

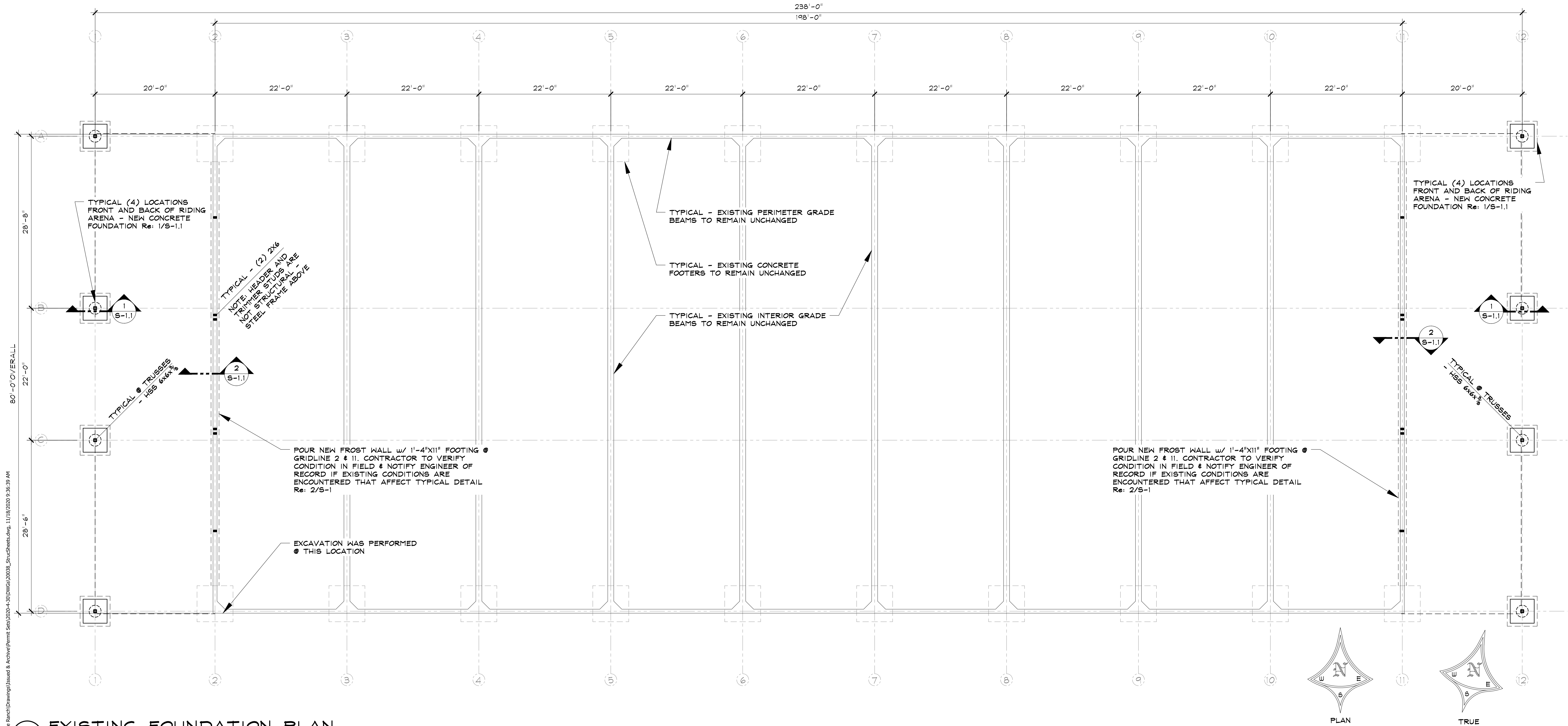
STRUCTURAL NOTES

- Applicable Codes and Standards:
- A. 2015 International Building Code (including all local adoptions)
  - B. 2015 International Residential code (including all local adoptions)
  - C. "Minimum Design Loads for Buildings and Other Structures" - ASCE 7-10
  - D. "Building Code Requirements for Structural Concrete" - ACI318
  - E. "Steel Construction Manual" - AISC fourteenth edition
  - F. "National Design Specification for Wood Construction" - ANSI/APA-PDA NDS 2015
- Design Live Loads:
- A. Roofs: 115 psf Ground Snow Load, 96 psf Roof Snow Load, 20 psf Dead Load
  - B. Wind: 115 mph, Exposure B
- Foundation Criteria:
- A. Design of continuous and individual footings is based on a maximum allowable soil bearing pressure of 3,000 psf dead load plus full live load and no minimum dead load placed on the natural undisturbed soils below frost depth per recommendations by NWCC.
- Structural Steel:
- A. Structural steel shall be detailed and fabricated in accordance with the latest version of the AISC Manual of Steel Construction.
  - B. All bolts, including anchor bolts, shall conform to ASTM spec. A307.
  - C. Structural steel rolled shapes, including plates and angles, shall be ASTM A36.
  - D. Expansion bolts called for on the drawings shall be Simpson "Weg-Ali", "Strong-Bolt 2" or approved wedge type anchors with the following minimum embedments: 3/4" diameter bolts - 3 3/8", 5/8" diameter bolts - 2 3/4", 1/2" diameter bolts - 2 1/4".
  - E. All epoxy shall be Simpson "Set-XP" and shall be installed per the "Anchoring and Fastening Systems For Concrete and Masonry" Simpson catalog #C-SAS-2012 by a qualified personnel.
  - F. Field welded connections must be inspected by the Engineer of Record.
  - G. Fillet welds indicated on the plans shall be of E70xx electrodes and shall be the minimum size specified in the AISC Manual of Steel Construction, Table J2.4.
  - H. All welds shall be performed by a certified welder.

