PE TEAGUE, PE, PLLC
2705 Waterloo Court, Raleigh, NC 27613
(919)247-2572, peteague50@gmail.com

July 21,2023

Mike Sayre
1623 Harrington Road, Broadway, NC 27505
Cell (910) 369-5452, msayre6@gmail.com

RE: Engineering - Plan Review and Structural Recommendations
MIKE SAYRE PLAN
Project No.:23PT-0620A

Dear Mike Sayre;

Thank you for using PE Teague. The plans named Mike Sayre, dated Preliminary 3-30-23, Final 4-17-23 and Revision 5-26-23 by Advanced House Plans and the Roof truss layouts prepared by Longleaf Truss Co. Project SAYRE ; order # P23-05036 with truss data dated Jun 15 2023 were provided by Mr Sayre. The wind speed for the plans was for 115 MPH and the North Carolina State Residential Building Code (NCSRBC) requires 130 MPR. The walls were analyzed for 130 MPH wind loading and will require the following:

Brace walls for continuously structurally sheathed conditions are adequate with the following exceptions. The front garage wall and the rear wall for the main structure as shown on sheets 2 and 3 of 8 29955. These walls require portal framing in accordance with R602 of the NCSRBC. The headers across the walls should be (2)1.75X11-7/8 LVL's running across the entire walls in accordance with R602 of the NCSRBC. The walls will be required to have a Simpson H2.5 attached to the roof trusses to the top plate for the main structure as well as the rafters (use of conventional framing for the garage - changed from the roof trusses). The porch framing on the exterior require the beams to be treated SYP (4)2X12's spanning no greater than 7ft 2in in the clear and should be posted to a treated SYP 6X6 to be attached to the beams by a Simpson EPC6Z post cap and to the concrete footing by a Simpson ABA66Z post base. The posts should run from the bottom of the beam to the footing. This may require the floor bands to be through bolted to the posts with two 5/8" diameter bolts. The porch post footings will require a 18"x18"x18" concrete for each post. The foundation walls should have 8 inch CMU foundation walls on a 10" thick by 18" wide concrete footing with two # 4 reinforcing steel bars continuously. The walls should have 5/8" diameter foundation bolts 1 ft from each corner and every 6 ft c/c with the exception of the two portal frame walls outlined previously. The exterior porch bands and floor joists appear to be adequate for treated SYP framing members as shown on the plans as shown on sheets 4 and 5 of 8 22915.

The garage roof and ceiling joists are planned on being conventionally framed by using 2x8 rafters at 16" c/c with a 2X6 collar tie every rafter at 1/3 the ridge height and a 2X10 ridge board. The ceiling joist will require an I-joist every 16" c/c. The I joist spanning 24 feet left to right (BCI 60s 2.0 or equivalent) would need to be a 11-7/8 inch deep joist for ceiling load only or a 14 inch deep joist for floor (40 PSF LL).

Sincerely,

Patrick E. Teague

Pat Teague
23PT-0615B

GENERAL NOTES

This plan was designed and drafted BY Advanced House Plans to meet average conditions and codes in the State of Nebraska at the time it was designed. Because codes and requirements can change and may vary from jurisdiction to jurisdiction, AHP cannot warrant compliance with any specific code or regulation. Consult your local building official to determine the suitability of these plans for your specific site and application. This plan can be adapted to your local building codes and requirements, however, it is the responsibility of the purchaser and/or builder of this plan to see that the structure is built in strict compliance with all governing municipal codes (city, county, state and federal). The purchaser and/or builder of this plan releases the designer from any claims or lawsuits that may arise during the construction of this structure or anytime thereafter.

* If the contractor or sub-contractor, in the course of their work finds any discrepancies between the plan and the physical conditions of the site or structure, or any errors in the plans or specifications, it shall be their responsibility to immediately inform AHP, who will promptly verify and if necessary correct the working drawings. Any work done after such discovery will be done at the contractor's expense.

* Only the purchaser of this plan has permission to build this plan. The purchaser is given permission to reproduce the drawings only as required for such construction. The purchaser also has permission to modify this plan. No permission is given to any party to claim copyright on the original or modified plan. The modified plans shall remain subject to the license and may not be sold, distributed or otherwise transferred without the express written consent of Advanced House Plans. Infringing upon Advanced House Plans' copyright through reproduction, distribution, construction or redrawing & design is punishable by law with fine up to $150,000 as defined by architectural copyright laws.

DESIGN LOADS:

* Ultimate design wind speed: 115 mph, Exposure Category: B
* Seismic Design Category A
* Floor: 40 psf. live, 15 psf. dead — Roof: 30 psf. live, 10 psf. dead — Ceiling: 10 psf. live, 5 psf. dead
* Soil bearing Capacity - 1500 psf.
* Live loads, dead loads, wind loads, snow loads, lateral loads, seismic zoning and any specialty loading conditions will need to be confirmed before construction and adjustments to plans made accordingly. See your local building officials for verification of your specific load data, zoning restrictions and site conditions.

CONCRETE AND FOUNDATIONS:
* All foundation walls and slabs on grade shall be 3000 PSI (28-day compressive strength concrete), unless noted otherwise.
* All interior slabs on grade shall bear on 4" compacted granular fill with 6 mil. polyethylene vapor barrier underneath.
* Provide proper expansion and control joints as per local requirements.
* All 36" x 36" x 18" concrete pads to have (3) #5 rods each way.
* All 48" x 48" x 24" concrete pads to have (4) #5 rods each way.
* Foundation walls are not to be backfilled until properly braced.
* Verify depth of frost footings with your local codes.
* Provide termite protection as required by HUD minimum property standards.
* Foundation bolts must be anchored to sill plate with 5/8" bolts embedded 15" in concrete walls.
* For window openings in conc. wall, provide #5 bars @4" o.c. (two total) w/2" clearance from top & sides of opg. for jamb & lintel reinforcing. Extend reinforcing a minimum of 2' past opening edges.

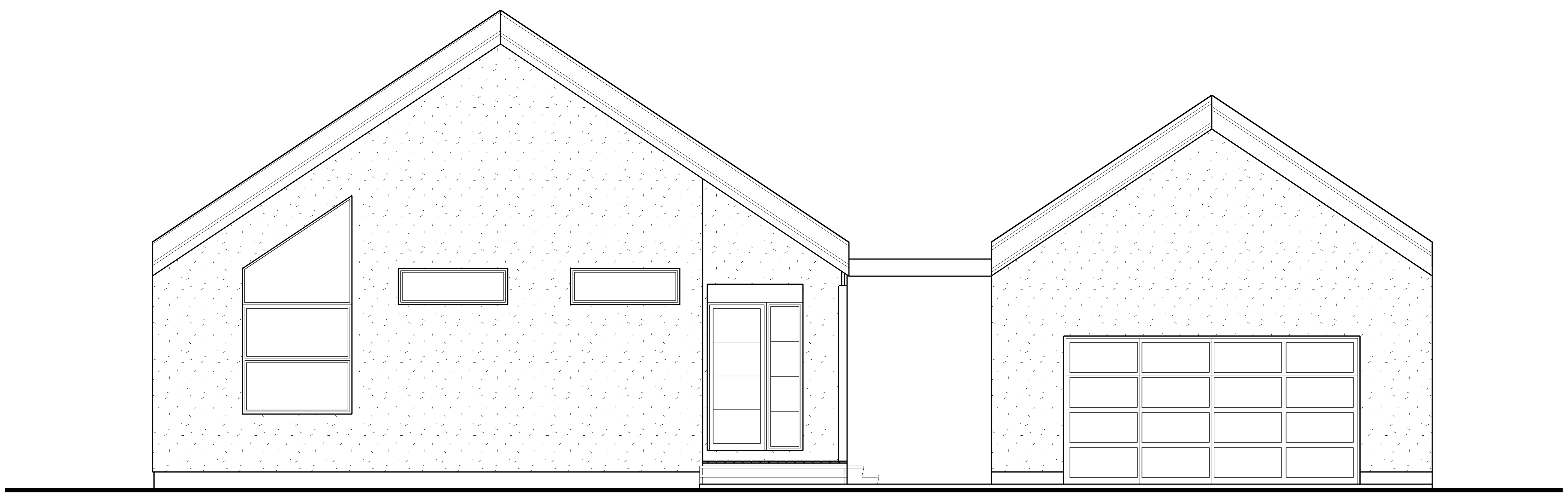
STEEL:
* All structural steel for beams and plates shall comply with ASTM specification A-36.
* All structural steel for steel columns shall comply with ASTM specification A-53 Grade B or A-501.
* All reinforcing steel for concrete shall comply with ASTM specification A-615 Grade 60.
* Provide steel shimns in all beam pockets.
* Steel columns are to be 3" I.D. (inside diameter) unless noted otherwise.

FRAMING MEMBERS:
* Unless noted otherwise, all framing lumber shall have the following characteristics:
  Fb = 1,000 psi   Fv = 75 psi   E = 1,400,000 psi
* Contractor to confirm the size, spacing and stress characteristics of all framing and structural members to meet your local code requirements.
* Wall bracing method assumed as CS-WSP. Since braced wall line spacing and braced wall panel calculations vary by location, purchaser will need to consult a local professional for specific wall bracing calculations and diagrams.
* Hole sizes and locations in GluLam or Laminated Veneered Lumber (L.V.L.) members are to be confirmed by a professional engineer.
* Any structural or framing members not indicated on the plan are to be sized by contractor.
* Double floor joists under all partition walls, unless noted otherwise.
* All subflooring is assumed to be 3/4" thick, glued & nailed.
* All exterior walls are dimensioned to outside of 1/2" sheathing
* Calculated dimensions take precedence over scaled dimensions.
* All angled walls on floor plans are at 45 degree angle, unless otherwise noted.
* Laterally unsupported walls 12'-0" high or higher shall be 2x6 and balloon framed unless noted otherwise.
* Unless noted otherwise, above all openings that are:
  (1) Load bearing and less than or equal to 3 ft. .... use 4x6.
  (2) Load bearing and more than 3 ft. ....use (2) 2x12 with 1/2" Plywood between.
  (3) Non-load bearing and less than or equal to 6 ft. .....use 4x6.
  (4) Non-load bearing and more than 6 ft. .... use (2) 2x12 with 1/2" Plywood between.
  (5) All exterior openings use (2) 2x12 with 1/2" Plywood between.
* All trusses to be engineered by truss manufacturer according to the loading indicated on this plan.
* All exterior corners shall be braced in each direction with let-in diagonal bracing or plywood.
* Place (1) row of 1" x 3" cross-bridging on all spans over 8'-0" and (2) rows of 1" x 3" cross-bridging on all spans over 16'-0".
* Collar ties are to be spaced 4'-0" o.c.
* All purlins and kickers are to be 2x6's, unless noted otherwise.
* Any hip or valley rafters over a 28'-0" span are to be Laminated Veneer Lumber (L.V.L.).

