

## GENERAL NOTES

- COMPLY WITH THE NEW YORK CITY BUILDING CODE LATEST AMENDED EDITION AND ALL OTHER GOVERNING CODES.
- ALL CONSTRUCTION METHODS SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 33 OF THE NEW YORK CITY BUILDING CODE, "SAFEGUARDS DURING CONSTRUCTION OR DEMOLITION".
- THE CONTRACTOR SHALL DO THE FOLLOWING:
  - VERIFY ALL EXISTING CONDITIONS, SUCH AS THE LOCATIONS OF EXISTING STRUCTURAL AND ARCHITECTURAL ELEMENTS AND DIMENSIONS OF EXISTING CONSTRUCTION. DIMENSIONS SHOWN ARE PER INFORMATION PROVIDED BY THE ORIGINAL STRUCTURAL DRAWINGS OR ARE ASSUMED.
  - SUBMIT TO THE ENGINEER FOR REVIEW A WRITTEN REPORT INDICATING ACTUAL FIELD CONDITIONS WHICH MAY VARY FROM INFORMATION INDICATED ON THE DRAWINGS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER OF RECORD BEFORE PROCEEDING.
  - COORDINATE THE EXISTING STRUCTURE WITH THE NEW STRUCTURAL ELEMENTS PRIOR TO DEMOLITION, FABRICATION AND CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACCURATE COORDINATION OF THE ARCHITECTURAL, STRUCTURAL, HVAC, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS.
  - REQUEST CLARIFICATION REGARDING DISCREPANCIES FOUND IN THE CONSTRUCTION DOCUMENTS. IN ANY CASE OF CONFLICT, BETWEEN THE NOTES, DETAILS, AND SPECIFICATIONS, THE MOST RIGID REQUIREMENTS SHALL GOVERN.
  - HIRE A NEW YORK REGISTERED PROFESSIONAL ENGINEER FOR THE DESIGN OF ALL SHORING, BRACING, AND OTHER ELEMENTS USED TO SUPPORT THE STRUCTURE DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING CONDITIONS OF PUBLIC AND WORKER SAFETY DURING EXECUTION OF THE WORK. THIS SHALL INCLUDE COMPLIANCE WITH ALL OSHA REGULATIONS, AND ALL STATE AND LOCAL LAWS WHICH MAY GOVERN THIS TYPE OF WORK.
- TEMPORARY BRACING OR SHORING SHALL BE PROVIDED WHEREVER REQUIRED TO SUPPORT LOADS AS MAY BE IMPOSED UPON THE STRUCTURE DURING CONSTRUCTION. PROVIDE TEMPORARY SHORING WHEREVER REQUIRED DUE TO CONSTRUCTION SEQUENCING FOR THE SUPPORT OF THE STRUCTURE PRIOR TO INSTALLATION OF NEW FLOOR SUPPORT STEEL. SUCH BRACING OR SHORING SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL REMAIN IN PLACE AS LONG AS REQUIRED TO MAINTAIN SAFETY.
- SUBMIT TO ENGINEER TWO COPIES EACH OF MATERIAL SPECIFICATIONS, ERECTION AND DETAIL DRAWINGS, ETC., OF ALL STRUCTURAL MATERIALS AND CONNECTIONS SUFFICIENTLY IN ADVANCE OF CONSTRUCTION TO PERMIT ADEQUATE TIME FOR REVIEW (10 WORKING DAYS MIN.). ENGINEER TO MARK UP ONE COPY AND FORWARD TO ARCHITECT.
- THE OWNER, THE ARCHITECT AND THE STRUCTURAL ENGINEER ARE NOT RESPONSIBLE FOR ACCURACY OF THE EXISTING CONDITIONS INFORMATION. EXISTING CONSTRUCTION AT AREAS WHERE NEW WORK IS NOT CONTEMPLATED MAY NOT BE COMPLETELY SHOWN.
- PATCH AND REPAIR EXISTING CONDITIONS DAMAGED DURING THE COURSE OF NEW CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.

## SPECIAL INSPECTION NOTES

- THE FOLLOWING MATERIALS AND METHODS OF CONSTRUCTION SHALL BE SUBJECT TO "SPECIAL INSPECTION" IN ACCORDANCE WITH CHAPTER 17 OF THE NEW YORK CITY BUILDING CODE:
  - STRUCTURAL STEEL – WELDING (1705.2.1)
  - STRUCTURAL STEEL – DETAILS (1705.2.2)
  - STRUCTURAL STEEL – HIGH STRENGTH BOLTING (1705.2.3)
- A SPECIAL INSPECTOR HIRED BY THE OWNER SHALL SUPERVISE THE TESTING AND INSPECTION OF THE ABOVE ITEMS. THE INSPECTOR SHALL HAVE QUALIFICATIONS IN ACCORDANCE WITH NYC CITY RULE 101-06.
- THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE INSPECTOR FOR ALL ITEMS REQUIRING INSPECTION A MINIMUM OF 72 HOURS PRIOR TO COMMENCEMENT OF THAT PORTION OF WORK. FOR ON-GOING INSPECTIONS THE CONTRACTOR SHALL PROVIDE 24 HRS ADVANCE NOTICE BEFORE INSPECTION.
- THE CONTRACTOR SHALL PROVIDE SAFE ACCESS AND MEANS TO ALLOW THE ABOVE TESTING AND/OR INSPECTION REQUIREMENTS TO BE COMPLETED IN A MANNER CONSISTENT WITH APPLICABLE OSHA, STATE, AND LOCAL DOB REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE SCAFFOLDING, PERSONNEL HOISTS OR ANY OTHER EQUIPMENT NECESSARY TO ACCESS AREAS SUBJECT TO INSPECTIONS.
- INSPECTION DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO PROVIDE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND PROVIDE THE CONTRACTORS INDEPENDENT QUALITY CONTROL. THE INSPECTOR IS NOT RESPONSIBLE FOR PROVIDING "QUALITY CONTROL" SERVICES FOR THE CONTRACTOR.

## SAFETY DURING EXECUTION OF WORK

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONDITIONS OF PUBLIC AND WORKER SAFETY DURING EXECUTION OF THE WORK. THIS SHALL INCLUDE COMPLIANCE WITH CHAPTER 33 OF THE NEW YORK CITY BUILDING CODE: SAFEGUARDS DURING CONSTRUCTION OR DEMOLITION.
- THE CONTRACTOR SHALL PROVIDE SIDEWALK PROTECTION AND PROTECTION OF ADJOINING PROPERTIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND FILING A SITE SAFETY PLAN AND/OR PROVIDING OTHER WRITTEN ASSURANCES OF SAFE OPERATIONS AS MAY BE REQUIRED BY THE AUTHORITIES HAVING JURISDICTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SAFE WORKING ENVIRONMENT FOR ALL WORKERS. THIS SHALL INCLUDE COMPLIANCE WITH ALL OSHA, STATE AND LOCAL LABOR LAWS WHICH MAY GOVERN THIS TYPE OF WORK.
- THE CONTRACTOR SHALL PROVIDE REGULAR PERIODIC INSPECTION OF CONSTRUCTION OPERATIONS AS REQUIRED TO ENSURE ONGOING MAINTENANCE OF ALL SAFETY OPERATIONS AND EQUIPMENT. SUCH INSPECTIONS SHALL BE UNDERTAKEN BY AN AGENT OF THE CONSTRUCTION WHO IS QUALIFIED TO EVALUATE SUCH OPERATIONS AND EQUIPMENT. THIS INSPECTOR SHALL PREPARE WRITTEN SAFETY REPORTS WHICH SHALL BE MAINTAINED AT THE JOB SITE FOR REVIEW BY THE AUTHORITIES HAVING JURISDICTION.

## STRUCTURAL STEEL NOTES

- ALL DETAILING, FABRICATION AND ERECTION SHALL CONFORM TO AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", LATEST EDITIONS.
- ALL BOLTING SHALL CONFORM TO THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", LATEST EDITION.
- ALL WELDING SHALL CONFORM TO THE AWS CODE D1.1 "STRUCTURAL WELDING CODE – STEEL", LATEST EDITION.
- THE FABRICATOR/ERECTOR SHALL SUBMIT TO THE ENGINEER OF RECORD, FOR REVIEW, ENGINEERED AND CHECKED DRAWINGS SHOWING SHOP FABRICATION DETAILS, FIELD ASSEMBLY DETAILS AND ERECTION DIAGRAMS FOR ALL STRUCTURAL STEEL. ERECTION DRAWINGS AND JOB STANDARDS DESCRIBING TYPICAL CONNECTION DETAILS AND CAPACITIES SHALL BE SUBMITTED AND APPROVED PRIOR TO THE START OF PIECE DETAILING.
- UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS, ALL CONNECTIONS SHALL BE DESIGNED AND DETAILED PER ASD (ALLOWABLE STRESS DESIGN) BY A NEW YORK STATE PROFESSIONAL ENGINEER HIRED BY THE FABRICATOR. CALCULATIONS SHALL BEAR THE SEAL AND SIGNATURE OF THIS ENGINEER. DETAILING SHALL BE PERFORMED USING RATIONAL ENGINEERING DESIGN AND STANDARD PRACTICES, PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONCEPTUAL DETAILS SHOWN ON DRAWINGS DO NOT INDICATE THE REQUIRED NUMBER OF BOLTS OR WELD SIZES, UNLESS SPECIFICALLY NOTED.
- ALL STAIR STRUCTURES AND MISCELLANEOUS STEEL SHALL BE DESIGNED AND DETAILED BY A NEW YORK STATE REGISTERED PROFESSIONAL ENGINEER HIRED BY THE CONTRACTOR. THE STAIR FABRICATOR/ERECTOR SHALL SUBMIT TO THE ENGINEER OF RECORD, FOR REVIEW, ENGINEERED AND CHECKED DRAWINGS SHOWING SHOP FABRICATION DETAILS, FIELD ASSEMBLY DETAILS, ERECTION DIAGRAMS AND CALCULATIONS. ALL STAIR STEEL SHOP DRAWINGS AND DESIGN CALCULATIONS SHALL BEAR THE SEAL AND SIGNATURE OF THE CONTRACTOR'S ENGINEER.
- ALL STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING UNLESS OTHERWISE NOTED:
 

WIDE FLANGES	ASTM A992 GR 50
SQUARE OR ROUND TUBE	ASTM A500-GR B, Fy=46 KSI
PIPES	ASTM A53, Fy=35 KSI
ANGLE AND CHANNEL	ASTM A36
STAINLESS STEEL	AISI 304 OR AISI 316
ANCHOR BOLTS/RODS	ASTM F1554
HIGH STRENGTH BOLTS	ASTM A325 OR A490 (MIN. 3/4" DIAM. UNO)
HARDENED WASHERS	ASTM F436
DTI WASHERS	ASTM F959
PLATE	ASTM A572 GR 50
- THE FOLLOWING CONNECTIONS SHALL USE SLIP-CRITICAL BOLTS:
 

BEAM-TO-COLUMN MOMENT CONNECTIONS  
BEAM-TO-GIRDER MOMENT CONNECTIONS  
WEB SHEAR CONNECTIONS FOR MOMENT CONNECTED BEAMS  
BOLTED BRACE CONNECTIONS  
BOLTED COLUMN SPLICES  
BOLTED BEAM SPLICES

ALL OTHER CONNECTIONS SHALL BE SIMPLE SHEAR CONNECTIONS UTILIZING FULLY PRETENSIONED HIGH-STRENGTH BOLTS IN BEARING-TYPE CONNECTIONS WITH THREADS INCLUDED IN THE SHEAR PLANE, UNLESS NOTED OTHERWISE.
- ALL BOLTS IN SLIP CRITICAL CONNECTIONS SHALL UTILIZE DIRECT TENSION INDICATOR WASHERS AND HARDENED WASHERS. DIRECT TENSION INDICATOR WASHERS SHALL COMPLY W/ ASTM 959 AND BE AS MANUFACTURED BY TURNASURE LLC. INSTALL PER RCSC AND MANUFACTURER'S RECOMMENDATIONS.
- FOR PRETENSIONED AND SLIP CRITICAL JOINTS, PERFORM PRE-INSTALLATION VERIFICATION WITH A TENSION CALIBRATOR (SKIDMORE-WILHELM) AS REQUIRED BY RCSC SECTION 7.
- MINIMUM SHEAR CONNECTION CAPACITIES SHALL BE AS SHOWN BELOW, UNLESS NOTED OTHERWISE. THE MINIMUM NUMBER OF BOLTS PER CONNECTION SHALL BE TWO (2):
 

MINIMUM SHEAR CAPACITIES (SERVICE LOAD)			
W4	6 KIPS	W21	70 KIPS
W5	6 KIPS	W24	75 KIPS
W6	6 KIPS	W27	90 KIPS
W8	10 KIPS	W30	115 KIPS
W10	15 KIPS	W33	135 KIPS
W12	25 KIPS	W36	160 KIPS
W14	35 KIPS	W40	185 KIPS
W16	45 KIPS	W44	210 KIPS
W18	60 KIPS		
- DESIGN CHANNEL AND TUBE MEMBERS FOR THE SAME LOAD AS THE SAME DEPTH OF W SHAPE. BEAM REACTIONS EXCEEDING THE ABOVE MINIMUM SHEAR CAPACITIES ARE NOTED ON THE DRAWINGS AND BOXED THUS {  $\frac{R}{K}$  } AT EACH END OF THE BEAM. DESIGN CONNECTIONS FOR AXIAL FORCES ARE DENOTED {  $\frac{P}{A}$  }. CONNECTION FORCES GIVEN ON PLAN ARE UNFACTORED AND IN KIPS. THE CONNECTION PATTERN SHALL ENGAGE AT LEAST 1/2 THE DEPTH OF BEAM.
- MOMENT CONNECTION SPLICES SHALL DEVELOP THE FULL BENDING CAPACITY OF THE BEAM =  $0.66 \cdot F_y \cdot S_x$  AND SHALL HAVE A SHEAR CAPACITY PER STEEL NOTE UNLESS NOTED OTHERWISE.
 

MOMENT CONNECTIONS SHALL DEVELOP THE FULL BENDING CAPACITY OF THE BEAM =  $0.66 \cdot F_y \cdot S_x$  AND SHALL HAVE A SHEAR CAPACITY OF  $0.66 \cdot F_y \cdot S_x \cdot 2 /$  (BEAM LENGTH) PLUS THE SHEAR CAPACITY REQUIRED PER STEEL NOTE UNLESS NOTED OTHERWISE.

ALL BRACE CONNECTIONS SHALL DEVELOP THE FULL TENSION CAPACITY OF THE MEMBER =  $0.6 \cdot F_y \cdot A_g$  UNO.
- ALL WELDING SHALL BE PERFORMED BY NEW YORK CITY LICENSED WELDERS.
- MINIMUM FILLET WELD SIZES SHALL COMPLY WITH THE AISC, BUT SHALL NOT BE LESS THAN 1/4 INCH, UNLESS NOTED OTHERWISE.
- ALL FIELD WELDING ELECTRODES SHALL BE E70XX LOW HYDROGEN. SHOP WELDING ELECTRODES SHALL BE E70XX LOW HYDROGEN OR E70T-9 GRADE D. ALL FILLER METAL SHALL HAVE A MINIMUM CHARPY V-NOTCH (CVN) TOUGHNESS OF 20 FT. LBS. AT MINUS 20 DEGREES F.
- SHOP AND FIELD TESTING OF WELDS AND BOLTS SHALL BE AS FOLLOWS:
  - ALL WELDS SHALL BE VISUALLY INSPECTED. 15% AT RANDOM SHALL BE MEASURED.
  - FILLET WELDS FOR BEAM AND GIRDER SHEAR CONNECTION PLATES (15 % AT RANDOM) SHALL BE CHECKED BY MAGNETIC PARTICLE FOR FINAL PASS ONLY.
  - ULTRASONICALLY TEST 100% OF ALL FULL PENETRATION WELDS.
  - CHECK ALL PRETENSIONED BOLTS BY EITHER THE T/C METHOD OR BY CALIBRATED TORQUE WRENCH. IN EACH SHEAR CONNECTION, CHECK 100% OF BOLTS WHEN USING T/C METHOD AND 25% OF BOLTS WITH OTHER METHOD FOR EACH SHEAR CONNECTION, BUT NOT LESS THAN TWO (2) BOLTS PER CONNECTION.
  - CHECK ALL SLIP CRITICAL BOLTS WITH THE "DIRECT TENSION INDICATOR" METHOD. ALL BOLTS SHALL BE VISUALLY INSPECTED. MEASURE WITH FEELER GAGES, AT LEAST 15 PERCENT OF BOLTS IN EACH CONNECTION, BUT NOT LESS THAN TWO BOLTS PER CONNECTION.
  - THE OWNER'S SPECIAL INSPECTOR OR TESTING AGENCY SHALL PERFORM ALL SHOP AND FIELD INSPECTION AND TESTING AS OUTLINED ABOVE.
- FABRICATE SIMPLY SUPPORTED BEAMS WITH NATURAL CAMBER UP, FABRICATE CANTILEVER BEAMS WITH NATURAL CAMBER DOWN, UNLESS NOTED OTHERWISE.
- GAS OR ARC CUTTING OF NEW OR EXISTING SECTIONS IS NOT ALLOWED. GAS OR ARC CUTTING TO ENLARGE EXISTING OR NEW BOLT HOLES IS NOT ALLOWED. GAS OR ARC CUTTING TO CREATE NEW HOLES IN EXISTING OR NEW STEEL IS NOT ALLOWED.
- FIELD FABRICATED BEAM SPLICES AND FIELD CUTTING OF STRUCTURAL STEEL MEMBERS ARE NOT ALLOWED WITHOUT PRIOR APPROVAL OF THE ENGINEER.

## STRUCTURAL STEEL NOTES (CONTINUED)

- BEAM FIELD SPLICES, AS REQUIRED, SHALL DEVELOP THE FULL MOMENT CAPACITY OF THE MEMBER. CONTRACTOR SHALL BE RESPONSIBLE TO SURVEY ACCESS TO AREA OF WORK TO DETERMINE THE MAXIMUM LENGTH OF MEMBER AND CORRESPONDING NUMBER OF SPLICES REQUIRED
- ALL NEW HOLES IN EXISTING AND NEW STEEL SHALL BE DRILLED.
- ALL NEW BEAMS INSTALLED ADJACENT TO PROPOSED FLOOR OPENINGS THROUGH THE EXISTING FLOOR CONSTRUCTION SHALL BE ERECTED, SHIMMED AND DRY PACKED WHERE REQUIRED, PRIOR TO THE CUTTING OF EXISTING FLOOR CONSTRUCTION.
- ALL STEEL EXPOSED TO WEATHER OR AS INDICATED SHALL BE HOT DIP GALVANIZED PER ASTM A123, 2 OZ. PER SQ. FOOT MINIMUM DEPOSITION, INCLUDING DUNNAGES, STEEL LINTELS, SHELF ANGLES, LINTEL HANGERS, AND ALL OTHER STEEL FRAMING OUTSIDE THE BUILDING ENVELOPE.
- STEEL PROTECTED FROM WEATHER IN THE FINISHED STRUCTURE, OR WHERE INDICATED, SHALL BE PRIMED UNLESS NOTED OTHERWISE BY ARCHITECT.
- STRUCTURAL STEEL TO BE FIREPROOFED SHALL NOT BE PAINTED, AND SHALL BE CLEANED OF ALL RUST, LOOSE MILL SCALE AND OTHER FOREIGN MATERIALS PRIOR TO FIREPROOFING APPLICATION.