- Structural Wood Framing:
- A. Unless noted otherwise, all 2" lumber shall be Douglas Fir S4S No. 2 and better. All solid timber beams and posts shall be DF-L No. 1 or better.
  - B. Unless noted otherwise, minimum nailing shall be provided as specified in Table No. 2304.9.1, "Fastener Schedule", of the 2015 IBC or Table No. R602.3(1), "Fastener Schedule For Structural Members", of the 2015 IRC.
  - C. Wall and floor sheathing shall be APA rated with exterior glue and graded in accordance with APA standards. Panel identification and thickness shall be as noted on the drawings.
  - D. Where light gauge framing anchors are shown or required, they shall be Simpson "Strong Tie" (or equal approved by ICBO). They shall be installed with the number and type of fasteners recommended by the manufacturer to develop the rated capacity.
  - E. Laminated Veneer Lumber shall be of such stress grade to provide an allowable bending stress of 2,600 psi, allowable shear stress parallel to the glue line of 285 psi and a modulus of elasticity of 1,900,000 psi.
  - F. Glue laminated timber shall be stress grade marked 24F-V4 unless noted otherwise.
  - G. Roof trusses shall be designed by a Colorado Registered Professional Engineer to support the full live load and dead loads of the roof, ceiling, and any other superimposed loads. Calculations and shop drawings, including member sizes, lumber species, and grade and substantiating data for connector capacities and truss bearing, shall be submitted to the Architect or Engineer for review and approval prior to fabrication.
  - H. Floor joists shall be plant fabricated I series with LVL or solid wood flanges and plywood or OSB webs, and shall carry ICBO approval for a complete section. Joists shall be designed to carry full live and dead loads of the roof(s), floor(s), and any superimposed loads.
  - I. Roof overframing shall be 2x6 rafters @ 24" O.C. w/ 2x6 studs @ 24" O.C. to stack over rafters or purlins below.
- Field Verification:
- A. The contractor shall thoroughly inspect and survey the existing structure to verify dimensions, elevations, framing, etc., which may affect the work shown on the drawings and report any variations or discrepancies to the Engineer.

STRUCTURE LEGEND

|  |                           |
|--|---------------------------|
|  | = COLUMN BELOW            |
|  | = COLUMN ABOVE            |
|  | = CONT. COLUMN THIS LEVEL |
|  | = RAFTER                  |
|  | = JOIST                   |
|  | = BEAM                    |
|  | = RIM                     |
|  | = LEDGER                  |
|  | = TYPICAL HEADER          |
|  | = CLOSURE WALL            |
|  | = HANGER                  |
|  | = CLIP                    |



EXISTING FOUNDATION PLAN

NOTE: FOUNDATION SIZES ARE BASED ON EXCAVATION PERFORMED IN FIELD BY CONTRACTOR @ SELECT LOCATIONS. ALL OTHER LOCATIONS ARE ASSUMED TO BE SIMILAR

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

52418

11 . 18 . 20

SEAD

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HOME RANCH ARENA ROOF

27315 HOME RANCH ROAD

ROUTT COUNTY, COLORADO

A NEW ROOF STRUCTURE FOR:

HOME RANCH ARENA

ISSUE DATES

REVIEW SET

9 . 28 . 20

PERMIT

11 . 18 . 20

DRAWN BY: SMS

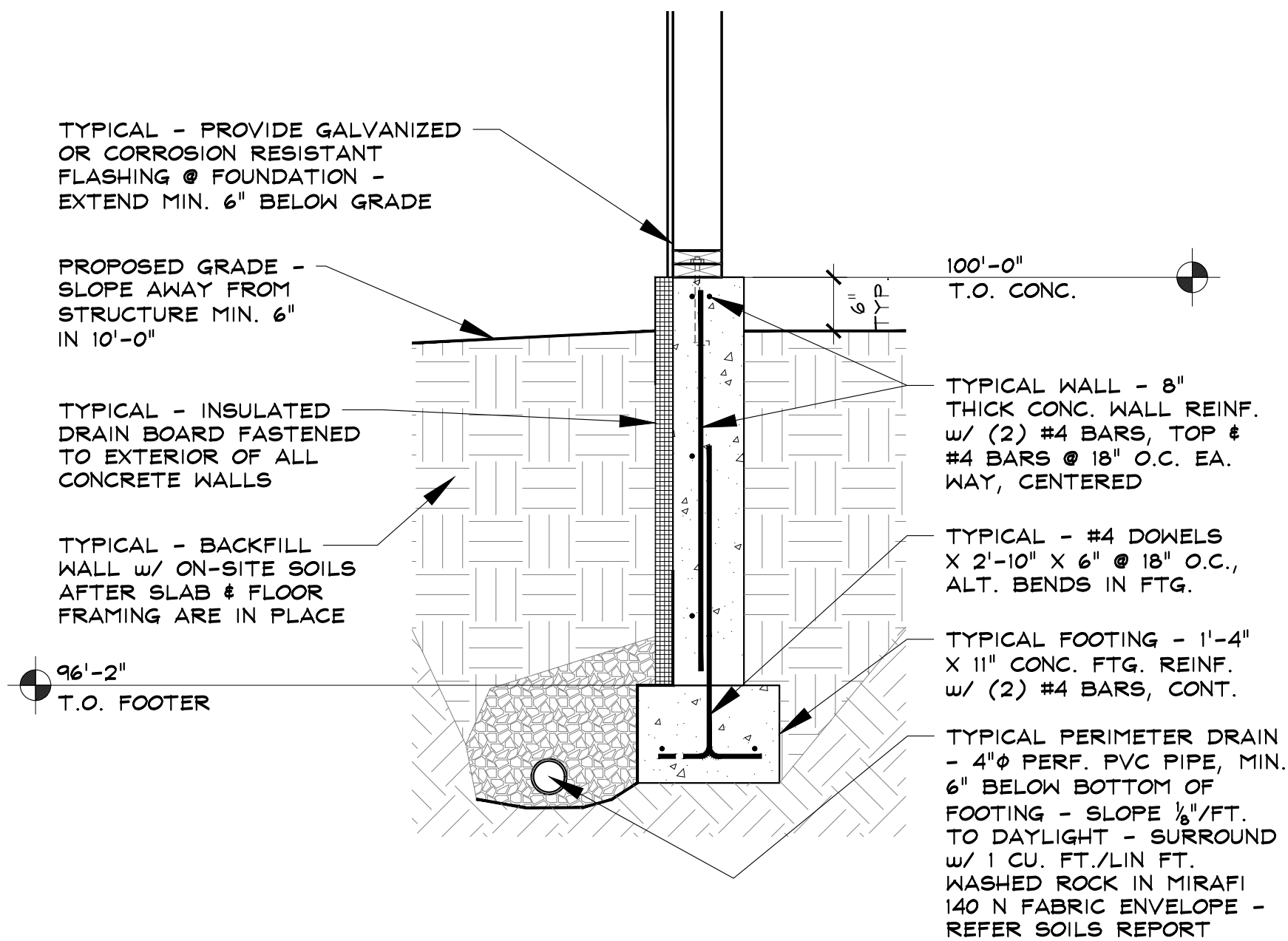
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PROJECT # 20038

