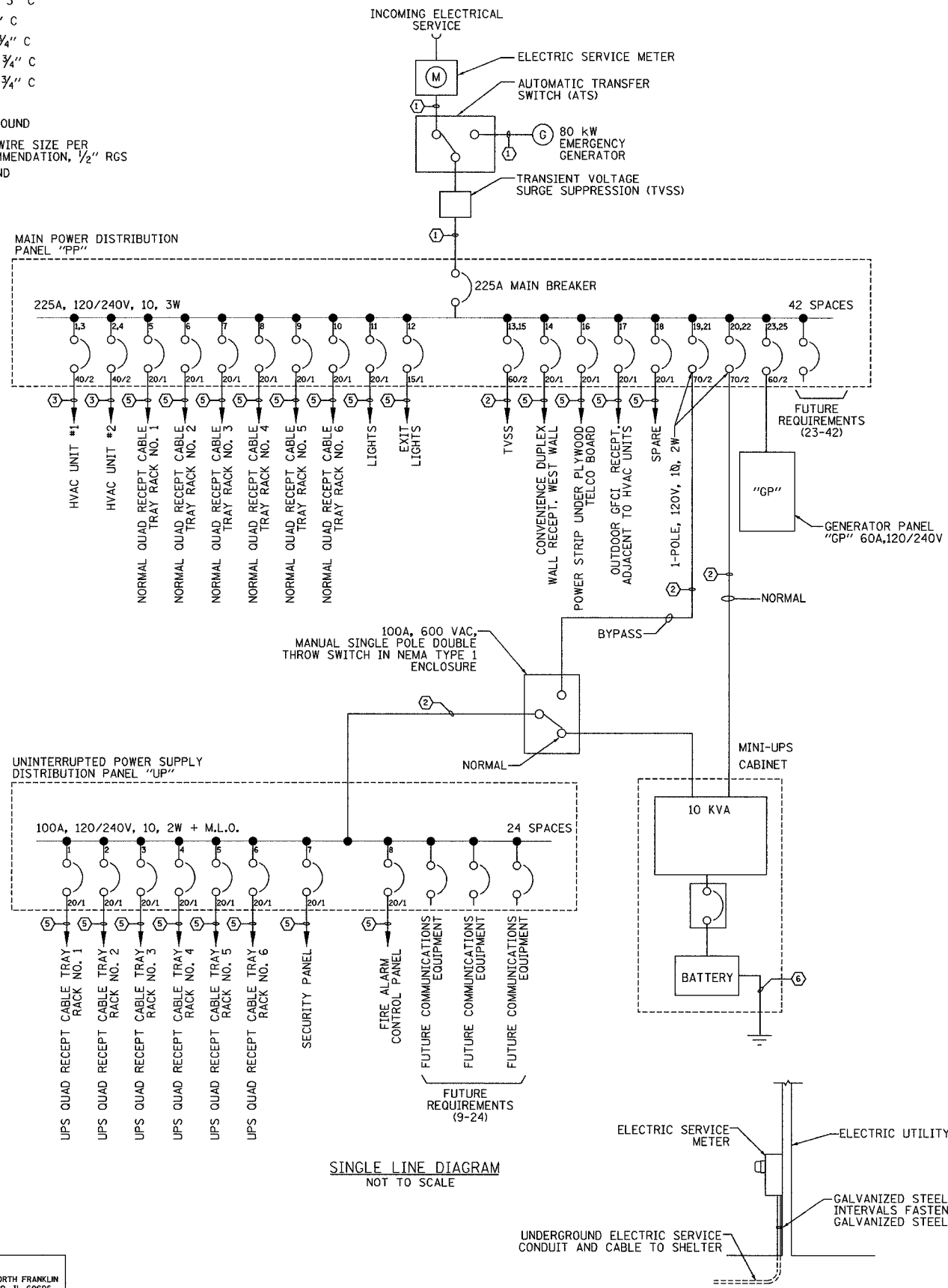


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0311	COOK	976	843
STA.		TO STA.		
FED. ROAD DIST. NO. - ILLINOIS		FED. AID PROJECT		
62583				

