

ADDENDUM NUMBER 1:

Bid#41-16  
Middle School Structural Reinforcement  
Issued: April 14, 2016

This Addendum forms part of the original document marked: Bid#1-16 Middle School Structural Reinforcement.

The deadline for questions has been extended until 12:00p.m., Monday April 18, 2016.

Replace the original paragraph from the bid invitation with the following:

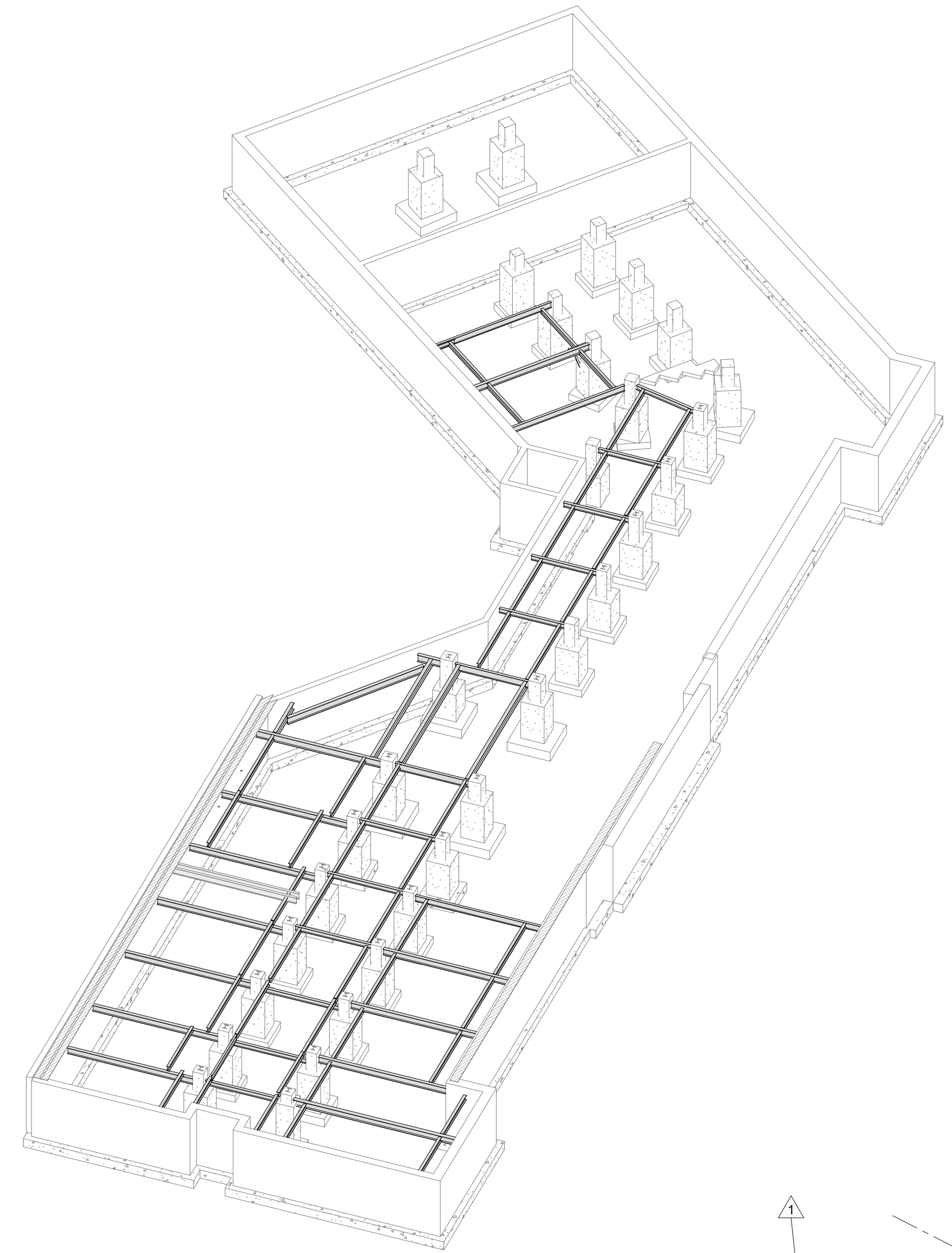
- The deadline for questions is **12:00 p.m., Monday April 18, 2016**. Addenda to this bid document, if any, including written answers to questions, will be posted **by 4:30 p.m. April 19, 2016** on the City of Portsmouth website at <http://www.cityofportsmouth.com/finance/purchasing.htm> under the project heading. Addenda and updates will NOT be sent directly to vendors.
- Included as part of Addendum 1 are Revised Drawings: Drawings S1.0, S1.0A and S2.1 modifying the scope of work. Added and deleted framing, details and notes are clouded. See attached drawings.

All else remains unchanged.

Please acknowledge this addendum within your proposal. Failure to do so may subject a bidder to disqualification.

End of Addendum #1

**NOTES REGARDING 3D VIEWS**  
ALL 3D VIEWS ARE FOR REFERENCE ONLY. THE 3D VIEWS ONLY SHOW BASIC STRUCTURAL ELEMENTS. THEY DO NOT INCLUDE DETAILS SUCH AS EXTERIOR RAMPS AND STAIRS, SLAB AND ROOF PITCHES, OR SPECIFIC STRUCTURAL DETAILS. REFER TO ALL PLANS, DETAIL SHEETS, AND ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION. DO NOT SCALE OFF OF THIS DRAWING.



