

Concord-Carlisle Regional High School

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LOCUS MAP



Design Development Submission Volume #2 August 15, 2012

Theater Consultant:

Don Hirsch Design Studio, LLC
95 Upper Barnett Hill
Montpelier, VT 05602

Landscape Architect:

Brown / Sardina, Inc.
129 South Street
Boston, MA 02111

Civil Engineer:

Nitsch Engineering, Inc.
186 Lincoln Street Suite 200
Boston, MA 02111

Environmental Engineer:

CDW Consultants, Inc.
40 Speen Street Suite 301
Framingham, MA 01701

GeoTechnical Engineer:

Nobis Engineering, Inc.
585 Middlesex Street
Lowell, MA 01851

Code Consultant:

Harold R. Cutler, P.E.
165 Landham Road
Sudbury, MA 01776

Structural Engineer:

Foley Buhl Roberts & Associates, Inc.
2150 Washington Street
Newton, MA 02462

Specifications:

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1121 Washington Street
Newton, MA 02465

Mechanical / Electrical / Plumbing / Fire-Protection Consultants:

Garcia Galuska DeSousa Consulting Engineers Inc.
370 Faunce Corner Road
N. Dartmouth, MA 02747

Owner's Project Manager:

KVA Building Industry Consultants
303 Congress Street
Boston MA 02210

Lighting Consultant:

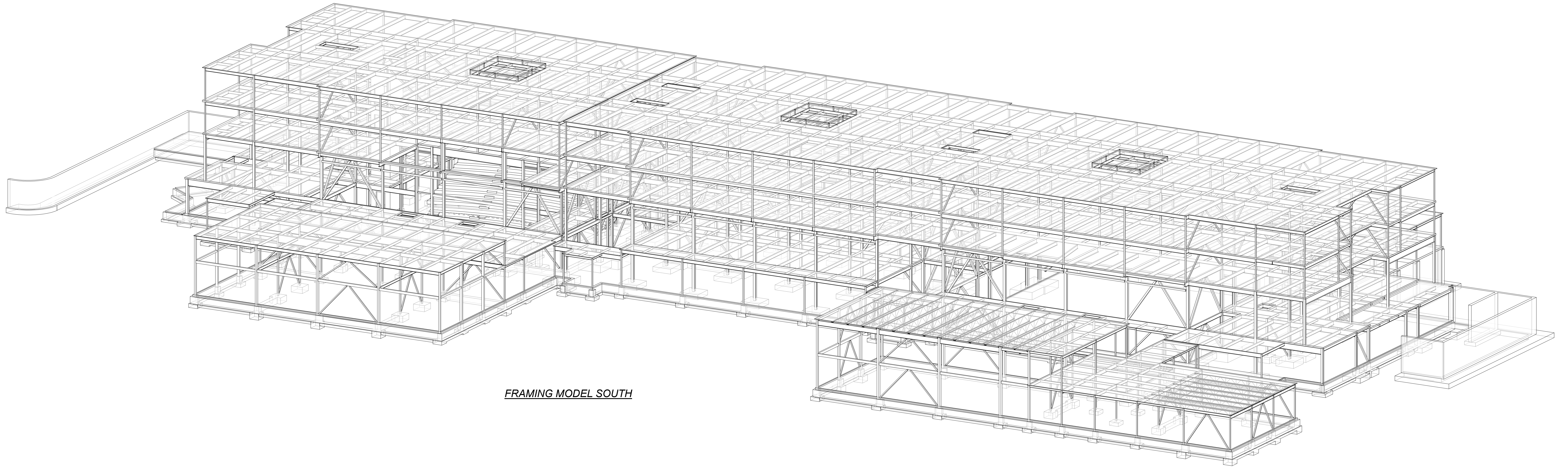
Ripman Lighting Consultants
3 Lexington Street
Belmont, MA 02478

Food Service Engineer:

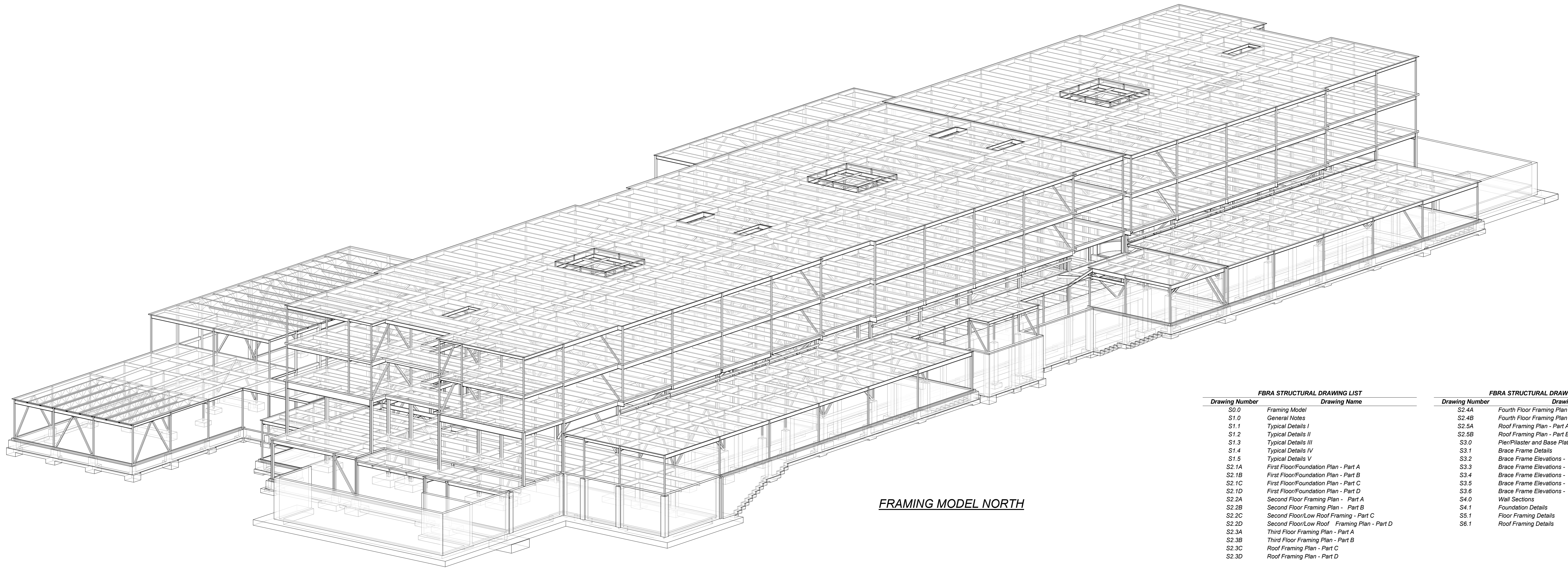
Colburn & Guyette Consulting Partners
201 Oak Street Suite 12
Pembroke, MA 02359

Acoustical Consultant:

Acentech Incorporated
33 Moulton Street
Cambridge, MA 02138



FRAMING MODEL SOUTH



FRAMING MODEL NORTH

FBRA STRUCTURAL DRAWING LIST		FBRA STRUCTURAL DRAWING LIST	
Drawing Number	Drawing Name	Drawing Number	Drawing Name
S0.0	Framing Model	S2.4A	Fourth Floor Framing Plan - Part A
S1.0	General Notes	S2.4B	Fourth Floor Framing Plan - Part B
S1.1	Typical Details I	S2.5A	Roof Framing Plan - Part A
S1.2	Typical Details II	S2.5B	Roof Framing Plan - Part B
S1.3	Typical Details III	S3.0	Pier/Plaster and Base Plate Details
S1.4	Typical Details IV	S3.1	Brace Frame Details
S1.5	Typical Details V	S3.2	Brace Frame Elevations - Part A
S2.1A	First Floor/Foundation Plan - Part A	S3.3	Brace Frame Elevations - Part A
S2.1B	First Floor/Foundation Plan - Part B	S3.4	Brace Frame Elevations - Part B
S2.1C	First Floor/Foundation Plan - Part C	S3.5	Brace Frame Elevations - Part B
S2.1D	First Floor/Foundation Plan - Part D	S3.6	Brace Frame Elevations - Parts C & D
S2.2A	Second Floor Framing Plan - Part A	S4.0	Wall Sections
S2.2B	Second Floor Framing Plan - Part B	S4.1	Foundation Details
S2.2C	Second Floor/Low Roof Framing - Part C	S5.1	Floor Framing Details
S2.2D	Second Floor/Low Roof Framing Plan - Part D	S6.1	Roof Framing Details
S2.3A	Third Floor Framing Plan - Part A		
S2.3B	Third Floor Framing Plan - Part B		
S2.3C	Roof Framing Plan - Part C		
S2.3D	Roof Framing Plan - Part D		

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Framing Model S0.0

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Registration:

Design Development Submission

Project Name and Address:

Concord-Carlisle Regional High School

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Concord, MA 01742

Issue Submissions:

No.:	Date:	Description:
	8/15/2012	Design Development Submission

Title:

Framing Model

Date: August 15, 2012 Scale: Drawn: CDM Checked: MAP

Project No.: 1102.00
Drawing No.: S0.0
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GENERAL

- G1. THE GENERAL NOTES APPLY UNLESS NOTED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATIONS.
G2. STRUCTURAL WORK SHALL CONFORM TO REQUIREMENTS OF THE MASSACHUSETTS STATE BUILDING CODE 780 CMR, EIGHTH EDITION AND ALL AMENDMENTS.
G3. THE INTENT OF THE STRUCTURAL DRAWINGS IS TO SHOW THE MAIN STRUCTURAL FEATURES AND DESIGN FOR THE COMPLETED PROJECT. ARCHITECTURAL DETAILS AND OTHER COMPONENTS THAT MAY BE NECESSARY TO CONSTRUCT THE PROJECT ARE SHOWN INDICATIVELY ONLY AND NOT COMPLETELY.
G4. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, SITE, MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS, APPROVED SHOP DRAWINGS, AND SPECIFICATIONS.
G5. REFER TO ARCHITECTURAL, SITE, MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS FOR VERIFICATION OF LOCATIONS AND DIMENSIONS OF ALL SHAFTS, INSERTS, CURBS, OPENINGS, SLEEVES, ANCHOR BOLTS, FLOOR PITCHES, ANGLE FRAMES, AND OTHER PROJECT REQUIREMENTS NOT SHOWN ON STRUCTURAL DRAWINGS.
G6. THE CONTRACTOR SHALL INFORM THE ARCHITECT OF ALL DISCREPANCIES BETWEEN DRAWINGS OF DIFFERENT TRADES PRIOR TO INITIATION OF ANY WORK.
G7. EXISTING DIMENSIONS AND CONDITIONS MUST BE VERIFIED OR DETERMINED IN THE FIELD AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
G8. THE CONTRACTOR SHALL PROVIDE ALL THE NECESSARY ENGINEERED TEMPORARY BRACING AND SHORING TO SAFELY SUPPORT THE NEW AND EXISTING WORK AND THE APPLIED LOADS UNTIL THE PERMANENT STRUCTURE IS FULLY INSTALLED AND AT FULL STRENGTH.
G9. SHOP DRAWINGS FOR REINFORCING BARS, PRECAST CONCRETE PIECES, STRUCTURAL STEEL, JOISTS, STEEL DECK AND PREFABRICATED WOOD TRUSSES SHALL BE SUBMITTED TO THE ARCHITECT AND A STAMPED APPROVAL RECEIVED BEFORE FABRICATION MAY PROCEED. FABRICATION AND ERECTION SHALL PROCEED FROM APPROVED SHOP DRAWINGS ONLY.
G10. NOTES AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS, UNLESS NOTED.
G11. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.

STRUCTURAL LOADS - MASSACHUSETTS STATE BUILDING CODE (780 CMR) - EIGHTH EDITION (I.B.C. 2009 WITH MASSACHUSETTS AMENDMENTS & ASCE STANDARD ASCE 7-05)

- L1. DEAD LOADS
A. WEIGHT OF BUILDING COMPONENTS
1. FLOOR 80 PSF
2. ROOFS 40 PSF
L2. SNOW LOADS
A. GROUND SNOW LOAD - CONCORD, MA CODE 780 CMR TABLE 1604.11 P(g) = 55 PSF
B. FLAT ROOF SNOW LOAD - ASCE 7-05 - SECTION 7.3 P(s) = 43 PSF
C. SNOW EXPOSURE FACTOR - ASCE 7-05 - TABLE 7-2 C(e) = 1.0
D. SNOW IMPORTANCE CATEGORY - ASCE 7-05 - TABLE 6.5.6 I(s) = 1
E. ROOF THERMAL FACTOR - ASCE 7-05 - TABLE 7-3 C(t) = 1.0
F. ROOF SLOPE FACTOR - ASCE 7-05 - FIGURE 7-2 C(s) = 1.0
G. SNOW DRIFT - ASCE 7-05 - FIGURES 7-7, 7-8 & 7-9
L3. LIVE LOADS
A. LOADS (I.B.C. - TABLE 1607.1)
1. ASSEMBLY AREAS - LOBBIES 100 PSF (INCLUDING PARTITION ALLOWANCE)
2. ASSEMBLY AREAS - FIXED SEATS 60 PSF (INCLUDING PARTITION ALLOWANCE)
3. STAIRS 100 PSF
4. STAGE 150 PSF
5. CLASSROOMS 50 PSF
6. MECHANICAL EQUIPMENT ROOMS 150 PSF (100PSF+50PSF EQUIPMENT PADS)
7. EXTERIOR PLAZAS 100 PSF
8. TYPICAL PARTITION ALLOWANCE - I.B.C. - SECTION 1607.5 15 PSF
9. LIVE LOAD REDUCTION I.B.C. - SECTION 1607.9 & MA CODE 780 CMR
L4. WIND LOADS - MAIN WIND FORCE RESISTING SYSTEM (MFRS)
A. BASIC WIND SPEED (3-SECOND GUST) - MA CODE TABLE 1604.10 V(3s) = 100 MPH
B. WIND IMPORTANCE FACTOR - ASCE 7-05 - TABLE 6-1 I(w) = 1.15
C. WIND EXPOSURE CATEGORY - ASCE 7-05 - TABLE 6-5.6 EXPOSURE C Kd = 0.85
D. DIRECTIONALITY FACTOR - ASCE 7-05 - TABLE 6-4 Kz = 0.95
E. VELOCITY PRESSURE EXPOSURE COEFFICIENT - ASCE 7-05 - TABLE 6-3 Kzt = 1.0
F. TOPOGRAPHY FACTOR - ASCE 7-05 - SECTION 6.5.1 G. VELOCITY PRESSURE - ASCE 7-05 - SECTION 6.5.10 qz = 24 PSF
H. INTERNAL PRESSURE COEFFICIENTS - ASCE 7-02 - FIGURE 6-5
1. TOWARD THE INTERNAL SURFACE GC(pi) = +0.18
2. AWAY FROM THE INTERNAL SURFACE GC(pf) = -0.18
I. EXTERNAL PRESSURE COEFFICIENTS - ASCE 7-05 - FIGURE 6-10
1. WINDWARD WALL GC(pf) = +0.40 (NON-SALIENT), +0.61
2. LEeward (WALL) GC(pl) = -0.37 (NON-SALIENT), -0.43 (SALIENT)
3. WINDWARD (ROOF) GC(pr) = -0.69 (NON-SALIENT), -1.07 (SALIENT)
4. LEeward (ROOF) GC(pl) = -0.29 (NON-SALIENT), -0.53 (SALIENT)
L5. WIND LOADS - COMPONENTS AND CLADDING
A. NET DESIGN WIND PRESSURE FOR A WALL ELEMENT (BASED ON <10 SF)
1. AT A NON-SALIENT AREA Pnet = -26 PSF / -28 PSF
2. AT A SALIENT AREA Pnet = -26 PSF / -34 PSF
B. NET DESIGN WIND PRESSURE FOR A ROOF ELEMENT (BASED ON <10 SF)
1. AT ROOF NON-SALIENT AREA Pnet = +11 PSF / -28 PSF
2. AT ROOF EDGE Pnet = +11 PSF / -47 PSF
3. AT ROOF CORNER Pnet = +11 PSF / -47 PSF
4. AT OVERHANG EDGE Pnet = -41 PSF
5. AT OVERHANG CORNER Pnet = -67 PSF
L6. SEISMIC LOADS
A. SEISMIC OCCUPANCY CATEGORY - ASCE 7-05 - TABLE 1-1 OCCUPANCY CATEGORY III
B. MAPPED SPECTRAL ACCELERATION FOR SHORT PERIODS - MA TABLE 1604.11 S(S) = 0.29g
C. DESIGN SPECTRAL RESPONSE ACCELERATION FOR SHORT PERIODS S(S) = 0.309g
D. MAPPED SPECTRAL ACCELERATION FOR 1-SECOND PERIOD - MA TABLE 1604.11 S(1) = 0.070g
E. DESIGN SPECTRAL RESPONSE ACCELERATION FOR 1-SECOND PERIOD S(1) = 0.112g
F. SITE CLASS - REFER TO GEOTECHNICAL REPORT SITE CLASS D
G. SEISMIC DESIGN CATEGORY - ASCE 7-05 - TABLES 11.6-1 & 11.6-2 CATEGORY B
H. BASIC SEISMIC FORCE-RESISTING SYSTEM BUILDING FRAME SYSTEM: STRUCTURAL STEEL SYSTEMS NOT SPECIFICATION DETAILED FOR SEISMIC RESISTANCE
I. RESPONSE MODIFICATION COEFFICIENT - ASCE 7-05 - TABLE 12.2-1 R = 3.0
J. DEFLECTION AMPLIFICATION FACTOR - ASCE 7-05 - TABLE 12.2-1 C(d) = 3.0
K. SYSTEM OVERSTRENGTH FACTOR - ASCE 7-05 - TABLE 12.2-1 Dp = 3.0
L. SEISMIC IMPORTANCE FACTOR - ASCE 7-05 - TABLE 11.5-1 I(E) = 1.25
M. SEISMIC RESPONSE COEFFICIENT C(s) = 0.126
N. DESIGN BASE SHEAR V = C(s)W * [S(DS)]/R(I(E))W
O. ANALYSIS PROCEDURE USED EQUIVALENT LATERAL FORCE

FOUNDATION (SECTION 310000)

- F1. FOUNDATION WORK SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT BY NOBIS ENGINEERING, INC., FILE # 64890.02, DATED FEBRUARY 21, 2012.
F2. THE OWNER AND ARCHITECT ASSUME NO RESPONSIBILITY FOR THE VALIDITY OF THE SUBSURFACE CONDITIONS DESCRIBED ON THE DRAWINGS, SPECIFICATIONS, BORING LOGS, OR TEST PITS. THIS DATA IS INCLUDED ONLY TO ASSIST THE CONTRACTOR DURING BIDDING AND SUBSEQUENT CONSTRUCTION AND REPRESENT CONDITIONS ONLY OF THOSE SPECIFIED LOCATIONS AT THE PARTICULAR TIME THEY WERE MADE.
F3. THE CONTRACTOR SHALL INFORM THE ARCHITECT AND RELOCATE, AS REQUIRED, ANY EXISTING UTILITY LINES THAT MAY INTERFERE WITH NEW FOUNDATIONS. THE CONTRACTOR SHALL REMOVE ANY EXISTING UTILITY LINES THAT ARE BEING ABANDONED IN THE VICINITY OF THE NEW FOUNDATION AND BACKFILL THE AREA WITH COMPACTED STRUCTURAL FILL.
F4. THE BOTTOM SURFACE OF ALL SPREAD FOOTINGS SHALL REST ON A 4" THICK LAYER OF COMPACTED CRUSHED STONE OVER UNDISTURBED APPROVED SOIL OR COMPACTED STRUCTURAL FILL, WITH A MINIMUM ALLOWABLE BEARING PRESSURE OF 2.5 TONS PER SQUARE FOOT. REMOVE ALL ORGANICS, CLAYS, SILTS, OR UNSUITABLE OR UNCOMPACTED FILL MATERIALS FROM BENEATH NEW FOOTINGS AND REPLACE WITH COMPACTED STRUCTURAL FILL.
F5. THE ESTIMATED BOTTOM ELEVATION OF EACH FOOTING IS INDICATED THUS (X'-X") ON PLAN. THE BOTTOM OF EACH EXTERIOR FOOTING SHALL BE A MINIMUM OF 4'-0" BELOW ADJACENT EXTERIOR FINISH GRADE.
F6. PROVIDE 2" RIGID INSULATION AND A VAPOR BARRIER UNDER INTERIOR CONCRETE SLABS ON GRADE. PROVIDE 6" MINIMUM OF COMPACTED STRUCTURAL FILL UNDER GROUND FLOOR SLABS ON GRADE.
F7. BACKFILL UNDER STRUCTURAL SLABS, MATS, AND FOOTINGS SHALL BE ENGINEERED BACKFILL COMPACTED IN SPECIFIED LIFTS TO 95 PERCENT OF MAXIMUM DENSITY, UNLESS OTHERWISE INDICATED OR SPECIFIED. REFER TO GEOTECHNICAL REPORT AND EARTHWORK SPECIFICATION FOR ADDITIONAL REQUIREMENTS.
F8. VERIFY LOCATIONS AND REQUIREMENTS FOR INSERTS, SLEEVES, CONDUITS, EMBEDMENTS, AND PENETRATIONS WITH RESPECTIVE TRADES BEFORE PLACING CONCRETE.
F9. FOUNDATIONS SHALL BE CENTERED UNDER SUPPORTED MEMBERS, UNLESS NOTED OTHERWISE.
F10. DOWELS FROM FOUNDATIONS INTO PIERS, COLUMNS, BUTTRESSES, OR WALLS SHALL BE THE SAME SIZE AND NUMBER AS REINFORCEMENT IN PIERS, COLUMNS, AND BUTTRESSES, OR WALLS ABOVE, UNLESS NOTED OTHERWISE.
F11. NO CONCRETE SHALL BE PLACED UNDER WATER OR ON FROZEN SUBGRADE. PROTECT IN-PLACE FOUNDATIONS AND SLABS FROM FROST PENETRATION UNTIL PROJECT IS COMPLETED.
F12. DO NOT BACK FILL FOUNDATION WALLS UNTIL WALLS HAVE REACHED THEIR 28 DAY STRENGTHS AND FLOOR SLABS AT THE TOP AND BOTTOM OF WALLS ARE IN PLACE AND CURED.

CAST-IN-PLACE CONCRETE (SECTION 033000)

- C1. CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318 - 2008/318R - 2008)".
C2. CONCRETE SHALL BE PLACED IN THE PRESENCE OF THE APPROVED TESTING AGENCY.
C3. CONCRETE QUALITY IN ACCORDANCE WITH THE REQUIREMENTS OF THESE DRAWINGS AND SPECIFICATIONS IS ESSENTIAL TO THE STRUCTURAL PERFORMANCE OF THE BUILDING. CONCRETE THAT IS NOT IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS WILL NOT BE ACCEPTED.
C4. CONCRETE EXPOSED TO WEATHER SHALL CONTAIN AN AIR ENTRAINMENT ADMIXTURE.
C5. NORMAL WEIGHT CONCRETE SHALL HAVE AN AIR-DRY UNIT WEIGHT OF 145 PCF.
C6. CONCRETE MINIMUM 28-DAY STRENGTH, UNLESS NOTED OTHERWISE, SHALL CONFORM TO FOLLOWING:
A. FOOTINGS, PIERS, FOUNDATION WALLS, GRADE BEAMS: 3000 PSI (NORMAL WEIGHT)
B. SLABS ON GRADE + STRUCTURAL SLABS: 4000 PSI (NORMAL WEIGHT)
C. SITE PAVING: 4500 PSI (NORMAL WEIGHT)
C7. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED BARS, LAP ALL CONTINUOUS BARS A MINIMUM OF 40 DIAMETERS, UNLESS NOTED. PROVIDE MATCHING CORNER AND INTERSECTION BARS.
C8. PROVIDE A MINIMUM OF #4 AT 12" EACH WAY, EACH FACE, FOR ALL WALLS, FOOTINGS, PITS, OR PADS, UNLESS NOTED OTHERWISE.
C9. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 IN FLAT SHEETS. LAP ONE AND ONE-HALF SQUARES AT ALL JOINTS AND TIE AT 3'-0" o.c. AT SLAB ON GRADE, PLACE WELDED WIRE FABRIC ON SLAB BOLSTERS WITH SOIL PLATES SPACED AT 3'-0" o.c. EACH WAY.
C10. PROVIDE REINFORCING STEEL DETAILING, LAP SPLICES, EMBEDMENTS, BAR SUPPORTS, SPACERS, AND ACCESSORIES AS RECOMMENDED IN THE "ACI DETAILING MANUAL 2004". ACCESSORIES, SUCH AS SLAB BOLSTERS AND BEAM AND SLAB CHAIRS IN CONTACT WITH EXPOSED SURFACES, SHALL BE ZINC COATED AND PLASTIC TYPED.
C11. REINFORCING STEEL DETAILS NOT SHOWN ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH THE "ACI DETAILING MANUAL 2004".
C12. CLEAR CONCRETE COVER FOR REINFORCING BARS OR WELDED WIRE FABRIC SHALL CONFORM TO THE FOLLOWING, UNLESS NOTED:
A. FOOTINGS: 3"
B. FOUNDATION WALLS: 1-1/2"
C. PILASTERS: 1-1/2" TO TIES
D. PIERS: 1-1/2" TO TIES
E. INTERIOR SLABS ON GRADE: MID-DEPTH
F. EXTERIOR SLABS ON GRADE: MID-DEPTH
G. BEAMS: 1-1/2" TO STIRRUPS
H. STRUCTURAL SLABS: 1" TOP & BOTTOM
I. TOPPING ON METAL DECK: 1" FROM TOP
C13. SET AND TIE ALL REINFORCING STEEL BEFORE PLACING CONCRETE. SETTING DOWELS AND REINFORCING STEEL INTO WET CONCRETE IS PROHIBITED.
C14. NO REINFORCING STEEL SHALL BE CUT OR OMITTED IN THE FIELD BECAUSE OF CONFLICT WITH SLEEVES, DUCT OPENINGS, OR RECESSES. REINFORCING STEEL MAY BE MOVED ASIDE WITHOUT CHANGE IN LEVEL, WITH THE APPROVAL OF THE ARCHITECT.
C15. NO CHASES, RECESS, OPENINGS, OR SLEEVES SHALL BE INSTALLED IN CONCRETE WITHOUT APPROVAL OF THE ARCHITECT.
C16. NO CONDUITS SHALL BE PLACED IN CONCRETE SLABS ON METAL DECK.
C17. KEYS SHALL BE A MINIMUM OF 2" x 4" WITH BEVELED SIDES, UNLESS NOTED OTHERWISE.
C18. DOWELS AND ANCHOR RODS SHALL BE SET BY TEMPLATE. SET EMBEDDED ITEMS FOR CONNECTION OF OTHER WORK ACCURATELY.
C19. HORIZONTAL CONSTRUCTION JOINTS SHALL BE AS INDICATED ON THE DRAWINGS. VERTICAL CONSTRUCTION JOINTS SHALL BE APPROVED BY THE ARCHITECT. CONSTRUCTION JOINTS SHALL BE FORMED WITH A STANDARD KEY AND ALL REINFORCING STEEL EXTENDED A MINIMUM OF 40 DIAMETERS, UNLESS NOTED. ALL CONSTRUCTION JOINTS BELOW GRADE SHALL HAVE CONTINUOUS BENTONITE WATERSTOPS.
C20. CONSTRUCTION AND CONTROL JOINT LOCATIONS OTHER THAN THOSE SHOWN ON THE DRAWINGS MAY BE PERMITTED SUBJECT TO THE PRIOR APPROVAL OF THE ARCHITECT. EXPANSION JOINT LOCATIONS ARE MANDATORY AS SHOWN.
C21. SEE ARCHITECTURAL AND SITE DRAWINGS FOR FINISHES, DEPRESSIONS, REGLETS, NOTCHES, AND OTHER ARCHITECTURAL FEATURES.
C22. PROVIDE CONCRETE PADS FOR MECHANICAL EQUIPMENT ACCORDING TO THE REQUIREMENTS OF THE MANUFACTURER AND IN ACCORDANCE WITH THE TYPICAL DETAILS. COORDINATE LOCATIONS WITH M.E.P. WORK.
C23. PROVIDE SEALANT FOR ALL EXPOSED-TO-VIEW CONSTRUCTION JOINTS, CONTROL JOINTS, AND SHEAR KEYS.
C24. EXPOSED EDGES OF CONCRETE ELEMENTS SHALL HAVE A 1-INCH CHAMFER.
C25. NOT ALL OPENINGS THROUGH CONCRETE SLABS AND WALLS ARE SHOWN ON STRUCTURAL DRAWINGS. OPENINGS INDICATED, OR ANY ADDITIONAL OPENINGS OR INSERTS REQUIRED, SHALL BE VERIFIED WITH RESPECTIVE TRADES PRIOR TO PLACING CONCRETE.
C26. FLOOR SLABS SHALL BE PLACED TO THE REQUIRED ELEVATIONS, INCLUDING TOLERANCES FOR FLATNESS AND LEVELNESS. SLAB THICKNESSES INDICATED ARE MINIMUM. QUANTITY OF CONCRETE USED SHALL TAKE INTO ACCOUNT THE DEFLECTIONS OF SUPPORTING STRUCTURAL MEMBERS AND FORMS.

UNIT MASONRY (SECTION 042200)

- M1. CONCRETE MASONRY CONSTRUCTION WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS AND COMMENTARY FOR MASONRY STRUCTURES (ACI 530/530R - 02)" AND "SPECIFICATIONS FOR MASONRY STRUCTURES AND RELATED COMMENTARIES (ACI 530/530R - 08)". CONCRETE MASONRY WALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH LOW LIFT GROUTING METHOD.
M2. CONCRETE MASONRY STRENGTH (fm) SHALL NOT BE LESS THAN 1500 PSI WITH SPECIAL INSPECTION.
M3. CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO ASTM C90, NORMAL WEIGHT, TYPE 1 AND TO NCMA "REQUIREMENTS FOR LOAD BEARING CONCRETE MASONRY". COMPRESSIVE STRENGTH SHALL BE AS REQUIRED FOR SPECIFIED CONCRETE MASONRY STRENGTH (fm), BUT NOT LESS THAN 1900 PSI FOR THE AVERAGE OF 3 UNITS OR 1700 PSI FOR AN INDIVIDUAL UNIT, BASED ON THE AVERAGE NET AREA.
M4. MORTAR FOR REINFORCED CMU SHALL CONFORM TO ASTM C270, TYPE M OR S, AND HAVE A 28-DAY COMPRESSIVE STRENGTH EQUAL TO THE SPECIFIED CONCRETE MASONRY STRENGTH (fm), BUT NOT LESS THAN 1800 PSI.
M5. GROUT SHALL CONFORM TO ASTM C476, FINE TYPE, AND HAVE A 28-DAY COMPRESSIVE STRENGTH EQUAL TO THE SPECIFIED CONCRETE MASONRY STRENGTH (fm), BUT NOT LESS THAN 3000 PSI.
M6. GROUTING SHALL BE LIMITED TO A MAXIMUM WALL HEIGHT OF 4 FT PER LIFT.
M7. HORIZONTAL JOINT REINFORCEMENT SHALL CONFORM TO ASTM A82, LADDER TYPE, #9 WIRE. PROVIDE PREFABRICATED CORNERS AND TEES.
M8. MINIMUM HORIZONTAL JOINT REINFORCEMENT FOR WALLS AND PARTITIONS SHALL BE #9 WIRE SPACED VERTICALLY AT 16" o.c. AT A MINIMUM. PROVIDE A BOND BEAM WITH 2-#6 HORIZONTAL AND CONTINUOUS BARS, AT EACH FLOOR LEVEL AND AT THE TOP OF WALL.
M9. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED BARS, LAP ALL CONTINUOUS BARS A MINIMUM OF 48 DIAMETERS.
M10. STAIR AND ELEVATOR SHAFT WALLS SHALL BE FULLY GROUTED SOLID AND IN ADDITION TO HORIZONTAL REINFORCEMENT SHALL BE REINFORCED VERTICALLY WITH A MINIMUM OF #5 BARS AT 32" O.C., UNLESS NOTED.
M11. THE TOP OF CMU WALLS AND PARTITIONS SHALL BE ANCHORED AS SHOWN IN THE TYPICAL DETAILS AND THE SECTIONS.
M12. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR REQUIRED FIRE RATINGS.

STRUCTURAL STEEL FRAMING (SECTION 051200)

- S1. STRUCTURAL STEEL WORK SHALL CONFORM TO THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - 360-05" AND AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES - 2005", AS MODIFIED BY THE SPECIFICATIONS.
S2. WELDING SHALL BE IN ACCORDANCE WITH AWS "D1.1 2006-STRUCTURAL WELDING CODE-STEEL".
S3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING, UNLESS NOTED:
A. PLATES ASTM A36 Fy = 36KSI
B. STRUCTURAL TUBING ASTM A500 GRADE B Fy = 46KSI (SQUARE & RECTANGULAR TUBING), Fy = 42KSI (ROUND TUBING)
C. ALL OTHER SHAPES ASTM A992 OR A588 GRADE B Fy = 50KSI
S4. CONNECTIONS MAY BE BOLTED OR WELDED, UNLESS SPECIFICALLY NOTED OTHERWISE. CONNECTIONS SHALL BE DESIGNED AND DETAILED IN ACCORDANCE WITH AISC STANDARDS, USING THE ASD METHOD.
S5. CONNECTIONS SHALL BE WELDED TO CONFORM TO ASTM A233, E70 SERIES, OR BOLTED TO CONFORM TO ASTM A325, TYPE N BOLTS.
S6. PROVIDE 3/4" DIAMETER MINIMUM HEADED TYPE ANCHOR RODS AT COLUMNS AND POSTS, UNLESS NOTED OTHERWISE.
S7. FURNISH AND INSTALL ONE WASHER AND ONE HEAVY HEX NUT WITH ALL ANCHOR RODS, UNLESS NOTED.
S8. SIMPLY SUPPORTED BEAM-TO-BEAM CONNECTIONS SHALL BE DOUBLE ANGLE TYPE IN CONFORMANCE WITH THE AISC "MANUAL OF STEEL CONSTRUCTION", UNLESS SPECIFICALLY NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS.
S9. PROVIDE A 1/4" THICK LEVELING PLATE UNDER EACH COLUMN BASE PLATE FOR USE IN ALIGNING ANCHOR RODS AND BASE PLATES. LEVELING PLATE SHALL BE SET AND GROUTED WITH AN APPROVED NON-SHINK, NON-METALLIC GROUT. GROUT SHALL HAVE ATTAINED DESIGN STRENGTH BEFORE ERECTION OF COLUMN.
S10. PROVIDE A 1/4" THICK MINIMUM CAP PLATE WELDED AT TOP OF HSS COLUMNS, UNLESS NOTED.
S11. SPLICING STRUCTURAL MEMBERS WHERE NOT DETAILED ON DRAWINGS IS PROHIBITED WITHOUT PRIOR APPROVAL OF ARCHITECT.
S12. STRUCTURAL STEEL EXPOSED TO THE WEATHER IN THE FINISHED PROJECT SHALL BE HOT DIP GALVANIZED TO CONFORM TO ASTM A123.
S13. STRUCTURAL STEEL EXPOSED TO VIEW IN THE COMPLETED PROJECT SHALL BE ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (A.E.S.S.). REFER TO THE SPECIFICATIONS FOR SPECIFIC REQUIREMENTS.
S14. REFER TO THE SPECIFICATION FOR PAINTING AND SURFACE PREPARATION REQUIREMENTS.
S15. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE NEW STRUCTURE FOR WIND AND CONSTRUCTION LOADS. TEMPORARY SUPPORTS SHALL REMAIN IN PLACE UNTIL ALL ELEMENTS REQUIRED FOR STABILITY OF THE STEEL FRAME ARE COMPLETED.

SHEAR CONNECTORS (SECTION 051220)

- SC1. SHEAR CONNECTORS SHALL BE HEADED STUDS CONFORMING TO ASTM A108, GRADES 1010, 1015, OR 1020.
SC2. SHEAR CONNECTORS SHALL BE 3/4" DIAMETER WITH A LENGTH EQUAL TO TOTAL SLAB THICKNESS MINUS 1 1/2 INCHES. THE NUMBER OF SHEAR CONNECTORS REQUIRED PER BEAM IS INDICATED THUS (X) ON THE DRAWINGS. INSTALL CONNECTORS UNIFORMLY ALONG THE LENGTH OF THE BEAM UNLESS NOTED. INSTALL AT LEAST ONE CONNECTOR PER FOOT OF BEAM LENGTH ON ALL BEAMS SUPPORTING CONCRETE SLABS.

STEEL JOIST FRAMING (SECTION 052100)

- J1. STEEL JOIST WORK SHALL CONFORM TO THE LATEST EDITION OF SJI "STANDARD SPECIFICATIONS, LOAD TABLES, AND WEIGHT TABLES FOR STEEL JOISTS AND JOIST GIRDERS".
J2. PROVIDE BOTTOM CHORD EXTENSIONS WITH SLIP CONNECTIONS AT COLUMNS FOR LATERAL STABILITY.
J3. PROVIDE TOP AND BOTTOM CHORD EXTENSIONS AND CEILING EXTENSIONS AS INDICATED ON THE DRAWINGS.
J4. SUSPENDED LOADS SHALL BE LOCATED AT THE TOP CHORD PANEL POINT OF JOIST. SUBMIT MANUFACTURER'S WEIGHT DATA AND UNIT LOCATION FOR APPROVAL OF THE ARCHITECT PRIOR TO PROCEEDING.
J5. OPEN WEB STEEL JOISTS (K-SERIES) SHALL BE WELDED TO SUPPORTING STRUCTURAL STEEL WITH A 3/16" MINIMUM FILLET WELD, 2 1/2" MINIMUM LENGTH, EACH SIDE OF JOIST SEAT.
J6. LONGSPAN STEEL JOISTS (LH-SERIES) AND DEEP LONGSPAN STEEL JOISTS (DLH-SERIES) SHALL BE WELDED TO SUPPORTING STRUCTURAL STEEL WITH A 1/4" MINIMUM FILLET WELD, 3" MINIMUM LENGTH, EACH SIDE OF JOIST SEAT.
J7. INSTALL BOLTED TIE JOISTS ON ALL COLUMN LINES. TIE JOISTS TO BE WELDED WITH THE WELDS MENTIONED ABOVE AFTER BUILDING HAS BEEN PLUMBED.
J8. BRIDGING SHALL BE IN ACCORDANCE WITH THE SJI STANDARD SPECIFICATIONS, UNLESS NOTED OTHERWISE ON THE DRAWINGS. BOTTOM CHORD BRIDGING SHALL BE PROVIDED AT THE FIRST BOTTOM CHORD PANEL OF ROOF STEEL JOISTS.
J9. ROOF STEEL JOISTS SHALL BE DESIGNED FOR A NET UPLIFT OF XX POUNDS PER SQUARE FOOT AT INTERIOR ROOF ZONES AND XX POUNDS PER SQUARE FOOT AT EXTERIOR ROOF ZONES.
J10. ALL JOISTS SHALL BE CAMBERED WITH A STANDARD CAMBER IN ACCORDANCE WITH THE SJI STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE DRAWINGS.
J11. STEEL JOISTS SHALL HAVE PARALLEL CHORDS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
J12. STEEL JOISTS SHALL EXTEND A MINIMUM OF 1" BEYOND THE CENTER OF THE SUPPORTING STRUCTURAL STEEL BEAM, UNLESS NOTED.

STEEL DECK (SECTION 053100)

- D1. STEEL DECK WORK SHALL CONFORM TO "SPECIFICATION FOR DESIGN OF LIGHT GAUGE COLD-FORMED STEEL STRUCTURAL MEMBERS (AIS1)", "STEEL DECK INSTITUTE DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS, AND ROOF DECKS", "STRUCTURAL STEEL WELDING CODE - STEEL (AWS D1.1)", AND "STRUCTURAL WELDING CODE - SHEET STEEL (AWS D1.3)".
D2. COMPOSITE STEEL FLOOR DECK SHALL BE MADE FROM STEEL CONFORMING TO ASTM A653 - MINIMUM GRADE 40 (Fy = 40 KSI) AND GALVANIZED IN ACCORDANCE WITH ASTM A653, COATING CLASS G60. COMPOSITE STEEL FLOOR DECK TYPE, DEPTH, AND GAUGE SHALL BE AS NOTED ON THE DRAWINGS.
D3. STEEL ROOF DECK SHALL BE MADE FROM STEEL CONFORMING TO ASTM A653 - GRADE 33 (Fy = 33 KSI) AND GALVANIZED IN ACCORDANCE WITH ASTM A653, COATING CLASS G60. STEEL ROOF DECK TYPE, DEPTH, AND GAUGE SHALL BE AS NOTED ON THE DRAWINGS.
D4. PROVIDE CONTINUOUS POUR STOP ANGLES WITH RETURN LIP AT BUILDING PERIMETER AND AT INTERIOR OPENINGS. REFER TO THE SCHEDULE FOR GAUGE.
D5. COMPOSITE STEEL FLOOR DECK SHALL BE ATTACHED TO THE SUPPORTING STRUCTURE WITH THE FOLLOWING MINIMUM REQUIREMENTS:
A. PANEL ENDS AND END LAPS 5/8"Ø PUDDLE WELD AT 12" o.c. MAX.
B. INTERMEDIATE SUPPORTS 5/8"Ø PUDDLE WELD AT 12" o.c. MAX.
C. LONGITUDINAL EDGES AT SIDE SUPPORTS 5/8"Ø PUDDLE WELD AT 12" o.c. MAX.
D. SIDE LAPS OF ADJACENT UNITS BUTTON PUNCHED AT 24" o.c. MAX.
D6. STEEL ROOF DECK SHALL BE ATTACHED TO THE SUPPORTING STRUCTURE WITH THE FOLLOWING MINIMUM REQUIREMENTS:
A. PANEL ENDS AND END LAPS 5/8"Ø PUDDLE WELD AT EACH RIB
B. INTERMEDIATE SUPPORTS 5/8"Ø PUDDLE WELD AT EACH RIB
C. LONGITUDINAL EDGES AT SIDE SUPPORTS 5/8"Ø PUDDLE WELD AT 12" o.c. MAX.
D. SIDE LAPS OF ADJACENT UNITS #12 SCREWS AT 24" o.c. MAX.
D7. CELLULAR ACOUSTIC STEEL ROOF DECK SHALL BE ATTACHED TO THE SUPPORTING STRUCTURE WITH THE FOLLOWING MINIMUM REQUIREMENTS:
A. PANEL ENDS AND END LAPS 5/8"Ø PUDDLE WELD AT EACH RIB
B. INTERMEDIATE SUPPORTS 5/8"Ø PUDDLE WELD AT EACH RIB
C. LONGITUDINAL EDGES AT SIDE SUPPORTS 5/8"Ø PUDDLE WELD AT 12" o.c. MAX.
D. SIDE LAPS OF ADJACENT UNITS 1-1/2" SEAM WELD AT 24" o.c. MAX.

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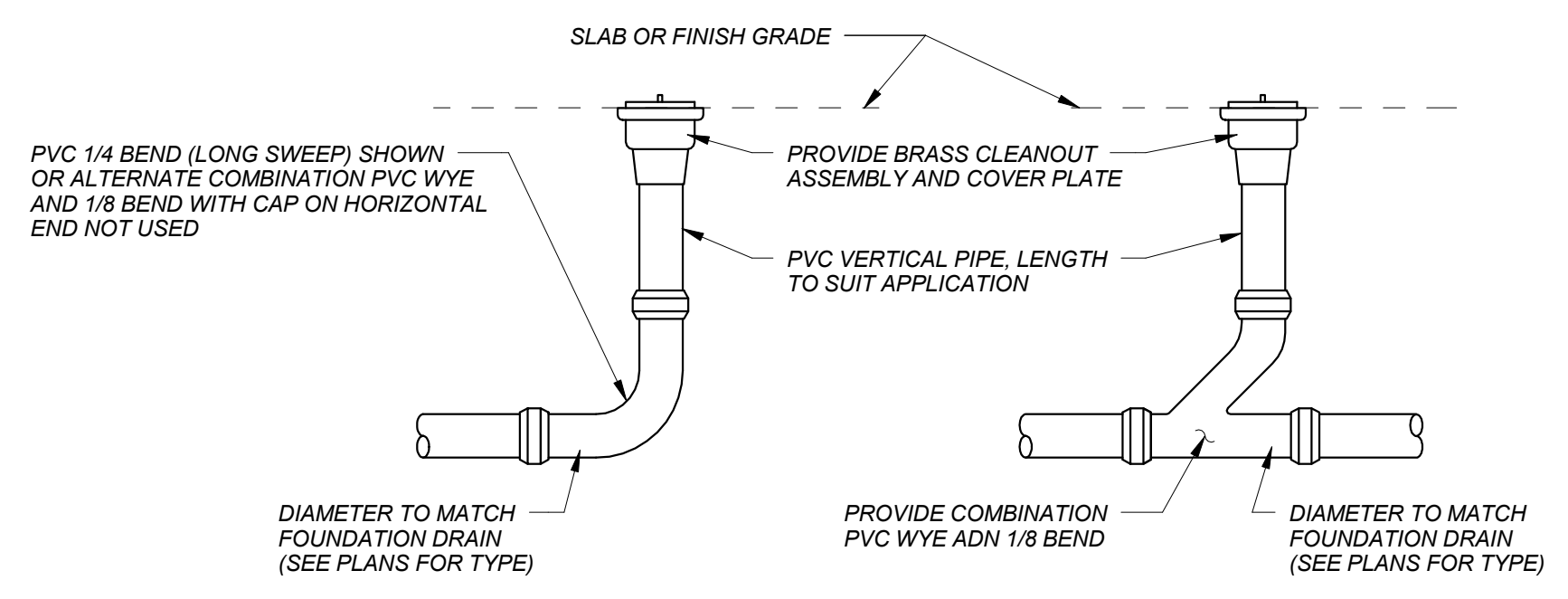
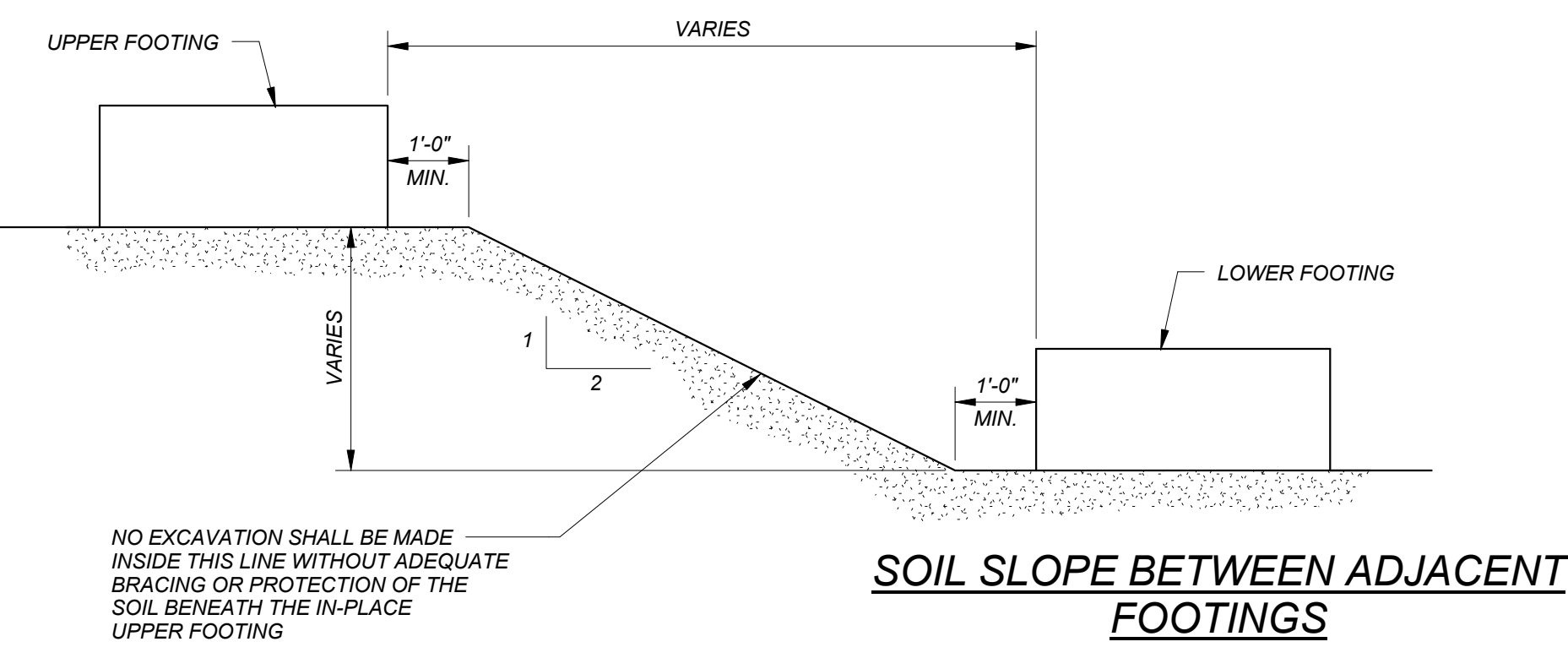
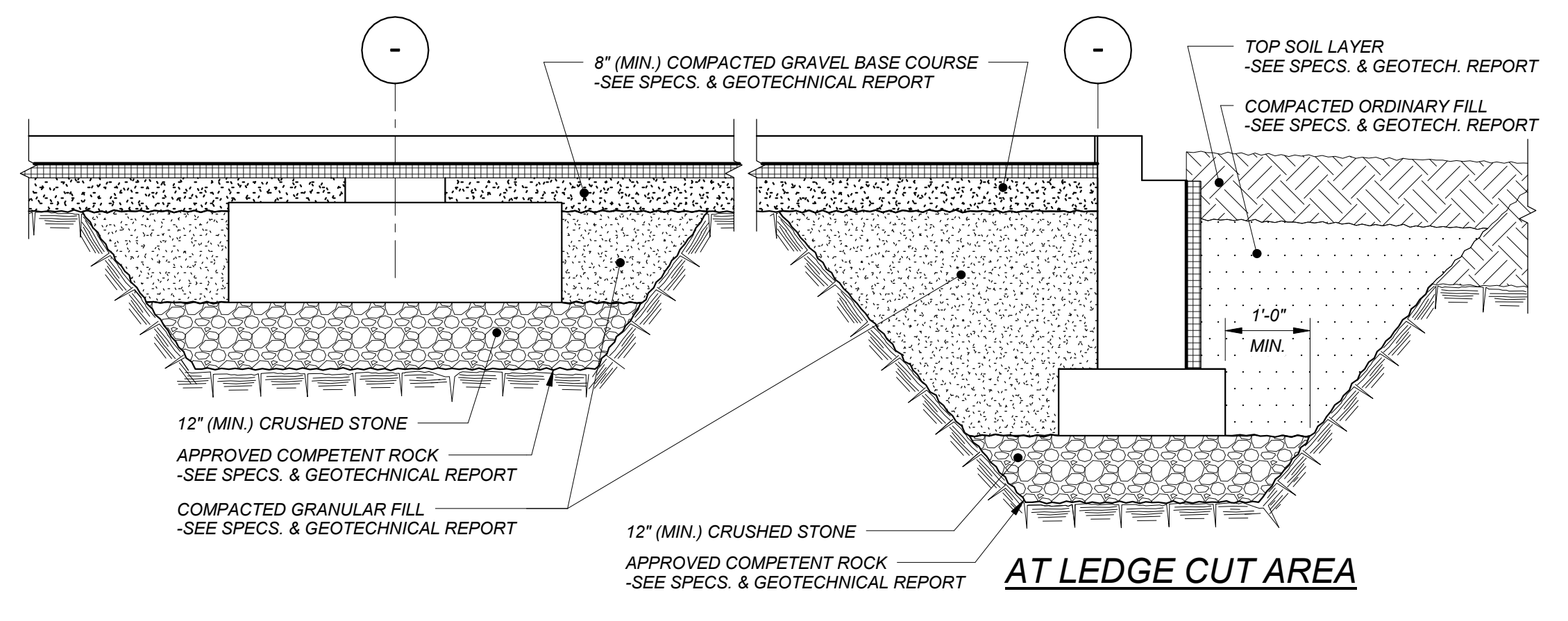
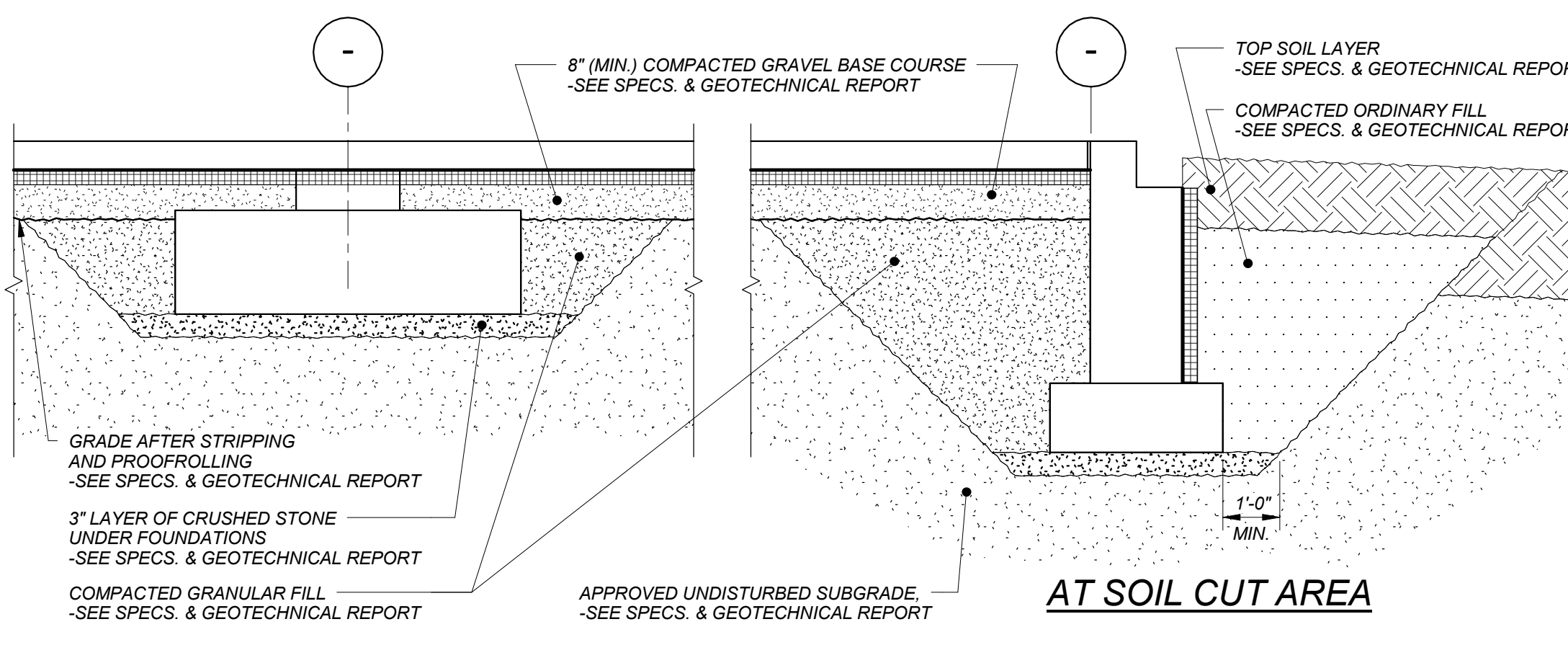
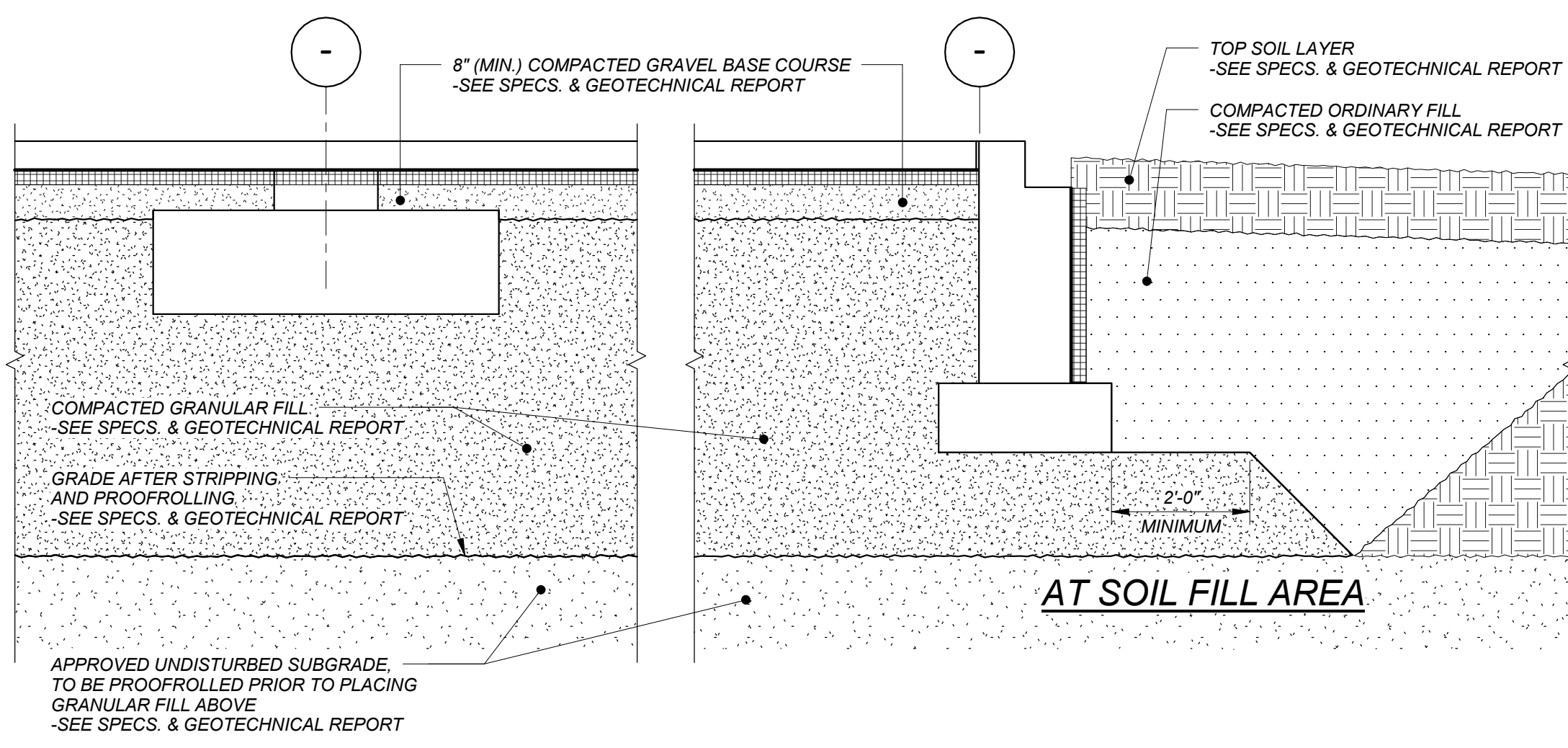
Registration: Design Development Submission

Project Name and Address: Concord-Carlisle Regional High School
500 Walden Street
Concord, MA 01742

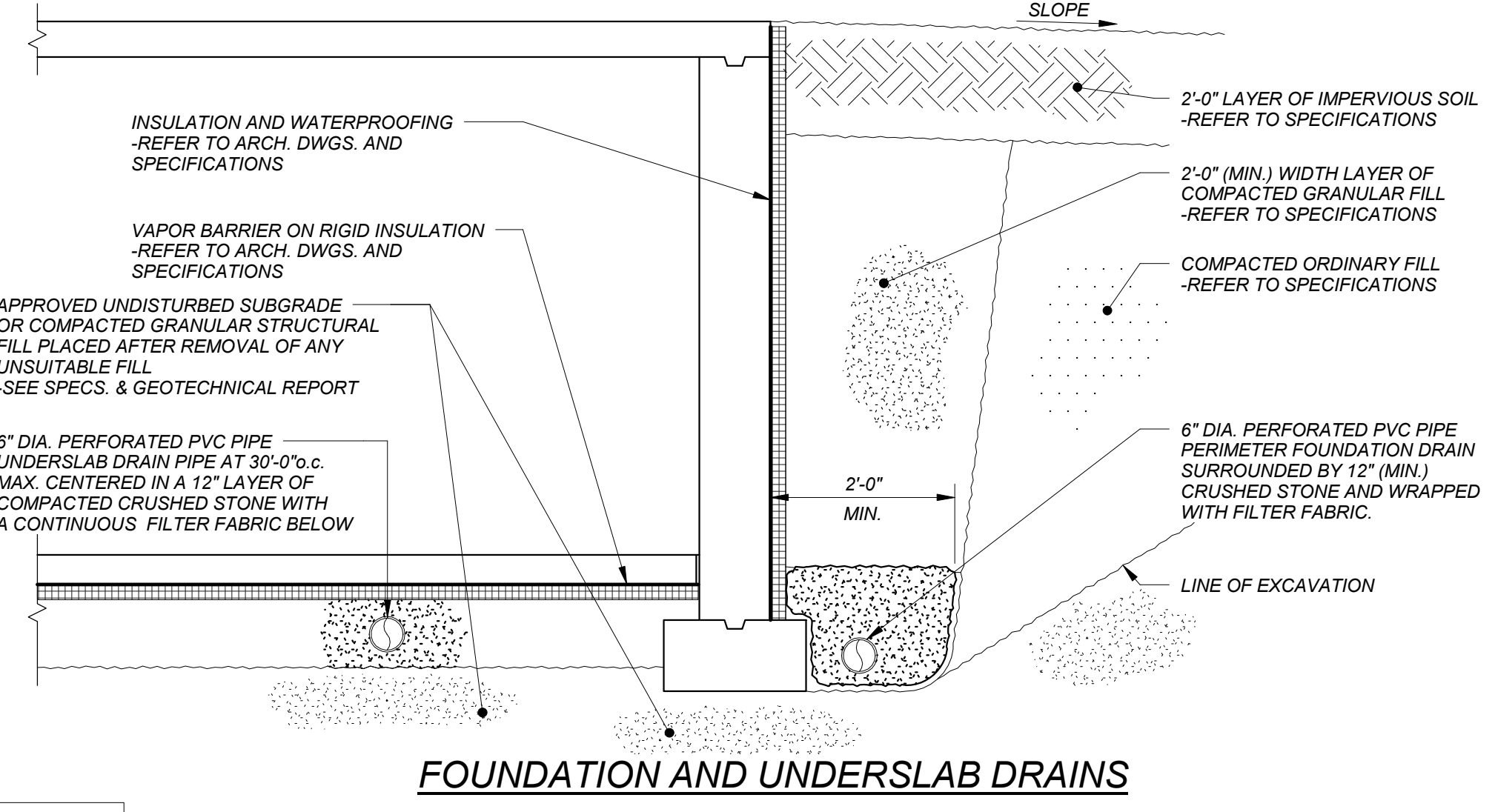
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Title: General Notes
Date: August 15, 2012
Scale: 1" = 1'-0"
Drawn: CDM
Checked: MAP

Project No.: 1102.00
Drawing No.: S1.0
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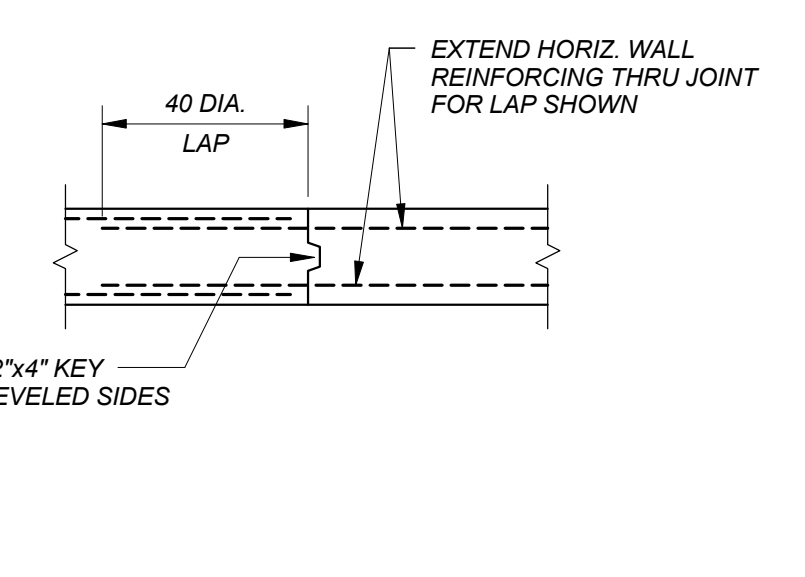
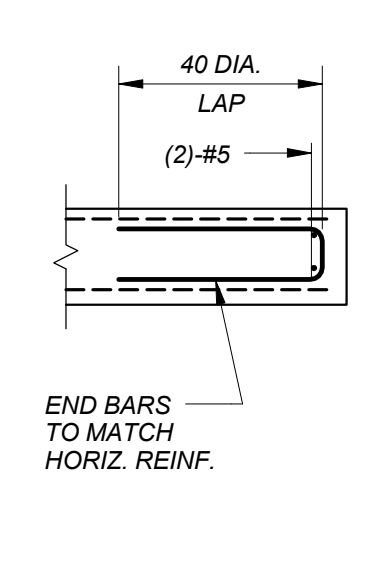
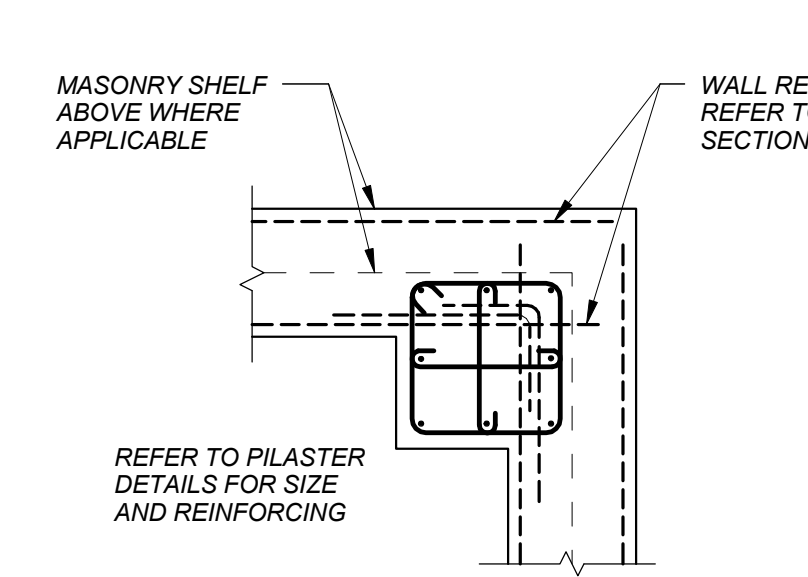
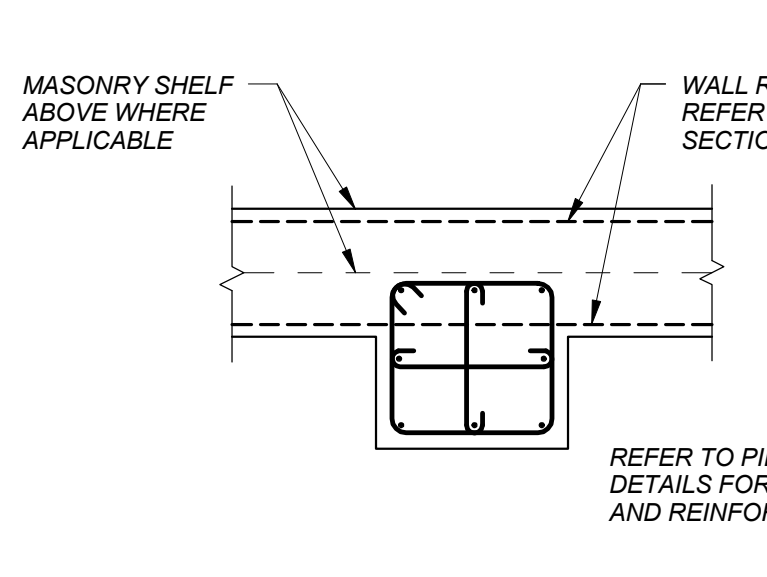
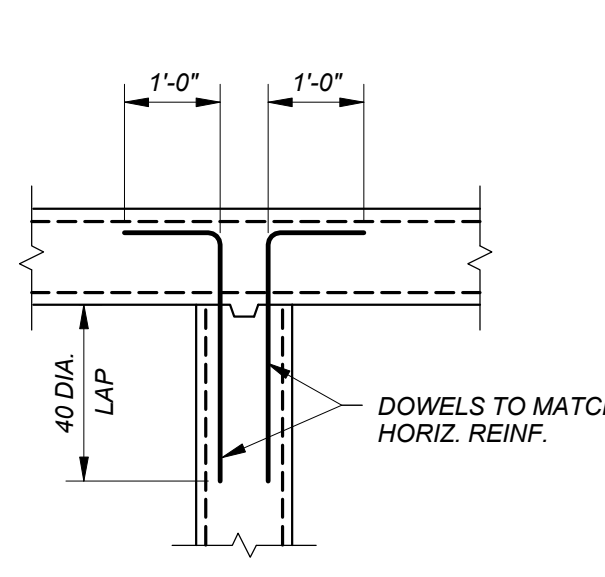
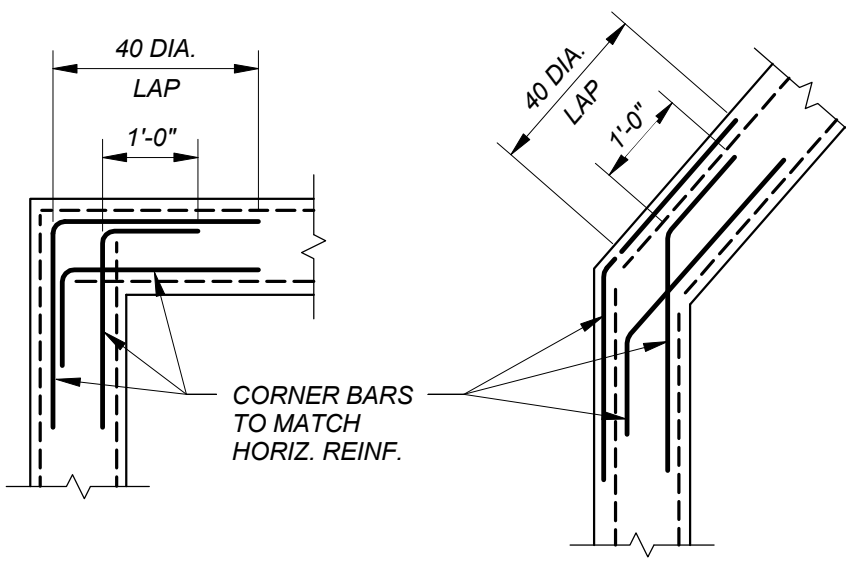
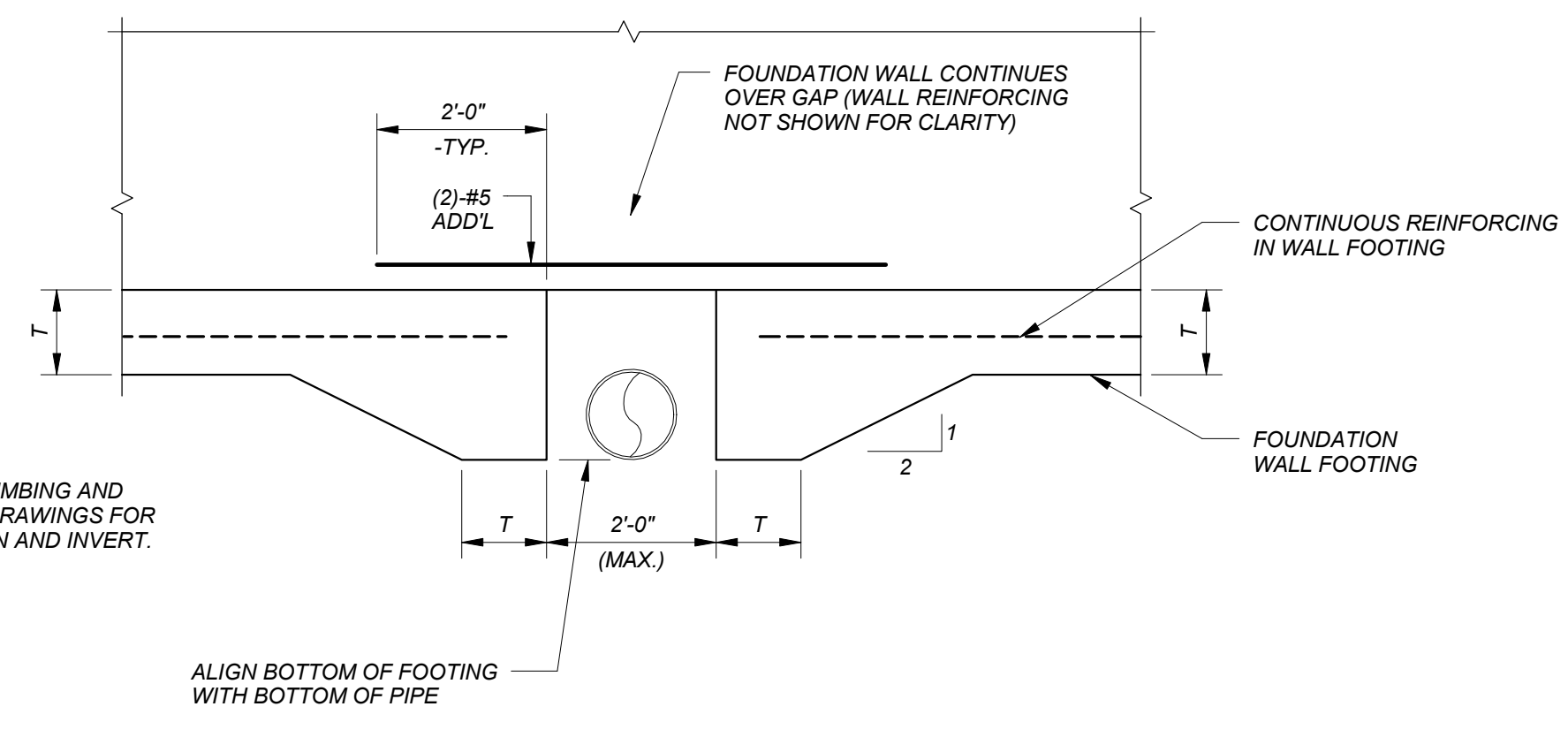
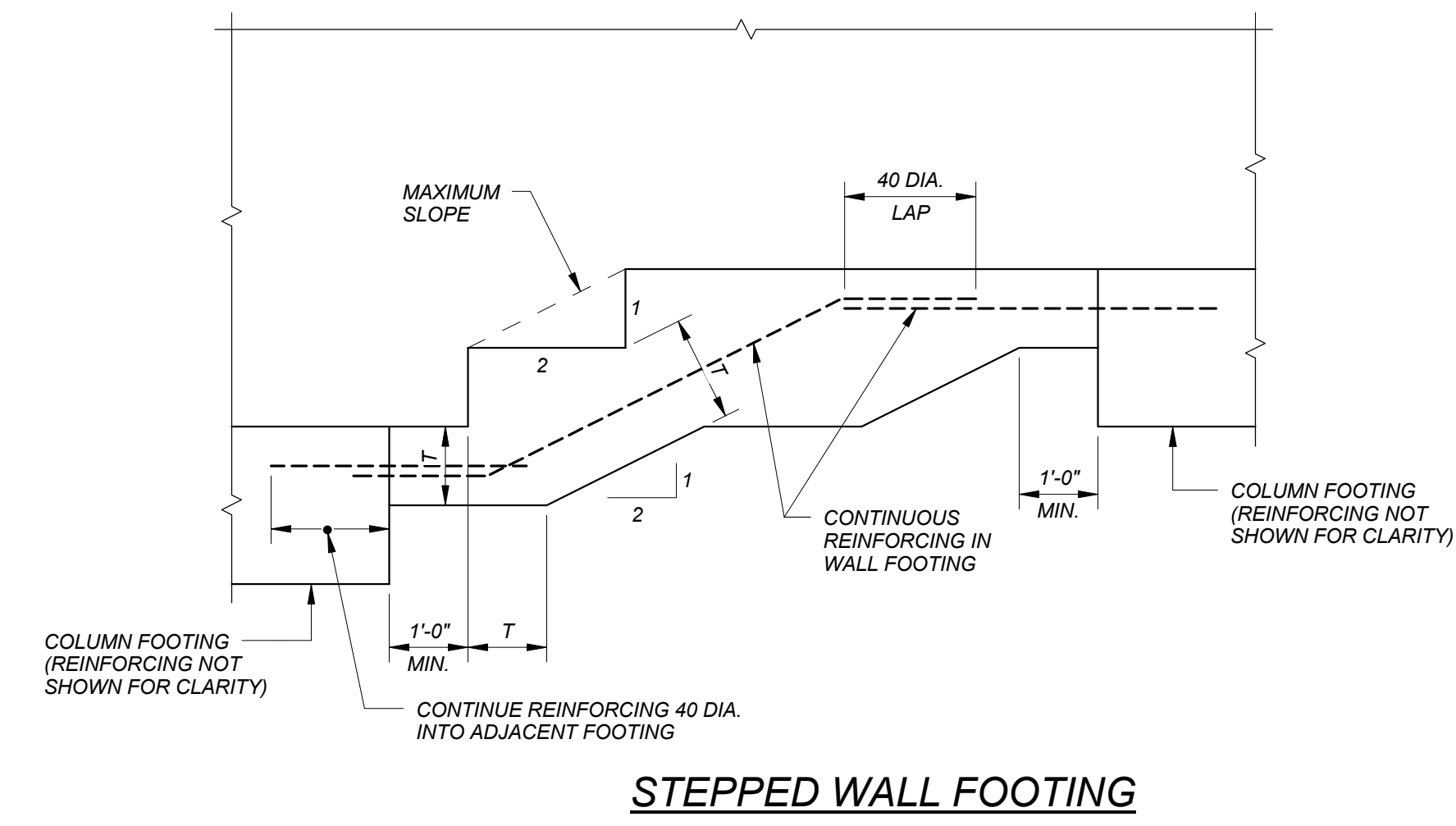
- NOTES:**
- GENERAL CONTRACTOR SHALL PROVIDE THE NECESSARY BRACING FOR THE CORRECT PLACEMENT AND TO PREVENT DAMAGE OF THE FOUNDATION DRAIN AND CLEANOUT SYSTEM.
 - PIPING AND CLEANOUT MATERIALS SHALL MATCH MATERIALS OF FOUNDATION DRAIN UNLESS NOTED OTHERWISE.



- EARTHWORK NOTES: (ALL SECTIONS)**
- REMOVE ALL VEGETATION, TOPSOIL, SUBSOIL, AND EXISTING FILL TO TOP OF UNDISTURBED GLACIAL TILL OR LEDGE FROM BELOW PROPOSED BUILDING AREA (WITH PROJECTIONS AS SHOWN ABOVE) AND AS INDICATED IN THE SPECIFICATIONS.
 - PROOFROLL/COMPACT EXISTING SUBGRADE PRIOR TO THE PLACEMENT OF BACKFILL AND/OR FOOTING CONSTRUCTION. PLACE COMPACTED GRANULAR FILL AS SPECIFIED IN THE SPECIFICATIONS WITHIN THE PROPOSED BUILDING AREA (WITH PROJECTIONS SHOWN ABOVE), UP TO THE BOTTOM OF THE PROPOSED SLAB BASE COURSE LEVEL.
 - WHERE BEDROCK/FRACTURED-ROCK/LARGE BOULDER(S) ARE ENCOUNTERED AT THE BOTTOM OF FOUNDATION LEVELS, REMOVE THE BEDROCK/BOULDER TO AT LEAST ONE FOOT BELOW THE BOTTOM OF FOUNDATIONS AND REPLACE IT WITH COMPACTED CRUSHED STONE.
 - WHERE SILTY/CLAYEY SOILS ARE ENCOUNTERED AT FOUNDATION SUBGRADE, THE CONTRACTOR SHALL CONSTRUCT A WORKING MAT TO PREVENT DISTURBANCE OF FOUNDATION SUBGRADES. THE WORKING MAT SHALL CONSIST OF 3-INCHES OF CRUSHED STONE. ALL DISTURBED SUBGRADES SHALL BE OVER-EXCAVATED TO FIRM AND STABLE GROUND AND REPLACED BY LEAN CONCRETE.
 - PLACE A MINIMUM 8" LAYER OF COMPACTED GRAVEL FILL BELOW BUILDING SLAB FOR SLAB BASE COURSE.
 - REFER TO THE SPECIFICATIONS AND GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
 - REFER TO THE BORING AND TEST PIT LOGS FOR DESCRIPTION OF SUBSURFACE CONDITIONS AT THE LOCATIONS OF THE EXPLORATIONS.

THESE SOIL PROFILE DIAGRAMS, THAT ARE PROVIDED AS A GUIDE, ARE AN ADAPTATION OF THE GEOTECHNICAL DATA INCLUDED IN THE XXXX XX, XXXX REPORT PREPARED BY XXXX, INC. FILE NO. XXXXX AND SHOULD BE VERIFIED BY THE CONTRACTOR. ACTUAL CONDITIONS MAY VARY.

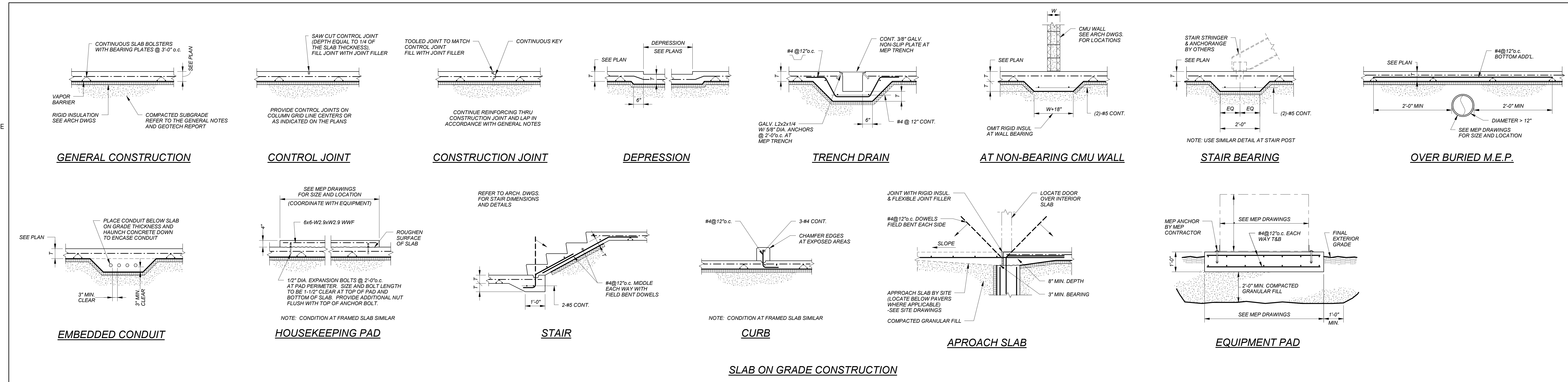
GENERAL EARTHWORK SCHEMATIC SECTIONS WITHIN PROPOSED BUILDING AREA
NO SCALE



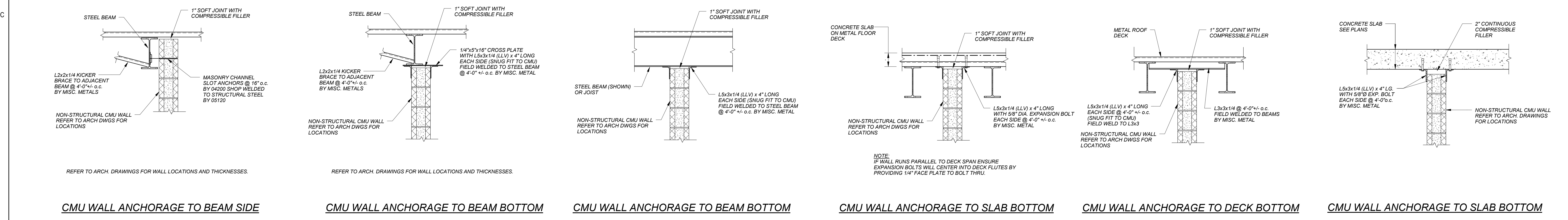
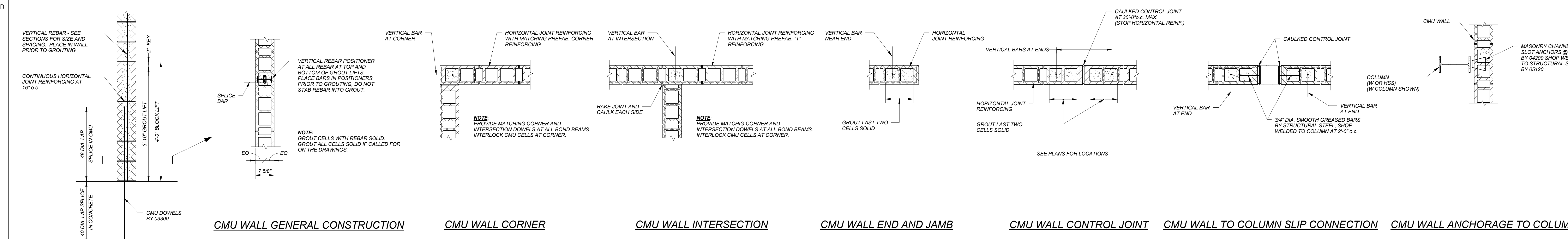
CONCRETE CONSTRUCTION

Architect: omrarchitects inc 543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer: FoleyBuhlRoberts & ASSOCIATES INC structural engineers T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St. Newton MA 02462	Registration: Design Development Submission	Project Name and Address: Concord-Carlisle Regional High School 500 Walden Street Concord, MA 01742	Issue Submissions: No.: Date: Description: 8/15/2012 Design Development Submission	Title: Typical Details I	Project No.: 1102.00 Drawing No.: S1.1 © omr architects inc
Date: August 15, 2012	Scale: 1/2" = 1'-0"	Drawn: CDM	Checked: MAP			

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SLAB ON GRADE CONSTRUCTION



LOOSE LINTEL SCHEDULE AT MASONRY
(BY MISC. METAL)

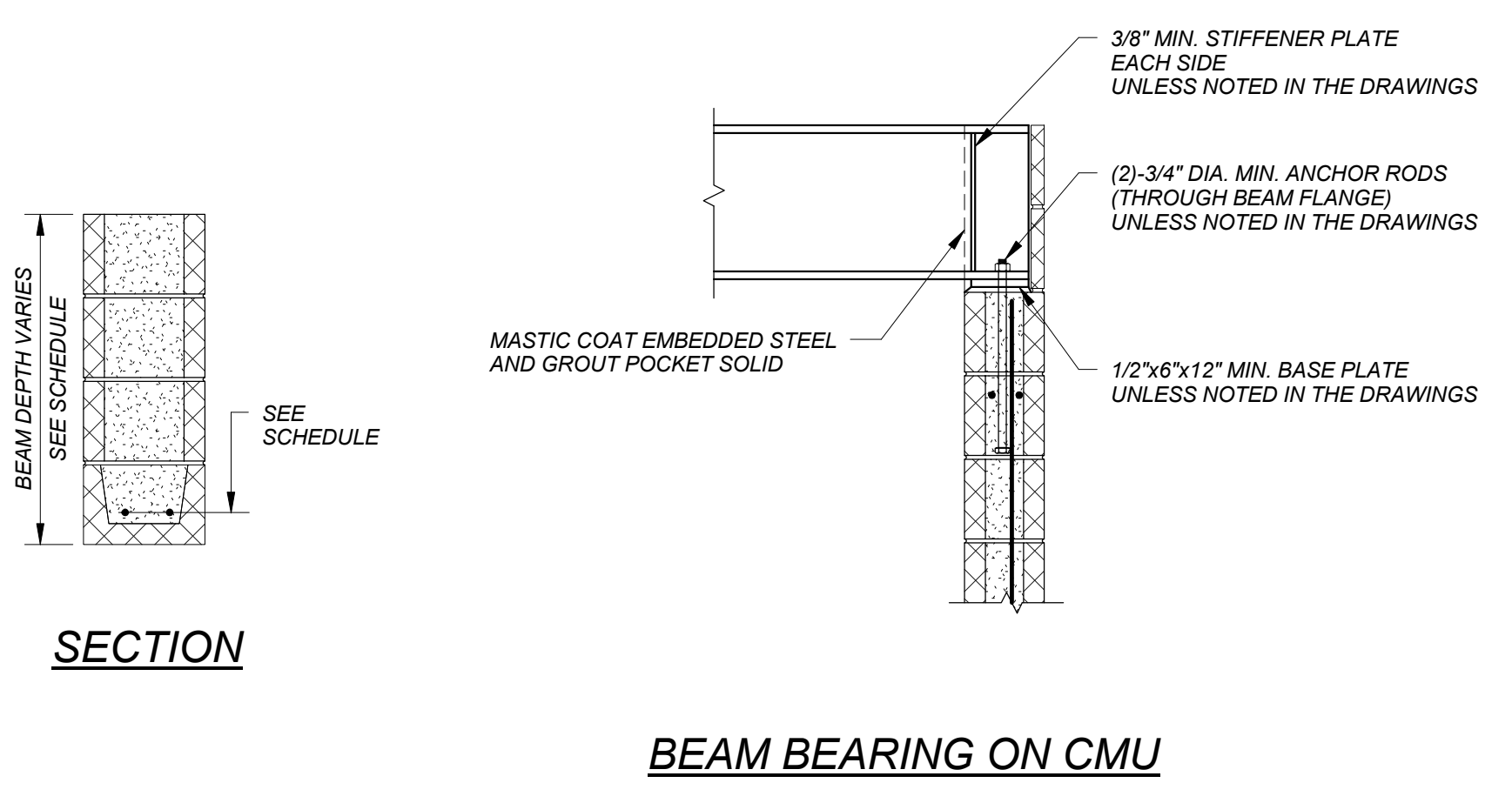
MASONRY OPENING	LINTEL SIZE	MIN. BEARING AT EACH END
UP TO 3'-0"	L3-1/2 x 3-1/2 x 5/16	8"
3'-1" TO 4'-6"	L4 x 3-1/2 x 5/16 (4" LEG VERT.)	8"
4'-7" TO 6'-0"	L5 x 3-1/2 x 3/8 (5" LEG VERT.)	8"
6'-1" TO 8'-0"	L6 x 3-1/2 x 3/8 (6" LEG VERT.)	8"

NOTES:
1. PROVIDE LINTELS OVER ALL OPENINGS (INCLUDING M.E.P. OPENINGS) EXCEPT WHERE LINTEL BLOCKS ARE PROVIDED.
2. PROVIDE ONE ANGLE FOR EACH 4" OF WALL THICKNESS. FOR 6" WALLS, PROVIDE A TEE OR BUILT UP SECTION WITH PROPERTIES EQUAL TO OR GREATER THAN 1.5 TIMES THE ANGLE PROPERTIES FOR A 4" WALL THICKNESS.
3. ALL EXTERIOR LINTELS SHALL BE GALVANIZED BY THE HOT DIP PROCESS.

