

1. READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH OTHER CONTRACT DOCUMENTS.
2. DO NOT RELY ON DRAWINGS UNLESS THEY ARE SIGNED AND SEALED.
3. THE CONTRACTOR IS TO CHECK AND VERIFY ALL DIMENSIONS ON THE STRUCTURAL DRAWINGS ON SITE BEFORE CONSTRUCTION. ANY DISCREPANCIES OR ERRORS MUST BE REPORTED TO THE ENGINEER PRIOR TO COMMENCING WORK.
4. DO NOT SCALE DRAWINGS.
5. DESIGN LIVE LOADS FOR EACH PORTION OF THE STRUCTURE ARE SHOWN. DO NOT EXCEED THESE LOADS DURING CONSTRUCTION.
6. FEATURES OF CONSTRUCTION NOT FULLY SHOWN ARE OF THE SAME CHARACTER AS THOSE NOTED FOR SIMILAR CONDITIONS.
7. STRUCTURAL DESIGN IS BASED ON THE LATEST EDITION OF THE NATIONAL AND ONTARIO'S BUILDING CODES.
8. THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING FOR THE TESTING OF CONCRETE, COMPACTION, REVIEW OF STRUCTURAL REINFORCING AND STRUCTURAL STEEL FOR ALIGNMENT, BOLTS AND WELDED CONNECTIONS AND FOR THE PROMPT SUBMISSION OF ALL REPORTS TO THE ENGINEER AND ARCHITECT.
9. ANY TEMPORARY SHORING REQUIRED TO CONSTRUCT THE WORKS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
10. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT THE START OF THE PROJECT AND ARRANGE FOR ALL REVIEWS IN ACCORDANCE WITH CLAUSE 10.2 OF THE BUILDING CODE ACT AND DIV. C, PART 1 OF THE ONTARIO BUILDING CODE. PROVIDE MINIMUM 48 HOURS NOTICE WHEN A REVIEW IS REQUIRED. GEI CONSULTANTS CANADA LTD. MAY BE CONTACTED BY PHONE AT (519) 576-1805 TO ARRANGE REVIEWS.
11. WHERE DEMOLITION OR RENOVATION OF EXISTING BUILDINGS IS INVOLVED, IT IS THE RESPONSIBILITY OF THE OWNER TO COMPLETE A DESIGNATED SUBSTANCE SURVEY. A COPY OF THIS SURVEY SHALL BE FORWARDED TO THE ENGINEER AND TO THE CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION.
12. WHERE IMPORTING OR EXPORTING OF SOILS FROM THE SITE IS REQUIRED, THE OWNER OR GENERAL CONTRACTOR SHALL ENSURE THAT SOIL IS MANAGED IN ACCORDANCE WITH MDCP EXCESS SOIL STANDARDS (O Reg 406/19).
13. GEI CONSULTANTS CANADA LTD.'S SCOPE OF WORK IS LIMITED TO:
 - CONCEPTUAL DESIGN OF STRUCTURE, INCLUDING PERMIT DRAWINGS.
 - FIELD REVIEW OF CONSTRUCTION.
14. GEI CONSULTANTS CANADA LTD. CANNOT BE RESPONSIBLE FOR CHANGES MADE DURING CONSTRUCTION FOR ANY REASON, UNLESS WRITTEN APPROVAL IS PROVIDED BY THE ENGINEER. THE OWNER AND CONTRACTOR ARE RESPONSIBLE FOR COORDINATING MECHANICAL, GRADING, DRAINAGE, ENERGY EFFICIENCY, ARCHITECTURAL, AND FIRE AND LIFE SAFETY DETAILS TO ENSURE THAT ALL RELEVANT CODES AND REGULATIONS ARE MET.

1. FOUND ALL FOOTINGS ON NATURALLY CONSOLIDATED, UNDISTURBED SOIL CAPABLE OF SAFELY SUSTAINING 50 kPa (1045 psf). BEARING CAPACITY SHALL BE CONFIRMED BY CBO OR ENGINEER.
2. NO FOOTINGS SHALL BE POURED UNTIL THE ENGINEER HAS APPROVED THE FOUNDATION CONDITIONS.
3. THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS OR EXCAVATIONS OR ALONG STEPPED FOOTINGS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10.
4. FOUND FOOTINGS WHICH ARE EXPOSED TO FREEZING WEATHER A MINIMUM OF 1200 mm (4'-0") BELOW FINISHED GRADE UNLESS SPECIFIED OTHERWISE.
5. ERECT, MAINTAIN, AND IF REQUIRED, REMOVE A SUPPORTING SHORING SYSTEM ALONG THE SIDES OF THE EXCAVATION.
6. PROTECT SOIL FROM FREEZING ADJACENT TO AND BELOW ALL FOOTINGS.
7. WHERE THERE IS GRADE ON BOTH SIDES, BACKFILL AGAINST FOUNDATION WALL IN SUCH A MANNER THAT THE LEVEL OF BACKFILLING ON ONE SIDE OF THE WALL IS NEVER MORE THAN 500 mm (1'-8") DIFFERENTIAL FROM THE LEVEL ON THE OTHER SIDE OF THE WALL EXCEPT WHERE TEMPORARY SUPPORT FOR THE WALL IS PROVIDED OR WALLS ARE DESIGNED AS CANTILEVER WALLS.
8. ANCHOR RODS TO BE ASTM A36 ROUND BAR STOCK (FY = 248 MPa) OR CSA-40.21 GRADE 300W (FY = 300 MPa)

1. STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF CSA S16.1 (LATEST EDITION) AND CSA G40.20/G40.21 (LATEST EDITION) TYPE 350W FOR BEAMS AND HSS (CLASS C), AND 300W FOR PLATES UNLESS NOTED OTHERWISE.
2. THE WELDING SHALL CONFORM TO THE REQUIREMENTS OF CSA W59 (LATEST EDITION) AND THE WELDING COMPANY AND WELDERS SHALL BE QUALIFIED UNDER THE REQUIREMENTS OF CSA W57 (LATEST EDITION) FOR THE APPROPRIATE POSITION.
3. PREPARE AND SUBMIT FOR APPROVAL FULLY DETAILED AND DIMENSIONED DRAWINGS AND ERECTION DIAGRAM. FOUR COPIES OF THE DRAWINGS SHALL BE PROVIDED TO THE ENGINEER FOR APPROVAL. FABRICATION AND ERECTION DRAWINGS SHALL BE SEALED BY THE FABRICATOR'S ENGINEER. ADDITIONAL COPIES OF THE DRAWINGS SHALL BE PROVIDED AS REQUIRED.
4. BOLTED CONNECTIONS SHALL BE MADE USING BEARING TYPE CONNECTION AND HIGH TENSILE STRENGTH BOLTS (A325 MIN.).
5. PROVIDE, AND REMOVE AFTERWARDS TEMPORARY BRACING NECESSARY TO KEEP THE STRUCTURE TRUE AND PLUMB DURING CONSTRUCTION.
6. ALL CONNECTIONS TO BE STANDARD FRAME BEAM CONNECTIONS AND ARE TO BE DESIGNED AND STAMPED BY THE FABRICATOR'S ENGINEER AS PER CSA S16.1 (LATEST EDITION).
7. STEEL SHALL BE THOROUGHLY CLEANED AND BE GIVEN ONE SHOP COAT OF ANTI-CORROSIVE PRIMER. AREAS AFFECTED BY WEATHERING, DAMAGE DUE TO HANDLING ETC., SHALL HAVE THE RUST REMOVED AND BE "TOUCHED UP" IN THE FIELD.
8. ALL OF THE BASE PLATES FOR THE COLUMNS AND BEARING PLATES SHALL BE GROUTED WITH A MINIMUM OF 38 mm ($1\frac{1}{2}$ ") OF 35 MPa (5100 psi) NON-SHRINK GROUT.
9. NO SPICES IN BEAMS AND COLUMNS WILL BE ALLOWED WITHOUT WRITTEN APPROVAL OF THE ENGINEER. BUTT WELDS IN SPICES AND MOMENT CONNECTIONS MUST BE ULTRASONICALLY TESTED OR X-RAYED AND PASSED BY AN INDEPENDENT TESTING COMPANY.
10. CO-ORDINATE WITH MECHANICAL ENGINEER, ELECTRICAL ENGINEER AND ALL SUB-TRADES WHOSE WORK AFFECTS THE DETAILING, FABRICATION AND ERECTION OF THE STRUCTURAL STEEL. DO NOT CUT OPENINGS IN STRUCTURAL STEEL MEMBERS WITHOUT THE ENGINEER'S APPROVAL.
11. AN INDEPENDENT INSPECTION AND TESTING COMPANY IS TO BE ENGAGED BY THE CLIENT, TO ENSURE THAT SHOP AND FIELD WORK IS IN ACCORDANCE WITH DRAWINGS AND THESE SPECIFICATIONS. COPIES OF THE INSPECTION(S) ARE TO BE SENT TO THE CLIENT, THE ENGINEER AND THE CHIEF BUILDING OFFICIAL.
12. ON SUPPORT WITH OWSJ FRAMING FROM ONE SIDE - THE CENTRE OF JOIST BEARING MUST SEAT WITHIN MIDDLE ONE-THIRD OF SUPPORT. FOR MASONRY WALL, JOISTS SHALL EXTEND MINIMUM 150 mm (6") INTO WALL.
13. JOIST SUPPLIER TO CHECK FOR WEIGHTS AND LOCATIONS OF ALL MECHANICAL UNITS THAT SIT ON OR HANG FROM THE ROOF, AND TO ENSURE ADEQUATE CLEARANCE IS PROVIDED FOR DUCTS THAT PASS THROUGH JOISTS.
14. JOIST SUPPLIER MUST PROVIDE ADEQUATE WEB REINFORCING UNDER CONCENTRATED ROOF LOADS. ALTERNATIVELY, PROVIDE TWO (2) L50 mm x 50 mm x 4.78 mm WEB REINFORCING UNDER EACH CONCENTRATED LOAD ON OWSJ TO BOTTOM CHORD PANEL POINT.
15. PROVIDE 40 mm x 5 mm x 525 mm LONG STRAP ANCHOR WITH 50 mm BEND AT 600 mm o.c. ($1\frac{1}{2}$ " x $\frac{1}{2}$ " x 1'-9" LONG STRAP ANCHOR WITH 2" BEND AT 24" o.c.) TO ALL FACES OF COLUMNS ABUTTING MASONRY.
16. PROVIDE DRAIN HOLES IN BOTTOM OF ALL CLOSED SECTION MEMBERS. (EG. PIPE AND HSS)
17. ALL VERTICAL MEMBERS TO BE INSTALLED PLUMB.

1. ALL DESIGN LOADINGS SHOWN ARE SPECIFIED (UNFACTORED) LOADS.
2. IMPORTANCE FACTOR, I: NORMAL (1.0)
3. BASIC SNOW LOAD FACTOR, C_{se} 0.80
4. SNOW:
 GROUND SNOW LOAD, S_g 2.7 kPa (56.4 psf)
 RAIN LOAD, S_r 0.4 kPa (8.4 psf)
 WIND LOAD, C_w 1.0
 SLOPE, C_s 1.0
 SHAPE, C_e 1.0
 ROOF SNOW LOAD:
 $= I [S_g \times C_w \times C_s \times C_e \times C_{se}] + S_r$
 $= 1.0 [(2.7 \times 1.0 \times 1.0 \times 1.0 \times 0.8) + 0.4] = 2.56 \text{ kPa (53.5 psf)}$
5. HOURLY WIND PRESSURES:
 1/10 YEAR: 0.37 kPa (7.7 psf)
 1/50 YEAR: 0.48 kPa (10.0 psf)
6. DEAD:
 EX. ROOF LOAD: 1.0 kPa (20.1 psf)
 PROPOSED ROOF LOAD: 1.0 kPa (20.1 psf)
 SPRINKLER LOAD: 0.24 kPa (5.0 psf)
 MISC. MECHANICAL LOAD: 2.87 kPa (60.0 psf)
7. LIVE:
8. SNOW ACCUMULATION DIAGRAMS ARE SHOWN ON SHEET S1.2

1. ALL CONCRETE MATERIALS, FORMWORK, TOLERANCES AND CONSTRUCTION SHALL CONFORM TO CSA A23.1 / A23.2 (LATEST EDITION).
2. REINFORCING STEEL BARS SHALL BE DEFORMED BILLET STEEL BARS, GRADE 400R CONFORMING TO CSA G30.18 (LATEST EDITION), UNLESS NOTED.
3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 (LATEST EDITION) FOR SMOOTH WIRE FABRIC AND ASTM A1064 / A1064M (LATEST EDITION) FOR DEFORMED WIRE FABRIC. WELDED WIRE FABRIC SHALL HAVE A MINIMUM YIELD STRENGTH OF 448 MPa.
4. THE FABRICATOR SHALL SUPPLY PLACING DRAWINGS AND BAR LISTS IN ACCORDANCE WITH THE REINFORCING STEEL INSTITUTE OF CANADA, MANUAL OF STANDARD PRACTICE, CHAPTER 5, "SUBMISSION OF PLACING DRAWINGS AND BAR LISTS."
5. ALL REINFORCING BARS SHALL BE SECURELY TIED, SUPPORTED IN THE FORMS AND SPACED WITH STANDARD ACCESSORIES SO THAT THERE IS NO MOVEMENT DURING CONCRETE PLACEMENT.
6. REINFORCING IS TO BE PLACED IN GENERAL ACCORDANCE WITH REINFORCING STEEL INSTITUTE OF CANADA, MANUAL OF STANDARD PRACTICE, CHAPTER 7. ALL SPLICES SHALL BE A CLASS "B" SPLICE, UNLESS OTHERWISE NOTED.
7. CONCRETE COVER TO REINFORCING:
 - a) ALL CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ... 75 mm (3")
 - b) ALL CONCRETE CAST IN FORMS, EXPOSED TO:
 - chlorides ... 60 mm (2 1/4")
 - freezing and thawing only ... 40 mm (1 1/2")
 - c) CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
 - slab and walls ... 20 mm (3/4")
 - beams and columns ... 30 mm (1 1/8")
8. ALL REINFORCING STEEL IN PLACE TO BE MADE AVAILABLE FOR REVIEW BY ENGINEER BEFORE POURING THE CONCRETE. ENGINEER TO BE NOTIFIED WELL IN ADVANCE OF POURING SCHEDULE. ENGINEER TO CARRY OUT REVIEW AT THEIR DISCRETION.
9. PROVIDE PORTLAND CEMENT OF CANADIAN MANUFACTURE CONFORMING WITH CSA-A3000 (LATEST EDITION). TYPE GU.
10. PROVIDE CLEAN, UNCOATED SAND AND COARSE AGGREGATES FROM APPROVED SOURCES WHICH CONFORM WITH CSA A23.1 / A23.2 (LATEST EDITION). NOMINAL SIZE OF SAND AND COARSE AGGREGATES TO BE 14 mm (1/2") - 20 mm (3/4").
11. CONCRETE SLUMPS SHALL BE CONSISTENT AT 80 mm (3 1/8") x 20 mm (3/4"). ADMIXTURES, WHERE APPROVED BY THE ENGINEER, SHALL CONFORM TO ASTM C494/C494M, AND MAY BE USED TO INCREASE THE SLUMP ABOVE THIS VALUE.
12. ALL CONCRETE ADMIXTURES SHALL CONFORM TO CAN/CSA A23.1 / A23.2 (LATEST EDITION) CLAUSE 4.2.4.
13. CURE CONCRETE FOR A MINIMUM OF SEVEN DAYS (CONTINUOUS WET CURE).
14. UNSHRINKABLE FILL SHALL HAVE THE FOLLOWING PROPERTIES:
 - MAX. 25 kg/m³ OF TYPE GU PORTLAND CEMENT (TYPE MH MAY BE USED FOR WINTER CONSTRUCTION)
 - SLUMP SHALL BE BETWEEN 150 mm AND 200 mm.
 - 4%-6% AIR ENTRAINMENT SHALL BE PROVIDED WHERE EXPOSURE TO FREEZE / THAW IS EXPECTED IN ACCORDANCE WITH CSA A23.1 / A23.2 (LATEST EDITION)
 - 28 DAY COMPRESSIVE STRENGTH SHALL BE 0.4 MPa.

