

SUMMARY OF WORK - THIS SHEET ONLY

1. SWITCHBOARD TYP AND PANELS L1, L2 ARE EXISTING.
2. DISTRIBUTION CIRCUIT BREAKERS MS-1-21 ARE EXISTING.
3. CONTACTOR G1 IS NEW AND REPLACES EXISTING CONTACTORS G1A, G1B. SEE CONTACTOR SCHEDULE ON SHEET ES-3.
4. CONTACTORS C2-C17 (SOCCER LIGHTING) ARE NEW.
5. WIRING AND CONDUIT FROM EXISTING CIRCUIT BREAKERS MS-2 THROUGH MS-17 TO CONTACTORS C2-C17 IS NEW.
6. WIRING FROM CONTACTORS C2-C17 TO SOCCER FIELD LIGHTING IS NEW.
7. CIRCUIT BREAKERS L1-16, 25, 27, 29, 31 ARE NEW.
8. CIRCUIT BREAKERS MS-2, 4 ARE NEW.
9. SHUNT TRIPS FOR WATER LEVEL SENSOR WELLS ARE NEW.

PANEL L1 5 PH 4 WIRE 208Y/120 VOLTS 325 A MLO SURFACE MOUNTED									
MIN INTERRUPTING RATING 10,000 RMS 5TH AMPS LOCATION ELEC. ROOM NEMA 1									
EXISTING PUMP, BATTERY, ELECTRIC HEAT, ELECT. LIGHTS, REFRIGERATOR, BURNER, FURNACE, FURNACE EXHAUST FAN ONLY, HOB-HAM, CIGRT, BURNER, HOB, REFRIG, BO-SPACE, OAT, SC-SPACE, CIGRT, BURNER									
POLE SPACE SET	CIRCUIT USE	CKT BRK RATING	CONNECTED LOAD VA			CKT BRK RATING	CIRCUIT USE	POLE SPACE SET	SET
1	2	3	A	B	C	4	5	6	7
1	F-E-CONTACTOR G1	20	300			20	L-E-GENERAL LIGHTING	2	2
2			770						
3	F-E-CONTACTOR TIMER	20		500		20	R-E-SPARE	4	4
4									
5	M-E-HAND DRYER	30			2800	30	M-E-SP-1 AND SP-2	6	6
6					660				
7	M-E-HAND DRYER	30	2500			20	L-E-OUTDOOR LIGHTS	8	8
8			820						
9	L-E-EXIT / EMERGENCY	20		150		20	OUTDOOR MALL	10	10
10				570			L-E-MOUNTED LIGHTS		
11	R-E-C.O. (N)	20			1800	20	R-E-SPARE	12	12
12									
13	F-E-PANEL L2	150/5	8580			20	R-E-SPARE	14	14
14			360						
15	P X	X		8580		20	R-E-TTS	16	16
16				432					
17	P X	X			8580		F-N-THETA LG-2 (N)	18	18
18									
19	M F-E-SITE	20	580				SO		18
20									
21	F-E-LIGHTING CONTACTORS	20		400			SO		20
22	SITE PUMP								
23	R-E-STATION C.O.	20			580		SO		22
24									
25	F-N-CONTACTORS C2-5 (N)	20		800			SO		24
26									
27	F-N-CONTACTORS C6-9 (N)	20		800			SO		26
28									
29	F-N-CONTACTORS C10-13 (N)	20			800		SO		28
30									
31	F-N-CONTACTORS C14-17 (N)	20		800			SO		30
32									
33	SO						SO		32
34	SO								
35	SO						SO		34
36	SO								
37	SO						SO		36
38	SO								
39	SO						SO		38
40	SO								
41	SO						SO		40
42									
* EXISTING PANEL			14440	11170	14750	CALCULATED DEMAND AMPS = 118			
(*) INSTALL NEW BREAKER			40860						

