DESIGN NOTES:

1. BUILDING CODE:
   2020 BUILDING CODE OF NEW YORK STATE

2. RISK CATEGORY:
   IV

3. BUILDING GRAVITY LOADS:
   A. DEAD LOADS:

ROOF	25 PSF
2ND FLOOR	68 PSF
MEZZANINE	68 PSF
CU-1A, 1B, 1C	782 LB
DOAS-1	2110 LB
RTU- B	2590 LB
RTU- A	1452 LB
MAU-1	1328 LB

   B. LIVE LOADS:

ROOF	20 PSF
OFFICES	50 PSF
CORRIDORS/LOBBIES/STAIRS	100 PSF
STORAGE (AT MEZZANINE)	125 PSF

   C. SNOW LOADS:

GROUND SNOW LOAD, pg	30 PSF
EXPOSURE COEFFICIENT, Ce	1.0
THERMAL COEFFICIENT, Ct	1.0
SNOW IMPORTANCE FACTOR	1.2
MINIMUM SNOW LOAD, pm	24 PSF
FLAT ROOF SNOW LOAD, pf	26 PSF

   SNOW DRIFT HAS BEEN ACCOUNTED FOR IN DESIGN OF ALL NEW STRUCTURAL MEMBERS AND ANALYSIS OF EXISTING STRUCTURAL MEMBERS.

   SEE ROOF FRAMING PLAN AND APPLICABLE FRAMING SCHEDULES FOR SNOW DRIFT LOAD LOCATIONS AND MAGNITUDES TO BE INCLUDED IN DELEGATED DESIGN.

4. WIND LOADS:

BASIC WIND SPEED	128 MPH
EXPOSURE	B
INTERNAL PRESSURE COEFF., GCpi	+/- 0.18
END ZONE WIDTH, a	10 FT

DESIGN WIND ZONE:	DESIGN WIND PRESSURE:
MWFRS WALL (END ZONE)	26.0 PSF
MWFRS WALL (INTERIOR ZONE)	17.3 PSF
MWFRS ROOF (END ZONE)	-16.0 PSF
MWFRS ROOF (INTERIOR ZONE)	-16.0 PSF
UPLIFT (MAXIMUM)	-31.3 PSF
C&C WALL (END ZONE)	29.5, -39.5 PSF
C&C WALL (INT. ZONE)	29.5, -32.1 PSF
C&C FLAT ROOF (CORNER ZONE)	16.0, -84.6 PSF
C&C FLAT ROOF (END ZONE)	16.0, -62.0 PSF
C&C FLAT ROOF (INT. ZONE)	16.0, -47.0 PSF

   COMPONENT AND CLADDING VALUES LISTED ARE BASED ON 10 SQUARE FOOT "EFFECTIVE AREA" AS DEFINED BY ASCE 7-16 - MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES. ALL ITEMS SPECIFIED TO BE DESIGNED BY OTHERS SHALL BE DESIGNED TO WITHSTAND COMPONENT AND CLADDING LOADS SHOWN, UNLESS SPECIFICALLY NOTED OTHERWISE IN PLANS, SPECIFICATIONS OR BY RFI RESPONSE. WIND LOADS MAY BE REDUCED BASED ON INCREASED "EFFECTIVE AREA" WHEN CALCULATIONS ARE SUBMITTED AND REVIEWED BY ENGINEER OF RECORD PRIOR TO FINAL DESIGN SUBMISSION. SUBMITTAL SHALL INCLUDE EFFECTIVE AREA ASSUMPTIONS FOR EACH COMPONENT AND WIND LOAD CALCULATIONS USING PARAMETERS SPECIFIED HEREIN.

5. SEISMIC LOADS:

SEISMIC SITE CLASS		D
SEISMIC IMPORTANCE FACTOR, Ie		1.5
Ss = 0.290 g	S1 = 0.061 g	
Fa = 1.57	Fv = 2.40	
Sms = 0.454 g	Sm1 = 0.147 g	
Sds = 0.303 g	Sd1 = 0.098 g	
SEISMIC DESIGN CATEGORY		C

   ANALYSIS PROCEDURE:
   EQUIVALENT LATERAL FORCE PROCEDURE
   SEISMIC FORCE RESISTING SYSTEM:
   STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE, EXCLUDING CANTILEVER COLUMN SYSTEMS
   R = 3.0   Cd = 3.0 $\Omega_0 = 3.0$

SEISMIC RESPONSE COEFFICIENT, Cs	0.093
BASE SHEAR, ULTIMATE	128.3 KIPS

6. SOIL DESIGN VALUES:

SOIL BEARING CAPACITY	3,000 PSF
SUBGRADE MODULUS	150 PSI/IN

   SOIL DESIGN VALUES AS REPORTED IN GEOTECHNICAL ENGINEERING REPORT BY WHITESTONE ASSOCIATES ENGINEERING & GEOLOGY NY, PLLC DATED [09/23/2024].

7. ANY BUILDING COMPONENT NOTED AS DELEGATED DESIGN ITEMS IN DRAWINGS AND/OR SPECIFICATIONS SHALL BE DESIGNED IN ACCORDANCE WITH MINIMUM LOADS SPECIFIED ABOVE. ANY DEVIATION FROM NOTED LOAD VALUES SHALL BE SUBMITTED BY CONTRACTOR FOR REVIEW AND APPROVAL TO EOR PRIOR TO SUBMITTING SHOP DRAWINGS AND CALCULATIONS.

8. ALL DELEGATED DESIGN SHALL BE DONE TO THE ABOVE REFERENCED BUILDING CODE VERSIONS, AND THEIR REFERENCED SUBCODES.

9. ADDITIONAL DESIGN LOADS INDICATED ON STRUCTURAL DRAWINGS ARE IDENTIFIED AS FOLLOWS:
   DL = DEAD LOAD
   LL = LIVE LOAD
   Lr = ROOF LIVE LOAD
   SL = SNOW LOAD
   WL = WIND LOAD
   EQ = SEISMIC LOAD
   FL = FLOOD LOAD

GENERAL NOTES:

1. SPECIFICATIONS ARE PART OF THE CONSTRUCTION DOCUMENTS AND MUST BE USED IN CONJUNCTION WITH THE DRAWINGS. WHERE SPECIFICATIONS ARE IN CONFLICT WITH THE GENERAL NOTES OR DRAWINGS, THE MORE RESTRICTIVE LIMITATION SHALL APPLY.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BY MEASUREMENTS OR SURVEY AT THE JOB SITE AND SHALL TAKE ANY AND ALL OTHER MEASUREMENTS NECESSARY TO VERIFY THE DRAWINGS AND TO PERFORM THE WORK PROPERLY.
3. ANY DISCREPANCY BETWEEN THE DRAWINGS AND THE MEASURED DIMENSIONS OF THE EXISTING CONDITION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. NO WORK SHALL PROCEED UNTIL SUCH DISCREPANCIES HAVE BEEN RECTIFIED, INCLUDING BUT NOT LIMITED TO FABRICATION OF MATERIALS. SUCH DISCREPANCIES BETWEEN THE DRAWINGS AND THE MEASURED DIMENSIONS SHALL NOT BE THE REASONS FOR ANY EXTRA COST OR DELAY IN THE EXECUTION OF THE WORK AND THE WORK SHALL BE PERFORMED AT NO EXTRA COST TO THE OWNER.
4. ALL CONTRACTORS ARE REQUIRED TO VISIT THE SITE AND FULLY INFORM THEMSELVES AS TO THE EXISTING CONDITIONS AND LIMITATIONS PRIOR TO SUBMITTING THEIR PROPOSAL/BID. FAILURE TO VISIT THE SITE AND NOT FAMILIARIZING THEMSELVES WITH THE CONDITIONS AND LIMITATIONS WILL IN NO WAY RELIEVE THE SUCCESSFUL BIDDER FROM FURNISHING ANY MATERIALS OR PERFORMING ANY WORK THAT MAY BE REQUIRED TO COMPLETE THE WORK IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER.
5. THE CONTRACT STRUCTURAL DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR ALONE IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND SAFETY OF THE STRUCTURE AND WORKMEN DURING THE ENTIRE CONSTRUCTION PERIOD, WHICH SHALL INCLUDE BUT NOT BE LIMITED TO: DESIGN AND INSTALLATION OF BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR NEW OR EXISTING BUILDINGS, FORMS, AND SCAFFOLDING, SHORING OF RETAINING WALLS, AND OTHER TEMPORARY SUPPORTS AS REQUIRED.
6. CONTRACTOR SHALL SCHEDULE WORK IN CONSULTATION WITH THE OWNER AND IN SUCH A WAY AS TO MINIMIZE CONFLICT WITH THE OPERATION OF ANY EXISTING BUILDINGS, FACILITIES, OR RIGHTS-OF-WAY.
7. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF OSHA AND ANY OTHER GOVERNING BODIES HAVING JURISDICTION AT THE SITE.
8. IN CASE OF ANY DAMAGE TO THE CONSTRUCTION, THE CONTRACTOR SHALL REPAIR THE SAME TO THE ENTIRE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
9. CONTRACTOR SHALL INFORM THE ENGINEER OF ANY DEMOLITION, ALTERATIONS REQUIRED, OR INTERFERENCES NOT SHOWN ON THE DEMOLITION DRAWINGS FOR RESOLUTION. THE CONTRACTOR SHALL ALLOW MINIMUM SEVEN (7) WORKING DAYS FOR RESOLUTION OF THE CONDITION UNLESS ADDITIONAL TIME IS STATED TO BE REQUIRED BY THE ENGINEER.
10. TYPICAL DETAILS ON THE DRAWINGS APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SUCH DETAILS APPLY WHETHER OR NOT DETAILS ARE REFERENCED AT EACH LOCATION. NOTIFY ENGINEER OF CONFLICTS REGARDING APPLICABILITY OF TYPICAL DETAILS.
11. DO NOT LOAD THE FINISHED SLAB-ON-GRADE OR ELEVATED SLABS WITH ERECTION EQUIPMENT. DO NOT STACK OR STORE CONSTRUCTION MATERIALS ON DECKS/SLABS. DO NOT CAUSE IMPACT LOADS TO DECK/SLAB DURING CONSTRUCTION.
12. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL CHASES, INSERTS, OPENING, SLEEVES, FINISHES, DEPRESSIONS, PADS, AND WALL OPENINGS PRIOR TO CONSTRUCTION.
13. PRINCIPAL OPENINGS THROUGH THE FRAMING AND SLABS ARE SHOWN ON DRAWINGS. COORDINATE WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR ALL REQUIRED OPENINGS AND PROVIDE FOR ALL REQUIRED OPENINGS WHETHER SHOWN ON THE STRUCTURAL DRAWING OR NOT. VERIFY SIZE AND LOCATION OF OPENINGS WITH THE MECHANICAL CONTRACTOR. DEVIATIONS FROM THE OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE APPROVED PRIOR TO CONSTRUCTION/FABRICATION OF THE REQUIRED OPENINGS.
14. LOADING FOR MECHANICAL EQUIPMENT ARE BASED ON THE UNITS SHOWN ON THE MECHANICAL DRAWINGS. ANY CHANGED IN TYPE, SIZE, OR NUMBER OF PIECES OF EQUIPMENT SHALL BE REPORTED TO THE ENGINEER OF RECORD FOR VERIFICATION OF THE ADEQUACY OF SUPPORTING MEMBERS PRIOR TO THE PLACEMENT OF SUCH EQUIPMENT.
15. SEE ARCHITECTURAL DRAWINGS FOR ELEVATIONS NOT SHOWN AND FOR EXACT LOCATION OF ALL SLAB DEPRESSIONS AND HOUSEKEEPING PADS. THE CONTRACTOR SHALL COMPARE THE STRUCTURAL SECTIONS WITH ARCHITECTURAL SECTIONS AND REPORT ANY DISCREPANCY TO THE ARCHITECT AND/OR ENGINEER PRIOR TO FABRICATING OR INSTALLING STRUCTURAL MEMBERS.

EXCAVATION NOTES:

1. EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROJECT GEOTECHNICAL REPORT. WHERE STRUCTURAL CONTRACT DOCUMENTS CONFLICT WITH THE GEOTECHNICAL REPORT, THE MORE RESTRICTIVE LIMITATION SHALL APPLY.
2. PROTECT ALL ABOVE AND BELOW GRADE UTILITIES WHICH ARE TO REMAIN.
3. PROTECT ALL PLANT LIFE, LAWNS, AND OTHER FEATURES REMAINING AS A PORTION OF THE FINAL LANDSCAPING.
4. PROTECT BENCHMARKS, EXISTING STRUCTURES, FENCES, SIDEWALKS, ROADWAYS, FINISHED PAVINGS, AND CURBS FROM EXCAVATION EQUIPMENT AND VEHICULAR TRAFFIC.
5. GRADE TOP PERIMETER OF EXCAVATION TO PREVENT SURFACE WATER FROM DRAINING INTO EXCAVATION.
6. HAND TRIM EXCAVATION. REMOVE LOOSE MATTER.
7. REMOVE LUMPED SUBSOIL, BOULDERS, AND ROCK.
8. UNSUITABLE BEARING MATERIAL, AS DEFINED IN THE PROJECT GEOTECHNICAL REPORT, IS TO BE REMOVED AND REPLACED WITH SUITABLE FILL PER THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
9. NOTIFY ENGINEER OF UNEXPECTED SUBSURFACE CONDITIONS AND DISCONTINUE WORK IN AFFECTED AREA UNTIL NOTIFIED TO RESUME WORK.
10. CORRECT UNAUTHORIZED EXCAVATION AT NO EXTRA COST TO OWNER IN ACCORDANCE WITH BACKFILLING NOTES.
11. STOCKPILE EXCAVATED MATERIAL IN AREA DESIGNATED ON SITE AND REMOVE EXCESS MATERIAL NOT BEING REUSED FROM SITE. DO NOT STOCKPILE EXCAVATED MATERIAL WITHIN 10 FEET, OR A DISTANCE EQUAL TO THE DEPTH OF EXCAVATION, OF THE EDGE OF EXCAVATION.
12. PROTECT EXCAVATIONS BY METHODS REQUIRED TO PREVENT CAVE-IN OR LOOSE SOIL FROM FALLING INTO EXCAVATION.
13. VERIFY LOCATION OF EXISTING STRUCTURES AND UTILITIES PRIOR TO EXCAVATION. CONTRACTOR SHALL ENSURE ALL SURROUNDING STRUCTURES ARE PROTECTED FROM ALL EFFECTS OF EXCAVATION, INCLUDING BUT NOT LIMITED TO: SETTLEMENT, SLIDING, CAVE-IN, AND VIBRATION.
14. SLOPE SIDES OF EXCAVATIONS AT A MAXIMUM SLOPE OF 1.5H:1V, UNLESS STEEPER SLOPE IS PERMITTED BY THE GEOTECHNICAL ENGINEER.
15. WHERE THE REQUIRED EXCAVATION SLOPE CANNOT BE PROVIDED, CONTRACTOR IS RESPONSIBLE FOR OBTAINING A SUPPORT OF EXCAVATION (SOE) DESIGN FOR VERTICAL EXCAVATION. SUPPORT OF EXCAVATION DESIGN SHALL INCLUDE EXCAVATION PLAN, SECTIONS, AND NOTES, AND BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONSTRUCTION.

BACKFILLING NOTES:

1. BACKFILLING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROJECT GEOTECHNICAL REPORT. WHERE STRUCTURAL CONTRACT DOCUMENTS CONFLICT WITH THE GEOTECHNICAL REPORT, THE MORE RESTRICTIVE LIMITATION SHALL APPLY.
2. BACKFILLING SHALL BE DONE WITH TYPE C SAND: NATURAL RIVER OR BANK SAND, WASHED FREE OF SILT, CLAY, LOAM, FRIABLE OR SOLUBLE MATERIALS, AND ORGANIC MATTER. FILL SHALL BE GRADED IN ACCORDANCE WITH ANSI/ASTM C136 WITHIN THE FOLLOWING LIMITS, UNLESS DIRECTED OTHERWISE IN THE GEOTECHNICAL REPORT:

SIEVE SIZE:	PERCENT PASSING:
NO. 4	100
NO. 14	10-100
NO. 50	5-90
NO. 100	4-30
NO. 200	0-1

3. VERIFY EXISTING CONDITIONS AND SUBSTRATE ARE SUITABLE PRIOR TO BACKFILLING.
4. VERIFY EXCAVATED MATERIALS TO BE REUSED AS FILL MATERIAL ARE ACCEPTABLE PRIOR TO BACKFILLING.
5. COMPACT SUBGRADE TO 95 PERCENT MAXIMUM DRY DENSITY IN ACCORDANCE WITH ANSI/ASTMD1557.
6. CUT OUT SOFT AREAS OF SUBGRADE NOT CAPABLE OF IN-SITU COMPACTION. BACKFILL AND COMPACT TO DENSITY EQUAL TO OR GREATER THAN REQUIREMENTS FOR SUBSEQUENT BACKFILL MATERIAL.
7. BACKFILL AREAS WITH UNFROZEN MATERIALS.
8. SYSTEMATICALLY BACKFILL TO ALLOW MAXIMUM TIME FOR NATURAL SETTLEMENT. DO NOT BACKFILL OVER POROUS, WET, FROZEN OR SPONGY MATERIALS. REMOVE ANY STANDING WATER PRIOR TO BACKFILLING.
9. PLACE AND COMPACT MATERIALS IN CONTINUOUS LAYERS NOT EXCEEDING 6 INCHES COMPACTED DENSITY.
10. ALL BACKFILL MATERIALS SHALL BE COMPACTED TO 95 PERCENT MAXIMUM DRY DENSITY IN ACCORDANCE WITH ANSI/ASTM D1557. MAINTAIN OPTIMUM MOISTURE CONTENT TO ATTAIN REQUIRED DENSITY.
11. AT COMPLETION OF BASEMENT OR FOUNDATION WALL CONSTRUCTION, BACKFILL SHALL BE PLACED LEVEL WITH FINAL TOP OF WALL ELEVATION. IF FINAL GRADING, PAVING, LANDSCAPING AND/OR STORM DRAINAGE INSTALLATION ADJACENT TO THE WALL IS NOT PLACED IMMEDIATELY AFTER COMPLETION, TEMPORARY GRADING AND DRAINAGE SHALL BE PROVIDED TO ENSURE WATER RUNOFF IS NOT DIRECTED AT THE WALL OR ALLOWED TO COLLECT OR POND BEHIND THE WALL UNTIL FINAL CONSTRUCTION ADJACENT TO THE WALL IS COMPLETED.
12. DO NOT BACKFILL AGAINST BASEMENT WALL UNTIL FIRST FLOOR FRAMING IS INSTALLED. BASEMENT WALLS ARE TO BE ADEQUATELY BRACED AGAINST CONSTRUCTION ACTIVITIES UNTIL FIRST FLOOR FRAMING IS FULLY INSTALLED.

FOUNDATION NOTES:

1. FOUNDATION DESIGN IS BASED UPON THE GEOTECHNICAL ENGINEERING REPORT PROVIDED BY WHITESTONE ASSOCIATES ENGINEERING & GEOLOGY NY, PLLC , DATED 09/23/2024. COORDINATE STRUCTURAL PLANS AND DETAILS WITH REQUIREMENTS OF GEOTECHNICAL REPORT AND ANY ADDENDUMS THERETO.
2. FOOTING DESIGN IS BASED ON 3,000 PSF NET ALLOWABLE SOIL BEARING PRESSURE.
3. REFER TO THE GEOTECHNICAL REPORT AND THE PROJECT SPECIFICATIONS FOR GENERAL REQUIREMENTS OF EARTHWORK, EXCAVATION, SUBGRADE PREPARATION, FILL AND COMPACTION, WATERPROOFING, AND OTHER PERTINENT REQUIREMENTS AND INFORMATION. IF THERE IS A CONFLICT BETWEEN GEOTECHNICAL REPORT AND STRUCTURAL PLANS OR SPECIFICATIONS, THE MORE STRINGENT CRITERIA SHALL APPLY UNLESS OTHERWISE DIRECTED BY AN RFI.
4. PROTECT PIPES AND CONDUITS RUNNING THROUGH WALLS AND SLABS WITH 1/2 INCH EXPANSION JOINT MATERIAL. LOWER CONTINUOUS FOOTINGS AND GRADE BEAMS PERPENDICULAR TO PIPE RUNS TO ALLOW PIPES TO PASS ABOVE THE FOOTING. LOWER FOOTING AND GRADE BEAMS PARALLEL TO PIPE RUNS TO AVOID DISCHARGE ONTO ADJACENT TRENCH EXCAVATIONS.
5. MAINTAIN SPECIFIED SUBGRADE AND FILL MOISTURE CONTENT UNTIL FOUNDATIONS ARE PLACED.
6. ARRANGE FOR OWNER'S INDEPENDENT TESTING AGENCY TO MONITOR CUT AND FILL OPERATIONS AND PERFORM FIELD DENSITY AND MOISTURE CONTENT TESTS TO VERIFY COMPACTION AND APPROVE FOOTING SUBGRADES PRIOR TO PLACING CONCRETE.
7. DO NOT PLACE FOOTINGS OR SLABS AGAINST SUBGRADE CONTAINING FREE WATER, FROST OR ICE.
8. MAINTAIN PROPER SITE DRAINAGE DURING CONSTRUCTION TO ENSURE SURFACE RUNOFF AWAY FROM STRUCTURES AND TO PREVENT PONDING OF SURFACE RUNOFF NEAR THE STRUCTURES.

CONCRETE NOTES:

1. PROVIDE BATCH MIXING, TRANSPORTATION, PLACING, AND CURING OF CONCRETE IN ACCORDANCE WITH RECOMMENDATIONS OF ACI 301 AND ACI 318, LATEST EDITIONS.
2. USE TYPE I PORTLAND CEMENT UNLESS NOTED OTHERWISE. PROVIDE ADMIXTURES AND SPECIAL REQUIREMENTS AS SPECIFIED. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. ALL CONCRETE SHALL BE NORMAL WEIGHT (145 PCF) CONCRETE, U.O.N.
4. CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH (f'c) AS FOLLOWS:

A. FOOTINGS, PIERS, AND FOUNDATION WALLS	4,000 PSI
B. SLABS-ON-GRADE	4,000 PSI
C. SLAB ON METAL DECK	4,000 PSI
D. ALL OTHER CONCRETE, U.O.N.	4,000 PSI

5. ALL CONCRETE SHALL HAVE A MAXIMUM WATER-CEMENT RATIO OF 0.50 +/- 0.10.
6. ALL CONCRETE SHALL BE AIR-ENTRAINED, WITH AN AIR CONTENT OF 6% +/- 1%, EXCEPT WHERE SLABS ARE TROWELED (USE AIR ENTRAINMENT OF 3% MAXIMUM.)
7. PROVIDE CONCRETE MIXES DESIGNED BY A QUALIFIED TESTING LABORATORY FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER. CONCRETE MIXES SHALL INCLUDE ALL PROPOSED ADMIXTURES, AND WEIGHTS/VOLUMES OF ALL COMPONENT MATERIALS, INCLUDING SOURCE AND/OR MANUFACTURER PRODUCT INFORMATION. CONCRETE MIX DESIGNS SHALL BE PROVIDED FOR EACH TYPE OF CONCRETE REQUIRED ON PROJECT.
8. PROVIDE CONSTRUCTION AND CONTROL JOINTS AS REQUIRED BY ACI CODE AND AS INDICATED ON DRAWINGS. HORIZONTAL CONSTRUCTION JOINTS ARE NOT ALLOWED UNLESS SPECIFICALLY NOTED OR APPROVED BY STRUCTURAL ENGINEER. SUBMIT PLAN TO ENGINEER INDICATING PROPOSED CONTROL AND EXPANSION JOINT LOCATIONS IN CONCRETE SLABS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
9. CONCRETE SHALL BE PLACED AND CURED IN ACCORDANCE WITH ACI 305.1 AND ACI 305R FOR HOT-WEATHER CONCRETING.
10. CONCRETE SHALL BE PLACED AND CURED IN ACCORDANCE WITH ACI 306.1 AND ACI 306R FOR COLD-WEATHER CONCRETING. DO NOT PLACE CONCRETE AGAINST FROZEN SURFACES.
11. CHAMFER EXPOSED CONCRETE EDGES 3/4 INCH, UNLESS NOTED OTHERWISE.
12. WIRE BRUSH AND CLEAN CONSTRUCTION JOINTS PRIOR TO POURING NEW CONCRETE.
13. PROVIDE ADEQUATE STRUCTURAL FRAMING AS APPROVED BY STRUCTURAL ENGINEER FOR MECHANICAL OPENINGS THROUGH THE SLABS, WALLS AND FLOOR DECK.
14. PROVIDE BROOM FINISH ON ALL SLABS, U.O.N. COORDINATE FINISH WITH ARCHITECTURAL AND/OR CIVIL DRAWINGS. FOR SIDEWALKS, PROVIDE FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.

CONCRETE REINFORCING NOTES:

1. PROVIDE DETAILING, FABRICATION, AND INSTALLATION OF REINFORCING AND ACCESSORIES IN ACCORDANCE WITH ACI 301, ACI 315, AND ACE 318, LATEST VERSIONS.
2. PROVIDE NEW BILLET STEEL REINFORCING BARS IN ACCORDANCE WITH ASTM A615, GRADE 60.
3. COORDINATE PLACEMENT OF CAST-IN-PLACE EMBEDS AND ANCHOR RODS. SET ANCHOR RODS WITH A TEMPLATE. SECURELY ATTACH EMBEDDED ITEMS TO FORMWORK OR REINFORCING.
4. PROVIDE CLASS "B" REINFORCEMENT SPLICES FOR CONTINUOUS REINFORCEMENT. PROVIDE STANDARD 90-DEGREE HOOKS IN ACCORDANCE WITH ACI 318, UNLESS NOTED OTHERWISE.
5. MAINTAIN THE FOLLOWING CONCRETE COVERAGE FOR REINFORCING STEEL UNLESS NOTED OTHERWISE:
   A. CONCRETE CAST AGAINST EARTH: 3 INCHES
   B. CONCRETE EXPOSED TO WEATHER:
      NO. 6 AND LARGER: 2 INCHES
      NO. 5 AND SMALLER: 1 1/2 INCHES
   C. CONCRETE NOT EXPOSED TO WEATHER AND NOT IN CONTACT WITH THE GROUND:
      SLABS AND WALLS, NO. 11 AND SMALLER: 3/4 INCHES
6. DO NOT WELD OR BEND REINFORCEMENT IN THE FIELD UNLESS SPECIFICALLY SHOWN OR APPROVED BY STRUCTURAL ENGINEER.
7. WHEN SPECIFICALLY APPROVED, PROVIDE WELDED REINFORCEMENT IN ACCORDANCE WITH ASTM A706, GRADE 60. USE LOW HYDROGEN ELECTRODES FOR WELDING OF REINFORCEMENT IN CONFORMANCE WITH "RECOMMENDED PRACTICES FOR WELDING REINFORCING STEEL," AMERICAN WELDING SOCIETY, AWS D12.1.
8. WHERE REQUIRED, PROVIDE DOWELS TO MATCH SIZE AND SPACING OF MAIN REINFORCING, U.O.N.
9. COORDINATE PLACEMENT OF REINFORCING DOWELS TO MASONRY WALLS WITH MASONRY WALL CELL LOCATIONS.
10. PROVIDE CONTINUOUS HORIZONTAL WALL REINFORCEMENT WITH 90-DEGREE BENDS AND EXTENSIONS AT CORNERS AND INTERSECTIONS AS SHOWN ON TYPICAL BAR PLACING DETAILS.

STRUCTURAL STEEL NOTES:

1. DETAIL, FABRICATE, AND ERECT STRUCTURAL STEEL IN ACCORDANCE WITH THE FOLLOWING, LATEST EDITIONS:
   A. AISC 360, "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS"
   B. AISC MANUAL OF STEEL CONSTRUCTION
   C. AISC 303, "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"
   D. AWS D1.1, "STRUCTURAL WELDING CODE"
2. PROVIDE STRUCTURAL STEEL OF THE FOLLOWING ASTM DESIGNATIONS, UNLESS NOTED OTHERWISE:

A. WIDE FLANGE SHAPES:	A992
B. CHANNELS, ANGLES, AND PLATES:	A36
C. HOLLOW STRUCTURAL SECTIONS, RECTANGULAR:	A500, GR. C
D. HOLLOW STRUCTURAL SECTIONS, CIRCULAR:	A500, GR. C
E. STRUCTURAL PIPE:	A53, GR. B
F. HIGH-STRENGTH PLATES:	A572, GR. 50
G. ANCHOR RODS:	F1554, GR. 36

3. PROVIDE CONNECTION MATERIALS OF THE FOLLOWING ASTM DESIGNATIONS, U.O.N.:
   A. STIFFENER AND DOUBLER PLATES TO MATCH THE GRADE OF PRIMARY STRUCTURAL MEMBER.

