

ADDENDUM NO.: ONE

DATE: September 9 2015

PROJECT TITLE: **Spent Fuel Research Labs Upfit**

University of South Carolina
State Project No. H27-Z209 - B
WTS Project No. 1433

WRITTEN BY: J. Sanders Tate, AIA LEED AP

TO: Prospective Bidders / Plan Holders

This addendum is issued pursuant to Article 1.1.1 of the AIA General Conditions of the Contract (A201) in connection with the revision of Bidding Documents which have been previously issued.

Addenda are issued prior to execution of Contract. All instructions contained herein shall be reflected in the Contract Sum and this Addendum will be made a part of the Contract Documents, if, as, and when a Construction Contract is awarded.

This Addendum forms a part of the Contract Documents and modifies the original documents dated August 14, 2015 as noted below. Acknowledge receipt of this Addendum in this space provided on the Bid Form. Failure to do so will subject the Bidder to disqualification.

This Addendum consists of 02 pages plus the following attachment:

- | | |
|---|----------|
| 1. Pre- Bid Conference Sign-in Sheet. | 2 pages |
| 2. HVAC addendum..... | 1 page |
| 3. Revised SE-310..... | 1 page |
| 4. Light Fixture prior approval..... | 1 page |
| 5. Answers to contractor questions..... | 1 page |
| 6. Drawings S0.0, S1.0, and S1.2 | 3 sheets |

GENERAL INFORMATION

1. All questions must be received by 4:30 pm on September 9, 2015. The last issue of any addenda information (except to change date of bid) will be at 2:00 pm on September 10, 2015.

REVISIONS TO THE DRAWINGS:

1. Replace drawings S0.0, S1.0, and S1.2 with attached revised drawings.
2. See attached HVAC addenda.
3. See attached prior approval of light fixtures

REVISIONS TO THE PROJECT MANUAL:

1. Replace the SE-310 in the Project Manual with the one attached. SE-310 is revised to provide correct date.
2. Section 13341 – Metal Building Systems – at Paragraph 2.1: add Oakland Metal Buildings to the list of metal building manufacturers.
3. See attached HVAC addenda

END OF ADDENDUM



University of South Carolina Pre Bid Conference Sign In Sheet

Columbia, SC

Project Name, Number & Project Manager:
 Pre Bid Conference Date & Time:

Spent Fuel Research Labs Upfit/H27-Z209-B/Pete Fisher
 September 1, 2015 10AM/743 Greene St Conf Room 053 Columbia, SC 29208

Name	Company	Address	Phone #	Email
Jo Rodgers	Henley's Construction Co	2876 Hwy 9 Chenow, SC 29520	803-255-4646	jo.rodgers@sc.rr.com
J.S. TATE	WTS	1316 WASHINGTON ST. COLA, SC 29201	803-792-5181	state@watsonbte.com
PAUL TAYLOR	Solid Structures	2548 Morning side Dr. W Columbia SC 29169	803-926-0298	
STAN RAWLS	SOLID STRUCTURES	2548 MORNINGSIDE DR. WEST COLUMBIA, 29169	0298 803-926-	strawls@solidstructure.info
Mike Dennis	Dennis Electric	570 Greenwood Rd W. Columbia 29169 SC	803-600-0965	dennis@electric.sc.rr.com
Howard Morrow	MAR CONSTRUCTION	121 Riverchase way Lexington SC	803-796-9460	MIKE R & MARR CONSTRUCTION 121 RIVERCHASE WAY LEXINGTON SC 29057
Steve Brass	First Class Construction LLC	1815 Gervens St Suite G Columbia, SC 29204	803-926-1922	sbrass@fcc.com
Bob Summers	Penn contracting	P.O. Box 204 Ballentine SC 29002	803-407-1193	bob@penncontracting.com
in alley	USC	743 Grant	—	Kolleg@fmcx.edu

*Please make sure you list your company name as registered with LIR.
 ♦ By signing and providing your email address, you are authorizing the University of South Carolina to send you information electronically.



University of South Carolina Pre Bid Conference Sign In Sheet

Columbia, SC

Project Name, Number & Project Manager: Spent Fuel Research Labs Upfit/H27-Z209-B/Pete Fisher
Pre Bid Conference Date & Time: September 1, 2015 10AM/743 Greene St Conf Room 053 Columbia, SC 29208

Name	Company	Address	Phone #	Email
Thatcher Hurt	USC	743 Green St	457-5138	Hurtth@mailbox.sc.edu
Aimee Rish	USC Facilities	743 Green St 29208	777-2261	arish@fmc.sc.edu
Pete Fisher	USC		777-9346	P.Fisher@fmc.sc.edu

* Please make sure you list your company name as registered with LLC.
* By signing and providing your email address, you are authorizing the University of South Carolina to send you information electronically.

ADDENDUM NUMBER 1

Date: September 9, 2015
Re: USC - Spent Fuel Research Labs Upfit
Columbia, SC
State Proj. No.: H27-Z209-B
MDI Comm No.: 153197

Submitted By: Danny Wilds, PE
Mechanical Design, Inc.
4403 Broad River Road
Columbia, S.C. 29210
(803)731-9834 Fax: (803)731-9837

The following items take precedence over referenced portions of the Contract Documents for the referenced project dated August 14, 2015, and, in executing a contract, shall become a part thereof.

Where any item called for in the documents is supplemented hereby, the original requirements shall remain in effect. All supplemental conditions shall be considered as added thereto.

Where any original item is amended, voided, or superseded hereby, the provision of such items not so specifically amended, voided, or superseded shall remain in effect.

Clarification:

1. Refer to Specification section 25 55 00 Automatic Temperature Controls, 1.2 SCOPE OF WORK, SECTION A:

Contractor shall provide a Johnson Controls TEC thermostat for control of the packaged heat pump as described in the specifications. The TEC will NOT be connected to the existing building management system at this time, however it shall be capable of being connected to the JCI NAE in the future without further modification.

Changes Pertaining to the Drawings:

1. Refer to Sheet M1, Packaged Heat Pump Schedule Note 6

Add - *"Hot Gas Re-Heat for humidity control"*

END OF ADDENDUM NO. 1

SE-310

INVITATION FOR CONSTRUCTION SERVICES

PROJECT NAME: Spent Fuel Research Labs UpfitPROJECT NUMBER: H27-7209-BPROJECT LOCATION: Corner of Whaley and Sumter Streets Columbia SCBID SECURITY REQUIRED? Yes No PERFORMANCE BOND REQUIRED? Yes No PAYMENT BOND REQUIRED? Yes No

NOTE: Contractor may be subject to a performance appraisal at the close of the project.

CONSTRUCTION COST RANGE: \$ \$125,000- \$200,000DESCRIPTION OF PROJECT: Construct pre-engineered metal building partition, steel lab platform structure, concrete foundation and slab, HVAC, plumbing, and electrical work.BIDDING DOCUMENTS/PLANS MAY BE OBTAINED FROM: www.purchasing.sc.edu-PLAN DEPOSIT AMOUNT: \$ _____ IS DEPOSIT REFUNDABLE Yes No N/A

Bidders must obtain Bidding Documents/Plans from the above listed source(s) to be listed as an official plan holder. Only those Bidding Documents/Plans obtained from the above listed source(s) are official. Bidders that rely on copies of Bidding Documents/Plans obtained from any other source do so at their own risk. All written communications with official plan holders & bidders **WILL** **WILL NOT** be via email or website posting.

IN ADDITION TO THE ABOVE OFFICIAL SOURCE(S), BIDDING DOCUMENTS/PLANS ARE ALSO AVAILABLE AT:

All questions & correspondence concerning this Invitation shall be addressed to the A-E.

A-E NAME: Watson Tate SavoryA-E CONTACT: Sanders TateA-E ADDRESS: Street/PO Box: 1316 Washington Street, Suite 100City: ColumbiaState: SCZIP: 29201-EMAIL: state@watsonatesavory.comTELEPHONE: 803-799-5181FAX: 803-799-5757AGENCY: University of South CarolinaAGENCY PROJECT COORDINATOR: Aimee RishADDRESS: Street/PO Box: 743 Greene StreetCity: ColumbiaState: SCZIP: 29208-EMAIL: arish@fmc.sc.eduTELEPHONE: 803-777-2261FAX: 803-777-7334PRE-BID CONFERENCE: Yes No MANDATORY ATTENDANCE: Yes No PRE-BID DATE: 9/1/2015 TIME: 10:00 AMPLACE: Conference Room 53, 743 Greene Street, ColumbiaBID CLOSING DATE: 9/15/2015 TIME: 2:00 PMPLACE: Conference Room 53, 743 Greene Street, Columbia

BID DELIVERY ADDRESSES:

HAND-DELIVERY:

Attn: Aimee Rish "Bid Enclosed"743 Greene StreetColumbia, SC 29208

MAIL SERVICE:

Attn: Aimee Rish "Bid Enclosed"743 Greene StreetColumbia, SC 29208

IS PROJECT WITHIN AGENCY CONSTRUCTION CERTIFICATION? (Agency MUST check one)

Yes No

APPROVED BY: _____

(OSE Project Manager)

DATE: _____



Land Engineering Associates, LLC

262 Sandhurst Road, Suite 101
Columbia, SC 29210

phone: (803) 528-1437
email: Joe.Land.LEA@sc.rr.com

Sanders Tate, AIA, LEED AP ^{BD+C}
Watson Tate Savory Architects
1316 Washington Street
Columbia, SC. 29201

September 9, 2015

RE: Spent Fuel Research Lab
Columbia, South Carolina

Dear Mr. Tate,

The following are approved lighting fixture substitutions for the above referenced project:

Type "A" Fixture: VT-332-DR-UNV-EB8-1-WL-U (Metalux)

Type "U1" Fixture: UEL1-WH-SD (Sure-Lites)

Type "U2" Fixture: UEL1-WH-SD (Sure-Lites) – Must be suitable for ceiling mount application.

Type "X" Fixture: UX7-0-00-R-WH-VSRD (Sure-Lites)

If you have any questions or comments, please contact me at the phone number or email address listed above.

