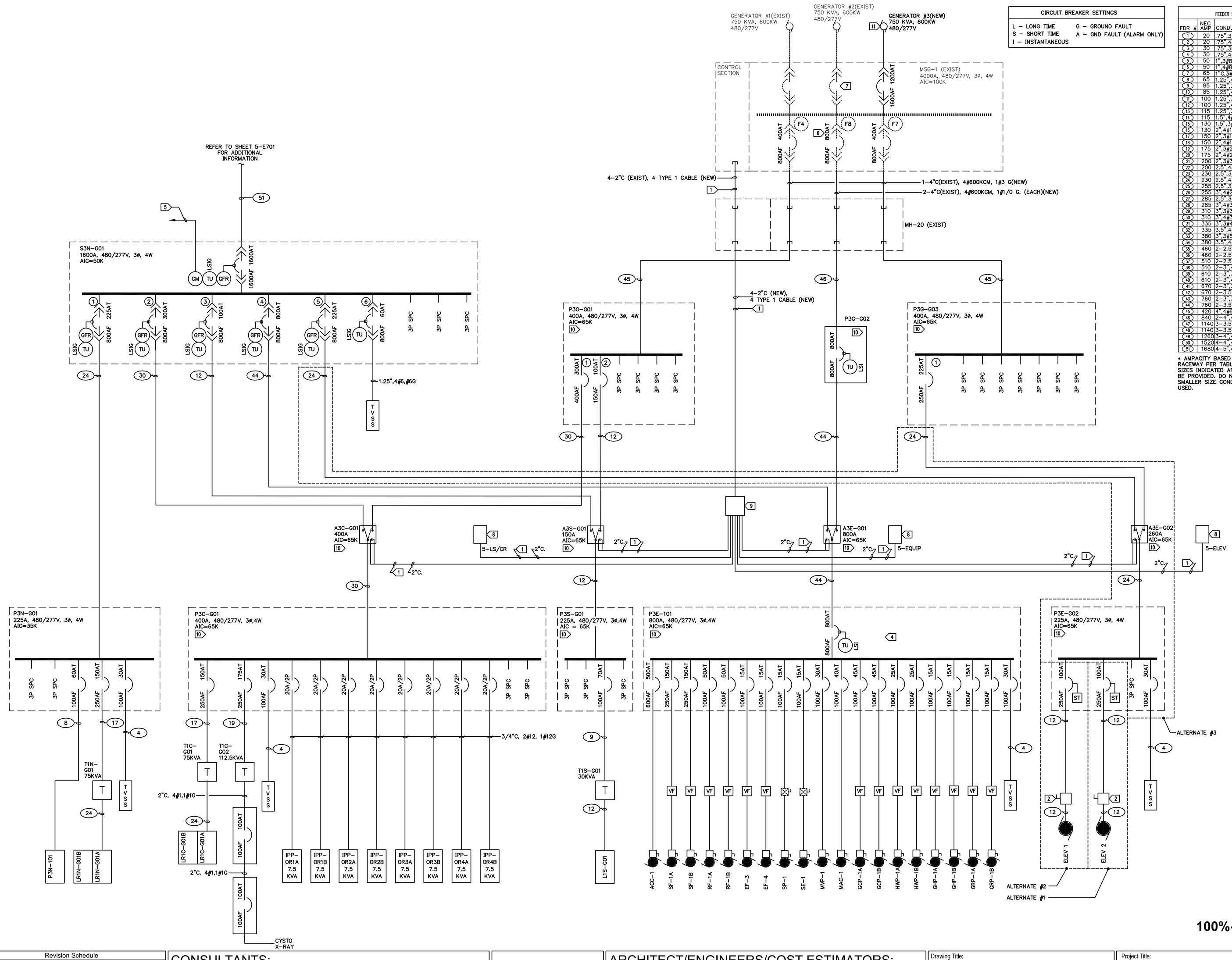

CIRCUIT BREAKER SETTINGS	
L – LONG TIME	G – GROUND FAULT
S – SHORT TIME	A – GND FAULT (ALARM ONLY)
I – INSTANTANEOUS	

FEEDER SCHEDULE		
FDR #	NEC AMP	CONDUIT/CONDUCTORS *
1	20	.75",3#12,#12G
2	20	.75",4#12,#12G
3	30	.75",3#10,#10G
4	30	.75",4#10,#10G
5	50	1",3#8,#10G
6	50	1",4#8,#10G
7	65	1"C,3#6,#8G
8	65	1.25",4#6,#8G
9	85	1.25",3#4,#8G
10	85	1.25",4#4,#8G
11	100	1.25",3#3,#8G
12	100	1.25",4#3,#8G
13	115	1.25",3#2,#6G
14	115	1.5",4#2,#6G
15	130	1.5",3#1,#6G
16	130	2",4#1,#6G
17	150	2",3#1/0,#6G
18	150	2",4#1/0,#6G
19	175	2",3#2/0,#6G
20	175	2",4#2/0,#6G
21	200	2",3#3/0,#6G
22	200	2.5",4#3/0,#6G
23	230	2.5",3#4/0,#4G
24	230	2.5",4#4/0,#4G
25	255	2.5",3#250KCM,#4G
26	255	3",4#250KCM,#4G
27	285	2.5",3#300KCM,#4G
28	285	3",4#300KCM,#4G
29	310	3",3#350KCM,#3G
30	310	3",4#350KCM,#3G
31	335	3",3#400KCM,#3G
32	335	3.5",4#400KCM,#3G
33	380	3",3#500KCM,#3G
34	380	3.5",4#500KCM,#3G
35	460	2–2.5",3#4/0,#2G
36	460	2–2.5",4#4/0,#2G
37	510	2–2.5",3#250KCM,#2G
38	510	2–3",4#250KCM,#2G
39	610	2–3",3#350KCM,#1G
40	610	2–3",4#350KCM,#1G
41	670	2–3",3#400KCM,#3G
42	670	2–3.5",4#400KCM,#3G
43	760	2–3",3#500KCM,#1/0G
44	760	2–3.5",4#500KCM,#1/0G
45	420	4",4#600KCM,#3G
46	840	2–4",4#600KCM,#1/0G
47	1140	3–3.5",3#500KCM,#2/0G
48	1140	3–3.5",4#500KCM,#2/0G
49	1260	3–4",4#600KCM,#3/0G
50	1520	4–4",4#500KCM,#3/0G
51	1680	4–5",4#600KCM,#4/0G

* AMPACITY BASED ON THW, 75°C, IN RACEWAY PER TABLE 310-16. CONDUIT SIZES INDICATED ARE MINIMUM SIZES TO BE PROVIDED. DO NOT SUBSTITUTE SMALLER SIZE CONDUIT IF 90°C WIRE IS USED.

GENERAL NOTES:

A. ELECTRICAL EQUIPMENT AND FEEDERS THAT ARE INDICATED BY A DASHED LINE ARE EXISTING OR FUTURE.

