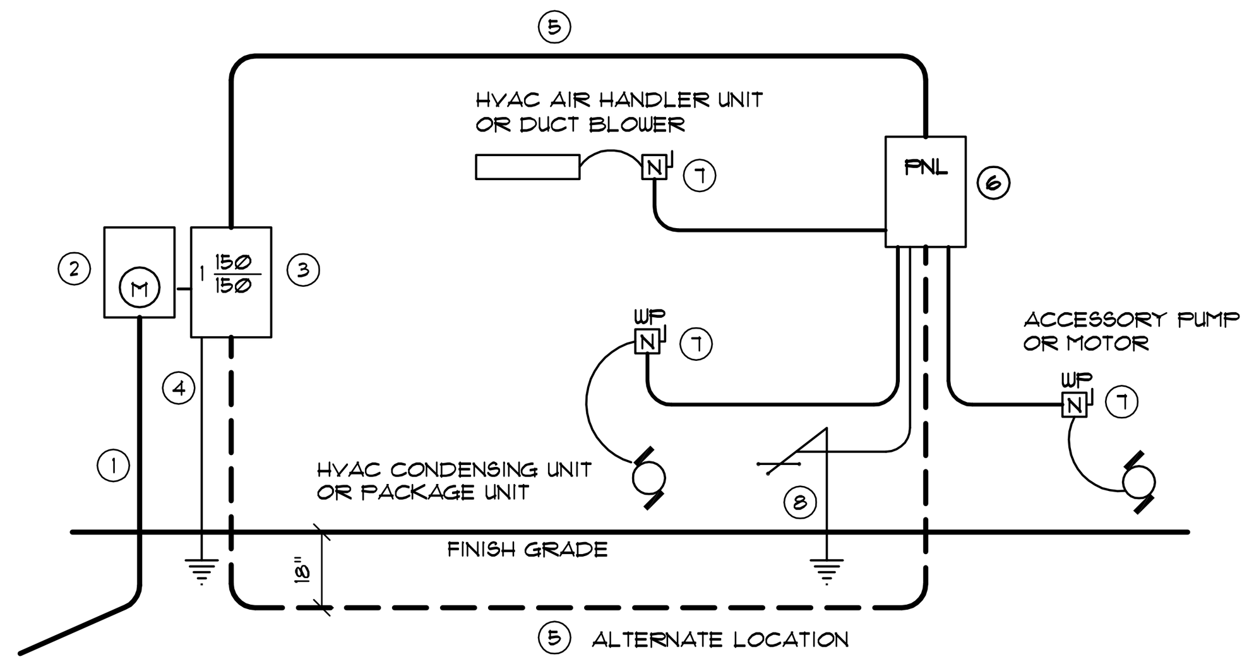
Electrical SYMBOLS

- SPST WALL SWITCH
- DPDT WALL SWITCH (3-WAY)
- DUPLEX WALL RECEPTACLE
- DUPLEX WALL RECEPT., BELOW COUNTER
- 240V OUTLET
- GND FAULT INTERRUPTER DUPLEX RECEPT.
- WEATHER PROOF GFI DUPLEX RECEPT.
- DUPLEX WALL RECEPTACLE, ½ SWITCHED
- MOTOR
- ELECTRICAL PANEL
- EXHAUST FAN
- DBL. LAMP INC. FLOOD LIGHT
- CEILING FAN, W/ INC. LIGHT FIXTURE
- INC. LIGHT FIXTURE
- SMOKE DETECTOR, 120V
- 4 TUBE FLU. PRISMATIC WRAP SURFACE FIXTURE
- CHIME
- MOMENTARY PUSHBUTTON SWITCH, LIGHTED
- SWITCH/FIXTURE WIRING
- CONTROL WIRE - LOW VOLTAGE
- NON-FUSED DISC. SWITCH
- TELEPHONE
- TELEVISION OUTLET
- HVAC THERMOSTAT, @ 60" AFF