B. HIGH STRENGTH BOLTS:	F3125, GR. A325
C. HARDENED STEEL WASHERS:	F436
D. THREADED RODS:	A36

4. WELD MINIMUM SIZE AND STRENGTH:
   A. FILLET WELDS SHALL NOT BE SMALLER THAN THE MINIMUM SIZE SPECIFIED IN TABLE J2.4 OF THE AISC MANUAL.
   B. PROVIDE MINIMUM EFFECTIVE THROAT THICKNESS OF PARTIAL PENETRATION GROOVE WELDS AS SPECIFIED IN TABLE J2.3 OF THE AISC MANUAL.
   C. SIZE WELDS IN TENSION CONNECTIONS TO DEVELOP THE FULL TENSILE STRENGTH OF THE MEMBER ELEMENT JOINED ON ALL SHOP AND FIELD WELDS, UNLESS NOTED OTHERWISE ON DRAWINGS.
   D. WHERE CONNECTIONS ARE NOTED ON DRAWINGS AS MOMENT CONNECTIONS, PROVIDE WELDS TO DEVELOP THE FULL FLEXURUAL CAPACITY OF THE LESSER MEMBER.
      PROVIDE ELECTRODES FOR FIELD AND SHOP WELDING THAT CONFORM TO ASTM A233 (CLASS 70).
   E. ALL WELDS ARE CONTINUOUS FOR THE FULL LENGTH OF THE CONNECTION, UNLESS NOTED OTHERWISE ON DRAWINGS.
5. PROVIDE MINIMUM OF TWO BOLTS PER BOLTED CONNECTION. MINIMUM BOLT DIAMETER SHALL BE 3/4 INCH.
6. PROVIDE BOLTS, NUTS, AND WASHERS THAT ARE HOT DIP GALVANIZED ACCORDING TO ASTM A153, CLASS C, WHEN USED TO CONNECT STEEL ELEMENTS THAT ARE HOT DIP GALVANIZED AFTER FABRICATION.
7. SUBMIT CALCULATIONS FOR CONNECTION DESIGNS NOT FULLY DETAILED ON DRAWINGS. DESIGN CONNECTIONS UNDER SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE PROJECT IS BEING CONSTRUCTED, AND EMPLOYED BY THE STEEL FABRICATOR. DESIGN CALCULATIONS SHALL BE SIGNED AND SEALED BY FABRICATOR'S REGISTERED PROFESSIONAL ENGINEER. SHOP DRAWINGS SUBMITTED WITHOUT COMPLETE DESIGN CALCULATIONS MAY NOT BE REVIEWED.
8. PROVIDE SIMPLE SHEAR CONNECTIONS FOR STEEL CONNECTIONS NOT FULLY DETAILED BY UTILIZING HIGH STRENGTH BEARING BOLTS IN SINGLE OR DOUBLE SHEAR. PROVIDE DOUBLE ANGLE BOLTED CONNECTIONS WHERE POSSIBLE. CONNECTION DESIGNER SHALL DESIGN SHEAR CONNECTION FOR THE LARGER OF:
   A. REACTION SHOWN ON DRAWINGS, OR
   B. MAXIMUM END REACTION RESULTING FROM THE APPLICATION OF THE ALLOWABLE UNIFORM LOADS LISTED IN TABLES OF PART 2 OF THE AISC MANUAL OF STEEL CONSTRUCTION, PLUS ANY LOADS OR REACTIONS OF MEMBERS SUPPORTED BY BEAM WITHIN THREE FEET OF BEAM END AND VERTICAL COMPONENTS OF FORCES IN BRACE MEMBERS FRAMING INTO BEAM.
9. STEEL FABRICATION:
   A. FABRICATE AND ASSEMBLE STRUCTURAL MEMBERS / ASSEMBLIES IN SHOP TO GREATEST EXTENT POSSIBLE.
   B. SPLICING OF STRUCTURAL STEEL MEMBERS IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE ENGINEER OF RECORD.
   C. FABRICATOR SHALL BE RESPONSIBLE FOR ALL ERRORS OF DETAILING ON THE SHOP DRAWINGS, ERRORS IN FABRICATION, AND THE CORRECT FITTING OF STRUCTURAL STEEL MEMBERS.
   D. ERECTION TOLERANCES SHALL CONFORM TO THE AISC CODE OF STANDARD PRACTICE.
   E. FIELD MODIFICATION OF STRUCTURAL STEEL IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE ENGINEER OF RECORD.
   F. CLEAN STEEL OF RUST, LOOSE MILL SCALE, AND OTHER FOREIGN MATERIALS WHERE REQUIRED FOR FABRICATION, FITTING UP, WELDING, PRIMING, OR PAINTING.
   G. DO NOT CUT STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT PRIOR REVIEW AND APPROVAL OF THE ENGINEER OF RECORD.
10. HOT DIP GALVANIZE AFTER FABRICATION ALL STRUCTURAL STEEL AND THEIR CONNECTIONS PERMANENTLY EXPOSED TO WEATHER OR CORROSIVE ENVIRONMENTS. ITEMS INCLUDED BUT NOT LIMITED TO:
    A. SHELF ANGLES
    B. LOOSE LINTELS
    C. PLATES EMBEDDED IN CONCRETE
11. EXAMINE THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR OTHER ITEMS THAT REQUIRE HOT-DIPPED GALVANIZATION.
12. PROVIDE DECK SUPPORT PLATES AND/OR ANGLES AT ALL COLUMNS.
13. FURNISH STEEL SHOP DRAWINGS FOR ARCHITECT'S AND STRUCTURAL ENGINEER'S REVIEW PRIOR TO FABRICATION. INCLUDE WELDING PROCEDURES, TESTING PROGRAMS FOR WELDING AND HIGH STRENGTH BOLTING, COATING MATERIAL, AND ERECTION SEQUENCE ON SHOP DRAWINGS. SHOP DRAWINGS SHALL NOT BE REPRODUCTIONS OF CONTRACT DOCUMENTS. SHOP DRAWINGS SHALL BE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROPOSED CONSTRUCTION, AND ALL DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY SAID ENGINEER.
14. HEADED STUDS (SHEAR AND ANCHOR) AND DEFORMED ANCHORS:
    A. PROVIDE HEADED STUDS (SHEAR AND ANCHOR) MADE OF MATERIALS CONFORMING TO ASTM A108.
    B. PROVIDE DEFORMED ANCHORS MADE OF MATERIAL CONFORMING TO ASTM A496.
    C. WELD STUDS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. MANUAL ARC (STICK) WELDING OF HEADED STUDS AND/OR DEFORMED ANCHORS IS NOT ALLOWED.

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JJN	SRK	JJN	DJA

PROJECT No:	DATE:	SCALE:
TRFD 2302	FEBRUARY 2025	AS SHOWN

CLIENT

THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

THIELLS 26 FD

65 W RAMAPO ROAD
GARNERVILLE, NY 10923

CONTRACT
CONTRACT G

STATUS
FINAL BID DOCUMENT

SHEET TITLE
GENERAL NOTES

DRAWING No.
S 001.00

MASONRY NOTES:

1. CONSTRUCT MASONRY IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE ACI-530 / ASCE 5 / TMS 402, LATEST EDITION "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES."
2. PROVIDE CONCRETE MASONRY UNITS (CMU) CONFORMING TO ASTM C90 GRADE N, WITH A MINIMUM NET COMPRESSIVE STRENGTH (F'M) OF 2,000 PSI. MASONRY STRENGTH SHALL BE DETERMINED BY THE UNIT STRENGTH METHOD OR THE PRISM TEST METHOD AS DESCRIBED BY ACI 530.
3. PROVIDE MORTAR CONFORMING TO THE REQUIREMENTS OF ASTM C-270, TYPE S (OR AS APPLICABLE). CEMENT USED FOR MORTAR SHALL BE PORTLAND CEMENT WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 750 PSI.
4. PROVIDE GROUT CONFORMING TO THE REQUIREMENTS OF ASTM C476 COARSE GROUT, WITH A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
5. PROVIDE REINFORCING BARS CONFORMING TO ASTM A615, GRADE 60. ALL WELDED REINFORCING SHALL BE ASTM A706. PROVIDE SPACERS AND TIES AS NEEDED TO PROPERLY SECURE REINFORCING PRIOR TO GROUTING. ALL CELLS WITH REINFORCING SHALL BE FULLY GROUTED.
6. MASONRY SHALL COMPLY WITH THE TYPICAL DETAILS FOR CONCRETE MASONRY WALL REINFORCING AND CONCRETE MASONRY OPENING REINFORCING AS SHOWN IN THE STRUCTURAL DRAWINGS.
7. SPECIAL INSPECTION IS REQUIRED ON ALL MASONRY WALLS, IN ACCORDANCE WITH BUILDING CODE REFERENCED ABOVE.
8. LAP REINFORCING IN ACCORDANCE WITH ACI 530, UNLESS INDICATED OTHERWISE IN STRUCTURAL DRAWINGS.
9. MORTARED CELLS SHALL BE PLACED CONTINUOUSLY AT THE ELEVATION OF CONSTRUCTION AND SHALL NOT BE PERMITTED TO BE PUMPED OR PLACED FROM ABOVE. GROUTING OF THE MASONRY CELLS SHALL BE PERMITTED IN THE INSTANCES WHERE CONTINUOUS MORTAR PLACEMENT CANNOT BE ACHIEVED.
10. MAXIMUM HEIGHT TO WHICH MASONRY SHALL BE LAID BEFORE GROUTING IS 5 FEET. MAXIMUM GROUT PLACEMENT HEIGHT IS 5 FEET. IF GROUT PLACEMENT HEIGHT EXCEEDS 5 FEET, PROVIDE CLEANOUT OPENINGS AT THE BOTTOM OF EACH PLACEMENT. CLEANOUT OPENINGS SHALL BE PROVIDED AT EACH CELL TO BE FILLED WITH GROUT.
11. REINFORCE MASONRY WHERE SHOWN ON STRUCTURAL DRAWINGS. TIE REINFORCING IN POSITION AND PLACE GROUT AROUND REINFORCING. DO NOT PUSH REINFORCING DOWN INTO PREVIOUSLY PLACED GROUT FILL. SET ANCHOR BOLTS SIMILARLY.
12. HORIZONTAL JOINT REINFORCEMENT SHALL NOT EXTEND THROUGH EXPANSION JOINTS IN THE MASONRY. JOINT REINFORCEMENT SHALL BE PLACED CONTINUOUSLY WITH THE ENDS LAPPED 6" FOR DEFORMED BARS AND 12" FOR SMOOTH BARS.
13. TIE MASONRY WYTHES TOGETHER WITH HORIZONTAL REINFORCING AS SPECIFIED.
14. PROVIDE VERTICAL BARS, SIZE AND SPACING MATCHING WALL REINFORCING, AT ALL CORNERS, ENDS OF WALLS, EACH SIDE OF CONTROL JOINTS, AND EACH SIDE OF WALL OPENINGS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF CONTROL JOINTS.
15. ALL CORNERS AND INTERSECTIONS OF STRUCTURAL MASONRY WALLS SHALL BE CONSTRUCTED BY INTERLOCKING COURSE.
16. ALL LINTELS SHALL BEAR 8" MINIMUM EACH SIDE OF OPENING ON SOLID GROUTED CELLS, UNLESS NOTED OTHERWISE.
17. VERTICAL BARS INTERRUPTED BY STEEL FRAMING SHALL BE WELDED TO TOP OF STEEL FRAMING, OR FASTENED TO TOP OF STEEL WITH REBAR COUPLERS WELDED TO TOP OF STEEL.
18. MORTAR BED JOINTS SHALL NOT EXCEED 3/8" THICKNESS, OR AS SPECIFIED IN EXPOSED AREAS WITH TIGHTER BED JOINT TOLERANCE.
19. COORDINATE PLACEMENT OF VERTICAL WALL DOWELS EMBEDDED INTO FOUNDATIONS AND FLOOR SLABS WITH CELLS OF MASONRY WALL. DOWEL SIZE AND SPACING TO MATCH VERTICAL WALL REINFORCING, U.O.N.
20. REFER TO ARCHITECTURAL DRAWINGS FOR NON-STRUCTURAL MASONRY PARTITION WALL CONSTRUCTION..

METAL DECK NOTES:

1. DESIGN, FABRICATE, AND ERECT METAL DECK IN CONFORMANCE WITH THE STEEL DECK INSTITUTE (SDI) "CODE OF RECOMMENDED STANDARD PRACTICE AND BASIC DESIGN SPECIFICATIONS".
2. FORM ROOF AND FLOOR DECK FROM STEEL SHEETS CONFORMING TO ASTM A611 GRADE C AND D OR A653 OR HIGHER SPECIFICATIONS WITH A MINIMUM YIELD STRENGTH OF 33 KSI.
3. METAL DECK PANELS ARE TO BE 3-SPAN CONTINUOUS, UNLESS OTHERWISE NOTED.
4. PROVIDE SHORING FOR METAL DECK IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS INDICATED METAL DECK ERECTION DRAWINGS.
5. ATTACH METAL DECK TO STEEL SUPPORT MEMBERS AS INDICATED AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION. WHEN DECK IS SCHEDULED TO BE EXPOSED, DE-SLAG, CLEAN, AND TOUCH UP WELDS WITH ZINC-RICH PRIMER.
6. LAP METAL DECK ENDS MINIMUM OF 2 INCHES.
7. WHEN FASTENING DECK TO SUPPORT MEMBERS WITH WELDS, PROVIDE WELDING MATERIALS INSTALLATION PROCEDURES TO PREVENT BURNING OF HOLES IN DECK. PROVIDE WELD WASHERS WHERE REQUIRED.
8. PROVIDE CLOSURE STRIP WHERE CHANGES IN DECK DIRECTION OCCUR. CLOSURE TO BE SAME DEPTH AND GUAGE AS DECK.
9. AT ENDS OF DECKS OR WHERE CHANGES OF DECK DIRECTION OCCUR, FASTEN DECK TO SUPPORTS AT EACH FLUTE. FASTEN SIDES OF DECK TO CLOSURES OR SUPPORTING MEMBERS PER SIDELAP FASTENING REQUIREMENTS.
10. WHERE PARTIAL PANELS MAY BE REQUIRED TO COMPLETE DECK INSTALLATION AT PERIMETER OF STRUCTURE, FASTEN DECK TO SUPPORTING STRUCTURAL MEMBERS AT EACH FLUTE. INSTALL PARTIAL DECK PIECES IN THREE CONTINUOUS SPAN LENGTHS.
11. AT PERIMETER OF DECK, SECURE DECK TO STRUCTURAL MEMBERS WITH SAME ATTACHMENT AND SPACING SUPPORT ATTACHMENT AS INDICATED ON PLANS.
12. DECK SUPPLIER IS RESPONSIBLE FOR PROVIDING CLOSURES AND POUR STOPS AT ALL TERMINATIONS OR CHANGES IN DIRECTION OF METAL DECK. ALL DECKING ACCESSORIES SHALL BE INCLUDED IN METAL DECK SHOP DRAWINGS FOR REVIEW AND APPROVAL.

COLD-FORMED STEEL NOTES:

1. COLD-FORMED STEEL FRAMING SHALL BE DESIGNED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE AMERICAN IRON AND STEEL INSTITUTE (AISI) "SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION.
2. PROVIDE ALL STUDS AND/OR JOISTS AND ACCESSORIES OF THE TYPE, SIZE, GAUGE, AND SPACING SHOWN ON THE DRAWINGS.
3. FORM ALL FRAMING MEMBERS AND ACCESSORIES FROM CORROSION RESISTANT STEEL, CORRESPONDING TO REQUIREMENTS OF ASTM A653 AND THE FOLLOWING STRENGTH REQUIREMENTS:
   A. MATERIAL WITH A THICKNESS OF 18 GA (43 MIL) OR THINNER SHALL HAVE MINIMUM YIELD STRENGTH OF 33 KSI.
   B. MATERIAL WITH A THICKNESS OF 16 GA (54 MIL) OR THICKER SHALL HAVE A MINIMUM YIELD STRENGTH OF 50 KSI.
4. PLACE ALL COLD-FORMED STEEL STUD WALL BRIDGING HORIZONTALLY WITH A MAXIMUM VERTICAL SPACING OF FOUR FEET, UNLESS NOTED OTHERWISE. AS AN OPTION, CONTINUOUS COLD-FORMED CHANNELS MAY BE POSITIONED THROUGH THE STUD PUNCH OUTS AS BRIDGING PROVIDED THE BRIDGING CHANNEL IS PROPERLY FASTENED TO EACH STUD. STUDS WITH A MEMBER DEPTH OF EIGHT (8) INCHES OR GREATER SHALL USE CONTINUOUS FLAT STRAP BRIDGING ON EACH SIDE OF THE WALL.
5. BRIDGING SHALL BE SECURELY ANCHORED TO A POST, STRONGBACK, BRACE, OR OTHER SUPPORTING MEMBER PER WALL DESIGN, OR NOT FARTHER THAN EVERY 24 FEET ON CENTER.
6. INSTALL AXIALLY LOADED STUDS IN A MANNER WHICH WILL ASSURE THAT THEIR ENDS ARE POSITIONED AGAINST THE INSIDE OF THE TRACK WEB PRIOR TO FASTENING.
7. FASTEN COMPONENTS WITH SELF-DRILLING SCREWS OR WELDING. PROVIDE SCREWS OF SUFFICIENT SIZE TO ENSURE THE STRENGTH OF THE CONNECTION. WIRE TYING OF COMPONENTS IS NOT PERMITTED. TOUCH UP ALL WELDS WITH A ZINC-RICH PAINT.
8. WELDING OF COLD-FORMED STUDS MAY BE PERFORMED USING A MINIMUM ONE-EIGHTH INCH AWS TYPE 6013 WELDING ROD.
9. SECURELY ANCHOR WALL TRACKS TO THE SUPPORTING STRUCTURE. PROVIDE COMPLETE, UNIFORM, AND LEVEL BEARING SUPPORT FOR THE BOTTOM TRACK. PROVIDE METAL OR PLASTIC SHIMS BETWEEN BOTTOM TRACK AND SLAB AT EACH WALL STUD AS NEEDED TO ENSURE FULL BEARING.
10. SECURELY ANCHOR ABUTTING LENGTHS OF WALL TRACK TO A COMMON STRUCTURAL ELEMENT, BUTT-WELDED OR SPLICED.
11. PLUMB, ALIGN, AND SECURELY ATTACH STUDS TO THE FLANGES OF BOTH UPPER AND LOWER WALL TRACKS. SPLICES IN WALL STUDS ARE NOT PERMITTED.
12. ALIGN PUNCHED OPENINGS OF WALL STUDS.
13. PROVIDE HEADERS AND SUPPORTING STUDS FOR FRAMING OF WALL OPENINGS.
14. STUD MATERIAL USED IN HEADER CONSTRUCTION SHALL BE FREE OF PUNCHED OPENINGS.
15. WHERE COLD-FORMED STEEL DESIGN HAS BEEN DELEGATED, OWNER/CONTRACTOR SHALL HIRE A SPECIALTY ENGINEER WITH EXPERIENCE IN COLD-FORMED STEEL DESIGN TO DEVELOP THE DESIGN OF THE DELEGATED COLD-FORMED STEEL MEMBERS. SPECIALTY ENGINEER RESPONSIBLE FOR COLD-FORMED STEEL DESIGN SHALL BE A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROPOSED CONSTRUCTION. SPECIALTY ENGINEER SHALL PROVIDE A FULL SET OF COLD-FORMED STEEL ENGINEERING DRAWINGS TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL. WHERE DELEGATED COLD-FORMED STEEL DESIGN INCLUDES BEARING WALLS, SHEAR WALLS, BRACED WALL PANELS, OR OTHER VERTICAL ELEMENTS OF THE BUILDING GRAVITY OR LATERAL SYSTEMS, DESIGN CALCULATIONS SHALL ALSO BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL. ALL ENGINEERING DRAWINGS AND CALCULATIONS SUBMITTED SHALL BE SIGNED AND SEALED BY THE SPECIALTY ENGINEER RESPONSIBLE FOR THE COLD-FORMED STEEL DESIGN.
16. SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL PANELIZED COLD-FORM STEEL CONSTRUCTION FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
17. FOR ANY JAMB MEMBER THAT CANNOT BE SIZED AS SPECIFIED IN THE ARCHITECTURAL DRAWINGS, THE CONTRACTOR SHALL SUBSTITUTE IT WITH AN HSS STEEL POST. THE HSS STEEL POST SHALL BE DESIGNED, PROCURED, AND INSTALLED BY THE CONTRACTOR

CURTAIN WALL SYSTEM NOTES:

1. CURTAIN WALL SYSTEM SHALL BE DESIGNED TO MEET THE MOST STRINGENT MINIMUM LOADING AND SERVICEABILITY REQUIREMENTS SPECIFIED IN DESIGN NOTES HEREIN AS WELL AS INDICATED IN SPECIFICATION SECTION. CURTAIN WALL SYSTEM MUST BE DESIGNED AS A DEAD LOADED SYSTEM BEARING ON FOUNDATIONS OR STEEL BEAMS WHERE SPECIFICALLY NOTED IN PLANS. NO COMPONENTS OF THE SYSTEM SHALL BE HUNG FROM STEEL SUPPORTS ABOVE UNLESS SPECIFICALLY INDICATED IN PLANS. MANUFACTURER SUPPLIED CLIPS SHALL BE PROVIDED BY GC FOR LATERAL ATTACHMENT TO STRUCTURE.

LIST OF ABBREVIATIONS:

C/C	=	CENTER-TO-CENTER
C.J.	=	CONTROL JOINT; CEILING JOISTS
D.E.	=	DECK EDGE
E.F.	=	EACH FACE
E.J.	=	EXPANSION JOINT
E.W.	=	EACH WAY
E.O.D.	=	EDGE OF DECK
E.O.S.	=	EDGE OF SLAB
I.F.	=	INSIDE FACE
O.C.	=	ON CENTER
O.F.	=	OUTSIDE FACE
O.H.	=	OPPOSITE HAND
R.R.	=	ROOF RAFTERS
S.O.G.	=	SLAB-ON-GRADE
T.O.D.	=	TOP OF DECK
T.O.F.	=	TOP OF FOOTING
T.O.P.	=	TOP OF PIER/PEDESTAL
T.O.S.	=	TOP OF SLAB; TOP OF STEEL
T.O.Sh.	=	TOP OF SHELF
T.O.W.	=	TOP OF WALL
TYP.	=	TYPICAL
U.N.O.	=	UNLESS NOTED OTHERWISE
U.O.N.	=	UNLESS OTHERWISE NOTED
W.P.	=	WORKING POINT

SPECIAL INSPECTIONS:

SPECIAL INSPECTION SHALL MEET THE REQUIREMENTS OF THE ABOVE REFERENCED BUILDING CODE, CHAPTER 17. SPECIAL INSPECTOR(S) SHALL BE RETAINED BY THE OWNER TO PERFORM THE REQUIRED SPECIAL INSPECTIONS. THE NAMES AND QUALIFICATIONS OF THE PERSONS AND/OR FIRMS WHO ARE TO PERFORM THE SPECIAL INSPECTIONS SHALL BE PROVIDED TO THE BUILDING OFFICIAL FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. THE SPECIAL INSPECTOR(S) SHALL COMPLETE AND SUBMIT ALL FORMS, REPORTS, AND CERTIFICATES REQUIRED BY THE JURISDICTION WHERE CONSTRUCTION OR WORK IS LOCATED.

1. THE SPECIAL INSPECTOR(S) SHALL:
   A. OBSERVE THE WORK ASSIGNED FOR CONFORMANCE TO THE APPROVED DRAWINGS AND SPECIFICATIONS.
   B. FURNISH INSPECTION REPORTS TO ENGINEER OF RECORD AND BUILDING DEPARTMENT. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF NOT CORRECTED, TO THE ATTENTION OF THE ENGINEER AND THE BUILDING DEPARTMENT.
   C. SUBMIT TO THE ENGINEER OF RECORD AND THE BUILDING DEPARTMENT A SIGNED FINAL REPORT STATING THAT THE WORK WAS IN CONFORMANCE WITH THE APPROVED DRAWINGS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE BUILDING CODE.
2. SPECIAL INSPECTION NOTES:
   A. WHERE FABRICATION OF STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES IS BEING PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP, SPECIAL INSPECTION OF THE FABRICATED ITEMS IS REQUIRED DURING THE PERFORMANCE OF THE WORK EXCEPT WHERE THE FABRICATOR HAS BEEN APPROVED TO PERFORM THE WORK WITHOUT SPECIAL INSPECTION IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE. WHERE SPECIAL INSPECTION HAS BEEN EXEMPTED DURING FABRICATION, FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE IN LIEU OF THE INSPECTION, STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
   B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE SPECIAL INSPECTOR(S) WITH ADVANCE NOTICE, NO LESS THAN 72 HOURS, OF THE INITIATION OF ANY WORK REQUIRED TO HAVE SPECIAL INSPECTIONS. ALL WORK PERFORMED WITHOUT REQUIRED SPECIAL INSPECTION WILL BE SUBJECT TO REMOVAL.
   C. THE CONSTRUCTION OR WORK FOR WHICH SPECIAL INSPECTION IS REQUIRED SHALL REMAIN ACCESSIBLE AND EXPOSED FOR SPECIAL INSPECTION UNTIL COMPLETION OF THE REQUIRED INSPECTIONS AND/OR TESTS.
3. STRUCTURAL OBSERVATION NOTES:
   A. WHERE REQUIRED BY THE BUILDING CODE OR BUILDING OFFICIAL, OR ELECTED BY THE OWNER OR ENGINEER OF RECORD, THE ENGINEER OF RECORD OR A DESIGNATED REGISTERED PROFESSIONAL ENGINEER ACTING ON THE OWNER'S OR ENGINEER'S BEHALF MAY PERFORM STRUCTURAL OBSERVATIONS DURING CONSTRUCTION.
   B. STRUCTURAL OBSERVATIONS DO NOT INCLUDE, OR WAIVE THE RESPONSIBILITY FOR, THE PERFORMANCE OF SPECIAL INSPECTIONS AS REQUIRED HEREIN, OR FOR ANY OTHER INSPECTIONS AS REQUIRED BY THE BUILDING CODE OR BUILDING OFFICIAL.
4. SPECIAL INSPECTIONS AND TESTS OF ELEMENTS OF BUILDINGS AND STRUCTURES SHALL MEET THE APPLICABLE REQUIREMENTS LISTED BELOW.
   A. STEEL CONSTRUCTION:
      a. STRUCTURAL STEEL:
         - SPECIAL INSPECTION AND NONDESTRUCTIVE TESTING OF STRUCTURAL STEEL ELEMENTS IN BUILDINGS, STRUCTURES, AND PORTIONS THEREOF SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF AISC 360, LATEST EDITION.
      b. COLD-FORMED STEEL DECK:
         - SPECIAL INSPECTIONS AND QUALIFICATION OF WELDING SPECIAL INSPECTOR(S) FOR COLD-FORMED STEEL FLOOR AND ROOF DECK SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF SDI QA/QC.
      c. OPEN-WEB STEEL JOISTS AND JOIST GIRDERS:
         - SPECIAL INSPECTIONS OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS IN BUILDINGS, STRUCTURES, AND PORTIONS THEREOF SHALL BE IN ACCORDANCE WITH BUILDING CODE TABLE 1705.2.3.
      d. COLD-FORMED STEEL TRUSSES SPANNING 60 FEET OR GREATER:
         - SPECIAL INSPECTOR SHALL VERIFY THAT THE TEMPORARY INSTALLATION RESTRAINT/BRACING AND THE PERMANENT INDIVIDUAL TRUSS MEMBER RESTRAINT/BRACING ARE INSTALLED IN ACCORDANCE WITH THE APPROVED TRUSS SUBMITTAL PACKAGE.
   B. CONCRETE CONSTRUCTION:
      a. SPECIAL INSPECTIONS OF CONCRETE CONSTRUCTION SHALL BE PERFORMED AS LISTED BELOW AND IN ACCORDANCE WITH BUILDING CODE TABLE 1705.3, EXCEPT AS ALLOWED PER THE EXEMPTIONS LISTED IN BUILDING CODE SECTION 1705.3.
      b. PERIODIC INSPECTION OF REINFORCING STEEL AND PRESTRESSING TENDON MATERIAL AND PLACEMENT.
      c. PERIODIC INSPECTION OF REINFORCING STEEL WELDING, INCLUDING BAR MATERIAL AND WELDS AS REQUIRED.
      d. PERIODIC INSPECTION OF ANCHORS CAST IN FRESH CONCRETE.
      e. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE PER ACI 318, SECTION 17.8.
      f. PERIODIC VERIFICATION OF USE OF REQUIRED DESIGN MIX.
      g. FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE TEMPERATURE OF THE FRESH CONCRETE PRIOR TO CONCRETE PLACEMENT.
      h. CONTINUOUS INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.
      i. PERIODIC VERIFICATION OF MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.
      j. INSPECT PRESTRESSED CONCRETE FOR APPLICATION OF PRESTRESSING FORCES AND GROUTING OF BONDED PRESTRESSING TENDONS.
      k. PERIODIC INSPECTION OF ERECTION OF PRECAST CONCRETE MEMBERS.
      l. VERIFY IN-SITU CONCRETE STRENGTH:
         - PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE, AND
         - PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.
      m. PERIODIC INSPECTION OF FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.
   C. MASONRY CONSTRUCTION:
      a. SPECIAL INSPECTIONS AND TESTS OF MASONRY CONSTRUCTION, INCLUDING VERTICAL MASONRY FOUNDATION ELEMENTS, SHALL BE PERFORMED IN ACCORDANCE WITH THE QUALITY ASSURANCE PROGRAM REQUIREMENTS OF TMS 402 AND TMS 602, LATEST EDITIONS, EXCEPT AS SPECIFICALLY EXEMPTED BY BUILDING CODE SECTION 1705.4
   D. SOILS:
      a. SPECIAL INSPECTIONS AND TESTS OF EXISTING SITE SOIL CONDITIONS, FILL PLACEMENT, AND LOAD-BEARING REQUIREMENTS SHALL BE PERFORMED IN ACCORDANCE WITH BUILDING CODE SECTION 1705.6 AND TABLE 1705.6, INCLUDING:
         - PERIODIC VERIFICATION THAT MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.
         - PERIODIC VERIFICATION THAT EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER BEARING MATERIAL.
         - PERIODIC CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.
         - CONTINUOUS VERIFICATION OF USE OF PROPER FILL MATERIALS, FILL MATERIAL DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.
         - PERIODIC INSPECTION OF SUBGRADE PREPARATION PRIOR TO PLACEMENT OF COMPACTED FILL.
   E. MAIN WIND-FORCE RESISTING SYSTEM: [>> ENGR NOTE: THIS DOES NOT ALWAYS APPLY, SEE BC SECTION 1705.11 FOR APPLICABILITY <<]
      a. ELEMENTS OF THE MAIN WIND-FORCE RESISTING SYSTEM SHALL BE INSPECTED IN ACCORDANCE WITH BUILDING CODE SECTION 1705.11
   F. MAIN SEISMIC-FORCE RESISTING SYSTEM: [>> ENGR NOTE: THIS DOES NOT ALWAYS APPLY, SEE BC SECTIONS 1705.12 AND 1705.13 FOR APPLICABILITY <<]
      a. ELEMENTS OF THE MAIN SEISMIC-FORCE RESISTING SYSTEM SHALL BE INSPECTED IN ACCORDANCE WITH BUILDING CODE SECTIONS 1705.12 AND 1705.13.
   G. SPECIAL INSPECTIONS SHALL BE PROVIDED FOR ANY OTHER ELEMENTS NOT LISTED AS ABOVE AS DEEMED NECESSARY BY THE BUILDING OFFICIAL.