## UNISTRUT FRAMING SYSTEM NOTES

- DESIGN OF THE UNISTRUT FRAMING SYSTEM (AND ALL CONNECTIONS TO THE BASE BUILDING) TO BE BY THE CONTRACTOR. SUBMIT SIGNED AND SEALED UNISTRUT FRAMING SHOP DRAWINGS AND STRUCTURAL CALCULATIONS BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.
- PROVIDE ALL UNISTRUT METAL FRAMING MATERIAL, FITTINGS AND RELATED ACCESSORIES (STRUT SYSTEM) AS INDICATED ON THE CONTRACT DRAWINGS.
- PROVIDE ALL LABOR, SUPERVISION, ENGINEERING, AND FABRICATION REQUIRED FOR INSTALLATION OF THE STRUT SYSTEM IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND AS SPECIFIED HEREIN.
- THE MANUFACTURER SHALL NOT HAVE HAD LESS THAN 10 YEAR'S EXPERIENCE IN MANUFACTURING STRUT SYSTEMS AND MUST CERTIFY IN WRITING ALL COMPONENTS SUPPLIED HAVE BEEN PRODUCED IN ACCORDANCE WITH AN ESTABLISHED QUALITY ASSURANCE PROGRAM.
- INSTALLER MUST BE A UNISTRUT TRAINED MANUFACTURER'S AUTHORIZED REPRESENTATIVE/INSTALLER WITH NOT LESS THAN 5 YEARS EXPERIENCE IN THE INSTALLATION OF STRUT SYSTEMS OF THIS SIZE AND CONFORMATION.
- ALL STRUT SYSTEM COMPONENTS MUST BE SUPPLIED BY A SINGLE MANUFACTURER.
- WORK SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS: FEDERAL, STATE AND LOCAL CODES. AMERICAN IRON AND STEEL INSTITUTE (AISI) SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS LATEST EDITION. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM).
- SUBMIT ALL SHOP/ASSEMBLY DRAWINGS NECESSARY TO COMPLETELY INSTALL THE STRUT SYSTEM IN COMPLIANCE WITH THE CONTRACT DRAWINGS. SUBMIT ALL PERTINENT MANUFACTURERS PUBLISHED DATA.
- ALL STRUT SYSTEM COMPONENTS SHALL BE AS MANUFACTURED BY UNISTRUT CORPORATION, HILTI, OR APPROVED EQUAL AS DETERMINED BY THE ARCHITECT OR ENGINEER OF RECORD.
- ALL CHANNEL MEMBERS SHALL BE FABRICATED FROM STRUCTURAL GRADE STEEL CONFORMING TO ONE OF THE FOLLOWING ASTM SPECIFICATIONS: A 1011 SS OR 33, A 653 GR 33.
- ALL FITTINGS SHALL BE FABRICATED FROM STEEL CONFORMING TO ONE OF THE FOLLOWING ASTM SPECIFICATIONS: A575, A576, A36 OR A635.

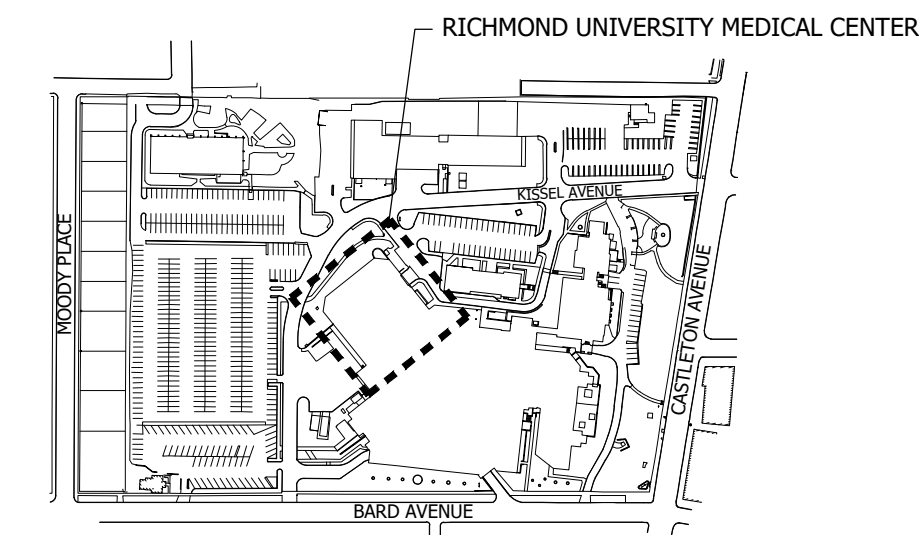
## STRUCTURAL DESIGN CRITERIA

CODES AND STANDARDS  
NEW YORK CITY BUILDING CODE, LATEST AMENDED EDITION

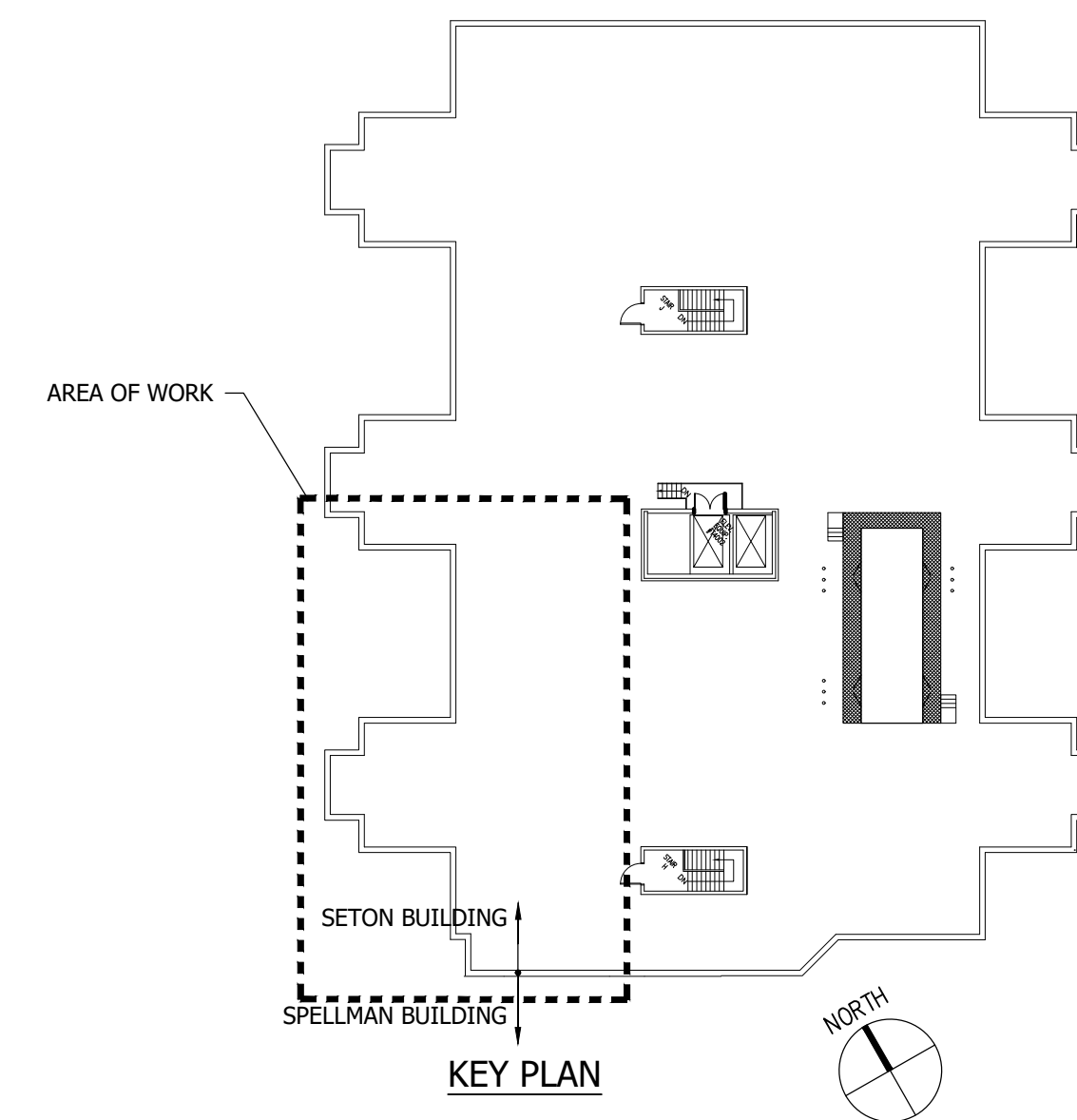
FLOOR LIVE LOADS	
1ST, 2ND, 3RD FLOORS	60 PSF
BUILDING ROOF	30 PSF
DUNNAGE PLATFORM	40 PSF

## BUILDING INFORMATION:

ADDRESS: 355 BARD AVENUE  
STATEN ISLAND, NEW YORK 10310  
BLOCK 102 LOT 1



PLOT PLAN



## SCHUNKEWITZ

ARCHITECTURE

INTERIORS

PROJECT MANAGEMENT

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Seal & Signature

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Consultants:

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GILSANZ MURRAY STEFICEK LLP

1	05/30/2023	100% CD
no.	date	description

revisions

Client Name:

RICHMOND UNIVERSITY  
MEDICAL CENTER

Project Name & Location:

BI-PLANE EP LAB  
355 BARD AVENUE  
STATEN ISLAND NY

Drawing Title:

GENERAL NOTES

Drawn By: IG	Date: 4-28-2023
Checked By: BO	Scale: AS NOTED

Issued To, For:  
CONSTRUCTION DOCUMENTS

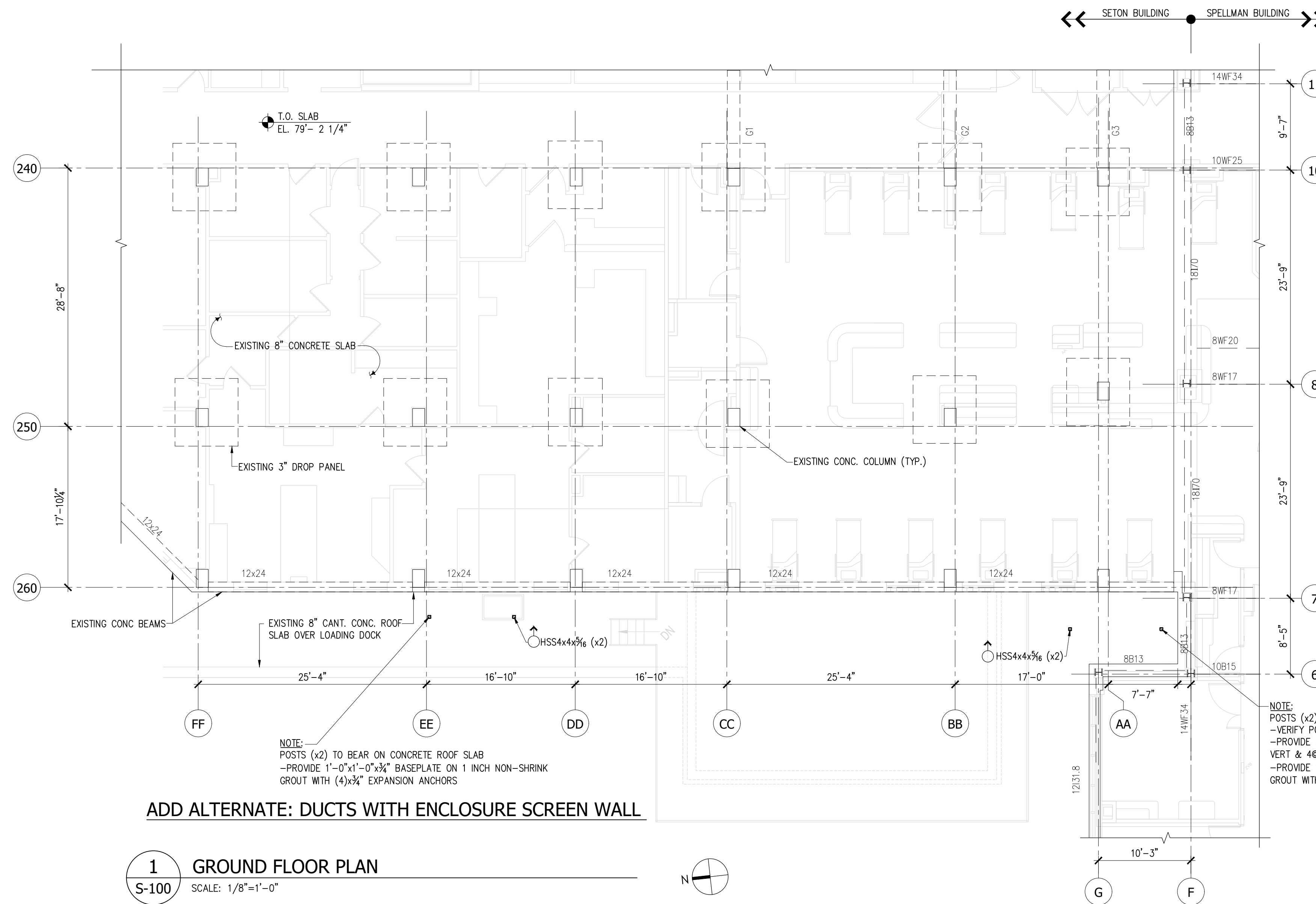
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Drawing No.:

S-001.00

1 OF 9





**ADD ALTERNATE: DUCTS WITH ENCLOSURE SCREEN WALL**

**FRAMING PLAN NOTES**

1. FOR GENERAL NOTES SEE S-001 SERIES DRAWINGS. FOR DETAILS SEE S-201 SERIES DRAWINGS.
2. FOR TOP OF SLAB ELEVATION SEE PLAN.
3. DENOTES DECK SPAN DIRECTION OF 3" 18 GAUGE COMPOSITE GALVANIZED METAL DECK WITH 2 1/2" NORMAL WEIGHT CONCRETE (TOTAL SLAB DEPTH=5 1/2") REINFORCED W/ WWF 6x6-W1.4xW1.4
4. DENOTES NEW STEEL FRAMING.
5. FOR TOP OF STEEL ELEVATION SEE PLAN
6. TOP OF STEEL (AT NEW SLABS) SHALL BE INSTALLED AT 5/8" BELOW TOP OF NEW SLAB U.O.N. THUS {±} INDICATING DISTANCE FROM TOP OF SLAB.  
TOP OF STEEL (AT EXISTING SLABS) SHALL BE INSTALLED UNDER THE EXISTING SLAB U.O.N. ALLOW A MINIMUM GAP OF 1" BETWEEN THE BEAM AND THE UNDERSIDE OF EXISTING SLAB FOR STEEL SHIMS AND CONTINUOUS DRYPACK. IF CONNECTION RESTRAINTS CAUSE A GAP OF GREATER THAN 2 1/2", A STEEL BOLSTER/FILLER IS TO BE USED.
7. DENOTES BRACING.
8. DENOTES 2L3x3x3/4 KNEE BRACING.
9. DENOTES EXISTING FRAMING. ALL BASE BUILDING STRUCTURAL INFORMATION IS SHOWN FOR REFERENCE ONLY. VERIFY EXISTING FRAMING IN FIELD AS REQUIRED FOR NEW WORK.
10. DENOTES EXISTING STRUCTURE TO BE REMOVED.
11. DENOTES SHORE, CUT AND RECONNECT EXISTING BEAM TO NEW FRAMING.
12. DENOTES MOMENT CONNECTION.
13. DENOTES NEW FLOOR OPENING TO BE SAWCUT IN SLAB AFTER INSTALLATION OF NEW FRAMING. COORDINATE LOCATION AND SIZE WITH ARCH'L. & MEP DWGS.
14. DENOTES EXISTING OPENING.
15. DENOTES NEW SLAB.
16. DENOTES NEW SLAB FILL ON HIGH DENSITY STYROFOAM.
17. DENOTES COLUMN OR POST STARTING UP FROM THIS LEVEL. "H" WITHIN SYMBOL INDICATES HANGER UP.
18. DENOTES COLUMN OR POST GOING DOWN FROM THIS LEVEL. "H" WITHIN SYMBOL INDICATES HANGER DOWN.
19. DENOTES BEAM END REACTION (SERVICE LOAD) IN KIPS FOR DESIGN OF NEW CONNECTIONS & REINFORCEMENT OF EXISTING CONNECTIONS. CONTRACTOR TO FIELD SURVEY EXISTING CONNECTIONS & REINFORCE AS REQ'D.
20. DENOTES AXIAL FORCE (SERVICE LOAD) IN KIPS TO BE TRANSFERRED THROUGH BEAM CONNECTION IN ADDITION TO END REACTION, FOR DESIGN OF NEW CONNECTIONS AND REINFORCEMENT OF EXISTING CONNECTIONS. CONTRACTOR TO FIELD SURVEY EXISTING CONNECTIONS AND REINFORCE AS REQUIRED.
21. DENOTES MOMENT (SERVICE LOAD) IN FT-KIPS TO BE DEVELOPED BY MOMENT CONNECTION.
22. INDICATES WELDED FITTED FULL HEIGHT STIFFENER REQUIRED AT CONNECTION.
23. VERIFY ALL DIMENSIONS OF EXISTING CONSTRUCTION IN FIELD AS REQUIRED FOR NEW WORK.

no.	date	description	100% CD
1	05/30/2023		

revisions

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Project Name & Location:  
BI-PLANE EP LAB  
355 BARD AVENUE  
STATEN ISLAND NY

