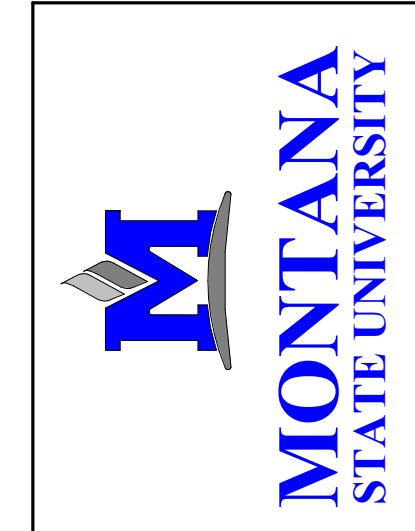
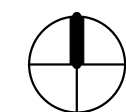






① SITE PLAN  
3/32" = 1'-0"



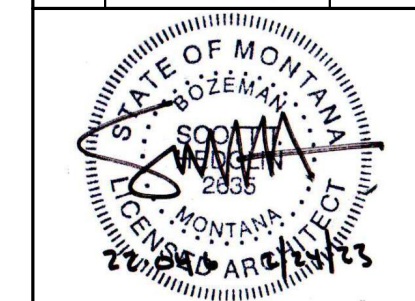
MSU-PDC  
MONTANA STATE UNIVERSITY  
BOZEMAN, MONTANA  
PHONE: 406.994.5413  
EMAIL: PDC@MONTANA.EDU

95% REVIEW

# MAES POST FARM, POLE BARN



DRAWN BY: MAS		
REVIEWED BY: STH		
REV.	DESCRIPTION	DATE



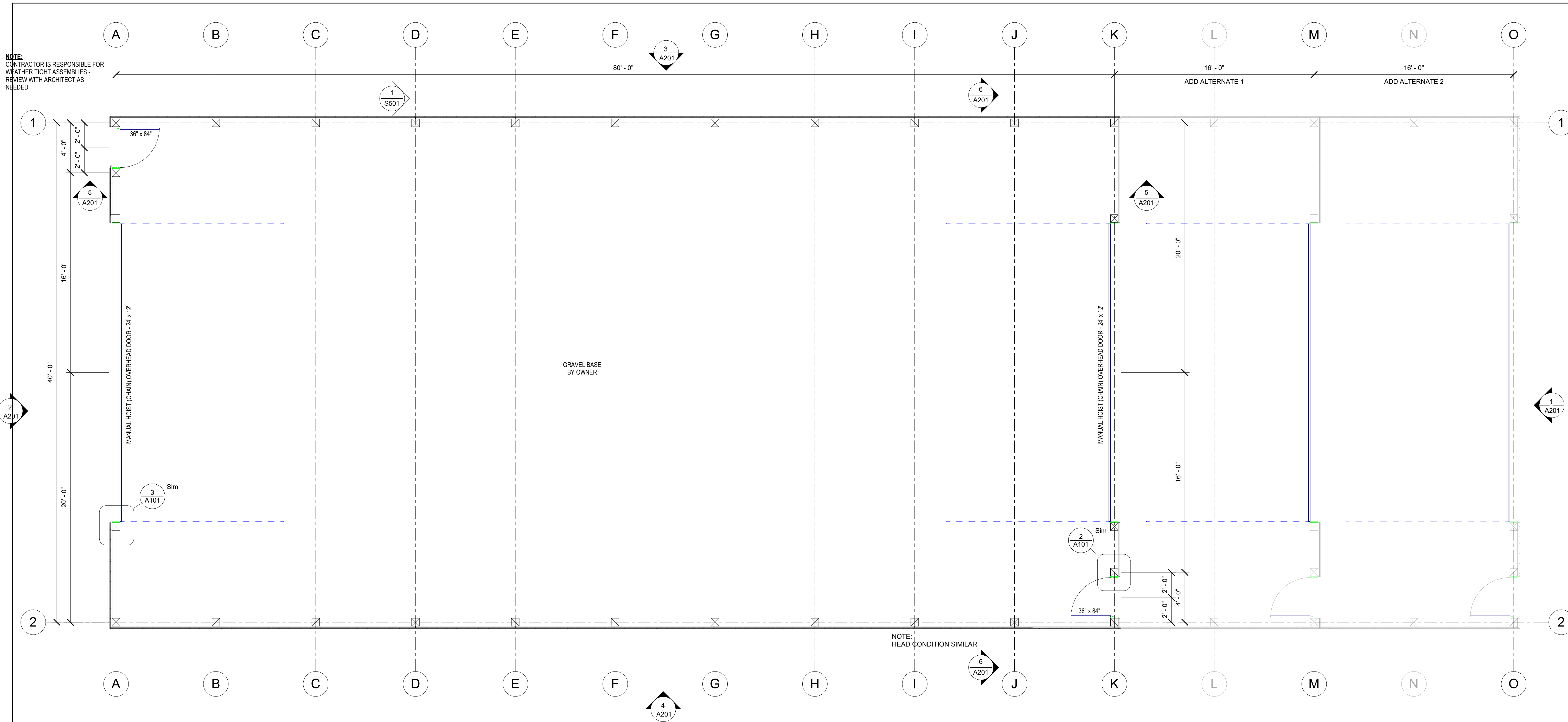
PPA#22-0039

SHEET TITLE  
SITE PLAN

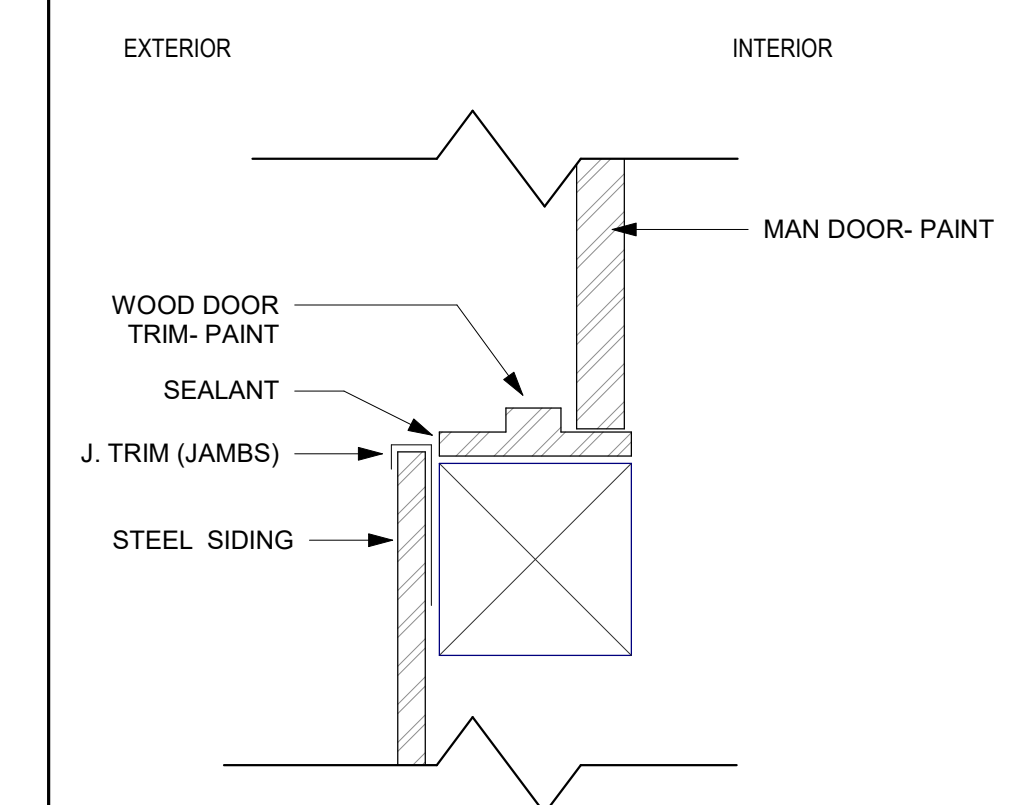
SHEET  
**A100**

DATE  
FEBRUARY 24, 2023

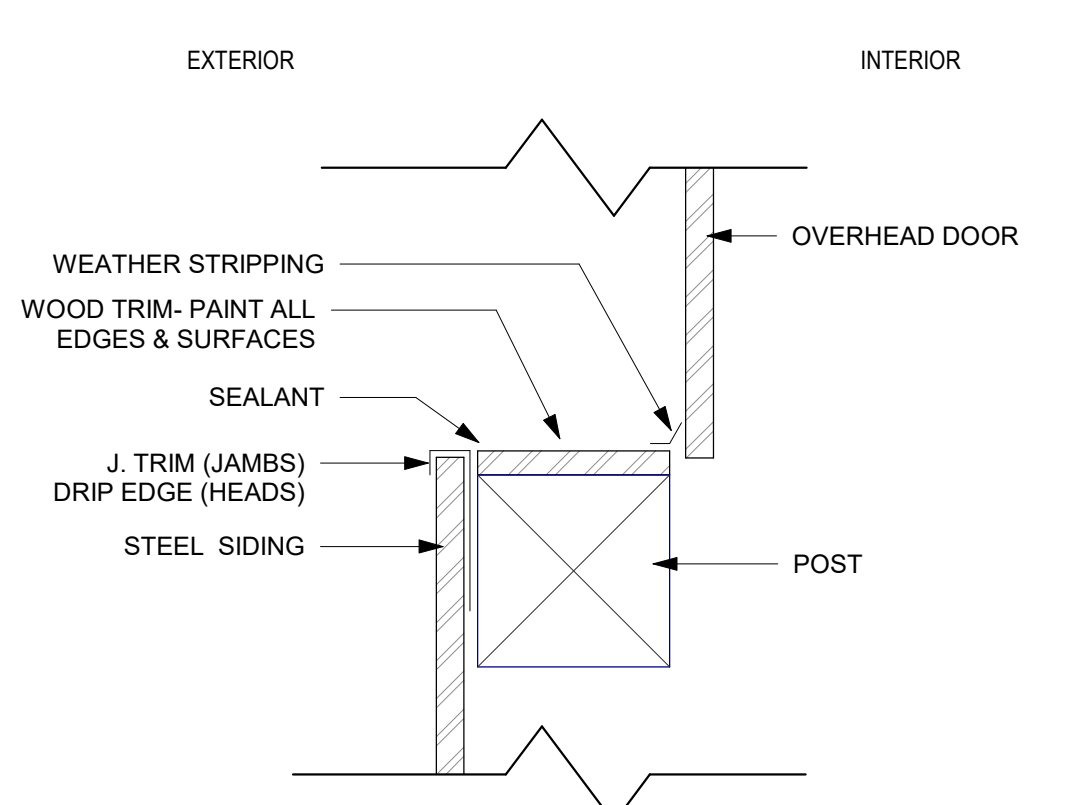
NOTE:  
CONTRACTOR IS RESPONSIBLE FOR  
WEATHER TIGHT ASSEMBLIES -  
REVIEW WITH ARCHITECT AS  
NEEDED.



