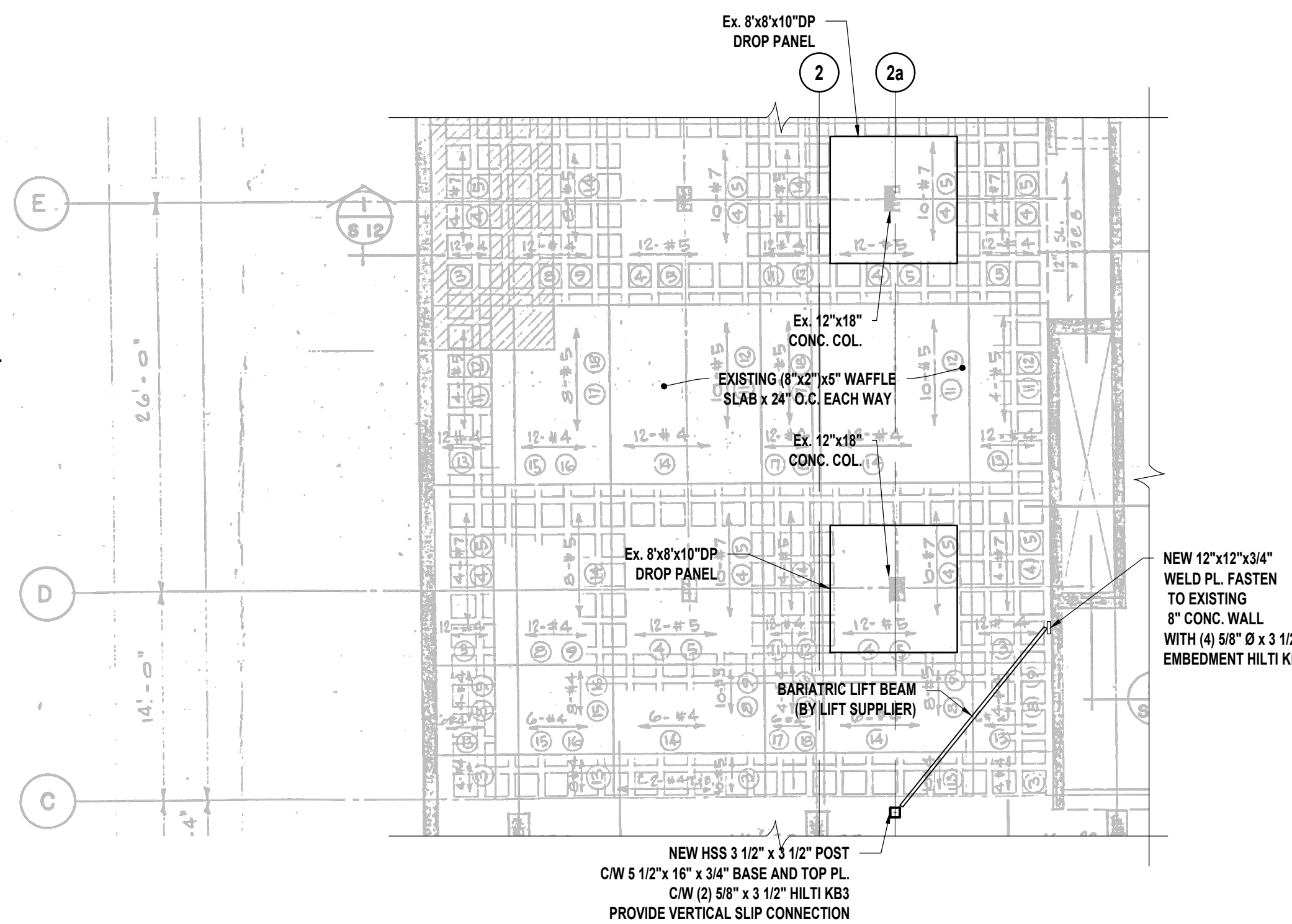
CONCRETE STRENGTH AND MIX SPECIFICATIONS							
USE	EXPOSURE CLASS	CEMENT TYPE	MINIMUM COMPRESSIVE STRENGTH	MAXIMUM WATER TO CEMENT RATIO	AIR CONTENT (%)	SLUMP	MAXIMUM AGGREGATE SIZE
SLABS (STRUCTURAL OR ON GRADE) & TOPPING ON STEEL DECK	N	GU	25 MPa AT 28 DAYS	0.55	NONE	90 mm	20 mm