EXISTING FOUNDATION PLAN & NOTES

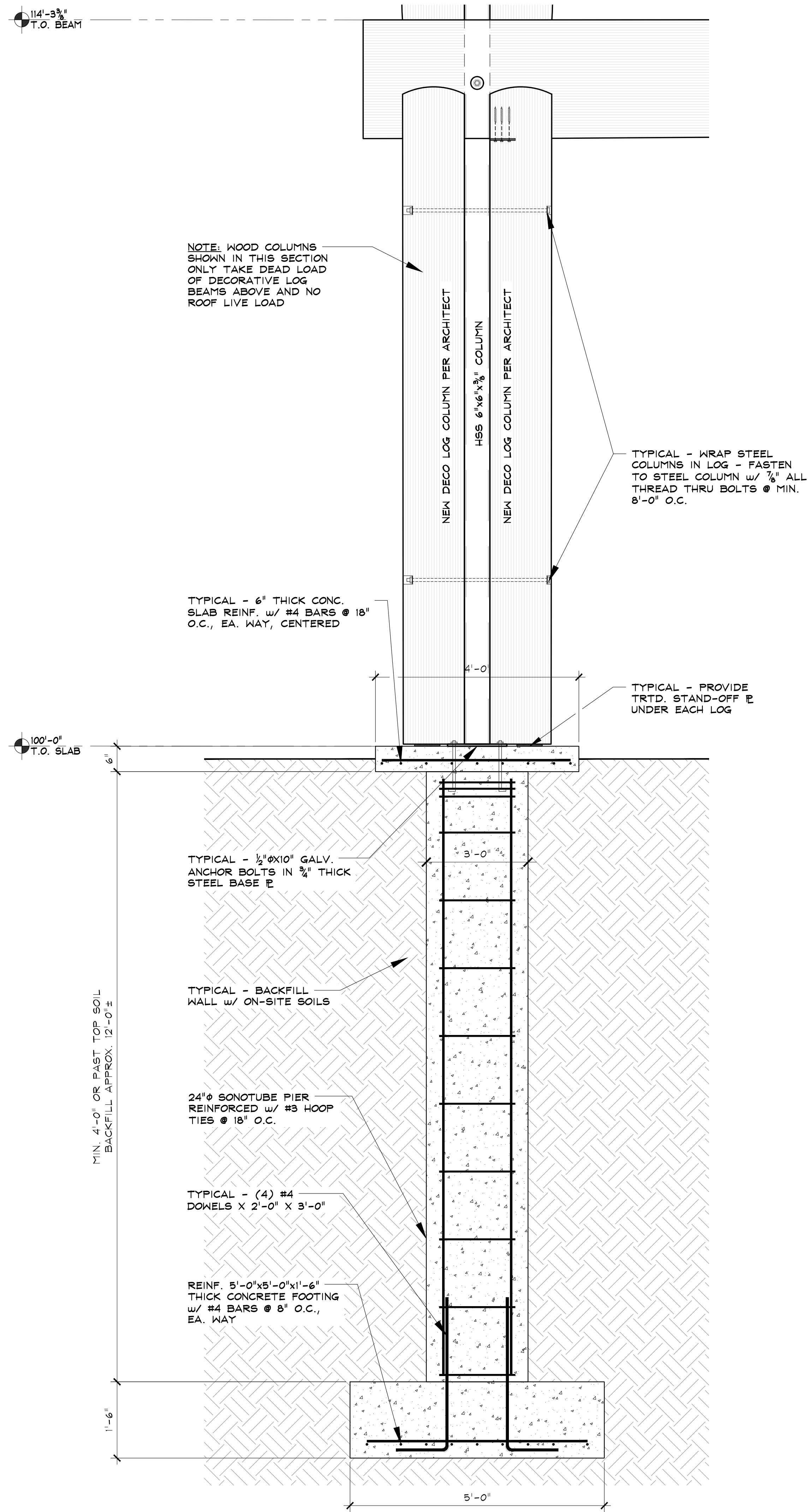
S-1

SHEET 1 of 5



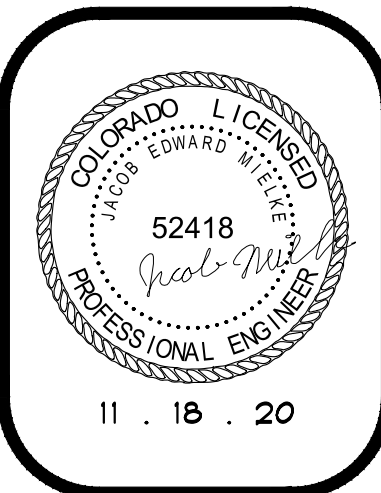
2 TYPICAL NEW CONCRETE WALL

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



1 TYPICAL NEW CONCRETE PIER

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



HOME RANCH ARENA ROOF

27315 HOME RANCH ROAD  
ROUIT COUNTY, COLORADO

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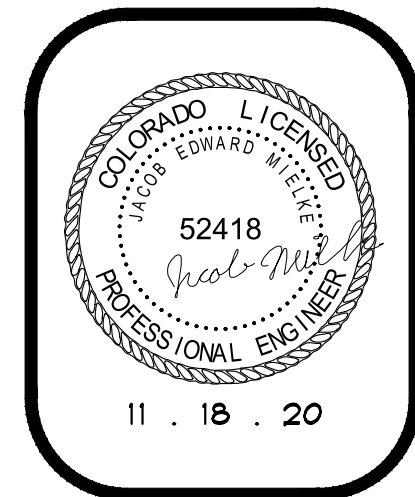
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NEW FOUNDATION  
SECTION

S-1.1

SHEET 2 of 5



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HOME RANCH ARENA ROOF

27315 HOME RANCH ROAD  
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A NEW ROOF STRUCTURE FOR:  
HOME RANCH ARENA

