

**GENERAL NOTES:**

**DESIGN:**

BUILDING CODE - 2015 INTERNATIONAL BUILDING CODE

- EXISTING ROOF DEAD LOAD = 22 PSF
- MINIMUM ROOF LIVE LOAD
  - TRIBUTARY AREA 0 TO 200 SQ. FT. = 20 PSF
  - TRIBUTARY AREA 201 TO 600 SQ. FT. = 20(1.2-0.001A) PSF
  - TRIBUTARY AREA OVER 600 SQ. FT. = 12 PSF
- SNOW LOADS:
  - GROUND SNOW LOAD,  $P_g$  = 5.0 PSF
  - FLAT ROOF SNOW LOAD,  $P_f$  (INCLUDES RAIN ON SNOW) = 8.5 PSF
  - SNOW EXPOSURE FACTOR,  $C_e$  = 1.0
  - SNOW LOAD IMPORTANCE FACTOR,  $I$  = 1.0
  - THERMAL FACTOR,  $C_t$  = 1.0
- WIND LOADS:
  - ULTIMATE WIND SPEED (3 SECOND GUST) = 115 MPH
  - BUILDING CATEGORY = ENCLOSED, SIMPLE DIAPHRAGM
  - OVERALL EXPOSURE CATEGORY = C
  - HEIGHT AND EXPOSURE ADJUSTMENT COEFFICIENT = 1.24
- SEISMIC:
  - RISK CATEGORY = II
  - SEISMIC IMPORTANCE FACTOR,  $I_e$  = 1.00
  - MAPPED SPECTRAL RESPONSE COEFFICIENTS
    - $S_p$  = 0.041
    - $S_1$  = 0.027
    - $S_2$  = D (ASSUMED)
  - SITE CLASS = 1
  - SPECTRAL RESPONSE COEFFICIENTS
    - $RSDS$  = 0.105
    - $SD1$  = 0.043
  - SEISMIC DESIGN CATEGORY = A

**CONCRETE:**

- ALL CONCRETE SHALL BE NORMAL-WEIGHT (DENSITY=145 PCF) AND SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH IN ACCORDANCE WITH THE FOLLOWING:
  - ALL FOUNDATIONS, INTERIOR SLAB = 3000psi
  - EXTERIOR SLABS, CURBS, SIDEWALKS = 4000psi
  - ALL OTHER CONCRETE (I.N.O.) = 3000psi
- THE SLUMP OF ALL CONCRETE SHALL NOT EXCEED 4" UNLESS A HIGH RANGE WATER-REDUCING ADMIXTURE IS USED. THE SLUMP OF CONCRETE PRIOR TO ADDITION OF A HIGH-RANGE WATER-REDUCING ADMIXTURE SHALL NOT EXCEED 4". THE SLUMP OF CONCRETE CONTAINING A HIGH RANGE WATER-REDUCING ADMIXTURE SHALL NOT EXCEED 10".
- ALL EXTERIOR CONCRETE SHALL BE AIR-ENTRAINED WITH BETWEEN 4% AND 8% AIR CONTENT.
- THE COARSE AGGREGATE SIZE SHALL BE #57 OR LARGER.
- THE MINIMUM PORTLAND CEMENT CONTENT (ASTM C150 TYPE I OR II) OF ALL CONCRETE SHALL CONFORM TO THE FOLLOWING TABLE (FLY ASH NOT PERMITTED):

SPECIFIED COMPRESSIVE STRENGTH (psi)	NON AIR-ENTRAINED CONCRETE (lb/cy)	AIR-ENTRAINED CONCRETE (lb/cy)
3000	470	517
4000	564	611

- THE CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS FOR REVIEW A MINIMUM OF ONE WEEK PRIOR TO THE PLACEMENT OF ANY CONCRETE. THE CONCRETE MIX DESIGNS SHALL INCLUDE ALL STRENGTH DATA NECESSARY TO SHOW COMPLIANCE WITH THE PROJECT SPECIFICATIONS FOR EITHER THE TRIAL BATCH OR FIELD EXPERIENCE METHOD.
- CONCRETE REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE.
- CONCRETE REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A106.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
- ALL REINFORCING SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE DETAILING MANUAL.
- ALL REINFORCING SHALL BE SUPPORTED IN FORMS, SPACED WITH NECESSARY ACCESSORIES AND SHALL BE SECURELY WIRED TOGETHER, IN ACCORDANCE WITH THE LATEST EDITION OF THE CRSI "MANUAL OF STANDARD PRACTICE".
- THE MINIMUM CONCRETE CLEAR COVER OVER REINFORCING STEEL, UNLESS NOTED OTHERWISE, SHALL BE:
  - UNFORMED SURFACE IN CONTACT WITH THE GROUND = 3 IN.
  - FORMED SURFACES EXPOSED TO EARTH OR WEATHER:
    - #5 BARS AND SMALLER = 1 1/2 IN.
    - SLABS, WALLS, AND JOISTS:
      - #11 BARS AND SMALLER = 3/4 IN.
- ALL BASE PLATES, ANCHOR BOLTS, SUPPORT ANGLES, ETC., WHICH ARE BELOW GRADE SHALL BE COVERED WITH A MINIMUM OF 3" OF CONCRETE.
- ALL LAP SPLICES SHALL BE IN ACCORDANCE WITH THAT SHOWN ON THE DRAWINGS.

**SUBGRADE PREPARATION NOTE**

- ALL EXPOSED AND/OR DISTURBED CONCRETE GRANULAR BASE AREAS SHALL BE COMPACTED TO A MINIMUM OF 98% OF OPTIMUM DENSITY IN ACCORDANCE WITH ASTM D 1557 AT OPTIMUM MOISTURE CONTENT AND TO A MINIMUM DEPTH OF 8" - ALL SUBGRADE SOIL AREAS EXPOSED BY EXCAVATIONS AND GRADING SHALL BE COMPACTED TO A MINIMUM OF 98% OF OPTIMUM DENSITY IN ACCORDANCE WITH ASTM D 1557 AT OPTIMUM MOISTURE CONTENT AND TO A MINIMUM DEPTH OF 12" - FILL WHERE REQUIRED SHALL BE PLACED IN LIFTS NOT TO EXCEED 8" LOOSE MEASURE AND SHALL BE COMPACTED AS OUTLINED ABOVE - THE ON SITE TESTING COMPANY SHALL PROVIDE TESTING AND INSPECTION OF THE SOIL WORK PRIOR TO PLACING CONCRETE

**STRUCTURAL STEEL:**

- STEEL SHALL CONFORM TO THE FOLLOWING GRADES:
  - WIDE FLANGE SHAPES = A992 OR A572 GR. 50 ( $F_y = 50$ )
  - CHANNELS, ANGLES, PLATES, ETC. (I.N.O.) = A36 ( $F_y = 36$ )
  - STRUCTURAL TUBE = A500 ( $F_y = 46$ )
  - STEEL PIPE = A53 ( $F_y = 35$ )
  - THREADED RODS = F1554, A36 OR A307
  - BOLTS = A325
  - WELDING ELECTRODES = E70XX
- ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC CODE OF STANDARD PRACTICE (360-05), EXCEPT AS MODIFIED IN THESE NOTES AND THE PROJECT SPECIFICATIONS.
- ALL STRUCTURAL STEEL TO HAVE A SHOP GRADE PRIMER UNLESS NOTED OTHERWISE.

