00-G-000-SHEET LIST AND 3D VIEW

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Project Management Initials:

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

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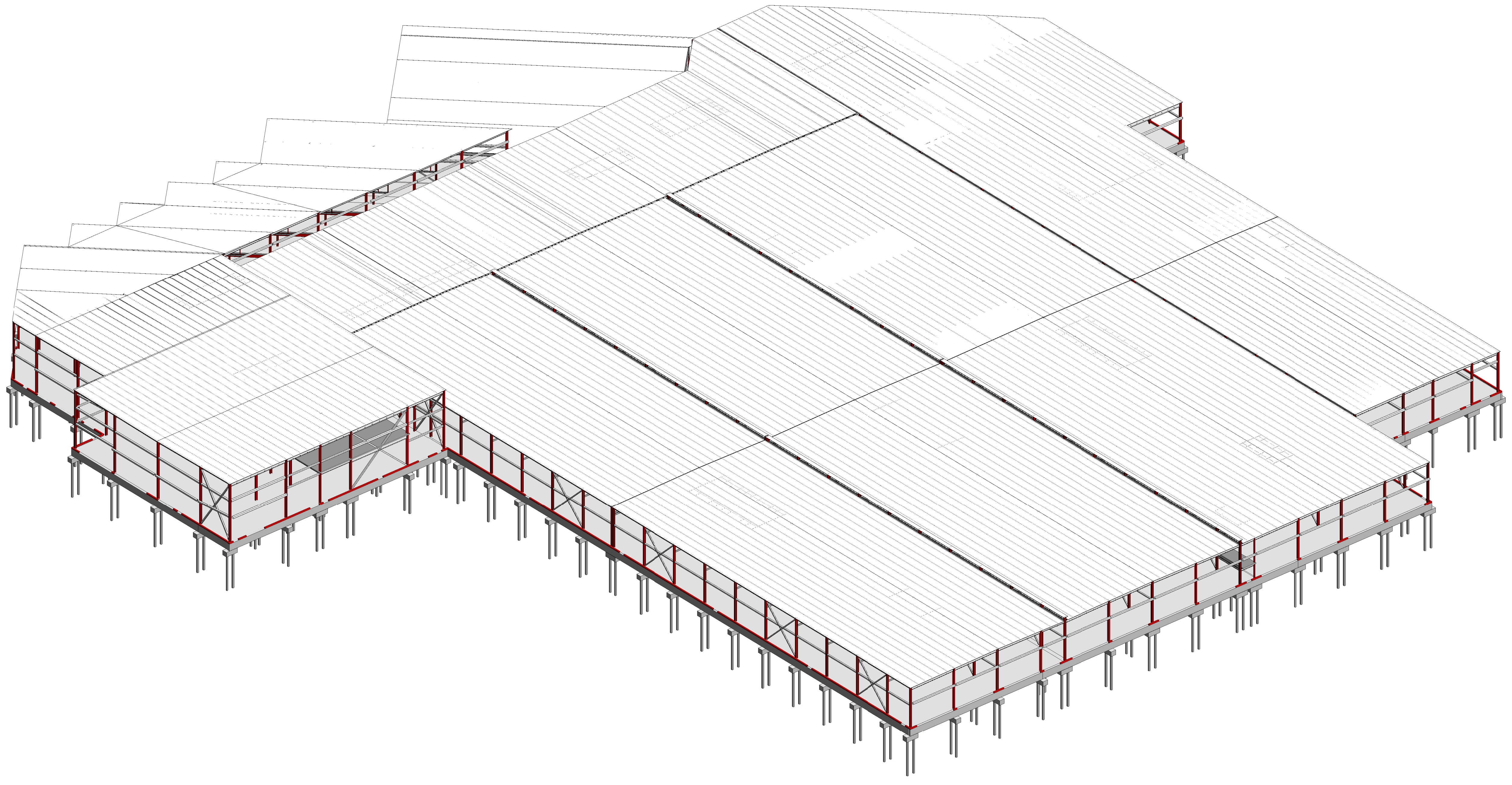

60721079 - WINNIPEG TRANSIT NORTH GARAGE STRUCTURAL MODEL

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

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REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW

PROJECT NUMBER

60721079

SHEET TITLE

SHEET LIST AND 3D VIEW

SHEET NUMBER

00-S-000

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:

GENERAL NOTES:

1. THE STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.
2. ALL DESIGN, CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE NATIONAL BUILDING CODE OF CANADA 2020 AND STRUCTURAL COMMENTARIES (PART 4). ABIDE BY LOCAL MUNICIPAL BY-LAWS AND OTHER REGULATORY AGENCIES THAT MAY AFFECT THE WORK.
3. ALL DIMENSIONS, ELEVATIONS, OPENINGS FOR PIPES, SLEEVES, EQUIPMENT LOCATIONS AND THE LIKE SHALL BE CHECKED WITH THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS. REPORT ANY DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE THESE DRAWINGS.
4. THE CONTRACTOR SHALL REVIEW THE SITE CONDITIONS AND ASSUME RESPONSIBILITY FOR EXISTING SERVICES (WATER; POWER; SEWAGE; GAS ETC.) THAT POTENTIALLY EXIST AT THE SITE.
5. PROVIDE ALL NECESSARY SHORING, SCAFFOLDING AND UNDERPINNING TO EXECUTE THE PROJECT SAFELY.
6. THE STRUCTURE IS DESIGNED TO RESIST DESIGN LOADS IN THE COMPLETED STAGE ONLY. CONTRACTOR IS FULLY RESPONSIBLE FOR PROVIDING TEMPORARY SUPPORTS FOR ALL LOADING, INCLUDING ANY CONSTRUCTION LOADING IMPOSED ON THE PARTIALLY COMPLETED STRUCTURE.
7. MAKE GOOD ANY DAMAGES DONE DURING CONSTRUCTION.
8. CARE TO BE TAKEN DURING THE WORK NOT TO DAMAGE EXISTING SERVICES.
9. FEATURES OF CONSTRUCTION NOT FULLY SHOWN SHALL BE OF THE SAME CHARACTER AS SHOWN FOR SIMILAR CONDITIONS.
10. PROVIDE BARRICADE AND SIGNS TO PROTECT WORKERS AND WORK AREA DURING THE WORK.

CONSTRUCTION SAFETY REGULATIONS SITE REQUIREMENTS:

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE MANITOBA WORKPLACE SAFETY AND HEALTH ACT AND REGULATIONS FOR THIS CONSTRUCTION PROJECT.

REFERENCE DESIGN CODES:

THE STRUCTURAL DESIGN IS BASED ON THE FOLLOWING CODES (AND ASSOCIATED REFERENCED CODES) :

1. NBCC 2020
2. CSA STANDARD A23.3
3. CSA STANDARD S16

DESIGN LOADS (NBCC 2020):

SITE LOCATION: WINNIPEG, MANITOBA
CLIMATIC DATA LOCATION (NBCC 2020): WINNIPEG, MANITOBA

1. WIND: q=0.45 kPa Ce=1.0(OPEN TERRAIN)
2. EARTHQUAKE: Sa(0.2, XE)=0.113, Sa(0.5, XE)=0.106, Sa(1.0, XE)=0.0548, Sa(2.0, XE)=0.0215, Sa(5.0, XE)=0.00432 Sa(10.0, XE)=0.00126, PGA=0.0678

   Rd=1.5; Ro=1.3;
   SITE CLASS: E
3. SNOW LOAD: Ss=1.9 kPa, Sr=0.2 kPa
4. ONE DAY RAINFALL 108mm
5. BUILDING IMPORTANCE CATEGORY: NORMAL
6. ACCUMULATED SNOW LOADS ARE SHOWN ON INDIVIDUAL DRAWINGS.
7. LOAD SHOWN ON STRUCTURAL DRAWINGS ARE UNFACTORED UNLESS NOTED OTHERWISE.

FOUNDATIONS AND SLAB ON GRADE:

1. REFER TO GEOTECHNICAL REPORT PREPARED BY AECOM DATED JAN. 28, 2025 FOR THE BOREHOLE DATA AND SITE CONDITIONS. SOIL DATA APPLIES TO ACTUAL BOREHOLE LOCATIONS AND CONDITIONS MAY DIFFER AT OTHER PARTS OF THE SITE.
2. THE CITY DOES NOT GUARANTEE THE ACCURACY OF THE GEOTECHNICAL REPORT OR ITS SUITABILITY FOR CONTRACTOR'S PURPOSES. IT IS THE RESPONSIBILITY OF OTHERS USING THIS INFORMATION TO ENSURE THAT IS SUITABLE FOR THEIR PURPOSE AND TO SUPPLEMENT IT AS THEY CONSIDER NECESSARY.
3. LOCATE UNDERSIDE OF FOUNDATIONS AS NOTED ON PLAN AND GEOTECHNICAL REPORT.
4. PROTECT FOUNDATIONS, WALLS, SLABS ON GRADE, FOOTINGS AND ADJACENT SOIL AGAINST FREEZING AND FROST ACTION AT ALL TIMES DURING CONSTRUCTION.
5. DO NOT BACKFILL AGAINST WALLS RETAINING EARTH UNTIL ELEMENTS PROVIDING LATERAL SUPPORT ARE COMPLETED. PLACE BACKFILL SIMULTANEOUSLY ON BOTH SIDES OF WALLS BELOW GRADE; MAXIMUM HEIGHT DIFFERENCE OF BACKFILLED SOIL SHALL NOT EXCEED 1.0m U.N.O.
6. MAINTAIN SLAB THICKNESS INDICATED ON THE DRAWINGS IN ALL CASES. FOR SLOPED SLABS, SLAB THICKNESS INDICATED ON THE DRAWINGS SHALL BE THE MINIMUM THICKNESS AT THE LOWEST POINT OF SLAB.
7. GEOTECHNICAL ENGINEER TO VERIFY SOIL BEARING CAPACITY PRIOR TO PLACING FOOTINGS.
8. ALL COLUMNS, PIERS AND WALL FOOTINGS SHALL BE CENTERED ON THE COLUMN, PIER OR WALL RESPECTIVELY, UNLESS NOTED.
9. PROVIDE SLAB ON GRADE THICKENING UNDER ALL NON-LOAD BEARING MASONRY WALLS UNLESS NOTED.
10. PROVIDE SLAB ON GRADE THICKENING TO SUIT ANY ANCHORS OR INSERTS AS REQUIRED, UNLESS NOTED.
11. PROVIDE 50mm THICK CONCRETE SLAB (MUD SLAB) UNDER FOOTINGS WHEN SOIL AND WEATHER CONDITIONS CREATE MUDDY SURFACE ON SITE.
12. PROVIDE 20mm CHAMFER AT EXPOSED CORNERS.
13. PROVIDE TEMPORARY SHORING, ETC. ADEQUATE TO SUPPORT EXISTING STRUCTURE DURING CONSTRUCTION. PROVIDE SHOP DRAWINGS, STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER OR CONSULTANT, FOR REVIEW.
14. PROVIDE 150mm VOID FORM UNDER ALL PILECAPS AND ALL GRADE BEAMS.

CONCRETE:

1. CONCRETE CONSTRUCTION SHALL CONFORM TO C.S.A. A 23.1/A23.2 AND A23.3
2. COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS IN MPa SHALL BE AS INDICATED IN THE SPECIFICATIONS:
3. CONCRETE SUBJECT TO FREEZE/THAW CYCLES TO HAVE 5% TO 7% AIR ENTRAINMENT.
4. CONCRETE IN CONTACT WITH SOIL, INCLUDING PRECAST PILES, PILECAPS, GRADE BEAMS, CONCRETE PIERS, IN-GROUND PITS SHALL BE CONSTRUCTED WITH SULPHATE RESISTANT CONCRETE MEETING S-2 EXPOSURE CLASS.
5. CONCRETE COVER FOR REINFORCEMENT - SEE TABLE BELOW AND REFER TO NATIONAL BUILDING CODE AND C.S.A. A 23.1-14.

TYPE OF MEMBER OR EXPOSURE CONDITION		CAST-IN PLACE CONCRETE mm	PRE-CASTC ONCRETE mm
1	CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH OR LAGGING (NOT FORMED)	90	-
2	CONCRETE NOT SUBMERGED OR EXPOSED TO EARTH OR DE-ICING CHEMICALS		
	- PRINCIPAL REINFORCEMENT	60	50
	- STIRRUPS, TIE AND SPIRALS	50	50
	- SOFIT FOR SLABS LESS THAN 300mm THICK	40	40
	- SOFIT FOR SLABS MORE THAN 300mm THICK	50	50
3	CONCRETE SUBMERGED OR EXPOSED TO EARTH (FORMED)		
	- PRINCIPAL REINFORCEMENT	70	70
	- STIRRUPS, TIE AND SPIRALS	60	60

6. HORIZONTAL CONSTRUCTION JOINTS IN CONCRETE WALLS ARE NOT PERMITTED EXCEPT WHERE SHOWN ON THESE DRAWINGS. LEAVE CHASES AND POCKETS IN WALLS FOR SEATING OF SLABS AND BEAMS.
7. NO OPENINGS OTHER THAN THOSE INDICATED ON STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE WALLS, COLUMNS, BEAMS AND SLABS WITHOUT PRIOR REVIEW BY THE CONSULTANT. SUBMIT DRAWINGS INDICATING ADDITIONAL OPENINGS TO THE CONSULTANT FOR REVIEW BEFORE PROCEEDING WITH THE WORK.
8. CONCRETE WALLS SHALL BE REINFORCED AS FOLLOWS, UNLESS NOTED OTHERWISE:
   - 100-150mm THICK - 10M AT 300 HOR. AND VERT. o.c.
   - 160-200mm THICK - 15M AT 300 HOR. AND VERT. o.c.
   - 210-330mm THICK - 15M AT 300 HOR. AND VERT. EACH FACE
   - 340-500mm THICK - 15M AT 300 HOR. AND VERT. EACH FACE
9. REINFORCE ALL SIDES OF OPENINGS IN CONCRETE WALLS EACH FACE AS INDICATED BELOW UNLESS NOTED:
   - LENGTH OF BARS EQUAL TO OPENING DIMENSION PLUS 600mm BOTH SIDES.
   - USE 2-15M BARS FOR WALL THICKNESS UP TO 200mm.
   - USE 2-20M BARS FOR WALL THICKNESS OVER 200mm.
10. JOINT CHAMFER:
    ALL FLUSH CONCRETE SURFACES MEETING AT JOINTS IN VISIBLE LOCATIONS SHALL BE FORMED WITH A 'V'SHAPED REGLET AT FACE (20mm DEEP).
11. ALL CONSTRUCTION JOINTS TO HAVE ROUGH SURFACES, UNLESS NOTED.
12. CONTRACTOR SHALL SUBMIT DRAWINGS TO THE CONSULTANT FOR REVIEW SHOWING LOCATION OF PROPOSED CONSTRUCTION JOINTS IN WALLS AND SLABS IN ADDITION TO THOSE SHOWN ON THE STRUCTURAL DRAWINGS.
13. CONTRACTOR SHALL SUBMIT DRAWINGS TO CONSULTANT FOR REVIEW SHOWING LOCATION OF FLOOR DRAINS AND FLOOR SLOPES FOR ALL SLABS ON GRADE.
14. REFER TO SPECIFICATIONS 03-30-00 FOR CONCRETE FINISH REQUIREMENTS.
15. FOR REINFORCEMENT BAR LAP TYPES REFER TO SPECIFICATION 03-20-00. FOR CONCRETE COVER THICKNESS REFER TO TABLE ABOVE.
16. WHERE THE STRUCTURAL THICKNESS OF A SLAB VARIES OR WHERE THE TOP SURFACE OF A SLAB IS SHOWN SLOPED, MAINTAIN CONSTANT COVER TO THE REINFORCING STEEL. TOP REINFORCING STEEL SHALL FOLLOW THE SLOPE OF THE SLAB UNLESS SPECIFICALLY NOTED OTHERWISE.
17. ALL EMBEDDED ITEMS REQUIRED FOR ARCHITECTURAL, PROCESS, MECHANICAL, ELECTRICAL AND INSTRUMENTATION SERVICES SHALL BE INCORPORATED INTO THE STRUCTURES.
18. MAX SPACING FOR CONTROL JOINTS FOR SLAB ON GRADE: 3000mm

REINFORCING STEEL:

1. ALL REINFORCING STEEL SHALL BE IN ACCORDANCE WITH CSA G30.18 GRADE 400W.
2. REINFORCING BARS SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS AND ELEVATION VARIATIONS UNLESS NOTED. CONTINUOUS BARS SHALL BE FULLY DEVELOPED BY LAPPING WHERE SPLICED.
3. CONFORM TO REINFORCING STEEL MANUAL OF STANDARD PRACTICE BY REINFORCING STEEL INSTITUTE OF CANADA (RSIC). PROVIDE NON-CONDUCTIVE CHAIRS TO SUPPORT STEEL MATS AT 450 C/C MAX

STEEL DECK:

1. SUBMIT DESIGN BRIEFS (DECK, CONNECTIONS, ETC.), ERECTION AND SHOP DRAWINGS TO THE ENGINEER FOR REVIEW.
2. DESIGN FOR MINIMUM 3-SPAN CONTINUOUS AND SPANNING IN DIRECTION SHOWN.
3. THE COMPOSITE FLOOR STRUCTURE DESIGN IS BASED ON THE FOLLOWING PROPERTIES:
   140mm (102mm CONCRETE +38x1.21mm THICK CANAM P-3615 GALVANIZED COMPOSITE STEEL DECK)
4. REFER TO FRAMING PLAN FOR REINFORCEMENT REQUIREMENT.
   MINIMUM COMPOSITE DECK CONNECTION SHALL BE AS FOLLOWS:
   SUPPORT CONNECTION: 19mm PUDDLE WELD IN 36/4 PATTERN OR EQUIVALENT MECHANICAL FASTENER
   SIDE LAP CONNECTION: BUTTON PUNCH AT 600 C/C.
5. STEEL ROOF DECK SHALL BE 38mm DEEP CANAM P-3615 GALVANIZED STEEL DECK. ACTUAL THICKNESS OF THE STEEL DECK SHALL BE DESIGNED BY THE STEEL DECK DESIGN ENGINEER; MINIMUM DECK THICKNESS SHALL BE 0.91mm. ROOF DECK SHALL BE DESIGNED AS A DIAPHRAGM FOR LATERAL WIND AND EARTHQUAKE LOADS. MAX. FACTORED HORIZONTAL SHEAR FORCE RESULTING FROM EARTHQUAKES = 10.0 kN/m (GOVERNS) MAX. FACTORED HORIZONTAL SHEAR FORCE RESULTING FROM WIND = 9.0 kN/m

   MINIMUM ROOF DECK CONNECTION SHALL BE AS FOLLOWS:
   SUPPORT CONNECTION: 19 PUDDLE WELD IN 36/7 PATTERN OR EQUIVALENT MECHANICAL FASTENER
   SIDE LAP CONNECTION: BUTTON PUNCH AT 230mm C/C
   ALL OPENINGS IN ROOF OR FLOOR DECK UP TO 450 mm TO BE REINFORCED WITH L55x55x6 ALL AROUND.
   OPENINGS 450mm AND LARGER TO BE STRUCTURALLY FRAMED WITH C150x16. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR OPENINGS SIZE AND LOCATIONS.
6. SEE PLAN NOTES FOR DESIGN LOADS.
7. DESIGN, SUPPLY AND INSTALL STEEL DECK REINFORCEMENT AT DECK OPENINGS.
8. DESIGN, SUPPLY AND INSTALL POUR STOPS AT EDGE OF STEEL DECK.
9. WHERE STEEL DECK MEETS COLUMNS AND OTHER ELEMENTS PENETRATING THE STEEL DECK, DESIGN, SUPPLY AND INSTALL SECONDARY STRUCTURAL ELEMENTS TO SUPPORT THE DECK AROUND THE PERIMETER OF SUCH PENETRATIONS.
10. SUBMIT SHOP DRAWINGS INDICATING LAYOUT, SIZE AND DETAILS, DESIGN LOADS, OPENINGS AND OPENING REINFORCEMENTS ACCESSORIES AND ATTACHMENTS OF THE STEEL DECK. SHOP DRAWINGS SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENCED IN THE PROVINCE OF MANITOBA.

OPEN WEB STEEL JOIST AND JOIST GIRDERS:

1. STEEL JOIST AND JOIST GIRDERS SHALL BE MANUFACTURED FROM HOT ROLLED STEEL SUITABLE FOR WELDING CONFORMING TO CAN2-
   G40.21 OR COLD FORMED STEEL SECTIONS TO CAN/CSA-S136-01 (INCLUDING SUPPLEMENT CAN/CSA-S136).
2. DESIGN, FABRICATION AND ERECTION OF STEEL JOISTS AND JOIST GIRDERS TO CAN/CSA-S16.
3. ALL JOISTS AND JOIST GIDERS AND THEIR CONNECTIONS TO BUILDING STRUCTURES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENCED IN THE PROVINCE OF MANITOBA. SUBMIT SHOP DRAWINGS AND STRUCTURAL CALCULATIONS OF THE JOISTS AND JOIST GIRDERS FOR REVIEW PRIOR TO CONSTRUCTION.
4. PROVIDE HORIZONTAL BRIDGINGS FOR STEEL JOISTS IN ACCORDANCE WITH CAN/CSA S16.
   PROVIDE HORIZONTAL BRIDGING FOR JOIST GIRDERS AS REQUIRED BY JOIST GIRDER DESIGN.
   PROVIDE DIAGONAL KNEE BRACES FROM BOTTOM CHORD OF JOIST GIRDER TO ADJACENT PERPENDICULAR JOISTS AS REQUIRED BY JOIST GIRDER DESIGN.
5. JOIST DESIGNATED AS 'TJ' (TIE JOIST) HAVE BOTTOM CHORDS EXTENDED AND CONNECTED TO SUPPORTING MEMBERS AT EACH END OR BOTTOM FLANGE OF SUPPORTING BEAM AT EACH END.
6. MAXIMUM LIVE LOAD DEFLECTION IS THAT SMALLER OF SPAN/360 OR 25mm.
7. PROVIDE MIN. 100mm DEEP SHOES FOR OWSJ (UNO).
8. END MOMENT CONNECTIONS SHALL BE PROVIDED AT EACH END OF THE JOIST GIRDERS, SO THAT THE JOIST GIRDER BECOMES PART OF THE LATERAL LOAD RESISTING FRAME OF THE BUILDING STRUCTURE. REFER TO DRAWINGS FOR SPECIFIED END MOMENTS OF THE JOIST GIRDERS. EACH ELEMENT OF THE JOIST GIRDER SHALL BE DESIGNED FOR WORST-CASE LOAD CONDITIONS, WHETHER SIMPLE SPAN OR WITH END MOMENTS. END MOMENT CONNECTION ARE TO BE COMPLETED AFTER ALL OF THE DEAD LOADS OF THE BUILDING STRUCTURE HAVE BEEN APPLIED.
9. AT ALL JOIST GIRDER'S END CONNECTIONS, JOIST GIRDER DESIGNER SHALL PROVIDE FACTORED FORCES AND DETAILS OF THE JOIST GIRDER'S TOP AND BOTTOM CHORDS TO THE STRUCTURAL STEEL FABRICATOR'S CONNECTION DESIGN ENGINEER TO COORDINATE THE END CONNECTIONS.
10. PROVIDE UPWARD CAMBER IN JOISTS AND JOIST GIRDERS THAT EQUAL TO DEAD LOAD DEFLECTIONS.
11. SUBMIT SHOP DRAWINGS OF JOISTS AND JOIST GIRDERS SIGNED AND STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF MANITOBA

STRUCTURAL STEEL:

1. DESIGN, FABRICATE AND ERECT STRUCTURAL STEEL IN ACCORDANCE WITH CSA STANDARD - CSA-S16.
2. MATERIAL: STRUCTURAL WIDE FLANGE SHAPES (W) TO CSA G40.21-M, GRADE 350W. HSS TO CSA G40.21-M, GRADE 350W CLASS C. ANGLES, PLATES AND CHANNELS TO CAN/CSA G40.21 GRADE 300W.
3. ANCHOR RODS TO G40.21-300W.
4. BOLTS FOR CONNECTIONS TO ASTM A325 OR ASTM A490.
5. SHEAR STUDS Fu : 415MPa.
6. CONTRACTOR TO SUBMIT TO THE ENGINEER FOR REVIEW OF STRUCTURAL SHOP FRAMING, CONNECTION DETAILS, ETC., STAMPED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA
7. CONFORM TO LATEST EDITION OF CSA W59 FOR WELDING.
8. BEAM CONNECTIONS TO BE NOT LESS THAN 2/3 OF MEMBER DEPTH AND MAY BE SHOP WELDED OR BOLTED.
9. WHERE NO DETAILS ARE PROVIDED, BEAM CONNECTIONS TO BE DESIGNED FOR 70% MEMBER ULTIMATE SHEAR RESISTANCE OR FOR LOAD SHOWN ON DRAWING, WHICHEVER IS GREATER.
10. ALL STRUCTURAL STEEL CONNECTIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER RETAINED BY THE CONTRACTOR. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL SUBMIT STRUCTURAL STEEL SHOP DRAWINGS STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF MANITOBA.
11. STRUCTURAL STEEL CONTRACTOR SHALL COORDINATE WITH THE STEEL JOIST GIRDER MANUFACTURER FOR THE END MOMENT CONNECTIONS OF JOIST GIRDERS AT BUILDING COLUMNS. DESIGN CONNECTIONS OF THE TOP AND BOTTOM CHORDS OF THE JOIST GIRDERS IN COORDINATION WITH THE JOIST GIRDER SUPPLIER. SUPPLY CAP PLATES OR BRACKETS AT TOP OF COLUMNS FOR THE CONNECTION OF JOIST GIRDER SHOES. SUPPLY CONNECTION PLATES AT BOTTOM CHORDS OF JOIST GIRDERS TO FACILITATE CONNECTIONS.
12. WHERE STRUCTURAL STEEL BEAMS ARE TO BE INSTALLED PERPENDICULAR TO JOIST GIRDERS AT TOP OF COLUMN, COORDINATE WITH JOIST GIRDER SUPPLIER, PROVIDE CAP PLATE CONNECTION OR JOIST GIRDER BRACKETS ON SIDE FACE OF COLUMN TO ALLOW FOR THE JOIST GIRDER CONNECTIONS.

MASONRY:

1. MASONRY IS DESIGNED TO COMPLY WITH THE REQUIREMENTS OF CSA-S304.1 "DESIGN OF MASONRY STRUCTURES".
2. MASONRY CONSTRUCTION AND REINFORCEMENT TO THE REQUIREMENTS OF CSA-A371-04(R2009) "MASONRY CONSTRUCTION FOR BUILDINGS".
3. MASONRY CONNECTORS TO CAN/CSA-A370.
4. HOLLOW CONCRETE BLOCK WALL TO CAN/CSA-A165 SERIES, CAN/CSA-A165.1 "CONCRETE BLOCK MASONRY UNITS".
5. CONCRETE FILL OF HIGH SLUMP (180mm TO 200mm) CONCRETE WITH A COMPRESSIVE STRENGTH OF 20 MPa AT 28 DAYS
6. WHERE MASONRY WALL HAS TWO OR MORE WYTHES, THE WYTHES BONDED WITH CONTINUOUS TIES IN ACCORDANCE WITH CSA-A371 UNLESS NOTED OTHERWISE, ALL WALL INTERSECTIONS BONDED AS FOLLOWS:

   a. IN TRUE MASONRY BOND SO THAT AT LEAST 50% OF THE UNITS OF ONE WALL ARE EMBEDDED IN THE OTHER WALL, OR

   b. RIGID STEEL CONNECTORS SPACED AT 600mm VERTICAL IN ACCORDANCE WITH CSA CAN3-A370-04(R2009) AND COMPLETELY EMBEDDED.
7. PROVIDE VERTICAL MASONRY JOINTS (KEY WAYS) AT THE WALL INTERSECTIONS COMPLETELY FILLED WITH GROUT.
8. ALL MASONRY WALLS SHALL BE LATERALLY SUPPORTED AT TOP. REFER TO TYPICAL DETAILS FOR LATERAL SUPPORT OF WALLS. IN ADDITION TO TOP SUPPORTS, PROVIDE LATERAL SUPPORT TO MASONRY WALLS AT INTERMEDIATE HEIGHTS WHERE INDICATED ON DRAWINGS.
9. PROVIDE LINTELS OVER ALL OPENINGS OR RECESSES IN MASONRY WALLS INCLUDING THOSE FOR MECHANICAL AND ELECTRICAL SERVICES OR EQUIPMENT. REFER TO LINTEL SCHEDULE 232-2000-005-01-GA-D
10. ALL MASONRY WALLS SHALL BE REINFORCED WITH FULL HEIGHT VERTICAL REINFORCEMENT OF 15M @800 , UNLESS OTHERWISE NOTED. PROVIDE ADDITIONAL FULL-HEIGHT VERTICAL REINFORCEMENT OF 3-15M AT L-SHAPED CORNERS, 4-15M AT T-SHAPED INTERSECTIONS, 2-15M AT EACH SIDE OF OPENINGS AND EACH SIDE OF CONTROL JOINTS, AND 3-15M AT WALL ENDS. PROVIDE ONE REINFORCING BAR AT EACH CELL AND GROUT SOLID FULL HEIGHT.
11. AT EACH VERTICAL REINFORCING BAR LOCATIONS, PROVIDE MATCHING DOWEL EMBEDDED IN THE FOUNDATION ALL OR THICKENED SLAB BELOW.
12. PROVIDE MASONRY REINFORCING DUR-0-WAL LADUR TYPE TRIROD (DW21O) OR EQUIVALENT HOT DIP GALVANIZED IN THE FIRST 2 COURSES AND 400mm C/C VERTICALLY THEREAFTER.
13. MASONRY WALLS SHOWN ON STRUCTURAL DRAWINGS ARE NON-LOAD BEARING U.N.O.
14. FULLY GROUT CONCRETE MASONRY BLOCK CELLS WHERE WITH REINFORCEMENT.
15. PROVIDE CHASES AND POCKETS IN WALLS FOR STRUCTURAL STEEL BEARING AND INSTALL ALL BEARING PLATES.
16. BLOCK IN SOLID AROUND ALL BEAM AND CHANNEL BEARING LOCATIONS IN MASONRY WALLS.
17. BLOCKS SUPPORTING CONCENTRATED LOADS TO BE GROUTED SOLID 2 BLOCK COURSES BELOW BEARINGS OR AS NOTED OTHERWISE.

PREFABRICATED STRUCTURES:

1. PREFABRICATED STRUCTURE DESIGN, CONSTRUCTION, MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH 2020 NBC REQUIREMENTS.
2. PREFABRICATED STRUCTURES SHALL BE DESIGNED FOR NORMAL IMPORTANCE CATEGORY IN ACCORDANCE WITH 2020 NBC.
3. DESIGN SERVICE LIFE OF THE PREFABRICATED STRUCTURES SHALL BE 50 YEARS.
4. PREFABRICATED STRUCTURES SHALL BE DESIGNED TO WITHSTAND ALL APPLICABLE COMBINATIONS OF DEAD, LIVE, WIND, SNOW, AND SEISMIC LOADS ESTABLISHED IN ACCORDANCE WITH 2010 NBC.
5. FLOOR OCCUPANCY LOAD ON GROUND FLOOR SHALL NOT BE LESS THAN 4.8 KPA. IN ADDITION TO ROOF WEIGHT, THE SUPERIMPOSED ROOF DEAD LOAD SHALL NOT BE LESS THAN 0.8KPA FOR MECHANICAL AND ELECTRICAL ALLOWANCE.
6. PREFABRICATED STRUCTURES AND FOUNDATIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF MANITOBA. CONTRACTOR SHALL SUBMIT STAMPED SHOP DRAWINGS,FOUNDATION DRAWINGS AND DESIGN CALCULATIONS STAMPED BY THE DESIGN ENGINEER TO THE PRIME CONSULTANT FOR REVIEW PRIOR TO CONSTRUCTION.
7. FOUNDATIONS OF THE PREFABRICATED STRUCTURES SHALL BE DESIGNED TO SUIT SITE GEOTECHNICAL CONDITIONS. IT IS THE FOUNDATION DESIGNER’S RESPONSIBILITY TO ASCERTAIN THE EXISTING GEOTECHNICAL CONDITIONS. ALL FOUNDATIONS SHALL HAVE SOIL COVER NOT LESS THAN FROST DEPTH OR EQUIVALENT ARTIFICIAL INSULATION FOR FROST PROTECTION.
8. PREFABRICATED STRUCTURE DESIGN ENGINEER SHALL PERFORM THOROUGH COORDINATION WITH THE MECHANICAL AND ELECTRICAL TRADES TO ENSURE THE STRUCTURE IS DESIGNED TO SUPPORT MECHANICAL/ELECTRICAL EQUIPMENT, DEVICES AND SERVICES.
9. THE FABRICATED STRUCTURES AND FOUNDATIONS SHOWN ON THE DESIGN DRAWINGS ARE CONCEPTUAL. IT IS THE GENERAL CONTRACTOR’S RESPONSIBILITY TO PERFORM THOROUGH COORDINATION BETWEEN PREFABRICATED STRUCTURE SUBTRADE AND THE FOUNDATION SUBTRADE. GENERAL CONTRACTOR SHALL MAKE NECESSARY ALLOWANCE FOR VARIATIONS AND REVISIONS MADE ON ACCOUNT OF THE SUBTRADES

PRECAST CONCRETE PILES:

1. PRECAST CONCRETE PILES ARE DESIGN-BUILD COMPONENTS DESIGNED AND INSTALLED BY THE PILE SUBCONTRACTOR. PRECAST CONCRETE PILES AND THEIR CONNECTIONS TO THE PRIMARY STRUCTURE SHALL BE DESIGNED BY AN EXPERIENCED PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF MANITOBA.
2. PRECAST CONCRETE PILES SHALL BE DESIGNED TO THE LOADS INDICATED ON CONTRACT DRAWINGS. PRECAST CONCRETE PILES SHALL BE DESIGNED TO SUIT THE EXISTING GEOTECHNICAL CONDITION AT THE LOCATIONS WHERE THE PRECAST CONCRETE PILES ARE TO BE INSTALLED. THE CITY DOES NOT GUARANTEE THE ACCURACY OR SUITABILITY OF THE GEOTECHNICAL INVESTIGATION FACTUAL DATA REPORT OR GEOTECHNICAL DESIGN REPORT PROVIDED BY THE CITY IT IS THE PILE SUBCONTRACTOR'S RESPONSIBILITY TO REVIEW AND ENSURE THE REPORT(S) PROVIDED BY THE CITY IS SUITABLE FOR THE DESIGN PURPOSE. IT IS CONTRACTOR'S RESPONSIBILITY TO CONDUCT SUPPLEMENTARY GEOTECHNICAL INVESTIGATION AS NECESSARY.
3. PILE SUBCONTRACTOR SHALL PREPARE AND SUBMIT DETAILED SHOP DRAWINGS INDICATING PILE LOCATIONS, SIZES, ELEVATIONS AND LENGTHS, BATTER ANGLES, DESIGN DETAILS AND DESIGN CAPACITY. SHOP DRAWING SHALL INDICATE DETAILED LOAD TESTING REQUIREMENTS AND PROCEDURES. SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY THE PILE DESIGN ENGINEER.
4. PILE INSTALLATION AND LOAD TESTING SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF THE PILE DESIGN ENGINEER. UPON COMPLETION OF WORK, THE DESIGN ENGINEER SHALL PREPARE A LETTER OF CONFORMANCE TO VERIFY THAT THE WORK CONFORMS TO CONTRACT REQUIREMENTS, CODE REQUIREMENTS, AND REVIEWED PILE SHOP DRAWINGS.
5. PILE DRIVING CRITERIA SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER BASED ON THE PILE DRIVING HAMMER. DRIVING STRESS SHALL NOT EXCEED THE LIMITS SPECIFIED BY THE PRECAST PILE MANUFACTURER.
6. PILES SHALL BE CENTERED UNDER COLUMNS.
7. PILES SHALL BE INSTALLED IN PRE-BORED HOLES.
8. PILECAPS AND GRADE BEAMS SHALL HAVE 150mm VOID FORMS AT UNDERSIDE.
9. PILE CUT-OFF ELEVATION SHALL BE COORDINATED WITH UNDERSIDE OF PILECAP ELEVATION. ALL VERTICAL STRANDS IN THE PRECAST PILE MUST BE EMBEDDED INTO PILECAP FOR THEIR FULL TENSILE CAPACITY.
10. TOLERANCE ON PLAN LOCATION OF THE PILES SHALL BE WITHIN 50MM FROM CENTER OF PILE.
11. PILING CONTRACTOR SHALL KEEP AN ACCURATE RECORD OF EACH PILE.

ABBREVIATIONS

A.R.	- ANCHOR ROD
ADD.	- ADDITIONAL
&	- AND
APPROX.	- APPROXIMATELY
ARCH.	- ARCHITECTURAL
@	- AT
B.F.	- BACK FACE
BM.	- BEAM
BLK	- BLOCK
B.H.	- BORE HOLE
BOT.	- BOTTOM
BP.	- BASE PLATE
B.L.L.	- BOTTOM LOWER LAYER
B.U.L.	- BOTTOM UPPER LAYER
BLDG.	- BUILDING
CANT.	- CANTILEVER
CSA	- CANADIAN STANDARD ASSOCIATIONS
C.B.	- CATCH BASIN
CL	- CENTRE LINE
C/C	- CENTRE TO CENTRE
COL.	- COLUMN
C/W	- COMPLETE WITH
CONC.	- CONCRETE
CONT.	- CONTINUOUS
C.J.	- CONSTRUCTION JOINT
C.L.T.	- CROSS LAMINATED TIMBER
DIAG.	- DIAGONAL
DIA.	- DIAMETER
DL.	- DEAD LOAD
DN	- DOWN
DWL	- DOWEL
DWG	- DRAWING
-DO-	- DITTO
E.F.	- EACH FACE
E.W.	- EACH WAY
EL.	- ELEVATION
ETC.	- ETCETERA
EXIST.	- EXISTING
EXP. JT.	- EXPANSION JOINT
EA.	- EACH
EL.	- ELEVATION
EMBED.	- EMBEDMENT
EQ.	- EQUAL
EXT.	- EXTERIOR
ELECT.	- ELECTRICAL
FI N.	- FINISH
F.D.	- FLOOR DRAIN
FDN.	- FOUNDATION
F.H.	- FULL HEIGHT
FTG.	- FOOTING
FF.	- FAR FACE
FL.	- FLOOR
GALV.	- GALVANIZED
GA.	- GAUGE
GRAN.	- GRANULAR
HORIZ.	- HORIZONTAL
HSS	- HOLLOW STRUCTURAL SECTION
I.F.	- INSIDE FACE
I.D.	- INSIDE DIAMETER
JT.	- JOINT
KPA	- KILOPASCAL
KN	- KILONEWTON
KN/M	- KILONEWTON PER METER
LG.	- LONG
LL.	- LIVE LOAD
LLH	- LONG LEG HORIZONTAL
LLV	- LONG LEG VERTICAL
M.H.	- MANHOLE
MFR.	- MANUFACTURER
MECH.	- MECHANICAL
MEZZ.	- MEZZANINE
MIN.	- MINIMUM
M.O.	- MASONRY OPENING
MPA	- MEGA PASCAL
M	- METRE
MM	- MILLIMETRE
MAX.	- MAXIMUM
MISC.	- MISCELLANEOUS
M.B.C.	- MANITOBA BUILDING CODE
N.B.C.	- NATIONAL BUILDING CODE
N.I.C.	- NOT IN CONTRACT
N.T.S.	- NOT TO SCALE
NO. #	- NUMBER
O/C	- ON CENTRE
O.F.	- OUTSIDE FACE
OPNG	- OPENING
O.D.	- OUTSIDE DIAMETRE
OWSJ	- OPEN WEB STEEL JOIST
PA	- PASCAL
PL	- PLATE
PVC	- POLYVINYL CHLORIDE
PSF	- POUNDS PER SQUARE FOOT
PSI	- POUNDS PER SQUARE INCH
QTY	- QUANTITY
RAP	- RAMMED AGGREGATE PIER
REINF.	- REINFORCEMENT
REQ'D	- REQUIRED
R.W.L.	- RAIN WATER LEADER
R.D.	- ROOF DRAIN
SECT.	- SECTION
SIM.	- SIMILAR
SPECS.	- SPECIFICATIONS
SP.	- SPAN
SQ.	- SQUARE
S.S.	- STAINLESS STEEL
ST.	- STEEL
S.D.F.	- STEP DOWN FOOTING
STIFF.	- STIFFENER
STIR.	- STIRRUP
STRUCT.	- STRUCTURAL
SYM.	- SYMMETRICAL
S.O.G.	- SLAB ON GRADE
T/CONC.	- TOP OF CONCRETE
T.L.L.	- TOP LOWER LAYER
T&B	- TOP AND BOTTOM
T/F.	- TOP OF FOOTING
T/ST.	- TOP OF STEEL
T.U.L	- TOP UPPER LAYER
TYP.	- TYPICAL
THK.	- THICK
U.N.O.	- UNLESS NOTED OTHERWISE
U/S	- UNDERSIDE
VERT.	- VERTICAL
V.B.	- VERTICAL BRACING
V.S.C.	- VERTICAL SLOT CONNECTION
W.PL.	- WALL PLATE
WS	- WATERSTOP
WWF	- WELDED WIRE FABRIC
WWM	- WELDED WIRE MESH

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
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Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

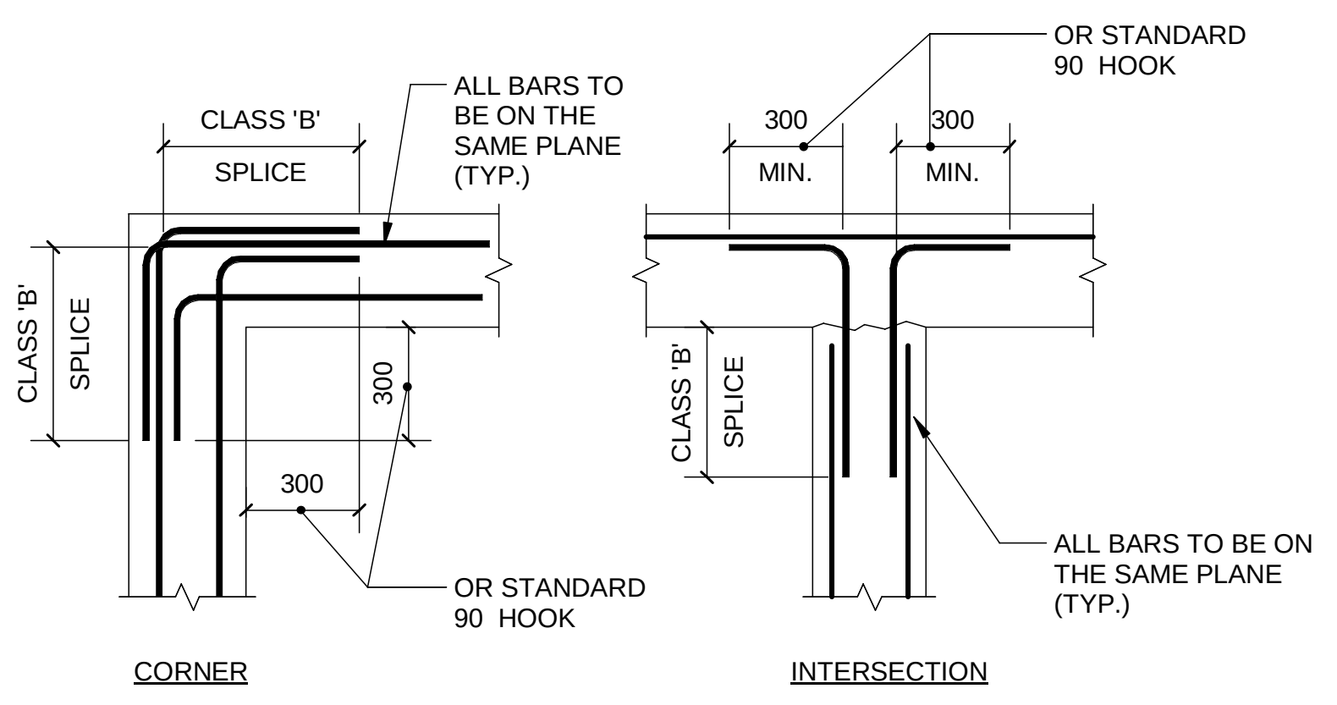
SHEET TITLE

GENERAL REQUIREMENTS NOTES

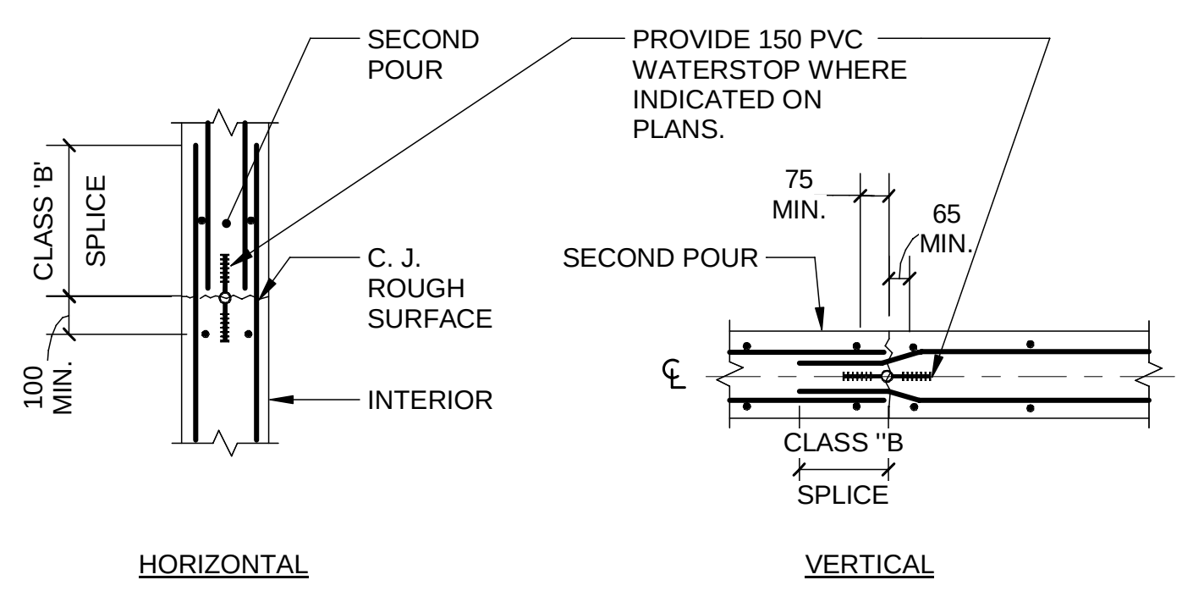
SHEET NUMBER

00-S-000A

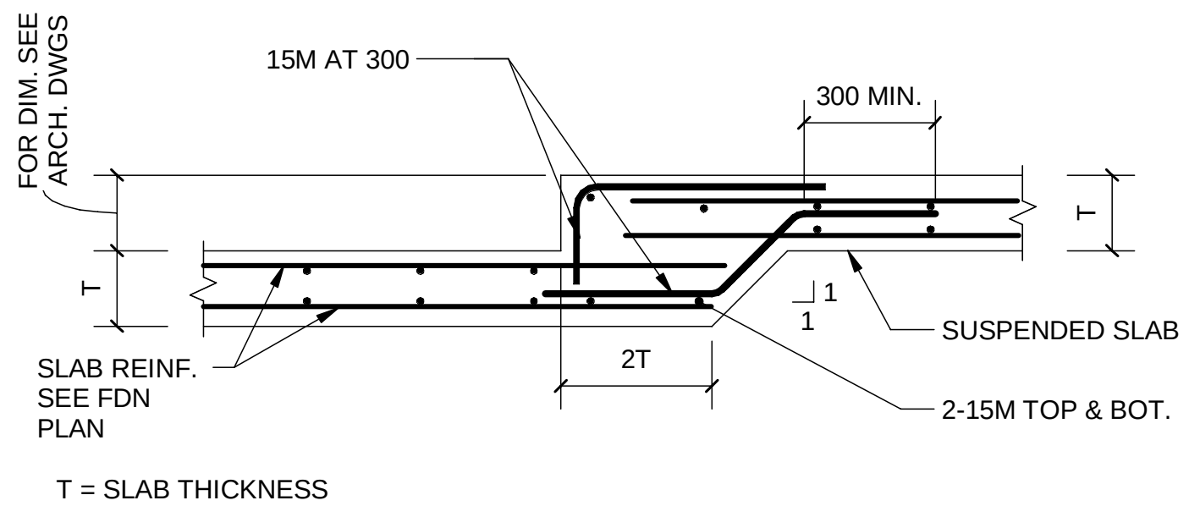
Printed on ___% Post-Consumer Recycled Content Paper



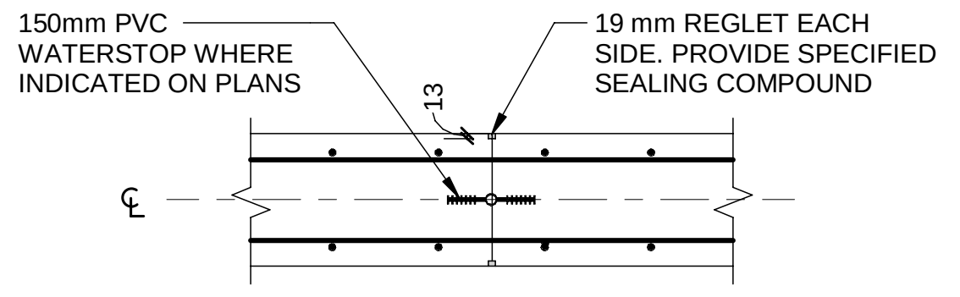
1 WALL REINFORCING PLAN DETAIL
00-S-001 SCALE: N.T.S.



2 CONSTRUCTION JOINT IN WALLS
00-S-001 SCALE: N.T.S.



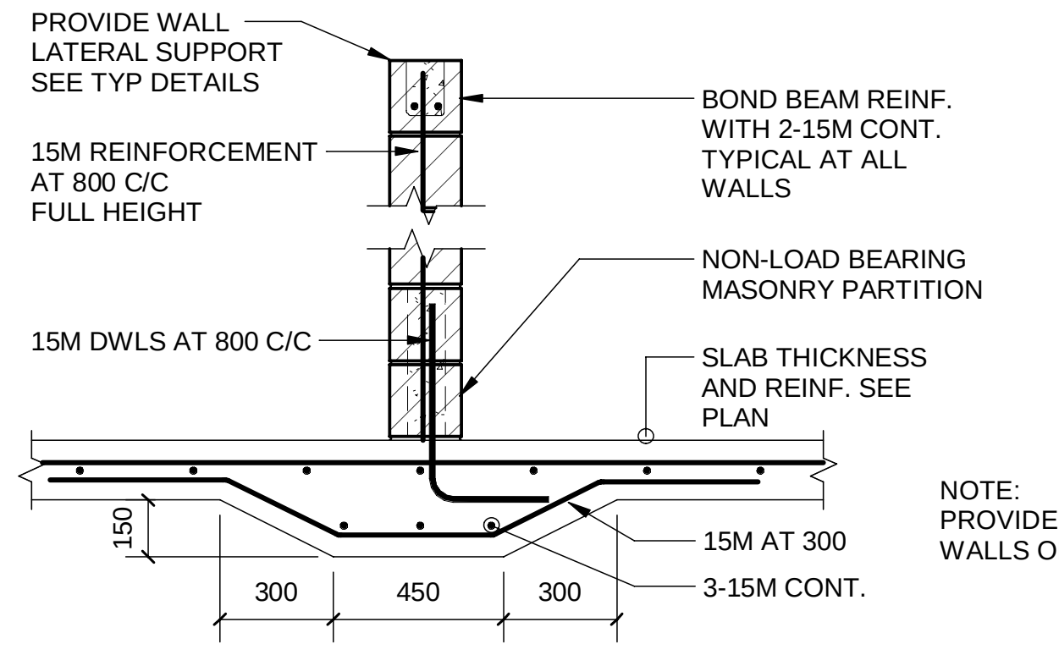
3 CRANKED SLAB DETAIL
00-S-001 SCALE: N.T.S.


150mm PVC WATERSTOP WHERE INDICATED ON PLANS
13
19 mm REGLET EACH SIDE. PROVIDE SPECIFIED SEALING COMPOUND

NOTES:

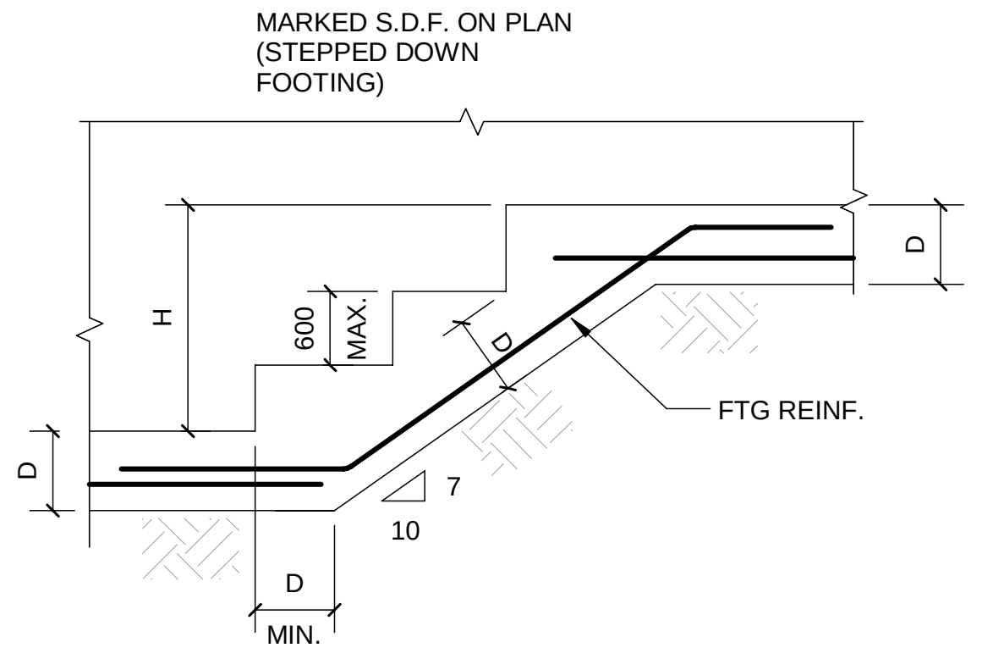
PROVIDE VERT. C.J. IN ALL WALLS AT 10m O/C MAX. UNLESS SPECIFICALLY NOTED OTHERWISE.

4 CONTROL JOINT IN WALLS
00-S-001 SCALE: N.T.S.


PROVIDE WALL LATERAL SUPPORT SEE TYP DETAILS
15M REINFORCEMENT AT 800 C/C FULL HEIGHT
15M DWLS AT 800 C/C
BOND BEAM REINF. WITH 2-15M CONT. TYPICAL AT ALL WALLS
NON-LOAD BEARING MASONRY PARTITION
SLAB THICKNESS AND REINF. SEE PLAN
150
300
450
300
15M AT 300
3-15M CONT.

NOTE:
PROVIDE SLAB THICKENING FOR MASONARY WALLS ON SLAB THAT IS LESS THAN 200mm.

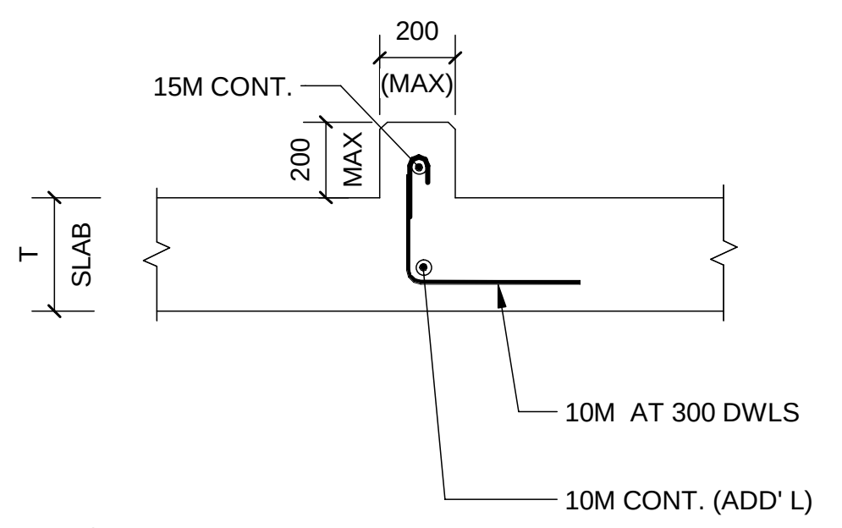
5 MASONRY PARTITION ON NEW SLAB
00-S-001 SCALE: N.T.S.



NOTES:

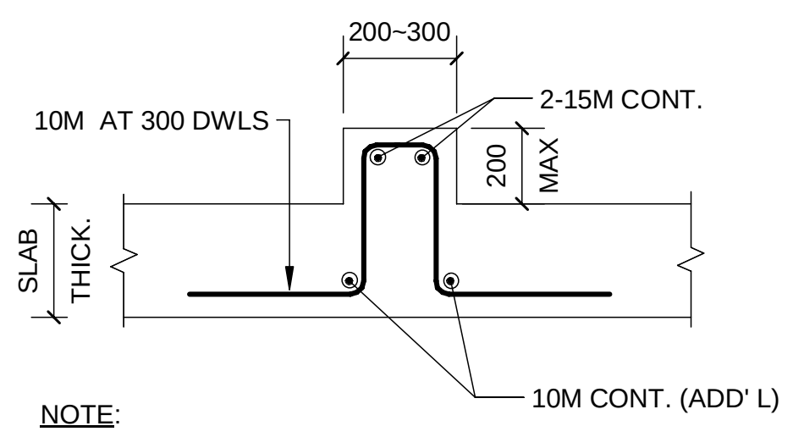
IF TOTAL STEP 'H' EXCEEDS 1800, PROVIDE AN INTERMEDIATE HORIZONTAL SECTION OF AT LEAST 1200 BETWEEN STEPS

6 TYPICAL WALL FOOTING STEPPING DETAIL
00-S-001 SCALE: N.T.S.



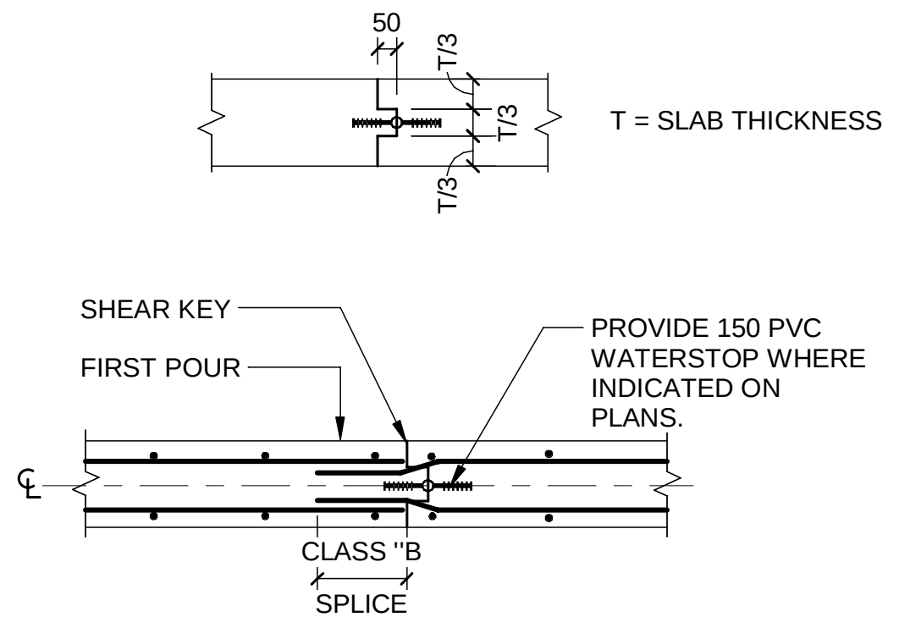
NOTE:
SEE ARCH. DRAWINGS FOR CURB SIZE AND LOCATION

7 TYPICAL CURB ON CONCRETE SLAB
00-S-001 SCALE: N.T.S.

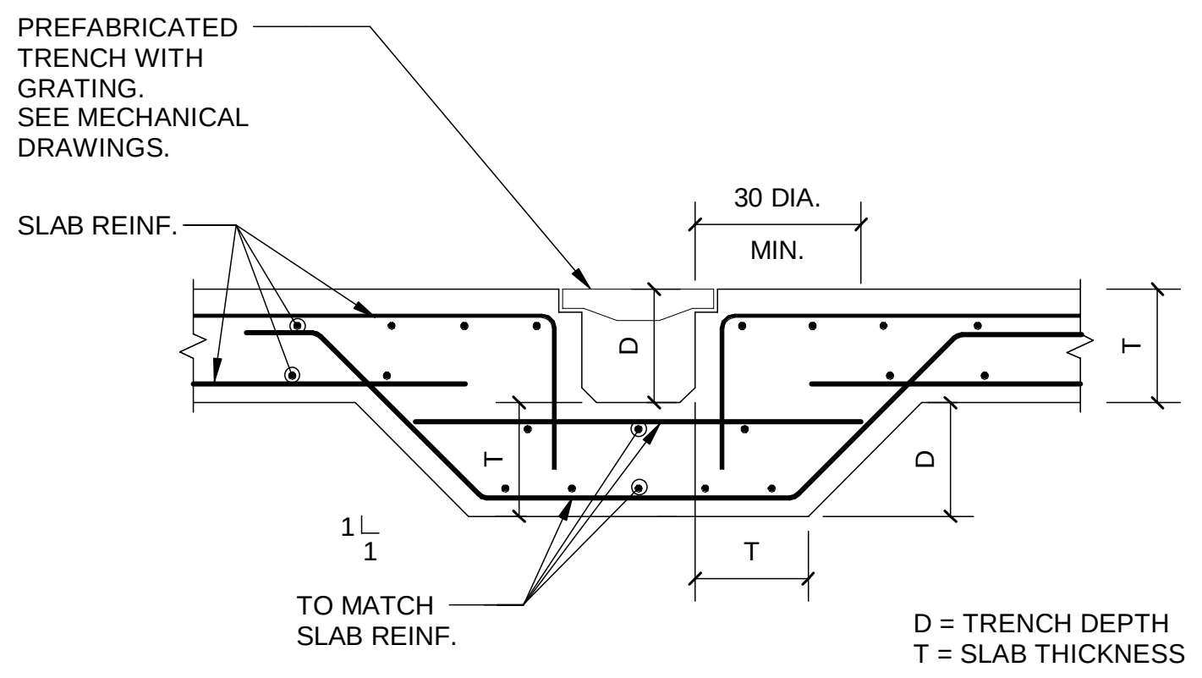


NOTE:
SEE ARCH. DRAWINGS FOR CURB SIZE AND LOCATION

8 TYPICAL CURB DETAIL
00-S-001 SCALE: N.T.S.



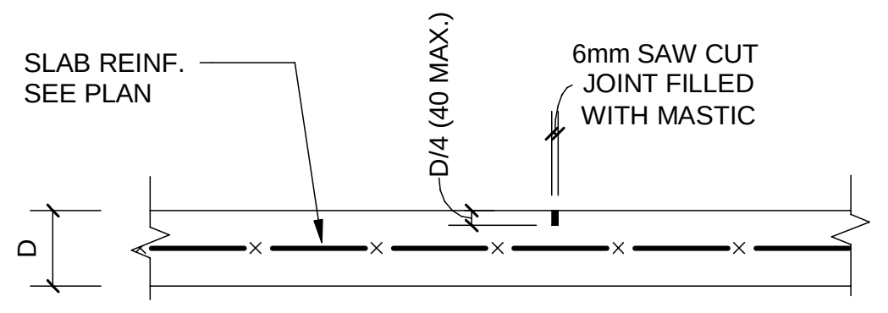
9 CONSTRUCTION JOINT DETAIL IN SLAB
00-S-001 SCALE: N.T.S.



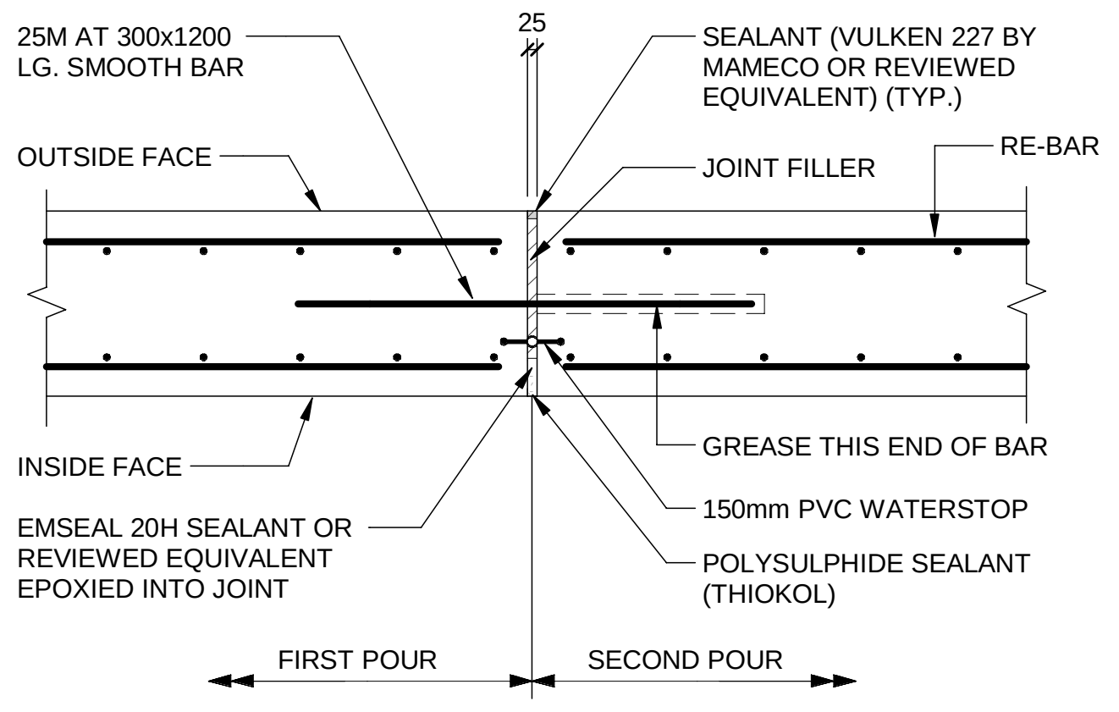
NOTES:

SEE MECHANICAL OR ARCH. DRAWINGS FOR TRENCH SIZE, SLOPE, AND LOCATIONS PROVIDE VARYING TRENCH DEPTH ("D") TO ACHIEVE TRENCH SLOPES.

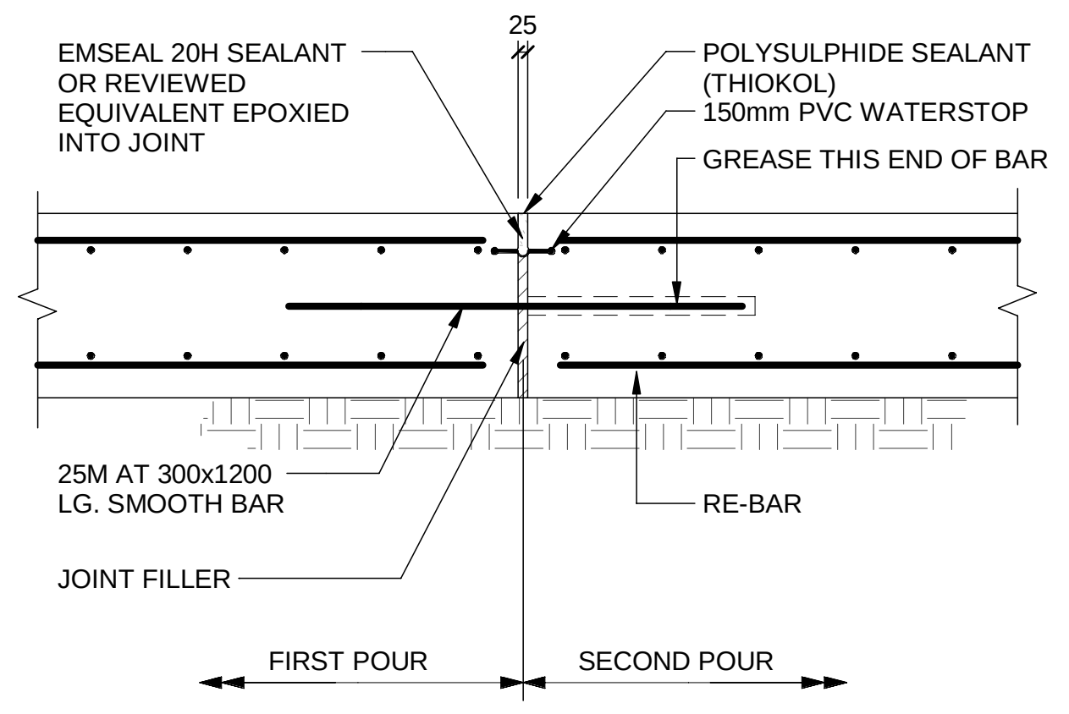
10 TYPICAL TRENCH REINFORCEMENT
00-S-001 SCALE: N.T.S.



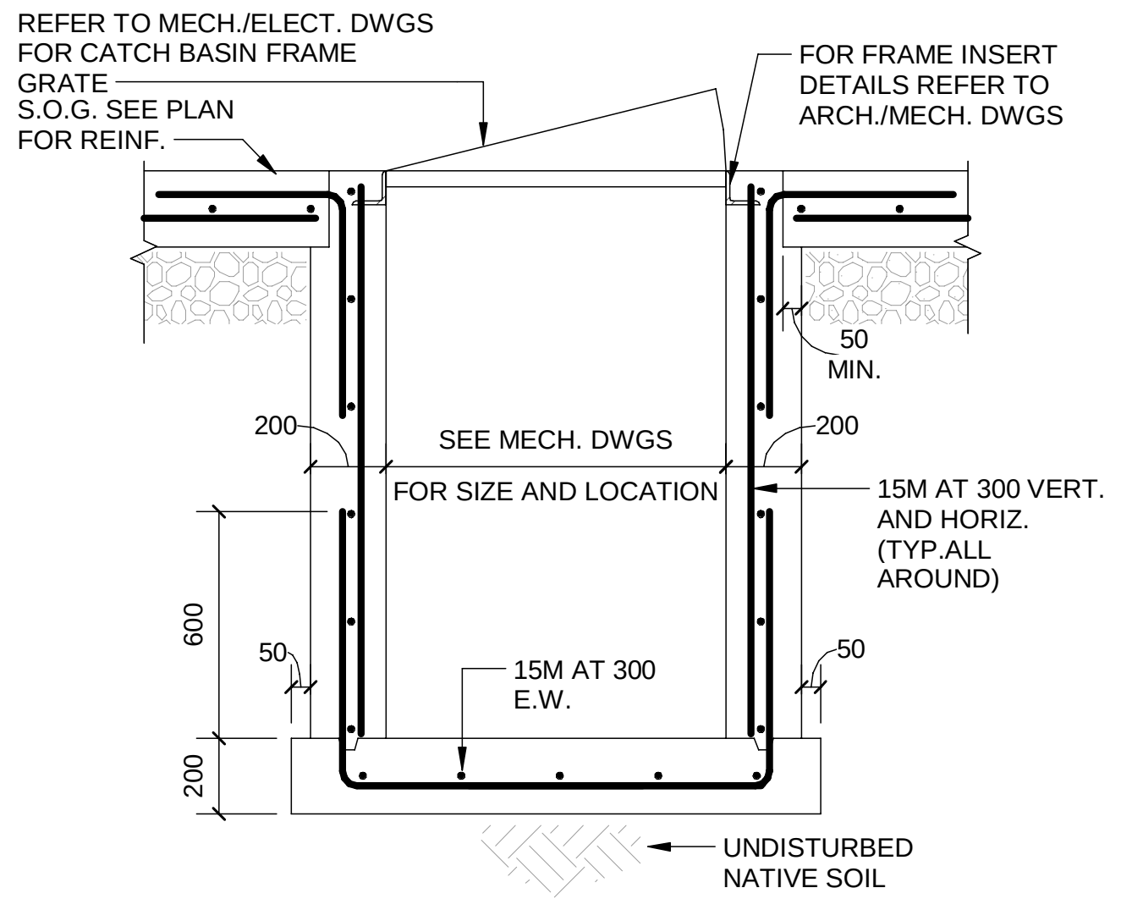
11 TYPICAL SAW-CUT CONTROL JOINT
00-S-001 SCALE: N.T.S.


25
25M AT 300x1200 LG. SMOOTH BAR
SEALANT (VULKEN 227 BY MAMECO OR REVIEWED EQUIVALENT) (TYP.)
OUTSIDE FACE
JOINT FILLER
RE-BAR
GREASE THIS END OF BAR
INSIDE FACE
150mm PVC WATERSTOP
EMSEAL 20H SEALANT OR REVIEWED EQUIVALENT EPOXIED INTO JOINT
POLYSULPHIDE SEALANT (THIOKOL)
FIRST POUR
SECOND POUR

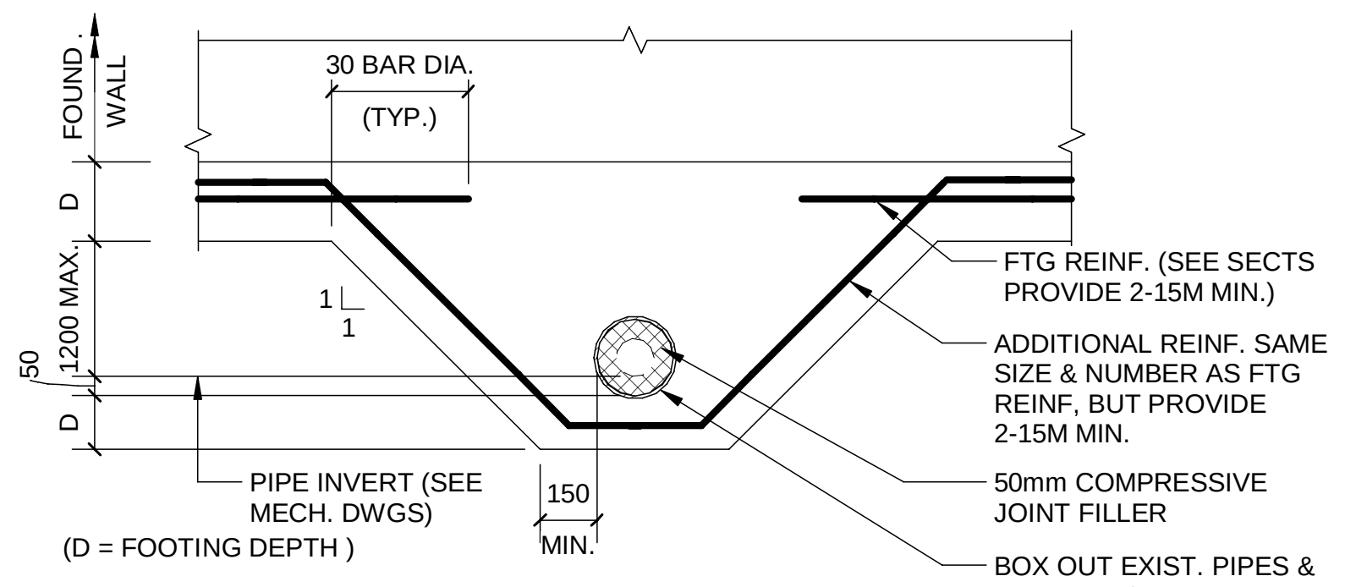
12 TYPICAL WALL EXPANSION JOINT
00-S-001 SCALE: N.T.S.


25
EMSEAL 20H SEALANT OR REVIEWED EQUIVALENT EPOXIED INTO JOINT
POLYSULPHIDE SEALANT (THIOKOL)
150mm PVC WATERSTOP
GREASE THIS END OF BAR
25M AT 300x1200 LG. SMOOTH BAR
RE-BAR
JOINT FILLER
FIRST POUR
SECOND POUR

13 TYPICAL SLAB EXPANSION JOINT
00-S-001 SCALE: N.T.S.


REFER TO MECH./ELECT. DWGS FOR CATCH BASIN FRAME GRATE
S.O.G. SEE PLAN FOR REINF.
FOR FRAME INSERT DETAILS REFER TO ARCH./MECH. DWGS
50 MIN.
200
200
SEE MECH. DWGS
FOR SIZE AND LOCATION
15M AT 300 VERT. AND HORIZ. (TYP.ALL AROUND)
600
50
50
15M AT 300 E.W.
200
UNDISTURBED NATIVE SOIL

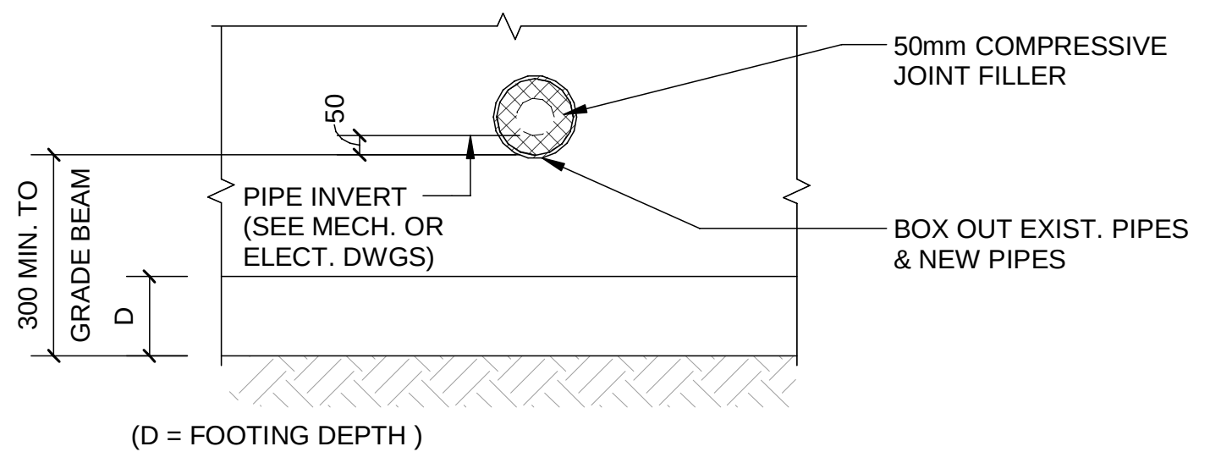
14 TYP. CATCH BASIN
00-S-001 SCALE: N.T.S.


FOUND. WALL
30 BAR DIA. (TYP.)
D
1200 MAX.
50
D
1
1
FTG REINF. (SEE SECTS PROVIDE 2-15M MIN.)
ADDITIONAL REINF. SAME SIZE & NUMBER AS FTG REINF, BUT PROVIDE 2-15M MIN.
50mm COMPRESSIVE JOINT FILLER
PIPE INVERT (SEE MECH. DWGS)
150 MIN.
(D = FOOTING DEPTH)
BOX OUT EXIST. PIPES & NEW PIPES

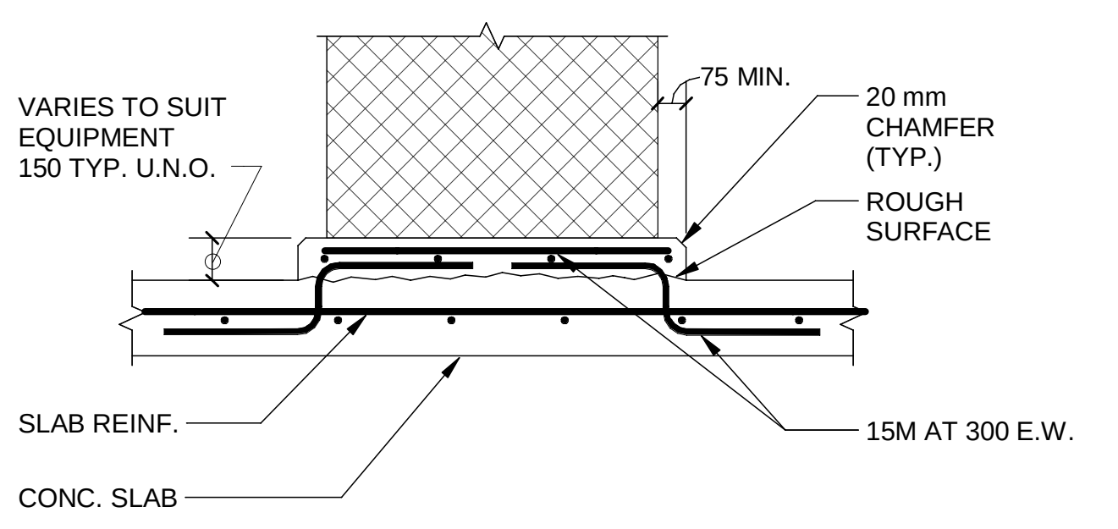
NOTES:

- FOR PIPES WITH INVERTS GREATER THAN 1200 BELOW U/S OF FOOTING. PROVIDES STEPPED FOOTINGS. PIPES TO BE THROUGH FOUND. WALL

15 SERVICE PIPES BELOW WALL FOOTING
00-S-001 SCALE: N.T.S.


50
50mm COMPRESSIVE JOINT FILLER
300 MIN. TO GRADE BEAM
PIPE INVERT (SEE MECH. OR ELECT. DWGS)
BOX OUT EXIST. PIPES & NEW PIPES
D
(D = FOOTING DEPTH)

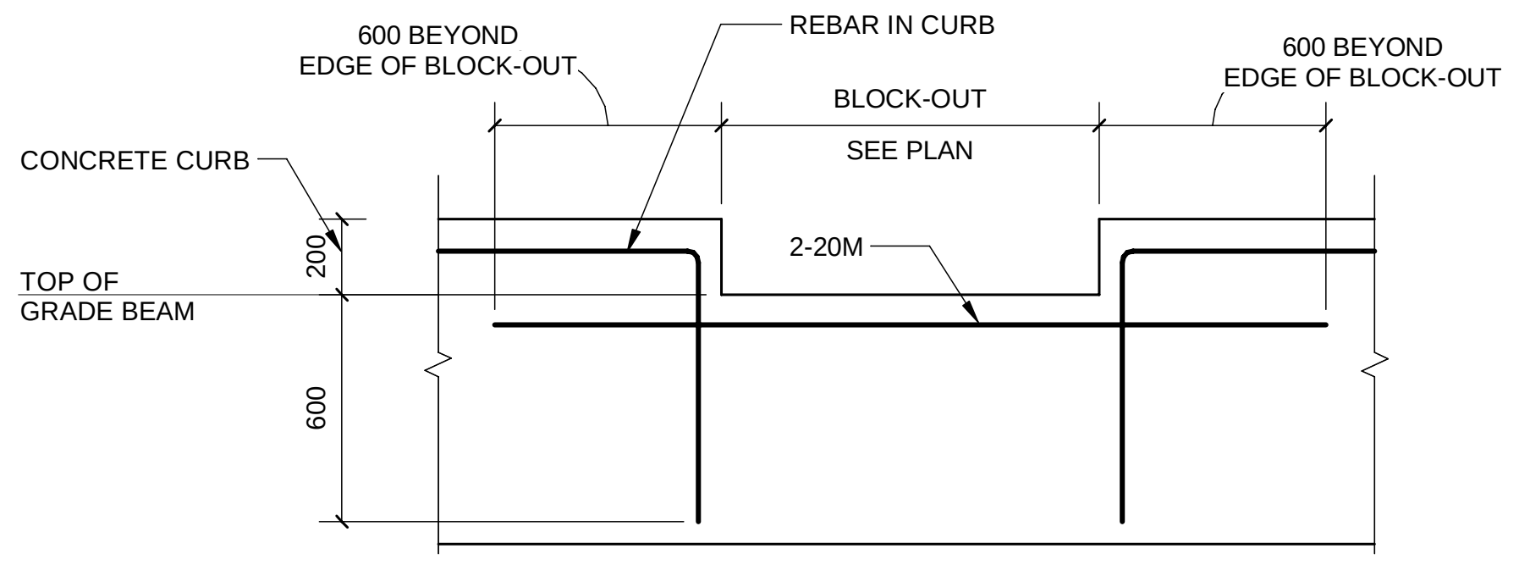
16 SERVICE PIPES THROUGH FOUNDATION WALL OR GRADE BEAM
00-S-001 SCALE: N.T.S.



NOTES:

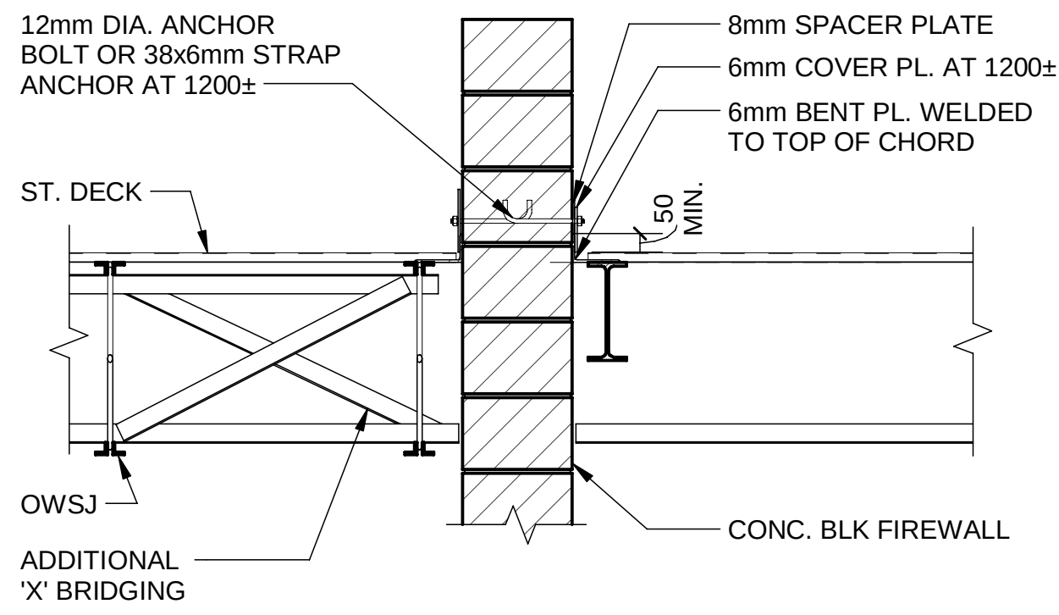
SEE PROCESS OR ARCH. DRAWINGS FOR PAD SIZE AND LOCATIONS

17 CONC. PAD ON GROUND FLOOR SLAB
00-S-001 SCALE: N.T.S.

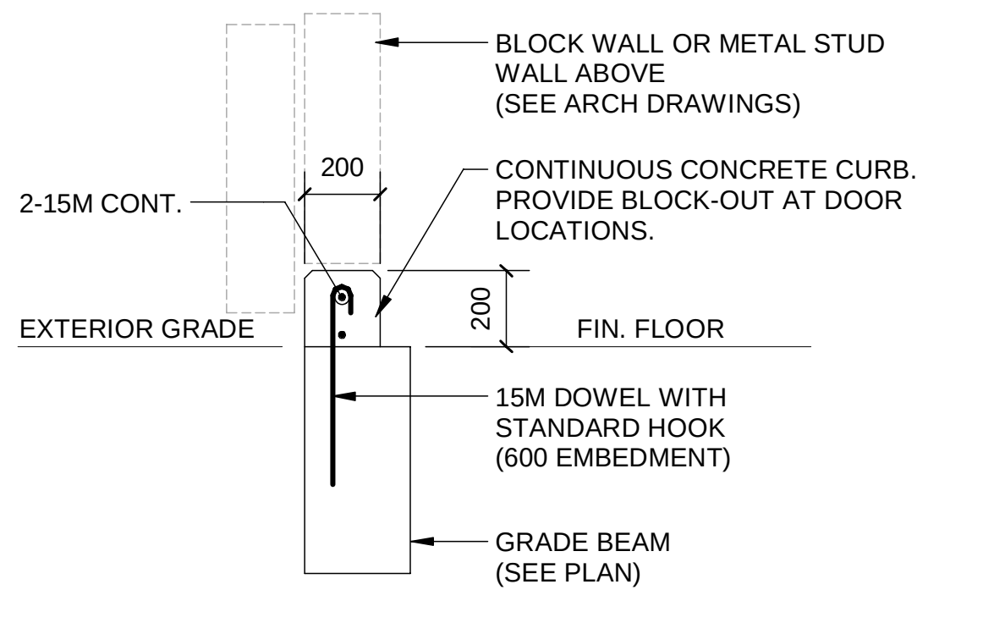


PROVIDE BLOCK OUT AT MANDOORS AND VEHICLE DOORS.

18 BLOCK OUT IN CONCRETE CURB DETAIL
00-S-001 SCALE: N.T.S.



19 CONCRETE BLOCK FIRE WALL WITH OWSJ OR STEEL BEAM
00-S-001 SCALE: N.T.S.


BLOCK WALL OR METAL STUD WALL ABOVE (SEE ARCH DRAWINGS)
200
2-15M CONT.
CONTINUOUS CONCRETE CURB. PROVIDE BLOCK-OUT AT DOOR LOCATIONS.
200
EXTERIOR GRADE
FIN. FLOOR
15M DOWEL WITH STANDARD HOOK (600 EMBEDMENT)
GRADE BEAM (SEE PLAN)

NOTE:
REBARS IN GRADE BEAM IS OMITTED FOR CLARITY

20 CONCRETE CURB AT EXTERNAL WALLS
00-S-001 SCALE: N.T.S.

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:

Last Plotted: 2/14/2025 10:47:13 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

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PROJECT
WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

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Winnipeg Transit
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Winnipeg, MB R3L 2A1

CONSULTANT
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Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

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A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW

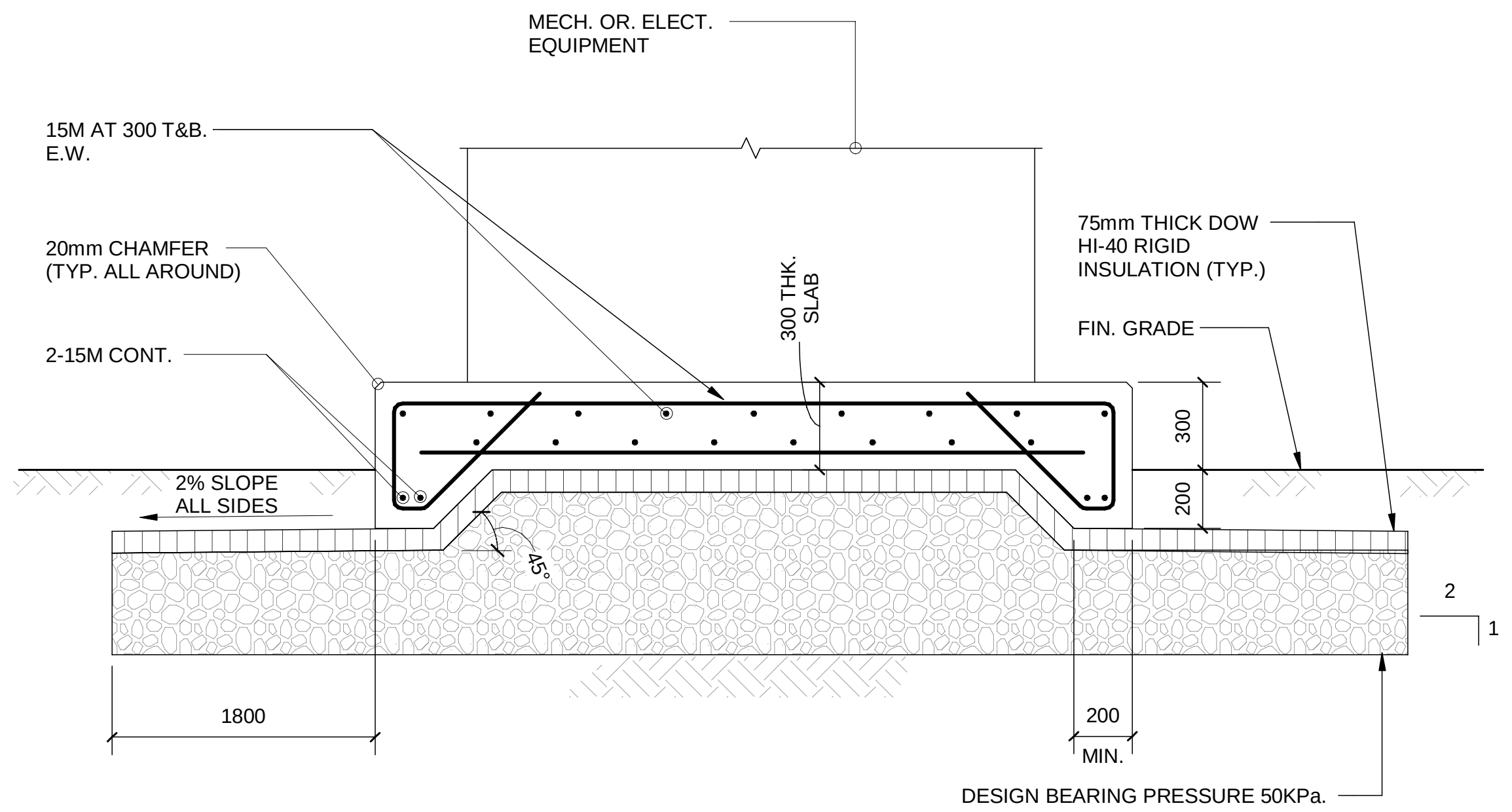
PROJECT NUMBER
60721079

SHEET TITLE
TYPICAL DETAILS SHEET 1

SHEET NUMBER
00-S-001

SUBGRADE PREPARATION NOTES:

1. REMOVE EXISTING SOIL TO DEPTH OF MINIMUM 800mm BELOW UNDERSIDE OF SLAB INSULATION
2. HAVE A GEOTECHNICAL ENGINEER'S REPRESENTATIVE INSPECT THE EXPOSED SUBGRADE. EXCAVATE ANY SOFT, WEAK SPOTS AS DIRECTED BY GEOTECH ENGINEER.
3. INSTALL GEOGRID LAYER OVER TOP OF NONWOVEN GEOTEXILE IN ACCORDANCE WITH COW SPEC CW3130 AND CW3135.
4. BACKFILL 500mm THICK 100mm GRANULAR "A" SUBBASE COMPACTED TO 100% SPMDD. PROOFROLL AND RECOMPACT AS REQUIRED.
5. BACKFILL 200mm THICK 50mm GRANULAR "A" SUBBASE COMPACTED TO 100% SPMDD.
6. BACKFILL 100mm THICK 28mm GRANULAR "A" BASE COURSE COMPACT TO 100% SPMDD.
7. PLACE INSULATION AND CONSTRUCT SLAB ON GRADE AS INDICATED. SAW CUT AT MAX 3000 C/C.

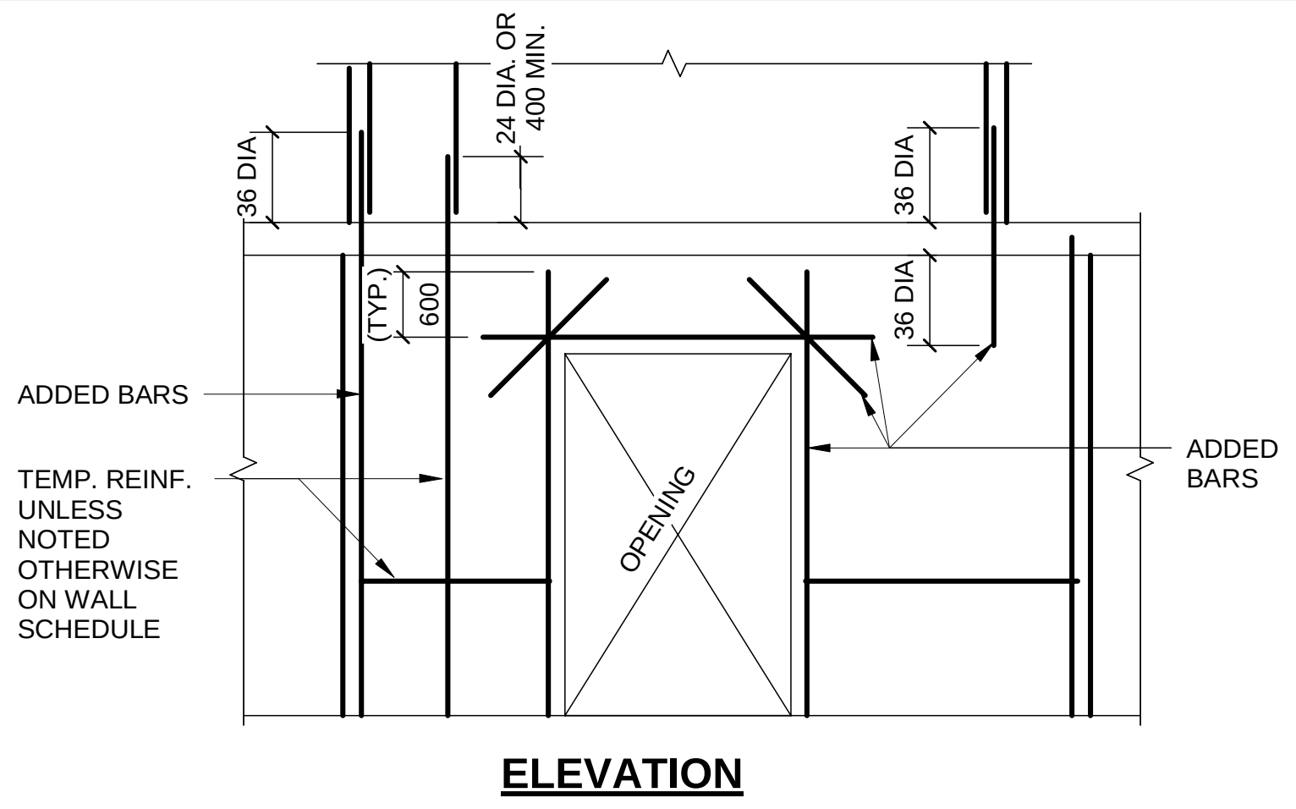

MECH. OR. ELECT. EQUIPMENT
15M AT 300 T&B. E.W.
20mm CHAMFER (TYP. ALL AROUND)
2-15M CONT.
300 THK. SLAB
75mm THICK DOW HI-40 RIGID INSULATION (TYP.)
FIN. GRADE
2% SLOPE ALL SIDES
45°
300
200
2
1
1800
200 MIN.

DESIGN BEARING PRESSURE 50KPa. REMOVE ALL LOSE & ORGANIC MATERIAL AND REPLACE WITH GRANULAR "A" COMPACTED TO 100% SPMDD AS DIRECTED AND APPROVED BY GEOTECHNICAL ENGINEER

* REFER TO CIVIL, MECHANICAL, ELECTRICAL OR ARCH. DRAWINGS FOR LOCATIONS. FINAL SIZE TO BE COORDINATED WITH EQUIPMENT VENDERS

1 | EXTERIOR CONCRETE PAD

00-S-002 SCALE: N.T.S.



CONCRETE WALL REINFORCEMENT		
WALL THICKNESS (mm)	HORIZONTAL REINFORCEMENT	VERTICAL REINFORCEMENT
100 - 150	10M AT 300 O.C.	10M AT 300 O.C.
160 - 200	15M AT 300 O.C.	15M AT 300 O.C.
210 - 330	10M AT 300 E.F.	10M AT 300 E.F.
340 - 500	15M AT 300 E.F.	15M AT 300 E.F.

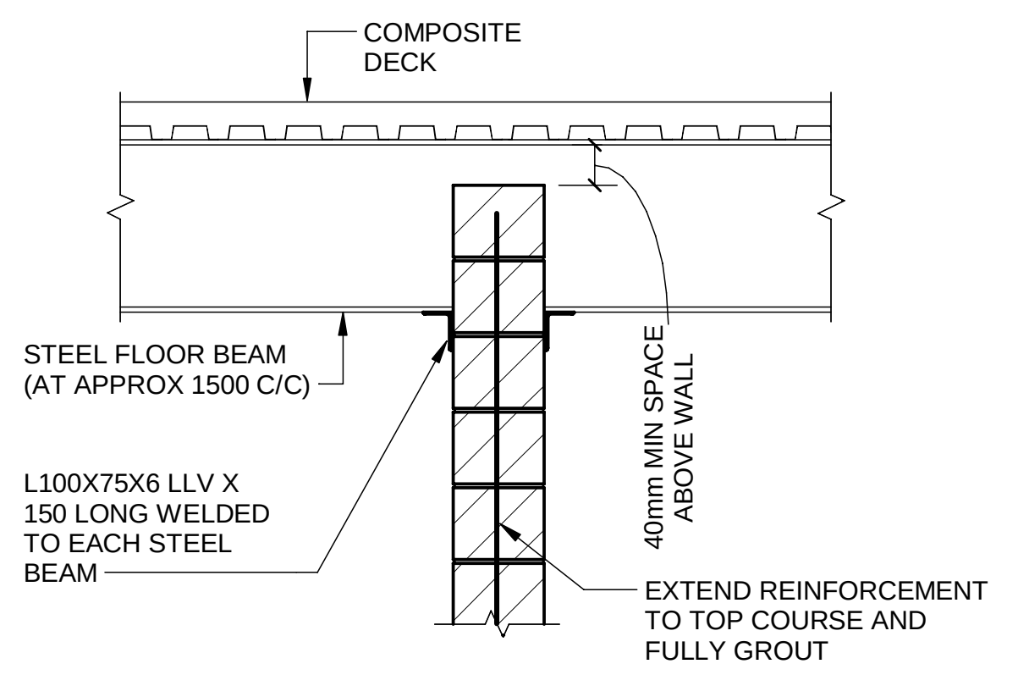
ADDITIONAL BARS IN CONCRETE WALLS

TOP & BOT. OF EACH POUR (CONTINUES, HORIZ)
EACH FACE OF OPENING (HORIZ., VERT. & DIAG.)

100 TO 150mm THICK WALL	2-15M
160 TO 200mm THICK WALL	
210 TO 330mm THICK WALL	2-15M
340 TO 500mm THICK WALL	

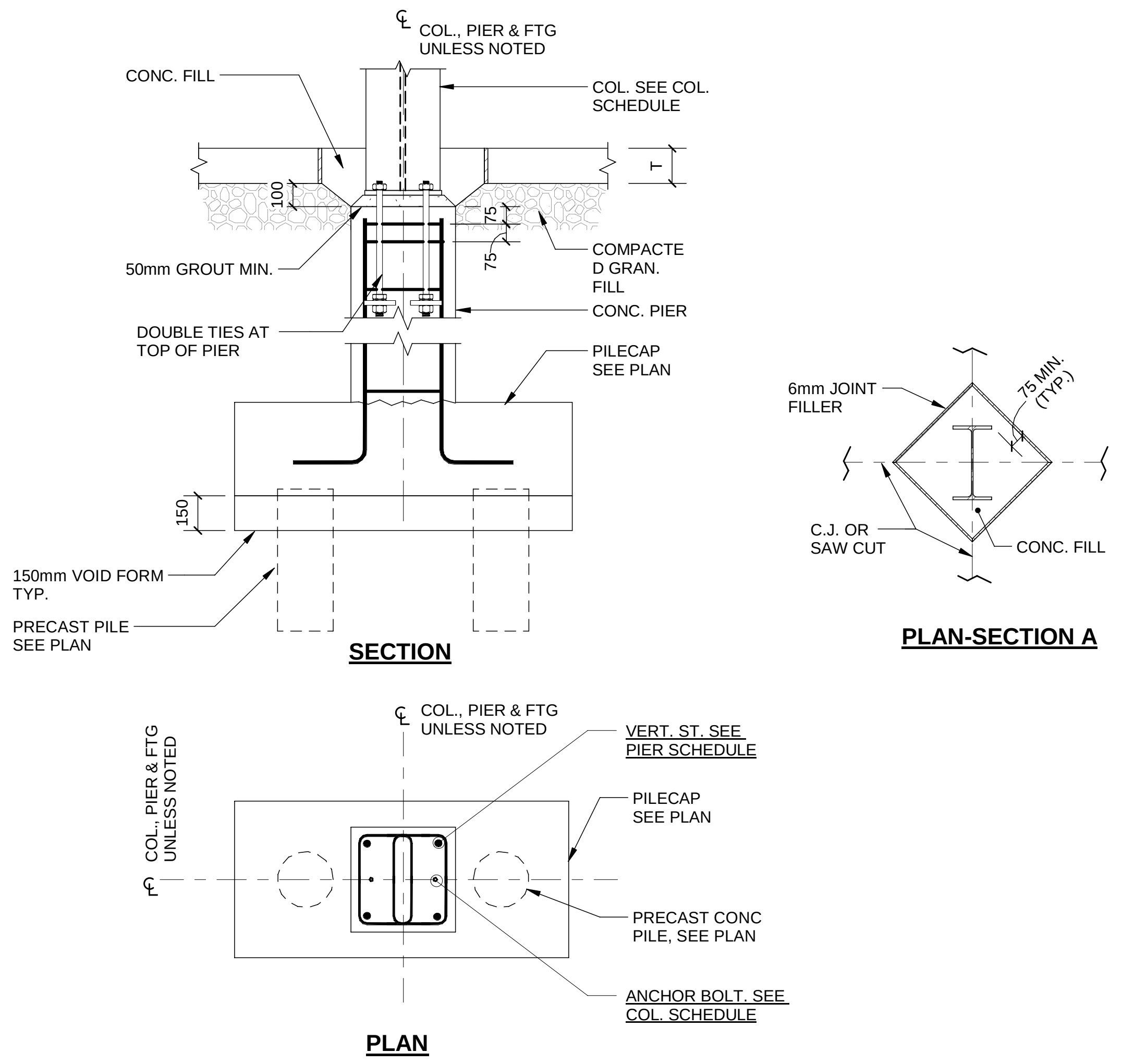
2 | TYPICAL CONCRETE WALL REINFORCEMENT DETAIL

00-S-002 SCALE: N.T.S.


COMPOSITE DECK
STEEL FLOOR BEAM (AT APPROX 1500 C/C)
L100X75X6 LLV X 150 LONG WELDED TO EACH STEEL BEAM
40mm MIN SPACE ABOVE WALL
EXTEND REINFORCEMENT TO TOP COURSE AND FULLY GROUT

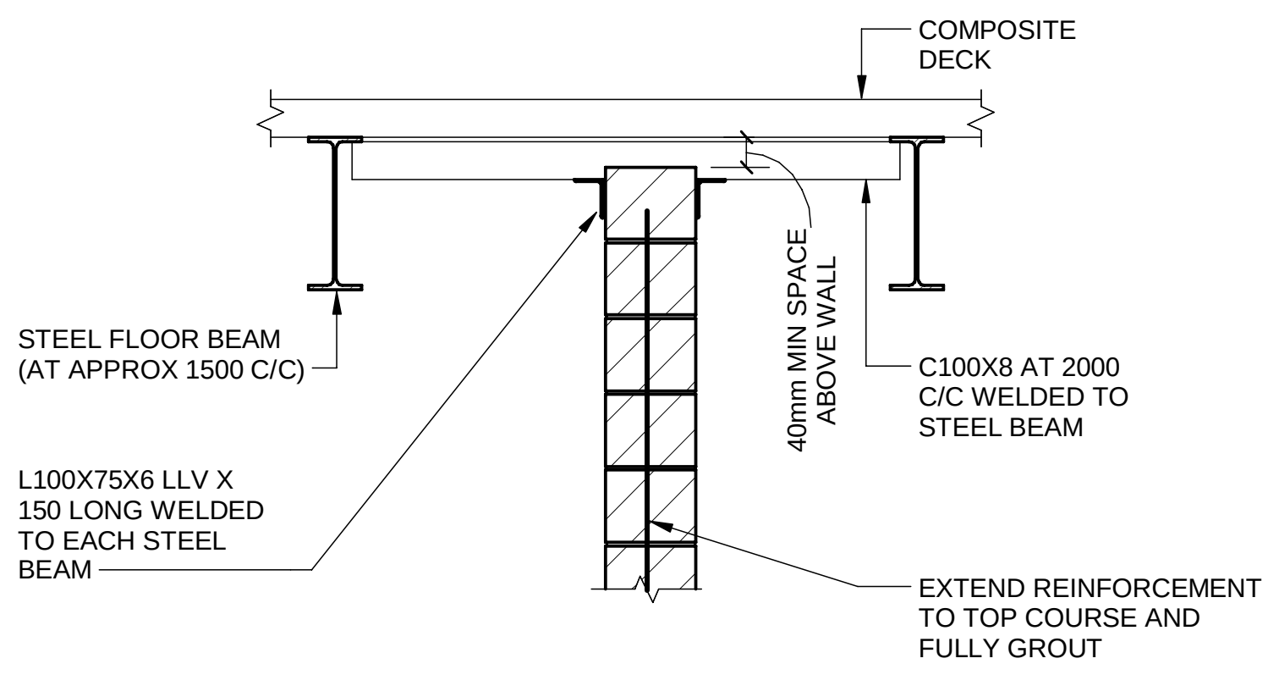
3 | LATERAL SUPPORT OF MASONRY WALL BELOW CONCRETE DECK (PERPENDICULAR TO STEEL BEAM)

00-S-002 SCALE: N.T.S.



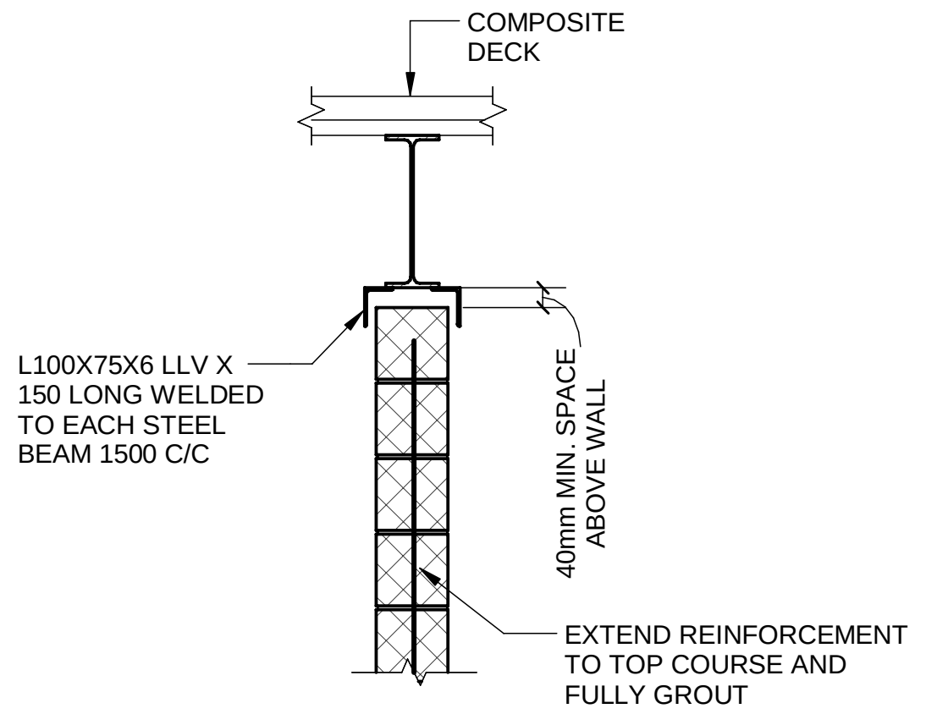
4 | CONCRETE PIER AND FOOTING DETAIL

00-S-002 SCALE: N.T.S.


COMPOSITE DECK
STEEL FLOOR BEAM (AT APPROX 1500 C/C)
L100X75X6 LLV X 150 LONG WELDED TO EACH STEEL BEAM
40mm MIN SPACE ABOVE WALL
C100X8 AT 2000 C/C WELDED TO STEEL BEAM
EXTEND REINFORCEMENT TO TOP COURSE AND FULLY GROUT

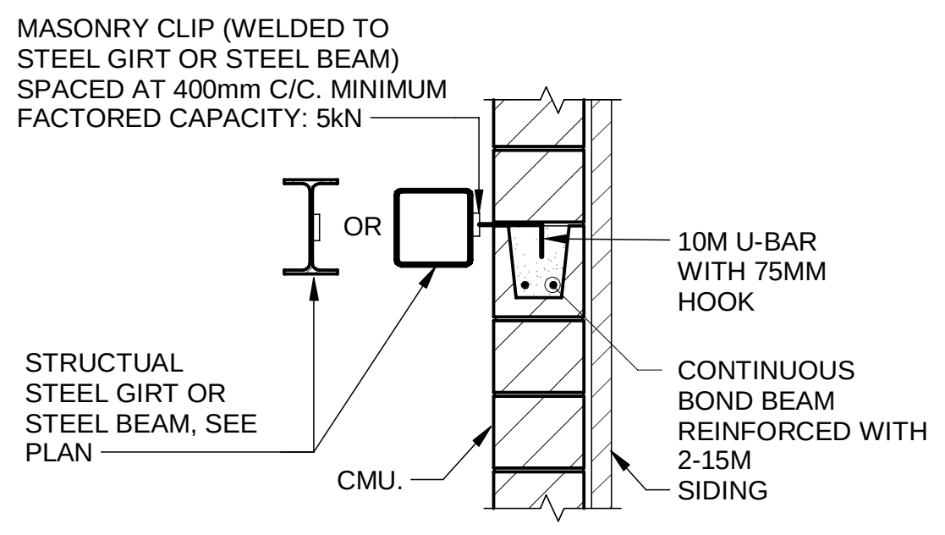
5 | LATERAL SUPPORT OF MASONRY WALL BELOW CONCRETE DECK (PARALLEL TO STEEL BEAM)

00-S-002 SCALE: N.T.S.


COMPOSITE DECK
L100X75X6 LLV X 150 LONG WELDED TO EACH STEEL BEAM 1500 C/C
40mm MIN. SPACE ABOVE WALL
EXTEND REINFORCEMENT TO TOP COURSE AND FULLY GROUT

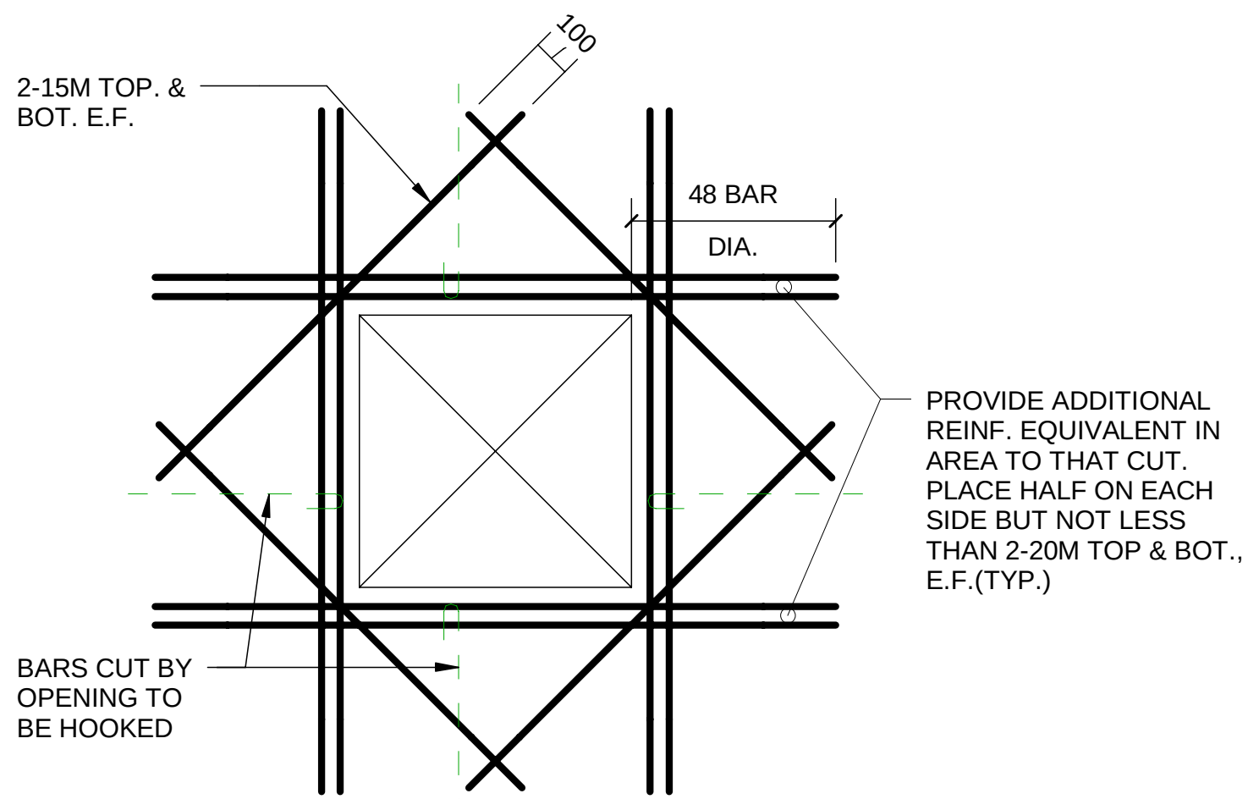
6 | LATERAL SUPPORT OF MASONRY WALL BELOW CONCRETE DECK (PARALLEL TO STEEL BEAM)

00-S-002 SCALE: N.T.S.


MASONRY CLIP (WELDED TO STEEL GIRT OR STEEL BEAM) SPACED AT 400mm C/C. MINIMUM FACTORED CAPACITY: 5kN
OR
10M U-BAR WITH 75MM HOOK
STRUCTUAL STEEL GIRT OR STEEL BEAM, SEE PLAN
CONTINUOUS BOND BEAM REINFORCED WITH 2-15M
CMU.
SIDING

7 | LATERAL SUPPORT OF EXTERIOR MASONRY WALL AT INTERMEDIATE HEIGHT

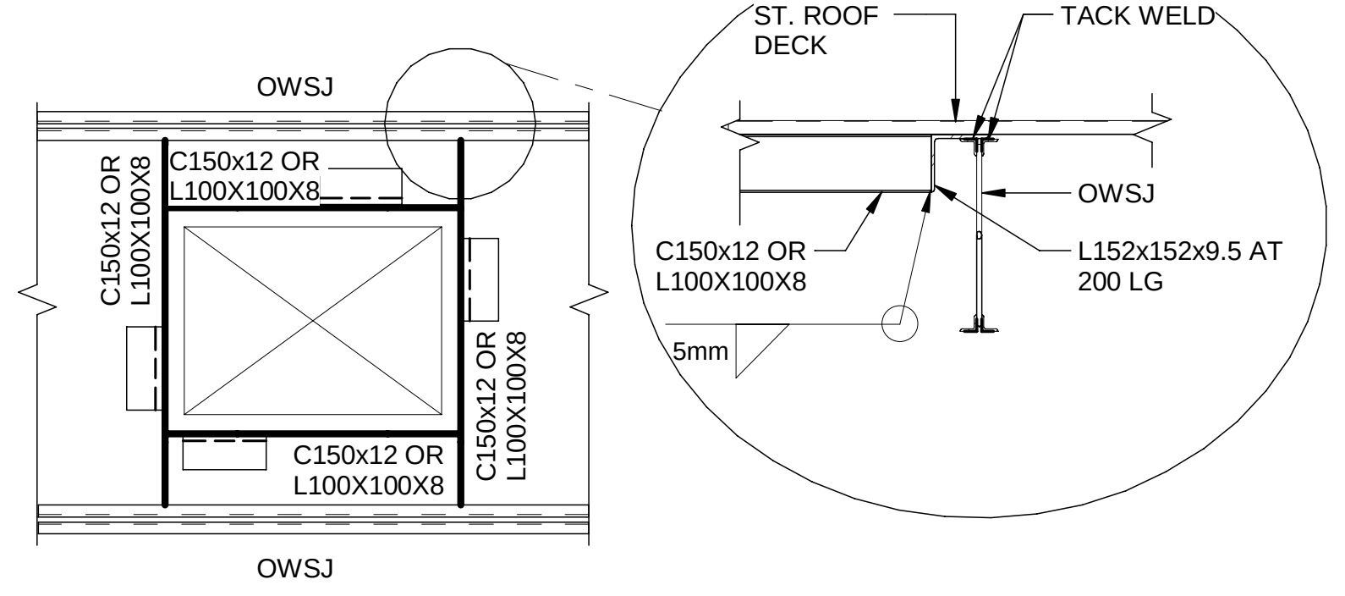
00-S-002 SCALE: N.T.S.


2-15M TOP. & BOT. E.F.
100
48 BAR DIA.
PROVIDE ADDITIONAL REINF. EQUIVALENT IN AREA TO THAT CUT. PLACE HALF ON EACH SIDE BUT NOT LESS THAN 2-20M TOP & BOT., E.F.(TYP.)
BARS CUT BY OPENING TO BE HOOKED

ONE WAY SLAB
FLAT SLAB SIMILAR EXCEPT:
1. MAXIMUM OPENING IS 600X600.
2. THIS DETAIL APPLIES TO OPENING S IN MIDDLE STRIP ONLY.

8 | OPENINGS IN CONCRETE SLAB AND WALL

00-S-002 SCALE: N.T.S.



ROOF OPENINGS: (UNLESS NOTED OTHERWISE)

FRAMING MEMBERS:
- UP TO 1200mm [4'-0"] SPAN TO BE L100x100x8.
- BETWEEN 1200mm AND 2000mm [4'-0" and 6'-6"] TO BE C150X12.

