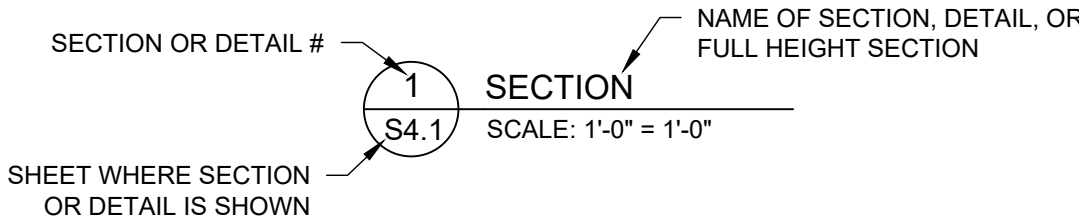


DRAWING LIST
S1.1 GENERAL NOTES / SCHEDULES / DETAILS
S2.1 EXISTING FOUNDATION / MAIN FLOOR / ROOF FRAMING PLANS
S2.2 FOUNDATION / MAIN FLOOR / ROOF FRAMING PLANS
S3.1 FULL HEIGHT SECTIONS
S3.2 FULL HEIGHT SECTIONS

SECTION SYMBOL



GENERAL NOTES

- STRUCTURAL DESIGN BASED ON THE 2024 MANITOBA BUILDING CODE.
 - IMPORTANCE CATEGORY: NORMAL
 - WIND LOAD: $q_{50} = 0.45 \text{ kPa}$
 - GROUND SNOW LOAD: $S_g = 1.89 \text{ kPa}$
 - ASSOCIATED RAIN LOAD: $S_r = 0.20 \text{ kPa}$
- SEISMIC SITE CLASSIFICATION: C
- DO NOT SCALE DRAWINGS.
- ALL DIMENSIONS, SLOPES, AND DETAILS NOTED ON THE STRUCTURAL DRAWINGS ARE TO BE VERIFIED WITH THE ARCHITECTURAL DRAWINGS AND EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCY.
- THESE STRUCTURAL DRAWINGS SHOW THE COMPLETED STRUCTURE AND DO NOT INDICATE ALL COMPONENTS NECESSARY FOR SAFETY DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON AND AROUND THE JOBSITE DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION, MAINTENANCE AND SAFETY OF ALL NECESSARY SHORING, BRACING, FORMWORK, AND SCAFFOLDING REQUIRED FOR THIS PROJECT.
- THE EXISTING BUILDING SUPERSTRUCTURE AND FOUNDATION HAVE BEEN REVIEWED AND CAN SUPPORT ALL NEW LOADINGS CONDITIONS SHOWN ON THESE DRAWINGS IN ACCORDANCE WITH PART 4 OF THE 2024 MANITOBA BUILDING CODE, UNLESS NOTED.
- ALL RELEVANT CSA CODES, PROVINCIAL BUILDING CODE, WORKMAN'S COMPENSATION BOARD, WORKPLACE HEALTH & SAFETY BOARD, AND LOCAL BY-LAWS SHALL APPLY TO ALL WORK ON THIS PROJECT.
- DESIGN LIVE LOADS SHOULD NOT BE EXCEEDED AT ANY TIME DURING CONSTRUCTION. FOR CONCRETE STRUCTURES, DESIGN LIVE LOADS MAY ONLY BE APPLIED AFTER CONCRETE REACHES ITS DESIGN STRENGTH.
- MODIFICATIONS, ALTERATIONS OR SUBSTITUTIONS MUST BE AUTHORIZED IN WRITING BY THE ENGINEER. FOR OPENINGS IN SLABS, FLOORS, WALLS, ROOFS, ETC. REFER TO ARCHITECTURAL, MECHANICAL, STRUCTURAL AND OR OTHER PERTINENT DRAWINGS. DO NOT CUT OR DRILL ANY OPENINGS INTO STRUCTURAL MEMBERS WITHOUT OBTAINING WRITTEN PERMISSION FROM THE ENGINEER.
- THE CONTRACTOR SHALL LOCATE ALL EXISTING SITE SERVICES PRIOR TO CONSTRUCTION.
- 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.
- THE CONTRACTOR SHALL VERIFY AND PAY SPECIAL ATTENTION TO THE VERTICAL ALIGNMENT AND CONCRETE TOLERANCES OF FLOOR ELEVATIONS.
- THE CONTRACTOR SHALL ENSURE ALL MATERIALS AND PRE-ENGINEERED COMPONENTS ARE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS.
- 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.

CAST-IN-PLACE CONCRETE

A. CONCRETE

- ALL CONCRETE WORK INCLUDING CURING SHALL BE PERFORMED IN ACCORDANCE WITH CSA-A23.1, CSA-A23.2, AND CSA-A23.3 (LATEST EDITIONS) INCLUDING COLD WEATHER PROTECTION REQUIREMENTS WHEN THE AMBIENT AIR TEMPERATURE FALLS BELOW 5 DEGREES CELSIUS, HOT WEATHER PROTECTION REQUIREMENTS WHEN AMBIENT AIR TEMPERATURE RISES ABOVE 27 DEGREES CELSIUS AND ADVERSE WEATHER CONDITIONS INCLUDING WINDS AND PRECIPITATION, MECHANICALLY VIBRATE ALL CONCRETE. UPON REQUEST, PROVIDE COLD AND/OR HOT WEATHER CONCRETING PROCEDURES TO ENGINEER FOR REVIEW PRIOR TO COMMENCING CONSTRUCTION.
- 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.
- UPON REQUEST, 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.
- THE CONTRACTOR SHALL FORWARD A COMPLETE POUR SCHEDULE TO THE ENGINEER IDENTIFYING ALL CONSTRUCTION JOINT LOCATIONS, ETC. PRIOR TO COMMENCEMENT OF CONSTRUCTION AND DETAILING AND SUBMITTING REBAR SHOP DRAWINGS. CONSTRUCTION JOINTS FOR SLABS AND BEAMS SHALL BE LOCATED SO AS NOT TO SIGNIFICANTLY IMPAIR THE STRENGTH OF THE STRUCTURE. THE LOCATION OF CONSTRUCTION JOINTS SHALL BE APPROVED BY THE STRUCTURAL CONSULTANT.
- THE USE OF CALCIUM CHLORIDE IS NOT PERMITTED ON THIS PROJECT. PRIOR TO THE USAGE OF ANY ADMIXTURES TO THE CONCRETE IT SHALL BE APPROVED IN WRITING BY THE ENGINEER.
- SAWCUTS ARE TO BE PROVIDED IN SLABS ON GRADE AS INDICATED ON PLAN AND DETAILS AS A PART OF THIS DRAWING SET OR IF NOT SHOWN ON DRAWINGS AS COORDINATED WITH THE ENGINEER AND/OR ARCHITECT. REINFORCING STEEL MUST BE REVIEWED BY THE STRUCTURAL CONSULTANT PRIOR TO PLACING CONCRETE. THE ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS (72 HOURS FOR OUT-OF-TOWN PROJECTS) PRIOR TO ALL CONCRETE PLACEMENT.
- FINIS ON CONCRETE SURFACES SHALL BE REMOVED. HONEYCOMBED OR OTHERWISE DEFECTIVE CONCRETE SHALL BE REMOVED SUFFICIENTLY TO EXPOSE SOUND CONCRETE AND SHALL BE REPAIRED AS DIRECTED BY THE STRUCTURAL CONSULTANT.
- SEE WRITTEN SPECIFICATIONS AND/OR ADDENDA FOR REQUIREMENTS FOR CYLINDER TESTING OF CONCRETE. CONTRACTOR TO TEST CONCRETE FOR EACH DAY'S CONCRETING AND/OR EVERY 40 CUBIC METERS EACH DAY CONCRETING. FORWARD TEST RESULTS TO THE STRUCTURAL ENGINEER.
- CONCRETE PROPERTIES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

CONCRETE SCHEDULE						
ITEM	CLASS OF EXPOSURE	STRENGTH (MPa) (28 days UIN)	CEMENT TYPE	MAXIMUM AGGREGATE SIZE (mm)	AIR ENTRAINMENT (%)	CURING TYPE
EXTERIOR / INTERIOR SLABS-ON-GRADE	C-2	32	GU	20	5-8	2
*: "HSB" IS ACCEPTABLE IN PLACE OF "HS" CEMENT WHERE SPECIFIED. ALL NECESSARY CONCRETE MIX DESIGN INFORMATION TO BE INCLUDED IN MIX PROPORTION SUBMISSION AS REQUIRED IN CONCRETE NOTE #2 ABOVE.						