MISC. NOTES:
* Prefabricated fireplaces and flues are to be U.L. approved and installed as per manufacturer's specifications.
* All materials, supplies and equipment to be installed as per manufacturer's specifications and per local codes and requirements.
* Provide proper insulation for all plumbing.
* 1/2" water-resistant drywall around showers, tubs and whirlpools.
* 1/2" drywall on interior walls and ceilings.
* 5/8" type "X" fire code drywall on garage walls and ceilings.
* When no brand is specifiend Windows are called out by glass size only.
* In dwelling units, where the top of the sill of an operable window opening unit is located less than 24 inches above the finished floor and greater than 72 inches above the finished grade, fall protection must comply with R312.2.1
* Window opening control devices on windows serving as a required emergency escape and rescue shall comply with ASTM F2090.
* Windows, if not noted, are assumed to be casements.
* Window header heights are 6'-8" unless noted otherwise.
* Header heights are labeled to bottom of arched transoms.
* Confirm window openings for your local egress requirements and minimum light and ventilation requirements.
* Headroom at stairs shall have a minimum clearance of 6'-8" high.
* Provide proper handrails at stairs per local codes.
* The mechanical and electrical layouts are suggested only. Consult your mechanical and electrical contractors for exact specifications, locations and sizes.
* Jog flue to rear of ridge as necessary.
* Provide proper wiring for all electrical appliances, mechanical equipment and whirlpools per manufacturer's specifications.
* Air conditioner locations may vary depending on restrictive covenants and codes.

Mike Sayre

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.
APPROVED
Limited building only review
Permit holder responsible for full compliance with the code
07/25/2023
Harnett COUNTY NORTH CAROLINA



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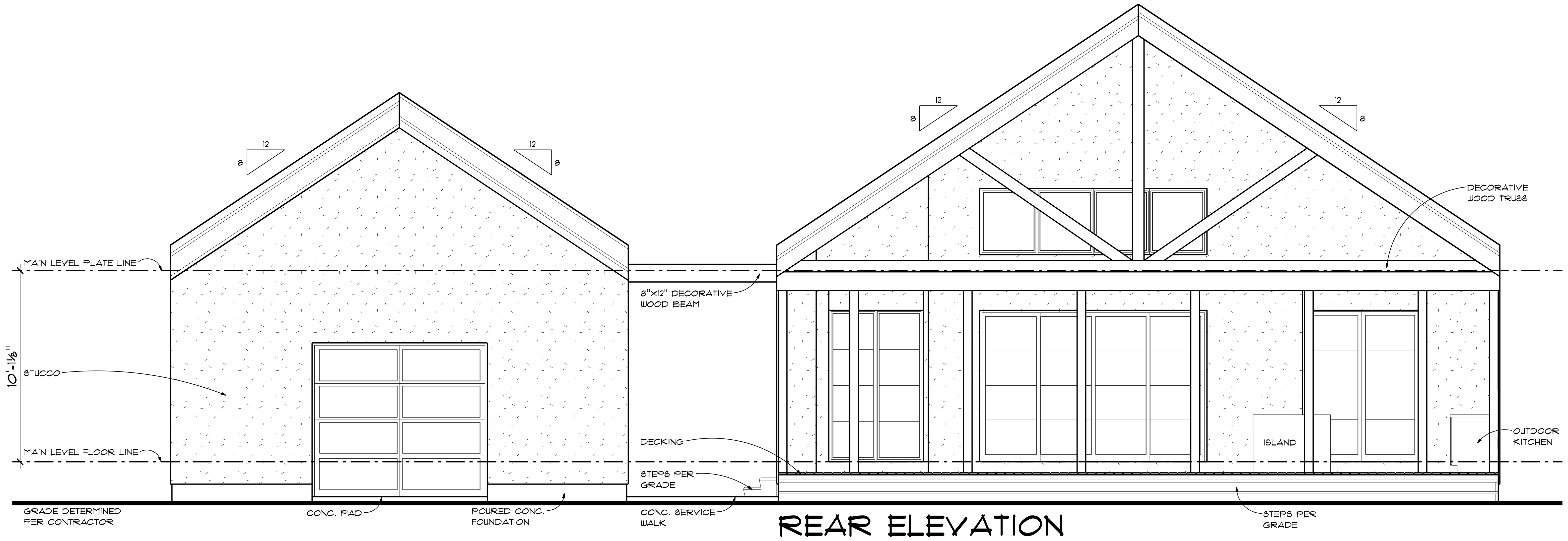
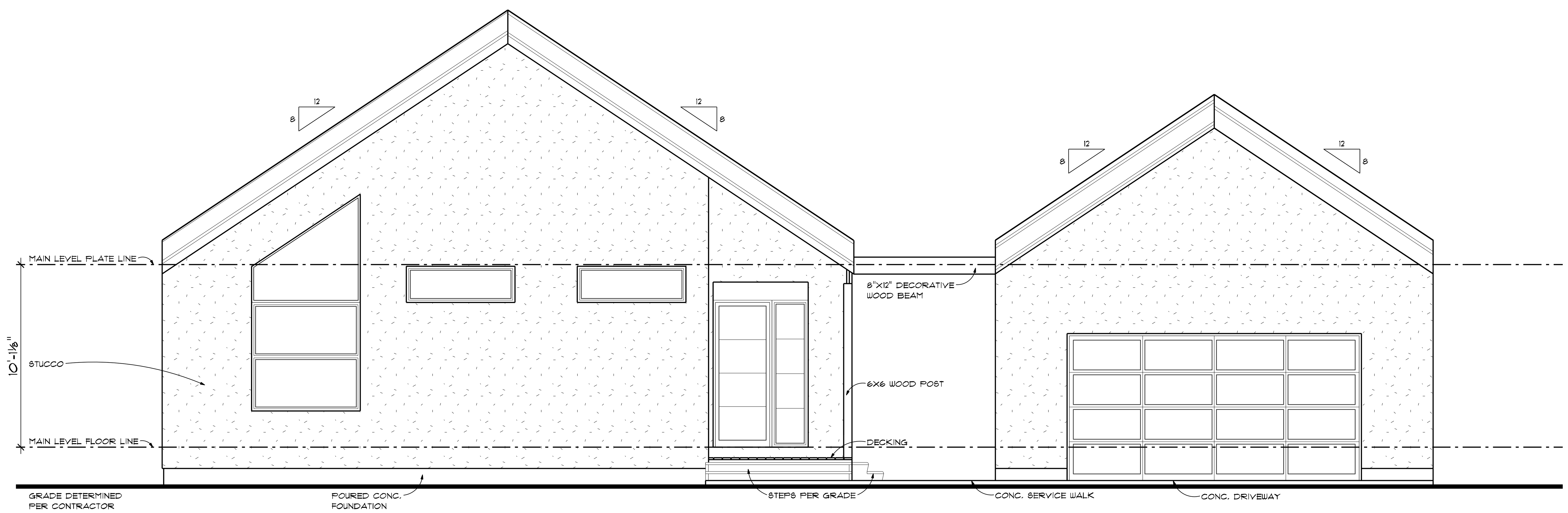
SHEET 1 OF 8