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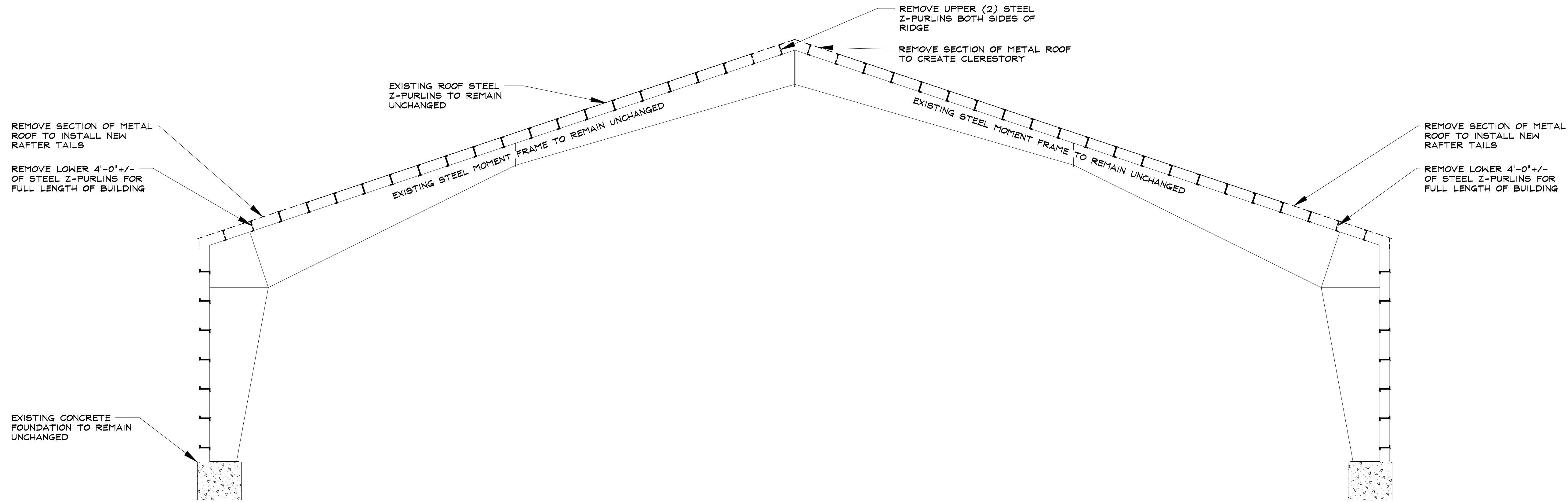
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DEMOLITION PLAN  
& SECTION

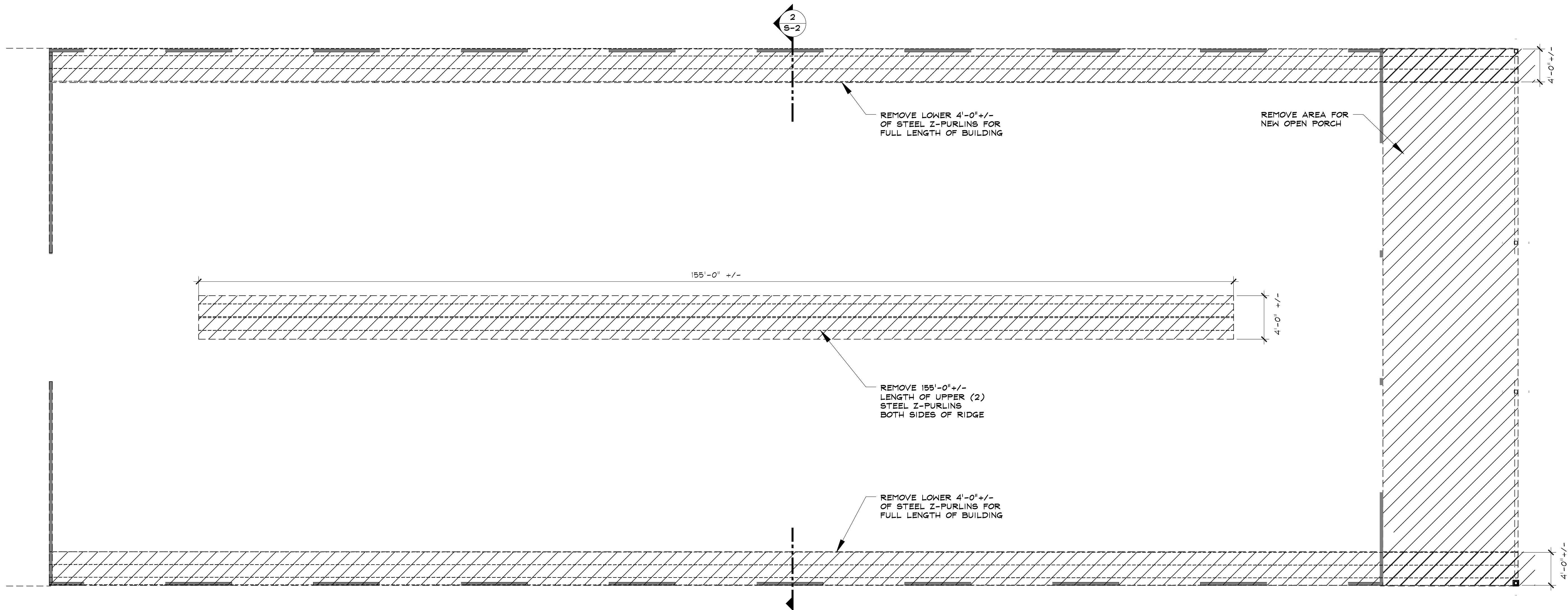
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SHEET 3 of 5



