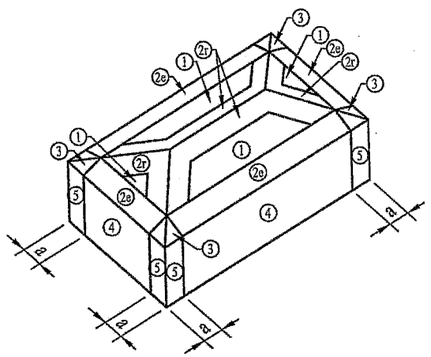
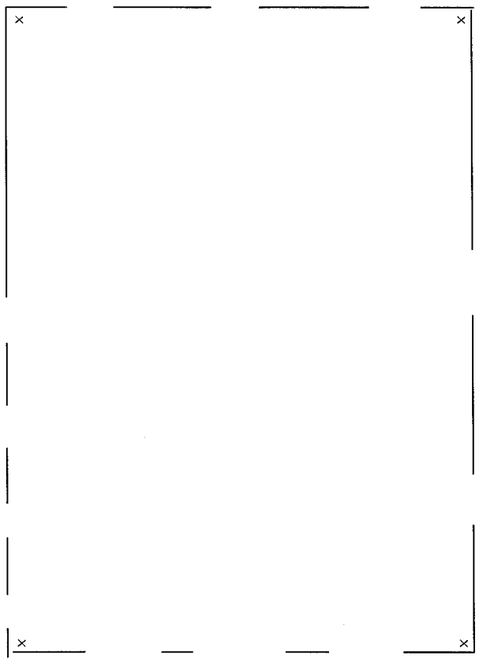
Wind Pressure Summary for C&C Zones based Upon Areas Ch 30 Pt 1 (Table 1 of 3)
All wind pressures include a load factor of 0.6

Zone	Figure	A <= 2.00 sq ft psf	A = 4.00 sq ft psf	A = 10.00 sq ft psf
1	30.3-2C	11.16 -21.30	10.26 -21.30	9.60 -21.30
2e	30.3-2C	11.16 -21.30	10.26 -21.30	9.60 -21.30
2n	30.3-2C	11.16 -33.99	10.26 -33.99	9.60 -33.99
2r	30.3-2C	11.16 -33.99	10.26 -33.99	9.60 -33.99
3e	30.3-2C	11.16 -33.99	10.26 -33.99	9.60 -33.99
3r	30.3-2C	11.16 -47.93	10.26 -47.93	9.60 -39.65
4	30.3-1	14.96 -16.23	14.96 -16.23	14.96 -16.23
5	30.3-1	14.96 -20.04	14.96 -20.04	14.96 -20.04



Hip Roof (7° ≤ Θ ≤ 45°)



× = SIMPSON HTT4 CONNECTOR

SHEAR WALLS QUANTITY
TRANSVERSAL SHEARWALLS = 42'-0"
LONGITUDINAL SHEARWALLS = 80'-0"

PROFESSIONAL SERVICES BY
DRISCOLL ENGINEERING,INC.
PO BOX 357577.
GAINESVILLE, FL 32609
PH (352)-331-1513
CA 8690

PLANS AND SPECIFICATIONS

The plans and specifications presented herein are applicable only for the anticipated construction at the locations shown. If construction plans change, the Design Professional should be notified so the plans and specifications can be re-evaluated. The Design Professional should be given the opportunity to review final plans and specifications to see if the intent of the plans and specifications has been followed and/or if supplemental details and recommendations are needed. The Design Professional warrants that the plans and specifications contained herein, have been prepared in accordance with generally accepted professional engineering practice. No other warranties are implied or expressed.

CORPORATE PROTECTION

It is understood and agreed that the Design Professional's Basic Services under this Agreement do not include project observation or review of the Contractor's performance or any other construction phase services, and that such services will be provided by the Client. The Client assumes all responsibility for interpretation of the contractor Documents and for construction observation and supervision and waives any claims against the Design Professional that may be in any way connected thereto.

In addition, the Client agrees, to the fullest extent permitted by law, to indemnify and hold the Design Professional harmless from any loss, claim or cost, including reasonable attorney's fees and costs of defense, arising or resulting from the performance of such services by other person or entities and from any and all claims arising from modifications, clarifications, interpretations, adjustments or changes made to Contract Documents to reflect changed field or other conditions, except for claims arising from the sole negligence or willful misconduct to the Design Professional.