REAR ELEVATION

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



FRONT ELEVATION

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

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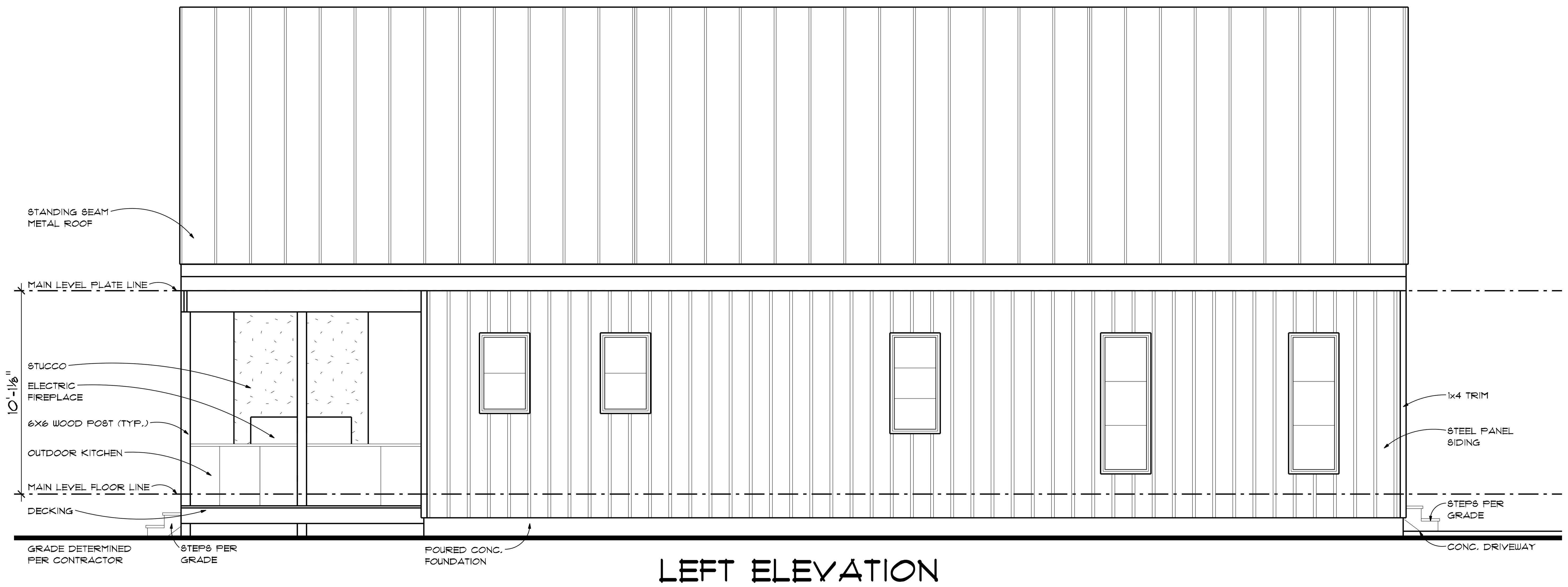
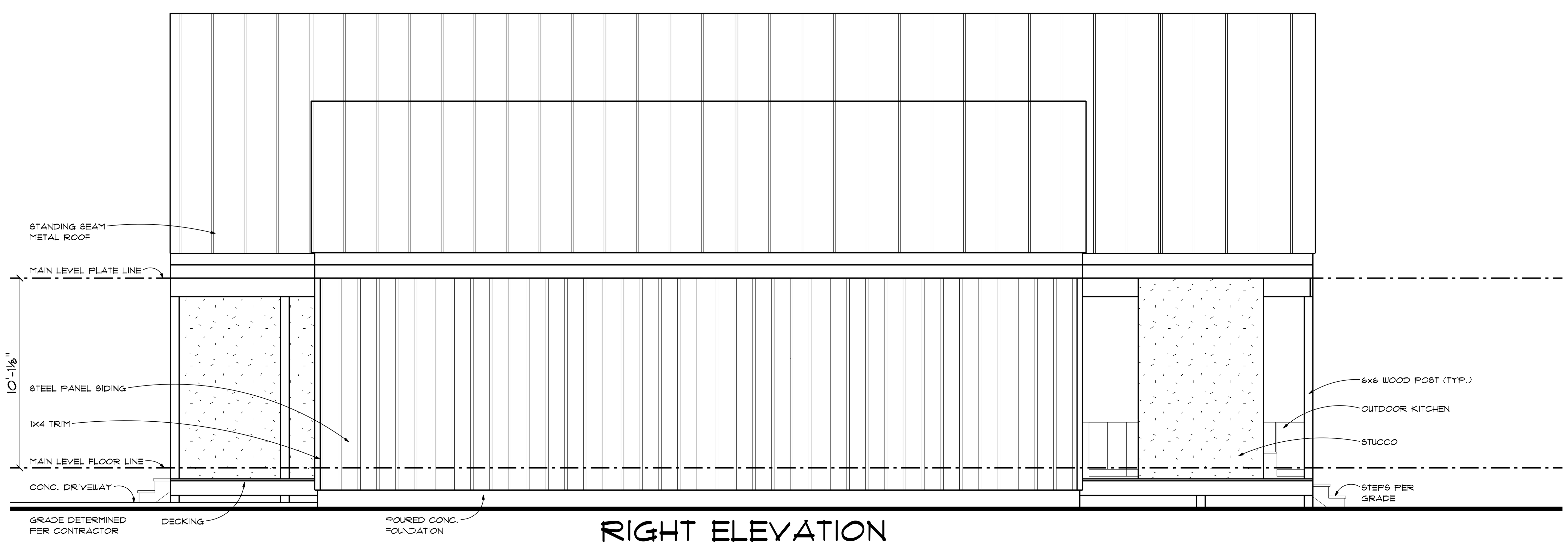
SHEET 2 OF 8

100% SCALE = 24"x36"



LEFT ELEVATION

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



RIGHT ELEVATION

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

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SHEET
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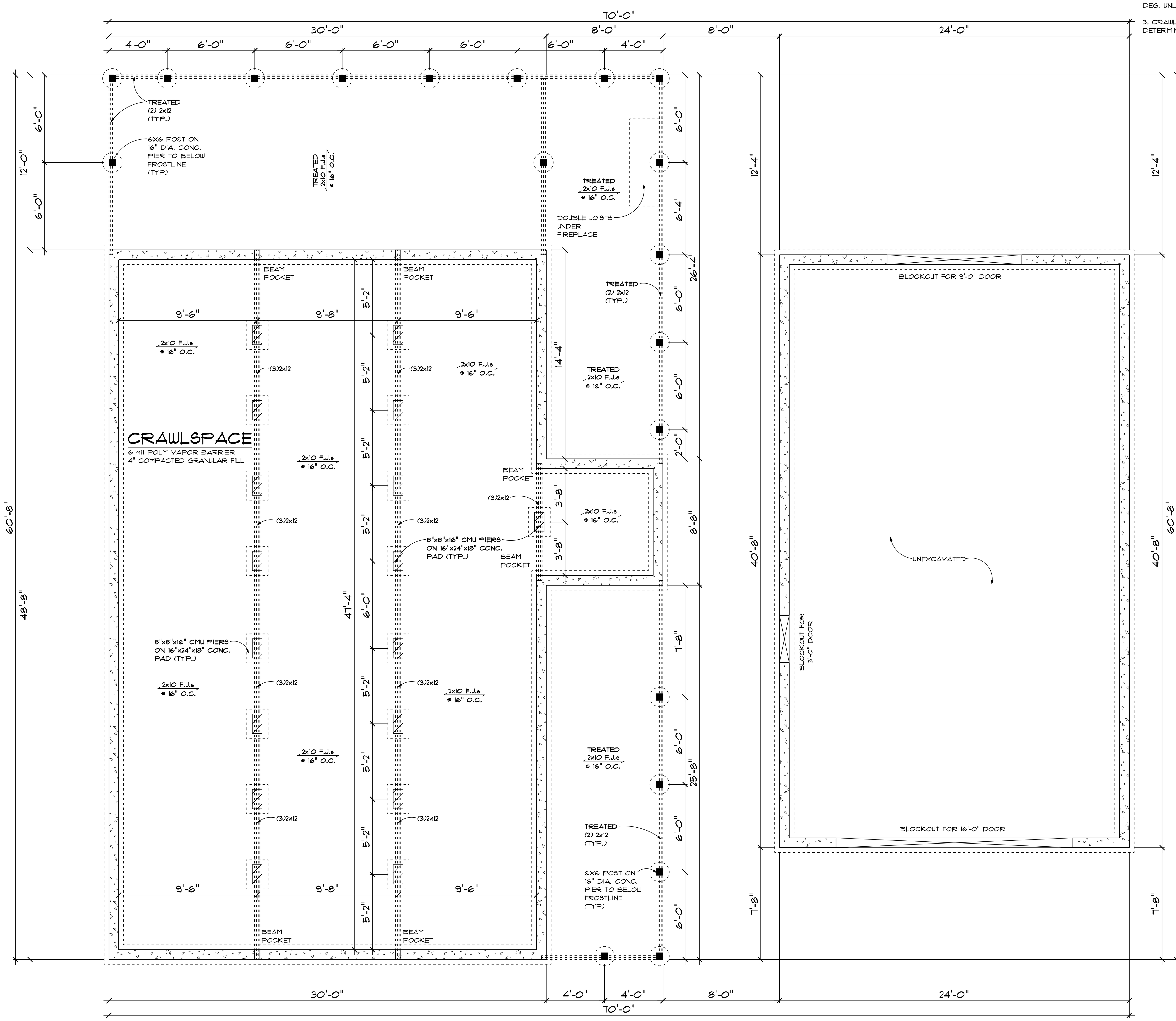
100% SCALE = 24"x36"

GENERAL NOTES:

1. FOUNDATION WALLS ARE 8" POURED CONC. FOUNDATION W/ 16"x8" CONT. CONC. FOOTING TO BELOW FROST LINE UNLESS NOTED OTHERWISE.

2. ALL ANGLED WALLS ARE @ 45 DEG. UNLESS NOTED OTHERWISE.

3. CRAWLSPACE ENTRANCE DETERMINED PER CONTRACTOR



FOUNDATION PLAN

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

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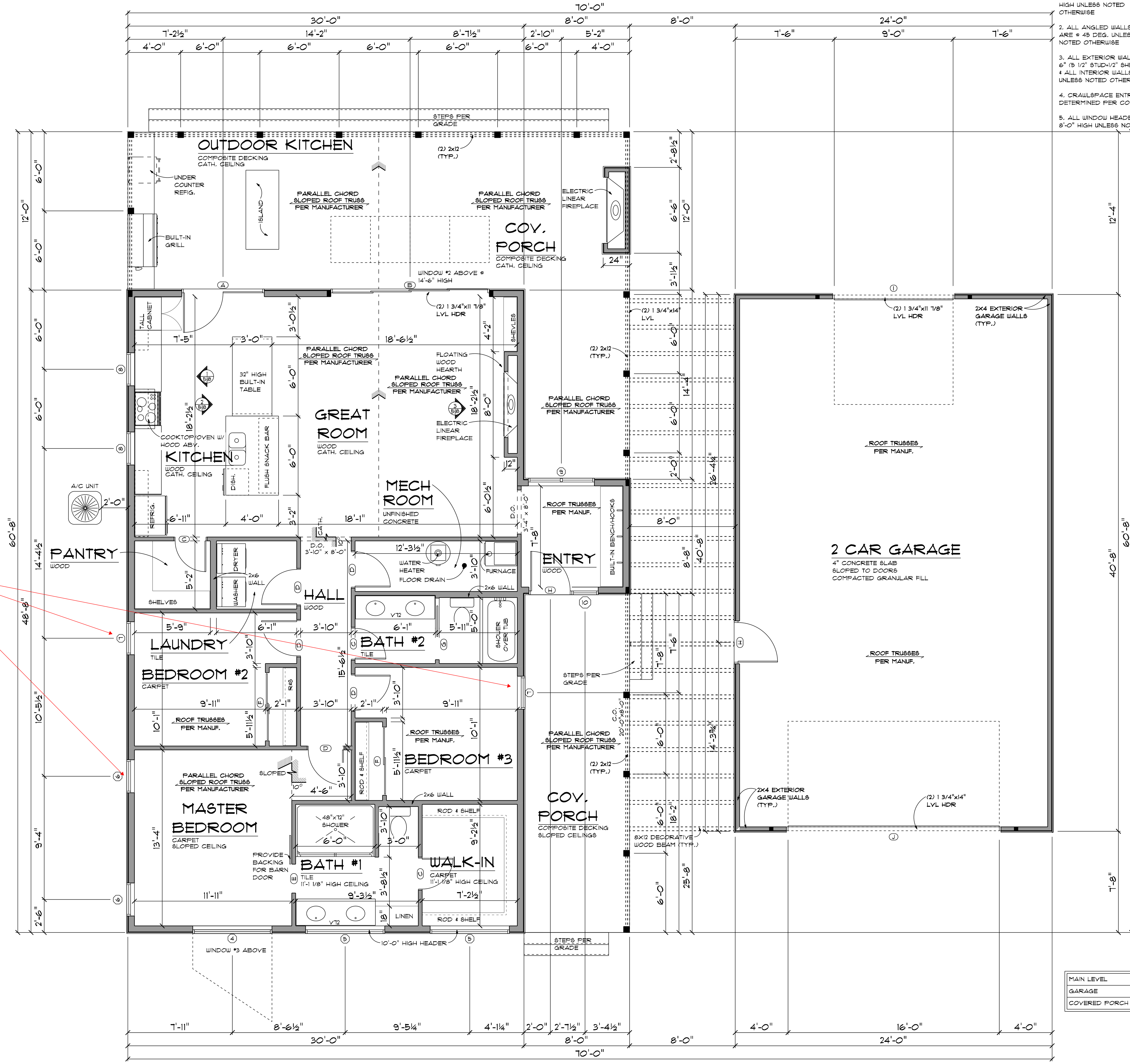
SHEET 4 OF 8

