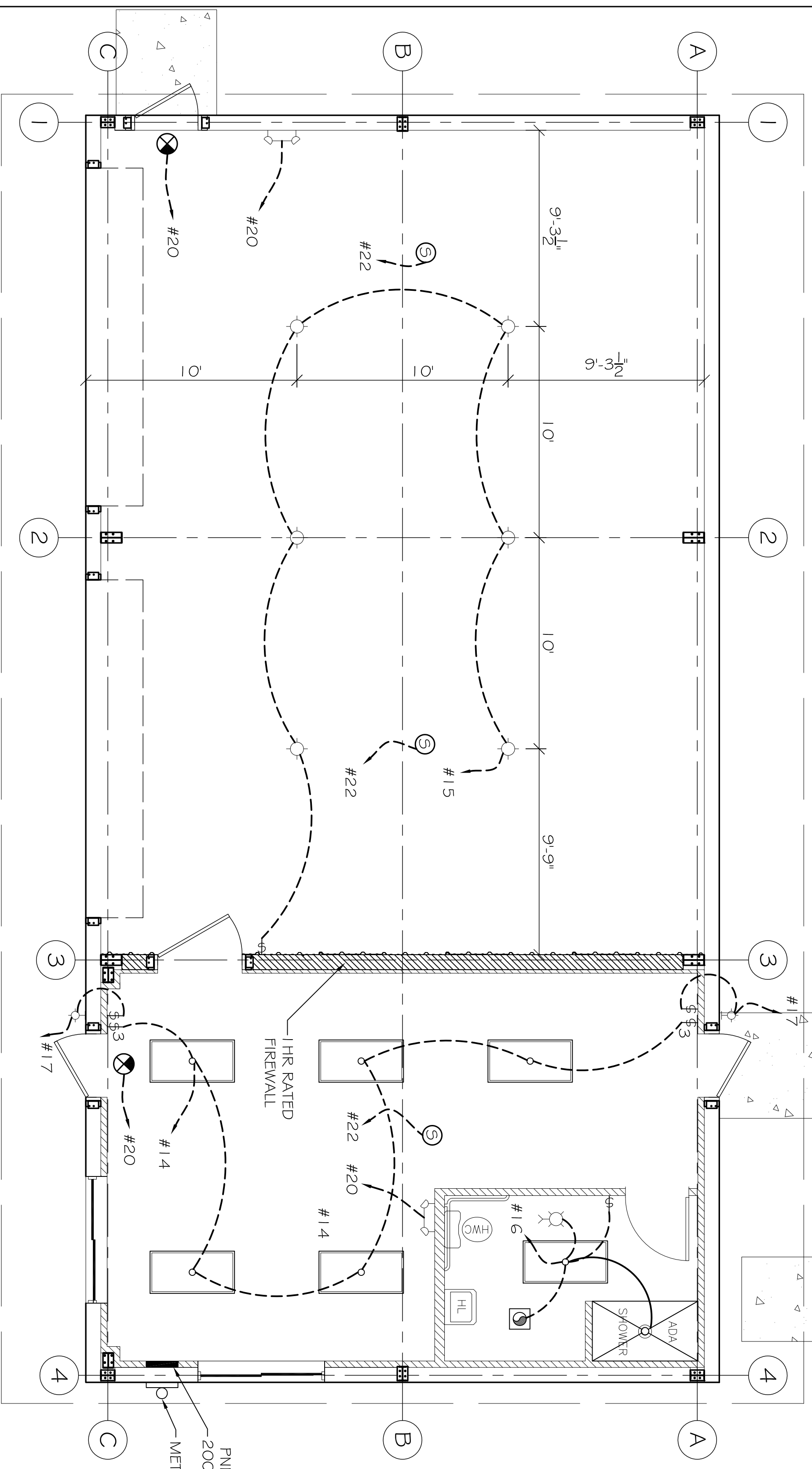


POWER PLAN
SCALE: 1/4" = 1'-0"



