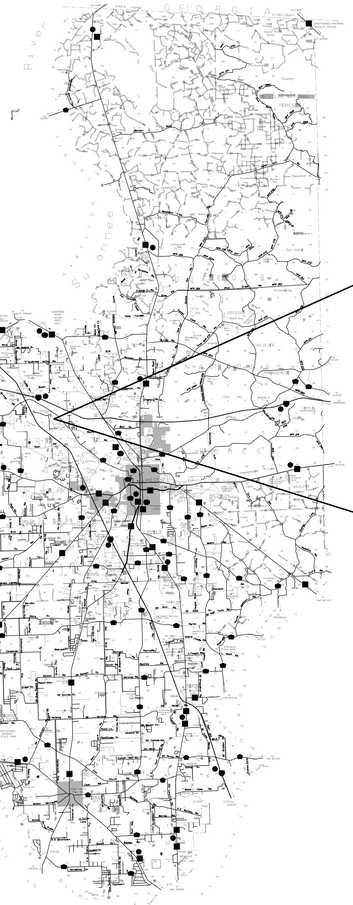
WIDERGREN GARAGE/CARPORT
NW BRINKLEY TERRACE
COLUMBIA COUNTY, FL



THIS ITEM HAS BEEN DIGITALLY
SIGNED AND SEALED BY

Christopher Q Dicks

Digitally signed by Christopher Q Dicks
DN: CN=Christopher Q Dicks,
OU=License A0141/0000001791044C76A00115687,
O=Florida, C=US
Reason: I am the author of this document
Date: 2022.11.20 18:42:41-05'00'

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT
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SEALED AND THE SIGNATURE MUST BE
VERIFIED ON ANY ELECTRONIC COPIES

CHRISTOPHER Q. DICKS
LICENSE
No. 64766
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

CHRISTOPHER Q. DICKS, P.E. NO. 64766
4037 SE COUNTY ROAD 252
LAKE CITY, FL 32025

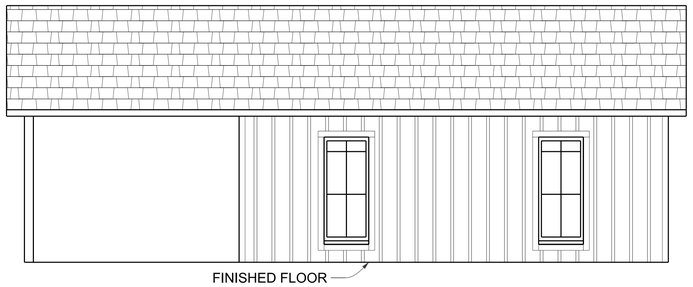
THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61g15-23.004, F.A.C.

PLAN SHEET INDEX

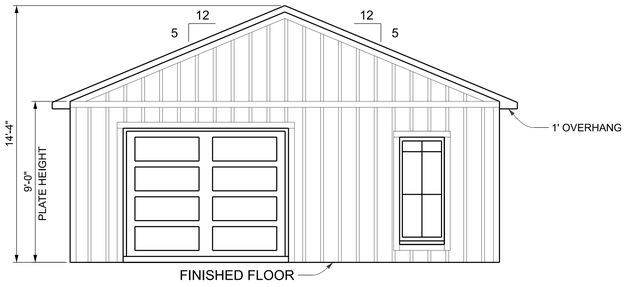
PLANS PREPARED BY:
CHRISTOPHER Q. DICKS, P.E. 64766
4037 SE CR 252, LAKE CITY, FL 32025