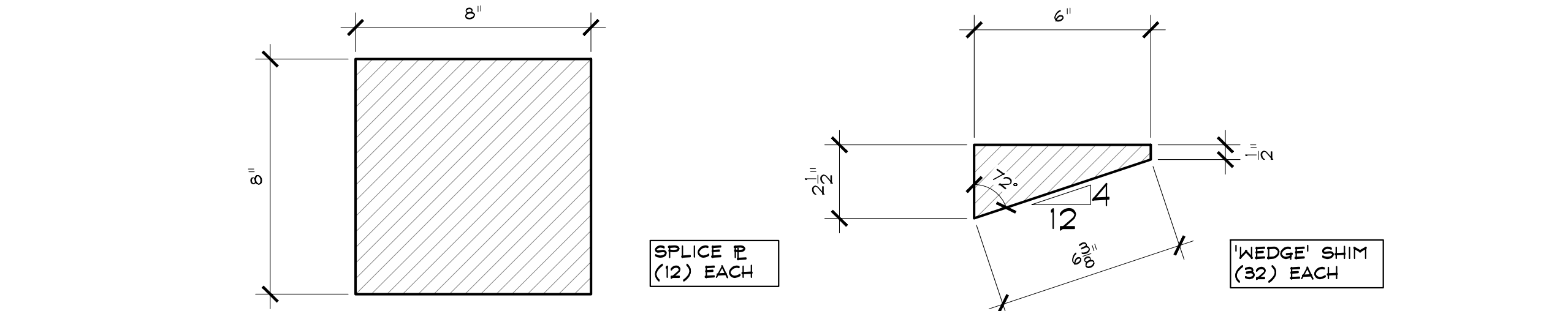
2 DEMOLITION SECTION

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

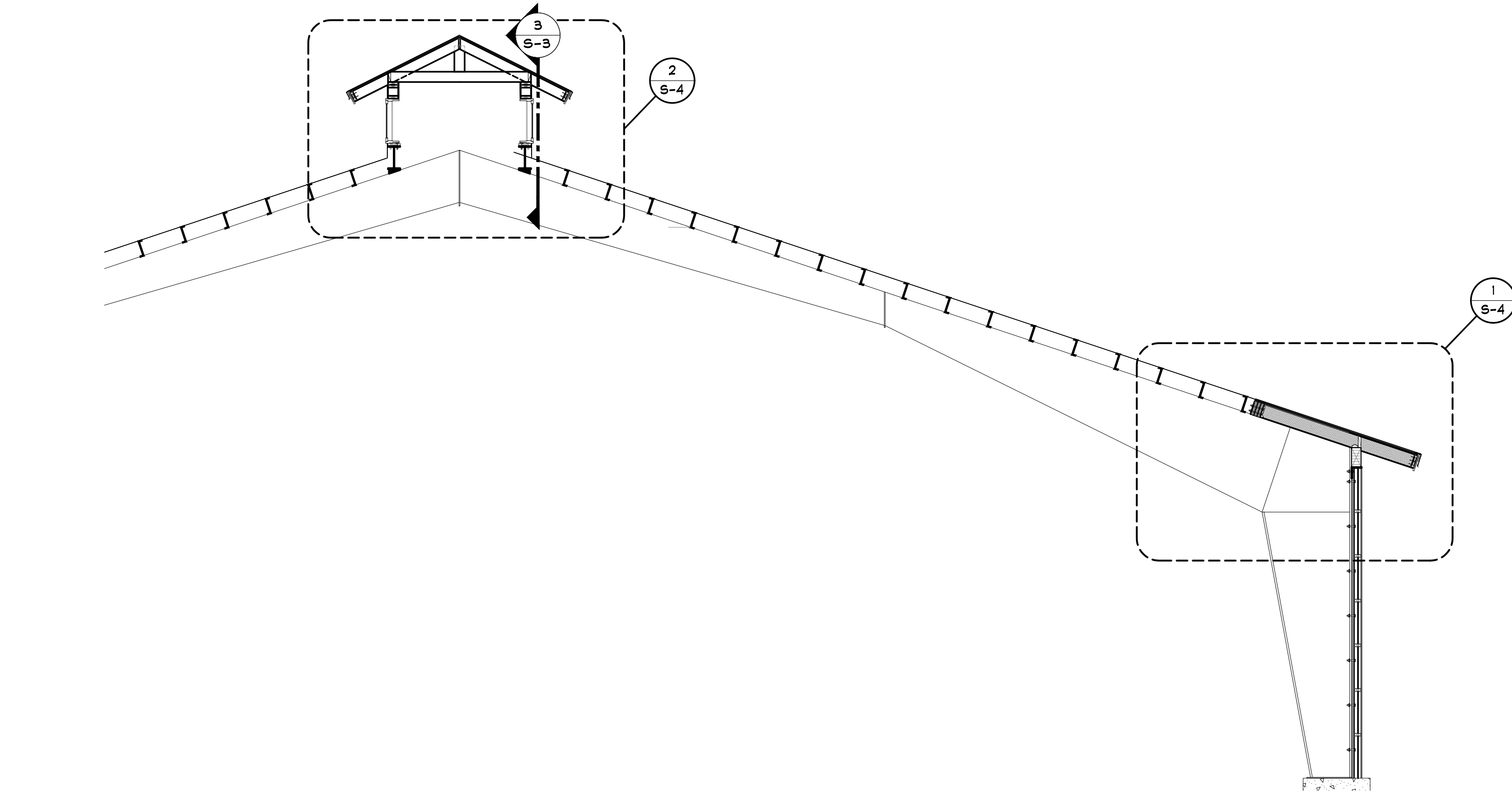
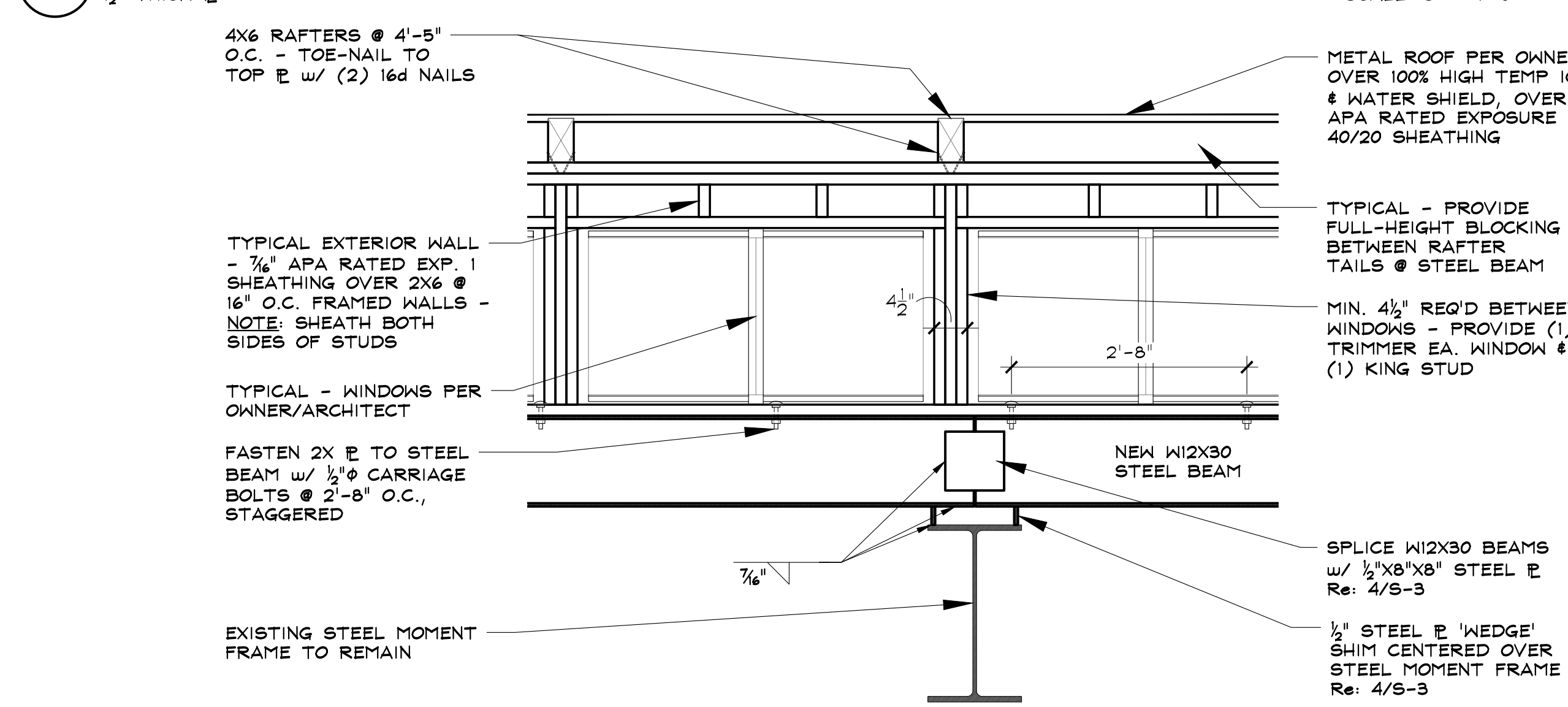