Drawing Title:  
**GROUND FLOOR FRAMING PLAN**

Drawn By: IG	Date: 4-28-2023
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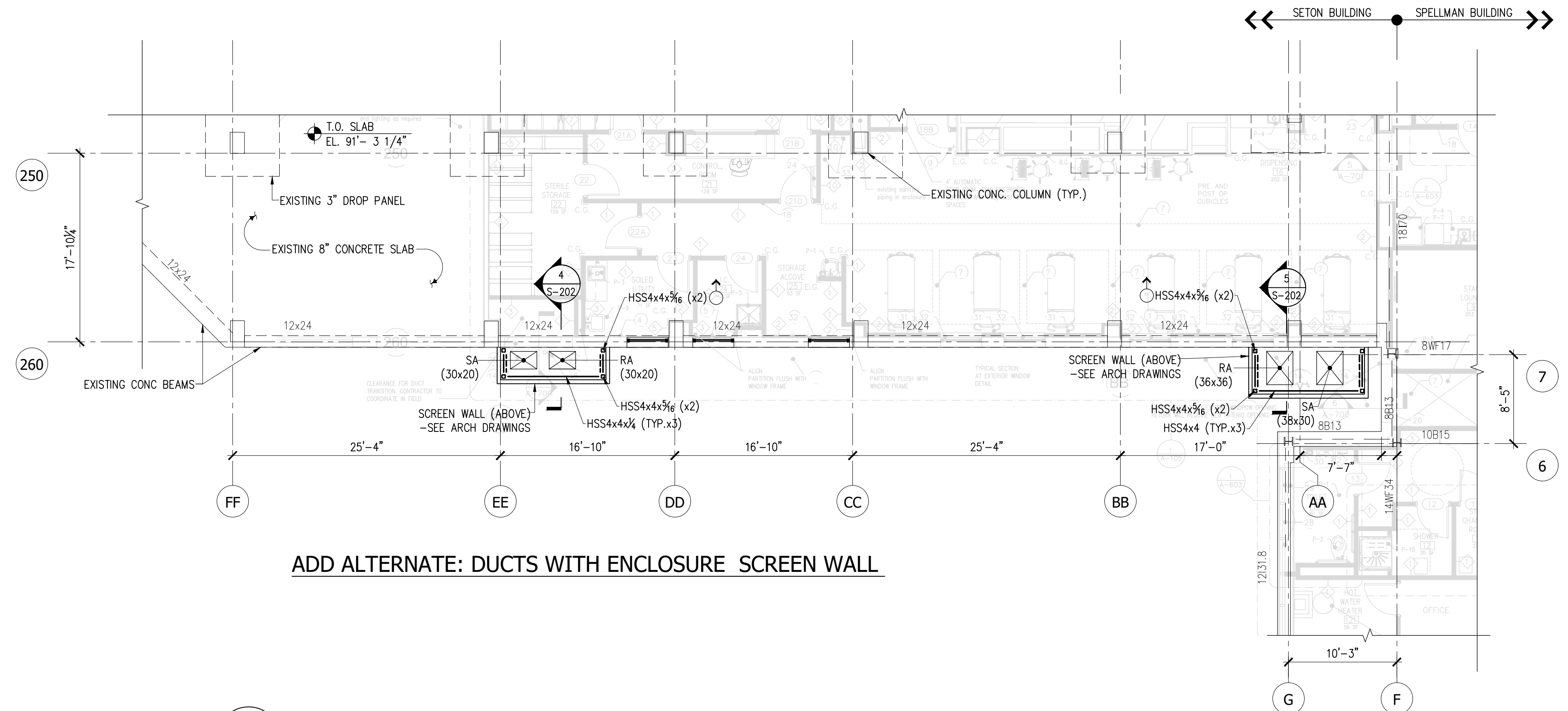
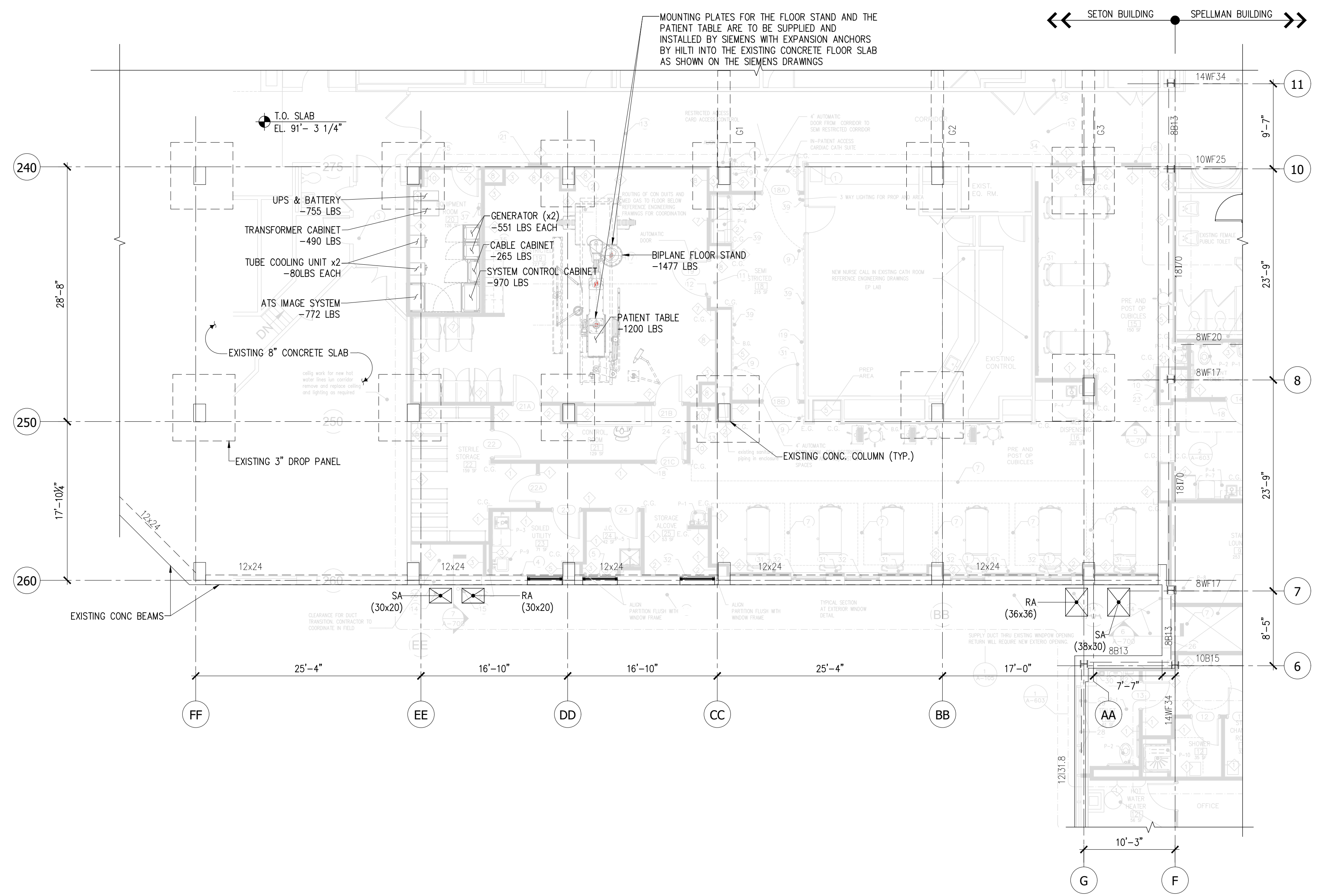
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Seal & Signature

ANTHONY J. PAGNOTTA: NY 064408

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**GILSANZ MURRAY STEFICEK LLP**



**FRAMING PLAN NOTES**

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- FOR TOP OF SLAB ELEVATION SEE PLAN.
- ↔ DENOTES DECK SPAN DIRECTION OF 3" 18 GAUGE COMPOSITE GALVANIZED METAL DECK WITH 2 1/2" NORMAL WEIGHT CONCRETE (TOTAL SLAB DEPTH=5 1/2") REINFORCED W/ WWF 6x6-W1.4xW1.4
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- ✕✕✕ DENOTES EXISTING STRUCTURE TO BE REMOVED.

- SCR DENOTES SHORE, CUT AND RECONNECT EXISTING BEAM TO NEW FRAMING.
- ↔ DENOTES MOMENT CONNECTION.
- ⊠ DENOTES NEW FLOOR OPENING TO BE SAWCUT IN SLAB AFTER INSTALLATION OF NEW FRAMING. COORDINATE LOCATION AND SIZE WITH ARCH'L & MEP DWGS.
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- DENOTES COLUMN OR POST GOING DOWN FROM THIS LEVEL. "H" WITHIN SYMBOL INDICATES HANGER DOWN.
- 20k DENOTES BEAM END REACTION (SERVICE LOAD) IN KIPS FOR DESIGN OF NEW CONNECTIONS & REINFORCEMENT OF EXISTING CONNECTIONS. CONTRACTOR TO FIELD SURVEY EXISTING CONNECTIONS & REINFORCE AS REQ'D.
- P40k DENOTES AXIAL FORCE (SERVICE LOAD) IN KIPS TO BE TRANSFERRED THROUGH BEAM CONNECTION IN ADDITION TO END REACTION. FOR DESIGN OF NEW CONNECTIONS AND REINFORCEMENT OF EXISTING CONNECTIONS. CONTRACTOR TO FIELD SURVEY EXISTING CONNECTIONS AND REINFORCE AS REQUIRED.
- M30 DENOTES MOMENT (SERVICE LOAD) IN FT-KIPS TO BE DEVELOPED BY MOMENT CONNECTION.
- FH INDICATES WELDED FITTED FULL HEIGHT STIFFENER REQUIRED AT CONNECTION.
- VERIFY ALL DIMENSIONS OF EXISTING CONSTRUCTION IN FIELD AS REQUIRED FOR NEW WORK.

**1** 1ST FLOOR FRAMING PLAN  
 S-101 SCALE: 1/8"=1'-0"

no.	date	description
1	05/30/2023	100% CD
revisions		

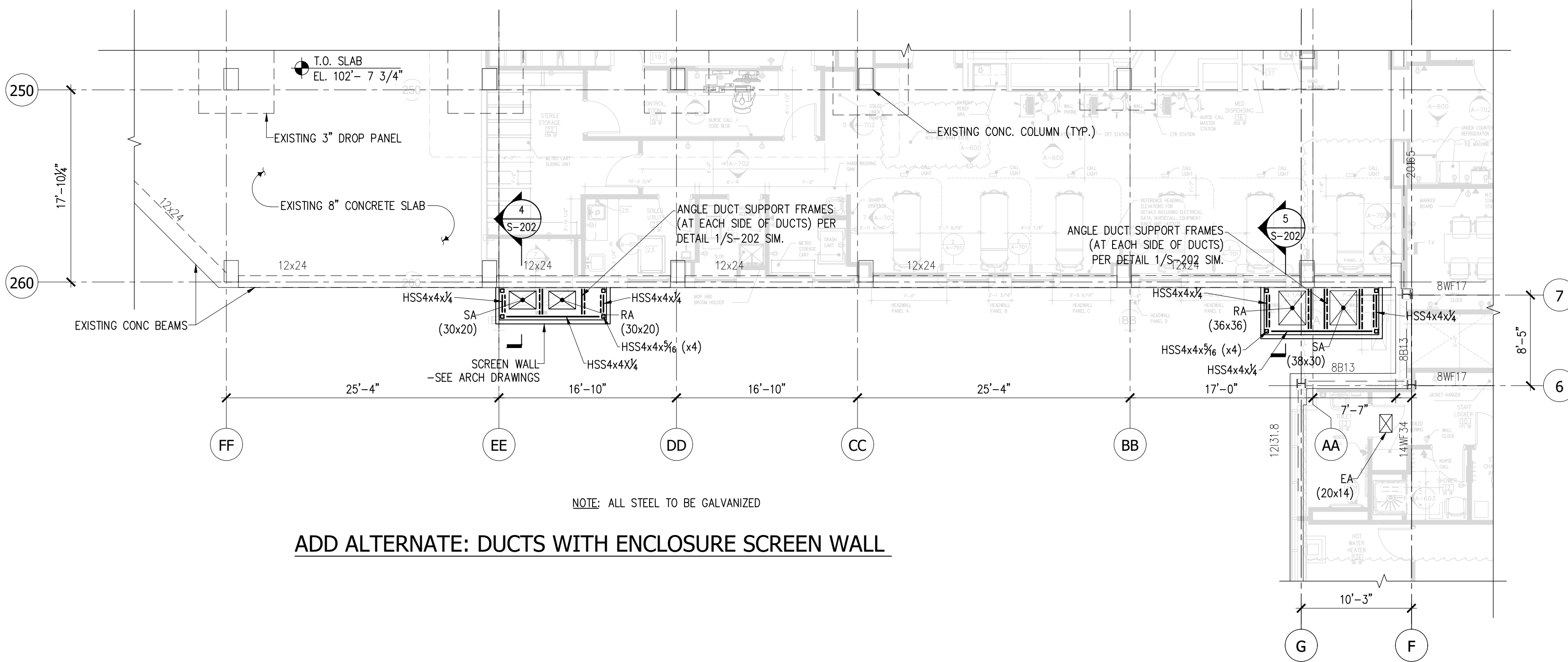
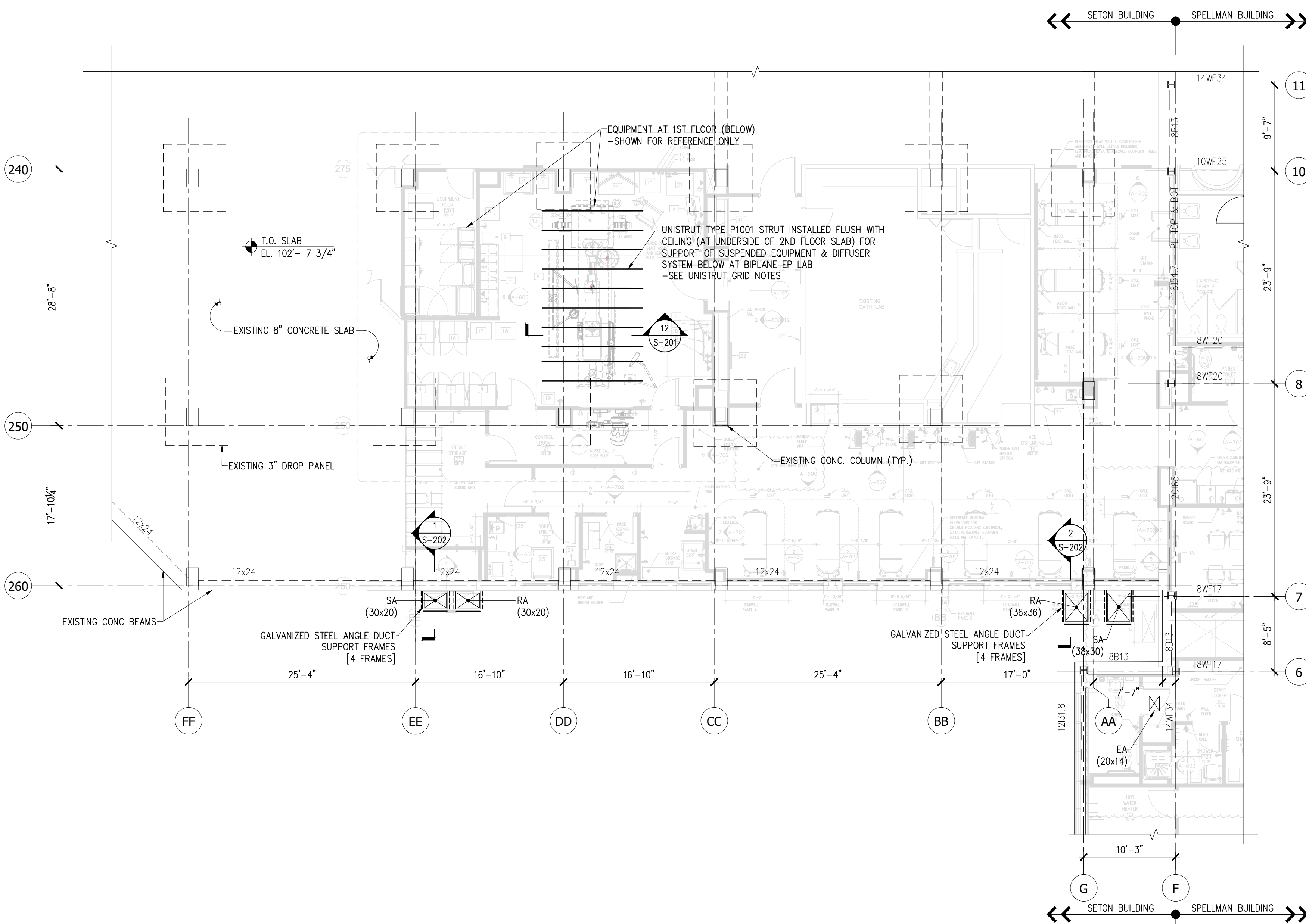
**Client Name:**  
 RICHMOND UNIVERSITY  
 MEDICAL CENTER

**Project Name & Location:**  
 BI-PLANE EP LAB  
 355 BARD AVENUE  
 STATEN ISLAND NY

**Drawing Title:**  
 1st FLOOR FRAMING PLAN

<b>Drawn By:</b> IG	<b>Date:</b> 4-28-2023
<b>Checked By:</b> BO	<b>Scale:</b> AS NOTED
<b>Issued To, For:</b> CONSTRUCTION DOCUMENTS	
<b>File No.:</b> 21190	
<b>Drawing No.:</b> S-101.00	<b>3 OF 9</b>





**ADD ALTERNATE: DUCTS WITH ENCLOSURE SCREEN WALL**

**1 2ND FLOOR FRAMING PLAN**  
S-102 SCALE: 1/8"=1'-0"



**FRAMING PLAN NOTES**

- FOR GENERAL NOTES SEE S-001 SERIES DRAWINGS. FOR DETAILS SEE S-201 SERIES DRAWINGS.
- FOR TOP OF SLAB ELEVATION SEE PLAN.
- ↔ DENOTES DECK SPAN DIRECTION OF 3" 18 GAUGE COMPOSITE GALVANIZED METAL DECK WITH 2 1/2" NORMAL WEIGHT CONCRETE (TOTAL SLAB DEPTH=5 1/2") REINFORCED W/ WWF 6x6-W1.4xW1.4
- DENOTES NEW STEEL FRAMING.
- FOR TOP OF STEEL ELEVATION SEE PLAN
- TOP OF STEEL (AT NEW SLABS) SHALL BE INSTALLED AT 5/8" BELOW TOP OF NEW SLAB U.O.N. THIS [±] INDICATING DISTANCE FROM TOP OF SLAB. TOP OF STEEL (AT EXISTING SLABS) SHALL BE INSTALLED UNDER THE EXISTING SLAB U.O.N. ALLOW A MINIMUM GAP OF 1" BETWEEN THE BEAM AND THE UNDERSIDE OF EXISTING SLAB FOR STEEL SHIMS AND CONTINUOUS DRYPACK. IF CONNECTION RESTRAINTS CAUSE A GAP OF GREATER THAN 2 1/2", A STEEL BOLSTER/FILLER IS TO BE USED.
- DENOTES BRACING.
- KB --- DENOTES 2L3x3x3/4 KNEE BRACING.
- DENOTES EXISTING FRAMING. ALL BASE BUILDING STRUCTURAL INFORMATION IS SHOWN FOR REFERENCE ONLY. VERIFY EXISTING FRAMING IN FIELD AS REQUIRED FOR NEW WORK.
- DENOTES EXISTING STRUCTURE TO BE REMOVED.

- SCR DENOTES SHORE, CUT AND RECONNECT EXISTING BEAM TO NEW FRAMING.
- ◀▶ DENOTES MOMENT CONNECTION.
- ◻ DENOTES NEW FLOOR OPENING TO BE SAWCUT IN SLAB AFTER INSTALLATION OF NEW FRAMING. COORDINATE LOCATION AND SIZE WITH ARCH'L & MEP DWGS.
- ◻ DENOTES EXISTING OPENING.
- ▬ DENOTES NEW SLAB.
- ▬ DENOTES NEW SLAB FILL ON HIGH DENSITY STYROFOAM.
- DENOTES COLUMN OR POST STARTING UP FROM THIS LEVEL. "H" WITHIN SYMBOL INDICATES HANGER UP.
- DENOTES COLUMN OR POST GOING DOWN FROM THIS LEVEL. "H" WITHIN SYMBOL INDICATES HANGER DOWN.
- 20k DENOTES BEAM END REACTION (SERVICE LOAD) IN KIPS FOR DESIGN OF NEW CONNECTIONS & REINFORCEMENT OF EXISTING CONNECTIONS. CONTRACTOR TO FIELD SURVEY EXISTING CONNECTIONS & REINFORCE AS REQ'D.
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- M30 DENOTES MOMENT (SERVICE LOAD) IN FT-KIPS TO BE DEVELOPED BY MOMENT CONNECTION.
- FH INDICATES WELDED FITTED FULL HEIGHT STIFFENER REQUIRED AT CONNECTION.
- VERIFY ALL DIMENSIONS OF EXISTING CONSTRUCTION IN FIELD AS REQUIRED FOR NEW WORK.