OWNERSHIP OF INSTRUMENTS OF SERVICE

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by the Design Professional as Instruments of service shall remain the property of the Design Professional. The Design Professional shall retain all common law, statutory and other reserved rights, including the copyright thereto.

DEFECTS IN SERVICE

The Client shall promptly report to the Design Professional any defects or suspected defects in the Design Professional's work or services of which the Client becomes aware, so that the Design Professional may take measures to minimize the consequences of such a defect. The Client warrants that he or she will impose a similar notification requirement on all contractors in his or her Client/Contractor contract and shall require all subcontractors at any level to contain a like requirement. Failure by the Client, and the Client's contractors or subcontractors to notify the Design Professional, shall relieve the Design Professional of the costs of remedying the defects above the sum such remedy would have cost had prompt notification been given.

VERIFICATION OF EXISTING CONDITIONS

Inasmuch as the remodeling and/or rehabilitation of an existing building requires that certain assumptions be made regarding existing conditions, and because some of these assumptions may not be verifiable without expending additional sums of money or destroying otherwise adequate or serviceable portions of the building, the Client agrees, to the fullest extent permitted by law, to indemnify and hold the Design Professional harmless from any claim, liability or cost (including reasonable attorney's fees and costs of defense) for injury or economic loss arising or allegedly arising out of the professional services provided under this Agreement, excepting only those damages, liabilities, or costs attributable to the sole negligence or willful misconduct of the Design Professional.

Certification
I hereby certify that the accompanying wind load analysis for a new residence demonstrates compliance with the FBC 2023 8th Edition Section 1609, to the best of my knowledge.

Project Wind load Information
1. Ultimate wind speed = 130 MPH
2. Nominal wind speed = 101 MPH
3. Risk Category = II
4. Wind exposure for this design is Exposure B
5. Interior Pressure Coefficient or Gcpi = +/- 0.18
6. For design of MWFRS: see attached MECAWind Version 2.1.0.6 per ASCE 7-22
7. Roof Design live load 20 psf.
8. Floor Design load 40 psf.

Drawings
See drawings for additional details. In case of conflict, the more restrictive requirements of the drawings or these calculations govern.

1. Roof Trusses: Pre-engineered wood roof trusses at 24" o.c. provided by WB Howland.Inc . Job# 24-1632 Signed & Sealed truss engineering shall be provided to Driscoll Engineering Inc for review prior to beginning construction.

2. Roof Sheathing: Sheathing to be or 15/32" Structural Sheathing or 7/16" osb. min. to adequately resist exterior shear and uplift forces due to nailing. Panels to be facenailed w/ #8 ring shank (0.113 Dia.) @ 6" oc along edges and @ 6" oc along interior supports. Galv. metal edging to be nailed @ 4" oc.

3. Roofing : Metal roof shall be installed per mfg. specifications to meet 130 m.p.h. windloading & in accord with the Florida Building Code 2023.

Exterior load bearing & shearwalls

1 Studs: Studs: 2 x 6 @ 16" o.c.
Governing load combination: dead + wind
Fv D+W = 55 psi
Fb D-W = 1900 psi
Use: SPF No. 2 grade or better

2. Shearwall Sheathing Minimum 7/16 structural sheathing, sheathing grade; attach all edges to framing with 8d common nails @ 6" o.c. attach to intermediate framing with 8d common nails @ 12" o.c. Sheathing shall be applied to outside face of all exterior frame walls. Use same nail pattern referenced above for non-shearwall segments also. Note that 8d common nails have a min 0.131 diameter.

See this sheet for shearwalls & holdown locations for Simpson Holdown type & locations.

Headers

1. Wood headers @ windows, doors & porch 2- 2"x 12" #2 syp w/ 1/2" osb 6'-0" max

Foundations (sizes based on wind load requirements only :

(1) Stemwall footing: 20" wide x 10" deep w/ 2 #5 bars cont.
stem wall 1 #5 bar vertical @ each corner & 72" max spacing
6" 90 into slab & 24" into slab. max 32" ht.