CMU LINTEL BEAM SCHEDULE

MASONRY OPENING	DEPTH	REINFORCING
IN 8" WALLS		
UP TO 4'-0"	2 COURSES	2-#5
4'-1" TO 6'-0"	3 COURSES	2-#5
6'-1" TO 10'-0"	4 COURSES	2-#6
10'-1" TO 14'-0"	5 COURSES	2-#7
IN 12" WALLS		
UP TO 4'-0"	2 COURSES	2-#5
4'-1" TO 6'-0"	3 COURSES	2-#5
6'-1" TO 10'-0"	4 COURSES	2-#6
10'-1" TO 14'-0"	5 COURSES	2-#7

NOTES:
1. PLACE REINFORCING IN THE FIRST COURSE AND OPENING.
2. PROVIDE 12" OF BEARING EACH END ON SOLID GROUTED CMU.
3. PROVIDE TEMPORARY SHORING AS REQUIRED UNTIL LINTEL HAS REACHED FULL 28 DAY STRENGTH.



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Registration: **Design Development Submission**

Project Name and Address: **Concord-Carlisle Regional High School**
500 Walden Street
Concord, MA 01742

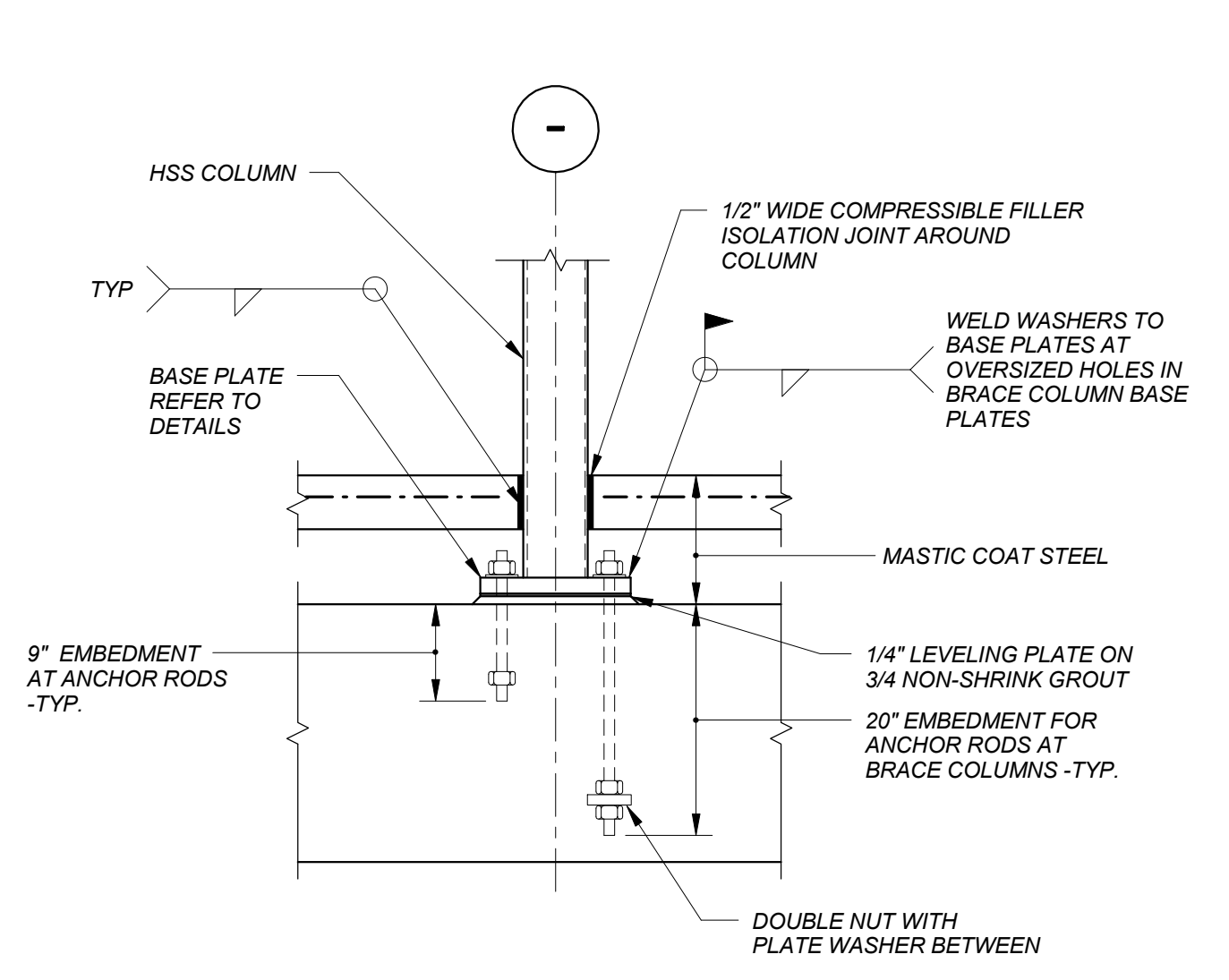
Issue Submissions:
No.: Date: Description:
8/15/2012 Design Development Submission

Title: **Typical Details II**

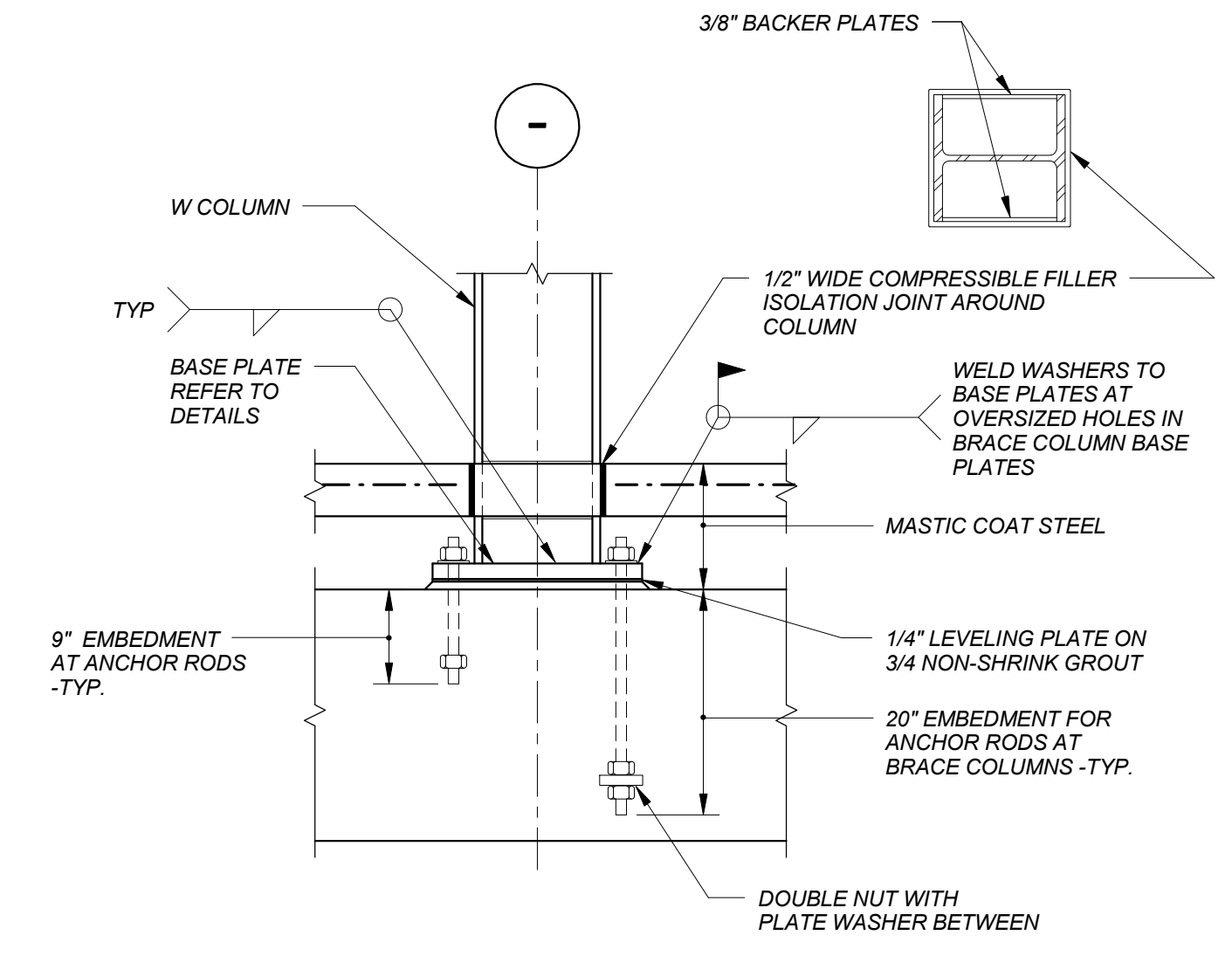
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Drawing No.: **S1.2**

Date: August 15, 2012 Scale: As indicated Drawn: CDM Checked: MAP

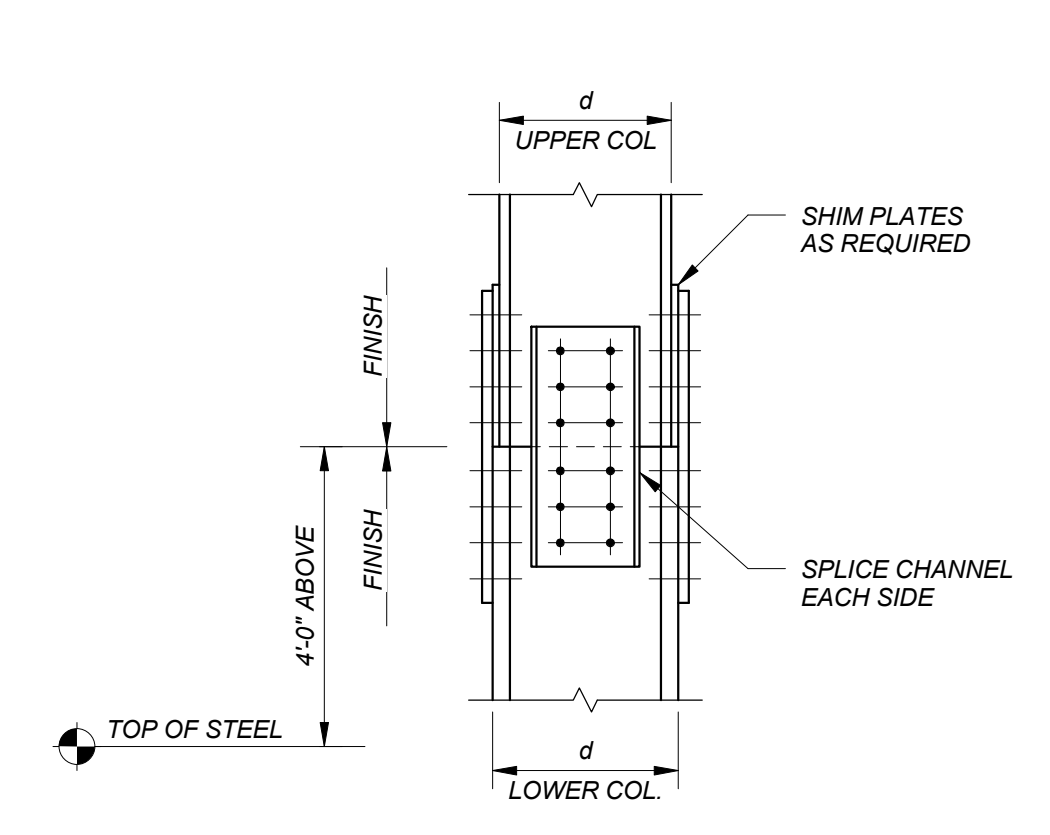
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HSS COLUMN BASE DETAIL



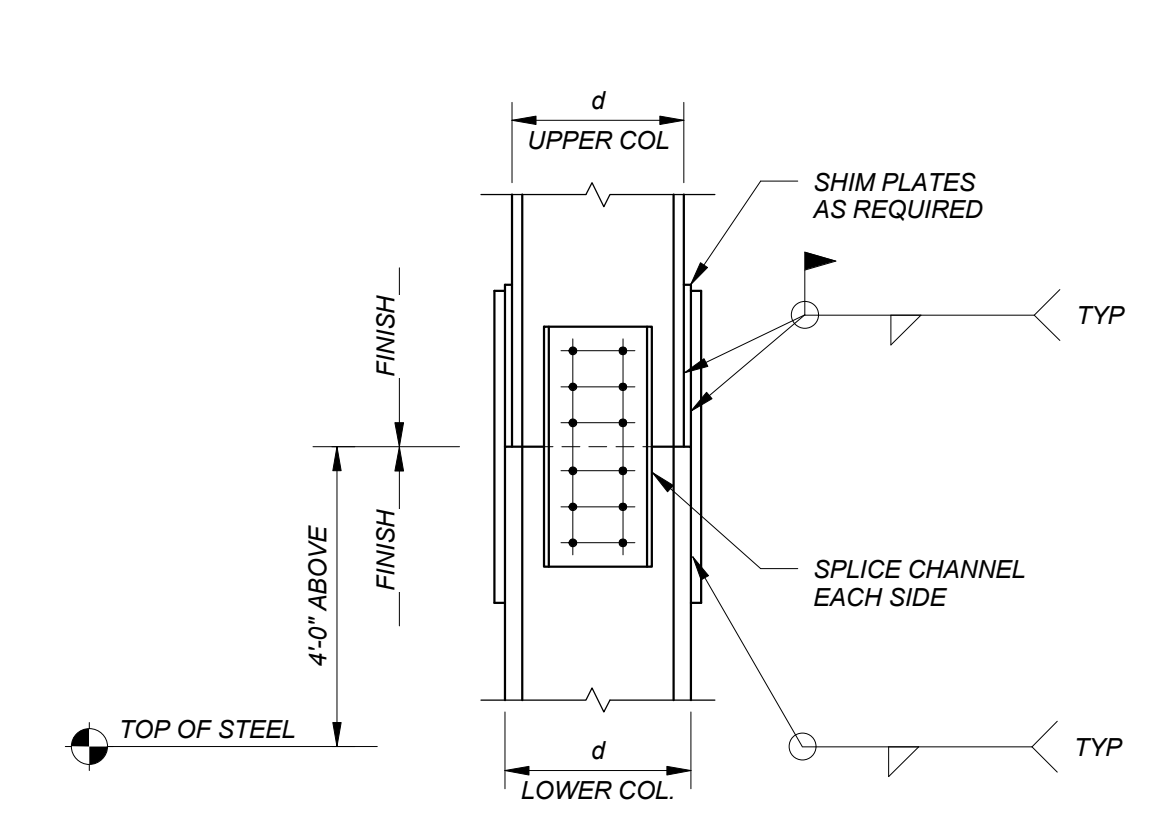
W COLUMN BASE DETAIL



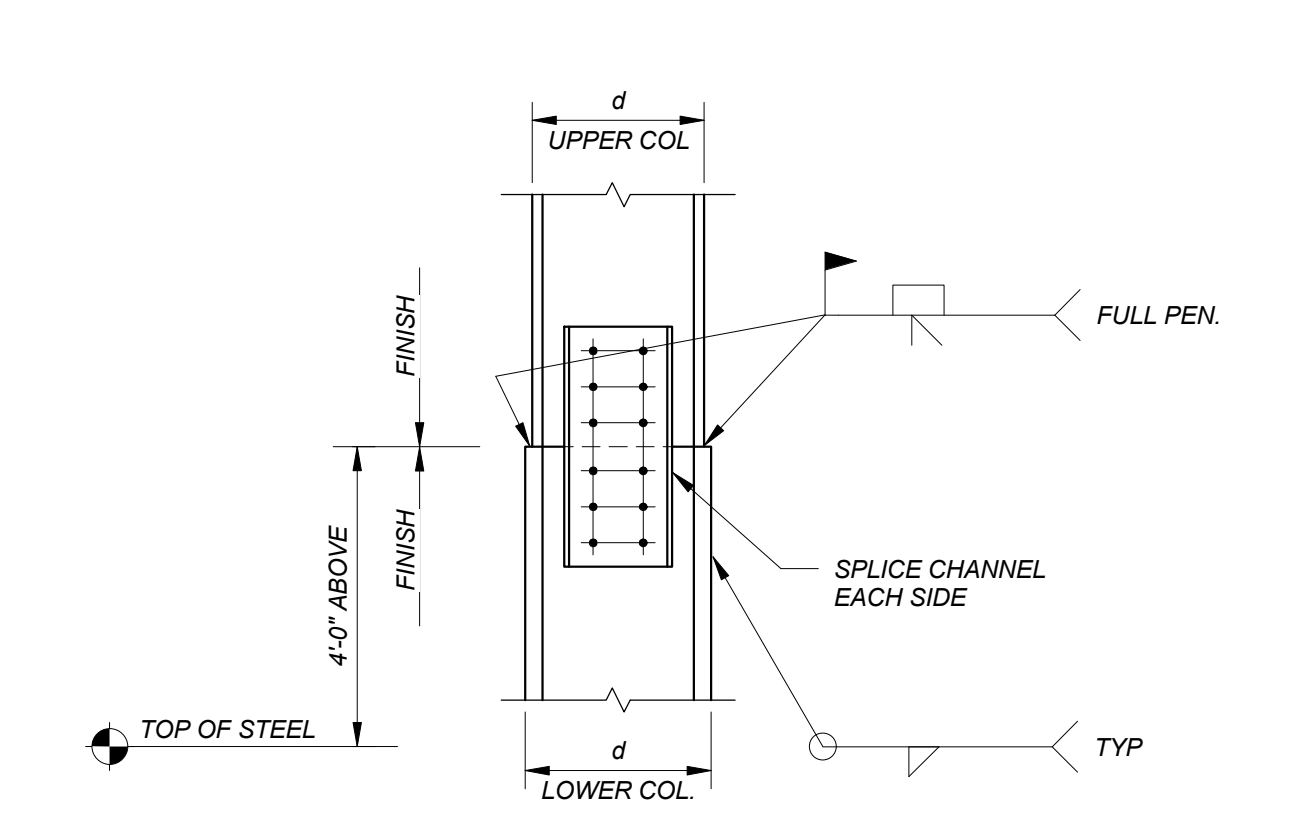
BOLTED SPLICE

REFER TO THE CURRENT AISC MANUAL FOR DETAILED SPLICE REQUIREMENTS

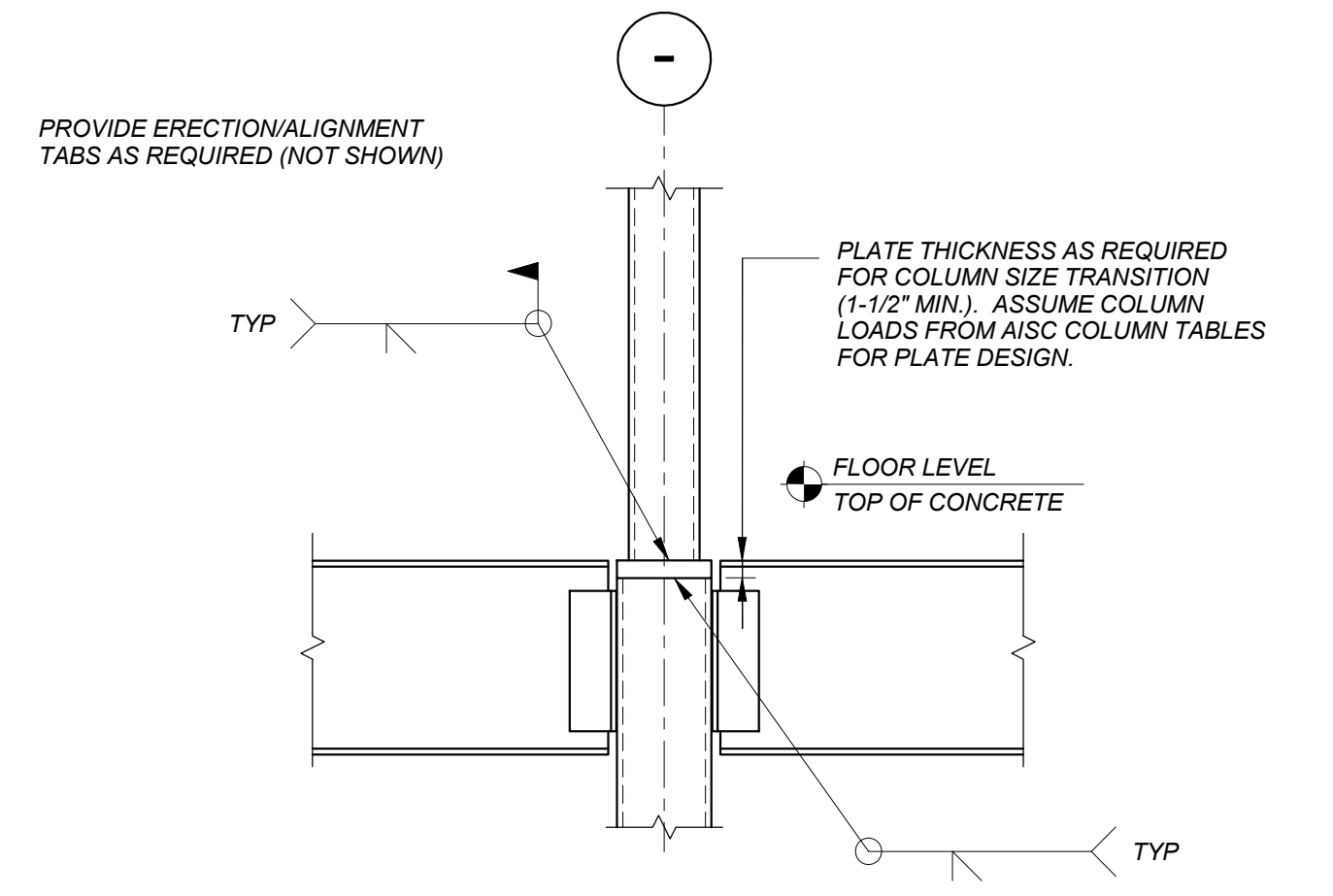
W COLUMN SPLICE



WELDED SPLICE

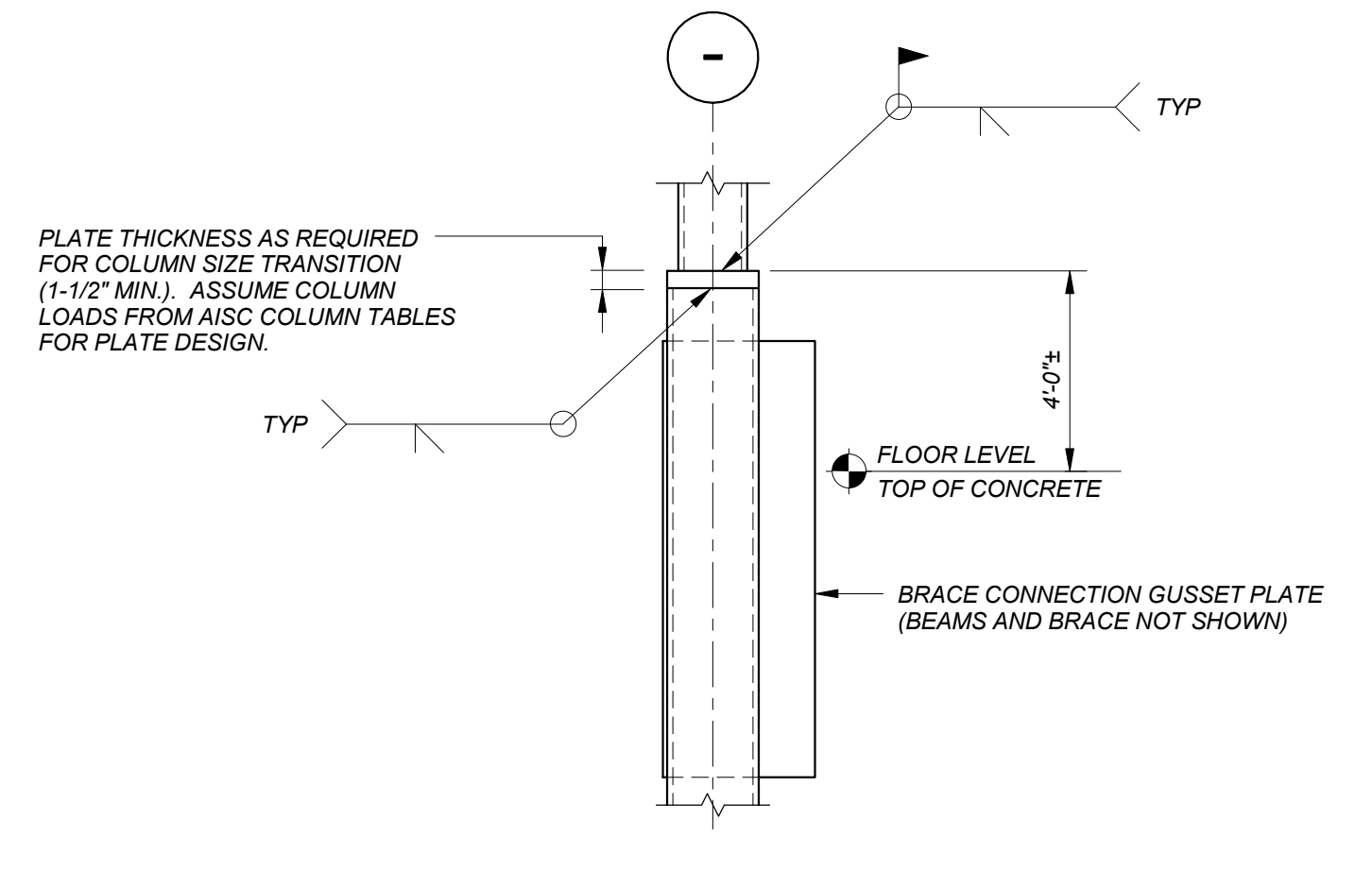


W BRACE & MOMENT FRAME COLUMN SPLICE



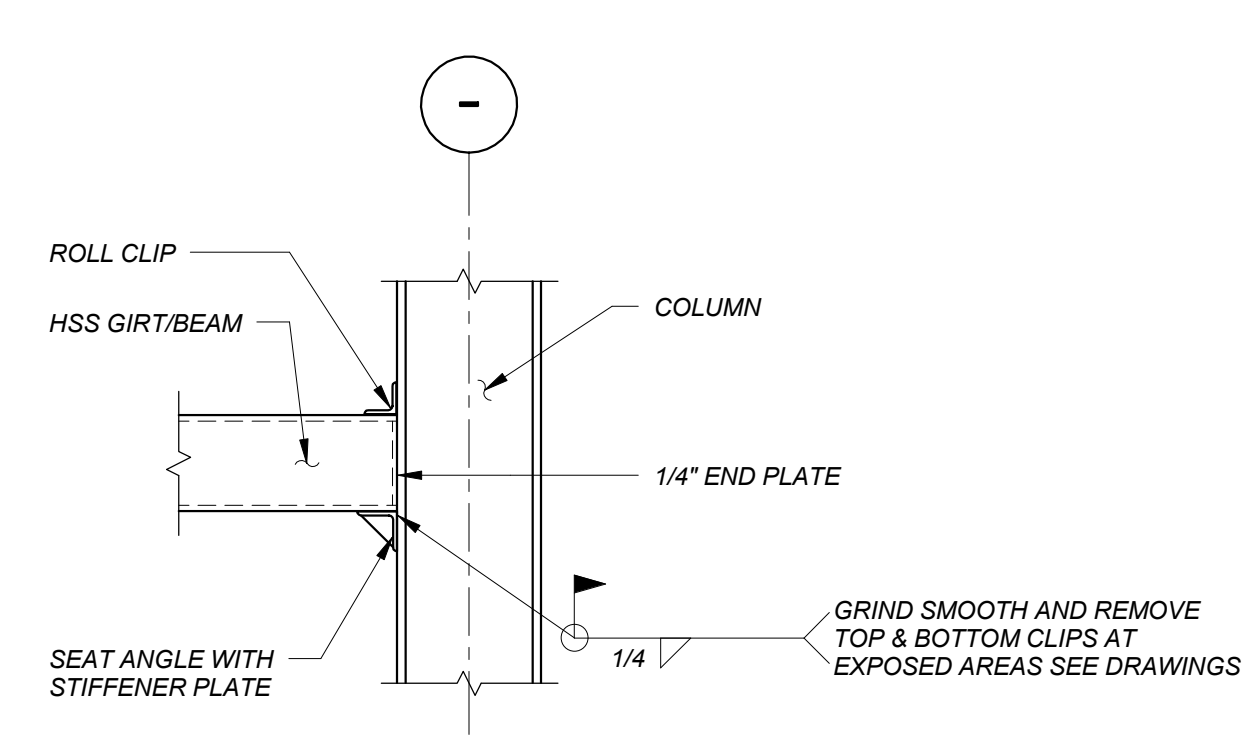
DETAIL SIMILAR AT SAME SIZE COLUMN SPLICE

HSS COLUMN SPLICE

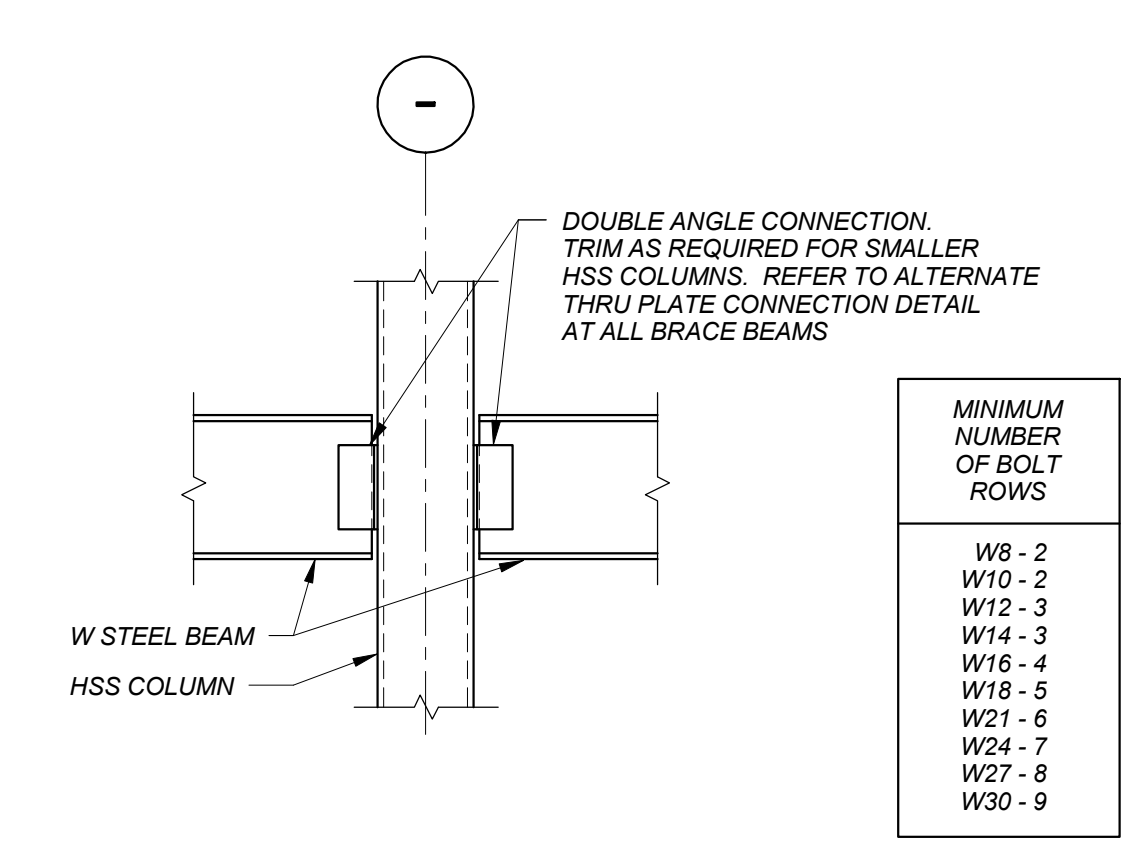


DETAIL SIMILAR AT SAME SIZE COLUMN SPLICE

HSS BRACE COLUMN SPLICE



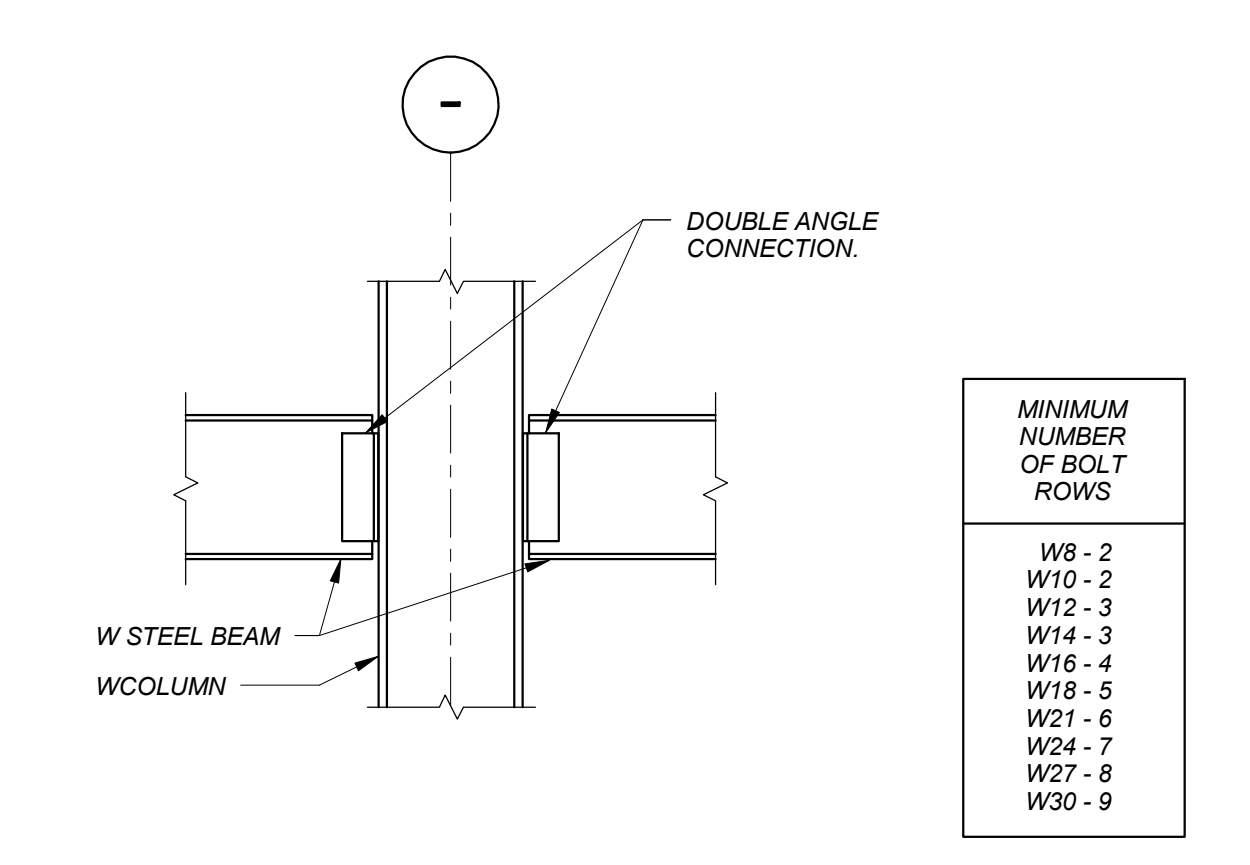
HSS BEAM TO COLUMN CONNECTION



BEAM TO HSS COLUMN CONNECTION

MINIMUM NUMBER OF BOLT ROWS
W8 - 2
W10 - 2
W12 - 3
W14 - 3
W16 - 4
W18 - 5
W21 - 6
W24 - 7
W27 - 8
W30 - 9

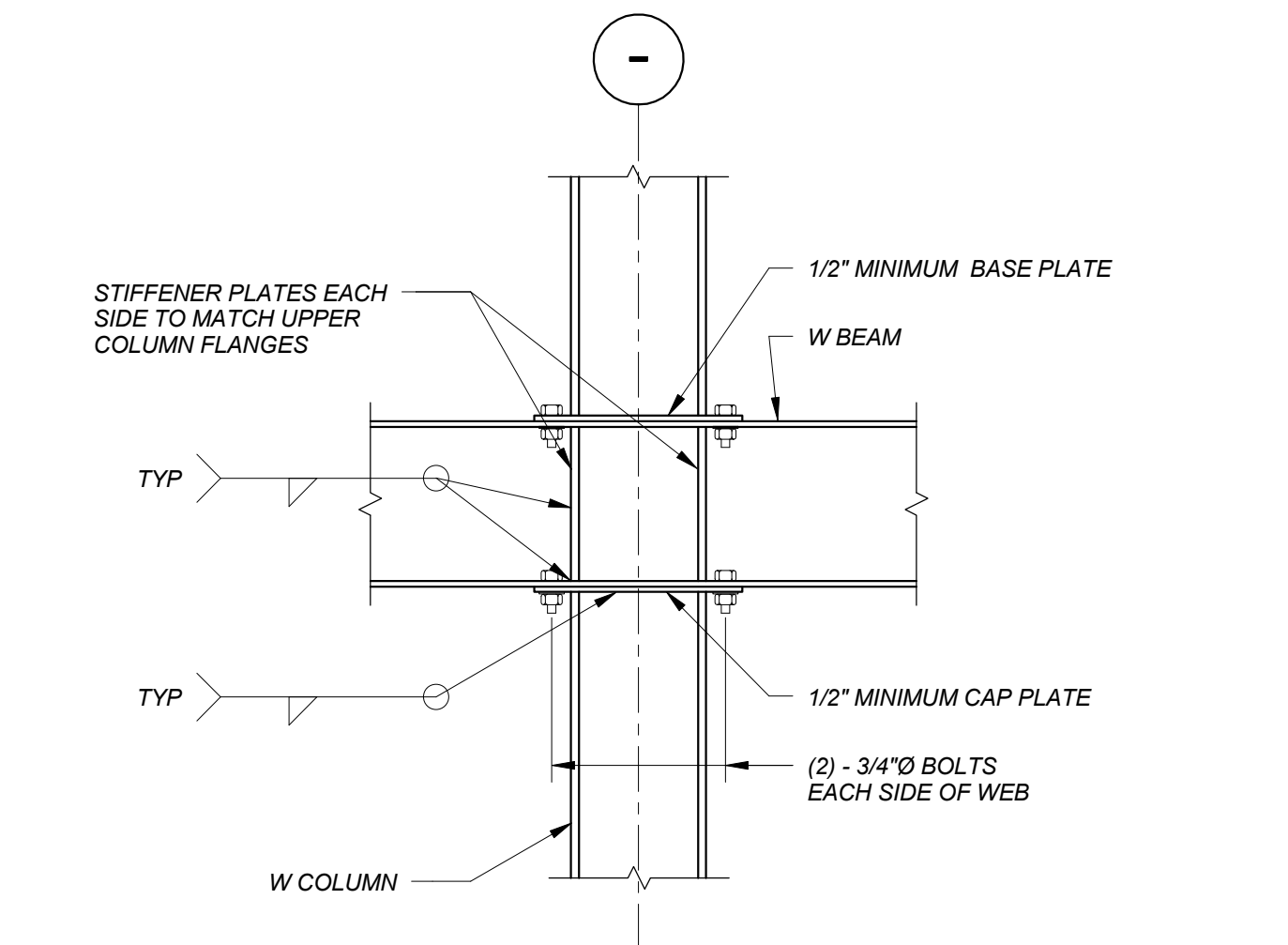
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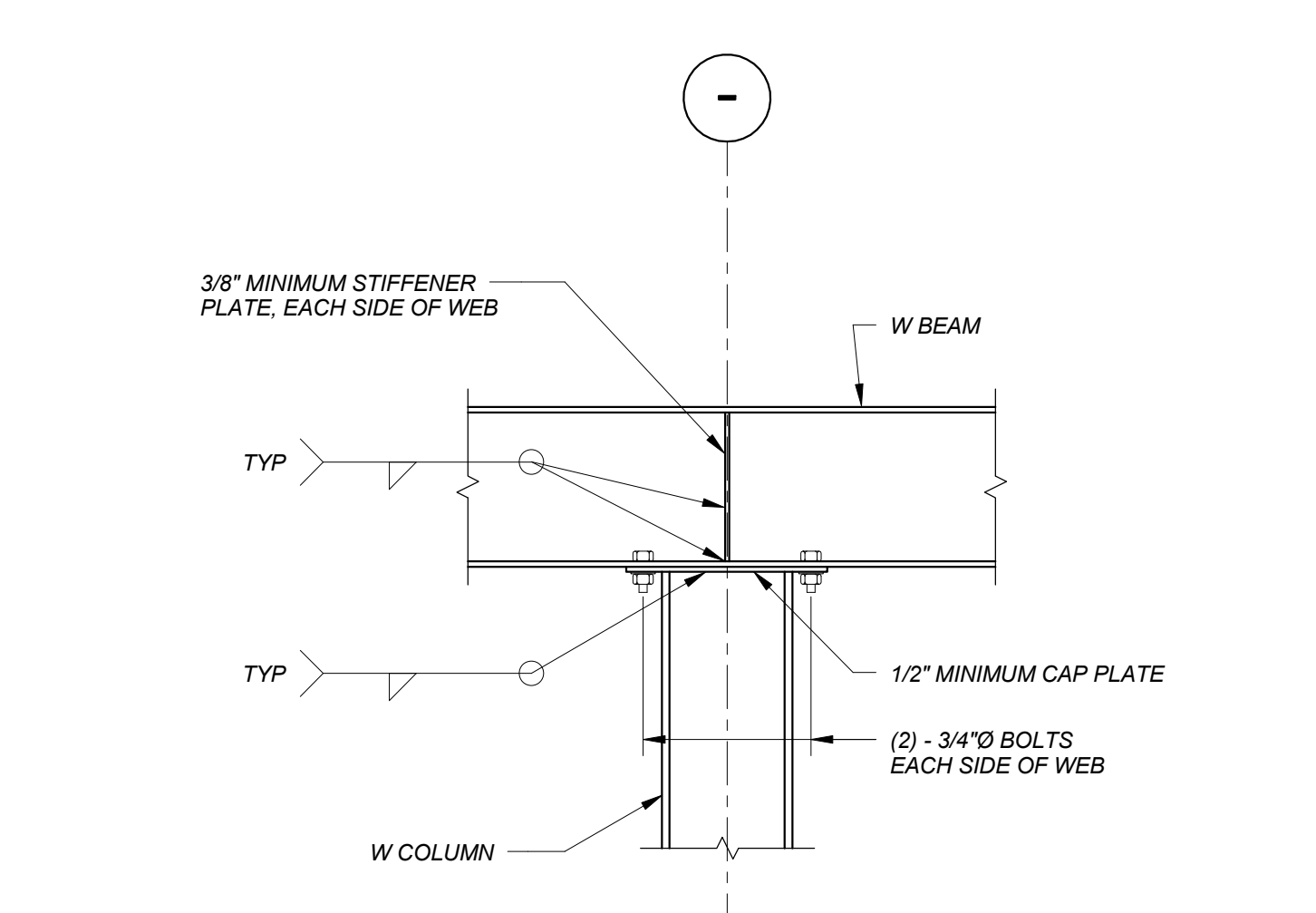
BEAM TO W COLUMN CONNECTION

MINIMUM NUMBER OF BOLT ROWS
W8 - 2
W10 - 2
W12 - 3
W14 - 3
W16 - 4
W18 - 5
W21 - 6
W24 - 7
W27 - 8
W30 - 9

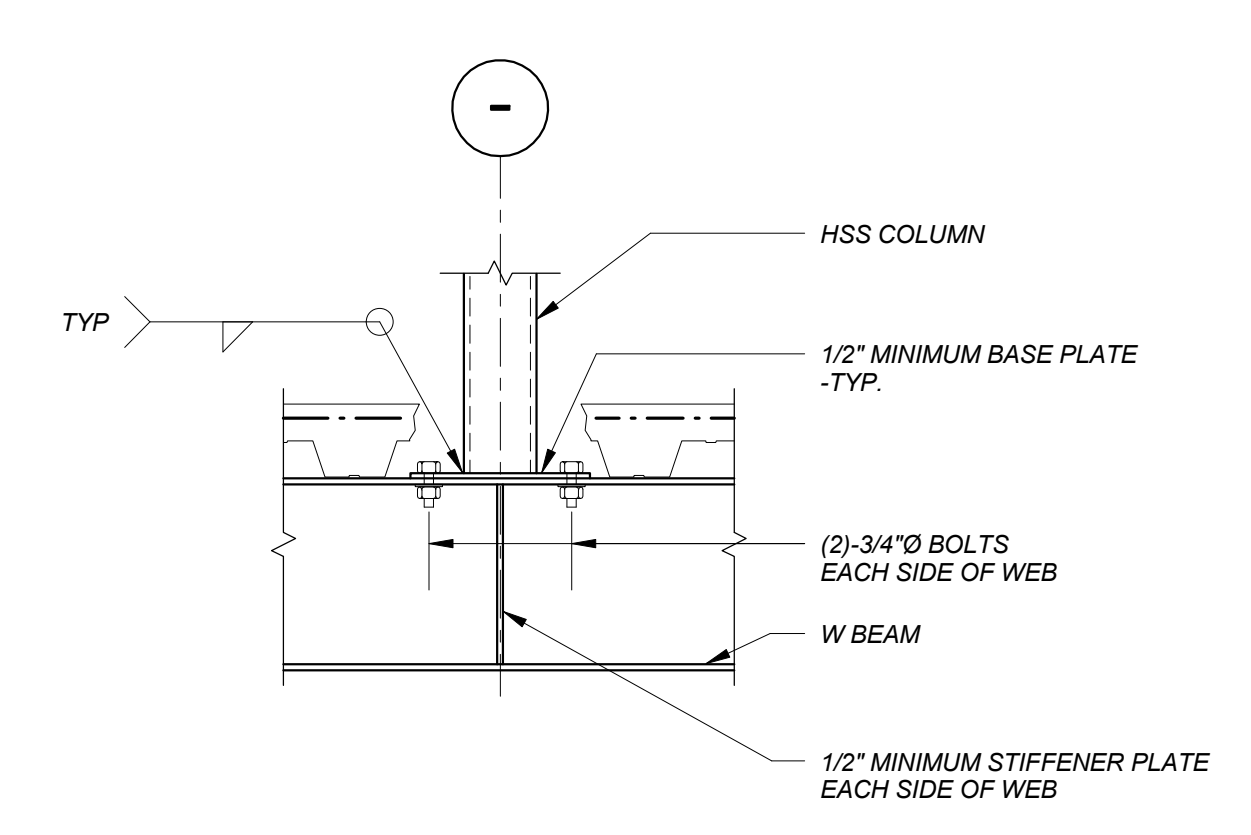
CONNECTIONS SHALL BE DESIGNED USING THE ALLOWABLE STRESS DESIGN METHOD -REFER TO SPECIFICATIONS



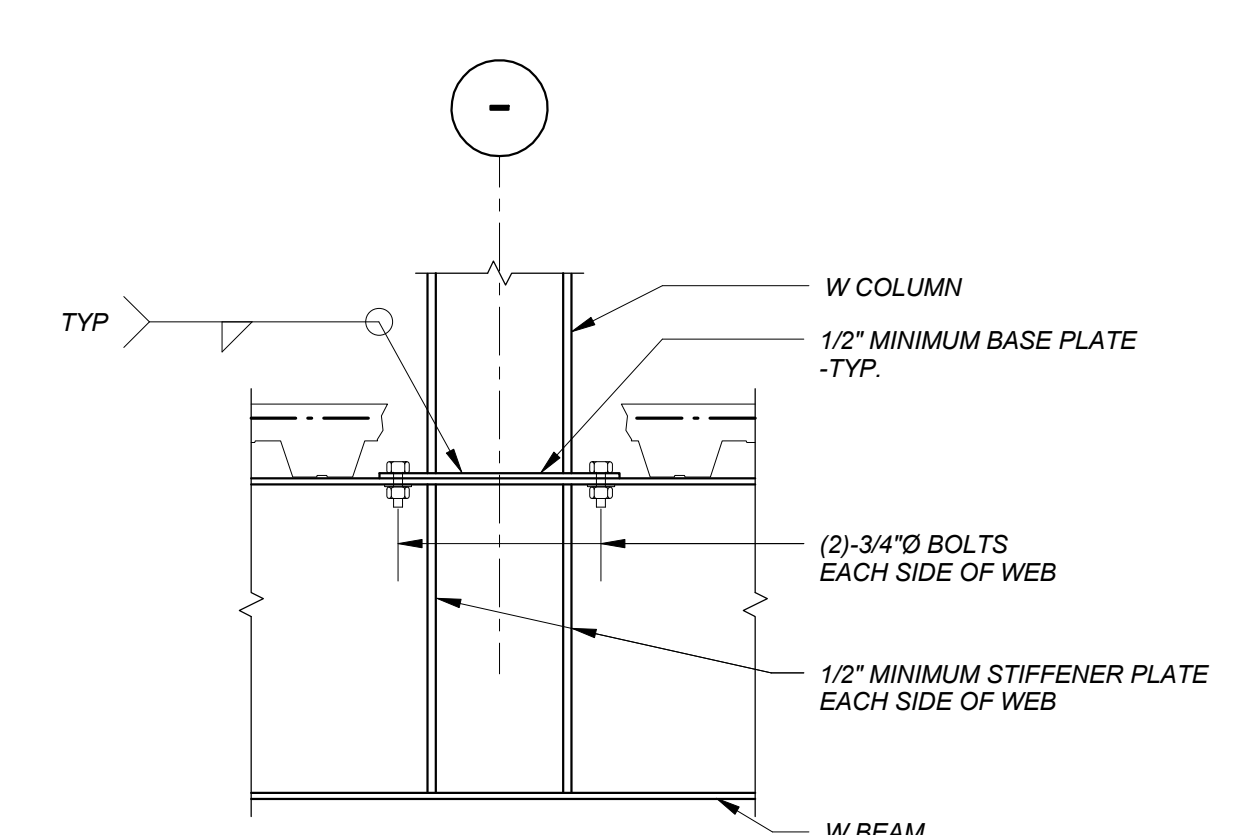
BEAM WITH COLUMN ABOVE & BELOW



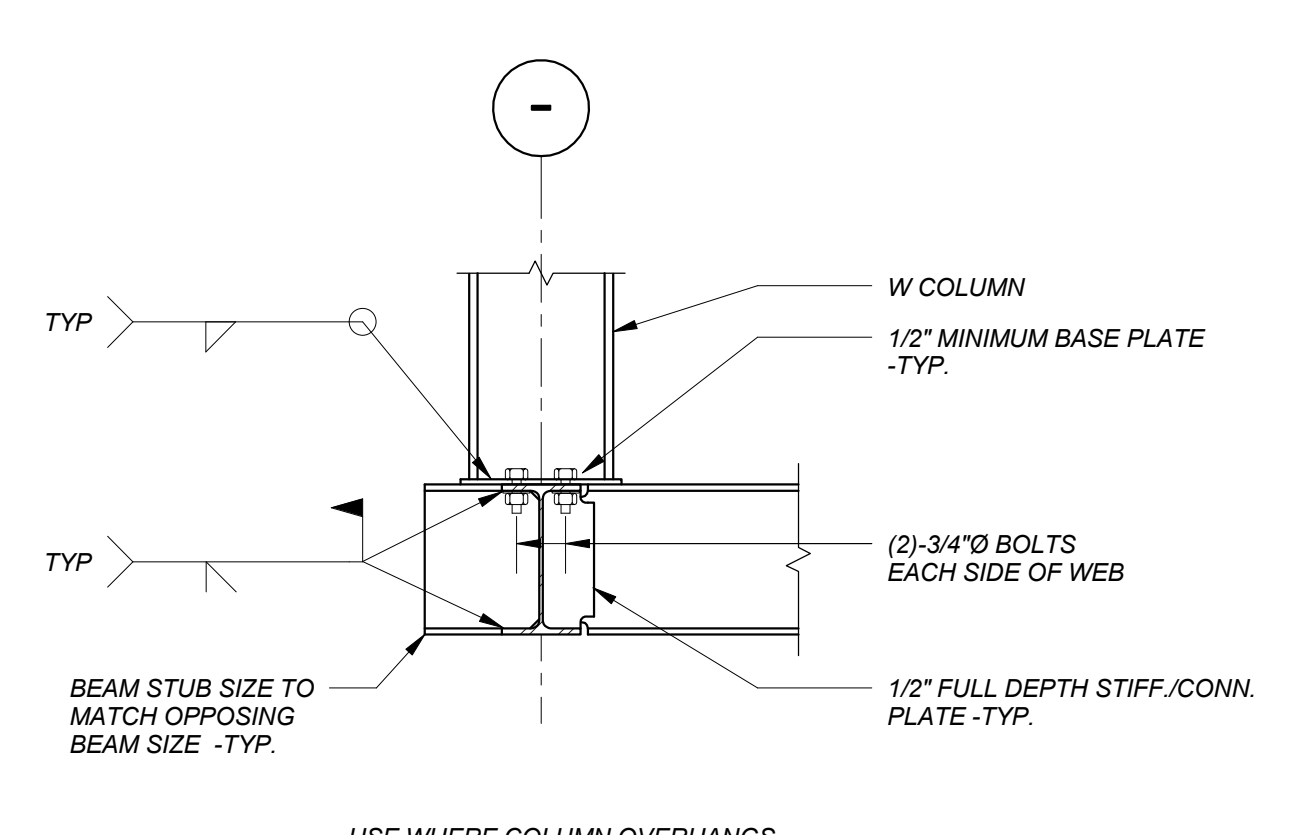
BEAM BEARING ON COLUMN CONNECTION



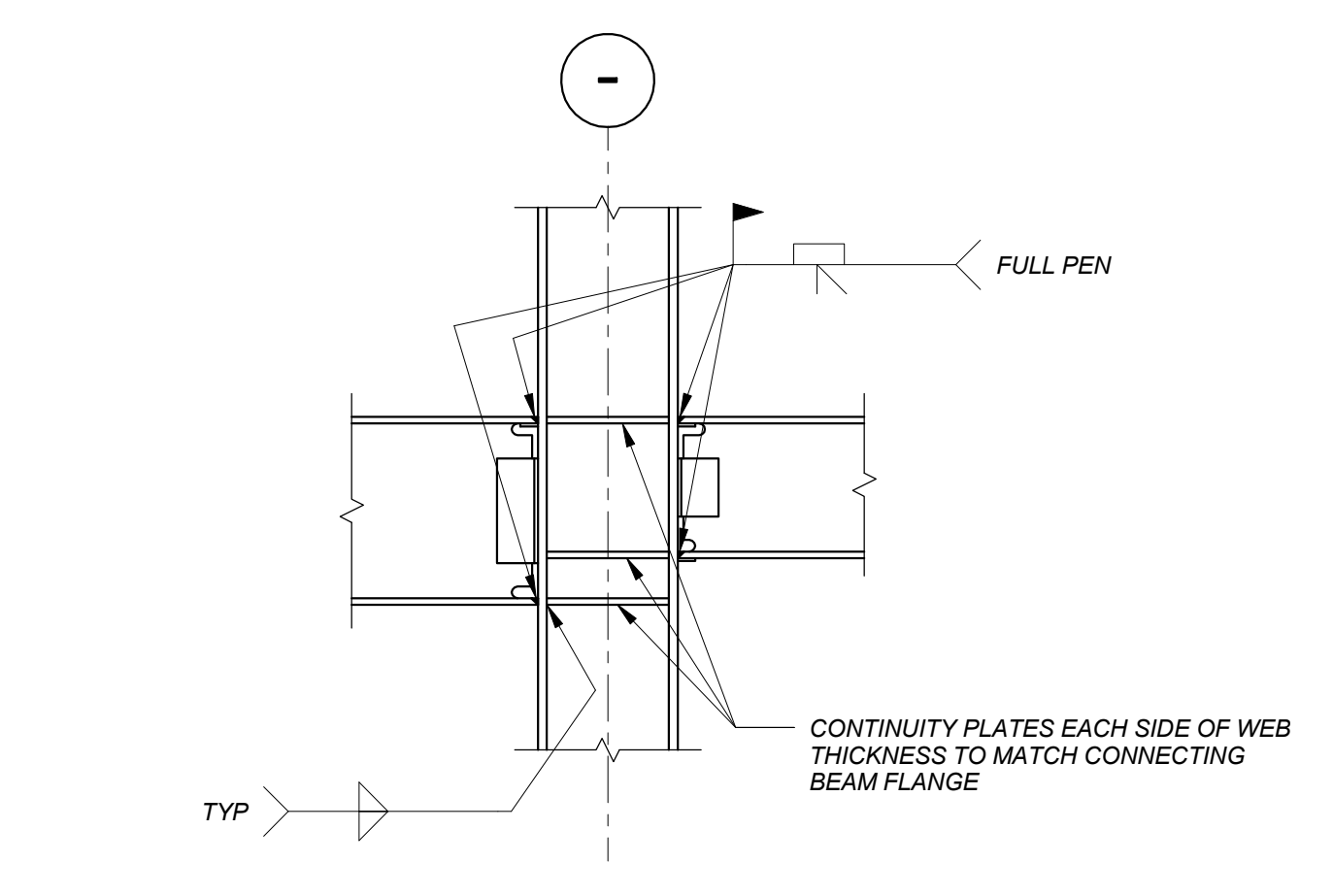
AT HSS COLUMN



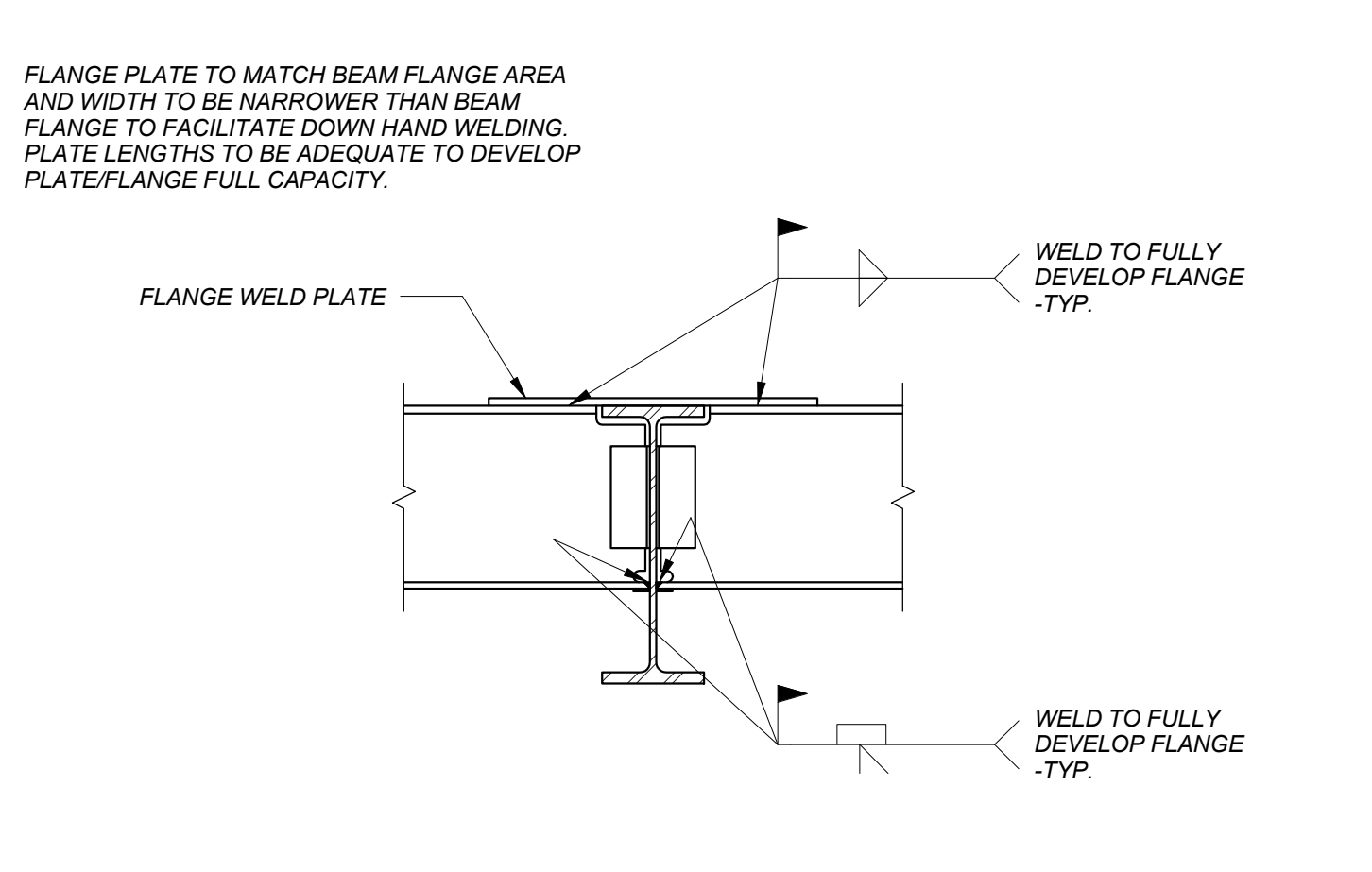
AT W COLUMN



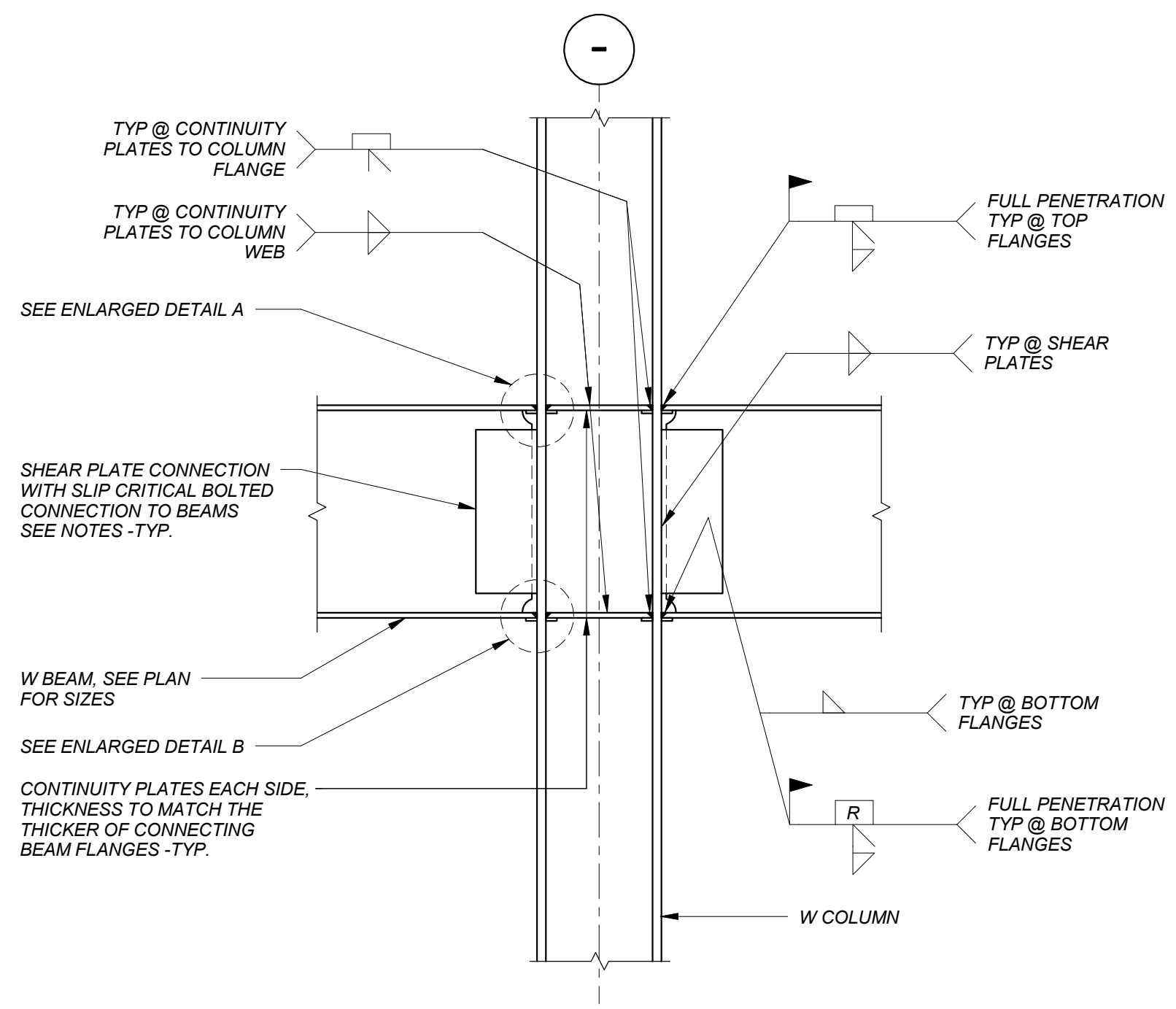
AT NARROW BEAM



BEAM TO COLUMN MOMENT CONNECTION



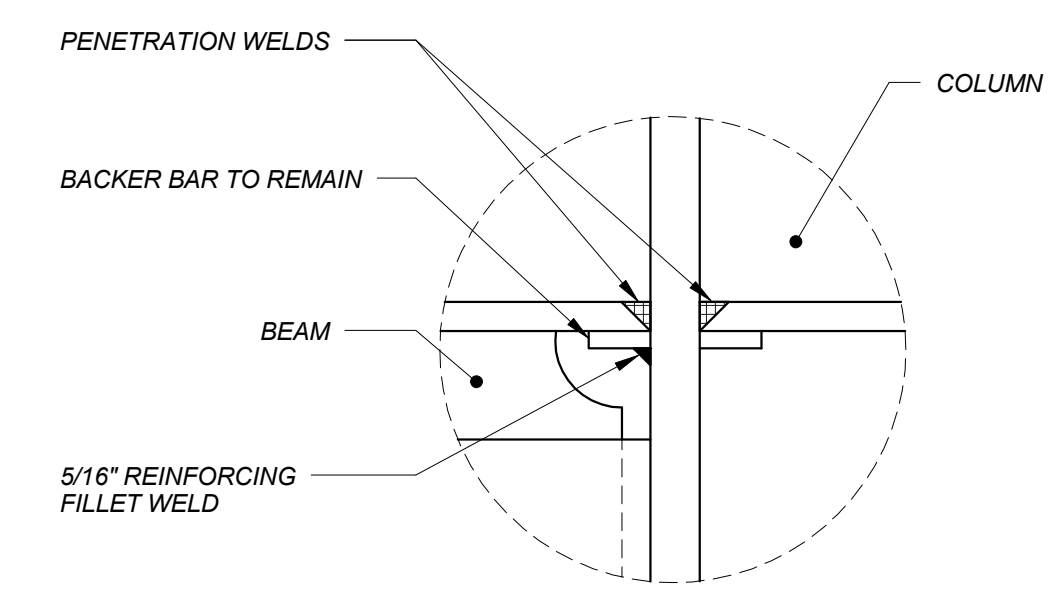
BEAM TO BEAM MOMENT CONNECTION



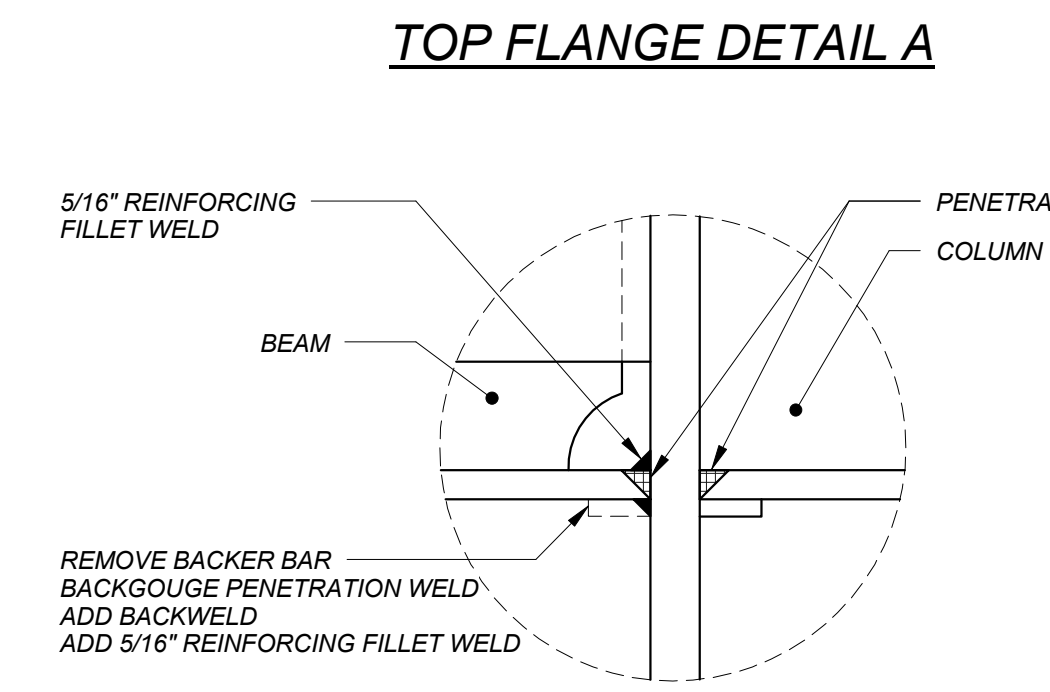
COLUMN BEARING ON BEAM CONNECTION

AT W COLUMN

COLUMN BEARING ON BEAM CONNECTION



TOP FLANGE DETAIL A



BOTTOM FLANGE DETAIL B

- MOMENT CONNECTION NOTES:**
- FILLER MATERIAL USED IN ALL WELDS AT BEAM TO COLUMN MOMENT FRAME CONNECTIONS SHALL HAVE A MINIMUM CHARTY V-NOTCH VALUE OF 20 FT-LBS AT 40° F.
 - BACKER BARS SHALL BE REMOVED AT ALL BOTTOM FLANGE WELDS AND THE ROOT PASS SHALL BE BACK GOUGED AND REWELDED. A REINFORCING FILLET WELD SHALL BE ADDED AT THE BOTTOM OF BOTTOM FLANGE FULL PENETRATION WELDS.
 - A REINFORCING FILLET WELD SHALL BE ADDED AT THE BOTTOM OF TOP FLANGE BACKER BAR TO THE FACE OF THE COLUMN.
 - ALL PENETRATION WELDS SHALL BE ULTRASONICALLY TESTED AND ALL FILLET WELDS SHALL BE VISUALLY INSPECTED BY THE OWNER'S TESTING AGENCY.

MOMENT FRAME CONNECTION

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Consulting Engineer: **FoleyBuhlRoberts & ASSOCIATES INC**
 structural engineers
 T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St. Newton MA 02462

Registration: **Design Development Submission**

Project Name and Address: **Concord-Carlisle Regional High School**
 500 Walden Street
 Concord, MA 01742

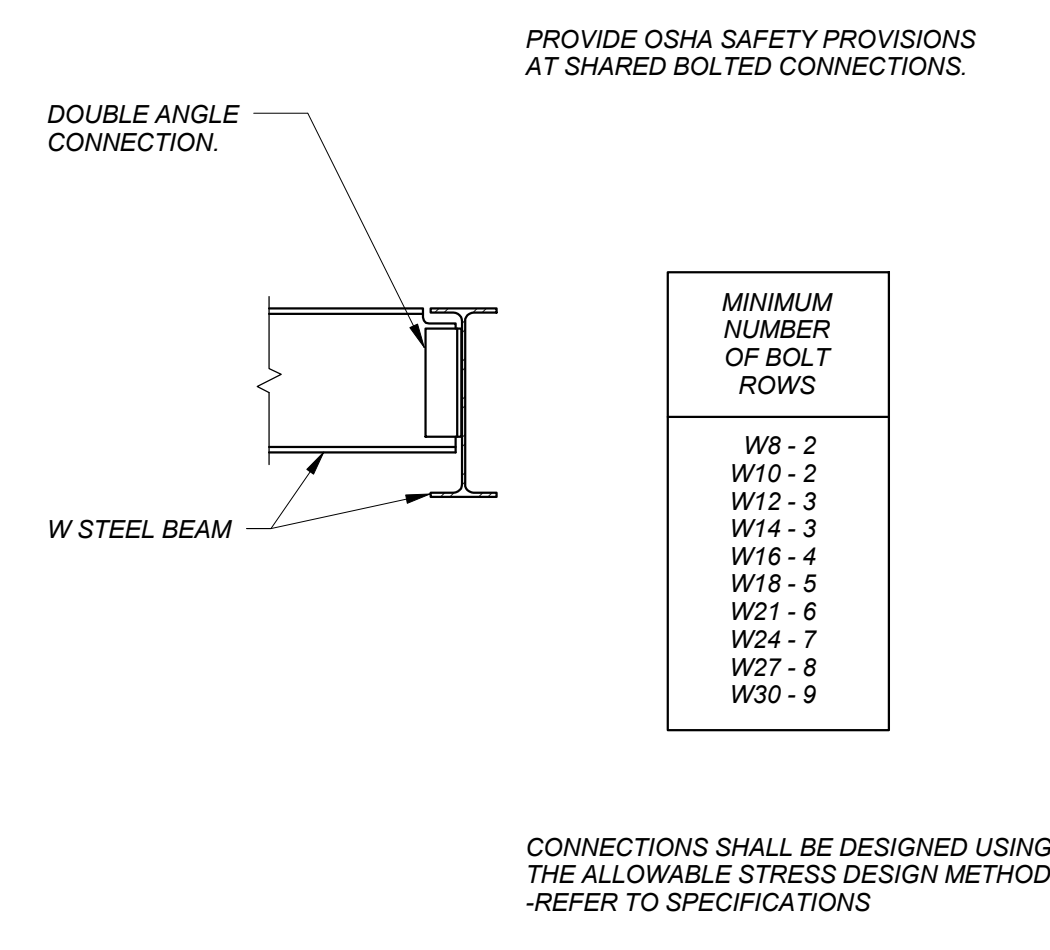
Issue Submissions:

No.	Date	Description
1	8/15/2012	Design Development Submission

Title: **Typical Details III**

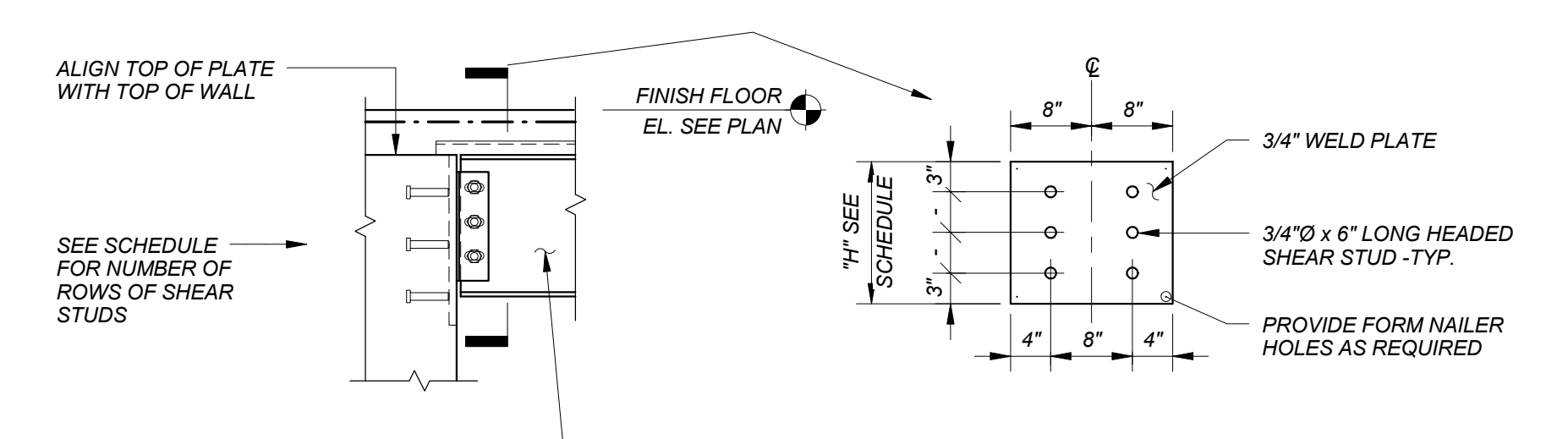
Date: August 15, 2012 Scale: 3/4" = 1'-0" Drawn: CDM Checked: MAP

Project No.: **1102.00**
 Drawing No.: **S1.3**
 © omr architects inc

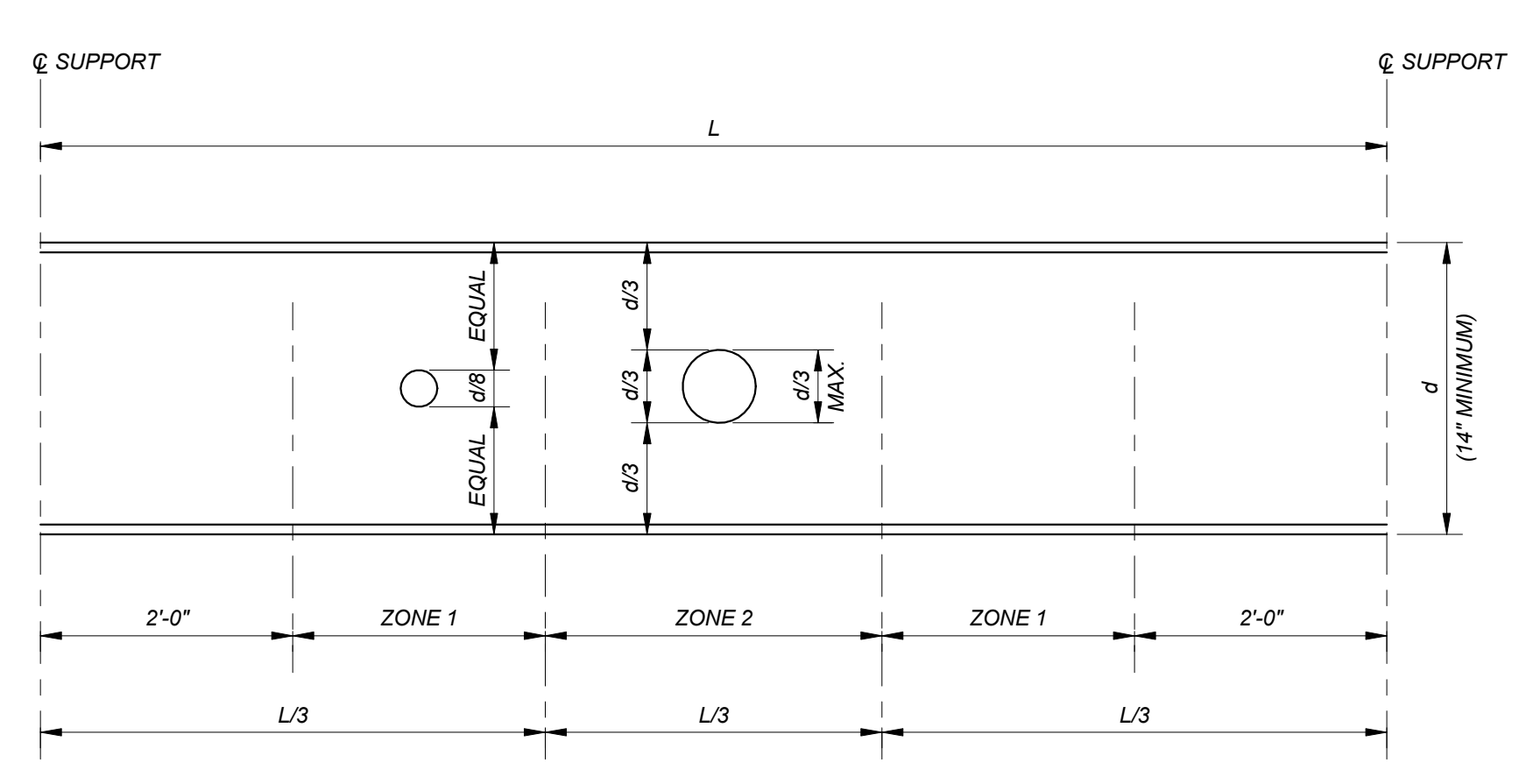


MINIMUM NUMBER OF BOLT ROWS
W8 - 2
W10 - 2
W12 - 3
W14 - 3
W16 - 4
W18 - 5
W21 - 6
W24 - 7
W27 - 8
W30 - 9

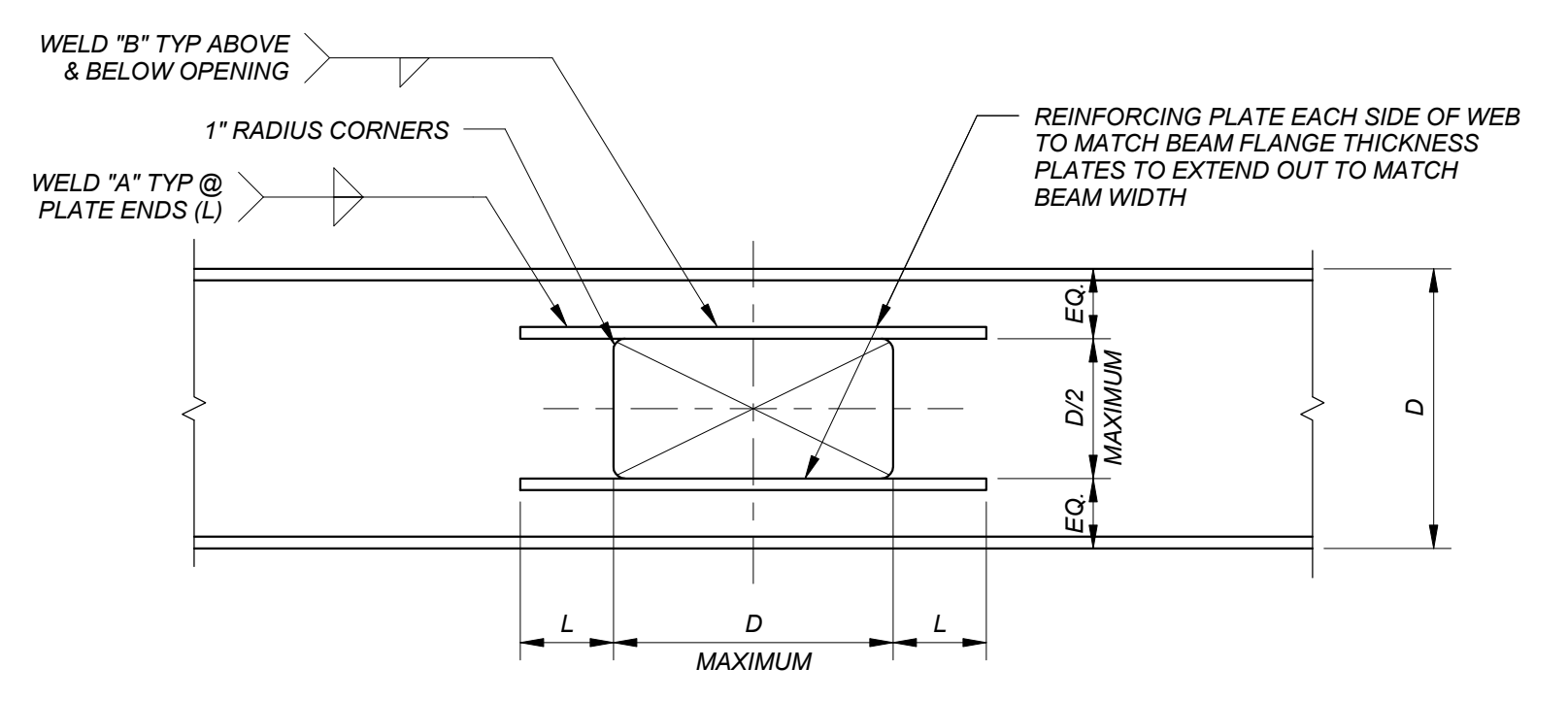
CONNECTIONS SHALL BE DESIGNED USING THE ALLOWABLE STRESS DESIGN METHOD - REFER TO SPECIFICATIONS



W SHAPE	MIN. NO OF STUD ROWS	MIN. DIMENSIONS B x T x H
W14 OR SMALLER	3	16\"/>

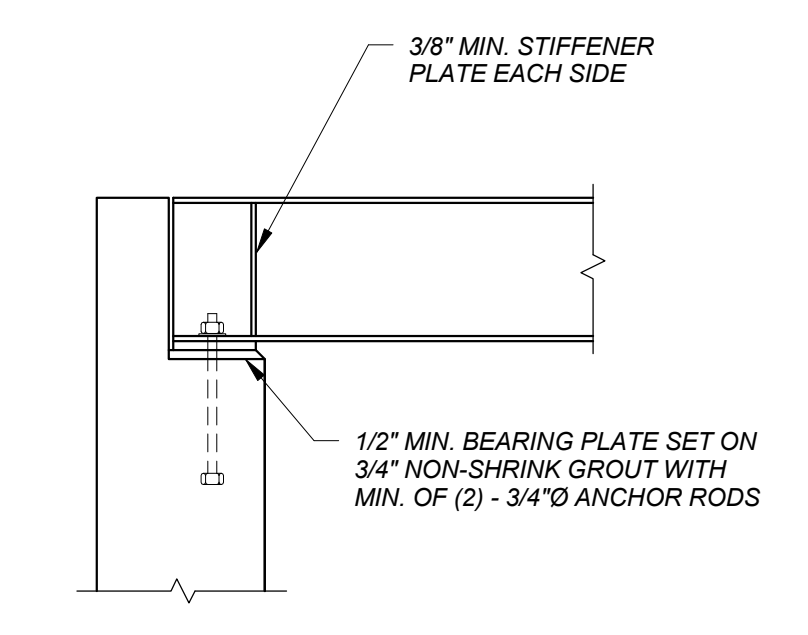


- NOTES:
- THE NUMBER, SIZES, AND LOCATIONS OF OPENINGS REQUIRED THROUGH STEEL BEAMS AND GIRDERS SHALL BE DETERMINED BY THE GENERAL CONTRACTOR AND SHOWN ON THE SHOP DRAWINGS SUBMITTED FOR ENGINEER'S REVIEW. REFER TO ALL THE DRAWINGS IN THE SET. FIELD CUTTING OPENINGS IS NOT PERMITTED. FIELD DRILLING OPENINGS OR PLASMA CUTTING MAY BE PERMITTED WITH THE SPECIFIC APPROVAL OF THE STRUCTURAL ENGINEER.
 - OTHER SPECIAL OPENING CASES MAY BE SHOWN ON THE STRUCTURAL DRAWINGS.
 - ALL OPENINGS ARE TO BE SHOWN ON THE SHOP DRAWINGS AND SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION SINCE IN SOME CASES MODIFICATIONS MAY BE REQUIRED.

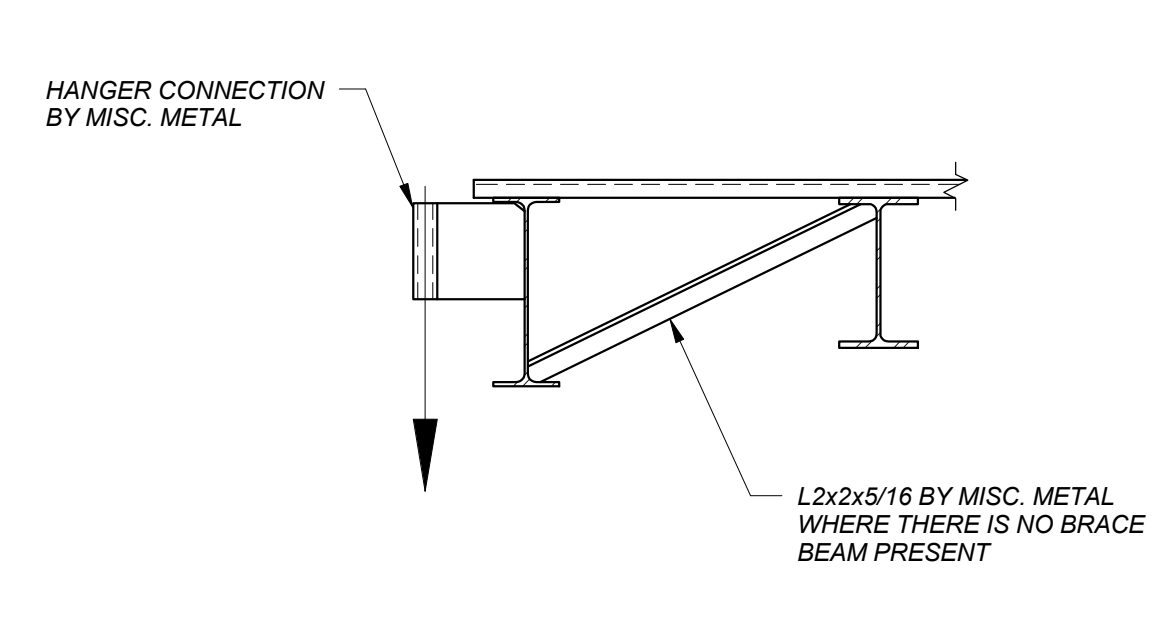


- NOTES:
- SIZE PLATE EXTENSIONS 'L' AND WELD 'A' TO FULLY DEVELOP PLATES.
 - REFER TO PLANS FOR SIZES AND LOCATIONS OF BEAM PENETRATIONS.