**UNISTRUT GRID NOTES:**

- FOR UNISTRUT FRAMING SYSTEM GENERAL NOTES SEE DRAWING S-001.
- CONTRACTOR IS TO PROVIDE A UNISTRUT GRID AT THE UNDERSIDE OF THE 2nd FLOOR SLAB, FOR THE SUPPORT OF THE FOLLOWING:
  - 1ST FLOOR BIPLANE EP LAB SUSPENDED EQUIPMENT. REFER TO THE OPERATING ROOM EQUIPMENT DRAWINGS BY SIEMENS.
  - OPERATING ROOM DIFFUSER SYSTEM. REFER TO DIFFUSER SYSTEM DRAWINGS BY PRICE CRITICAL ENVIRONMENTS.
- UNISTRUT GRID IS TO CONSIST OF THE BOTTOM LEVEL OF UNISTRUT TO BE INSTALLED FLUSH WITH THE CEILING, AND ALL UNISTRUT TRANSVERSE SUPPORT MEMBERS, VERTICAL HANGER TUBES, AND DIAGONAL BRACING AS REQUIRED TO PROPERLY SUPPORT THE GRID.
- DESIGN OF THE UNISTRUT FRAMING SYSTEM, AND ALL CONNECTIONS TO THE BASE BUILDING, TO BE BY THE CONTRACTOR. SUBMIT SIGNED AND SEALED UNISTRUT FRAMING SHOP DRAWINGS AND STRUCTURAL CALCULATIONS BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK FOR REVIEW AND APPROVAL. UNISTRUT SHOP DRAWINGS SHALL INCLUDE ALL UNISTRUT SIZES, LAYOUT, ALL CONNECTION DETAILS TO THE BASE BUILDING, AND ALL HANGER AND BRACING DETAILS.
- UNISTRUT GRID IS TO BE DESIGNED TO SUPPORT ALL EQUIPMENT WEIGHTS AND FORCES IMPOSED AS SHOWN ON THE OPERATING ROOM EQUIPMENT DRAWINGS AND FOR THE WEIGHT OF THE DIFFUSER SYSTEM. UNISTRUT SHOP DRAWINGS SHALL SHOW ALL EQUIPMENT WEIGHTS AND FORCES IMPOSED BY BOTH THE OPERATING ROOM EQUIPMENT AND BY THE DIFFUSER SYSTEM.
- THE BOTTOM LEVEL OF THE UNISTRUT GRID IS TO BE INSTALLED FLUSH WITH THE CEILING. UNISTRUT LAYOUT SHOWN IS APPROXIMATE. CONTRACTOR IS TO COORDINATE THE UNISTRUT GRID LAYOUT AND DETAILS WITH THE REQUIREMENTS SHOWN ON THE OPERATING ROOM EQUIPMENT DRAWING, THE DIFFUSER SYSTEM DRAWINGS, AND WITH THE ARCHITECTURAL DRAWINGS.
- UNISTRUT TO BE MINIMUM 12 GAGE, 1-5/8" WIDE BY 3-1/4" TALL, TYPE P1001 STRUT BY UNISTRUT, OR APPROVED EQUAL BY HILTI OR OTHERS.
- PROVIDE VERTICAL HANGER TUBES / STRUT AS REQUIRED TO SUPPORT GRID, WITH MINIMUM 3/8" DIAMETER EXPANSION ANCHOR THREADED ROD CONNECTIONS TO THE UNDERSIDE OF THE 2ND FLOOR CONCRETE SLAB.
- PROVIDE DIAGONAL BRACING OF UNISTRUT GRID TO PREVENT HORIZONTAL MOVEMENT OF GRID. THE SYSTEM SHALL BE FIXED, RIGID, AND BRACED FOR SWAY.
- FOR TYPICAL UNISTRUT SUPPORT DETAIL REFER TO DETAIL #12/S-201.

no.	date	description
1	05/30/2023	100% CD
revisions		

**Client Name:**  
**RICHMOND UNIVERSITY MEDICAL CENTER**

**Project Name & Location:**  
**BI-PLANE EP LAB  
355 BARD AVENUE  
STATEN ISLAND NY**

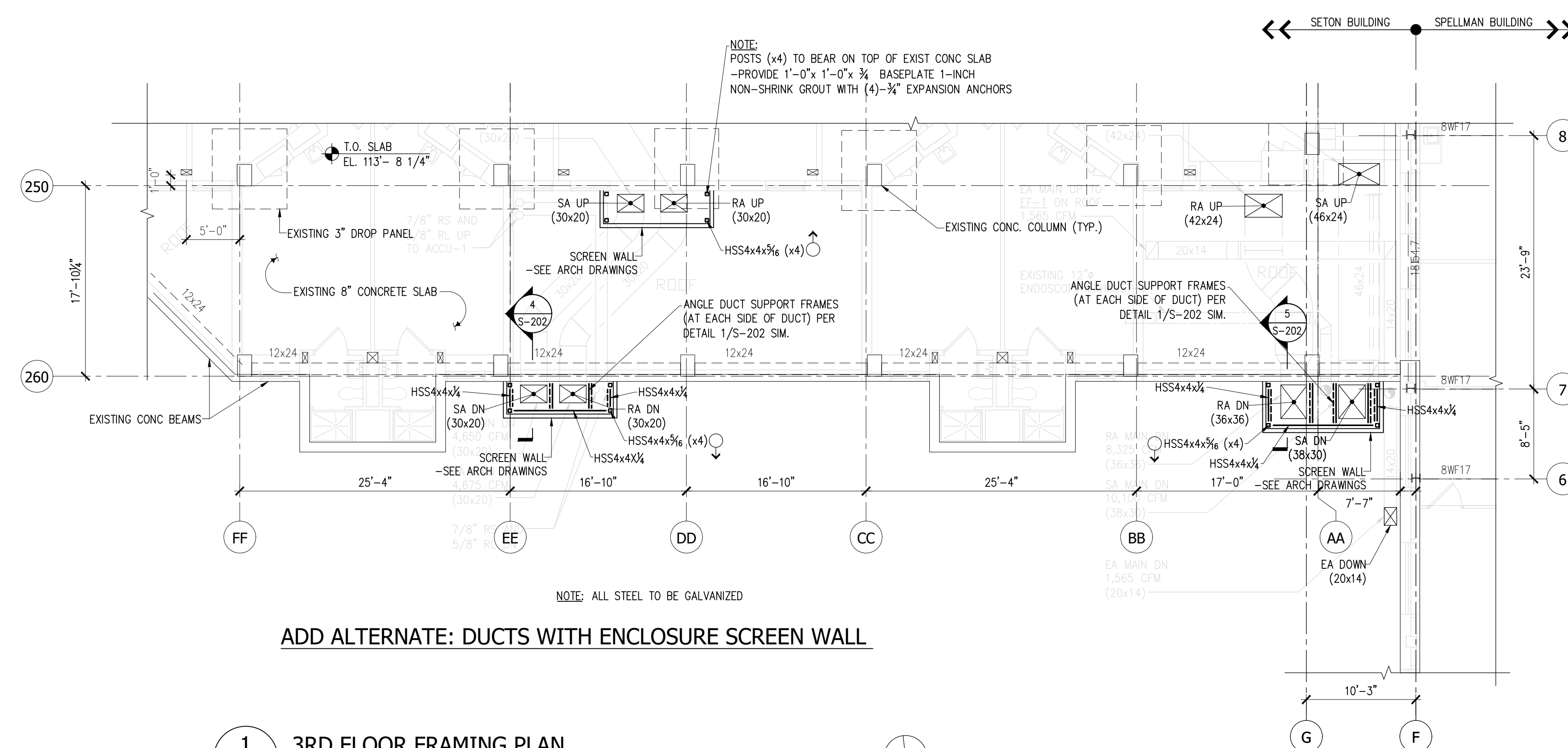
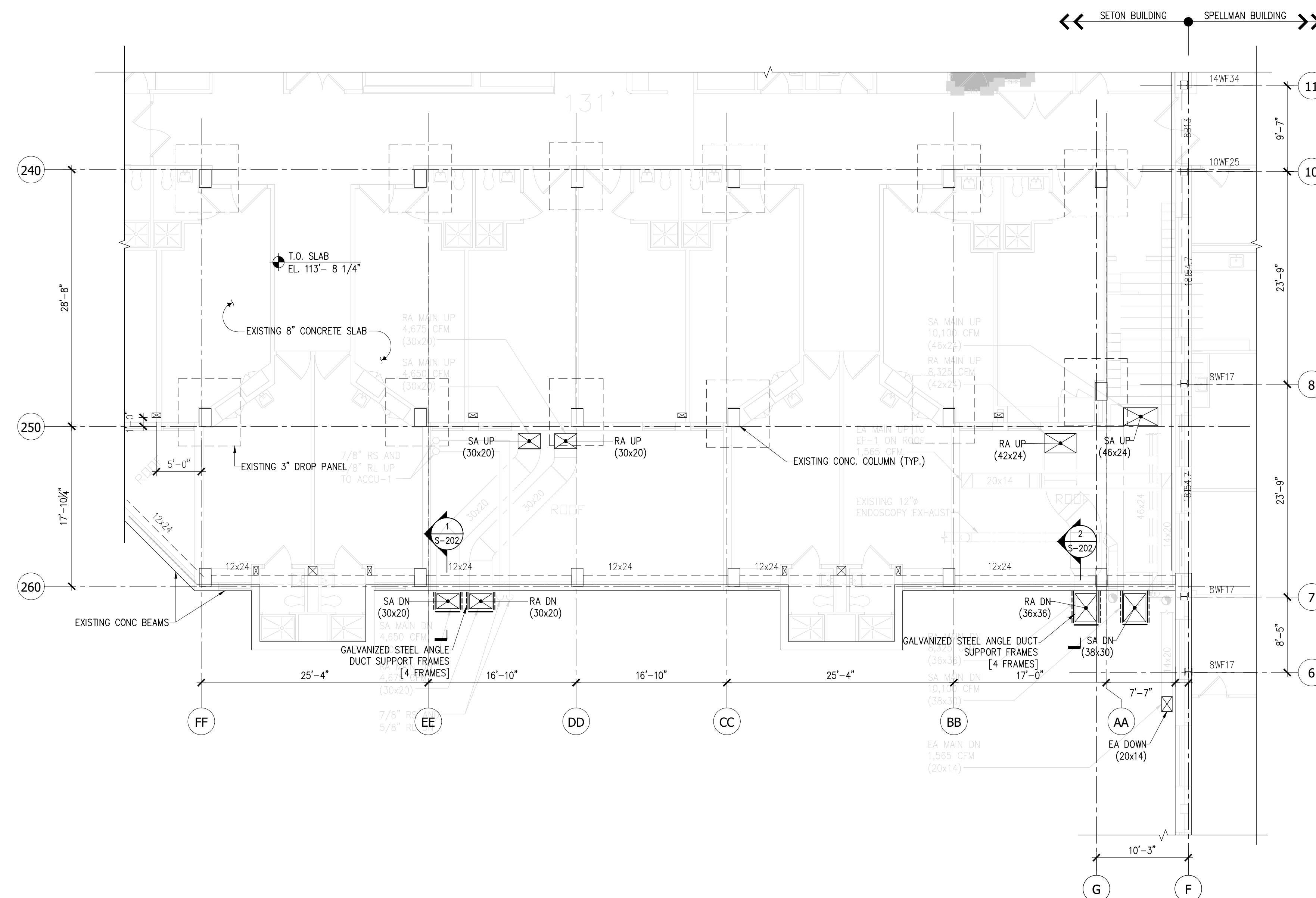
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**2nd FLOOR FRAMING PLAN**

<b>Drawn By:</b> IG	<b>Date:</b> 4-28-2023
<b>Checked By:</b> BO	<b>Scale:</b> AS NOTED

**Issued To, For:**  
**CONSTRUCTION DOCUMENTS**

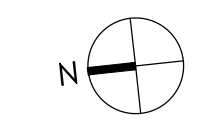
**File No.:** 21190  
**Drawing No.:** S-102.00 4 OF 9





**ADD ALTERNATE: DUCTS WITH ENCLOSURE SCREEN WALL**

**1** 3RD FLOOR FRAMING PLAN  
SCALE: 1/8"=1'-0"



**FRAMING PLAN NOTES**

- FOR GENERAL NOTES SEE S-001 SERIES DRAWINGS. FOR DETAILS SEE S-201 SERIES DRAWINGS.
- FOR TOP OF SLAB ELEVATION SEE PLAN.
- ↗ DENOTES DECK SPAN DIRECTION OF 3" 18 GAUGE COMPOSITE GALVANIZED METAL DECK WITH 2 1/2" NORMAL WEIGHT CONCRETE (TOTAL SLAB DEPTH=5 1/2") REINFORCED W/ WWF 6x6-WI.4xW1.4
- ↔ DENOTES NEW STEEL FRAMING.
- FOR TOP OF STEEL ELEVATION SEE PLAN
- TOP OF STEEL (AT NEW SLABS) SHALL BE INSTALLED AT 5/8" BELOW TOP OF NEW SLAB U.O.N. THIS {#} INDICATING DISTANCE FROM TOP OF SLAB.
  - TOP OF STEEL (AT EXISTING SLABS) SHALL BE INSTALLED UNDER THE EXISTING SLAB U.O.N. ALLOW A MINIMUM GAP OF 1" BETWEEN THE BEAM AND THE UNDERSIDE OF EXISTING SLAB FOR STEEL SHIMS AND CONTINUOUS DRYPACK. IF CONNECTION RESTRAINTS CAUSE A GAP OF GREATER THAN 2", A STEEL BOLSTER/FILLER IS TO BE USED.
- ↗ DENOTES BRACING.
- ↗-KB DENOTES 2L3x3x1/4 KNEE BRACING.
- ↗ DENOTES EXISTING FRAMING. ALL BASE BUILDING STRUCTURAL INFORMATION IS SHOWN FOR REFERENCE ONLY. VERIFY EXISTING FRAMING IN FIELD AS REQUIRED FOR NEW WORK.
- ↗-x-x-2 DENOTES EXISTING STRUCTURE TO BE REMOVED.

- SCR DENOTES SHORE, CUT AND RECONNECT EXISTING BEAM TO NEW FRAMING.
- ↗ DENOTES MOMENT CONNECTION.
- ⊠ DENOTES NEW FLOOR OPENING TO BE SAWCUT IN SLAB AFTER INSTALLATION OF NEW FRAMING. COORDINATE LOCATION AND SIZE WITH ARCH'L. & MEP DWGS.
- ⊠ DENOTES EXISTING OPENING.
- ▭ DENOTES NEW SLAB.
- ▭ DENOTES NEW SLAB FILL ON HIGH DENSITY STYROFOAM.
- DENOTES COLUMN OR POST STARTING UP FROM THIS LEVEL. "H" WITHIN SYMBOL INDICATES HANGER UP.
  - DENOTES COLUMN OR POST GOING DOWN FROM THIS LEVEL. "H" WITHIN SYMBOL INDICATES HANGER DOWN.
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- VERIFY ALL DIMENSIONS OF EXISTING CONSTRUCTION IN FIELD AS REQUIRED FOR NEW WORK.

no.	date	description
1	05/30/2023	100% CD
revisions		

**Client Name:**  
**RICHMOND UNIVERSITY MEDICAL CENTER**

**Project Name & Location:**  
**BI-PLANE EP LAB  
355 BARD AVENUE  
STATEN ISLAND NY**

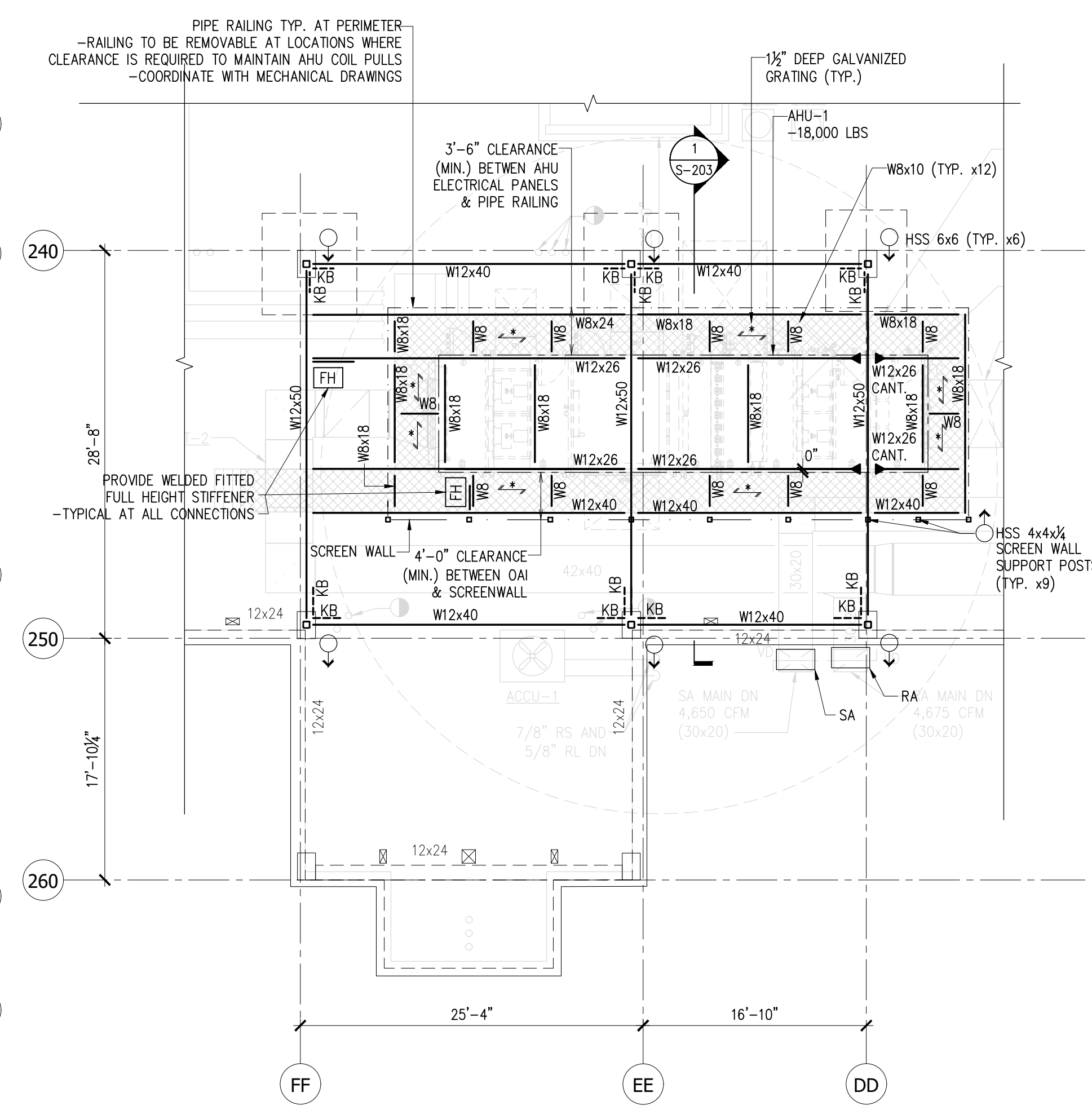
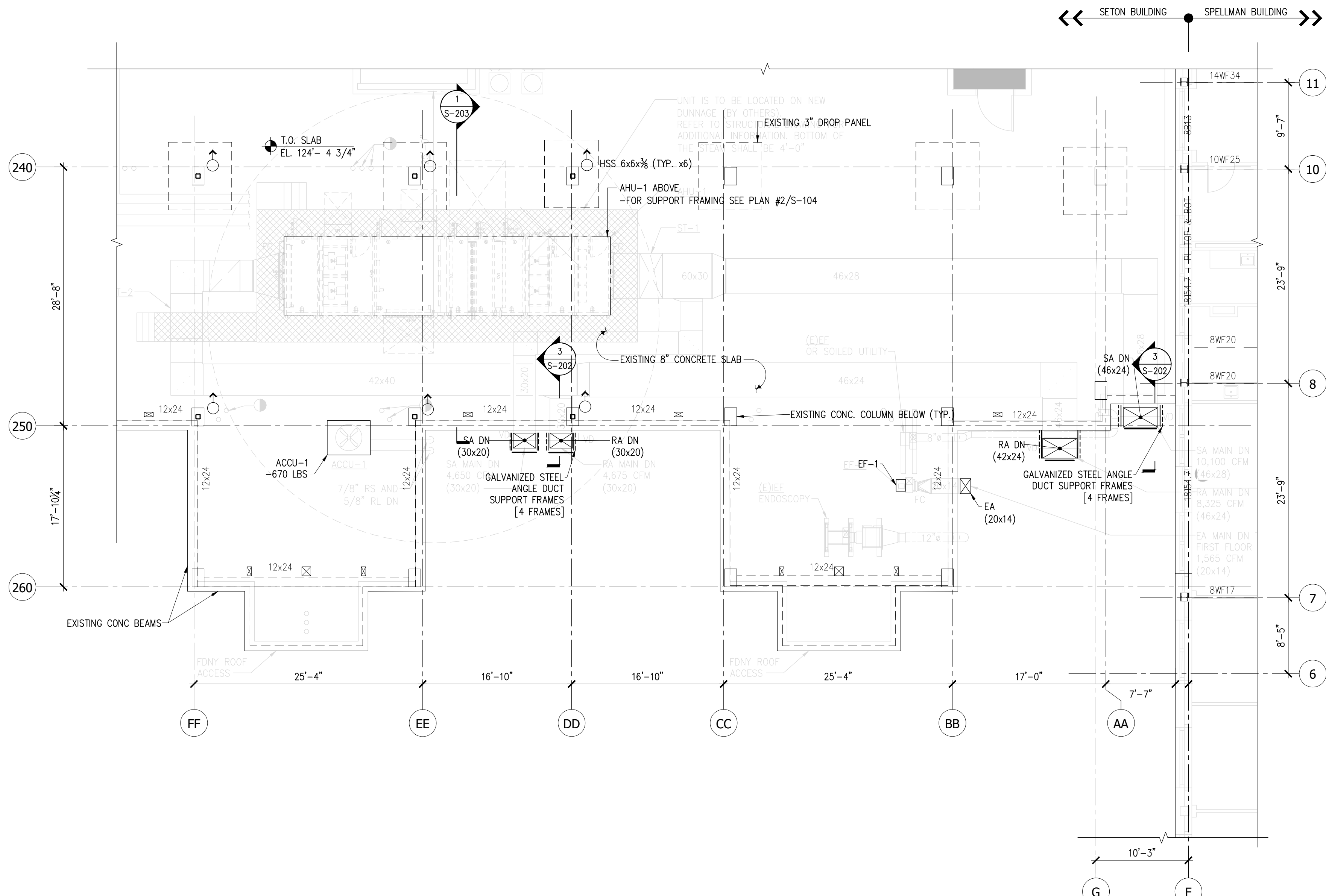
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**3rd FLOOR FRAMING PLAN**