WIDERGREN GARAGE/CARPORT
COLUMBIA COUNTY, FLORIDA

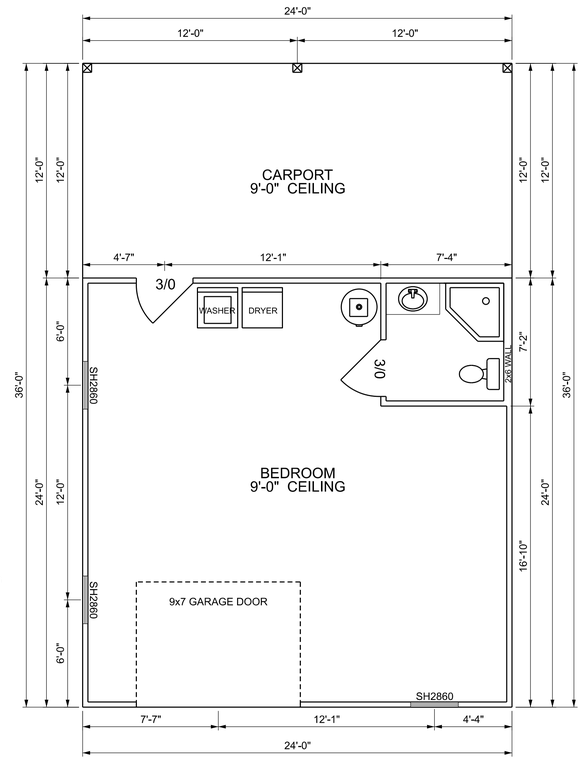
0 4' 8'
scale



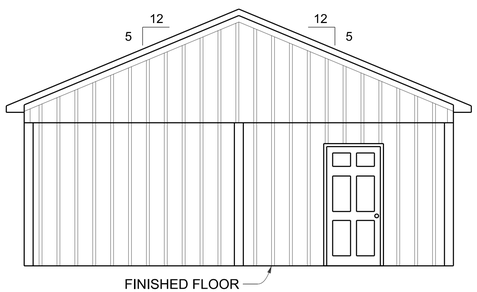
LEFT ELEVATION



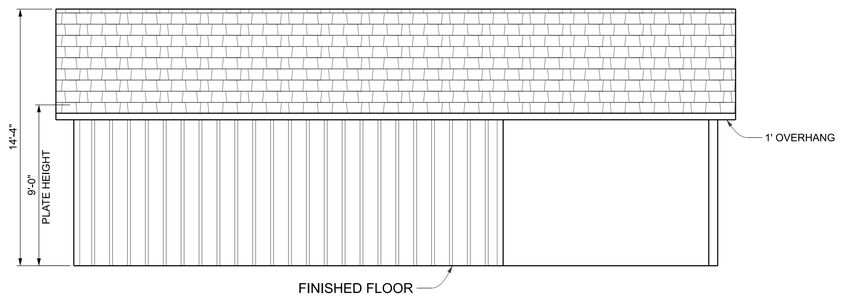
FRONT ELEVATION



FLOOR PLAN



REAR ELEVATION



RIGHT ELEVATION

SQUARE FOOTAGE	
GARAGE	576 SF
CARPORT	288 SF
TOTAL	864 SF

PLANS PREPARED BY:
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4037 SE CR 252, LAKE CITY, FL 32025

WIDERGREN GARAGE/CARPORT
COLUMBIA COUNTY, FLORIDA

SHEET
2
OF
5

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SEALED ROOF PLAN OPTIONS:

OPTION I

A layer of self-adhering polymer-modified bitumen underlayment complying with ASTM D1970 applied over the entire roof.

OPTION II

Either
(A min. 4-inch wide strip of self-adhering polymer-modified bitumen complying with ASTM D1970
or
A min. 3 3/4 - inch wide strip of self adhering flexible flashing tape complying with AAMA 711)
applied over all joints in the roofing deck.
with

One layer of 30# felt underlayment complying with ASTM D226 Type II, ASTM D4869 Type III or IV, or ASTM D6757, or a synthethic underlayment complying with ASTM D226 Type II (min. tear strength 15 lbf ASTM D4533, min. tensile strength 20 lbf/in ASTM D5035)

See installation below:

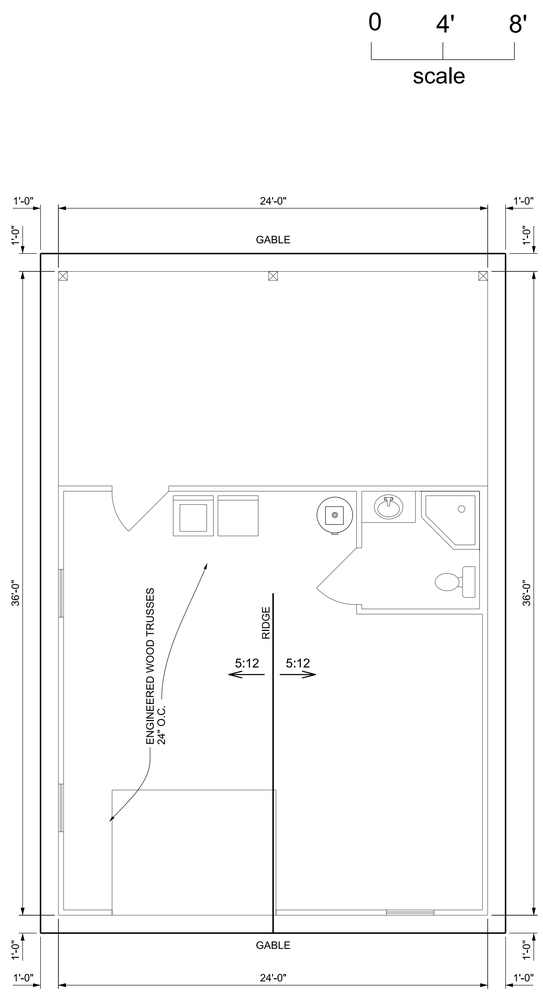
OPTION III

Two layers of 30# felt underlayment complying with ASTM D226 Type II, ASTM D4869 Type III or IV, or ASTM D6757, or a synthethic underlayment complying with ASTM D226 Type II (min. tear strength 15 lbf ASTM D4533, min. tensile strength 20 lbf/in ASTM D5035)

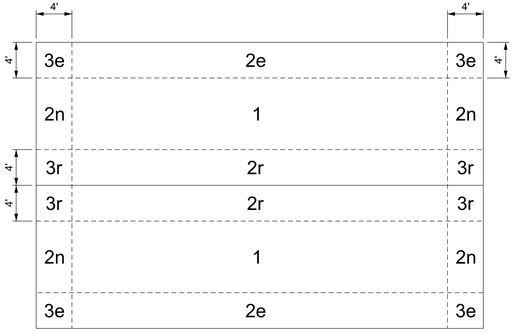
See Installation below:

Installation:
Apply a 19-inch strip of underlayment felt parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36-inch-wide sheets of underlayment, overlapping successive sheets 19 inches; end laps shall be 6 inches and shall be offset by 6 feet.
The underlayment shall be attached to a nailable deck with corrosion-resistant fasteners with one row centered in the field of the sheet with a maximum fastener spacing of 12 inches o.c., and one row at the end and side laps fastened 6 inches o.c. Underlayment shall be attached using annular ring or deformed shank nails with metal or plastic caps with a nominal cap diameter of not less than 1 inch.
Metal caps shall have a thickness of not less than 32-gage sheet metal. Powerdriven metal caps shall have a minimum thickness of 0.010 inch. The minimum thickness of the outside edge of plastic caps shall be 0.035 inch. The cap nail shank shall be not less than 0.083 inch for ring shank cap nails. The cap nail shank shall have a length sufficient to penetrate through the roof sheathing or not less than 3/4 inch into the roof sheathing.