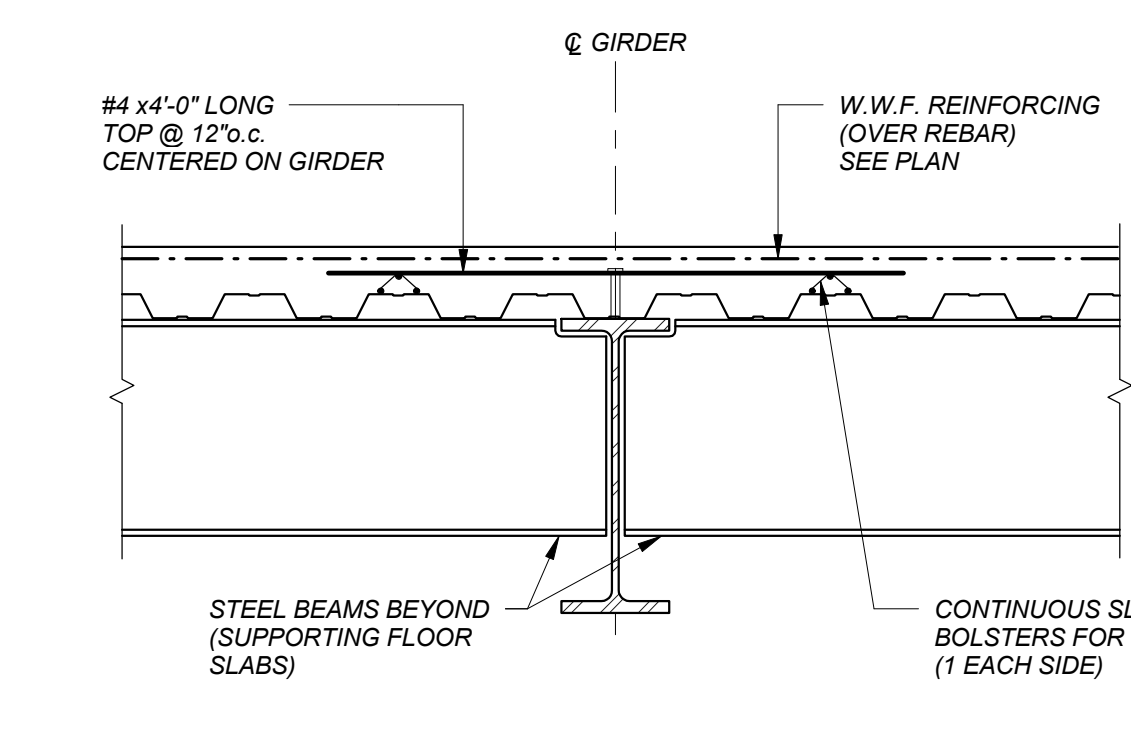
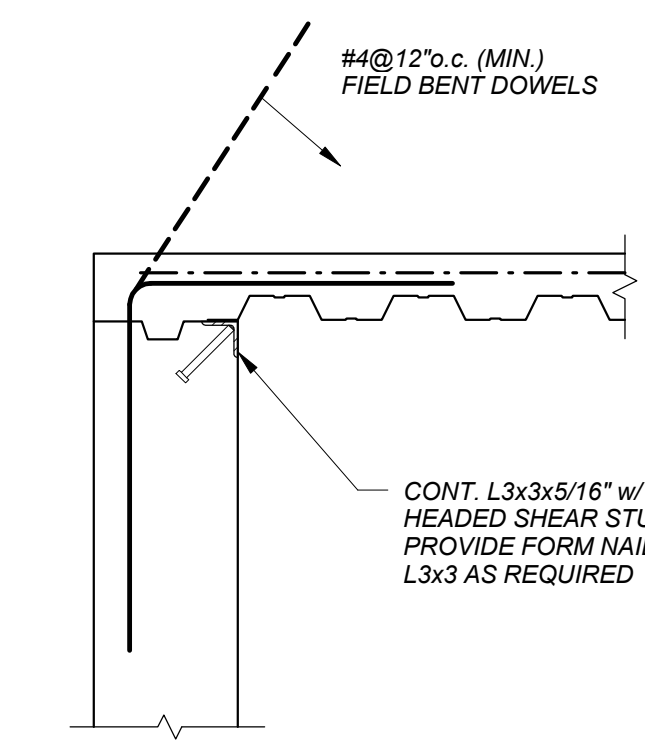
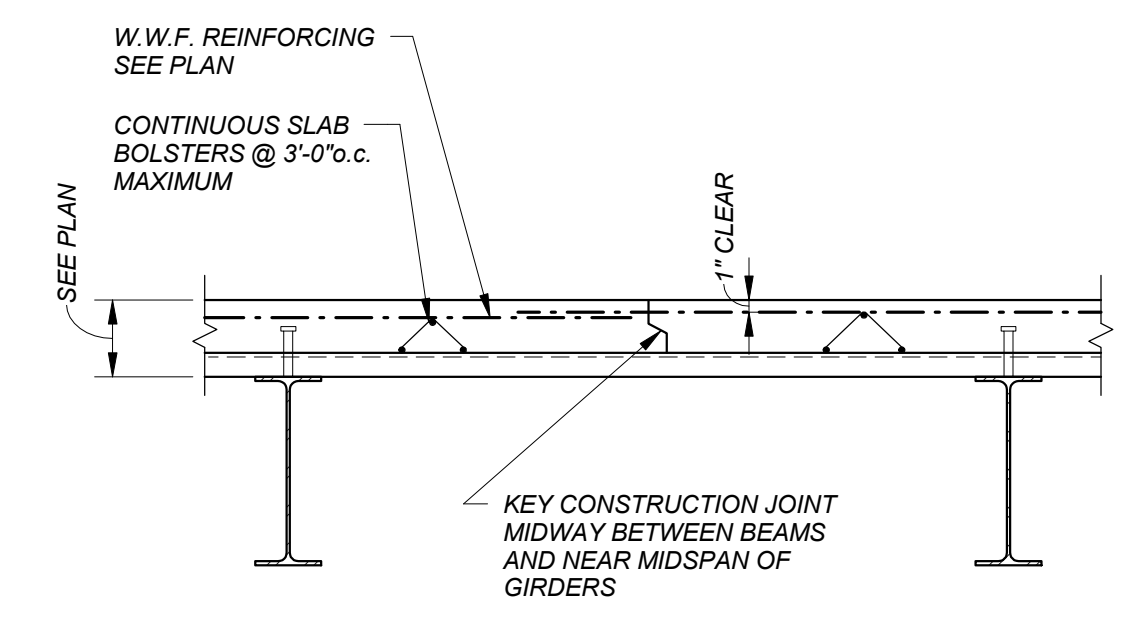
BEAM TO BEAM CONNECTION



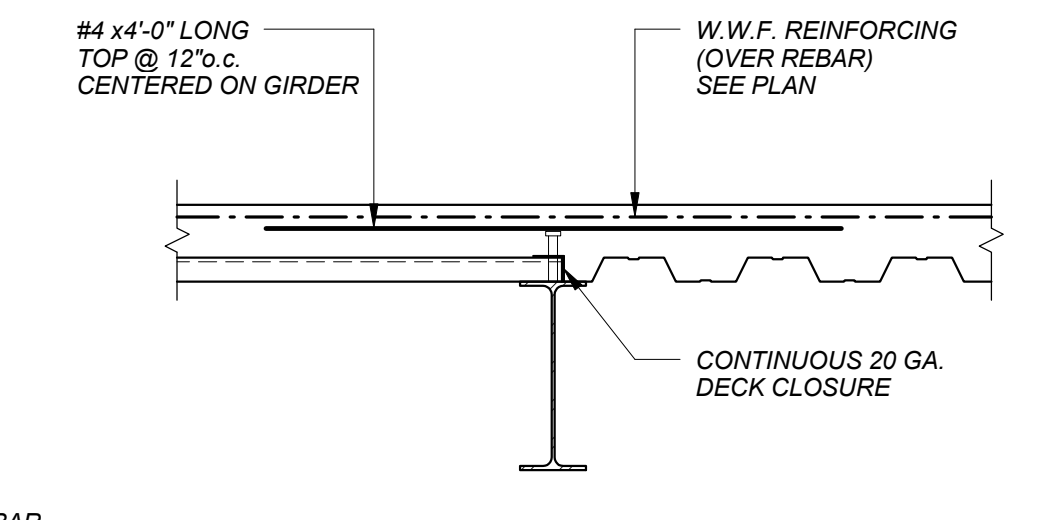
EMBEDDED WELD PLATE BEAM CONNECTION



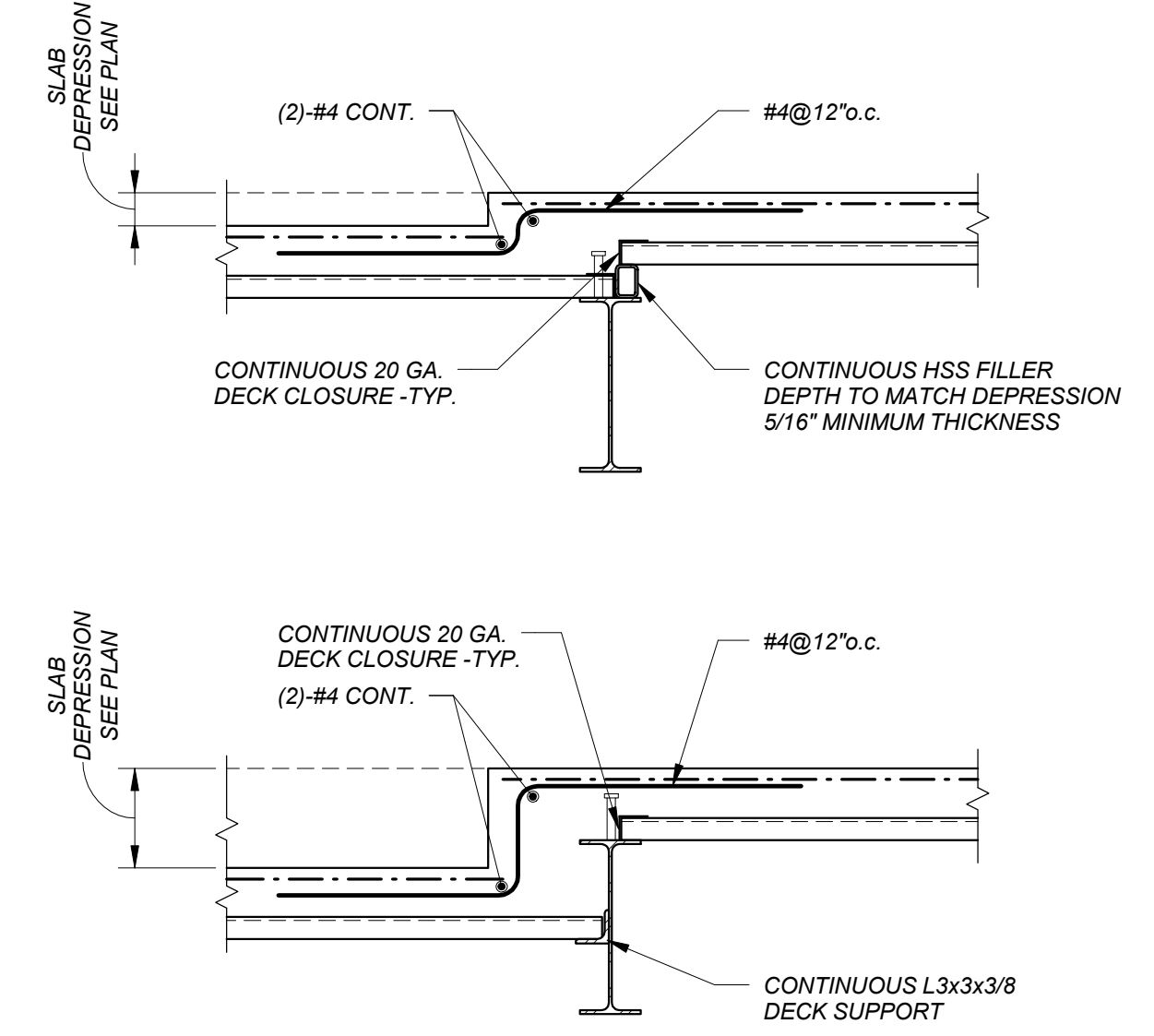
SMALL BEAM PENETRATION



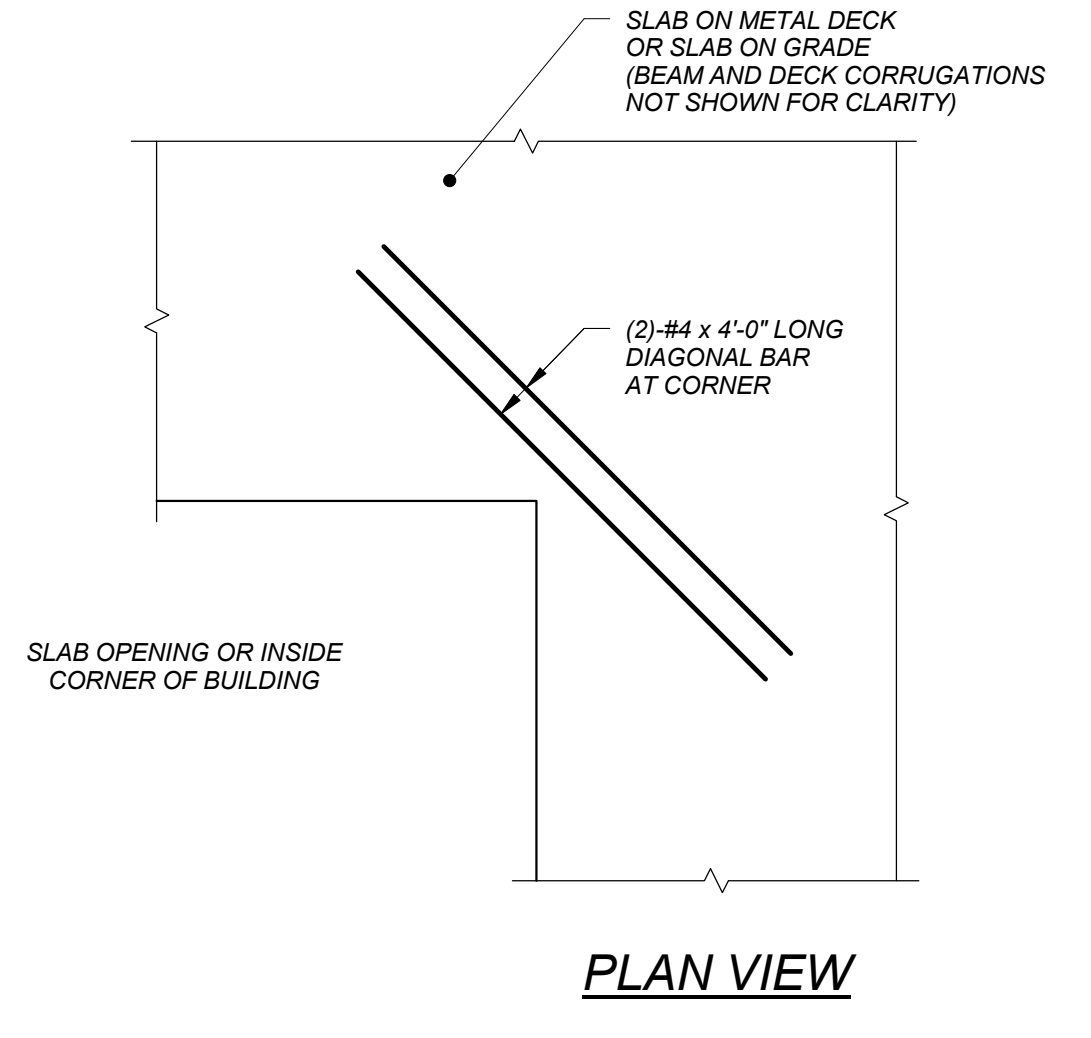
LARGE BEAM PENETRATION



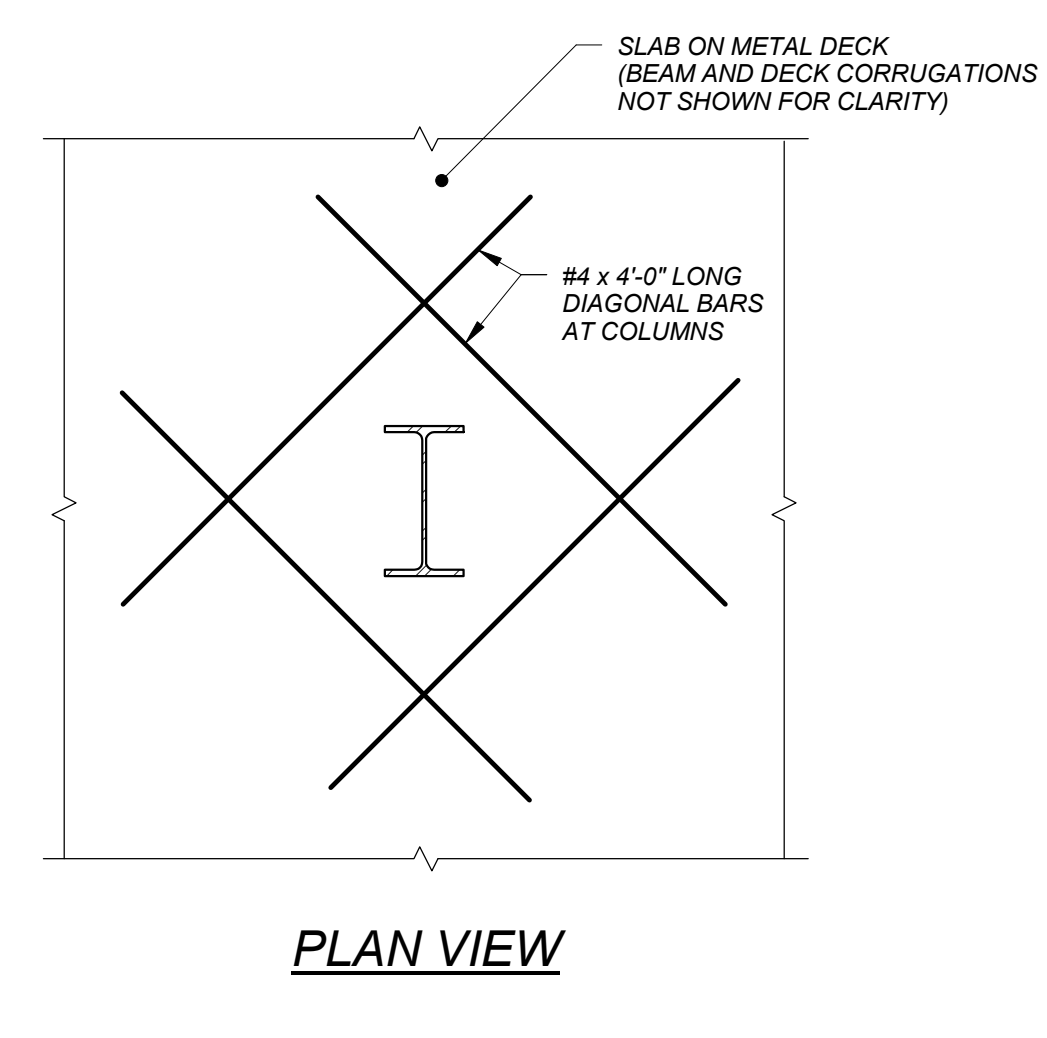
BEAM POCKET CONNECTION



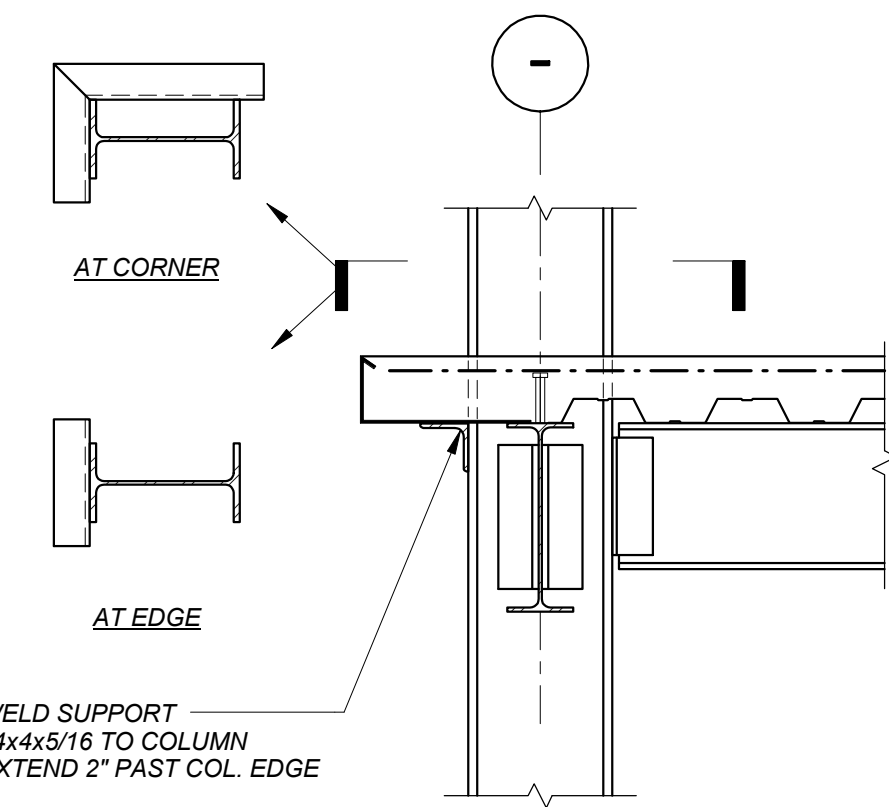
BEAM AT STAIR STRINGER



CONCRETE ON COMPOSITE DECK

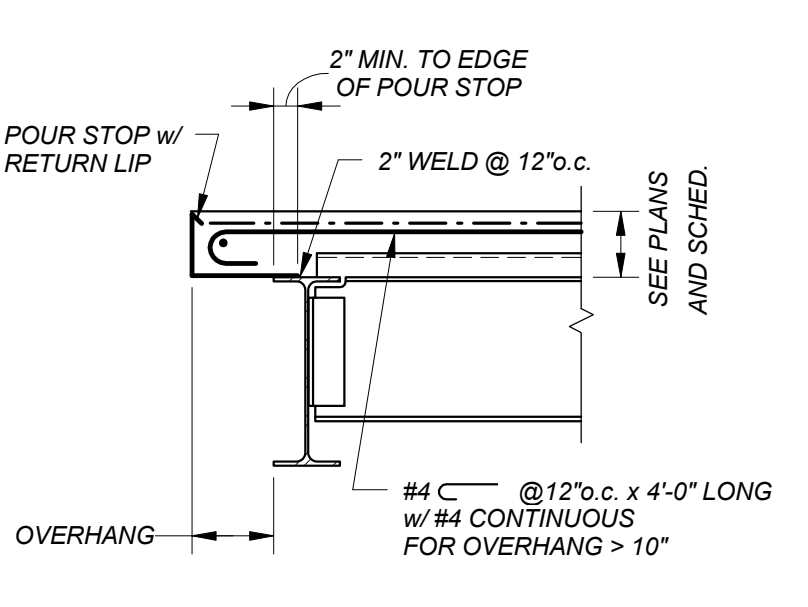


DECK EMBEDMENT AT CONCRETE WALLS



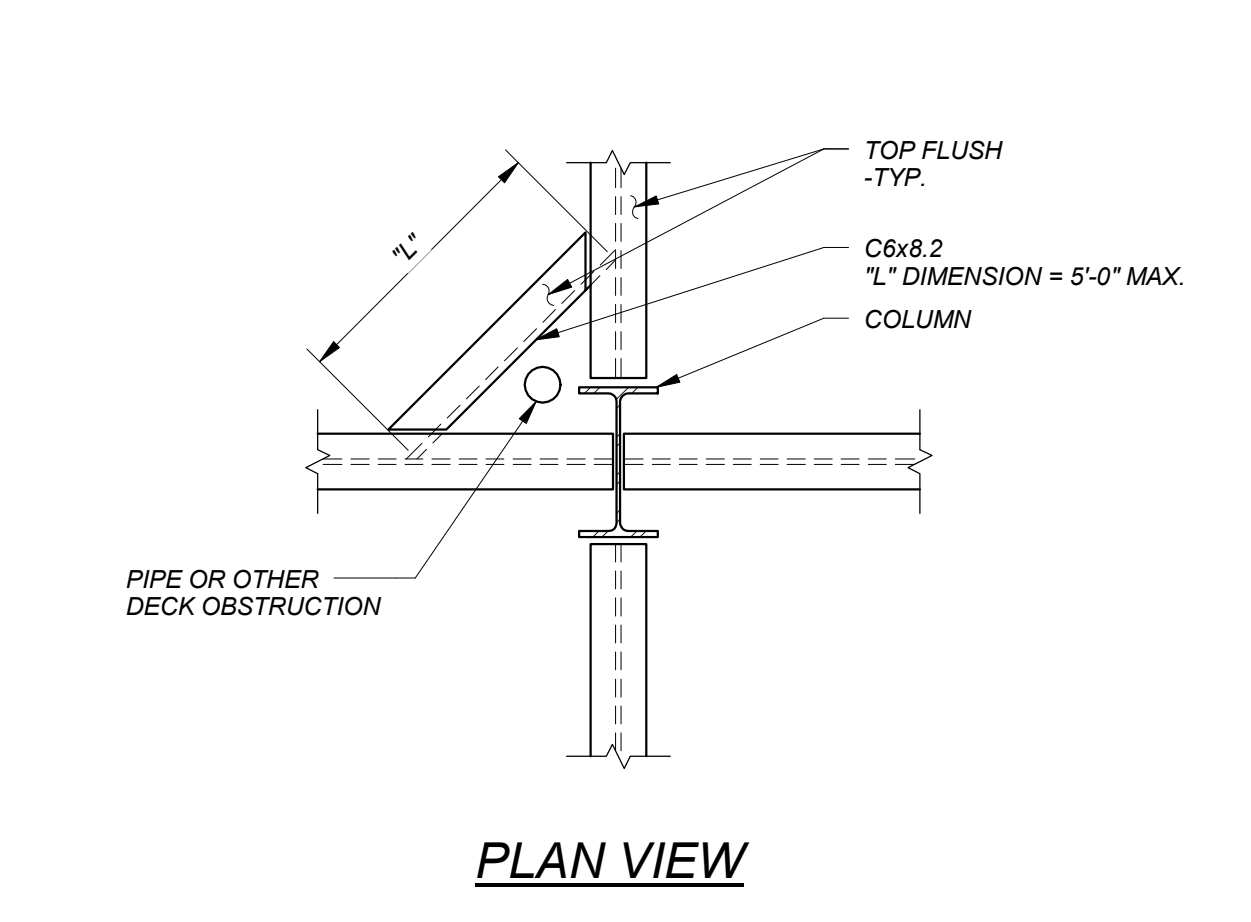
ADDED REBAR OVER GIRDERS

POUR STOP SCHEDULE	
7-1/2\"/>	
SLAB OVERHANG BEYOND EDGE OF BEAM FLANGE	POUR STOP GAUGE
<1'	16 GA.
1' TO 3'	14 GA.
3' TO 7'	12 GA.
7' TO 10'	10 GA.
>10'	16 GA. + TEMP. SUPPORT

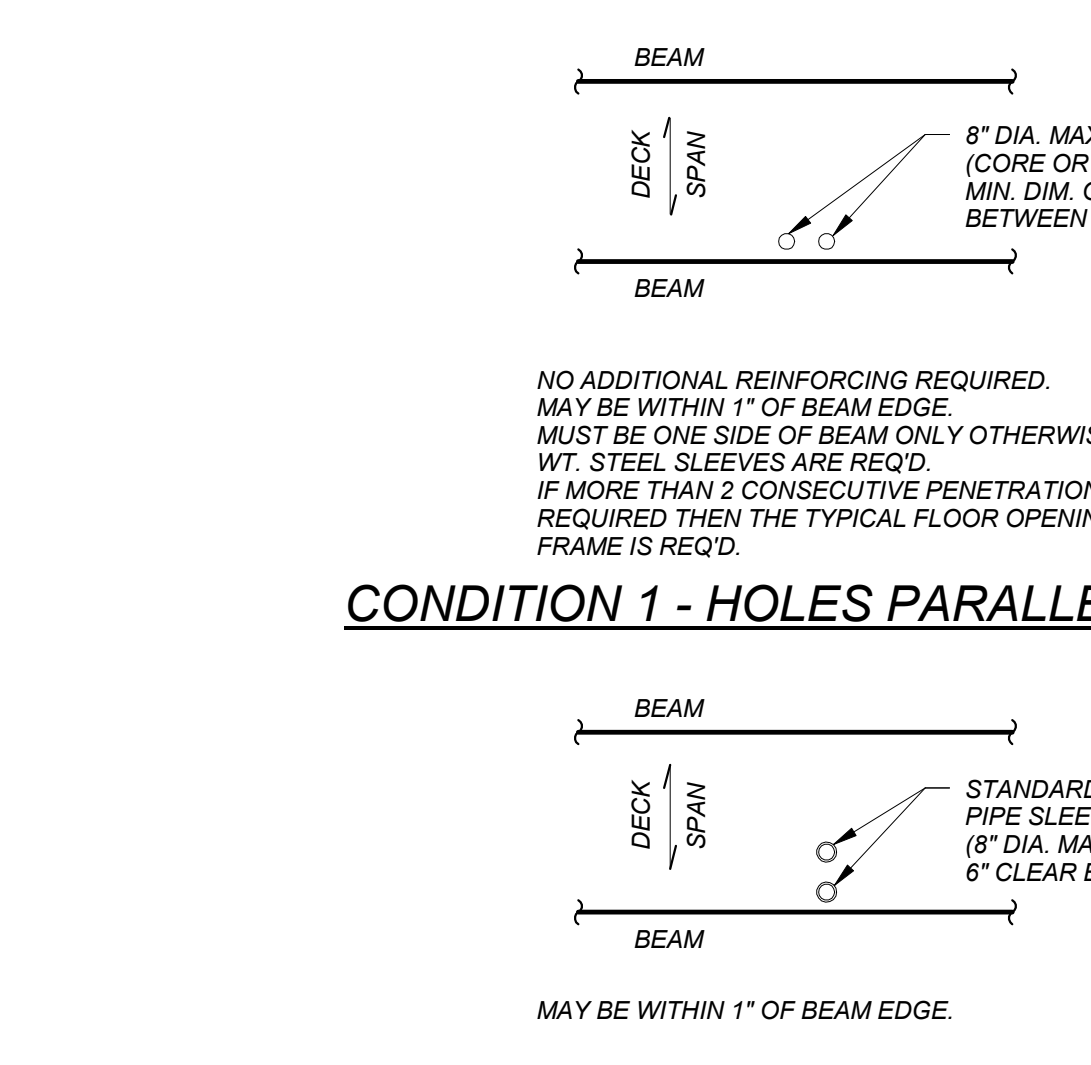


DECK CHANGE IN DIRECTION

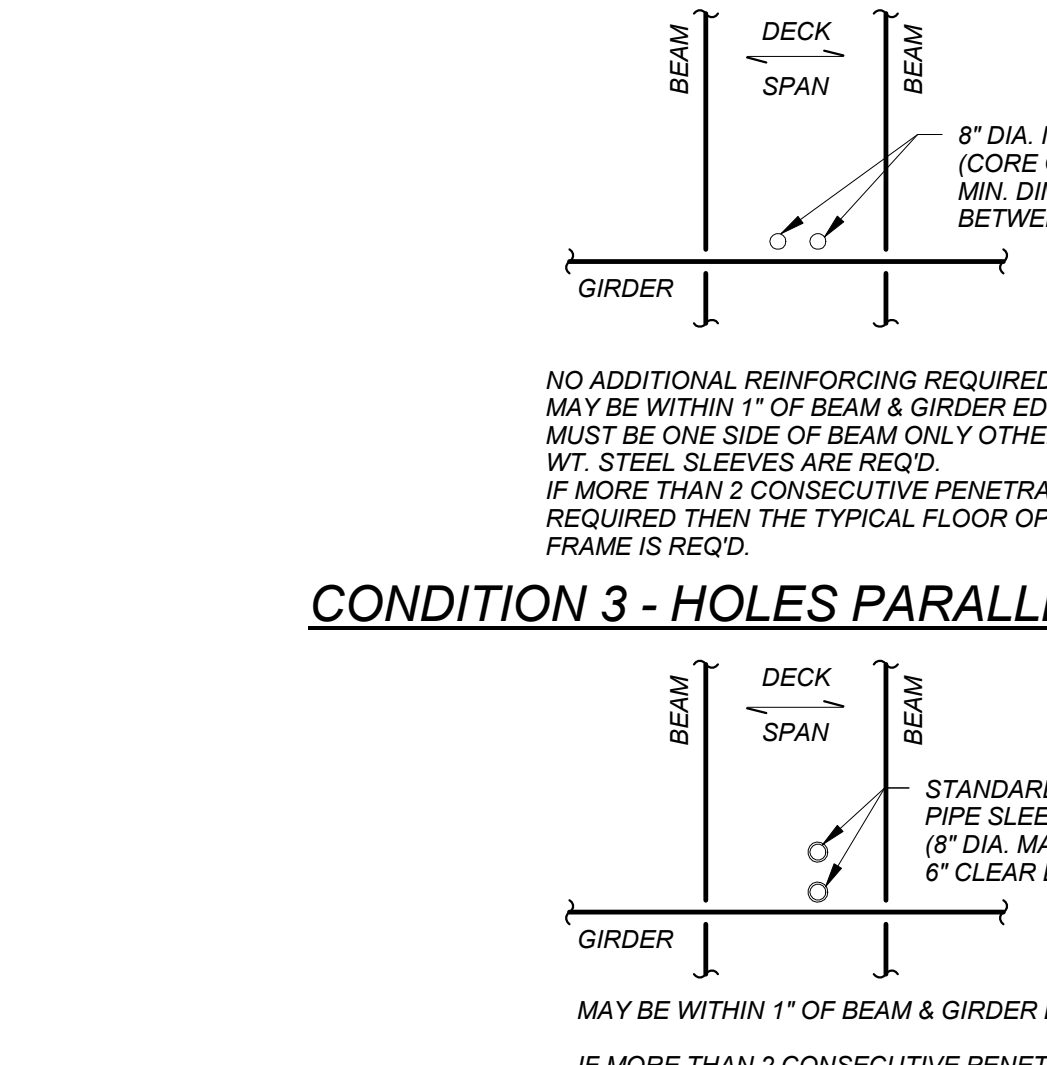
DECK CHANGE IN ELEVATION



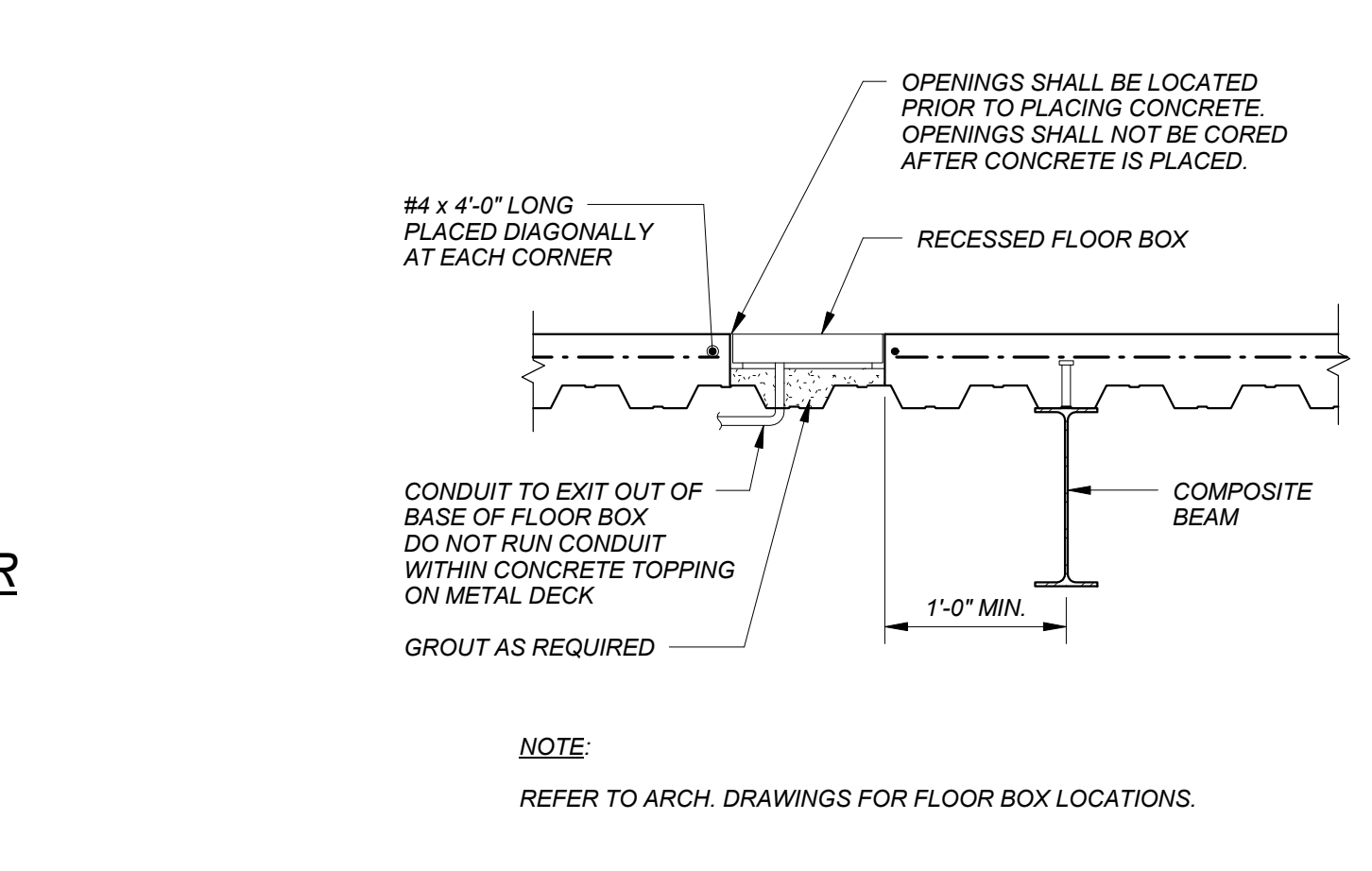
ADDED REBAR AT INSIDE CORNERS



ADDED REBAR AT INTERIOR COLUMNS



DECK SUPPORT AT EXTERIOR COLUMNS



POUR STOP SCHEDULE AND DETAILS

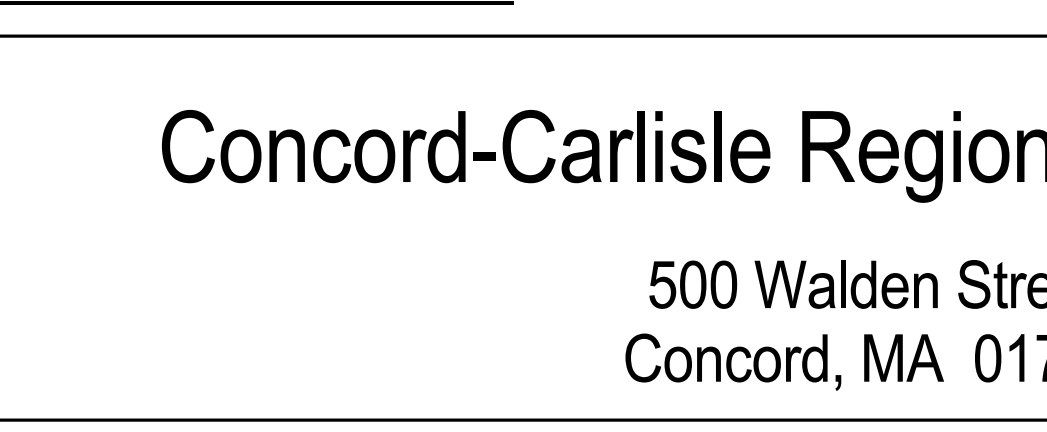
DECK SUPPORT AT INTERIOR COLUMNS



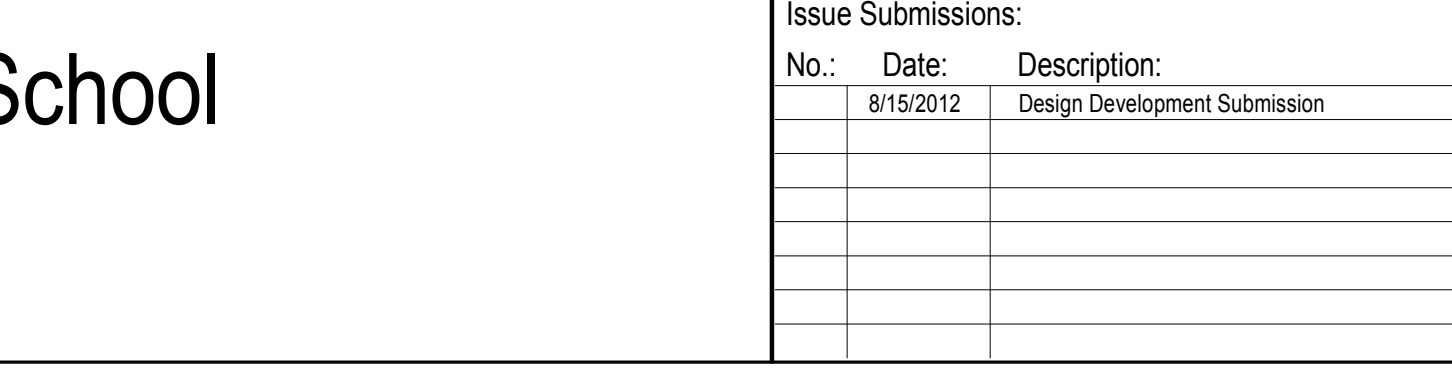
CONDITION 2 - HOLES PERPENDICULAR TO BEAM



CONDITION 4 - HOLES PERPENDICULAR TO GIRDER



FLOOR BOX EMBEDMENT



NOTE: THIS DETAIL IS TO BE USED AT CONDITIONS WHERE DECK IS OBSTRUCTED BY OPENINGS, MOMENT CONNECTIONS, OR OTHER SIMILAR CONDITIONS.

NOTE: IF MORE THAN 2 CONSECUTIVE PENETRATIONS ARE REQUIRED THEN THE TYPICAL FLOOR OPENING FRAME IS REQ'D.

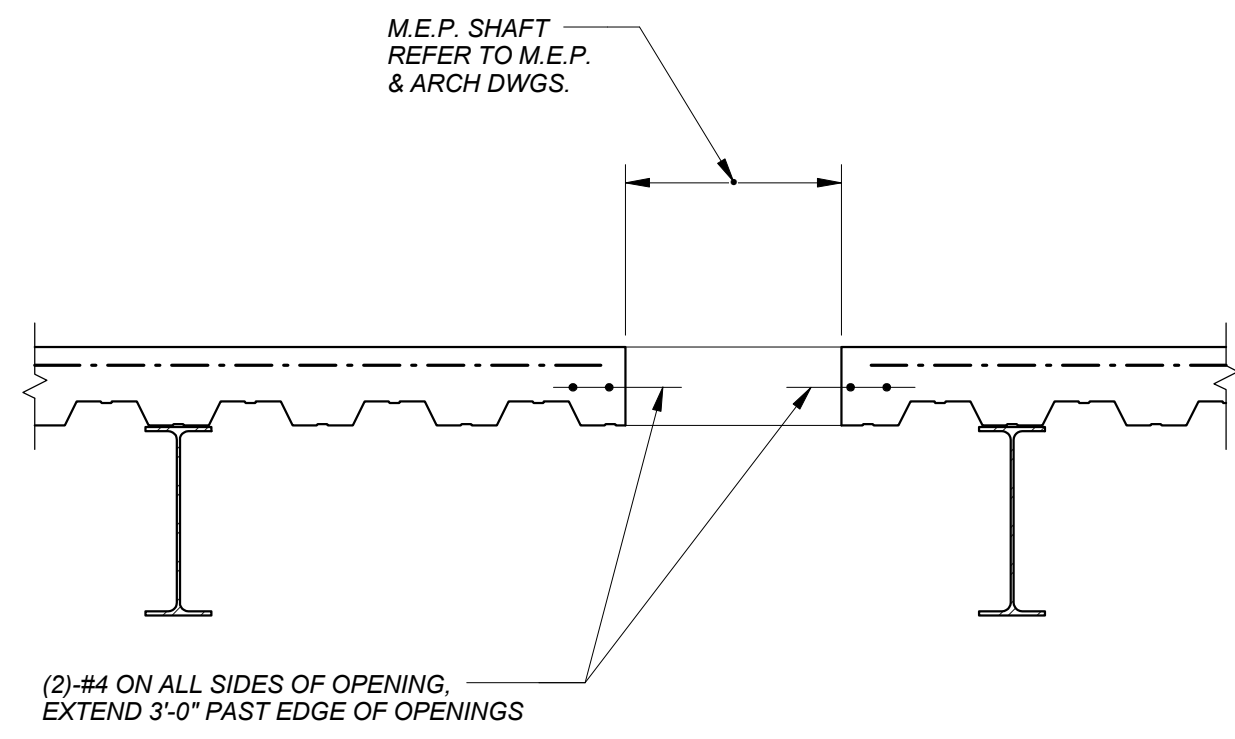
NOTE: IF MORE THAN 2 CONSECUTIVE PENETRATIONS ARE REQUIRED THEN THE TYPICAL FLOOR OPENING FRAME IS REQ'D.

NOTE: REFER TO ARCH. DRAWINGS FOR FLOOR BOX LOCATIONS.

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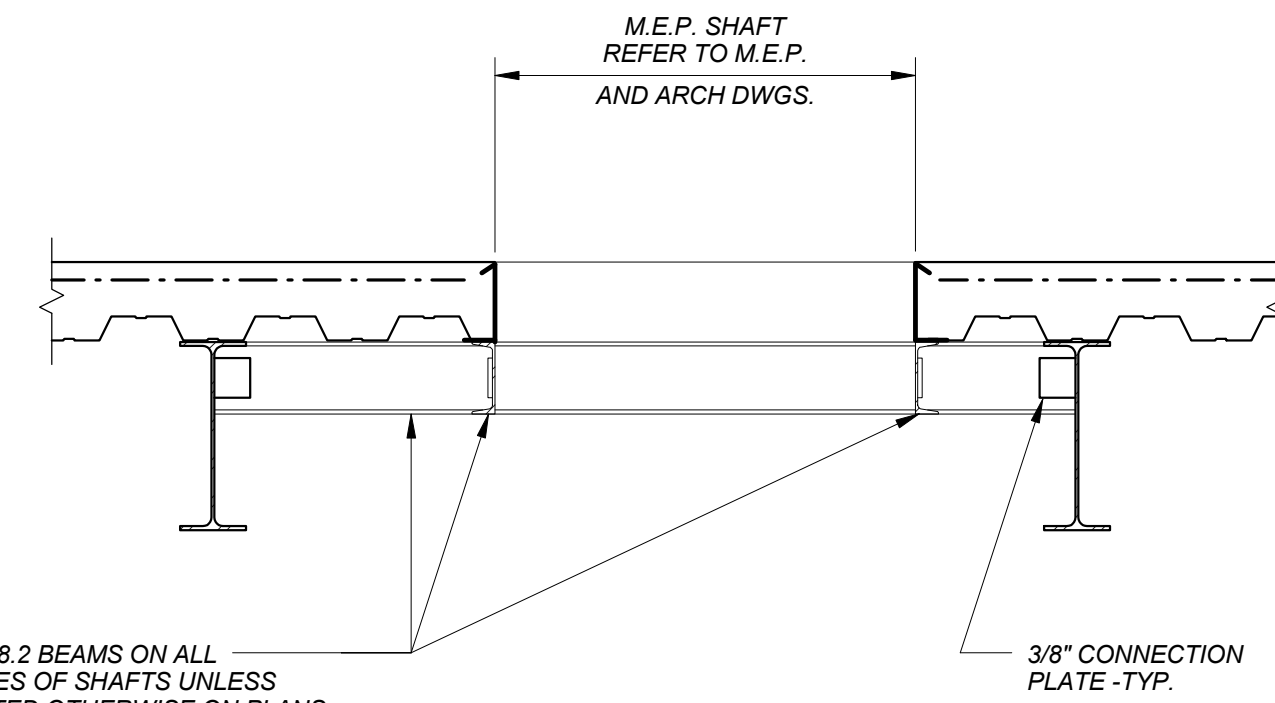
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Architect: omr architects inc 543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer: FoleyBuhlRoberts & ASSOCIATES INC structural engineers T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St. Newton MA 02462	Registration: Design Development Submission	Project Name and Address: Concord-Carlisle Regional High School 500 Walden Street Concord, MA 01742	Issue Submissions: No.: Date: Description: 8/15/2012 Design Development Submission	Title: Typical Details IV	Project No.: 1102.00 Drawing No.: S1.4 © omr architects inc
Date: August 15, 2012	Scale: 3/4" = 1'-0"	Drawn: CDM	Checked: MAP			



NOTE:
REFER TO ARCH. AND M.E.P. DRAWINGS FOR SHAFT LOCATIONS AND SIZES. OPENINGS ARE NOT SHOWN ON STRUCTURAL PLANS.

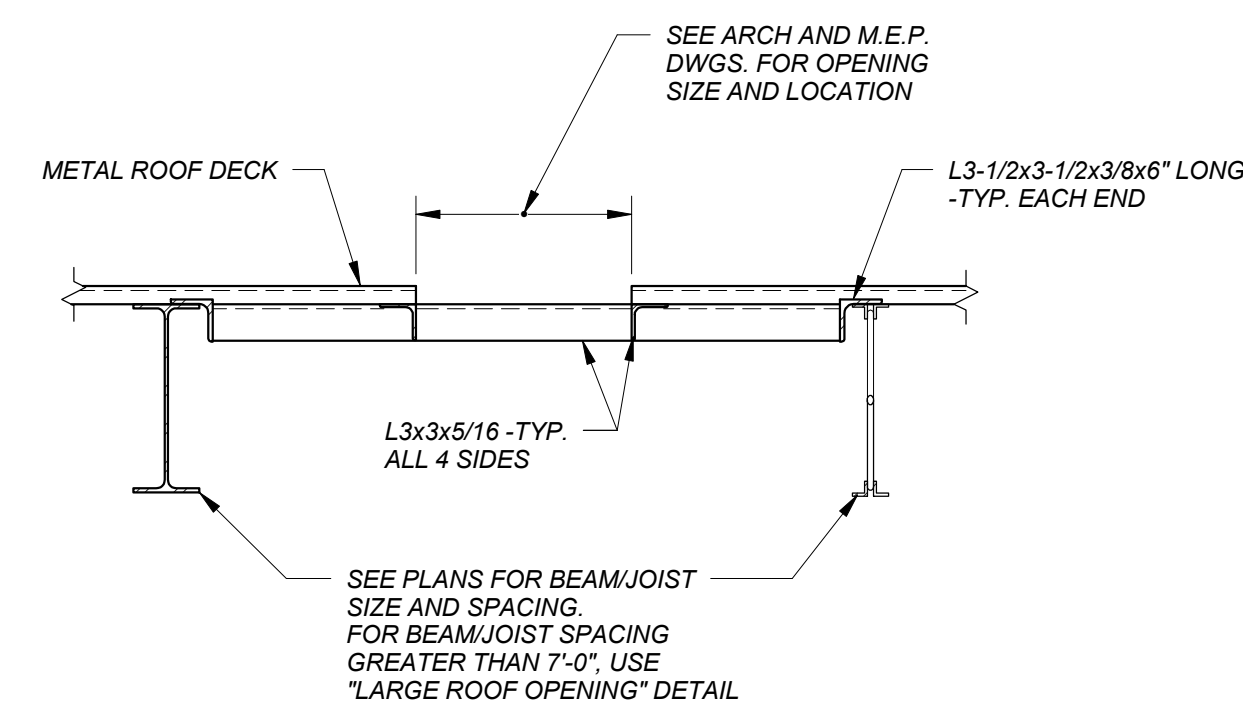
SMALL FLOOR OPENINGS (LESS THAN 18")



C6x8.2 BEAMS ON ALL SIDES OF SHAFTS UNLESS NOTED OTHERWISE ON PLANS

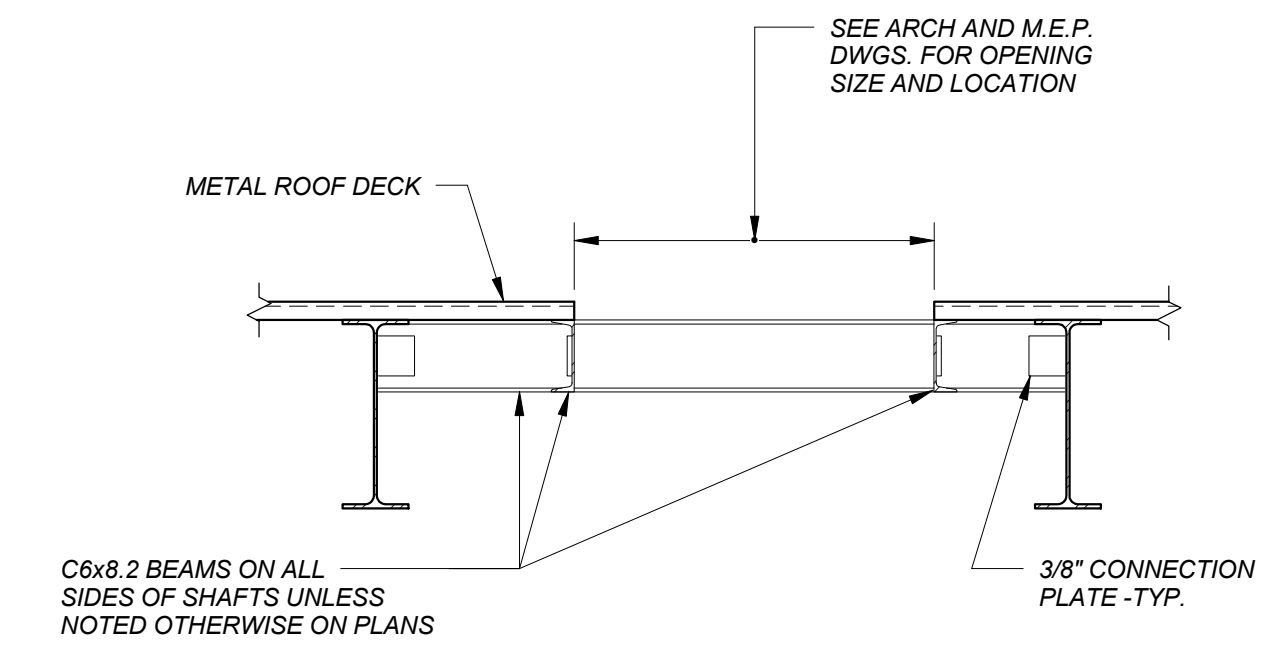
NOTE:
REFER TO ARCH. AND M.E.P. DRAWINGS FOR SHAFT LOCATIONS AND SIZES. OPENINGS ARE NOT SHOWN ON STRUCTURAL PLANS.

LARGE FLOOR OPENINGS (LARGER THAN 18")



NOTES:
1. DETAIL ABOVE APPLIES TO OPENINGS IN ROOF STRUCTURE TO BE PROVIDED FOR ROOF DRAINS, FANS, M.E.P. SHAFTS, ETC.
2. SEE ARCHITECTURAL AND M.E.P. DRAWINGS FOR SIZE AND LOCATION OF OPENINGS. COORDINATE WITH EQUIPMENT REQUIREMENTS.
3. FRAMING SHOWN ON THE PLANS GOVERN OVER THAT WHICH IS INDICATED ON THE DETAIL ABOVE.
4. WHERE ADDED LOAD TO JOISTS OCCURS BETWEEN TOP CHORD PANEL POINTS, ADD L1-1/2x1-1/2x1/4 TO BOTTOM CHORD PANEL POINT.

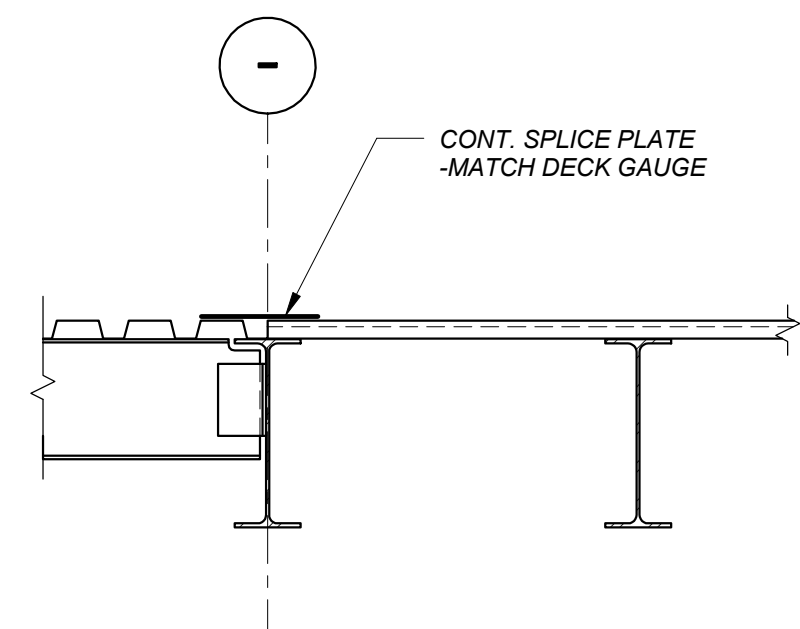
SMALL ROOF OPENINGS (LESS THAN 18")



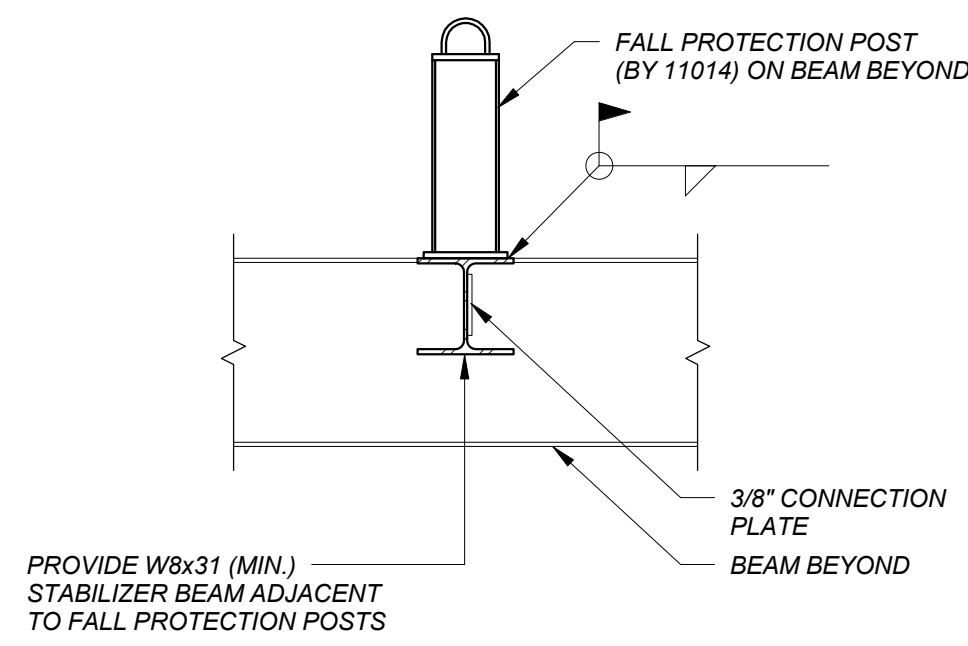
C6x8.2 BEAMS ON ALL SIDES OF SHAFTS UNLESS NOTED OTHERWISE ON PLANS

NOTES:
1. DETAIL ABOVE APPLIES TO OPENINGS IN ROOF STRUCTURE TO BE PROVIDED FOR ROOF DRAINS, FANS, M.E.P. SHAFTS, ETC.
2. SEE ARCHITECTURAL AND M.E.P. DRAWINGS FOR SIZE AND LOCATION OF OPENINGS. COORDINATE WITH EQUIPMENT REQUIREMENTS.
3. FRAMING SHOWN ON THE PLANS GOVERN OVER THAT WHICH IS INDICATED ON THE DETAIL ABOVE.
4. WHERE ADDED LOAD TO JOISTS OCCURS BETWEEN TOP CHORD PANEL POINTS, ADD L1-1/2x1-1/2x1/4 TO BOTTOM CHORD PANEL POINT.

LARGE ROOF OPENINGS (LARGER THAN 18")



ROOF DECK SPLICE

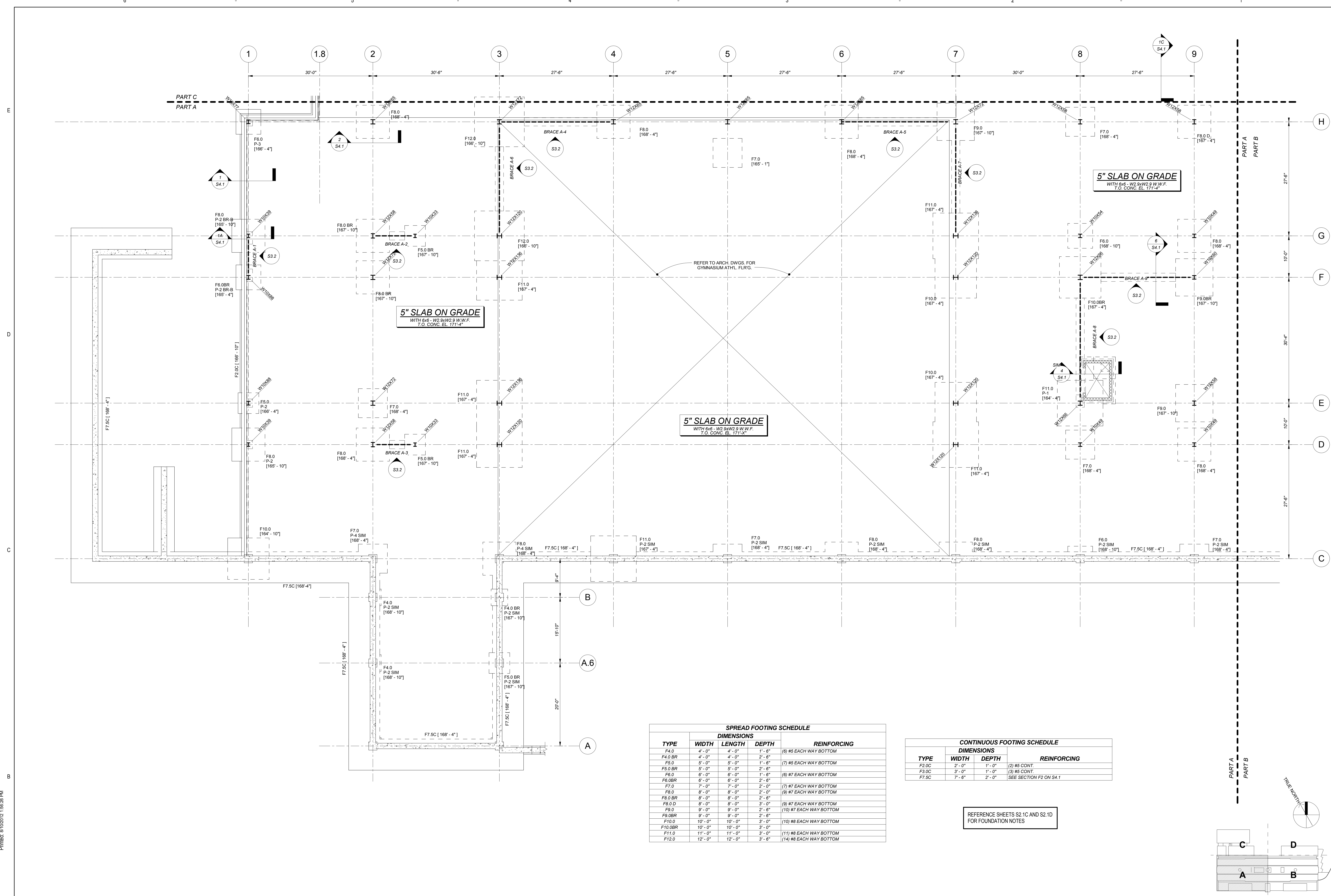


NOTES:
1. COORDINATE LOCATION OF BEAMS WITH LAYOUT OF TIE-BACK ANCHORS SHOWN ON ARCH. DWGS.
2. FINISHED FIELD WELDS TO BE PAINTED WITH ZINC-RICH PAINT.
3. DETAIL TO ACCOUNT FOR SLOPING ROOF MEMBERS WHERE APPLICABLE.

FALL PROTECTION ROOF ANCHOR

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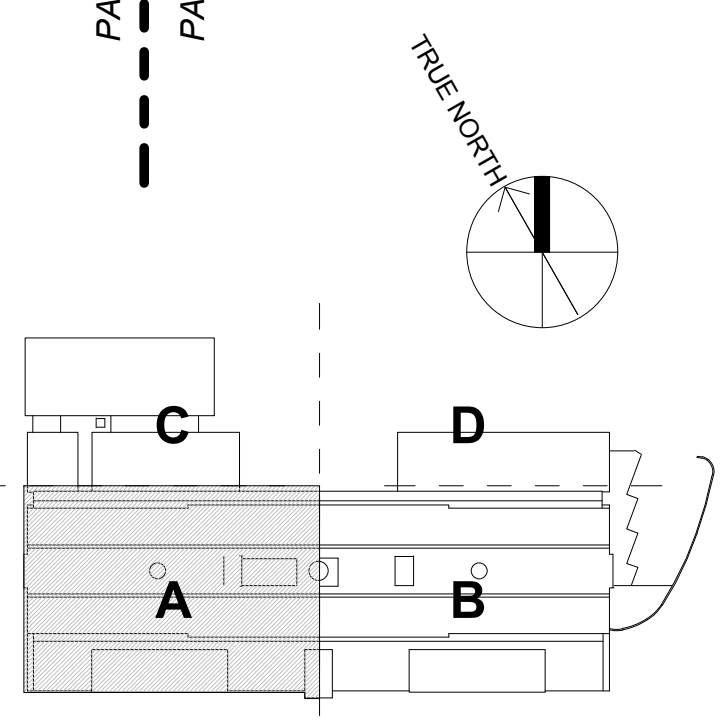
Architect:  543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer:  structural engineers T 617-527-9600 F 617-527-9606 2150 Washington St. Newton MA 02462	Registration: 	Project Name and Address: <h2 style="text-align: center;">Concord-Carlisle Regional High School</h2> <p style="text-align: center;">500 Walden Street Concord, MA 01742</p>	Issue Submissions: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.:</th> <th>Date:</th> <th>Description:</th> </tr> </thead> <tbody> <tr> <td> </td> <td>8/15/2012</td> <td>Design Development Submission</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.:	Date:	Description:		8/15/2012	Design Development Submission										Title: <h3 style="text-align: center;">Typical Details V</h3>	Project No.: 1102.00 Drawing No.: <h1 style="text-align: center;">S1.5</h1>
No.:	Date:	Description:																			
	8/15/2012	Design Development Submission																			
Date: August 15, 2012 Scale: 3/4" = 1'-0" Drawn: CDM Checked: MAP					© omr architects inc																



SPREAD FOOTING SCHEDULE				REINFORCING
TYPE	WIDTH	LENGTH	DEPTH	
F4.0	4'-0"	4'-0"	1'-6"	(6) #5 EACH WAY BOTTOM
F4.0 BR	4'-0"	4'-0"	2'-6"	(7) #5 EACH WAY BOTTOM
F5.0	5'-0"	5'-0"	2'-6"	(7) #5 EACH WAY BOTTOM
F5.0 BR	5'-0"	5'-0"	2'-6"	(7) #5 EACH WAY BOTTOM
F6.0	6'-0"	6'-0"	2'-6"	(8) #7 EACH WAY BOTTOM
F6.0 BR	6'-0"	6'-0"	2'-6"	(8) #7 EACH WAY BOTTOM
F7.0	7'-0"	7'-0"	2'-0"	(7) #7 EACH WAY BOTTOM
F8.0	8'-0"	8'-0"	2'-0"	(9) #7 EACH WAY BOTTOM
F8.0 BR	8'-0"	8'-0"	2'-6"	(9) #7 EACH WAY BOTTOM
F8.0 D	8'-0"	8'-0"	3'-0"	(9) #7 EACH WAY BOTTOM
F9.0	9'-0"	9'-0"	2'-6"	(10) #8 EACH WAY BOTTOM
F9.0 BR	9'-0"	9'-0"	2'-6"	(10) #8 EACH WAY BOTTOM
F10.0	10'-0"	10'-0"	3'-0"	(10) #8 EACH WAY BOTTOM
F10.0 BR	10'-0"	10'-0"	3'-0"	(11) #8 EACH WAY BOTTOM
F11.0	11'-0"	11'-0"	3'-0"	(11) #8 EACH WAY BOTTOM
F12.0	12'-0"	12'-0"	3'-6"	(14) #8 EACH WAY BOTTOM

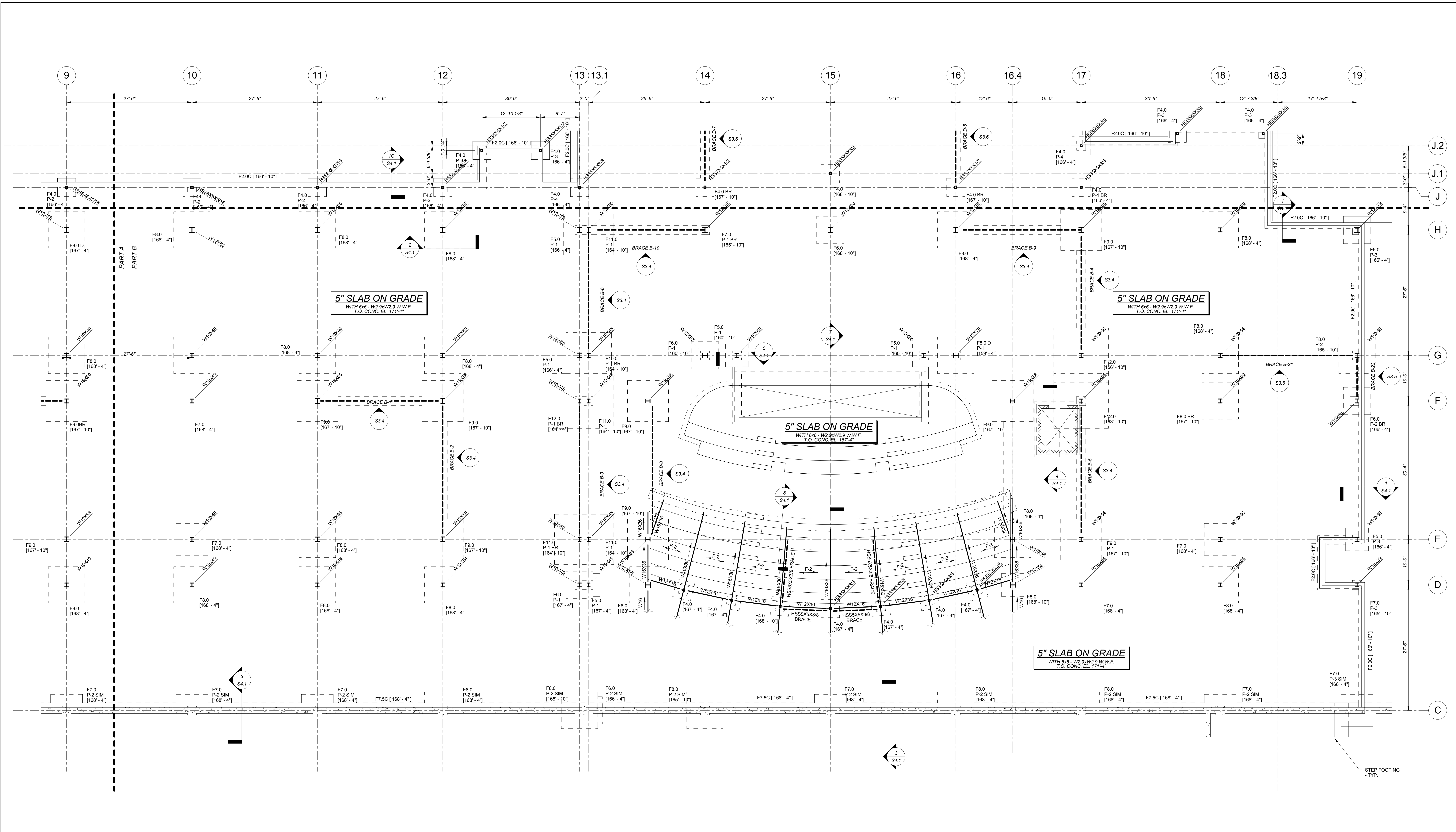
CONTINUOUS FOOTING SCHEDULE			
TYPE	WIDTH	DEPTH	REINFORCING
F2.0C	2'-0"	1'-0"	(2) #5 CONT.
F3.0C	3'-0"	1'-0"	(3) #5 CONT.
F7.5C	7'-6"	2'-0"	SEE SECTION F2 ON S4.1

REFERENCE SHEETS S2.1C AND S2.1D FOR FOUNDATION NOTES



CALSCALE: REVISED: 01/11/17, CORRECTS: FBRA_2012.rvt
 First Floor Foundation Plan - Part A S2.1A
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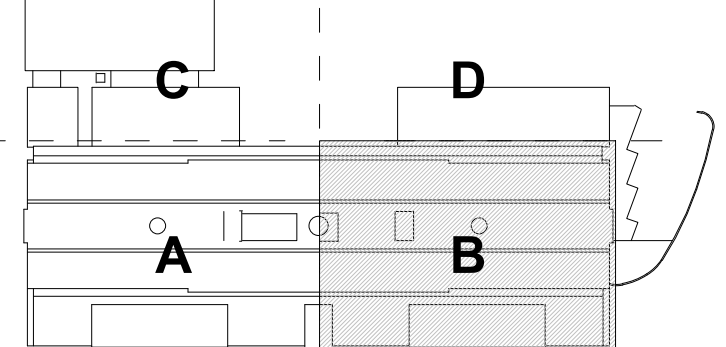
Architect: omrarchitects inc 543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer: FoleyBuhlRoberts & ASSOCIATES INC structural engineers T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St. Newton MA 02462	Registration: Design Development Submission	Project Name and Address: Concord-Carlisle Regional High School 500 Walden Street Concord, MA 01742	Issue Submissions: No.: Date: Description: 8/15/2012 Design Development Submission	Title: First Floor/Foundation Plan - Part A Date: August 15, 2012 Scale: 1/8" = 1'-0" Drawn: CDM Checked: MAP	Project No.: 1102.00 Drawing No.: S2.1A © omr architects inc
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SPREAD FOOTING SCHEDULE				
TYPE	DIMENSIONS			REINFORCING
	WIDTH	LENGTH	DEPTH	
F4.0	4'-0"	4'-0"	1'-6"	(6) #5 EACH WAY BOTTOM
F4.0 BR	4'-0"	4'-0"	2'-6"	(7) #5 EACH WAY BOTTOM
F5.0	5'-0"	5'-0"	1'-6"	(7) #5 EACH WAY BOTTOM
F5.0 BR	5'-0"	5'-0"	2'-6"	(8) #7 EACH WAY BOTTOM
F6.0	6'-0"	6'-0"	1'-6"	(6) #5 EACH WAY BOTTOM
F6.0 BR	6'-0"	6'-0"	2'-6"	(7) #7 EACH WAY BOTTOM
F7.0	7'-0"	7'-0"	2'-0"	(9) #7 EACH WAY BOTTOM
F8.0	8'-0"	8'-0"	2'-0"	(9) #7 EACH WAY BOTTOM
F8.0 BR	8'-0"	8'-0"	2'-6"	(10) #8 EACH WAY BOTTOM
F8.0 D	8'-0"	8'-0"	3'-0"	(9) #7 EACH WAY BOTTOM
F9.0	9'-0"	9'-0"	2'-6"	(10) #8 EACH WAY BOTTOM
F9.0 BR	9'-0"	9'-0"	2'-6"	(11) #8 EACH WAY BOTTOM
F10.0	10'-0"	10'-0"	3'-0"	(10) #8 EACH WAY BOTTOM
F10.0 BR	10'-0"	10'-0"	3'-0"	(11) #8 EACH WAY BOTTOM
F11.0	11'-0"	11'-0"	3'-0"	(11) #8 EACH WAY BOTTOM
F12.0	12'-0"	12'-0"	3'-6"	(14) #8 EACH WAY BOTTOM

CONTINUOUS FOOTING SCHEDULE				
TYPE	DIMENSIONS			REINFORCING
	WIDTH	DEPTH		
F2.0C	2'-0"	1'-0"	(2) #5 CONT.	
F3.0C	3'-0"	1'-0"	(3) #5 CONT.	
F7.5C	7'-6"	2'-0"	SEE SECTION F2 ON S4.1	

REFERENCE SHEETS S2.1C AND S2.1D FOR FOUNDATION NOTES

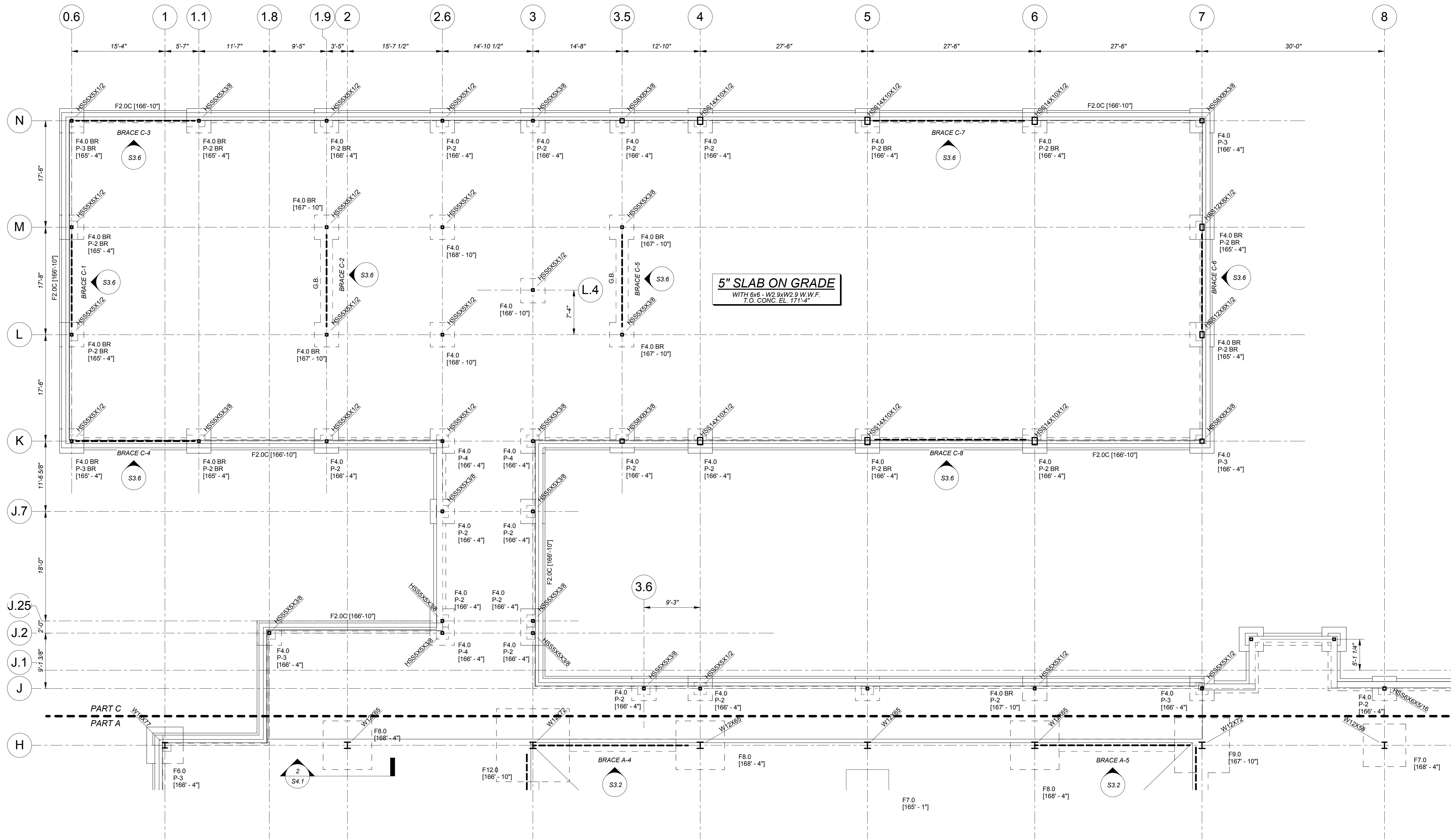


Architect: 543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer: structural engineers T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St. Newton MA 02462	Registration: 	Project Name and Address: <h2 style="margin: 0;">Concord-Carlisle Regional High School</h2> <p style="margin: 0;">500 Walden Street Concord, MA 01742</p>	Issue Submissions: <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>No.</th> <th>Date</th> <th>Description</th> </tr> <tr> <td> </td> <td>8/15/2012</td> <td>Design Development Submission</td> </tr> </table>	No.	Date	Description		8/15/2012	Design Development Submission	Title: <h3 style="margin: 0;">First Floor/Foundation Plan - Part B</h3>	Project No.: 1102.00 Drawing No.: <h2 style="margin: 0;">S2.1B</h2>
No.	Date	Description										
	8/15/2012	Design Development Submission										
				Date: August 15, 2012 Scale: 1/8" = 1'-0" Drawn: CDM Checked: MAP	© omr architects inc							

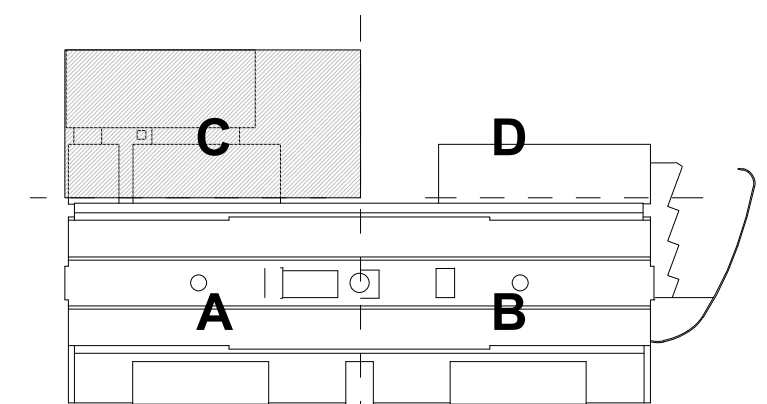
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SPREAD FOOTING SCHEDULE				
TYPE	DIMENSIONS			REINFORCING
	WIDTH	LENGTH	DEPTH	
F4.0	4'-0"	4'-0"	1'-6"	(6) #5 EACH WAY BOTTOM
F4.0 BR	4'-0"	4'-0"	2'-6"	(6) #5 EACH WAY BOTTOM
F5.0	5'-0"	5'-0"	1'-6"	(7) #5 EACH WAY BOTTOM
F5.0 BR	5'-0"	5'-0"	2'-6"	(7) #5 EACH WAY BOTTOM
F6.0	6'-0"	6'-0"	1'-6"	(6) #7 EACH WAY BOTTOM
F6.0 BR	6'-0"	6'-0"	2'-6"	(6) #7 EACH WAY BOTTOM
F7.0	7'-0"	7'-0"	2'-0"	(7) #7 EACH WAY BOTTOM
F7.0 BR	7'-0"	7'-0"	2'-0"	(7) #7 EACH WAY BOTTOM
F8.0	8'-0"	8'-0"	2'-0"	(9) #7 EACH WAY BOTTOM
F8.0 BR	8'-0"	8'-0"	2'-6"	(9) #7 EACH WAY BOTTOM
F8.0 D	8'-0"	8'-0"	3'-0"	(9) #7 EACH WAY BOTTOM
F9.0	9'-0"	9'-0"	2'-6"	(10) #7 EACH WAY BOTTOM
F9.0 BR	9'-0"	9'-0"	2'-6"	(10) #7 EACH WAY BOTTOM
F10.0	10'-0"	10'-0"	3'-0"	(10) #8 EACH WAY BOTTOM
F10.0 BR	10'-0"	10'-0"	3'-0"	(10) #8 EACH WAY BOTTOM
F11.0	11'-0"	11'-0"	3'-0"	(11) #8 EACH WAY BOTTOM
F12.0	12'-0"	12'-0"	3'-0"	(14) #8 EACH WAY BOTTOM

CONTINUOUS FOOTING SCHEDULE			
TYPE	DIMENSIONS		REINFORCING
	WIDTH	DEPTH	
F2.0C	2'-0"	1'-0"	(2) #5 CONT.
F3.0C	3'-0"	1'-0"	(3) #5 CONT.
F7.5C	7'-6"	2'-0"	SEE SECTION F2 ON S4.1



- FOUNDATION NOTES:**
- FOR GENERAL NOTES AND TYPICAL DETAILS REFER TO DRAWINGS S1.0 THRU S1.5.
 - FLOOR TOP OF CONCRETE EL. = 171'-4". UNLESS NOTED (+) OR (-).
 - INDICATES A DEPRESSION. REFER TO ARCHITECTURAL DRAWINGS FOR DEPTH AND EXTENTS. COORDINATE WITH FLOORING MANUFACTURER.
 - COLUMN SIZES ARE SHOWN ON PLANS AT THEIR LOWEST LEVELS OR AT SPLICES. REFER TO FOUNDATION PLANS AND FRAMING PLANS.
 - FOR PIER, PILASTER AND BASE PLATE DETAILS REFER TO DRAWING S3.0.
 - BRACE B-X" INDICATES A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS AND DETAILS REFER TO DRAWING S3.1 THRU S3.6.
 - ESTIMATED ELEVATION OF BOTTOM OF FOOTING IS INDICATED THUS (X'-X") ON PLAN. BOTTOM OF EACH EXTERIOR FOOTING SHALL BE A MINIMUM OF 4'-0" BELOW ADJACENT FINISH GRADE.
 - REFER TO ARCHITECTURAL DRAWINGS FOR DOOR THRESHOLDS AND SLOPING SLABS TO DRAINS.
 - COORDINATE DIMENSIONS AND LOCATIONS OF ANY PIPES OR DUCTS TO BE PLACED UNDER OR THROUGH THE SLABS OR FOUNDATION WALL WITH ARCHITECTURAL AND MEP DRAWINGS.
 - ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED.
 - INDICATES ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (A.E.S.S.). REFER TO THE SPECIFICATIONS FOR SURFACE PREPARATION AND FINISH REQUIREMENTS. COORDINATE LOCATIONS OF A.E.S.S. WITH ARCHITECTURAL DRAWINGS.
 - SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF STEEL FIREPROOFING.
 - PROVIDE CONTROL JOINTS IN SLABS ON GRADE AT ALL COLUMN LINES.




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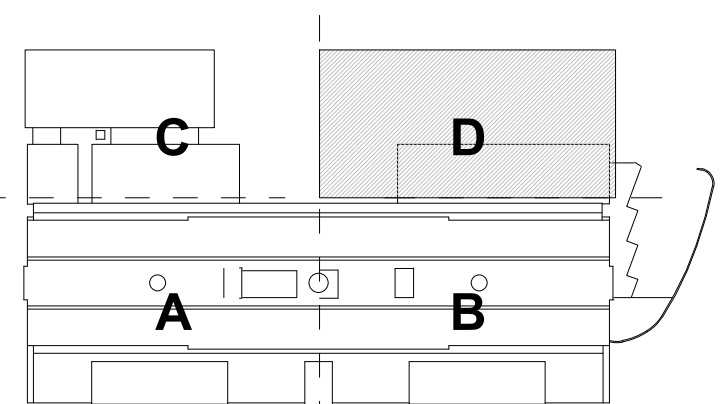
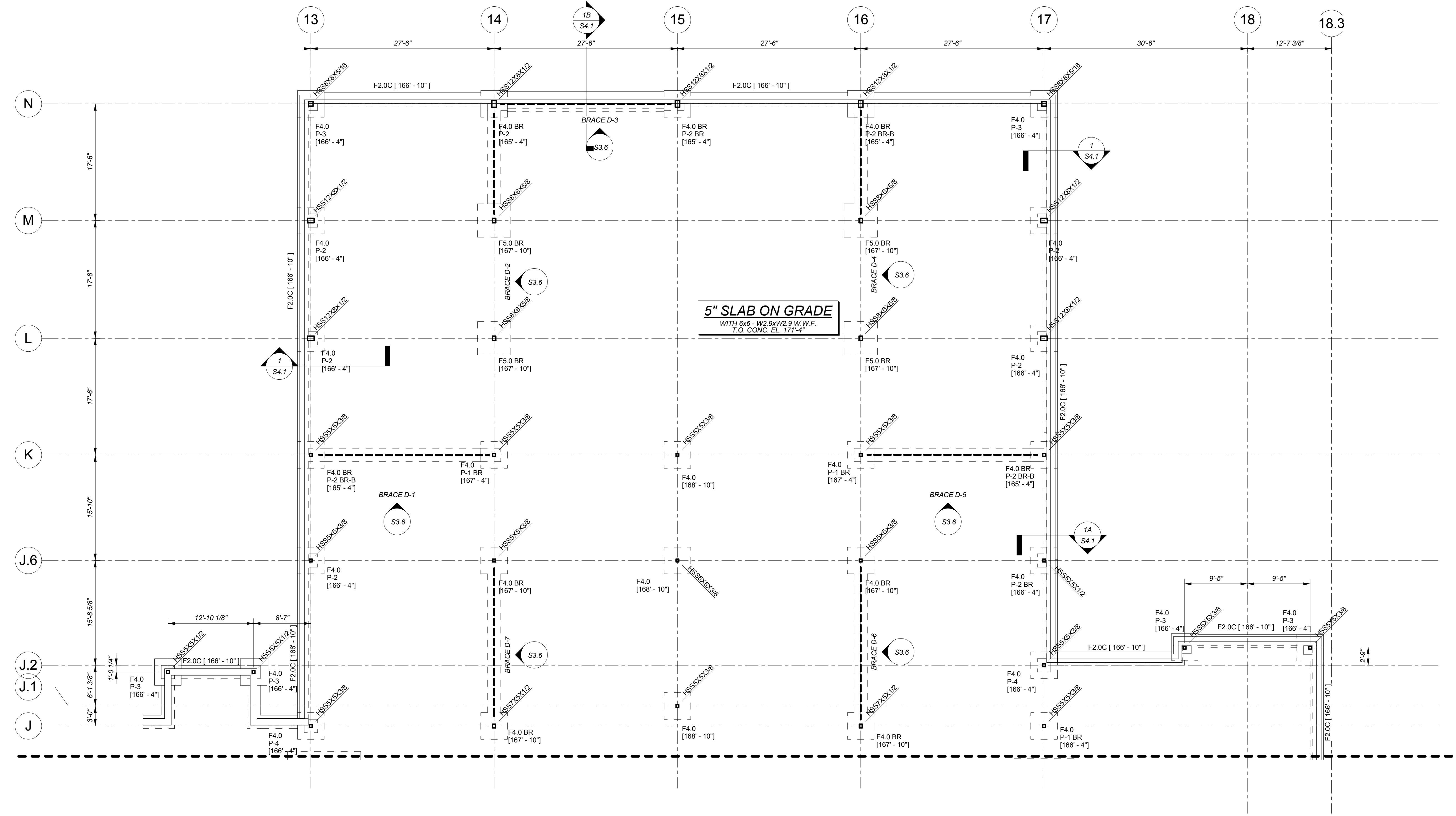
Architect: omr architects inc 543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer: FoleyBuhlRoberts & ASSOCIATES INC structural engineers T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St. Newton MA 02462	Registration: Design Development Submission	Project Name and Address: Concord-Carlisle Regional High School 500 Walden Street Concord, MA 01742	Issue Submissions: No. Date Description 8/15/2012 Design Development Submission	Title: First Floor/Foundation Plan - Part C	Project No.: 1102.00 Drawing No.: S2.1C © omr architects inc
Date: August 15, 2012 Scale: 1/8" = 1'-0" Drawn: Author Checked: MAP						

SPREAD FOOTING SCHEDULE				
TYPE	DIMENSIONS			REINFORCING
	WIDTH	LENGTH	DEPTH	
F4.0	4'-0"	4'-0"	1'-6"	(6) #5 EACH WAY BOTTOM
F4.0 BR	4'-0"	4'-0"	2'-6"	
F5.0	5'-0"	5'-0"	1'-6"	(7) #5 EACH WAY BOTTOM
F5.0 BR	5'-0"	5'-0"	2'-6"	
F6.0	6'-0"	6'-0"	1'-6"	(6) #7 EACH WAY BOTTOM
F6.0 BR	6'-0"	6'-0"	2'-6"	
F7.0	7'-0"	7'-0"	2'-0"	(7) #7 EACH WAY BOTTOM
F8.0	8'-0"	8'-0"	2'-0"	(9) #7 EACH WAY BOTTOM
F8.0 BR	8'-0"	8'-0"	2'-6"	
F8.0 D	8'-0"	8'-0"	3'-0"	(9) #7 EACH WAY BOTTOM
F9.0	9'-0"	9'-0"	2'-6"	(10) #7 EACH WAY BOTTOM
F9.0 BR	9'-0"	9'-0"	2'-6"	
F10.0	10'-0"	10'-0"	3'-0"	(10) #8 EACH WAY BOTTOM
F10.0 BR	10'-0"	10'-0"	3'-0"	
F11.0	11'-0"	11'-0"	3'-0"	(11) #8 EACH WAY BOTTOM
F12.0	12'-0"	12'-0"	3'-6"	(14) #8 EACH WAY BOTTOM

CONTINUOUS FOOTING SCHEDULE			
TYPE	DIMENSIONS		REINFORCING
	WIDTH	DEPTH	
F2.0C	2'-0"	1'-0"	(2) #5 CONT.
F3.0C	3'-0"	1'-0"	(3) #5 CONT.
F7.5C	7'-6"	2'-0"	SEE SECTION F2 ON S4.1

FOUNDATION NOTES:

- FOR GENERAL NOTES AND TYPICAL DETAILS REFER TO DRAWINGS S1.0 THRU S1.5.
- FLOOR TOP OF CONCRETE EL. = 171'-4". UNLESS NOTED (+) OR (-).
-  INDICATES A DEPRESSION. REFER TO ARCHITECTURAL DRAWINGS FOR DEPTH AND EXTENTS. COORDINATE WITH FLOORING MANUFACTURER.
- COLUMN SIZES ARE SHOWN ON PLANS AT THEIR LOWEST LEVELS OR AT SPLICES. REFER TO FOUNDATION PLANS AND FRAMING PLANS.
- FOR PIER, PILASTER AND BASE PLATE DETAILS REFER TO DRAWING S3.0.
- BRACE B-X" INDICATES A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS AND DETAILS REFER TO DRAWING S3.1 THRU S3.6.
- ESTIMATED ELEVATION OF BOTTOM OF FOOTING IS INDICATED THUS (X-X') ON PLAN. BOTTOM OF EACH EXTERIOR FOOTING SHALL BE A MINIMUM OF 4'-0" BELOW ADJACENT FINISH GRADE.
- REFER TO ARCHITECTURAL DRAWINGS FOR DOOR THRESHOLDS AND SLOPING SLABS TO DRAINS.
- COORDINATE DIMENSIONS AND LOCATIONS OF ANY PIPES OR DUCTS TO BE PLACED UNDER OR THROUGH THE SLABS OR FOUNDATION WALL WITH ARCHITECTURAL AND MEP DRAWINGS.
- ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED.
- * INDICATES ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (A.E.S.S.). REFER TO THE SPECIFICATIONS FOR SURFACE PREPARATION AND FINISH REQUIREMENTS. COORDINATE LOCATIONS OF A.E.S.S. WITH ARCHITECTURAL DRAWINGS.
- SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF STEEL FIREPROOFING.
- PROVIDE CONTROL JOINTS IN SLABS ON GRADE AT ALL COLUMN LINES.