- Construction joints shall be made and located so as not to significantly impair the strength of the structure. The location of construction joints shall be approved by the Structural Consultant. Slab and beam construction joint details shall be approved by the Design Engineer.
- Provide 6" (150mm) plastic wrapped cardboard void form below all beams, walls and pile caps.
- Place concrete as a continuous operation stopping only at construction joints. Construction joints shall be adequately dowelled and keyed. If not provided as part of this drawing set, details and locations of construction joints shall be provided by the contractor and reviewed by the structural consultant.
- Reinforcing steel must be reviewed by the structural consultant prior to placing concrete.
- The general contractor shall notify the Design Engineer at least 48 hours (72 hours for out-of-town projects) prior to all concrete pours.
- Fins on concrete surfaces shall be removed. Honeycombed or otherwise defected concrete shall be removed sufficiently to expose sound concrete and shall be repaired as directed by the structural consultant.
- Timing for removal of form work to be based on strength of concrete, as determined by the testing of field cured concrete cylinders. Do not remove form work from footings before concrete has reached 50% of its design strength. For walls and columns not supporting load, remove at 60% of design strength. For suspended structural slabs, form work may be removed at 80% of design strength, provided the slab is re-shored until full strength is reached.
- Unless noted otherwise, contractor to test concrete for each day's concreting and/or every 40 cubic meters each day concreting. Forward test results to the structural consultant.
- All freshly placed and consolidated concrete shall be cured in accordance with CSA standard A23.1, latest edition.
- All freshly placed, consolidated concrete shall be suitably protected during the curing period against damage from adverse weather conditions such as winds, precipitation and extreme temperatures in accordance with CSA standard A23.1, latest edition.



