

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





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

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.

APPROVED
Contract building only review.
Honest builder responsible for full compliance with the code.

03/22/2022

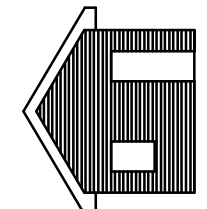



IMPORTANT NOTE:
Prior to construction start, the Contractor shall verify all dimensions, details, and specifications and be responsible for same. The Contractor shall also verify compliance with all local and state building codes.



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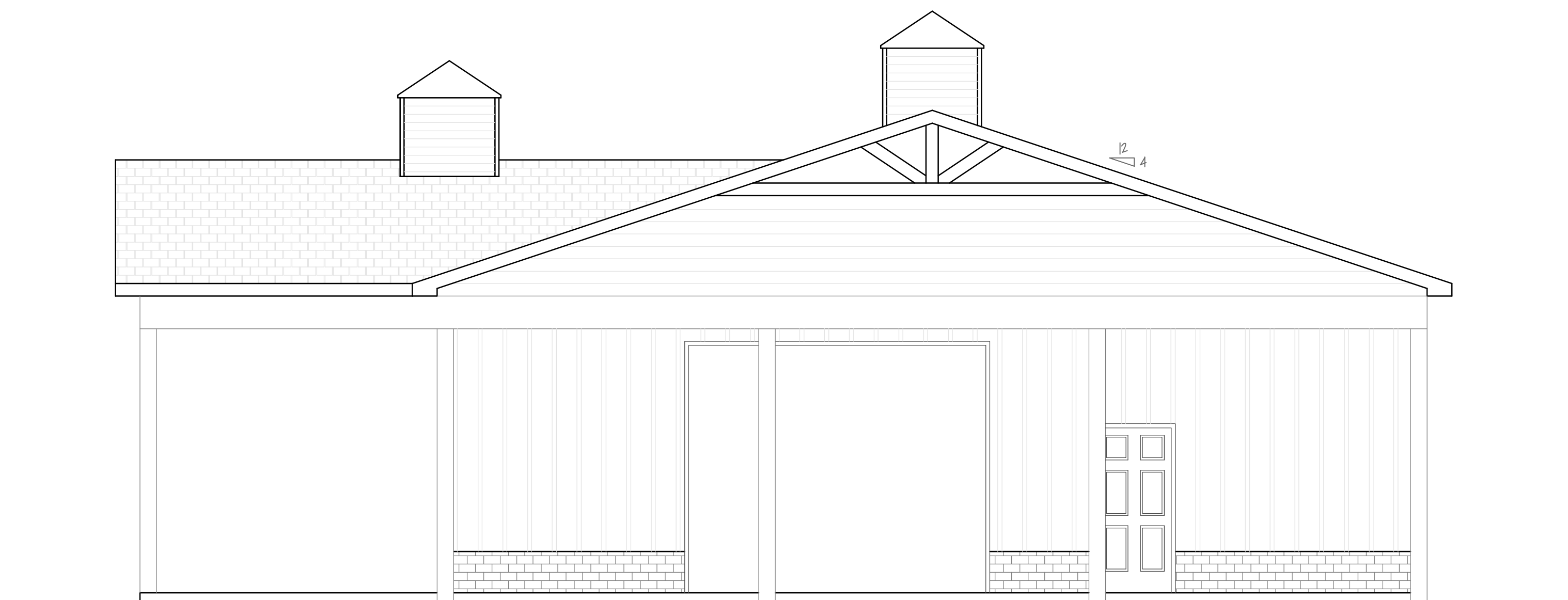


