



SOUTH LAKES SPORTS PARK WICHITA, KS

Issue:	
100% PLANS	10/18/23
BID SETS	10/25/23
JOB NO.	220008-003
DATE	18 OCTOBER 2023
PM	NLS
DESIGNED BY	DCG
DRAWN BY	SRM
CHECKED BY	SMS
ELECTRICAL SCHEDULES	

PANELBOARD: LA

208Y/120 VOLTS, 3 PHASE, 4 WIRE
400 AMP MAIN BKR, SURFACE MTD.
42000 AIC LABELED

CIRC NO.	LOAD V. A.	LOAD TYPE	LOAD DESCRIPTION	AMP SIZE	AMP	LOAD DESCRIPTION	LOAD TYPE	LOAD V. A.	CIRC NO.			
1	8320	EQPT	FOOD TRUCK PEDESTAL S	2	80	A	20	1	LIGHTS-LOBBY/MERCHANDISE/STORAGE	LGHT	507	2
3	---	---	---	---	---	B	20	1	LIGHTS-103-114	LGHT	1090	4
5	8320	EQPT	FOOD TRUCK PEDESTAL N	2	80	C	20	1	LIGHTS-EXTERIOR BUILDING	STLT	528	6
7	---	---	---	---	---	A	20	1	OVERHEAD DOOR-W SIDE	MOTR	1000	8
9	1200	EQPT	REFRIGERATOR EAST	1	20	B	20	1	OVERHEAD DOOR-S/W SIDE	MOTR	1000	10
11	1200	EQPT	REFRIGERATOR CENTER	1	20	C	20	1	OVERHEAD DOOR-S/E SIDE	MOTR	1000	12
13	1200	EQPT	REFRIGERATOR WEST	1	20	A	20	1	SCOREBOARD	POWR	200	14
15	400	RCPT	RECEPT-MERCHANDISE 101 N WALL	1	20	B	20	1	HVLS-01	MOTR	1200	16
17	1200	POWR	TVS LOBBY, MERCH/SNACKS	1	20	C	20	1				18
19	800	EQPT	U.C. FREEZER	1	20	A	20	1				20
21	600	RCPT	RECEPT-STORAGE 102W WALL 101	1	20	B	20	1	DOOR ASSIST	MOTR	400	22
23	400	RCPT	RECEPT-NE WALL LOBBY 100	1	20	C	20	1	EF-01,EF-02,EF-03,EF-04,EF-05,EF-06	MOTR	303	24
25	600	RCPT	RECEPT-POS/COUNTER	1	20	A	20	1	CARD READER	POWR	600	26
27	1000	RCPT	RECEPT- LOBBY 100	1	20	B	20	1	SPARE			28
29	700	R/P	RCPT-WOMIN 110/LOCKER 111/INFRARED SNSR	1	20	C	20	1	SPARE			30
31	700	R/P	RCPT-MENS 107/LCKR 108/INFRARED SNSRS	1	20	A	20	1	SPARE			32
33	900	R/P	RCPT-RR 113/INFRARED/IR 106/EXTRIOR	1	20	B	20	1	SPARE			34
35	1200	RCPT	RECEPT-OFFICE 105/CORRIDOR 103	1	20	C	20	1	SPARE			36
37	800	RCPT	RECEPT-OFFICE 104	1	20	A	20	1	CONTACTORS 'A' & 'B'	POWR	400	38
39	---	---	SPARE	1	20	B	20	1	LIGHTING CONTROL PANEL 'RP'	POWR	400	40
41	---	---	SPARE	1	20	C	20	1	ACCESS CONTROL PANEL	POWR	400	42
43	3444	H/M	MHP-01	2	30	A	20	1	IT RACK	POWR	1500	44
45	---	---	---	---	---	B	20	1	RECEPT-IT RM	RCPT	800	46
47	9030	H/M	AH-01A	2	70	C	20	1	WRP RECEPT CENTER POLES	RCPT	400	48
49	---	---	---	---	---	A	20	1	WR RECEPT EXTERIOR SHADE STRUCTURE	RCPT	200	50
51	7200	HEAT	AH-01B	2	50	B	20	1	WRP RECEPPTS - COURT 1	RCPT	400	52
53	---	---	---	---	---	C	20	1	WRP RECEPPTS - COURT 2	RCPT	400	54
55	5762	C/M	HP-01	2	50	A	20	1	WRP RECEPT - COURTS 4,6	RCPT	400	56
57	---	---	---	---	---	B	20	1	WR RECEPPTS N COURTS	RCPT	400	58
59	120	MOTR	CP-01	1	20	C	20	1	WRP RECEPPTS - COURTS 7,10	RCPT	400	60
61	---	---	SPARE	1	20	A	20	1	SPARE			62
63	---	---	SPARE	1	20	B	20	1	EXTERIOR BUILDING RECEPPTS - S.E	RCPT	800	64
65	---	---	SPARE	1	20	C	20	1	EXTERIOR BUILDING RECEPPTS - N.W	RCPT	800	66
67	---	---	SPARE	1	20	A			SPACE			68
69	---	---	SPARE	1	20	B			SPACE			70
71	---	---	SPARE	1	20	C			SPACE			72
73	---	---	SPARE	1	20	A			SPACE			74
75	---	---	SPARE	1	20	B			SPACE			76
77	---	---	SPARE	1	20	C			SPACE			78
79	---	---	SPARE	1	20	A			SPACE			80
81	---	---	SPARE	1	20	B			SPACE			82
83	---	---	SPARE	1	20	C			SPACE			84