100% SCALE @ 24"x36"

OPENING SCHEDULE				
OPENING ID	TYPE	PRODUCT CODE	SIZE	COUNT
2	WINDOW	144X42 TRANSOM 4	12'-0" x 3'-6"	1
3	WINDOW	TRAPEZOID	6'-0" x 6'-0"	1
4	WINDOW	72X72 CASEMENT 2 VERT.	6'-0" x 6'-0"	1
5	WINDOW	72X24 TRANSOM 1	6'-0" x 2'-0"	2
6	WINDOW	30X84 CASEMENT 1	2'-6" x 7'-0"	2
7	WINDOW	30X60 CASEMENT 1	2'-6" x 5'-0"	2
8	WINDOW	30X48 CASEMENT 1	2'-6" x 4'-0"	2
9	WINDOW	60X96 CASEMENT 2	5'-0" x 8'-0"	1
10	WINDOW	24X96 CASEMENT 1	2'-0" x 8'-0"	1
A	DOOR	72X96 EXTERIOR GLASS 2	6'-0" x 8'-0"	1
B	SLIDING DOOR	144X96	12'-0" x 8'-0"	1
C	DOOR	28X80 1	2'-4" x 6'-8"	3
D	DOOR	32X80 1	2'-8" x 6'-8"	4
E	SLIDING BARN DOOR	32x80 BARN DOOR 1	2'-8" x 6'-8"	1
F	SLIDING DOOR	60X80 SLIDING 2	5'-0" x 6'-8"	2
G	POCKET	28X80 POCKET 1	2'-4" x 6'-8"	1
H	DOOR	36X96 EXTERIOR GLASS 1	3'-0" x 8'-0"	2
I	GARAGE	108X96 - 2 PANEL GALSS	9'-0" x 8'-0"	1
J	GARAGE	192X96 - 4 PANEL - GLASS	16'-0" x 8'-0"	1

All sleeping room shall have at least one code complaint egress window. Casement windows may require a special kit to make them complaint



MAIN LEVEL FLOOR PLAN

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

GENERAL NOTES:

1. ALL MAIN LEVEL WALLS ARE 10'-1 1/8" HIGH UNLESS NOTED OTHERWISE
2. ALL ANGLED WALLS ARE @ 45 DEG. UNLESS NOTED OTHERWISE
3. ALL EXTERIOR WALLS ARE 6" (5 1/2" STUD+1/2" SHEATHING) & ALL INTERIOR WALLS ARE 3 1/2" UNLESS NOTED OTHERWISE
4. CRAWLSPACE ENTRANCE DETERMINED PER CONTRACTOR
5. ALL WINDOW HEADER HEIGHTS ARE 8'-0" HIGH UNLESS NOTED OTHERWISE

MAIN LEVEL	1529 sq ft.
GARAGE	976 sq ft.
COVERED PORCH	790 sq ft.

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SHEET 5 OF 8

100% SCALE @ 24"x36"

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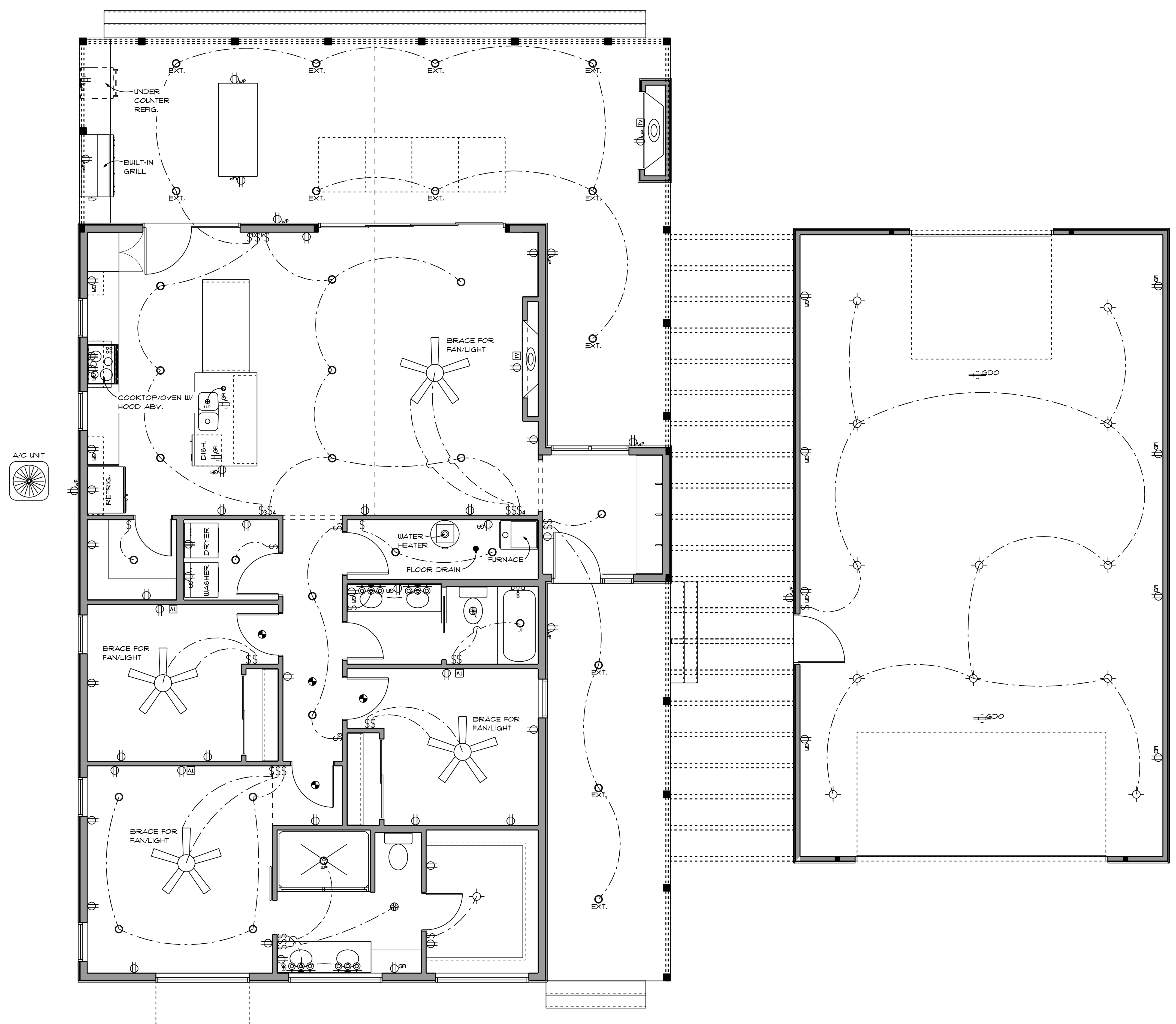
ELECTRICAL LEGEND		
ELECTRICAL	COUNT	SYMBOL
ceiling fan 5 bladed 04	4	
CAN LIGHT WATERPROOF 6INCH	2	WP
can light 6inch	19	
EXTERIOR CAN LIGHT	12	EXT.
GARAGE DOOR OUTLET	2	GDO
GARBAGE DISPOSAL	1	GD
PLUNGER SWITCH	1	
cable tv outlet	5	TV
fan	2	
light	13	
outlet	30	
outlet 220v	2	
outlet gfi	20	GFI
outlet wp	11	WP
smoke detector	4	
switch	23	$
switch 3 way	4	$3
switch 4 way	3	$4
wall mounted 03 3 lights	4	