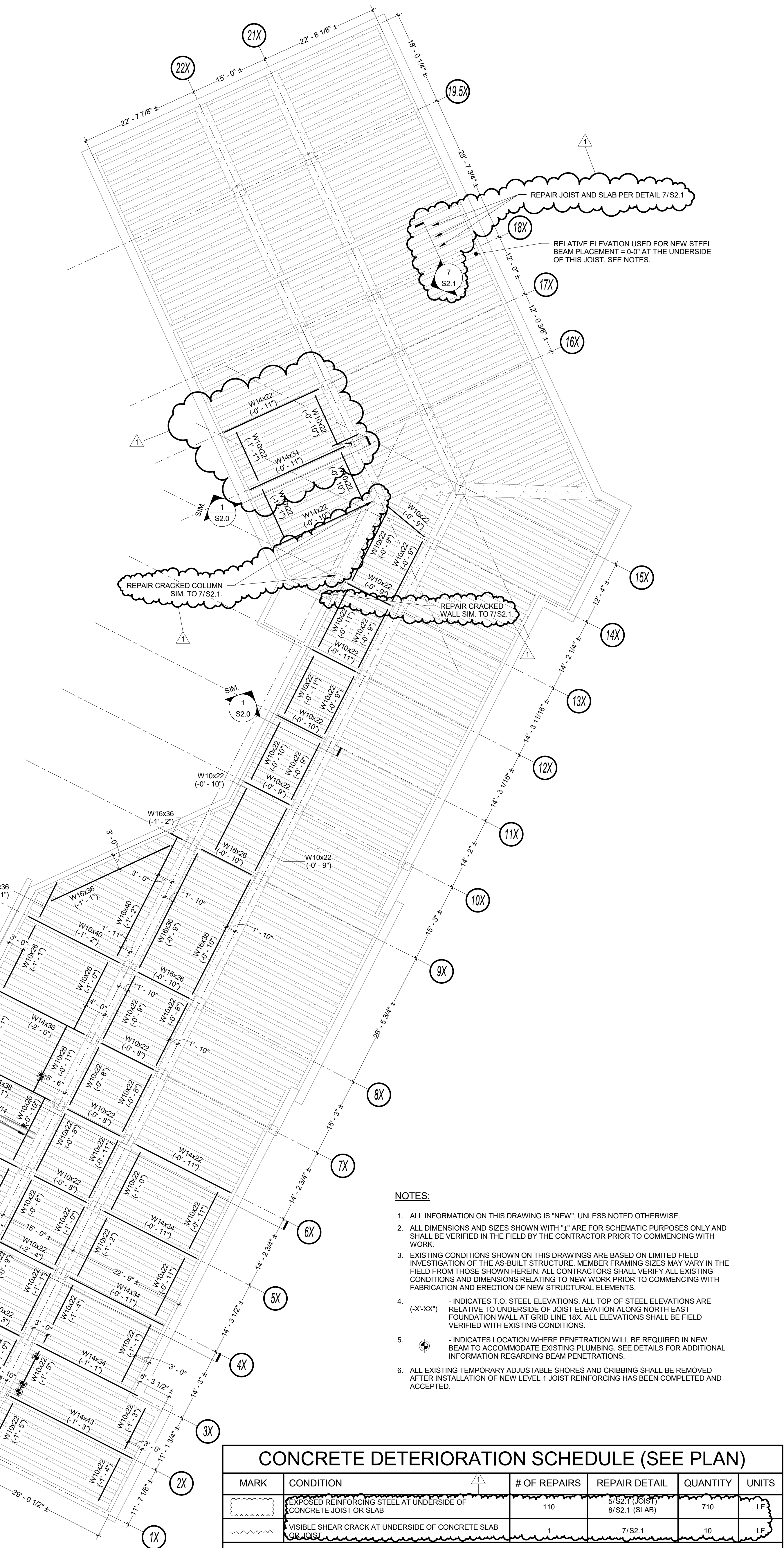
**3 3D VIEW**  
N.T.S.

**NOTES REGARDING EXISTING CONDITIONS**  
ALL EXISTING CONDITIONS ON THE PLANS ARE ASSUMED BASED ON LIMITED VISUAL INSPECTIONS AND/OR ORIGINAL DESIGN DRAWINGS. THE CONTRACTOR SHALL CARRY CONTINGENCY IN PRICING FOR DIFFERENCES IN CONDITIONS SHOWN, INCLUDING BUT NOT LIMITED TO:  
a) DIFFERENT FRAMING CONDITIONS  
b) DIFFERENT FOUNDATION CONDITIONS  
c) HIDDEN DAMAGE OR DETERIORATION IN STRUCTURAL MEMBERS

**1 LEVEL 1 JOIST DEFICIENCY PLAN**  
SCALE: 3/32" = 1'-0"



**2 LEVEL 1 JOIST REINFORCING PLAN**  
SCALE: 3/32" = 1'-0"



- NOTES:**
- ALL INFORMATION ON THIS DRAWING IS "NEW", UNLESS NOTED OTHERWISE.
  - ALL DIMENSIONS AND SIZES SHOWN WITH "±" ARE FOR SCHEMATIC PURPOSES ONLY AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO COMMENCING WITH WORK.
  - EXISTING CONDITIONS SHOWN ON THIS DRAWING ARE BASED ON LIMITED FIELD INVESTIGATION OF THE AS-BUILT STRUCTURE. MEMBER FRAMING SIZES MAY VARY IN THE FIELD FROM THOSE SHOWN HEREIN. ALL CONTRACTORS SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS RELATING TO NEW WORK PRIOR TO COMMENCING WITH FABRICATION AND ERECTION OF NEW STRUCTURAL ELEMENTS.
  - INDICATES T.O. STEEL ELEVATIONS. ALL TOP OF STEEL ELEVATIONS ARE RELATIVE TO UNDERSIDE OF JOIST ELEVATION ALONG NORTH EAST FOUNDATION WALL AT GRID LINE 18X. ALL ELEVATIONS SHALL BE FIELD VERIFIED WITH EXISTING CONDITIONS.
  - INDICATES LOCATION WHERE PENETRATION WILL BE REQUIRED IN NEW BEAM TO ACCOMMODATE EXISTING PLUMBING. SEE DETAILS FOR ADDITIONAL INFORMATION REGARDING BEAM PENETRATIONS.
  - ALL EXISTING TEMPORARY ADJUSTABLE SHORES AND CRIBBING SHALL BE REMOVED AFTER INSTALLATION OF NEW LEVEL 1 JOIST REINFORCING HAS BEEN COMPLETED AND ACCEPTED.

**CONCRETE DETERIORATION SCHEDULE (SEE PLAN)**

MARK	CONDITION	# OF REPAIRS	REPAIR DETAIL	QUANTITY	UNITS
△	EXPOSED REINFORCING STEEL AT UNDERSIDE OF CONCRETE JOIST OR SLAB	110	3/S2.1 (JOIST) 8/S2.1 (SLAB)	710	LF
○	VISIBLE SHEAR CRACK AT UNDERSIDE OF CONCRETE SLAB OR JOIST	1	7/S2.1	10	LF

REPAIR QUANTITIES ARE ESTIMATES ONLY, BASED UPON LIMITED VISUAL OBSERVATIONS. PRIOR TO CONSTRUCTION AND REPAIR, AN ADDITIONAL STUDY SHOULD BE CONDUCTED AND ALL AREAS OF DAMAGED CONCRETE SHALL BE IDENTIFIED AND REPAIRED. PROVIDE ADEQUATE CONTINGENCY FOR ADDITIONAL REPAIRS DUE TO HIDDEN OR OTHERWISE UNFORESEEN CONDITIONS. IN ADDITION TO PROVIDING A BASE BID FOR THE QUANTITIES OF CAST-IN-PLACE CONCRETE REPAIR SCHEDULED, REFER TO THE GENERAL REQUIREMENTS AND THE BID FORM TO PROVIDE UNIT PRICES FOR ADDITIONAL LINEAL FOOTAGE (ADD) OF REPAIRS AND UNIT PRICE FOR LESS LINEAR FOOTAGE (DEDUCT).