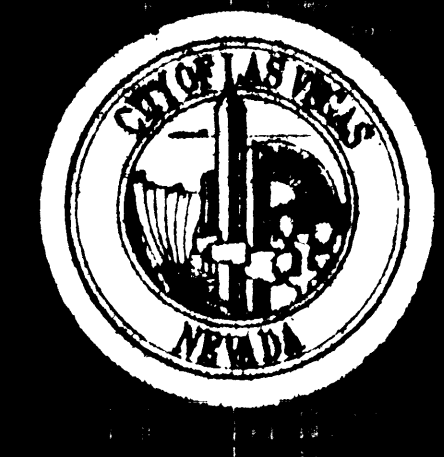
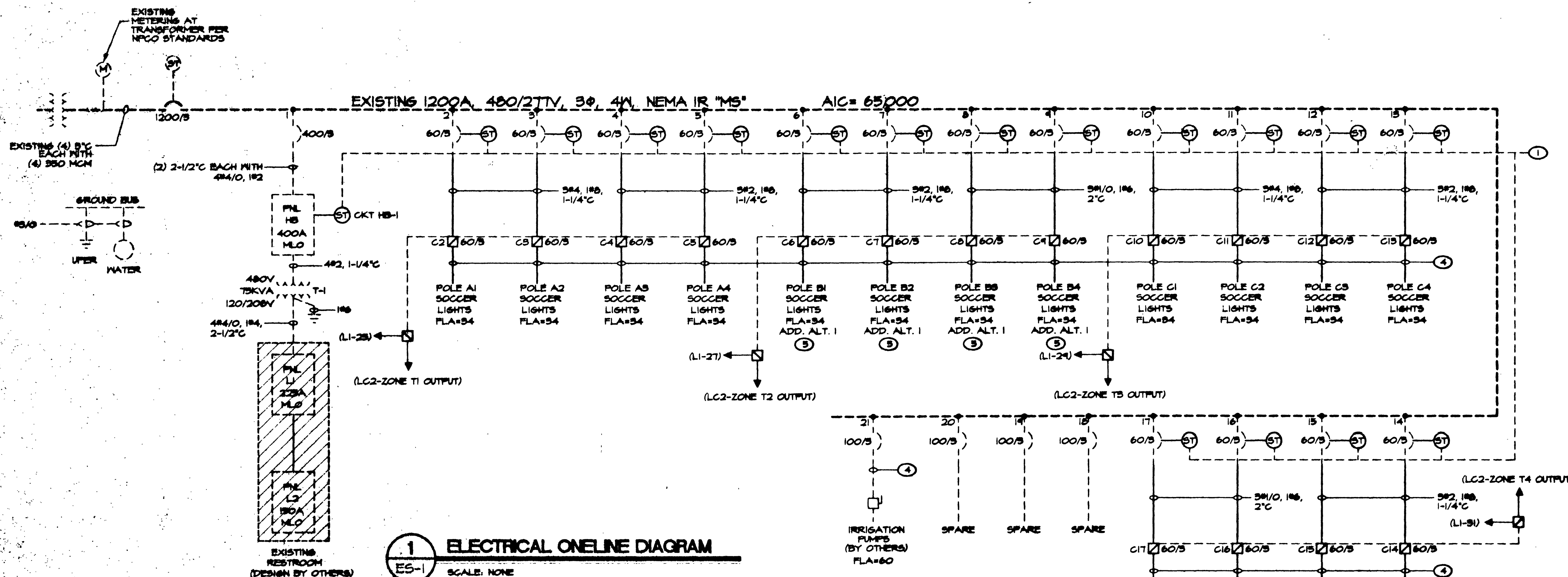
PANEL MS 5 PH, 4 WIRE, 480Y/277 VOLTS 400 AMPS MLO SURFACE MOUNTED									
MIN INTERRUPTING RATING 65,000 RMS 5TH AMPS LOCATION ELEC. RM, NEMA 1									
P=POSSIBLE BREAKPOINT, K=KITCHEN EQUIPMENT, L=LIGHTS, M=MUSICAL EQUIPMENT, P=PA/AMPL, R=RECEIVER/AMPLIFIER, MLO=MAIN LINES ONLY, NEM=MAIN CIRCUIT BREAKER, W=H2O, R=RECYCLAY, B=SPACE ONLY, SC=SCHEMATIC CIRCUIT, A=NOT BREAKER									
SPACE SET	CIRCUIT USE	CKT BRK RATING	CONNECTED LOAD VA			CKT BRK RATING	CIRCUIT USE	POLE SPACE SET	
			A	B	C				
1	L-E- PATH/AREA (*)	20/2	1860				FUTURE PARK PICNIC SHELTER	2	
			3240				L-N - LIGHTS (*)		
3	L X	X		1860		30		4	
5	L-E - PARKING LOT	30/2			4140		30	6	
							30	8	
7	L X	X		4140			30	10	
9	FUTURE PARK L-N- PATH/AREA (*)	30/2		3080			30	12	
							30	14	
11	L X	X			3080		30	16	
							30	18	
13	30						30	20	
15	30						30	22	
17	30						30	24	
19	30						30	26	
21	30						30	28	
23	30						30	30	
25	30						30	32	
27	30						30	34	
29	30						30	36	
31	30						30	38	
33	30						30	40	
35	30						30	42	
37	30						30	44	
39	30						30	46	
41	30						30	48	
			25000			110/B	P -E- TRANSFORMER T-1	50	
			25000			X	P X	40	
			25000			X	P X	42	
			84240	24840	32230	CALCULATED DEMAND AMPS =			122
			48400						
* EXISTING PANEL									
(*) INSTALL NEW BREAKER									
(**) INSTALL NEW BREAKER WITH SHUNT TRIP									

