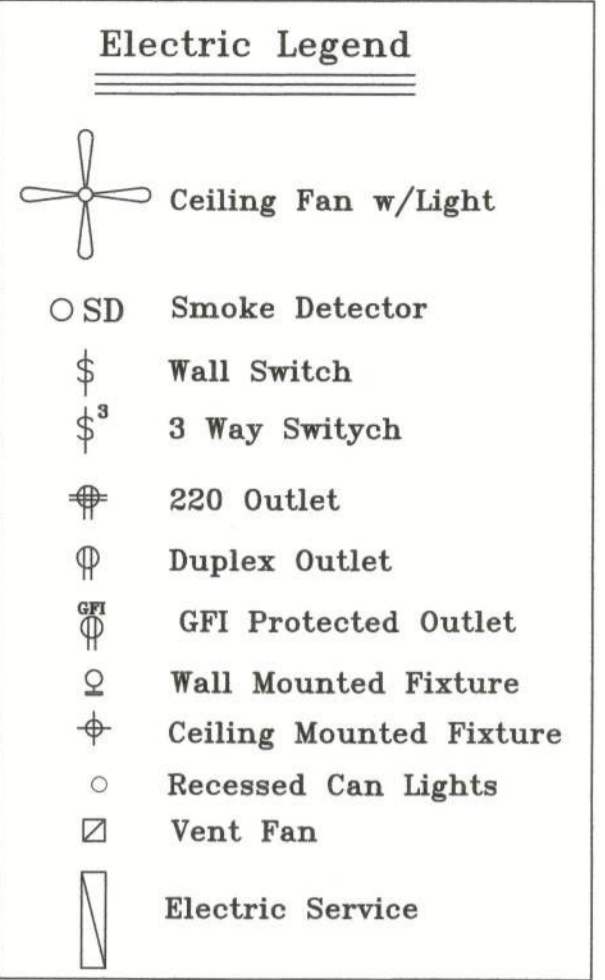


Floor Plan/Electric Plan

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

Stairs & Handrail Design By Delegated Engineer. Stair Construction Shall Meet FBC 7th Edition, 2020. Stairs Designed For Residential Use.