1. REMOVE ALL TOPSOIL AND SOILS CONTAINING ORGANICS. CONTRACTOR IS TO REFER TO SOILS REPORT, IF AVAILABLE FOR INDICATION OF DEPTHS OF UNSUITABLE SOIL, AND IS TO REMOVE SOFT OR WEAK AREAS TO COMPETENT MATERIAL. ALL OF THIS WORK IS TO BE CARRIED OUT UNDER THE DRECT INSTRUCTIONS OF THE SOILS ENGINEER.
2. PROOF ROLL SUB-GRADE AS DIRECTED BY SOILS ENGINEER.
3. BACKFILL WITH GRANULAR MATERIAL SUITABLE TO SOILS ENGINEER.
4. BACKFILL SHOULD BE COMPACTED IN LAYERS NOT EXCEEDING 150 mm (6") IN COMPACTED THICKNESS, AND SHOULD BE COMPACTED TO A UNIFORM DRY DENSITY OF 98% STANDARD PROCTOR MAXIMUM DRY DENSITY. MATERIAL SHALL CONSIST OF GRANULAR B UP TO 150 mm (6") BELOW THE UNDERSIDE OF THE CONCRETE SLAB, WITH 150 mm (6") OF GRANULAR A OR CRUSHED STONE DIRECTLY BELOW THE SLAB.
5. PLACE SLABS-ON-GRADE ON MATERIAL CAPABLE OF SUSTAINING 24 kN/m² (500 psf) WITHOUT SETTLEMENT RELATIVE TO THE BUILDING FOUNDATIONS.
6. REINFORCE SLAB-ON-GRADE WITH WWM 12x152 (5"x6") MW18.7XMM18.7 UNLESS NOTED OTHERWISE ON THE DRAWINGS. ROLLED REINFORCING MESH IS UNACCEPTABLE. SHEETS OF MESH MUST BE USED. SITUATE MESH ON "CHAIRS" ABOVE SUB-GRADE AT MID-DEPTH OF SLAB. JOINTS TO OVERLAP 300 mm (12") IN EACH DIRECTION.
7. PROVIDE SLAB THICKENING UNDER ALL MASONRY PARTITIONS.
8. REFER TO THE "CAST-IN-PLACE CONCRETE" SECTION FOR THE REQUIREMENTS FOR COMPRESSIVE STRENGTH, WATER CEMENT RATIO, AND AIR ENTRAINMENT REQUIREMENTS. IF THE SLAB IS TO BE STEEL TROWEL FINISHED, AND EXPOSURE CLASS C-4, S-1, S-2, OR S-3 APPLIES, THEN THE REQUIREMENT FOR AIR ENTRAINMENT MAY BE WAIVED, AS PER CSA A23.1 / A23.2 (LATEST EDITION), TABLE 2.
9. PROVIDE CONTROL JOINTS OR SAW-CUTS TO CREATE AREAS 4.5 m x 4.5 m (15' x 15') MAX. PROVIDE DIAMOND CUT PATTERN AROUND COLUMNS AND AT DOORWAYS.

THE FOLLOWING COLD WEATHER REQUIREMENTS SHALL APPLY WHENEVER THE AIR TEMPERATURE IS AT OR BELOW 5°C, OR WHEN THERE IS A PROBABILITY OF ITS FALLING BELOW 5°C WITHIN 24 HOURS OF PLACING CONCRETE. NO COLD WEATHER CONCRETE WORK SHOULD BE DONE WITHOUT APPROVAL BY THE STRUCTURAL ENGINEER.

1. ALL WOOD WEATHER CONCRETING SHALL BE COMPLETED IN ACCORDANCE WITH CSA A23.1 / A23.3 (LATEST EDITION).
2. ALL MATERIALS AND HEATING EQUIPMENT NEEDED FOR ADEQUATE PROTECTION AND CURING SHALL BE ON HAND AND READY FOR USE BEFORE PLACEMENT IS STARTED. PROTECTION SHALL BE PROVIDED BY MEANS OF HEATED ENCLOSURES, COVERINGS, INSULATION, OR A SUITABLE COMBINATION OF THESE METHODS.
3. ALL AGGREGATES AND WATER SHALL BE PRE-HEATED, ALL FORMS, FILL AND GROUND WITH WHICH THE CONCRETE IS IN CONTACT OR IS CALCULATED TO COME IN CONTACT WITH SHALL BE DEFROSTED. STEEL REINFORCEMENT AND AGGREGATES SHALL BE PROTECTED BY ADEQUATE MEANS TO PREVENT FORMATION OF AN ICE FILM.
4. ALL CONCRETE SHALL HAVE A TEMPERATURE BETWEEN 10°C AND 25°C WHEN PLACED IN THE FORMS. REFER TO CAST-IN-PLACE CONCRETE NOTES REGARDING CURING TYPES. MAINTAIN THE FOLLOWING CONCRETE TEMPERATURES DURING CURING:
 - CURING TYPE 1 - 10°C FOR 3 DAYS (OR UNTIL 40% OF SPECIFIED STRENGTH IS OBTAINED)
 - CURING TYPE 2 - 10°C FOR 10 DAYS (OR UNTIL 70% OF SPECIFIED STRENGTH IS OBTAINED)
5. ALL CANVAS OR OTHER PROTECTIVE COVERING SHALL BE KEPT CLEAR OF ALL CONCRETE IN ORDER TO PERMIT FREE CIRCULATION OF AIR AROUND ALL WALLS, COLUMNS, AND OVER THE TOPS OF ALL SLABS.
6. THE HEATING PROTECTION SHALL NOT BE COMPLETELY REMOVED UNTIL THE CONCRETE HAS COOLED TO A MAXIMUM TEMPERATURE DIFFERENTIAL BETWEEN THE CONCRETE AND AIR TEMPERATURE OF 12°C.
7. THE CONTRACTOR IS TO PROTECT ALL FOUNDING SOIL FROM FREEZING DURING THE CONSTRUCTION PERIOD. THIS INCLUDES FOOTINGS THAT HAVE BEEN CAST.

1. UNLESS NOTED OTHERWISE, ALL DECK DECK SHALL BE R0938 BY VICWORK OR EQUAL. 38 mm (1½") DEEP WITH FLUTES AT 150 mm (6") CENTRES. CONTINUOUS OVER AT LEAST THREE SPANS.
2. STEEL DECKING SHALL BE COLD FORMED SHEET STEEL, $f_y = 230$ MPa (33,400 psi), FINISH AS SPECIFIED BY OWNER. INSTALLATION TO CSSBI CODE OF PRACTICE.
3. ROOF DECK SHALL HAVE A MINIMUM OF 4 TRANSVERSE WELDS FOR 900 WIDE DECK AND LONGITUDINAL WELD AT 300 mm o.c. ALL WELDS TO BE 20 mm (¾") DIAMETER NOMINAL AND MINIMUM 12 mm (½") EFFECTIVE DIAMETER. PROVIDE SIDE LAP BUTTON PUNCH AT MAXIMUM 450 mm (1'-5½") o.c. PROVIDE TRANSVERSE WELDS AND LONGITUDINAL WELDS AT 150 mm (6") o.c. FOR 2400 mm (7'-10½") WIDE STRIP OF ROOF ALONG ALL ROOF PERIMETERS. SUBSTITUTION OF WELDS WITH DIRECT FASTENING WILL NOT ALLOWED.
4. ANGLES TO BE CONTINUOUS AND FIELD WELDED AT SPLICES. PROVIDE L75 mm x 75 mm x 6mm (L3"x3"x0.25") AROUND ROOF PERIMETER.
5. DECK CONTRACTOR TO REINFORCE ALL DECK OPENINGS LARGER THAN 150 mm (6") AND UP TO 450 mm (1'-6") UNLESS NOTED OTHERWISE. PROVIDE L75x75x6 FRAME FROM JOIST TO JOIST FOR ANY DECK OPENING LARGER THAN 450 mm (1'-6").
6. PROVIDE C150x12 (C6x8.2) FRAME AT ALL MECHANICAL UNITS THAT SIT OR HANG FROM ROOF.
7. PROVIDE DECK SUPPORT ANGLE FROM JOIST TO JOIST AT LOCATION WHERE METAL DECK CHANGES ORIENTATION. THE ANGLE SHALL BE MINIMUM 75 mm (3") x JOIST SHOE DEPTH x 6 mm (¼"). IN ADDITION, PROVIDE 1.22 mm x 150 mm (8GA x 6") CONTINUOUS PLATE OVER THE DECK TO DECK JOINT.
8. DECK CONTRACTOR TO PROVIDE ALL DECK CLOSURES, PROVIDE CLOSURES AT ALL AREAS WHERE DECK EDGES ARE WEAK.
9. DECKING CONTRACTOR TO PRIME PAINT TOP SIDES OF ALL WELDS.
10. SUBMIT DECK SHOP DRAWINGS SIGNED AND SEALED BY A QUALIFIED PROFESSIONAL ENGINEER FOR APPROVAL.
11. ERECTION COMPANIES MUST BE CERTIFIED BY CANADIAN WELDING BUREAU UNDER CSA W47.1 (LATEST EDITION) CERTIFICATION OF COMPANIES FOR FUSION WELDING OF STEEL STRUCTURES, AND WELDING OPERATORS MUST BE QUALIFIED BY CWB FOR DECK WELDING.
12. NO MECHANICAL OR ELECTRICAL EQUIPMENT/ACCESSORIES SHALL BE HUNG FROM THE DECK.
13. HANGERS FOR SUSPENSION OF FALSE CEILING SHALL BE ATTACHED TO STEEL JOISTS, NOT TO THE DECKING.

1. CONSTRUCTION JOINTS SHALL BE DESIGNED AND LOCATED SO AS NOT TO IMPAIR THE STRENGTH OF THE STRUCTURE. IF CONSTRUCTION JOINTS ARE NOT SPECIFICALLY LOCATED AND THERE IS ANY DOUBT CONCERNING THE LOCATION, THE CONTRACTOR MUST CONSULT WITH THE ENGINEER.
2. WHERE A CONSTRUCTION JOINT IS TO BE MADE, THE SURFACE OF THE SET CONCRETE SHALL BE THOROUGHLY CLEANED OF FOREIGN MATTER AND LAITANCE, SATURATED WITH WATER AND LEFT IN A DAMP CONDITION WITH NO FREE WATER ON THE SURFACE IMMEDIATELY BEFORE PLACING ADJACENT CONCRETE.
3. A 38 mm x 89 mm (1½" x 3½") KEYWAY SHALL BE PLACED IN THE WALL AT ALL CONSTRUCTION JOINTS IN CONCRETE WALLS.
4. REINFORCING STEEL PROJECTING THROUGH CONSTRUCTION JOINT SHALL BE THOROUGHLY CLEANED OF LOOSE FLAKY RUST, MUD, OIL, DRIED CONCRETE OR OTHER COATINGS WHICH WOULD DESTROY OR REDUCE BOND.
5. THE MAXIMUM SPACING OF THE CONTROL JOINTS IN POURED CONCRETE FOUNDATION OR RETAINING WALLS SHALL BE 11 m (36'-0").
6. REFER TO MASONRY NOTES FOR MASONRY CONTROL JOINT LOCATIONS.

1. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE SUBMITTAL OF ALL REQUIRED SHOP OR FABRICATION DRAWINGS IN A TIMELY MANNER
2. ALL STRUCTURAL SUBMITTALS SUBMITTED FOR REVIEW MUST FIRST BE REVIEWED BY AND STAMPED BY THE GENERAL CONTRACTOR.
3. THE FOLLOWING SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW:

| | |
|--------------------------------|-------------|
| DRAWING | P. ENG SEAL |
| a. REINFORCING STEEL | NO |
| b. STRUCTURAL STEEL | YES |
| c. METAL ROOF DECK | YES |
| d. EXTERIOR METAL STUD FRAMING | YES |
4. WHEN NOTED IN THE ABOVE TABLE, STRUCTURAL SUBMITTALS SHALL BEAR THE SEAL AND SIGNATURE OF A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.
5. ALL STRUCTURAL SUBMITTALS WILL BE REVIEWED BY THE ARCHITECT AND ENGINEER SOLELY FOR THEIR CONFORMANCE WITH THE DESIGN INTENT AND THE CONSTRUCTION DOCUMENTS.
6. ALL SUBMITTALS SHALL CONSIST OF ONE ELECTRONIC PDF COPY OR FOUR PRINTS. ONE COPY WILL BE RETAINED BY THE ENGINEER.

| SHEET LIST | |
|------------|------------------------------|
| No. | DESCRIPTION |
| S1.1 | STRUCTURAL NOTES |
| S1.2 | STRUCTURAL NOTES & SCHEDULES |
| S2.1 | EXISTING FOUNDATION PLAN |
| S2.2 | EXISTING ROOF FRAMING PLAN |
| S2.3 | PROPOSED FOUNDATION PLAN |
| S2.4 | PROPOSED ROOF FRAMING PLAN |
| S3.1 | BUILDING SECTIONS |
| S4.1 | WALL SECTIONS |
| S4.2 | WALL SECTIONS |
| S4.3 | WALL SECTIONS |
| S5.1 | SECTION DETAILS |
| S5.2 | SECTION DETAILS |
| S6.1 | REAR CANOPY STRUCTURE |
| S6.2 | SKYLIGHT FRAMING |
| S6.3 | ROOF STAIR FRAMING |
| S6.4 | FRONT CANOPY STRUCTURE |



NOT FOR
CONSTRUCTION



CLIENT: TOWN OF SOUTH BRUCE PENINSULA

PROJECT:
SOUTH BRUCE PENINSULA
NEW TOWN HALL CONVERSION

PROJECT ADDRESS:
370 WILLIAM STREET,
WIARTON, ON N0H 2T0

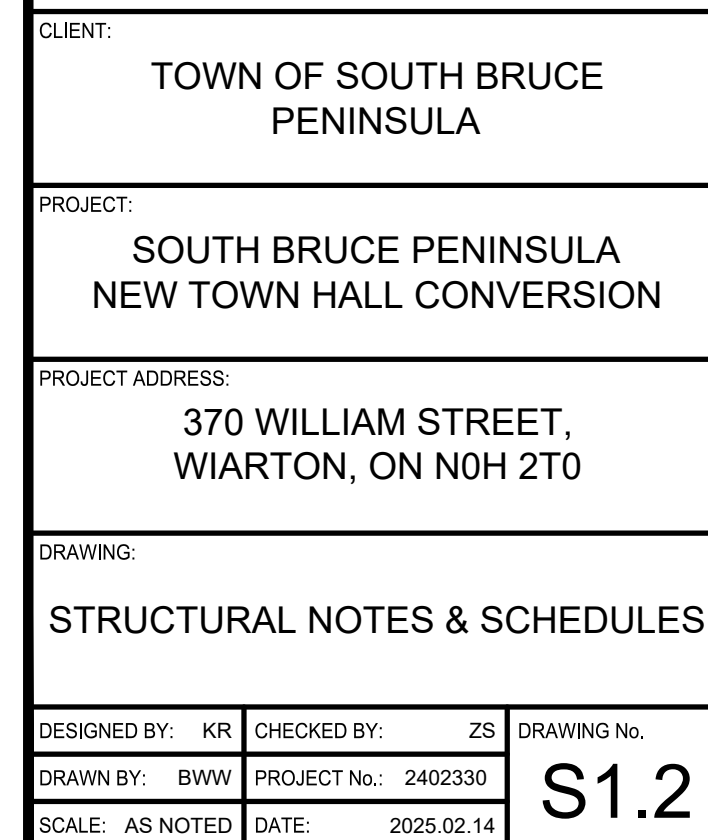
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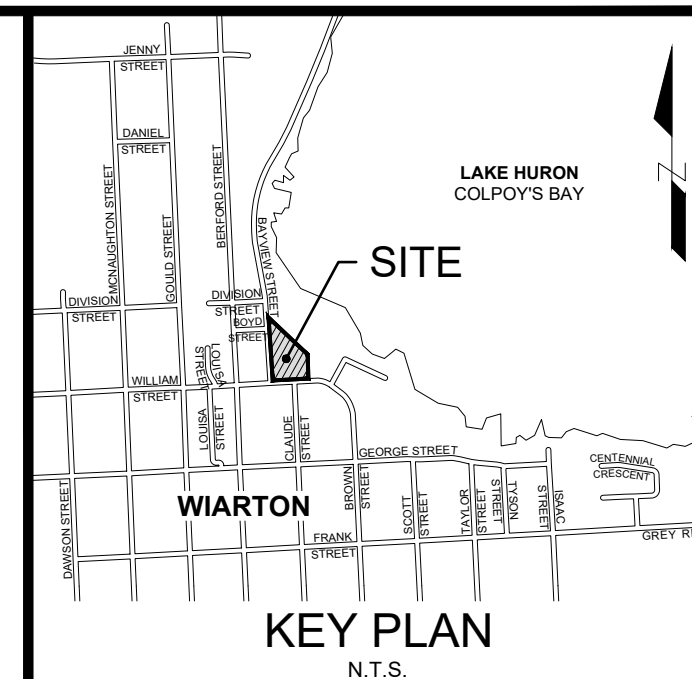
STRUCTURAL NOTES

| | | |
|-----------------|----------------------|----------------------------|
| DESIGNED BY: KR | CHECKED BY: ZS | DRAWING No. S1.1 |
| DRAWN BY: BWW | PROJECT No.: 2402330 | |
| SCALE: AS NOTED | DATE: 2025.02.14 | |



1. ALL METAL STUDS SHALL CONFORM TO CSA S136 (LATEST EDITION) AND GRADE A, 228 MPa YIELD FOR STUD 1.14 mm (18 GA) OR THINNER. ALL METAL STUDS SHALL CONFORM TO CSA S136 (LATEST EDITION) AND ASTM A653 / A653M (LATEST EDITION) GRADE D, 345 MPa (50,000 psi) YIELD FOR STUD 1.14 mm (16 GA) OR THICKER.
2. THICKNESS OF STUD MUST BE DETERMINED BY SPECIALIST'S ENGINEER BUT MUST NOT BE LESS THAN THE FOLLOWING: ALL STRUCTURAL STUDS SHALL BE OF MINIMUM 1.22 mm (18 GA) THICK FOR WALL BACKING MASONRY VENER. MINIMUM 1.52 mm (16 GA) THICK FOR OTHER APPLICATION.
3. STUDS SHALL BE SPACED AT MAXIMUM 400 mm (1'4") ON CENTRE, COMPLETE WITH DEFLECTION TRACKS AT TOP OF WALL.
4. FOR EXTERIOR WALLS: ALL STUDS, BRIDGING AND TRACKS SHALL BE DESIGNED FOR A WIND LOAD ON THE WALL SYSTEM, TO CSA S136 (LATEST EDITION) AND IN ACCORDANCE WITH THE OBC, MAXIMUM DEFLECTION UNDER WIND LOAD MUST NOT EXCEED SPAN / 720 FOR STUD WALL BACKING MASONRY VENER WALL. OTHERWISE, MAXIMUM DEFLECTION UNDER WIND LOAD MUST NOT EXCEED SPAN / 360.
5. FOR INTERIOR WALLS: ALL STUDS, BRIDGING AND TRACKS SHALL BE DESIGNED FOR A WIND LOAD OF 0.3kPa ON THE WALL SYSTEM, TO CSA S136 (LATEST EDITION) AND IN ACCORDANCE WITH THE OBC (LATEST EDITION), MAXIMUM DEFLECTION UNDER WIND LOAD MUST NOT EXCEED SPAN / 360.
6. ALL INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL CONNECTORS USED SHALL BE OF CORROSION RESISTANCE MATERIAL COMPATIBLE WITH GALVANIZED COATING OF STUDS.
7. METAL STUD CONTRACTOR IS FULLY RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF THE STUD WALL SYSTEM AND ALL CONNECTION DETAILS, INCLUDING BRICK TIE CONNECTION AND ANCHOR DETAILS OF THE SYSTEM TO THE MAIN STRUCTURE. SHOP DRAWINGS AND SITE WORK REPORTS OF THE STUD WALLS PREPARED BY CONTRACTOR'S SPECIALIST ENGINEER COMPLETE WITH P.E.NG. SEAL SHALL BE SUBMITTED TO ARCHITECT AND ENGINEER FOR REVIEW AND RECORD.