1 FLOOR PLAN  
1/4" = 1'-0"



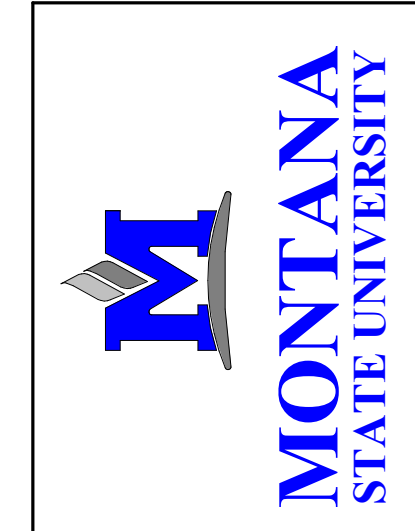
2 MAN DOOR JAMBS  
3" = 1'-0" NOTE: HEAD CONDITION SIMILAR



3 OVERHEAD DOOR JAMBS  
3" = 1'-0" NOTE: HEAD CONDITION SIMILAR

**SPECIFICATIONS**

- DIVISION 00: SEE PROJECT MANUAL**  
**DIVISION 01: SEE PROJECT MANUAL**
- DIVISION 07: THERMAL AND MOISTURE PROTECTION**  
074113 METAL ROOF PANELS  
A. MATERIAL: STEEL, 29 GAUGE  
B. PROFILE: BRIDGER STEEL TUFF-RIB (BASIS OF SPECIFICATION) OR EQUAL  
C. INSTALLATION PER MANUFACTURER'S SPECIFICATIONS  
074213 METAL WALL PANELS  
A. MATERIAL: STEEL, 29 GAUGE  
B. PROFILE: POLYCARBONATE WALL PANEL (BASIS OF SPECIFICATION) OR EQUAL  
C. TRANSLUCENT PANEL: POLYCARBONATE. MATCH PROFILE OF METAL WALL PANEL.  
D. INSTALLATION PER MANUFACTURER'S SPECIFICATIONS  
076200 SHEET METAL FLASHING AND TRIM  
A. MATERIAL: STEEL, 29 GAUGE  
B. PROVIDED BY SAME MANUFACTURER / SUPPLIER AS ROOF AND WALL PANELS.  
079200 JOINT SEALANTS  
A. COMPATIBILITY: PROVIDE SEALANTS, JOINT FILLERS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES.  
B. SEALANT FOR GENERAL EXTERIOR USE: SINGLE-COMPONENT, NEUTRAL-CURING SILICONE, ASTM C920, TYPE S, GRADE NS, CLASS 25. FOR USE NT, SIMPLEX-1A  
C. DO NOT PROCEED WITH INSTALLATION WHEN AMBIENT AND SUBSTRATE TEMPERATURES ARE OUTSIDE LIMITS PERMITTED BY JOINT-SEALANT MANUFACTURER OR ARE BELOW 40 DEGREES F
- DIVISION 08: OPENINGS**  
081113 PRE-HUNG METAL DOORS  
A. BASIS OF SPECIFICATION: THERMATRU (800-843-7628, THERMATRU.COM) OR EQUAL.  
B. PANEL: FLUSH, INSULATED, PRIMED METAL.  
C. SIZE: AS NOTED.  
D. HARDWARE:  
a. ENTRY LOCKSET, LEVER HANDLE.  
b. LATCH PROTECTION PLATE.  
c. HINGES: THREE  
d. THRESHOLD AND SEALS: INTEGRAL  
E. INSTALL TRUE AND PLUMB. ADJUST FOR WEATHERTIGHT ASSEMBLY AND SMOOTH OPERATION.  
F. PAINT FRAME AND DOOR PANEL.  
083323 OVERHEAD SECTIONAL DOORS  
A. BASIS OF SPECIFICATION: OVERHEAD DOOR, MODEL 420 (800-929-3667, OVERHEADDOOR.COM) OR EQUAL.  
B. STRUCTURAL PERFORMANCE: CAPABLE OF WITHSTANDING 20 LBF/SQ. FT. WIND LOAD.  
C. PANELS: GALVANIZED STEEL, DIMPLED OR RIBBED TO RESIST OIL-CANNING, 20 GAUGE, FACTORY PAINTED, WHITE.  
D. OPERATION: MANUAL CHAIN HOIST.  
E. TRACKS: GALVANIZED STEEL, SIZED FOR DOOR SIZE AND WEIGHT.  
F. LOCK: SLIDE BOLT COMPATIBLE WITH OWNER-PROVIDED STANDARD PADLOCK, INTERIOR MOUNTED.  
G. WEATHERSTRIPPING.  
H. INSTALL TRUE AND PLUMB. ADJUST FOR WEATHERTIGHT ASSEMBLY AND SMOOTH OPERATION.



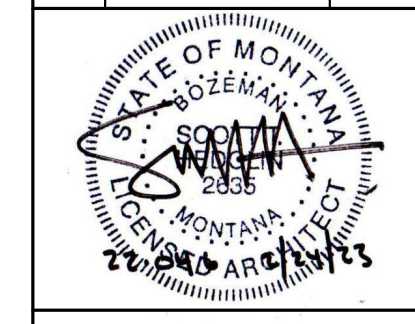
MSU-PDC  
MONTANA STATE UNIVERSITY  
BOZEMAN, MONTANA  
PHONE: 406.994.5413  
EMAIL: PDC@MONTANA.EDU