<b>Drawn By:</b> IG	<b>Date:</b> 4-28-2023
<b>Checked By:</b> BO	<b>Scale:</b> AS NOTED

**Issued To, For:**  
**CONSTRUCTION DOCUMENTS**

**File No.:** 21190  
**Drawing No.:** S-103.00 5 OF 9



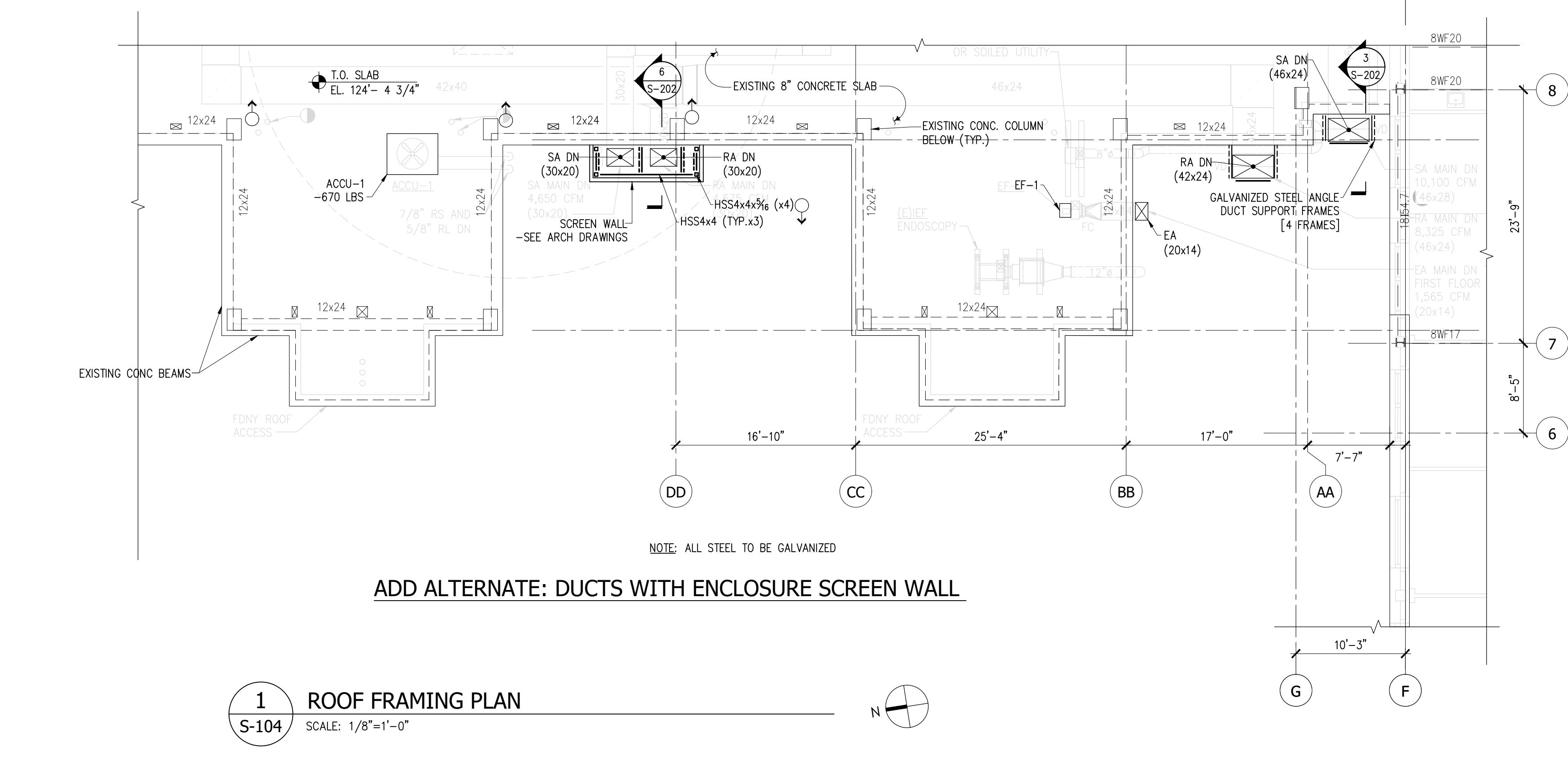


**2 DUNNAGE FRAMING PLAN**  
S-104 SCALE: 1/8"=1'-0"

- NOTES**
- ALL STEEL, RAILINGS AND GRATING TO BE GALVANIZED.
  - TOP OF STEEL TO BE ± 4'-0" ABOVE EXISTING ROOFING (± 3'-0" MIN FROM BOTTOM OF STEEL ABOVE EXISTING ROOFING).
  - INDICATES 1 1/2" DEEP x 3/4" WELDED STEEL GALVANIZED GRATING, TYPE WB BY IKG INDUSTRIES OR APPROVED EQUIVALENT.

**FRAMING PLAN NOTES**

- FOR GENERAL NOTES SEE S-001 SERIES DRAWINGS. FOR DETAILS SEE S-201 SERIES DRAWINGS.
- FOR TOP OF SLAB ELEVATION SEE PLAN.
- INDICATES DECK SPAN DIRECTION OF 3" 18 GAUGE COMPOSITE GALVANIZED METAL DECK WITH 2 1/2" NORMAL WEIGHT CONCRETE (TOTAL SLAB DEPTH=5 1/2") REINFORCED W/ WWF 6x6-WI.4xWI.4
- INDICATES NEW STEEL FRAMING.
- ALL ROOF STEEL, INCLUDING ALL POSTS, BRACING, DUNNAGE AND GRATING IS TO BE GALVANIZED. AT FIELD WELDED CONNECTIONS TO EXISTING GALVANIZED STEEL PROVIDE GALVANIZING REPAIR PAINT AFTER INSTALLATION.
- FOR TOP OF STEEL ELEVATION SEE PLAN
- TOP OF STEEL (AT NEW SLABS) SHALL BE INSTALLED AT 5/8" BELOW TOP OF NEW SLAB U.O.N. THUS [± ] INDICATING DISTANCE FROM TOP OF SLAB. TOP OF STEEL (AT EXISTING SLABS) SHALL BE INSTALLED UNDER THE EXISTING SLAB U.O.N. ALLOW A MINIMUM GAP OF 1" BETWEEN THE BEAM AND THE UNDERSIDE OF EXISTING SLAB FOR STEEL SHIMS AND CONTINUOUS DRYPACK. IF CONNECTION RESTRAINTS CAUSE A GAP OF GREATER THAN 2 1/2", A STEEL BOLSTER/FILLER IS TO BE USED.
- INDICATES BRACING.
- INDICATES 2L3x3x3/4 KNEE BRACING.
- INDICATES EXISTING FRAMING. ALL BASE BUILDING STRUCTURAL INFORMATION IS SHOWN FOR REFERENCE ONLY. VERIFY EXISTING FRAMING IN FIELD AS REQUIRED FOR NEW WORK.
- 2x x-x-2 DENOTES EXISTING STRUCTURE TO BE REMOVED.
- SCR DENOTES SHORE, CUT AND RECONNECT EXISTING BEAM TO NEW FRAMING.
- INDICATES MOMENT CONNECTION.
- INDICATES NEW FLOOR OPENING TO BE SAWCUT IN SLAB AFTER INSTALLATION OF NEW FRAMING. COORDINATE LOCATION AND SIZE WITH ARCH'L & MEP DWGS.
- INDICATES EXISTING OPENING.
- INDICATES NEW SLAB.
- INDICATES NEW SLAB FILL ON HIGH DENSITY STYROFOAM.
- INDICATES COLUMN OR POST STARTING UP FROM THIS LEVEL. "H" WITHIN SYMBOL INDICATES HANGER UP.
- INDICATES COLUMN OR POST GOING DOWN FROM THIS LEVEL. "H" WITHIN SYMBOL INDICATES HANGER DOWN.
- INDICATES BEAM END REACTION (SERVICE LOAD) IN KIPS FOR DESIGN OF NEW CONNECTIONS & REINFORCEMENT OF EXISTING CONNECTIONS. CONTRACTOR TO FIELD SURVEY EXISTING CONNECTIONS & REINFORCE AS REQ'D.
- INDICATES AXIAL FORCE (SERVICE LOAD) IN KIPS TO BE TRANSFERRED THROUGH BEAM CONNECTION IN ADDITION TO END REACTION. FOR DESIGN OF NEW CONNECTIONS AND REINFORCEMENT OF EXISTING CONNECTIONS. CONTRACTOR TO FIELD SURVEY EXISTING CONNECTIONS AND REINFORCE AS REQUIRED.
- M30 DENOTES MOMENT (SERVICE LOAD) IN FT-KIPS TO BE DEVELOPED BY MOMENT CONNECTION.
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- VERIFY ALL DIMENSIONS OF EXISTING CONSTRUCTION IN FIELD AS REQUIRED FOR NEW WORK.



**1 ROOF FRAMING PLAN**  
S-104 SCALE: 1/8"=1'-0"

1	05/30/2023	100% CD
no.	date	description

revisions

**Client Name:**  
RICHMOND UNIVERSITY  
MEDICAL CENTER

**Project Name & Location:**  
BI-PLANE EP LAB  
355 BARD AVENUE  
STATEN ISLAND NY

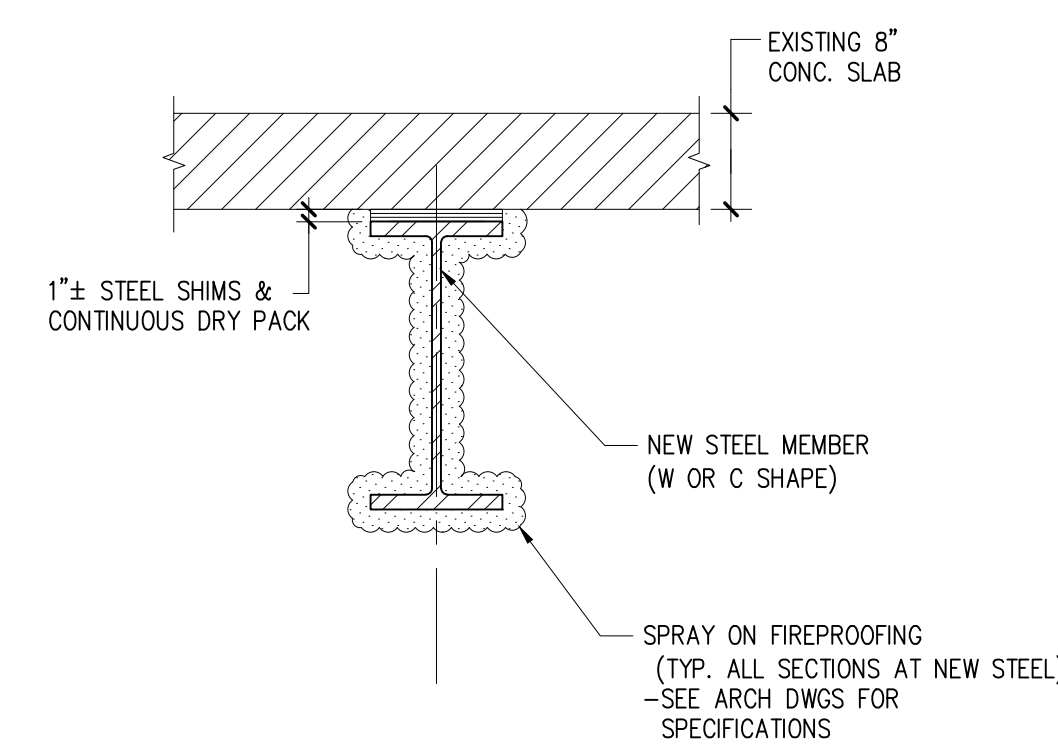
**Drawing Title:**  
ROOF FRAMING PLAN

**Drawn By:** IG **Date:** 4-28-2023  
**Checked By:** BO **Scale:** AS NOTED

**Issued To, For:**  
CONSTRUCTION DOCUMENTS

**File No.:** 21190  
**Drawing No.:** S-104.00 **6 OF 9**

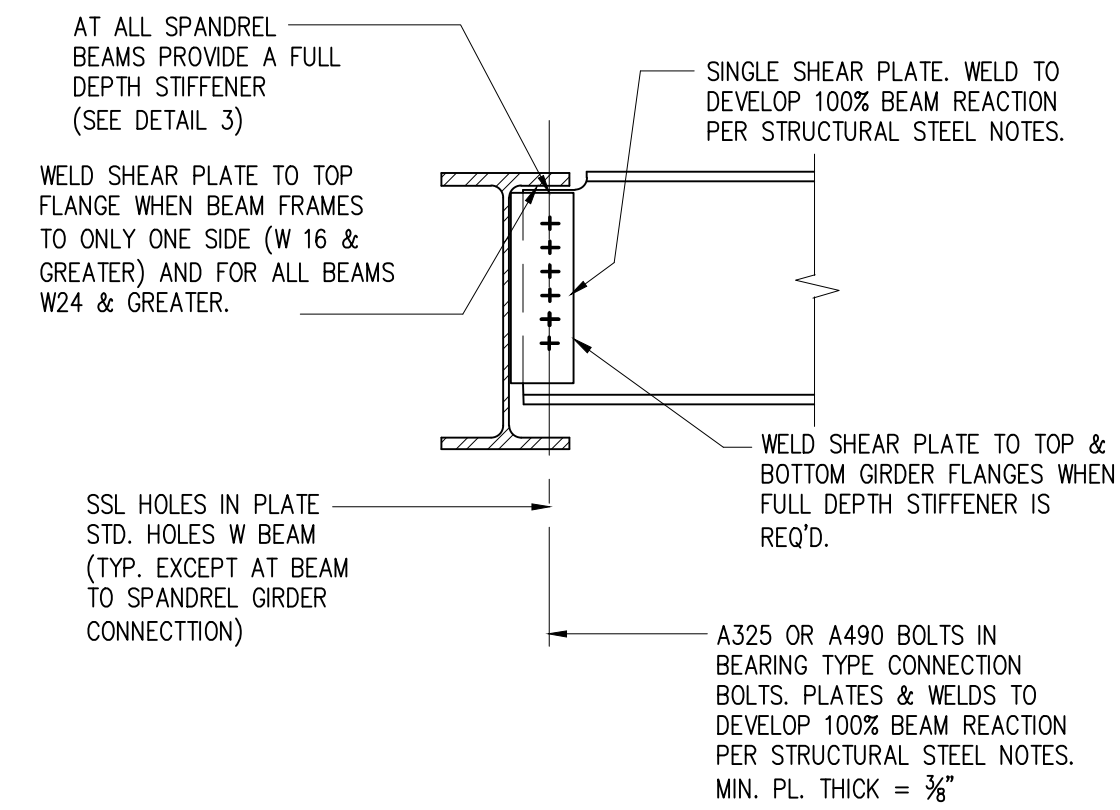




NOTE: DETAIL IS PROVISIONAL ONLY

**1** TYP. DETAIL OF NEW BEAM UNDER EXISTING SLAB

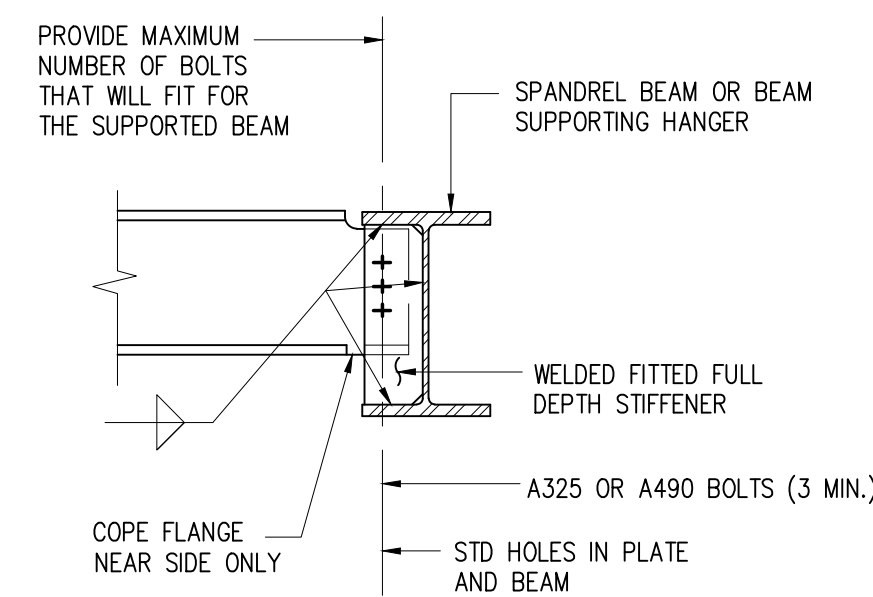
S-201 SCALE: 3/4"=1'-0"



NOTE: PROVIDE WEB REINFORCING WHERE REQUIRED DUE TO WEB CUT FOR CONNECTION.