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Architect:

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Consulting Engineer:

FoleyBuhlRoberts & ASSOCIATES INC.

structural engineers

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Registration:

Design Development Submission

Project Name and Address:

Concord-Carlisle Regional High School

500 Walden Street
Concord, MA 01742

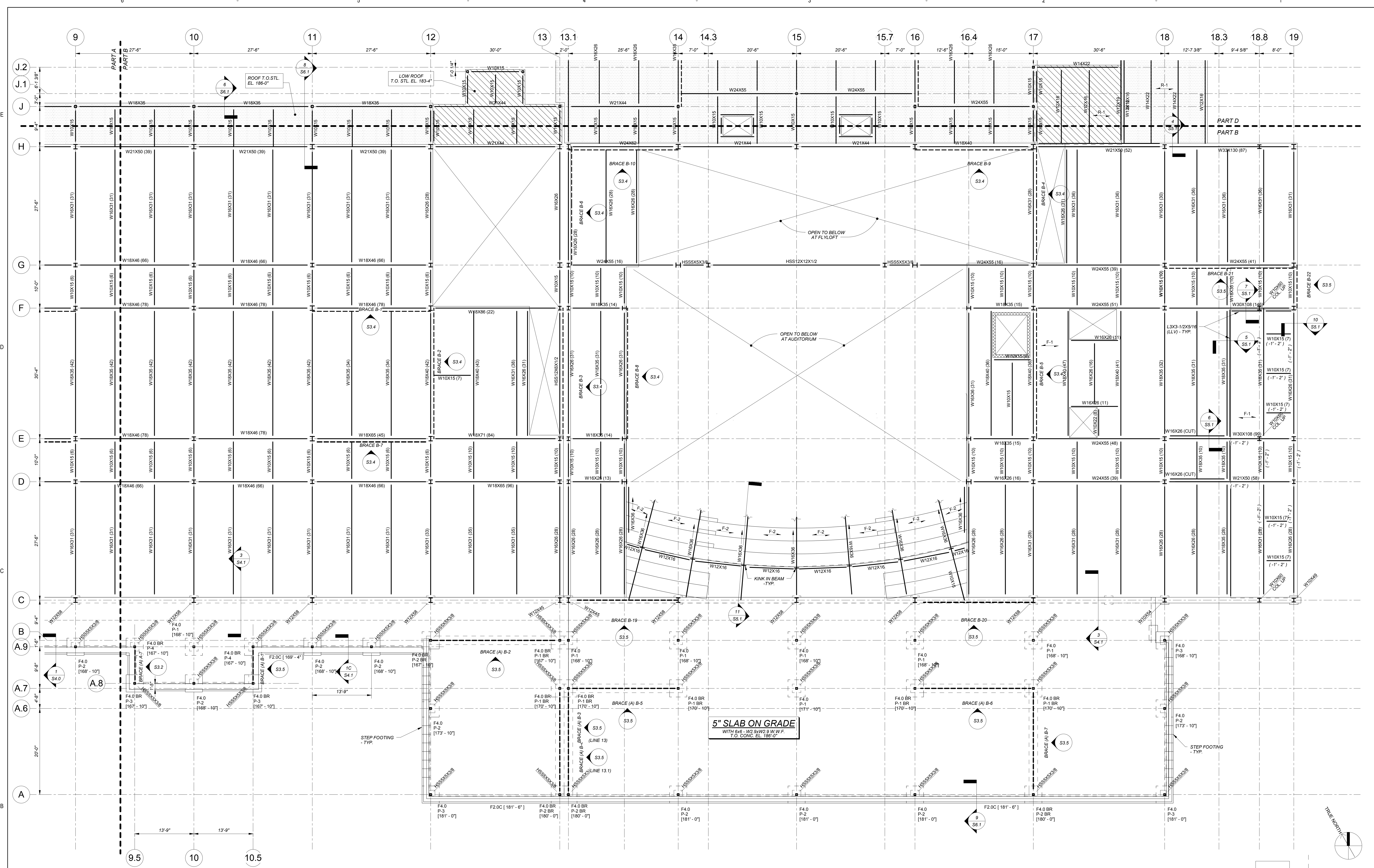
Issue Submissions:

No.	Date	Description
1	8/15/2012	Design Development Submission

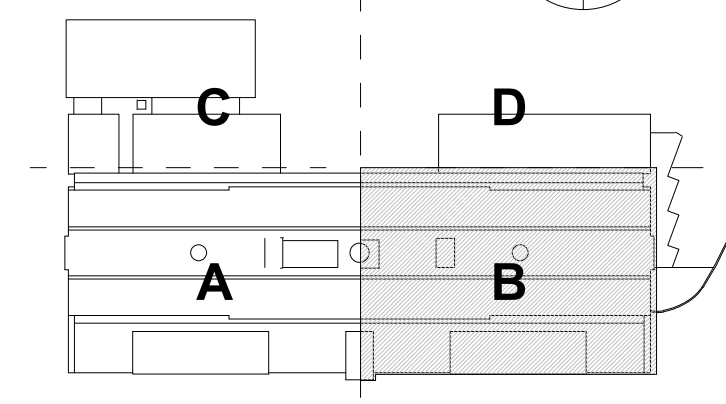
Title: **First Floor/Foundation Plan - Part D**

Date: August 15, 2012 Scale: 1/8" = 1'-0" Drawn: CDM Checked: MAP

Project No.: 1102.00
Drawing No.: **S2.1D**
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REFERENCE SHEET S2.1D FOR FOOTING SCHEDULES, FOUNDATION, FLOOR, AND ROOF NOTES



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Architect: **omrarchitects inc.**
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Consulting Engineer: **FoleyBuhlRoberts & ASSOCIATES INC.**
 structural engineers
 T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St. Newton MA 02462

Registration: **Design Development Submission**

Project Name and Address: **Concord-Carlisle Regional High School**
 500 Walden Street
 Concord, MA 01742

Issue Submissions:		
No.:	Date:	Description:
1	8/15/2012	Design Development Submission

Title: **Second Floor Framing Plan - Part B**
 Date: August 15, 2012 Scale: 1/8" = 1'-0"
 Drawn: CDM Checked: MAP

Project No.: 1102.00
 Drawing No.: **S2.2B**
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SPREAD FOOTING SCHEDULE				
TYPE	DIMENSIONS		REINFORCING	
	WIDTH	LENGTH		DEPTH
F4.0	4'-0"	4'-0"	1'-6"	(6) #5 EACH WAY BOTTOM
F4.0 BR	4'-0"	4'-0"	2'-6"	(7) #5 EACH WAY BOTTOM
F5.0	5'-0"	5'-0"	1'-6"	(7) #5 EACH WAY BOTTOM
F5.0 BR	5'-0"	5'-0"	2'-6"	(6) #7 EACH WAY BOTTOM
F6.0	6'-0"	6'-0"	1'-6"	(6) #7 EACH WAY BOTTOM
F6.0 BR	6'-0"	6'-0"	2'-6"	(7) #7 EACH WAY BOTTOM
F7.0	7'-0"	7'-0"	2'-0"	(9) #7 EACH WAY BOTTOM
F8.0	8'-0"	8'-0"	2'-0"	(9) #7 EACH WAY BOTTOM
F8.0 BR	8'-0"	8'-0"	2'-6"	(9) #7 EACH WAY BOTTOM
F9.0	9'-0"	9'-0"	3'-0"	(10) #7 EACH WAY BOTTOM
F9.0 BR	9'-0"	9'-0"	2'-6"	(11) #8 EACH WAY BOTTOM
F10.0	10'-0"	10'-0"	3'-0"	(10) #8 EACH WAY BOTTOM
F10.0 BR	10'-0"	10'-0"	3'-0"	(11) #8 EACH WAY BOTTOM
F11.0	11'-0"	11'-0"	3'-0"	(11) #8 EACH WAY BOTTOM
F12.0	12'-0"	12'-0"	3'-6"	(14) #8 EACH WAY BOTTOM

CONTINUOUS FOOTING SCHEDULE			
TYPE	DIMENSIONS		REINFORCING
	WIDTH	DEPTH	
F3.0C	3'-0"	1'-0"	(2) #5 CONT.
F3.0C	3'-0"	1'-0"	(3) #5 CONT.
F7.5C	7'-6"	2'-0"	SEE SECTION F2 ON S4.1

FOUNDATION NOTES:

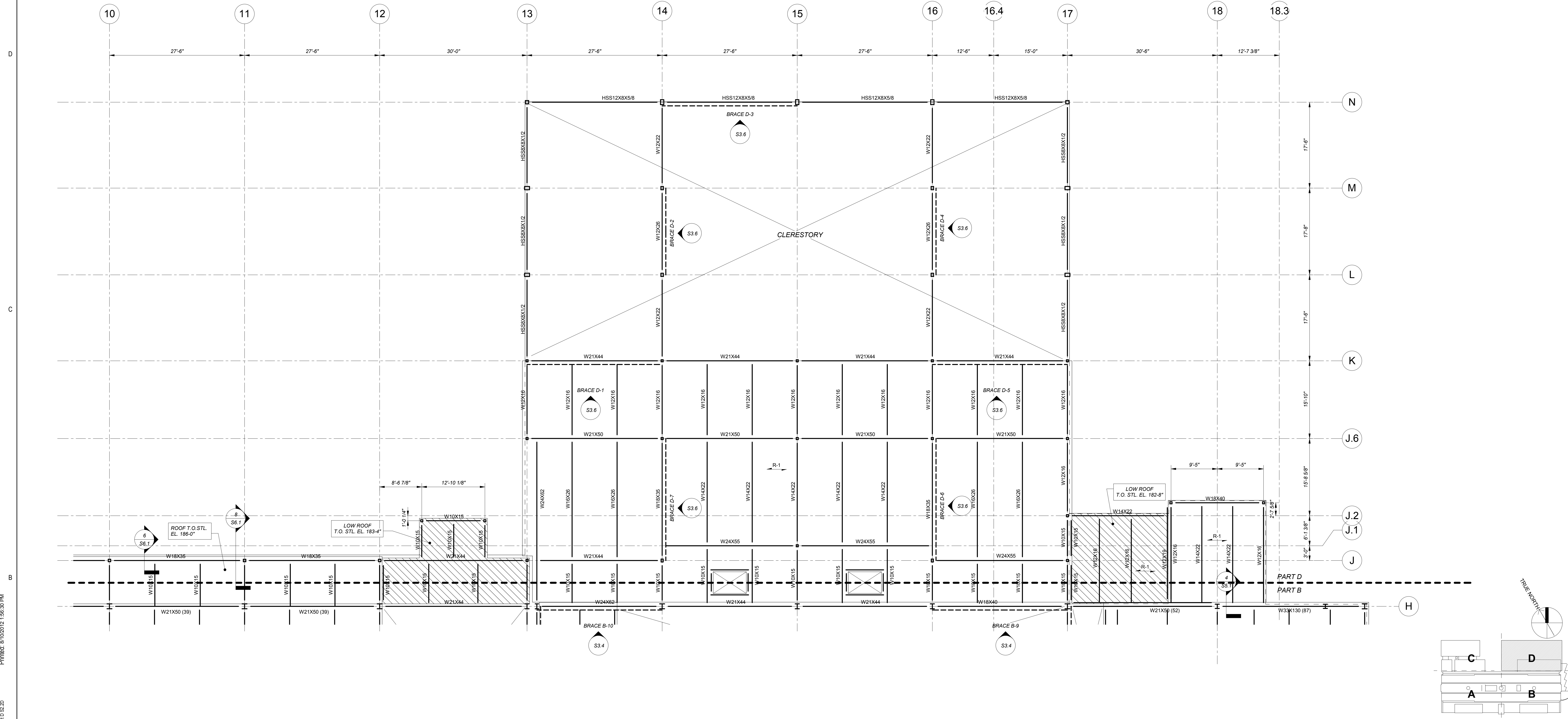
- FOR GENERAL NOTES AND TYPICAL DETAILS REFER TO DRAWINGS S1.0 THRU S1.5.
- FLOOR TOP OF CONCRETE EL. = 171'-4". UNLESS NOTED (+) OR (-).
- INDICATES A DEPRESSION. REFER TO ARCHITECTURAL DRAWINGS FOR DEPTH AND EXTENTS. COORDINATE WITH FLOORING MANUFACTURER.
- COLUMN SIZES ARE SHOWN ON PLANS AT THEIR LOWEST LEVELS OR AT SPLICES. REFER TO FOUNDATION PLANS AND FRAMING PLANS.
- FOR PIER, PILASTER AND BASE PLATE DETAILS REFER TO DRAWING S3.0.
- BRACE B-X" INDICATES A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS AND DETAILS REFER TO DRAWING S3.1 THRU S3.6.
- ESTIMATED ELEVATION OF BOTTOM OF FOOTING IS INDICATED THUS (X'-Y") ON PLAN. BOTTOM OF EACH EXTERIOR FOOTING SHALL BE A MINIMUM OF 4'-0" BELOW ADJACENT FINISH GRADE.
- REFER TO ARCHITECTURAL DRAWINGS FOR DOOR THRESHOLDS AND SLOPING SLABS TO DRAINS.
- COORDINATE DIMENSIONS AND LOCATIONS OF ANY PIPES OR DUCTS TO BE PLACED UNDER OR THROUGH THE SLABS OR FOUNDATION WALL WITH ARCHITECTURAL AND MEP DRAWINGS.
- ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED.
- INDICATES ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (A.E.S.S.). REFER TO THE SPECIFICATIONS FOR SURFACE PREPARATION AND FINISH REQUIREMENTS. COORDINATE LOCATIONS OF A.E.S.S. WITH ARCHITECTURAL DRAWINGS.
- SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF STEEL FIREPROOFING.
- PROVIDE CONTROL JOINTS IN SLABS ON GRADE AT ALL COLUMN LINES.

FLOOR NOTES:

- FOR GENERAL NOTES AND TYPICAL DETAILS REFER TO DRAWINGS S1.0 THRU S1.5.
- F-1 INDICATES SPAN DIRECTION OF FLOOR CONSTRUCTION CONSISTING OF 4.5" (MINIMUM) NORMAL WEIGHT CONCRETE TOPPING WITH 6x6-W2.9W2.9 W.W.F. SUPPORTED WITH SLAB BOLSTERS, AND 3" DEEP x 18 GAUGE GALVANIZED COMPOSITE METAL FLOOR DECK. MINIMUM TOTAL THICKNESS = 7.5". POUR SLABS LEVEL, ACCOUNTING FOR ADDITIONAL CONCRETE DUE TO STRUCTURAL FRAMING AND DECK DEFLECTIONS (AVERAGE OF 3/4" OVER THE ENTIRE FLOOR AREA).
- F-2 INDICATES SPAN DIRECTION OF 2" DEEP x 18 GAUGE GALVANIZED COMPOSITE METAL FLOOR DECK. REFER TO PART B PLANS AT AUDITORIUM AND SECTIONS FOR FLOOR CONSTRUCTION.
- INDICATES A DEPRESSION. REFER TO ARCHITECTURAL DRAWINGS FOR DEPTH AND EXTENTS. COORDINATE WITH FLOORING MANUFACTURER.
- (X) INDICATES THE NUMBER OF 3/4" DIA. x 6" LONG HEADED SHEAR STUDS ON THAT BEAM.
- FLOOR TOP OF CONCRETE EL. = 186'-0". UNLESS NOTED (+) OR (-).
- BRACE X" INDICATES A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS AND DETAILS REFER TO DRAWING S3.1 THRU S3.6.
- INDICATES ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (A.E.S.S.). REFER TO THE SPECIFICATIONS FOR SURFACE PREPARATION AND FINISH REQUIREMENTS. COORDINATE LOCATIONS OF A.E.S.S. WITH ARCHITECTURAL DRAWINGS.
- COLUMN SIZES ARE SHOWN ON PLANS AT THEIR LOWEST LEVELS OR AT SPLICES. REFER TO FOUNDATION PLANS AND FRAMING PLANS.
- INDICATES A FULL CAPACITY MOMENT CONNECTION.
- PROVIDE 2-#5 DRAG BARS IN CONCRETE SLAB, ONE ON EACH SIDE AT INTERIOR MOMENT FRAME AND BOTH BARS ON SAME SIDE WHERE FRAME IS NEAR THE EDGE OF SLAB.
- ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED.
- SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF STEEL FIREPROOFING.

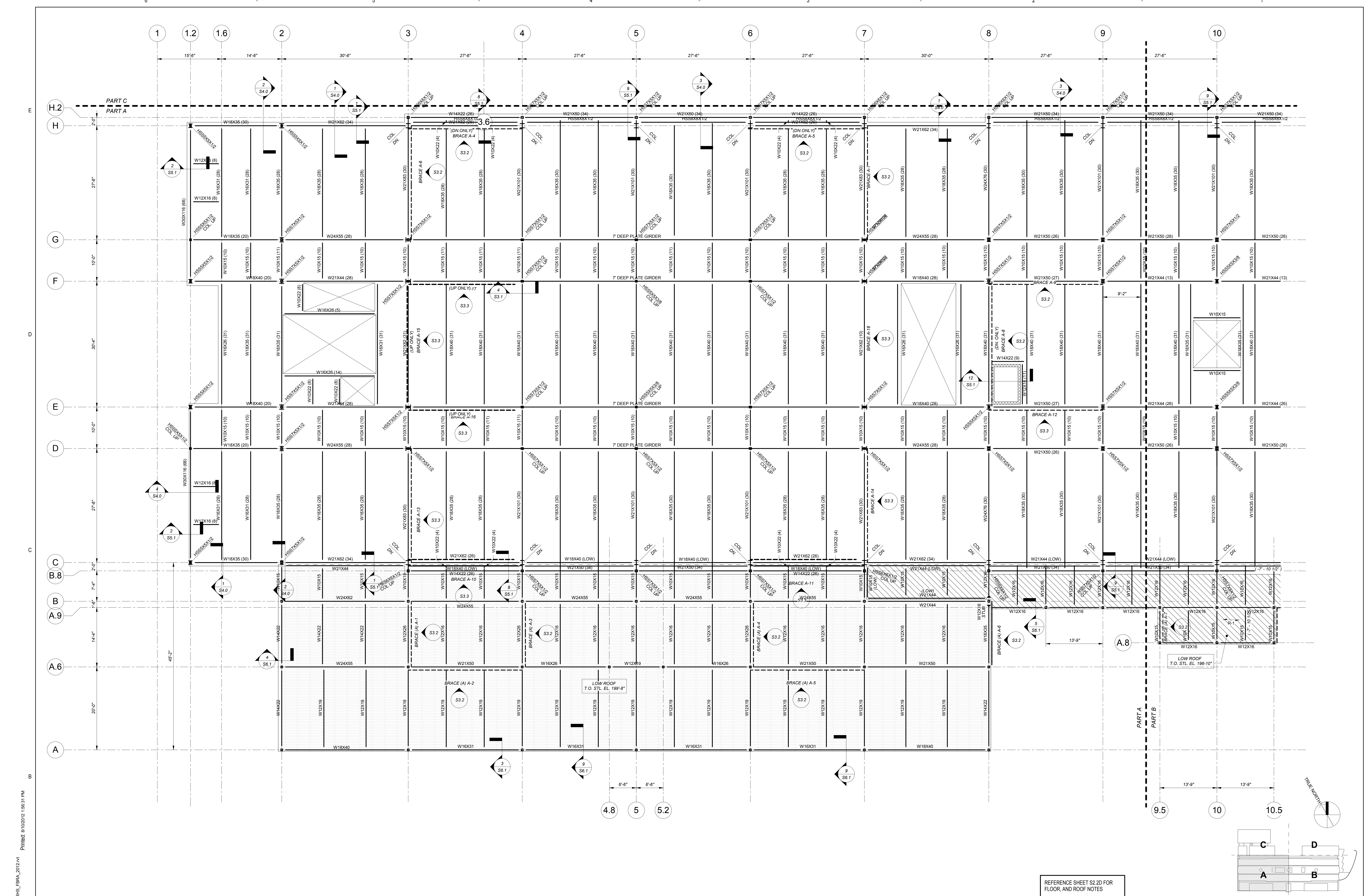
ROOF NOTES:

- FOR GENERAL NOTES AND TYPICAL DETAILS REFER TO DRAWINGS S-001 THRU S-006.
- R-3 INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 3" DEEP x 18 GAUGE GALVANIZED DEEP RIB METAL ROOF DECK.
- R-1 INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 1-1/2" DEEP x 18 GAUGE GALVANIZED WIDE RIB METAL ROOF DECK.
- R-2 INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 1-1/2" DEEP x 20/20 GAUGE GALVANIZED (WITH SHOP PRIMED UNDERSIDE) WIDE RIB CELLULAR ACoustic METAL ROOF DECK.
- ROOF TOP OF STEEL ELEVATION VARIES. REFER TO SECTIONS FOR ELEVATIONS.
- INDICATES A FULL CAPACITY MOMENT CONNECTION.
- ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED.
- BRACE X" INDICATES A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS AND DETAILS REFER TO DRAWING S3.1 THRU S3.6.
- ALL OPEN WEB STEEL JOISTS SHALL BE BRIDGED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STEEL JOIST INSTITUTE (SJI). ROOF JOISTS SHALL HAVE A LINE OF "UPLIFT" BRIDGING AT THE FIRST INTERIOR BOTTOM CHORD PANEL POINT AT EACH END.
- BEAMS AND GIRDERS THAT SUPPORT LH-SERIES JOISTS SHALL BE 5" LOWER IN ELEVATION TO ACCOUNT FOR JOIST SEAT DIMENSION.
- T.J. INDICATES A BOLTED TIE JOIST.
- INDICATES ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (A.E.S.S.). REFER TO THE SPECIFICATIONS FOR SURFACE PREPARATION AND FINISH REQUIREMENTS. COORDINATE LOCATIONS OF A.E.S.S. WITH ARCHITECTURAL DRAWINGS.
- FRAMING FOR SHAFTS, SKYLIGHTS, ROOFTOP M.E.P. EQUIPMENT, AND ROOF OPENINGS SHALL BE SIMILAR TO TYPICAL DETAILS, UNLESS NOTED OTHERWISE. COORDINATE DIMENSIONS AND LOCATIONS WITH ARCHITECTURAL AND M.E.P. DRAWINGS.



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Architect: omrarchitects inc. 543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer: FoleyBuhlRoberts & ASSOCIATES INC. structural engineers T 617-527-9600 F 617-527-9606 2150 Washington St. Newton MA 02462	Registration: Design Development Submission	Project Name and Address: Concord-Carlisle Regional High School 500 Walden Street Concord, MA 01742	Issue Submissions: <table border="1"> <tr> <th>No.</th> <th>Date</th> <th>Description</th> </tr> <tr> <td></td> <td>8/15/2012</td> <td>Design Development Submission</td> </tr> </table>	No.	Date	Description		8/15/2012	Design Development Submission	Title: Second Floor/Low Roof Framing Plan - Part D	Project No.: 1102.00 Drawing No.: S2.2D © omr architects inc
No.	Date	Description										
	8/15/2012	Design Development Submission										
Date: August 15, 2012			Scale: 1/8" = 1'-0"		Drawn: CDM Checked: MAP							



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Architect: **omrarchitects inc.**
 543 Massachusetts Ave, West Acton, MA 01720
 www.omr-architects.com t: 978.264.0160

Consulting Engineer: **FoleyBuhlRoberts & ASSOCIATES INC.**
 structural engineers
 T 617-527-9600 2150 Washington St. Newton MA 02462
 F 617-527-9606 www.fbr.com

Registration: **Design Development Submission**
 Project Name and Address:

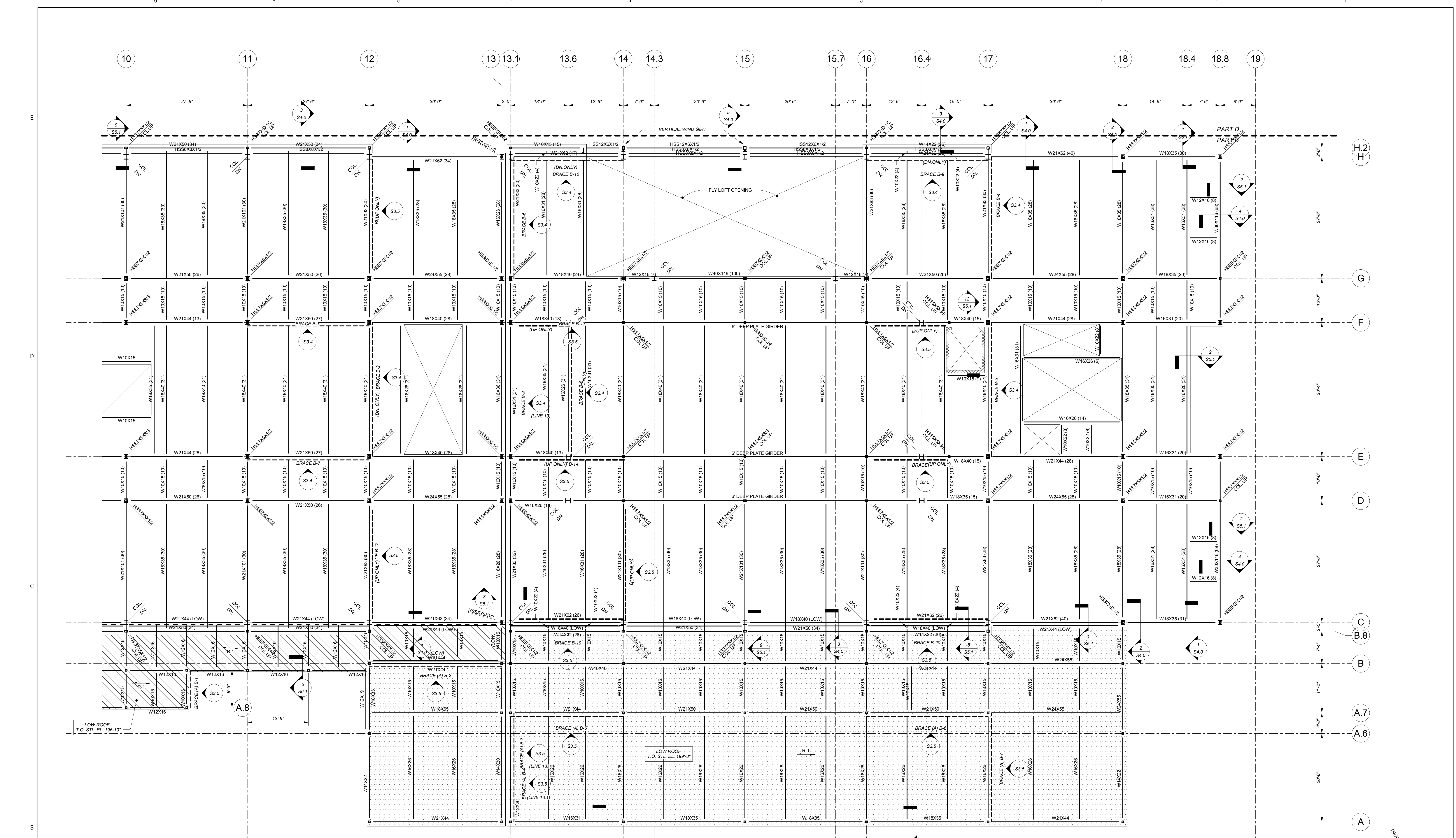
Concord-Carlisle Regional High School
 500 Walden Street
 Concord, MA 01742

Issue Submissions:

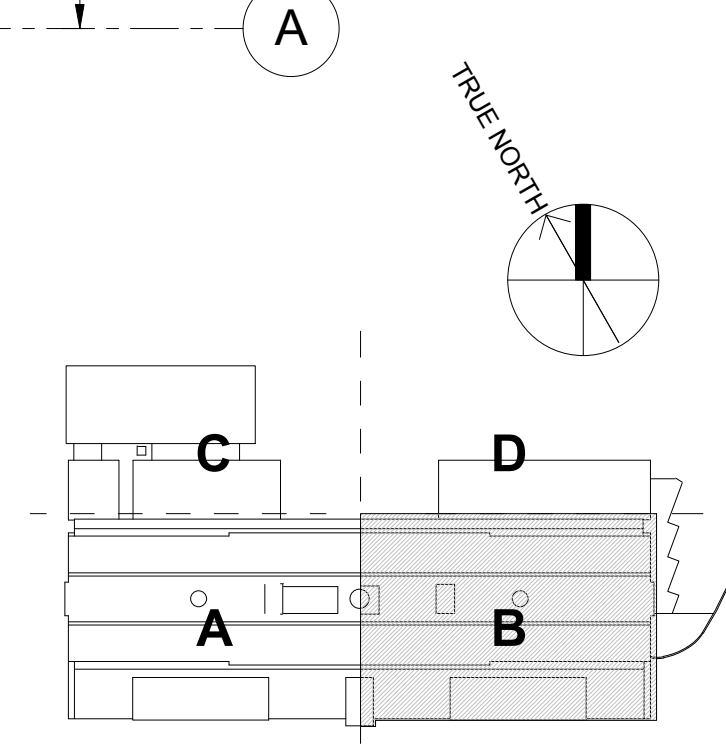
No.	Date	Description
1	8/15/2012	Design Development Submission

Title: **Third Floor Framing Plan - Part A**
 Date: August 15, 2012 Scale: 1/8" = 1'-0"
 Drawn: CDM Checked: MAP

Project No.: 1102.00
 Drawing No.: **S2.3A**
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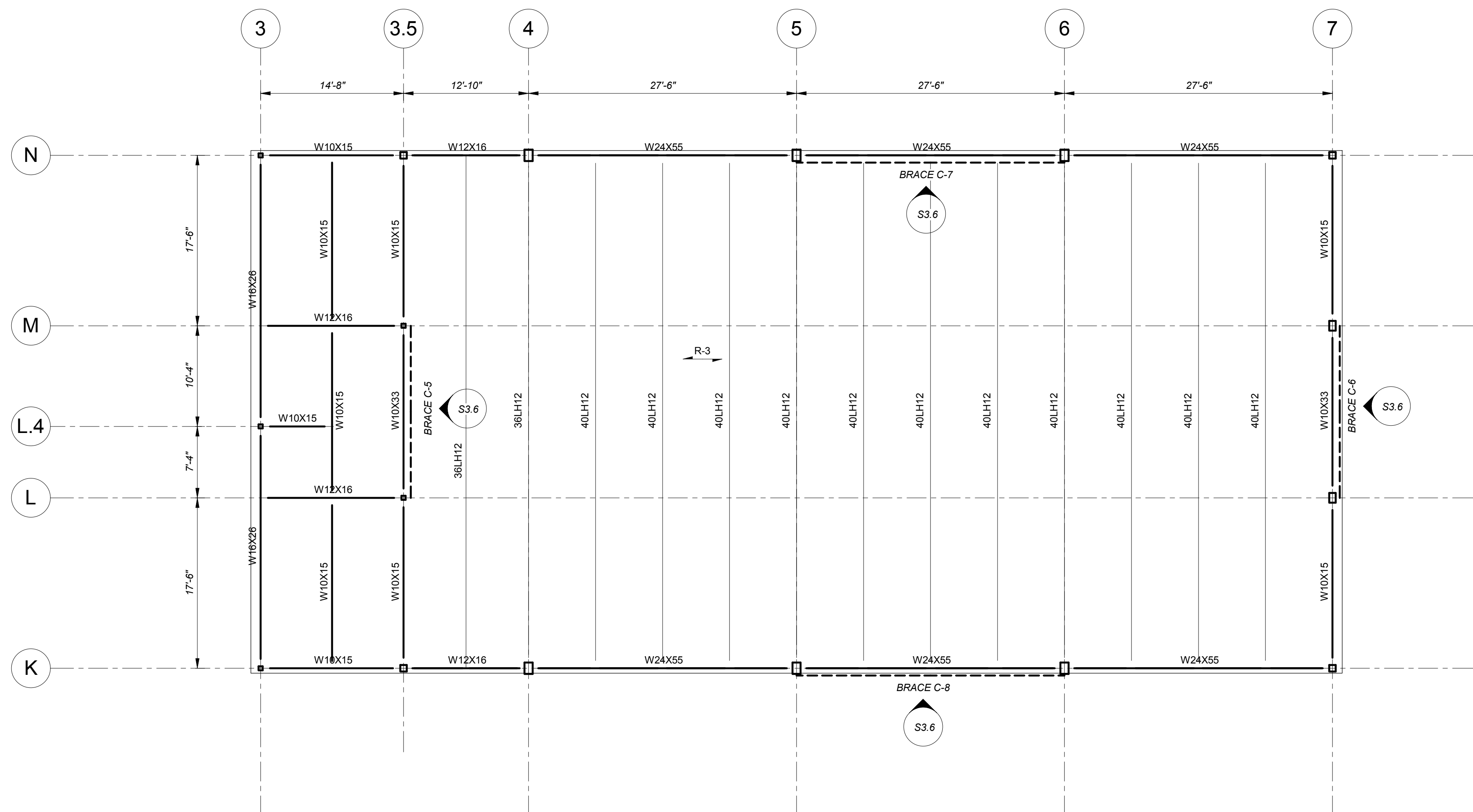


REFERENCE SHEET S2.2D FOR FLOOR, AND ROOF NOTES

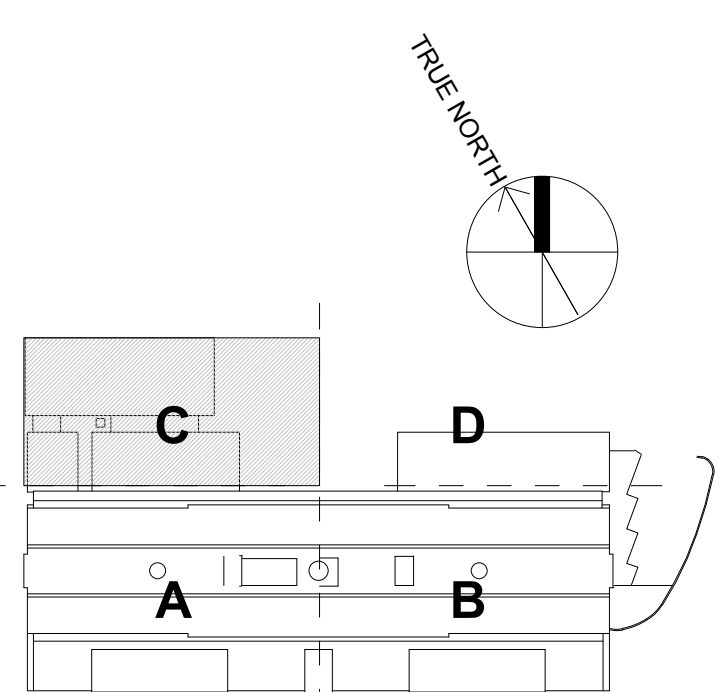


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Architect: omrarchitects inc. <small>543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160</small>	Consulting Engineer: FoleyBuhlRoberts & ASSOCIATES INC. <small>structural engineers T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St Newton MA 02462</small>	Registration: Design Development Submission	Project Name and Address: <h2 style="text-align: center;">Concord-Carlisle Regional High School</h2> <p style="text-align: center;">500 Walden Street Concord, MA 01742</p>	Issue Submissions: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Date</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>8/15/2012</td> <td>Design Development Submission</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	Date	Description	1	8/15/2012	Design Development Submission							Title: <h3 style="text-align: center;">Third Floor Framing Plan - Part B</h3> <p style="text-align: center;">Date: August 15, 2012 Scale: 1/8" = 1'-0" Drawn: CDM Checked: MAP</p>	Project No.: 1102.00 Drawing No.: <h2 style="text-align: center;">S2.3B</h2> <small>© omr architects inc</small>
No.	Date	Description																
1	8/15/2012	Design Development Submission																



REFERENCE SHEET S2.2D FOR ROOF NOTES



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Architect:

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Consulting Engineer:

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structural engineers

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Registration:

Design Development Submission

Project Name and Address:

Concord-Carlisle Regional High School

500 Walden Street
Concord, MA 01742

Issue Submissions:



No.	Date	Description
1	8/15/2012	Design Development Submission


Title:

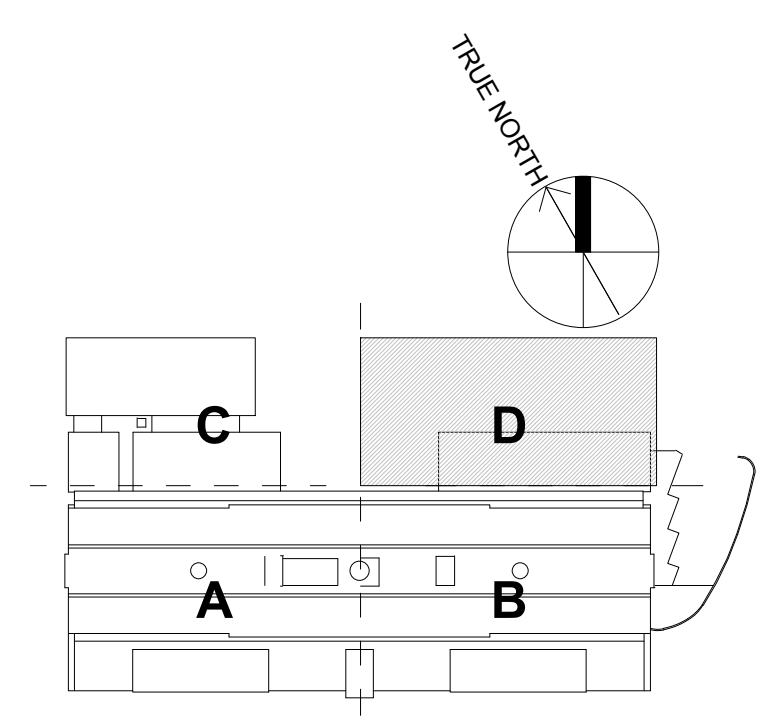
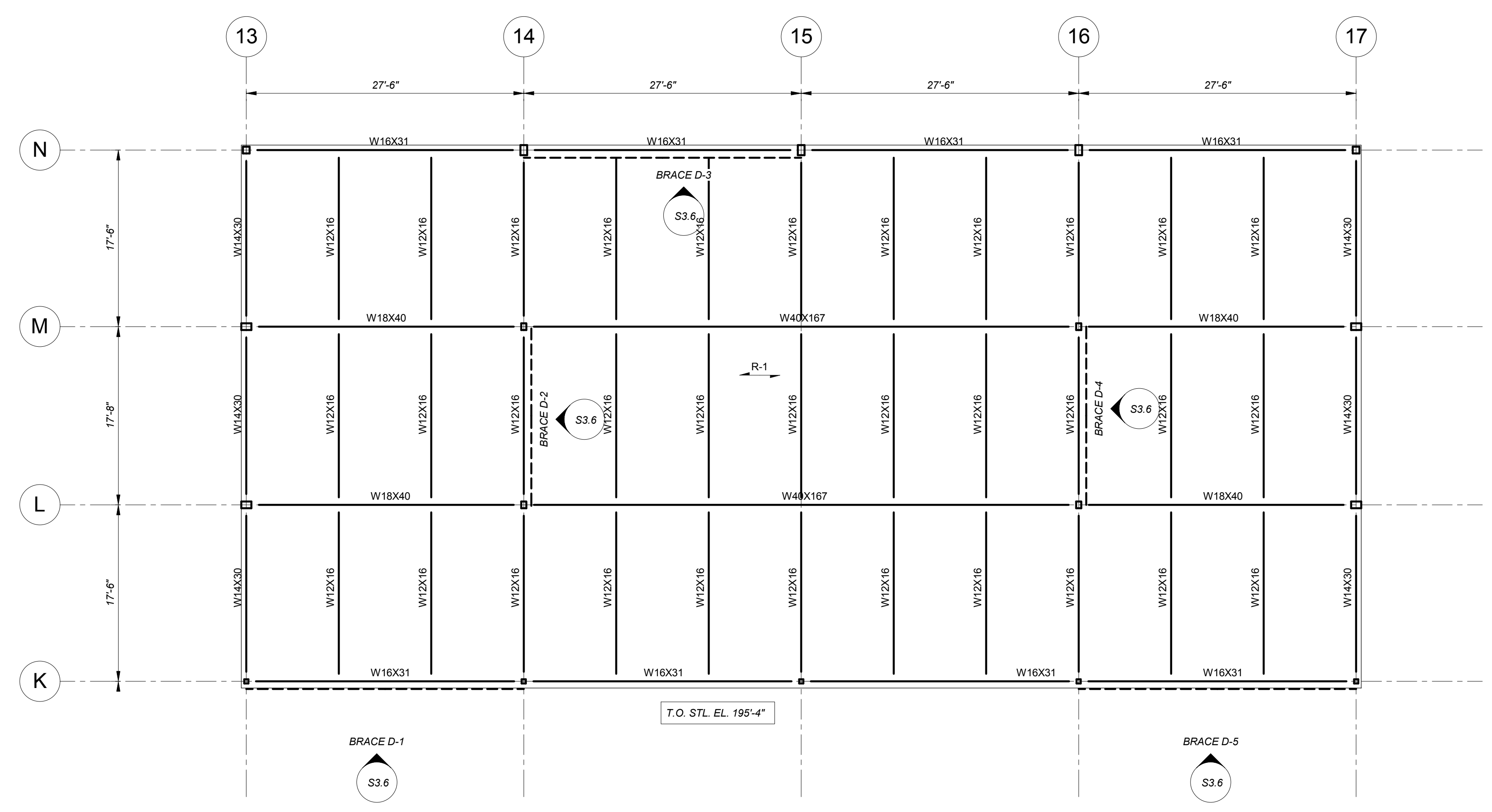
Roof Framing Plan - Part C

Date: August 15, 2012 Scale: 1/8" = 1'-0" Drawn: CDM Checked: MAP

Project No.: 1102.00
Drawing No.: **S2.3C**
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- FLOOR NOTES:**
- FOR GENERAL NOTES AND TYPICAL DETAILS REFER TO DRAWINGS S1.0 THRU S1.5.
 - F-1** INDICATES SPAN DIRECTION OF FLOOR CONSTRUCTION CONSISTING OF 4" (MINIMUM) NORMAL WEIGHT CONCRETE TOPPING WITH 6#S-W2.9/W2.9 W.W.F. SUPPORTED WITH SLAB BOLSTERS, AND 3" DEEP x 18 GAUGE GALVANIZED COMPOSITE METAL FLOOR DECK. MINIMUM TOTAL THICKNESS = 7.5". POUR SLABS LEVEL, ACCOUNTING FOR ADDITIONAL CONCRETE DUE TO STRUCTURAL FRAMING AND DECK DEFLECTIONS (AVERAGE OF 3/4" OVER THE ENTIRE FLOOR AREA).
 - F-2** INDICATES SPAN DIRECTION OF 2" DEEP x 18 GAUGE GALVANIZED COMPOSITE METAL FLOOR DECK. REFER TO PART B PLANS AT AUDITORIUM AND SECTIONS FOR FLOOR CONSTRUCTION.
 -  INDICATES A DEPRESSION. REFER TO ARCHITECTURAL DRAWINGS FOR DEPTH AND EXTENTS. COORDINATE WITH FLOORING MANUFACTURER.
 - (XX) INDICATES THE NUMBER OF 3/4" DIA. x 6" LONG HEADED SHEAR STUDS ON THAT BEAM.
 - FLOOR TOP OF CONCRETE EL. = 186'-0". UNLESS NOTED (+) OR (-).
 - BRACE "X"** INDICATES A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS AND DETAILS REFER TO DRAWING S3.1 THRU 3.6.
 - * INDICATES ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (A.E.S.S.). REFER TO THE SPECIFICATIONS FOR SURFACE PREPARATION AND FINISH REQUIREMENTS. COORDINATE LOCATIONS OF A.E.S.S. WITH ARCHITECTURAL DRAWINGS.
 - COLUMN SIZES ARE SHOWN ON PLANS AT THEIR LOWEST LEVELS OR AT SPLICES. REFER TO FOUNDATION PLANS AND FRAMING PLANS.
 -  INDICATES A FULL CAPACITY MOMENT CONNECTION.
 - PROVIDE 2-#5 DRAG BARS IN CONCRETE SLAB, ONE ON EACH SIDE AT INTERIOR MOMENT FRAME AND BOTH BARS ON SAME SIDE WHERE FRAME IS NEAR THE EDGE OF SLAB.
 - ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED.
 - SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF STEEL FIREPROOFING.

- ROOF NOTES:**
- FOR GENERAL NOTES AND TYPICAL DETAILS REFER TO DRAWINGS S-001 THRU S-006.
 - R-3** INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 3" DEEP x 18 GAUGE GALVANIZED DEEP RIB METAL ROOF DECK.
 - R-1** INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 1-1/2" DEEP x 18 GAUGE GALVANIZED WIDE RIB METAL ROOF DECK.
 - R-1C** INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 1-1/2" DEEP x 20/20 GAUGE GALVANIZED (WITH SHOP PRIMED UNDERSIDE) WIDE RIB CELLULAR ACOUSTIC METAL ROOF DECK.
 - ROOF TOP OF STEEL ELEVATION VARIES. REFER TO SECTIONS FOR ELEVATIONS.
 -  INDICATES A FULL CAPACITY MOMENT CONNECTION.
 - ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED.
 - BRACE "X"** INDICATES A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS AND DETAILS REFER TO DRAWING S3.1 THRU 3.6.
 - ALL OPEN WEB STEEL JOISTS SHALL BE BRIDGED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STEEL JOIST INSTITUTE (SJI). ROOF JOISTS SHALL HAVE A LINE OF "UPLIFT" BRIDGING AT THE FIRST INTERIOR BOTTOM CHORD PANEL POINT AT EACH END.
 - BEAMS AND GIRDERS THAT SUPPORT LH-SERIES JOISTS SHALL BE 5" LOWER IN ELEVATION TO ACCOUNT FOR JOIST SEAT DIMENSION.
 - T.J. INDICATES A BOLTED TIE JOIST.
 - * INDICATES ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (A.E.S.S.). REFER TO THE SPECIFICATIONS FOR SURFACE PREPARATION AND FINISH REQUIREMENTS. COORDINATE LOCATIONS OF A.E.S.S. WITH ARCHITECTURAL DRAWINGS.
 - FRAMING FOR SHAFTS, SKYLIGHTS, ROOFTOP M.E.P. EQUIPMENT, AND ROOF OPENINGS SHALL BE SIMILAR TO TYPICAL DETAILS, UNLESS NOTED OTHERWISE. COORDINATE DIMENSIONS AND LOCATIONS WITH ARCHITECTURAL AND M.E.P. DRAWINGS.



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Architect:

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Consulting Engineer:

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 Newton MA 02462

Registration:

Design Development Submission

Project Name and Address:

Concord-Carlisle Regional High School

500 Walden Street
 Concord, MA 01742

Issue Submissions:

No.	Date	Description
1	8/15/2012	Design Development Submission

Title:

Roof Framing Plan - Part D

Date: August 15, 2012 Scale: 1/8" = 1'-0"

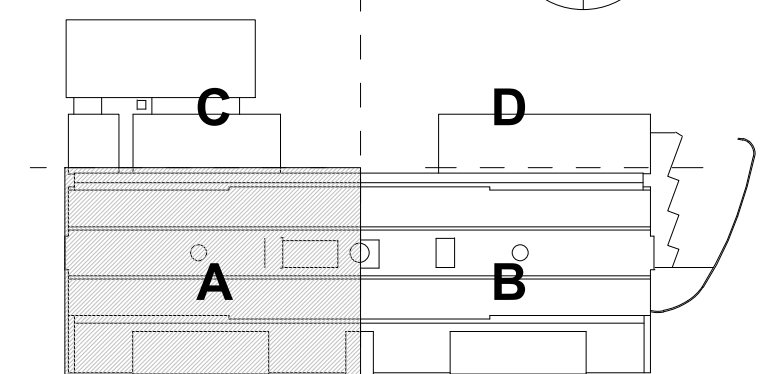
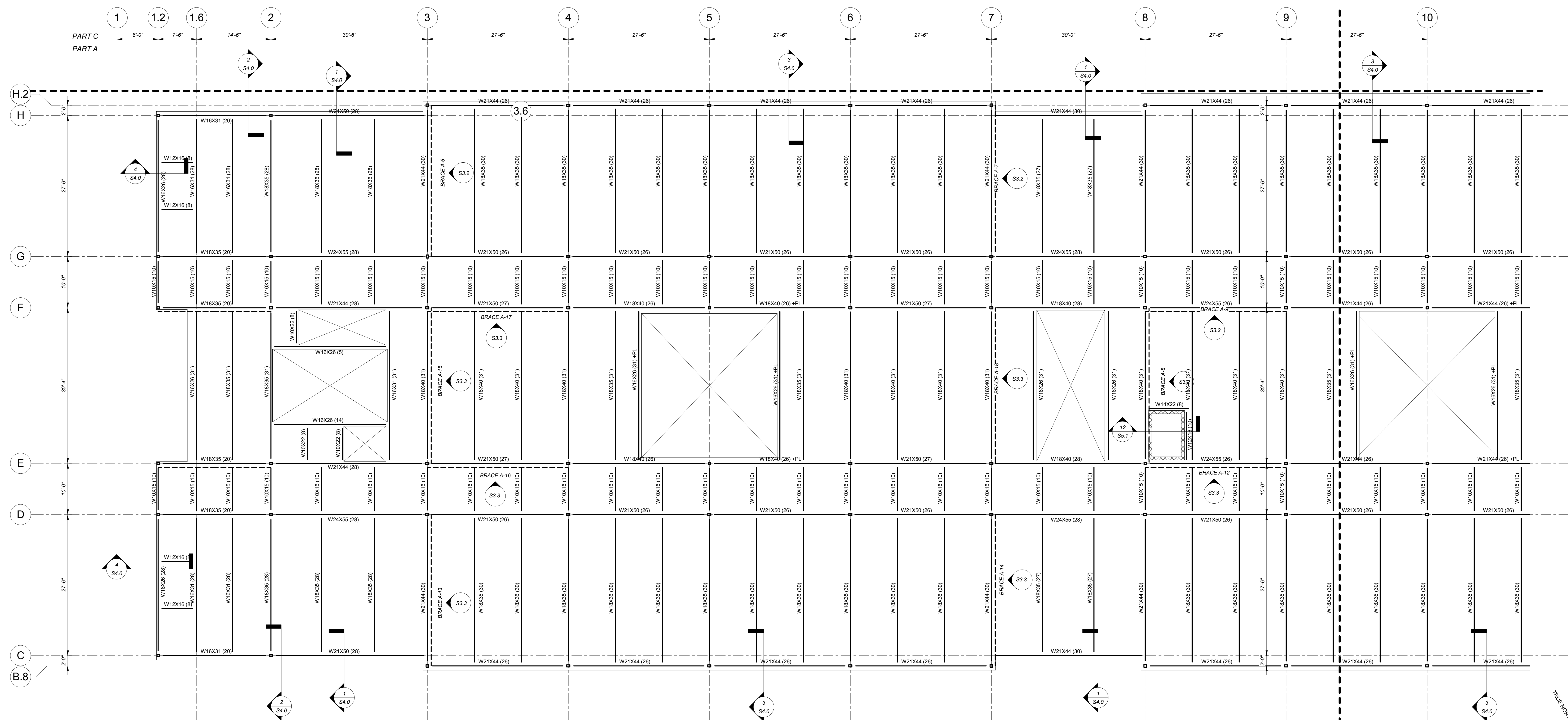
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 Checked: MAP

Project No.: 1102.00

Drawing No.: **S2.3D**

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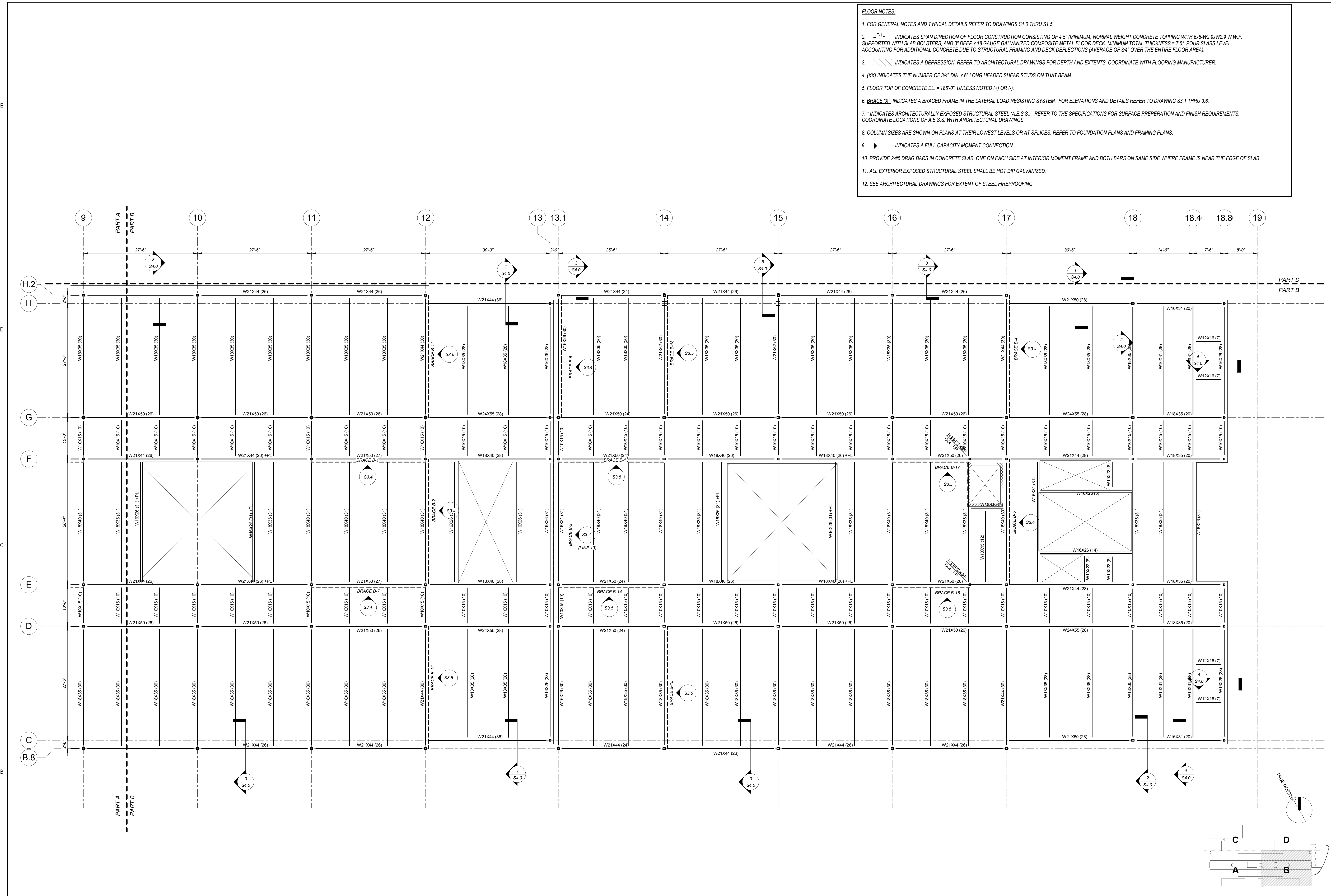
- FLOOR NOTES:**
- FOR GENERAL NOTES AND TYPICAL DETAILS REFER TO DRAWINGS S1.0 THRU S1.5.
 - F-1** INDICATES SPAN DIRECTION OF FLOOR CONSTRUCTION CONSISTING OF 4" (MINIMUM) NORMAL WEIGHT CONCRETE TOPPING WITH 6#x2 W2.9 W.W.F. SUPPORTED WITH SLAB BOLSTERS, AND 3" DEEP x 18 GAUGE GALVANIZED COMPOSITE METAL FLOOR DECK. MINIMUM TOTAL THICKNESS = 7.5". POUR SLABS LEVEL, ACCOUNTING FOR ADDITIONAL CONCRETE DUE TO STRUCTURAL FRAMING AND DECK DEFLECTIONS (AVERAGE OF 3/4" OVER THE ENTIRE FLOOR AREA).
 - INDICATES A DEPRESSION. REFER TO ARCHITECTURAL DRAWINGS FOR DEPTH AND EXTENTS. COORDINATE WITH FLOORING MANUFACTURER.
 - (XX) INDICATES THE NUMBER OF 3/4" DIA. x 6" LONG HEADED SHEAR STUDS ON THAT BEAM.
 - FLOOR TOP OF CONCRETE EL. = 186'-0", UNLESS NOTED (+) OR (-).
 - BRACE "X"** INDICATES A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS AND DETAILS REFER TO DRAWING S3.1 THRU 3.6.
 - * INDICATES ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (A.E.S.S.). REFER TO THE SPECIFICATIONS FOR SURFACE PREPARATION AND FINISH REQUIREMENTS. COORDINATE LOCATIONS OF A.E.S.S. WITH ARCHITECTURAL DRAWINGS.
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 - SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF STEEL FIREPROOFING.



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Architect:  543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer:  structural engineers T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St Newton MA 02462	Registration: 	Project Name and Address: <h2 style="text-align: center;">Concord-Carlisle Regional High School</h2> <p style="text-align: center;">500 Walden Street Concord, MA 01742</p>	Issue Submissions: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Date</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>8/15/2012</td> <td>Design Development Submission</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	Date	Description	1	8/15/2012	Design Development Submission										Title: <h3 style="text-align: center;">Fourth Floor Framing Plan - Part A</h3>	Project No.: 1102.00 Drawing No.: <h1 style="text-align: center;">S2.4A</h1>
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Date: August 15, 2012		Scale: 1/8" = 1'-0"	Drawn: CDM	Checked: MAP	© omr architects inc																

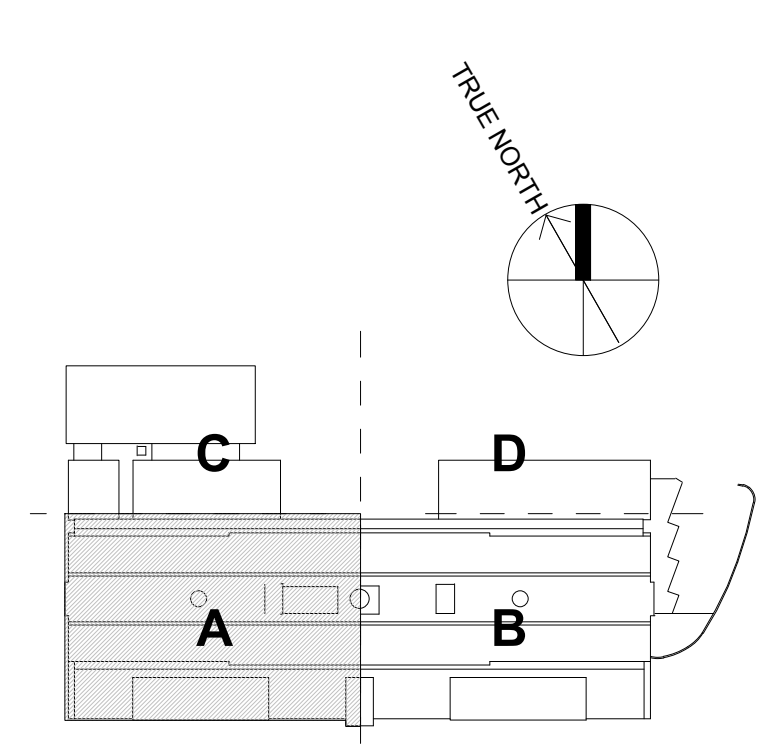
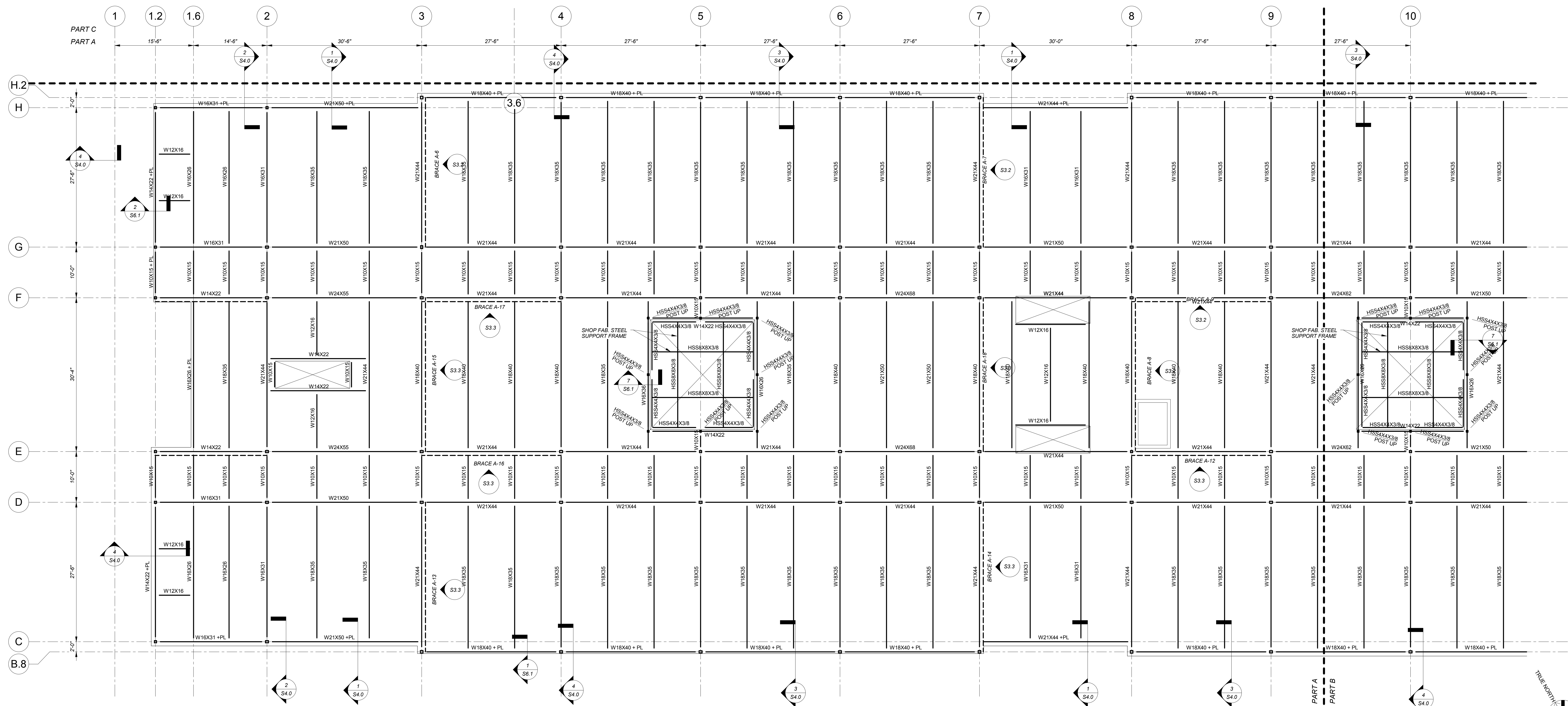
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 - SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF STEEL FIREPROOFING.



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Architect: 543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer: structural engineers T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St Newton MA 02462	Registration: 	Project Name and Address: <h2 style="text-align: center;">Concord-Carlisle Regional High School</h2> <p style="text-align: center;">500 Walden Street Concord, MA 01742</p>	Issue Submissions: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Date</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>8/15/2012</td> <td>Design Development Submission</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	Date	Description	1	8/15/2012	Design Development Submission										Title: <h3 style="text-align: center;">Fourth Floor Framing Plan - Part B</h3>	Project No.: 1102.00 Drawing No.: <h2 style="text-align: center;">S2.4B</h2>
No.	Date	Description																			
1	8/15/2012	Design Development Submission																			
Date: August 15, 2012		Scale: 1/8" = 1'-0"	Drawn: CDM	Checked: MAP	© omr architects inc																

- ROOF NOTES:**
- FOR GENERAL NOTES AND TYPICAL DETAILS REFER TO DRAWINGS S-001 THRU S-006.
 - INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 3" DEEP x 18 GAUGE GALVANIZED DEEP RIB METAL ROOF DECK.
 - INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 1-1/2" DEEP x 18 GAUGE GALVANIZED WIDE RIB METAL ROOF DECK.
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 - ROOF TOP OF STEEL ELEVATION VARIES, REFER TO SECTIONS FOR ELEVATIONS.
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 Roof Framing Plan - Part A (S2.5A)
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Consulting Engineer:

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Registration:
Design Development Submission

Project Name and Address:

Concord-Carlisle Regional High School
 500 Walden Street
 Concord, MA 01742

Issue Submissions:

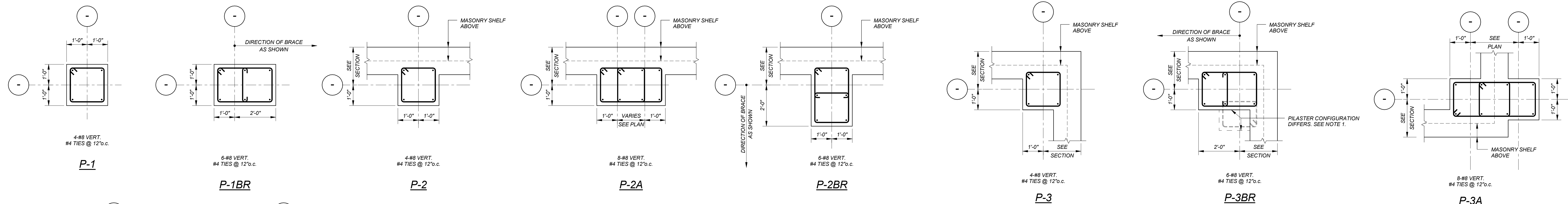
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Title:

Roof Framing Plan - Part A

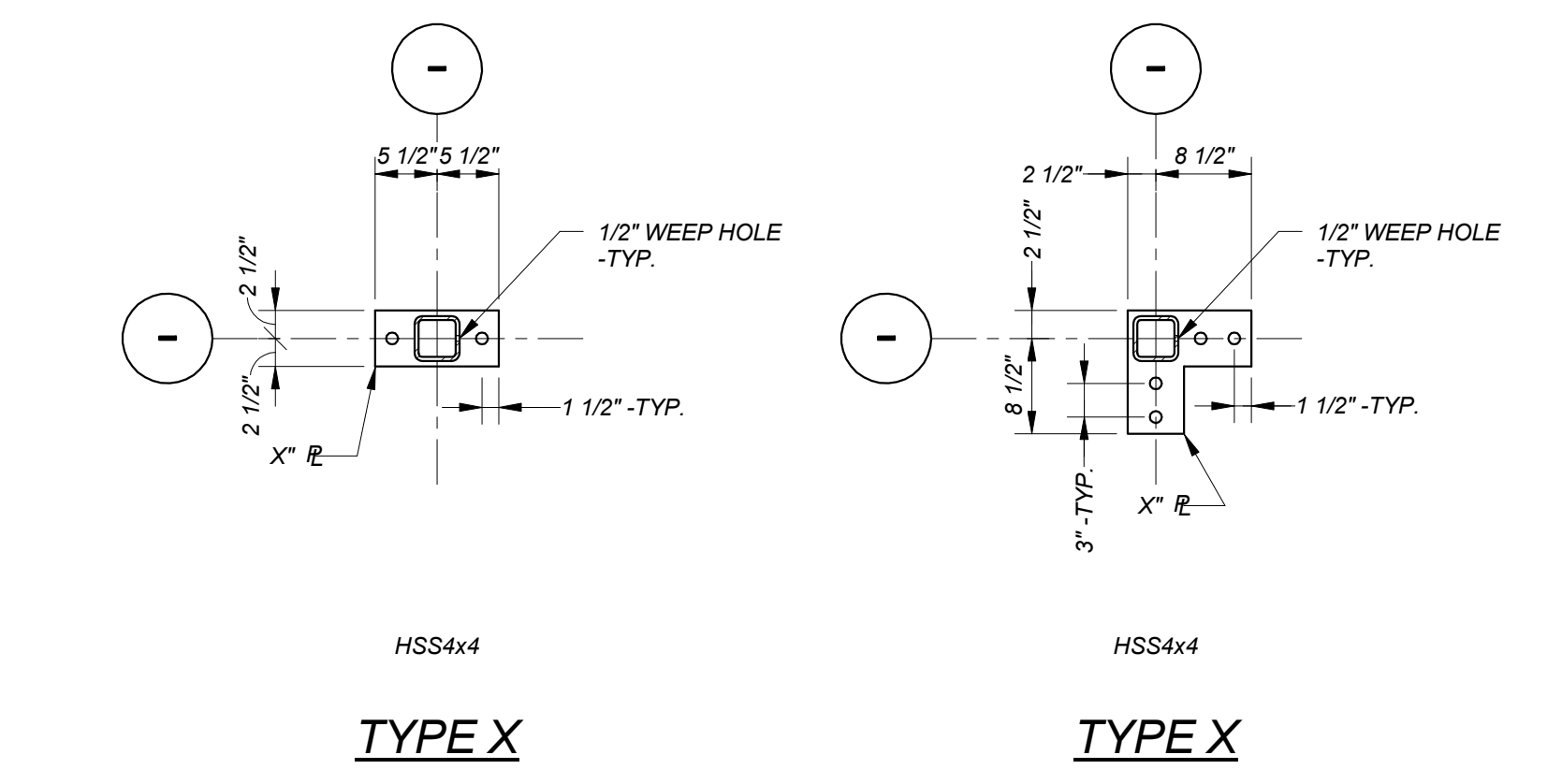
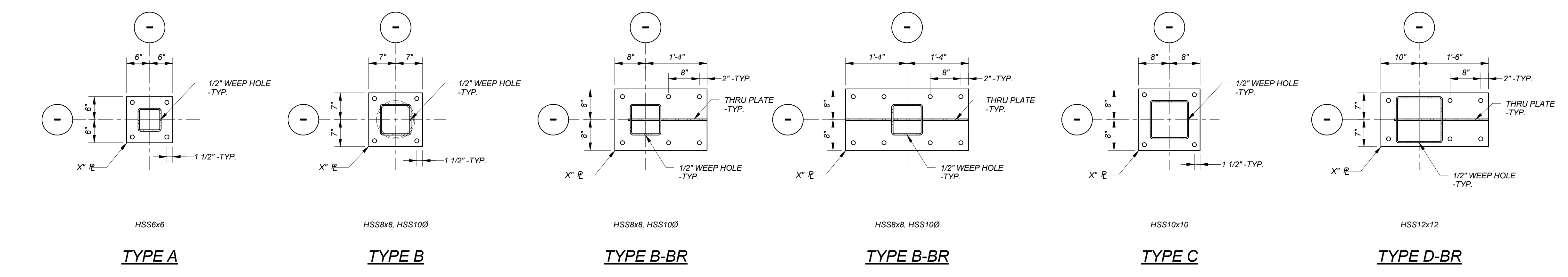
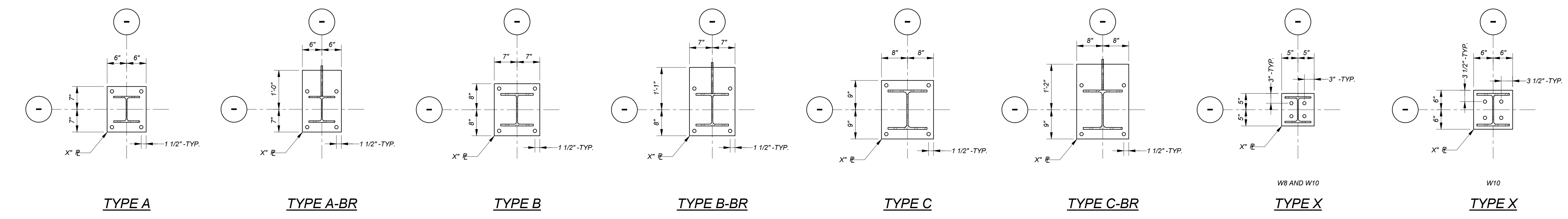
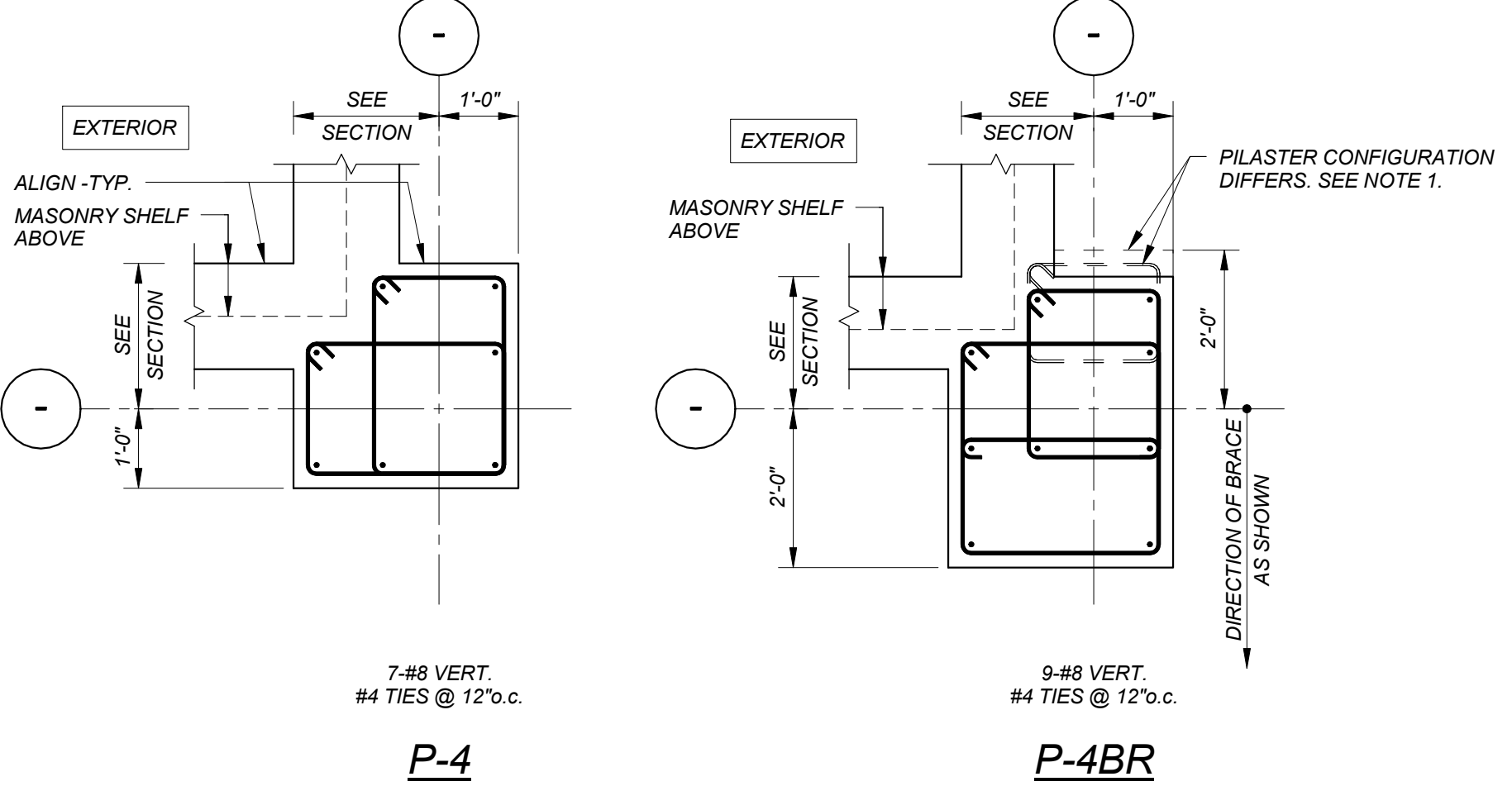
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Project No.: 1102.00
 Drawing No.: **S2.5A**
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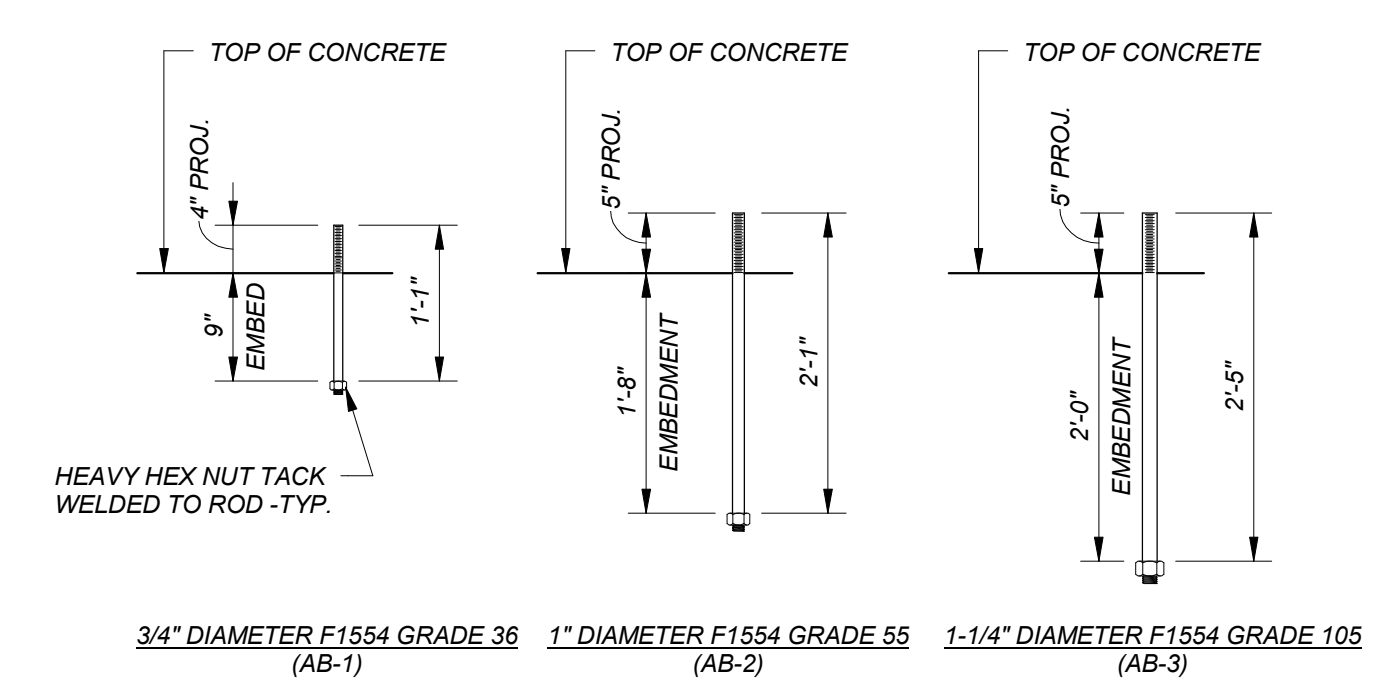


- NOTES:**
- AT PIERS/PILASTERS SUPPORTING BRACE COLUMNS (PIERS/PILASTERS WITH THE "BR" SUFFIX (EX. P-1BR)) ENLARGE THE 12" DIMENSION TO 24" IN THE DIRECTION OF THE BRACE TO SUPPORT THE ENLARGED BRACE COLUMN BASE PLATE - TYPICAL. COORDINATE PIER/PILASTER EXTENSIONS WITH PLANS AND BRACE ELEVATIONS.
 - AT THE TOP OF PIERS/PILASTERS, PROVIDE TIES WITH 4 SPACES @ 3" o.c. AND THE BALANCE AS INDICATED ABOVE (SEE SECTIONS) - TYPICAL.
 - WALL REINFORCING NOT SHOWN FOR CLARITY, CONTINUE THROUGH PILASTER.
 - REFER TO SECTIONS FOR WALL THICKNESS, REINFORCING, AND LOCATION FROM COLUMN GRID.

PIER AND PILASTER DETAILS
1/2" = 1'-0"



- NOTES:**
- PROVIDE 3/4"x9"x0" EMBEDMENT F1554-36 ANCHOR RODS W/ TACK WELDED NUT AT ALL BASE PLATES UNLESS NOTED OTHERWISE.
 - PROVIDE 1"x3"x1" EMBEDMENT F1554-55 ANCHOR RODS W/ TACK WELDED NUT. PROVIDE PLATE WASHERS UNDER NUTS ON TOP OF COLUMN BASE PLATES. (NOTED ON PLANS AS BASE PLATE TYPE BR-"X" BR)
 - PROVIDE 1/4" LEVELING PLATE AND 3/4" NON-SHRINK GROUT UNDER ALL BASE PLATES.
 - ANY OVERSIZED HOLES IN TYPE "BR" BASE PLATES TO BE GROUTED SOLID PRIOR TO INSTALLING NUTS AND WASHERS.
 - WELD PLATE WASHERS ALL AROUND TO BASE PLATES AT BRACED BAYS.
 - BASE PLATE TYPE NOTED ON PLAN AS BP-"X".

