

Rio Blanco County Columbine Park Office

Columbine Horse Park, Rangley, Rio Blanco County, Colorado 81648

PROJECT TEAM DIRECTORY:

Owner/Contractor:
Rio Blanco County
 555 Main Street,
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 Project Manger: Eric Jaquez
 970-878-9583

Architect:
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 5101 Ellsworth Pl.,
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 Electrical: Art Donoho, PE
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 (970) 879-7891 fax
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PROJECT DESCRIPTION:
 THIS PROJECT CONSISTS OF THE REMODEL OF, AND ADDITION TO, AN EXISTING OFFICE & SUPPORT BUILDING TO CREATE A FLEXIBLE USE OFFICE AND MEETING BUILDING.

THE PROJECT CONSISTS OF AN 828 SF ADDITION TO AN EXISTING 883 SF BUILDING WITH A 770 SF BASEMENT. THE ADDITIONS WILL INCLUDE COVERED PORCHES ON FRONT AND BACK OF BUILDING.

THE NEW ONE STORY ADDITION WILL BE CONSTRUCTED OF LIGHT FRAME WOOD FRAMING OVER AN INSULATED FORM CONCRETE FOUNDATION. THE REMODEL/ADDITION WILL INCLUDE REPLACING THE EXISTING PREFAB TRUSS ROOF WITH A NEW PREFAB TRUSS ROOF OVER THE ENTIRE STRUCTURE AND ASSOCIATED PORCHES.

MINOR CHANGES TO THE ASSOCIATED ACCESS AND PARKING WILL BE MADE TO ACCOMMODATE THE DISPLACED CIRCULATION AREA NEXT TO THE EXISTING BUILDING.

APPLICABLE CODES: The Town of Rangley has indicated that code enforcement for this project will be based on the 2006 Series International Building Codes. We recommend that the construction conform to the 2021 Series codes, where it is practical, and is more restrictive than the 2006 Series. The most recent version of the Electrical Code applies regardless.
 International Building Code (IBC)
 International Mechanical Code (IMC)
 International Plumbing Code (IPC)
 International Fuel Gas Code (IFGC)
 International Energy Conservation Code (IECC)
 International Fire Code (IFC)

ROOF SNOW LOADS/FOUNDATION FROST DEPTH
 Minimum Ground Snow Load 65 psf (for 5,400 ft)
 Minimum Roof Snow Load* 40 psf (for locations below 6,000 ft)
 Minimum Frost Depth 36 inches (for locations below 6,000 ft) 48 inches used
 * Actual Roof Snow Load will be determined by RBC Building Official (per website)

Climate Zone-6
 Wind Design 90 mph (3 sec) Exposure B or C
 Weathering Probability for concrete - Severe
 Ice Barrier Underlayment required
 Floodplain (Section 245 RBC Land Use Resolution)

ABBREVIATIONS

NOTE: Clarify with Architect all abbreviations not listed.

| | | | |
|------------------------------|--|--|-------------------------------|
| AB ANCHOR BOLT | E.J. EXPANSION JOINT | H.B. HOSE BIBB | O.C. ON CENTER |
| ACT ACOUSTICAL CEILING TILE | E.I.F.S. EXTERIOR INSULATION AND FINISH SYSTEM | H.C. HOLLOW CORE | O.D. OUTSIDE DIAMETER |
| A.F.F. ABOVE FINISHED FLOOR | EL. ELEVATION | HIC HANDICAPPED | OH. OVERHEAD |
| AGG. AGGREGATE | ELEV. ELEVATOR | HDWD. HARDWOOD | OPG. OPENING |
| AL ALUMINUM | ELEC. ELECTRICAL | HDWE. HARDWARE | OPP. OPPOSITE |
| ALT ALTERNATE | EMER. EMERGENCY | H.M. HOLLOW METAL | PCT. PRE-CAST |
| APX APPROXIMATE | ENCL. ENCLOSURE | HR. HOUR | PL. PLATE |
| ARCH ARCHITECT(URAL) | EQ. EQUAL | HT. HEIGHT | P.L. PROPERTY LINE |
| BD. BOARD | EQUIP. EQUIPMENT | HVAC HEATING, VENTILATION AND AIR CONDITIONING | P.LAM. PLASTIC LAMINATE PLAS. |
| BLDG. BUILDING | E.W. EACH WAY | I.D. INSIDE DIAMETER | PLYWD. PLYWOOD |
| BLK(G) BLOCKING | E.W.C. ELECTRIC WATER COOLER | INT. INTERIOR | SPEC. SPECIFICATION |
| BM. BEAM | EXP. EXPANSION | INSUL. INSULATION | SQ. SQUARE |
| BOT. BOTTOM | EXT. EXTERIOR | INT. INTERIOR | S.S. STAINLESS STEEL |
| B.TWN. BETWEEN | F.A. FIRE ALARM | JAN. JANITOR | STAGG. STAGGERED |
| B.U.R. BUILT UP ROOFING | F.D. FLOOR DRAIN | JNT. JOINT | STD. STANDARD |
| B.W. BOTH WAYS | F.D.C. FIRE DEPARTMENT CONNECTION | JST. JOIST | STIFF. STIFFENER |
| C.J. CONTROL JT. | F.F. FIRE EXTINGUISHER | KIT. KITCHEN | STL. STEEL |
| CL. CENTERLINE | F.E. FIRE EXTINGUISHER CABINET | LAB. LABORATORY | STRUC. STRUCTURAL |
| CLG. CEILING | F.F. FINISH FLOOR | LAM. LAMINATE | SUSP. SUSPENDED |
| CLG. CAULKING | F.H.C. FIRE HOSE CABINET | LAV. LAVATORY | TR. TREAD |
| CLR. CLEAR | FIN. FINISH | LT. LIGHT | T & B TOP AND BOTTOM |
| C.M.U. CONCRETE MASONRY UNIT | FLR. FLOOR | MAX. MAXIMUM | T & G TONGUE & GROOVE |
| COL. COLUMN | FLR. FLUORESCENT | MECH. MECHANICAL | THK. THICK |
| CONC. CONCRETE | FND. FOUNDATION | MEMB. MEMBRANE | T.O. TOP OF |
| CONN. CONNECTION | F.O.B. FACE OF BRICK | MFR. MANUFACTURER | TYP. TYPICAL |
| CONSTR. CONSTRUCTION | F.O.C. FACE OF CONCRETE | M.H. MANHOLE | U.O.N. UNLESS OTHERWISE NOTED |
| CONT. CONTINUOUS | F.S. FULL SIZE | MIN. MINIMUM | VCT. VINYL COMPOSITION TILE |
| C.T. CERAMIC TILE | FT. FOOT OR FEET | MISC. MISCELLANEOUS | VER. VERIFY |
| DEG. DEGREE | FTG. FOOTING | M.O. MASONRY OPENING | VERT. VERTICAL |
| DET/DTL. DETAIL | FURR. FURRING | MTL. METAL | W. WEST |
| D.F. DRINKING FOUNTAIN | GA. GAUGE | MUL. MULLION | W. WITH |
| DIAG. DIAGONAL | GALV. GALVANIZED | N. NORTH | W.C. WATER CLOSET |
| DIAØ. DIAMETER | G.C. GENERAL CONTRACTOR | N.I.C. NOT IN CONTRACT | WD. WOOD |
| DN. DOWN | G.L. GLASS | NO. NUMBER | W/O. WITHOUT |
| DS. DOWNSPOUT | GR. GRADE | NOM. NOMINAL | |
| DWG. DRAWING | GYP. GYPSUM | N.T.S. NOT TO SCALE | |
| E. EAST | GYP. BD. GYPSUM BOARD | | |
| (E) EXISTING | | | |
| EA. EACH | | | |

Radon Mitigation:
 These drawings show the installation of a passive radon mitigation system. A radon mitigation system is not required by the 2006 International Building Code and thus is not required for this project. We recommend it's installation. However, it is not required and can be installed, or not, at the discretion of the Owner.

BUILDING AREA:

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| EXTG. BLDG. AREA: | |
| GROUND FLOOR: | |
| NET (INSIDE OF EXT. WALLS) | 847 SF |
| GROSS (OUTSIDE OF EXT. FRAMING) | 883 SF |
| NET AREA OF WALKOUT BASEMENT | 770 SF |
| TOTAL EXTG. AREA (GROSS) | 1,653 SF |
| ADDITION AREA: | |
| NET (INSIDE OF EXT. WALLS) | 803 SF |
| GROSS (OUTSIDE OF EXT. FRAMING) | 828 SF |
| TOTAL EXTG. + ADDITION (GROSS) | 2,481 SF |

- SHEET INDEX:**
- GENERAL:**
 A0.0 - COVER SHEET, GENERAL INFORMATION
 A0.1 - CODE SHEET
 A1.1 - SITE PLAN - 1" = 10'-0"

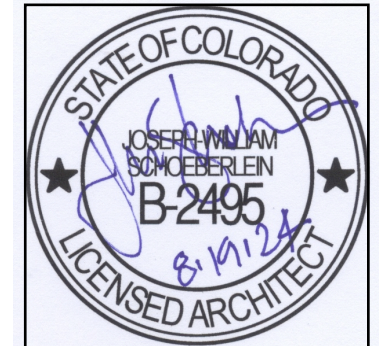
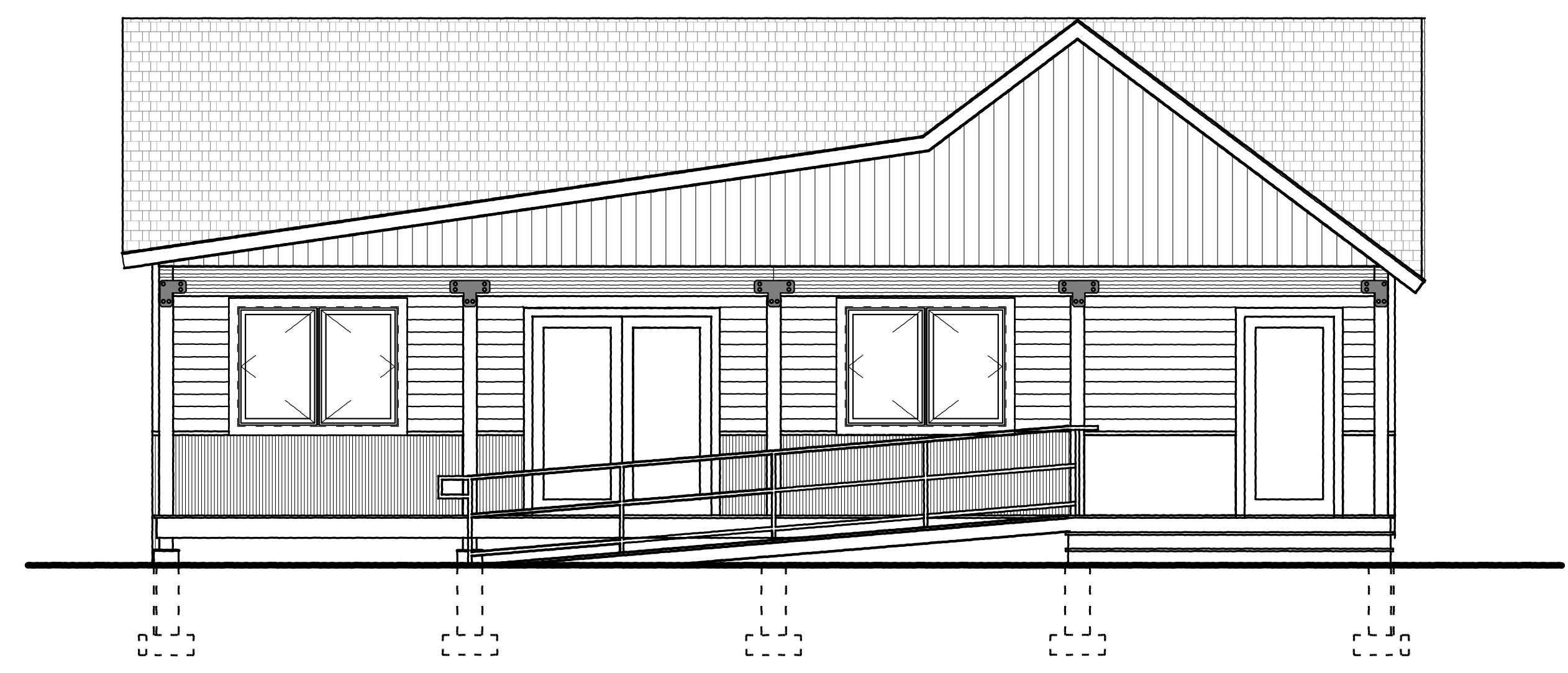
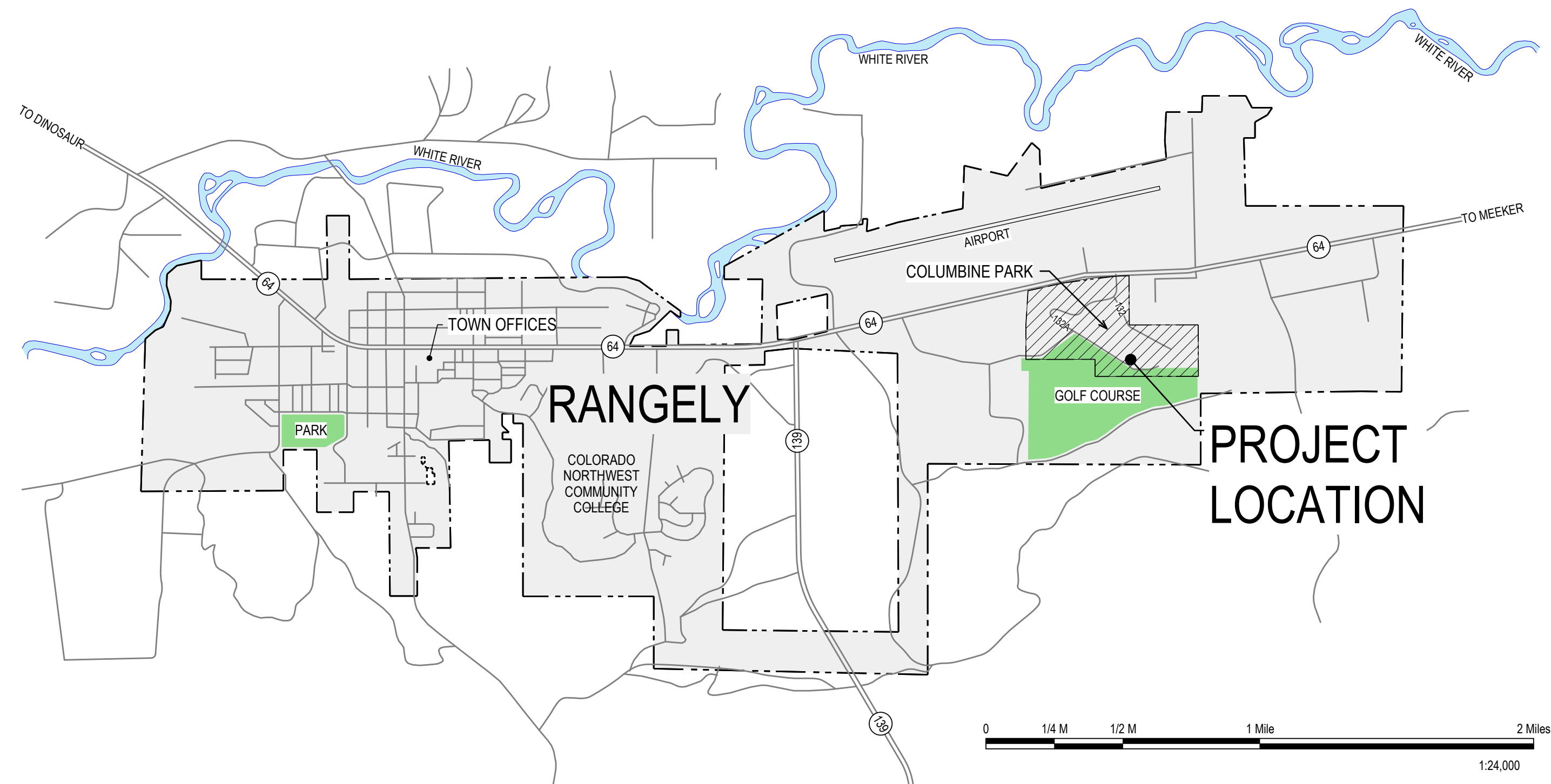
- ARCHITECTURAL PLANS**
 A2.1 - REVISED PLANS - 1/4" = 1'-0"
 A2.2 - REVISED ROOF PLAN - 1/4" = 1'-0"
 A2.3 - REFLECTED CEILING PLANS - 1/4" = 1'-0"
 A3.1 - REVISED SECTIONS - 1/4" = 1'-0"
 A3.2 - WALL SECTIONS 1 - 3/4" = 1'-0"
 A3.3 - WALL SECTIONS 2 - 3/4" = 1'-0"
 A4.1 - REVISED ELEVATIONS - 1/4" = 1'-0"
 A5.1 - RAMP & STAIR DETAILS - 1/2" = 1'-0"

- STRUCTURAL PLANS**
 S001 - GENERAL NOTES
 S003 - SYMBOLS AND ANNOTATIONS
 S101 - FOUNDATION PLAN
 S102 - FLOOR FRAMING PLAN
 S103 - ROOF FRAMING PLAN
 S104 - FOUNDATION DETAILS (1)
 S105 - FRAMING DETAILS (2)

- MECHANICAL PLANS**
 M0-1 - GENERAL NOTES
 M1-1 - MECHANICAL MAIN FLOOR PLAN
 M1-2 - MECHANICAL LOWER FLOOR PLAN
 M2-1 - MECHANICAL DETAILS (1)
 M2-2 - MECHANICAL DETAILS (2)

- ELECTRICAL PLANS**
 E0-1 - GENERAL NOTES
 E1-1 - ELECTRICAL FLOOR PLANS
 E2-1 - LUMINAIRE SCHEDULE NOTES

- EXTG. PLANS:**
 EX1.1 - EXTG. BUILDING PLANS - 1/4" = 1'-0"
 EX1.2 - EXTG. BUILDING SECTION, ELEVATIONS - 1/4" = 1'-0"
 EXS1.1 - EXTG. STRUCT LAYOUT - 1/4" = 1'-0"

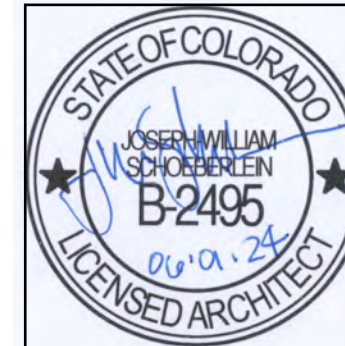


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Title: GENERAL INFORMATION

Drawing No: A0.0

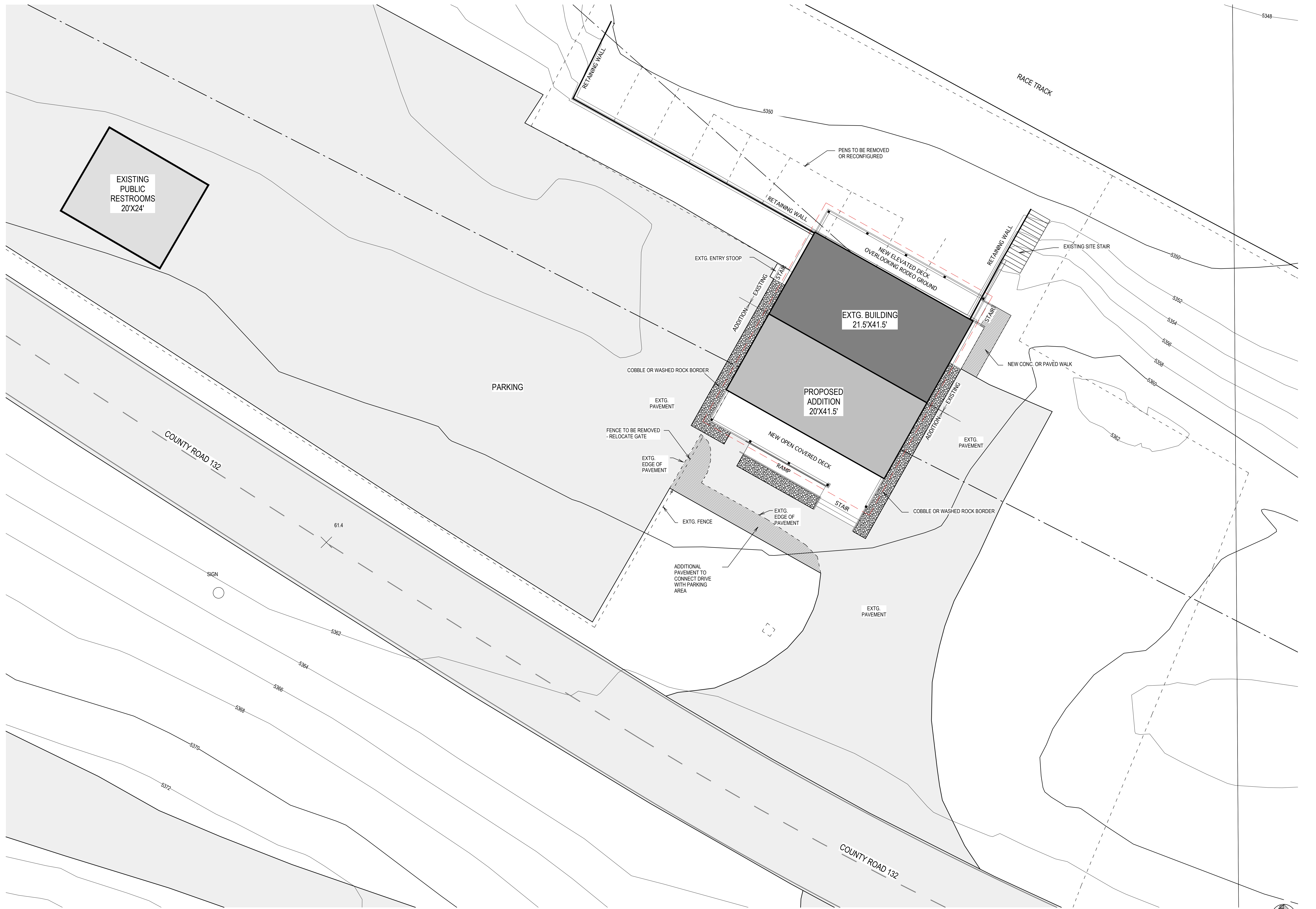


C O L O R A D O A R C H I T E C T S

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SITE PLAN

Scale 1" = 10' - 0" (@ 24x36)

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Title: **SITE PLAN**

Drawing No: **A1.1**



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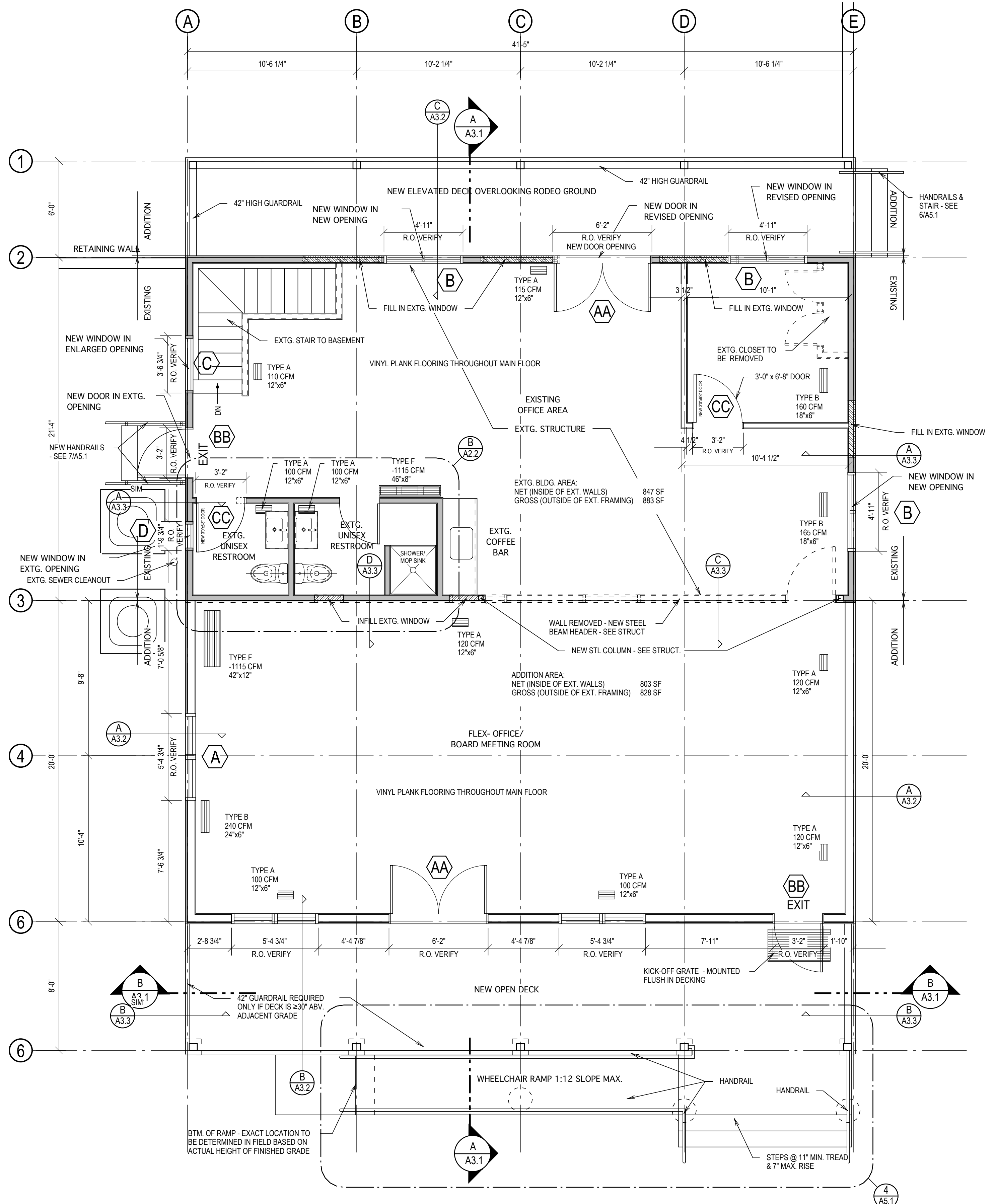
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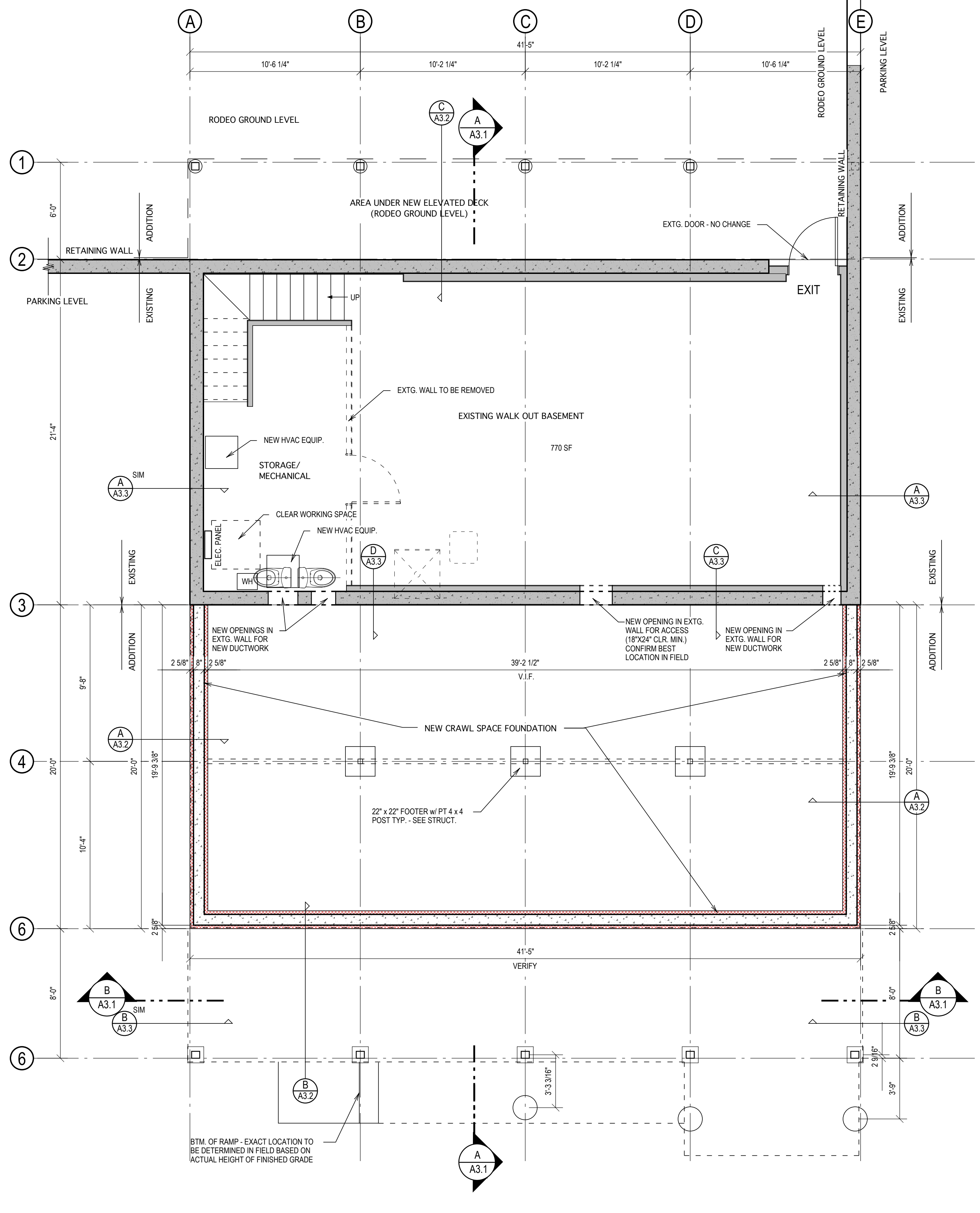
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Title: FLOOR PLANS

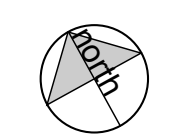
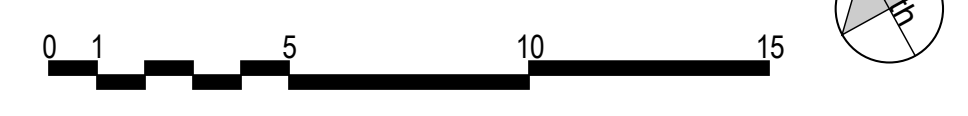
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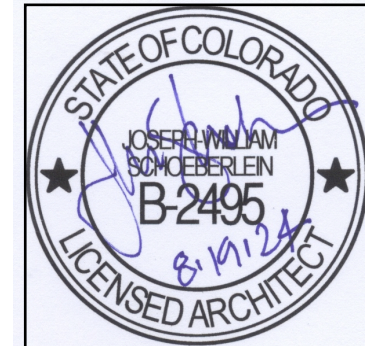


B REVISED MAIN FLOOR PLAN
 scale: 1/4" = 1'-0" when printed @ 24x36



A REVISED LOWER FLOOR PLAN
 scale: 1/4" = 1'-0" when printed @ 24x36





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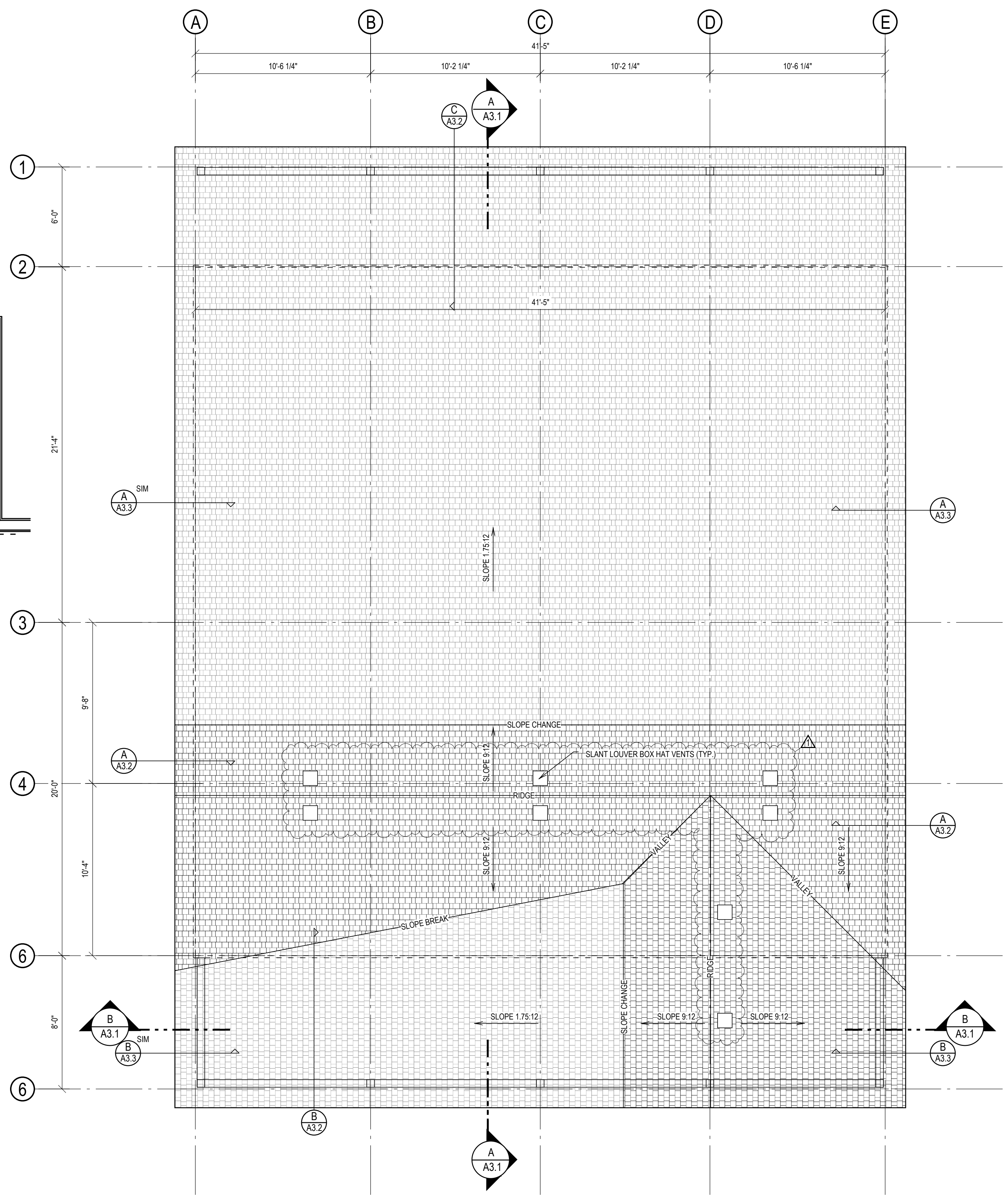
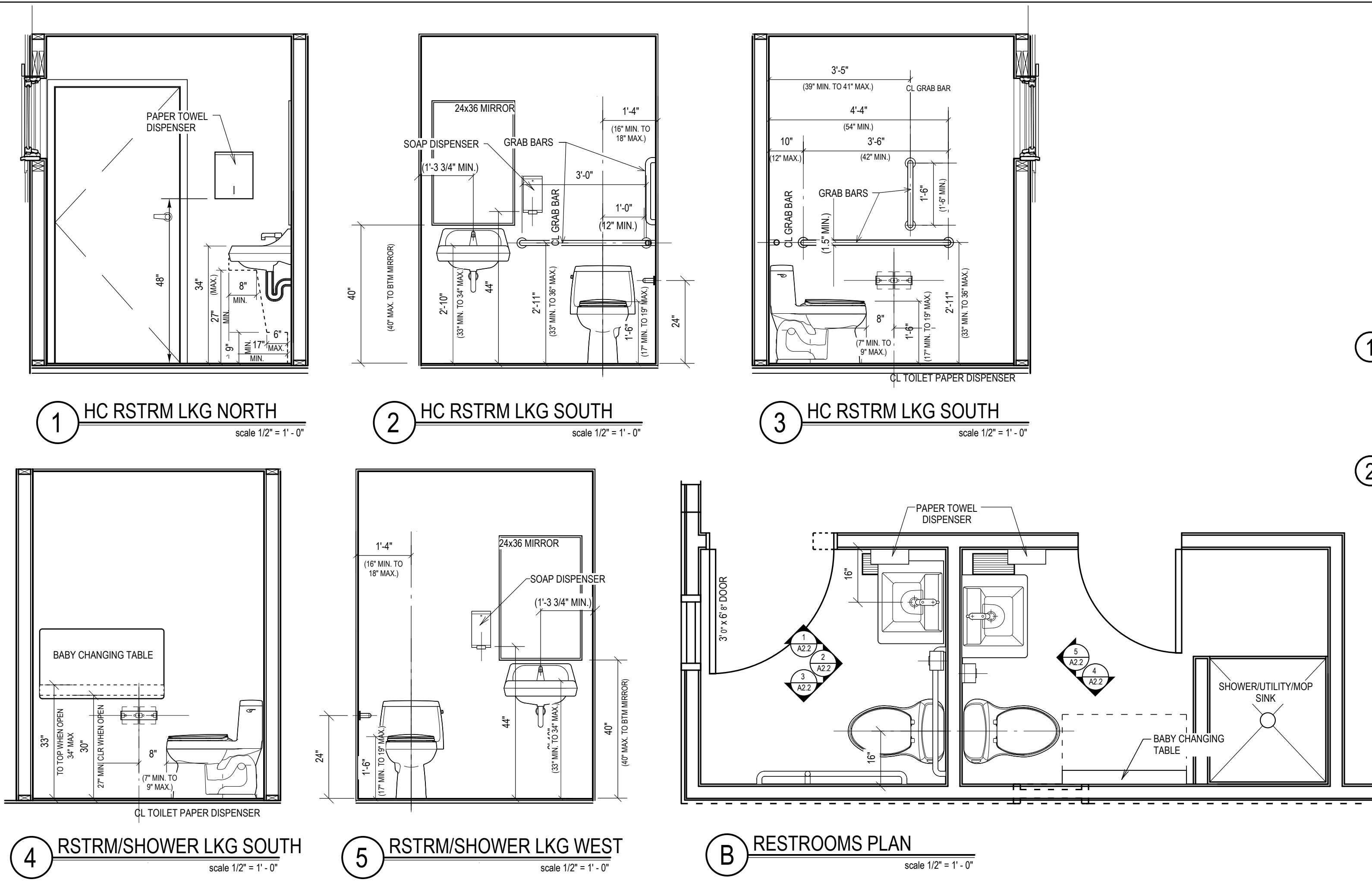
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Title: **ROOF PLAN**

Drawing No: **A2.2**

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A REVISED ROOF PLAN
 scale: 1/4" = 1'-0" when printed @ 24x36

INTERIOR FINISH OUTLINE SPECIFICATIONS:

- GROUND FLOOR:**
- WALLS: 5/8" DRYWALL THROUGHOUT (WHEREVER NEW OR REPLACED)
- PAINT FINISH ("RIO BLANCO COUNTY" STANDARD NAVAHO WHITE)
- 4" RUBBER BASE ("RIO BLANCO COUNTY" STANDARD GRAY)
- FLOORING:** FAUX WOOD PATTERN VINYL PLANK FLOORING - COLOR/PATTERN TBD
- CEILING:** 5/8" DRYWALL THROUGHOUT
- PAINT FINISH ("RIO BLANCO COUNTY" STANDARD NAVAHO WHITE)
- BASEMENT:** WALLS, FLOOR, CEILING: EXISTING TO REMAIN

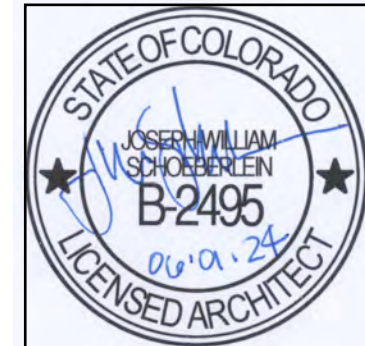
Attic Ventilation:
 Per Section 1202.2.1 Ventilated attics and rafter spaces – IBC 2006. (Note: This requirement is unchanged in subsequent editions of the IBC.)

The attic shall be ventilated at a rate of 1/300 of space ventilated. The vapor retarder between the ceiling drywall shall conform to Class I or Class II standards for impermeability. (Perm rating of 1.0 perms or less.) At least 40% and not more than 50% of the ventilation total requirement shall be at or more than 3' below the ridge. The balance (50%-60%) of the required ventilation shall be at the eave/porch soffit level. A 1" minimum airspace shall be maintained between the insulation and roof sheathing (Where the roof section is shallow.) Use baffles to maintain the required clearances. Maintain an opening equivalent in area to a 1" continuous air gap, or greater, between the porch attics and the attic over the heated space. This minimum space shall be roughly evenly distributed along the full length of the side.

Total attic area, including areas above insulated spaces and unheated porches, is 2,285 SF (329,040 SI.) Ventilation requirement at or near ridge = 438.8 SI – 548.5 SI. Ventilation requirement eaves/porch soffits = 548.5 – 658 SI.

If standard Slant Louver Box Hat Vents with 60 SI of ventilation are used high in the attic 8 would be required. 6 of these to be placed along the main ridge, spaced evenly. 2 of these to be placed along the shorter ridge on the front side, evenly spaced. If a different sized vent is used the number would need to be adjusted accordingly.

The ventilation requirement in the porch soffits can be met with either perforated soffit board or rectangular soffit vents. If perforated Hardi soffit board with 5 SI per linear ft is used, a minimum of 3 rows of perforated soffit board would be required. 4 rows, 2 each side, would be preferred. (2 rows of 48" x 96" soffit panels each side.) If solid soffit board is used the required ventilation could be met with 8"x16" rectangular vents with 56 SI of ventilation each. 12 vents would be required, with 6 each side of the roof evenly distributed along the soffit. If a different sized vent is used the number would need to be adjusted accordingly.



