

POWER DISTRIBUTION PLAN

MOUNTING: SURFACE ENCLOSURE: NEMA-12,30CKT M	NELBOARD: MDP UNTING: SURFACE CLOSURE: NEMA-12,30CKT MINIMUM						BOLT-ON BREAKERS				MAIN BUSS: 200 AMP, COPPER VOLTAGE: 480/277VAC,3 #W,60 Hz INTERIOR: 150 AMP MAIN CIRCUIT BREAKER						
LOAD DESCRIPTION	CB SIZE	WRE GA.	# CKT AMPS/ PHASE CKT #					LOAD DESCRIPTION									
DUPLEX PUMP CONTROL PANEL SUPPLY WITH BREAKER LOCKOUT DEVICE	60	4	3	1-13-15-5	25 19	25 79	25	\\2\\4\\6	3	8	30	TRANSFORMER, 15 XVA 480-208V/120VAC, 3 SUPPLY WITH BREAKER LOCKOUT DEVICE					
SPACE WITH PROVISIONS SPACE WITH PROVISIONS				7 0	6	6		0 0	3	12	15	BUILDING UNIT HEATER (3 KW/3ø)					
SPACE WITH PROVISIONS				=			6	12				SUPPLY WITH BREAKER LOCKOUT DEVICE					
SPACE WITH PROVISIONS				13				14	_		_	SPACE WITH PROVISIONS					
SPACE MTH PROVISIONS				15				18				SPACE WITH PROVISIONS					
SPACE MTH PROVISIONS KAIC RATING: AS REGIMED	_		_	17	-			18		_	_	SPACE WITH PROVISIONS					

LOAD DESCRIPTION	CB	WRE	1	СКТ	AM	PS/ PH	ASE	CKT	*	WRE		AIN CIRCUIT BREAKER
	SIZE	GA.	POLE	#	#A	≠B	≠C	#	POLE	GA.	SIZE	LOAD DESCRIPTION
INSIDE LIGHTS	20	12	1	-	<u>5</u>			2	1	10	30	PUMP STATION CONTROL PANEL (PCP)
GENERATOR BLOCK HEATER (2KW)	25	10	1	3		17 5		4	1	12	20	GENERATOR BATTERY CHARGER
OUTSIDE WALLPACK LIGHTS	20	12	1	5			9	6				
SPARE BREAKER	20	12	1	7				8	1	12	20	SPARE BREAKER
FLOW METER CONTROLER (FMC)	20	12	1	9		2		10	1	12	20	ALARM DIALER PANEL (ADP)
RECEPTACLES (R1,R2)			_	-	•		7	12		,		
SPACE WITH PROVISIONS			_	13				14		_	_	SPACE WITH PROVISIONS
SPACE WITH PROVISIONS			_	15				16				SPACE WITH PROVISIONS
SPACE WITH PROVISIONS			_	17				18			_	SPACE WITH PROVISIONS

		LIGHTING FIXTURE SCHEDULE	L BE AS NOTED	S SHALL ROVED		
LAMPS	LAMPS	CATALOG NUMBER	MANUFACTURER	QTY	TYPE	
WATTS TYPE	NO. WATTS					
32 T8	2 32	DMW-2-32WT8-AR-120-GEB10IS-STSL	LITHONIA	1	A	
42 MH	1 42	TWAC-42TRT-120-LP1 WITH PHOTOCELL OPERATION	LITHONIA	1	В	
100 MH	1 100	PGS-A100H-128-1-PVLV	HUBBELL	4	С	