B. UNLESS NOTED OTHERWISE 120/208V PANELBOARDS TO HAVE AN AIC RATING OF 10K AND 277/480V PANELBOARDS TO HAVE AN AIC RATING OF 14K.

ELECTRICAL NOTES:

1. REFER TO REMOTE I/O SCHEDULE ON SHEET 5-E603 FOR CONTROL CABLE REQUIREMENTS.
2. PROVIDE 100A, 480V, 3P, FUSED DISCONNECT SWITCH FOR ELEVATOR. LOCATE SWITCH AND SIZE FUSES PER ELEVATOR SUPPLIER'S SHOP DRAWINGS.
3. REFER TO PANELBOARD SCHEDULES FOR ADDITIONAL CIRCUIT BREAKERS IN THIS PANEL.
4. REFER TO MOTOR STARTER SCHEDULE ON SHEET 5-602 FOR MOTOR FEEDER SIZES TO THIS PANELBOARD.
5. PROVIDED REQUIRED INTERFACE COMPONENTS TO MONITOR POINTS THROUGH THE BUILDING AUTOMATION SYSTEM (BAS).
6. REPLACE THE EXISTING 400A SENSOR PLUG TRIP UNIT WITH A 800A SENSOR PLUG.
7. EXISTING PARALLELING SWITCHGEAR LOCATED IN GENERATOR BUILDING.
8. PROVIDE GENERATOR BUILDING EMERGENCY POWER REMOTE CIRCUIT BREAKER CONTROL SWITCH. REFER TO DETAIL 1 ON SHEET 5-E603.
9. PROVIDE PULL-BOX AS REQUIRED, FOR CONTROL WIRING.
10. REVISE THE AIC RATINGS OF THE ELECTRICAL EQUIPMENT BASED ON THE ELECTRICAL SYSTEM PROTECTIVE DEVICE STUDY TO BE PROVIDED BY SPECIFICATION SECTION 26 05 71.
11. GENERATOR #3 TO BE PROVIDED BY THE VAMC AS PART OF A SEPARATE PROJECT.

100%-FINAL-NOT FOR CONSTRUCTION
FULLY SPRINKLERED

Revision Schedule	
Revision Number	Revision Date

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Ellerbe Becket Architects and Engineers
2009

Drawing Title: ELECTRICAL ONE-LINE/ RISER DIAGRAM

Approved: Project Director

Project Title: CONSTRUCT SURGICAL SUITE

Location: SIOUX FALLS, SD

Date: 05/14/10 | Checked: D.R. | Drawn: L.F.

Project Number: 438-363ES

Building Number: 5

Drawing Number: 5-E702

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Construction & Facilities Management CFM
Department of Veterans Affairs