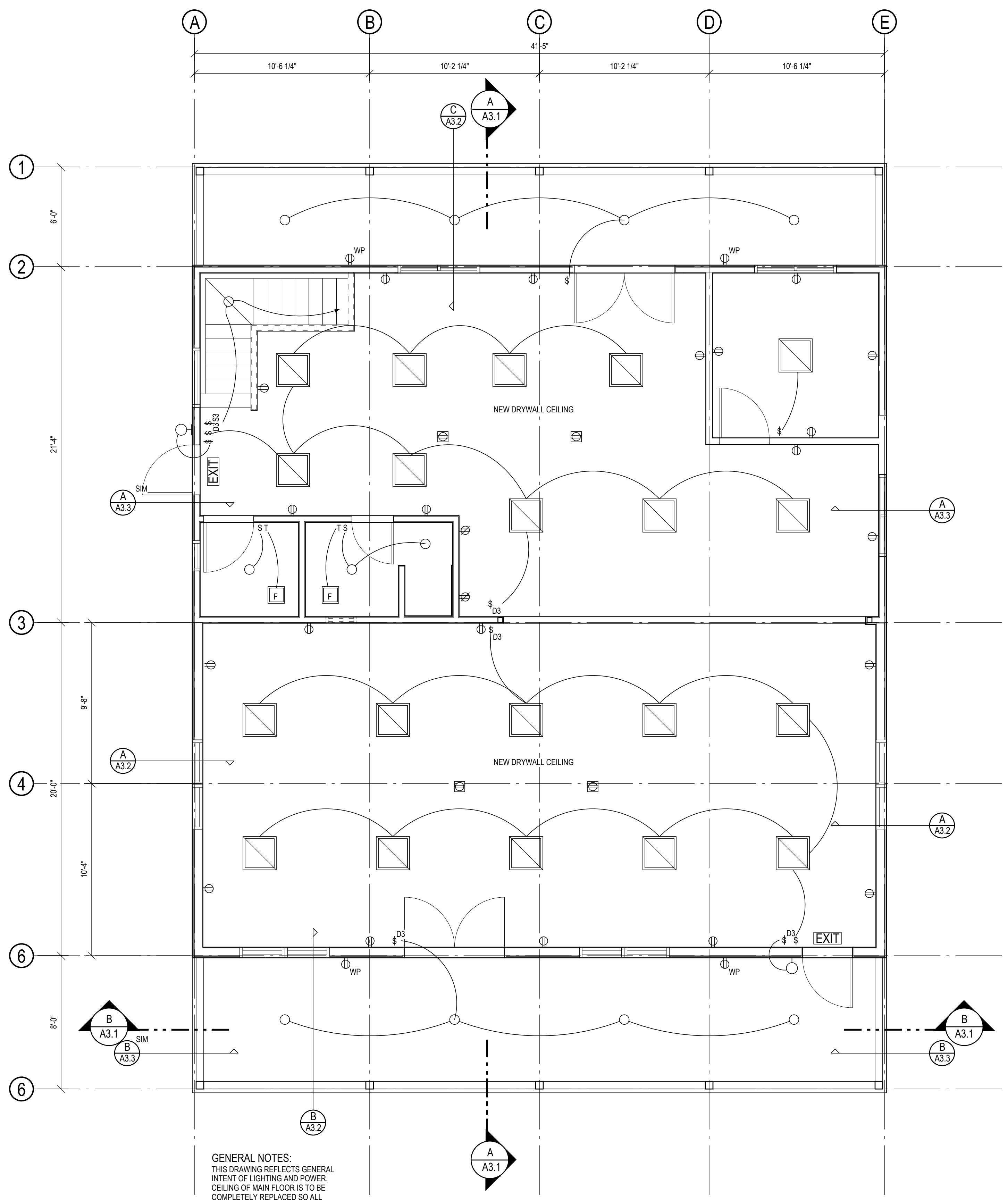
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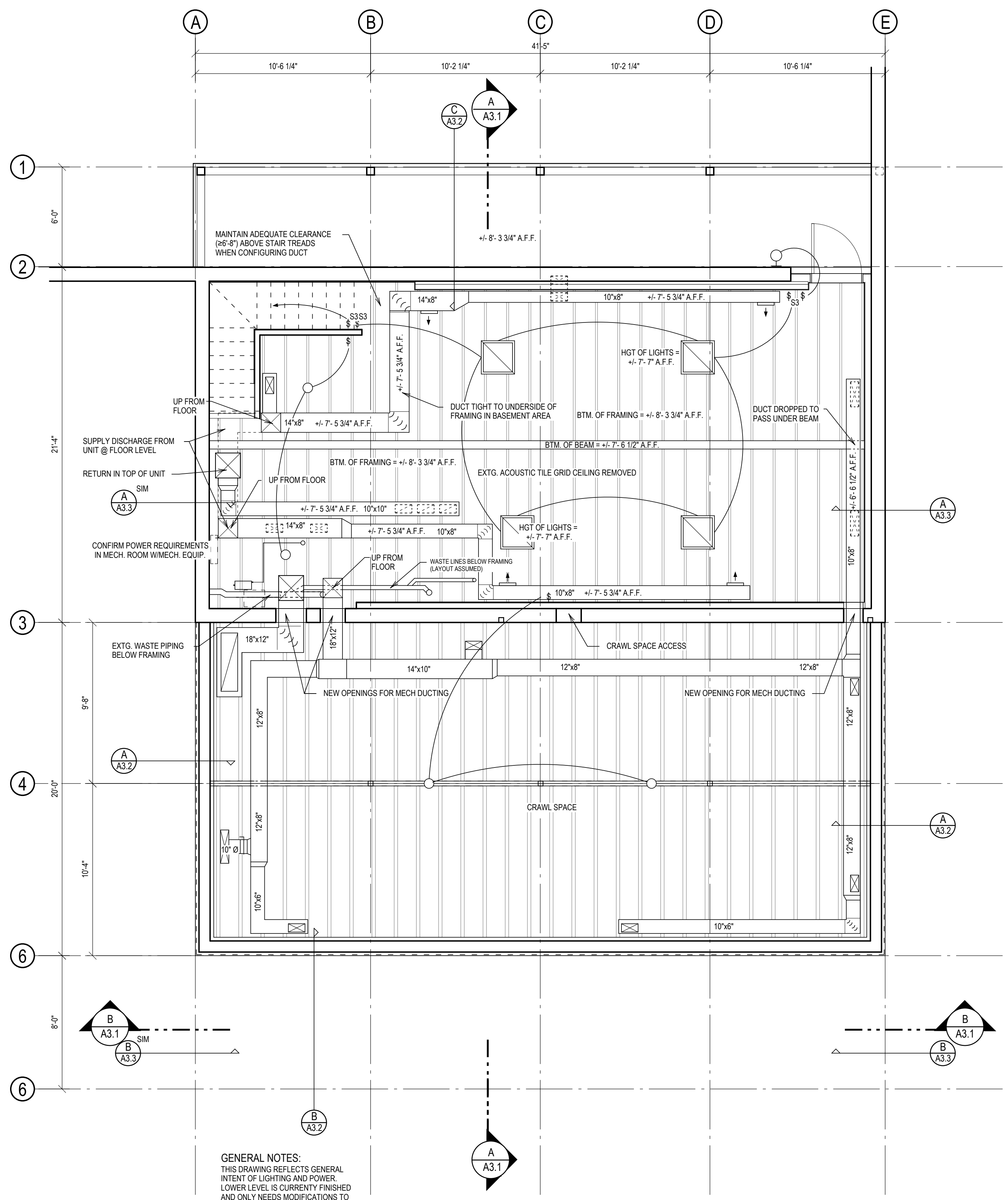
Title: RCP's

Drawing No: A2.3



GENERAL NOTES:
THIS DRAWING REFLECTS GENERAL INTENT OF LIGHTING AND POWER. CEILING OF MAIN FLOOR IS TO BE COMPLETELY REPLACED SO ALL LIGHTING AND BATH FANS WILL BE NEW. OUTLETS IN THE EXTG. PORTION MAY BE DIFFERENT FROM WHAT IS SHOWN. VERIFY FINAL LAYOUT WITH OWNER TO INSURE PRACTICAL LAYOUT.

B REVISED UPPER LEVEL REFLECTED CEILING PLAN
scale: 1/4" = 1'-0" when printed @ 24x36

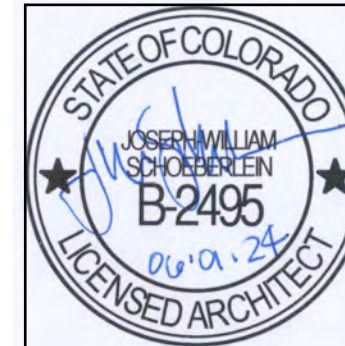


GENERAL NOTES:
THIS DRAWING REFLECTS GENERAL INTENT OF LIGHTING AND POWER. LOWER LEVEL IS CURRENTLY FINISHED AND ONLY NEEDS MODIFICATIONS TO ACCOMMODATE NEW WORK. MOST OF THE WORK IS RELATED TO THE INSTALLATION OF NEW HEATING EQUIPMENT AND MODIFICATION TO CEILING TO ACCOMMODATE NEW DUCTWORK. VERIFY FINAL LAYOUT OF SWITCHING AND POWER WITH OWNER TO INSURE PRACTICAL LAYOUT.

A REVISED LOWER LEVEL REFLECTED CEILING PLAN
scale: 1/4" = 1'-0" when printed @ 24x36



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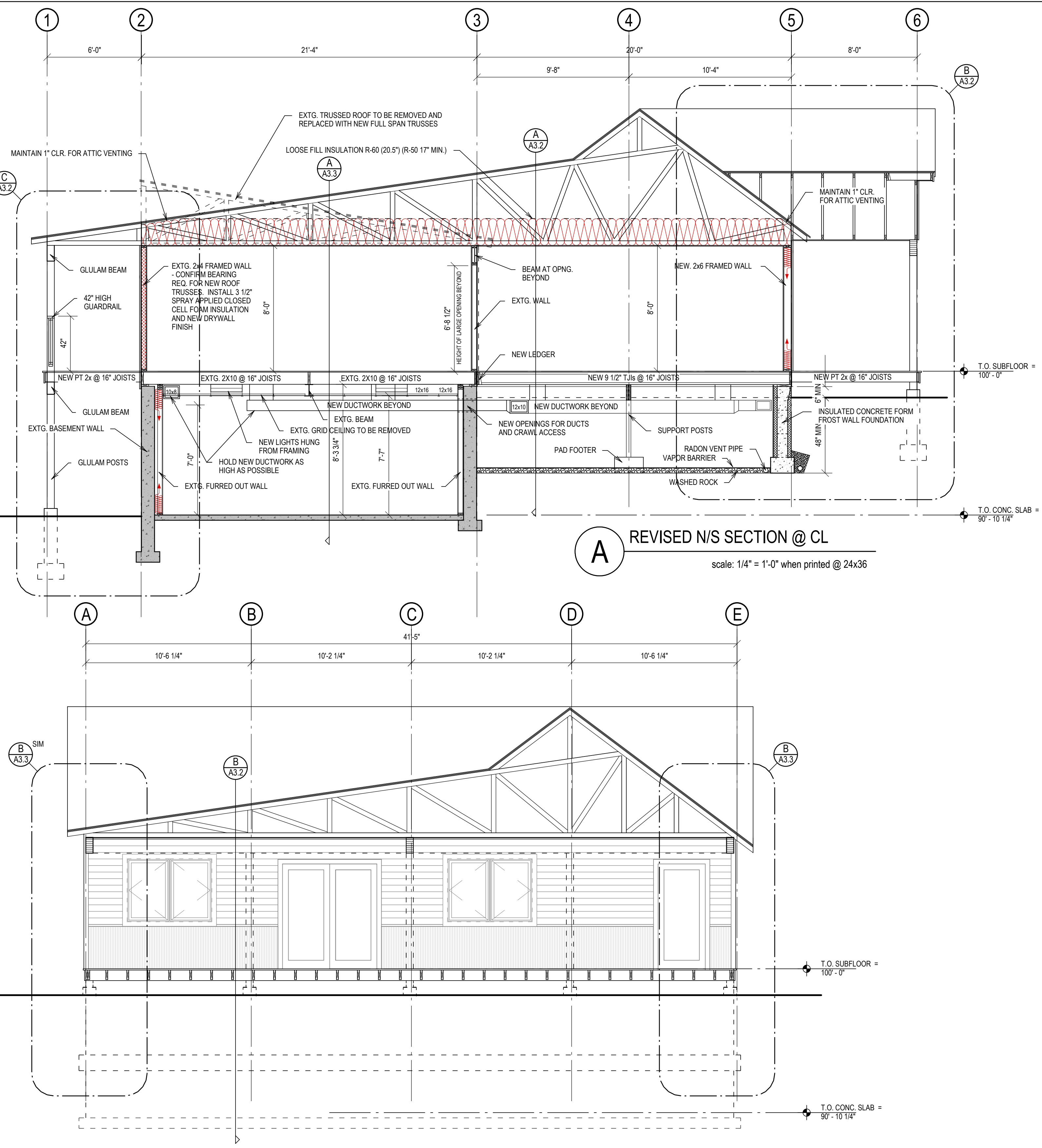
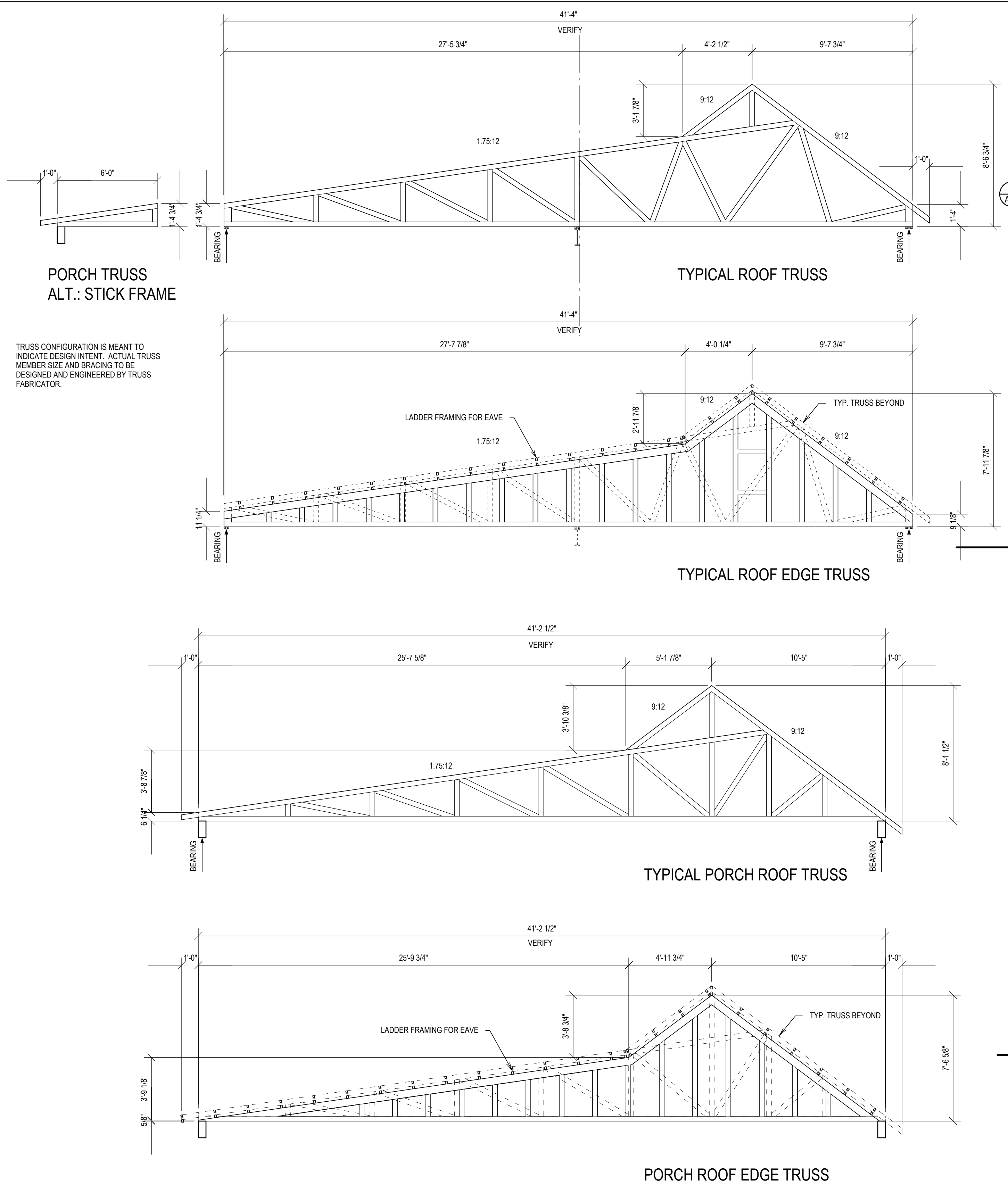
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Title: REVISED SECTIONS

Drawing No: A3.1

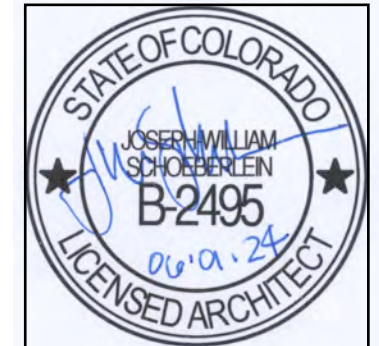
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A REVISED N/S SECTION @ CL
 scale: 1/4" = 1'-0" when printed @ 24x36

B REVISED E/W SECTION @ PORCH
 scale: 1/4" = 1'-0" when printed @ 24x36

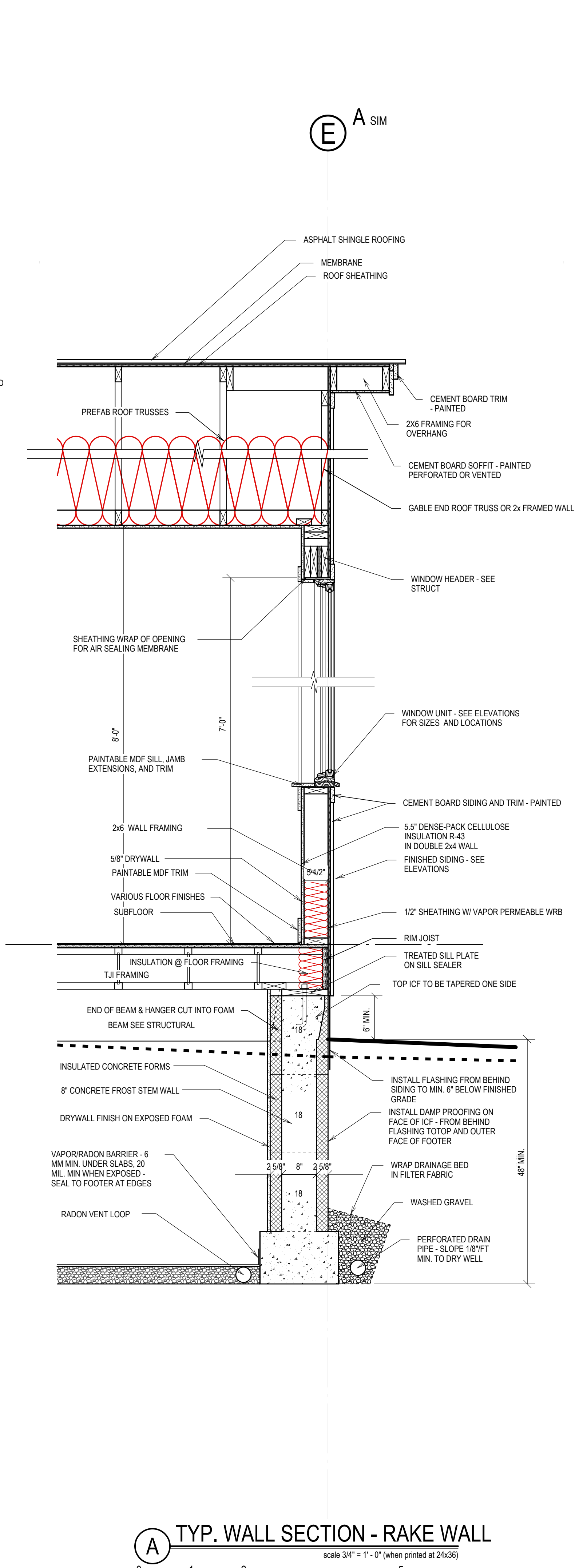
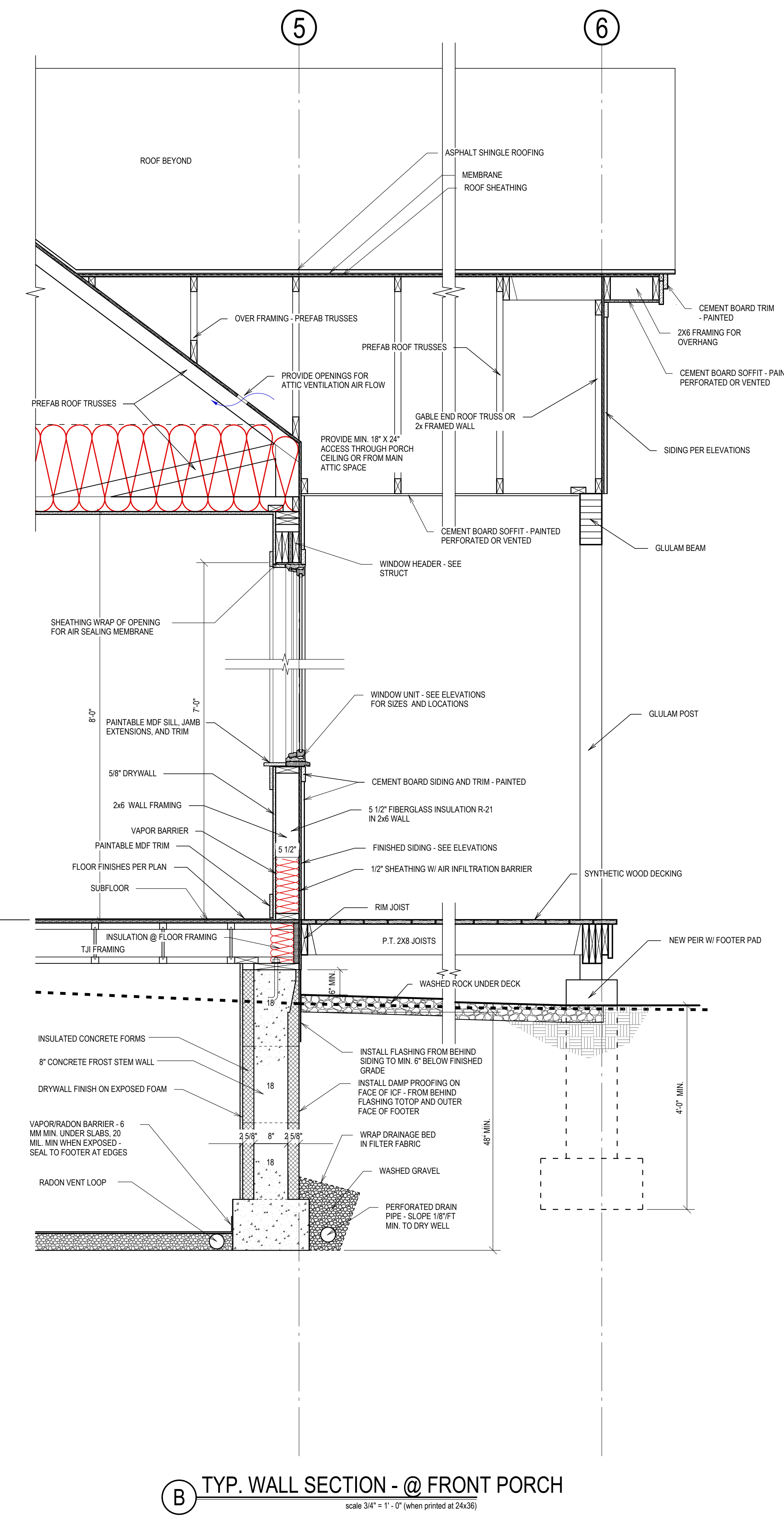
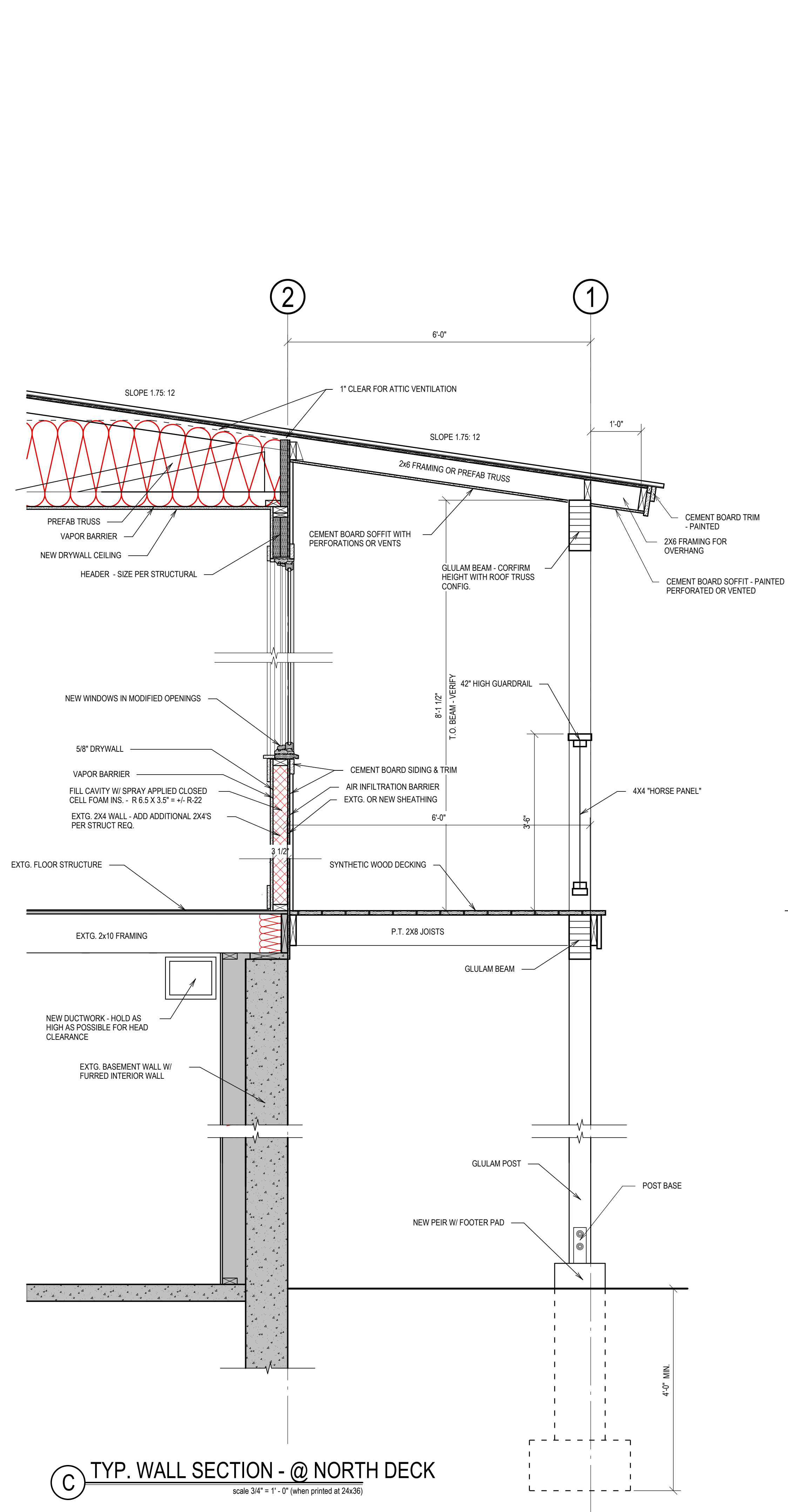




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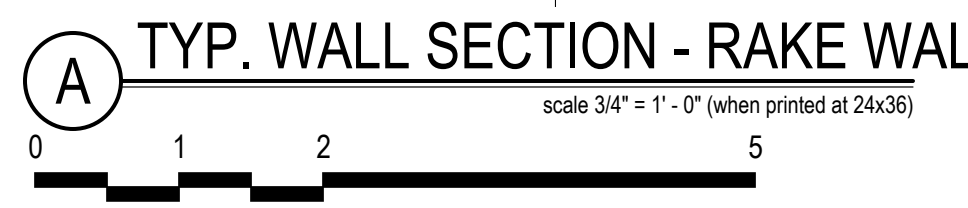
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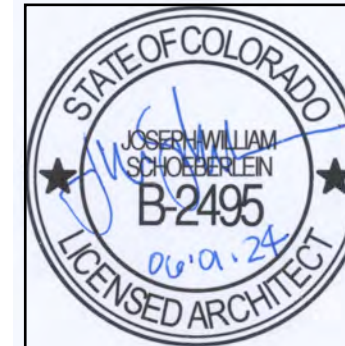


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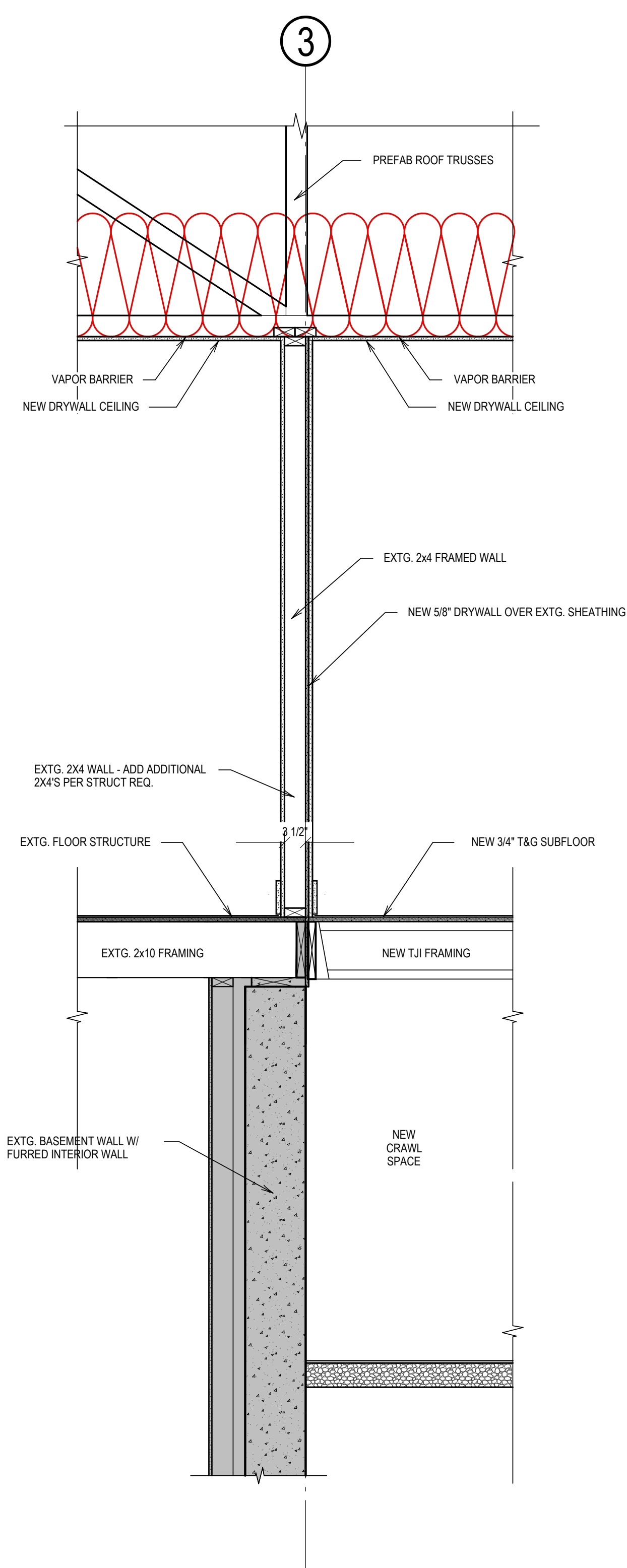
Title: WALL SECTIONS

Drawing No: A3.2

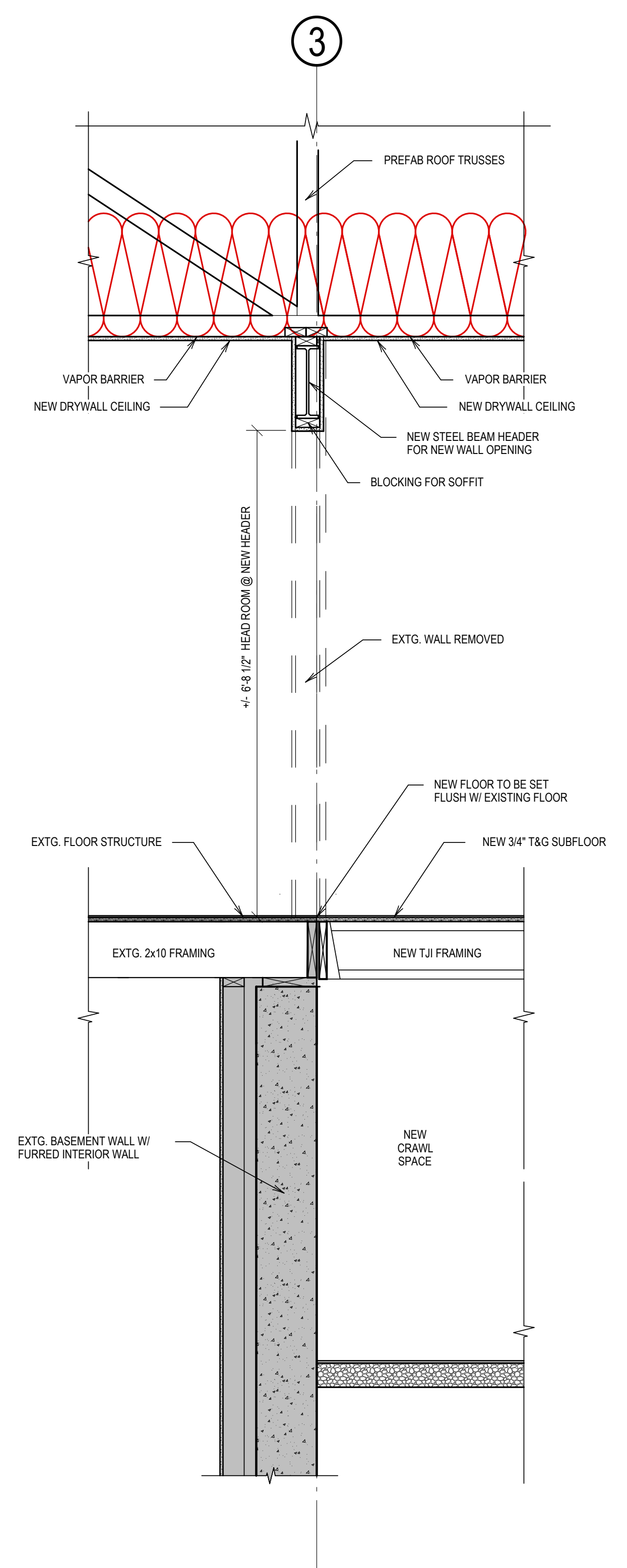




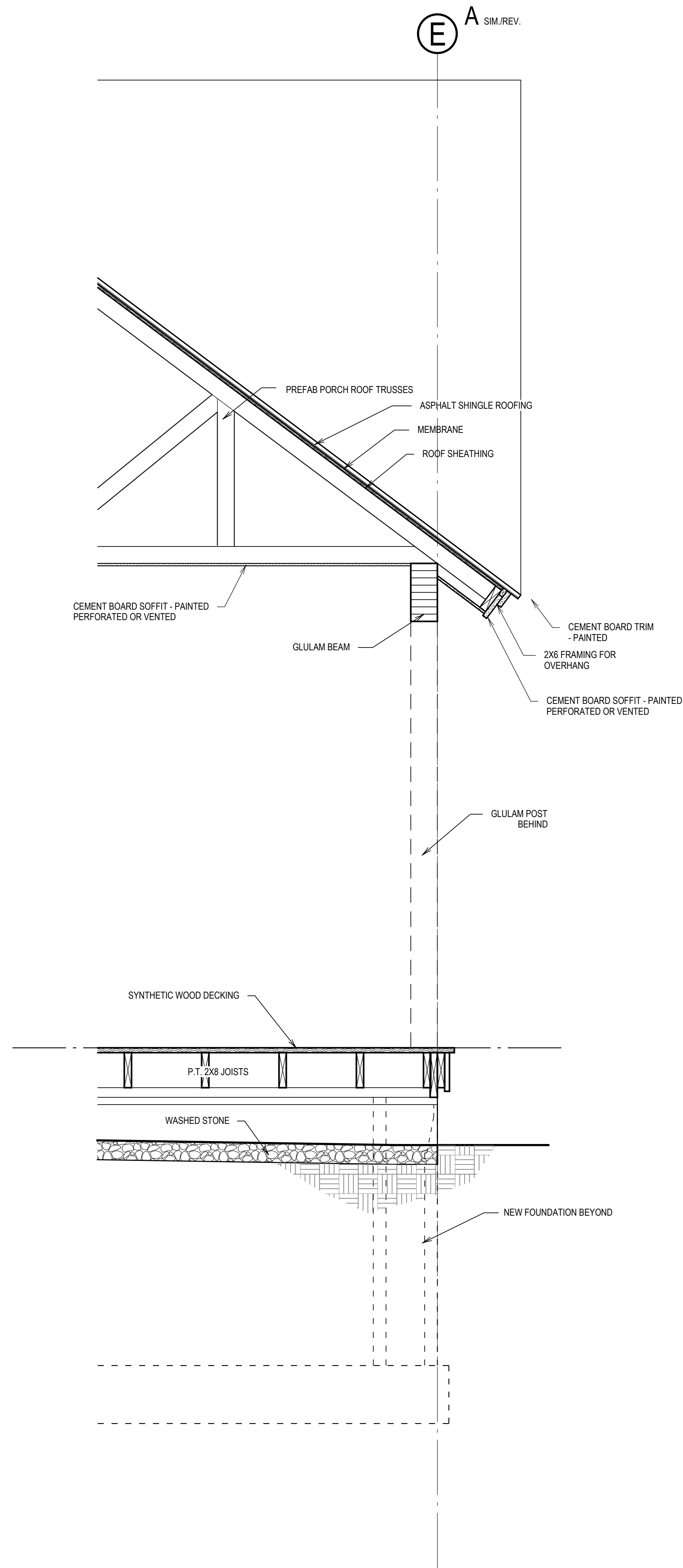
R I O B L A N C O C O U N T Y A R C H I T E C T S P C , I N C .
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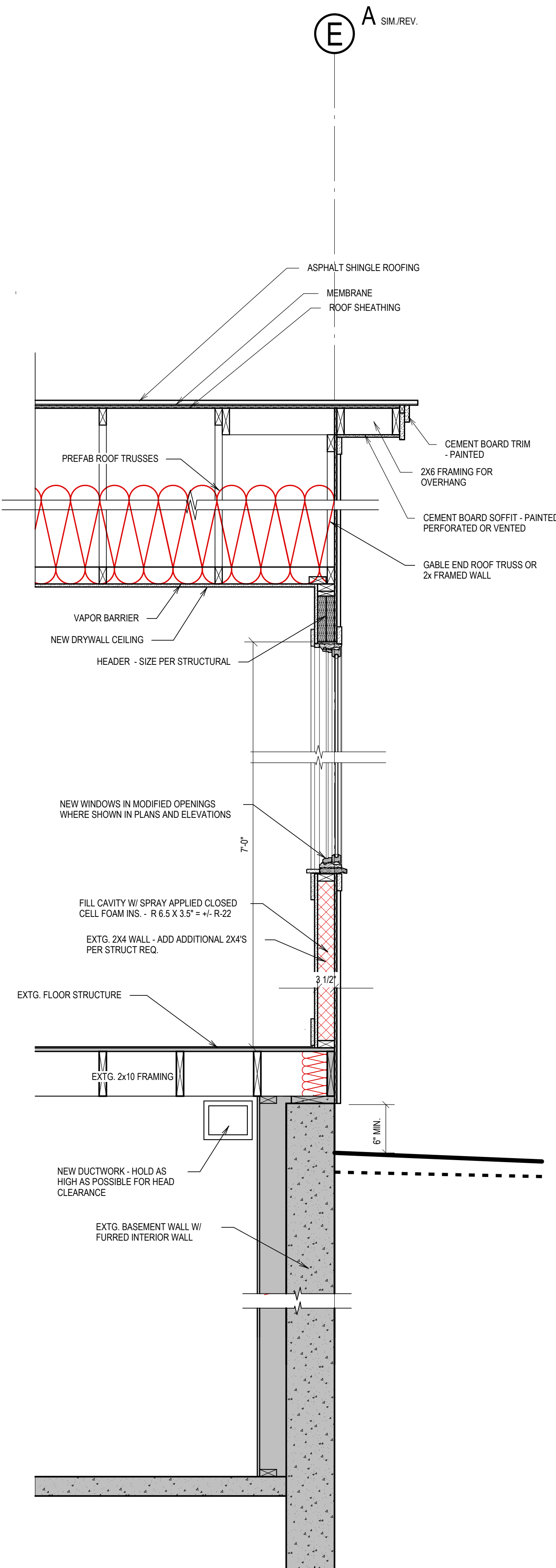
D TYP. WALL SECTION - @ NEW/OLD
 scale 3/4" = 1' - 0" (when printed at 24x36)



C TYP. WALL SECTION - @ NEW/OLD
 scale 3/4" = 1' - 0" (when printed at 24x36)



B TYP. SECTION @ END OF PORCH
 scale 3/4" = 1' - 0" (when printed at 24x36)



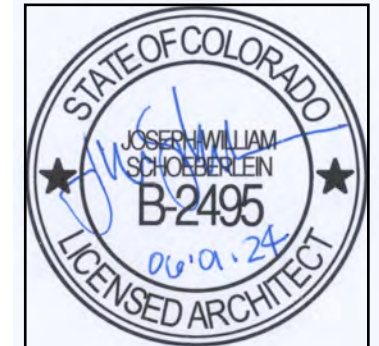
A TYP. WALL SECTION - RAKE WALL @ EXTG. STRUCTURE
 scale 3/4" = 1' - 0" (when printed at 24x36)



