

INDEX OF DRAWINGS
S0 SITE PLAN, INDEX OF DRAWINGS

- ENGINEERING DRAWINGS
DRAWINGS PREPARED BY TUFF SHED, INC.
S1 PROJECT NOTES, ELEVATIONS
S2 PLANS, SHEAR WALL SCHEDULE
S3 SECTION, DETAILS

THIS PROJECT SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES AND REGULATIONS

- CALIFORNIA BUILDING CODE, 2022 (CBC)
- CALIFORNIA RESIDENTIAL CODE, 2022 (CRC)
- CALIFORNIA PLUMBING CODE 2022 EDITION (CPC)
- CALIFORNIA ELECTRICAL CODE 2022 EDITION (CEC)
- CALIFORNIA MECHANICAL CODE 2022 EDITION (CMC)
- CALIFORNIA GREEN BUILDING CODE 2022 EDITION (GBC)
- CALIFORNIA ENERGY CODE 2022 EDITION (EC)
- CALIFORNIA HISTORICAL CODE 2022 EDITION (HC)

INCLUDING ALL AMENDMENTS AS ADOPTED BY THE GOVERNING JURISDICTION.

SCOPE OF WORK

- FOUNDATION (SEE SHEETS S2 & S3)
- DETACHED GARAGE
20'-0" x 24'-0" - 124-7/16" HIGH,
(TUFF SHED) ON A FOUNDATION.

NOTE:

PLEASE SEE ADDITIONAL SHEETS (PLANS & CALCULATIONS BY OTHERS) FOR FOUNDATION / STRUCTURAL.

WE ARE NOT APPLYING FOR AN ELECTRICAL PERMIT.

OCCUPANCY = U
CONSTRUCTION TYPE = VB

PROPERTY IS ON SEPTIC/LEACH FIELD, WELL. WATER SUPPLY ELECTRICITY IS UNDERGROUND TO HOME
NO NATURAL FEATURES ON PROPERTY
PROPERTY HAS NO PROPANE ON SITE

PROPERTY BOUNDARY DETERMINED BY MARIN COUNTY ASSESSORS PM_80585

SITE & BUILDING INFORMATION:

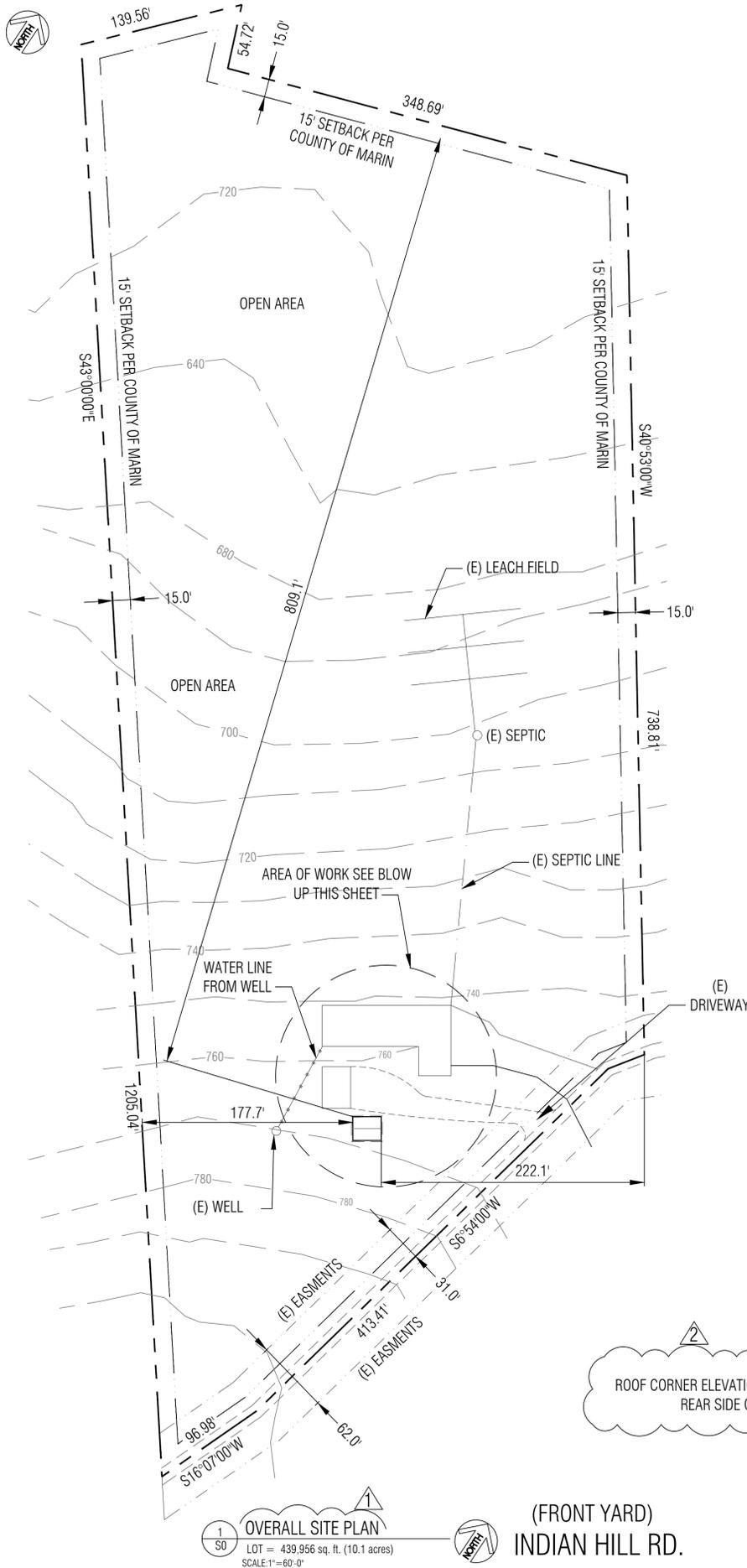
ADDRESS: 70 INDIAN HILL RD., NICASIO, CA 94946
BUILDING TYPE: VB
OCCUPANCY: R-3
ZONING: ARP-60
APN: 121-270-30
LOT SIZE: 439,956 sq. ft. (10.1 acres)
MAIN RESIDENCE BUILDING SQ. FT.: 2,903

NOTE:

- SITE PLAN IS FOR TUFF SHED PLACEMENT ONLY.
- PROPERTY WILL HAVE NO GRADING PERFORMED ON PREMISES
- PROPERTY WILL HAVE NO ADDITIONAL PARKING AREA OTHER THAN (E) DRIVEWAY

20' X 24' DETACHED GARAGE FRONT ENTRY DOOR IS FACING NORTH EAST

PREPARED BY: *DF*
DONALD FERNANDEZ / PERMIT SERVICES



1 S0 OVERALL SITE PLAN
LOT = 439,956 sq. ft. (10.1 acres)
SCALE: 1"=60'-0"

(FRONT YARD)
INDIAN HILL RD.