**2** TYPICAL BEAM TO GIRDER CONN.

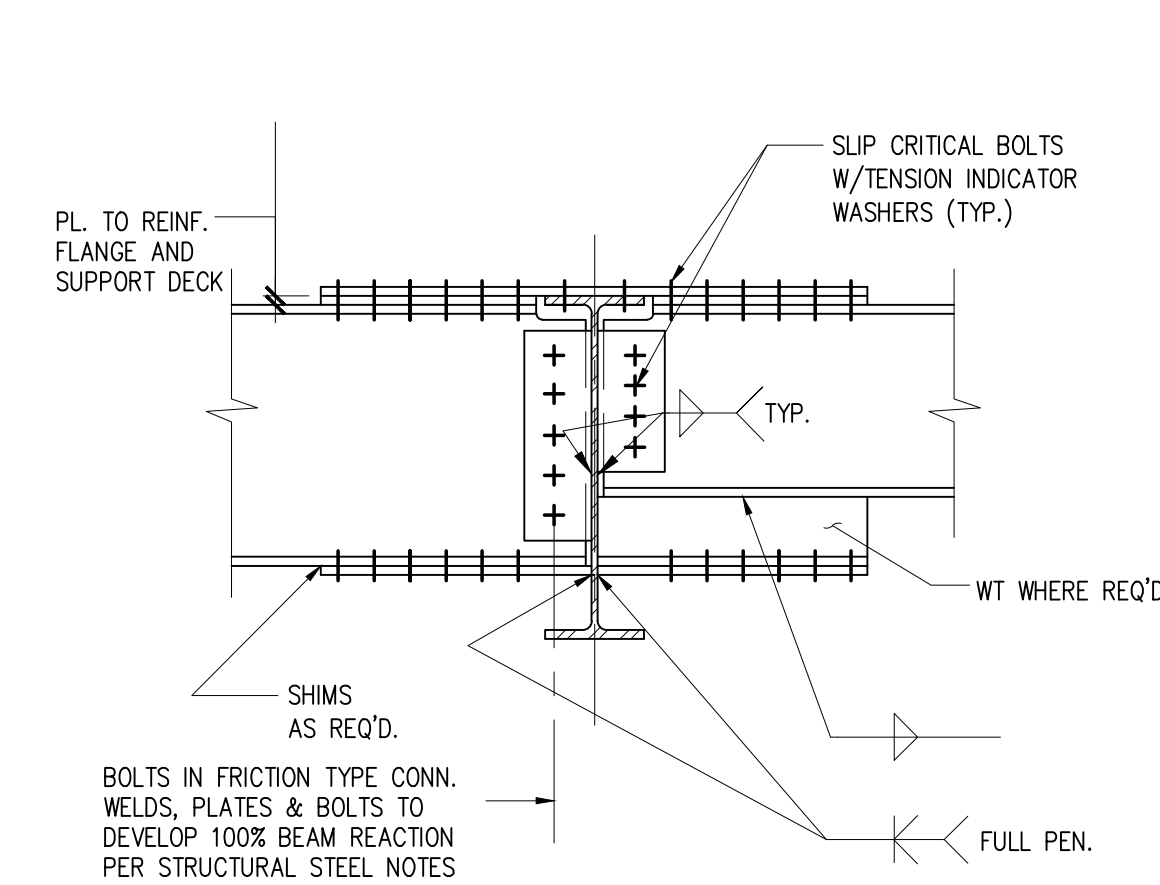
S-201 SCALE: 3/4"=1'-0"



NOTES:  
1. PROVIDE WELDED FITTED FULL DEPTH STIFFENER AT ALL CONNECTIONS TO PERIMETER BEAMS, AT ALL BEAMS SUPPORTING HANGERS, AND AT ALL LOCATIONS NOTED ON FRAMING PLANS THUS FH [Symbol].  
2. SEE DET. 2 FOR ADD'L INFORMATION.  
3. PROVIDE WEB REINFORCING WHERE REQUIRED DUE TO WEB CUT FOR CONNECTION.

**3** TYP. END CONN. AT BM'S SUPPORTING HANGER OR AT SPANDRELS

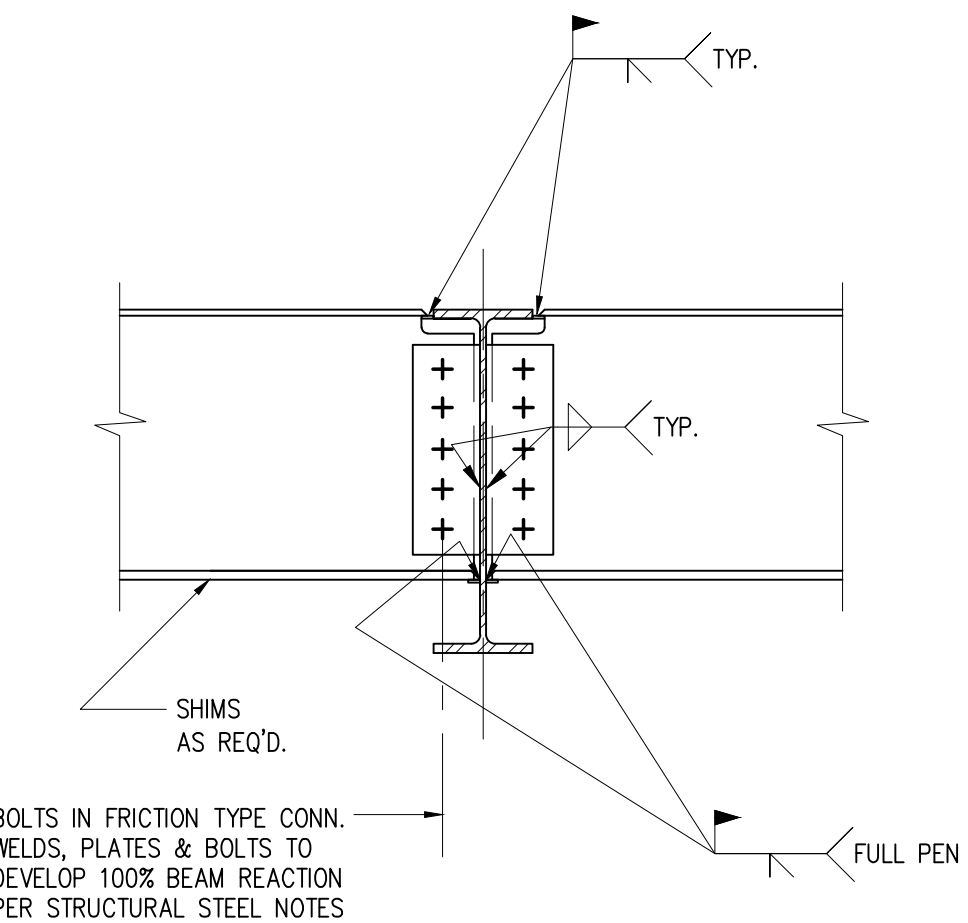
S-201 SCALE: 3/4"=1'-0"



NOTES:  
1. MOMENT CONNECTION SHALL DEVELOP FULL MOMENT CAPACITY OF BEAM U.O.N.  
2. PROVIDE WEB REINFORCING WHERE REQUIRED DUE TO WEB CUT FOR CONNECTION.

**4** TYPICAL BEAM TO BEAM MOMENT CONNECTION - BOLTED

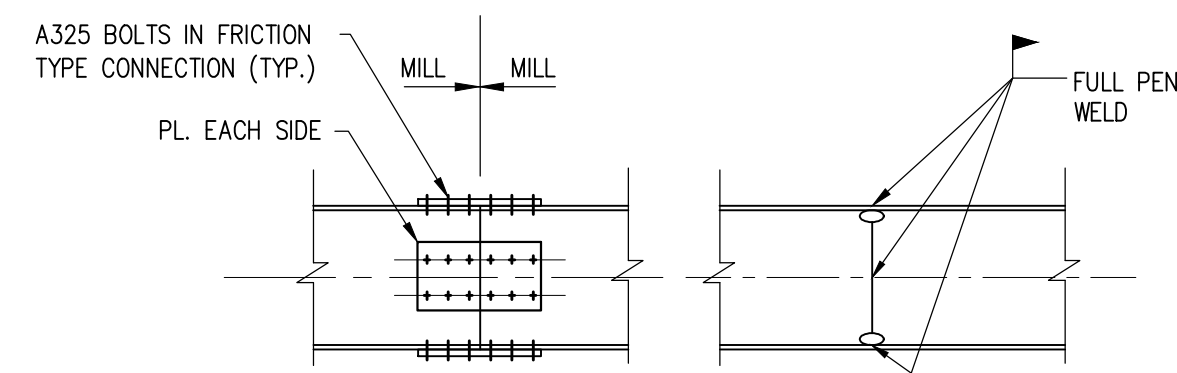
S-201 SCALE: 3/4"=1'-0"



NOTES:  
1. MOMENT CONNECTION SHALL DEVELOP FULL MOMENT CAPACITY OF BEAM U.O.N.  
2. PROVIDE WEB REINFORCING WHERE REQUIRED DUE TO WEB CUT FOR CONNECTION.

**5** TYPICAL BEAM TO BEAM MOMENT CONNECTION - WELDED

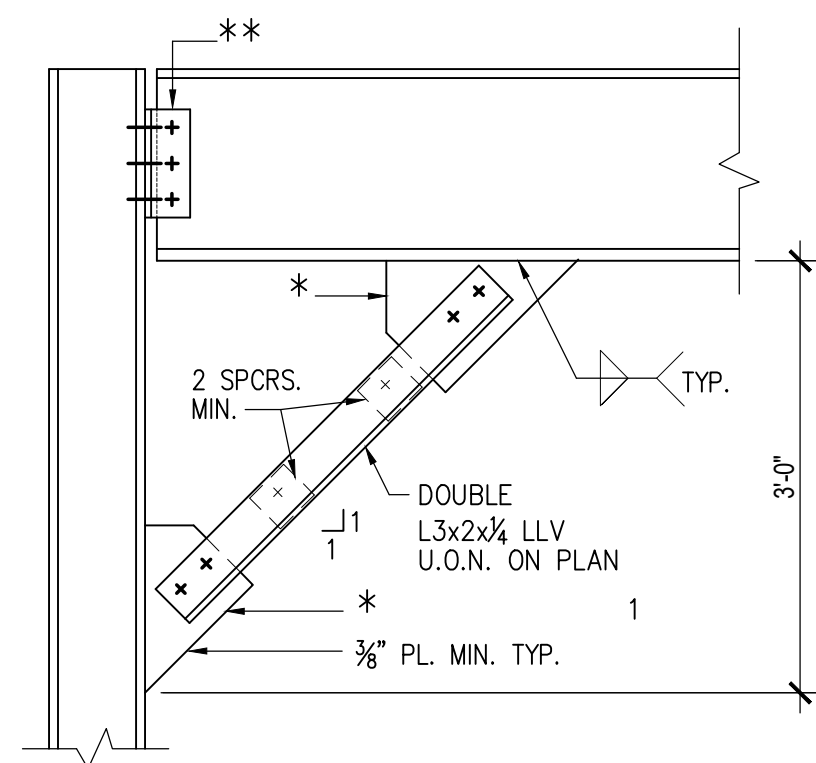
S-201 SCALE: 3/4"=1'-0"



NOTE:  
1. DESIGN CONNECTION FOR FULL MOMENT CAPACITY OF THE MEMBER.

**6** TYPICAL BEAM SPLICE DETAIL

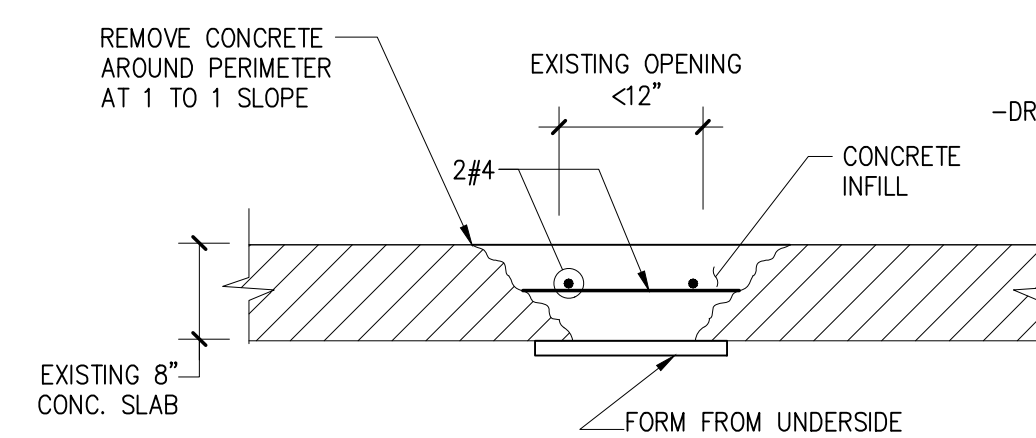
S-201 SCALE: 3/4"=1'-0"



\* CONNECTIONS TO DEVELOP 20 KIPS (2 BOLTS MINIMUM)  
\*\* CONNECTION TO DEVELOP 100% BEAM REACTION PER STRUCTURAL STEEL NOTES PLUS 25 KIPS AXIAL FORCE

**7** TYPICAL KNEE BRACE

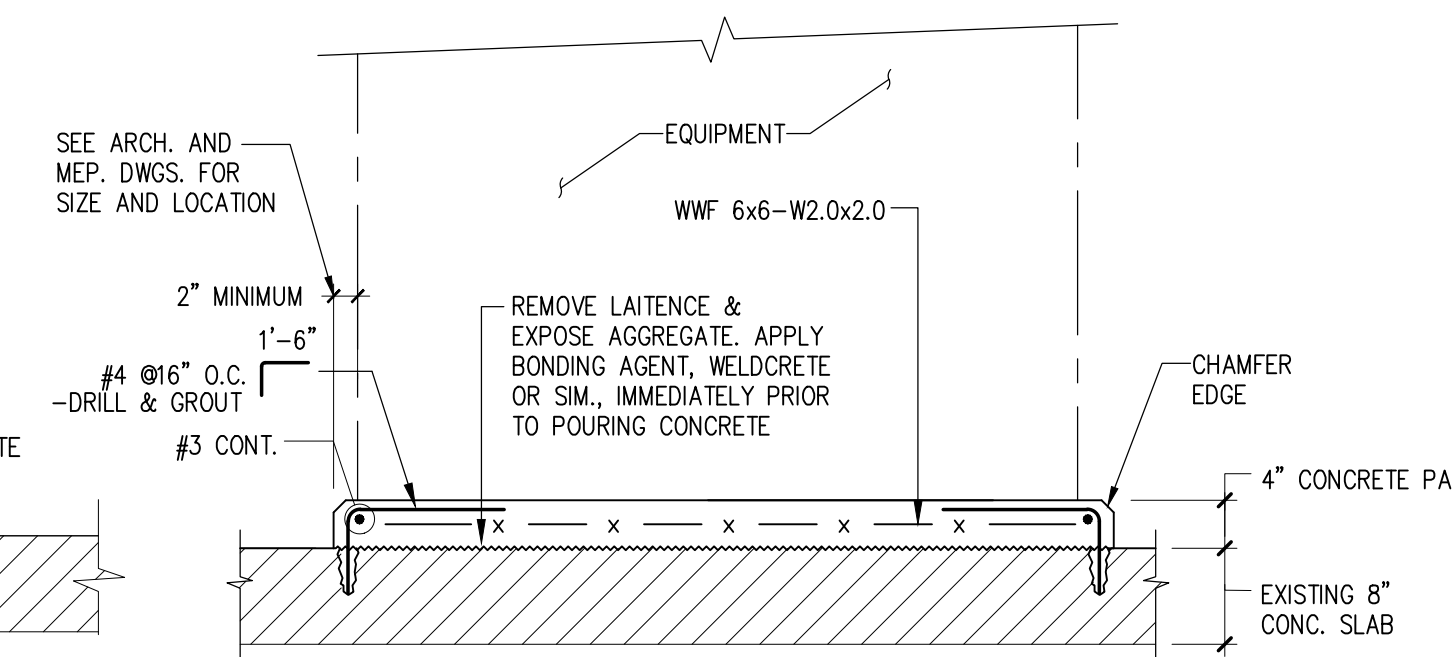
S-201 SCALE: 3/4"=1'-0"



NOTES:  
1. DETAIL IS PROVISIONAL ONLY - FOR USE AS REQUIRED TO INFILL EXISTING SMALL FLOOR SLAB OPENINGS (V.I.F.)  
2. PROVIDE UNIT COST ALLOWANCE TO INFILL SMALL OPENINGS AS SHOWN.

**8** TYPICAL SLAB IN FILL AT EXIST. OPENINGS LESS THAN 12"X12"

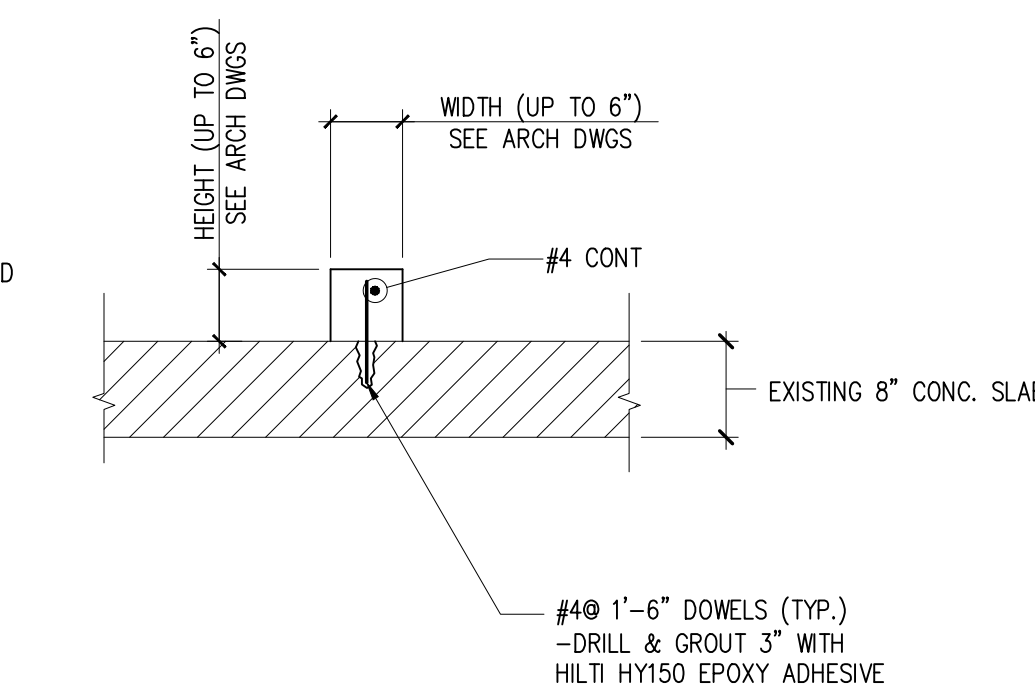
S-201 SCALE: 3/4"=1'-0"



NOTES:  
1. REFER TO ARCH & MEP DRAWINGS FOR PAD LOCATIONS.