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Title: WALL SECTIONS

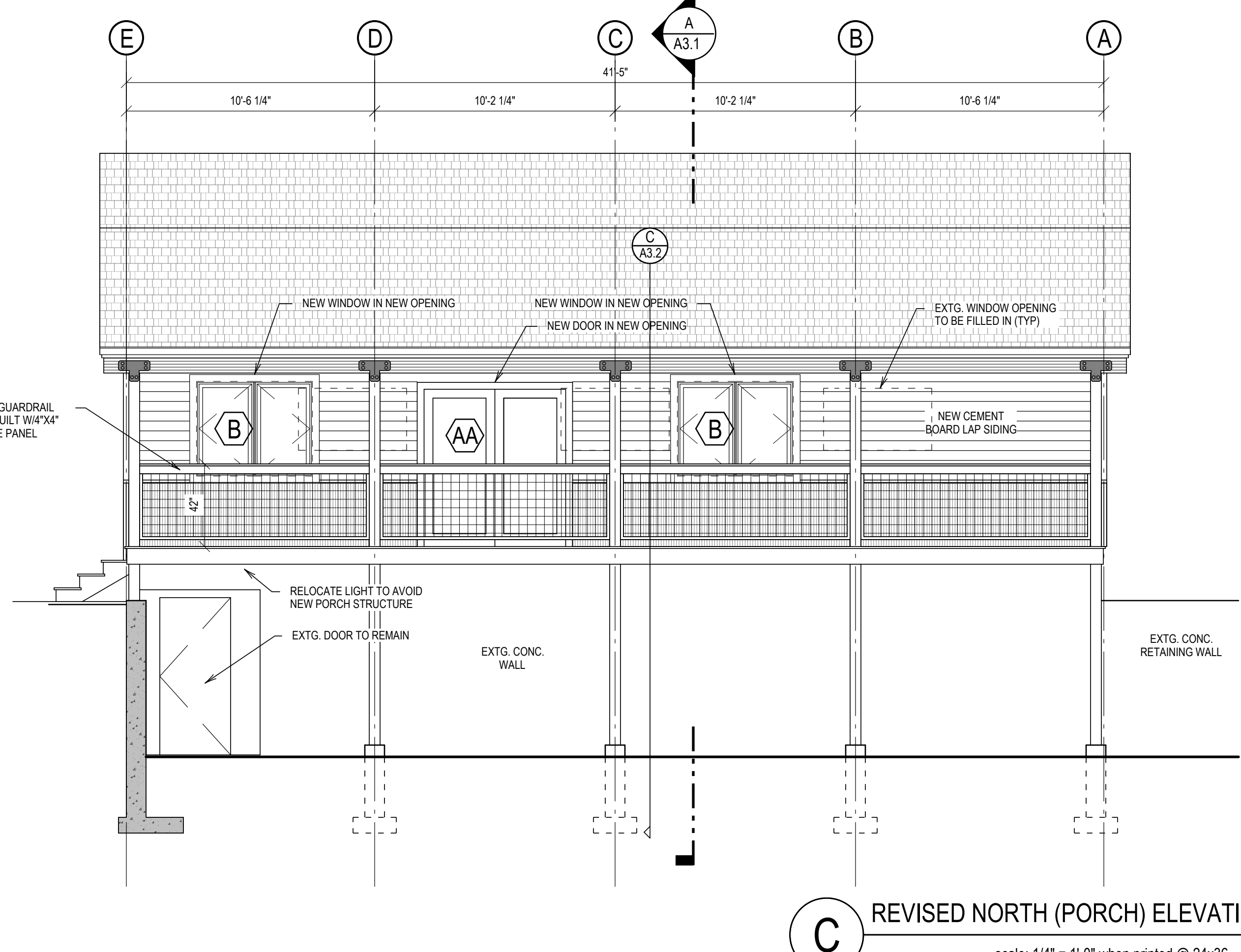
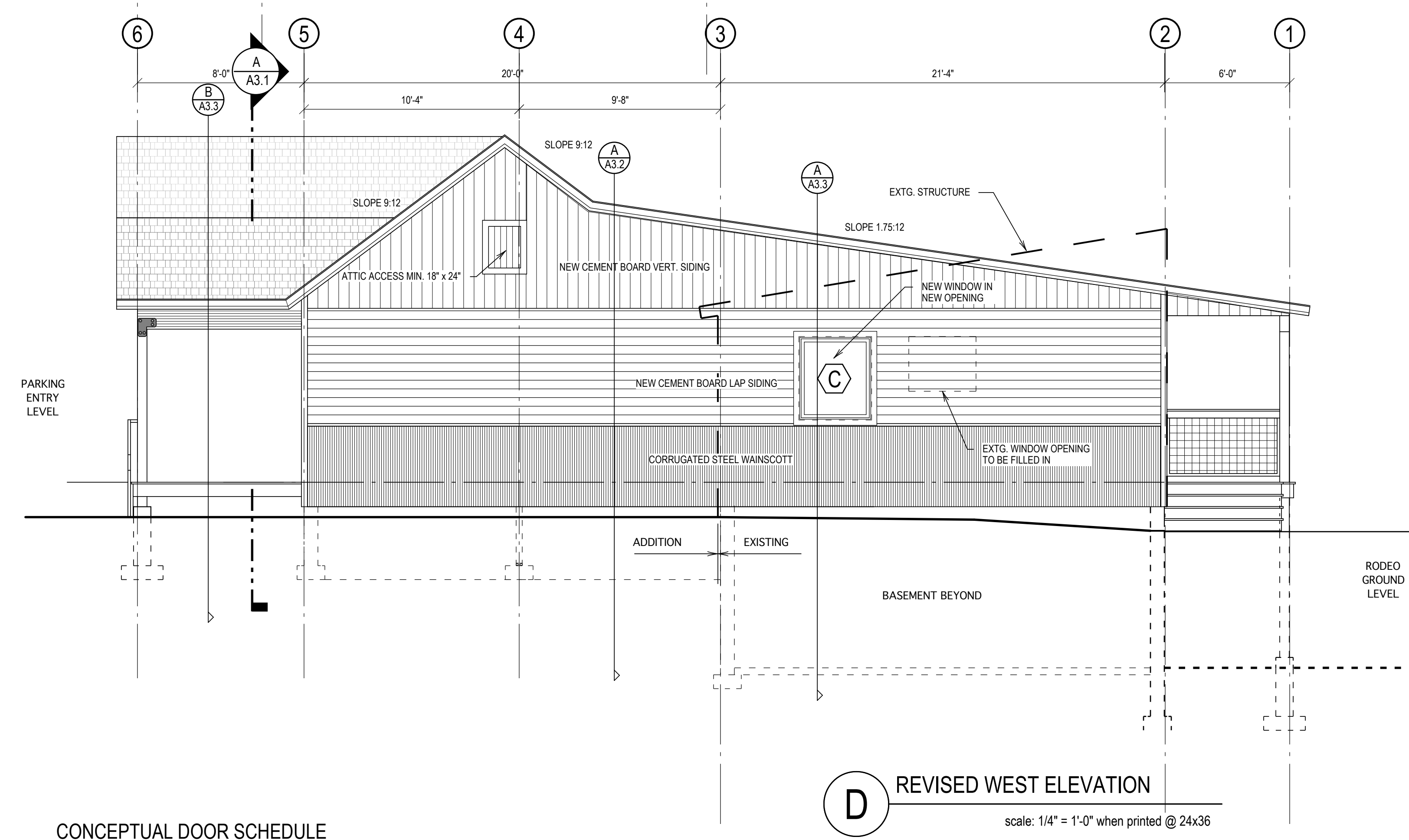
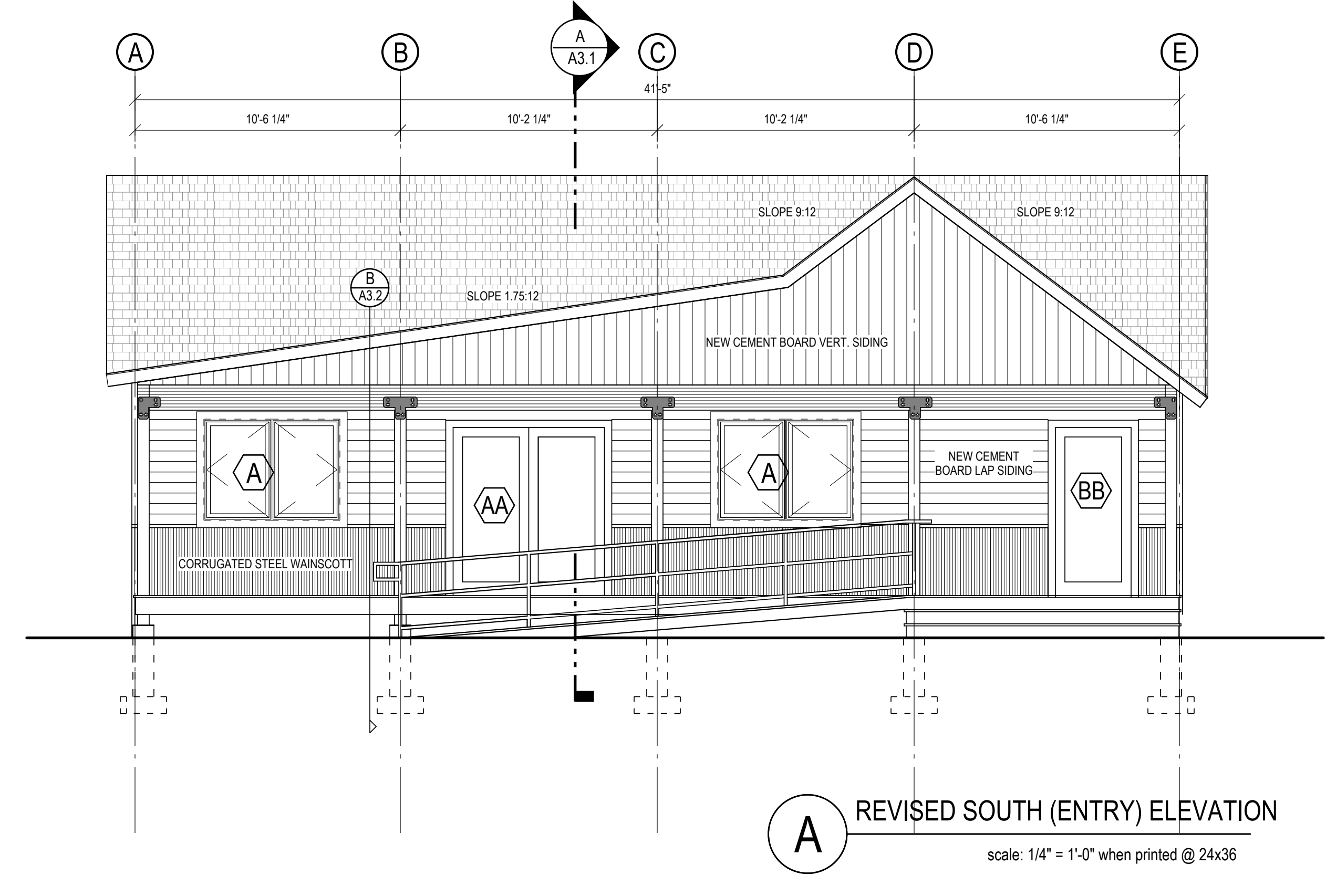
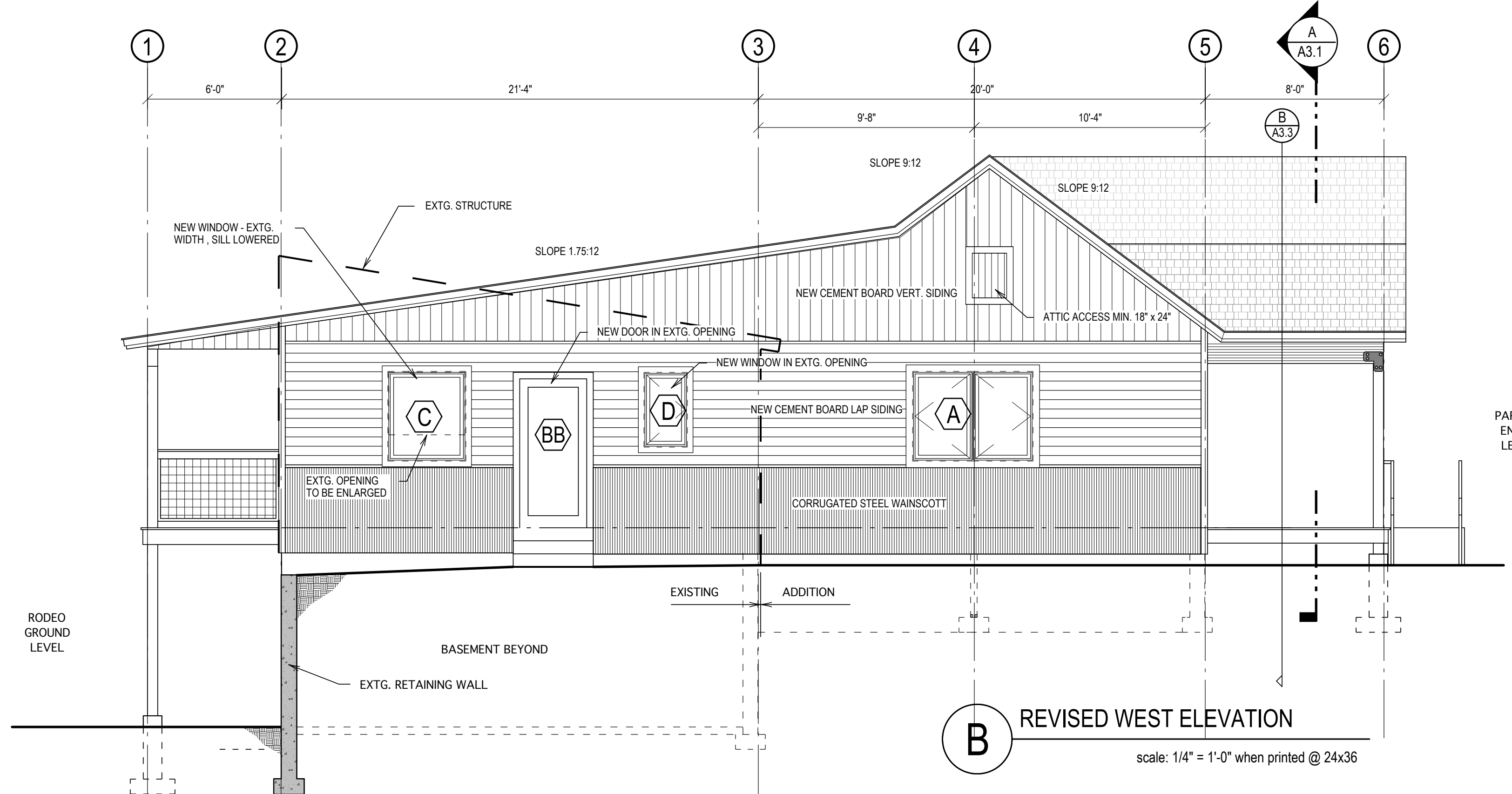
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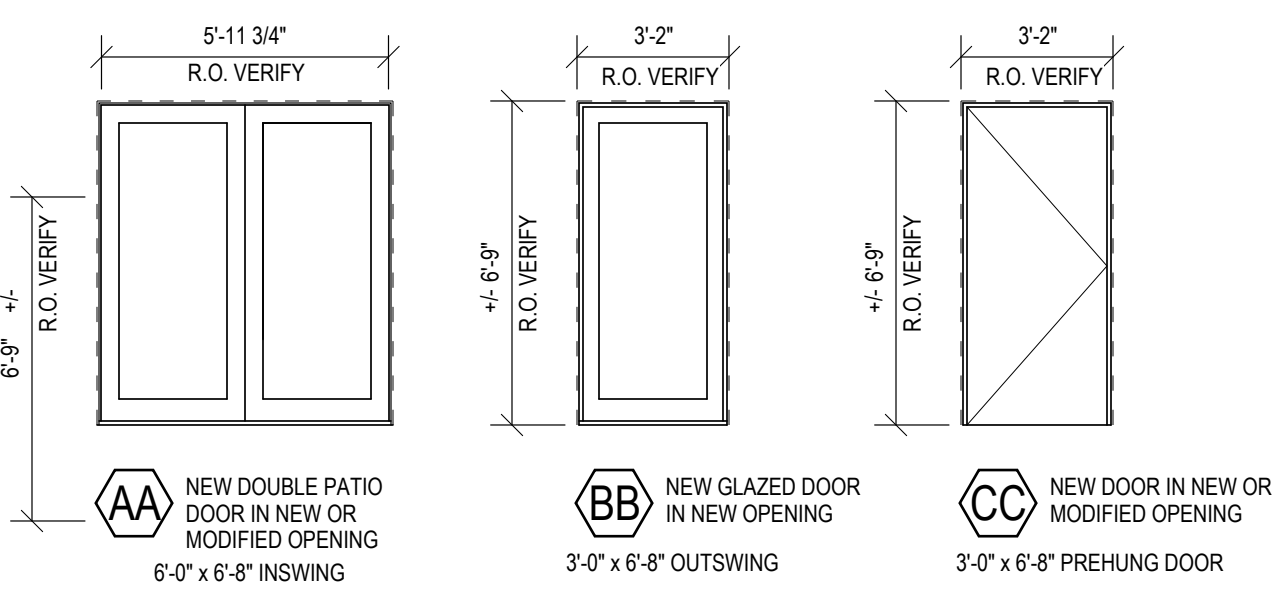
C O L U M B I N E P A R K O F F I C E
 R I O B L A N C O C O U N T Y
 A R C H I T E C T S
 5101 Ellsworth Place • Boulder, CO 80303 • TEL 970 948-7009

Rio Blanco County Columbine Park Office

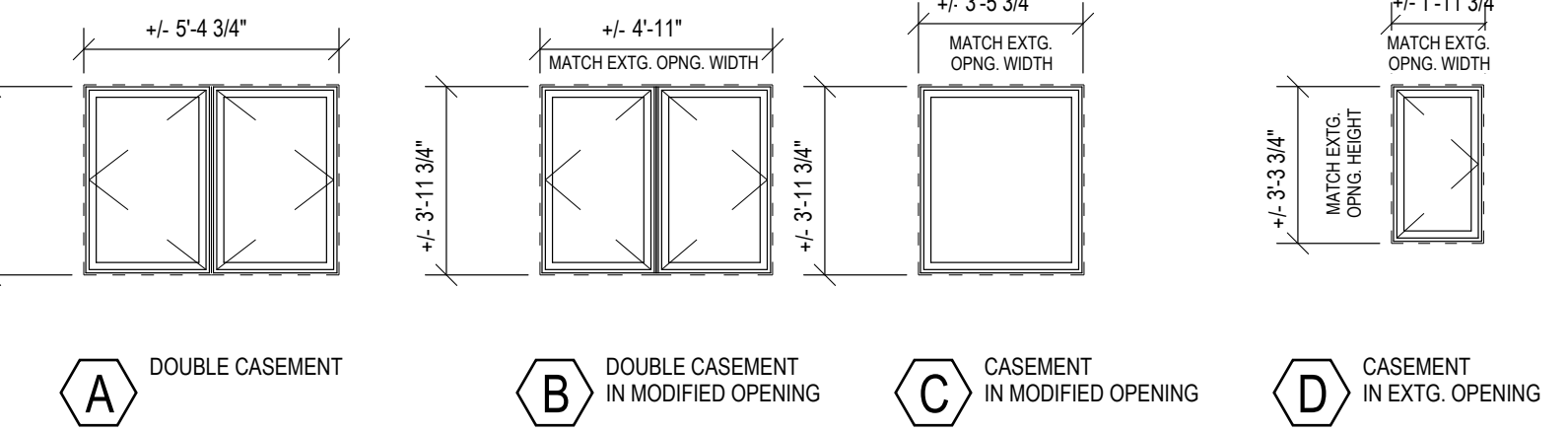
Columbine Horse Park, Rangley, Rio Blanco County, Colorado 81648



CONCEPTUAL DOOR SCHEDULE



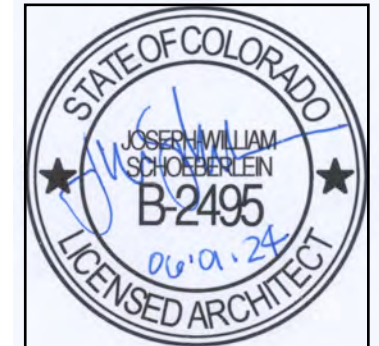
CONCEPTUAL WINDOW SCHEDULE



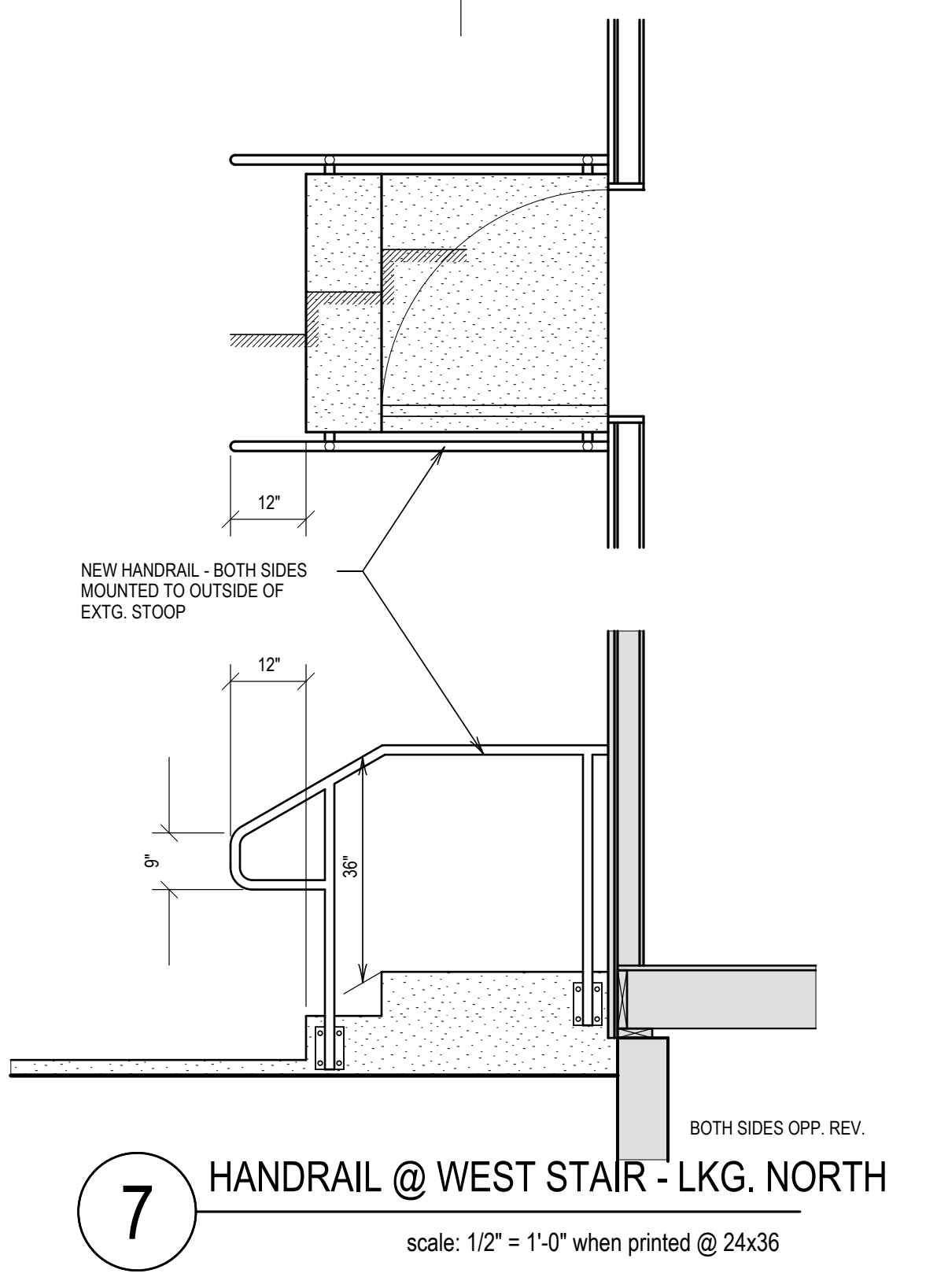
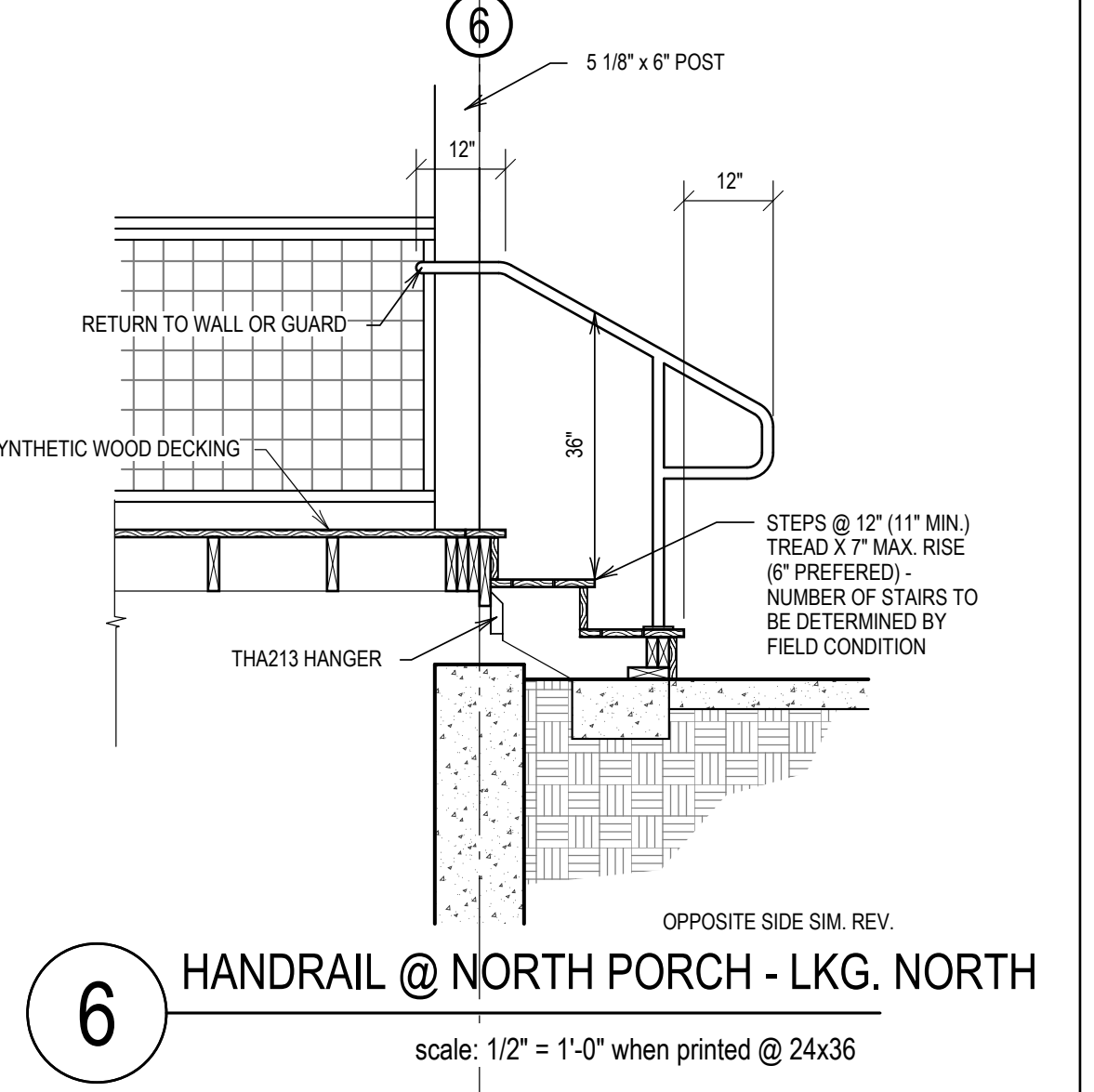
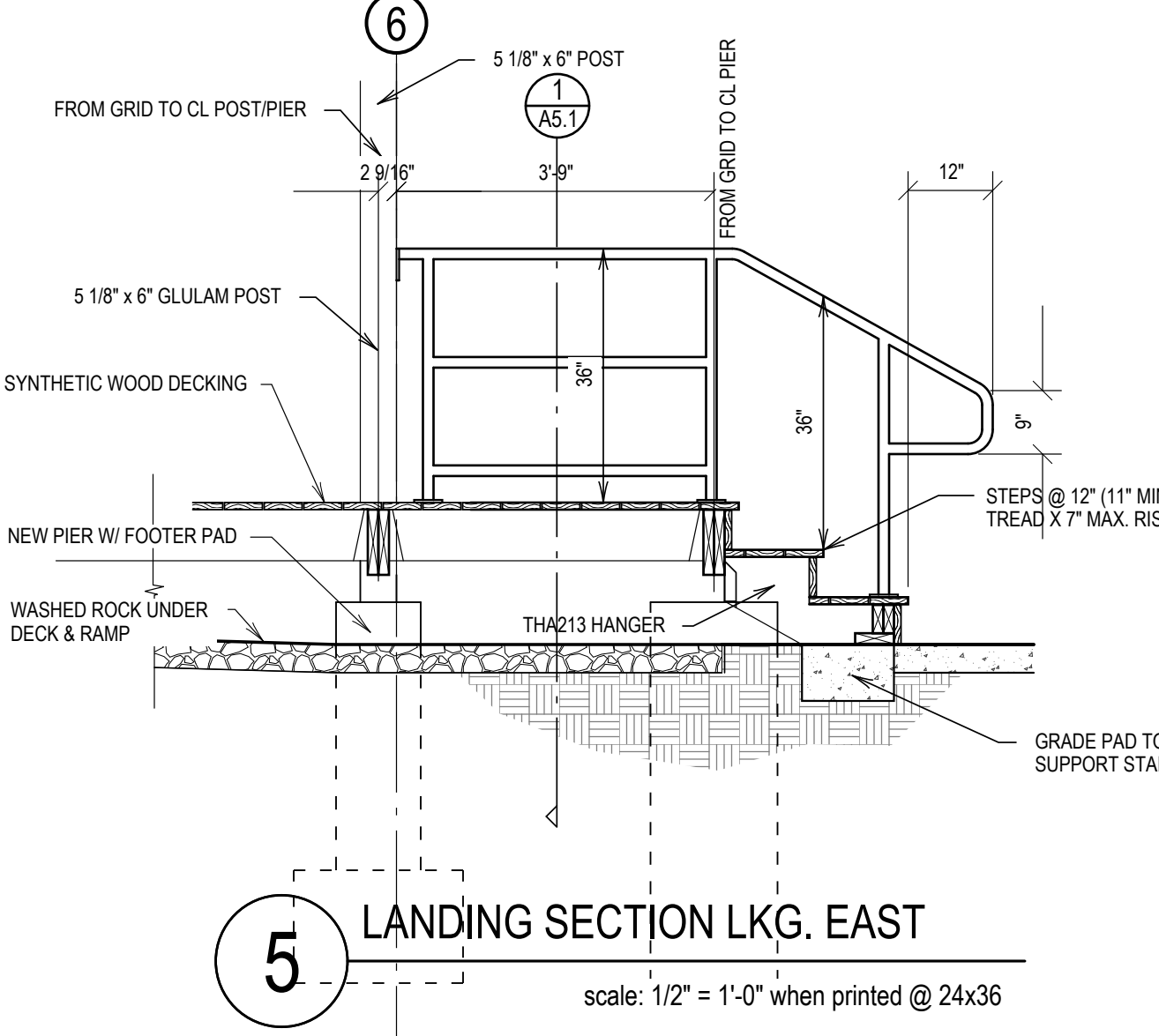
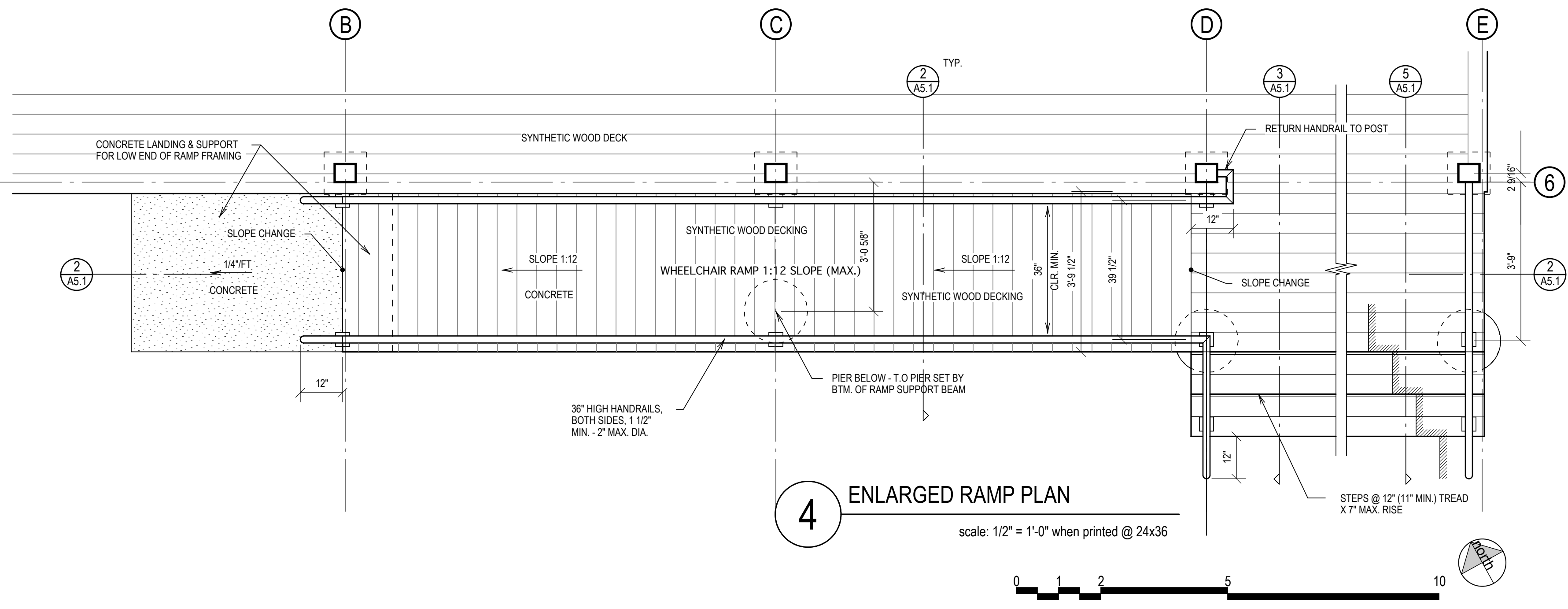
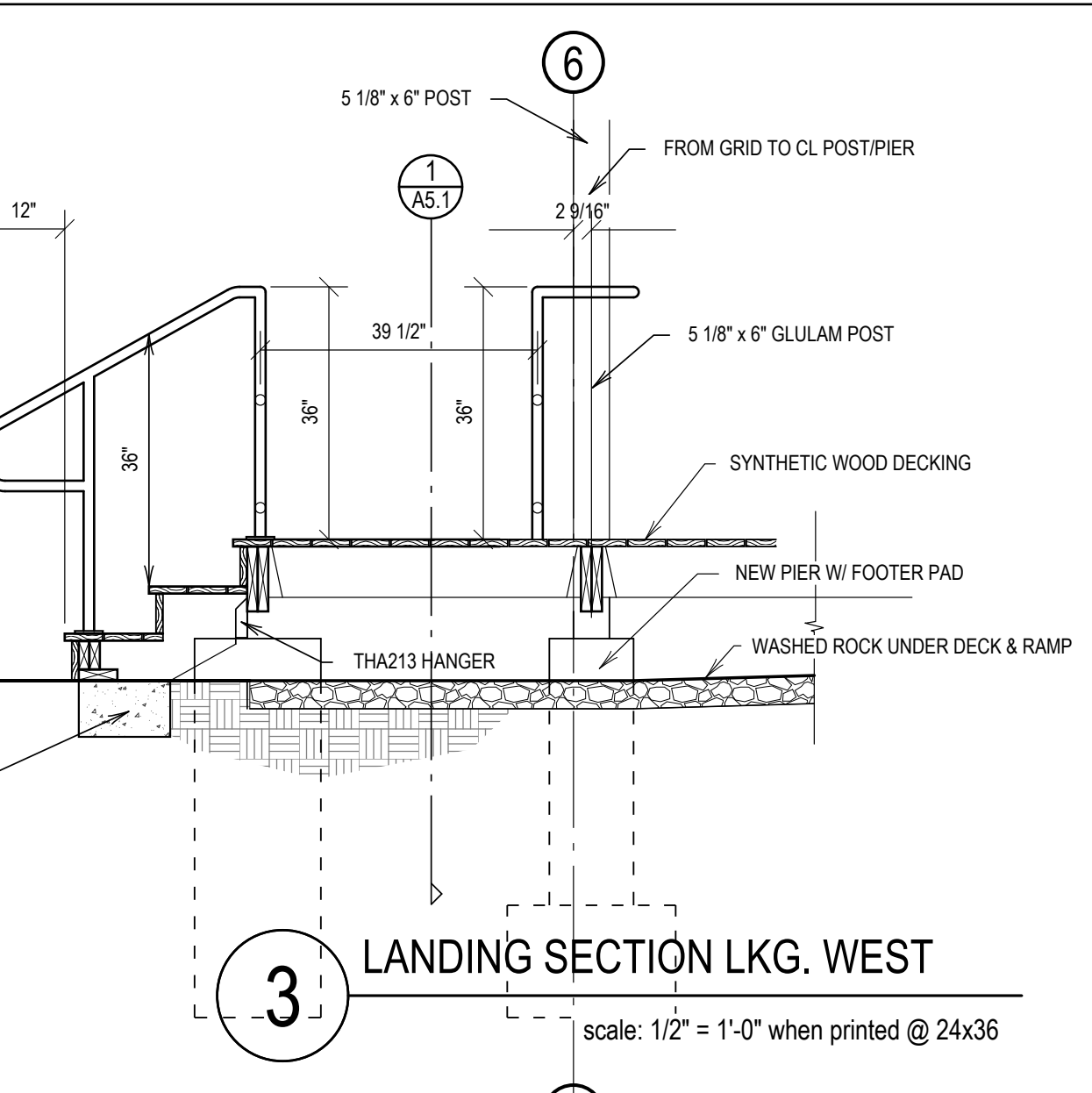
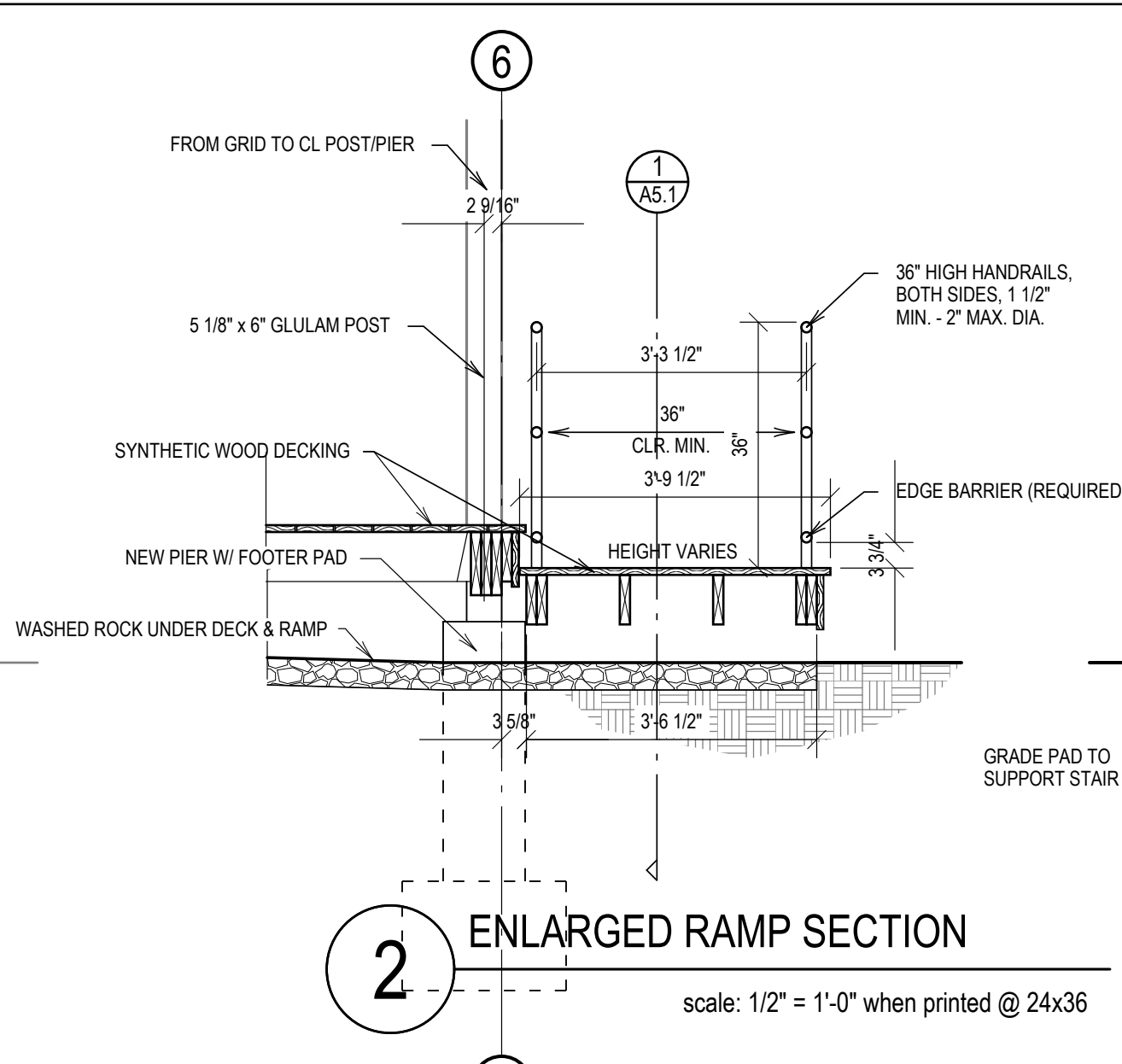
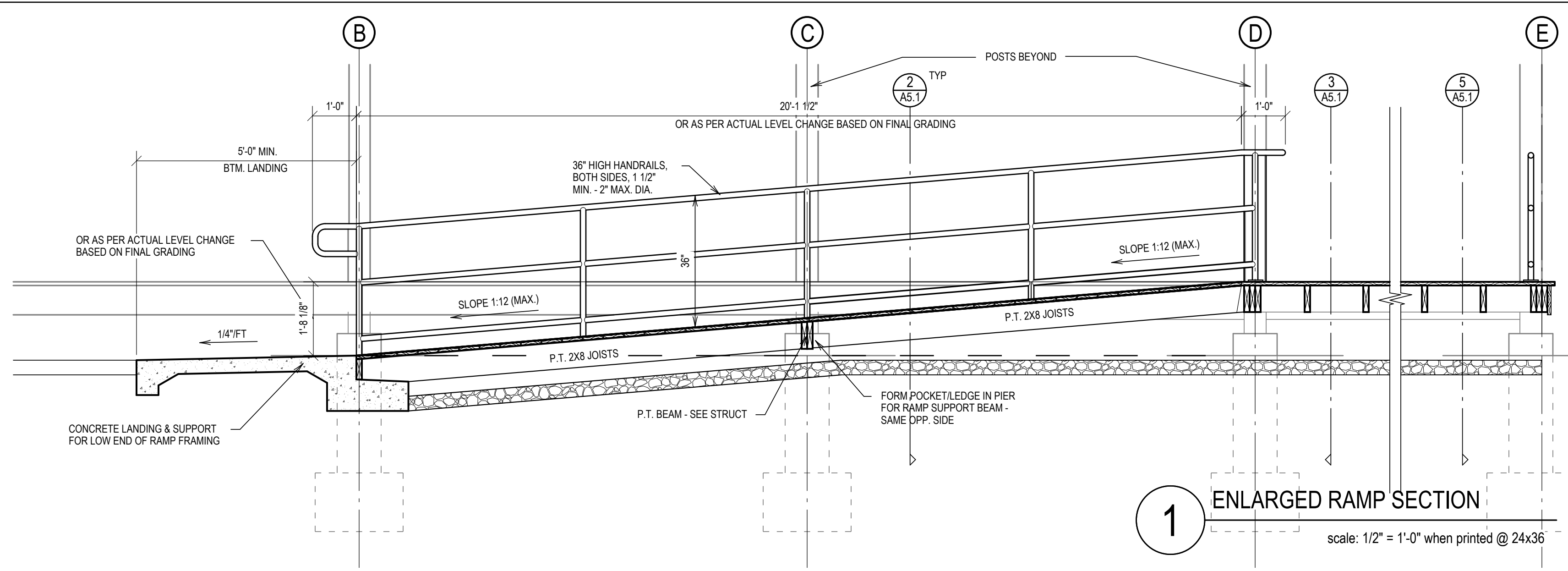
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Title: REVISED ELEVATIONS