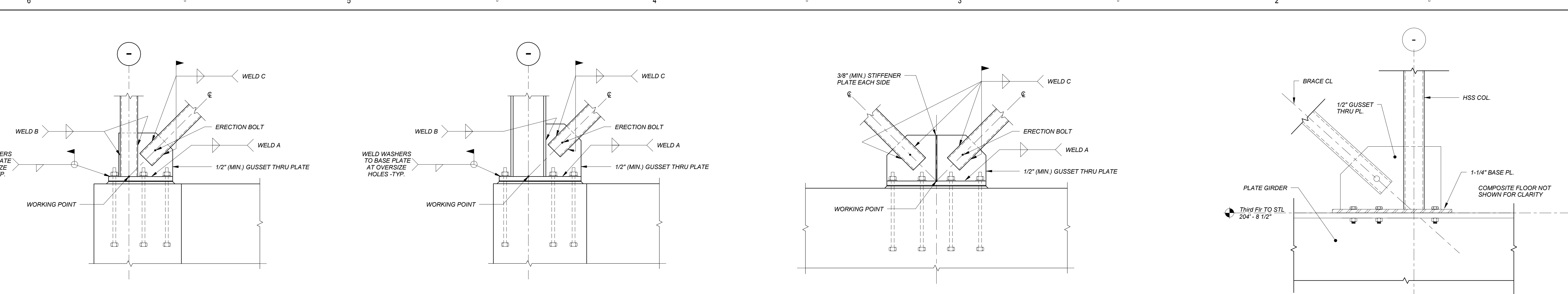


BASE PLATE DETAILS
3/4" = 1'-0"

ANCHOR ROD DETAILS

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Architect: omr architects inc 543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer: FoleyBuhlRoberts & ASSOCIATES INC structural engineers T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St. Newton MA 02462	Registration: Design Development Submission	Project Name and Address: Concord-Carlisle Regional High School 500 Walden Street Concord, MA 01742	Issue Submissions: No. Date Description 8/15/2012 Design Development Submission	Title: Pier/Pilaster and Base Plate Details	Project No.: 1102.00 Drawing No.: S3.0 © omr architects inc
Date: August 15, 2012 Scale: As indicated Drawn: CDM Checked: MAP						



HSS COLUMN BASE AT BRACE DETAIL

W COLUMN BASE AT BRACE DETAIL

HSS V BRACE BASE DETAIL

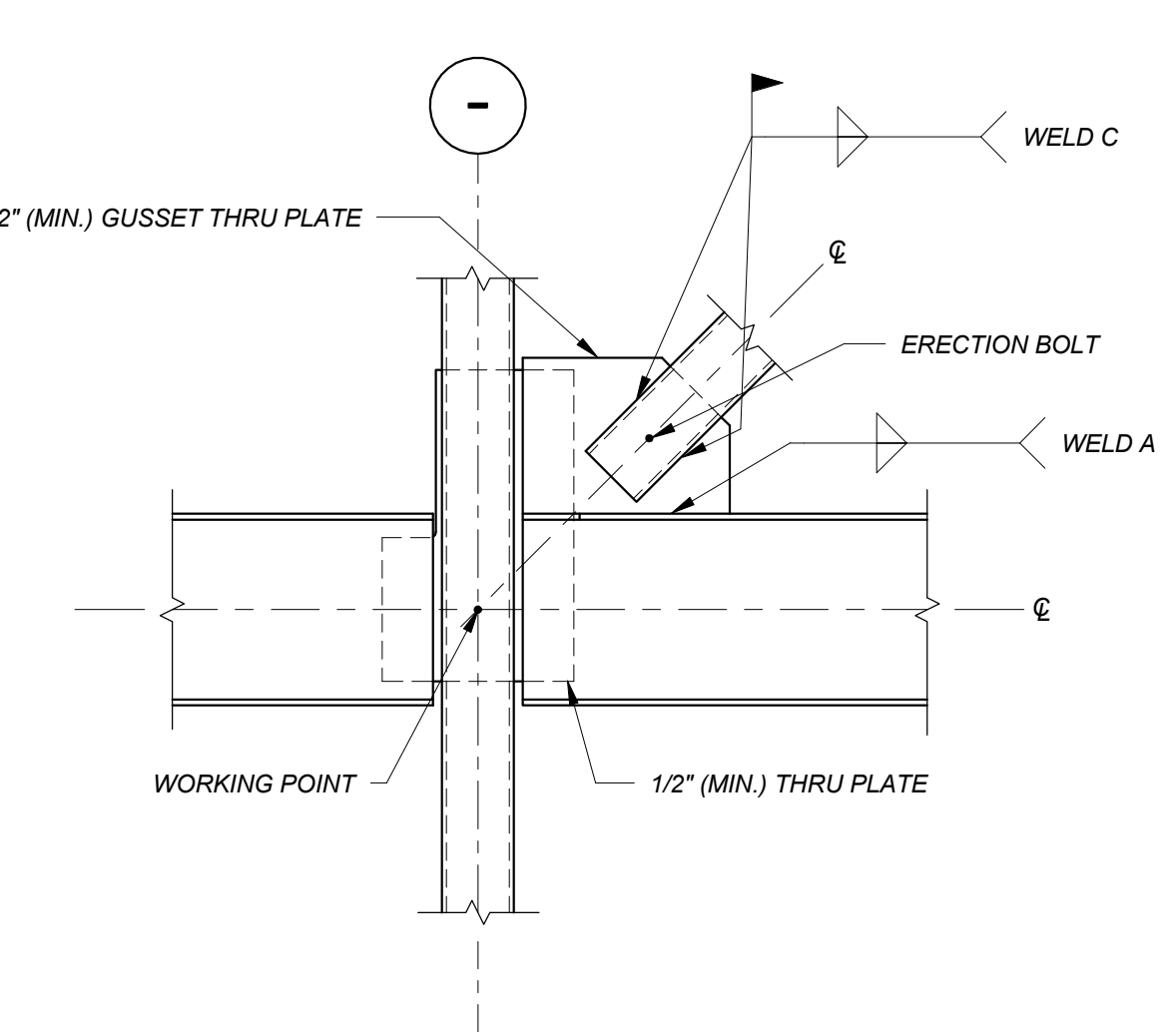
HSS V BRACE AT PLATE GIRDER DETAIL

1 DETAIL
3/4" = 1'-0"

2 DETAIL
3/4" = 1'-0"

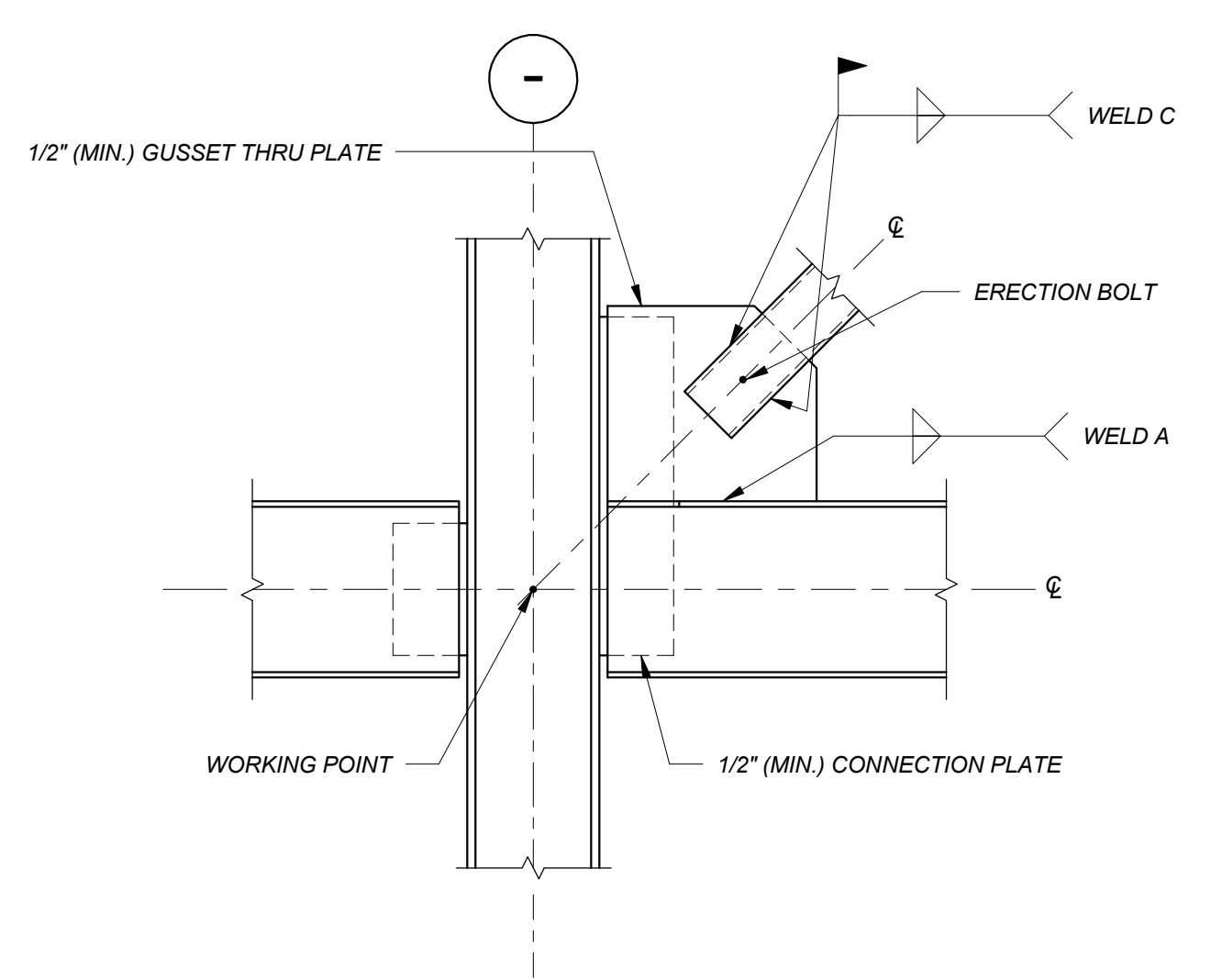
3 DETAIL
3/4" = 1'-0"

4 DETAIL
3/4" = 1'-0"



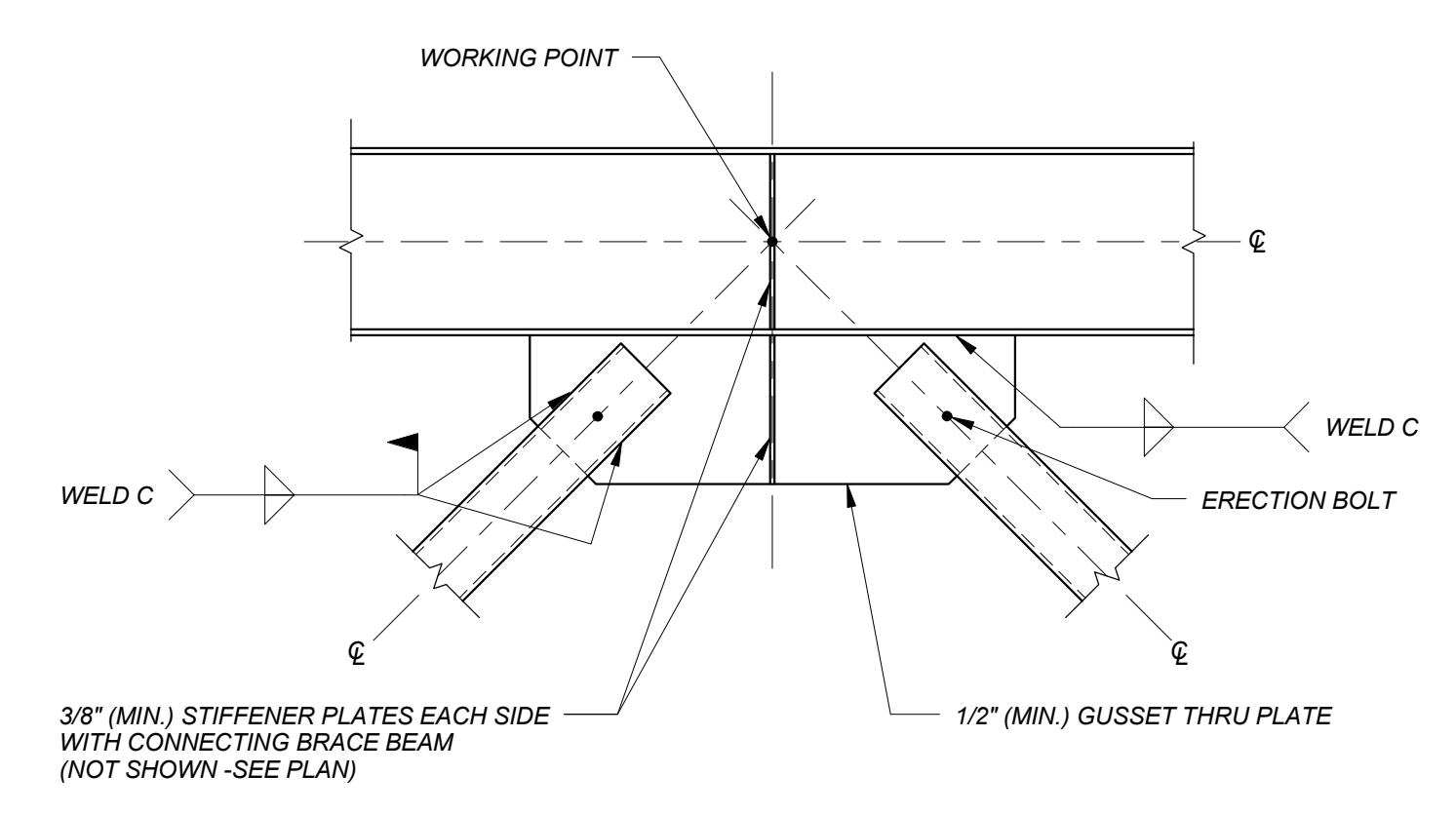
HSS COLUMN TO W BEAM BRACE DETAIL

5 DETAIL
3/4" = 1'-0"



W COLUMN TO W BEAM BRACE DETAIL

6 DETAIL
3/4" = 1'-0"



W BEAM BRACE DETAIL

7 DETAIL
3/4" = 1'-0"

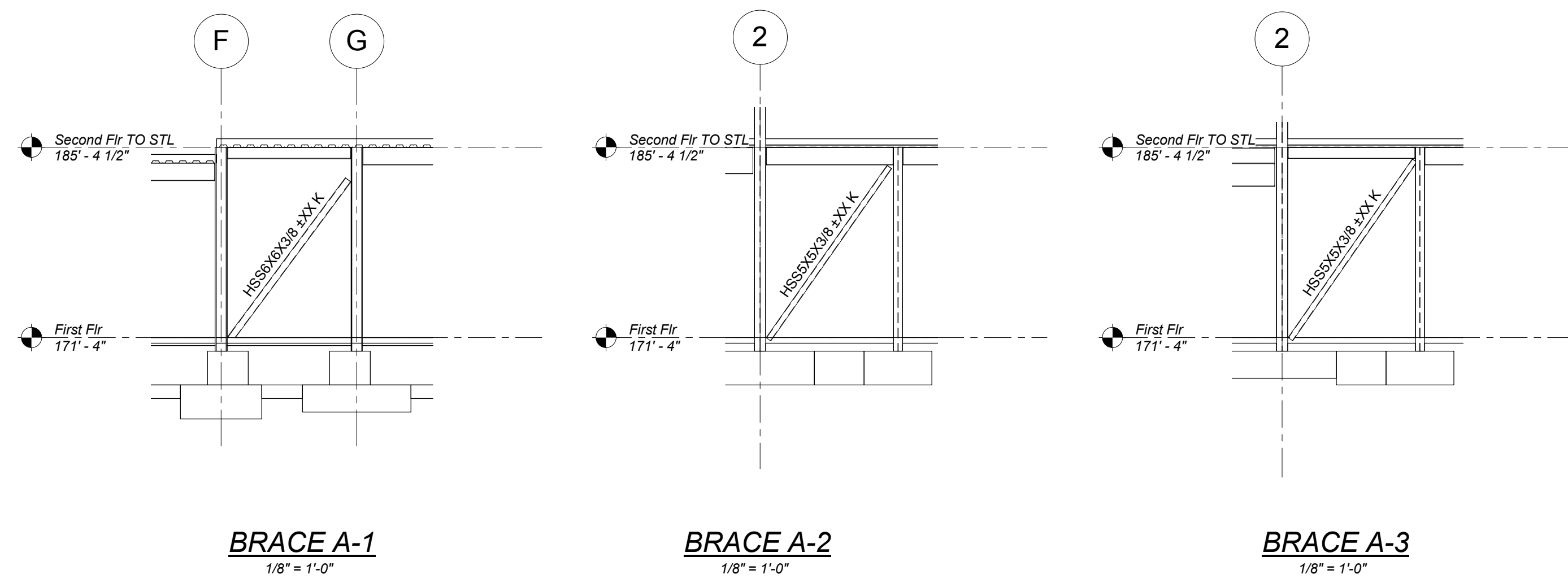
DETAIL NOTES:
WELD A: WELD SIZE TO FULLY DEVELOP THE HORIZONTAL COMPONENT OF THE BRACE FORCE SHOWN.
WELD B: WELD SIZE TO FULLY DEVELOP THE VERTICAL COMPONENT OF THE BRACE FORCE SHOWN.
WELD C: WELD SIZE TO FULLY DEVELOP THE BRACE FORCE SHOWN.

BRACE FRAME DETAILS

- LATERAL LOAD RESISTING SYSTEM NOTES:**
- BRACING ELEVATIONS AND DETAILS ARE SCHEMATIC ONLY AND ARE INTENDED TO SHOW BRACING CONFIGURATIONS AND CONNECTIONS DESIGN REQUIREMENTS.
 - BRACE FORCE (KIPS) TO BE USED FOR CONNECTION DESIGN IS INDICATED THUS (±0.0 K). ONE THIRD INCREASE IN ALLOWABLE STRESS IS NOT PERMITTED IN BRACING CONNECTIONS. CONNECTIONS ARE TO BE DESIGNED USING THE ALLOWABLE STRESS DESIGN (A.S.D.) METHOD.
 - BRACE OFFSET DIMENSIONS ARE MEASURED FROM INTERSECTION OF CENTER OF BEAMS AND BRACES TO GRID LINES.
 - COORDINATE SIZE AND LOCATION OF BRACING WITH WALL OPENINGS SHOWN ON ARCHITECTURAL DRAWINGS.
 - REFER TO PLANS FOR BEAM SIZES, COLUMN SIZES, AND BRACING LOCATIONS.
 - TOP CONNECTION OF EACH BRACING MEMBER SHALL REMAIN LOOSE AND ACCESSIBLE UNTIL THE BUILDING HAS BEEN PLUMBED.
 - BOLTED BRACE CONNECTIONS SHALL BE SLIP-CRITICAL (SC) TYPE.
 - ALL WELDS IN BRACING CONNECTIONS SHALL HAVE A MINIMUM LENGTH OF THREE INCHES.

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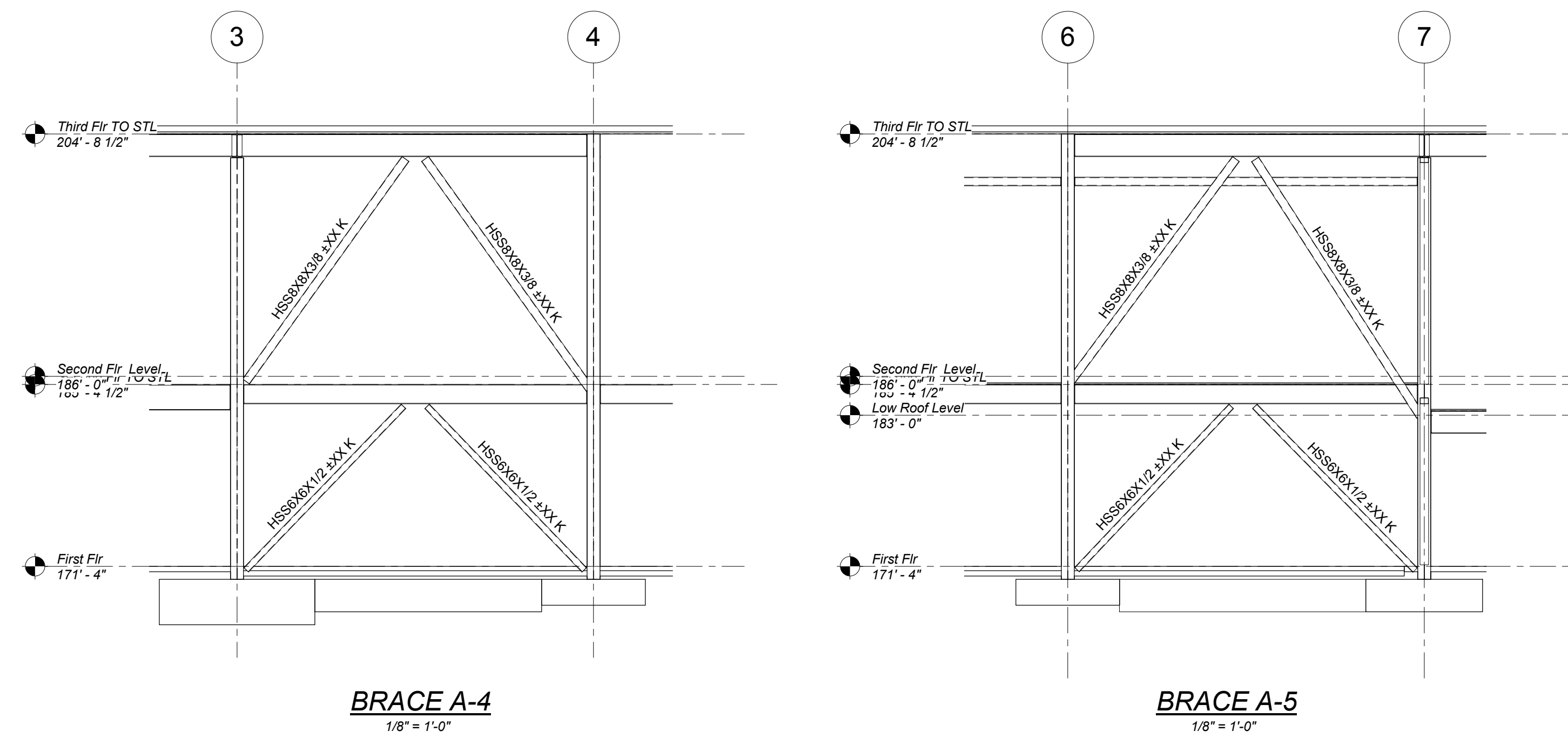
Architect:  543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer:  structural engineers T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St. Newton MA 02462	Registration: 	Project Name and Address: <h2 style="text-align: center;">Concord-Carlisle Regional High School</h2> <p style="text-align: center;">500 Walden Street Concord, MA 01742</p>	Issue Submissions: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.:</th> <th>Date:</th> <th>Description:</th> </tr> </thead> <tbody> <tr> <td> </td> <td>8/15/2012</td> <td>Design Development Submission</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.:	Date:	Description:		8/15/2012	Design Development Submission										Title: <h3 style="text-align: center;">Brace Frame Details</h3>	Project No.: 1102.00 Drawing No.: <h1 style="text-align: center;">S3.1</h1>
No.:	Date:	Description:																			
	8/15/2012	Design Development Submission																			
Date: August 15, 2012 Scale: 3/4" = 1'-0" Drawn: CDM Checked: MAP					© omr architects inc																



BRACE A-1
1/8" = 1'-0"

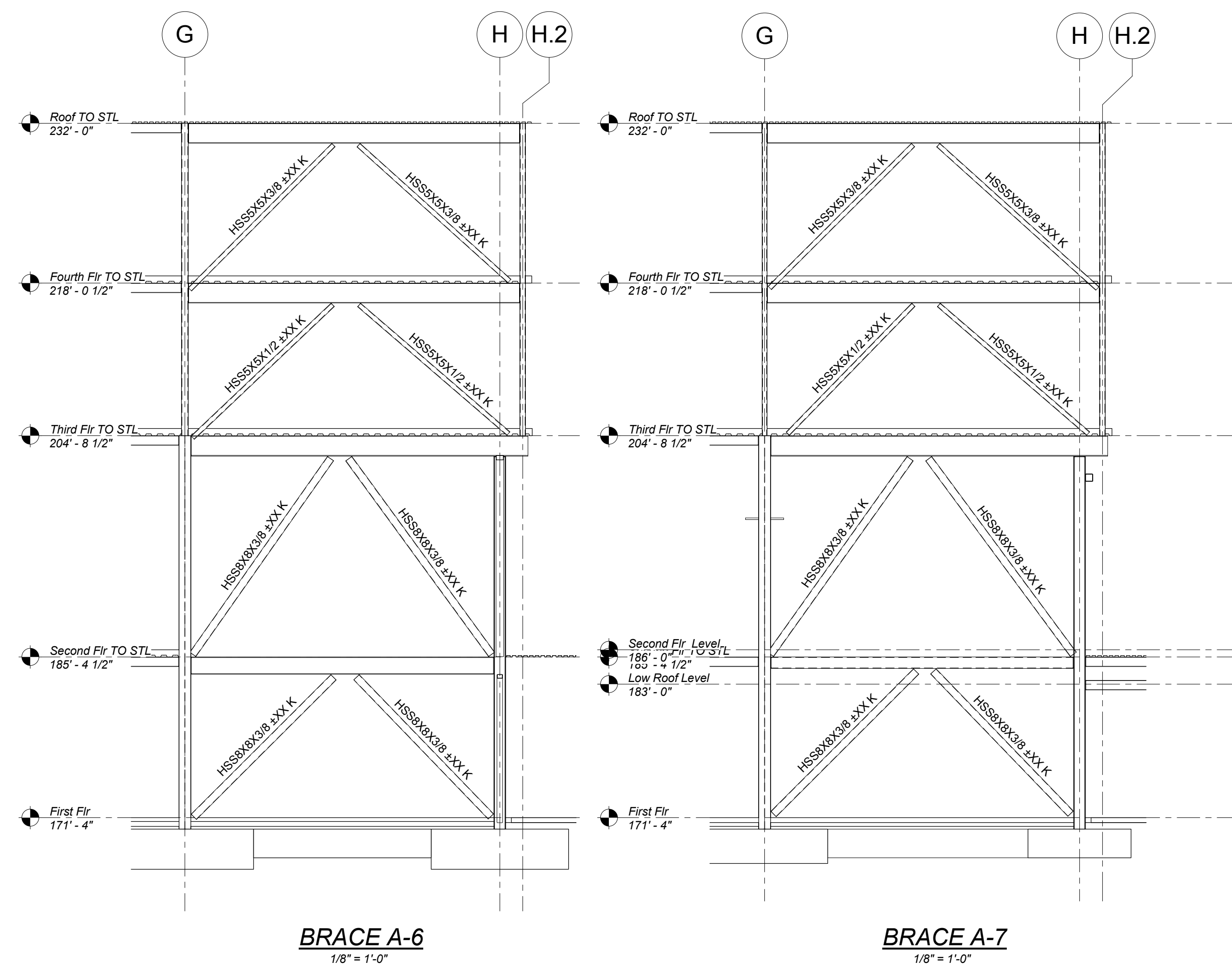
BRACE A-2
1/8" = 1'-0"

BRACE A-3
1/8" = 1'-0"



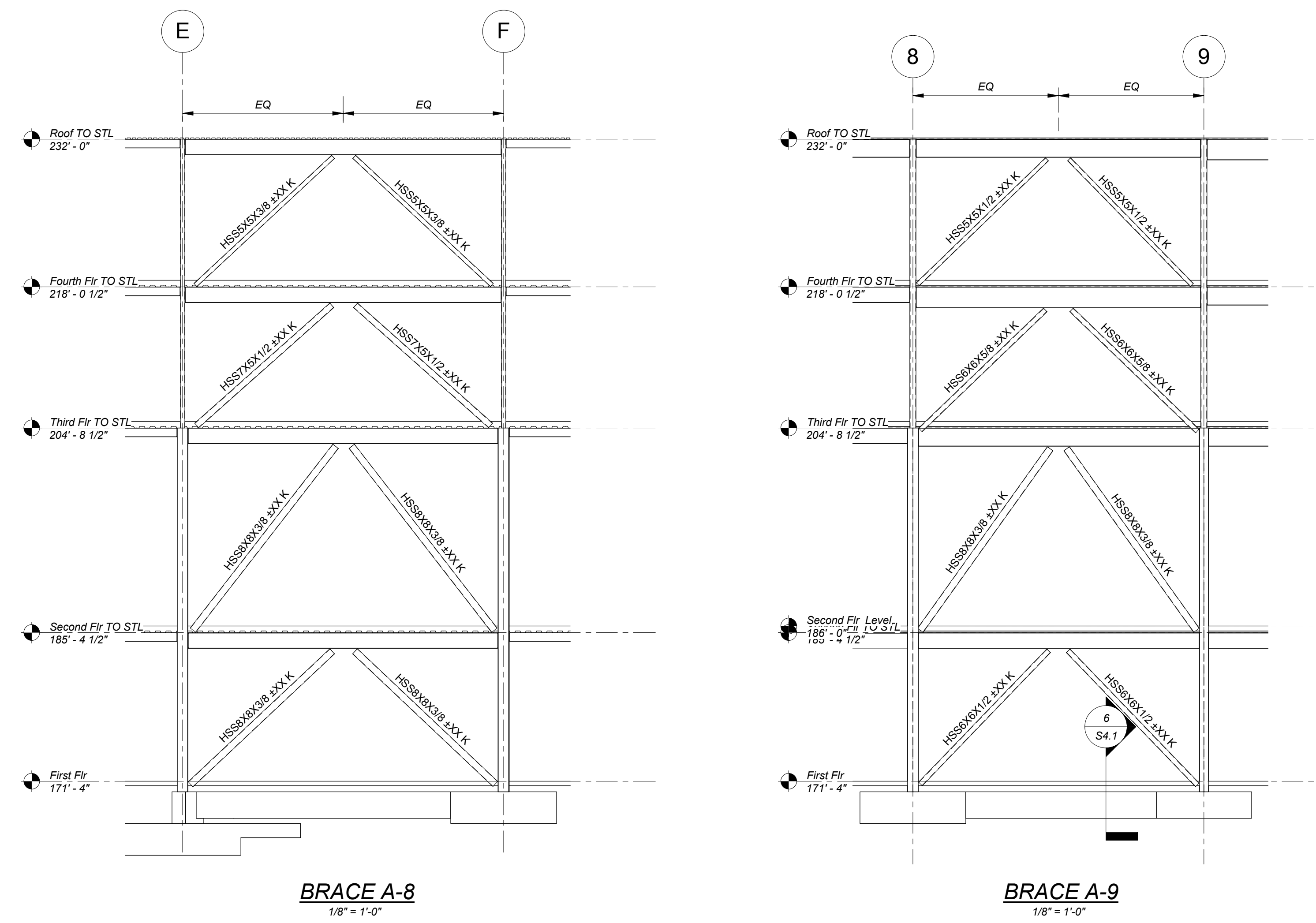
BRACE A-4
1/8" = 1'-0"

BRACE A-5
1/8" = 1'-0"



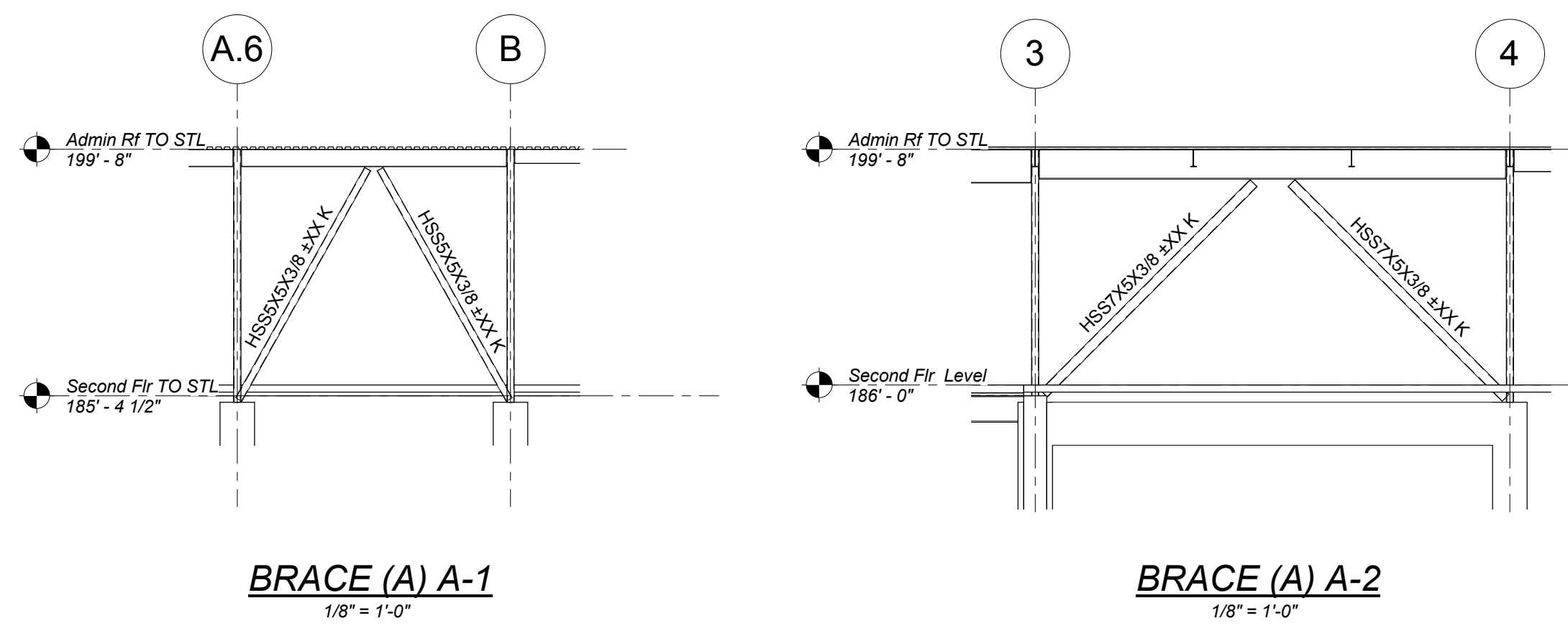
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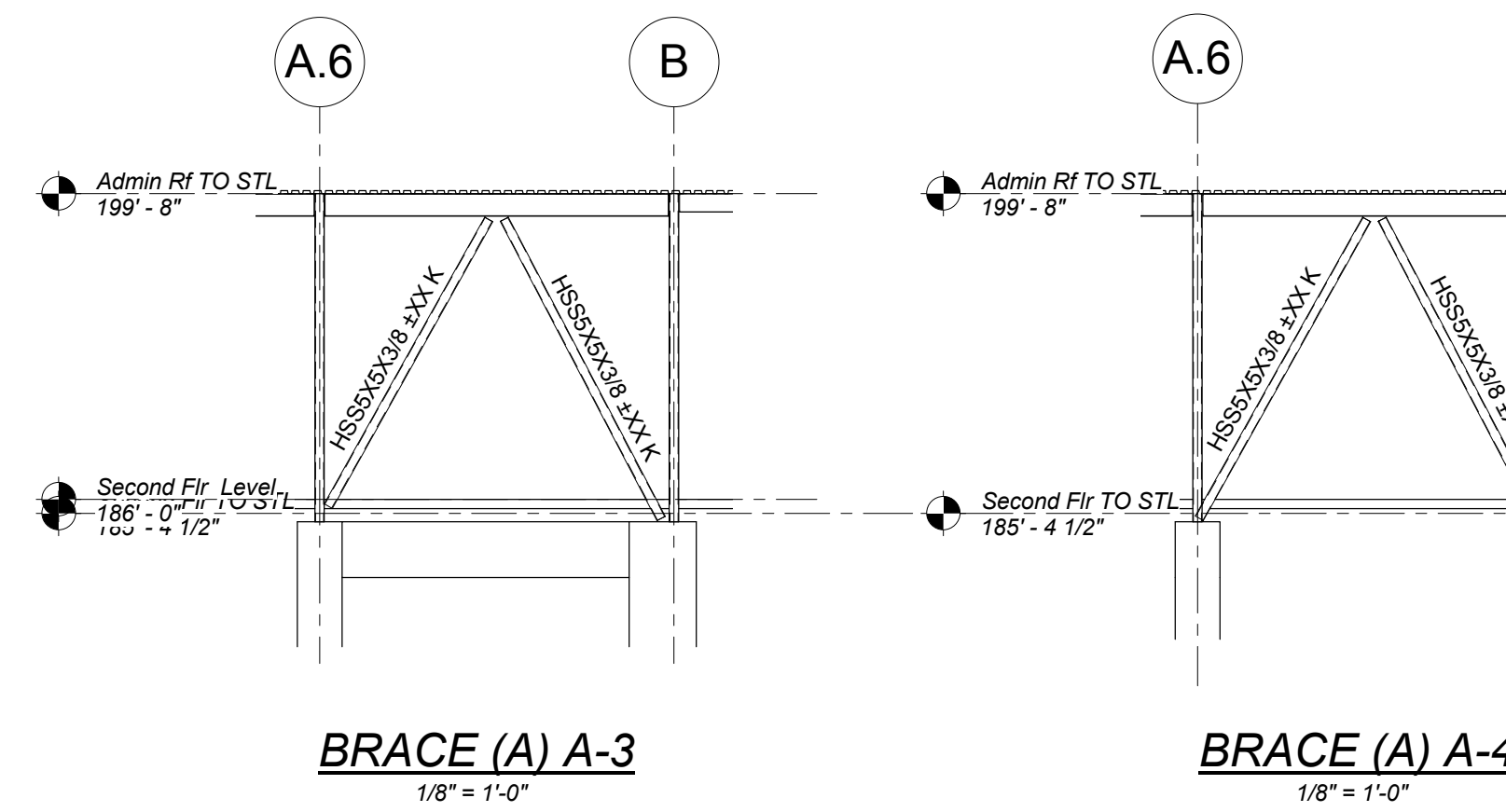
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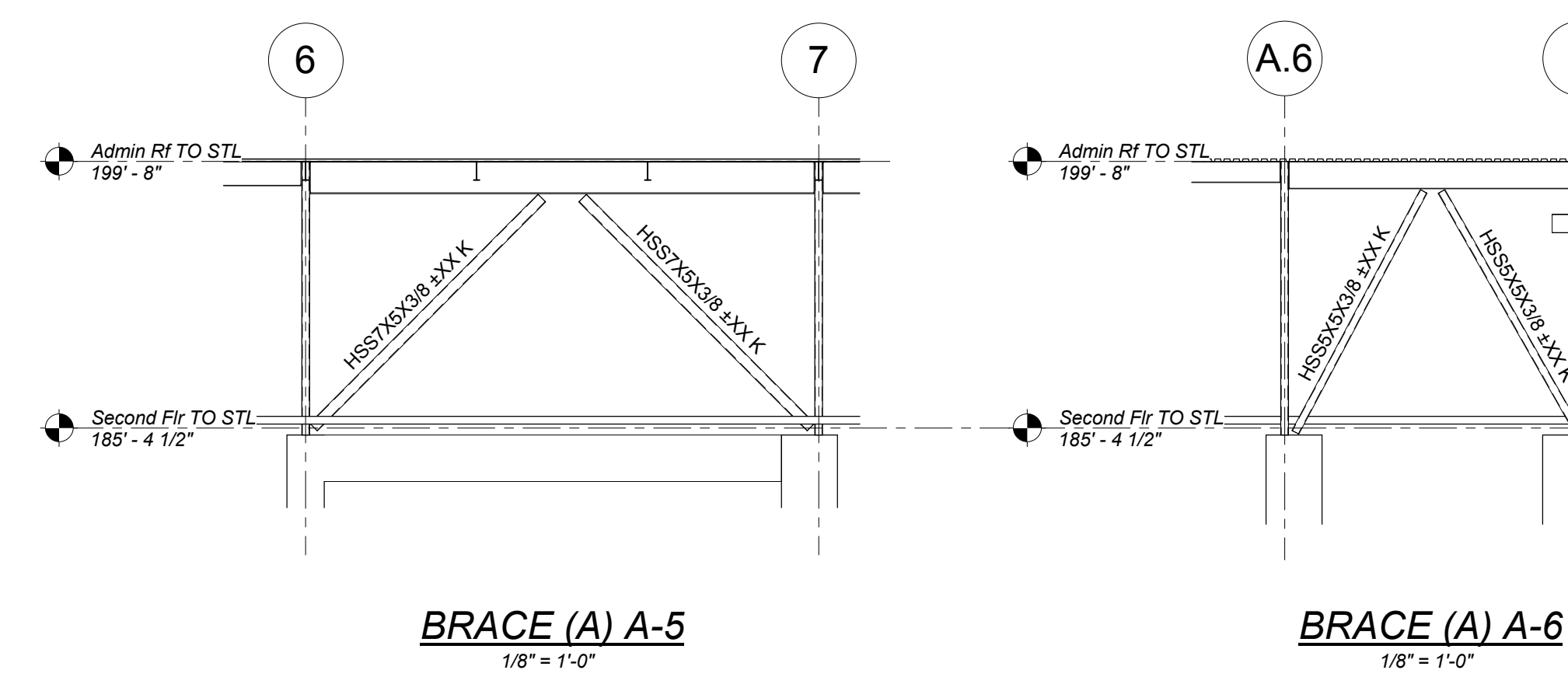
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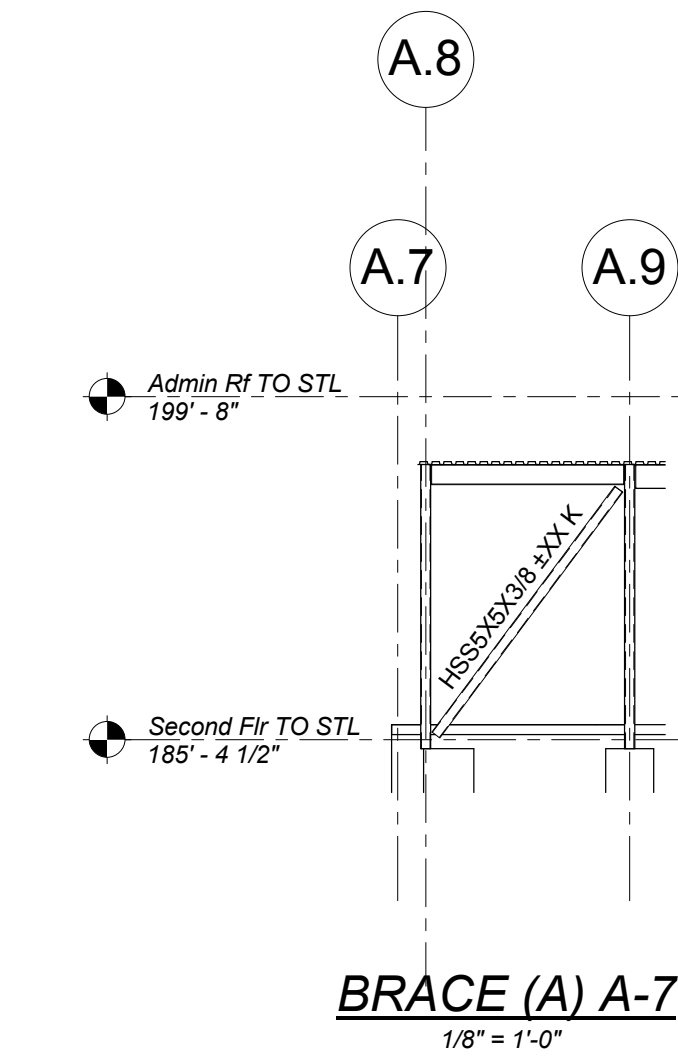
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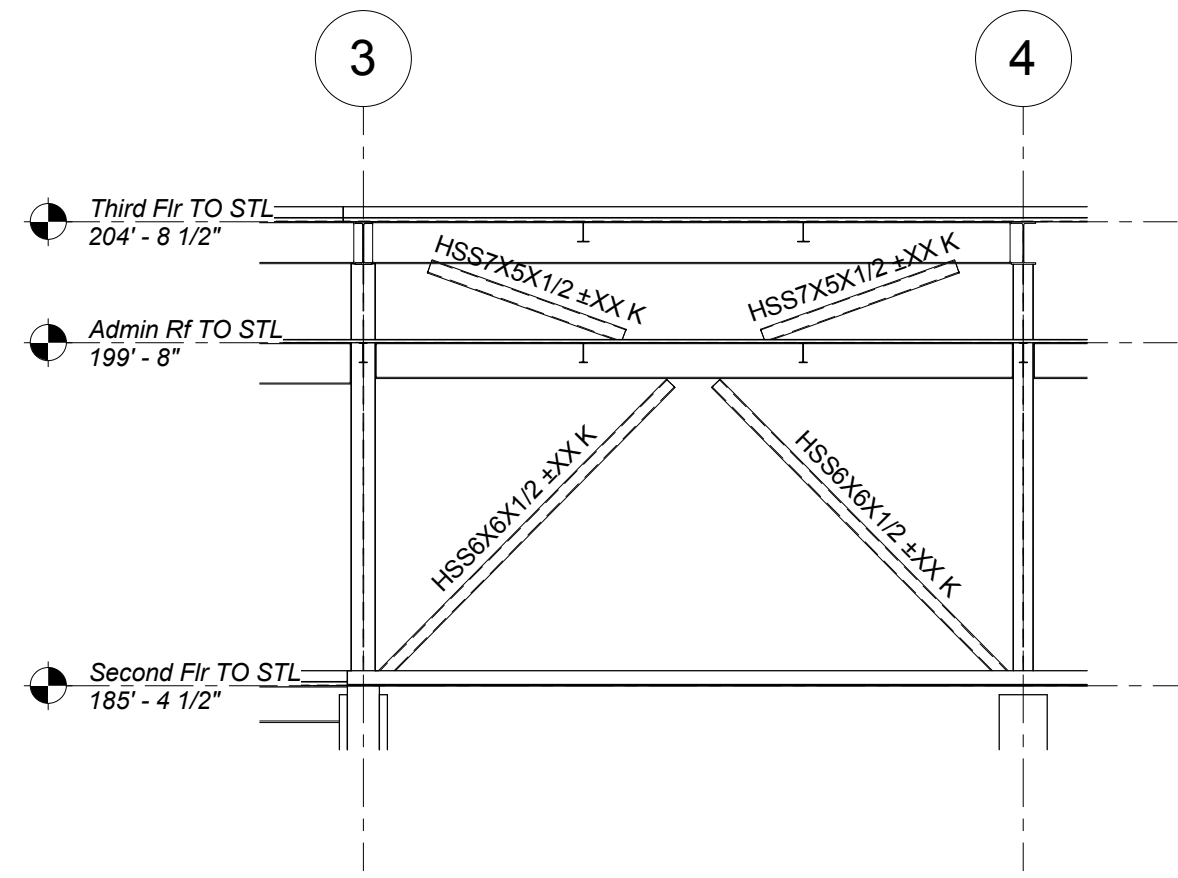
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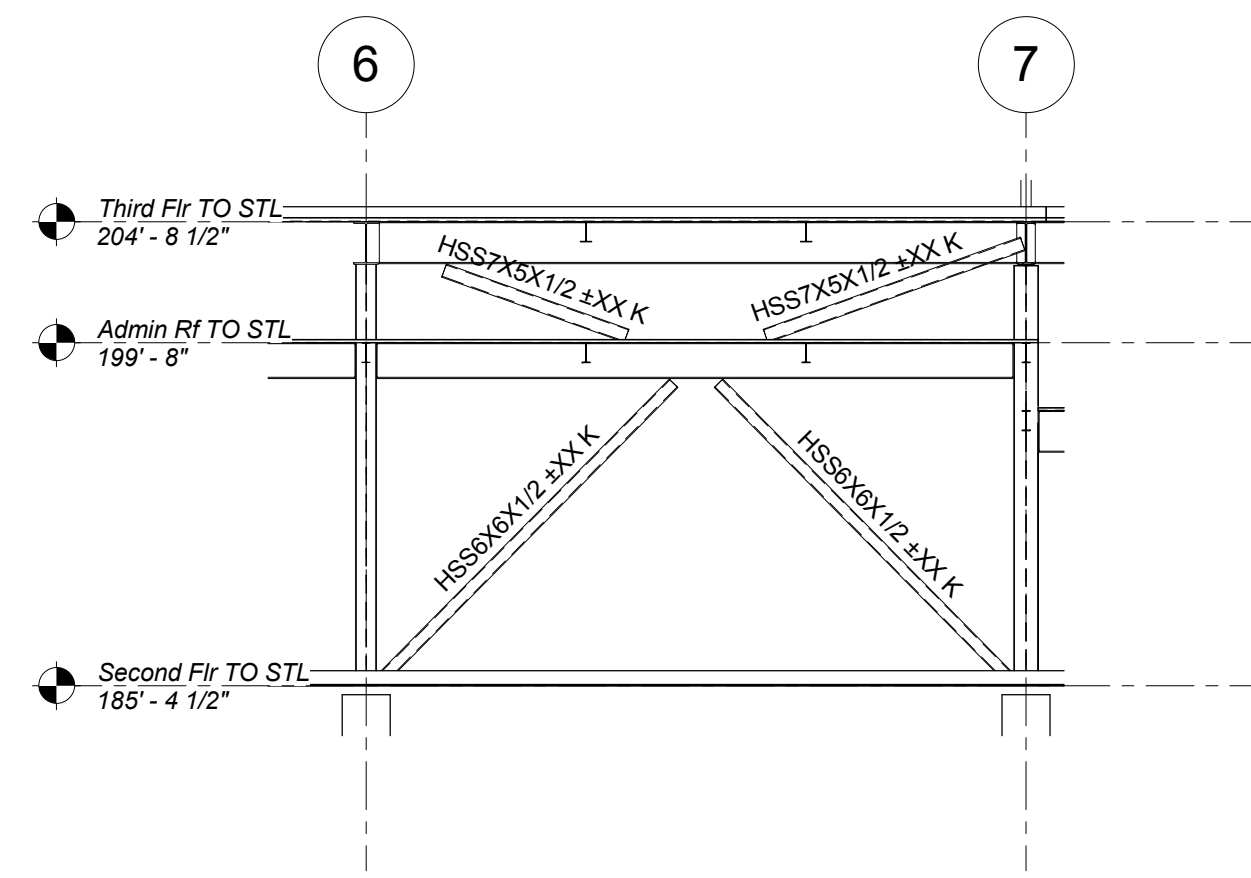
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Structural Engineer - Paul SL
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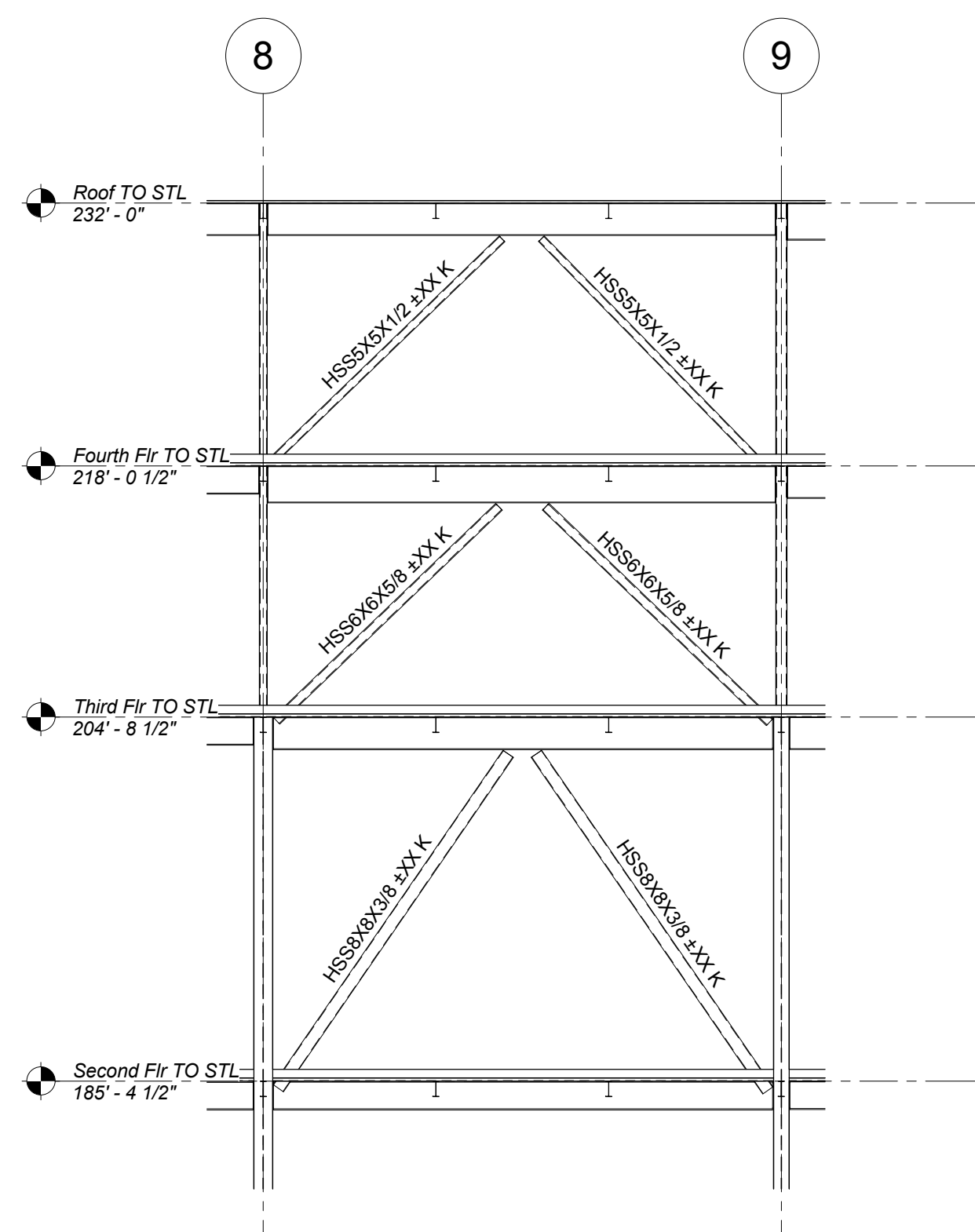
Architect:  543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer:  structural engineers T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St. Newton MA 02462	Registration: 	Project Name and Address: <p style="text-align: center;">Concord-Carlisle Regional High School</p> <p style="text-align: center;">500 Walden Street Concord, MA 01742</p>	Issue Submissions: <table border="1"> <thead> <tr> <th>No.</th> <th>Date</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>8/15/2012</td> <td>Design Development Submission</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	Date	Description	1	8/15/2012	Design Development Submission													Title: <p style="text-align: center;">Brace Frame Elevations - Part A</p>	Project No.: <p style="text-align: center;">1102.00</p> Drawing No.: <p style="text-align: center;">S3.2</p>
No.	Date	Description																						
1	8/15/2012	Design Development Submission																						
				Date: August 15, 2012 Scale: 1/8" = 1'-0" Drawn: CDM Checked: MAP		© omr architects inc																		



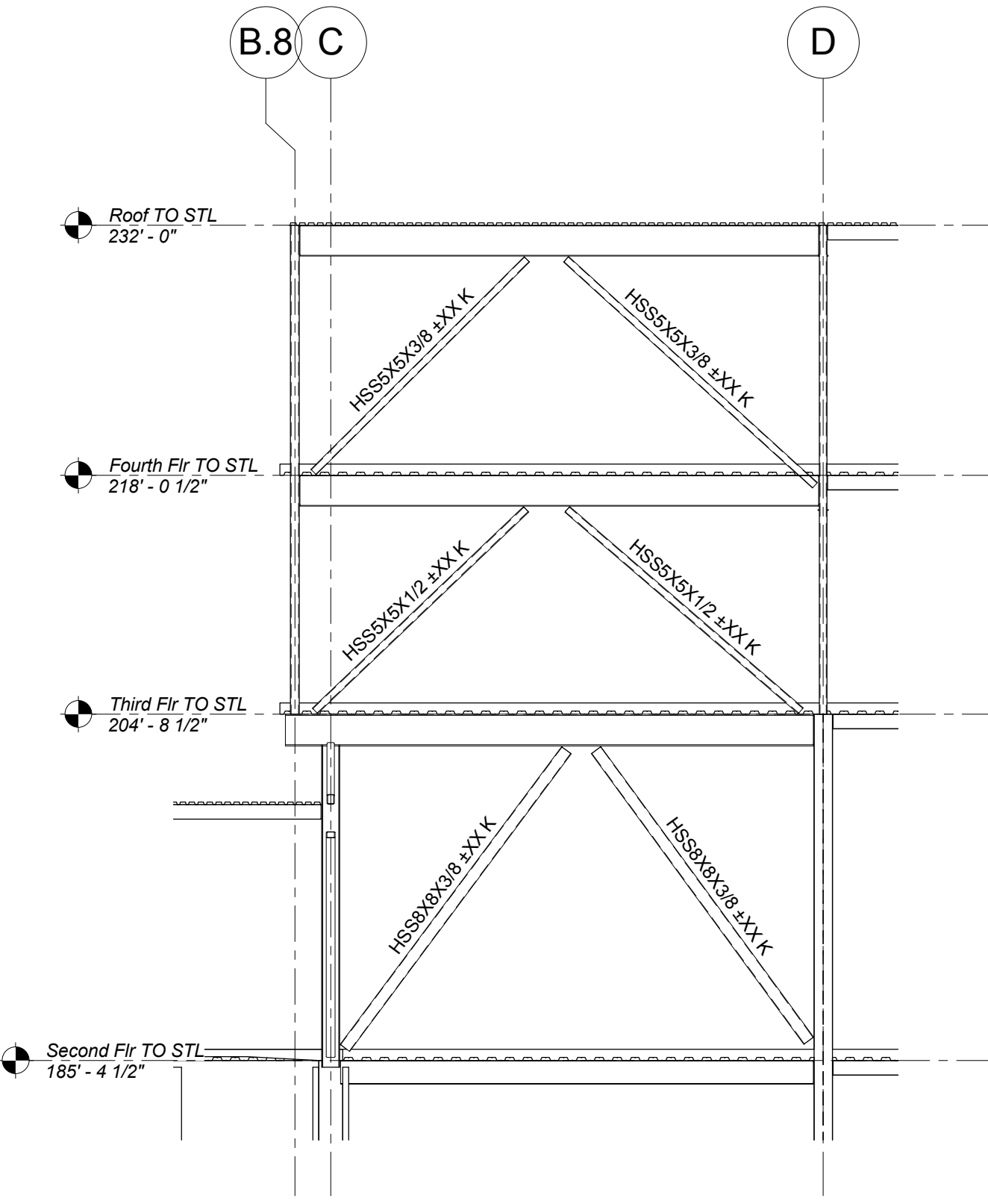
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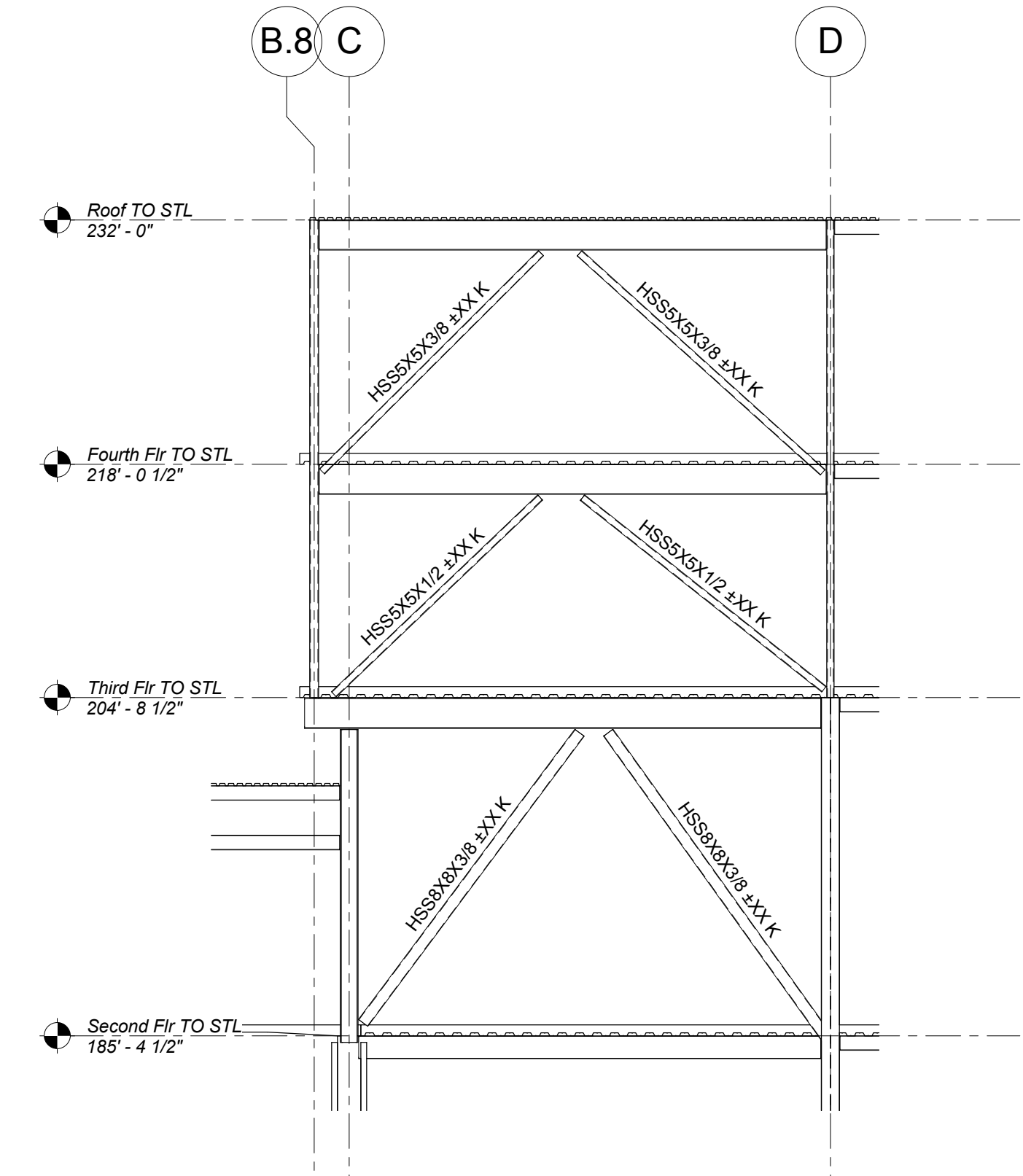
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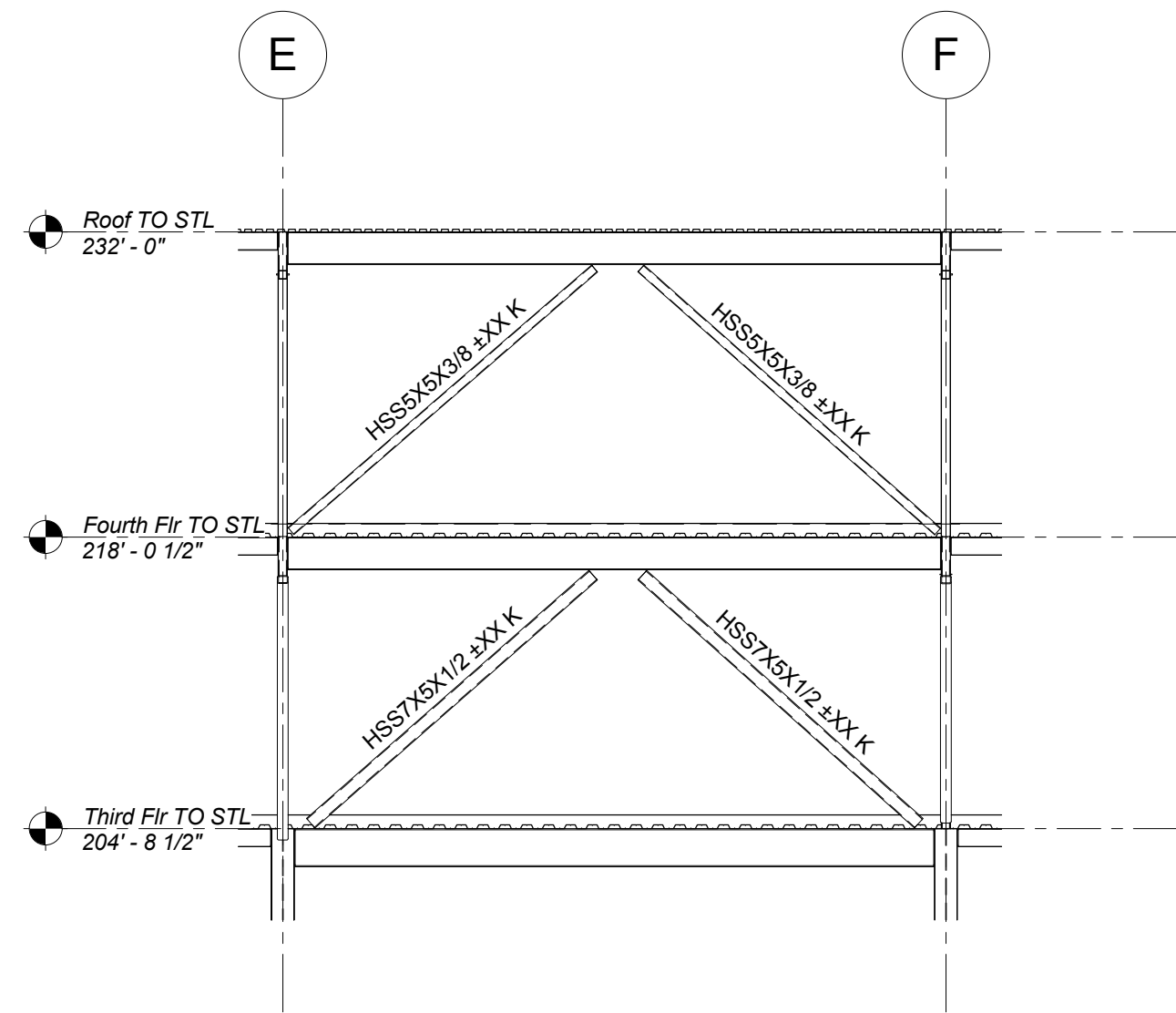
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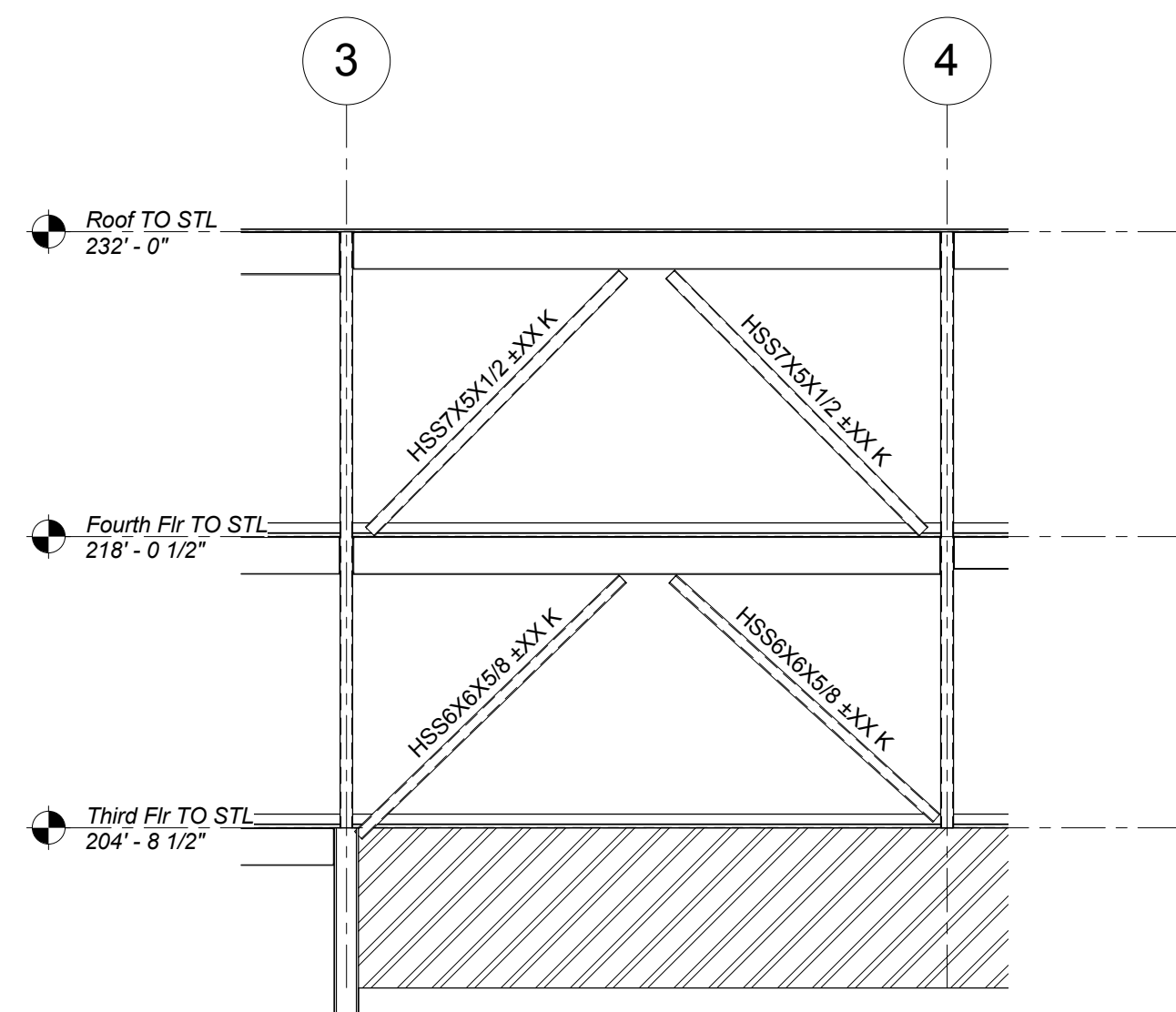
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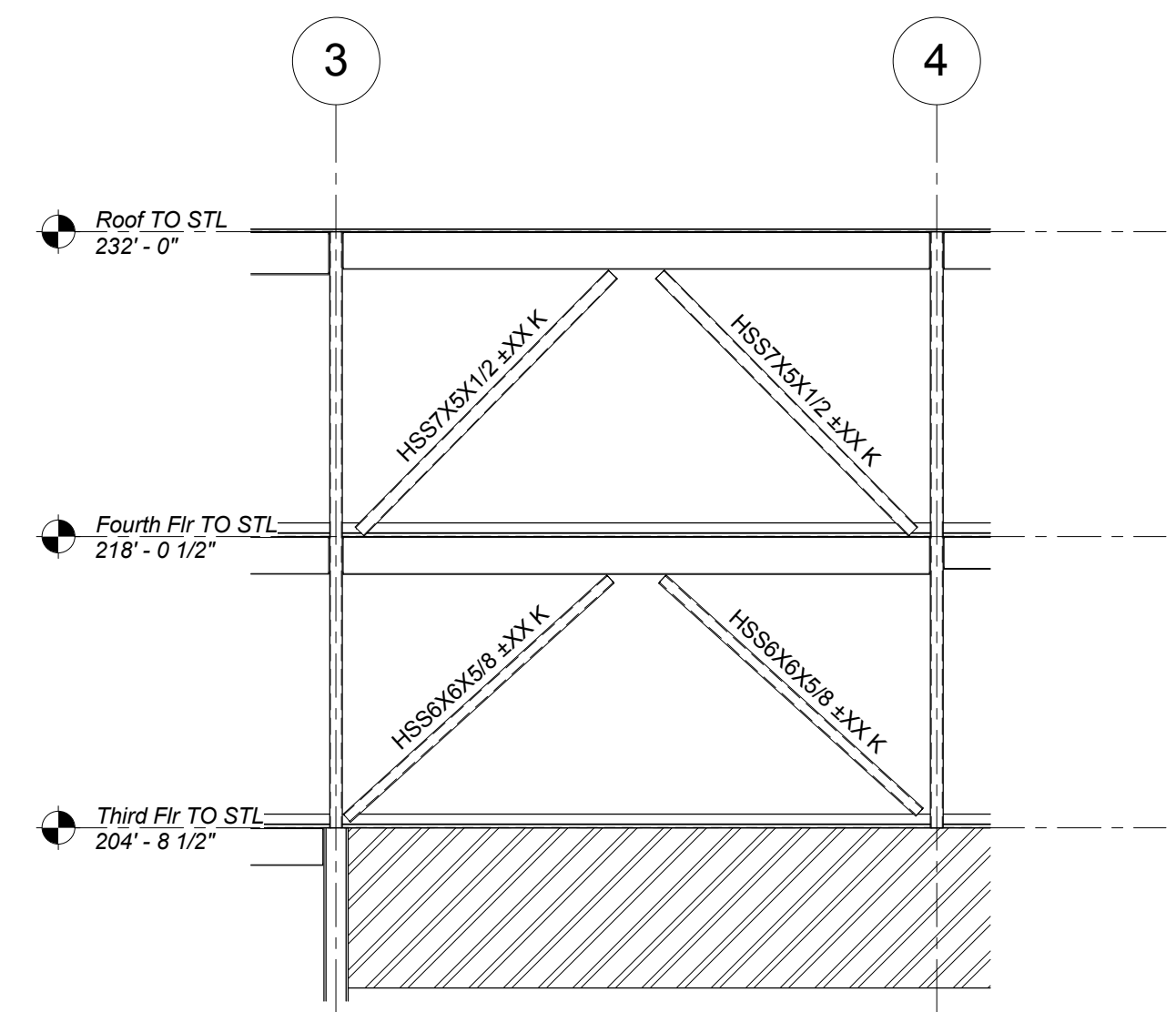
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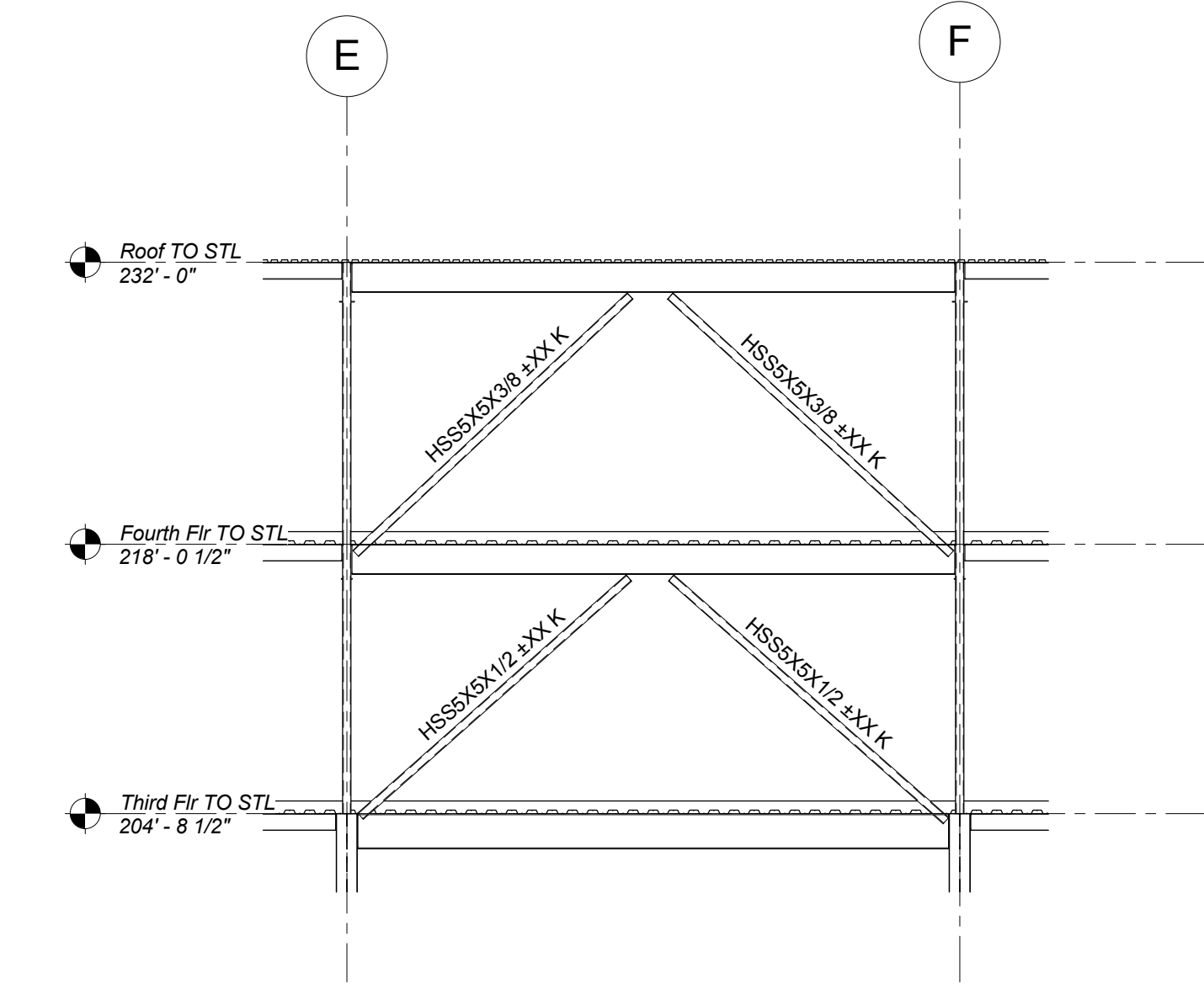
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BRACE A-16
1/8" = 1'-0"



BRACE A-17
1/8" = 1'-0"



BRACE A-18
1/8" = 1'-0"

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Consulting Engineer:
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Registration:
Design Development Submission

Project Name and Address:
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500 Walden Street
Concord, MA 01742

Issue Submissions:

No.	Date	Description
1	8/15/2012	Design Development Submission

Title:
Brace Frame Elevations - Part A

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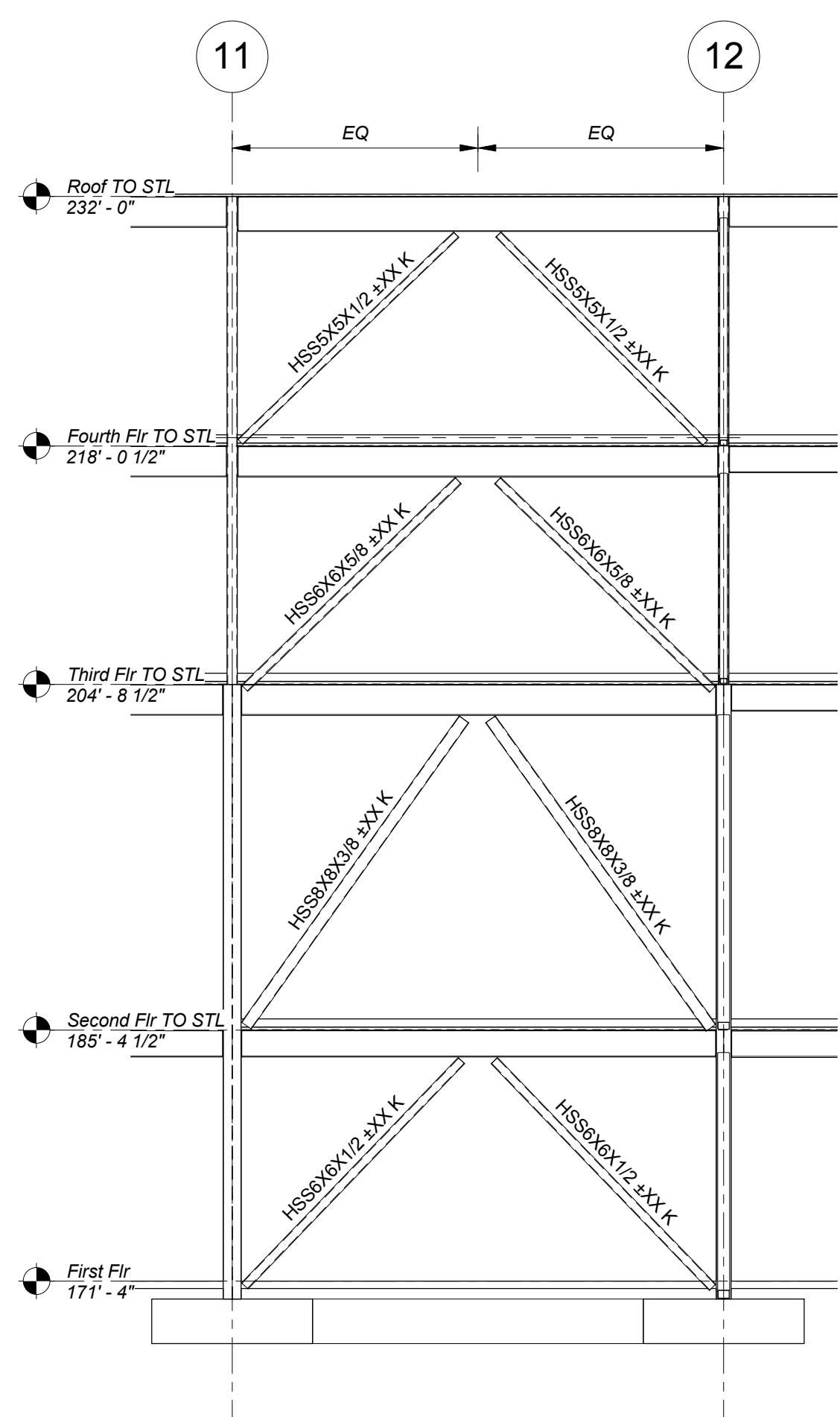
Project No.: 1102.00
Drawing No.: **S3.3**
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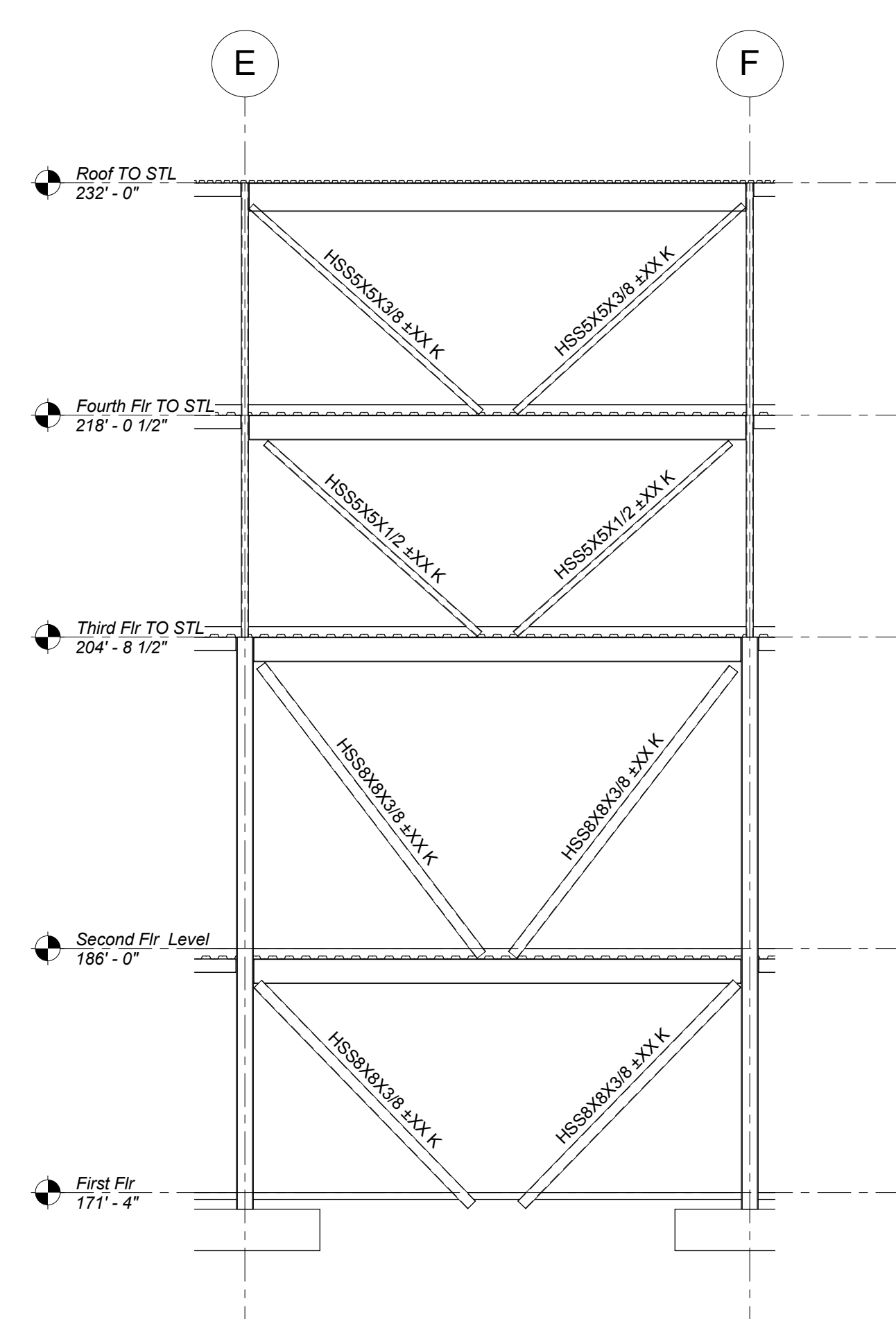
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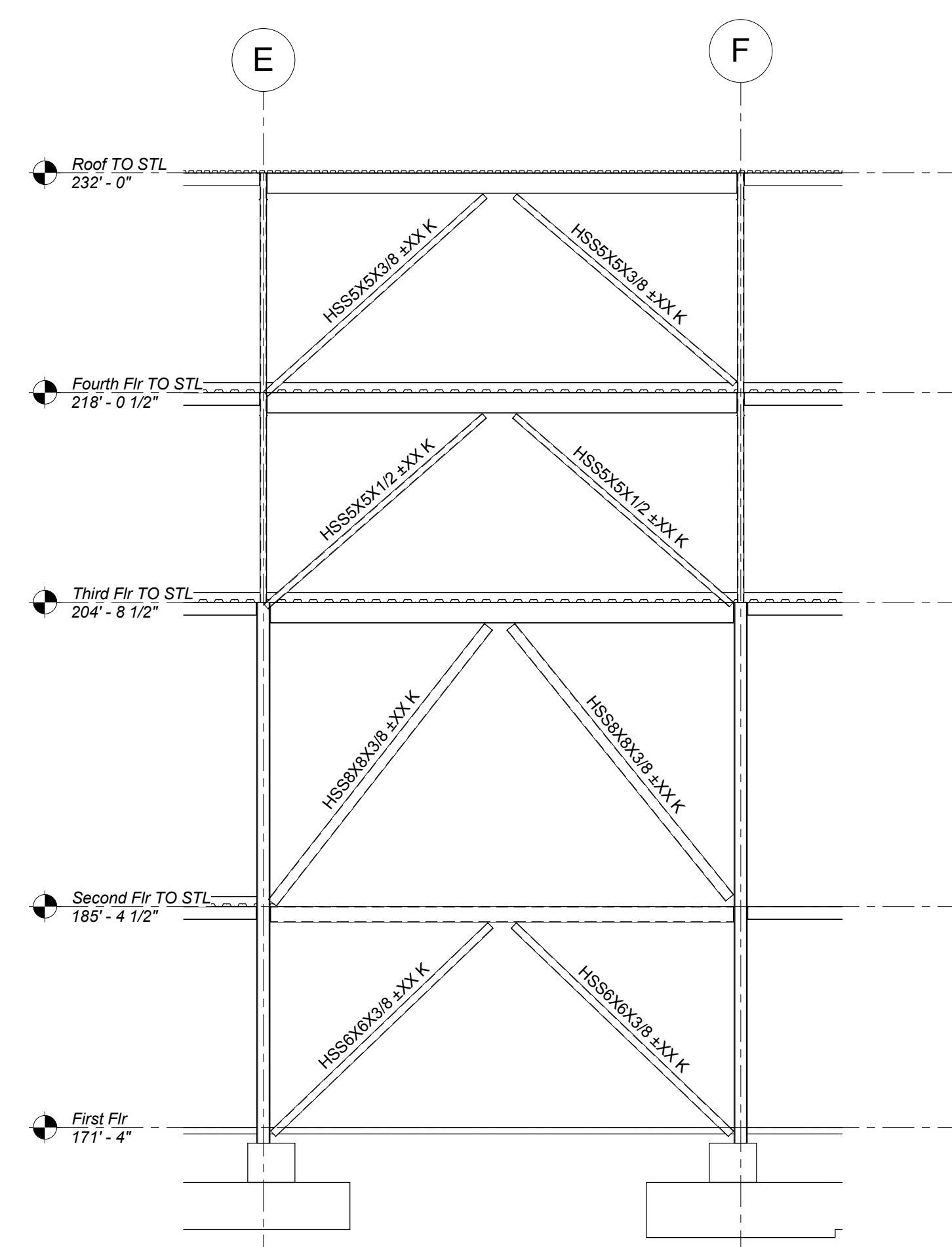
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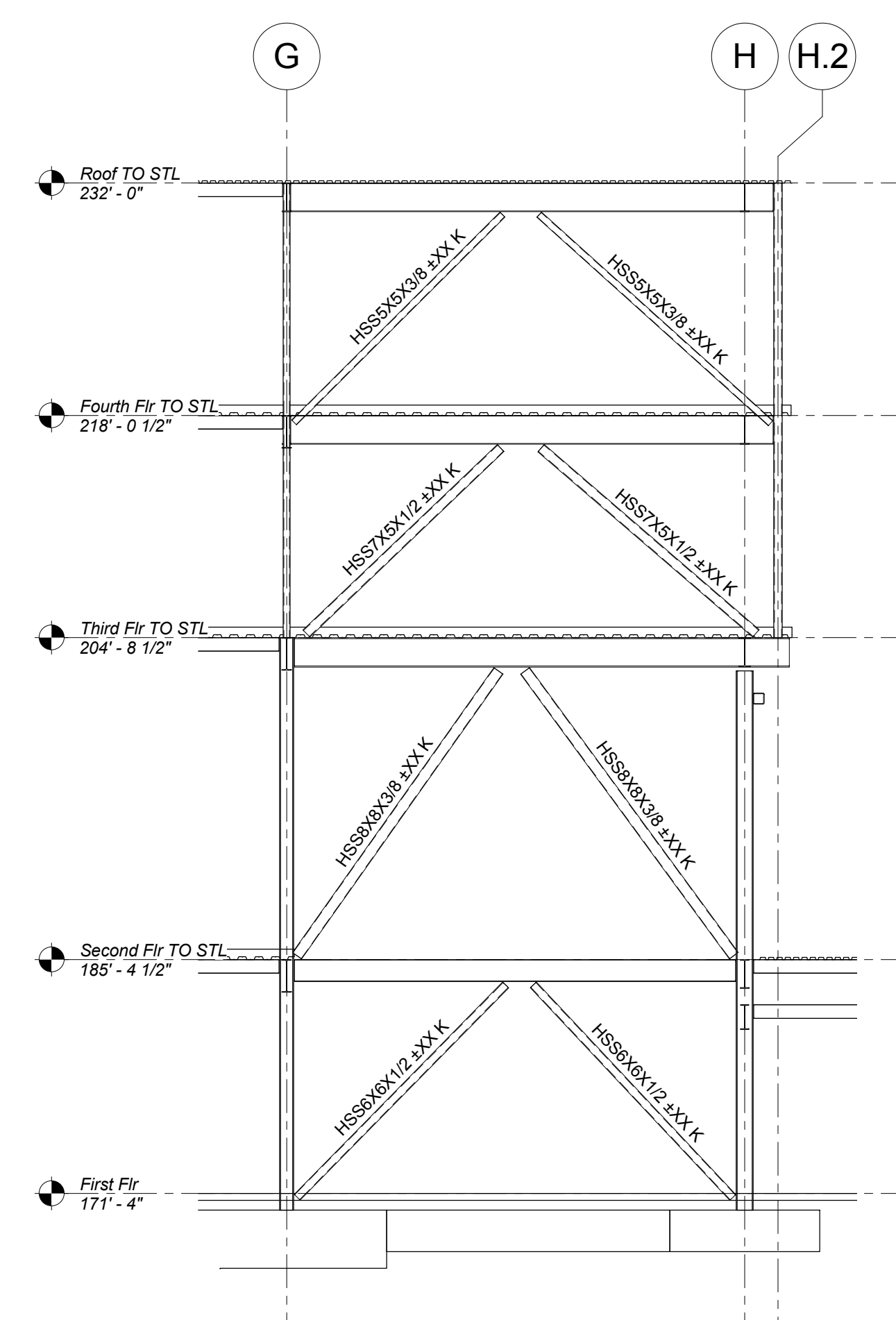
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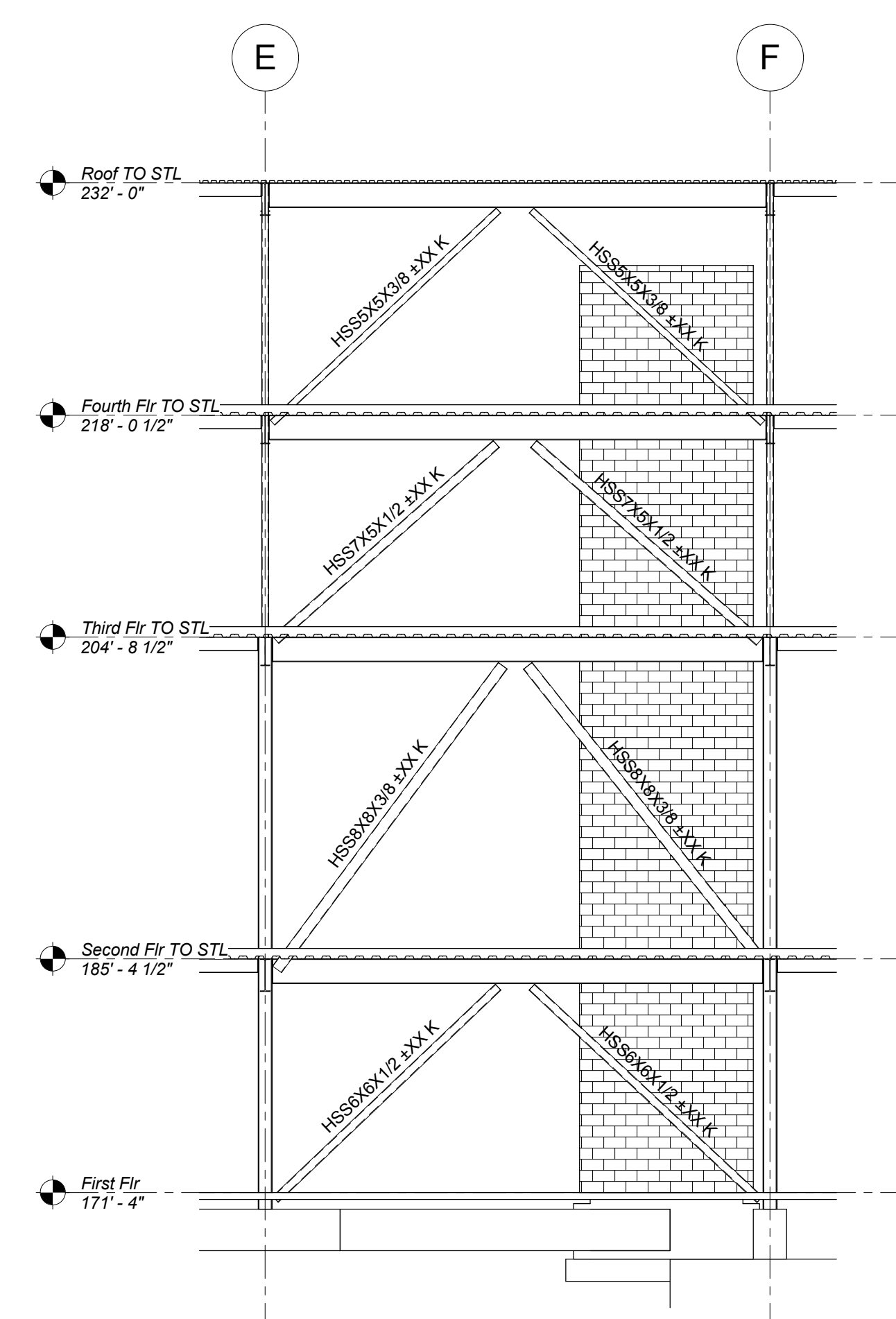
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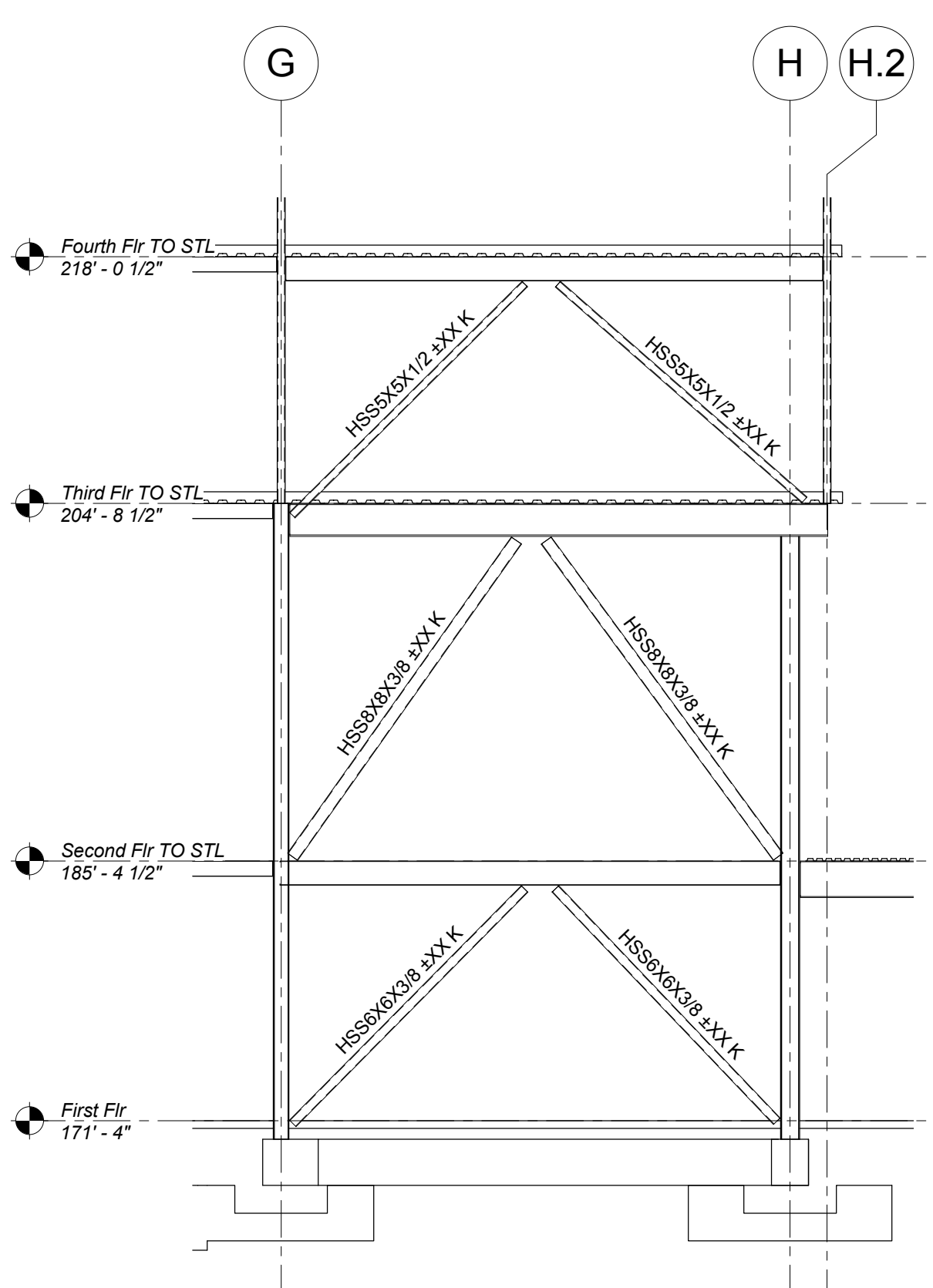
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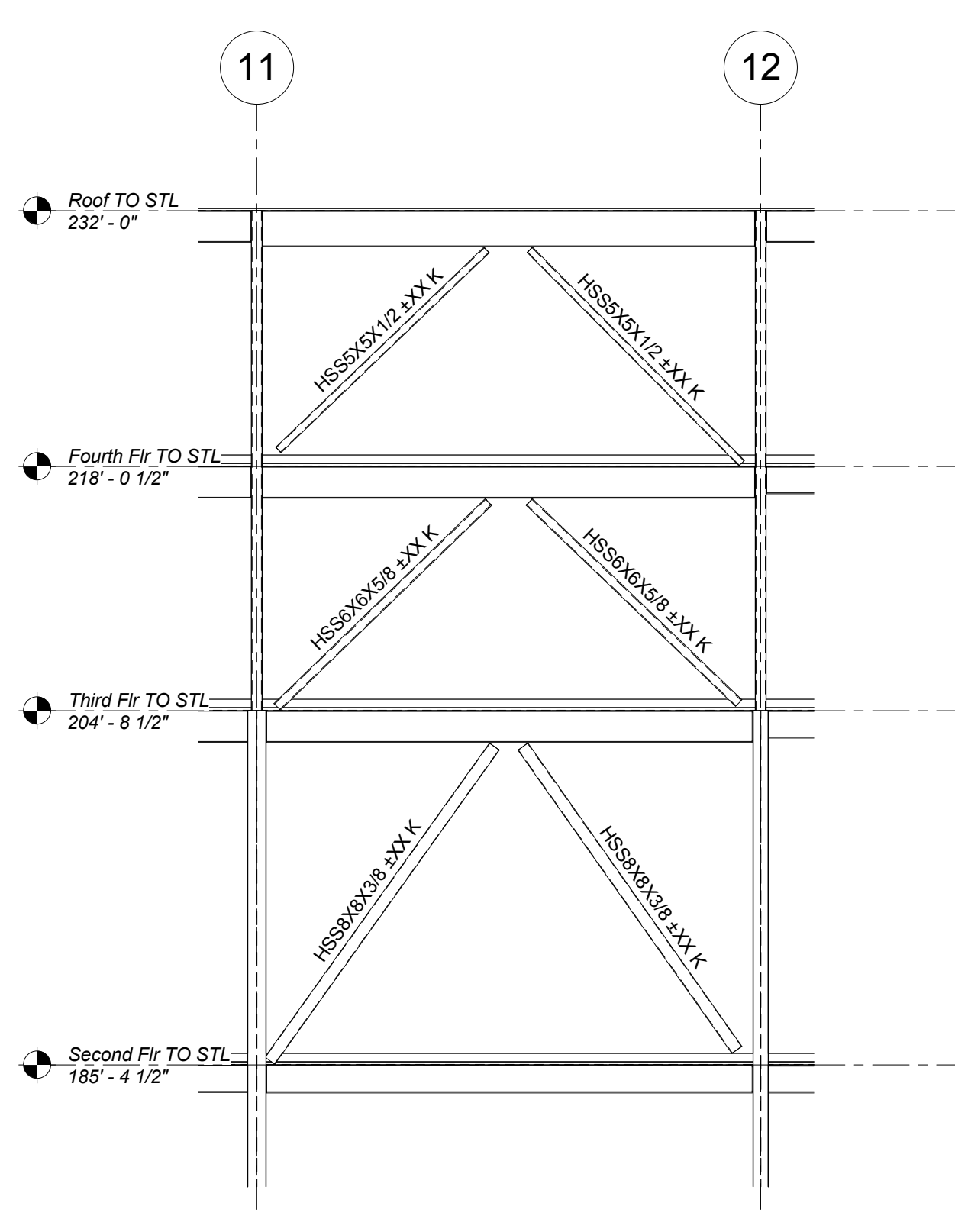
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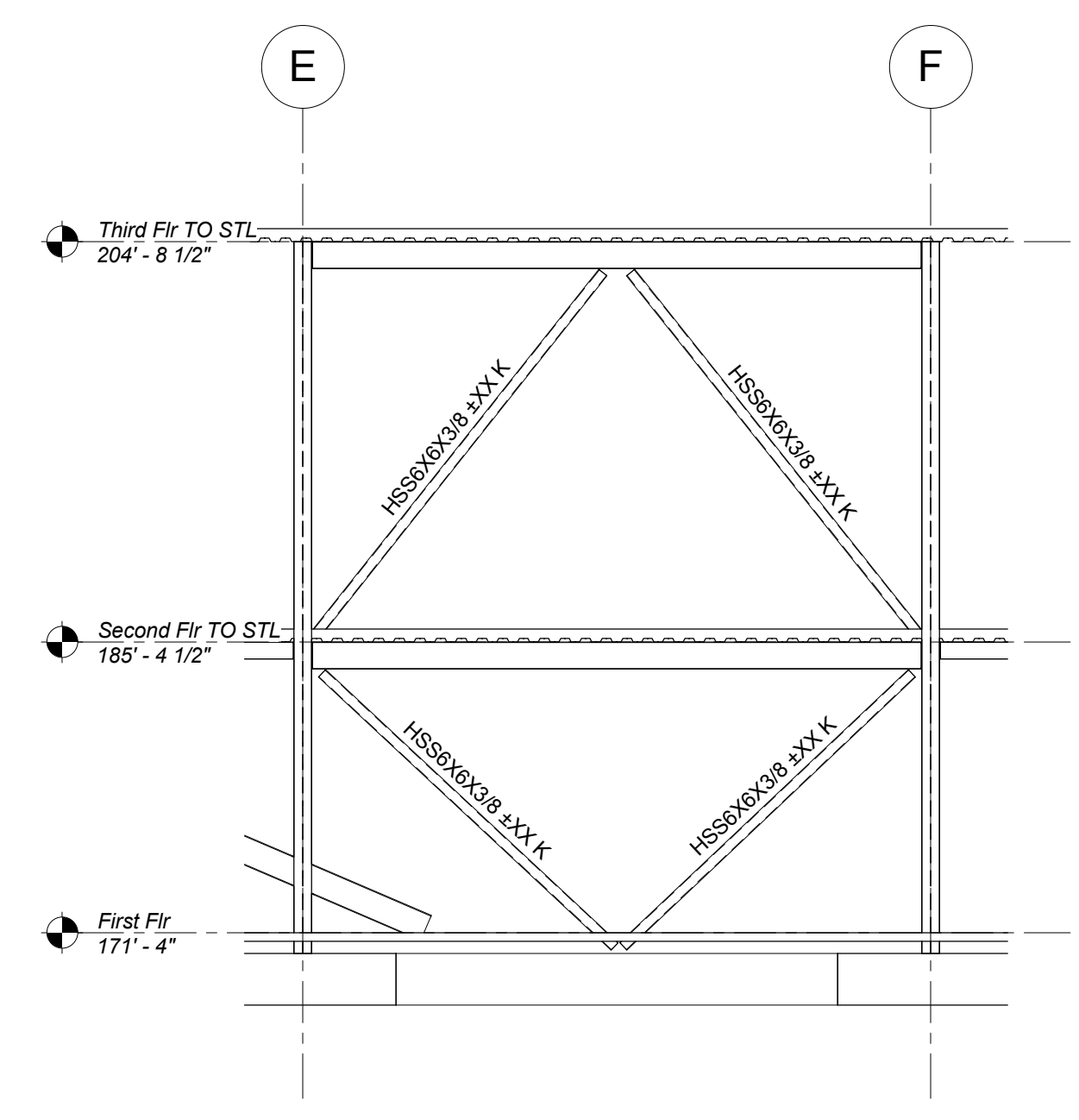
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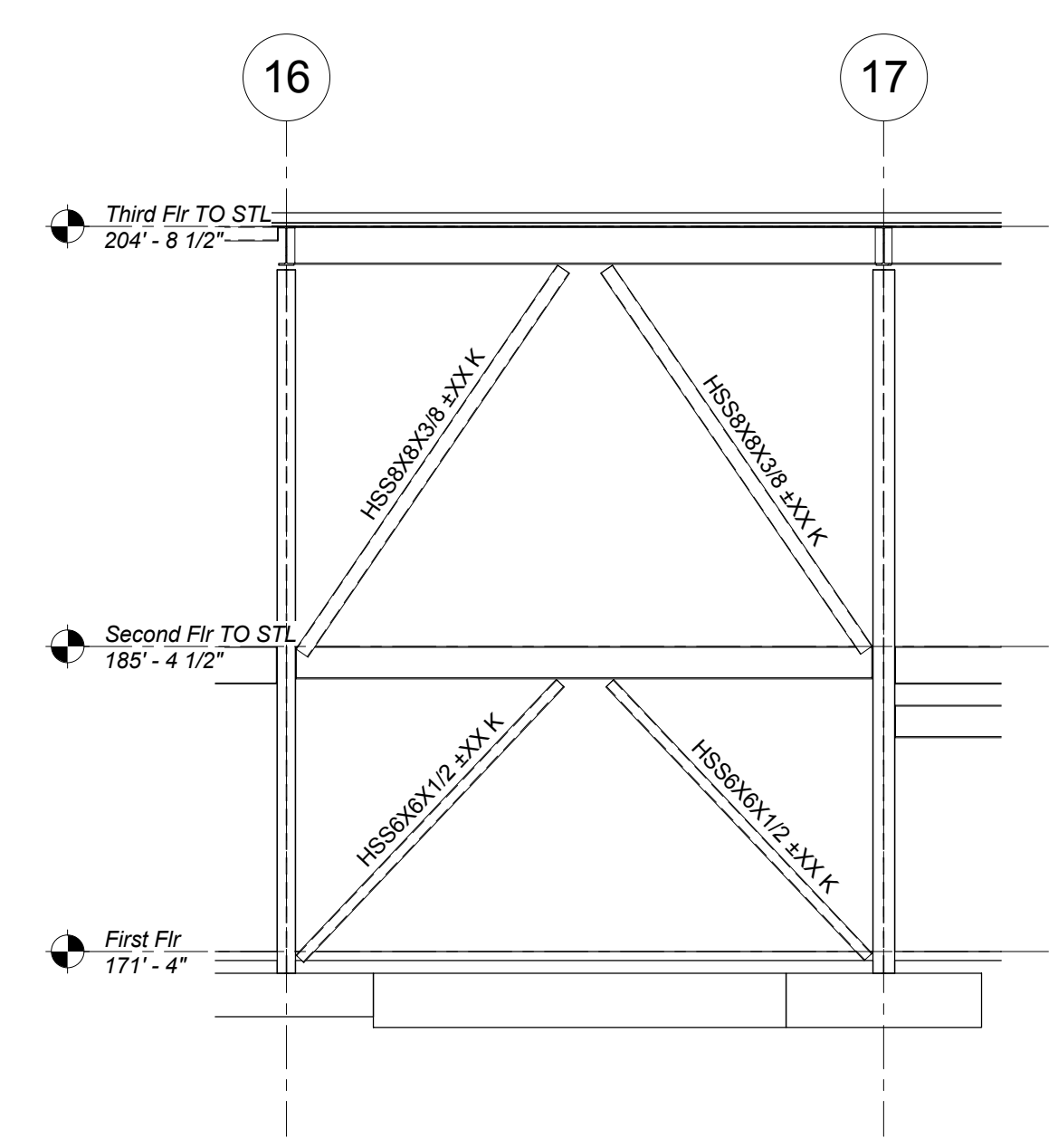
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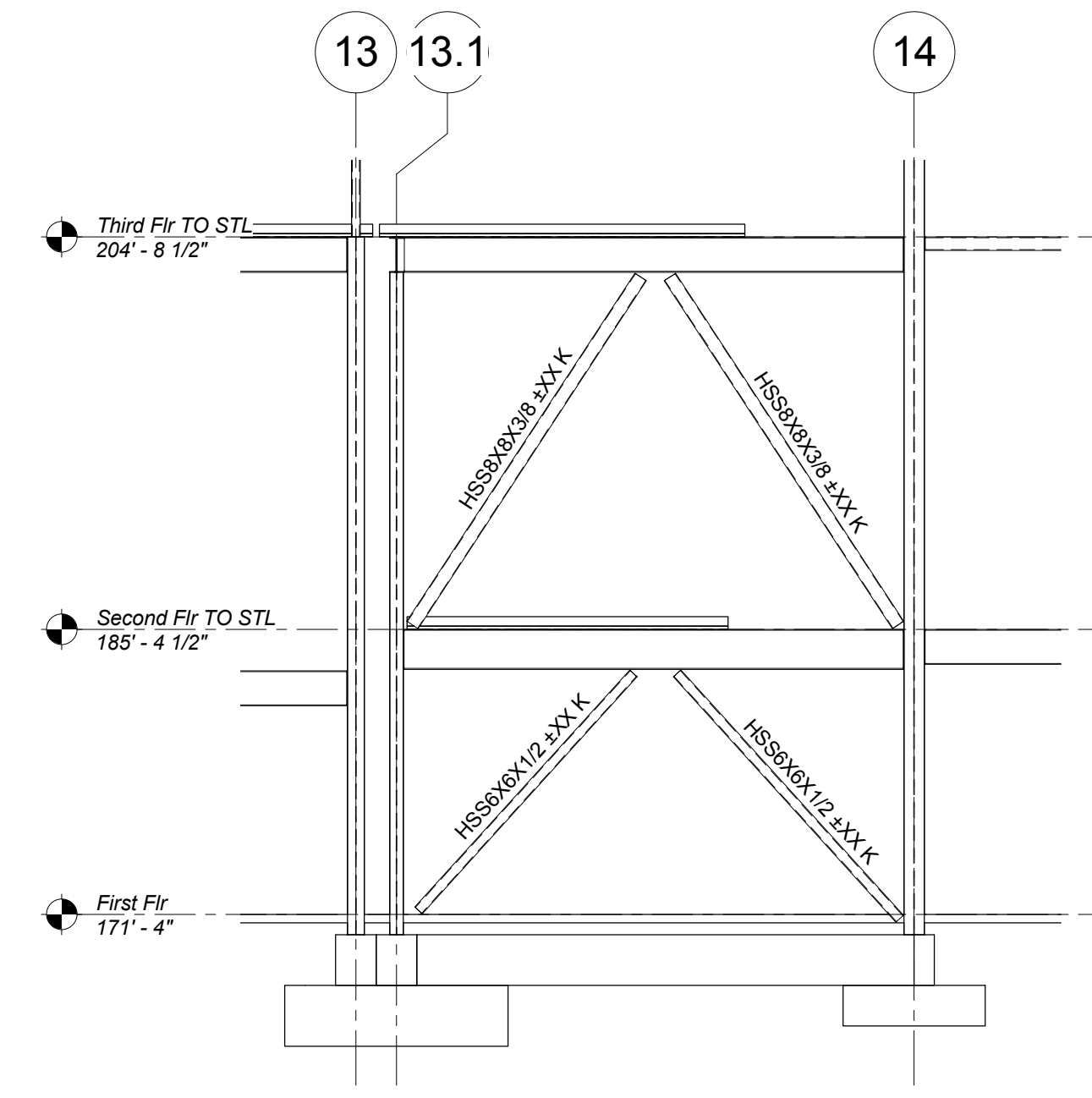
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BRACE B-8
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BRACE B-9
1/8" = 1'-0"