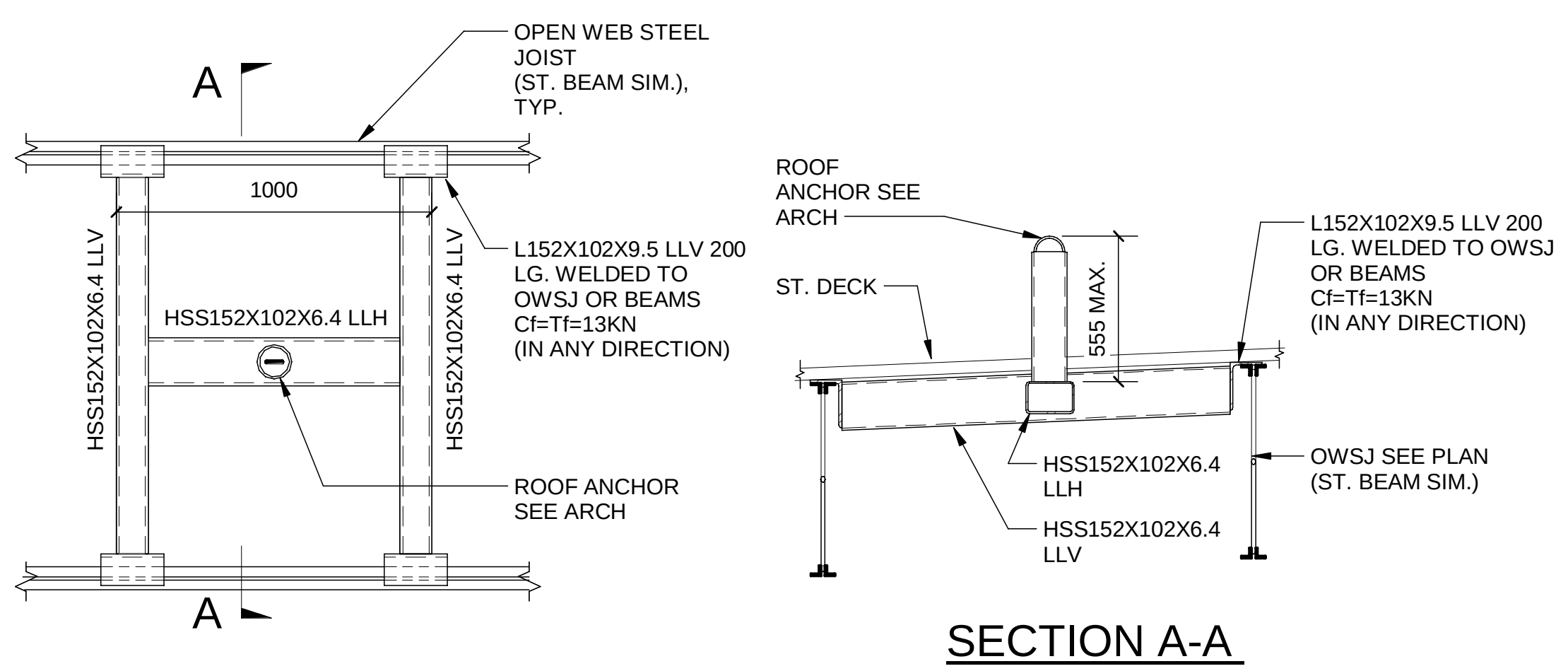
FOR EXACT SIZE AND LOADS AT OPENINGS SEE ARCHITECTURAL AND MECHANICAL DRAWINGS.

NOTE:

GENERAL CONTRACTOR TO CO-ORDINATE OPENING SIZE AND LOCATION

9 | TYP. FRAMING FOR ROOF/FLOOR OPENINGS AND ROOF TOP UNITS

00-S-002 SCALE: N.T.S.

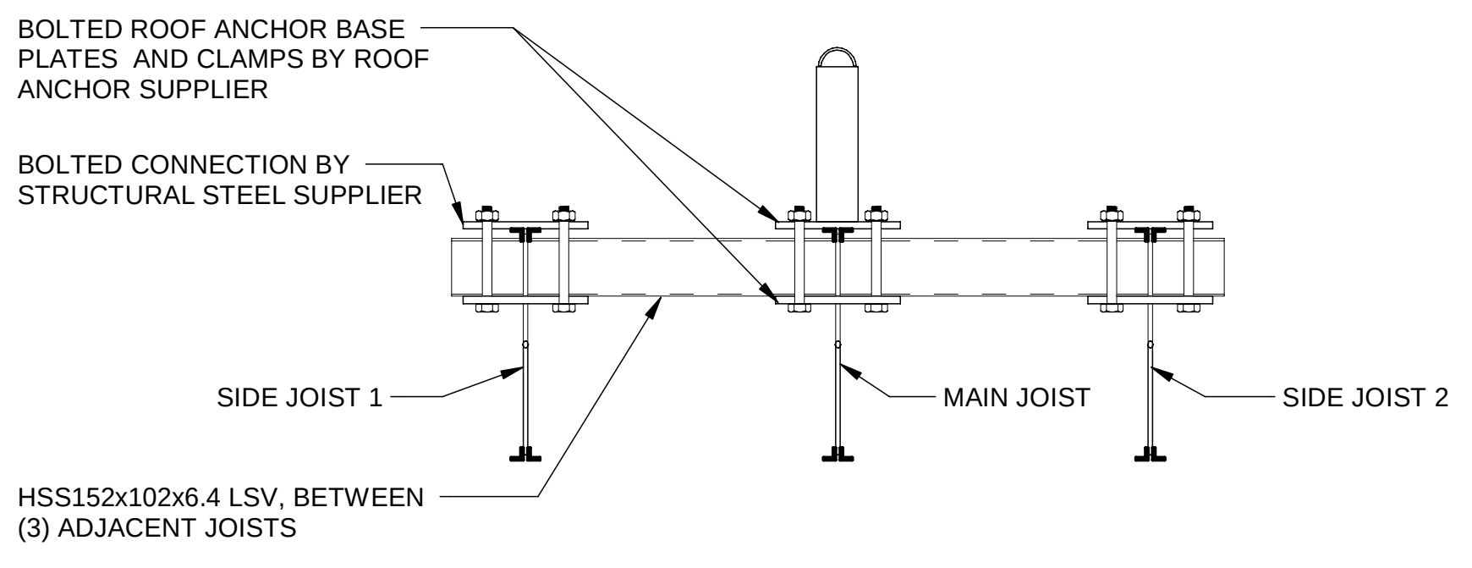

A
A
OPEN WEB STEEL JOIST (ST. BEAM SIM.), TYP.
1000
HSS152X102X6.4 LLV
HSS152X102X6.4 LLV
HSS152X102X6.4 LLH
L152X102X9.5 LLV 200 LG. WELDED TO OWSJ OR BEAMS Cf=Tf=13KN (IN ANY DIRECTION)
ROOF ANCHOR SEE ARCH
ROOF ANCHOR SEE ARCH
ST. DECK
555 MAX.
L152X102X9.5 LLV 200 LG. WELDED TO OWSJ OR BEAMS Cf=Tf=13KN (IN ANY DIRECTION)
HSS152X102X6.4 LLH
HSS152X102X6.4 LLV
OWSJ SEE PLAN (ST. BEAM SIM.)
SECTION A-A

NOTE:

- FOR END ANCHORS, ROOF ANCHOR SHALL BE WELDED TO HSS FRAME FOR:
  Tf = Cf = 22.2 kN IN ANY DIRECTION
  Mfx = Mfy = 13 kNm IN EITHER DIRECTION
- FOR INTERMEDIATE ANCHORS, ROOF ANCHORS SHALL BE WELDED TO HSS FRAME BEAM FOR:
  Tf = Cf = 16 kN IN ANY DIRECTION
  Mfx = Mfy = 9 kNm IN EITHER DIRECTION
- ROOF JOISTS OR BEAMS SUPPORTING THE ROOF ANCHOR FRAME SHALL BE DESIGNED FOR TWO CONCENTRATED FORCES OF Cf = Tf = 13kN IN ANY DIRECTION. THESE TWO FORCES CAN BE IN THE SAME DIRECTION OR IN OPPOSITE DIRECTIONS.

10 | ROOF ANCHOR FRAME BETWEEN JOISTS OR BEAMS

00-S-002 SCALE: N.T.S.

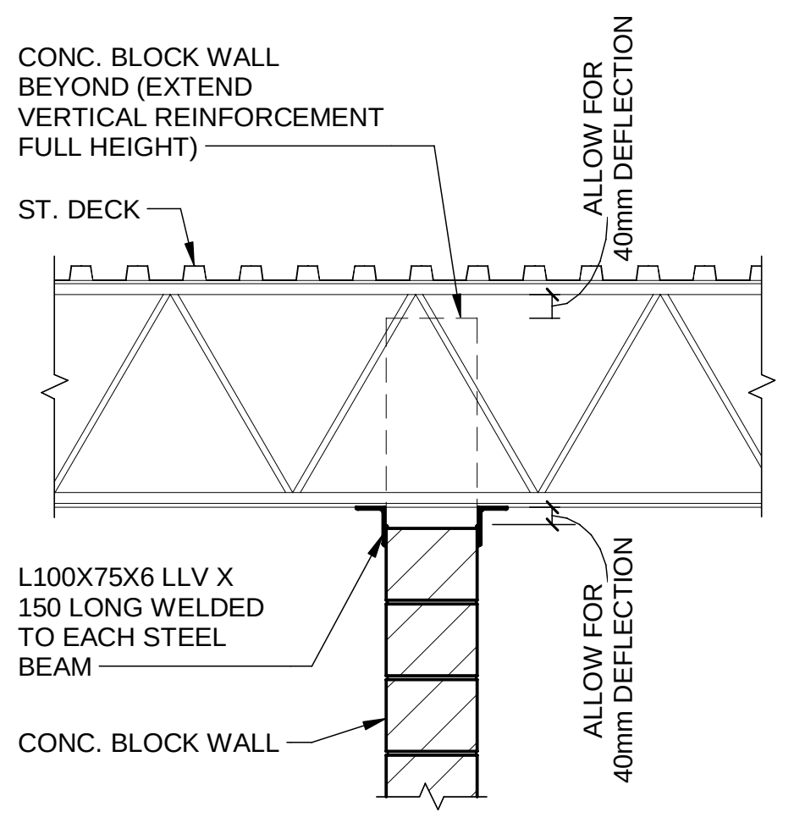

BOLTED ROOF ANCHOR BASE PLATES AND CLAMPS BY ROOF ANCHOR SUPPLIER
BOLTED CONNECTION BY STRUCTURAL STEEL SUPPLIER
SIDE JOIST 1
MAIN JOIST
SIDE JOIST 2
HSS152x102x6.4 LSV, BETWEEN (3) ADJACENT JOISTS

NOTES:

- FOR END ANCHORS, ROOF ANCHOR SHALL BE WELDED TO HSS FRAME FOR:
  Tf = Cf = 22.2 kN IN ANY DIRECTION
  Mfx = Mfy = 13 kNm IN EITHER DIRECTION
- FOR INTERMEDIATE ANCHORS, ROOF ANCHORS SHALL BE WELDED TO HSS FRAME BEAM FOR:
  Tf = Cf = 16 KN IN ANY DIRECTION
  Mfx = Mfy = 9 kNm IN EITHER DIRECTION
- THE MAIN JOIST DIRECTLY BELOW ROOF ANCHOR SHALL BE DESIGNED FOR
  IN-PLANE MOMENT OF 13kN-m PLUS Tf=Cf=22.2 IN ANY DIRECTION (FOR END ANCHORS)
  OR IN-PLANE MOMENT OF 9kN-m PLUS Tf=Cf=16kN (FOR INTERMEDIATE ANCHORS),
  EACH OF THE TWO SIDE JOISTS SHALL BE DESIGNED FOR A VERTICAL FORCE OF 5kN (UP OR DOWN).

11 | ROOF ANCHOR FRAME DIRECTLY ABOVE JOIST

00-S-002 SCALE: N.T.S.


CONC. BLOCK WALL BEYOND (EXTEND VERTICAL REINFORCEMENT FULL HEIGHT)
ST. DECK
ALLOW FOR 40mm DEFLECTION
L100X75X6 LLV X 150 LONG WELDED TO EACH STEEL BEAM
CONC. BLOCK WALL
ALLOW FOR 40mm DEFLECTION

12 | LATERAL SUPPORT FOR CONCRETE BLOCK PARTITION WALLS

00-S-002 SCALE: N.T.S.

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

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Winnipeg Transit
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Winnipeg, MB R3L 2A1

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I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

TYPICAL DETAILS SHEET 2

SHEET NUMBER

00-S-002

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:

00-S-002-TYPICAL DETAILS SHEET 2

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Project Management Initials: Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

STEEL LINTELS

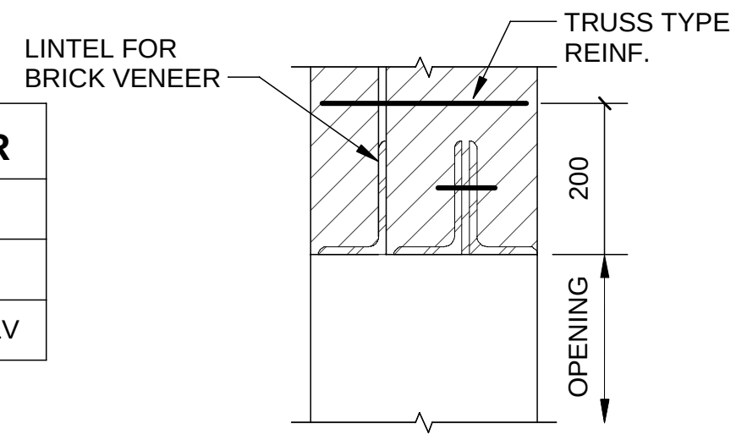
CLEAR SPAN	190 WALL		240 WALL		290 WALL	
	TYPE	MATERIAL	TYPE	MATERIAL	TYPE	MATERIAL
UP TO 1200	⅃L	2L'S 90X90X8	⅃L	2L'S 100X100X8	⅃LL	3L'S 90X90X8
1200 TO 1800	⅃L	2L'S 125X90X8	⅃L	2L'S 150X100X8	⅃LL	3L'S 125X90X8
1800 TO 2400	⅃L	2L'S 125X90X10	⅃L	2L'S 150X100X10	⅃LL	3L'S 150X90X10
2400 TO 4000	W200X52		W200X52 + 8X240 STEEL PLATE AT BOTTOM		W410X54 + 8X290 STEEL PLATE AT BOTTOM	

NOTE:

1. WHERE DOUBLE ANGLES ARE USED BACK (L.L.B.B.), THEY SHALL BE BOLTED WITH 16M BOLTS AT 600mm C/C, OR EQUIVALENT STITCHWELD TOP & BOT. SHALL BE PROVIDED.
2. MINIMUM BEARING FOR LINTELS SHALL BE 200mm. CONCRETE BLOCKS UNDER BEARING AREA (AT EA SIDE OF THE OPENING) SHALL BE GROUT SOLID FULL HEIGHT. GROUTED BLOCKS SHALL BE 400mm (2 CORES) ON EACH SIDE OF OPENING.
3. PROVIDE STEEL PACKING PLATES TO ENSURE EVEN BEATING.
4. FOR WALLS THICKER THAN 290mm ADD 1 ANGLE OF SIZE CHECKED ABOVE FOR EVERY 100mm OF MASONRY OR PORTION THEREOF.

LINTELS FOR BRICK VENEER

No.	CLEAR SPAN	LINTEL SIZE
L1	1200	L 90X90X8
L2	2400	L 125X90X8 LLV

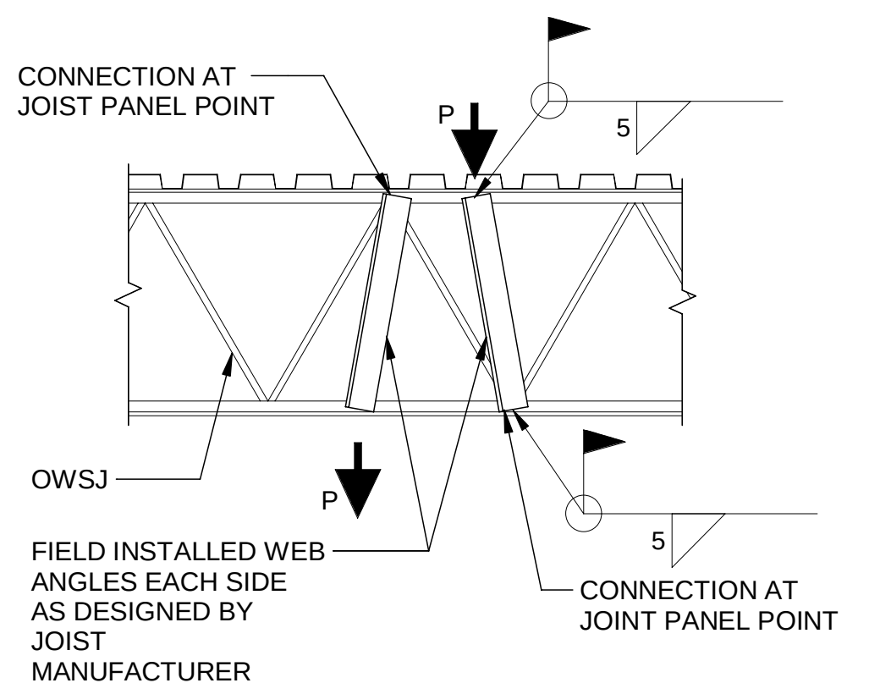


NOTE:

1. USE TRUSS TYPE HORIZ. REINF TO TIE BRICK VENEER AND BLOCK WALL TOGETHER.
2. FIRST TIE AT 200mm ABOVE TOP OF OPENING.

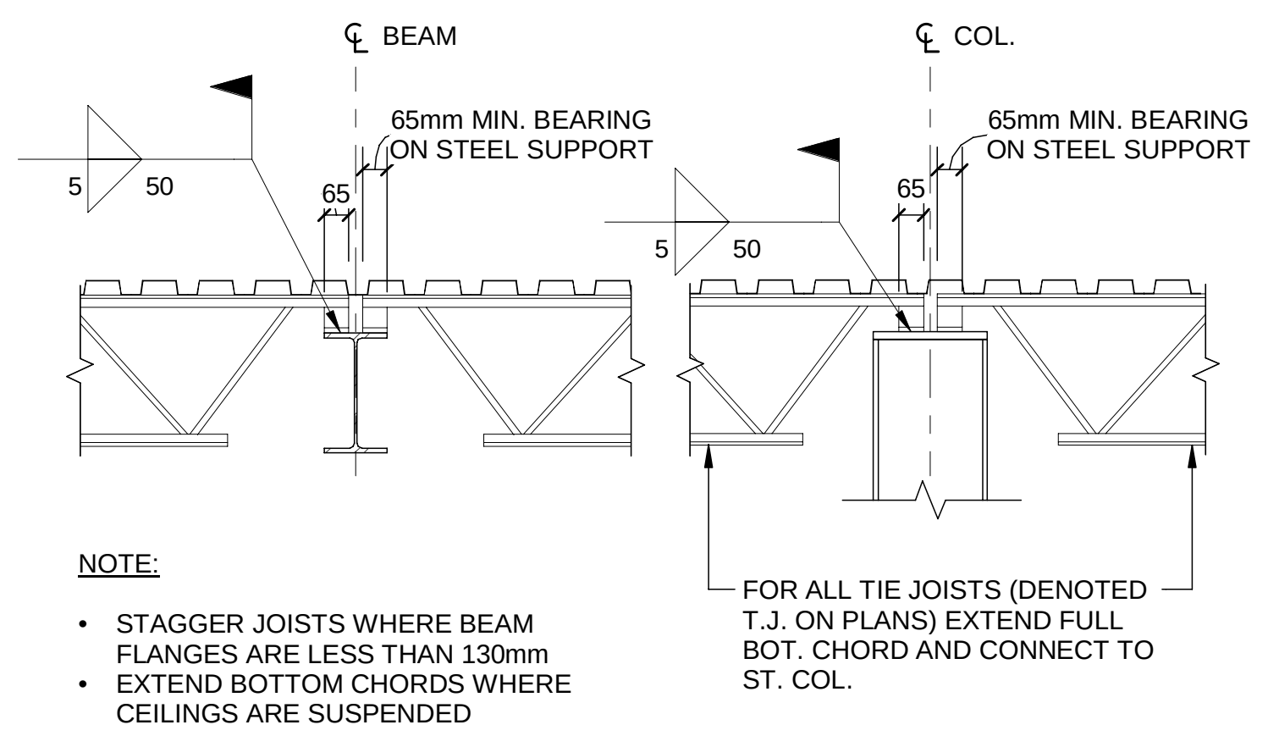
1 | STEEL LINTEL SCHEDULE

00-S-003 SCALE: N.T.S.



2 | TYPICAL JOIST REINFORCEMENT FOR POINT LOADS

00-S-003 SCALE: N.T.S.

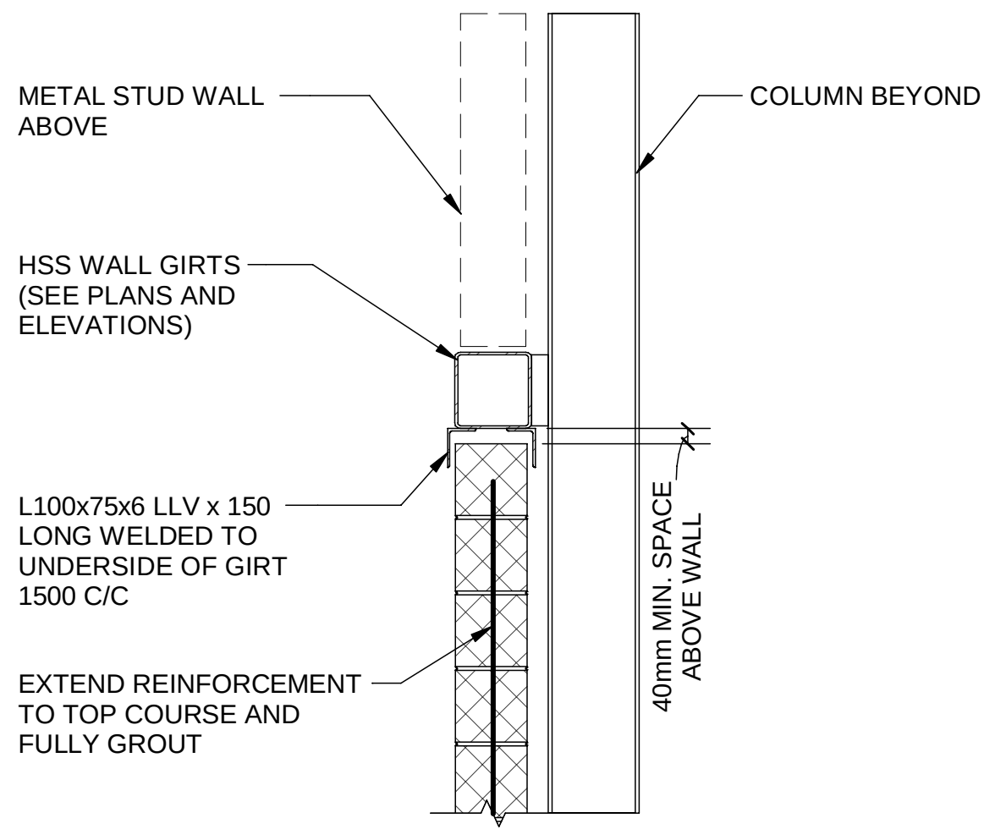


NOTE:

- STAGGER JOISTS WHERE BEAM FLANGES ARE LESS THAN 130mm
- EXTEND BOTTOM CHORDS WHERE CEILINGS ARE SUSPENDED

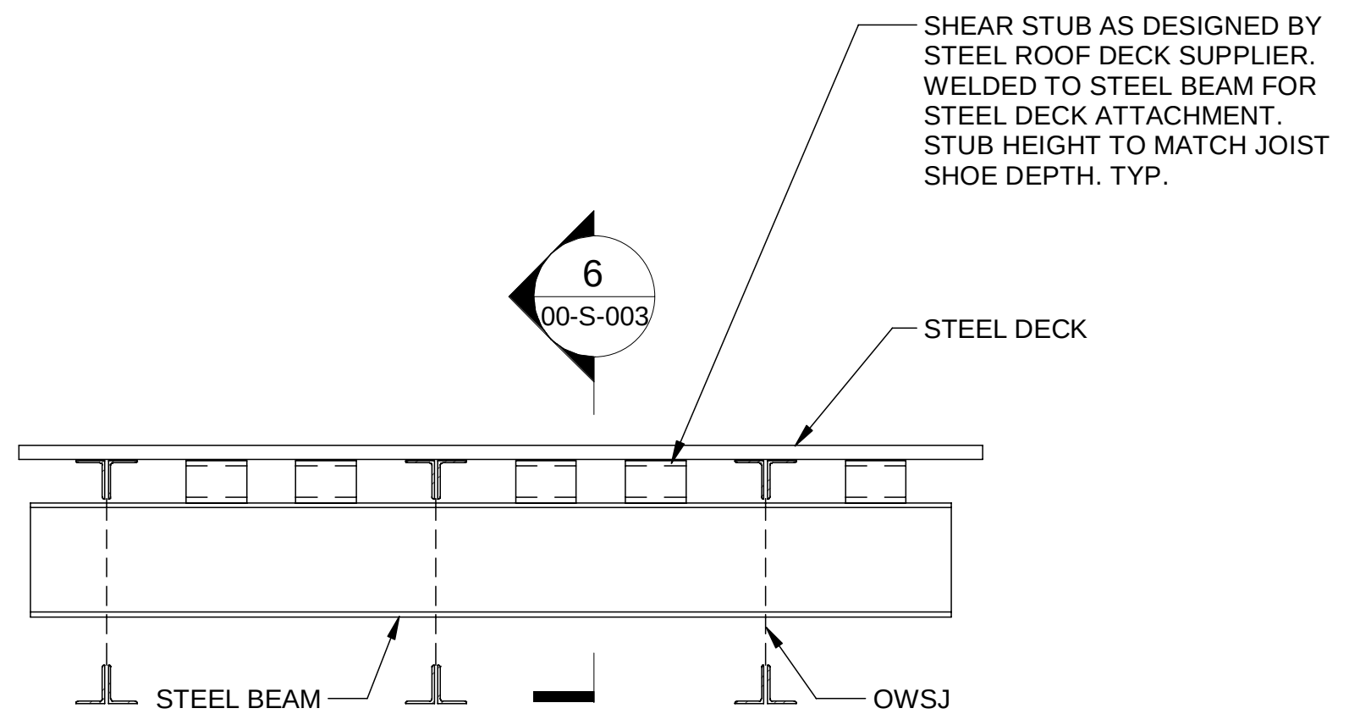
3 | OPEN WEB ST. JOIST - ST. SUPPORT

00-S-003 SCALE: N.T.S.



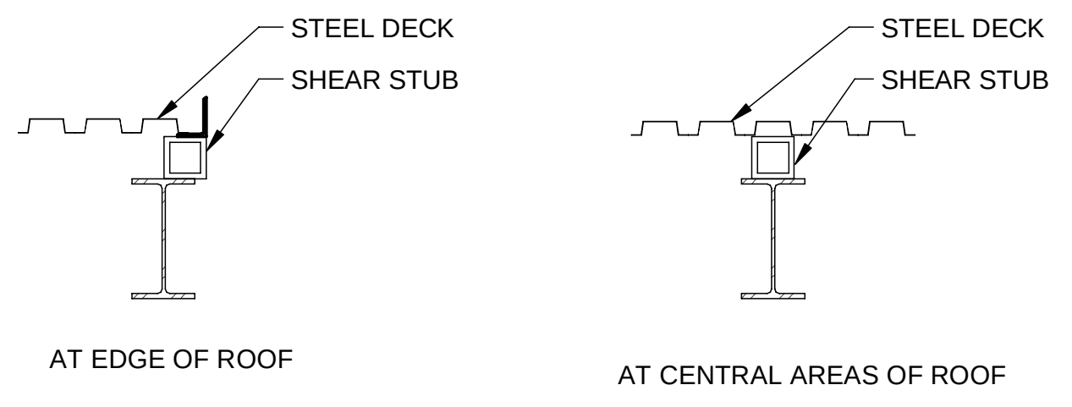
4 | LATERAL SUPPORT FOR CONCRETE BLOCK WALL AT GIRTS

00-S-003 SCALE: N.T.S.



5 | SHEAR STUB FOR STEEL DECK ATTACHMENT BETWEEN JOIST SHOES

00-S-003 SCALE: 1 : 20

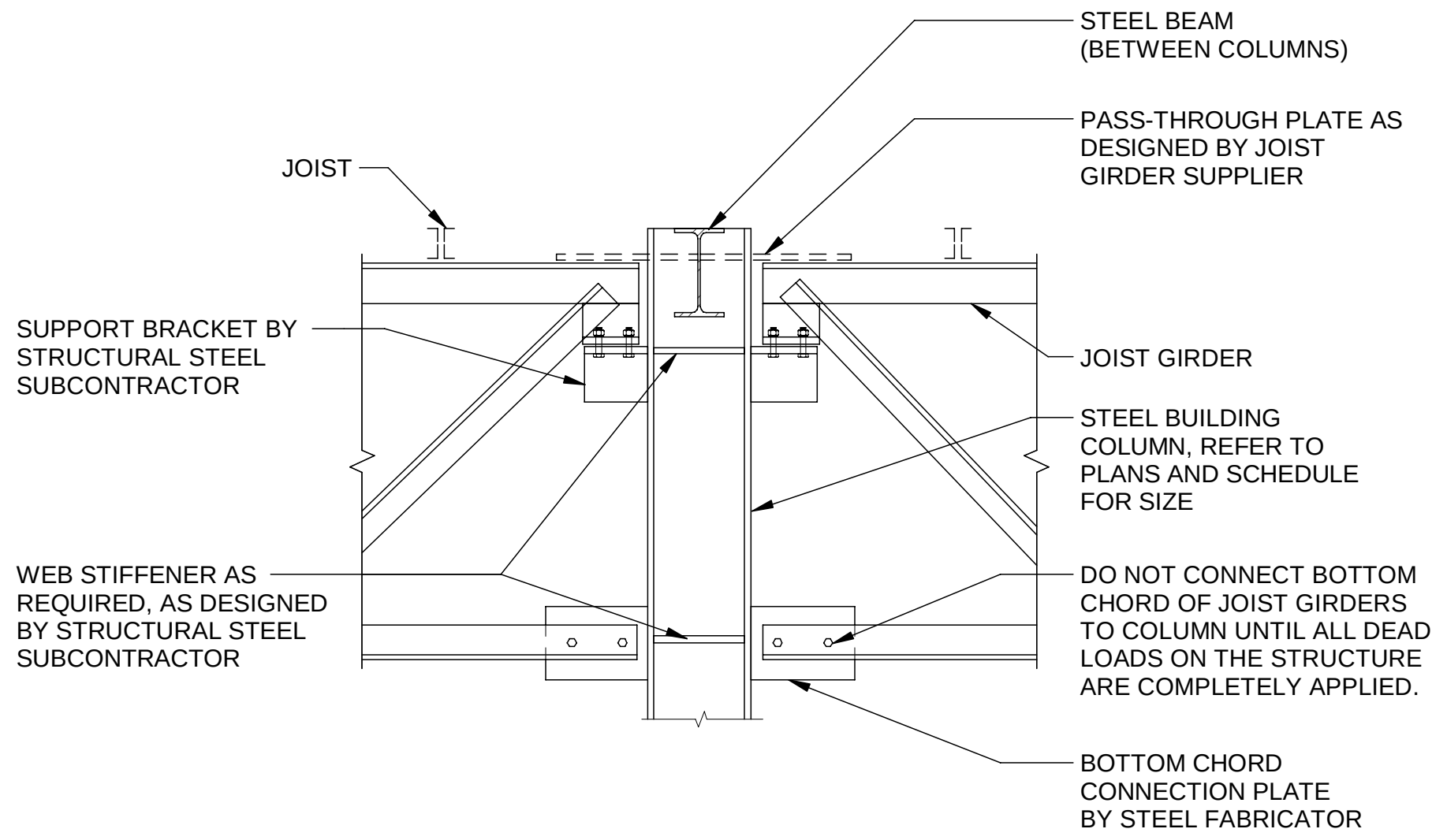


AT EDGE OF ROOF

AT CENTRAL AREAS OF ROOF

6 | SHEAR STUB AT EDGE OF ROOF AND AT CENTRAL AREAS OF ROOF

00-S-003 REF: 00-S-003 SCALE: 1 : 20



NOTES:

1. JOIST GIRDERS SHALL BE RIDIGLY CONNECTED TO BUILDING COLUMNS WITH END MOMENTS. REFER TO PLANS AND SECTIONS FOR THE DESIGN REQUIREMENTS OF END MOMENTS OF THE JOIST GIRDERS.
2. DETAILS ARE INDICATIVE ONLY
   ACTUAL DETAILS TO BE DESIGNED BY FABRICATOR

7 | TYPICAL COLUMN SUPPORT FOR JOIST GIRDER

00-S-003 SCALE: 1 : 20

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

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SHEET TITLE

TYPICAL DETAILS SHEET 3

SHEET NUMBER

00-S-003

00-S-003-TYPICAL DETAILS SHEET 3

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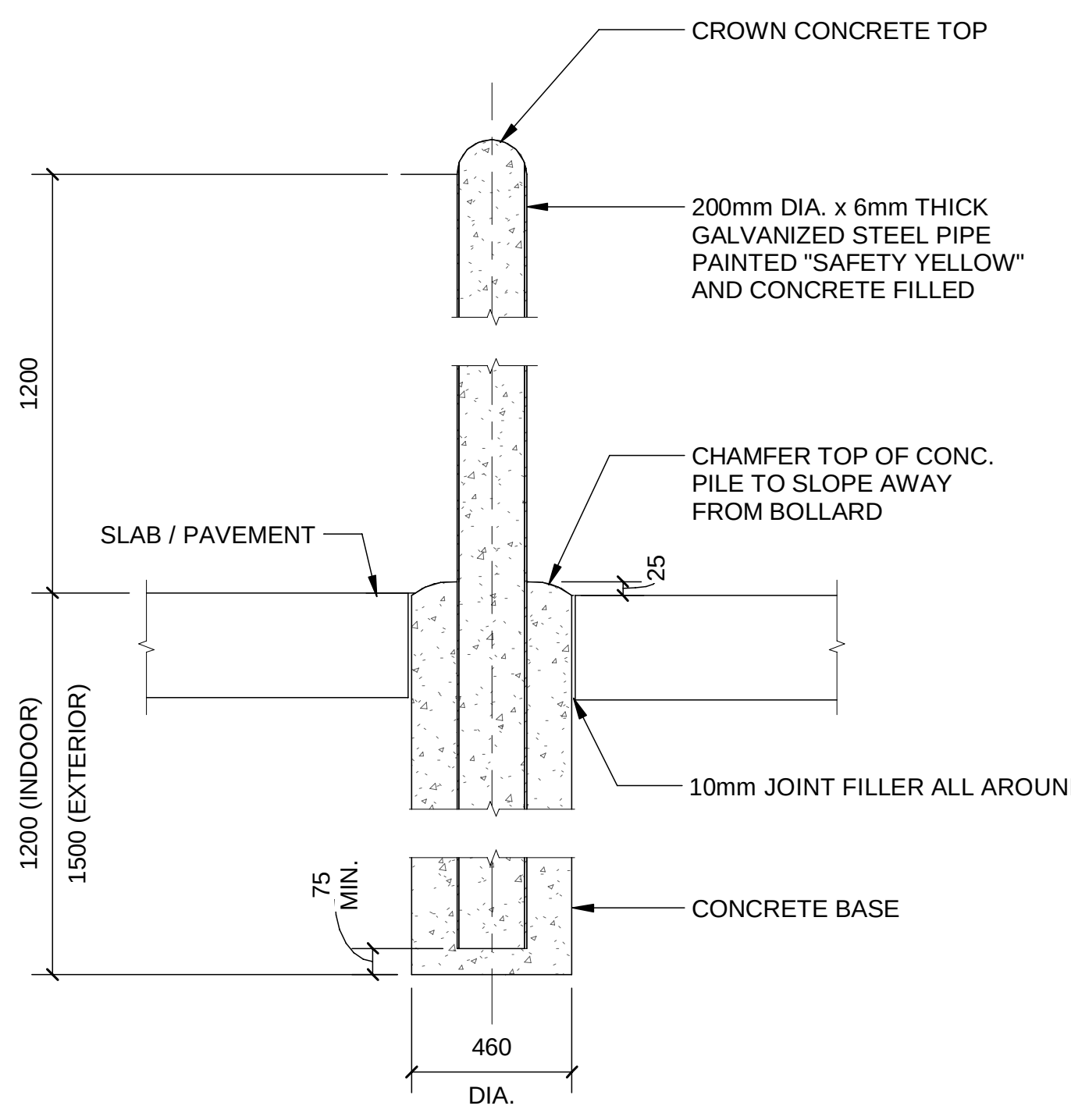
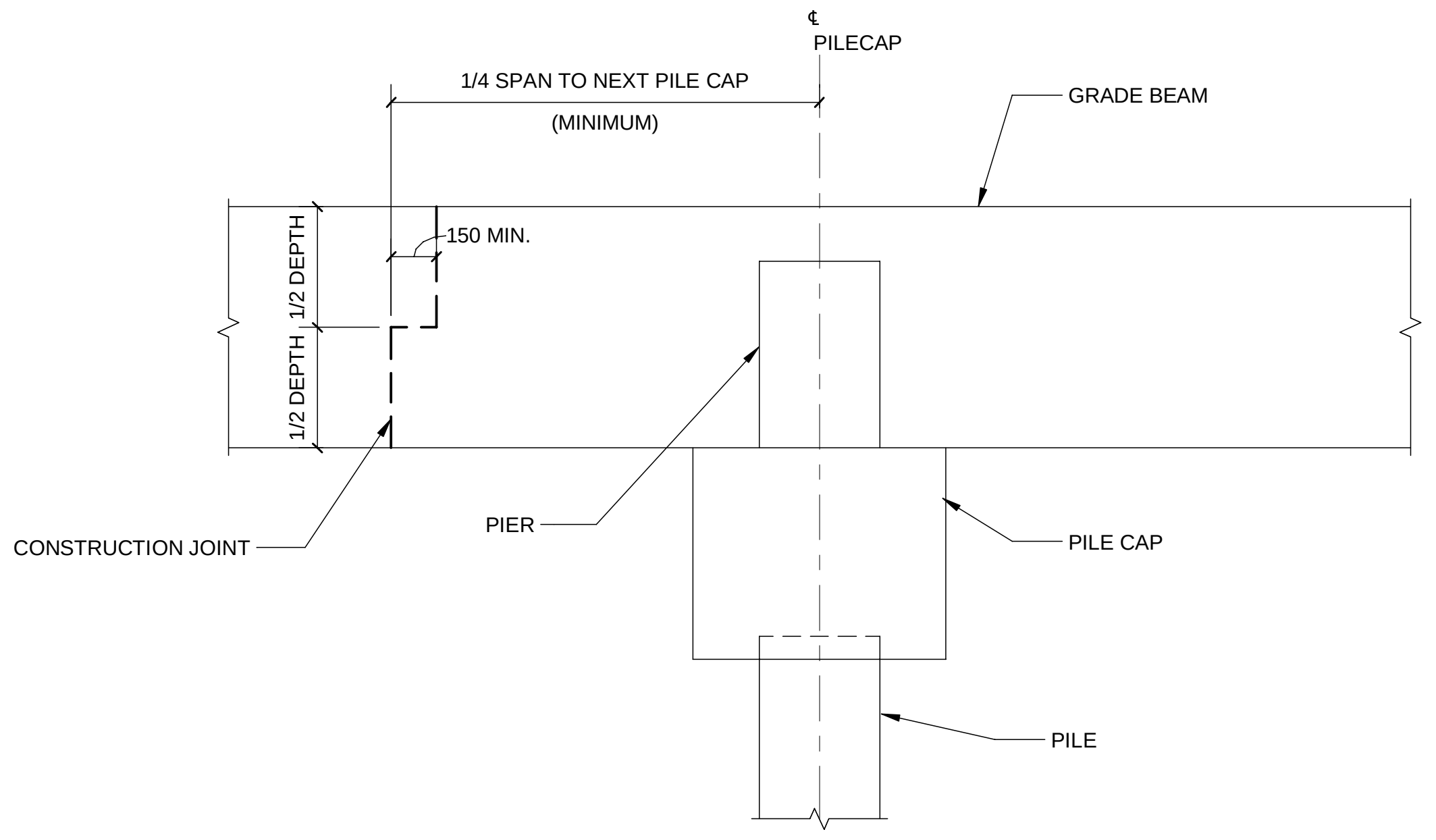

CROWN CONCRETE TOP
200mm DIA. x 6mm THICK GALVANIZED STEEL PIPE PAINTED "SAFETY YELLOW" AND CONCRETE FILLED
1200
CHAMFER TOP OF CONC. PILE TO SLOPE AWAY FROM BOLLARD
SLAB / PAVEMENT
25
1200 (INDOOR)
1500 (EXTERIOR)
10mm JOINT FILLER ALL AROUND
75 MIN.
CONCRETE BASE
460
DIA.

NOTES

1. PLACE BOLLARDS TO ENSURE NO CONFLICT WITH ANY UNDERGROUND SERVICES OR STRUCTURAL ELEMENTS.
2. PROVIDE NECESSARY/ADEQUATE FORMWORK TO SUSPEND PIPE DURING CONCRETE PLACEMENT AND CURING
3. REFER TO SECTION 03 30 00 FOR DETAL AND REQUIREMENTS OF CONCRETE FOOTING AND INFILL.
4. PERFORM LOCATIONS OF ALL BURIED OR CONCEALED UTILITIES THAT MAY POTENTIAL AFFECT DRILLING OF BOLLARD PRIOR TO CONSTRUCTION
5. ALL DIMENSIONS ARE IN MILLIMETRES

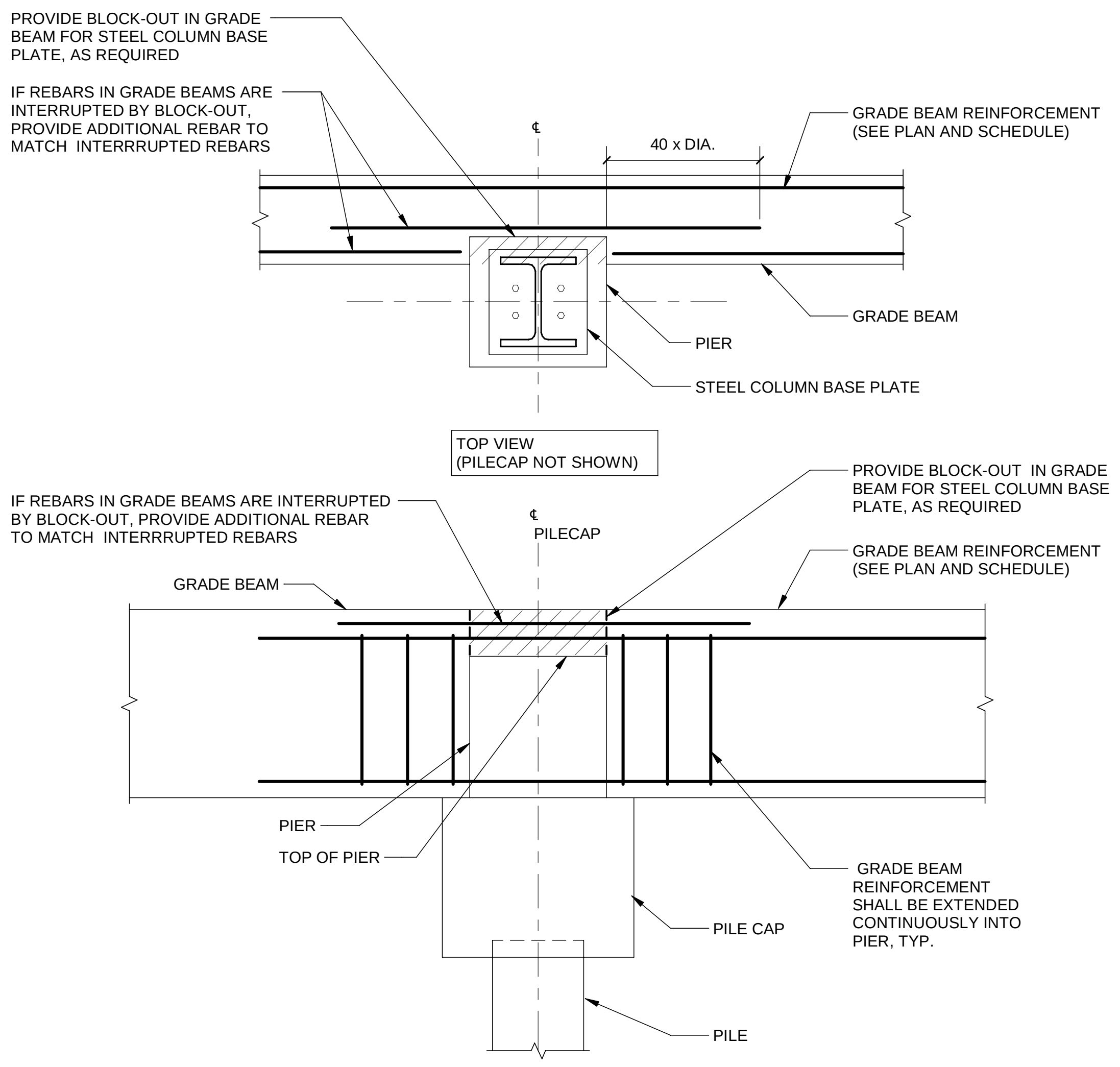
1 STEEL BOLLARD DETAIL

00-S-004 SCALE: 1 : 20



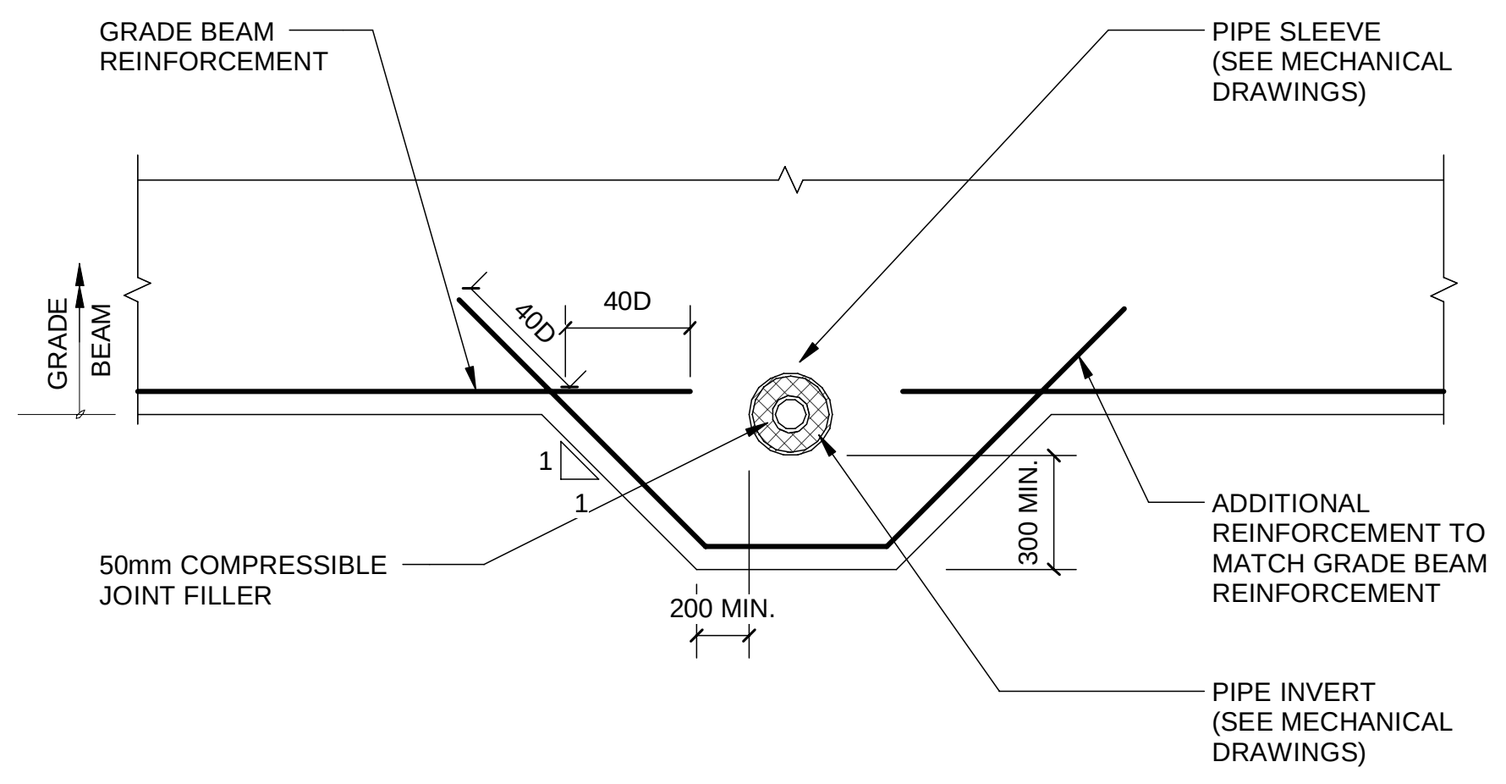
2 CONSTRUCTION JOINTS IN GRADE BEAMS

00-S-004 SCALE: 1 : 20


PROVIDE BLOCK-OUT IN GRADE BEAM FOR STEEL COLUMN BASE PLATE, AS REQUIRED
IF REBARS IN GRADE BEAMS ARE INTERRUPTED BY BLOCK-OUT, PROVIDE ADDITIONAL REBAR TO MATCH INTERRRUPTED REBARS
℄
40 x DIA.
GRADE BEAM REINFORCEMENT (SEE PLAN AND SCHEDULE)
GRADE BEAM
PIER
STEEL COLUMN BASE PLATE
TOP VIEW (PILECAP NOT SHOWN)
IF REBARS IN GRADE BEAMS ARE INTERRUPTED BY BLOCK-OUT, PROVIDE ADDITIONAL REBAR TO MATCH INTERRRUPTED REBARS
℄ PILECAP
PROVIDE BLOCK-OUT IN GRADE BEAM FOR STEEL COLUMN BASE PLATE, AS REQUIRED
GRADE BEAM REINFORCEMENT (SEE PLAN AND SCHEDULE)
GRADE BEAM
PIER
TOP OF PIER
GRADE BEAM REINFORCEMENT SHALL BE EXTENDED CONTINUOUSLY INTO PIER, TYP.
PILE CAP
PILE

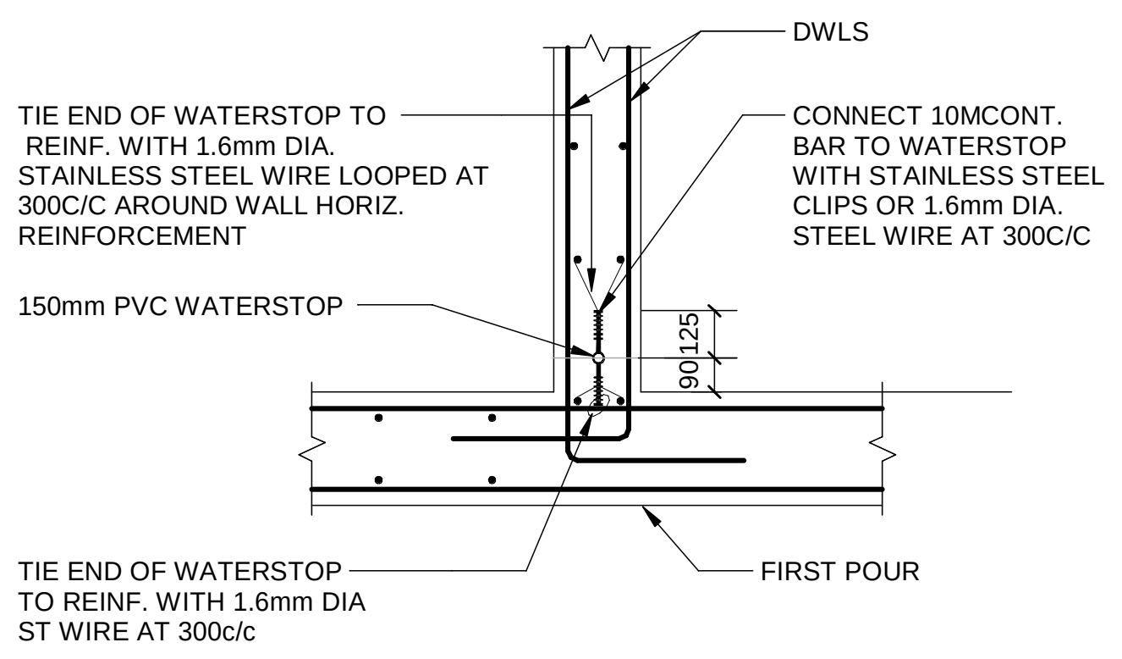
3 GRADE BEAM REINFORCEMENT AT PILECAPS

00-S-004 SCALE: 1 : 20


GRADE BEAM REINFORCEMENT
PIPE SLEEVE (SEE MECHANICAL DRAWINGS)
GRADE BEAM
40D
40D
1
1
50mm COMPRESSIBLE JOINT FILLER
200 MIN.
300 MIN.
ADDITIONAL REINFORCEMENT TO MATCH GRADE BEAM REINFORCEMENT
PIPE INVERT (SEE MECHANICAL DRAWINGS)

4 SERVICE PIPES THROUGH BOTTOM OF GRADE BEAM

00-S-004 SCALE: 1 : 20


DWLS
TIE END OF WATERSTOP TO REINF. WITH 1.6mm DIA. STAINLESS STEEL WIRE LOOPED AT 300C/C AROUND WALL HORIZ. REINFORCEMENT
CONNECT 10MCONT. BAR TO WATERSTOP WITH STAINLESS STEEL CLIPS OR 1.6mm DIA. STEEL WIRE AT 300C/C
150mm PVC WATERSTOP
125
90
TIE END OF WATERSTOP TO REINF. WITH 1.6mm DIA ST WIRE AT 300c/c
FIRST POUR

5 TYPICAL DETAIL AT BASE OF WALL WITH WATERSTOP

00-S-004 SCALE: 1 : 20

Project Management Initials: Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

00-S-004-TYPICAL DETAILS SHEET 4

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Winnipeg Transit
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CONSULTANT

AECOM CANADA ULC
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0	19/02/2025	ISSUED FOR TENDER

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SHEET TITLE

TYPICAL DETAILS SHEET 4

SHEET NUMBER

00-S-004

A0 33.1"x46.8"

Designer: Designer Checked: Checker Approved: Approver

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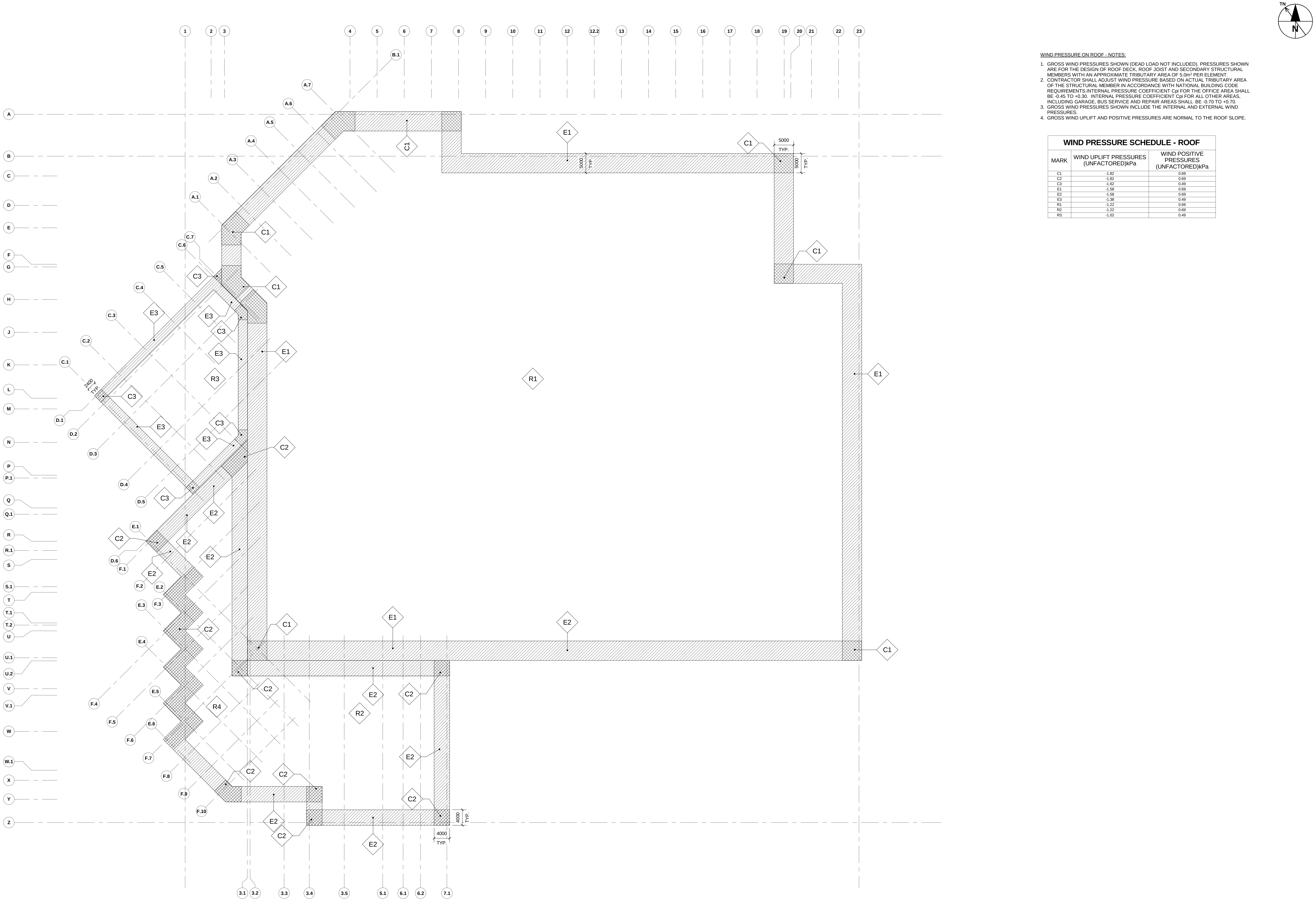

1 | ROOF WIND LOAD DIAGRAM

00-S-010 | REF: 00-S-400 SCALE: 1 : 350

WIND PRESSURE ON ROOF - NOTES:

1. GROSS WIND PRESSURES SHOWN (DEAD LOAD NOT INCLUDED). PRESSURES SHOWN ARE FOR THE DESIGN OF ROOF DECK, ROOF JOIST AND SECONDARY STRUCTURAL MEMBERS WITH AN APPROXIMATE TRIBUTARY AREA OF 5.0m^2 PER ELEMENT.
2. CONTRACTOR SHALL ADJUST WIND PRESSURE BASED ON ACTUAL TRIBUTARY AREA OF THE STRUCTURAL MEMBER IN ACCORDANCE WITH NATIONAL BUILDING CODE REQUIREMENTS.INTERNAL PRESSURE COEFFICIENT Cpi FOR THE OFFICE AREA SHALL BE -0.45 TO +0.30. INTERNAL PRESSURE COEFFICIENT Cpi FOR ALL OTHER AREAS, INCLUDING GARAGE, BUS SERVICE AND REPAIR AREAS SHALL BE -0.70 TO +0.70.
3. GROSS WIND PRESSURES SHOWN INCLUDE THE INTERNAL AND EXTERNAL WIND PRESSURES.
4. GROSS WIND UPLIFT AND POSITIVE PRESSURES ARE NORMAL TO THE ROOF SLOPE.

WIND PRESSURE SCHEDULE - ROOF

MARK	WIND UPLIFT PRESSURES (UNFACTORED)kPa	WIND POSITIVE PRESSURES (UNFACTORED)kPa
C1	-1.82	0.69
C2	-1.82	0.69
C3	-1.62	0.49
E1	-1.58	0.69
E2	-1.58	0.69
E3	-1.38	0.49
R1	-1.22	0.69
R2	-1.22	0.69
R3	-1.02	0.49

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SHEET TITLE

ROOF WIND LOAD DIAGRAM

SHEET NUMBER

00-S-010

00-S-010-ROOF WIND LOAD DIAGRAM

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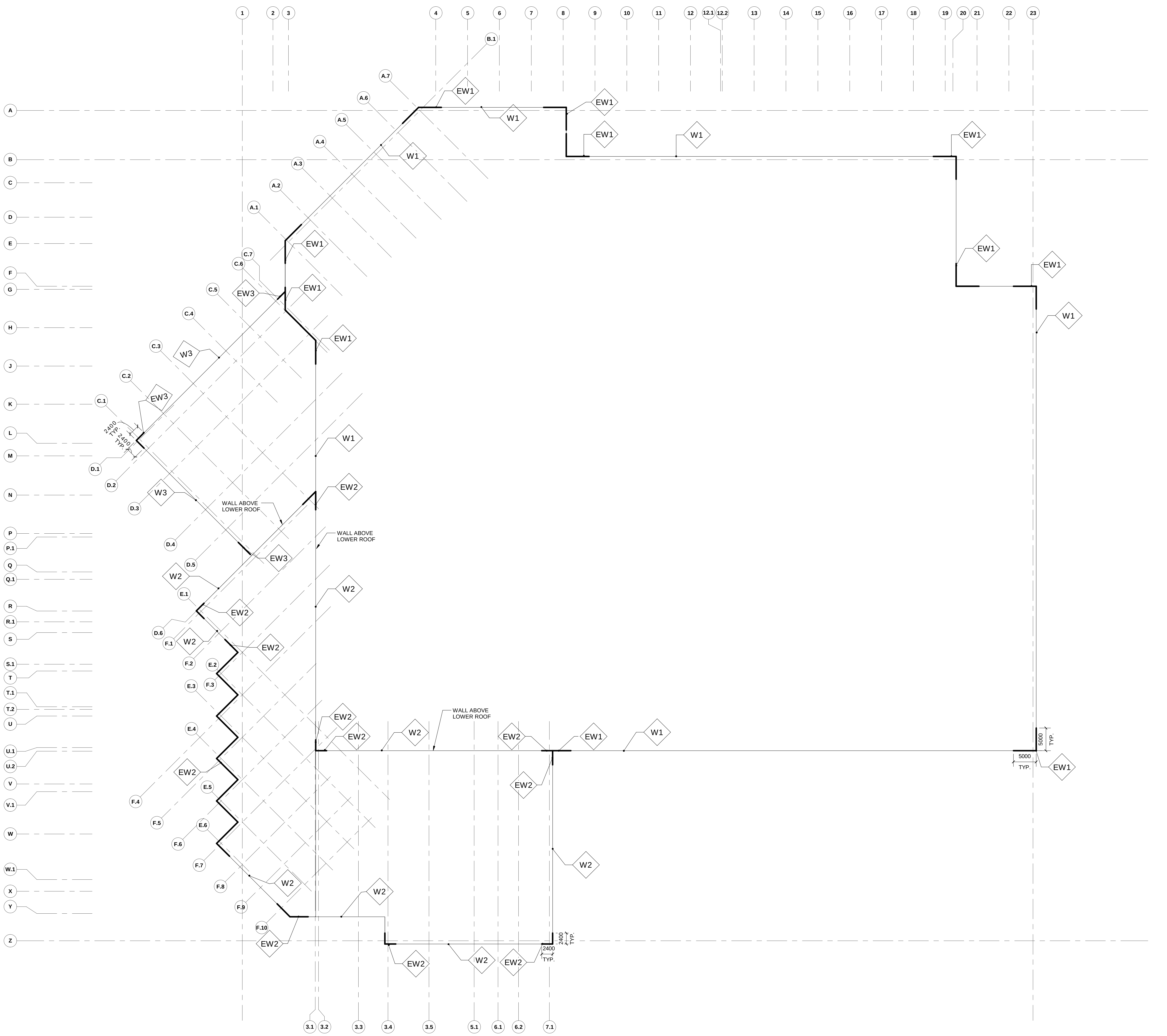

1 WALL WIND LOAD DIAGRAM

00-S-011 REF: 00-S-400 SCALE: 1 : 350

TN
N

WIND PRESSURE ON EXTERNAL WALLS - NOTES:

1. WIND PRESSURES SHOWN ARE FOR THE DESIGN OF SECONDARY STRUCTURAL ELEMENTS OF THE WALL WITH AN APPROXIMATE TRIBUTARY AREA OF 5.0m^2 PER ELEMENT.
2. CONTRACTOR SHALL ADJUST WIND PRESSURE BASED ON ACTUAL TRIBUTARY AREA OF THE STRUCTURAL MEMBER IN ACCORDANCE WITH NATIONAL BUILDING CODE REQUIREMENTS. INTERNAL PRESSURE COEFFICIENT Cpi FOR THE OFFICE AREA SHALL BE -0.45 TO +0.30. INTERNAL PRESSURE COEFFICIENT Cpi FOR ALL OTHER AREAS, INCLUDING GARAGE, BUS SERVICE AND REPAIR AREAS SHALL BE -0.70 TO +0.70.
3. WIND PRESSURES SHOWN INCLUDE THE INTERNAL AND EXTERNAL WIND PRESSURES.
4. WIND PRESSURES SHOWN ARE NORMAL TO SURFACE OF WALL.

WIND PRESSURE SCHEDULE - EXTERIOR WALLS

AREA	WIND PRESSURE AWAY FROM BUILDING (kPa)	WIND PRESSURE TOWARDS BUILDING (kPa)
W1	1.31	1.27
EW1	1.38	1.27
W2	1.31	1.27
EW2	1.38	1.27
W3	1.11	1.06
EW3	1.18	1.06

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REGISTRATION

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PROJECT NUMBER

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SHEET TITLE

WALL WIND LOAD DIAGRAM

SHEET NUMBER

00-S-011

00-S-011-WALL WIND LOAD DIAGRAM

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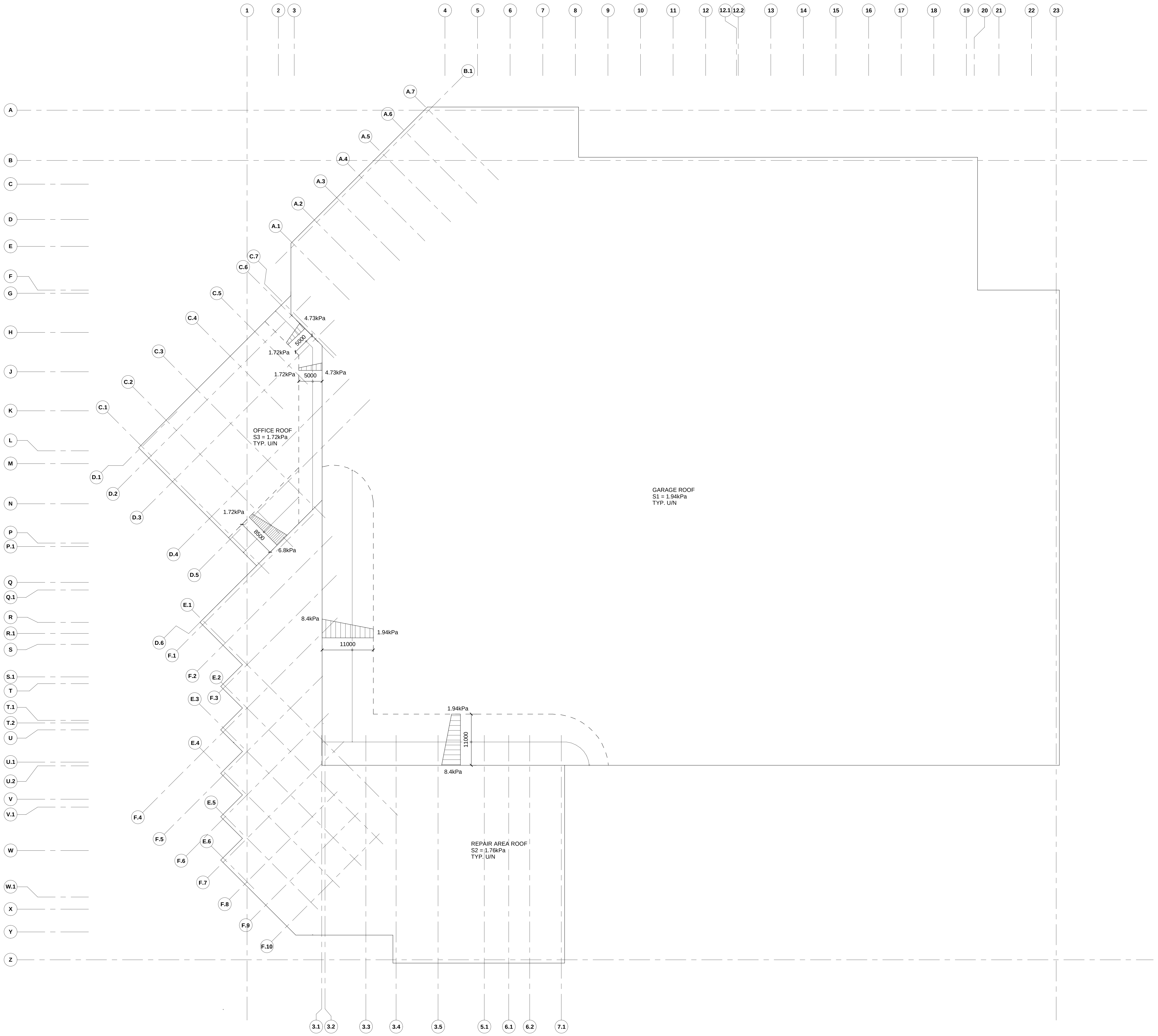
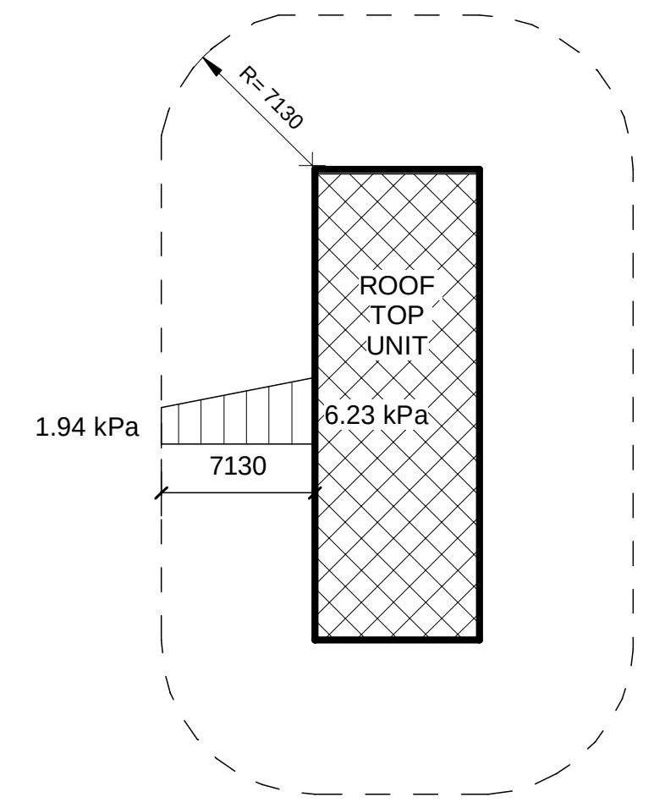
Project Management Initials:

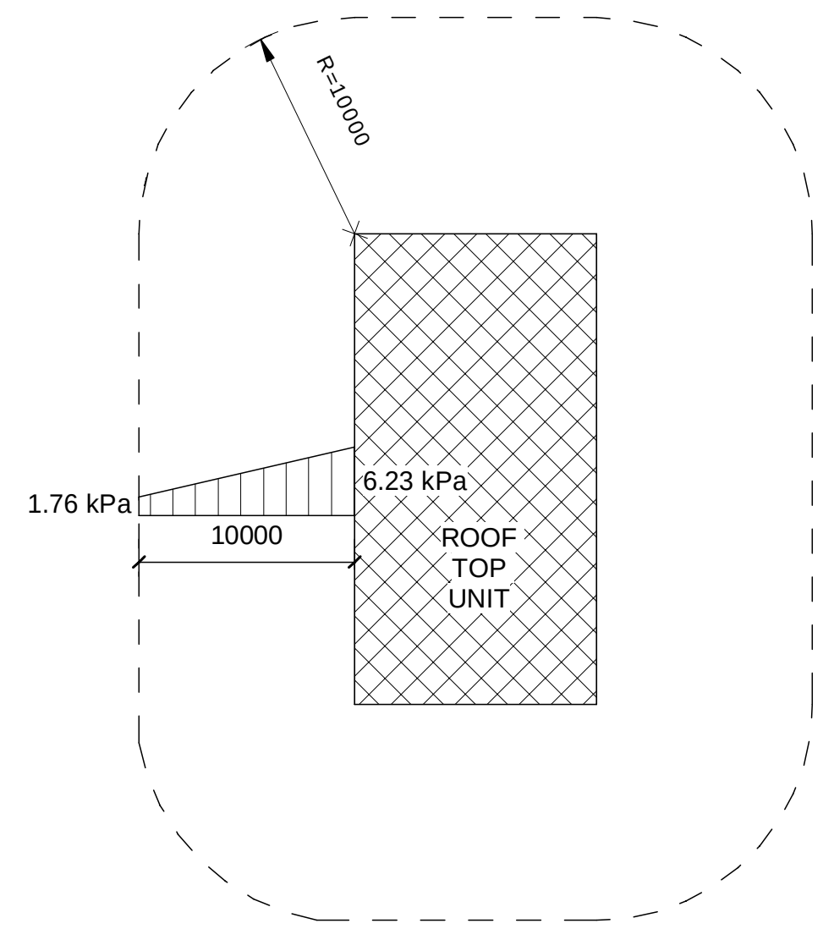


1 ROOF SNOW LOAD DIAGRAM

00-S-012 REF: 00-S-400 SCALE: 1 : 350



TYPICAL SNOW LOAD
AROUND ROOF TOP UNIT
(GARAGE ROOF)



TYPICAL SNOW LOAD
AROUND ROOF TOP UNIT
(REPAIR AREA ROOF)

SNOW LOAD ON ROOF - NOTES:

1. SNOW LOAD SHOWN ON DIAGRAM INCLUDES SNOW AND ASSOCIATED RAIN LOADS.
2. ROOF SHALL BE DESIGNED FOR THE UNIFORM SNOW LOAD OR ACCUMULATED SNOW LOAD (WHERE APPLICABLE) AS INDICATED ON THE DIAGRAM.
3. AREAS SURROUNDING ALL ROOF TOP UNITS SHALL BE DESIGNED FOR ACCUMULATED LOADS AROUND THE ROOF TOP UNIT AS INDICATED ON TYPICAL PLANS. ROOF TOP UNITS ARE NOW SHOWN ON THE DIAGRAM ON THIS DRAWING. CONTRACTOR MUST REFER TO ROOF PLANS AND MECHANICAL DRAWINGS FOR LOCATIONS AND SIZES OF ROOF TOP UNITS, AND ACCOUNT FOR ACCUMULATED SNOW LOADS ACCORDINGLY.
4. IF TWO ACCUMULATED SNOW LOADS OVERLAP EACH OTHER IN CERTAIN AREAS, THE OVERLAPPED SNOW LOAD SHALL BE TAKEN AS THE TOTAL SUM OF THE TWO ACCUMULATED SNOW LOAD, MINUS THE UNIFORM SNOW LOAD IN THE OVERLAPPED AREA.

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PROJECT NUMBER

60721079

SHEET TITLE

ROOF SNOW LOAD DIAGRAM

SHEET NUMBER

00-S-012

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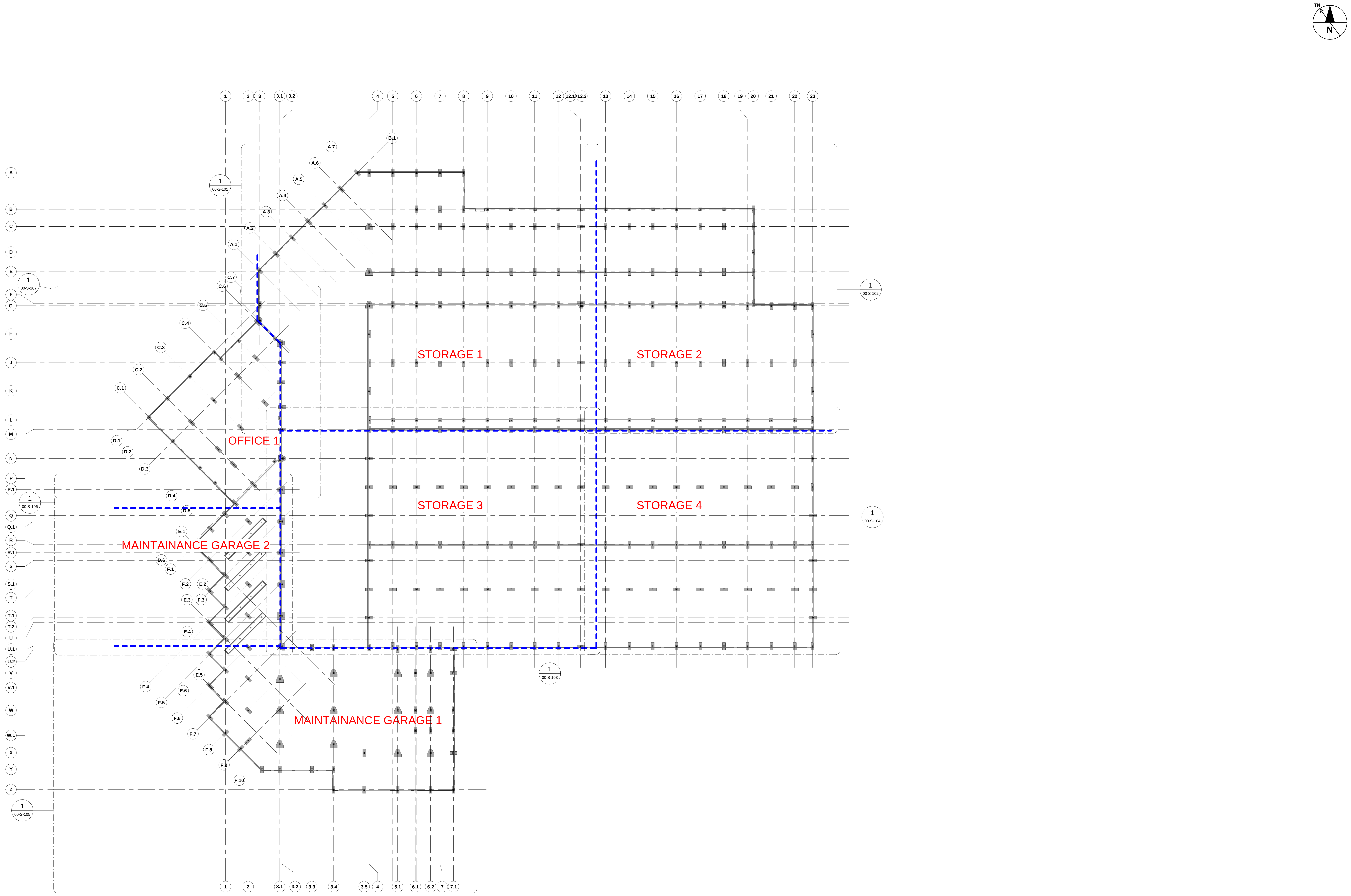

1 | FOUNDATION OVERALL GA PLAN
00-S-100
SCALE: 1 : 400

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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

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REGISTRATION

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B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FOUNDATION OVERALL G.A PLAN

SHEET NUMBER

00-S-100

00-S-100-FOUNDATION OVERALL G.A PLAN
Last Plotted: 2/14/2025 10:47:31 PM
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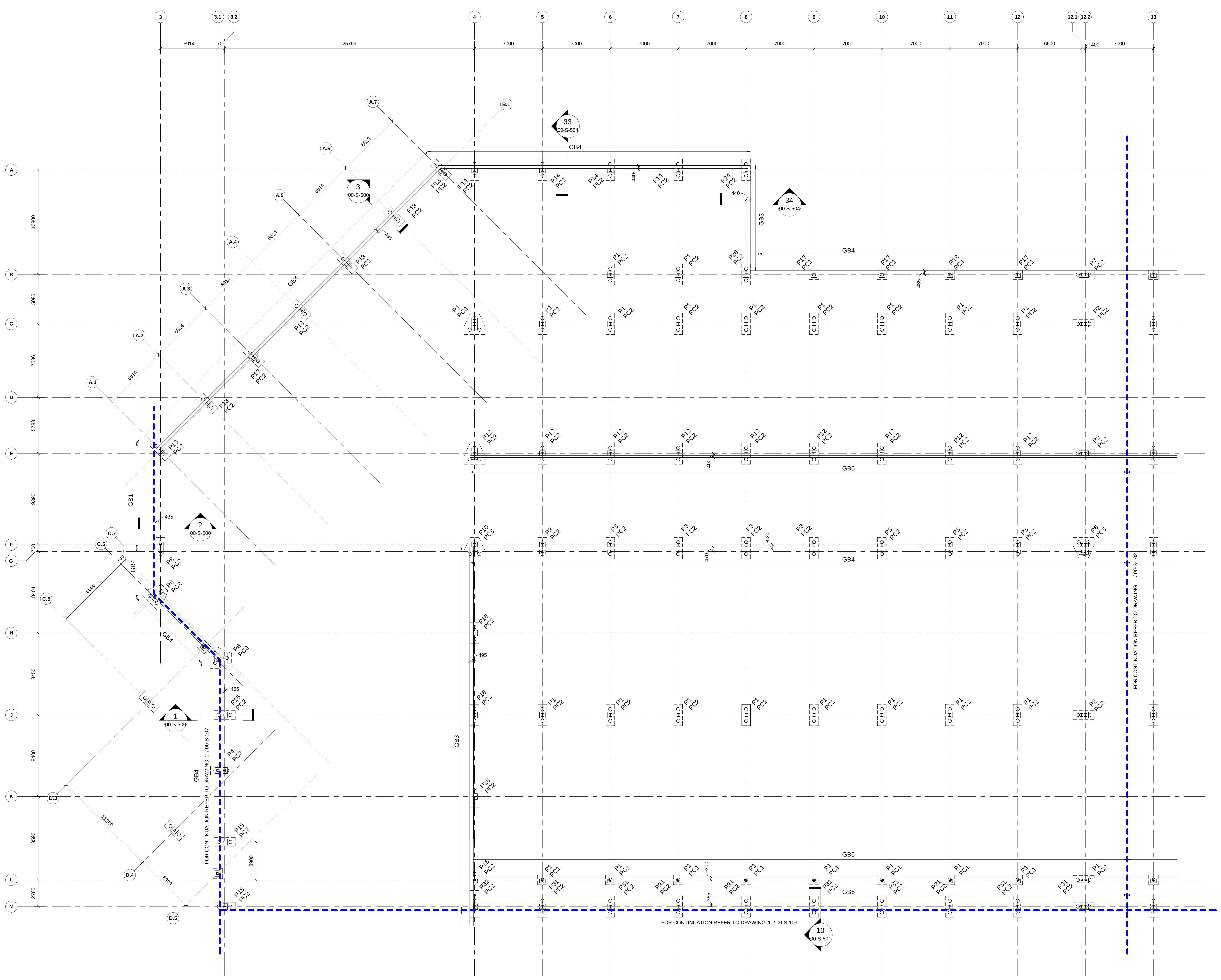
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:



1 FOUNDATION GA STORAGE ENLARGED PLAN-1
00-S-101
SCALE: 1 : 150

FOUNDATION NOTES:

1. REFER TO DRAWING G-001 FOR GENERAL NOTES.
2. FOR SIZE, LOCATION AND DEPTH OF UNDERGROUND SERVICES, REFER TO CIVIL, MECHANICAL AND ELECTRICAL DRAWINGS.
3. ALL LOADS INDICATED ON THE FOUNDATION DRAWINGS ARE UNFACTORED LOADS, UNLESS OTHERWISE NOTED.
4. ALL ELEVATIONS ARE REFERENCED FROM DATUM ELEVATION, REFER TO CIVIL DRAWINGS FOR DATUM ELEVATION.
5. FOR FINISHED FLOOR ELEVATION REFER TO ARCHITECTURAL DRAWINGS AND ADJUST TOP OF CONCRETE ACCORDINGLY.
6. ALL FOUNDATIONS ARE DESIGNED TO BE FOUNDED ON PRECAST PILES.
7. PRECAST PILES SHALL BE INSPECTED AND APPROVED BY GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE PILE CAPS.
8. PROVIDE STEPPED DOWN FOOTINGS AS REQUIRED TO SUIT DIFFERENT FOOTING ELEVATIONS.
9. COLUMN AND WALL FOUNDATIONS ADJACENT TO PITS, FOOTINGS AND TRENCHES SHALL BE LOWERED WHERE NECESSARY TO MAINTAIN A 10H:7V SLOPE FROM EDGE OF HIGHER FOOTING TO BOTTOM EDGE OF PITS, FOOTING OR TRENCH.
10. PROVIDE STEP-DOWN FOOTINGS AS REQUIRED TO SUIT UNDERGROUND PIPES AND SERVICE DUCTS PARALLEL OR CROSSING FOUNDATIONS. REFER TO MECHANICAL, ELECTRICAL OR CIVIL DRAWINGS FOR UNDERGROUND SERVICES, PROVIDE OPENINGS IN FOUNDATION WALLS FOR CROSSING PIPES OR SERVICE DUCTS.
11. UNDERSIDE OF PILECAPS SHALL BE LOCATED AT MINIMUM 2.0m BELOW FINISHED GRADE ELEVATION OF FINISHED SLAB ELEVATION, WHICHEVER IS LOWER.

LEGEND:

P#	DENOTES CONC. PIER MARK
PC#	DENOTES PILE CAP MARK SEE PILE CAP SCHEDULE

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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

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PROJECT NUMBER

60721079

SHEET TITLE

FOUNDATION GA STORAGE ENLARGED PLAN-1

SHEET NUMBER

00-S-101

00-S-101-FOUNDATION GA STORAGE ENLARGED PLAN-1
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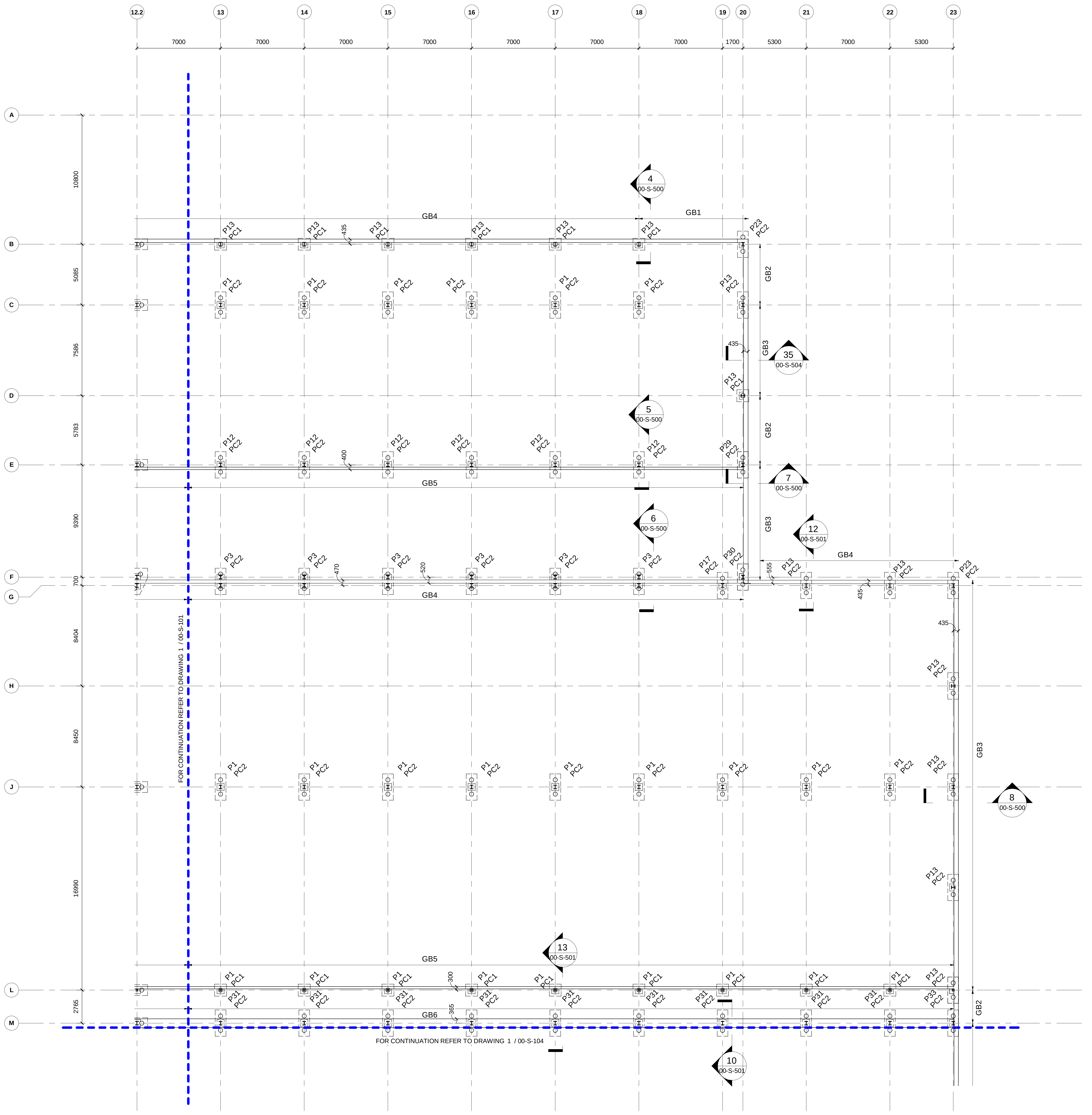
Project Management Initials: Designer: Designer   Checked: Checker   Approved: Approver   A0 33.1"x46.8"

NOTE:

1. REFER TO DRAWING S-101 FOR FOUNDATION NOTES
2. GB1 AND GB4 ARE SAME SIZE DIFFERENT REINFORCEMENT
3. GB2 AND GB3 ARE SAME SIZE DIFFERENT REINFORCEMENT



1 FOUNDATION GA STORAGE ENLARGED PLAN-2

00-S-102

SCALE: 1 : 150

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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

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I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FOUNDATION GA STORAGE ENLARGED PLAN-2

SHEET NUMBER

00-S-102

00-S-102-FOUNDATION GA STORAGE ENLARGED PLAN-2
Last Plotted: 2/14/2025 10:47:43 PM
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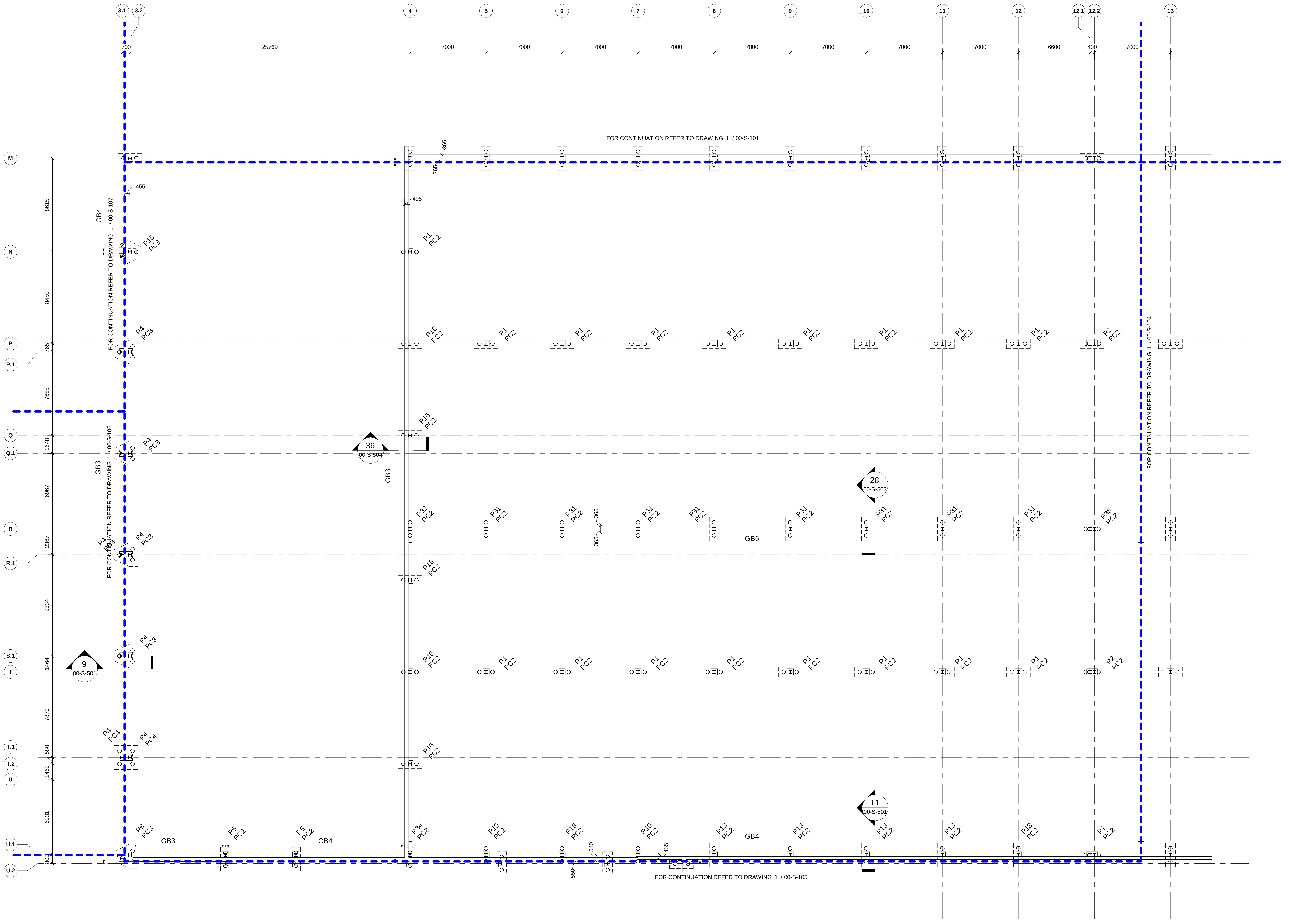
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:

NOTE:

1. REFER TO DRAWING S-101 FOR FOUNDATION NOTES
2. GB1 AND GB4 ARE SAME SIZE DIFFERENT REINFORCEMENT
3. GB2 AND GB3 ARE SAME SIZE DIFFERENT REINFORCEMENT



1 FOUNDATION GA STORAGE ENLARGED PLAN-3
00-S-103
SCALE: 1 : 150

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

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A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
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SHEET TITLE

FOUNDATION GA STORAGE ENLARGED PLAN-3

SHEET NUMBER

00-S-103

00-S-103-FOUNDATION GA STORAGE ENLARGED PLAN-3
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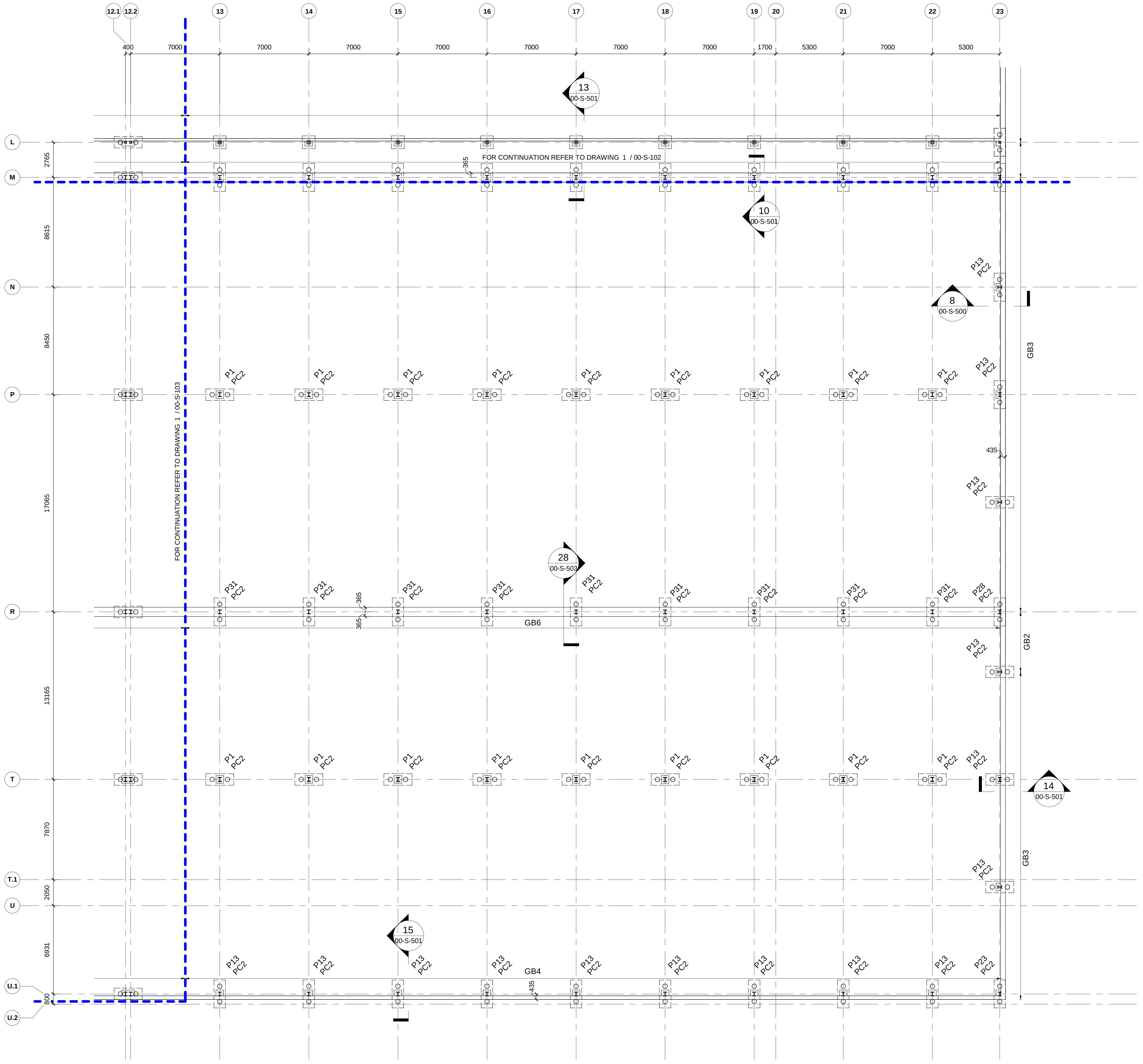
Project Management Initials:



1 FOUNDATION GA STORAGE ENLARGED PLAN-4

00-S-104

SCALE: 1 : 150

NOTE:

1. REFER TO DRAWING S-101 FOR FOUNDATION NOTES
2. GB1 AND GB4 ARE SAME SIZE DIFFERENT REINFORCEMENT
3. GB2 AND GB3 ARE SAME SIZE DIFFERENT REINFORCEMENT

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WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

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Winnipeg Transit
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Winnipeg, MB R3L 2A1

CONSULTANT

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Winnipeg, MB R3P 0Y7

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A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FOUNDATION GA STORAGE ENLARGED PLAN-4

SHEET NUMBER

00-S-104

00-S-104-FOUNDATION GA STORAGE ENLARGED PLAN-4
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Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

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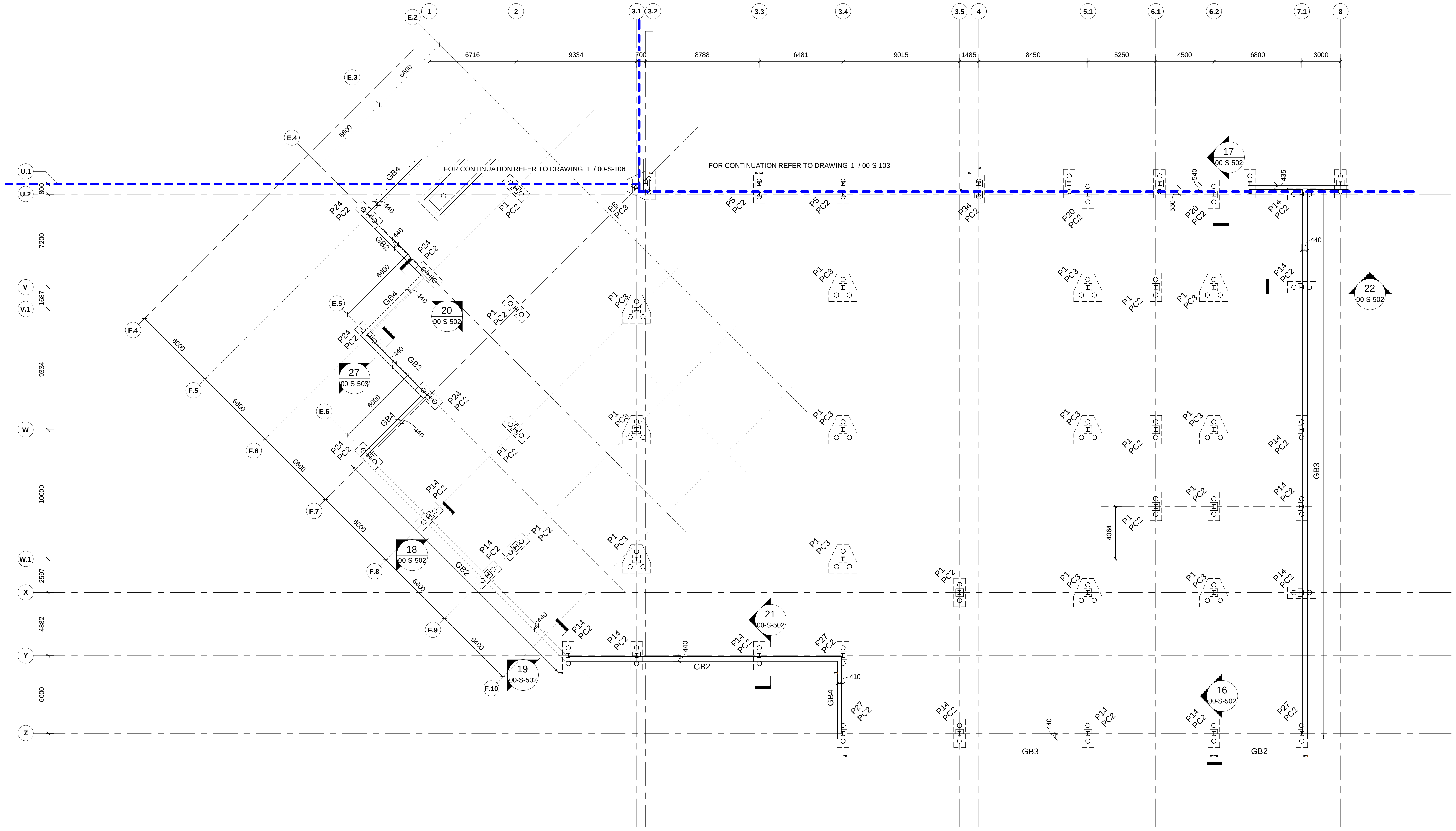

1 | FOUNDATION GA ENLARGED MAINTENANCE GARAGE PLAN-1

00-S-105

SCALE: 1 : 150

NOTE:

1. REFER TO DRAWING S-101 FOR FOUNDATION NOTES
2. GB1 AND GB4 ARE SAME SIZE DIFFERENT REINFORCEMENT
3. GB2 AND GB3 ARE SAME SIZE DIFFERENT REINFORCEMENT

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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974   1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr.
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FOUNDATION GA ENLARGED MAINTENANCE GARAGE PLAN-1

SHEET NUMBER

00-S-105

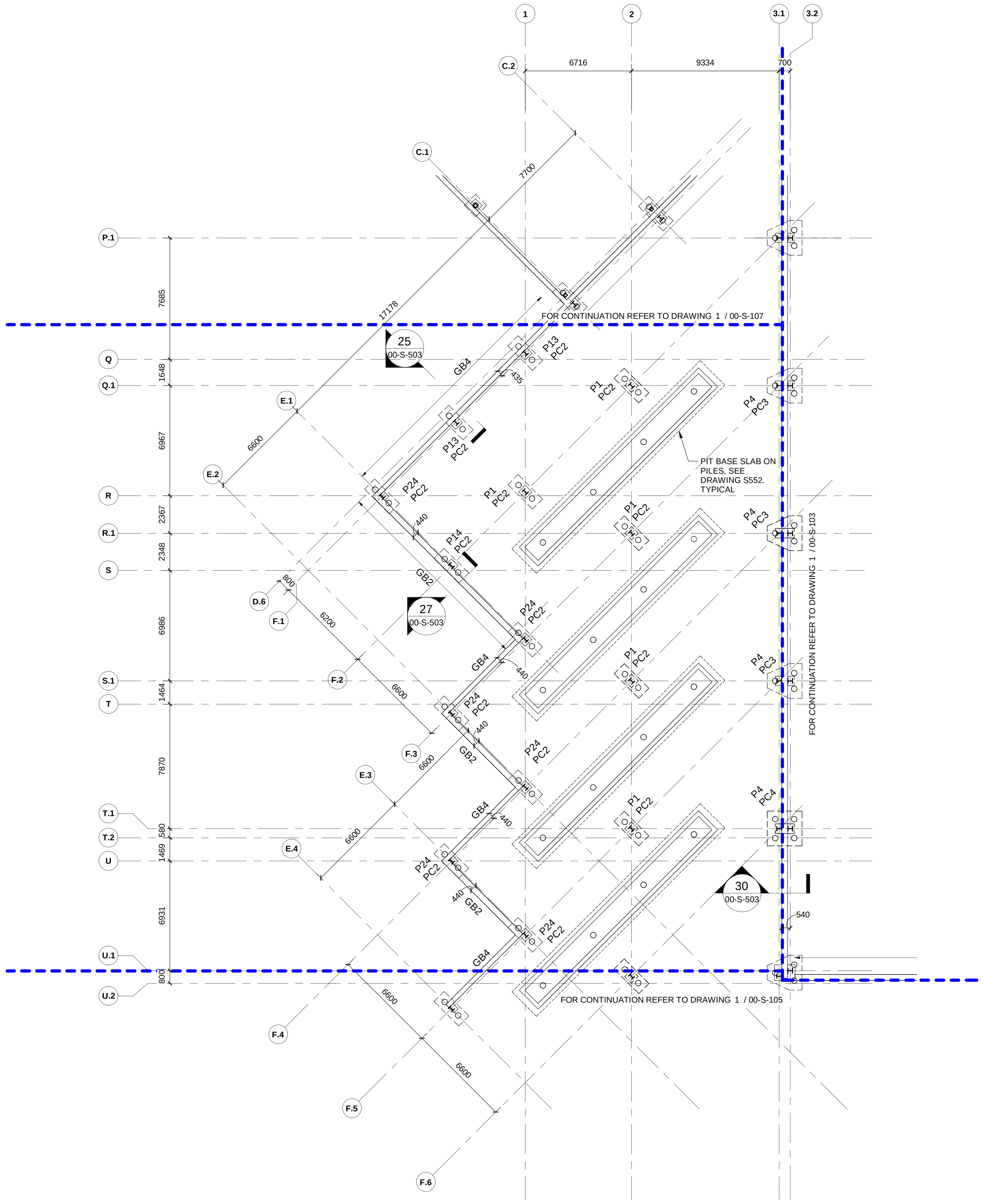
Printed on ___% Post-Consumer Recycled Content Paper

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:

NOTE:

1. REFER TO DRAWING S-101 FOR FOUNDATION NOTES
2. GB1 AND GB4 ARE SAME SIZE DIFFERENT REINFORCEMENT
3. GB2 AND GB3 ARE SAME SIZE DIFFERENT REINFORCEMENT



1 | FOUNDATION GA ENLARGED MAINTENANCE GARAGE PLAN-2

00-S-106

SCALE: 1 : 150

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

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PROJECT NUMBER

60721079

SHEET TITLE

FOUNDATION GA ENLARGED MAINTENANCE GARAGE PLAN-2

SHEET NUMBER

00-S-106

00-S-106-FOUNDATION GA ENLARGED MAINTENANCE GARAGE PLAN-2

Last Plotted: 2/14/2025 10:48:05 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

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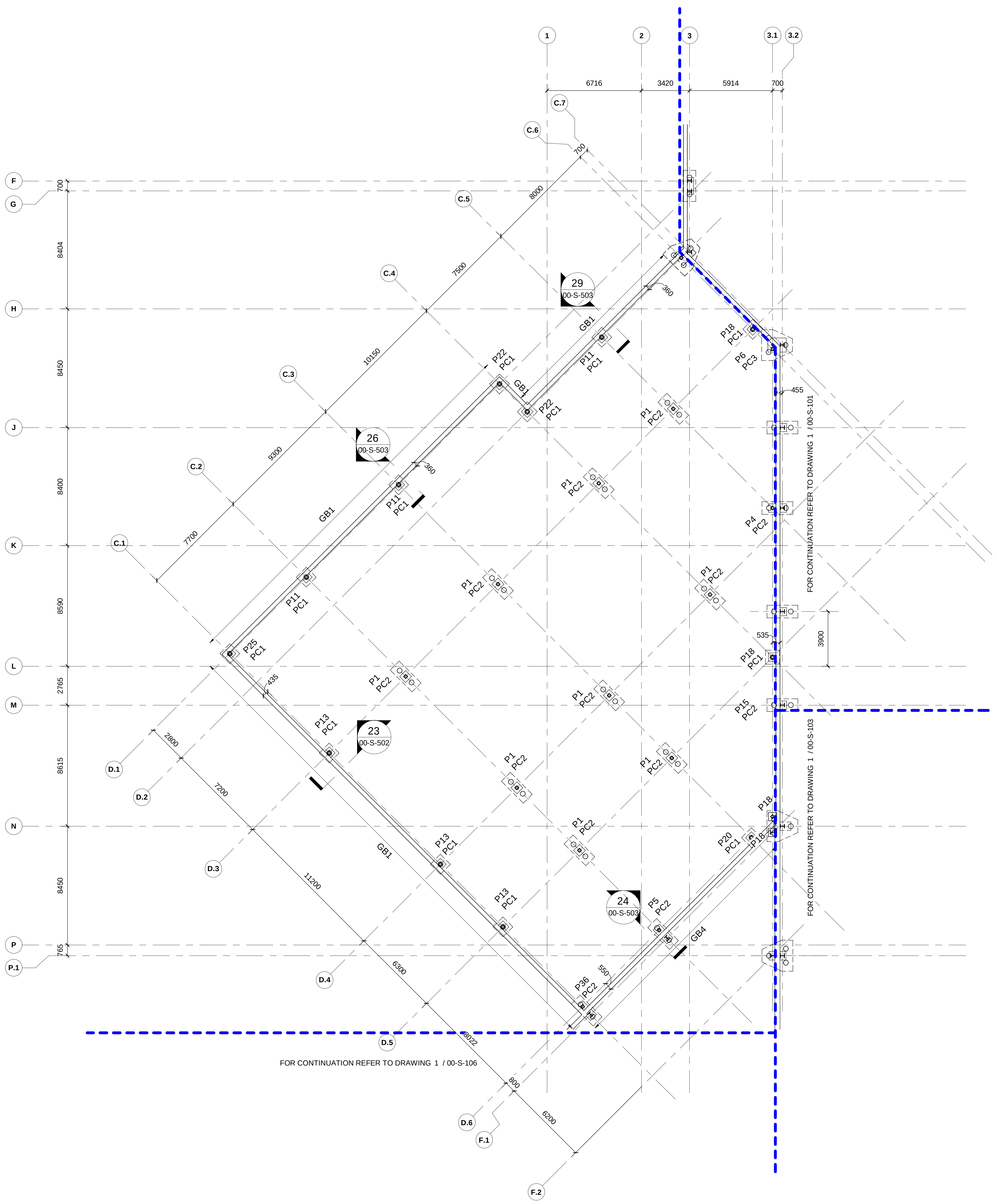

1 FOUNDATION GA ENLARGED OFFICE PLAN-1

00-S-107

SCALE: 1 : 150

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

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PROJECT NUMBER

60721079

SHEET TITLE

FOUNDATION GA ENLARGED OFFICE GARAGE PLAN-1

SHEET NUMBER

00-S-107

00-S-107-FOUNDATION GA ENLARGED OFFICE GARAGE PLAN-1

Last Plotted: 2/14/2025 10:48:12 PM

Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

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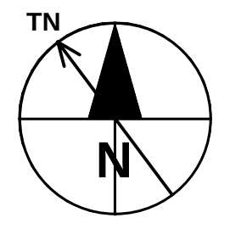
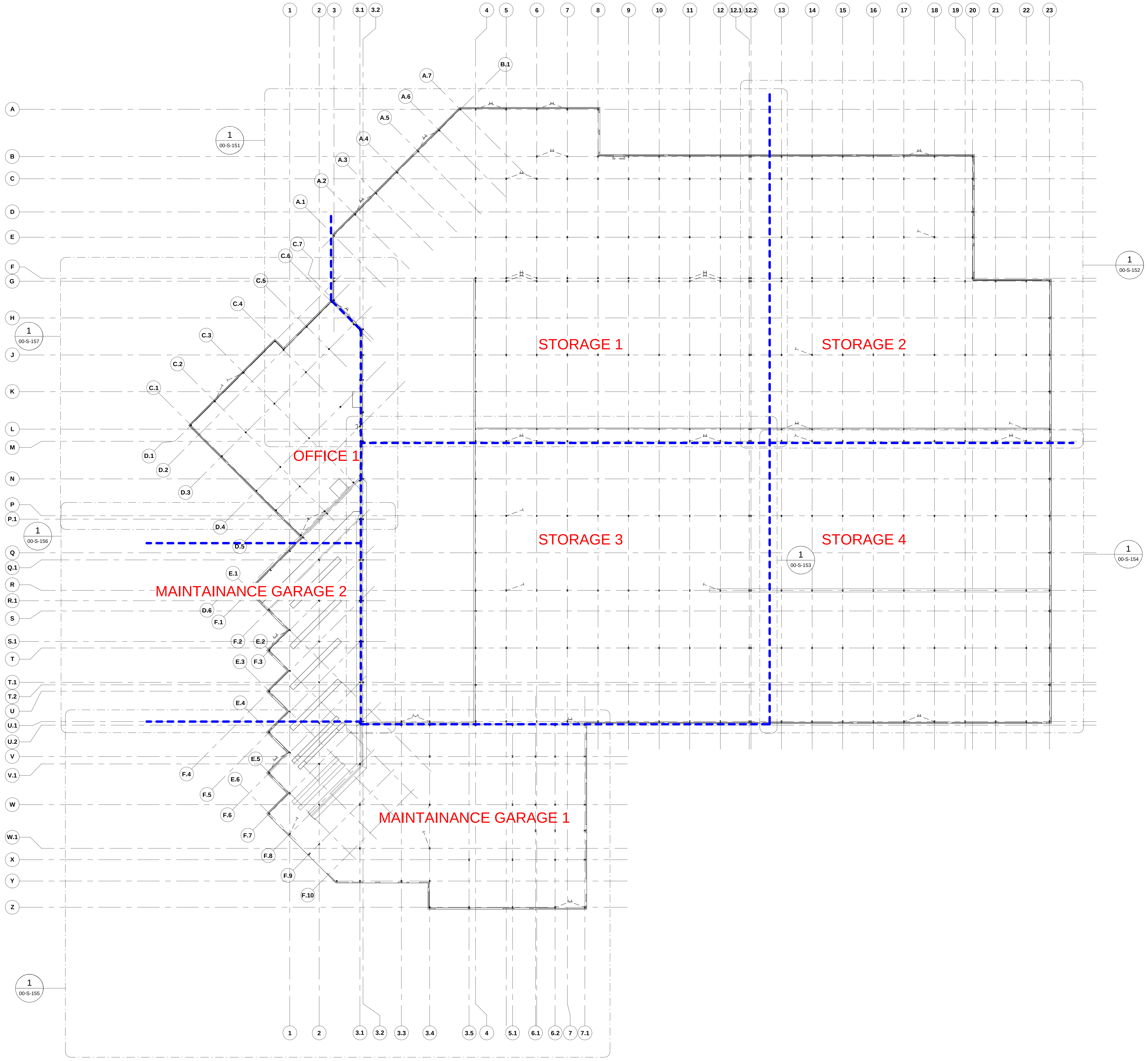
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:





1 GROUND FLOOR OVERALL G.A PLAN
00-S-150
SCALE: 1 : 400

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

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Winnipeg

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PROJECT NUMBER

60721079

SHEET TITLE

GROUND FLOOR OVERALL G.A PLAN

SHEET NUMBER

00-S-150

00-S-150-GROUND FLOOR OVERALL G.A PLAN

Last Plotted: 2/14/2025 10:48:14 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

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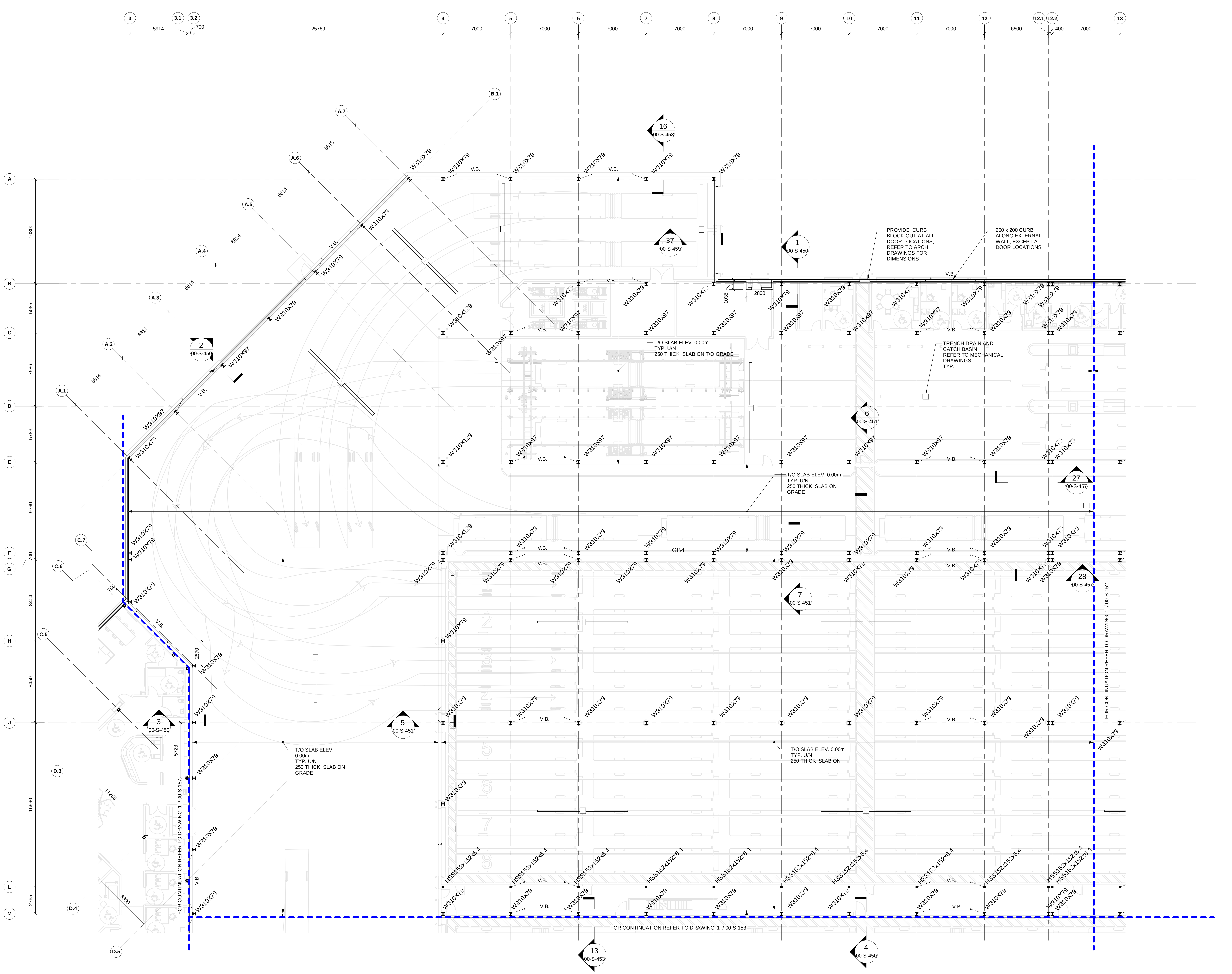
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00-S-450
W310X79
W310X97
W310X129
HSS152x152x6.4
V.B.
GB4
1035
2800
PROVIDE CURB BLOCK-OUT AT ALL DOOR LOCATIONS, REFER TO ARCH DRAWINGS FOR DIMENSIONS
200 x 200 CURB ALONG EXTERNAL WALL, EXCEPT AT DOOR LOCATIONS
T/O SLAB ELEV. 0.00m TYP. U/N 250 THICK SLAB ON T/O GRADE
TRENCH DRAIN AND CATCH BASIN REFER TO MECHANICAL DRAWINGS TYP.
T/O SLAB ELEV. 0.00m TYP. U/N 250 THICK SLAB ON GRADE
T/O SLAB ELEV. 0.00m TYP. U/N 250 THICK SLAB ON GRADE
T/O SLAB ELEV. 0.00m TYP. U/N 250 THICK SLAB ON
FOR CONTINUATION REFER TO DRAWING 1 / 00-S-152
FOR CONTINUATION REFER TO DRAWING 1 / 00-S-157
FOR CONTINUATION REFER TO DRAWING 1 / 00-S-153

1 GROUND FLOOR GA ENLARGED STORAGE PLAN -1

00-S-151

SCALE: 1 : 150

SLAB-ON-GRADE CONSTRUCTION NOTES:

1. REMOVE EXISTING SOIL TO DEPTH OF MINIMUM 800mm BELOW UNDERSIDE OF NEW SLAB.
2. HAVE A GEOTECHNICAL ENGINEER INSPECT THE EXPOSED SUBGRADE. EXCAVATE ANY SOFT, WEAK SPOTS AS DIRECTED BY GEOTECH ENGINEER.
3. INSTALL GEOGRID LAYER OVER TOP OF NONWOVEN GEOTEXILE IN ACCORDANCE WITH COW SPEC CW3130 AND CW3135.
4. BACKFILL 500mm THICK 100mm GRANULAR "A" SUBBASE COMPACTED TO 100% SPMDD. PROOFROLL AND RECOMPACT AS REQUIRED.
5. BACKFILL 200mm THICK 50mm GRANULAR "A" SUBBASE COMPACTED TO 100% SPMDD.
6. BACKFILL 100mm THICK 28mm GRANULAR "A" BASE COURSE COMPACT TO 100% SPMDD.
7. LAY VAPOUR BARRIER.
8. CONSTRUCT REINFORCED SLAB-ON-GRADE AS INDICATED ON PLAN, PROVIDING LOCALLY-THICKENED SLAB AT PARTITION WALLS, MECHANICAL INSERTS AND OTHER LOCATIONS WHERE REQUIRED.
9. PROVIDE SAW-CUT CONTROL JOINTS AT 3000 C/C EACH WAY, TYPICAL.