- 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.
- UNLESS NOTED OTHERWISE CONCRETE CURING TO CONFORM TO THE LATEST EDITION OF CSA-A23.1 AS FOLLOWS:
 - TYPE 1 - BASIC: 3 DAYS $\geq 10^{\circ}\text{C}$ AND FOR A TIME NECESSARY TO ATTAIN 40% OF THE SPECIFIED STRENGTH.
 - TYPE 2 - ADDITIONAL: 7 DAYS $\geq 10^{\circ}\text{C}$ AND FOR A TIME NECESSARY TO ATTAIN 70% OF THE SPECIFIED STRENGTH.
 - TYPE 3 - EXTENDED: 7 DAYS WET CURING $\geq 10^{\circ}\text{C}$.
- AIR ENTRAINING ADMIXTURES SHALL CONFORM TO THE REQUIREMENTS OF ASTM C260/C260M-10a "STANDARD SPECIFICATION FOR AIR ENTRAINING ADMIXTURES FOR CONCRETE". SUPERPLASTICIZING ADMIXTURES SHALL CONFORM TO ASTM C494/C494M "STANDARD SPECIFICATION FOR CHEMICAL ADMIXTURES FOR CONCRETE" OR ASTM C1017/C1017M "STANDARD SPECIFICATION FOR CHEMICAL ADMIXTURES FOR USE IN PRODUCING FLOWING CONCRETE" WHEN FLOWING CONCRETE IS APPLICABLE. AIR ENTRAINED ADMIXTURES TO HAVE A DURABILITY FACTOR GREATER THAN 75. WHEN TESTED TO ASTM STANDARDS C666/C666M PROCEDURE A, SPACING FACTOR FOR ANY AIR ENTRAINING ADMIXTURE MUST BE $\geq 17\text{mm}$ OR LESS WHEN TESTED IN ACCORDANCE WITH ASTM C457 "STANDARD TEST METHOD FOR MICROSCOPICAL DETERMINATION OF PARAMETERS OF THE AIR-VOID SYSTEM IN HARDENED CONCRETE".

B. REINFORCING STEEL

- ALL REINFORCING STEEL TO BE NEW BILLET CSA-G30, 18M-09 GRADE 400R DEFORMED BARS MINIMUM YIELD STRENGTH TO BE 400 MPa EXCEPT COLUMN TIES AND BEAM STIRRUPS WHICH SHALL BE GRADE 400W STEEL.
- ALL REINFORCING IS TO BE DETAILED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION CSA-A23.1, CSA-A23.3 AND THE LATEST EDITION OF THE REINFORCING STEEL INSTITUTE OF CANADA - MANUAL OF STANDARD PRACTICE, EXCEPT NOTED OTHERWISE ON DRAWINGS.
- WELDED STEEL WIRE MESH SHALL BE TO ASTM A185/A185M-07, 400 MPa YIELD, FLAT SHEETS ONLY.
- REINFORCING STEEL COVER IS TO CONFORM TO THE LATEST EDITION CAN/CSA A23.3 "DESIGN OF CONCRETE STRUCTURES FOR BUILDINGS" AND AS FOLLOWS:

EXPOSURE CONDITION		EXPOSURE CLASS			
		N	F-1, F-2, S-1, S-2	C-1, C-2, C-3, C-4, A-1, A-2, A-3	
SLABS	TOP	19mm	40mm	60mm	
	BOTTOM	19mm	40mm	60mm	

- FRAME ALL OPENINGS IN CONCRETE SLABS WITH ADDITIONAL 2-20M BARS ALL FOUR SIDES, EXTENDING 600 mm BEYOND EDGES OF OPENINGS UNLESS NOTED OTHERWISE ON DRAWINGS.
- IN SLABS ON GRADE, BARS TO BE LAPPED WITH CLASS A TENSION SPLICES, UNLESS NOTED OTHERWISE ON DRAWINGS.
- ALL REINFORCING TO BE HELD IN PLACE, AND TIED BY THE USE OF PROPER ACCESSORIES, SUCH AS HI-CHAIRS, SPACERS, ETC. TO BE SUPPLIED BY THE REINFORCING STEEL FABRICATOR. HI-CHAIRS TO HAVE 4 LEGS AND TO BE STAPLED OR NAILED TO THE FORMWORK. ALL REINFORCING SUPPORTS AND ACCESSORIES SHALL BE COMMERCIAL GRADE AND SHALL SECURE ALL BARS IN POSITIONS TO MAINTAIN REQUIRED CONCRETE COVER AND SPACINGS.
- ALL MISCELLANEOUS CONCRETE PADS AND CURBS ARE TO BE REINFORCED WITH A MINIMUM OF 10M AT 400 mm O/C EACH WAY TOP, UNLESS NOTED OTHERWISE ON DRAWINGS.
- HOUSEKEEPING PADS SHALL BE A MINIMUM OF 90 mm THICK AND REINFORCED WITH 10M AT 300 mm O/C EACH WAY AT CENTRE UNLESS NOTED OTHERWISE ON DRAWINGS. COORDINATE HOUSEKEEPING PAD SIZE AND LOCATION WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS.
- PIT WALLS/SLABS SHALL BE 200 mm THICK REINFORCED WITH 15M @ 300 mm O/C. EACH WAY AT CENTER UNLESS NOTED OTHERWISE ON DRAWINGS.
- COORDINATE LOCATION OF ALL SLABS INCLUDING WALKS, CURBS AND GUTTERS NOT SHOWN ON STRUCTURAL DRAWINGS WITH ARCHITECTURAL.
- ALL REINFORCING STEEL SHALL BE PROPERLY CLEANED AND FREE OF ALL DIRT, GREASE, AND OTHER DELETERIOUS MATERIALS PRIOR TO PLACING CONCRETE AND TO BE STORED ABOVE GROUND IN DRY CONDITIONS.
- HEATING, QUENCHING AND BENDING OF REINFORCING STEEL ON THE SITE IS NOT ALLOWED.
- TERMINATE CONTINUOUS BARS AT NON-CONTINUOUS ENDS WITH STANDARD HOOK.
- UPON REQUEST SUBMIT SHOP DRAWINGS INDICATING BAR SIZES, STEEL GRADE, BAR SPACING, HOOKS, BENDS, ACCESSORIES, ETC. FOR REVIEW PRIOR TO FABRICATION OF THE REINFORCING STEEL.

C. FORMWORK

- PLYWOOD AND FORMWORK MATERIALS TO BE IN ACCORDANCE WITH CAN/CSA O86, CSA O121, CSA O151, AND CAN/CSA S269.3 (LATEST EDITIONS).
- DESIGN, CONSTRUCT AND ERECT FORMWORK IN ACCORDANCE WITH THE LATEST EDITIONS OF CAN/CSA S269.1 AND S269.3, TO PRODUCE CONCRETE FORMING TO SHAPE, DIMENSIONS, LOCATIONS AND LEVELS WITHIN TOLERANCES REQUIRED BY THE LATEST EDITION OF CAN/CSA A23.1/A23.3.
- CONCRETE SHALL BE PLACED IN FORMS FREE OF STANDING OR FROZEN WATER
- ACCESSORIES SUCH AS HI-CHAIRS, SPACERS, ETC. SHALL BE SUPPORTED BY PADS OF PLYWOOD OR TEMPERED HARDBOARD TO PREVENT PUNCTURING THE VOIDFORM.
- UNLESS NOTED OTHERWISE ON DRAWINGS PROVIDE SLIP JOINT ALL PAVING OR CONCRETE SLABS ON GRADE AGAINST STRUCTURAL MEMBERS WITH 13 mm ASPHALT IMPREGNATED FIBREBOARD.
- ALL CONSTRUCTION JOINT KEYS ARE TO BE A MINIMUM OF 38 mm DEEP.
- PLACE 10 MIL POLYETHYLENE UNDER ALL SLABS ON FILL AND OVER TOP OF VOIDFORM.
- PROVIDE 150 mm WIDE, RIBBED, PVC WATERSTOPS IN ALL HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS IN ALL EXTERIOR WALLS BELOW GRADE AND PIT WALLS OR WATERPROOF AS PER ARCH.
- 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 ON DRAWINGS IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE LOCATION ATTACHMENT AND SHORING FOR ANY POSSIBLE LATERAL LOADS INCLUDING WIND, ECCENTRIC LOADING, FALL PROTECTION, ETC.
- K.N.H. SAWATZKY AND ASSOCIATES LTD. IS NOT RESPONSIBLE FOR ANY ALTERATIONS AND DEVIATIONS FROM WHAT IS SPECIFIED IN THE FORMWORK DETAILS, DRAWINGS OR GENERAL NOTES PROVIDED. IT IS THE FINAL RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE PROPER DESIGN, ERECTION, SAFETY AND MAINTENANCE OF ALL FORMWORK.

POST-INSTALLED ANCHORS

- ALL ANCHORS ARE TO BE HILTI PRODUCTS OR APPROVED ALTERNATE.
- ALL PRE-ENGINEERED FASTENERS INSTALLED INTO CONCRETE OR MASONRY AFTER CASTING ARE TO BE INSTALLED AS PER MANUFACTURERS SPECIFICATIONS INCLUDING HOLE CLEANING, HOLE PREPARATION, ADHESIVE INSTALLATION (IF APPLICABLE), AND ANCHOR INSTALLATION.
- THE CONTRACTOR SHALL ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ON-SITE INSTALLATION TRAINING FOR ALL THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.
- IT IS RECOMMENDED THAT THE HILTI SAFASET SYSTEM WITH HILTI HOLLOW DRILL BIT IS USED FOR DRILLING. OTHERWISE, THE USE OF COMPRESSED AIR AND WIRE BRUSHING FOR CLEANING OF DRILLED HOLES IS TO BE AS PER MANUFACTURER'S SPECIFICATIONS AND REQUIREMENTS.