PROJECT TITLE  
**PORTSMOUTH MIDDLE SCHOOL**

155 Parrott Ave.  
Portsmouth, NH 03801

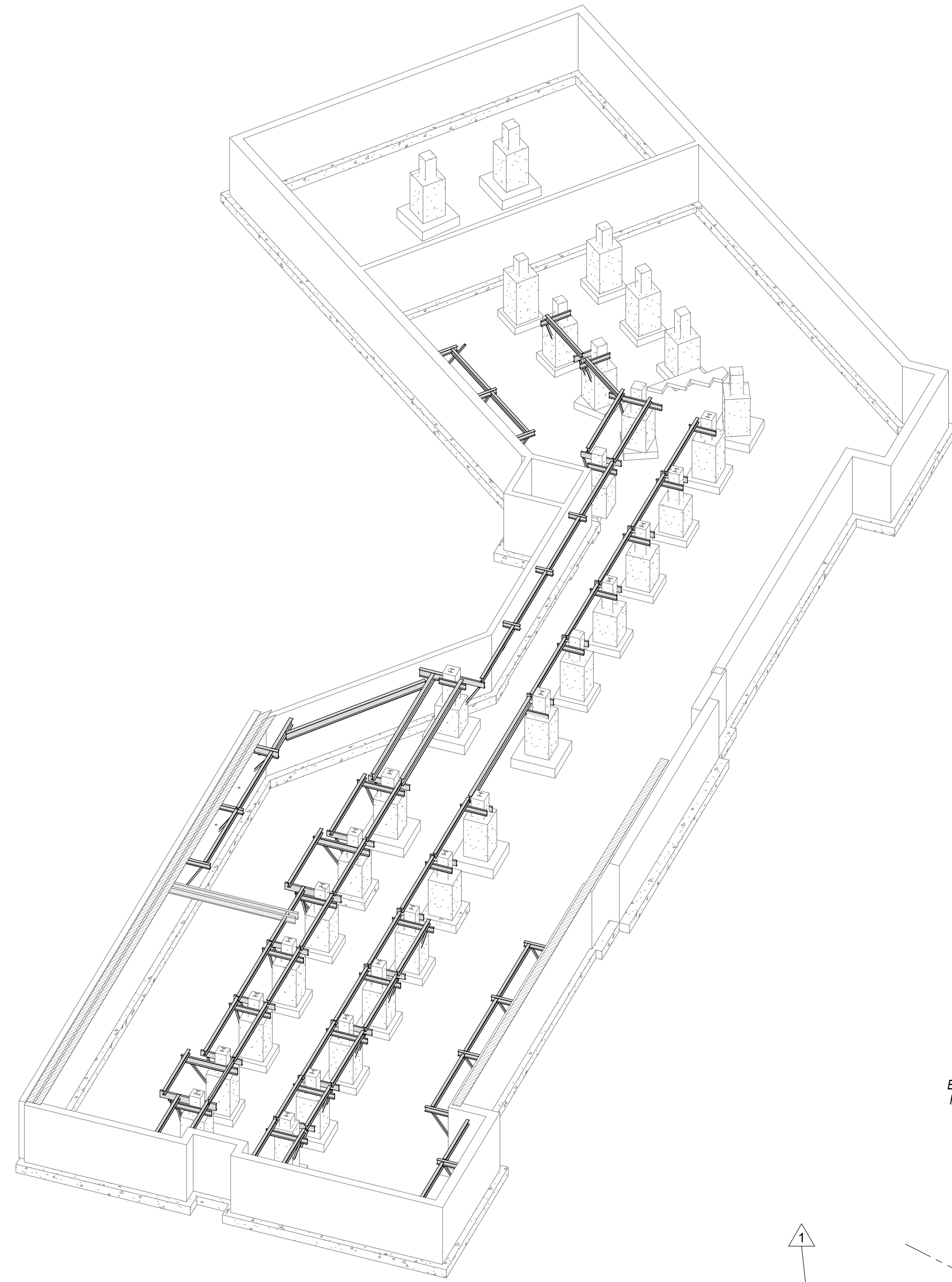
REV. #	DATE	DESCRIPTION
1	4/12/2016	Addendum 1

SHEET CONTENTS  
**JOIST REINFORCING PLAN**

SCALE	As indicated
DRAWN BY	MTS/CGS
CHECKED BY	DJO
DATE	MARCH 11, 2016
PROJECT NO.	2015-00097

DRAWING NO.  
**S1.0**

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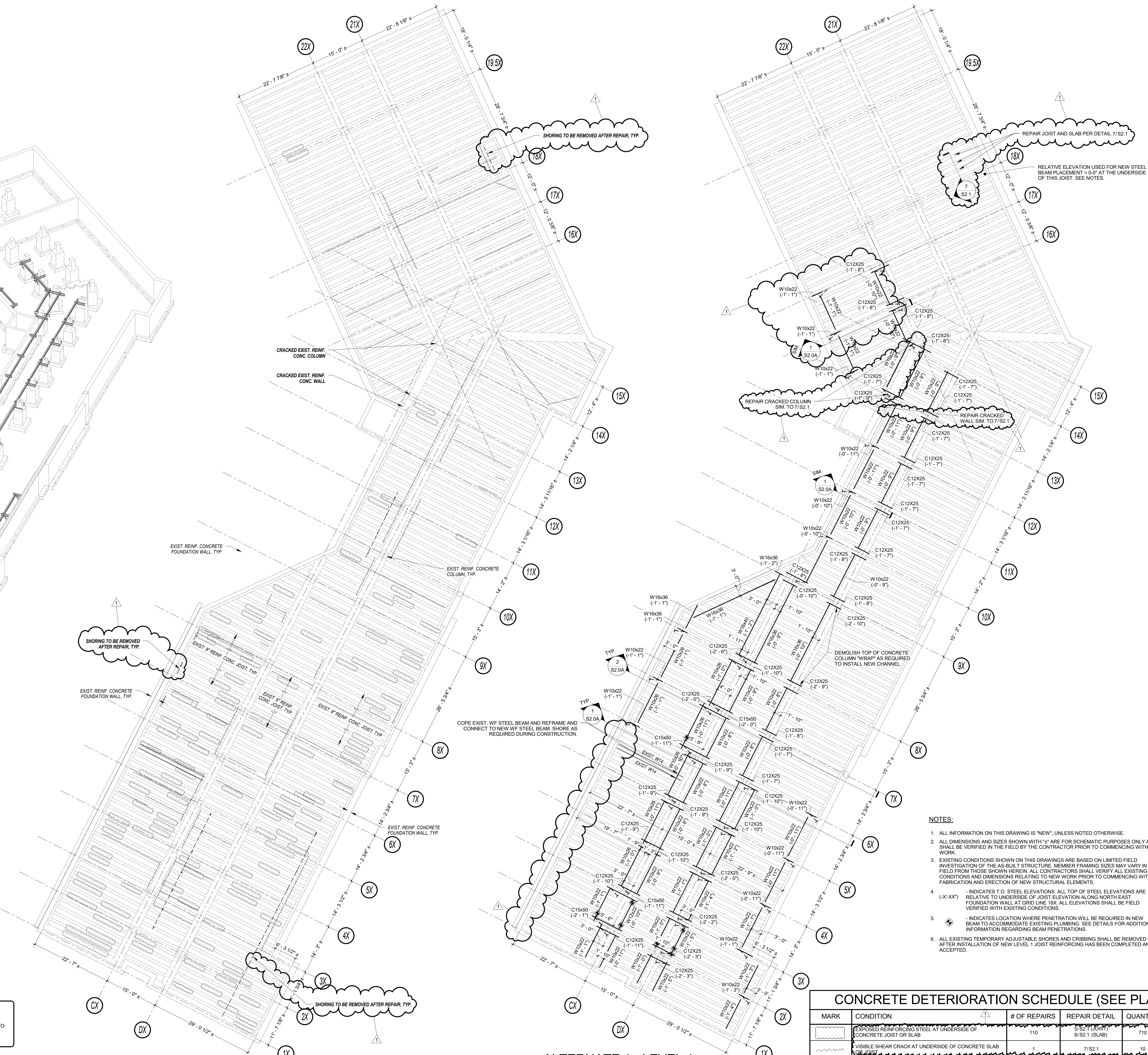