Drawing No: A4.1

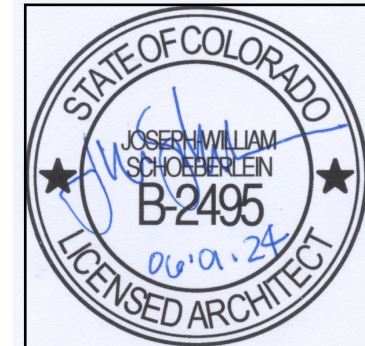


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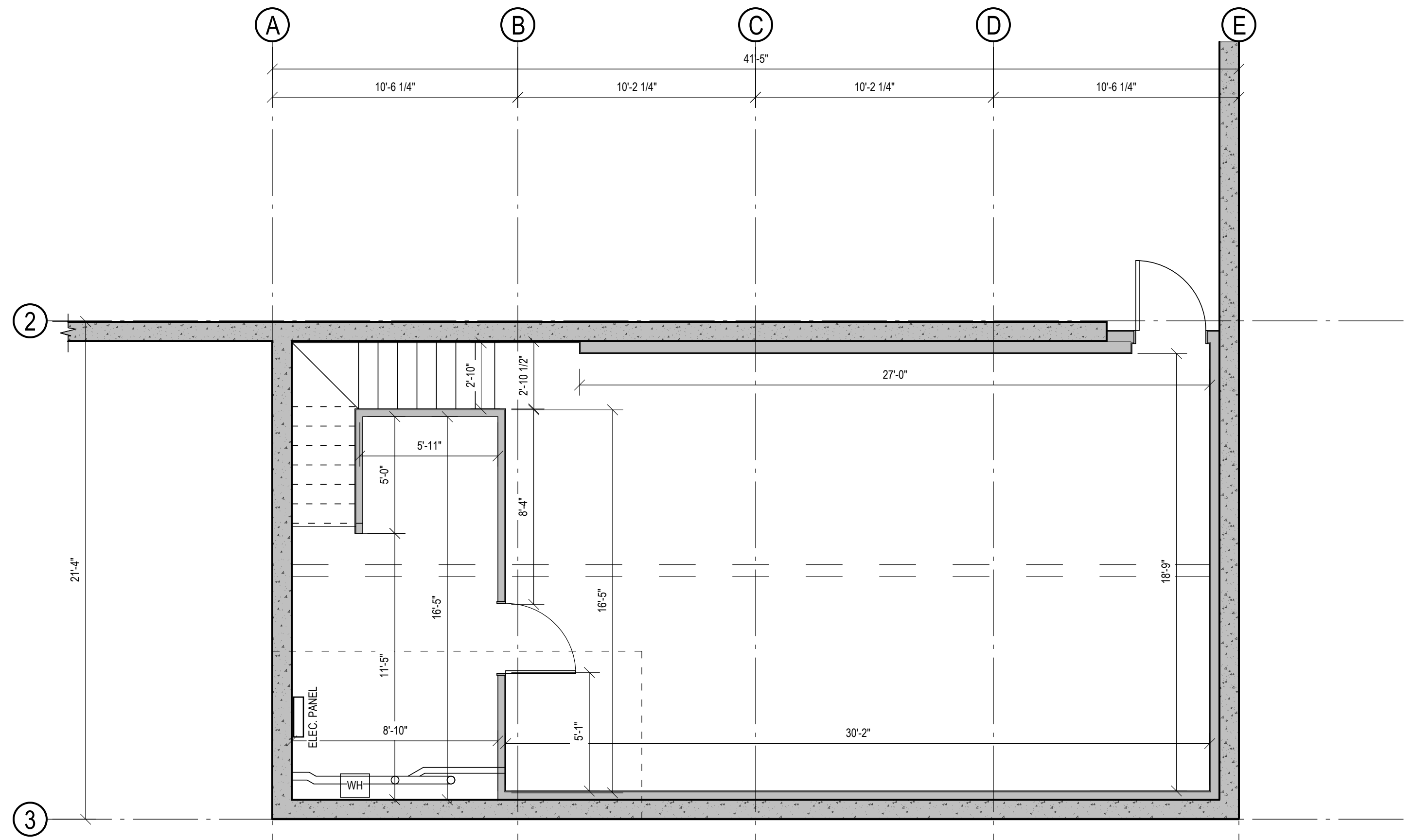
Rio Blanco County Columbine Park Office
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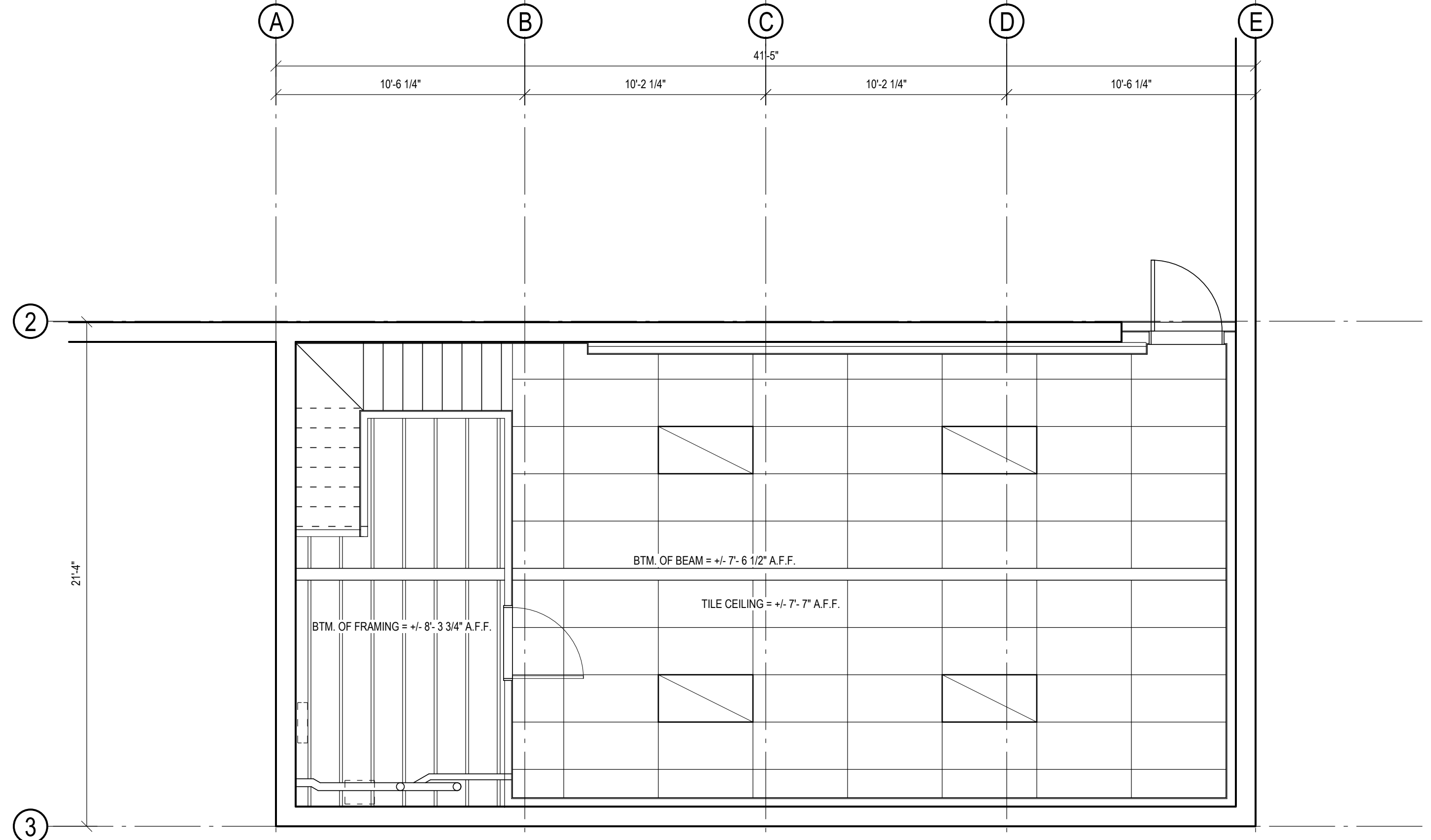
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Title: **EXISTING PLANS/SECTION**

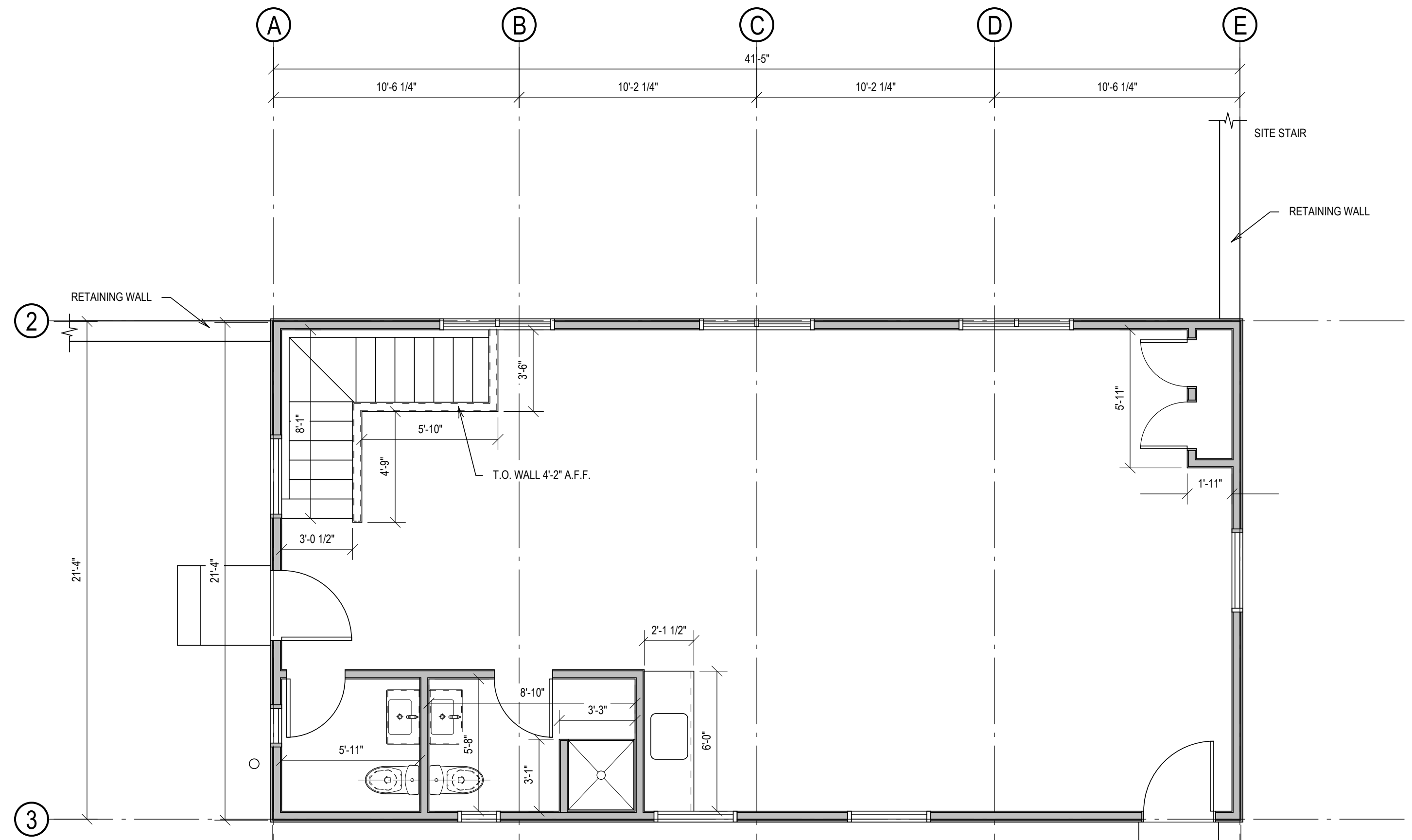
Drawing No: **EX1.1**



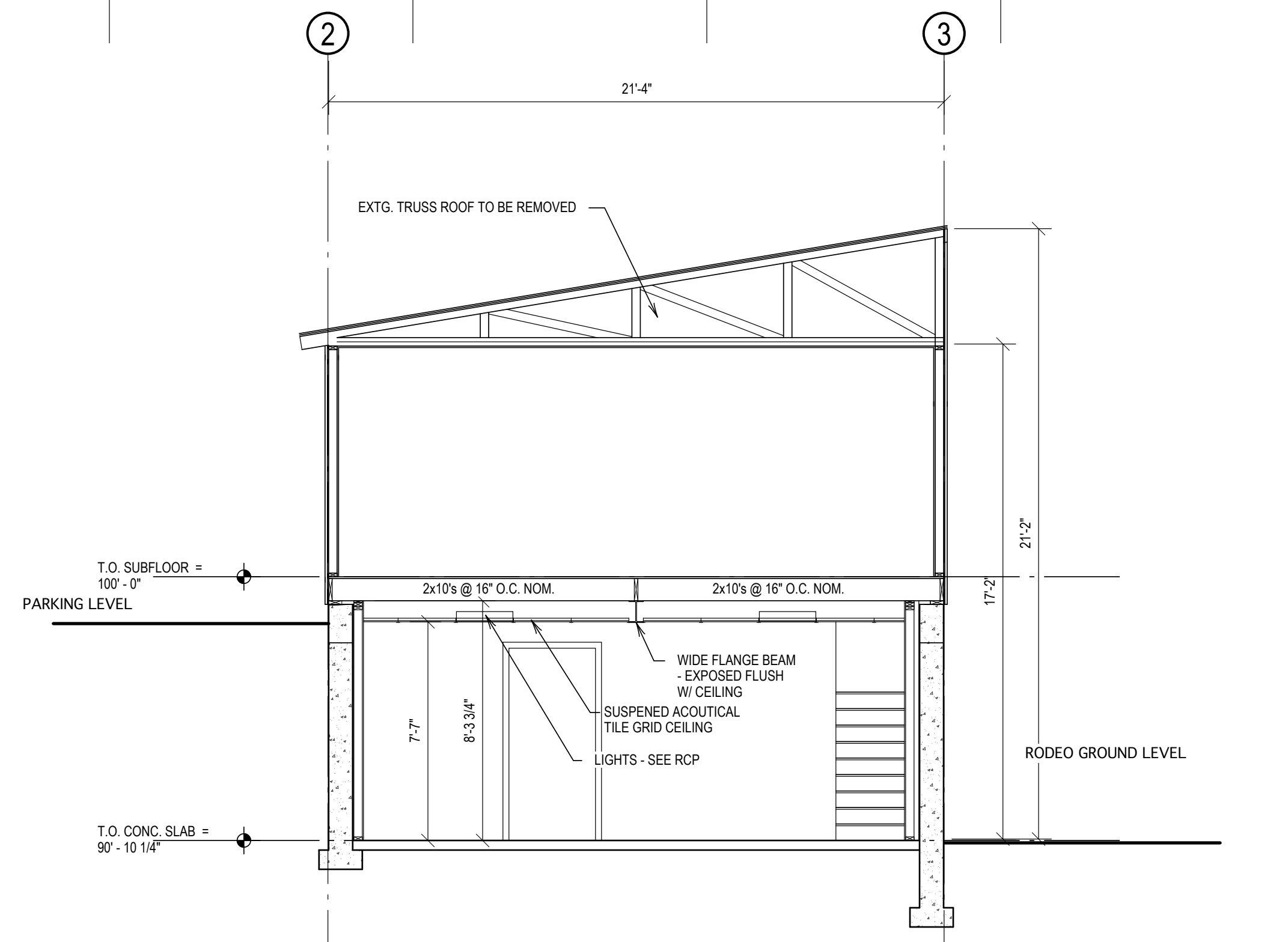
B EXTG. LOWER FLOOR PLAN
 scale: 1/4" = 1'-0" when printed @ 24x36



C EXTG. LOWER REFLECTED CEILING PLAN
 scale: 1/4" = 1'-0" when printed @ 24x36

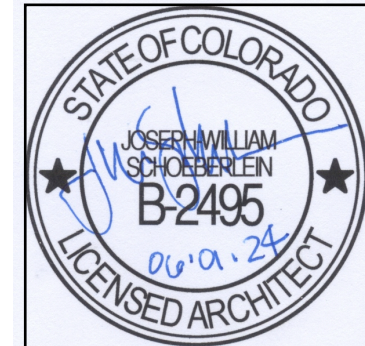


A EXTG. UPPER FLOOR PLAN
 scale: 1/4" = 1'-0" when printed @ 24x36



D TYPICAL EXTG. SECTION
 scale: 1/4" = 1'-0" when printed @ 24x36



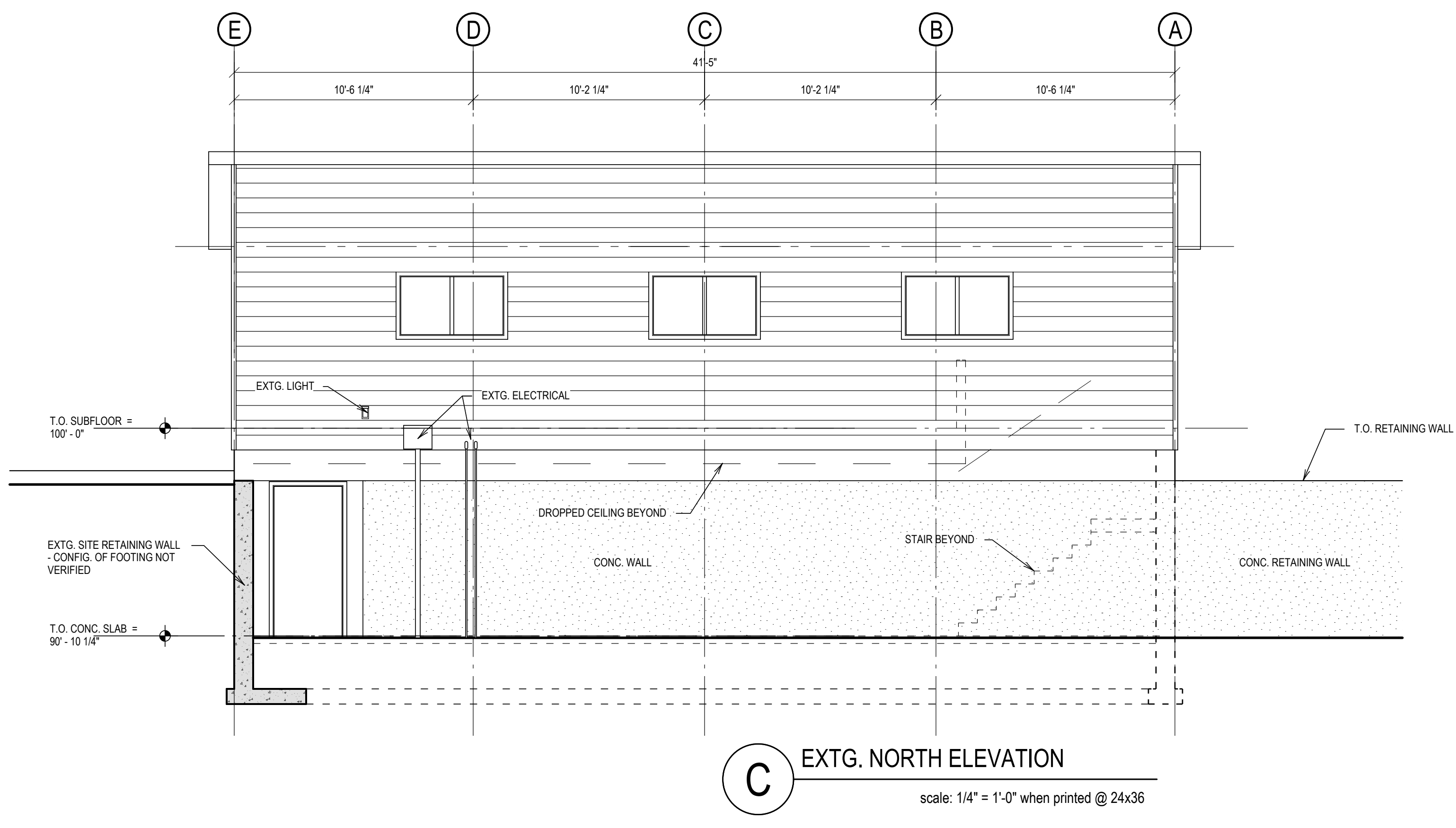
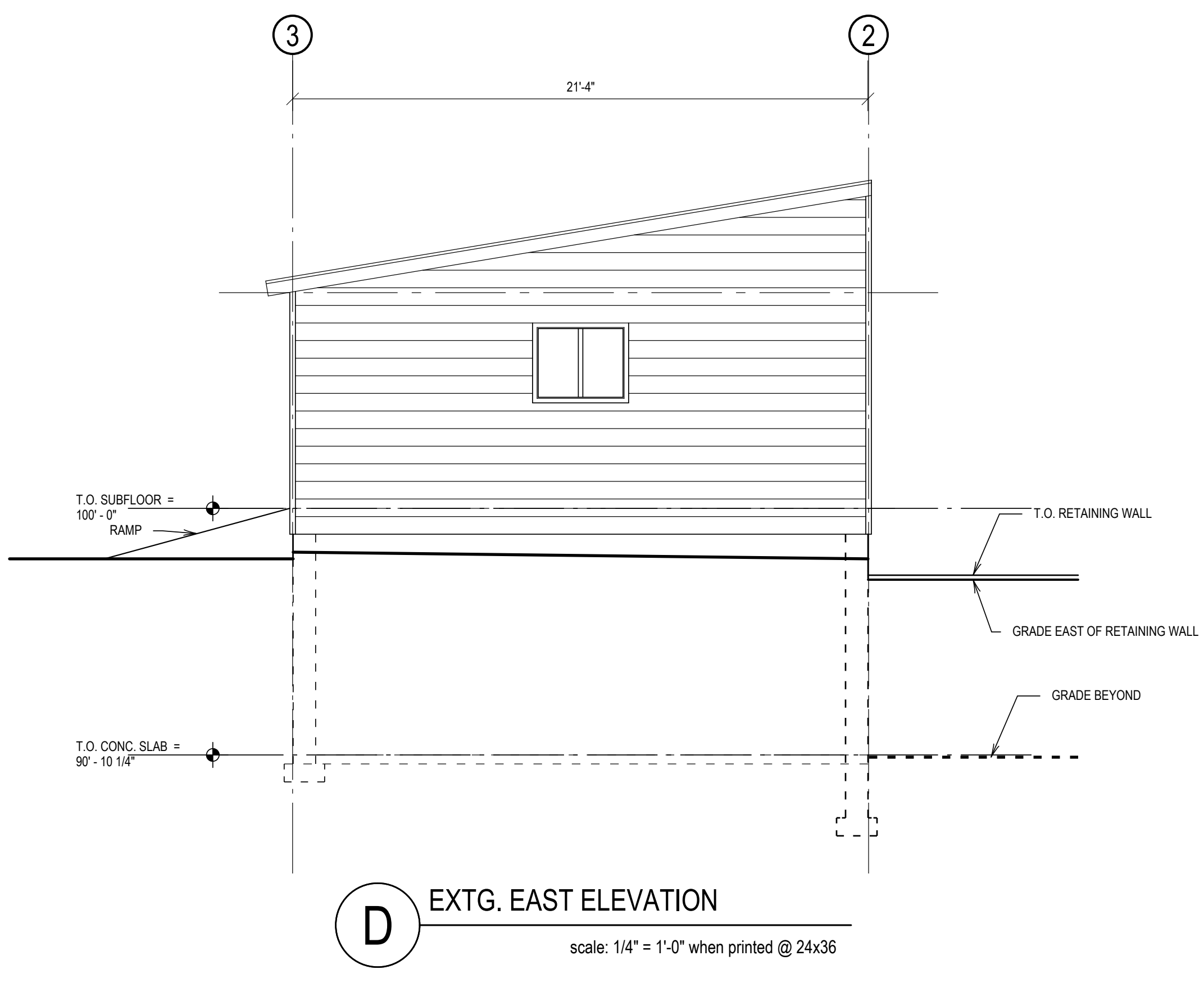
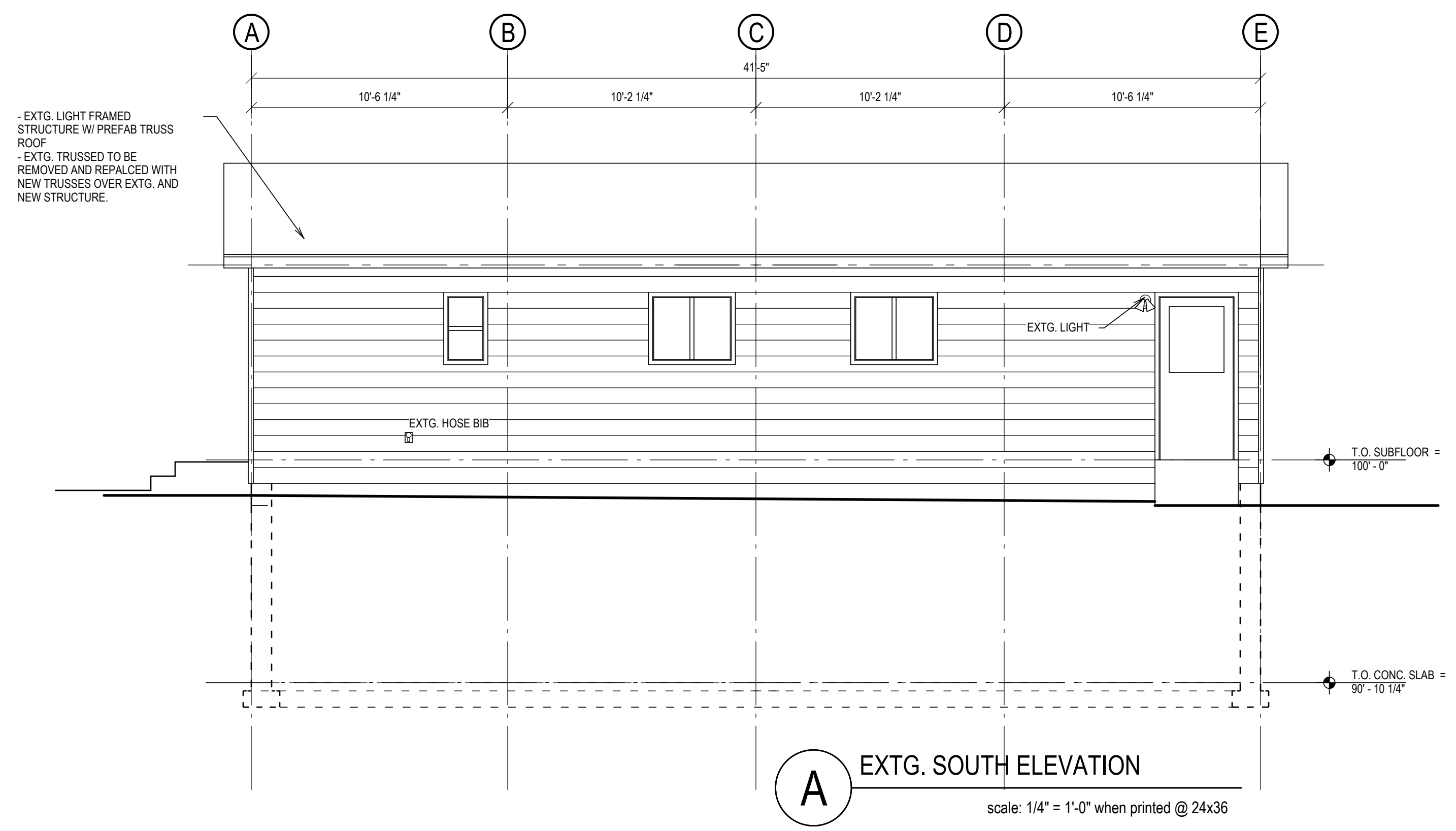
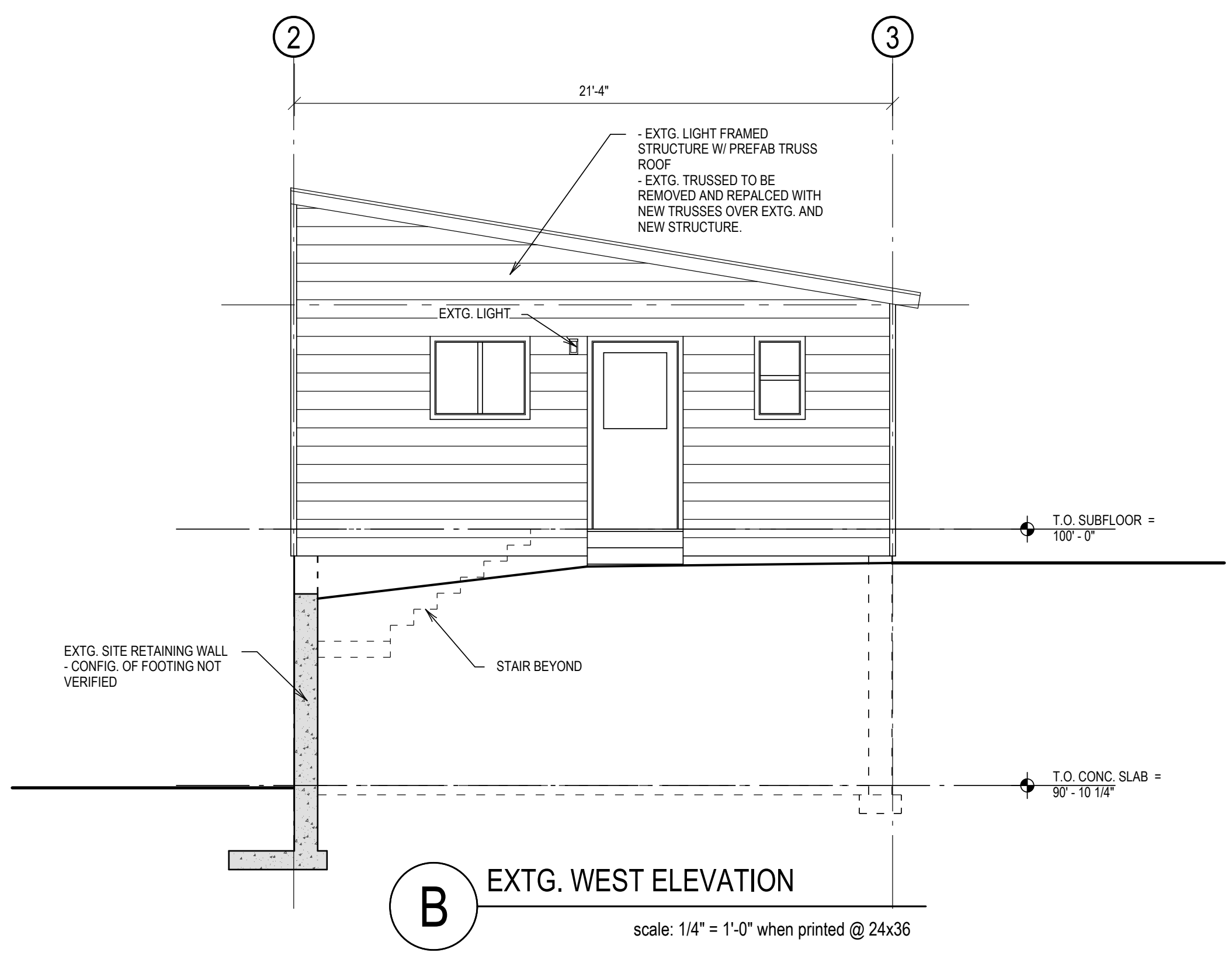


C I V I C F O R U M A S S O C I A T I O N

Rio Blanco County Columbine Park Office

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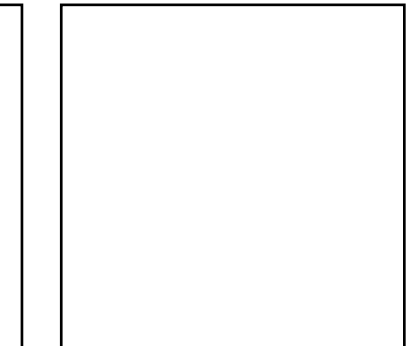
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Title: EXISTING ELEVATIONS

Drawing No: EX1.2



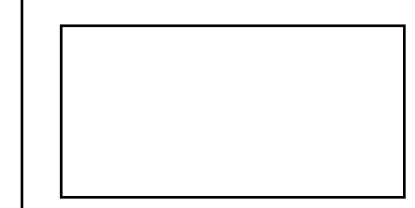
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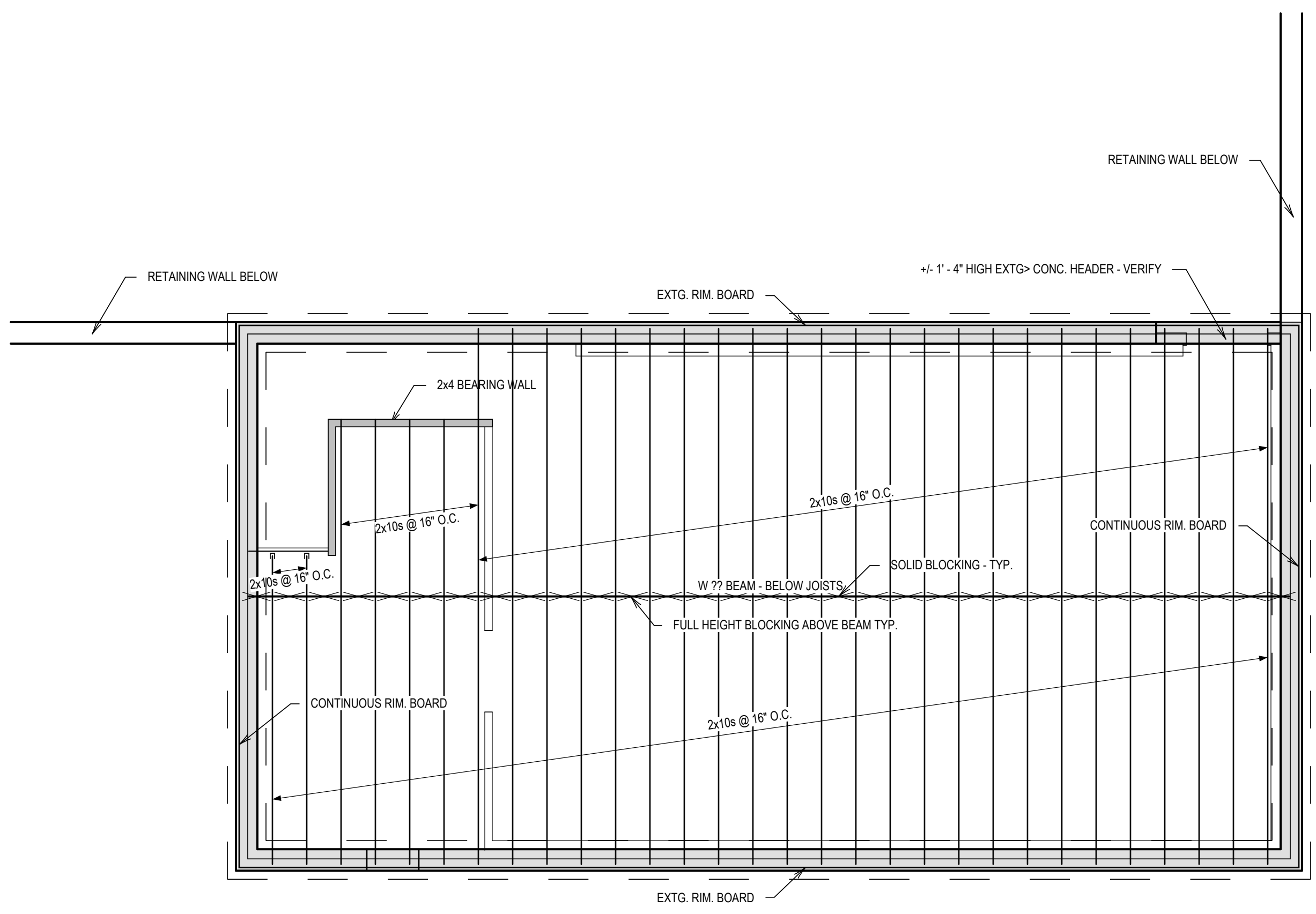
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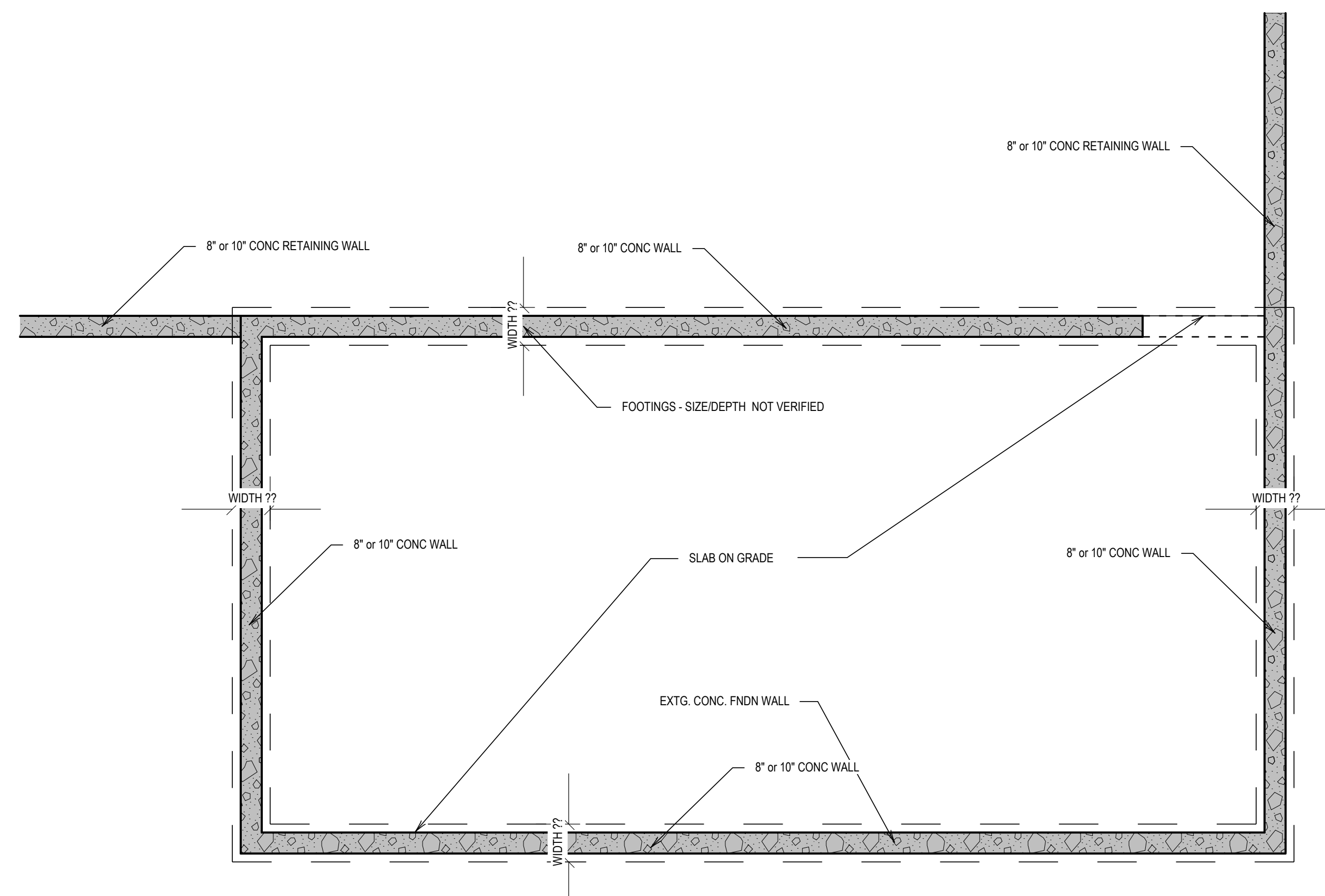


Title:
EXISTING
STRUCT PLANS

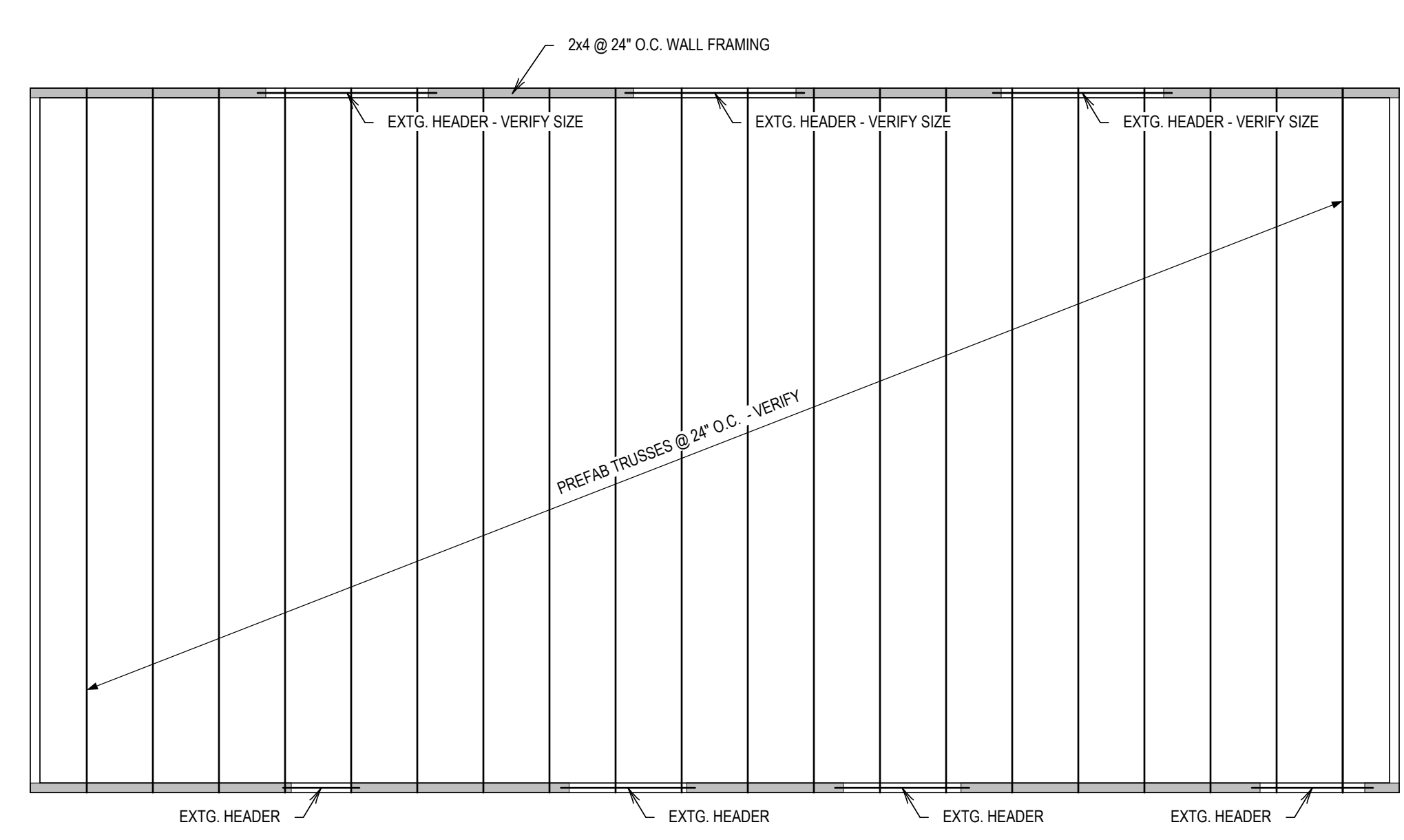
Drawing No:
EXS1.1



B EXTG. FLOOR FRAMING PLAN
scale: 1/4" = 1'-0" when printed @ 24x36



A EXTG. FOUNDATION PLAN
scale: 1/4" = 1'-0" when printed @ 24x36



C EXTG. ROOF FRAMING PLAN
scale: 1/4" = 1'-0" when printed @ 24x36

General Structural Notes:

Design Criteria:
Code Edition: 2006 IBC (International Building Code)
Loads used in design are as follows:

Table with columns for Load Type (Roof, Floor), Location (Offices, Decks and Balconies), and Load Value (psf).