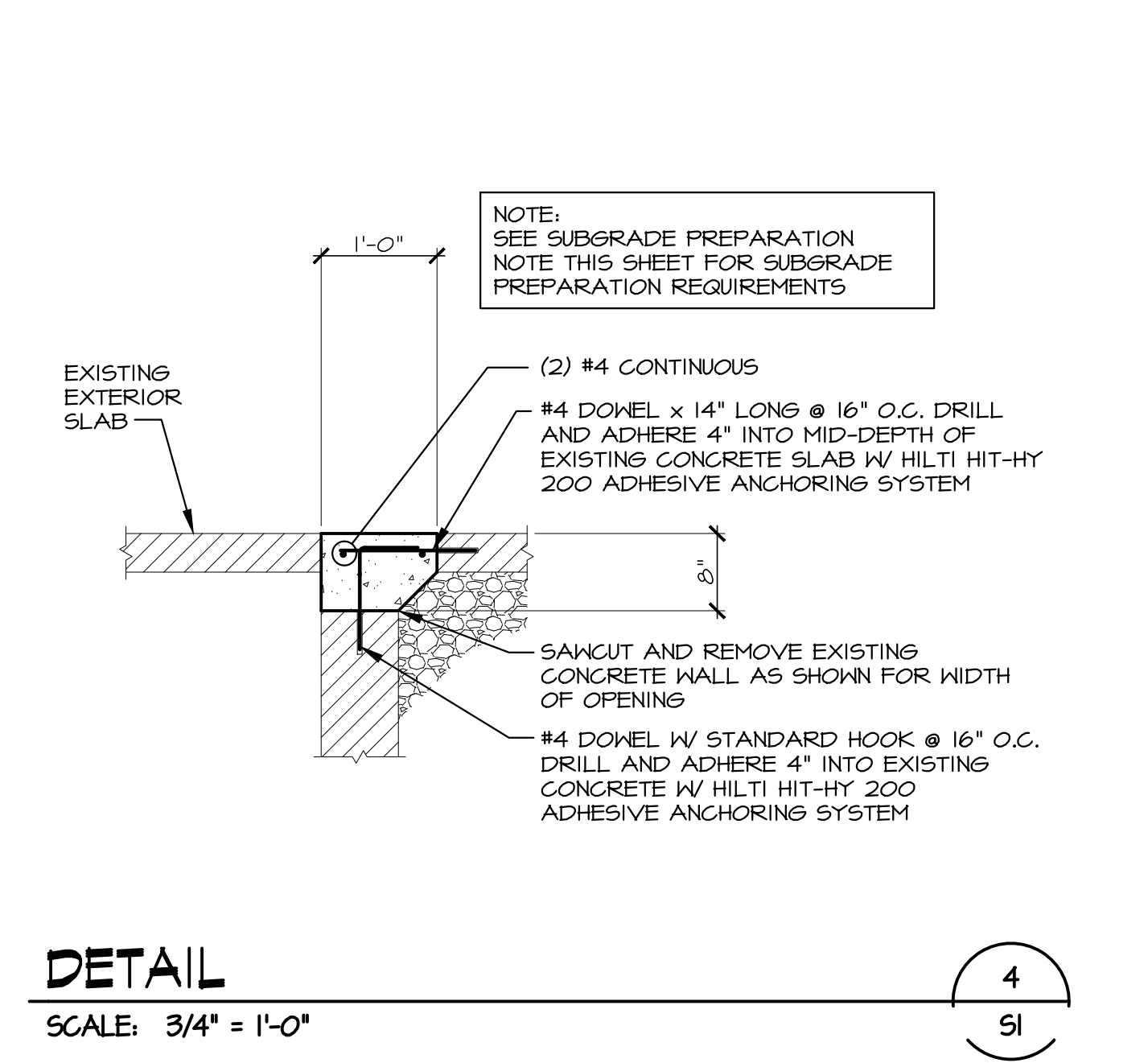
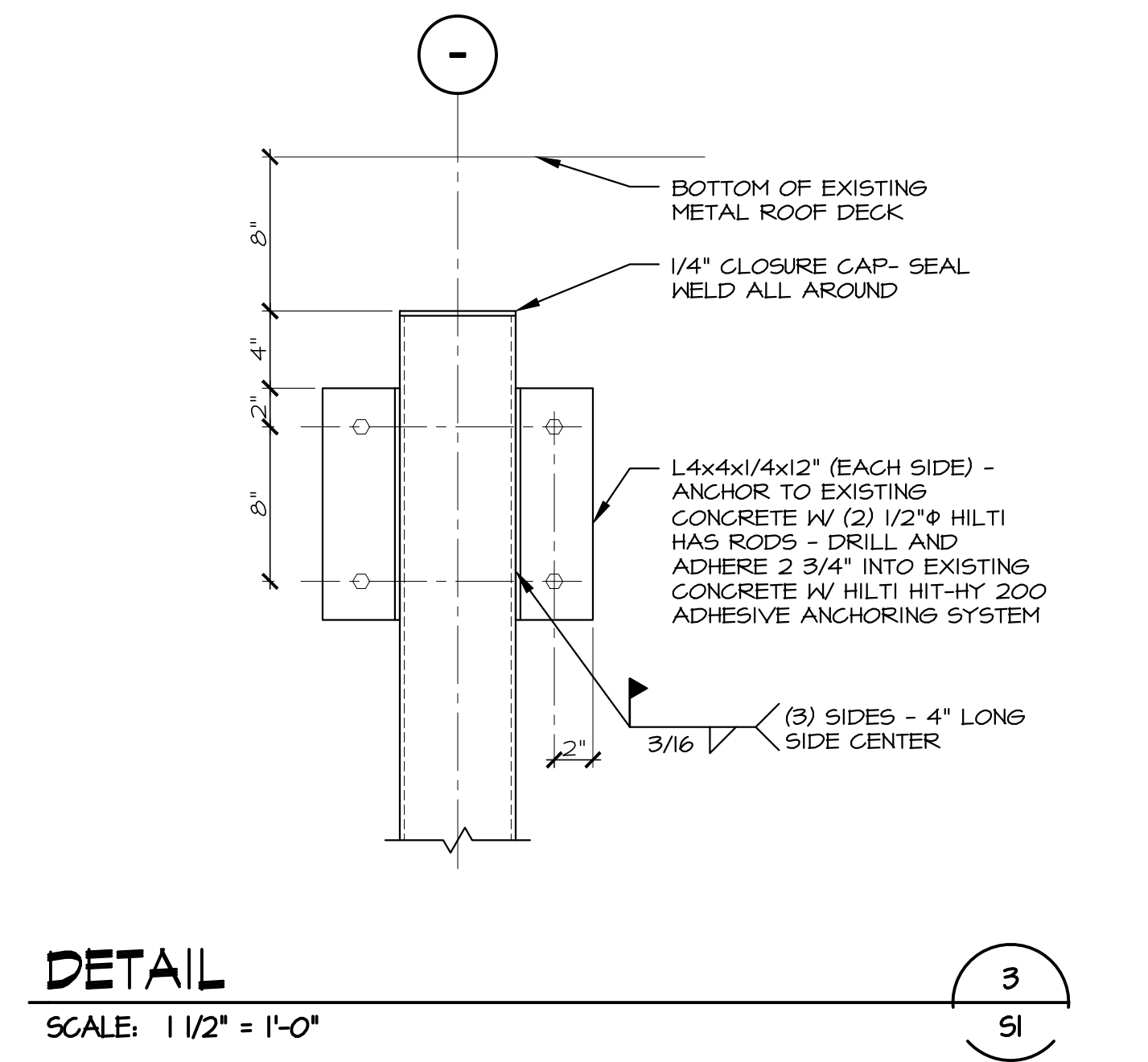
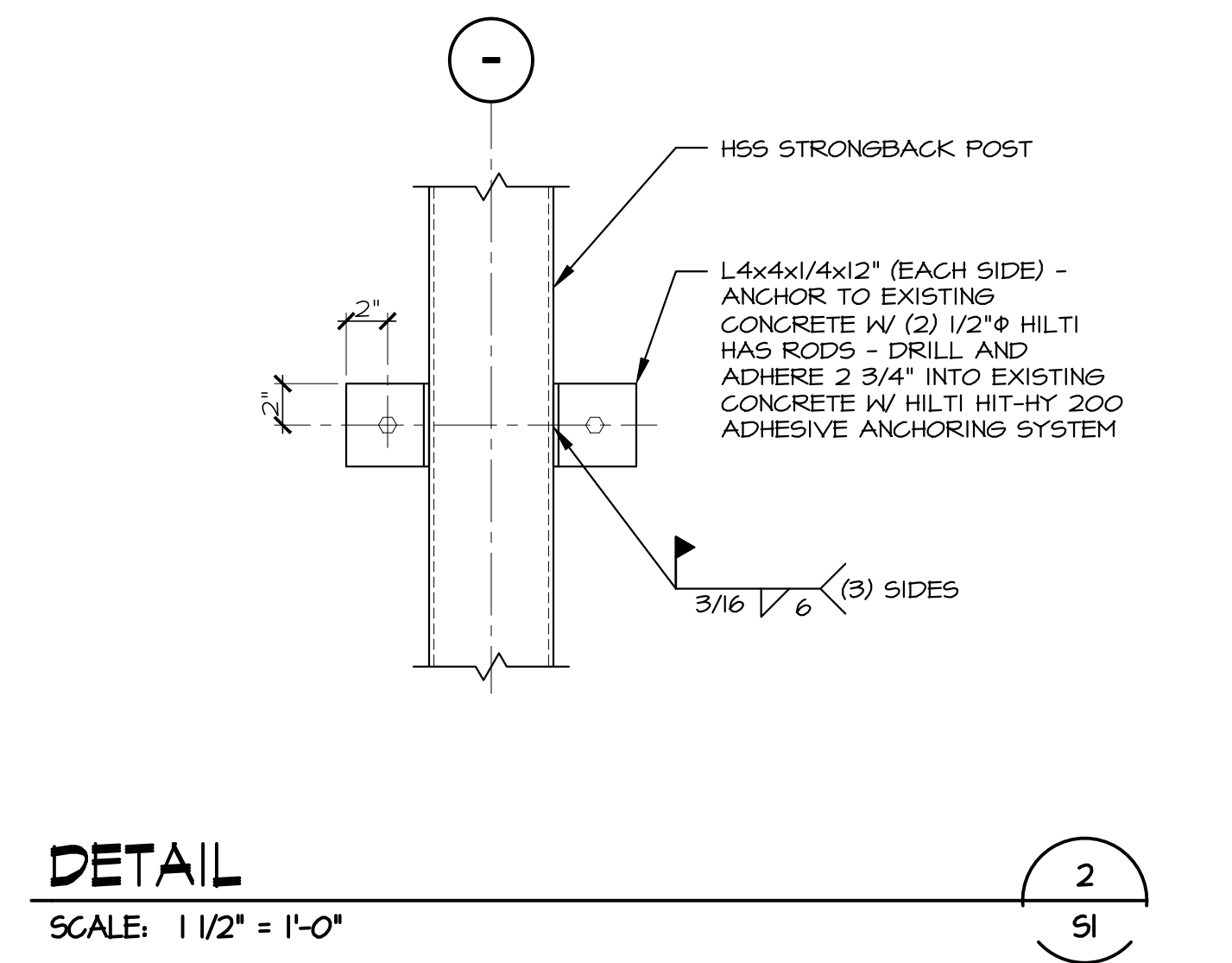
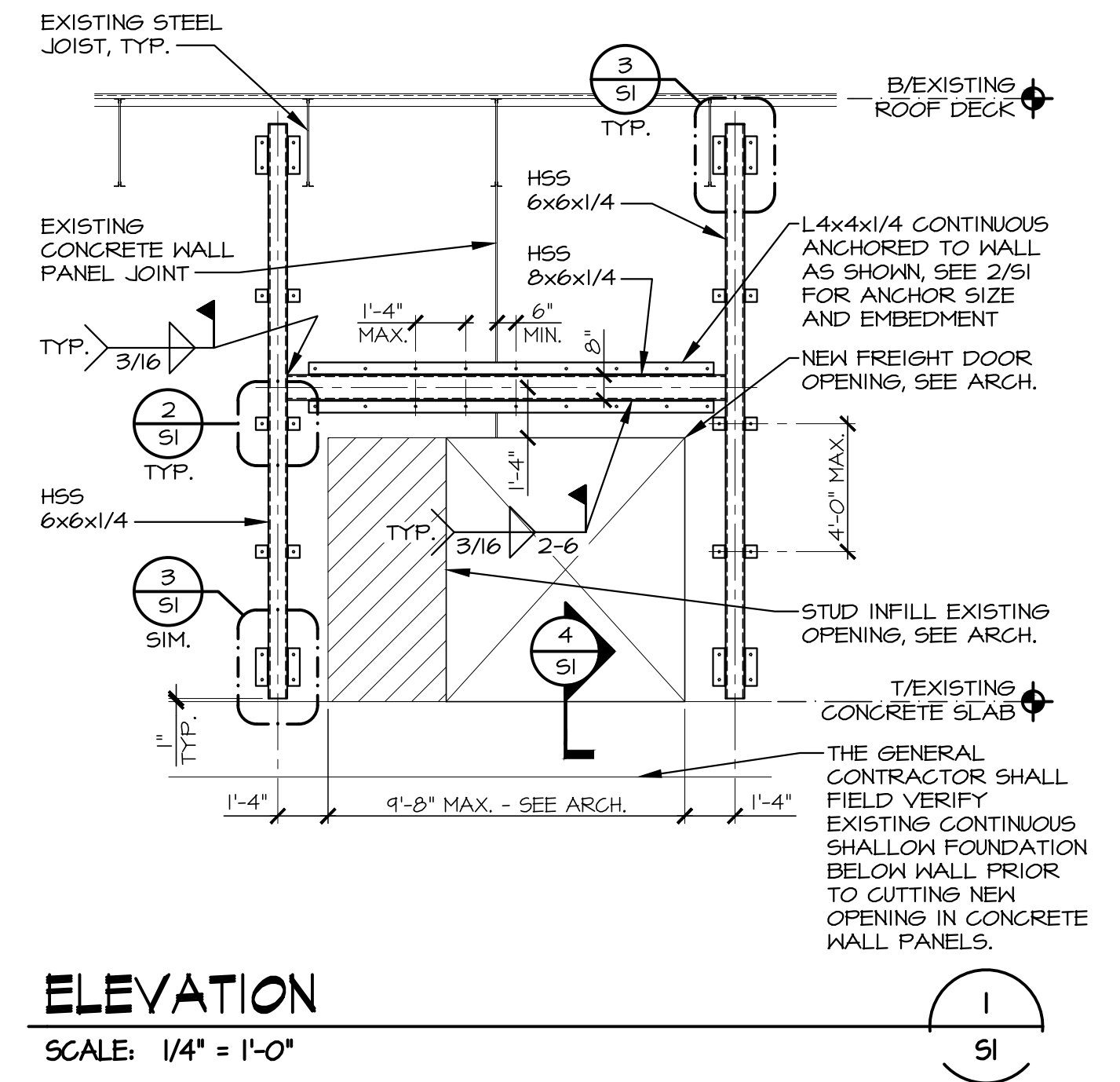
**MISCELLANEOUS:**