Area	
Sq. Ft. Heated	480
Sq. Ft. Porch	304
Total Sq. Ft.	784

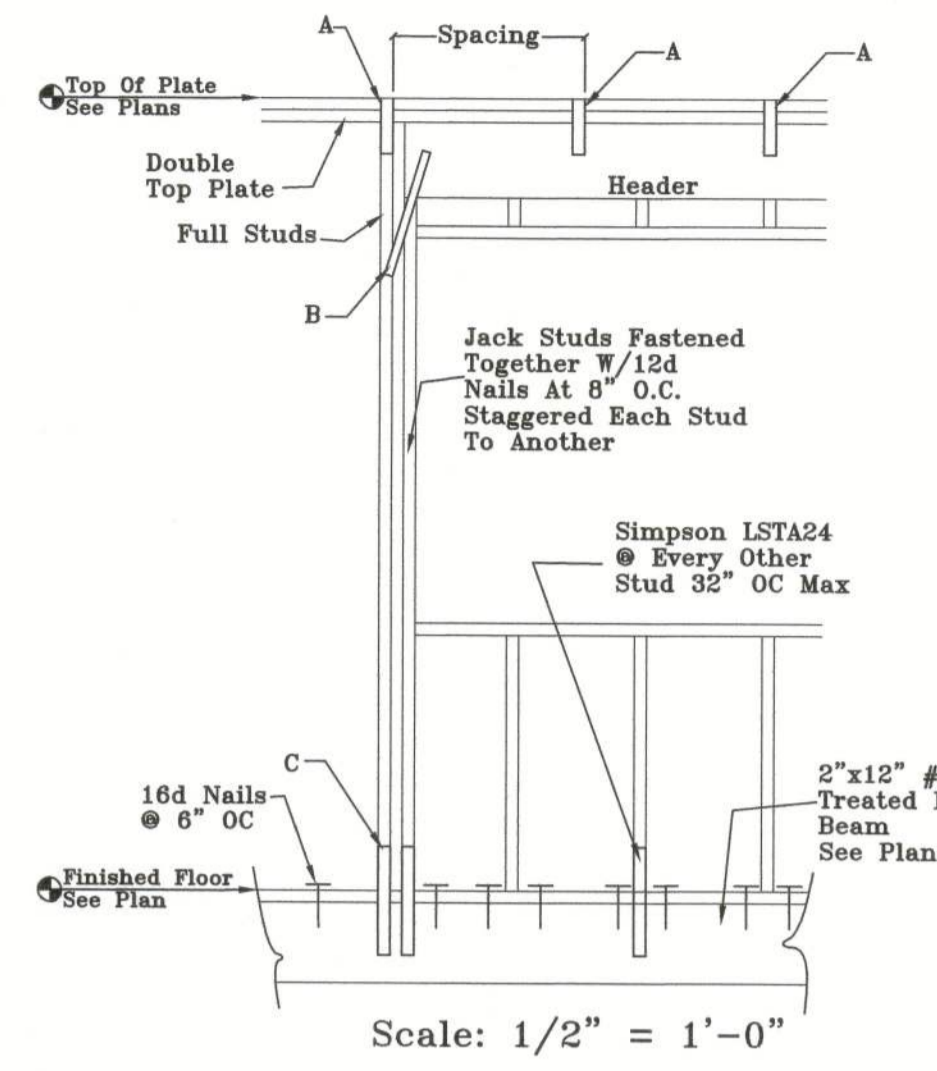


Note: 200 Amp Electric Service Box in Bed #1

Header Schedule

Max Header Span Ft.	Header #2 SYP	Jack Studs #2 SYP	Full Studs #2 SYP	A	B	C
1'-10"	(2) 2x6	1	2	SPB @ 24" O.C.	(1) LSTA 15	(2) Simpson LSTA24
6'-4"	(2) 2x12	2	3	SPB @ 24" O.C.	(3) LSTA 15	(3) Simpson LSTA24

Note: Studs And Strapping Specified Is Required For Each Side Of Opening.



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

- Wood Framing**
- Comply with Florida Building Code, 7th. edition (2020)
 - Wall Framing**
 - Load-bearing studs-No. 2 Spruce-Pine-Fir or better.
 - Bottom Plate-No. 2 Southern Pine, pressure treated.
 - Top Plate-Double Top Plate Required, No. 2 Spruce-Pine-Fir or better.
 - Posts-No. 2 Southern Pine, pressure treated.
 - Headers/Beams- No. 2 Southern Pine.
 - LVL Beams-MicroLam 1.9E, Truss-Joist or equal.
 - All gable endwalls shall be balloon framed.
 - Multiple studs shall be fastened one to another W/10d common nails @ 8" O.C.
 - Roof Framing**
 - Engineered Roof Trusses
 - Pre-engineered roof trusses shall be designed by the manufacturer in accordance with specified loads and governing codes.
 - Truss manufacturer to engineer trusses to support dead, live and wind loads per Florida Building Code or ASCE 7-16.
 - Engineering & handling of trusses to comply w/ANSI/TP1 "National Design Standard for Metal Plate Connected Wood Truss Construction", TPI HIB "Commentary & Recommendations for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses", and TPI HIB Recommended Design Specifications for Temporary Bracing of Metal Plate Connected Wood Trusses".
 - Truss Engineering to be signed & sealed by a Professional Engineer registered in the State of Florida.
 - Submittals shall include truss framing plan & details showing member sizes, bracing, anchorage, bridging as required for erection & for permanent structure.
 - One copy of the signed sealed submittal to be provided to Structural Engineer prior to fabrication for verification of loads & connectors specified.
 - Truss spacing 2'-0" o.c. maximum.
 - Sheathing**
 - Lay roof & floor sheathing perpendicular to supporting members. Stagger end panel locations.
 - Use "H" panel clip between panel supports for roof sheathing.
 - Cover sheathing as soon as possible for protection from excessive moisture exposure.
 - Fasteners**
 - Framing Fasteners-Comply with Florida Building Code.
 - Anchor Bolts-ASTM A307
 - Wind Uplift Connectors-Simpson Strong-Tie or equivalent
 - Fasteners permanently exposed to weather shall be hot-dipped galvanized.