1 2 S0 (N) TUFF SHED
DETACHED GARAGE
480 sq. ft.

2 S0 SHED PLACEMENT PLAN
LOT = 439,956 sq. ft. (10.1 acres)
SC: 1"=30'-0"

(FRONT YARD)
INDIAN HILL RD.

1	revisions per jurisdictions comments dated 02-2024
2	revisions per jurisdictions comments dated 02-2024

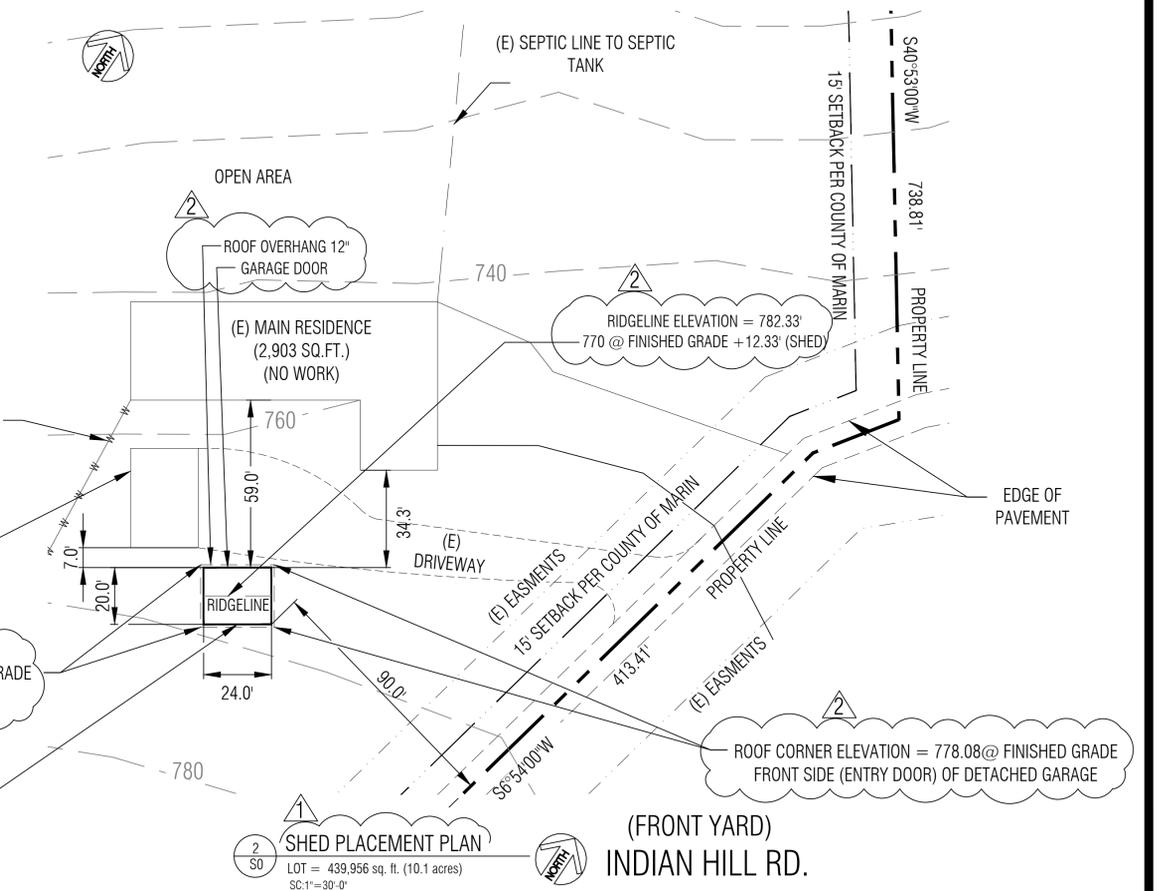
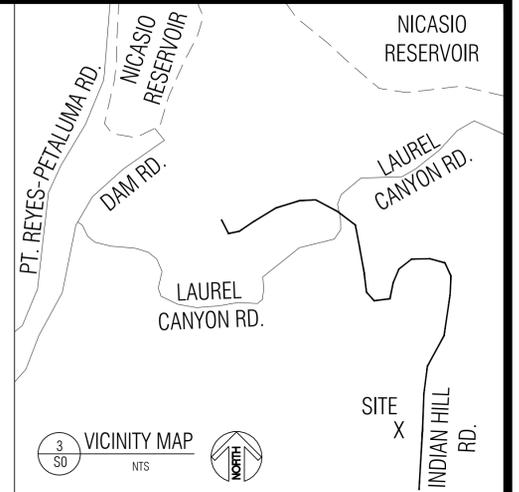
PROJECT DATA INFORMATION:

ADDRESS: 70 INDIAN HILL RD., NICASIO, CA 94946
APN: 121-270-30

Property Structures	Areas	Existing	Proposed
(E) MAIN RESIDENCE	Building Area	3,040sq. ft	(no change)
(E) MAIN RESIDENCE	Floor Area	2,903sq. ft	(no change)
(E) 24'X35' SHOP	Building Area	840sq. ft	(no change)
(E) 24'X35' SHOP	Floor Area	805sq. ft	(no change)
(N) 20' X 24' TUFF SHED	Building Area		480sq. ft
(N) 20' X 24" TUFF SHED	Floor Area		454sq. ft
TOTAL BUILDING AREA			4,360sq.ft.
TOTAL FLOOR AREA			4,162sq.ft.