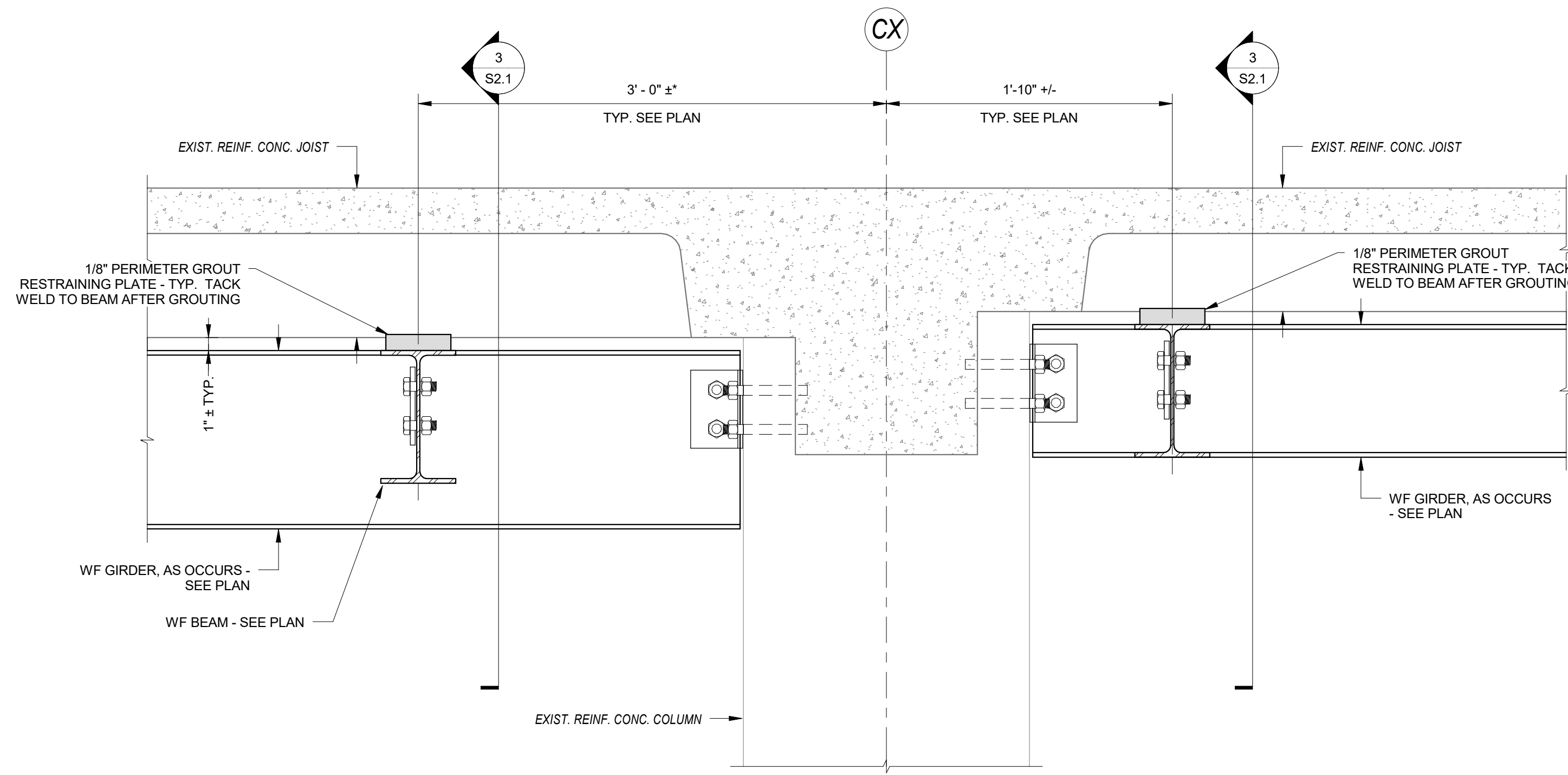
**3 3D VIEW**  
N.T.S.

**NOTES REGARDING EXISTING CONDITIONS**  
ALL EXISTING CONDITIONS ON THE PLANS ARE ASSUMED BASED ON LIMITED VISUAL INSPECTIONS AND/OR ORIGINAL DESIGN DRAWINGS. THE CONTRACTOR SHALL CARRY CONTINGENCY IN PRICING FOR DIFFERENCES IN CONDITIONS SHOWN, INCLUDING BUT NOT LIMITED TO:  
a) DIFFERENT FRAMING CONDITIONS  
b) DIFFERENT FOUNDATION CONDITIONS  
c) HIDDEN DAMAGE OR DETERIORATION IN STRUCTURAL MEMBERS