Sincerely,

Joseph W. Land

Joseph W. Land, PE

1. Sheet S0.0 Concrete note 8. Should this be an allowance?
Delete the words “at the Contractor’s expense”. The Owner will contract separately for concrete testing.
2. Sheet S0.0 Please explain the wording (knock down 2’ of wall length)
See revised drawings S0.0, S1.0, and S1.2
3. Sheet S1.2 Detail 3 Shows 19 ga 8” Z girts spaced a 2’ o/c. The corrugated wall panels are typically 3’ wide. How are the wall panels to attach? And at what fastener spacing?
Typical wall panels will be attached to Z girts spaced at 2’ o/c. A typical 3 foot wall panel can overlap the adjacent panel or be trimmed to work with the 2’ o/c support. Spacing for fasteners should follow the manufacturer’s recommendation. There is no wind load on the metal building wall panels.
4. Will the engineer allow a different design wall system?
No substitution wall design has been submitted for prior approval. Any substitutions to the Contract Documents after contract award must follow the substitution request requirements as spelled out in the Project Manual.
5. What is the design thickness of the concrete and asphalt that will be cut for alternate 1 .
The documents indicate an existing 6 inch thick reinforced concrete slab to be removed the full length of the installed drain line, if Alternate 1 is accepted.
6. Are drawings available for the existing building, these are needed in order to know existing concrete thickness and building height.
Drawings of the existing building are not available.

General Notes:

- Design Specifications: International Building Code (2012 Edition).
Design Loads:
Floor live load: Slab on Grade 100 PSF
Dead load: Actual
- In case of a discrepancy in dimensions or details, between Architectural and Structural drawings, not affecting strength, the Architect's plans shall govern. For dimensions and details not shown, see Architect's plans and/or field measurement shall be performed by G.C.
- The construction falsework design (if any) is the responsibility of the Contractor. The design shall be performed by a Registered Engineer and shall be submitted for approval before commencing of the work.
- Where a detail is shown on Structural drawings for one condition, it shall apply to all similar or like conditions, unless noted or shown otherwise on plans.
- All items shall be tightly anchored or attached square, plumb, and true, or in other planes and shapes as shown on the drawings. Joints shall be tight, even, and free of offsets. No field altering of any members will be allowed that will cause them not to be in accordance with the drawings and specifications, without written approval of the Project Engineer.
- The dimensions shown with a suffix "+/-" are approximate and shall be verified by the Contractor before fabrication.
- If the Contractor finds a difference between these drawings & existing conditions, or finds any other conditions which prohibit execution of the work as directed in these drawings, the Contractor shall notify the Engineer immediately.
- The owner shall employ a laboratory to perform the quality assurance, sampling, testing and/or inspection at his expense. Final selection of such laboratory shall be approved by the Engineer.
- The foundation is designed based on an allowable presumptive soil bearing pressure of 2 KSF per IBC 2012. The foundation excavation shall be verified by the Geotechnical Engineer before the placement of foundation. All fill soil shall be compacted at 8" lift in loose thickness. All subgrade of foundation shall be compacted to 95% standard proctor density as a minimum or as directed by soil report.
- Any revision/modification to the original design during the shop drawing process, the Contractor shall clearly cloud line all the changes and shall receive approval from the Engineer in writing before fabrication. Any costs associated with correcting the unapproved change shall be at the Contractor's expense.

Concrete:

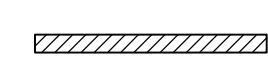


- Concrete: concrete minimum compressive strength at 28 days shall be 3,000 PSI.
- Reinforcement: all mild reinforcement bar shall be A615 grade 60 steel. All welded wire fabric shall conform to ASTM A165, grade 65. All welded wire fabric shall be in sheets and shall be supported on chairs.
- Bending dimensions & tolerances for reinforcing bar shall conform to current CRSI Manual of Standard Practice.
- Lap splices shall conform to the current CRSI Manual of Standard Practice unless otherwise noted.
- Horizontal construction joints to be scrubbed with a coarse wire brush at the approximate time of initial set to remove all laitance and to produce a roughened surface.
- Concrete work shall comply with ACI "Specifications for Structural Concrete" (ACI 301-10) and applicable provisions of ACI 318-11. Keep a copy of ACI Field Reference Manual (ACI SP-15-10) which includes ACI 301 and other ACI and ASTM references on the job.
- Detailing, fabricating, and placing of reinforcing steel and accessories shall be in accordance with ACI "Details and Detailing of Concrete Reinforcement" (ACI 315-99) and shall comply with (ACI 318-11) and with (ACI 301-10).
- The owner shall select the testing laboratory & employ the laboratory at the contractor's expense to perform concrete strength testing per ACI 318-11. Final selection of testing laboratory shall be approved by engineer.

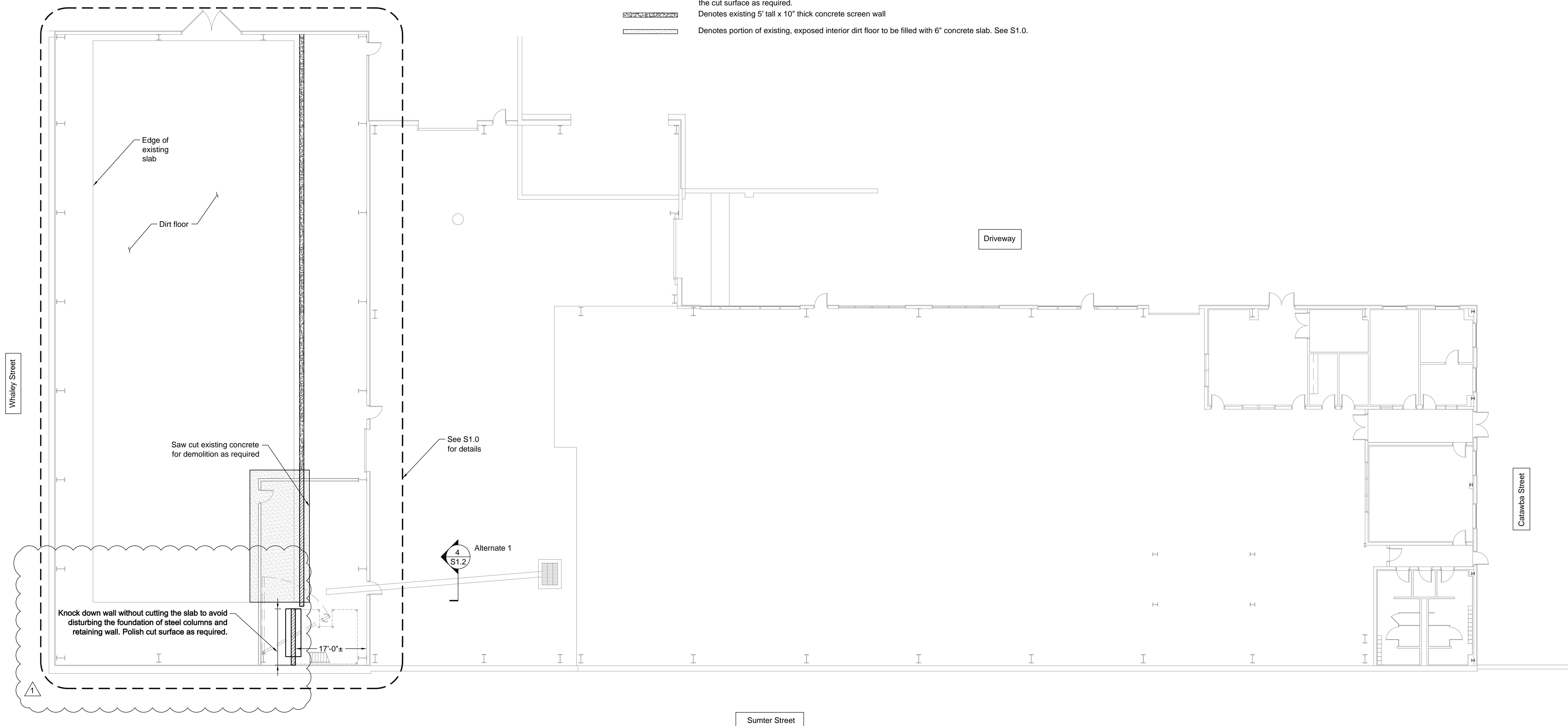
Metal Framing (light gage):

- All metal framing shall be designed, fabricated and erected in accordance with the American Iron and Steel Institute's "Specification for the Design of Cold Formed Steel Structural Members."
- Metal framing shall be of the size, gage and section properties indicated on the drawing or as required for the specific loading condition.
- All welding of metal framing shall be performed by certified welders experienced in the welding of light gage members.
- All metal framing shall be saw cut, square and true. Cutting of metal framing with a torch will not be permitted.
- Prior to proceeding w/ any metal framing work, the Contractor shall submit to the Architect/Engineer, for approval, shop drawings showing the size, location & connection details of all load bearing metal framing and all exterior framing. Shop drawings shall include a plan and elevation of all wall or soffit framing and connection details. The Contractor shall also submit calculations prepared and sealed by a Professional Engineer registered in the State of South Carolina which demonstrate that all applied loads will be resisted by the supplied framing system.
- All light gage walls shall be non-load bearing walls unless noted otherwise.