95% REVIEW  
**MAES POST FARM,  
POLE BARN**



DRAWN BY JKF/MAS  
REVIEWED BY MRA/STH

REV.	DESCRIPTION	DATE

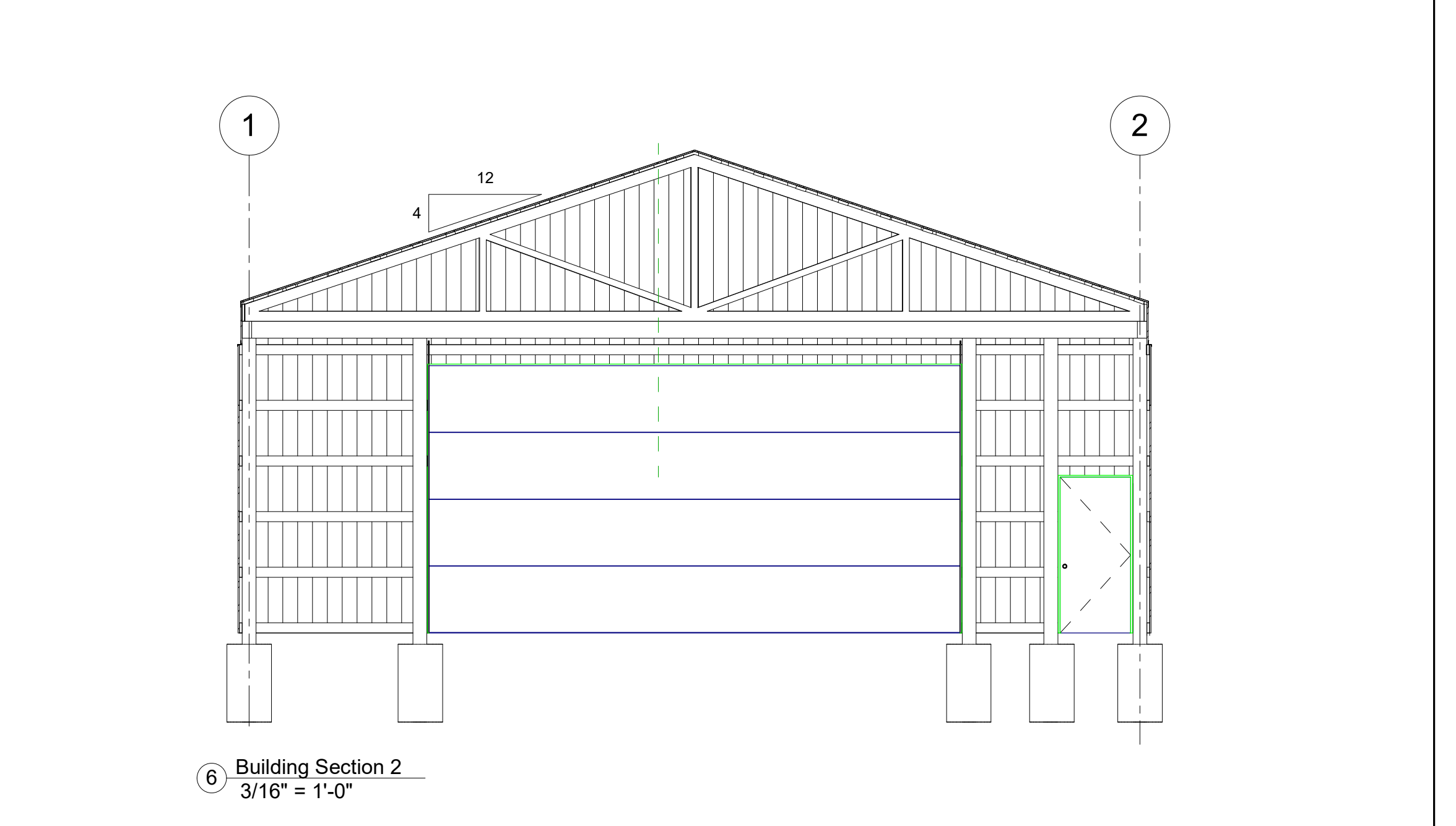
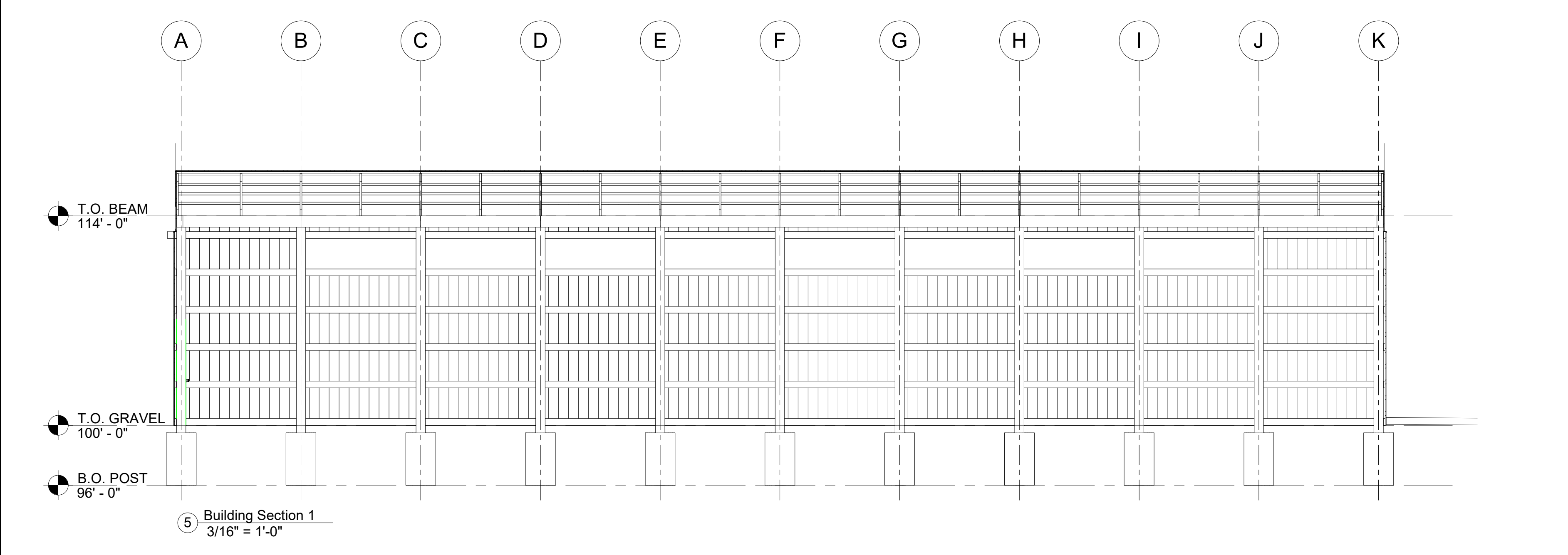
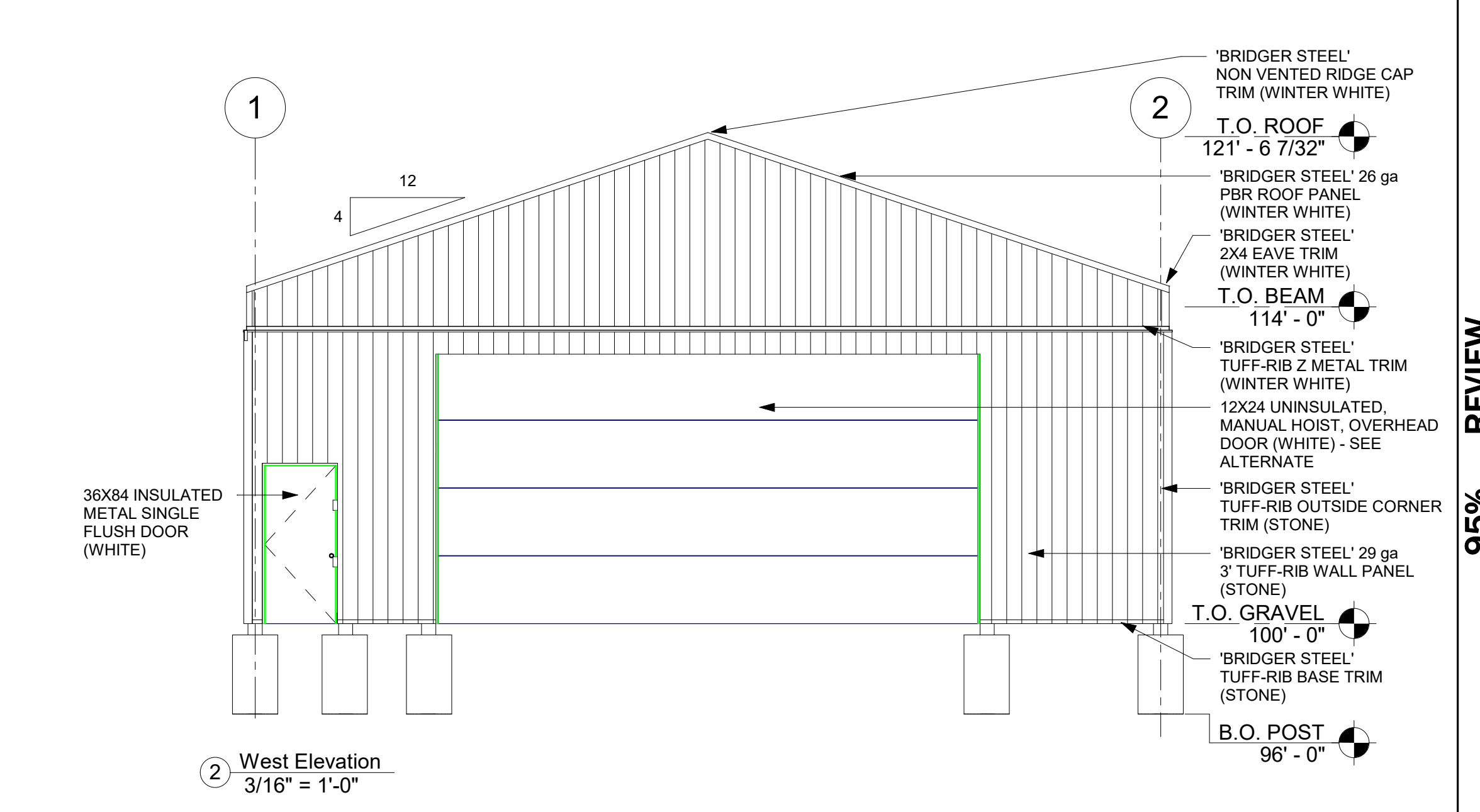
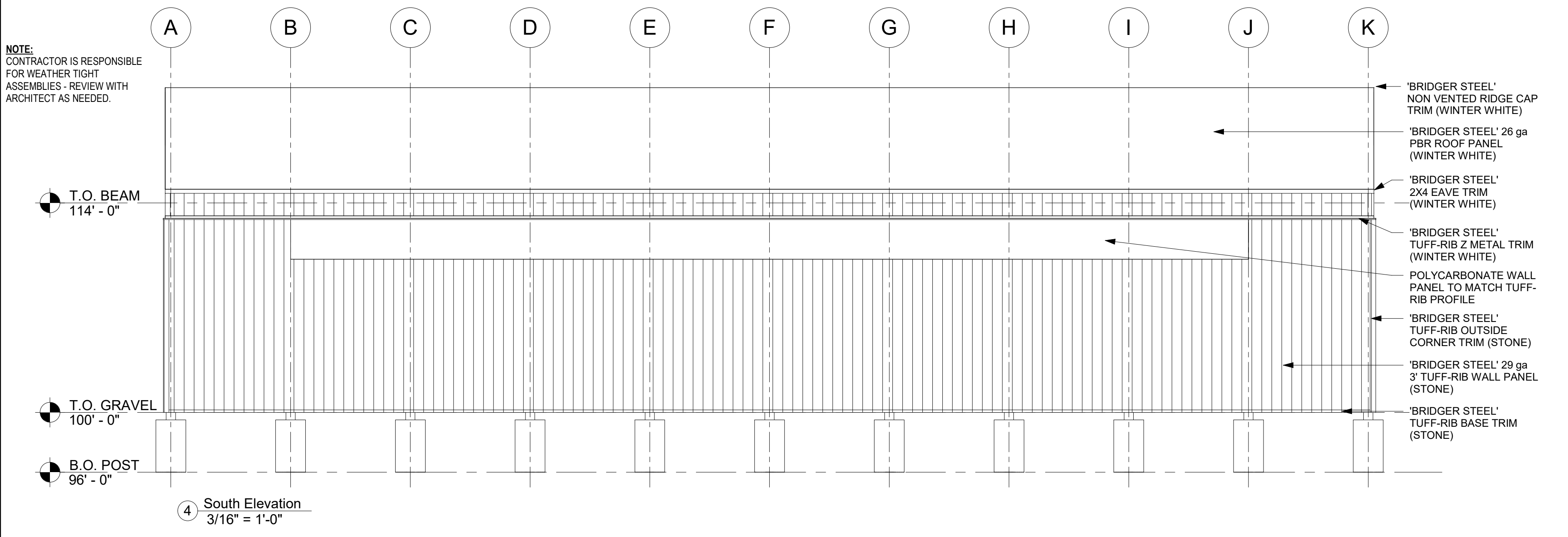
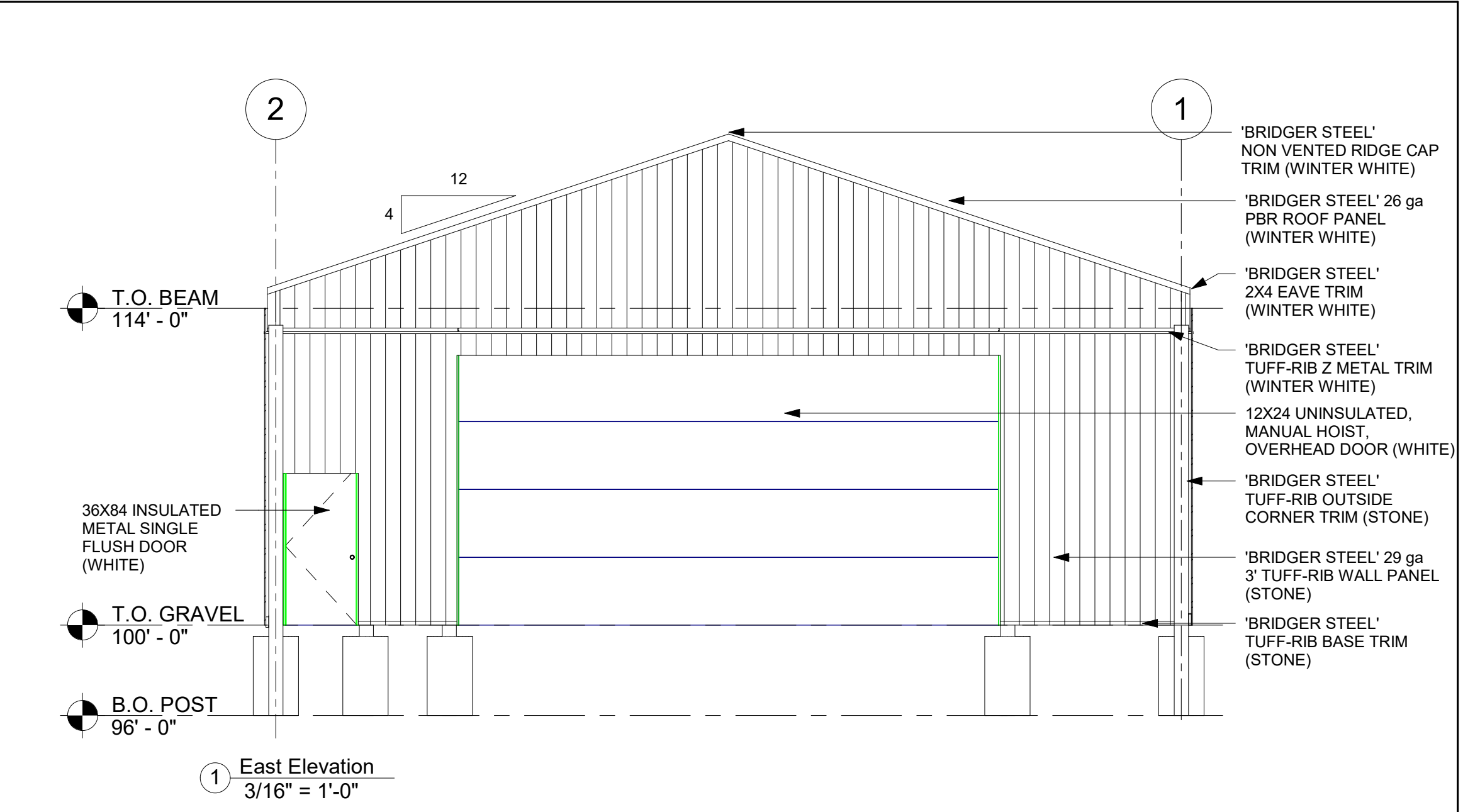
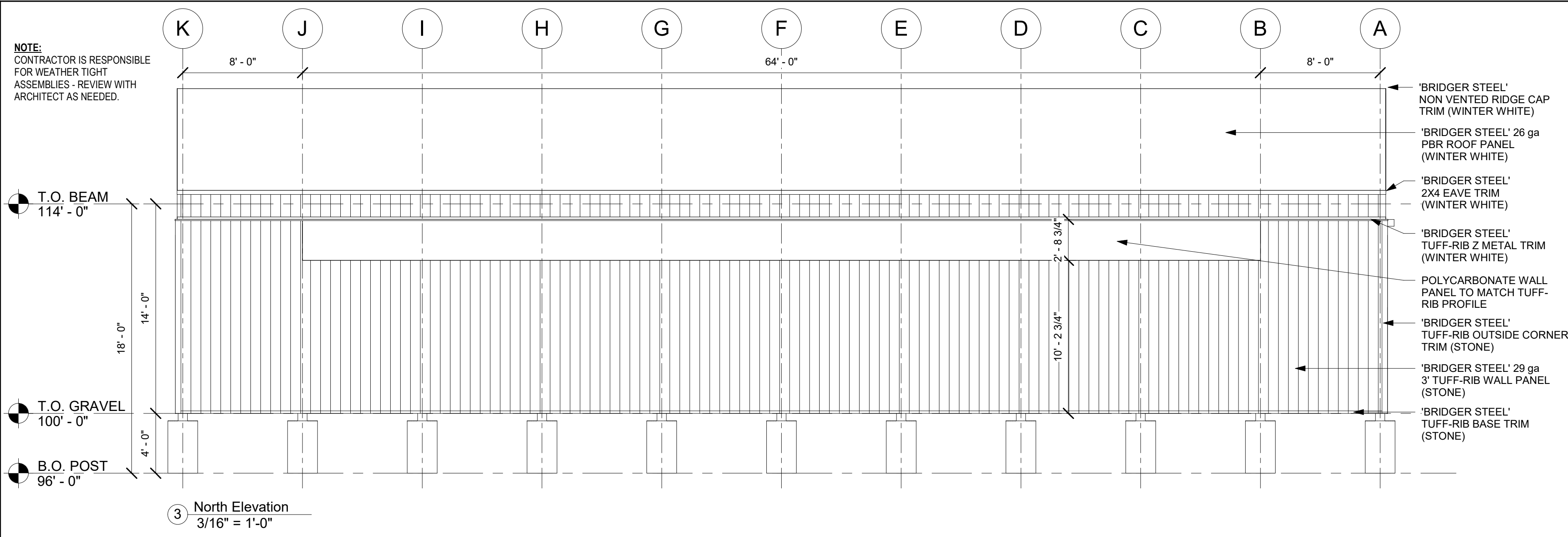