- ① ROUTE VIA CONTACTOR 'A'
- ② ROUTE VIA CONTACTOR 'B'
- ③ GFCI CIRCUIT BREAKER SHALL PROVIDE GROUND FAULT PERSONNEL PROTECTION PER THE NEC.

PANELBOARD: HA

480Y/277 VOLTS, 3 PHASE, 4 WIRE
400 AMP MAIN BKR, SURFACE MTD.
65000 AIC LABELED

CIRC NO.	LOAD V. A.	LOAD TYPE	LOAD DESCRIPTION	AMP SIZE	AMP	LOAD DESCRIPTION	LOAD TYPE	LOAD V. A.	CIRC NO.			
1	3888	STLT	LIGHTS - COURTS 1,2	2	20	A	30	1	EUH-01	HEAT	4792	2
3	---	---	---	---	---	B	25	1	EUH-02	HEAT	3989	4
5	1752	STLT	LIGHTS - COURTS 3,4	2	20	C	30	1	EUH-03	HEAT	4792	6
7	---	---	---	---	---	A	25	1	EUH-04	HEAT	3989	8
9	1752	STLT	LIGHTS - COURTS 5,6	2	20	B	20	1	EUH-05	HEAT	2992	10
11	---	---	---	---	---	C	20	1	EUH-06	HEAT	2992	12
13	5256	STLT	LIGHTS - COURTS 7-12	2	20	A	15	1	EUH-07	HEAT	2992	14
15	---	---	---	---	---	B	20	1	SPARE			16
17	5256	STLT	LIGHTS - COURTS 13-18	2	20	C	20	1	SPARE			18
19	---	---	---	---	---	A	25	3	WH-01	WTRH	12000	20
21	5256	STLT	LIGHTS - COURTS 19-24	2	20	B	1	1	---			22
23	---	---	---	---	---	C	1	1	---			24
25	1125	STLT	LIGHTS - PARKING LOT	2	20	A			SPACE			26
27	---	---	---	---	---	B			SPACE			28
29	1700	STLT	LIGHTS - COMPLEX SIDEWALKS	1	20	C			SPACE			30
31	---	---	SPARE	2	20	A	250	3	TRANSFORMER: TLA	Q/H	72899	32
33	---	---	---	---	---	B	1	1	---			34
35	---	---	SPARE	2	20	C	1	1	---			36
37	---	---	---	---	---	A	60	3	SPD			38
39	---	---	SPARE	2	20	B	1	1	---			40
41	---	---	---	---	---	C	1	1	---			42

- ① FURNISH ADJUSTABLE TRIP BREAKER
- ② VIA LIGHTING CONTROL PANEL 'RP'