Structural and Miscellaneous Steel

- All structural and miscellaneous steel shall conform to the latest edition of the AISC "Specification for Structural Steel Buildings" and all its supplements, and to the AISC "Code of Standard Practice for Steel Buildings and Bridges".
- All structural steel shall conform to ASTM A-36, FY=36,000 PSI unless otherwise noted.
- Steel W-Shapes shall conform to ASTM A992.
- All rectangular or square steel HSS-Shapes shall conform to ASTM A500 grade B, FY=46,000 PSI.
- All welded connections shall be done with E70XX electrodes with 3/16" min. material. All welding shall comply with AWS D1-1 structural welding code the latest edition. All bolts shall be A325 snug tight bolts, unless otherwise noted.
- The structural steel shall have one coat of anti-rust paint and one coat of finish paint of color determined by the owner. Prior to painting, all steel surfaces shall be prepared in accordance with SSPC-SF3. All paints shall be approved by the Owner/Architect prior to their use.
- Fabrication and assembly of bolted connections shall comply with applicable sections of AISC "Specification for Structural Joints using ASTM A325 or A490 bolts."
- No openings in beams shall be permitted without the written permission of the engineer.
- The use of a gas-cutting torch in the field for cutting holes or for correcting fabrication errors will not be permitted on structural framing members except w/ the written approval of the Engineer for each specification.
- An independent inspection agency shall be employed by the owner and approved by the engineer to inspect the structural steel in the field and verify that it conforms to the requirements of the contract documents.
- All columns shall have 5/8" thick cap plates unless noted.
- All anchor bolts shall be ASTM F1554 Grade 36 type B, unless noted otherwise.
- Steel grating shall be made of 1 1/2" x 3/16" bearing bars with maximum 1 3/16" center-to-center spacing.

-  Denotes existing 5' tall x 10" thick concrete screen wall to be demolished. The demolition can be achieved by saw cutting existing concrete slab/footing, or knocking down the wall while preserving slab/footing below and polishing the cut surface as required.
-  Denotes existing 5' tall x 10" thick concrete screen wall
-  Denotes portion of existing, exposed interior dirt floor to be filled with 6" concrete slab. See S1.0.



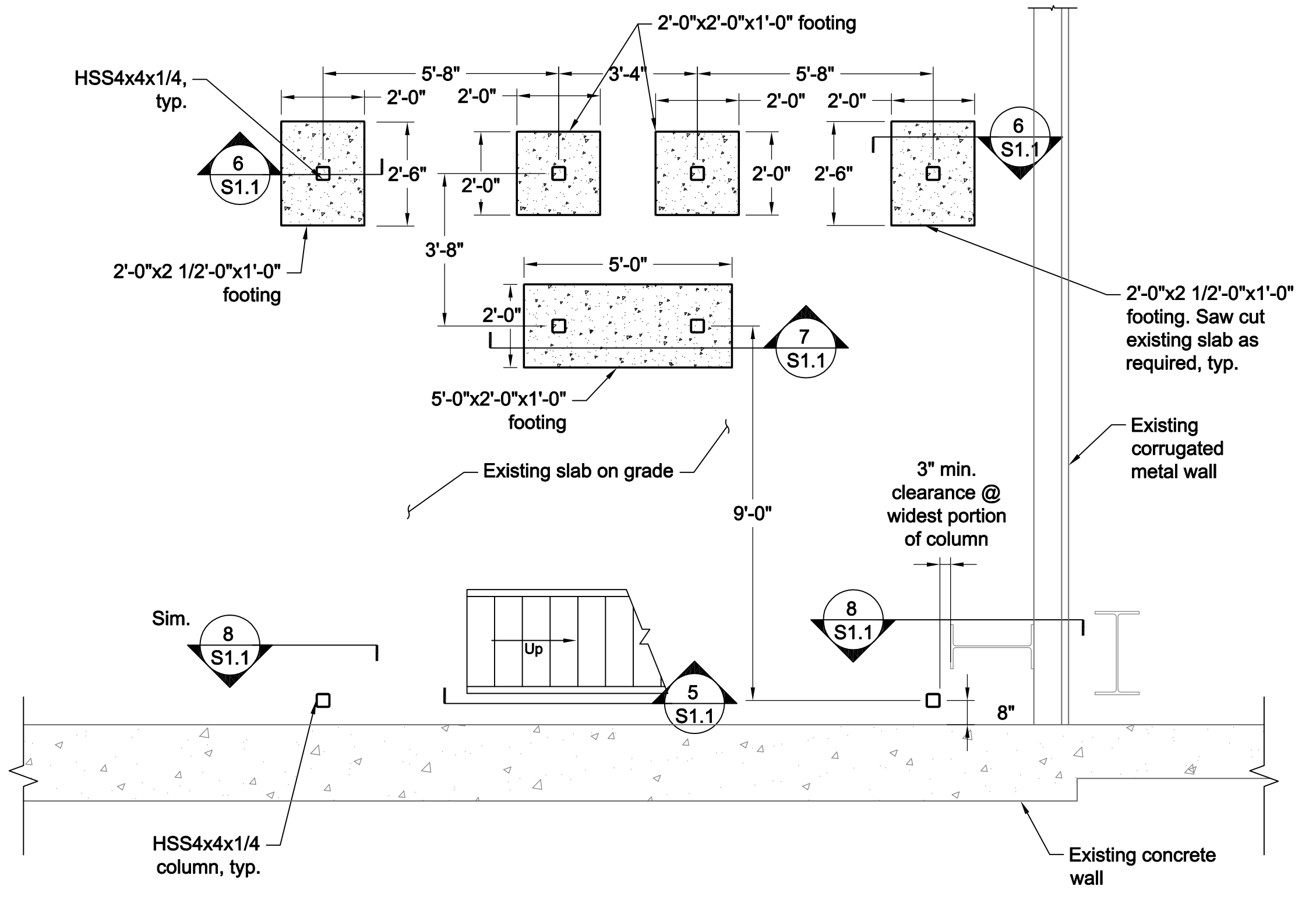
Plan view
Scale: 3/32" = 1'-0"



Project Number: 1433.2
Date: 17 AUGUST 2015

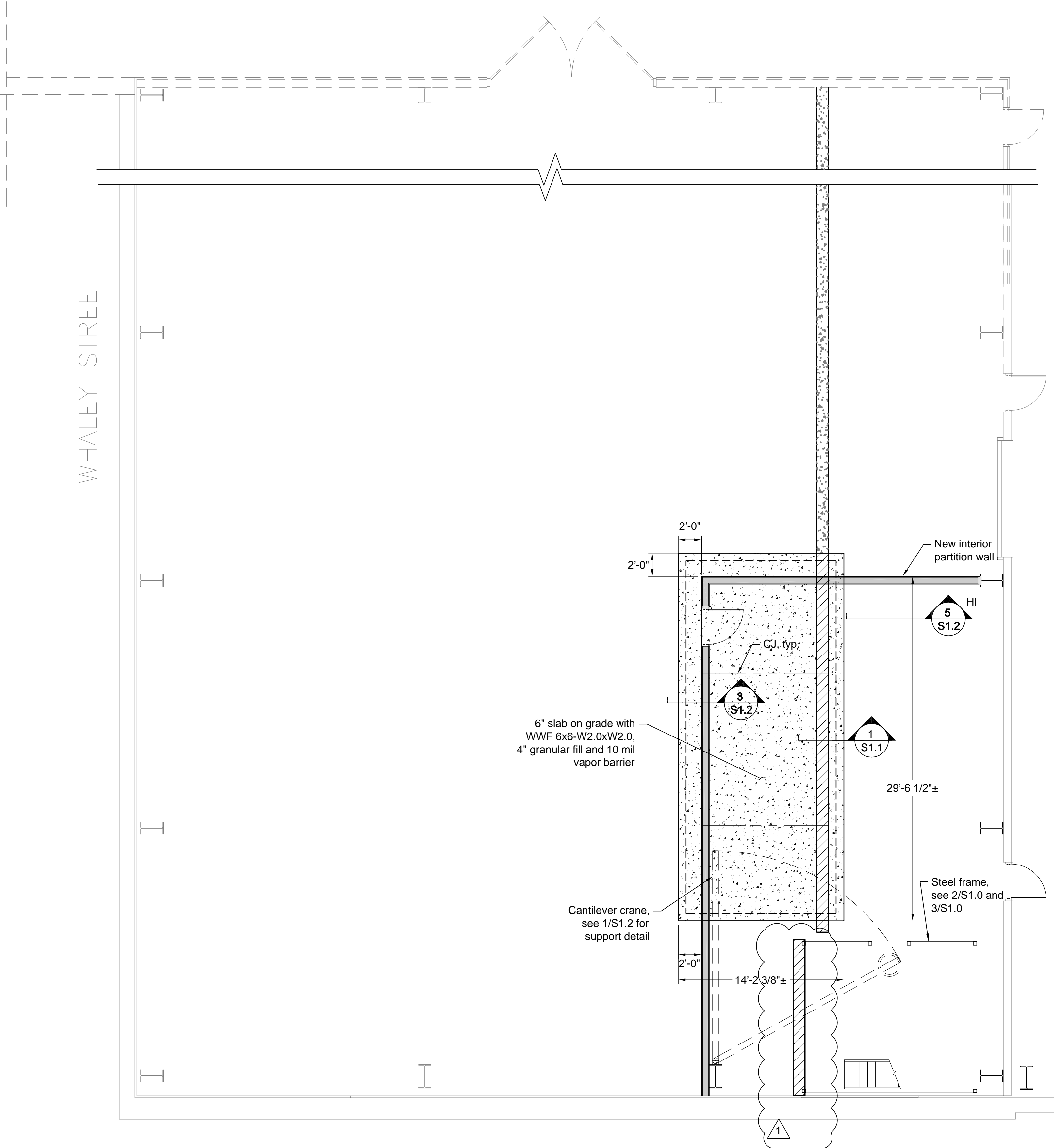
Revisions:

1	9-9-15	Addendum 1



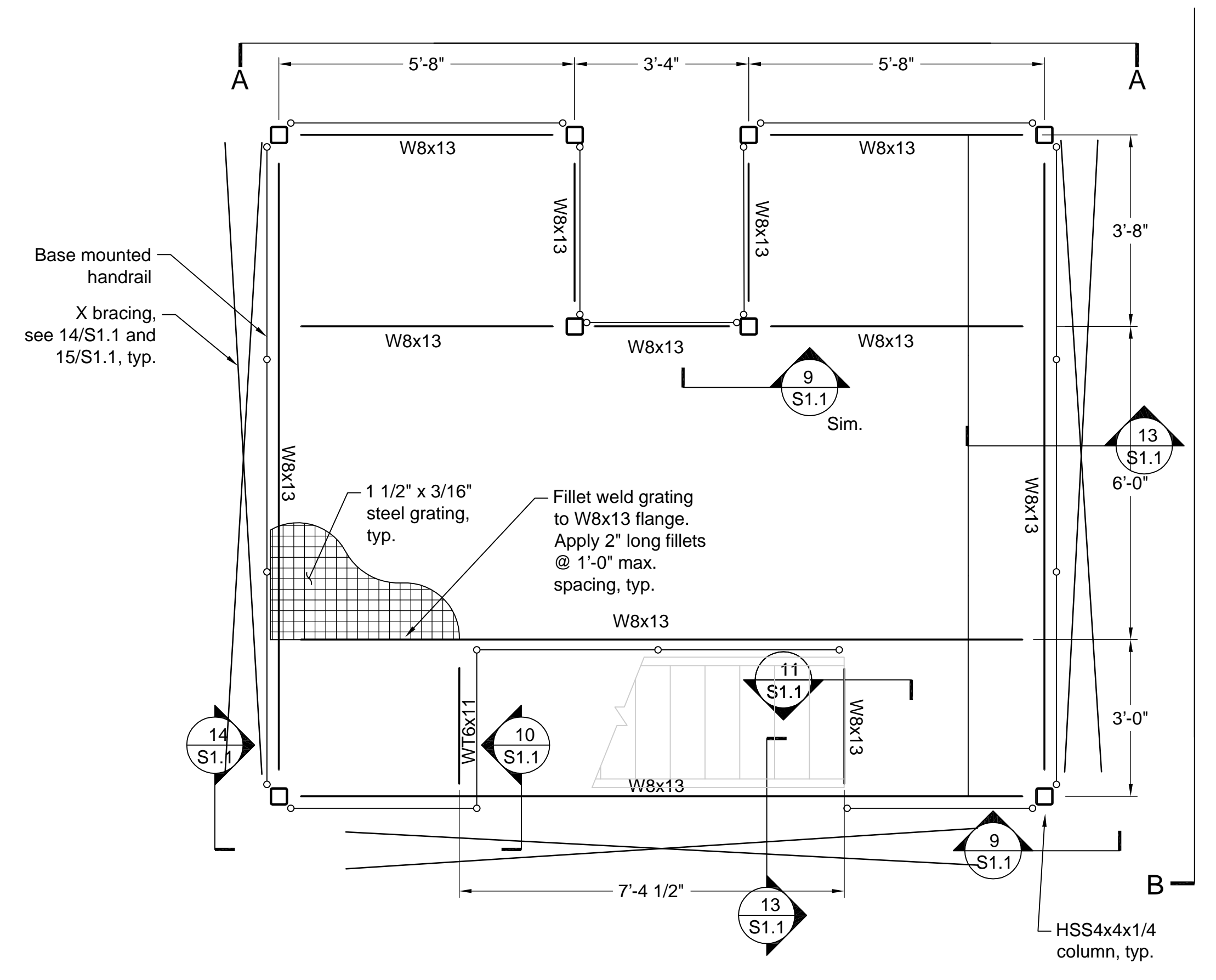
2 - Steel Frame Foundation Plan

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

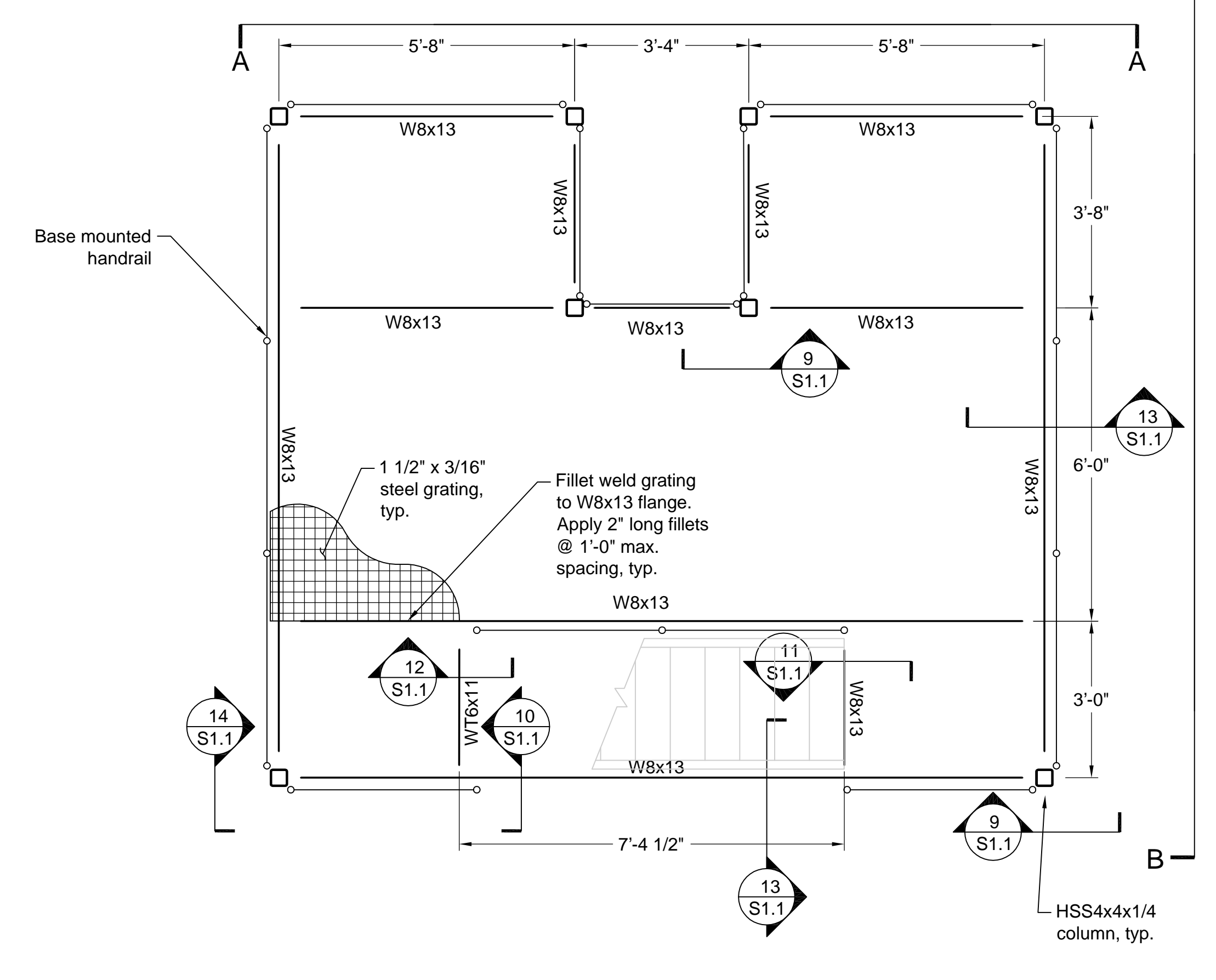


1 - Rotor Drive Train Area Foundation Plan

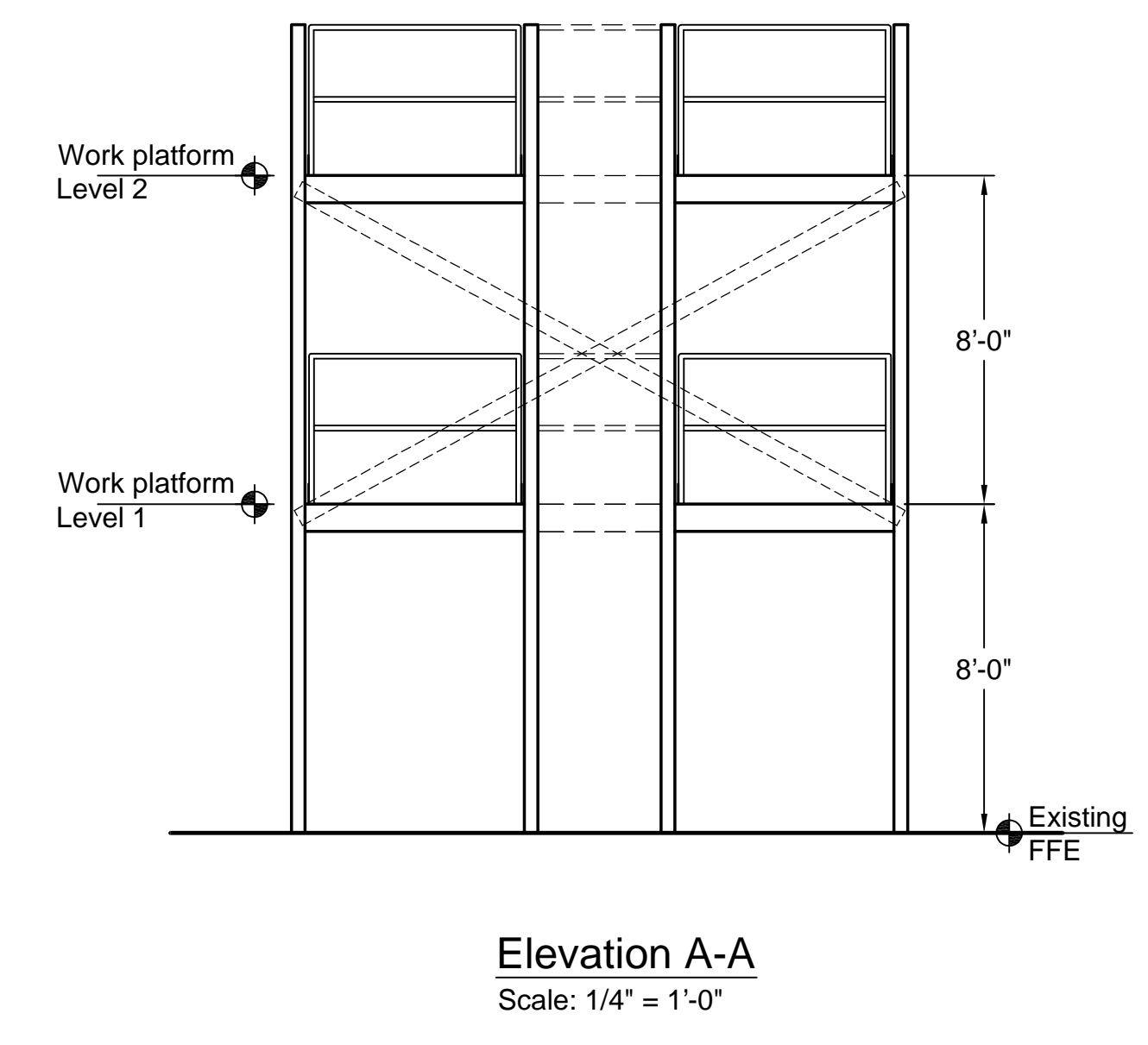
Scale: 3/16" = 1'-0"



