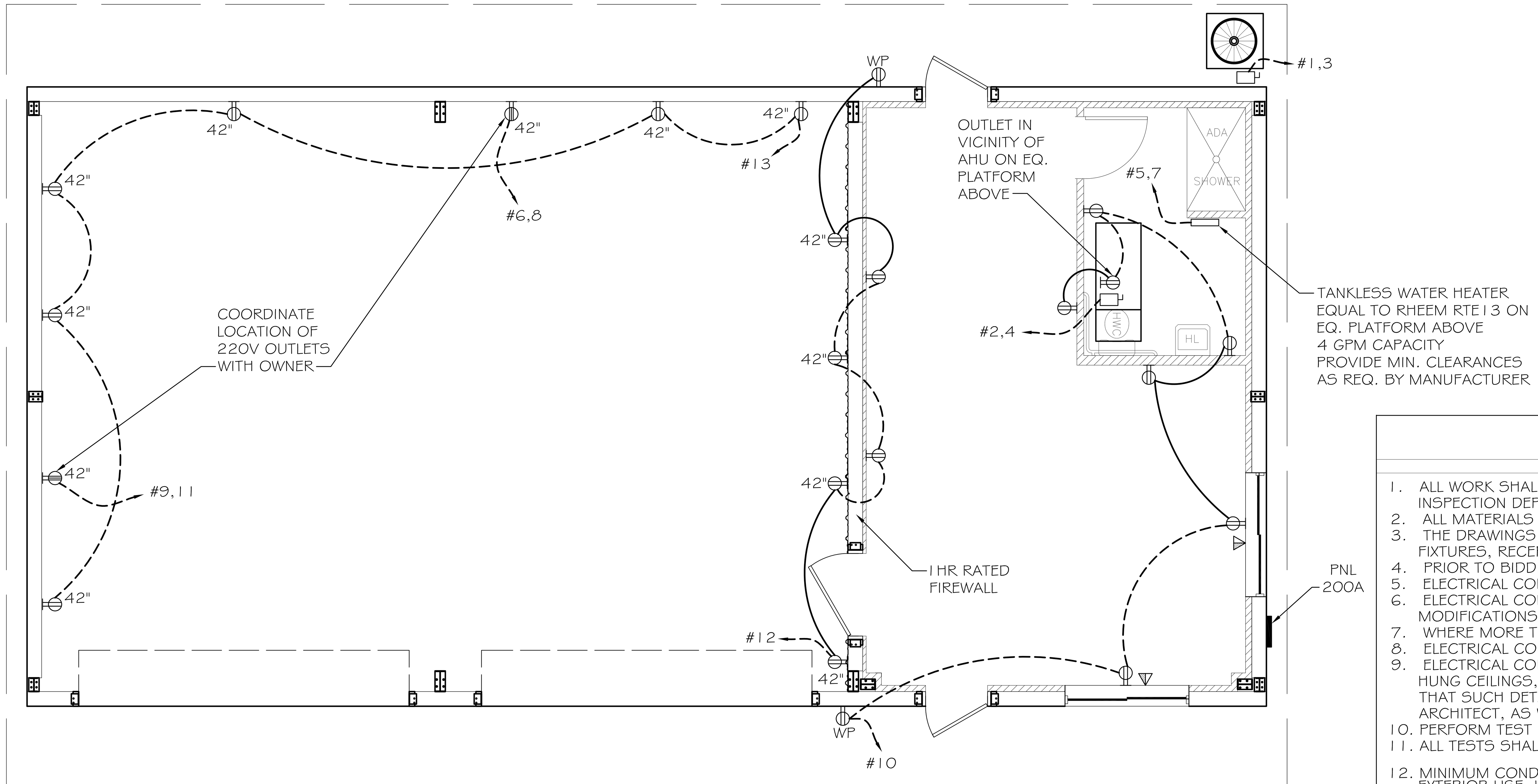
