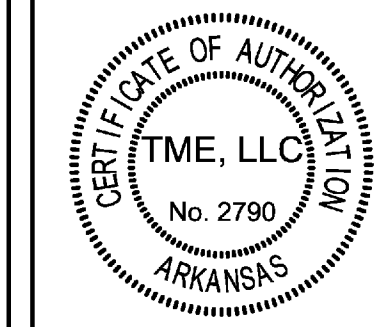




7/01/16



**Fire Station Renovation and
Police Station Addition**
 Building 7200 - Camp Joseph T. Robinson
 North Little Rock, Arkansas

DISTRIBUTION PNL: MDP **EXISTING PANEL**

LOCATION: WEST EXTERIOR L-L VOLTAGE: 208 AIC RATING: 10,000
 SUPPLY FROM: SERVICE XFMR VIA MAIN DISC. PHASES: 3 BUS RATING: 400 A
 MOUNTING: SURFACE WIRES: 4 MCB RATING: MLO
 ENCLOSURE: NEMA 3R

NOTES: [1] PROVIDE AND INSTALL NEW BREAKER
 CUTLER HAMMER PRL3a

CCT	CIRCUIT DESCRIPTION	POLES	FRAME SIZE (A)	TRIP RATING (A)	LOAD (VA)	REMARKS
1	PANEL E17200 @ ELEC/MECH ROOM 114	3	225	200	14,560	
2	PANEL N17200B @ ELEC/MECH ROOM	3	225	200	31,900	
3	EXISTING CCT	1	30	20		
[1] 4	PANEL N2 @ ELEC/MECH 114	3	225	225	62,075	
5	SPACE W/ BUS	3	225	-		
6	SPACE W/ BUS	3	225	-		
7	SPACE W/ BUS	1	30	-		
8	SPACE W/ BUS	1	30	-		
TOTAL LOAD:					108,535	
TOTAL AMPS:					301	

LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND / DESIGN FACTORS	ESTIMATED DEMAND (VA)	TOTALS
LIGHTING:	0	100%	0	CONNECTED LOAD: 108,535 VA ESTIMATED DEMAND: 108,535 VA CONNECTED CURRENT: 301 A EST. DEMAND CURRENT: 301 A
POWER, OTHER:	108,535	100%	108,535	
RECEPTACLES:	0	100% @ 10KVA + 50% @ >10KVA	0	
MOTORS:	0	125% LARGEST + 100% OTHERS	0	
KITCHEN EQUIPMENT:	0	NEC TABLE 220.56	0	
ELEVATORS:	0	NEC TABLE 620.14	0	

BRANCH PANEL: N1 (PANEL 7200B) **EXISTING PANEL**

LOCATION: ELEC/MECH L-L VOLTAGE: 208 AIC RATING: 10,000
 SUPPLY FROM: MDP PHASES: 3 BUS RATING: 225 A
 MOUNTING: SURFACE WIRES: 4 MCB RATING: MLO
 ENCLOSURE: NEMA 1

NOTES: [1] PROVIDE AND INSTALL NEW BREAKER
 CUTLER HAMMER PRL-1A [2] PROVIDE AND INSTALL NEW AFCI BREAKER
 [3] USE EXISTING SPARE BREAKER

CCT	CIRCUIT DESCRIPTION	TRIP (A)	POLES	A (VA)	B (VA)	C (VA)	POLES	TRIP (A)	CIRCUIT DESCRIPTION	CCT	
1	RCPT BAY DOOR CHARGER	20	1				1	20	RCPT BAY DOOR CHARGER	2	
3	RCPT BAY DOOR CHARGER	20	1				1	20	RCPT BAY DOOR CHARGER	4	
5	RCPT BAY DOOR CHARGER	20	1				1	20	RCPT BAY DOOR CHARGER	6	
7	MOTOR DOOR OPENER (1/2 HP)	20	1				1	20	MOTOR DOOR OPENER (1/2 HP)	8	
9	MOTOR DOOR OPENER (1/2 HP)	20	1				1	20	MOTOR DOOR OPENER (1/2 HP)	10	
11	MOTOR DOOR OPENER (1/2 HP)	20	1				1	20	MOTOR DOOR OPENER (1/2 HP)	12	
13	BAY LIGHTS	20	1				1	20	RCPT CLASSROOM	14	
15	RCPT EWC BAY	20	1				1	20	RCPT CLASSROOM	16	
17	RCPT TRUCK BAY	20	1				1	20	FURNACE NEW ADDITION	18	
19	RCPT CLASS/STOR 1 & 2	20	1				2	20	WATER HEATER 208V 1P 3KW	20	
21	RCPT OFFICE #1	20	1				1	-	-	22	
23	RCPT OFFICE #2	20	1				1	20	GAS FURNACE	24	
25	EXHAUST FAN 208V 1P 3/4 HP	20	2				1	20	EXTERIOR LIGHTS	26	
27	-	-	-				1	20	BAY LIGHTS	28	
29	EXHAUST FAN 208V 1P 3/4 HP	20	2				1	20	BAY LIGHTS	30	
31	-	-	-				1	20	BAY LIGHTS	32	
[1] 33	CU-1 @ EXTERIOR NORTHEAST	30	2		1,633		1	20	CAN LIGHTS CLASSROOM OFFICE 1 & 2	34	
35	-	-	-				1	20	LIGHTS CLASS/OFFICE/STORAGE/BATH	36	
[1] 37	F-1 @ MECH/ELEC 130	30	1	1,728			1	20	RCPT PAGING EQUIPMENT	38	
[1] 39	F-2 @ KITCHEN 127	30	1		1,728	540	1	20	RCPT @ SUPPLY RM, CORR 133, WASH	40	
[2] 41	GFIS @ UNISEX LATRINE	20	1			540	98	1	20	LTS @ CORR 133, SPLY 137, STOR 138	42
				TOTAL LOAD:	9,728	11,901			10,271		
				TOTAL AMPS:	27	33			29		

LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND / DESIGN FACTORS	ESTIMATED DEMAND (VA)	TOTALS
LIGHTING:	98	100%	98	CONNECTED LOAD: 31,900 VA ESTIMATED DEMAND: 31,900 VA CONNECTED CURRENT: 89 A EST. DEMAND CURRENT: 89 A
POWER, OTHER:	30,722	100%	30,722	
RECEPTACLES:	1,080	100% @ 10KVA + 50% @ >10KVA	1,080	
MOTORS:	0	125% LARGEST + 100% OTHERS	0	
KITCHEN EQUIPMENT:	0	NEC TABLE 220.56	0	
ELEVATORS:	0	NEC TABLE 620.14	0	

BRANCH PANEL: E1 (PANEL 7200) **EXISTING PANEL**

LOCATION: MECH/ELECT 114 L-L VOLTAGE: 208 AIC RATING: 10,000
 SUPPLY FROM: MDP VIA ATS PHASES: 3 BUS RATING: 225 A
 MOUNTING: SURFACE WIRES: 4 MCB RATING: 225 A
 ENCLOSURE: NEMA 1

NOTES: [1] USE EXISTING SPARE BREAKER
 SQUARE D NQ08-424M [2] PROVIDE AND INSTALL NEW AFCI BREAKER

CCT	CIRCUIT DESCRIPTION	TRIP (A)	POLES	A (VA)	B (VA)	C (VA)	POLES	TRIP (A)	CIRCUIT DESCRIPTION	CCT
[1] 1	FIRE ALARM CONTROL PNL @ IT ROOM	20	1	360	600		1	20	FRIG @ BREAK RM 106	2
[1] 3	FRIG @ FOOD STR 128	20	1		600	720		4	QUAD'S @ OFFICE 105, 107	4
[1] 5	QUAD'S @ DIR OFFICE 108, ADMIN SPEC	20	1			720	720	6	QUAD'S @ IT ROOM EAST	6
[1] 7	QUAD'S @ IT ROOM WEST	20	1	720	720			8	RCPT @ DISPATCH 102	8
[2] 9	FRIG @ FOOD STR 128	20	1		600	600		10	FRIG @ FOOD STR 128	10
11	OUTSIDE	20	1			720		12	RCPT @ DISPATCH 102	12
[1] 13	RCPT @ DISPATCH 102	20	1	720	600			14	DRYER @ WASHER/DRYER 131	14
[1] 15	FIRE PROT. COMPRESSOR @ FIRE SPRINK	20	1		528	600		16	WASHER @ WASHER/DRYER 131	16
[1] 17	TV AND VIDEO MONITORS @ DISPATCH 102	20	1			720	500	18	EMER LTS @ POLICE/FIRE STATION	18
19	DEMOLISHED CCT - SPARE BREAKER	20	1	600				20	ICE MAKER @ KITCHEN NORTH COUNTER	20
21	DEMOLISHED CCT - SPARE BREAKER	20	2		360			22	GAS COOKTOP, EXHAUST HOOD @ KITCHEN	22
23	-	-	-					24	LTS @ POLICE STATION	24
25	FIRE SREN	30	3	510				26	LTS @ FIRE STATION NORTH	26
27	-	-	-			1,200		28	LTS @ FIRE STATION SOUTH	28
29	-	-	-					30	EXT LTS, TOWER LIGHT @ EXTERIOR	30
31	CASCADE AIR COMPRESSOR	30	3					32	DEMOLISHED CCT - SPARE BREAKER	32
33	-	-	-					34	DEMOLISHED CCT - SPARE BREAKER	34
35	-	-	-					36	DEMOLISHED CCT - SPARE BREAKER	36
37	WEST AND EAST POLE LIGHTS	20	2					38	DEMOLISHED CCT - SPARE BREAKER	38
39	-	-	-					40	DEMOLISHED CCT - SPARE BREAKER	40
[1] 41	TV AND VIDEO MONITORS @ DISPATCH 102	20	1			720		42	DEMOLISHED CCT - SPARE BREAKER	42
				TOTAL LOAD:	4,830	5,208			5,570	
				TOTAL AMPS:	13	14			15	

LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND / DESIGN FACTORS	ESTIMATED DEMAND (VA)	TOTALS
LIGHTING:	3,680	100%	3,680	CONNECTED LOAD: 15,608 VA ESTIMATED DEMAND: 14,560 VA CONNECTED CURRENT: 43 A EST. DEMAND CURRENT: 40 A
POWER, OTHER:	360	100%	360	
RECEPTACLES:	11,040	100% @ 10KVA + 50% @ >10KVA	10,520	
MOTORS:	0	125% LARGEST + 100% OTHERS	0	
KITCHEN EQUIPMENT:	0	NEC TABLE 220.56	0	
ELEVATORS:	0	NEC TABLE 620.14	0	

BRANCH PANEL: N2 **NEW PANEL**

LOCATION: ELEC/MECH 114 L-L VOLTAGE: 208 AIC RATING: 10,000
 SUPPLY FROM: MDP PHASES: 3 BUS RATING: 225 A
 MOUNTING: SURFACE WIRES: 4 MCB RATING: 225 A
 ENCLOSURE: NEMA 1

NOTES: [1] PROVIDE AND INSTALL AFCI BREAKER

CCT	CIRCUIT DESCRIPTION	TRIP (A)	POLES	A (VA)	B (VA)	C (VA)	POLES	TRIP (A)	CIRCUIT DESCRIPTION	CCT	
[1] 1	RCPT @ SLEEPING QUARTERS #1, #2	20	1	720	720			1	20	RCPT @ SLEEPING QUARTERS #3, #4	2
[1] 3	RCPT @ SLEEPING QUARTERS #5, #6	20	1		720	720		1	20	RCPT @ SLEEPING QUARTERS #7, #8	4
[1] 5	RCPT @ CORR 112, 119	20	1			1,080	1,080	1	20	RCPT @ SLEEPING QUART #9, TV AREA	6
[1] 7	GFIS @ KITCHEN	20	1	720	180			1	20	GF @ KITCHEN EAST COUNTER	8
[1] 9	GF @ KITCHEN EAST COUNTER	20	1		180	180		1	20	GF @ KITCHEN EAST COUNTER	10
[1] 11	GF @ KITCHEN EAST COUNTER	20	1			180	540	1	20	GF @ KITCHEN NORTH, FOOD STR, FIRE SF	12
[1] 13	GF @ DISPOSAL @ KITCHEN NORTH CNTR	20	1	180	180			1	20	GF @ KITCHEN NORTH COUNTER	14
[1] 15	VENDING @ VENDING 113 NORTH	20	1		360	180		1	20	VENDING @ VENDING 113 SOUTH	16
[1] 17	LTS @ POLICE/FIRE STATION CORRIDORS	20	1			565	180	1	20	GF @ BREAK ROOM COUNTER 106	18
[1] 19	RCPT @ SUPPLY 103, EVID 104, SUPPLY 103	20	1	900	720			1	20	RCPT @ OFFICE 139, STOR 138	20
[1] 21	RCPT @ CORR 101, BREAK RM 106, EXT W	20	1		1,080	900		1	20	RCPT, EWC-1 @ WAITING 100, EXT S, TLT	22
[1] 23	RCPT @ OFFICES 107, 108	20	1			1,080	540	1	20	RCPT @ ADMIN SPEC 109	24
25	RCPT, COPIER @ DISPATCH 102	20	1	720	2,080			2	30	WH-1 @ BREAK RM 106	26
27	WH-1 @ ADA TLT 111	30	2		2,080	2,080		-	-	-	28
29	-	-	-					1	20	GFIS @ BREAK RM COUNTER WEST	30
31	EXHAUST HOOD, RANGE RCPT @ BREAK R	20	1	360	1,728			1	30	F-4 @ MECH/ELECT 114	32
33	F-3 @ MECH/ELECT 114	30	1		1,728	4,992		2	60	UH-1 @ FIRE SPRINK 129	34
35	WH-2 @ KITCHEN 127	60	2			4,160	4,992	-	-	-	36
37	-	-	-	4,160	180			1	20	VENDING RCPT @ VENDING 113	38
39	CU-3 @ EXTERIOR WEST	40	2		2,995	2,995		2	40	CU-4 @ EXTERIOR WEST	40
41	-	-	-			2,995	2,995	-	-	-	42
43	CU-2 @ EXTERIOR EAST	40	2	2,995	1,260			1	20	RCPT @ STOR 138, OFFICE 139	44
45	-	-	-			2,995	360	1	20	CEILING RCPTS @ CORR 119, TV AREA 125	46
47	SPARE	20	1					1	20	SPARE	48
49	SPARE	20	1					1	20	SPARE	50
51	SPARE	20	1					1	20	SPARE	52
53	SPARE	20	1					1	20	SPARE	54
				TOTAL LOAD:	17,803	24,546			22,827		
				TOTAL AMPS:	49	68			63		

LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND / DESIGN FACTORS	ESTIMATED DEMAND (VA)	TOTALS
LIGHTING:	565	100%	565	CONNECTED LOAD: 65,176 VA ESTIMATED DEMAND: 62,075 VA CONNECTED CURRENT: 181 A EST. DEMAND CURRENT: 172