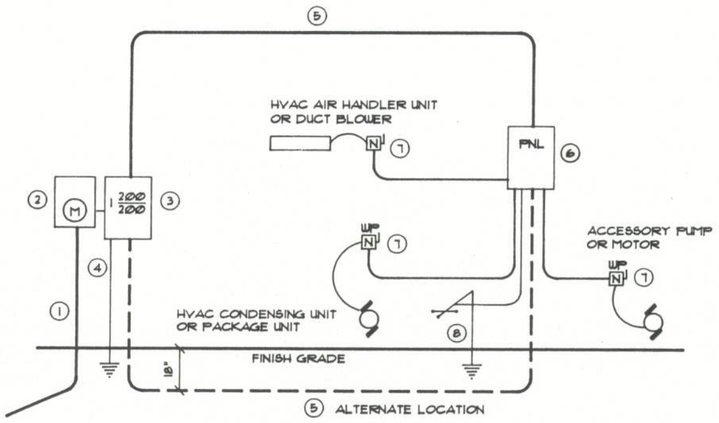

(1) Service/Feeder Entrance Conductors: 2½" rigid conduit, min. 18" deep, w/ continuous Ground Bonding Conductor. Service/Entrance Conductors shall not be spliced except that bolted connections at the Meter, Disconnecting Devices and Panel shall be allowed.

(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-#4-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

Electrical SYMBOLS

- SPST WALL SWITCH
- DPDT WALL SWITCH (3-WAY)
- DUPLEX WALL RECEPTACLE
- DUPLEX WALL RECPT., BELOW COUNTER
- 240V OUTLET
- GND FAULT INTERRUPTER DUPLEX RECEPT.
- WEATHER PROOF GFI DUPLEX RECEPT.
- MOTOR
- ELECTRICAL PANEL
- EXHAUST FAN
- DBL. LAMP INC. FLOOD LIGHT
- CEILING FAN, W/ INC. LIGHT FIXTURE
- INC. LIGHT FIXTURE
- FLU. WALL LIGHT, PULL CHAIN
- 4 TUBE FLU. PRISMATIC WRAP SURFACE FIXTURE
- TRAK LIGHTING
- EXIT LIGHT, W/ BATTERY PACK
- SINGLE LAMP TYPE I EMERGENCY LIGHT, W/ BATT. PACK
- DUAL LAMP TYPE I EMERGENCY LIGHT, W/ BATT. PACK
- SWITCH/FIXTURE WIRING
- NON-SWITCHED WIRING

- NON-FUSED DISC. SWITCH
- FUSED DISC. SWITCH - REFER TO PLAN FOR SIZE
- NON-FUSED DISC. SW., WEATHER PROOF
- FUSED DISC. SW., WEATHER PROOF
- TELEPHONE
- TELEPHONE, FLOOR OUTLET
- TELEPHONE, DEDICATED
- CHIME
- MOMENTARY PUSHBUTTON SWITCH, LIGHTED
- TELEVISION OUTLET
- HVAC THERMOSTAT, @ 60" AFF
- SPST WALL SWITCH, W/ DIMMER
- DUPLEX WALL RECEPTACLE, DEDICATED
- QUADRAPLEX WALL RECEPTACLE
- DUPLEX WALL RECEPTACLE, ½ SWITCHED
- DUPLEX FLOOR RECEPTACLE
- JUNCTION BOX
- HEAT LAMP
- INC. LIGHT FIXTURE, PULL CHAIN
- HIGH HAT DOWN LIGHT
- HIGH HAT WALL WASHER
- INC. WALL BRACKET

- FIRE ALARM PULL STATION
- SMOKE DETECTOR, 120V
- HEAT DETECTOR
- FIRE ALARM MASTER CONTROL CABINET
- ALARM ANNUNCIATOR
- STROBE LIGHT
- INTERLOCK WIRING - STROBE/PULL STATION/SMOKE DET.

- INTERCOM STATION
- INTERCOM MASTER CONTROL
- PASSIVE IR MOTION DETECTOR
- SOUND DETECTOR
- SECURITY ALARM MASTER CONTROL CABINET
- SECURITY ALARM KEYPAD
- DOOR/WINDOW SWITCH

NOTE!
THE ASSOCIATED PLANS MAY NOT INCLUDE ALL OF THE SYMBOLS SHOWN ABOVE.