LOT COVERAGE:

	Existing	Proposed
Lot Area	439,956sq. ft.	(no change)
Floor Area	3,708sq. ft	4,162sq. ft.
Building Area	3,880sq. ft.	4,360sq. ft.
% Lot Coverage		.99%



REVISIONS

No.	Description	By	Date

PREPARED BY: *DF*
DONALD FERNANDEZ / PERMIT SERVICES

CLIENT: ROLAND FELD (Owner)
70 INDIAN HILL RD., NICASIO, CA 94956
PHONE: (415) 828-7673
TUFF SHED (Contractor)
9925 REDWOOD DR., FORTY-NINE PK., CA 94928
PHONE: (707) 304-7128

SITE ADDRESS:
APN 121-270-30
70 INDIAN HILL RD.
NICASIO, CA 94946

SHEET TITLE:
Site Plan
for Tuff Shed

DATE: 12.12.23
DRAWN: DONALD FERNANDEZ
SCALE: AS NOTED
JOB#: 1996669

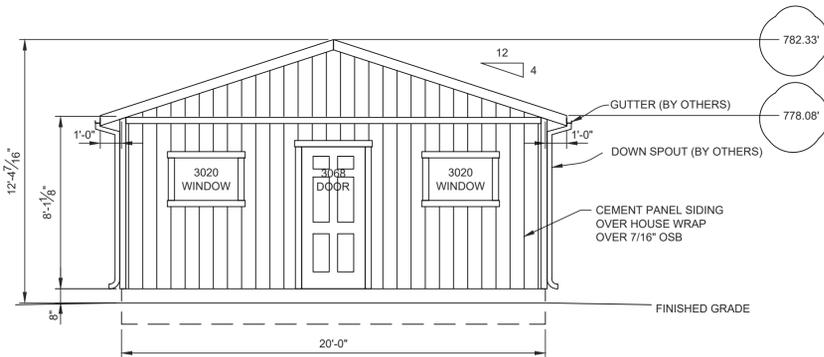
SHEET NUMBER
S0
SHEET 1 OF 1

ACCESSORY BUILDING
20' X 24' = 480 SQ FT

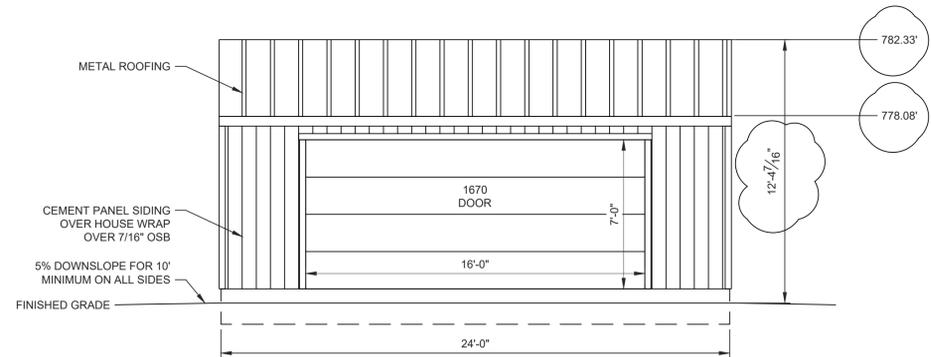
DRAWING INDEX
S1 - PROJECT NOTES, ELEVATIONS
S2 - PLANS, SHEAR WALL SCHEDULE
S3 - SECTIONS, DETAILS