SPECIAL INSPECTION REQUIREMENTS

REQ'D?	INSPECTION OR TEST	CODE REFERENCE SECTION	REFERENCE STANDARDS
X	STEEL - MATERIAL TEST REPORTS & CERTS.	1705.2	AISC 360
X	STEEL - WELDED CONNECTIONS	1705.2	AISC 360, AWS D1.1
X	STEEL - BOLTED CONNECTIONS	1705.2	AISC 360
	STEEL - GALVANIZED MAIN MEMBERS	1705.2	AISC 360
X	STEEL - DETAILS	1705.2	AISC 360
X	STEEL - ANCHOR RODS & EMBEDMENTS	1705.2	AISC 360, ACI 318
X	COLD-FORMED STEEL DECK	1705.2	SDI
X	OPEN-WEB STEEL JOISTS & JOIST GIRDERS	1705.2; TABLE 1705.2.3	SJI
	COLD-FORMED STEEL TRUSSES	1705.2	-
X	CONCRETE CONSTRUCTION	1705.3; TABLE 1705.3	ACI 318, AWS D1.4
X	MASONRY CONSTRUCTION: TYPE A	1705.4	TMS 402, TMS 602
X	MASONRY CONSTRUCTION: TYPE B	1705.4	TMS 402, TMS 602
X	MASONRY CONSTRUCTION: TYPE C	1705.4	TMS 402, TMS 602
	WOOD - HIGH LOAD DIAPHRAGMS	1705.5	-
	METAL-PLATE CONNECTED WOOD TRUSSES	1705.5	-
X	SOIL TESTING & INSPECTION	1705.6; TABLE 1705.6	-
	DRIVEN DEEP FOUNDATIONS	1705.7; TABLE 1705.7	-
	CAST-IN-PLACE DEEP FOUNDATIONS	1705.8; TABLE 1705.8	-
	HELICAL PILE FOUNDATIONS	1705.9	-
	WIND RESISTANCE - WOOD CONSTRUCTION	1705.11	-
	WIND RESISTANCE - CFS CONSTRUCTION	1705.11	-
	WIND RESISTANCE - COMPONENTS	1705.11	-
	SEISMIC RESISTANCE - STRUCTURAL STEEL	1705.12; 1705.13	AISC 341
	SEISMIC RESISTANCE - WOOD CONSTRUCTION	1705.12	-
	SEISMIC RESISTANCE - CFS CONSTRUCTION	1705.12	-

NOTE:
1. THE ABOVE TABLE IS INTENDED TO SUMMARIZE THE REQUIRED STRUCTURAL SPECIAL INSPECTIONS AND ALERT THE OWNER AND CONTRACTOR OF THEIR INCLUSION IN THE SCOPE. THE CONTRACTOR IS RESPONSIBLE FOR BEING FAMILIAR WITH THE BUILDING CODE AND COMPLYING WITH ALL OF THE SPECIFIC REQUIREMENTS OF THE SECTIONS LISTED ABOVE. IT IS NOT INTENDED TO BE AN EXHAUSTIVE OR COMPLETE LIST OF REQUIRED SPECIAL INSPECTIONS, THERE MAY BE OTHER, OR MORE SPECIFIC, REQUIREMENTS SHOWN ELSEWHERE ON THE DRAWINGS OR IN THE SPECIFICATIONS THAT ARE REQUIRED BY THE SCOPE OF WORK.
2. THE REFERENCE STANDARD COLUMN ABOVE IS FOR GENERAL USE, THE CONTRACTOR IS RESPONSIBLE FOR BEING IN COMPLIANCE WITH ALL STANDARDS REFERENCED IN THE GOVERNING BUILDING CODE.

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NY Engineering Certificate of Authorization No.: 0018178

CONSULTANTS:

MARK	DATE	DESCRIPTION

STATE OF NEW YORK · DANIEL J. AIELLO · 100515 · LICENSED PROFESSIONAL ENGINEER

04/30/2027 Exp. Date

DANIEL J. AIELLO, P.E.
NY PROFESSIONAL ENGINEER Lic. No. 100515

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
JJN	SRK	JJN	DJA

PROJECT No:	DATE:	SCALE:
TRFD 2302	FEBRUARY 2025	AS SHOWN

CLIENT
THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

THIELLS 26 FD

65 W RAMAPO ROAD GARNERVILLE, NY 10923

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CONTRACT G

STATUS
FINAL BID DOCUMENT

SHEET TITLE
GENERAL NOTES

DRAWING No.
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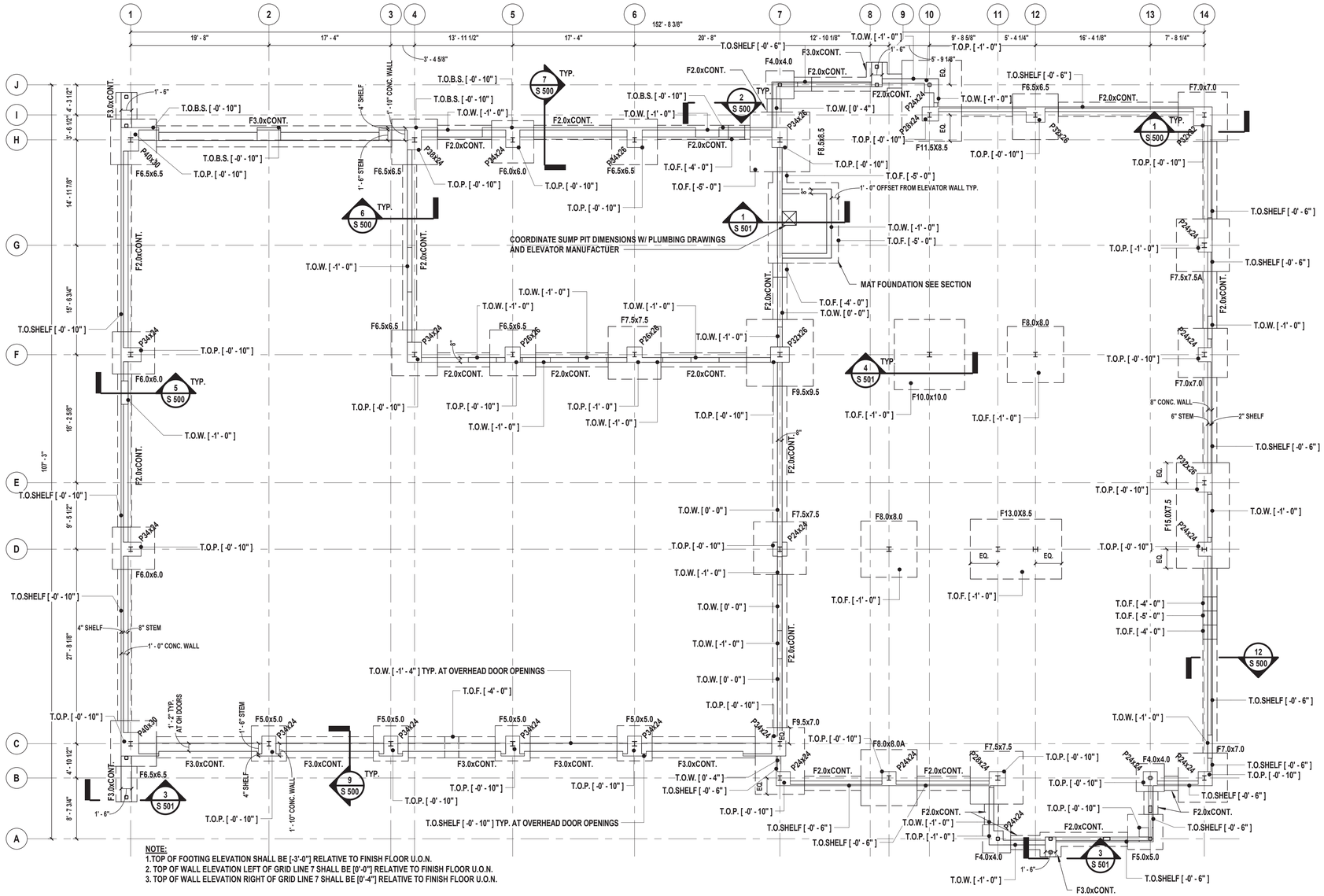

NOTE:
1.TOP OF FOOTING ELEVATION SHALL BE [-3'-0"] RELATIVE TO FINISH FLOOR U.O.N.
2. TOP OF WALL ELEVATION LEFT OF GRID LINE 7 SHALL BE [0'-0"] RELATIVE TO FINISH FLOOR U.O.N.
3. TOP OF WALL ELEVATION RIGHT OF GRID LINE 7 SHALL BE [0'-4"] RELATIVE TO FINISH FLOOR U.O.N.

1 Foundation Plan

SCALE: 1/8" = 1'-0"

FOUNDATION PLAN NOTES:

1. ELEVATIONS SHOWN THUS [ ] ARE RELATIVE TO FINISHED FIRST FLOOR ELEVATION [0'-0"].
2. BACKFILLING SHALL NOT COMMENCE AT AREAS ADJACENT TO BASEMENT FOUNDATION WALLS UNTIL THE WALL HAS BEEN PROPERLY LATERALLY BRACED.
3. ALL EXCAVATED EARTH SHALL BE REPLACED WITH CONTROLLED FILL AS PER SPECIFICATIONS.
4. ALL CONCRETE PEDESTALS ARE TO ALIGN WITH WALL CORNERS AND INTERSECTIONS AS SHOWN, UNLESS DIMENSIONED OTHERWISE ON PLAN. CONTRACTOR TO COORDINATE STEEL COLUMN LOCATION WITH PIER LOCATION.
5. CONTRACTOR SHALL COORDINATE SIZE AND LOCATIONS OF ALL REQUIRED PIPING AND CONDUIT PENETRATIONS THROUGH FOUNDATION WALL WITH ALL OTHER CONTRACTS. PROVIDE PIPE SLEEVES AND REINFORCEMENT AROUND PENETRATIONS AS PER DETAILS 5 AND 6 ON SHEET S 501.
6. REFER TO 'A' DWGS FOR WATERPROOFING REQUIREMENTS.
7. COORDINATE LOCATIONS OF REINFORCEMENT DOWELS INTO BUILDING WALLS WITH MASONRY TRADE.
8. THE FOUNDATIONS SHALL BE CAST ON SUITABLE BEARING MATERIAL VERIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER/INSPECTOR. THE GEOTECHNICAL REPORT STATES A 6'-0" LAYER OF UNSUITABLE FILL. THE CONTRACTOR SHALL PROVIDE A UNIT PRICE IN $/CU. YD FOR FILL REMOVAL ON THIS PROJECT ALONG WITH THE BID.
9. SEE SLAB PLAN FOR ADDITIONAL SECONDARY AND STEM WALL CONCRETE POURS

FOOTING SCHEDULE

FOOTING TYPE	SIZE	THICKNESS	REINFORCEMENT	COMMENTS
F2.0xCONT.	2'-0"xCONT.	12"	#5 @ 12" O.C. SHORT & (3) #5 LONG	-
F3.0xCONT.	3'-0"xCONT.	12"	#5 @ 12" O.C. SHORT & (3) #5 LONG	-
F4.0x4.0	4'-0"x4'-0"	12"	(4) #5 BARS T&B	-
F5.0x5.0	5'-0"x5'-0"	12"	(5) #5 BARS T&B	-
F6.0x6.0	6'-0"x6'-0"	12"	(6) #5 BARS T&B	-
F6.5x6.5	6'-6"x6'-6"	12"	(6) #5 BARS T&B	-
F7.0x7.0	7'-0"x7'-0"	12"	(6) #5 BARS T&B	-
F7.5x7.5	7'-6"x7'-6"	15"	(8) #5 BARS B ONLY	-
F7.5x7.5A	7'-6"x7'-6"	15"	(8) #5 BARS T&B	-
F8.0x8.0	8'-0"x8'-0"	15"	(9) #5 BARS T&B	-
F8.0x8.0A	8'-0"x8'-0"	15"	(9) #5 BARS B. (6) #5 BARS T.	-
F8.5x8.5	8'-6"x8'-6"	15"	(9) #5 BARS T&B	-
F9.5x9.5	9'-6"x9'-6"	18"	(12) #5 BARS B ONLY	-
F10.0x10.0	10'-0"x10'-0"	18"	(13) #5 BARS B ONLY	-
F9.5x7.0	9'-6"x7'-0"	15"	(15) #5 BARS SHORT B ONLY (8) #5 T&B LONG	-
F11.5x8.5	11'-6"x8'-6"	15"	(16) #5 BARS SHORT B ONLY (9) #5 T&B LONG	-
F13.5x8.5	13'-6"x8'-6"	15"	(17) #5 BARS SHORT B ONLY (9) #5 T&B LONG	-
F15.0x7.5	15'-0"x7'-6"	15"	(19) #5 BARS SHORT B (10) #5 BARS SHORT T (10) #5 T&B LONG	-
MAT FOUNDATION	SEE PLAN	15"	#5 @ 10" B EACH WAY. #5 @ 12" T EACH WAY	-

PEDESTAL SCHEDULE

PEDESTAL TYPE	SIZE	STIRRUPS	LONG. REINF.	NOTES
P24x24	24" x 24"	#4 @ 10" O.C.	(8) #7	1, 3
P26x26	26" x 26"	#4 @ 10" O.C.	(8) #7	N/A
P32x32	32" x 32"	#4 @ 10" O.C.	(8) #7	2, 5
P28x24	28" x 24"	#3 @ 10" O.C.	(10) #7	1,3
P32x26	32" x 26"	#3 @ 10" O.C.	(22) #7	1,5
P34x24	34" x 24"	#4 @ 10" O.C.	(24) #7	1,3
P34x26	34" x 26"	#4 @ 10" O.C.	(28) #7	1,4
P38x24	38" x 24"	#3 @ 10" O.C.	(34) #7	1,4
P40x30	40" x 30"	#3 @ 10" O.C.	(34) #7	N/A

NOTES:
1. PROVIDE ADDITIONAL TENSION REINFORCEMENT: (4) #7 VERTICAL BARS
2. PROVIDE ADDITIONAL TENSION REINFORCEMENT: (6) #7 VERTICAL BARS
3. PROVIDE ADDITIONAL SHEAR REINFORCEMENT: (4) #4 STIRRUPS @ 3" O.C. TOP
4. PROVIDE ADDITIONAL SHEAR REINFORCEMENT: (6) #4 STIRRUPS @ 3" O.C. TOP
5. PROVIDE ADDITIONAL SHEAR REINFORCEMENT: (8) #4 STIRRUPS @ 3" O.C. TOP

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100515

04/30/2027
Exp. Date

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THIELLS 26 FD

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GARNERVILLE, NY 10923

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FOUNDATION PLAN

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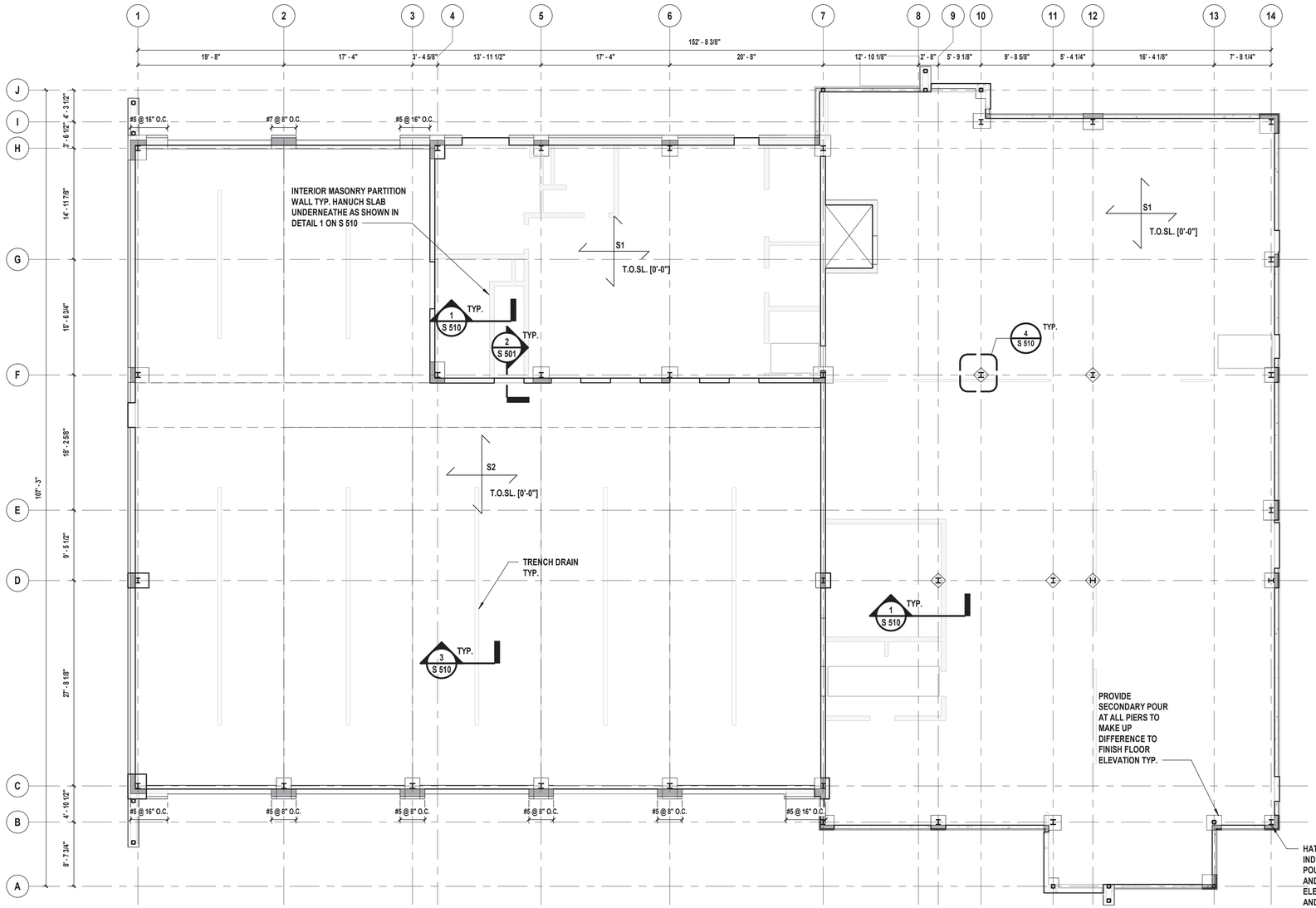

NOTE: PLACE SLAB RE-ENTRANT BARS AT ALL SLAB RE-ENTRANT CORNERS AS PER 5/S 510

1 **Slab Plan**
SCALE: 1/8" = 1'-0"

MASONRY NOTES:

1. ELEVATIONS SHALL BE ESTABLISHED RELATIVE TO FINISHED FIRST FLOOR ELEVATION [0'-0"].
1.1 INDICATES CMU WALL (SEE 'A' DWGS FOR SIZE) REINFORCED VERTICALLY WITH #5 BARS SPACED AT A MAXIMUM SPACING OF 32" O.C., TYPICAL, UNLESS OTHERWISE NOTED.
2. FILL ALL MASONRY CELLS CONTAINING REINFORCEMENT SOLID WITH GROUT, TYPICAL.
3. AT EACH SIDE OF MASONRY OPENINGS, FILL TWO CELLS WITH GROUT AND (1) #5 MIN. PER CELL VERTICALLY UNLESS NOTED OTHERWISE. AT CORNERS OF MASONRY WALLS, CORNER CELL AND ONE ADJACENT CELL TO EACH SIDE OF CORNER (3 TOTAL) ARE TO BE FILLED WITH GROUT AND (1) #5 MIN. PER CELL FROM FOOTING INTO UPPERMOST BOND BEAM UNLESS NOTED OTHERWISE. FOR WALLS WITH LARGER REBAR INDICATED IN SCHEDULE USE THE LARGER REBAR.
4. REFER TO 'A' DWGS. AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS NOT OUTLINED HERE.
5. ALL VERTICAL REINFORCEMENT INTERRUPTED BY STRUCTURAL STEEL SHALL BE WELDED TO TOP OF STEEL MEMBERS, TYPICAL.
6. COORDINATE PLACEMENT OF VERTICAL WALL DOWELS EMBEDDED INTO FOUNDATION WALLS AND FLOOR SLABS WITH CELLS OF MASONRY WALL. DOWEL SPACING TO MATCH SPACING OF VERTICAL REINFORCEMENT IN WALLS, TYPICAL.
7. REFER TO 'A' DWGS. FOR LOCATIONS AND BRACING REQUIREMENTS OF INTERIOR MASONRY WALLS.
8. ALL INTERIOR STRUCTURAL MASONRY WALLS SHALL BE REINFORCED VERTICALLY WITH #5 @ 48" O.C., CENTERED IN FULLY GROUTED CELL, TYPICAL U.O.N.
9. PROVIDE LADDER TYPE HORIZONTAL JOINT REINFORCING IN ALL WALLS AT 16" O.C. , MAXIMUM, U.O.N.
10. BOND BEAMS REINFORCED WITH (1) #5 BAR, CONTINUOUS, SHALL BE PLACED AT EACH FLOOR LEVEL AND AT TOP OF WALL, U.O.N.

NOTES:

1. ELEVATIONS SHOWN THUS [ ] ARE RELATIVE TO FINISHED FIRST FLOOR ELEVATION [0'-0"].
2. S1 INDICATES 6" CONCRETE SLAB ON GRADE REINFORCED WITH 6x6 - W2.9xW2.9 W.W.F.
3. S2 INDICATES SPAN OF 8" CONCRETE SLAB ON GRADE, REINFORCED WITH 6x6 - W4.0XW4.0 W.W.F. TOP & BOTTOM, MAINTAIN THICKNESS THROUGH PITCHED AREAS
4. PROVIDE 1/2" PRE-MOLDED EXPANSION JOINT AROUND PERIMETER OF CONCRETE SLAB ON METAL DECK AND SLAB ON GRADE WHERE IT ABUTS THE FOUNDATION WALL OF THE BUILDING.
5. COORDINATE LOCATIONS OF INTERIOR MASONRY WALLS WITH 'A' DWGS. PROVIDE #5 DOWELS, 1'-4" x 6" LG. @ 48" O.C. TO BE EMBEDDED INTO CONCRETE FLOOR SLAB.

LEGEND:

C.J. = CONTROL JOINT
E.J. = 1/2" PREMOLDED EXPANSION JOINT
E.O.S. = EDGE OF SLAB
T.O.S. = TOP OF SLAB
U.O.N. = UNLESS OTHERWISE NOTED
H.P. = HIGH POINT OF PITCHED SLAB
L.P. = LOW POINT OF PITCHED SLAB
INDICATES PITCH DIRECTION OF SLAB
INDICATES CHANGE IN SLAB ELEVATION

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CLIENT
THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

65 W RAMAPO ROAD GARNERVILLE, NY 10923

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SHEET TITLE
SLAB PLAN

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S 110.00

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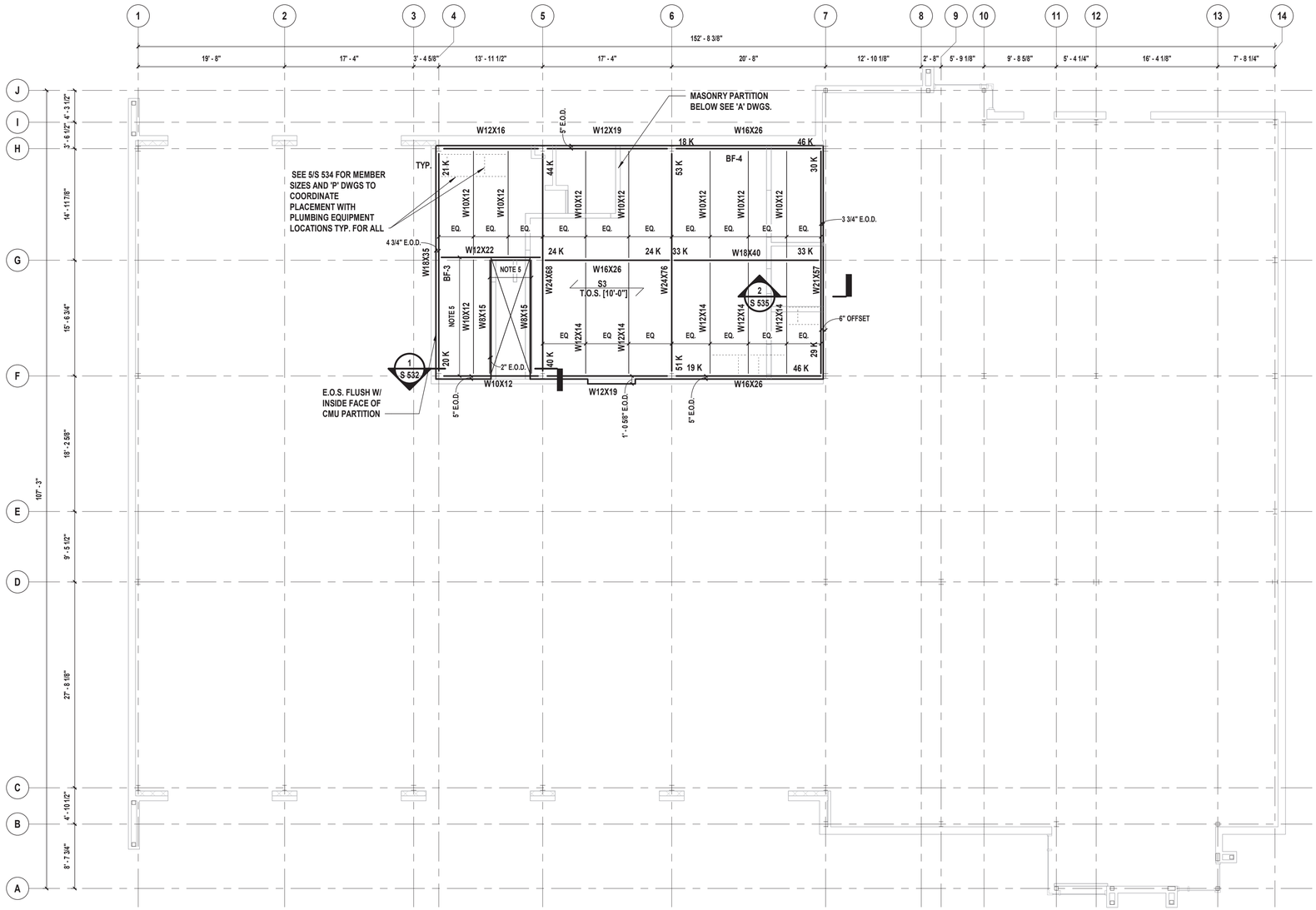

1 **Mezzanine Framing Plan**
SCALE: 1/8" = 1'-0"

NOTES:

1. TOP OF STEEL SHALL BE SET AT [9'-8"] FROM TOP OF SLAB ELEVATION SEE PLAN FOR SLAB ELEVATION.
2. S3 INDICATES SPAN OF 1.5C-36 18GA. NON-COMPOSITE METAL DECK BY VULCRAFT OR APPROVED EQUAL, WITH 2 1/2" OF 4000PSI CONCRETE (4" THK. TOTAL) REINFORCED W/ 6X6 W2.9xW2.9 WELDED WIRE FABRIC & #4 @ 12" O.C. PARALLEL WITH SPAN OF DECK
3. SEE A DWGS. FOR EDGE OF SLAB DIMENSIONS.
4. STEEL CONNECTION PIECE DETAILS SHALL BE SUBMITTED WITH CALCULATIONS SIGNED AND SEALED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER. CONNECTION DESIGNER SHALL DESIGN ALL MOMENT CONNECTIONS AND SIMPLE SHEAR CONNECTIONS. WHERE DESIGN SHEAR REACTION IS NOT LISTED ON DRAWINGS, IT SHALL BE TAKEN AS 15 KIPS LRFD. WHERE AXIAL FORCE IN BEAMS IS NOT LISTED IN DRAWINGS, IT SHALL BE TAKEN AS 15 KIPS LRFD. ALL CONNECTIONS SHALL BE DESIGNED CONSIDERING AXIAL, SHEAR AND MOMENT FORCES SIMULTANEOUSLY AS REQUIRED BY BUILDING CODE. SEE STRUCTURAL STEEL SPECIFICATIONS FOR ADDITIONAL DESIGN LOADING REQUIREMENTS.
5. COORDINATE DIMENSIONS OF STAIR LANDING FRAMING WITH STAIR MANUFACTURER. SEE 'A' DWGS. FOR ADDITIONAL INFORMATION.
6. DECK IS DESIGNED AS THREE-SPAN DECK.

LEGEND:

= HANGER BELOW

= CARRIED COLUMN/HANGER ABOVE

E.O.S. = EDGE OF SLAB

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NEW 26-100 FIRE HEADQUARTERS

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STORAGE MEZZANINE FRAMING PLAN

DRAWING No.