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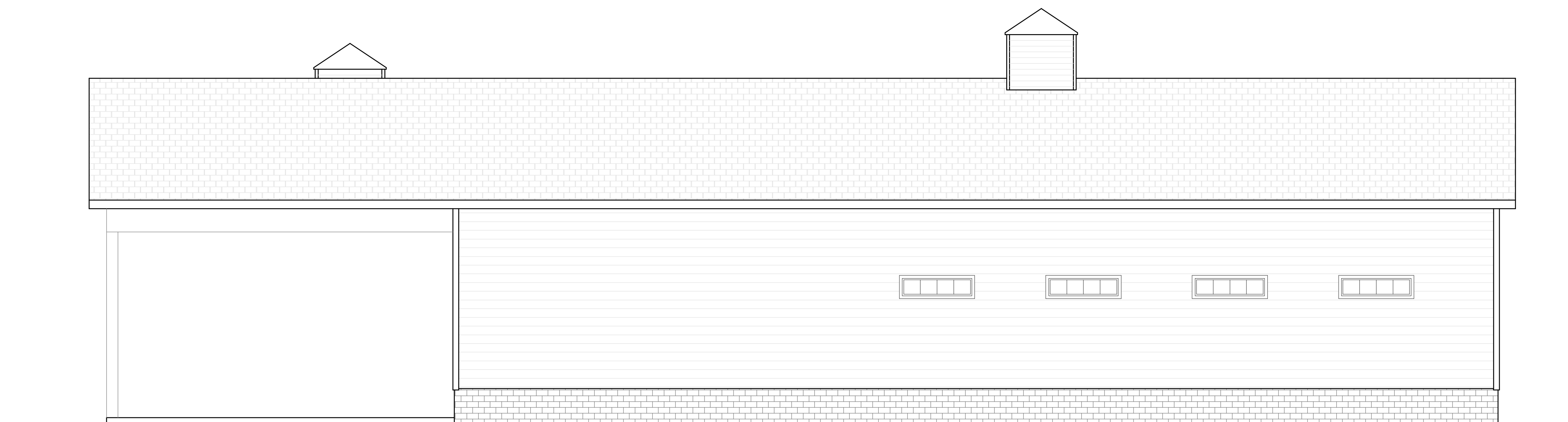
P.J.'s Designs

DATE: 1/26/22
DRAWN BY: P JONES
SCALE: AS NOTED

SHEET NO.
23
OF




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



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

IMPORTANT NOTE:
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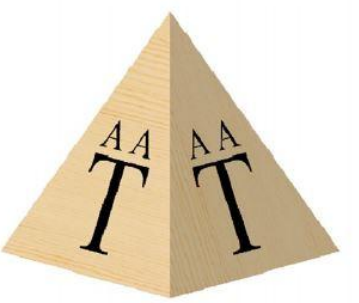
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SHEET NO.
3 3
OF