MAIN LEVEL ELECTRICAL PLAN

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

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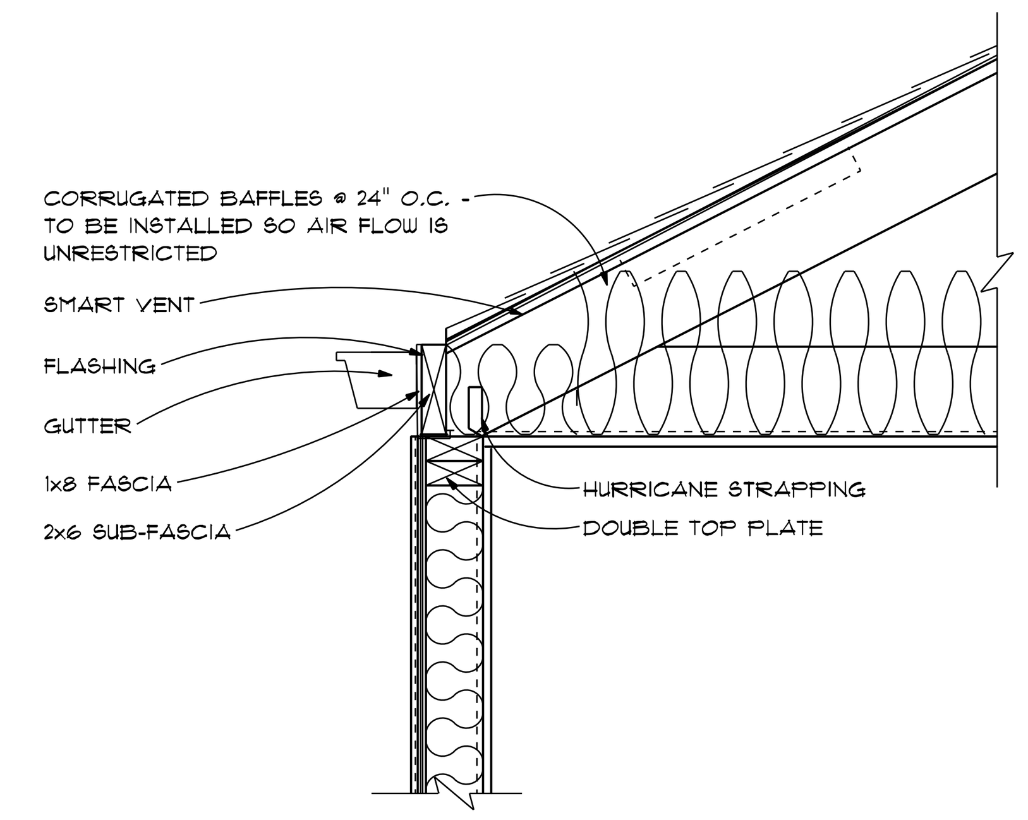
100% SCALE = 24"x36"

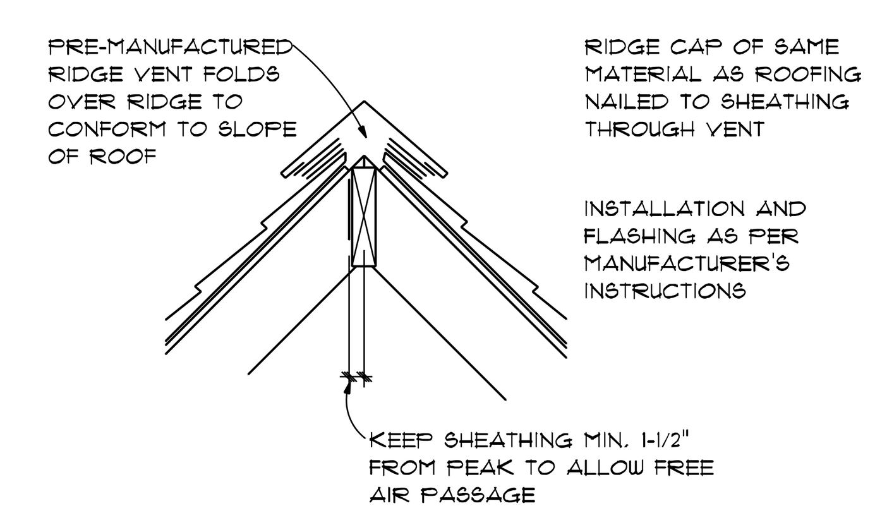
ROOF PLAN

SCALE: 1/4" = 1'-0"
NOTE: ALL ROOFS TO BE STANDING SEAM METAL



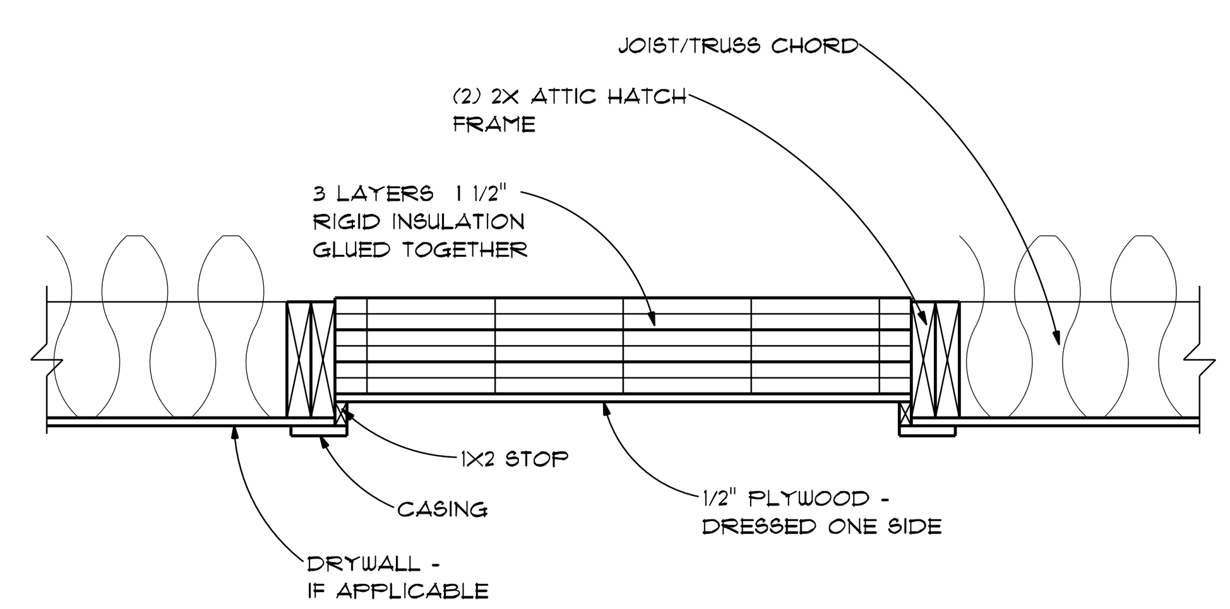
EAVE VENT

SCALE: 1"=1'-0"



RIDGE VENT

SCALE: 1"=1'-0"



ATTIC HATCH

SCALE: 1"=1'-0"

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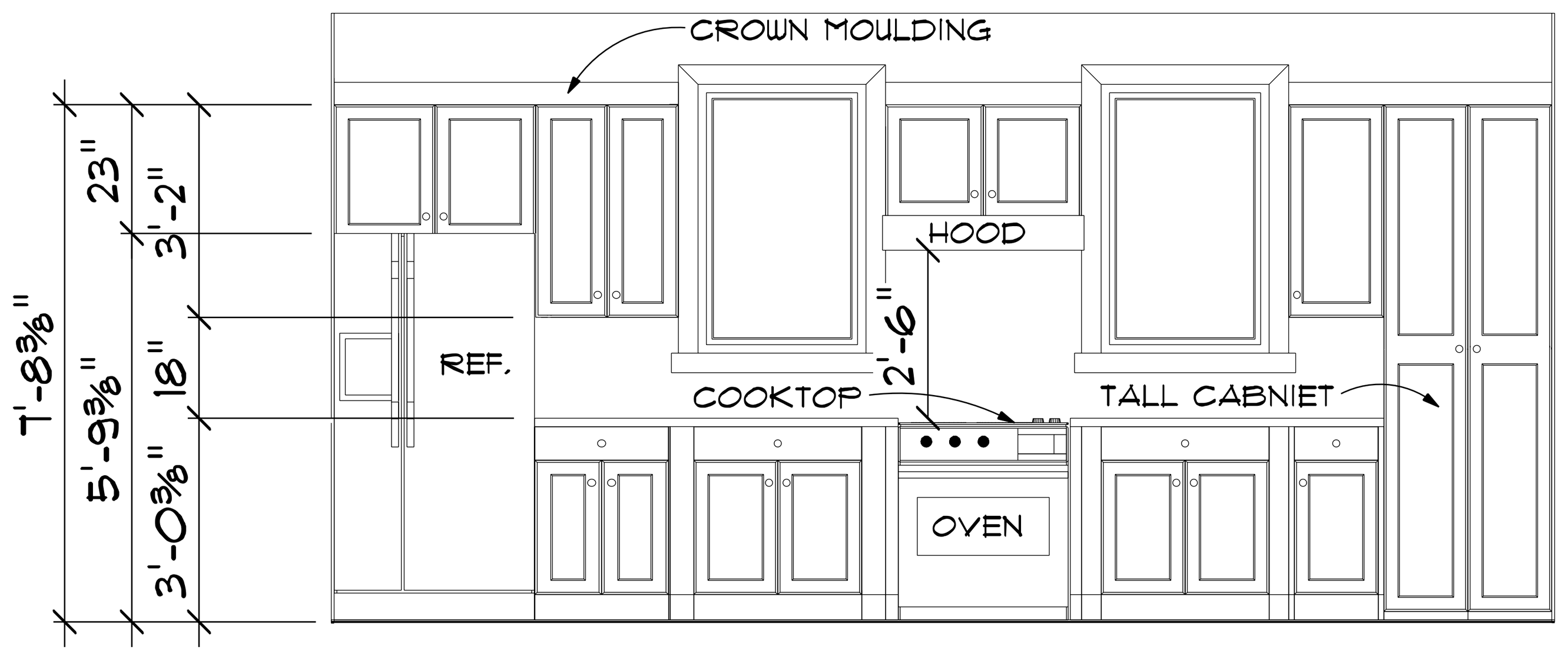
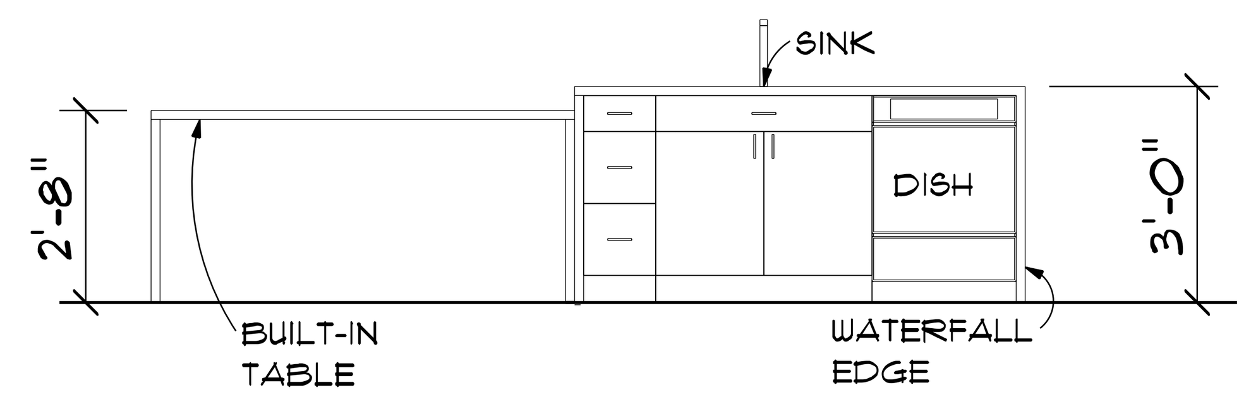