WOOD FRAMING

- ALL FLOOR JOISTS AND LINTELS TO BE NO.1/NO.2 SPF, WALL STUDS AND PLATES TO BE NO.1/NO.2 SPF. ALL WOOD TO BE KILN DRIED.
- ALL WALLS TO BE ADEQUATELY BRACED UNTIL SHEATHING INSTALLED ON WALLS, FLOOR BELOW AND STRUCTURES ABOVE.
- THE BOTTOM PLATE AT THE MAIN FLOOR IS TO BE BOLTED TO THE FOUNDATION WITH A MINIMUM OF 13 mm DIAMETER GALVANIZED ANCHOR BOLTS X 200 mm LONG AT 800 mm O/C.
- ALL STRUCTURAL SAWN LUMBER, NAILING, AND CONNECTIONS SHALL BE IN ACCORDANCE WITH CSA O86 (LATEST REVISION).
- ALL METAL STRAPS, JOIST HANGERS, TRUSS ANCHORS ETC. SHALL BE MINIMUM 18 GAUGE HOT-DIPPED GALVANIZED MATERIAL INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- ALL JOISTS OR BEAMS FLUSH FRAMED INTO OTHER BEAMS SHALL BE CONNECTED USING METAL JOIST OR BEAM HANGERS
- ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED IN ACCORDANCE WITH CSA O80.1 STANDARD (LATEST REVISION) UNLESS OTHERWISE NOTED ON DRAWINGS.
- MICROLAM LVL FLEXURAL MEMBERS TO BE 2.0E GRADE AS MANUFACTURED BY WEYERHAEUSER OR APPROVED ALTERNATE.
- LVL SUPPLIER SHALL SUBMIT SHOP DRAWINGS BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN MANITOBA COVERING THE DESIGN OF THE BEAMS AND ASSOCIATED CONNECTIONS PRIOR TO FABRICATION.
- THE CONTRACTOR SHALL CO-ORDINATE OPENING SIZES AND LOAD REQUIREMENTS FOR ANY AND ALL MECHANICAL AND ELECTRICAL EQUIPMENT ON ALL PRE-ENGINEERED FRAMING SYSTEMS.
- DO NOT PILE ROOF SHEATHING ON ROOF DURING CONSTRUCTION.
- ADO THROUGH BOLTS TO BE A307. ALL NUTS OR BOLT HEADS ARE TO BE PROVIDED WITH OVERSIZED WASHERS AGAINST WOOD.

SHEATHING/PLYWOOD

- SHEATHING SHALL BE DOUGLAS FIR PLYWOOD TO CSA O121 (LATEST REVISION), SPRUCE PLYWOOD TO CSA STANDARD O151 (LATEST REVISION), OR OSB PANEL TO CSA O325 (LATEST REVISION).
- PLYWOOD SUB-FLOORING AND SHEATHING SHALL BE EXTERIOR DOUGLAS FIR PLYWOOD UNLESS OTHERWISE NOTED ON THE DRAWINGS
- WALL SHEATHING SHALL BE 11 mm OSB PANEL UNLESS OTHERWISE NOTED ON DRAWINGS.
- FLOOR SHEATHING SHALL BE 19 mm T&G PLYWOOD UNLESS OTHERWISE NOTED ON DRAWINGS.
- SLOPED ROOF SHEATHING SHALL BE 13 mm PLYWOOD WITH GALVANIZED H-CLIPS
- FLAT ROOF SHEATHING SHALL BE 16 mm T&G PLYWOOD.
- ASPENITE OR WAFERBOARD IS NOT PERMITTED TO BE USED FOR ANY STRUCTURAL APPLICATION ON THIS PROJECT.
- SHEATHING FOR WALL, FLOOR, AND ROOF SHALL BE INSTALLED WITH FACE GRAIN AT RIGHT ANGLES TO STUDS, TRUSSES, AND JOISTS.
- FLOOR SHEATHING TO BE FASTENED TO SUPPORTING STRUCTURE WITH GLUE AND #8 x 50 mm LG. WOOD SCREWS @ 150 mm O.C. MAX. AT SUPPORTED PANEL EDGES AND @ 240 mm O.C. MAX. IN THE FIELD UNLESS SPECIFIED MORE STRINGENTLY ON FLOOR JOIST SHOP DRAWINGS.
- WALL SHEATHING FOR SHEAR WALLS TO BE FASTENED AT PANEL EDGES AND IN THE FIELD AS PER PLAN. ALLOW 2 mm SPACE BETWEEN PLYWOOD ROOF SHEETS FOR EXPANSION.
- ROOF SHEATHING TO BE FASTENED TO SUPPORTING STRUCTURE WITH 3.33mm $\varnothing$ x 64 mm COMMON WIRE NAILS @ 150 mm O.C. AT PANEL EDGES AND @ 300 mm O.C. IN THE FIELD.

NAILS AND LAG SCREWS

- NAILS SHALL BE IN ACCORDANCE WITH CSA STANDARD B111, WIRE NAILS, SPIKES, AND STAPLES. MATERIAL FOR LAG SCREW SHALL BE IN ACCORDANCE WITH ANSI/ASTM STANDARD A307, CARBON STEEL EXTERNALLY THREADED STANDARD FASTENERS.