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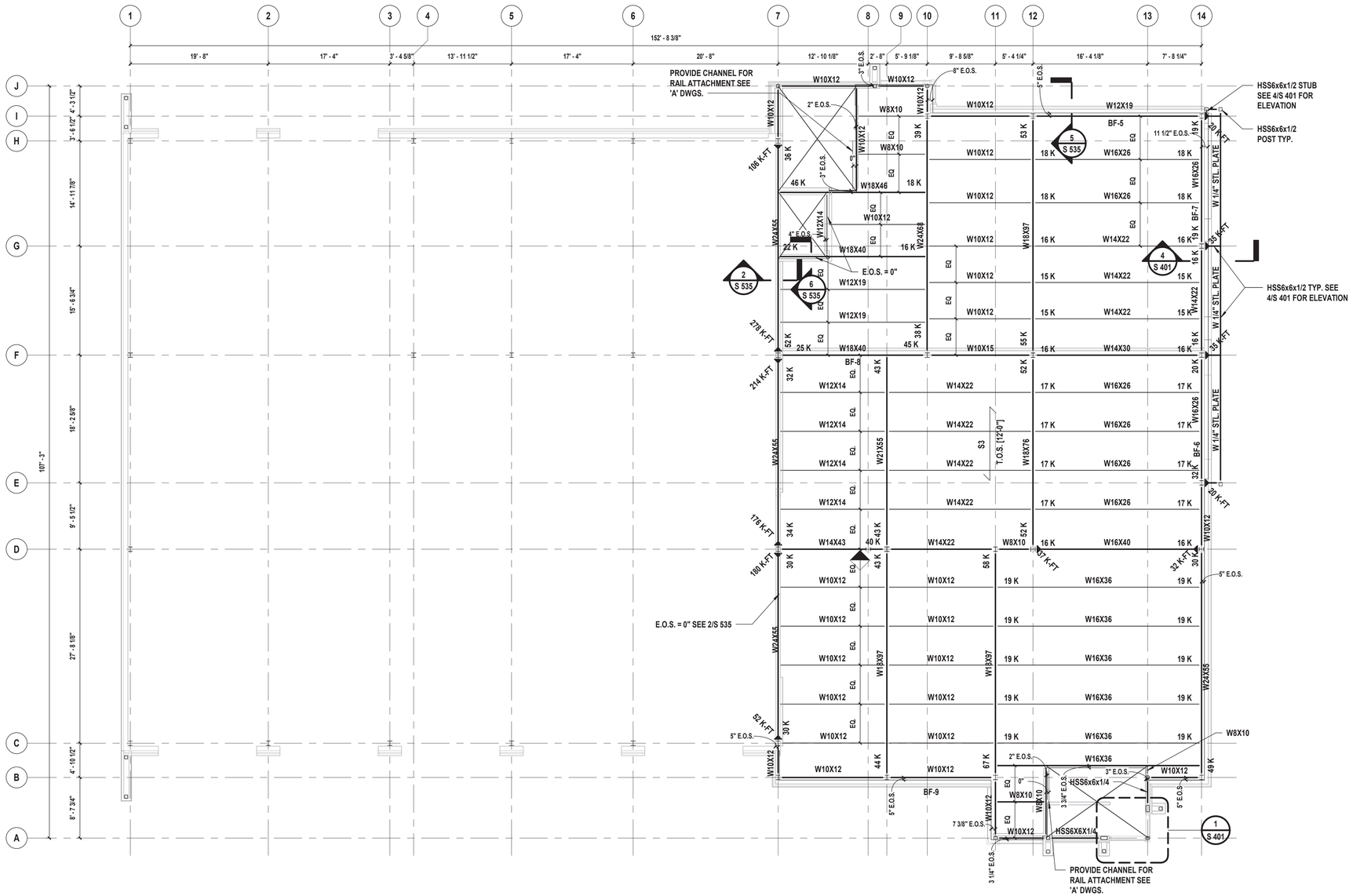

1 **Second Floor Framing Plan**
SCALE: 1/8" = 1'-0"

NOTES:

1. TOP OF STEEL SHALL BE SET AT [11'-8]" FROM TOP OF SLAB ELEVATION SEE PLAN FOR SLAB ELEVATION.
2. S3 INDICATES SPAN OF 1.5C-36 18GA. NON-COMPOSITE METAL DECK BY VULCRAFT OR APPROVED EQUAL, WITH 2 1/2" OF 4000PSI CONCRETE (4" THK. TOTAL) REINFORCED W/ 6X6 W2.9XW2.9 WELDED WIRE FABRIC & #4 @ 12" O.C. PARALLEL WITH SPAN OF DECK
3. SEE 'A' DWGS. FOR EDGE OF SLAB DIMENSIONS.
4. INDICATES BEAM TO COLUMN MOMENT CONNECTION WITH THE NUMBER REPRESENTING THE L.R.F.D. DESIGN MOMENT IN FT-KIPS.
5. STEEL CONNECTION PIECE DETAILS SHALL BE SUBMITTED WITH CALCULATIONS SIGNED AND SEALED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER. CONNECTION DESIGNER SHALL DESIGN ALL MOMENT CONNECTIONS AND SIMPLE SHEAR CONNECTIONS. WHERE DESIGN SHEAR REACTION IS NOT LISTED ON DRAWINGS, IT SHALL BE TAKEN AS 15 KIPS LRFD. WHERE AXIAL FORCE IN BEAMS IS NOT LISTED IN DRAWINGS, IT SHALL BE TAKEN AS 15 KIPS LRFD. ALL CONNECTIONS SHALL BE DESIGNED CONSIDERING AXIAL, SHEAR AND MOMENT FORCES SIMULTANEOUSLY AS REQUIRED BY BUILDING CODE. SEE STRUCTURAL STEEL SPECIFICATIONS FOR ADDITIONAL DESIGN LOADING REQUIREMENTS.
6. COORDINATE DIMENSIONS OF STAIR LANDING FRAMING WITH STAIR MANUFACTURER. SEE 'A' DWGS. FOR ADDITIONAL INFORMATION.

LEGEND:

= HANGER BELOW

= CARRIED COLUMN/HANGER ABOVE

E.O.S. = EDGE OF SLAB

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SECOND FLOOR FRAMING PLAN

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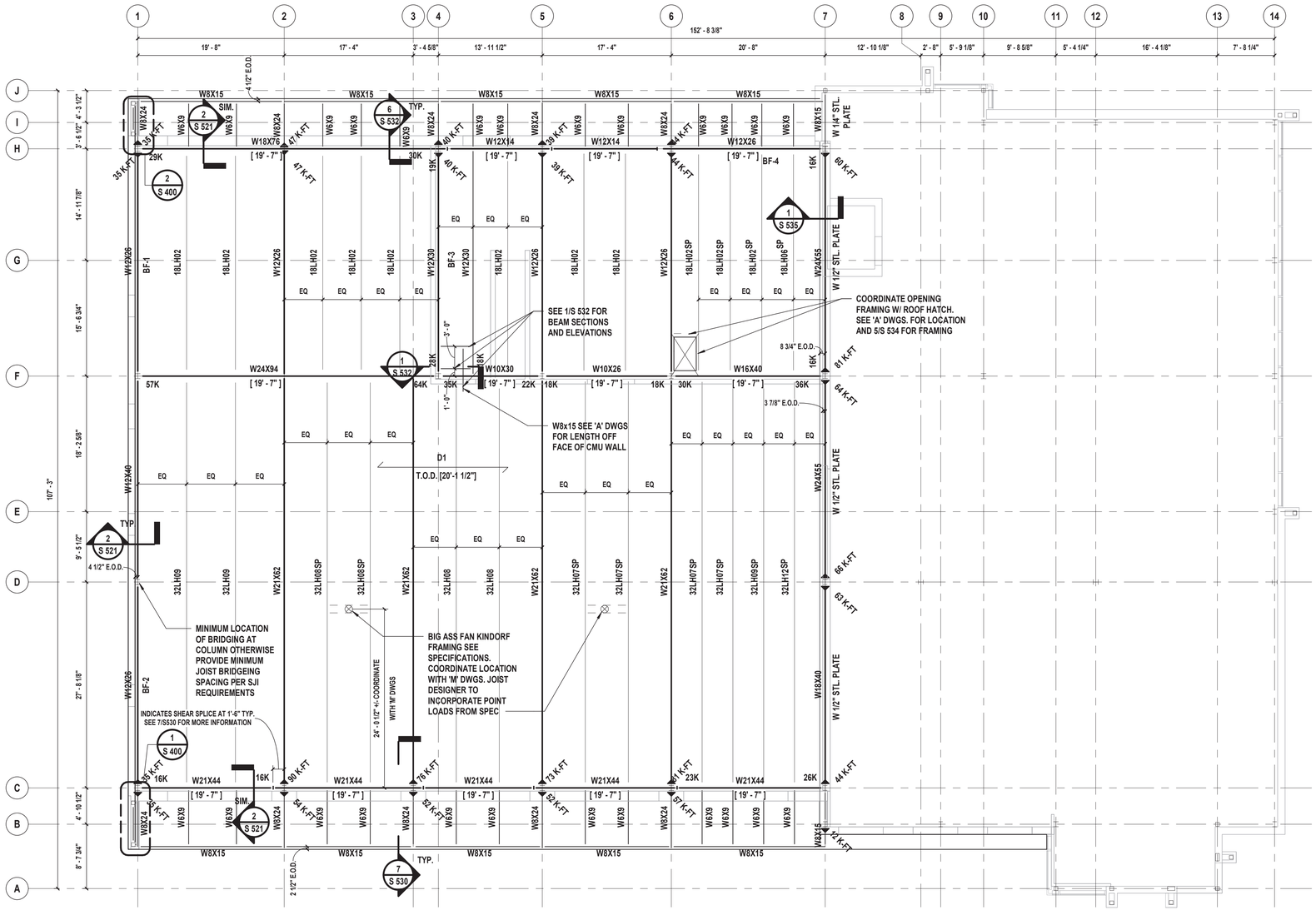

1 Low Roof Framing Plan

SCALE: 1/8" = 1'-0"

NOTES:

1. TOP OF STEEL SHALL BE SET AT -0'-1 1/2" FROM TOP OF DECK SEE PLAN FOR DECK ELEVATION.
2. D1 INDICATES SPAN OF 1.5B-36 19GA. ROOF DECK BY VULCRAFT NUCOR OR APPROVED EQUAL
3. INSTALL BRIDGING FOR BAR JOISTS AS PER S.J.I. REQUIREMENTS.
4. SEE 'A' DWGS. FOR EDGE OF DECK DIMENSIONS.
5. INDICATES BEAM TO COLUMN MOMENT CONNECTION WITH THE NUMBER REPRESENTING THE L.R.F.D. MOMENT CAPACITY IN FT-KIPS.
6. STEEL CONNECTION PIECE DETAILS SHALL BE SUBMITTED WITH CALCULATIONS SIGNED AND SEALED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER. CONNECTION DESIGNER SHALL DESIGN ALL MOMENT CONNECTIONS AND SIMPLE SHEAR CONNECTIONS. WHERE DESIGN SHEAR REACTION IS NOT LISTED ON DRAWINGS, IT SHALL BE TAKEN AS 15 KIPS LRFD. WHERE AXIAL FORCE IN BEAMS IS NOT LISTED IN DRAWINGS, IT SHALL BE TAKEN AS 15 KIPS LRFD. ALL CONNECTIONS SHALL BE DESIGNED CONSIDERING AXIAL, SHEAR AND MOMENT FORCES SIMULTANEOUSLY AS REQUIRED BY BUILDING CODE. SEE STRUCTURAL STEEL SPECIFICATIONS FOR ADDITIONAL DESIGN LOADING REQUIREMENTS.
7. COORDINATE DIMENSIONS OF STAIR LANDING FRAMING WITH STAIR MANUFACTURER. SEE 'A' DWGS. FOR ADDITIONAL INFORMATION.

LEGEND:

= HANGER BELOW

= CARRIED COLUMN/HANGER ABOVE

E.O.S. = EDGE OF SLAB

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LOW ROOF FRAMING PLAN

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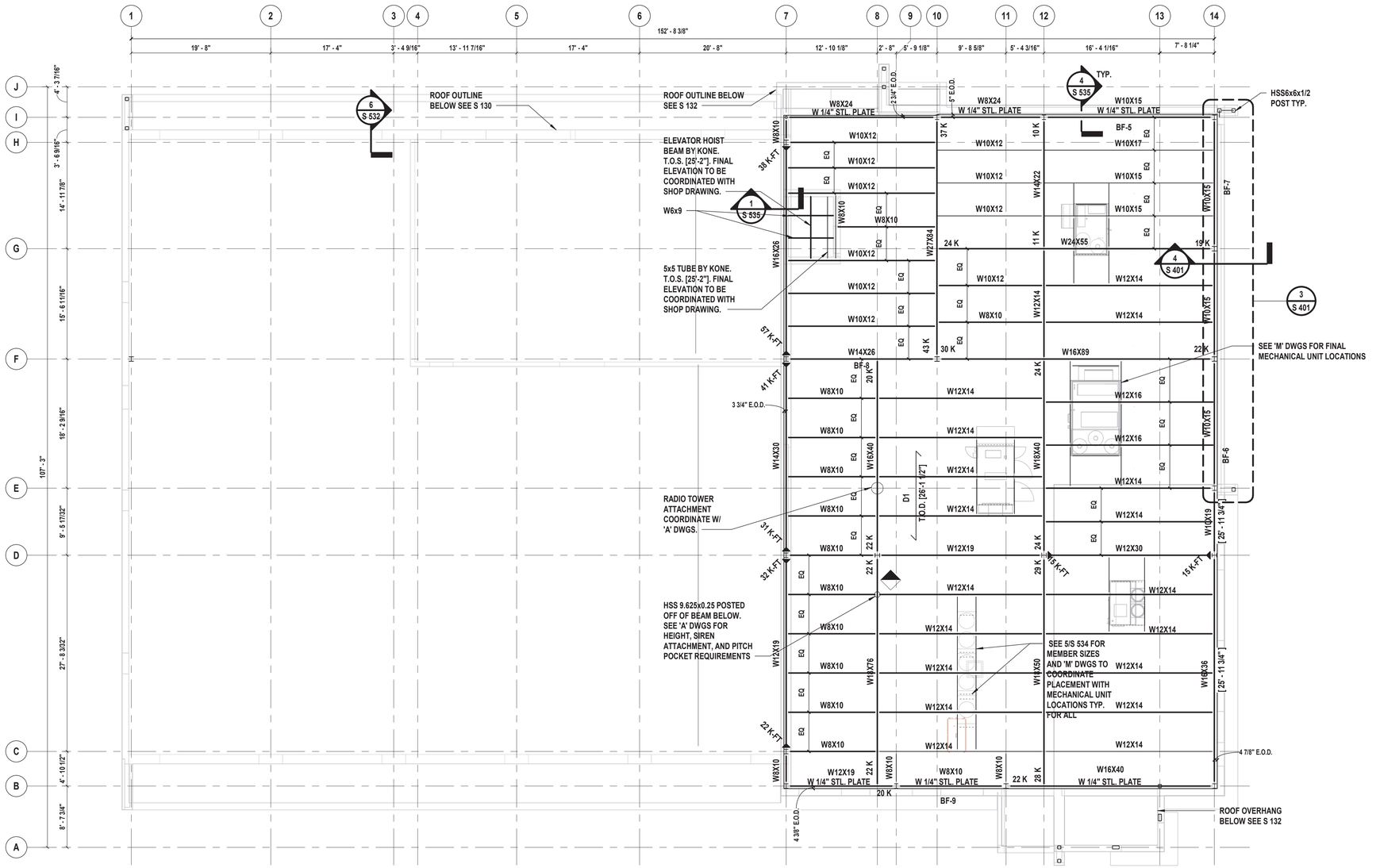

1 **High Roof Framing Plan**
SCALE: 1/8" = 1'-0"

NOTES:

1. TOP OF STEEL SHALL BE SET AT [26'-0"] ABOVE FINISHED FIRST FLOOR ELEVATION UNLESS OTHERWISE NOTED AS THUS [ ].
2. D1 INDICATES SPAN OF 1.5B-36 19GA. ROOF DECK BY VULCRAFT NUCOR OR APPROVED EQUAL
3. INSTALL BRIDGING FOR BAR JOISTS AS PER S.J.I. REQUIREMENTS.
4. SEE 'A' DWGS FOR EDGE OF DECK DIMENSIONS.
5. INDICATES BEAM TO COLUMN MOMENT CONNECTION WITH THE NUMBER REPRESENTING THE L.R.F.D. DESIGN MOMENT IN FT-KIPS.
6. STEEL CONNECTION PIECE DETAILS SHALL BE SUBMITTED WITH CALCULATIONS SIGNED AND SEALED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER. CONNECTION DESIGNER SHALL DESIGN ALL MOMENT CONNECTIONS AND SIMPLE SHEAR CONNECTIONS. WHERE DESIGN SHEAR REACTION IS NOT LISTED ON DRAWINGS, IT SHALL BE TAKEN AS 15 KIPS LRFD. WHERE AXIAL FORCE IN BEAMS IS NOT LISTED IN DRAWINGS, IT SHALL BE TAKEN AS 15 KIPS LRFD. ALL CONNECTIONS SHALL BE DESIGNED CONSIDERING AXIAL, SHEAR AND MOMENT FORCES SIMULTANEOUSLY AS REQUIRED BY BUILDING CODE. SEE STRUCTURAL STEEL SPECIFICATIONS FOR ADDITIONAL DESIGN LOADING REQUIREMENTS.
7. COORDINATE DIMENSIONS OF STAIR LANDING FRAMING WITH STAIR MANUFACTURER. SEE 'A' DWGS. FOR ADDITIONAL INFORMATION.

LEGEND:

= HANGER BELOW
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STATE OF NEW YORK · DANIEL J. AIELLO · LICENSED PROFESSIONAL ENGINEER · 100515

04/30/2027
Exp. Date

DANIEL J. AIELLO, P.E.
NY PROFESSIONAL ENGINEER Lic. No. 100515

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
JJN	SRK	JJN	DJA

PROJECT No:	DATE:	SCALE:
TRFD 2302	FEBRUARY 2025	AS SHOWN

CLIENT

THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

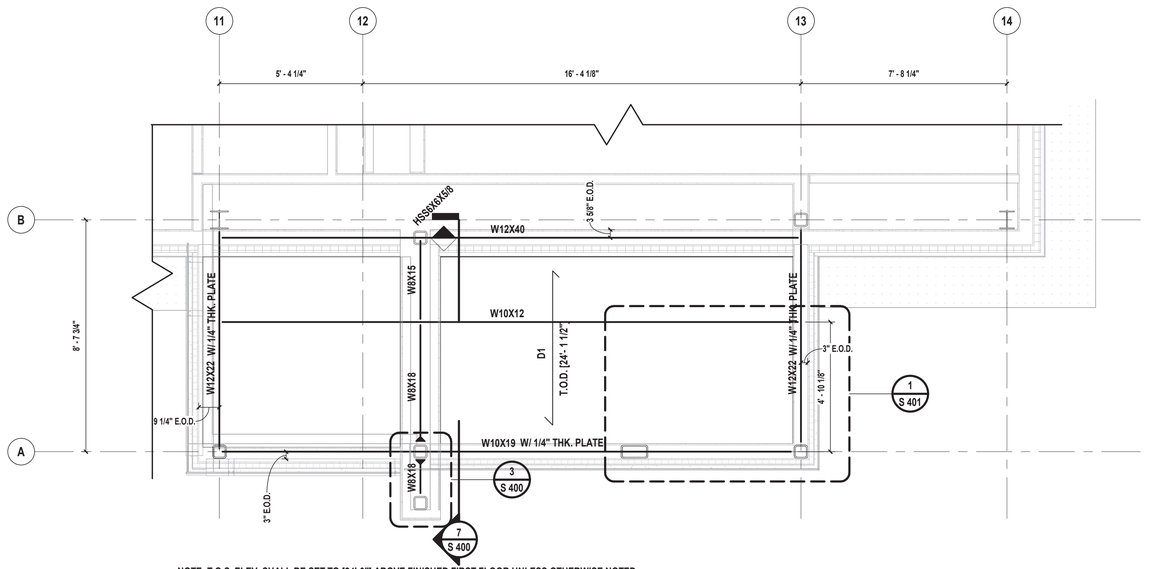
65 W RAMAPO ROAD GARNERVILLE, NY 10923

CONTRACT
CONTRACT G GENERAL CONSTRUCTION

STATUS
FINAL BID DOCUMENT

SHEET TITLE
HIGH ROOF FRAMING PLAN

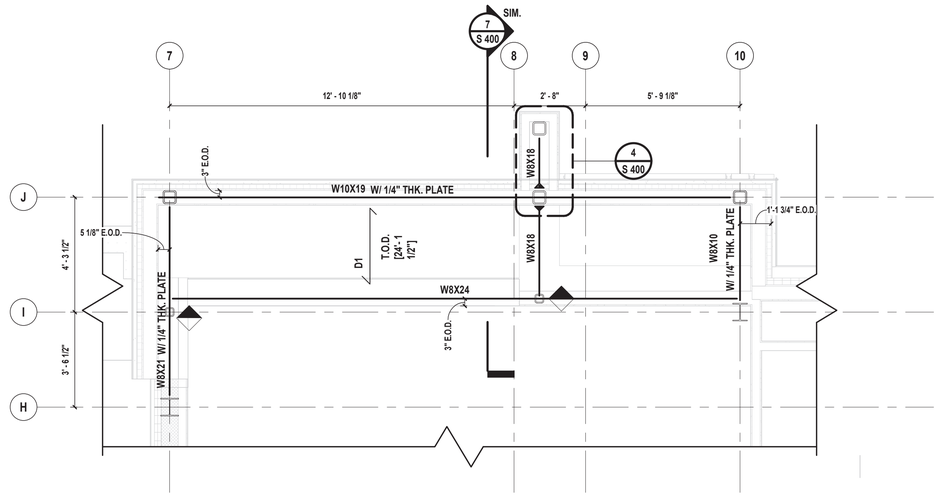
DRAWING No.
S 131.00



NOTE: T.O.S. ELEV. SHALL BE SET TO [24'-0"] ABOVE FINISHED FIRST FLOOR UNLESS OTHERWISE NOTED.

1 Roof Framing Plan at Stair A

SCALE: 3/8" = 1'-0"



NOTE: T.O.S. ELEV. SHALL BE SET TO [24'-0"] ABOVE FINISHED FIRST FLOOR UNLESS OTHERWISE NOTED.

2 Roof Framing Plan at Stair B

SCALE: 3/8" = 1'-0"

NOTES:

1. SEE NOTES ON PLAN VIEWS FOR T.O.S. ELEVATIONS.
2. D1 INDICATES SPAN OF 1.5B-36 19GA. ROOF DECK BY VULCRAFT NUCOR OR APPROVED EQUAL
3. SEE PLAN FOR EDGE OF DECK DIMENSIONS.
4. INDICATES BEAM TO COLUMN MOMENT CONNECTION WITH THE NUMBER REPRESENTING THE L.R.F.D. DESIGN MOMENT IN FT-KIPS.
5. STEEL CONNECTION PIECE DETAILS SHALL BE SUBMITTED WITH CALCULATIONS SIGNED AND SEALED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER. CONNECTION DESIGNER SHALL DESIGN ALL MOMENT CONNECTIONS AND SIMPLE SHEAR CONNECTIONS. WHERE DESIGN SHEAR REACTION IS NOT LISTED ON DRAWINGS, IT SHALL BE TAKEN AS 15 KIPS LRFD. WHERE AXIAL FORCE IN BEAMS IS NOT LISTED IN DRAWINGS, IT SHALL BE TAKEN AS 15 KIPS LRFD. ALL CONNECTIONS SHALL BE DESIGNED CONSIDERING AXIAL, SHEAR AND MOMENT FORCES SIMULTANEOUSLY AS REQUIRED BY BUILDING CODE. SEE STRUCTURAL STEEL SPECIFICATIONS FOR ADDITIONAL DESIGN LOADING REQUIREMENTS.
6. COORDINATE DIMENSIONS OF STAIR LANDING FRAMING WITH STAIR MANUFACTURER. SEE 'A' DWGS. FOR ADDITIONAL INFORMATION.

LEGEND:

= HANGER BELOW

= CARRIED COLUMN/HANGER ABOVE

E.O.S. = EDGE OF SLAB

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NY Engineering Certificate of Authorization No.: 0018178

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TRFD 2302	FEBRUARY 2025	AS SHOWN

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THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

65 W RAMAPO ROAD GARNERVILLE, NY 10923

CONTRACT

CONTRACT G

STATUS

FINAL BID DOCUMENT

SHEET TITLE

STAIR ROOF FRAMING PLANS

DRAWING No.

S 132.00

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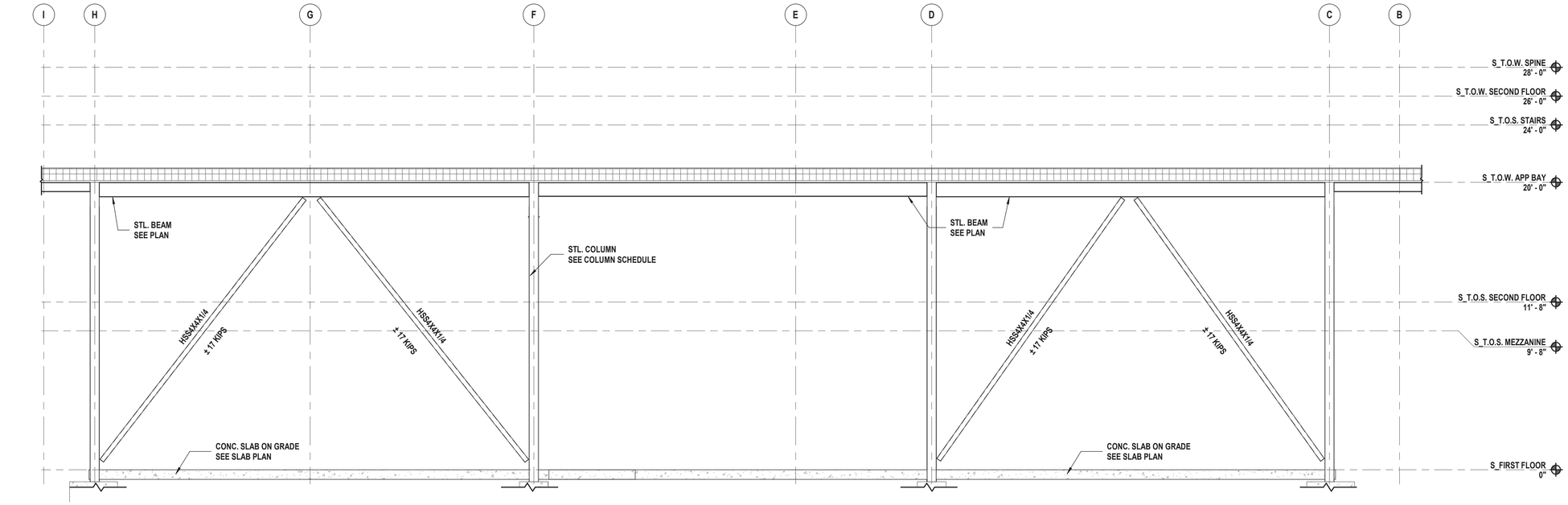
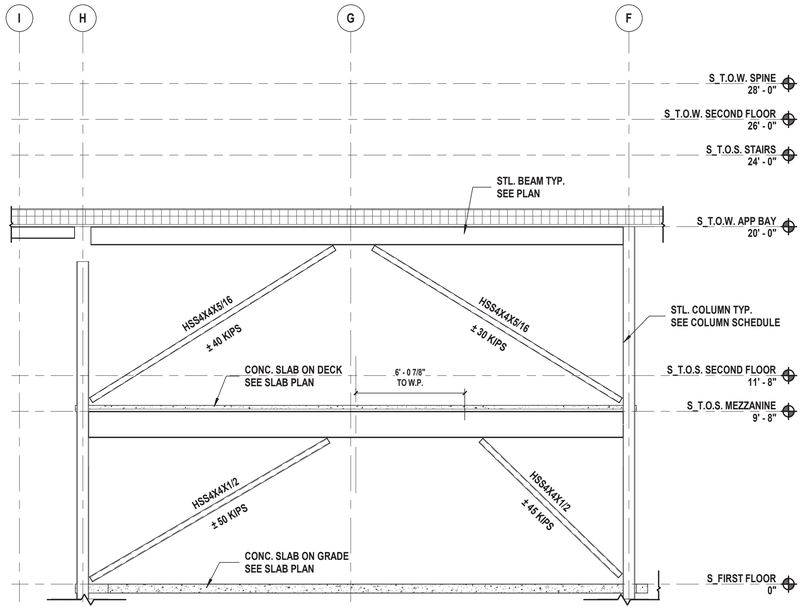
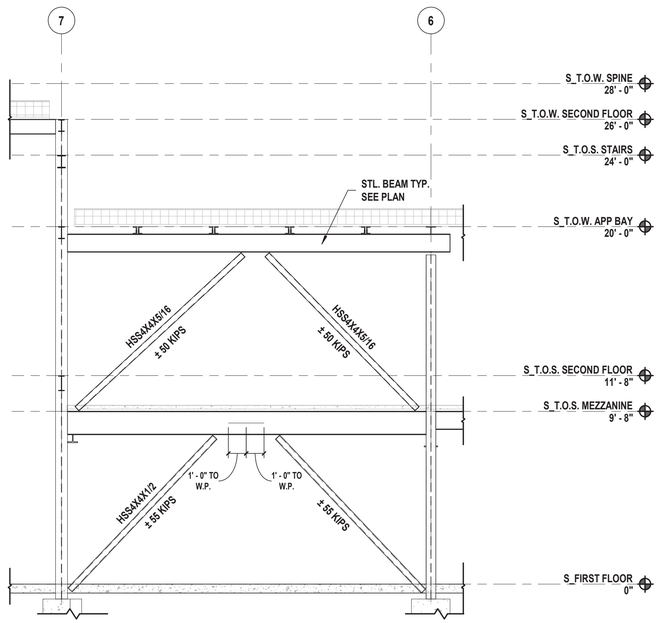
2/25/2025 12:04:58 PM



1 BF-1 and BF-2 Elevation
SCALE: NTS



2 BF-3 Elevation
SCALE: NTS



3 BF-4 Elevation
SCALE: NTS

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STATE OF NEW YORK
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LICENSED PROFESSIONAL ENGINEER
100515

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THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

THIELLS 26 FD

**65 W RAMAPO ROAD
GARNERVILLE, NY 10923**

CONTRACT

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STATUS

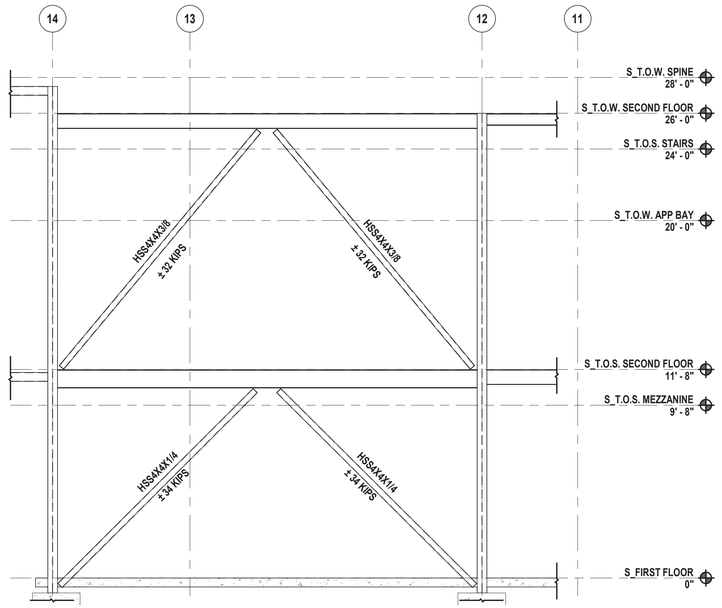
FINAL BID DOCUMENT

SHEET TITLE

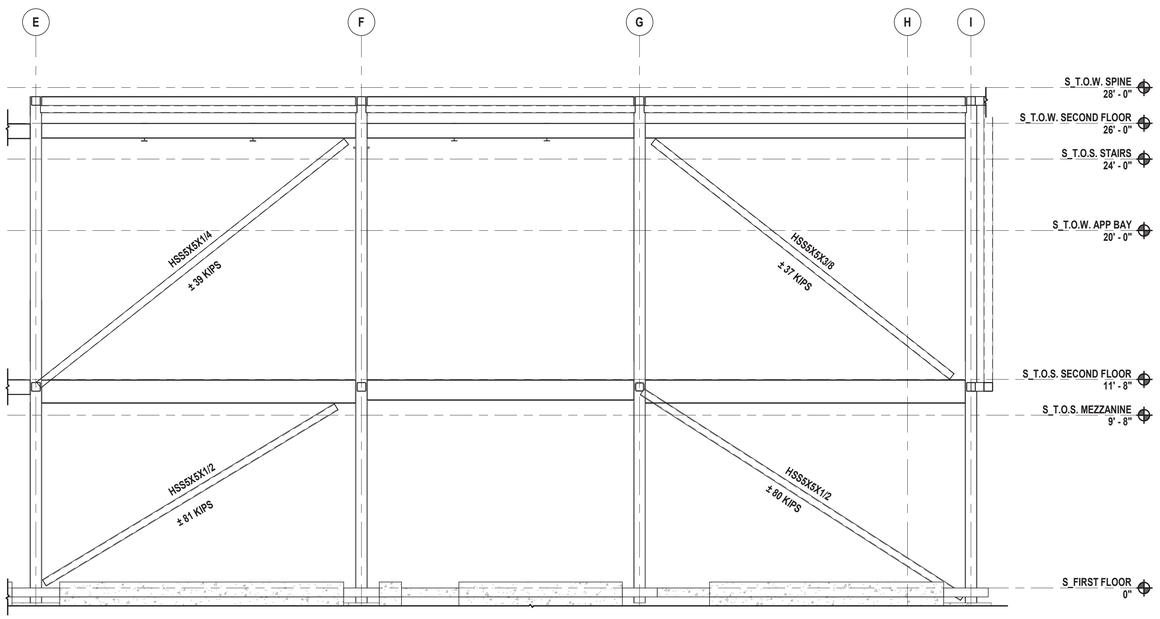
BRACED FRAME ELEVATIONS

DRAWING No.