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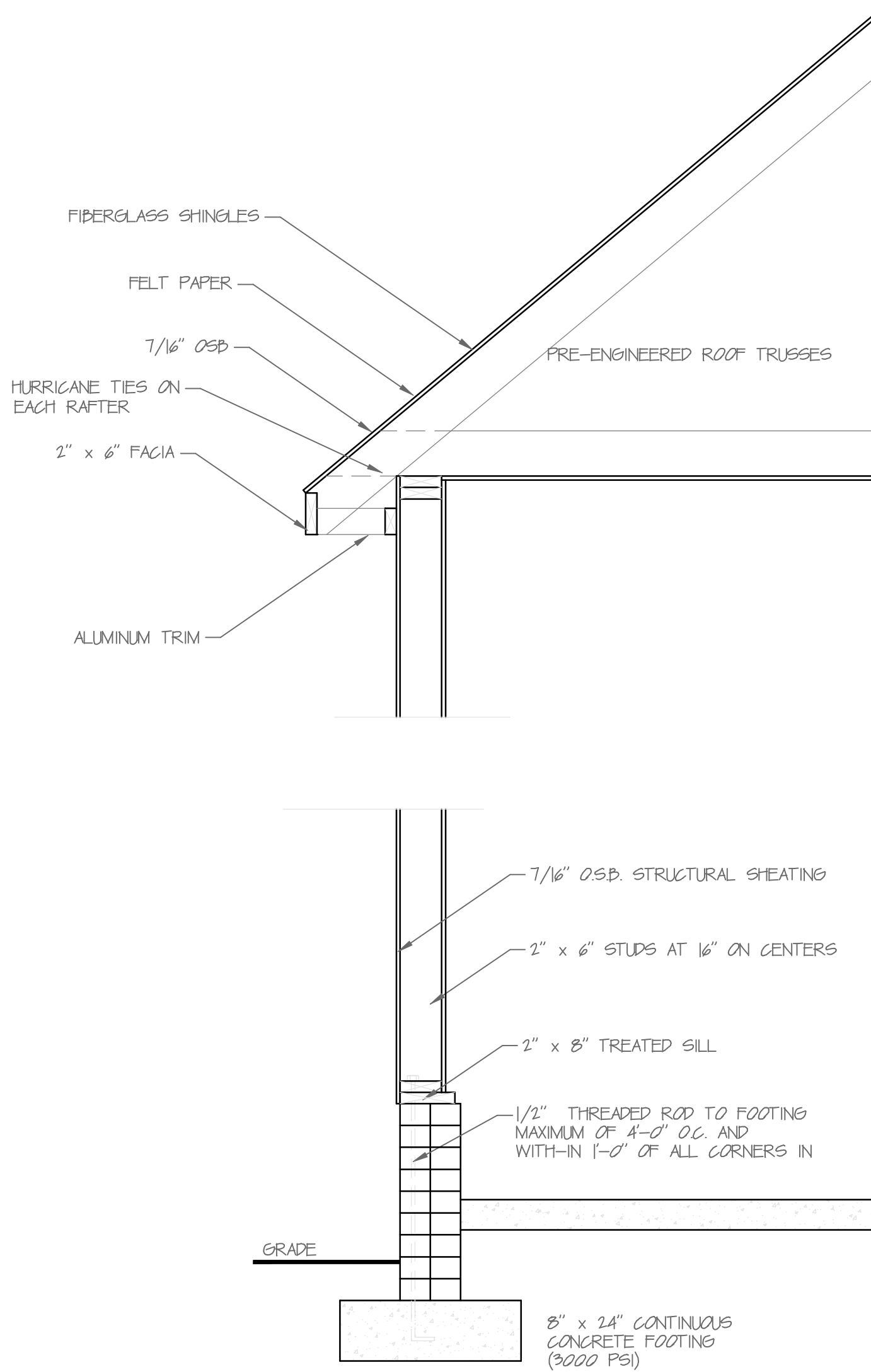