EXISTING PILE SCHEDULE	
MARK	DESCRIPTION
eP-1	EXISTING 300 $\varnothing$ REINFORCED CONCRETE PILE

EXISTING BEAM SCHEDULE

MARK	DESCRIPTION
eB-1	EXISTING 200x600 REINFORCED CONCRETE GRADE BEAM
eB-2	EXISITNG 2 PLY 38x185 D.FIR BEAM

EXISTING SLAB SCHEDULE

MARK	DESCRIPTION
eS-1	EXISTING 150mm CONCRETE SLAB ON MIN. 150mm COMPACTED GRANULAR

EXISTING WALL SCHEDULE

MARK	DESCRIPTION
eW-1	EXISTING 38x140 LOAD BEARING WOOD STUD WALL

EXISTING RAFTER / JOIST SCHEDULE

MARK	DESCRIPTION
eRJ-1	EXISTING 38x140 RAFTERS / CEILING JOISTS @ 400 O/C

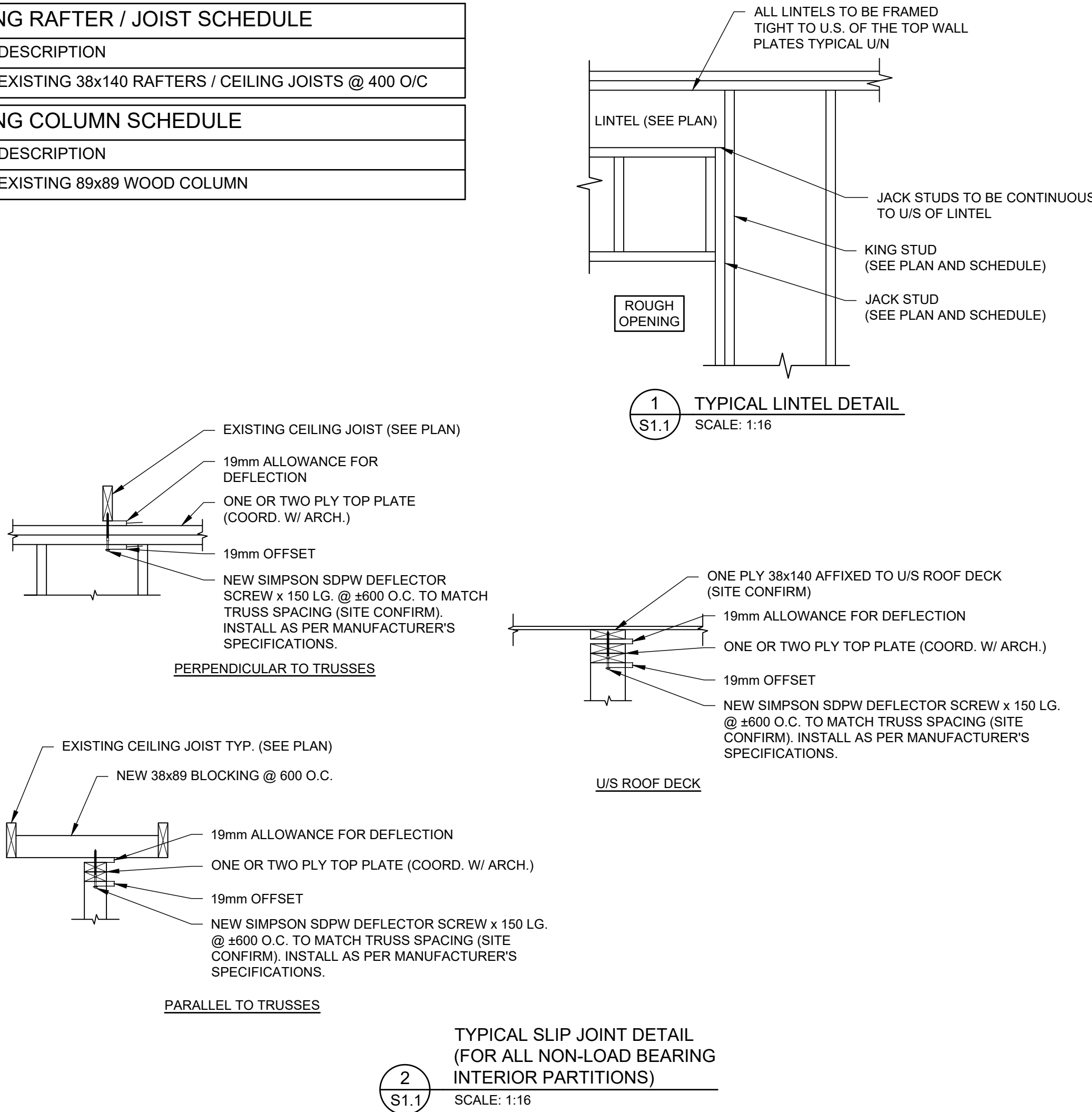
EXISTING COLUMN SCHEDULE

MARK	DESCRIPTION
eC-1	EXISTING 89x89 WOOD COLUMN

WALL SCHEDULE	
MARK	DESCRIPTION
W-1	NEW 38x140 STUD WALL @ 400 O/C MAX. C/W DOUBLE 38x140 TOP PLATE SINGLE P.T. 38x140 BOTTOM PLATE AFFIXED TO T/O EXISTING GRADE BEAM/SLAB C/W 13mm $\varnothing$ GALV. WEDGE BOLTS W/ 100 EMBED & OVERSIZED GALV. WASHERS.

LINTEL SCHEDULE

MARK	DESCRIPTION
L-1	NEW 2 PLY 38x184 LINTEL C/W 1 PLY 38x140 JACK & KING STUDS
L-2	NEW 3 PLY 38x184 LINTEL C/W 1 PLY 38x140 JACK STUD 2 PLY 38x140 KING STUDS



ALL DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF THE CONSULTANT
NO REPRODUCTIONS MAY BE MADE WITHOUT THE CONSENT OF THE CONSULTANT AND
ALL REPRODUCTIONS MUST BEAR THE NAME OF THE CONSULTANT.
THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS AND LEVELS NOTED ON
THE DRAWINGS WITH THE CONDITIONS ON SITE AND SHALL BE RESPONSIBLE FOR
REPORTING ANY ERRORS OR OMISSIONS TO THE ENGINEER FOR ADJUSTMENTS.
THIS DRAWING SHALL NOT BE SCALED.

Revisions

July 13, 2026	Issued for Construction
June 15, 2026	Issued for Owner Review
Date	Revision

Northern Sky Architecture Inc.

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K.N.H. SAWATZKY & ASSOCIATES
STRUCTURAL ENGINEERING
CONSULTANTS

Stamp

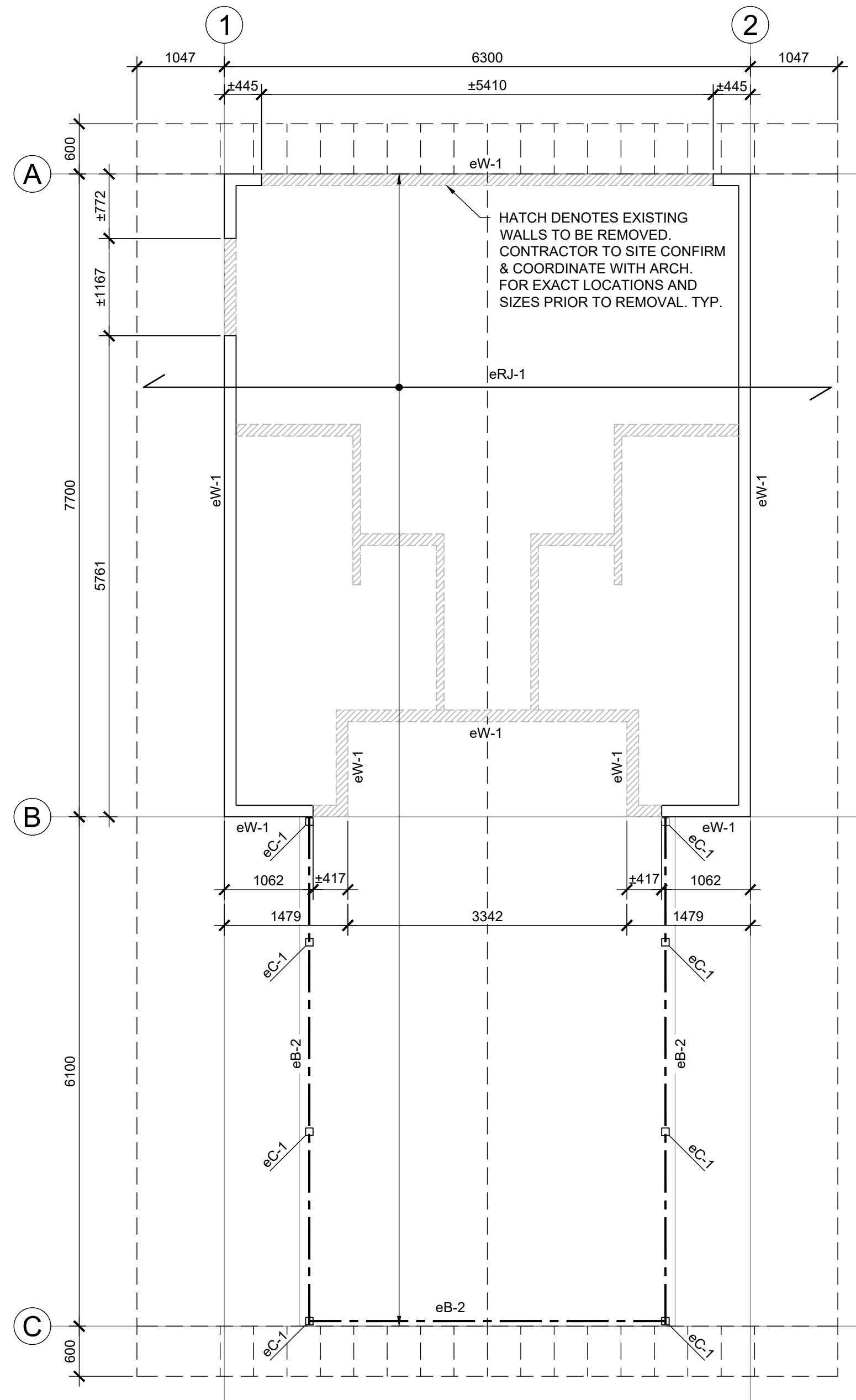
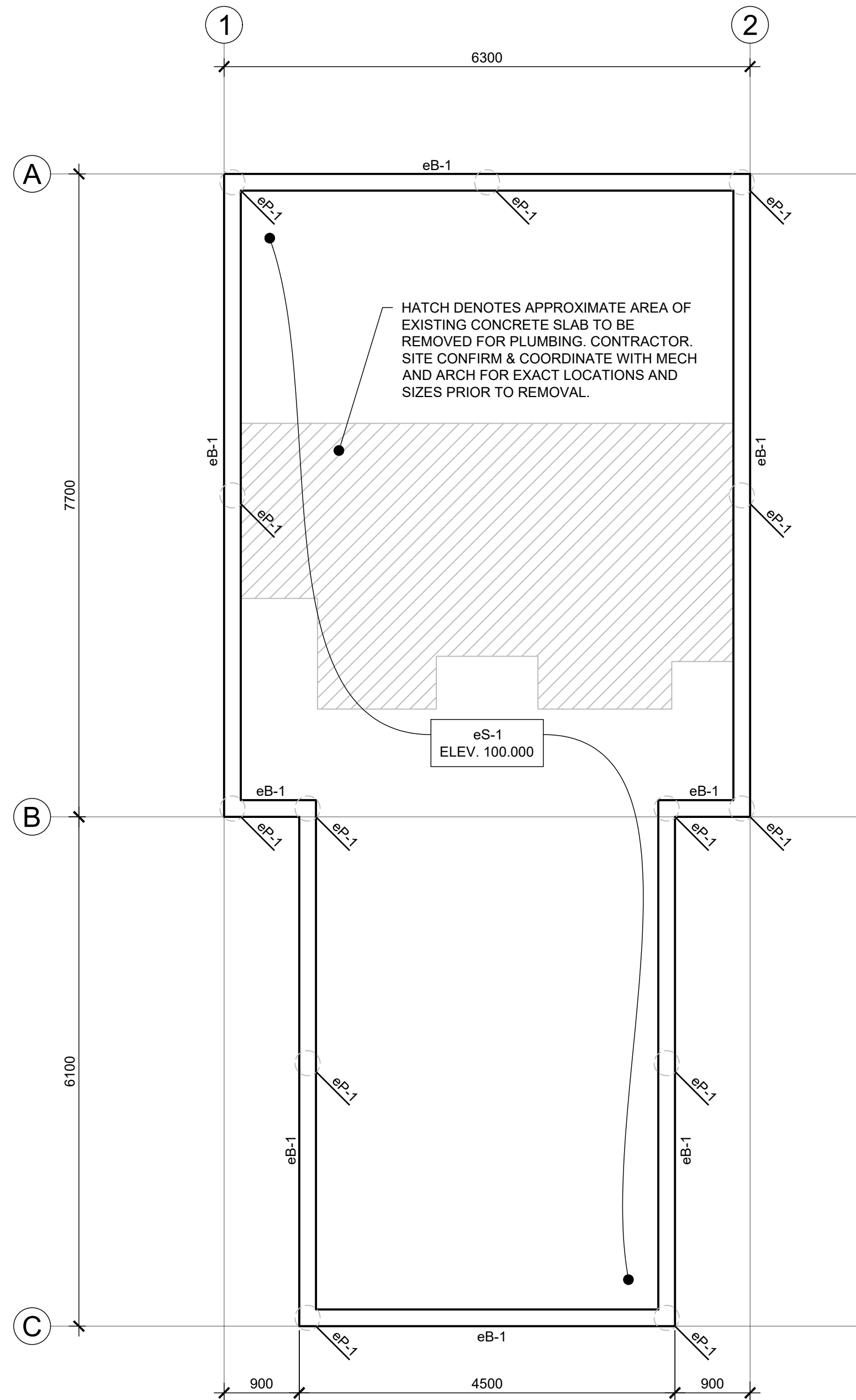
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July 13, 2026
REGISTERED PROFESSIONAL ENGINEER
Manitoba
23243