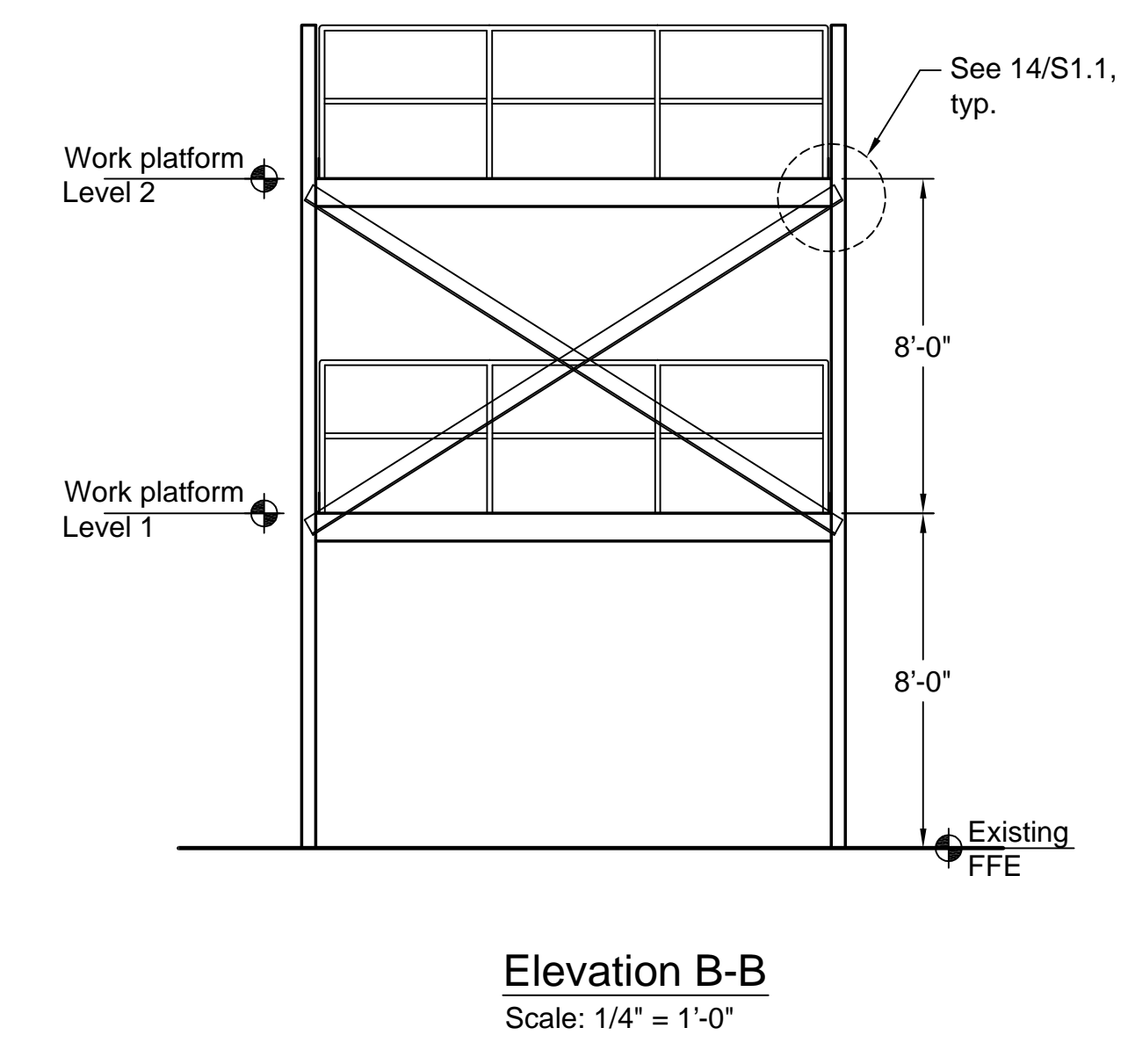
Level 2 Framing Plan



Level 1 Framing Plan



Elevation A-A
Scale: 1/4" = 1'-0"



Elevation B-B
Scale: 1/4" = 1'-0"