- NO CHANGE IN SIZE OR DIMENSION OF STRUCTURAL MEMBERS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE PROFESSIONAL OF RECORD.
- STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING SUCH REQUIREMENTS INTO THEIR SHOP DRAWINGS AND WORK.
- NO OPENINGS SHALL BE MADE IN ANY STRUCTURAL MEMBER WITHOUT THE WRITTEN APPROVAL OF THE PROFESSIONAL OF RECORD.
- DO NOT SCALE THESE DRAWINGS, USE DIMENSIONS.
- THE CONTRACTOR SHALL INFORM THE PROFESSIONAL OF RECORD IN WRITING OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF THE RESPONSIBILITY OF SUCH DEVIATION BY THE PROFESSIONAL OF RECORD REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE PROFESSIONAL OF RECORD OF SUCH DEVIATION AT THE TIME OF SUBMISSION AND THE PROFESSIONAL OF RECORD HAS GIVEN WRITTEN APPROVAL TO THE SPECIFIC DEVIATION.
- ANY DETAIL TITLED AS A TYPICAL DETAIL IS APPLICABLE THROUGHOUT THE DESIGN DRAWINGS. THESE DETAILS ARE DEFINED AS GENERAL STANDARDS THAT ARE USUALLY NOT IDENTIFIED BY SPECIFIC REFERENCE WITHIN THE DRAWINGS. THESE DETAILS MAY BE MODIFIED OR SUPERSEDED BY SPECIFIC DETAILS THAT ARE REFERENCED WITHIN THE DRAWINGS.
- THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED UPON THE STRUCTURAL FRAMING. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE IMPOSED.