**1 LEVEL 1 JOIST DEFICIENCY PLAN**  
SCALE: 3/32" = 1'-0"

**2 ALTERNATE 1 - LEVEL 1 JOIST REINFORCING PLAN**  
SCALE: 3/32" = 1'-0"

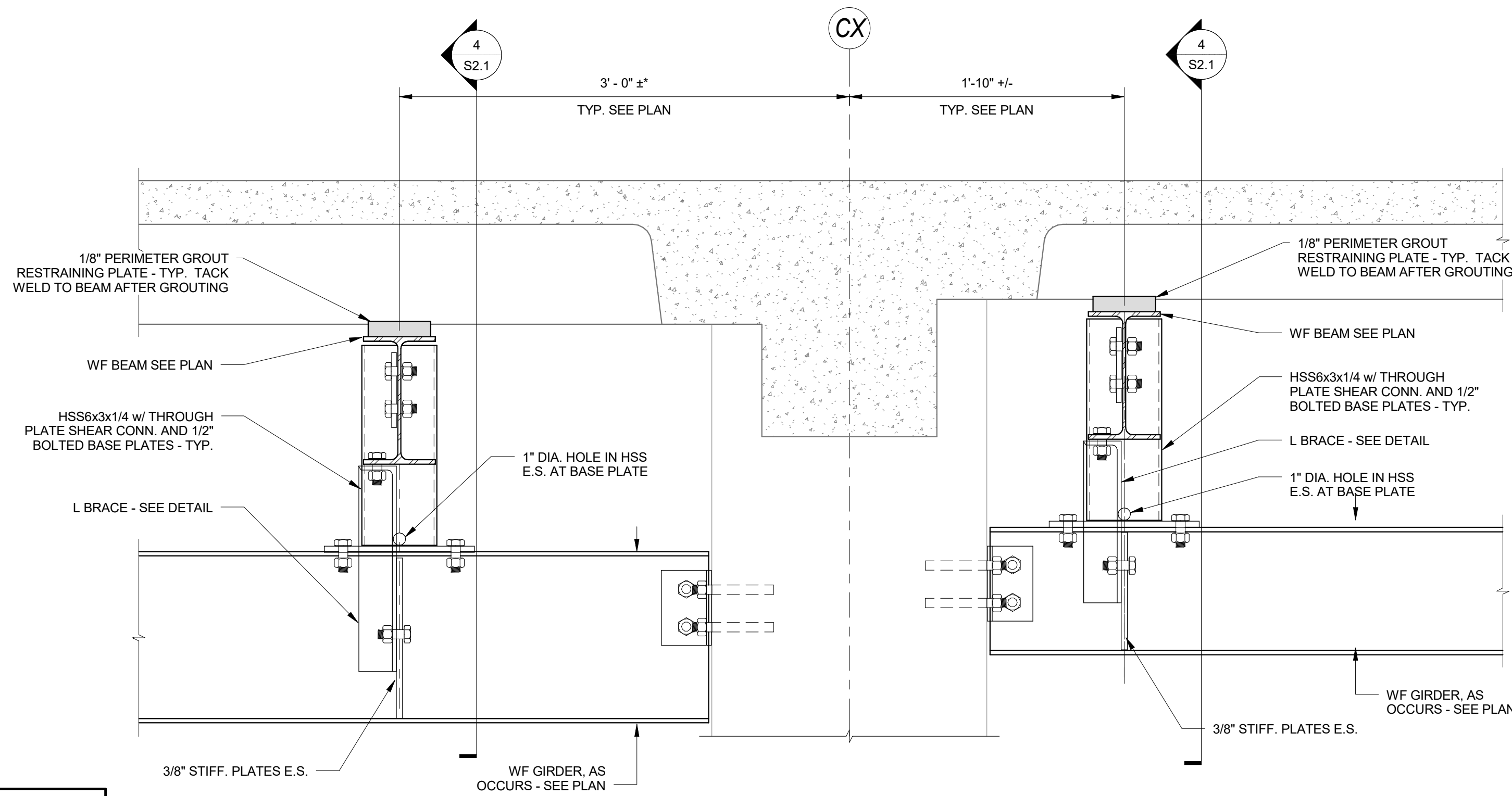




NOTE: THE DETAILS SHOWN HERE ARE FOR THE PRIMARY DESIGN OPTION. SIMILAR JOIST SUPPORT DETAILS SHALL APPLY FOR THE ALTERNATE 1 REINFORCING SCHEME. SEE ALTERNATE TYPICAL REINFORCING DETAILS FOR MORE INFORMATION.

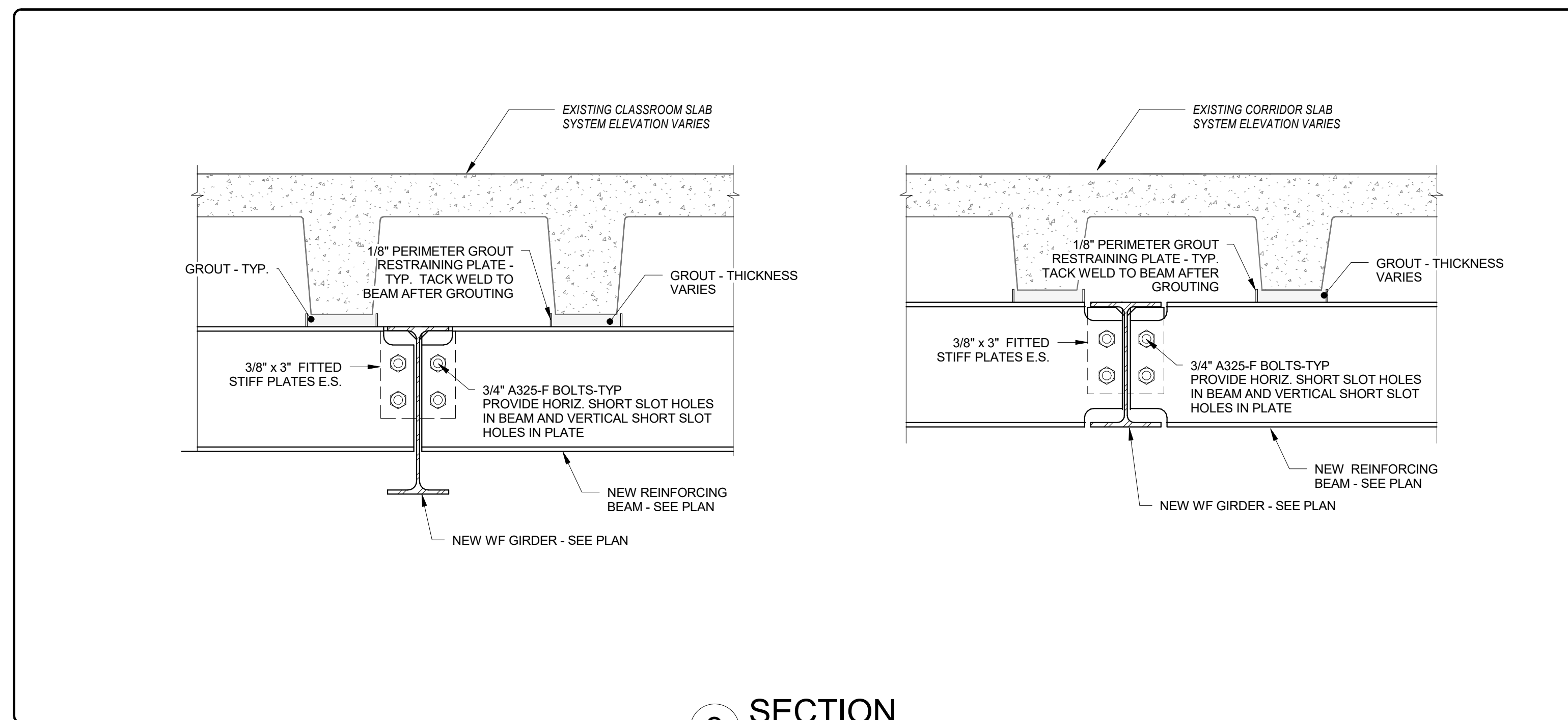
**1 SECTION**  
SCALE: 1/2" = 1'-0"

DESIGN ALL CONNECTIONS TO EXISTING CONCRETE USING HILTI HIT-HY200 ADHESIVE ANCHORING SYSTEM WITH 3/4" DIA. MINIMUM HIT-Z-R THREADED RODS (9" MIN. EMBEDMENT) - OR APPROVED EQUAL ADHESIVE ANCHORING SYSTEM AND MATERIALS.