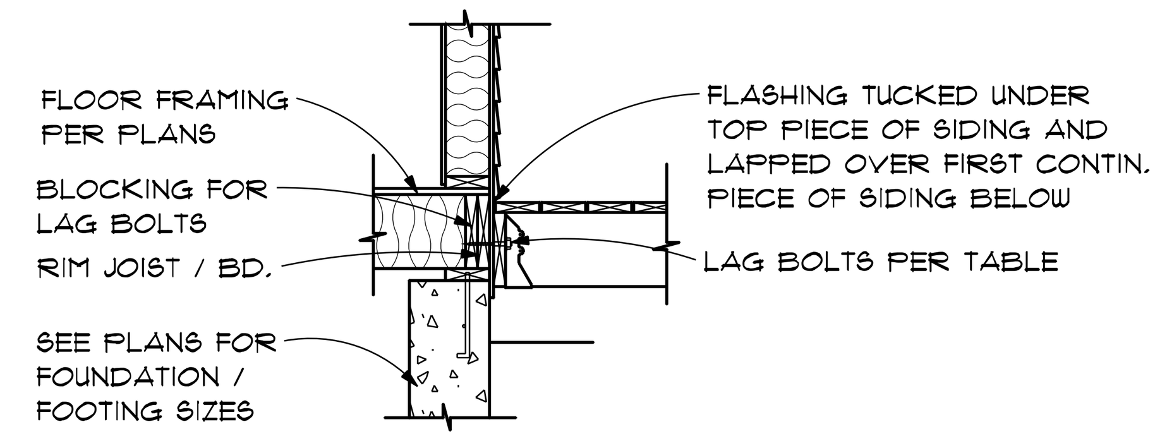
DETAIL 1



DETAIL 2

KITCHEN CABINET ELEVATIONS

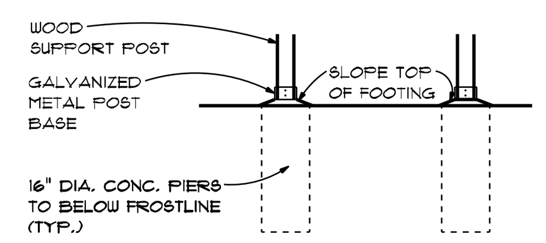
SCALE: 3/8" = 1'-0"



DECK LEDGER DETAIL

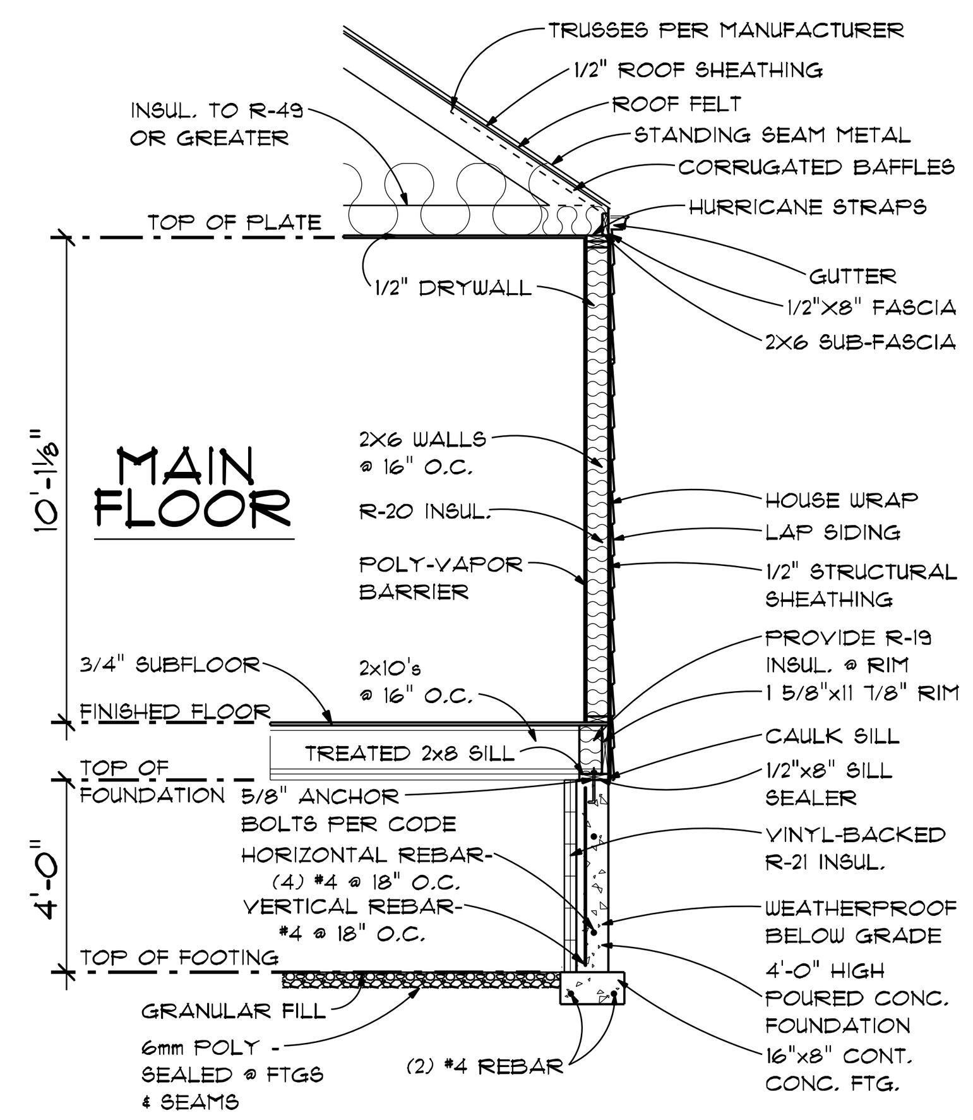
SCALE: 1/2"=1'-0"

DECK LEDGER BOLTING SCHEDULE						
JOIST SPAN	6'	8'	10'	12'	14'	16'
BOLT SIZE	1/2"	1/2"	1/2"	1/2"	1/2"	5/8"
BOLT SPACING	24"	18"	16"	12"	12"	12"



