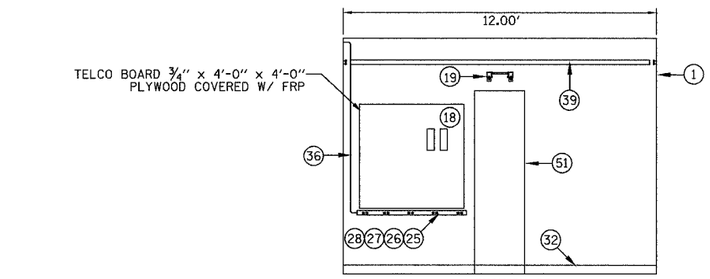
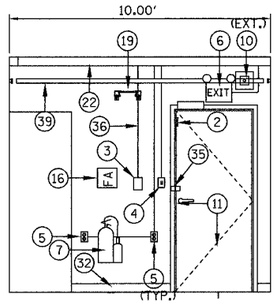
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-031I	COOK	976	847
STA.		TO STA.		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

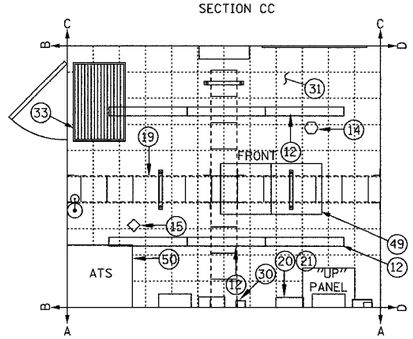
62583

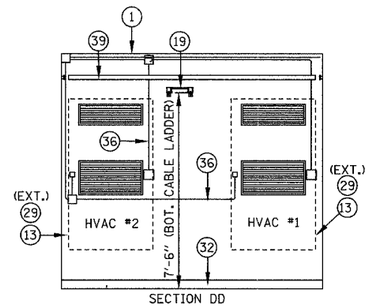


SECTION CC

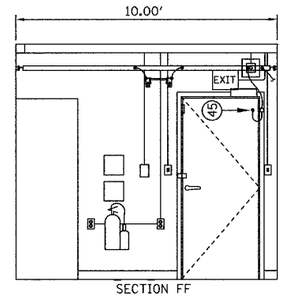


SECTION BB

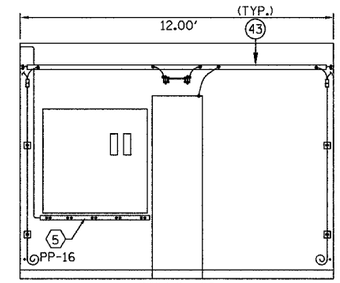




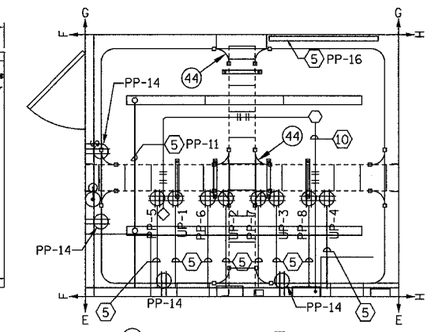
SECTION DD

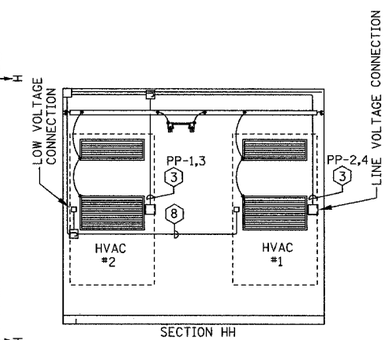


SECTION FF

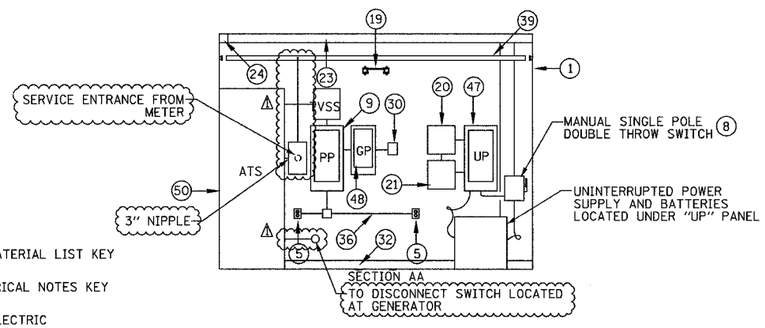


SECTION GG

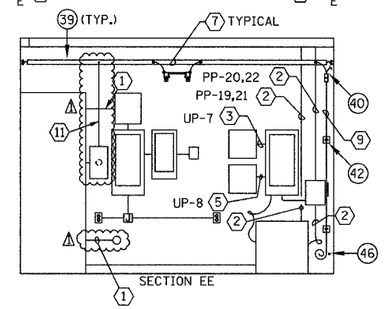




SECTION HH



EQUIPMENT LAYOUT



ELECTRICAL LAYOUT

1. (2) #4/0, (1) #4/0 NEUTRAL & (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. (1) #6 GRD. WIRE, 3/4"C
7. COPPER GROUND BUS (SEE SHEET COMM-95 FOR DETAILS)
8. QUANTITY & CONTROL WIRE SIZE PER MANUFACTURER'S RECOMMENDATION, 1/2" RGS
9. (1) #8 BARE COPPER GROUND
10. (2) #22 AWG TWISTED PAIR, 3/4"C
11. (1) #2 GROUND, 1" C