Table with columns for Load Type (Snow Loads), Location (Elevation, Ground Snow Load, Roof Snow Load), and Load Value (psf).

Table with columns for Wind Design Data (Analysis Procedure, Ultimate Wind Speed, Wind Exposure, Exterior Component and Cladding Wind Pressures).

Table with columns for Geotechnical Design Data (Allowable Soil Bearing Pressure, Minimum Dead Load Pressure, Frost Depth, Lateral Bearing Pressure).

Geo-Technical Information
1 The foundation design was prepared in accordance with a nearby geotechnical report by NWCC, Inc., dated 6/15/2015, job number 15-10035.

Reinforcing Steel:
1 All reinforcement detailing, fabrication and placement shall conform to the ACI Details and Detailing of Reinforcement (ACI 315).

Reinforced Concrete:
1 All structural concrete has been designed in accordance with ACI 318. All structural concrete construction work shall conform to ACI 301 unless noted otherwise.

Concrete and Masonry Anchors:
1 Anchor bolts are to be ASTM F1554, Grade 36 L type or headed anchor bolts, unless noted otherwise.

Structural Steel:
1 Structural steel shall be detailed, fabricated, and erected in accordance with the latest provisions of AISI Manual of Steel Construction.

Wood Framing:

- 1 Wood Framing shall be kiln dried lumber graded and marked in accordance with the following minimum standards unless noted otherwise:
2 Glued Laminated (GL) members shall be fabricated in accordance with ANSI/AITC standard A190.1 and stamped with an AITC quality mark or APA-EWS trademark.

Design is based on products manufactured by Boise Cascade. Alternate manufacturers may be used with review and approval of the architect and structural engineer.

- 5 Wood I-Joists shown on the plans are based on joists manufactured by Boise Cascade. Alternate manufacturers may be used with review and approval of the architect and structural engineer.

- 7 All wood framing details not shown otherwise shall be constructed equal to or better than the minimum standards of the 2006 IBC (International Building Code)
8 Unless noted otherwise, minimum nailing shall be in accordance with the Fastening Schedules and Details of the 2006 IBC (International Building Code)

Table with columns for Location (Roof, Floor, Exterior Wall), Material (Sheathing), and Nailing Schedule (e.g., 19/32 in. sheathing nailed with 10d @ 6" o.c.).

- 15 Roof rafters, trusses, and lookout framing shall be attached to walls and bearing beams with H2.5A hurricane clips unless noted otherwise.

Table with columns for Nail Name, Diameter, and Nail Length for Wood Nail Fasteners.

19 Generic Wood Screw Fasteners:
Screw types specified on the drawings are based on the following minimum specifications:

Table with columns for ID, Screw Name, Diameter, and Screw Length for Generic Wood Screw Fasteners.

Alternative screws proposed by the contractor shall be submitted with specifications to the structural engineer prior to construction for review and approval.

20 Manufacturer Specific Wood Screw Fasteners:
Manufacturer specific screw types specified on the drawings are based on screws manufactured by Simpson, Inc.

Table with columns for ID, Screw Name, Diameter, and Screw Length for Manufacturer Specific Wood Screw Fasteners.

Alternative screws proposed by the contractor shall be submitted with specifications to the structural engineer prior to construction for review and approval.

General Requirements:

- 1 Structural erection and bracing: The structural drawings illustrate the completed structure with all elements in their final positions supported and braced.
2 Shop drawings: Submit shop and erection drawings for all structural steel, structural aluminum, miscellaneous steel, steel joists and girders, steel deck, masonry reinforcing steel, engineer to review prior to fabrication.

Deferred Submittals:

- 1 When received and reviewed by the Engineer of Record, the following submittal items will be submitted to the building official for review and approval:
Truss Shop Drawings



RBC Columbine Office Addition
Columbine Horse Park,
Rangley, CO 81648

Table with columns for Date, Revision, and Permit Set.

Job No. 2024-187.001
Drawn by: JRK
Date: 05/31/2024
QC: JEP | PE: JEP

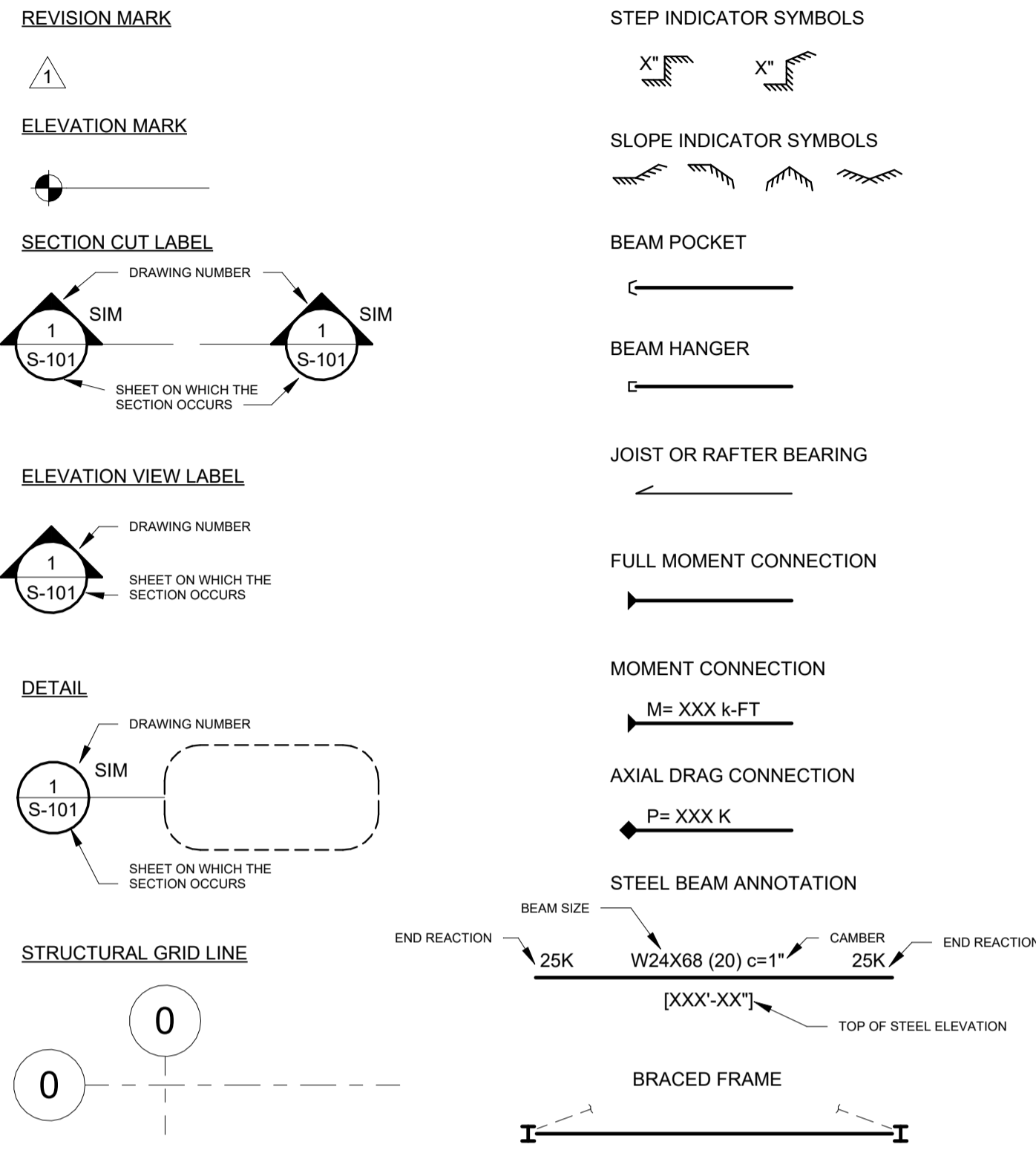
GENERAL NOTES

Dwg No. S-001

ABBREVIATIONS

| | |
|-----------------------------------|------------------------------------|
| AB ANCHOR BOLT | NA NOT APPLICABLE |
| AFF ABOVE FINISHED FLOOR | NIC NOT IN CONTRACT |
| ALT ALTERNATIVE / ALTERNATE | NOM NOMINAL |
| ANCH ANCHOR | NTS NOT TO SCALE |
| ARCH ARCHITECT | NW NORMAL WEIGHT |
| EA AT | |
| | OAE OR APPROVED EQUAL |
| B BOTTOM OF | OC ON CENTER(S) |
| BF BOTTOM OF FOOTING | OD OUTSIDE DIAMETER |
| BLDG BUILDING | OH OVERHEAD / OVERHANG |
| BM BEAM | OPNG OPENING |
| BOT BOTTOM | OPP OPPOSITE |
| BRG BEARING | OSB ORIENTED STRAND BOARD |
| BW BOTTOM OF WALL | OSL ORIENTED STRAND LUMBER |
| | OVS OVERSIZED HOLE |
| C STEEL CHANNEL | (P) PRO PROPOSED |
| CANT CANTILEVER | P AXIAL LOAD |
| CF COLD FORMED | PAF POWDER ACTUATED FASTENER |
| CIP CAST IN PLACE | PARTBD PARTICLEBOARD |
| CJ CONTROL JOINT | PC PRECAST |
| CJP COMPLETE JOINT PENETRATION | PEMB PRE-ENGINEERED METAL BUILDING |
| CL CENTER LINE | PL PLATE |
| CLR CLEAR(ANCE) | PLF POUNDS PER LINEAL FOOT |
| CMU CONCRETE MASONRY UNIT | PLY PLYWOOD |
| COL COLUMN | PRELM PRELIMINARY |
| CONC CONCRETE | PSF POUNDS PER SQUARE FOOT |
| CONT CONTINUOUS / CONTINUE | PSI POUNDS PER SQUARE INCH |
| | PT PRESSURE TREATED |
| | PT POST TENSION (ED) |
| DET DETAIL | QTY QUANTITY |
| DIA DIAMETER | R REACTION |
| DIM DIMENSION | RAD RADIUS |
| (E) / EXIST EXISTING | RD ROOF DRAIN |
| EA EACH | REF REFERENCE / REFER TO |
| EJ EXPANSION JOINT | REINF REINFORCE / REINFORCING |
| EMBED EMBEDMENT | REQD REQUIRED |
| ENGR ENGINEER | RO ROUGH OPENING |
| EO EDGE OF | RTU ROOF TOP UNIT |
| EQ EQUAL | |
| ES EACH SIDE | SF SQUARE FOOT/FEET |
| EW EACH WAY | SIM SIMILAR |
| EXP EXPANSION | SLBB SHORT LEG BACK TO BACK |
| EXT EXTERIOR | SPEC SPECIFICATION (S) |
| | SS STAINLESS STEEL |
| (F) FUT FUTURE | SSLP SHORT SLOTTED HOLE PARALLEL |
| F'c 28 DAY CONCRETE STRENGTH | SSLT SHORT SLOTTED HOLE TRANSVERSE |
| FD FLOOR DRAIN | STD STANDARD |
| FDN FOUNDATION | STL STEEL |
| FF / FFE FINISH FLOOR (ELEVATION) | STRUCT STRUCTURE / STRUCTURAL |
| FOEW FACE OF EXISTING WALL | SUSP SUSPENDED |
| FOS FACE OF STUD | SYST SYSTEM |
| FRP FIBER REINFORCED PANEL | |
| FT FOOT | T TOP OF: DECK, CONCRETE, BEAM, |
| FTG FOOTING | PARAPET, STEEL, WALL |
| FV SHEAR STRENGTH | T&B TOP AND BOTTOM |
| Fy YIELD STRENGTH | T&G TONGUE AND GROOVE |
| | TOW TOP OF WALL |
| GA GAUGE | TRANS TRANSVERSE |
| GALV GALVANIZED | TYP TYPICAL |
| GB GYPSUM BOARD | UNO UNLESS NOTED OTHERWISE |
| GC GENERAL CONTRACTOR | V SHEAR LOAD |
| GL GLU-LAM LUMBER | VERT VERTICAL |
| GWB GYPSUM WALL BOARD | VIF VERIFY IN FIELD |
| GYP GYPSUM | VNR VENEER |
| | W WIDE FLANGE |
| HAS HEADED ANCHOR STUD | WASH WASHER |
| HGR HANGER | WCV WALL COVERING |
| HOOK STANDARD REINFORCING HOOK | WD WOOD |
| HORIZ HORIZONTAL | WD BLK WOOD BLOCKING |
| HSS HOLLOW STEEL SECTION | WDB WOOD BASE |
| HT HEAVY TIMBER | WDF WOOD FLOORING |
| | WDT WOOD TRIM |
| ID INSIDE DIAMETER | WDV WOOD VENEER |
| IN INCH | WDW WINDOW |
| INSUL INSULATION | WF WIDE FLANGE |
| INT INTERIOR | WP WORK POINT |
| | WPT WALL PROTECTION |
| KLF KIPS PER LINEAL FOOT | WT WINDOW TREATMENT |
| KSF KIPS PER SQUARE FOOT | WT STEEL TEE SECTION |
| KSI KIPS PER SQUARE INCH | WWR WELDED WIRE REINFORCING |
| | XPS EXTRUDED POLYSTYRENE |
| L ANGLE | |
| LAP LAP SPLICE | # NUMBER / POUND |
| Ld DEVELOPMENT LENGTH | & AND |
| LLBB LONG LEG BACK TO BACK | @ AT |
| LLH LONG LEG HORIZONTAL | |
| LLV LONG LEG VERTICAL | |
| LONG LONGITUDINAL | |
| LSL LAMINATED STRAND LUMBER | |
| LSLP LONG SLOTTED HOLE PARALLEL | |
| LSLT LONG SLOTTED HOLE TRANSVERSE | |
| LVL LAMINATED VENEER LUMBER | |
| LW LIGHTWEIGHT | |
| | M MOMENT |
| MAS MASONRY | |
| MATL MATERIAL | |
| MAX MAXIMUM | |
| MECH MECHANICAL | |
| MFD MANUFACTURED | |
| MIN MINIMUM | |
| MIR MIRROR(ED) | |
| MTL METAL | |

SYMBOLS LEGEND



MATERIALS LEGEND

| | |
|--|--------------------------|
| | CONCRETE - CAST-IN-PLACE |
| | CLAY MASONRY / BRICK |
| | CONCRETE MASONRY UNIT |
| | STEEL |
| | DIMENSIONED LUMBER |
| | WOOD BLOCKING |
| | PLYWOOD |
| | NATIVE EARTH |
| | COMPACTED EARTH |
| | GRAVEL |
| | SAND / GRANULAR FILL |
| | GYPSUM WALL BOARD |

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SGM
118 West Sixth Street, Suite 200
Glenwood Springs, CO 81601
970.945.1004
www.sgm-inc.com



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Columbine Horse Park,
Rangley, CO 81648

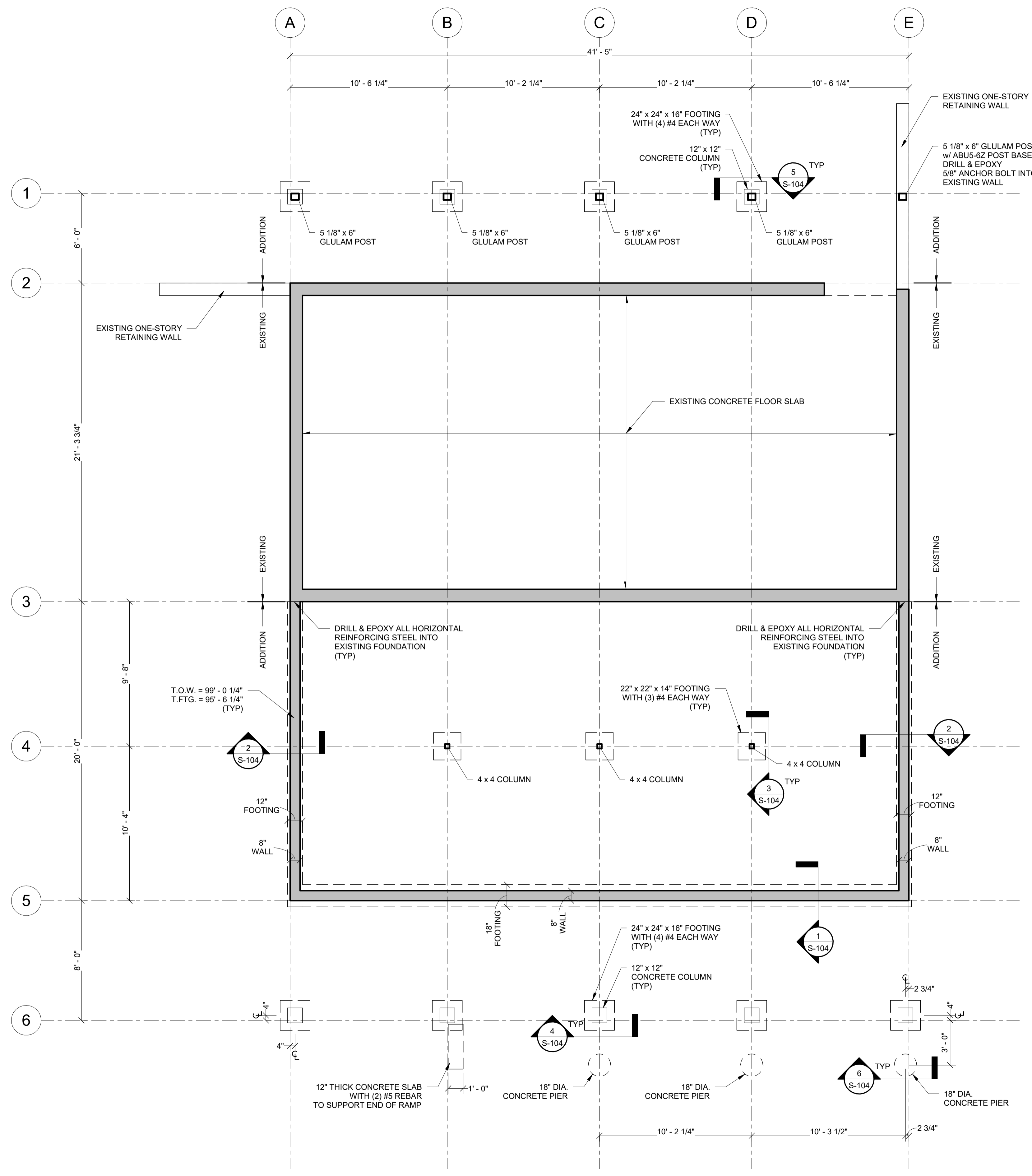
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Job No. 2024-187.001
Drawn by: JRK
Date: 05/31/2024
QC: JEP | PE: JEP
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Title:
SYMBOLS AND ANNOTATIONS

Dwg No.
S-003
Of:

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1 FOUNDATION PLAN
S-101 1/4" = 1'-0"

SGM
 118 West Sixth Street, Suite 200
 Glenwood Springs, CO 81601
 970.945.1004
 www.sgm-inc.com



RBC Columbine Office Addition
 Columbine Horse Park,
 Rangley, CO 81648

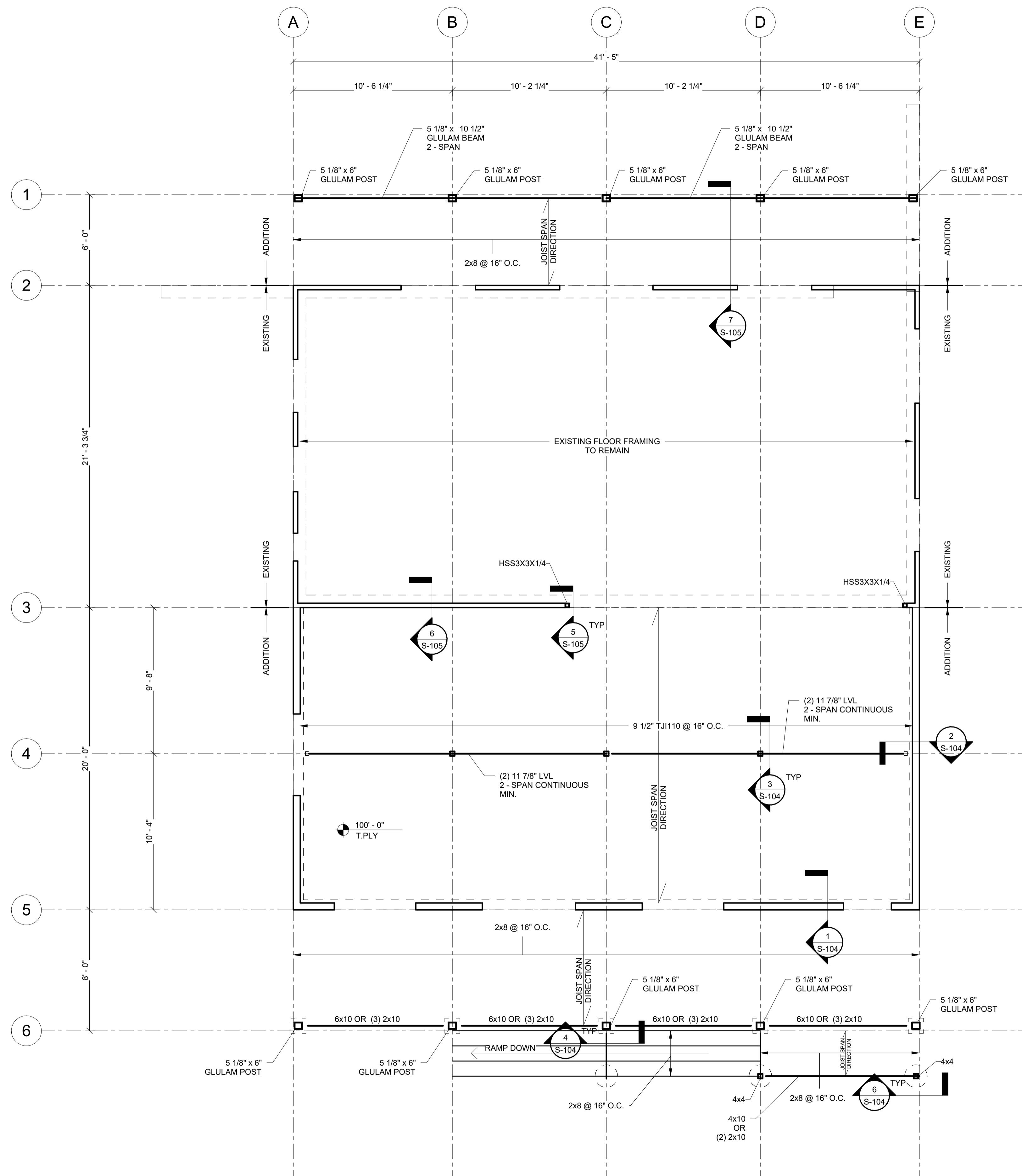
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Job No. 2024-187.001
 Drawn by: JRK
 Date: 05/31/2024
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Title:
FOUNDATION PLAN

Dwg No.
S-101
 Of:

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1 MAIN LEVEL FRAMING PLAN
S-102 1/4" = 1'-0"

SGM
118 West Sixth Street, Suite 200
Glenwood Springs, CO 81601
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RBC Columbine Office Addition
Columbine Horse Park,
Rangley, CO 81648

| Revision | Date | By |
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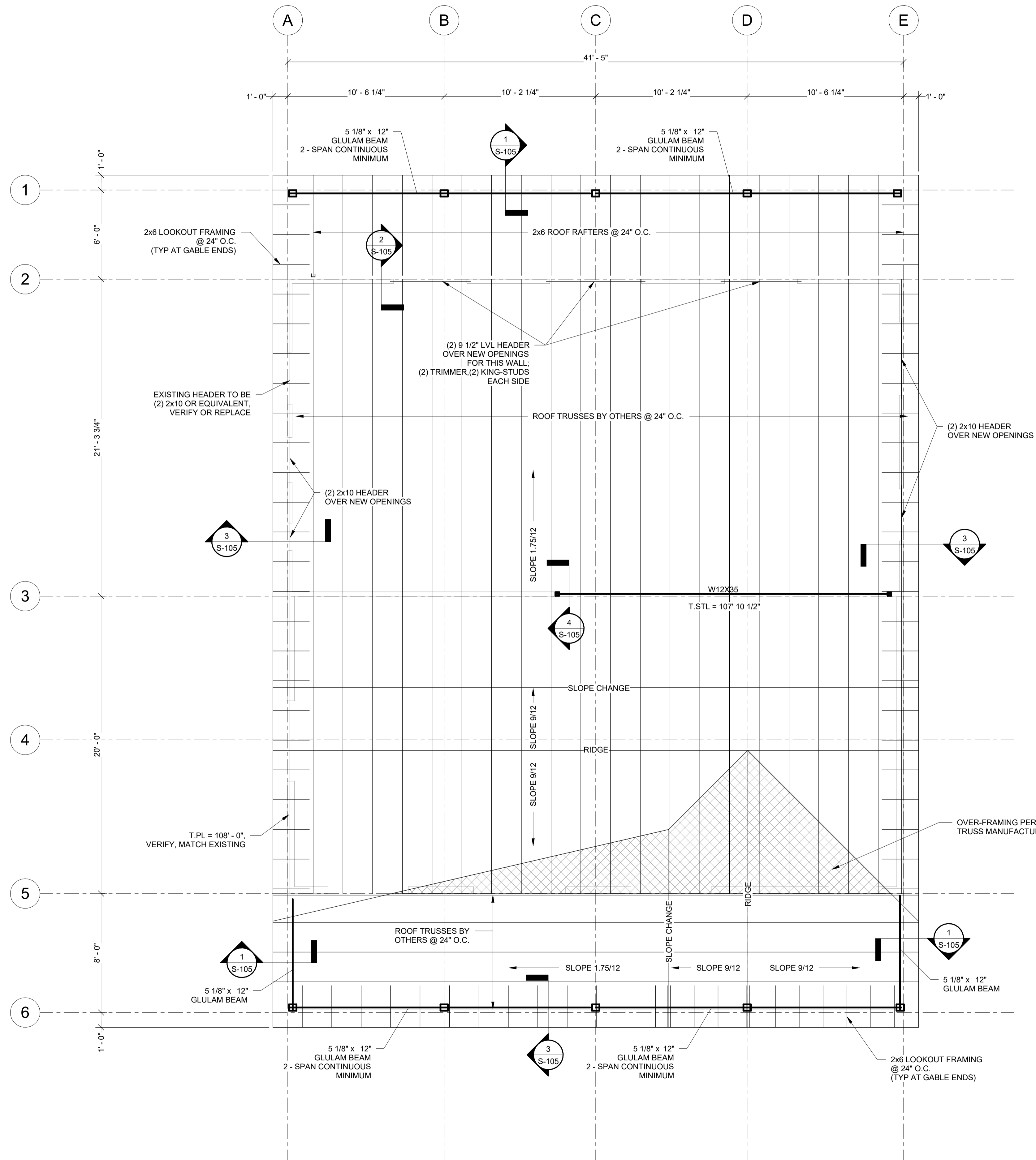
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| Job No. | 2024-187.001 |
| Drawn by: | JRK |
| Date: | 05/31/2024 |
| QC: | JEP |
| FE: | JEP |
| File: | |

Title:
FLOOR FRAMING PLAN

Dwg No.
S-102

Of:

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1 ROOF FRAMING PLAN
 S-103 1/4" = 1'-0"



RBC Columbine Office Addition
 Columbine Horse Park,
 Rangley, CO 81648

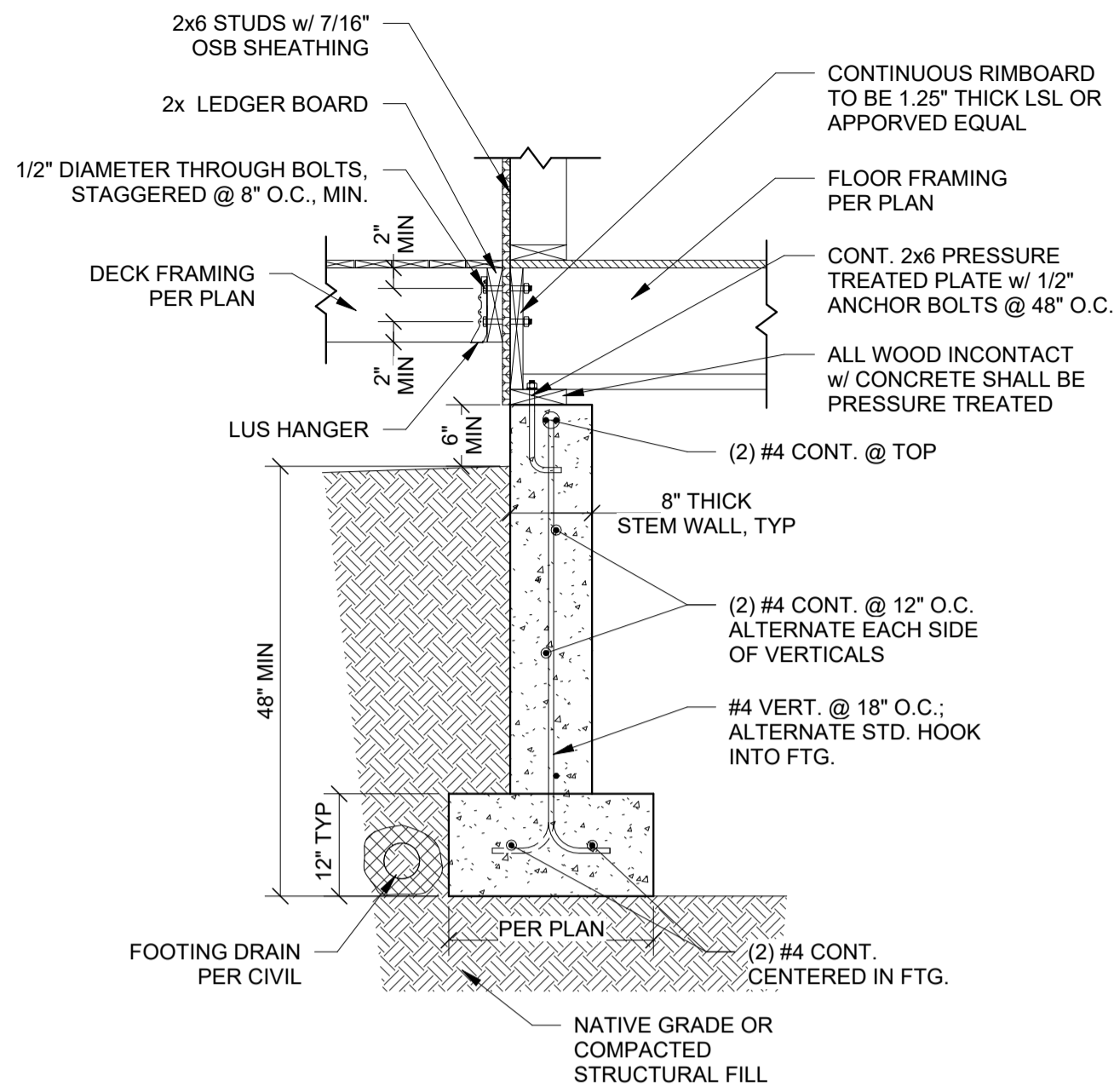
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Job No. 2024-187.001
 Drawn by: JRK
 Date: 05/31/2024
 QC: JEP | PE: JEP
 File:

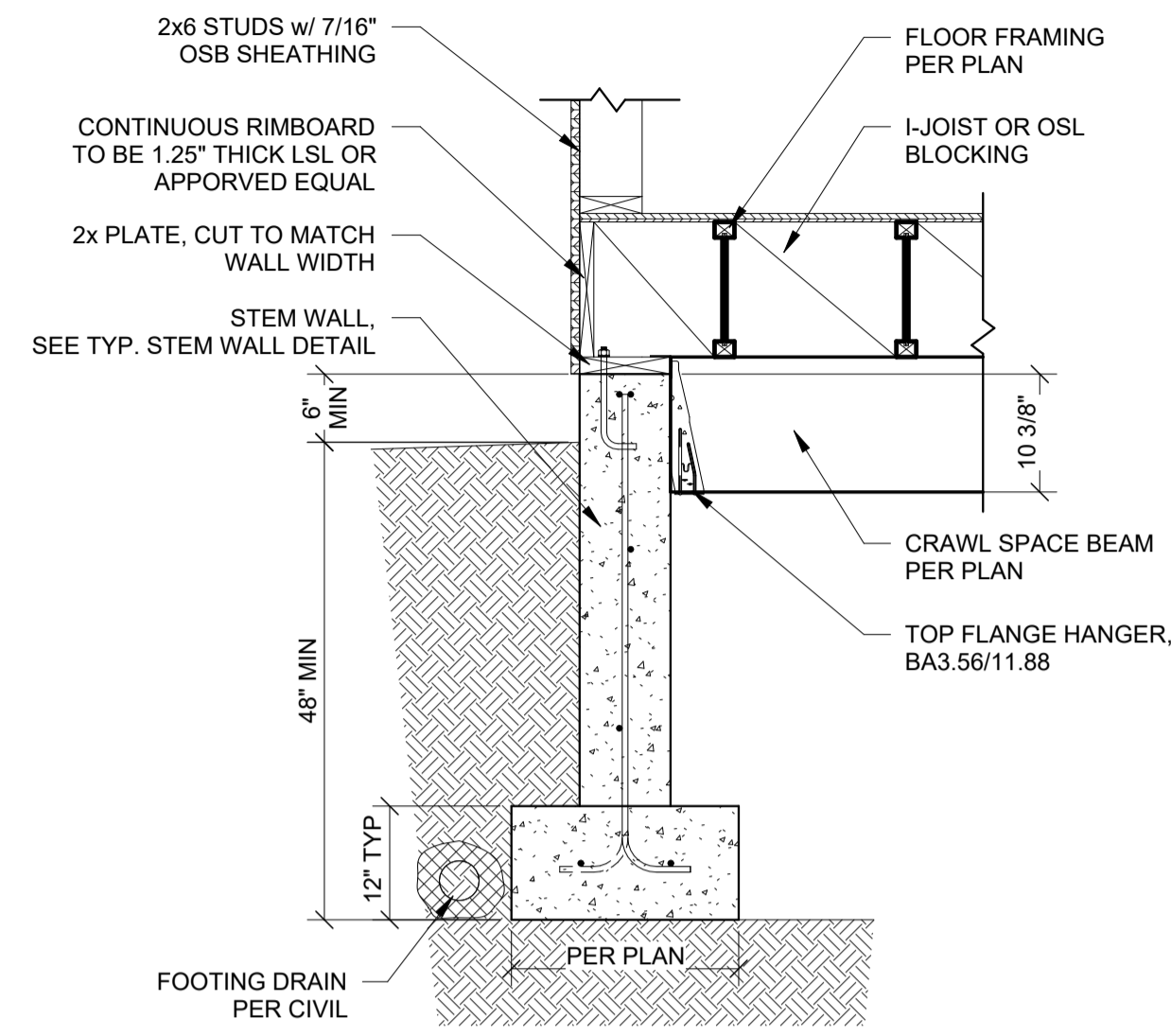
Title:
ROOF FRAMING PLAN

Dwg No.
S-103

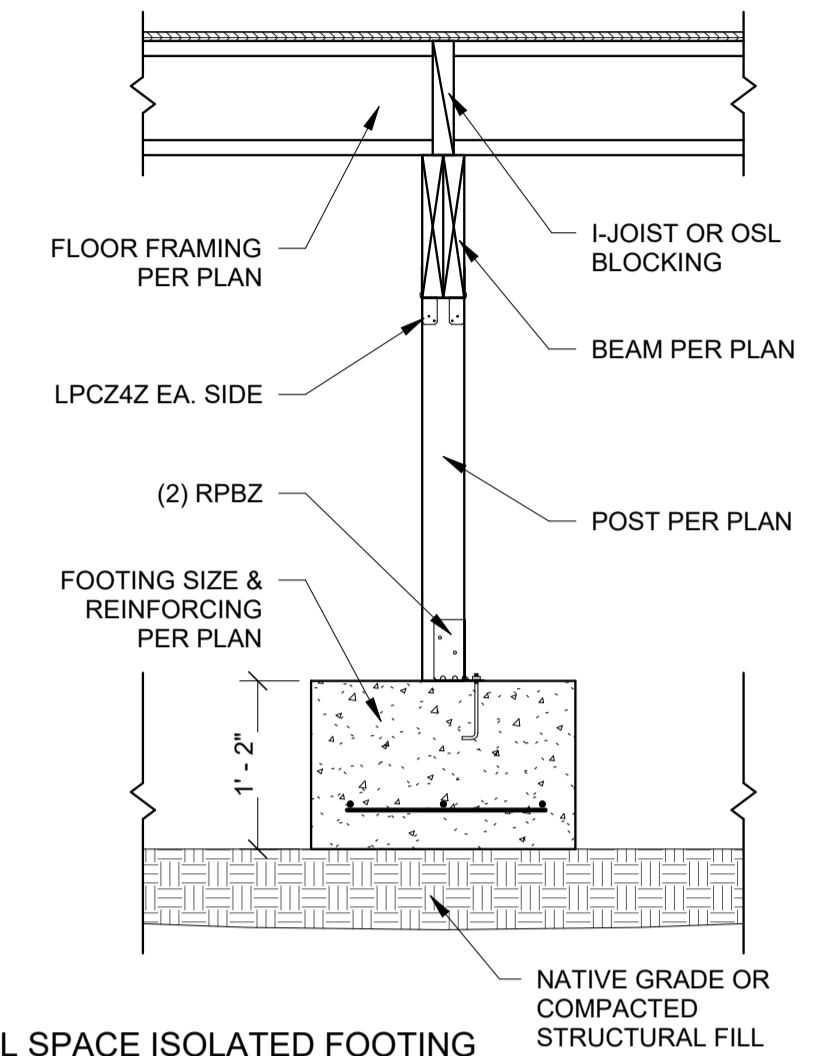
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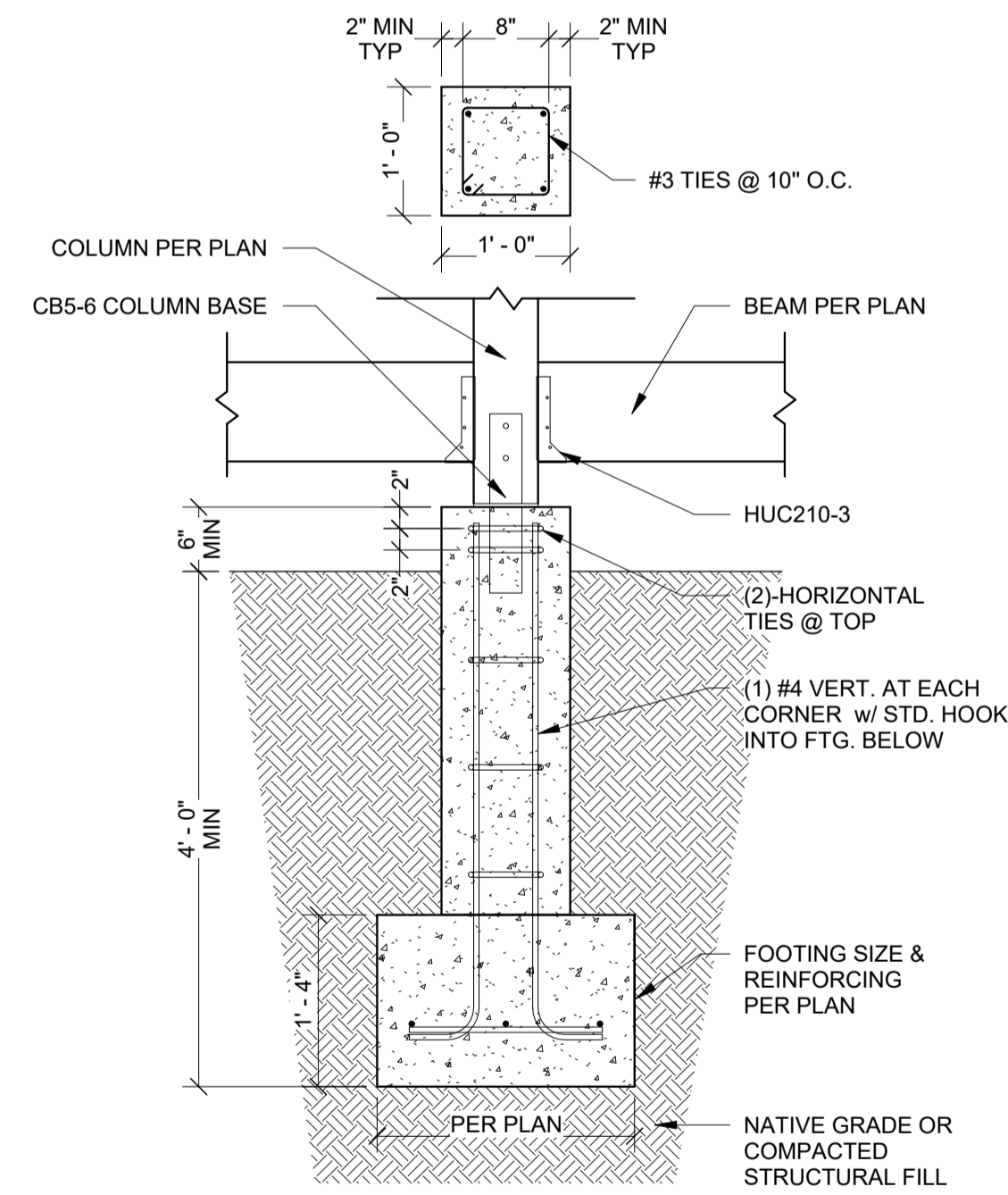
1 TYP STEM WALL WITH JOISTS PERPENDICULAR
3/4" = 1'-0"