- Concrete Masonry:**
- See notes on primary codes & specifications.
 - Concrete masonry units shall be load bearing Type conforming to ASTM C-90 having a min. compressive strength of 1900 PSI (Net Area).
 - Mortar shall conform to ASTM C-270 Type S.
 - Fill cells as noted on drawings with 3000 PSI coarse grout or concrete, or grout conforming to ASTM C-476, specifically designed for filling of cells.

Note: All exterior horizontal wall segments the full height of the structure not containing openings & over 3'-0" in length are shearwalls. All shearwalls shall have 2 studs and an anchor bolt W/nut & washer within 2" of stud at each end of each segment. Shearwall segments require Simpson holdowns at the base of each end of each segment to resist overturning, see floor plan for locations. Simpson holdowns are indicated on the floor plan as follows:

- *Simpson HDU2 Fastened to 2-Studs min.
- ⊕Simpson HDU4 Fastened to 2-Studs min.

The capacity of the truss connectors specified shall be verified by the contractor to exceed the loads provided in the truss engineering.

Opening sizes & locations shall not be changed without the written consent of the engineer of record due to affect on shearwall calc.

Structural Diaphragm At Porches & Carports

1/2" Plywood/OSB Sheathing Shall Be Installed On The Bottom Side Of The Trusses. Plywood Shall Be Fastened W/8d Common Nails @ 6" O.C. @ Edges & 12" O.C. @ Intermediate Supports. Gypsum Board Shall Be Fastened @ 4" O.C. @ Edges & Intermediate Supports.

Design Loads:

- Roof Live Load: 20 PSF
- Wind Loads:
 - Loads based on ASCE 7-16 Wind Load Criteria.
 - Wind Speed.....VULT = 130 MPH
 - Wind Speed.....VASD = 101 MPH
 - Risk Classification.....II
 - Exposure.....C
 - Internal Pressure Coefficient.....+/-0.18

ALLOWABLE COMPONENT & CLADDING WIND PRESSURES (PSF)			
Zone	10 sf	50 sf	100 sf
Interior/Edge	1 & 2e	14 / -41	10 / -25
Ridge/Edge	2n, 2r, 3e	14 / -60	10 / -33
Roof	3r	14 / -72	10 / -38
WALL	Interior	4	22 / -24
	Corner	5	22 / -30

Note: Effective areas or wind speeds between those given above may be interpolated, otherwise use the load associated with the lower effective area.

Wind resistance of the referenced building has been designed using a wind speed of 130 mph as required by Section 1609, 2020 Florida Building Code-7th Edition.

Requirements For Protection Of Glazed Openings

IF IMPACT RESISTANT GLAZING IS NOT USED IN CONSTRUCTION OF THE BUILDING, THE OWNER SHALL PROVIDE PROTECTION FOR ALL GLAZED OPENINGS IN ACCORDANCE WITH THE EXCEPTIONS STATED IN FBC 1609.1.2