PPA#22-0039

**SHEET TITLE  
FLOOR PLAN**

**SHEET  
A101**

**DATE  
FEBRUARY 24, 2023**



DRAWN BY:	MAS	
REVIEWED BY:	STH	
REV.	DESCRIPTION	DATE



PPA#22-0039

SHEET TITLE  
ELEVATIONS/  
SECTIONS  
SHEET  
**A201**

DATE  
FEBRUARY 24, 2023

STRUCTURAL GENERAL NOTES

STRUCTURAL GENERAL NOTES ARE INTENDED TO SUPPLANT PROJECT SPECIFICATIONS.

A. GOVERNING CODES

- 1. INTERNATIONAL BUILDING CODE (IBC), 2021 EDITION
2. AMERICAN CONCRETE INSTITUTE (ACI), 318-19
3. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), 15TH EDITION.
4. NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS), 2018 EDITION.
5. AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC), 6TH EDITION.
6. NATIONAL FRAME BUILDING ASSOCIATION BLDG. DES. MANUAL, 2ND EDITION.

B. DESIGN LOADS AND CRITERIA

- 1. DEAD LOAD CRITERIA: FLOOR NA PSF, ROOF 10 PSF
2. LIVE LOAD CRITERIA: FLOOR NA PSF, ROOF 20 PSF
3. SNOW LOAD CRITERIA: Pg = 30 PSF, Pf = 40 PSF, Ce = 1.0, I = 0.8, Ct = 1.0
4. WIND CRITERIA: 3 SEC GUST WIND SPEED = 100 MPH, BUILDING CATEGORY: ENCLOSED, RISK CATEGORY I/EXPOSURE C, INTERNAL PRESSURE COEFFICIENT: 0.18 +/- 33 PSF MINIMUM FOR EXTERNAL WALL COMPONENTS & CLADDING (BASED ON 100 S.F.)
5. SEISMIC CRITERIA: SITE CLASS D, SDS = 0.593 / SD1 = 0.325, I = 1.00 / RISK CATEGORY I, R = 1.5, DESIGN CATEGORY D, LATERAL FORCE RESISTING SYSTEM: CANTILEVERED TIMBER COLUMN
6. FOOTING BEARING PRESSURE: 2500 PSF ON APPROVED SUBGRADE, SEE D.1
7. SOIL FRICTION COEFFICIENT: 0.50
8. LATERAL SOIL PRESSURE: 35 PCF ACTIVE EQUIVALENT FLUID PRESSURE, 60 PCF AT-REST EQUIVALENT FLUID PRESSURE, 400 PCF PASSIVE EQUIVALENT FLUID PRESSURE
9. FROST DEPTH: 48 INCHES

C. CONCRETE

- 1. PERFORM CONCRETE WORK IN ACCORDANCE WITH THE CURRENT ADDITION OF ACI-301 "STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE" UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED
2. MINIMUM REINFORCING BAR COVER: UNFORMED SURFACES EXPOSED TO EARTH: 3" FORMED SURFACES EXPOSED TO EARTH OR WEATHER: 2" FOR #6 AND LARGER, 1 1/2" FOR #3-#5, FORMED SURFACES NO EXPOSED TO EARTH OR WEATHER: 1 1/2" FOR #6 AND LARGER, 1 1/2" FOR #3-#5
3. SPLICE REINFORCING BARS BY LAPPING ACCORDING TO THE SCHEDULE ON THE DRAWINGS. PLACE MECHANICAL CONNECTORS WHERE SHOWN. SPLICE WWF SHEETS BY LAPPING AT LEAST ONE PANEL WIDTH (TWO LONGITUDINAL BARS IN CONTACT) OR 6 INCHES MINIMUM.
4. ADD #5x5'-0" DIAGONAL EACH FACE AT ALL OPENING CORNERS AND #5x5'-0" DIAGONAL MID-DEPTH AT ALL RE-ENTRANT SLAB CORNERS UNLESS SHOWN OTHERWISE.
5. SECURE ALL REINFORCING, INCLUDING WWF, IN POSITION WITH CHAIRS BEFORE CONCRETE PLACEMENT. CONCRETE DOBIES MAY BE USED TO POSITION SLABS ON GRADE REINFORCEMENT.
6. TIE DOWELS IN PLACE BEFORE PLACING CONCRETE. DO NOT STAB OR "WET-SET" DOWELS.
7. INSTALL AND SECURE EMBEDMENTS SUCH AS ANCHOR BOLTS AND EMBEDMENT PLATES WITHIN SPECIFIED TOLERANCES BEFORE CONCRETE PLACEMENT.
8. ROUND ISOLATION JOINTS SHOWN AT COLUMN LOCATIONS MAY BE SIMILAR SIZE DIAMOND SHAPED JOINTS AT THE CONTRACTOR'S DISCRETION.
9. WHERE TOP SURFACES OF CONCRETE SLABS ARE SHOWN TO BE RECESSED MORE THAN 1/2", THICKENED SLAB TO MAINTAIN INDICATED SLAB THICKNESS.
10. MECHANICALLY VIBRATE ALL CONCRETE PLACEMENTS EXCEPT SLABS LESS THAN 5" THICK.
11. WHERE SLAB CONTRACTION JOINTS ARE SHOWN ON THE DRAWINGS, CONSTRUCTION JOINTS MAY BE SUBSTITUTED TO ACCOMMODATE THE CONTRACTOR'S PLACEMENT STRATEGY.
12. FREE WATER ON THE SLAB SURFACE DURING FINISH OPERATIONS IS PROHIBITED. SOFT CUT CONTRACTION JOINTS AS SOON AS POSSIBLE - GENERALLY WITHIN 6 HOURS AFTER FINISHING.
13. PROTECT AND CURE ALL CONCRETE SURFACES. BEGIN CURING WALLS IMMEDIATELY AFTER STRIPPING FORMS AND FLATWORK IMMEDIATELY AFTER FINISHING.
14. CONCRETE SURFACES TO RECEIVE GROUT UNDER COLUMN BASEPLATES MUST BE PREPARED BY LIGHT BUSH HAMMERING (1/4" AMPLITUDE) THE GROUTED AREA AND PRE-SOAKING.