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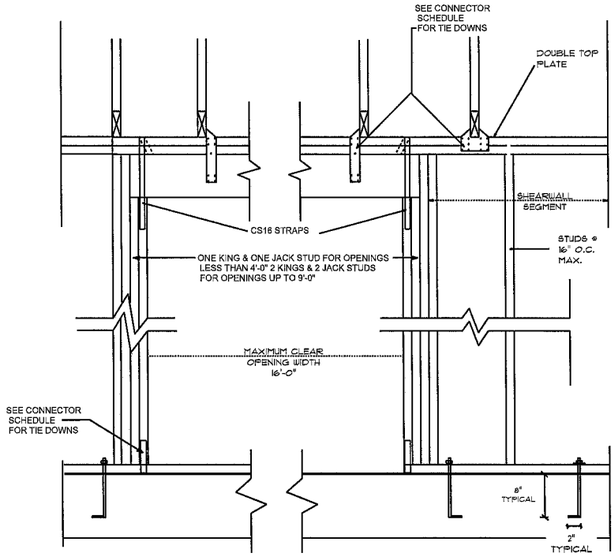
DATE: 10-2-24

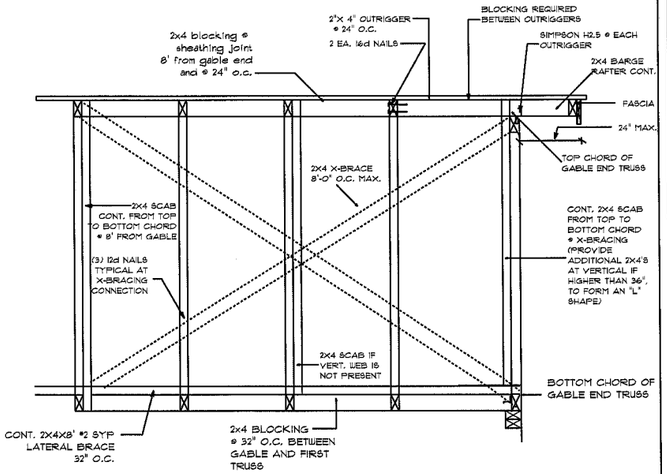
sheet WL 1

CONNECTOR SCHEDULE FOR LOAD BEARING & SHEAR WALLS

TO CONNECT	TO	NO.	PRODUCT CODE	FASTENER	UPLIFT CAPACITY LBS
STUDS	BOTTOM PLATE		H2.5	32" SPACING MAX.	360
STUDS	TOP PLATE		H2.5T	32" SPACING MAX.	535
JACK STUDS	HEADER		CS16	(22) 8d COMMON NAILS	1705
JACK STUDS	BOTTOM PLATE		H2.5		360
JACK TRUSS	TOP PLATE		H2.5T		535
TRUSS	TOP PLATE		H2.5T		535
GABLE TRUSS	TOP PLATE/ BEAM		LTS 12	@ EACH VERTICAL	
6"x 6" POST	CONCRETE		ABU66		2200
6"x 6" POST	HEADER		2- H6	8- 8d COMMON	1055 EA
HEADER	WOOD FRAME WALL		H8	8- 8d COMMON	860 EA
BOTTOM PLATE	FOOTING/ SLAB			1/2" DIA.X 12" ANCHOR BOLT W/ 2"X 2" X 1/8" WASHER @ 32" O.C. MAX. & AT EACH BOARD END & OPENING 7" MIN. EMBED	2200
BOTTOM PLATE / WALL	FOOTING/ SLAB		HTT4	1- 5/8" DIA./18-16D COMMON AS SHOWN ON HOLDDOWN LOCATION SHEET	3080



LOAD BEARING WALL OPENING FRAMING DETAIL



NOTES:
1) Unbraced length of x-bracing may not exceed 10 ft. If length exceeds 10 ft., additional scabs are required.
2) Siding omitted for clarity.

FRAMING GABLE END

Concrete Construction Notes

1. Concrete work shall conform to "Building Code Requirements for Reinforced Concrete" (ACI-318) and "Specifications for Structural Concrete" (ACI-301), Latest Edition.
2. Concrete mix shall conform to the following specifications. All concrete mixes shall contain a water-reducing admixture conforming to ASTM C-494. Air-entraining admixture shall conform to ASTM C-260.