**EXISTING CONSTRUCTION:**

- WORK SHOWN IS NEW UNLESS INDICATED AS EXISTING.
- EXISTING CONSTRUCTION SHOWN IS BASED UPON ASSUMED EXISTING CONDITIONS AND CAN BE USED FOR BIDDING PURPOSES. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING JOB CONDITIONS, REVIEW ALL DRAWINGS AND VERIFY DIMENSIONS, ELEVATIONS, AND MEMBER SIZES PRIOR TO CONSTRUCTION OR MATERIAL PURCHASE. THE CONTRACTOR SHALL NOTIFY THE PROFESSIONAL OF RECORD IN WRITING OF ALL DISCREPANCIES AND EXCEPTIONS BEFORE PROCEEDING WITH THE WORK.
- THE REMOVAL, CUTTING, DRILLING, ETC. OF EXISTING CONSTRUCTION SHALL BE PERFORMED WITH GREAT CARE IN ORDER NOT TO JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING. IF STRUCTURAL MEMBERS OR MECHANICAL, ELECTRICAL OR ARCHITECTURAL FEATURES NOT INDICATED FOR REMOVAL INTERFERE WITH THE NEW WORK, THE PROFESSIONAL OF RECORD SHALL BE IMMEDIATELY NOTIFIED AND PRIOR WRITTEN APPROVAL SHALL BE OBTAINED BEFORE REMOVAL OR MODIFICATION OF MEMBERS.
- THE CONTRACTOR SHALL RESTORE ALL EXISTING INCIDENTAL CONSTRUCTION REQUIRED TO BE REMOVED TO ACCOMMODATE THE ERECTION OF THE NEW JOIST CONSTRUCTION TO ITS ORIGINAL WORKING CONDITION.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS & METHOD OF ALL DEMOLITION WORK & FOR PROVIDING ALL NECESSARY TEMPORARY SHORING, BRACING & PROTECTION AS NECESSARY FOR SAFETY, STABILITY & PROTECTION OF ALL BUILDING ELEMENTS & STRUCTURE DURING CONSTRUCTION & DEMOLITION.

SPECIAL INSPECTIONS SCHEDULE		
SPECIAL INSPECTION	FREQUENCY	REFERENCED STANDARD(S)
<b>ADHESIVE ANCHORS/REINFORCEMENT:</b>		
I. DURING PLACEMENT OF ADHESIVE ANCHORS OR REINFORCEMENT EMBEDDED WITH ADHESIVE (AS SPECIFIED ON THE CONSTRUCTION DOCUMENTS) IN MASONRY AND CONCRETE		
A. SIZE AND EMBEDMENT OF ANCHORS/REINF.	CONTINUOUS	MANUFACTURERS INSTALLATION INSTRUCTIONS
B. ANCHORS/REINFORCEMENT INSTALLED PER MANUFACTURERS RECOMMENDATIONS.	CONTINUOUS	MANUFACTURERS INSTALLATION INSTRUCTIONS
<b>STEEL CONSTRUCTION:</b>		
I. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS, AND WASHERS, HIGH-STRENGTH BOLTING:		
A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS	PERIODIC	APPLICABLE ASTM MATERIAL SPECIFICATIONS; AISC ASD Sec. A3.4; AISC LRFD Sec. A3.3
B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED	PERIODIC	
2. INSPECTION OF BEARING-TYPE CONNECTIONS	PERIODIC	AISC LRFD Sec. M2.5
3. MATERIAL VERIFICATION OF STRUCTURAL STEEL:		
A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	---	ASTM A-6 OR ASTM A-568
B. MANUFACTURER'S CERTIFIED MILL TEST REPORTS REQUIRED	---	
4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS:		
A. IDENTIFICATION MARKINGS TO CONFORM TO AISC SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.	---	AISC ASD Sec. A3.6; AISC LRFD Sec. A3.5
B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED	---	
5. INSPECTION OF WELDING:		
SINGLE-PASS FILLET WELDS $\leq 5/16"$	PERIODIC	AWS D11