**9** TYPICAL HOUSE KEEPING PAD

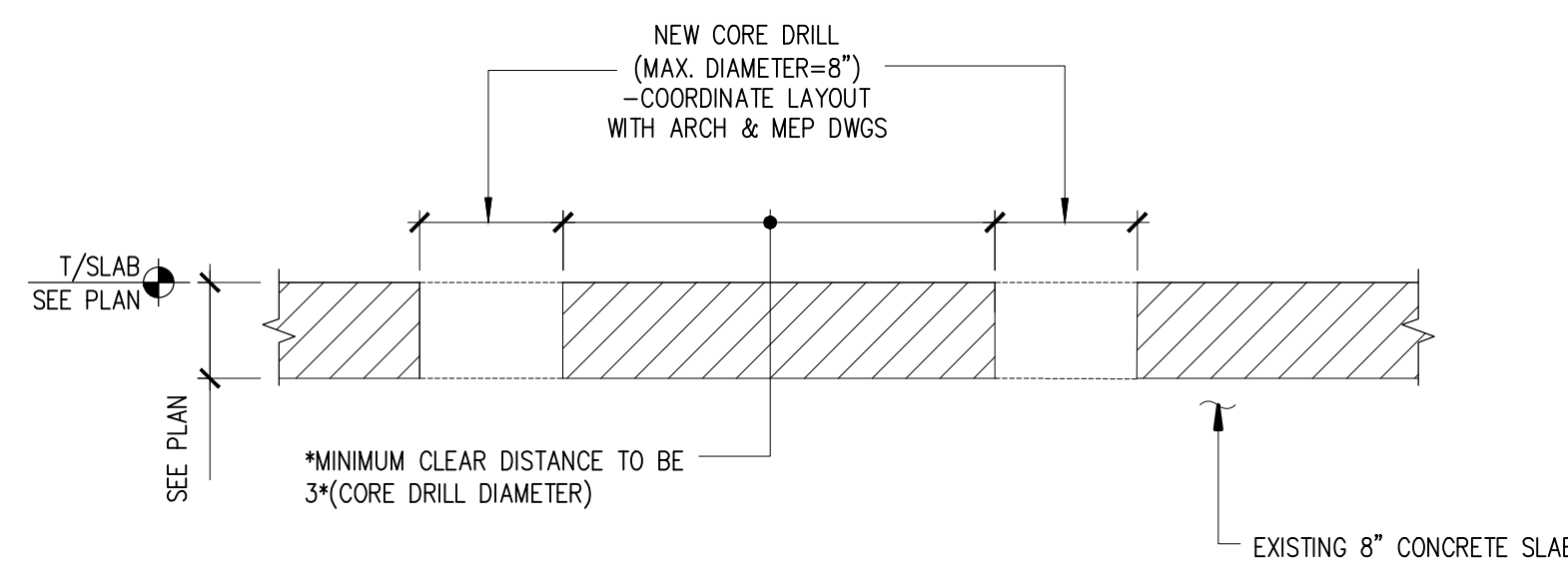
S-201 SCALE: 3/4"=1'-0"



NOTES:  
1. FOR CURB SIZE AND LOCATION SEE ARCHITECTURAL DRAWINGS.

**10** TYPICAL CONCRETE CURB DETAIL

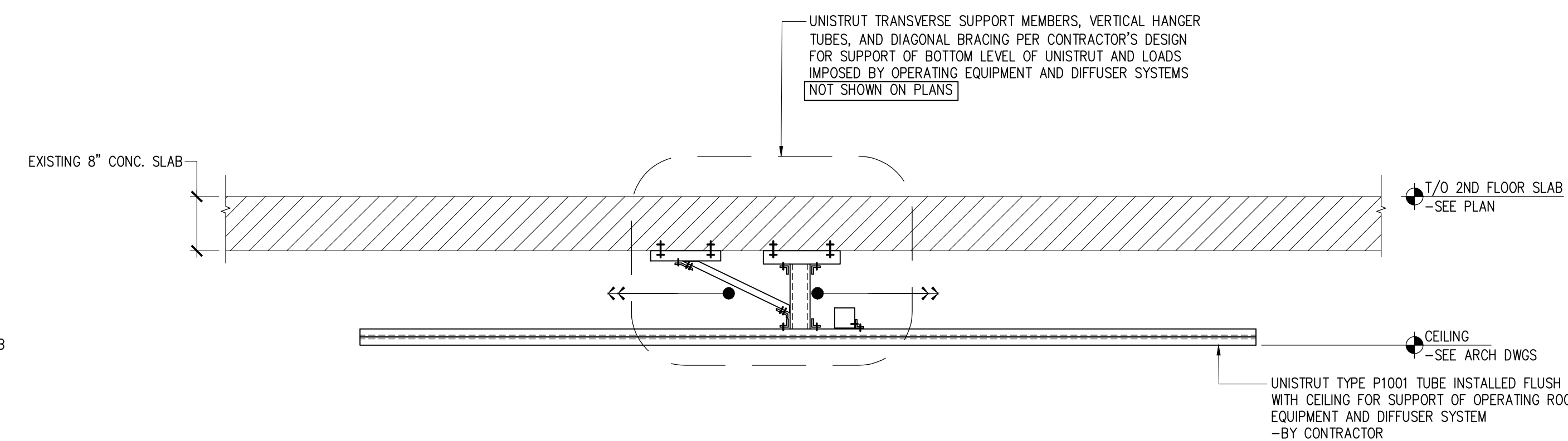
S-201 SCALE: 3/4"=1'-0"



NOTES:  
1. CONTRACTOR PERFORMING THE CONCRETE CORING SHALL CONFIRM THE EXACT LOCATION OF THE CORE HOLES PRIOR TO DRILLING. ENSURE THAT EXISTING BUILDING COMPONENTS, INCLUDING STEEL FRAMING MEMBERS, ANY MECHANICAL, ELECTRICAL AND PLUMBING EQUIPMENT TO REMAIN, ARE NOT DAMAGED DURING THE CORING.  
2. \* IF CORE DRILLS ARE LOCATED DIRECTLY ADJACENT TO EACH OTHER SUCH THAT THE RESULTANT SLAB OPENING IS GREATER THAN 1'-0", PROVIDE FRAMED SLAB OPENING.

**11** NEW CORE DRILL IN EXISTING SLAB TYPICAL DETAIL

S-201 SCALE: 3/4"=1'-0"



**12** TYPICAL UNISTRUT DETAIL

S-201 SCALE: 3/4"=1'-0"

1	05/30/2023	100% CD
no.	date	description

revisions

Client Name:  
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Project Name & Location:  
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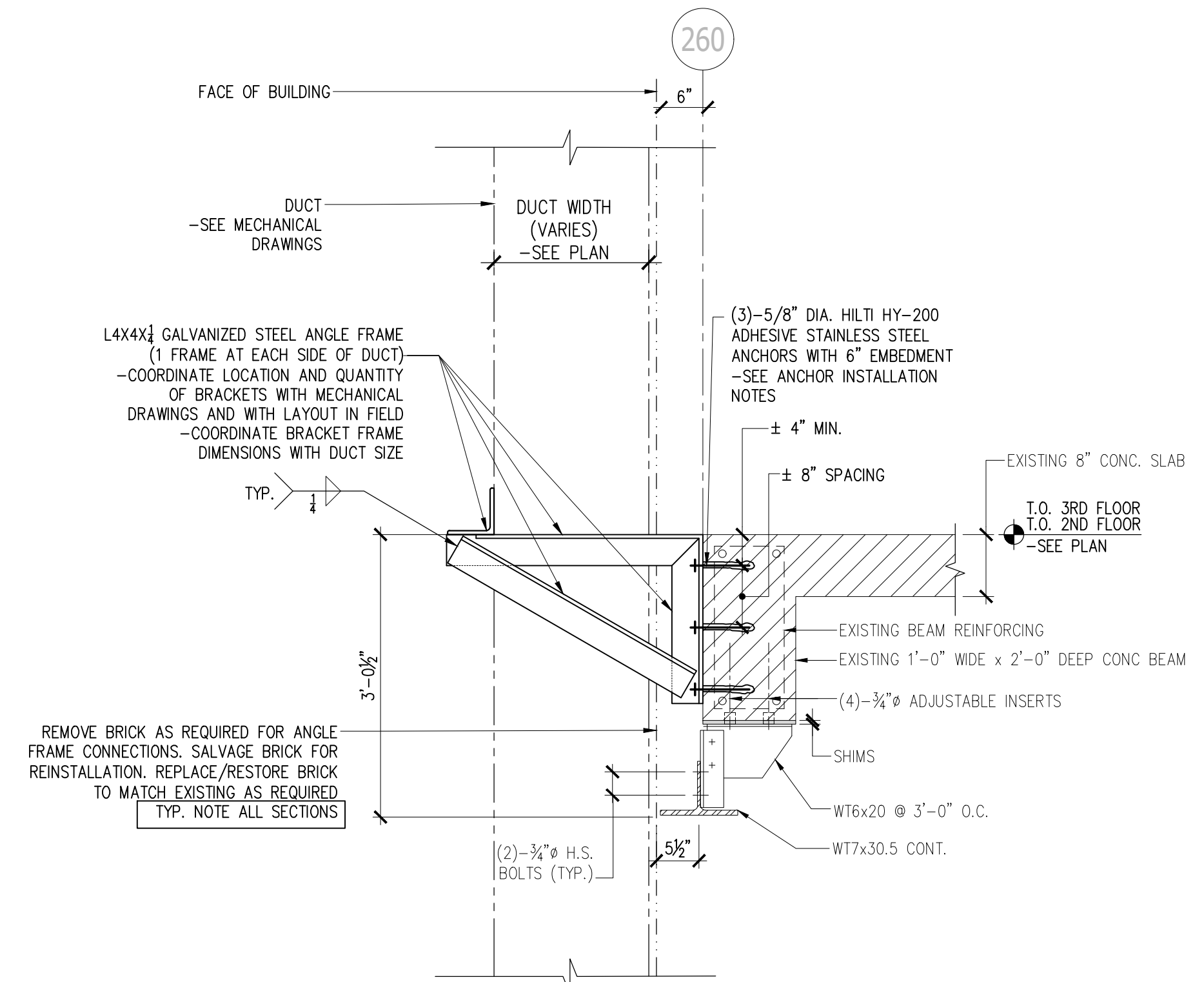
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**SECTIONS AND DETAILS  
SHEET 1**

Drawn By: IG	Date: 4-28-2023
Checked By: BO	Scale: AS NOTED

Issued To, For:  
**CONSTRUCTION DOCUMENTS**

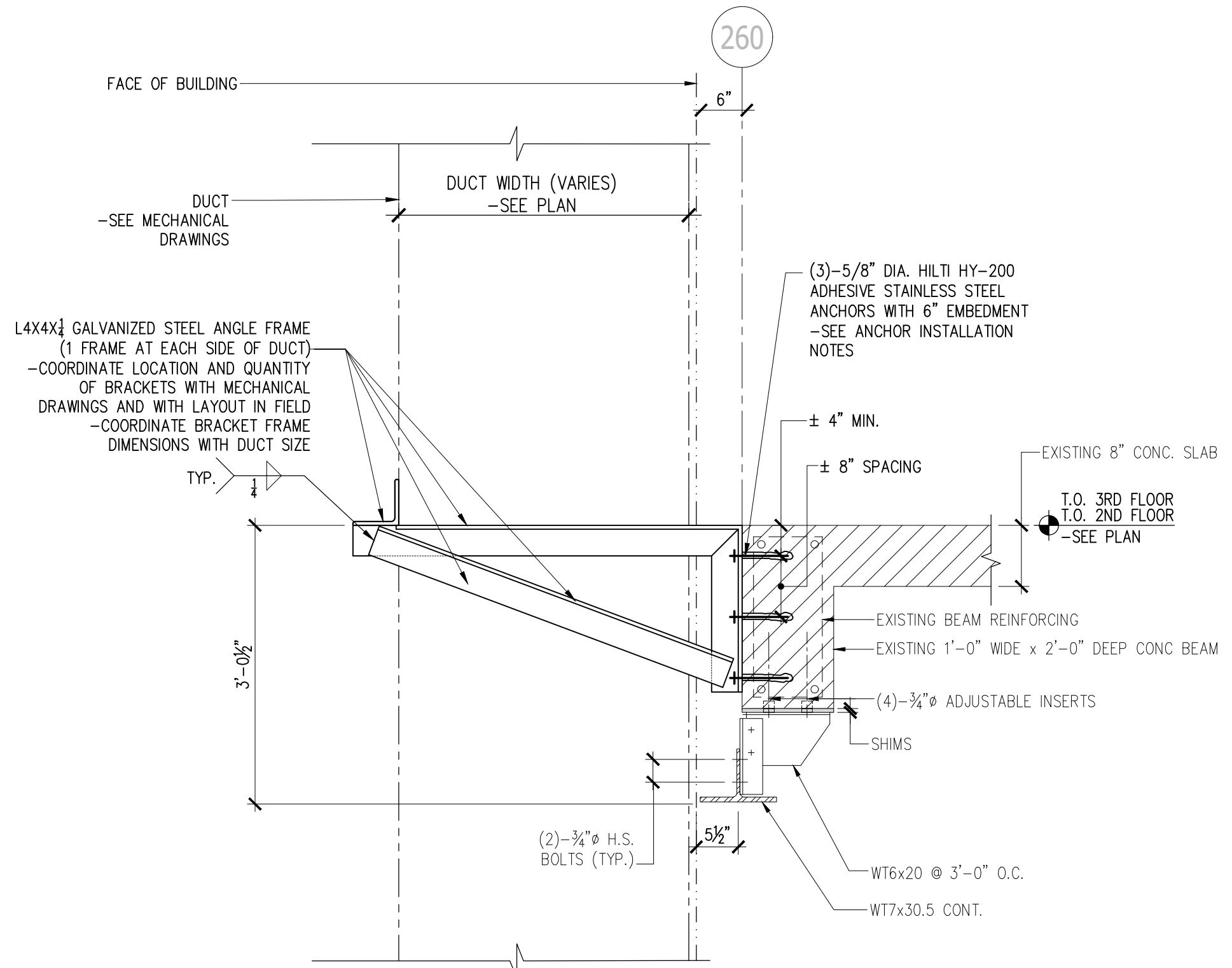
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Drawing No.:  
**S-201.00** 7 OF 9



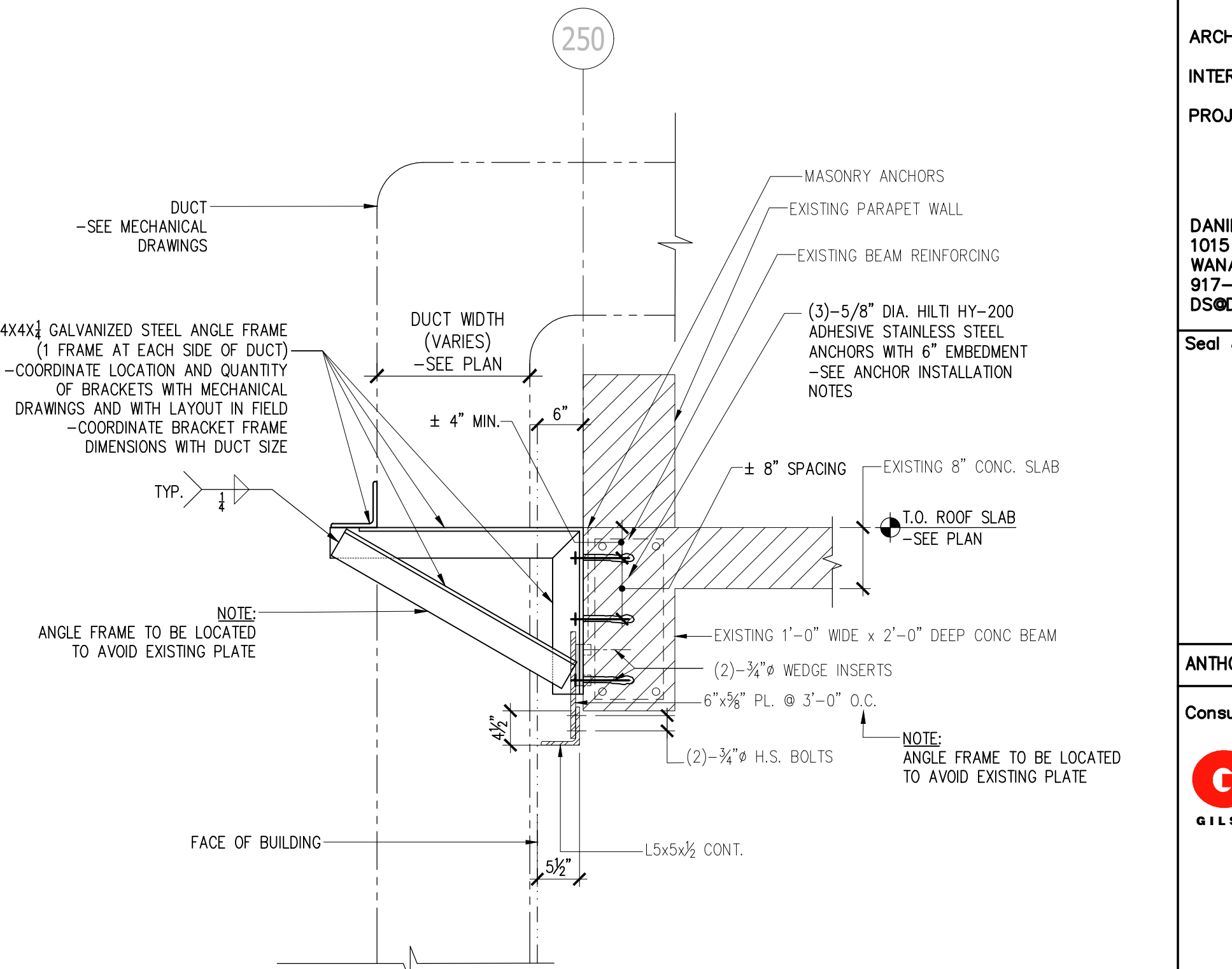


- TYPICAL ANCHOR INSTALLATION NOTES**
1. INSTALL ANCHORS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
  2. LOCATE BY NON-DESTRUCTIVE MEANS (X-RAY) AND AVOID ALL EXISTING REINFORCEMENT PRIOR TO INSTALLATION OF ANCHORS.
  3. DO NOT DRILL THROUGH EXISTING REINFORCEMENT.
  4. ADJUST ANCHOR LOCATIONS AS REQUIRED TO AVOID EXISTING REINFORCING BARS.
  5. IF EXISTING REINFORCING LAYOUT PROHIBITS THE INSTALLATION OF ANCHORS, THE CONTRACTOR SHALL NOTIFY ENGINEER FOR EVALUATION.