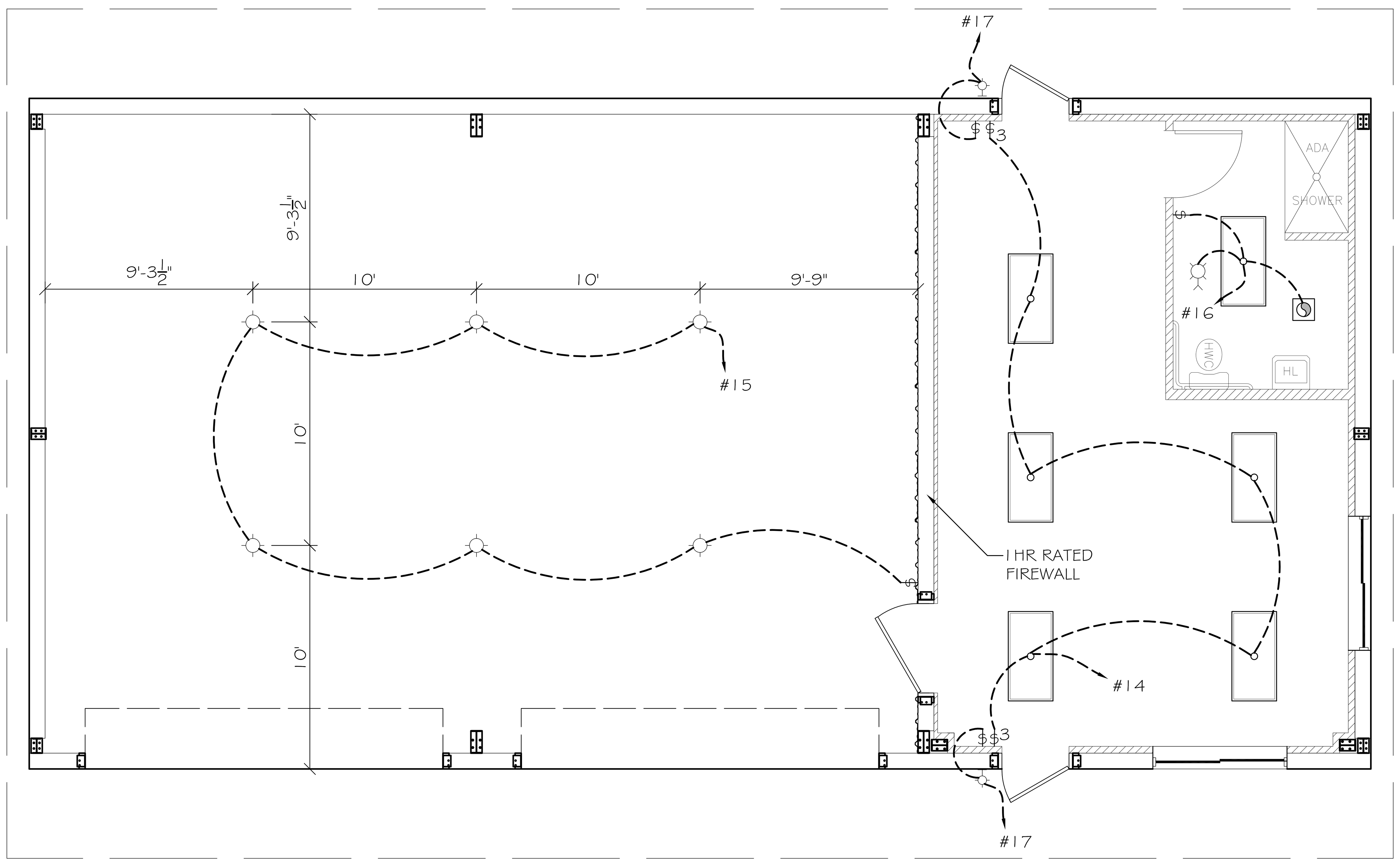