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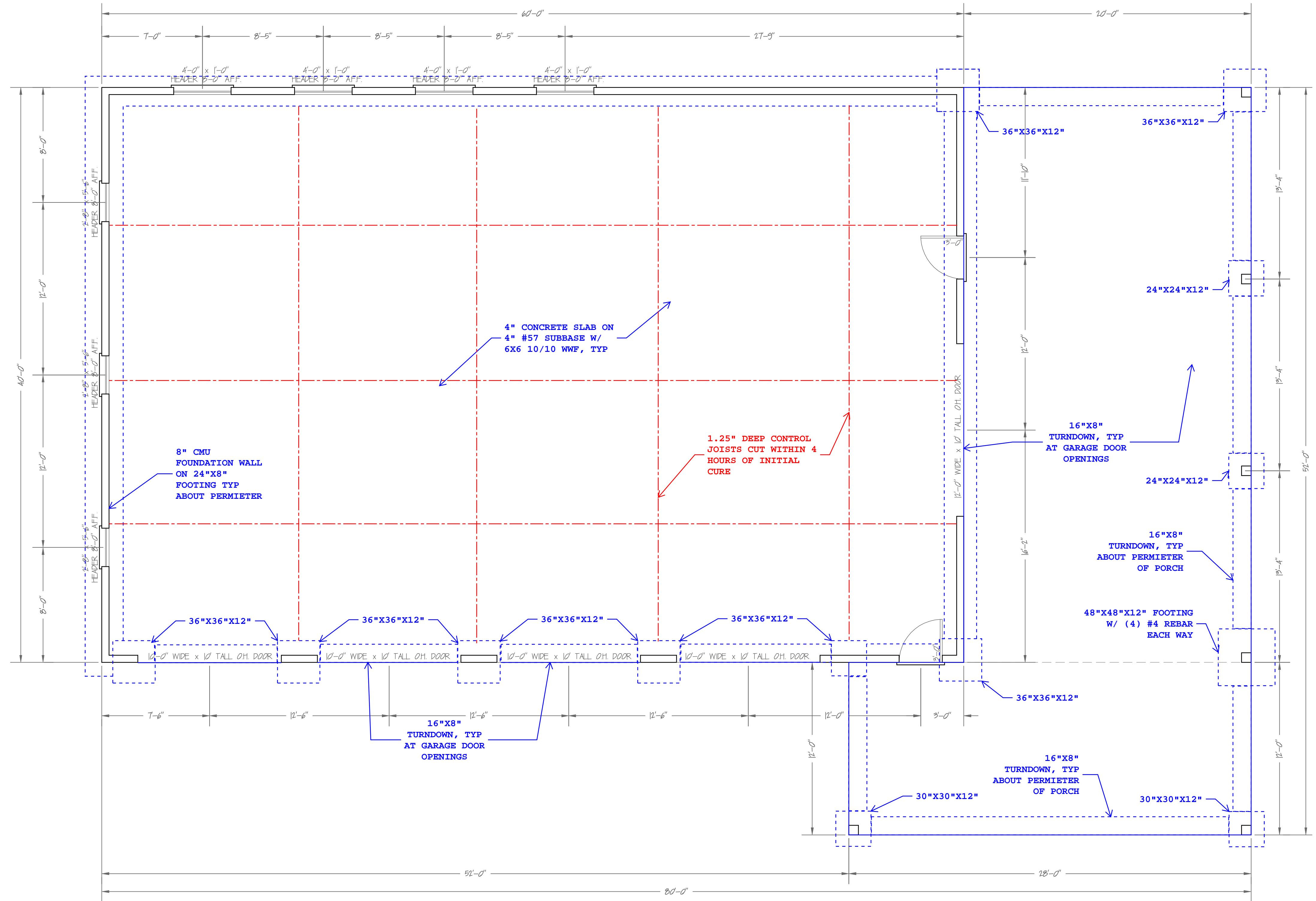
**Parker Barn
Benson, NC
Riggs Custom Construction LLC**

Job Number:
0170-22

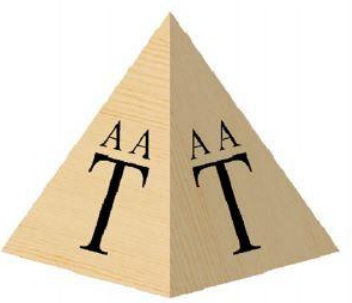
S1



TYPICAL WALL SECTION
SCALE: 1" = 1'-0"



FOUNDATION PLAN
SCALE 1/4" : 1'