ELECTRICAL NOTES: General

1. Do not scale the Electrical Drawings. Refer to architectural plans and elevations for exact location of all equipment. CONFIRM with Owner.
2. Install all electrical work in conformance with the NEC 1994 edition, and it's amendments as adopted by the permit issuing authority at the time of construction.
3. GROUNDING: ground all main disconnects to standard ground rod(s) and to cold water supply as per Article 250 of NEC-1994.
4. Install only copper wiring on this project: THW, TW, THWN, THHN or NM cable, unless noted otherwise. All conductors #10 and smaller may be solid. All conductors #8 and larger shall be stranded type.
5. Provide continuity of Neutral on multi-branch circuits by splicing and bringing out a tap, assuring no openings of Neutral in replacement of a device.
6. Color code multi-circuit wiring as follows: Neutral - White, Ground - Green, Line - all other colors.
7. Install only high power factor ballasts at fluorescent fixtures.
8. Install GFI breakers of devices at all bathroom, restroom, kitchen, garage and exterior receptacles and as noted on the drawings.
9. Install only those electrical devices that bear a "UL" or other recognized Testing Lab Label. All materials shall be new.
10. Install non-fused disconnect switches at all places of electrical equipment located where said equipment is not visible from the circuit breaker that protects it: size in accord with the load. All disconnect switches shall be H.P. rated, heavy duty, quick-make - quick-break type - enclosures shall be as req'd for exposure.
11. Motor starters shall be manual or magnetic with overload relays in each hot leg.
12. Isolate dissimilar conduit and tubing metals from soil, water and gas piping and other building materials where damage by friction or electrolysis may occur, except where electrical ground is provided.
13. Furnish and install all electrical devices and items requires for a complete, operating system, providing the functions as detailed in the plans (and specs).
14. Outlet boxes shall be pressed steel or plastic or all dry locations. For wet locations, cast alloy with threaded hub outlet boxes shall be installed.
15. Hot check all systems with the owner's representative present to verify proper function prior to C.O.
16. Coordinate all work through GC to avoid conflicts. Coordinate with HVAC contractor and Electronics Systems contractors so that a complete, functioning system is installed, in each case, with no extra cost to the owner.
17. Emergency Lighting and EXIT Signs, if indicated on the plans, shall be wired per NEC 700-12F.
18. All panel schedules shall be fully filled out and shall be typewritten. Ea. circuit shall be clearly identified a to what is included on said circuit.
19. It is not the intent of these drawings to show every minor detail of the construction.
20. The electrical installation shall meet all standard requirements of the power company & telephone company.
21. Furnish and install disconnect switches and wiring for HVAC System as per manufacturer's recommendations. Controls are to be supplied by the HVAC contractor, and connected by the Electrical contractor.
22. All raceways below ground shall be a minimum od 3/4".
23. All circuit breakers, two and three pole, shall be common trip. No tie handles or tandems shall be acceptable.
24. All fuses, unless noted otherwise on the drawings, shall be current limited type (C.L.) rated 200,000 AIC.
25. Electrical contractor shall verify all components for all electrical applications & determine the correctness of same. Any discrepancy shall be reported to the owner prior to fabricating any materials, ordering components or doing any work.
26. Circuits on Panel Schedule (and Plans) are to determine load data and size. The contractor shall provide circuits and routing of conduits and wiring to suit job conditions, and balance the job, throughout.
27. Check equipment for proper voltage, phase and amperage rating prior to connection to circuits.
28. Panel boards shall be circuit breaker type. Verify number and sizes of circuits.
29. When conduit runs exceed 200 feet, pull boxes shall be installed so that no pull exceeds this distance.
30. Electrical equipment AIC rating and feeder size shown on the plans are designed for max. available fault current and max. allowable voltage drop, respectively.

NOTE!
REFER TO DETAILS L1 & L2 ON D.3b FOR DEVICE WIRING IN LOGS & TIMBERS.

ELECTRICAL COMPUTATIONS

General Lighting/Receptacles @ 3w/sf		
2114.6 sf x 3w =	6343.8w	
Washer Circuit	1500.0w	
Dishwasher Circuit	1500.0w	
Sm. Appliance Circuits (3 @ 1500w)	4500.0w	
Sub-Total	13843.8w	
1st 3KW @ 100%		3000.0w
Bal. of KW @ 35%		3795.1 w
Fixed Appliances:		
Refrigerator	1200.0w	
Clg. Fans (6 @ 200w)	1200.0w	
Irrigation Pump (future)	1200.0w	
Water Well Pump	1200.0w	
Pool Pump (future)	1200.0w	
EWH	4500.0w	
Spares (8 @ 400w)	3200.0w	
Sub-Total	13700.0w	
Load @ 75% D.F.		10275.0w
100% Demand Factor Loads:		
Dryer		5000.0w
Range		8000.0w
HVAC System (4.0T Heat Pump)		4800.0w
Total Demand Load:		34070.1w

FEEDER SIZE: 34070.1w / 240v = 141.96 amperes
USE: 3 #2/0 THW w/ 1 #1 Cu GND / 2½" C.

TYPICAL LOAD COMPUTATIONS:

ELECTRICIAN SHALL PROVIDE LOAD CALCULATIONS BASED ON THE AS-BUILT CONNECTED LOADS & DEVICES

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	6344W
9	Dishwasher	"	"	1500W
10-12	Sm. Kit. Appliances	20A/1P	12NM	4500W
13-14	Ceiling Fans	15A/1P	14NM	1200W
15,17	Fut. Irrigation Pump	20A/1P	12NM	1200W
16	Refrigerator	15A/1P	14NM	1200W
18	Spare	-	-	400W
19,21	EWH	30A/2P	10NM	4500W
20,22	Range	50A/2P	6NM	8000W
23,25	Water Well	20A/2P	12NM	1200W
24,26	Dryer	30A/2P	10NM	5000W
27,29	HVAC CU	50A/2P	6NM	4000W
38,30	HVAC AHU	20A/2P	12NM	800W
31,33	Fut. Pool Pump	20A/2P	12NM	1200W
34	Spare	-	-	400W
35-40	Spare	-	-	2400W
TOTAL CONNECTED LOAD:				43844W

NOTE!
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.

TYPICAL ELECTRICAL PANEL SCHEDULE:

ELECTRICIAN SHALL PROVIDE A REVISED PANEL SCHEDULE BASED ON THE AS-BUILT CONNECTED LOADS & DEVICES

SHEET: D.1d
REVISION:
DRAWN: NPG
DATE: ØINOV96
COMM: SRLH

Custom Log Home Standard Details:

ELECTRICAL DETAILS / NOTES

SUWANNEE RIVER LOG HOMES, INC.
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