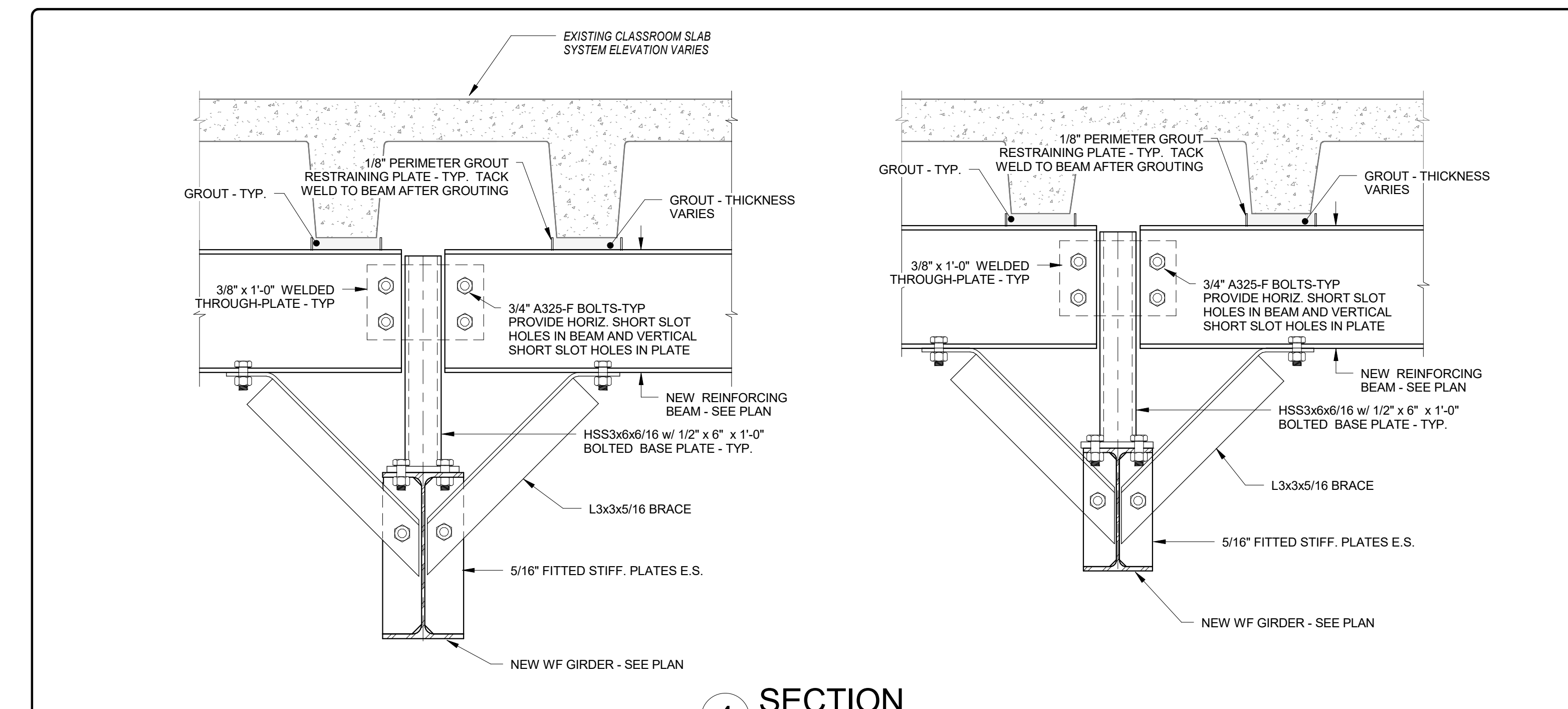


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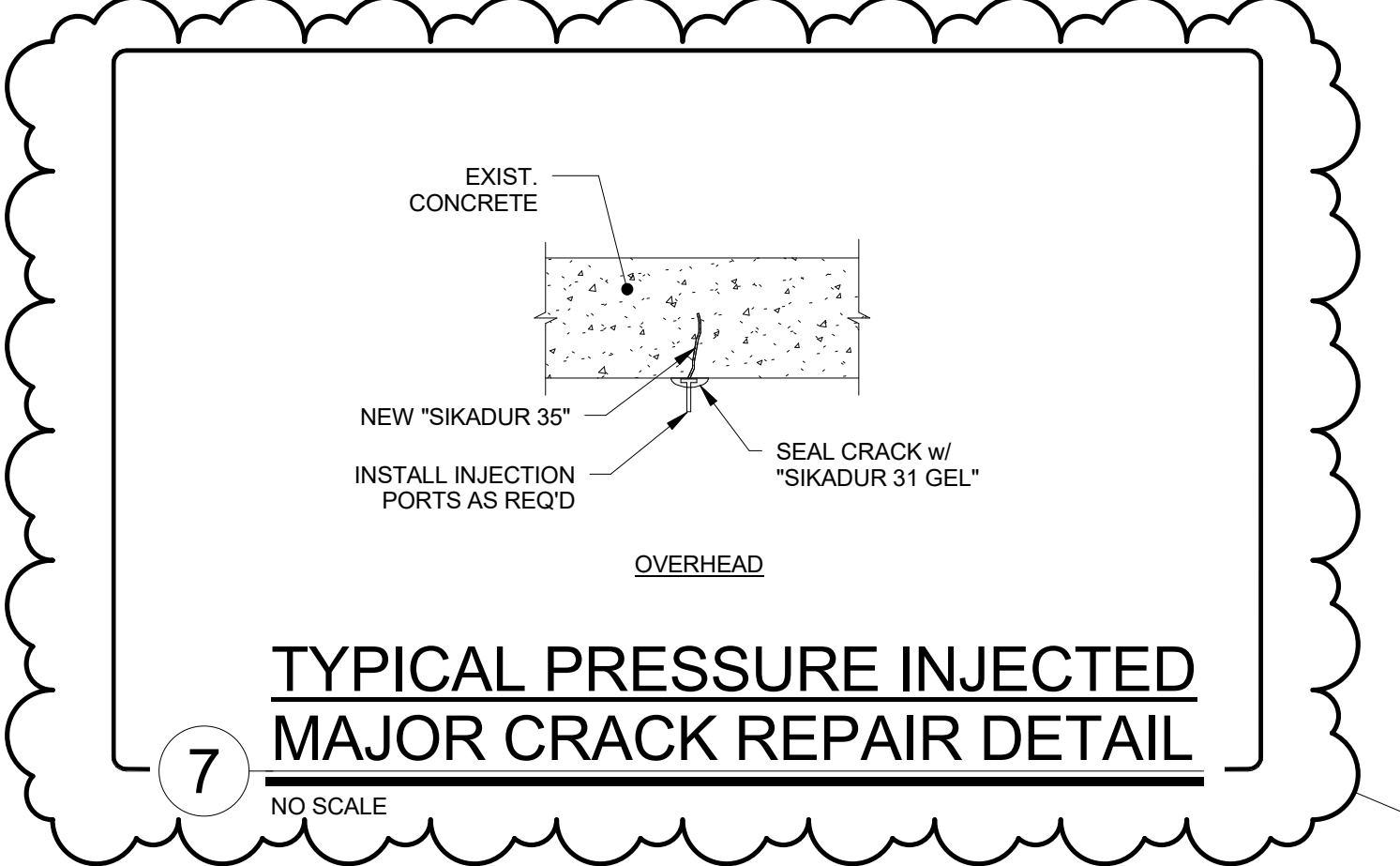
**2 SECTION**  
SCALE: 1/2" = 1'-0"



