

**GENERAL NOTES**

- A. NEW PANEL BOARD SHALL BE FULLY RATED, SERIES RATED PANELS SHALL NOT BE PERMITTED.
- B. NEW PANEL BOARD SHALL BE COPPER BUS, ALUMINUM SHALL NOT BE PERMITTED.
- C. ALUMINUM BUS WITHIN PANELS SHALL NOT BE PERMITTED.
- D. PANEL BOARDS EXCEEDING (42) CIRCUITS SHALL BE FROM A SINGLE BUS CONFIGURATION, MULTIPLE BUS CONFIGURATIONS SHALL NOT BE PERMITTED.
- E. ALL ELECTRICAL PANELS SHALL HAVE VISIBLE TRIP INDICATORS.

MOUNTING: SURFACE		42,000 AIC	
480/277 VOLT		1,000A. MCB	
3 PHASE / 4 WIRE		SERVICE ENTRANCE RATED	
PANEL "12-MDP"			
CKT NO.	TRIP RATING	NO. OF POLES	INTERRUPTING AMPS (NOTE 1)
1	200	3	42,000
2	50	3	42,000
4	125	3	42,000
5	30	3	42,000
6	60	3	42,000
7	60	3	42,000
8	60	3	42,000
9	60	3	42,000
10	20	3	42,000
11	20	3	42,000
12	15	3	42,000
13	15	3	42,000
14	40	3	42,000
15	30	3	42,000
16	30	3	42,000
17	30	3	42,000
18	30	3	42,000
19	30	3	42,000
20	100	3	42,000

**1 MAIN DISTRIBUTION PANEL "12-MDP" (NORMAL POWER - 277/480 VOLTS)**  
SCALE NOT TO SCALE

PANEL INFORMATION				PANEL "12-LN1"				PANEL RATING & FEEDER									
MAIN TYPE: 100A MLO				NORMAL POWER				PANEL AMPACITY: 100 AMPS									
VOLTAGE: 120/208 VOLTS				NEW PANEL				PHASE CONDUCTORS: (3) #3 THWN									
MOUNTING: SURFACE MOUNT								NEUTRAL: (1) #8 THWN									
AIC RATING: 10000 AIC								# OF SETS: (1 SET)									
ENCLOSURE TYPE: NEMA-1								SOURCE: "T-12-LN1"									
CKT	DESCRIPTION	CB AMPS	WIRE SIZE	LOAD IN VOLT AMPS (VA)				PHASE	LOAD IN VOLT AMPS (VA)				WIRE SIZE	CB AMPS	DESCRIPTION	CKT	
				LTG (125%)	RECEPT.	KITCHEN	HVAC		MISC	MISC	HVAC	KITCHEN					RECEPT.
1	INTERIOR LIGHTING	20	#12	2228				A					1522	#12	20	HIGH BAY LIGHTING	2
3	PARKING LOT LIGHTS	20	#12	486				B					1522	#12	20	HIGH BAY LIGHTING	4
5	EXTERIOR LIGHTING	20	#12				600	C					1522	#12	20	HIGH BAY LIGHTING	6
7	EXTERIOR LIGHTING	20	#12				600	A					1435	#12	20	EXTERIOR LIGHTING	8
9	WORK BENCH RECEPTACLES	20	#12		1080			B	1737					#10	30	12-AC-1 (5 HP)	10
11	GARBAGE DISPOSAL	20	#12				600	C	1737								12
13	TUNNEL LIGHTING	20	#12	300				A		1000				#12	20	12-EF-4 (1/4HP)	14
15	SPARE	20	#12					B				180	100	#12	20	ROOF TOP RECEPTACLE AND LIGHT	16
17	MOTORIZED GATE	20	#12				500	C					600	#12	20	PROPANE STORAGE LIGHTING	18
19	GAS SHUT OFF VALVE	20	#12				100	A	300					#12	20	BOILER CONTROL PANEL (12-B-101)	20
21	(SHUNT TRIP)	20	#12				100	B	300					#12	20	BOILER CONTROL PANEL (12-B-102)	22
23	STEAM SHUT OFF VALVE	20	#12				100	C	300					#12	20	BOILER CONTROL PANEL (12-B-103)	24
25	(SHORT TRIP)	20	#12				100	A						#12	20	SPARE	26
27	INDUSTRIAL WATER TANK CNTL PNL	20	#12				300	B	260					#12	20	12-RP-1 DOMESTIC HOT WATER PUMP	28
29	PUMPS 12-BPW-1 & 12-PBW-2	20	#12				528	C	260								30
31	FUEL OIL STATION ALARM	20	#12				560	A						#12	20	SPARE	32
33	SPARE	20	#12					B						#12	20	SPARE	34
35	SPARE	20	#12					C						#12	20	SPARE	36
37	SPARE	20	#12					A									38
39	SPARE	20	#12					B						#10	30	SPD-12-LN1 (125KA)	40
41	SPARE	20	#12					C									42
TOTAL LOADS					3014	1080	0	0	4088		4894	1000	0	180	6701	TOTAL LOADS	

**2 PANEL SCHEDULE "12-LN1" (NORMAL POWER - 120/208 VOLTS)**  
SCALE NOT TO SCALE

LOAD CALCULATION (NEC 2023 - ARTICLE 220)			
LOAD TYPE	LOAD (kVA)	DEMAND %	DEMAND LOAD
LIGHTING	9.72	1.25	12.1 kW
RECEPTACLES	1.26	1.00	1.3 kW
RECEPTACLES > 10000	0.00	0.50	0.0 kW
KITCHEN EQUIPMENT	0.00	0.65	0.0 kW
MISC.	8.98	1.00	9.0 kW
HVAC	1.00	1.00	1.0 kW
TOTAL kW DEMAND			23.4 kW
TOTAL DEMAND AMPS		@ 100%	64.91 AMPS

ADDENDUM 1	08-09-2024
ADDENDUM 2	09-12-2024
ADDENDUM 3	01-24-2025
Revisions:	Date:

**CONSULTANT**

**ARCHITECT/ENGINEER OF RECORD**

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TYLER M. MONTGOMERY  
LICENSE NO. 000714  
1/24/2025

**Office of Construction and Facilities Management**

U.S. Department of Veterans Affairs

Drawing Title: **PANEL SCHEDULES**

Phase: 100% CONSTRUCTION DOCUMENTS

Approved: Project Director

Project Title: **SIoux FALLS BOILER PLANT**

Location: VAMC-Sioux Falls: 2501 W 22nd St, Sioux Falls, SD 57105

Issue Date: 06/25/2024

Checked: WLM

Drawn: KMB

Project Number: 438-22-900

Building Number: 12

Drawing Number: **EP601**