description  
by  
mark date  
revisions

date	project	designed	drawn	checked
4/21/15	51560	MP	BR	MP

**CASCO**  
CORPORATION  
10011 WATSON ROAD  
ST. LOUIS, MO 63121  
PROJECT MANAGER

CASCO DIVERSIFIED CORPORATION  
ENGINEERING FIRM  
LICENSE #1545  
EXPIRES 08/31/18

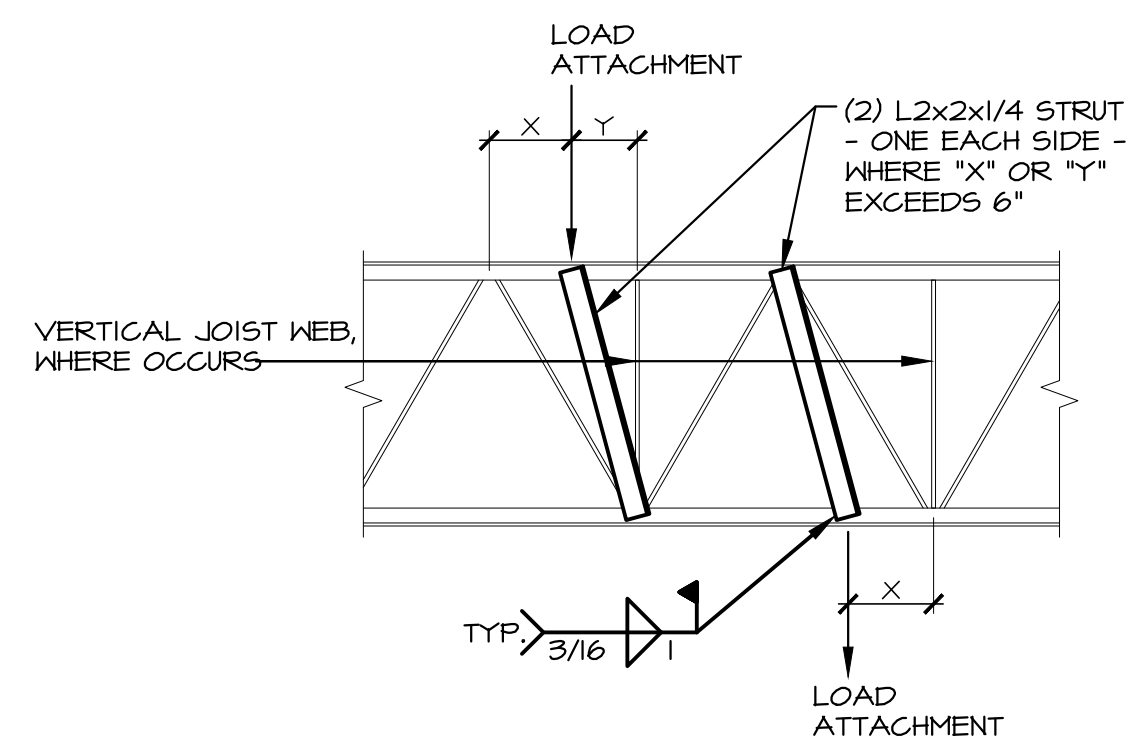
PROFESSIONAL OF RECORD

DANIEL F. CUTLER  
LICENSE NO. 03886  
EXPIRATION DATE 03/31/18  
PHONE: 314-8211100

project  
drawing

**DOLLAR TREE**  
ATASCOSA MARKET  
2094 WEST OAKLAWN RD., SUITE 300, PLEASANTON, TX 75064  
GENERAL NOTES AND DETAILS

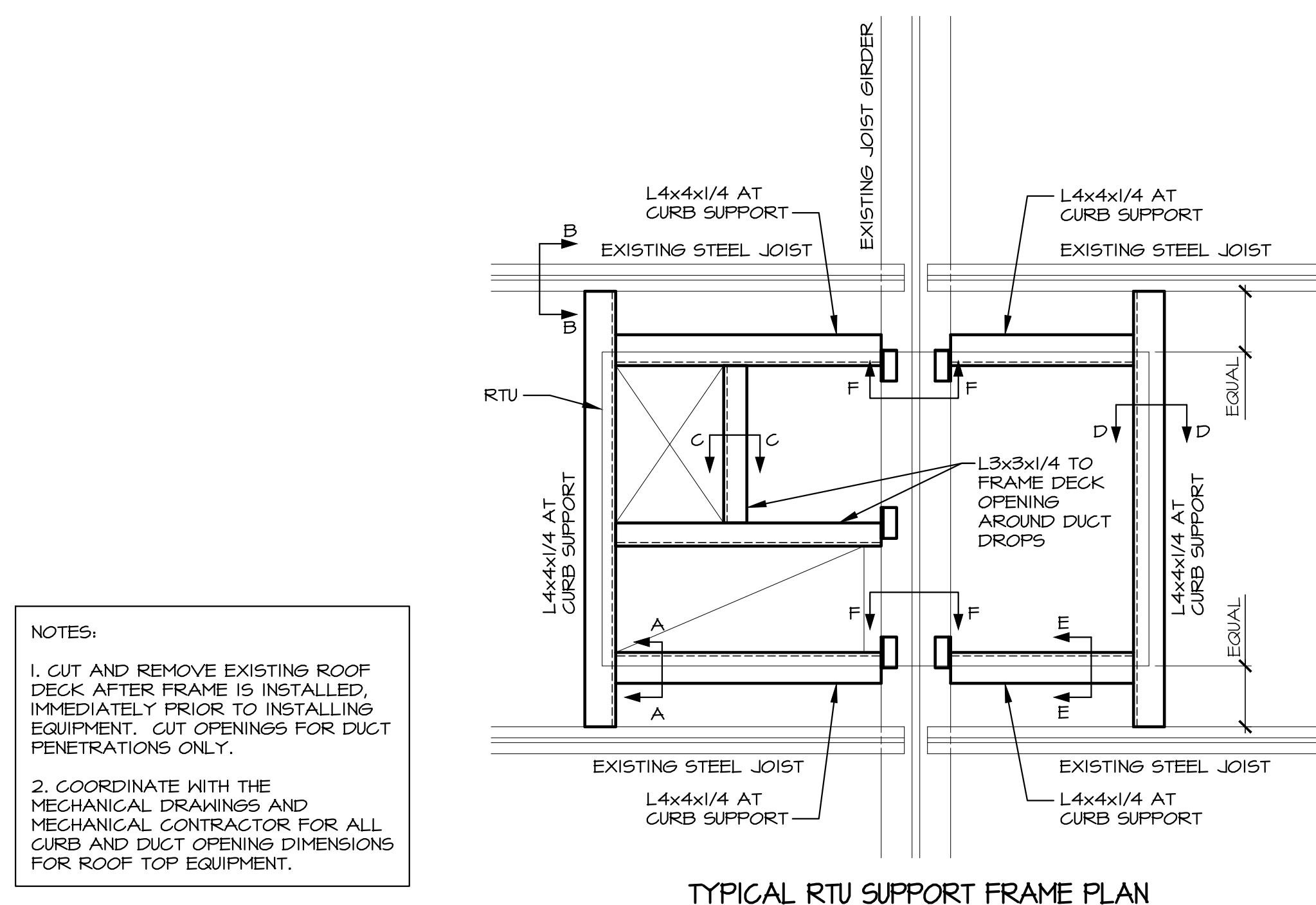
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**JOIST LOAD STRUT DETAIL**

