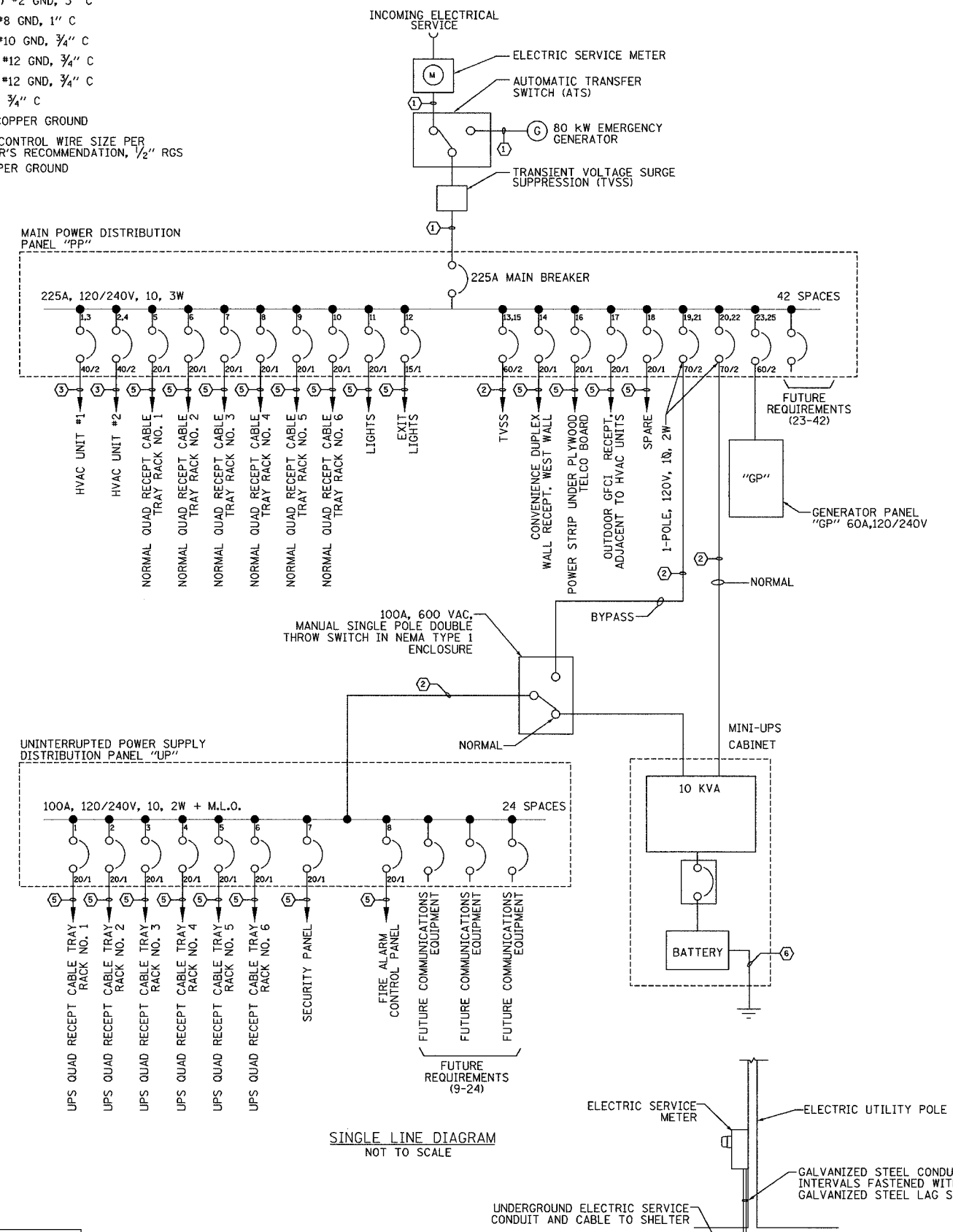


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	848
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62583				

- ① (3) #4/0 & (1) #2 GND, 3" C
- ② (2) #3 & (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, 1/2" RGS
- ⑨ #8 BARE COPPER GROUND