STRUCTURAL SPECIFICATIONS

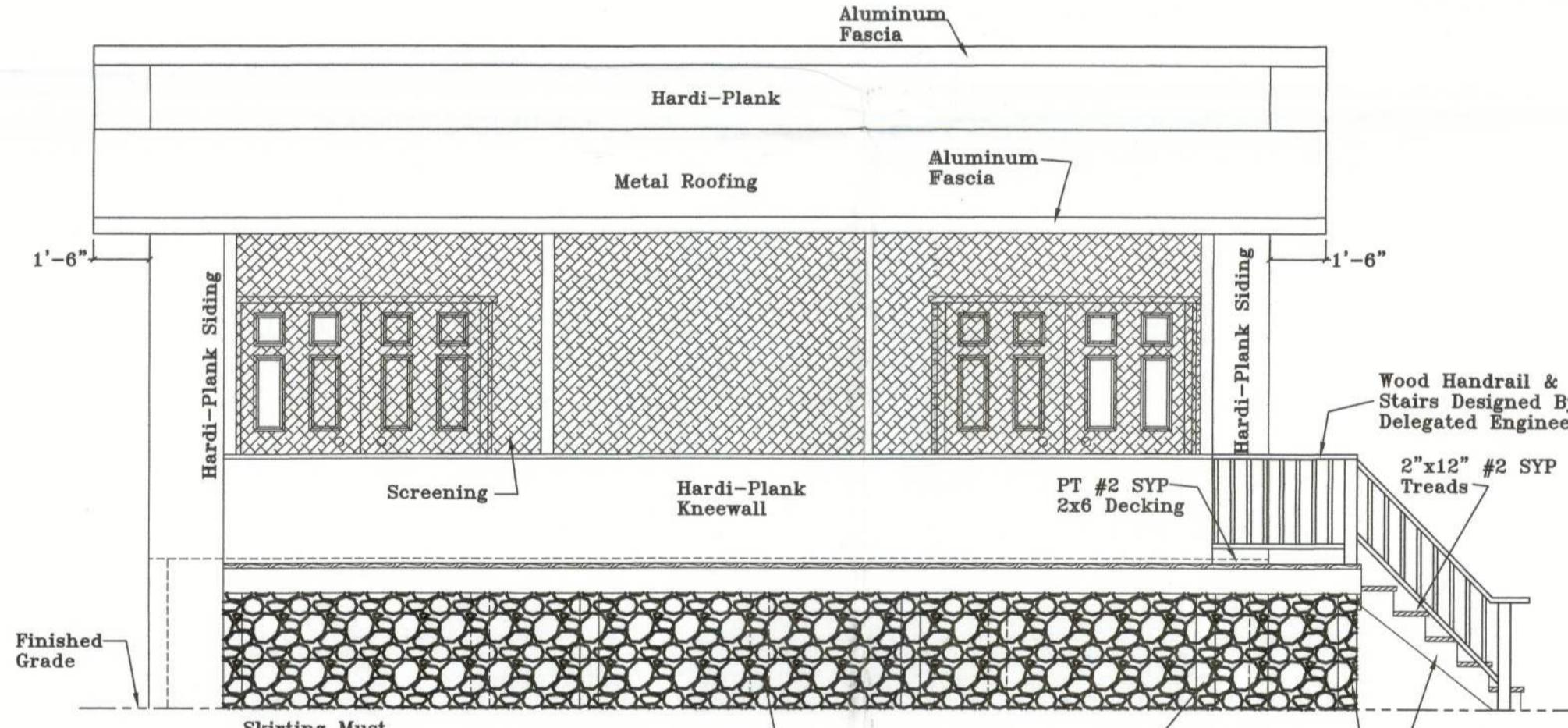
- GENERAL**
- The structural specifications shall be considered part of the contract documents for this project and shall be attached to the drawings.
 - Structural Engineer's certification (signature and seal) on this document is limited to only the structural design. Structural Engineer is not responsible for site plan verification, soils testing or verification, FEMA Velocity Zone elevation certification, electrical, mechanical or plumbing systems design, life safety code verification, occupancy limitations or requirements, ADA compliance, or the architectural design or other systems that may be shown on the same drawings. The Structural Engineer is not responsible for changes made to the signed and sealed documents without written consent from the Engineer of Record.
 - Information and materials specified in the structural specifications shall take precedence over that shown on the drawings.
 - The structural design is in compliance with the Florida Building Code, 7th. edition (2020).

- FOUNDATIONS**
- General
 - A geotechnical or soil investigation has not been performed for this site.
 - Bearing soil is presumed to be sandy soil with no organic, peat, clay, expansive clays, or boulders.
 - It is assumed that the seasonal high groundwater table is well below the footing bearing elevation.
 - It is assumed that the allowable bearing pressure is 2,000 pounds per square foot.
 - If the owner, contractor or building inspector encounters organic, clays, silts, boulders or high groundwater levels during site preparation/excavation, the Structural Engineer of Record and/or a Geotechnical Engineer shall be contacted to assess the conditions first hand and provide direction for corrective action or modifications to the design as needed.
 - Site Preparation
 - All vegetation, topsoils, roots and organic zones shall be stripped and removed from the construction area for a distance of at least 5 feet beyond the exterior of the building foundation limits. The depth of stripping shall be that required to remove significant root zones, small tree stumps and other unacceptible materials, but in no case less than 6 inches.