CONCRETE MATERIALS

- 1. CLASS A CONCRETE: PORTLAND CEMENT ASTM C150 TYPE III/FLY ASH ASTM C618, 10% - 25% BY WEIGHT WATER / CEMENT + FLY ASH = 0.45 MAXIMUM, 28 DAY fc = 2500 PSI, SLUMP: 4" - 5" MAXIMUM, AIR CONTENT 4.5% - 7.0% EXCEPT 3.0% MAX. INTERIOR SLABS 3/4" MAX. NORMAL WEIGHT AGGREGATE
2. REINFORCING BARS: ASTM A615, GRADE 60
3. DEFORMED BARS: ASTM A706, GRADE 60 (WHERE INDICATED TO BE WELDED)
4. MECHANICAL SPLICES: LENTON TAPERED, THREADED COUPLERS AS MFG BY ERICO
5. WELDED WIRE FABRIC: ASTM A185, FLAT SHEET MATERIAL
6. EXPANSION ANCHORS: HILTI KWIK BOLT 3, ICC-ES ESR-1385, CARBON STEEL w/ ZINC COATING
7. ADHESIVE ANCHORS: 'SIMPSON' SET-XP, ICC-ES ESR-2508, ANCHOR AS SPECIFIED IN DRAWINGS
8. THREADED ROD: ASTM A307 GRADE A
9. SCREW ANCHOR: SIMPSON TITEN HD, ICC-ES ESR-2713
10. ANCHOR ROD: ASTM F1554 GR 36
11. ANCHOR BOLT: ASTM F1554 GR 36

D. FOUNDATIONS

- 1. FOUNDATIONS HAVE BEEN DESIGNED BASED UPON ASSUMED VALUES, NO SOILS REPORT HAS BEEN PROVIDED.
2. PLACE FOOTINGS ON COMPACTED NATURAL GRAVELY SOILS OR ENGINEERED FILL PLACED OVER UNDISTURBED NATURAL GRAVELY SOILS. ENGINEERED FILL MATERIAL SHALL BE MINUS 3" GRANULAR, APPROVED BY THE GEOTECHNICAL ENGINEER. PLACE ENGINEERED FILL IN UNIFORM LIFTS AND COMPACT TO 98% STANDARD PROCTOR ACCORDING TO ASTM D698. PLAN LIMITS OF ENGINEERED FILL MUST EXTEND AT LEAST 2'-0" BEYOND ALL FOOTING EDGES. IF ENCOUNTERED, EXISTING FILL SHALL BE REMOVED TO AN APPROVED DEPTH AND REPLACED WITH ENGINEERED FILL AS DESCRIBED ABOVE, PLACED AND COMPACTED AS DESCRIBED ABOVE.
3. PLACE INTERIOR SLABS ON GRADE ON 4" OF MINUS 3/4" DRAINAGE COURSE, GRADED FOR COMPACTION WITH LESS THAN 12% PASSING THE #200 SIEVE. PLACE DRAINAGE COURSE OVER A VAPOR RETARDER ON NATURAL SOILS OR ENGINEERED FILL PLACED OVER UNDISTURBED NATURAL SOILS. COMPACT SOILS UNDER SLABS (ABOVE FOOTINGS) TO 95% STANDARD PROCTOR ACCORDING TO ASTM D698
4. DO NOT BACKFILL WALLS WITH UNBALANCED SOIL LEVELS UNLESS ADEQUATELY SHORED OR PERMANENT FLOOR PLATES ARE INSTALLED AND CONNECTIONS ARE COMPLETE. THIS DOES NOT INCLUDE RETAINING WALLS. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SHORING DESIGN AND INSTALLATION.
5. BACKFILL AND COMPACT BURIED WALLS OR GRADE BEAMS EVENLY ON EACH SIDE TO AVOID UNBALANCED LOADS. COMPACT LAYERS TO 95% STANDARD PROCTOR ACCORDING TO ASTM D698 EXCEPT 92% UNDER NON-PAVED AREAS.
6. ALWAYS PROVIDE POSITIVE SURFACE WATER DRAINAGE AWAY FROM THE STRUCTURE.

E. WOOD FRAMING

- 1. PREFABRICATED WOOD TRUSSES SHALL CONFORM TO THE TRUSS PLATE INSTITUTE DESIGN SPECIFICATION FOR METAL-PLATE CONNECTED WOOD TRUSSES (ANSI/TPI 1). TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT ALL SUPERIMPOSED LOADS INDICATED AND LOADS TRANSFERRED BY FRAMING MEMBERS INDICATED ON ROOF FRAMING PLAN(S) AND ANY ADDITIONAL LOADS REQUIRED. TRUSS DESIGN SHALL BE PERFORMED BY AN ENGINEER LICENSED IN THE PROJECT'S JURISDICTION. TRUSS SHOP DRAWINGS SHALL BEAR THE ENGINEER'S SIGNATURE AND SEAL.
2. ENGINEERED WOOD PRODUCTS (WOOD JOISTS & PARALLEL STRAND LUMBER) SHOWN ON THE DRAWINGS ARE THE PRODUCTS OF TRUSS JOIST AND ARE DESIGNATED BY THE MANUFACTURER'S STANDARD PRODUCT NUMBERS. THE INTENT OF THE DESIGN IS FOR THESE ITEMS TO BE ATTACHED TO EACH OTHER AND TO THE SURROUNDING STRUCTURE TO BEHAVE AS A SYSTEM. WHETHER SHOWN OR NOT, PROVIDE ACCESSORY ITEMS (BLOCKS, CLIPS, STIFFENERS, STRAPS, ETC.) DESIGNED BY THE MANUFACTURER, FOR A COMPLETE SYSTEM. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION AND USE.
3. FRAMING CONNECTORS, ANCHORS, AND HANGERS SHOWN ON THE DRAWINGS ARE PRODUCTS OF SIMPSON STRONG-TIE AND ARE DESIGNATED BY MANUFACTURER'S STANDARD PRODUCT NUMBERS. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION AND USE.
3.1. USP PRODUCTS MAY BE USED BASED ON THE REFERENCE NUMBER IDENTIFIED ON THEIR PRODUCTS. THE LOWER OF THE TWO MANUFACTURERS DESIGN LOADS WERE CONSIDERED DURING ENGINEERING DESIGN
4. ALL LAG BOLTS SHALL HAVE LEAD HOLES DRILLED THE SAME DIAMETER FOR THE SHANK AND 50% OF THE SHANK DIAMETER FOR THE THREADED PORTION. LUBRICATE THREADS BEFORE INSTALLATION.
5. PROVIDE HEADERS FOR ALL OPENINGS AS SCHEDULED. WHERE NOT INDICATED, INSTALL 2x8 WITH PLATES TOP AND BOTTOM MATCHING STUD WIDTH. INSULATE ALL BOX HEADERS.
6. DOUBLE TOP PLATES SHALL HAVE A MINIMUM LAP LENGTH OF 4 FEET FASTEN WITH 2 ROWS OF 16d NAILS @ 6" UNLESS INDICATED OTHERWISE.
7. INSTALL WOOD SHEATHING PANELS WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. STAGGER ALL END JOINTS 32" MINIMUM. FASTEN PANELS TO SUPPORTING FRAMING AND BLOCKING AS INDICATED. (SEE SHEARWALL SCHEDULE AND FRAMING PLAN(S) FOR CRITICAL NAILING.) NAIL HEADS SHALL NOT PENETRATE BEYOND A FLUSH CONDITION WITH FACE OF SHEATHING.
8. NAILING REQUIREMENTS NOT SPECIFIED ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH THE FASTENING SCHEDULE, TABLE 2304.9.1 IN THE IBC.
9. 2" MINIMUM CLEARANCE FROM FRAMING MATERIALS TO MASONRY @ ALL TRUE MASONRY FLUES.
10. FASTENERS IN PRESERVATIVE TREATED & FIRE RETARDENT-TREATED WOOD SHALL BE HOT DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL PER IBC 2304.9.5

WOOD MATERIALS

- 1. BOLTS: ASTM A307: WOOD OR WOOD TO STEEL CONNECTIONS OR ERECTION ONLY
2. ADHESIVE ANCHORS: 'SIMPSON' SET-XP, ICC-ES ESR-2508, ANCHOR AS SPECIFIED IN DRAWINGS
3. THREADED ROD: ASTM A307 GRADE A
4. TIMBER SCREW: GRK RUGGED STRUCTURAL SCREW (RSS), ICC ES ER-5883
5. LOG SCREW: OLYMPIC LOG HOG
6. LAG SCREW: ASTM A307 GRADE A OR EQUIVALENT
7. METAL FRAMING SCREW: ASTM C1513
8. GLUE LAMINATED TIMBER: ANSII/AITC A190.1, COMBINATION SYMBOL 24F-V4-DF/DF
9. MICROLAM LVL: LEVEL 1.9E MICROLAM LVL OR EQUIVALENT, ICC ES ESR-1387
10. TIMBERSTRAND LSL: LEVEL 1.55E TIMBERSTRAND LSL OR EQUIVALENT, ICC ES ESR-1387
11. TIMBERSTRAND LSL RIM: LEVEL 1.1/4" TIMBERSTRAND LSL RIM BOARD OR EQUIVALENT, ICC ES ESR-1387
12. PARALLAM PSL: LEVEL 2.0E PARALLAM PSL OR EQUIVALENT, ICC ES ESR-1387
13. DIMENSIONAL LUMBER: GRADED BY WESTERN WOOD PRODUCTS ASSOCIATION (WWPA) OR WEST COAST LUMBER INSPECTION BUREAU (WCLBI) DOUG-FIR #2 & BETTER FOR STUDS, PLATES, & BLOCKING, UNLESS NOTED OTHERWISE. AMERICAN PLYWOOD ASSOCIATION (APA) RATED SHEATHING SUITED FOR SPAN & USE. GRADED BY WESTERN WOOD PRODUCTS ASSOCIATION (WWPA) OR WEST COAST LUMBER INSPECTION BUREAU (WCLBI). DOUG-FIR # 2 UNLESS NOTED OTHERWISE. LOG WALL STACKS - DOUGLAS FIR - LARCH TPI WALL LOG 40 BEAMS AND COLUMNS - DOUGLAS FIR - LARCH TPI SELECT (WALL LOG 61)

SHEATHING: (AT HORIZONTAL DIAPHRAGM) LAY PLYWOOD PANELS WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. STAGGER ALL END JOINTS AND PLACE AS INDICATED IN "CASE 1" OF IBC TABLE 2306.3.1

Table with 3 columns: LOCATION, MATERIAL, NAILING. Row 1: ROOF, 1/2" 5-PLY PLYWOOD OR OSB 32/16 MIN. SPAN RATING UN-BLOCKED AT PANEL JOINTS, 8d AT 6" O.C. AT PANEL EDGES, 8d AT 12" O.C. AT INTERMEDIATE SUPPORTS

\*\*SEE SHEARWALL SCHEDULE AND FRAMING PLANS FOR SPECIFIC NAILING, SHEATHING AND FRAMING REQUIREMENTS AT VERTICAL WALLS.