S 300.00



1 BF-5 Elevation
SCALE: NTS



2 BF-6 and BF-7 Elevation
SCALE: NTS

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THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

65 W RAMAPO ROAD
GARNERVILLE, NY 10923

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CONTRACT G

STATUS

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SHEET TITLE

BRACED FRAME ELEVATIONS

DRAWING No.

S 301.00

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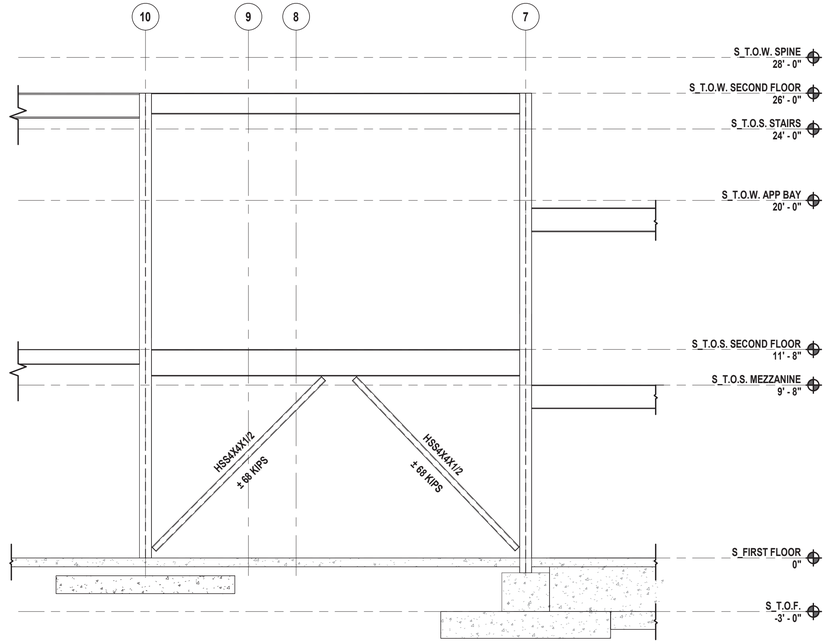
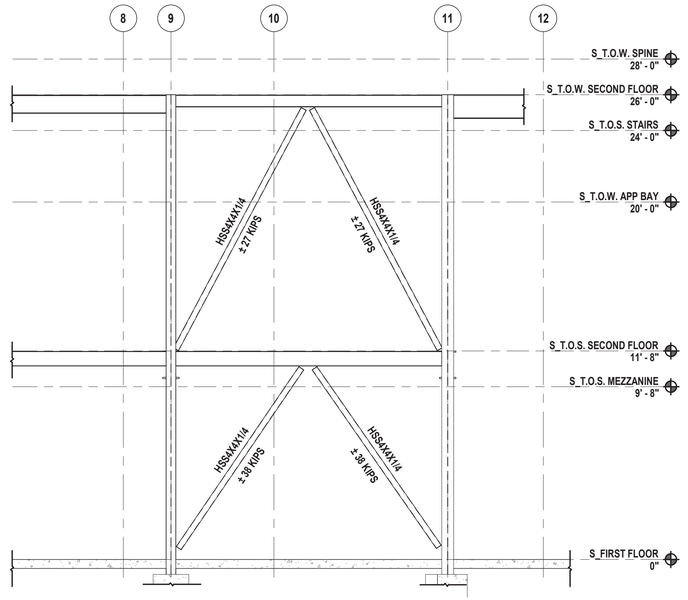
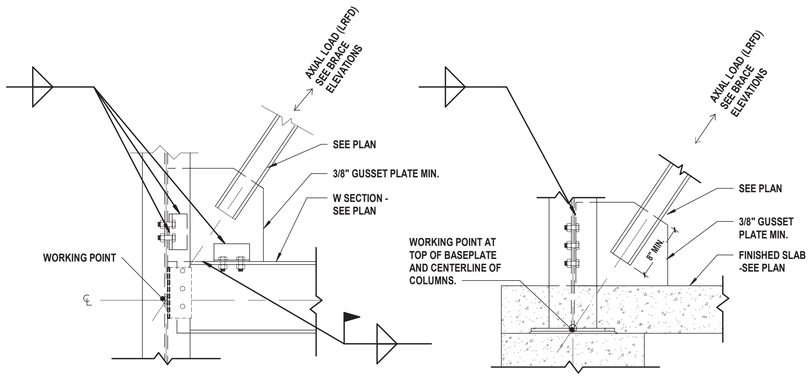


1 **BF-8 Elevation**
SCALE: NTS

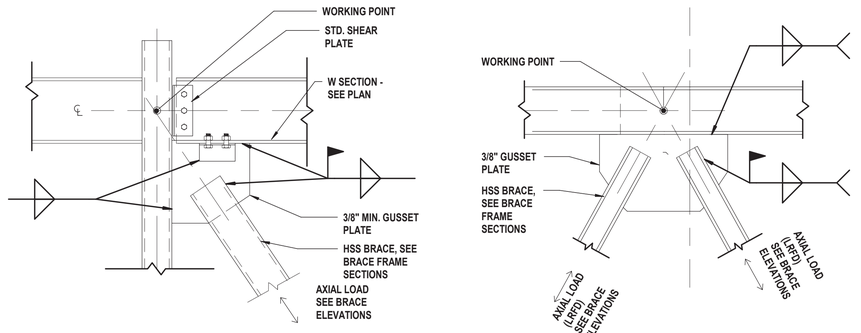


2 **BF-9 Elevation**
SCALE: NTS



NOTE: CONNECTIONS SHOWN HERE ARE SUGGESTIONS TO THE FABRICATOR. FABRICATOR'S ENGINEER TO DESIGN THESE CONNECTIONS TO THE LOADS PROVIDED ON THE BRACED FRAME ELEVATIONS.

3 **Base Bracing Connection**
SCALE: 1" = 1'-0"



NOTE: CONNECTIONS SHOWN HERE ARE SUGGESTIONS TO THE FABRICATOR. FABRICATOR'S ENGINEER TO DESIGN THESE CONNECTIONS TO THE LOADS PROVIDED ON THE BRACED FRAME ELEVATIONS.

4 **Beam Bracing Connection**
SCALE: NTS

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THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

THIELLS 26 FD

65 W RAMAPO ROAD GARNERVILLE, NY 10923

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CONTRACT G

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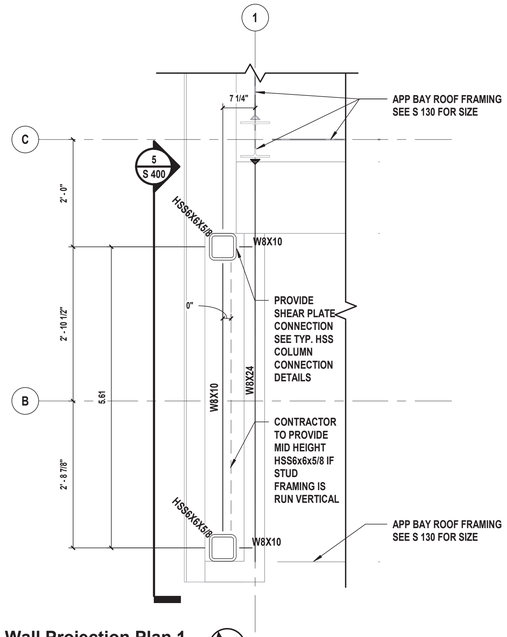
FINAL BID DOCUMENT

SHEET TITLE

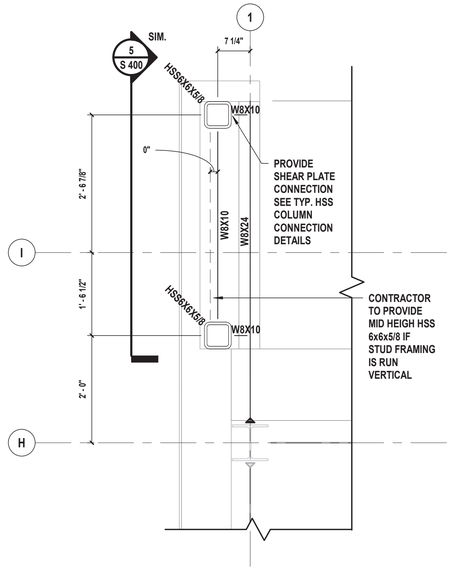
BRACED FRAME ELEVATIONS

DRAWING No.

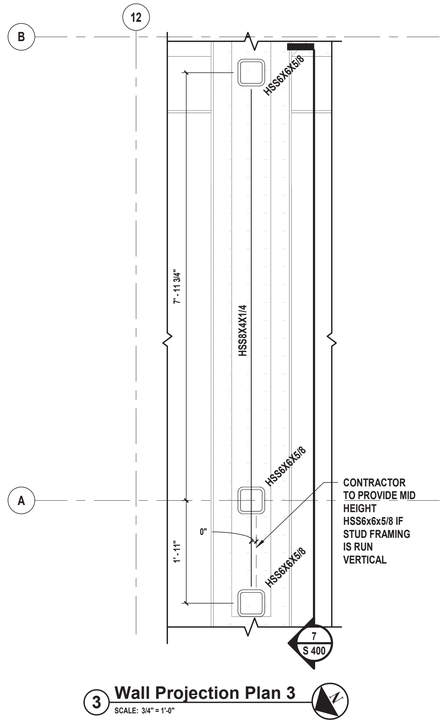
S 302.00



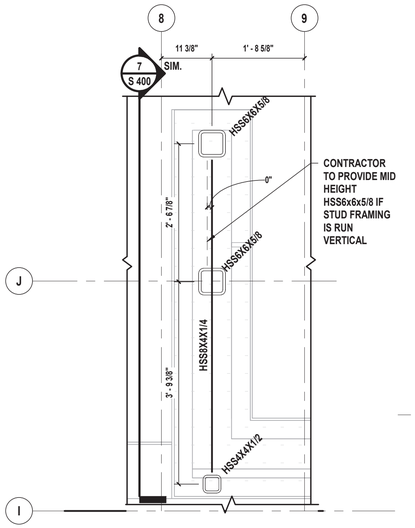
1 Wall Projection Plan 1
SCALE: 3/4" = 1'-0"



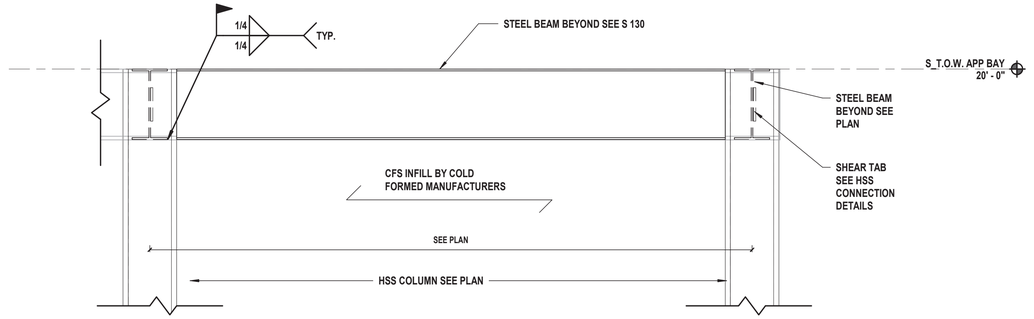
2 Wall Projection Plan 2
SCALE: 3/4" = 1'-0"



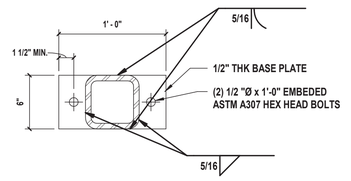
3 Wall Projection Plan 3
SCALE: 3/4" = 1'-0"



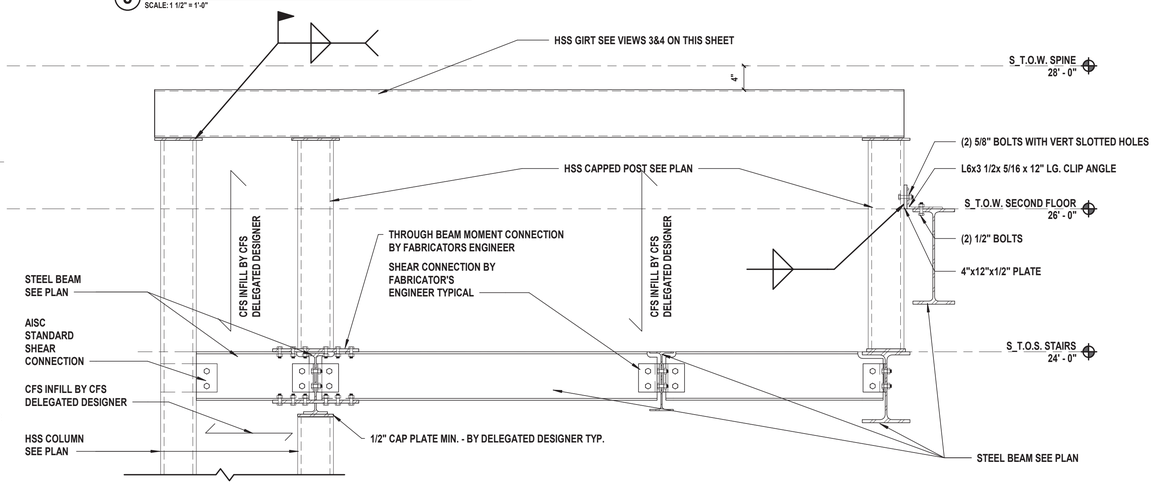
4 Wall Projection Plan 4
SCALE: 3/4" = 1'-0"



5 App Bay Wall Projection Section
SCALE: 1 1/2" = 1'-0"



6 Projection Frame Base Plate Detail
SCALE: 1 1/2" = 1'-0"



7 Stair Roof Wall Projection Section
SCALE: 1" = 1'-0"

NOTES:

1. SEE SECTIONS FOR T.O.S. ELEVATIONS.
2. D1 INDICATES SPAN OF 1.5B-36 ROOF DECK BY VULCRAFT NUCOR OR APPROVED EQUAL
3. SEE PLAN FOR EDGE OF DECK DIMENSIONS.
4. INDICATES BEAM TO COLUMN MOMENT CONNECTION WITH THE NUMBER REPRESENTING THE L.R.F.D. DESIGN MOMENT IN FT-KIPS.
5. STEEL CONNECTION PIECE DETAILS SHALL BE SUBMITTED WITH CALCULATIONS SIGNED AND SEALED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER. CONNECTION DESIGNER SHALL DESIGN ALL MOMENT CONNECTIONS AND SIMPLE SHEAR CONNECTIONS. WHERE DESIGN SHEAR REACTION IS NOT LISTED ON DRAWINGS, IT SHALL BE TAKEN AS 15 KIPS LRFD. WHERE AXIAL FORCE IN BEAMS IS NOT LISTED IN DRAWINGS, IT SHALL BE TAKEN AS 15 KIPS LRFD. ALL CONNECTIONS SHALL BE DESIGNED CONSIDERING AXIAL, SHEAR AND MOMENT FORCES SIMULTANEOUSLY AS REQUIRED BY BUILDING CODE. SEE STRUCTURAL STEEL SPECIFICATIONS FOR ADDITIONAL DESIGN LOADING REQUIREMENTS.
6. COORDINATE DIMENSIONS OF STAIR LANDING FRAMING WITH STAIR MANUFACTURER. SEE 'A' DWGS. FOR ADDITIONAL INFORMATION.

LEGEND:

= HANGER BELOW

= CARRIED COLUMN/HANGER ABOVE

E.O.S. = EDGE OF SLAB

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THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

65 W RAMAPO ROAD GARNERVILLE, NY 10923

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SHEET TITLE

WALL PROJECTION PLANS AND SECTIONS

DRAWING No.

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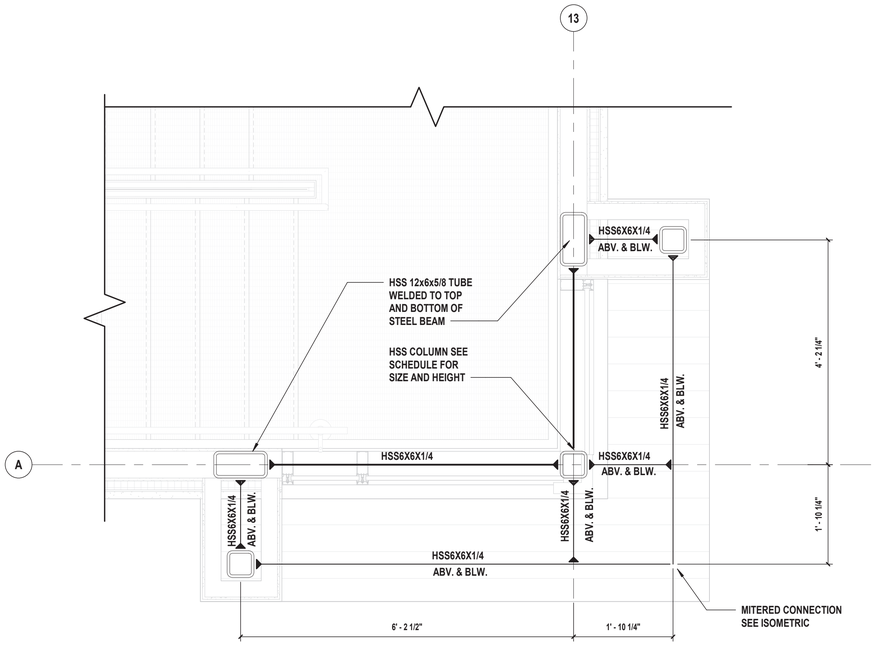
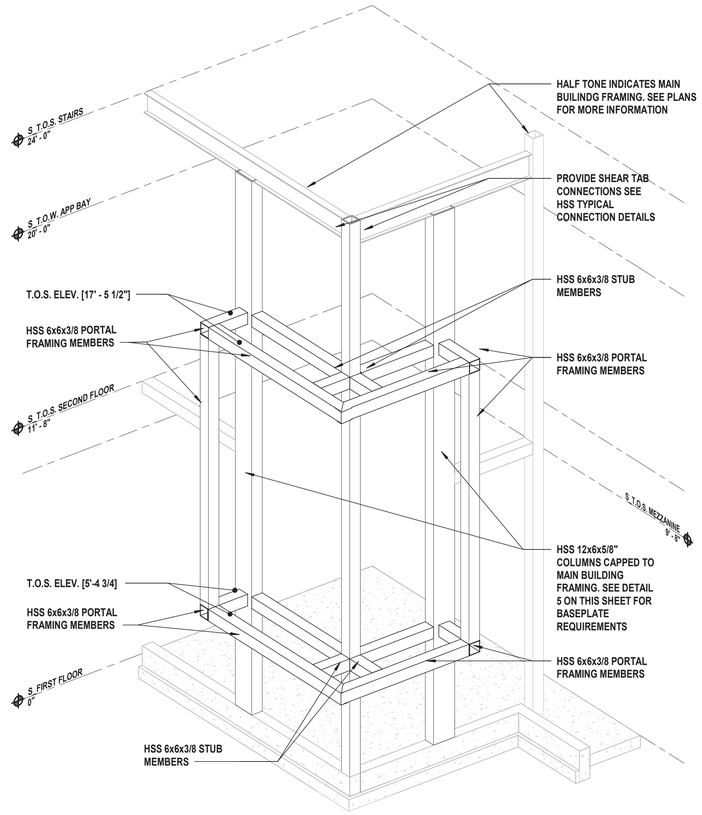


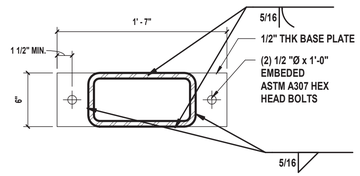
NOTE:
1. SEE PORTAL FRAMING ISOMETRIC VIEW ON THIS SHEET FOR MORE INFORMATION.
2. ALL MOMENT CONNECTIONS SHOWN IN THIS PLAN SHALL BE DESIGNED FOR 15 K-FT LRFD U.O.N.

1 Stair Portal Framing Plan
SCALE: 3/4" = 1'-0"

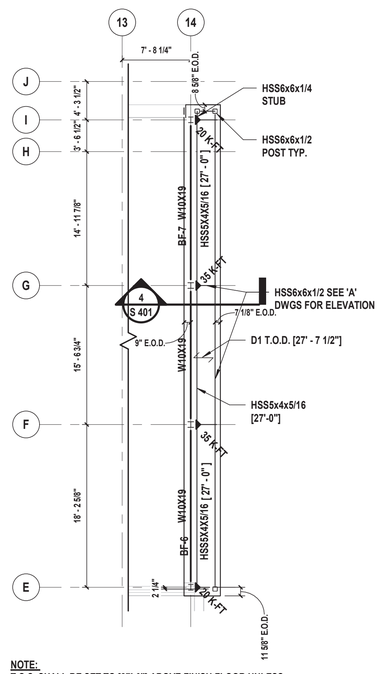


NOTE: T.O.S ELEVATIONS SHOWN ARE RELATIVE TO FINISHED FIRST FLOOR TYP.

2 Portal Framing Isometric View
SCALE:

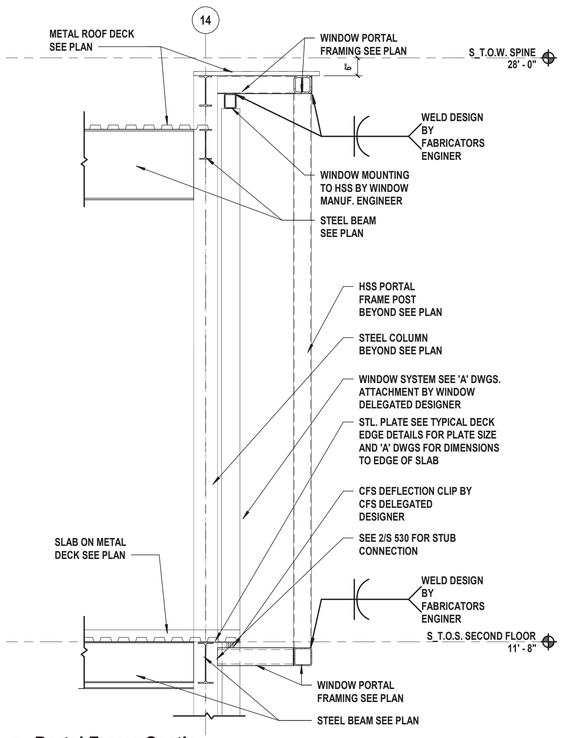


5 Stair Portal Frame Base Plate Detail
SCALE:1 1/2" = 1'-0"



NOTE:
T.O.S. SHALL BE SET TO [27'-6"] ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED.

3 Portal Frame Partial Plan
SCALE: 1/8" = 1'-0"



4 Portal Frame Section
SCALE: 1/2" = 1'-0"

NOTES:

1. SEE VIEWS ON THIS SHEET FOR T.O.S. ELEVATIONS.
2. D1 INDICATES SPAN OF 1.5B-36 ROOF DECK BY VULCRAFT NUCOR OR APPROVED EQUAL
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65 W RAMAPO ROAD
GARNERVILLE, NY 10923

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SHEET TITLE

STAIR A PORTAL FRAME PLAN AND ISOMETRIC

DRAWING No.