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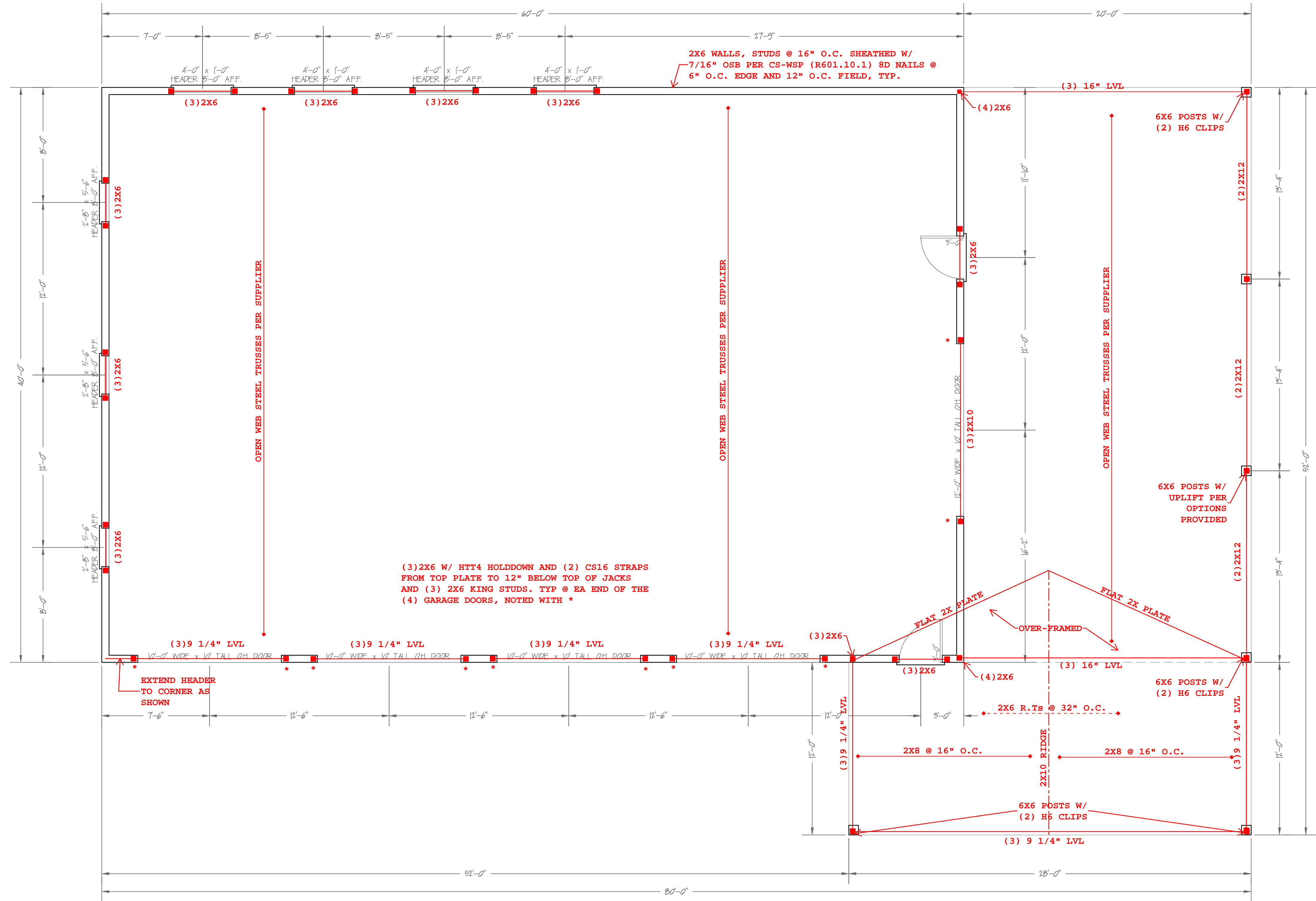
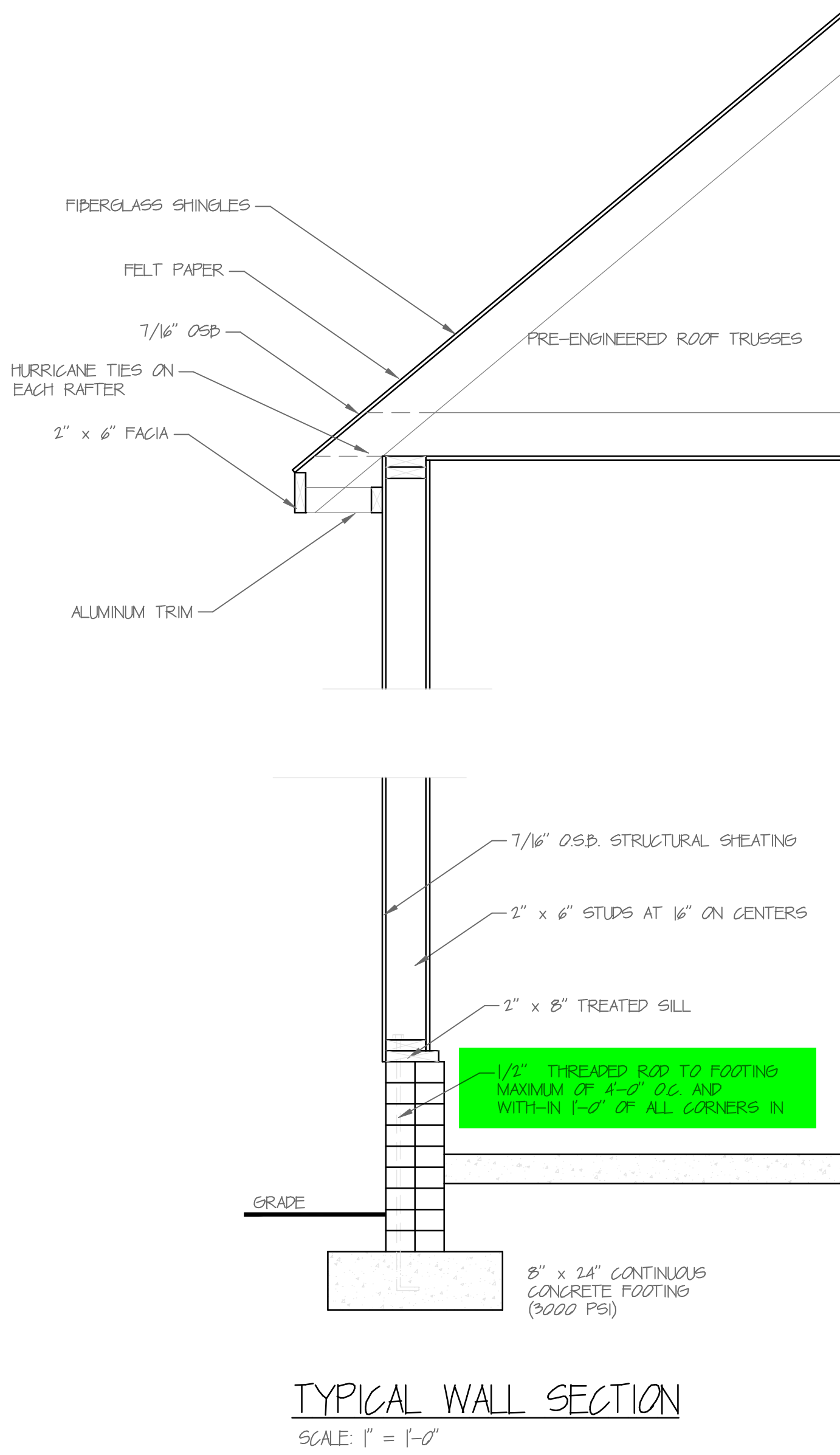


