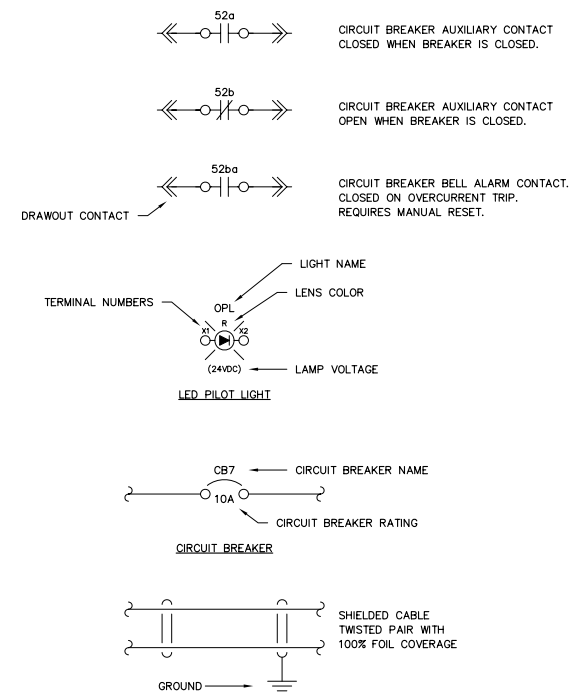
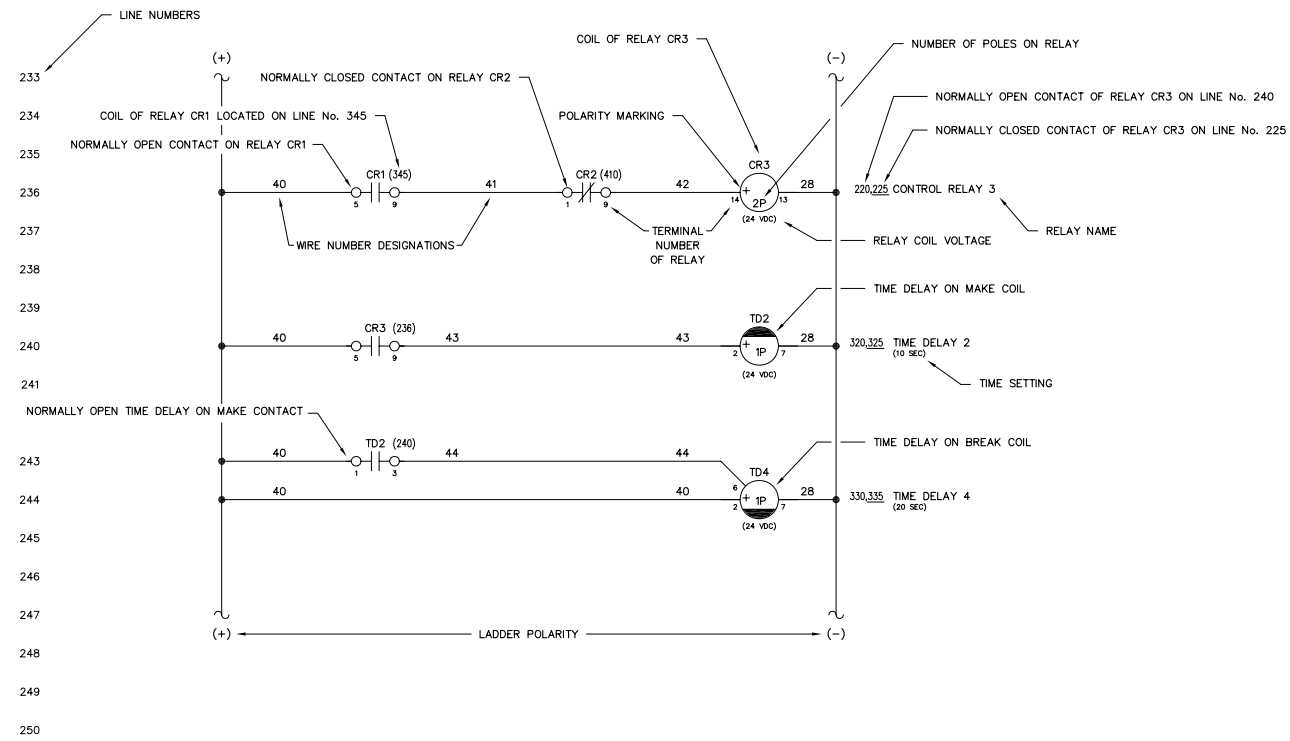




**CHITINA GENERATOR SWITCHGEAR  
ALASKA ENERGY AUTHORITY PURCHASE ORDER No. REG-08-026  
CONTROLLED POWER, INC. JOB No. 6475**

<u>DRAWING No.</u>	<u>DRAWING TITLE</u>	<u>DRAWING No.</u>	<u>DRAWING TITLE</u>
6475-2101-D	COVER SHEET	6475-5310-D	MASTER DC CONTROL, SCHEMATIC DIAGRAM
6475-3101-D	SCHEMATIC LEGEND AND NOTES	6475-5311-D	MASTER DC CONTROL, SCHEMATIC DIAGRAM
6475-4101-D	GENERATOR SWITCHGEAR ELEVATION VIEW, OUTLINE DIAGRAM	6475-5312-D	MASTER DC CONTROL, SCHEMATIC DIAGRAM
6475-4201-D	GENERATOR SWITCHGEAR PLAN VIEW, OUTLINE DIAGRAM	6475-5313-D	VFD DC CONTROL, SCHEMATIC DIAGRAM
6475-5101-D	GENERATOR SINGLE LINE, SCHEMATIC DIAGRAM	6475-5314-D	VFD DC CONTROL, SCHEMATIC DIAGRAM
6475-5201-D	GENERATOR 1 AC THREE LINE, SCHEMATIC DIAGRAM	6475-5315-D	VFD DC CONTROL, SCHEMATIC DIAGRAM
6475-5202-D	GENERATOR 2 AC THREE LINE, SCHEMATIC DIAGRAM	6475-5401-D	FEEDER BREAKER CONTROL, SCHEMATIC DIAGRAM