ELECTRICAL LEGEND

- PANELBOARD SURFACE MOUNTED
- SWITCHBOARD
- TRANSFORMER
- DISCONNECT SWITCH F INDICATES FUSIBLE (DASHED LINES = EXISTING)
- TELEPHONE TERMINAL BOARD 4 X 8 X 3/4" FIRE TREATED PLYWOOD
- DUPLEX RECEPTACLE (15' AFF UNLESS NOTED OTHERWISE) NF INDICATES WEATHERPROOF OUTLET
- SWITCH (48" AFF UNLESS NOTED OTHERWISE)
- ELECTRIC SHEET NOTE DESIGNATION
- MECHANICAL EQUIPMENT DESIGNATION
- BRANCH CIRCUIT CONSISTING OF 2#12 IN MINIMUM SIZE 1" CONDUIT NOT INCLUDING GROUND WIRE, OR AS NOTED ON DRAWINGS
- HOME RUN TO PANELBOARD OR DEVICE - NUMBER OF ARROW HEADS INDICATES NUMBER OF CIRCUITS
- BRANCH CIRCUIT - SHORT SLASHES INDICATE NUMBER OF PHASE OR SWITCH LEADS, LONG SLASHES INDICATE NUMBER OF NEUTRALS, LONG SLASH IV A DOT INDICATES A SEPARATE ISOLATED GROUND WIRE.
- CONDUIT IN SLAB OR UNDERGROUND
- INTERRUPTER SWITCH
- DUPLEX RECEPTACLE (15' AFF UNLESS NOTED OTHERWISE)
- JUNCTION BOX
- FUSE
- CIRCUIT BREAKER
- METERING (DASHED LINES = EXISTING)
- PULLBOX, SIZE NO. 5-1/2 UNLESS NOTED OTHERWISE WITH NON-METALLIC LIDS (TYP.) STAMPED "ELECTRIC"
- IRRIGATION CONTROLLER(S) LOCATION
- CONTACTOR
- SHUNT TRIP OR CONTROL STATION
- PAY TELEPHONE OUTLET 48" AFF UNO
- ARM MOUNTED HID AREA FIXTURES
- ASTRONOMICAL TIMECLOCK
- LOCATION OF SOCCER FIELD POLE
- SOCCER FIELD LIGHT CONTROLLER - THETA LAB LG-2

ABBREVIATIONS

- | | |
|----------------------------|----------------------------|
| AFB ABOVE FINISHED FLOOR | J-BX JUNCTION BOX |
| AFG ABOVE FINISHED GRADE | KVA KILOVOLT AMPS |
| AL ALUMINUM | KW KILOWATT |
| BRK BREAKER | LTG LIGHTING |
| C CONDUIT | NIC NOT IN CONTRACT |
| CKT CIRCUIT | NTS NOT TO SCALE |
| C.O. CONDUIT ONLY | PNL PANEL |
| CU COPPER | PWR POWER |
| DWG DRAWING | TYP TYPICAL |
| ELEC ELECTRICAL | UNO UNLESS NOTED OTHERWISE |
| EXT EXISTING | V VOLTS |
| GFI GROUND FAULT INTERRUPT | VA VOLT AMPS |
| GRD GROUND | WP WEATHER PROOF |
| | XT TRANSFORMER |

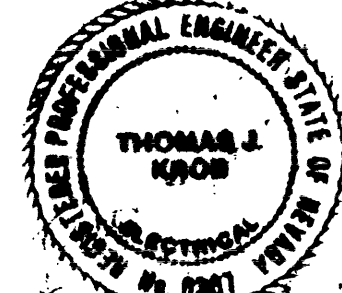


TUKROB
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ELECTRICAL ENGINEERING

**BUCKSKIN BASIN
FIELD LIGHTING
ELECTRICAL LEGEND**

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DATE: 07/25/94
SCALE: AS SHOWN
PROJECT: BUCKSKIN BASIN FIELD LIGHTING



DESIGNED
MAY 06 11

Fast Trac Electric

ES-1
SHEET 2 OF 5

650.61