NOTES:

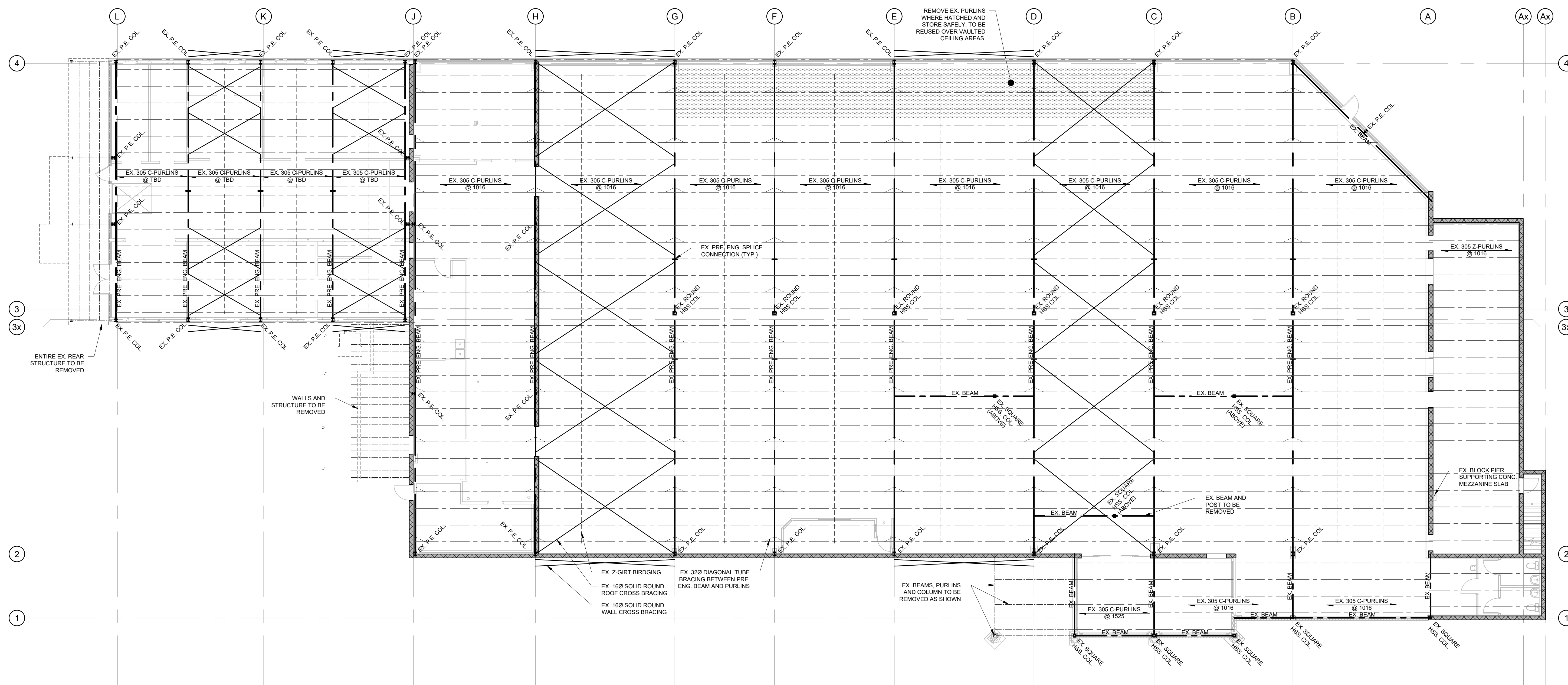
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CONSTRUCTION**

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DRAWING:

EXISTING ROOF FRAMING PLAN

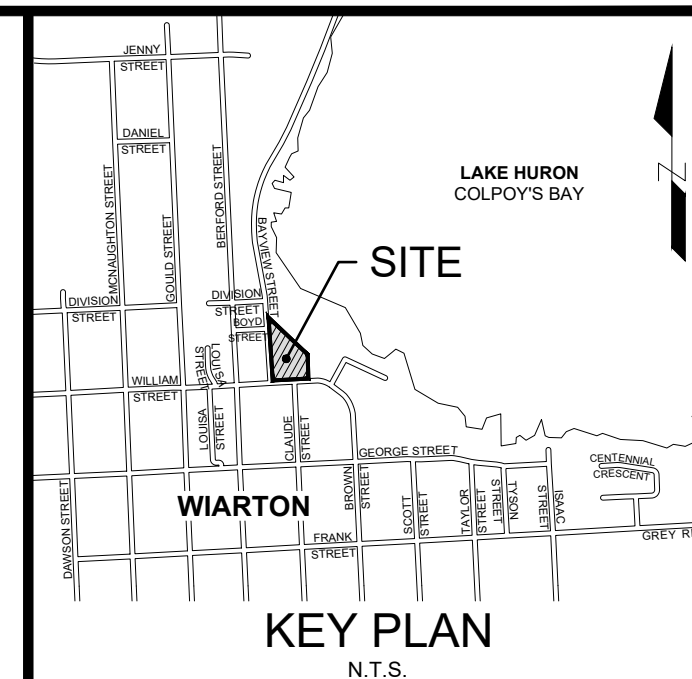
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| DESIGNED BY: KR | CHECKED BY: ZS | DRAWING No. S2. |
| DRAWN BY: BWW | PROJECT No.: 2402330 | |
| SCALE: AS NOTED | DATE: 2025.02.14 | |



1 EXISTING ROOF FRAMING PLAN

SCALE: 1:125

S2.2



NOTES:

**NOT FOR
CONSTRUCTION**

[illegible]

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(519) 376-1805

CLIENT: TOWN OF SOUTH BRUCE
PENINSULA

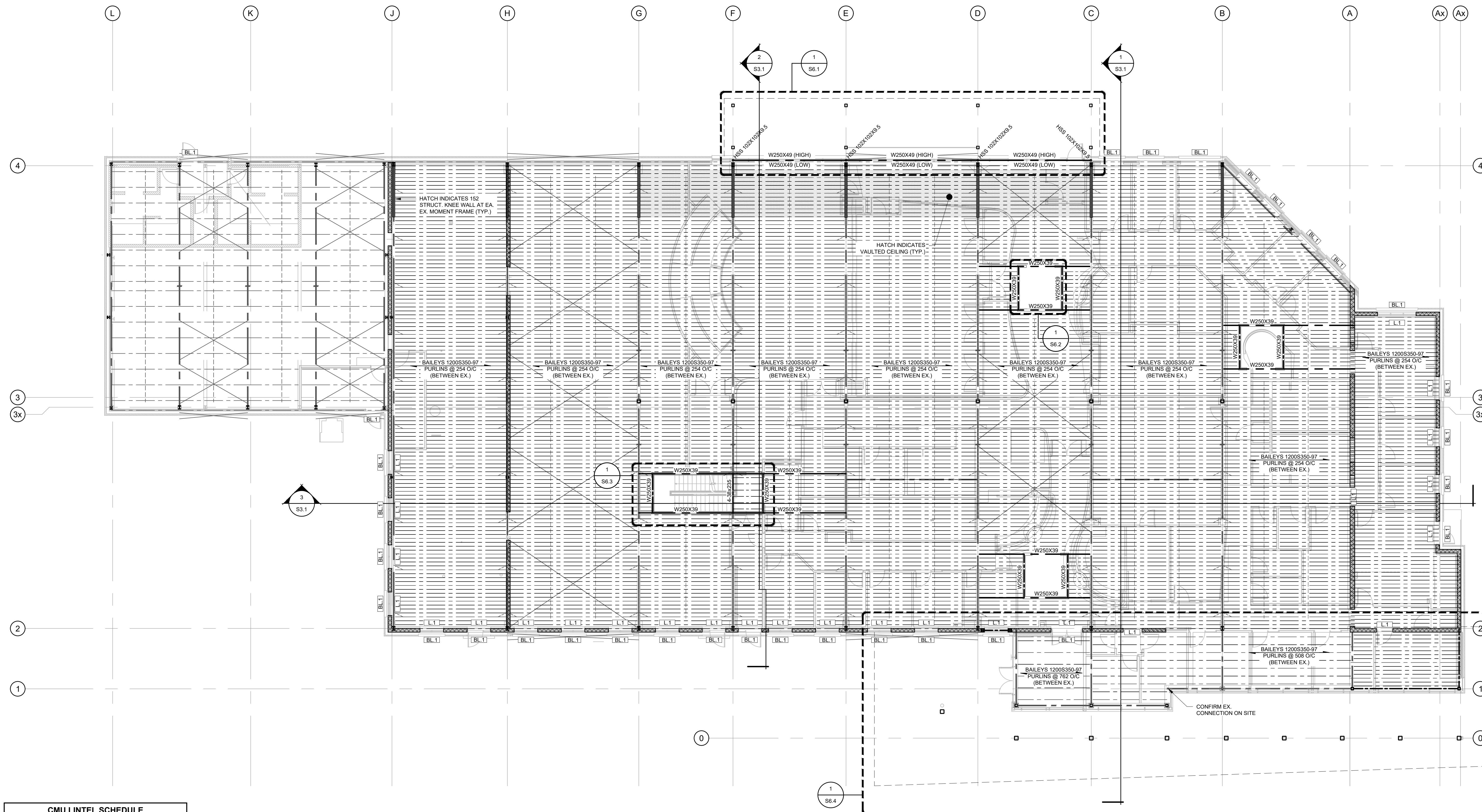
PROJECT:
SOUTH BRUCE PENINSULA
NEW TOWN HALL CONVERSION

PROJECT ADDRESS:
370 WILLIAM STREET,
WIARTON, ON N0H 2T0

DRAWING:

PROPOSED ROOF FRAMING PLAN

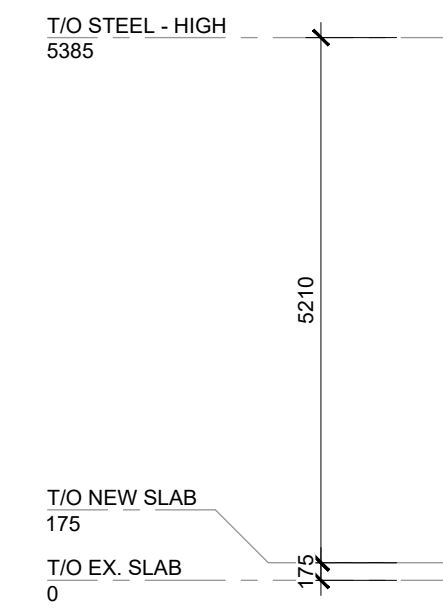
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| DESIGNED BY: KR | CHECKED BY: ZS | DRAWING No. S2.4 |
| DRAWN BY: BWW | PROJECT No.: 2402330 | |
| SCALE: AS NOTED | DATE: 2025.02.14 | |



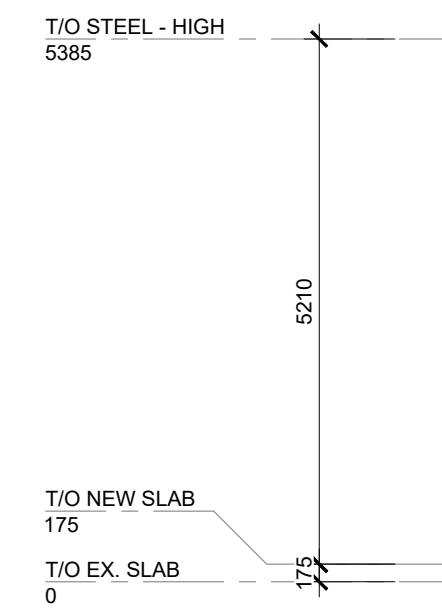
| MASONRY VENEER LINTEL SCHEDULE | | |
|--------------------------------|-----------|--------------|
| MARK | SPAN | DESCRIPTION |
| BL.1 | 1.5m-2.5m | L127X127X9.5 |

1 PROPOSED ROOF FRAMING PLAN
S2.4

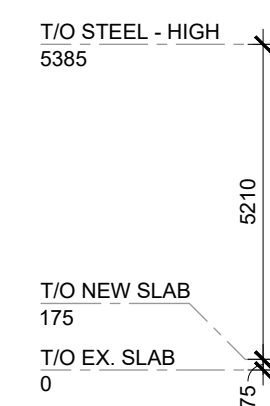
SCALE: 1:125



SCALE: 1:75



SCALE: 1:75



SCALE: 1:125



**NOT FOR
CONSTRUCTION**

[illegible]