ELECTRICAL LEGEND

JUNCTION BOX

+8' OUTSIDE WALL PACK LIGHT W/ HEIGHT ABOVE FF

FLUORESCENT LIGHT

FLUORESCENT LIGHT W/ EMERGENCY BALLAST AND BATTERY PACK

WALL MOUNTED TOGGLE SWITCH

RECEPTACLE

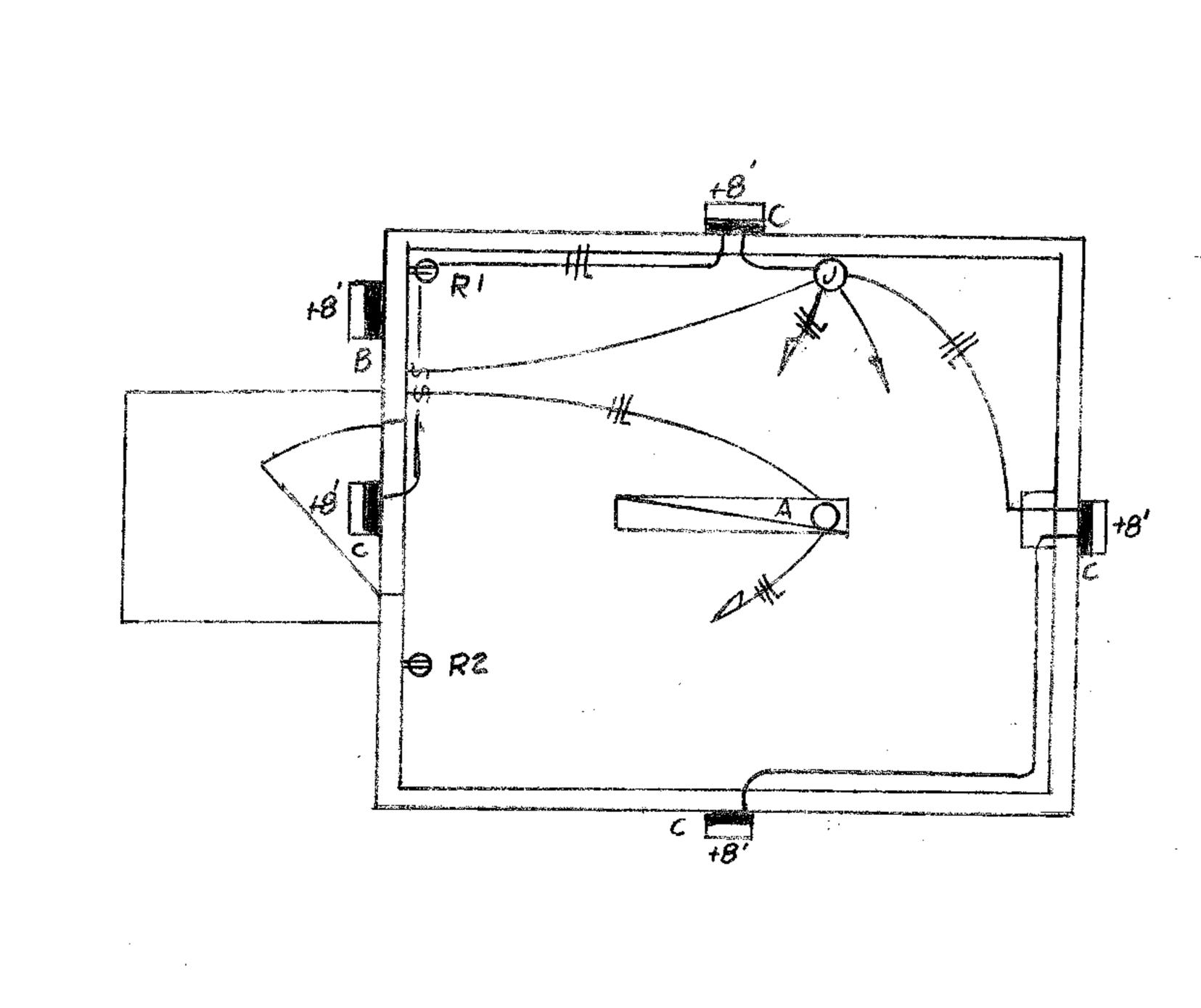
CONDUIT RUN (- - CONDUIT RUN UNDERGROUND)

INDICATES NO. OF WIRES(1-HOT,1-NEUTRAL & 1-GND)

INDICATES A "HOMERUN" (3-HOT & 1-GND)

DISCONNECT SWITCH

WALL MOUNTED TELEPHONE



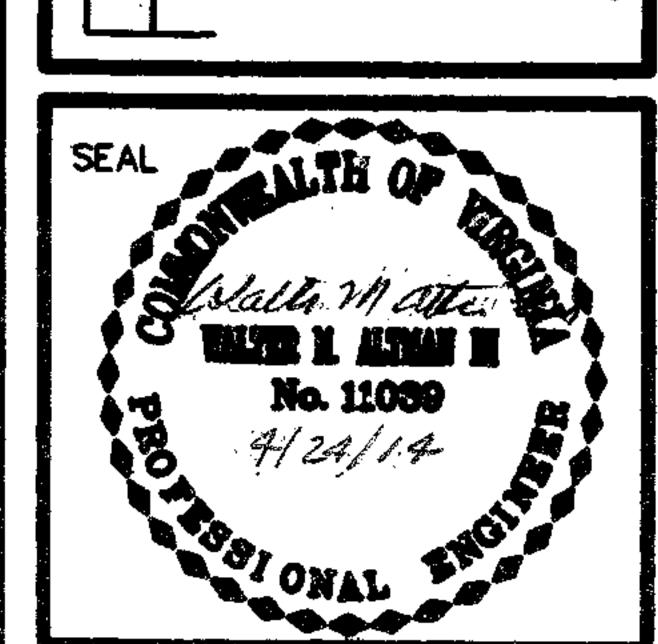
LIGHTS/RECEPTACALS DISTRIBUTION PLAN

ELECTRICAL NOTES:

- 1. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY FOR THE EXTENSION OF THE POWER SERVICE TO THE PUMP STATION AND INSTALL UTILITY SUPPLIED EQUIPMENT AS REQUIRED BY THE THE UTILITY. IN ADDITION, THE CONTRACTOR SHALE SUPPLY AND INSTALL THE CONDUIT/WIRE BETWEEN THE UTILITY TRANSFORMER AND THE SERVICE METERBASE.
- 2. PROVIDE AND INSTALL BONDING BUSHINGS ON ALL SERVICE CONNECTIONS AND GROUNDING LOCKNUTS ON ALL PANEL CONNECTORS.
- 3. PROVIDE AND INSTALL THE FOLLOWING LIGHTING/SURGE ARRESTORS PER THE MANUFACTURE'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS: a. PANELS MBD,MDP,PB: DELTA LA AND CA SERIES OR APPROVED EQUAL.
- 4. ALL INCLOSURES INSTALLED UNDER THIS CONTRACT SHALL BE PAD LOCKABLE AND SHALL BE PROVIDED WITH COMMON KEYED LOCKING DEVICES.
- 5. ALL WIRE INSTALLED UNDER THIS CONTRACT SHALL BE COPPER. 6. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES AND REGULATIONS.
- 7. ALL EQUIPMENT SHALL BE PROVIDED WITH LAMICOID NAMEPLATES(3/16" LETTERING MIN.)
- 8. CONTRACTOR SHALL PROVIDE ALL EQUIPMENT REQUIRED FOR A COMPLETE OPERATING SYSTEM.
- 9. CONTRACTOR SHALL COORDINATE WITH ALL EQUIPMENT SUPPLIERS TO ENSURE THAT ALL REQUIRED ALARM SIGNALS ARE PROVIDED IN A FORM COMPATIBLE WITH THE ALARM DIALER
- 10. ALL PANEL BOARD SCHEDULES SHALL REFLECT AS-BUILT CONDITIONS.
- 11. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND THE LOCAL TELEPHONE COMPANY FOE EXTENSION AND INSTALLATION OF THE PROPER TELEPHONE SERVICE REQUIRED FOR THE TELEPHONE ALARM DIALER PANEL AND A WALL PHONE. THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL EQUIPMENT, CONDUIT WIRE AND CIRCUIT TESTING TO ENSURE A FULLY FUNCTIONAL PHONE SERVICE.
- 12. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY TO ENSURE THAT EACH PANEL AND IT'S ASSOCIATED BREAKERS HAVE AN AIC RATING THAT IS EQUAL TO OR GREATER THAN THAT THAT WHICH IS DELIVERABLE TO THE SITE.
- 13. ALL ELECTRICAL ENCLOSURES AND PANELBOARDS SHALL BE AS FOLLOWS UNLESS
- SPECIFICALLY NOTED OTHERWISE: a. ULSOBA LISTED FOR ENCLOSURED INDUSTRIAL ENCLOSURES.
- b. ENCLOSURES MOUNTED INSIDE: NEMA-12 MINIMUM.
- c. ENCLOSURES MOUNTED OUTSIDE: NEMA-3R MINIMUM.
- d. ALL ENCLOSURES SHALL BE PROVIDED WITH AMBIENT COMPENSATION AS REQUIRED BY THE INSTALLED EQUIPMENT. (ie AIR CONDITIONER, HEATER, COOLING FANS, ETC.)
- 14. SERVICE EQUIPMENT ENCLOSURES SHALL BE FACTORY WIRED AND CONFORM TO NEMA STANDARDS.
- 15. ENCLOSURES HOUSING TRANSFORMERS OF MORE THAN ONE KVA SHALL HAVE EFFECTIVE SCREENED VENTILATION LOUVERS OF NOT LESS THAN 32,000 $\,\mathrm{mm}^{\,2}$. SCREENS SHALL BE STAINLESS STEEL NO. 304, WITH A NO. 10 SIZE MESH. SCREWS, NUTS, BOLTS AND WASHERS SHALL BE STAINLESS STEEL.
- 16. FASTENERS ON THE EXTERIOR OF THE ENCLOSURES SHALL BE VANDAL-RESISTANT AND SHALL NOT BE REMOVEABLE FROM THE EXTERIOR. SCREWS, NUTS, BOLTS AND WASHERS SHALL BE STAINLESS STEEL.
- 17. A PLASTIC LAMINATED WIRING DIAGRAM SHALL BE PROVIDED WITH BRASS MOUNTING EYELETS AND ATTACHED TO THE INSIDE OF THE ENCLOSURE AND THE WRING DIAGRAM SHALL BE AFFIXED TO THE INTERIOR WITH A UL OR ETL APPROVED METHOD.
- 18. AN ENGRAVED PHENOLIC NAMEPLATE ON THE DEAD FRONT PANEL INDICATING THE FUNCTION OF EACH CIRCUIT OR DEVICE SHALL BE INSTALLED WITH STAINLESS RIVETS OR STAINLESS STEEL SCREWS: a) ADJACENT TO THE BREAKER OR DEVICE WITH CHARACTER SIZE A MIMIMUM OF 3 mm.
- b) AT THE TOP OF THE EXTERIOR DOOR PANEL INDICATING SYSTEM NUMBER, VOLTAGE LEVEL AND NUMBER OF PHASES WITH CHARACTER SIZE A MIN. OF 5 mm. 19. THE PLAN SHOWS THE APPROXIMATE LOCATION OF DEVICES WITHIN THE BUILDING.
- COMPONENTS MAY BE REARRANGED, HOWEVER, THE "WORKING" CLEARANCES WITHIN THE SERVICE EQUIPMENT BUILDING SHALL BE MAINTAINED.
- 20. MINIMIUM CLEARANCE SHALL BE REQUIRED FOR FRONT AND BACK OF SERVICE EQUIPMENT ENCLOSURE PER NATIONAL ELECTRICAL CODE, ARTICLE 110.26, "SPACES ABOUT ELECTRIC EQUIPMENT (600 VOLTS, NOMINAL, OR LESS)".
- 21. SEE C'VI SITE PLAN FOR OUTSIDE EQUIPMENT LOCATIONS.

REVISIONS





CHECKED DATE : 5-19-13 AS NOTED JOB NO. :