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**Parker Barn
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S2



ROOF & WALL PLAN
SCALE 1/4" : 1'

General Plan Reading Notes:

- Typically, Engineer's notes are in red, blue or green ink for clarity.
- These general notes shall apply unless otherwise noted in handwriting.
- Noted dimensions shall take priority.

General Construction Notes:

- All temporary shoring, means and methods are the responsibility of the contractor.
- All dimensions to be verified by the contractor in the field.
- Engineer assumes no responsibility for safety of project delivery.
- Any questions pertaining to structural components should be immediately brought to the attention of engineer.
- Limitations: Services provided are in accordance with the standard of practice for structural engineering and within the limits imposed by scope, schedule and budget. Sequencing, shoring, means and methods of construction are considered beyond the scope of this design.

Design Loads

Meet/exceeds minimum per NCRC 2018

	Live	Dead	Deflection
All Floors	40	10	L/360
Attic Platforms	25	10	L/360
Ceiling	10	10	L/360
Decks/Porches	60	10	L/240
Roof	20	15	L/240
Windload	115(MPH)	115(MPH)	L/240

Footing Schedule:

- A = 16"x16"x8"
 B = 20"x20"x8"
 C = 24"x24"x10"
 D = 30"x30"x12"
 E = 36"x36"x12"
 F = 40"x40"x12" w/ (3) #4 EW
 G = 48"x48"x12" w/ (4) #4 EW

*All rebar in footings to have 3" cover from sides, bottoms and other parallel rebar.

Header Schedule:

- A = 2x6 w/ (1) Jack @ EE
 B = 2x8 w/ (2) Jack @ EE
 C = 2x10 w/ (2) Jack @ EE
 D = 2x12 w/ (3) Jack @ EE
 E = 9 1/4" LVL w/ (3) Js @ EE
 F = 11 7/8" LVL w/ (3) Js @ EE
 * Headers to match width of wall.
 * Stud size to match width of wall.

King Stud Schedule:

- 0'-3' wide = (1)2x4 @ EE
 3'-6' wide = (2)2x4 @ EE
 6'-9' wide = (3)2x4 @ EE
 * King stud size to match width of wall.

Foundation Notes:

- Assumed soil load bearing capacity = 2000 PSF
- Minimum 28 day f'c of concrete = 3000 PSI
- Foundations to be built in accordance with NCRC 2018, CH 4
- "Tie-In"s shall be (2) 16" long #4 epoxy bonded dowels half embedded mid-depth into existing footings. If no footing exists, omit Tie-in
- Install anchor bolts per R403.1.6.
- All slabs shall be 4" thick, 3000 psi concrete slab on 4" of #57 sub-base w/ a 6 mil vapor barrier (if used in an interior or garage application) w/ 10/10 6x6 welded wire fabric UON.
- All slabs shall be on compacted fill or full depth self consolidated structural fill (#57) (at porches, garages and stem wall slabs UON.
- All suspended slabs on metal pans shall utilize 16GA type B UON.
- Max unreinforced, unbalanced condition of any CMU wall shall be 36". Any foundation wall subjected to 24" of unbalanced fill or more shall be fully grouted.
- Top course of all foundation walls shall be fully grouted.
- All piers shall be in the middle 1/3rd of the footing. Min 2" footing projection at each side. Max projection shall be the depth of the footing.

Framing Notes:

- All dimensional lumber to be Spruce Pine Fir No.2 or better.
- (X) = Number of 2x4/2x6 studs supporting beams. Size of studs to match stud schedule in remainder of wall UNO. Strap all stud columns of 4 or more with (3) horz. CS22 straps.
- Engineered Beams shall be 1.75" wide per ply. Bending Stress (Fb) of: LVL= 2600 psi, LSL = 2325 psi. PSL (columns) shall be 3.5" wide w/ F'b = 1344 psi
- All floor framing per NCRC 2018 CH 5.
- All Wall framing per NCRC 2018 CH6.
- All I-joists and floor truss framing per supplier's specifications and layout.
- All structural steel shall be ASTM A-36; Fy= 36 KSI.
- All weld material shall be 70 KSI material.
- All welds to be installed by a certified AWS welder.
- Install double joist under all walls parallel with joists.
- Typically, load bearing walls (LBW) are shown hatched in red. Nearby girders and beams should be assumed to be directly supporting these LBWs, UON.
- All interior LVL beams of 3 ply or more shall be fastened with 1/2" dia bolts at 16" o.c. staggered w/ 2" min edge distance from top/bottom edge UON. 2 ply LVLs shall be fastened with (4) #9 3" long wood screws UON.
- All side loaded steel beams should be packed out with dbl 2x material and bolted thru to web with 1/2" dia thru bolts at 24" o.c. staggered.
- All beam bearings shall be no less than 3". All other bearing to be 2" min.
- All hangers shall be standard, appropriately sized face mounted UON. Consult Simpson catalog or local supplier. High capacity hangers will be load rated on plans. Install hardware per manufacturer guidelines.