 - Excavations for large stumps, abandoned utilities, underground tanks, etc. shall be backfilled in layers with compaction and testing of each layer as described for placement and compaction of fill materials. Use loose backfill layer thickness appropriate for the size of the compactor being used.
 - After the site has been cleared, the exposed soils at the stripped surface within and to a point 5 feet outside the building construction area shall be proof rolled with overlapping passes with heavy rubber tired equipment. Clayey or other unsatisfactory soil shall be removed and replaced. The site shall then be compacted to densities of at least 95 percent of the modified proctor maximum dry density (ASTM D-1557) at a depth of at least 12 inches below the compacted surface. Regardless of the degree of compaction achieved, a minimum of eight complete coverages shall be made within the building area. The roller coverages shall be divided evenly into two perpendicular directions.
 - After completion of densification of existing soil, structural fill shall then be placed in lifts not exceeding 12 inches in loose thickness when using the roller previously described. Each lift shall be thoroughly compacted until densities equivalent to at least 95 percent of modified proctor maximum dry density are uniformly obtained. Structural fill shall consist of an inorganic, non-plastic, granular soil containing less than 10 percent material passing the No. 200 sieve, a relatively clean and well graded sand.
 - Compaction or recompaction of the bearing level soils loosened by the excavation process, shall be achieved by making several passes with a relatively lightweight, walk-behind vibratory sled or roller compactor.
 - Footings
 - Monolithic and stem wall foundations shall be a minimum 12" below grade.
 - The upper 12 inches of sandy bearing soils in the footing excavation bottoms shall be compacted to densities equivalent to 95 percent of the modified proctor maximum dry density.