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

3  
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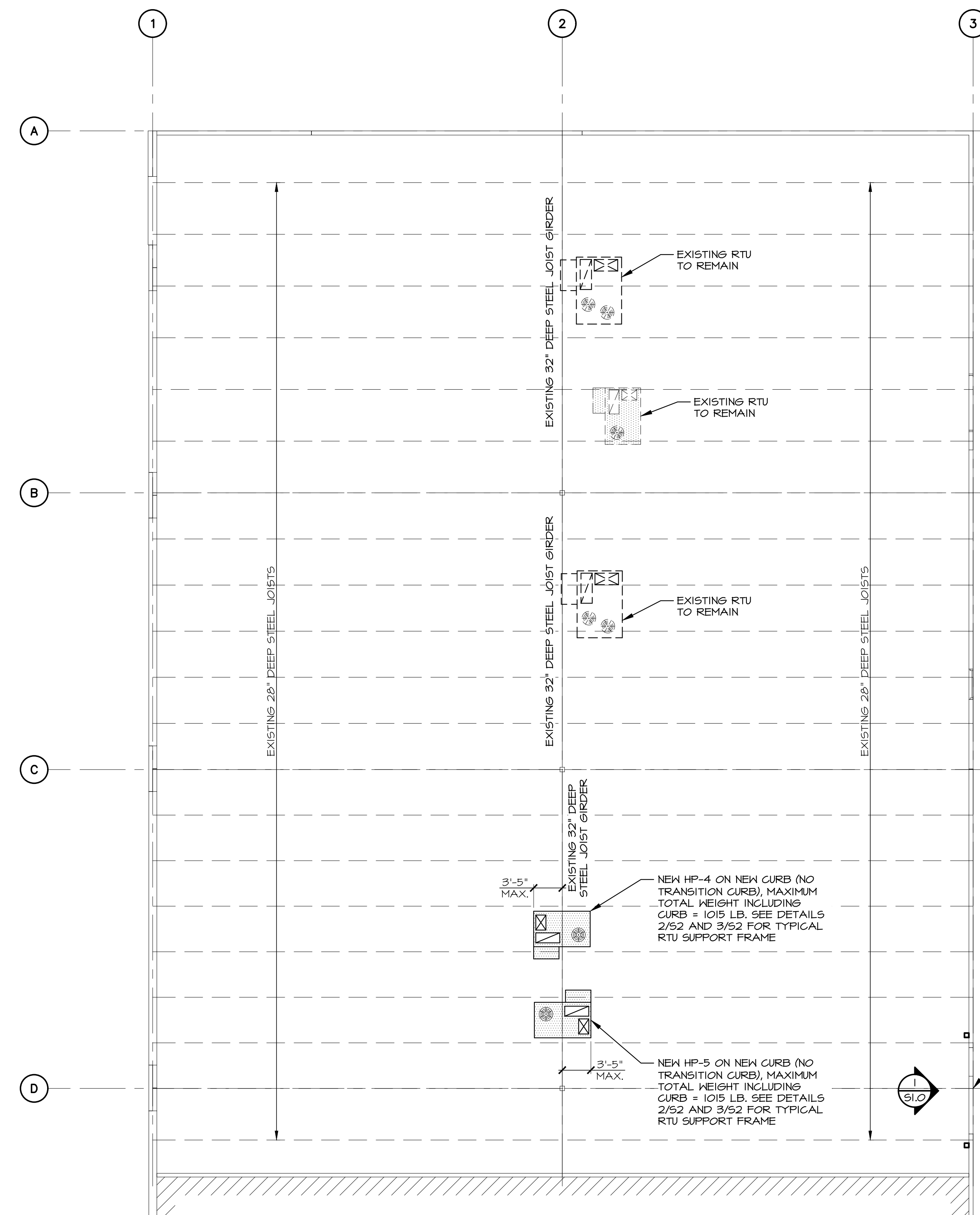
**TYPICAL RTU SUPPORT FRAME PLAN**

- NOTES:
- CUT AND REMOVE EXISTING ROOF DECK AFTER FRAME IS INSTALLED, IMMEDIATELY PRIOR TO INSTALLING EQUIPMENT. CUT OPENINGS FOR DUCT PENETRATIONS ONLY.
  - COORDINATE WITH THE MECHANICAL DRAWINGS AND MECHANICAL CONTRACTOR FOR ALL CURB AND DUCT OPENING DIMENSIONS FOR ROOF TOP EQUIPMENT.

**ROOF TOP UNIT FRAMING DETAIL**

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

2  
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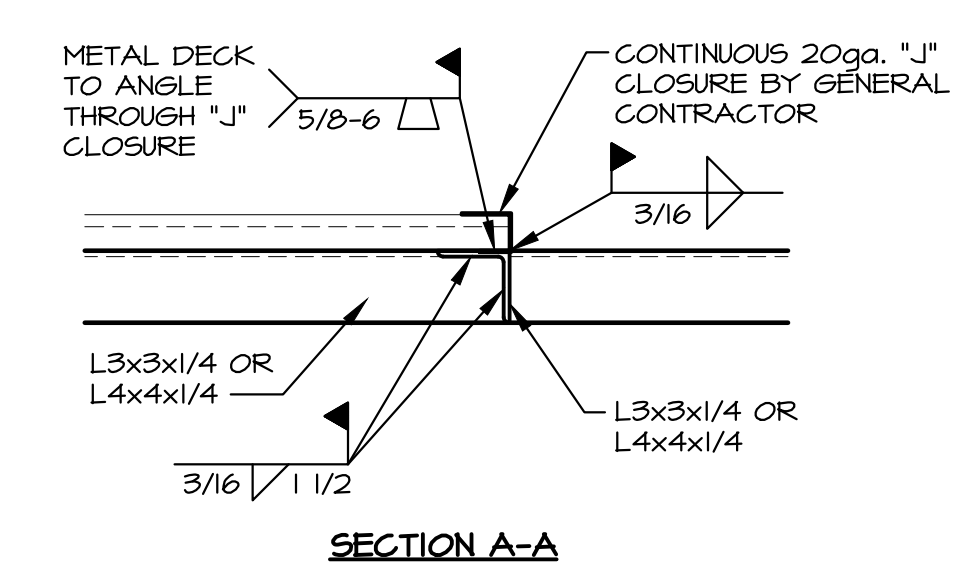
**PARTIAL EXISTING ROOF FRAMING PLAN**