1 DEMOLITION PLAN

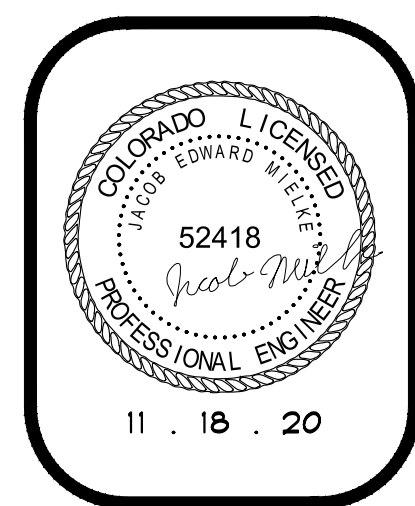
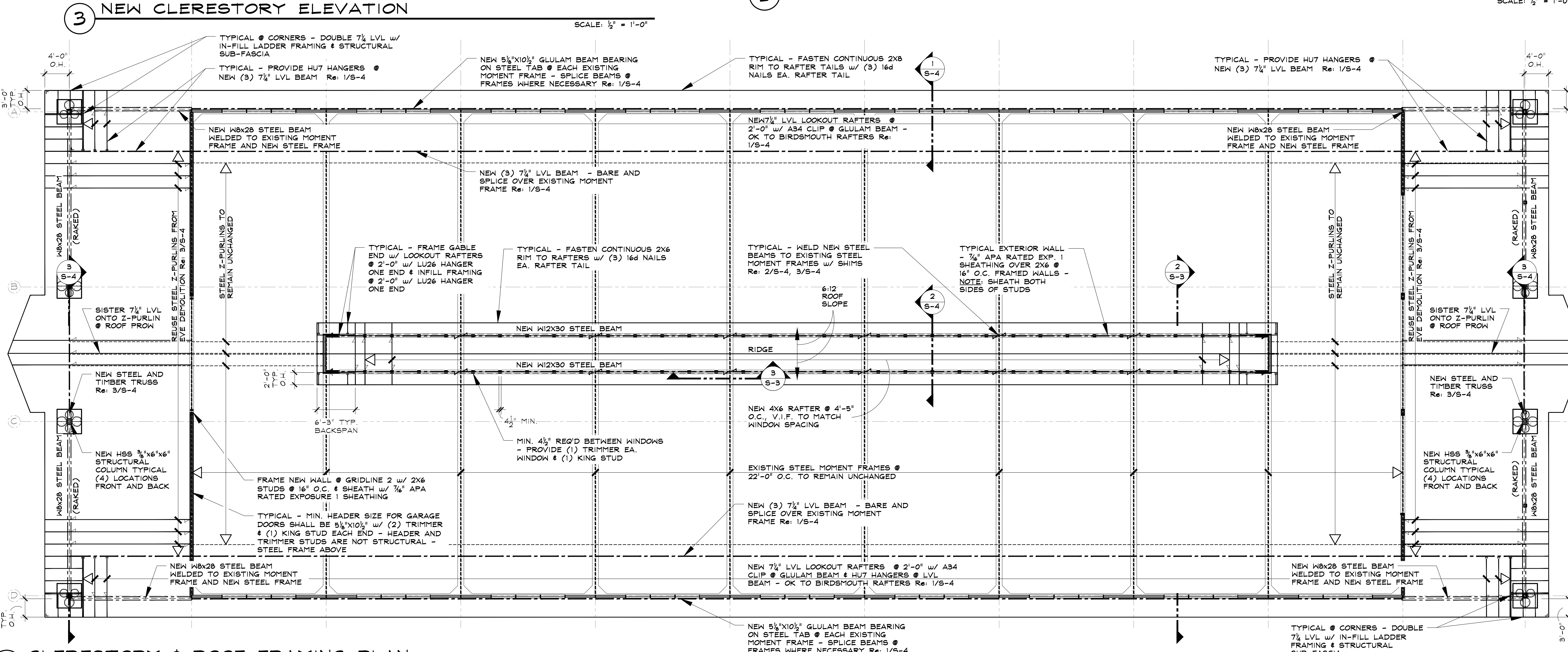
SCALE: 1/8" = 1'-0"