EQUIPMENT CONNECTION SCHEDULE

MECHANICAL EQUIPMENT CONNECTIONS

UNIT DESIG	UNIT VOLTAGE	LOAD			PANEL DEVICE			DEVICE AT UNIT			FEEDER DESCRIPTION OR SEE THE FEEDER SCHEDULE	REMARKS OR SEE THE INDICATED NOTES BELOW				
		H.P.	FLA	KVA	CIRCUIT NUMBER	BKR.	SW.	FUSE	NEMA START SIZE	BKR.			SW.	FUSE	NEMA START SIZE	OTHER
AH AIR HANDLING UNIT																
5	01A	208/1	1	43.4	9.03	LA:47	70		2		60	60	2	1	2 #4 AWG THWN; #8 AWG GRD; 1°C.	
5	01B	208/1		34.6	7.2	LA:51	50		2		60	45	2	1	2 #6 AWG THWN; #10 AWG GRD; 3/4°C.	
HP HEAT PUMP																
01		208/1	23.7A	27.7	5.762	LA:55	40		2		60	35	2		1	2 #6 AWG THWN; #10 AWG GRD; 3/4°C.
EUH ELECTRIC UNIT HEATER																
6	01	277/1		17.3	4.792	HA:2	30		1						1	2 #10 AWG THWN; #10 AWG GRD; 1/2°C.
6	02	277/1		14.4	3.989	HA:4	25		1						1	2 #10 AWG THWN; #10 AWG GRD; 1/2°C.
6	03	277/1		17.3	4.792	HA:6	30		1						1	2 #10 AWG THWN; #10 AWG GRD; 1/2°C.
6	04	277/1		14.4	3.989	HA:8	25		1						1	2 #10 AWG THWN; #10 AWG GRD; 1/2°C.
6	05	277/1		10.8	2.992	HA:10	20		1						1	2 #12 AWG THWN; #12 AWG GRD; 1/2°C.
6	06	277/1		10.8	2.992	HA:12	20		1						1	2 #12 AWG THWN; #12 AWG GRD; 1/2°C.
6	07	277/1		10.8	2.992	HA:14	20		1						1	2 #12 AWG THWN; #12 AWG GRD; 1/2°C.
CP CIRCULATING PUMP																
01		120/1	1A	1.0	0.12	LA:59	20		1					FUSTAT	1	2 #12 AWG THWN; #12 AWG GRD; 1/2°C.
WH WATER HEATER																
01		480/3		14.4	12.00	HA:20	25		3		30	3			1	3 #10 AWG THWN; #10 AWG GRD; 3/4°C.
EF EXHAUST FAN																
01		120/1	83VA	0.7	0.083	LA:24	20		1					FUSTAT	1	2 #12 AWG THWN; #12 AWG GRD; 1/2°C. VIA ROOM LIGHTS
02		120/1	83VA	0.7	0.083	LA:24	20		1					FUSTAT	1	2 #12 AWG THWN; #12 AWG GRD; 1/2°C. VIA ROOM LIGHTS
03		120/1	83VA	0.7	0.083	LA:24	20		1					FUSTAT	1	2 #12 AWG THWN; #12 AWG GRD; 1/2°C. VIA ROOM LIGHTS
04		120/1	18VA	0.2	0.018	LA:24	20		1					FUSTAT	1	2 #12 AWG THWN; #12 AWG GRD; 1/2°C. VIA ROOM LIGHTS
05		120/1	18VA	0.2	0.018	LA:24	20		1					FUSTAT	1	2 #12 AWG THWN; #12 AWG GRD; 1/2°C. VIA ROOM LIGHTS
06		120/1	18VA	0.2	0.018	LA:24	20		1					FUSTAT	1	2 #12 AWG THWN; #12 AWG GRD; 1/2°C. VIA THERMOSTAT
MHP MULTI/MINI SPLIT HEAT PUMP																
4	01	208/1	0.73A	16.6	3.444	LA:43	30		2		30	25	2		1	2 #10 AWG THWN; #10 AWG GRD; 1/2°C.
MSS MULTI/MINI-SPLIT INDOOR UNIT																
4	1.1	208/1	0.25A	0.3	0.052	MHP-01/MHP-01	15		2					'0'	1	2 #12 AWG THWN; #12 AWG GRD; 1/2°C.
4	1.2	208/1	0.25A	0.3	0.052	MHP-01/MHP-01	15		2					'0'	1	2 #12 AWG THWN; #12 AWG GRD; 1/2°C.
HVLS HVLS FAN																
01		120/1	10A	10.0	1.2	LA:16	20		1		20	1	MMS		1	2 #12 AWG THWN; #12 AWG GRD; 1/2°C.