1. Service/Feeder Entrance Conductors: 2½" rigid conduit, min. 18" deep, w/ continuous Ground Bonding Conductor, Service/ Entrance Conductors shall not be spliced except that bolted connections at the Meter, Disconnecting Devices and Panel shall be allowed.
2. Meter Enclosure, weatherproof, U.L. Listed.
3. Main Disconnect Switch: fused or Main BRKR, weatherproof, U.L. Listed.
4. Service entrance Ground: ⅝" ϕ iron/steel rod x 8'-0" long and/or concrete encased foundation steel rebar x 20'-0" long. Grounding Conductor shall be bonded to each piece of Service/ Entrance Equipment, and shall be sized per Item #5, below.
5. 200 AMPERE SERVICE: 3-#2/0-USE-Cu, 1-#1-Cu-GND, 2" Conduit.
6. House Panel (PNL), U.L. Lised, sized per schedule.
7. Equipment Disconnect Switch: non-fused, in weatherproof enclosure, size according to Panel Schedule loads.
8. Provide Ground Bond Wire to metal piping, size in accordance with the Service Ground Conductor.

NOTE!
THE MINIMUM AIC RATING FOR PANEL BOARDS, BRKRS AND DISCONNECT SWITCHES SHALL BE 22,000 AIC.

ELECTRICAL RISER DIAGRAM: 200A

SCALE: NONE

AREA CALCULATION

GROSS FLOOR AREA:	2202.8 SF
GARAGE AREA:	517.4 SF
GARAGE ATTIC (UNFINISHED):	236.5 SF
FRONT COVERED PORCH AREA:	223.2 SF
REAR COVERED PORCH AREA:	314.0 SF
TOTAL AREA:	3493.9 SF

ELECTRICAL COMPUTATIONS

General Lighting/Receptacles @ 3w/sf		
3493.9 sf x 3w =	10481.7w	
Washer Circuit	1500.0w	
Dishwasher Circuit	1500.0w	
Sm. Appliance Circuits (3 @ 1500w)	4500.0w	
Sub-Total	17981.7w	
1st 3KW @ 100%		3000.0w
Bal. of KW @ 35%		5243.6w
Fixed Appliances:		
Refrigerator	1200.0w	
Clg. Fans (8 @ 200w)	1600.0w	
Water Well Pump	1200.0w	
Spares (8 @ 400w)	3200.0w	
Sub-Total	7200.0w	
Load @ 75% D.F.		5400.0w
100% Demand Factor Loads:		
Dryer		5000.0w
Range		8000.0w
HVAC System (10.0kw Strip Heat)		10000.0w
Total Demand Load:		36643.6w

SERVICE SIZE: 36643.6w / 240v = 152.7 Amperes
USE: 3 #2/0 USE w/ 1 #1 Cu GND / 2" C.

PANEL SCHEDULE

PANEL "L": 200A - MLO - 120/240V - 1ϕ - 4 WIRE
40 SLOT - FLUSH MOUNT

Cir. Nr.	Location	Trip Poles	Wire Size	Load
1-8	Lighting/Recept.	15A/1P	14NM	10482W
9	Dishwasher	"	"	1500W
10-12	Sm. Kit. Appliances	20A/1P	12NM	4500W
13-14	Ceiling Fans	15A/1P	14NM	1800W
15,17	Spare	-	-	3000W
16	Refrigerator	15A/1P	14NM	1200W
18	Spare	-	-	400W
19,21	Range	50A/2P	6NM	8000W
20,22	Water Well	20A/2P	12NM	1200W
23,25	Dryer	30A/2P	10NM	5000W
24,26	HVAC CU (5T)	60A/2P	6NM	(6300W)
27,29	HVAC AHU	45A/2P	8NM	10000W
30-36	Spare	-	-	2800W
37-40	Space	-	-	0W
TOTAL CONNECTED LOAD:				49882W

ELECTRICAL PLAN NOTES

INSTALLATION SHALL BE PER 2014 NAT'L. ELECTRIC CODE.

WIRE ALL APPLIANCES, HVAC UNITS AND OTHER EQUIPMENT PER MANUF. SPECIFICATIONS.