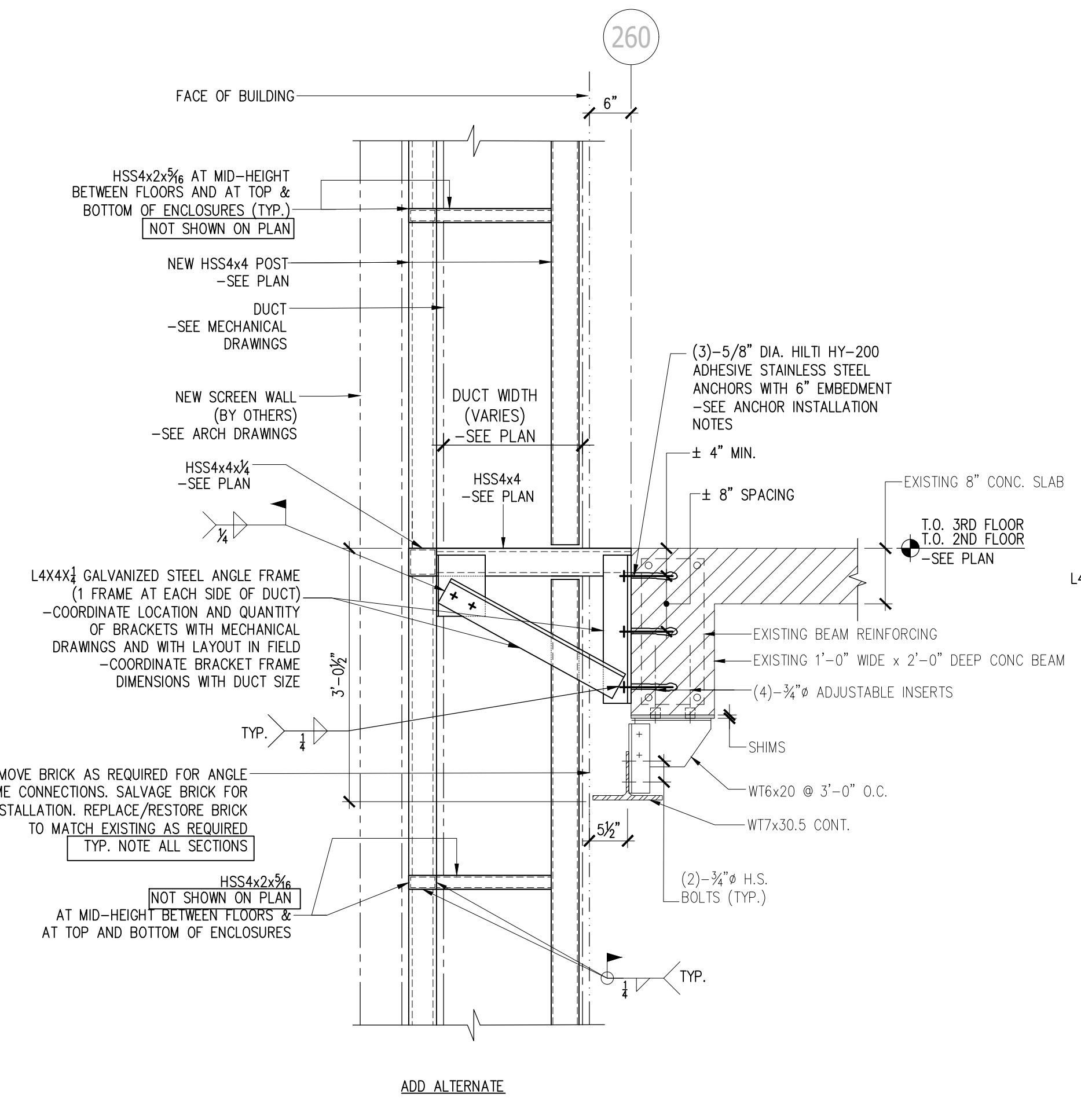
**1 SECTION - DUCT SUPPORT AT 2ND & 3RD FLOORS**  
S-202 SCALE: 3/4"=1'-0"



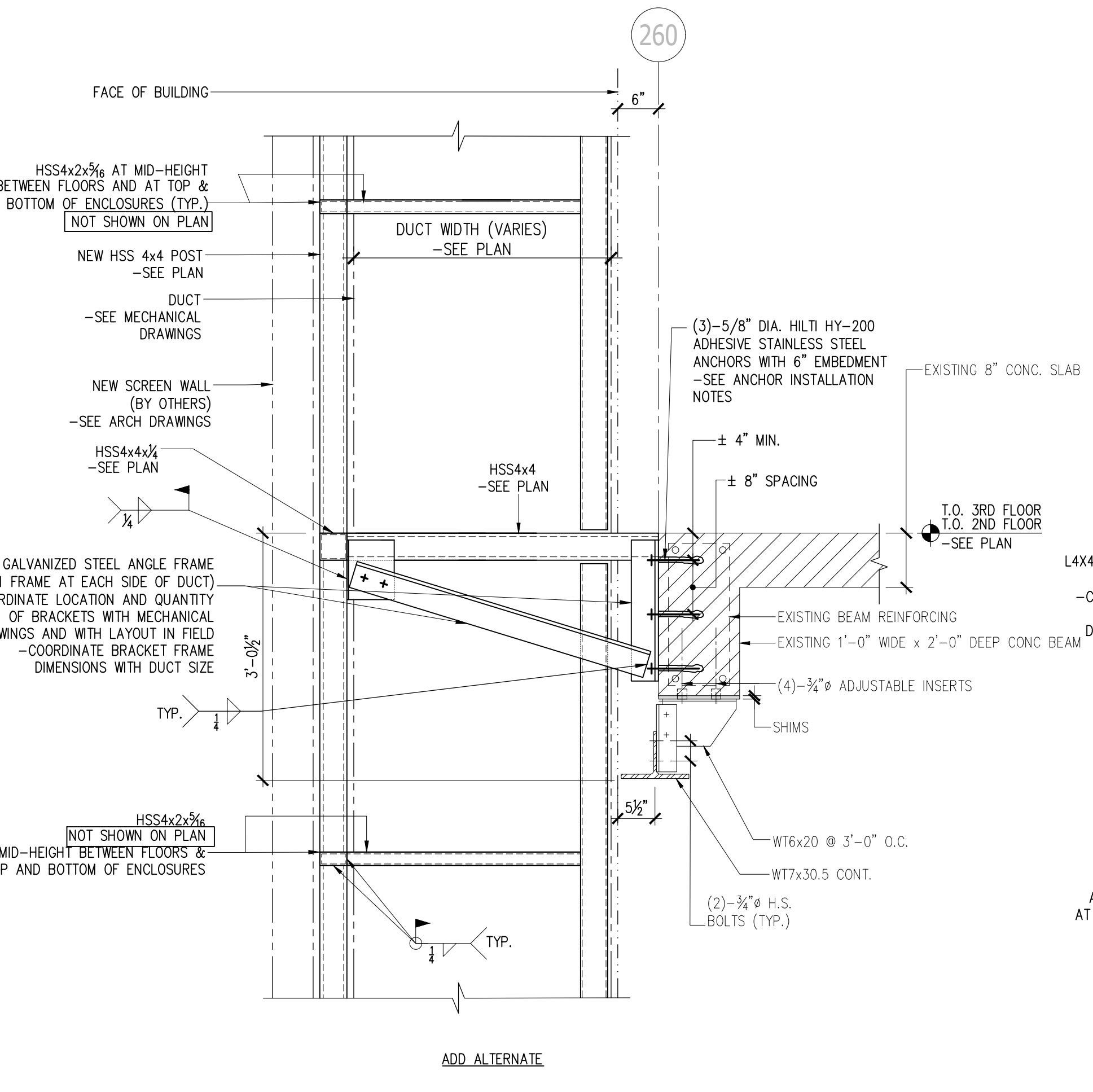
**2 SECTION - DUCT SUPPORT AT 2ND & 3RD FLOORS**  
S-202 SCALE: 3/4"=1'-0"



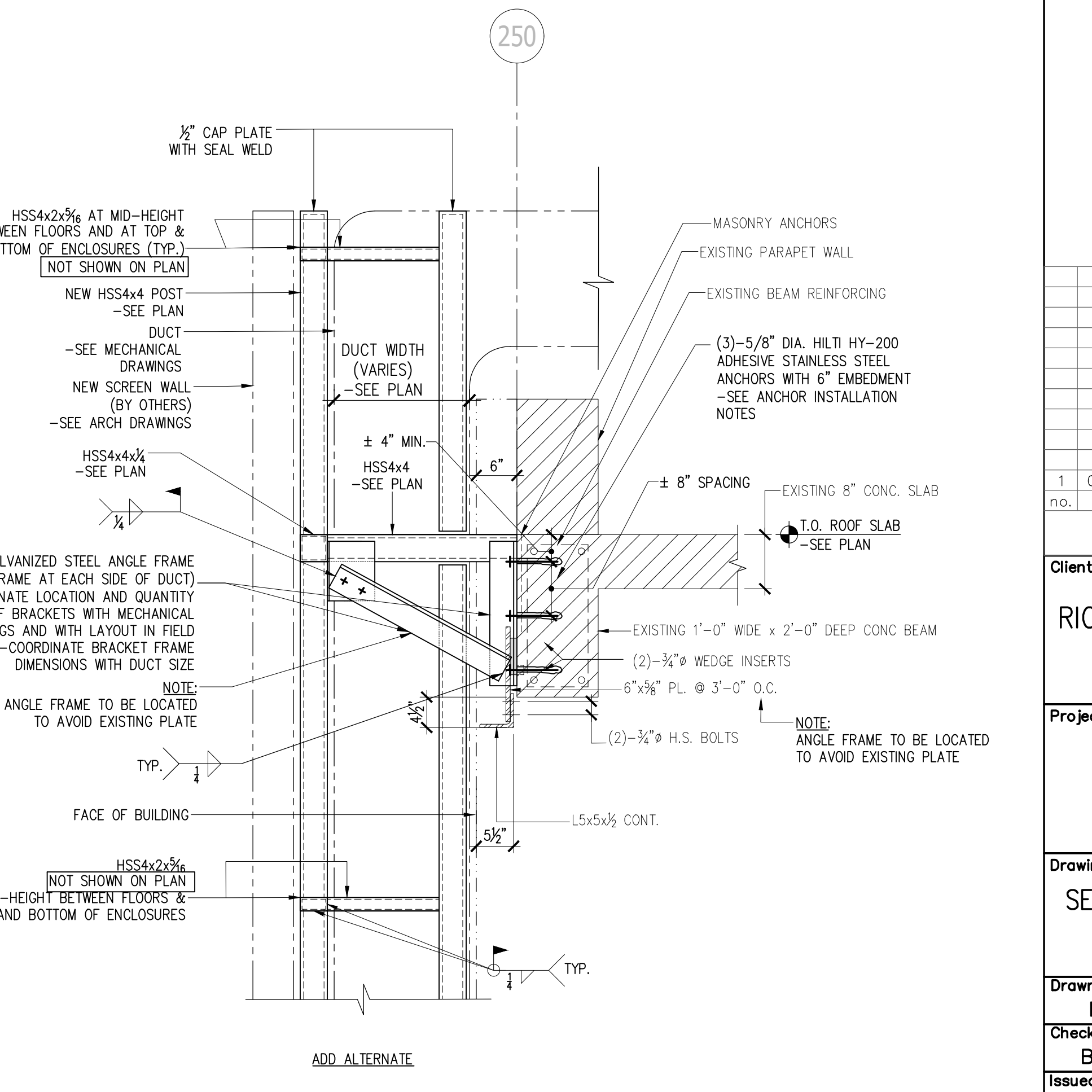
**3 SECTION - DUCT SUPPORT AT ROOF LEVEL**  
S-202 SCALE: 3/4"=1'-0"



**4 SECTION - DUCT & ENCLOSURE SUPPORT AT 1ST, 2ND & 3RD FLOORS**  
S-202 SCALE: 3/4"=1'-0"



**5 SECTION - DUCT & ENCLOSURE SUPPORT AT 1ST, 2ND & 3RD FLOORS**  
S-202 SCALE: 3/4"=1'-0"



**6 SECTION - DUCT & ENCLOSURE SUPPORT AT ROOF LEVEL**  
S-202 SCALE: 3/4"=1'-0"

no.	date	description
1	05/30/2023	100% CD

Client Name:  
**RICHMOND UNIVERSITY MEDICAL CENTER**

Project Name & Location:  
**BI-PLANE EP LAB  
355 BARD AVENUE  
STATEN ISLAND NY**

Drawing Title:  
**SECTIONS AND DETAILS  
SHEET 2**

Drawn By: IG Date: 4-28-2023  
Checked By: BO Scale: AS NOTED

Issued To, For:  
CONSTRUCTION DOCUMENTS

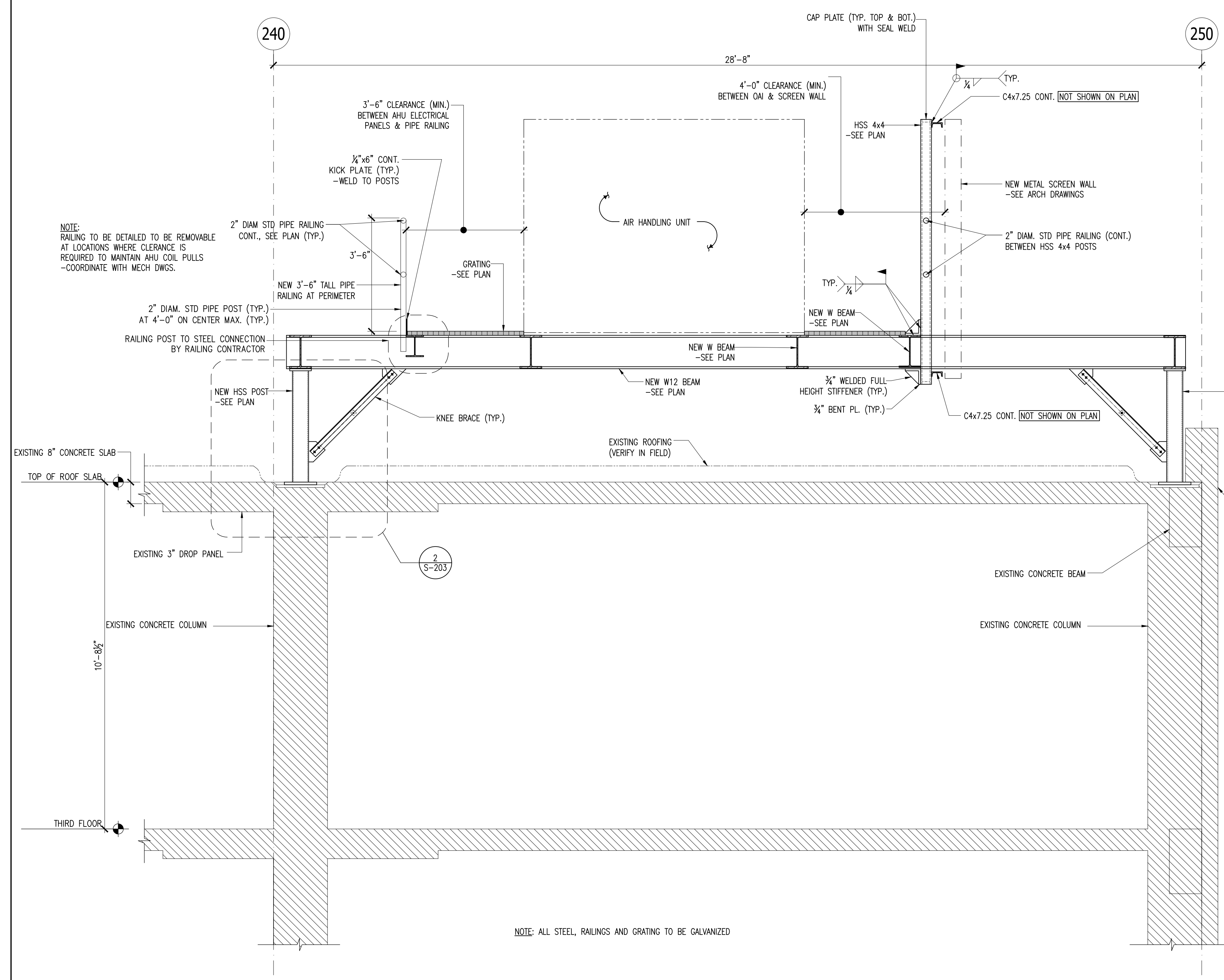
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Drawing No.: S-202.00 8 OF 9



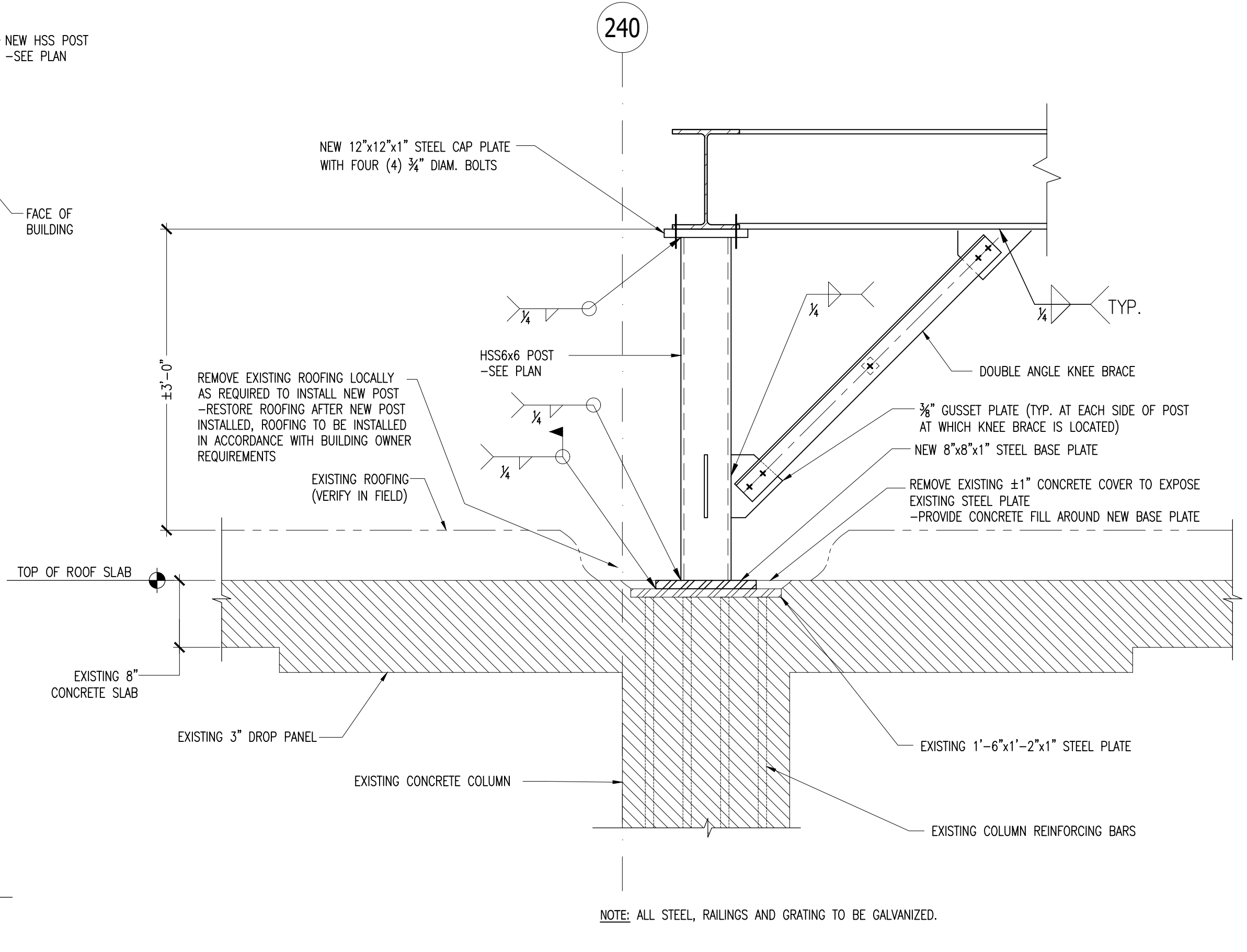
Seal & Signature

ANTHONY J. PAGNOTTA: NY 064408

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**1** SECTION AT ROOF AIR HANDLING UNIT  
 S-203 SCALE: 1/2"=1'-0"



**2** SECTION AT NEW POST  
 S-203 SCALE: 1"=1'-0"

no.	date	description
1	05/30/2023	100% CD

revisions

Client Name:  
**RICHMOND UNIVERSITY  
 MEDICAL CENTER**

Project Name & Location:  
 BI-PLANE EP LAB  
 355 BARD AVENUE  
 STATEN ISLAND NY

Drawing Title:  
 SECTIONS AND DETAILS  
 SHEET 3

Drawn By: IG Date: 4-28-2023  
 Checked By: BO Scale: AS NOTED

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File No.: 21190  
 Drawing No.: S-203.00 9 OF 9