TOWN OF SOUTH BRUCE
PENINSULA

PROJECT:
SOUTH BRUCE PENINSULA
NEW TOWN HALL CONVERSION

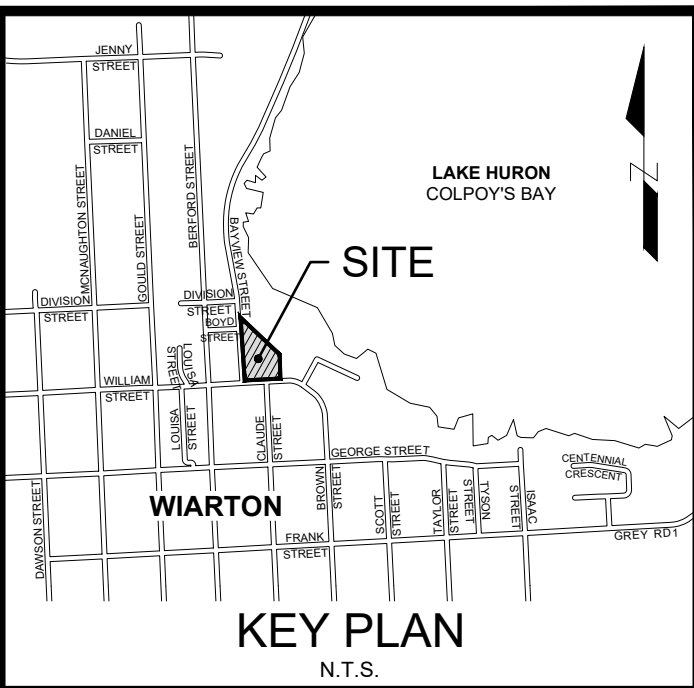
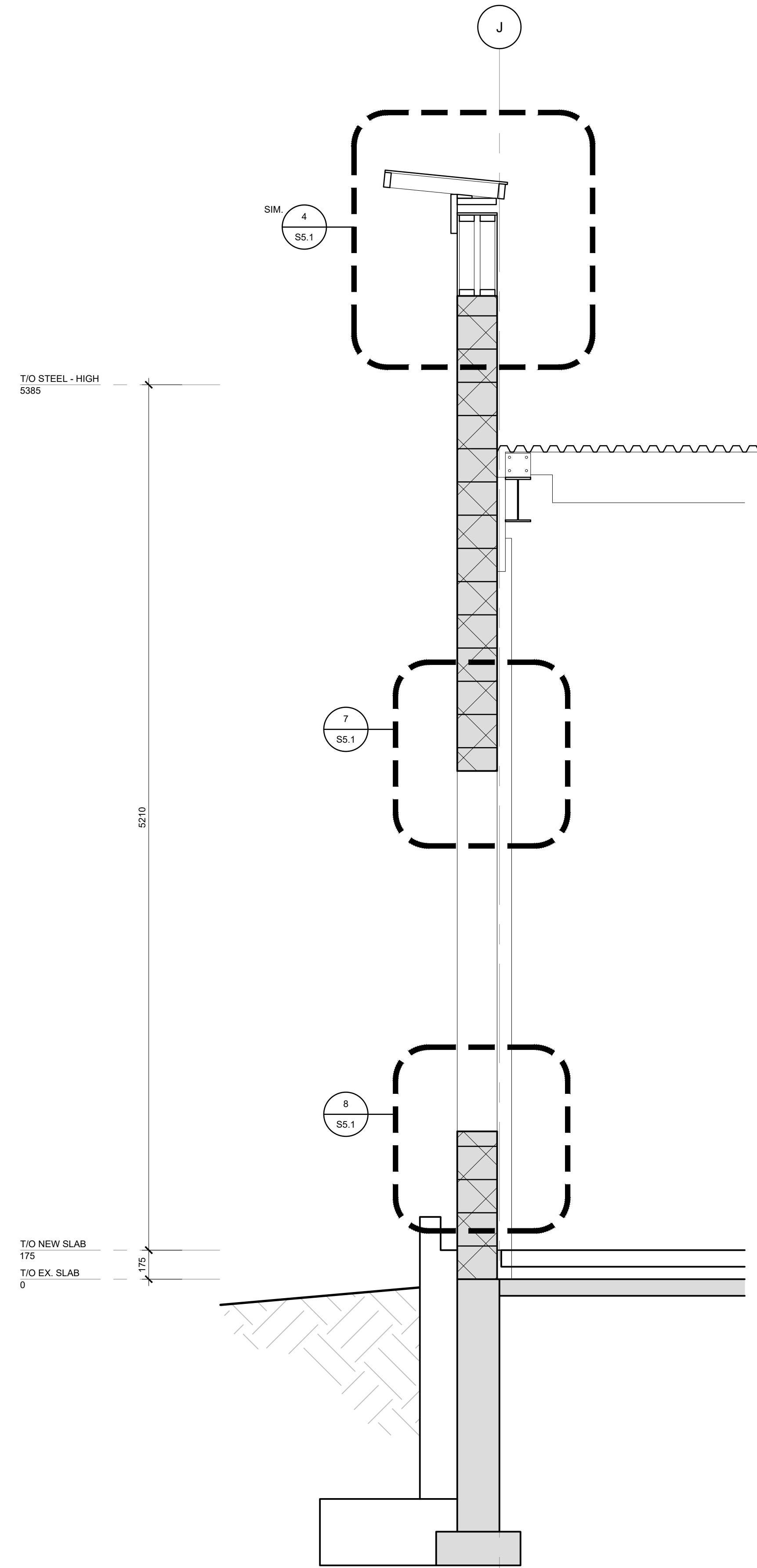
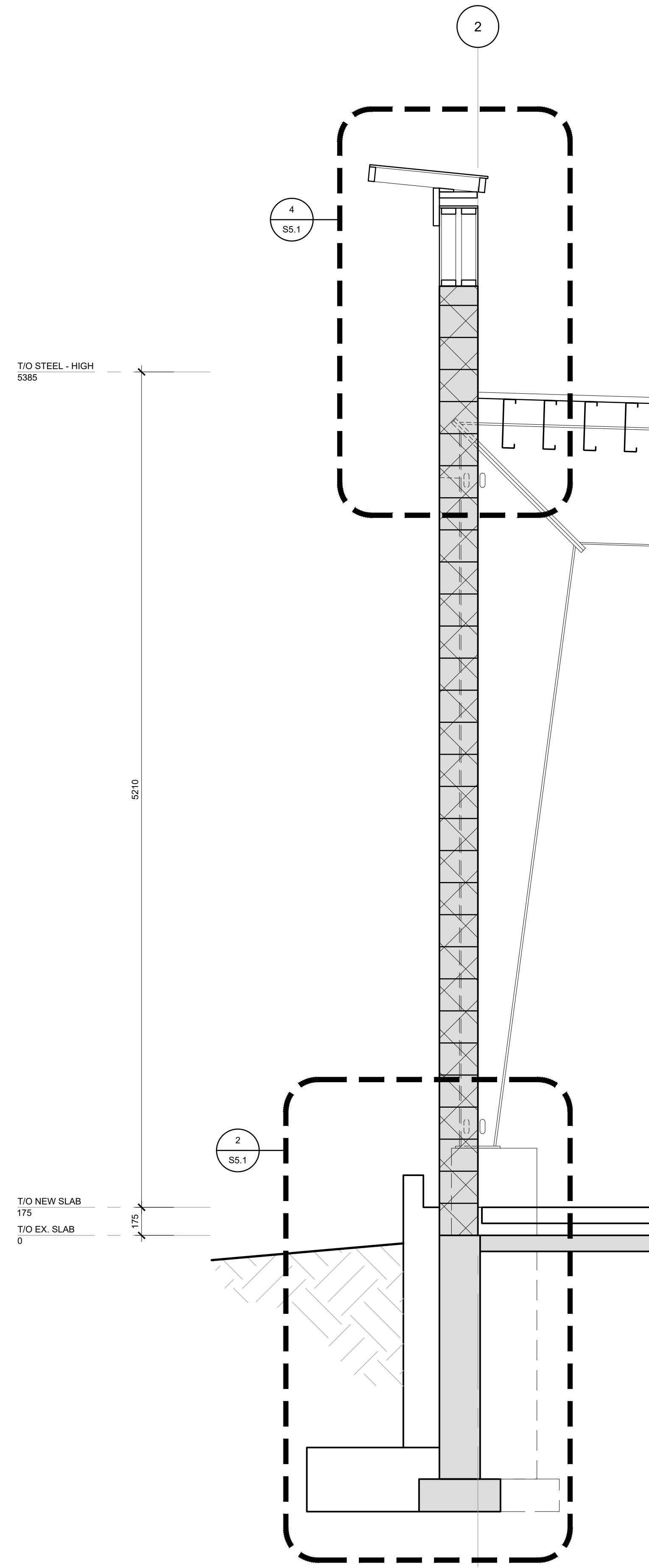
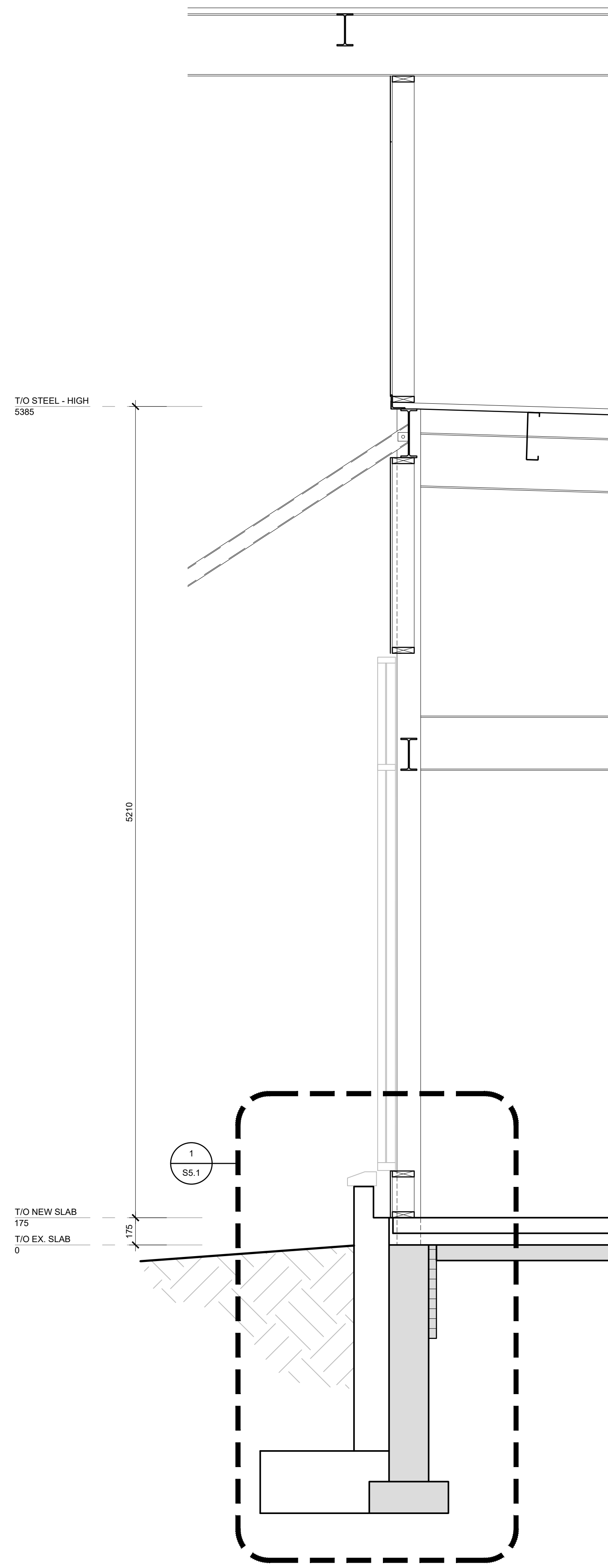
PROJECT ADDRESS:
370 WILLIAM STREET,
WIARTON, ON N0H 2T0

DRAWING:

BUILDING SECTIONS

| | | |
|-----------------|----------------------|----------------------------|
| DESIGNED BY: KR | CHECKED BY: ZS | DRAWING No. S3.1 |
| DRAWN BY: BWV | PROJECT No.: 2402330 | |
| SCALE: AS NOTED | DATE: 2025.02.14 | |

S3.1



NOTES:

NOT FOR
CONSTRUCTION

[illegible]

CLIENT: TOWN OF SOUTH BRUCE
PENINSULA

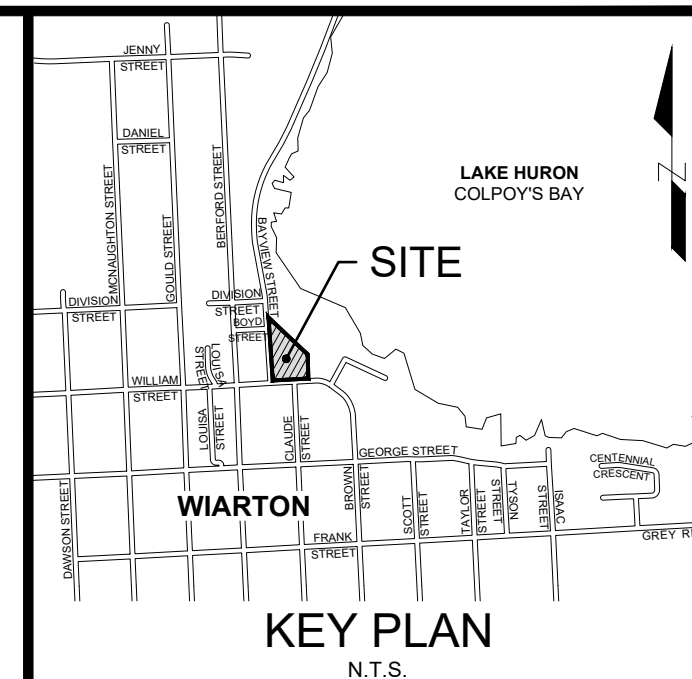
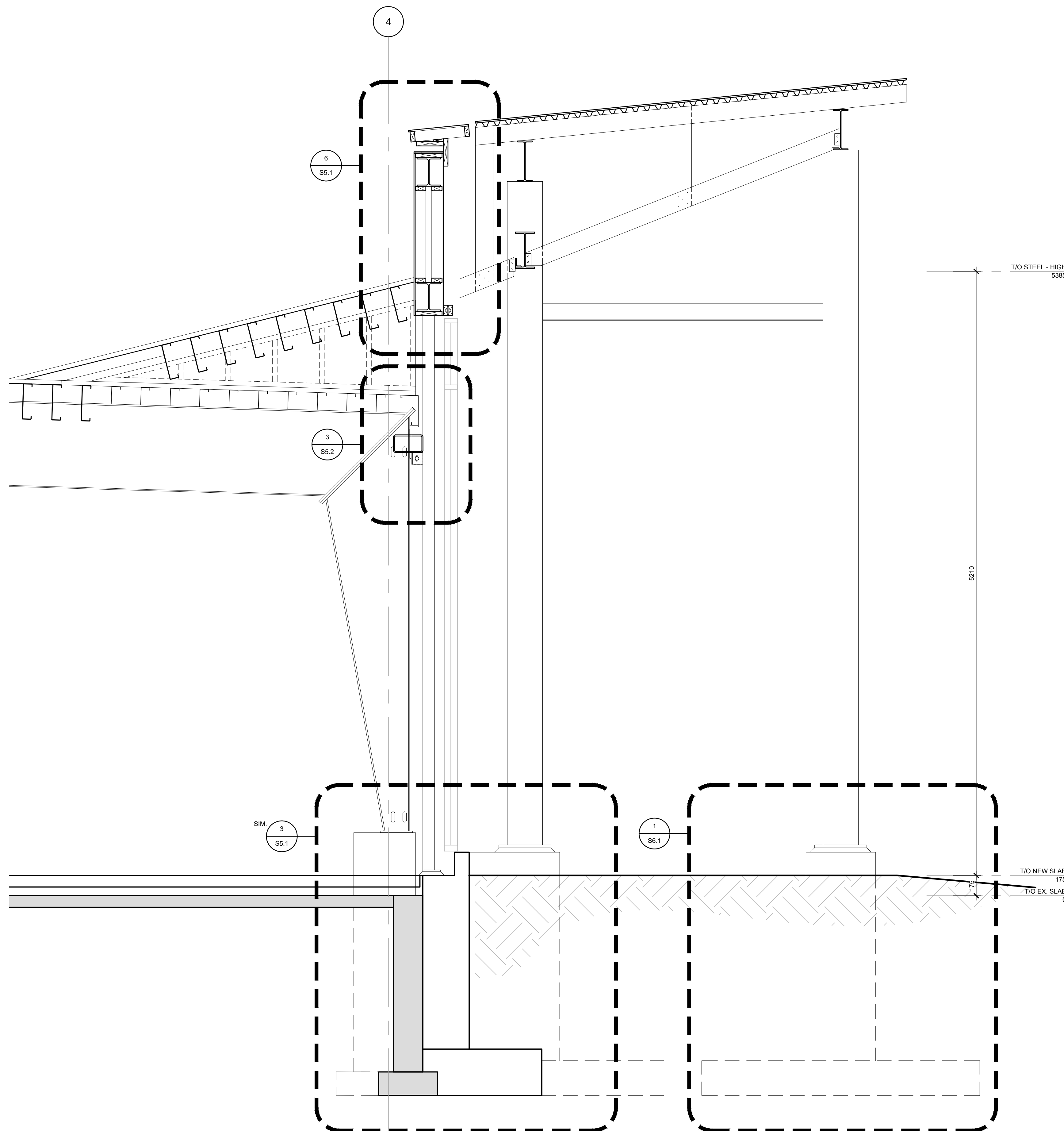
PROJECT:
SOUTH BRUCE PENINSULA
NEW TOWN HALL CONVERSION

PROJECT ADDRESS:
370 WILLIAM STREET,
WIARTON, ON N0H 2T0

DRAWING:

WALL SECTIONS

| | | |
|-----------------|----------------------|--------------------------------|
| DESIGNED BY: KR | CHECKED BY: ZS | DRAWING No. S4.1 |
| DRAWN BY: BWW | PROJECT No.: 2402330 | |
| SCALE: AS NOTED | DATE: 2025.02.14 | |



NOTES:

**NOT FOR
CONSTRUCTION**

[illegible]

CLIENT: TOWN OF SOUTH BRUCE
PENINSULA

PROJECT:
SOUTH BRUCE PENINSULA
NEW TOWN HALL CONVERSION

PROJECT ADDRESS:
370 WILLIAM STREET,
WIARTON, ON N0H 2T0

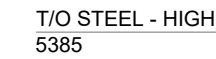
DRAWING:

WALL SECTIONS

| | | |
|-----------------|----------------------|----------------------------|
| DESIGNED BY: KR | CHECKED BY: ZS | DRAWING No. S4.2 |
| DRAWN BY: BWW | PROJECT No.: 2402330 | |
| SCALE: AS NOTED | DATE: 2025.02.14 | |

1 WALL SECTION "D"
S4.2 SCALE: 1:20

2 WALL SECTION "E"
S4.2 SCALE: 1:20



**NOT FOR
CONSTRUCTION**

[illegible]

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(519)376-1805

CLIENT: TOWN OF SOUTH BRUCE
PENINSULA

PROJECT: SOUTH BRUCE PENINSULA
NEW TOWN HALL CONVERSION

PROJECT ADDRESS:
370 WILLIAM STREET,
WIARTON, ON N0H 2T0

DRAWING:

WALL SECTIONS

| | | |
|-----------------|----------------------|----------------------------|
| DESIGNED BY: KR | CHECKED BY: ZS | DRAWING No. S4.3 |
| DRAWN BY: BWV | PROJECT No.: 2402330 | |
| SCALE: AS NOTED | DATE: 2025.02.14 | |

S4.3

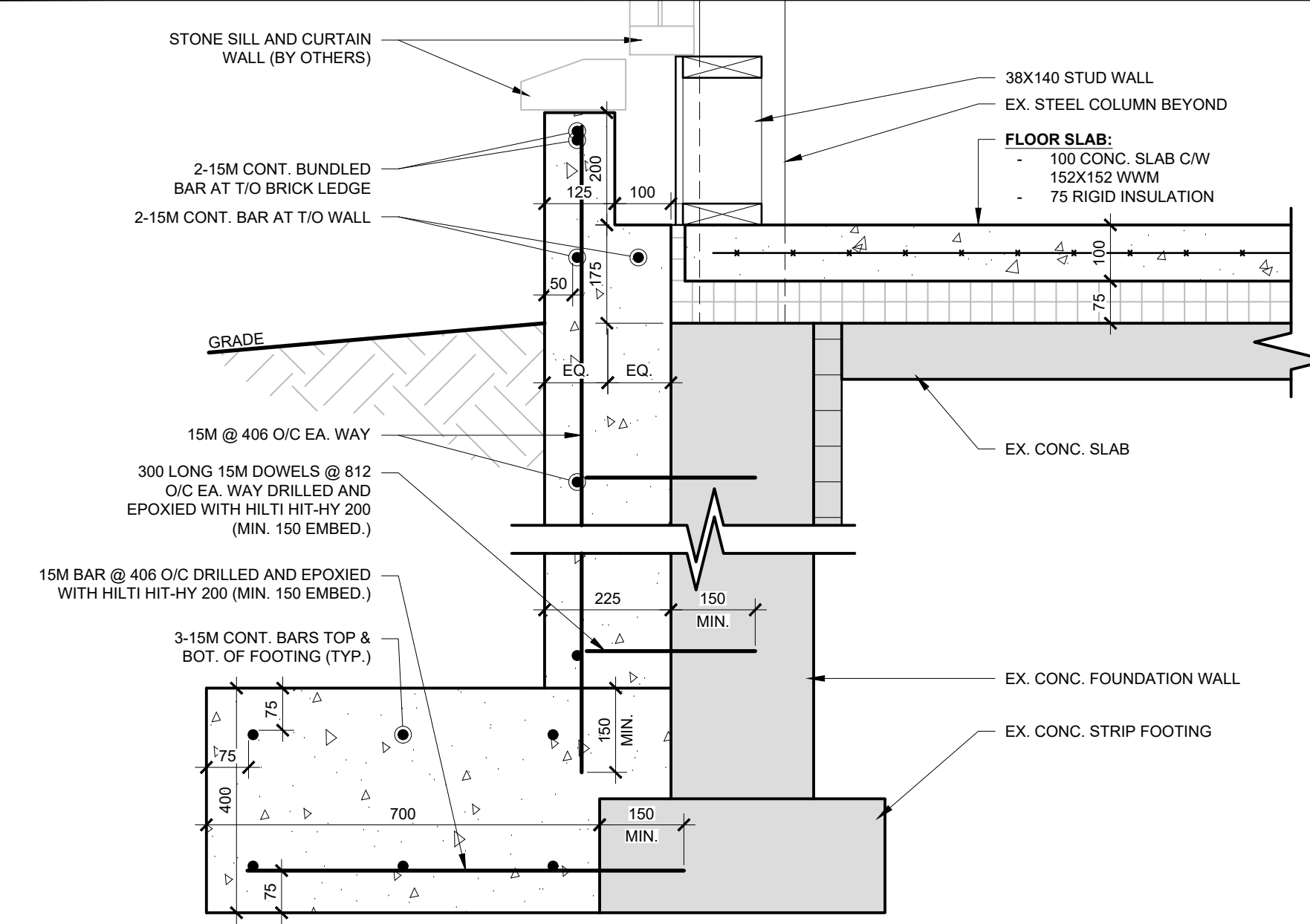
1 WALL SECTION "F"
S4.3

SCALE: 1:20

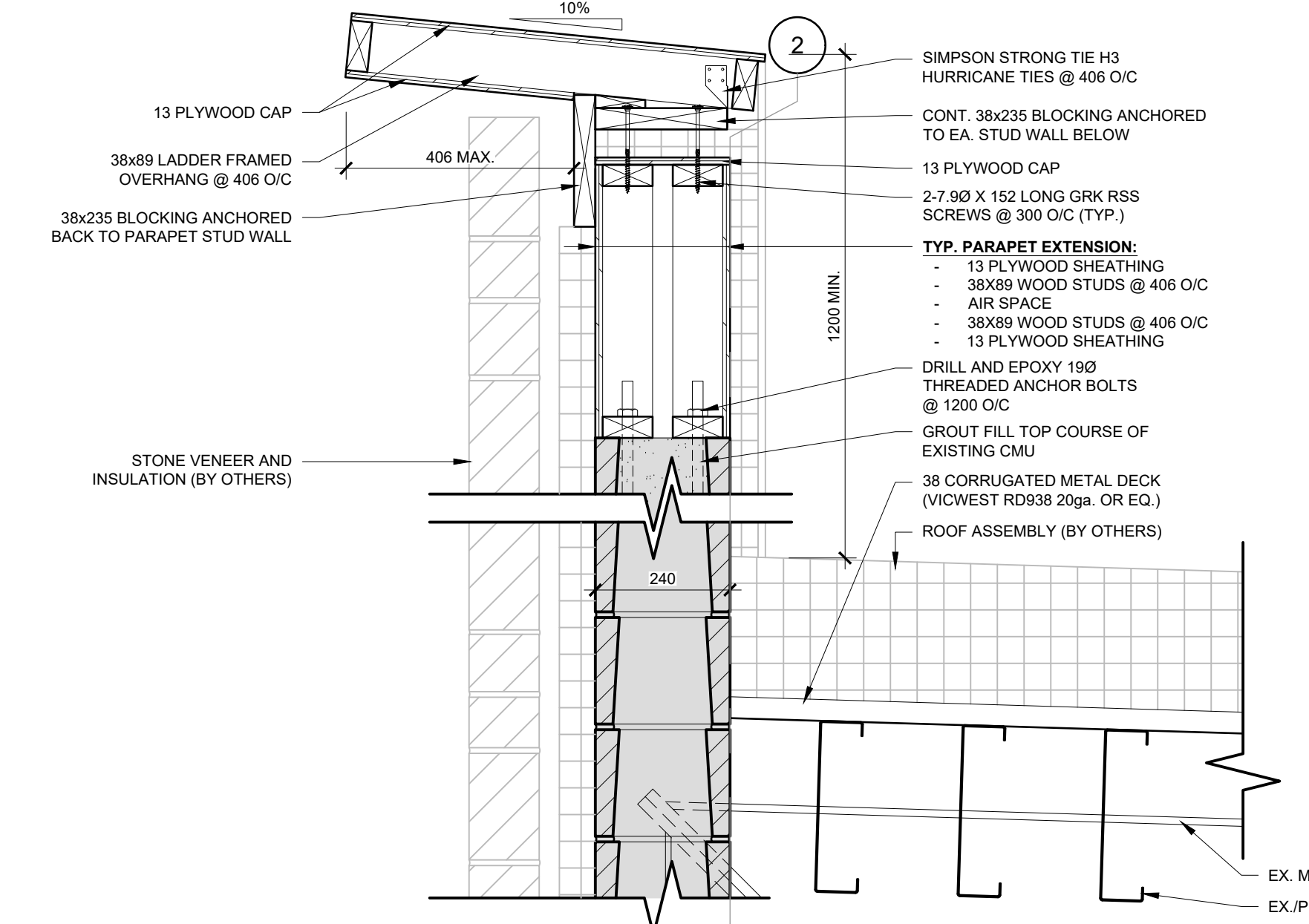
2 WALL SECTION "G"
S4.3

SCALE: 1:20

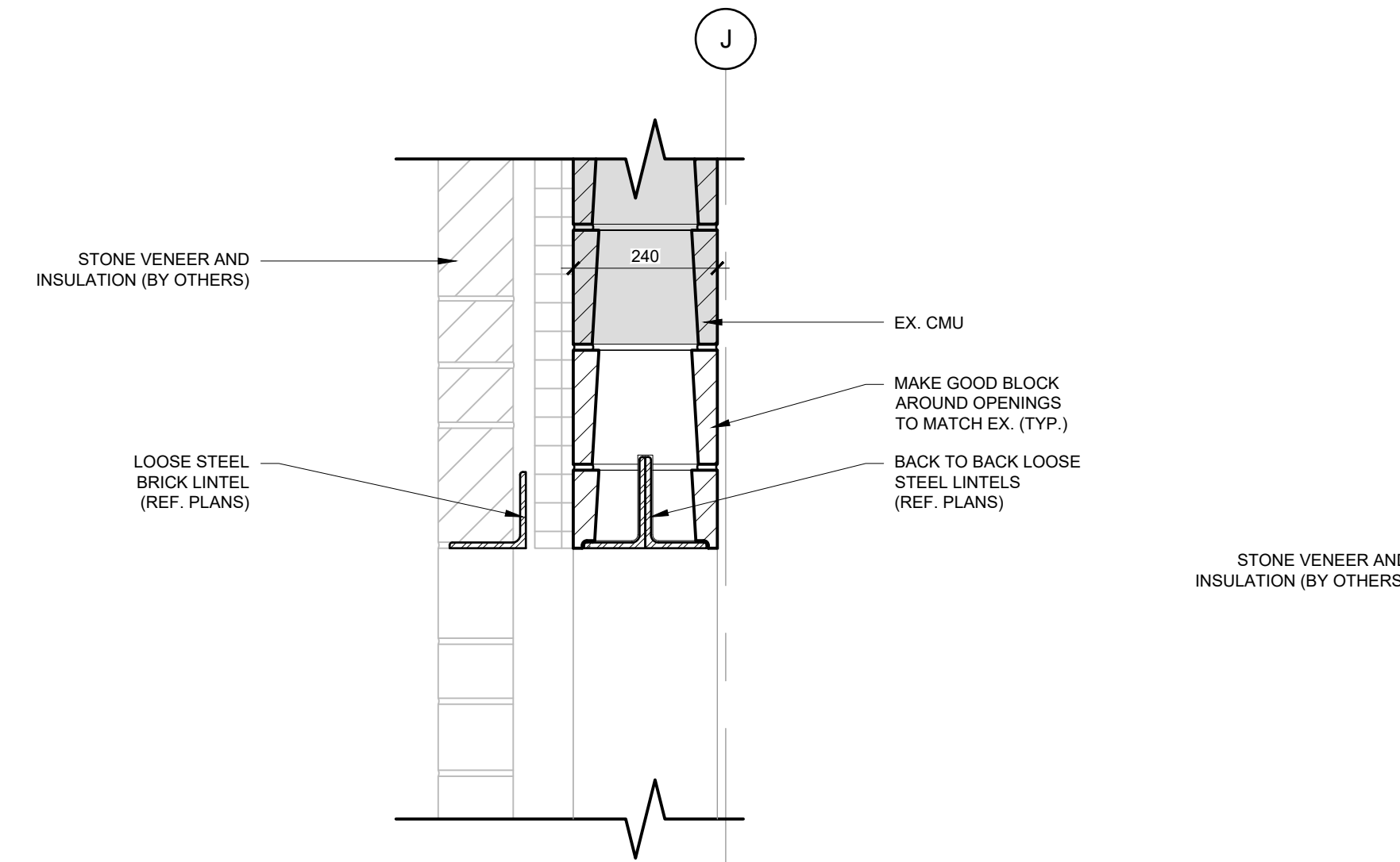
WARDLE, BROCK | geiconsultants.com | TOWN OF SOUTH BRUCE PENINSULA ON, TOWN OF 2402330 - 220892 Structural Review - Warden Foodland Drawings 2402330 TSBP Town Hall BMM.dwg - 10/29/2025



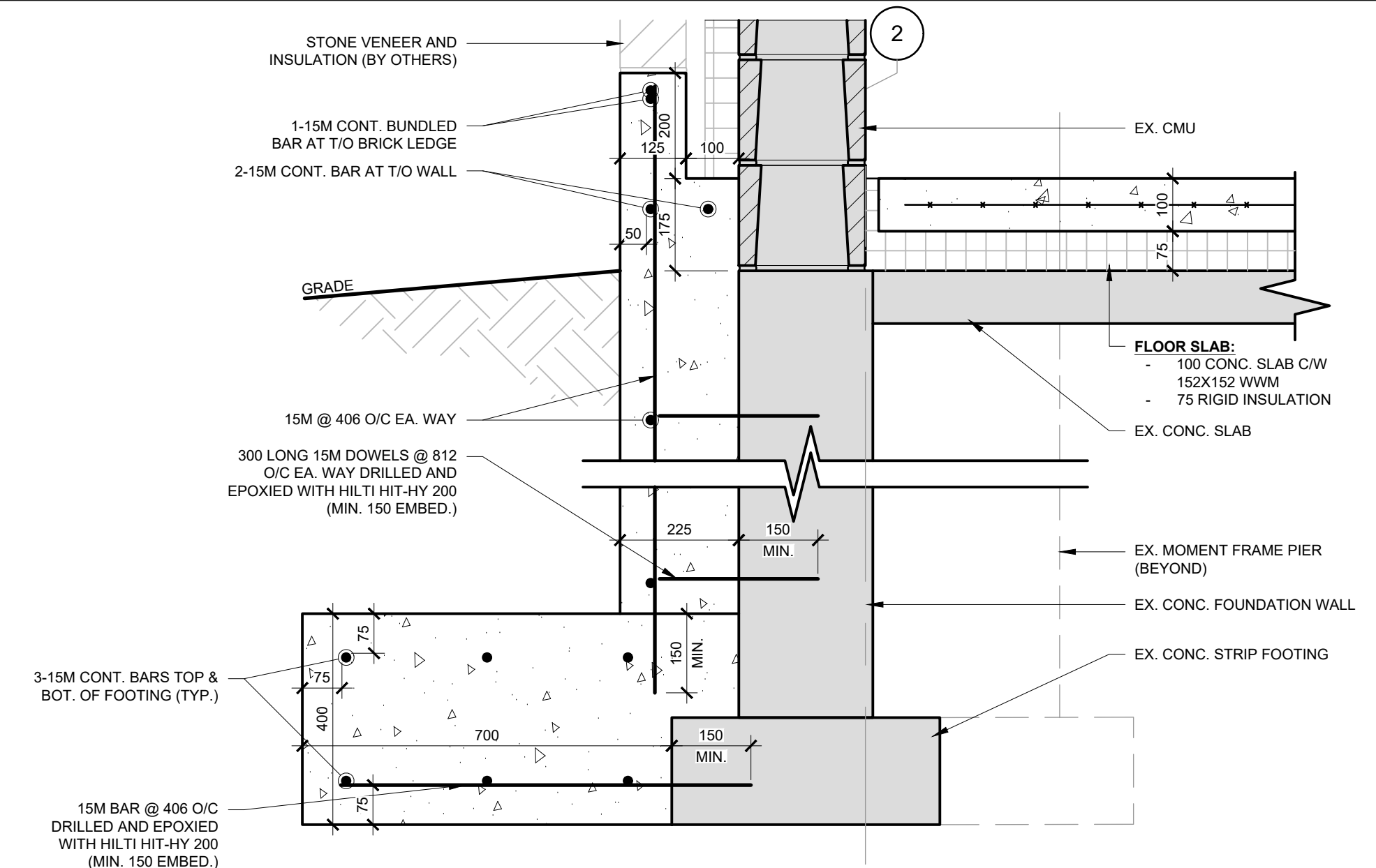
1 SECTION DETAIL B/O WALL AT SOUTH CURTAIN WALL
S5.1 SCALE: 1:10



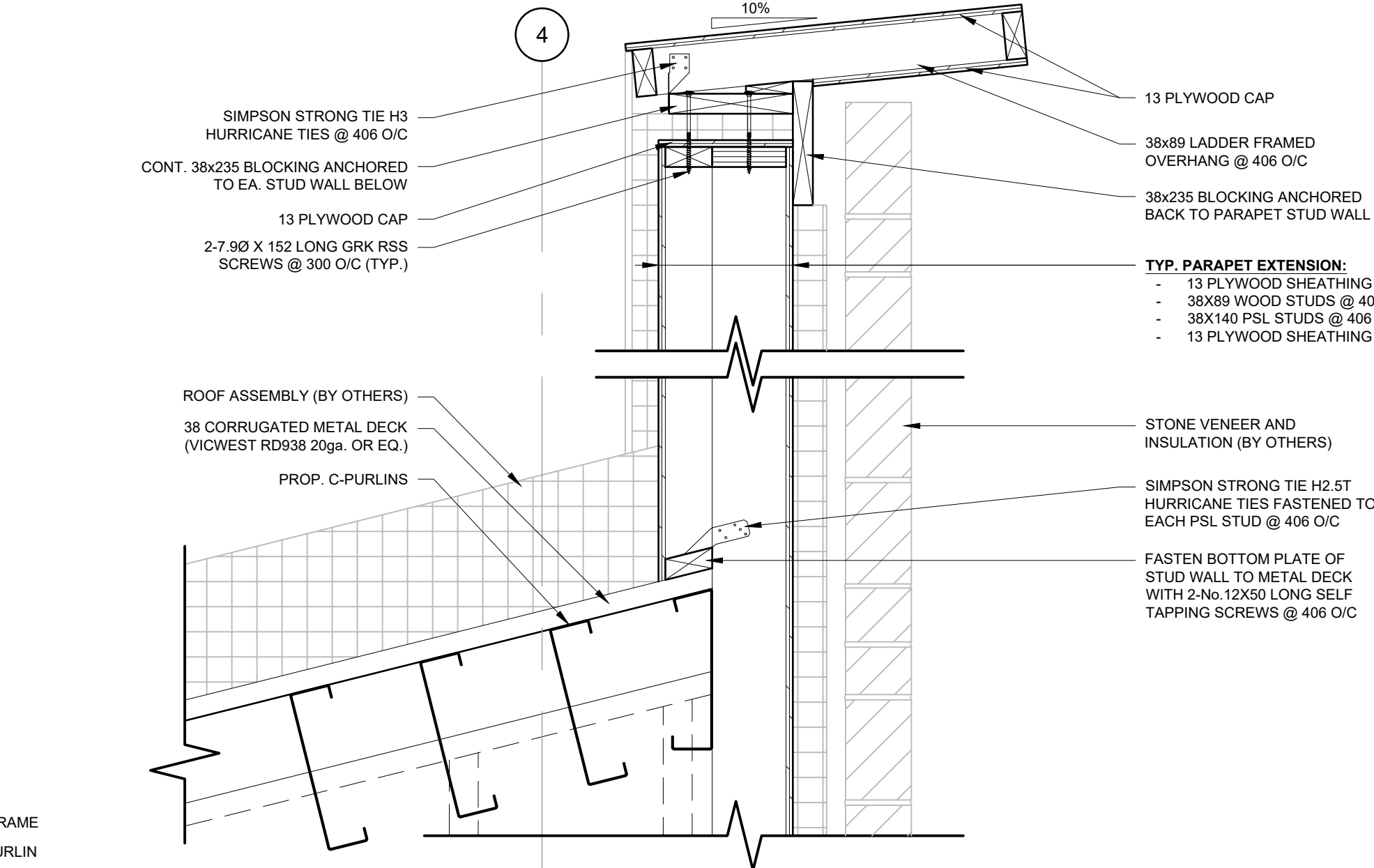
4 SECTION DETAIL PARAPET AT EX. CMU
S5.1 SCALE: 1:10



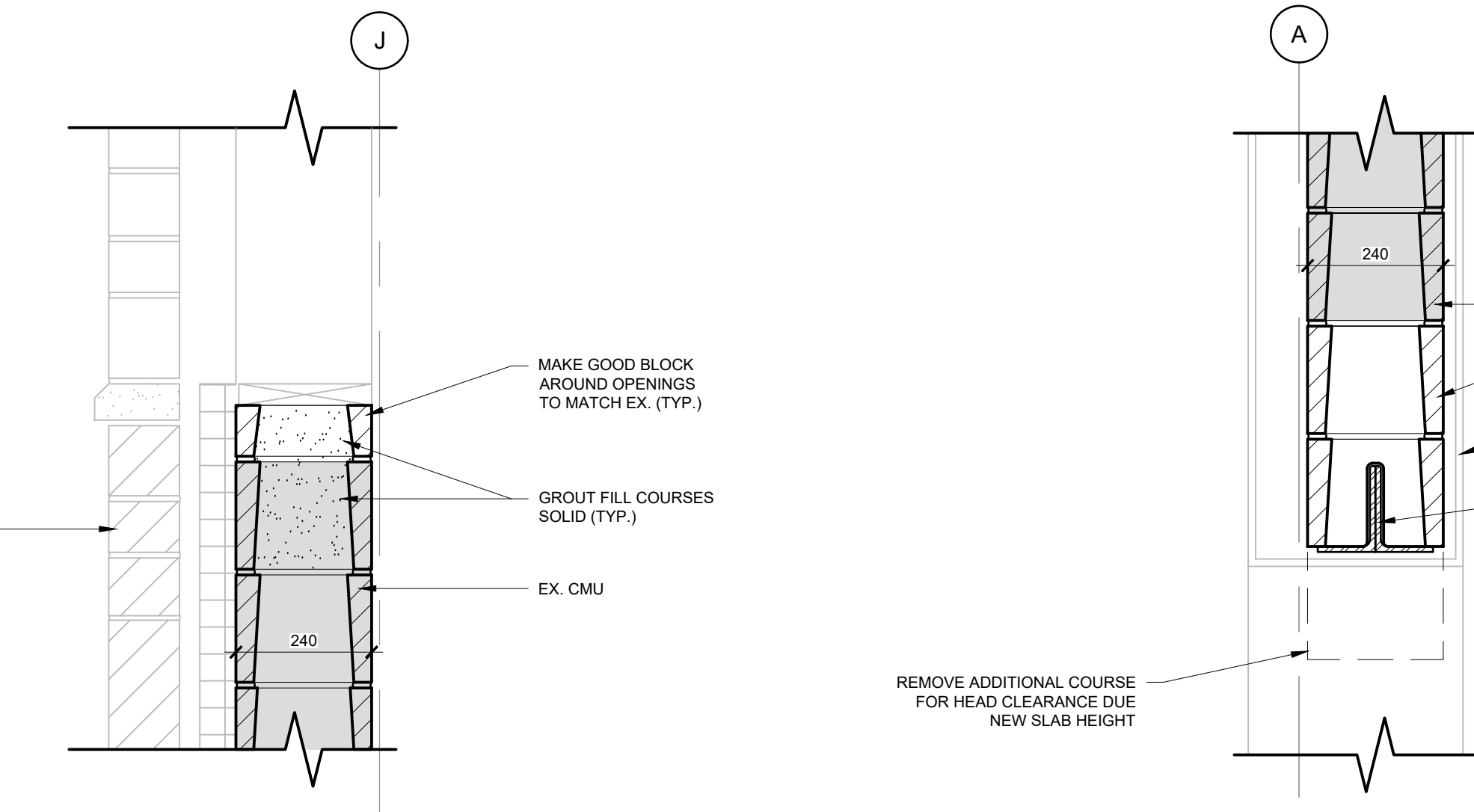
7 SECTION DETAIL TYP. EXTERIOR CMU HEADER
S5.1 SCALE: 1:10



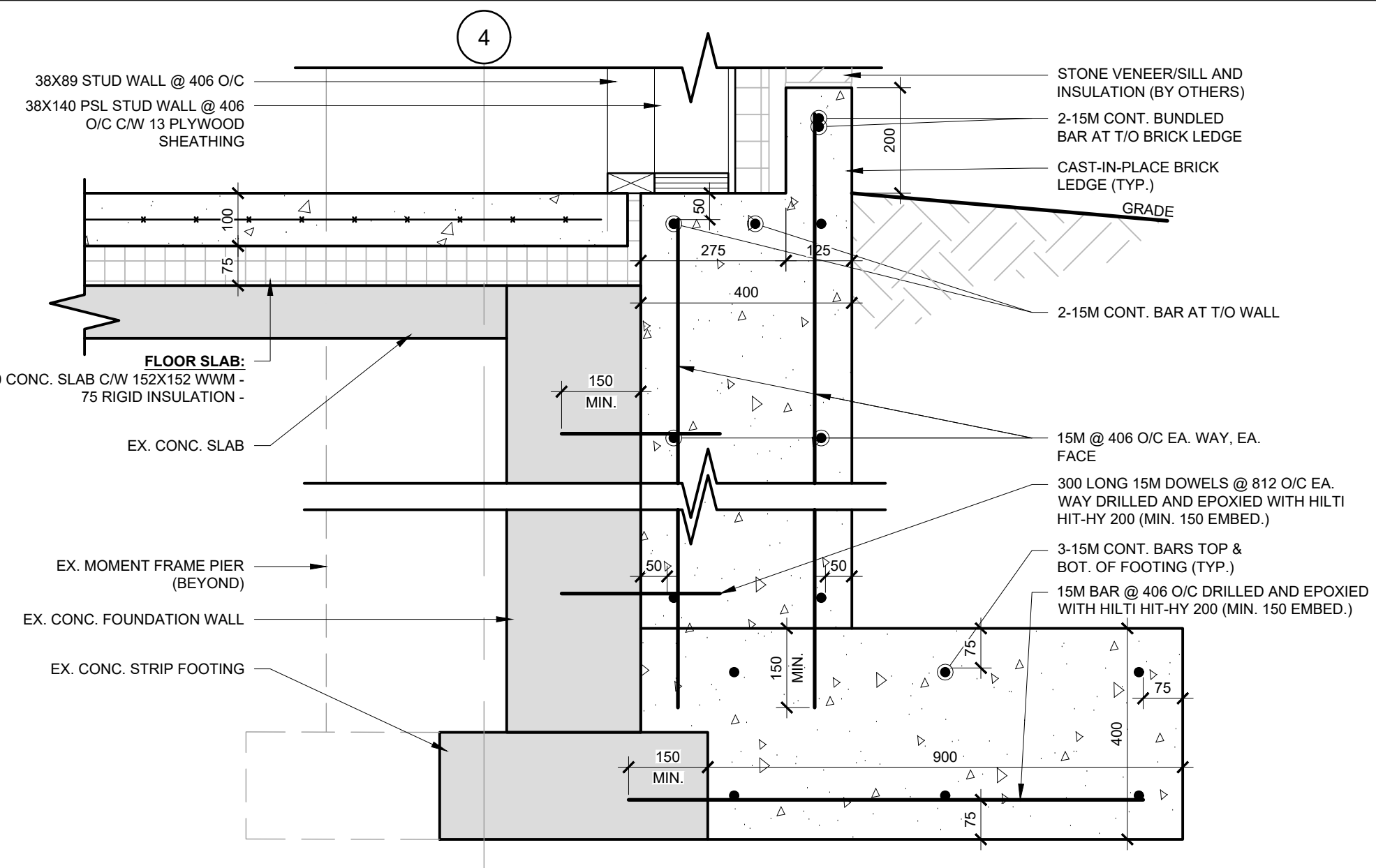
2 SECTION DETAIL B/O WALL AT EX. CMU
S5.1 SCALE: 1:10



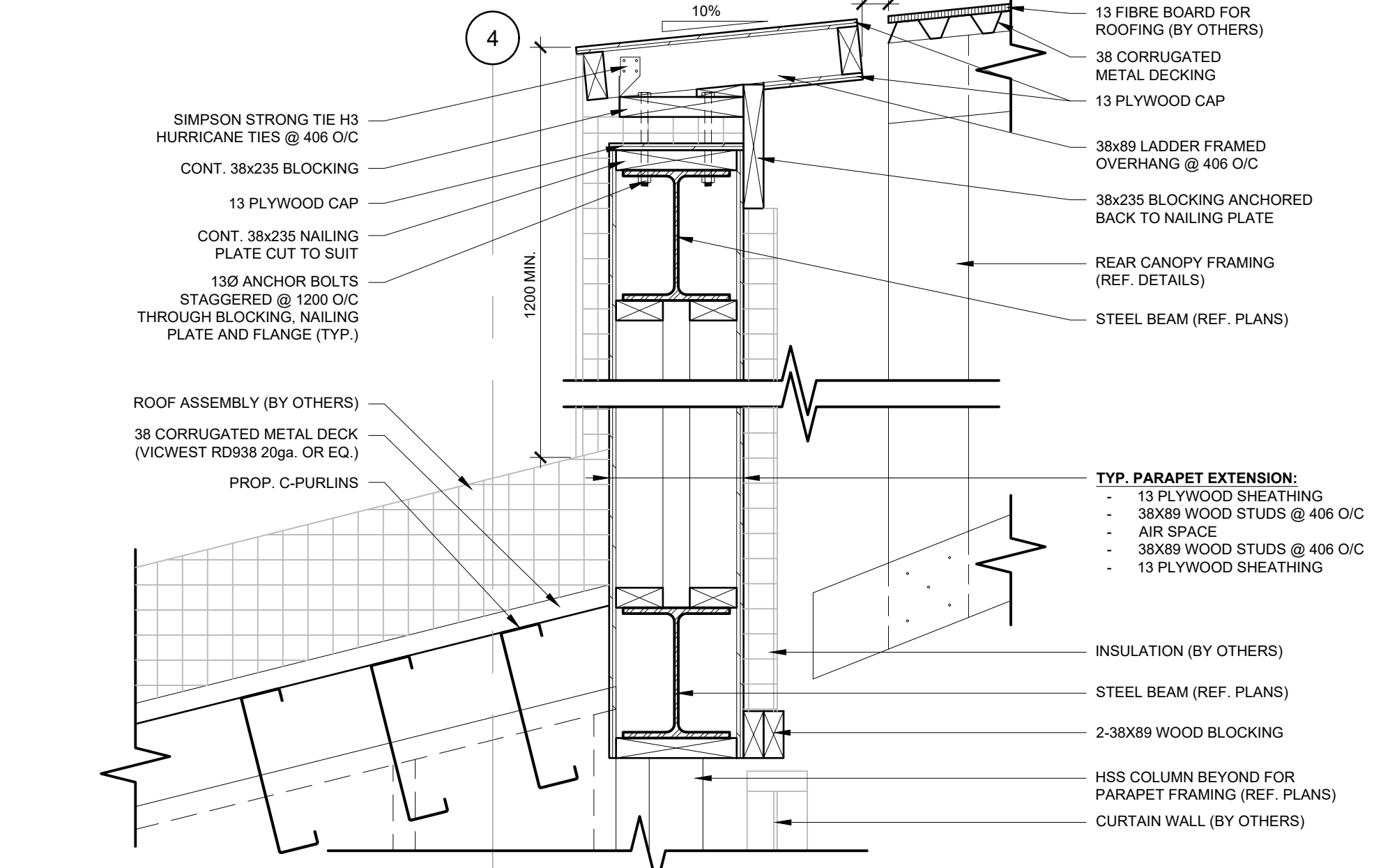
5 SECTION DETAIL PARAPET AT STUD WALL
S5.1 SCALE: 1:10



8 SECTION DETAIL TYPICAL EXTERIOR CMU SILL
S5.1 SCALE: 1:10



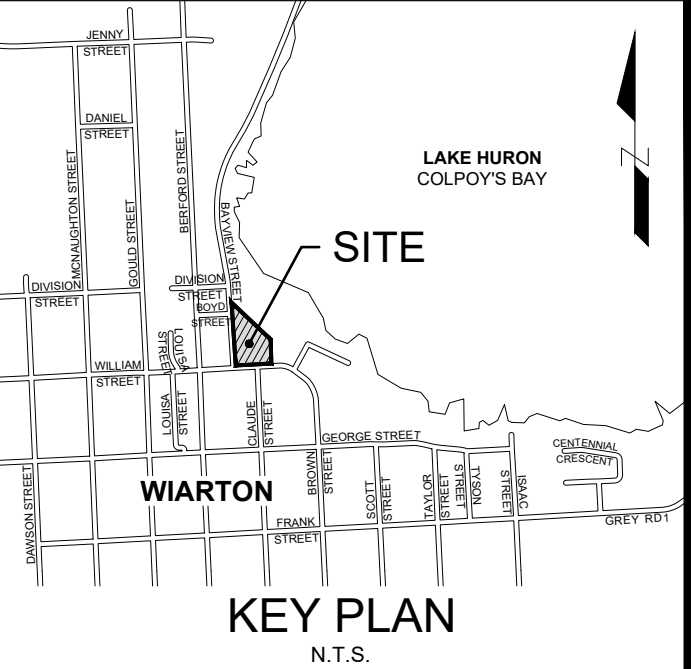
3 SECTION DETAIL B/O WALL AT WOOD STUD/CURTAIN WALL
S5.1 SCALE: 1:10



6 SECTION DETAIL PARAPET AT CURTAIN WALL
S5.1 SCALE: 1:10



9 SECTION DETAIL INTERIOR CMU LINTEL
S5.1 SCALE: 1:10



NOTES:

NOT FOR CONSTRUCTION

| No. | DATE | REVISION DESCRIPTION | CHECKED |
|-----|------------|--------------------------------|---------|
| 1 | 2025.05.02 | EXISTING CONDITIONS | ZS |
| 2 | 2025.06.27 | SKYLIGHT AND CANOPY STRUCTURES | ZS |
| 3 | 2025.09.04 | ISSUED FOR 90% | ZS |
| 4 | 2025.10.28 | ISSUED FOR TENDER | ZS |



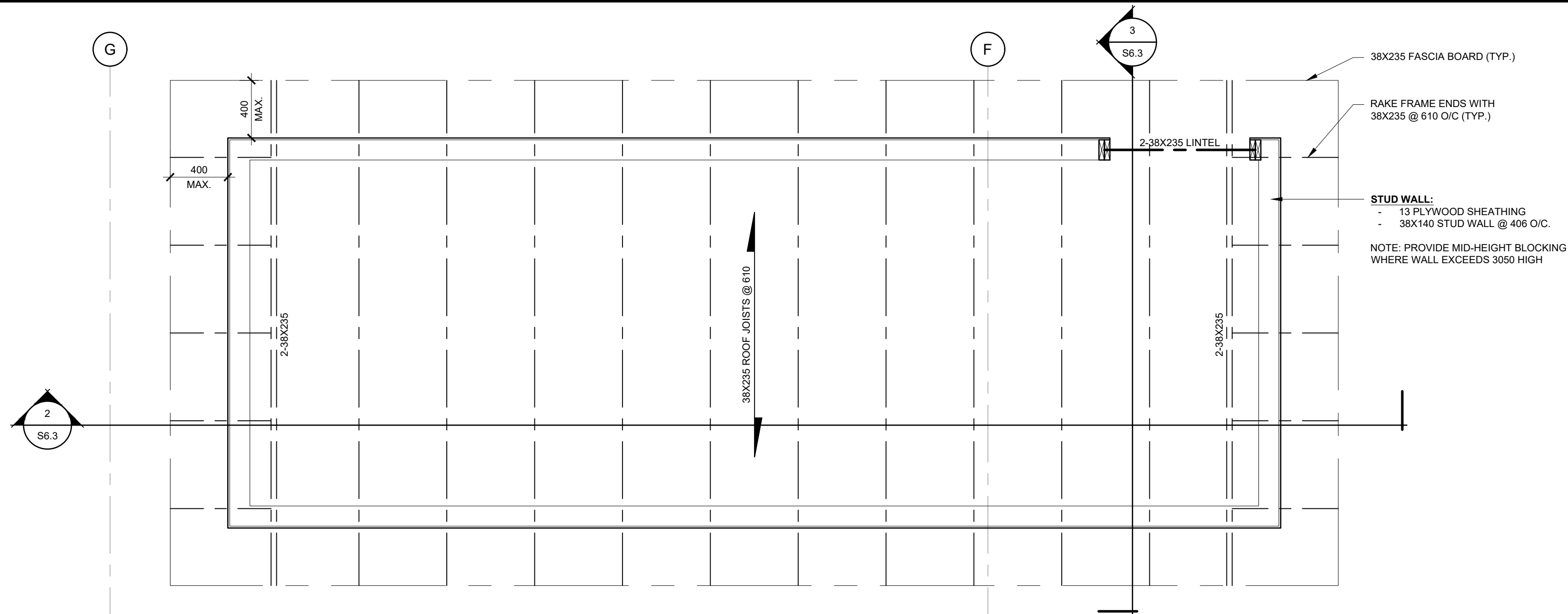
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1260-2ND AVENUE EAST
OWEN SOUND, ONTARIO N4K 2J3
(519)376-1805

| | | | |
|------------------|---|-------------|--|
| CLIENT: | TOWN OF SOUTH BRUCE PENINSULA | | |
| PROJECT: | SOUTH BRUCE PENINSULA NEW TOWN HALL CONVERSION | | |
| PROJECT ADDRESS: | 370 WILLIAM STREET, WIARTON, ON N0H 2T0 | | |
| DRAWING: | SECTION DETAILS | | |
| DESIGNED BY: KR | CHECKED BY: ZS | DRAWING No. | |
| DRAWN BY: BWW | PROJECT No.: 2402330 | S5.1 | |
| SCALE: AS NOTED | DATE: 2025.06.23 | | |

[illegible]

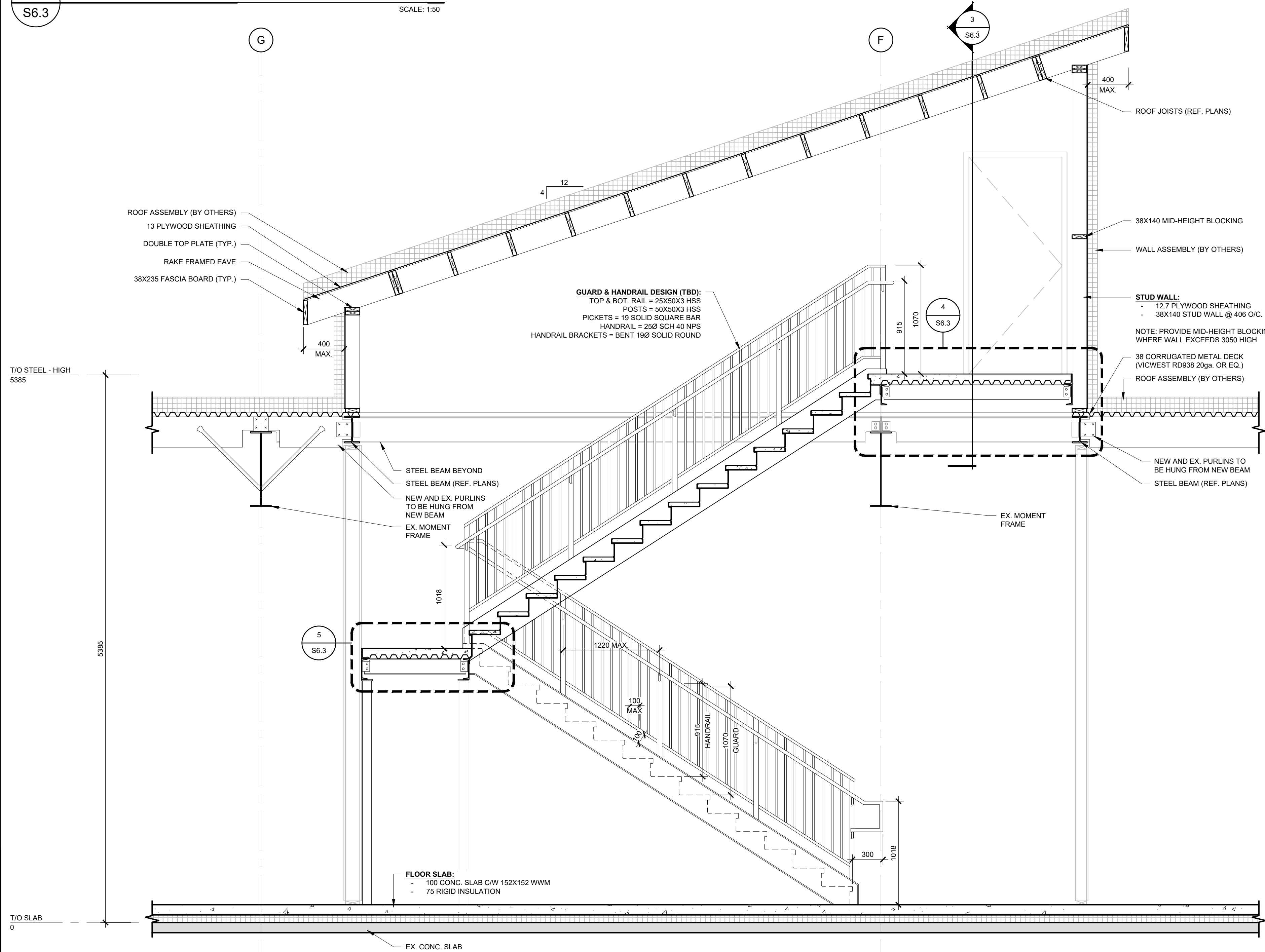
| | |
|-----------------|---|
| PROJECT: | TOWN OF SOUTH BRUCE PENINSULA |
| OBJECT: | SOUTH BRUCE PENINSULA NEW TOWN HALL CONVERSION |
| OBJECT ADDRESS: | 370 WILLIAM STREET, WIARTON, ON N0H 2T0 |
| DRAWING: | SKYLIGHT FRAMING |

| | | |
|---------------|----------------------|--------------------------------|
| SIGNED BY: KR | CHECKED BY: ZS | DRAWING No. S6.2 |
| AWN BY: BWW | PROJECT No.: 2402330 | |
| ALE: AS NOTED | DATE: 2025.06.23 | |