\*\* SEE SHEARWALL GENERAL NOTES

F. MISCELLANEOUS

- 1. COORDINATE OPENINGS AND EMBEDDED ITEMS IN CONCRETE WORK WITH ALL TRADES.
2. NOTIFY ENGINEER OF ANY DISCREPANCIES DISCOVERED WITH OTHER TRADES
3. CONSTRUCTION LOADS SHALL NO T BE GREATER THAN THE DESIGN LOADS INDICATED IN B.1 UNLESS REVIEWED AND APPROVED BY THE ENGINEER.
4. EQUIPMENT OPENINGS INDICATED ARE FOR REFERENCE ONLY. COORDINATE EXACT LOCATIONS, DIMENSIONS AND DETAILS WITH EQUIPMENT MANUFACTURER.
5. TEMPORARILY BRACE THE STRUCTURE TO RESIST ALL LOADS OR COMBINATIONS OF LOADS UNTIL ALL PERMANENT ELEMENTS ARE IN PLACE AND ALL CONNECTIONS ARE COMPLETE AS SHOWN.

G. MANUFACTURED WOOD TRUSSES

- 1. MAXIMUM TRUSS SPACING: 48" O.C.
2. TRUSS LOADING UNLESS OTHERWISE NOTED ON THESE DRAWINGS: 2.1 TOP CHORD SNOW LOAD 2.1.1 FLAT ROOF SNOW LOAD = 40 PSF 2.1.2 BALANCED SNOW LOAD = 40 PSF 2.1.3 UNBALANCED SNOW LOAD = SHALL BE APPLIED 2.2 TOP CHORD DEAD LOAD = 10 PSF 2.3 BOTTOM CHORD DEAD LOAD = 7 PSF
3. CONNECTOR PLATES SHALL BE ICBO APPROVED WITH A MINIMUM SIZE OF 3"x5". ALL CHORD MEMBERS SHALL HAVE LUMBER GRADE STAMPS; ALL WEB MEMBERS FROM THE SAME LUMBER GRADE WITH AT LEAST 50% OF THE WEB MEMBERS BEARING A GRADE STAMP
4. TRUSS DESIGN, ERECTION PLANS, AND SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
5. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR APPROVAL. CONTRACTOR SHALL ALLOW A MINIMUM OF TWO WEEKS FOR REVIEW OF SHOP DRAWINGS. SHOP DRAWINGS SHALL INCLUDE, FOR EACH TYPE OF TRUSS, DIMENSIONS AND CONFIGURATIONS, NOMINAL LUMBER SIZE AND GRADE, SPECIFICATIONS FOR CONNECTOR PLATES USED, SIZE AND LOCATION OF EACH CONNECTOR AT EACH JOINT AND AMOUNT OF CAMBER IF REQUIRED. DESIGN CALCULATIONS, SHOP DRAWINGS AND ERECTION PLANS SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION.
6. ALL NON-BEARING WALLS BELOW PREFABRICATED TRUSSES SHALL BE SLIP CONNECTED TO ALLOW FOR POTENTIAL TRUSS DEFLECTION AND UP LIFT.
7. GENERAL CONTRACTOR SHALL BE AWARE THAT THE TRUSS MANUFACTURER MAY REQUIRE TRUSS ERECTION, WEB AND LATERAL BRACING MEMBERS INDEPENDENT OF THESE DRAWINGS. CONTRACTOR SHALL SUPPLY AND INSTALL BRACING AS SPECIFIED UNLESS OTHERWISE AGREED TO BE SUPPLIED BY THE TRUSS MFG.
8. HANDLING, INSTALLATION AND BRACING OF ALL TRUSSED SHALL FOLLOW TPI PUBLICATION HB-91. TRUSS MANUFACTURER SHALL FULLY COORDINATE TRUSS BRACING REQUIREMENTS WITH THE CONTRACTOR PRIOR TO INSTALLATION.
9. TRUSS MANUFACTURER RESPONSIBLE FOR BLOCKING @ MANUFACTURED WOOD TRUSS BEARING.

H. SHOP DRAWINGS AND SUBMITTALS

- 1. SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL ITEMS LISTED AND ANY ADDITIONAL ITEMS REQUIRED BY THE ARCHITECTURAL SPECIFICATIONS. CONSTRUCTION DOCUMENTS PROVIDED BY THE ENGINEER OF RECORD SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS UNLESS APPROVED IN WRITING BY THE ENGINEER. ANY SHOP DRAWINGS REPRODUCED FROM THE ENGINEERING DRAWINGS WILL BE RETURNED WITHOUT REVIEW. 1.1 MANUFACTURED TRUSSES
2. THE GENERAL CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS AND PRODUCT DATA FROM CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS PRIOR TO SUBMITTAL TO THE ENGINEER OR ARCHITECT OF RECORD. ANY SHOP DRAWINGS OF PRODUCT NOT REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR WILL BE RETURNED WITHOUT REVIEW. THE CONTRACTOR SHALL CLOUD OR FLAG ALL ITEMS NOT IN ACCORDANCE WITH CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR FINAL VERIFICATION AND COORDINATION OF ALL DIMENSIONS.
3. ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM THE ORIGINAL CONTRACT DRAWINGS SHALL BE CLOUDED BY THE MANUFACTURER OR FABRICATOR. ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS WHICH ARE NOT CLOUDED OR FLAGGED BY SUBMITTING PARTIES, SHALL NOT BE CONSIDERED ALLOWED AFTER THE ENGINEER'S REVIEW, UNLESS NOTED ACCORDINGLY BY THE ENGINEER OF RECORD.
4. THE SHOP DRAWINGS DO NOT REPLACE THE ORIGINAL CONTRACT DRAWINGS. ITEMS OMITTED OR SHOWN INCORRECTLY AND WHICH ARE NOT NOTED AS ALLOWED BY THE ENGINEER OF RECORD OR ARCHITECT ARE NOT TO BE CONSIDERED CHANGES TO THE ORIGINAL CONTRACT DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE FINAL COORDINATION BETWEEN THE SHOP DRAWINGS AND CONSTRUCTION DOCUMENTS. ANY ITEMS OMITTED OR SHOWN INCORRECTLY MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ORIGINAL CONTRACT DRAWINGS UNLESS A CHANGE IS APPROVED IN WRITING BY THE ENGINEER OF RECORD.
5. ALL ENGINEERING DESIGNS AND LAYOUTS PERFORMED BY OTHERS SHALL BE SEALED BY A CIVIL OR STRUCTURAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
6. REVIEW OF SHOP DRAWINGS IS FOR CONFORMITY TO DESIGN. RESPONSIBILITY FOR COORDINATION AND COMPLETENESS SHALL REST WITH THE CONTRACTOR.
7. SHOP DRAWINGS WILL BE RETURNED FOR RESUBMITTAL IF MAJOR ERRORS ARE FOUND DURING REVIEW. ENGINEER OF RECORD IS NOT RESPONSIBLE FOR PROJECT DELAYS CAUSED BY INCORRECT OR INCOMPLETE SUBMITTALS.
8. NO MORE THAN ONE SET OF REPRODUCTION PRINTS AND ONE SET OF REPRODUCIBLES CAN BE REVIEWED FOR ANY INDIVIDUAL SUBMITTAL. ADDITIONAL COPIES CAN BE PROVIDED TO THE CONTRACTOR AT COST FOR THE REPRODUCTIONS, OR MASKS MAY BE TRANSFERRED TO ADDITIONAL SETS AT AN HOURLY RATE. FOR EACH SUBMITTAL, ONLY THE FRONT SHEET WILL BE STAMPED FOR THE OVERALL CONFORMANCE OF THE REVIEW. INDIVIDUAL SHEETS WILL HAVE APPLICABLE NOTES AND MARKS FOR INDIVIDUAL ITEMS OR REVIEW.

I. WOOD SPECIES SCHEDULE

Table with 4 columns: MEMBER, SPECIES, GRADE, GRADING AGENCY. Rows include PLATES (SPF-S, STUD, WWPA), NAILERS (SPF-S, STUD, WWPA), GIRTS (DF, #2, WWPA), TIMBER (DF, #1, WWPA), GL BEAMS (DF-DF, 24F-U4, ---)

NOTE: GRADING TO BE AS NOTED IN SCHEDULE UNLESS NOTED OTHERWISE. FOR MEMBERS NOT SHOWN IN SCHEDULE, SEE GENERAL NOTES.

Table with 5 columns: BOLT DIAMETER, HOLE SHANK DIAMETER, THREADED PORTION HOLE DIA., THROUGH BOLT. Rows include 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1"

Table with 2 columns: CONNECTION, NAILING. Rows include JOIST TO SILL OR GIRDER, TOENAIL TOP PLATE TO STUD, END NAIL; STUD TO SILL PLATE; DOUBLE STUDS, FACE NAIL; TOP PLATES, LAPS & INTERSECTIONS, FACE NAIL; CONTINUOUS HEADER, TWO PIECES; CEILING JOISTS TO PLATE, TOENAIL; RAFTER TO PLATE, TOENAIL; BUILT-UP CORNER STUDS; BUILT-UP GIRDERS & BEAMS

NOTE: SEE IBC TABLE 2304.9.1 FOR CLARIFICATION OR ITEMS NOT SPECIFICALLY CALLED OUT

Table with 5 columns: BAR #, CONCRETE (3000 PSI, 4000 PSI, 5000 PSI), MASONRY. Rows include #3, #4, #5, #6, #7, #8, #9, #10, #11