BRACE B-10
1/8" = 1'-0"

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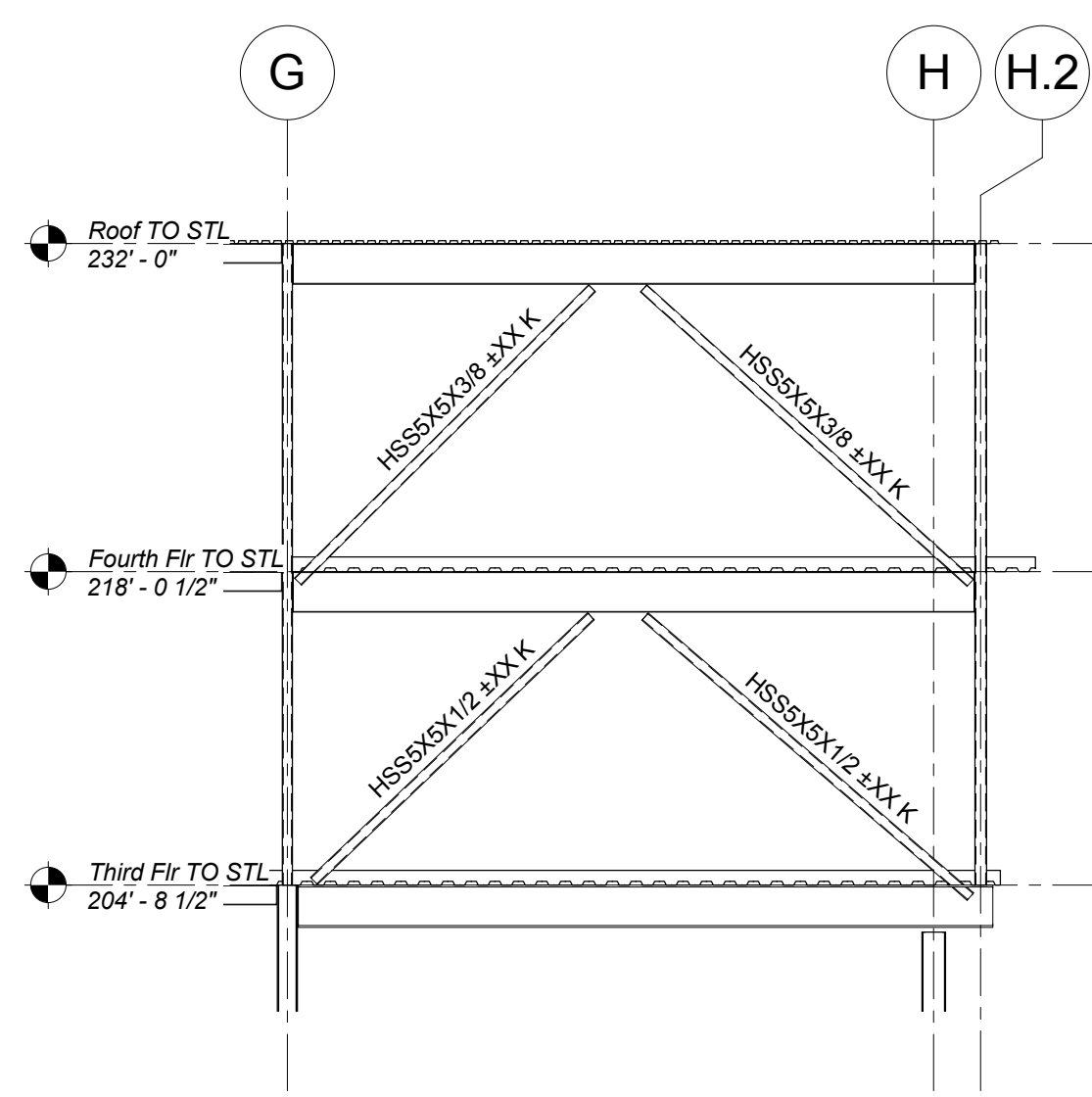
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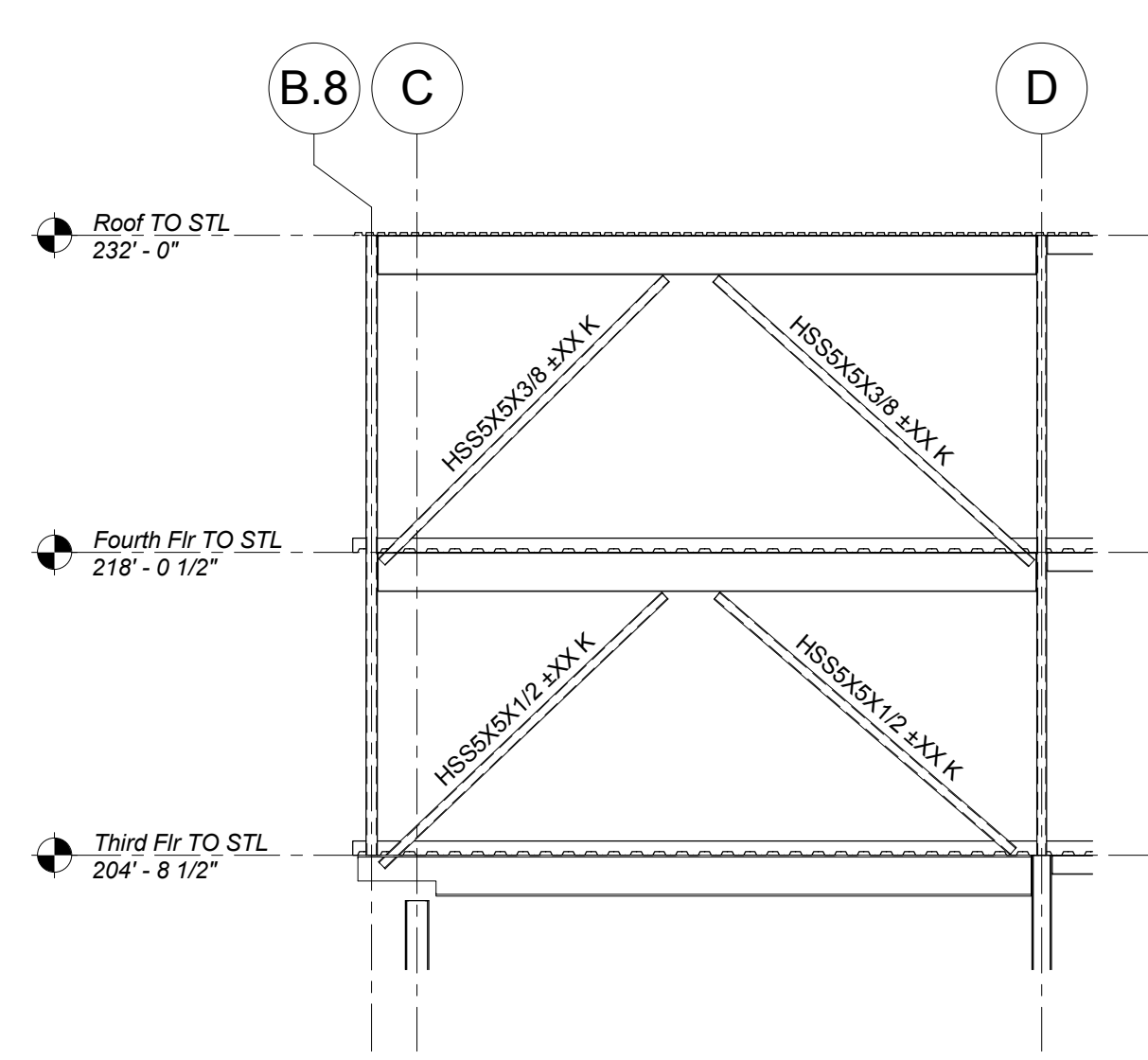
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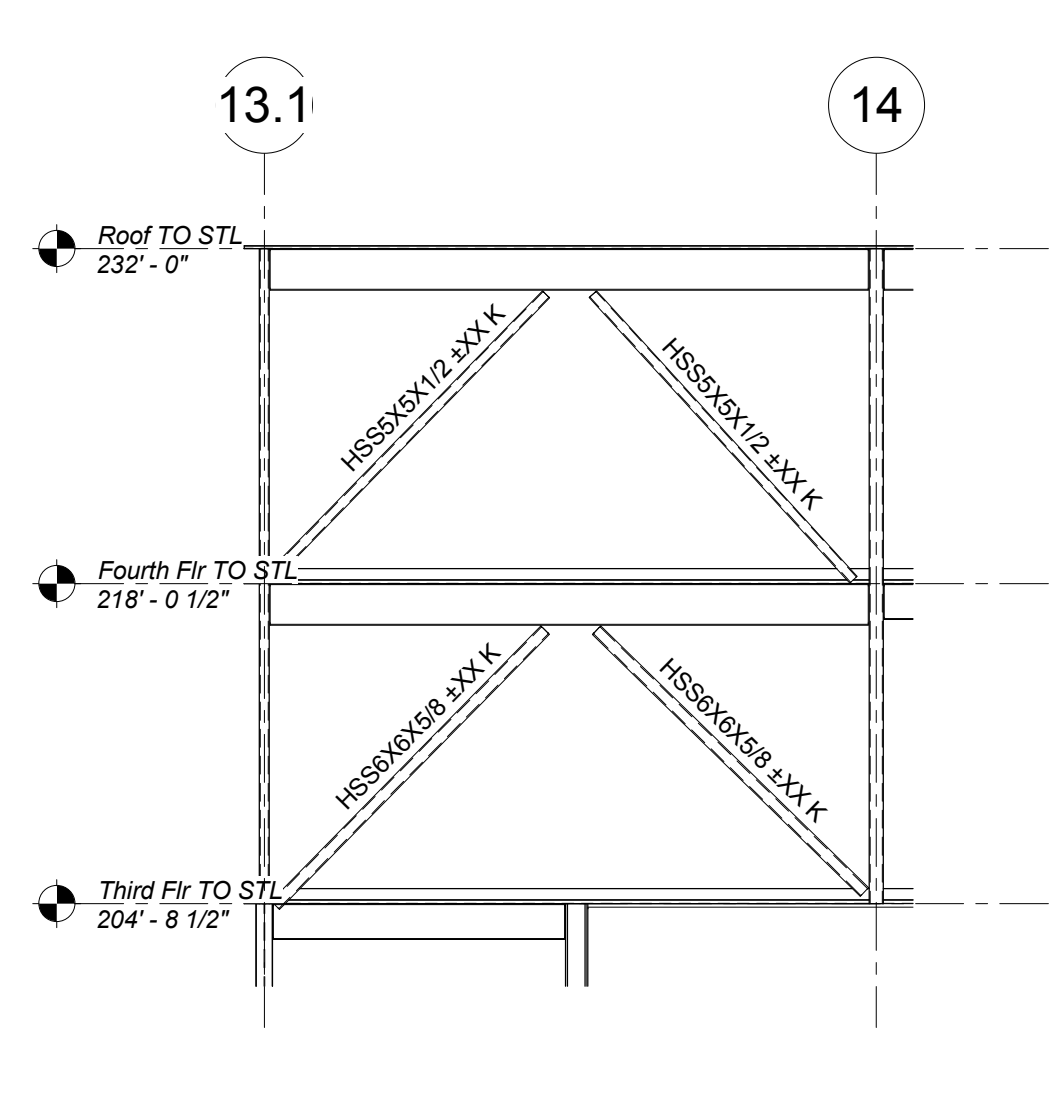
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 Drawing No.: S3.4
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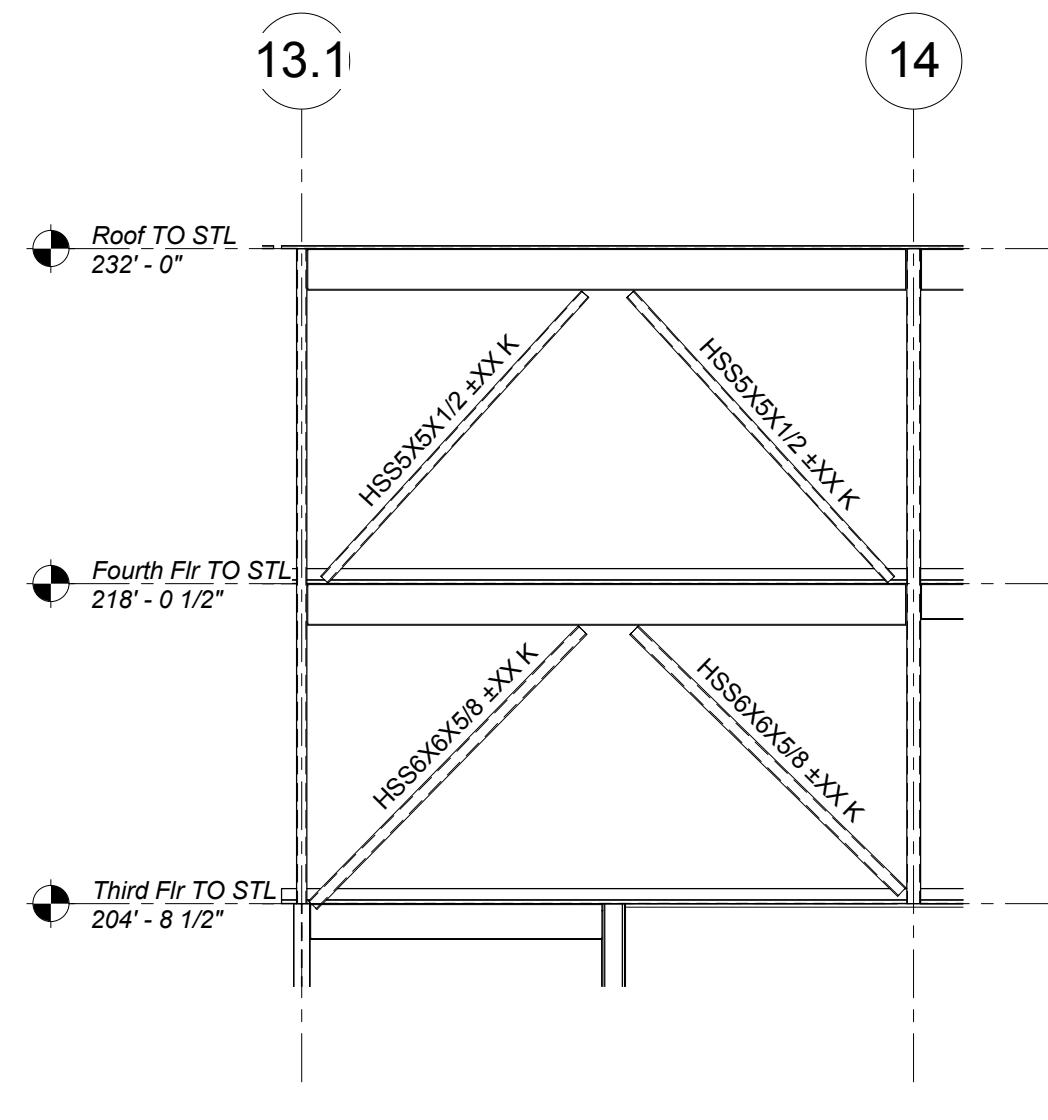
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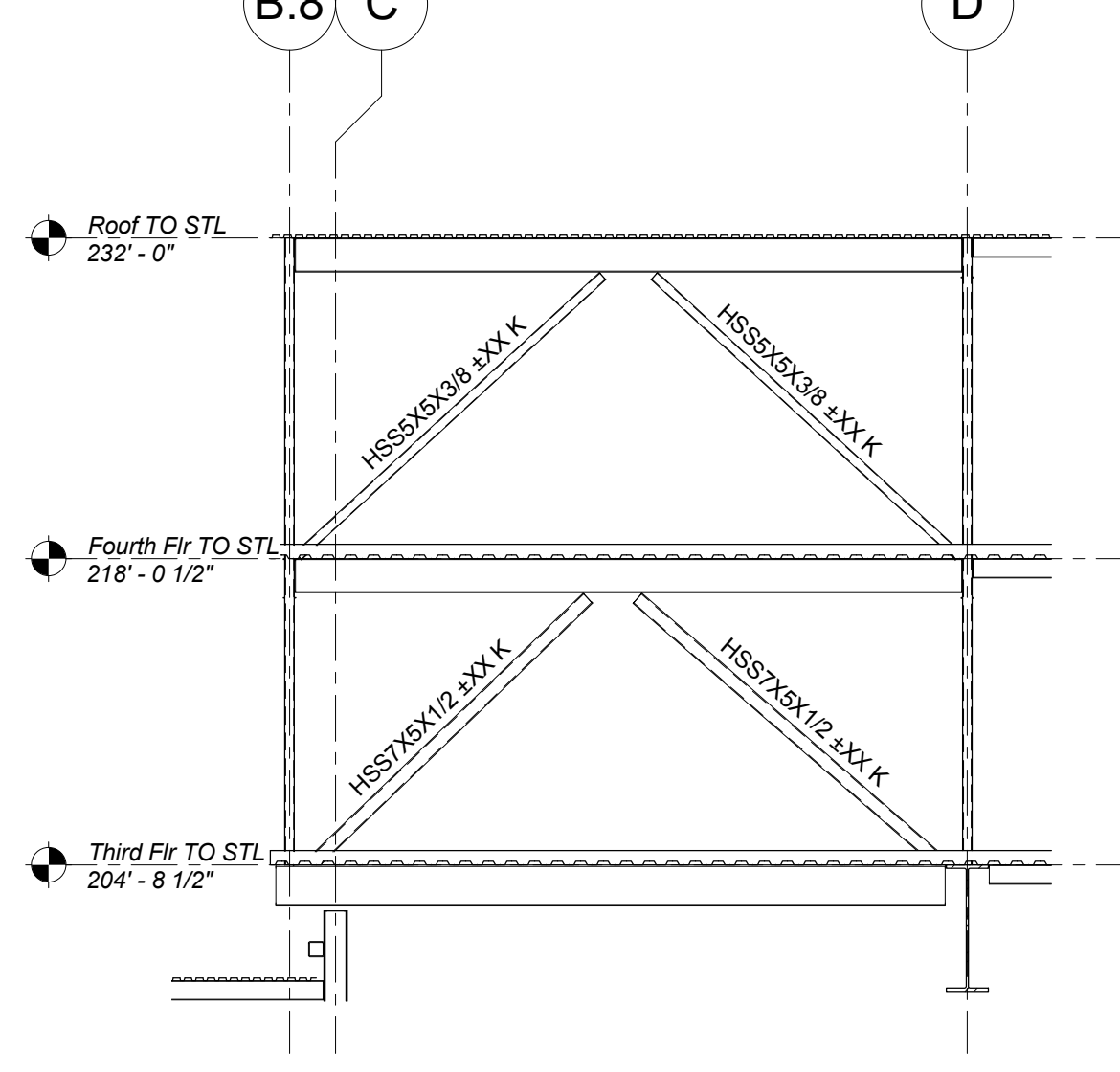
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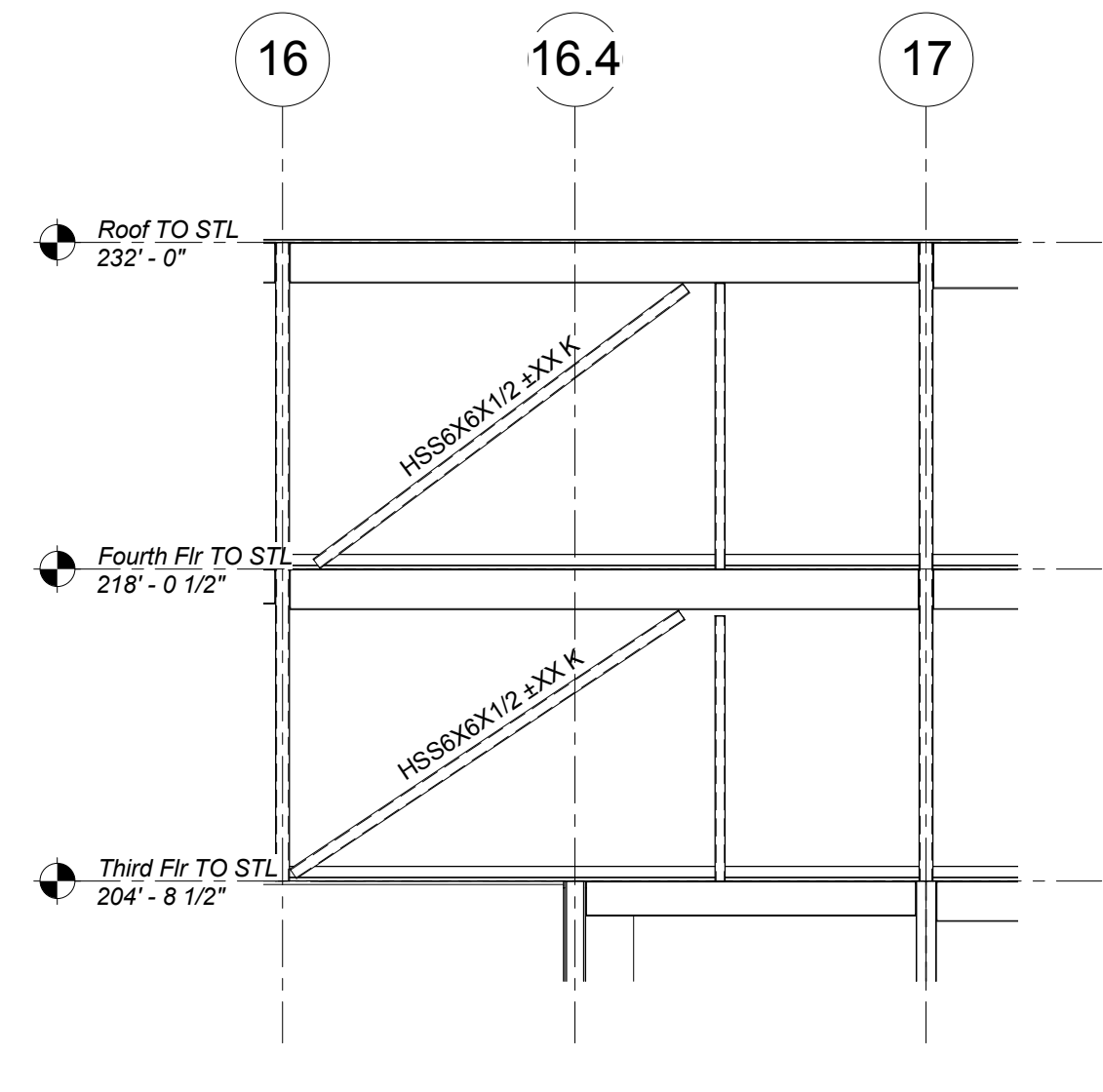
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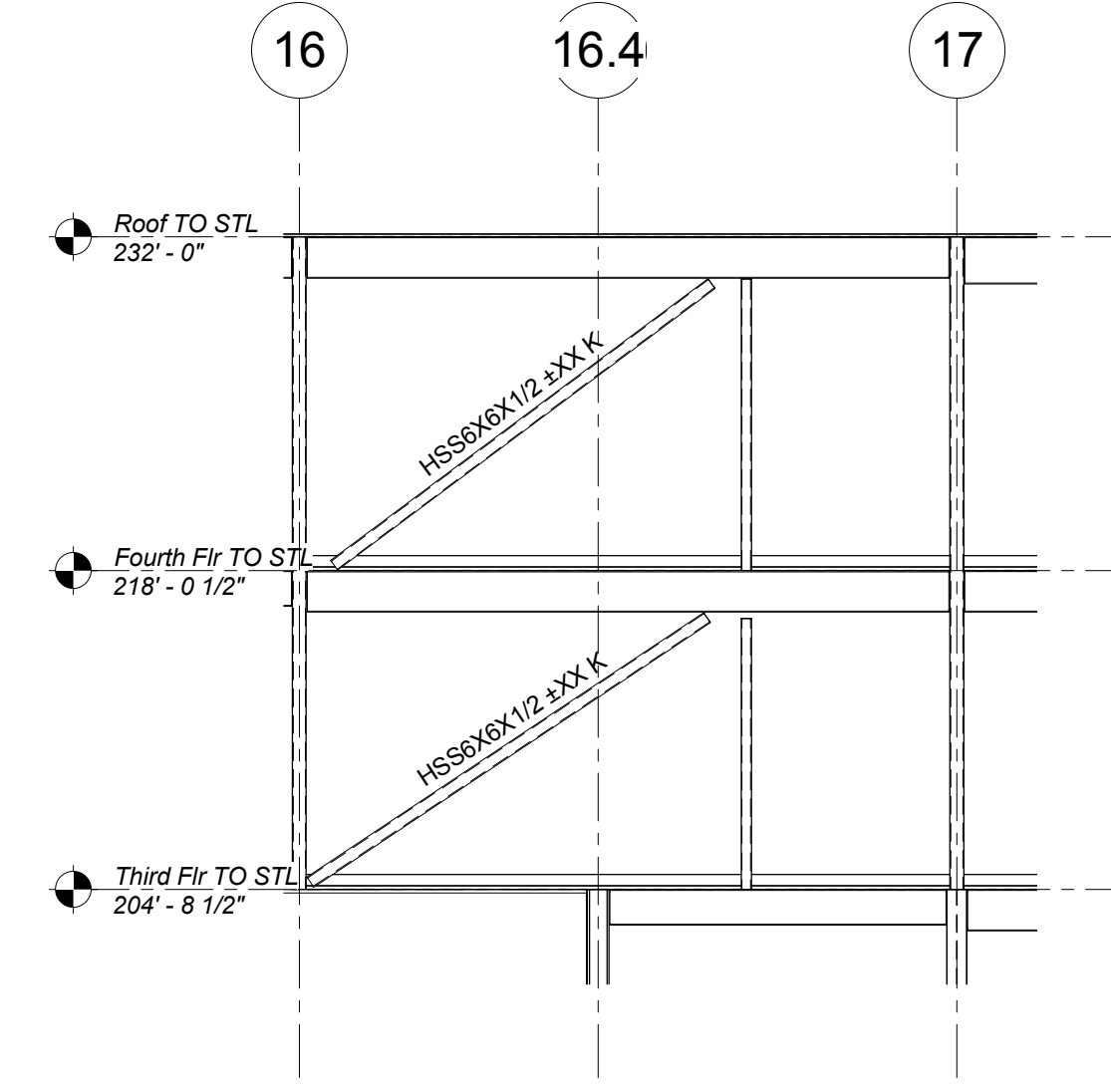
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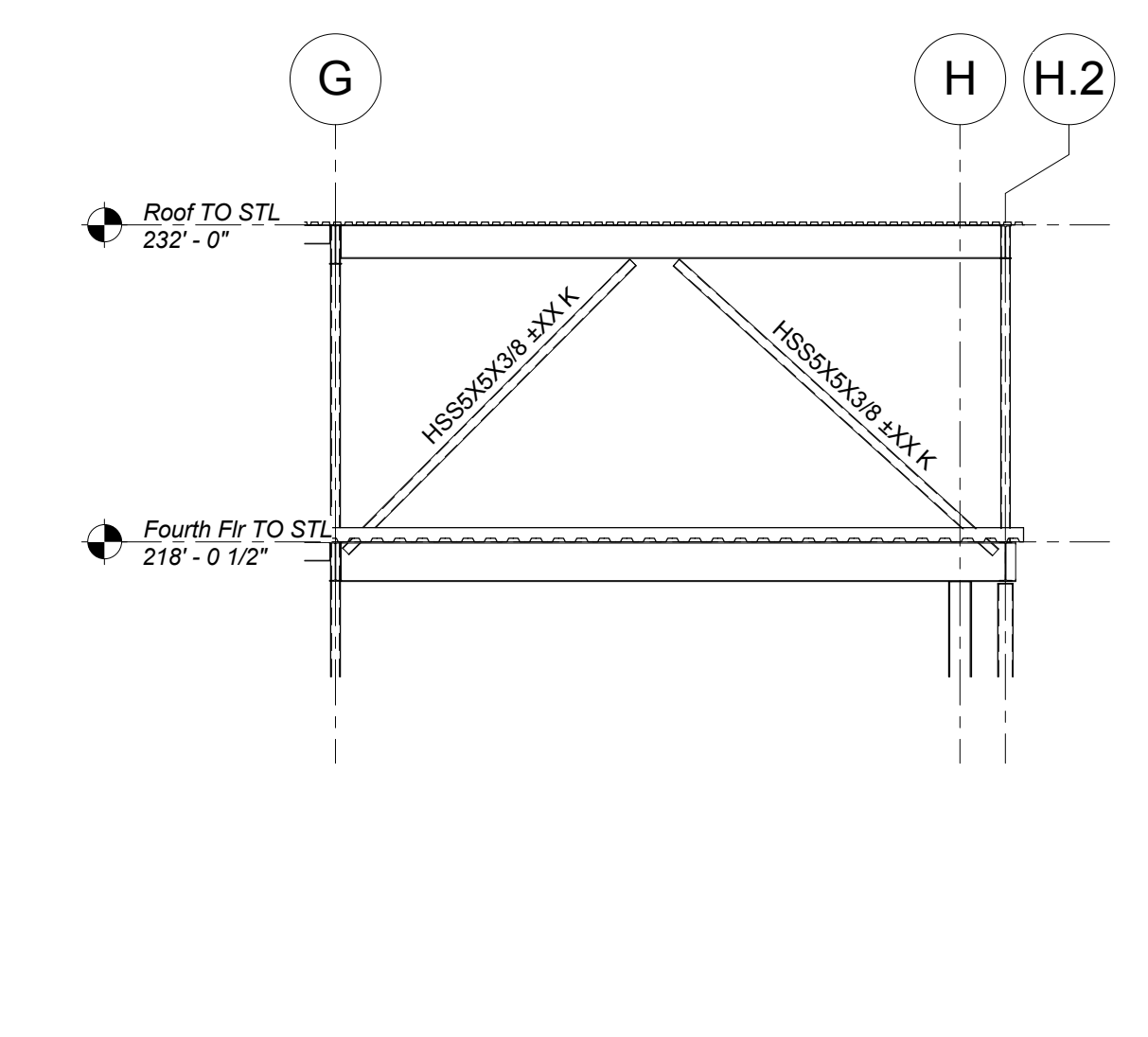
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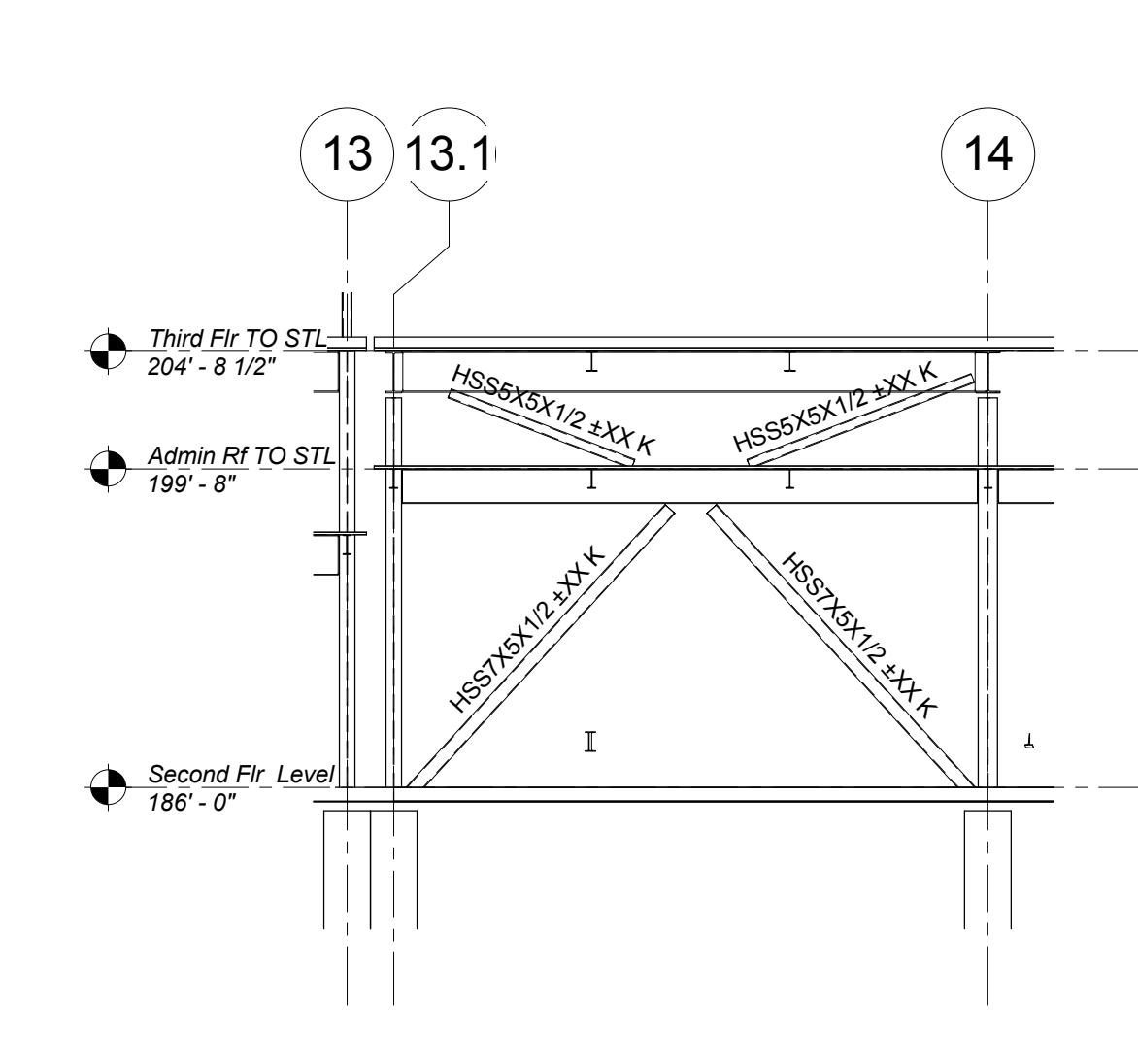
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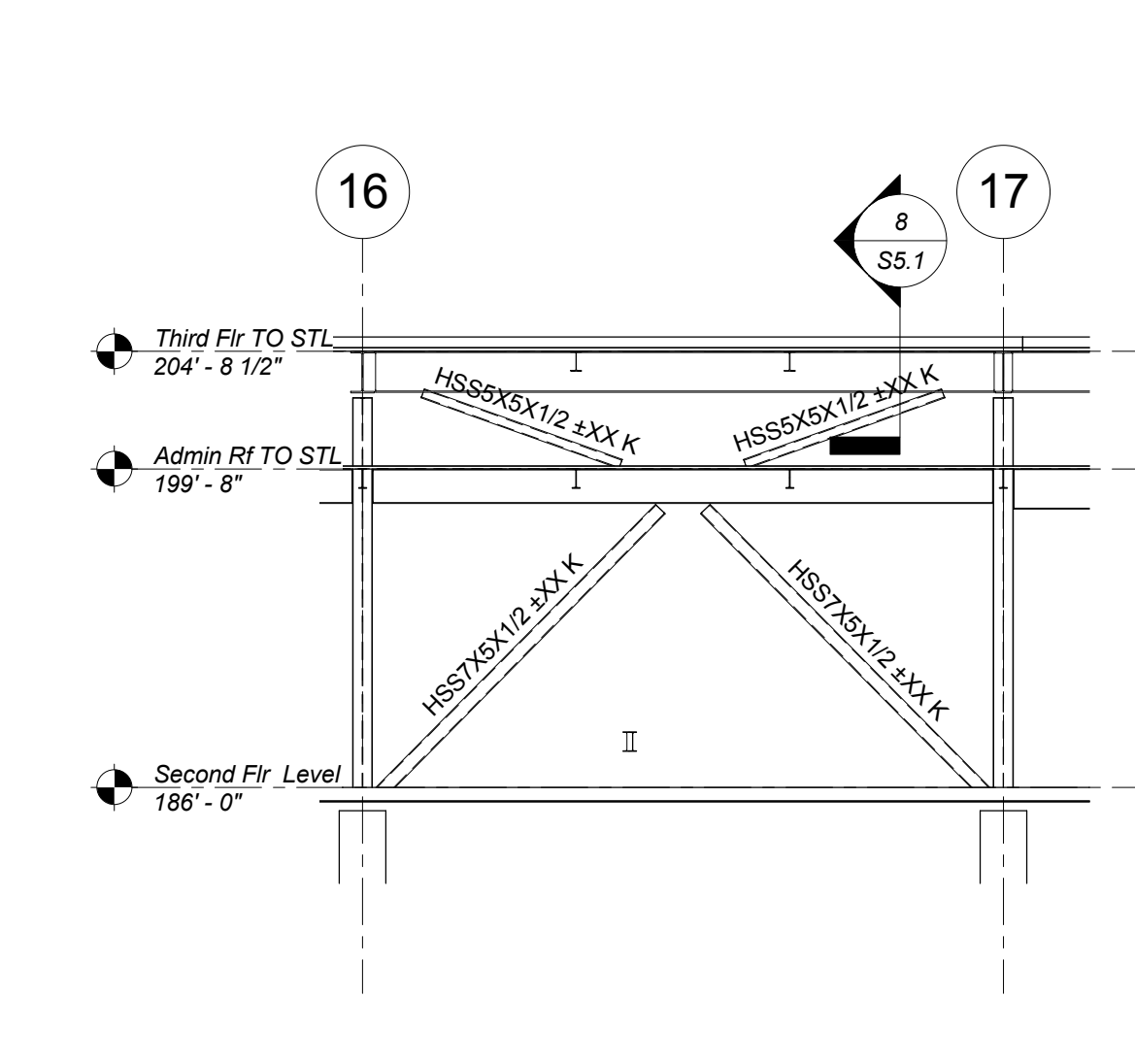
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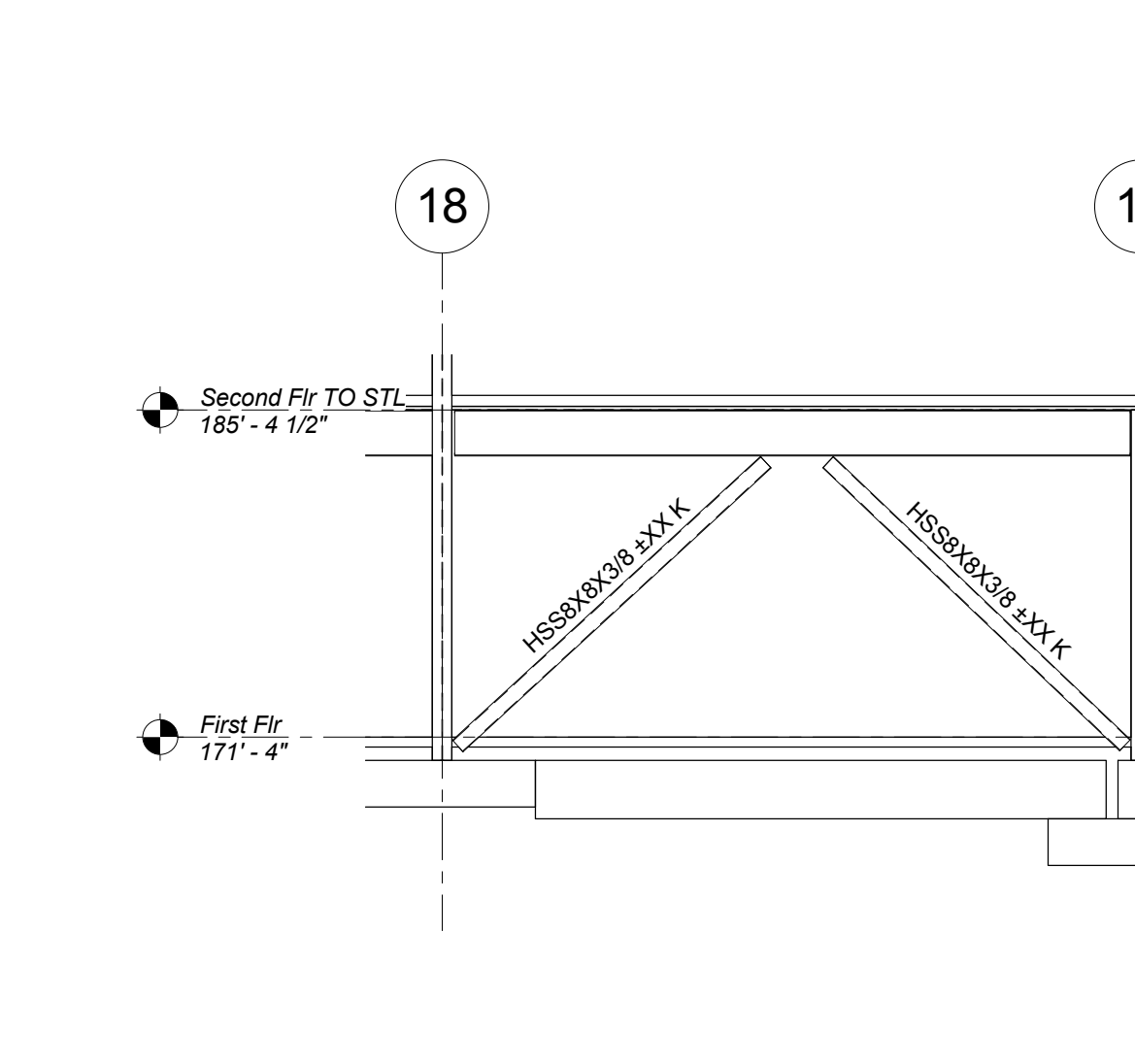
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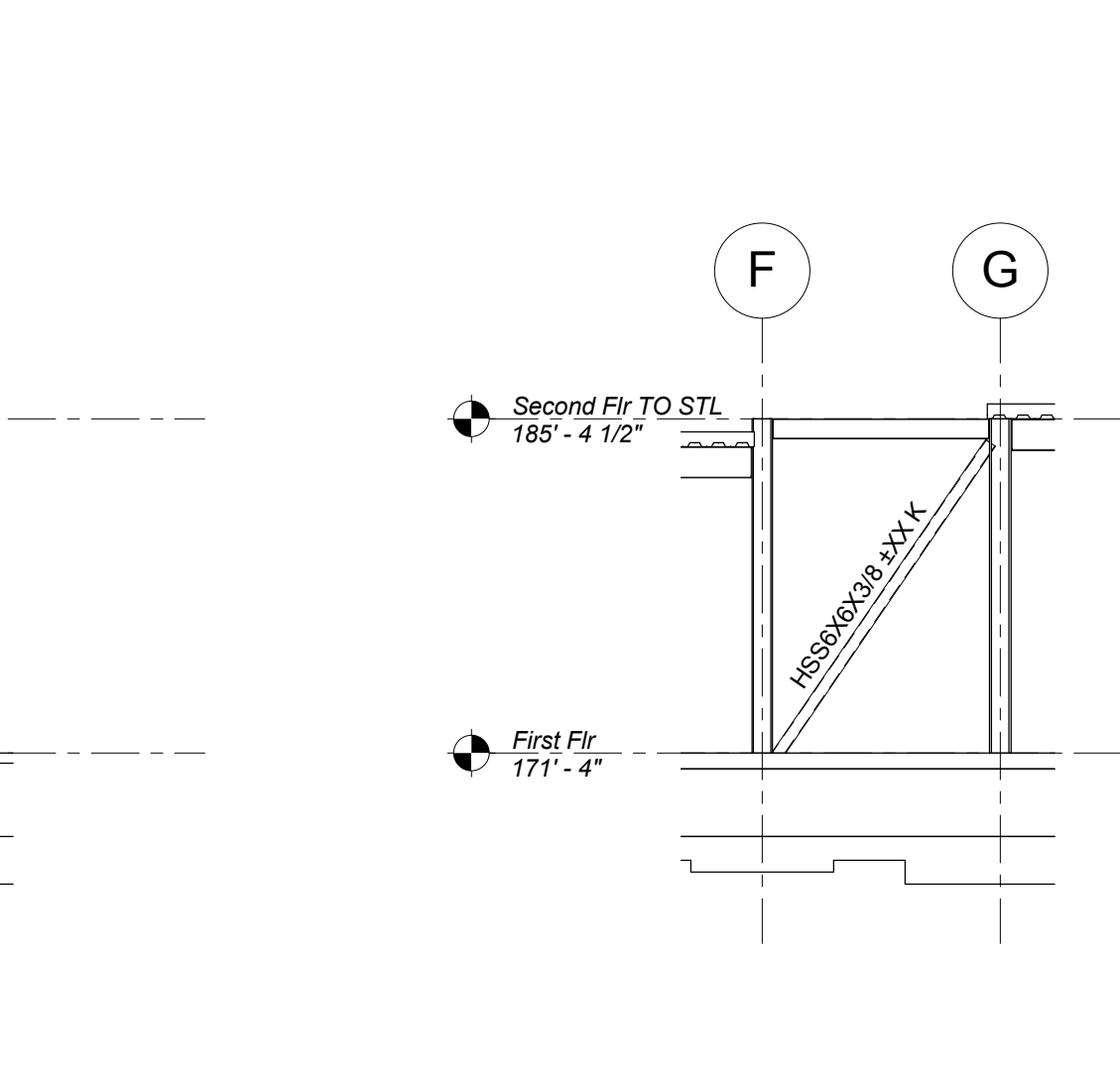
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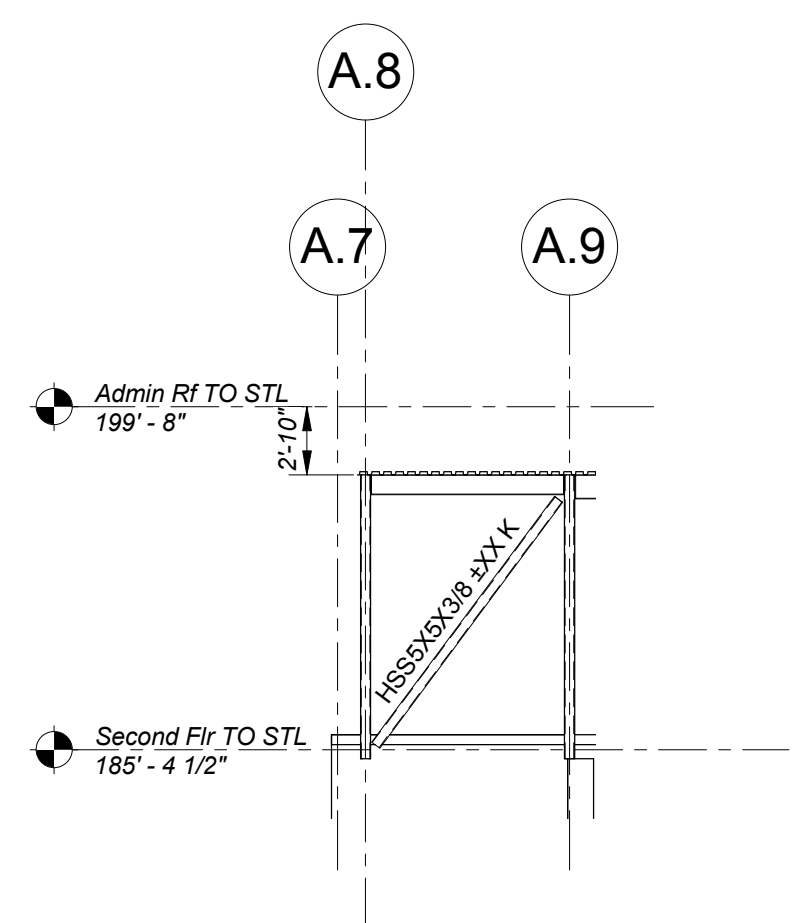
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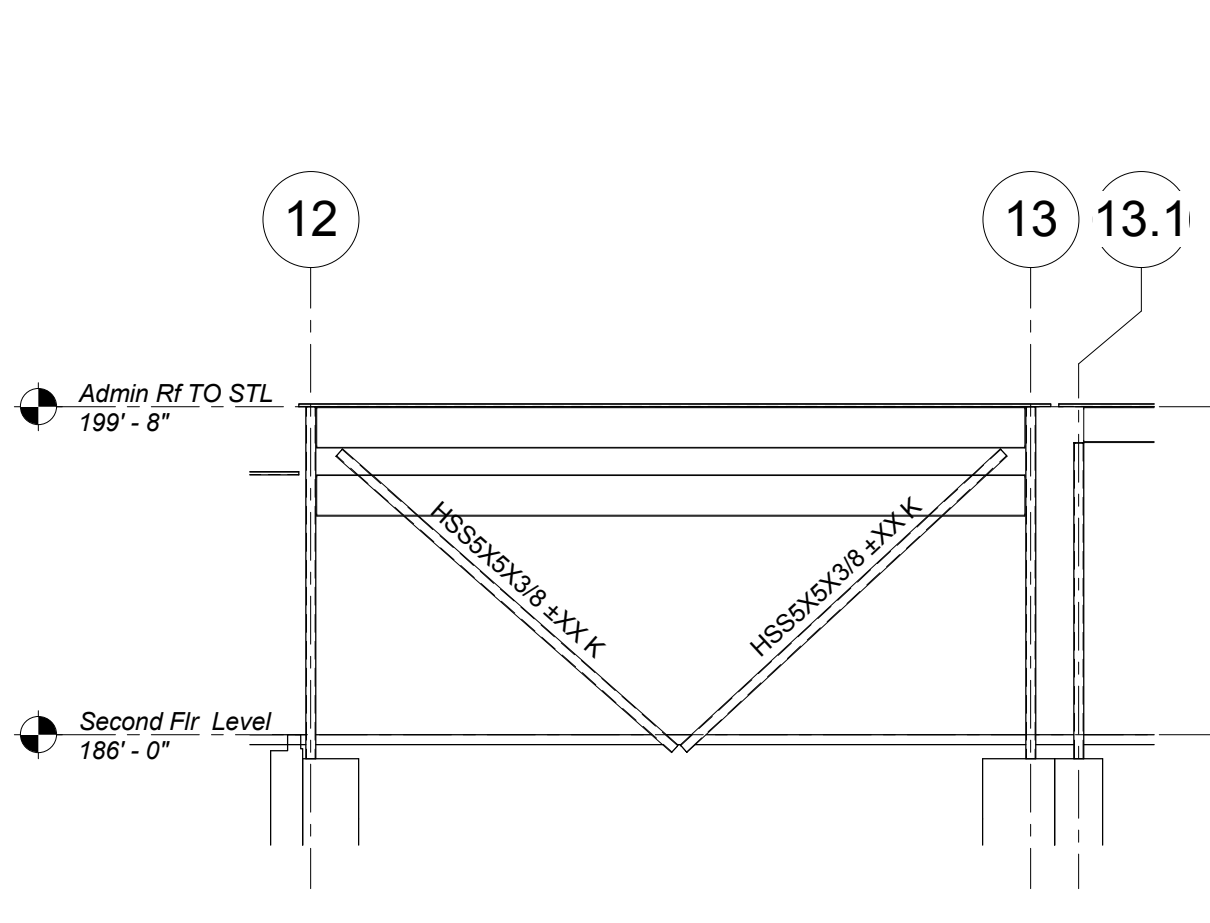
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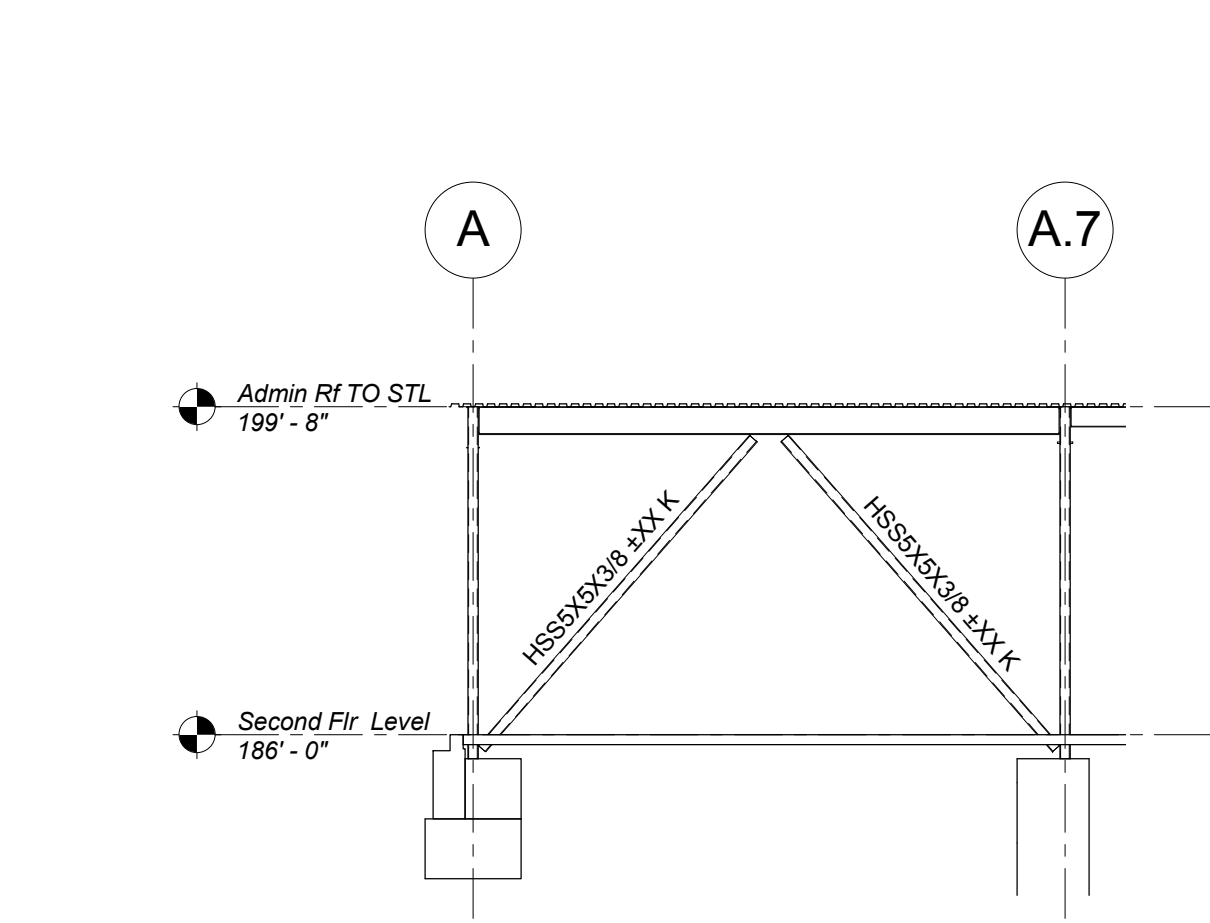
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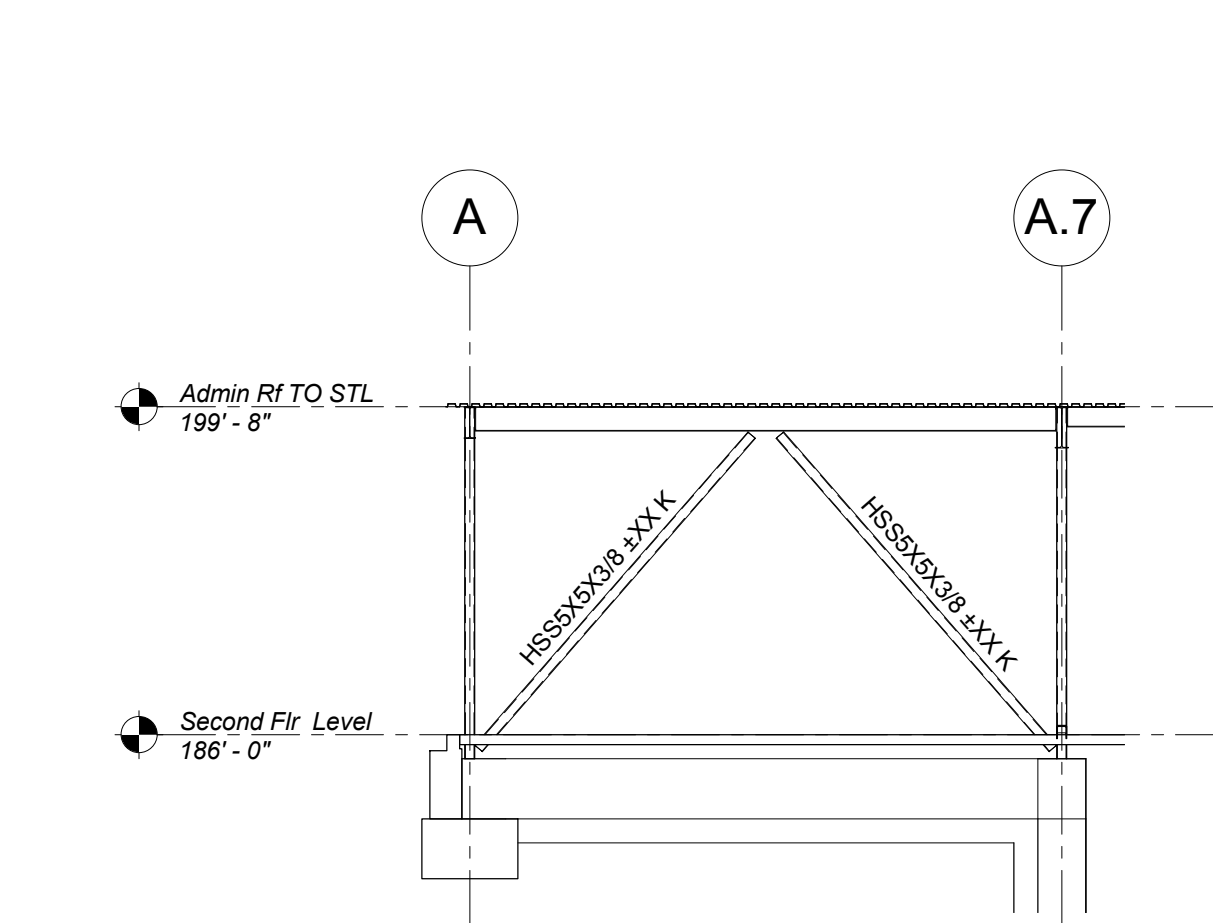
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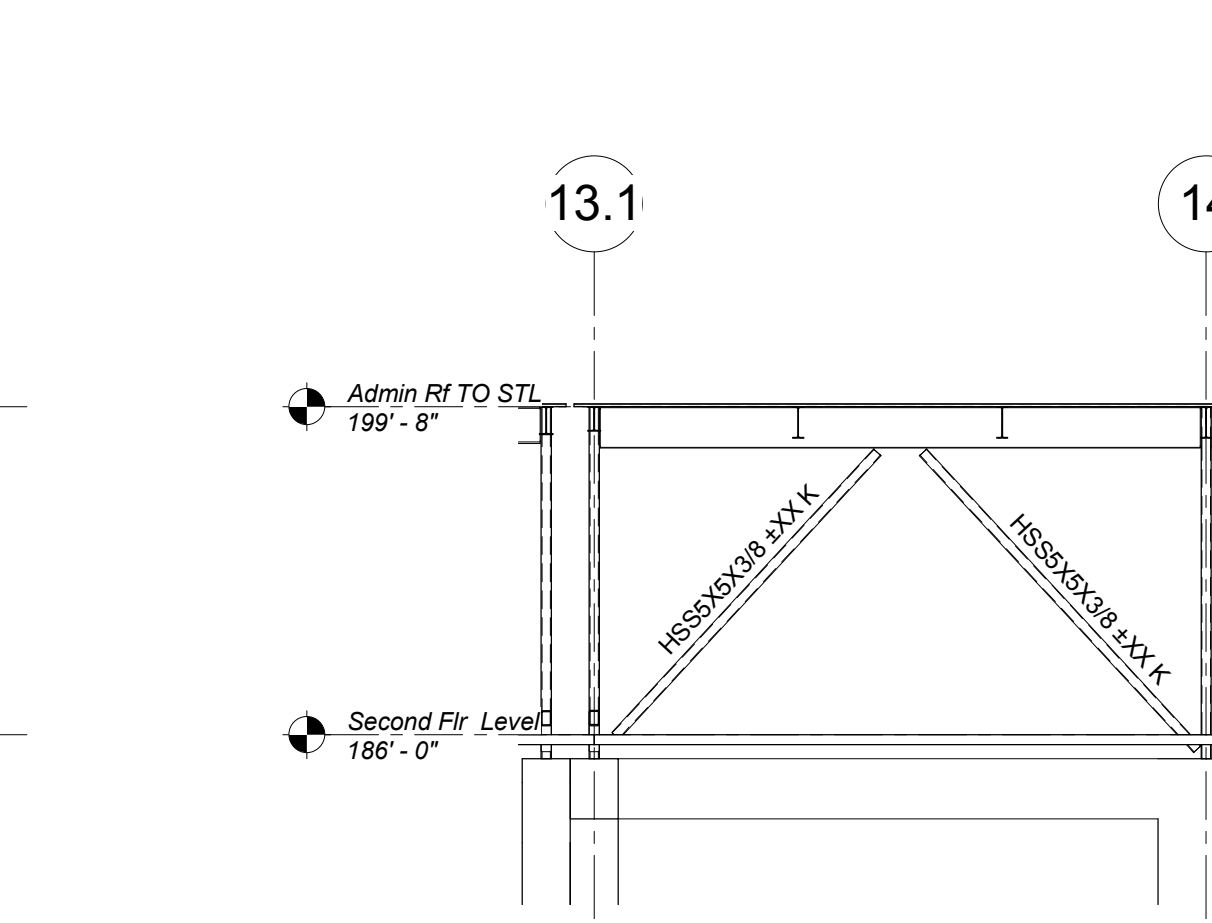
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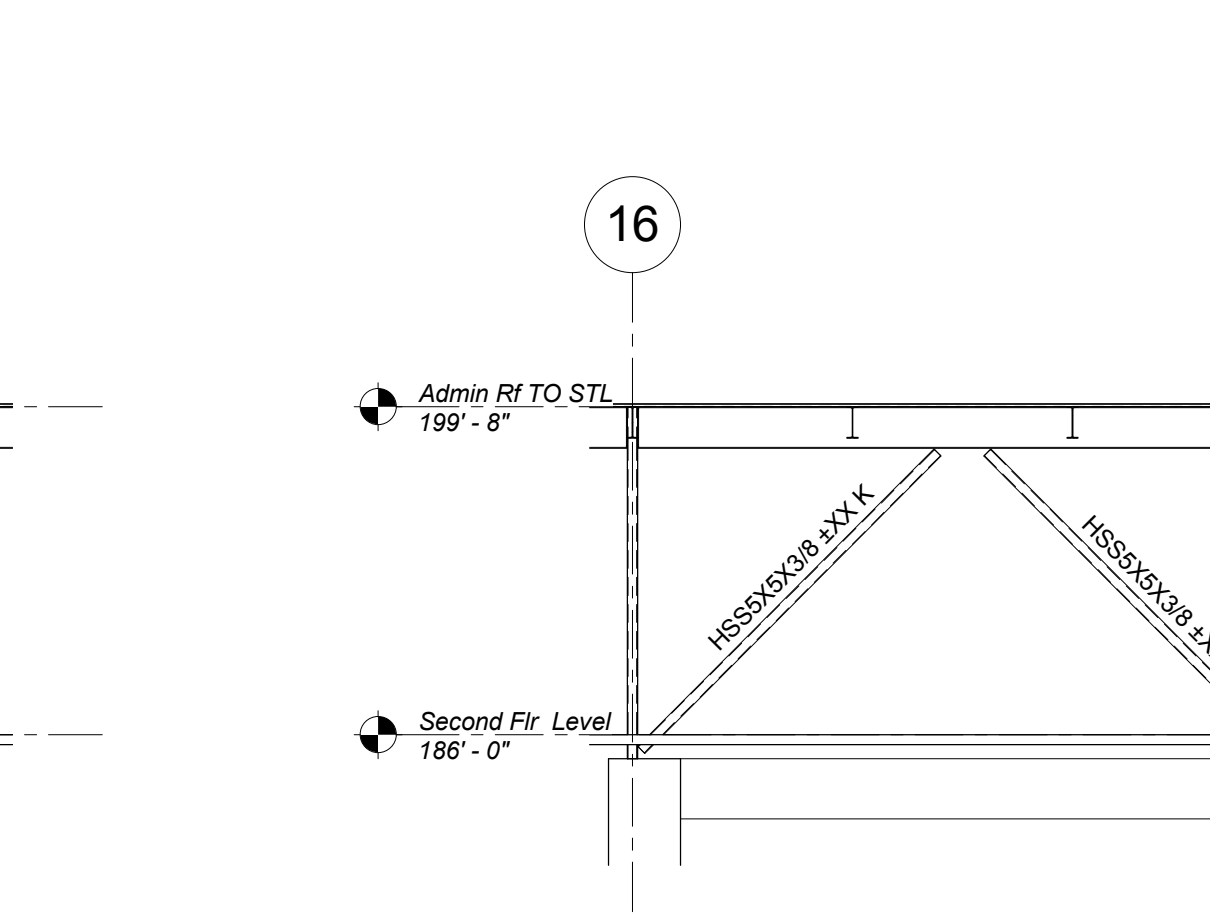
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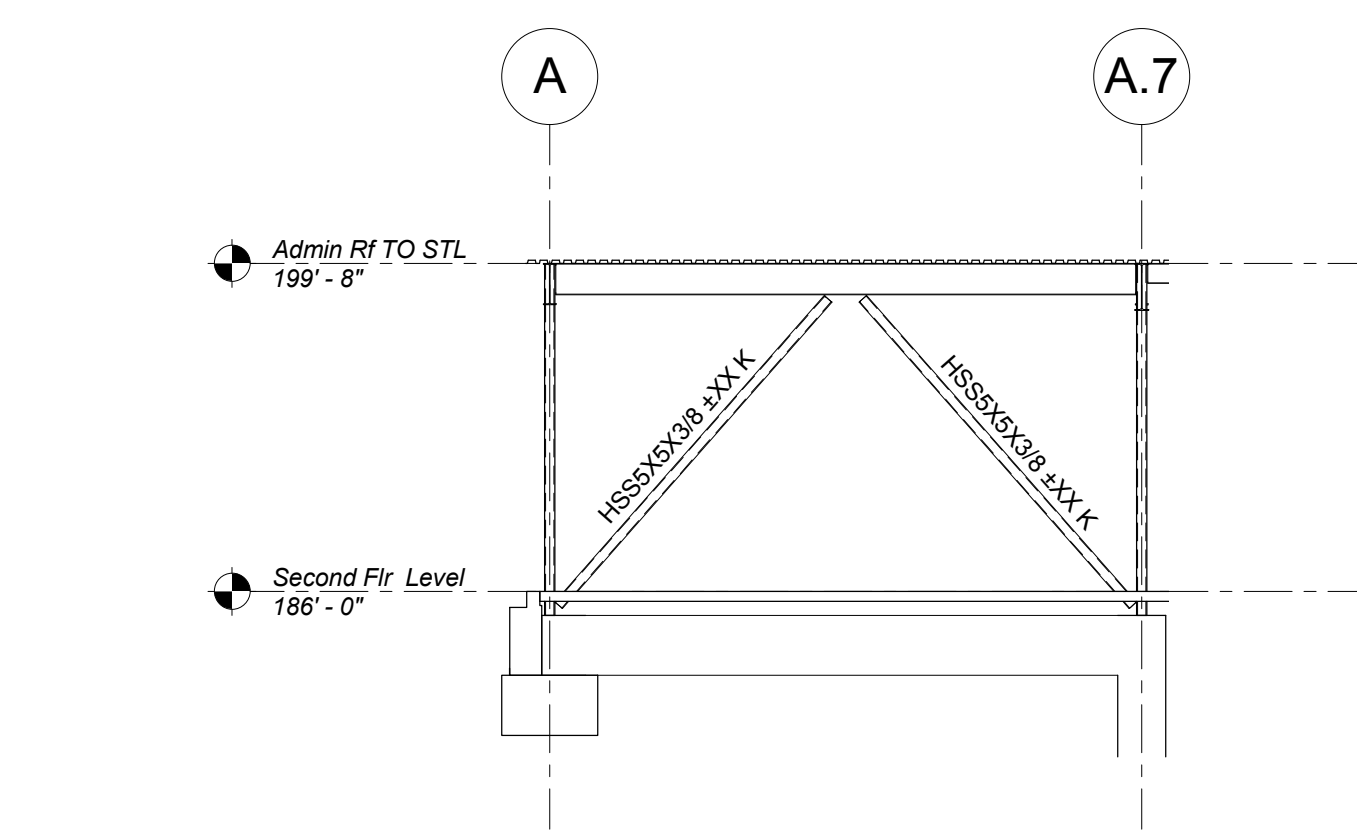
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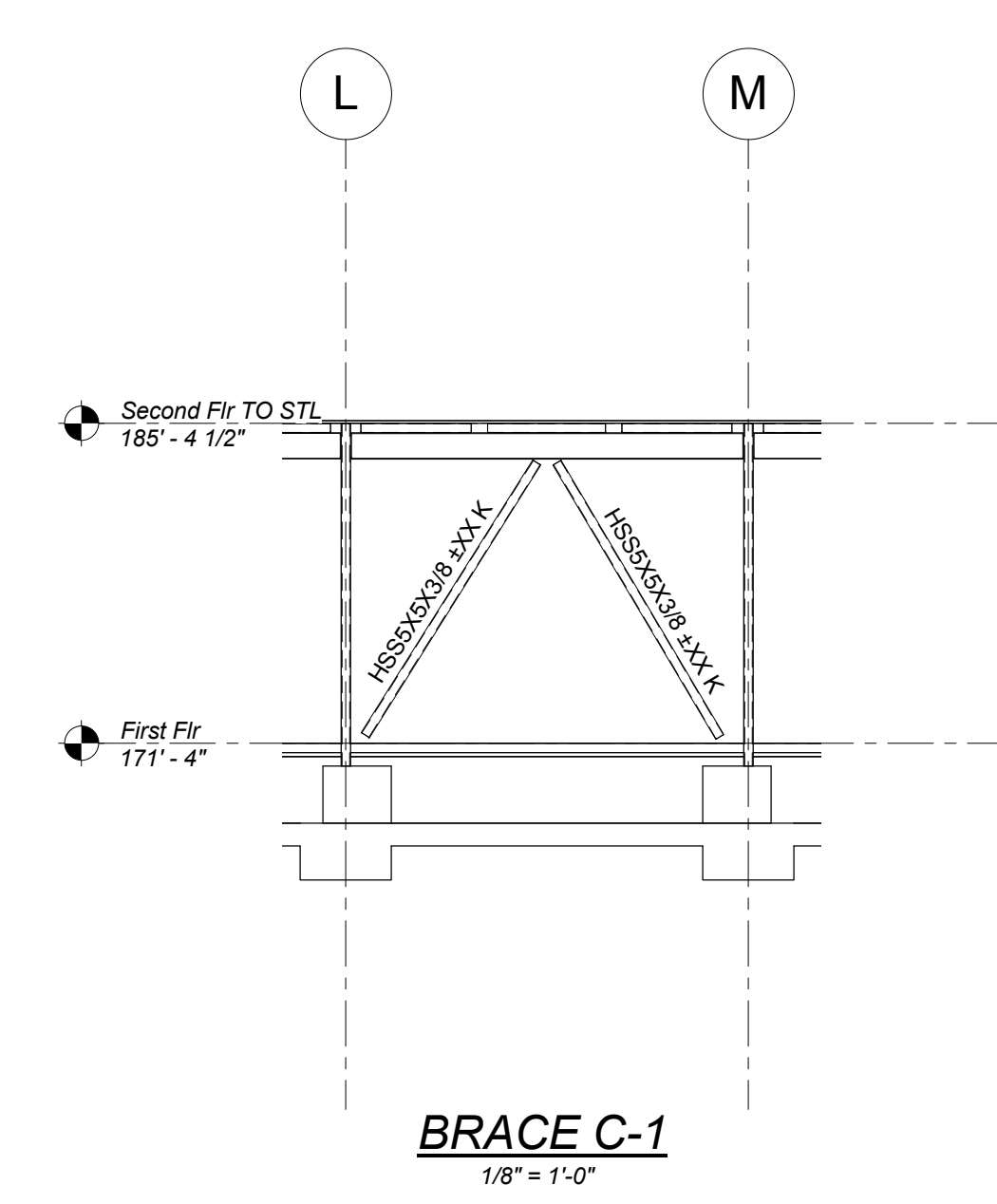
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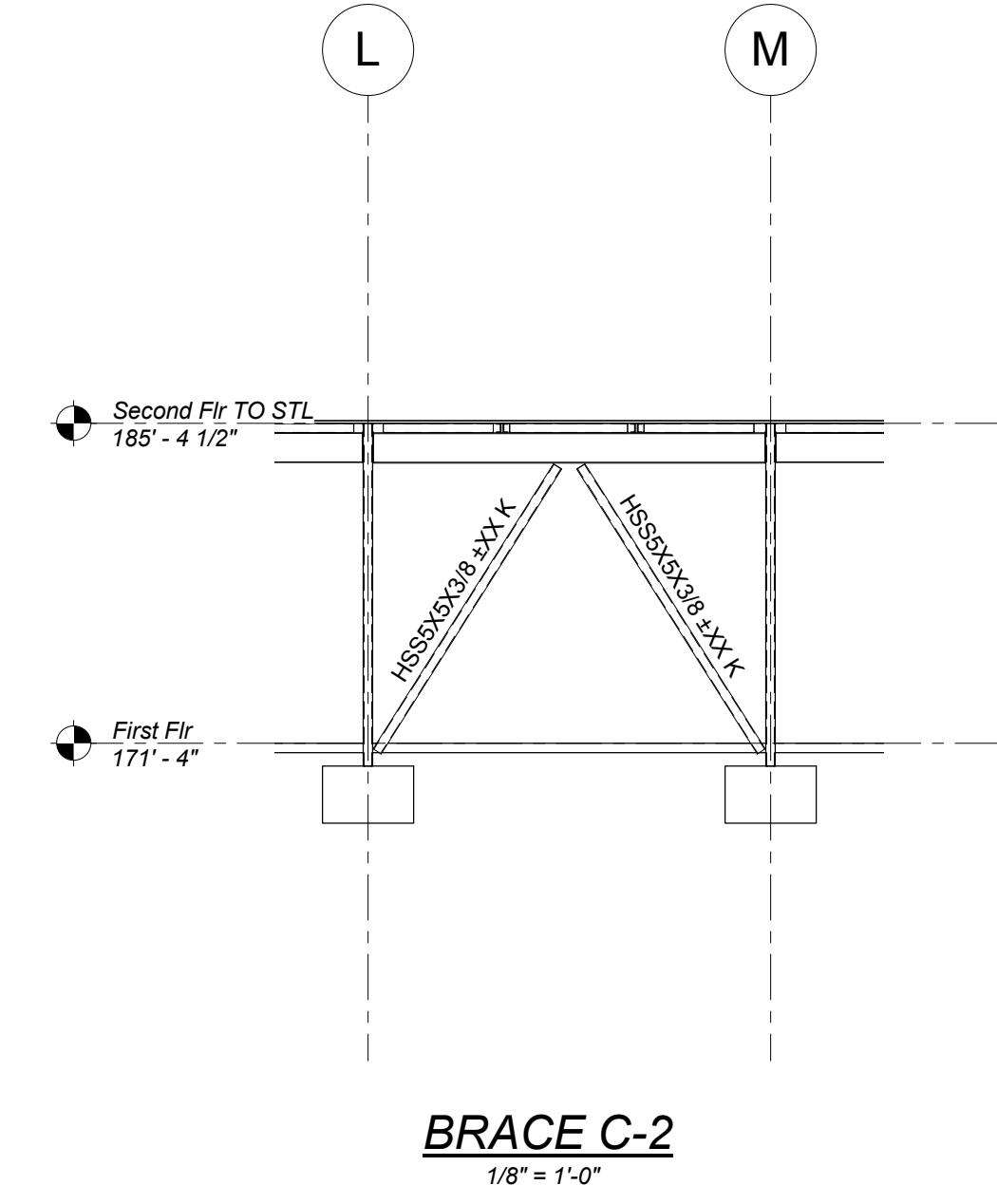
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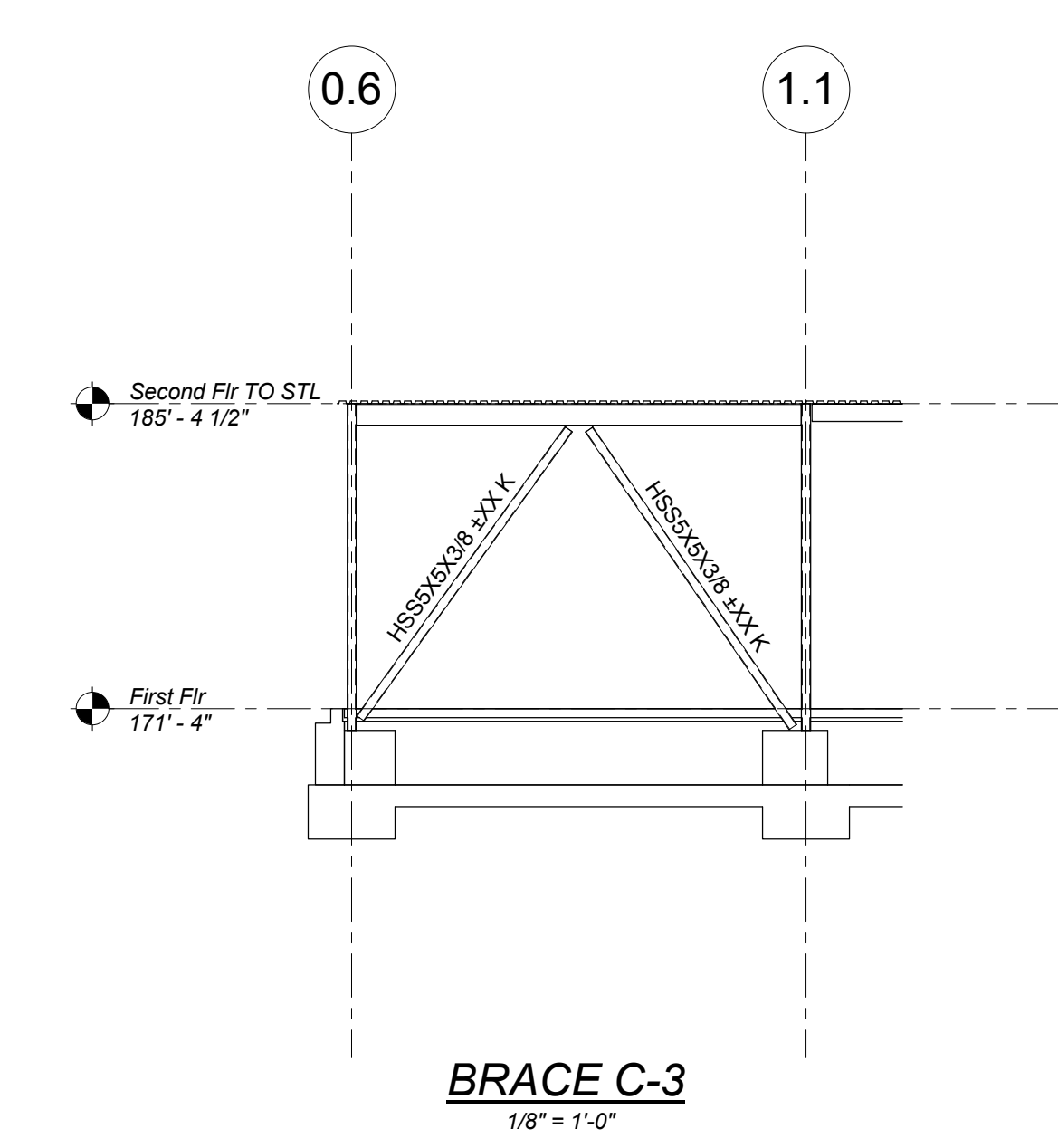
Architect:  543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer:  structural engineers T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St. Newton MA 02462	Registration: 	Project Name and Address: <h3 style="text-align: center;">Concord-Carlisle Regional High School</h3> <p style="text-align: center;">500 Walden Street Concord, MA 01742</p>	Issue Submissions: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Date</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td> </td> <td>8/15/2012</td> <td>Design Development Submission</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	Date	Description		8/15/2012	Design Development Submission										Title: <h3 style="text-align: center;">Brace Frame Elevations - Part B</h3>	Project No.: 1102.00 Drawing No.: <h2 style="text-align: center;">S3.5</h2>
No.	Date	Description																			
	8/15/2012	Design Development Submission																			
Date: August 15, 2012		Scale: 1/8" = 1'-0"	Drawn: CDM	Checked: MAP	© omr architects inc																