GROUND FLOOR NOTES:

1. REFER TO DRAWING G-001 FOR GENERAL NOTES.
2. TOP OF NEW CONCRETE COLUMN PIERS SHALL BE 100mm BELOW UNDERSIDE OF SLAB, UNLESS OTHERWISE NOTED.
3. UNDERSIDE OF COLUMN BASE PLATE SHALL BE 50mm ABOVE TOP OF PIER.
4. PROVIDE MAXIMUM 50MM NON-SHRINK GROUT UNDER COLUMN BASE PLATES, UNLESS OTHERWISE NOTED.
5. PROVIDE SLAB THICKENING AT UNDERSIDE OF MASONRY PARTITION WALLS AT ALL NEW SLABS THAT ARE 150mm THICK OR LESS.
6. REFER TO TYPICAL DETAILS. REFER TO ARCHITECTURAL DRAWINGS FOR LAYOUT OF MASONRY PARTITION WALLS.
7. WHERE MASONRY WALL IS CONSTRUCTED NEXT TO STEEL COLUMNS, PROVIDE MASONRY ANCHORS ON COLUMN FACE, AT 400 C/C VERTICAL.
8. WHERE MASONRY WALL IS CONSTRUCTED NEXT TO 2ND FLOOR OR MEZZANINE BUT BYPASSES EDGE OF FLOOR, PROVIDE MASONRY ANCHORS ALONG THE EDGE FLOOR BEAMS AT 400 C/C HORIZONTAL, FOR LATERAL SUPPORT.
9. WHERE MASONRY WALL IS CONSTRUCTED TO UNDERSIDE OF SUSPENDED FLOOR OR ROOF, PROVIDE LATERAL SUPPORT TO TOP OF WALL. REFER TO TYPICAL DETAILS.
10. WHERE MASONRY WALL IS CONSTRUCTED NEXT TO A SUSPENDED FLOOR BUT TERMINATES AT TOP OF FLOOR, PROVIDE MASONRY ANCHORS AT THE EDGE FLOOR BEAMS AT 400 C/C HORIZONTAL, FOR LATERAL SUPPORT. INSTALL MASONRY ANCHORS AT 200mm BELOW TOP OF WALL.
11. AT BASE OF ALL MASONRY WALLS, PROVIDE DOWELS AT THICKENED SLABS OR AT TOP OF GRADE BEAMS TO MATCH VERTICAL WALL REINFORCEMENT.
12. TOP OF SLAB ELEVATION SHOWN ON STRUCTURAL DRAWINGS ARE REFERENC ELEVATION ONLY. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLOPES, DEPRESSIONS, CURBS, PADS, TRENCHES, CATCH BASINS, PITS, AREA DRAINS, FLOOR DRAINS AND SIMILAR FEATURES AND ADJUST TOP OF CONCRETE ACCORDINGLY.
13. PROVIDE HOUSEKEEPING PADS FOR GROUND FLOOR EQUIPMENTS, TANKS AND MECHANICAL / ELECTRICAL UNITS. REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR SIZES AND LOCATIONS.

SLAB REINFORCEMENT NOTES:

1. ALL 250mm OR 300mm THICK SLAB ON GRADE SHALL BE REINFORCED WITH 15M@300 E.W. , TOP AND BOTTOM.
2. ALL 150mm OR 200mm THICK SLAB ON GRADE SHALL BE REINFORCED WITH 15M@200 E.W. AT MID-DEPTH. PROVIDE LOCAL THICKENED SLAB UNDER ALL INTERIOR PARTITION WALLS AS PER TYPICAL DETAIL.

PROJECT

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100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

City of Winnipeg
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1.877.311.4974 1.204.986.1311

Winnipeg Transit
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Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

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PROJECT NUMBER

60721079

SHEET TITLE

GROUND FLOOR GA ENLARGED STORAGE PLAN-1

SHEET NUMBER

00-S-151

00-S-151-GROUND FLOOR GA ENLARGED STORAGE PLAN-1

Last Plotted: 2/14/2025 10:48:26 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

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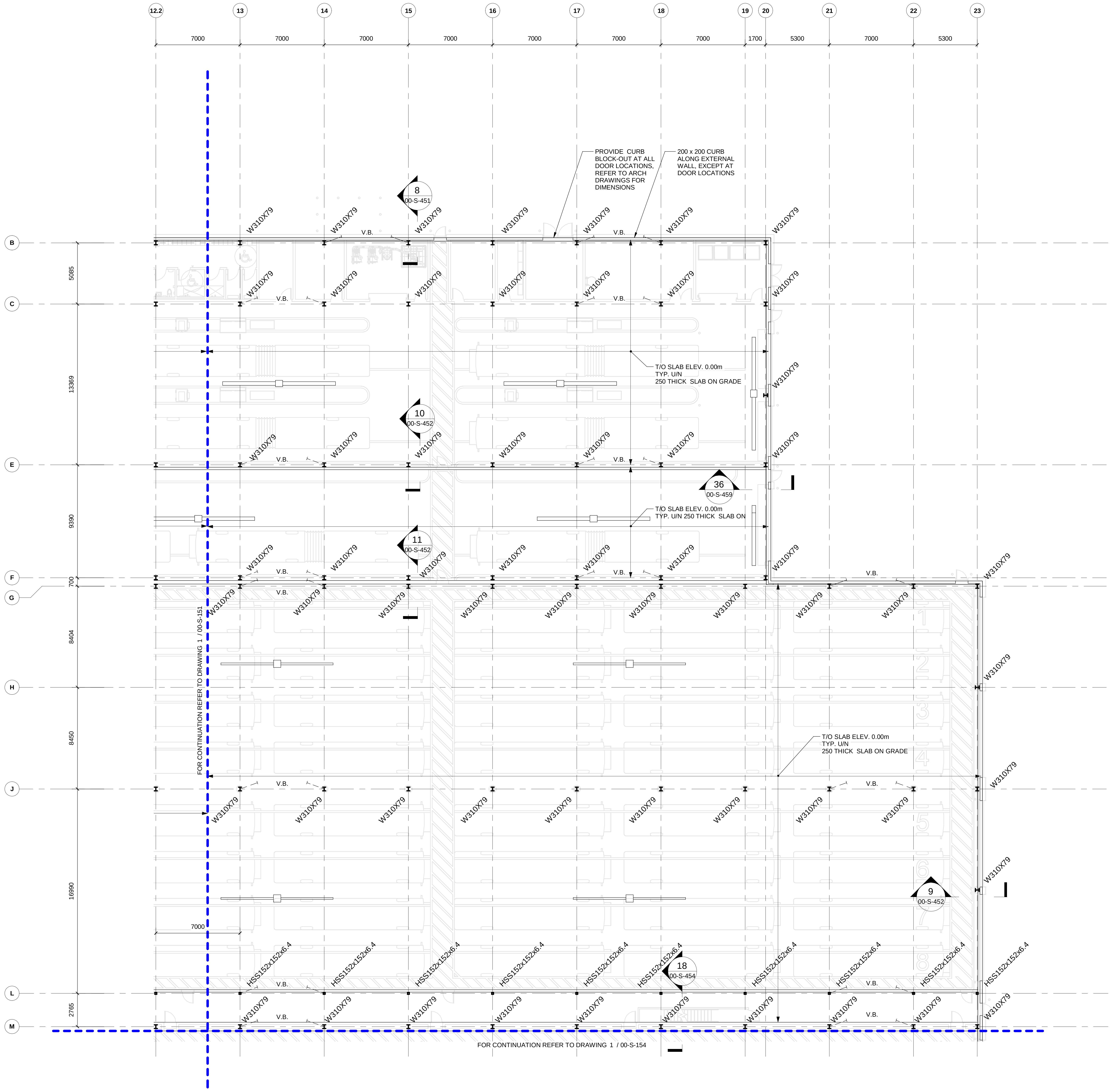
Project Management Initials: Designer: Designer   Checked: Checker   Approved: Approver   A0 33.1"x46.8"

NOTE:

REFER TO DRAWING S-151 FOR GROUND FLOOR NOTES
AND SLAB-ON-GRADE CONSTRUCTION NOTES.



1	GROUND FLOOR GA ENLARGED STORAGE PLAN-2
00-S-152	SCALE: 1 : 150

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974   1.204.986.1311

Winnipeg Transit
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PROJECT NUMBER

60721079

SHEET TITLE

GROUND FLOOR GA ENLARGED STORAGE PLAN-2

SHEET NUMBER

00-S-152

00-S-152-GROUND FLOOR GA ENLARGED STORAGE PLAN-2
Last Plotted: 2/14/2025 10:48:32 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:

NOTE:

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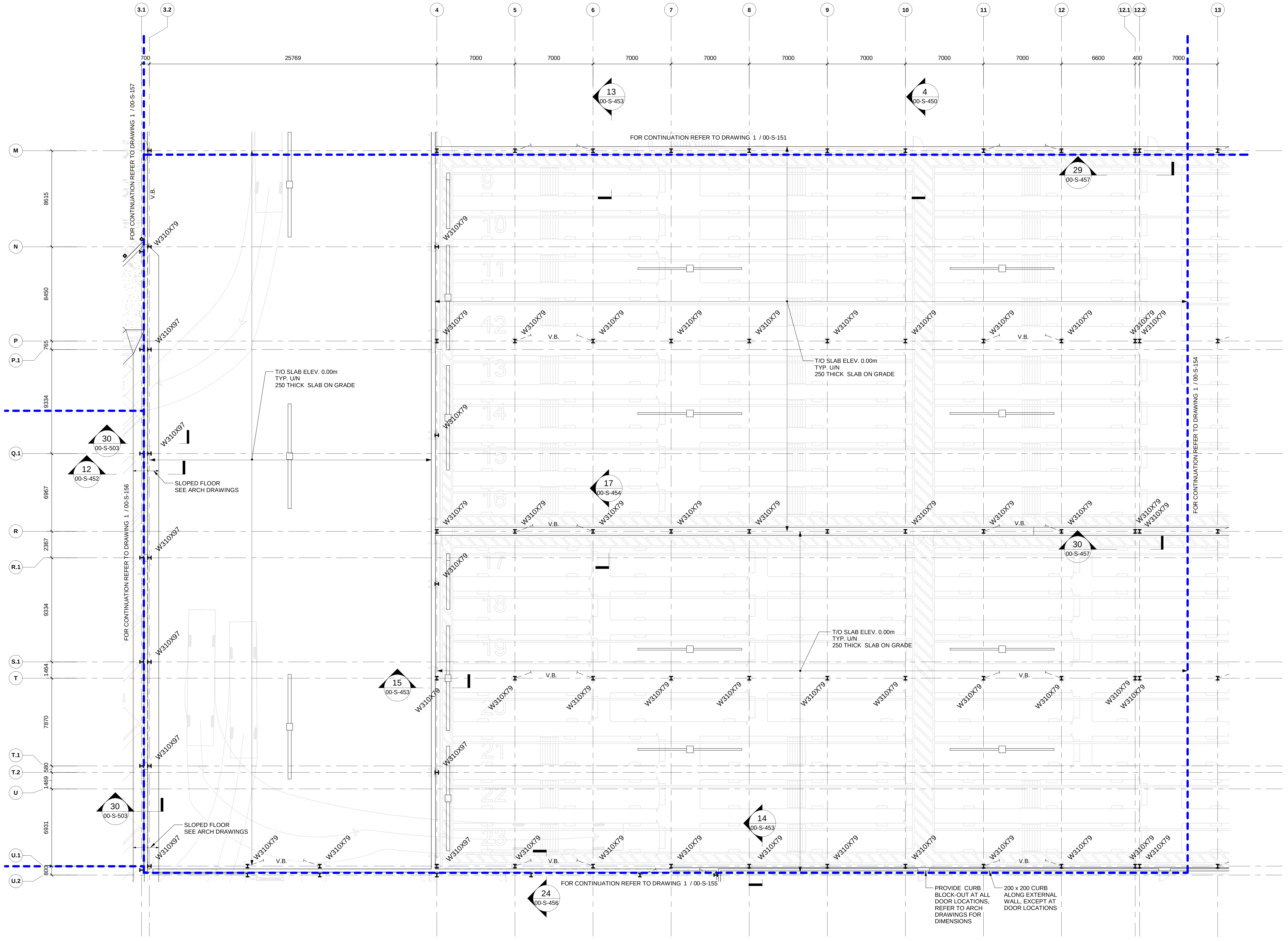

1 GROUND FLOOR GA ENLARGED STORAGE PLAN-3

00-S-153

SCALE: 1 : 150

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
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PROJECT NUMBER

60721079

SHEET TITLE

GROUND FLOOR GA ENLARGED STORAGE PLAN-3

SHEET NUMBER

00-S-153

00-S-153-GROUND FLOOR GA ENLARGED STORAGE PLAN-3
Last Plotted: 2/14/2025 10:48:40 PM
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Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:

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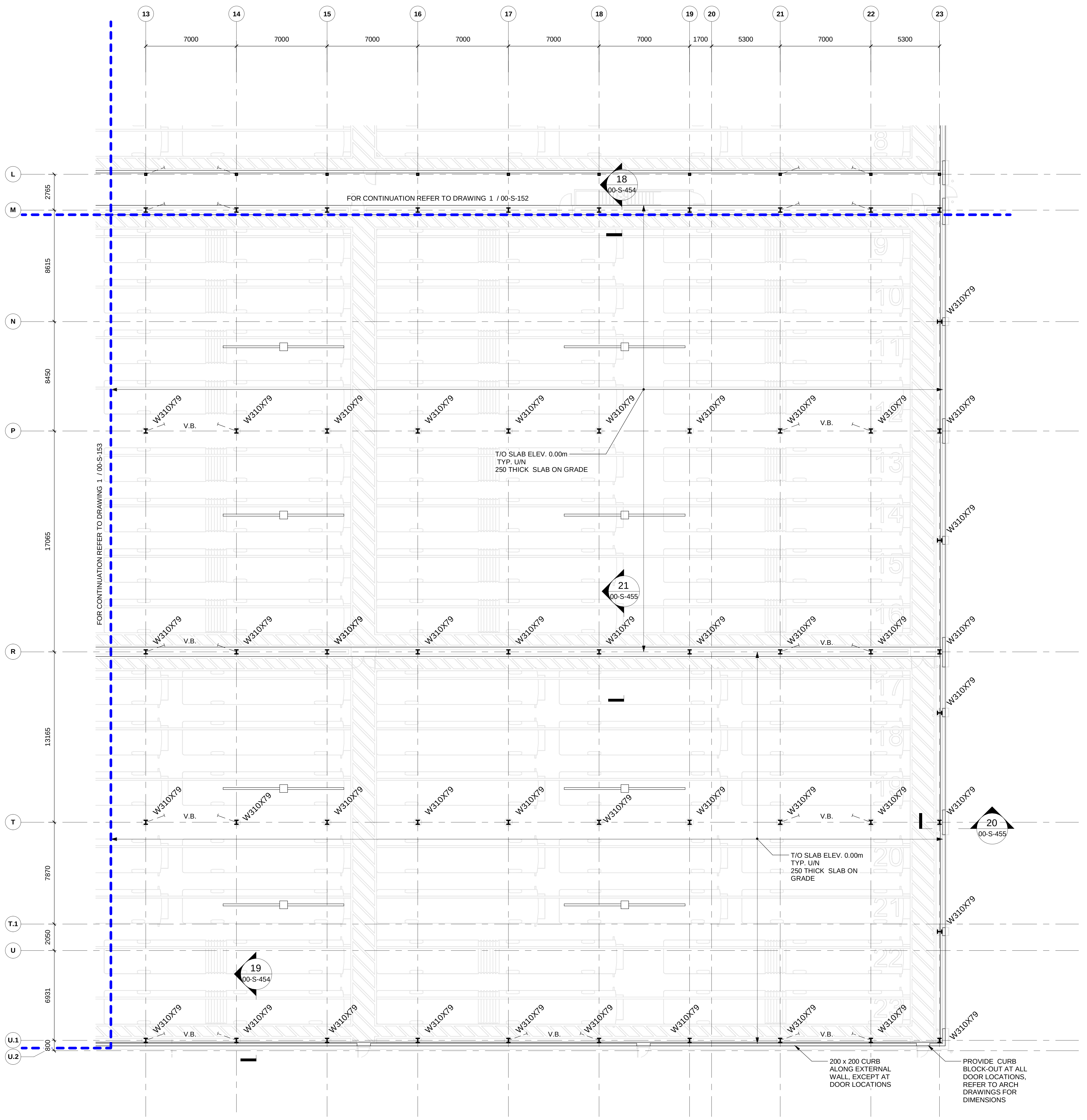

T/O SLAB ELEV. 0.00m
TYP. U/N
250 THICK SLAB ON GRADE

T/O SLAB ELEV. 0.00m
TYP. U/N
250 THICK SLAB ON GRADE

200 x 200 CURB
ALONG EXTERNAL
WALL, EXCEPT AT
DOOR LOCATIONS

PROVIDE CURB
BLOCK-OUT AT ALL
DOOR LOCATIONS,
REFER TO ARCH
DRAWINGS FOR
DIMENSIONS

1 GROUND FLOOR GA ENLARGED STORAGE PLAN-4

00-S-154

SCALE: 1 : 150

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
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City of Winnipeg
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PROJECT NUMBER

60721079

SHEET TITLE

GROUND FLOOR GA ENLARGED STORAGE PLAN-4

SHEET NUMBER

00-S-154

00-S-154-GROUND FLOOR GA ENLARGED STORAGE PLAN-4

Last Plotted: 2/14/2025 10:48:47 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

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A0 33.1"x46.8"
Designer: Designer Checked: Checker Approved: Approver
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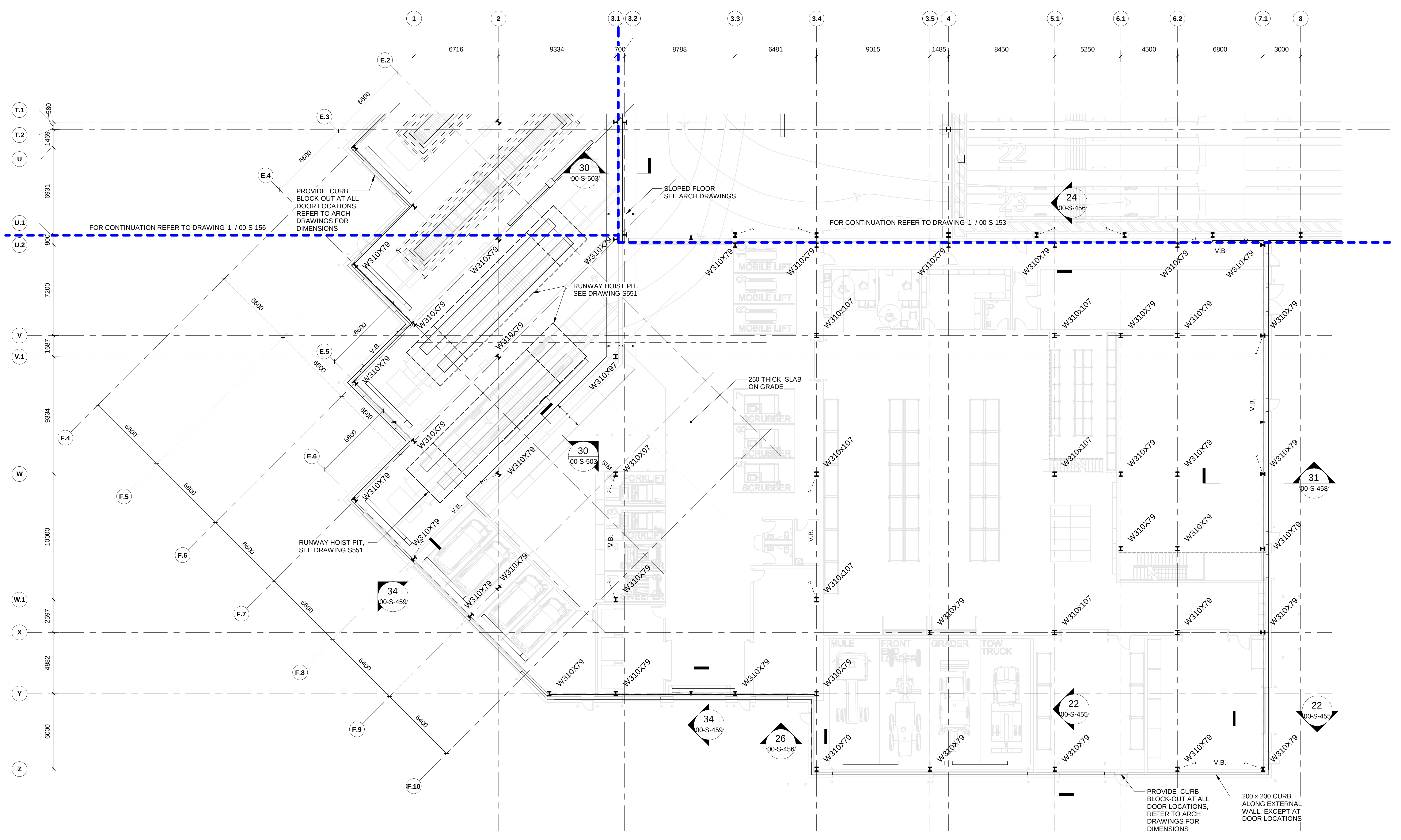

PROVIDE CURB BLOCK-OUT AT ALL DOOR LOCATIONS, REFER TO ARCH DRAWINGS FOR DIMENSIONS

FOR CONTINUATION REFER TO DRAWING 1 / 00-S-156

SLOPED FLOOR SEE ARCH DRAWINGS

FOR CONTINUATION REFER TO DRAWING 1 / 00-S-153

RUNWAY HOIST PIT, SEE DRAWING S551

250 THICK SLAB ON GRADE

RUNWAY HOIST PIT, SEE DRAWING S551

PROVIDE CURB BLOCK-OUT AT ALL DOOR LOCATIONS, REFER TO ARCH DRAWINGS FOR DIMENSIONS

200 x 200 CURB ALONG EXTERNAL WALL, EXCEPT AT DOOR LOCATIONS

1 GROUND FLOOR GA ENLARGED MAINTENANCE GARAGE PLAN-1

00-S-155

SCALE: 1 : 150

PROJECT

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00-S-155

00-S-155-GROUND FLOOR GA ENLARGED MAINTENANCE GARAGE PLAN-1
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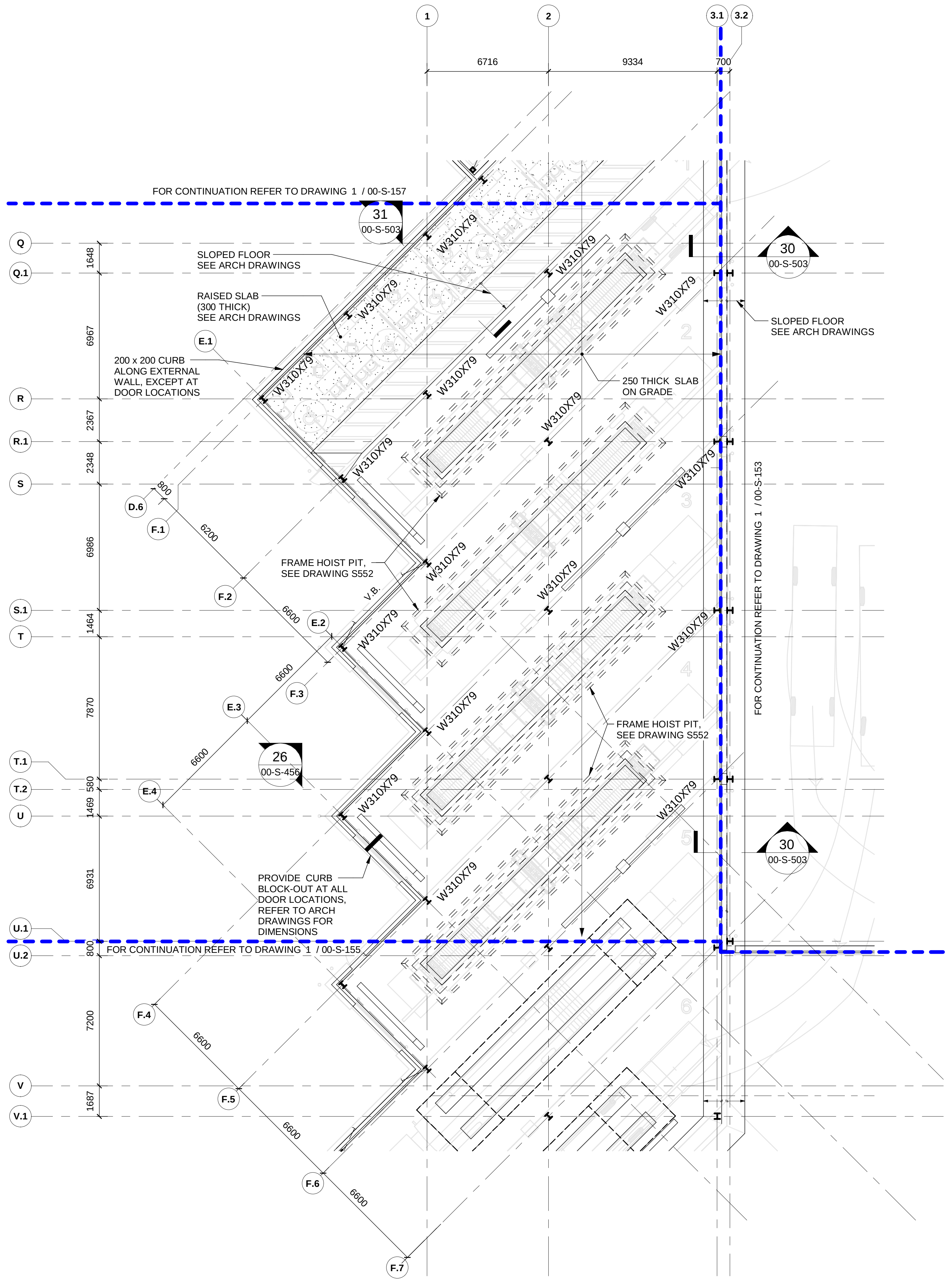

1 | GROUND FLOOR GA ENLARGED MAINTENANCE GARAGE PLAN-2

00-S-156

SCALE: 1 : 150

AECOM

PROJECT

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GROUND FLOOR GA ENLARGED MAINTENANCE GARAGE PLAN-2

SHEET NUMBER

00-S-156

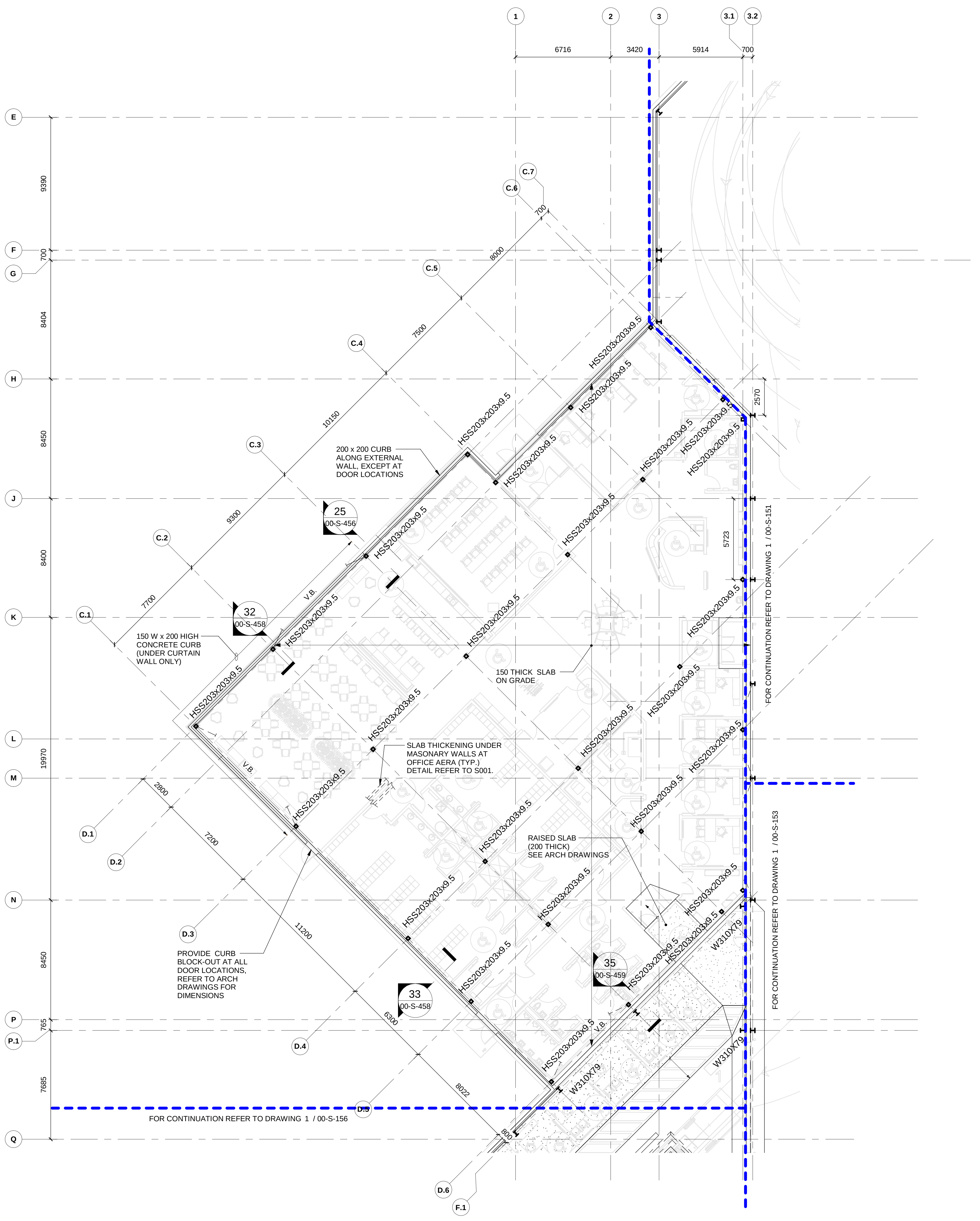
00-S-156-GROUND FLOOR GA ENLARGED MAINTENANCE GARAGE PLAN-2

Last Plotted: 2/14/2025 10:49:08 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

Project Management Initials: Designer: Designer   Checked: Checker Approved: Approver   A0 33.1"x46.8"

NOTE:

REFER TO DRAWING S-151 FOR GROUND FLOOR NOTES AND SLAB-ON-GRADE CONSTRUCTION NOTES.



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HSS203x203x9.5
W310X79
V.B.
25
00-S-456
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00-S-458
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00-S-458
35
00-S-459
200 x 200 CURB ALONG EXTERNAL WALL, EXCEPT AT DOOR LOCATIONS
150 W x 200 HIGH CONCRETE CURB (UNDER CURTAIN WALL ONLY)
150 THICK SLAB ON GRADE
SLAB THICKENING UNDER MASONARY WALLS AT OFFICE AERA (TYP.) DETAIL REFER TO S001.
RAISED SLAB (200 THICK) SEE ARCH DRAWINGS
PROVIDE CURB BLOCK-OUT AT ALL DOOR LOCATIONS, REFER TO ARCH DRAWINGS FOR DIMENSIONS
FOR CONTINUATION REFER TO DRAWING 1 / 00-S-151
FOR CONTINUATION REFER TO DRAWING 1 / 00-S-153
FOR CONTINUATION REFER TO DRAWING 1 / 00-S-156

1 GROUND FLOOR GA ENLARGED OFFICE PLAN-1

00-S-157

SCALE: 1 : 150

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

City of Winnipeg
510 Main St.
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Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

GROUND FLOOR GA ENLARGED OFFICE PLAN-1

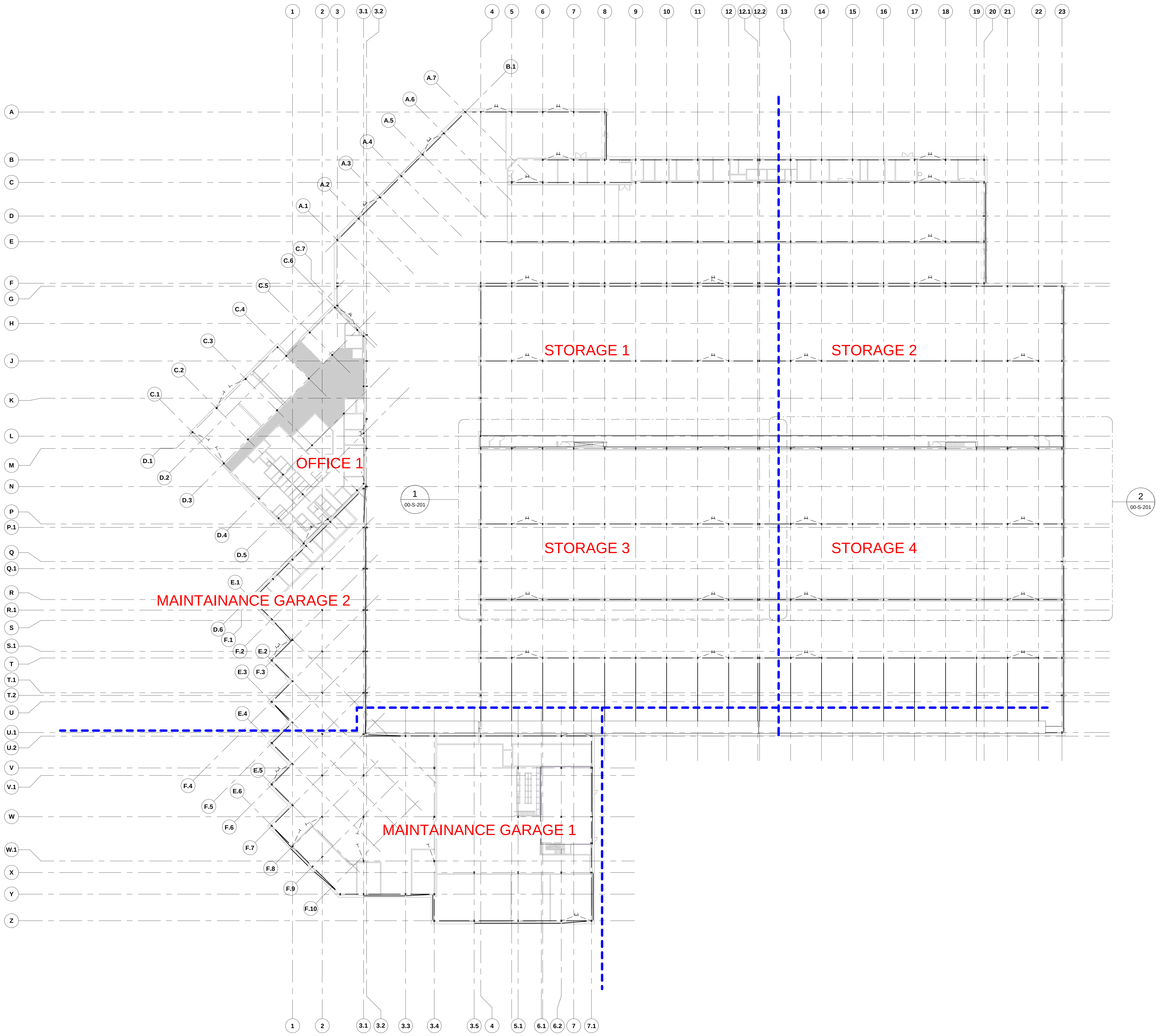
SHEET NUMBER

00-S-157

00-S-157-GROUND FLOOR GA ENLARGED OFFICE PLAN-1
Last Plotted: 2/14/2025 10:49:20 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:



1 | SECOND/MAZZENINE FLOOR-OVERALL G.A. PLAN
00-S-200
SCALE: 1 : 400

00-S-200-SECOND FLOOR-OVERALL G.A. PLAN

Last Plotted: 2/14/2025 10:49:30 PM
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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

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PROJECT NUMBER

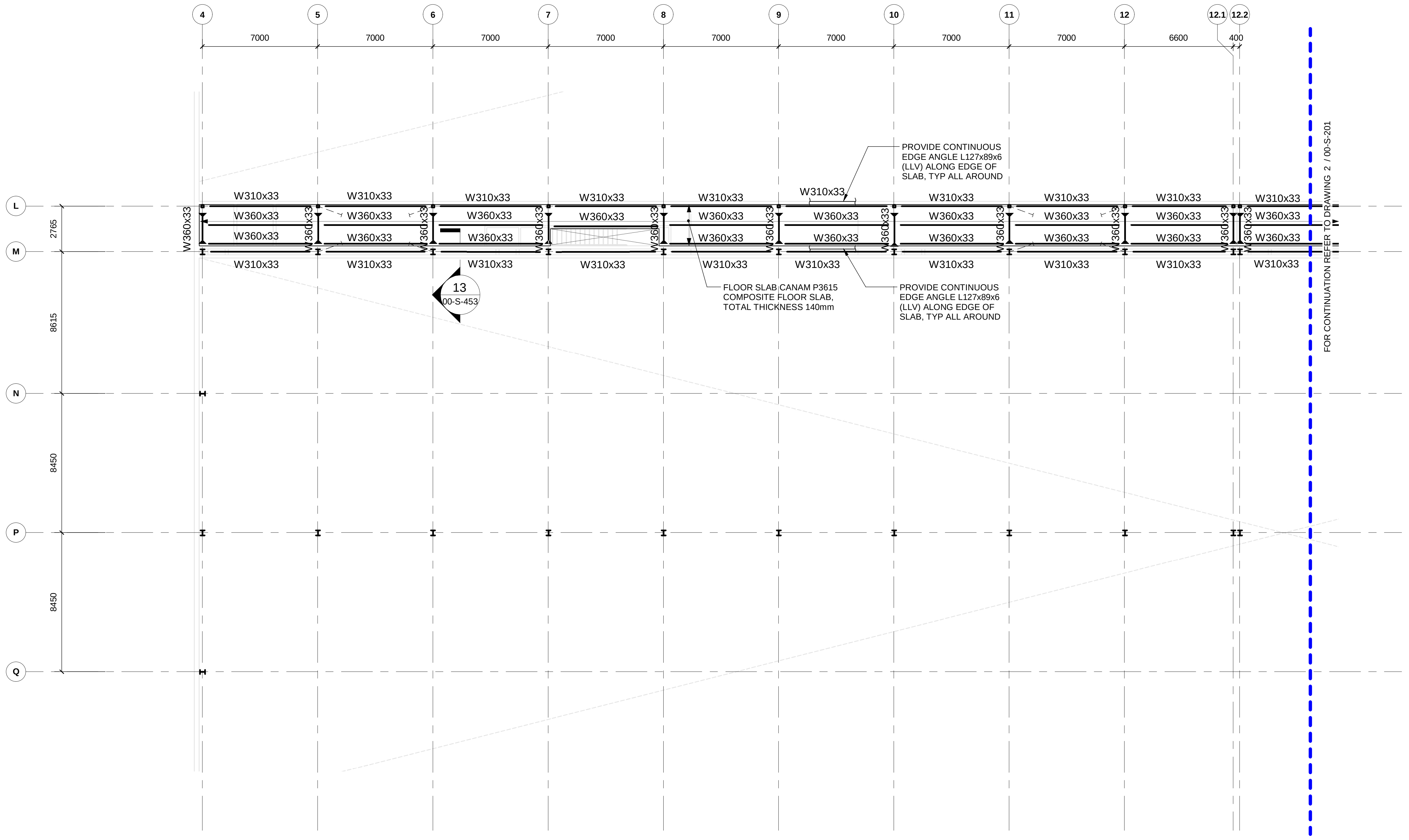
60721079

SHEET TITLE

SECOND FLOOR-OVERALL G.A. PLAN

SHEET NUMBER

00-S-200



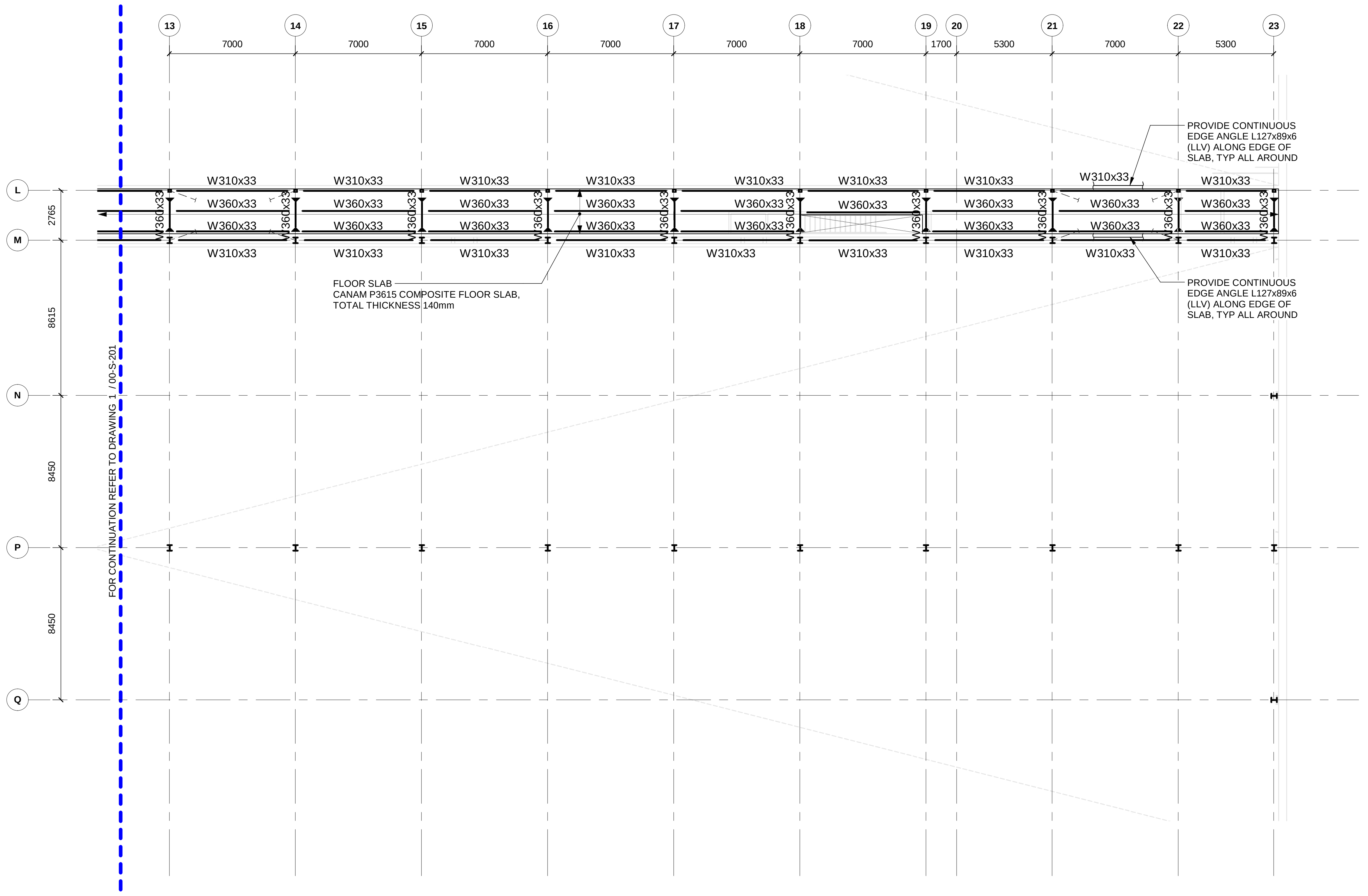
PROVIDE CONTINUOUS EDGE ANGLE L127x89x6 (LLV) ALONG EDGE OF SLAB, TYP ALL AROUND

FLOOR SLAB CANAM P3615 COMPOSITE FLOOR SLAB, TOTAL THICKNESS 140mm

PROVIDE CONTINUOUS EDGE ANGLE L127x89x6 (LLV) ALONG EDGE OF SLAB, TYP ALL AROUND

1 | SECOND FLOOR-CORRIDOR FRAMING ENLARGED PLAN 1

00-S-201 SCALE: 1 : 150



PROVIDE CONTINUOUS EDGE ANGLE L127x89x6 (LLV) ALONG EDGE OF SLAB, TYP ALL AROUND

FLOOR SLAB CANAM P3615 COMPOSITE FLOOR SLAB, TOTAL THICKNESS 140mm

PROVIDE CONTINUOUS EDGE ANGLE L127x89x6 (LLV) ALONG EDGE OF SLAB, TYP ALL AROUND

2 | SECOND FLOOR-CORRIDOR FRAMING ENLARGED PLAN 2

00-S-201 SCALE: 1 : 150

2ND FLOOR / MEZZANINE NOTES:

1. REFER TO DRAWING G-001 FOR GENERAL NOTES.
2. ALL LOADS INDICATED IN THE PLANS ARE UNFACTORED U.N.O.
3. ALL COMPOSITE STEEL DECK SHALL BE 102mm CONCRETE TOPPING OVER 38mm STEEL DECK (TOTAL THICKNESS 140mm), REINFORCED WITH 152X152MW18.7X18.7.
4. PROVIDE ADDITIONAL REINFORCEMENT AT THE HOUSEKEEPING PADS ON 2ND FLOOR AND MEZZANINE. REFER TO TYPICAL DETAILS.
5. TOP OF STEEL AT 2ND FLOOR OR MEZZANINE SHALL BE AT UNDERSIDE OF STEEL DECK.
6. UNLESS NOTED OTHERWISE, DESIGN BEAM END CONNECTIONS FOR 50% OF THE MAXIMUM UNIFORMLY DISRIBUTED LOADS AS SHOWN ON THE BEAM LOAD ABLES OF CISC HANDBOOK OF STEEL CONSTRUCTION.
7. DESIGN MOMENT CONNECTIONS AS INDICATED. IF NO MOMENT VALUES ARE SHOWN ON ESIGN DRAWINGS, PROVIDE FULL MOMENT CAPACITY OF THE BEAM OR COLUMN.
8. FOR FINISHED FLOOR ELEVATIONS REFER TO ARCHITECTURAL DRAWINGS.
9. PROVIDE RAISED HOUSEKEEPING PADS FOR MECHANICAL OR ELECTRICAL EQUIPMENTS. REFER TO ARCHITECTURAL, MECHANICAL OR ELECTRICAL DRAWINGS.

2ND FLOOR / MEZZANINE DESIGN LOAD:

DEAD LOAD	:	COMPOSITE FLOOR SLAB	2.83kPa
		STEEL JOISTS AND BEAMS	0.3kPa
		MECH. ALLOWANCE	0.8kPa
		CEILING	0.2kPa
		PARTITION	1.0kPa
		TOTAL	5.13kPa
LIVE LOAD	:	4.8kPa	

AECOM

PROJECT

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100 Oak Point Hwy, Winnipeg, MB R2R 1V1

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REGISTRATION

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I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

SECOND FLOOR-CORRIDOR FRAMING ENLARGED PLANS

SHEET NUMBER

00-S-201

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:

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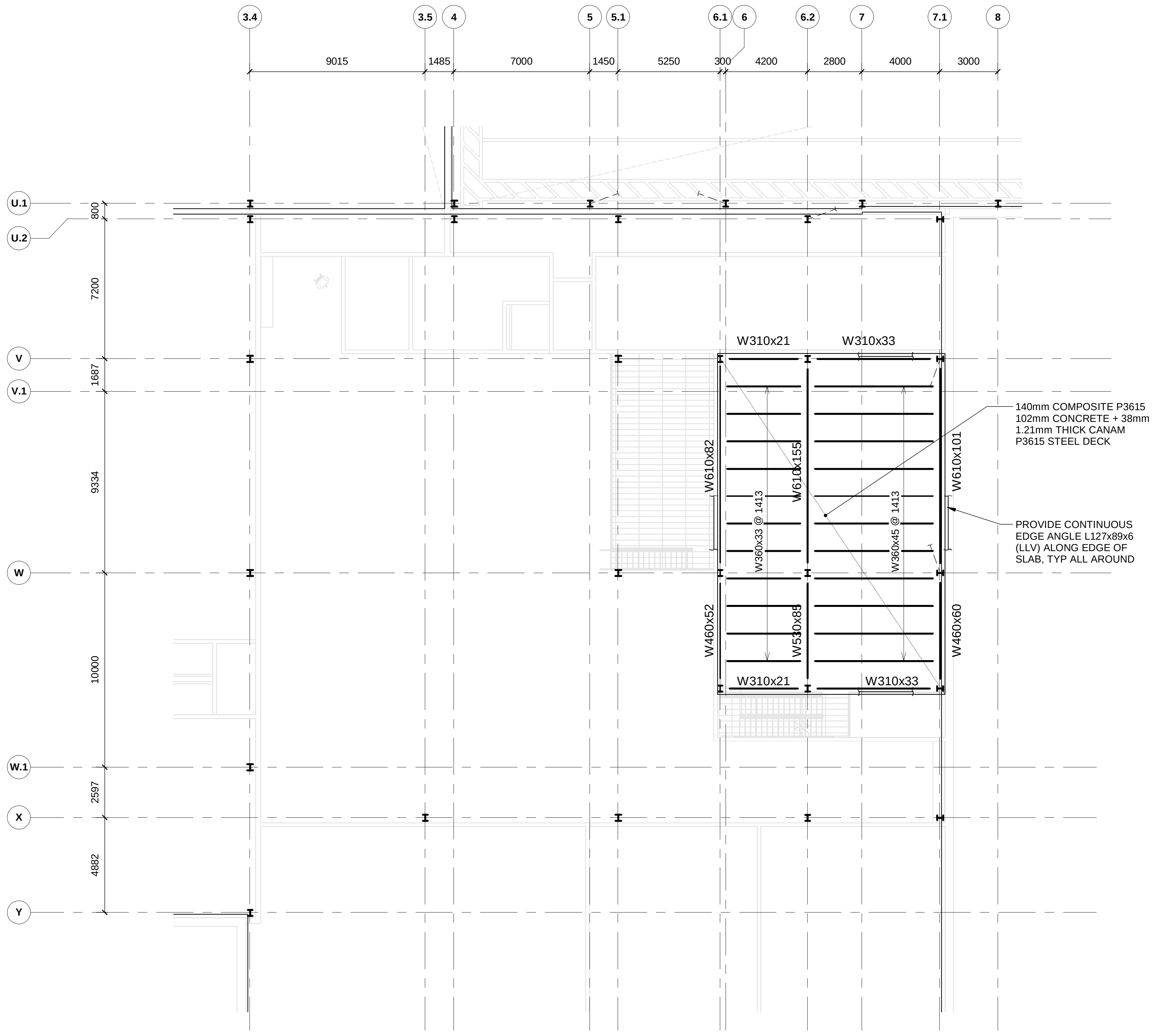
Project Management Initials:
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"



1 MAZZENINE MAINTANANCE GARAGE ENLARGED PLAN

00-S-202
SCALE: 1 : 150

NOTE:

REFER TO DRAWING S-201 FOR NOTES
REGARDING 2ND FLOOR AND MEZZANINE STRUCTURES.

JOIST SCHEDULE	
TYPE	JOIST DEPTH (mm)
J1	1400
J2	2000
J3	1800
J4	2200
J5	1200
J6	1100
J7	900
J8	800
J9	700
J10	650
J11	500
J12	450
J13	550
J14	250
J15	600
J16	1300
J17	1000
J18	750

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PROJECT

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100 Oak Point Hwy, Winnipeg, MB R2R 1V1

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REGISTRATION

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I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

MAZZENINE MAINTANANCE GARAGE ENLARGED PLAN

SHEET NUMBER

00-S-202

00-S-202-MAZZENINE MAINTANANCE GARAGE ENLARGED PLAN
Last Plotted: 2/14/2025 10:49:46 PM
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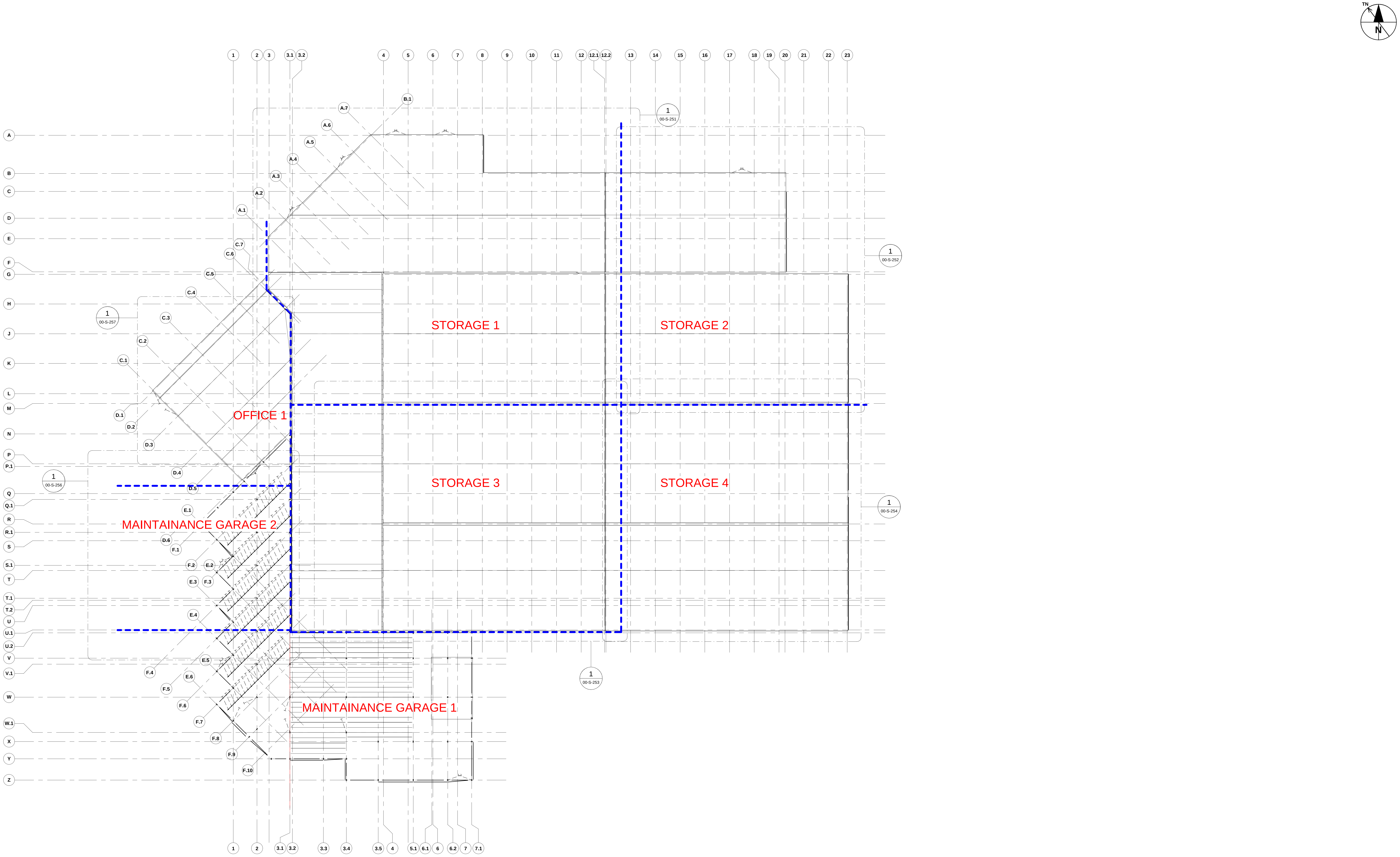
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:



1 OVERALL ROOF FRAMING PLAN

00-S-250

SCALE: 1 : 400

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
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I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

OVERALL ROOF FRAMING PLAN

SHEET NUMBER

00-S-250

00-S-250-OVERALL ROOF FRAMING PLAN

Last Plotted: 2/14/2025 10:49:51 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

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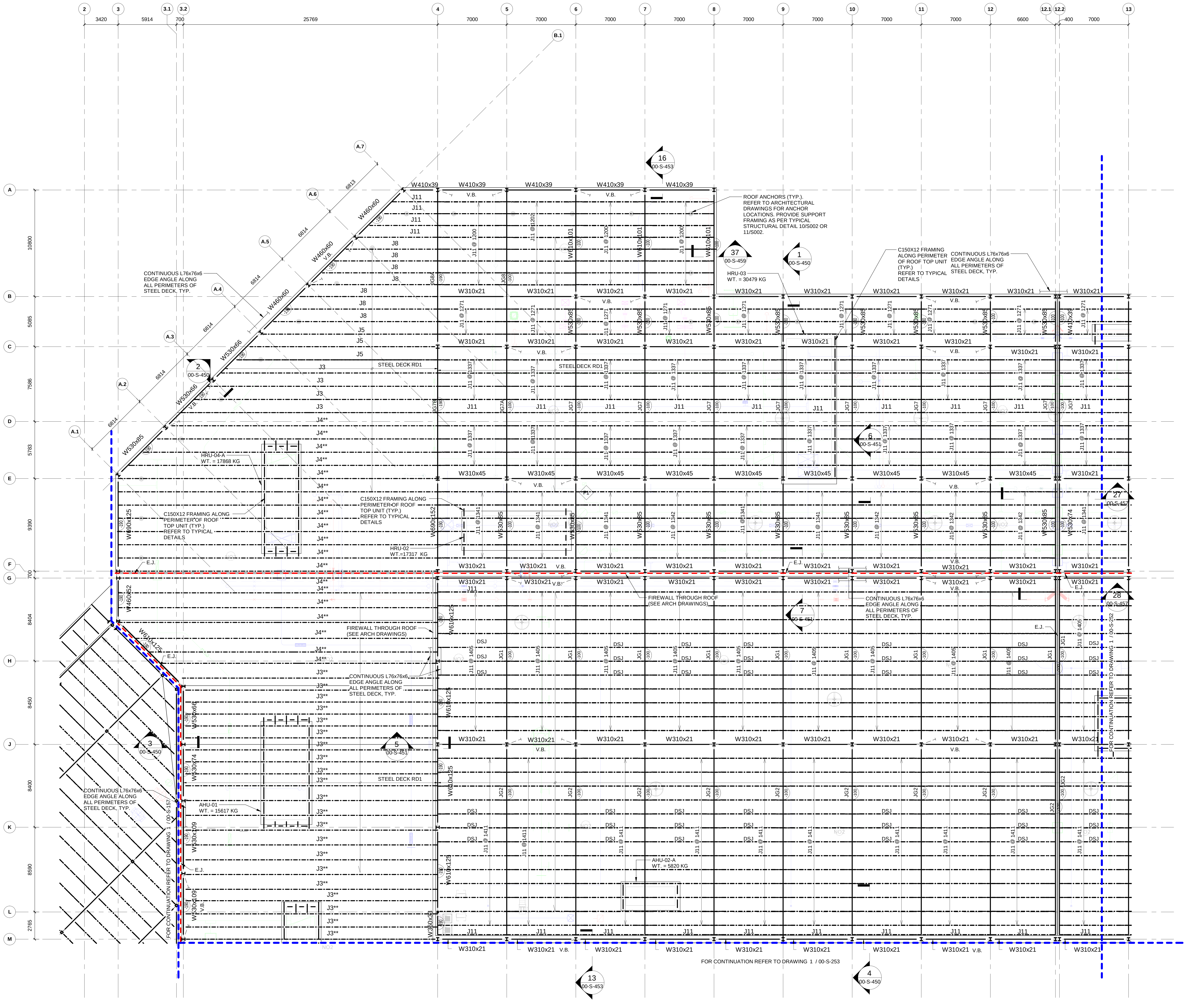
Project Management Initials: Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"



1 ROOF FRAMING ENLARGED STORAGE PLAN-1

00-S-251

SCALE: 1 : 150

ROOF NOTES:

1. REFER TO DRAWINGS S001 TO S004 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. ALL LOADS INDICATED ON THE DRAWINGS ARE UNFACTORED.
3. TOP OF STRUCTURAL STEEL AND STEEL JOISTS SUPPORTING STEEL DECK TO BE AT UNDERSIDE OF DECK UNLESS NOTED PROVIDE STRUCTURAL SLOPE TO SUIT SLOPED ROOF DECK. SEE ARCH. DRAWINGS FOR ELEVATIONS AND SLOPES OF THE STEEL DECK.
4. UNLESS NOTED ON PLAN OR SECTIONS, JOIST SHOES ARE 100mm DEEP. FOR JOISTS MARKED WITH **(e.g. J3**),JOIST SHOES SHALL BE 190mm DEEP. STRUCTURAL BEAMS SUPPORTING JOISTS SHALL BE LOWERED TO SUIT JOIST SHOE DEPTH.
5. CONTRACTOR SHALL DESIGN JOISTS AND JOIST GIRDERS FOR DEAD LOAD, SNOW LOAD AND SNOW ACCUMULATION AND WEIGHT OF MECHANICAL EQUIPMENT AS SHOWN ON PLAN. IN ADDITION TO DEAD, SNOW AND MECHANICAL UNIT WEIGHT SHOWN, COORDINATE LOCATION WITH MECHANICAL DRAWINGS. ROOF JOISTS SHALL BE ANGLED VERTICALLY. PROVIDE HORIZONTAL BRIDGING IN ACCORDANCE WITH S16-09.
6. ACTUAL MECHANICAL EQUIPMENT WEIGHT IS TO BE VERIFIED BY THE CONTRACTOR AND ANY EXCEEDING WEIGHT IS TO BE REPORTED TO THE ENGINEER PRIOR TO FABRICATION AND INSTALLATION OF STRUCTURAL STEEL. ENGINEER'S APPROVAL MUST BE OBTAINED PRIOR TO INSTALLATION.
7. ALL FRAMING MEMBERS FOR ROOF TOP UNITS SHOWN ON PLAN ARE TO BE C200x17 U.N.O.
8. PROVIDE FRAMING MEMBERS AROUND ROOF OPENINGS. REFER TO TYPICAL DETAIL.
9. FOR SMALLER MECHANICAL UNITS NOT SHOWN ON PLAN, REFER TO MECHANICAL DRAWINGS FOR LOCATION. PROVIDE SUPPORT FRAME AS PER TYPICAL DETAIL.
10. COORDINATE LOCATION AND SIZE OF MECHANICAL UNITS AND ROOF OPENINGS WITH MECHANICAL DRAWINGS.PROVIDE STEEL FRAMING AROUND ROOF OPENINGS AND MECHANICAL UNITS. REFER TO TYPICAL STRUCTURAL DETAIL ON DRAWING S002 FOR TYPICAL FRAMING AROUND ROOF OPENINGS.
11. PROVIDE JOIST LOCAL REINFORCING WHERE POINT LOADS ARE NOT LOCATED AT JOIST PANEL POINTS. REFER TO TYPICAL DETAILS.
12. PROVIDE UPWARD CAMBER TO JOISTS AND JOIST GIRDERS EQUAL TO DEAD LOAD DEFLECTION.
13. STEEL ROOF DECK SHALL BE DESIGNED AS A STRUCTURAL DIAPHRAGM. REFER TO GENERAL NOTES FOR DIAPHRAGM DESIGN REQUIREMENTS.
14. STEEL DECK SHALL BE TRIPLE SPAN UNLESS NOTED OTHERWISE ON PLAN.
15. STEEL DECK THICKNESS (GAUGE) SHALL BE DESIGNED BY THE STEEL DECK SUPPLIER. STEEL DECK THICKNESS INDICATED ON STRUCTURAL DRAWINGS ARE MINIMUM THICKNESS.
16. ROOF SHALL BE DESIGNED FOR UNIFORM SNOW LOAD AND ACCUMULATED SNOW LOAD AS INDICATED ON DRAWING S012. AREAS SURROUNDING ALL ROOF TOP UNITS SHALL BE DESIGNED FOR ACCUMULATED LOADS AROUND THE ROOF TOP UNIT AS INDICATED ON TYPICAL PLANS ON DRAWING S012. REFER TO ROOF PLANS AND MECHANICAL DRAWINGS FOR LOCATIONS AND SIZES OF ROOF TOP UNITS, AND ACCOUNT FOR ACCUMULATED SNOW LOADS ACCORDINGLY.
17. END MOMENT CONNECTIONS SHALL BE PROVIDED AT EACH END OF THE JOIST GIRDERS, SO THAT THE JOIST GIRDER BECOMES PART OF THE LATERAL LOAD RESISTING FRAME OF THE BUILDING STRUCTURE. REFER TO DRAWINGS FOR SPECIFIED END MOMENTS OF THE JOIST GIRDERS. EACH ELEMENT OF THE JOIST GIRDER SHALL BE DESIGNED FOR WORST-CASE LOAD CONDITIONS, WHETHER SIMPLE SPAN OR WITH END MOMENTS. END MOMENT CONNECTION ARE TO BE COMPLETED AFTER ALL OF THE DEAD LOADS OF THE BUILDING STRUCTURE HAVE BEEN APPLIED.
18. AT ALL JOIST GIRDER'S END CONNECTIONS, JOIST GIRDER DESIGNER SHALL PROVIDE FACTORED FORCES AND DETAILS OF THE JOIST GIRDER'S TOP AND BOTTOM CHORDS TO THE STRUCTURAL STEEL FABRICATOR'S CONNECTION DESIGN ENGINEER TO COORDINATE THE END CONNECTIONS.
19. FOR MULTIPLE ADJACENT JOISTS OR JOIST GIRDERS THAT ARE PARALLEL TO ONE ANOTHER IN THE SAME STRUCTURAL BAY, THE WEB MEMBERS OF ALL JOISTS OR JOIST GIRDERS MUST BE ARRANGED IN THE SAME CONSISTENT PATTERN, SO THAT SERVICE PIPES AND DUCTS WITHIN THE DEPTH OF THE JOISTS OR JOIST GIRDERS MAY PASS THROUGH AS FREELY AS POSSIBLE.
20. ROOF JOISTS SUPPORTING ROOF ANCHORS SHALL BE DESIGNED FOR THE CONCENTRATED FORCE FROM THE ROOF ANCHORS. REFER TO TYPICAL DETAIL ON DRAWING S002, CONCENTRATED FORCE FROM ROOF ANCHOR FRAME CAN BE IN ANY DIRECTION.
21. PROVIDE FRAMING TO SUPPORT ROOF ANCHORS AS PER TYPICAL STRUCTURAL DETAIL ON DRAWING S002. REFER TO ARCHITECTUAL DRAWINGS FOR ROOF ANCHOR LOCATIONS.
22. ALL ROOF JOISTS SHALL BE DESIGNED FOR AN ADDITIONAL CONCENTRATED LIVE LOAD OF 4.0kN AT ANY PANEL POINT OF THE BOTTOM CHORD, EXCEPT THAT FOR ROOF JOISTS SUPPORTING ELECTRICAL DISPENSER (MARKED AS "DSJ" ON PLAN), SUCH CONCENTRATED LIVE LOAD SHALL BE 6.0kN.
23. E. J. DENOTES EXPANSION JOINT. ALL EXPANSION JOINTS SHALL BE 75mm WIDE UNLESS NOTED OTHERWISE"

ROOF DESIGN LOADS:

DEAD LOAD	:	ROOFING	0.4 kPa
		STEEL DECK	0.2 kPa
		STRUCTURAL STEEL	0.3 kPa
		MECH. ALLOWANCE	0.8 kPa
		TOTAL	1.7 kPa

SNOW LOAD : FOR SNOW AND ASSOCIATED RAIN LOAD ON ROOF, REFER TO DRAWING S012.

WIND LOAD : FOR WIND PRESSURES ON ROOF, REFER TO DRAWING S010.

LEGENDS

-XXX	TOP OF STEEL ELEVATION FROM U/S OF DECK
JG#	JOIST GIRDER
J#	JOIST WITH A SHOE DEPTH OF 100mm
J#*	JOIST WITH A SHOE DEPTH OF 125mm
J#**	JOIST WITH A SHOE DEPTH OF 190mm
RD1	38mm DEEP ACOUSTIC ROOF DECK
V.B.	VERTICAL BRACING
H.B.	HORIZONTAL BRACING
TYP.	TYPICALLY
E.J.	EXPANSION JOINT
DSJ	JOISTS SUPPORTING ELECTRICAL DISPENSER

JOIST SCHEDULE

TYPE	JOIST DEPTH (mm)
J1	1400
J2	2000
J3	1800
J4	2200
J5	1200
J6	1100
J7	900
J8	800
J9	700
J10	650
J11	500
J12	450
J13	550
J14	250
J15	600
J16	1300
J17	1000
J18	750

JOIST GIRDER SCHEDULE

TYPE	TRUSS DEPTH (MINIMUM)
JG1	1200
JG2	1200
JG3	1200
JG4	1200
JG5	1200
JG6	1200
JG7	1000
JG8	1200

AECOM

PROJECT

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100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

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PROJECT NUMBER

60721079

SHEET TITLE

ROOF FRAMING ENLARGED STORAGE PLAN-1

SHEET NUMBER

00-S-251

00-S-251-ROOF FRAMING ENLARGED STORAGE PLAN-1

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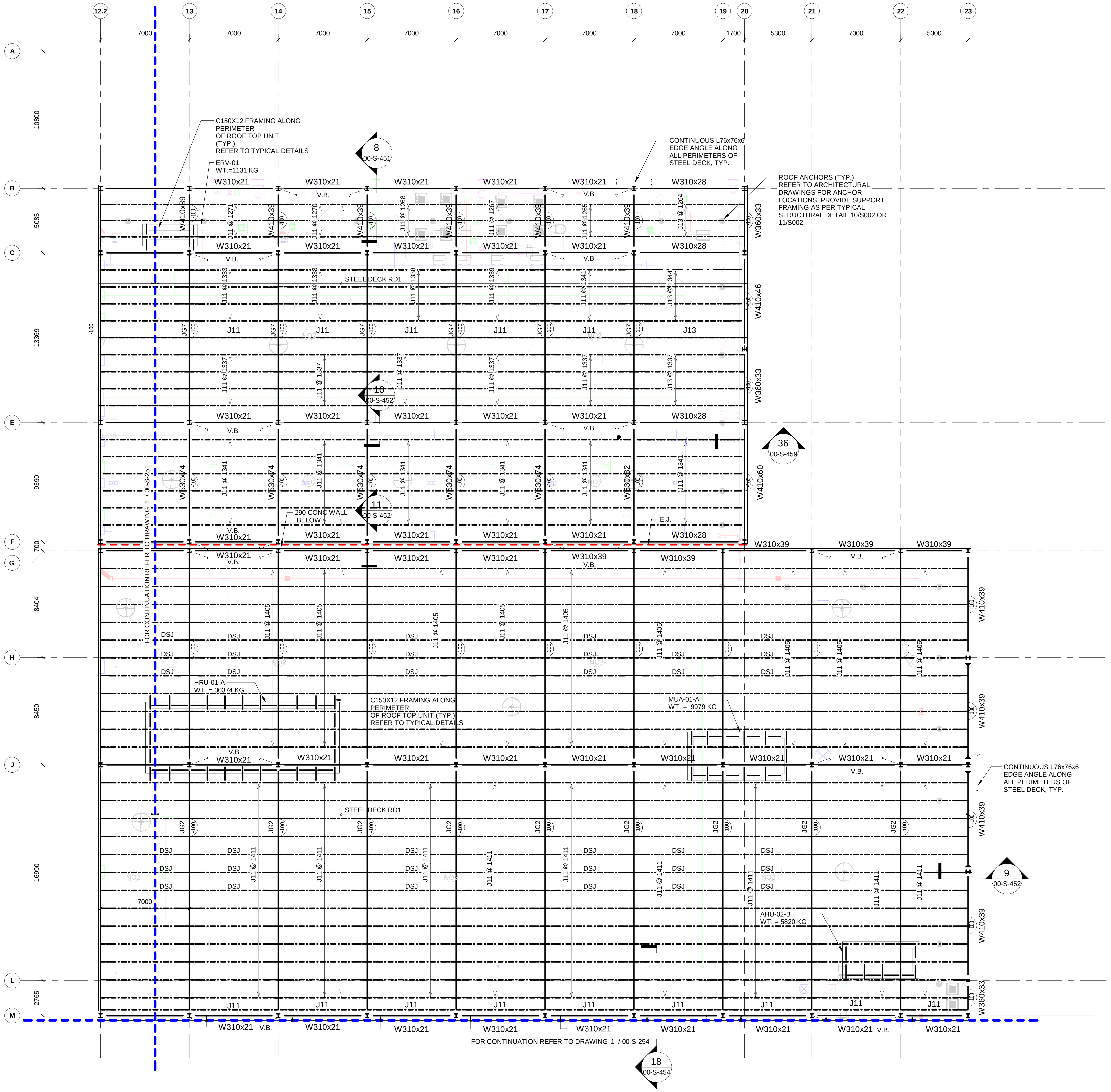

1 | ROOF FRAMING ENLARGED STORAGE PLAN- 2

00-S-252

SCALE: 1 : 150

NOTE:

1. REFER TO S251 FOR ROOF NOTES, LEGENDS AND ROOF DESIGN LOADS.
2. EACH ROOF JOIST SUPPORTING MONORAILS SHALL BE DESIGNED FOR A UNFACTORED CONCENTRATED LOAD OF 15.0kN.
3. CONNECTION OF THE MONORAIL TO THE UNDERSIDE OF JOIST OR TO THE UNDERSIDE OF ROOF BEAMS SHALL BE DESIGNED, FABRICATED AND INSTALLED BY STRUCTURAL STEEL SUBCONTRACTOR. DESIGN CONNECTIONS FOR FATIGUE LIMIT STATES AS PER CSA S16.

JOIST SCHEDULE

TYPE	JOIST DEPTH (mm)
J1	1400
J2	2000
J3	1800
J4	2200
J5	1200
J6	1100
J7	900
J8	800
J9	700
J10	650
J11	500
J12	450
J13	550
J14	250
J15	600
J16	1300
J17	1000
J18	750

JOIST GIRDER SCHEDULE

TYPE	TRUSS DEPTH (MINIMUM)
JG1	1200
JG2	1200
JG3	1200
JG4	1200
JG5	1200
JG6	1200
JG7	1000
JG8	1200

PROJECT

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PROJECT NUMBER

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SHEET TITLE

ROOF FRAMING ENLARGED STORAGE PLAN -2

SHEET NUMBER

00-S-252

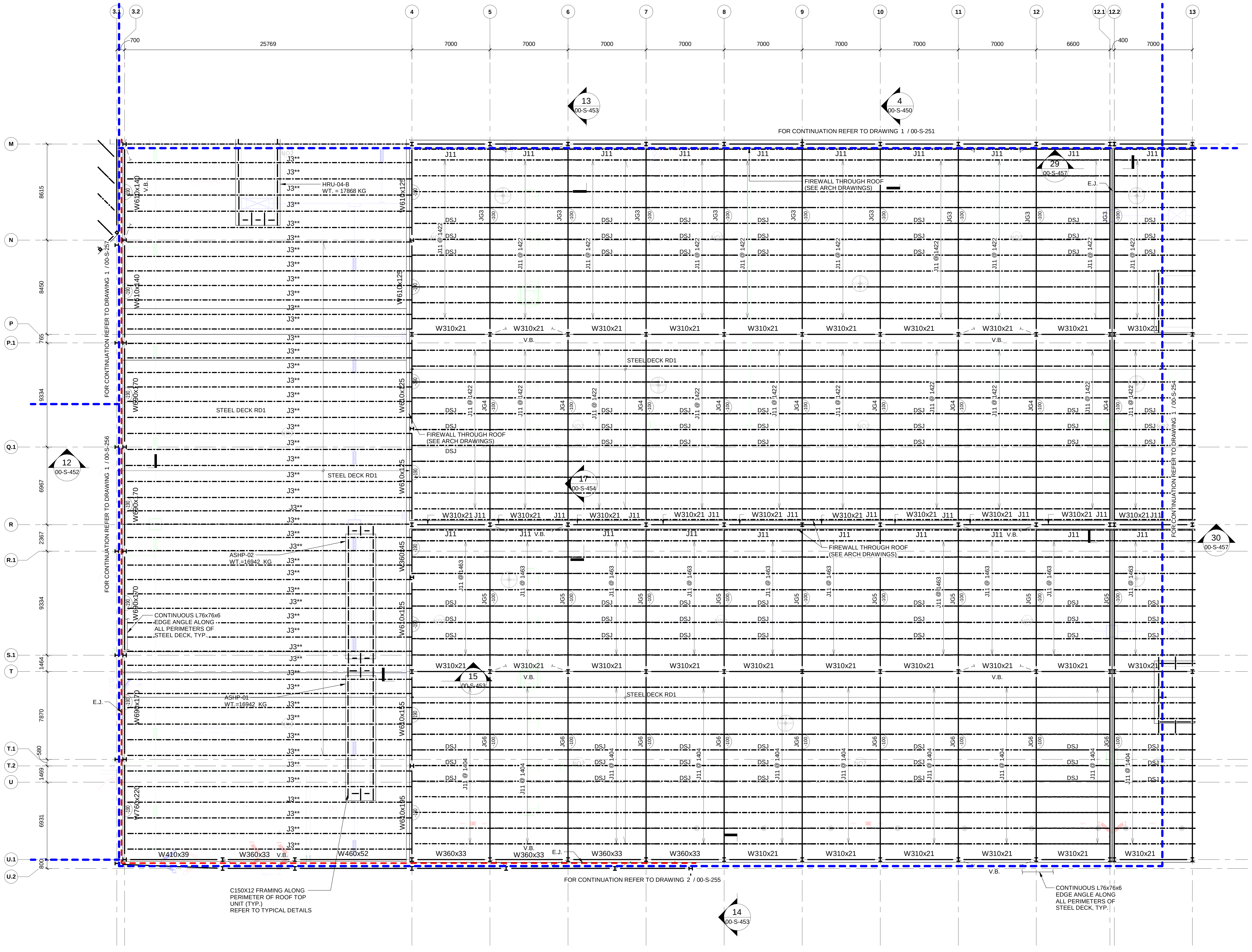
Project Management Initials:
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

00-S-252-ROOF FRAMING ENLARGED STORAGE PLAN -2

Last Plotted: 2/14/2025 10:50:40 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:



1 ROOF FRAMING ENLARGED STORAGE PLAN-3

00-S-253

SCALE: 1 : 150

NOTE:

1. REFER TO S251 FOR ROOF NOTES, LEGENDS AND ROOF DESIGN LOADS.
2. EACH ROOF JOIST SUPPORTING MONORAILS SHALL BE DESIGNED FOR A UNFACTORED CONCENTRATED LOAD OF 15.0kN.
3. CONNECTION OF THE MONORAIL TO THE UNDERSIDE OF JOIST OR TO THE UNDERSIDE OF ROOF BEAMS SHALL BE DESIGNED, FABRICATED AND INSTALLED BY STRUCTURAL STEEL SUBCONTRACTOR. DESIGN CONNECTIONS FOR FATIGUE LIMIT STATES AS PER CSA S16.

JOIST SCHEDULE

TYPE	JOIST DEPTH (mm)
J1	1400
J2	2000
J3	1800
J4	2200
J5	1200
J6	1100
J7	900
J8	800
J9	700
J10	650
J11	500
J12	450
J13	550
J14	250
J15	600
J16	1300
J17	1000
J18	750

JOIST GIRDER SCHEDULE

TYPE	TRUSS DEPTH (MINIMUM)
JG1	1200
JG2	1200
JG3	1200
JG4	1200
JG5	1200
JG6	1200
JG7	1000
JG8	1200

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr.
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

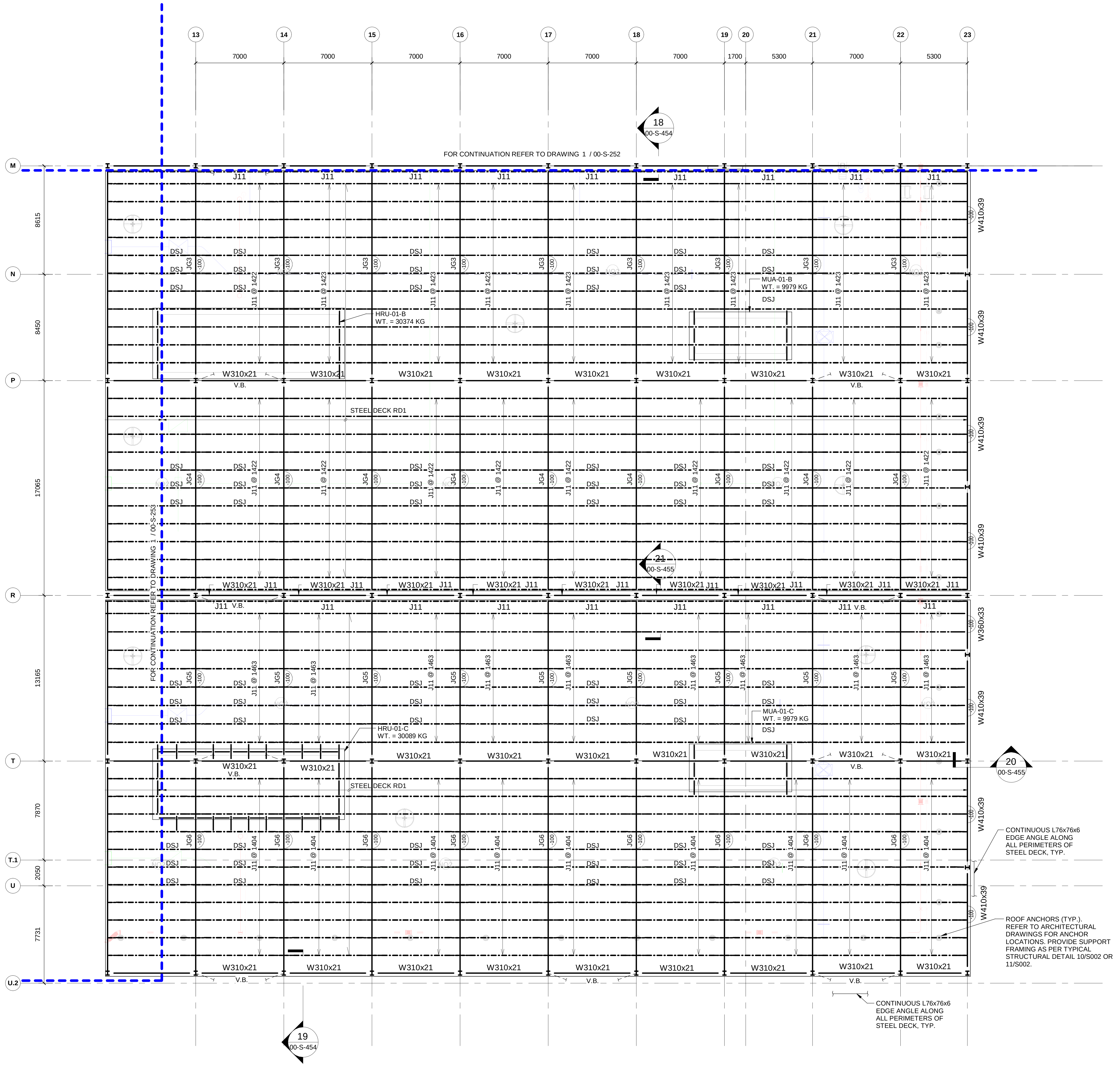
ROOF FRAMING ENLARGED STORAGE PLAN- 3

SHEET NUMBER

00-S-253

00-S-253-ROOF FRAMING ENLARGED STORAGE PLAN- 3
Last Plotted: 2/14/2025 10:50:53 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

Project Management Initials:
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"



1 | ROOF FRAMING ENLARGED STORAGE PLAN- 4

00-S-254 SCALE: 1 : 150

NOTE:

1. REFER TO S251 FOR ROOF NOTES, LEGENDS AND ROOF DESIGN LOADS.
2. EACH ROOF JOIST SUPPORTING MONORAILS SHALL BE DESIGNED FOR A UNFACTORED CONCENTRATED LOAD OF 15.0kN.
3. CONNECTION OF THE MONORAIL TO THE UNDERSIDE OF JOIST OR TO THE UNDERSIDE OF ROOF BEAMS SHALL BE DESIGNED, FABRICATED AND INSTALLED BY STRUCTURAL STEEL SUBCONTRACTOR. DESIGN CONNECTIONS FOR FATIGUE LIMIT STATES AS PER CSA S16.

JOIST SCHEDULE

TYPE	JOIST DEPTH (mm)
J1	1400
J2	2000
J3	1800
J4	2200
J5	1200
J6	1100
J7	900
J8	800
J9	700
J10	650
J11	500
J12	450
J13	550
J14	250
J15	600
J16	1300
J17	1000
J18	750

JOIST GIRDER SCHEDULE

TYPE	TRUSS DEPTH (MINIMUM)
JG1	1200
JG2	1200
JG3	1200
JG4	1200
JG5	1200
JG6	1200
JG7	1000
JG8	1200

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

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C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

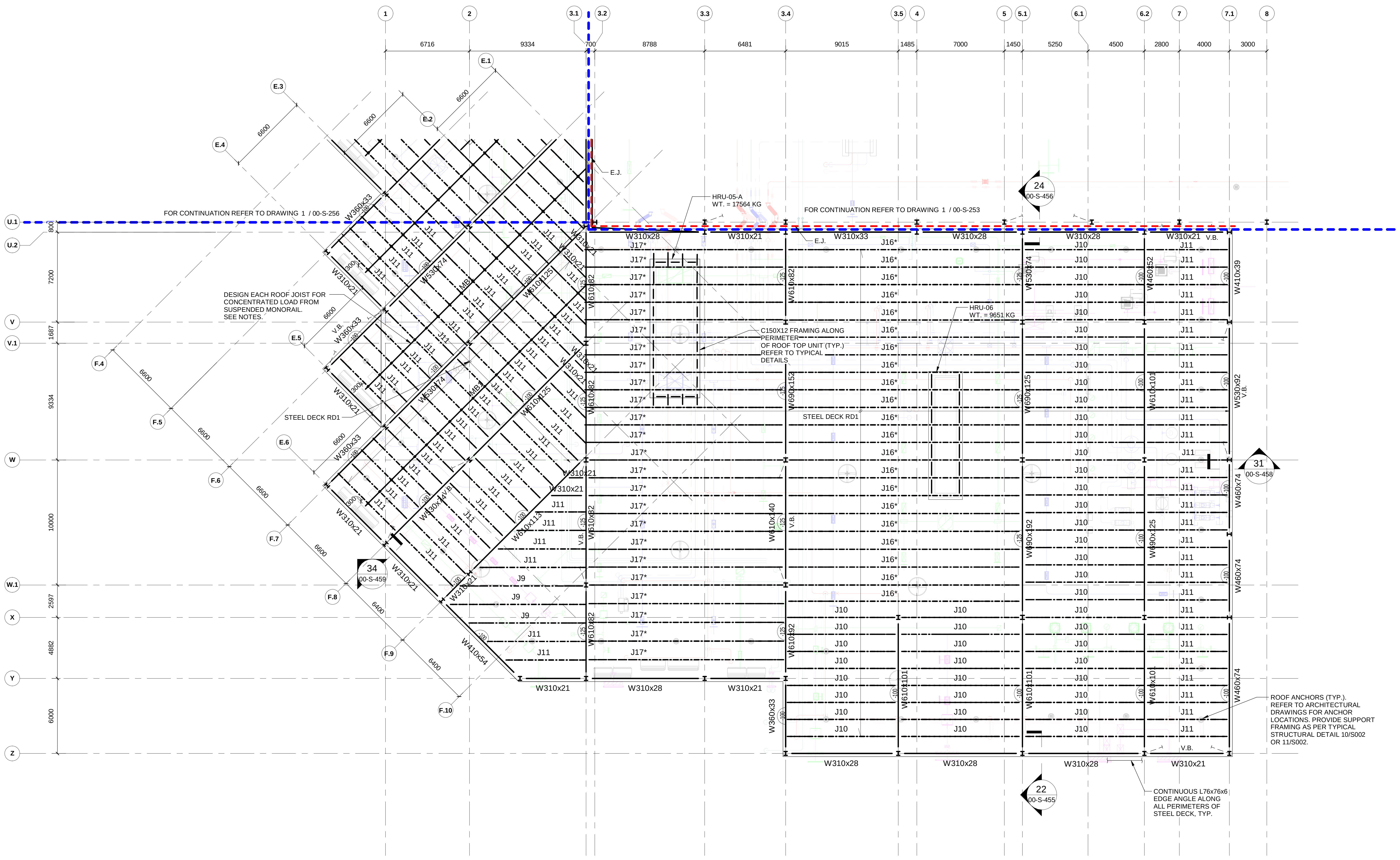
SHEET TITLE

ROOF FRAMING ENLARGED STORAGE PLAN- 4

SHEET NUMBER

00-S-254

00-S-254-ROOF FRAMING ENLARGED STORAGE PLAN- 4
Last Plotted: 2/14/2025 10:50:59 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt


1
2
3.1
3.2
3.3
3.4
3.5
4
5
5.1
6.1
6.2
7
7.1
8
6716
9334
700
8788
6481
9015
1485
7000
1450
5250
4500
2800
4000
3000
E.1
E.2
E.3
E.4
E.5
E.6
F.4
F.5
F.6
F.7
F.8
F.9
F.10
U.1
U.2
V
V.1
W
W.1
X
Y
Z
800
7200
1687
9334
10000
2597
4882
6000
6600
6400
E.J.
HRU-05-A
WT. = 17564 KG
FOR CONTINUATION REFER TO DRAWING 1 / 00-S-256
FOR CONTINUATION REFER TO DRAWING 1 / 00-S-253
24
00-S-456
DESIGN EACH ROOF JOIST FOR CONCENTRATED LOAD FROM SUSPENDED MONORAIL. SEE NOTES.
C150X12 FRAMING ALONG PERIMETER OF ROOF TOP UNIT (TYP.) REFER TO TYPICAL DETAILS.
HRU-06
WT. = 9651 KG
STEEL DECK RD1
31
00-S-458
34
00-S-459
22
00-S-455
ROOF ANCHORS (TYP.). REFER TO ARCHITECTURAL DRAWINGS FOR ANCHOR LOCATIONS. PROVIDE SUPPORT FRAMING AS PER TYPICAL STRUCTURAL DETAIL 10/S002 OR 11/S002.
CONTINUOUS L76x76x6 EDGE ANGLE ALONG ALL PERIMETERS OF STEEL DECK, TYP.
V.B.
MB1
W310x28
W310x21
W310x33
W360x33
W410x54
W530x74
W610x82
W610x125
W610x140
W610x152
W610x92
W690x125
W690x152
W460x74
W460x125
W460x152
W410x101
W410x39
W530x92
W610x101
W360x33
W310x114
J9
J10
J11
J16*
J17*

2 ROOF PLAN-MAINTAINANCE GARAGE FRAMING ENLARGED PLAN -1

00-S-255

SCALE: 1 : 150

NOTE:

1. REFER TO S251 FOR ROOF NOTES, LEGENDS AND ROOF DESIGN LOADS.
2. EACH ROOF JOIST SUPPORTING MONORAILS SHALL BE DESIGNED FOR A UNFACTORED CONCENTRATED LOAD OF 15.0kN.
3. CONNECTION OF THE MONORAIL TO THE UNDERSIDE OF JOIST OR TO THE UNDERSIDE OF ROOF BEAMS SHALL BE DESIGNED, FABRICATED AND INSTALLED BY STRUCTURAL STEEL SUBCONTRACTOR. DESIGN CONNECTIONS FOR FATIGUE LIMIT STATES AS PER CSA S16.

JOIST SCHEDULE

TYPE	JOIST DEPTH (mm)
J1	1400
J2	2000
J3	1800
J4	2200
J5	1200
J6	1100
J7	900
J8	800
J9	700
J10	650
J11	500
J12	450
J13	550
J14	250
J15	600
J16	1300
J17	1000
J18	750

JOIST GIRDER SCHEDULE

TYPE	TRUSS DEPTH (MINIMUM)
JG1	1200
JG2	1200
JG3	1200
JG4	1200
JG5	1200
JG6	1200
JG7	1000
JG8	1200

J# : JOIST SHOE DEPTH 100MM
J#* : JOIST SHOE DEPTH 125MM
J#** : JOIST SHOE DEPTH 190MM

MONORAIL BEAM LEGEND

MB1 - S200x34
MONORAIL BEAM SUSPENDED FROM UNDERSIDE OF OPEN WEB STEEL JOIST. C/W REMOVEABLE TROLLEY STOP AT EACH END OF BEAM.
CAPACITY: 1.0 TONNE.

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
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A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

ROOF PLAN-MAINTAINANCE GARAGE FRAMING ENLARGED PLAN-1

SHEET NUMBER

00-S-255

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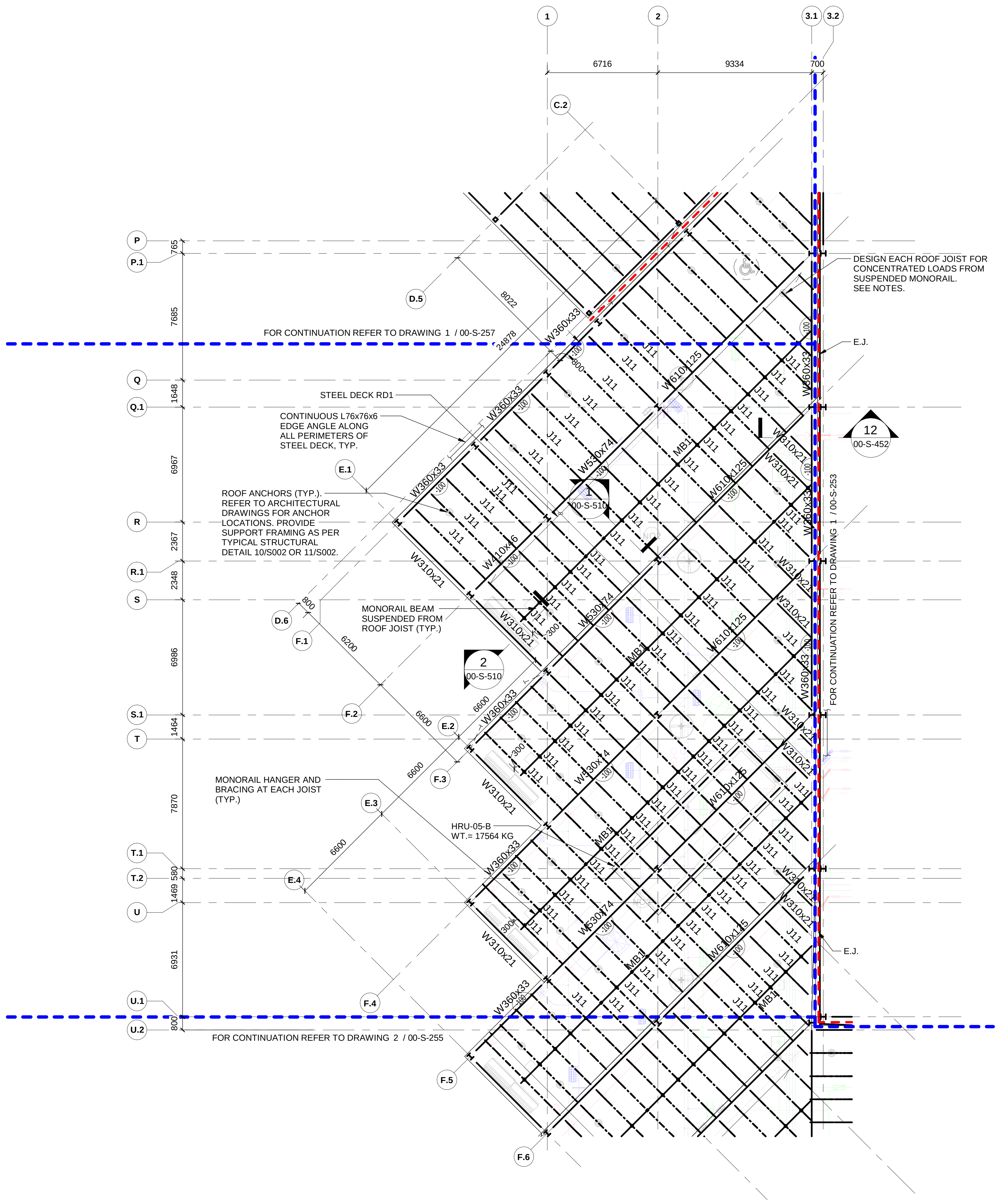
Project Management Initials: Designer: Designer   Checked: Checker   Approved: Approver   A0 33.1"x46.8"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2
3.1
3.2
6716
9334
700
C.2
P
P.1
765
7685
D.5
8022
24878
FOR CONTINUATION REFER TO DRAWING 1 / 00-S-257
Q
Q.1
1648
STEEL DECK RD1
CONTINUOUS L76x76x6 EDGE ANGLE ALONG ALL PERIMETERS OF STEEL DECK, TYP.
E.1
6967
ROOF ANCHORS (TYP.). REFER TO ARCHITECTURAL DRAWINGS FOR ANCHOR LOCATIONS. PROVIDE SUPPORT FRAMING AS PER TYPICAL STRUCTURAL DETAIL 10/S002 OR 11/S002.
R
R.1
2367
2348
S
800
D.6
F.1
6200
MONORAIL BEAM SUSPENDED FROM ROOF JOIST (TYP.)
2
00-S-510
6986
S.1
F.2
1464
T
6600
E.2
F.3
MONORAIL HANGER AND BRACING AT EACH JOIST (TYP.)
E.3
7870
HRU-05-B
WT.= 17564 KG
T.1
T.2
580
1469
E.4
U
6931
U.1
F.4
800
U.2
FOR CONTINUATION REFER TO DRAWING 2 / 00-S-255
F.5
F.6
W360x33
W310x21
W410x46
W610x125
W530x74
J11
MB1
-100
300
DESIGN EACH ROOF JOIST FOR CONCENTRATED LOADS FROM SUSPENDED MONORAIL. SEE NOTES.
E.J.
12
00-S-452
FOR CONTINUATION REFER TO DRAWING 1 / 00-S-253
E.J.
TN
N

1 ROOF PLAN-MAINTAINANCE GARAGE FRAMING ENLARGED PLAN- 2

00-S-256

SCALE: 1 : 150

NOTE:

1. REFER TO S251 FOR ROOF NOTES, LEGENDS AND ROOF DESIGN LOADS.
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JOIST SCHEDULE

TYPE	JOIST DEPTH (mm)
J1	1400
J2	2000
J3	1800
J4	2200
J5	1200
J6	1100
J7	900
J8	800
J9	700
J10	650
J11	500
J12	450
J13	550
J14	250
J15	600
J16	1300
J17	1000
J18	750

JOIST GIRDER SCHEDULE

TYPE	TRUSS DEPTH (MINIMUM)
JG1	1200
JG2	1200
JG3	1200
JG4	1200
JG5	1200
JG6	1200
JG7	1000
JG8	1200

J# : JOIST SHOE DEPTH 100MM
J#* : JOIST SHOE DEPTH 125MM
J#** : JOIST SHOE DEPTH 190MM

MONORAIL BEAM LEGEND

MB1 - S200x34
MONORAIL BEAM SUSPENDED FROM
UNDERSIDE OF OPEN WEB STEEL JOIST.
C/W REMOVEABLE TROLLEY STOP AT
EACH END OF BEAM.
CAPACITY: 1.0 TONNE.

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974   1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW

PROJECT NUMBER

60721079

SHEET TITLE

ROOF PLAN-MAINTAINANCE GARAGE FRAMING ENLARGED PLAN -2

SHEET NUMBER

00-S-256

00-S-256-ROOF PLAN-MAINTAINANCE GARAGE FRAMING ENLARGED PLAN -2
Last Plotted: 2/14/2025 10:51:21 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

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Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:

NOTE:

1. REFER TO S251 FOR ROOF NOTES, LEGENDS AND ROOF DESIGN LOADS.
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3. CONNECTION OF THE MONORAIL TO THE UNDERSIDE OF JOIST OR TO THE UNDERSIDE OF ROOF BEAMS SHALL BE DESIGNED, FABRICATED AND INSTALLED BY STRUCTURAL STEEL SUBCONTRACTOR. DESIGN CONNECTIONS FOR FATIGUE LIMIT STATES AS PER CSA S16.

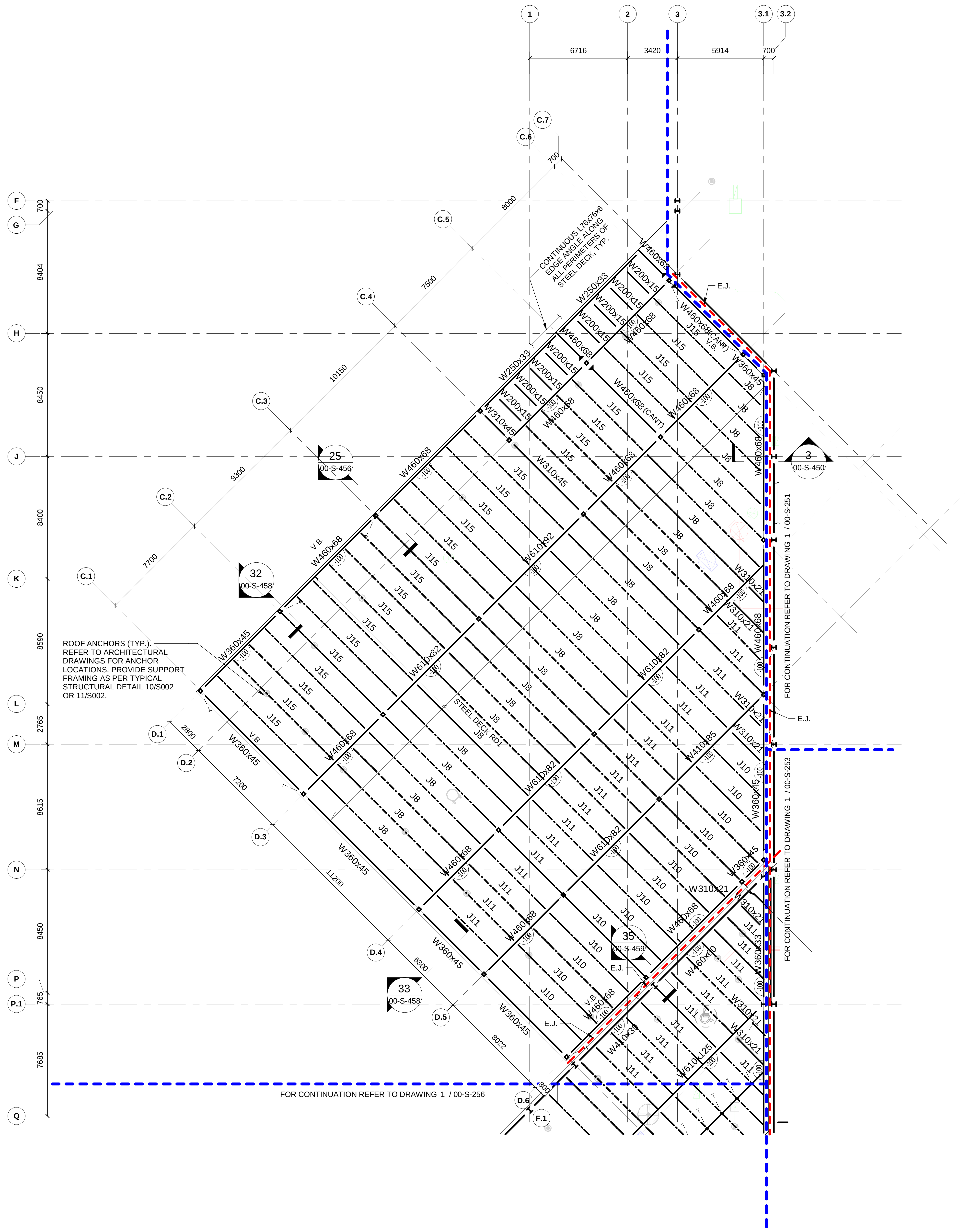
JOIST SCHEDULE

TYPE	JOIST DEPTH (mm)
J1	1400
J2	2000
J3	1800
J4	2200
J5	1200
J6	1100
J7	900
J8	800
J9	700
J10	650
J11	500
J12	450
J13	550
J14	250
J15	600
J16	1300
J17	1000
J18	750

JOIST GIRDER SCHEDULE

TYPE	TRUSS DEPTH (MINIMUM)
JG1	1200
JG2	1200
JG3	1200
JG4	1200
JG5	1200
JG6	1200
JG7	1000
JG8	1200

J# : JOIST SHOE DEPTH 100MM
J#* : JOIST SHOE DEPTH 125MM
J#** : JOIST SHOE DEPTH 190MM



CONTINUOUS L76x76x6 EDGE ANGLE ALONG ALL PERIMETER OF STEEL DECK, TYP.

ROOF ANCHORS (TYP.). REFER TO ARCHITECTURAL DRAWINGS FOR ANCHOR LOCATIONS. PROVIDE SUPPORT FRAMING AS PER TYPICAL STRUCTURAL DETAIL 10/S002 OR 11/S002.

FOR CONTINUATION REFER TO DRAWING 1 / 00-S-251

FOR CONTINUATION REFER TO DRAWING 1 / 00-S-253

FOR CONTINUATION REFER TO DRAWING 1 / 00-S-256

1 | ROOF PLAN-OFFICE ENLARGED PLAN- 1
00-S-257
SCALE: 1 : 150

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
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Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
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REGISTRATION

ISSUE/REVISION

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B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW

PROJECT NUMBER

60721079

SHEET TITLE

ROOF/SECOND PLAN-OFFICE ENLARGED PLAN- 1

SHEET NUMBER

00-S-257

00-S-257-ROOF/SECOND PLAN-OFFICE ENLARGED PLAN- 1
Last Plotted: 2/14/2025 11:10:50 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

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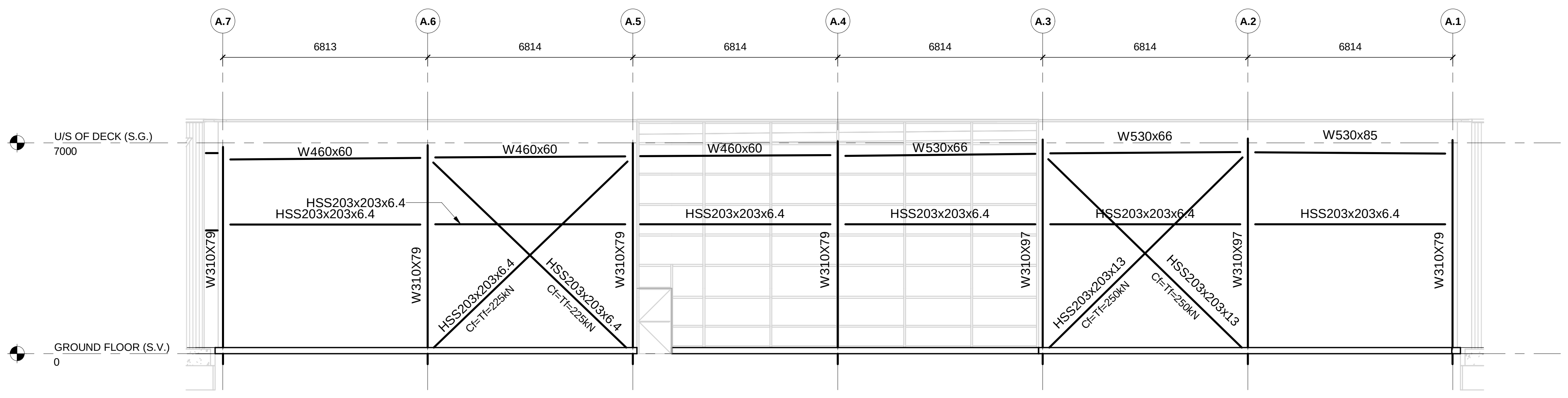
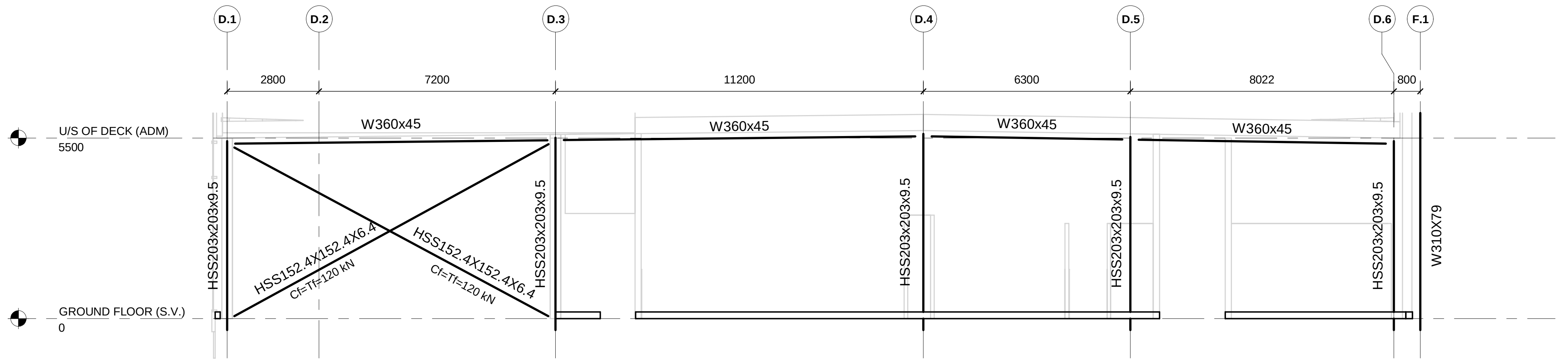
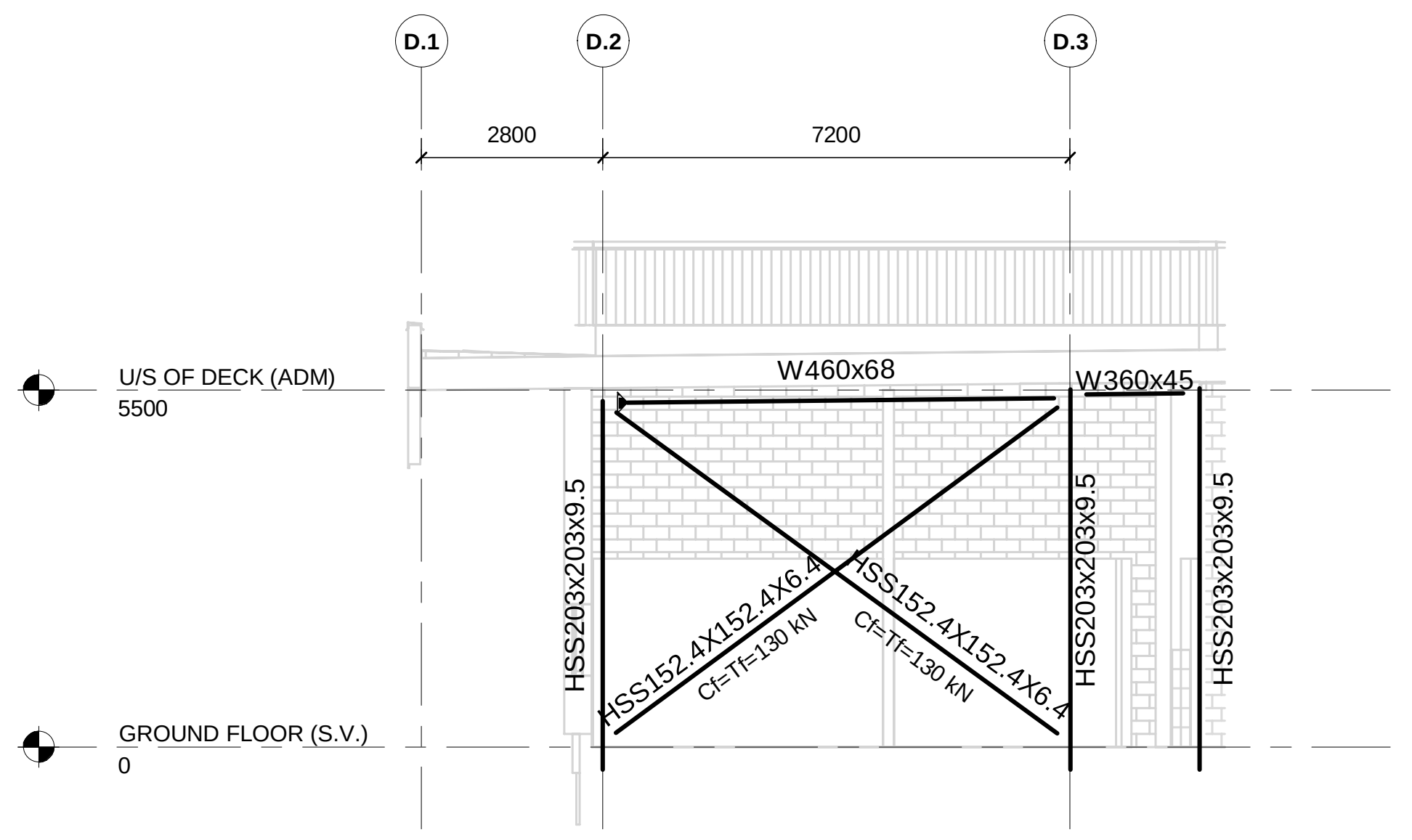
Project Management Initials: Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"



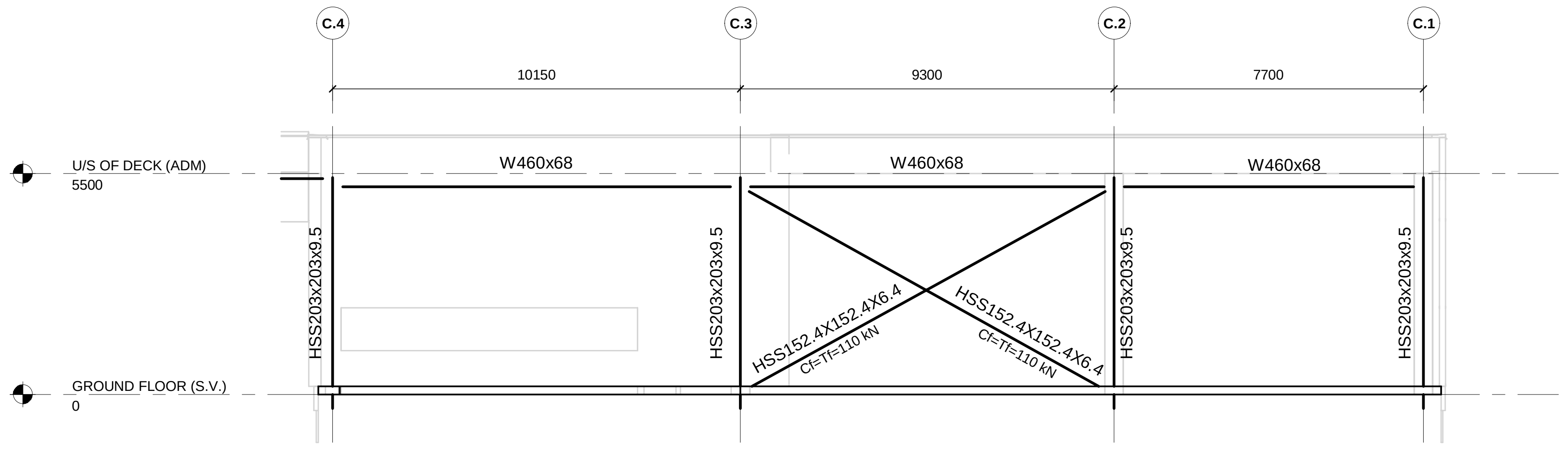
1 FRAMING ELEVATON AT GRID 'B.1'
00-S-400
SCALE: 1 : 100



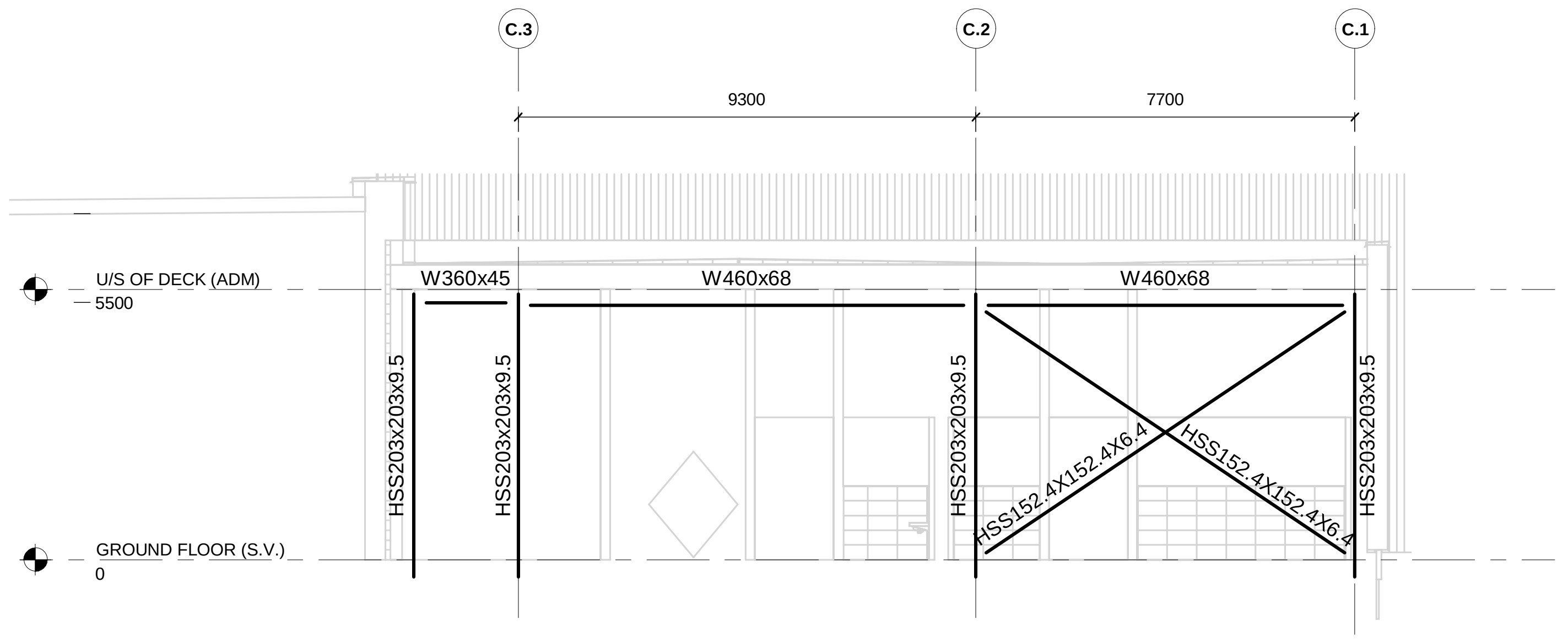
2 FRAMING ELEVATON AT GRID 'C.1'
00-S-400
SCALE: 1 : 100



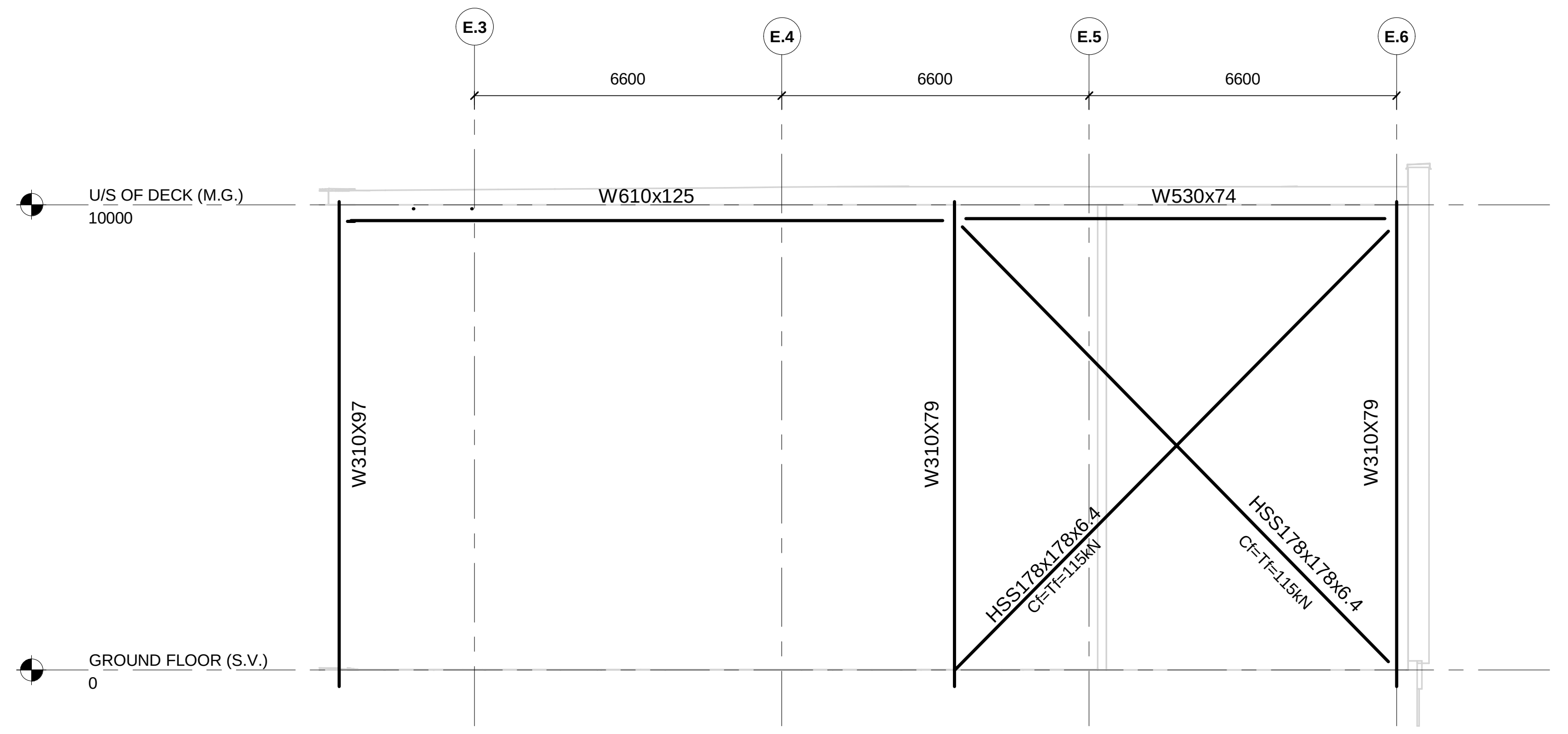
3 FRAMING ELEVATON AT GRID 'C.6'
00-S-400
SCALE: 1 : 100



4 FRAMING ELEVATON AT GRID 'D.1'
00-S-400
SCALE: 1 : 100



5 FRAMING ELEVATON AT GRID 'D.6'
00-S-400
SCALE: 1 : 100



6 FRAMING ELEVATON AT GRID 'F.8'
00-S-400
SCALE: 1 : 100

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

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I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FRAMING ELEVATIONS 1

SHEET NUMBER

00-S-400

00-S-400-FRAMING ELEVATIONS 1

Last Plotted: 2/14/2025 10:51:34 PM
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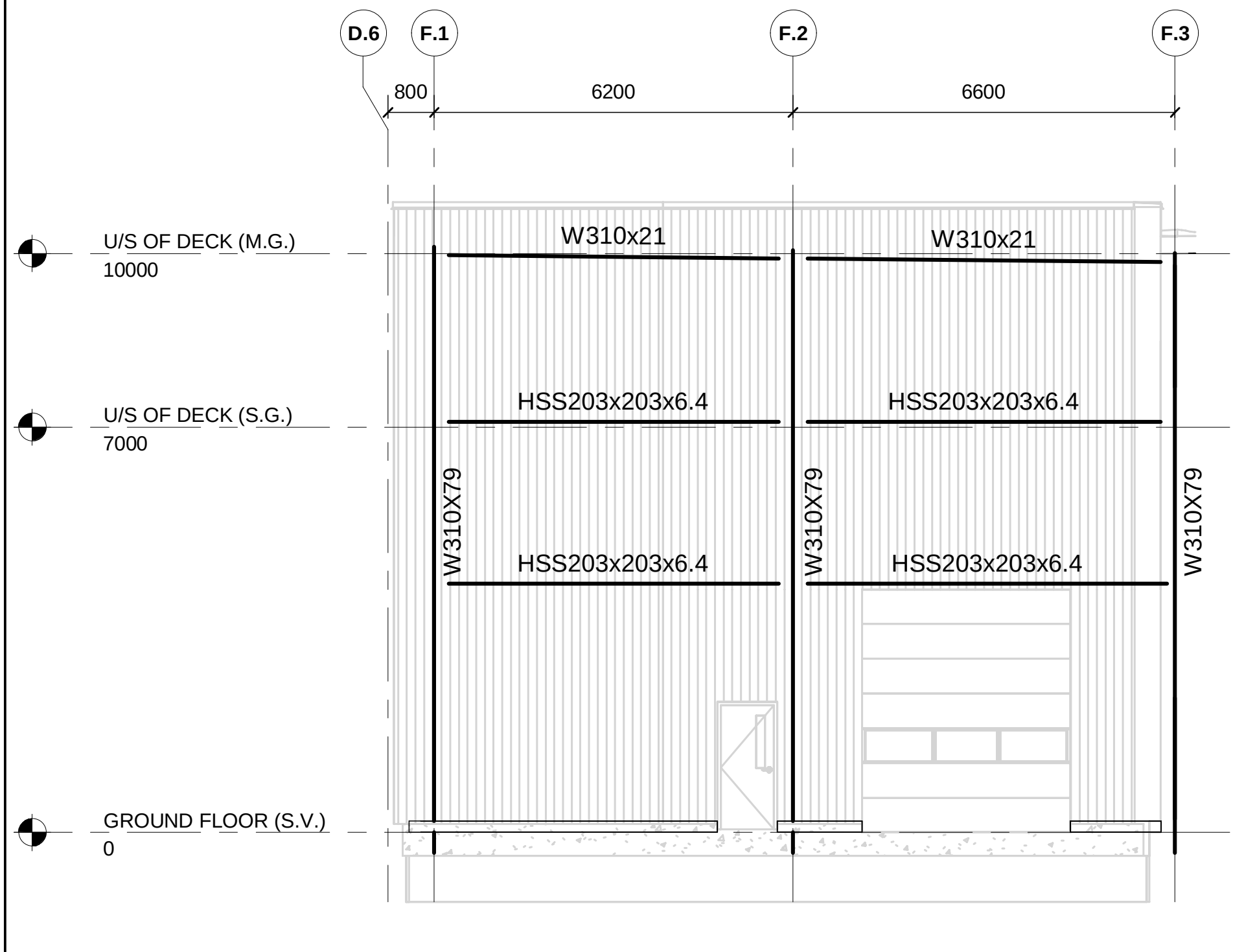
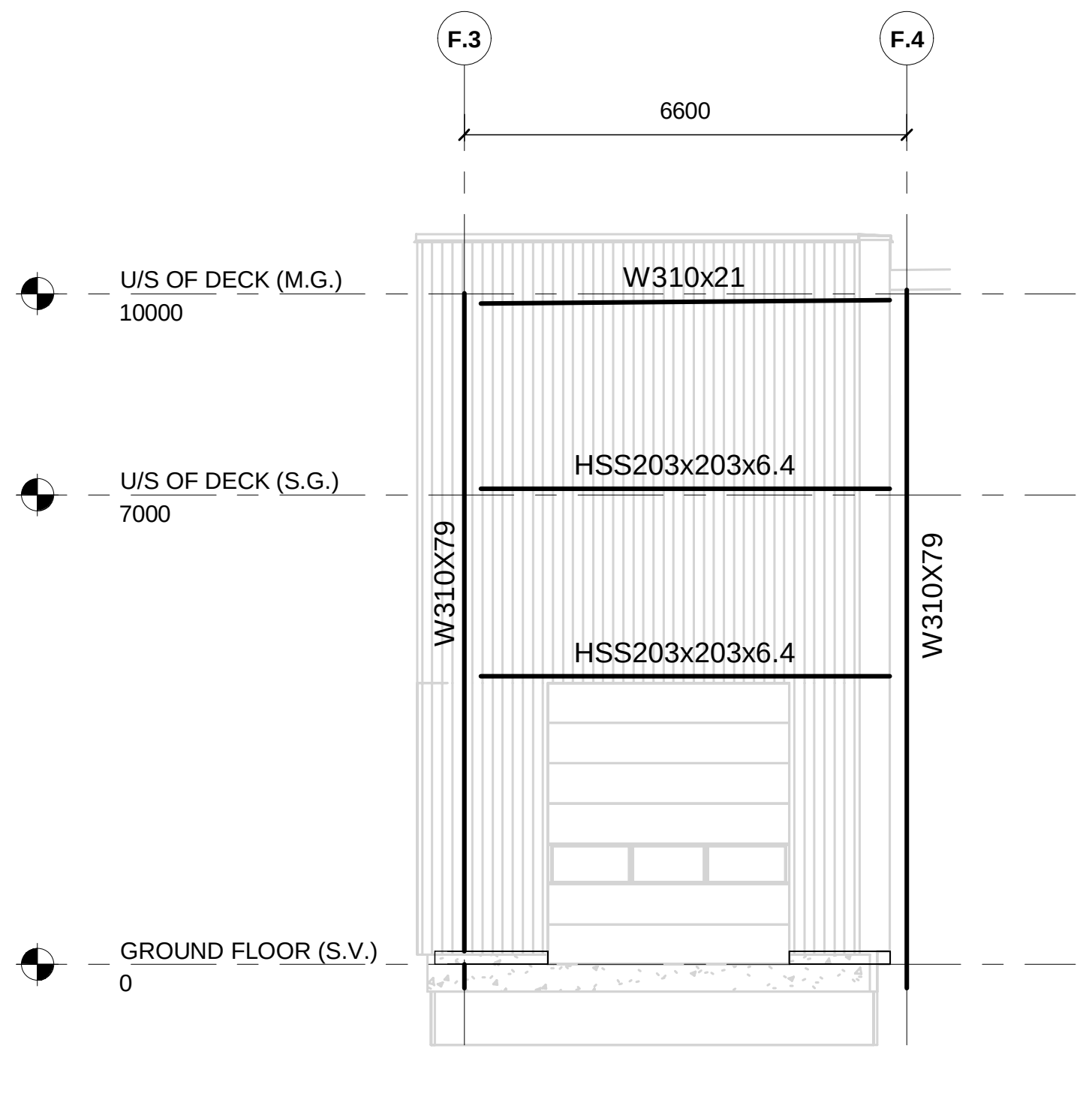
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

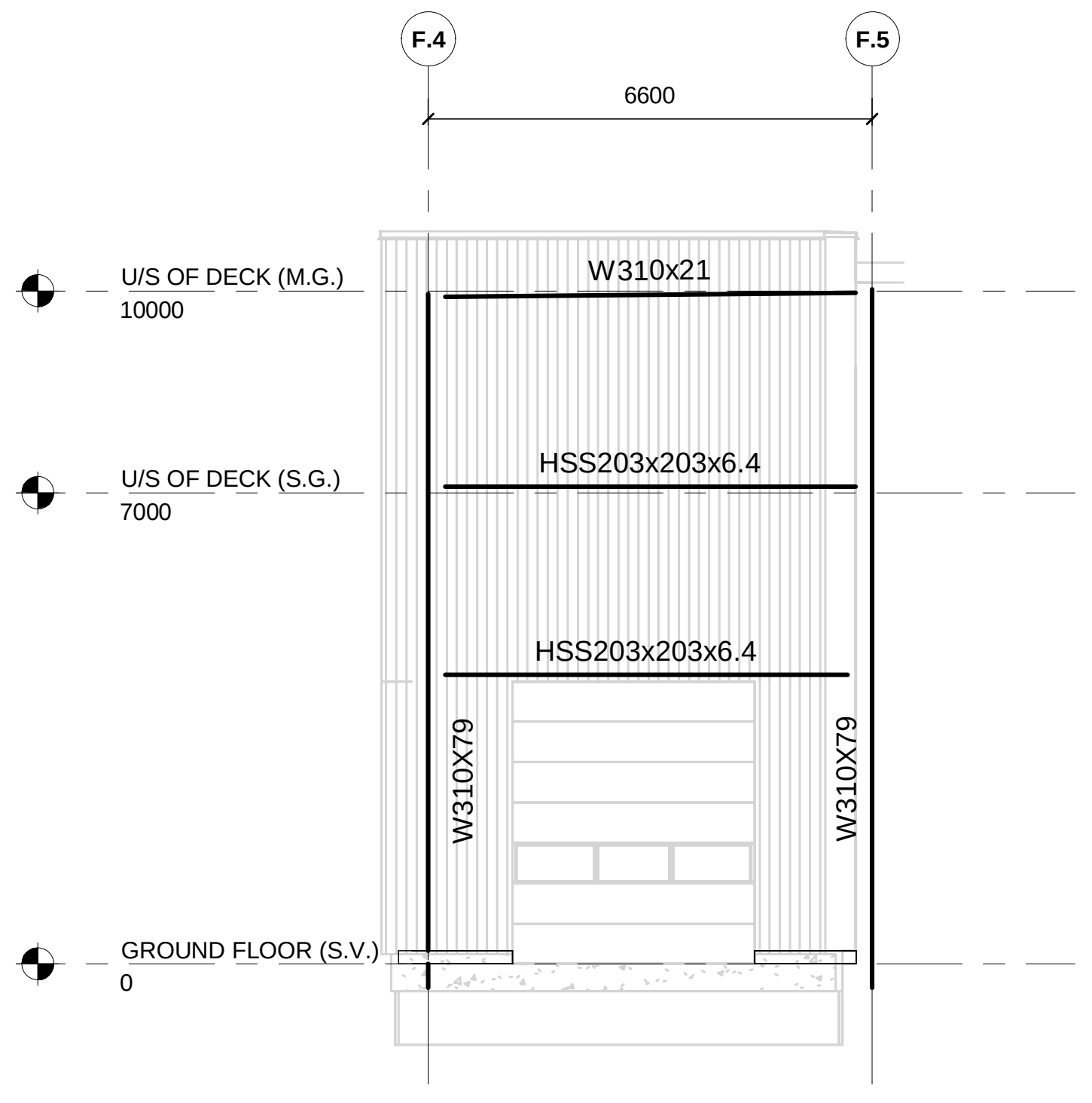
Project Management Initials:



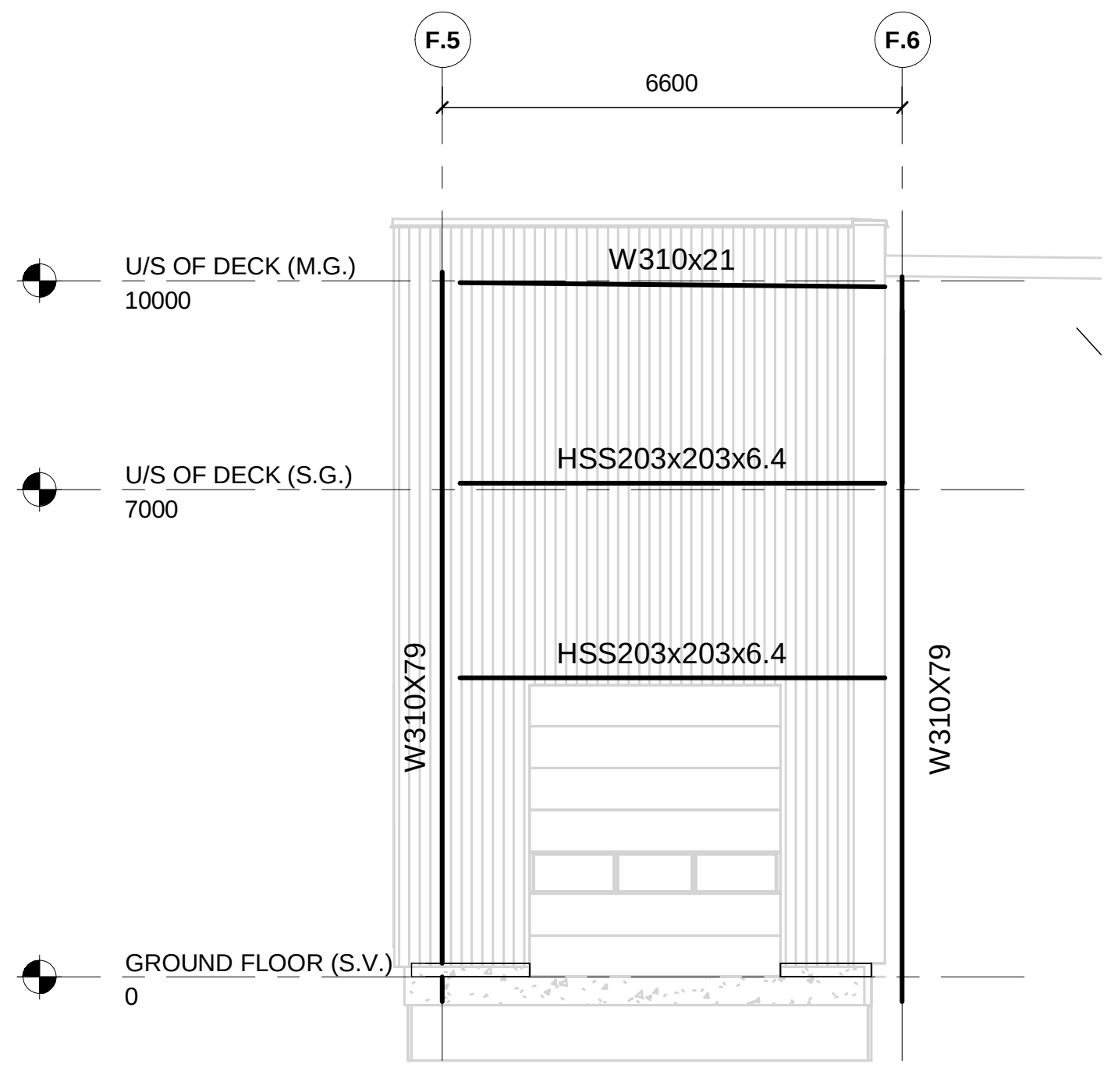
1 FRAMING ELEVATION AT GRID 'E.1'
00-S-401 SCALE: 1 : 100



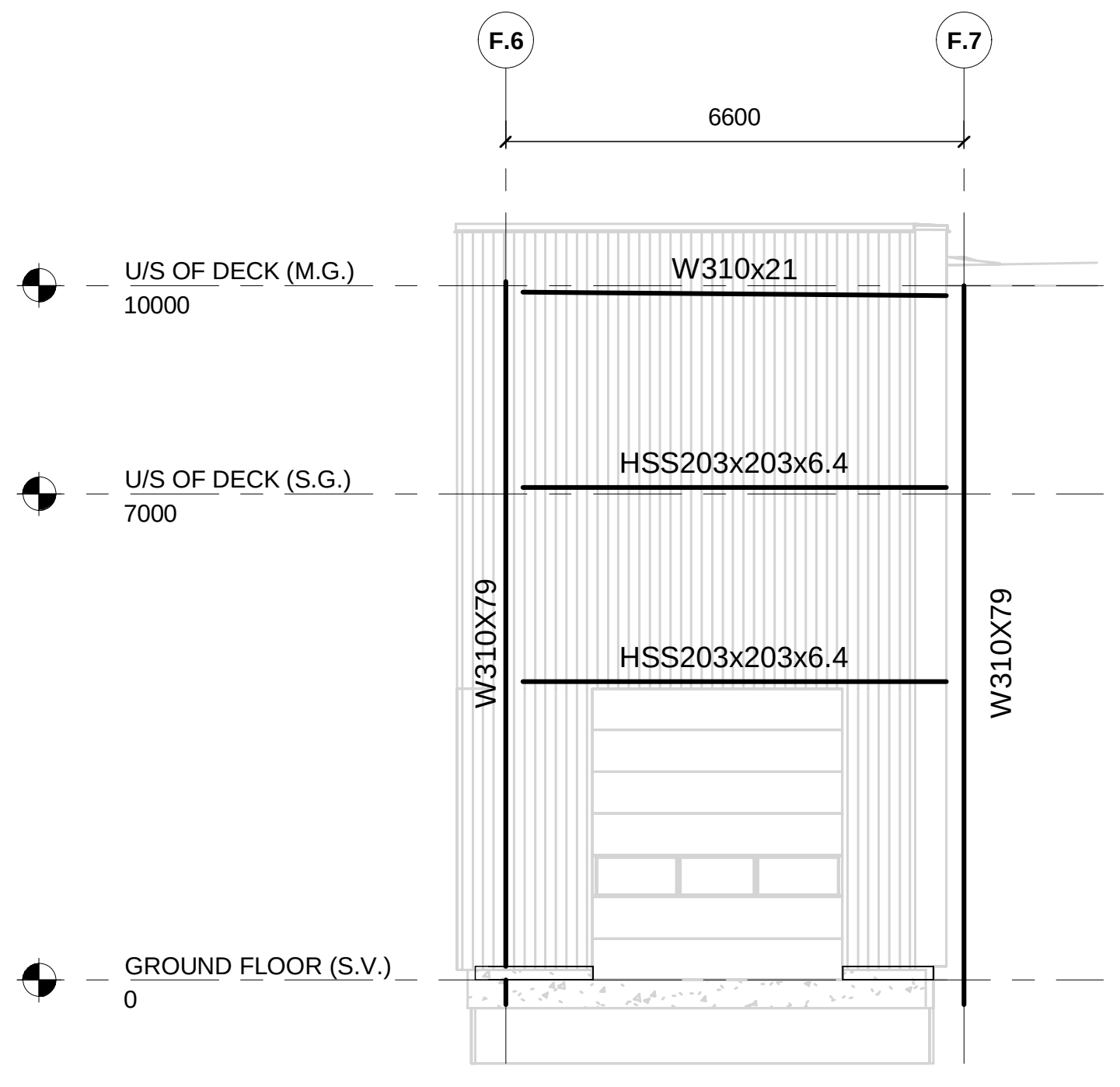
2 FRAMING ELEVATION AT GRID 'E.2'
00-S-401 SCALE: 1 : 100



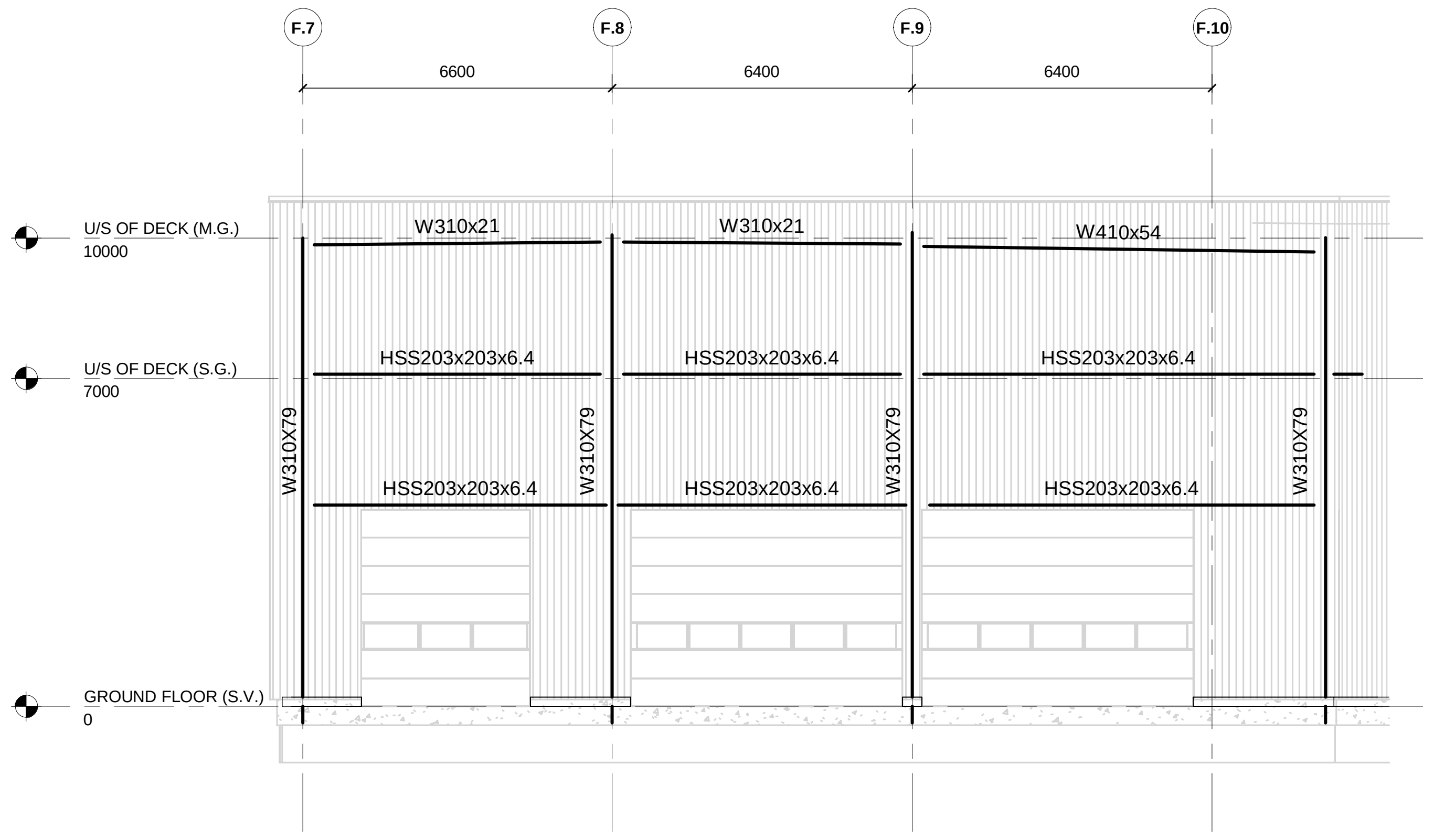
3 FRAMING ELEVATION AT GRID 'E.3'
00-S-401 SCALE: 1 : 100



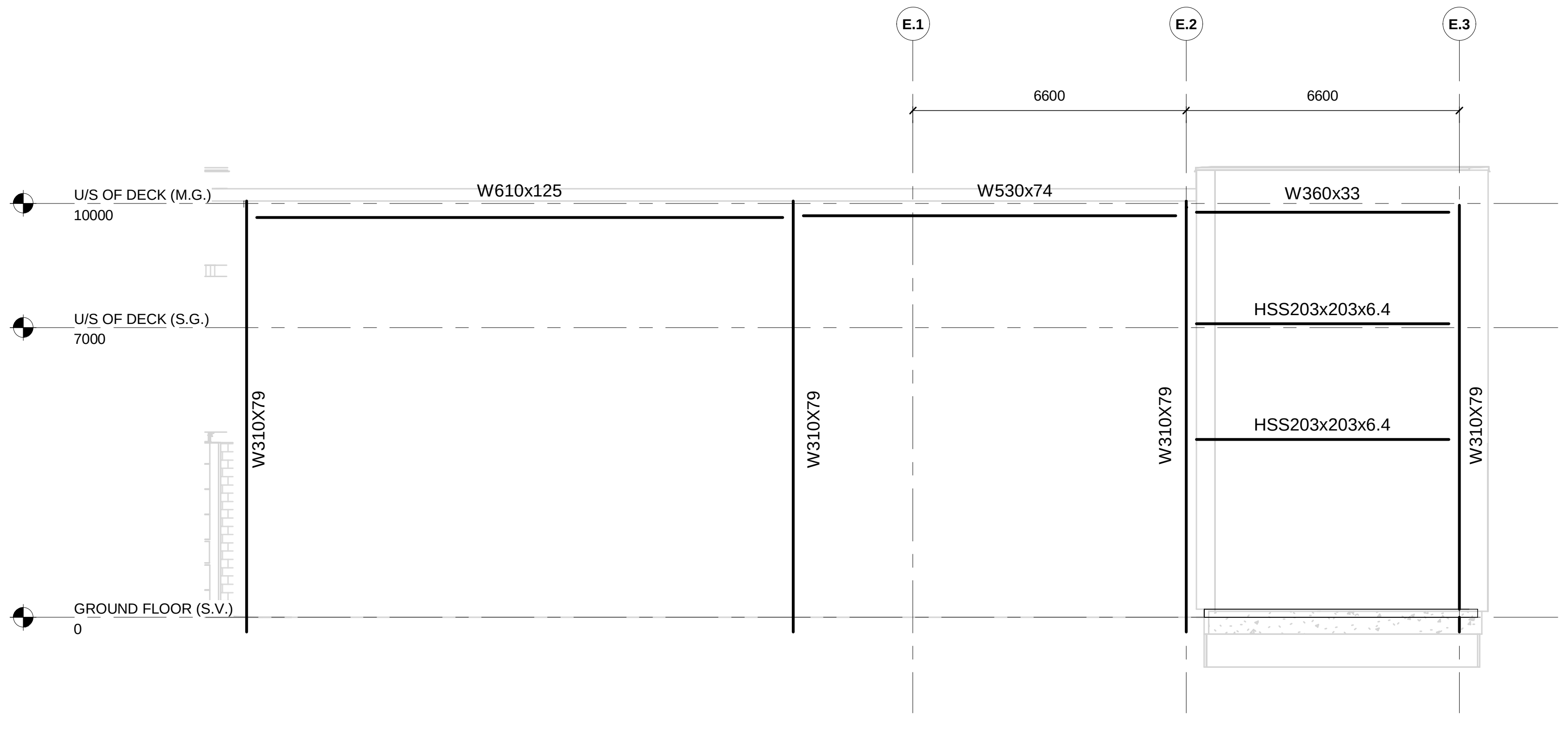
4 FRAMING ELEVATION AT GRID 'E.4'
00-S-401 SCALE: 1 : 100



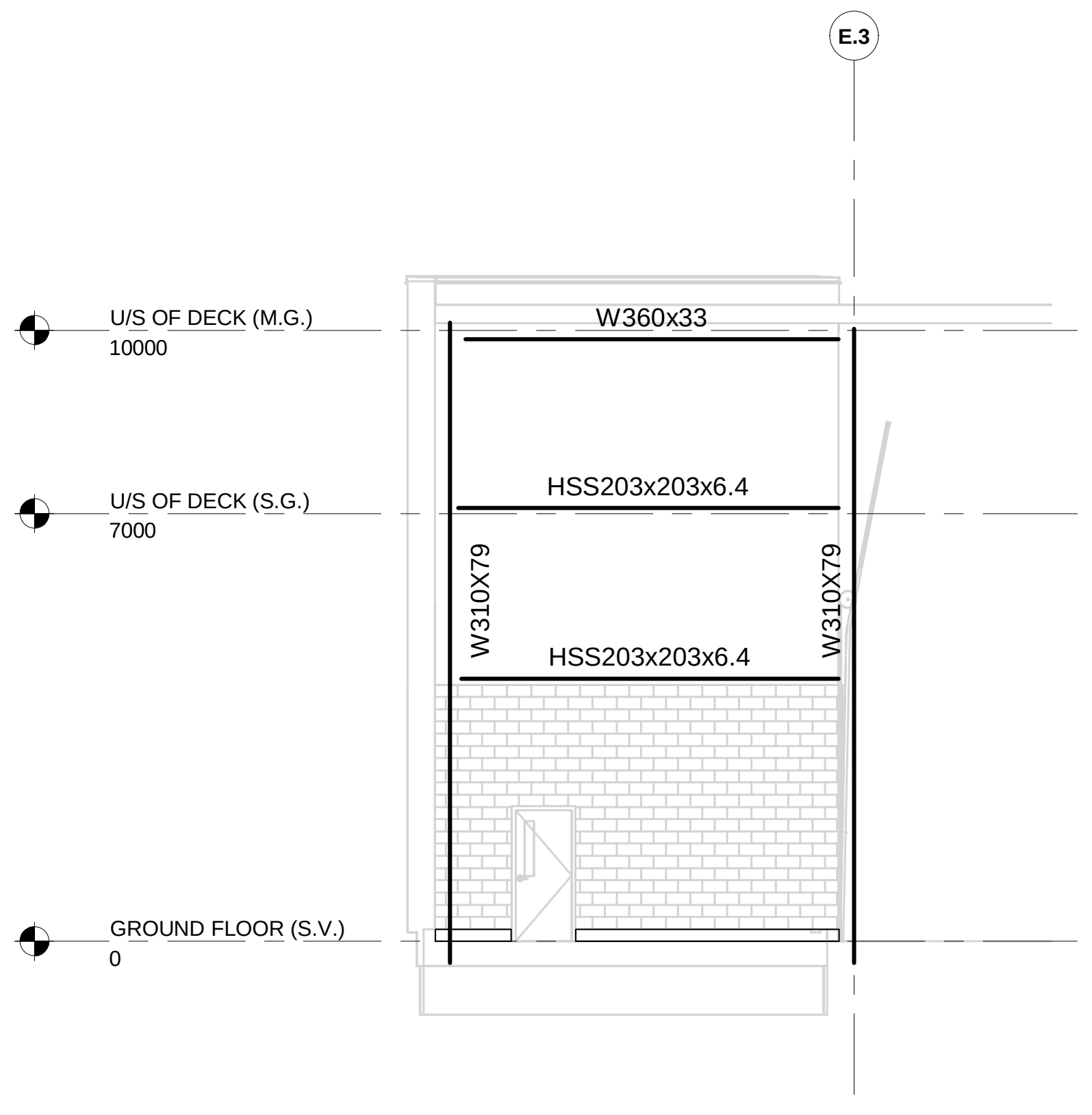
5 FRAMING ELEVATION AT GRID 'E.5'
00-S-401 SCALE: 1 : 100



6 FRAMING ELEVATION AT GRID 'E.6'
00-S-401 SCALE: 1 : 100



7 FRAMING ELEVATON AT GRID 'F.4'
00-S-401 SCALE: 1 : 100



8 FRAMING ELEVATION AT GRID 'F.5'
00-S-401 SCALE: 1 : 100

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
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1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
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Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FRAMING ELEVATIONS 2

SHEET NUMBER

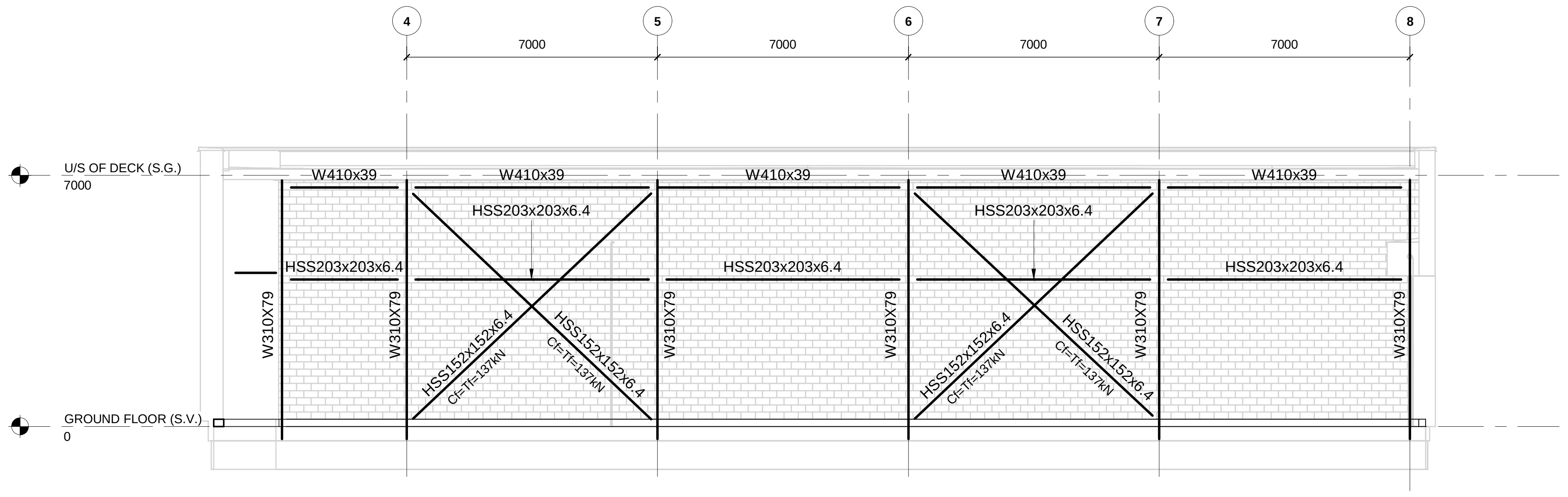
00-S-401

00-S-401-FRAMING ELEVATIONS 2
Last Plotted: 2/14/2025 10:51:42 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

Printed on ___% Post-Consumer
Recycled Content Paper

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

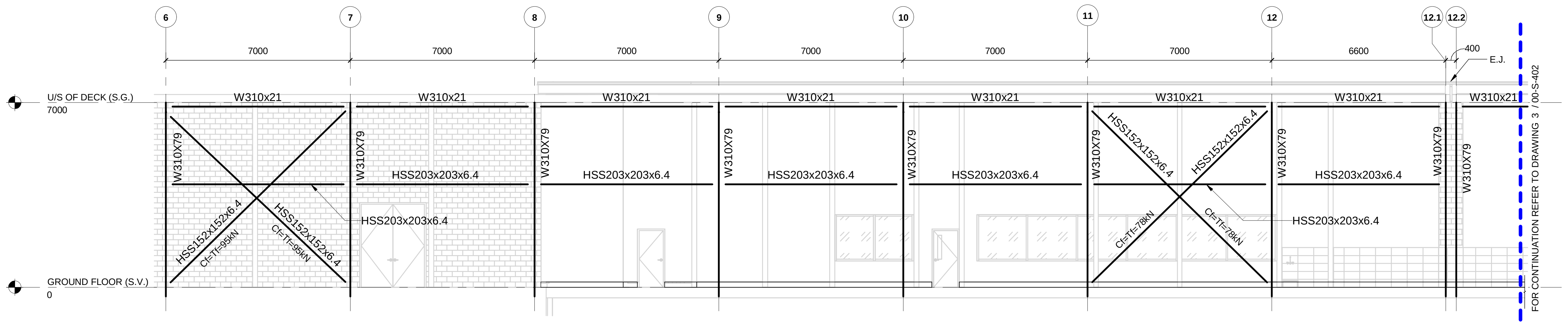
Project Management Initials:



1 | FRAMING ELEVATION AT GRID 'A'

00-S-402

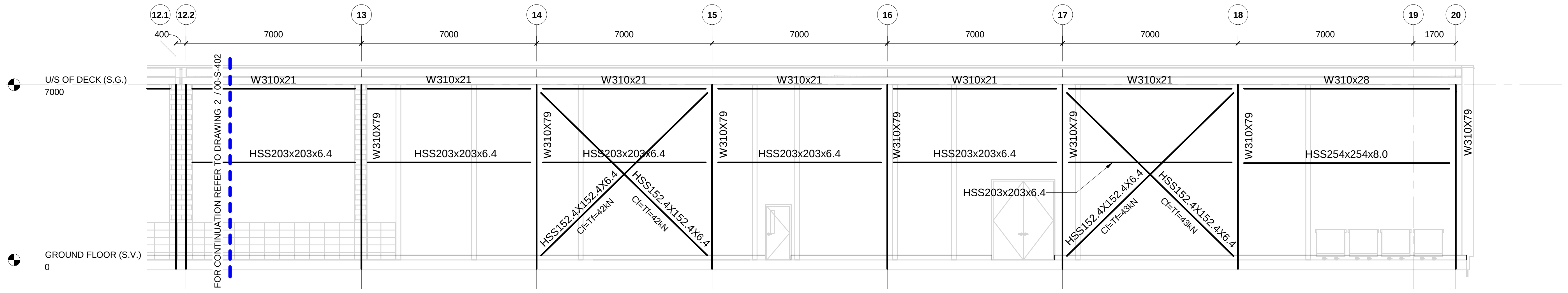
SCALE: 1 : 100



2 | FRAMING ELEVATION AT GRID 'B'

00-S-402

SCALE: 1 : 100



3 | FRAMING ELEVATION AT GRID 'B' CONT.

00-S-402

SCALE: 1 : 100

Last Plotted: 2/14/2025 10:51:47 PM
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WINNIPEG NORTH GARAGE REPLACEMENT
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CLIENT

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Winnipeg Transit
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CONSULTANT

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REGISTRATION

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A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

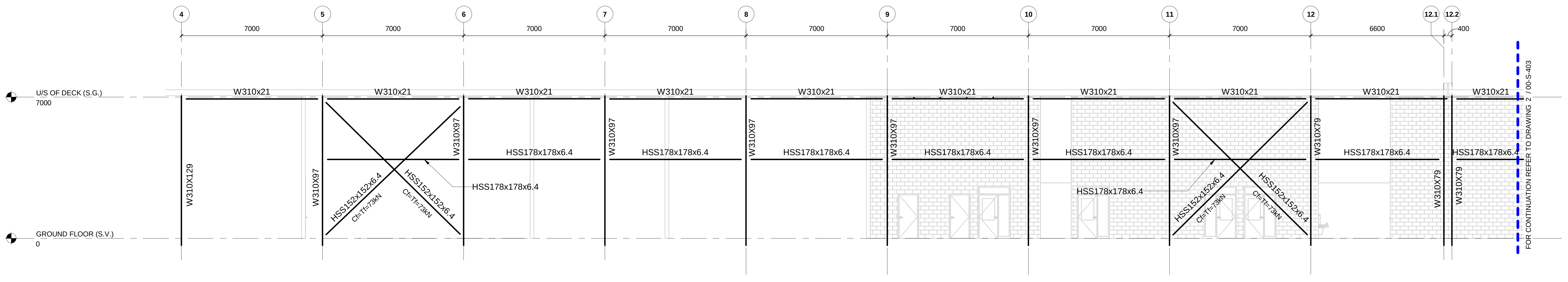
FRAMING ELEVATIONS 3

SHEET NUMBER

00-S-402

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

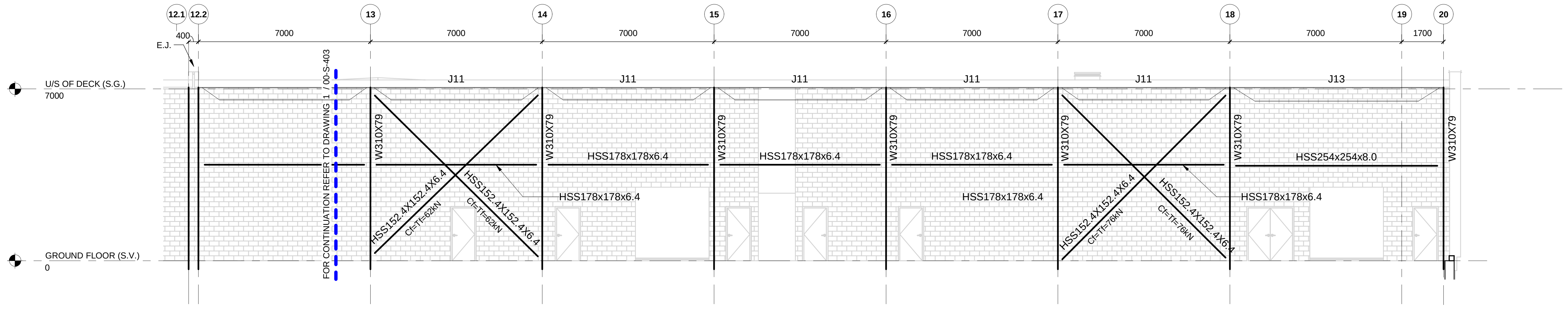
Project Management Initials:



1 FRAMING ELEVATION AT GRID 'C'

00-S-403

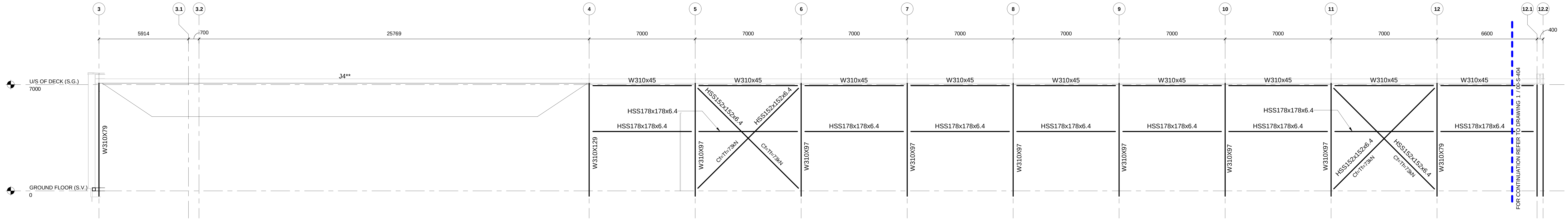
SCALE: 1 : 100



2 FRAMING ELEVATION AT GRID 'C' CONT.

00-S-403

SCALE: 1 : 100



3 FRAMING ELEVATION AT GRID 'E'

00-S-403

SCALE: 1 : 100

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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

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CONSULTANT

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REGISTRATION

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I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FRAMING ELEVATIONS 4

SHEET NUMBER

00-S-403

00-S-403-FRAMING ELEVATIONS 4

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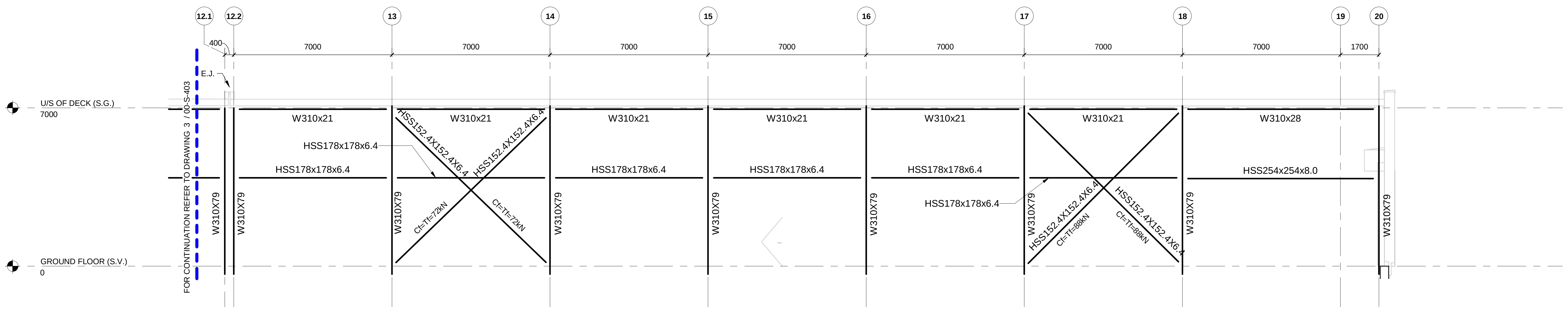
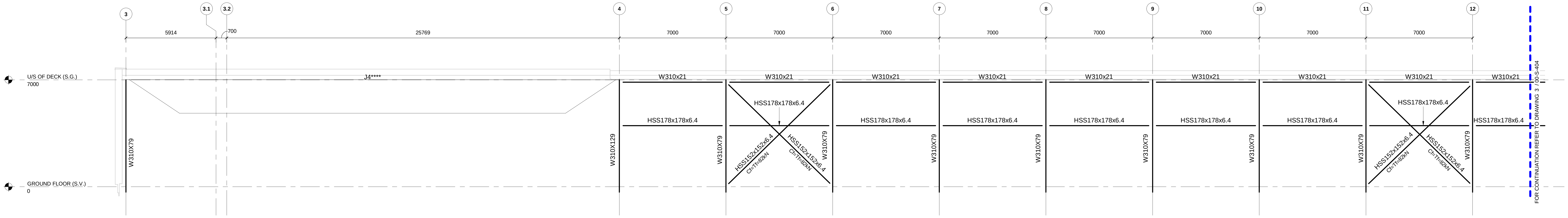
Project Management Initials:



1 FRAMING ELEVATION AT GRID 'E' CONT.
00-S-404
SCALE: 1 : 100



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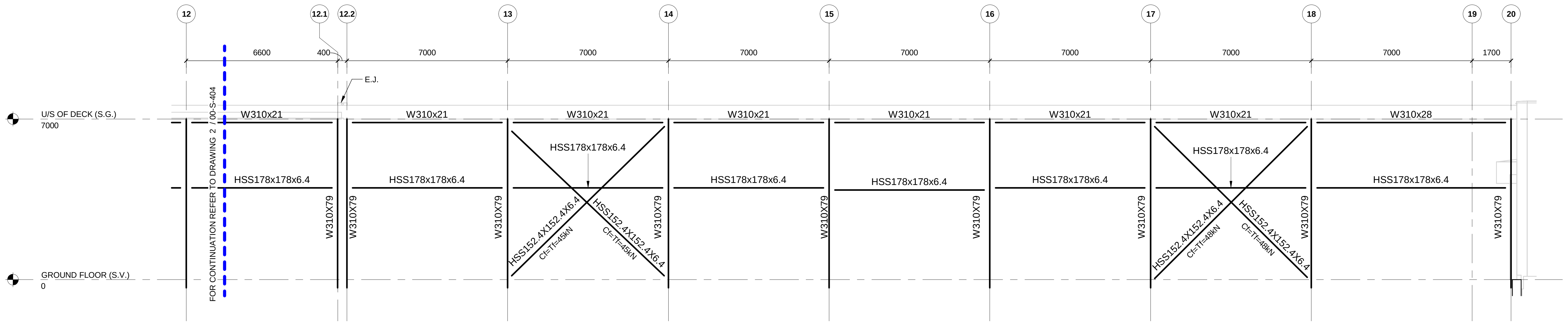
00-S-404
SCALE: 1 : 100



3 FRAMING ELEVATION AT GRID 'F' CONT.
00-S-404
SCALE: 1 : 100

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

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CONSULTANT

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REGISTRATION

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PROJECT NUMBER

60721079

SHEET TITLE

FRAMING ELEVATIONS 5

SHEET NUMBER

00-S-404

00-S-404-FRAMING ELEVATIONS 5

Last Plotted: 2/14/2025 10:51:59 PM
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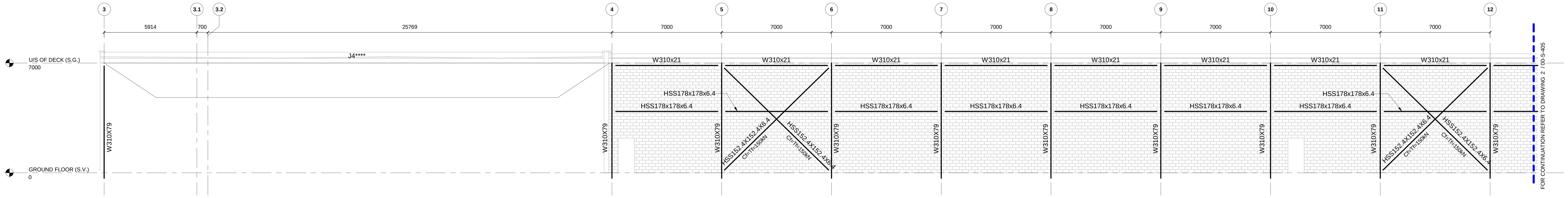
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

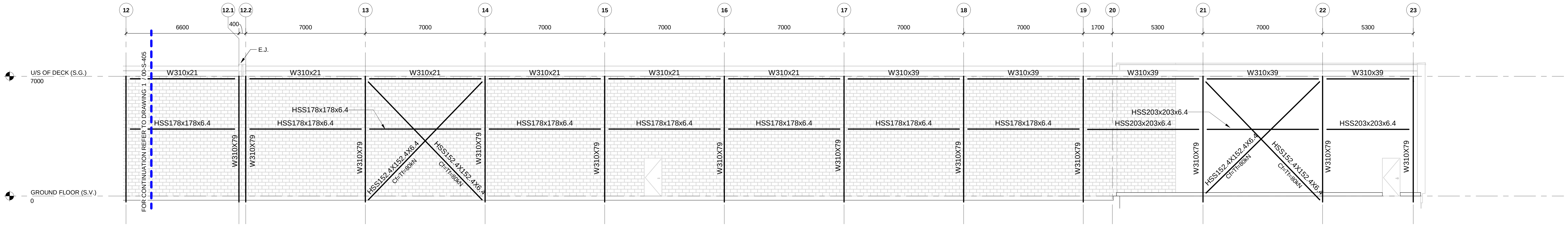
Project Management Initials:



1 FRAMING ELEVATION AT GRID 'G'

00-S-405

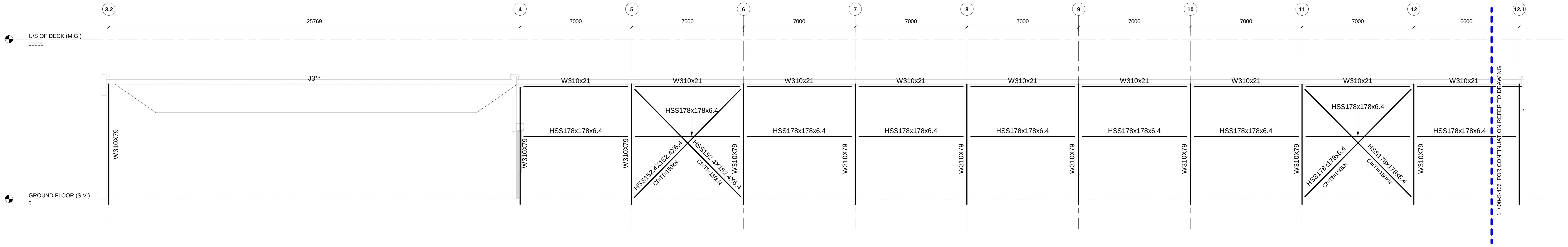
SCALE: 1 : 100



2 FRAMING ELEVATION AT GRID 'G' CONT.

00-S-405

SCALE: 1 : 100



3 FRAMING ELEVATION AT GRID 'J'

00-S-405

SCALE: 1 : 100

00-S-405-FRAMING ELEVATIONS 6

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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

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510 Main St.
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1.877.311.4974 1.204.986.1311

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CONSULTANT

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REGISTRATION

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I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

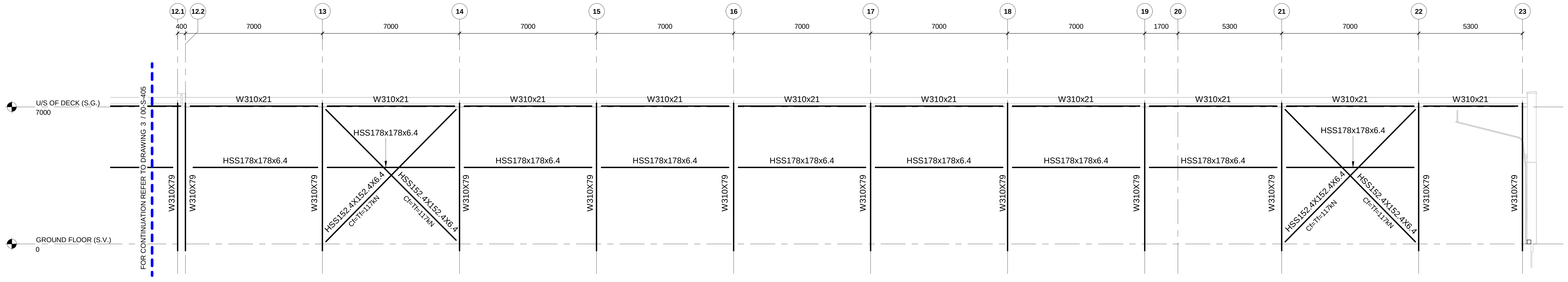
FRAMING ELEVATIONS 6

SHEET NUMBER

00-S-405

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:



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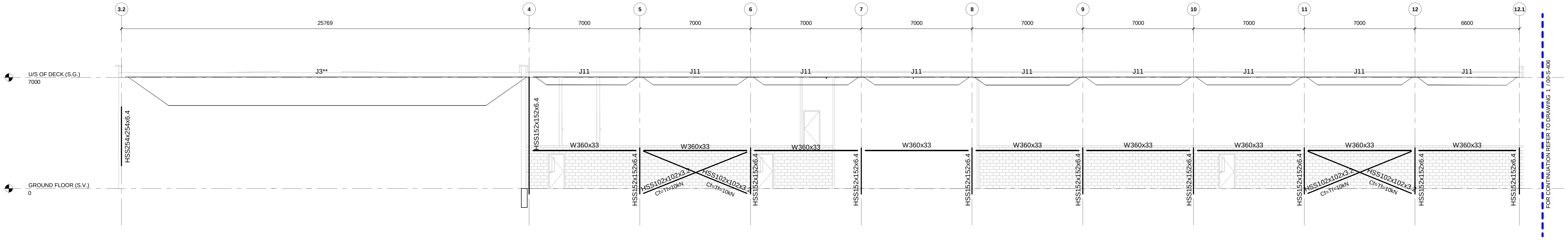
00-S-406 SCALE: 1 : 100



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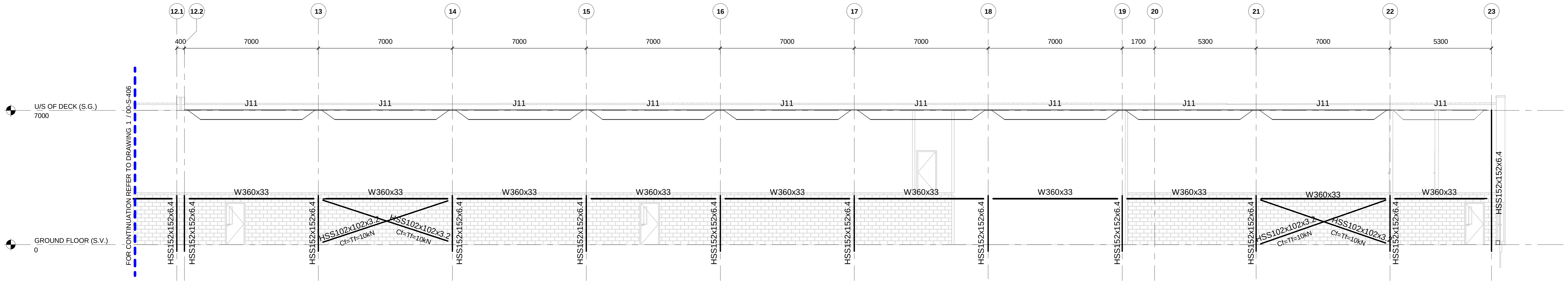
00-S-406 SCALE: 1 : 100



3 FRAMING ELEVATION AT GRID 'L' CONT.

00-S-406 SCALE: 1 : 100

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
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Winnipeg, MB R3P 0Y7

REGISTRATION

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A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FRAMING ELEVATIONS 7

SHEET NUMBER

00-S-406

00-S-406-FRAMING ELEVATIONS 7
Last Plotted: 2/14/2025 10:52:11 PM
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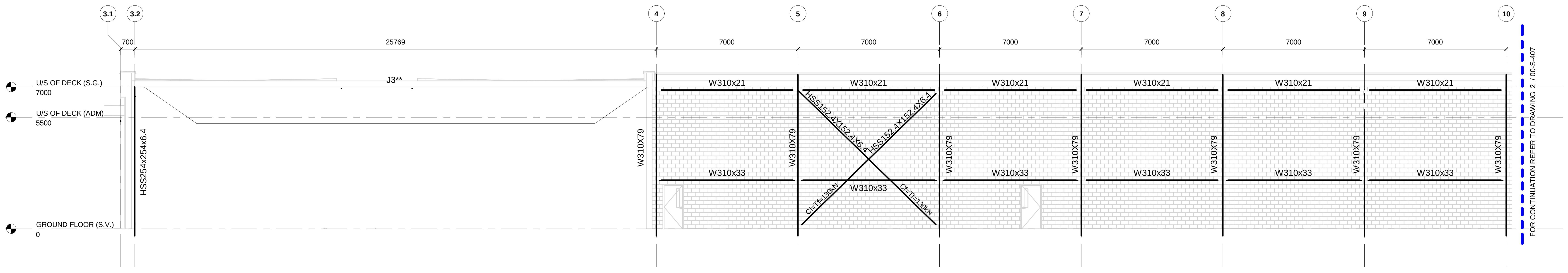
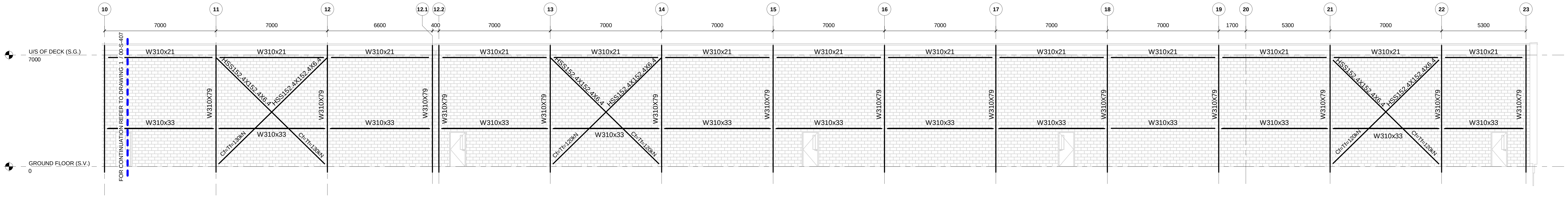
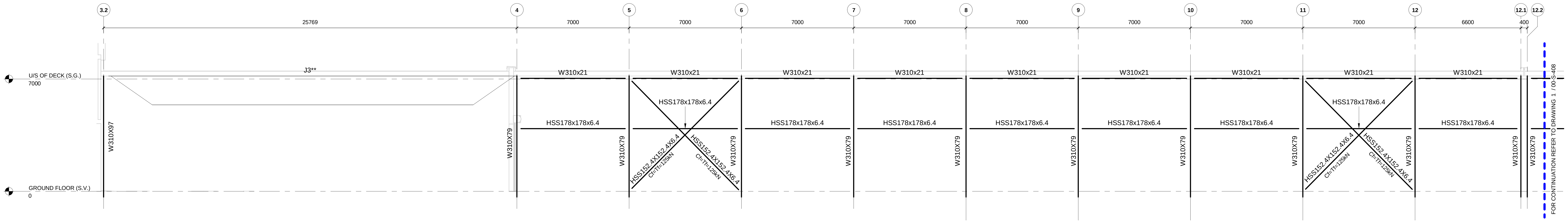
A0 33.1"x46.8"
Designer: Designer   Checked: Checker   Approved: Approver
Project Management Initials:



1 | FRAMING ELEVATION AT GRID 'M'
00-S-407
SCALE: 1 : 100



2 | FRAMING ELEVATION AT GRID 'M' CONT.
00-S-407
SCALE: 1 : 100



3 | FRAMING ELEVATION AT GRID 'P'
00-S-407
SCALE: 1 : 100

00-S-407-FRAMING ELEVATIONS 8
Last Plotted: 2/14/2025 10:52:17 PM
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AECOM

PROJECT
WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
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Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr.
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

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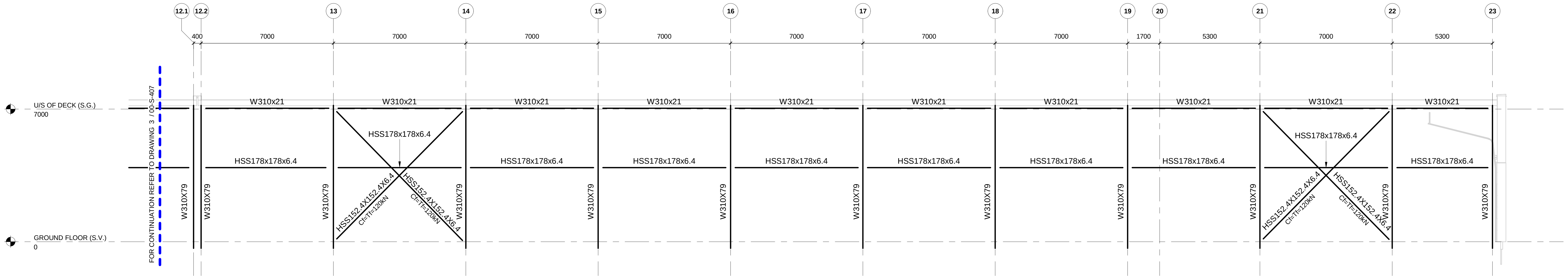
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW

PROJECT NUMBER
60721079

SHEET TITLE
FRAMING ELEVATIONS 8

SHEET NUMBER
00-S-407

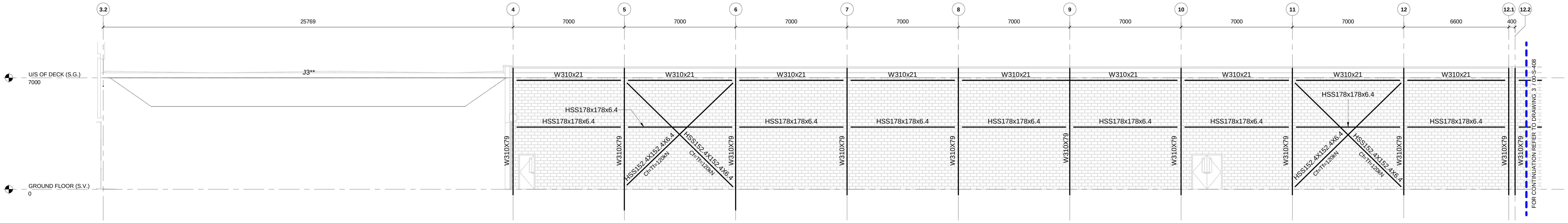
Project Management Initials:
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"



1 | FRAMING ELEVATION AT GRID 'P' CONT.

00-S-408

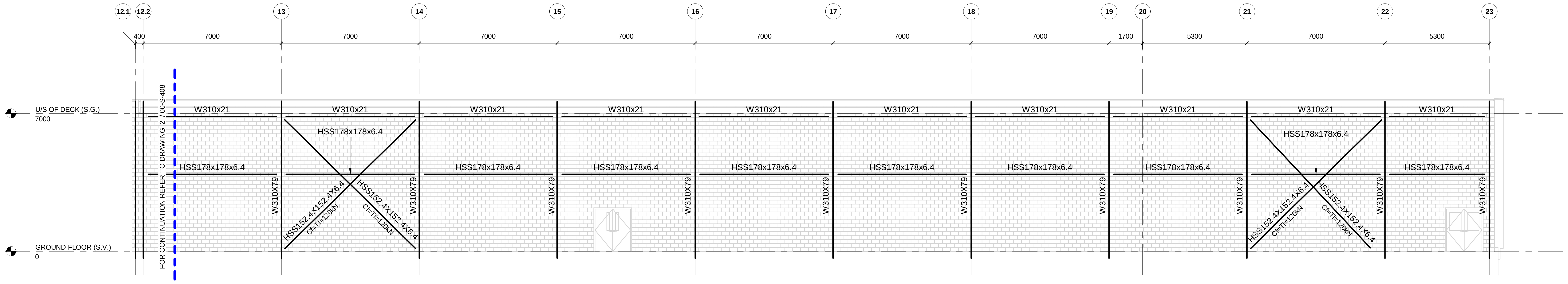
SCALE: 1 : 100



2 | FRAMING ELEVATION AT GRID 'R'

00-S-408

SCALE: 1 : 100



3 | FRAMING ELEVATION AT GRID 'R' CONT.

00-S-408

SCALE: 1 : 100

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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
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1.877.311.4974 1.204.986.1311

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CONSULTANT

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Winnipeg, MB R3P 0Y7

REGISTRATION

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A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FRAMING ELEVATIONS 9

SHEET NUMBER

00-S-408

00-S-408-FRAMING ELEVATIONS 9
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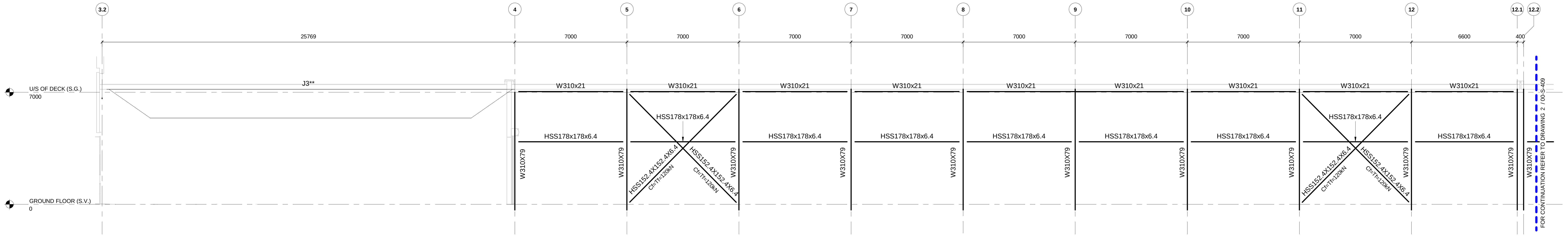

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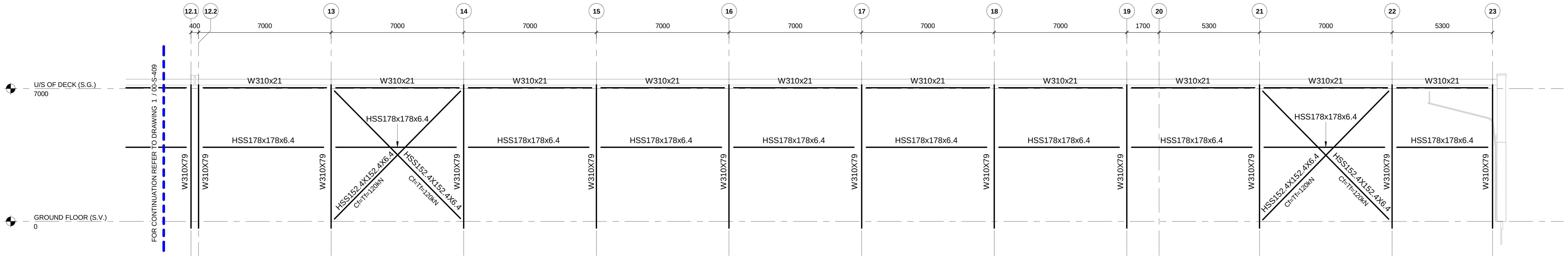
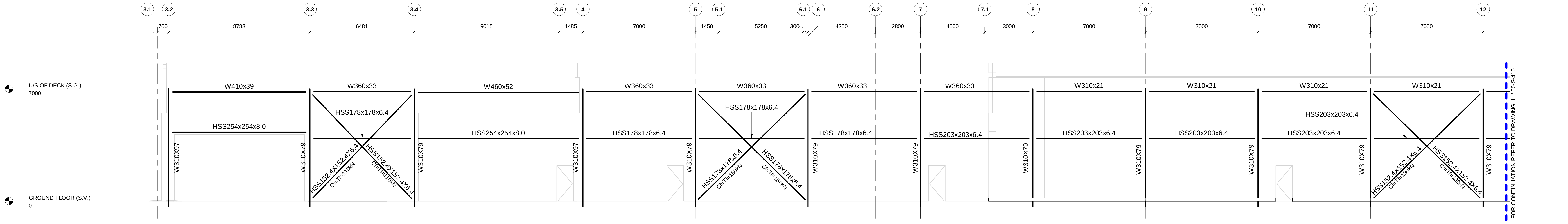
00-S-409
SCALE: 1 : 100



2 FRAMING ELEVATION AT GRID 'T' CONT.
00-S-409
SCALE: 1 : 100



3 FRAMING ELEVATION AT GRID 'U.1'
00-S-409
SCALE: 1 : 100

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PROJECT
WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

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Winnipeg, MB R3L 2A1

CONSULTANT
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I/R	DATE	DESCRIPTION

PROJECT NUMBER
60721079

SHEET TITLE
FRAMING ELEVATIONS 10

SHEET NUMBER
00-S-409

00-S-409-FRAMING ELEVATIONS 10
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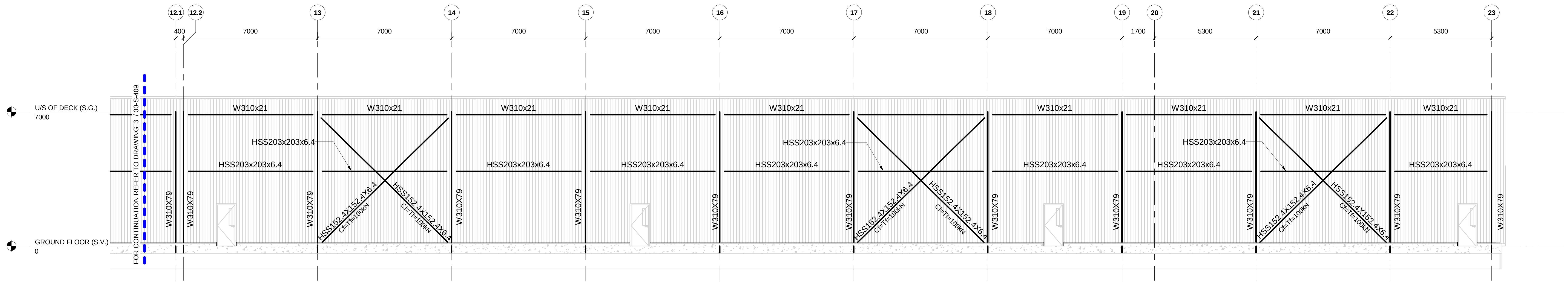
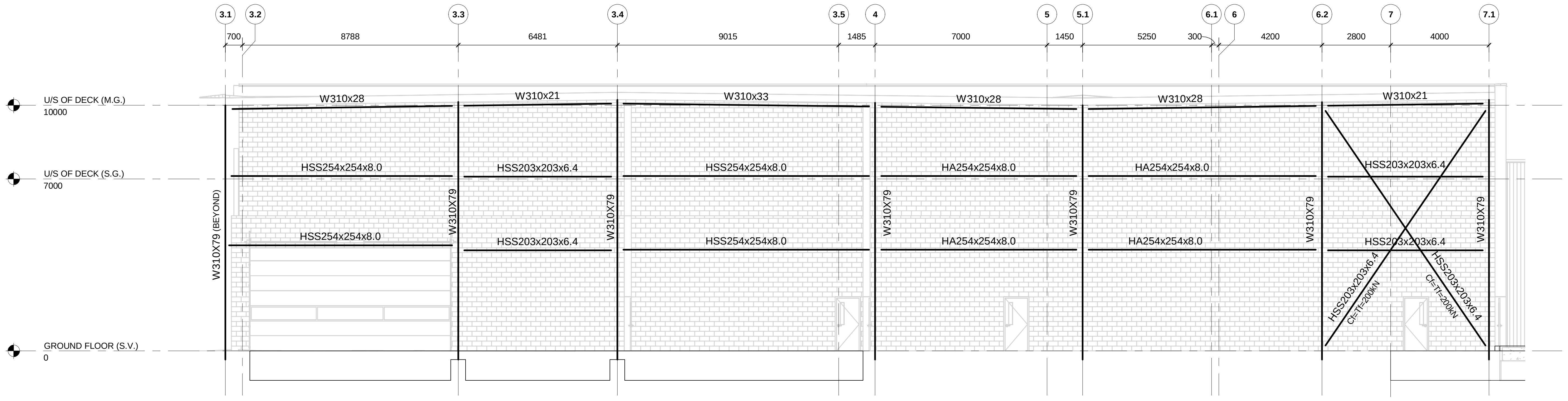
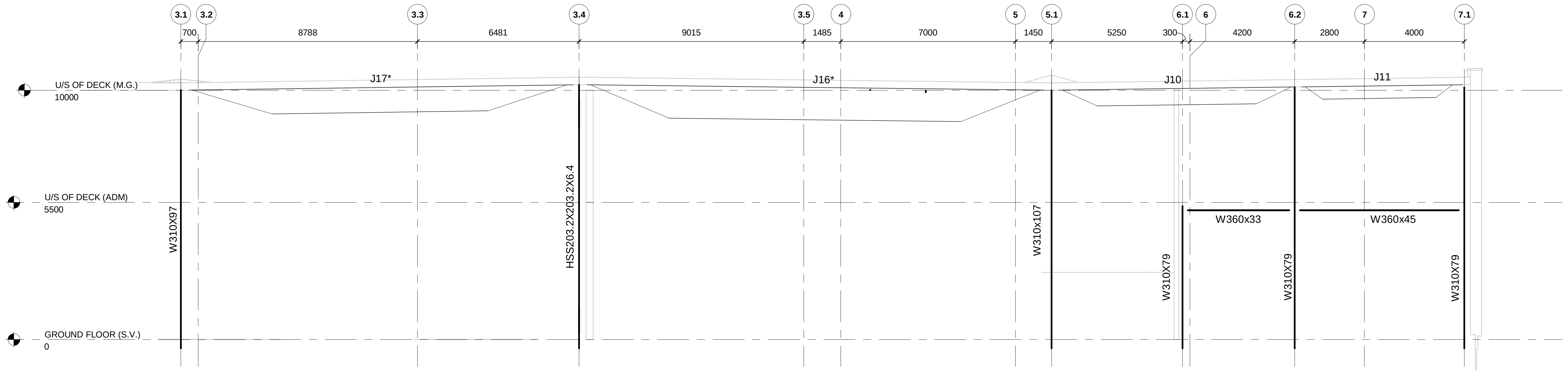


1 FRAMING ELEVATION AT GRID 'U.1' CONT.
00-S-410
SCALE: 1 : 100



2 FRAMING ELEVATION AT GRID 'U.2'
00-S-410
SCALE: 1 : 100



4 FRAMING ELEVATION AT GRID 'W'
00-S-410
SCALE: 1 : 100

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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FRAMING ELEVATIONS 11

SHEET NUMBER

00-S-410

00-S-410-FRAMING ELEVATIONS 11

Last Plotted: 2/14/2025 10:52:36 PM
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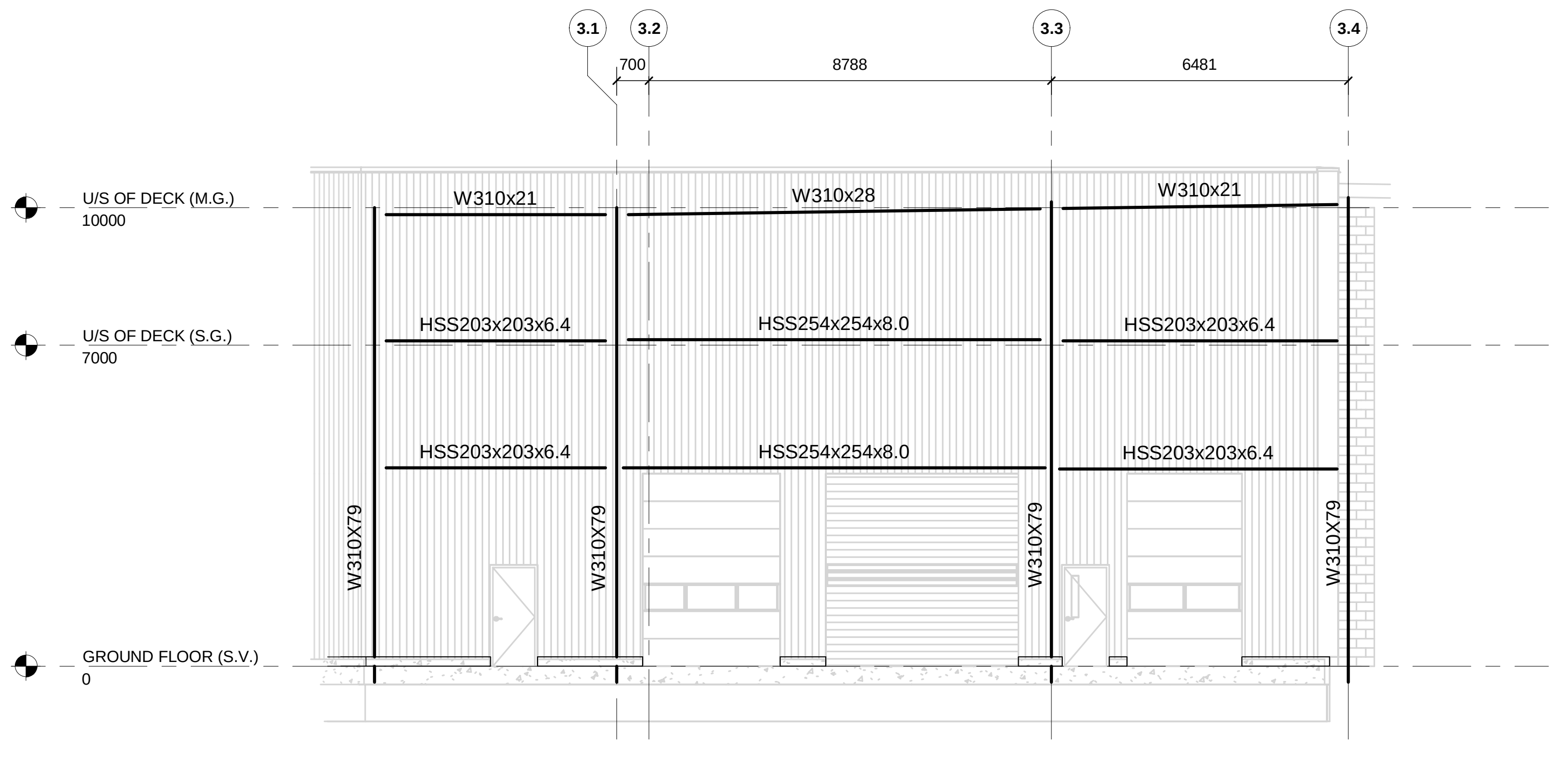

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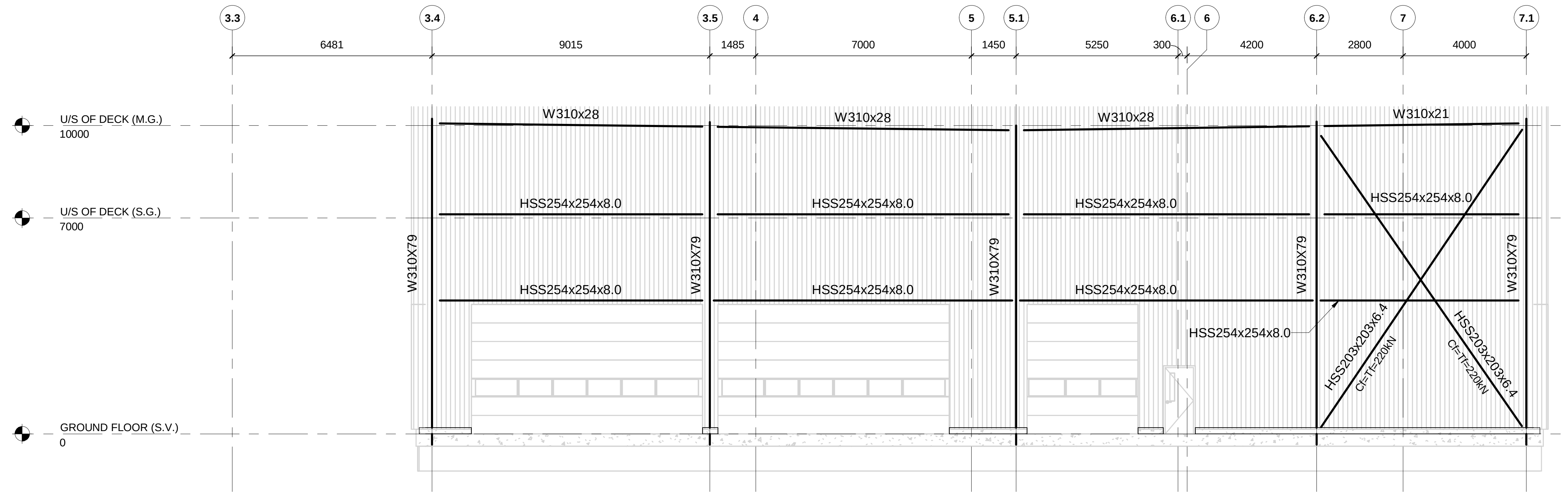

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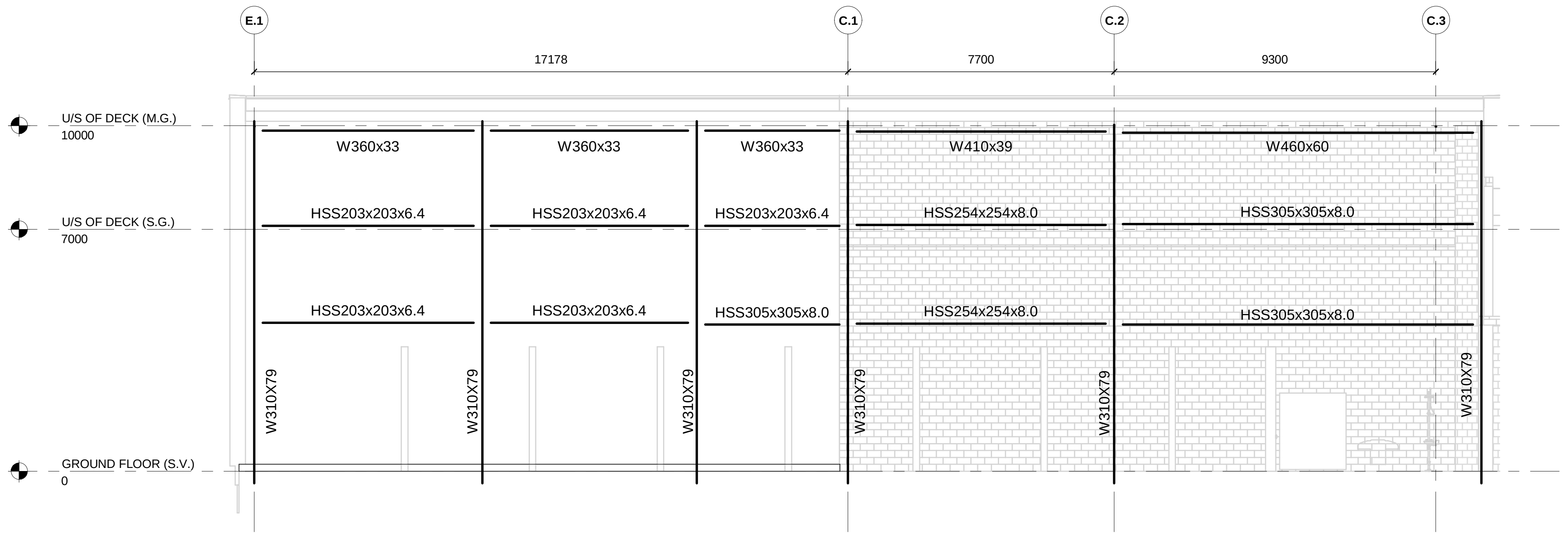
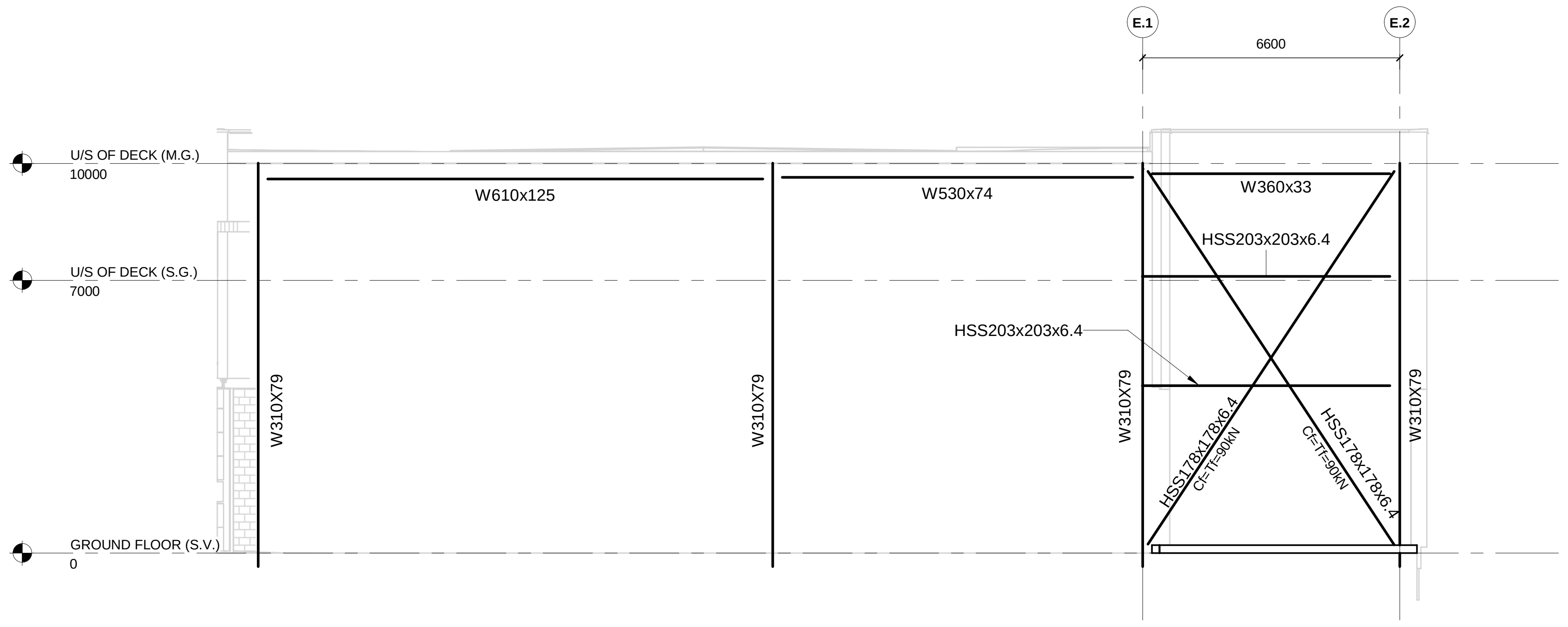


3 FRAMING ELEVATION AT GRID 'F.1'
00-S-411
SCALE: 1 : 100



4 FRAMING ELEVATON AT GRID 'F.3'
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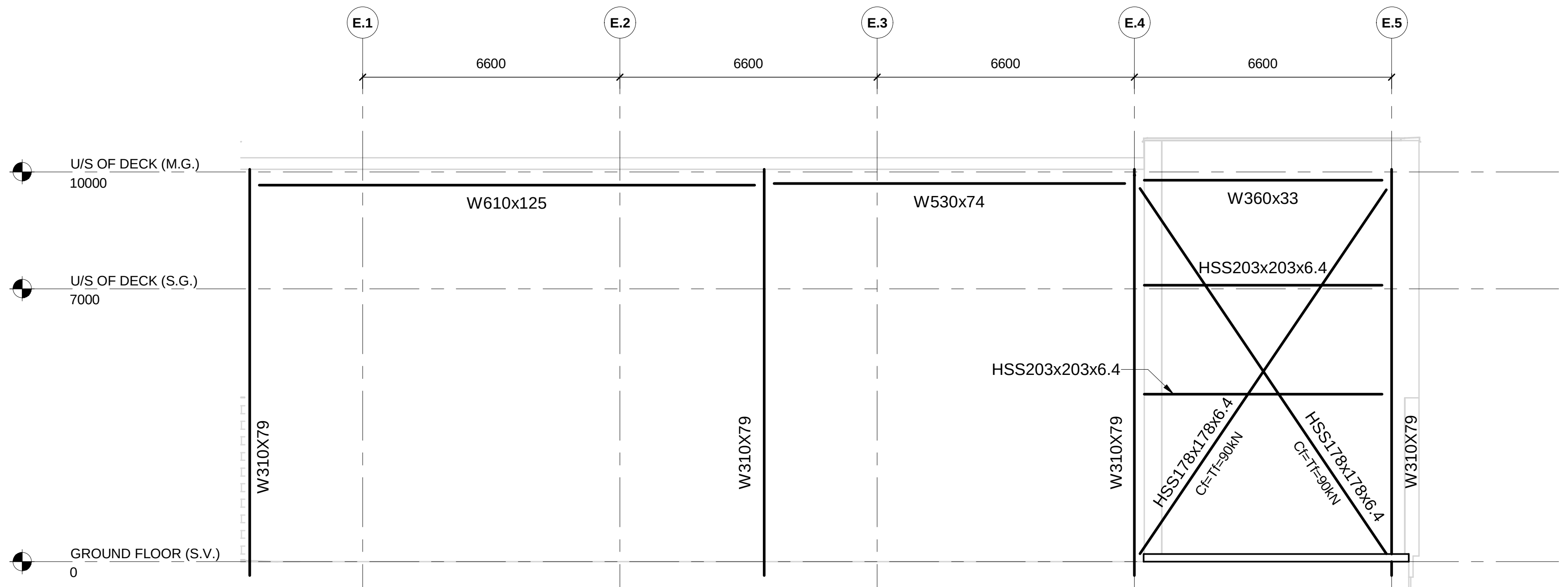
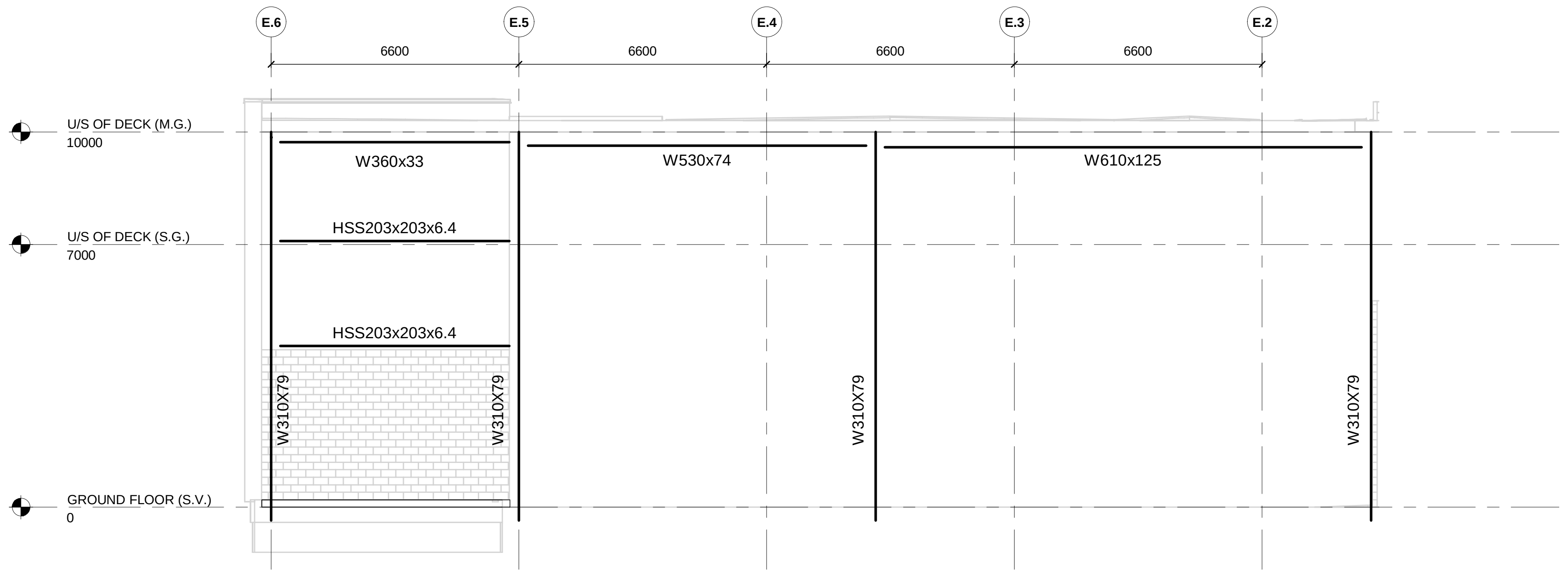
SCALE: 1 : 100



5 FRAMING ELEVATON AT GRID 'F.6'
00-S-411
SCALE: 1 : 100



6 FRAMING ELEVATION AT GRID 'F.7'
00-S-411
SCALE: 1 : 100

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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
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1.877.311.4974 1.204.986.1311

Winnipeg Transit
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Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
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REGISTRATION

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B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FRAMING ELEVATIONS 12

SHEET NUMBER

00-S-411

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:

00-S-411-FRAMING ELEVATIONS 12
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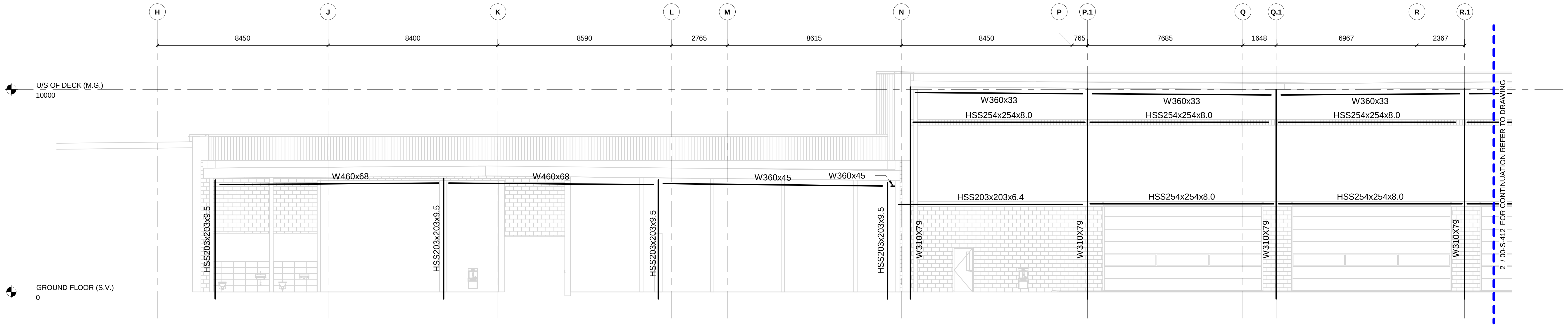
Designer: Designer   Checked: Checker   Approved: Approver   A0 33.1"x46.8"

Project Management Initials:



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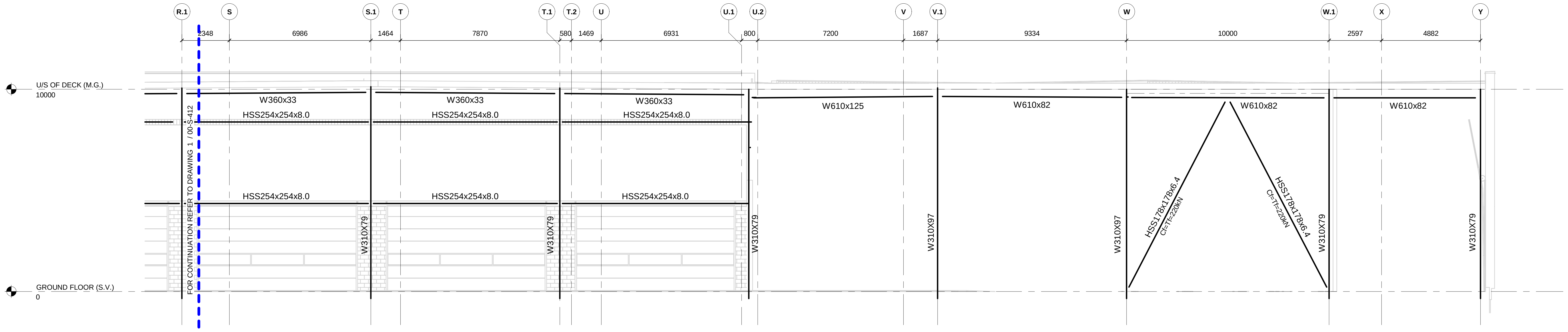
00-S-412 SCALE: 1 : 100



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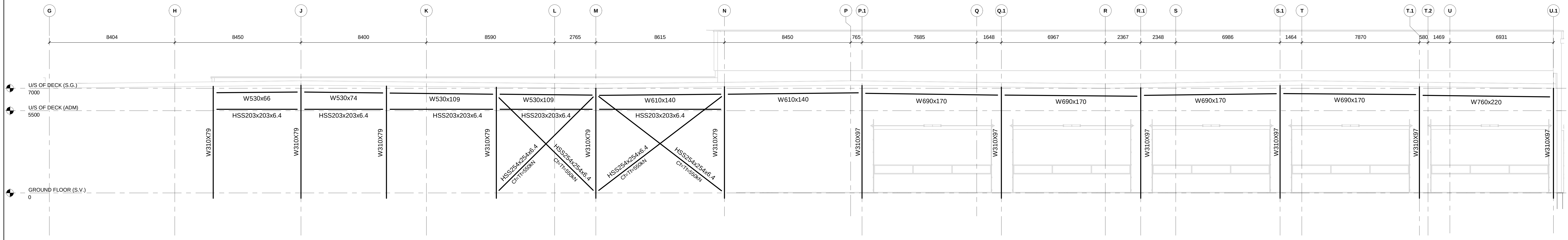
00-S-412 SCALE: 1 : 100



3 | FRAMING ELEVATION AT GRID '3.2'
00-S-412 SCALE: 1 : 100

00-S-412-FRAMING ELEVATIONS 13

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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

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510 Main St.
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Winnipeg Transit
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Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr.
Winnipeg, MB R3P 0Y7

REGISTRATION

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A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

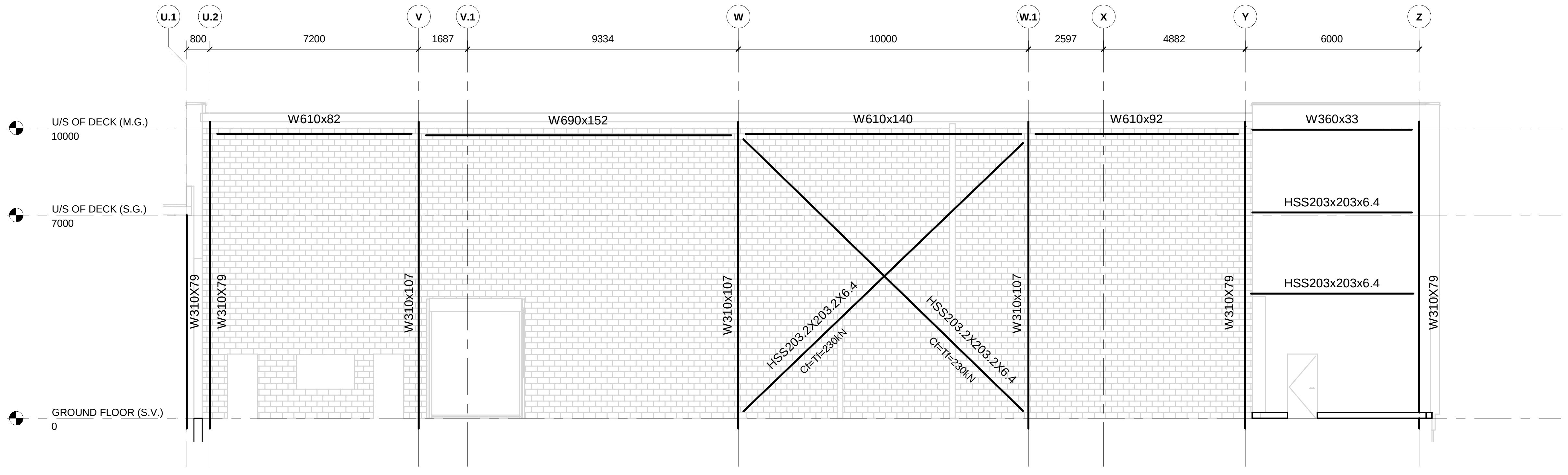
SHEET TITLE

FRAMING ELEVATIONS 13

SHEET NUMBER

00-S-412

Project Management Initials: Designer: Designer   Checked: Checker Approved: Approver   A0 33.1"x46.8"



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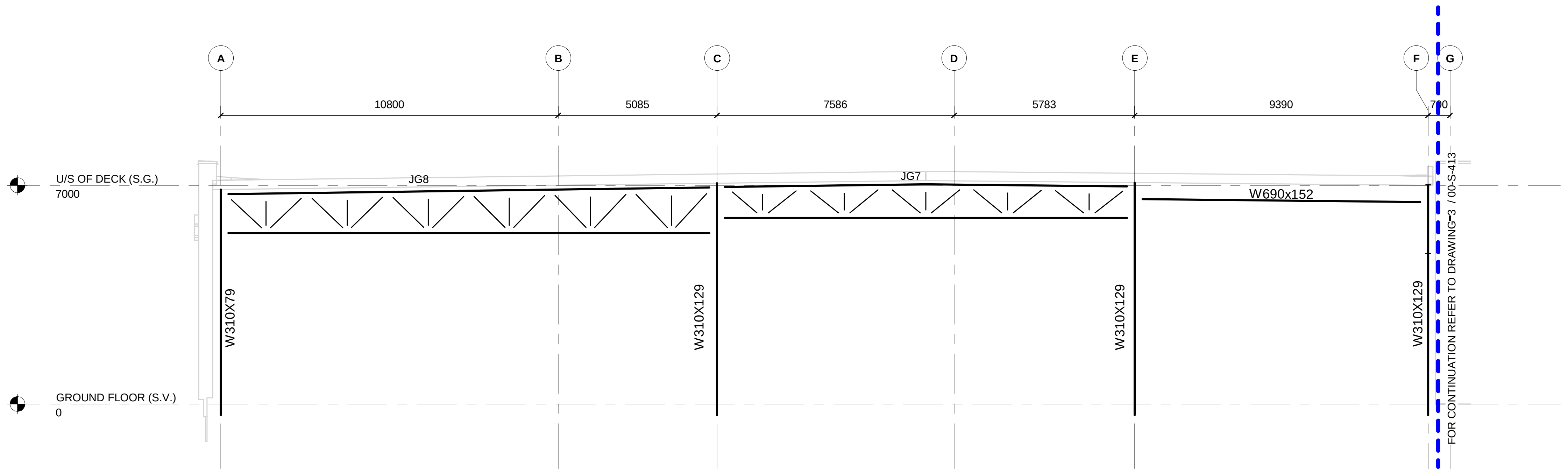
00-S-413 | SCALE: 1 : 100



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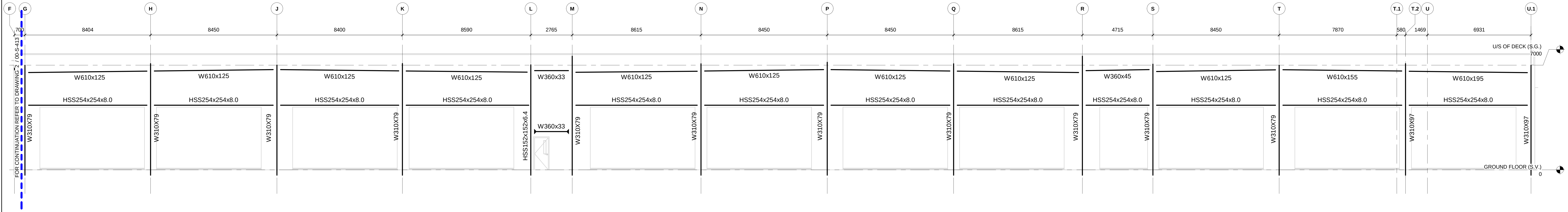
00-S-413 | SCALE: 1 : 100



3 | FRAMING ELEVATION AT GRID '4' CONT.
00-S-413 | SCALE: 1 : 100

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT

100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

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City of Winnipeg
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Winnipeg Transit
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Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
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Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

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A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

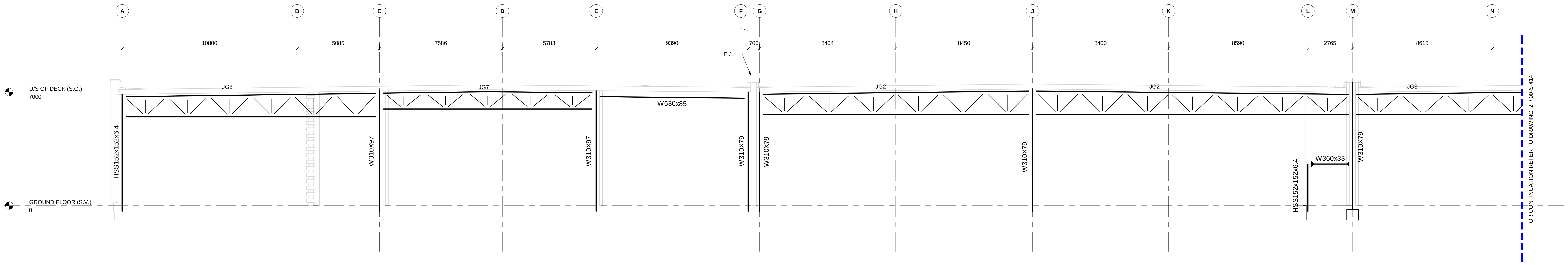
FRAMING ELEVATIONS 14

SHEET NUMBER

00-S-413

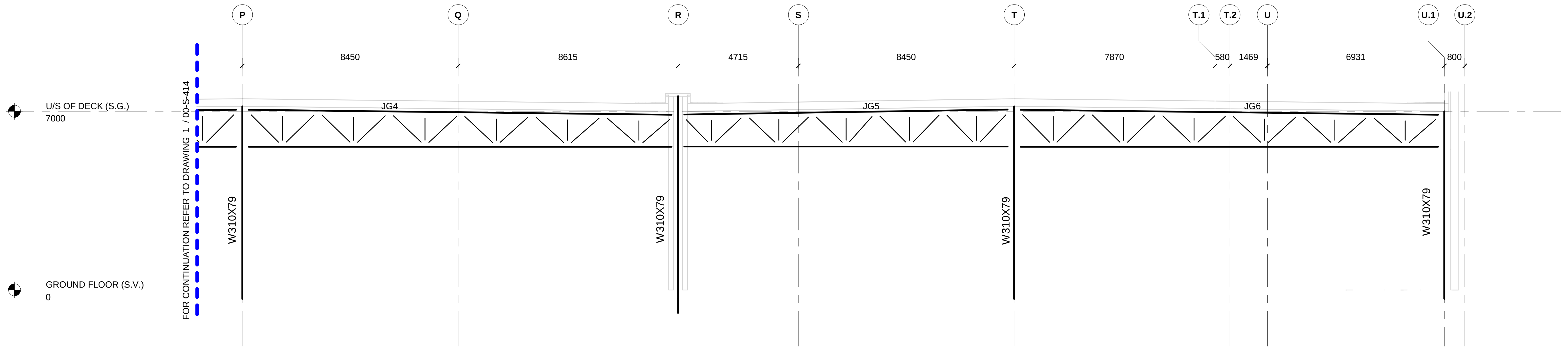
00-S-413-FRAMING ELEVATIONS 14

Last Plotted: 2/14/2025 10:53:25 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt



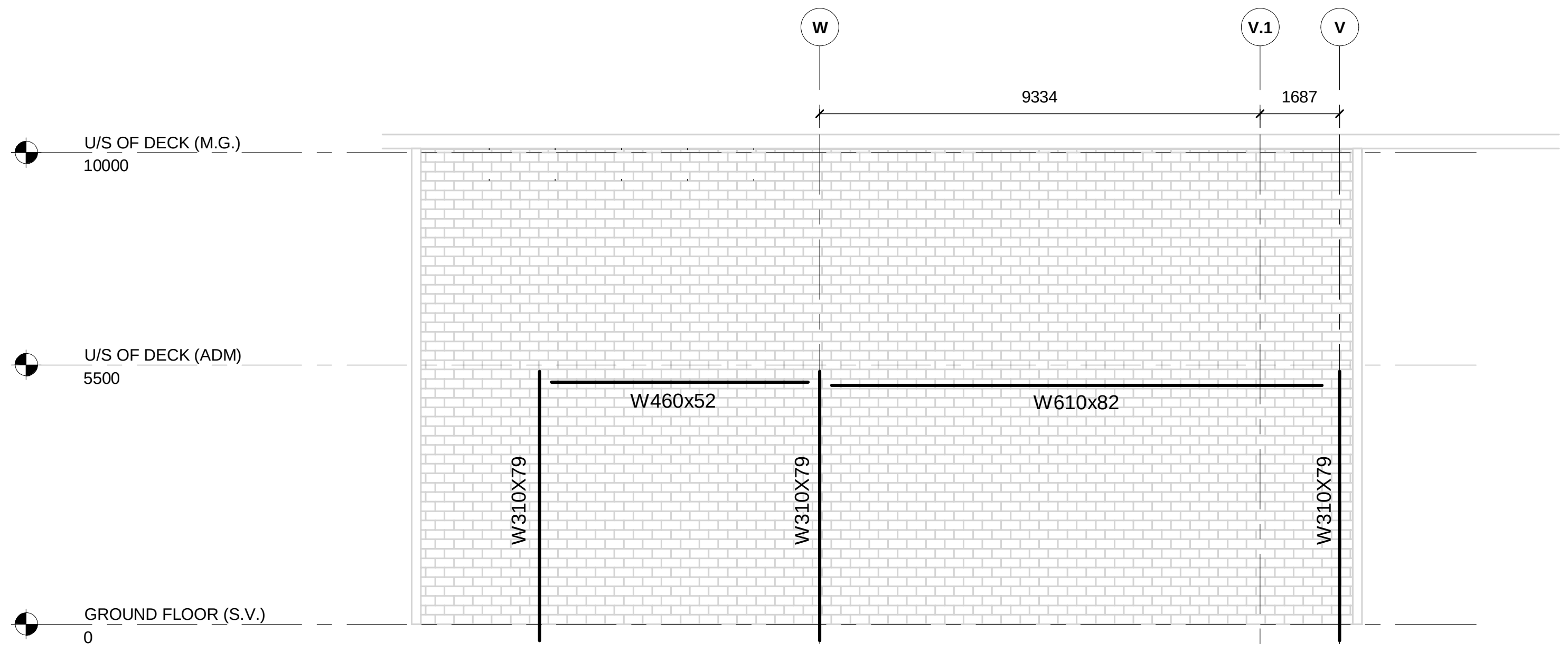
1 FRAMING ELEVATION AT GRID '5'

00-S-414
SCALE: 1 : 100



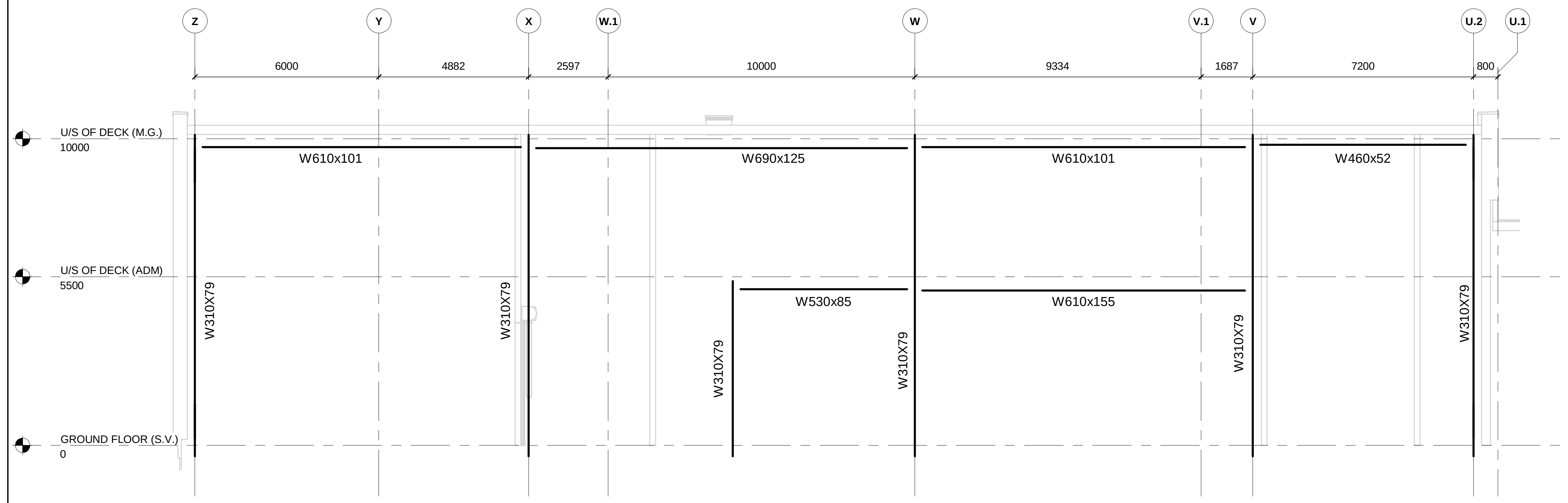
2 FRAMING ELEVATION AT GRID '5' CONT.

00-S-414
SCALE: 1 : 100



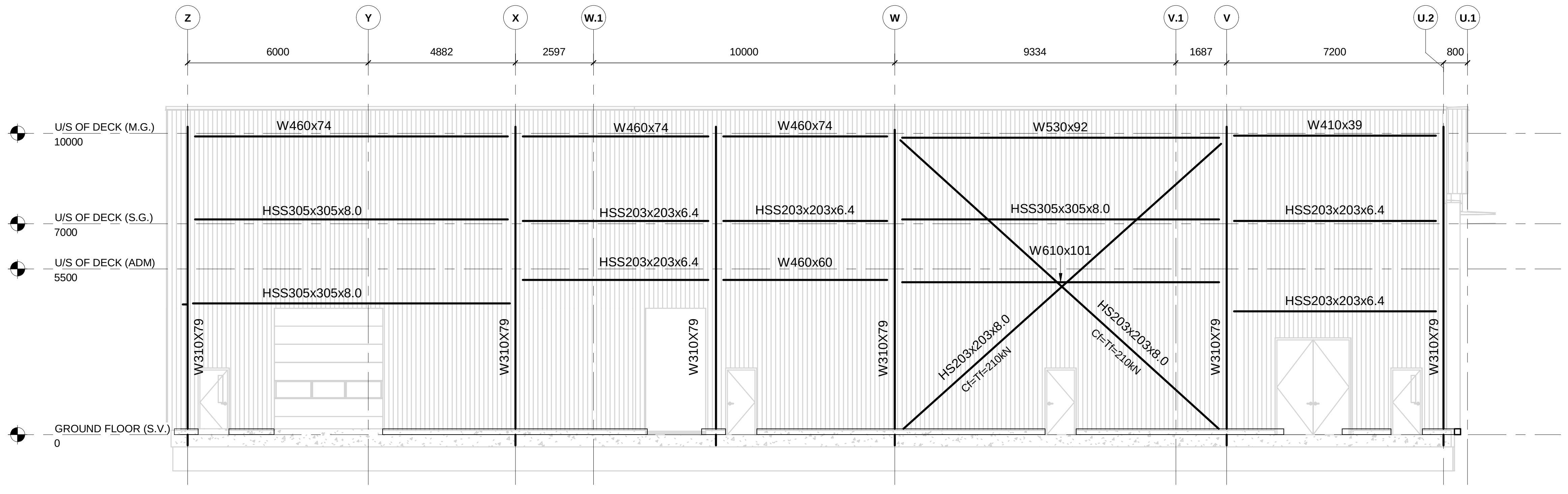
3 FRAMING ELEVATION AT GRID '6.1'

00-S-414
SCALE: 1 : 100



4 FRAMING ELEVATION AT GRID '6.2'

00-S-414
SCALE: 1 : 100



5 FRAMING ELEVATION AT GRID '7.1'

00-S-414
SCALE: 1 : 100

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

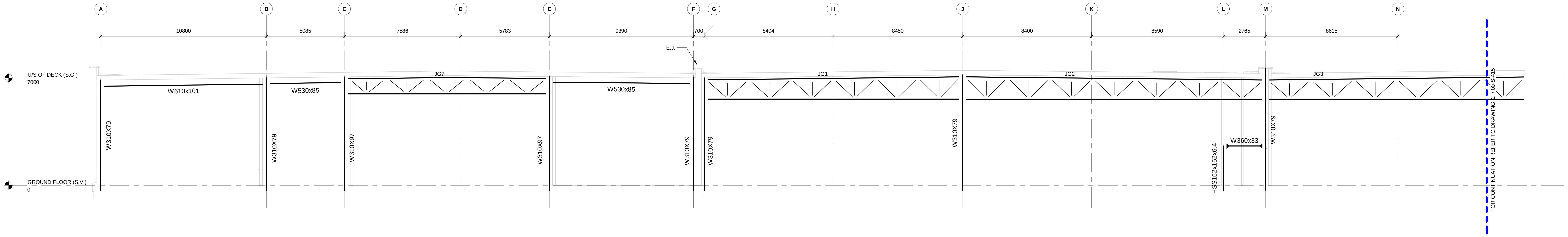
FRAMING ELEVATIONS 15

SHEET NUMBER

00-S-414

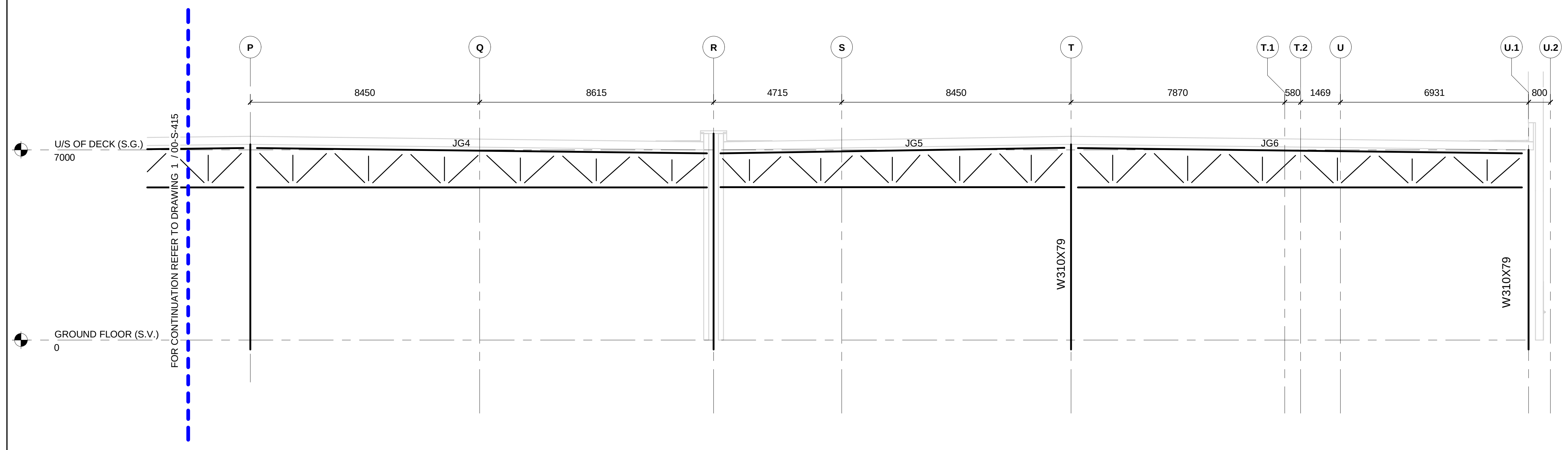
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:



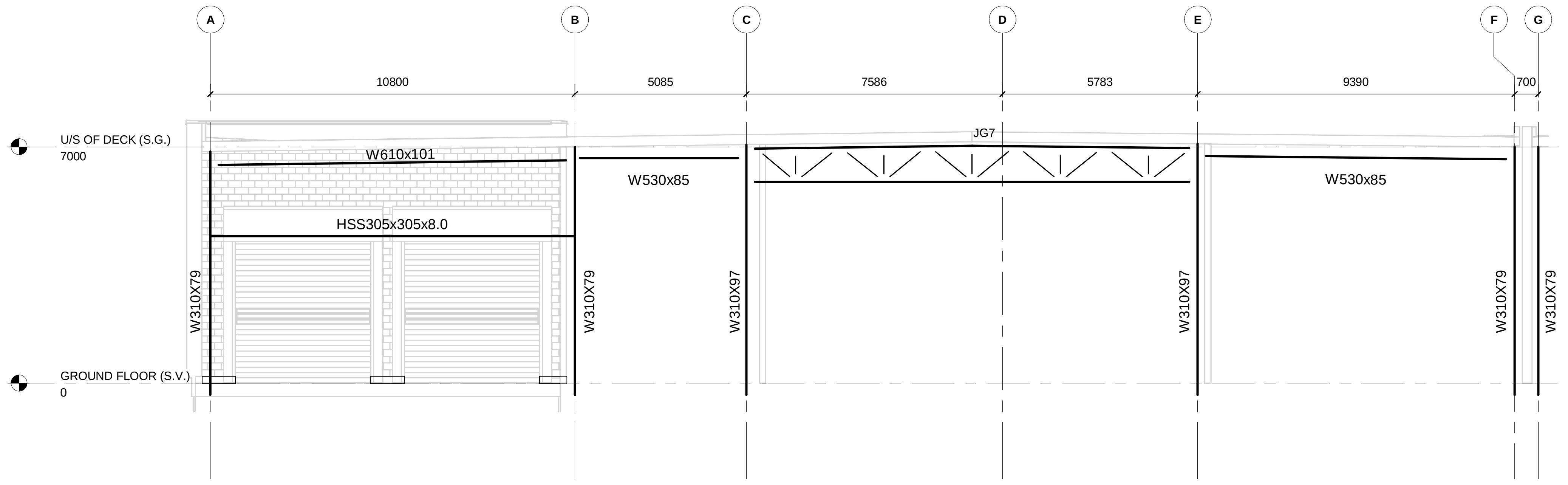
1 | FRAMING ELEVATION AT GRID '7'

00-S-415 SCALE: 1 : 100



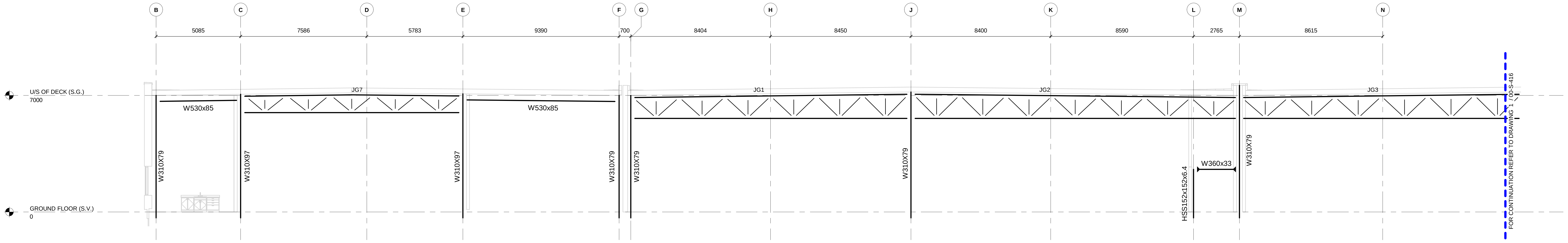
2 | FRAMING ELEVATION AT GRID '7' CONT.