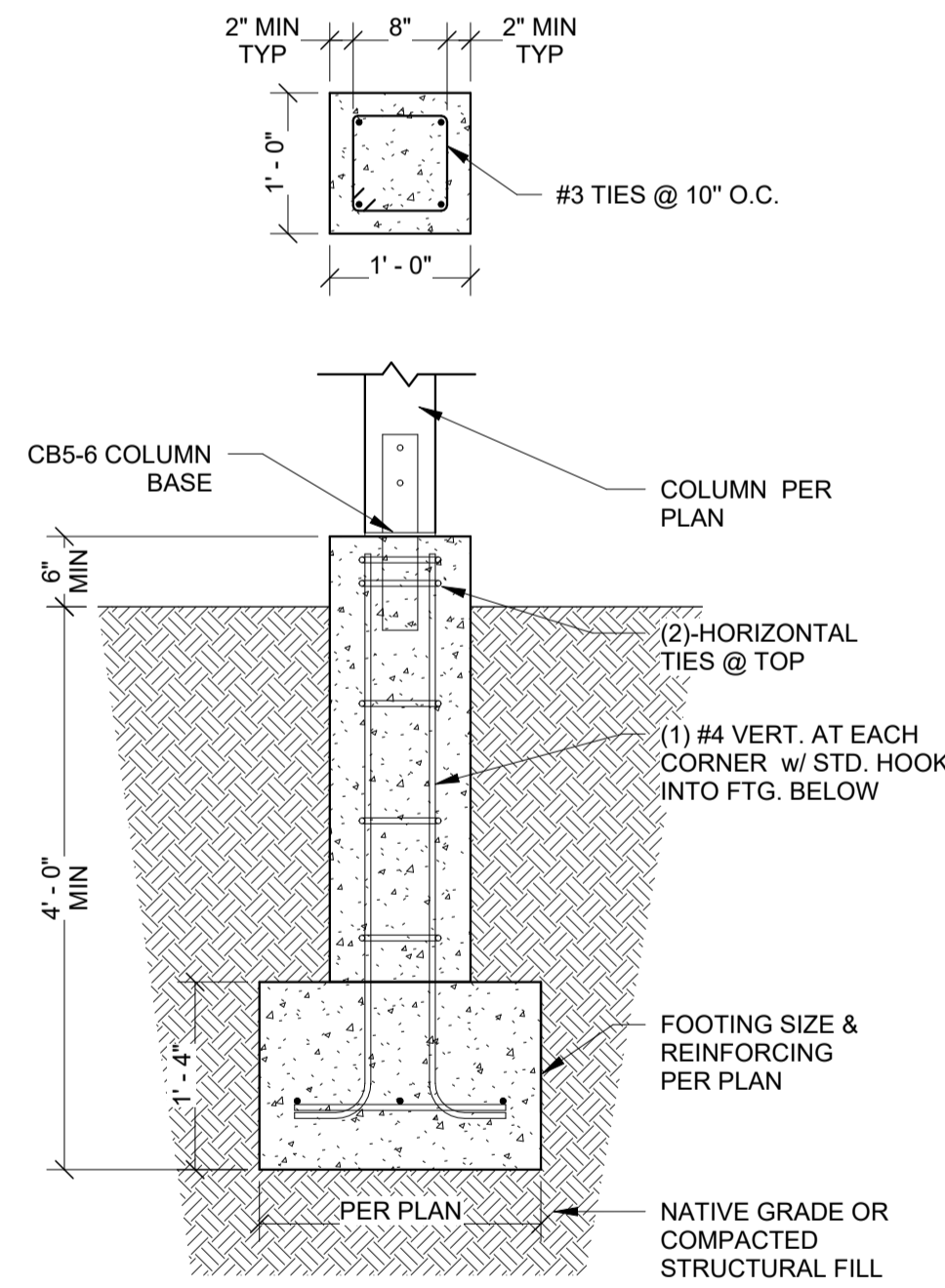
2 CRAWL SPACE BEAM AT STEM WALL
3/4" = 1'-0"



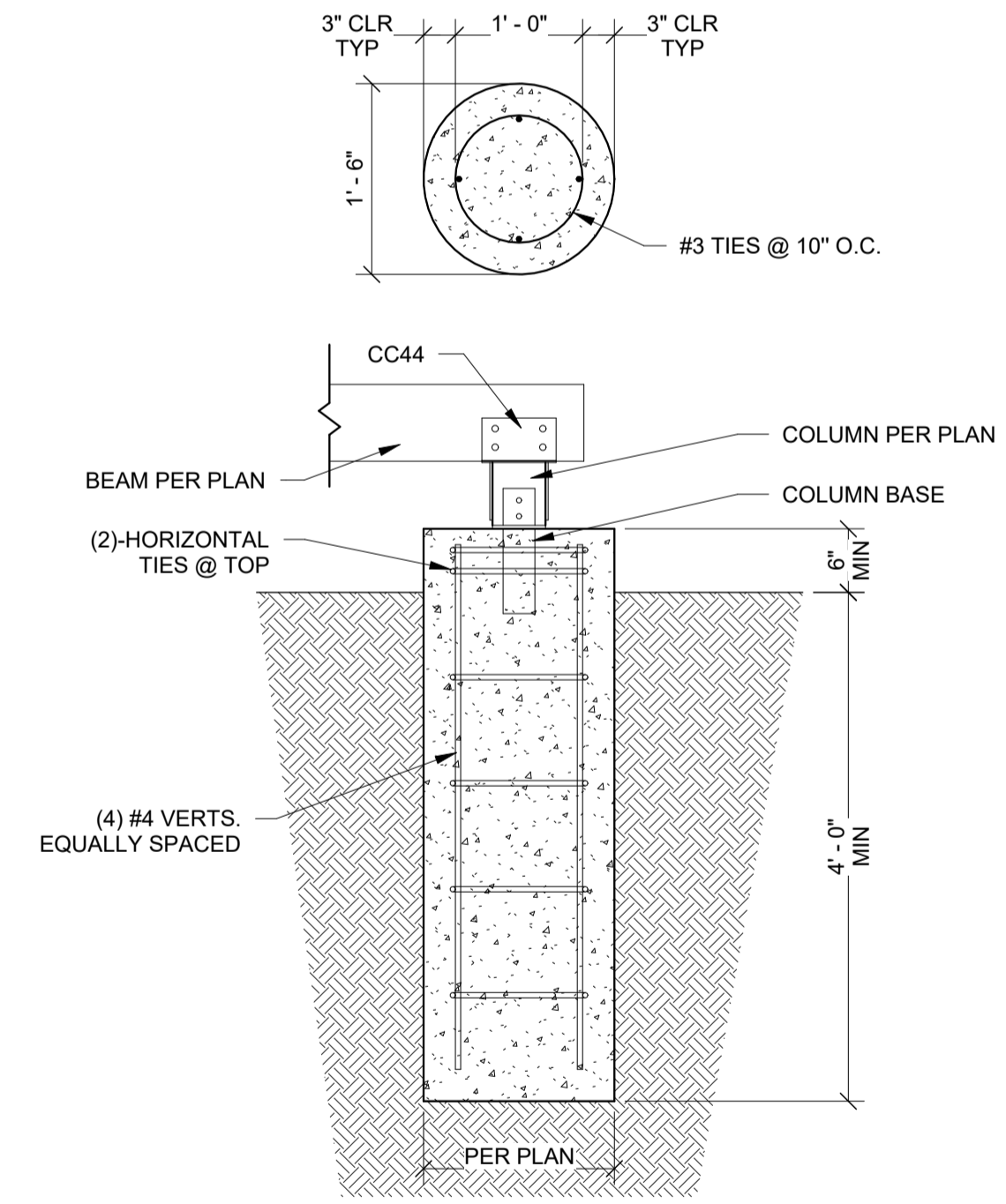
3 TYP CRAWL SPACE ISOLATED FOOTING
3/4" = 1'-0"



4 TYP ISOLATED FOOTING WITH BEAM CONNECTION
3/4" = 1'-0"



5 TYP ISOLATED FOOTING WITH COLUMN CONNECTION
3/4" = 1'-0"



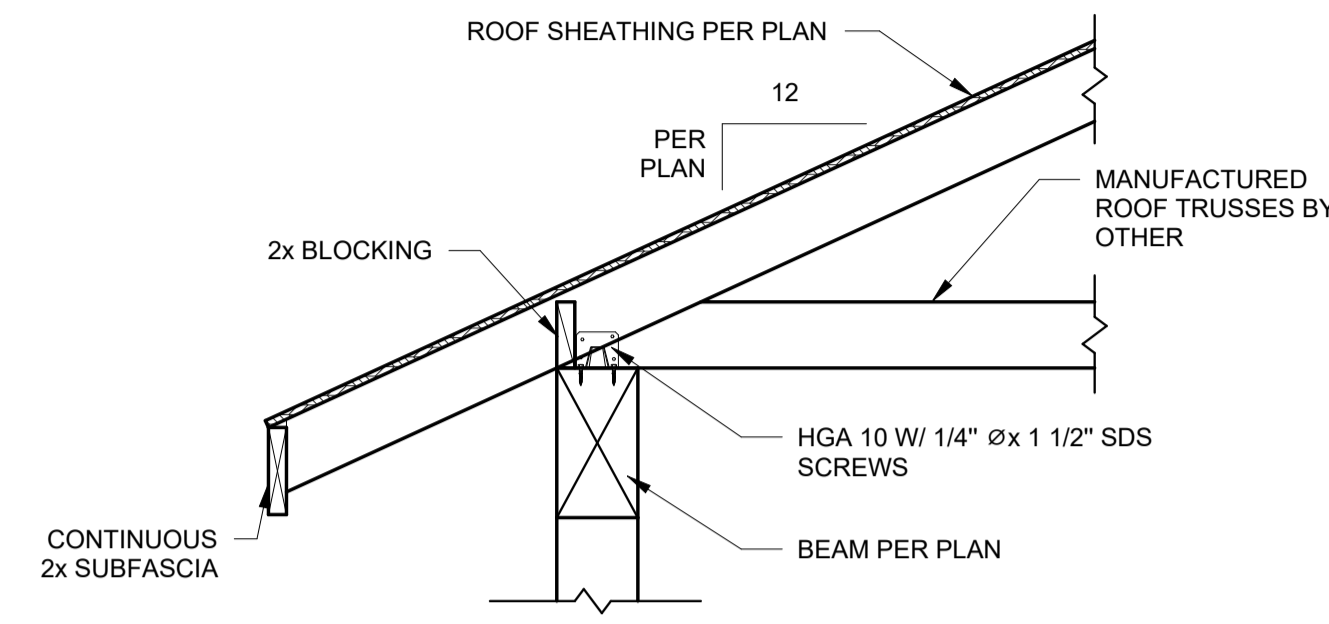
6 TYP CONCRETE PIER
3/4" = 1'-0"

| | |
|-----------|---------------|
| Job No. | 2024-187.001 |
| Drawn by: | JRK |
| Date: | 05/31/2024 |
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| File: | |
| Revision: | |
| Date: | |
| By: | |
| # | |

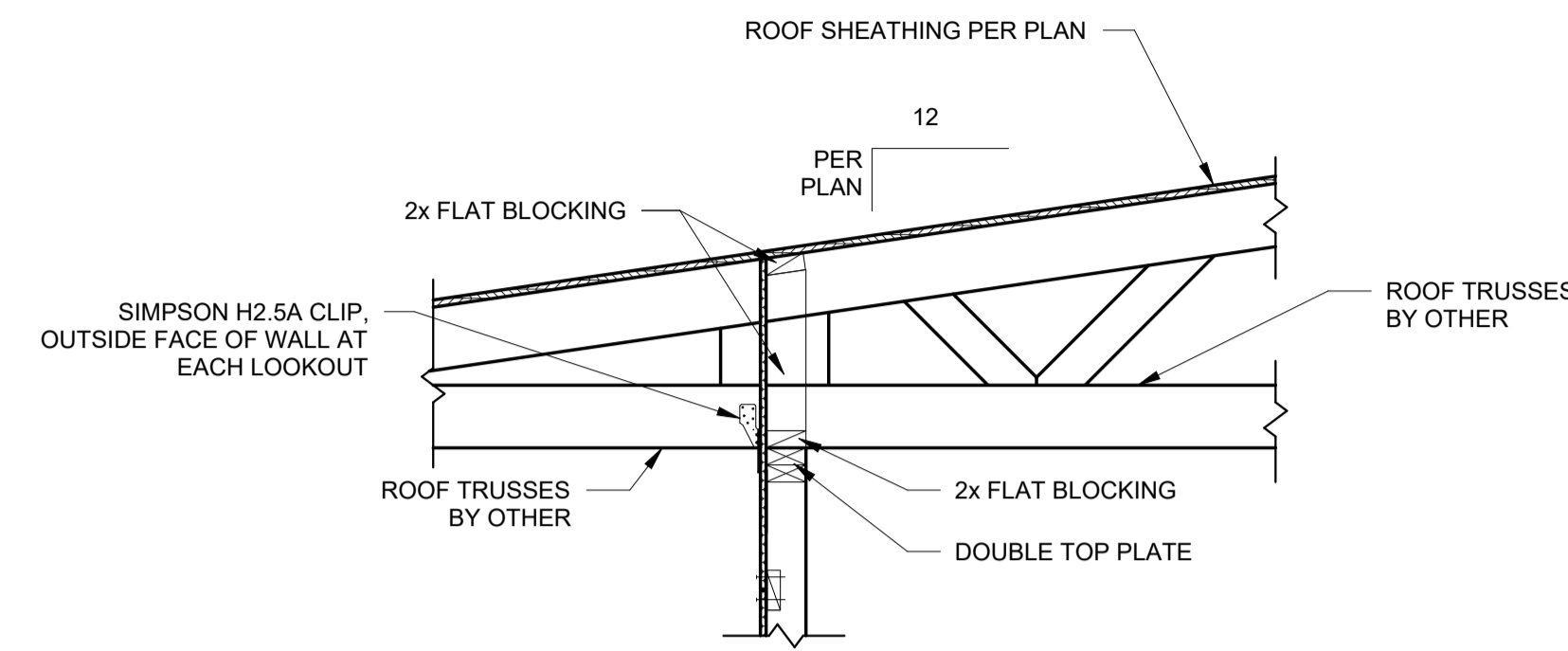
Title: DETAILS (1)

Dwg No. S-104

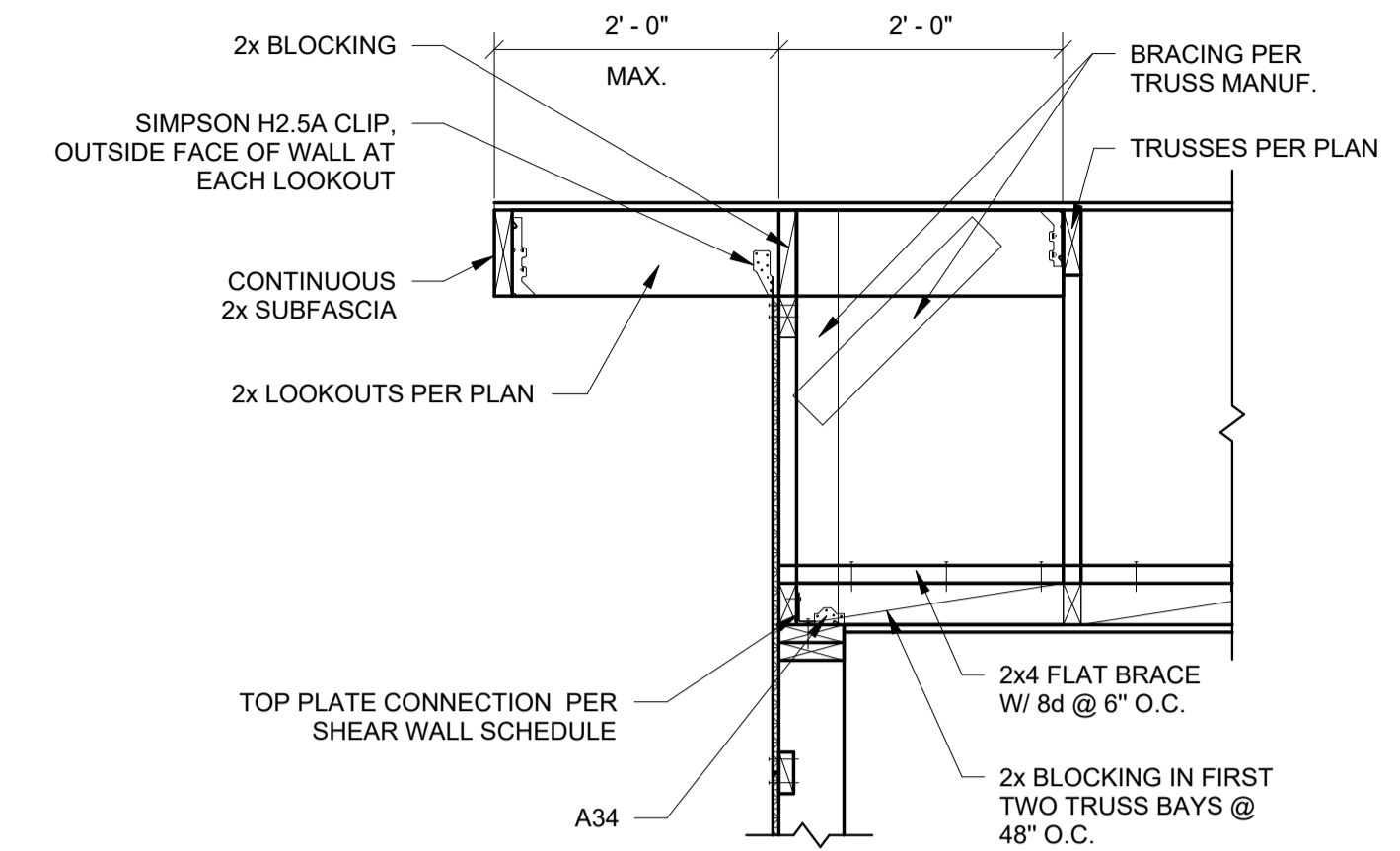
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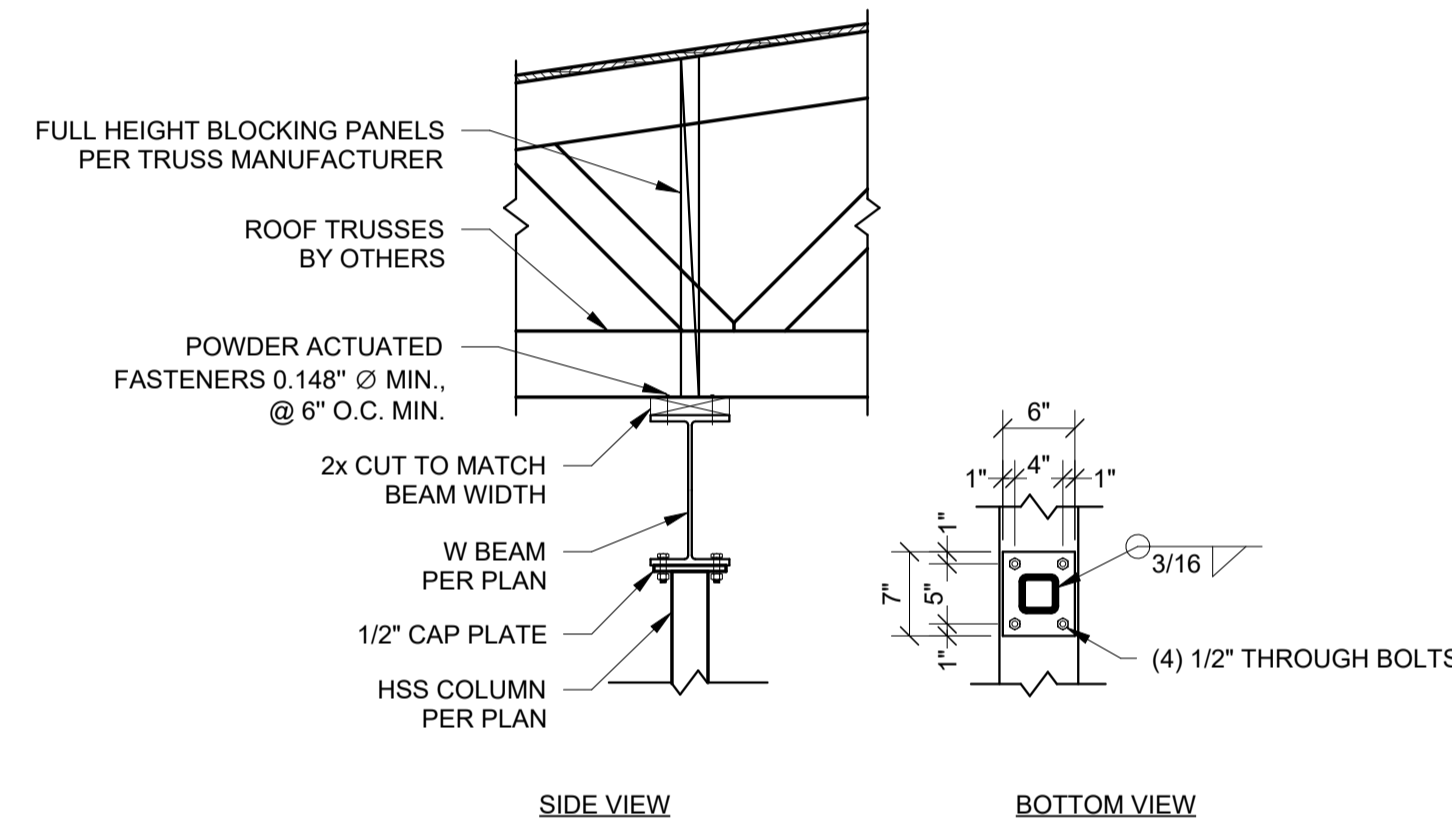
1 TYP HEEL TRUSS BEARING ON TIMBER BEAM
3/4" = 1'-0"



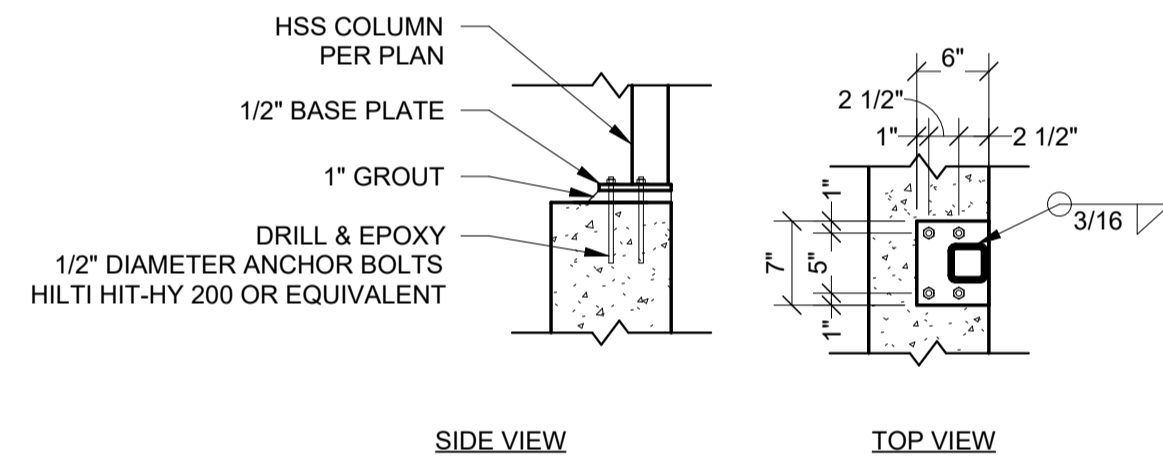
2 TYP RAISED HEEL TRUSS BEARING ON STUD WALL
3/4" = 1'-0"



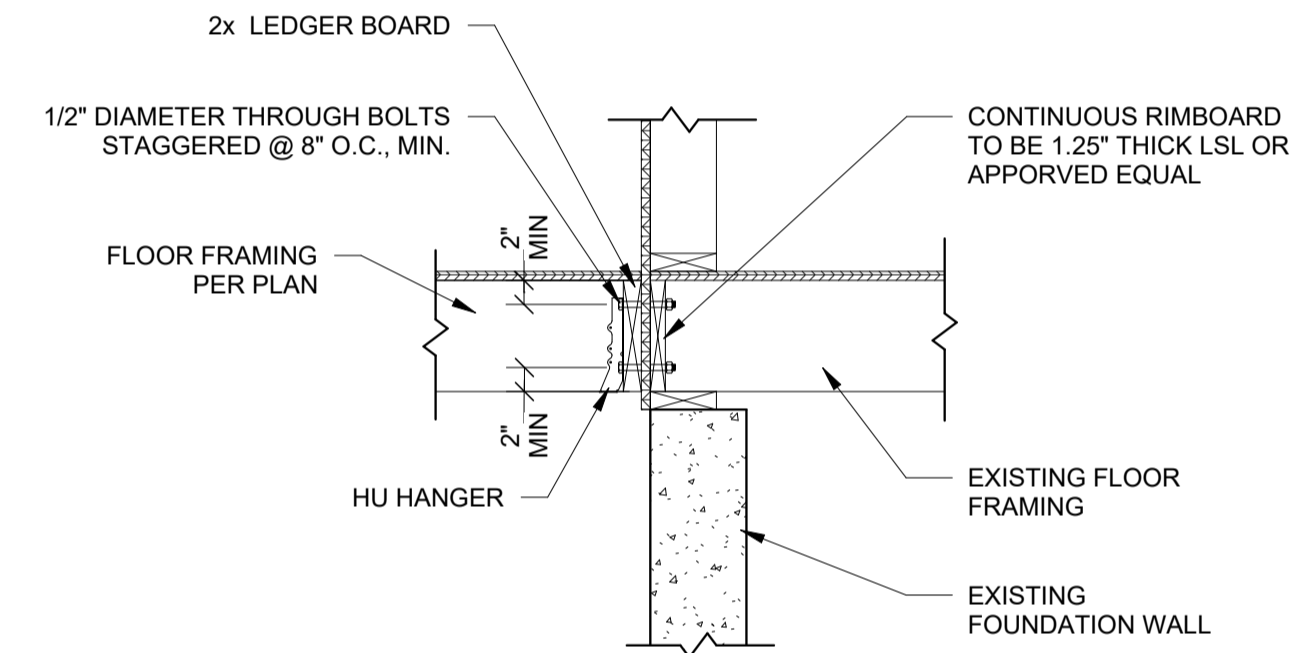
3 TYP GABLE END LOOKOUT FRAMING AT TRUSS FRAMED ROOF
3/4" = 1'-0"



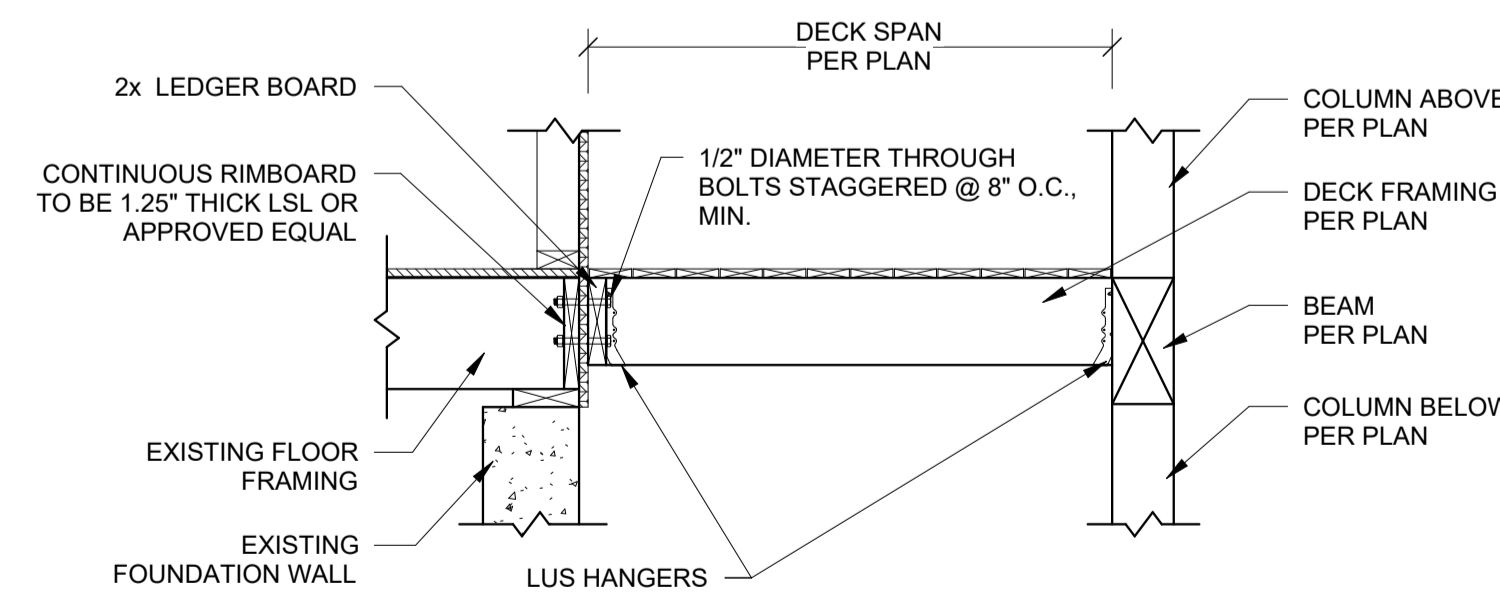
4 STEEL COLUMN TO STEEL BEAM CONNECTION
3/4" = 1'-0"



5 STEEL COLUMN TO FOUNDATION CONNECTION
3/4" = 1'-0"



6 FLOOR JOISTS LEDGER CONNECTION
3/4" = 1'-0"



7 DECK FRAMING SECTION
3/4" = 1'-0"

SGM
118 West Sixth Street, Suite 200
Glenwood Springs, CO 81601
970.945.1004
www.sgm-inc.com



RBC Columbine Office Addition
Columbine Horse Park,
Rangley, CO 81648

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|------|----|----------|---|-----------|---------------|
| Date | By | Revision | # | Job No. | 2024-187.001 |
| | | | | Drawn by: | JRK |
| | | | | Date: | 05/31/2024 |
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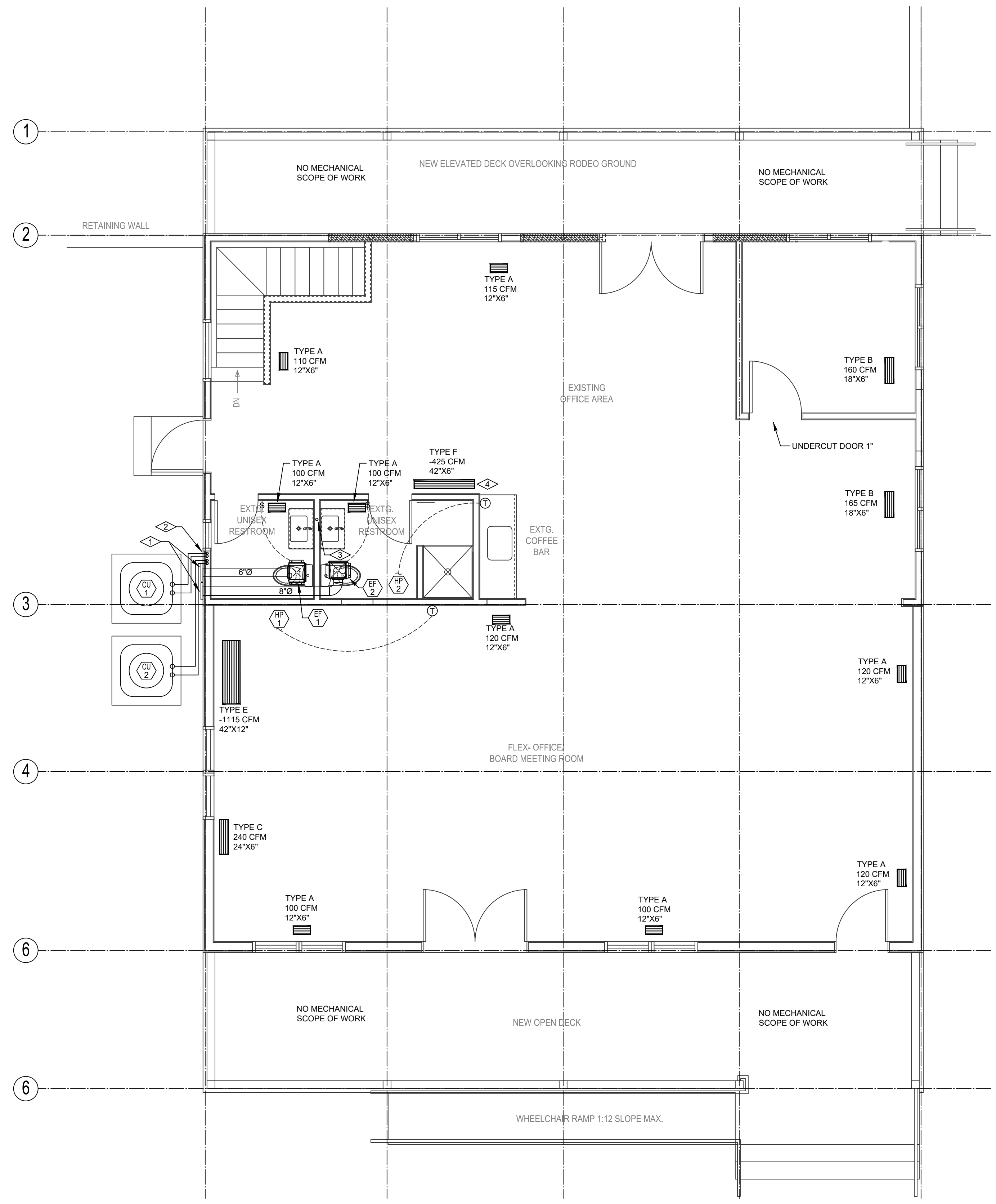
Title: **DETAILS (2)**

Dwg No. **S-105**

I:\projects\2024\2024-187\FBC\2024\ColumbineOffice\001 - Structural\Drawings\RBC_ColumbineOffice_R24.rvt

Project Milestone: Permit Set

DO NOT REPRODUCE THESE DRAWINGS AND SPECIFICATIONS WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE DESIGNER. THE DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF THE SERVICE AND SHALL REMAIN THE PROPERTY OF THE DESIGNER. WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT, THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANYONE ON ANY OTHER PROJECTS FOR ADDITIONS TO THIS PROJECT BY OTHERS EXCEPT BY THE EXPRESSED WRITTEN PERMISSION OF THE DESIGNER.



MECHANICAL GENERAL NOTES:

- DRAWING IS DIAGRAMMATIC IN NATURE. LOCATIONS AND SIZES MAY VARY DURING FIELD COORDINATION & INSTALLATION OF MECHANICAL, PLUMBING, & ELECTRICAL. DRAWINGS DO NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS. TAKE ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS, CERTIFIED EQUIPMENT DRAWINGS AND FROM THE STRUCTURE ITSELF BEFORE FABRICATING ANY WORK. VERIFY ALL SPACE REQUIREMENTS COORDINATING WITH OTHER TRADES, AND INSTALL THE SYSTEMS IN THE SPACE PROVIDED WITHOUT EXTRA CHARGES TO THE OWNER.
- DUCT DIMENSIONS DO NOT REFLECT ADDITIONAL DIMENSIONS FOR INSULATION. ALL DUCTING SHALL BE INSULATED PER 2008 IECC CODE REQUIREMENTS. (SUPPLY AND RETURN AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH NOT LESS THAN R-6 INSULATION WHERE LOCATED IN UNCONDITIONED SPACES AND WHERE LOCATED OUTSIDE THE BUILDING WITH NOT LESS THAN R-8 INSULATION IN CLIMATE ZONES 1 THROUGH 4 AND NOT LESS THAN R-12 INSULATION IN CLIMATE ZONES 5 THROUGH 8. WHERE LOCATED WITHIN A BUILDING ENVELOPE ASSEMBLY, THE DUCT OR PLENUM SHALL BE SEPARATED FROM THE BUILDING EXTERIOR OR UNCONDITIONED OR EXEMPT SPACES BY NOT LESS THAN R-6 INSULATION IN CLIMATE ZONES 1 THROUGH 4 AND NOT LESS THAN R-12 INSULATION IN CLIMATE ZONES 5 THROUGH 8. RIO BLANCO COUNTY IS CLIMATE ZONE 6B)
- COORDINATE FINAL LOCATION OF THERMOSTAT WITH OWNER PRIOR TO INSTALLATION. IF THERMOSTAT IS LOCATED ON EXTERIOR WALL PROVIDE THERMOSTAT WITH INSULATED BACKING.
- ALL REFRIGERANT LINES SHALL BE INSULATED IN A WORKMAN LIKE MANNER PER MANUFACTURER'S INSTRUCTIONS. REFRIGERANT LINES SET LONGEST LENGTHS SHALL LIMITED TO PIPING EQUIVALENT LENGTH SPECIFIED BY HEATPUMP/CONDENSING UNIT MANUFACTURER REQUIREMENTS.
- ROUTE CLEAR CONDENSATE FROM CONDENSATE PUMP TO TAIL PIECE OF NEAREST SINK UPSTREAM OF P-TRAP.
- MECHANICAL CONTRACTOR SHALL FIELD LOCATE EXISTING SYSTEMS AND BUILDING ASSEMBLIES. MECHANICAL CONTRACTOR SHALL COORDINATE NEW MECHANICAL SYSTEMS WITH EXISTING SYSTEMS AND BUILDING ASSEMBLIES AS REQUIRED.
- MECHANICAL EQUIPMENT MANUFACTURERS AS SCHEDULED ON MECHANICAL DRAWINGS ARE SUGGESTED MANUFACTURERS. UNLESS NOTED OTHERWISE DUE TO OWNER/CLIENT REQUIREMENTS AND PREFERENCES. MECHANICAL CONTRACTOR CAN SUBMIT EQUIVALENT EQUIPMENT FROM MANUFACTURERS THAT DIFFER FROM SCHEDULED MECHANICAL EQUIPMENT. ALTERNATE MANUFACTURERS OF MECHANICAL EQUIPMENT WILL BE REVIEWED FOR EQUIVALENCE OF PERFORMANCE AND FUNCTIONALITY BY ENGINEER.
- SINGLE PHASE VRF HEAT PUMP CONDENSER MODULES SHALL BE PROVIDED WITH LOCAL POWER SOURCE PROTECTION. POWER SOURCE PROTECTION DEVICE SHALL BE BETWEEN MAIN POWER SUPPLIED TO THE UNIT AND INTERNAL COMPONENTS. POWER PROTECTION DEVICE SHALL PROVIDE PROTECTION FROM VOLTAGE SAG AND SPORADIC FREQUENCY. POWER PROTECTION DEVICE SHALL AUTOMATICALLY SHUT OFF CONDENSER MODULE UPON DETECTION OF POWER EVENT. PHASE PROTECTION DEVICE SHALL AUTOMATICALLY ENERGIZE AND START UP CONDENSER MODULE UPON POWER EVENT ENDING. POWER MONITOR PROTECTION DEVICE SHALL BE SIMILAR/EQUIVALENT TO ICM #493 WITH 2-POLE CONFIGURATIONS.

FLAG NOTES:

- NEW 8" Ø HOODED WALL VENT PAINTED TO MATCH EXTERIOR OF BUILDING. PROVIDE WITH BIRDSCREEN. (TYPICAL)
- REFRIGERANT PIPING TO PENETRATE EXTERIOR OF BUILDING AND DROP DOWN WALL TO SERVE RESPECTIVE HEAT PUMP UNITS IN BASEMENT.
- CONDENSATE CLEAR WASTE PUMPED UP THROUGH WALL FROM BASEMENT. PLUMB CONDENSATE PIPING TO TAIL PIECE OF SINK, UPSTREAM OF P-TRAP FROM HEAT PUMP CONDENSATE PUMP. ROUTE IN 3/4" Ø TYPE L COPPER.
- RETURN LINEAR BAR GRILLE SHALL BE SHOWN AS ONE CONTINUOUS GRILLE AND SHALL HAVE BLANK SECTIONS INSTALLED TO COVER FLOORING OVER FLOOR JOISTS. LINEAR BAR GRILLE SHALL BE SUPPLIED BY 3 INDIVIDUAL 18"X12" DUCTS FROM BASEMENT. SEE LINEAR BAR GRILLE DETAIL ON SHEET M2.2.