Lateral Bracing:

- Unless otherwise noted, lateral bracing is found sufficient and compliant with minimum requirements set forth in NCRC 2018 Table R602.10.2 provided all exterior walls are sheathed at the exterior per CS-WSP, R602.10.3 which includes 2x4 (min) studs at 16" o.c. sheathed with 7/16" OSB w/ (1)8d nail at 6" o.c. edge and (1)8d nail at 12" o.c. field.
- Typically, required length of CS-WSP at each designated shear walls are shown on plans.
- All noted Portal Frame (P-F) shall be compliant with R602.10.1
- All locations noted with "HD" shall be 800 lbs min capacity. Option include 20" long CS16 straps fully populated with 10d nails, centered at bottom of stud, extending to bottom of band below, Builder may install straps on the exterior of the walls. Several other hardware are available for use.
- Walls noted as GB shall be framed in accordance with R602.10.2

Roof Framing Notes:

- All roof framing shall comply with NCRC 2018 CH 9.
- All dimensional lumber to be SYP or SPF No.2 or better. Sheath with 7/16" OSB w/ 8d nails at 6" o.c. edge and 12" o.c. field.
- All rafter ties to be installed no higher than 1/3rd height eave to ridge up from eave nailed with (5) 10d nails at each end, UON
- Roof trusses per others; installation per supplier guidelines.
- When structural ridge is used, collar ties may be omitted with 24" long ridge strapping (CS22) is applied @ 32" O.C

Wood Deck Notes:

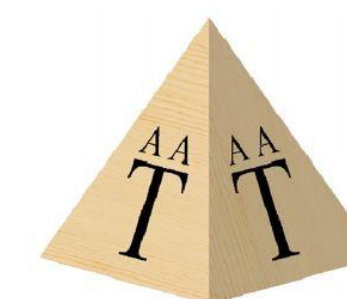
- All lumber to be pressure treated SYP or SPF No.2.
- Band attachments to be installed per NCRC 2018, Appendix M (AM 104.1(1))
- Install lateral bracing AM109.1
- Install handrails per AM111.1. Note, 4x4 handrails shall not be notched.
- Max Post Heights per AM 108.1
- Stair Stringers per AM 110.1

Screened in and Covered Porch Notes:

- All wood deck notes apply.
- Posts to be attached to footings, slab or CMU piers using ABU44 or ABU66 post base (or applicable size) or (2) RPBZ base connector.
- Uplift for posts to headers may be either (2) Simpson LCE4, (2)Simpson GA1 clips with 3" long #9 screws or (4) 1/4" diameter, 4.5" long LedgerLoks driven at a 45" degree angle to each side of posts or notched 50% width w/ (2) LedgerLoks.
- Uplift for posts to floor framing may be either (2)Simpson GA1 clips with 3" long #9 screws or (4) 1/4" diameter, 4.5" long LedgerLoks driven at a 45" degree angle to each side of posts.

Abbreviations:

CONC	Concrete
CONT.	Continuous
C.J	Ceiling Joists
CMU	Conc Masonry Unit
CS-WSP	Sheathing per R602.10.3
DIA	Diameter
DBL	Double
DJ / DR	Double Joist / Rafter
EQ	Equal
EE	Each End
FJ	Floor Joist
FND	Foundation
FT	Floor Truss
FTG	Footing
GB	Gypsum Board (shear wall)
GRT	Girder Roof Truss
HGR	Hanger
HD	Holddowns
LBW	Load Bearing Wall
MANUF	Manufacturer
NTS	Not To Scale
O.C.	On Center
O.F.	Over-framed (roof)
PF	Portal Frame
PL	Point Load
P.T.	Pressure Treated
R.T.	Roof Truss
SC	Stud Column
SIM	Similar
STGR	Staggered
SUP	Supplier
TYP.	Typical
UON	Unless Otherwise Noted



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