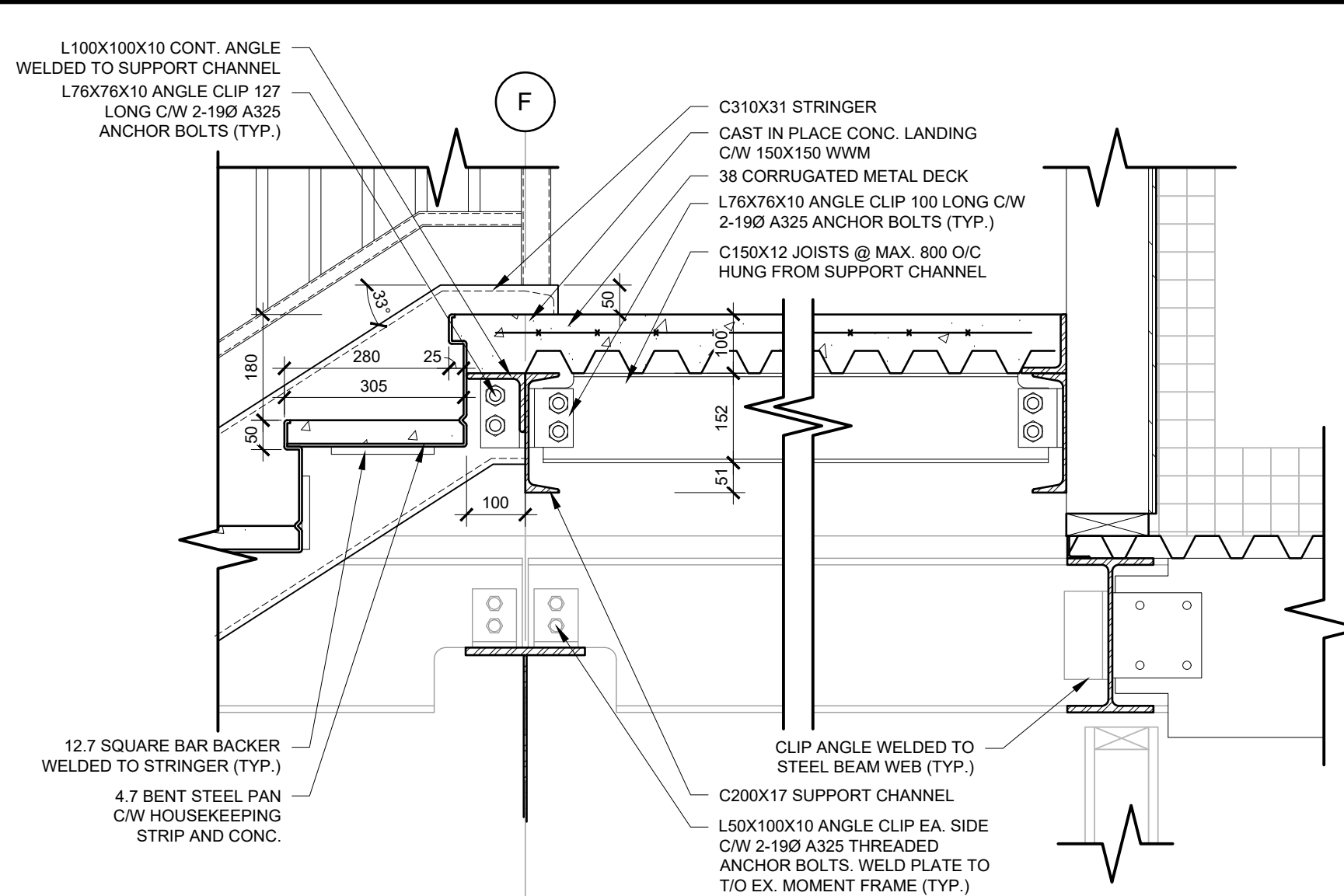
1 ROOF STAIR FRAMING PLAN
S6.3

SCALE: 1:50



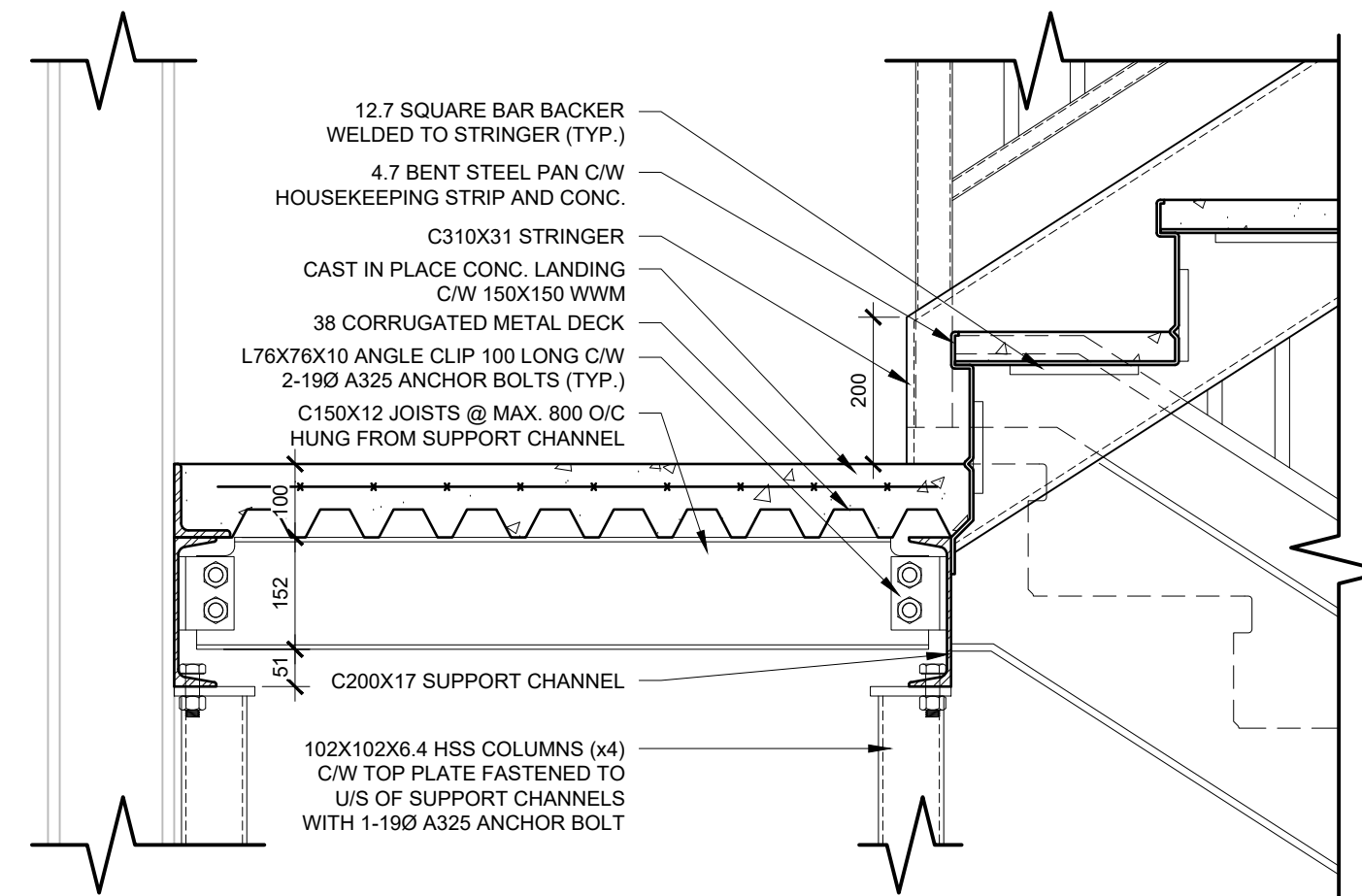
2 ROOF STAIR FRAMING SECTION 'B'
S6.3

SCALE: 1:25



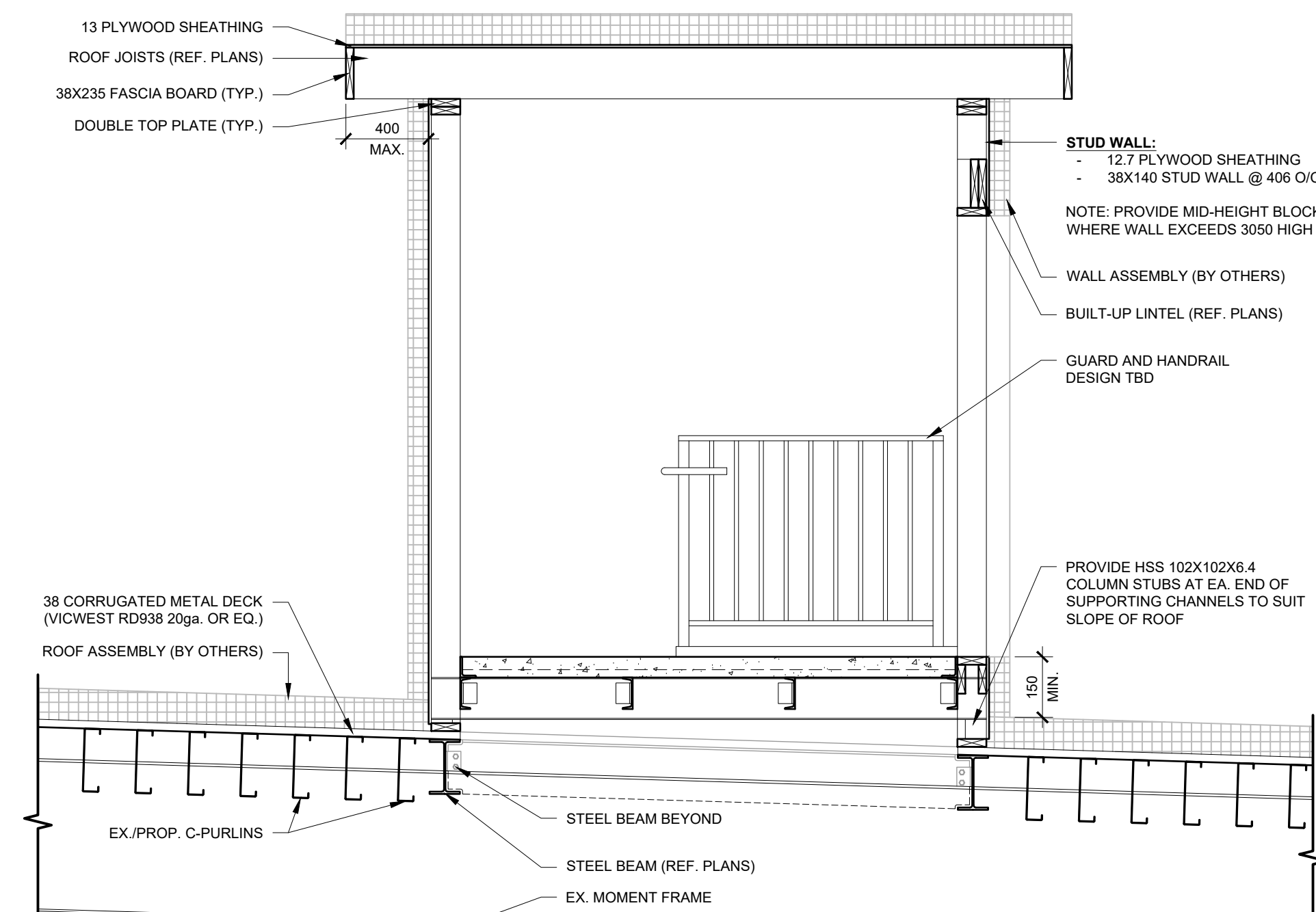
4 ROOF STAIR FRAMING PLAN
S6.3

SCALE: 1:10



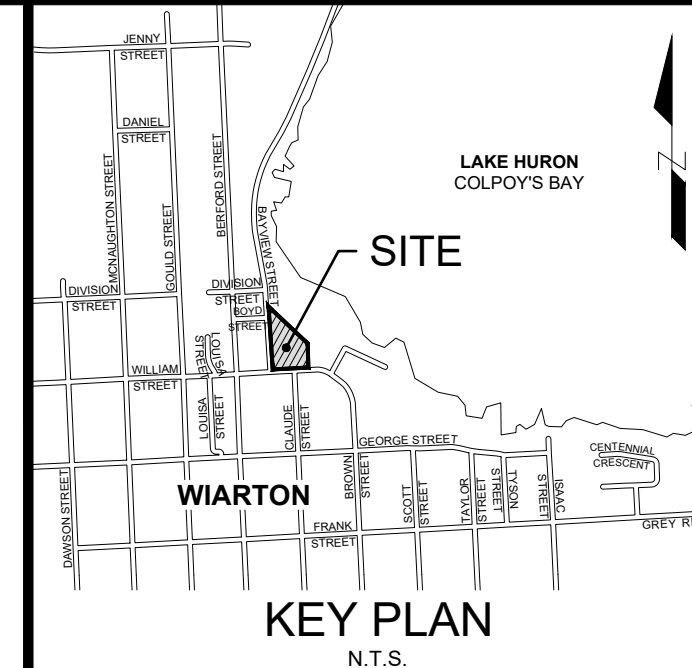
5 ROOF STAIR FRAMING PLAN
S6.3

SCALE: 1:10



3 ROOF STAIR FRAMING SECTION 'A'
S6.3

SCALE: 1:25



NOTES:

| No. | DATE | REVISION DESCRIPTION | CHECKED |
|-----|------------|--------------------------------|---------|
| 1 | 2025.05.02 | EXISTING CONDITIONS | ZS |
| 2 | 2025.06.27 | SKYLIGHT AND CANOPY STRUCTURES | ZS |
| 3 | 2025.09.04 | ISSUED FOR 90% | ZS |
| 4 | 2025.10.28 | ISSUED FOR TENDER | ZS |



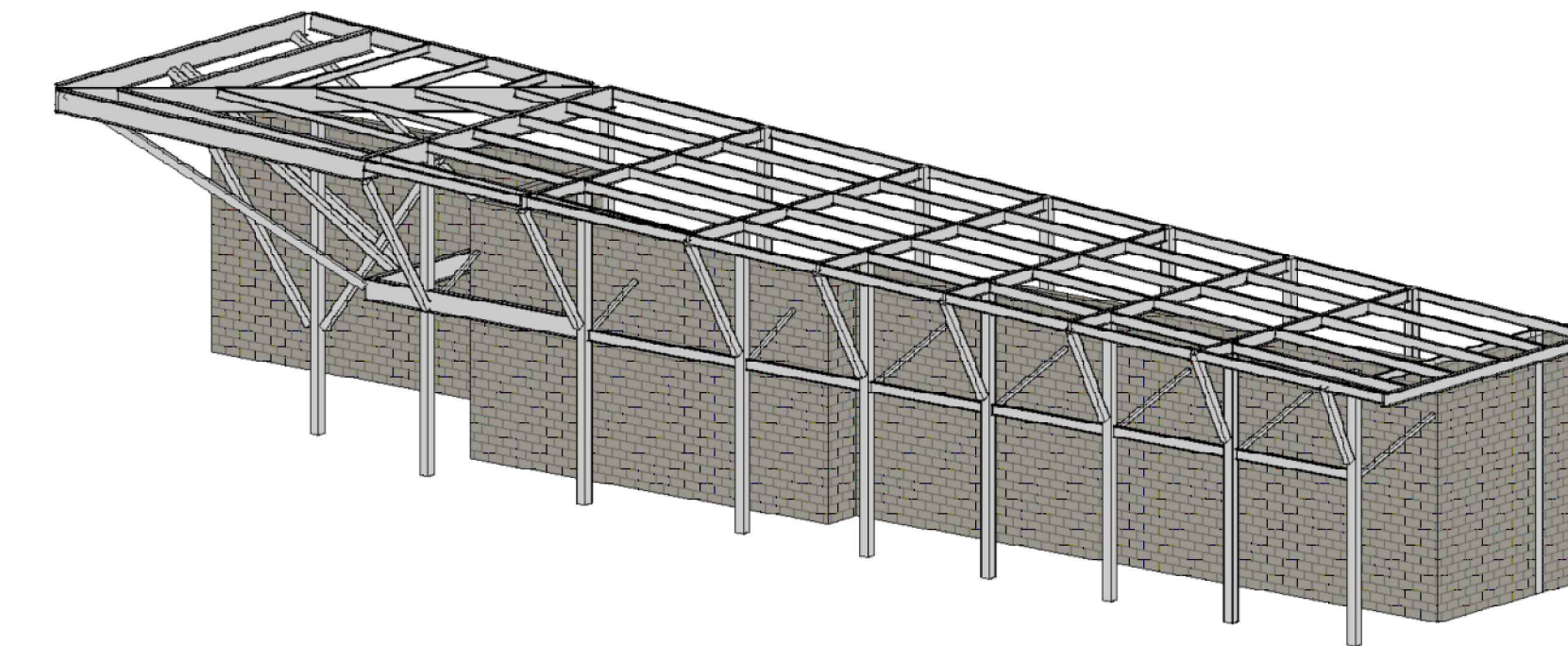
CLIENT: TOWN OF SOUTH BRUCE PENINSULA

PROJECT: SOUTH BRUCE PENINSULA NEW TOWN HALL CONVERSION

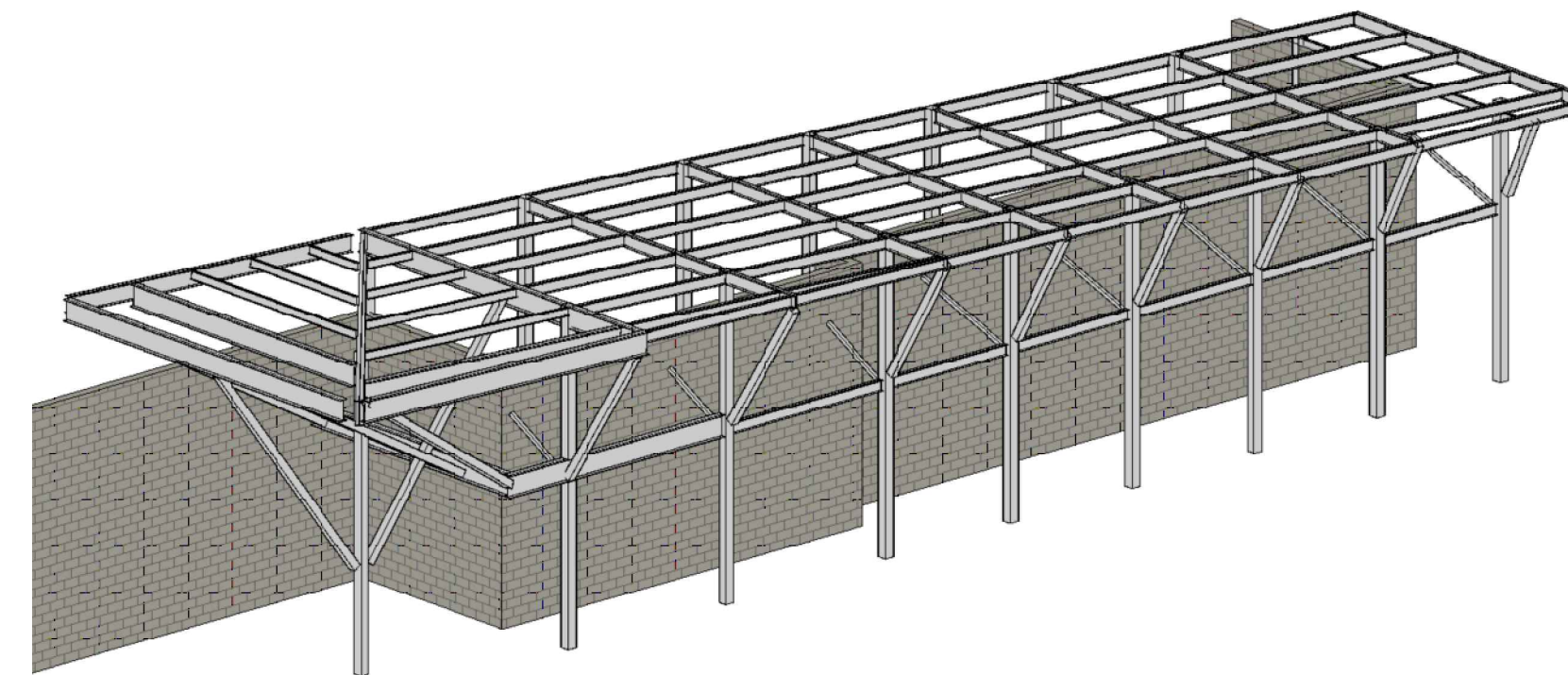
PROJECT ADDRESS: 370 WILLIAM STREET, WIARTON, ON N0H 2T0

DRAWING: ROOF STAIR FRAMING

DESIGNED BY: KR CHECKED BY: ZS DRAWING No. S6.3
DRAWN BY: BWV PROJECT No.: 2402330
SCALE: AS NOTED DATE: 2025.06.23

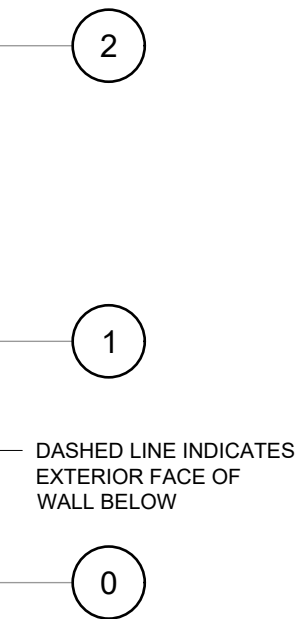


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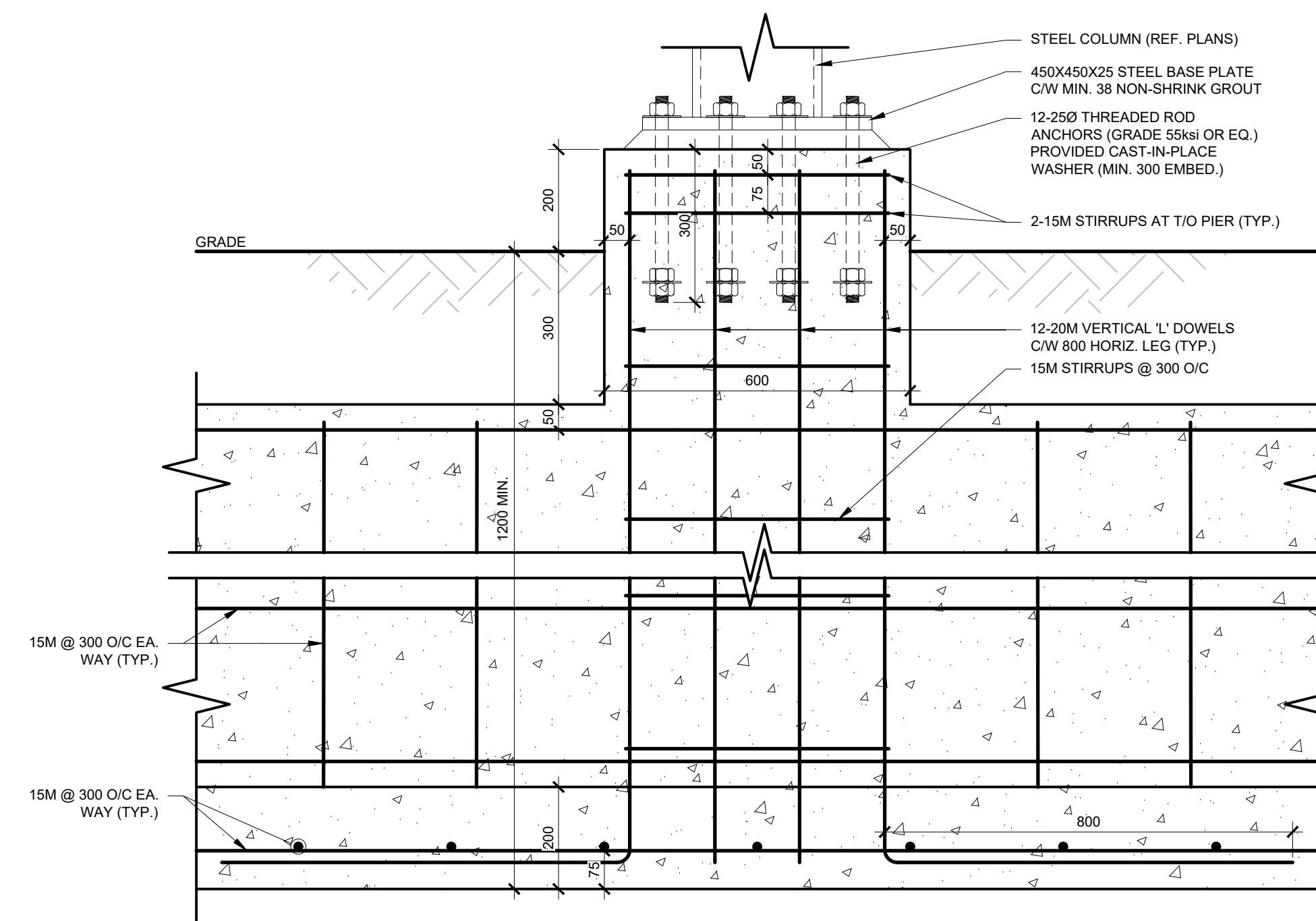


SCALE: NTS

SCALE: 1:100



SCALE: 1:100



SCALE: 1:10

SCALE: 1:10

[illegible]

PROJECT:
SOUTH BRUCE PENINSULA
NEW TOWN HALL CONVERSION

DRAWING:

FRONT CANOPY STRUCTURE

S6.4