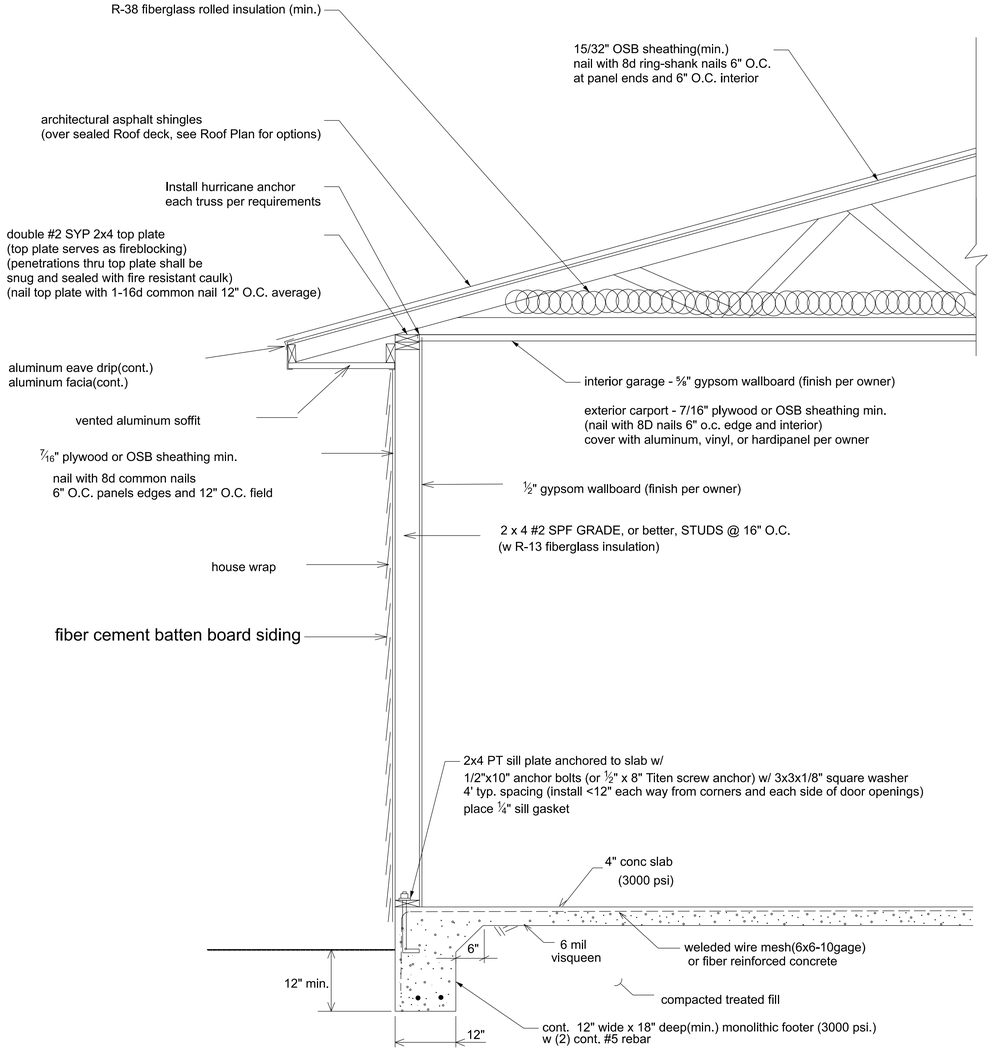
ROOF SHEATHING FASTNERS			
PRESSURE ZONE	SHEATHING TYPE	FASTNER	SPACING
ALL ZONES	15/32" OSB	(2 3/8" x 0.113") RING SHANK NAILS	6" O.C. EDGE 6" O.C. FIELD



ROOF PLAN



ROOF COMPONENT AND CLADDING PRESSURE ZONES
(GABLE ROOF) (7 TO <= 45 DEGREES)



TYPICAL WALL SECTION (N.T.S.)

PLANS PREPARED BY:
CHRISTOPHER Q. DICKS, P.E. 64766
4037 SE CR 252, LAKE CITY, FL 32025

WIDERGREN GARAGE/CARPORT
COLUMBIA COUNTY, FLORIDA

DESIGN CRITERIA

1. DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 7TH EDITION (2020).

   CODE REFERENCES:
   BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-14)
   SPECIFICATIONS FOR STRUCTURAL CONCRETE BUILDINGS (ACI 301-16)
   BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530-13)
   NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, 2015 EDITION
   APA PLYWOOD DESIGN SPECIFICATION
   NATIONAL ELECTRICAL CODE, 2017

3. ALL COMPONENTS, SYSTEMS AND EQUIPMENT NOT SPECIFICALLY COVERED BY THESE PLANS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE CODE(S).

4. PROJECT INFORMATION

OCCUPANCY GROUP:	R-3
MEAN ROOF HEIGHT:	12'
ROOF CROSS SLOPE:	5:12, (see elevations)
WALL HEIGHT:	9' above slab
ROOF SNOW LOAD:	ZERO psf
SEISMIC DESIGN CATEGORY:	A
FLOOD DESIGN DATA:	ZONE X

5. WIND LOADS IN ACCORDANCE WITH ASCE MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7)

   FLOOR AND ROOF LIVE LOADS

UNINHABITABLE ATTICS:	20 psf
HABITABLE ATTICS:	30 psf
ALL OTHER ROOMS:	40 psf
ROOFS:	20 psf

   WIND DESIGN DATA

ULTIMATE DESIGN WIND SPEED, Vult, (3-SECOND GUST):	120 mph
NOMINAL DESIGN WIND SPEED, Vasd	93 mph
EXPOSURE CATERGORY:	B
IMPORTANCE FACTOR:	1.0
RISK CATEGORY:	II
ENCLOSURE CLASSIFICATION:	ENCLOSED
INTERNAL PRESSURE COEFFICIENT:	+/- 0.18