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

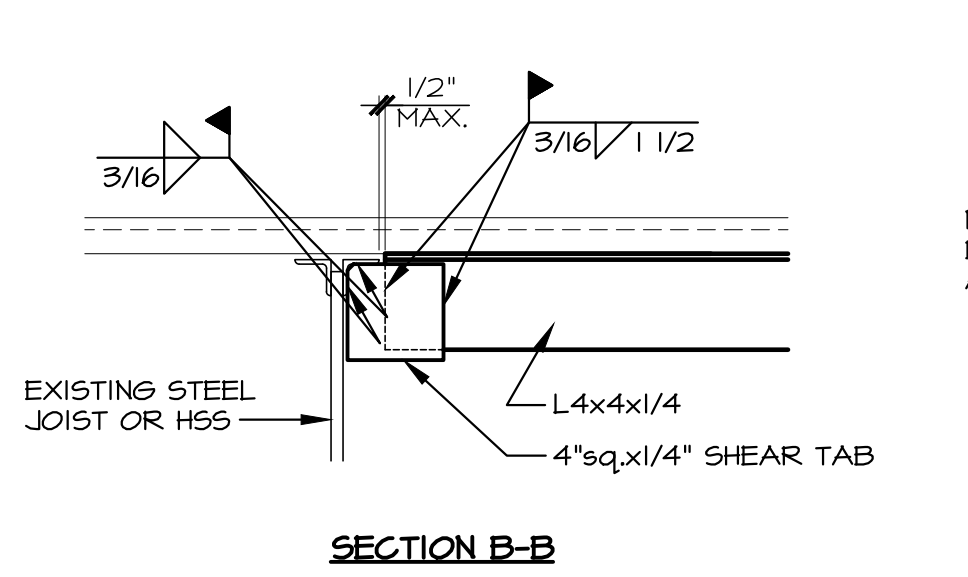


NORTH

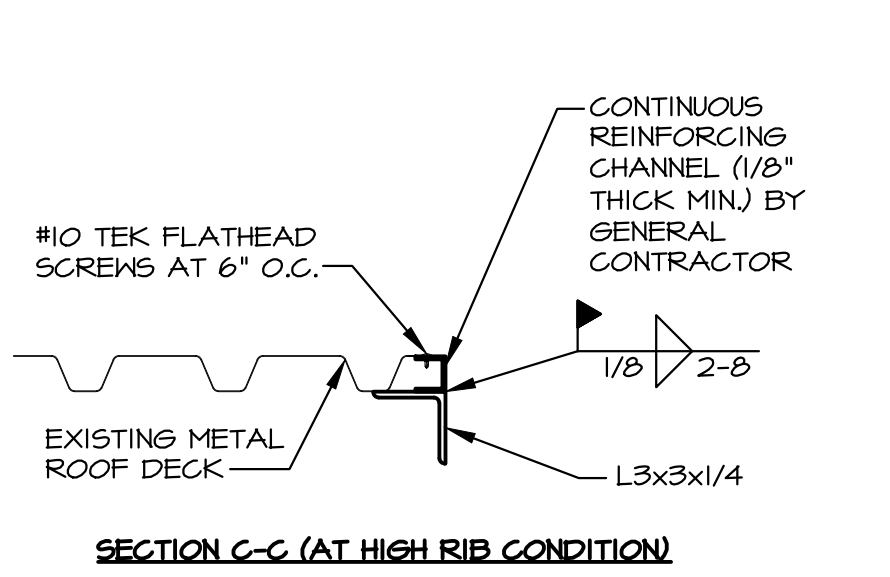
- EXISTING ROOF FRAMING PLAN NOTES:**
- PLACE NEW UNITS WHERE SHOWN ON PLAN.
  - THE GENERAL CONTRACTOR SHALL FIELD VERIFY THAT THE DEPTHS OF THE EXISTING JOISTS INDICATED TO SUPPORT NEW ROOF TOP UNITS MATCH THE DEPTHS OF THE RESPECTIVE JOISTS INDICATED ON PLAN AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO INSTALLING THE ROOF TOP UNITS.
  - SEE ARCHITECTURAL DEMOLITION DRAWINGS FOR EXISTING STRUCTURAL ELEMENTS TO BE DEMOLISHED. SEE GENERAL STRUCTURAL NOTES FOR DEMOLITION AND SHORING NOTES.
  - ALL ROOF DECK PENETRATIONS WITH DIMENSIONS LESS THAN 18" SHALL BE REINFORCED WITH GAGE SHEET METAL IN ACCORDANCE WITH THE STEEL DECK INSTITUTE RECOMMENDATIONS.