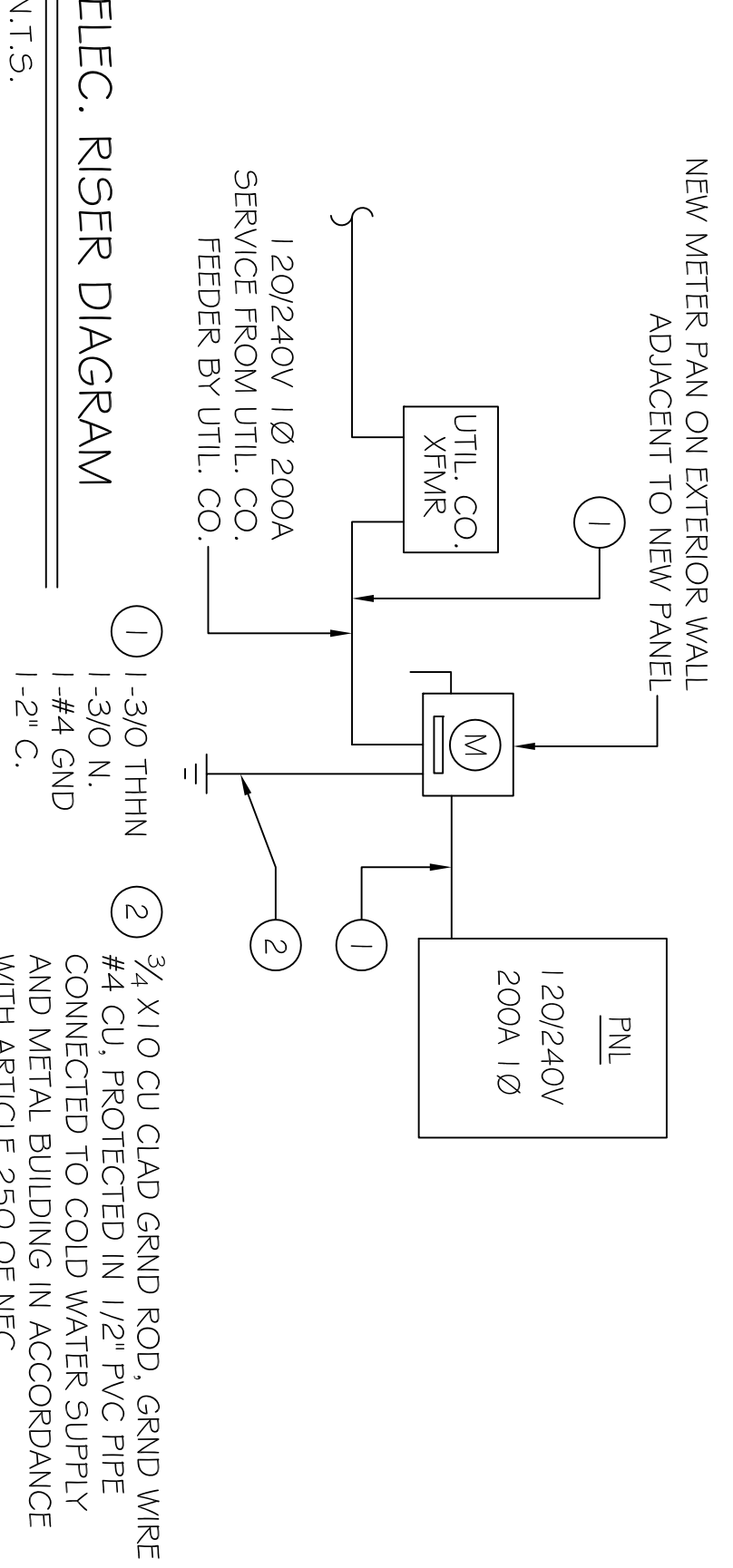
LIGHTING PLAN
SCALE: 1/4" = 1'-0"