   COMPONENT AND CLADDING DESIGN PRESSURES (psf)

ROOF ZONE 1,2e:	9.6	-13.34
ROOF ZONE 2n:	9.6	-26.52
ROOF ZONE 2r:	9.6	-16.43
ROOF ZONE 3e:	9.6	-26.52
ROOF ZONE 3r:	9.6	-30.17
WALL ZONE 4:	10.08	-11.16
WALL ZONE 5:	11.69	-14.95

6. STRUCTURAL DESIGN CRITERIA

   LIVE LOADS

ROOF:	20 psf
RESIDENTIAL FLOOR:	40 psf

   WIND LOADS (BASED ON ASCE 7-16)

VELOCITY:	120 mph, USE FACTOR 1.0

   CONCRETE STRENGTH @ 28 DAYS: 3000 psi

   REINFORCING:

WELDED WIRE FABRIC SHALL CONFORM TO	ASTM A185
ALL REINFORCING BARS	ASTM A615-40 40,000PSI
ALL STIRRUPS AND TIES	ASTM A615-40 40,000PSI

   CONCRETE MASONRY UNITS:
   ASTM C90-99b, STANDARD WEIGHT UNITS, fm=1500 psi

MORTOR TYPE "S"	1800 psi
CONCRETE GROUT	3000 psi

   STRUCTURAL STEEL:
   ALL STRUCTURAL AND MISCELLANEOUS STEEL A36 36,000 psi, U.N.O.
   ALL BOLTS CAST IN CONCRETE: ASTM A36 OR ASTM A-307

   WOOD FRAMING:
   BEAMS, RAFTERS, JOIST, PLATES, ETC. U.N.O.
   NO. 2 SOUTHERN YELLOW PINE (19% M.C.)
   ROOF DECK: PLYWOOD C-C/C-D, EXTERIOR OR OSB
   WALL SHEATING: PLYWOOD C-C/C-D, EXTERIOR OR OSB

   WOOD ROOF TRUSSES (DESIGN LOADS):

TOP CHORD LIVE AND DEAD LOAD	30 psf
BOTTOM CHORD DEAD LOAD	10 psf
TOTAL	40 psf

   SOIL BEARING VALUE:
   ASSUMED ALLOWABLE SOIL BEARING PRESSURE AFTER COMPACTION: 2000 psf

TRUSS ANCHORS:

Install the following Simpson anchor(s) at each truss to exterior wall, interior load bearing wall, and porch beam locations.

Single ply trusses - install Simpson H10A

WALL STRAP TIES:

At the top and bottom of the wall, install one Simpson SP4 at each side of doors and windows 4' or less in width, install two Simpson SP4s at each side of doors and widows larger than 4' but less than 6'. For interior load bearing walls install one SP4 top and bottom of wall at 32" o.c. and each side of door openings.

At garage door opening,
Install three Simpson SP4 on each side at the bottom of the wall. Install three Simpson LSTA18 (nails - 0.148 x 2 1/2) on each side at the top of the wall (double top plate, header, cripples)

(5/8" threaded rod, embedded 10" into slab with Simpson epoxy or coupled with 5/8" Simpson Titen HD Screw Anchor, up thru double top plate with 3" square plate washer may be substituted for SP4 installations)

SHEATHING:

Wall sheathing shall be installed with long dimension vertical on exterior walls and full-depth blocking shall be required at horizontal joints in sheathing.

COLUMNS AND BEAMS:

Columns shall be 6"x6" PT.
Load Bearing Beam(s): 2 - 1.75" x 11.875" LVL (2.0 x 10^6 E min.)
Install Simpson PBS66(ZMAX) for column connections to slab, orient strap to resist 24' width.
For column top Install Simpson AC6MAX at each column to beam connection. (ACE6MAX may be installed at end columns)
Install Simpson HUCQ412-SDS at beam to exterior wall locations.

