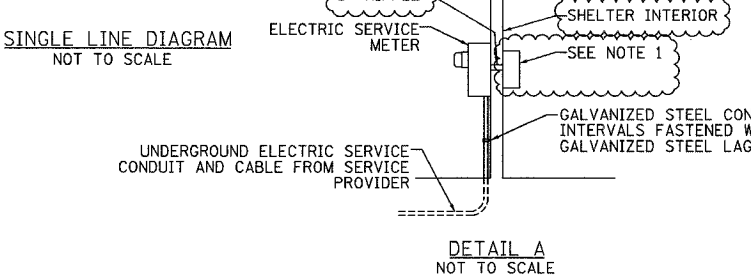
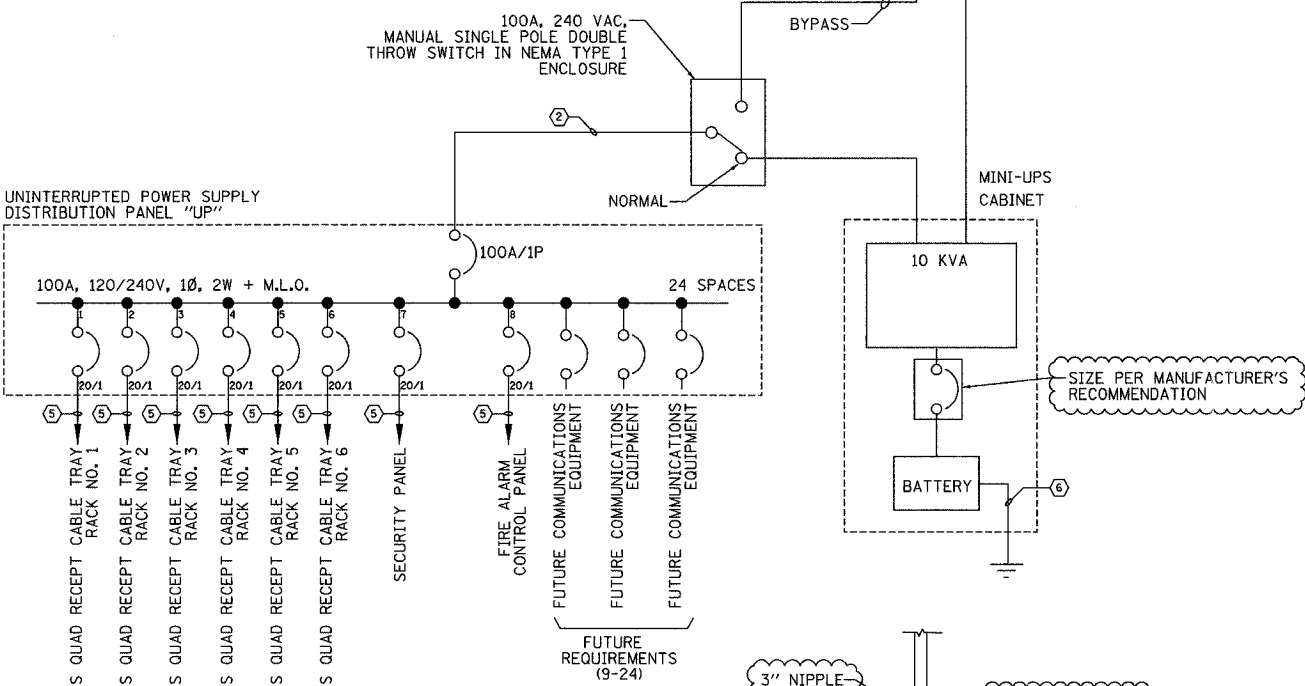