POWER PLAN

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



LIGHTING PLAN

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

LIGHTING PLAN SYMBOL LEGEND

NOTE: ALL LIGHTING FIXTURES TO BE SELECTED BY OWNER.

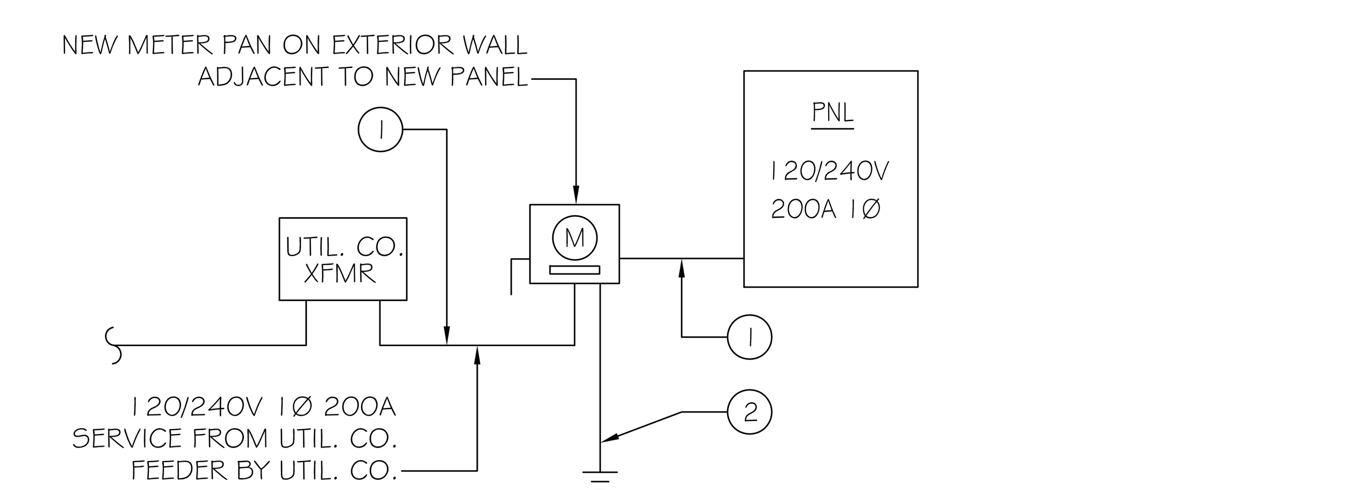
- 2x4 FLOURESCENT, LAY-IN, PRISMATIC LENSE, 4x 32W T8 LAMPS
- EXTERIOR WALL MTD. FIXTURE, 1x 100W INCANDESCENT LAMP
- 16" ALUMINUM LOW BAY LIGHT, PULSE START, 1x 250W METAL HALIDE LAMP
- PULL CHAIN LIGHT FIXTURE IN ATTIC, 1x 75W INCANDESCENT LAMP

POWER PLAN LEGEND

SYM.	DESCRIPTION	COMMENTS
	STANDARD 110V DUPLEX RECEPTACLE @ 18" AFF (UNLESS NOTED)	ALL RECEPTACLES SHALL BE GFCI WITH NEMA 3R BASE. COORDINATE FACEPLATE COLOR WITH OWNER
	STANDARD 220V DUPLEX RECEPTACLE @ 18" AFF (UNLESS NOTED)	COORDINATE LOCATION WITH OWNER
WP	EXTERIOR 120V DUPLEX RECEPTACLE @ 24" AFF (UNLESS NOTED) PROVIDE GASKETED WATERPROOF HOUSING	COORDINATE LOCATION WITH OWNER
	POWER DISCONNECT	
	AIR CONDITIONING COND. UNIT SEE MECH SHEETS FOR UNIT DETAILS	
	DUPLEX CAT.5 JACK WITH FACEPLATE NETWORKING CONNECTION AND T.V. COAXIAL CONNECTION WHERE REQUIRED	COORDINATE LOCATION WITH OWNER