#### 4 STEEL SHOP DRAWINGS



#### 2 ROOF OVERHANG & CLERESTORY PARTIAL FRAMING SECTION



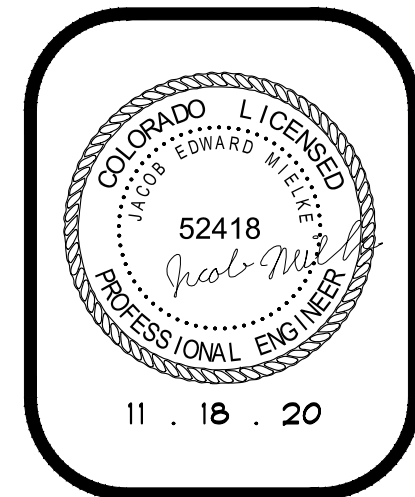
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**HOME RANCH ARENA ROOF**  
27315 HOME RANCH ROAD  
ROUTT COUNTY, COLORADO  
A NEW ROOF STRUCTURE FOR:  
HOME RANCH ARENA

| ISSUE DATES |          |
|-------------|----------|
| REVIEW SET  | 9.28.20  |
| PERMIT      | 11.18.20 |

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REVIEWED BY: JEM  
PROJECT # 20038  
CLERESTORY & ROOF OVERHANG  
PLAN & SECTION





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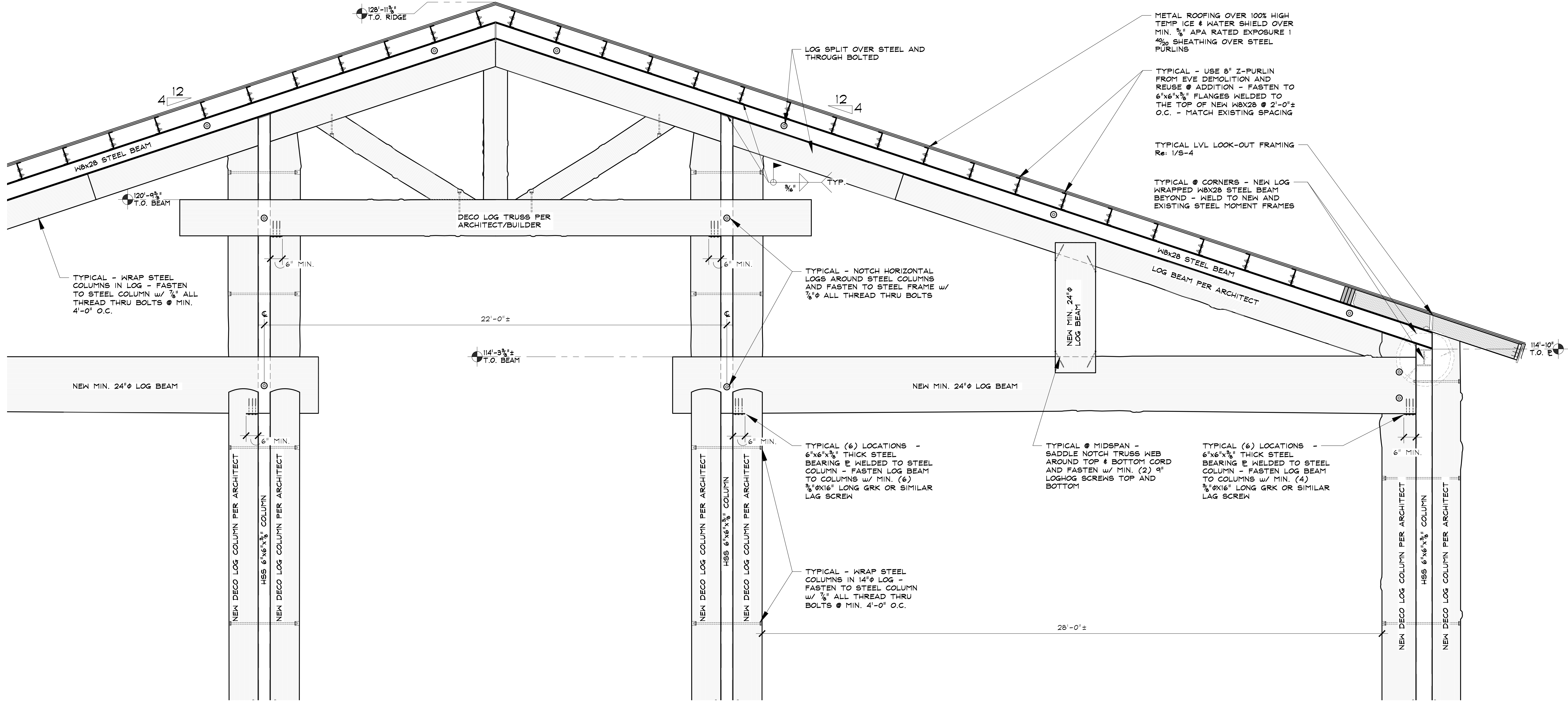
**HOME RANCH ARENA ROOF**  
27315 HOME RANCH ROAD  
ROUTT COUNTY, COLORADO  
A NEW ROOF STRUCTURE FOR:  
HOME RANCH ARENA