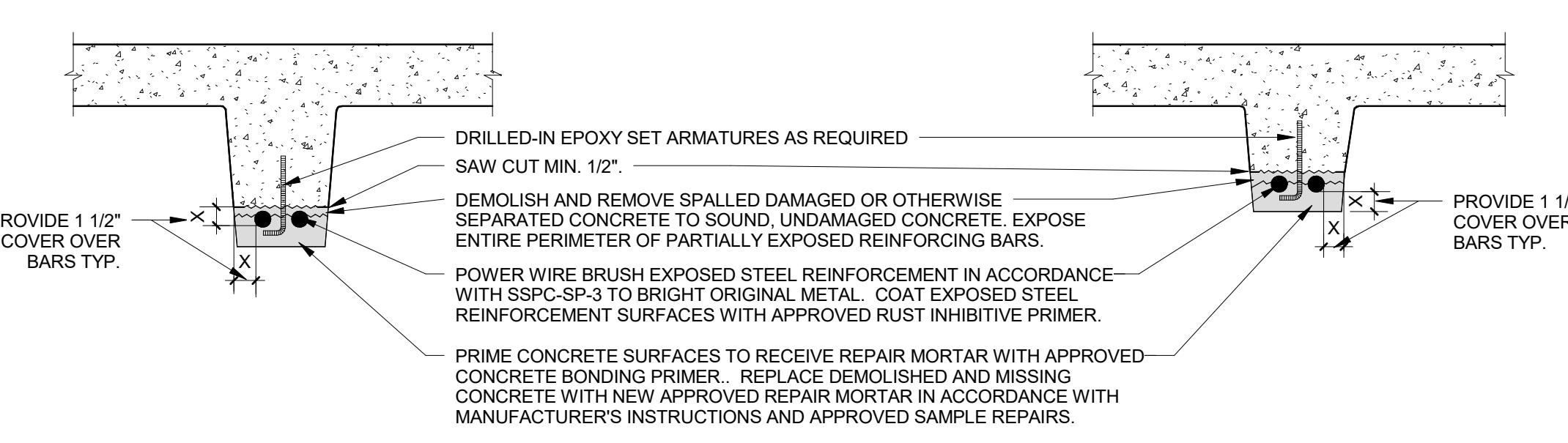
**3 SECTION**  
SCALE: 1/2" = 1'-0"



**4 SECTION**  
SCALE: 1/2" = 1'-0"



**7 TYPICAL PRESSURE INJECTED MAJOR CRACK REPAIR DETAIL**  
NO SCALE



CONSTRUCT SAMPLES OF EACH TYPE OF REPAIR, FOR APPROVAL PRIOR TO COMMENCING REPAIR WORK.

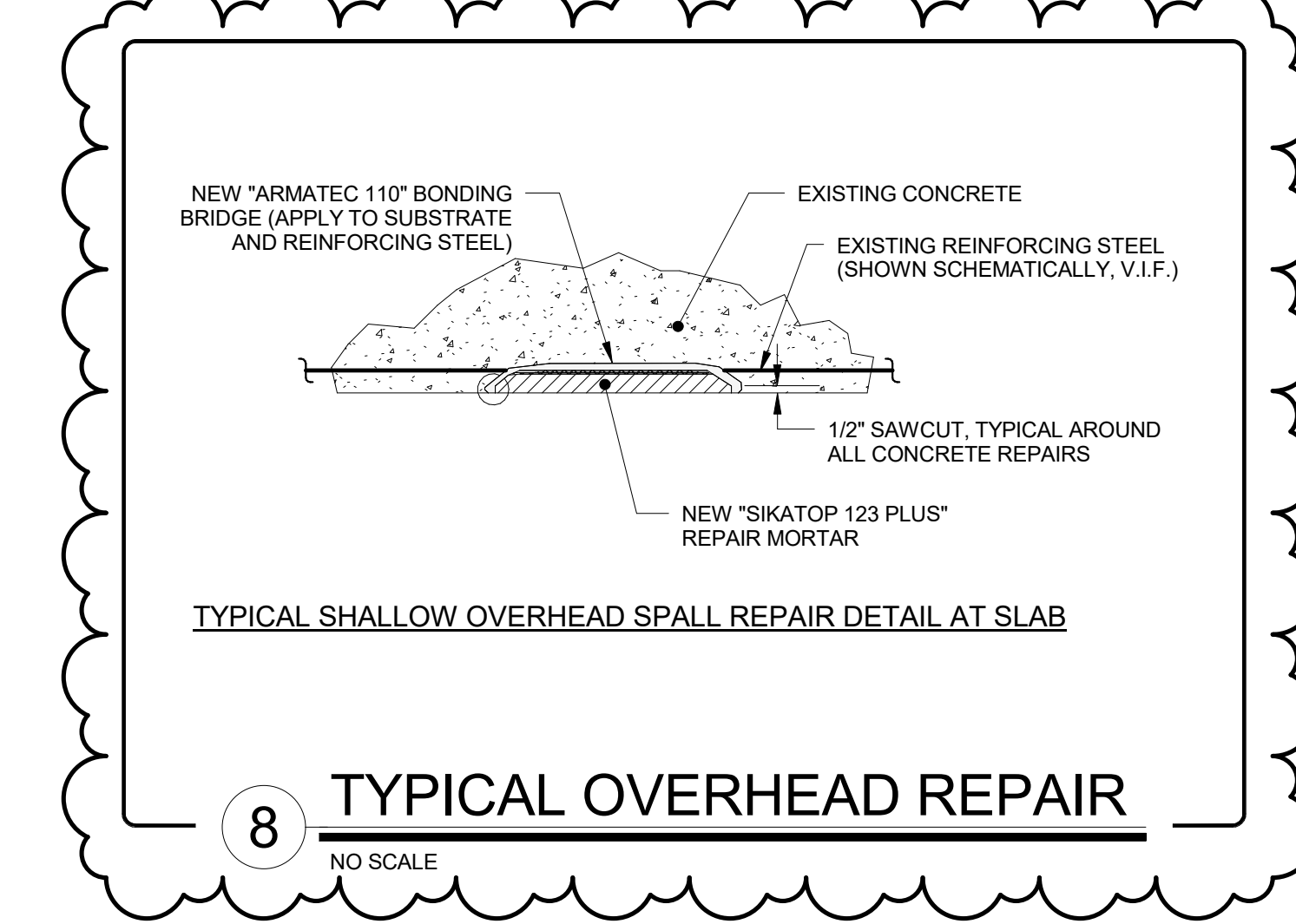
REINFORCING ARMATURES SHALL BE STAINLESS STEEL THREADED 1/4" DIA. ROD DRILLED-IN AND EPOXY-SET, INDIVIDUALLY SIZED AND CHOSEN AS REQUIRED FOR EACH REPAIR CONDITION.