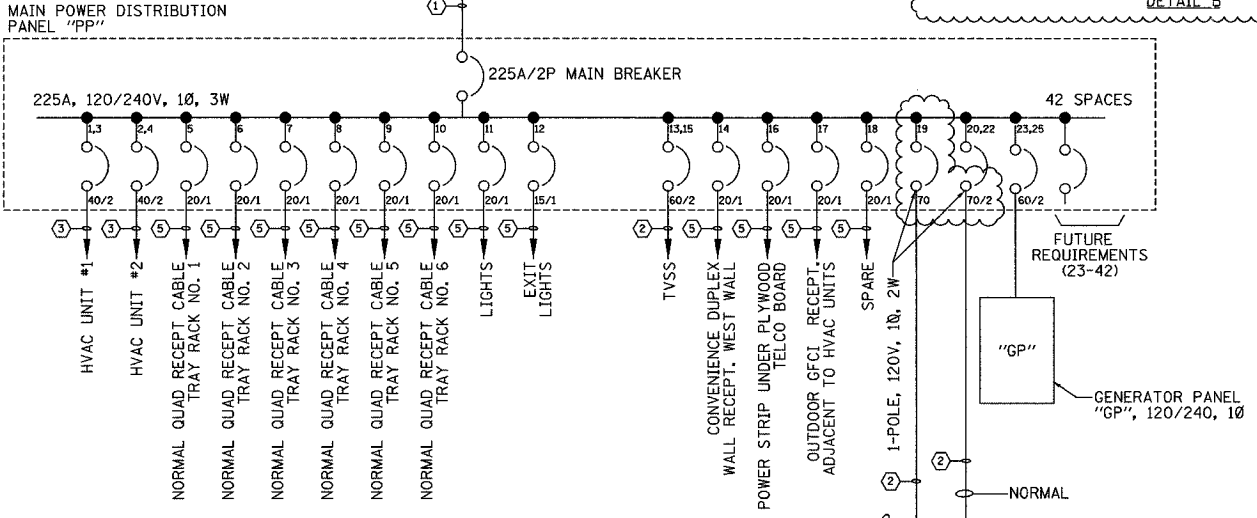
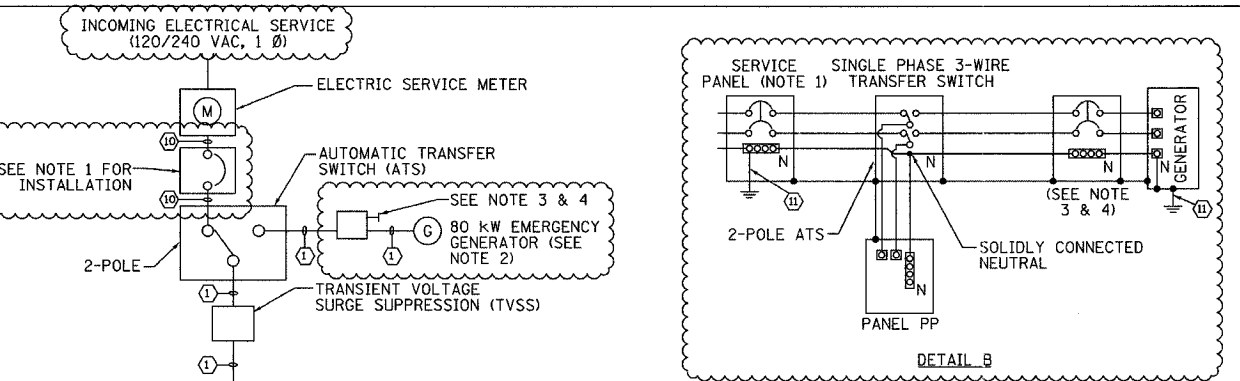