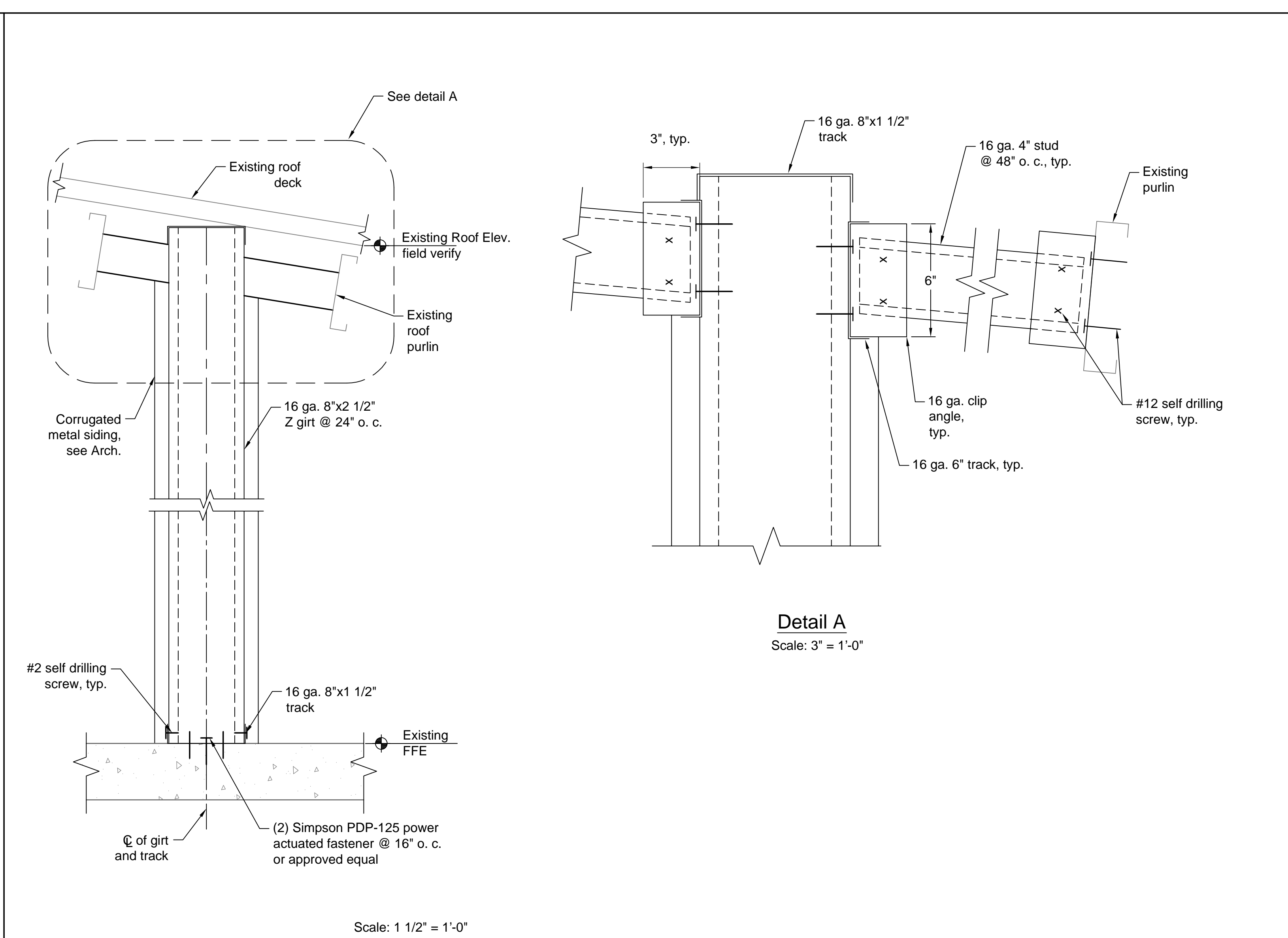
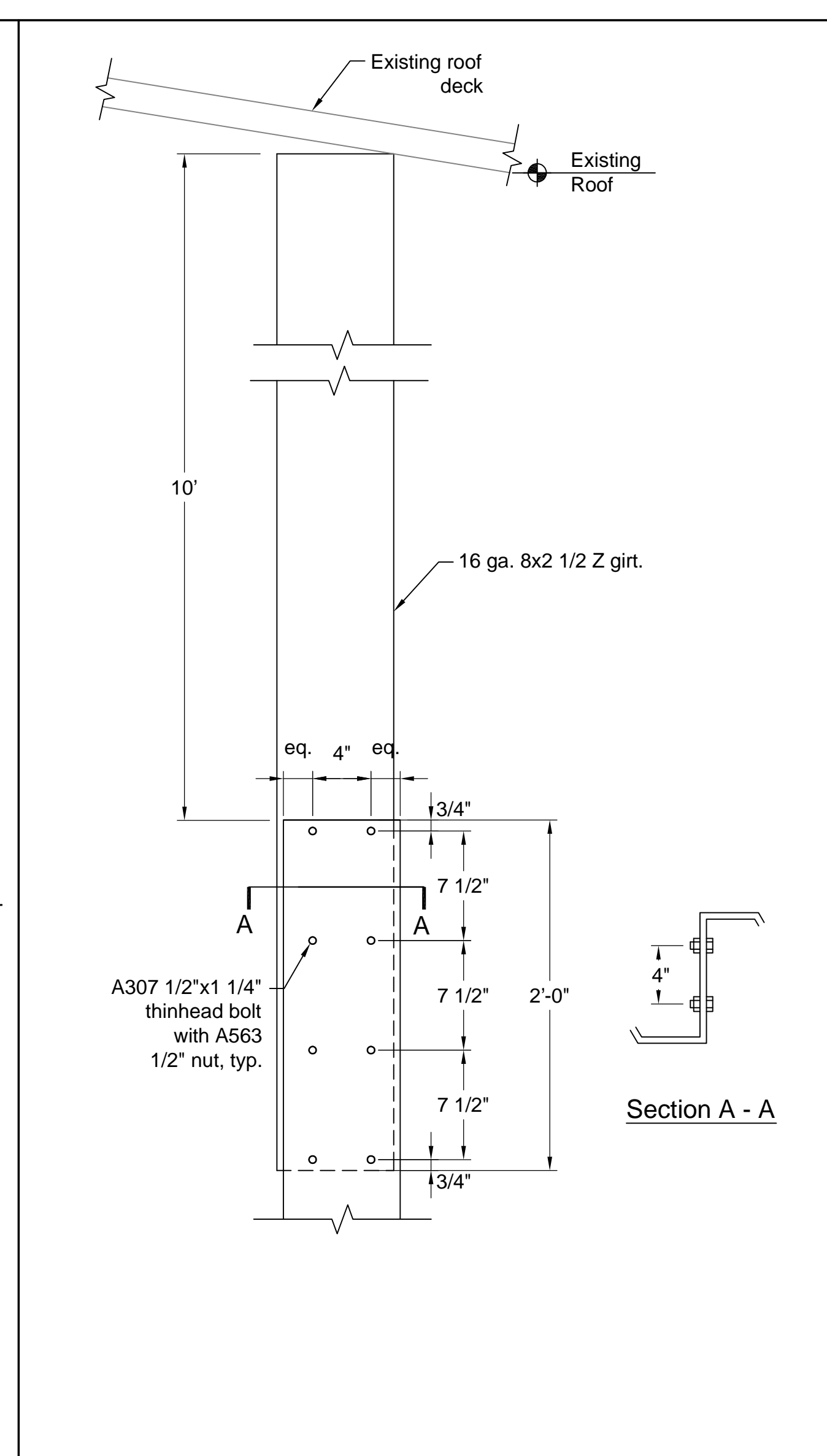
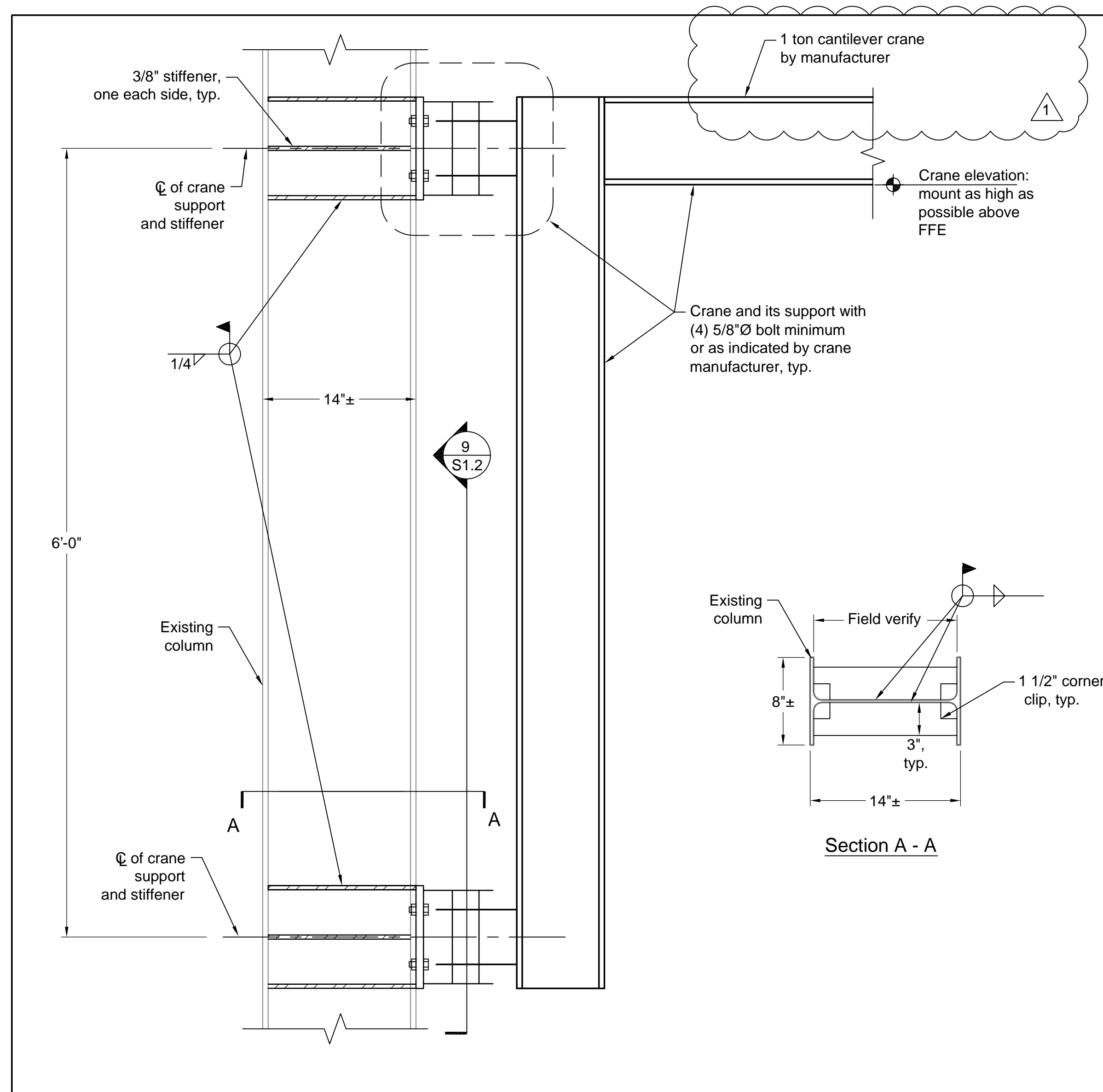
3 - Typical Steel Floor Framing Plan and Frame Elevation

Scale: 1/2" = 1'-0"



Project Number: 1433_2
Date: 17 AUGUST 2015

Revisions:	Date	Description
1	9-9-15	Addendum 1



1 - Cantilever Crane Support Detail

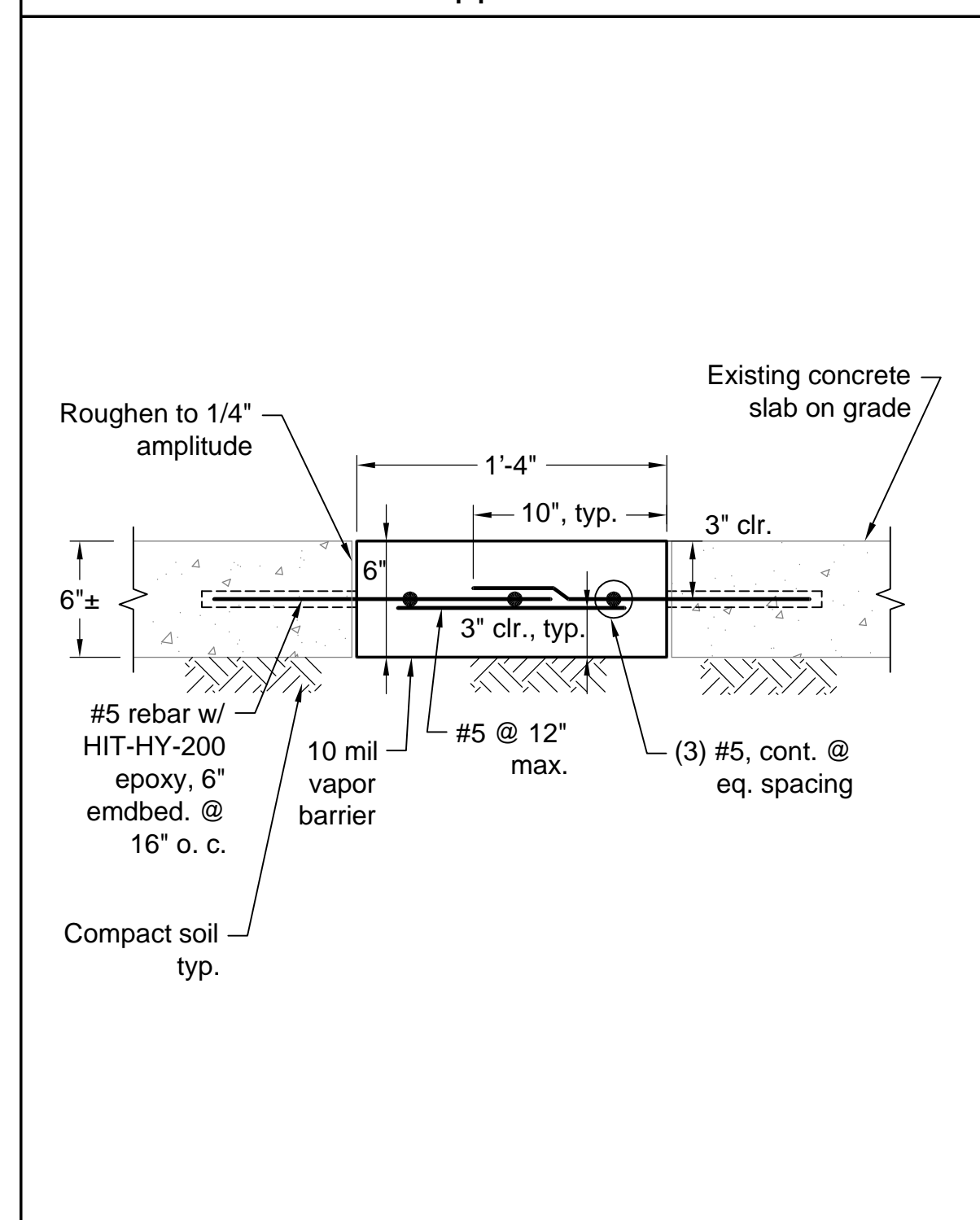
Scale: 1 1/2" = 1'-0"