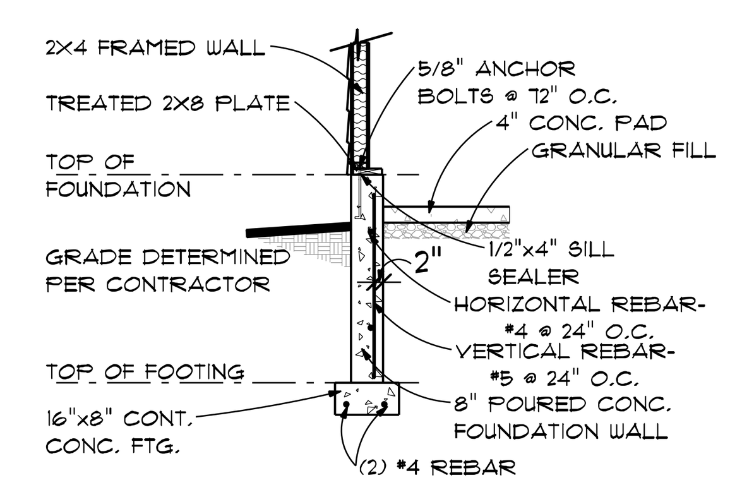
POST FOOTING DETAIL

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



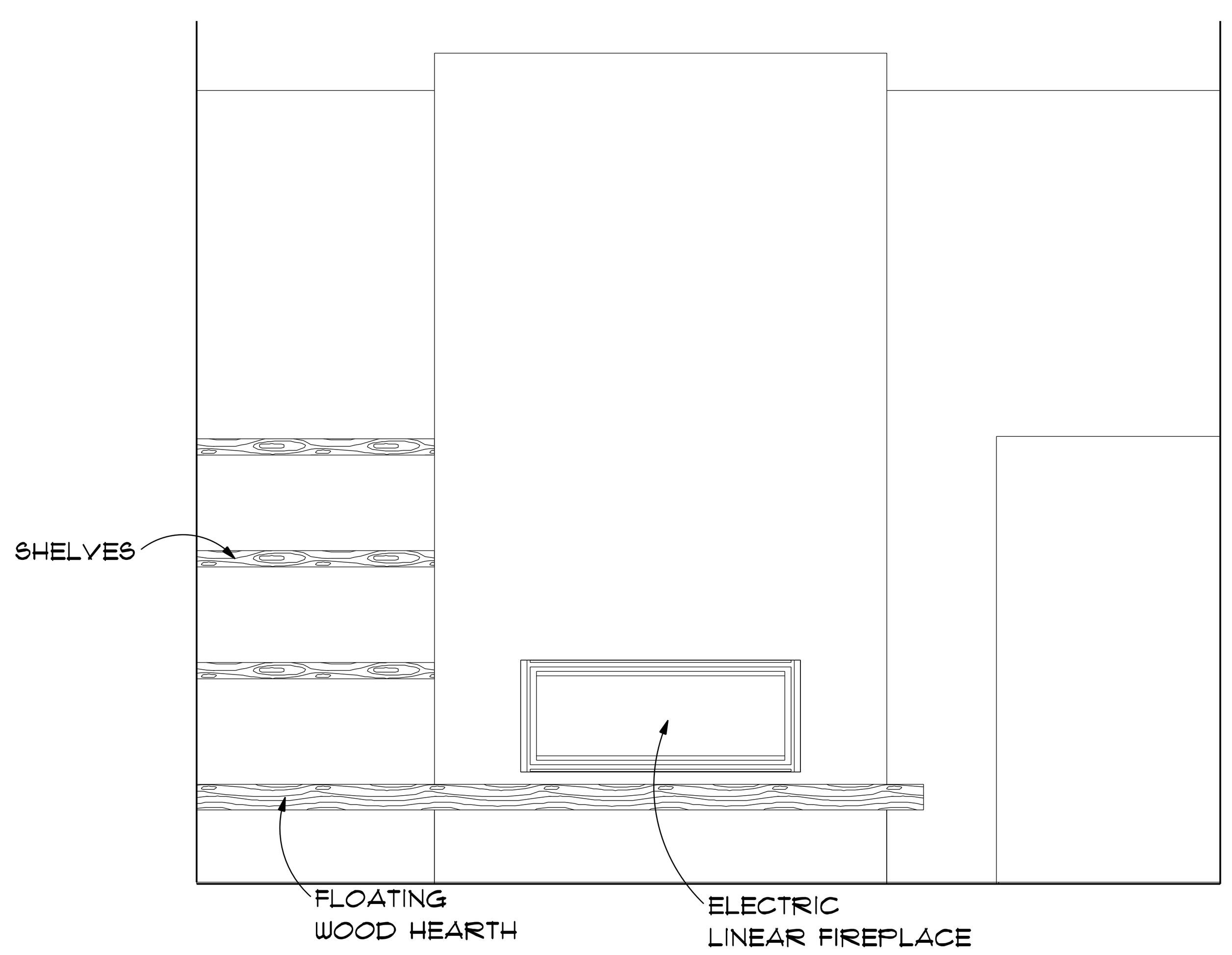
CRAWL SPACE WALL SECTION

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



TYP. GARAGE WALL

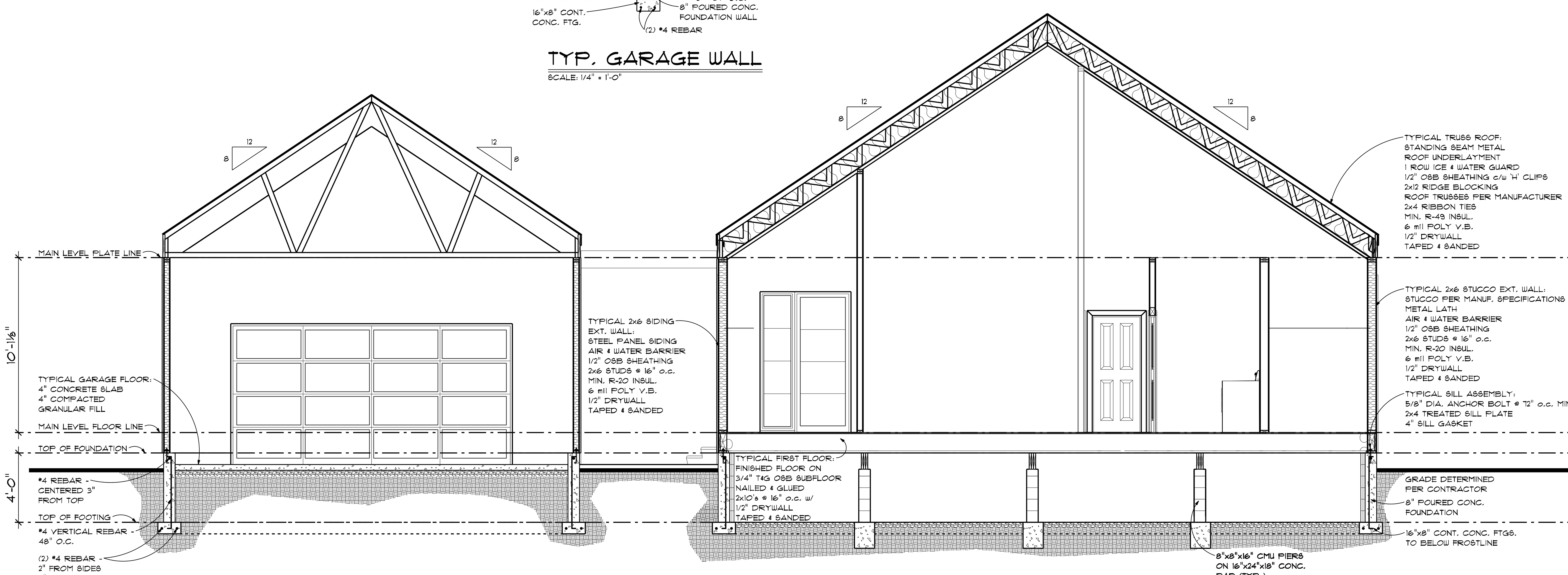
SCALE: 1/4" = 1'-0"



DETAIL 3

GREAT ROOM CABINET ELEVATIONS

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



CROSS SECTION

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

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100% SCALE @ 24"x36"

Job	Truss	Truss Type	Qty	Ply	MIKE SAYRE
P23-05036	PB01	Piggyback	32	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.430 s Nov 30 2020 Print: 8.630 s Feb 9 2023 MiTek Industries, Inc. Thu Jun 15 12:07:28 2023 Page 1
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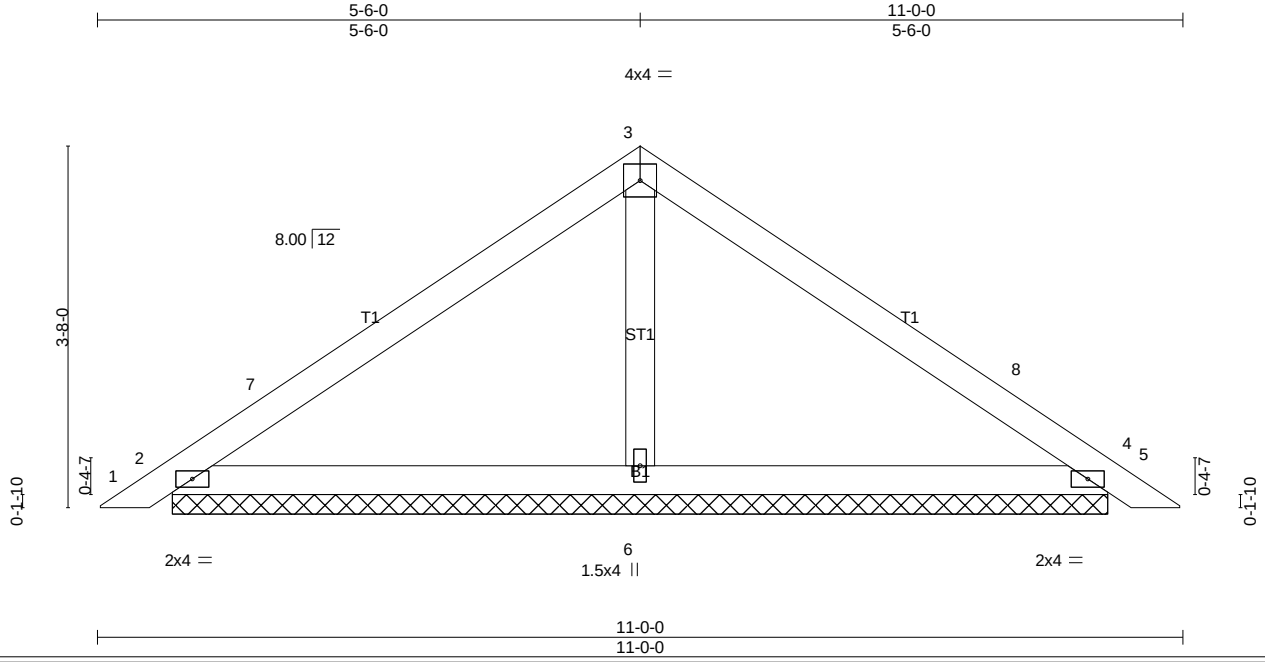

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	0.01	5	n/r	120	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	0.01	5	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 38 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Sheathed or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=168/9-5-12 (min. 0-1-8), 4=168/9-5-12 (min. 0-1-8), 6=303/9-5-12 (min. 0-1-8)
Max Horz 2=-66(LC 10)
Max Uplift2=-26(LC 12), 4=-26(LC 12)
Max Grav 2=220(LC 2), 4=220(LC 2), 6=377(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	MIKE SAYRE
P23-05036	T01	Piggyback Base	32	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.430 s Nov 30 2020 Print: 8.630 s Feb 9 2023 MiTek Industries, Inc. Thu Jun 15 12:07:30 2023 Page 1
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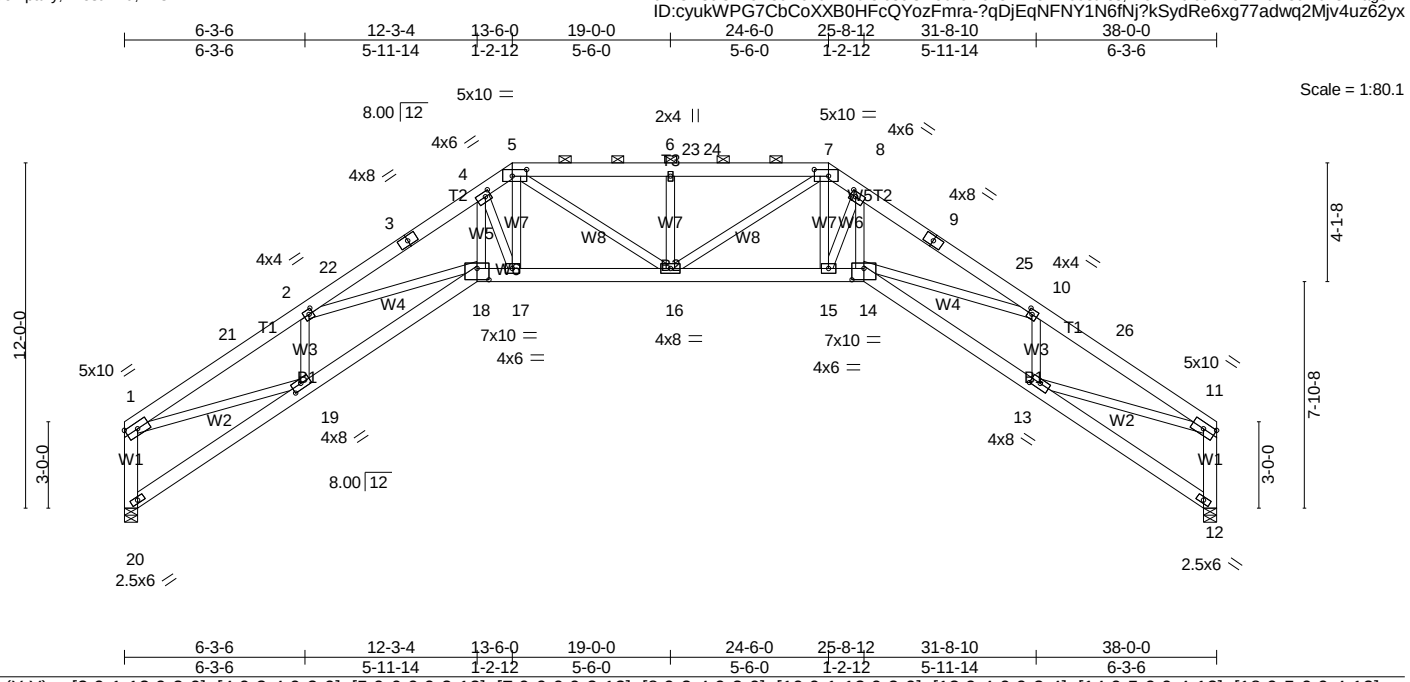