ELECTRICAL NOTES

1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC 2008 EDITION), THE GOVERNING ELECTRICAL CODE AND ALL OTHER INSPECTION DEPARTMENTS HAVING JURISDICTION. OBTAIN CERTIFICATES OR APPROVAL WHERE REQUIRED.
2. ALL MATERIALS FURNISHED SHALL BE NEW AND SHALL BE U.L. LISTED.
3. THE DRAWINGS INDICATE SIZE AND GENERAL LOCATION OF WORK. SCALE DIMENSIONS SHALL NOT BE USED. THE EXACT LOCATION AND LOCATION OF ALL LIGHTING FIXTURES, RECEPTACLES AND TELEPHONE OUTLETS, ETC. SHALL BE DETERMINED BY ACTUAL CONDITIONS IN THE FIELD.
4. PRIOR TO BIDDING, CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS.
5. ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES AND WITH OTHER CONTRACTORS WHOSE WORK MAY AFFECT THIS INSTALLATION.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE INCOMING ELECTRICAL SERVICE WITH UTILITY COMPANY AND INCLUDE IN HIS BID ALL CHARGES AND FEES INCURRED IN MODIFICATIONS.
7. WHERE MORE THAN ONE SWITCH OCCURS IN THE SAME LOCATION, THEY SHALL BE INSTALLED IN A GANG TYPE BOX UNDER ONE COVER PLATE.
8. ELECTRICAL CONTRACTOR SHALL COORDINATE THE TELEPHONE INSTALLATION WITH THE TELEPHONE COMPANY AND THE GENERAL CONTRACTOR.
9. ELECTRICAL CONTRACTOR, BEFORE INSTALLING ANY OF THE WORK, SHALL SEE THAT IT DOES NOT INTERFERE WITH CLEARANCES REQUIRED FOR FINISHED COLUMNS, HUNG CEILINGS, PLASTER, PARTITIONS, WALLS, ETC. AS SHOWN IN THE ARCHITECTURAL DRAWINGS AND DETAILS. IF ANY WORK IS INSTALLED AND IT LATER DEVELOPS THAT SUCH DETAILS OR DESIGN CANNOT BE FOLLOWED, THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL MAKE SUCH CHANGES IN THE WORK AS DIRECTED BY THE ARCHITECT, AS WELL AS TO PERMIT THE INSTALLATION OF THE ARCHITECTURAL WORK AS SHOWN ON THE PLANS AND DETAILS.
10. PERFORM TEST REQUIRED BY THE OWNER OR THE ENGINEER IN CONNECTION WITH THE OPERATION OF THE ELECTRICAL SYSTEM IN THE BUILDING.
11. ALL TESTS SHALL BE MADE IN ACCORDANCE WITH THE LATEST STANDARD OF THE IEEE AND THE NATIONAL ELECTRICAL CODE.
12. MINIMUM CONDUCTOR SIZE SHALL BE #12, 600V INSULATION. MINIMUM SIZE CONDUIT SHALL BE ¾" EMT FOR INTERIOR USE, AND ¾" RIGID ALUMINUM FOR EXTERIOR USE. USE TYPE NMC CABLE COPPER, FOR LIGHTS AND RECEPTACLE CIRCUITS. EXTERIOR FITTINGS SHALL BE CAST BOXES AND COVERS. INTERIOR FITTINGS SHALL BE CAST WHERE EXPOSED ON WALLS. STAMPED BOXES MAY BE USED ABOVE CEILINGS IN AIR CONDITIONED SPACES. WHERE LAY IN FIXTURES ARE IN USE, USE 14/ 2 ALLOWED FOR 6' WIDTH.
13. CONTRACTOR SHALL INSTALL WIRING AND OTHER CIRCUIT COMPONENTS TO MATCH EQUIPMENT ACTUALLY INSTALLED.
14. INSTALL GROUND FAULT RECEPTACLES AT RECEPTACLE LOCATIONS WITHIN 5' OF SINKS OR LAVATORIES, AND AT EXTERIOR LOCATIONS. EXTERIOR RECEPTACLES SHALL ALSO BE WATERPROOF.
15. BONDING AND GROUNDING SHALL BE IN ACCORDANCE WITH NFPA 70:230-63, NFPR 250-23, 250-71 & 250-72.
16. GROUND NEUTRAL IN ACCORDANCE WITH NFPA 70:250-23b.
17. FUSES SHALL BE ITT CLASS K5, 250 VOLT, 200,000 AMP INTERRUPTING CAP.
18. PROVIDE SERVICES OF A FIRE/SMOKE DETECTION AND ALARM COMPANY TO DESIGN AND INSTALL ALARM SYSTEM TO MEET REQUIREMENTS OF THE STATE FIRE MARSHAL.
19. EXTERIOR LIGHTING SHALL BE SHADED OR INWARDLY DIRECTED IN SUCH A MANNER SO THAT NO DIRECT LIGHTING OR GLARE IS CAST BEYOND THE PROPERTY LINE. THE INTENSITY OF SUCH LIGHTING SHALL NOT EXCEED ONE FOOT CANDLE AS MEASURED AT THE ABUTTING PROPERTY LINE.
20. ALL ELECTRICAL, MECHANICAL AND PLUMBING PENETRATING FIRE PARTITIONS SHALL BE FIRE CAULKED. (PENETRATIONS THROUGH RATED CONSTRUCTION SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN TESTED IN ACCORDANCE WITH ASTM-E814.)