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	848

STA. TO STA. TO STA.

FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT 62583

- ① (2) #4/0, (1) #4/0 NEUTRAL & (1) #2 GND, 3" C
- ② (1) #3, (1) #3 NEUTRAL, & (1) #8 GND, 1" C
- ③ (2) #8 & (1) #10 GND, 3/4" C
- ④ (2) #10 & (1) #12 GND, 3/4" C
- ⑤ (2) #12 & (1) #12 GND, 3/4" C
- ⑥ #6 GND WIRE, 3/4" C
- ⑦ #4/0, BARE COPPER GROUND
- ⑧ QUANTITY & CONTROL WIRE SIZE PER MANUFACTURER'S RECOMMENDATION, 3/4" RGS
- ⑨ #8 BARE COPPER GROUND
- ⑩ (3) #4/0, 3" C
- ⑪ (1) #2 GND, 1" C



LOAD DESCRIPTION	QTY	UNIT (W)	LOAD PER PHASE(KVA)		TRIP	POLES	WIRE SIZE	LOAD PER PHASE(W)		LOAD DESCRIPTION		
			A	B				A	B	UNIT (W)	QTY	
HVAC UNIT 1 (36K BTU)	1	10300	5150	5150	40	2	6	5150	5150	10300	1	HVAC UNIT 2 (36K BTU)
NORMAL QUAD RECEPTACLE - RACK 1	1	900	900	900	20	1	12	900	900	900	1	NORMAL QUAD RECEPTACLE - RACK 2
NORMAL QUAD RECEPTACLE - RACK 3	1	900	900	900	20	1	12	900	900	900	1	NORMAL QUAD RECEPTACLE - RACK 4
NORMAL QUAD RECEPTACLE - RACK 5	1	900	900	900	20	1	12	900	900	900	1	NORMAL QUAD RECEPTACLE - RACK 6
LIGHTS	8	50	400	400	20	1	12	35	35	35	1	EXIT LIGHT
TVSS	1	N/A	-	-	60	2	4	900	900	180	5	DUPLEX RECEPTACLE
OUTDOOR GFCI RECEPTACLE	1	180	180	180	20	1	12	900	900	180	5	RECEPTACLE - POWER STRIP
UPS BYPASS (LOAD NOT INCLUDED IN TOTALS)					70	1	3	5000	5000	10000	1	UPS INPUT (10 KVA)
SPARE					20	1	12					SPARE
GENERATOR PANEL "GP"					60	2	6					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE

VOLTAGE: 120/240V CYCLE: 60 HZ PHASE: 1 WIRES: 3

SOLID NEUTRAL: 225 AMPS

MAIN BREAKER: 225 AMP FRAME 225 AMP TRIP

MAIN LUGS: - AMPS MAIN COPPER BUS: 225 AMPS

MANUFACTURER: TYPE AND CAT. NO.: -00140M200-

NO EQUAL: APPROVED EQUAL:

MANUFACTURER'S SURFACE: FLUSH:

MAINS: TOP BOTTOM

TOTAL LOAD: 27,265 W

LOAD DESCRIPTION	QTY	UNIT (W)	LOAD PER PHASE(KVA)		TRIP	POLES	WIRE SIZE	LOAD PER PHASE(W)		LOAD DESCRIPTION		
			A	B				A	B	UNIT (W)	QTY	
UPS QUAD RECEPTACLE - CAB 1	1	900	900	900	20	1	12	900	900	900	1	UPS QUAD RECEPTACLE - CAB 2
UPS QUAD RECEPTACLE - CAB 3	1	900	900	900	20	1	12	900	900	900	1	UPS QUAD RECEPTACLE - CAB 4
UPS QUAD RECEPTACLE - CAB 5	1	900	900	900	20	1	12	900	900	900	1	UPS QUAD RECEPTACLE - CAB 6
SECURITY PANEL	1	260	260	260	20	1	12	260	260	260	1	FIRE ALARM CONTROL PANEL
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE
SPARE	1				20	1	12					SPARE

VOLTAGE: 120/240V CYCLE: 60 HZ PHASE: 1 WIRES: 2

SOLID NEUTRAL: 100 AMPS

MAIN BREAKER: 100 AMP FRAME 100 AMP TRIP

MAIN LUGS: - AMPS MAIN COPPER BUS: 100 AMPS

MANUFACTURER: TYPE AND CAT. NO.: -00140M200-

NO EQUAL: APPROVED EQUAL:

MANUFACTURER'S SURFACE: FLUSH:

MAINS: TOP BOTTOM

TOTAL LOAD: 5,920 W

- NOTES:
- INSTALL NEW 225 AMP MAIN CIRCUIT BREAKER DISCONNECT SWITCH WITH NEUTRAL AND GROUND BUS IN NEMA 1 ENCLOSURE.
 - PACKAGED STANDBY GENERATOR AND TRANSFER SWITCH, INSTALLATION ONLY.
 - INSTALL NEW 225 AMP CIRCUIT BREAKER DISCONNECT SWITCH WITH NEUTRAL AND GROUND BUS IN NEMA TYPE 3R ENCLOSURE.
 - MOUNT NEMA 3R DISCONNECT SWITCH TO STRUCTURAL FRAME OF GENERATOR. NOTE: DESIGNATED WORK SHALL BE PAID FOR AS PART OF COMMUNICATION SHELTER.
 - ALL CONDUIT SHALL BE RIGID GALVANIZED STEEL UNLESS OTHERWISE NOTED.
 - ALL WIRE SHALL BE TYPE THWN UNLESS OTHERWISE NOTED.

REVISIONS	NAME	DATE
REVISION 1		12/17/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET to I-57

MAINTENANCE YARD SHELTER (R02)
POWER SINGLE LINE DIAGRAM

SCALE: NOT TO SCALE DATE: October 29, 2004

DRAWN BY: JM
CHECKED BY: CS

Edwards AND Kelcey
ONE NORTH FRANKLIN CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

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