CONSULT THE OWNER FOR THE NUMBER OF SEPERATE TELEPHONE LINES TO BE INSTALLED.

ALL SMOKE DETECTORS SHALL BE 120V W/ BATTERY BACKUP OF THE PHOTOELECTRIC TYPE, AND SHALL BE INTERLOCKED TOGETHER. INSTALL INSIDE AND NEAR ALL BEDROOMS.

PROVIDE & INSTALL CARBON MONOXIDE DETECTORS IN ALL BEDROOMS, @ 12" ABV. FIN. FL., INTERLOCKED TOGETHER.

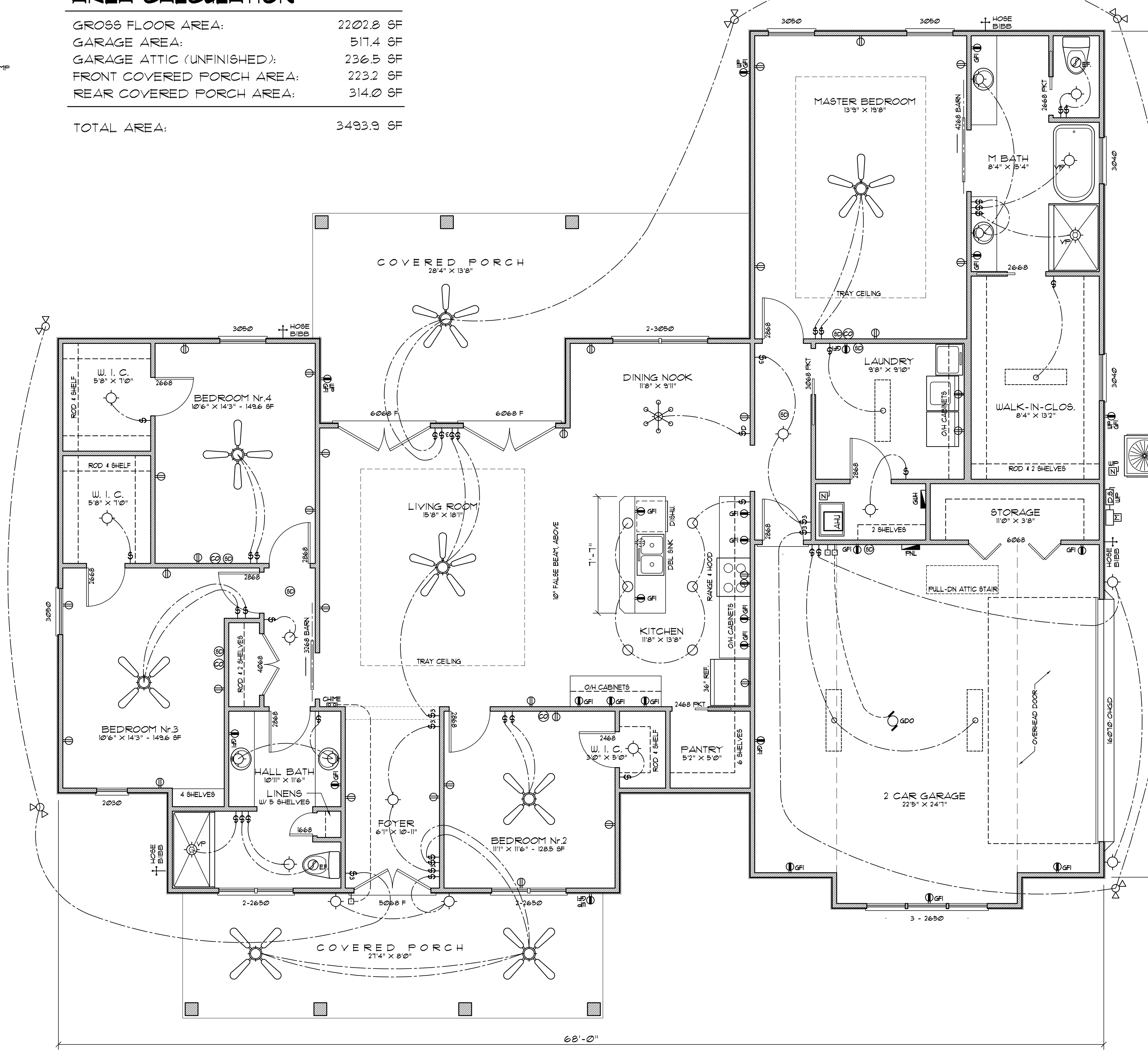
TELEPHONE, TELEVISION AND OTHER LOW VOLTAGE DEVICES OR OUTLETS SHALL BE AS PER THE OWNER'S DIRECTIONS, & IN ACCORDANCE W/ APPLICABLE SECTIONS OF NEC-LATEST EDITION.