ELEC. RISER DIAGRAM

N.T.S.

(1) 1-3/0 THHN
1-3/0 N.
1-#4 GND
1-2" C.

(2) ¾ X10 CU CLAD GRND ROD, GRND WIRE #4 CU, PROTECTED IN 1/2" PVC PIPE CONNECTED TO COLD WATER SUPPLY AND METAL BUILDING IN ACCORDANCE WITH ARTICLE 250 OF NEC.

PANEL: PNL-1
LOCATION: EQUIPMENT ROOM 104
FEEDER SOURCE: ELEC. SERVICE PROVIDER

VOLTAGE: 120/240V, 400A 1Ø, 3W MLO
ENCLOSURE: SURFACE MOUNTED W/EQUIPMENT GND BAR
BOLT-ON BRK 22000 AIC
OUTDOOR ENCLOSURE

CKT. NO.	THHN WIRE SIZE	LOAD DESCRIPTION / LOCATION	BREAKER AMP	BREAKER POLE	LOAD (VA)	AØ BØ	LOAD (VA)	BREAKER POLE	BREAKER AMP	LOAD DESCRIPTION / LOCATION	THHN WIRE SIZE	CKT. NO.
1	#10	A/C COMPRESSOR UNIT 2 TON	30	2	2300		4200	2	40	AHU 2 TON 6 kW ELEC. HEATER	#8	2
3					2300		4200					4
5	#6	4 GPM TANKLESS ELECTRIC WATER HEATER	60	2	6400		1500	2	20	220V OUTLET IN REPAIR BAY COORDINATE LOCATION WITH OWNER	#12	6
7					6400		1500					8
9	#12	220V OUTLET IN REPAIR BAY COORDINATE LOCATION WITH OWNER	20	2	1500		1600	1	20	RECEPTACLES	#12	10
11					1500		1600	1	20	RECEPTACLES	#12	12
13	#12	RECEPTACLES	20	1	1600		700	1	20	OFFICE LIGHTING	#12	14
15	#12	SHOP LOW BAY LIGHTING	20	1	1500		500	1	20	RESTROOM LIGHTING	#12	16
17	#12	EXTERIOR LIGHTING	20	1	1600		1000	1	20	SEWAGE SEPTIC SYSTEM	#12	18
19	#12	SPARE	20	1	1600		1600	1	20	SPARE	#12	20
21	-	BLANK	-	-	-		-	-	-	BLANK	-	22
23	-	BLANK	-	-	-		-	-	-	BLANK	-	24

SOLID NEUTRAL
NEUTRAL WIRE (W)

TOTAL CONNECTED LOAD (VA)=109200
AØ=20100 BØ=20400

GROUND BUS
GROUND WIRE (G)

REVISIONS

#	DESCRIPTION	DATE

U.S. FISH & WILDLIFE SERVICE NEW EQUIPMENT STORAGE BLDG.

UPPER OUACHITA NATIONAL WILDLIFE REFUGE
BASTROP, LA

JOB No: 2151 DATE: 10/02/12
DRAWN BY: BSN CHECKED BY: BSN

The above drawings and specifications, designs and arrangements represented thereby are and shall remain the property of Dammon Engineering, and no part thereof shall be copied, disclosed to others, or used in connection with any work or project other than the specific project for which the have been prepared and developed without written consent of Dammon Engineering. Visual contact with these drawings or specifications shall constitute conclusive evidence of acceptance of these restrictions.

DAMMON ENGINEERING, INC.
Architects & Engineers
CHIEF ENGINEER: EMMETT DAMMON, P.E.
CHIEF ARCHITECT: ROBERT WILTSE
554 OLD SPANISH TRAIL
SLIDELL, LA 70458
dammonengineering.com
dammoneng@bellsouth.net
PHONE: 985-649-5832
FAX: 985-641-5950

ELECTRICAL PLAN

SHEET No: 04 OF 05

E-1