PROJECT NOTES

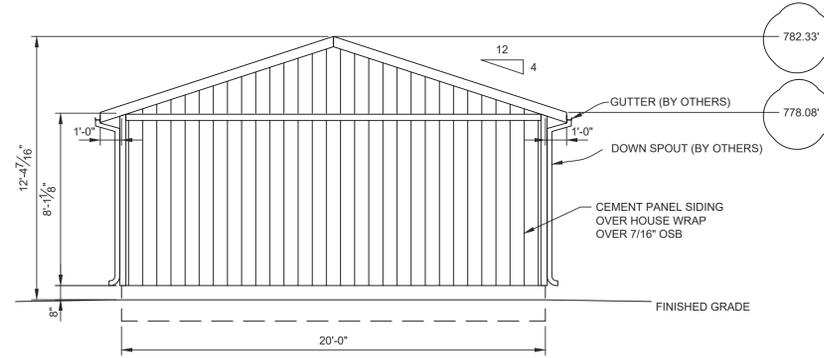
- DESIGN REQUIREMENTS
GOVERNING CODES: 2022 CALIFORNIA BUILDING CODE WITH LOCAL AMENDMENTS
OCCUPANCY GROUP: GROUP U
RISK CATEGORY: II
CONSTRUCTION TYPE: V-B
- DESIGN SCHEDULE
A. BUILDING SIZE
WIDTH: 20'-0"
LENGTH: 24'-0"
SIDE WALL HEIGHT: 8'-1 1/8"
TOTAL HEIGHT: 12'-4 3/8"
B. ROOF PITCH: 4/12
C. BUILDING LOADS
ROOF LIVE LOAD: 20 PSF
ROOF DEAD LOAD: 10 PSF
D. DESIGN WIND
BASIC WIND SPEED, V: 100 MPH
WIND EXPOSURE: C
E. SEISMIC INFORMATION
SEISMIC DESIGN CATEGORY: E
SEISMIC IMPORTANCE FACTOR, I_s: 1.00
S_s: 1.93
S_i: 0.79
SITE CLASS: D
S_{DS}: 1.54
S_{D1}: 0.90
SEISMIC FORCE-RESISTING SYSTEM: BEARING WALL
DESIGN BASE SHEAR WALL: 2,100 LBS.
C_s: 0.24
F: 6.5
ANALYSIS PROCEDURE: SIMPLIFIED DESIGN
- ROOFING SCHEDULE
A. ROOF SHEATHING SHALL BE APA RATED 7/16" THICK OSB WITH FOIL BACKING, 24/16 RATED MIN., UNBLOCKED DIAPHRAGM. STAGGER LAYOUT PER APA CONDITION 1.
B. SHEATHING NAILING SHALL BE PER NAILING SCHEDULE.
C. METAL ROOF.
D. GAF FELTBUSTER.
E. TYPE 'D' METAL DRIP EDGE FLASHING REQUIRED ALL SIDES.
F. TRUSSES SHALL BE SPACED @ 24" OC.
G. SEE SEPARATE TRUSS SHEETS FOR TRUSS FRAMING AND MATERIALS.
H. TRUSSES MUST BE BRACED ACCORDING TO THE LATEST EDITION OF THE BUILDING COMPONENT SAFETY INFORMATION "GUIDE TO GOOD PRACTICE OF METAL PLATE CONNECTED WOOD TRUSSES" (BCS1)
I. TRUSS CONNECTION PLATES 'EAGLE METAL PLATES'.
J. THE TRUSS PLATE INSTITUTE (TPI) (NER QA 430) IS THE INSPECTION AGENCY RESPONSIBLE FOR IN-PLANT INSPECTIONS.
K. TRUSS MANUFACTURER: TUFF SHED, INC.
- WOOD FRAMING
A. ALL HEADERS ARE HEM-FIR (HF) #2 (U.N.O.).
B. ALL WALL FRAMING MEMBERS SHALL BE HEM-FIR (HF) STUD GRADE OR BETTER.
C. STUDS SHALL BE SPACED @ 16" OC.
D. FASTEN EXTERIOR WALL SHEATHING TO FRAMING PER NAILING SCHEDULE.
E. PROVIDE SOLID BLOCKING AT ALL HORIZONTAL JOINTS OCCURRING IN BRACED WALL PANELS.
F. SHEAR WALL MATERIAL AND NAILING SHALL BE AS SPECIFIED IN SHEAR WALL SCHEDULE.
G. LAMINATED VENEER LUMBER (LVL) SHALL BE LVL 2.0E-2600 F_b WITH THE FOLLOWING DESIGN VALUES: F_b = 2600 PSI, F_v = 1555 PSI, F_r = 285 PSI, F_{cl} = 2510 PSI, F_{cl} = 750 PSI, E = 2.0 x 10⁶ PSI, SG = 0.50
- SOIL
A. MIN. REQUIRED SOIL TYPE SHALL BE CLAY, SANDY CLAY, SILTY CLAY, OR CLAYEY SILT (CL, ML, MH & CH). PRESCRIPTIVE ALLOWABLE SOIL BEARING PRESSURE USED IN DESIGN IS 1500 PSF AT 12" DEEP. VALUES ARE PER TABLE 1806.2.
B. ALL FOOTINGS SHALL BE FOUNDED ON UNDISTURBED NATURAL SOIL.
C. IN THE EVENT EXCAVATIONS REVEAL UNFAVORABLE CONDITIONS, THE SERVICES OF A SOILS ENGINEER MAY BE REQUIRED.
- PERMIT
A. PERMIT APPLICATIONS, WHERE NO PERMIT IS ISSUED, SHALL EXPIRE PER LIMITATIONS SET BY LOCAL CODES.
B. JOB CARD REQUIRED TO BE AVAILABLE FOR SIGNATURE AT JOB SITE
- GENERAL NOTES
A. INSTALLATION PROCEDURES SHALL CONFORM TO OSHA STANDARDS. BUILDER SHALL PROTECT ALL ADJACENT PROPERTY, STRUCTURES, TREES, UTILITIES, ETC.
B. BUILDER IS RESPONSIBLE FOR SAFETY OF BUILDING DURING CONSTRUCTION. PROVIDE ALL SHORING OR BRACING AS REQUIRED AND PER GOVERNING REGULATIONS.
C. ALL WOOD CONSTRUCTION CONNECTORS REFERENCED IN THIS DRAWING SHALL BE SIMPSON 'STRONG-TIE' OR EQUIVALENT AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
D. GREEN VINYL SINKER NAILS DO NOT MEET THE NAILING REQUIREMENTS OF COMMON NAILS.
- MATERIAL EVALUATION REPORT IDENTIFICATION:
A. TRUSS CONNECTION PLATES BY EAGLE METAL PLATES PER ICC-ES REPORT #ESR-1082
B. SMARTSIDE SIDING BY LP CORPORATION PER ICC-ES REPORT #ESR-1301.
C. HARDIE PANEL SIDING BY JAMES HARDIE BUILDING PRODUCTS PER ICC-ES REPORT #ESR-1844.
D. HARDIE PLANK LAP SIDING BY JAMES HARDIE BUILDING PRODUCTS PER ICC-ES REPORT #ESR-2290.
E. LAMINATED VENEER LUMBER (LVL) BY WEYERHAEUSER PER ICC-ES REPORT #ESR-1387.
F. ASPHALT SHINGLES BY GAF PER ICC-ES REPORT #ESR-1475.
G. FELTBUSTER ROOFING UNDERLAYMENT BY GAF PER ICC-ES REPORT #ESR-2808.
H. HDU PRE-DEFLECTED HOLD-DOWNS BY SIMPSON STRONG-TIE PER ICC-ES REPORT #ESR-2330.
I. SSTB ANCHOR BOLTS BY SIMPSON STRONG-TIE PER ICC-ES REPORT #ESR-2611.



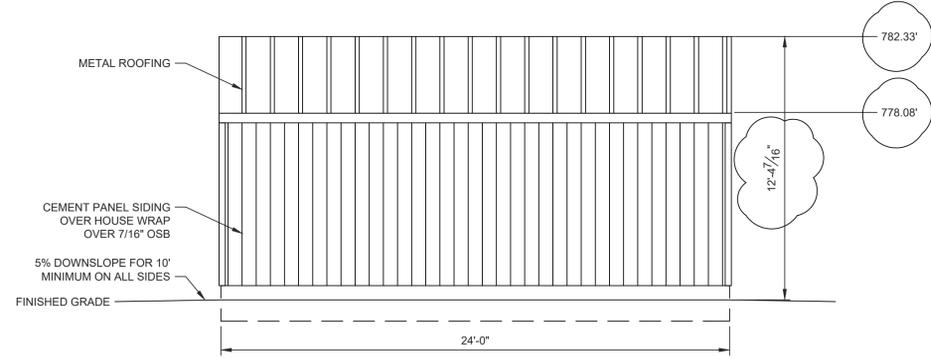
WALL A ELEVATION



WALL B ELEVATION



WALL C ELEVATION



WALL D ELEVATION

2/22/2024

TUFF SHED, INC.
ENGINEERING DEPARTMENT
TIMOTHY D. CAHALAN, P.E.
TCAHALAN@TUFFSHED.COM
1777 S. HARRISON STREET
DENVER, COLORADO 80210
(303) 753-8833 EXT. 96319

SO #: 1996669 EP #: 17849
Customer: ROLAND FELD
Description:
ACCESSORY BUILDING
20' X 24' = 480 SQ FT
Site Address:
70 INDIAN HILL RD
NICASIO, CA 94946

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TUFF SHED
Storage Buildings & Garages
TUFF SHED, INC.
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ROHNERT PARK, CA 94928
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Drawn By: PK
Date: 10/2/23
Checked By: JR
Date: 11/21/23
Revised:
Revised:

Title:
PROJECT NOTES
ELEVATIONS

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

Sheet:

S1

Sheet 1 of 3

NAILING SCHEDULE	SHEAR WALL SCHEDULE	CALC. SHEAR LOAD (lb/ft)	ALLOW. SHEAR LOAD (lb/ft)	SHEAR WALL SCHEDULE	CALC. SHEAR LOAD (lb/ft)	ALLOW. SHEAR LOAD (lb/ft)
CHORD SPLICE NAILING: (8) 16d NAILS EACH SIDE OF SPLICE. TRUSS BLOCKING: (4) 16d (TOENAIL) FRAMING NAILING: STUD TO TOP PLATE, (2) 16d END NAIL STUD TO SILL PLATE, (2) 16d END NAIL OR (4) 8d TOENAIL DOUBLE HEADER 16d @ 16" OC ALONG EACH EDGE HEADER TO KING STUD (4) 8d TOENAIL OR (4) 16d END NAIL DOUBLE TOP PLATES, 16d @ 16" FACE NAIL UNLESS SPECIFIED HEREIN, ALL NAILING SHALL BE PER 2022 CBC TABLE 2304.10.2. UPLIFT TRANSFER: PROVIDE SIMPSON H2.5A AT EACH END OF TRUSSES. PROVIDE 2X4 SOLID BLOCKING ON ALL UNSUPPORTED EDGES OF PLYWOOD ON SHEAR WALLS.	2X4 FRAMING. SHEATHE EXTERIOR WITH 7/16" OSB FOR CEMENT PANEL SIDING. 20'-0" LONG TOTAL. (2.5'+3'+3'+2.5') = 11' AND 2b _s /h=0.62 USED FOR SHEAR. NAILING: EDGE: 8d COMMON @ 4" OC FIELD: 8d COMMON @ 12" OC NO HOLD-DOWNS REQUIRED.	134	152	2X4 FRAMING. SHEATHE EXTERIOR WITH 7/16" OSB FOR CEMENT PANEL SIDING. 24'-0" LONG TOTAL. (4'+4') = 8' AND 2b _s /h=0.99 USED FOR SHEAR. NAILING: EDGE: 8d COMMON @ 4" OC FIELD: 8d COMMON @ 12" OC PROVIDE SIMPSON HDU2 HOLD-DOWNS ATTACHED TO END STUDS AND SSB16 ANCHOR BOLTS. TOENAIL BLOCKING TO TOP PLATE: (3) 8d/BLOCK	184	243
UNBLOCKED ROOF DIAPHRAGM ROOF SHEATHING NAILING: BORDER: 8d COMMON @ 6" OC EDGE: 8d COMMON @ 6" OC FIELD: 8d COMMON @ 6" OC	2X4 FRAMING. SHEATHE EXTERIOR WITH 7/16" OSB FOR CEMENT PANEL SIDING. 20'-0" LONG TOTAL. 20' USED FOR SHEAR. NAILING: EDGE: 8d COMMON @ 6" OC FIELD: 8d COMMON @ 12" OC NO HOLD-DOWNS REQUIRED.	74	167	2X4 FRAMING. SHEATHE EXTERIOR WITH 7/16" OSB FOR CEMENT PANEL SIDING. 24'-0" LONG TOTAL. 24' USED FOR SHEAR. NAILING: EDGE: 8d COMMON @ 6" OC FIELD: 8d COMMON @ 12" OC NO HOLD-DOWNS REQUIRED. TOENAIL BLOCKING TO TOP PLATE: (3) 8d/BLOCK	61	167
END WALL SHEAR TRANSFER: SHEATHING AT END WALL LAPS TOP PLATE OF WALL BELOW. PROVIDE EDGE NAILING. REFERENCE END WALL ASSEMBLY/S3 , OR BALLOON FRAME END WALLS.						

WHEN PERFORATED SHEAR WALL DESIGN IS DESIGNATED, AREAS ABOVE AND BELOW OPENINGS ARE USED IN SHEAR CALCULATIONS. REFER TO THE ANS/AWC SDPWS.

FASTENER EQUIVALENCY	
SIMPSON	USP
H2.5A	RT7A
SSTB16-SSTB36	STB16-STB36
HDU2-HDU5	PHD2A-PHD5A
HDU8	PHD8
LUS24-LUS210	JUS24-JUS210
LS30/LS50	MP3/MP5
LSTA9-LSTA24	LSTA9-LSTA24
A24	TDL5
H1	RT15
H3	RT3A
H6	LFTA6
H8	LTW12
H10	RT16A
PA51/PA68	TA51/TA71
ABA44/ABA66	PA44E/PA66E
BC4/BC6	C44/C66
A311	TDL10
HST2	KHST2
SDS1/4X3 SCREW	WS3
A34	MP34
A35	MPA1
CS18/CS22	RE200/RS300
HTT4/HTT5	HTT16/HTT22
CMSTC16	CMSTC16

TUFF SHED, INC.
ENGINEERING DEPARTMENT
2/22/2024
TIMOTHY D. CAHALAN, P.E.
TCAHALAN@TUFFSHED.COM
1777 S. HARRISON STREET
DENVER, COLORADO 80210
(303) 753-8833 EXT. 96319

SO #: 1996689 EP #: 17849
Customer: ROLAND FELD
Description:
ACCESSORY BUILDING
20' X 24' = 480 SQ FT
Site Address:
70 INDIAN HILL RD
NICASIO, CA 94946

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TUFF SHED
Storage Buildings & Garages
TUFF SHED, INC.
956 REDWOOD DRIVE, SUITE A
PHOENIX, AZ 85028
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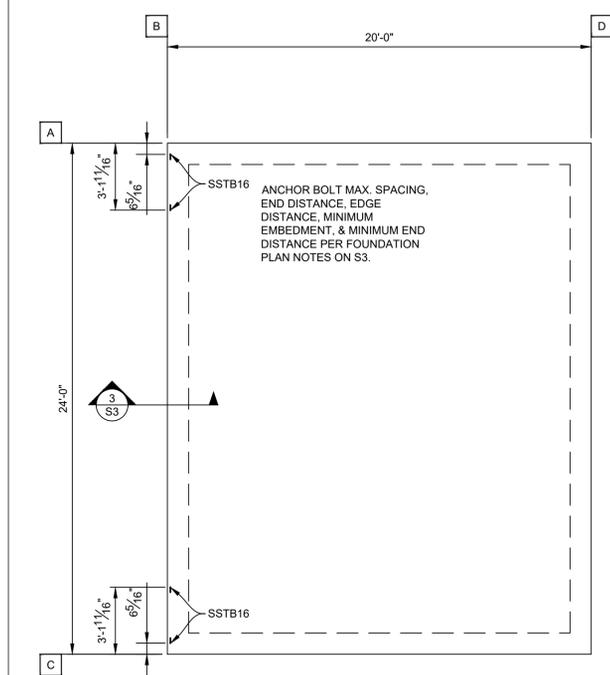
Drawn By: PK
Date: 10/2/23
Checked By: JR
Date: 11/21/23
Revised:
Revised:

Title:
PLANS
SHEAR WALL SCHED
NAILING SCHEDULE

Scale: 1/4" = 1'-0"
Sheet:

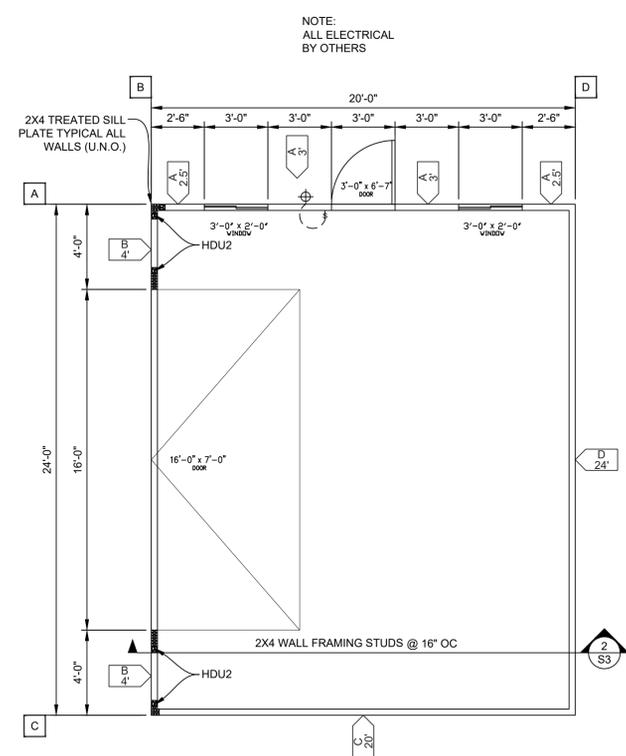
S2

Sheet 2 of 3



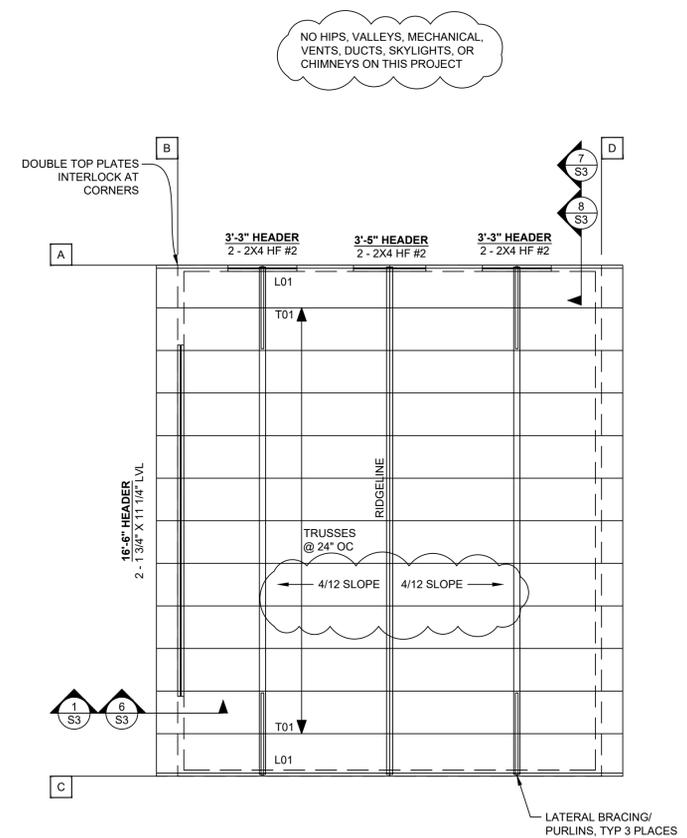
FOUNDATION PLAN

HOLD-DOWN ANCHORS SHALL BE SET AND POSITIONED IN PLACE BEFORE CALLING FOR FOUNDATION INSPECTION.

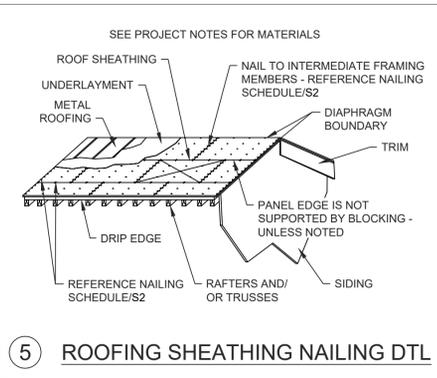


FLOOR PLAN

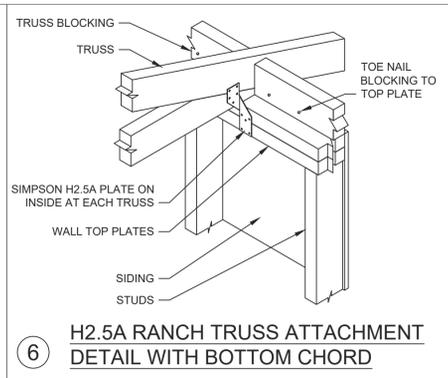
HOLD-DOWNS SHALL BE RE-TIGHTENED JUST PRIOR TO COVERING THE WALL FRAMING.