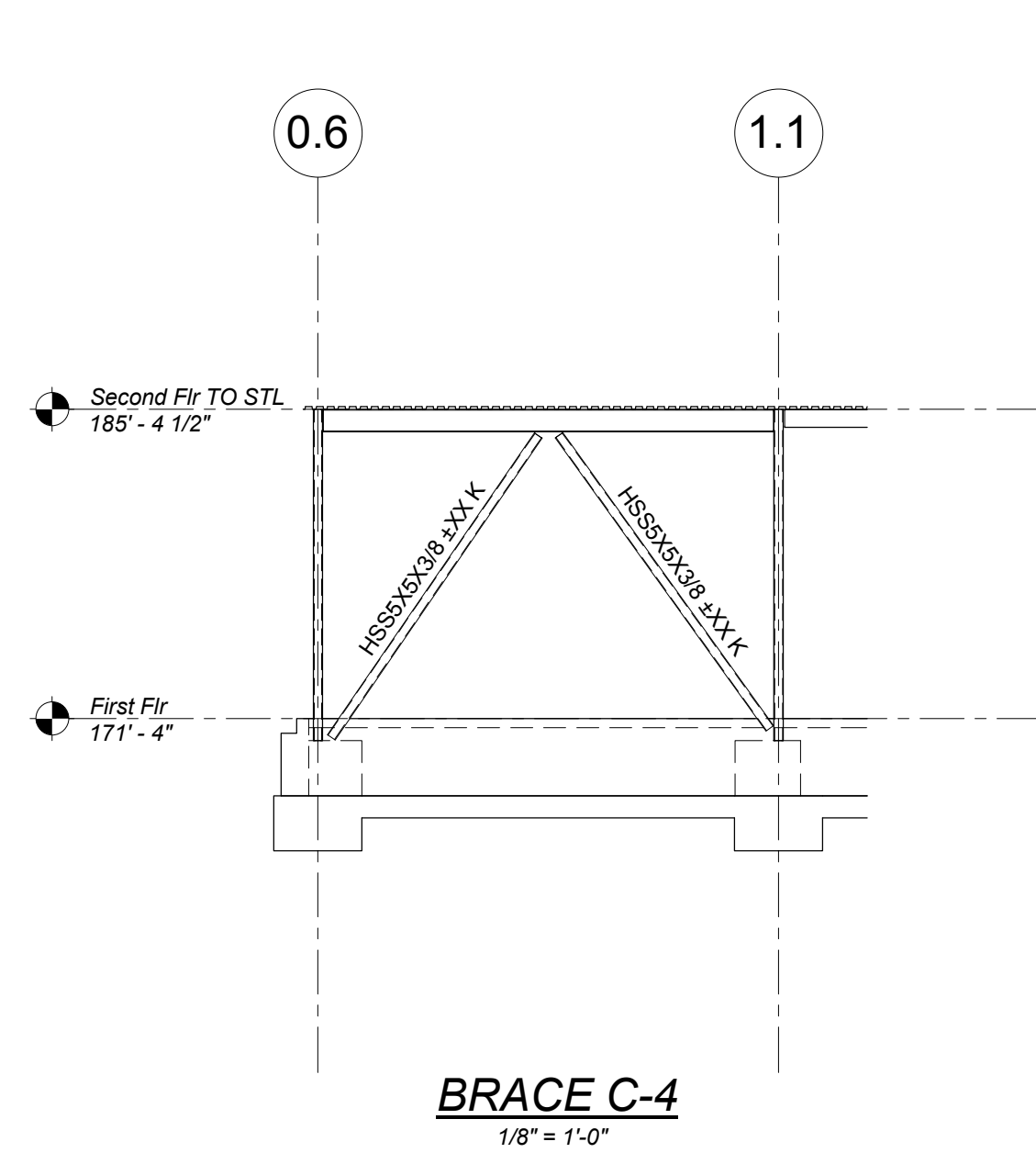
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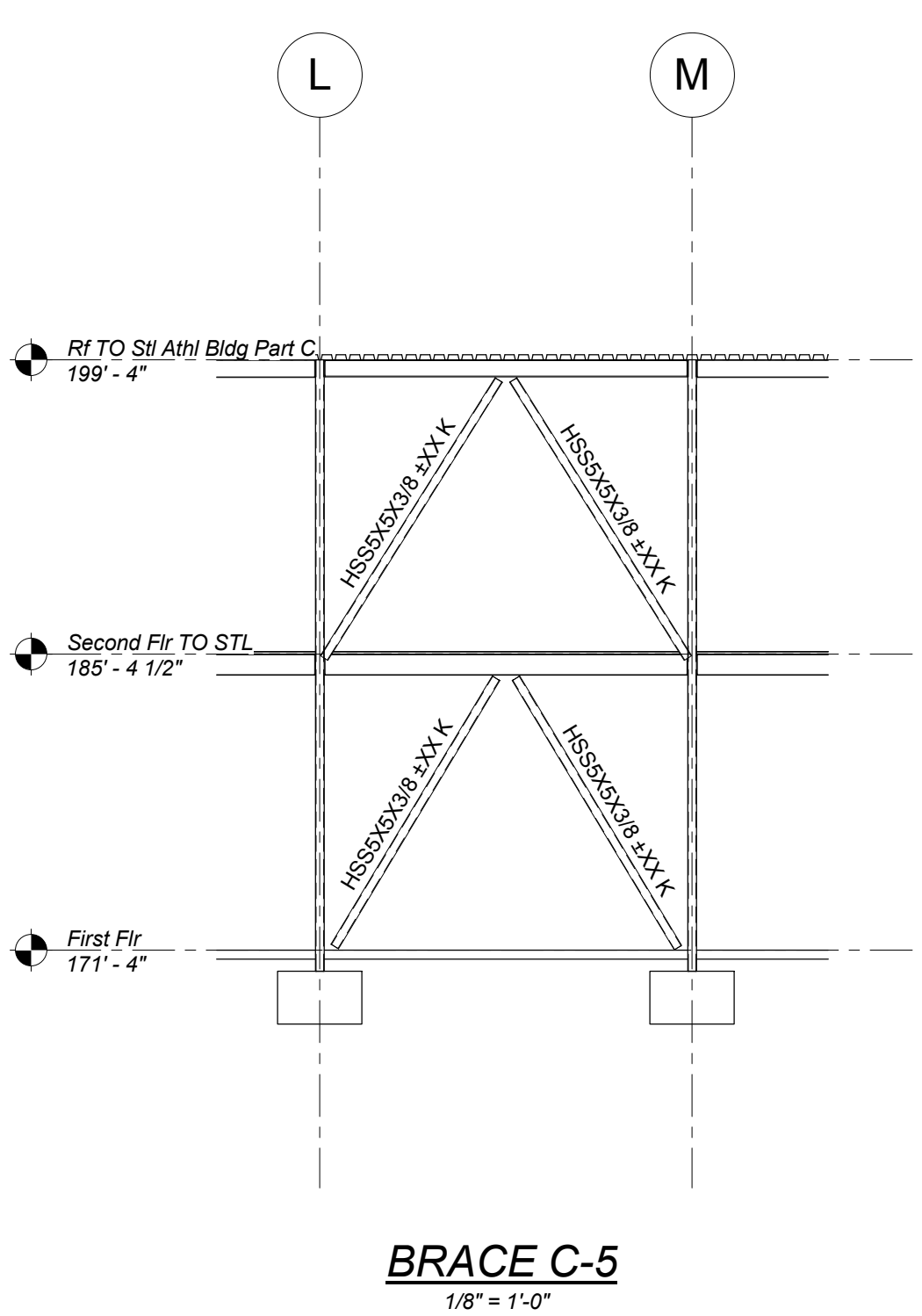
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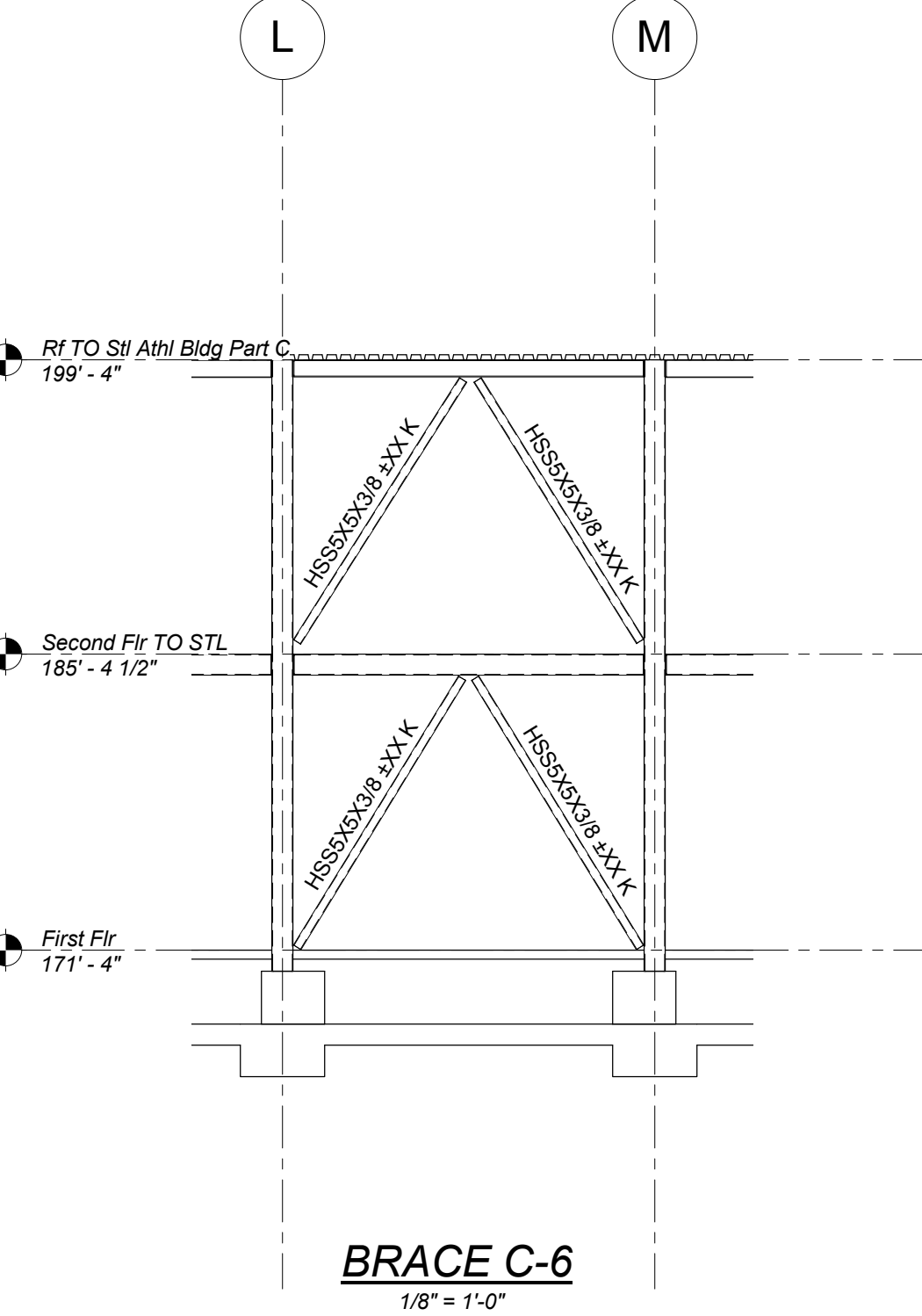
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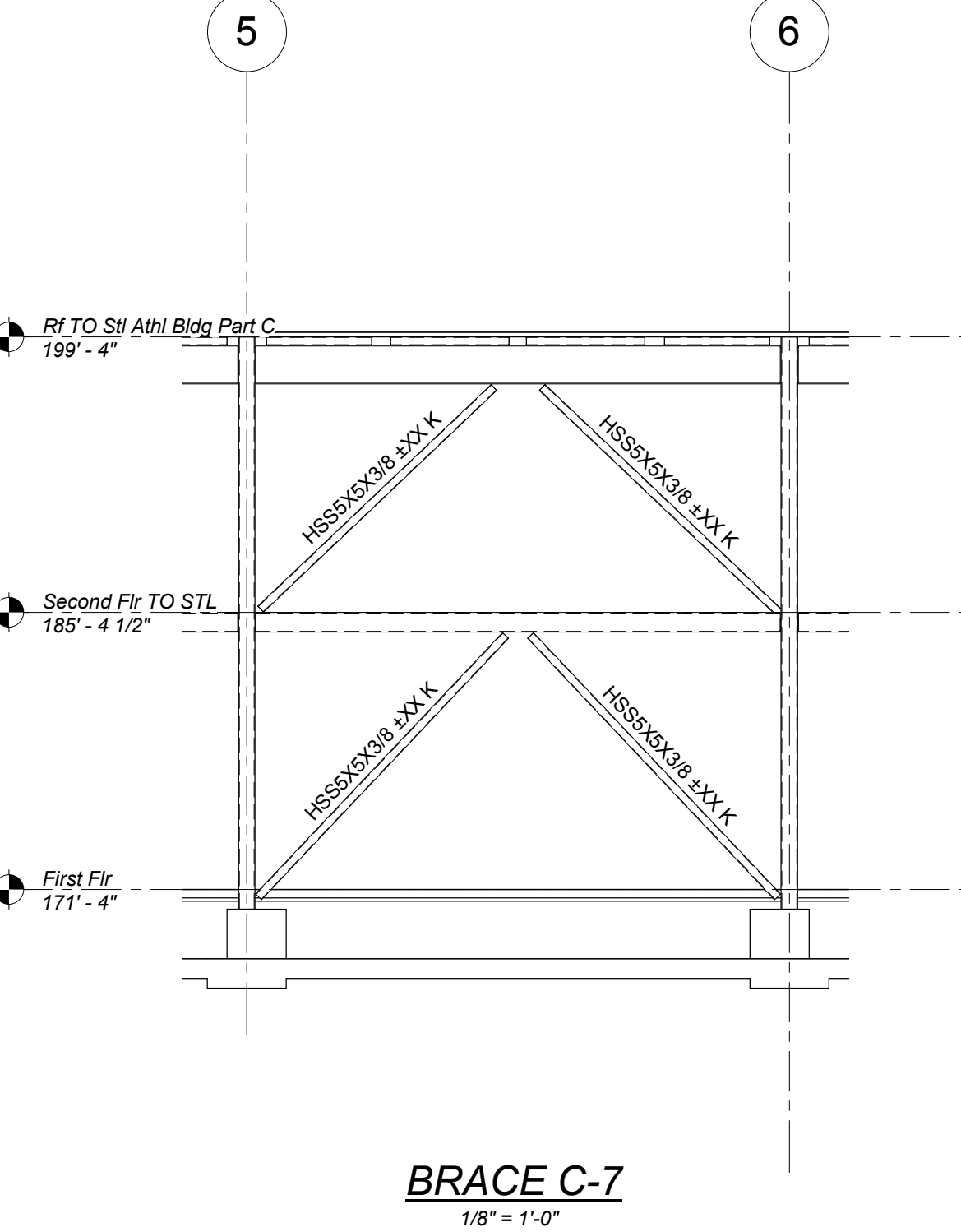
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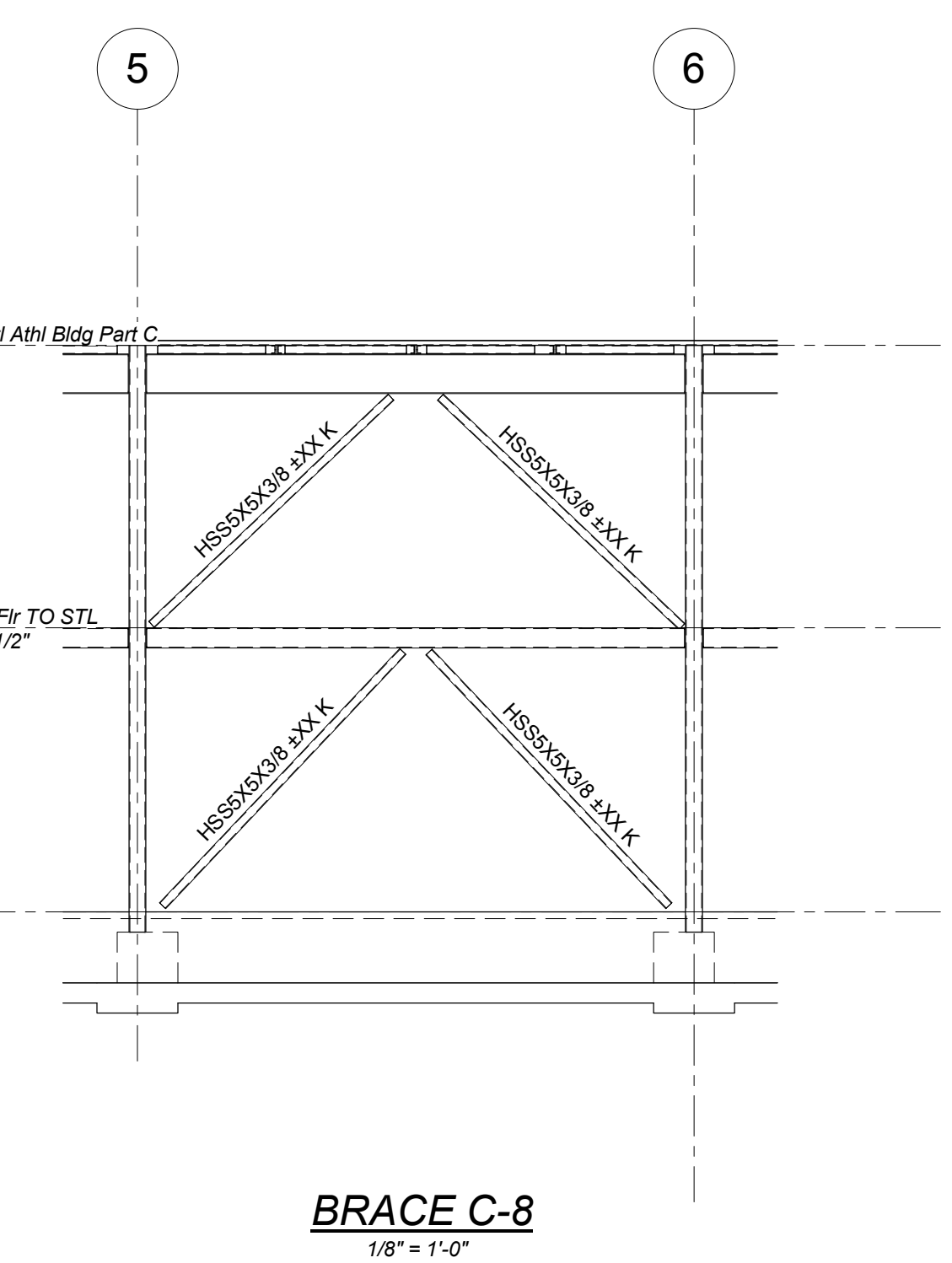
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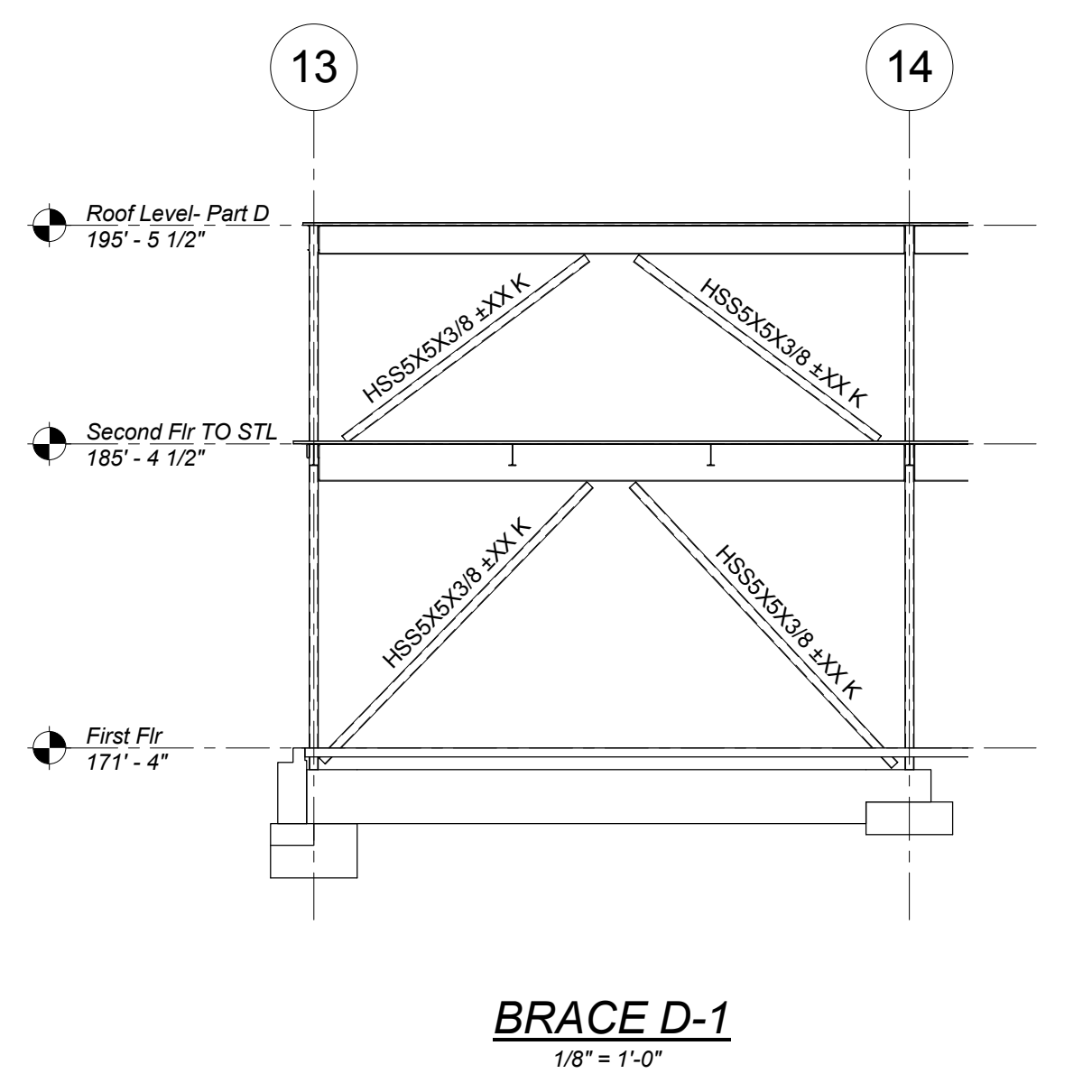
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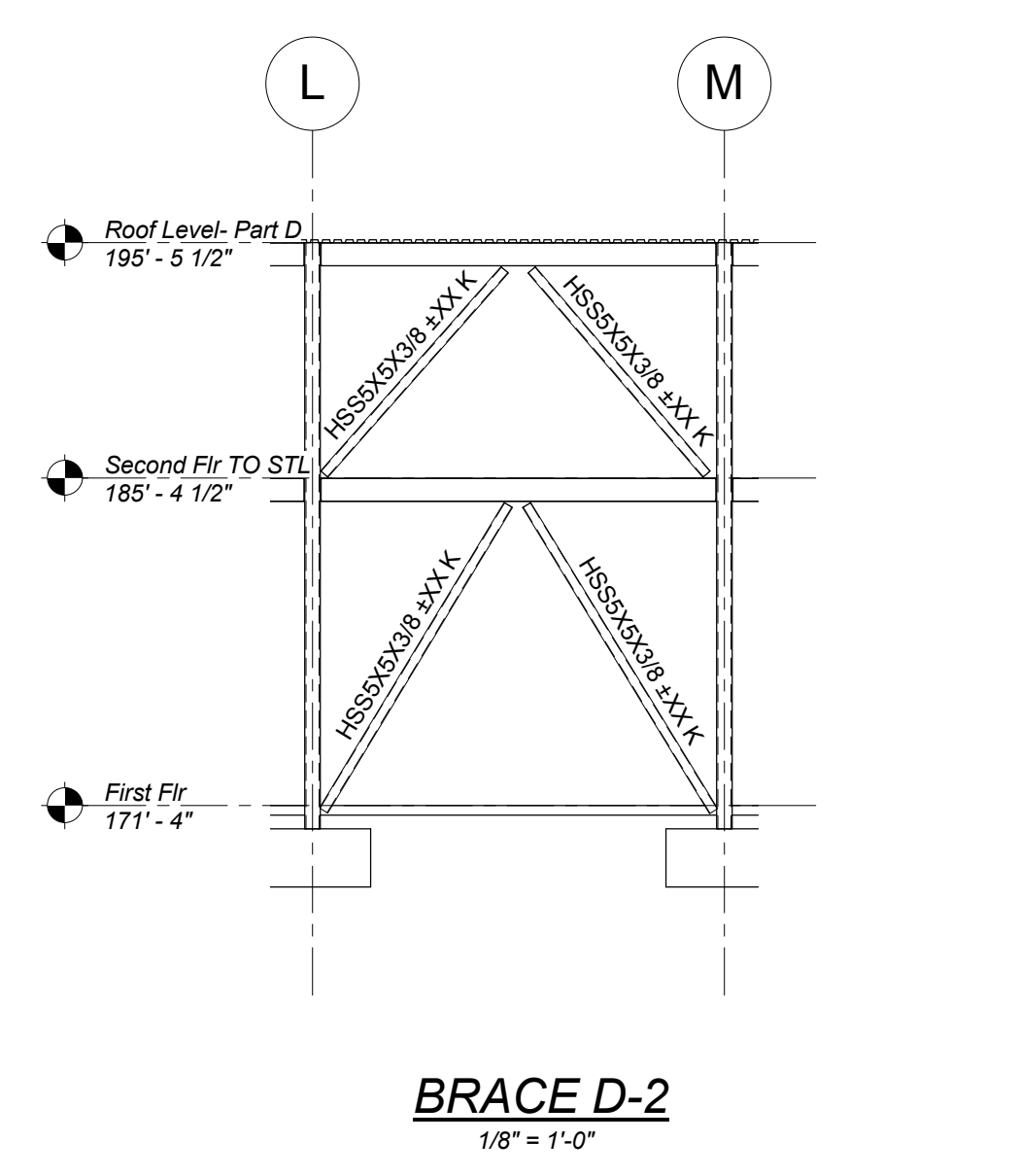
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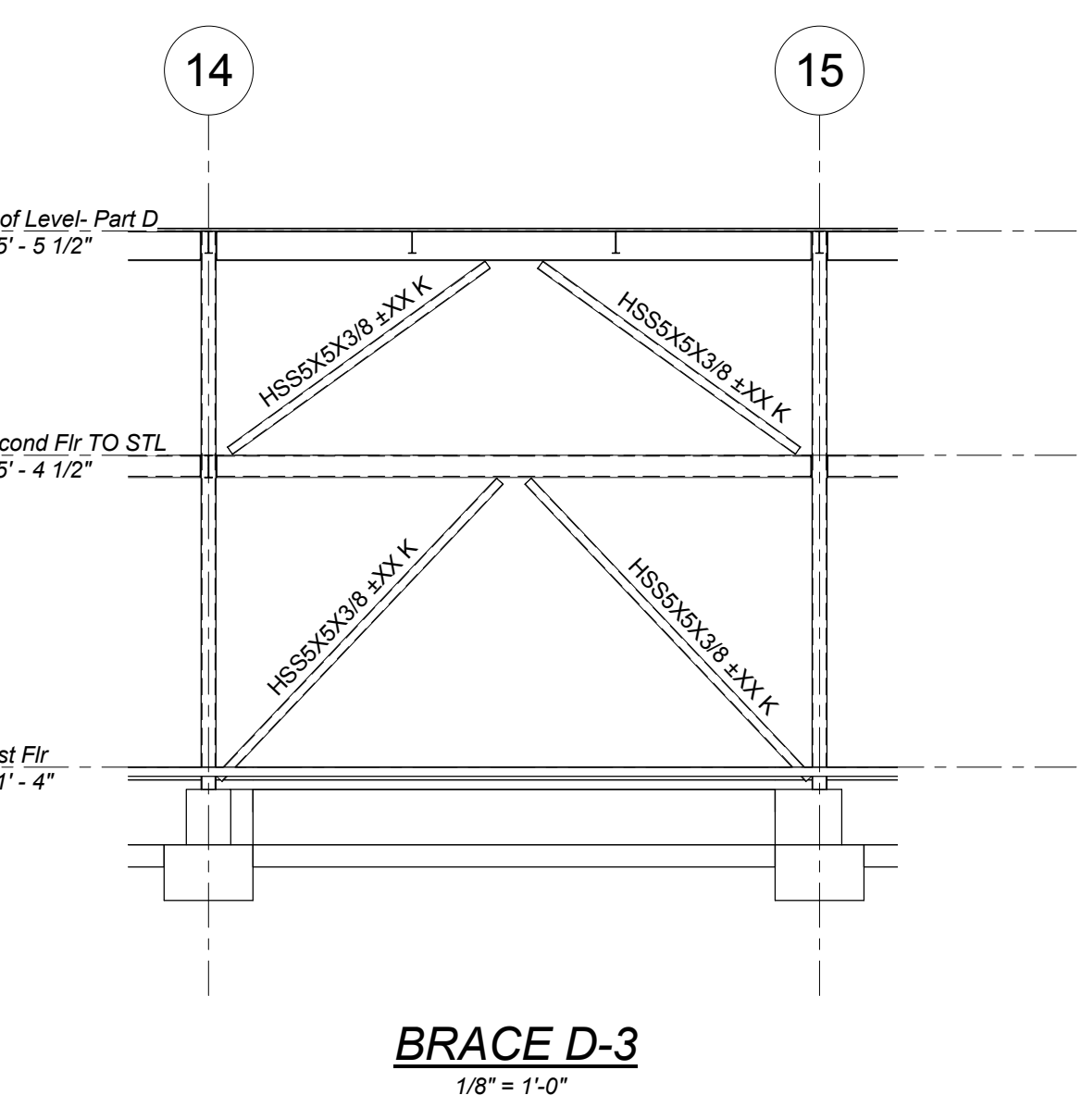
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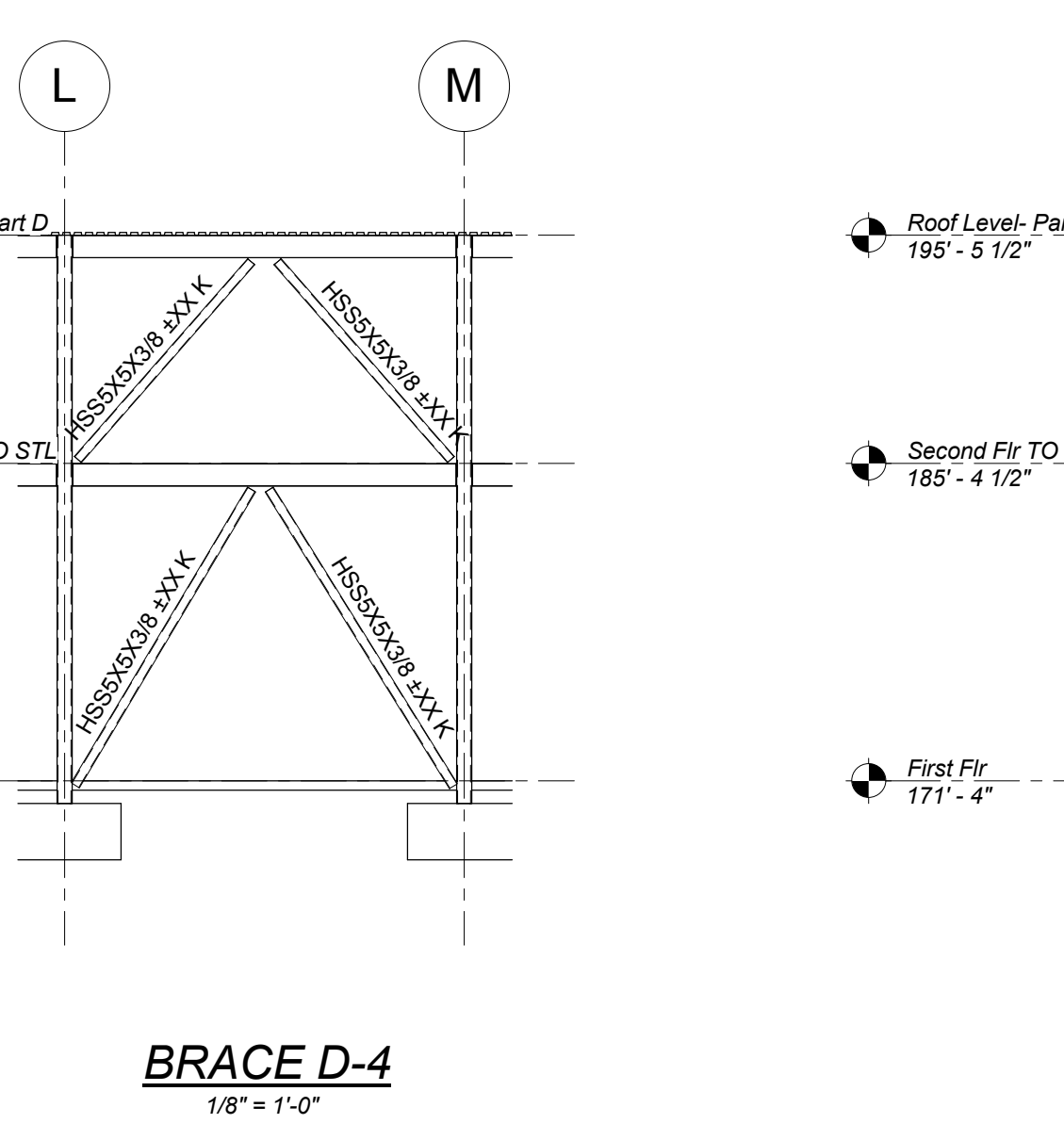
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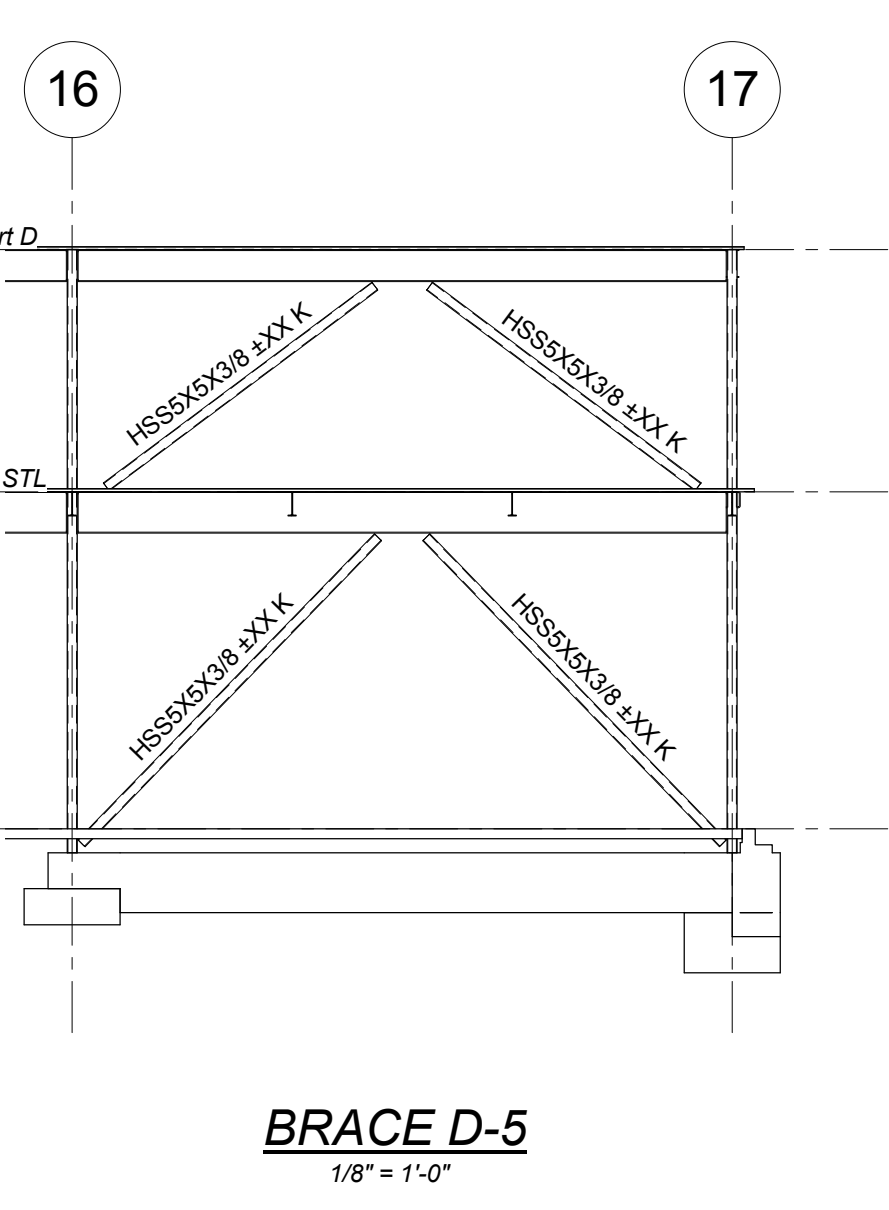
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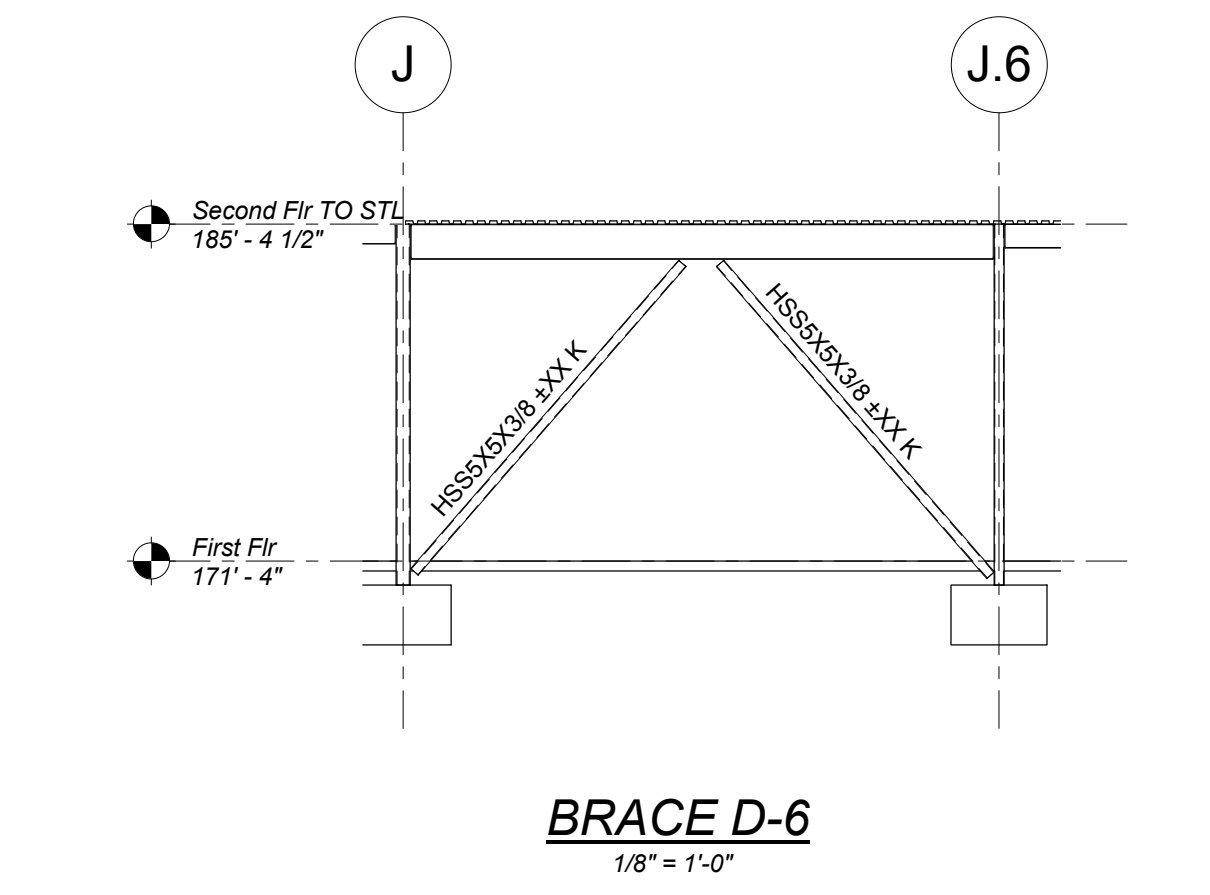
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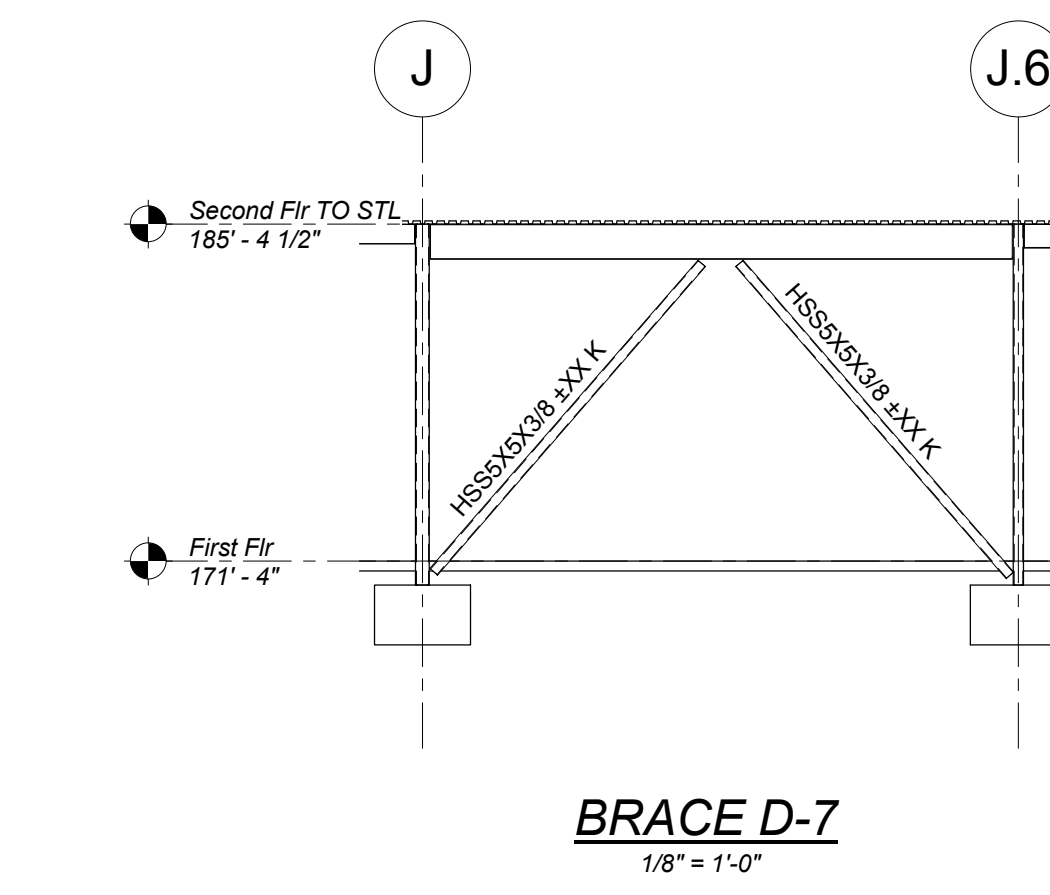
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1/8" = 1'-0"

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Architect:

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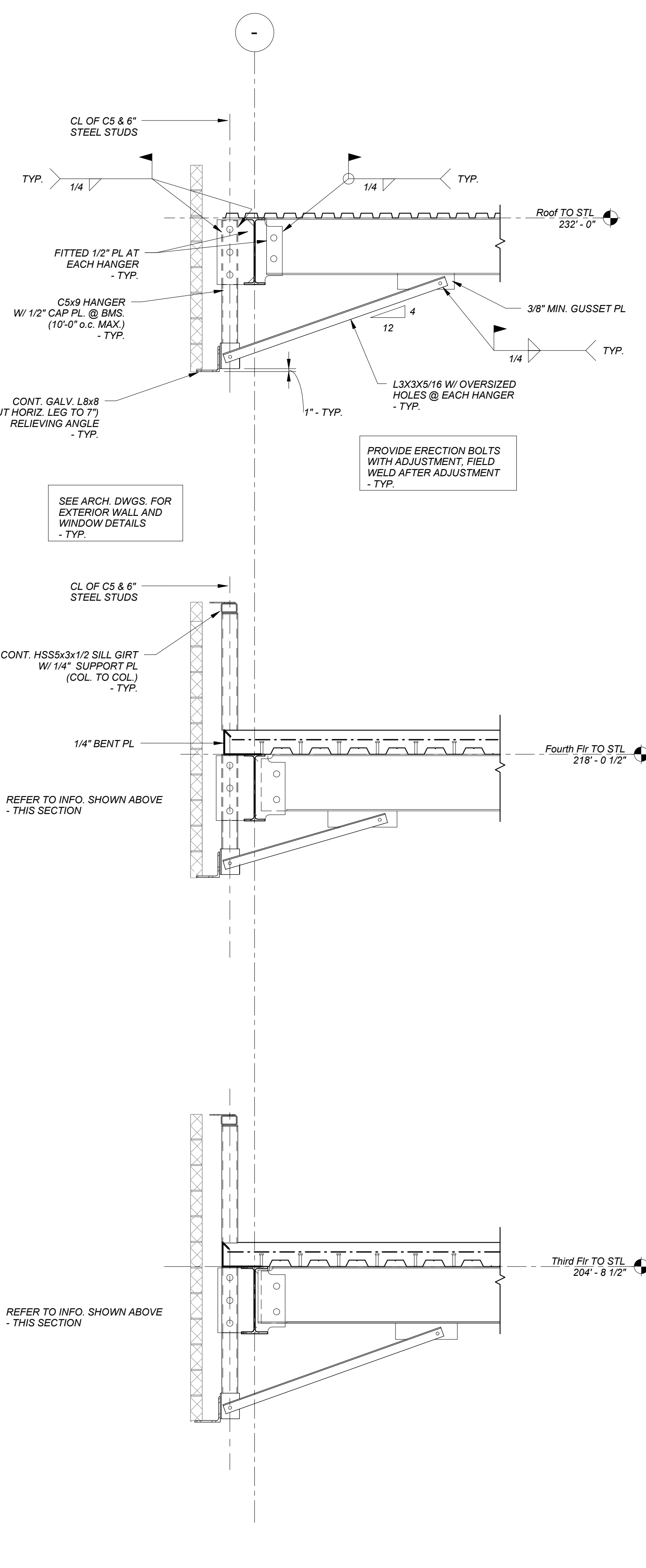
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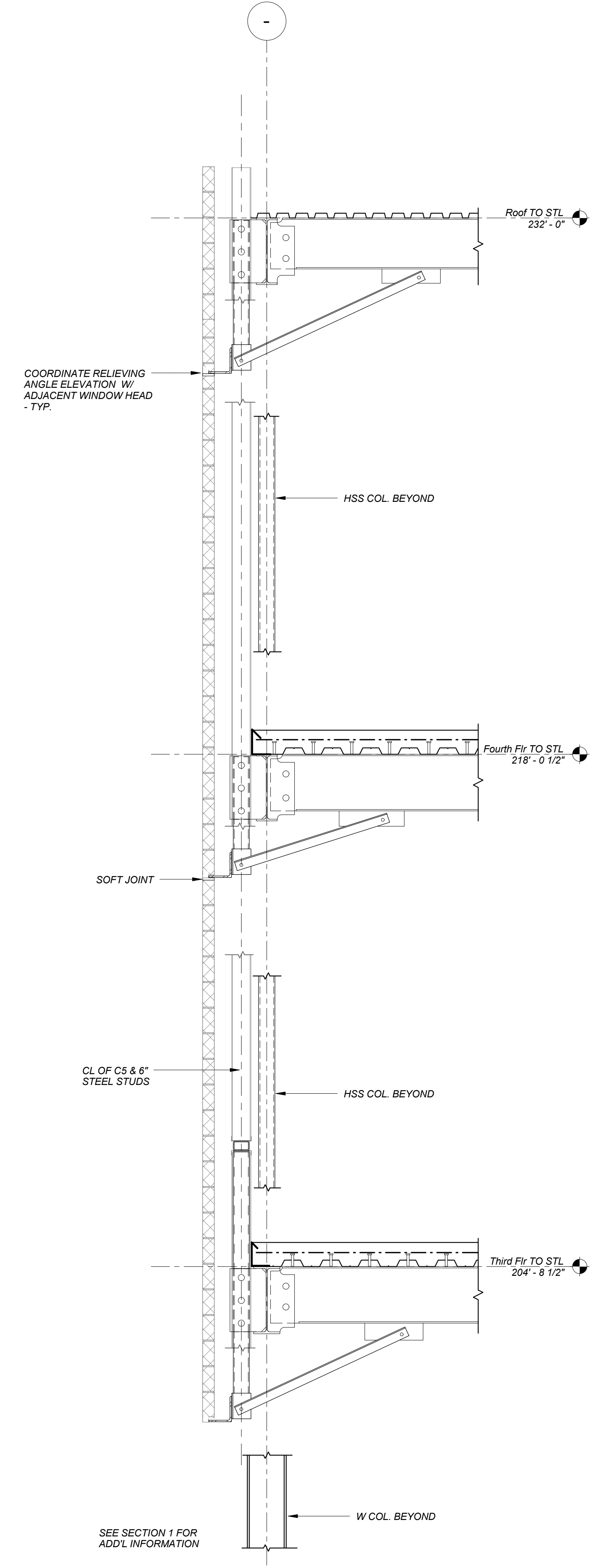
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Project No.: 1102.00
Drawing No.: **S3.6**
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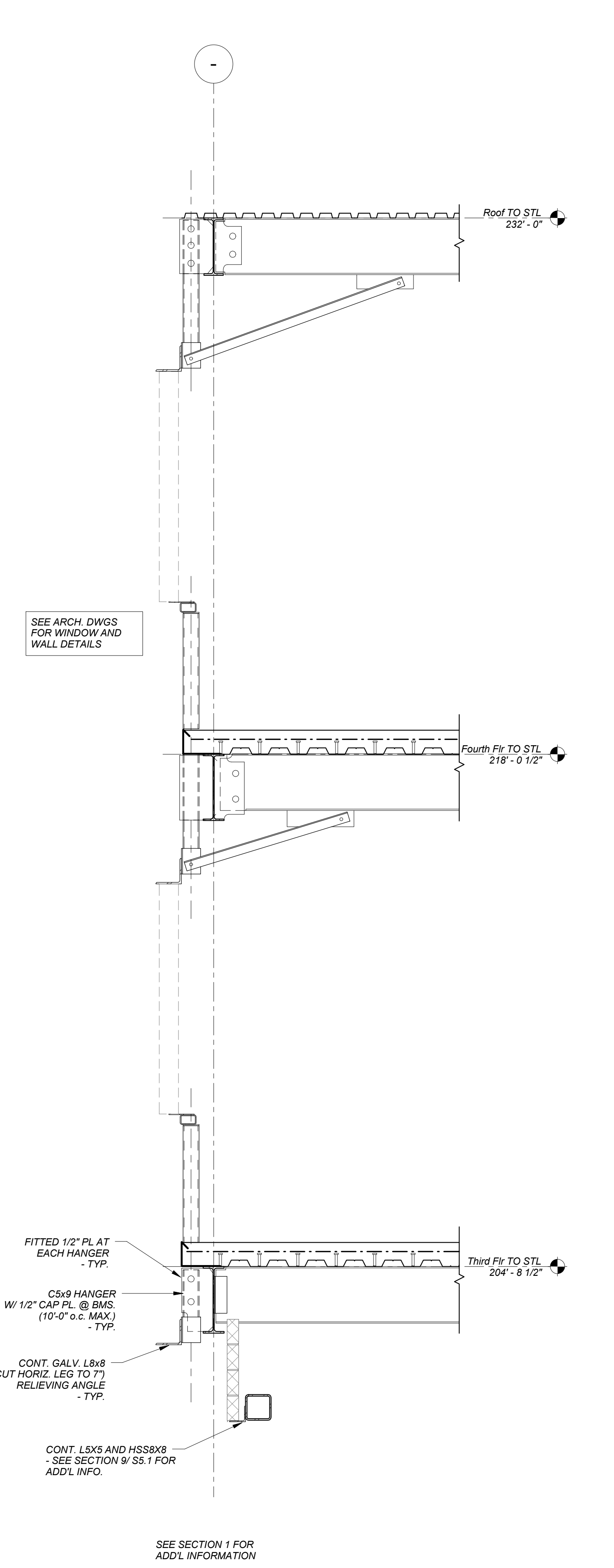
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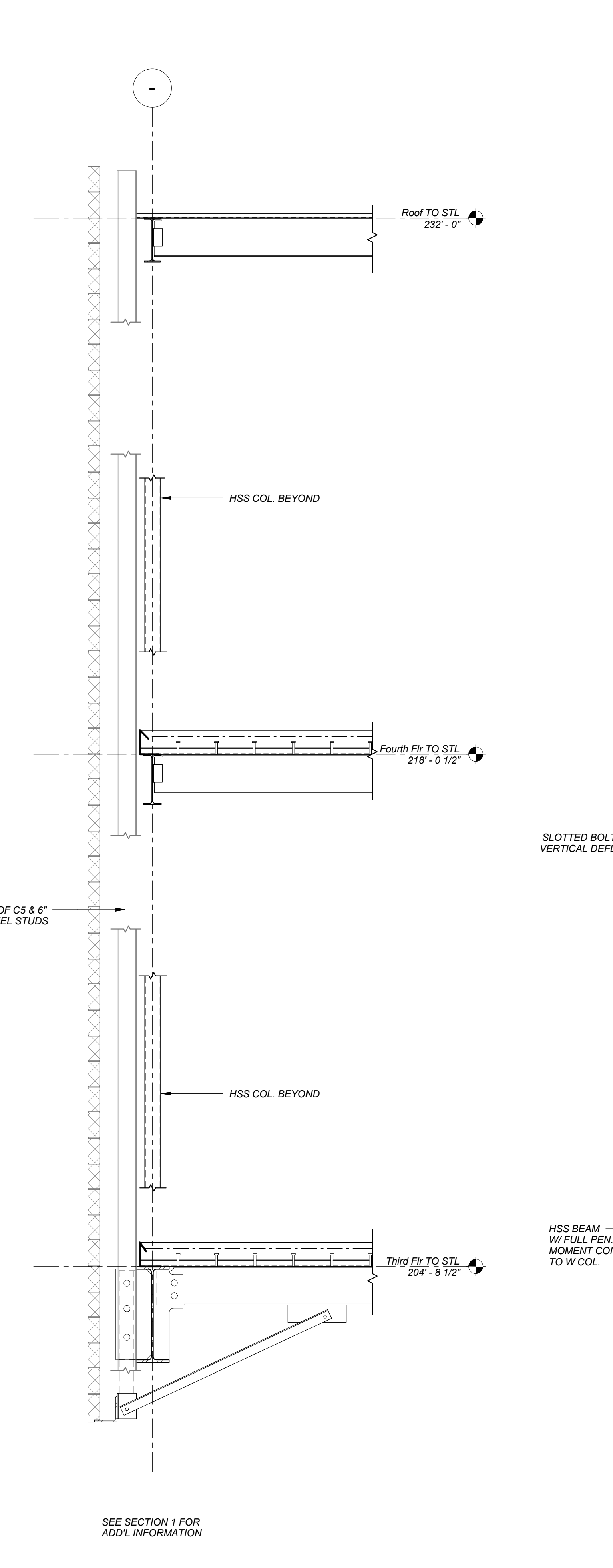
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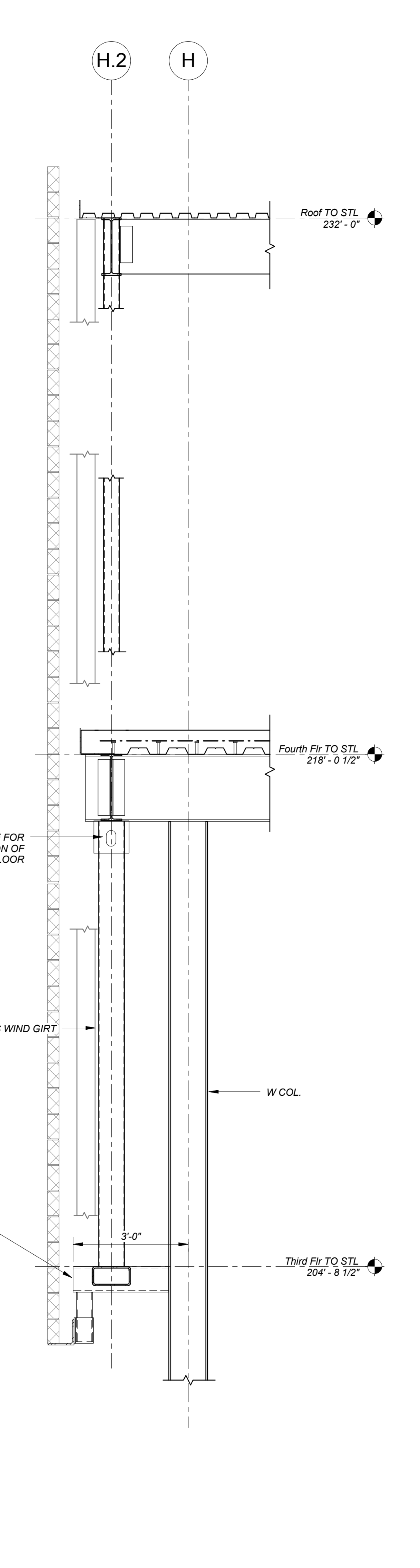
2 SECTION 1/2" = 1'-0"



3 SECTION 1/2" = 1'-0"



4 SECTION 1/2" = 1'-0"



5 SECTION 1/2" = 1'-0"

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Wall Sections S4.0
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Architect:

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Newton MA 02462

Registration:

Design Development Submission

Project Name and Address:

Concord-Carlisle Regional High School

500 Walden Street
Concord, MA 01742

Issue Submissions:

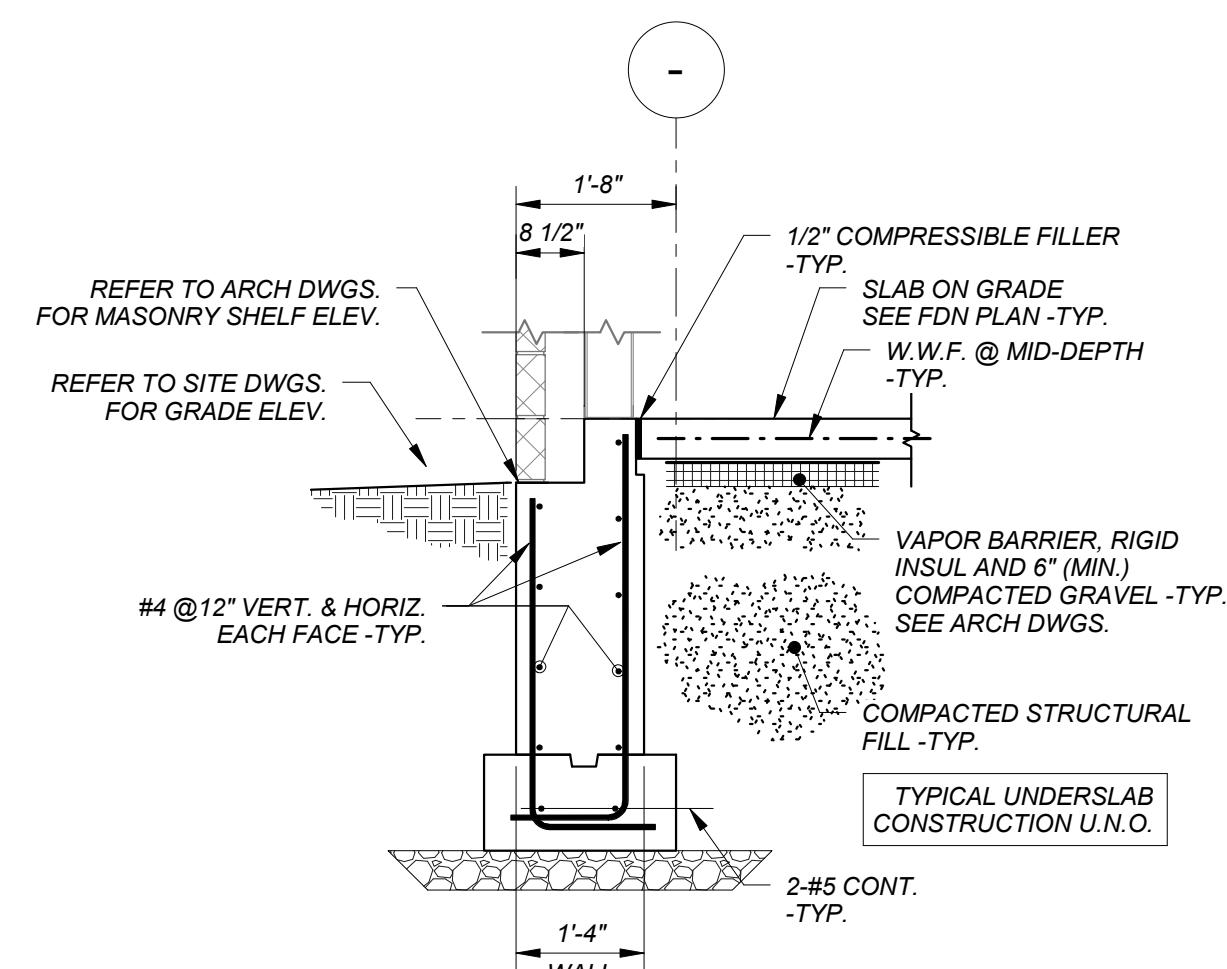
No.	Date	Description
1	8/15/2012	Design Development Submission

Title:

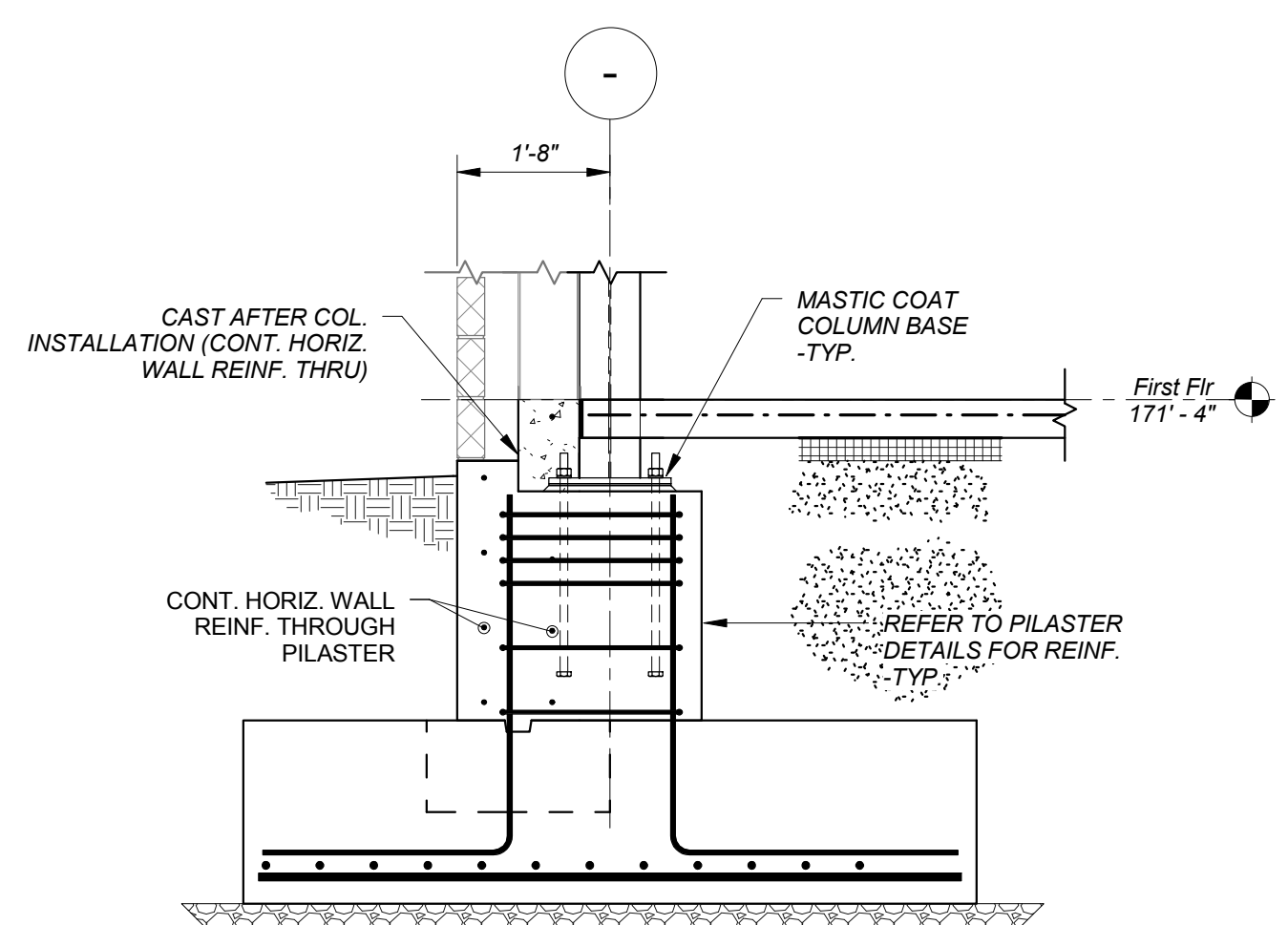
Wall Sections

Date: August 15, 2012 Scale: 1/2" = 1'-0" Drawn: CDM Checked: MAP

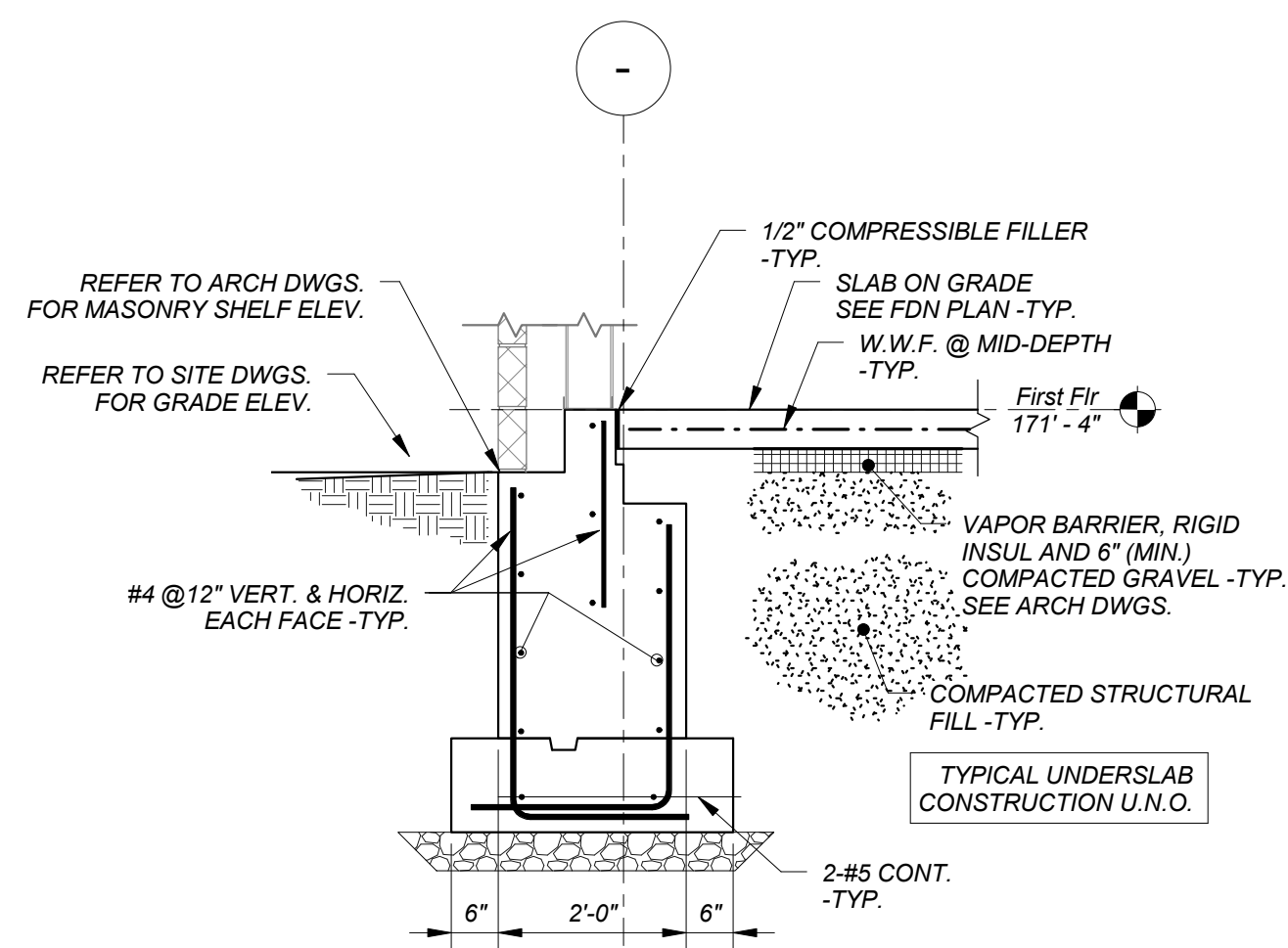
Project No.: 1102.00
Drawing No.: S4.0
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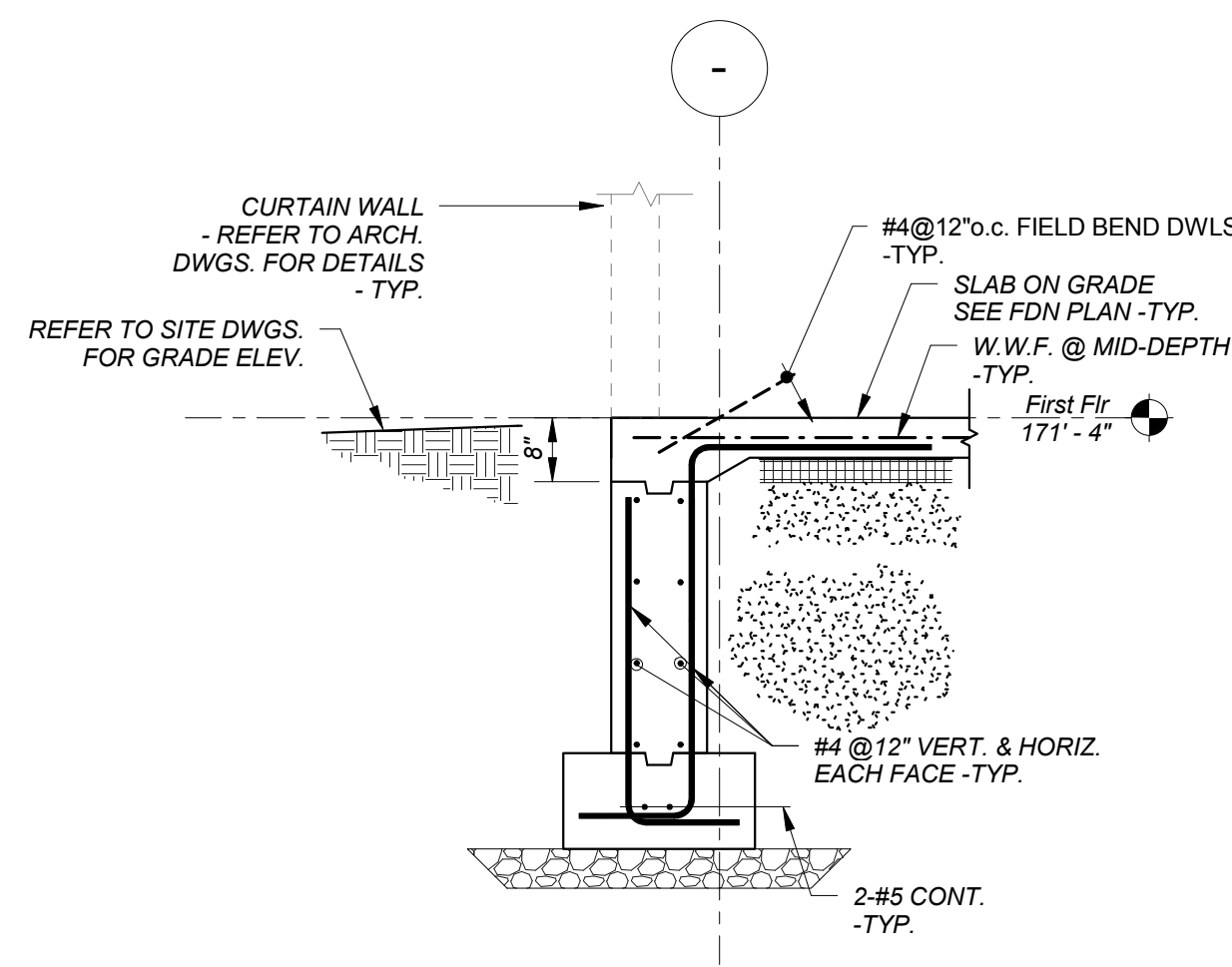
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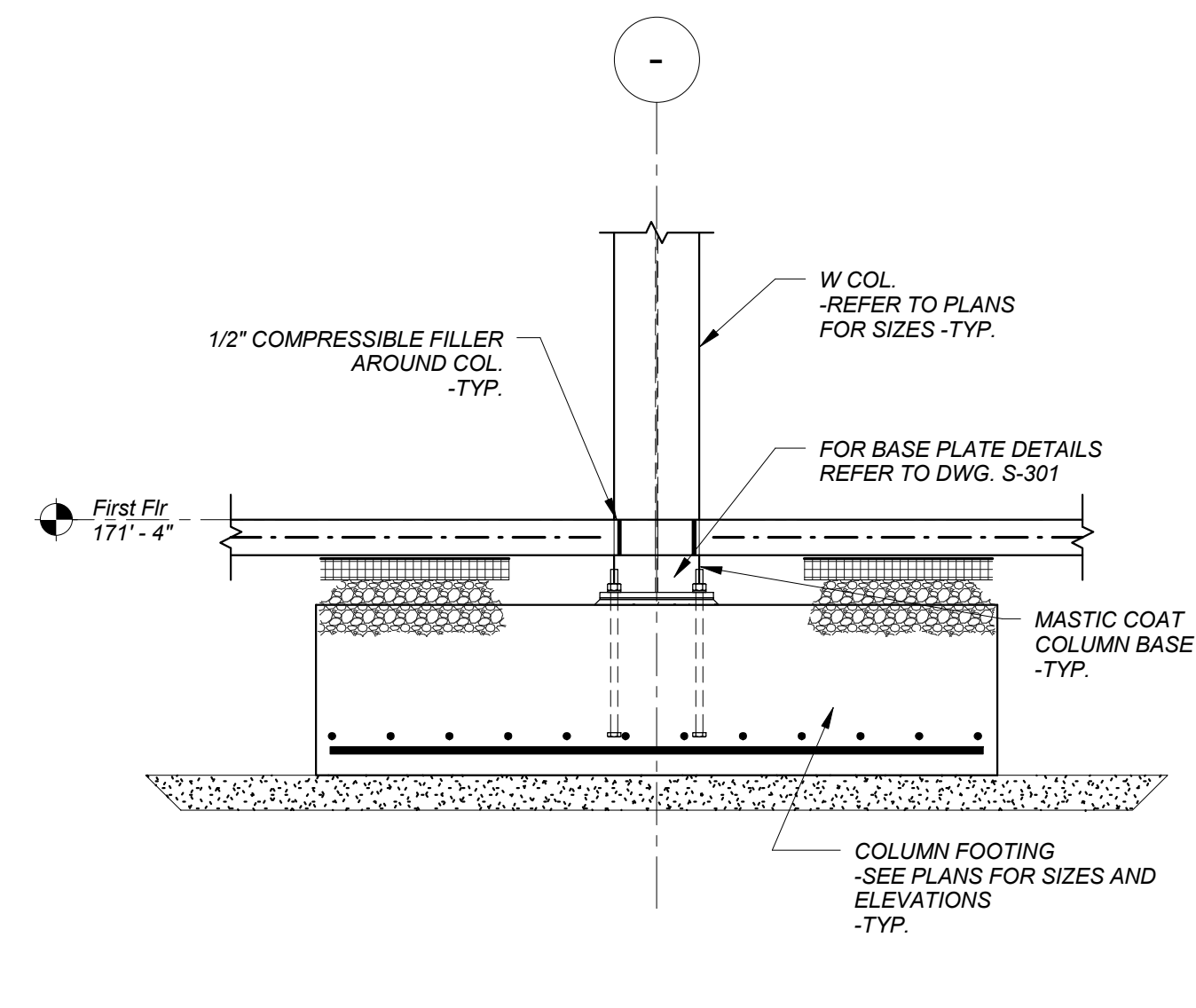
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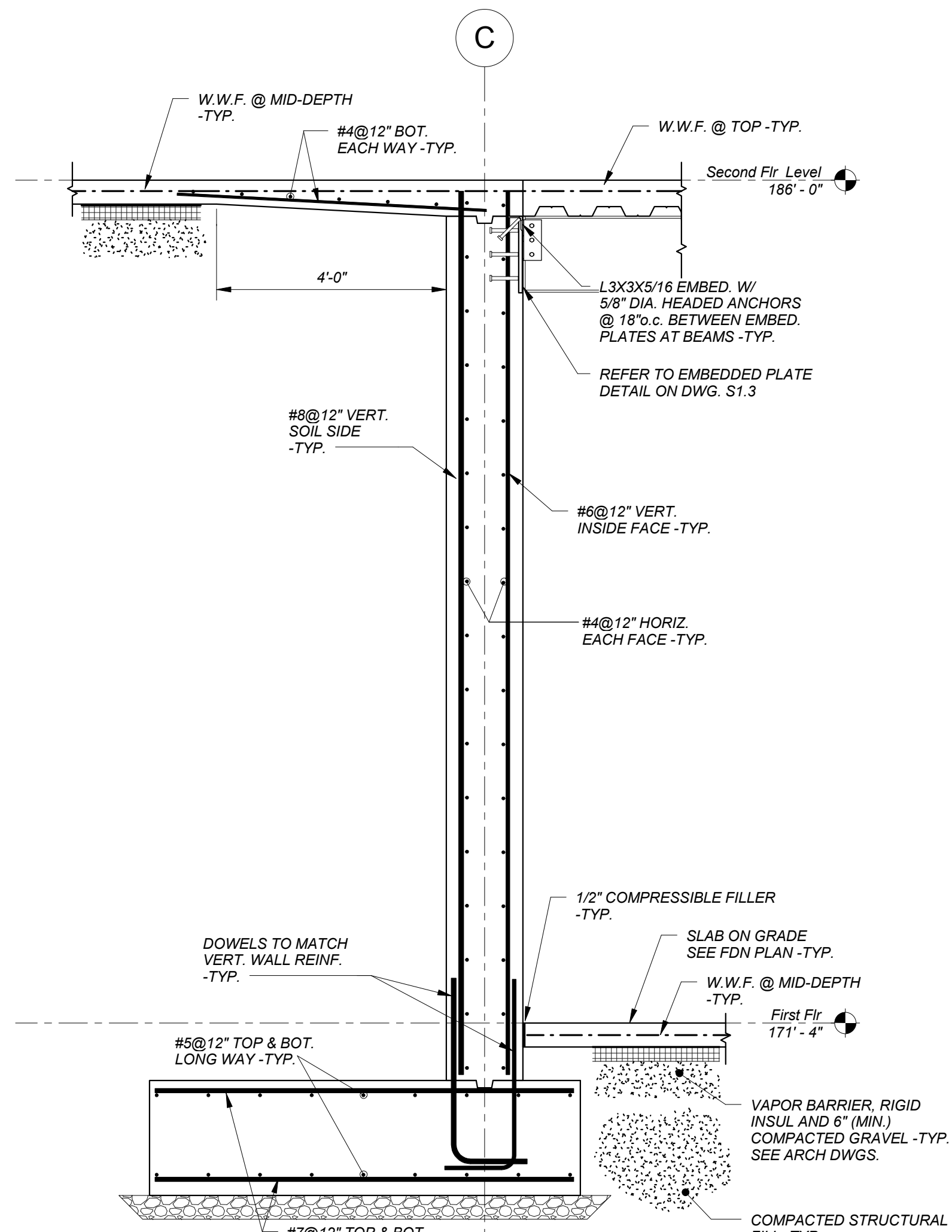
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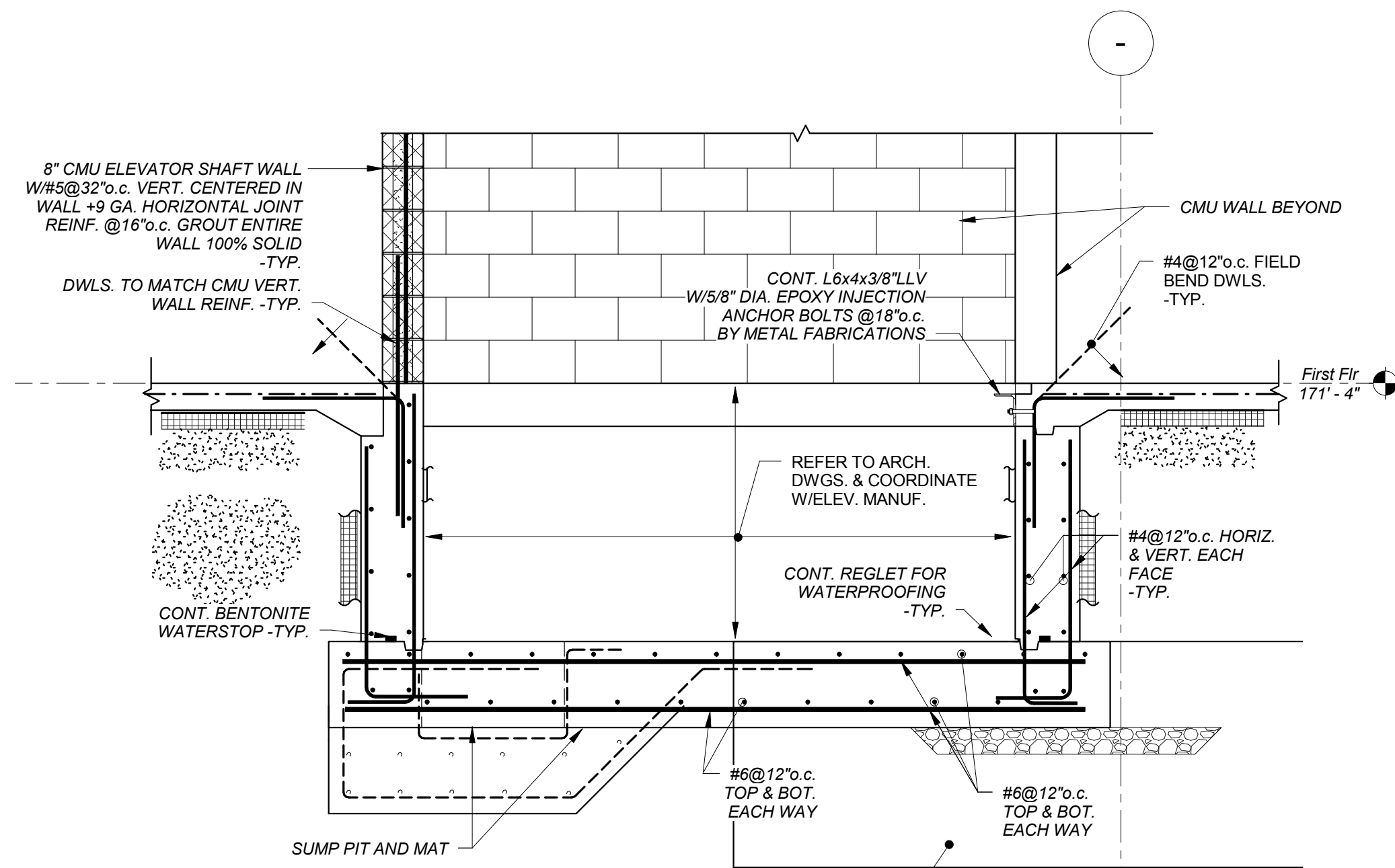
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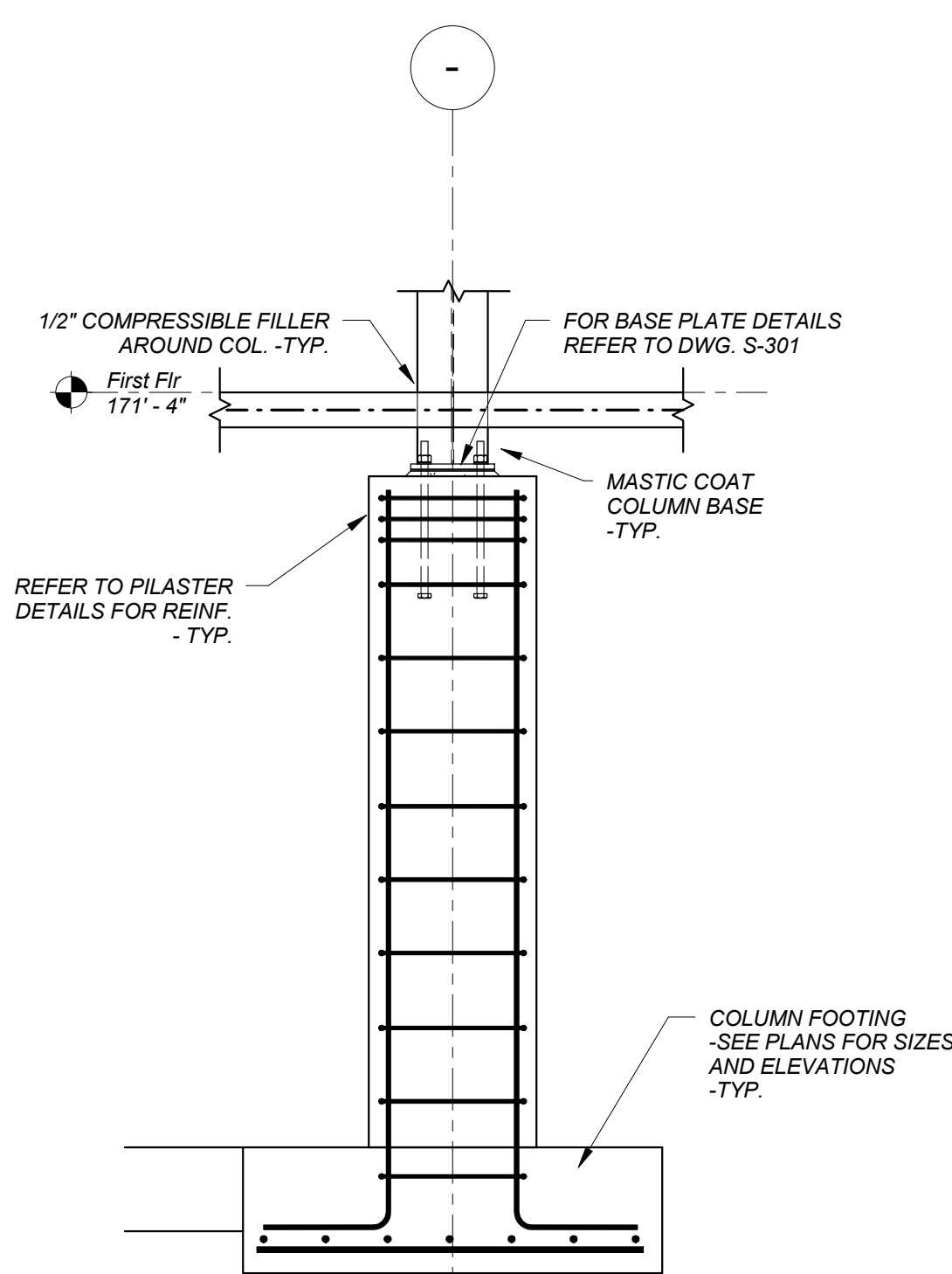
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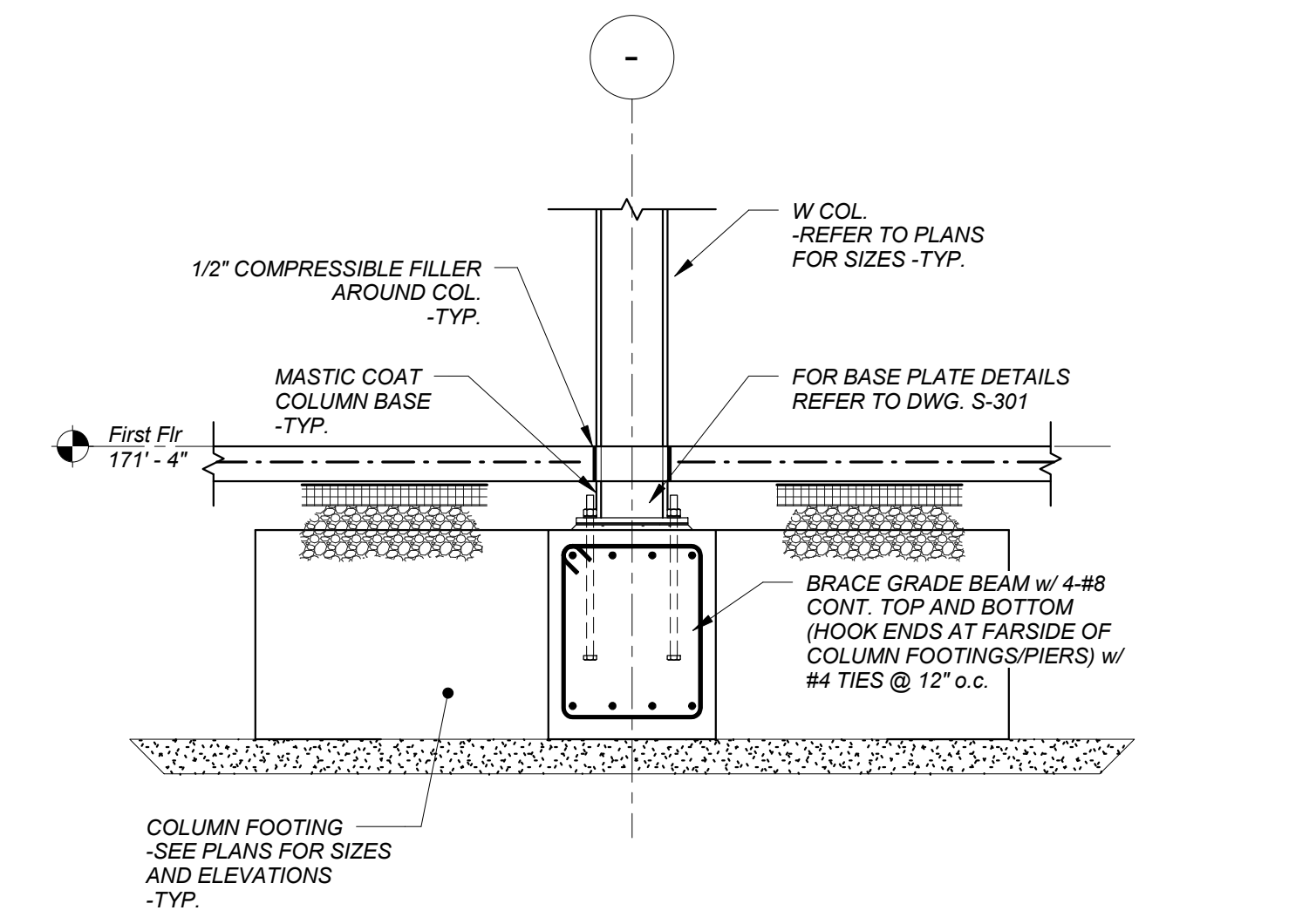
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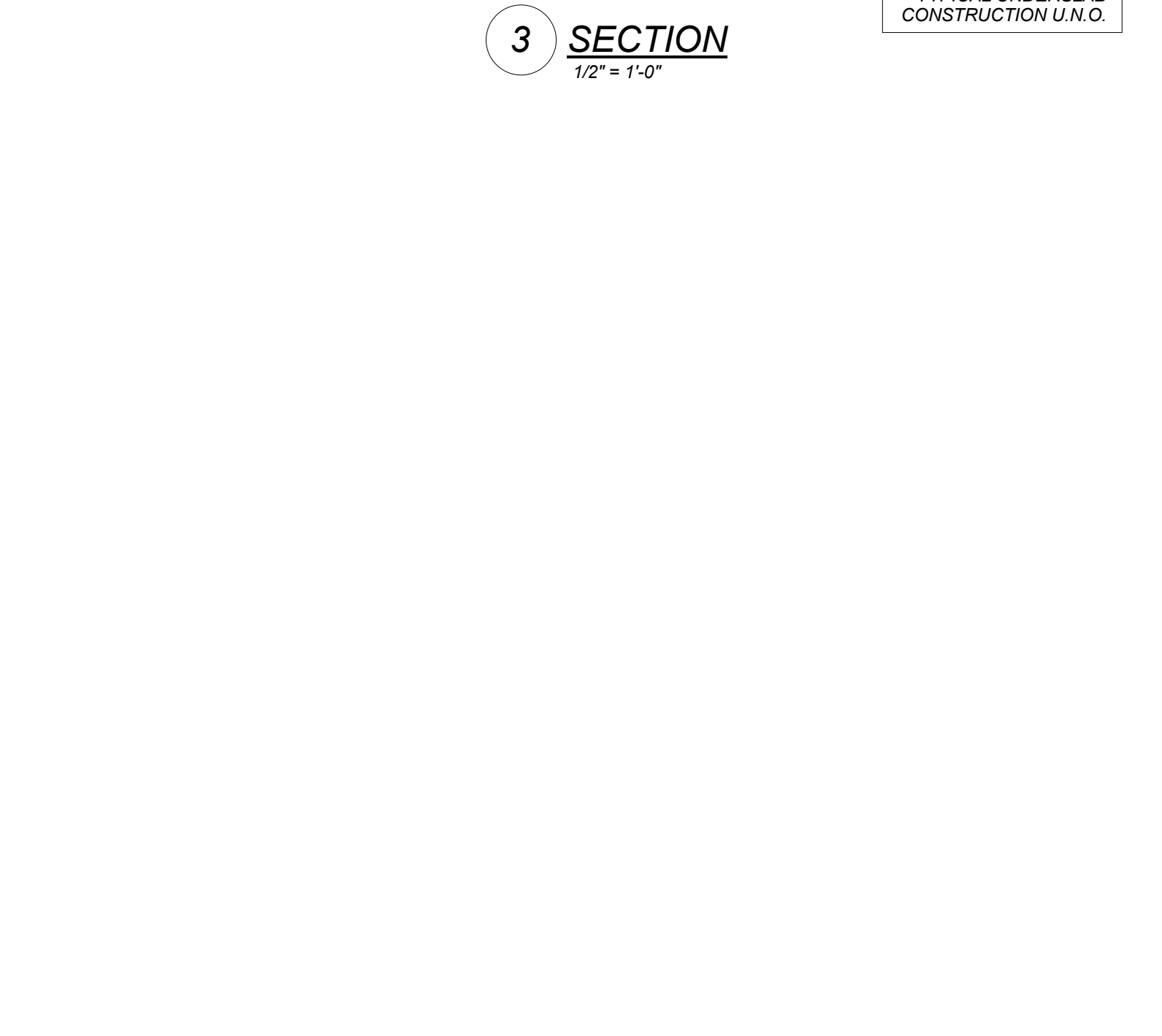
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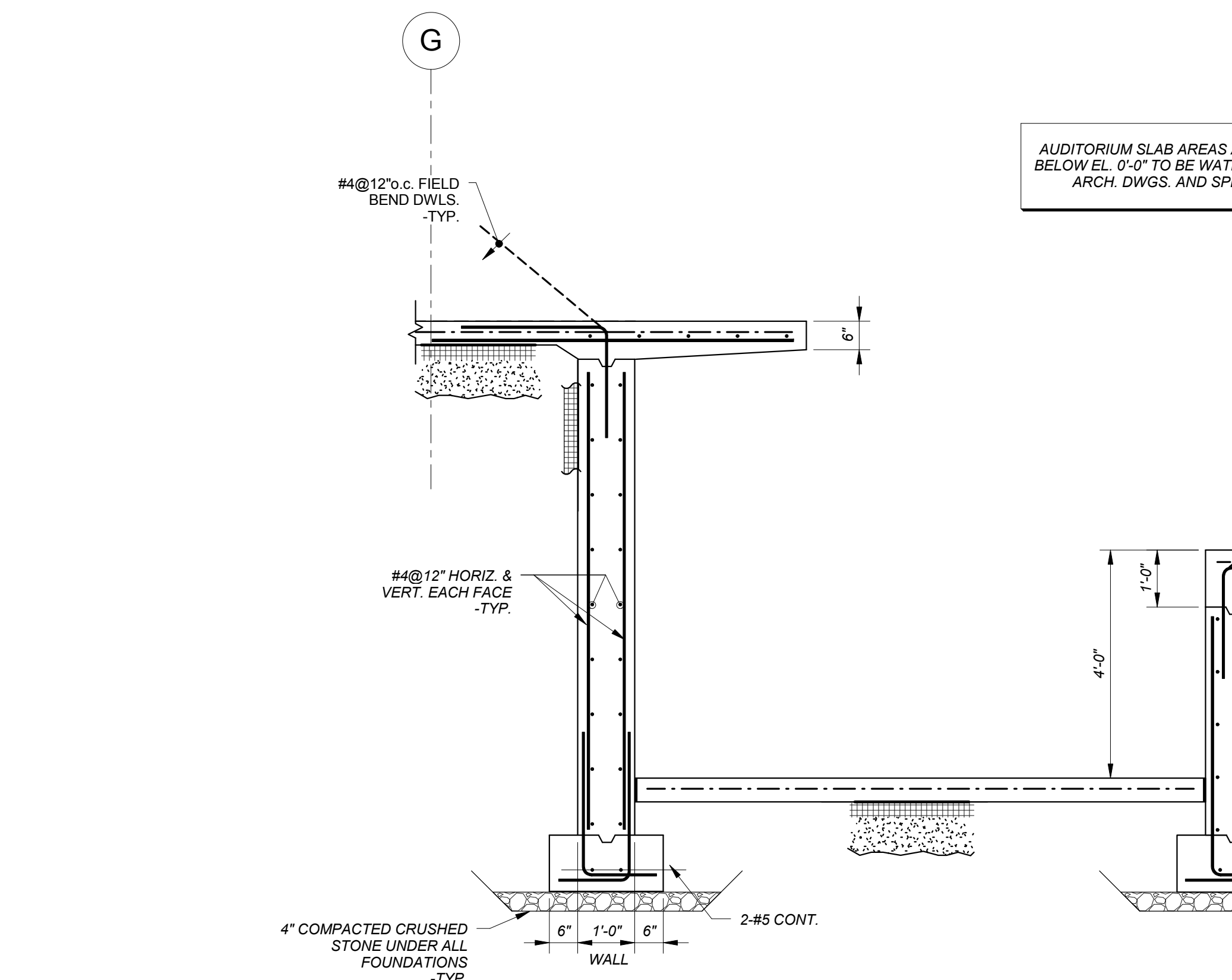
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1/2" = 1'-0"