MSU-PDC MONTANA STATE UNIVERSITY BOZEMAN, MONTANA PHONE: 406.994.5413 EMAIL: PDC@MONTANA.EDU

MAES POST FARM, POLE BARN



DRAWN BY: CDMC REVIEWED BY: MRA

Table with 2 columns: REV, DESCRIPTION, DATE



PPA#22-0039

SHEET TITLE GENERAL NOTES

SHEET S001

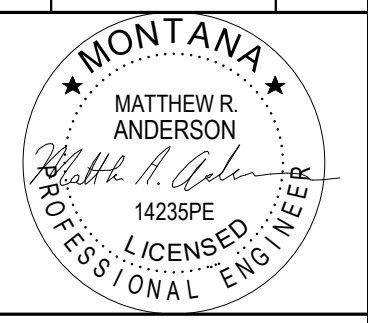
DATE February 24, 2023

**MAES POST FARM,  
POLE BARN**



DRAWN BY: CDMC  
REVIEWED BY: MRA

REV.	DESCRIPTION	DATE

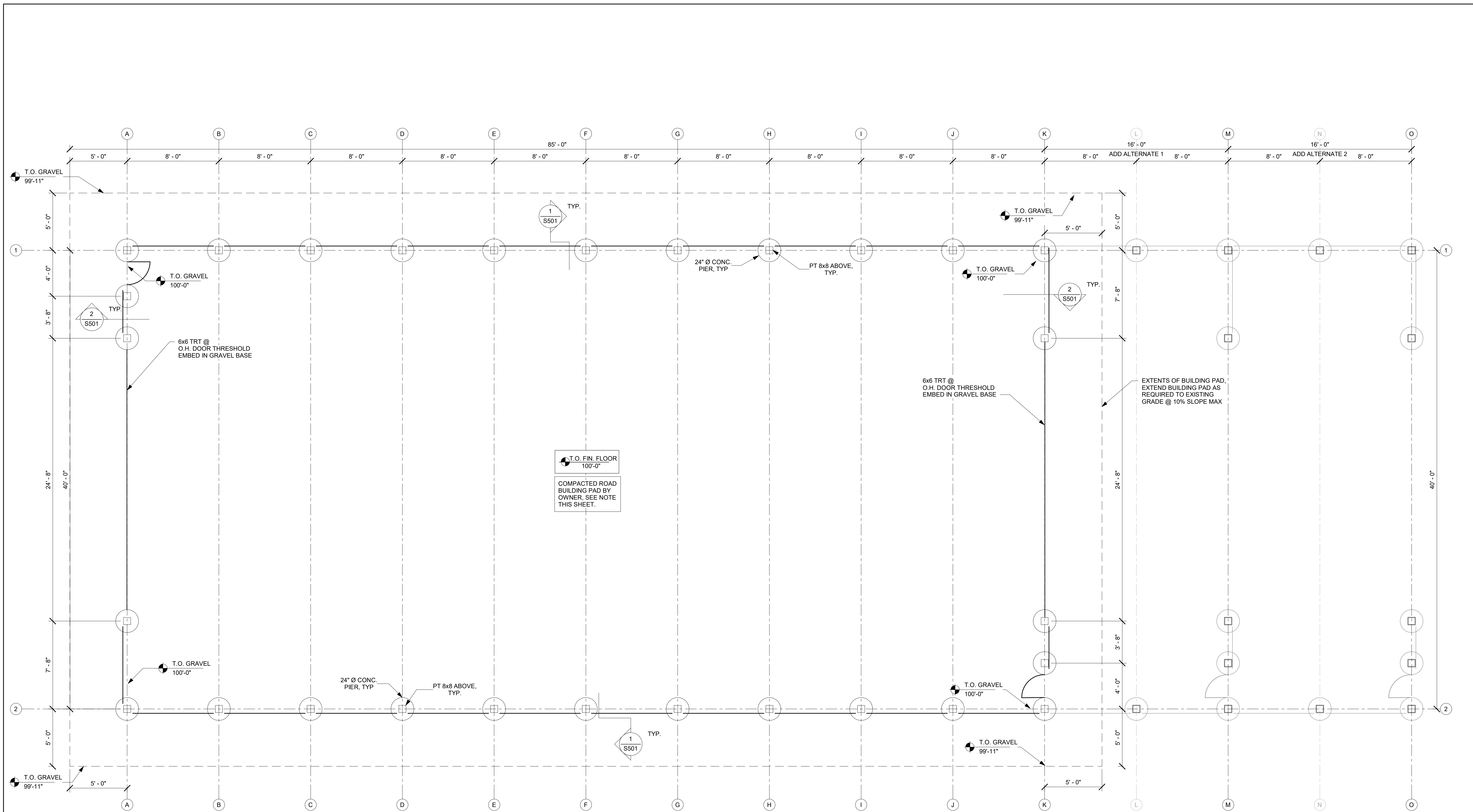


PPA#22-0039

**SHEET TITLE  
FOUNDATION  
PLAN**

**SHEET  
S101**

**DATE  
February 24, 2023**



1 FLOOR PLAN  
1/4" = 1'-0"

**PLAN NOTES:**

- SEE S001 FOR GENERAL STRUCTURAL NOTES & SCHEDULES.
- SEE S501 SHEETS FOR CONCRETE AND FRAMING DETAILS.

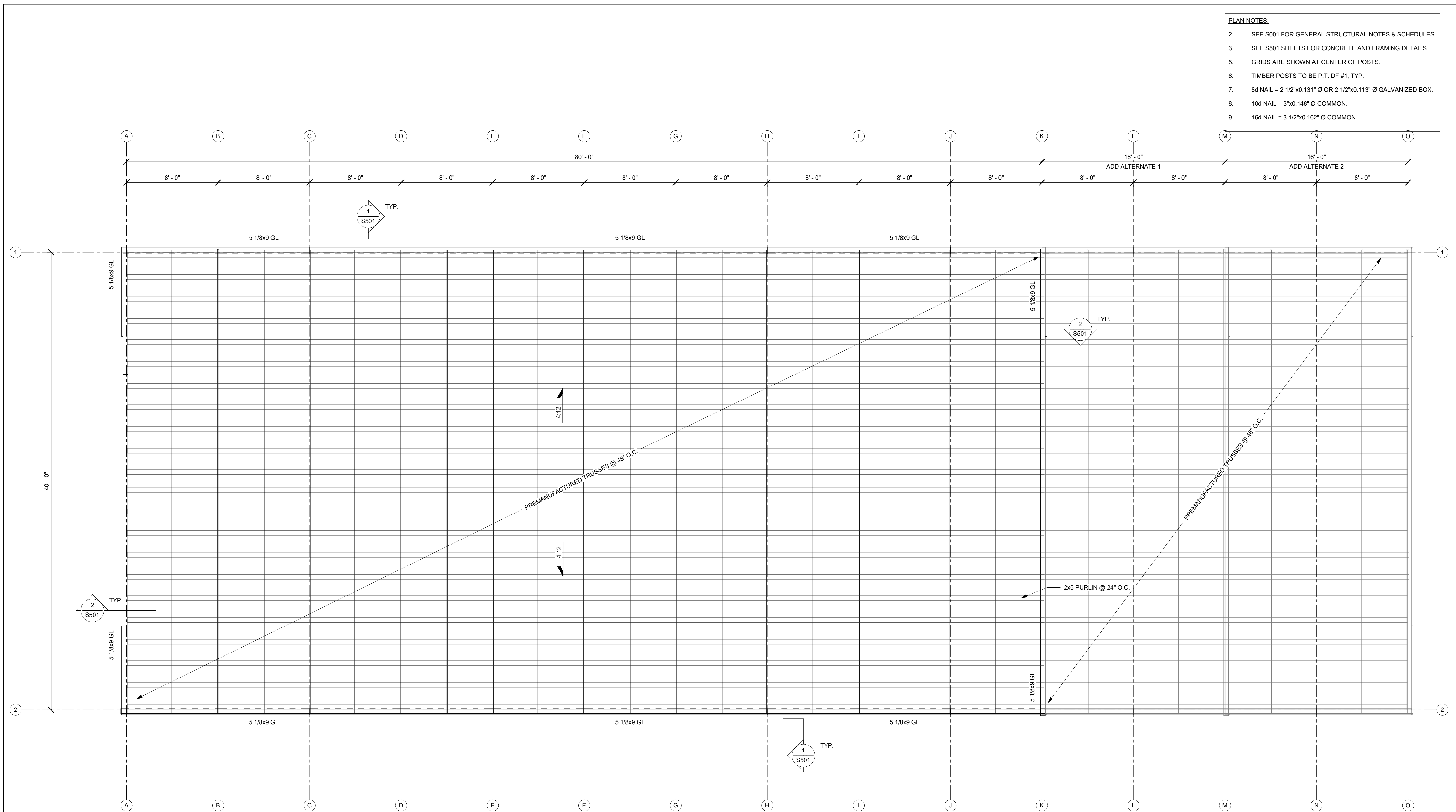
**BUILDING PAD NOTE:**

THE OWNER SHALL PERFORM THE FOLLOWING WORK PRIOR TO CONTRACTOR BEGINNING CONSTRUCTION:

- A MINIMUM OF 6" OF EXISTING TOP SOIL SHALL BE REMOVED FROM EXTENTS SHOWN ON FOUNDATION PLAN. IF ORGANIC MATERIAL FOUND BELOW 6", ADDITIONAL MATERIAL SHALL BE REMOVED UNTIL ALL ORGANIC MATERIAL HAS BEEN REMOVED.
- BUILDING PAD MATERIAL SHALL BE IMPORTED AND PLACED IN UNIFORM LIFTS NOT EXCEEDING 6". EACH LIFT SHALL BE COMPACTED TO 95% STANDARD PROCTOR ACCORDING TO ASTM D698.
- BUILDING PAD MATERIAL SHALL CONFORM TO MONTANA PUBLIC WORK STANDARD SPECIFICATION (MPWSS) SECTION 02234 MEETING GRADATION CRITERIA FOR 2" MINUS.

**MAES POST FARM,  
 POLE BARN**

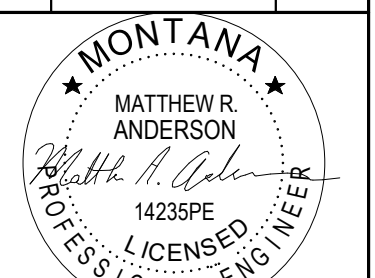
- PLAN NOTES:**
- SEE S001 FOR GENERAL STRUCTURAL NOTES & SCHEDULES.
  - SEE S501 SHEETS FOR CONCRETE AND FRAMING DETAILS.
  - GRIDS ARE SHOWN AT CENTER OF POSTS.
  - TIMBER POSTS TO BE P.T. DF #1, TYP.
  - 8d NAIL = 2 1/2"x0.131" Ø OR 2 1/2"x0.113" Ø GALVANIZED BOX.
  - 10d NAIL = 3"x0.148" Ø COMMON.
  - 16d NAIL = 3 1/2"x0.162" Ø COMMON.