2 - Vertical Girt Splice (Optional)

Scale: 1 1/2" = 1'-0"

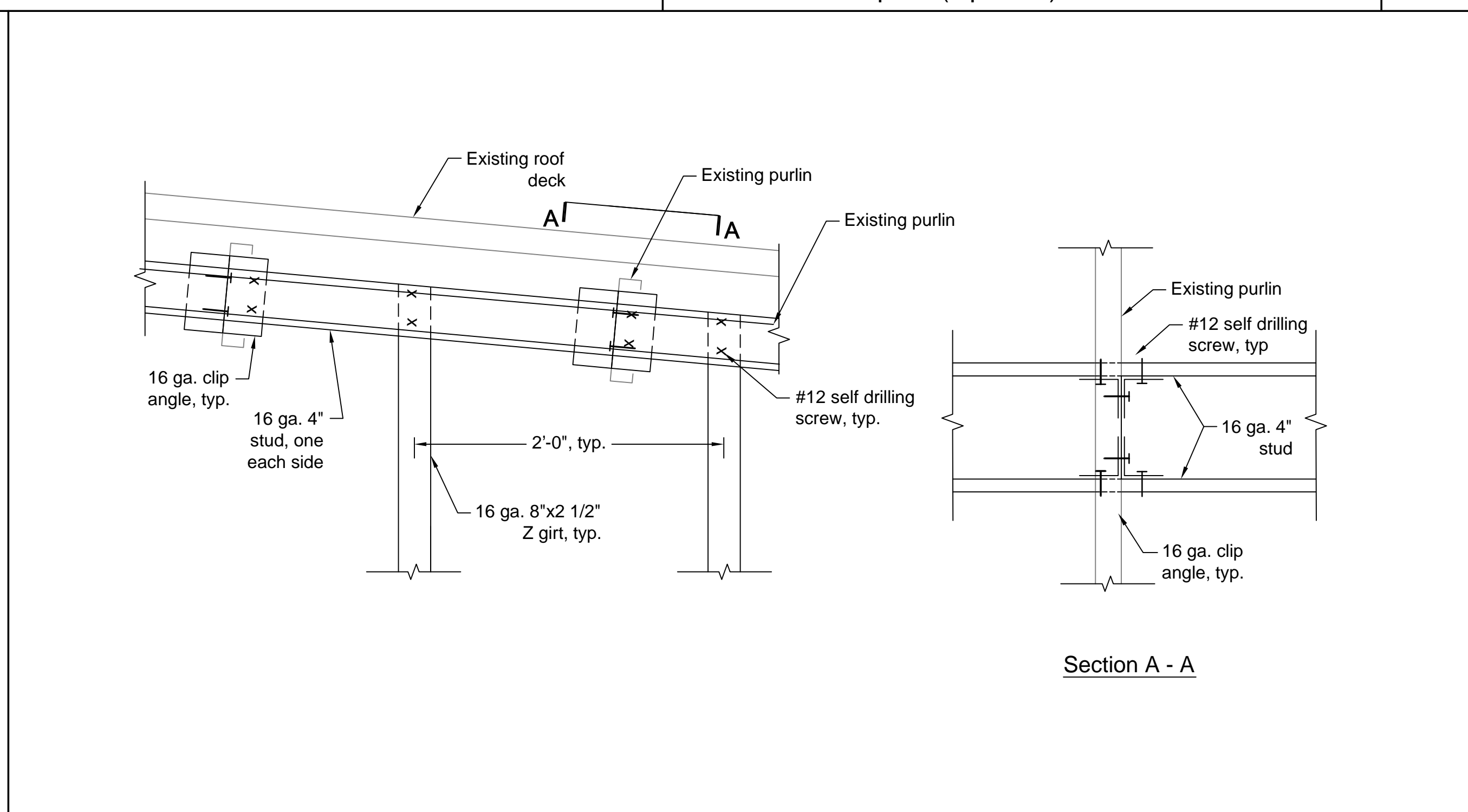
3 - Partition Wall Detail (wall parallel to purlins)

Scale: 1 1/2" = 1'-0"



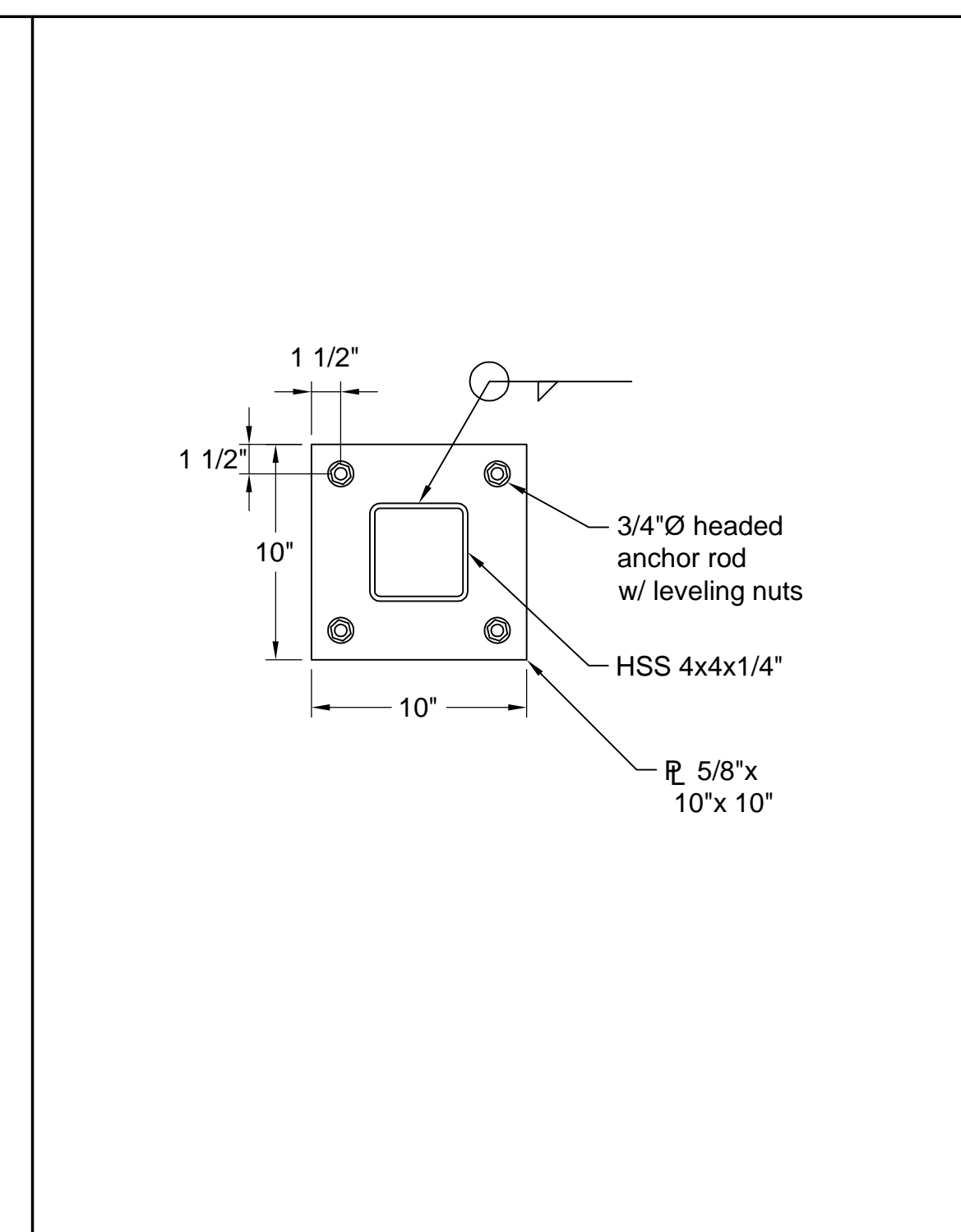
4 - Section

Scale: 1 1/2" = 1'-0"