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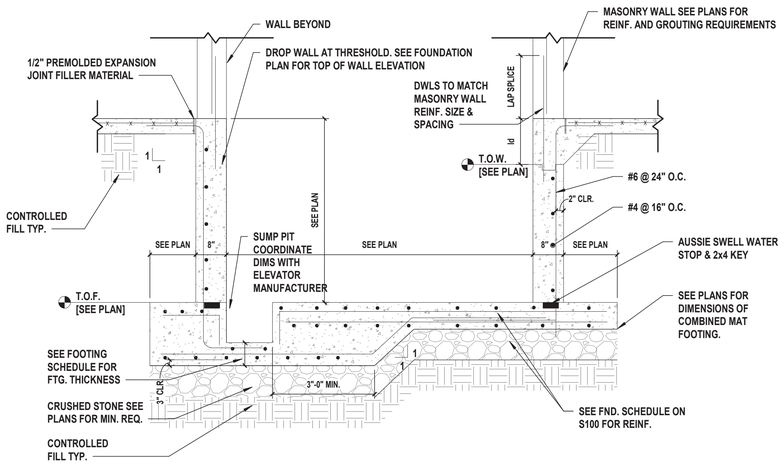
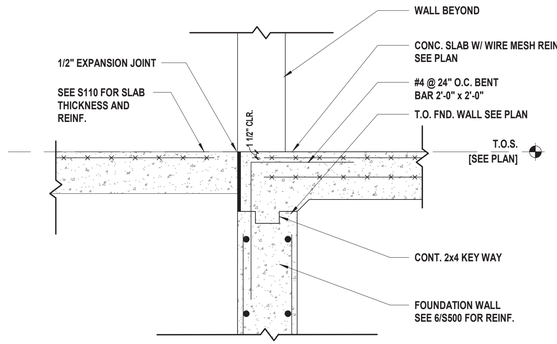
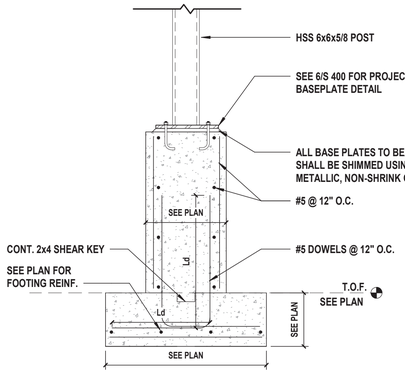


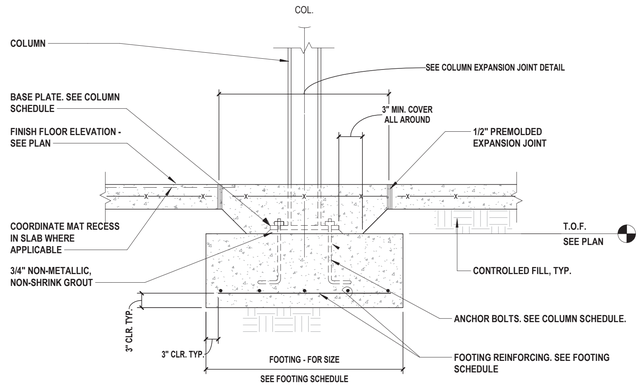
1 Elevator Pit with Sump Pit
SCALE: NTS



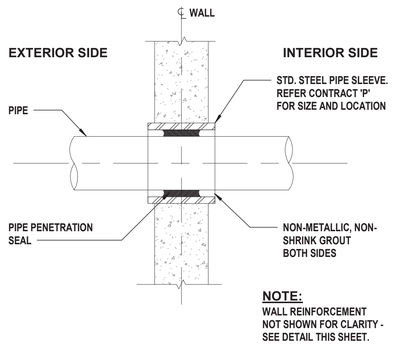
2 Interior Foundation at Door Opening
SCALE: NTS



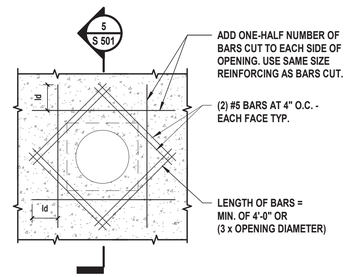
3 Foundation Wall Detail at Wall Projections
SCALE: 3/4" = 1'-0"



4 Interior Footing Detail
SCALE: NTS



5 Pipe Penetration at Wall or Slab
SCALE: NTS



6 Pipe Penetration at Wall or Slab (Elevation)
SCALE: NTS

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04/30/2027
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NEW 26-100 FIRE HEADQUARTERS

65 W RAMAPO ROAD GARNERVILLE, NY 10923

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FOUNDATION DETAILS

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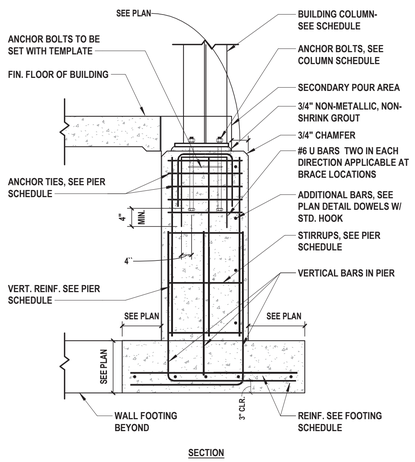
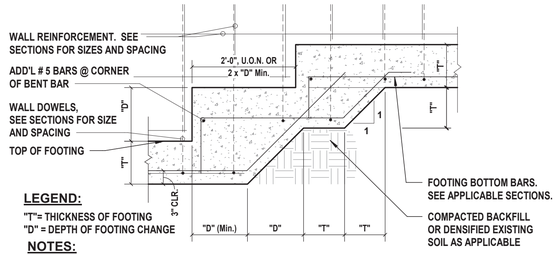


SECTION

1 Concrete Pier/Footing Section Detail

SCALE: NTS



LEGEND:

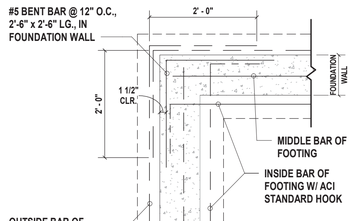
"T"= THICKNESS OF FOOTING
"D" = DEPTH OF FOOTING CHANGE

NOTES:

1. TOP REINFORCEMENT FOR RETAINING WALL/ COLUMN SUPPORT FOOTINGS NOT SHOWN FOR CLARITY.
2. COORDINATE STEP LOCATIONS WITH STRUCTURAL ENGINEER IF STEP IS NOT INDICATED ON THESE DRAWINGS.

2 Typical Stepped Footing Detail

SCALE: NTS



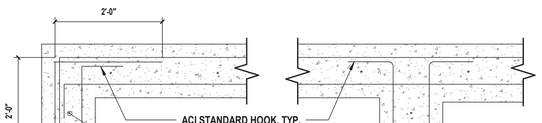
PLAN VIEW

NOTES:

1. VERTICAL WALL REINFORCEMENT NOT SHOWN FOR CLARITY

3 Corner of Building Fnd/Fgt

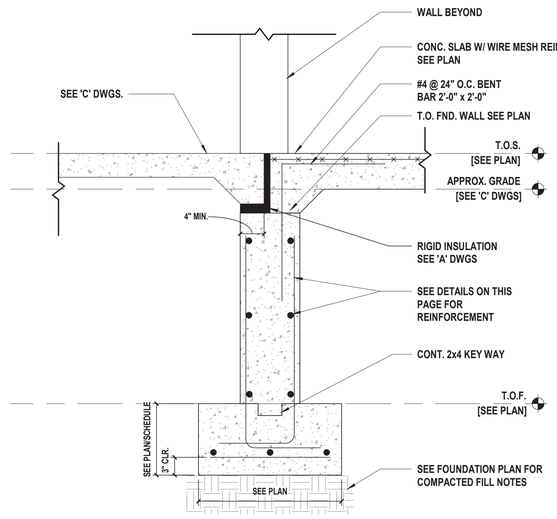
SCALE: NTS



OUTSIDE CORNER **INTERSECTION**

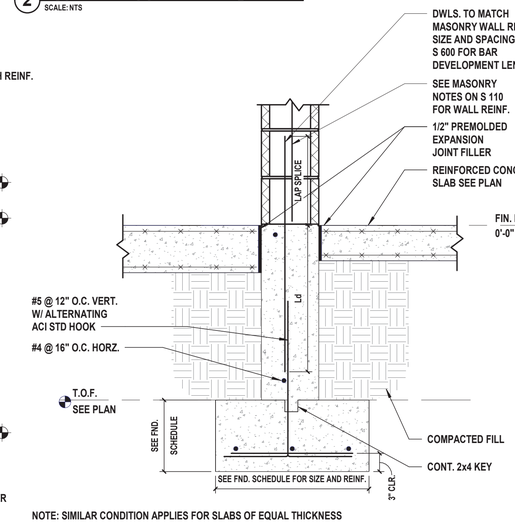
4 Corner Horizontal Reinforcement at Foundation Wall or Footing

SCALE: NTS



5 Haunched Slab on Grade at Doorway

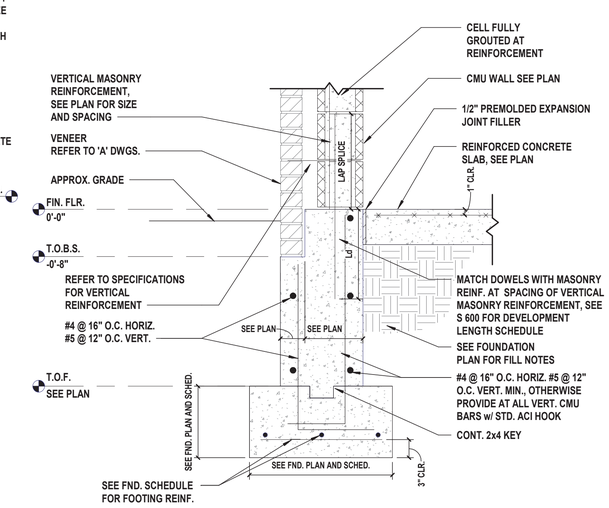
SCALE: NTS



NOTE: SIMILAR CONDITION APPLIES FOR SLABS OF EQUAL THICKNESS

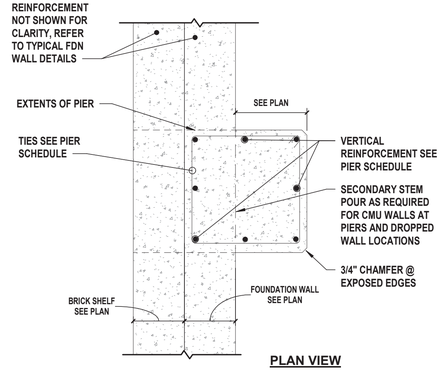
6 Interior 8" Wide Foundation Wall

SCALE: NTS



7 Exterior Foundation Wall With Brick Shelf

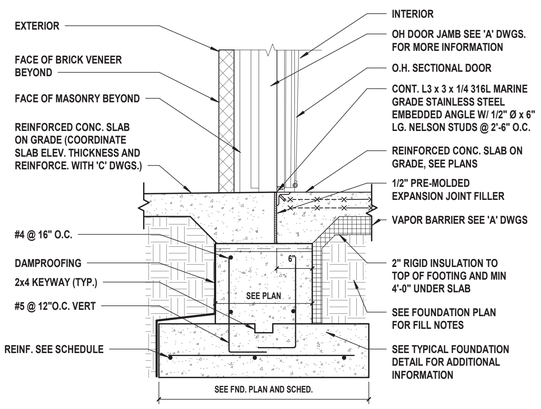
SCALE: NTS



PLAN VIEW

8 Typical Pier/Foundation Wall/Brick Shelf Intersection

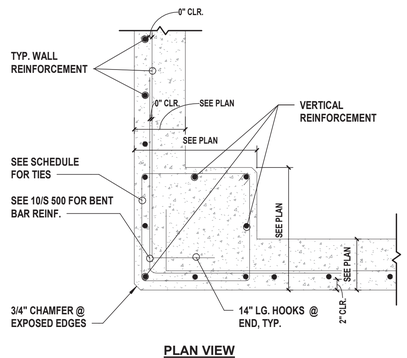
SCALE N T S



NOTE: EMBEDDED ANGLE LENGTH SHALL EXTEND FULL LENGTH OF O.H. DOOR OPENING WITH 4" ADDITIONAL EMBEDDED CLOSURE ANGLE EXTENDING TO MASONRY WALL/EDGE OF SLAB AT EA. END (MITER CORNER FOR SMOOTH EXPOSED SURFACE). REFER TO 'A' DWGS. FOR ADDITIONAL INFORMATION.

9 Thickened Wall at Overhead Door

SCALE: NTS



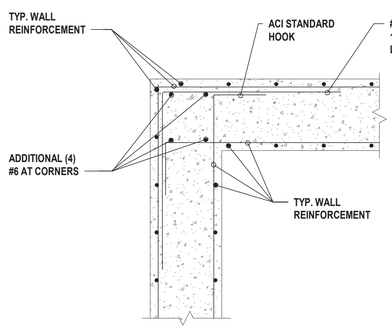
PLAN VIEW

NOTE:

1. CONDITION AT SINGLE LAYER OF WALL REINFORCEMENT SHOWN. DOUBLE LAYER REINFORCEMENT CONDITION SIMILAR.

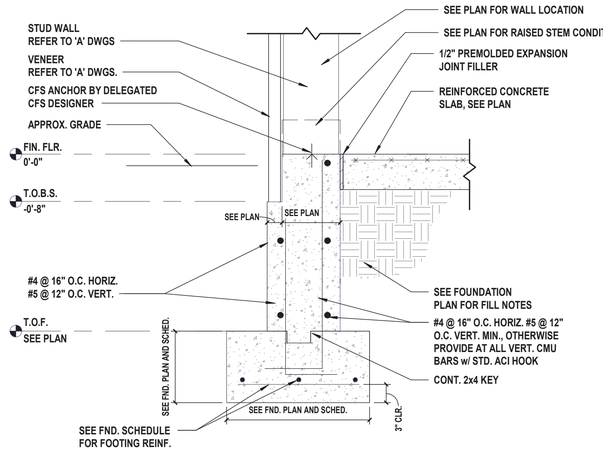
10 Corner Pier/Foundation Wall Intersection

SCALE: NTS



11 Wall Corner Reinforcement with Additional Vertical Bars

SCALE: NTS



12 Exterior Foundation Wall With Panel Shelf

SCALE: NTS

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Daniel Aiello 04/30/2027
Exp. Date

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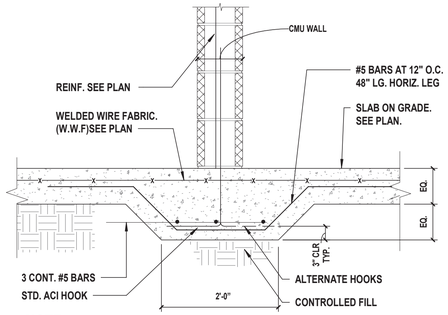
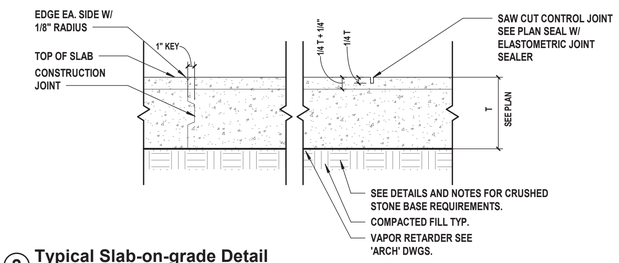
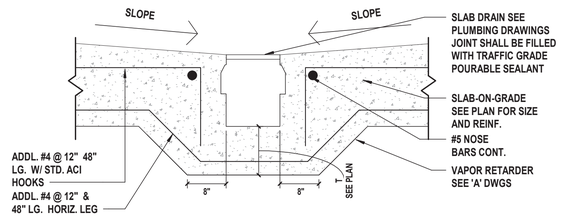


NOTE
VAPOR BARRIER TO BE CONTINUOUS UNDER THICKENED SLAB.

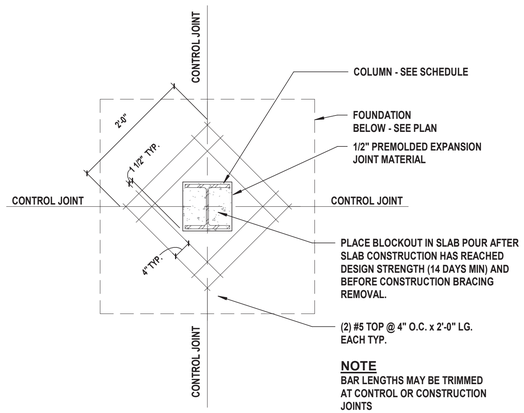
1 Haunched Slab at Masonry Non-Load-Bearing Partition
SCALE: NTS



2 Typical Slab-on-grade Detail
SCALE: NTS

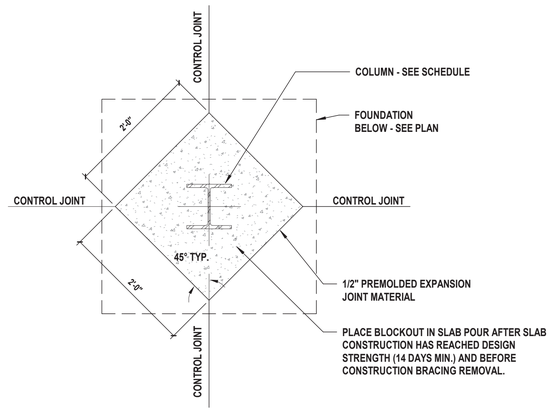


3 Trench Drain Detail
SCALE: NTS



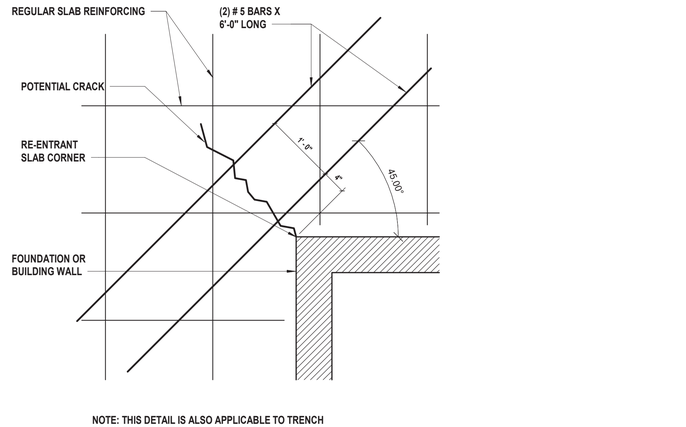
NOTE
BAR LENGTHS MAY BE TRIMMED AT CONTROL OR CONSTRUCTION JOINTS

SQUARE BLOCKOUT TIGHT TO COLUMN



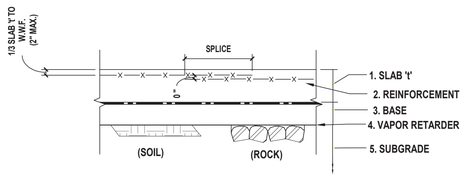
DIAMOND BLOCKOUT AROUND COLUMN

4 Column Expansion Joint Details
SCALE: NTS



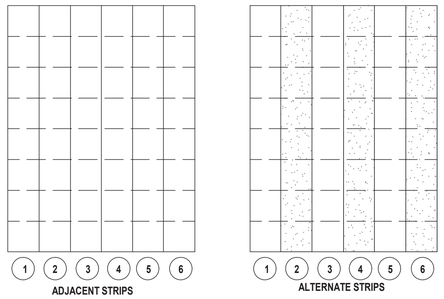
NOTE: THIS DETAIL IS ALSO APPLICABLE TO TRENCH DRAIN ENDS. LENGTH OF REBAR TO BE 2'-0".

5 Typical Slab Re-Entrant Corner Reinforcement
SCALE: NTS



TYPICAL DETAIL- SLAB ON GROUND

NOTE:
1. SLAB THICKNESS NOTED ON PLANS.
2. REINFORCEMENT: SEE PLAN
3. BASE = SEE PLAN NOTES, SPECS AND REFER TO DIRECTION OF GEOTECHNICAL REPORT
4. VAPOR RETARDER (VAPOR "BARRIER"): SEE 'A' DWGS.
5. SUBGRADE: COMPACTED STRUCTURAL FILL, BACKFILL OR UNDISTURBED NATIVE SOIL.
6. PER GEOTECHNICAL REPORT CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ALL UNSUITABLE BEARING MATERIALS PER SUBGRADE INSPECTIONS.

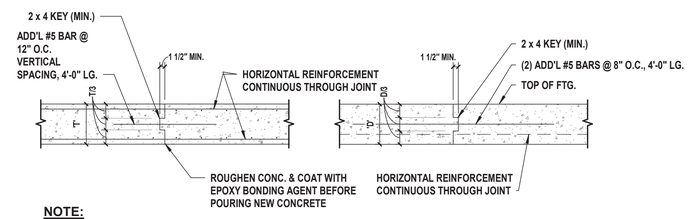


SUGGESTED SEQUENCE OF CASTING STRIPS

SLAB ON GROUND NOTES:
1. SLAB ON GROUND SHALL BE PLACED IN STRIPS, AS SHOWN IN "SUGGESTED SEQUENCE OF CASTING STRIPS".
2. CONTROL JOINTS SHALL BE SAWCUT AS SOON CONCRETE IS HARD ENOUGH NOT TO BE TORN OR DAMAGED BY THE BLADE, AND BEFORE THE CONCRETE STARTS TO COOL. TYPICALLY JOINTS SHOULD BE CUT 4 TO 12 HOURS AFTER THE SLAB HAS BEEN FINISHED, DEPENDING UPON WEATHER AND JOB CONDITIONS.
3. SPACING OF SAWCUT CONTROL JOINTS (IN FEET) TO BE APPROXIMATELY THREE TIMES THE SLAB THICKNESS IN INCHES, WITH A MAXIMUM OF TWENTY (20) FEET.
4. A MAXIMUM RATIO OF 1.5 SHALL BE MAINTAINED BETWEEN LONG AND SHORT DIMENSIONS OF PANELS FORMED BY CONSTRUCTION AND CONTROL JOINTS.

LEGEND:
- STRIPS CAST FIRST
- INFILL STRIPS
- FORMED JOINTS
- SAWCUT JOINTS

6 Typical Slab on Grade Detail
SCALE: NTS



NOTE:
KEY WIDTH NOT TO EXCEED 1/3 WIDTH OF WALL IN GRADE BEAM. VERTICAL CONSTRUCTION JOINT PERMITTED IN WALL OR GRADE AT ANY POINT 4'-0" MIN. AWAY FROM FACE OF SUPPORTING PIER, BUTTRESS AND/OR WALL OPENING. PROVIDE ONE VERTICAL CONSTRUCTION JOINT FOR EVERY 40'-0" OF STRAIGHT RUN OF WALL.

VERTICAL CONSTRUCTION JOINT IN WALL OR GRADE BEAM

VERTICAL CONSTRUCTION JOINT IN CONTINUOUS FOOTING

NOTE:
SUBMIT CONSTRUCTION JOINT LAYOUT FOR ALL CONCRETE STRUCTURES FOR ENGINEER'S REVIEW

7 Construction Joint Details
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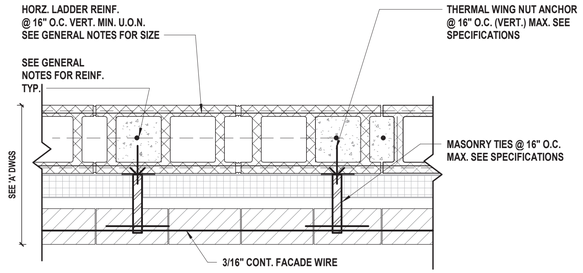
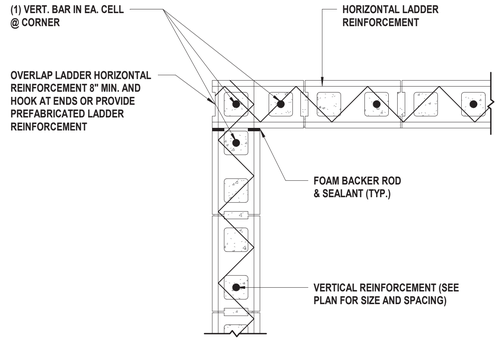
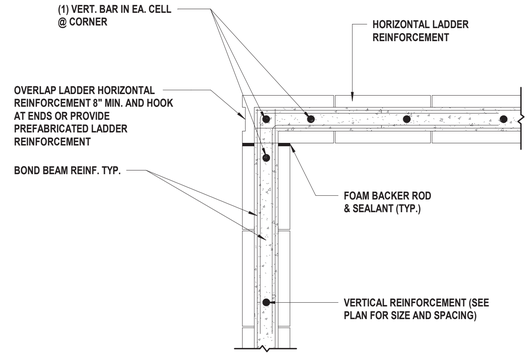


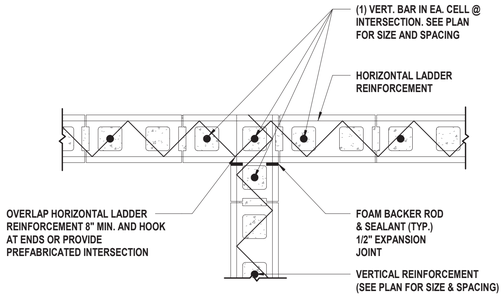


AT CMU BLOCKS

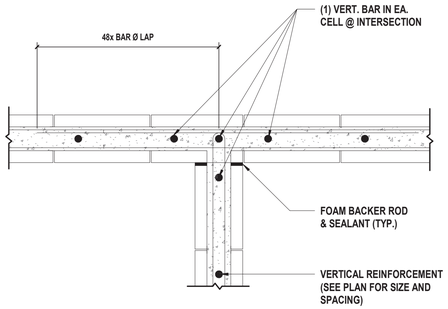


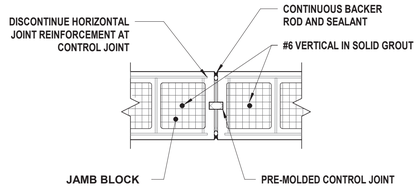
AT CMU BOND BEAMS

1 Typical CMU Wall Reinforcing Detail
SCALE: NTS



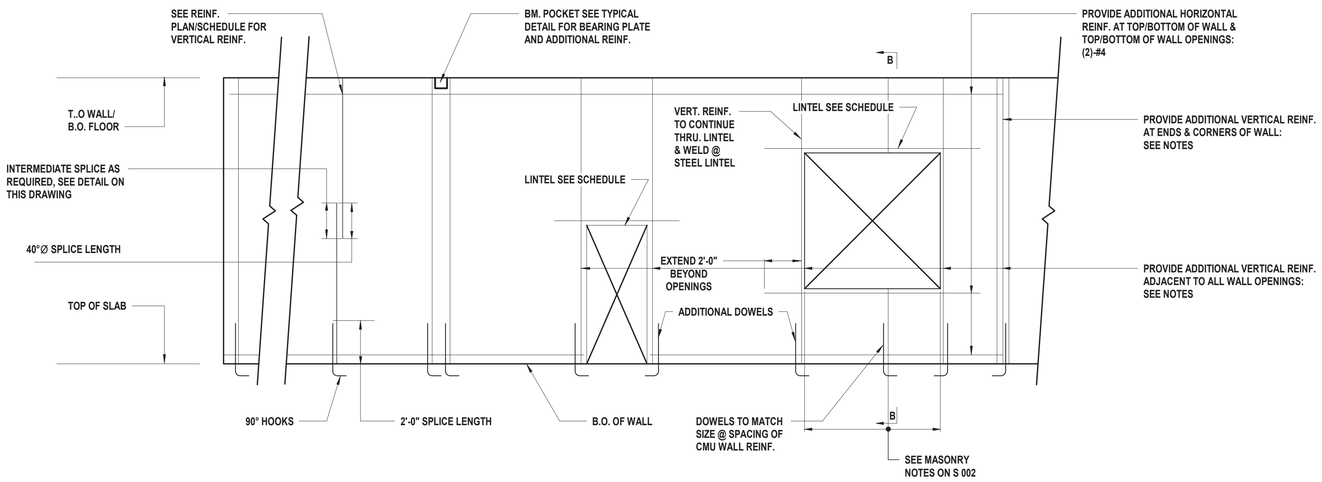
2 Typical CMU Corner Reinforcement Detail
SCALE: NTS





3 Typical CMU Intersection Reinforcement Detail
SCALE: NTS

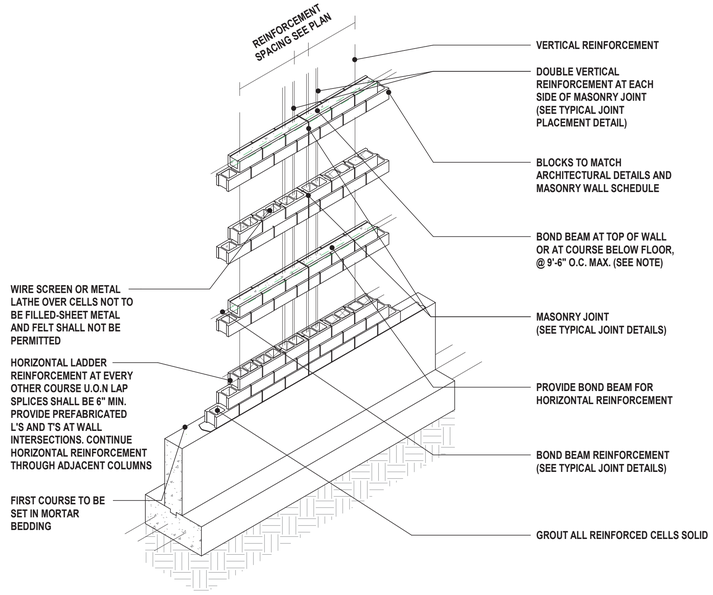
4 Typical CMU Wall Control Joint
SCALE: NTS



WALL REINFORCEMENT ELEVATION NOTES:

1. ABOVE DETAIL APPLIES TO ALL MASONRY (C.M.U.) WALLS
2. DETAIL DOES NOT SHOW GENERAL REINFORCEMENT SEE PLANS & SCHEDULES FOR REINFORCEMENT SIZE AND SPACING.
3. DETAIL DOES NOT SHOW BOND BEAM, LADDER REINFORCEMENT, ETC. FOR CLARITY.
4. FOR MULTI-WYTHE EXTERIOR WALLS ABOVE DETAIL APPLIES TO C.M.U. BACKUP WALL ONLY. SEE ARCH DWGS FOR ADDITIONAL INFORMATION.
5. FOR C.M.U. MASONRY NOTES SEE S 002.

5 Typical CMU Wall Elevation Detail
SCALE: NTS



NOTE: IF FLOOR HEIGHT EXCEEDS 9'-6", PROVIDE A BOND BEAM AT THE MID HEIGHT OF THE WALL

6 Typical CMU Wall Bond Beam Elevation Detail
SCALE: NTS

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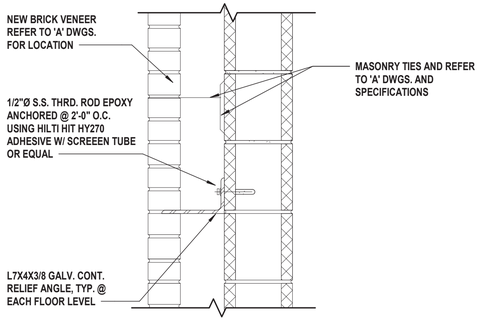
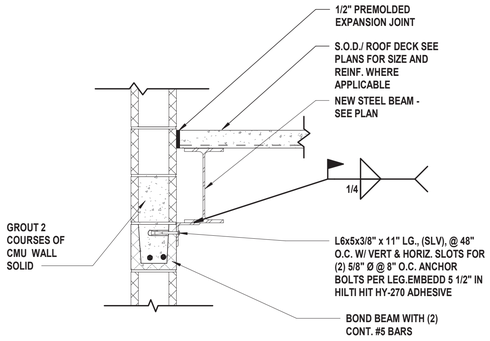
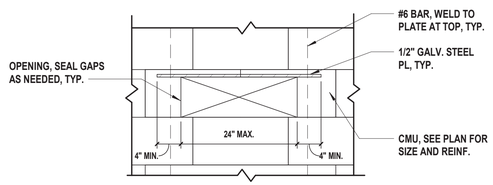


NOTE:
REFER TO 'A' DWGS. FOR INSULATION REQUIREMENTS AS WELL AS ADDITIONAL INFO FOR MASONRY NOT DEPICTED HERE.