MECHANICAL - MAIN FLOOR PLAN
SCALE: 1/4"=1'-0"
NORTH

Bighorn Consulting Engineers, Inc.
Mechanical & Electrical Engineers
386 Indian Road
Grand Junction, CO 81501
Phone: (970) 241-8709

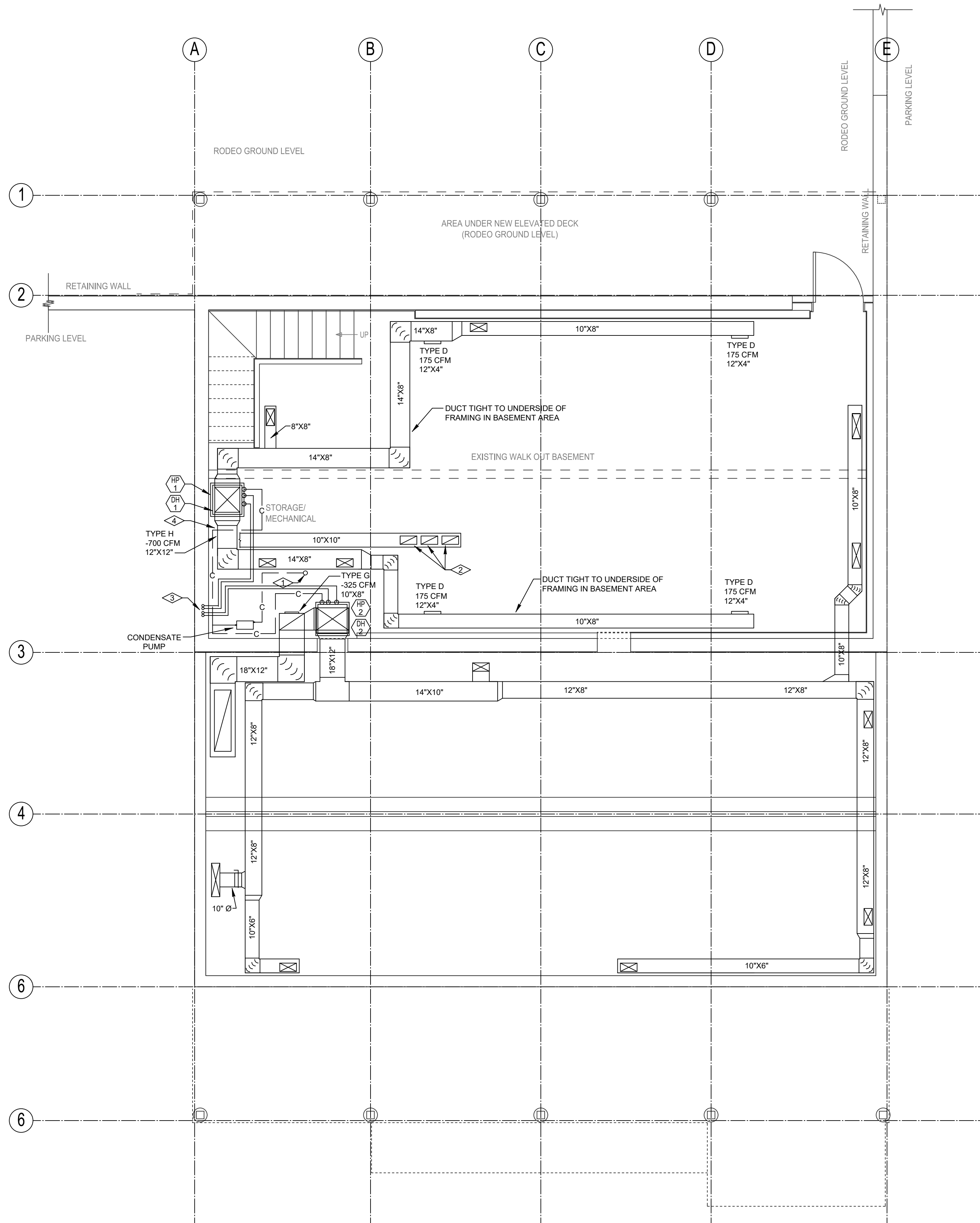
**RBC COLUMBINE PARK OFFICE
MECHANICAL - MAIN FLOOR PLAN**
COLUMBINE HORSE PARK, RANGLEY
RIO BLANCO COUNTY, COLORADO 81648

| DATE: | ISSUED FOR: |
|------------|-------------|
| 02/05/2024 | REVIEW |
| 05/31/2024 | REVIEW |
| 06/04/2024 | PERMIT |
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| DATE: | 07/26/2023 |
| JOB NO: | 23-227 |
| DRAWN BY: | BCE |
| CHECKED BY: | BCE |
| SCALE: | AS SHOWN |
| SHEET NUMBER: | M1-1 |

REVISIONS



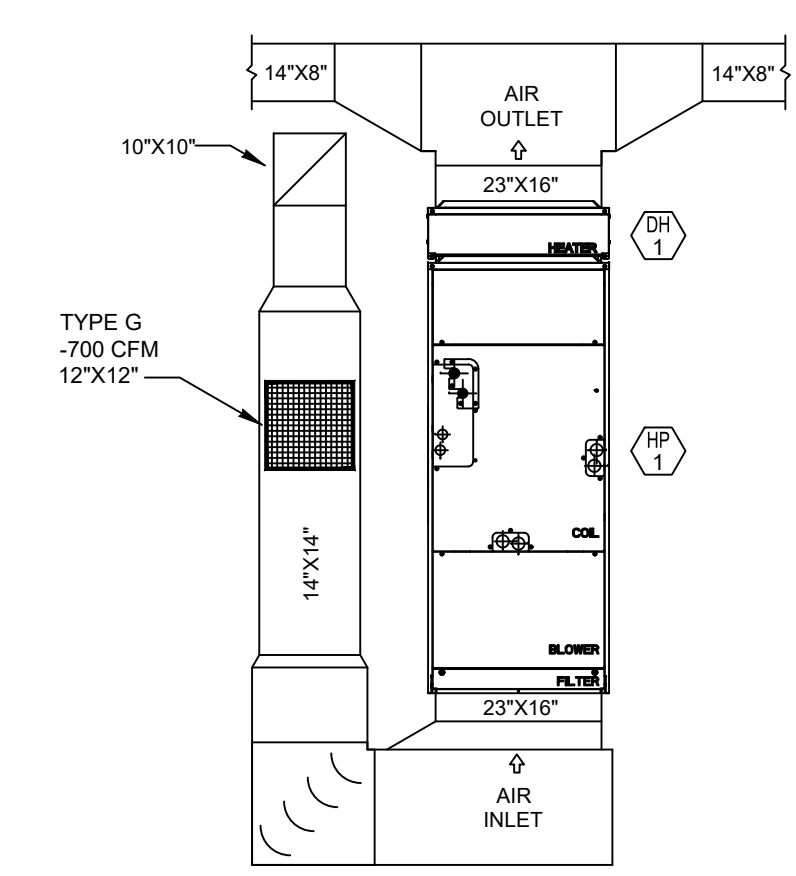
MECHANICAL - LOWER FLOOR PLAN
 SCALE: 1/4"=1'-0"
 NORTH

MECHANICAL GENERAL NOTES:

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FLAG NOTES:

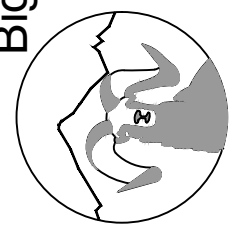
- CONDENSATE CLEAR WASTE SHALL BE PUMPED UP THROUGH WALL AND PIPING TO TAIL PIECE OF SINK, UPSTREAM OF P-TRAP FROM HEAT PUMP CONDENSATE PUMP. ROUTE IN 3/4"Ø TYPE L COPPER.
- THREE INDIVIDUAL 6"x12" DUCTS TO GO UP THROUGH FLOOR AND BETWEEN JOISTS TO SERVE RETURN LINEAR BAR GRILLE ON ABOVE FLOOR. SEE LINEAR BAR GRILLE DETAIL ON SHEET M2-2.
- REFRIGERANT PIPING SERVING HP-1 & 2 TO ROUTE UP WALL TO CONNECT TO OUTDOOR CONDENSING UNITS.
- HEATPUMP DETAIL SHOWING CONNECTIONS OF SUPPLY AND RETURN DUCTWORK SHOWN ON BELOW ON SHEET M1-2.



UPFLOW HEAT PUMP DETAIL
 NOT TO SCALE

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Bighorn Consulting Engineers, Inc.
 Mechanical & Electrical Engineers
 386 Indian Road
 Grand Junction, CO 81501
 Phone: (970) 241-8709



**RBC COLUMBINE PARK OFFICE
 MECHANICAL - LOWER FLOOR PLAN**
 COLUMBINE HORSE PARK, RANGLEY
 RIO BLANCO COUNTY, COLORADO 81648

| DATE: | ISSUED FOR: |
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| 02/05/2024 | REVIEW |
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| DATE: | 07/26/2023 |
| JOB NO: | 23-227 |
| DRAWN BY: | BCE |
| CHECKED BY: | BCE |
| SCALE: | AS SHOWN |
| SHEET NUMBER: | M1-2 |

MECHANICAL PROVISIONS

1. SCOPE OF WORK

- A. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS, AND LABOR TO SATISFY A COMPLETE WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.
- B. ALL WORK IS TO BE PERFORMED IN STRICT COMPLIANCE WITH ALL LOCAL CODES AND ALL OTHER REGULATION GOVERNING WORK OF THIS NATURE.
- C. THE CONTRACTOR SHALL, BEFORE SUBMITTING ANY PROPOSAL, EXAMINE THE PROPOSED SITE AND SHALL DETERMINE FOR HIMSELF THE CONDITIONS THAT MAY AFFECT THE WORK. NO ALLOWANCE SHALL BE MADE IF THE CONTRACTOR FAILS TO MAKE SUCH EXAMINATIONS.
- D. ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR "APPROVED EQUAL" BY THE ENGINEER OR ARCHITECT.

2. PERMITS

- A. THE CONTRACTOR SHALL SECURE ALL PERMITS OR APPLICATIONS AND PAY ANY AND ALL FEES.

3. SHOP DRAWINGS

- A. SUBMIT MATERIAL LIST AND SHOP DRAWINGS FOR MAJOR EQUIPMENT TO THE ARCHITECT/ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL SUBMIT FIVE SETS OF SHOP DRAWINGS AND THEY SHALL BE CLEARLY LABELED.

4. FLEXIBLE DUCT WORK

- A. FLEXIBLE TYPE DUCT SHALL BE OF TWO ELEMENT SPIRAL CONSTRUCTION COMPOSED OF A CORROSION RESISTANT METAL SUPPORTING SPIRAL AND COATED FABRIC WITH A MINERAL BASE. FLEXIBLE DUCT CONNECTORS SHALL BE LISTED BY U.L. CLASS 1 DUCTS, AND SHALL HAVE A FLAME SPREAD RATING NOT EXCEEDING 25 AND A SMOKE DEVELOPED RATING NOT EXCEEDING 50.
- B. USE OF FLEXIBLE DUCTWORK SHALL BE LIMITED TO NO MORE THAN 6 LINEAR FEET PER RUN.
- C. CONTRACTOR SHALL BE CAREFUL SO AS NOT TO KINK OR COLLAPSE FLEXIBLE DUCT.

5. REFRIGERANT

- A. PIPING CONTRACTOR SHALL PROVIDE AND INSTALL REFRIGERANT PIPING IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND IN SUCH A WAY AS TO BE INCONSPICUOUS AND FREE FROM ANY POSSIBLE CONDENSATION.
- B. INSULATE REFRIGERANT LINES WITH ARMOUR-FLEX TYPE INSULATION, SHALL BE TYPE "K" COPPER TUBING, WITH WROUGHT COPPER SOLDER TYPE FITTINGS SUITABLE FOR CONNECTION WITH SILVER SOLDER.

6. DUCTWORK

- A. THE DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "SMACNA" APPLICABLE MANUALS.
- B. ALL DUCTWORK SHALL BE THE LOW VELOCITY TYPE, UNLESS SPECIFIED OTHERWISE.
- C. CONTRACTOR SHALL PROVIDE AND INSTALL APPROVED FIRE DAMPERS AND ACCESS PANELS IN ANY AND ALL DUCTWORK WHICH PENETRATES A HORIZONTAL OR VERTICAL FIRE PARTITION, OR AS OTHERWISE SHOWN ON DRAWINGS.
- D. ALL BRANCH DUCTS TO HAVE VOLUME DAMPERS, SMOOTH TURN RADIUS DUCTWORK OR TURNING VANES SHALL BE USED THROUGHOUT WHERE FLOW EXCEEDS 150 CFM.
- E. ALL DUCT JOINTS TO BE SEALED IN ACCORDANCE WITH "SMACNA" STANDARDS AND ACCEPTED GOOD PRACTICE.
- F. ALL DUCT DIMENSIONS SHOWN ARE NET INSIDE VALUES DIMENSIONS MAY BE CHANGED SO LONG AS THE NET FREE FACE AREA IS MAINTAINED.
- G. ALL CONCEALED DUCTWORK SHALL BE INSULATED WITH 1-1/2" FIBERGLASS INSULATING BLANKET WITH ALUMINUM FOIL FACING.
- H. ALL SUPPLY AND RETURN DUCTWORK 15 FEET DOWNSTREAM OF THE HVAC UNIT SHALL BE INTERNALLY LINED WITH A 1/2" ACOUSTICAL DUCT LINER UNLESS OTHERWISE NOTED ON THE DRAWINGS.

7. DRAINAGE PIPING

- A. (CONDENSATE) SHALL BE SCHEDULE 40 PVC PIPE WITH SOLVENT JOINTS. PITCH HORIZONTAL LINES 1" IN 10'-0". CONDENSATE DRAINS SHALL BE ROUTED TO FLOOR DRAIN, ROOF DRAIN OR INDIRECT WASTE DRAIN.

8. HVAC CONTROLS

- A. CONTRACTOR TO SUPPLY AND INSTALL ALL CONTROL WIRING AND THERMOSTATS AS REQUIRED.

9. ELECTRICAL

- A. CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR LOCATION OF WIRING FOR EACH HVAC UNIT.

10. PIPE SUPPORTS

- A. ALL PIPE SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN A NEAT AND WORKMANLIKE MANNER. THE USE OF WIRE OR METAL STRAP TO SUPPORT PIPES WILL NOT BE PERMITTED. SPACING OF PIPE SUPPORTS SHALL NOT EXCEED 8 FEET FOR ALL PIPING. PLASTIC PIPING TO BE SUPPORTED EVERY 4 FEET.

11. GAS PIPING

- A. PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH MALLEABLE IRON FITTINGS. WHERE GAS PIPE CONNECTS TO EQUIPMENT, IT SHALL BE PROVIDED WITH A DRIP LEG THE FULL SIZE OF THE RUNOUT, A 100% SHUT-OFF VALVE AND A UNION. GAS PIPING CONTAINING PRESSURE GREATER THAN 9" W.G. SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH WELDED JOINTS.

12. MISCELLANEOUS

- A. ALL EXTERIOR OPENINGS TO BE PROPERLY CAULKED AND SEALED WITH A SEALANT OF HIGH QUALITY AND LONG LIFE, TO PREVENT INFILTRATION OF OUTSIDE AIR INTO CONDITIONED SPACE. COORDINATE INSTALLATION OF ALL ROOF FLASHING AT ROOF PENETRATION.
- B. DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS.
- C. VERIFY ALL FIGURES, CONDITIONS, AND DIMENSIONS AT THE JOB SITE.
- D. THE MECHANICAL PLANS ARE INTENDED TO BE DIAGRAMMATIC AND ARE BASED ON ONE MANUFACTURER'S EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION, THE EXACT DIMENSIONS, OR ALL THE DETAILS OF THE EQUIPMENT.
- E. THE CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIPMENT PROPOSED TO ENSURE THAT THE EQUIPMENT WILL FIT IN THE AVAILABLE SPACE.
- F. PEX TUBING, IF PEX TUBING IS USED AS AN APPROVED ALTERNATE FOR APPLICATIONS WHERE METALLIC PIPING IS THE BASIS OF DESIGN, THE PEX MANUFACTURER SHALL SUBMIT SHOP DRAWINGS CLEARLY INDICATING THAT THE DESIGN HAS BEEN ANALYZED AND MODIFIED, AS REQUIRED TO MAINTAIN SCHEDULED HYDRONIC SYSTEM PARAMETERS. ANY DESIGN RESULTING IN INCREASED SYSTEM PRESSURE DROP AS A RESULT OF IMPROPER PEX SIZING OR DESIGN SHALL NOT BE PERMITTED.

13. TESTING AND BALANCING

- A. THE HVAC SYSTEM SHALL BE TESTED AND BALANCED BY AN INDEPENDENT AGENCY, UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. A SEALED TYPE WRITTEN REPORT SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL.

14. GUARANTEE

- A. MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE(1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT THIS CONTRACTOR'S EXPENSE.
- B. FOR THE SAME PERIOD, THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED BY HIM.

| INDOOR HEAT PUMP UNIT EQUIPMENT SCHEDULE | | | | | | | | | | | | | | |
|--|----------|------------------------------------|------------------------------------|-------|--------|------------------|------|-----------------------------|---------|------------|-------------|--------------|----------------------|---------------------|
| EQUIPMENT NO. | SERVICE | NOMINAL COOLING CAPACITY (BTU/HR.) | NOMINAL HEATING CAPACITY (BTU/HR.) | CFM | E.S.P. | EER (EFFICIENCY) | SEER | REFRIGERANT PIPING DIAMETER | | ELECTRICAL | | | MANUFACTURER & MODEL | OPTIONS/ACCESSORIES |
| | | | | | | | | LIQUID | SUCTION | MCA (AMPS) | MOCP (AMPS) | V./PH./HZ. | | |
| HP-1 | ADDITION | 36,000 | 30,400 | 1,125 | 0.8 | 13 | 18.2 | 3/8" | 5/8" | 5.5 | 15 | 208-230/1/60 | TRANE - PVA-A36AA7 | NOTE-1 & 2 |
| HP-2 | ADDITION | 36,000 | 30,400 | 1,125 | 0.8 | 13 | 18.2 | 3/8" | 5/8" | 5.5 | 15 | 208-230/1/60 | TRANE - PVA-A36AA7 | NOTE-1 & 2 |

NOTES:
1. PROVIDE INDOOR UNIT WITH REFRIGERANT LINESET RECOMMENDED BY MANUFACTURER, 7-DAY PROGRAMMABLE THERMOSTAT WITH NIGHTTIME/DAYTIME SETTINGS, DOWNFLOW KIT, CONDENSATE PUMP (120-230V/1PH/60HZ), ELECTRIC HEAT LOCKOUT, SEPARATE TERMINAL POWER BLOCK, FLEX DUCT CONNECTIONS, VIBRATION ISOLATION.
2. PROVIDE 10 KW ELECTRIC HEATER KIT (MITSUBISHI - EH10-MPA-L(B)) WITH MULTIPLE STAGES MANUFACTURER OPTIONAL ACCESSORY. POWER TO AUXILIARY ELECTRIC RE-HEAT COIL IS SEPARATE FROM HEAT PUMP SYSTEM. (SEE INLINE DUCT HEATER SCHEDULE)

| AIR COOLED CONDENSING UNIT SCHEDULE | | | | | | | | | | |
|-------------------------------------|-------------------|--------------------------------|--------------------------------|----------------|-------|--------------|--------|----------|----------------------|---------------------|
| EQUIPMENT NO. | SERVICE | NOMINAL HEATING CAPACITY (MBH) | NOMINAL COOLING CAPACITY (MBH) | REFRIG. PIPING | | ELECTRIC | | | MANUFACTURER & MODEL | OPTIONS/ACCESSORIES |
| | | | | LIQUID | VAPOR | V/PH/HZ | MCA(A) | MOCP (A) | | |
| CU-1 | ADDITION | 30.4 | 36 | 3/8" | 5/8" | 208-230/1/60 | 24 | 40 | TRANE PUZ-HA36NKA | NOTE-1 |
| CU-2 | EXISTING BUILDING | 30.4 | 36 | 3/8" | 5/8" | 208-230/1/60 | 24 | 40 | TRANE PUZ-HA36NKA | NOTE-1 |

NOTES:
1. THIS UNIT IS A SINGLE ZONE SPLIT SYSTEM WITH INDOOR HEAT PUMP ELECTRIC FURNACE. PROVIDE HYPER HEAT LOW AMBIENT HEATING OPERATION (RATED FOR FULL HEATING CAPACITY LISTED IN SCHEDULE DOWN TO -13°F DB), 18" TALL STAND, 4" CONCRETE HOUSE KEEPING PAD, REFRIGERANT LINESET MATCHING MANUFACTURER'S RECOMMENDATION, MATCHING INDOOR 3 TON HEAT PUMP FORCED AIR FURNACE, CENTRAL DRAIN PAN, AIR OUTLET GUIDE, HAIL GUARDS, FRONT WIND BAFFLE, SINGLE PHASE VRF HEAT PUMP CONDENSER MODULES SHALL BE PROVIDED WITH LOCAL POWER SOURCE PROTECTION ICM #493. POWER SOURCE PROTECTION DEVICE SHALL BE BETWEEN MAIN POWER SUPPLIED TO THE UNIT AND INTERNAL COMPONENTS. POWER PROTECTION DEVICE SHALL PROVIDE PROTECTION FROM VOLTAGE SAG AND SPORADIC FREQUENCY. POWER PROTECTION DEVICE SHALL AUTOMATICALLY SHUT OFF CONDENSER MODULE UPON DETECTION OF POWER EVENT. PHASE PROTECTION DEVICE SHALL AUTOMATICALLY ENERGIZE AND START UP CONDENSER MODULE UPON POWER EVENT ENDING. POWER MONITOR PROTECTION DEVICE SHALL BE SIMILAR/EQUIVALENT TO ICM #493 WITH 2-POLE CONFIGURATIONS.

| EXHAUST FAN SCHEDULE | | | | | | | | | |
|----------------------|----------|-----|----------------------------------|--------|------|------|------------|----------------------|---------------------|
| EQUIPMENT NO. | SERVICE | CFM | EXTERNAL STATIC PRESS (IN. W.G.) | MOTOR | | | | MANUFACTURER & MODEL | OPTIONS/ACCESSORIES |
| | | | | WATTS | HP | RPM | VOLT/PH/HZ | | |
| EF-1 | BATHROOM | 100 | 0.77 | 128.00 | 0.05 | 1050 | 115/1/60 | GREENHECK - SP-B150 | NOTE-1 |
| EF-2 | BATHROOM | 100 | 0.77 | 128.00 | 0.05 | 1050 | 115/1/60 | GREENHECK - SP-B150 | NOTE-1 |

NOTES:
1. CEILING EXHAUST FAN. PROVIDE FUSED DISCONNECT. FAN SHALL BE INTERLOCKED WITH WALL SWITCH IN RESTROOM.

| INLINE DUCT HEATER | | | | | | | |
|--------------------|-------------------|--------|----|------|----------|----------------------------|---------------------|
| EQUIPMENT NO. | SERVICE | BTU/HR | KW | AMPS | V/PH/HZ | MANUFACTURER & MODEL | OPTIONS/ACCESSORIES |
| DH-1 | SUPPLEMENTAL HEAT | 34,120 | 10 | 42 | 240/1/60 | MITSUBISHI - EH10-MPA-L(B) | NOTE-1 |
| DH-2 | SUPPLEMENTAL HEAT | 34,120 | 10 | 42 | 240/1/60 | MITSUBISHI - EH10-MPA-L(B) | NOTE-1 |

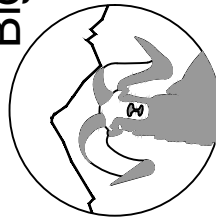
NOTES:
1. PROVIDE WITH POWER DISCONNECT, MULTI STAGED HEATING ELEMENTS, MERCURY CONTACTOR, PILOT LIGHT (INDICATES UNIT IS ENERGIZED), TIME DELAY RELAY, THERMAL OVERLOAD DETECTION, DUCT THERMOSTAT, AIRFLOW SWITCH. INSTALL INLINE DUCT HEATER DIRECTLY TO THE AIR OUTLET CONNECTION OF THE AIR HANDLER.

| GRILLE-REGISTER-DIFFUSER SCHEDULE | | | | | |
|-----------------------------------|---------|-------|--------------|----------|---------------------|
| EQUIPMENT NO. | SIZE | MODEL | MANUFACTURER | FINISH | OPTIONS/ACCESSORIES |
| TYPE A | 12"X6" | LBMH | PRICE | ALUMINUM | NOTE-1 |
| TYPE B | 18"X6" | LBMH | PRICE | ALUMINUM | NOTE-1 |
| TYPE C | 24"X6" | LBMH | PRICE | ALUMINUM | NOTE-1 |
| TYPE D | 12"X4" | 510 | PRICE | ALUMINUM | NOTE-2 |
| TYPE E | 42"X12" | LBMH | PRICE | ALUMINUM | NOTE-3 |
| TYPE F | 42"X18" | LBMH | PRICE | ALUMINUM | NOTE-3 |
| TYPE G | 10"X8" | 80 | PRICE | ALUMINUM | NOTE-4 |

NOTES: COORDINATE ALL MOUNTING TYPES WITH CEILING.
1. FLOOR SUPPLY GRILLE. PROVIDE WITH 16A 1/4" BLADE SPACEING 15° DEFLECTION CONSTRUCTION RATED FOR FOOT TRAFFIC, OPPOSED BLADE DAMPER FOR BALANCING, AIR SCOOP, INTEGRAL MANDRAL TUBE, FRAME/BORDER, EXTRUDED ALUMINUM. COORDINATE FINISH WITH OWNER PRIOR TO ORDERING.
2. DUCT MOUNTED SUPPLY DIFFUSER. DAMPER FOR BALANCING, AIR SCOOP COORDINATE FINISH WITH OWNER PRIOR TO ORDERING.
3. FLOOR RETURN GRILLE. PROVIDE WITH 16A 1/4" BLADE SPACEING 15° DEFLECTION CONSTRUCTION RATED FOR FOOT TRAFFIC, AIR SCOOP, INTEGRAL MANDRAL TUBE, FRAME/BORDER, EXTRUDED ALUMINUM. COORDINATE FINISH WITH OWNER PRIOR TO ORDERING.
4. DUCT MOUNTED RETURN GRILLE. COORDINATE FINISH WITH OWNER PRIOR TO ORDERING.

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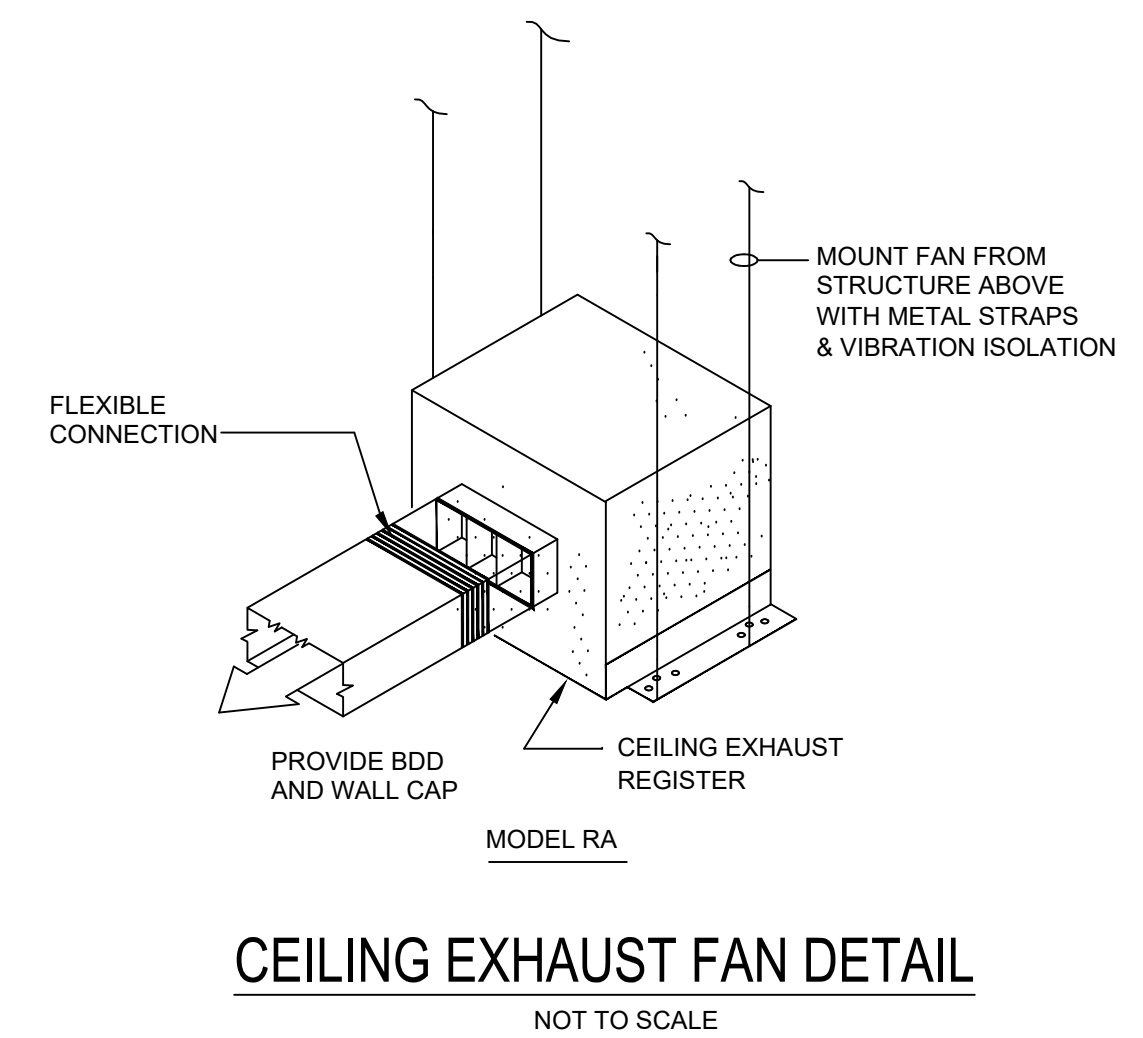
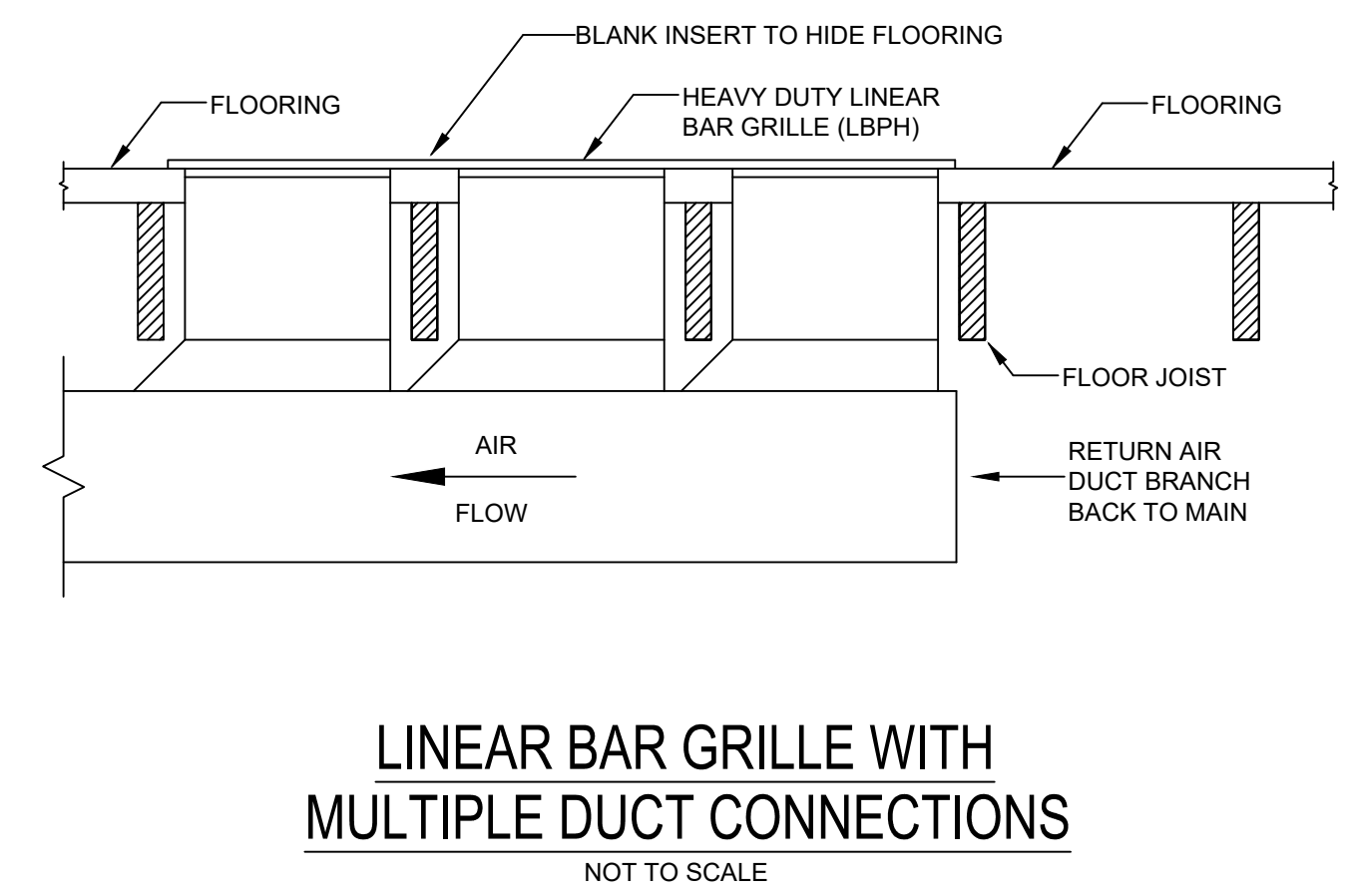
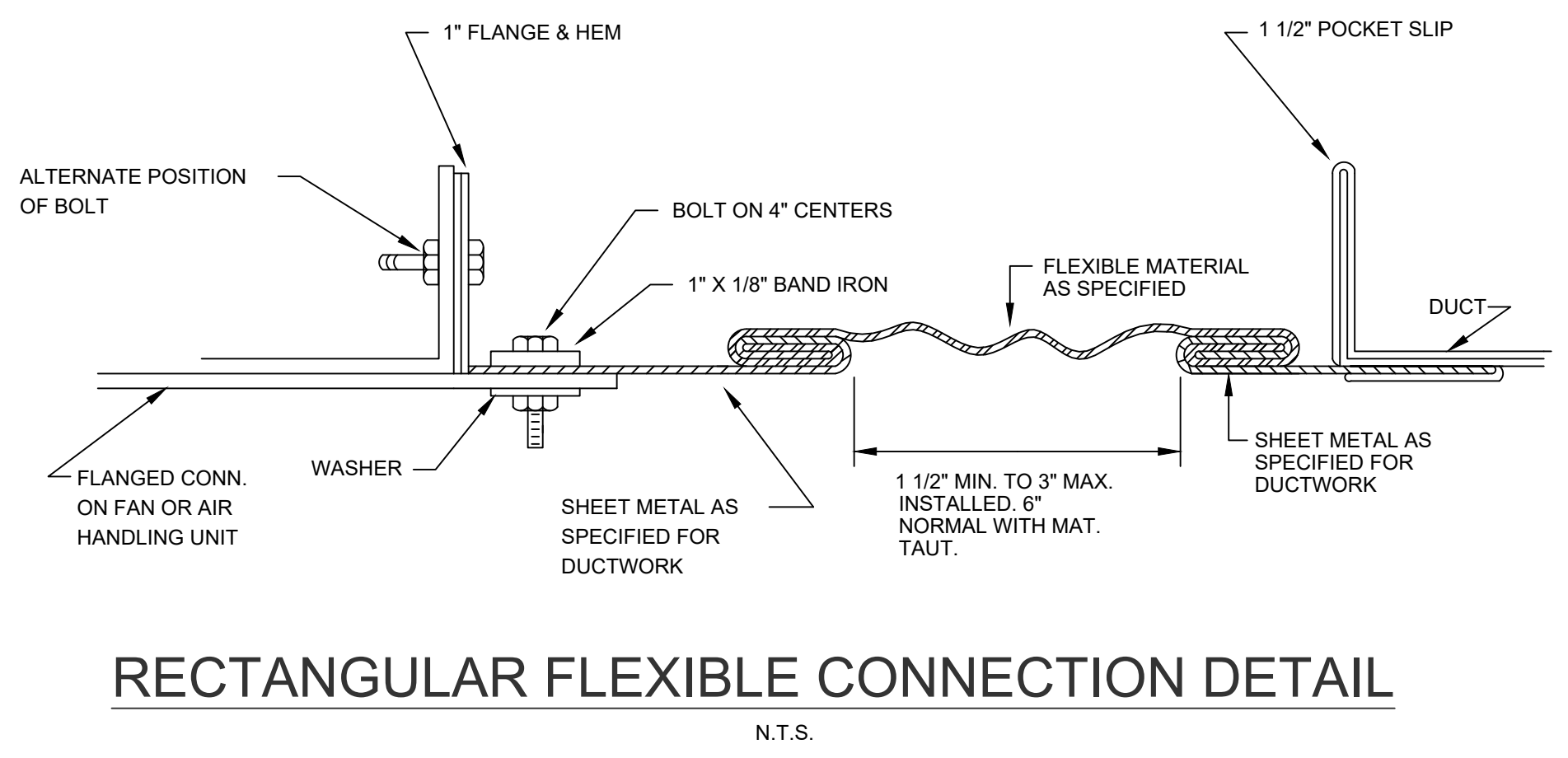
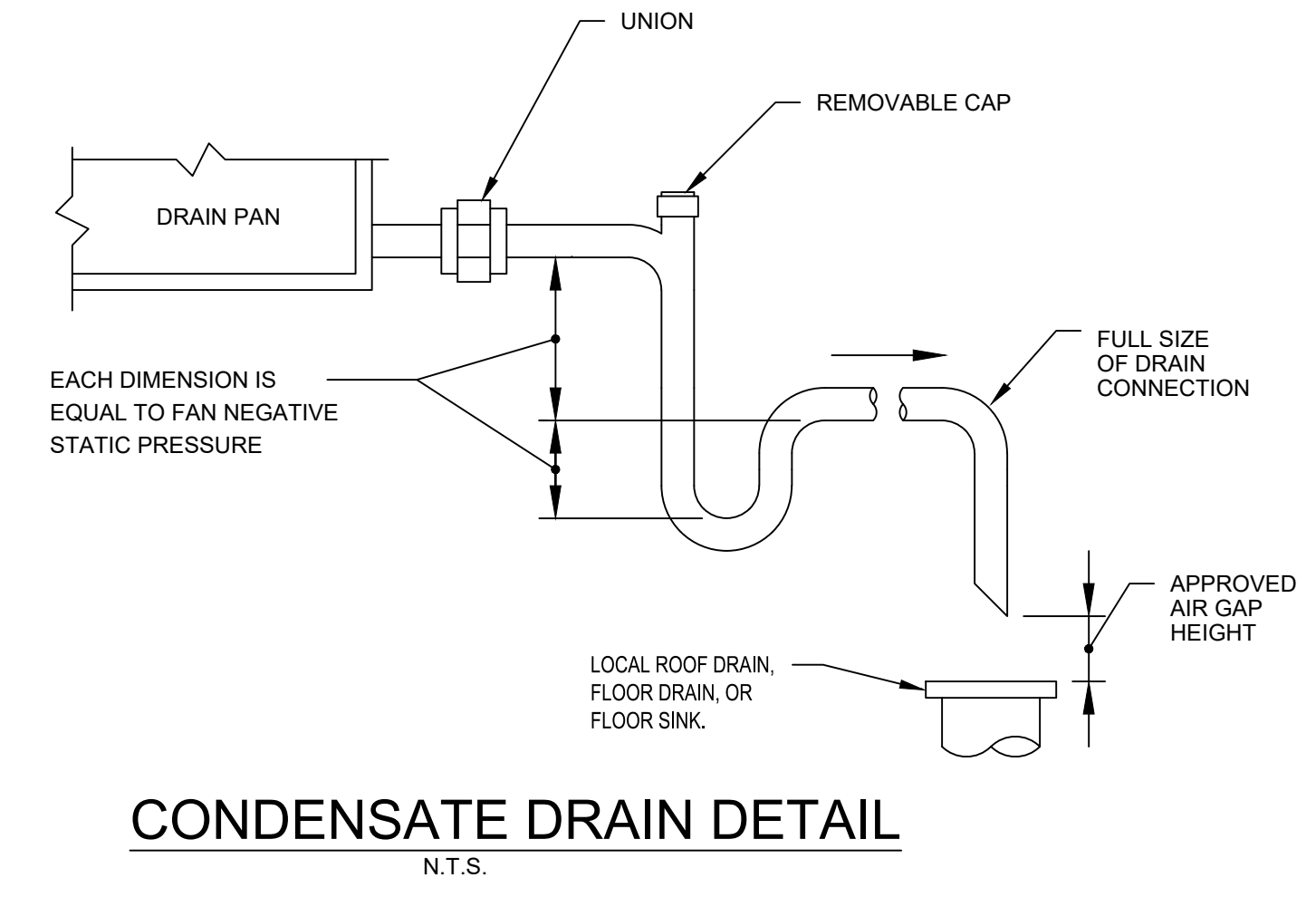
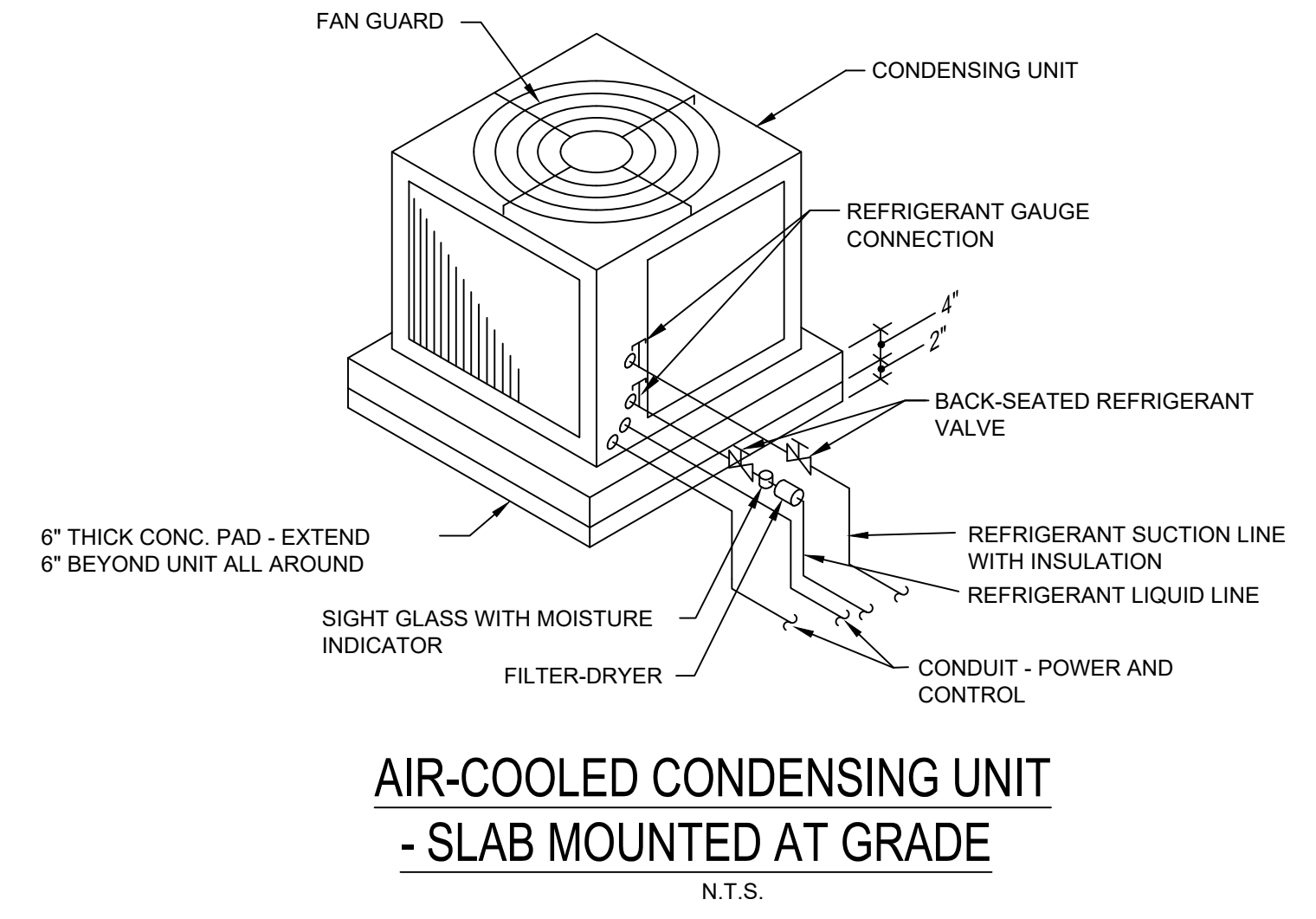
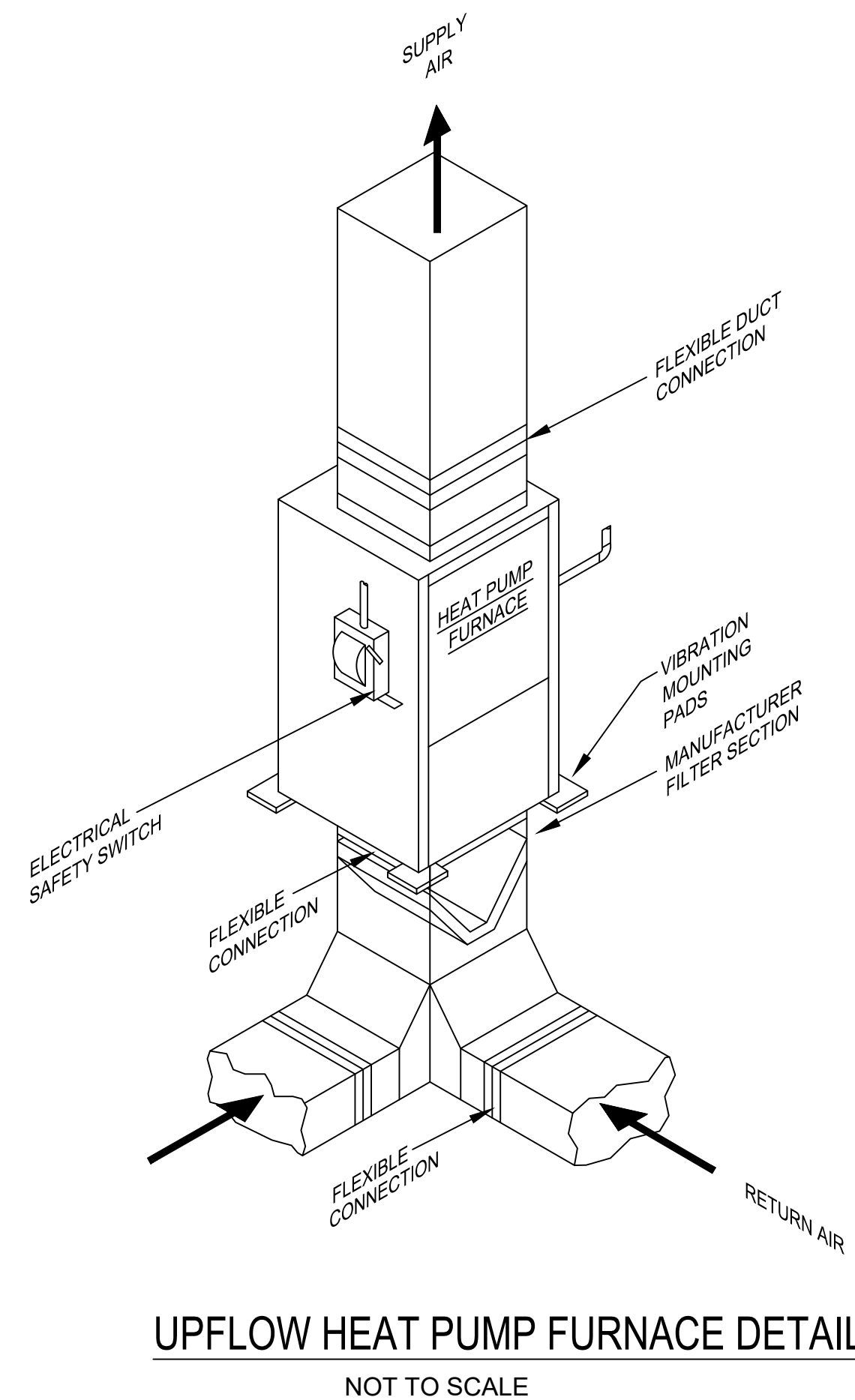
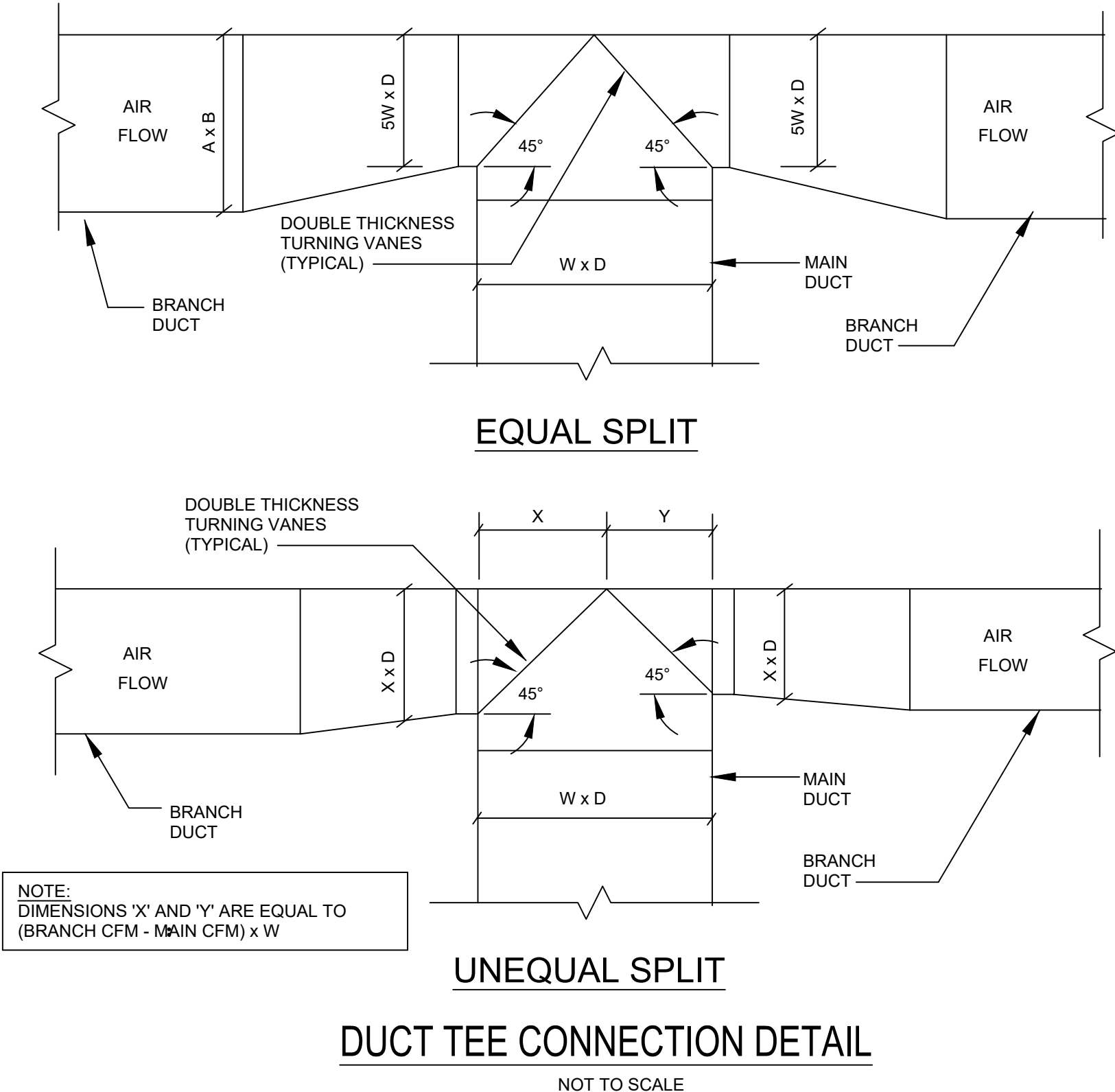
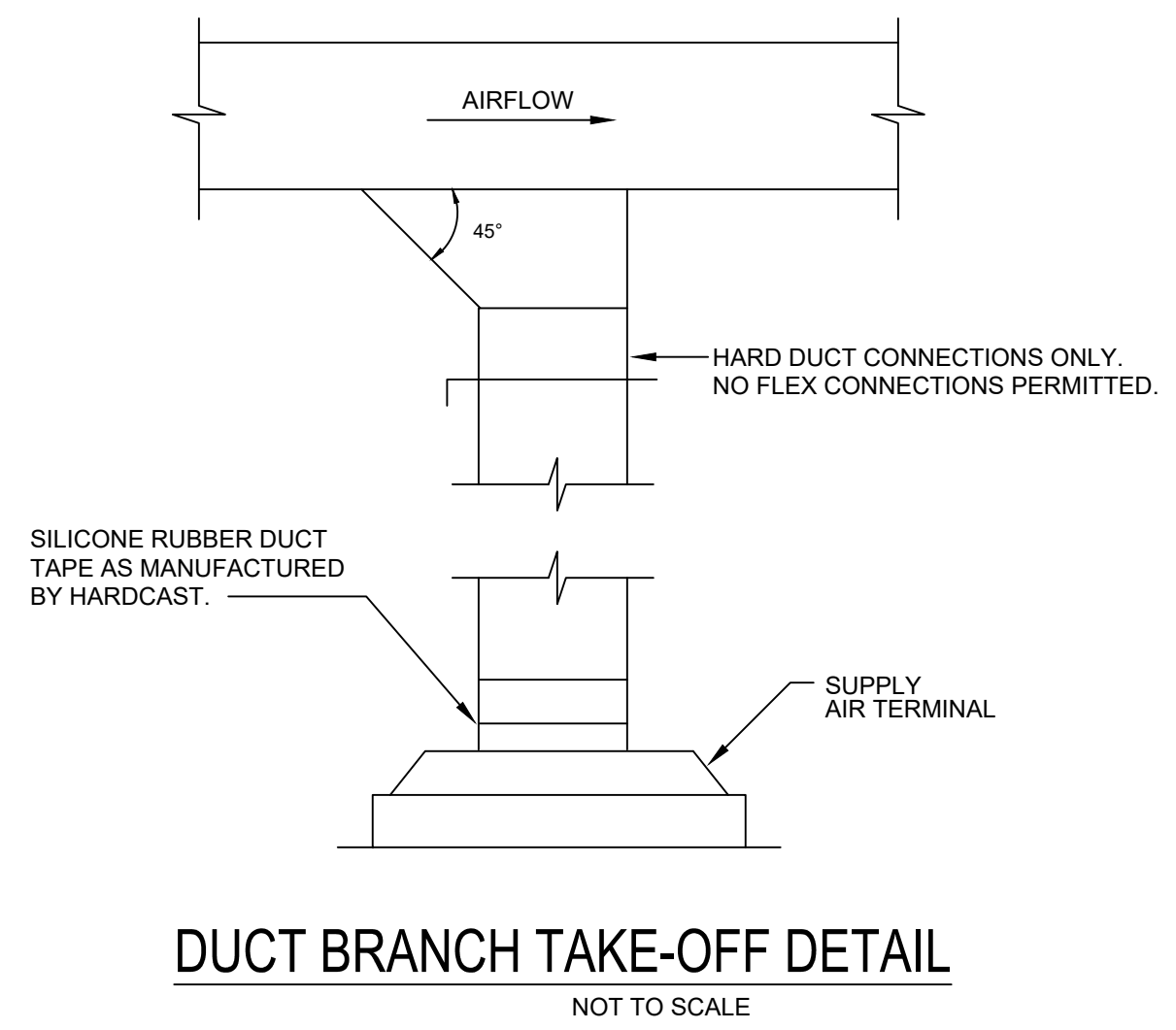
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M2-1