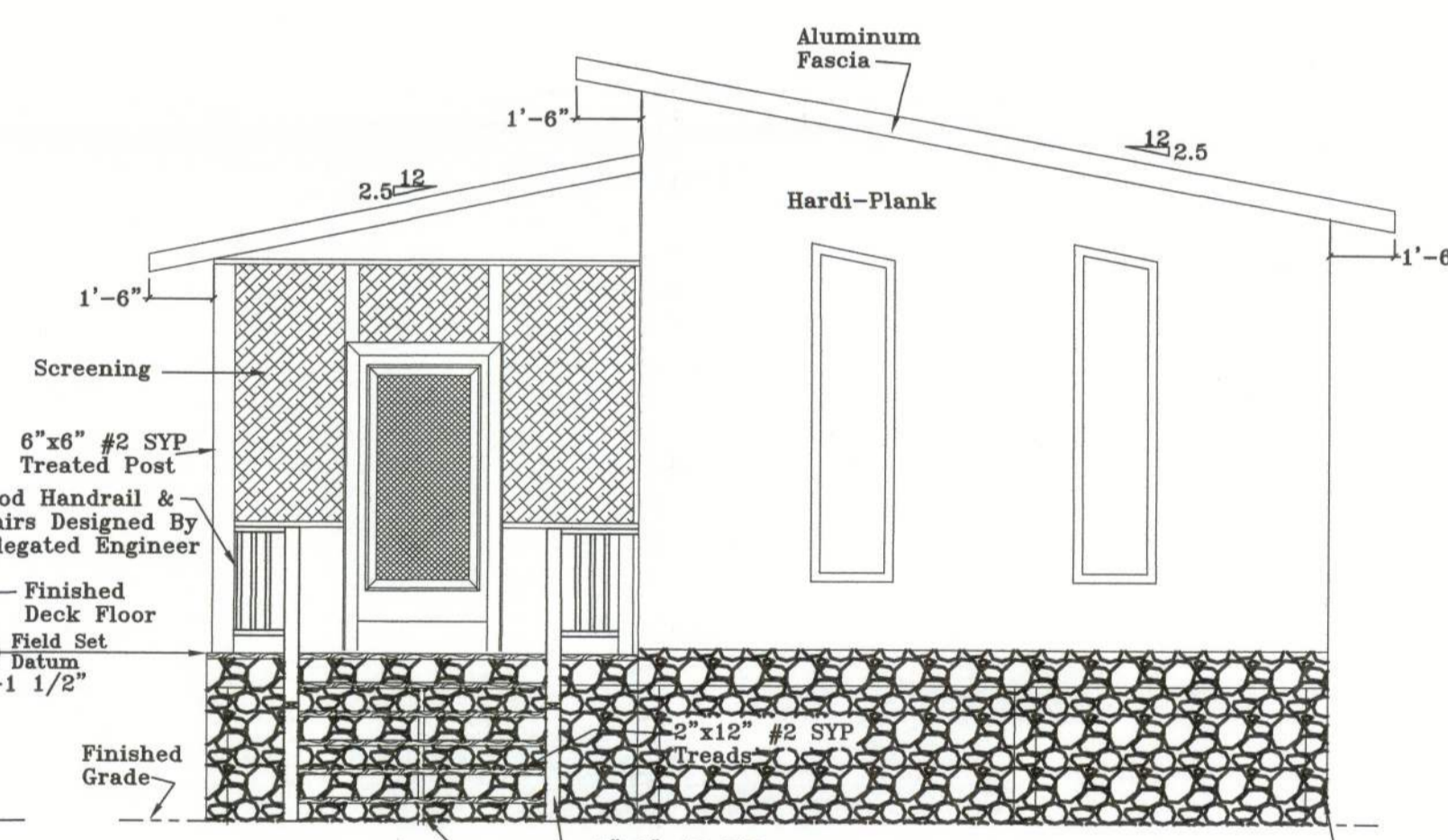
- CAST-IN-PLACE CONCRETE**
- Concrete Codes: Florida Building Code, 7th. Edition, and ACI 301-11 Specifications for Structural Concrete
 - All concrete shall be normal weight (145 pcf), with mixes designed to meet the following criteria for use in various elements of the structure as follows:

Structural Element	28-day Comp. Strength (psi)	Max. Size Aggregate	Max. W/C Ratio
Footings	3000	1"	0.55
Slab-on-Grade	3000	3/4"	0.50
Walls	3000	3/4"	0.50
 - Slump range at point of discharge: 3" to 6"
 - Water reducing and air entraining agents shall be included in design mixes. Superplasticizers may be used at the contractor's option.
 - A six mil polyethylene vapor barrier shall be placed under concrete floor slabs. Minimum lap 6 inches.

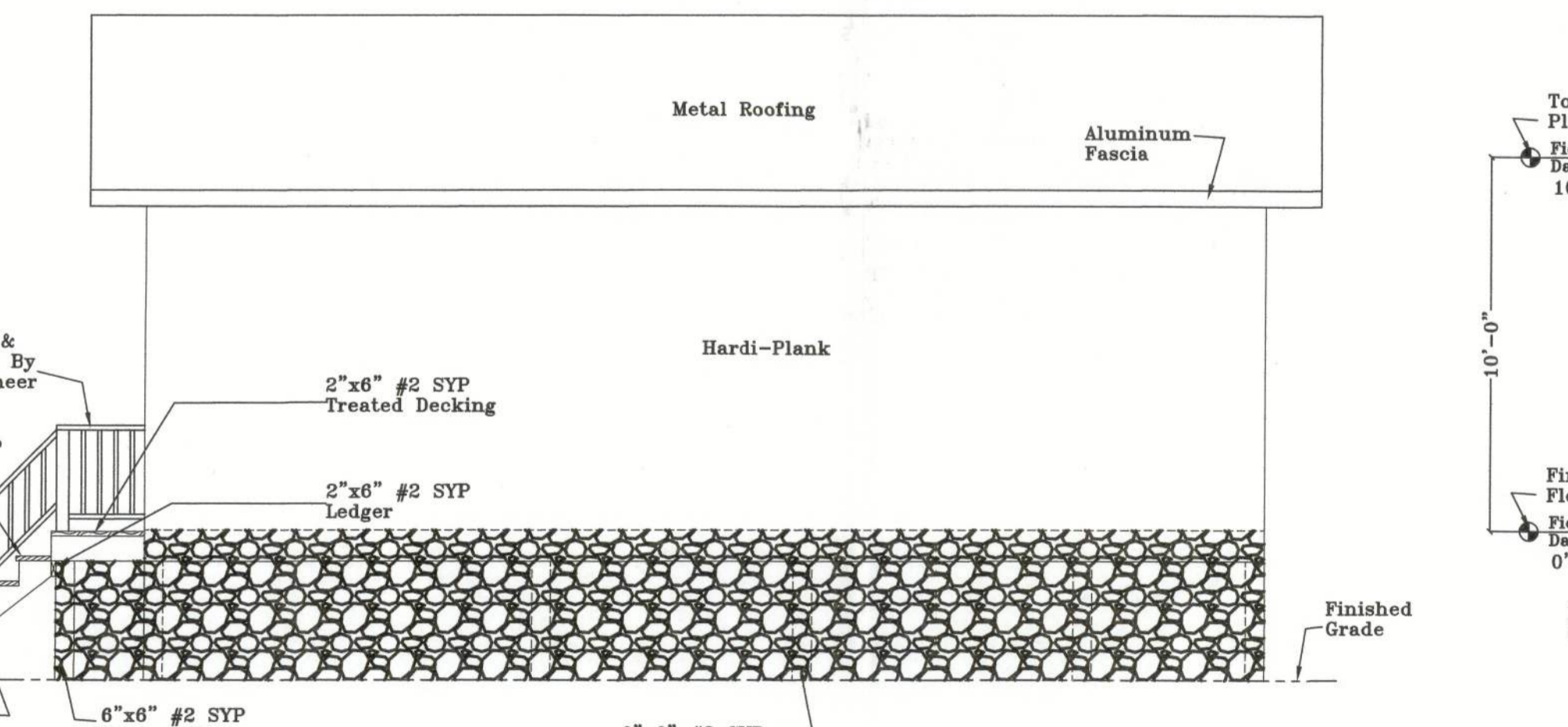
- REINFORCING STEEL**
- Reinforcing Steel - ASTM A615, Grade 40 or Grade 60
 - Welded Wire Fabric - ASTM A185 (Flat Sheets), Minimum yield strength of 70,000 psi
 - Minimum Reinforcing Steel Clear Cover (l.n.o.):
 - Concrete cast directly against earth 3"
 - Beams and Columns 1-1/2" to ties
 - Slabs-on-Grade 1-1/2" to top
 - Where specific lengths are not specified, use 48 bar diameters in masonry and 40 bar diameters in concrete.
 - Reinforcing steel shall not be tack welded for any reason.
 - Lap all welded wire fabric a minimum distance of one cross wire spacing plus 2 inches.
 - All reinforcing steel shall be supported on standard accessories, held rigidly and accurately in place, and protected against displacement before and during placement of concrete.