- LIGHTING PLAN SYMBOL LEGEND**
- NOTE: ALL LIGHTING FIXTURES TO BE SELECTED BY OWNER.
 - 2x4 FLOURESCENT, LAY-IN, PRISMATIC LENSE, 4x 32W T8 LAMP'S
 - ◇ EXTERIOR WALL MTD. FIXTURE, 1x 100W INCANDESCENT LAMP
 - ◇ 16" ALUMINUM LOW BAY LIGHT, FLUO START, 1x 250W METAL HALIDE LAMP
 - ◇ PNL CHAIN LIGHT FIXTURE IN ATTIC, 1x 75W INCANDESCENT LAMP
 - WALL MTD. EMERGENCY LIGHT W/90 MIN. BATTERY BACKUP
 - WALL MTD. EMERGENCY LIGHT W/90 MIN. BATTERY BACKUP
 - CIG LMTD. SMOKE DETECTOR
 - CIG LIGHT / 100W

SYM.	DESCRIPTION	COMMENTS
⊖	STANDARD 1.0V DUPLEX RECEPTACLE @ 18" AFF (UNLESS NOTED)	ALL RECEPTACLES SHALL BE GFCI WITH NEMA 3R BASE. COORDINATE FACERATE COLOR WITH OWNER
⊖	STANDARD 220V DUPLEX RECEPTACLE @ 18" AFF (UNLESS NOTED)	COORDINATE LOCATION WITH OWNER
⊖	EXTERIOR 1.20V DUPLEX RECEPTACLE @ 24" AFF (UNLESS NOTED)	COORDINATE LOCATION WITH OWNER
⊖	24" AFF GASETTED WATERPROOF HOUSING	
⊖	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

- 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.
- ALL MATERIALS FURNISHED SHALL BE NEW AND SHALL BE U.L. LISTED.
- 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.
- PRIOR TO BIDDING, CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS.
- ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES AND WITH OTHER CONTRACTORS WHOSE WORK MAY AFFECT THIS INSTALLATION.
- ELECTRICAL CONTRACTOR SHALL COORDINATE INCOMING ELECTRICAL SERVICE WITH UTILITY COMPANY AND INCLUDE IN HIS BID ALL CHARGES AND FEES INCURRED IN MODIFICATIONS.
- WHERE MORE THAN ONE SWITCH OCCURS IN THE SAME LOCATION, THEY SHALL BE INSTALLED IN A GANG TYPE BOX UNDER ONE COVER PLATE.
- ELECTRICAL CONTRACTOR SHALL COORDINATE THE TELEPHONE INSTALLATION WITH THE TELEPHONE COMPANY AND THE GENERAL CONTRACTOR 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.
- PERFORM TEST REQUIRED BY THE OWNER OR THE ENGINEER IN CONNECTION WITH THE OPERATION OF THE ELECTRICAL SYSTEM IN THE BUILDING.
- ALL TESTS SHALL BE MADE IN ACCORDANCE WITH THE LATEST STANDARD OF THE IEEE AND THE NATIONAL ELECTRICAL CODE.
- MINIMUM CONDUCTOR SIZE SHALL BE #2, 600V INSULATION. MINIMUM SIZE CONDUIT SHALL BE 3/4" EMT FOR INTERIOR USE, AND 3/4" RIGID ALUMINUM FOR EXTERIOR USE. USE THE 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 AND RECEPTACLE CIRCUITS. STAMPED BOXES MAY BE USED ABOVE CEILINGS IN AIR CONDITIONED SPACES, WHERE LAY IN FIXTURES ARE IN USE. USE 1/4" 2 ALLOWED FOR 6" WIDTH.
- CONTRACTOR SHALL INSTALL WIRING AND OTHER CIRCUIT COMPONENTS TO MATCH EQUIPMENT ACTUALLY INSTALLED.
- INSTALL GROUND FAULT RECEPTACLES AT RECEPTACLE LOCATIONS WITHIN 5' OF SINKS OR LAVATORIES, AND AT EXTERIOR LOCATIONS. EXTERIOR RECEPTACLES SHALL ALSO BE WATERPROOF.
- BONDING AND GROUNDING SHALL BE IN ACCORDANCE WITH NFPA 70:250-63, NFPA 250-23, 250-71 & 250-72.
- GROUND NEUTRAL IN ACCORDANCE WITH NFPA 70:250-23b.
- FUSES SHALL BE ITC CLASS K5, 250 VOLT, 200,000 AMP INTERRUPTING CAP.
- PROVIDE SERVICES OF A FIRE/SMOKE DETECTION AND ALARM COMPANY TO DESIGN AND INSTALL ALARM SYSTEM TO MEET REQUIREMENTS OF THE STATE FIRE MARSHAL.
- 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 ADJUTING PROPERTY LINE.
- ALL ELECTRICAL, MECHANICAL AND PLYING PENETRATING SHALL BE FIRE RATED. 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.)