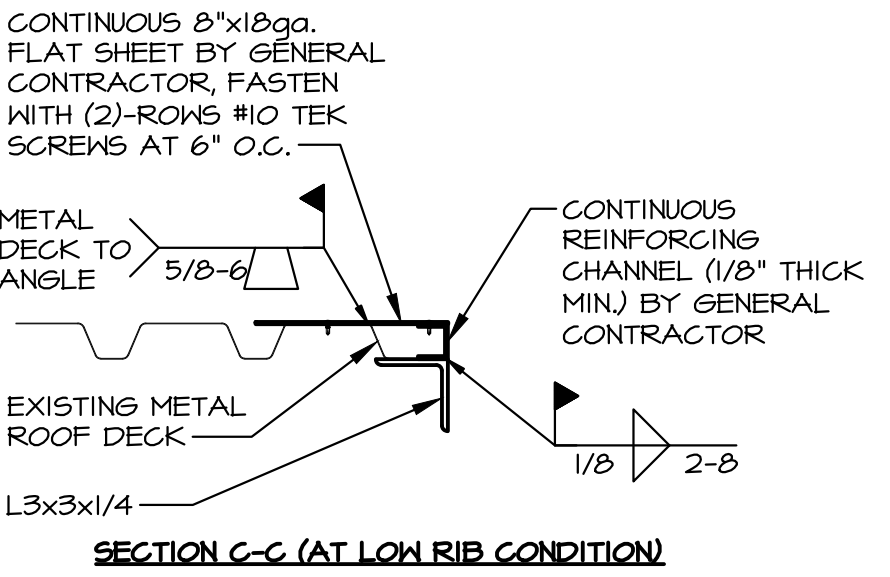
**SECTION A-A**



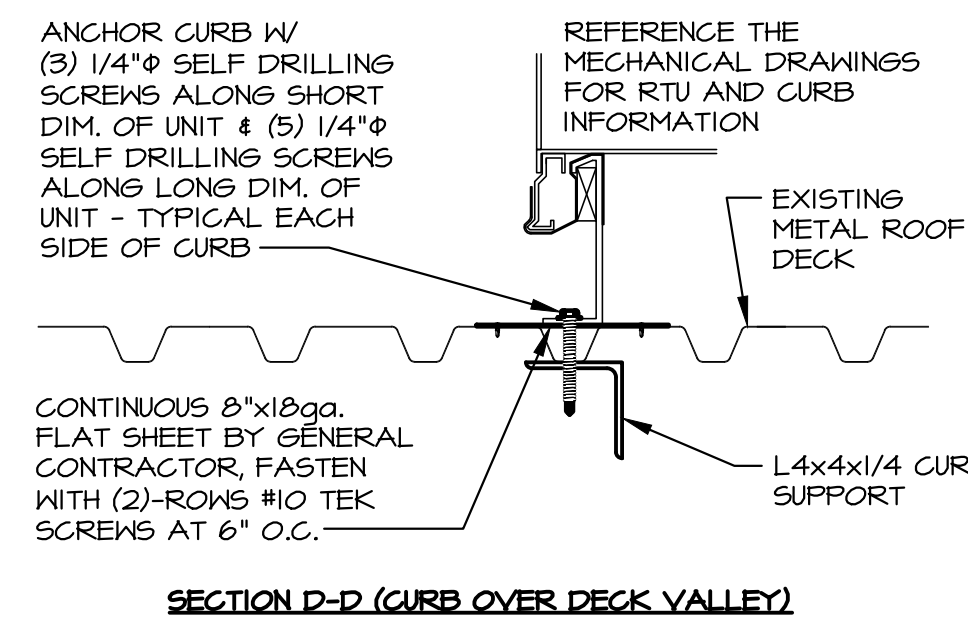
**SECTION B-B**



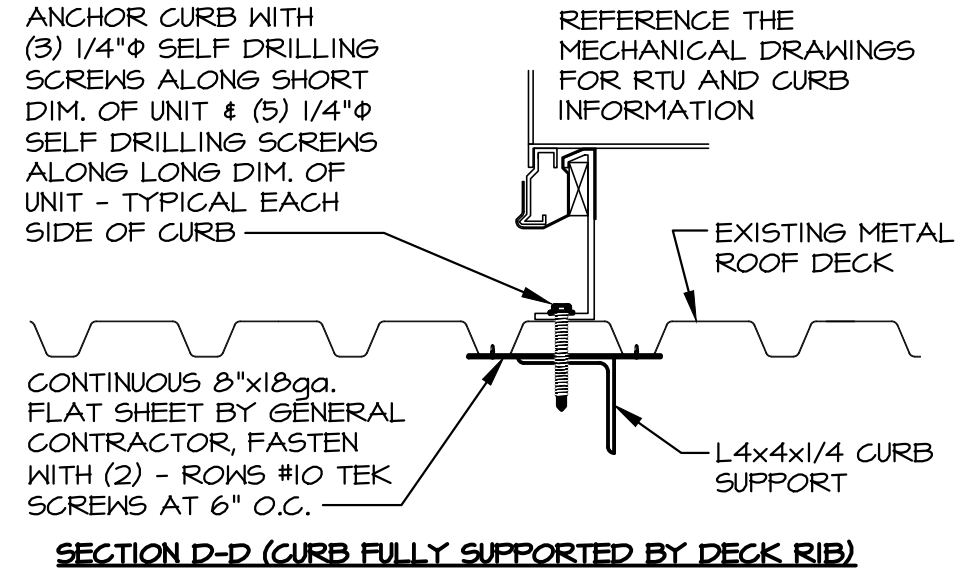
**SECTION C-C (AT HIGH RIB CONDITION)**



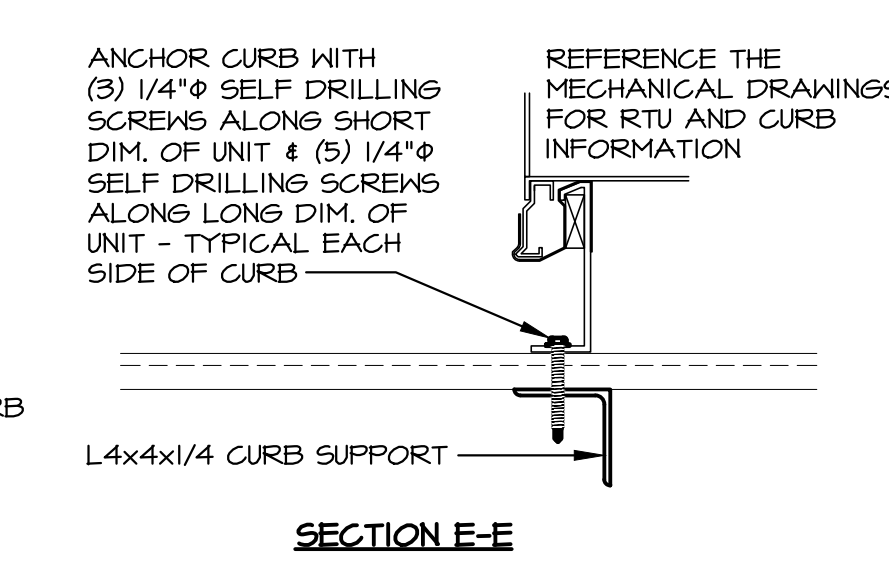
**SECTION C-C (AT LOW RIB CONDITION)**



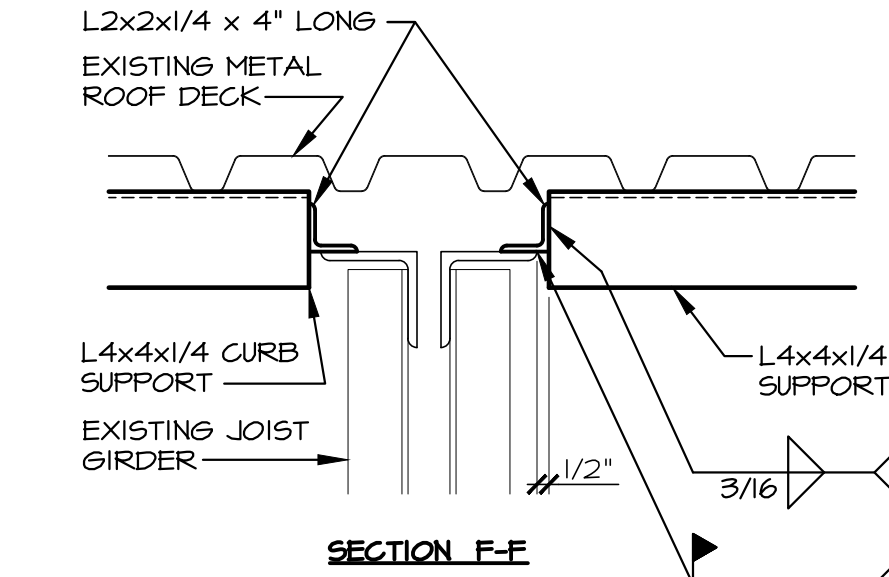
**SECTION D-D (CURB OVER DECK VALLEY)**



**SECTION D-D (CURB FULLY SUPPORTED BY DECK RIB)**



**SECTION E-E**

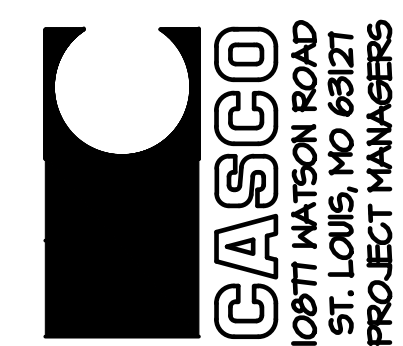


**SECTION F-F**

date	project	designed	drawn	checked
5/15/60	MP	BR	MP	

mark	revisions
by	description

date	project	designed	drawn	checked
5/15/60	MP	BR	MP	



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project  
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drawing  
ROOF FRAMING PLAN AND DETAILS

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