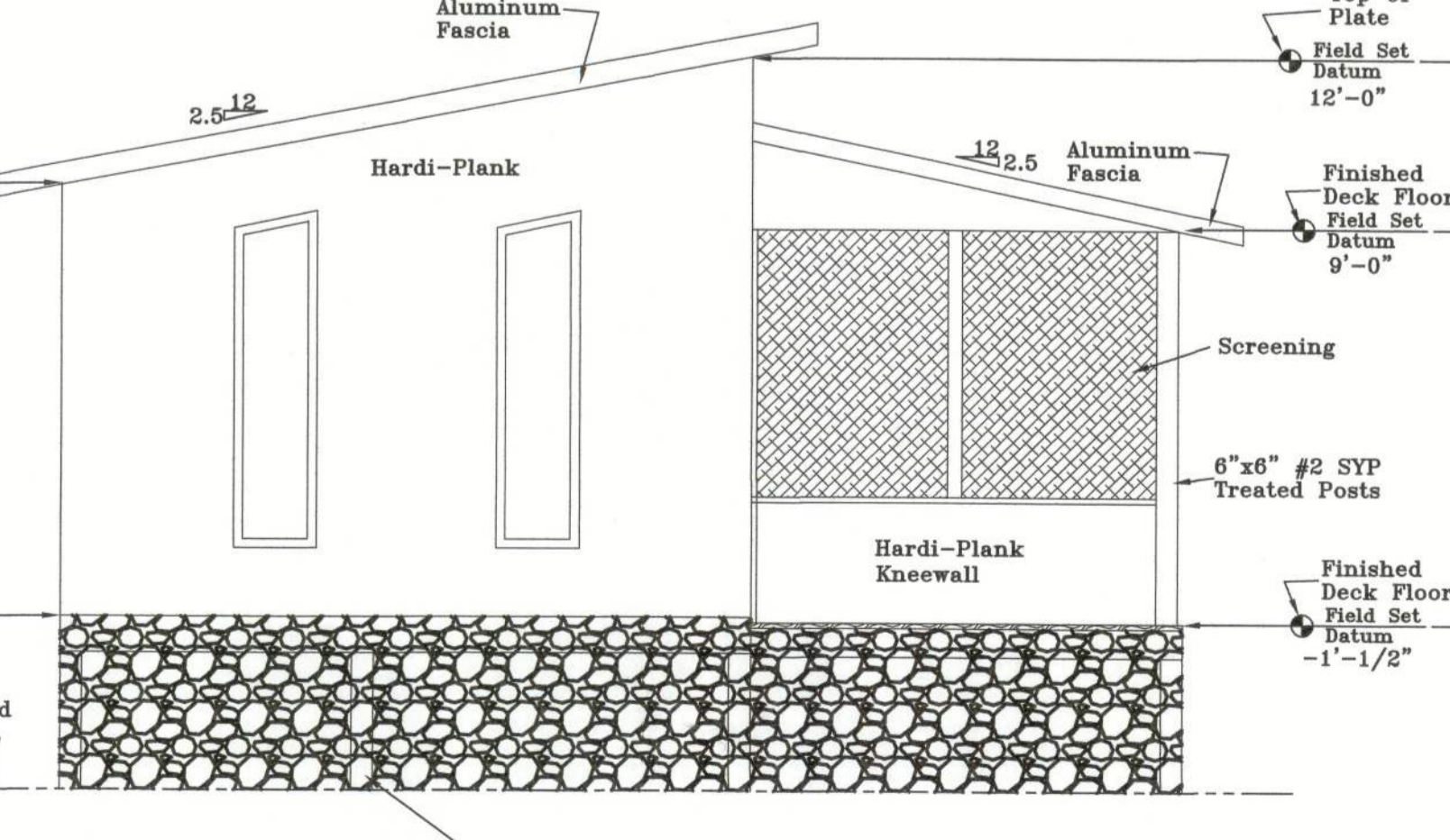
Front Elevation



Right Elevation

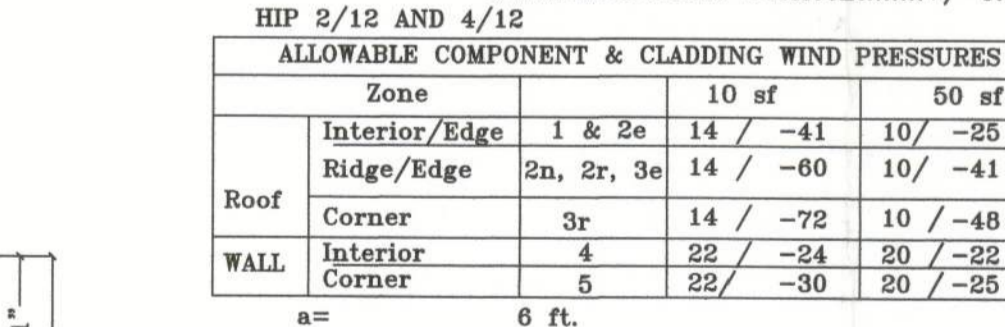


Rear Elevation



Left Elevation

Elevations



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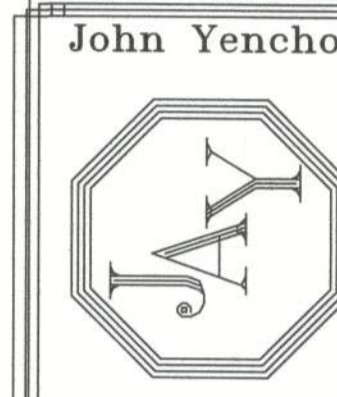
Engineers Signature/Seal On Any Sheet Is Valid Only For The Structural Design, Or To Indicate Conformance With The Structural Design.

TR Engineering LLC

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(352) 804-8773
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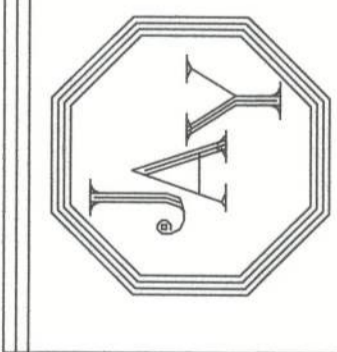


Submitted To:
Jim Mackey
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32693



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5559 SW CR 313, Trenton, Florida 32693
352/463-7282 Cell:352/359-2081

John Yencho



Drawn By
JAY

Date
10/30/22

Scale
1/4" = 1'-0"

Dwg. #
P-518-21

Sheet #
1