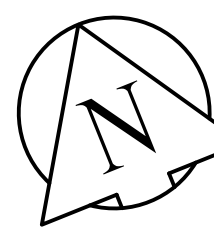
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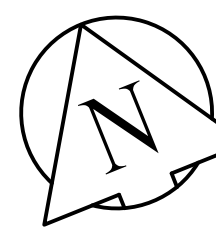
ENGINEERS
GEOSCIENTISTS
MANITOBA
Certificate of Authorization
KNH Sawatzky & Associates Ltd.
No. 1193

Project City of Winnipeg
Grant's Old Mill
Maintenance Bldg Renovation
2777 Portage Avenue
Winnipeg, MB

drawing title	GENERAL NOTES / SCHEDULES / DETAILS	
scale	as noted	designed by ajg
date	July 2026	drawn by jm
project no.	26.146	reviewed by ajg
reference no.	sheet S1.1	REV. R0



 **EXISTING FOUNDATION / MAIN FLOOR FRAMING
DEMOLITION PLAN**
SCALE: 1:50

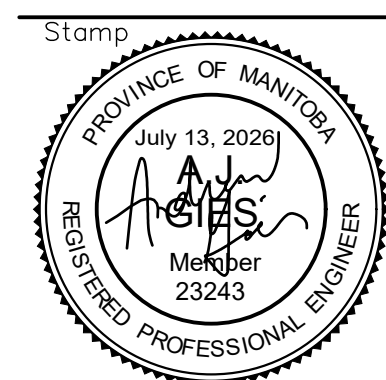
 **EXISTING ROOF FRAMING DEMOLITION PLAN**
SCALE: 1:50



Revisions

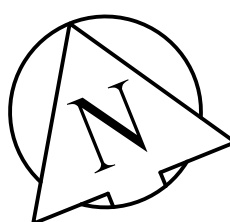
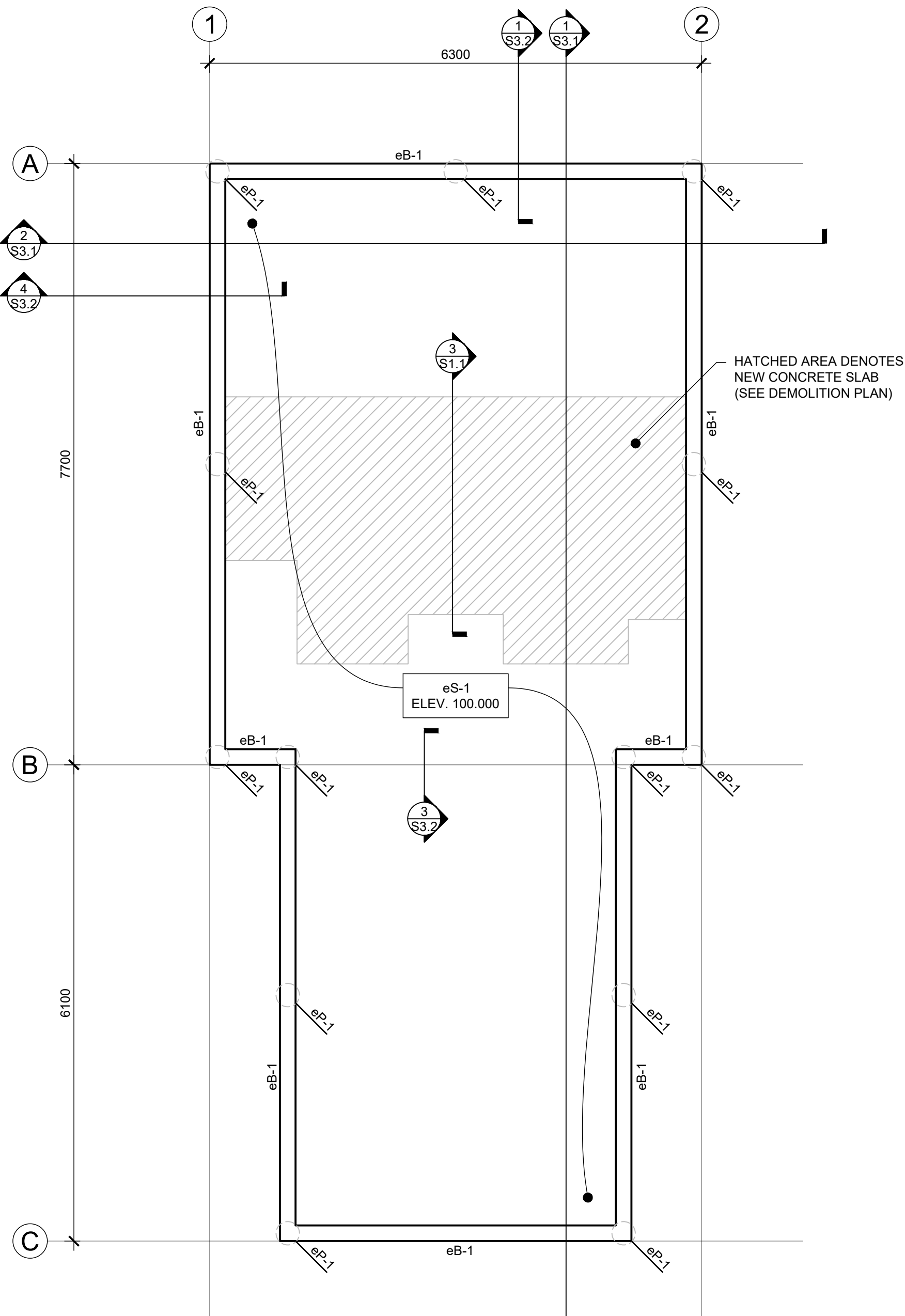
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Date Revision

Northern Sky Architecture Inc.



Project City of Winnipeg
Grant's Old Mill
Maintenance Bldg Renovation
2777 Portage Avenue
Winnipeg, MB

drawing title	EXISTING FOUNDATION / MAIN FLOOR & ROOF DEMOLITION FRAMING PLANS		
scale	as noted	designed by	ajg
date	July 2026	drawn by	jm
project no.	26.146	reviewed by	ajg
reference no.	sheet	S2.1	REV. R0



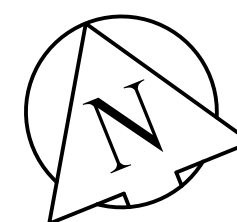
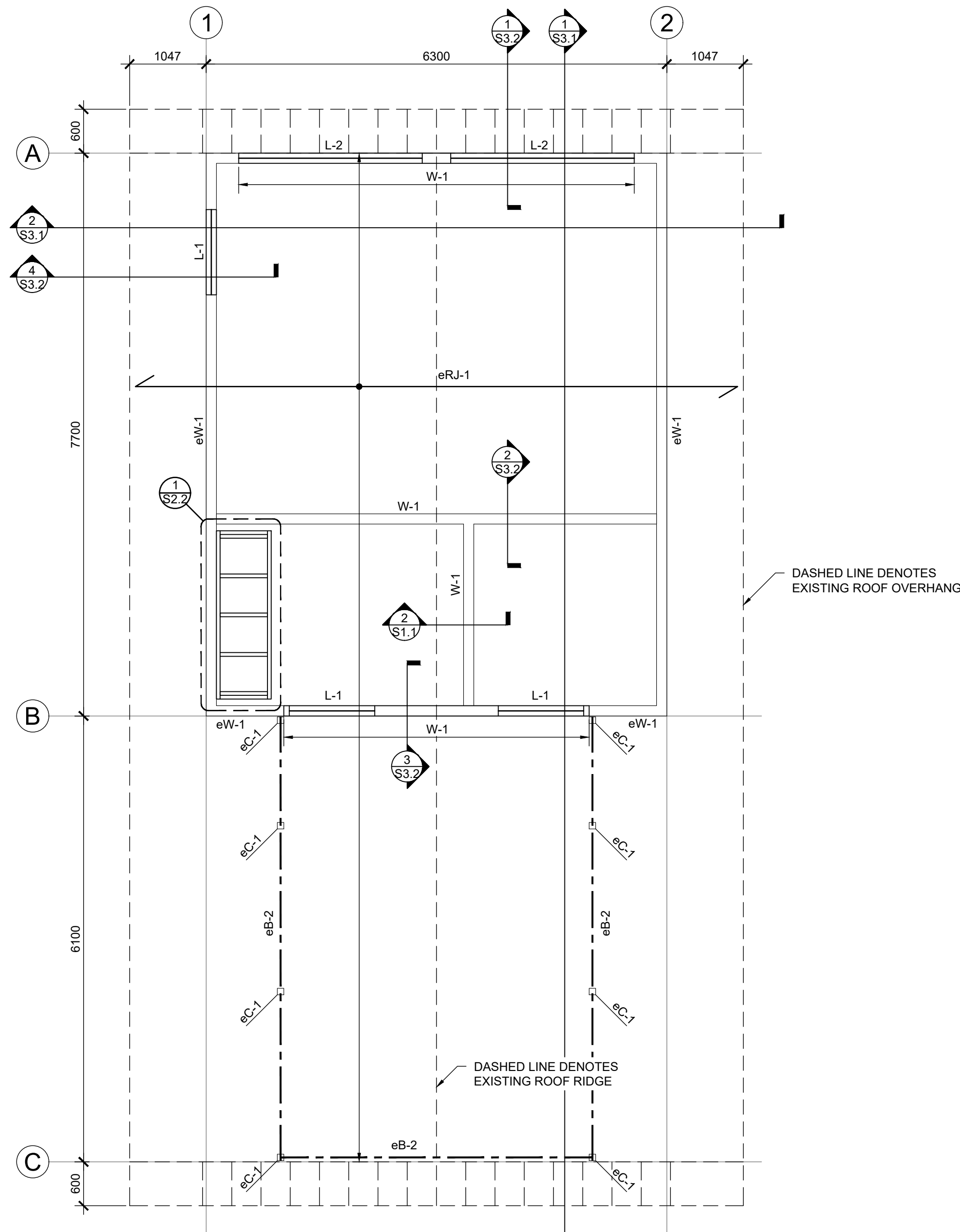
FOUNDATION / MAIN FLOOR FRAMING PLAN

SCALE: 1:50

MAIN FLOOR DESIGN LOADING:

LIVE LOAD = 4.8 kPa

DEAD LOAD = 2.4 kPa (150mm CONCRETE SLAB)



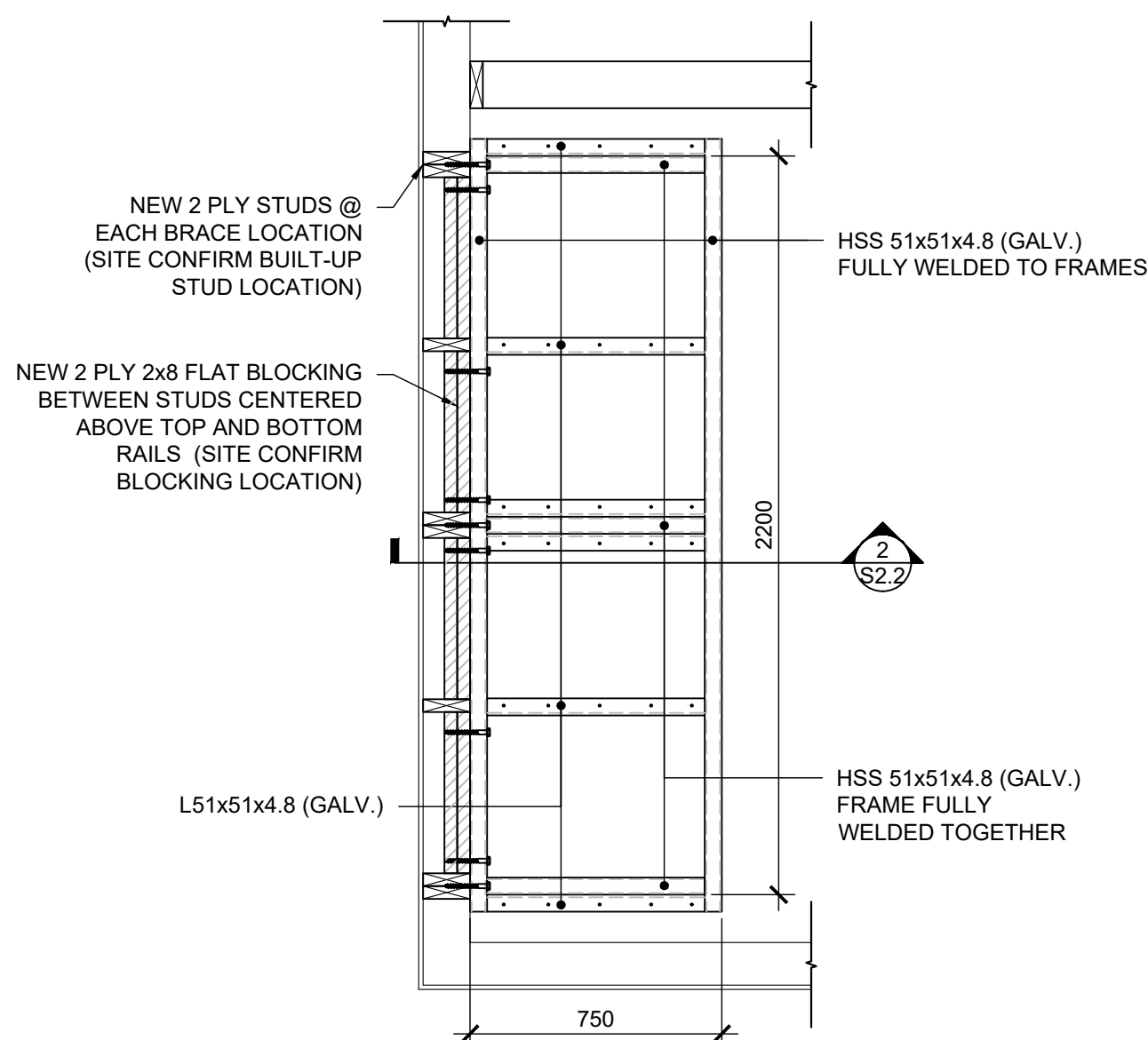
ROOF FRAMING PLAN

SCALE: 1:50

ROOF DESIGN LOADING:

LIVE LOAD = 1.25 kPa

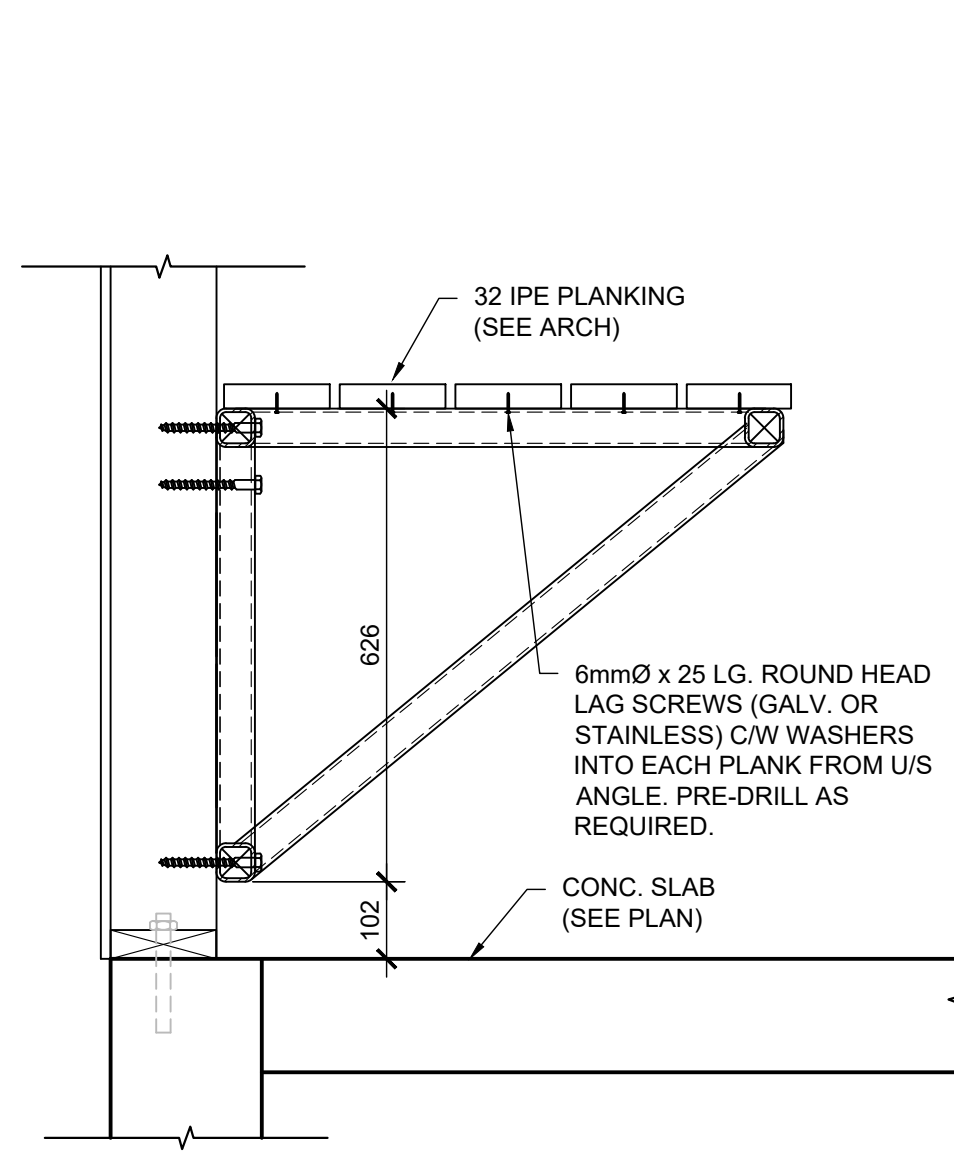
DEAD LOAD = 0.72 kPa



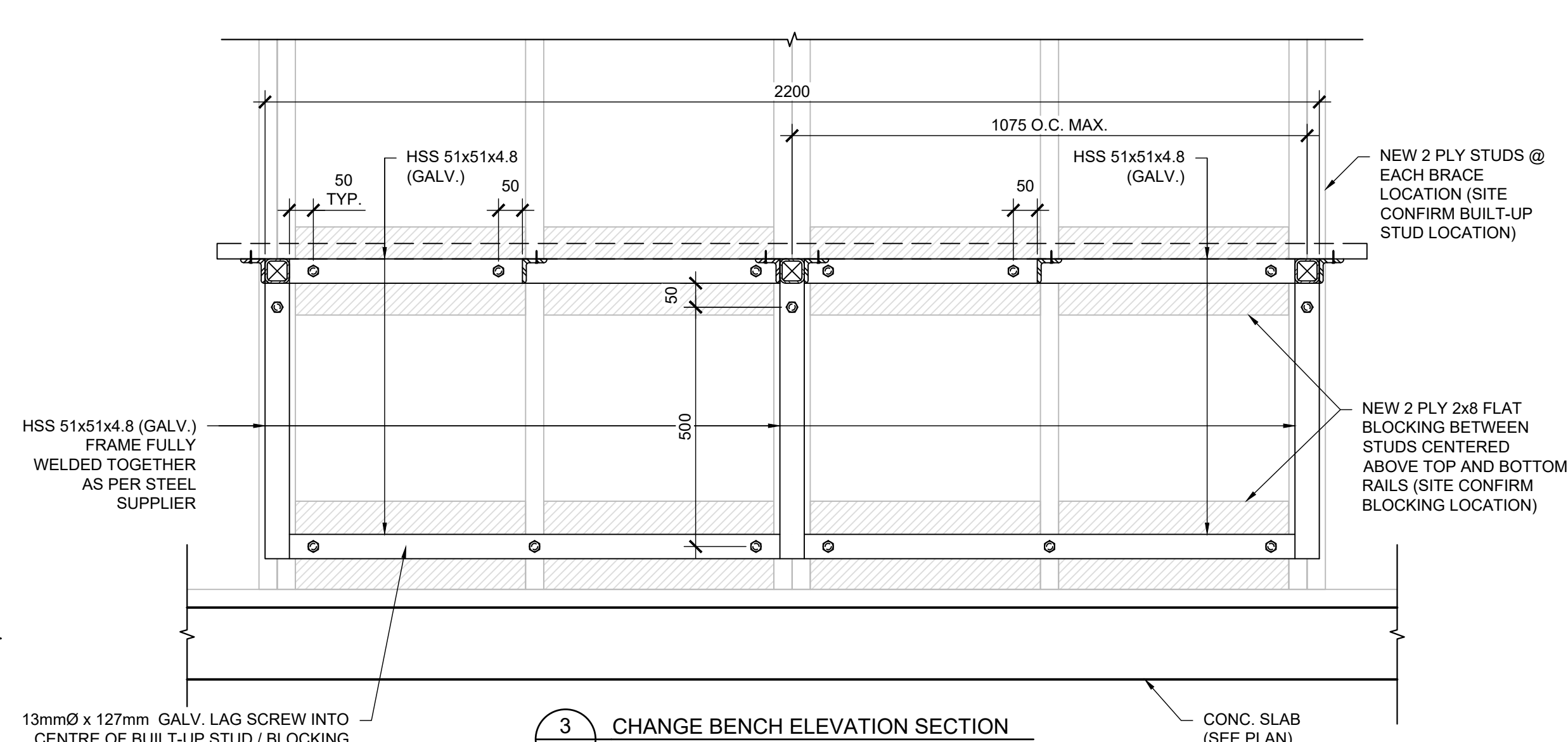
1
S2.2 CHANGE BENCH BLOW-UP DETAIL
SCALE: 1:20

NOTES:

- COORD. BENCH LOCATION & DETAILS W/ ARCH.
- SITE CONFIRM FASTENER LOCATIONS PRIOR TO FABRICATION



2
S2.2 CHANGE BENCH SECTION
SCALE: 1:10



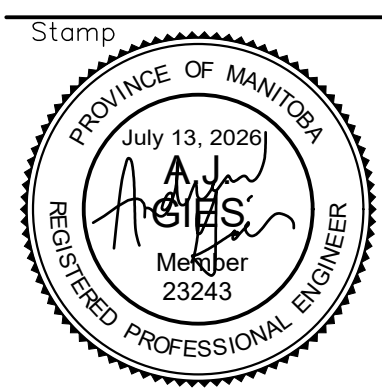
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S2.2 CHANGE BENCH ELEVATION SECTION
SCALE: 1:10



Revisions

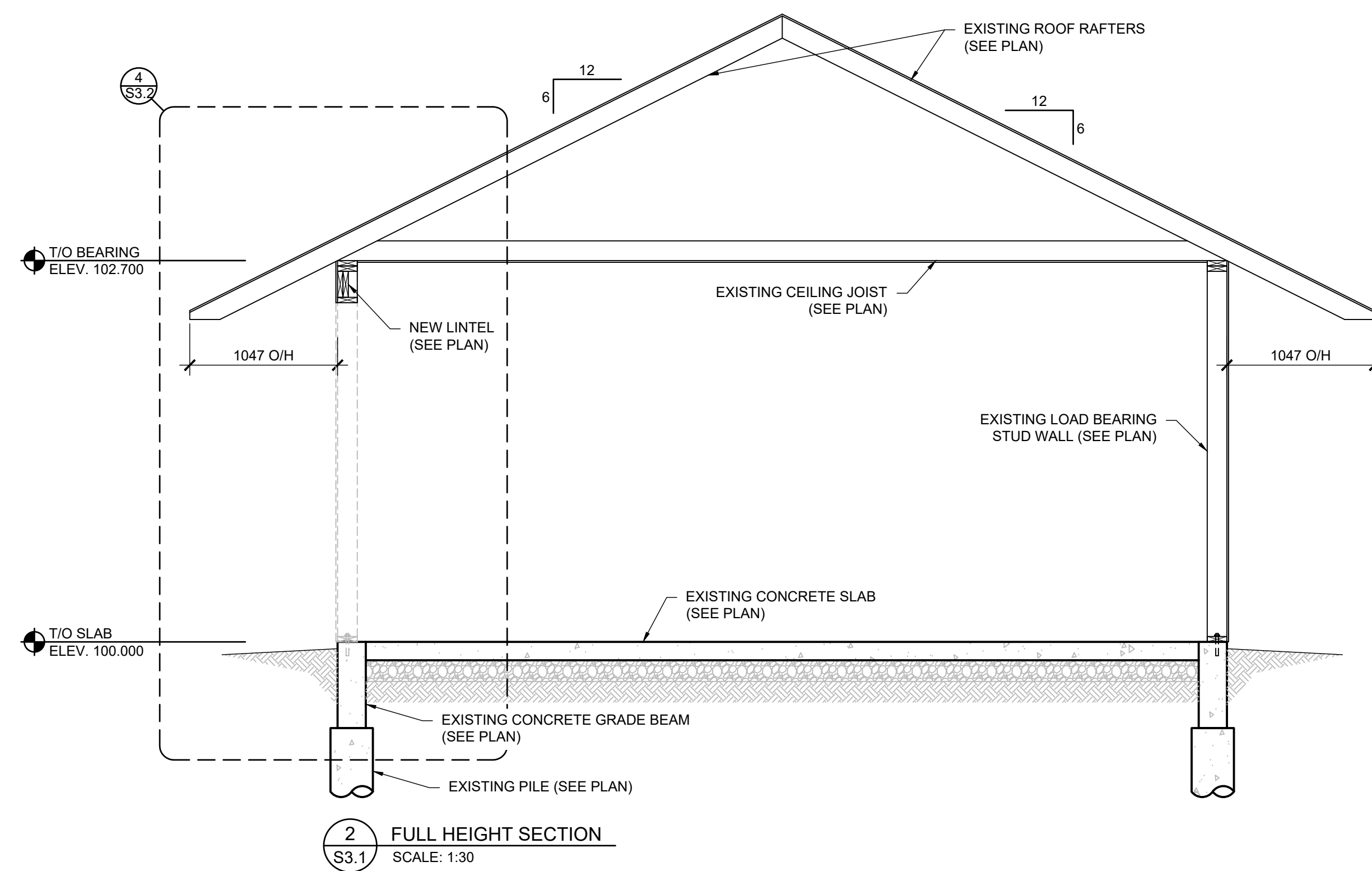
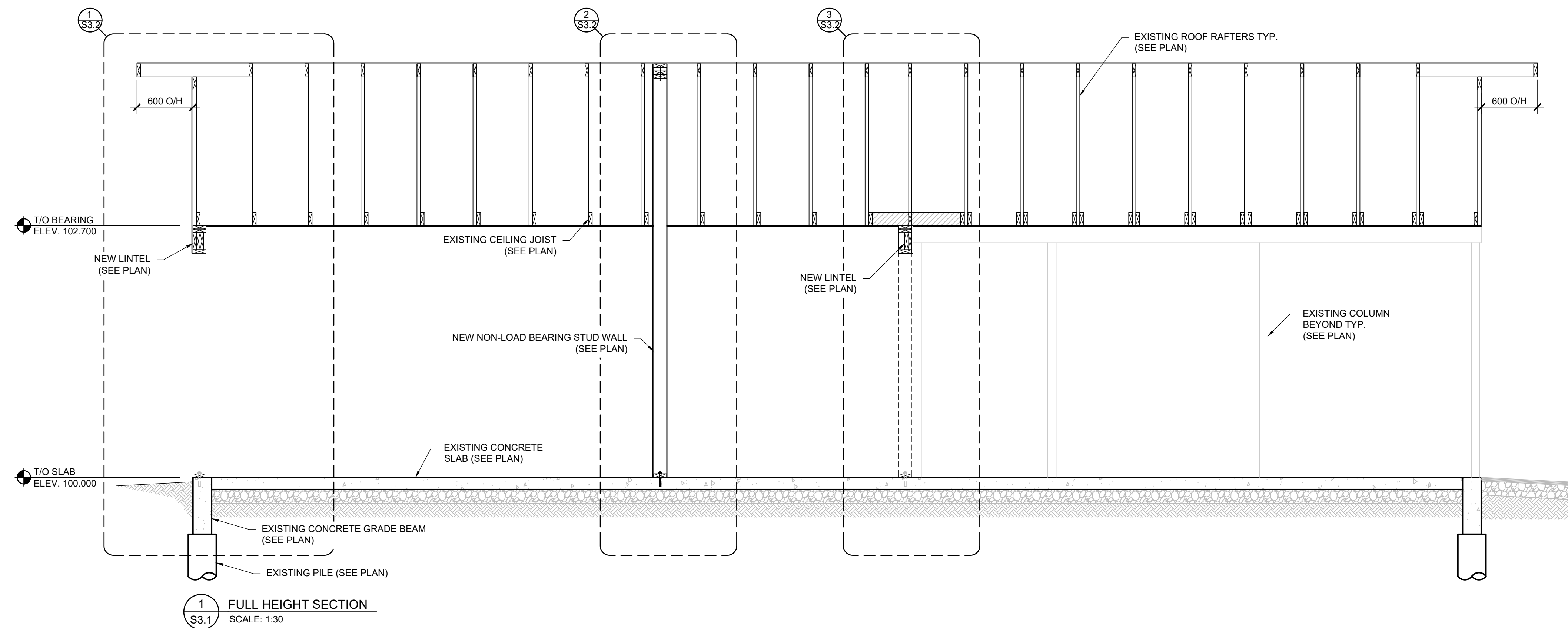
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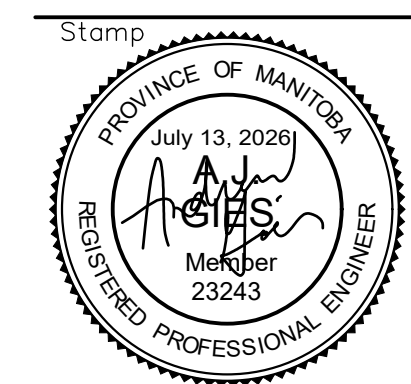
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scale	as noted
date	July 2026
project no.	26.146
reference no.	
designed by	ajg
drawn by	jm
reviewed by	ajg
sheet	S2.2
REV.	R0



Revisions

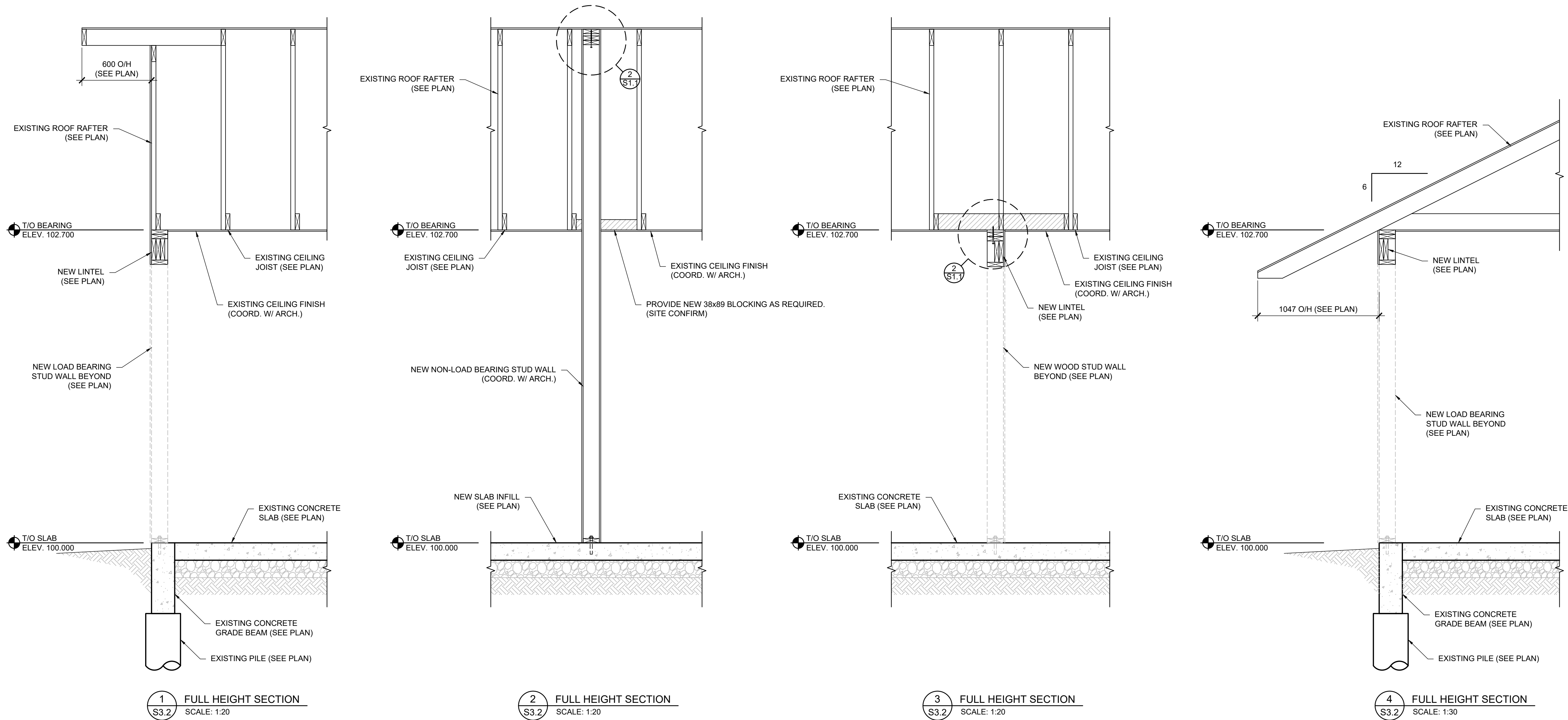
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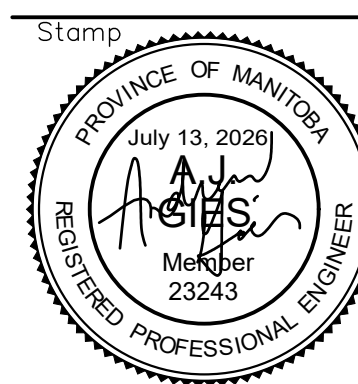
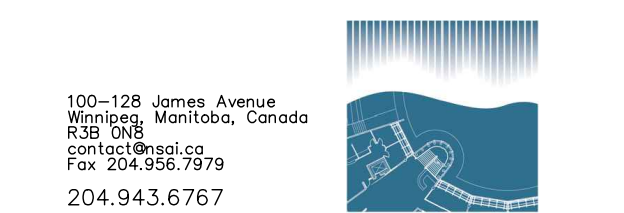
drawing title	FULL HEIGHT SECTIONS		
scale	as noted	designed by	ajg
date	July 2026	drawn by	jm
project no.	26.146	reviewed by	ajg
reference no.	sheet S3.1	REV.	R0



Revisions

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drawing title	FULL HEIGHT SECTIONS		
scale	as noted	designed by	ajg
date	July 2026	drawn by	jm
project no.	26.146	reviewed by	ajg
reference no.	sheet S3.2	REV.	R0