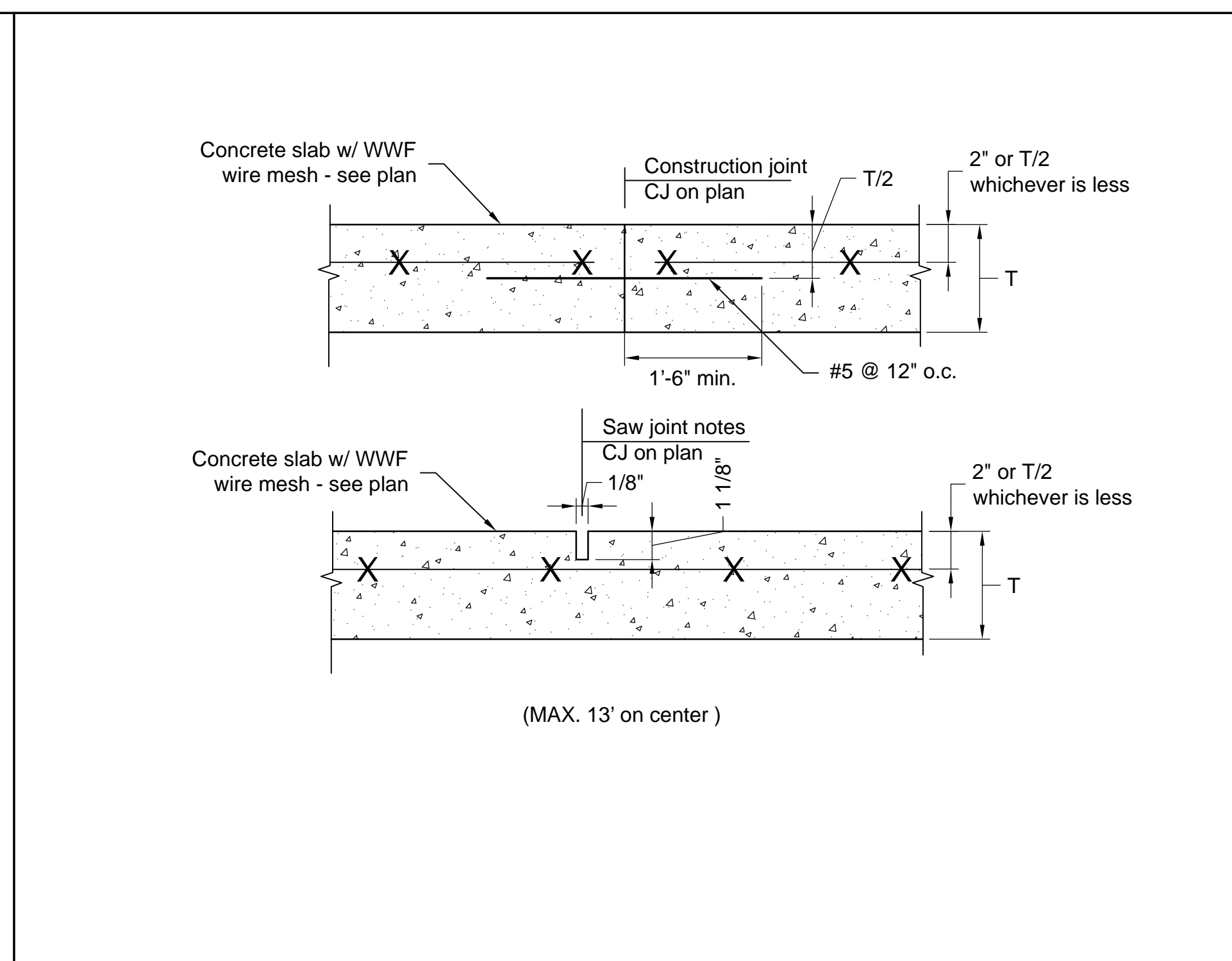
5 - Partition Wall Detail (wall perpendicular to purlins)

Scale: 1 1/2" = 1'-0"



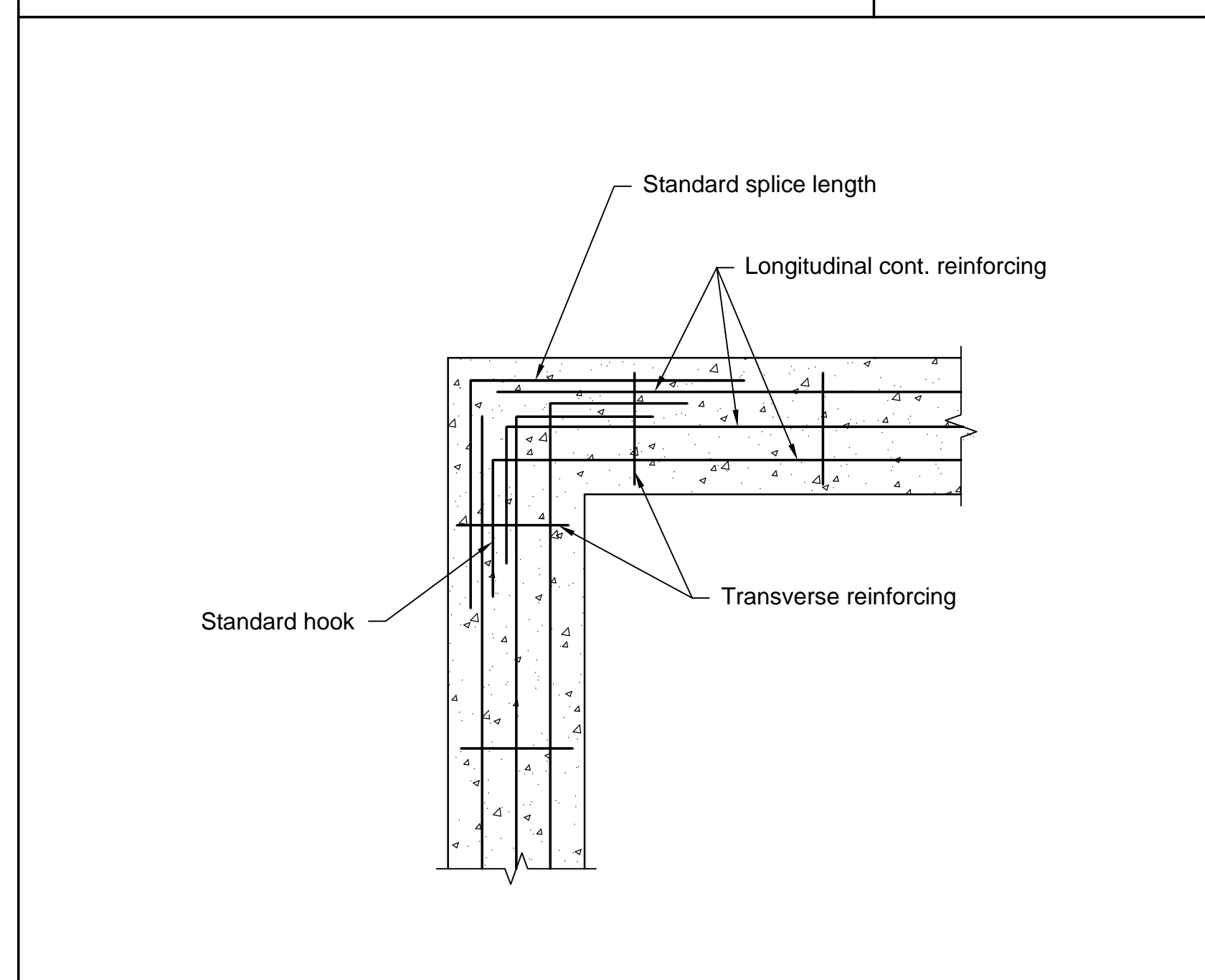
6 - Section

Scale: 1 1/2" = 1'-0"



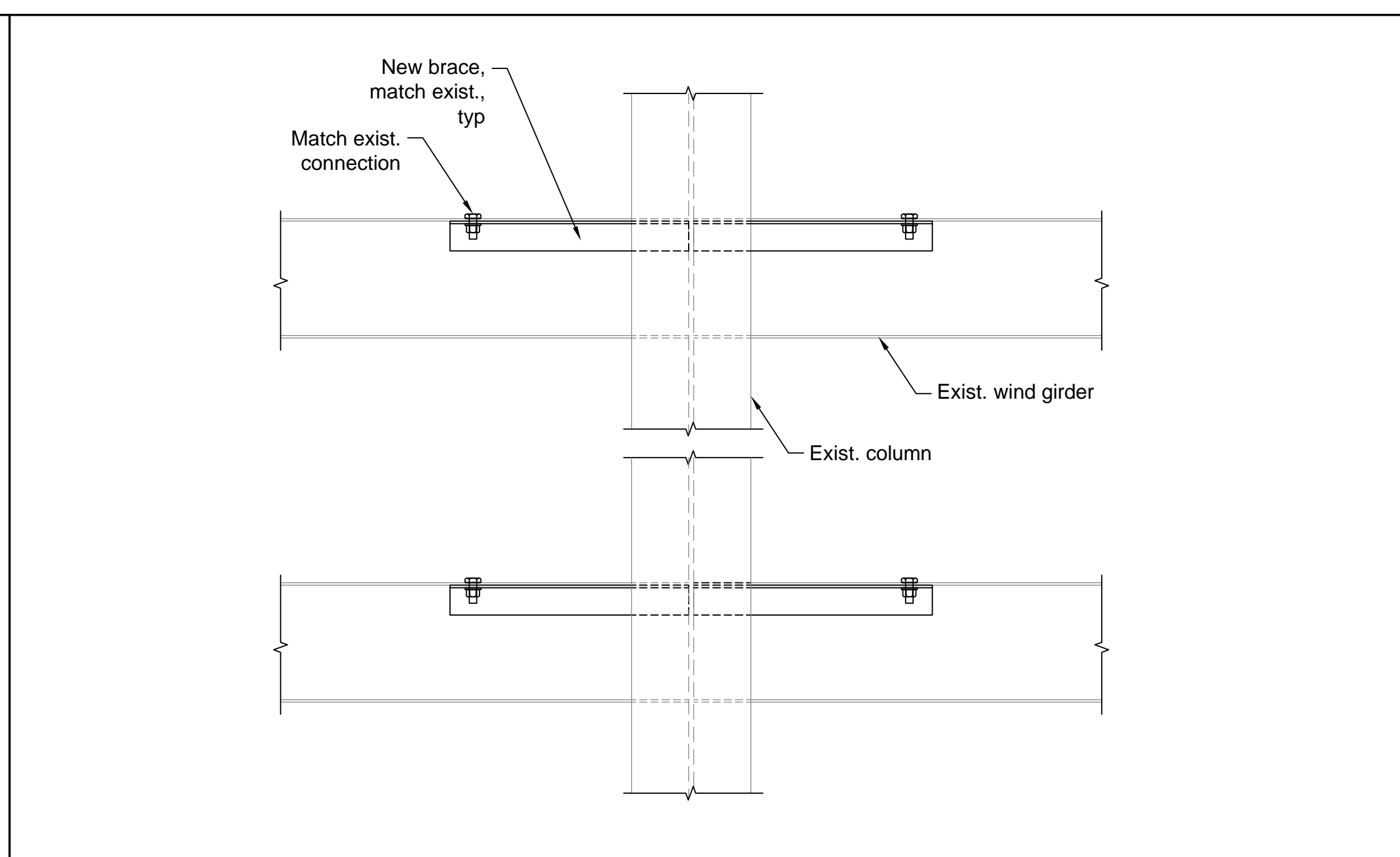
7 - Contraction Joint Standard Detail

Scale: NTS



8 - Typical Footing Corner Detail

Scale: NTS



9 - Column Bracing Detail

Scale: NTS