SINGLE LINE DIAGRAM
NOT TO SCALE

ELECTRICAL SERVICE SCHEMATIC
NOT TO SCALE

PANEL CIRCUIT AND LOAD SCHEDULE

LOAD DESCRIPTION	QTY	UNIT (W)	LOAD PER PHASE(KVA)		TRIP	POLES	WIRE SIZE	LOAD PER PHASE(W)	LOAD		
			A	B					UNIT (W)	QTY	DESCRIPTION
HVAC UNIT 1 (36K BTU)	1	10300	5150	5150	40	2	6	10300	1	HVAC UNIT 2 (36K BTU)	
NORMAL QUAD RECEPTACLE - RACK 1	1	900	900		20	1	12	900	1	NORMAL QUAD RECEPTACLE - RACK 2	
NORMAL QUAD RECEPTACLE - RACK 3	1	900	900		20	1	12	900	1	NORMAL QUAD RECEPTACLE - RACK 4	
NORMAL QUAD RECEPTACLE - RACK 5	1	900	900		20	1	12	900	1	NORMAL QUAD RECEPTACLE - RACK 6	
LIGHTS	8	50		400	20	1	12	35	35	EXIT LIGHT	
TVSS	1	N/A			60	2	4	900	180	DUPLEX RECEPTACLE	
OUTDOOR GFCI RECEPTACLE	1	180	180		20	1	12	900	180	RECEPTACLE- POWER STRIP	
UPS BYPASS (LOAD NOT INCLUDED IN TOTALS)					70	2	2	2000	4000	UPS INPUT (60 KVA)	
SUBTOTAL LEFT								9550	8985	SUBTOTAL RIGHT	TOTAL LOAD:
VOLTAGE: 120/240V								11830	15435	SUBTOTAL	27,265
SOLID NEUTRAL: 225 AMPS								MANUFACTURER: SQUARE D		TYPE AND CAT. NO.: -G0140M200-	
MAIN BREAKER: 225 AMP FRAME 225 AMP TRIP								NO EQUAL: <input checked="" type="checkbox"/> APPROVED EQUAL: <input type="checkbox"/>		1. BOLT ON BRANCH BREAKERS	
MAIN LUGS: - AMPS MAIN COPPER BUS: 225 AMPS								MOUNTING: SURFACE: <input checked="" type="checkbox"/> FLUSH: <input type="checkbox"/>		2. ALL COPPER CURRENT CARRYING PARTS	
MAINS: TOP <input checked="" type="checkbox"/> BOTTOM <input type="checkbox"/>										3. Ⓢ = SHUNT TRIP	

PANEL CIRCUIT AND LOAD SCHEDULE

LOAD DESCRIPTION	QTY	UNIT (W)	LOAD PER PHASE(KVA)		TRIP	POLES	WIRE SIZE	LOAD PER PHASE(W)	LOAD		
			A	B					UNIT (W)	QTY	DESCRIPTION
UPS QUAD RECEPTACLE - CAB 1	1	900	900		20	1	12	900	1	UPS QUAD RECEPTACLE - CAB 2	
UPS QUAD RECEPTACLE - CAB 3	1	900	900		20	1	12	900	1	UPS QUAD RECEPTACLE - CAB 4	
UPS QUAD RECEPTACLE - CAB 5	1	900	900		20	1	12	900	1	UPS QUAD RECEPTACLE - CAB 6	
SECURITY PANEL	1	260		260	20	1	12	260	260	FIRE ALARM CONTROL PANEL	
SUBTOTAL LEFT								1800	1160	SUBTOTAL RIGHT	TOTAL LOAD:
VOLTAGE: 120/240V								3600	2320	SUBTOTAL	5,920
SOLID NEUTRAL: 100 AMPS								MANUFACTURER: SQUARE D		TYPE AND CAT. NO.: -G0140M200-	
MAIN BREAKER: 100 AMP FRAME 100 AMP TRIP								NO EQUAL: <input checked="" type="checkbox"/> APPROVED EQUAL: <input type="checkbox"/>		1. BOLT ON BRANCH BREAKERS	
MAIN LUGS: - AMPS MAIN COPPER BUS: 100 AMPS								MOUNTING: SURFACE: <input checked="" type="checkbox"/> FLUSH: <input type="checkbox"/>		2. ALL COPPER CURRENT CARRYING PARTS	
MAINS: TOP <input checked="" type="checkbox"/> BOTTOM <input type="checkbox"/>										3. Ⓢ = SHUNT TRIP	

REVISIONS	
NAME	DATE

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 DRAWN BY: JM
DATE: October 29, 2004 CHECKED BY: CS

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