ALL RECEPTICALS, NOT OTHERWISE DESIGNATED, SHALL BE ARC FAULT INTERRUPTER TYPE, EXCEPT DEDICATED OUTLETS.

ALL RECEPTICALS IN KITCHEN AND BATHS SHALL BE GROUND FAULT INTERRUPTER TYPE (GFI).

ALL EXTERIOR RECEPTICALS SHALL BE WEATHERPROOF GROUND FAULT INTERRUPTER TYPE (WP/GFI).

ELECTRICAL CONT'R SHALL PREPARE "AS-BUILT" SHOP DWGS INDICATING ALL ELECTRICAL WORK, INCLUDING ANY CHANGES TO THE ELEC. PLAN, ADD'NS TO THE ELEC. PLAN, RISER DIAGRAM, AS-BUILT PANEL SCHEDULE W/ ALL CKTS IDENTIFIED W/ CKT Nr., DESCRIPTION & BRKR, SERVICE ENT. & ALL UNDERGROUND WIRE LOCATIONS/ROUTING/DEPTH. RISER DIA. SHALL INCLUDE WIRE SIZES/TYPE & EQUIPMENT TYPE W/ RATINGS & LOADS.
CONTRACTOR SHALL PROVIDE 1 COPY OF AS-BUILT DWGS TO OWNER & 1 COPY TO THE PERMIT ISSUING AUTHORITY.



FLOOR PLAN

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

NOTE!
ALL INTERIOR PARTITION WALLS ARE 3 1/2" THICK, UNLESS NOTED OTHERWISE.

NOTE!
ALL EXTERIOR WALLS ARE 2X4 STUDS W/ 1/2" THICK CDX PLYWD. SHEATHING (4")

NOTE!
CABINETS, COUNTERS, SHELVES AND THE LIKE, SHOWN ON THIS PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS OF QUALITY AS OUTLINED IN THE NOTES TITLED "GENERAL MILLWORK NOTES", AND SHALL INCLUDE SUCH FEATURES, HARDWARE AND FINISHES AS DIRECTED BY THE OWNER. THE PLAN VIEWS INDICATED ARE FOR GENERAL LOCATION AND EXTENT OF THE WORK - UNLESS DETAILED CABINET PLANS ARE INCLUDED WITH THIS PLANS PACKAGE ALL OTHER PHYSICAL CHARACTERISTICS SHALL BE AS DIRECTED BY THE OWNER.

NOTE!
PROVIDE 2X6 BACKING AT ALL OVERHEAD CABINET LOCATIONS, FLUSH WITH FACE OF FRAMING - TOP OF BACKING TO BE 7'-0" AFF.

REVISION: 07 SEP 2020

DRAWN: NPG

CUSTOM RESIDENTIAL DESIGN for:
MR. & MRS. L. DRAWDY
COLUMBIA COUNTY, FLORIDA
FLOOR PLAN w/ ELECTRICAL

Celebrating 48 Years of Service
1972 - 2020
N.P. Geisler, Architect
AR0007005

NICHOLAS PAUL GEISLER ARCHITECT
N.C.A.R.B. Certified
1758 NW Brown Rd.
Lake City, FL 32055
386-365-4355

DATE: 07 SEP 2020

COMM: 2K2033

SHEET: A.2