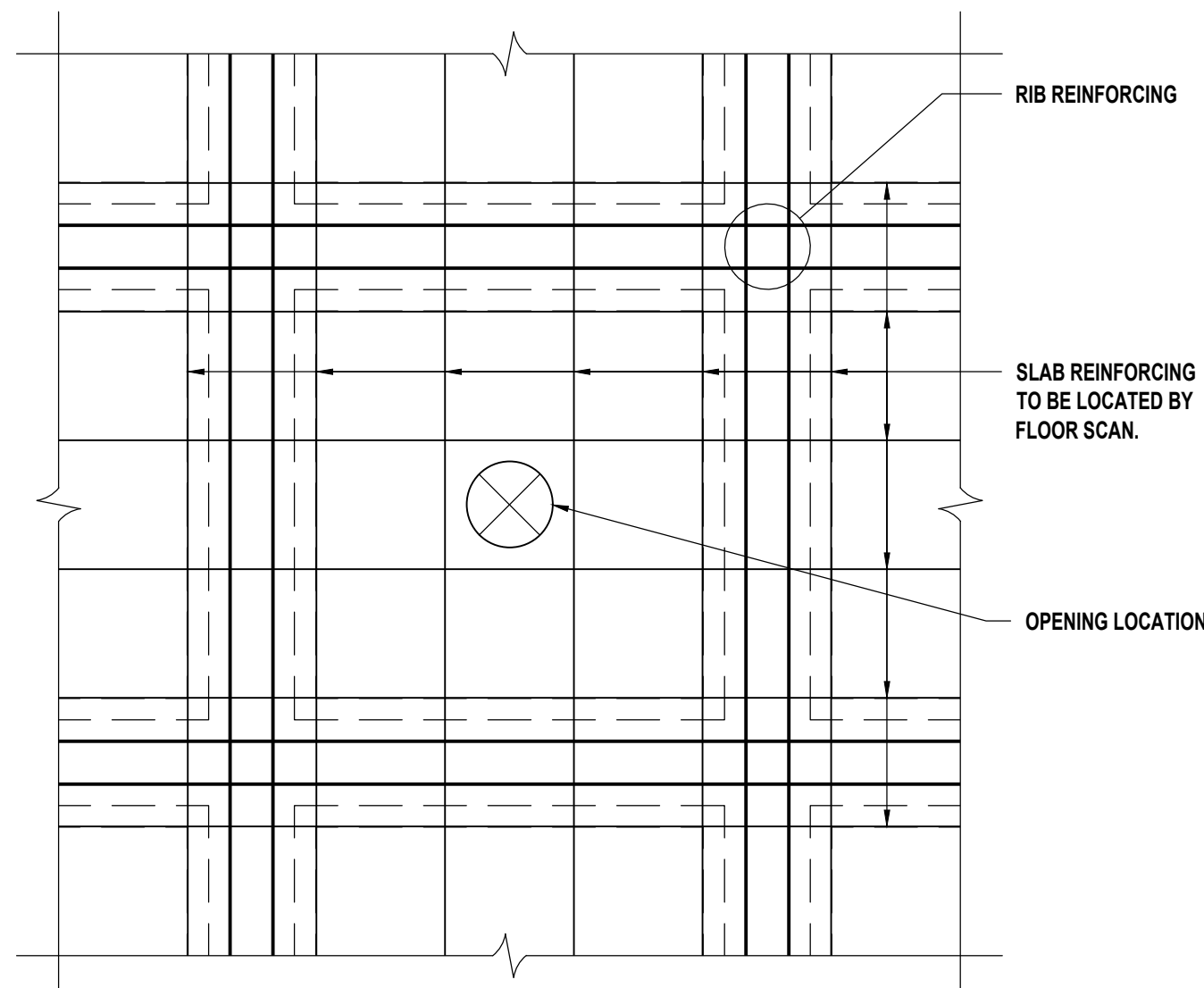
PARTIAL MAIN FLOOR FRAMING PLAN

N.T.S.
 NOTE:
 - EXACT LOCATION OF FLOOR DRAINS & OPENINGS TO BE COORDINATED WITH ARCHITECTURAL & MECHANICAL.
 - ALL ABANDON FLOOR PENETRATIONS TO BE FORMED AND INFILLED WITH CONCRETE. SITE VERIFY LOCATIONS AND NUMBER WITH ARCHITECTURAL.



PARTIAL CONCOURSE LEVEL FRAMING PLAN

N.T.S.
 NOTE:
 - GENERAL CONTRACTOR TO COORDINATE RELOCATION OF ELECTRICAL/MECHANICAL TO MAKE WAY FOR NEW LIFT SUPPORT.



TYPICAL FLOOR DRAIN PENETRATION DETAIL

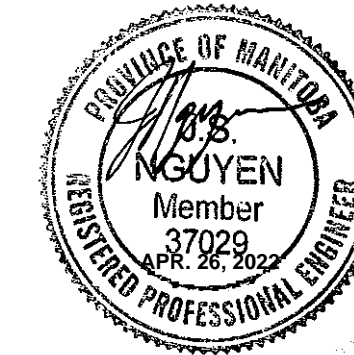
SCALE 1 1/2"=1'-0"
 NOTE:
 - GENERAL CONTRACTOR TO HAVE REINFORCING SCANNED PRIOR TO CORING, TO AVOID REINFORCING
 - FLOOR DRAIN TO BE KEPT AWAY FROM RIBS. TYPICAL.

THE CONTRACTOR IS TO VERIFY DIMENSIONS AND DATA NOTED ON THE STRUCTURAL DRAWINGS WITH CONDITIONS ON THE SITE. CO-ORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS, AND IS HELD RESPONSIBLE FOR REPORTING ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THE STRUCTURAL DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ENGINEER. THIS DRAWING IS NOT TO BE SCALED. ALL BEAMS, ANGLES AND MISCELLANEOUS METALS INDICATED ON ARCHITECTURAL, MECHANICAL AND/OR ELECTRICAL DRAWINGS BUT NOT SHOWN OR NOTED ON STRUCTURAL DRAWINGS, SHALL BE INCLUDED IN THE TENDER PRICE. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING SIZES AND LOCATIONS OF THESE MEMBERS WITH BOTH THE ARCHITECT AND THE ENGINEER PRIOR TO TENDER CLOSING.

0 04/26/2022 ISSUED FOR CONSTRUCTION

No. DATE REVISION / ISSUANCE

Seal



Architect



Engineer



DRAWN BY: NR REVIEWED BY: JN

Project: BID OPPORTUNITY: 878 2021

PAN AM POOL
 UNIVERSAL CHANGE ROOM
 25 POSEIDON BAY

Sheet Title

GENERAL NOTES, PARTIAL FLOOR PLANS, AND SECTION

Project No. 15504

Date: APR. 26, 2022

S1.1