| ISSUE DATES |          |
|-------------|----------|
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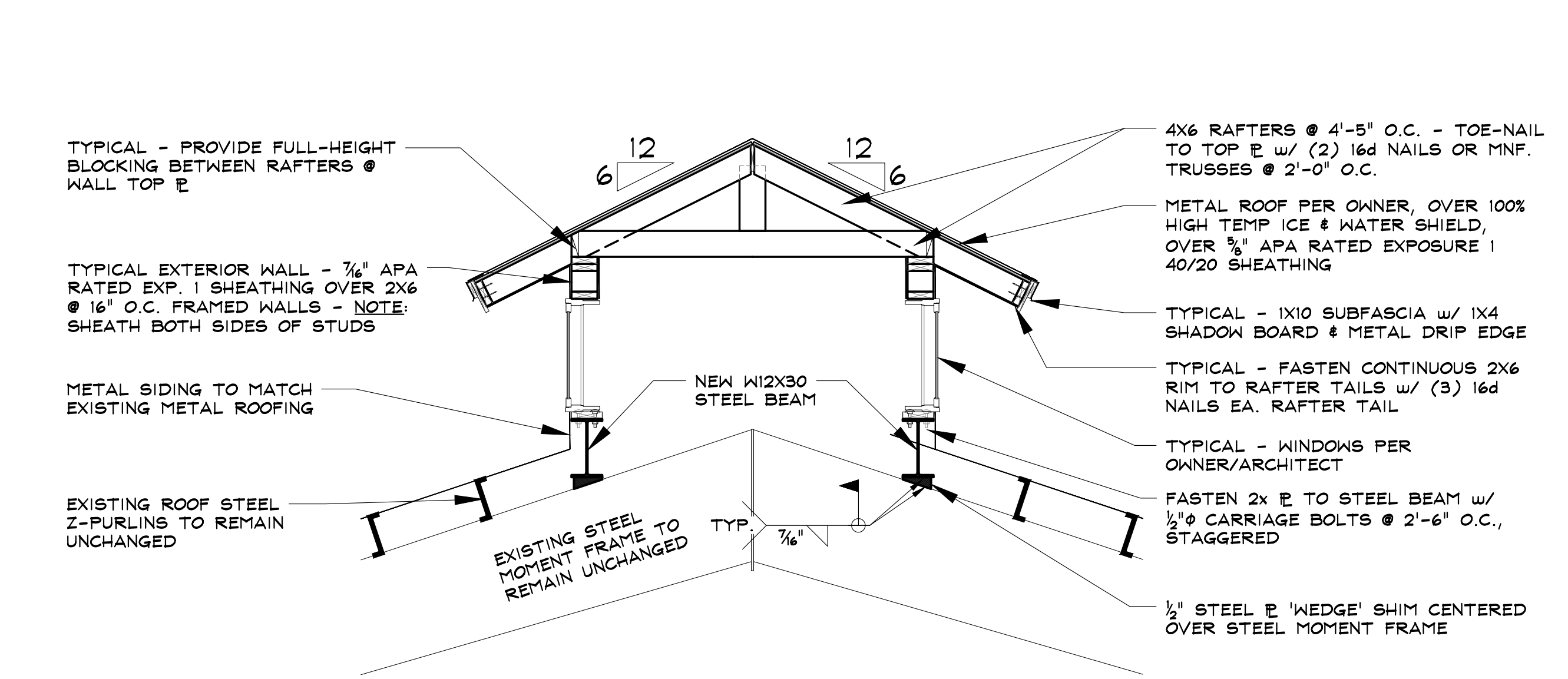
STRUCTURAL SECTIONS

**S-4**  
SHEET 5 of 5



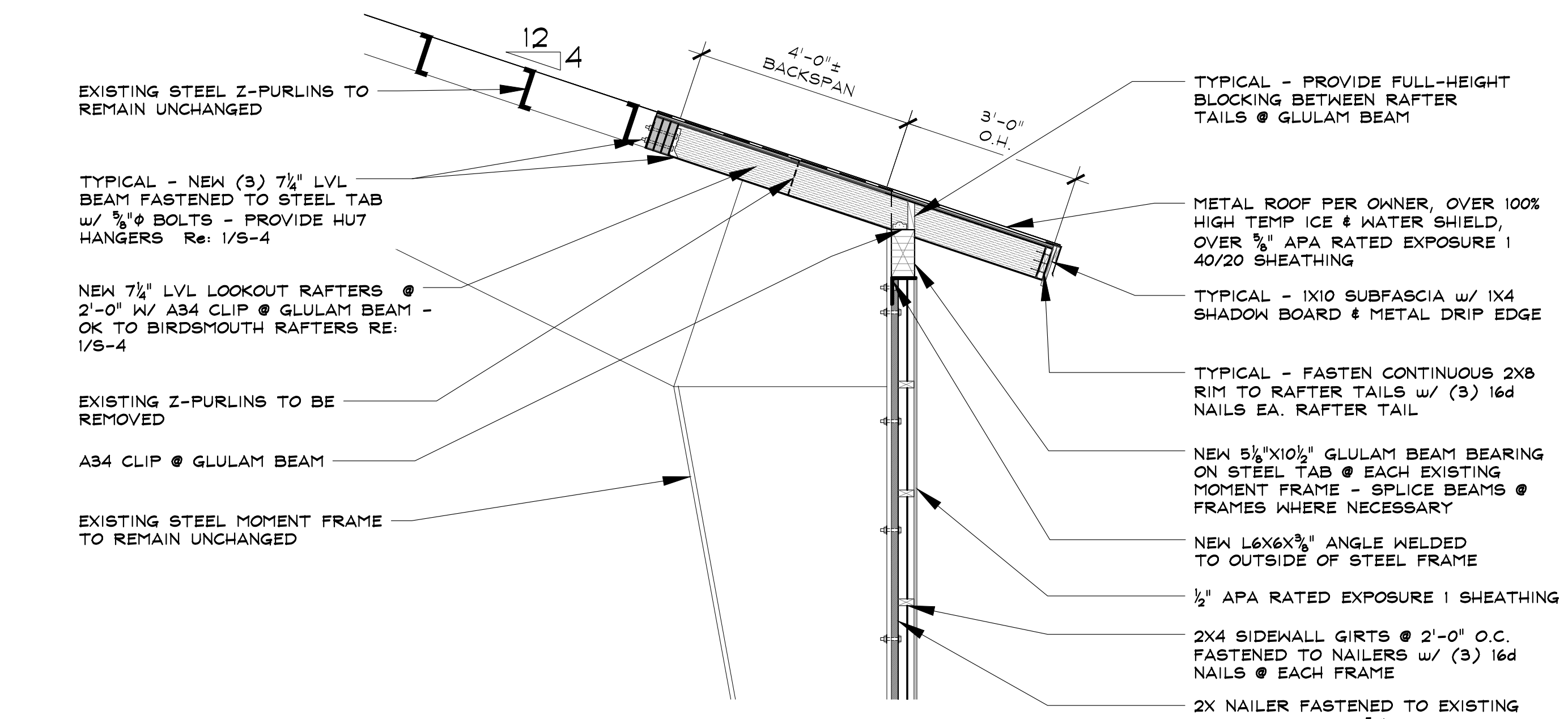
**3 GABLE END TIMBER & STEEL TRUSS SECTION**

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



**2 NEW CLERESTORY SECTION**

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



**1 NEW ROOF OVERHANG SECTION**

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

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