LEGEND

- MAIN MATERIAL LIST KEY
- ELECETRICAL NOTES KEY
- PHOTOELECTRIC DETECTOR
- IONIZATION DETECTOR
- JUNCTION BOX
- LIGHT SWITCH
- QUAD RECEPTACLE
- DUPLEX RECEPTACLE
- FLUORESCENT LIGHT FIXTURE
- CABLE TRAY
- COMMUNICATION EQUIPMENT RACK

ITEM	DESCRIPTION
1	PREFABRICATED 10'WX12'LX9'H (INTERIOR DIMENSION) CONCRETE EQUIPMENT SHELTER
2	DOOR INTRUSTION SENSOR
3	DUAL HVAC UNIT CONTROLLER
4	SINGLE POLE LIGHT SWITCH
5	DUPLEX RECEPTABLE
6	COMBINED EMERGENCY LIGHT W/ BATTERY BACKUP
7	10 LB. CARBON DIOXIDE FIRE EXTINGUISHER, WALL MOUNTED
8	TWO POLE, DOUBLE THROW DISCONNECT SWITCH, 240 VAC, NEMA 1 ENCLOSURE
9	NORMAL POWER PANEL "PP", 120/240 VAC, 3W, 225 AMP PANEL
10	35W HGIH PRESSURE SODIUM, VANDAL RESISTANT EXTERIOR MOUNTED FLOODLIGHT, WITH PHOTOCELL
11	36" x 80" INSULLATED HOLLW METAL CORE DOOR AND FRAME
12	FLUORESCENT LIGHT, 2 LAMPS 30 WATTS EACH, 120 VOLT
13	AIR CONDITIONING UNIT W/ GRILLS
14	CEILING MOUNTED SMOKE DETECTOR (IONIZATION TYPE)
15	CEILING MOUNTED SMOKE DETECTOR (PHOTOELECTRIC TYPE)
16	~~FIRST AID KIT~~
17	~~(NOT USED)~~
18	~~68 BLOCKS~~, MODULE 50M - 1500W W/ 2 R66M 50 BLOCKS AND BLOCK COVERS
19	12" CABLE TRAY
20	FIRE ALARM PANEL
21	ALARM I/O MODULE
22	4" x 4" x 10' WIREWAY
23	4" x 4" x 20' WIREWAY
24	4" x 8" CORNER PIECE
25	6' RECEPTACLE STRIP W/ OUTLETS EVERY 1'
26	CONDUIT ADAPTER

ITEM	DESCRIPTION
27	ELBOW ADAPTER
28	END CAP
29	VANDAL PROOF CAGE FOR HVAC
30	REMOTE ANNUNCIATOR MODULE (PRE-PURCHASED)
31	FLOOR TILES -1/8" x 12" x 12" COMMERCIAL TILE
32	BASE FINISH, 4" BLACK BASE COVER MOLD 10' x 12' SHELTER
33	24" x 36" RUBBER MAT
34	INSULATION MATERIAL FOR 10' x 20' x 9' FIRE RESISTANT R-19
35	~~1/8" x 2" x 2"~~ ANGLE PLATES AT EXTERIO DOOR AND WALL FOR VANDAL PROOF LOCK
36	3/4" CONDUIT
37	~~1/2" CONDUIT~~
38	UPS SYSTEM, 10KVA, 240 VAC INPUT, 120 VOLT, 10 OUTPUT (PAID FOR AS PART OF SHELTER)
39	~~INTERIOR COPPER GROUND BUS BAR~~
40	INTERIOR GROUND SYSTEM - GROUND LEAD TO EXTERIOR GROUND TRIAD
41	INTERIOR GROUND SYSTEM - NON-DIRECTIONAL SPLICE
42	INTERIOR GROUND SYSTEM - GROUND WALL SUPPORT
43	INTERIOR GROUND SYSTEM - GROUND BUS GROUND TAP
44	INTERIOR GROUND SYSTEM - CABLE LADDER BOND
45	INTERIOR GROUND SYSTEM - DOOR BONDING STRIP
46	INTERIOR GROUND SYSTEM - PVC 45 NIPPLE
47	UPS PANEL "UP", 120/240VAC, 2W, 100 AMP PANEL
48	STANDBY GENERAL PANEL "GP"
49	EQUIPMENT RACK (PAID FOR AS PART OF CCTV DISTRIBUTION)
50	AUTOMATIC TRANSFER SWITCH (ATS)
51	WALL MOUNTED FIBER OPTIC TERMINATION PANEL

NOTES:

1. CONDUIT AND WIRING IS SHOWN DIAGRAMATIC. ACTUAL LOCATION OF EQUIPMENT AND HARDWARE SHALL BE SHOWN IN SHOP DRAWINGS AND SHALL BE APPROVED BY THE ENGINEER.
2. CONTRACTOR SHALL MAINTAIN MINIMUM 36" CLEARANCE WHEN INSTALLING EQUIPMENT RACKS AND EQUIPMENT.
3. ALL CABLE TRAY AND EQUIPMENT SHALL HAVE GROUND WIRE INSTALLED SIZED AS PER ELECTRICAL CODE REQUIREMENTS.
4. SEE COMMUNICATION DRAWINGS FOR DETAILS ON FIBER OPTIC CABLE TERMINATIONS.
5. ROUTE ALARM CABLE FROM ALARM OUTPUT DEVICES TO ALARM INPUT PANEL VIA CABLE TRAY. SEE SHEET COMM-83 FOR NUMBER AND TYPE OF ALARM INPUTS.
6. COORDINATE SERVICE ENTRANCE AND CONDUIT PENTRATION LOCATIONS AS DETAILED PER SHELTER SITE PLAN.

COMM-81

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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)
EQUIPMENT AND ELECTRICAL LAYOUT

SCALE:

DRAWN BY: JM

DATE: October 29, 2004

CHECKED BY: CS

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