- 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



PANEL CIRCUIT AND LOAD SCHEDULE

WIRE SIZE #3/0
IP, 225A

LOAD DESCRIPTION	QTY	UNIT (W)	LOAD PER PHASE(KVA)		TRIP	POLES	WIRE SIZE	LOAD PER PHASE(W)		UNIT (W)	QTY	DESCRIPTION
			A	B				A	B			
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		20	1	12	900		900	1	NORMAL QUAD RECEPTACLE - RACK 2
NORMAL QUAD RECEPTACLE - RACK 3	1	900		900	20	1	12		900	900	1	NORMAL QUAD RECEPTACLE - RACK 4
NORMAL QUAD RECEPTACLE - RACK 5	1	900	900		20	1	12	900		900	1	NORMAL QUAD RECEPTACLE - RACK 6
LIGHTS	8	50		400	20	1	12		35	35	1	EXIT LIGHT
TVSS	1	N/A			60	2	4			180	5	DUPLEX RECEPTACLE
OUTDOOR GFCI RECEPTACLE	1	180	180		20	1	12	180		180	5	RECEPTACLE- POWER STRIP
UPS BYPASS (LOAD NOT INCLUDED IN TOTALS)					70	2	2			4000	1	UPS INPUT (10 KVA)
GENERATOR PANEL "GP"					60	2	6					
SUBTOTAL LEFT			1980	6450						9850	8885	SUBTOTAL RIGHT
TOTAL LOAD:										11830	15435	SUBTOTAL
TOTAL LOAD:												27,265

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
MOUNTING: TOP BOTTOM

SERVICE : 120/240VAC, 1Ø, 3W
DESIGNATION : IDOT- SHELTER NORMAL POWER (PP)
LOCATION : EAST SKYWAY SHELTER (R03)

MANUFACTURER: SQUARE D
TYPE AND CAT. NO.: 00140M200
NO EQUAL: APPROVED EQUAL:
MOUNTING: SURFACE: FLUSH:

1. BOLT ON BRANCH BREAKERS
2. ALL COPPER CURRENT CARRYING PARTS
3. Ⓢ = SHUNT TRIP

PANEL CIRCUIT AND LOAD SCHEDULE

WIRE SIZE #3/0
IP, 100A

LOAD DESCRIPTION	QTY	UNIT (W)	LOAD PER PHASE(KVA)		TRIP	POLES	WIRE SIZE	LOAD PER PHASE(W)		UNIT (W)	QTY	DESCRIPTION
			A	B				A	B			
UPS QUAD RECEPTACLE - CAB 1	1	900	900		20	1	12	900		900	1	UPS QUAD RECEPTACLE - CAB 2
UPS QUAD RECEPTACLE - CAB 3	1	900		900	20	1	12		900	900	1	UPS QUAD RECEPTACLE - CAB 4
UPS QUAD RECEPTACLE - CAB 5	1	900	900		20	1	12	900		900	1	UPS QUAD RECEPTACLE - CAB 6
SECURITY PANEL	1	260		260	20	1	12		260	260	1	FIRE ALARM CONTROL PANEL
SUBTOTAL LEFT			1800	1160						1800	1160	SUBTOTAL RIGHT
TOTAL LOAD:										3600	2320	SUBTOTAL
TOTAL LOAD:												5,920

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
MOUNTING: TOP BOTTOM

SERVICE : 120/240VAC, 1Ø, 2W
DESIGNATION : IDOT- SHELTER UPS POWER (UP)
LOCATION : EAST SKYWAY SHELTER (R03)

MANUFACTURER: SQUARE D
TYPE AND CAT. NO.: 00140M200
NO EQUAL: APPROVED EQUAL:
MOUNTING: SURFACE: FLUSH:

1. BOLT ON BRANCH BREAKERS
2. ALL COPPER CURRENT CARRYING PARTS
3. Ⓢ = SHUNT TRIP

SINGLE LINE DIAGRAM NOT TO SCALE

ELECTRICAL SERVICE SCHEMATIC NOT TO SCALE

COMM-77

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REVISIONS	
NAME	DATE

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

EAST SKYWAY SHELTER (R03)
POWER SINGLE LINE DIAGRAM

SCALE: NOT TO SCALE
DATE: October 29, 2004
DRAWN BY: JM
CHECKED BY: CS

11/23/2004 07:27:34 AM