00-S-415 SCALE: 1 : 100



3 | FRAMING ELEVATION AT GRID '8'

00-S-415 SCALE: 1 : 100



4 | FRAMING ELEVATION AT GRID '11'

00-S-415 SCALE: 1 : 100

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr.
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

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A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FRAMING ELEVATIONS 16

SHEET NUMBER

00-S-415

00-S-415-FRAMING ELEVATIONS 16

Last Plotted: 2/14/2025 10:53:39 PM
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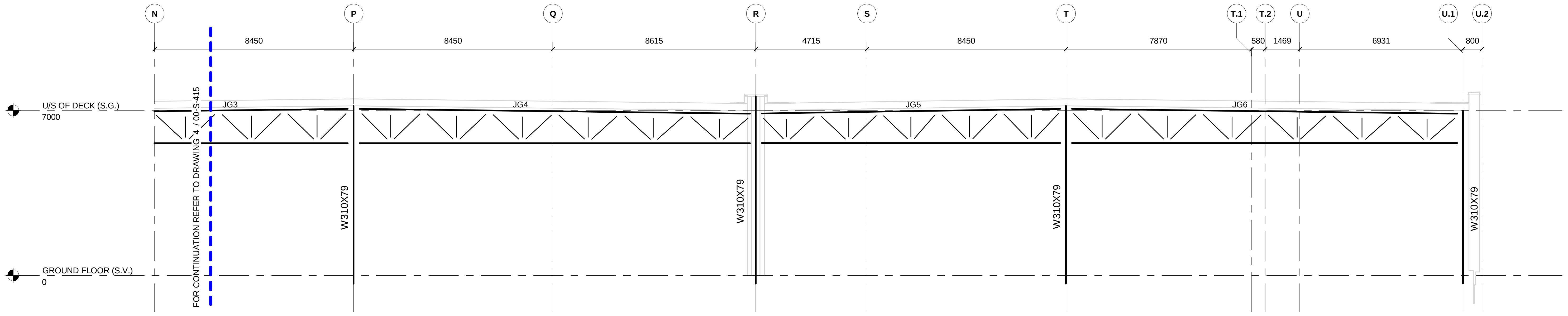
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:



1 FRAMING ELEVATION AT GRID '11' CONT.
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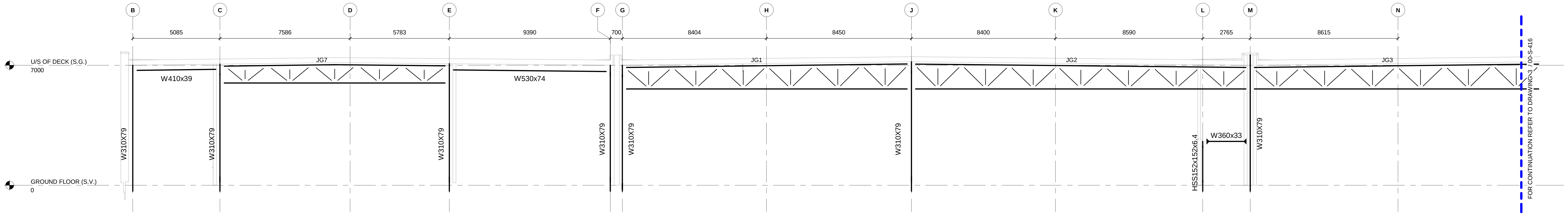
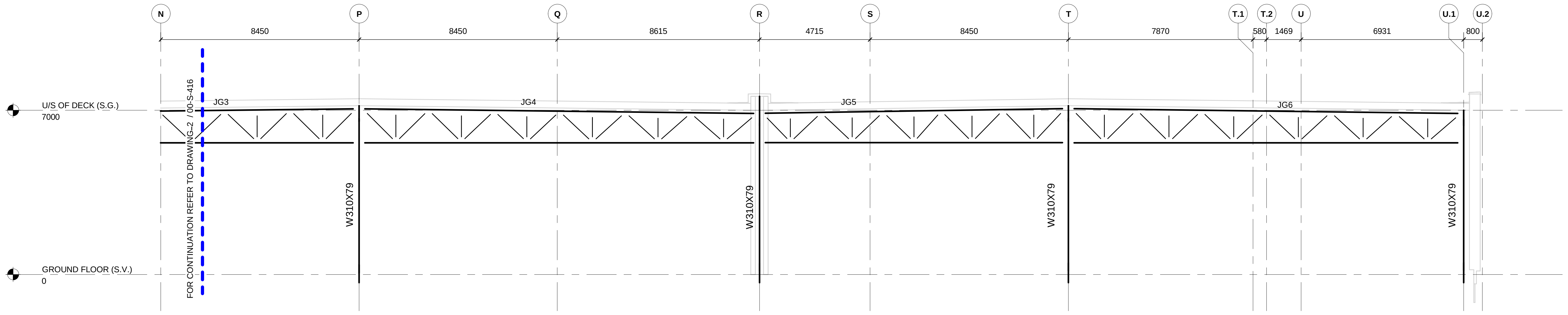
SCALE: 1 : 100



2 FRAMING ELEVATION AT GRID '14'
00-S-416
SCALE: 1 : 100



3 FRAMING ELEVATION AT GRID '14' CONT.
00-S-416
SCALE: 1 : 100

00-S-416-FRAMING ELEVATIONS 17

Last Plotted: 2/14/2025 10:53:45 PM
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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr.
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

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B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

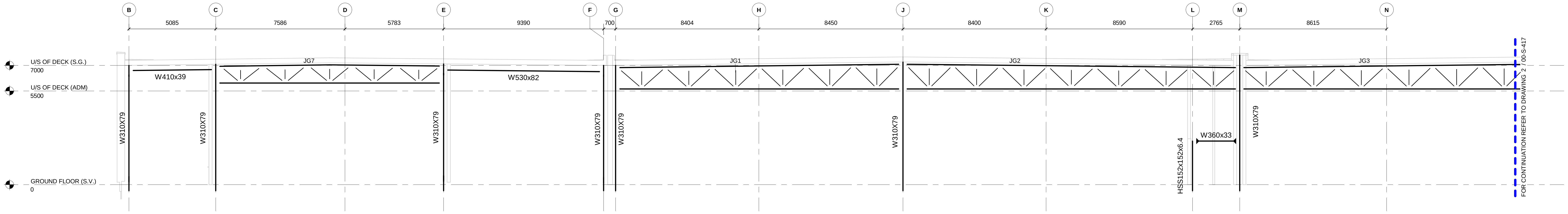
FRAMING ELEVATIONS 17

SHEET NUMBER

00-S-416

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

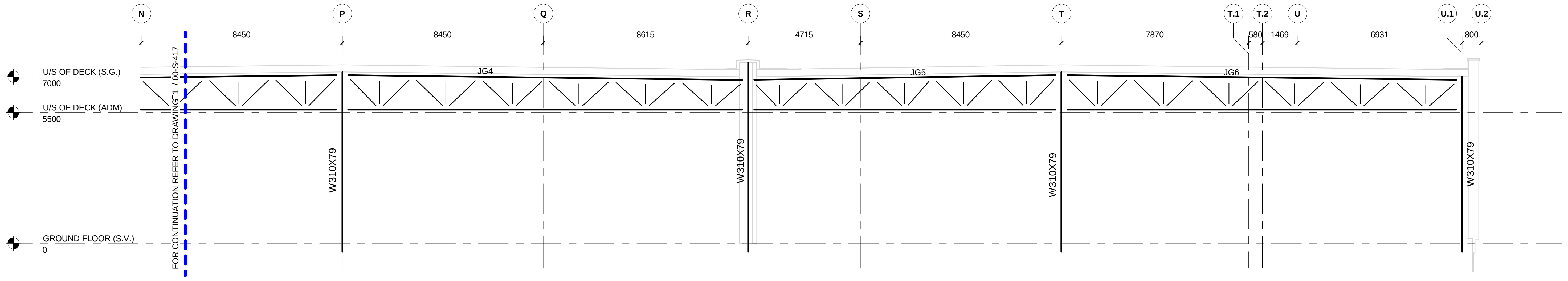
Project Management Initials:



1 FRAMING ELEVATION AT GRID '18'

00-S-417

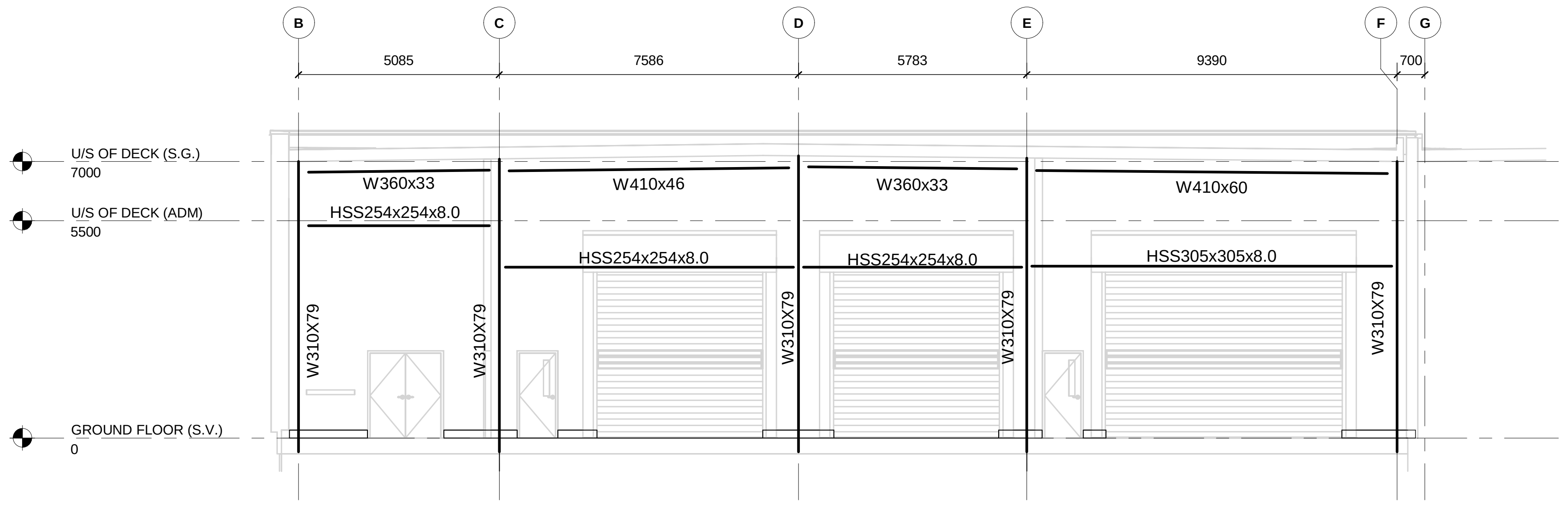
SCALE: 1 : 100



2 FRAMING ELEVATION AT GRID '18' CONT.

00-S-417

SCALE: 1 : 100



3 FRAMING ELEVATION AT GRID '20'

00-S-417

SCALE: 1 : 100

00-S-417-FRAMING ELEVATIONS 18

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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
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Winnipeg, MB R3L 2A1

CONSULTANT

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Winnipeg, MB R3P 0Y7

REGISTRATION

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I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

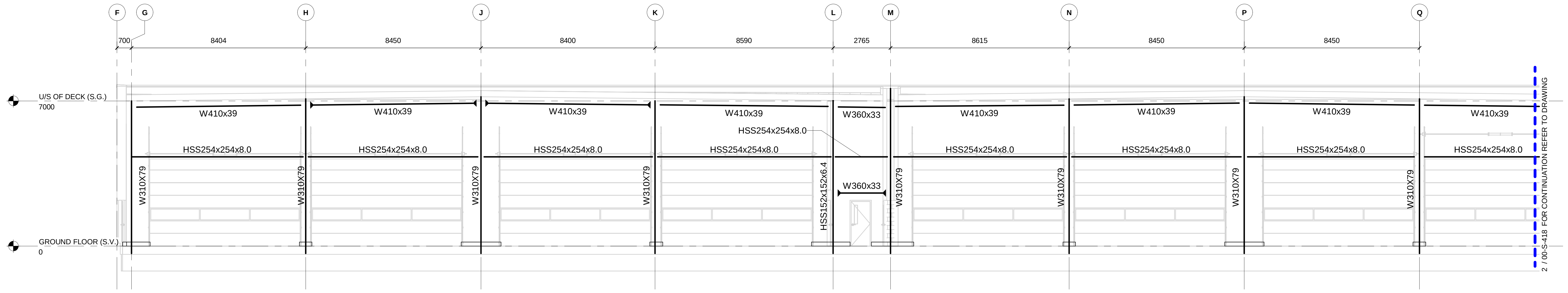
FRAMING ELEVATIONS 18

SHEET NUMBER

00-S-417

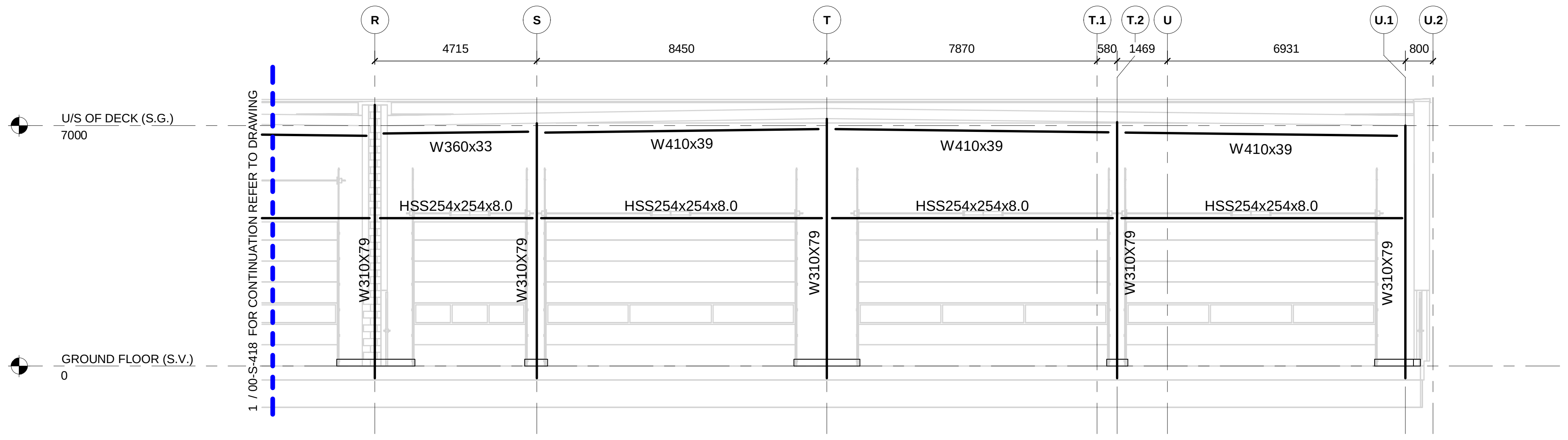
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:



1 | FRAMING ELEVATION AT GRID '23'

00-S-418 SCALE: 1 : 100



2 | FRAMING ELEVATION AT GRID '23' CONT.

00-S-418 SCALE: 1 : 100

00-S-418-FRAMING ELEVATIONS 19

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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
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Winnipeg, MB R3L 2A1

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REGISTRATION

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A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

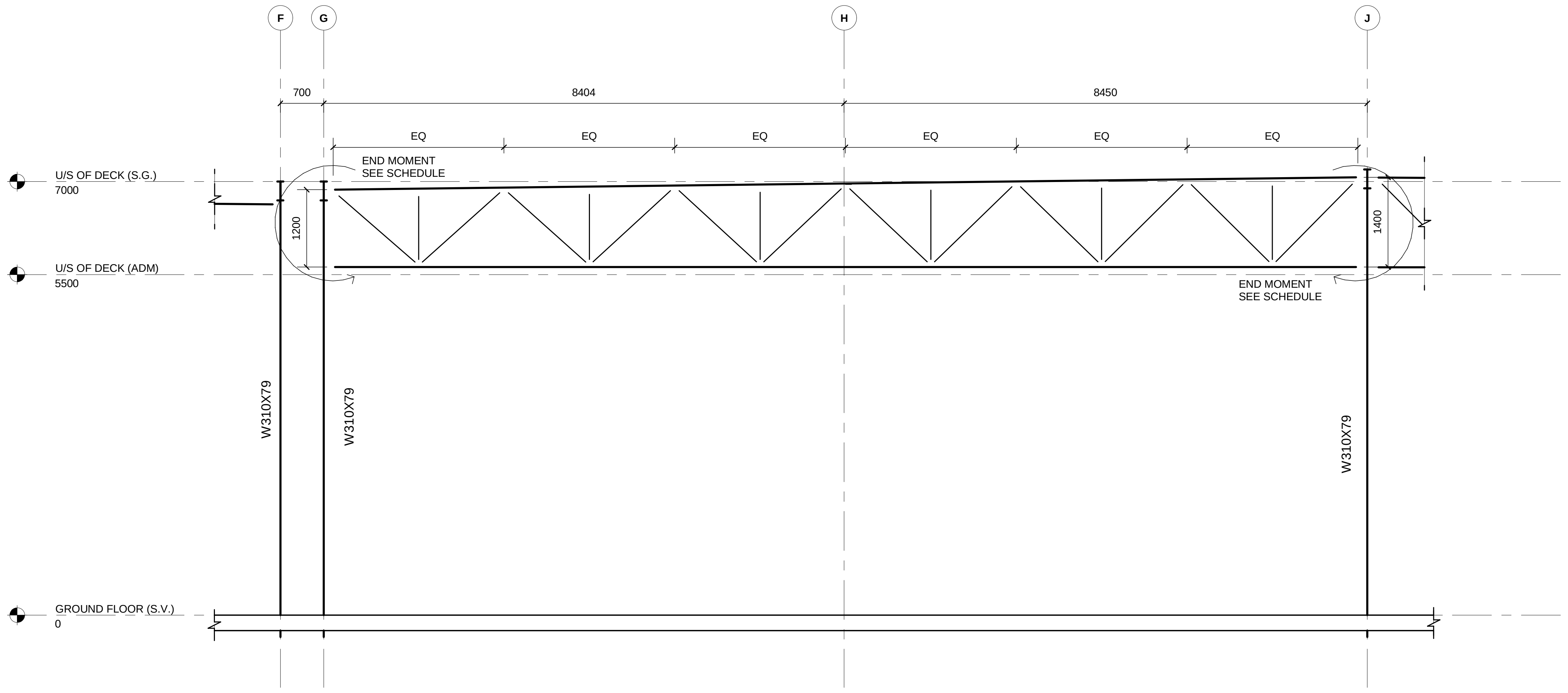
FRAMING ELEVATIONS 19

SHEET NUMBER

00-S-418

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:



1 JOIST GIRDER - JG1

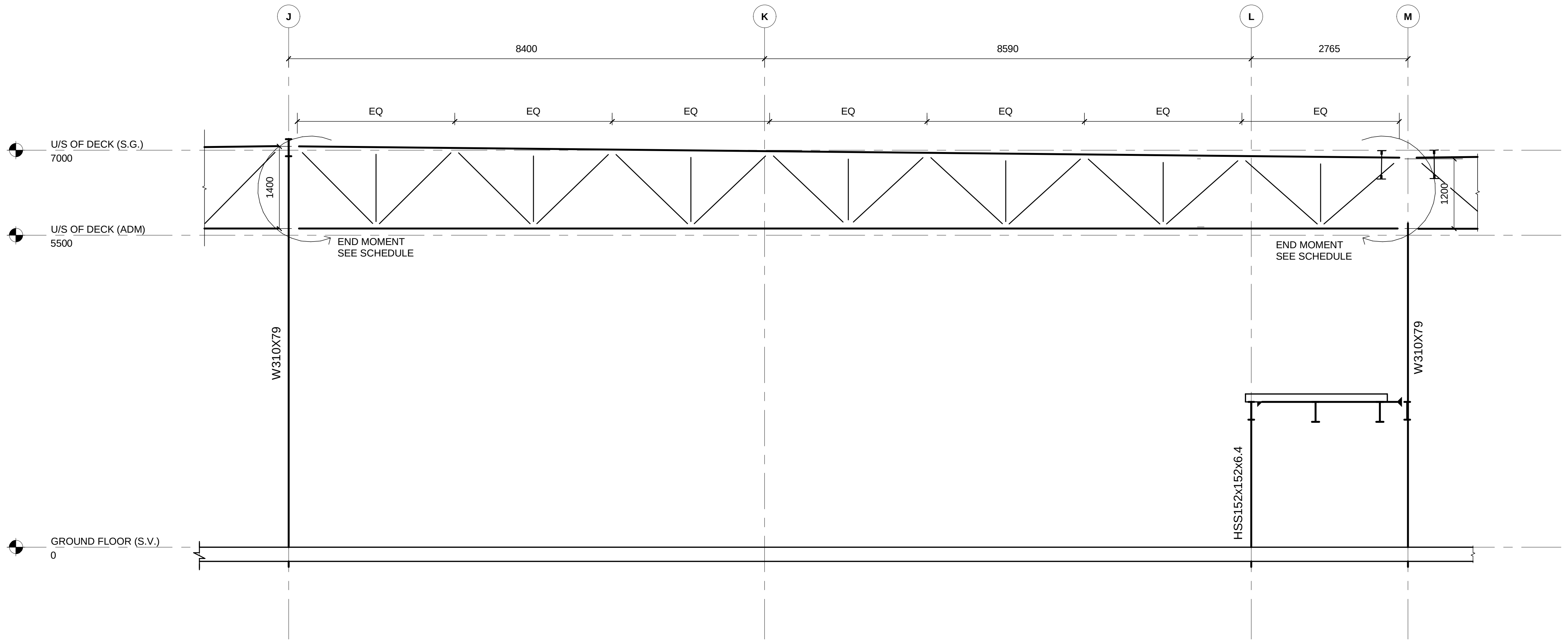
00-S-420 SCALE: 1 : 50

JOIST GIRDER DESIGN NOTES

1. REFER TO GENERAL NOTES FOR DESIGN REQUIREMENTS OF THE JOIST GIRDERS.
2. ALL JOIST GIRDER MEMBER SIZES SHOWN, IF ANY, ARE PRELIMINARY SIZES FOR THE PURPOSE OF COORDINATION WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL ELEMENTS ONLY. ALL JOIST GIRDER MEMBER SIZES ARE TO BE DESIGNED BY THE JOIST GIRDER MANUFACTURER.
3. REFER TO SCHEDULE FOR THE END MOMENTS AT EACH JOIST GIRDER.
4. JOIST GIRDER DEPTH VARIES. JOIST GIRDER DEPTH SHOWN ON DRAWINGS ARE CENTER TO CENTER DIMENSION BETWEEN SECTION CENTROIDS OF TOP AND BOTTOM CHORDS.

JOIST GIRDER END MOMENT SCHEDULE
(kN-m, UNFACTORED)

JOIST GIRDER	END MOMENT 1 (NORTH END OF JOIST GIRDER)	END MOMENT 2 (SOUTH END OF JOIST GIRDER)
JG1	94	520
JG2	520	388
JG3	378	380
JG4	385	258
JG5	248	376
JG6	397	94
JG7	88	88
JG7A	310	55
JG7B	600	94
JG8	54	330
JG8A	70	590



2 JOIST GIRDER - JG2

00-S-420 SCALE: 1 : 50

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

TYPICAL JOIST GIRDER DETAILS 1

SHEET NUMBER

00-S-420

00-S-420-TYPICAL JOIST GIRDER DETAILS 1

Last Plotted: 2/14/2025 10:54:03 PM
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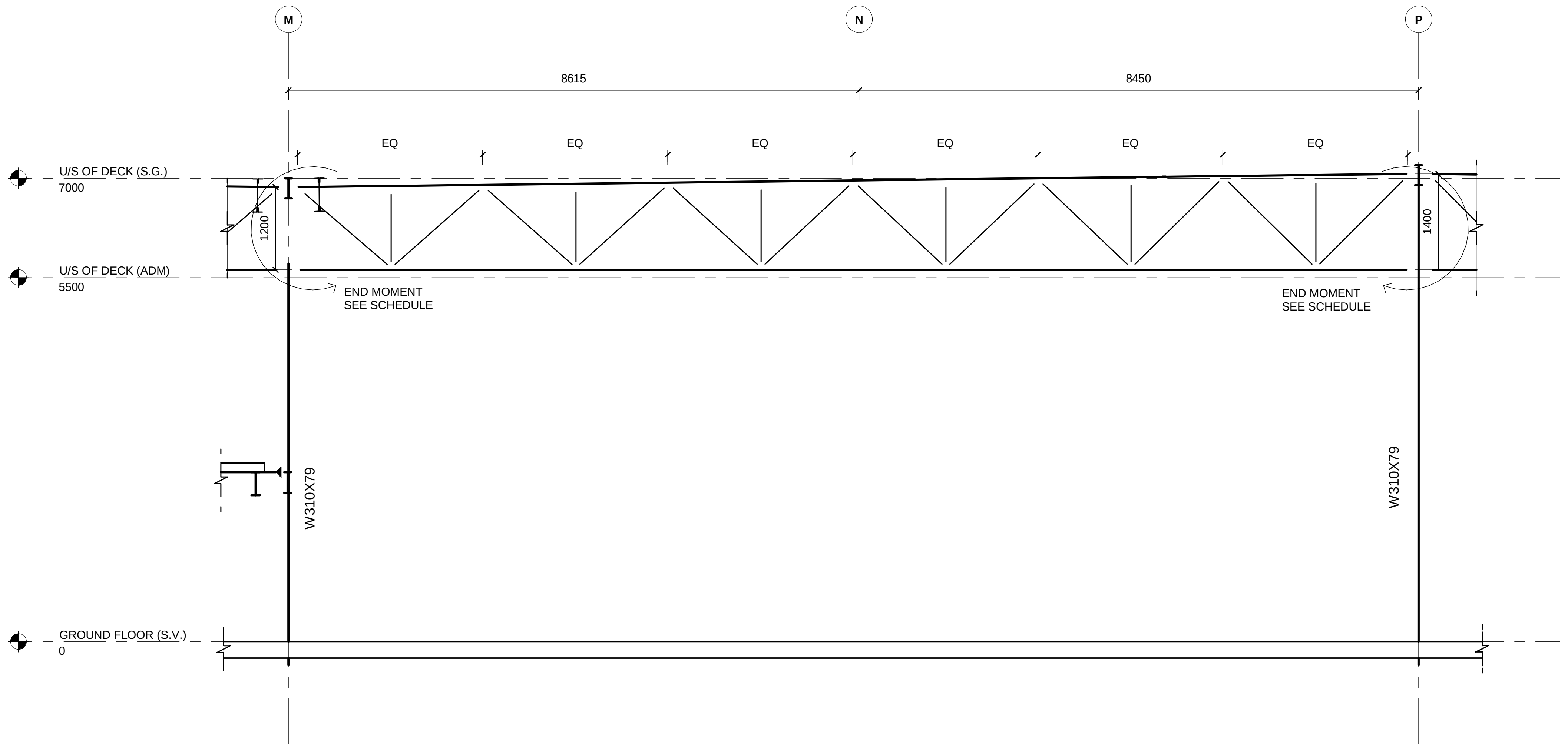
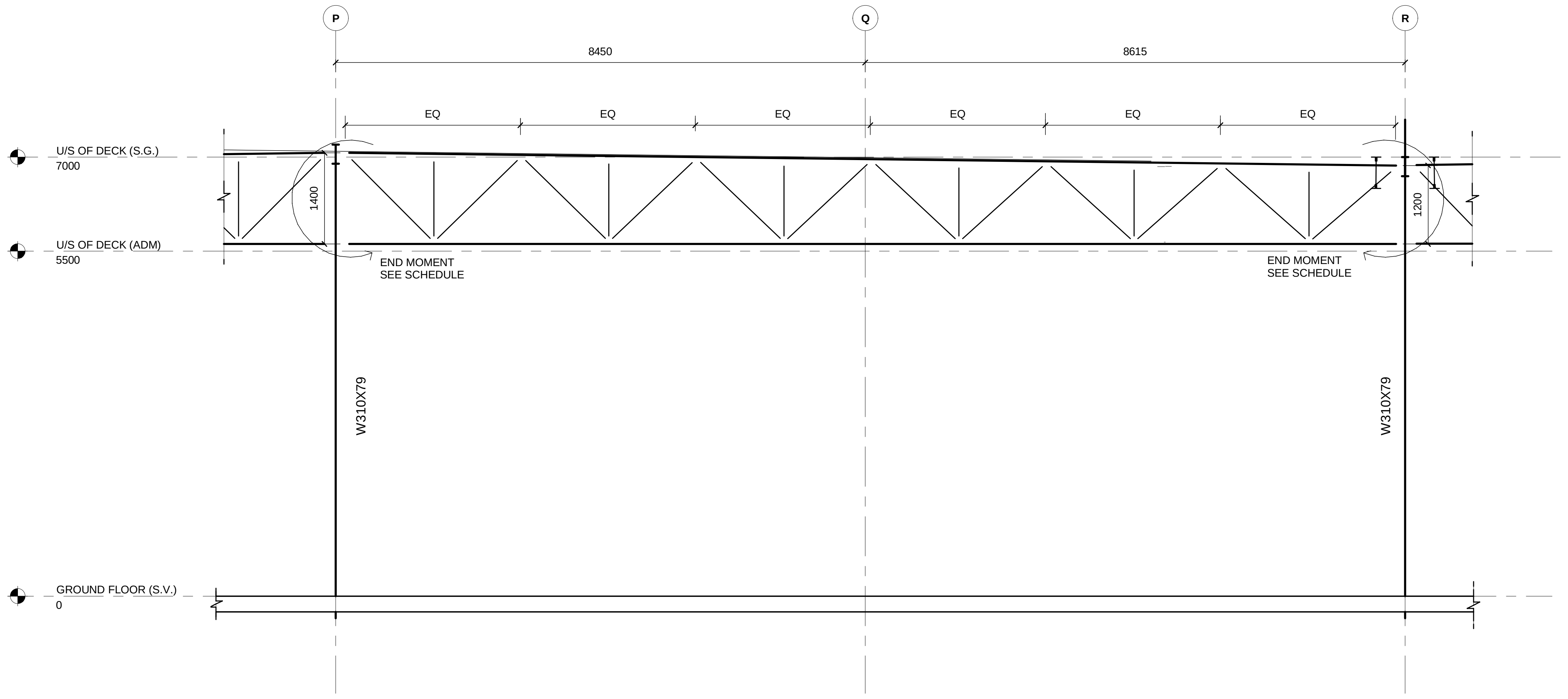
REFER TO DRAWING S420 FOR JOIST GIRDER DESIGN NOTES



1 | JOIST GIRDER - JG3
00-S-421 SCALE: 1 : 50



2 | JOIST GIRDER - JG4
00-S-421 SCALE: 1 : 50

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

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A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

TYPICAL JOIST GIRDER DETAILS 2

SHEET NUMBER

00-S-421

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:

00-S-421-TYPICAL JOIST GIRDER DETAILS 2

Last Plotted: 2/14/2025 10:54:04 PM
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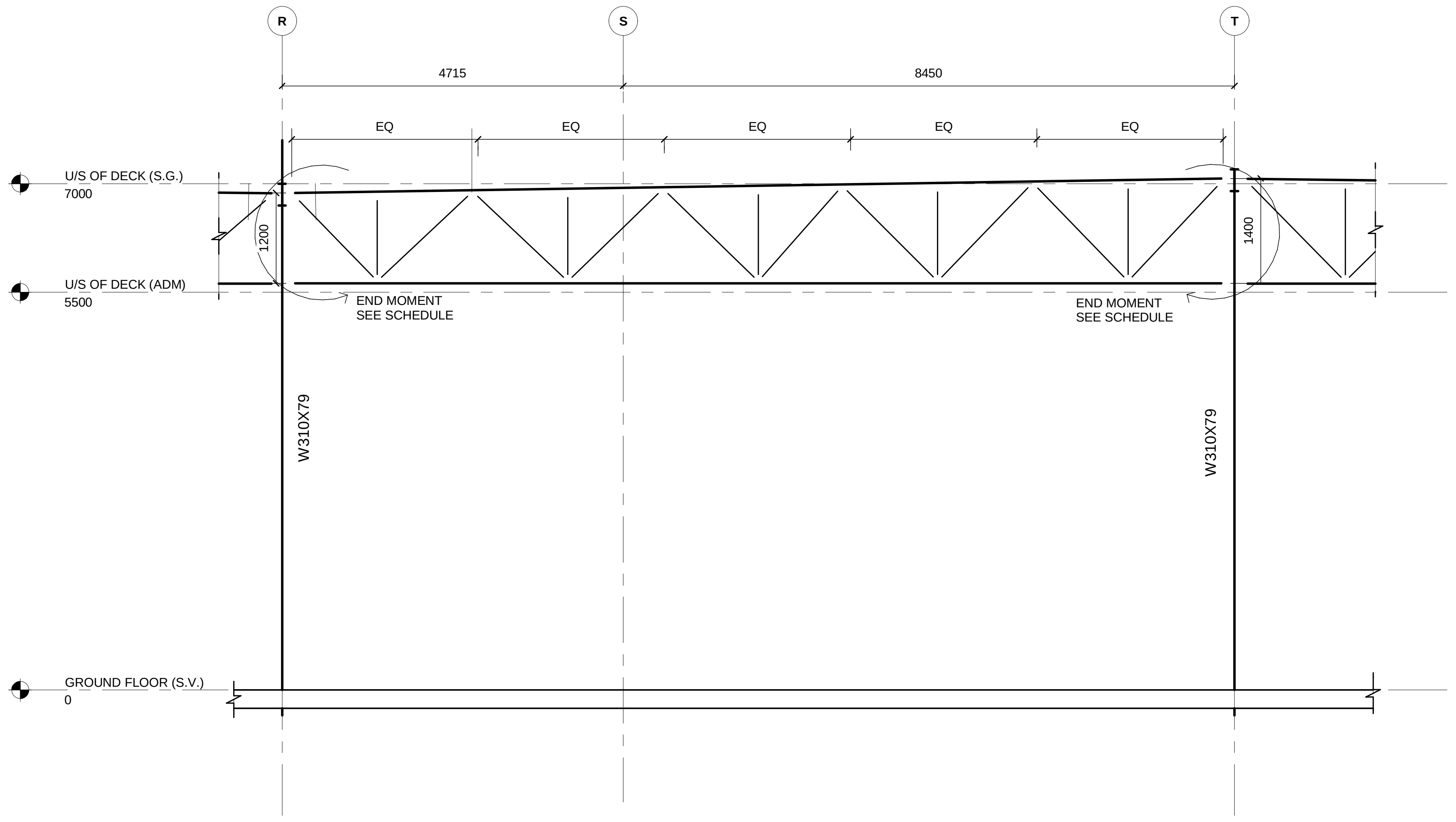
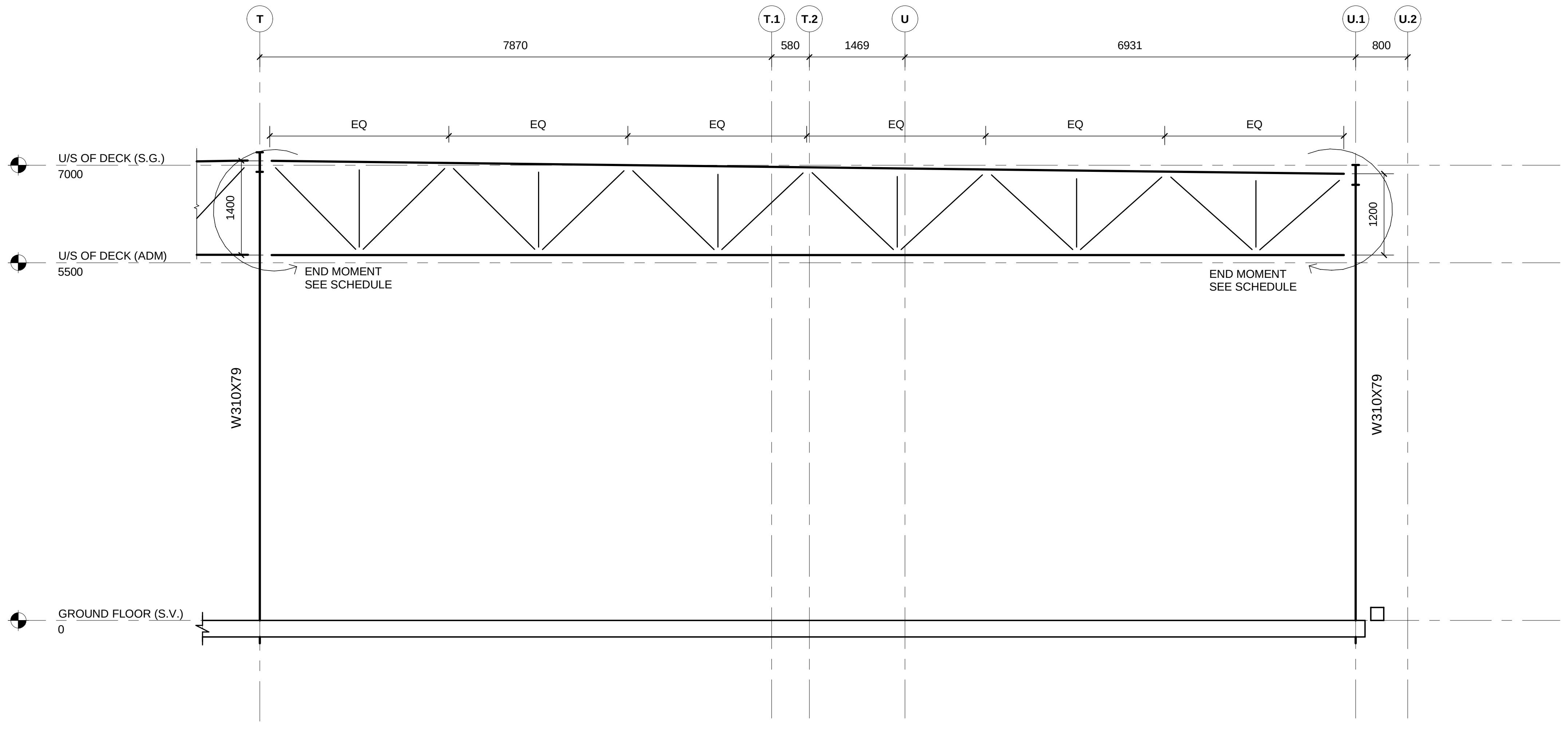
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:



1 JOIST GIRDER - JG5

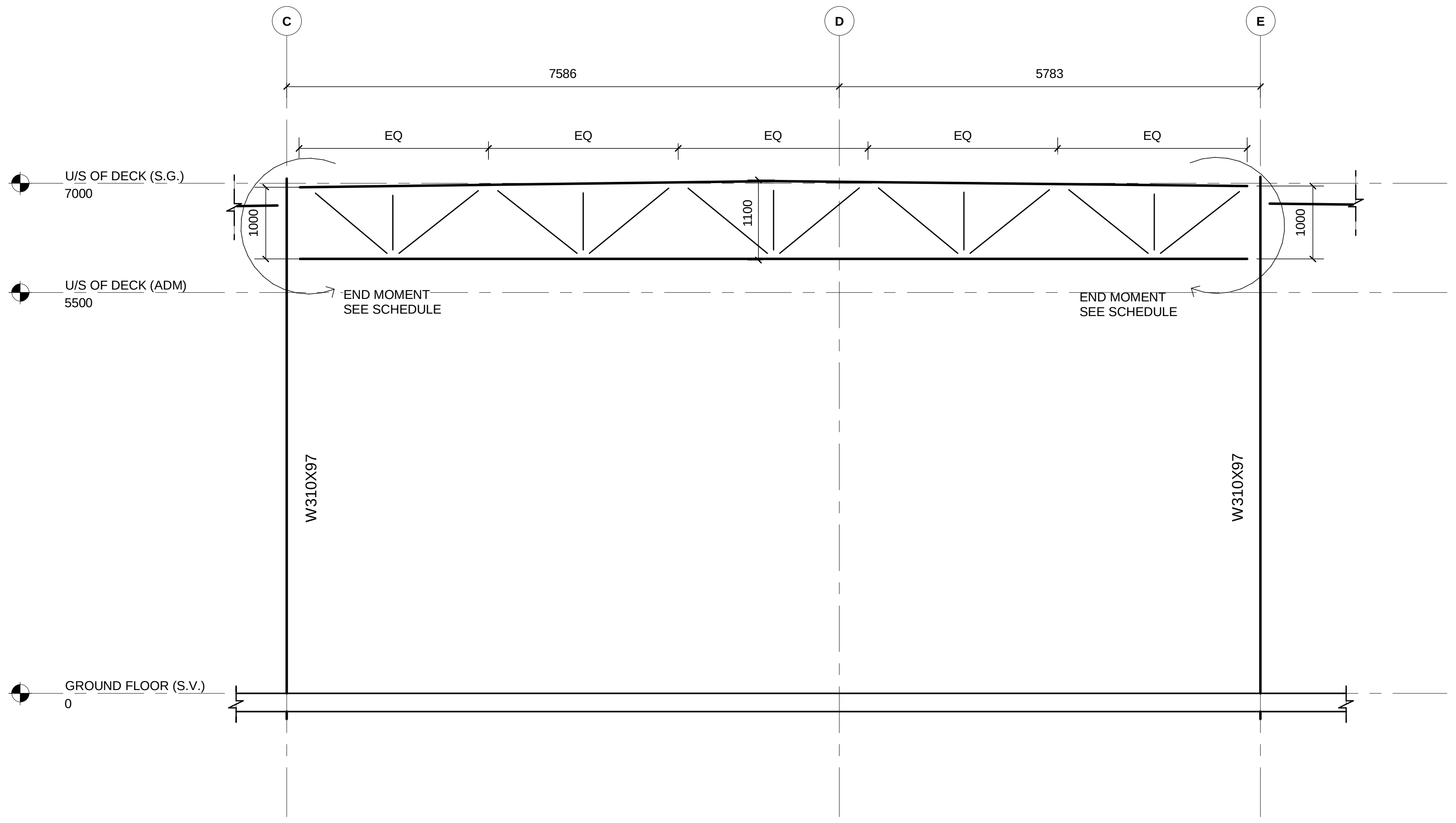
00-S-422 SCALE: 1 : 50



2 JOIST GIRDER - JG6

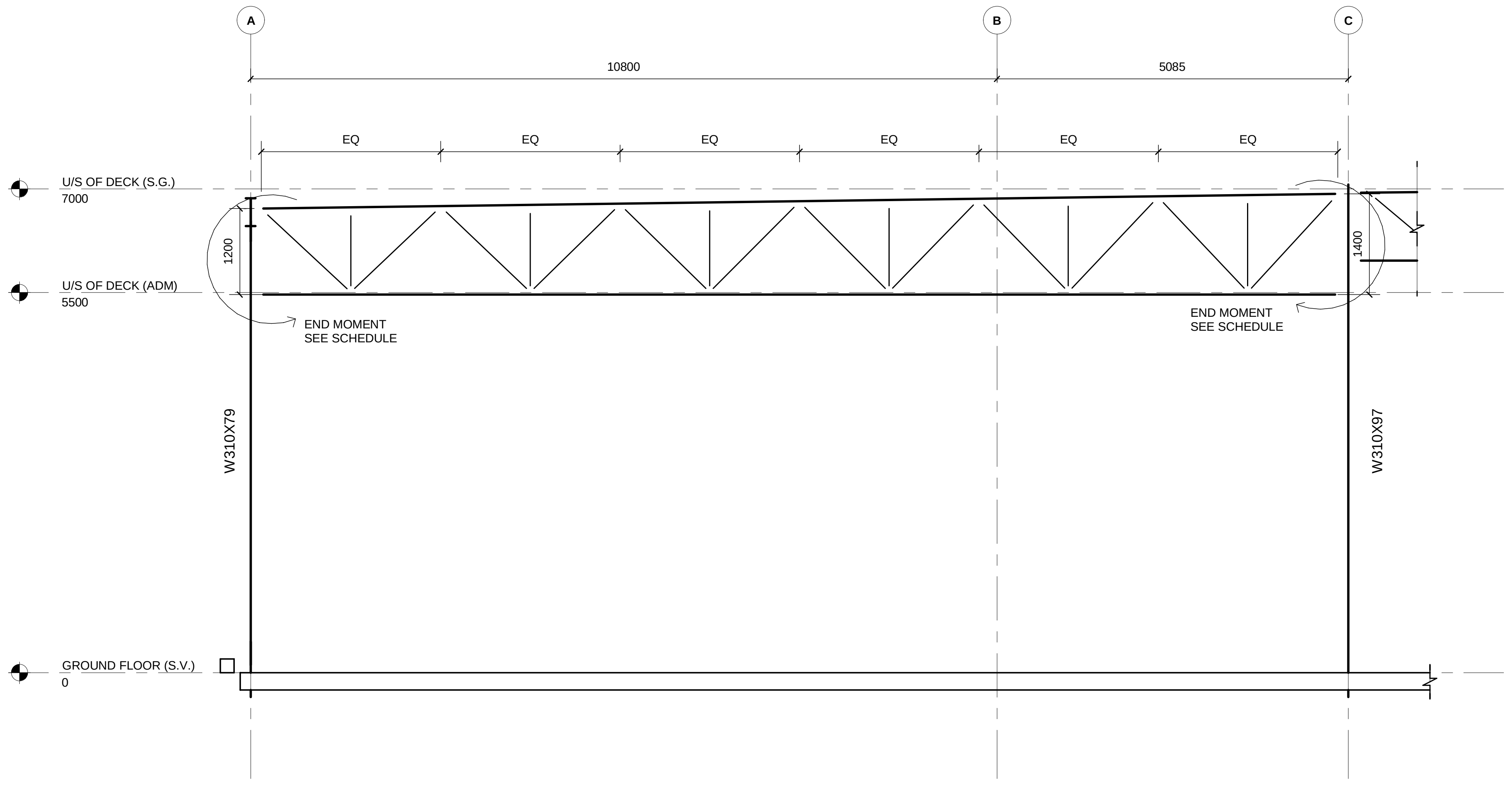
00-S-422 SCALE: 1 : 50

NOTE:
REFER TO DRAWING S420 FOR JOIST GIRDER DESIGN NOTES



3 JOIST GIRDER - JG7

00-S-422 SCALE: 1 : 50



4 JOIST GIRDER - JG8

00-S-422 SCALE: 1 : 50

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

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A	29/03/2024	ISSUED FOR 33% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

TYPICAL JOIST GIRDER DETAILS 3

SHEET NUMBER

00-S-422

00-S-422-TYPICAL JOIST GIRDER DETAILS 3

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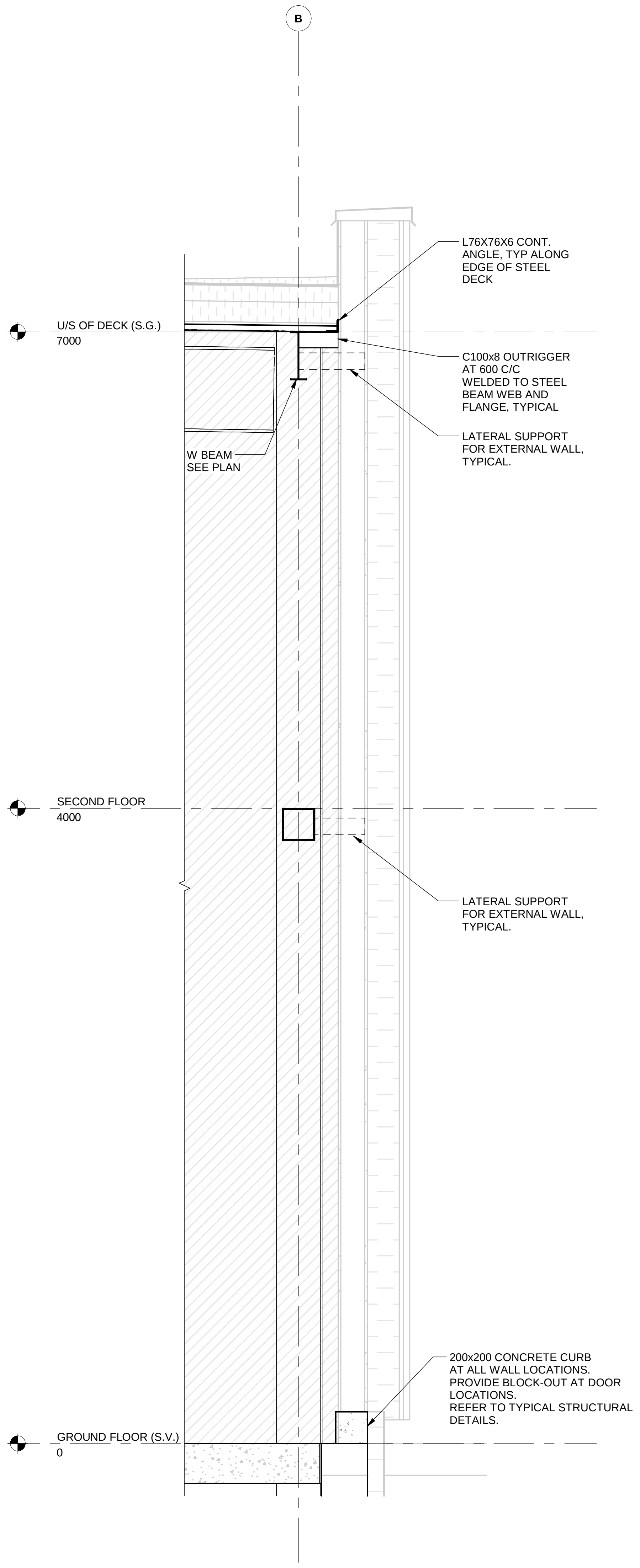
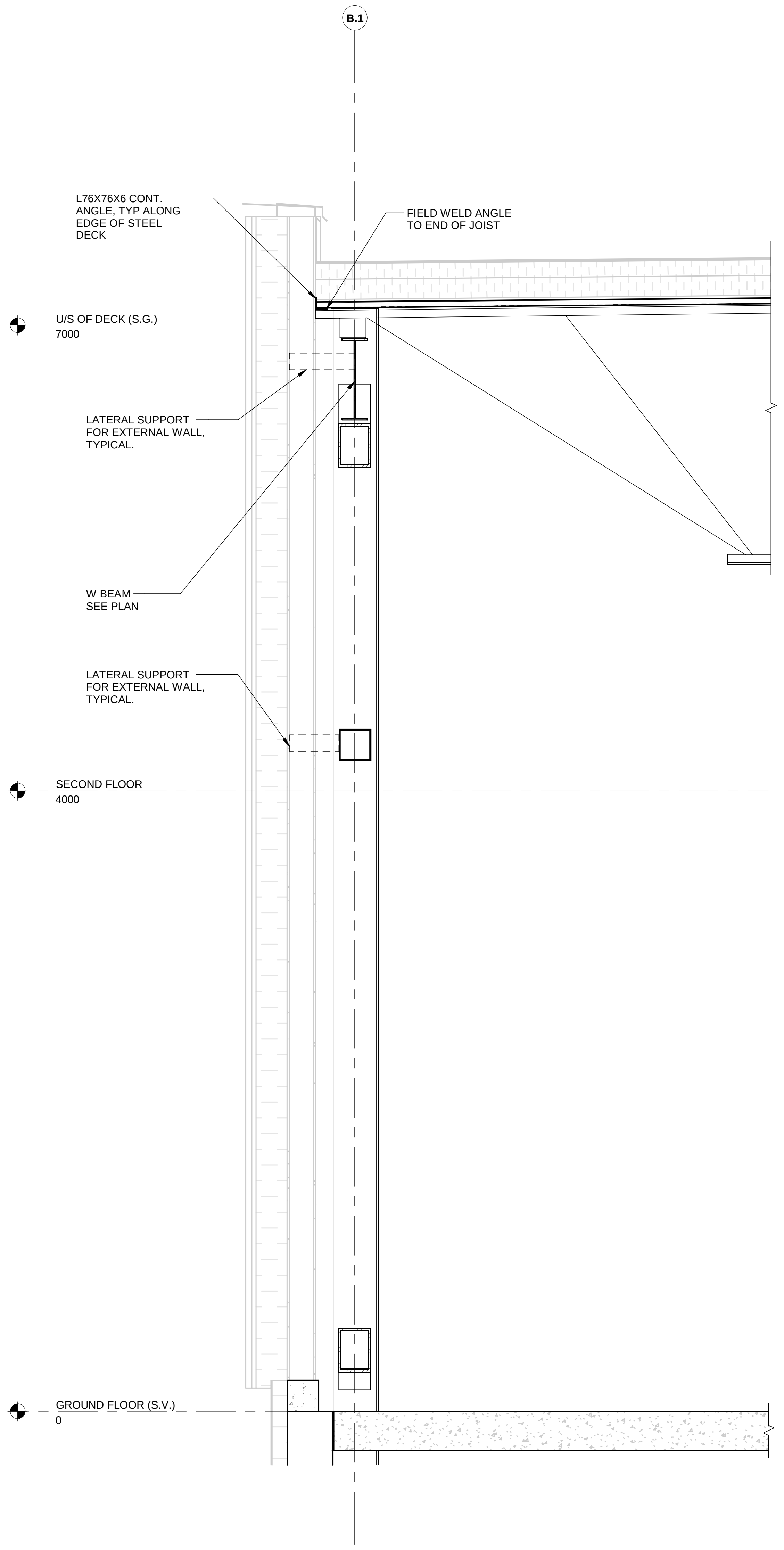
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:


B
U/S OF DECK (S.G.)
7000
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
C100x8 OUTRIGGER AT 600 C/C WELDED TO STEEL BEAM WEB AND FLANGE, TYPICAL
LATERAL SUPPORT FOR EXTERNAL WALL, TYPICAL.
W BEAM SEE PLAN
SECOND FLOOR
4000
LATERAL SUPPORT FOR EXTERNAL WALL, TYPICAL.
200x200 CONCRETE CURB AT ALL WALL LOCATIONS. PROVIDE BLOCK-OUT AT DOOR LOCATIONS. REFER TO TYPICAL STRUCTURAL DETAILS.
GROUND FLOOR (S.V.)
0

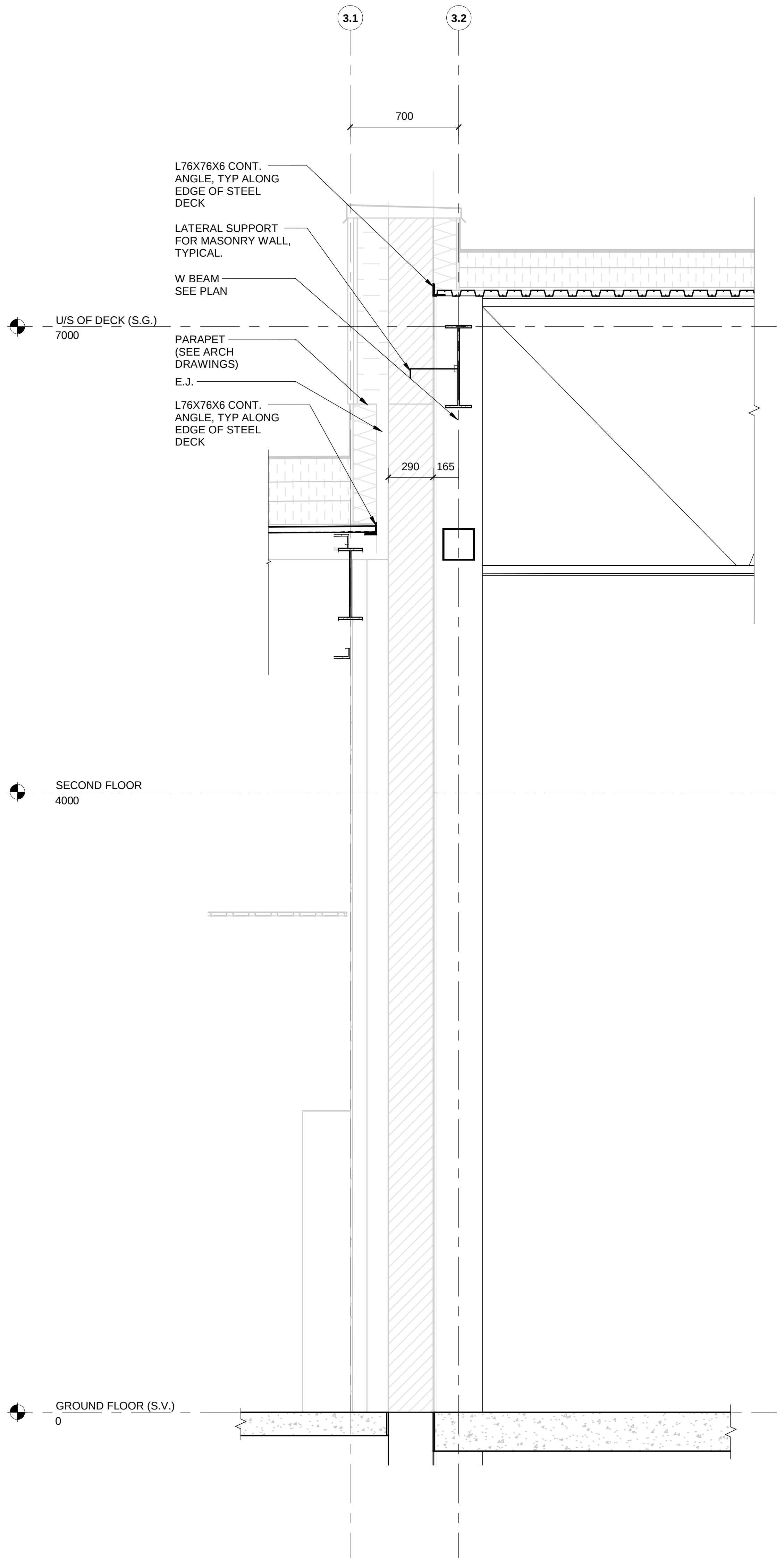
1 WALL SECTION

00-S-450 REF: 00-S-151 SCALE: 1 : 20


B.1
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
FIELD WELD ANGLE TO END OF JOIST
U/S OF DECK (S.G.)
7000
LATERAL SUPPORT FOR EXTERNAL WALL, TYPICAL.
W BEAM SEE PLAN
LATERAL SUPPORT FOR EXTERNAL WALL, TYPICAL.
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

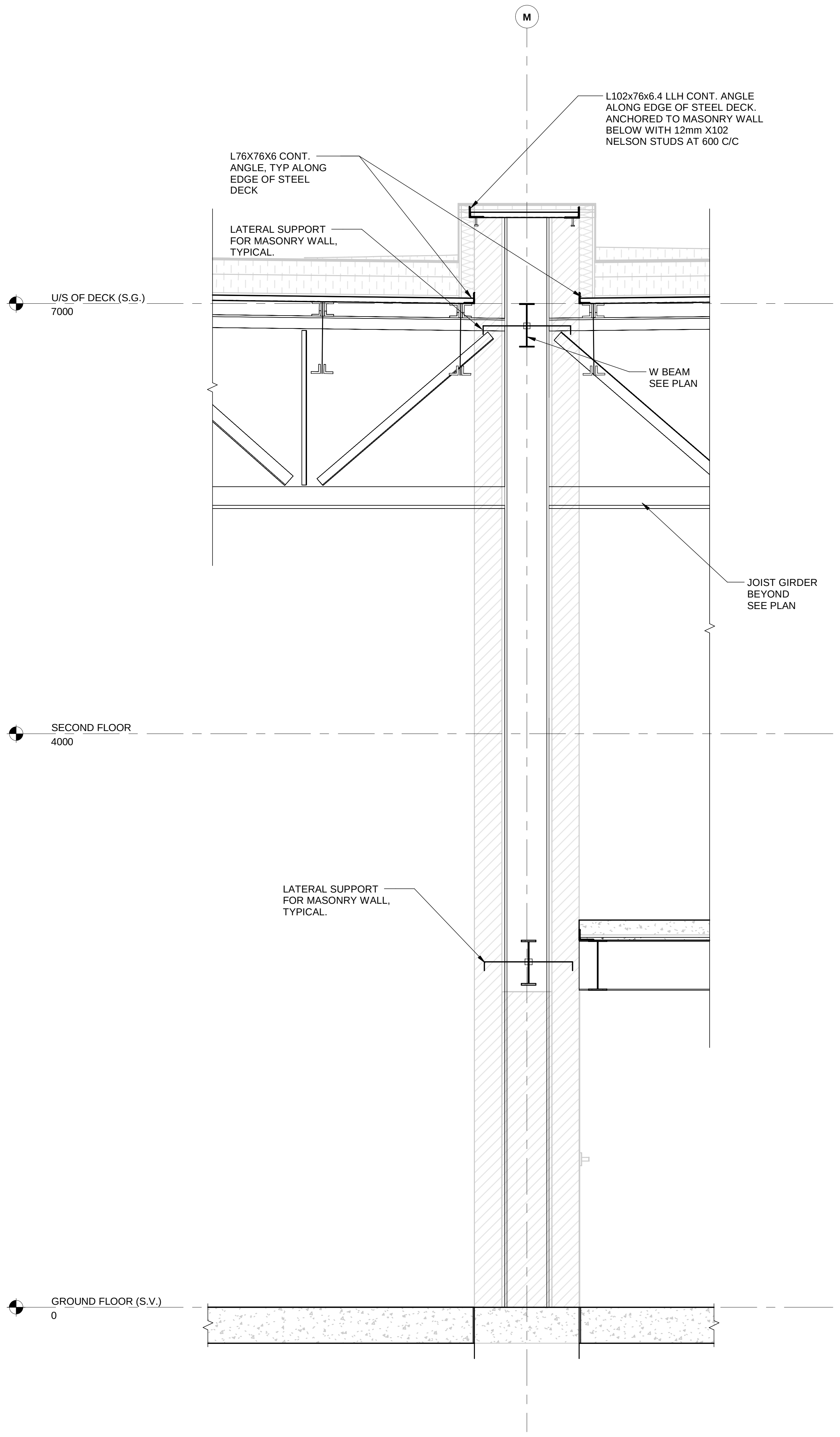
2 WALL SECTION

00-S-450 REF: 00-S-151 SCALE: 1 : 20


3.1
3.2
700
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
W BEAM SEE PLAN
PARAPET (SEE ARCH DRAWINGS)
E.J.
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
290
165
U/S OF DECK (S.G.)
7000
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

3 WALL SECTION

00-S-450 REF: 00-S-151 SCALE: 1 : 20


M
L102x76x6.4 LLH CONT. ANGLE ALONG EDGE OF STEEL DECK. ANCHORED TO MASONRY WALL BELOW WITH 12mm X102 NELSON STUDS AT 600 C/C
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
U/S OF DECK (S.G.)
7000
W BEAM SEE PLAN
JOIST GIRDER BEYOND SEE PLAN
SECOND FLOOR
4000
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
GROUND FLOOR (S.V.)
0

4 WALL SECTION

00-S-450 REF: 00-S-151 SCALE: 1 : 20

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

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B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

WALL SECTION DETAILS 1

SHEET NUMBER

00-S-450

00-S-450-WALL SECTION DETAILS 1
Last Plotted: 2/14/2025 10:54:25 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

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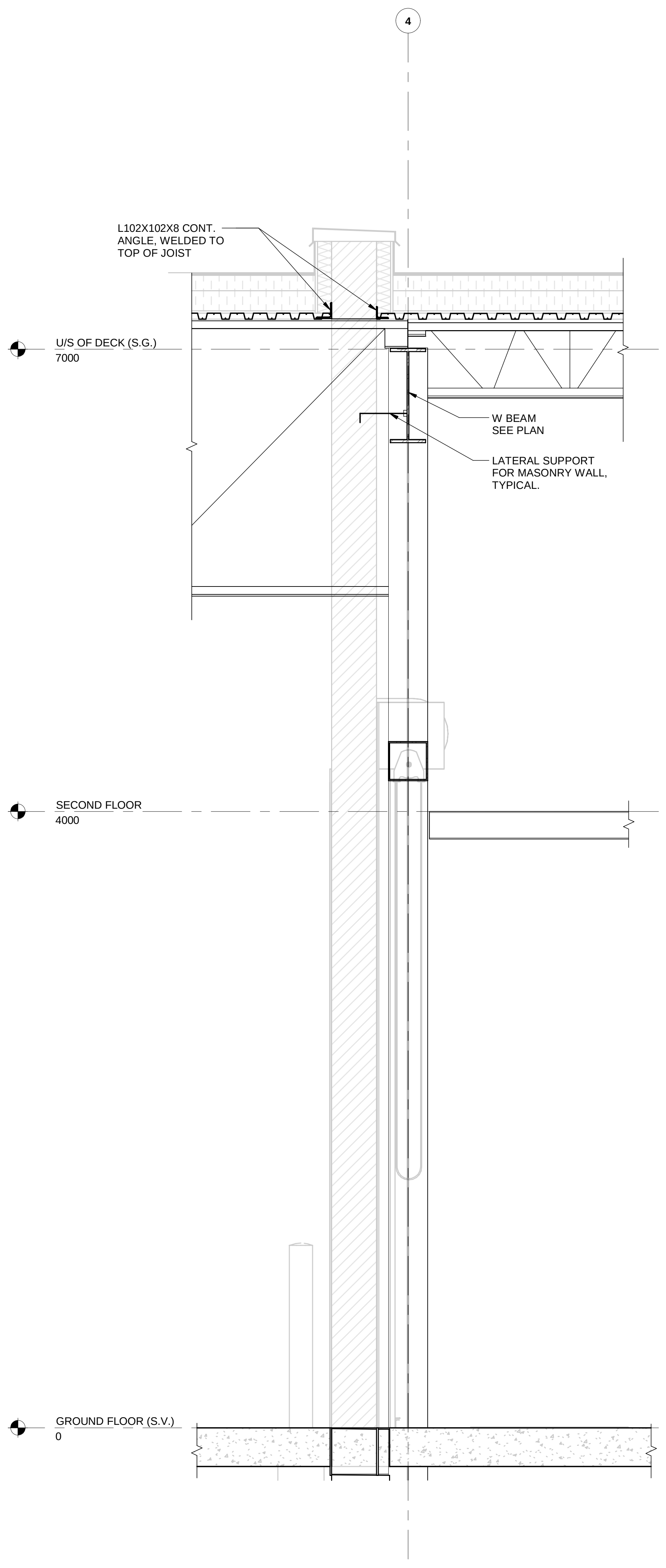
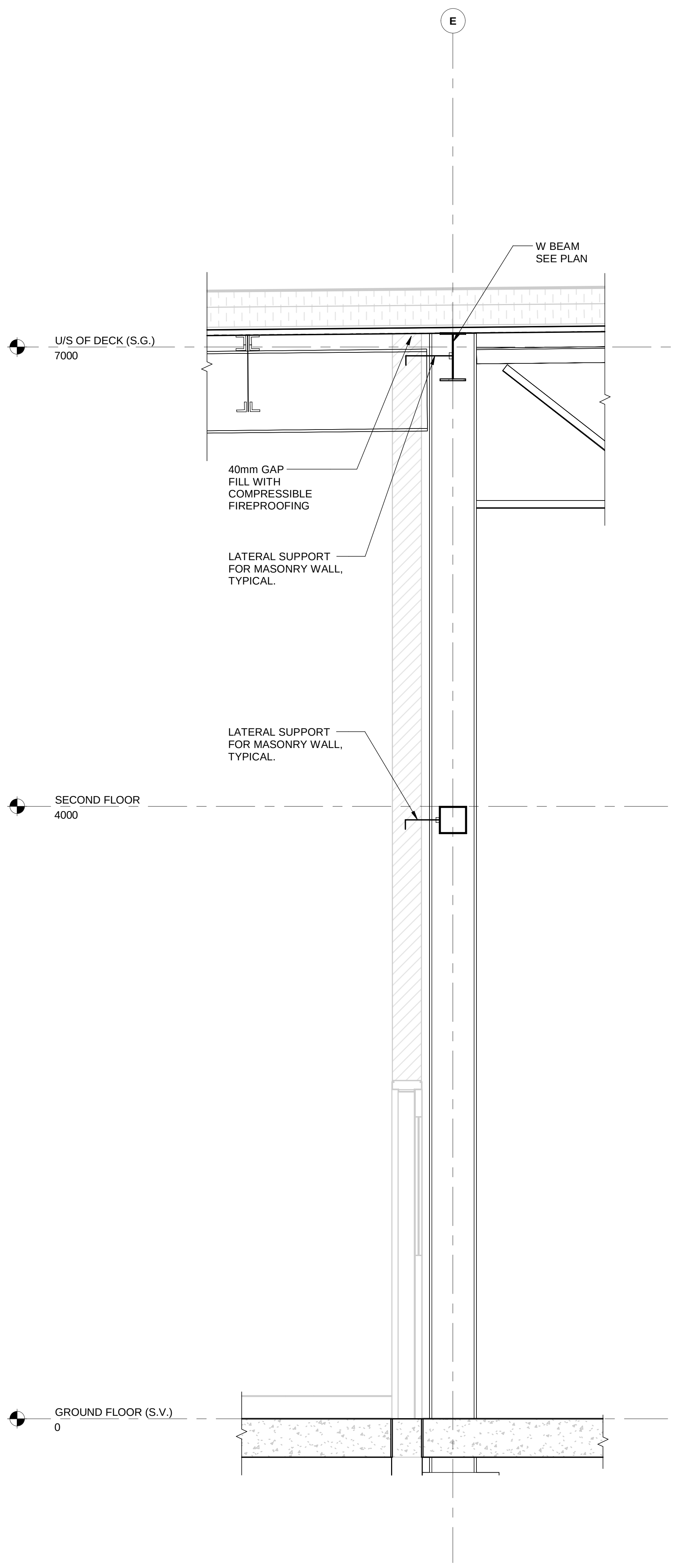
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:


4
L102X102X8 CONT. ANGLE, WELDED TO TOP OF JOIST
U/S OF DECK (S.G.)
7000
W BEAM SEE PLAN
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

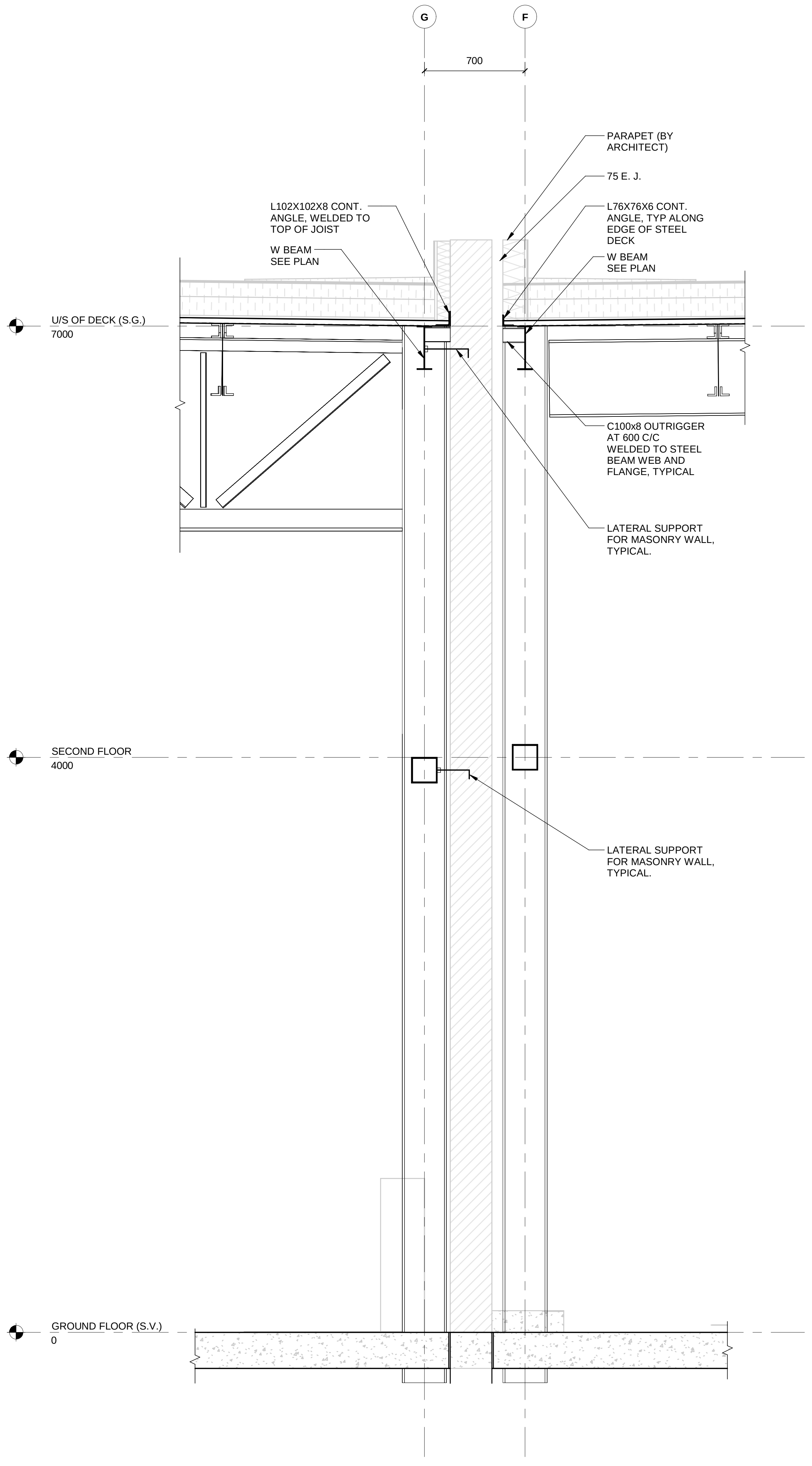
5 WALL SECTION

00-S-451 REF: 00-S-151 SCALE: 1 : 20


E
W BEAM SEE PLAN
U/S OF DECK (S.G.)
7000
40mm GAP FILL WITH COMPRESSIBLE FIREPROOFING
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

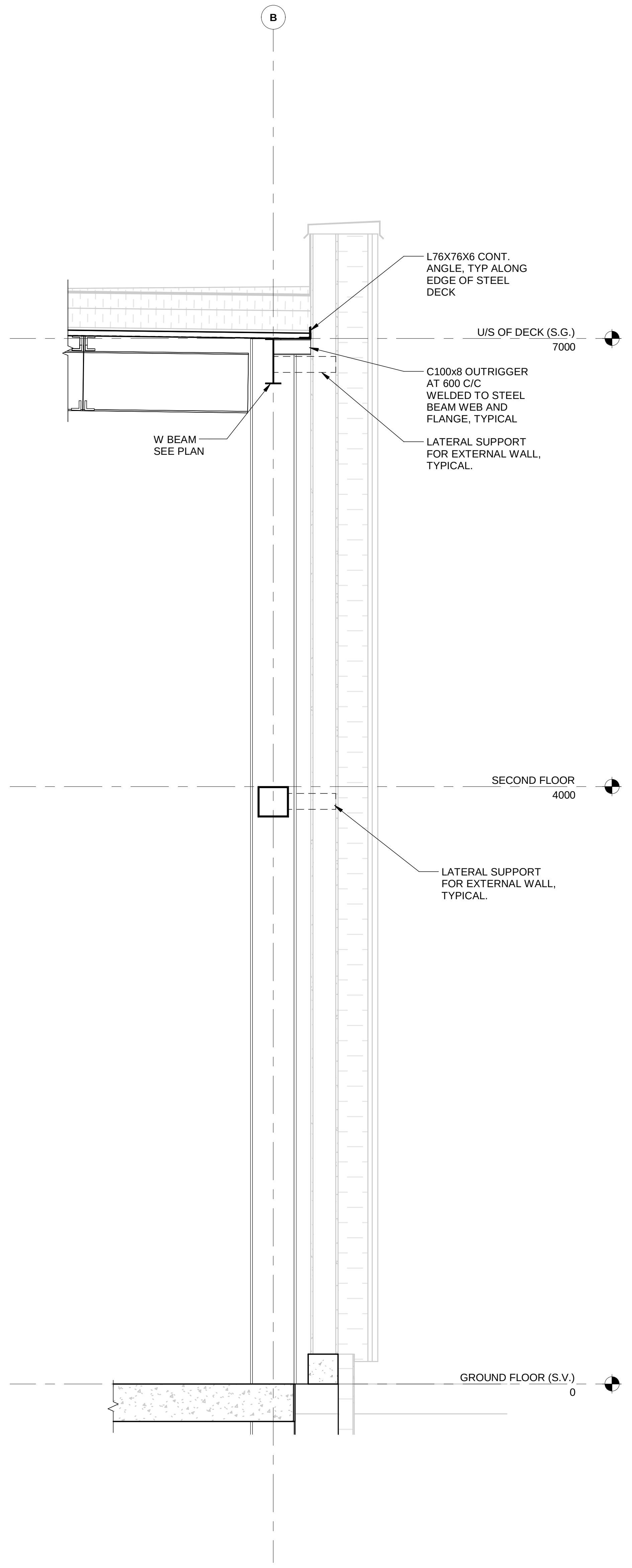
6 WALL SECTION

00-S-451 REF: 00-S-151 SCALE: 1 : 20


G
F
700
PARAPET (BY ARCHITECT)
75 E. J.
L102X102X8 CONT. ANGLE, WELDED TO TOP OF JOIST
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
W BEAM SEE PLAN
W BEAM SEE PLAN
U/S OF DECK (S.G.)
7000
C100x8 OUTRIGGER AT 600 C/C WELDED TO STEEL BEAM WEB AND FLANGE, TYPICAL
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
SECOND FLOOR
4000
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
GROUND FLOOR (S.V.)
0

7 WALL SECTION

00-S-451 REF: 00-S-151 SCALE: 1 : 20


B
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
U/S OF DECK (S.G.)
7000
C100x8 OUTRIGGER AT 600 C/C WELDED TO STEEL BEAM WEB AND FLANGE, TYPICAL
W BEAM SEE PLAN
LATERAL SUPPORT FOR EXTERNAL WALL, TYPICAL.
SECOND FLOOR
4000
LATERAL SUPPORT FOR EXTERNAL WALL, TYPICAL.
GROUND FLOOR (S.V.)
0

8 WALL SECTION

00-S-451 REF: 00-S-152 SCALE: 1 : 20

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT

100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
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B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

WALL SECTION DETAILS 2

SHEET NUMBER

00-S-451

00-S-451-WALL SECTION DETAILS 2

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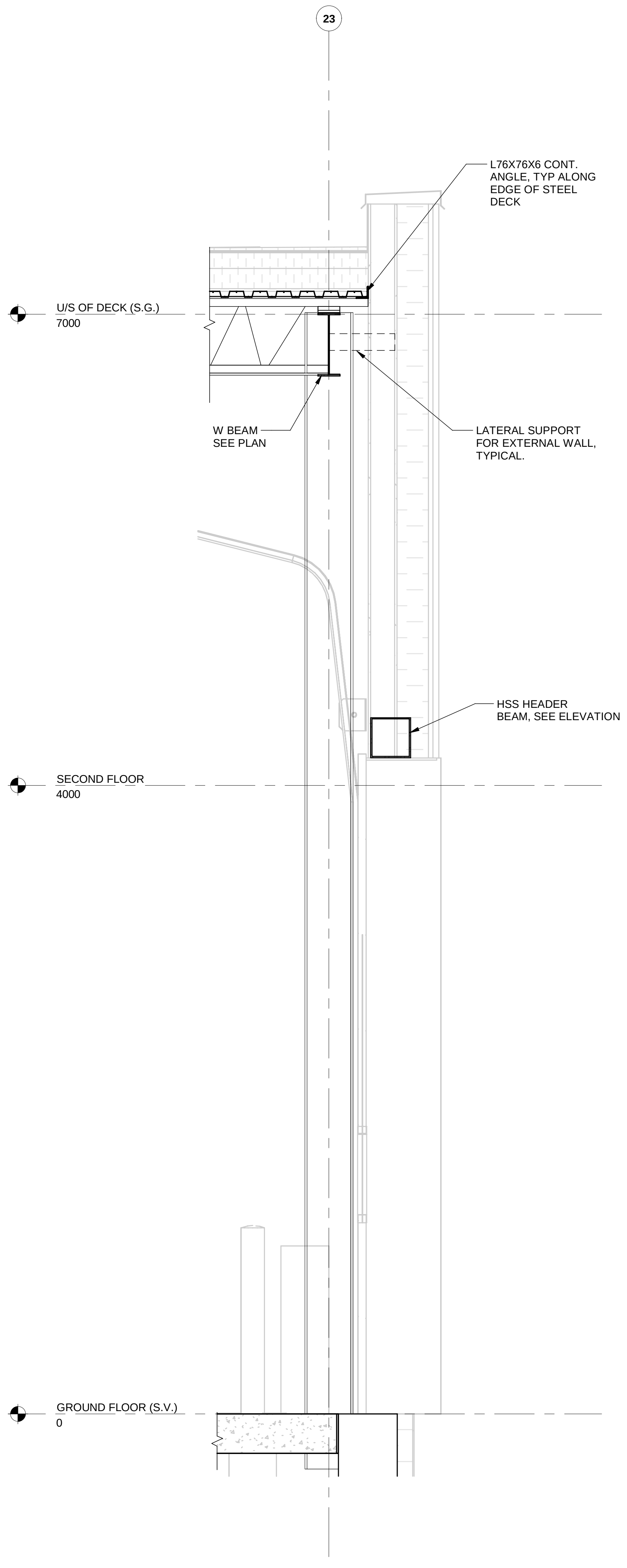
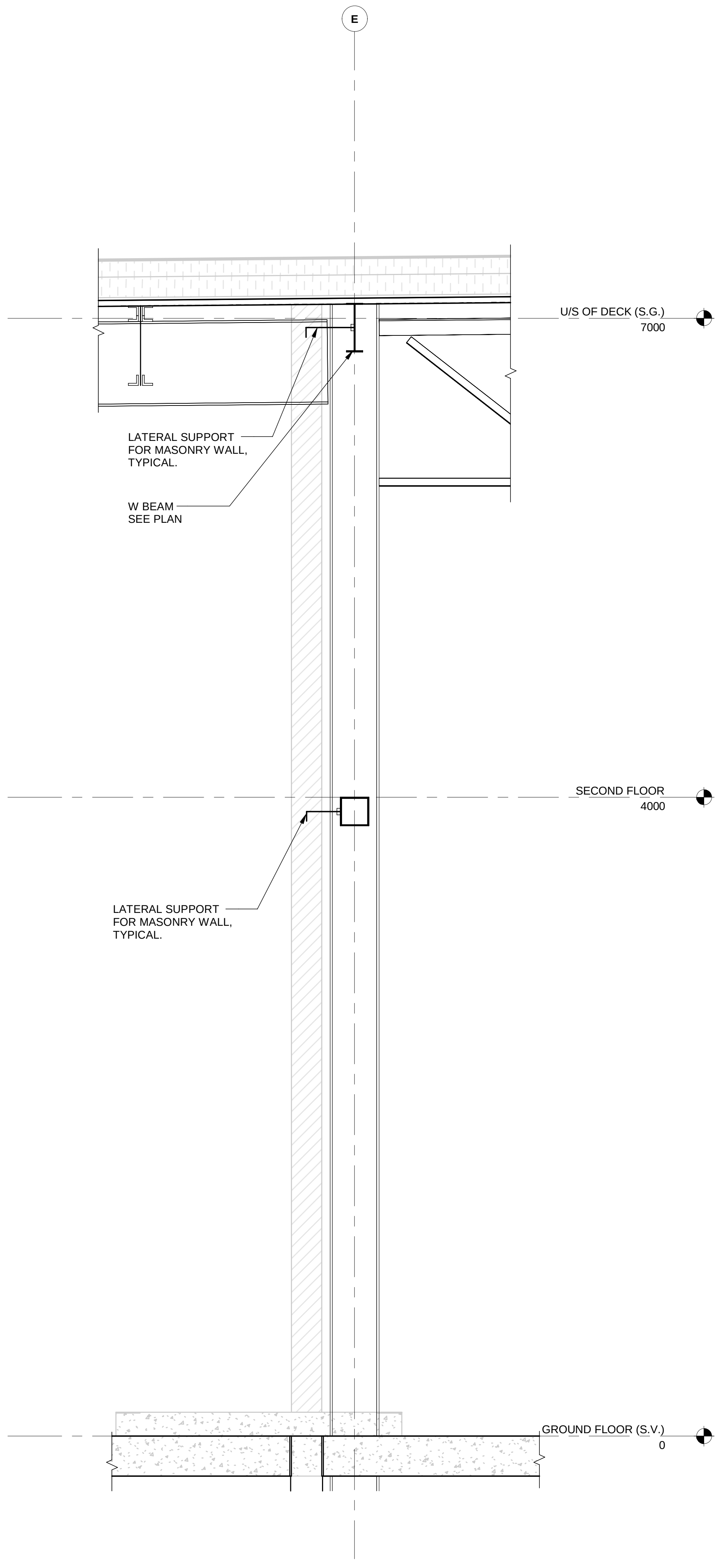

23
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
U/S OF DECK (S.G.)
7000
W BEAM SEE PLAN
LATERAL SUPPORT FOR EXTERNAL WALL, TYPICAL.
HSS HEADER BEAM, SEE ELEVATION
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

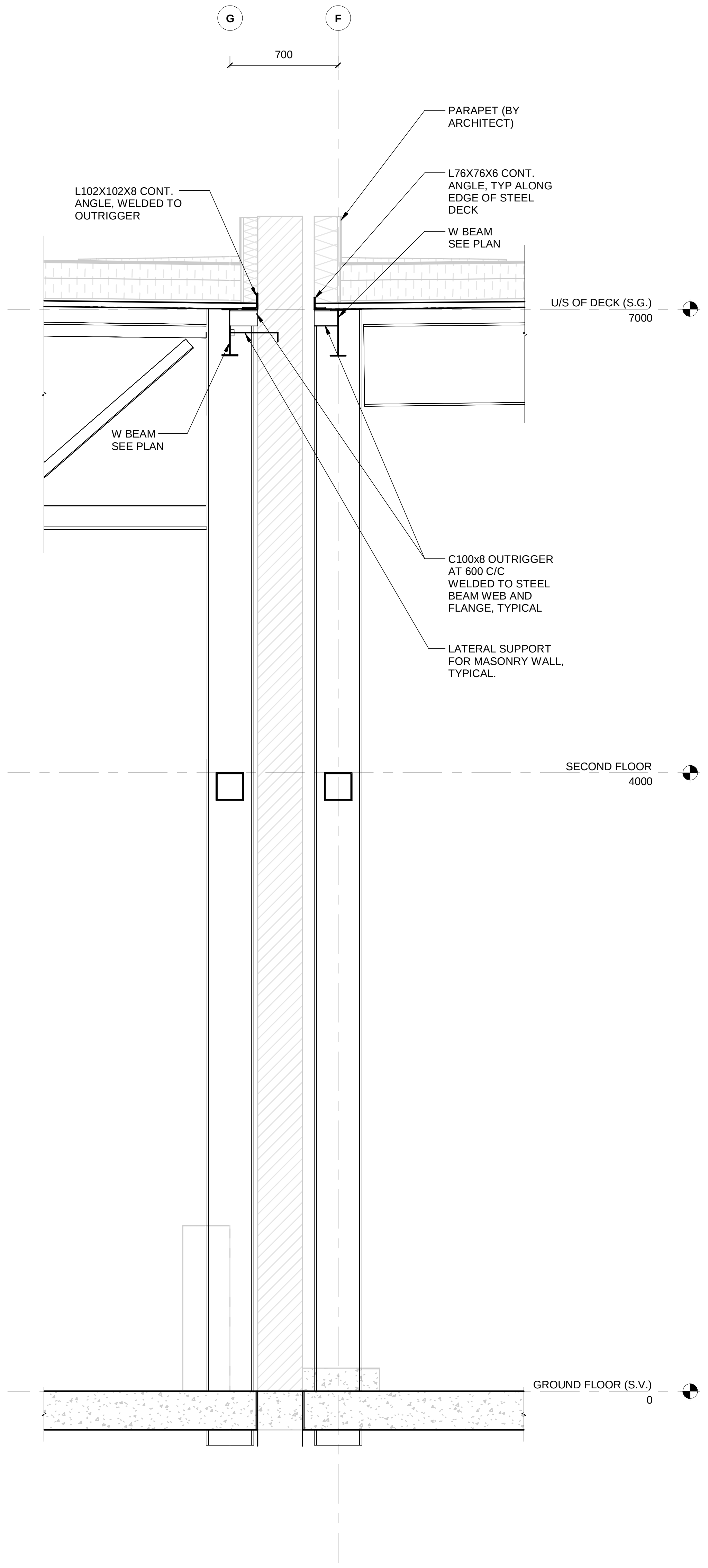
9 WALL SECTION

00-S-452 REF: 00-S-152 SCALE: 1 : 20


E
U/S OF DECK (S.G.)
7000
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
W BEAM SEE PLAN
SECOND FLOOR
4000
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
GROUND FLOOR (S.V.)
0

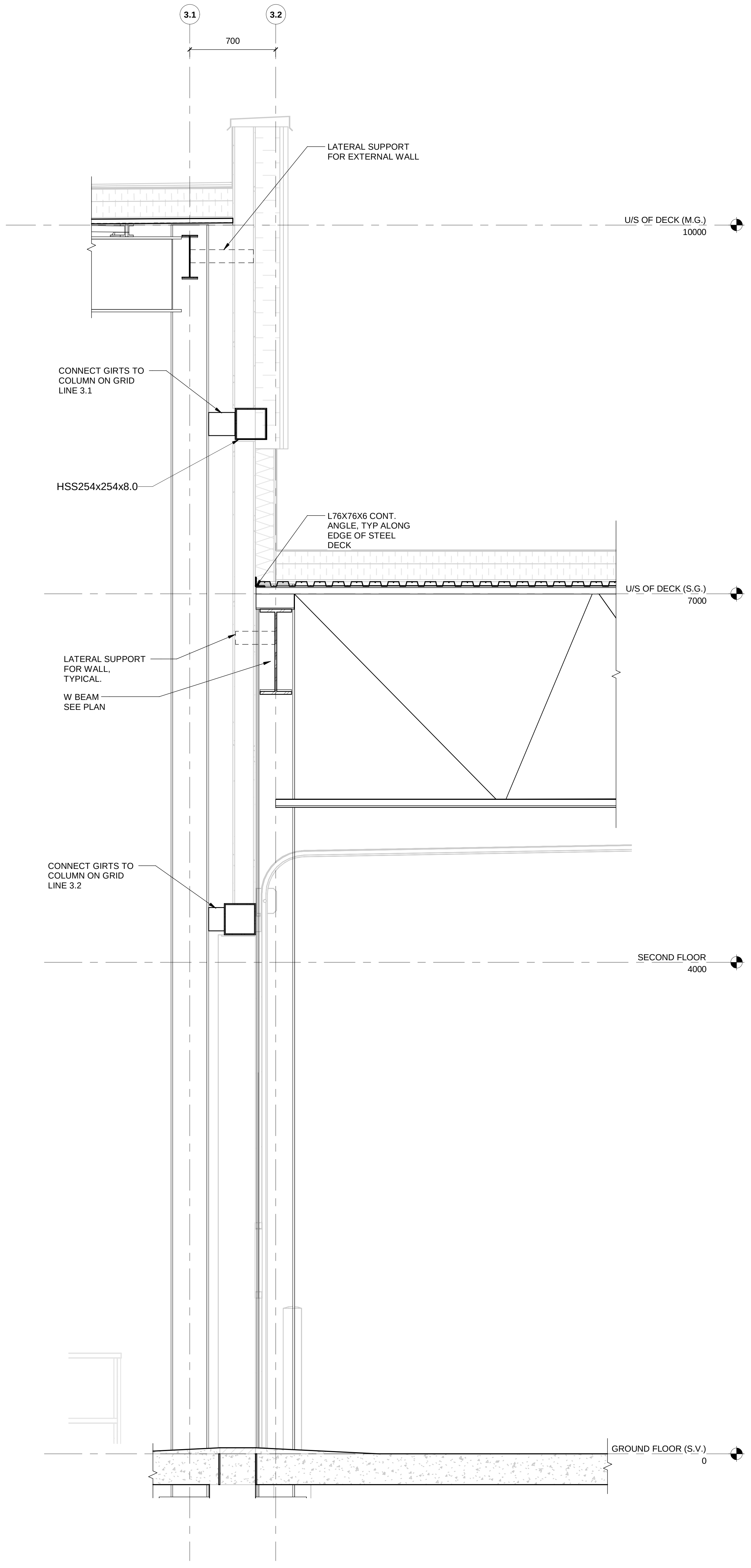
10 WALL SECTION

00-S-452 REF: 00-S-152 SCALE: 1 : 20


G
F
700
PARAPET (BY ARCHITECT)
L102X102X8 CONT. ANGLE, WELDED TO OUTRIGGER
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
W BEAM SEE PLAN
U/S OF DECK (S.G.)
7000
W BEAM SEE PLAN
C100x8 OUTRIGGER AT 600 C/C WELDED TO STEEL BEAM WEB AND FLANGE, TYPICAL
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

11 WALL SECTION

00-S-452 REF: 00-S-152 SCALE: 1 : 20


3.1
3.2
700
LATERAL SUPPORT FOR EXTERNAL WALL
U/S OF DECK (M.G.)
10000
CONNECT GIRTS TO COLUMN ON GRID LINE 3.1
HSS254x254x8.0
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
U/S OF DECK (S.G.)
7000
LATERAL SUPPORT FOR WALL, TYPICAL.
W BEAM SEE PLAN
CONNECT GIRTS TO COLUMN ON GRID LINE 3.2
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

12 WALL SECTION

00-S-452 REF: 00-S-153 SCALE: 1 : 20

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

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PROJECT NUMBER

60721079

SHEET TITLE

WALL SECTION DETAILS 3

SHEET NUMBER

00-S-452

00-S-452-WALL SECTION DETAILS 3

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Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

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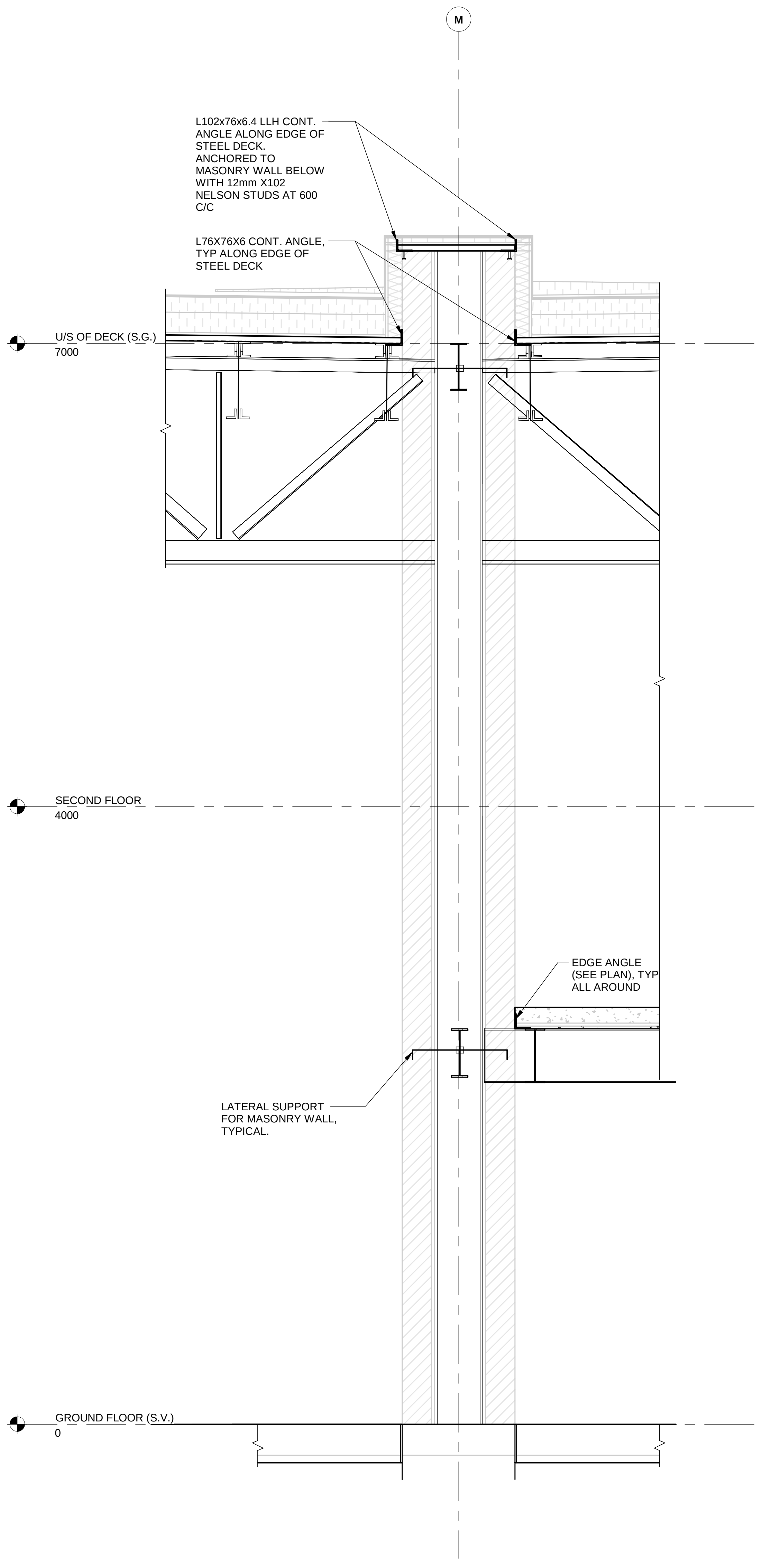
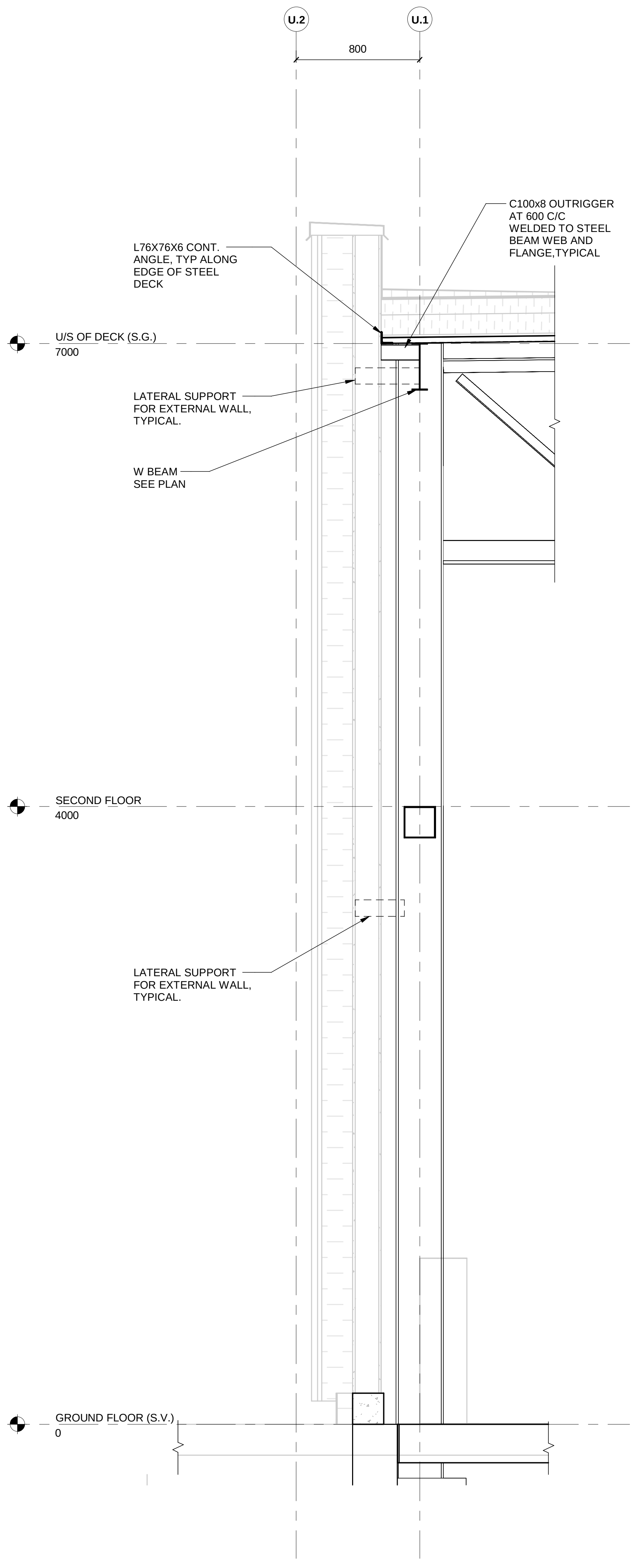
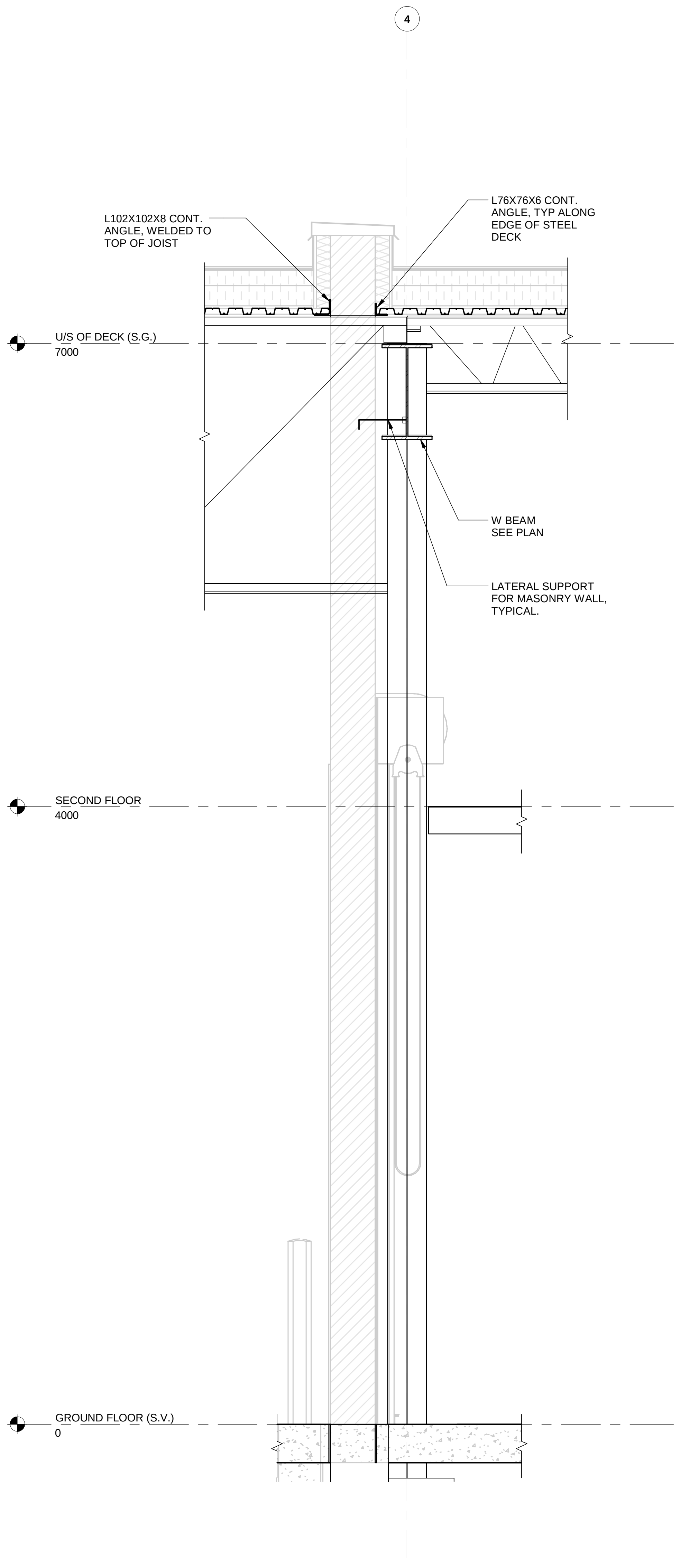

M
L102x76x6.4 LLH CONT. ANGLE ALONG EDGE OF STEEL DECK. ANCHORED TO MASONRY WALL BELOW WITH 12mm X102 NELSON STUDS AT 600 C/C
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
U/S OF DECK (S.G.)
7000
SECOND FLOOR
4000
EDGE ANGLE (SEE PLAN), TYP ALL AROUND
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
GROUND FLOOR (S.V.)
0

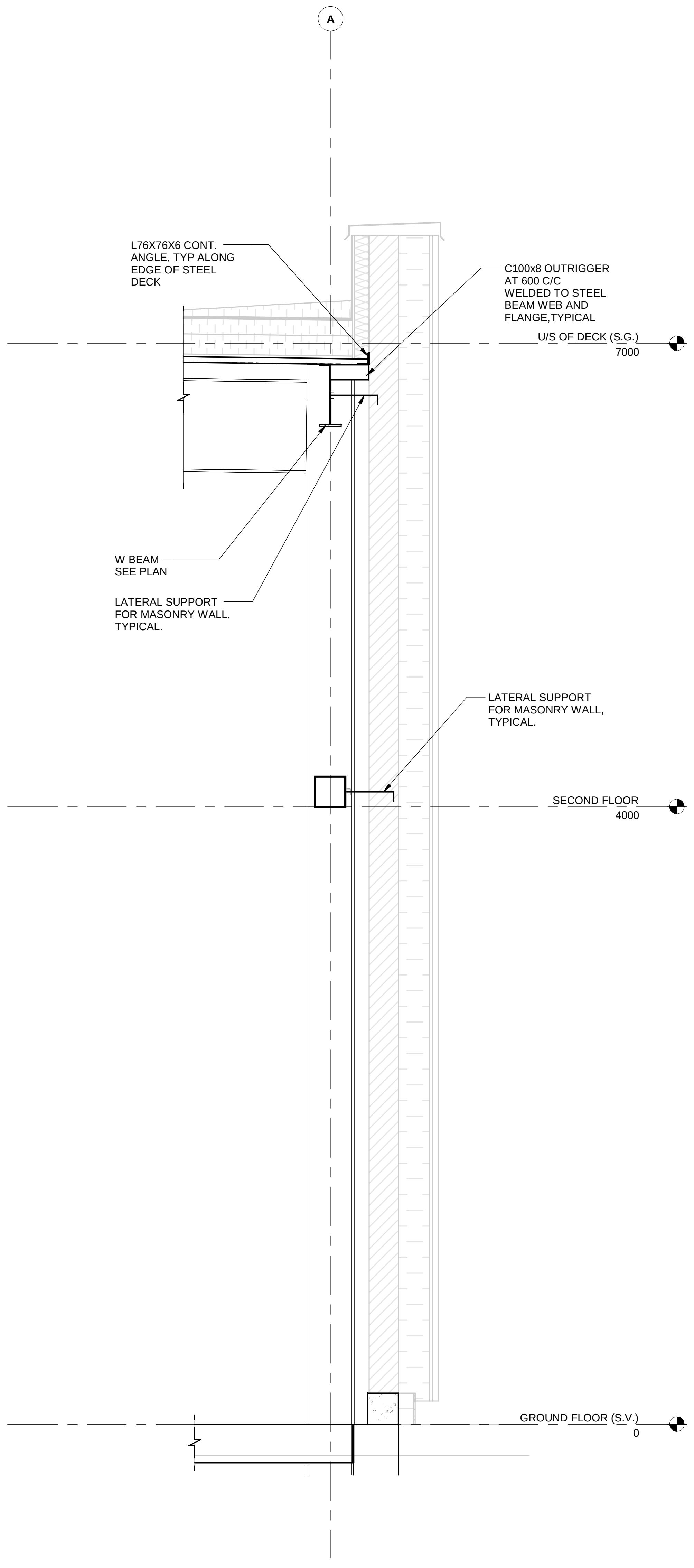
13 WALL SECTION
00-S-453 REF: 00-S-151 SCALE: 1 : 20


U.2
U.1
800
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
C100x8 OUTRIGGER AT 600 C/C WELDED TO STEEL BEAM WEB AND FLANGE,TYPICAL
U/S OF DECK (S.G.)
7000
LATERAL SUPPORT FOR EXTERNAL WALL, TYPICAL.
W BEAM SEE PLAN
SECOND FLOOR
4000
LATERAL SUPPORT FOR EXTERNAL WALL, TYPICAL.
GROUND FLOOR (S.V.)
0

14 WALL SECTION
00-S-453 REF: 00-S-153 SCALE: 1 : 20


4
L102X102X8 CONT. ANGLE, WELDED TO TOP OF JOIST
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
U/S OF DECK (S.G.)
7000
W BEAM SEE PLAN
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

15 WALL SECTION
00-S-453 REF: 00-S-153 SCALE: 1 : 20


A
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
C100x8 OUTRIGGER AT 600 C/C WELDED TO STEEL BEAM WEB AND FLANGE,TYPICAL
U/S OF DECK (S.G.)
7000
W BEAM SEE PLAN
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

16 WALL SECTION
00-S-453 REF: 00-S-151 SCALE: 1 : 20

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

WALL SECTION DETAILS 4

SHEET NUMBER

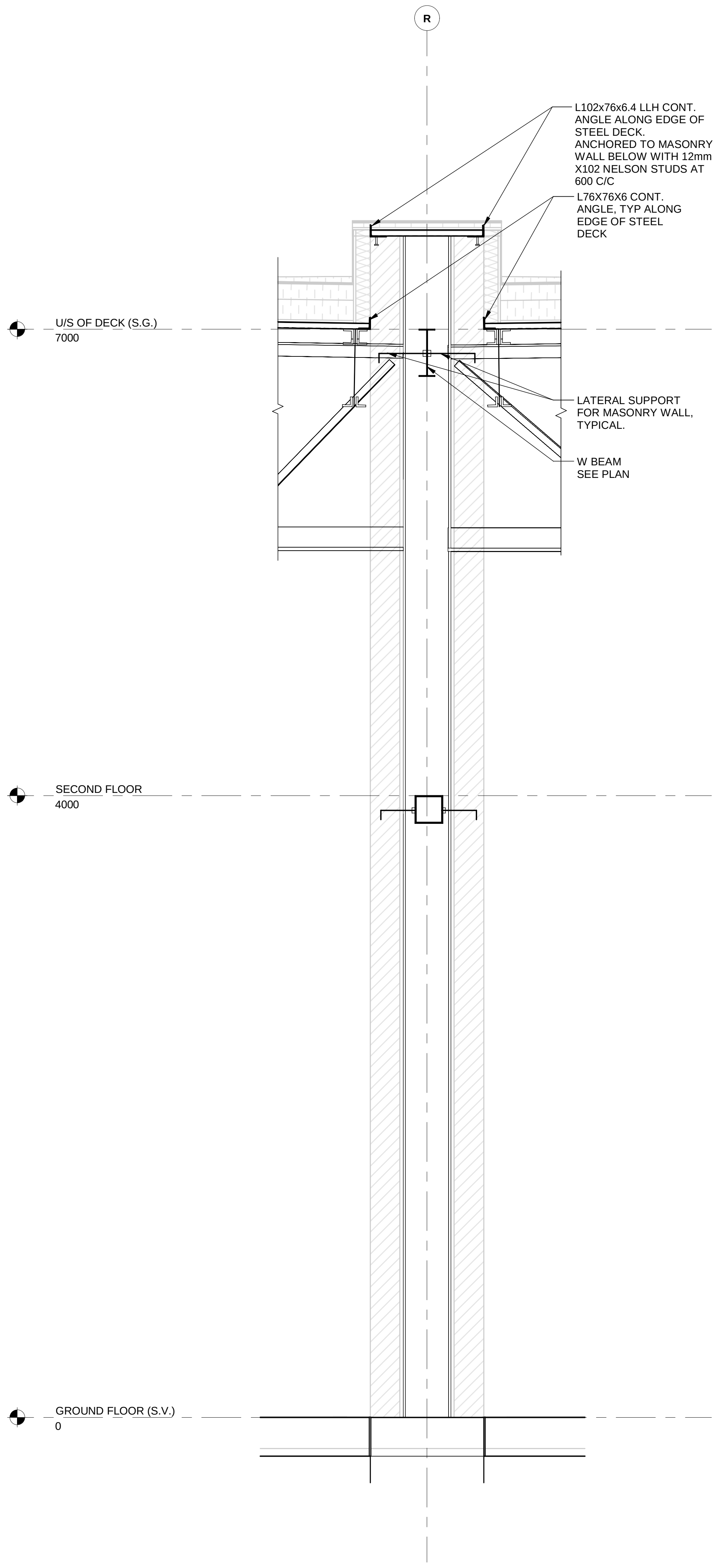
00-S-453

00-S-453-WALL SECTION DETAILS 4
Last Plotted: 2/14/2025 10:55:20 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

Printed on ___% Post-Consumer Recycled Content Paper

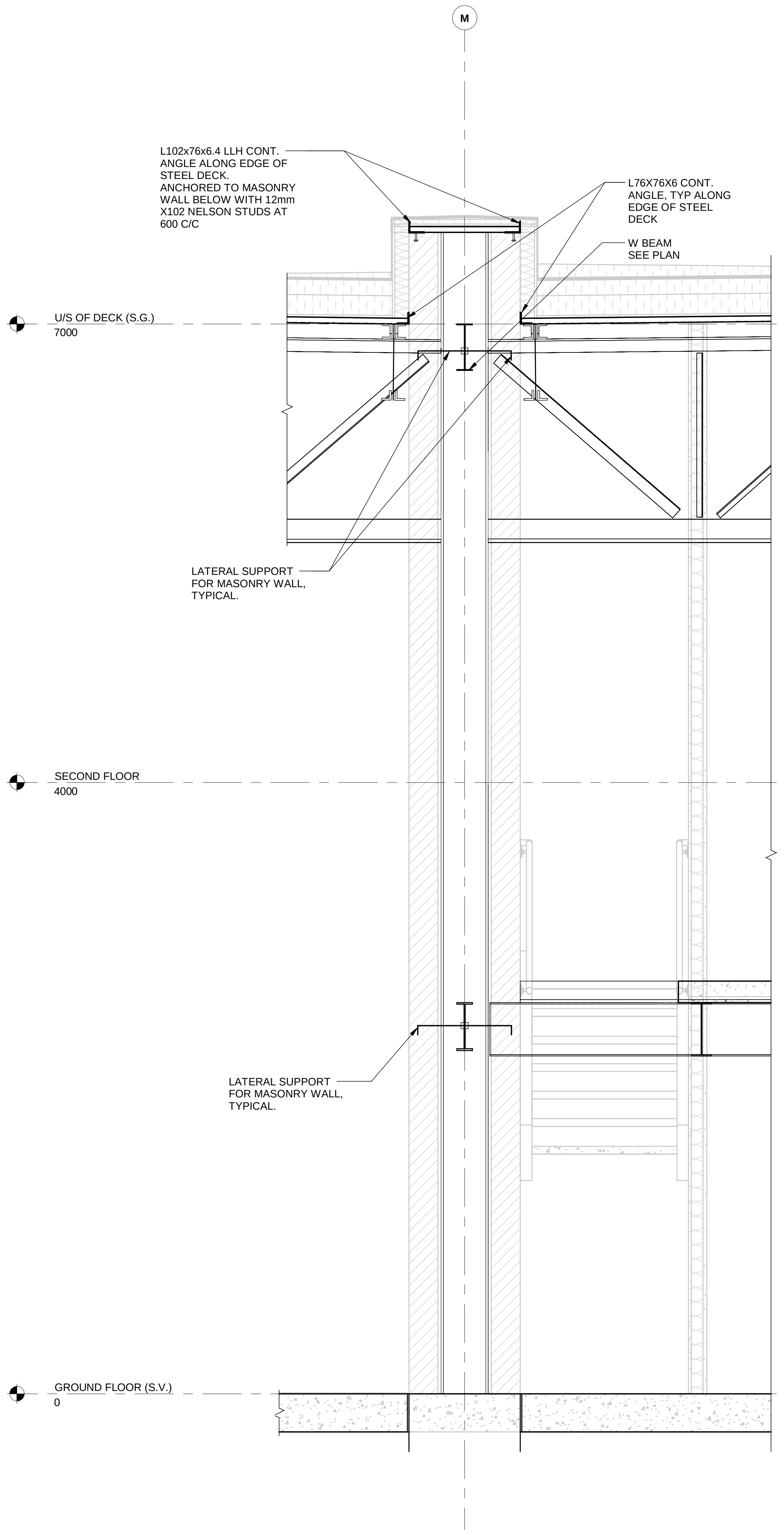
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:


R
L102x76x6.4 LLH CONT. ANGLE ALONG EDGE OF STEEL DECK. ANCHORED TO MASONRY WALL BELOW WITH 12mm X102 NELSON STUDS AT 600 C/C
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
U/S OF DECK (S.G.)
7000
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
W BEAM SEE PLAN
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

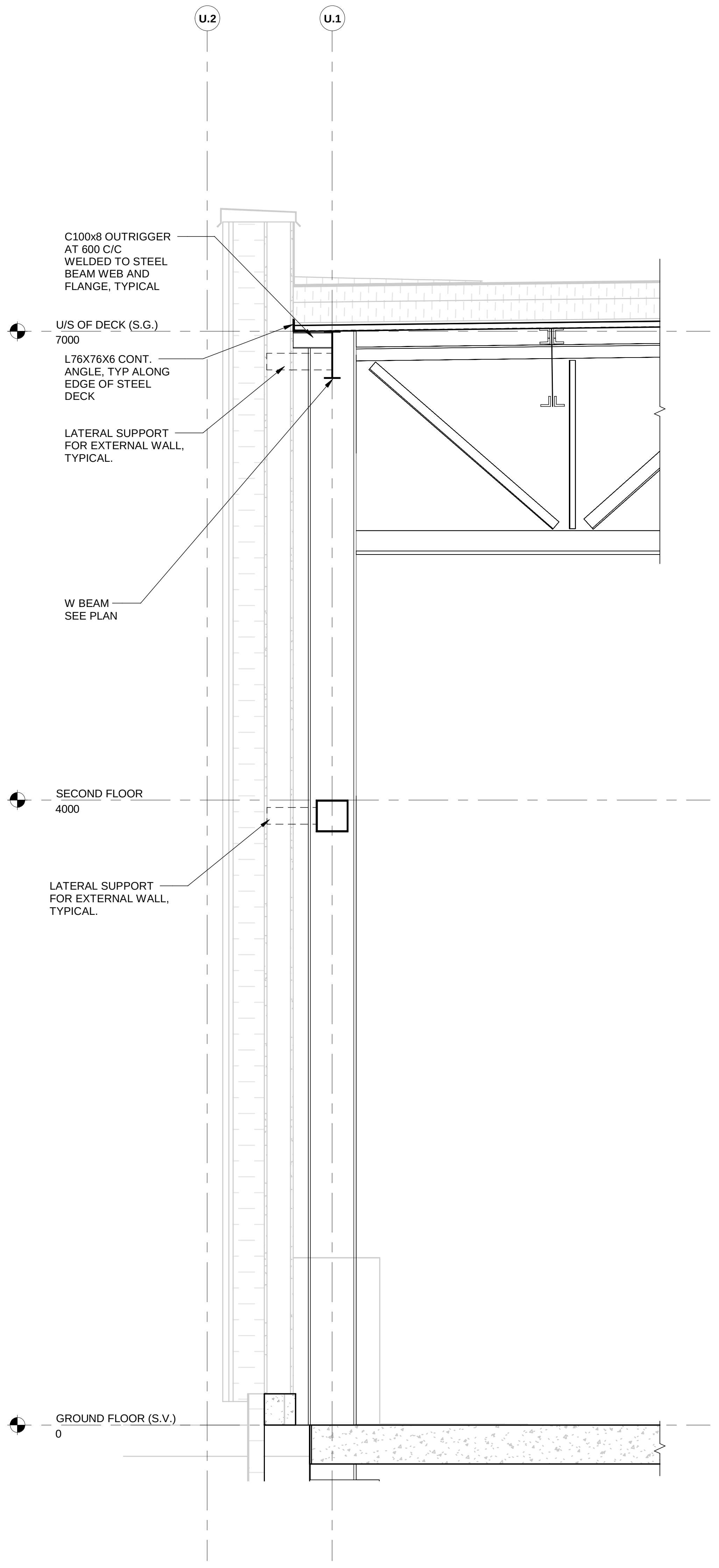
17 | WALL SECTION

00-S-454 | REF: 00-S-153 SCALE: 1 : 20


M
L102x76x6.4 LLH CONT. ANGLE ALONG EDGE OF STEEL DECK. ANCHORED TO MASONRY WALL BELOW WITH 12mm X102 NELSON STUDS AT 600 C/C
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
W BEAM SEE PLAN
U/S OF DECK (S.G.)
7000
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
SECOND FLOOR
4000
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
GROUND FLOOR (S.V.)
0

18 | WALL SECTION

00-S-454 | REF: 00-S-152 SCALE: 1 : 20


U.2
U.1
C100x8 OUTRIGGER AT 600 C/C WELDED TO STEEL BEAM WEB AND FLANGE, TYPICAL
U/S OF DECK (S.G.)
7000
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
LATERAL SUPPORT FOR EXTERNAL WALL, TYPICAL.
W BEAM SEE PLAN
SECOND FLOOR
4000
LATERAL SUPPORT FOR EXTERNAL WALL, TYPICAL.
GROUND FLOOR (S.V.)
0

19 | WALL SECTION

00-S-454 | REF: 00-S-154 SCALE: 1 : 20

00-S-454-WALL SECTION DETAILS 5

Last Plotted: 2/14/2025 10:55:32 PM

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AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW

PROJECT NUMBER

60721079

SHEET TITLE

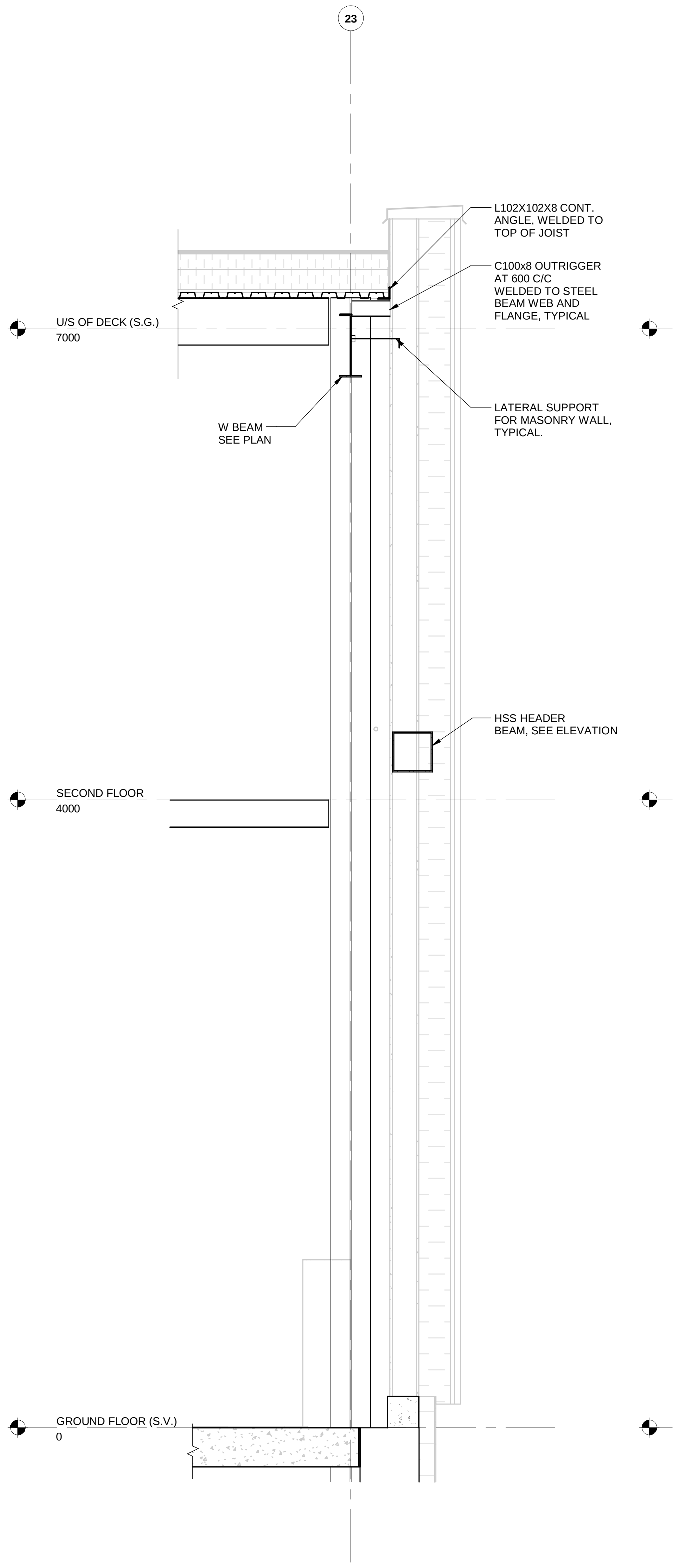
WALL SECTION DETAILS 5

SHEET NUMBER

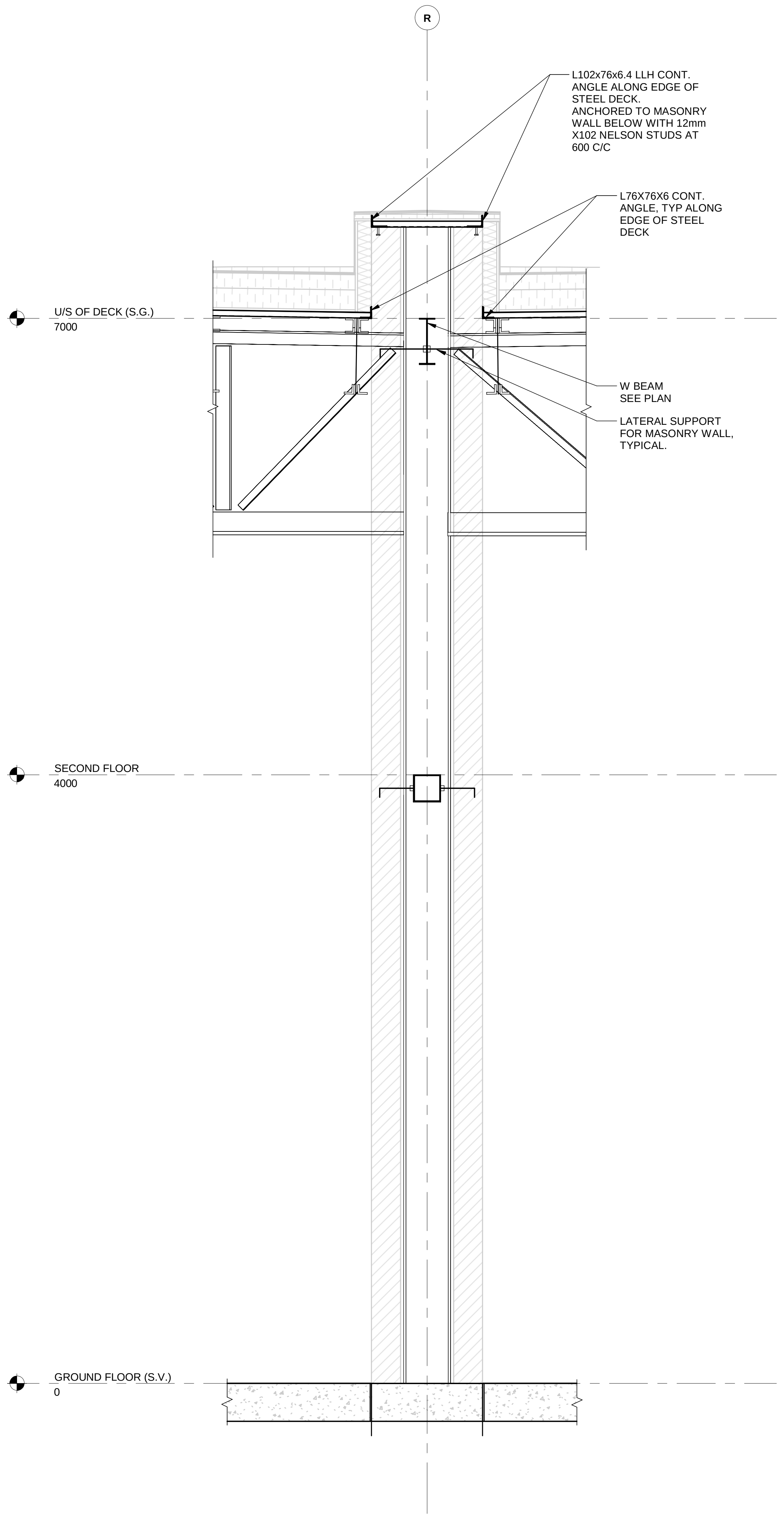
00-S-454

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

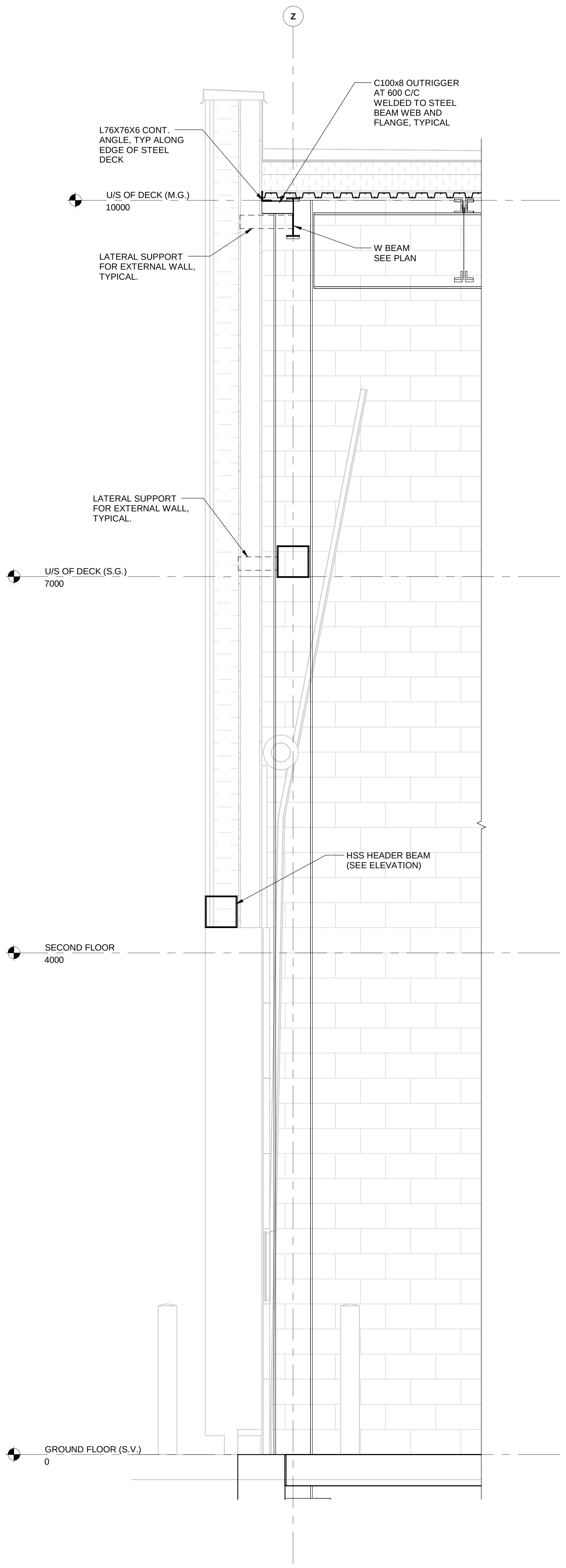
Project Management Initials:


23
L102X102X8 CONT. ANGLE, WELDED TO TOP OF JOIST
C100x8 OUTRIGGER AT 600 C/C WELDED TO STEEL BEAM WEB AND FLANGE, TYPICAL
U/S OF DECK (S.G.)
7000
W BEAM SEE PLAN
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
HSS HEADER BEAM, SEE ELEVATION
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

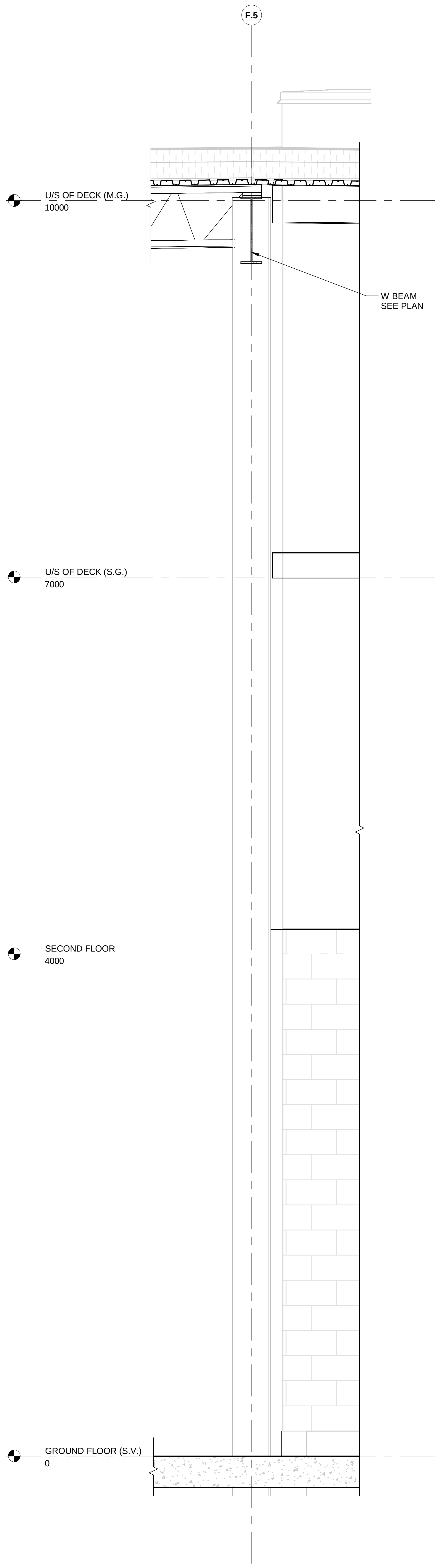
20 WALL SECTION
00-S-455 REF: 00-S-154 SCALE: 1 : 20


R
L102x76x6.4 LLH CONT. ANGLE ALONG EDGE OF STEEL DECK. ANCHORED TO MASONRY WALL BELOW WITH 12mm X102 NELSON STUDS AT 600 C/C
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
U/S OF DECK (S.G.)
7000
W BEAM SEE PLAN
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

21 WALL SECTION
00-S-455 REF: 00-S-154 SCALE: 1 : 20


Z
C100x8 OUTRIGGER AT 600 C/C WELDED TO STEEL BEAM WEB AND FLANGE, TYPICAL
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
U/S OF DECK (M.G.)
10000
W BEAM SEE PLAN
LATERAL SUPPORT FOR EXTERNAL WALL, TYPICAL.
U/S OF DECK (S.G.)
7000
LATERAL SUPPORT FOR EXTERNAL WALL, TYPICAL.
HSS HEADER BEAM (SEE ELEVATION)
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

22 WALL SECTION
00-S-455 REF: 00-S-151 SCALE: 1 : 20



23 WALL SECTION
00-S-455 REF: X-201 SCALE: 1 : 20

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

WALL SECTION DETAILS 6

SHEET NUMBER

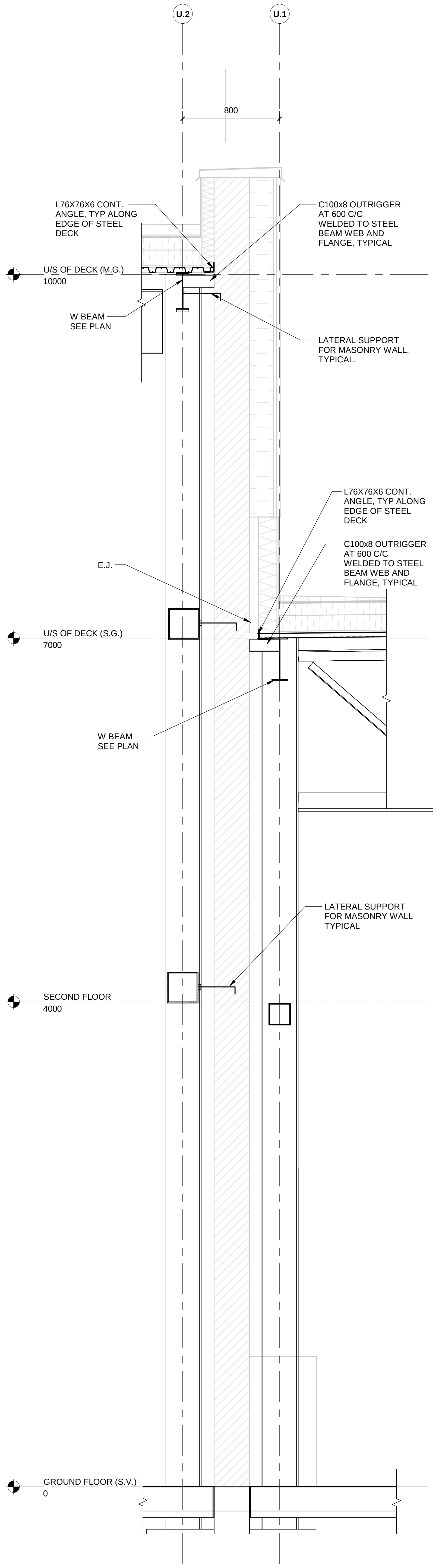
00-S-455

00-S-455-WALL SECTION DETAILS 6

Last Plotted: 2/14/2025 10:56:06 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

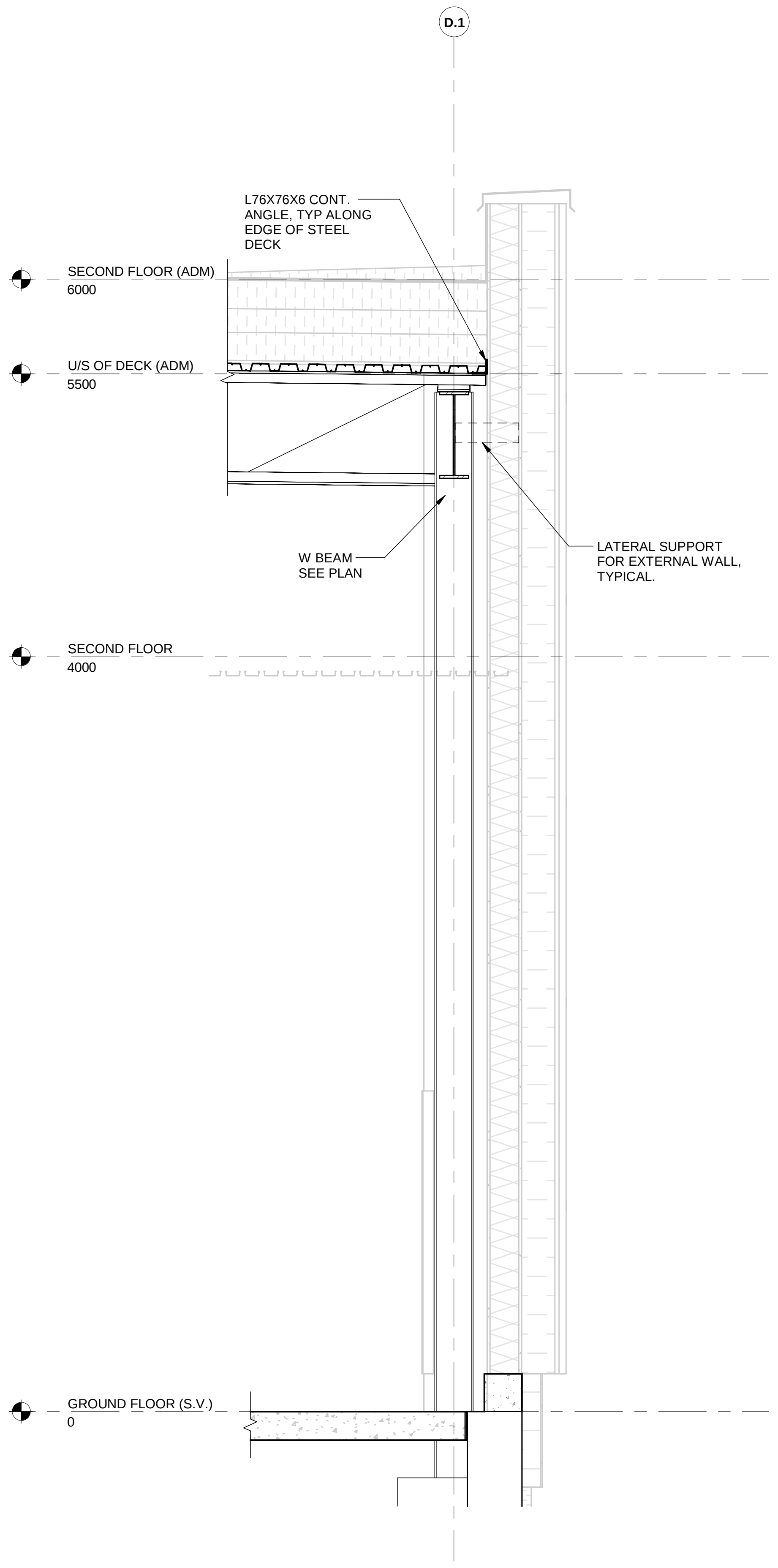
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:


U.2
U.1
800
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
C100x8 OUTRIGGER AT 600 C/C WELDED TO STEEL BEAM WEB AND FLANGE, TYPICAL
U/S OF DECK (M.G.)
10000
W BEAM SEE PLAN
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
C100x8 OUTRIGGER AT 600 C/C WELDED TO STEEL BEAM WEB AND FLANGE, TYPICAL
E.J.
U/S OF DECK (S.G.)
7000
W BEAM SEE PLAN
LATERAL SUPPORT FOR MASONRY WALL TYPICAL
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

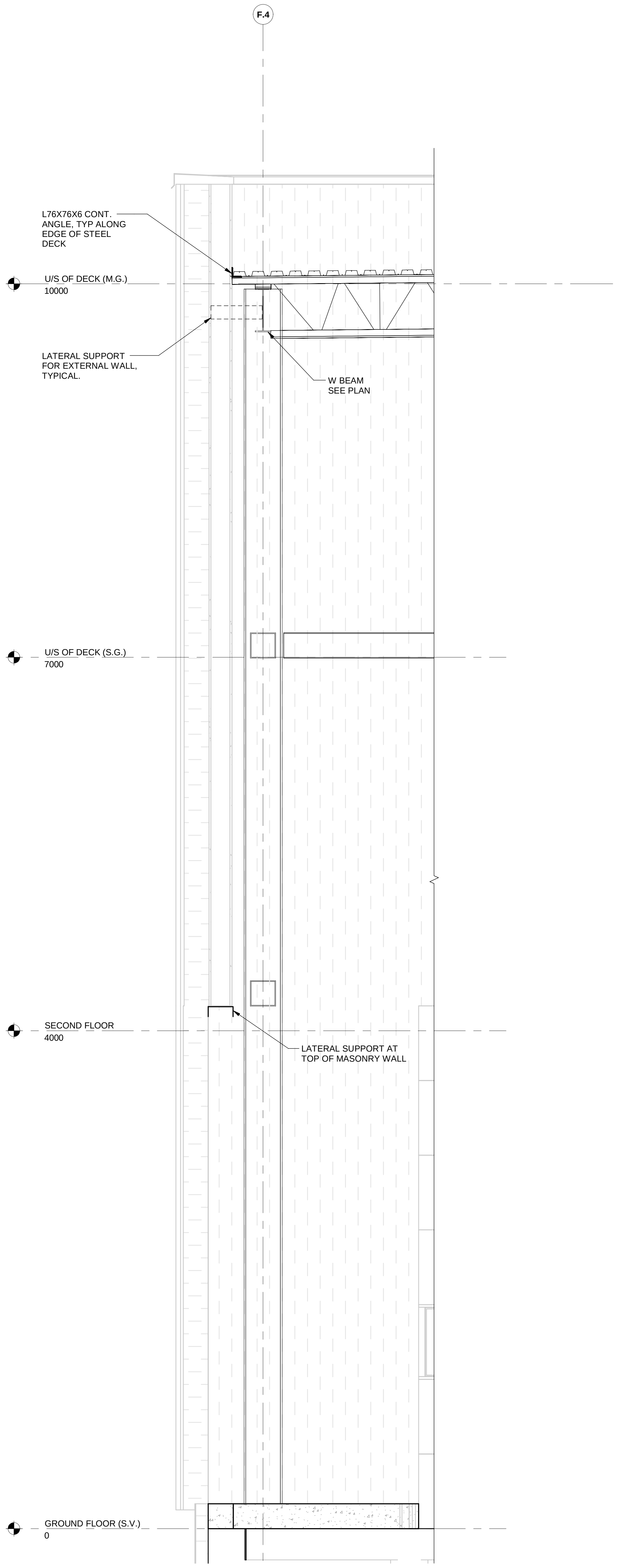
24 WALL SECTION

00-S-456 REF: 00-S-153 SCALE: 1 : 20



25 WALL SECTION

00-S-456 REF: 00-S-157 SCALE: 1 : 20


F.4
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
U/S OF DECK (M.G.)
10000
LATERAL SUPPORT FOR EXTERNAL WALL, TYPICAL.
W BEAM SEE PLAN
U/S OF DECK (S.G.)
7000
SECOND FLOOR
4000
LATERAL SUPPORT AT TOP OF MASONRY WALL
GROUND FLOOR (S.V.)
0

26 WALL SECTION

00-S-456 REF: 00-S-151 SCALE: 1 : 20

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr.
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW

PROJECT NUMBER

60721079

SHEET TITLE

WALL SECTION DETAILS 7

SHEET NUMBER

00-S-456

00-S-456-WALL SECTION DETAILS 7

Last Plotted: 2/14/2025 10:56:18 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

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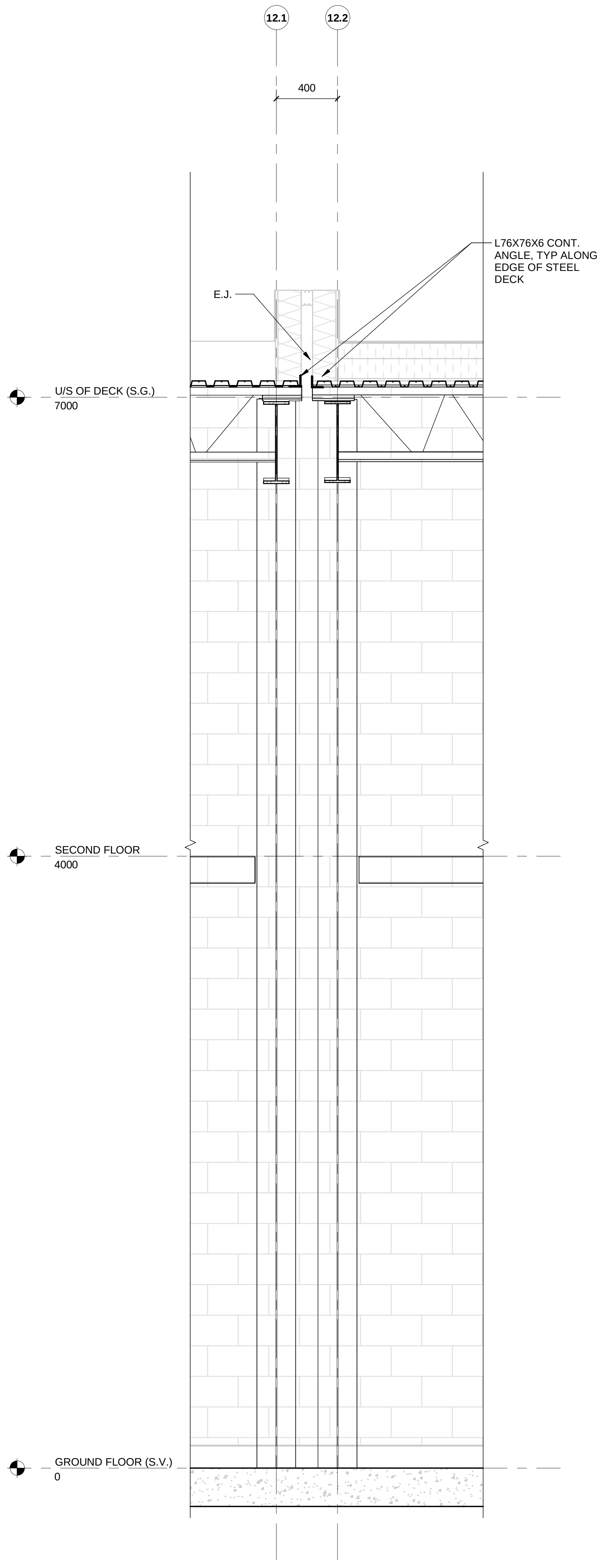
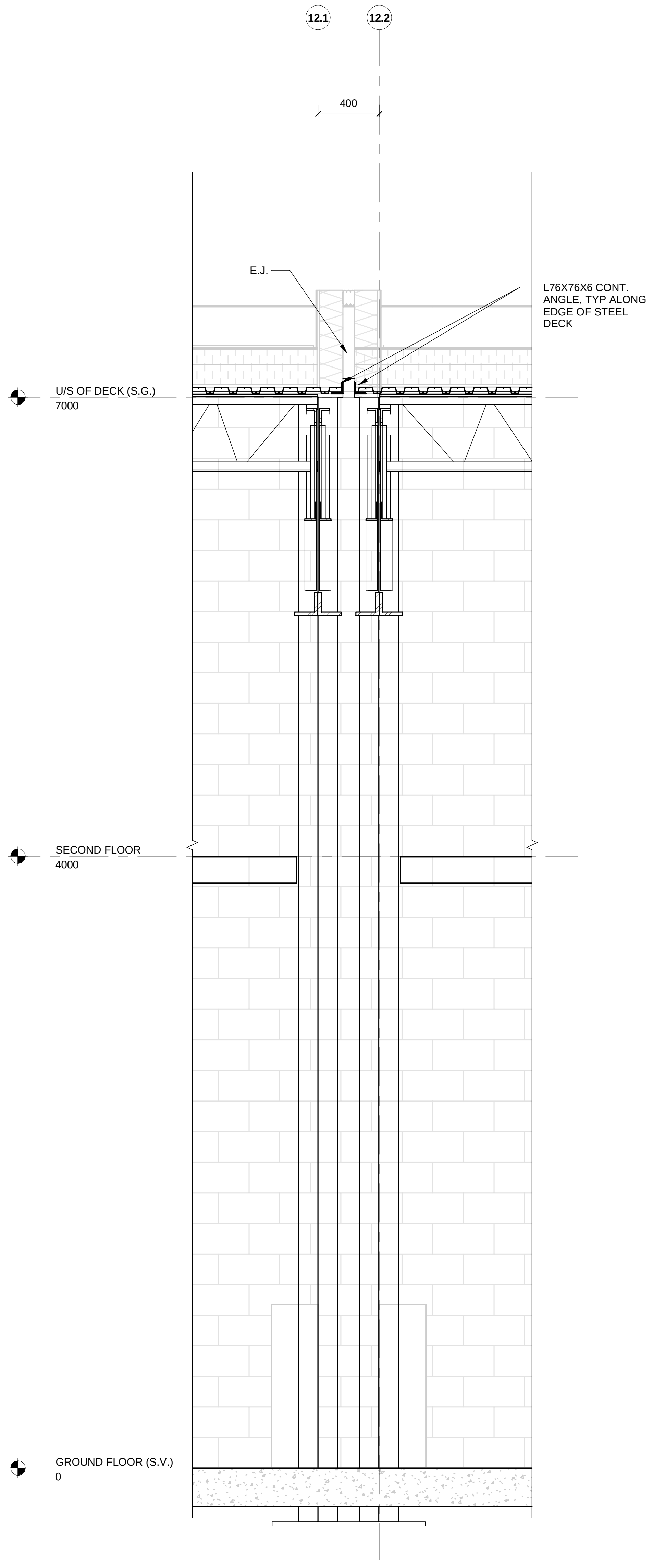
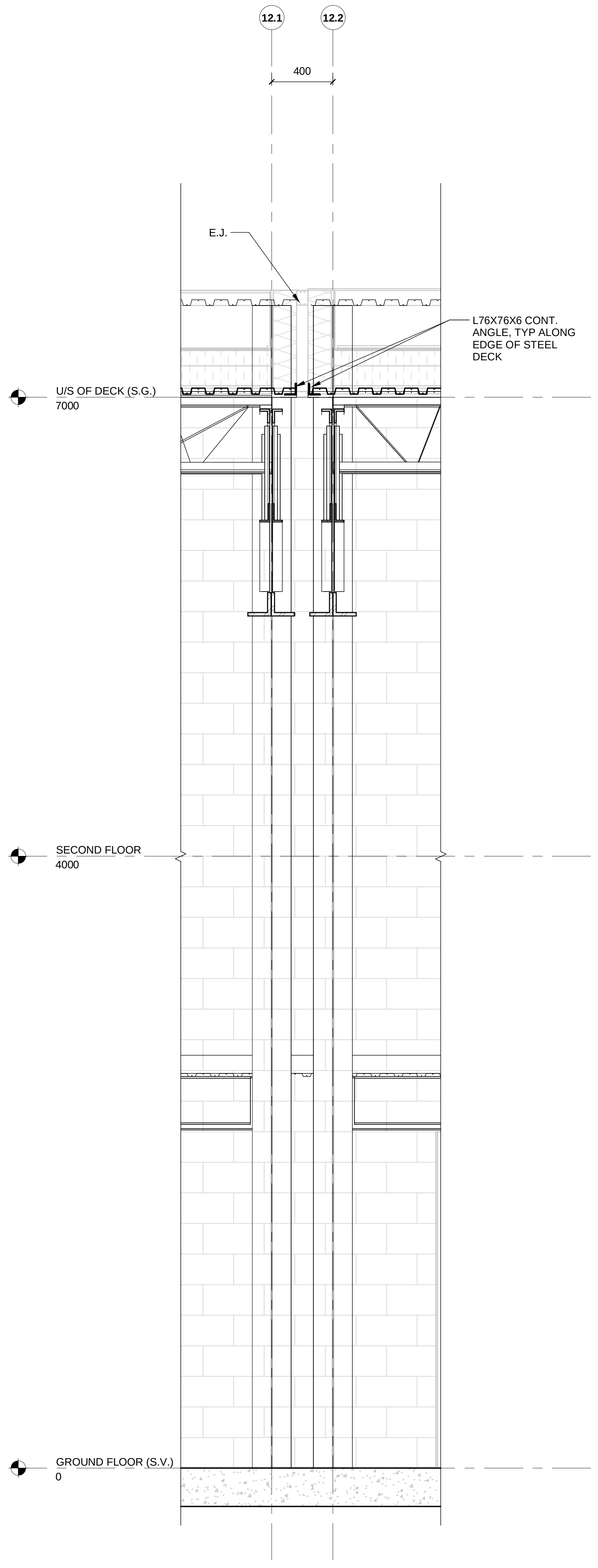


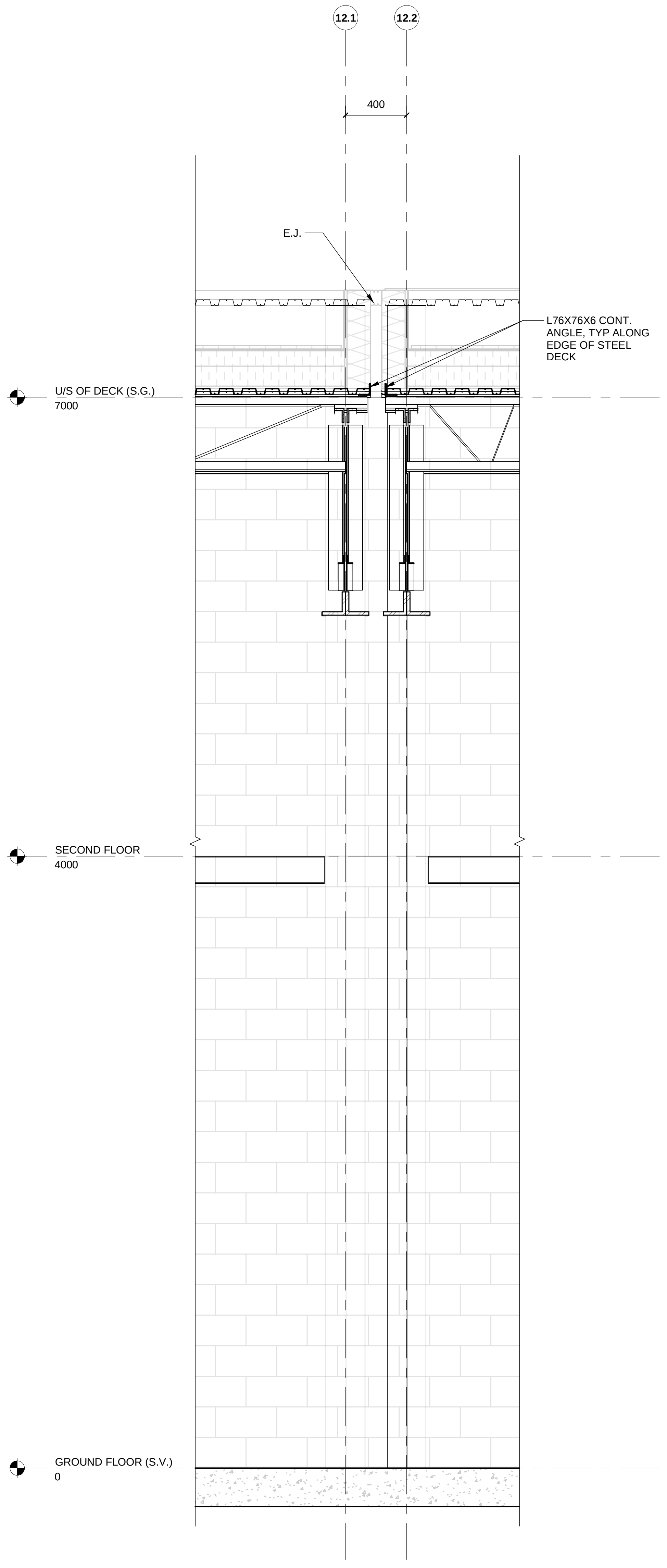
27 | WALL SECTION
00-S-457 | REF: 00-S-151 SCALE: 1 : 20



28 | WALL SECTION
00-S-457 | REF: 00-S-151 SCALE: 1 : 20



29 | WALL SECTION
00-S-457 | REF: 00-S-153 SCALE: 1 : 20



30 | WALL SECTION
00-S-457 | REF: 00-S-153 SCALE: 1 : 20

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

WALL SECTION DETAILS 8

SHEET NUMBER

00-S-457

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:

Last Plotted: 2/14/2025 10:56:24 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

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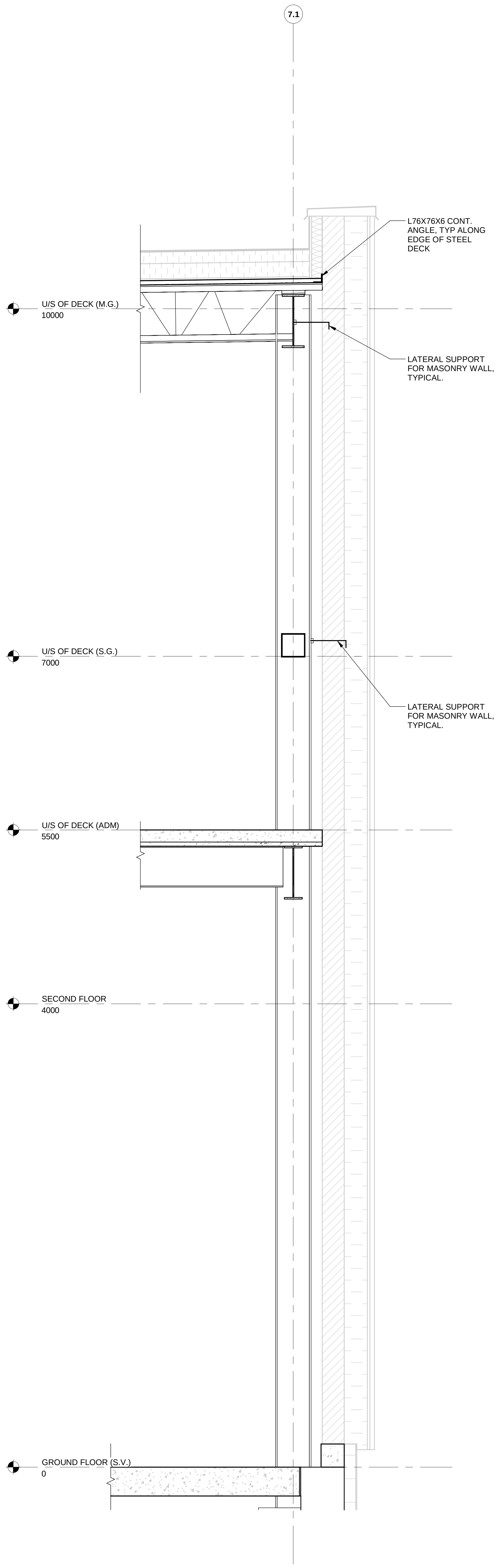
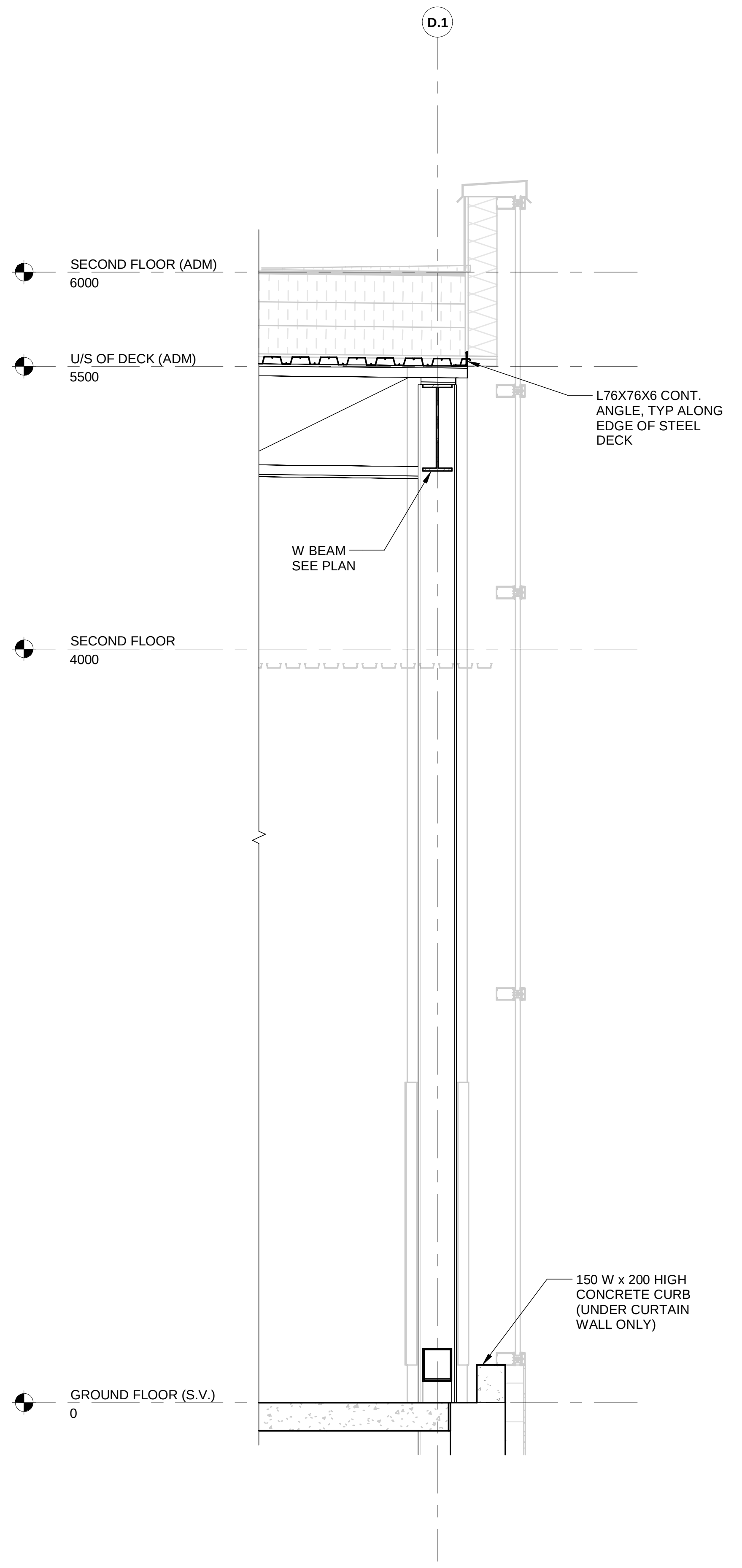
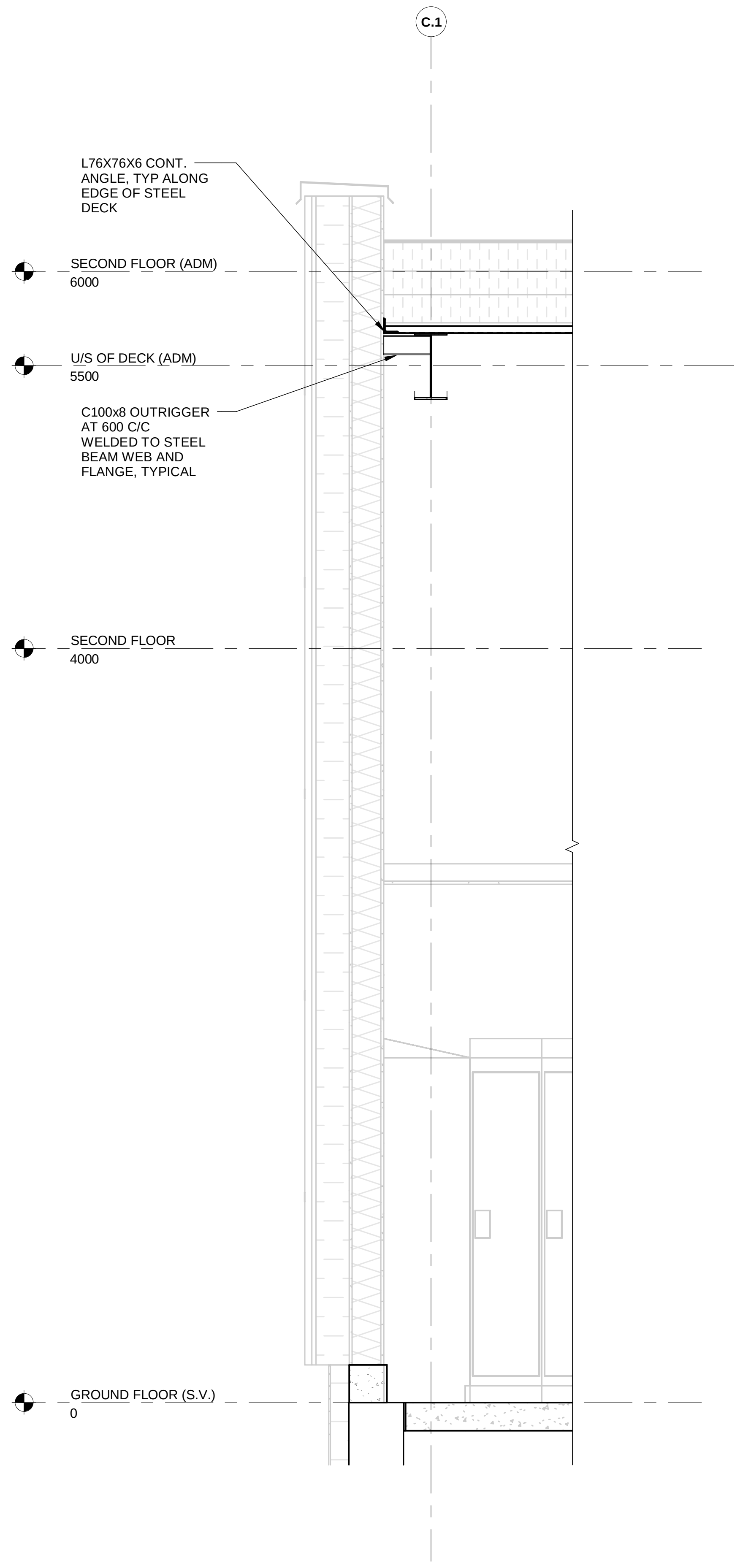
Project Management Initials:　Designer: Designer　Checked: Checker　Approved: Approver　A0 33.1"x46.8"


7.1
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
U/S OF DECK (M.G.)
10000
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
U/S OF DECK (S.G.)
7000
LATERAL SUPPORT FOR MASONRY WALL, TYPICAL.
U/S OF DECK (ADM)
5500
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

31 WALL SECTION
00-S-458　REF: 00-S-155　SCALE: 1 : 20


D.1
SECOND FLOOR (ADM)
6000
U/S OF DECK (ADM)
5500
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
W BEAM SEE PLAN
SECOND FLOOR
4000
150 W x 200 HIGH CONCRETE CURB (UNDER CURTAIN WALL ONLY)
GROUND FLOOR (S.V.)
0

32 WALL SECTION
00-S-458　REF: 00-S-157　SCALE: 1 : 20


C.1
L76X76X6 CONT. ANGLE, TYP ALONG EDGE OF STEEL DECK
SECOND FLOOR (ADM)
6000
U/S OF DECK (ADM)
5500
C100x8 OUTRIGGER AT 600 C/C WELDED TO STEEL BEAM WEB AND FLANGE, TYPICAL
SECOND FLOOR
4000
GROUND FLOOR (S.V.)
0

33 WALL SECTION
00-S-458　REF: 00-S-157　SCALE: 1 : 20

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974　1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW

PROJECT NUMBER

60721079

SHEET TITLE

WALL SECTION DETAILS 9

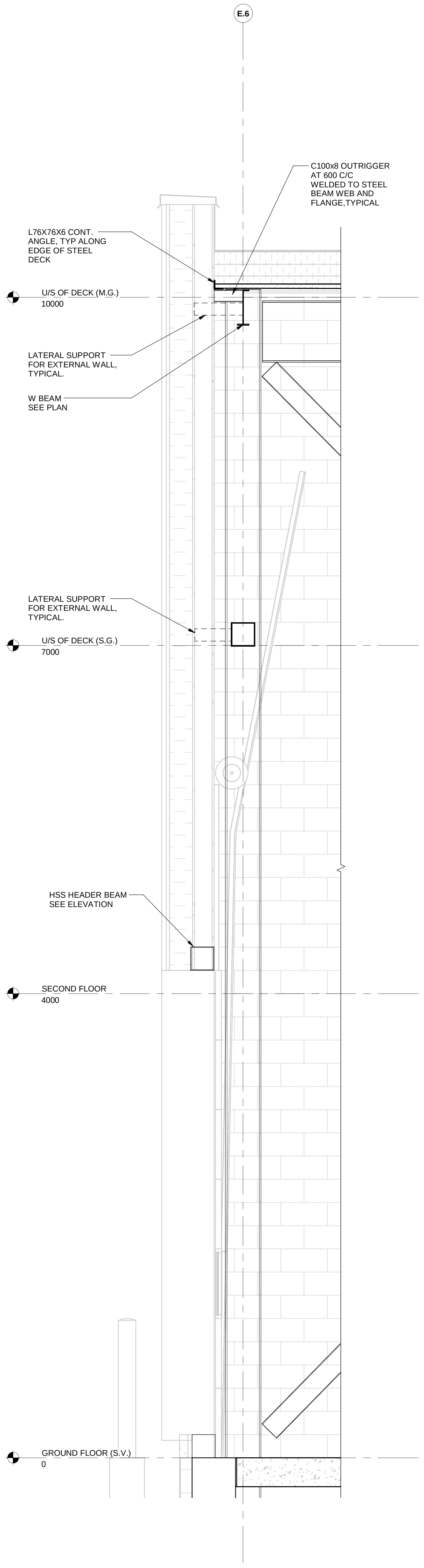
SHEET NUMBER

00-S-458

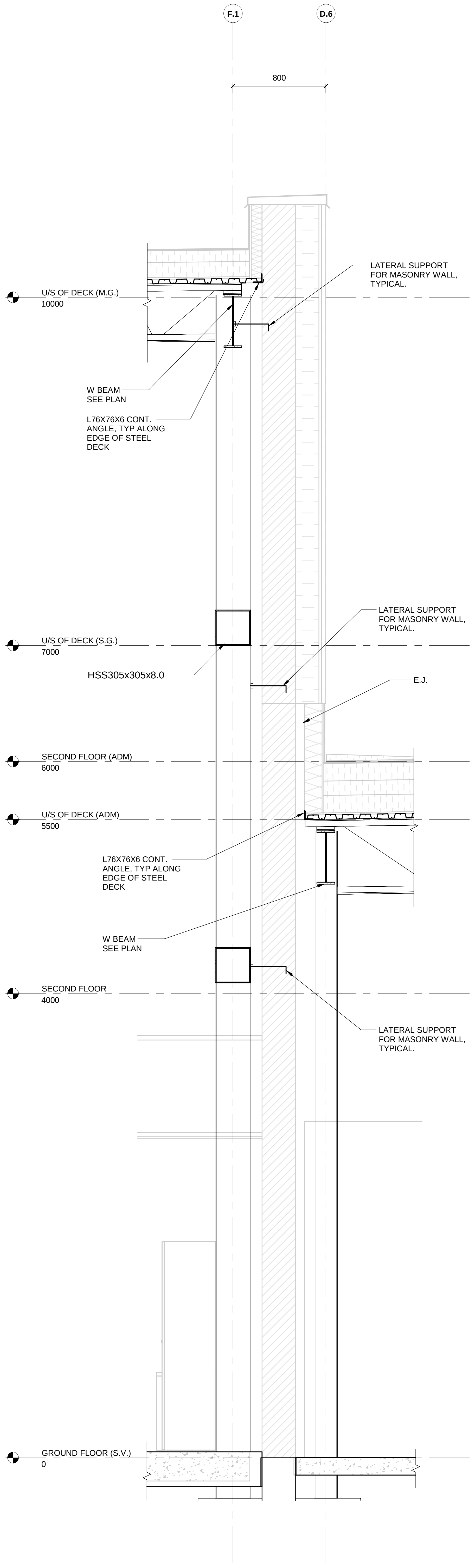
00-S-458-WALL SECTION DETAILS 9
Last Plotted: 2/14/2025 10:56:28 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

Printed on ___% Post-Consumer
Recycled Content Paper

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"
Project Management Initials:



34 | WALL SECTION
00-S-459 | REF: 00-S-151 | SCALE: 1 : 20



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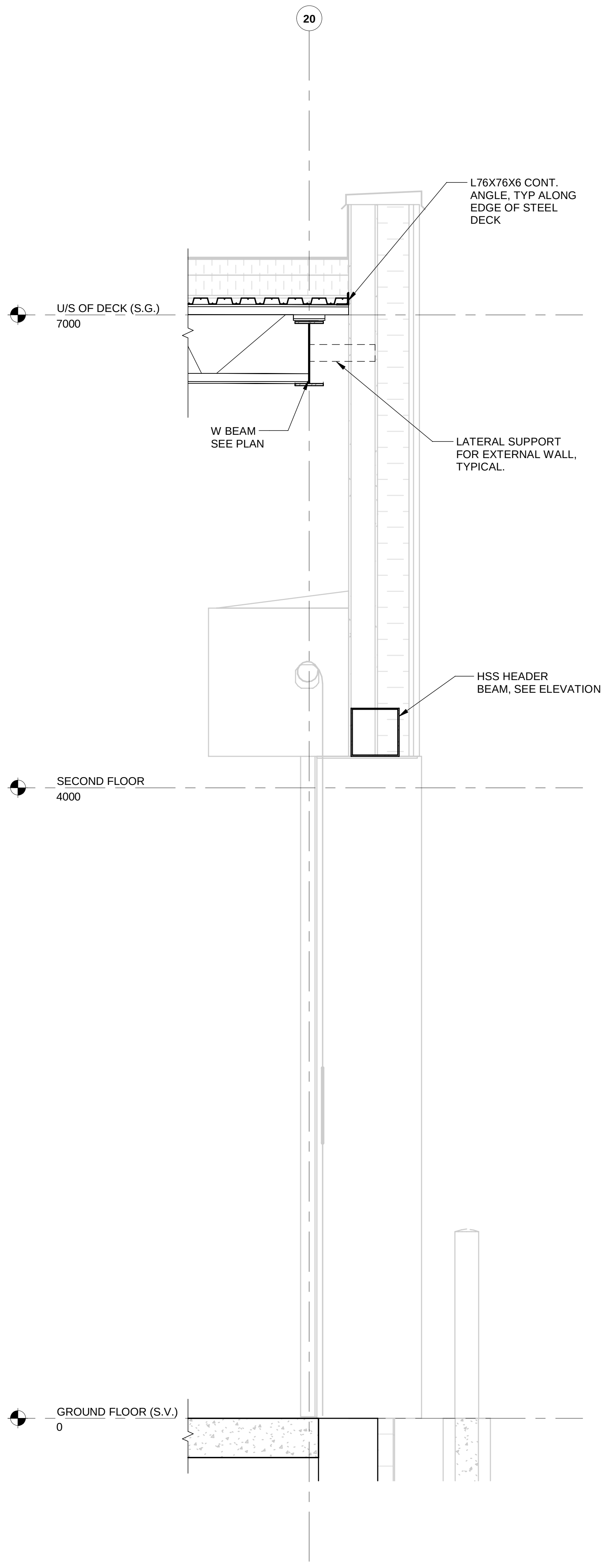
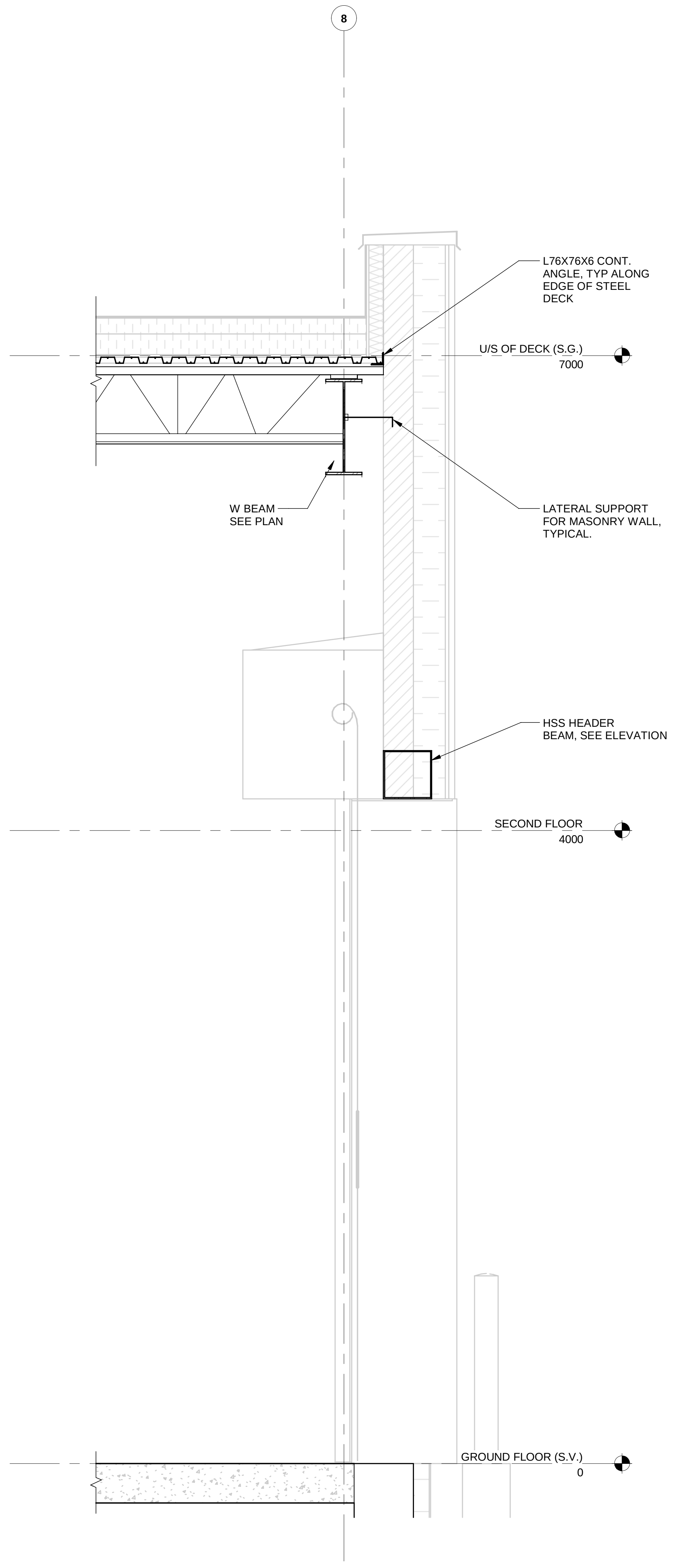
00-S-459 | REF: 00-S-157 | SCALE: 1 : 20



36 | WALL SECTION
00-S-459 | REF: 00-S-152 | SCALE: 1 : 20



37 | WALL SECTION
00-S-459 | REF: 00-S-151 | SCALE: 1 : 20

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW

PROJECT NUMBER

60721079

SHEET TITLE

WALL SECTION DETAILS 10

SHEET NUMBER

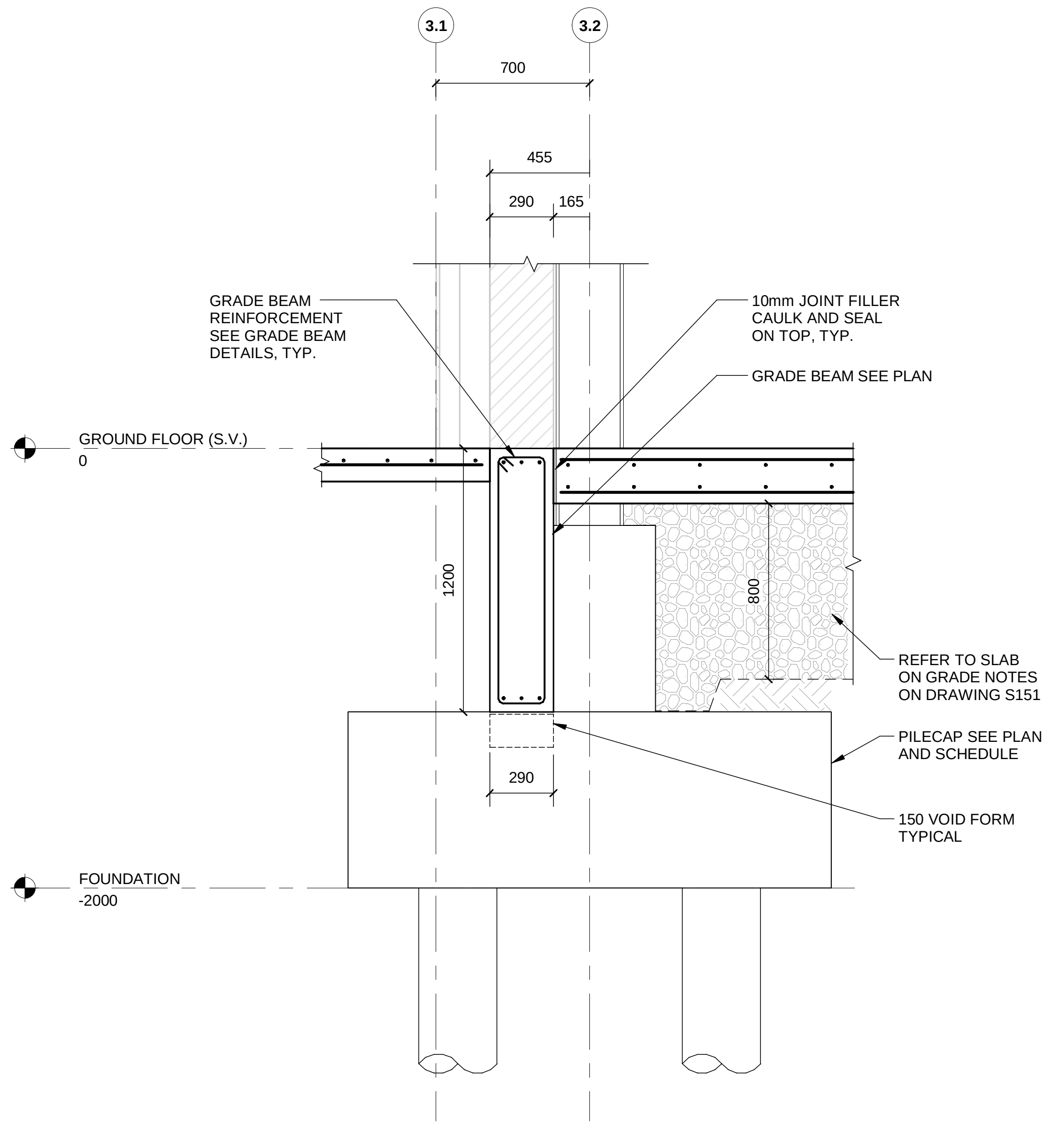
00-S-459

00-S-459-WALL SECTION DETAILS 10

Last Plotted: 2/14/2025 10:56:35 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

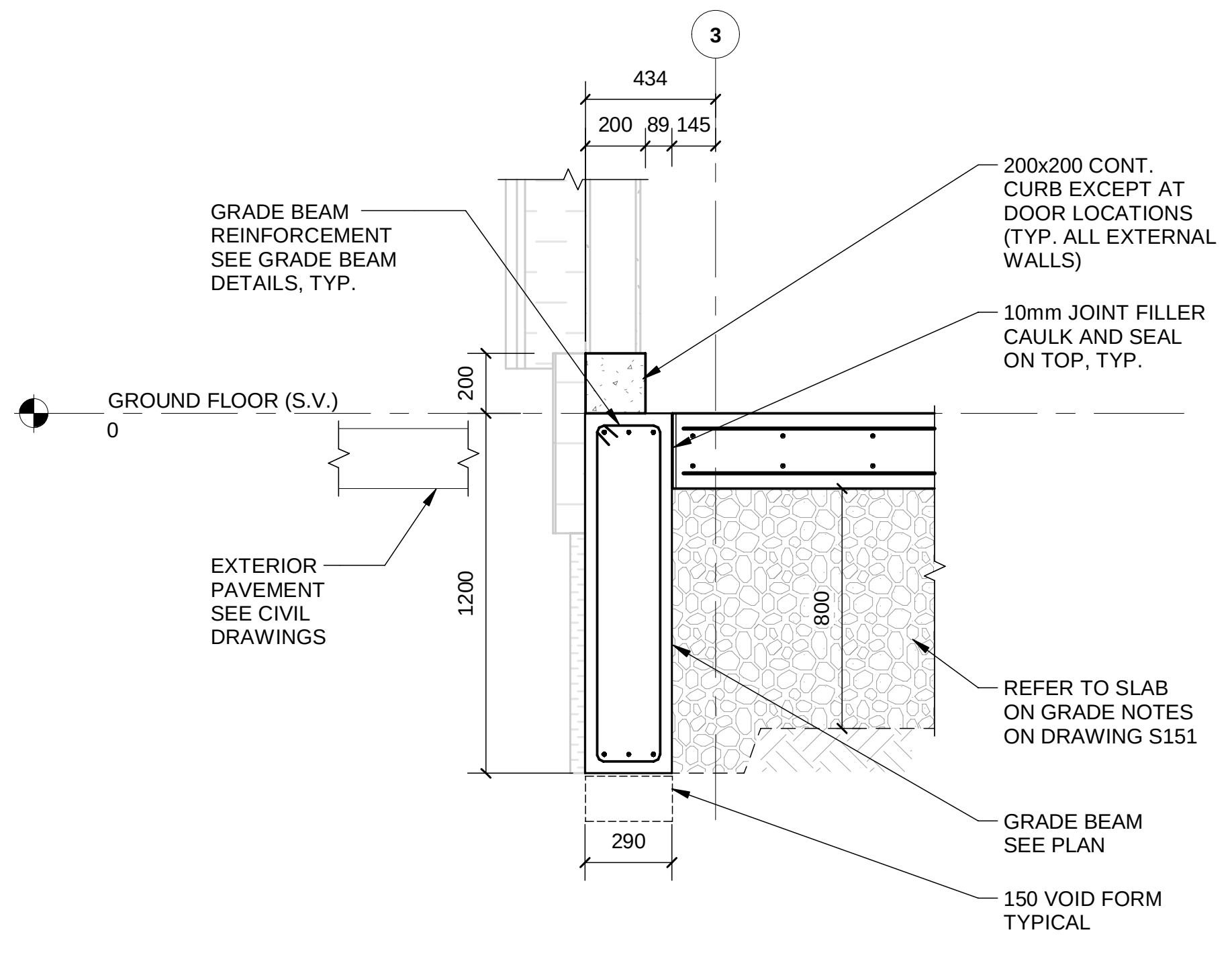
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:


3.1
3.2
700
455
290
165
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GRADE BEAM SEE PLAN
GROUND FLOOR (S.V.)
0
1200
800
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
PILECAP SEE PLAN AND SCHEDULE
290
150 VOID FORM TYPICAL
FOUNDATION
-2000

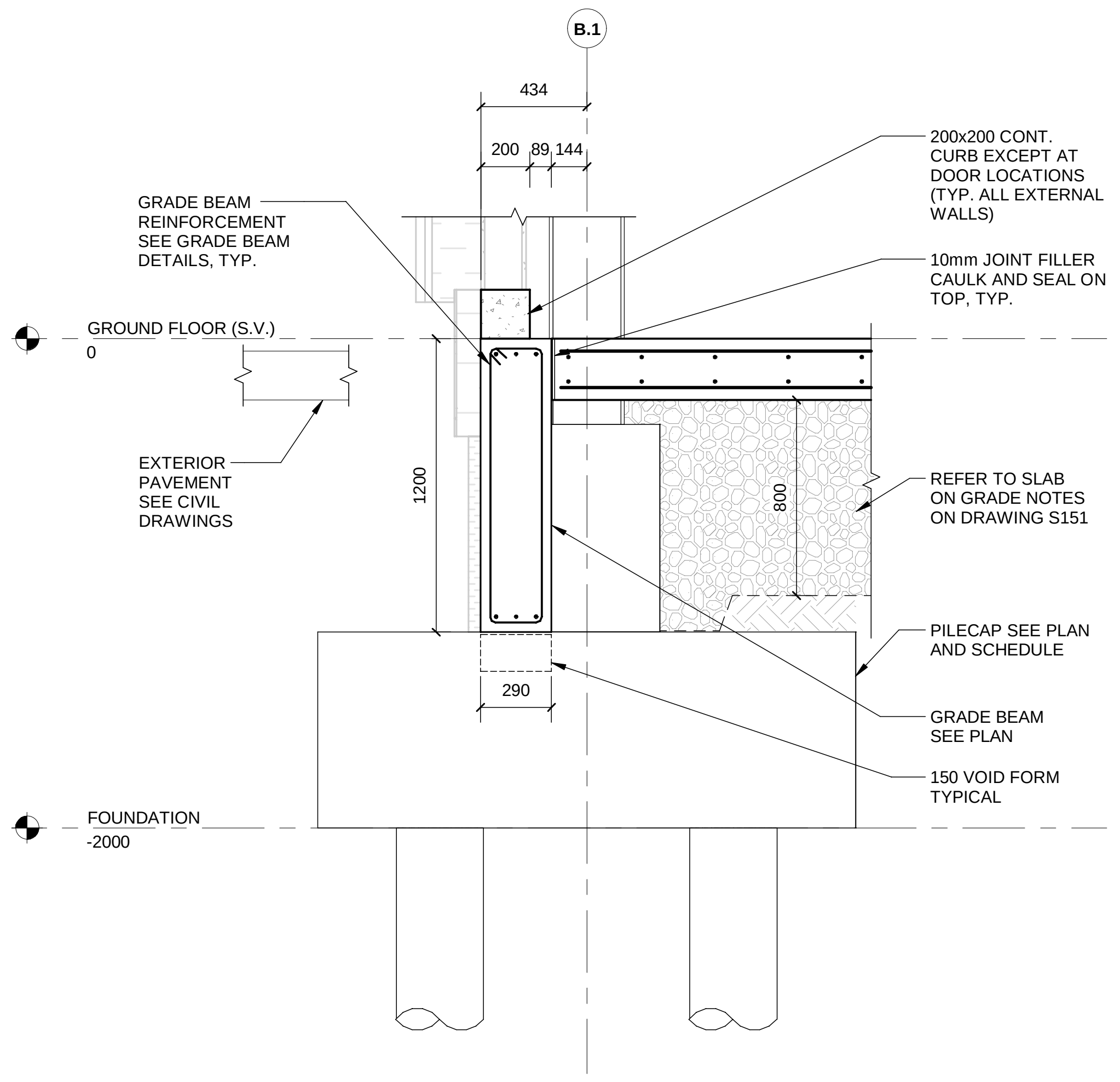
1 FOUNDATION SECTION

00-S-500 REF: 00-S-101 SCALE: 1 : 20


3
434
200
89
145
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GROUND FLOOR (S.V.)
0
200
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
1200
800
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
GRADE BEAM SEE PLAN
290
150 VOID FORM TYPICAL

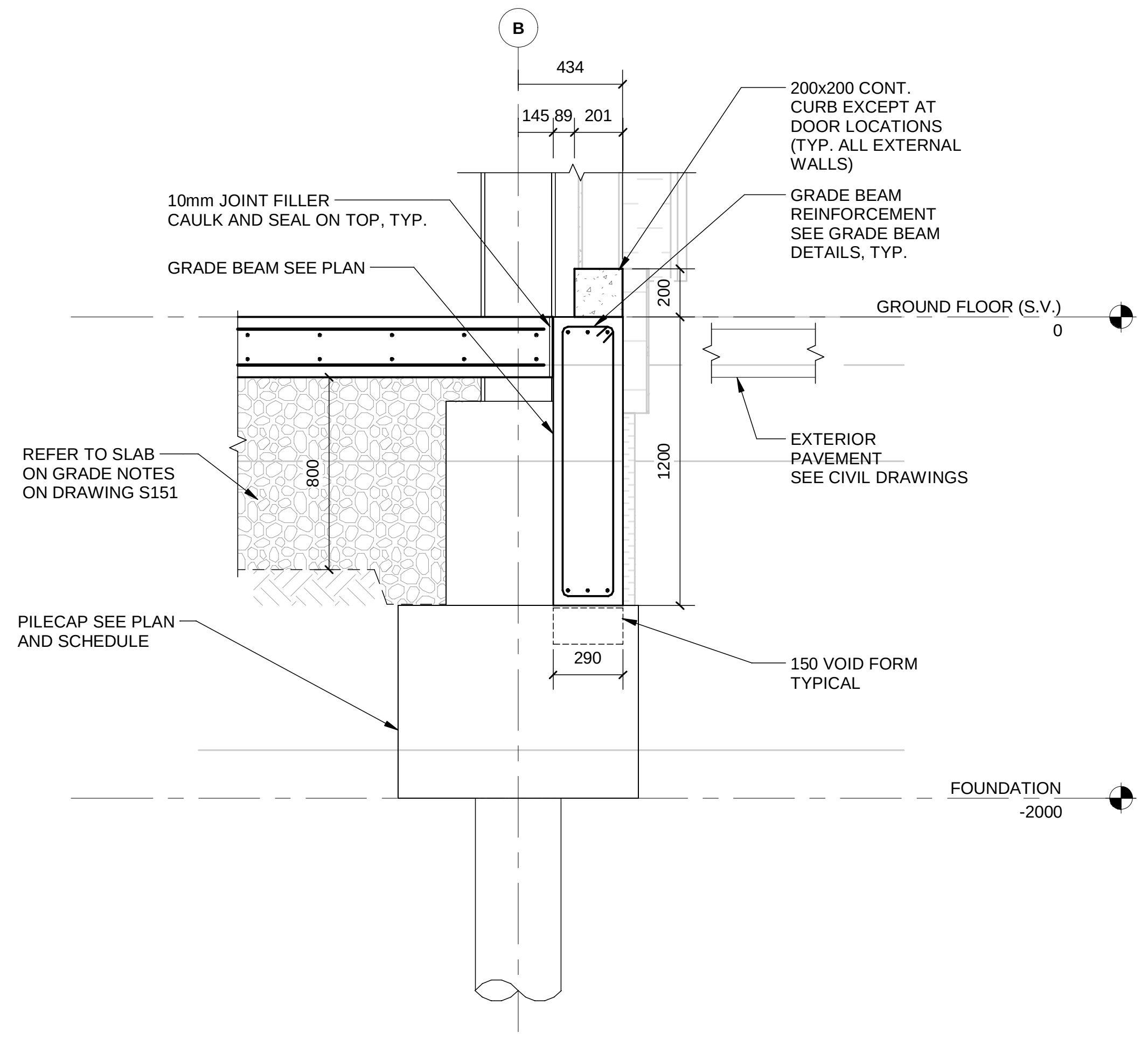
2 FOUNDATION SECTION

00-S-500 REF: 00-S-101 SCALE: 1 : 20


B.1
434
200
89
144
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GROUND FLOOR (S.V.)
0
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
1200
800
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
PILECAP SEE PLAN AND SCHEDULE
GRADE BEAM SEE PLAN
290
150 VOID FORM TYPICAL
FOUNDATION
-2000

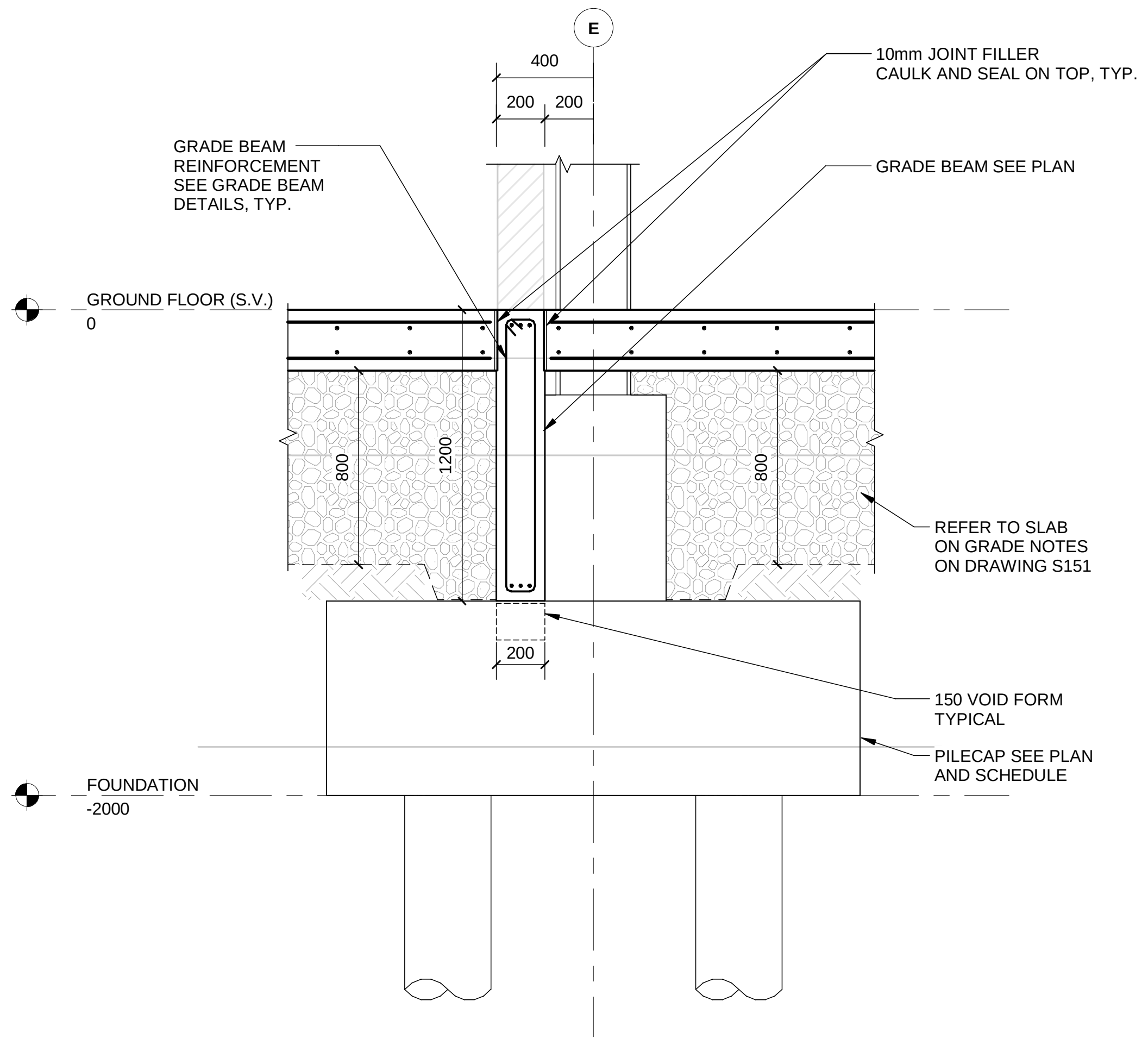
3 FOUNDATION SECTION

00-S-500 REF: 00-S-101 SCALE: 1 : 20


B
434
145
89
201
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
GRADE BEAM SEE PLAN
GROUND FLOOR (S.V.)
0
200
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
800
1200
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
PILECAP SEE PLAN AND SCHEDULE
290
150 VOID FORM TYPICAL
FOUNDATION
-2000

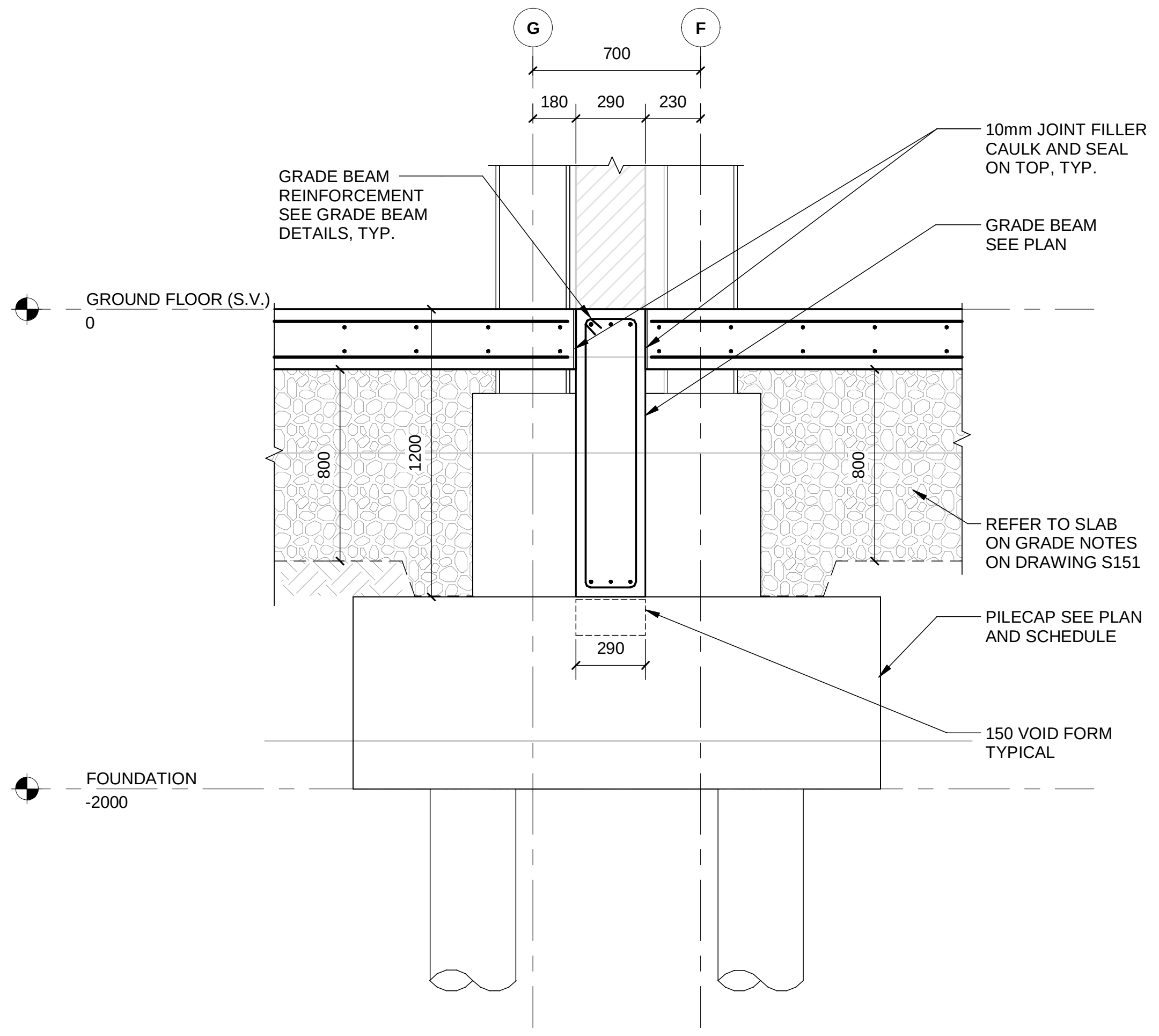
4 FOUNDATION SECTION

00-S-500 REF: 00-S-102 SCALE: 1 : 20


E
400
200
200
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
GRADE BEAM SEE PLAN
GROUND FLOOR (S.V.)
0
800
1200
800
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
200
150 VOID FORM TYPICAL
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000

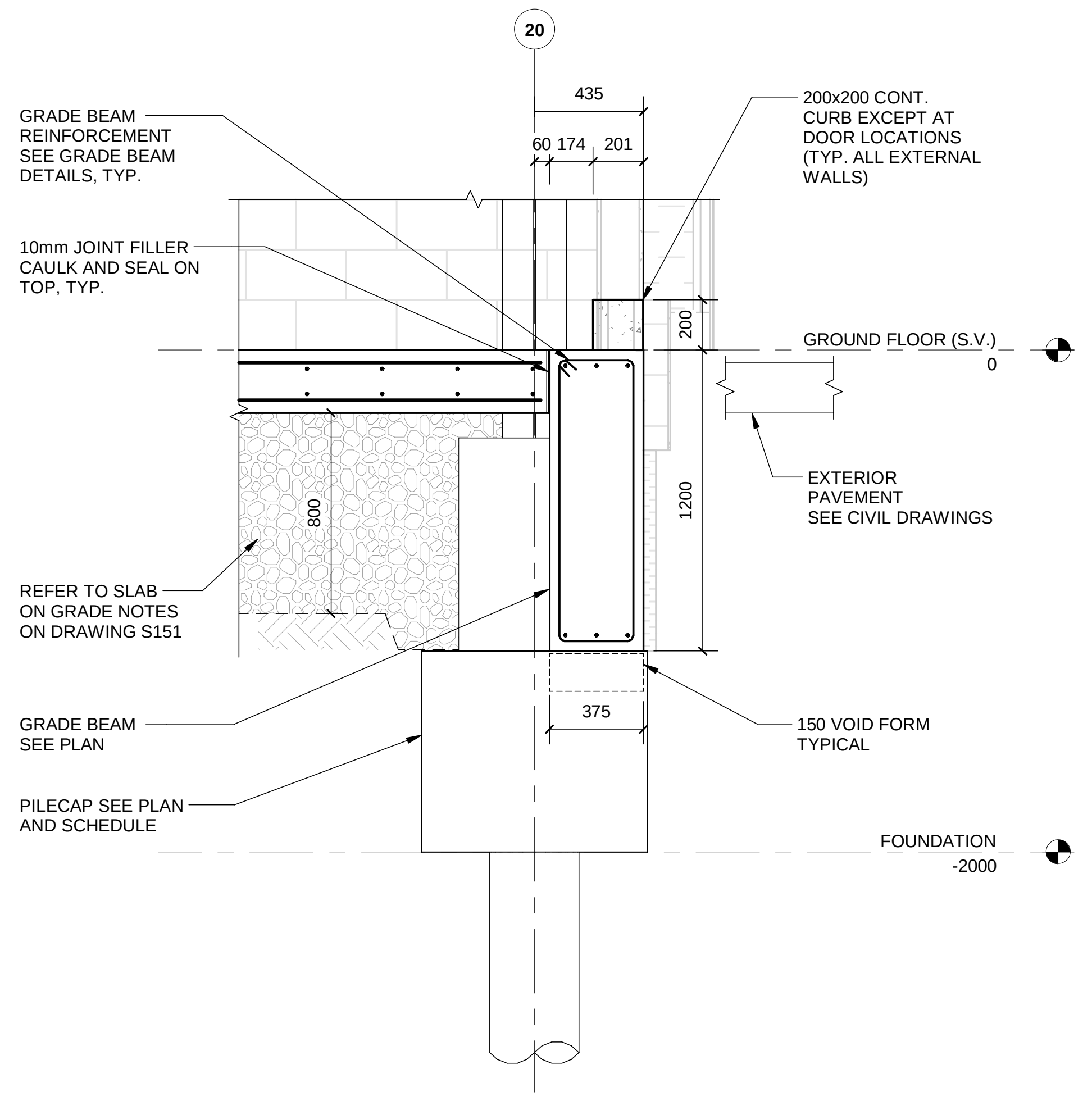
5 FOUNDATION SECTION

00-S-500 REF: 00-S-102 SCALE: 1 : 20


G
F
700
180
290
230
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GRADE BEAM SEE PLAN
GROUND FLOOR (S.V.)
0
800
1200
800
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
PILECAP SEE PLAN AND SCHEDULE
290
150 VOID FORM TYPICAL
FOUNDATION
-2000

6 FOUNDATION SECTION

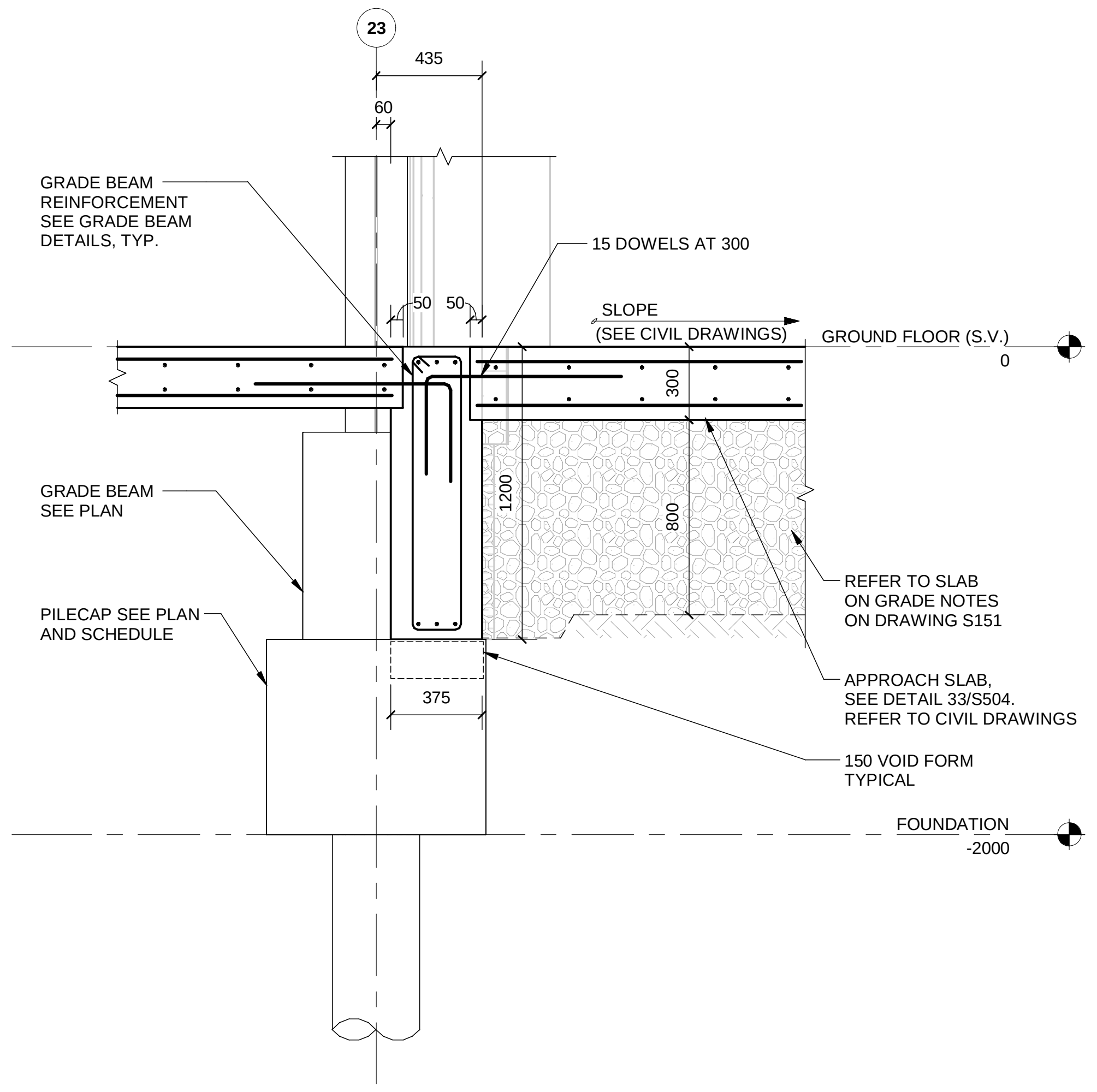
00-S-500 REF: 00-S-102 SCALE: 1 : 20


20
435
60
174
201
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
200
GROUND FLOOR (S.V.)
0
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
800
1200
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
GRADE BEAM SEE PLAN
375
150 VOID FORM TYPICAL
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000

TYPICAL AT WALL LOCATIONS

7 FOUNDATION SECTION

00-S-500 REF: 00-S-102 SCALE: 1 : 20


23
435
60
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
15 DOWELS AT 300
50
50
SLOPE (SEE CIVIL DRAWINGS)
GROUND FLOOR (S.V.)
0
300
GRADE BEAM SEE PLAN
1200
800
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
PILECAP SEE PLAN AND SCHEDULE
APPROACH SLAB, SEE DETAIL 33/S504. REFER TO CIVIL DRAWINGS
375
150 VOID FORM TYPICAL
FOUNDATION
-2000

TYPICAL AT DOOR LOCATIONS

8 FOUNDATION SECTION

00-S-500 REF: 00-S-102 SCALE: 1 : 20

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FOUNDATION SECTION 1

SHEET NUMBER

00-S-500

00-S-500-FOUNDATION SECTION 1
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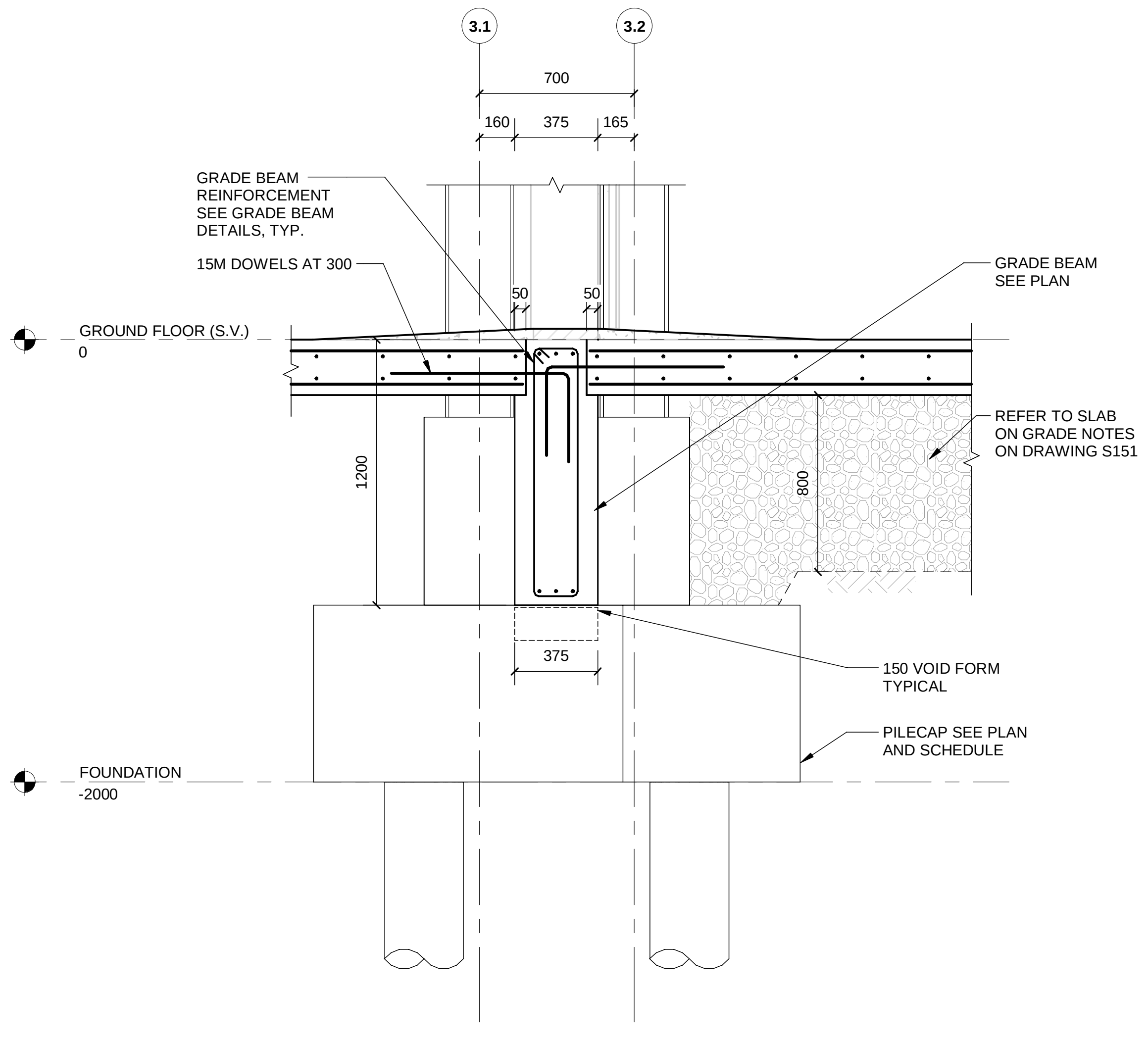
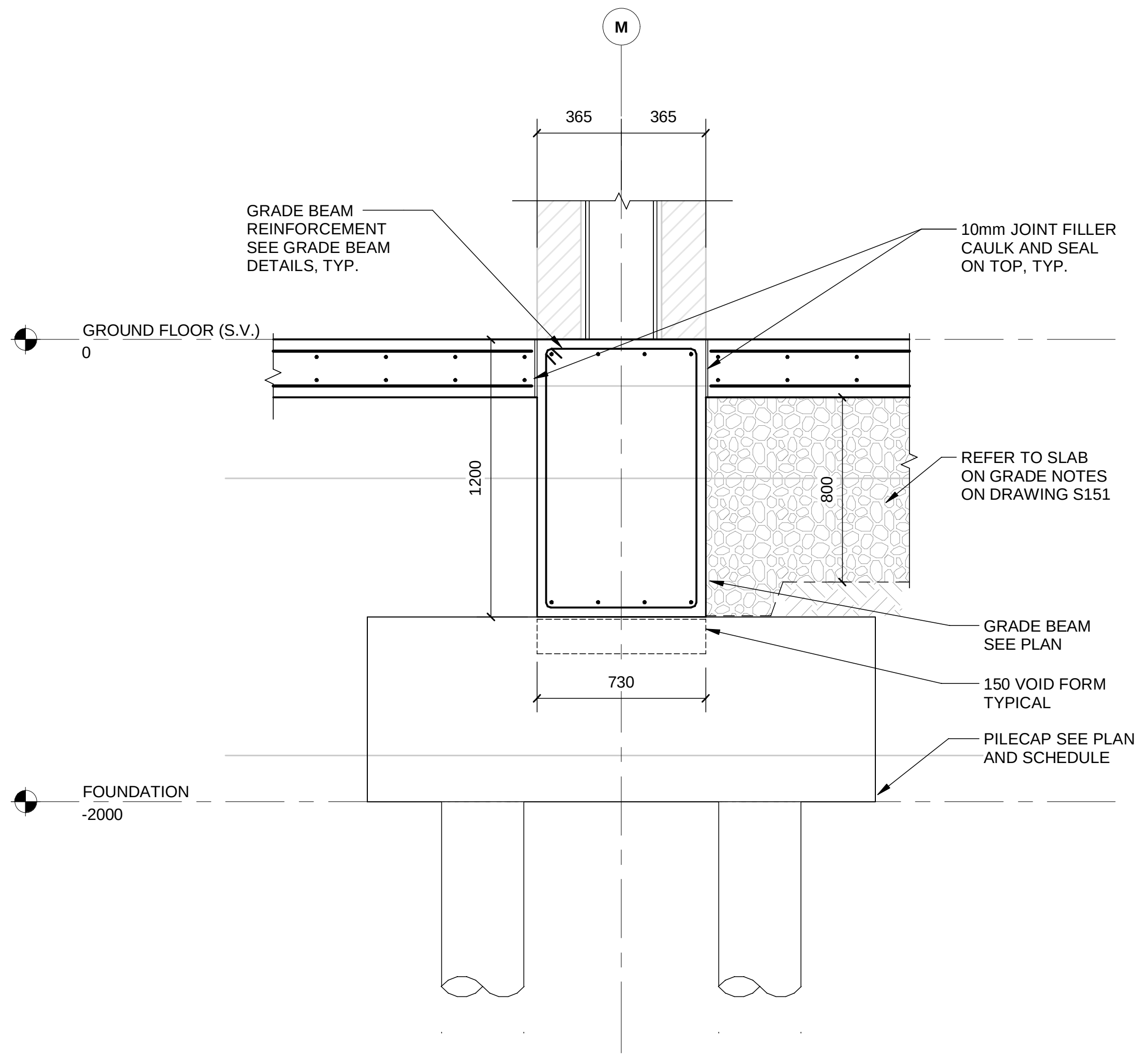
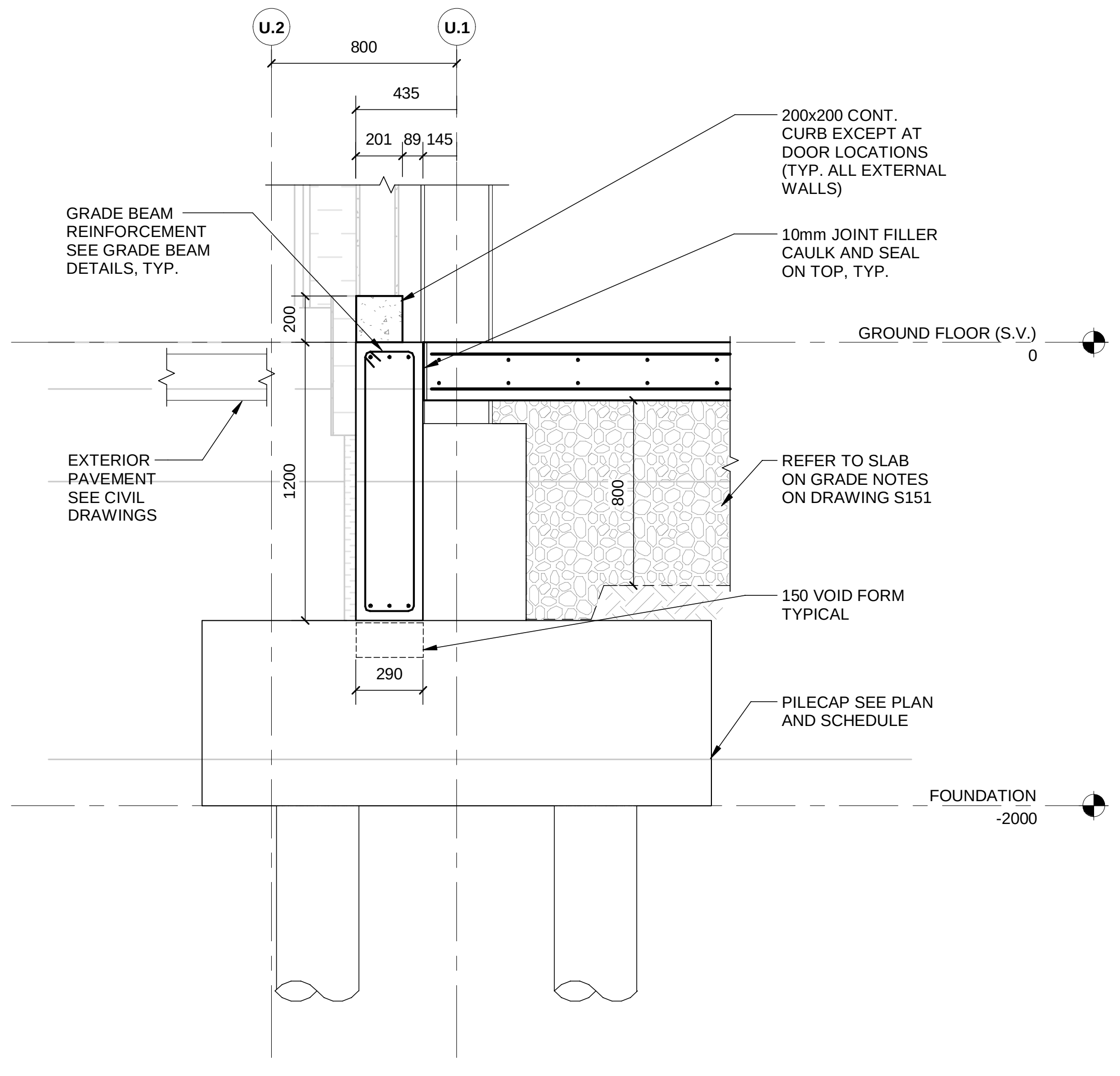

3.1
3.2
700
160
375
165
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
15M DOWELS AT 300
50
50
GRADE BEAM SEE PLAN
GROUND FLOOR (S.V.)
0
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
1200
800
375
150 VOID FORM TYPICAL
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000

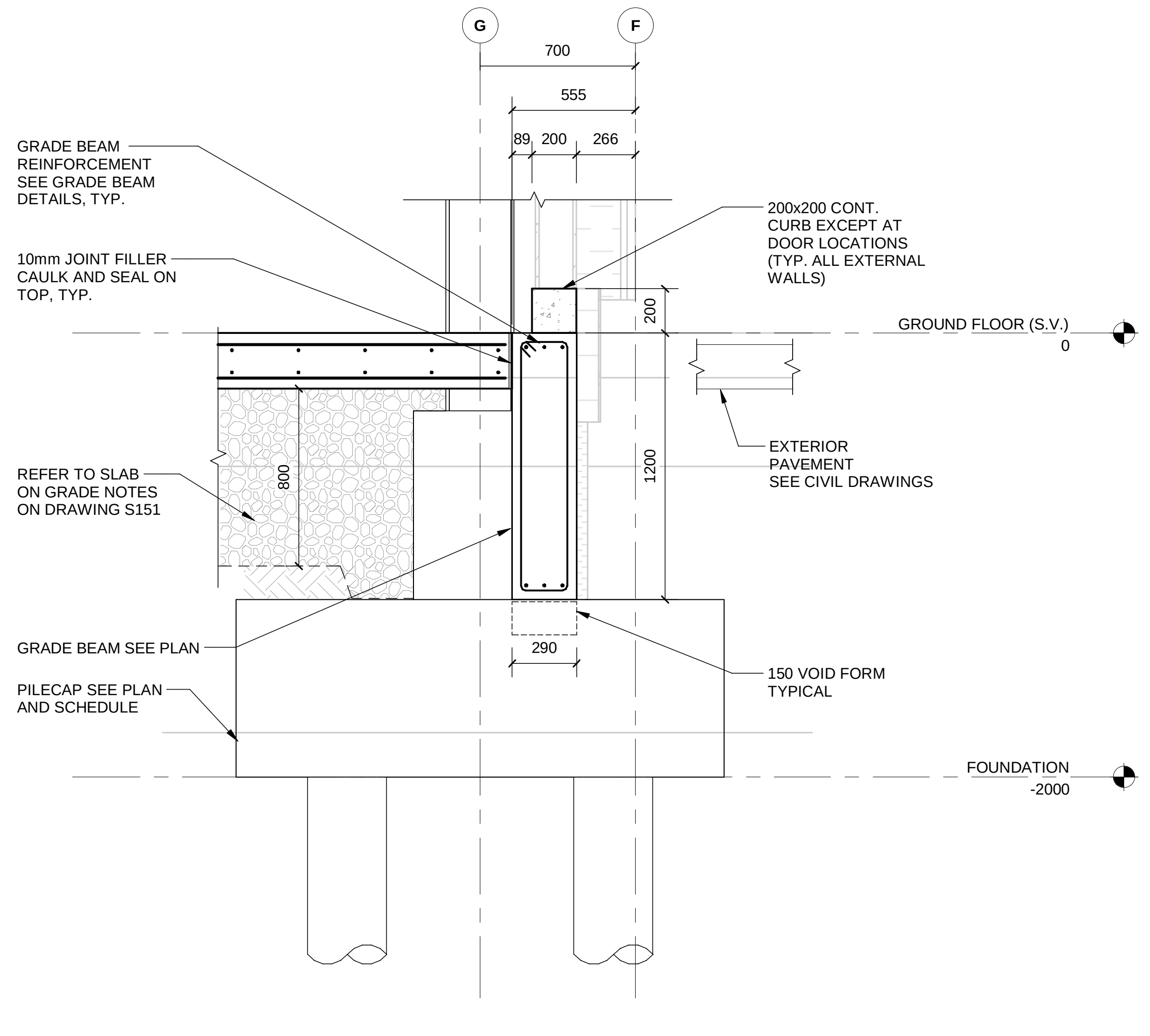
9 FOUNDATION SECTION
00-S-501 REF: 00-S-103 SCALE: 1 : 20


M
365
365
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GROUND FLOOR (S.V.)
0
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
1200
800
GRADE BEAM SEE PLAN
150 VOID FORM TYPICAL
730
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000

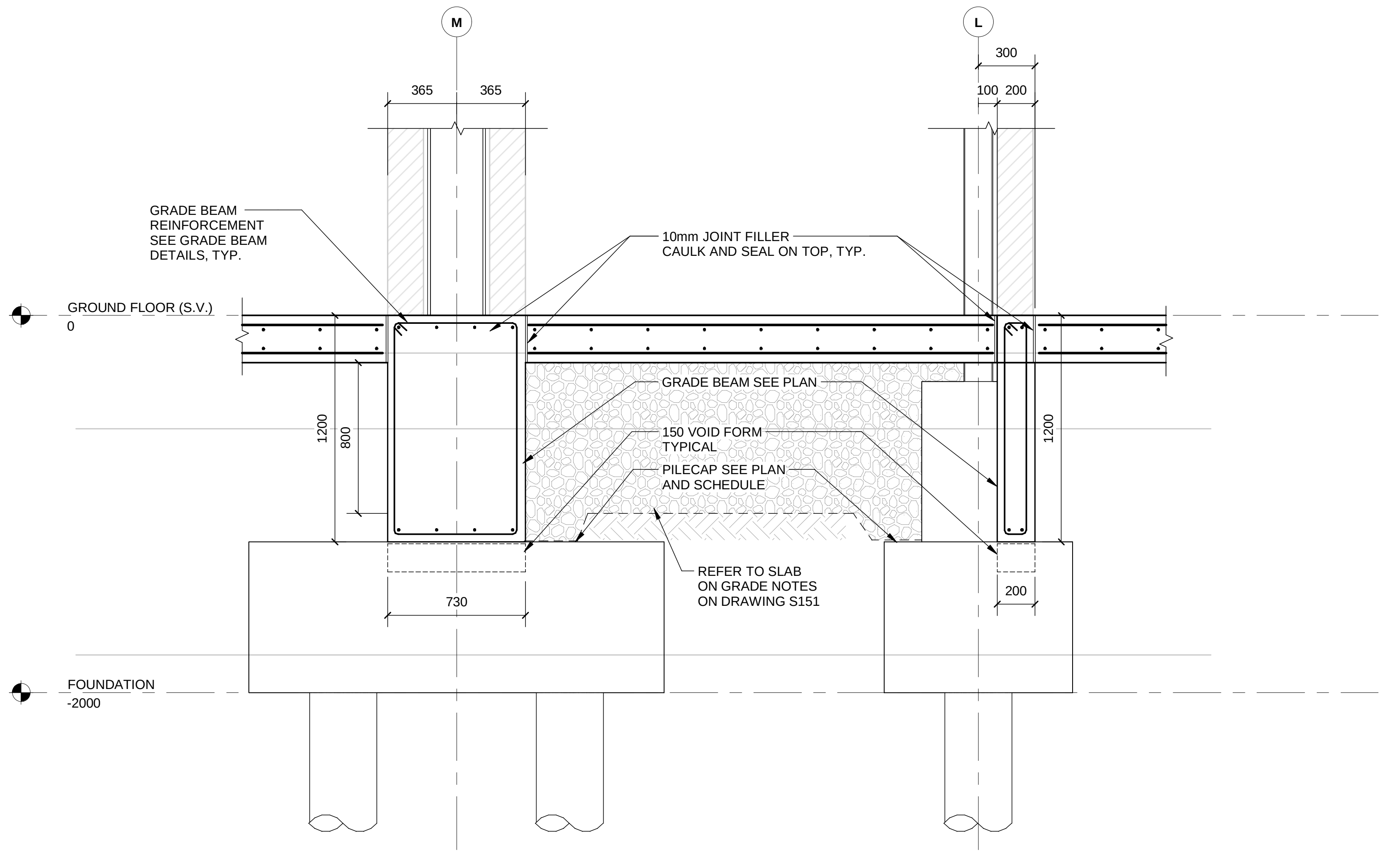
10 FOUNDATION SECTION
00-S-501 REF: 00-S-101 SCALE: 1 : 20


U.2
U.1
800
435
201
89
145
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
200
GROUND FLOOR (S.V.)
0
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
1200
800
150 VOID FORM TYPICAL
290
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000

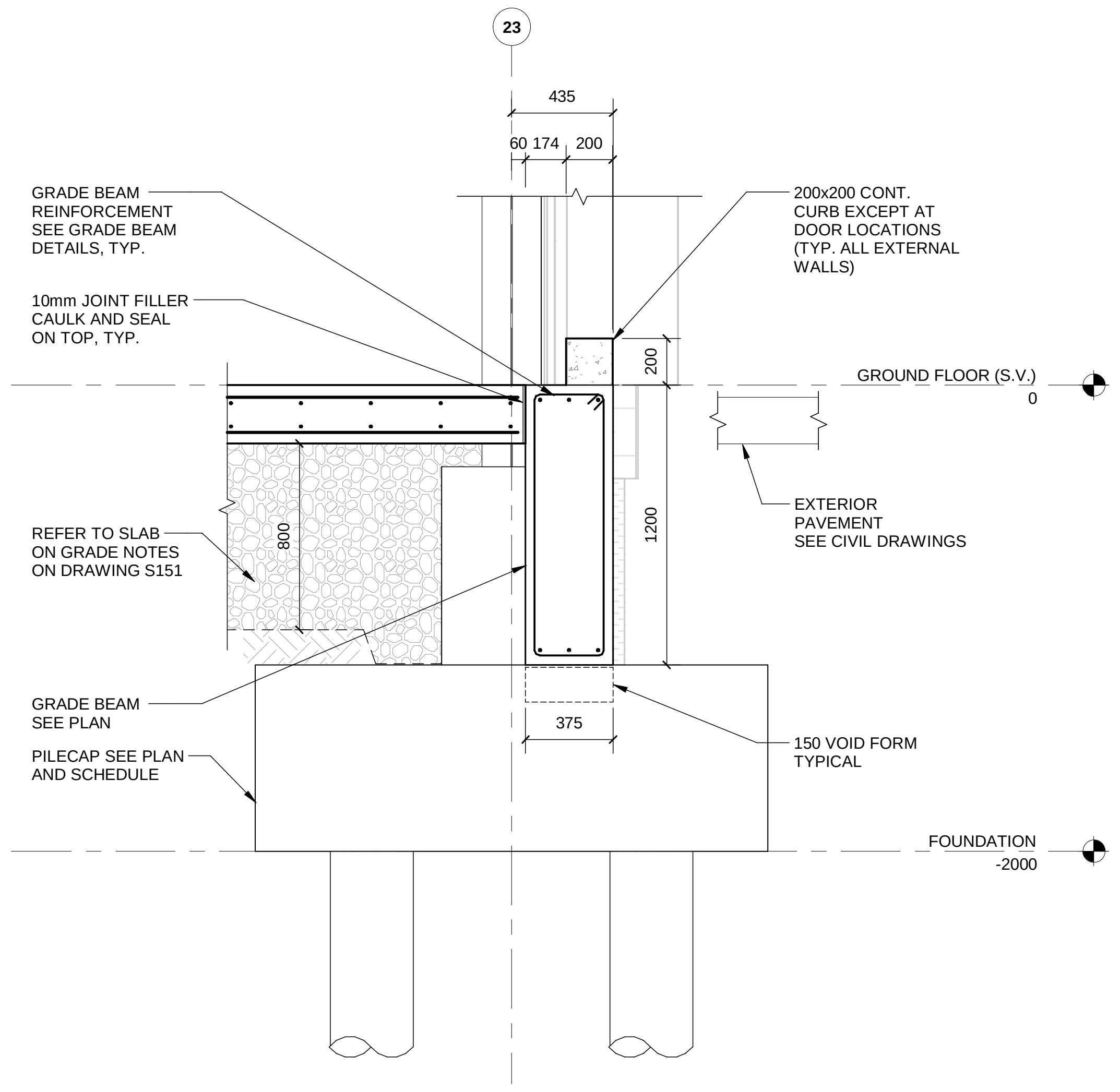
11 FOUNDATION SECTION
00-S-501 REF: 00-S-103 SCALE: 1 : 20


G
F
700
555
89
200
266
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
200
GROUND FLOOR (S.V.)
0
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
800
1200
GRADE BEAM SEE PLAN
290
150 VOID FORM TYPICAL
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000

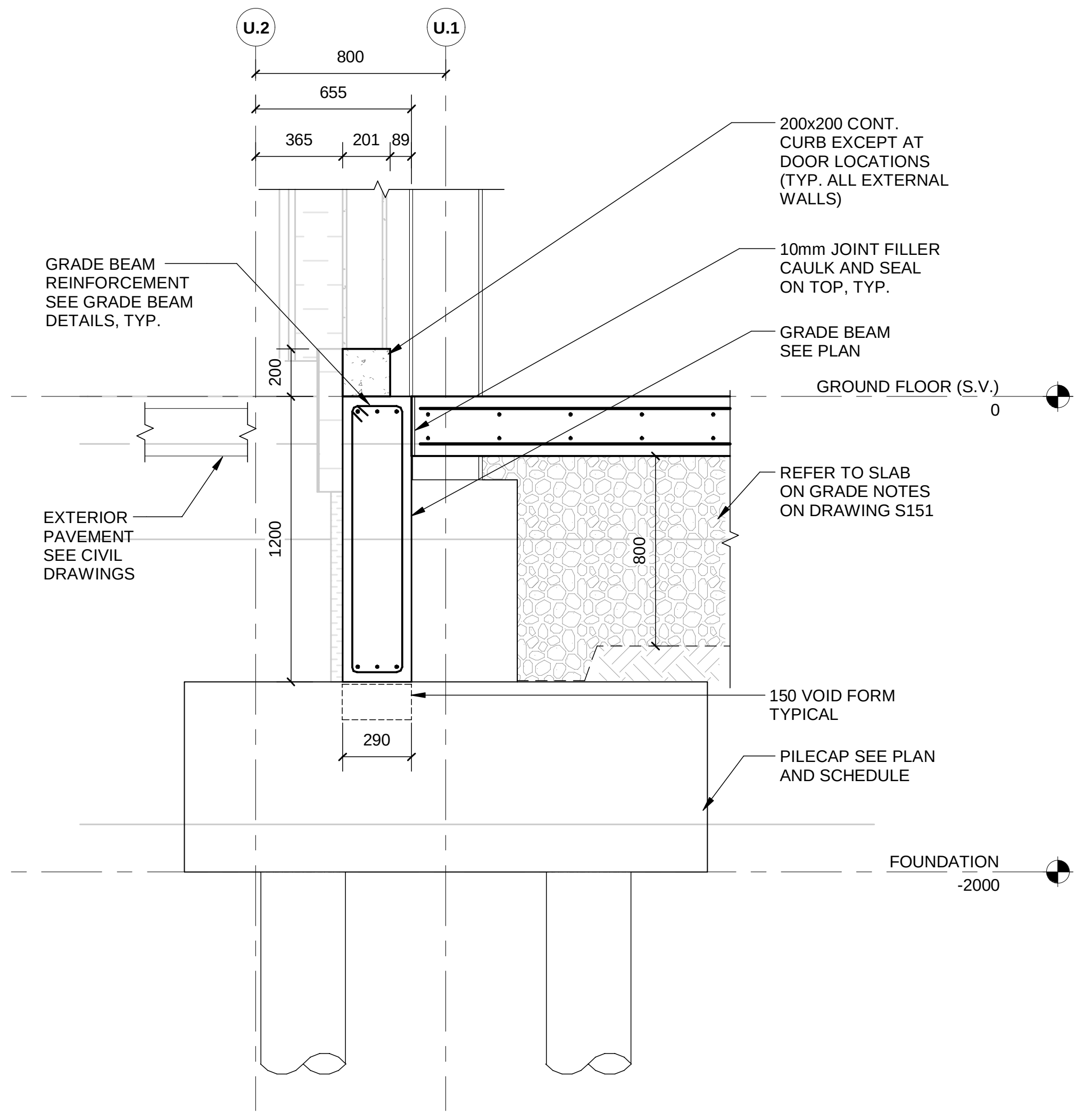
12 FOUNDATION SECTION
00-S-501 REF: 00-S-102 SCALE: 1 : 20


M
L
365
365
300
100
200
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GROUND FLOOR (S.V.)
0
GRADE BEAM SEE PLAN
1200
800
150 VOID FORM TYPICAL
PILECAP SEE PLAN AND SCHEDULE
1200
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
200
730
FOUNDATION
-2000

13 FOUNDATION SECTION
00-S-501 REF: 00-S-102 SCALE: 1 : 20


23
435
60
174
200
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
200
GROUND FLOOR (S.V.)
0
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
800
1200
GRADE BEAM SEE PLAN
375
150 VOID FORM TYPICAL
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000

14 FOUNDATION SECTION
00-S-501 REF: 00-S-104 SCALE: 1 : 20


U.2
U.1
800
655
365
201
89
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GRADE BEAM SEE PLAN
200
GROUND FLOOR (S.V.)
0
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
1200
800
150 VOID FORM TYPICAL
290
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000

15 FOUNDATION SECTION
00-S-501 REF: 00-S-104 SCALE: 1 : 20

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr.
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FOUNDATION SECTION 2

SHEET NUMBER

00-S-501

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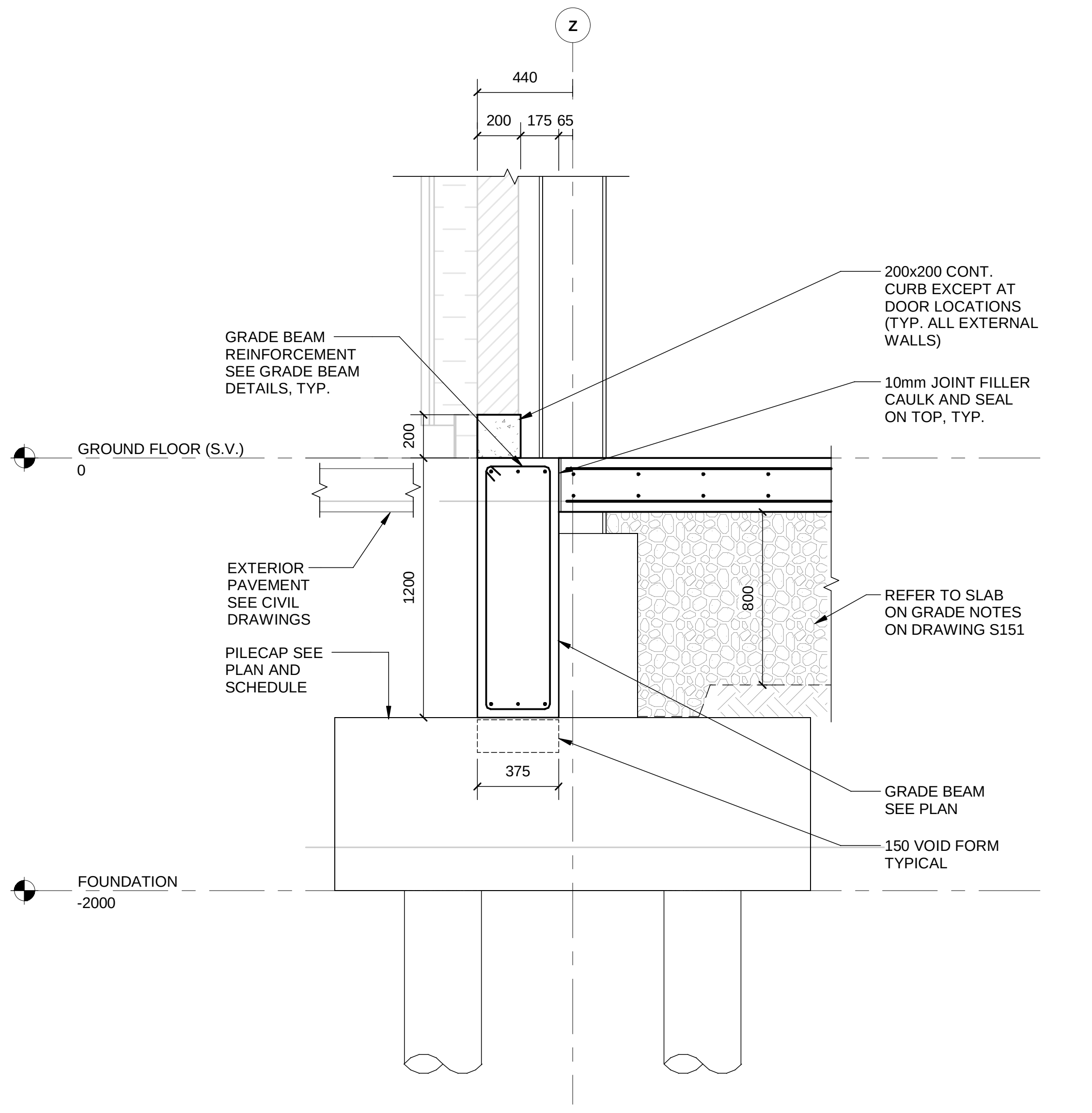
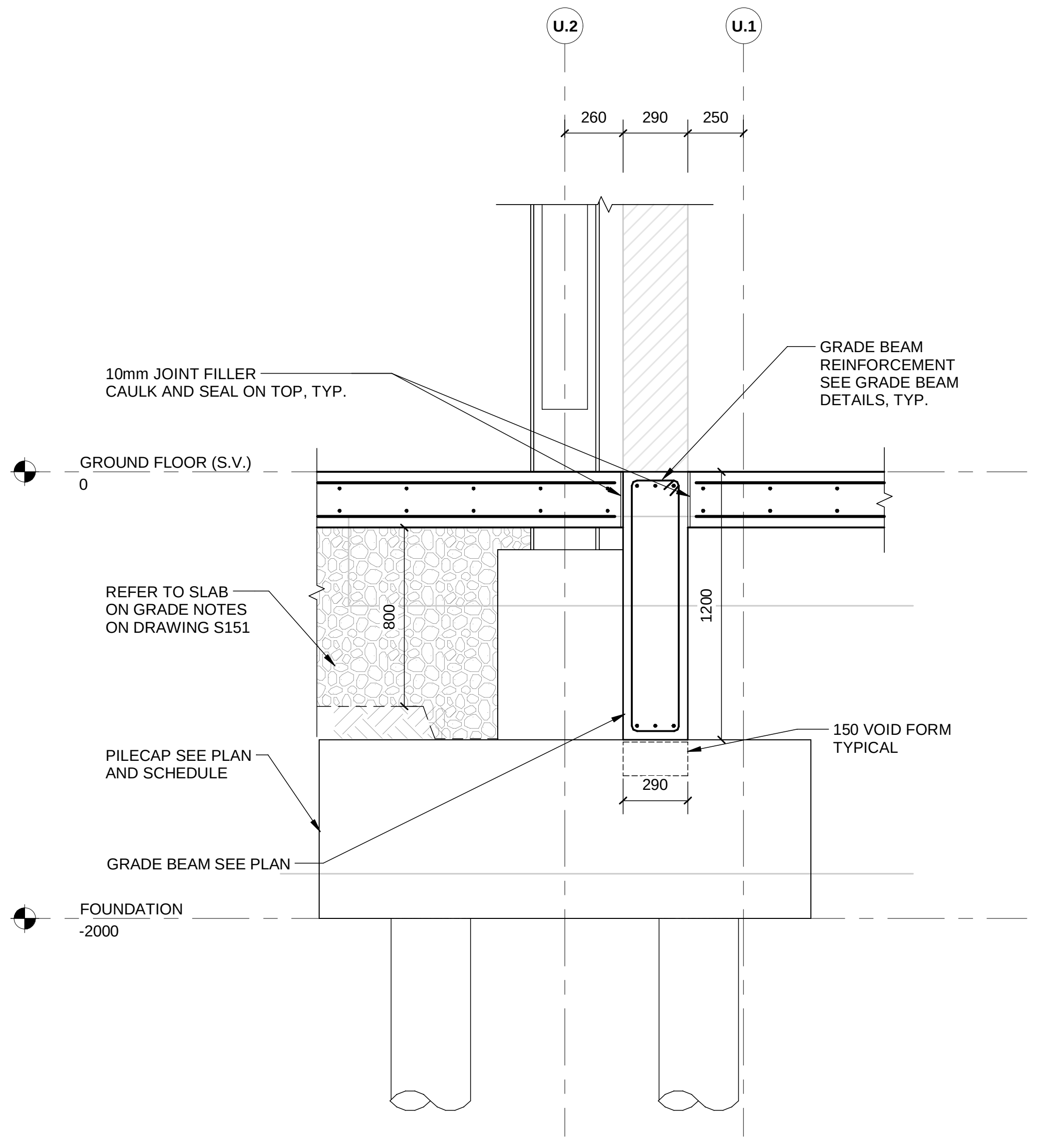