Plate Offsets (X,Y)-- [2:0-1-12,0-2-0], [4:0-2-4,0-2-0], [5:0-6-0,0-2-12], [7:0-6-0,0-2-12], [8:0-2-4,0-2-0], [10:0-1-12,0-2-0], [13:0-4-0,0-2-4], [14:0-5-0,0-4-12], [18:0-5-0,0-4-12], [19:0-4-0,0-2-4]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.34	16	>999	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.68	16	>667	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.97	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S							Weight: 306 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3 *Except*
W1: 2x6 SP No.1, W2: 2x4 SP No.2

BRACING-
TOP CHORD Sheathed or 3-0-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 20=1239/0-5-8 (min. 0-2-6), 12=1239/0-5-8 (min. 0-2-6)
Max Horz 20=-258(LC 10)
Max Grav 20=1502(LC 2), 12=1502(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-20=-1477/15, 1-21=-3503/0, 2-21=-3376/0, 2-22=-5323/0, 3-22=-5204/0, 3-4=-5194/0, 4-5=-4171/0, 5-23=-3858/0, 6-23=-3856/0, 6-24=-3856/0, 7-24=-3858/0, 7-8=-4171/0, 8-9=-5194/0, 9-25=-5204/0, 10-25=-5322/0, 10-26=-3376/0, 11-26=-3503/0, 11-12=-1477/15
BOT CHORD 19-20=-301/360, 18-19=0/3521, 17-18=0/4212, 16-17=0/3614, 15-16=0/3614, 14-15=0/4211, 13-14=0/3414
WEBS 1-19=0/2829, 2-19=-1112/22, 2-18=0/1516, 4-18=0/2160, 4-17=-1869/0, 5-17=0/1910, 5-16=-70/480, 6-16=-408/79, 7-16=-56/480, 7-15=0/1888, 8-15=-1841/0, 8-14=0/2121, 10-14=0/1516, 10-13=-1112/22, 11-13=0/2829

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 20, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	MIKE SAYRE
P23-05036	T01GE	Common Supported Gable	2	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.430 s Nov 30 2020 Print: 8.630 s Feb 9 2023 MiTek Industries, Inc. Thu Jun 15 12:07:31 2023 Page 1
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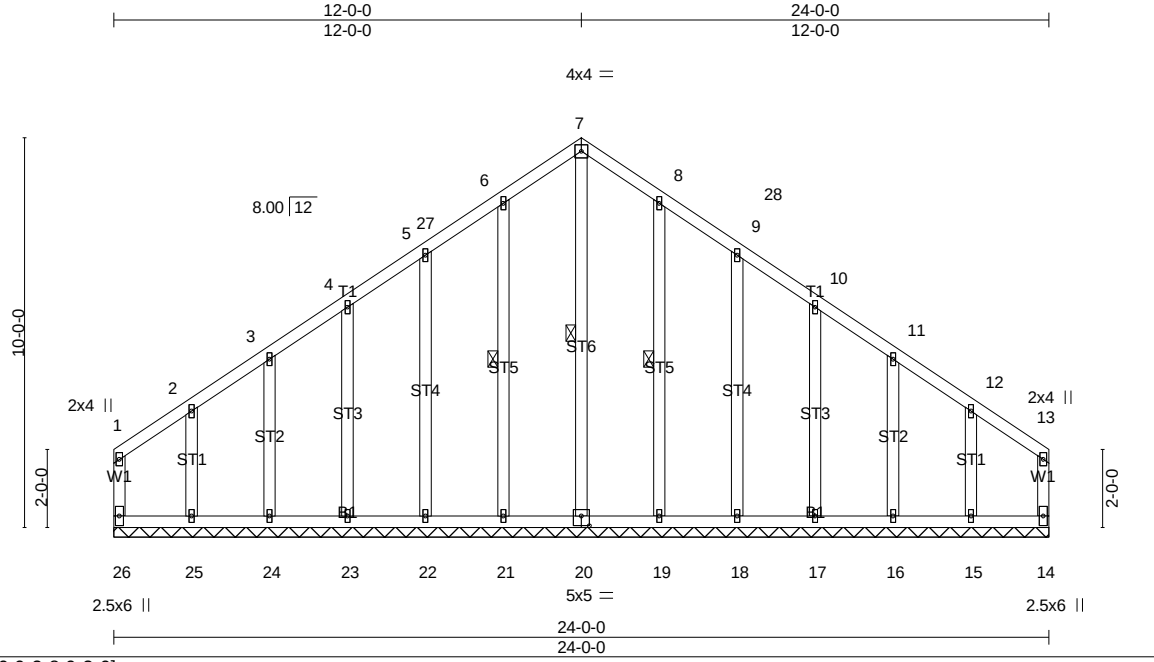

Plate Offsets (X,Y)-- [20:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	-0.00	14	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-R								
BCDL	10.0										Weight: 179 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 7-20, 6-21, 8-19

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 24-0-0.
(lb) - Max Horz 26=199(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 21, 22, 23, 24, 25, 19, 18, 17, 16, 15 except 26=-110(LC 10), 14=-101(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 26, 14, 20, 21, 22, 23, 24, 19, 18, 17, 16 except 25=267(LC 23), 15=262(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) All plates are 1.5x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 22, 23, 24, 25, 19, 18, 17, 16, 15 except (jt=lb) 26=110, 14=101.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	MIKE SAYRE
P23-05036	T02	Common	20	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

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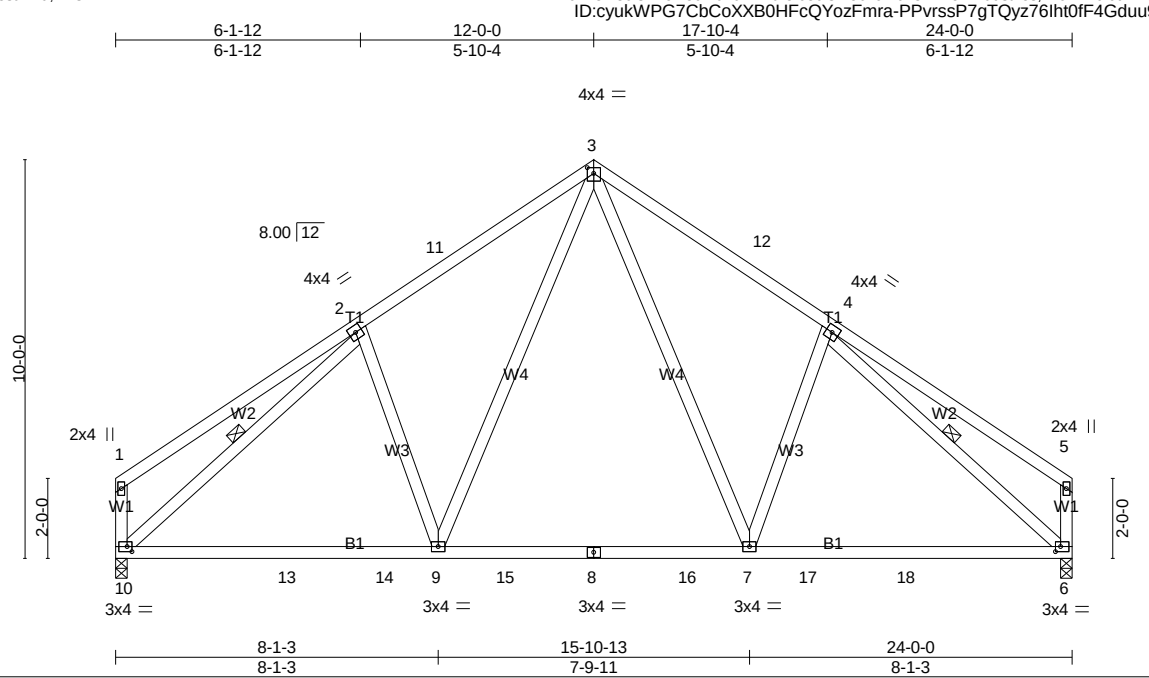

Plate Offsets (X,Y)-- [3:0-2-0,0-1-12], [6:0-1-8,0-1-8], [10:0-1-8,0-1-8]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.11	9-10	>999	240	MT20	244/190
Snow (Pf/Pg)	11.6/15.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.20	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.03	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 155 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Sheathed or 5-8-4 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 2-10, 4-6

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 10=748/0-3-8 (min. 0-1-12), 6=748/0-3-8 (min. 0-1-12)
Max Horz 10=-199(LC 10)
Max Grav 10=1101(LC 23), 6=1101(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-11=-1139/93, 3-11=-1047/128, 3-12=-1047/128, 4-12=-1139/93
BOT CHORD 10-13=0/994, 13-14=0/994, 9-14=0/994, 9-15=0/740, 8-15=0/740, 8-16=0/740, 7-16=0/740, 7-17=0/897, 17-18=0/897, 6-18=0/897
WEBS 3-7=-33/541, 3-9=-33/541, 2-10=-1111/0, 4-6=-1110/0

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard