

PANEL H1, 3 PH, 4 WIRE, 480Y/277 VOLTS 225 A MLO SURFACE MOUNTED MIN INTERRUPTING RATING 14,000 RMS SYM AMPS LOCATION ELECT. RM. NEMA 1									
L=LIGHTS, R=RECEPTACLES, M=MECHANICAL EQUIPMENT, SO=SPACE ONLY, SC=SPARE CIRCUIT, E=EXISTING, 6=6FI BREAKER MLO=MAIN LUGS ONLY, MCB=MAIN CIRCUIT BREAKER, N=NEN, R=RELAY									
POLE SPACE	CIRCUIT USE	CKT BKR RATINGS	CONNECTED LOAD VA			CKT BKR RATINGS	CIRCUIT USE	POLE SPACE	CKT
			A	B	C				
1	L - PKG LOT	20	3240			40/2	FIELD 1, POLE 1	2	2
3	L - WALKWAYS - N & E	20	6720						
5	L - WALKWAYS - S & W	20		1870		X	X	4	4
7	L - FUT. BLDG.	20		6720					
9	FIELD 2, POLE 1	40/2		2880		25/2	FIELD 1, POLE 2	6	6
11	X	X		3360		X	X	8	8
13	FIELD 2, POLE 2	25/2		6720		25/2	FIELD 1 POLE 3	10	10
15	X	X		3360		X	X	12	12
17	FIELD 2, POLE 3	25/2		6720		40/2	FIELD 1, POLE 4	14	14
19	X	X		3360		X	X	16	16
21	FIELD 2, POLE 4	40/2		3240		20	L - PKG LOT	18	18
23	X	X		3240		20	L - PKG LOT	20	20
25	SO			6720				22	22
27	SO							24	24
29	SO							26	26
31	SO							28	28
33	SO							30	30
35	SO							32	32
37	SO							34	34
39	SO							36	36
41	SO							38	38
43	SO							40	40
45	SO							42	42
			30100	35470	24190				
				94760					

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PANEL L1, 3 PH, 4 WIRE, 208Y/120 VOLTS 150 A MCB SURFACE MOUNTED MIN INTERRUPTING RATING 10,000 RMS SYM AMPS LOCATION ELECT. RM. NEMA 1									
L=LIGHTS, R=RECEPTACLES, M=MECHANICAL EQUIPMENT, SO=SPACE ONLY, SC=SPARE CIRCUIT, E=EXISTING, 6=6FI BREAKER MLO=MAIN LUGS ONLY, MCB=MAIN CIRCUIT BREAKER, N=NEN, R=RELAY									
POLE SPACE	CIRCUIT USE	CKT BKR RATINGS	CONNECTED LOAD VA			CKT BKR RATINGS	CIRCUIT USE	POLE SPACE	CKT
			A	B	C				
1	LIGHTING CONTR.	20	1440						
3	CONTACTORS, TIMERS	20		500					
5	SC	20							
7	SC	20							
9	SC	20							
11	SC	20							
13	SO								
15	SO								
17	SO								
19	SO								
21	SO								
23	SO								
25	SO								
27	SO								
29	SO								
31	SO								
33	SO								
35	SO								
37	SO								
39	SO								
41	SO								
			1440	500	0				
				1940					

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PANEL H2, 3 PH, 4 WIRE, 480Y/277 VOLTS 225 A MLO SURFACE MOUNTED MIN INTERRUPTING RATING 14,000 RMS SYM AMPS LOCATION ELECT. RM. NEMA 1									
L=LIGHTS, R=RECEPTACLES, M=MECHANICAL EQUIPMENT, SO=SPACE ONLY, SC=SPARE CIRCUIT, E=EXISTING, 6=6FI BREAKER MLO=MAIN LUGS ONLY, MCB=MAIN CIRCUIT BREAKER, N=NEN, R=RELAY									
POLE SPACE	CIRCUIT USE	CKT BKR RATINGS	CONNECTED LOAD VA			CKT BKR RATINGS	CIRCUIT USE	POLE SPACE	CKT
			A	B	C				
1	FIELD 3, POLE 1	40/2		6720		25/2	FIELD 4, POLE 2	2	2
3	X	X		3360		X	X	4	4
5	FIELD 3, POLE 2	25/2		6720		25/2	FIELD 4, POLE 3	6	6
7	X	X		3360		X	X	8	8
9	FIELD 3, POLE 3	25/2		3360		40/2	FIELD 4, POLE 4	10	10
11	X	X		6720		X	X	12	12
13	FIELD 3, POLE 4	40/2		6720				14	14
15	X	X		6720				16	16
17	FIELD 4, POLE 1	40/2		6720				18	18
19	X	X		6720				20	20
21	SO							22	22
23	SO							24	24
25	SO							26	26
27	SO							28	28
29	SO							30	30
31	SO							32	32
33	SO							34	34
35	SO							36	36
37	SO							38	38
39	SO							40	40
41	SO							42	42
			30240	26880	23520				
				80640					

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LIGHTING FIXTURE SCHEDULE									
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FIXT ID	TYPE	MANUFACTURER AND CATALOG NO.	NO.	WATT	TYPE	VLTS	CKT	REMARKS AND MOUNTING	
F1	HID CAST ALUMINUM POST TOP LUMINAIRE	QUALITY LIGHTING HB-13-V-HPS100-277-DBZ	1	100	LJ100	277		PROVIDE POLE & BASE PER DIAGRAM, SHEET E-3	
F2	HID CAST ALUMINUM POST TOP LUMINAIRE	QUALITY LIGHTING HB-13-II-V-HPS100-277-DBZ	1	100	LJ100	277		PROVIDE POLE & BASE PER DIAGRAM, SHEET E-3	
F3	HID RECTILINEAR SINGLE ARM MOUNTING	GARDCO EH19-1-3-400HPS-277-BRA	1	400	LJ400	277		PROVIDE POLE & BASE PER DIAGRAM, SHEET E-3	
F4	NOT USED								
F5	4 LUMINAIRE AND POLE ASSEMBLY	MUSCO LIGHT-STRUCTURE	4	1500	MVR1500/HEU	480		PROVIDE 10' POLE	
F6	8 LUMINAIRE AND POLE ASSEMBLY	MUSCO LIGHT-STRUCTURE	8	1500	MVR1500/HEU	480		PROVIDE 10' POLE	

* PROVIDE INLINE FUSEHOLDER AND FUSE INSIDE POLE BASE.

CONTACTOR SCHEDULE				
CONTACTOR #	RATINGS	NO. POLES	LOCATION	CIRCUITS CONTROLLED
C1	20A	4	RESTROOM BLDG.	HI-1, 18, 20
C2	20A	2	RESTROOM BLDG.	HI-3
C3	20A	2	RESTROOM BLDG.	HI-5
C4A	60A	4	RESTROOM BLDG.	HI-2, 6
C4B	60A	4	RESTROOM BLDG.	HI-10, 14
C5A	60A	4	RESTROOM BLDG.	HI-4, 13
C5B	60A	4	RESTROOM BLDG.	HI-17, 21
C6A	60A	4	RESTROOM BLDG.	H2-1, 5
C6B	60A	4	RESTROOM BLDG.	H2-4, 13
C7A	60A	4	RESTROOM BLDG.	H2-2, 6
C7B	60A	4	RESTROOM BLDG.	H2-10, 17

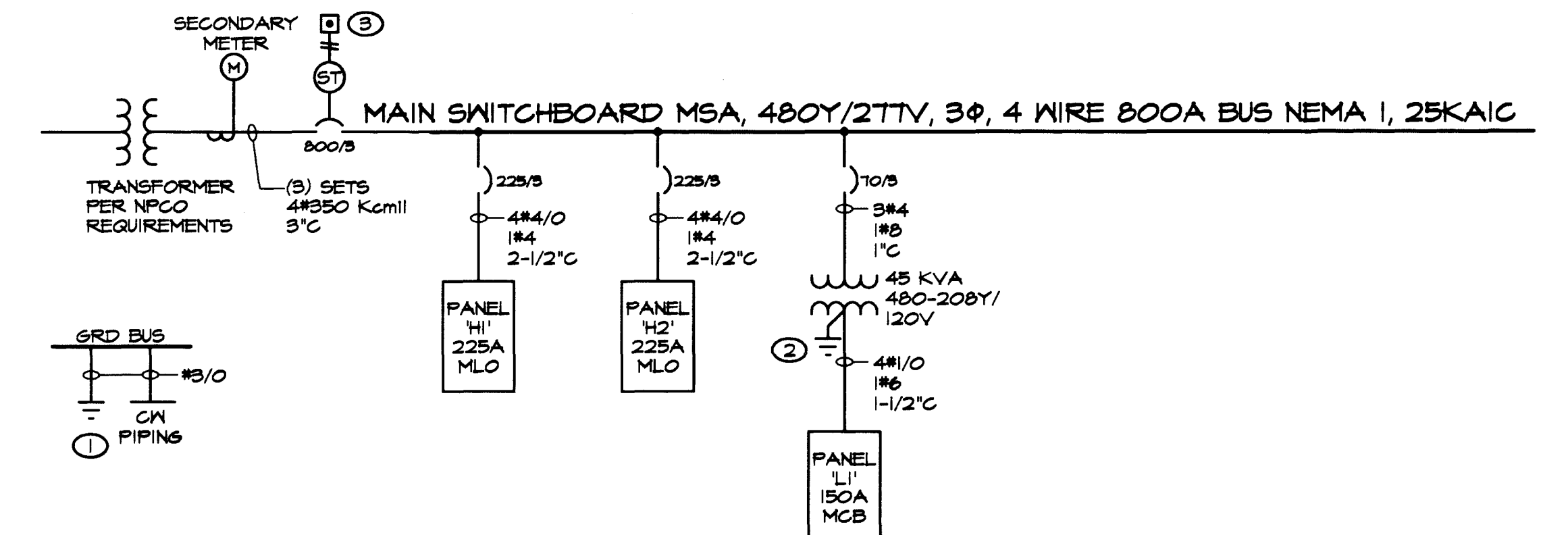
CONTROL SCHEDULE			
CONTROL	DESCRIPTION	CONTACTORS CONTROLLED	AREA
PC-1	PHOTOCELL	C1	PARKING LOT LIGHTS
PC-2	PHOTOCELL	C2, C3	WALKWAY LIGHTS
CONTACT 1	THETA LABS CONTROLLER	C4A, C4B	BALLFIELD 1
CONTACT 2	THETA LABS CONTROLLER	C5A, C5B	BALLFIELD 2
CONTACT 3	THETA LABS CONTROLLER	C6A, C6B	BALLFIELD 3
CONTACT 4	THETA LABS CONTROLLER	C7A, C7B	BALLFIELD 4

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 NP 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 LEGS, LONG SLASHES INDICATE NUMBER OF NEUTRALS, LONG SLASH W/ A DOT INDICATES A SEPARATE ISOLATED GROUND WIRE
- CONDUIT IN SLAB OR UNDERGROUND
- INTERRUPTER SWITCH
- DUPLEX RECEPTACLE @ 18" AFF UNLESS NOTED OTHERWISE
- JUNCTION BOX
- FUSE
- CIRCUIT BREAKER
- METERING (DASHED LINES = EXISTING)
- CONDUIT
- C.O. CONDUIT ONLY
- U.N.O. UNLESS NOTED OTHERWISE
- PULLBOX, SIZE NO. 3-1/2 UNLESS NOTED OTHERWISE
- IRRIGATION CONTROLLER
- CONTACTOR
- SHUNT TRIP OR CONTROL STATION
- PAY TELEPHONE OUTLET 48" AFF UNO
- SURFACE MOUNTED FLUORESCENT FIXTURE
- SURFACE MOUNTED HID OR INCANDESCENT
- ARM MOUNTED HID AREA FIXTURES
- FLUORESCENT SIGN LIGHT (GRADE MOUNTED)
- CEILING MOUNTED FLUORESCENT FIXTURE
- POST TOP HID AREA FIXTURE
- ASTRONOMICAL TIMECLOCK
- LOCATION OF BALLFIELD POLE
- BALLFIELD LIGHT CONTROLLER
- (E) INDICATES "EXISTING".

**Rainbow Park Phase II Redesign
Electrical Load Calculation**

Load Description	VA	Demand	Total
Ballfield Lighting	274345	125%	341181
Walkway Lighting	5836	125%	7295
Parking Lot Lighting	6703	125%	8379
Restroom Bldg. Lighting (Est.)	2405	125%	3006
Restroom Bldg. Misc. Power (Est.)	19154	100%	19154
Restroom Bldg. HVAC (Est.)	8116	100%	8116
25% Of Largest Motor	17459	25%	4365
Total VA=			400121
Total kVA=			400.12
Amperes At 480Y/277V, 3 Phase, 4 Wire=			481



1 ELECTRICAL ONELINE DIAGRAM

E-1 SCALE: NONE

NOTES:

- 1 PROVIDE CONCRETE ENCASED GROUNDING ELECTRODE (UFER) CONSISTING OF 20" MINIMUM #3/0 BC INSTALLED PER NEC 250-81 (C).
- 2 #6BC, 3/4" C TO GROUND PER NEC 250-26(C).
- 3 PROVIDE SHUNT TRIP STATION PER BUILDING DEPT REQUIREMENTS. LOCATE AT BUILDING EXTERIOR PER PARKS AND RECREATION DEPT. INSTRUCTIONS.



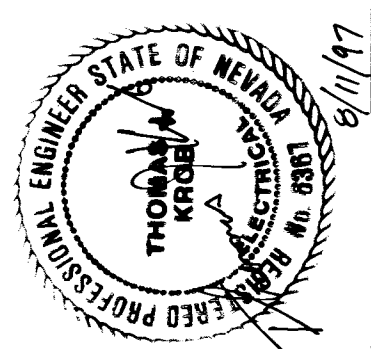
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ELECTRICAL ENGINEERING

SUBMITTED BY: BALLFIELD'S REDESIGN

DATE: 05/11/97



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ELECTRICAL LEGEND, SCHEDULES AND ONELINE DIAGRAM

JOB # T15/LEGEND
NAME JT/KM
DATE 05/02/97
SCALE AS SHOWN

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