1 Veneer Relief Angle At CMU Wall
SCALE: NTS

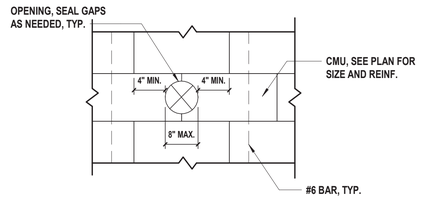


2 CMU Wall Bracing Detail
SCALE: 1" = 1'-0"



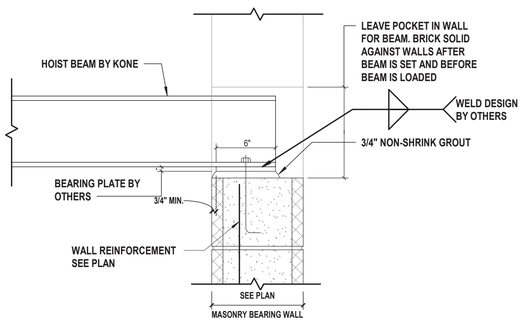
NOTE: SEE 'M' DRAWINGS FOR PENETRATION LOCATIONS

3 CMU Opening 8" - 24"
SCALE: NTS



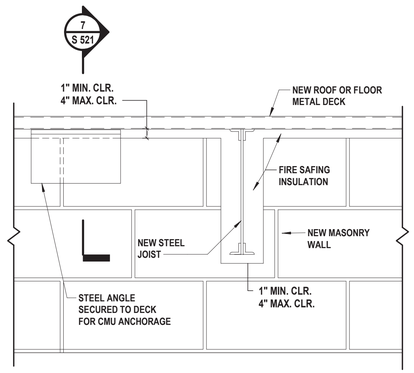
NOTE: SEE 'M' DRAWINGS FOR PENETRATION LOCATIONS

4 CMU Opening 8" and Less
SCALE: NTS



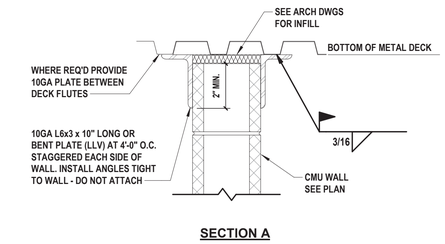
NOTE:
FILL HOLLOWS IN WALL UNDER BEARING PLATE SOLID WITH MORTAR BEFORE PLACING BEARING PLATE.

5 Elevator Hoist Beam Bearing on CMU Wall
SCALE: 1" = 1'-0"



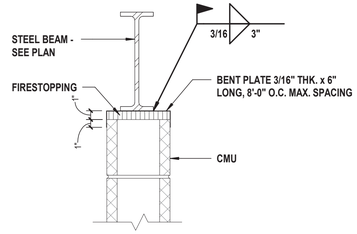
NOTE: DETAIL APPLIES FOR W-SHAPE STEEL BEAMS AS WELL

6 Joist Thru Non-bearing CMU Wall
SCALENTS

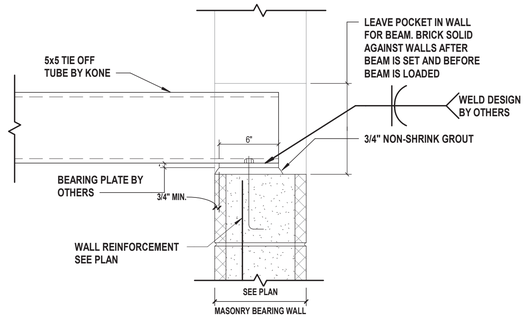


SECTION A

7 Non-Bearing CMU Wall Bracing Detail
SCALE: 1" = 1'-0"

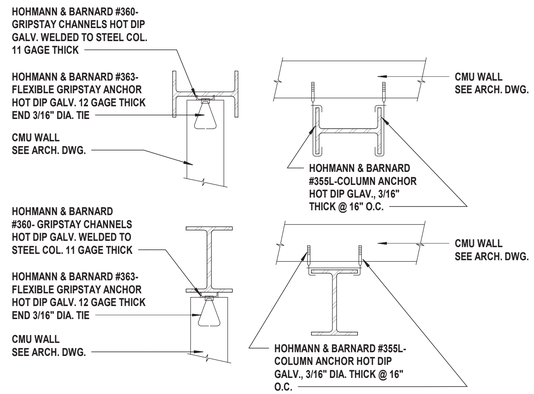


8 Typical CMU Beam Bracing
SCALE: NTS



NOTE:
FILL HOLLOWS IN WALL UNDER BEARING PLATE SOLID WITH MORTAR BEFORE PLACING BEARING PLATE.

9 Elevator Tie-Off Bearing on CMU Wall
SCALE: 1" = 1'-0"



10 Masonry Ties at Steel Column
SCALENTS

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NY Engineering Certificate of Authorization No.: 0018178

CONSULTANTS:

MARK	DATE	DESCRIPTION

STATE OF NEW YORK
DANIEL J. AIELLO
LICENSED PROFESSIONAL ENGINEER
100515

04/30/2027
Exp. Date

DANIEL J. AIELLO, P.E.
NY PROFESSIONAL ENGINEER Lic. No. 100515

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
JJN	SRK	JJN	DJA

PROJECT No:	DATE:	SCALE:
TRFD 2302	FEBRUARY 2025	AS SHOWN

CLIENT

THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

THIELLS 26 FD

**65 W RAMAPO ROAD
GARNERVILLE, NY 10923**

CONTRACT

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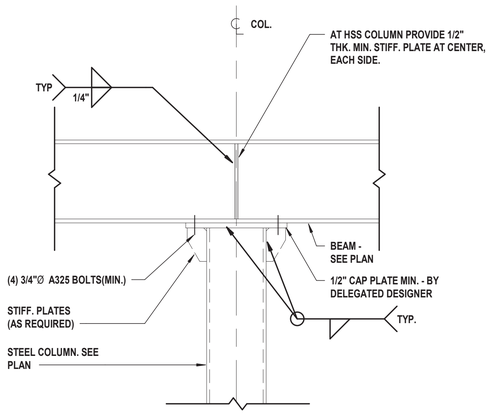
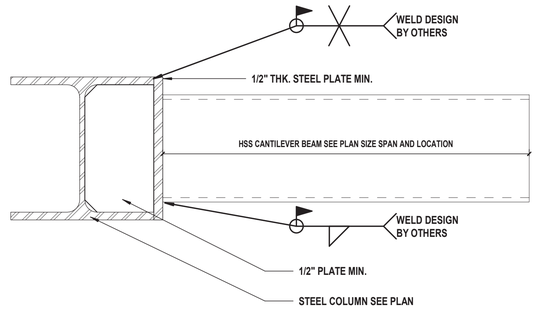
MASONRY DETAILS

DRAWING No.

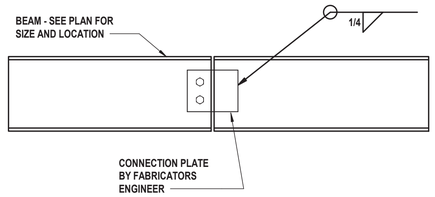
S 521.00



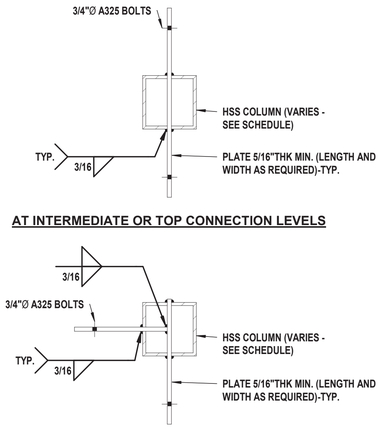
1 Beam Cantilever Over Column
SCALE: NTS



2 Face Mounted HSS Moment Connection
SCALE: 3" = 1'-0"

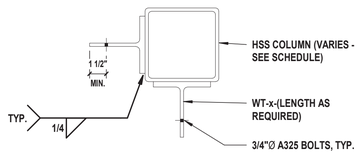


3 Shear Splice Connection Detail
SCALE: NTS



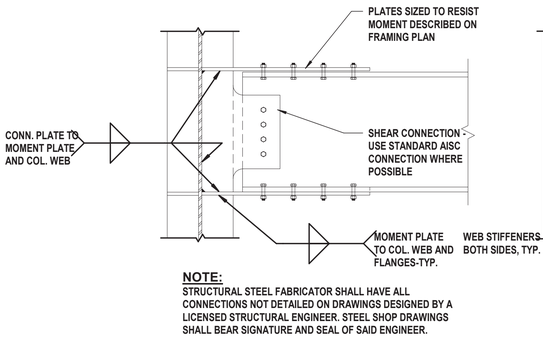
AT INTERMEDIATE OR TOP CONNECTION LEVELS

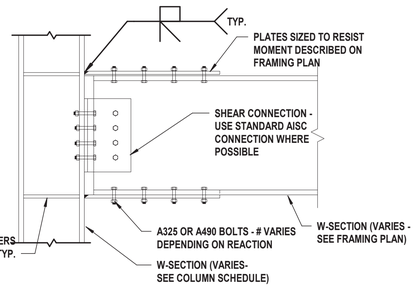
AT TOP CONNECTION LEVEL



AT INTERMEDIATE CONNECTION LEVELS

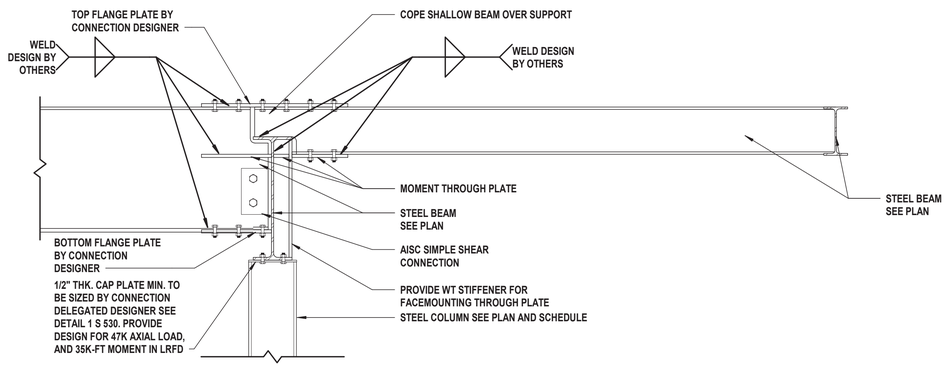
4 Shear Connections at HSS Steel Columns
SCALE:NTS





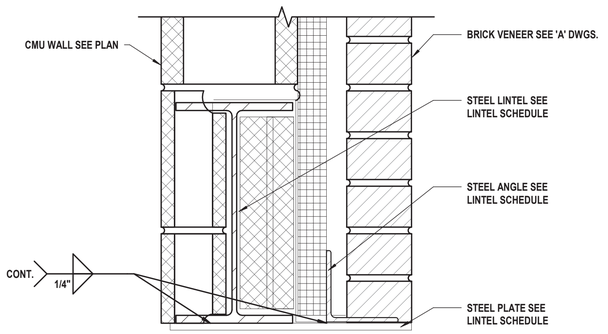
NOTE:
STRUCTURAL STEEL FABRICATOR SHALL HAVE ALL CONNECTIONS NOT DETAILED ON DRAWINGS DESIGNED BY A LICENSED STRUCTURAL ENGINEER. STEEL SHOP DRAWINGS SHALL BEAR SIGNATURE AND SEAL OF SAID ENGINEER.

5 Beam to Column Moment Connection
SCALE:NTS



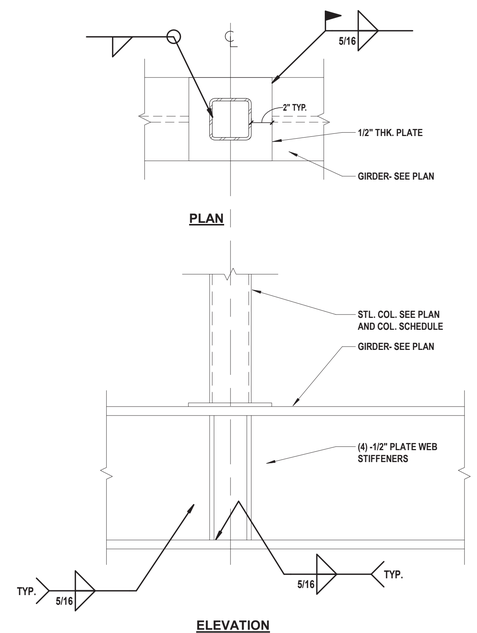
NOTE- ALL CONNECTIONS SHOWN HEREIN IS TO BE DESIGNED BY THE DELEGATED CONNECTION DESIGNER.

7 Through-Beam Moment Connection at Apparatus Bay
SCALE: 1" = 1'-0"



NOTE- WELD ALL VERTICAL REBAR IN CMU WALL TO STEEL BEAM

9 Section at Overhead Door Lintel
SCALENTS



NOTE: SIMILAR DETAIL APPLIES FOR W-SHAPED COLUMNS

10 Carried Column Or Post
SCALE: NTS

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Melville, NY 11747
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NY Engineering Certificate of Authorization No.: 0018178

CONSULTANTS:

MARK	DATE	DESCRIPTION

STATE OF NEW YORK · DANIEL J. AIELLO · LICENSED PROFESSIONAL ENGINEER · 100515

04/30/2027
Exp. Date

DANIEL J. AIELLO, P.E.
NY PROFESSIONAL ENGINEER Lic. No. 100515

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
SRK	SRK	JJN	DJA

PROJECT No:	DATE:	SCALE:
TRFD 2302	FEBRUARY 2025	AS SHOWN

CLIENT

THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

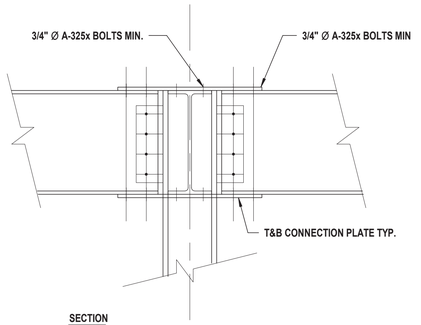
65 W RAMAPO ROAD GARNERVILLE, NY 10923

CONTRACT
CONTRACT G GENERAL CONSTRUCTION

STATUS
FINAL BID DOCUMENT

SHEET TITLE
STRUCTURAL STEEL DETAILS

DRAWING No.
S 530.00



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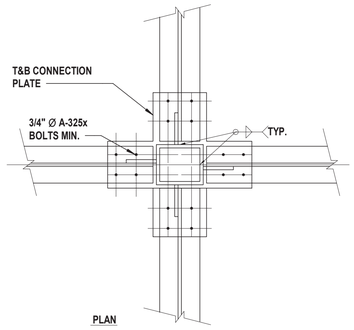
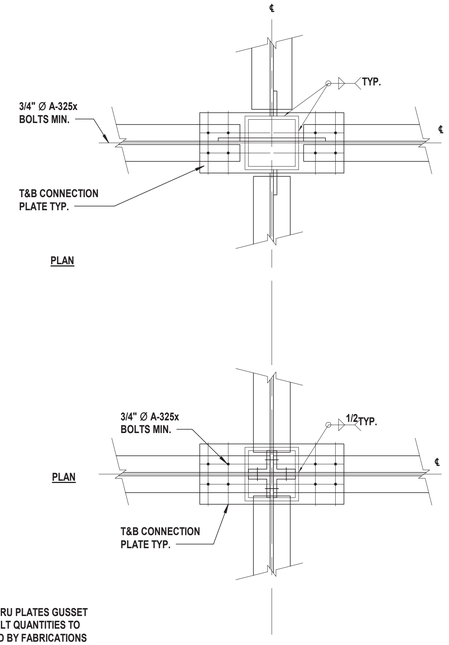


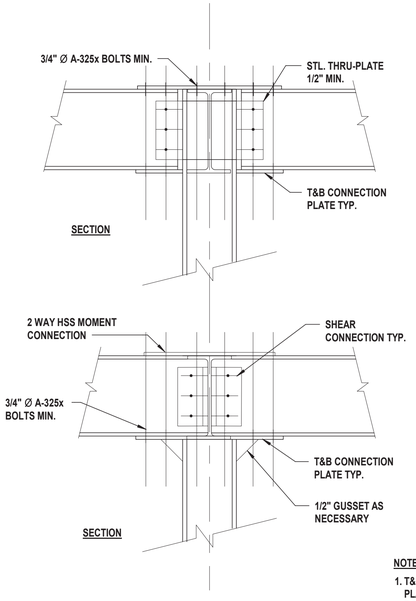
PLAN

4 WAY HSS MOMENT CONNECTIONS

SECTION



PLAN

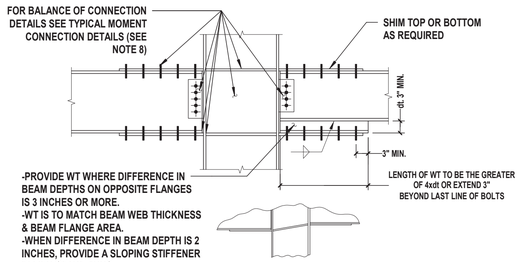


SECTION

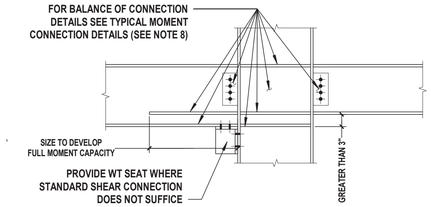
PLAN

NOTE:

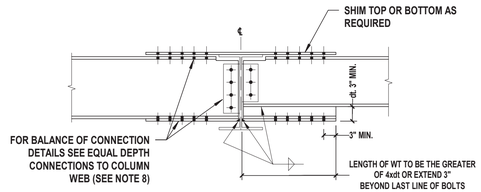
1. T&B PLATES, THRU PLATES GUSSET PLATES AND BOLT QUANTITIES TO ROLE, DESIGNED BY FABRICATIONS ENGINEER AND CALCULATIONS TO BE SUBMITTED TO E.O.R.



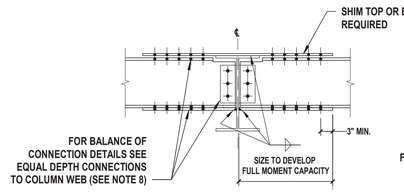
BEAM TO COLUMN FLANGE WITH DIFFERENT BEAM DEPTHS
(BEAM TO COLUMN WEB SIMILAR SEE EQUAL DEPTH CONNECTIONS)



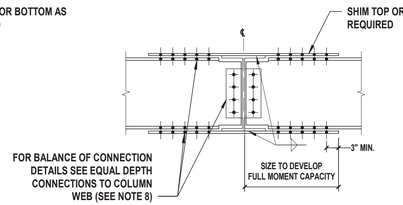
ALTERNATE BEAM TO COLUMN FLANGE WITH DIFFERENT BEAM DEPTHS
(BEAM TO COLUMN WEB SIMILAR SEE EQUAL DEPTH CONNECTIONS)



BEAM TO BEAM WITH DIFFERENT DEPTHS



BEAM TO BEAM WITH DIFFERENT DEPTHS

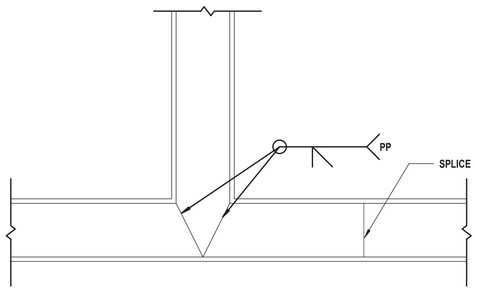


BEAM TO BEAM WITH DIFFERENT DEPTHS

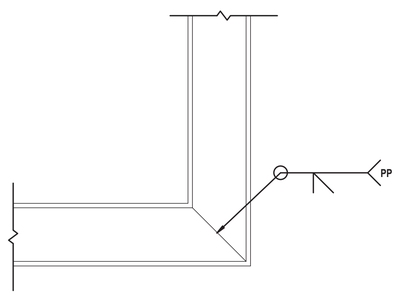
ALTERNATE HSS MOMENT CONNECTIONS

1 HSS Moment Connections

SCALE: 3/4" = 1'-0"



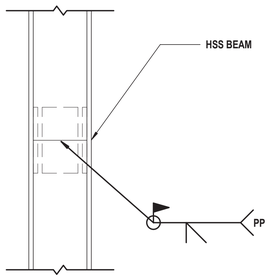
TYPICAL BEAM-TO-BEAM CONNECTION AT INTERIOR INTERSECTION



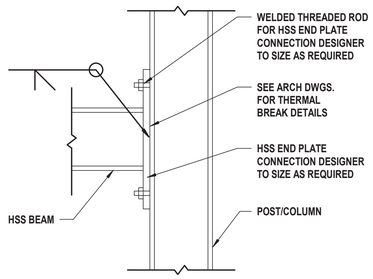
TYPICAL BEAM-TO-BEAM CONNECTION AT EXTERIOR CORNER

2 Through-Beam and Stepped Moment Connection Details

SCALE: 3/4" = 1'-0"



TYPICAL SPLICE DETAIL



TYPICAL BEAM-TO-COLUMN CONNECTION WITH BEAM FRAMING INTO COLUMN

NOTES:

1. WHERE SMALLER HSS INTERSECTS LARGER HSS, FILLET WELDS SHALL BE SUBSTITUTED FOR FLARE BEVEL WELDS.

2. FABRICATOR TO COORDINATE WHERE SPLICES ARE REQUIRED FOR SHIPMENT AND FABRICATION REFER TO TYPICAL DETAIL HEREIN FOR INTENT.

3. ALL EXPOSED STEEL SHALL BE GALVANIZED.

4. REFER TO SCREEN MANUFACTURER SPECS AND DETAILS FOR ATTACHMENT OF SCREEN TO HSS TUBES

3 HSS Outrigger Details

SCALE: NTS

H2M architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747
631.756.8000 • www.h2m.com
NY Architecture & Landscape Architecture: No Certificate Required
NY Engineering Certificate of Authorization No.: 0018178

CONSULTANTS:

MARK	DATE	DESCRIPTION

STATE OF NEW YORK · DANIEL J. AIELLO · LICENSED PROFESSIONAL ENGINEER · 100515

04/30/2027
Exp. Date

DANIEL J. AIELLO, P.E.
NY PROFESSIONAL ENGINEER Lic. No. 100515

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JJN	JJN	DJA	DJA

PROJECT No:	DATE:	SCALE:
TRFD 2302	FEBRUARY 2025	AS SHOWN

CLIENT

THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

65 W RAMAPO ROAD GARNERVILLE, NY 10923

CONTRACT

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STATUS

FINAL BID DOCUMENT

SHEET TITLE

STRUCTURAL STEEL DETAILS

DRAWING No.

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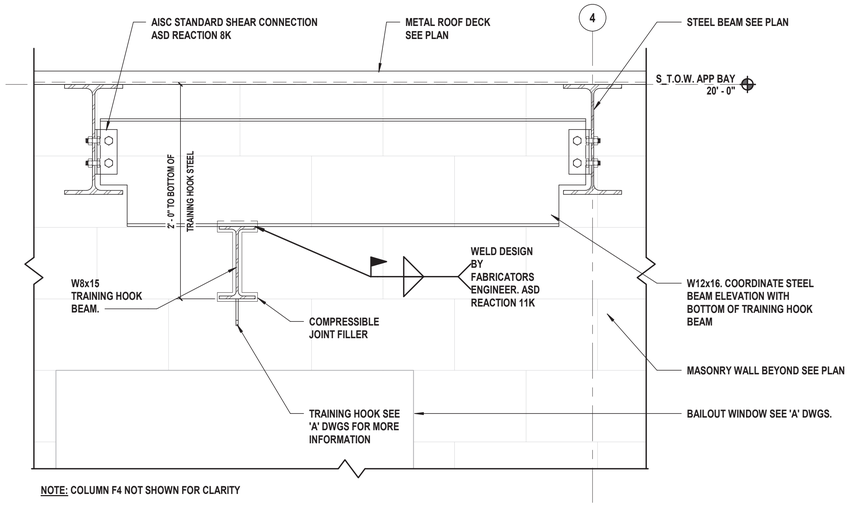
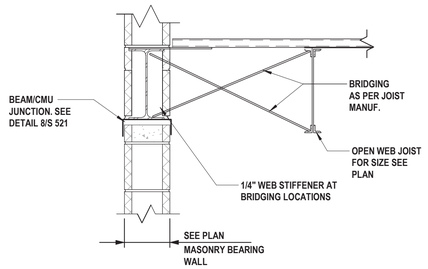
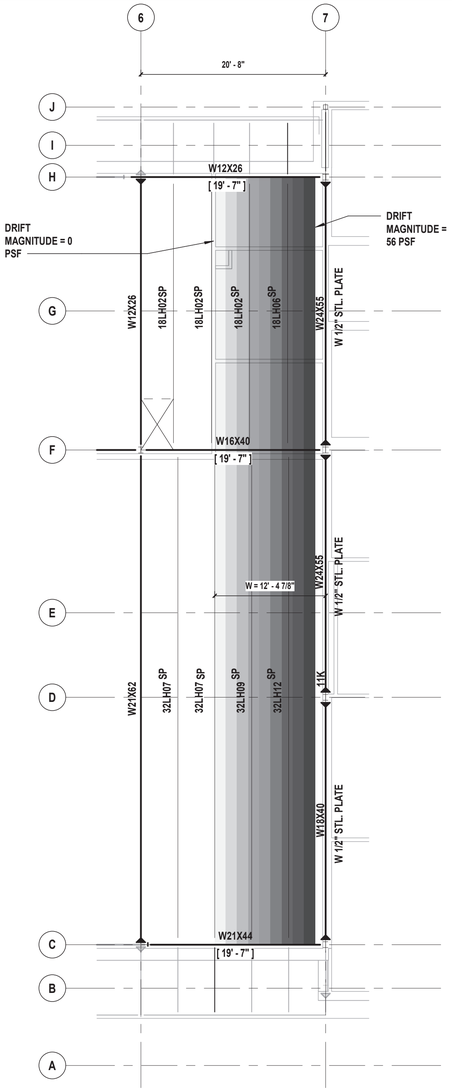


NOTE: COLUMN F4 NOT SHOWN FOR CLARITY

1 Training Hook Steel Section
SCALE: 1 1/2" = 1'-0"

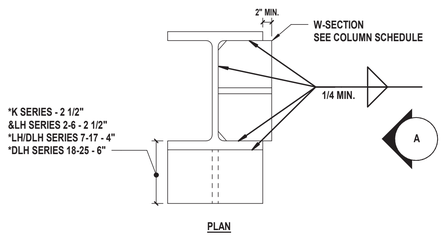


2 Joist Bridging at Spandrel Beam
SCALE:1 1/2" = 1'-0"

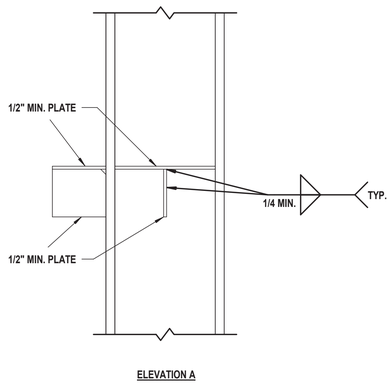


3 Snow Drift Load Plan
SCALE: 1/8" = 1'-0"

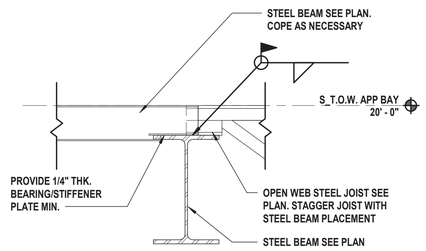
4 Joist Bearing On Steel Girder
SCALE: NTS



NOTE: SEATS SHOWN HERE SHALL BE DESIGNED BY
THE STEEL CONNECTION DELEGATED DESIGNER



5 Typical Joist/Bridging Seat at Steel Column Detail
SCALENTS



6 Offset Beam/Joist Connection Detail
SCALE: 1" = 1'-0"

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Melville, NY 11747
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JJN	JJN	DJA	DJA

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**65 W RAMAPO ROAD
GARNERVILLE, NY 10923**

CONTRACT

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STATUS

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SHEET TITLE

STRUCTURAL STEEL/OPEN WEB STEEL JOIST DETAILS

DRAWING No.

S 532.00

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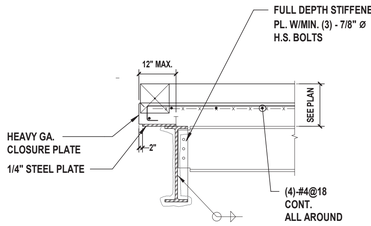
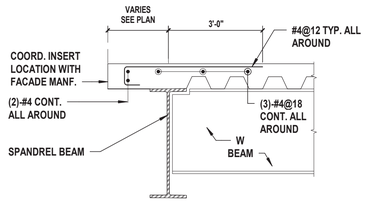
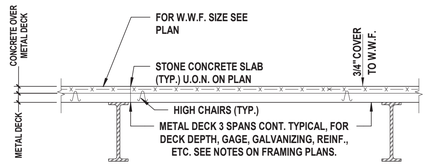


TYPICAL SPANDREL BEAM & PERIMETER REINFORCING

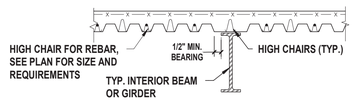


DECK SUPPORT AT PERIMETER

NOTE:
NOTCH IN CONCRETE SLAB IS REQUIRED FOR CURTAIN WALL ANCHORS COORDINATE WITH CURTAIN WALL CONTRACTOR & REINFORCING DETAILS ON THE DRAWINGS.