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

CIT NO.	THIN WIRE SIZE	LOAD DESCRIPTION	BRK/INT	AMP	FOUL	VA	W/V	W/V	FOUL	AMP	LOAD DESCRIPTION	THIN WIRE SIZE	CIT NO.
1	#10	A/C COMPRESSOR UNIT	2	2300		4800			2	40	AHU 2 TON 6 W ELEC. HEATER	#6	2
3	#6	1 GPM TANKLESS ELECTRIC WATER HEATER	2	6400		1500			2	20	220V OUTLET IN REAR BAY COORDINATE LOCATION WITH OWNER	#12	5
4	#6	220V OUTLET IN REAR BAY	2	6400		1500			2	20	220V OUTLET IN REAR BAY COORDINATE LOCATION WITH OWNER	#12	8
7	#12	220V OUTLET IN REAR BAY	2	1500		1600			1	30	RECEPTACLES	#12	10
9	#12	220V OUTLET IN REAR BAY	2	1500		1600			1	20	RECEPTACLES	#12	12
11	#12	RECEPTACLES	20	1600		700			1	20	OFFICE LIGHTING	#12	14
13	#12	RECEPTACLES	20	1500		500			1	20	RESTROOM LIGHTING	#12	16
15	#12	SHOP LOW BAY LIGHTING	20	1600		1000			1	20	SHARED SERVICE SYSTEM	#12	18
17	#12	EXTERIOR LIGHTING	20	1200		900			1	20	EMERGENCY LIGHTS	#12	20
19	#12	SPACE	20	1200		900			1	20	SMOKE DETECTOR	#12	22
21	#12	SHOP EXHAUST FAN	20	1200		900			1	20	SMOKE DETECTOR	#12	24
23	-	BLANK	-	-		-			-	-	BLANK	-	-

TOTAL CONNECTED LOAD (VA) 48,216.000
GND WIRE (G) 20

VOLTAGE: 120/240V, 2000A 1Ø, 3W MTD
ENCLOSURE: 201 ON BRK, 22000 A/C
SERVICES: 201 ON BRK, 22000 A/C

ELEC. RISER DIAGRAM
N.T.S.
1-3/0 THHN
1-3/0 N.I.
1-#4 GND
1-2" C.
2-#4 CU, PROTECTED IN 1/2" PVC PIPE AND METAL BUILDING IN ACCORDANCE WITH ARTICLE 250 OF NEC.

#	DESCRIPTION	DATE

U.S. FISH & WILDLIFE SERVICE
NEW EQUIPMENT STORAGE BLDG.
UPPER OUCHITA NATIONAL WILDLIFE REFUGE
BASTROP, LA

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



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

100% DESIGN DRAWINGS
ELECTRICAL PLAN
SHEET No: 04 OF 05
E-1