**1 FRAMING PLAN**  
 1/4" = 1'-0"

**MAES POST FARM,  
 POLE BARN**

REV.	DESCRIPTION	DATE

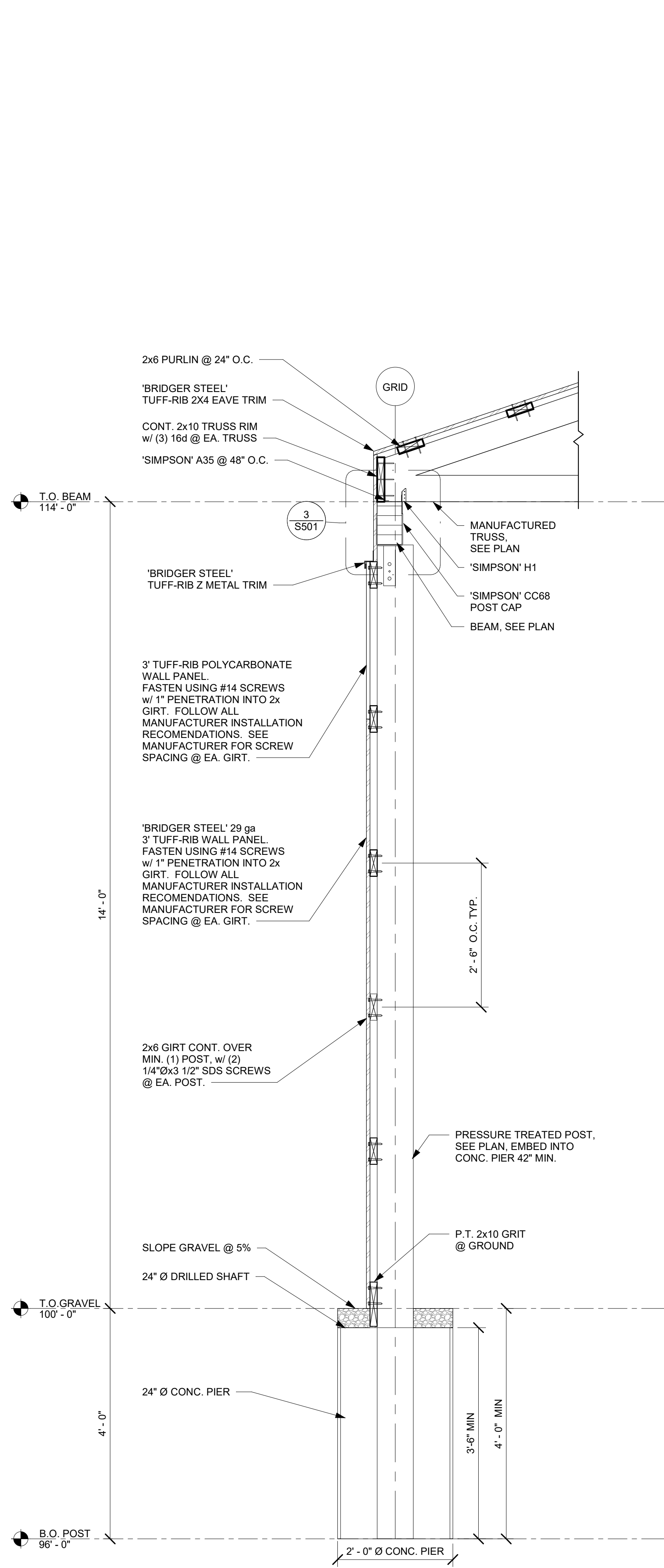


PPA#22-0039

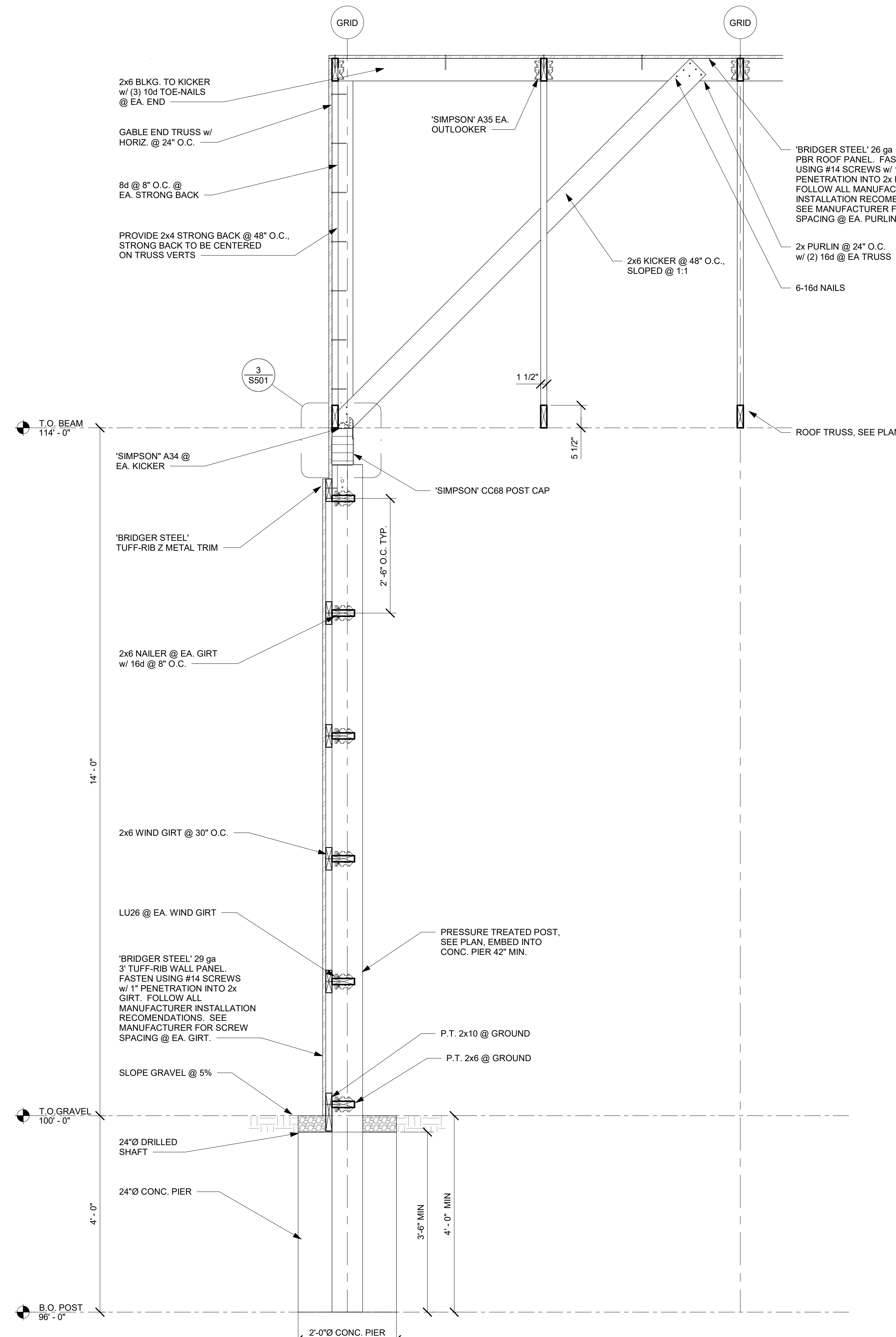
**SHEET TITLE**  
**FRAMING**  
**DETAILS**

**SHEET**  
**S501**

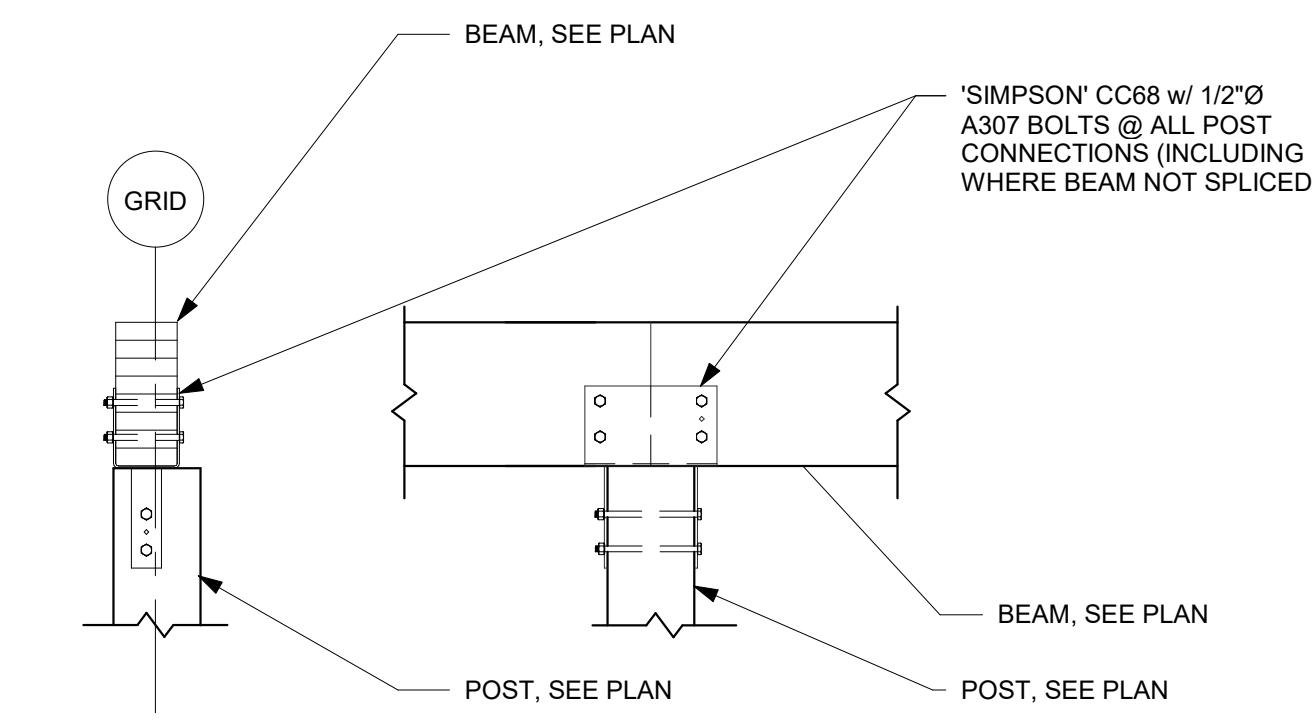
**DATE**  
 February 24, 2023



1 TYPICAL SIDE WALL SECTION  
 3/4" = 1'-0"



2 TYPICAL END WALL SECTION  
 3/4" = 1'-0"



3 BEAM TO POST DETAIL  
 3/4" = 1'-0"