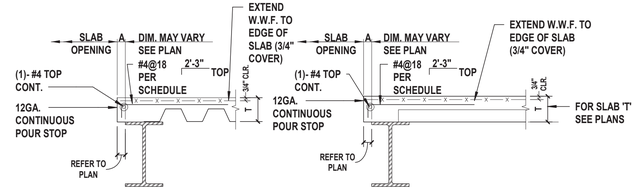
METAL DECK PERPENDICULAR TO FLOOR BEAMS OR GIRDERS

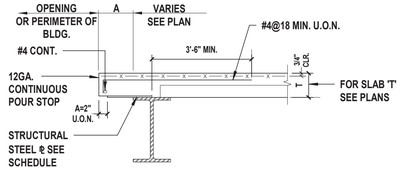


FOR SPRAY ON FIREPROOFING REQUIREMENTS @ GIRDERS,
BEAMS & STEEL DECKS, SEE NOTES & PROJECT SPECIFICATIONS

METAL DECK PARALLEL TO FLOOR BEAMS OR GIRDERS

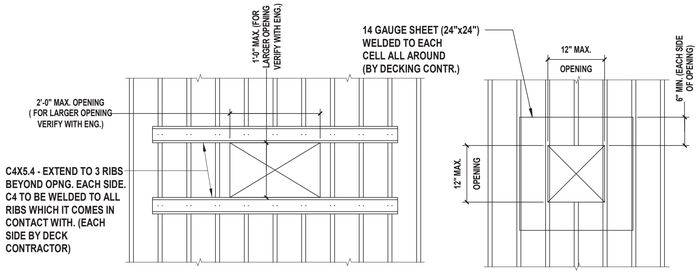
TYPICAL FLOOR CONSTRUCTION





SLAB EDGES AT INTERIOR OPENINGS
(FOR EXTERIOR SLAB EDGES SEE DETAILS OF PERIMETER CONDITIONS)

1 Perimeter Deck Support Details
SCALE: 3/4" = 1'-0"



NO REINF. REQUIRED FOR HOLES 6"Ø OR LESS PROVIDE CONCRETE STOP AT ALL OPENINGS

FOR OPENINGS TO 2'-0" PERPENDICULAR TO DECK

NO REINF. REQUIRED WHERE "L" IS 6" OR LESS IN DIRECTION PERPENDICULAR TO DECK

FOR OPENINGS TO 12" PERPENDICULAR TO DECK

TYPICAL FLOOR DETAILS @ OPENINGS

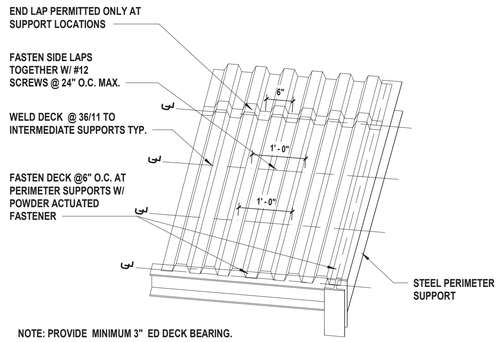
NOTES:
1. FOR OPENING SIZE & LOC. SEE 'A' + MEP DWGS
2. SPACING BETWEEN FLOOR OPENINGS SHOWN TO BE 3'-0" MIN. U.O.N.

2 Typical Slab Reinforcement/ Pour Stop Details
SCALE:N.T.S.

END CLOSURE PLATE SCHEDULE

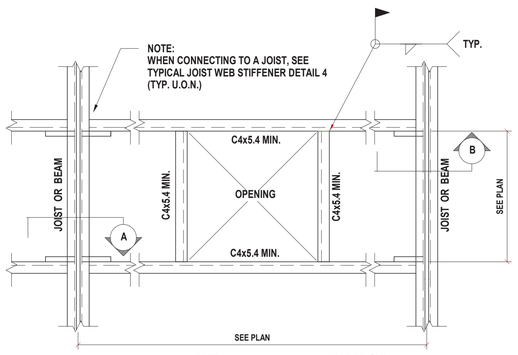
T= UP TO & INCLUDING 6 1/4"		T= OVER 6 1/4", UP TO & INCLUDING 8"		REMARKS
A	GAGE OF PLATE	A	GAGE OF PLATE	
UP TO 4"	14	UP TO 4"	12	--
OVER 4" TO 8"	12	OVER 4" TO 8"	10	FOR A=6" OR GREATER PROVIDE #4@18 TOP
OVER 8" TO 10"	10	OVER 8" TO 12"	1/4" THICK PLATE	PROVIDE #4@18 TOP
10" TO 12"	3/16" THICK PLATE			PROVIDE #4@18 TOP
12" TO 18"	1/4" THICK PLATE			PROVIDE #4@18 TOP

NOTES:
1. CLOSURE TO BEAR 2" ON FLANGE OF BEAM
2. WELD CLOSURE TO TOP FLANGE PER MANUFACTURER'S RECOMMENDATIONS.
3. PROVIDE RETURN LIP AT ALL VERTICAL LEGS, 1" FOR 10 GAGE, 3/4" FOR 12 GAGE, 1/2" FOR 14 GAGE.
4. IF 'A' EXCEEDS DIMENSIONS SHOWN ABOVE, REINFORCE POUR STOP WITH STIFFENERS OR SHORE UP THE EDGE OF SLAB DURING POUR.



NOTE: PROVIDE MINIMUM 3" ED DECK BEARING.

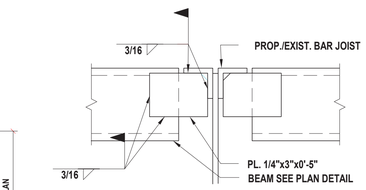
3 Typical Floor Details at Openings
SCALE: 3/4" = 1'-0"



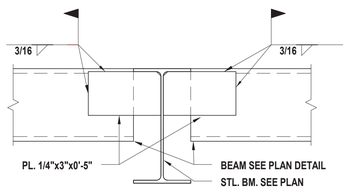
NOTE:
MAX. SIZE OPENING 60"x60"
MAX. UNIT WEIGHT 1000#

MEMBER SIZE
C4x5.4 U.O.N. IN PLANS

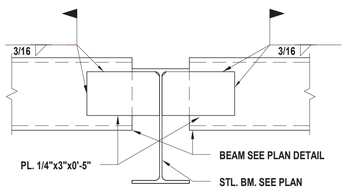
PLAN



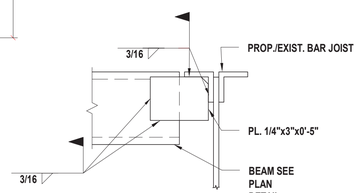
SECTION A-CONTINUOUS END CONNECTION AT BAR JOIST



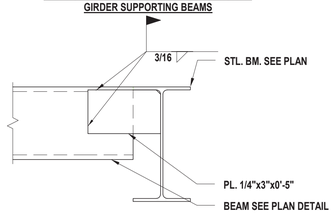
SECTION A-CONTINUOUS END CONNECTION AT GIRDER SUPPORTING BEAMS



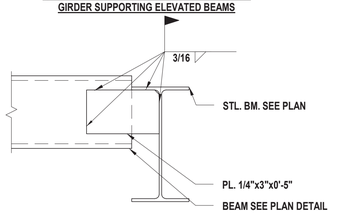
SECTION A-CONTINUOUS END CONNECTION AT GIRDER SUPPORTING ELEVATED BEAMS



SECTION B-TERMINAL END CONNECTION AT BAR JOIST



SECTION B-TERMINAL END CONNECTION AT GIRDER SUPPORTING BEAMS



SECTION B-TERMINAL END CONNECTION AT GIRDER SUPPORTING ELEVATED BEAMS

4 Typical Roof Deck Details
SCALE: N.T.S.

5 Floor Opening/Equipment Support Details
SCALE: 3/4" = 1'-0"

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JJN	JJN	DJA	DJA

PROJECT No:	DATE:	SCALE:
TRFD 2302	FEBRUARY 2025	AS SHOWN

CLIENT

THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

65 W RAMAPO ROAD
GARNERVILLE, NY 10923

CONTRACT
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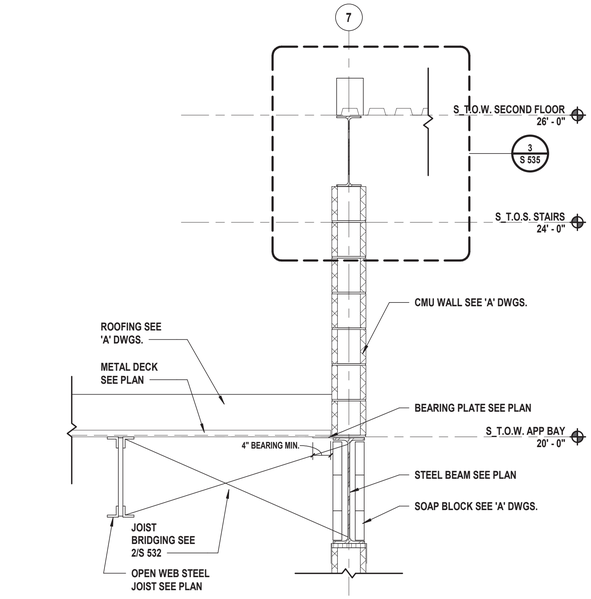
STATUS
FINAL BID DOCUMENT

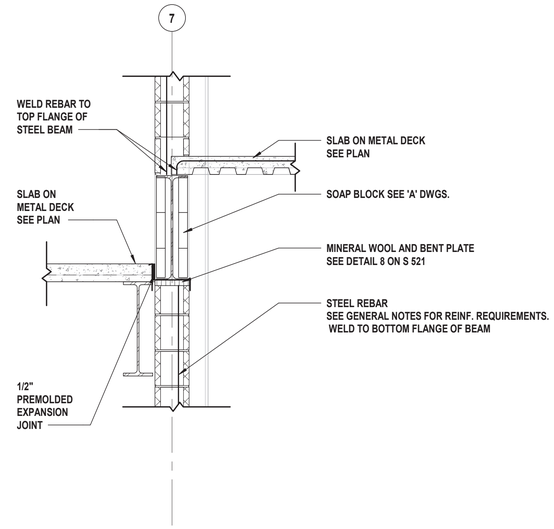
SHEET TITLE
METAL DECK DETAILS

DRAWING No.
S 534.00

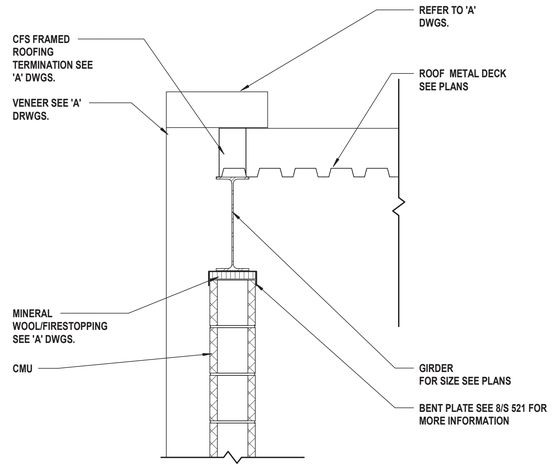
C:\Users\jnieubauer\Documents\TRFD2302_Central23-S_jnieubauerLCLC6.rvt
2/25/2025 12:05:07 PM



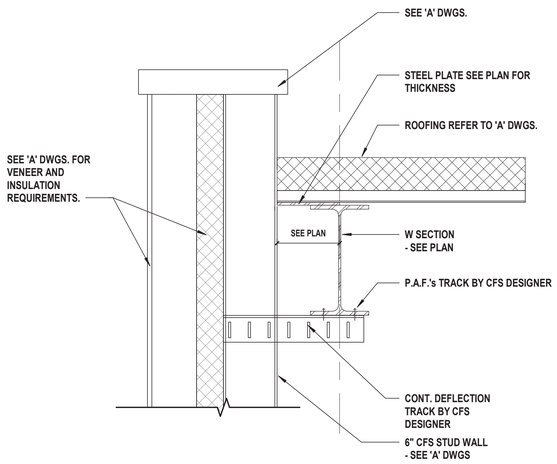
1 Section at Low to High Roof Transition
SCALE: 3/4" = 1'-0"



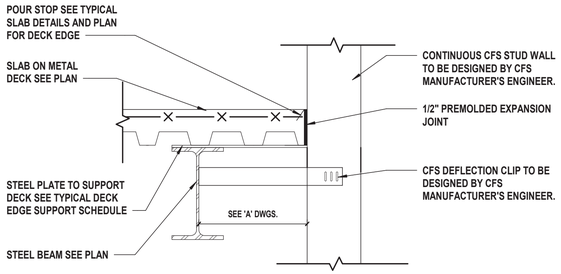
2 Section at Mezzanine/Second Floor Slab Junction
SCALE: 3/4" = 1'-0"



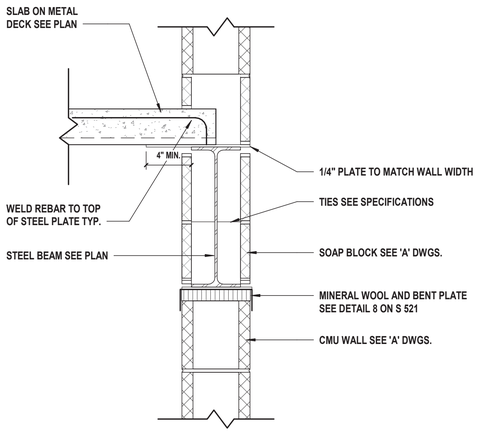
3 Typical High Roof Detail
SCALE: NTS



4 Typical CFS Deflection Clip at High Roof
SCALE: NTS



5 Deck Edge at Continuous CFS Stud Detail
SCALE NTS



6 Deck Bearing on Steel Beam at Elevator Pit
SCALE NTS

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TRFD 2302	FEBRUARY 2025	AS SHOWN

CLIENT

THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

**65 W RAMAPO ROAD
GARNERVILLE, NY 10923**

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SHEET TITLE

METAL DECK BEARING DETAILS

DRAWING No.

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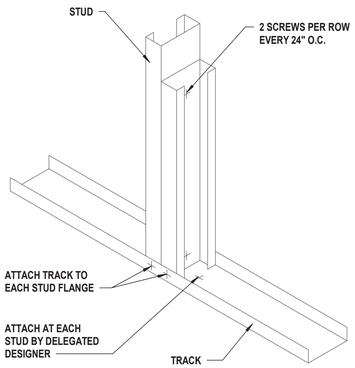
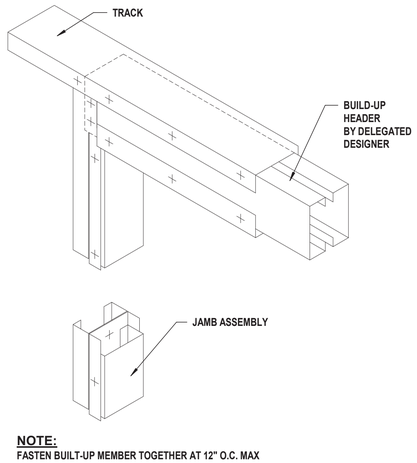
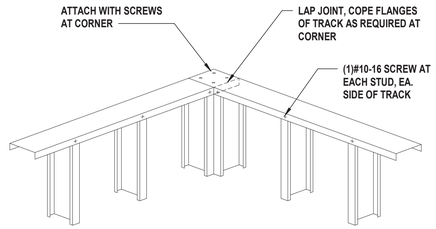


1 Back-to-Back Studs
SCALE: NTS

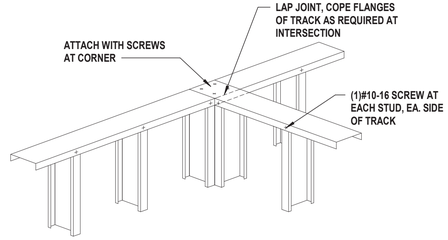


NOTE:
FASTEN BUILT-UP MEMBER TOGETHER AT 12" O.C. MAX

2 Bearing Header
SCALE: NTS



3 Exterior Corner tie
SCALE: NTS



4 Interior Corner Tie
SCALE: NTS

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TRFD 2302	FEBRUARY 2025	AS SHOWN

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THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

THIELLS 26 FD

65 W RAMAPO ROAD
GARNERVILLE, NY 10923

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SHEET TITLE

COLD FORMED STEEL DETAILS

DRAWING No.

S 540.00

COLUMN SCHEDULE

COLUMN DESIGNATION	A		B					C						D						E	F								G	H				I				J	
	11	13	7	9	11	13	14	1	2	3	5	6	7	1	7	8	9	11	12	14	14	1	4	5	6	7	10	12	14	14	1	4	5	6	7	7	10	12	14	7	10
HIGH ROOF [26'-0"]																				[27'-6"]								[27'-6"]	[27'-6"]							[28'-0"]		
STAIR ROOF [24'-0"]			[26'-0"]	[26'-0"]	[26'-0"]	[24' - 8"]	[26'-0"]						[26'-0"]		[26'-0"]	[26'-0"]			[26'-0"]	[26'-0"]					[26'-0"]	[26'-0"]						[26'-0"]	[26'-0"]	[26'-0"]	[26'-0"]	[26'-0"]	[24' - 0"] HSS4x4x1/2	[26'-0"]	[26'-0"]	[26'-0"]	[24'-0"]	[24'-0"]
LOW ROOF [20'-0"]	[23'-2"]	[24'-0"]						[20'-0"]	[17'-10"]	[17'-10"]	[17'-10"]	[17'-10"]		[20'-0"]								[20'-0"]	[20'-0"]	[20'-0"]	[20'-0"]						[20'-0"]	[18'-0 1/2"]	[18'-5"]	[18'-5"]						
FINISHED 2nd FLOOR [11'-4"]																W8X24																									
MEZZANINE [10'-0"]																[11' - 4"]	[11'-4"]	[11'-4"]										[11'-4"]												
FIRST FLOOR [0'-0"]	HSS8x6x5/8	HSS8x6x5/8	W8X24	W8X24	W8X31	HSS8x6x5/8	W8X24	W8X24	W8X31	W8X31	W8X31	W8X31	W8X24	W8X24	W8X24		W8X31	W8X31	W8X24	W8X31	W8X24	W8X35	W8X31	W8X24	W8X24	W8X35	W8X40	W8X24	W8X31	W8X31	W8X31	W8X35	W8X24	W8X24	W8X31	W8X24	W8X24	W8X24	HSS8x6x5/8	HSS6x6x5/8
	[-1' - 0"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]		[-1' - 0"]	[-1' - 0"]	[-1' - 0"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-1' - 0"]	[-1' - 0"]	[-0' - 10"]	[-1' - 0"]	[-1' - 0"]	[-0' - 10"]	[-1' - 0"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[-0' - 10"]	[0' - 4"]	[-1' - 0"]
BASE PLATE TYPE	BP7	BP8	BP5	BP3	BP3	BP7	BP1	BP2	BP1	BP1	BP1	BP1	BP1	BP2	BP1	-	BP1	BP1	BP1	BP1	BP4	BP2	BP3	BP1	BP1	BP4	BP4	BP1	BP1	BP9	BP2	BP4	BP1	BP4	BP3	-	BP1	BP2	BP10	BP6	BP6

NOTES:

1. ⟋ INDICATES TOP OF COLUMN/TOP PLATE
2. ⟍ INDICATES BOTTOM OF BASE PLATE
3. SEE BASE PLATE DETAIL AND SCHEDULE TO DETERMINE BOTTOM OF COLUMN ELEVATION. COORDINATE TOP OF COLUMN ELEVATION WITH ALL CAP PLATE DESIGNS.
4. SEE "FOOTING SCHEDULE" FOR FOOTING SIZE AND REINFORCING.
5. ALL BASE PLATES TO BEAR ON CONCRETE SHALL BE SHIMMED USING 2" NON-METALLIC, NON-SHRINK GROUT.
6. FOR COLUMNS POSTED OFF OF BEAMS SEE 10/S 530 FOR BASEPLATE SIZE AND ATTACHMENT

TENSION DEVELOPMENT LENGTH (Ld) (Inches)

BAR SIZE	Fy = 60,000 PSI CONCRETE: 4000 PSI
#3	15
#4	19
#5	24
#6	29
#7	42
#8	48
#9	54
#10	60
#11	66

TENSION DEVELOPMENT LENGTH (Ld) FOR TOP BAR (Inches)

BAR SIZE	Fy = 60,000 PSI CONCRETE: 4000 PSI
#3	19
#4	25
#5	31
#6	37
#7	54
#8	62
#9	70
#10	78
#11	85

TENSION LAP SPLICE LENGTH (CLASS B MIN.) (Inches)

BAR SIZE	Fy = 60,000 PSI CONCRETE: 4000 PSI
#3	18
#4	24
#5	30
#6	36
#7	52
#8	60
#9	67
#10	75
#11	82

TENSION LAP SPLICE LENGTH FOR TOP BAR (CLASS B MIN.) (Inches)

BAR SIZE	Fy = 60,000 PSI CONCRETE: 4000 PSI
#3	24
#4	31
#5	39
#6	47
#7	68
#8	78
#9	87
#10	97
#11	106

NOTES:
1. REINFORCEMENT IS UNCOATED, WITH Fy=60,000 PSI.
2. CONCRETE IS NORMAL WEIGHT (122-150#/C.F).
3. FOR "TOP" BAR SPLICE LENGTH ("TOP" IS DEFINED BY ACI 318 AS HAVING MORE THAN 12 INCHES OF FRESH CONCRETE CAST BELOW THE BAR), TABULATED LENGTHS HAVE BEEN MULTIPLIED BY 1.3.
4. LENGTHS TABULATED MUST BE MULTIPLIED BY THE FOLLOWING MODIFICATION FACTORS:
   A. LIGHTWEIGHT CONCRETE 1.3
   B. EPOXY-COATED BARS:
      a. BARS WITH COVER <3db, OR WITH CLEAR SPACING <6db ..1.5 FOR BOTTOM & VERTICAL BARS, 1.3 FOR 'TOP' BARS *
      b. ALL OTHER CONDITIONS 1.2
      * FOR EPOXY-COATED 'TOP' BARS THE MAXIMUM FOR COMBINED FACTORS= 1.7
5. WHERE TENSION DEVELOPMENT LENGTH (Ld) IS REQUIRED ON PLANS OR IN DETAILS, SEE TENSION DEVELOPMENT LENGTH TABLES.
6. CLASS A LAP SPLICE LENGTHS ARE EQUAL TO TENSION DEVELOPMENT LENGTHS. SEE TABLES FOR TENSION DEVELOPMENT LENGTHS (Ld). APPLY APPROPRIATE MODIFICATION FACTORS TO CLASS A SPLICE LENGTHS.

1 Concrete Rebar Development Length Tables
SCALE: NTS

MASONRY DEVELOPMENT LENGTH (Ld)

BAR SIZE	Fy = 60,000 PSI F'm = 1500 PSI
#3	9
#4	12
#5	16
#6	29
#7	39
#8	59
#9	74
#10	91
#11	111

NOTES:
1. REINFORCEMENT IS UNCOATED, WITH Fy= 60,000 PSI.
2. NET COMPRESSIVE STRENGTH OF F'M = 1500 PSI.
3. TABULATED LENGTHS HAVE USED "9db" FOR THE SMALLEST "K" VALUE IN DEVELOPMENT LENGTH BARS.
4. FACTORS APPLIED TO LENGTHS ABOVE ARE:
   A. NO. 3 THROUGH NO. 5 BARS = 1.0
   B. NO. 6 THROUGH NO. 7 BARS = 1.3
   C. NO. 8. THROUGH NO. 11 BARS = 1.5
5. LENGTHS TABULATED MUST BE MULTIPLIED BY THE FOLLOWING MODIFICATION FACTORS:
   A. EPOXY-COATED BARS SHALL BE TAKEN AS 150 PERCENT OF LENGTH DETERMINED

2 Masonry Rebar Development Length Tables
SCALE: NTS

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JJN	JJN	DJA	DJA

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CLIENT

THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

65 W RAMAPO ROAD GARNERVILLE, NY 10923

CONTRACT

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SHEET TITLE

COLUMN AND REBAR DEVELOPMENT SCHEDULES

DRAWING No.

S 600.00

BASEPLATE SCHEDULE

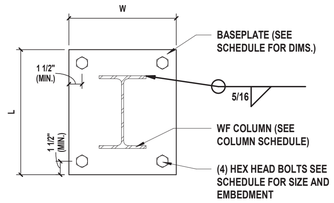
BASEPLATE ID	WIDTH, W (in.)	LENGTH, L (in.)	BASEPLATE THICKNESS (in)	COLUMN OFFSET (in.)	ANCHOR BOLT DIA. (in.)	EMBEDMENT (in.)	NOTES
BP1	12	14	3/4	N/A	3/4	12	1
BP2	12	17	1	1 1/2	1	24	1 - 2
BP3	14	18	1 1/4	1	1	24	1 - 2
BP4	16	22	1 1/4	N/A	1 1/4	24	1 - 2
BP5	12	18	3/4	SEE DETAIL	3/4	12	1
BP6	6	14	3/4	N/A	1/2	12	1
BP7	11	11	3/4	N/A	3/4	12	1
BP8	11	11	1	SEE DETAIL	3/4	24	1
BP9	12	14	1	N/A	1	24	1
BP10	20	20	1 3/4	N/A	1 3/4	24	1

NOTES:
1. REFER TO BASEPLATE DETAILS FOR ANCHOR BOLT LOCATIONS
2. GUSSET CONNECTIONS TO BE DESIGNED BY STEEL FABRICATOR'S ENGINEER

LINTEL SCHEDULE

MARK	SIZE	DETAILS	COMMENTS
LL-1	W16X26 & L3 1/2x3 1/2 x 5/16 W/ 1/4" THK. STEEL PLATE. WIDTH OF PLATE TO MATCH WIDTH OF WALL SEE 'A' DWGS FOR WALL PROFILES		NOTES 1-4
LL-2	(2) L4x3 1/2x 5/16 & L3 1/2x3 1/2 x 5/16 W/ 1/4" THK. STEEL PLATE. WIDTH OF PLATE TO MATCH WIDTH OF WALL SEE 'A' DWGS FOR WALL PROFILES		NOTES 1-5
LL-3	(2) L3 1/2x3 1/2x 5/16 & L3 1/2x3 1/2 x 5/16 W/ 1/4" THK. STEEL PLATE. WIDTH OF PLATE TO MATCH WIDTH OF WALL SEE 'A' DWGS FOR WALL PROFILES		NOTES 1-5
LL-4	(2) L3 1/2x3 1/2x 5/16		NOTES 1-5
LL-5	W8x10		NOTES 1-4
LL-6	(2) L4vx3 1/2x 5/16		NOTES 1-5

NOTES:
1. LINTEL LENGTH SHALL BE M.O. + 1'-4" TO PROVIDE MIN. BEARING OF 8" ONTO SOLID MASONRY ON EACH SIDE.
2. ALL EXTERIOR LINTELS TO BE SHOP APPLIED HOT DIPPED GALVANIZED.
3. WELD VERTICAL REINFORCEMENT INTERRUPTED BY MASONRY OPENINGS TO TOP OF THE STEEL LINTELS, TYPICAL.
4. REFER TO ARCHITECTURAL FLOOR PLANS AND ELEVATIONS FOR LINTEL LOCATIONS.
5. VERTICAL LEGS OF DOUBLE ANGLES SHALL BE WELDED TOGETHER.



1 Baseplate BP1, BP9
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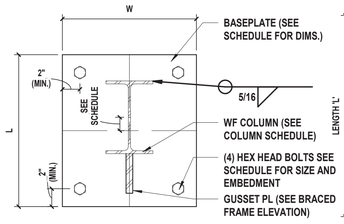
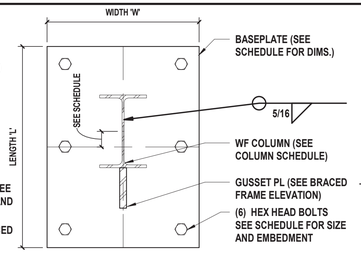


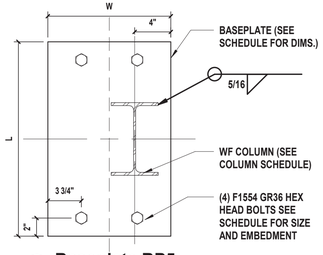
NOTE: DETAIL APPLIES WHERE GUSSET IS ATTACHED TO COLUMN WEB AS WELL. APPLY OFFSET IN PLANE OF BRACE

2 Baseplate BP2,BP3
SCALE: NTS

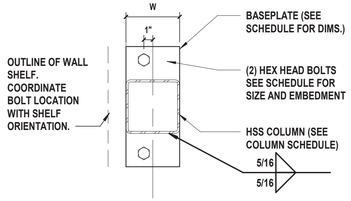


NOTE: DETAIL APPLIES WHERE GUSSET IS ATTACHED TO COLUMN WEB AS WELL. APPLY OFFSET IN PLANE OF BRACE

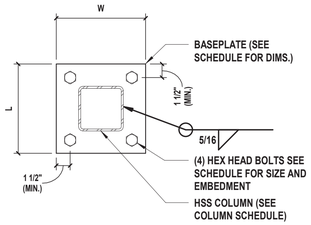
3 Baseplate BP4
SCALE: NTS



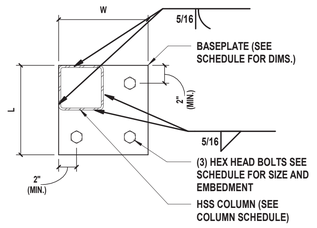
4 Baseplate BP5
SCALE: 1 1/2" = 1'-0"



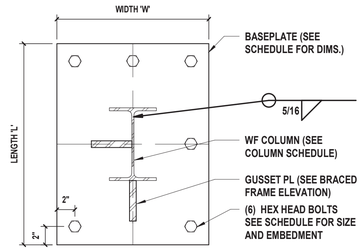
5 Baseplate BP6
SCALE: 1 1/2" = 1'-0"



6 Baseplate BP7
SCALE: NTS



7 Baseplate BP8
SCALE: NTS



8 Baseplate BP10
SCALE: NTS

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CONSULTANTS:

MARK	DATE	DESCRIPTION

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DANIEL J. AIELLO
LICENSED PROFESSIONAL ENGINEER
100515

04/30/2027
Exp. Date

DANIEL J. AIELLO, P.E.
NY PROFESSIONAL ENGINEER Lic. No. 100515

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DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
JJN	SRK	DJA	DJA

PROJECT No:	DATE:	SCALE:
TRFD 2302	FEBRUARY 2025	AS SHOWN

CLIENT

THIELLS ROSEVILLE FIRE DISTRICT

NEW 26-100 FIRE HEADQUARTERS

65 W RAMAPO ROAD GARNERVILLE, NY 10923

CONTRACT

CONTRACT G

STATUS

FINAL BID DOCUMENT

SHEET TITLE

BASEPLATE SCHEDULE AND DETAILS

DRAWING No.

S 601.00

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