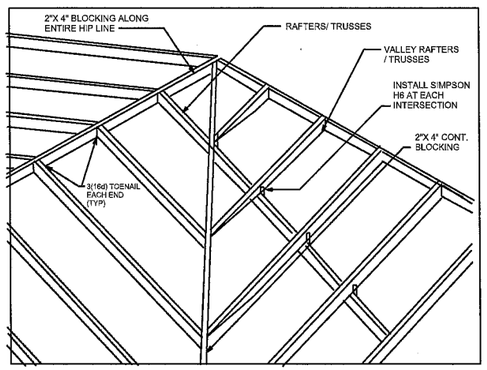
CONCRETE MIX A

Ultimate Compressive Strength @ 28 days	3,000 PSI
Slump Range	4" +/- 1"
Maximum Aggregate Size	1"
Entrained Air	None
Dry Weight per Cubic Foot	150 #

3. All concrete shall be cured for a minimum of 28 days. If forms for vertical surfaces are removed prior to the end of the curing period, spray surfaces with liquid membrane curing compound.
4. Reinforcing steel shall conform to ASTM A615, Grade 40 (Fy=40 ksi). Lap continuous bars for tension lap splice per ACI-318, unless otherwise noted. Provide corner bars of same size and spacing as horizontal wall reinforcement. Cover for concrete reinforcing steel shall be in accordance with ACI-318, Paragraph 7.7.
5. Welded wire fabric (WWF) shall conform to ASTM A185. Lap sheets two mesh spaces and wire tie adjacent sheets together securely. Cut alternate reinforcement at control joints.
6. All slabs on grade shall have construction or control joints not to exceed 10' - 0" spacing, unless otherwise noted.
7. Electrical conduit and other pipes to be embedded in structural concrete floor slabs or walls shall be placed in accordance with the requirements of ACI-318, Paragraph 6.3.

Masonry Construction Notes

1. Concrete masonry work shall conform to "Building Code Requirements for Masonry Structures" (ACI 530-02/ASCE5-02) and "Specifications for Masonry Structures: (ACI 530.1-02/ASCE6-02).
2. Concrete masonry units shall be Type 1 and comply with "Standard Specifications for Hollow Load-Bearing Concrete Masonry Units" (ASTM C90-90).
3. The minimum net area compressive strength of masonry (f'm), as determined by the unit strength method, shall be 1500 psi.
4. Mortar shall conform to ASTM C270. Type M Mortar shall be used unless otherwise noted. Type S Mortar shall be used with masonry in contact with earth.
5. Masonry column reinforcement shall have #2 ties in the bed joints at 8" oc, unless otherwise noted.
6. Grout for filling block cores and bond beams shall have a minimum compressive strength (f'c) of 3,000 psi at the age of 28 days.



CONTINUOUS 2"X 4" MIN. VALLEY BLOCKING
(2) EACH 16d TOENAILS EACH END EACH PIECE.
ROOF SHEATHING FROM ADJACENT PLANES TO BE CONNECTED TO COMMON RAFTERS & BLOCKING

SHEATHING MAY BE PROVIDED BETWEEN MAIN ROOF TRUSSES & VALLEY SET TRUSSES

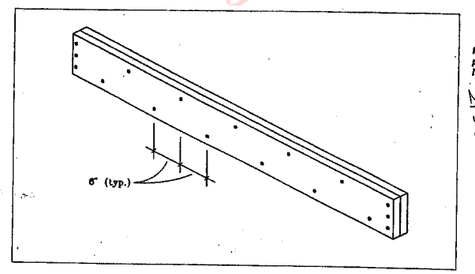


Figure 20. Nailing pattern for nail-laminated beams.

Note:
use 16d nails (typ)

BEAM LAMINATE

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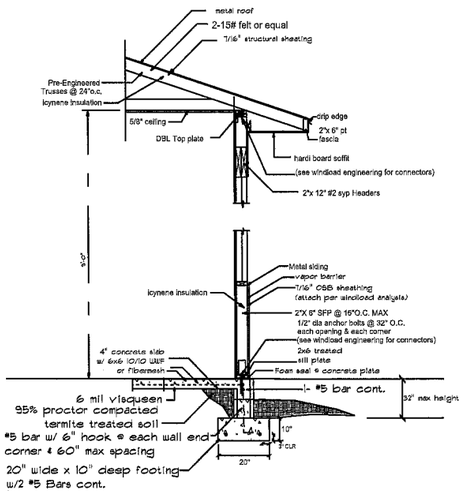
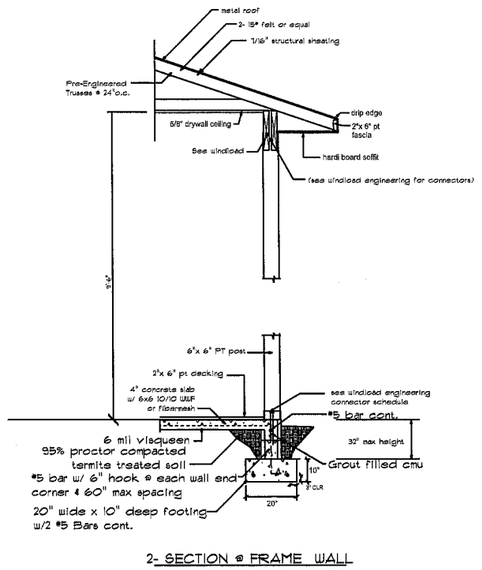
sheet WL 2