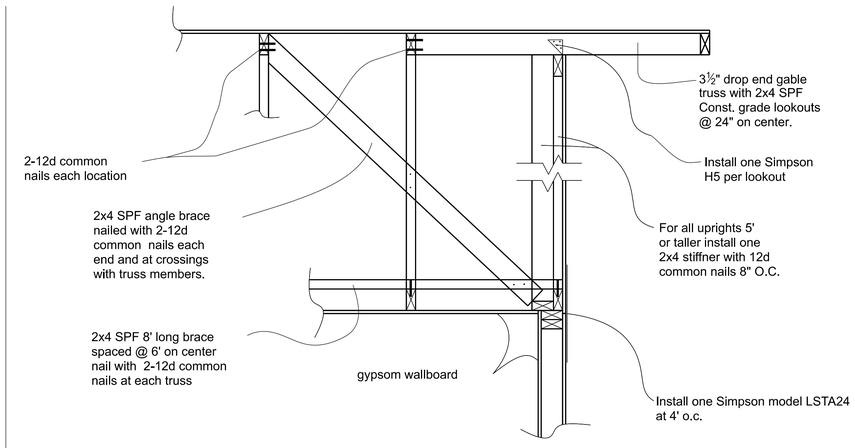
CARPORT CEILING:

Install 7/16" sheathing nailed with 8d nails 6" o.c.
and cover with solid aluminum or vinyl soffit material or hardipanel.

GABLE ENDS:

At gable ends install one Simpson model H5 anchor where lookouts connect to end gable truss.

BRACING: At each gable end install one 2x4 SPF 8' stud spaced 6' on center horizontal along top of bottom chord of trusses, nail with 2-12d nails at each truss including end truss. In addition, install a 2x4 brace extending from this stud at the gable end truss 45 degrees to truss at roof sheathing, nail with 2-12d nails where it crosses truss members and at ends. Gable end truss shall be built to recieve sheathing with vertical members 2' on center(see Detail).



GABLE END BRACING DETAIL (N.T.S.)

NOTE: Gable end trusses shall be dropped 3½" for construction of lookouts & overhang.

HEADER SCHEDULE:

LOCATION	HEADER	KING STUDS / JACK STUDS
DOORS AND WINDOWS (0' to < 4')	2 - 2"x12" SYP w/ 7/16" PLYWOOD BETWEEN	1/1
DOORS AND WINDOWS (4' to <= 6')	2 - 2"x12" SYP w/ 7/16" PLYWOOD BETWEEN	2/2
GARAGE DOORS	2 - 1.75" x 11.875" LVL (2.0 x10^6 E min.)	4/3

DESIGN CRITERIA / STRAPPING AND ANCHOR REQUIREMENTS

CHRISTOPHER Q. DICKS LICENSE No. 64766 STATE OF FLORIDA PROFESSIONAL ENGINEER

PLANS PREPARED BY:
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4037 SE CR 252, LAKE CITY, FL 32025