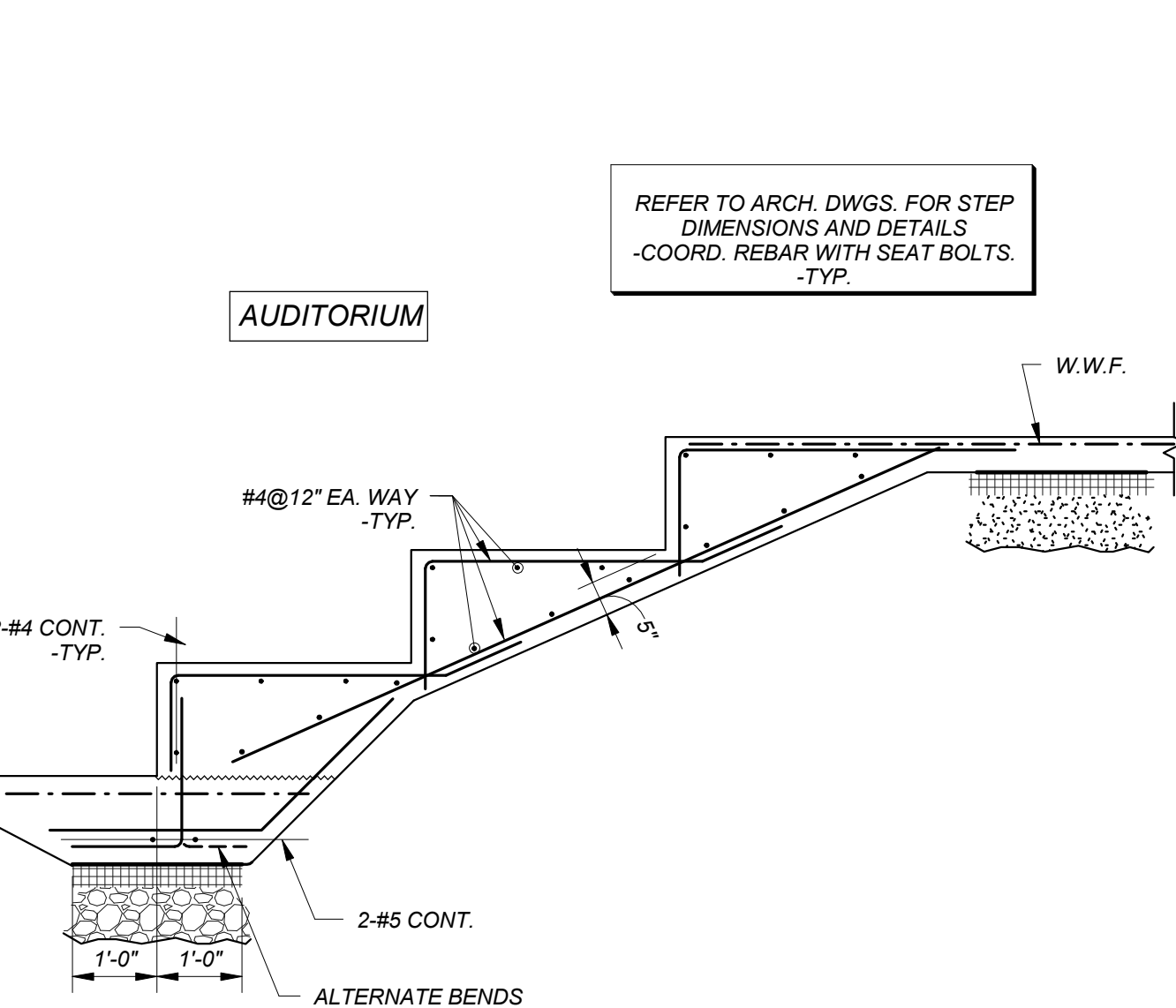
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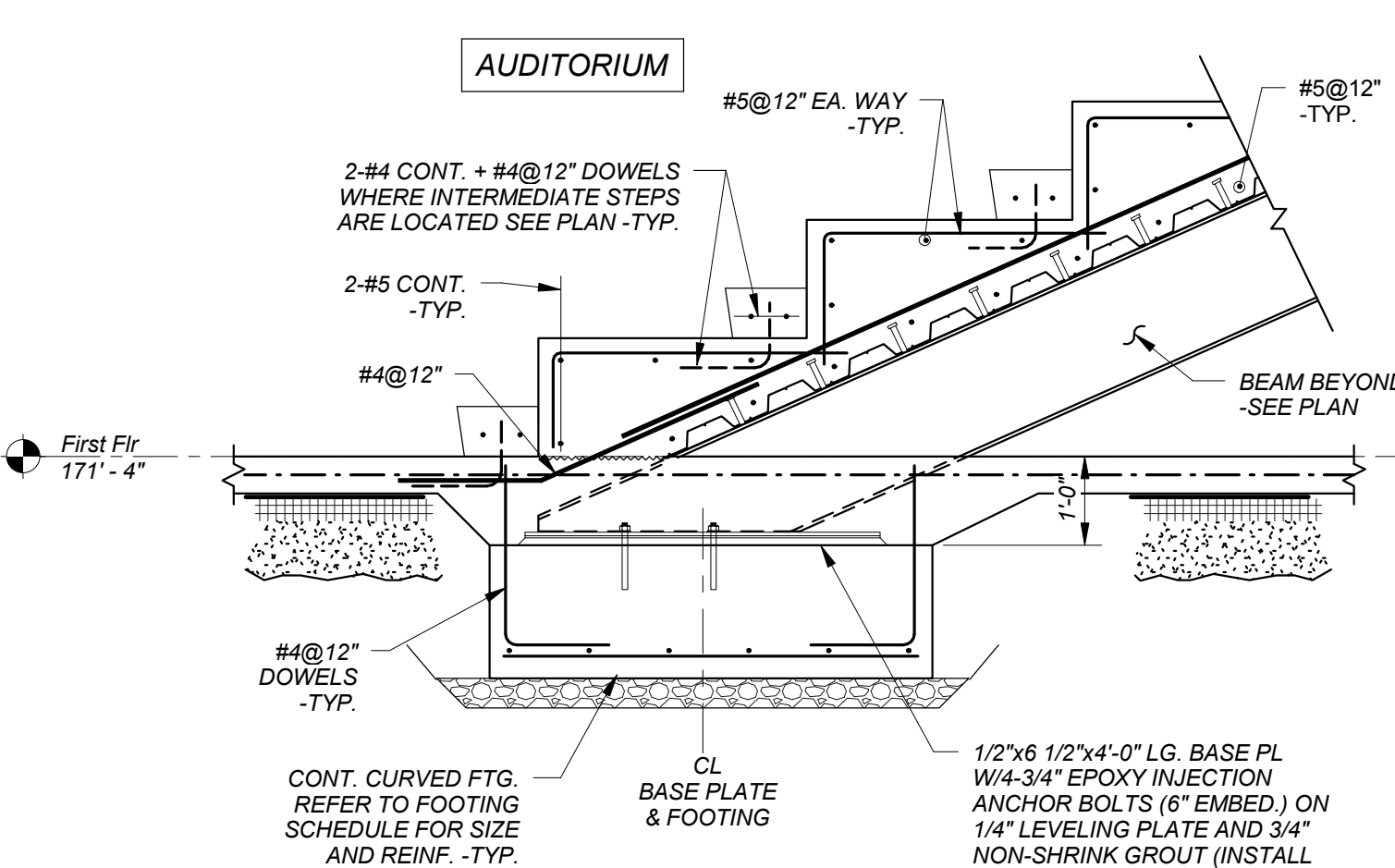
7 SECTION
1/2" = 1'-0"



7 SECTION
1/2" = 1'-0"

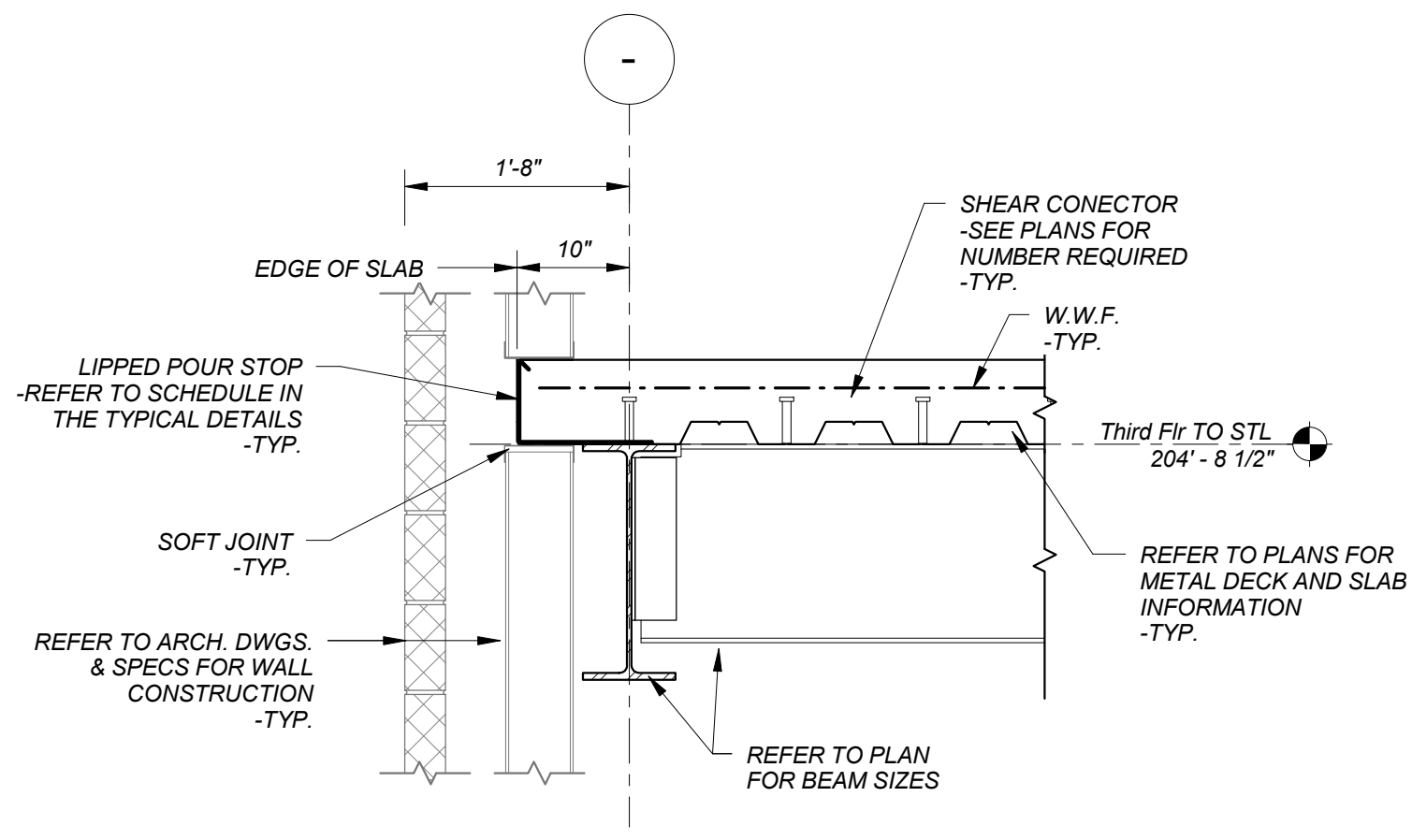


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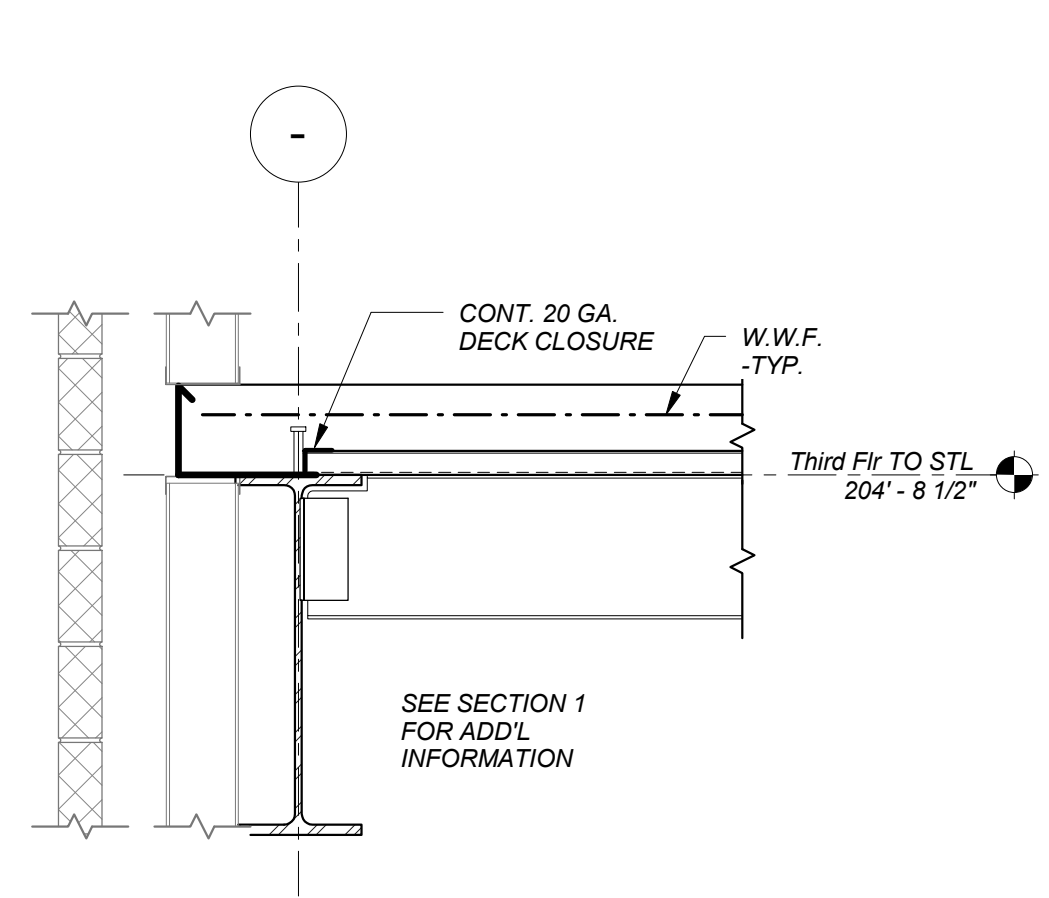


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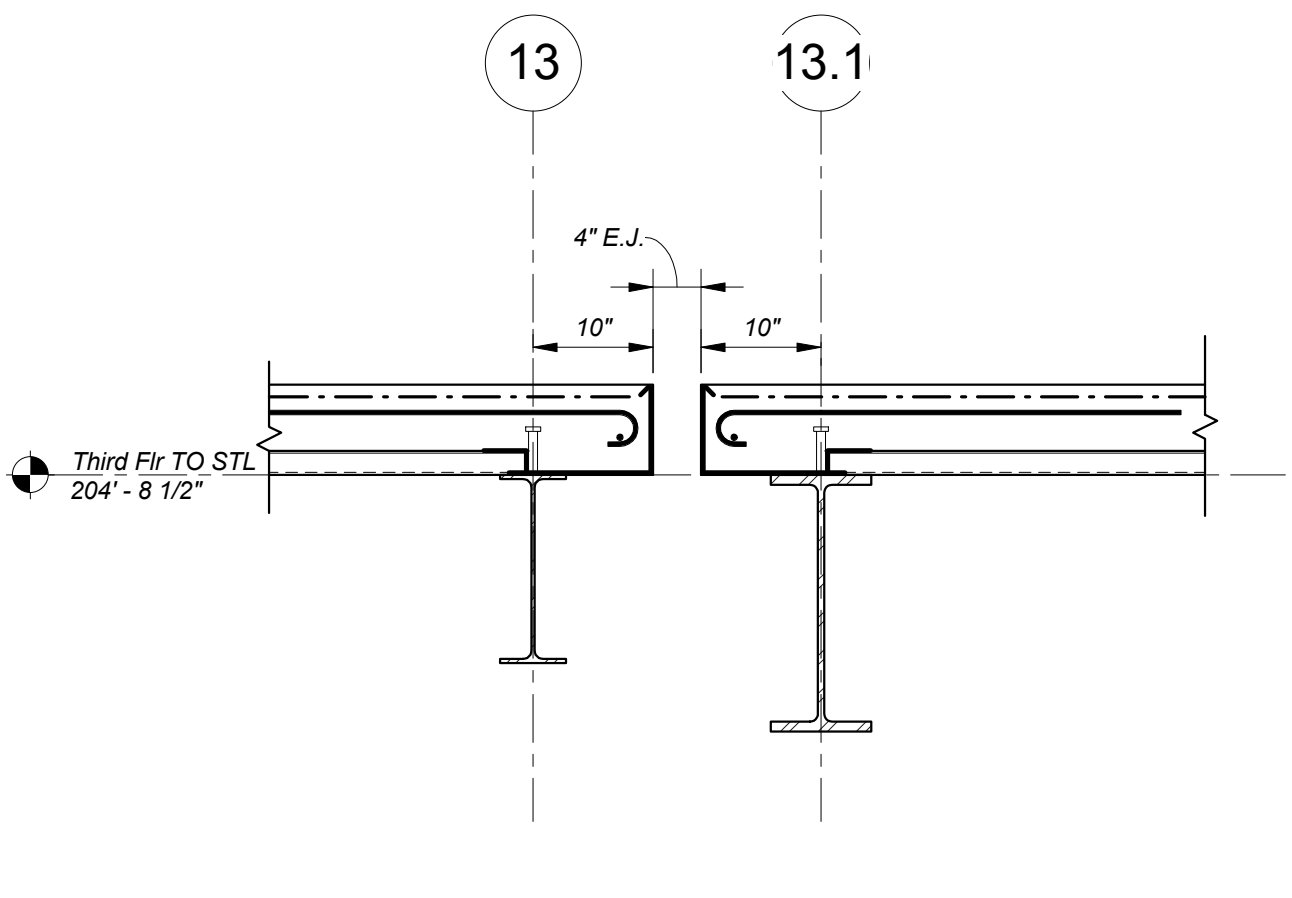
<p>Architect:</p> <p>omr architects inc</p> <p>543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160</p>	<p>Consulting Engineer:</p> <p>FoleyBuhlRoberts & ASSOCIATES INC</p> <p>structural engineers</p> <p>T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St. Newton MA 02462</p>	<p>Registration:</p> <p>Design Development Submission</p>	<p>Project Name and Address:</p> <p>Concord-Carlisle Regional High School</p> <p>500 Walden Street Concord, MA 01742</p>	<p>Issue Submissions:</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Date</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>8/15/2012</td> <td>Design Development Submission</td> </tr> </tbody> </table>	No.	Date	Description	1	8/15/2012	Design Development Submission	<p>Title:</p> <p>Foundation Details</p> <p>Date: August 15, 2012 Scale: 1/2" = 1'-0" Drawn: CDM Checked: MAP</p>	<p>Project No.: 1102.00</p> <p>Drawing No.: S4.1</p> <p>© omr architects inc</p>
No.	Date	Description										
1	8/15/2012	Design Development Submission										



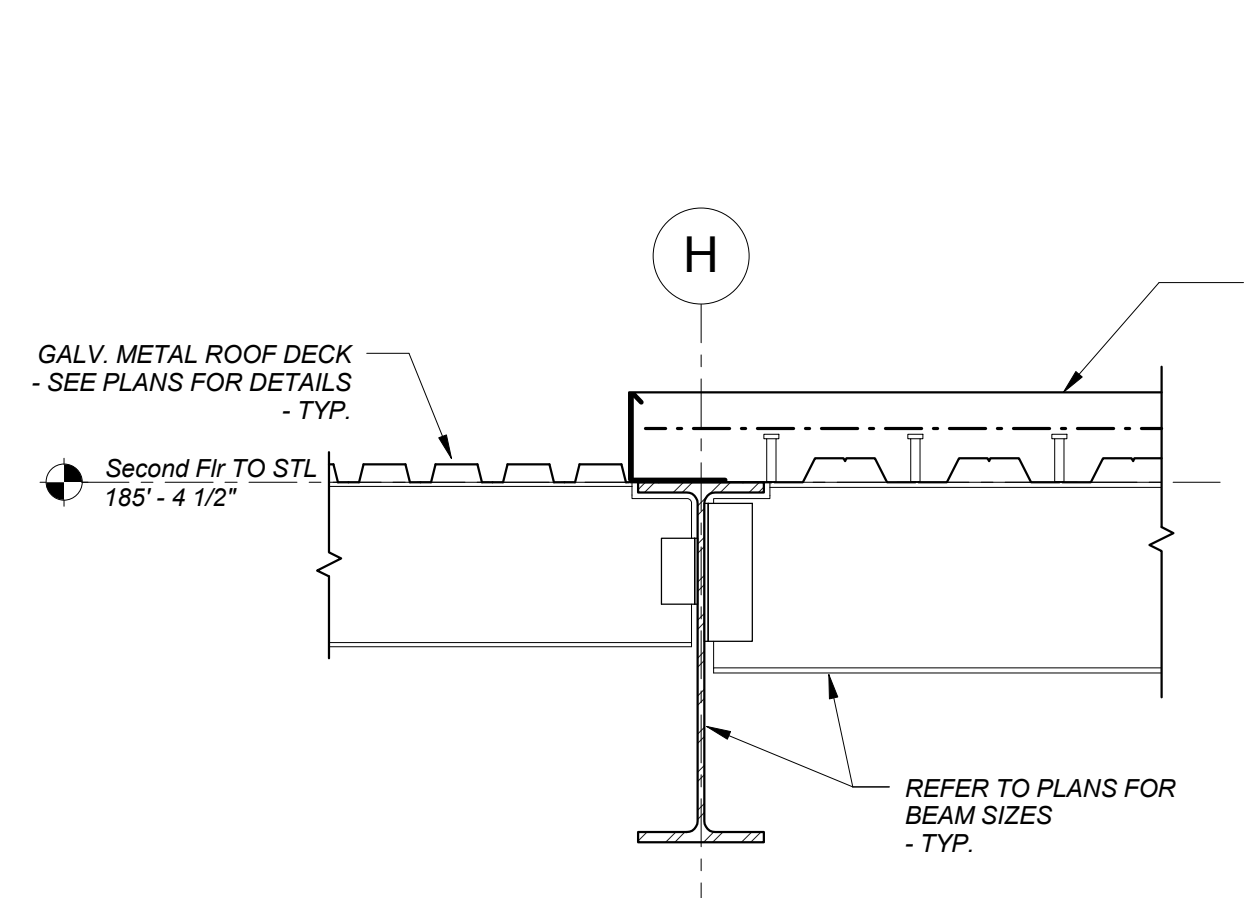
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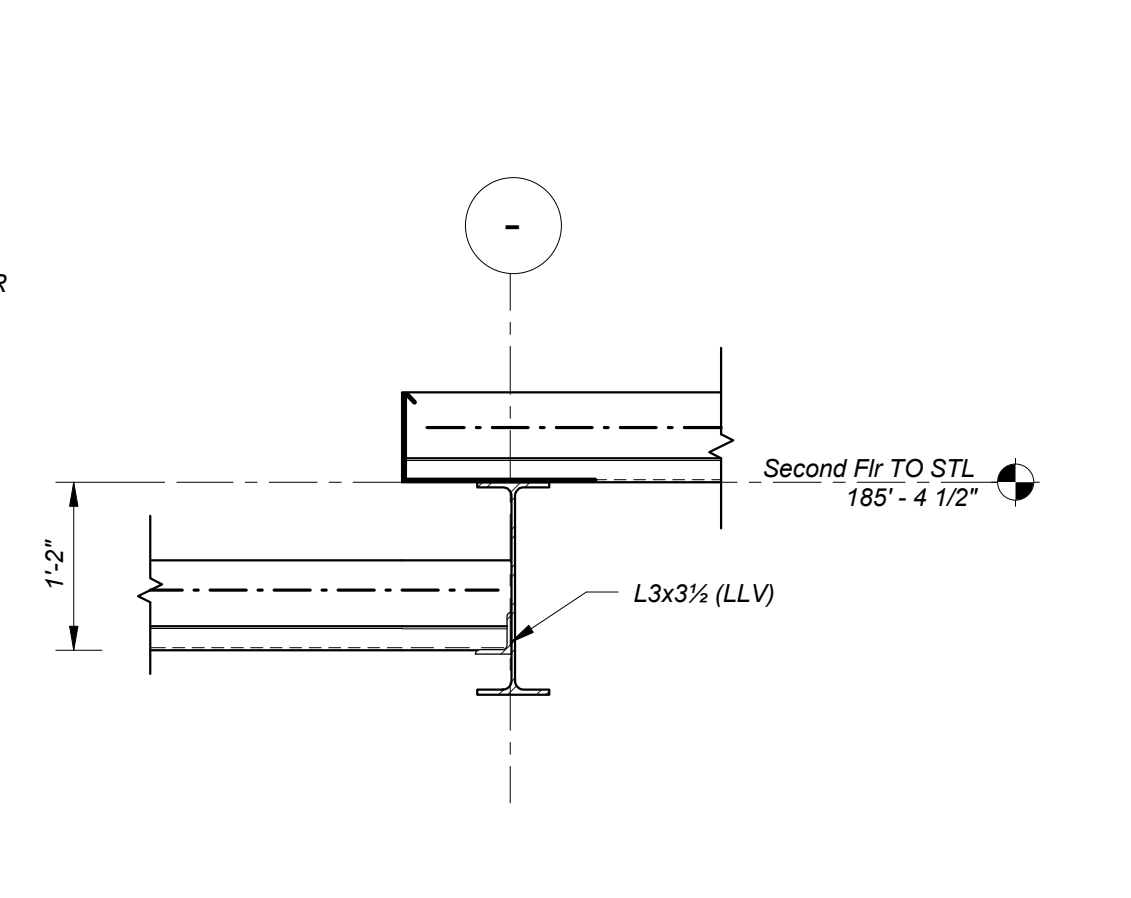
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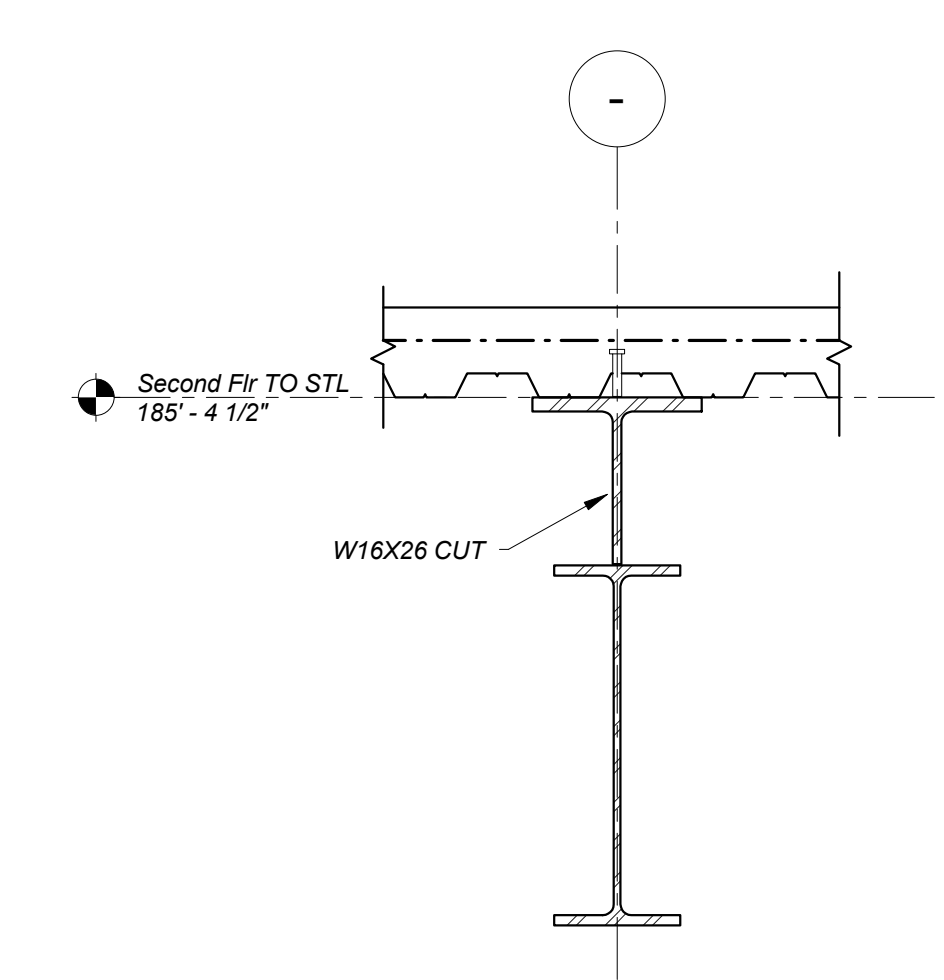
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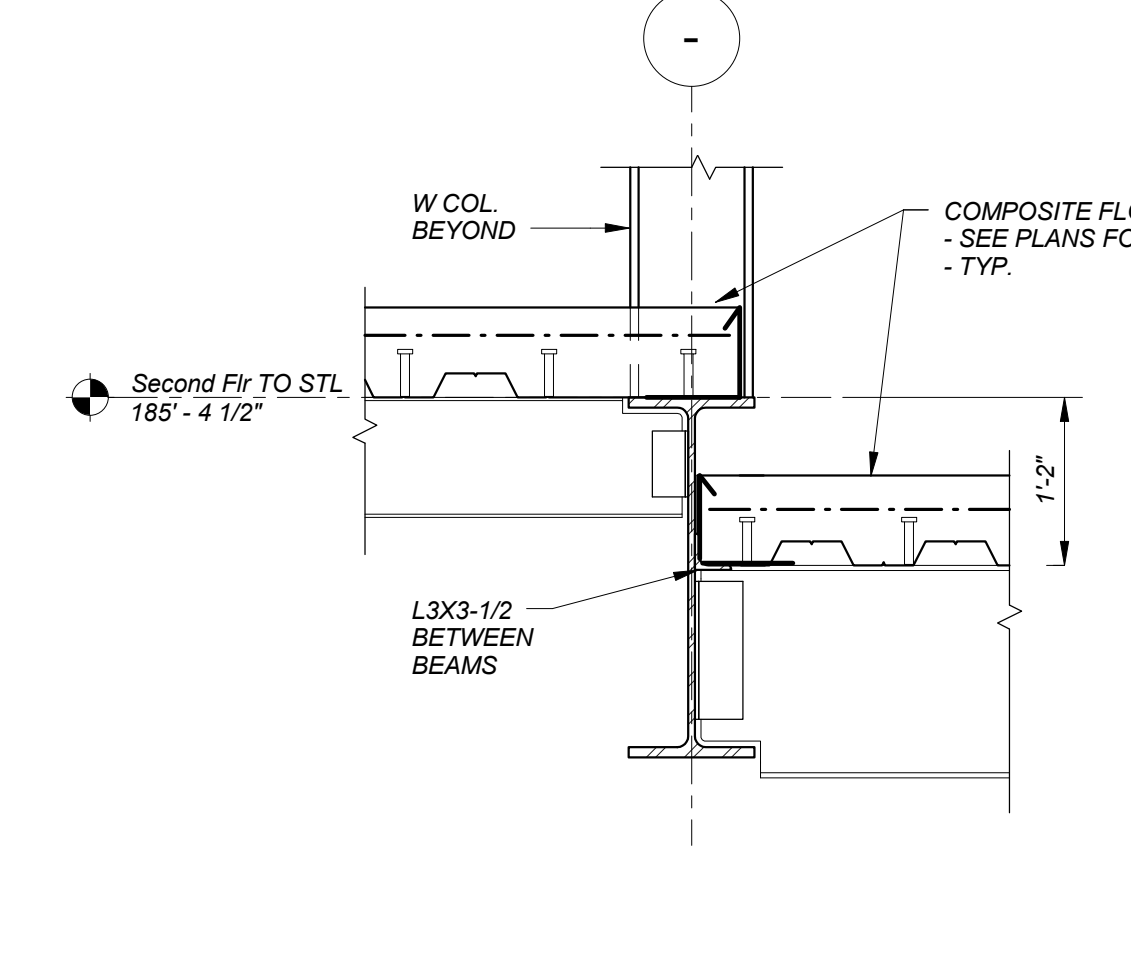
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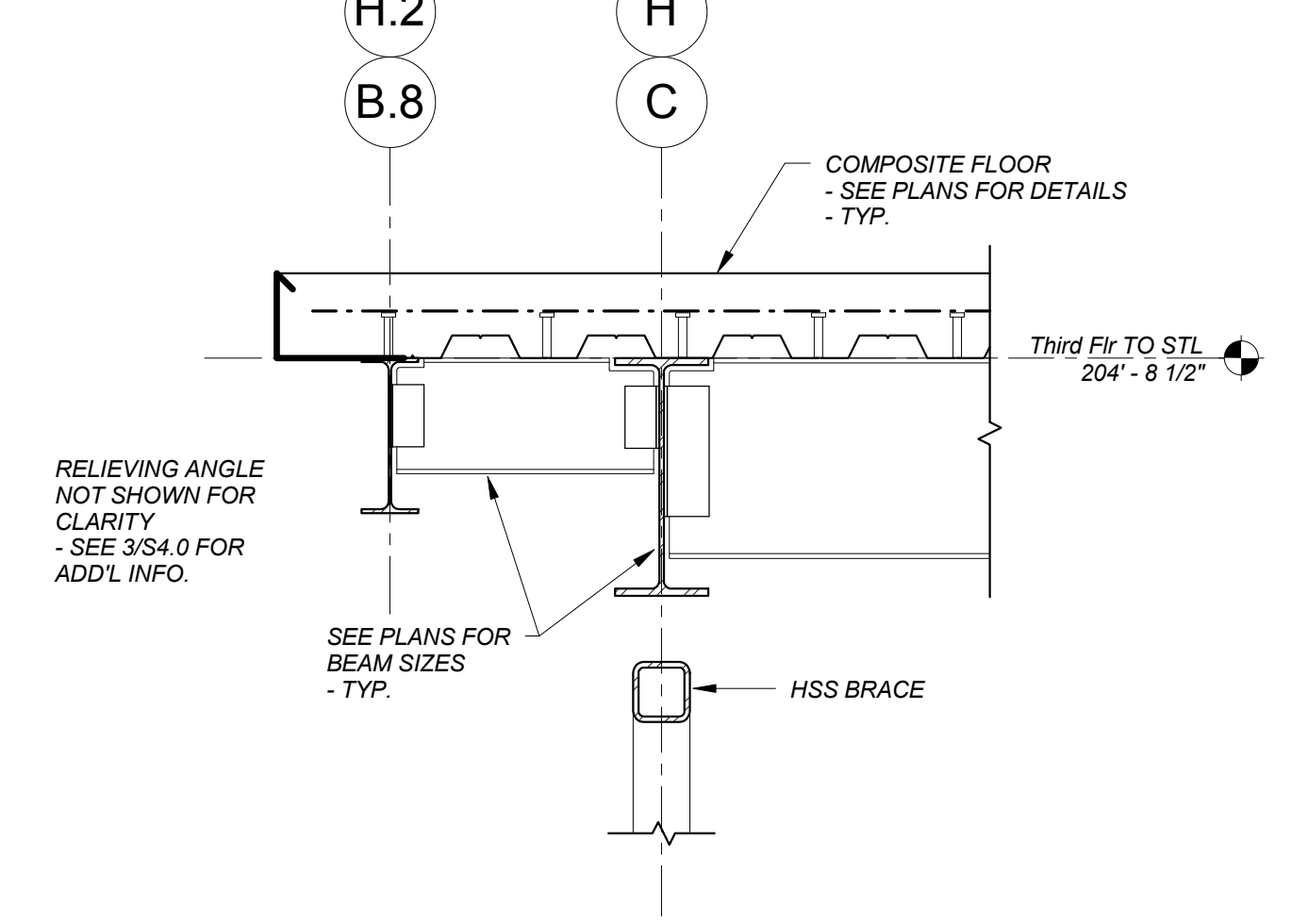
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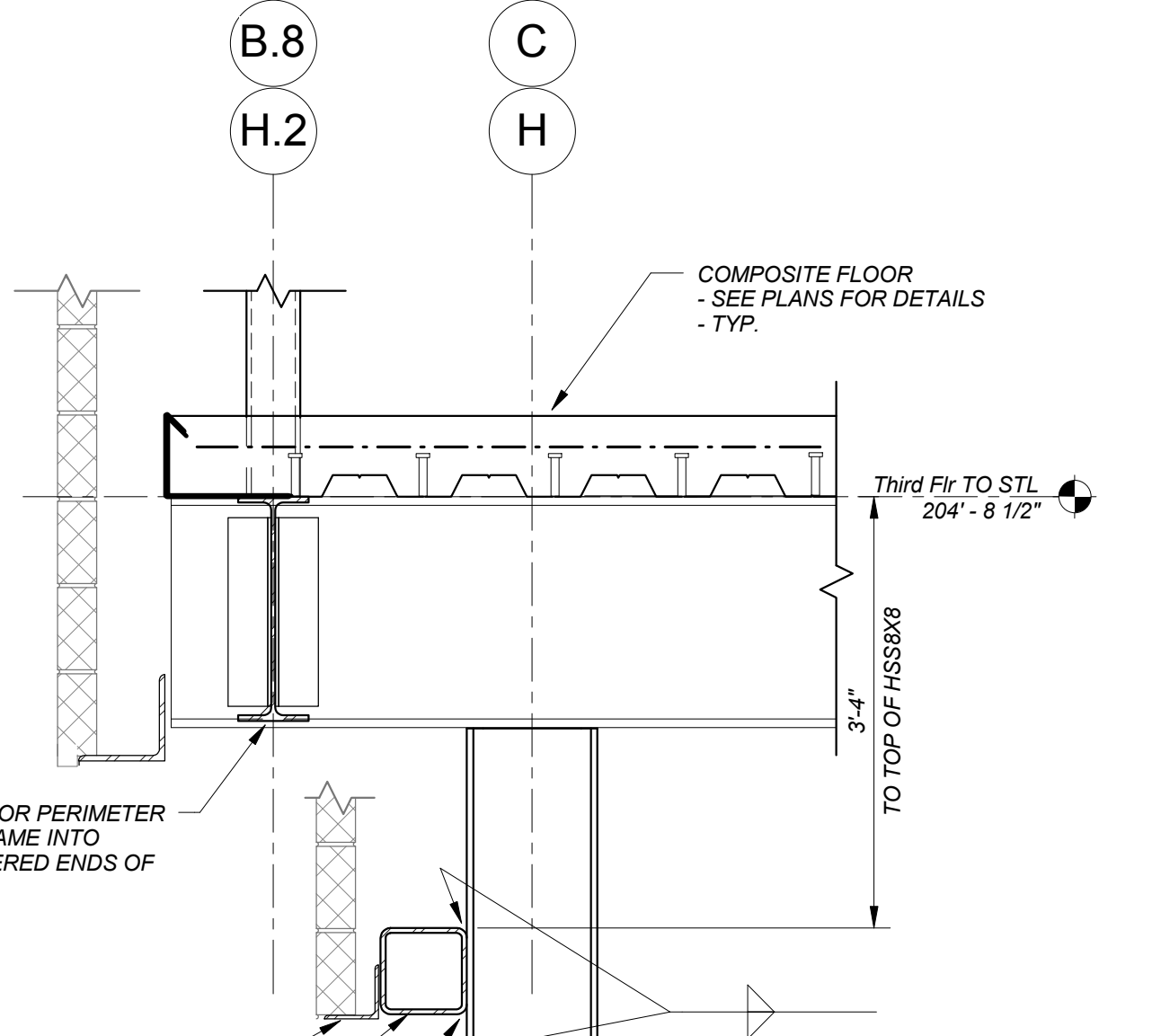
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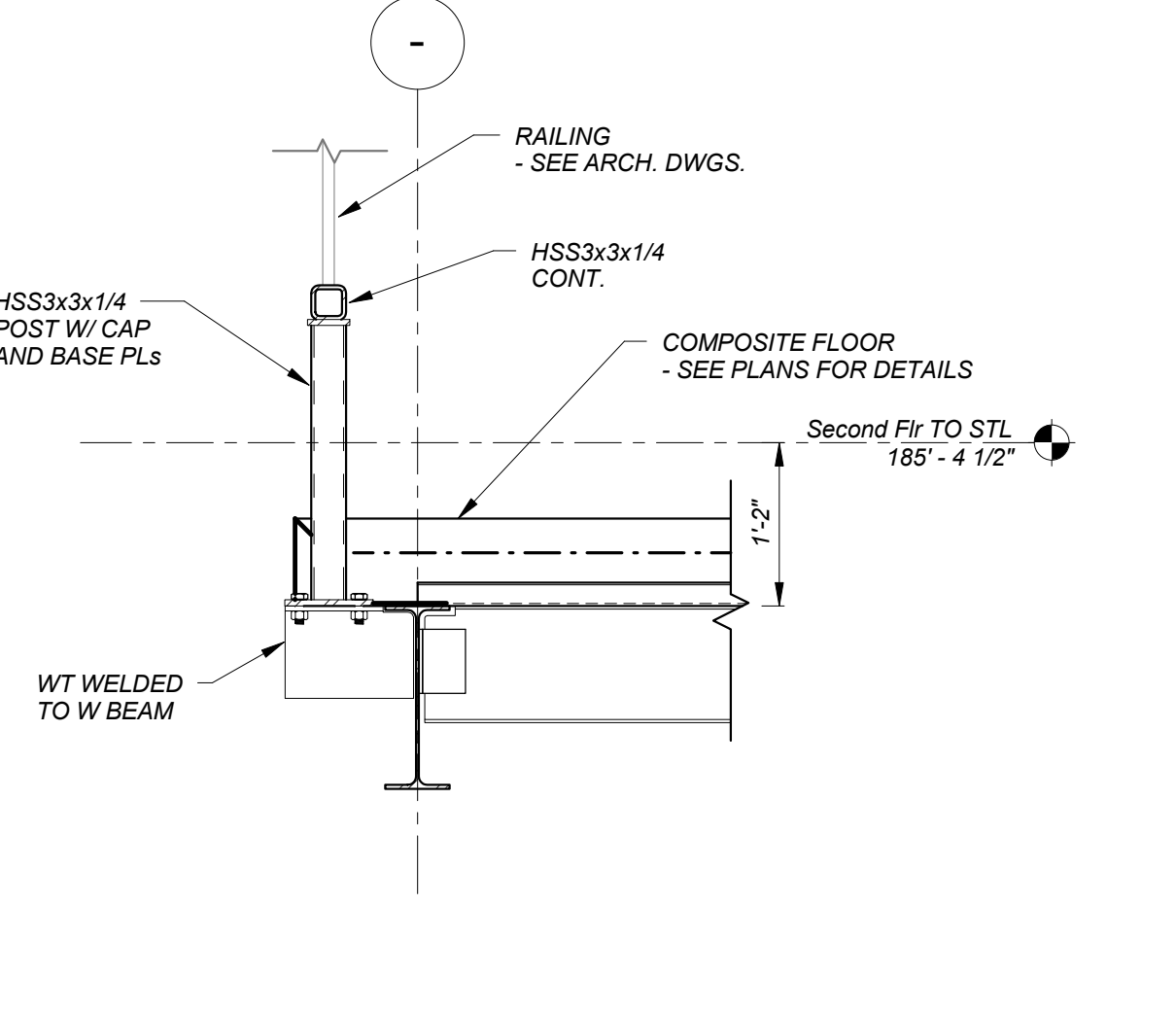
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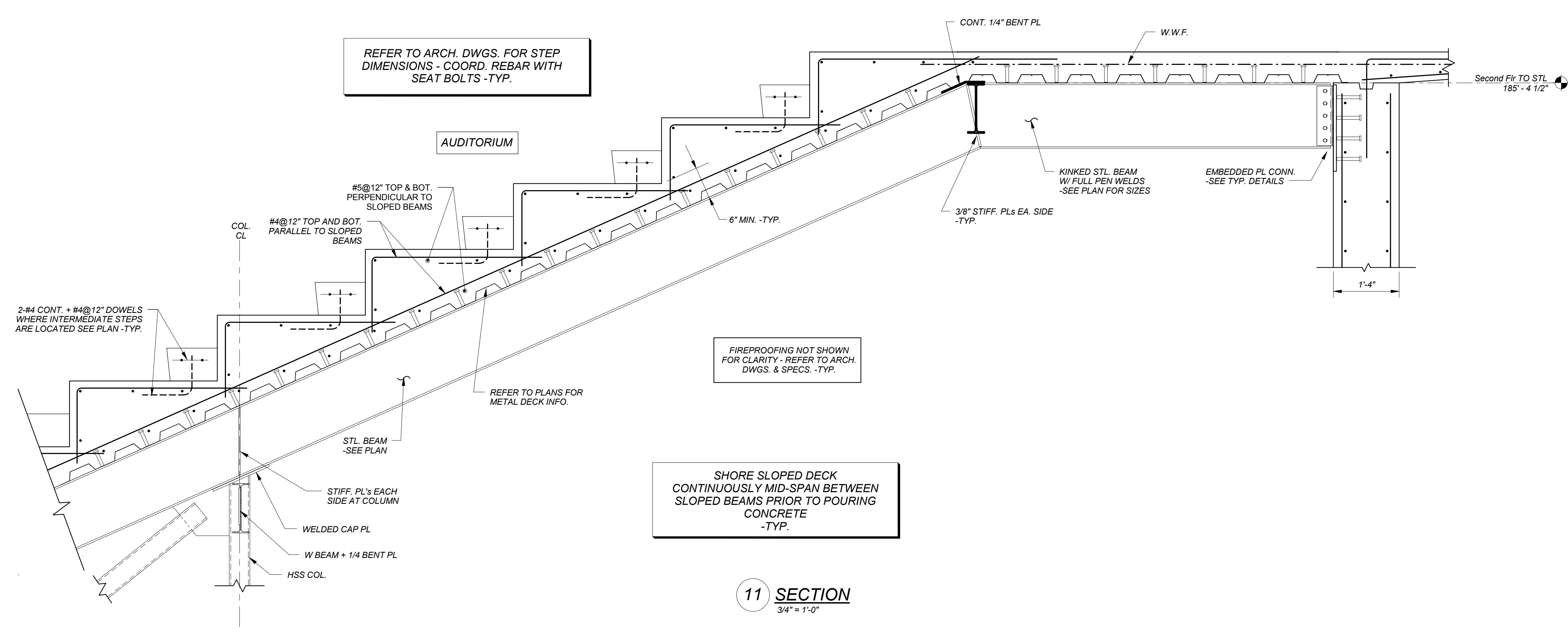
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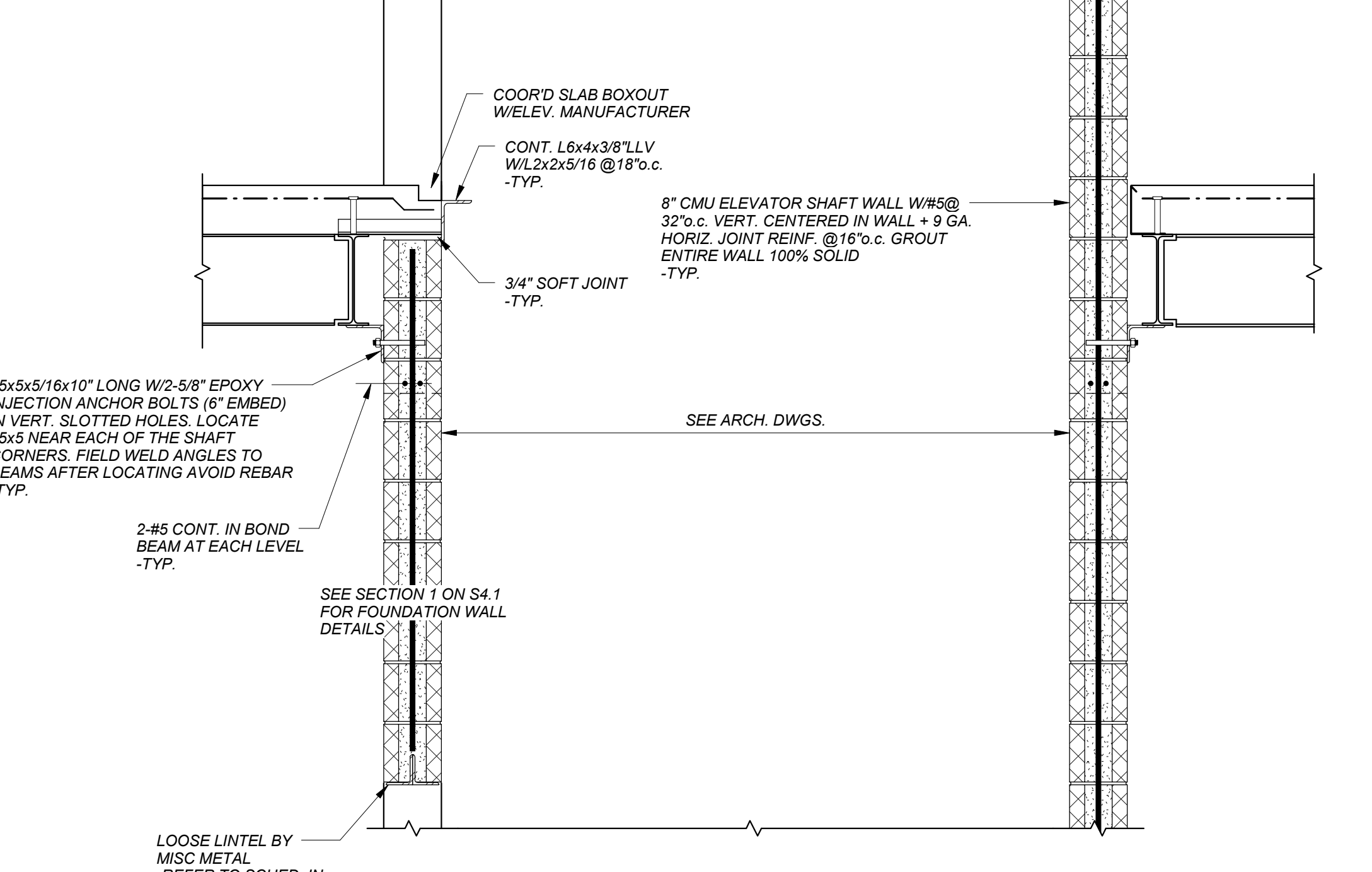
9 SECTION
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10 SECTION
3/4" = 1'-0"



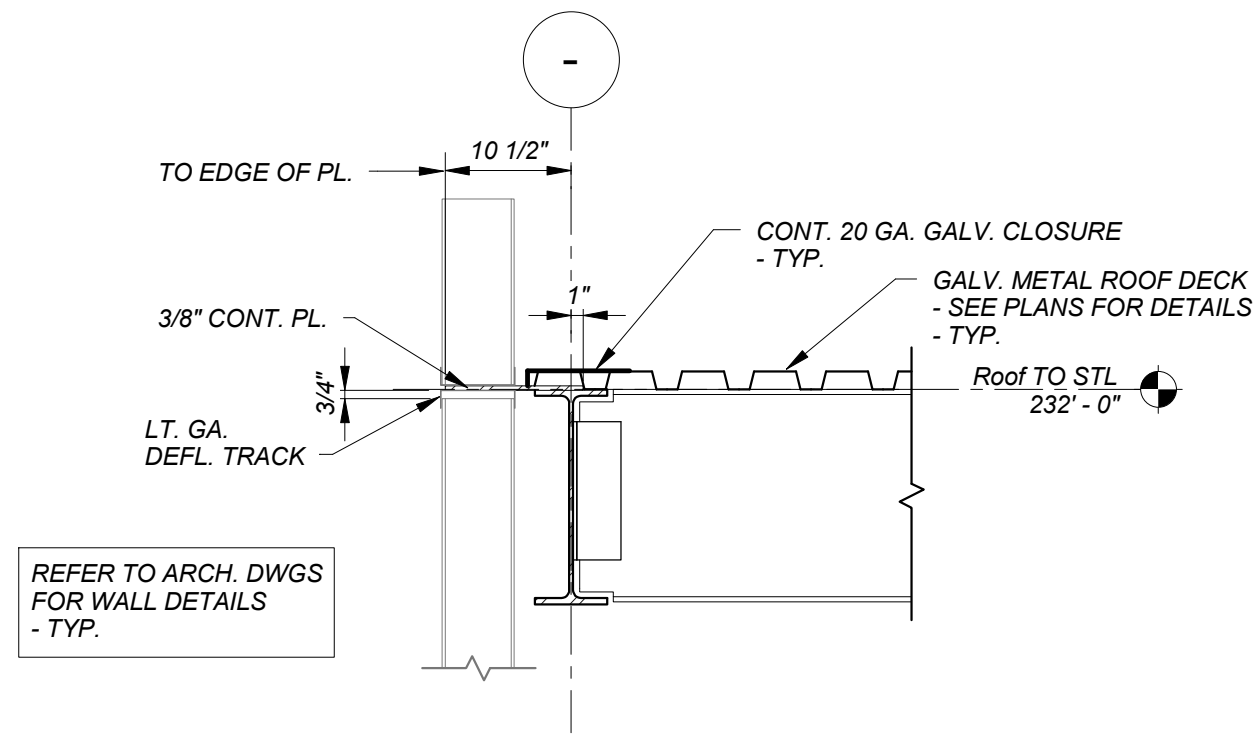
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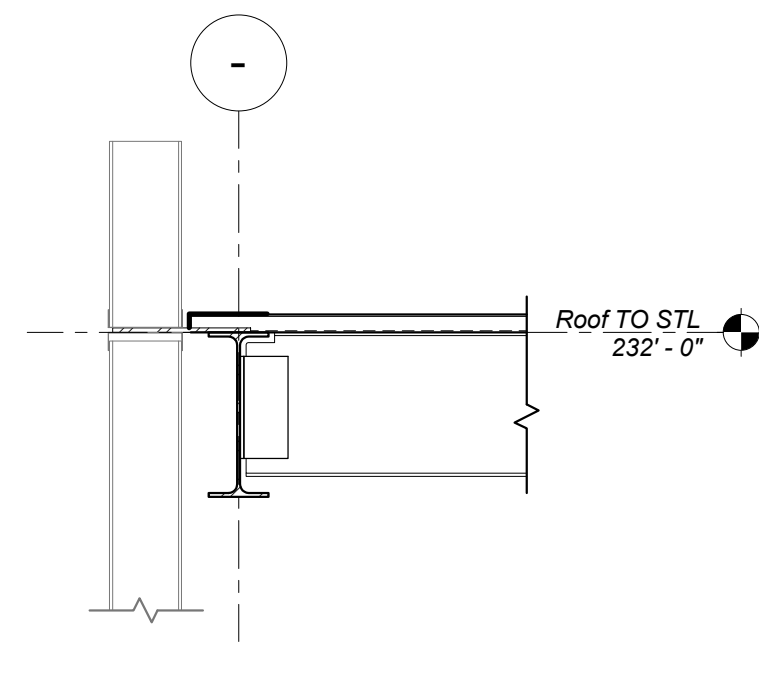
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 Floor Framing Details S5.1
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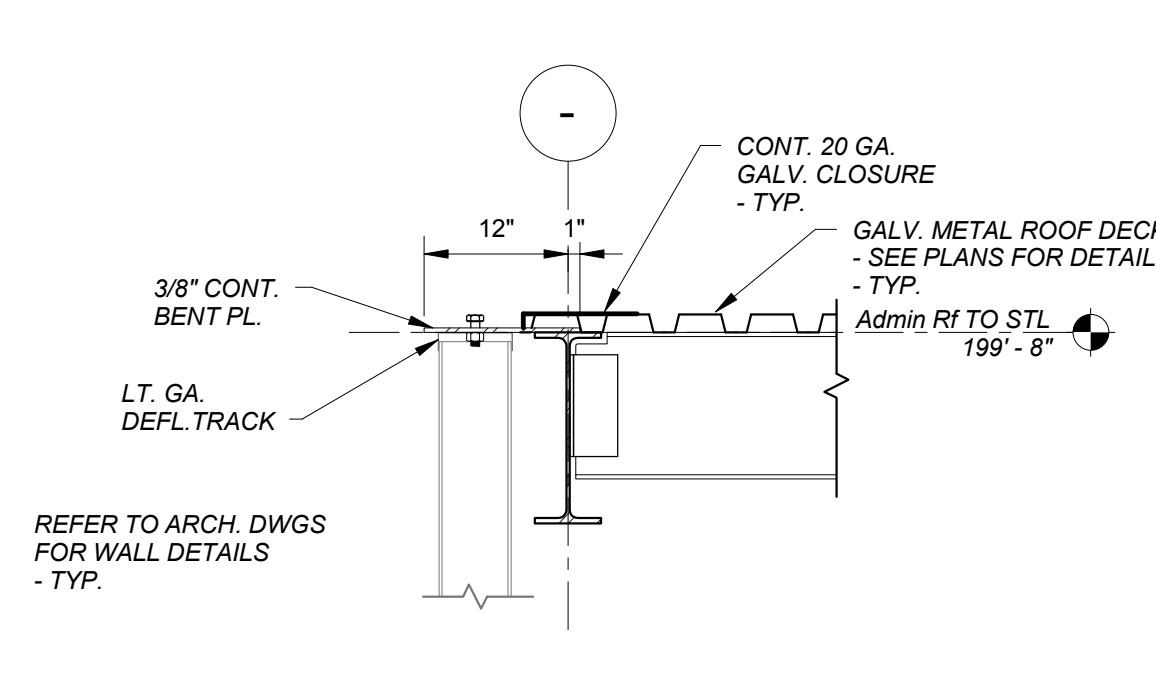
Architect: omrarchitects inc 543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer: FoleyBuhlRoberts & ASSOCIATES INC structural engineers T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St. Newton MA 02462	Registration: Design Development Submission	Project Name and Address: Concord-Carlisle Regional High School 500 Walden Street Concord, MA 01742	Issue Submissions: No. Date Description 8/15/2012 Design Development Submission	Title: Floor Framing Details	Project No.: 1102.00 Drawing No.: S5.1 © omr architects inc
Date: August 15, 2012 Scale: 3/4" = 1'-0" Drawn: CDM Checked: MAP						



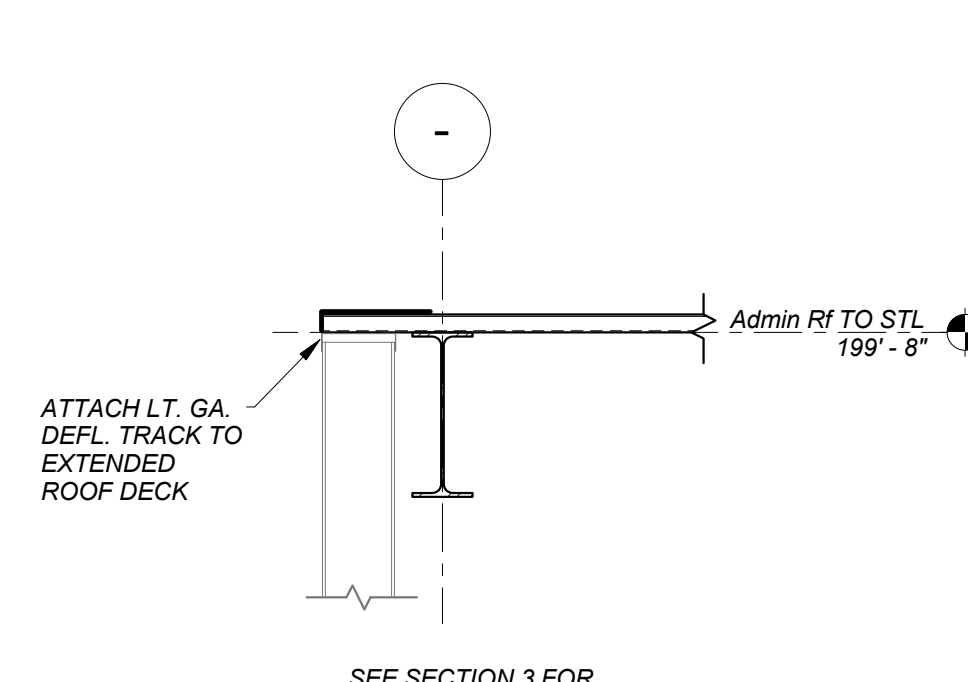
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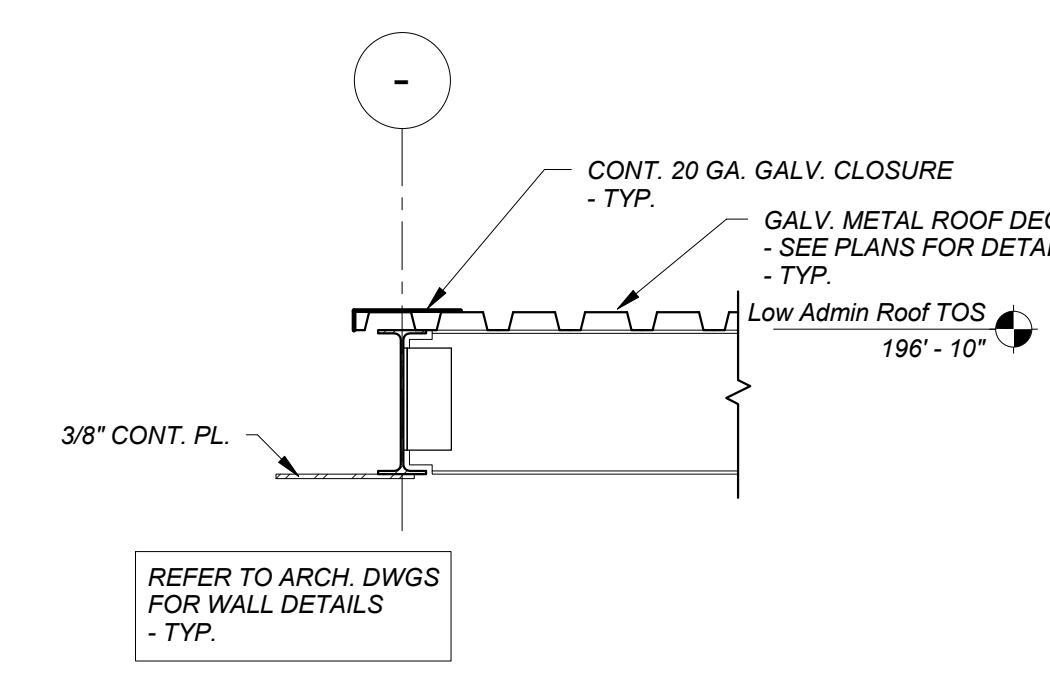
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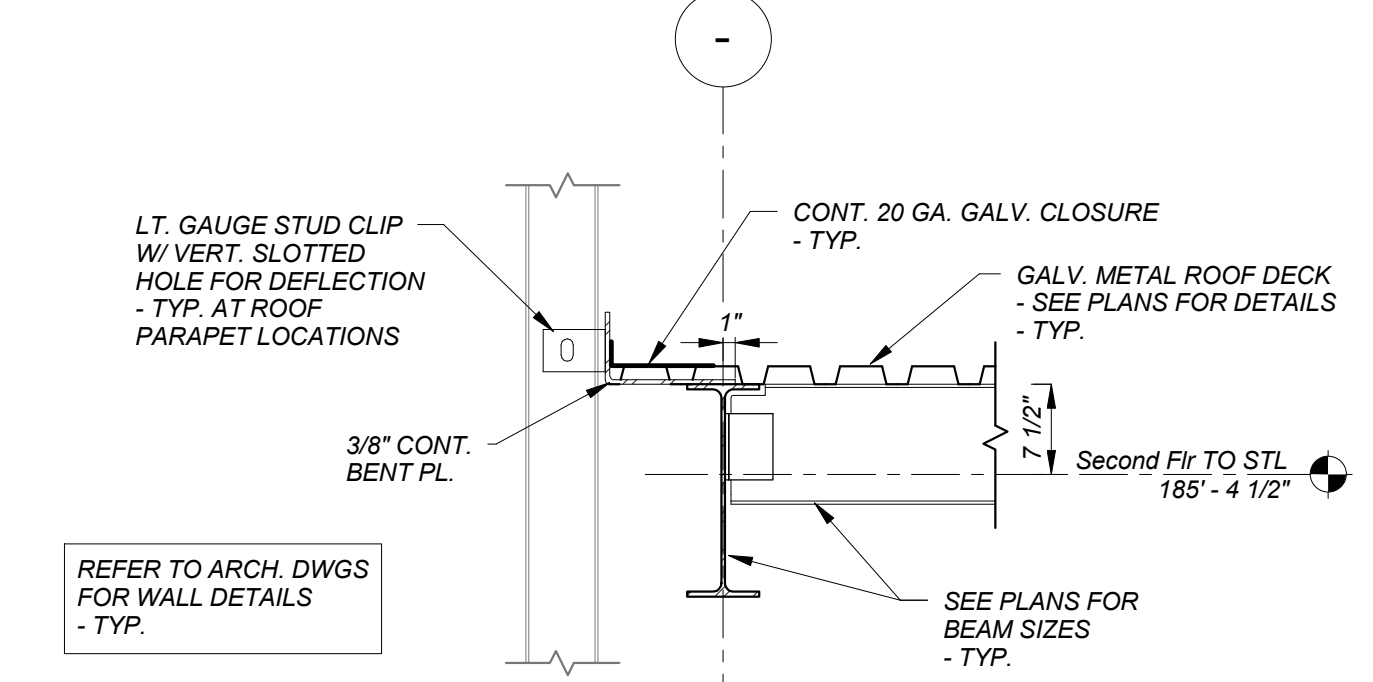
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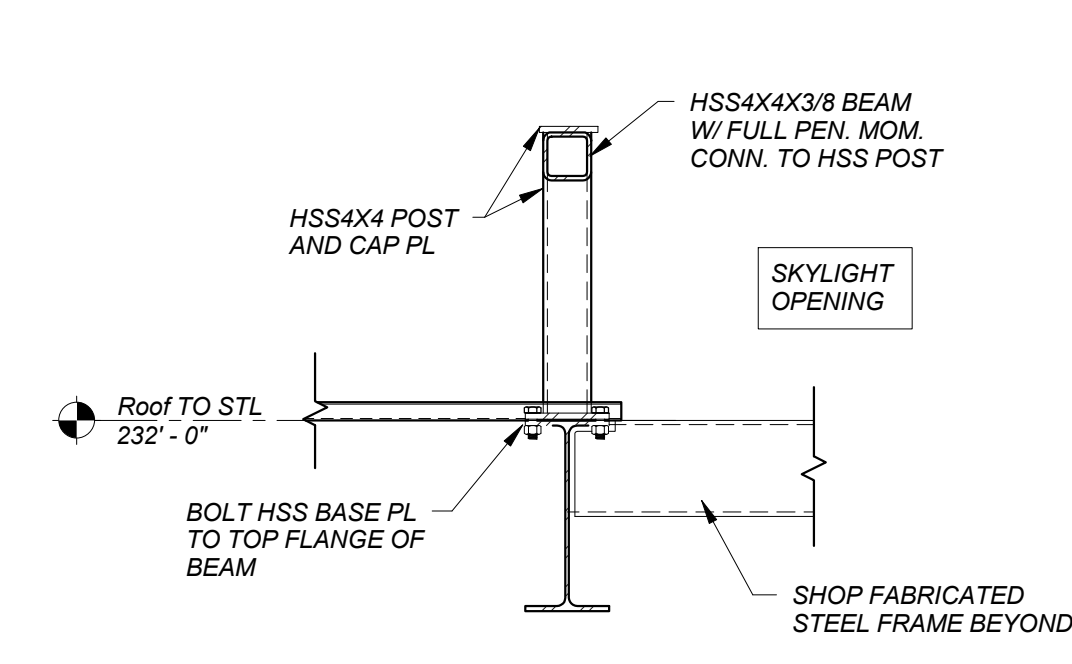
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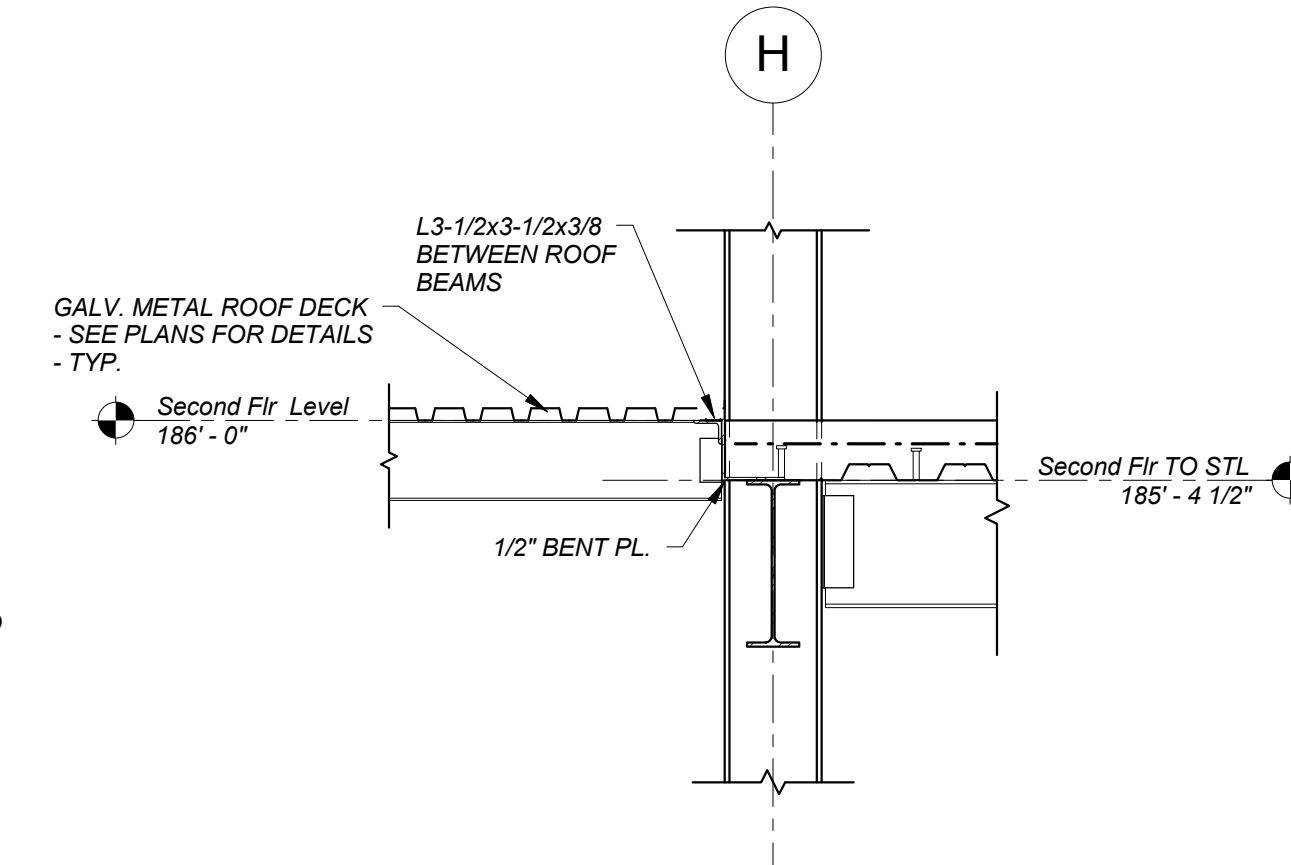
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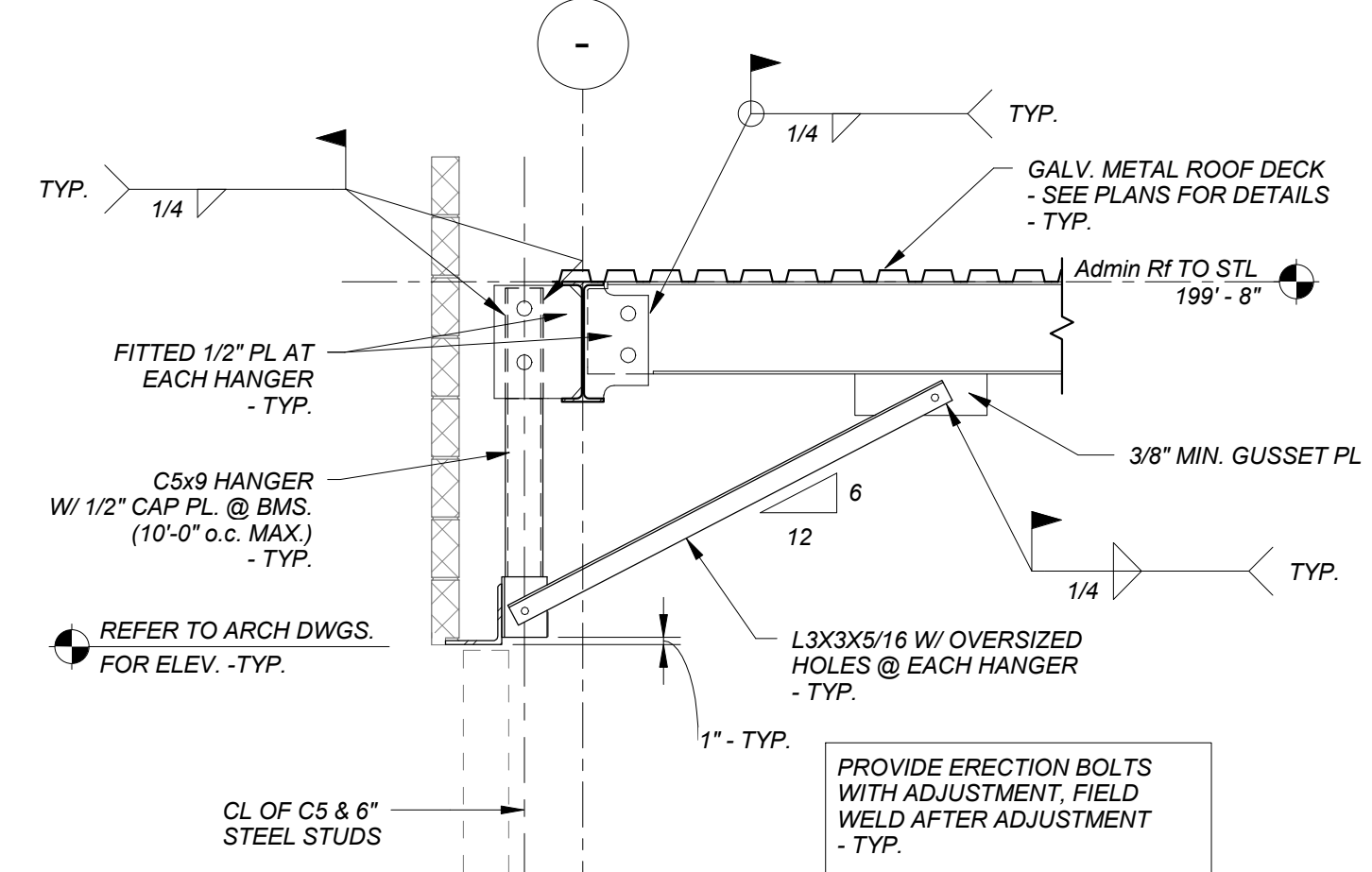
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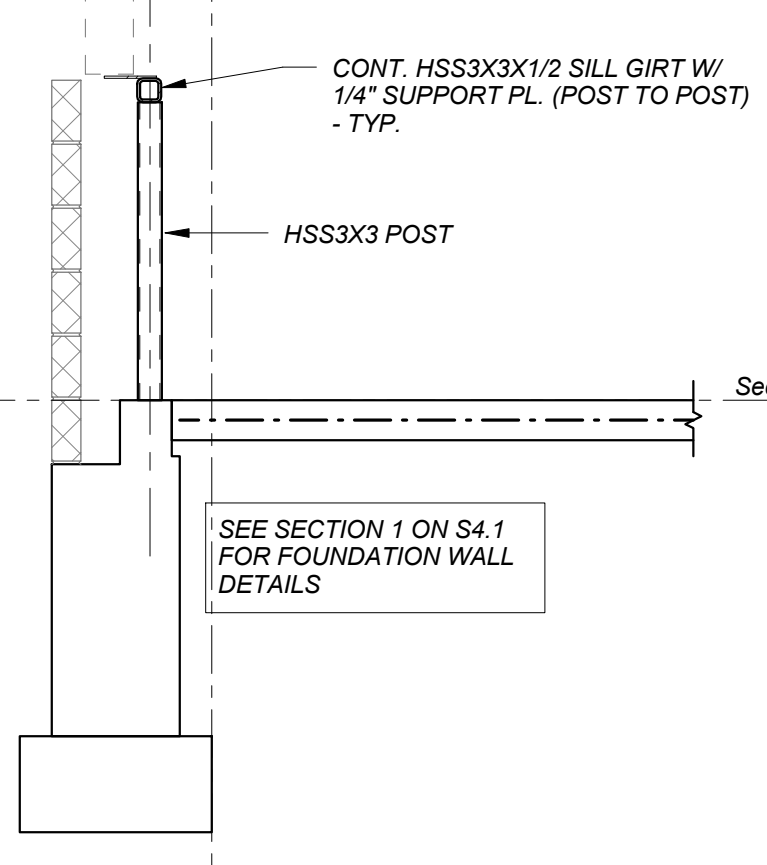
7 SECTION
3/4" = 1'-0"



8 SECTION
1/2" = 1'-0"



9 SECTION
1/2" = 1'-0"



9 SECTION
1/2" = 1'-0"

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Architect:  543 Massachusetts Ave, West Acton, MA 01720 www.omr-architects.com t: 978.264.0160	Consulting Engineer:  structural engineers T 617-527-9600 F 617-527-9606 www.fbr.com 2150 Washington St Newton MA 02462	Registration: 	Project Name and Address: <h2 style="text-align: center;">Concord-Carlisle Regional High School</h2> <p style="text-align: center;">500 Walden Street Concord, MA 01742</p>	Issue Submissions: <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>No.:</th> <th>Date:</th> <th>Description:</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>8/15/2012</td> <td>Design Development Submission</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.:	Date:	Description:	1	8/15/2012	Design Development Submission										Title: <h3 style="text-align: center;">Roof Framing Details</h3>	Project No.: 1102.00 Drawing No.: <h1 style="text-align: center;">S6.1</h1>
No.:	Date:	Description:																			
1	8/15/2012	Design Development Submission																			
				Date: August 15, 2012 Scale: As indicated Drawn: CDM Checked: MAP		© omr architects inc															