Z
440
200
175
65
200
1200
375
800
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GROUND FLOOR (S.V.)
0
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
PILECAP SEE PLAN AND SCHEDULE
GRADE BEAM SEE PLAN
150 VOID FORM TYPICAL
FOUNDATION
-2000

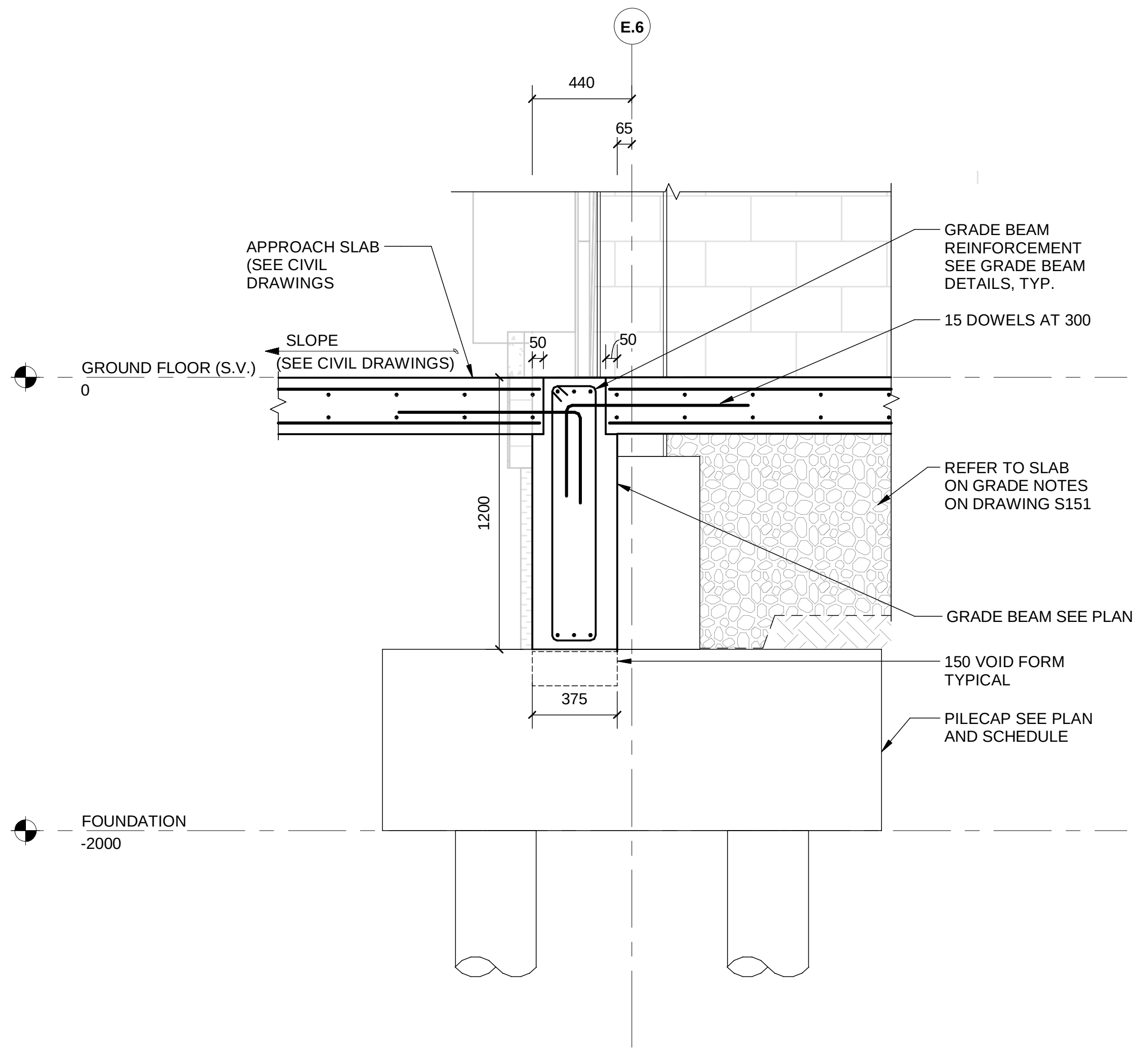
16 FOUNDATION SECTION

00-S-502 REF: 00-S-105 SCALE: 1 : 20


U.2
U.1
260
290
250
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
GROUND FLOOR (S.V.)
0
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
800
1200
150 VOID FORM TYPICAL
290
PILECAP SEE PLAN AND SCHEDULE
GRADE BEAM SEE PLAN
FOUNDATION
-2000

17 FOUNDATION SECTION

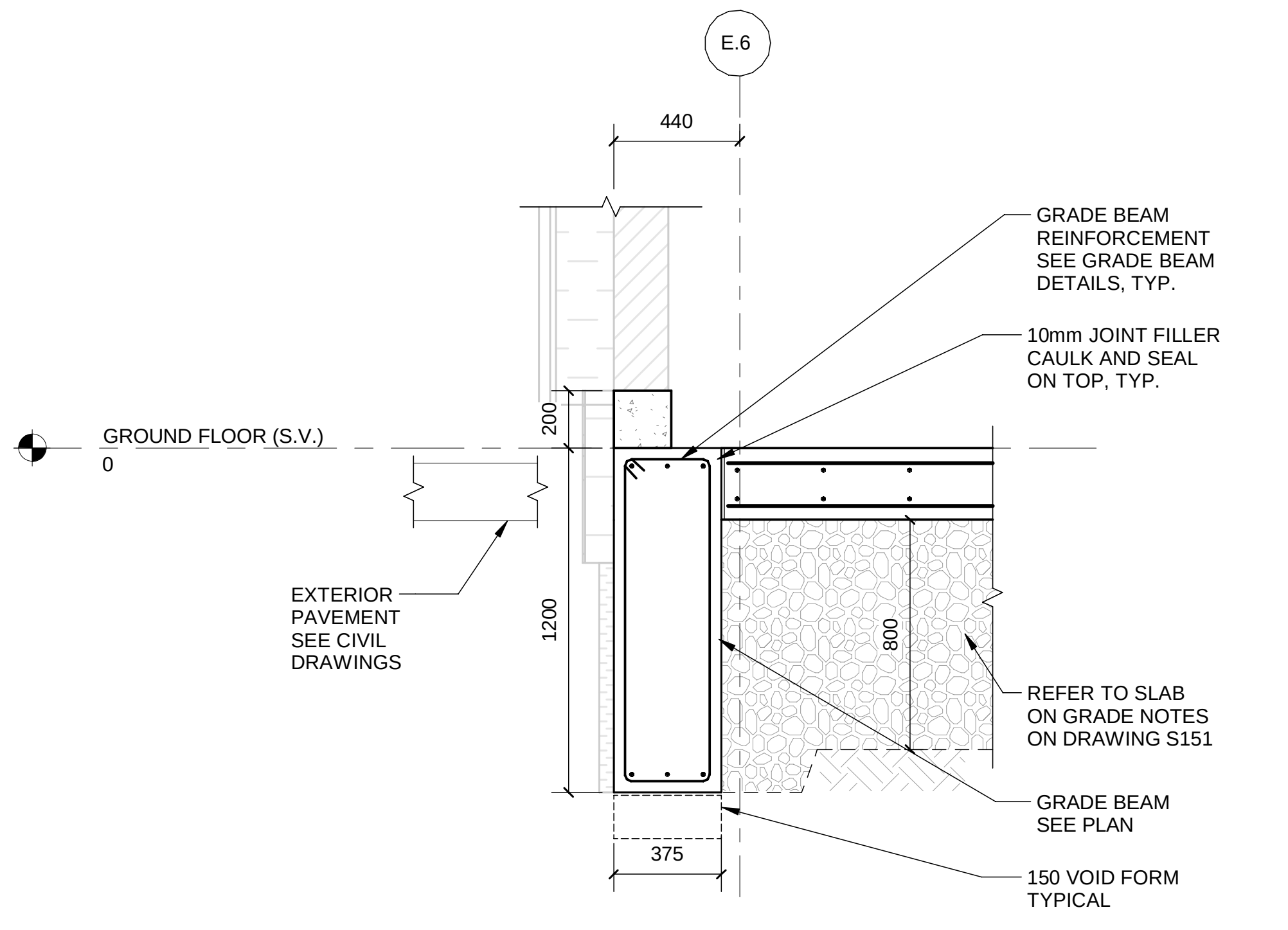
00-S-502 REF: 00-S-105 SCALE: 1 : 20


E.6
440
65
APPROACH SLAB (SEE CIVIL DRAWINGS
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
15 DOWELS AT 300
SLOPE
(SEE CIVIL DRAWINGS)
50
50
GROUND FLOOR (S.V.)
0
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
1200
GRADE BEAM SEE PLAN
150 VOID FORM TYPICAL
375
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000

SECTION AT DOOR

18 FOUNDATION SECTION

00-S-502 REF: 00-S-105 SCALE: 1 : 20


E.6
440
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
200
GROUND FLOOR (S.V.)
0
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
1200
800
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
GRADE BEAM SEE PLAN
375
150 VOID FORM TYPICAL

SECTION AT WALL

19 FOUNDATION SECTION

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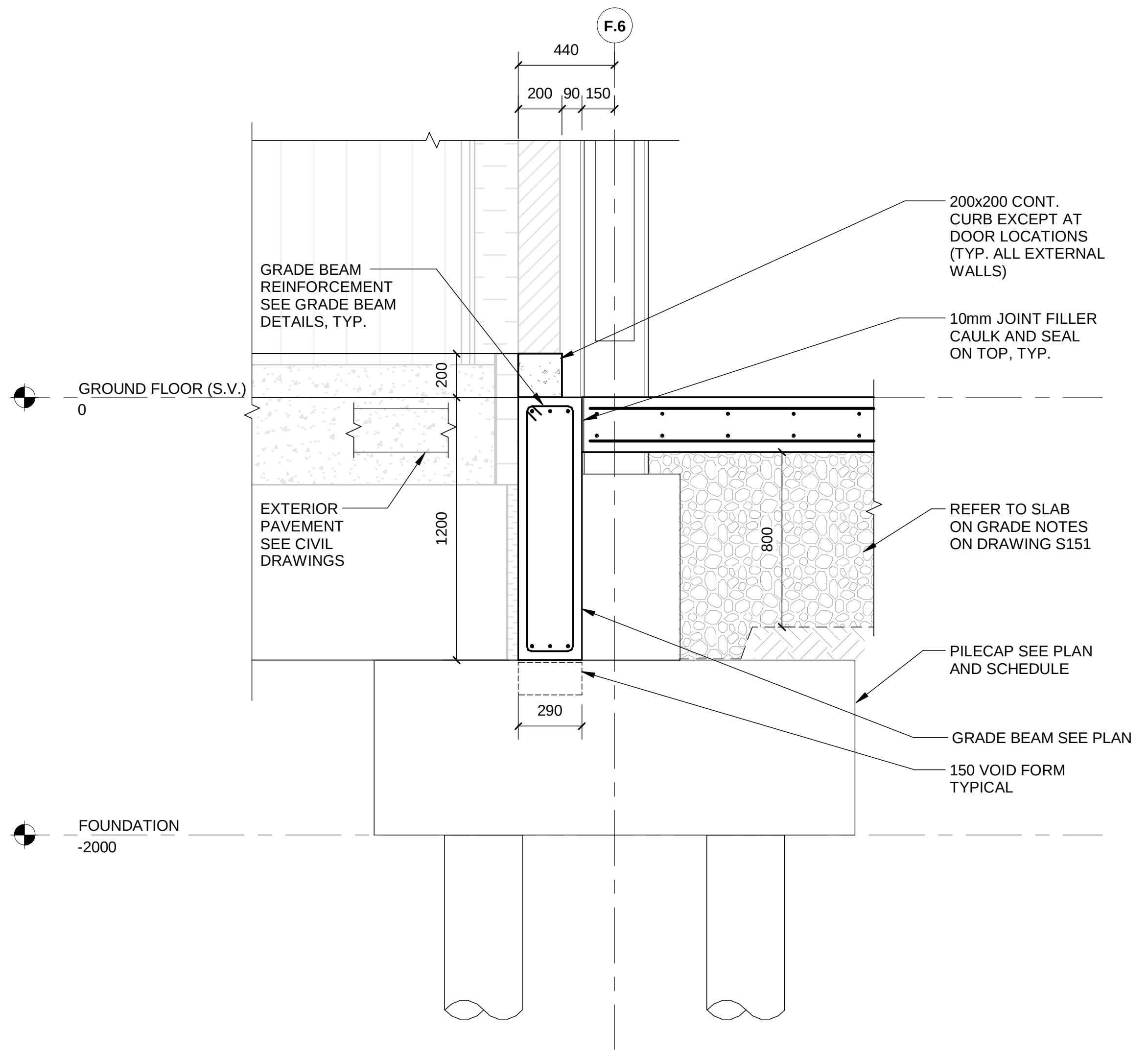
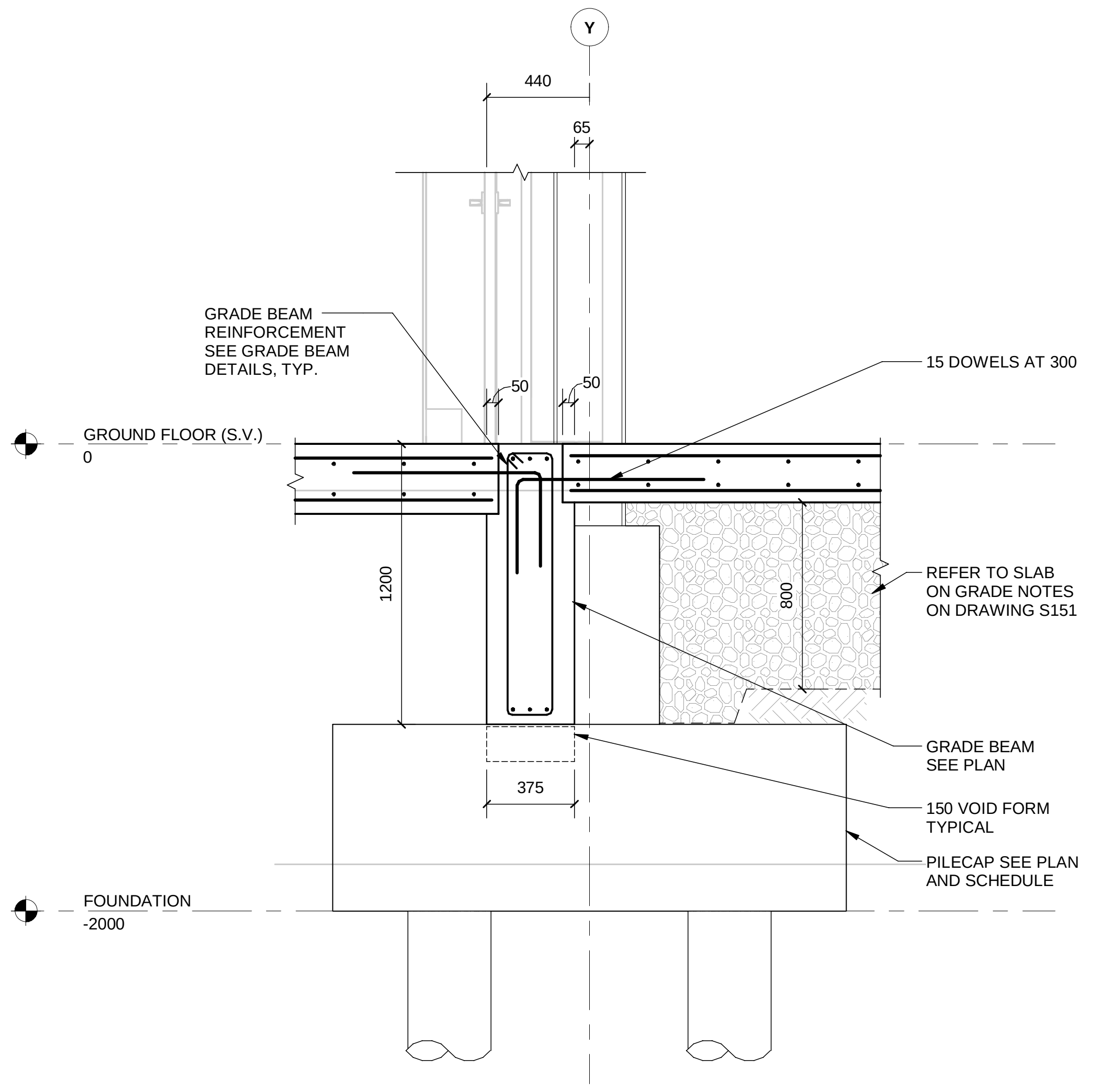

F.6
440
200
90
150
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
200
GROUND FLOOR (S.V.)
0
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
1200
800
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
PILECAP SEE PLAN AND SCHEDULE
290
GRADE BEAM SEE PLAN
150 VOID FORM TYPICAL
FOUNDATION
-2000

20 FOUNDATION SECTION

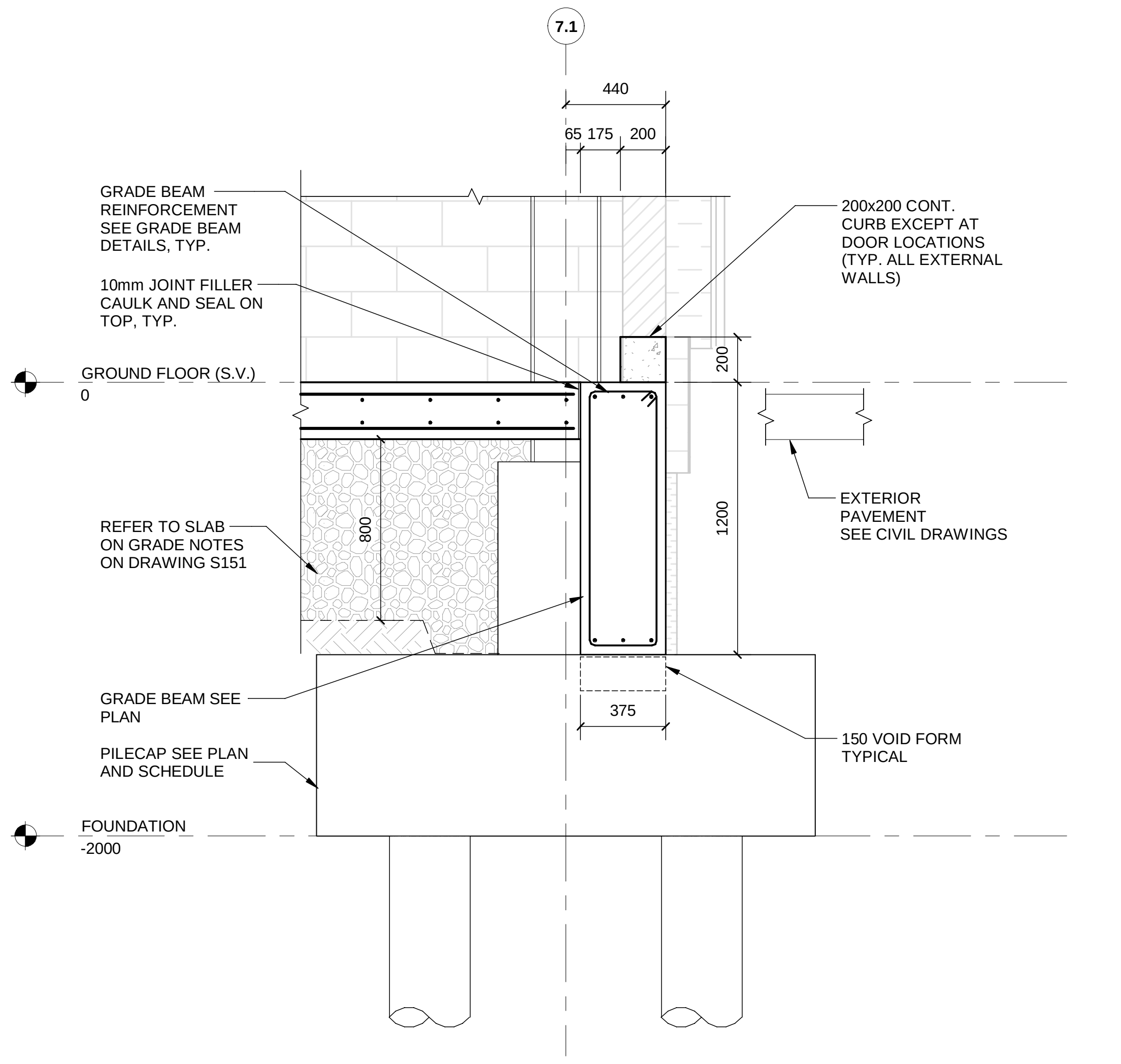
00-S-502 REF: 00-S-105 SCALE: 1 : 20


Y
440
65
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
50
50
15 DOWELS AT 300
GROUND FLOOR (S.V.)
0
1200
800
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
GRADE BEAM SEE PLAN
375
150 VOID FORM TYPICAL
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000

SECTION AT DOOR

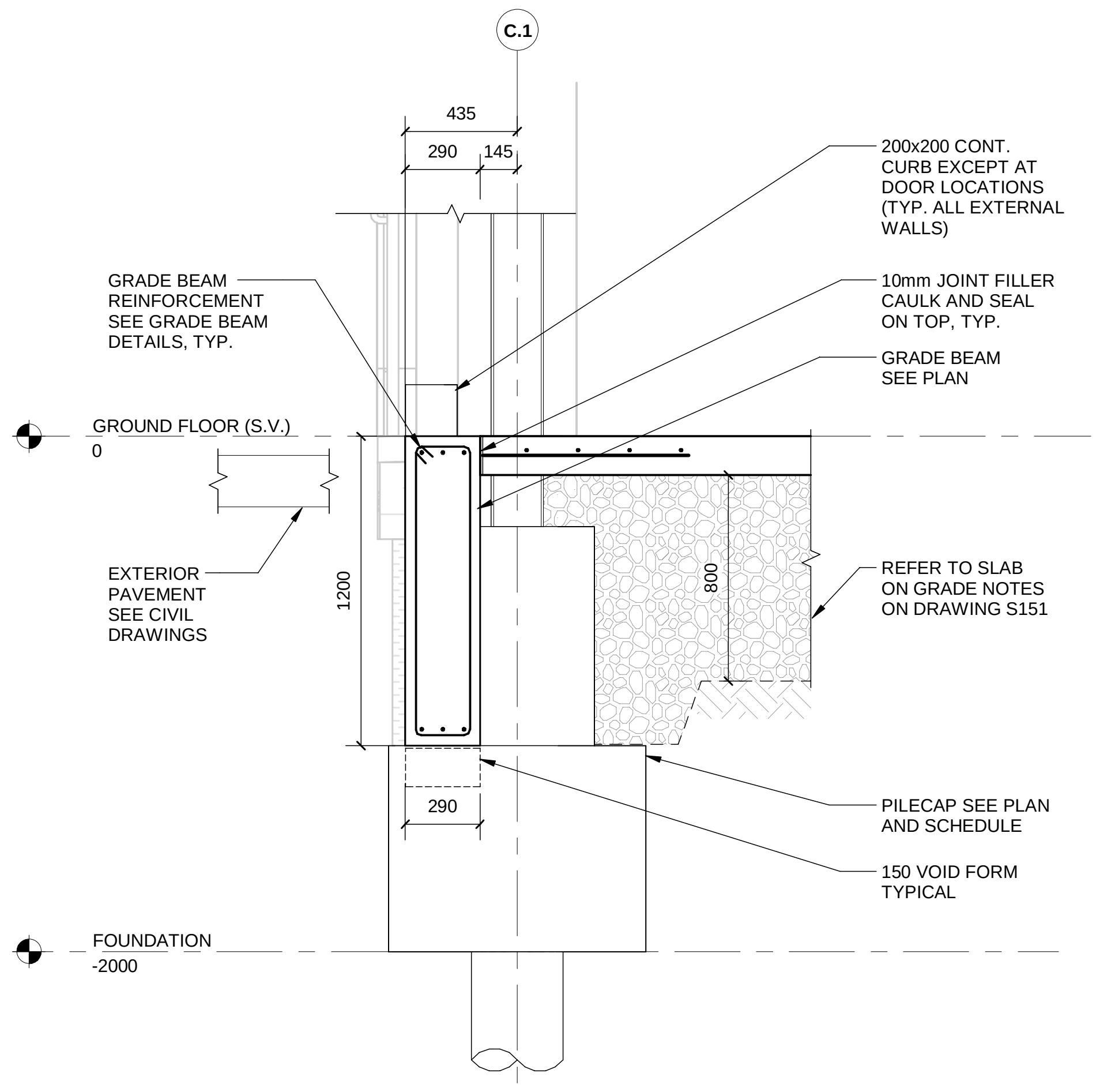
21 FOUNDATION SECTION

00-S-502 REF: 00-S-105 SCALE: 1 : 20


7.1
440
65
175
200
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
200
GROUND FLOOR (S.V.)
0
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
800
1200
GRADE BEAM SEE PLAN
375
PILECAP SEE PLAN AND SCHEDULE
150 VOID FORM TYPICAL
FOUNDATION
-2000

22 FOUNDATION SECTION

00-S-502 REF: 00-S-105 SCALE: 1 : 20


C.1
435
290
145
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GRADE BEAM SEE PLAN
GROUND FLOOR (S.V.)
0
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
1200
800
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
290
PILECAP SEE PLAN AND SCHEDULE
150 VOID FORM TYPICAL
FOUNDATION
-2000

23 FOUNDATION SECTION

00-S-502 REF: 00-S-107 SCALE: 1 : 20

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FOUNDATION SECTION 3

SHEET NUMBER

00-S-502

00-S-502-FOUNDATION SECTION 3

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Designer: Designer   Checked: Checker   Approved: Approver   A0 33.1"x46.8"

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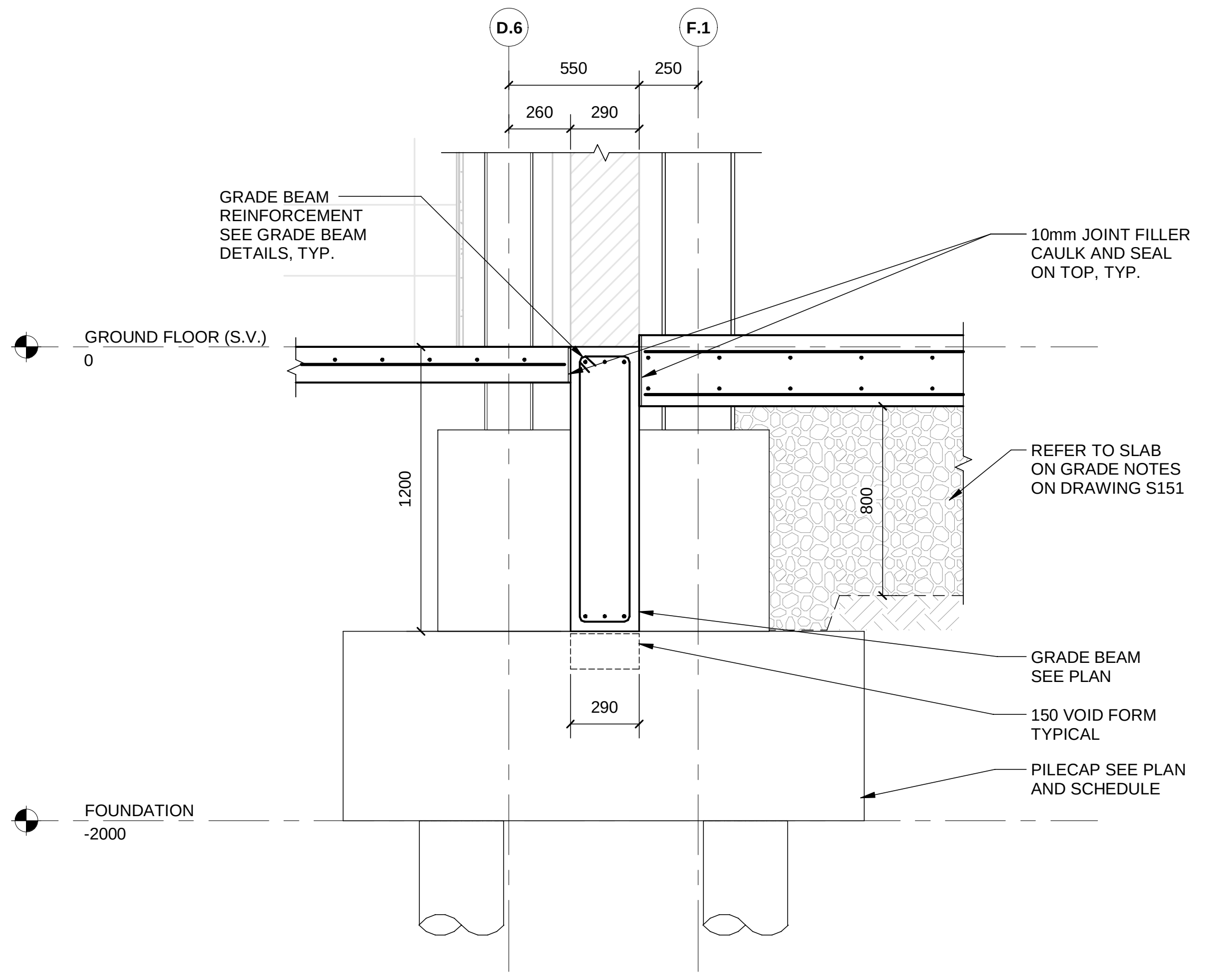
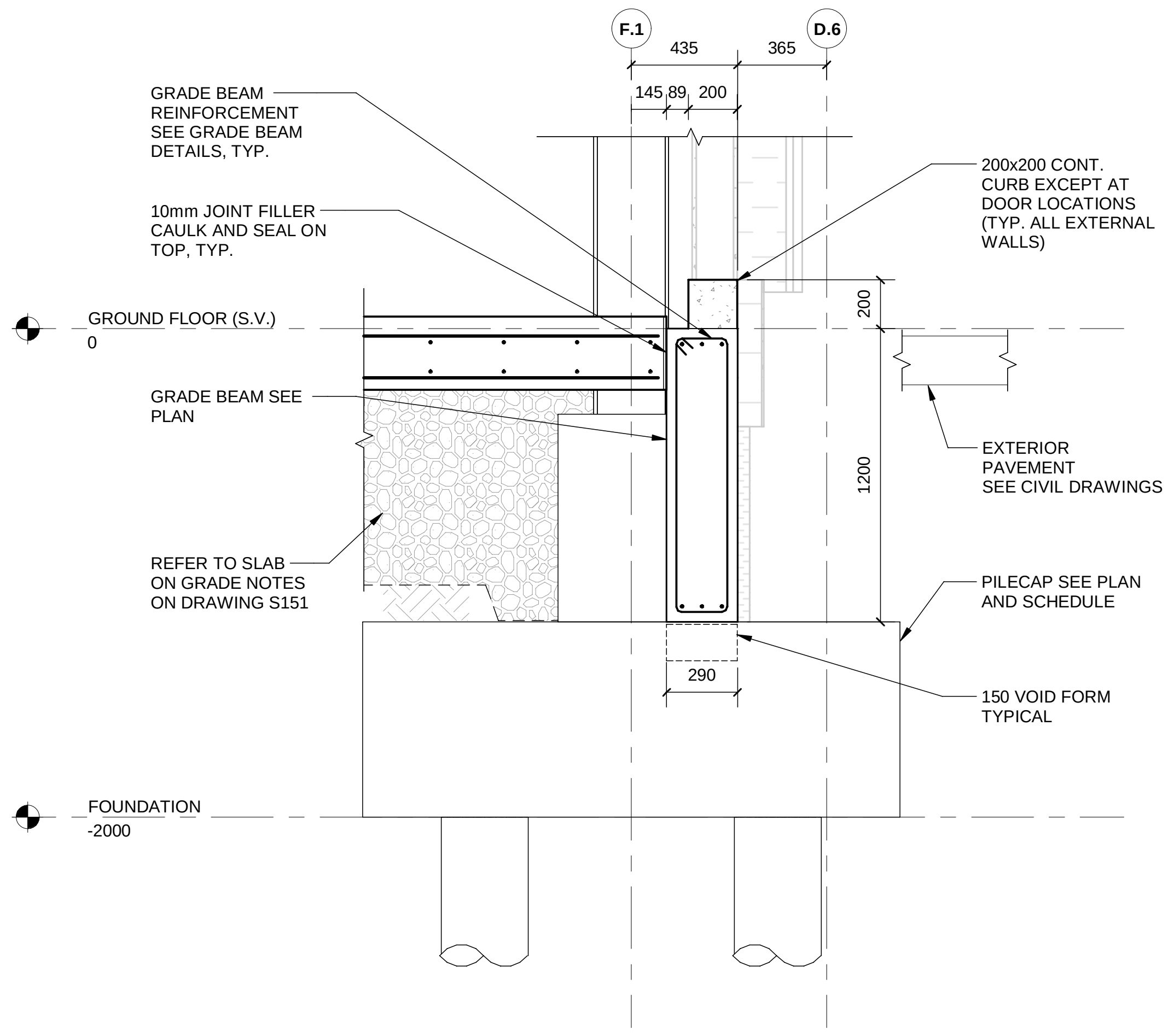

D.6
F.1
550
250
260
290
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GROUND FLOOR (S.V.)
0
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
1200
800
GRADE BEAM SEE PLAN
290
150 VOID FORM TYPICAL
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000

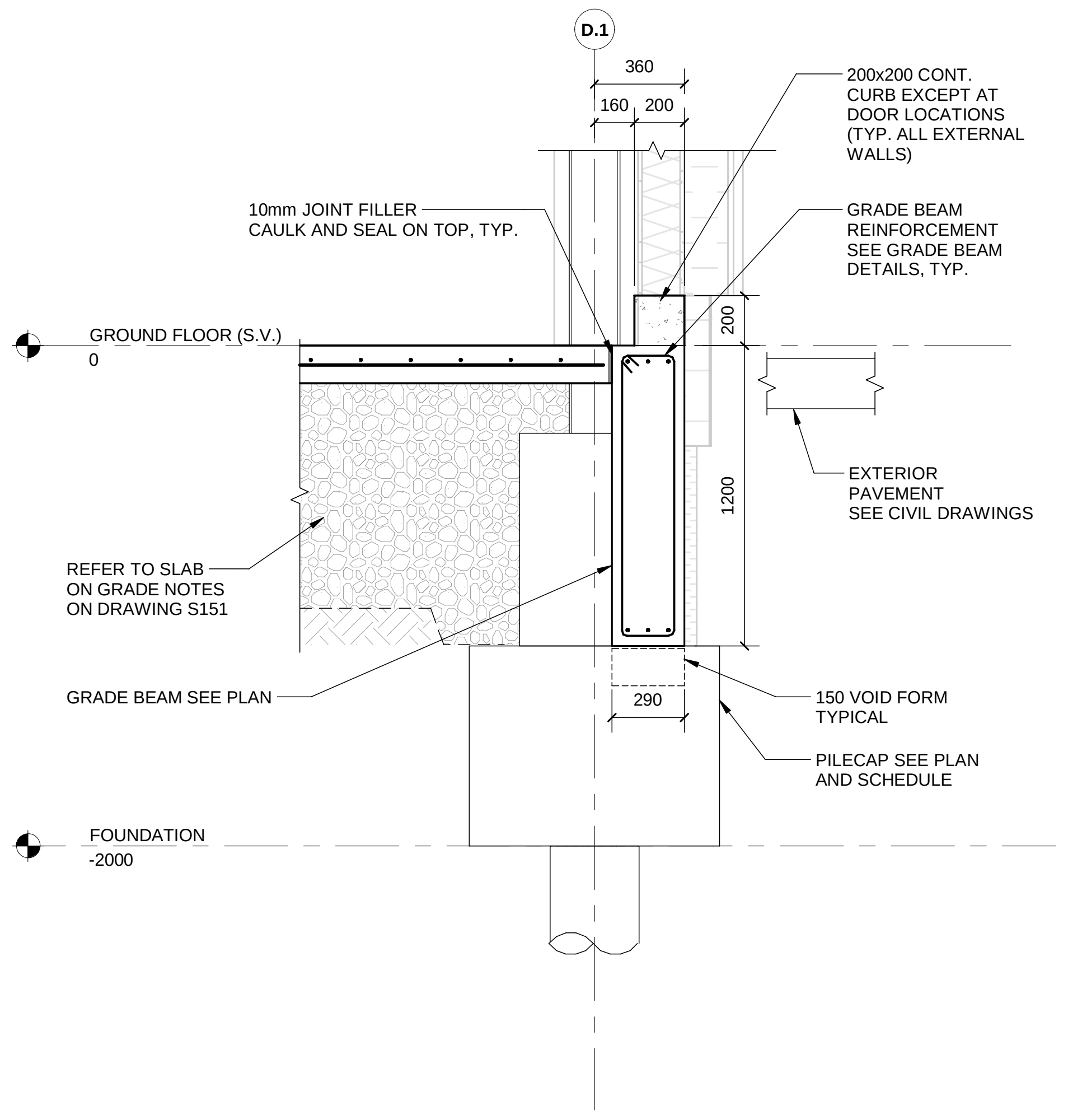
24 FOUNDATION SECTION

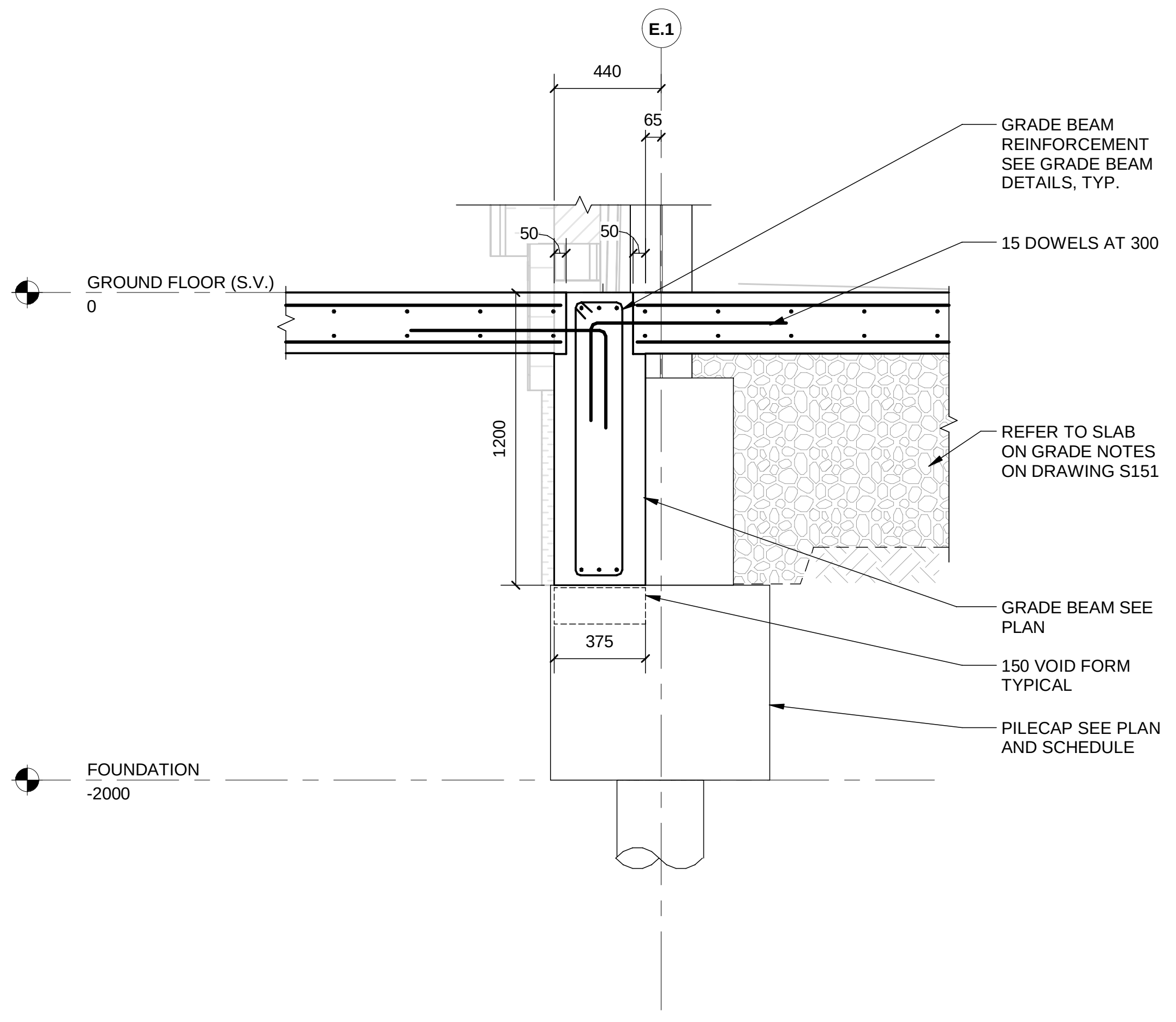
00-S-503   REF: 00-S-107   SCALE: 1 : 20


F.1
D.6
435
365
145
89
200
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
GROUND FLOOR (S.V.)
0
200
GRADE BEAM SEE PLAN
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
1200
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
PILECAP SEE PLAN AND SCHEDULE
290
150 VOID FORM TYPICAL
FOUNDATION
-2000

25 FOUNDATION SECTION

00-S-503   REF: 00-S-106   SCALE: 1 : 20


D.1
360
160
200
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
GROUND FLOOR (S.V.)
0
200
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
1200
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
GRADE BEAM SEE PLAN
290
150 VOID FORM TYPICAL
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000


E.1
440
65
50
50
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
15 DOWELS AT 300
GROUND FLOOR (S.V.)
0
1200
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
GRADE BEAM SEE PLAN
375
150 VOID FORM TYPICAL
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000

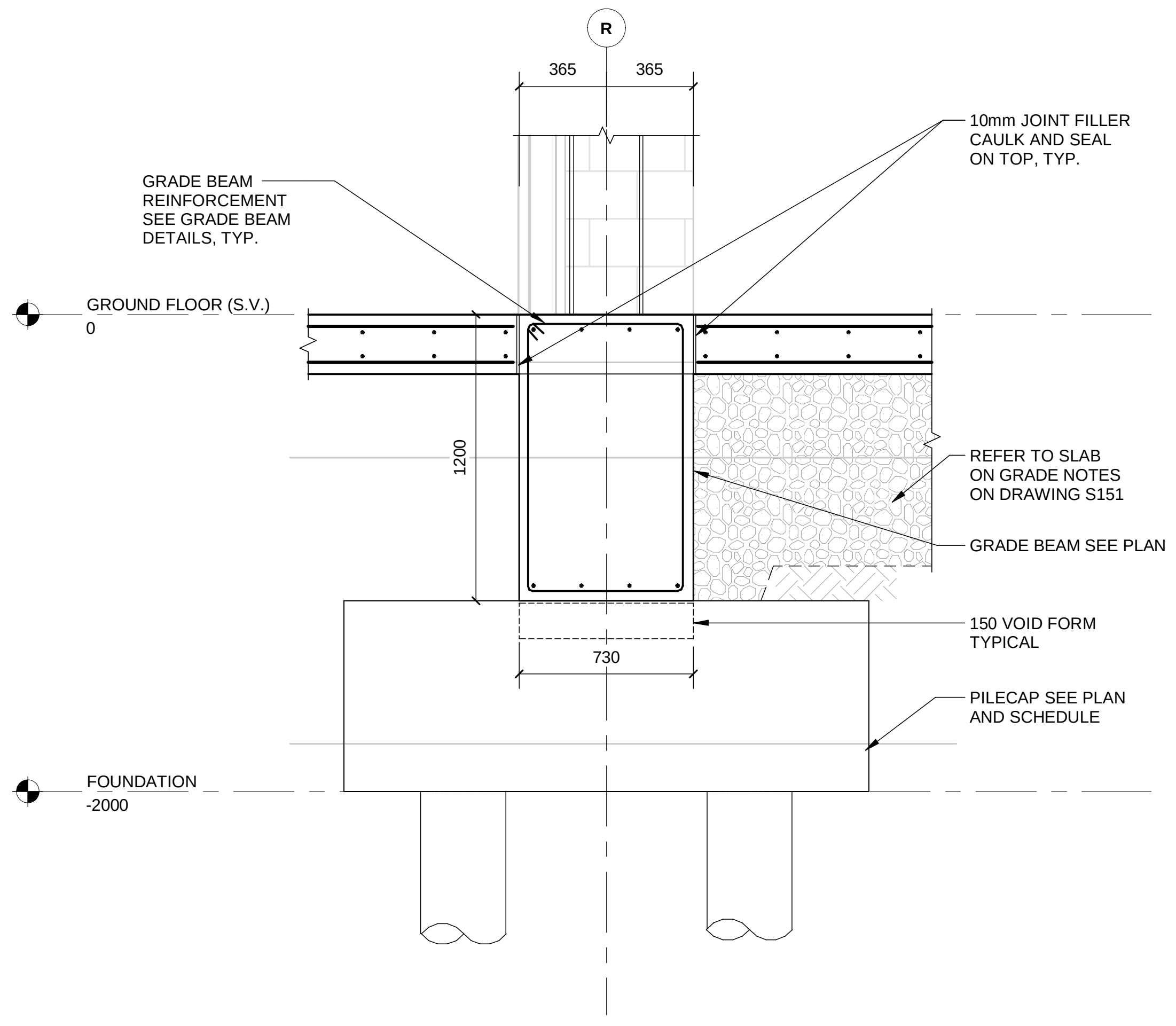
26 FOUNDATION SECTION

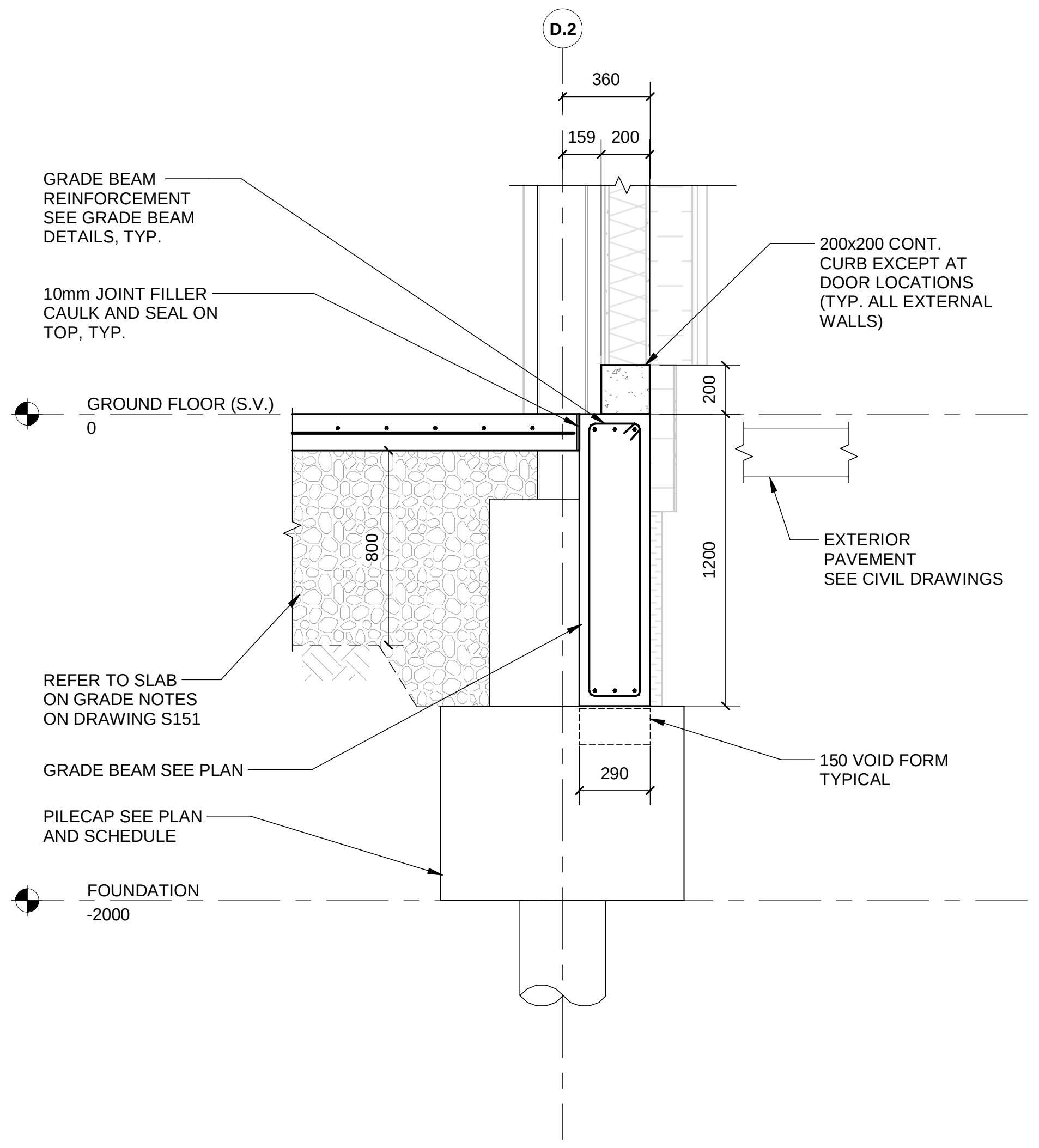
00-S-503   REF: 00-S-107   SCALE: 1 : 20

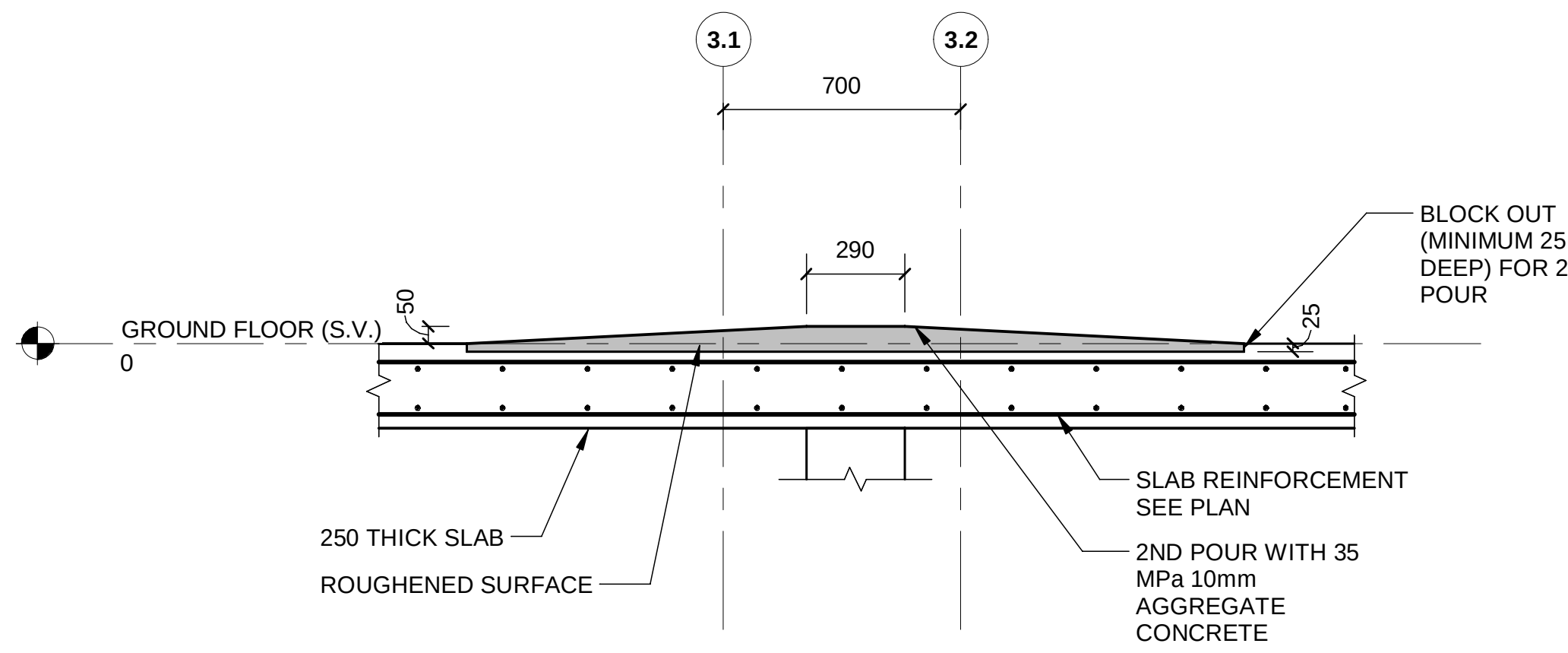
SECTION AT DOOR

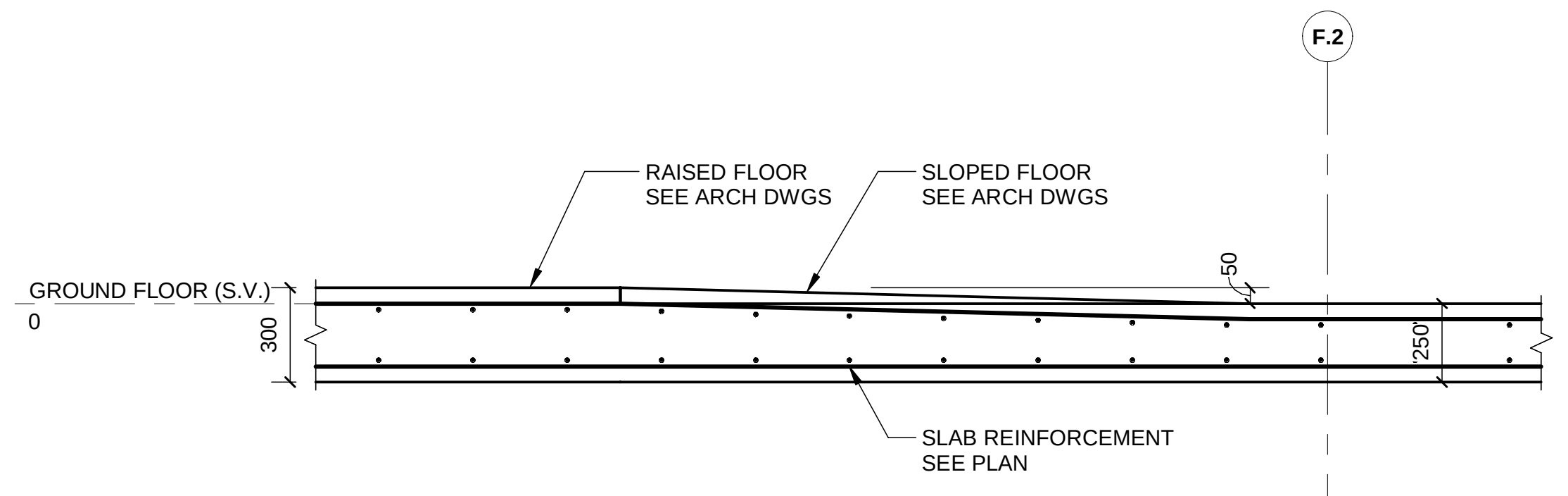
27 FOUNDATION SECTION

00-S-503   REF106-S-101   SCALE: 1 : 20


R
365
365
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
GROUND FLOOR (S.V.)
0
1200
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
GRADE BEAM SEE PLAN
150 VOID FORM TYPICAL
730
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000


D.2
360
159
200
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
GROUND FLOOR (S.V.)
0
200
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
800
1200
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
GRADE BEAM SEE PLAN
150 VOID FORM TYPICAL
290
PILECAP SEE PLAN AND SCHEDULE
FOUNDATION
-2000


3.1
3.2
700
290
BLOCK OUT (MINIMUM 25mm DEEP) FOR 2ND POUR
GROUND FLOOR (S.V.)
0
50
25
250 THICK SLAB
ROUGHENED SURFACE
SLAB REINFORCEMENT SEE PLAN
2ND POUR WITH 35 MPa 10mm AGGREGATE CONCRETE


F.2
RAISED FLOOR SEE ARCH DWGS
SLOPED FLOOR SEE ARCH DWGS
GROUND FLOOR (S.V.)
0
50
300
250
SLAB REINFORCEMENT SEE PLAN

28 FOUNDATION SECTION

00-S-503   REF: 00-S-101   103   SCALE: 1 : 20

29 FOUNDATION SECTION

00-S-503   REF: 00-S-107   SCALE: 1 : 20

30 SLAB SECTION 1 AT RAISED FLOOR

00-S-503   REF: 00-S-106   SCALE: 1 : 20

31 SLAB SECTION 2 AT RAISED FLOOR

00-S-503   REF: 00-S-156   SCALE: 1 : 20

00-S-503-FOUNDATION SECTION 4

Last Plotted: 2/14/2025 10:56:47 PM
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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974   1.204.986.1311

Winnipeg Transit
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Winnipeg, MB R3L 2A1

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AECOM CANADA ULC
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Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FOUNDATION SECTION 4

SHEET NUMBER

00-S-503

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"
Project Management Initials:
00-S-504-FOUNDATION SECTION 5
Last Plotted: 2/14/2025 10:56:49 PM
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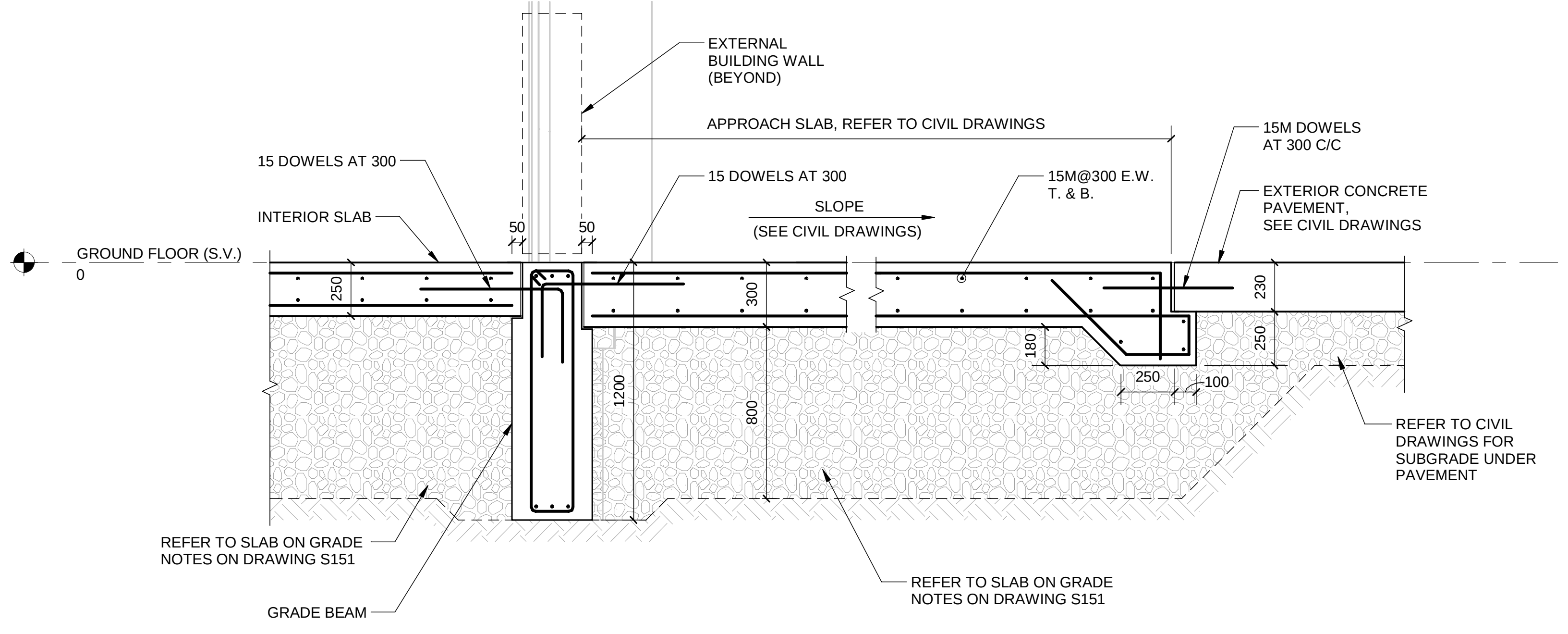
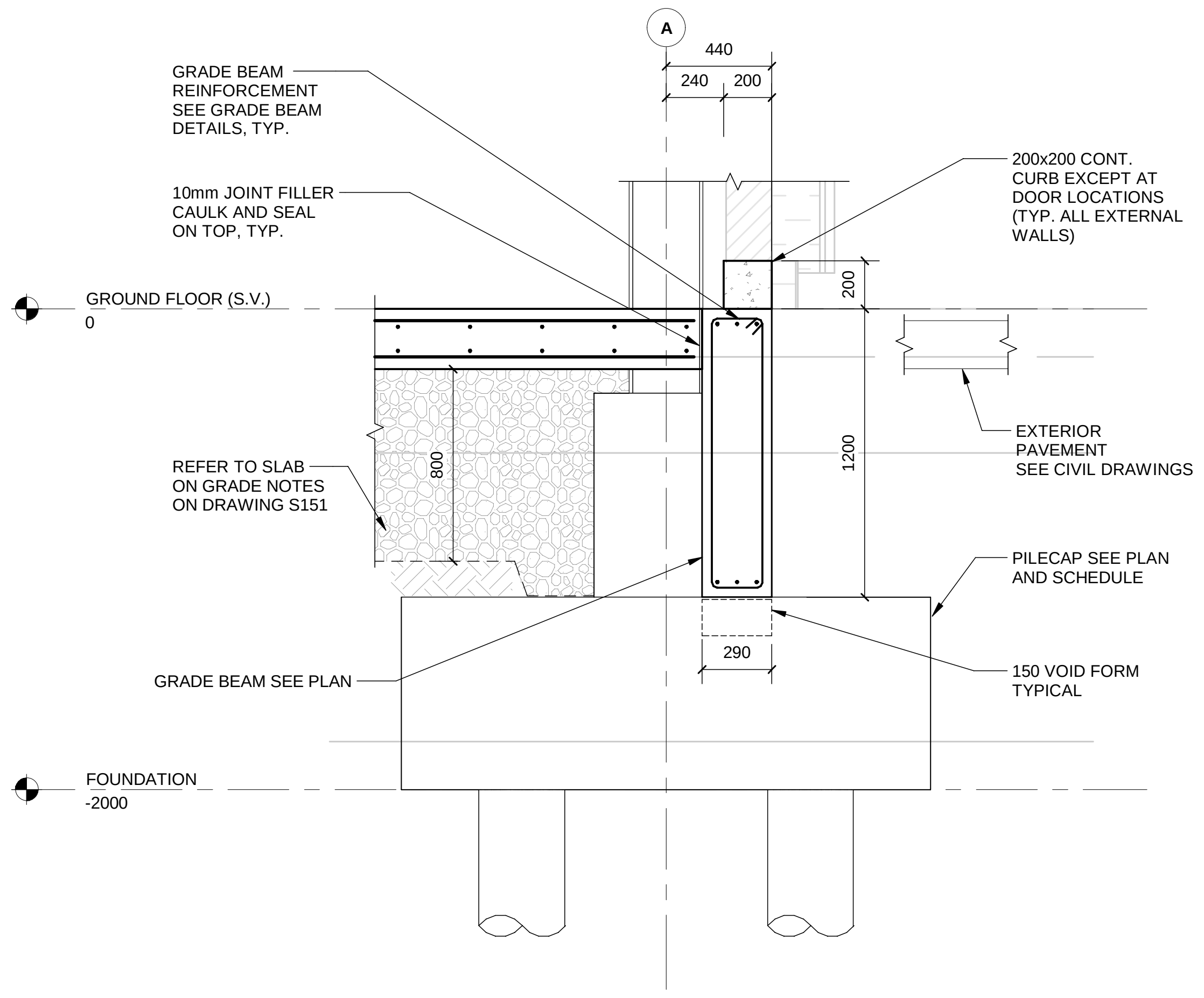
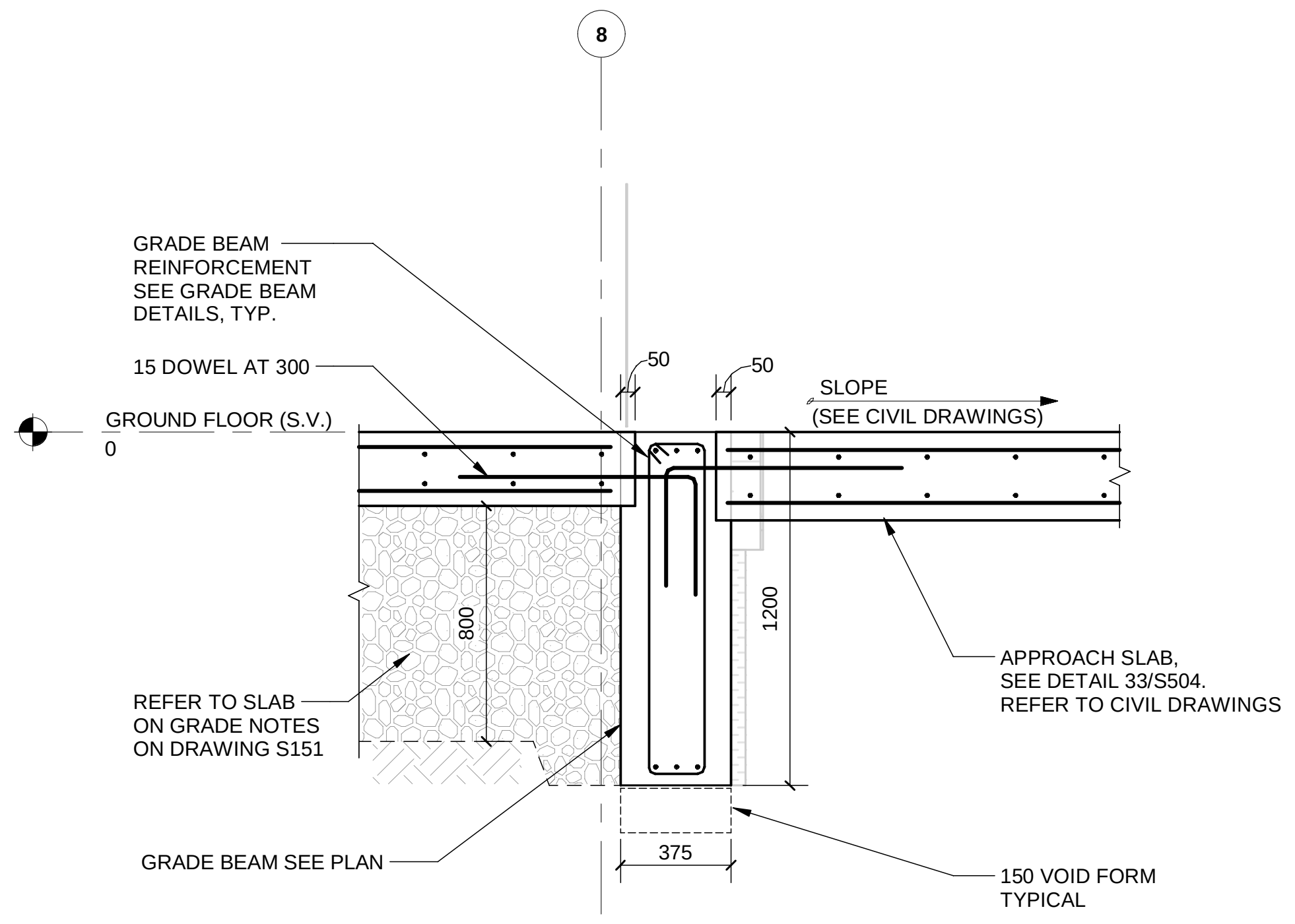

EXTERNAL BUILDING WALL (BEYOND)
APPROACH SLAB, REFER TO CIVIL DRAWINGS
15 DOWELS AT 300
15M DOWELS AT 300 C/C
INTERIOR SLAB
15 DOWELS AT 300
SLOPE (SEE CIVIL DRAWINGS)
15M@300 E.W. T. & B.
EXTERIOR CONCRETE PAVEMENT, SEE CIVIL DRAWINGS
50
50
GROUND FLOOR (S.V.)
0
250
300
230
180
250
250
100
1200
800
REFER TO CIVIL DRAWINGS FOR SUBGRADE UNDER PAVEMENT
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
GRADE BEAM
REFER TO SLAB ON GRADE NOTES ON DRAWING S151

32 | FOUNDATION SECTION
00-S-504 SCALE: 1 : 20

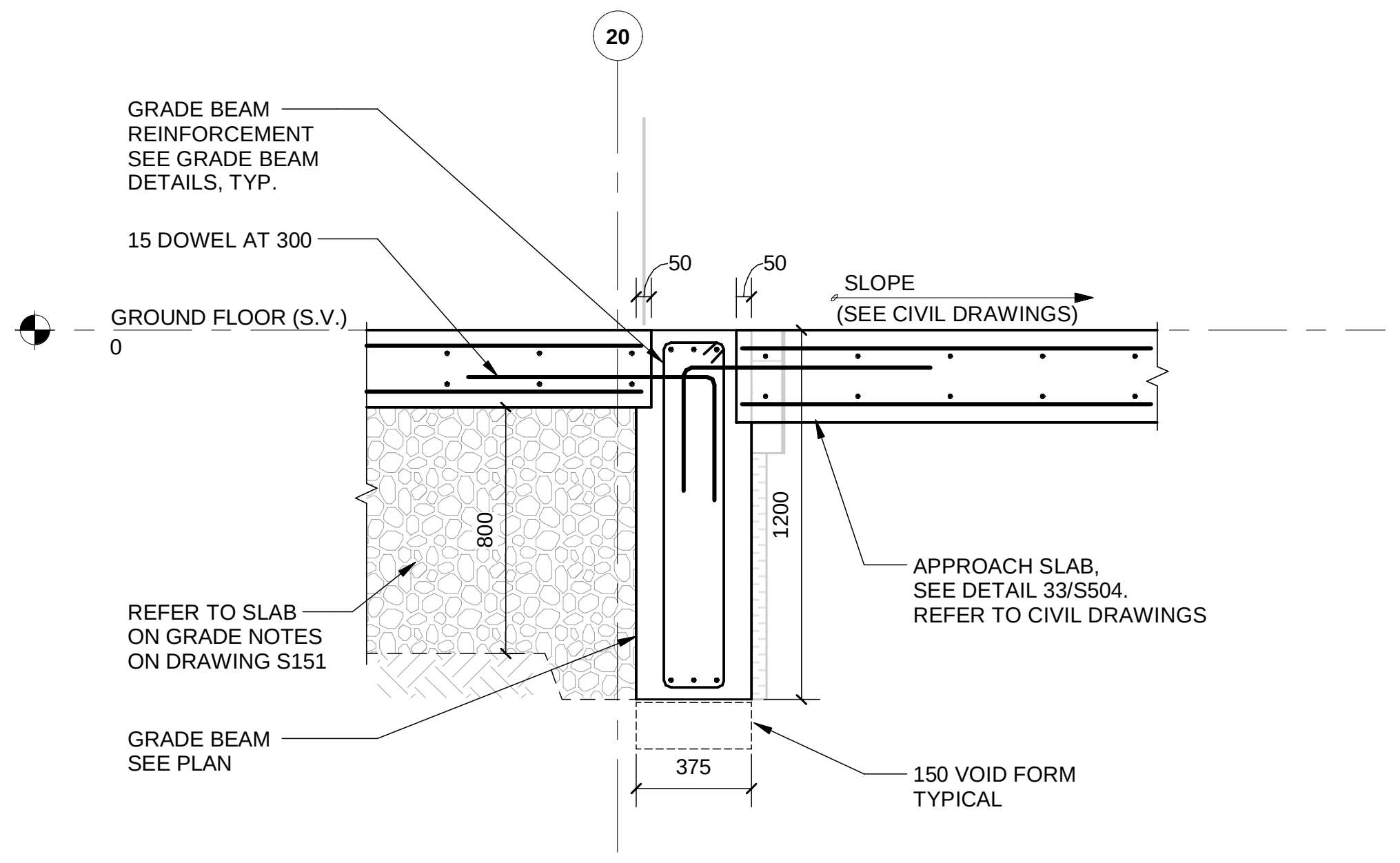

A
440
240
200
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
10mm JOINT FILLER CAULK AND SEAL ON TOP, TYP.
200x200 CONT. CURB EXCEPT AT DOOR LOCATIONS (TYP. ALL EXTERNAL WALLS)
GROUND FLOOR (S.V.)
0
200
EXTERIOR PAVEMENT SEE CIVIL DRAWINGS
800
1200
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
PILECAP SEE PLAN AND SCHEDULE
290
GRADE BEAM SEE PLAN
150 VOID FORM TYPICAL
FOUNDATION
-2000

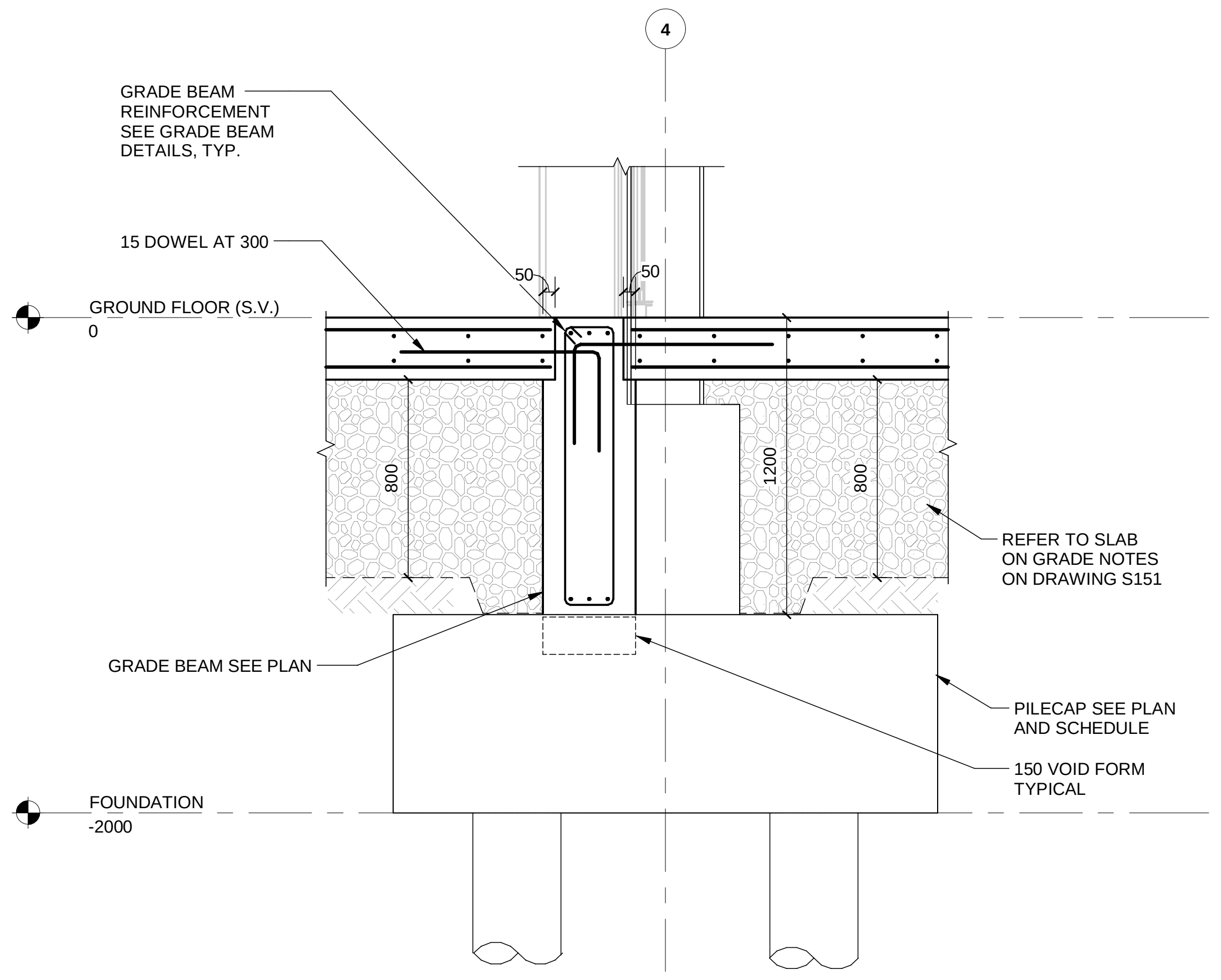
33 | FOUNDATION SECTION
00-S-504 REF: 00-S-101 SCALE: 1 : 20


8
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
15 DOWEL AT 300
50
50
SLOPE (SEE CIVIL DRAWINGS)
GROUND FLOOR (S.V.)
0
800
1200
APPROACH SLAB, SEE DETAIL 33/S504. REFER TO CIVIL DRAWINGS
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
GRADE BEAM SEE PLAN
375
150 VOID FORM TYPICAL

SECTION AT DOOR

34 | FOUNDATION SECTION
00-S-504 REF: 00-S-101 SCALE: 1 : 20


20
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
15 DOWEL AT 300
50
50
SLOPE (SEE CIVIL DRAWINGS)
GROUND FLOOR (S.V.)
0
800
1200
APPROACH SLAB, SEE DETAIL 33/S504. REFER TO CIVIL DRAWINGS
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
GRADE BEAM SEE PLAN
375
150 VOID FORM TYPICAL


4
GRADE BEAM REINFORCEMENT SEE GRADE BEAM DETAILS, TYP.
15 DOWEL AT 300
50
50
GROUND FLOOR (S.V.)
0
800
1200
800
REFER TO SLAB ON GRADE NOTES ON DRAWING S151
GRADE BEAM SEE PLAN
PILECAP SEE PLAN AND SCHEDULE
150 VOID FORM TYPICAL
FOUNDATION
-2000

SECTION AT DOOR

35 | FOUNDATION SECTION
00-S-504 REF: 00-S-102 SCALE: 1 : 20

36 | FOUNDATION SECTION
00-S-504 REF: 00-S-103 SCALE: 1 : 20

AECOM

PROJECT
WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT
Winnipeg
City of Winnipeg
510 Main St.
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Winnipeg Transit
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Winnipeg, MB R3L 2A1

CONSULTANT
AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
0	19/02/2025	ISSUED FOR TENDER

PROJECT NUMBER
60721079

SHEET TITLE
FOUNDATION SECTION 5

SHEET NUMBER
00-S-504

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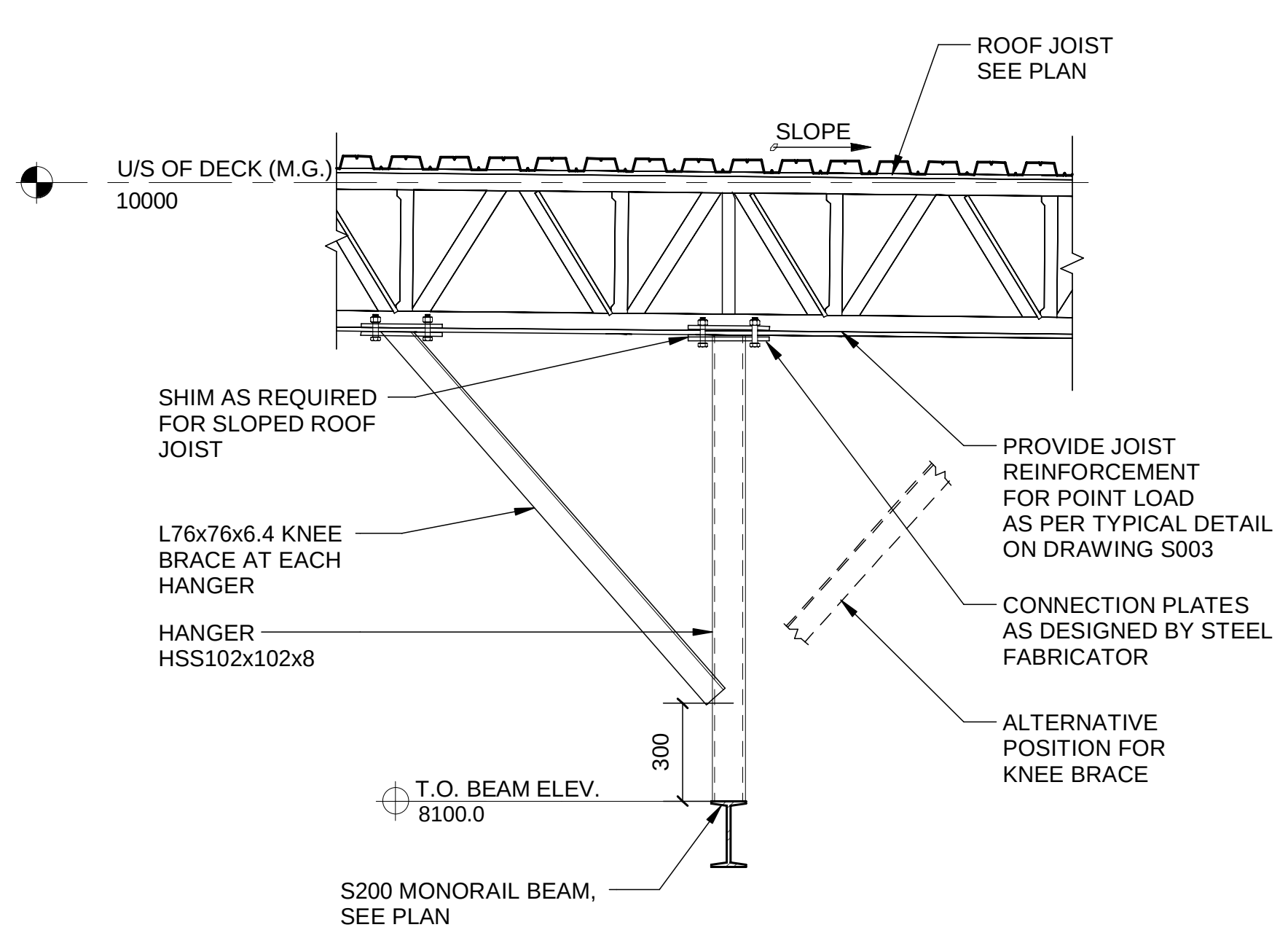
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

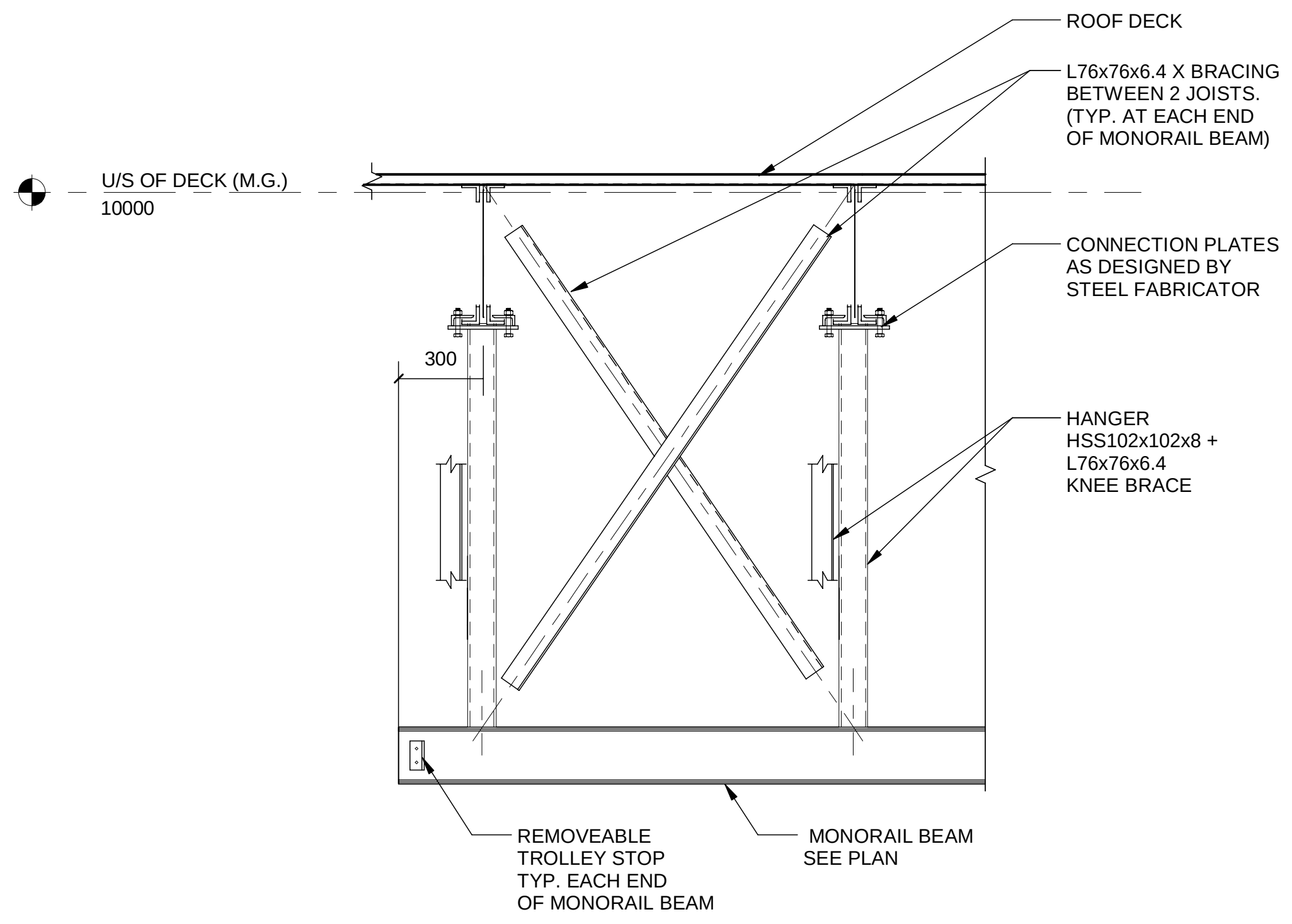
Project Management Initials:



FACTORED LOADS:
HANGERS: 22.5kN
KNEE BRACES: 5.0kN
X-BRACES: 15kN

1 MONORAIL HANGER DETAIL

00-S-510 SCALE: 1 : 20



FACTORED LOADS:
HANGERS: 22.5kN
KNEE BRACES: 5.0kN
X-BRACES: 15kN

2 MONORAIL END DETAIL

00-S-510 SCALE: 1 : 20

00-S-510-DETAIL SECTIONS 1
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PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

City of Winnipeg
510 Main St.
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1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
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Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION

PROJECT NUMBER

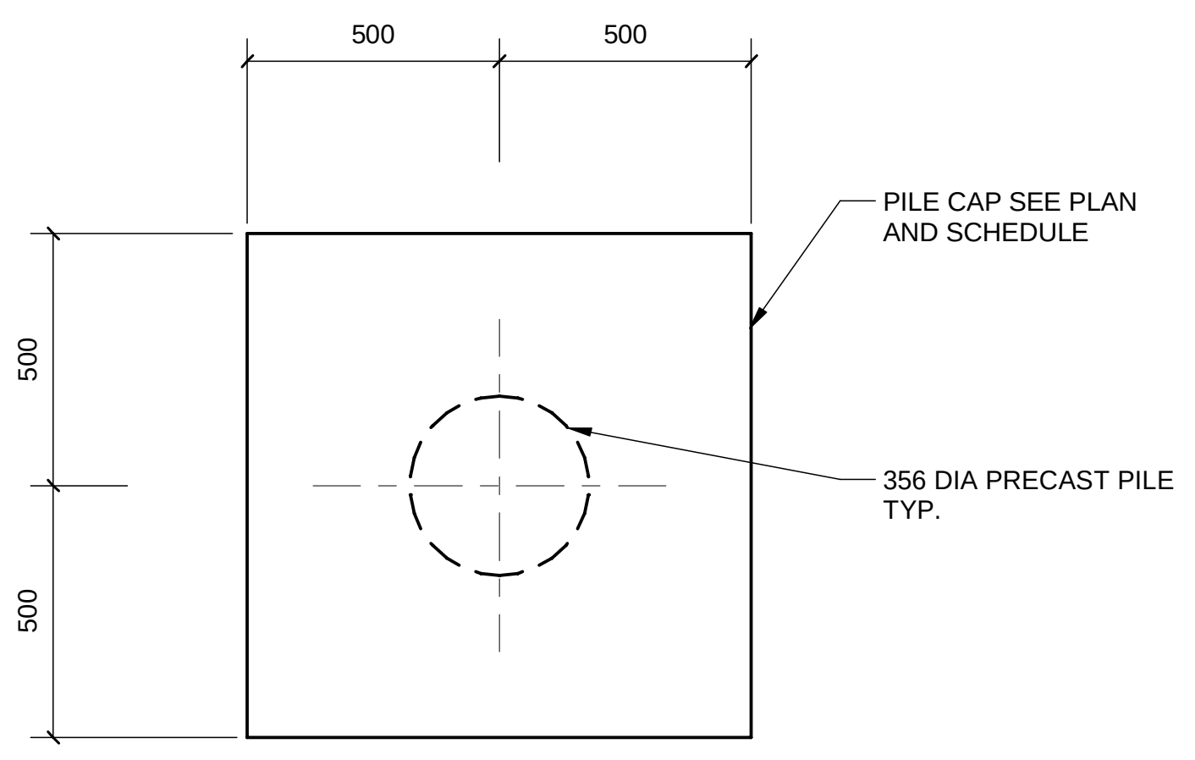
60721079

SHEET TITLE

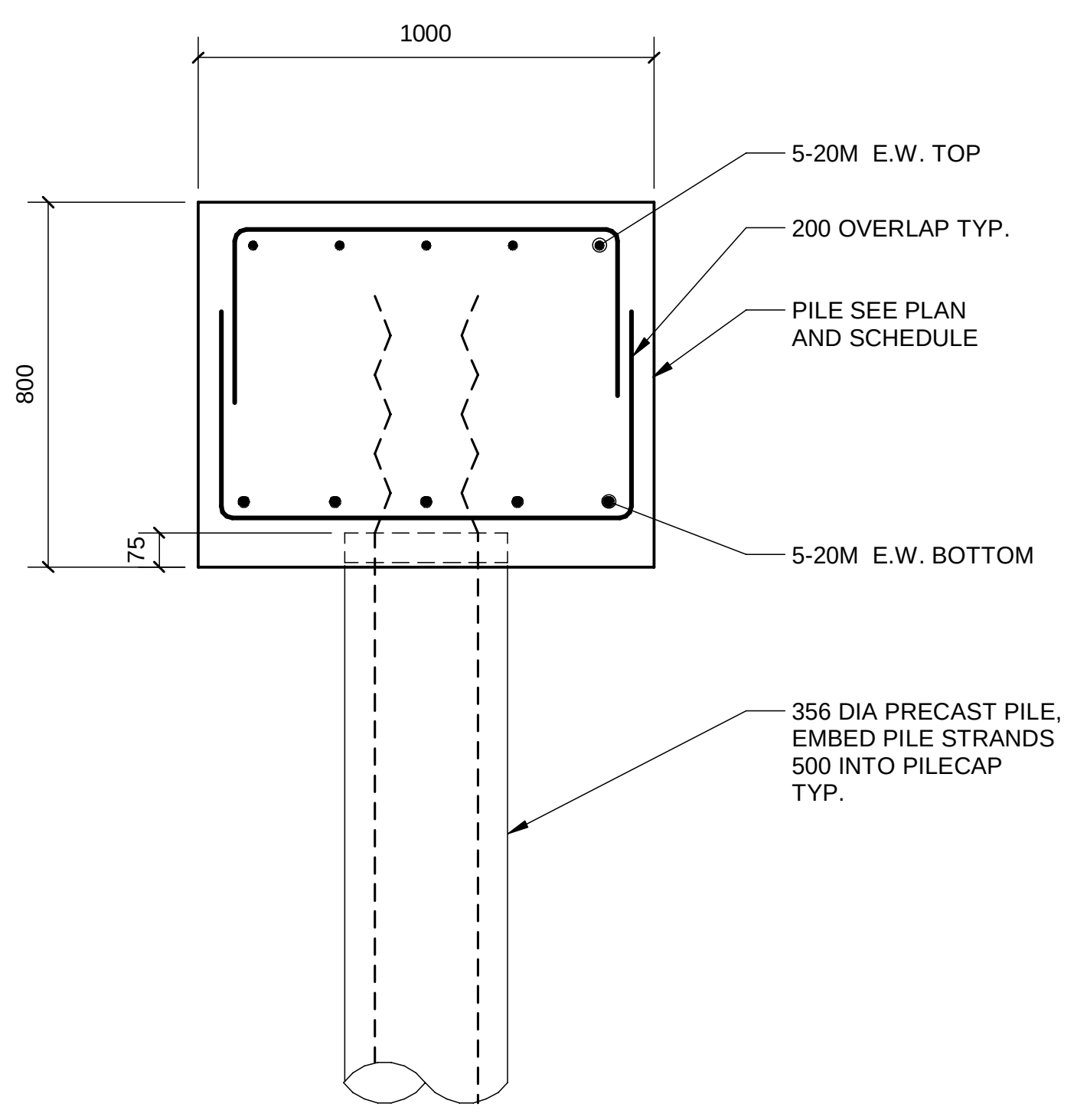
DETAIL SECTIONS 1

SHEET NUMBER

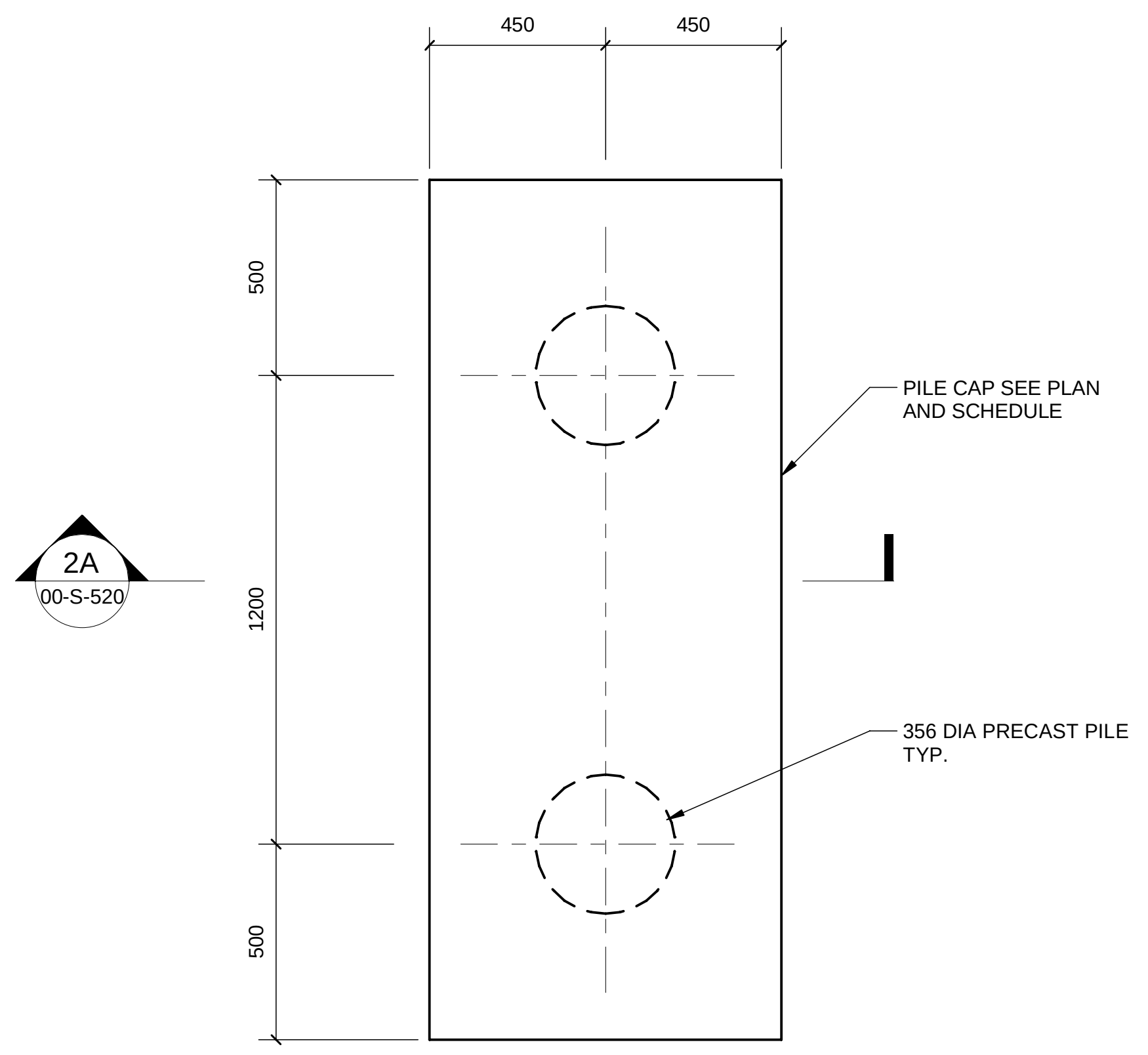
00-S-510



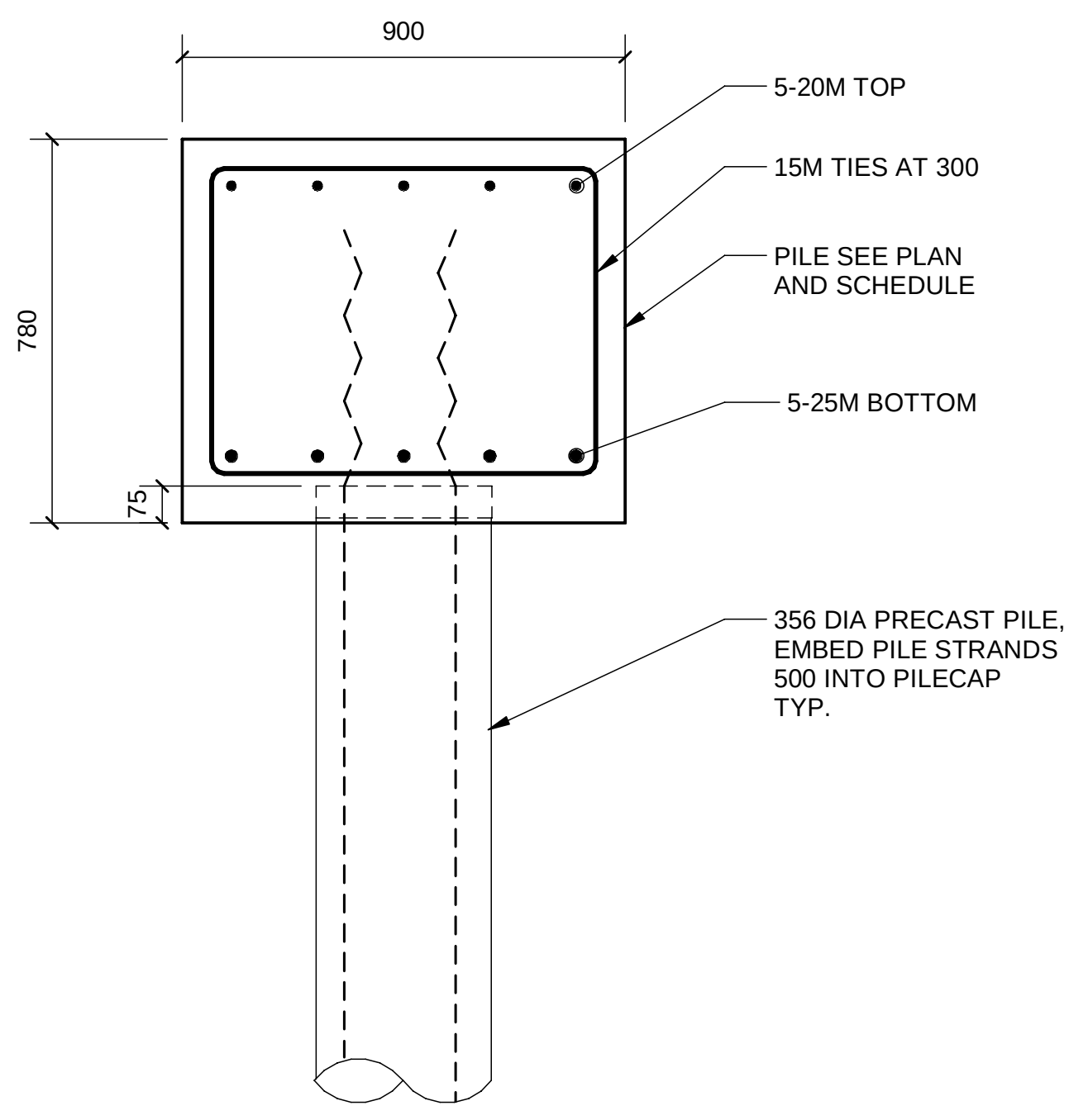
1 | PC1 PLAN
00-S-520 SCALE: 1 : 15


1000
800
75
5-20M E.W. TOP
200 OVERLAP TYP.
PILE SEE PLAN AND SCHEDULE
5-20M E.W. BOTTOM
356 DIA PRECAST PILE, EMBED PILE STRANDS 500 INTO PILECAP TYP.

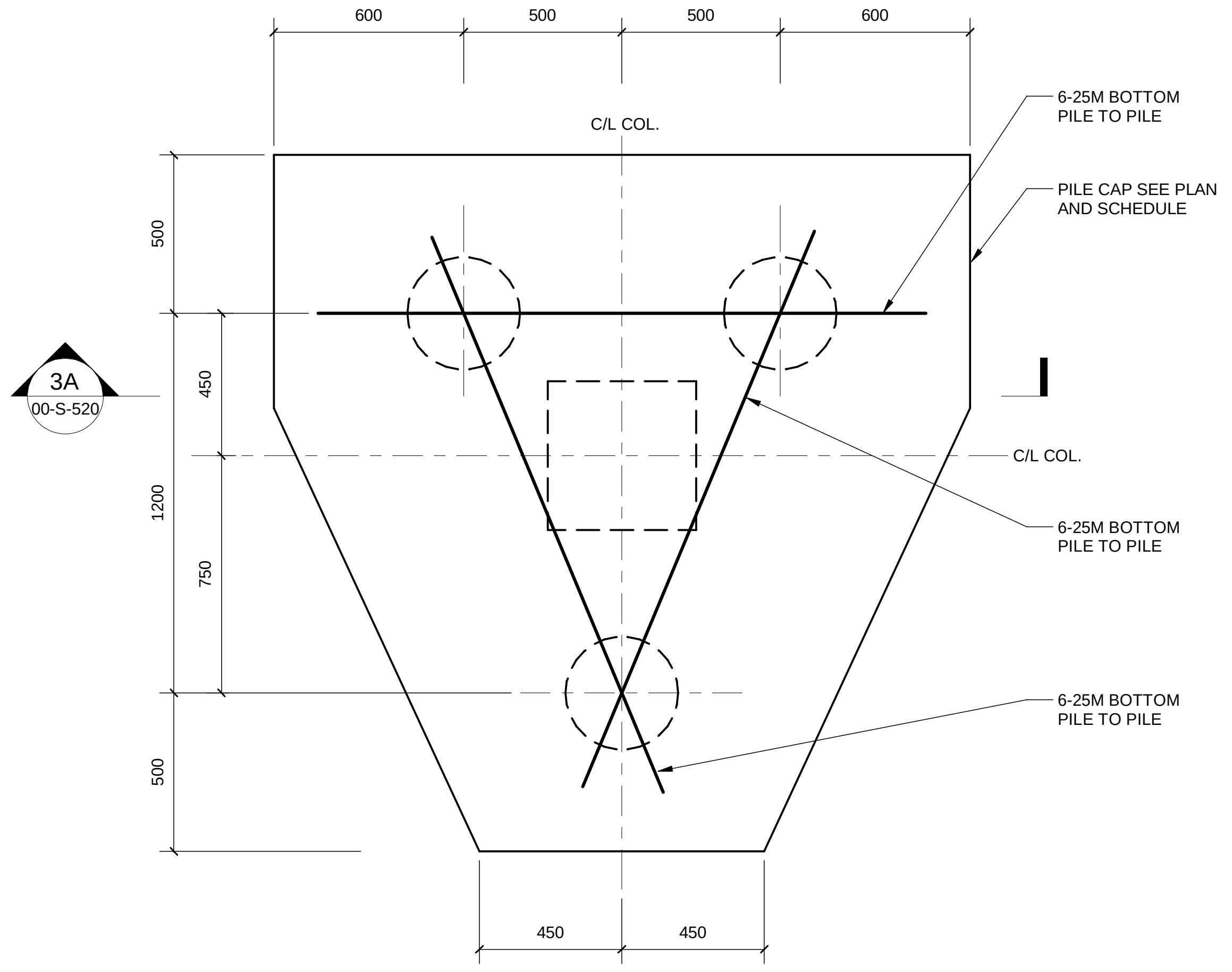
1A | PC1 SECTION
00-S-520 SCALE: 1 : 15



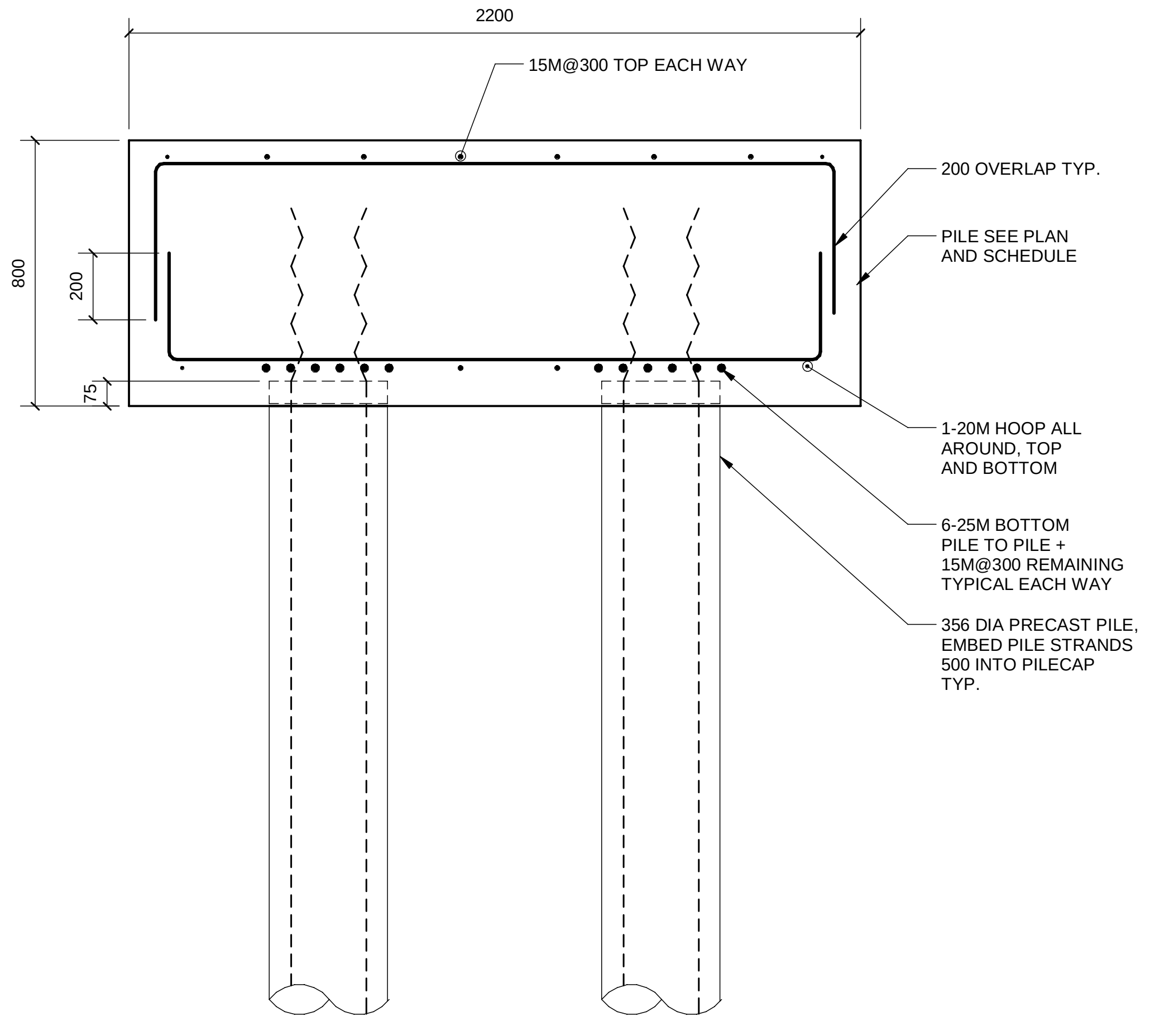
2 | PC2 PLAN
00-S-520 SCALE: 1 : 15


900
780
75
5-20M TOP
15M TIES AT 300
PILE SEE PLAN AND SCHEDULE
5-25M BOTTOM
356 DIA PRECAST PILE, EMBED PILE STRANDS 500 INTO PILECAP TYP.

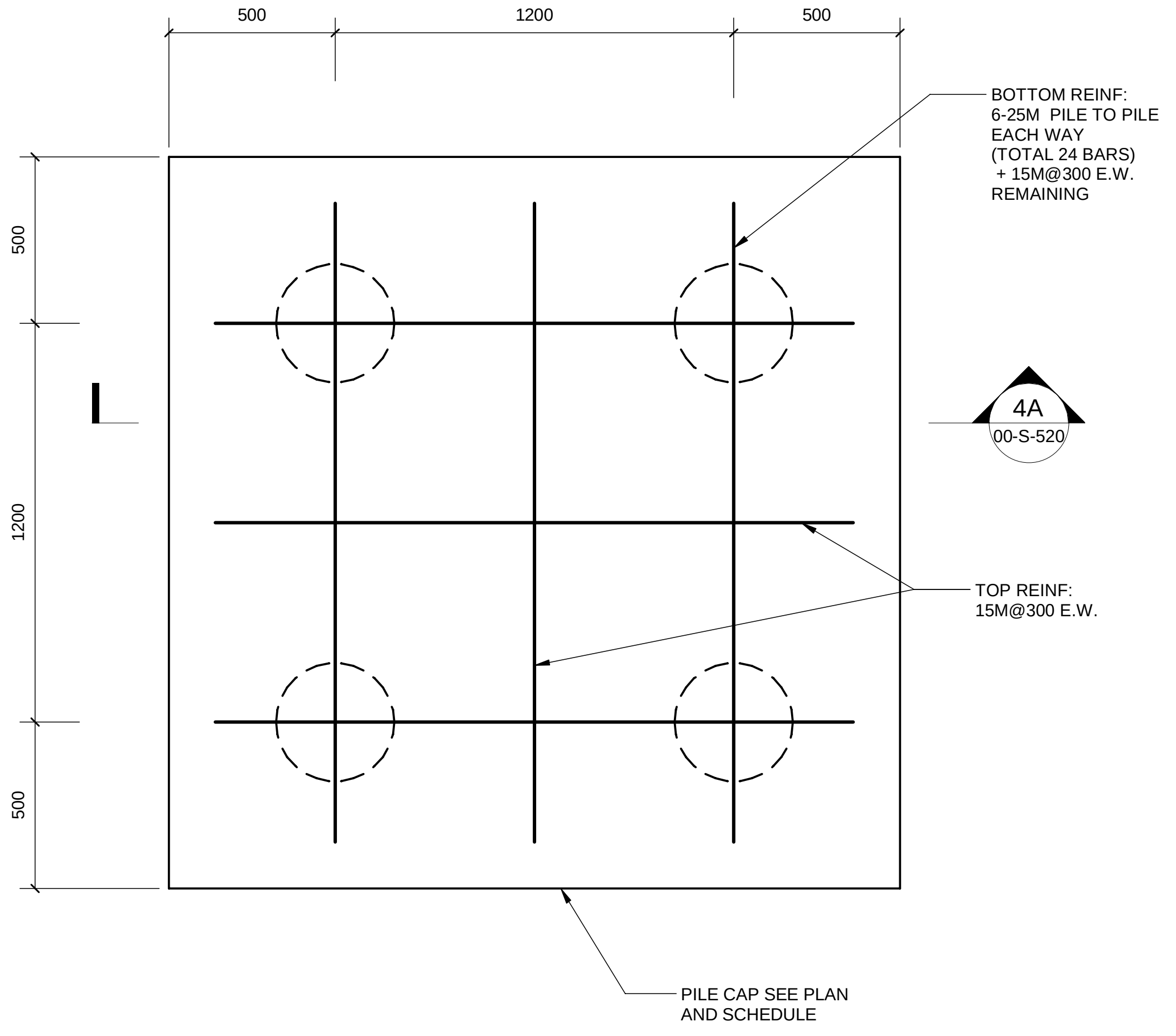
2A | PC2 SECTION
00-S-520 REF: 00-S-520 SCALE: 1 : 15


600
500
500
600
C/L COL.
6-25M BOTTOM PILE TO PILE
PILE CAP SEE PLAN AND SCHEDULE
500
450
1200
750
500
3A
00-S-520
C/L COL.
6-25M BOTTOM PILE TO PILE
6-25M BOTTOM PILE TO PILE
450
450

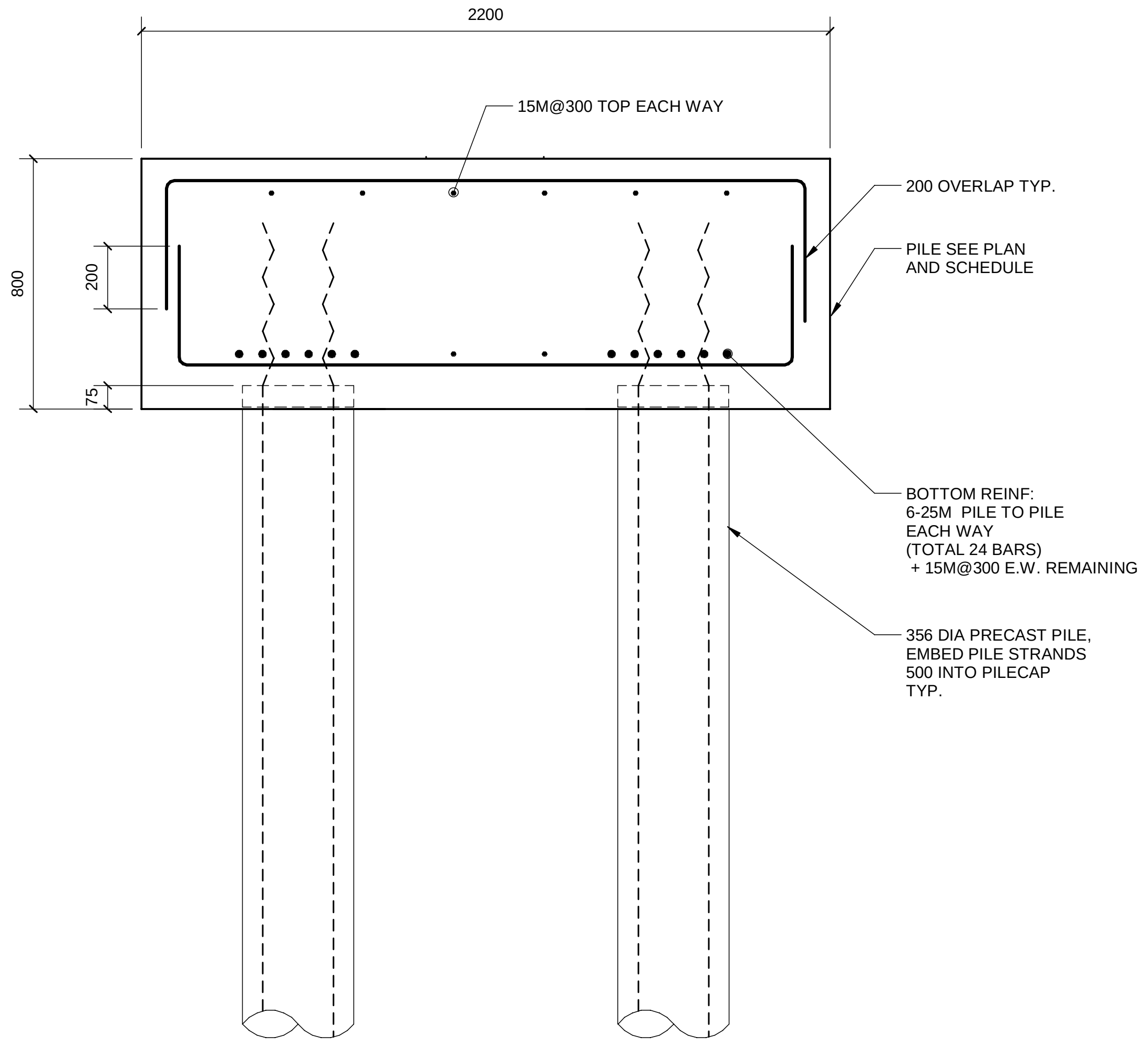
3 | PC3 PLAN
00-S-520 SCALE: 1 : 15


2200
15M@300 TOP EACH WAY
800
200
75
200 OVERLAP TYP.
PILE SEE PLAN AND SCHEDULE
1-20M HOOP ALL AROUND, TOP AND BOTTOM
6-25M BOTTOM PILE TO PILE + 15M@300 REMAINING TYPICAL EACH WAY
356 DIA PRECAST PILE, EMBED PILE STRANDS 500 INTO PILECAP TYP.

3A | PC3 SECTION1
00-S-520 REF: 00-S-520 SCALE: 1 : 15


500
1200
500
BOTTOM REINF: 6-25M PILE TO PILE EACH WAY (TOTAL 24 BARS) + 15M@300 E.W. REMAINING
500
1200
500
4A
00-S-520
TOP REINF: 15M@300 E.W.
PILE CAP SEE PLAN AND SCHEDULE

4 | PC4 PLAN
00-S-520 SCALE: 1 : 15


2200
15M@300 TOP EACH WAY
800
200
75
200 OVERLAP TYP.
PILE SEE PLAN AND SCHEDULE
BOTTOM REINF: 6-25M PILE TO PILE EACH WAY (TOTAL 24 BARS) + 15M@300 E.W. REMAINING
356 DIA PRECAST PILE, EMBED PILE STRANDS 500 INTO PILECAP TYP.