DUCT CONSTRUCTION MINIMUM SHEET METAL THICKNESSES

| RECTANGULAR DUCTS | | | |
|-----------------------|------------------------------------|---------------------------------------|--|
| MAXIMUM SIZE (INCHES) | STEEL (MINIMUM THICKNESS, NOMINAL) | ALUMINUM (MINIMUM THICKNESS, NOMINAL) | |
| THROUGH 12 | 0.022 INCH (26 GAGE, GALV.) | 0.020 INCH (NO. 24 B&S GAGE) | |
| 13 THROUGH 30 | 0.028 INCH (24 GAGE, GALV.) | 0.025 INCH (NO. 22 B&S GAGE) | |
| 31 THROUGH 54 | 0.034 INCH (22 GAGE, GALV.) | 0.032 INCH (NO. 20 B&S GAGE) | |
| 55 THROUGH 84 | 0.040 INCH (20 GAGE, GALV.) | 0.040 INCH (NO. 18 B&S GAGE) | |
| OVER 84 | 0.052 INCH (18 GAGE, GALV.) | 0.051 INCH (NO. 16 B&S GAGE) | |

| ROUND DUCTS | | | |
|-----------------------|------------------------------------|------------------------------------|------------------------------------|
| MAXIMUM SIZE (INCHES) | SPIRAL SEAM DUCT | LONGITUDINAL SEAM DUCT | FITTINGS |
| | STEEL (MINIMUM THICKNESS, NOMINAL) | STEEL (MINIMUM THICKNESS, NOMINAL) | STEEL (MINIMUM THICKNESS, NOMINAL) |
| THROUGH 12 | 0.019 INCH (28 GAGE, GALV.) | 0.022 INCH (26 GAGE, GALV.) | 0.022 INCH (26 GAGE, GALV.) |
| 13 THROUGH 18 | 0.022 INCH (26 GAGE, GALV.) | 0.028 INCH (24 GAGE, GALV.) | 0.028 INCH (24 GAGE, GALV.) |
| 19 THROUGH 28 | 0.028 INCH (24 GAGE, GALV.) | 0.034 INCH (22 GAGE, GALV.) | 0.034 INCH (22 GAGE, GALV.) |
| 29 THROUGH 36 | 0.034 INCH (22 GAGE, GALV.) | 0.040 INCH (20 GAGE, GALV.) | 0.040 INCH (20 GAGE, GALV.) |
| 37 THROUGH 52 | 0.040 INCH (20 GAGE, GALV.) | 0.052 INCH (18 GAGE, GALV.) | 0.052 INCH (18 GAGE, GALV.) |



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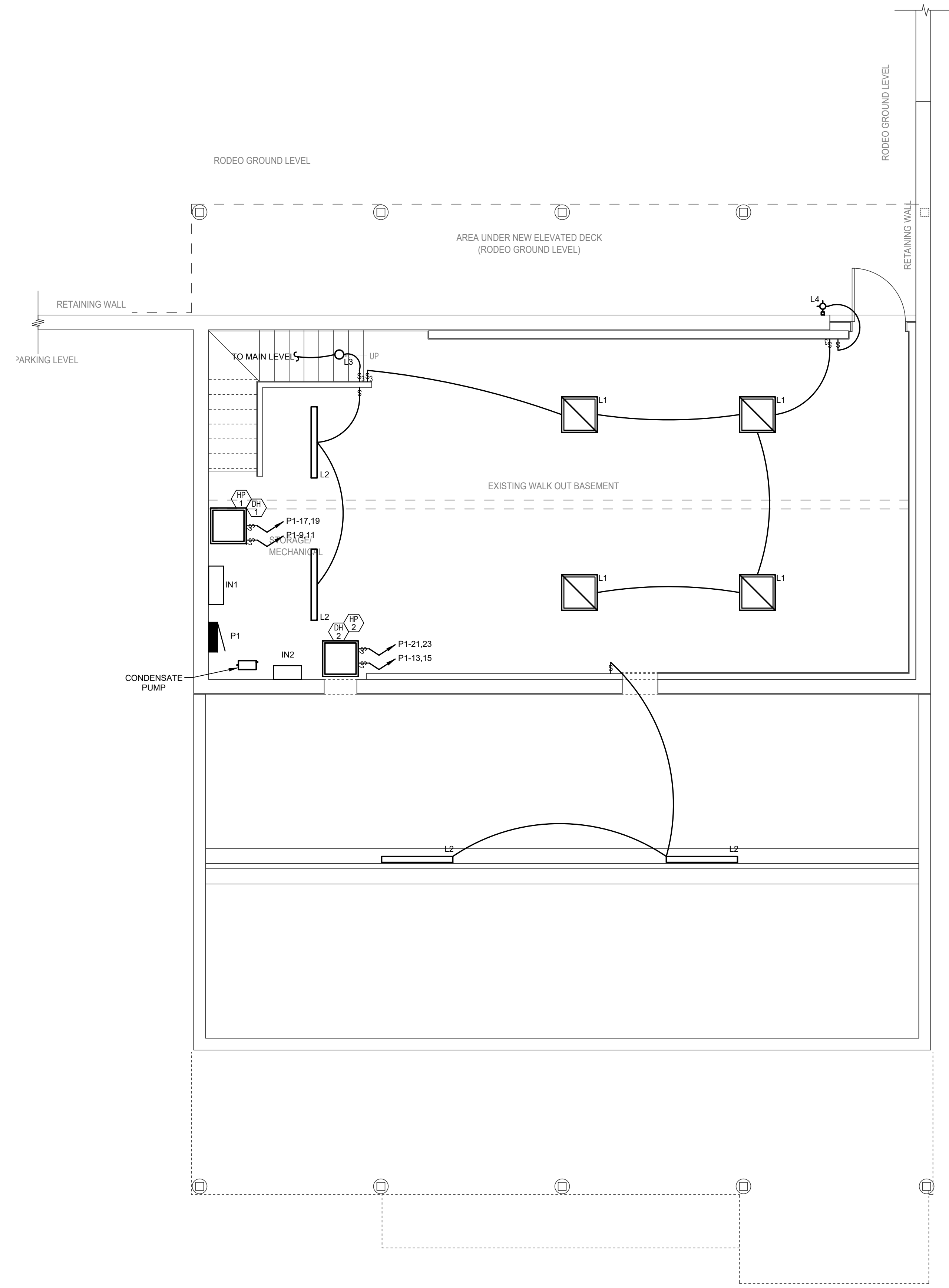
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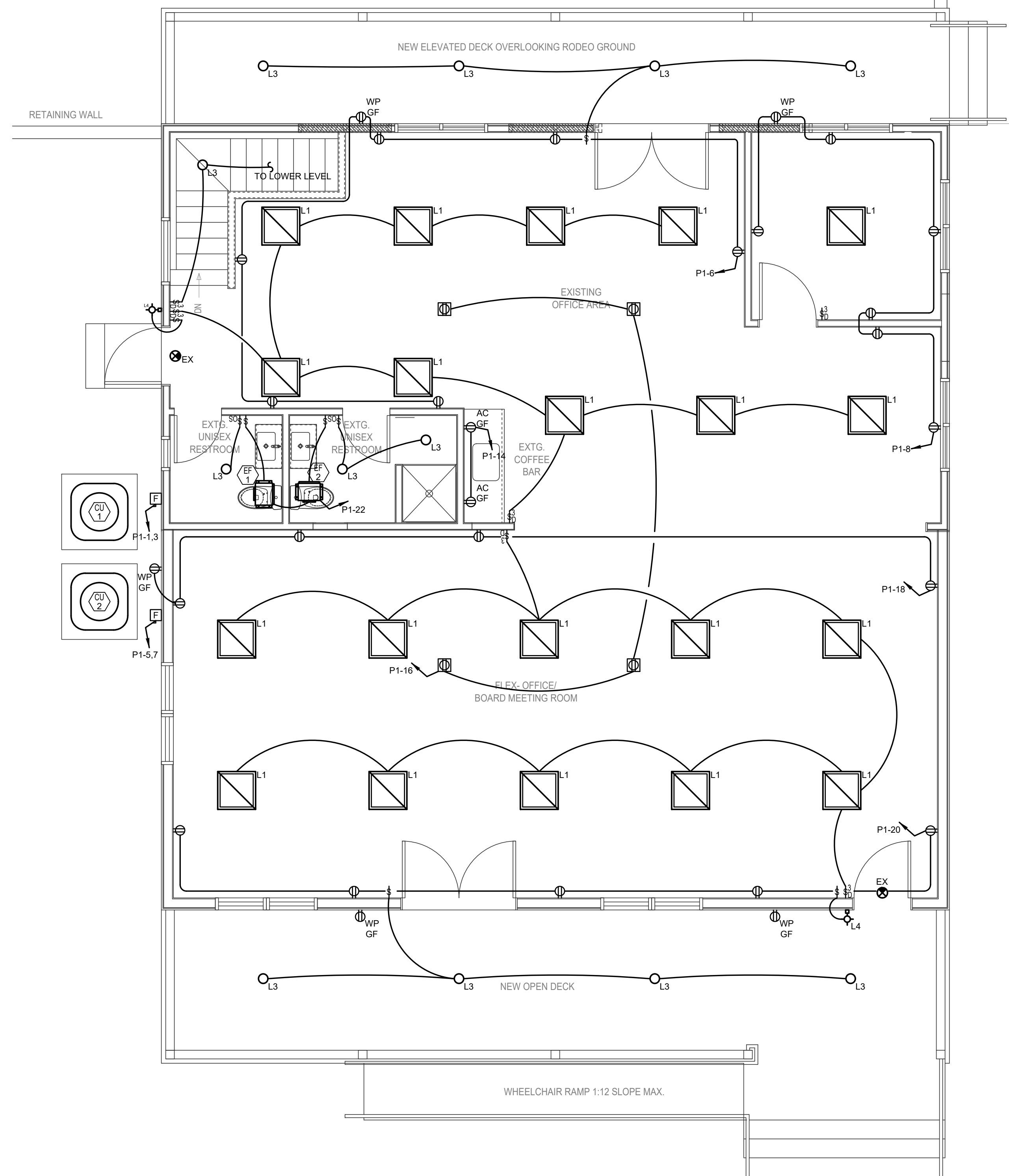
ELECTRICAL - LOWER FLOOR PLAN
SCALE: 1/4"=1'-0"
NORTH

ELECTRICAL - LOWER FLOOR PLAN NOTES

- CONNECT STAIR, LOWER LEVEL, CRAWL SPACE AND LOWER LEVEL OUTDOOR LIGHT TO CIRCUIT 10.

GENERAL ELECTRICAL PLAN NOTES

- SCOPE OF WORK FOR EXISTING PORTION OF BUILDING IS TO CONNECT NEW LIGHTING TO NEW PANEL LOCATED IN LOWER LEVEL OF EXISTING BUILDING. EXISTING RECEPTACLES ARE TO BE REMOVED TO ALLOW INSULATION INSTALLATION. EXISTING DEVICES MAY BE REUSED IF IN GOOD ENOUGH CONDITION. REPLACE WITH NEW AS NEEDED FOR REPLACEMENT AND NEW LOCATIONS. FIELD VERIFY CONDITIONS. CONNECT ALL CIRCUITS AS SHOWN TO NEW PANEL, WHICH IS TO REPLACE THE EXISTING PANEL IN SAME LOCATION AS SHOWN ON PLAN.
- DUCT HEATERS ARE LOCATED ON TOP OF HPS.



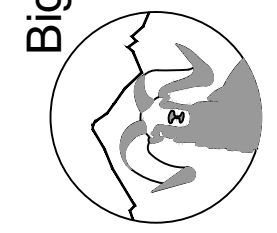
ELECTRICAL - MAIN FLOOR PLAN
SCALE: 1/4"=1'-0"
NORTH

ELECTRICAL - MAIN FLOOR PLAN NOTES

- CONNECT ALL LIGHTS AND EXHAUST FANS IN RESTROOMS TO CIRCUIT 2. SEE PANEL SCHEDULE ON SHEET E2-1 FOR MORE INFORMATION.

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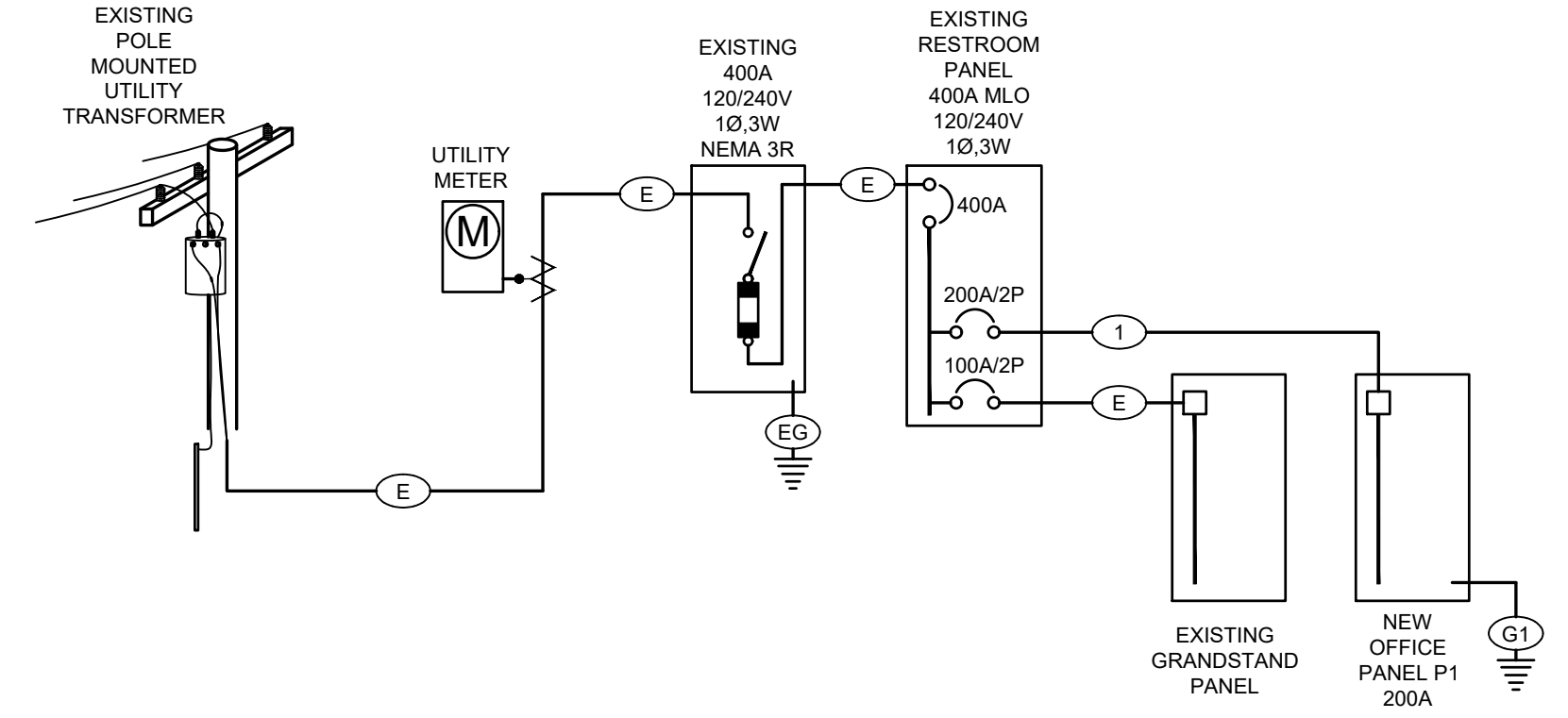
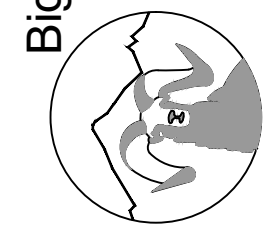


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E1-1

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ONE-LINE DIAGRAM

- NOT TO SCALE
NOTES:
1. ELECTRICAL SCOPE OF WORK FOR DISTRIBUTION EQUIPMENT INVOLVES REPLACEMENT OF BREAKER THAT FEEDS THE NEW OFFICE PANEL.
2. PROVIDE GROUNDING AND BONDING TO MEET THE 2023 NEC 250 REQUIREMENTS.
3. PROVIDE LABELING TO MEET THE REQUIREMENTS OF THE 2023 NEC 110.21.

LOAD SUMMARY (2023 NEC 220.87)
2023 NEC 220.87(1) - MAXIMUM DEMAND DATA OVER 1-YEAR PERIOD: 18.267kW (DATA RECEIVED FROM MLEA UTILITY SERVICE)
2023 NEC 220.87(2) - MAXIMUM DEMAND AT 125% PLUS NEW LOAD: 1.25*18.267 = 22.834 + 33224 = 56.0kW
56.0kW @ 240V 1-PHASE: 232.6A
EXISTING 400A MAIN DISCONNECT TO REMAIN

- WIRE SCHEDULE:
E EXISTING TO REMAIN
1 1-1/2" C - (3#3/0AWG(CU,THWN) + #6AWG(CU/G)
EG EXISTING TO REMAIN
G1 #4AWG TO STRUCTURAL STEEL AND UNDERGROUND WATER PIPE

| LUMINAIRE SCHEDULE | | | | | |
|--------------------|-------------------------------------|--------------------------|--------------------------------|--|--|
| TYPE | MANUFACTURER CATALOG NO. | MANUFACTURER CATALOG NO. | VOLTAGE MOUNTING | DRIVER LAMP SPECIFICATION | DESCRIPTION |
| L1 | COOPER METALUX 22FP4240C | APPROVED EQUIVALENT | 120V CEILING/SURFACE/SUSPENDED | LED 0-10V DIMMING 4465LM, 4000K, 38.3W | 2X2' LED FLAT PANEL |
| L2 | COOPER METALUX 4SLSTP2040DD-120V | APPROVED EQUIVALENT | 120V CEILING/SURFACE/SUSPENDED | LED TRIAC DIMMING 2630LM, 4000K, 23W | 4' STRIP LIGHT |
| L3 | COOPER HALO SMD6R12940WH | APPROVED EQUIVALENT | 120V CEILING/SURFACE/SUSPENDED | 0-10V DIMMING 1223LM, 4000K, 15.3W | 6" ROUND DOWNLIGHT, WET LISTED |
| L4 | COOPER LIGHTING ABW-B1-727-LED-D1-A | APPROVED EQUIVALENT | 120V WALL | LED, 3000K, 499LM, 80CRI, 11W | LED WALL SCOFF, UL LISTED, IP66 RATED, FULL CUT OFF |
| IN1 | MULE CEPS-M-5-W-1 | APPROVED EQUIVALENT | 120V WALL | - | 1100 WATT INVERTER FOR UPPER LEVEL LIGHTS |
| IN2 | MULE CEPS-M-2-W-1 | APPROVED EQUIVALENT | 120V WALL | - | 350 WATT INVERTER FOR LOWER LEVEL LIGHTS |
| EX | LITHONIA LIGHTING LHQM LED HD | APPROVED EQUIVALENT | 120/277V WALL/CEILING | LED EXIT SIGN | LED EXIT SIGN, HIGH IMPACT, FLAME RETARDANT, THERMOPLASTIC HOUSING. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS. |

- NOTES:
1. PROVIDE ALL APPURTENANCES REQUIRED TO INSTALL A COMPLETE AND FUNCTIONING SYSTEM.
2. COORDINATE SELECTION OF COLORS AND FINISHES WITH ARCHITECT/OWNER.
3. EMERGENCY LIGHTING TO BE PROVIDED VIA INVERTERS.

- GENERAL NOTES
- ALL PENETRATIONS IN OR THROUGH FIRE RATED PARTITIONS SHALL BE FIRE STOPPED IN SUCH A WAY THAT THE PENETRATION MATCHES THE FIRE RATING OF THE WALL.
 - THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION BETWEEN THE APPROPRIATE DISCIPLINES AND CONTRACTORS. ALL EQUIPMENT IS TO BE INSTALLED TO STRICTLY CONFORM TO MANUFACTURER'S INSTALLATION GUIDELINES. ALL EQUIPMENT IS TO BE INSTALLED WITH ALL NECESSARY CONTROL/ACCESSORY OPTIONS TO FUNCTION AS INTENDED. IT IS THE RESPONSIBILITY OF THE EQUIPMENT MANUFACTURER/SUPPLIER AND THE CONTRACTOR/INSTALLER TO PROVIDE COMPLETE INSTALLATION AND FUNCTIONALITY OF ALL EQUIPMENT BASED ON DESIGN SPECIFICATIONS AS OUTLINED BY THE ARCHITECT/ENGINEER.
 - COORDINATE ALL DEVICE, FIXTURE AND HARDWARE COLOR SELECTIONS WITH THE ARCHITECT/OWNER PRIOR TO MAKING SHOP DRAWING SUBMITTALS.
 - ALL EXPOSED CONDUITS, BOXES, ETC. IN ROOMS TO BE PAINTED SHALL BE PAINTED TO MATCH THE SURROUNDING SURFACE. EXPOSED CONDUITS, BOXES, ETC. IN ROOMS WHICH ARE NOT PAINTED MAY BE LEFT UNPAINTED. EXPOSED CONDUIT, BOXES, ETC. ON THE EXTERIOR OF BUILDINGS SHALL BE PAINTED TO MATCH THE SURROUNDING SURFACE AS CLOSELY AS POSSIBLE.
 - ALL SERVICEABLE MECHANICAL EQUIPMENT IS TO BE INSTALLED WITH AN ACCEPTABLE DISCONNECTING MEANS AND/OR SERVICE OUTLET AS REQUIRED BY GOVERNING CODES.
 - ALL INSTALLED EQUIPMENT THAT REQUIRES MARKING, TAGGING, OR OTHER IDENTIFICATION SHALL BE SO MARKED, TAGGED, OR OTHERWISE IDENTIFIED BY THE CONTRACTOR/INSTALLER AT THE TIME OF INSTALLATION IN COMPLIANCE WITH ALL GOVERNING CODES.
 - ALL 120V, SINGLE-PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING ELECTRICAL OUTLETS OR DEVICES SHALL BE PROVIDED WITH ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION IN ACCORDANCE WITH 2020 NEC 210.12(A)(1) THROUGH (6).
 - ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL IN ACCORDANCE WITH 2020 NEC 210.8, OR AS MAY BE REQUIRED BY OTHER SECTIONS OF 2020 NEC.
 - ELECTRICAL CONTRACTOR SHALL PROVIDE REQUIRED GROUND-FAULT PROTECTION OF EQUIPMENT FOR ALL ELECTRIC HEAT TRACING AND HEATING PANELS IN ACCORDANCE WITH 2020 NEC 427.22, OR AS MAY BE REQUIRED BY OTHER SECTIONS OF 2020 NEC. ELECTRICAL CONTRACTOR SHALL ALSO PROVIDE FOR ANY REQUIRED AT-GRADE ACCESSIBLE SHUTOFF DEVICE(S) OR DISCONNECT(S) FOR ELECTRIC HEAT TRACE INSTALLED ON THE ROOF.
 - ELECTRICAL CONTRACTOR SHALL FOLLOW THE APPLICABLE INSTALLATION REQUIREMENTS OF 2020 NEC 406.12; AS AMENDED BY AHJ.
 - ELECTRICAL CONTRACTOR SHALL PROVIDE WEATHER-PROOF IN-USE COVERS FOR ALL EXTERIOR RECEPTACLES.
 - REFER TO MECHANICAL AND PLUMBING DESIGN DRAWINGS FOR ADDITIONAL EQUIPMENT INFORMATION.

| PANEL SCHEDULE - P1 | | TYPE: VOLTAGE: ENCLASURE: | PANELBOARD: 120/240 NEMA1 | BUS SIZE: MAIN BRKR: MOUNTING: | 225 225 FLUSH | PHASES: WIRES: SC RATING: | 1 3 10000 | NEUTRAL BUS: GROUND BUS: | YES YES |
|---------------------|---------------------|---------------------------|---------------------------|--------------------------------|---------------------|---------------------------|-------------------|------------------------------|---------|
| LOAD TYPE | LOAD DESCRIPTION | AMPS POLES | CKT# LOAD | Ø | CKT# LOAD | AMPS POLES | LOAD TYPE | LOAD DESCRIPTION | |
| MECH COOLING | CU-1 | 40A 2P | 1 2900 | A | 2 957 | 20A 1P | LIGHTING | UPPER LIGHTS | |
| MECH COOLING | --- | --- | 3 2900 | B | 4 360 | 20A 1P | RECEPTACLE | RESTROOM RECEPTACLES | |
| MECH COOLING | CU-2 | 40A 2P | 5 2900 | A | 6 1260 | 20A 1P | RECEPTACLE | MAIN LEVEL RECEPTACLES | |
| MECH COOLING | --- | --- | 7 2900 | B | 8 1440 | 20A 1P | RECEPTACLE | MAIN LEVEL RECEPTACLES | |
| MECH YEAR ROUND | HP-1 W/COND PUMP | 20A 2P | 9 650 | A | 10 276 | 20A 1P | LIGHTING | LOWER LEVEL AND STAIR LIGHTS | |
| MECH YEAR ROUND | --- | --- | 11 650 | B | 12 1500 | 20A 1P | MECH YEAR ROUND | EXISTING WATER HEATER | |
| MECH YEAR ROUND | HP-2 | 20A 2P | 13 572 | A | 14 360 | 20A 1P | RECEPTACLE | COFFEE BAR RECEPTACLES | |
| MECH YEAR ROUND | --- | --- | 15 572 | B | 16 360 | 20A 1P | RECEPTACLE | BOARD ROOM FLOOR RECEPTACLES | |
| MECH HEATING | HP-1 DUCT HEATER | 60A 2P | 17 5000 | A | 18 900 | 20A 1P | RECEPTACLE | BOARD ROOM RECEPTACLES | |
| MECH HEATING | --- | --- | 19 5000 | B | 20 900 | 20A 1P | RECEPTACLE | BOARD ROOM RECEPTACLES | |
| MECH HEATING | HP-2 DUCT HEATER | 60A 2P | 21 5000 | A | 22 256 | 20A 1P | MECH YEAR ROUND | EXHAUST FANS | |
| MECH HEATING | --- | --- | 23 5000 | B | 24 0 | 20A 1P | SPARE | UNALLOCATED FUTURE | |
| SPARE | UNALLOCATED FUTURE | 20A 1P | 25 0 | A | 26 0 | 20A 1P | SPARE | UNALLOCATED FUTURE | |
| SPACE | --- | --- | 27 0 | B | 28 0 | --- | SPACE | --- | |
| SPACE | --- | --- | 29 0 | A | 30 0 | --- | SPACE | --- | |
| SPACE | --- | --- | 31 0 | B | 32 0 | --- | SPACE | --- | |
| SPACE | --- | --- | 33 0 | A | 34 0 | --- | SPACE | --- | |
| SPACE | --- | --- | 35 0 | B | 36 0 | --- | SPACE | --- | |
| SPACE | --- | --- | 37 0 | A | 38 0 | --- | SPACE | --- | |
| SPACE | --- | --- | 39 0 | B | 40 0 | --- | SPACE | --- | |
| SPACE | --- | --- | 41 0 | A | 42 0 | --- | SPACE | --- | |
| LOADS BY TYPE: | | | | | | | LOADS BY PHASE: | | |
| LOAD TYPE | CONNECTED LOAD (VA) | DEMAND FACTOR | DEMAND LOAD (VA) | PHASE | CONNECTED LOAD (VA) | CONNECTED LOAD (AMPS) | BALANCE (PERCENT) | | |
| LIGHTING | 1233.00 | 1.25 | 1541.25 | A | 21031.00 | 175.26 | A-B: 95.8 | | |
| KITCHEN | 0.00 | 0.00 | 0.00 | B | 21942.00 | 182.85 | B-A: 95.8 | | |
| PROCESS | 0.00 | 1.00 | 0.00 | C | --- | --- | --- | | |
| RECEPTACLES | 5940.00 | 1.00 | 5940.00 | | | | | | |
| MECH HEATING | 20000.00 | 1.00 | 20000.00 | | | | | | |
| MECH COOLING | 11650.00 | 1.00 | 11650.00 | | | | | | |
| MECH YEAR ROUND | 4200.00 | 1.00 | 4200.00 | | | | | | |
| APPLIANCE | 0.00 | 1.00 | 0.00 | | | | | | |
| MISCELLANEOUS | 0.00 | 1.00 | 0.00 | | | | | | |
| MOTOR | 0.00 | 1.00 | 0.00 | | | | | | |
| SPARE | 0.00 | 1.00 | 0.00 | | | | | | |
| LARGEST MOTOR | --- | 0.25 | 1450.00 | | | | | | |
| TOTAL | 42973.00 | --- | 33131.00 | | | | | | |
| | | | | TOTAL/AVERAGE | 42973.00 | 179.05 | 95.8 | | |

NOTES:
1. THE LARGEST CONNECTED MOTOR LOAD IS INCLUDED IN MECHANICAL, PROCESS, OR MOTOR LOADS.

RBC COLUMBINE PARK OFFICE
ELECTRICAL - DETAILS
COLUMBINE HORSE PARK, RANGLEY
RIO BLANCO COUNTY, COLORADO 81648

| DATE: | ISSUED FOR: |
|------------|-------------|
| 02/05/2024 | REVIEW |
| 05/31/2024 | REVIEW |
| 06/04/2024 | PERMIT |



DATE: 07/26/2023
JOB NO: 23-227
DRAWN BY: BCE
CHECKED BY: BCE
SCALE: AS SHOWN
SHEET NUMBER: E2-1