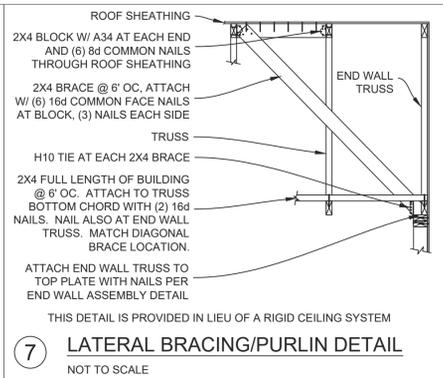
ROOF FRAMING PLAN



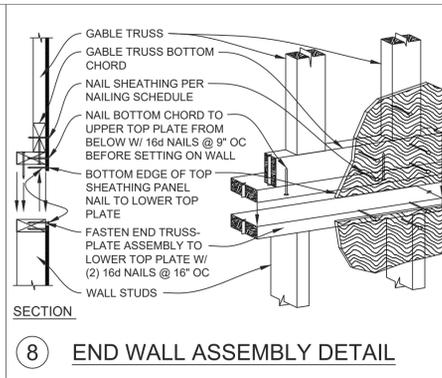
5 ROOFING SHEATHING NAILING DTL



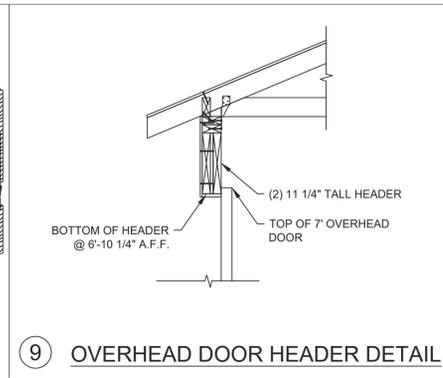
6 H2.5A RANCH TRUSS ATTACHMENT DETAIL WITH BOTTOM CHORD



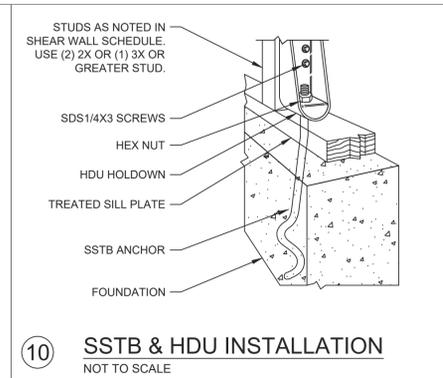
7 LATERAL BRACING/PURLIN DETAIL NOT TO SCALE



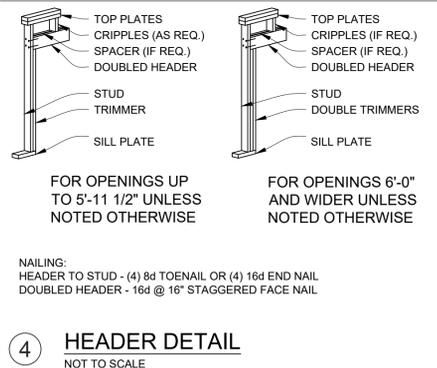
8 END WALL ASSEMBLY DETAIL



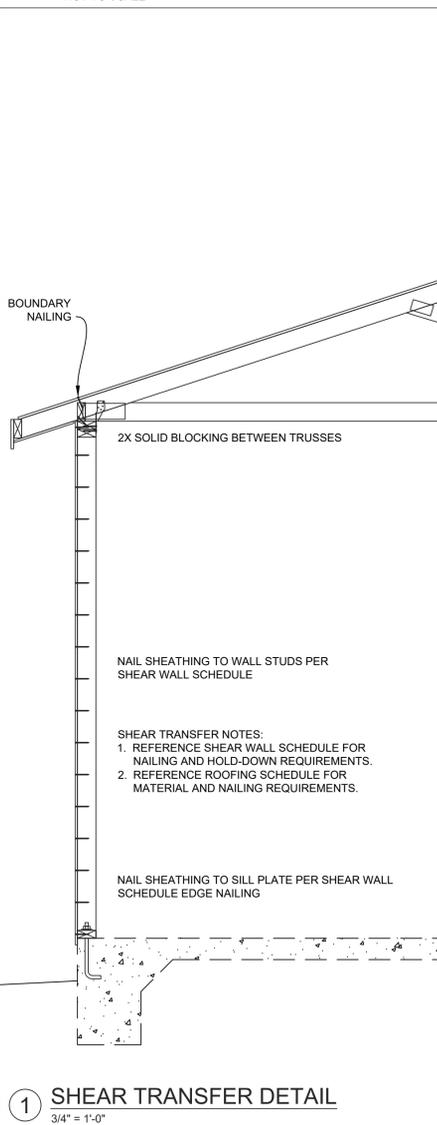
9 OVERHEAD DOOR HEADER DETAIL



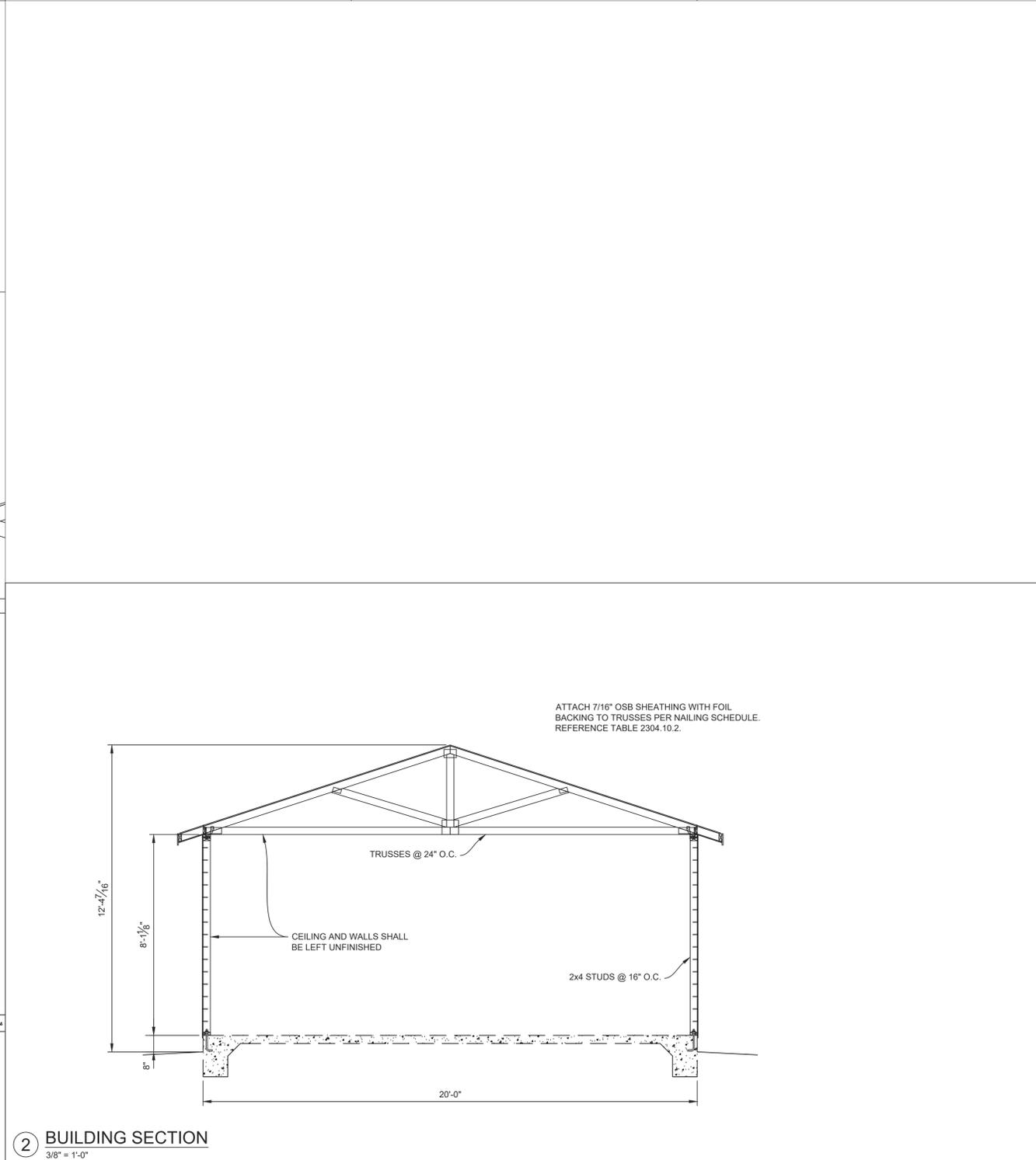