4A | PC4 SECTION
00-S-520 REF: 00-S-520 SCALE: 1 : 15

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

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Winnipeg Transit
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Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
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Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

PILE CAP DETAILS

SHEET NUMBER

00-S-520

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:

00-S-520-PILE CAP DETAILS

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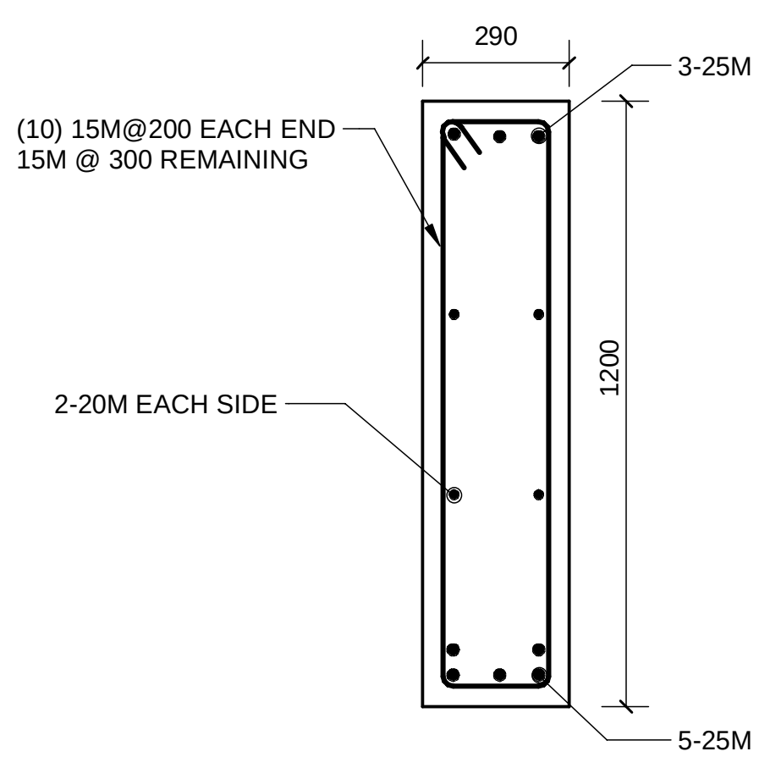
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:



1 GB1 SECTION
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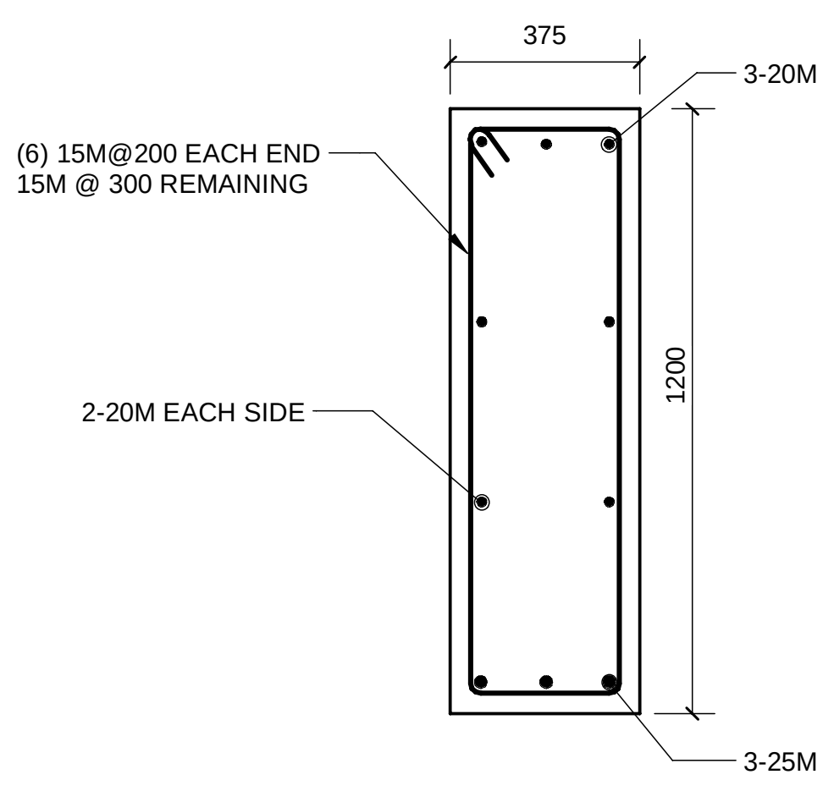

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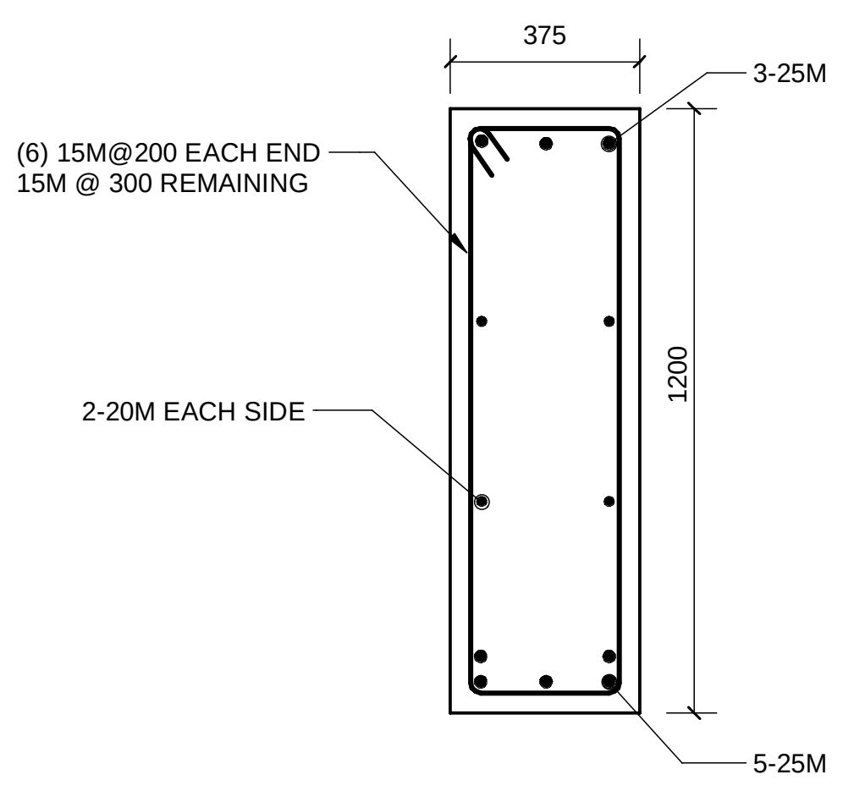
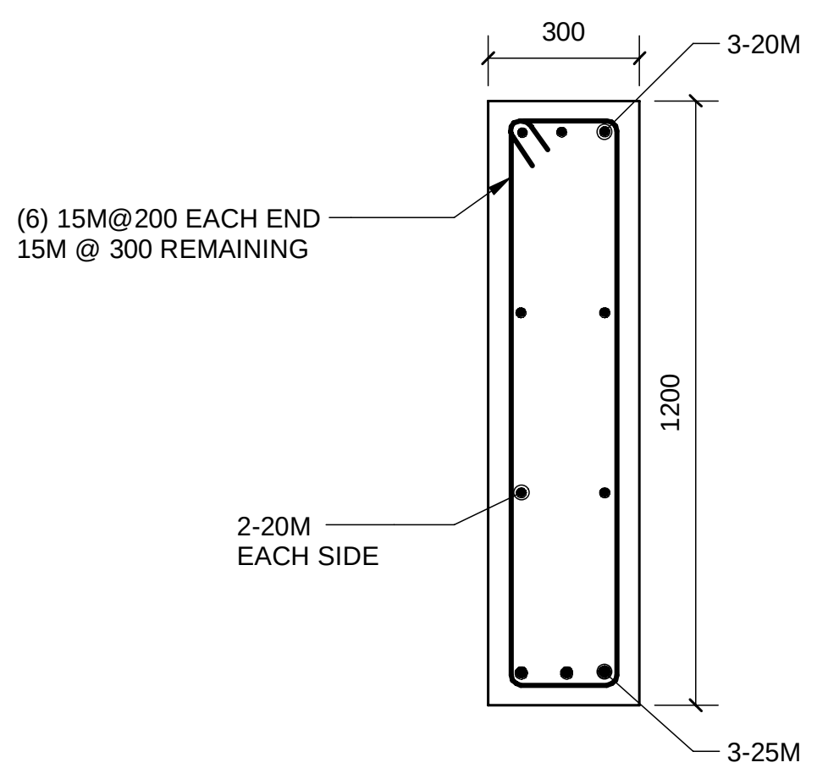


3 GB3 SECTION
00-S-521 SCALE: 1 : 15



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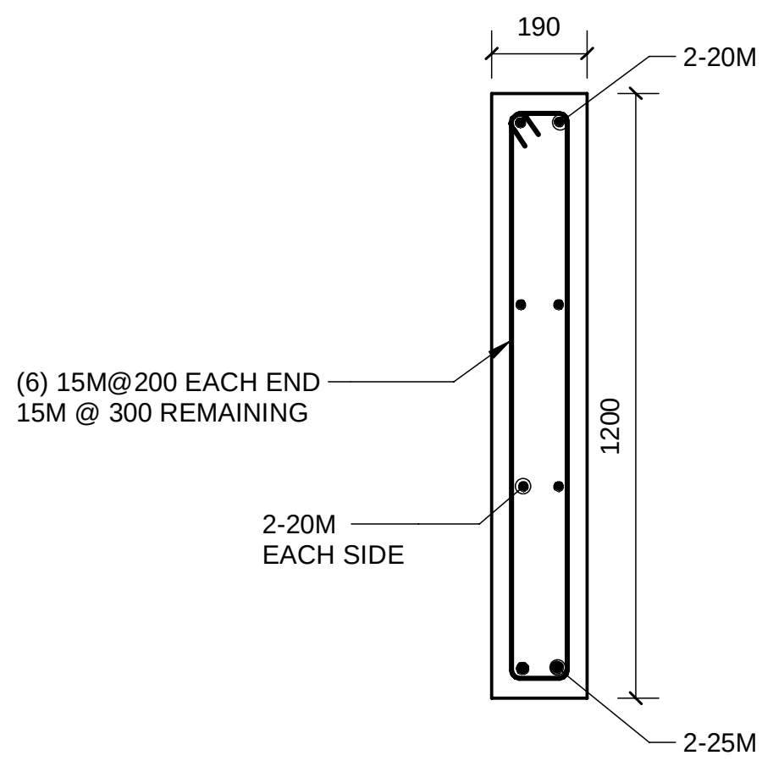

5 GB5 SECTION
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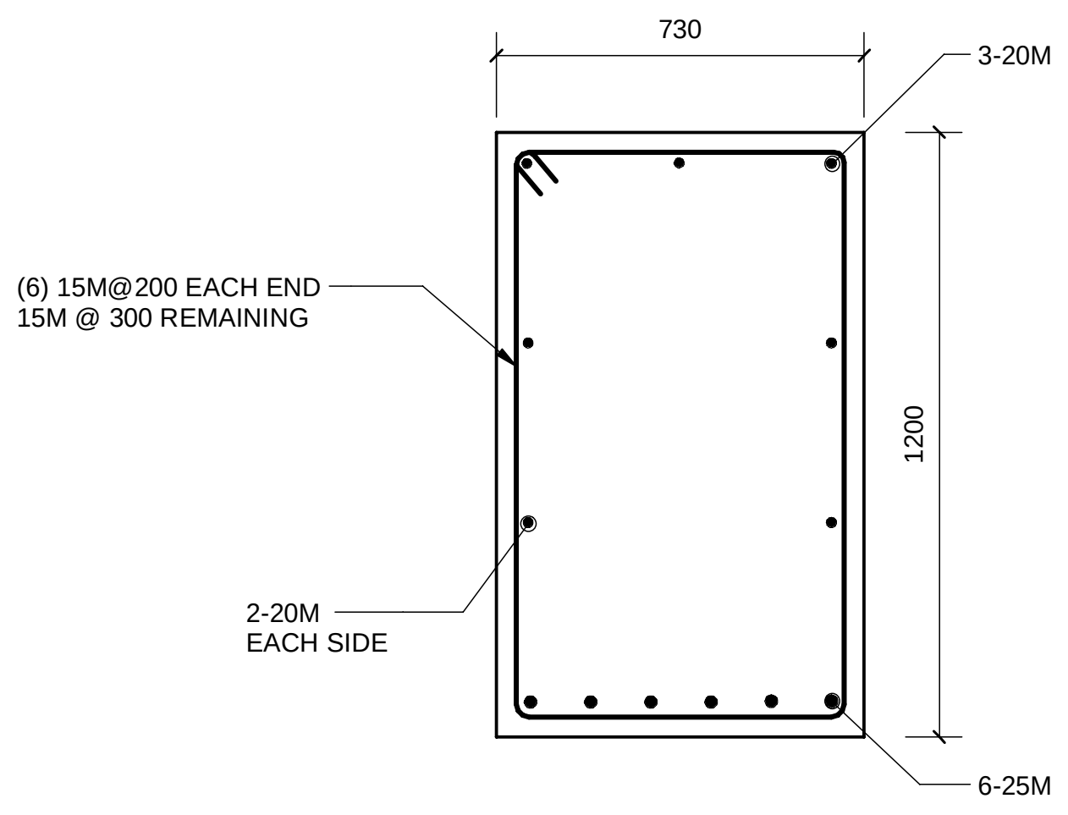

6 GB6 SECTION
00-S-521 SCALE: 1 : 15

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
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Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
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C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION

PROJECT NUMBER

60721079

SHEET TITLE

GRADE BEAM DETAILS 1

SHEET NUMBER

00-S-521

00-S-521-GRADE BEAM DETAILS 1
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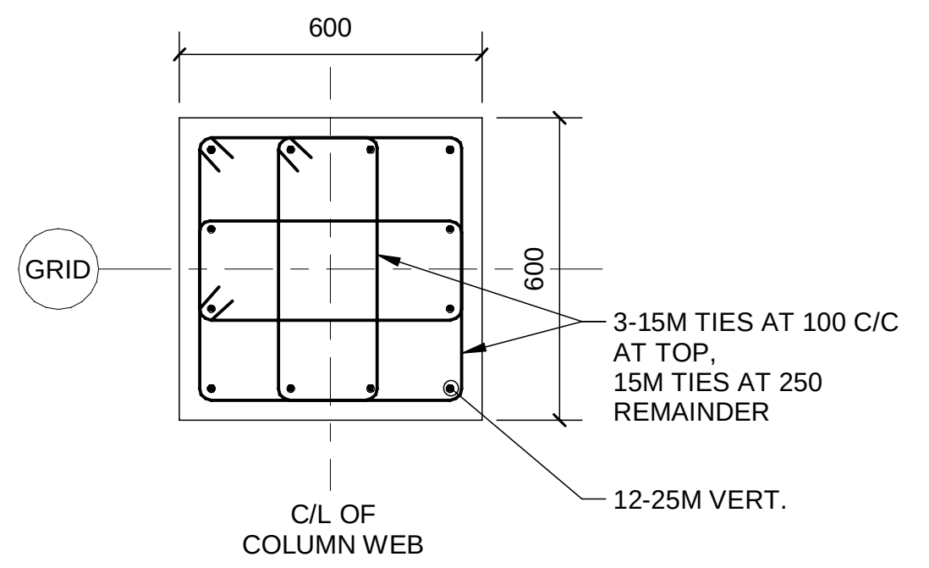
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"
Project Management Initials:



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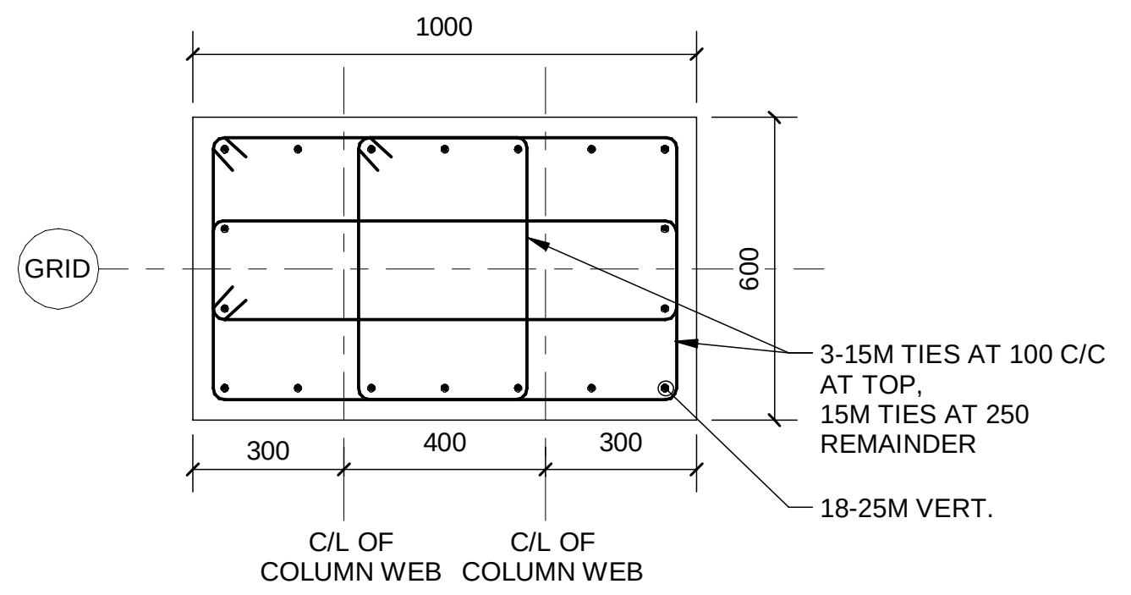
00-S-523 SCALE: 1 : 15



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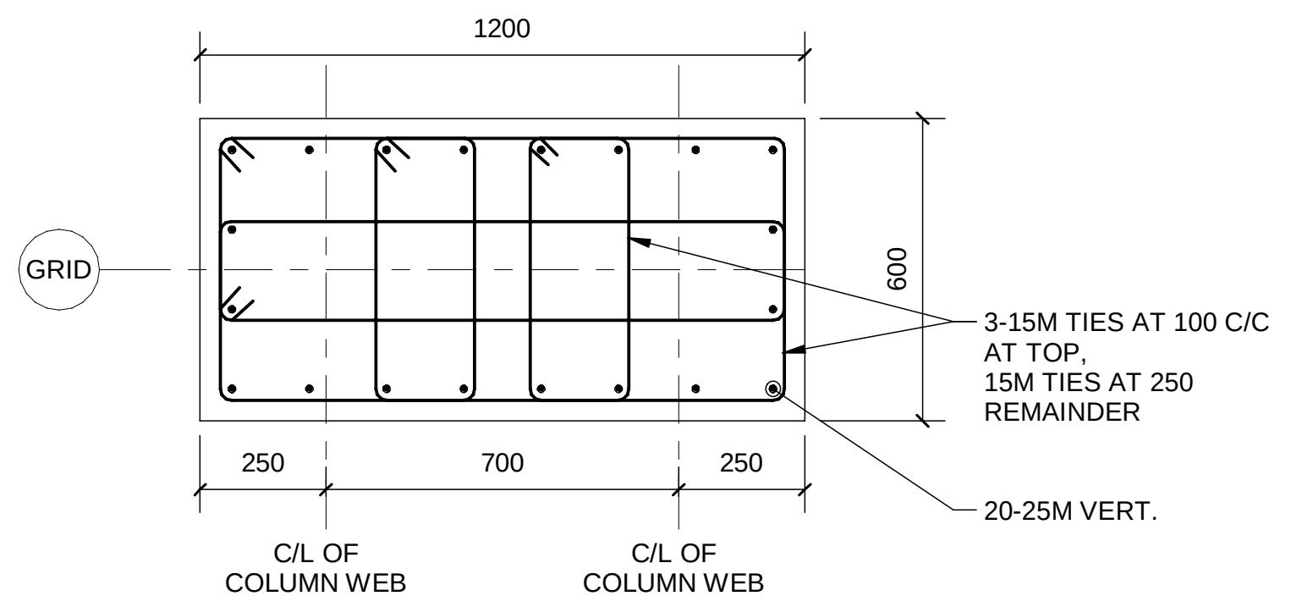

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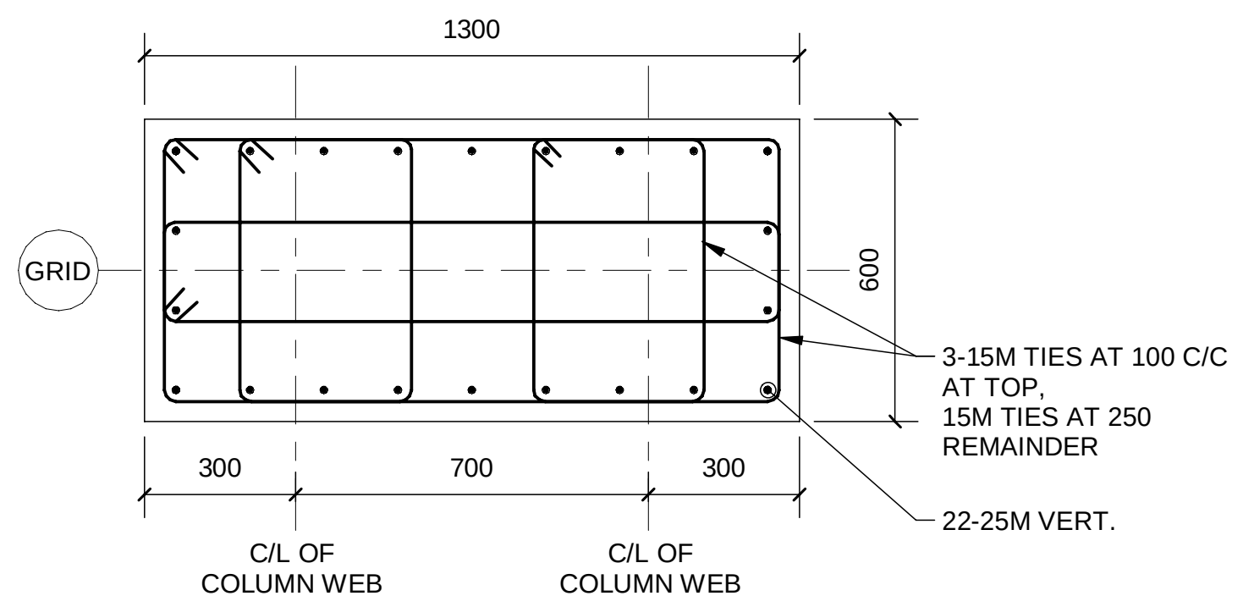

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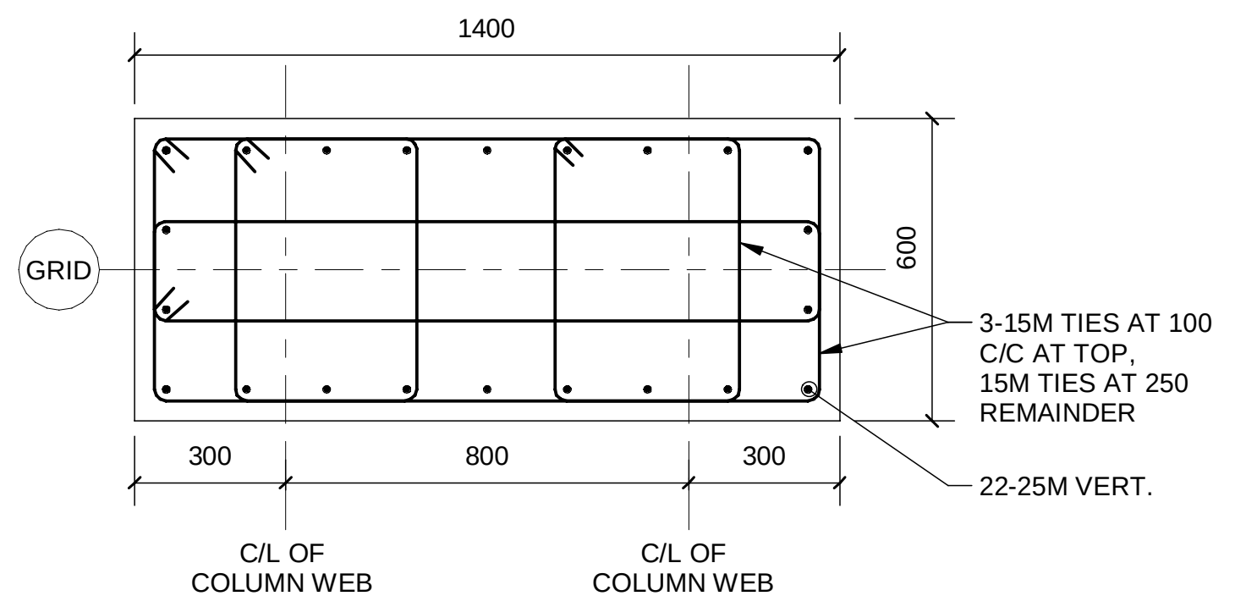

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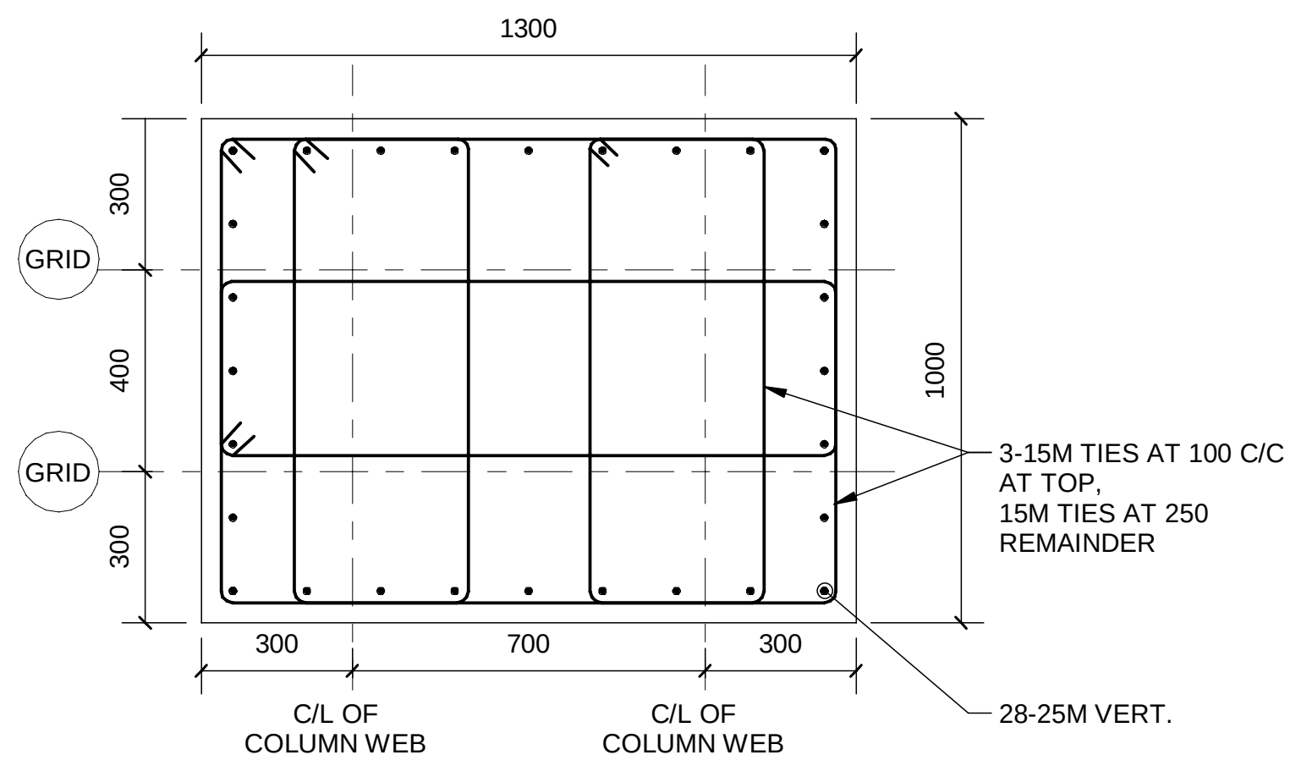

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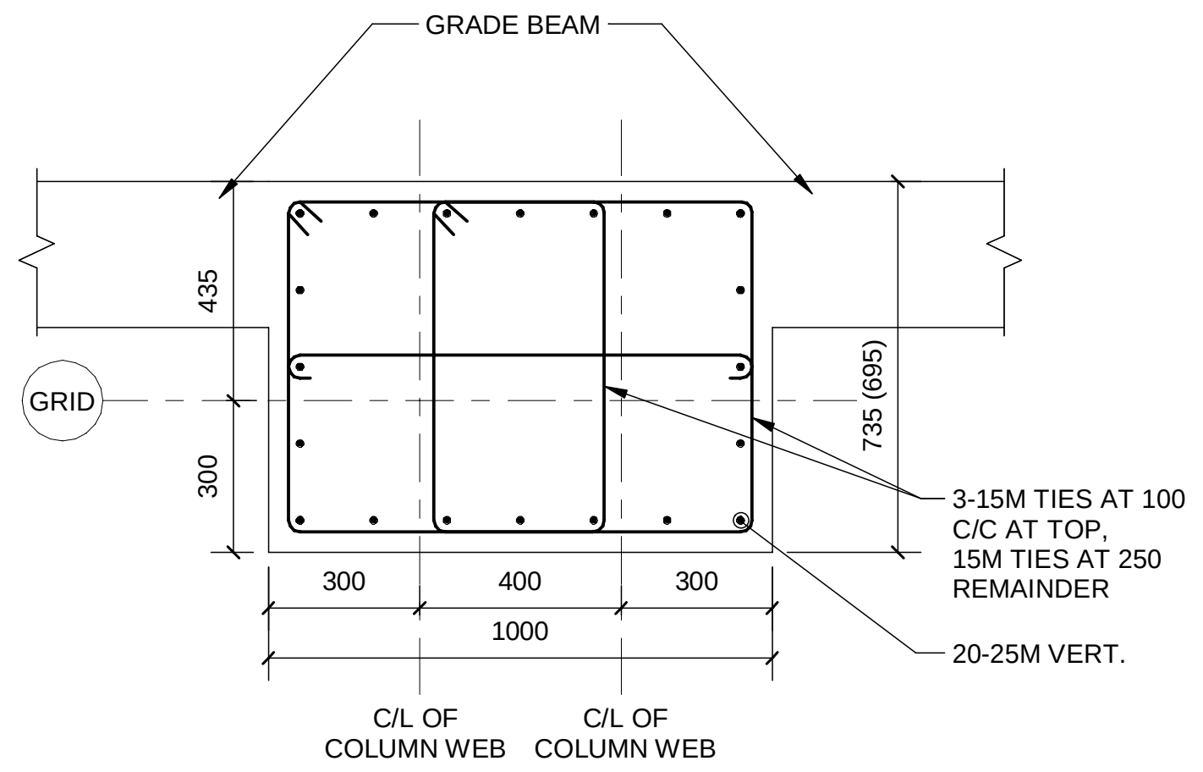

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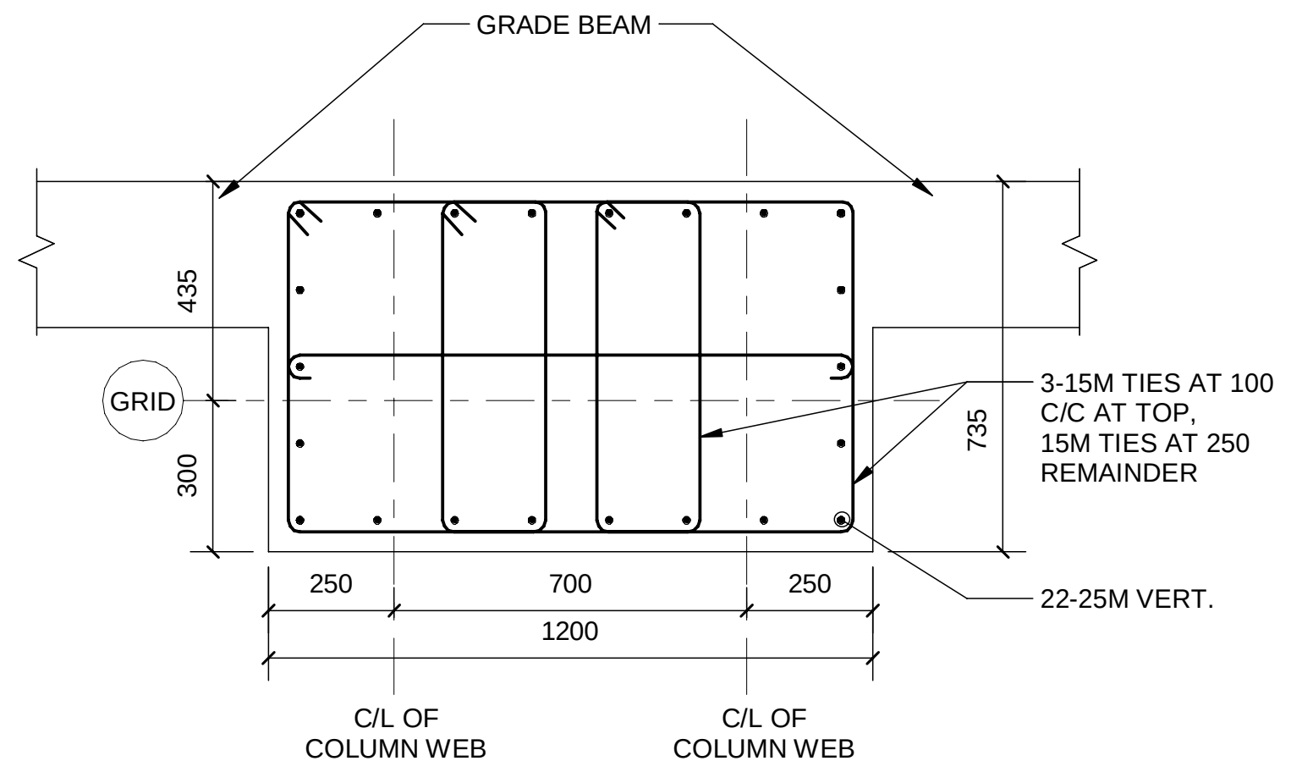

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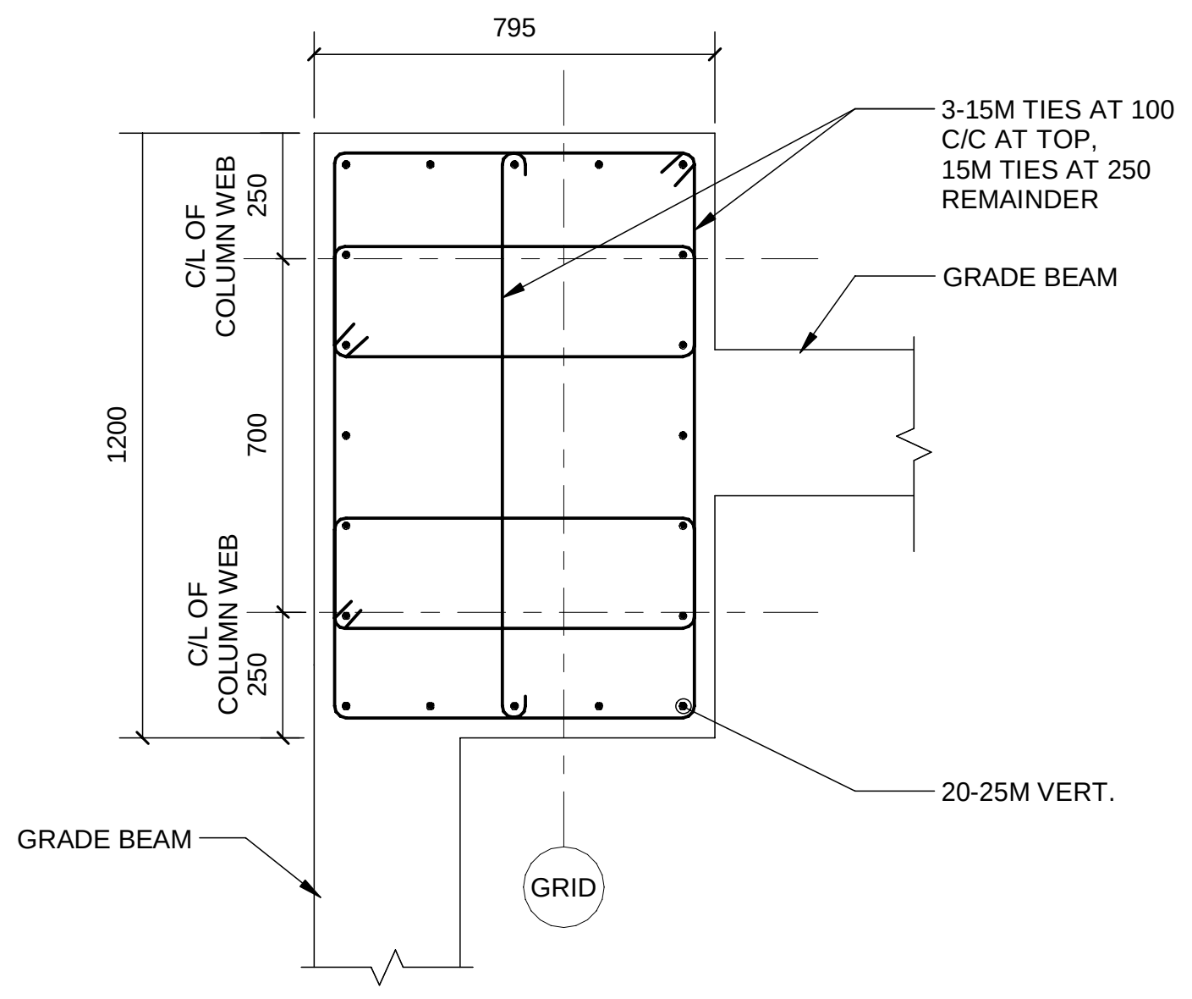

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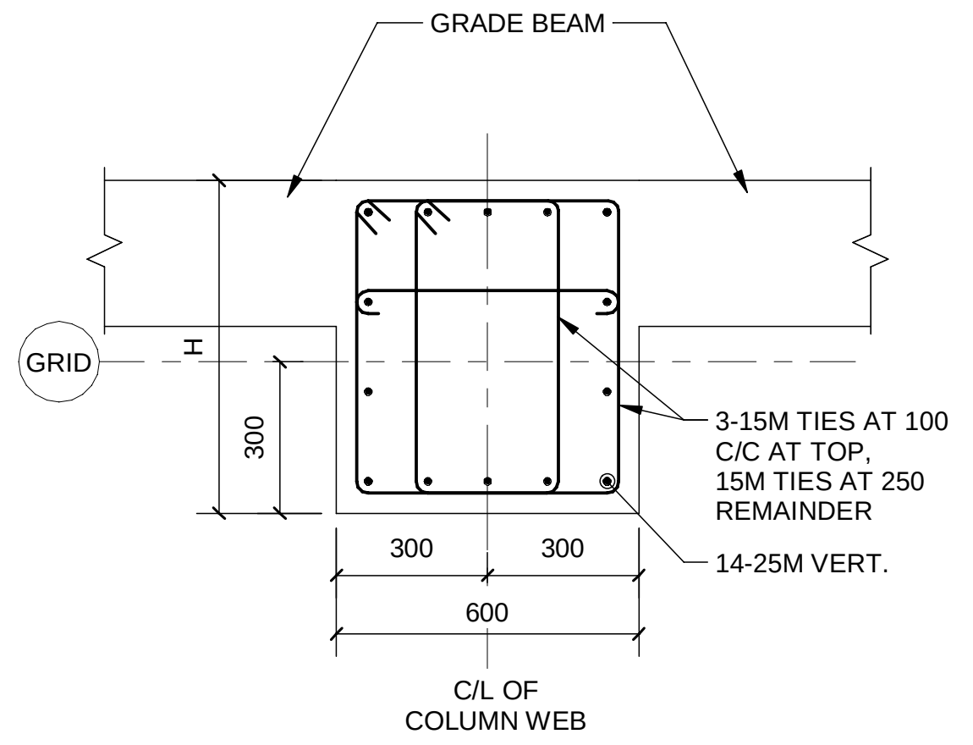

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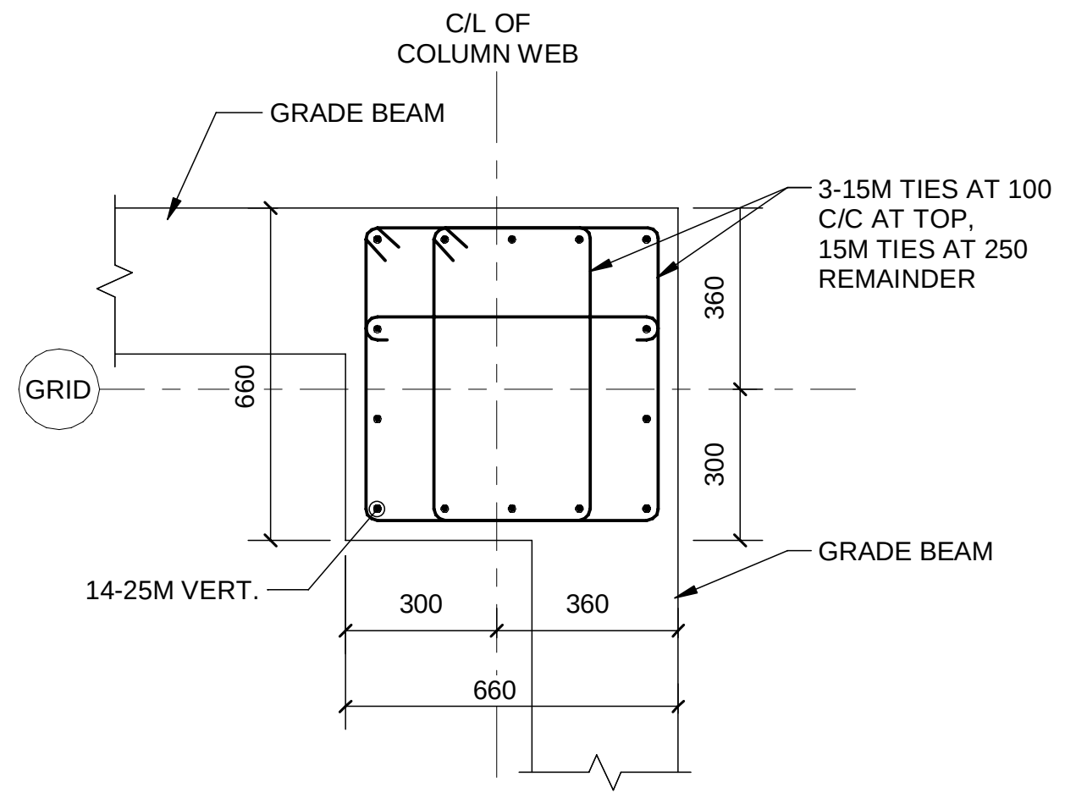
P13	735
P14	740
P15	755
P16	795
P17	735
P18	755
P19	840
P20	850
P21	955

10 | PIER P11 ~ PIER P21
00-S-523 SCALE: 1 : 15



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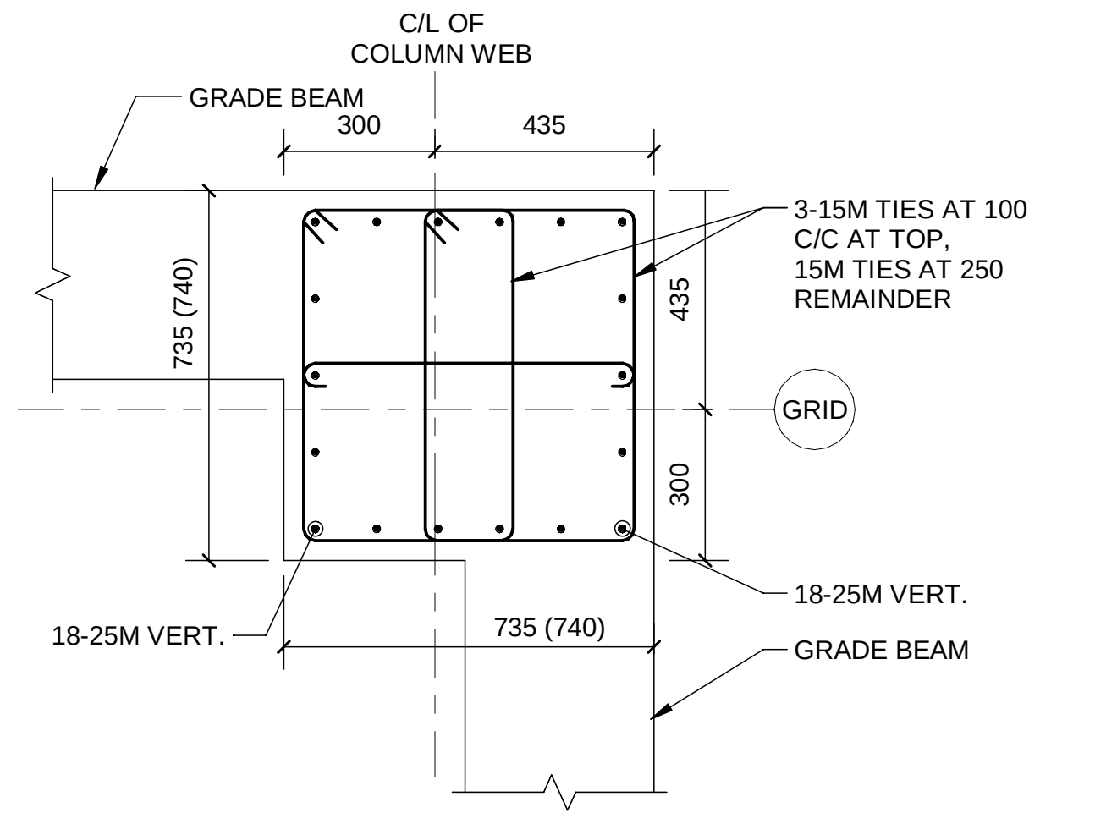

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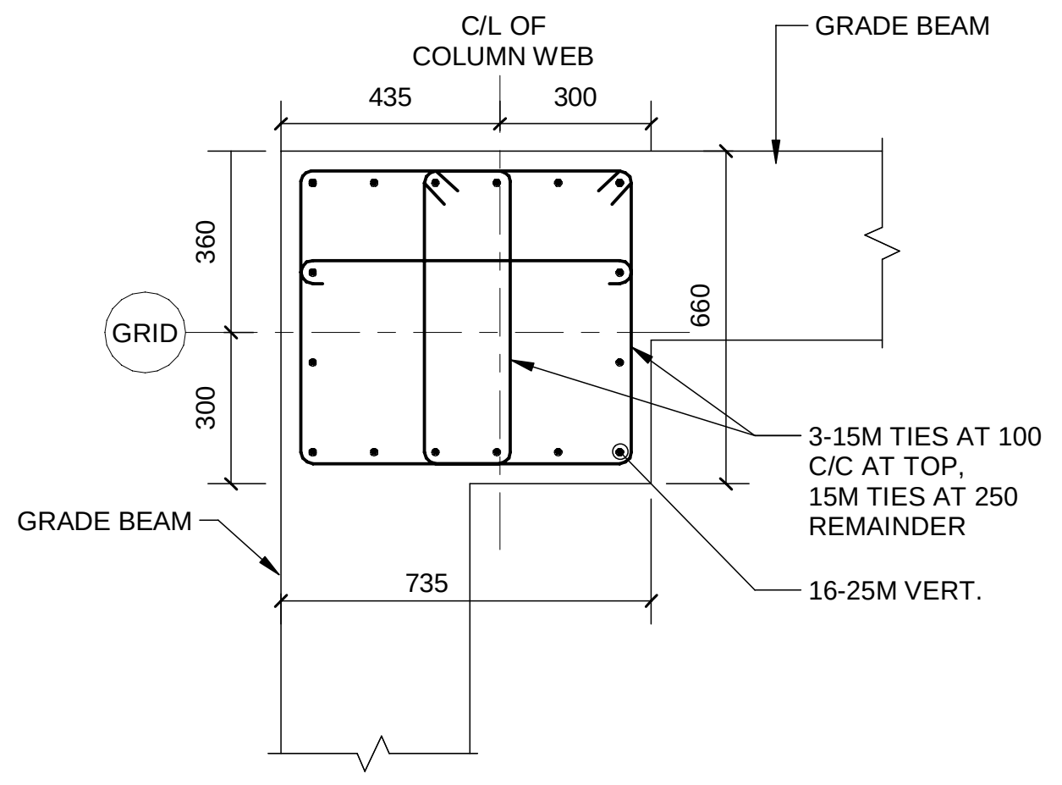

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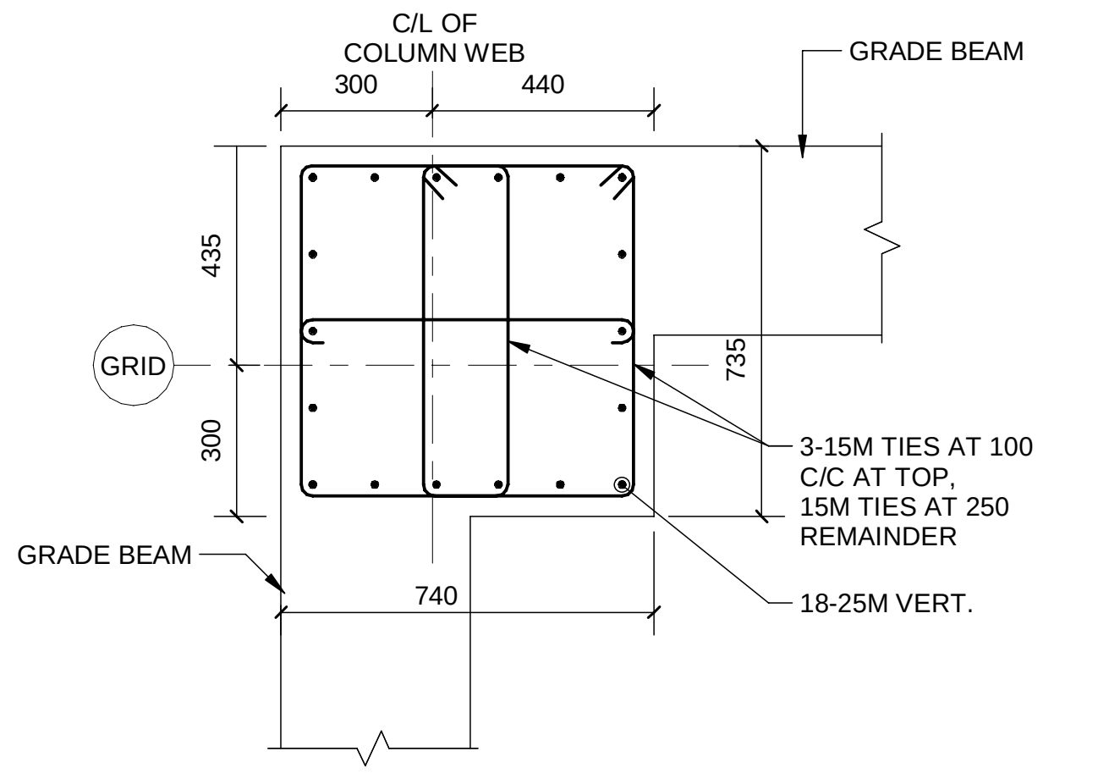

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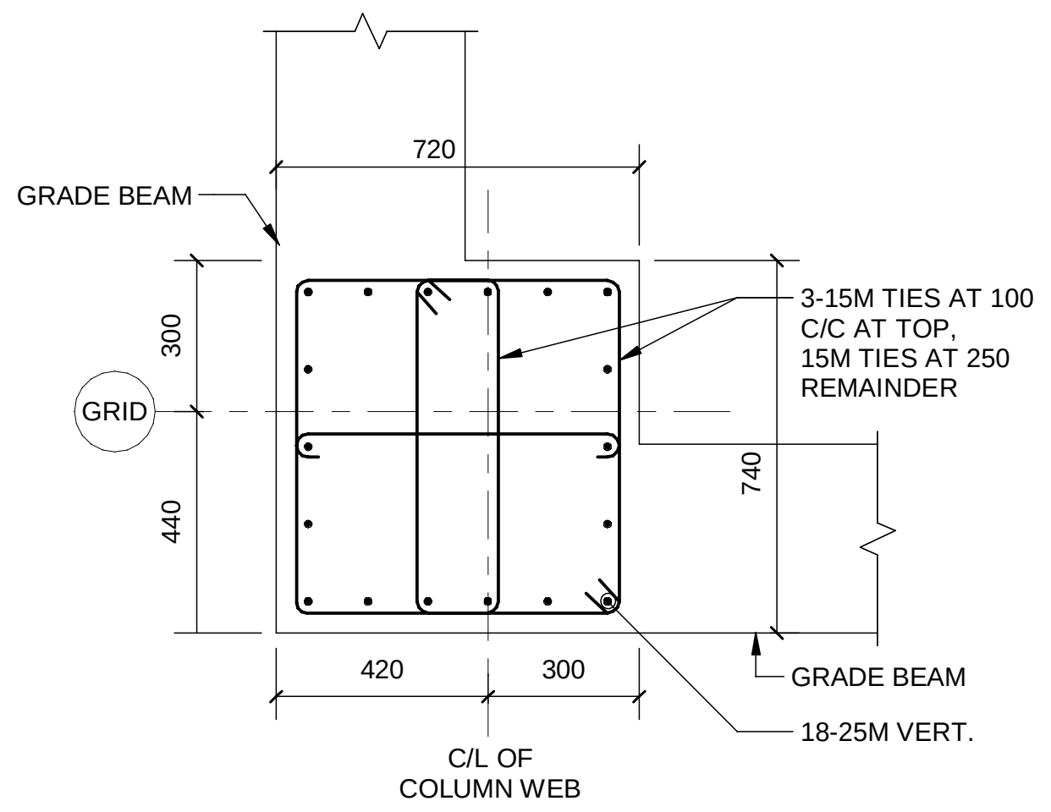

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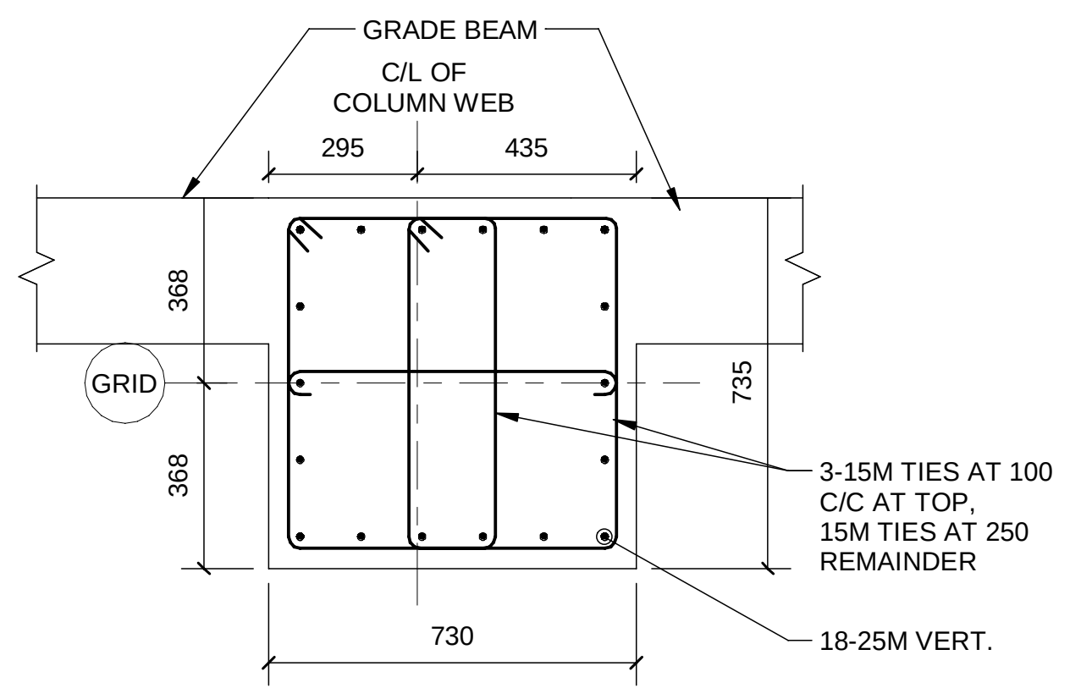

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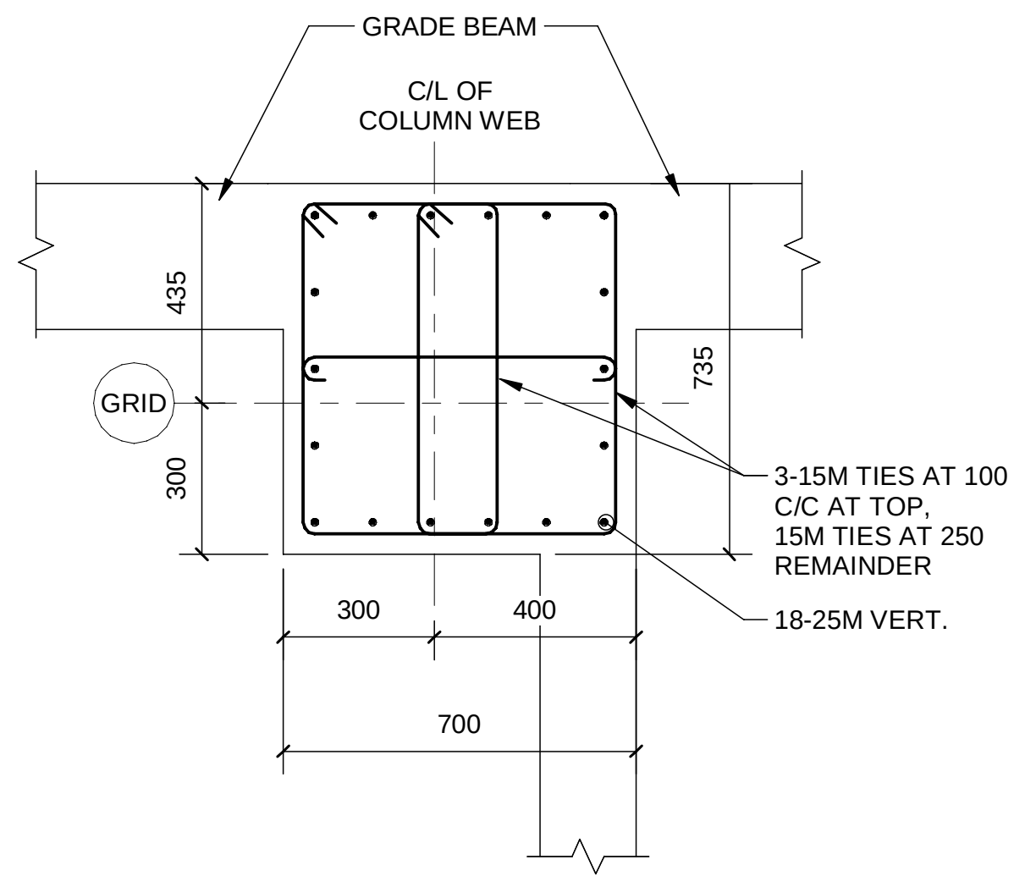

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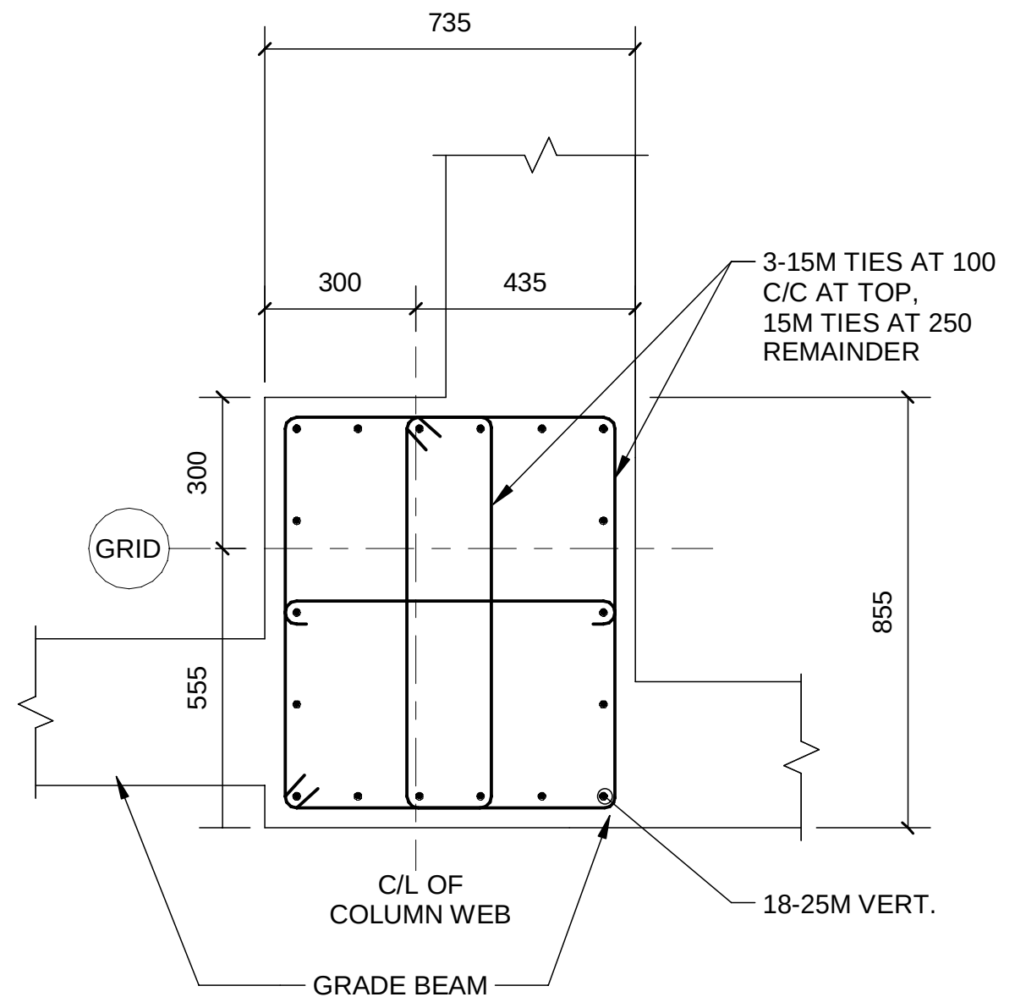

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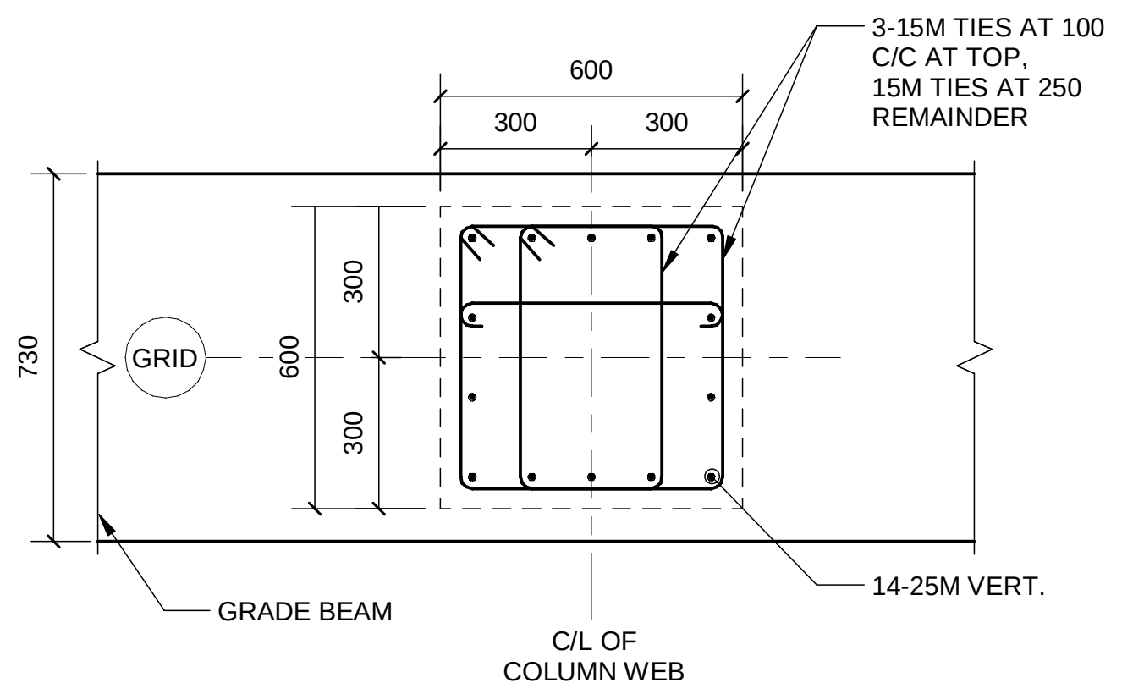

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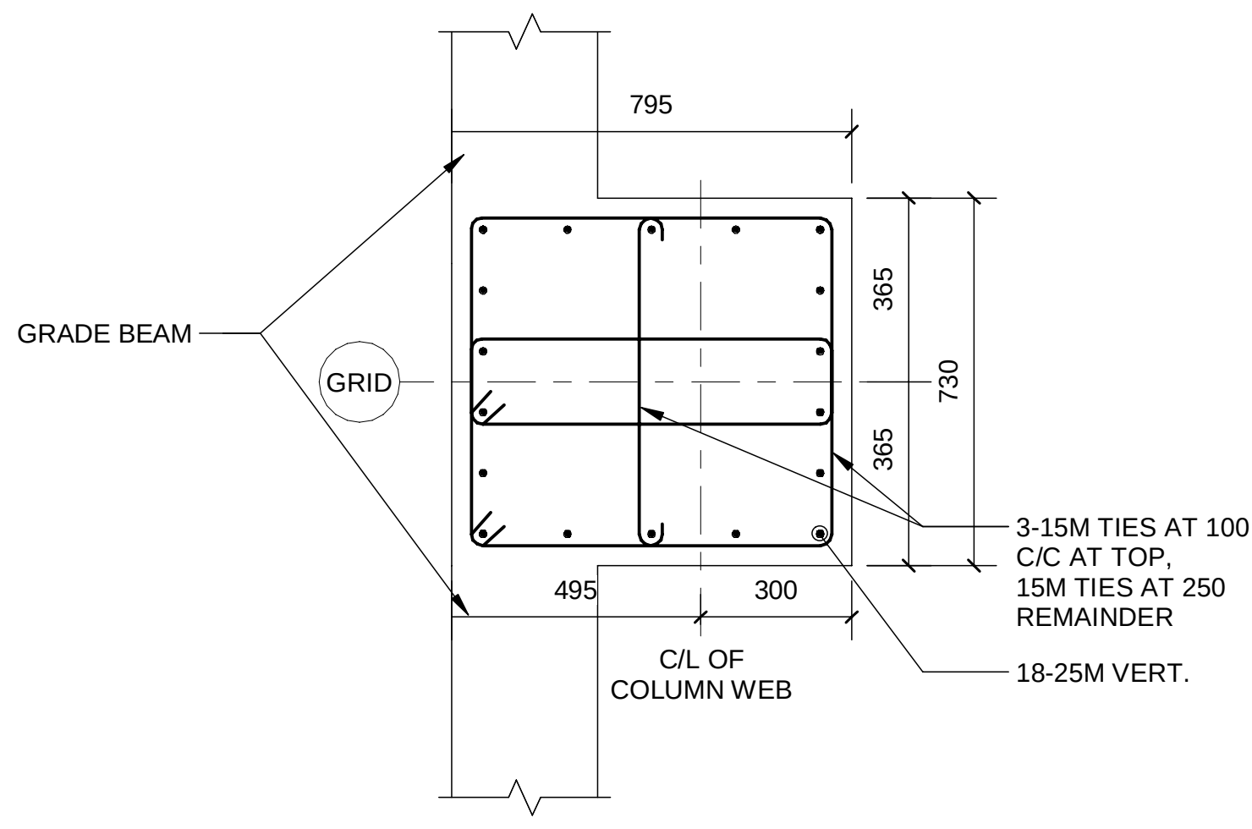

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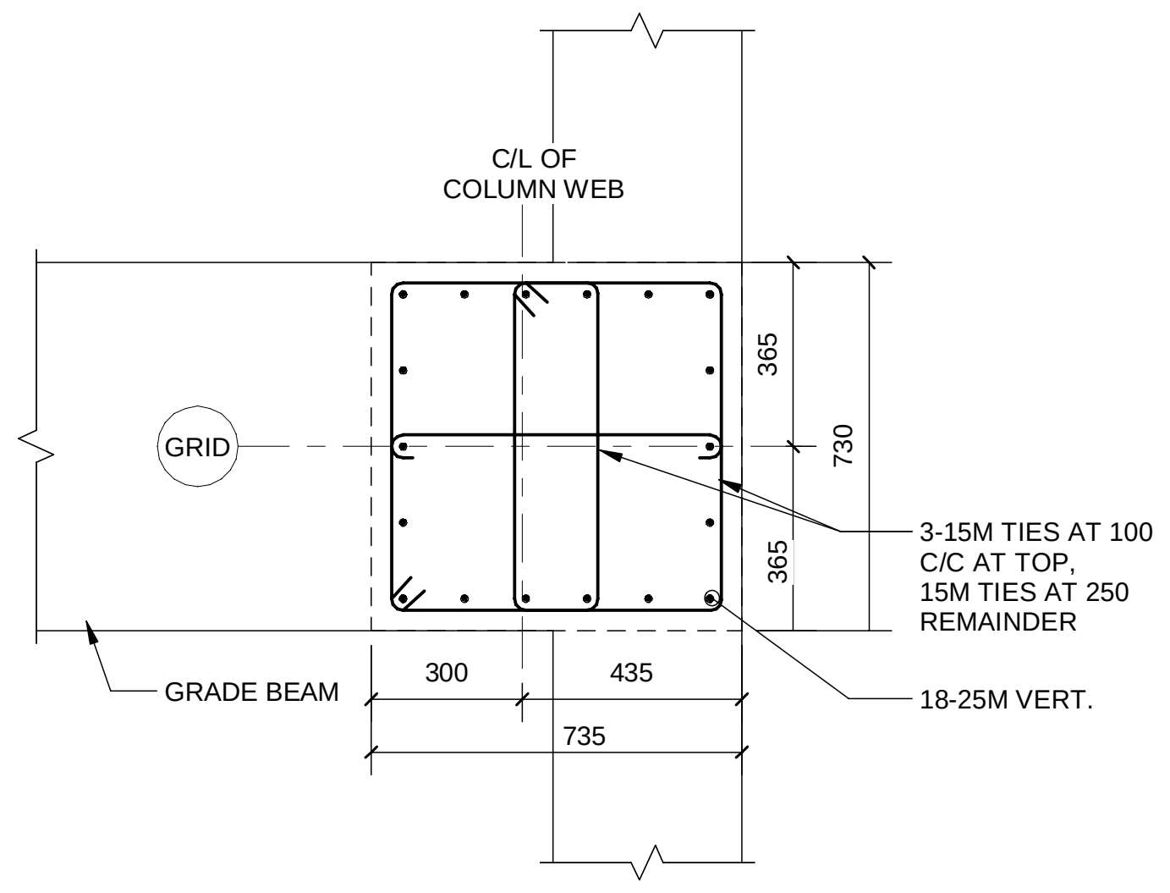

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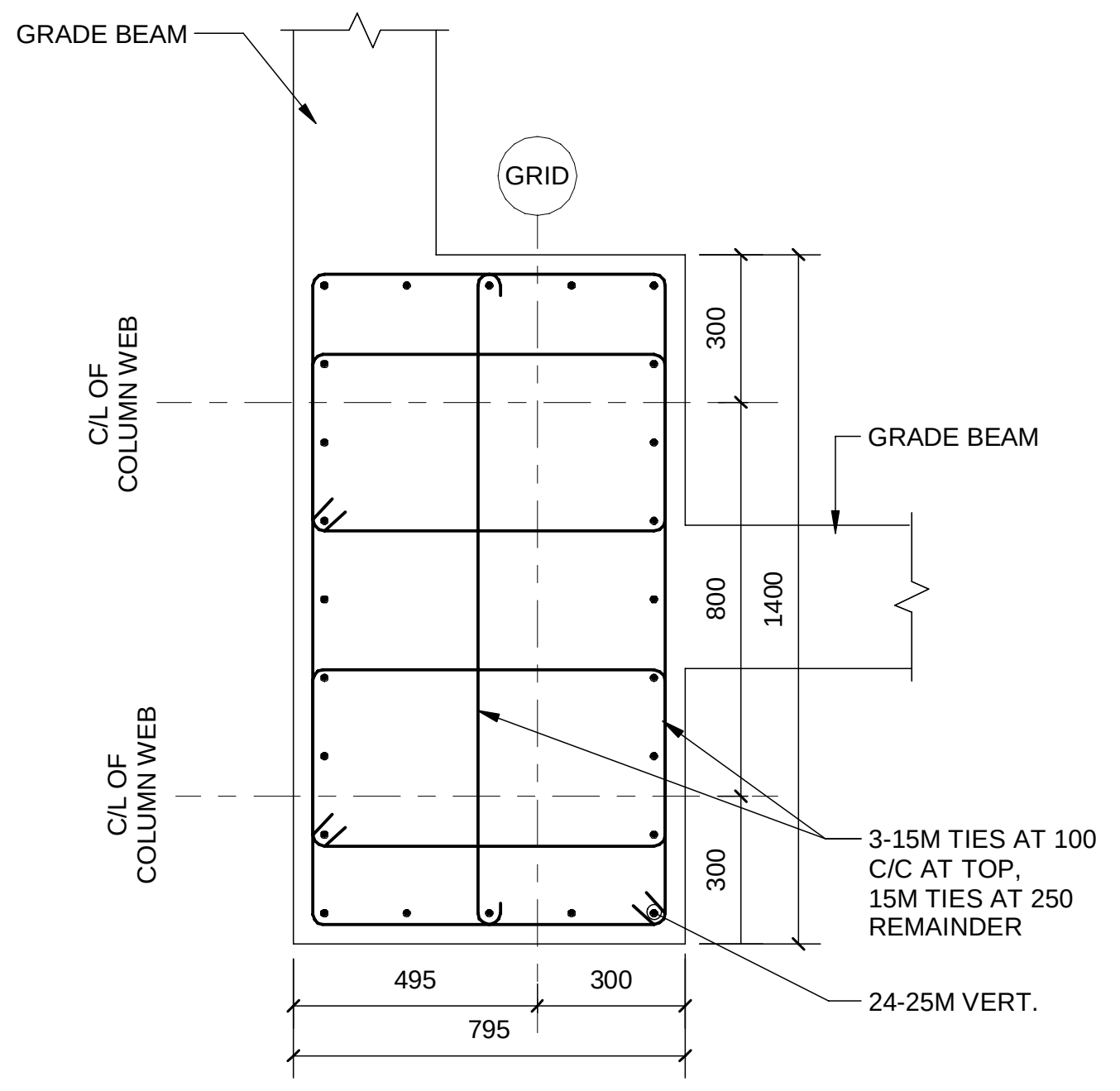

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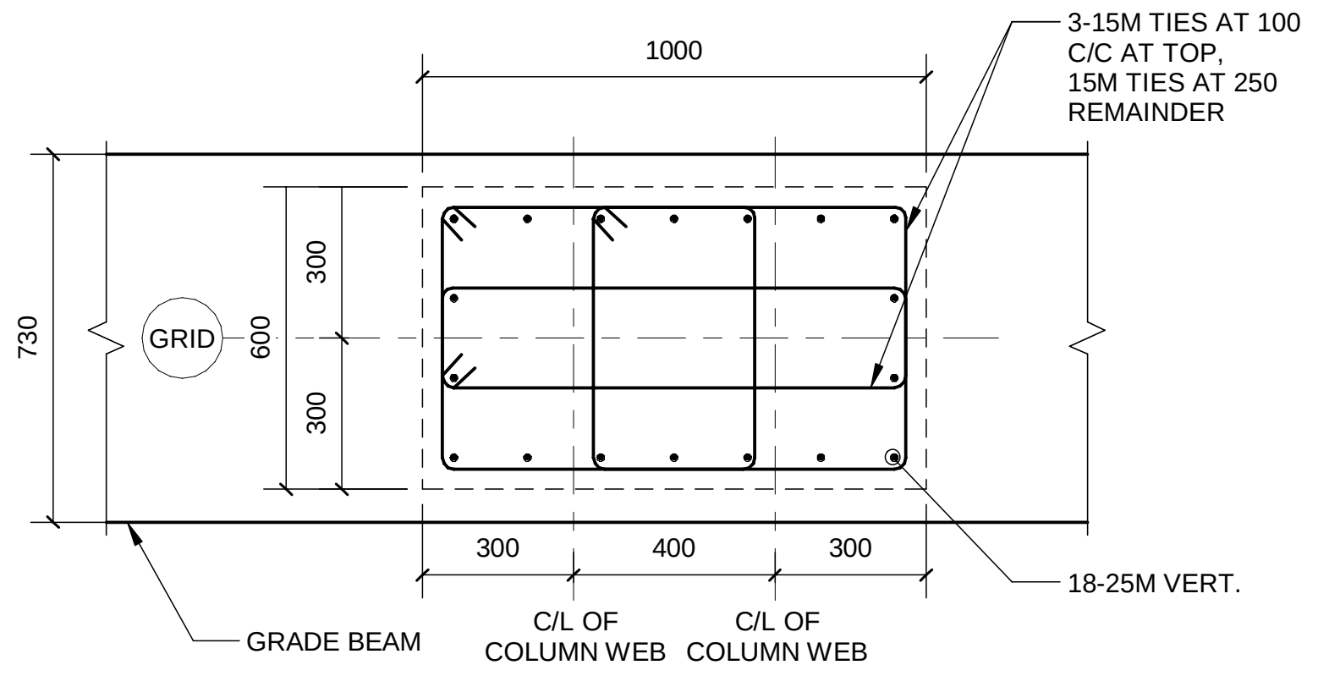

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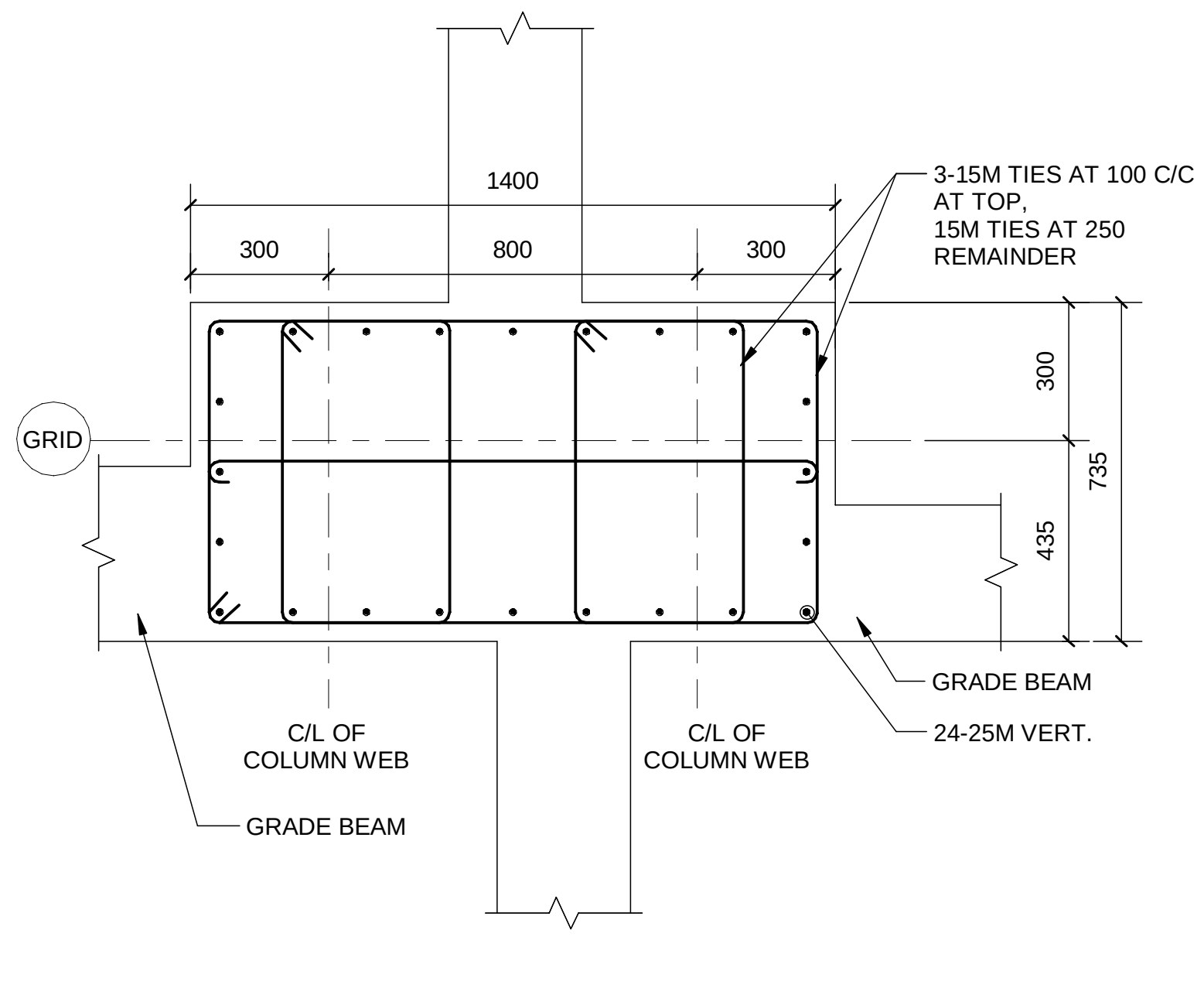

24 | PIER P36
00-S-523 SCALE: 1 : 15

AECOM

PROJECT
WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION

PROJECT NUMBER
60721079

SHEET TITLE
PIER DETAILS

SHEET NUMBER
00-S-523

00-S-523-PIER DETAILS
Last Plotted: 2/14/2025 10:56:53 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

Printed on ___% Post-Consumer Recycled Content Paper

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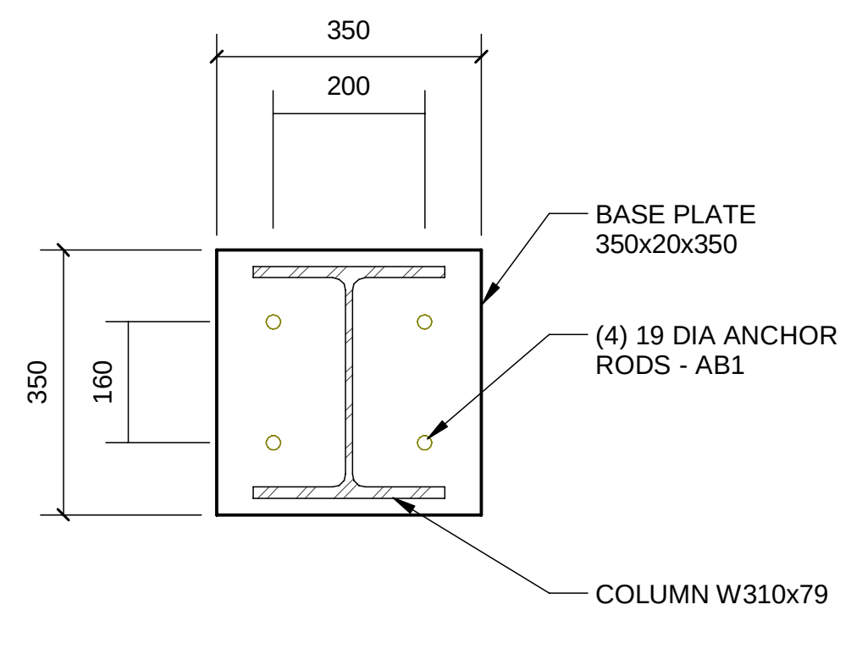
Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

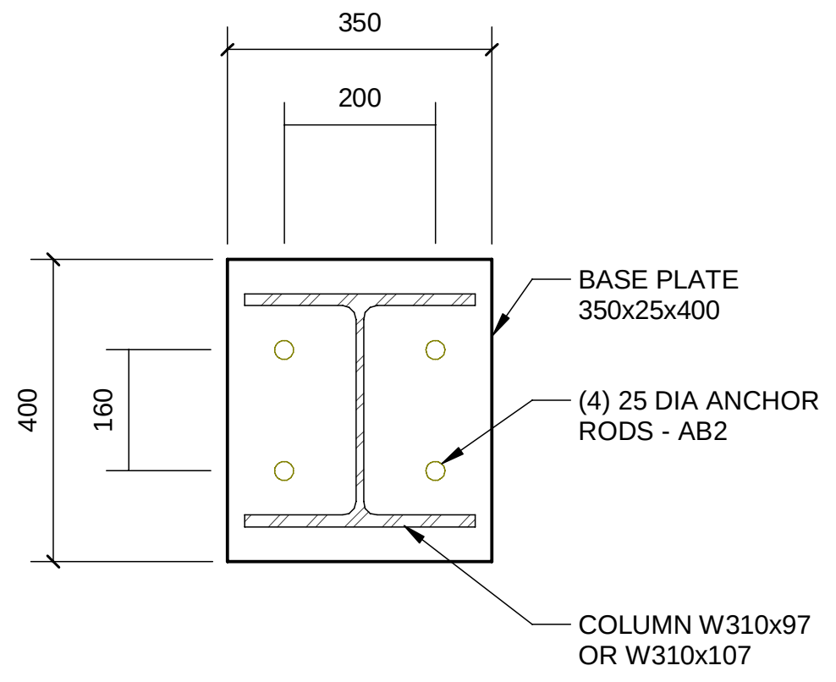
Project Management Initials:



TYPICAL FOR W310x79 COLUMN

1 BASE PLATE BP1

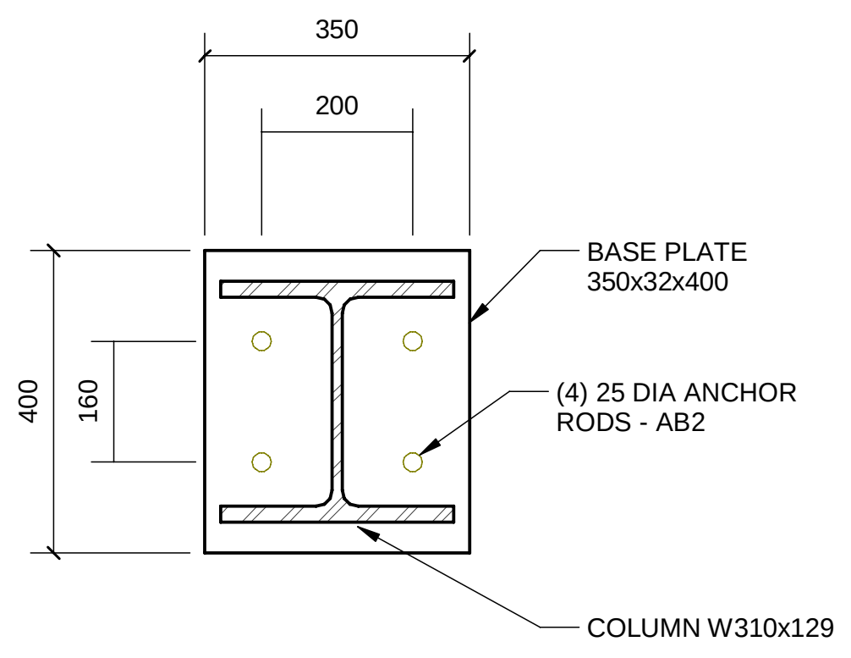
00-S-524 SCALE: 1 : 10



TYPICAL FOR W310x97 OR W310x107 COLUMN

2 BASE PLATE BP2

00-S-524 SCALE: 1 : 10



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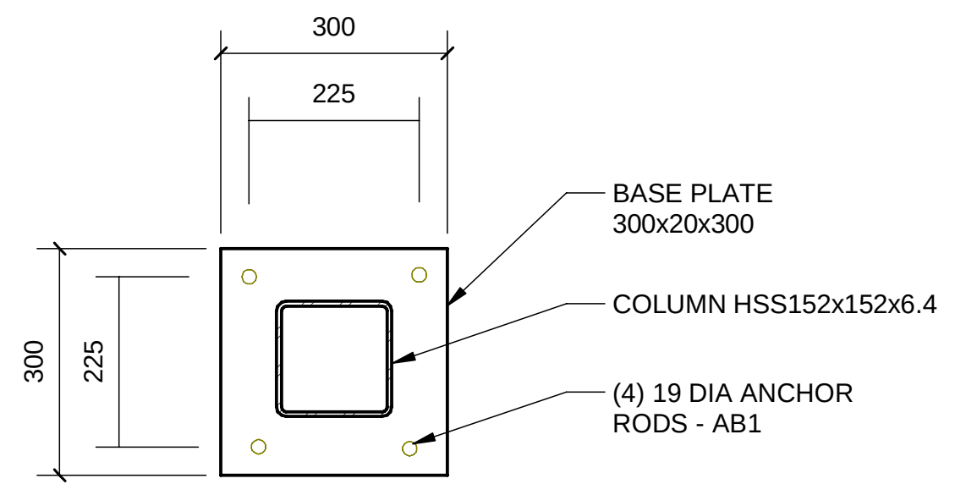
3 BASE PLATE BP3

00-S-524 SCALE: 1 : 10



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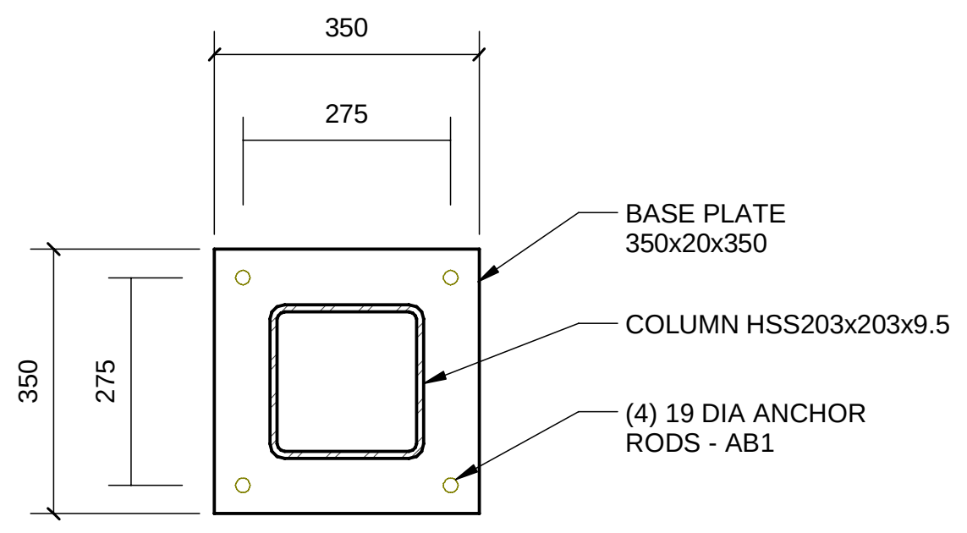
4 BASE PLATE BP4

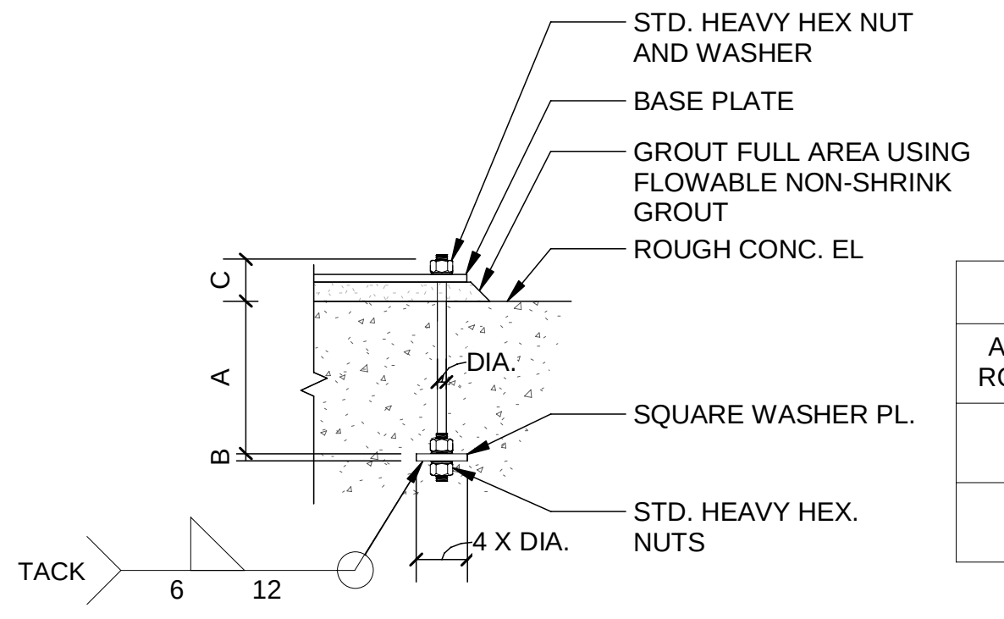
00-S-524 SCALE: 1 : 10



TYPICAL FOR HSS203x203x9.5 COLUMN

5 BASE PLATE BP5

00-S-524 SCALE: 1 : 10



ANCHOR ROD SCHEDULE				
ANCHOR ROD TYPE	DIAMETER	A	B	C
AB1	19	480	12	120
AB2	25	770	16	140

6 ANCHOR ROD DETAIL

00-S-524 SCALE: 1 : 20

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

BASE PLATE DETAILS

SHEET NUMBER

00-S-524

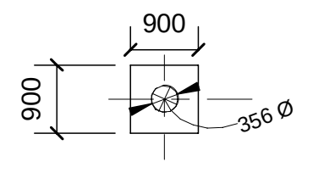
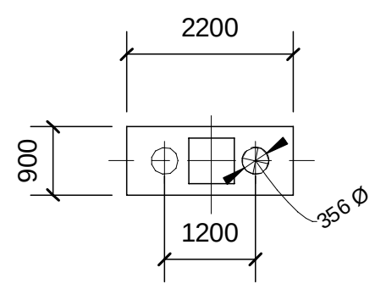
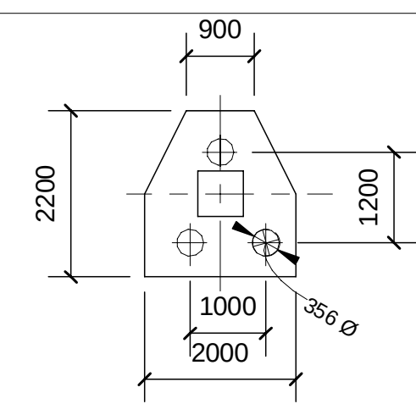
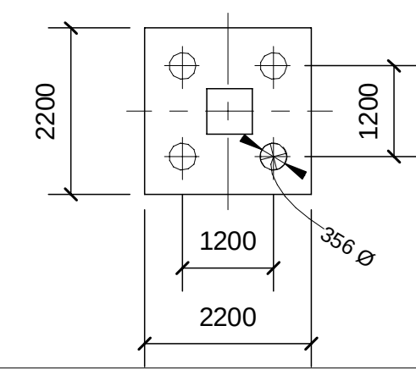
00-S-524-BASE PLATE DETAILS

Last Plotted: 2/14/2025 10:56:54 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"

Project Management Initials:

PILECAP SCHEDULE

TYPE		PILECAP SIZE	PILES
PC1		900 x 900 x 800	(1) 356 DIA PRECAST CONCRETE PILES
PC2		2200 x 900 x 800	(2) 356 DIA PRECAST CONCRETE PILES
PC3		2200 x 2000 x 800	(3) 356 DIA PRECAST CONCRETE PILES
PC4		2200 x 2200 x 800	(4) 356 DIA PRECAST CONCRETE PILES

PILE SCHEDULE

PILE DIAMETER	FACTORED RESISTANCE IN COMPRESSION AT ULS (kN)	FACTORED RESISTANCE IN TENSION AT ULS (kN)
356	750	54

00-S-550-SCHEDULES

Last Plotted: 2/14/2025 10:56:54 PM

Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

Winnipeg

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974 1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
0	19/02/2025	ISSUED FOR TENDER
C	06/12/2024	ISSUED FOR 66% DESIGN RESUBMISSION
B	12/08/2024	ISSUED FOR 66% DESIGN REVIEW

PROJECT NUMBER

60721079

SHEET TITLE

SCHEDULES

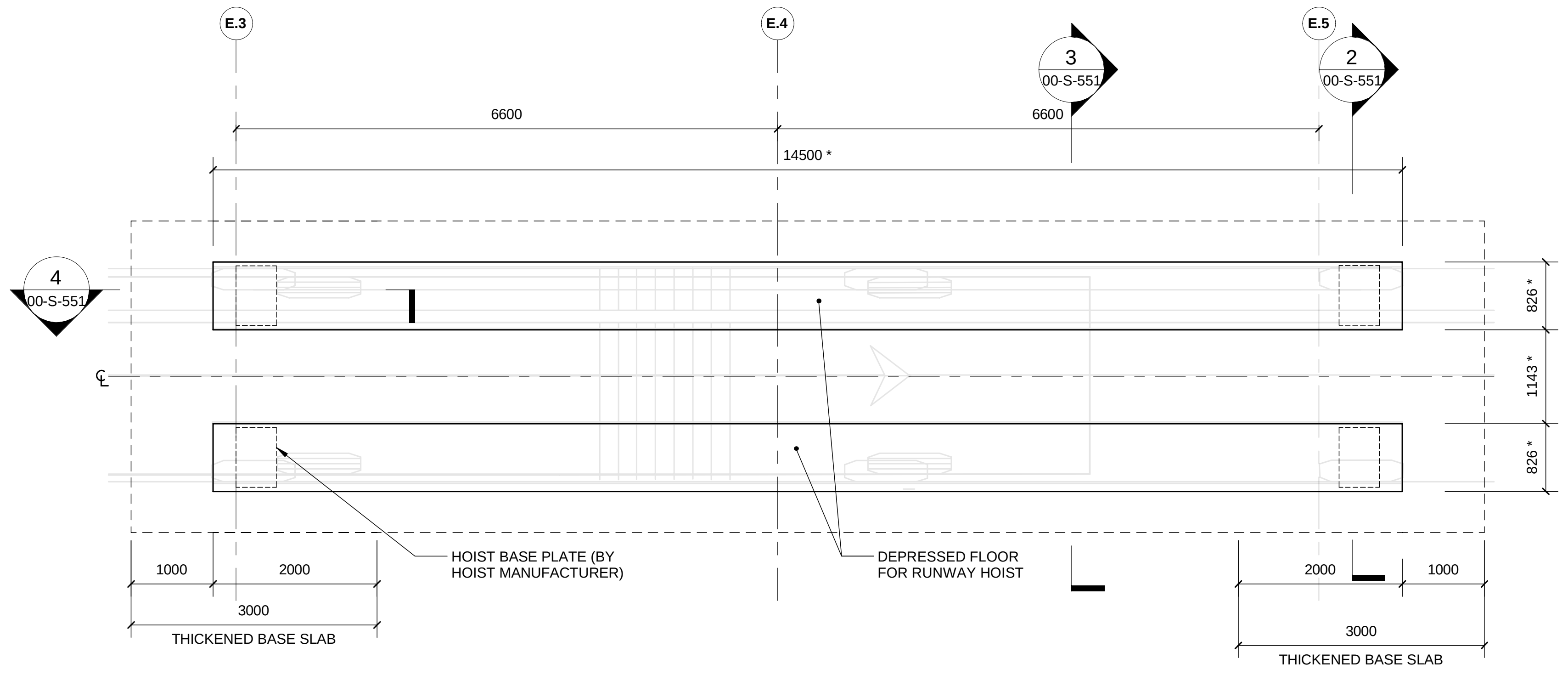
SHEET NUMBER

00-S-550

00-S-551-RUNWAY HOIST PIT DETAILS
Last Plotted: 2/14/2025 10:56:55 PM
Filename: Autodesk Docs://BP-AMER (CAN) 60721079-Winnipeg North Transit Garage Replacement/60721079-Winnipeg Transit North Garage-S.rvt

Project Management Initials:

Designer: Designer Checked: Checker Approved: Approver A0 33.1"x46.8"



1 RUNWAY HOIST PIT PLAN

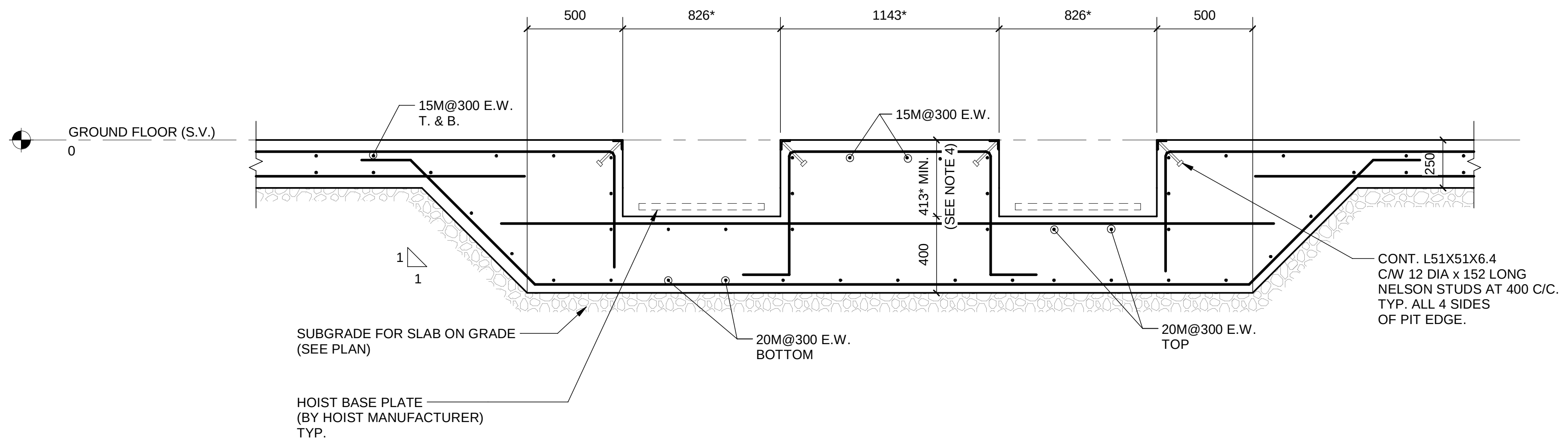
00-S-551 SCALE: 1 : 50

LEGEND:

*   INDICATES DIMENSIONS TO BE VERIFIED BY HOIST MANUFACTURER.

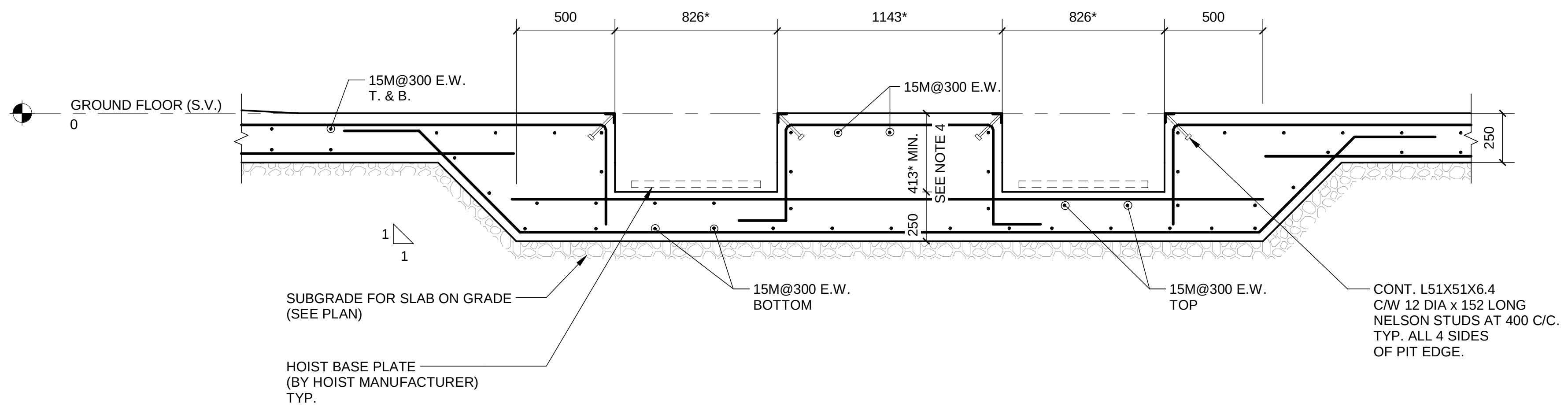
NOTES:

1. ALL PIT DIMENSIONS (MARKED WITH A *) MUST BE COORDINATED WITH AND VERIFIED BY HOIST MANUFACTURER PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL COORDINATE WITH HOIST MANUFACTURER FOR CONDUITS, BASE PLATES, ANCHORS AND ALL OTHER ELEMENTS EMBEDDED IN CONCRETE.
3. CONTRACTOR COORDINATE WITH HOIST MANUFACTURER FOR POST-DRILLED ANCHOR LOCATIONS. DISPLACE REINFORCING BARS TO AVOID THE ANCHOR LOCATIONS. DO NOT CUT OR OTHERWISE DAMAGE REBARS FOR.
4. PIT DEPTH SHOWN ON DESIGN DRAWINGS ARE MINIMUM DEPTH. PROVIDE SLOPES TOWARDS AREA DRAINS OR CATCHBASINS AS APPLICABLE. FOR ALL SLOPED SLABS, THE SLAB THICKNESS SHOWN ON THE DRAWINGS MUST BE MAINTAINED AT ALL LOCATIONS.
5. WATERSTOP AT SLAB AND WALL JOINTS SHALL BE CONTINUOUS WITH WELDED JOINTS. PROVIDE WATERSTOP IN CONSTRUCTION JOINTS IN THE BASE SLAB.



2 SECTION

00-S-551 SCALE: 1 : 20



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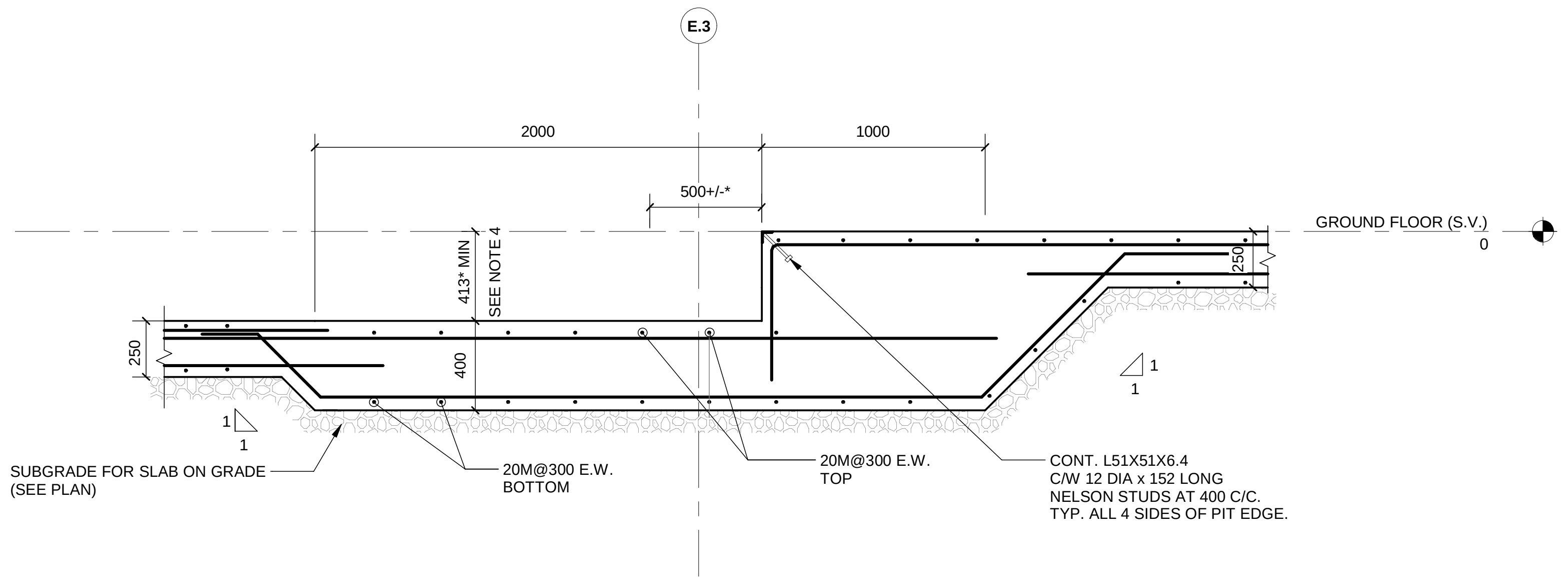


4 SECTION

00-S-551 SCALE: 1 : 20

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974   1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

I/R	DATE	DESCRIPTION
0	19/02/2025	ISSUED FOR TENDER

PROJECT NUMBER

60721079

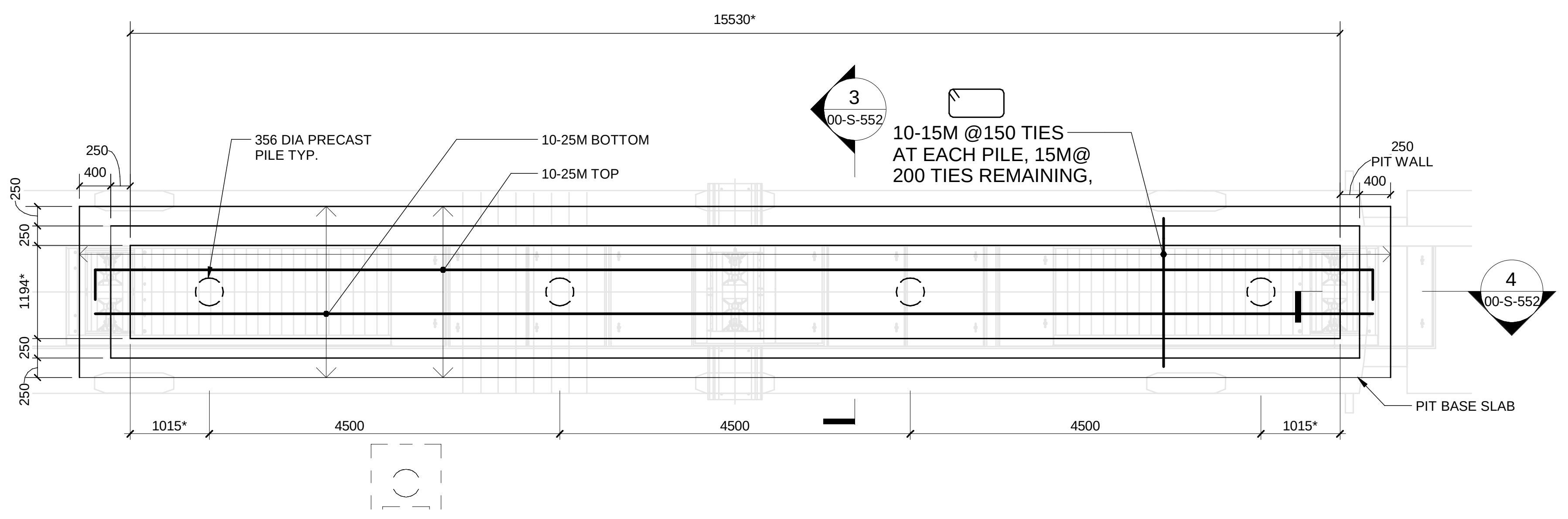
SHEET TITLE

RUNWAY HOIST PIT DETAILS

SHEET NUMBER

00-S-551

Project Management Initials: Designer: Designer   Checked: Checker   Approved: Approver   A0 33.1"x46.8"



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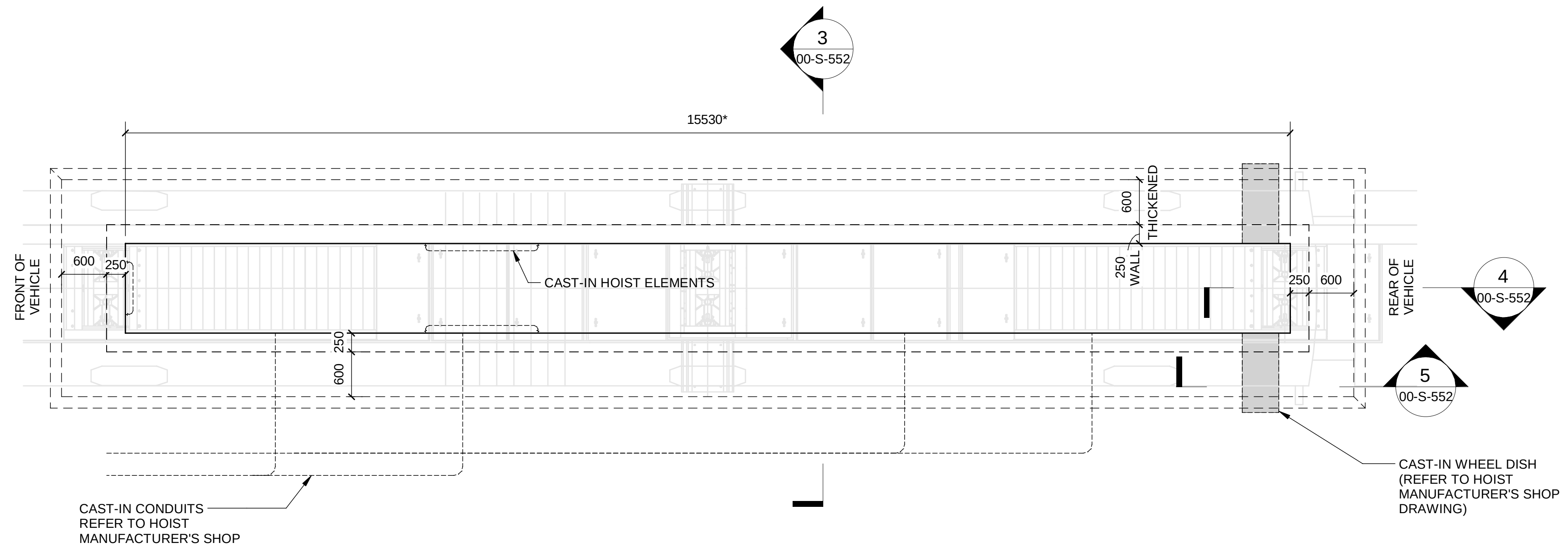
00-S-552 SCALE: 1 : 50



2 | FRAME HOIST PIT - PLAN AT GROUND FLOOR

00-S-552 SCALE: 1 : 50

LEGEND:

* INDICATES DIMENSIONS TO BE VERIFIED BY HOIST MANUFACTURER.

NOTES:

1. ALL PIT DIMENSIONS (MARKED WITH A *) MUST BE COORDINATED WITH AND VERIFIED BY HOIST MANUFACTURER PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL COORDINATE WITH HOIST MANUFACTURER FOR CONDUITS, BASE PLATES, ANCHORS AND ALL OTHER ELEMENTS EMBEDDED IN CONCRETE.
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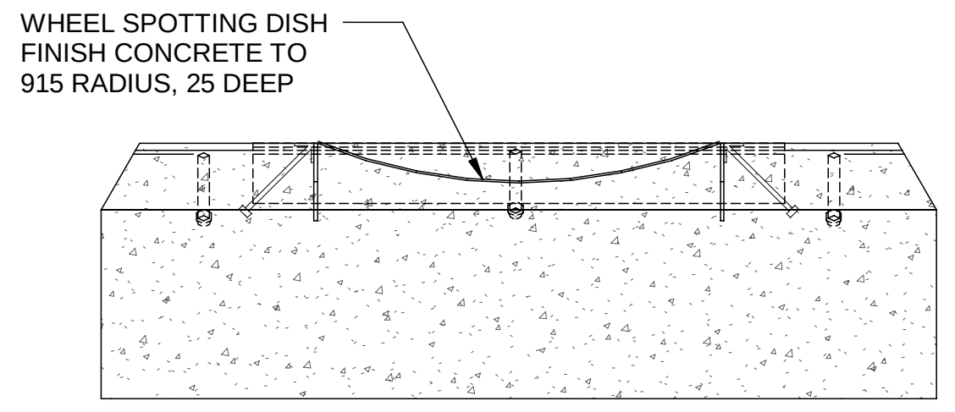
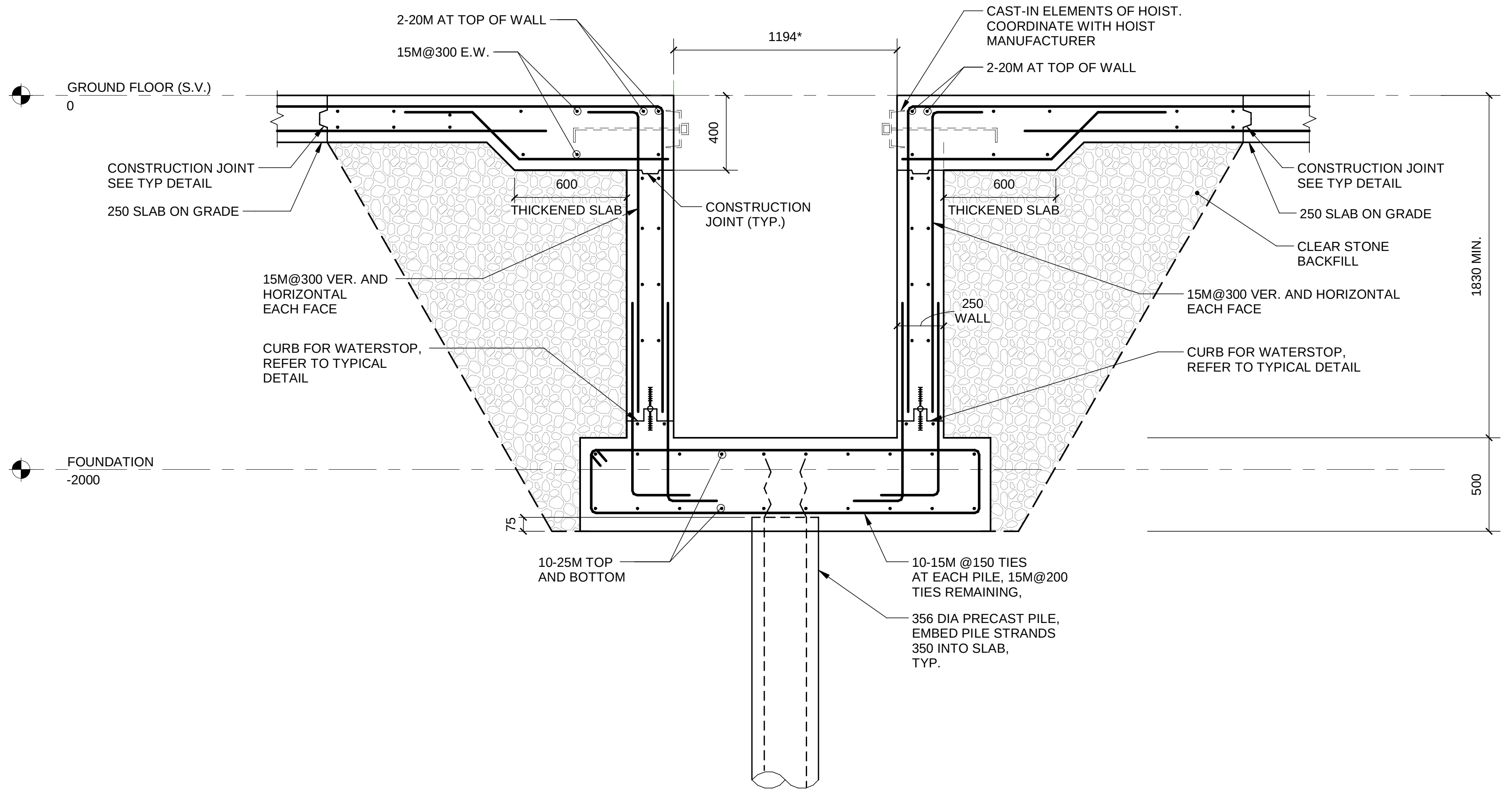
5. WATERSTOP AT SLAB AND WALL JOINTS SHALL BE CONTINUOUS WITH WELDED JOINTS. PROVIDE WATERSTOP IN CONSTRUCTION JOINTS IN THE BASE SLAB.



5 | SECTION THROUGH WHEEL DISH

00-S-552 SCALE: 1 : 20



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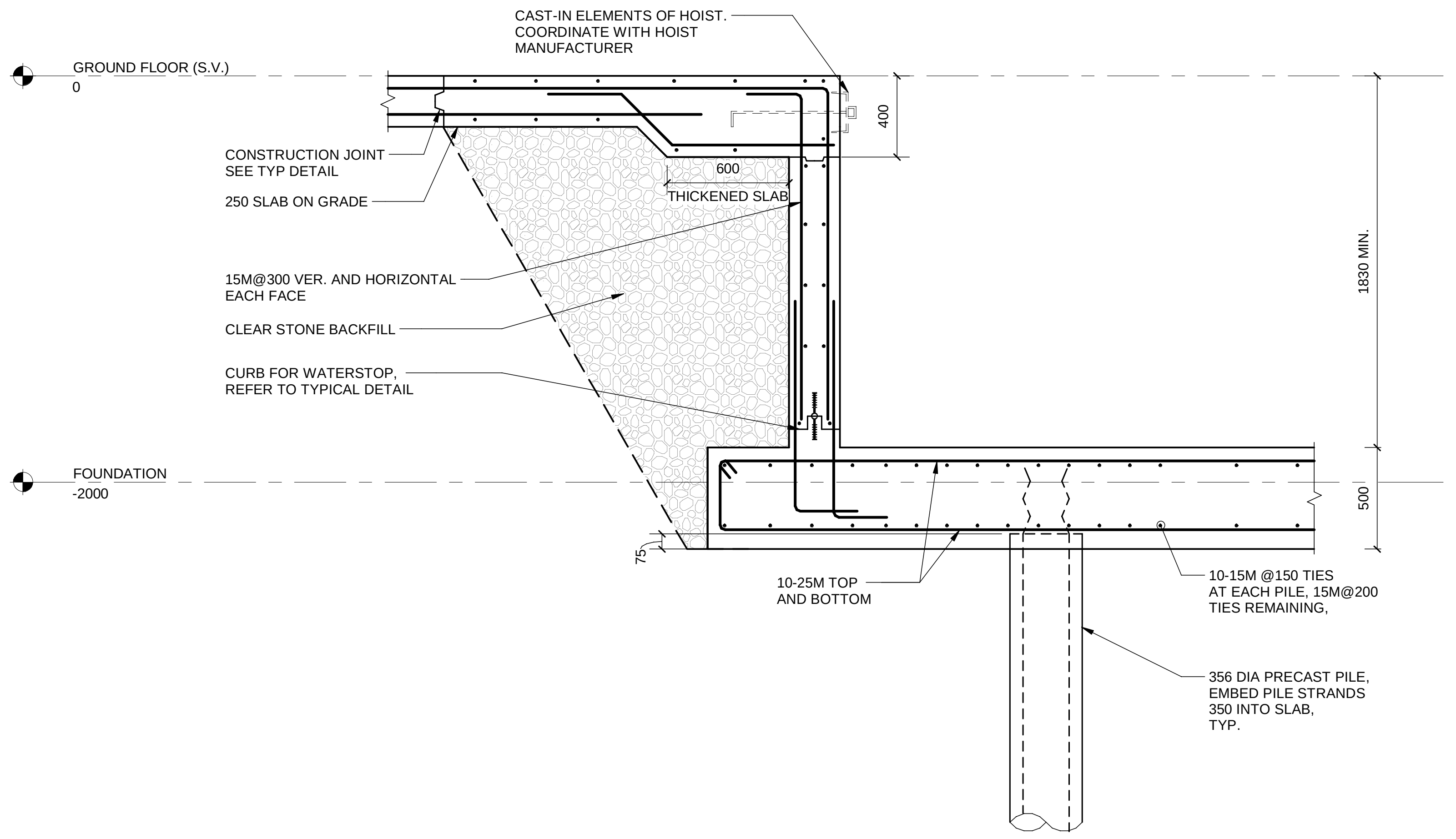

4 | SECTION

00-S-552 SCALE: 1 : 20

00-S-552-FRAME HOIST PIT DETAILS

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AECOM

PROJECT

WINNIPEG NORTH GARAGE REPLACEMENT
100 Oak Point Hwy, Winnipeg, MB R2R 1V1

CLIENT

City of Winnipeg
510 Main St.
Winnipeg, MB R3B 1B9
1.877.311.4974   1.204.986.1311

Winnipeg Transit
B-414 Osborne St.
Winnipeg, MB R3L 2A1

CONSULTANT

AECOM CANADA ULC
99 Commerce Dr,
Winnipeg, MB R3P 0Y7

REGISTRATION

ISSUE/REVISION

0	19/02/2025	ISSUED FOR TENDER
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60721079

SHEET TITLE

FRAME HOIST PIT DETAILS

SHEET NUMBER

00-S-552