CONCRETE BONDING PRIMER SHALL BE SIKA ARMADEC 110 EPOCEM, CONPRO PRIMER, SONOPREP PLUS, OR APPROVED EQUAL.

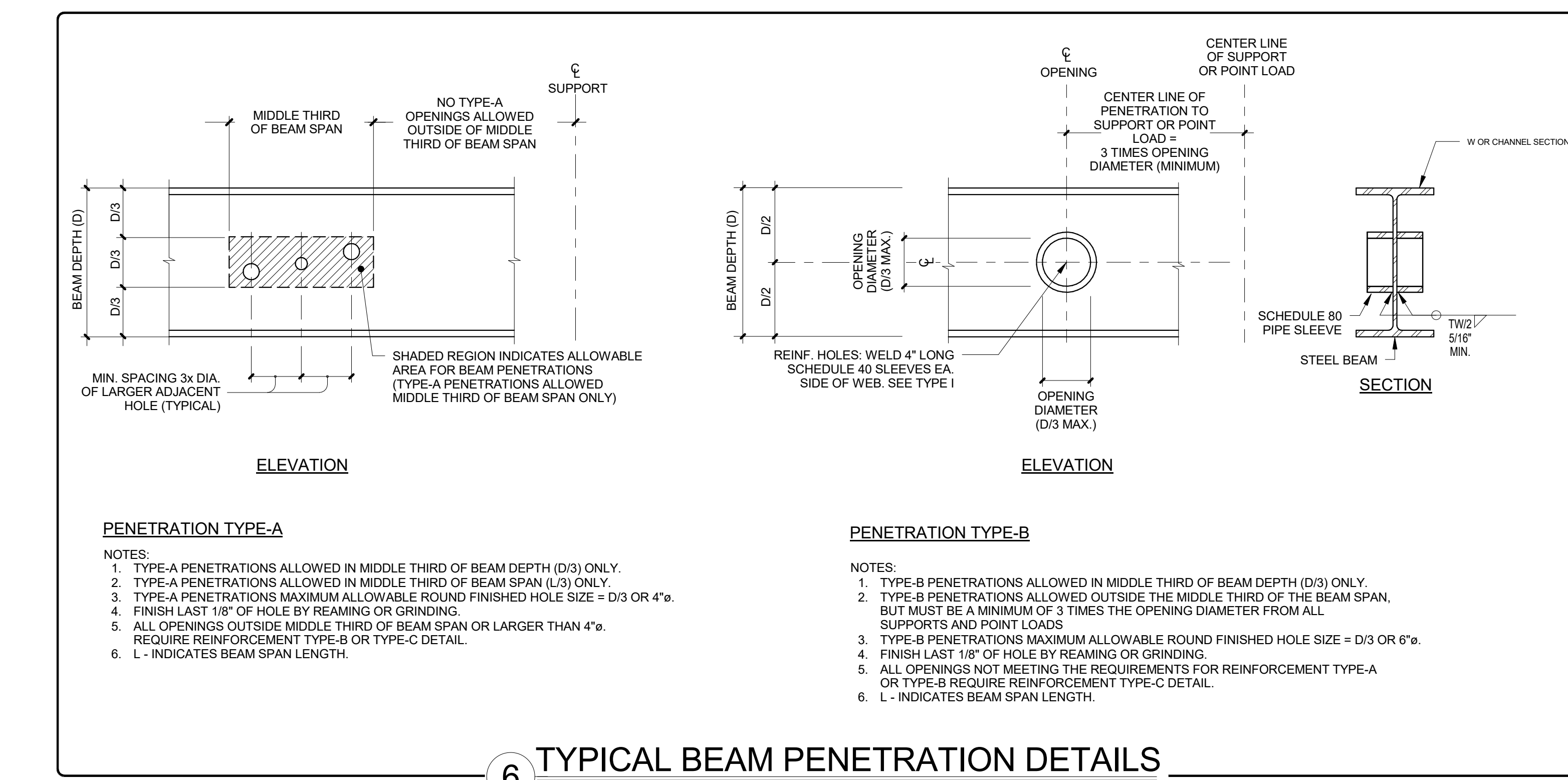
RUST INHIBITIVE PRIMER FOR EXPOSED STEEL ELEMENTS SHALL BE SIKA ARMADEC 110 EPOCEM, ECB BY CONPROCO, SONOPREP PLUS, OR APPROVED EQUAL.

REPAIR MORTAR FOR MISSING OR DETERIORATED CONCRETE SHALL BE SIKATOP-123 PLUS, CONPROSET, OR APPROVED EQUAL.

**5 TYP. JOIST REINFORCING REPAIR DETAIL**  
SCALE: 1/2" = 1'-0"



**8 TYPICAL OVERHEAD REPAIR**  
NO SCALE



**PENETRATION TYPE-A**

NOTES:

- TYPE-A PENETRATIONS ALLOWED IN MIDDLE THIRD OF BEAM DEPTH (D/3) ONLY.
- TYPE-A PENETRATIONS ALLOWED IN MIDDLE THIRD OF BEAM SPAN (L/3) ONLY.
- TYPE-A PENETRATIONS MAXIMUM ALLOWABLE ROUND FINISHED HOLE SIZE = D/3 OR 4".
- FINISH LAST 1/8" OF HOLE BY BEAMING OR GRINDING.
- ALL OPENINGS OUTSIDE MIDDLE THIRD OF BEAM SPAN OR LARGER THAN 4"φ REQUIRE REINFORCEMENT TYPE-B OR TYPE-C DETAIL.
- L - INDICATES BEAM SPAN LENGTH.

**PENETRATION TYPE-B**

NOTES:

- TYPE-B PENETRATIONS ALLOWED IN MIDDLE THIRD OF BEAM DEPTH (D/3) ONLY.
- TYPE-B PENETRATIONS ALLOWED OUTSIDE THE MIDDLE THIRD OF THE BEAM SPAN, BUT MUST BE A MINIMUM OF 3 TIMES THE OPENING DIAMETER FROM ALL SUPPORTS AND POINT LOADS.
- TYPE-B PENETRATIONS MAXIMUM ALLOWABLE ROUND FINISHED HOLE SIZE = D/3 OR 6".
- FINISH LAST 1/8" OF HOLE BY BEAMING OR GRINDING.
- ALL OPENINGS NOT MEETING THE REQUIREMENTS FOR REINFORCEMENT TYPE-A OR TYPE-B REQUIRE REINFORCEMENT TYPE-C DETAIL.
- L - INDICATES BEAM SPAN LENGTH.

**6 TYPICAL BEAM PENETRATION DETAILS**  
NO SCALE

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**S2.1**