10 SSTB & HDU INSTALLATION NOT TO SCALE



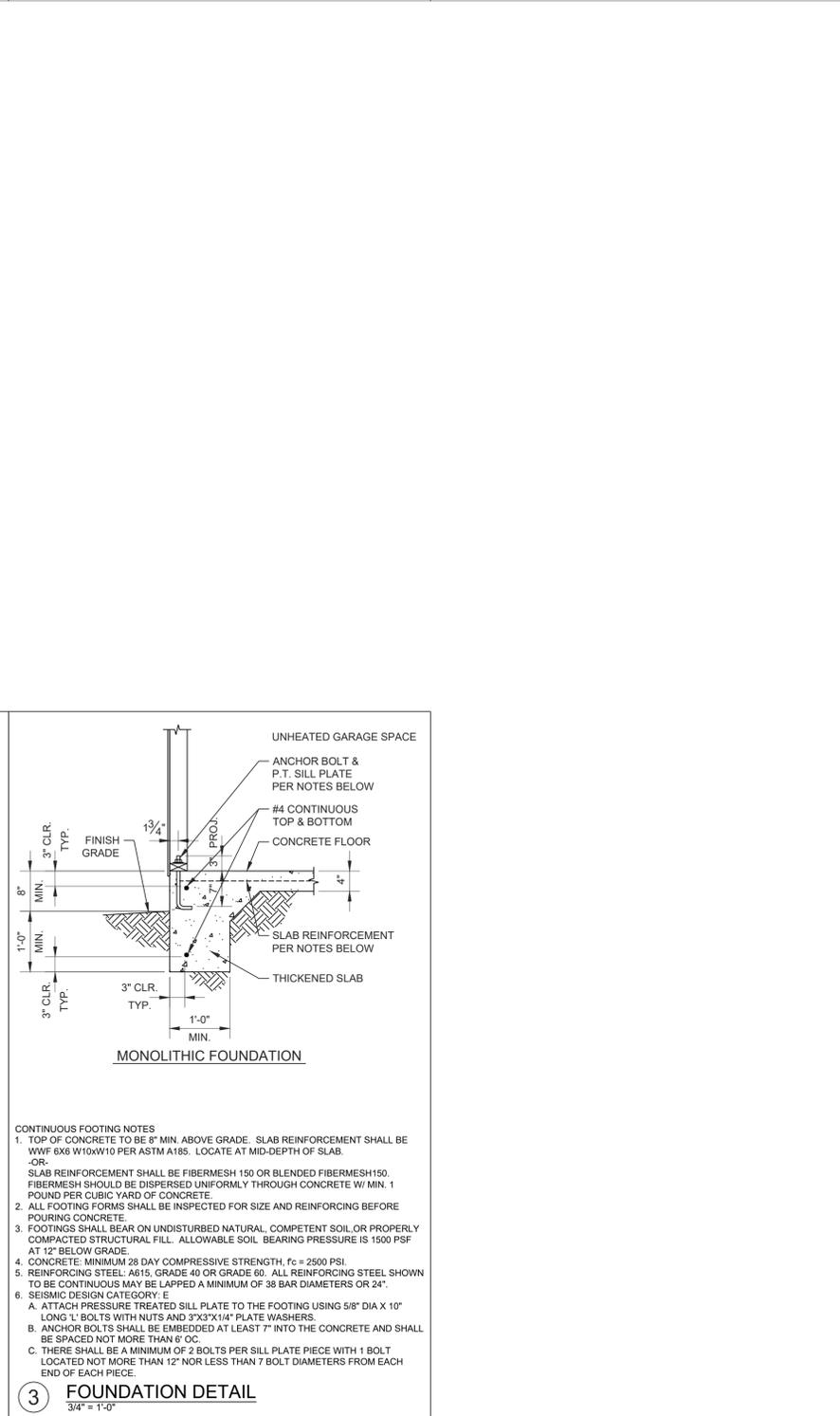
4 HEADER DETAIL NOT TO SCALE



1 SHEAR TRANSFER DETAIL 3/4" = 1'-0"



2 BUILDING SECTION 3/8" = 1'-0"



3 FOUNDATION DETAIL 3/4" = 1'-0"

2/22/2024

TUFF SHED, INC.
ENGINEERING DEPARTMENT

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(303) 753-8833 EXT. 96319

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Drawn By: PK
Date: 10/2/23
Checked By: JR
Date: 11/21/23
Revised:
Title:
SECTIONS
DETAILS
Scale: NONE
Sheet:
S3
Sheet 3 of 3