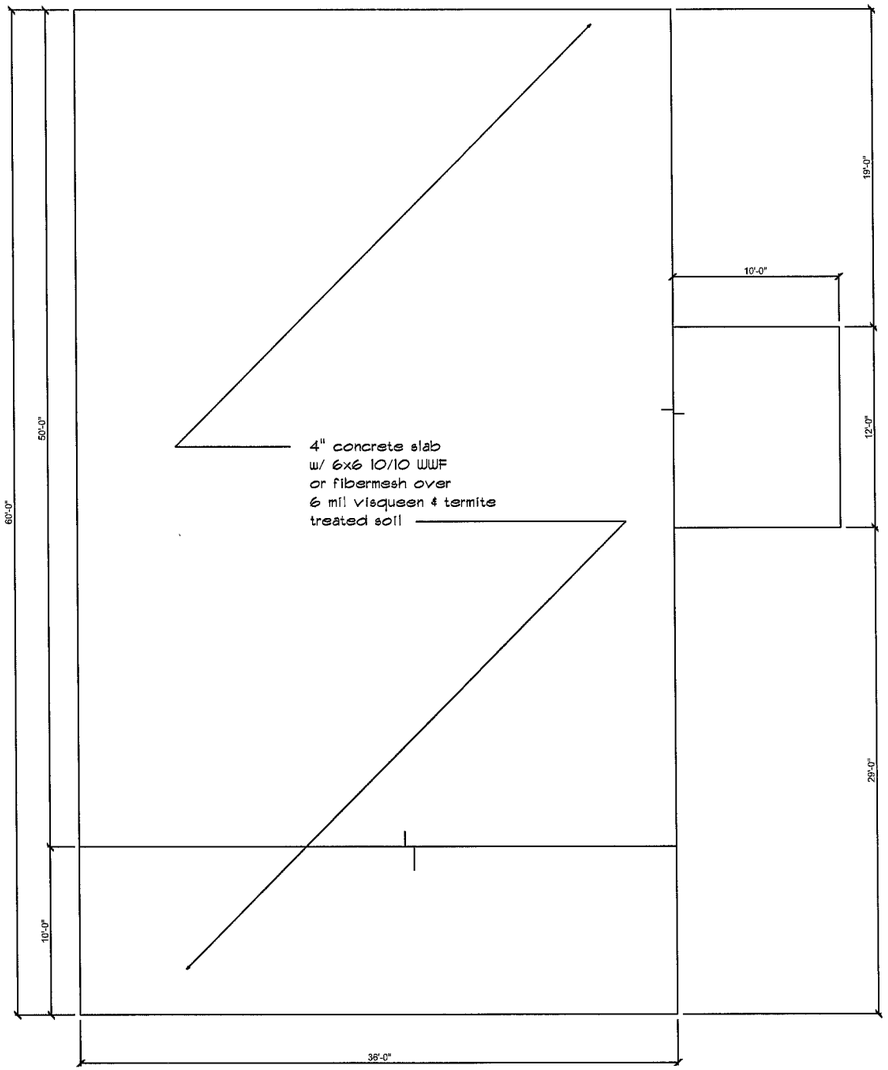
1- SECTION @ FRAME WALL

SCALE: NTS



2- SECTION @ FRAME WALL

SCALE: NTS



FOUNDATION PLAN

concrete porches require 2% min. slope from house

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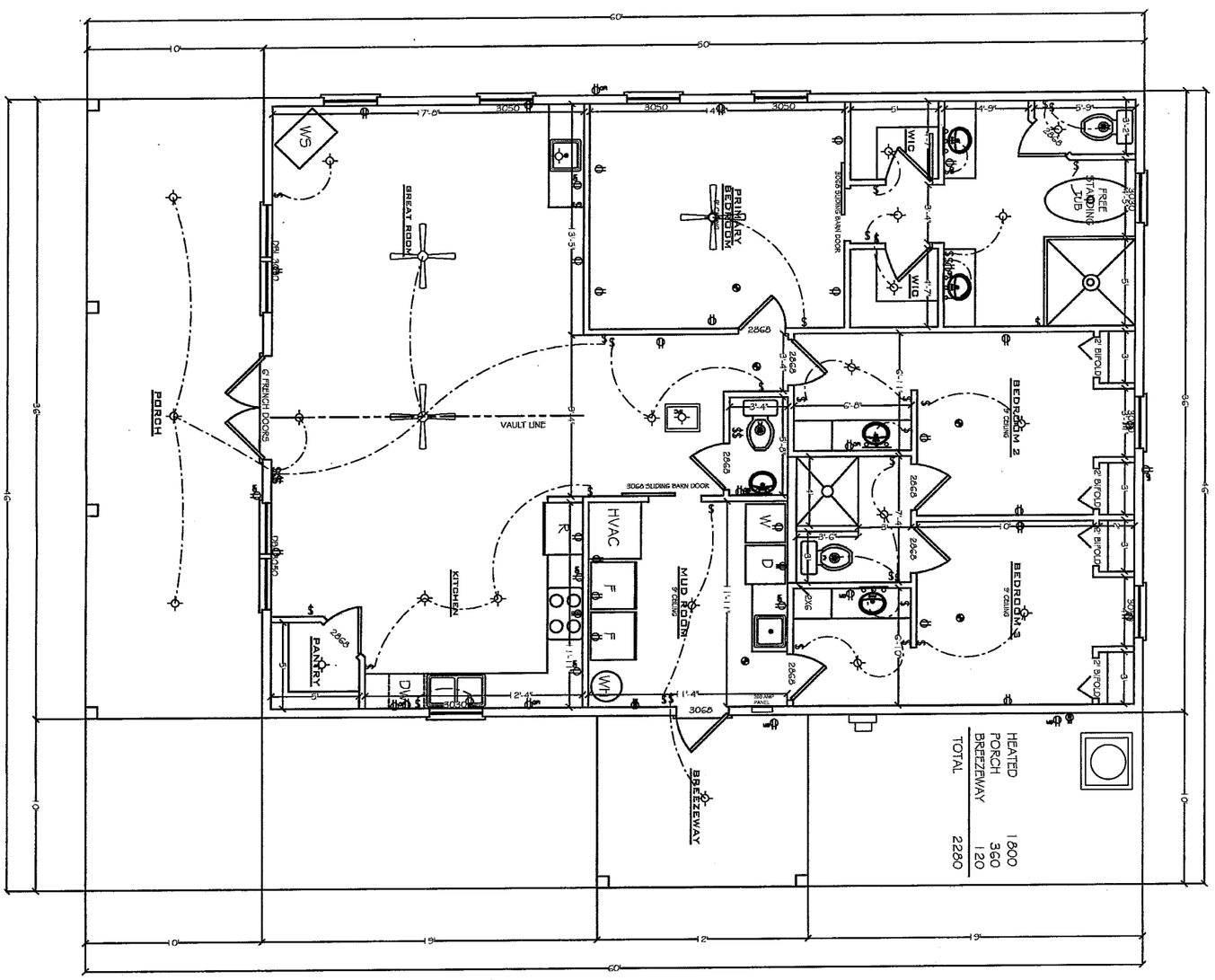
sheet F

ELECTRICAL PLAN



Electrical symbols	
single pole switch	$
dimmer switch	$D
3 way switch	$3
110V outlet	
220 OUTLET	
GFI outlet	
GFI outlet	
std overhead light	
recessed light	
ceiling exhaust fan &/or light	
wall mount light fixture	
std overhead light	
double flood lights	
track bar light	
vanity bar light	
basement light	
ceiling fan - light	
smoke/ carbon monoxide detector	
phone outlet	
tv outlet	
THERMOSTAT	

sheet	DATE: 10-2-24	VANMESBURGER 1168 SW CUMORAH HILL ST FT WHITE, FL DS24-80	
EL			