- ① ALL CONNECTIONS AND ELECTRICAL EQUIPMENT LISTED IN SCHEDULE SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. FIELD VERIFY CONNECTION REQUIREMENTS AND EQUIPMENT PROVIDED BY OTHERS PRIOR TO ROUGH-IN.
- ② REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR THE REQUIREMENTS ASSOCIATED WITH WIRING AND CONNECTIONS OF INTERLOCKING, THERMOSTAT LOCATIONS, EXHAUST FAN CONTROL SWITCHES, AND OTHER CONTROLS OF MECHANICAL EQUIPMENT.
- ③ SIZE FUSES FOR MOTOR FUSTATS BASED ON 125% OF MANUFACTURER'S NAMEPLATE FULL LOAD AMPERAGE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ④ MINI-SPLIT SYSTEM: INDOOR UNIT IS FED FROM THE OUTDOOR UNIT. PROVIDE INTERCONNECTING WIRING AS REQUIRED. PROVIDE A 3-POLE MANUAL MOTOR STARTING SWITCH WITHOUT OVERLOADS FOR INDOOR LOCAL DISCONNECTING MEANS. PROVIDE WITH APPROPRIATE COVERPLATE. FIELD VERIFY ALL CONNECTION REQUIREMENTS PRIOR TO ROUGH-IN WITH EQUIPMENT PROVIDED.
- ⑤ AIR HANDLING UNIT REQUIRES 2 CIRCUITS DUE TO ELECTRIC HEAT. REFER TO MANUFACTURERS RECOMMENDATIONS FOR WIRING.
- ⑥ FACTORY PROVIDED DISCONNECT SWITCH.

PANELBOARD: LA

	CONNECTED KVA:			TOTAL	DEMAND FACTOR	CONT. KVA	CONT. FACT	SIZING AMPS:			
	PH-A	PH-B	PH-C					TOTAL	PH-A	PH-B	PH-C
Lighting	0.5	1.1	0.0	1.6	1	1.6	1.25	5.5	5.3	11.4	0.0
Site/Ext. Ltg.	0.0	0.0	0.5	0.5	1	0.5	1.25	1.8	0.0	0.0	5.5
Receptacle	2.4	5.2	4.0	10.0	1	10.0	>	30.0	18.6	40.3	31.0
(First 10000VA at 1 + remainder at 0.5)				1.6	0.5	0.8					
Largest Motor	0.0	0.0	0.0	0.0	1	0.0	0.25	5.8	8.7	8.7	0.0
Cooling	2.5	2.5	0.0	5.0	1	5.0	1	14.0	21.0	21.0	0.0
Motor	2.4	3.1	2.3	7.8	1	7.8	1	21.8	20.1	25.8	19.5
Equipment	10.3	5.4	5.4	21.0	1	21.0	1	58.4	86.0	44.7	44.7
Heating	5.2	5.2	7.2	17.6	1	17.6	1.25	61.0	54.1	54.1	75.0
Power	3.0	0.5	1.9	5.4	1	5.4	1	15.0	25.0	4.2	15.8
Spare					0.2	14.0	1	38.8	38.8	38.8	38.8
TOTAL KVA:	26.3	23.0	21.3	70.6		83.8		TOTAL AMPS:	PH-A	PH-B	PH-C
TOTAL AMPS:	219.5	191.3	177.7	196.0				252.0	277.5	248.8	230.3

PANELBOARD: HA

	CONNECTED KVA:			TOTAL	DEMAND FACTOR	CONT. KVA	CONT. FACT	SIZING AMPS:		