WIDERGREN GARAGE/CARPORT
COLUMBIA COUNTY, FLORIDA

SHEET 4 OF 5

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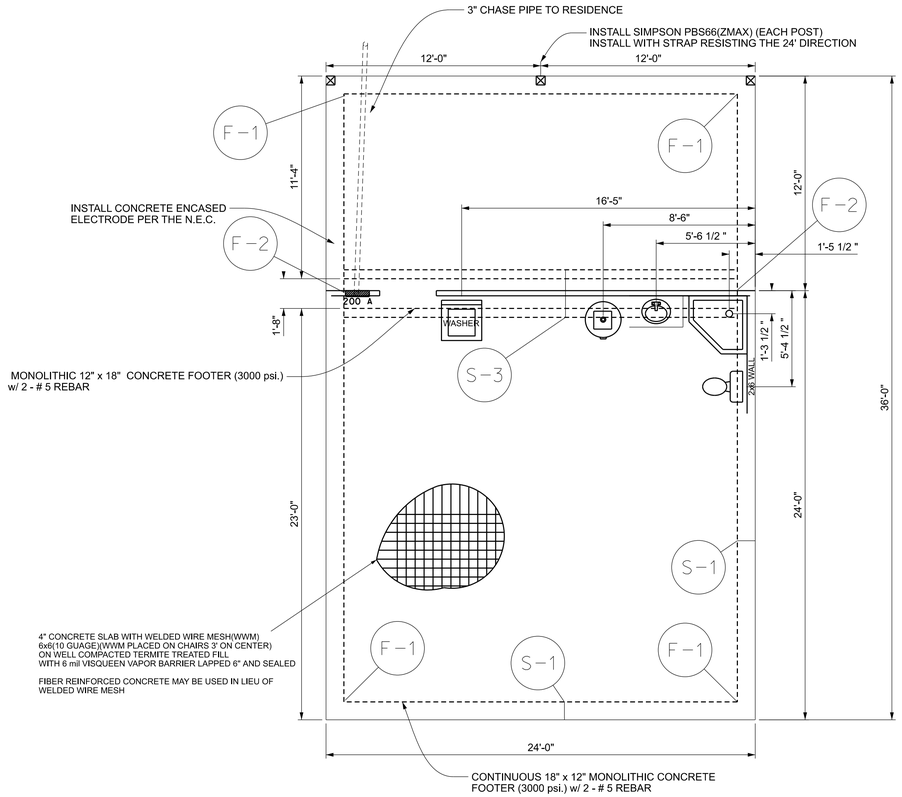
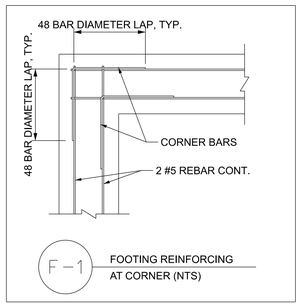
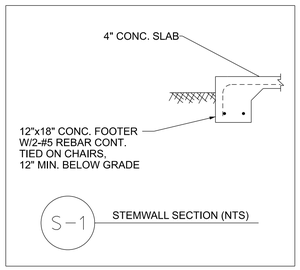
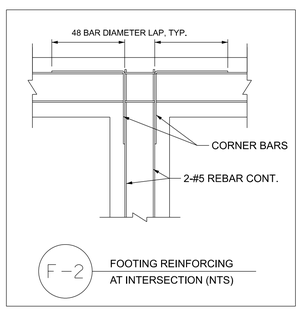
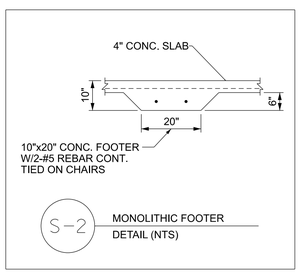




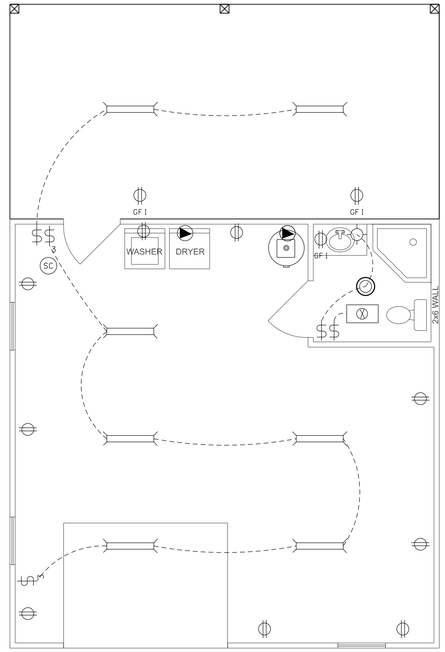






FOUNDATION PLAN

0 4' 8'
scale



ELECTRICAL PLAN

ELECTRICAL LEGEND

- LED LIGHT FIXTURE
- LIGHT FIXTURE
- RECESSED CAN LIGHT FIXTURE
- SINGLE POLE SWITCH
- THREE-WAY SWITCH
- RECEPT.
- GFI RECEPT OR PART OF A GFI CIRCUIT.
- SECURITY LIGHT
- 220 V.
- SMOKE/CARBON MONOXIDE DETECTOR COMBINATION (AC/DC and interconnected)

NOTES:

1. ALL ELECTRICAL COMPONENTS, EQUIPMENT AND SYSTEMS SHALL COMPLY WITH THE PROVISIONS OF NFPA 70, NATIONAL ELECTRICAL CODE (LATEST EDITION) AND THE FLORIDA BUILDING CODE (LATEST EDITION).
2. INSTALL A CONCRETE ENCASED ELECTRODE WITHIN THE FOUNDATION (see Foundation Plan) PER THE N.E.C.
3. ALL EXTERIOR RECEPTACLES SHALL BE WEATHERPROOF.
4. ALL RECEPTACLES SHALL BE CHILD RESISTANT.

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SHEET 5 OF 5

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