6475-5203-D	GENERATOR 3 AC THREE LINE, SCHEMATIC DIAGRAM	6475-5501-D	PLC COMMUNICATION, SCHEMATIC DIAGRAM
6475-5204-D	MASTER AC THREE LINE, SCHEMATIC DIAGRAM	6475-5502-D	PLC COMMUNICATION, SCHEMATIC DIAGRAM
6475-5205-D	VFD AC THREE LINE, SCHEMATIC DIAGRAM	6475-5601-D	COMMUNICATION NETWORK SINGLE LINE DIAGRAM
6475-5301-D	GENERATOR 1 DC CONTROL, SCHEMATIC DIAGRAM	6475-5602-D	COMMUNICATION NETWORK SCHEMATIC DIAGRAM
6475-5302-D	GENERATOR 1 DC CONTROL, SCHEMATIC DIAGRAM	6475-5701-D	HEATER, LIGHTING & FAN CONTROL, SCHEMATIC DIAGRAM
6475-5303-D	GENERATOR 1 DC CONTROL, SCHEMATIC DIAGRAM	6475-6101-D	CONTROL SWITCH TARGET DIAGRAM
6475-5304-D	GENERATOR 2 DC CONTROL, SCHEMATIC DIAGRAM	6475-6201-D	NAMEPLATE ENGRAVING SCHEDULE
6475-5305-D	GENERATOR 2 DC CONTROL, SCHEMATIC DIAGRAM	6475-6202-D	ANNUNCIATOR WINDOW, FABRICATION DIAGRAM
6475-5306-D	GENERATOR 2 DC CONTROL, SCHEMATIC DIAGRAM	6475-7101-D	INTERCONNECTION DIAGRAM
6475-5307-D	GENERATOR 3 DC CONTROL, SCHEMATIC DIAGRAM	6475-7102-D	INTERCONNECTION DIAGRAM
6475-5308-D	GENERATOR 3 DC CONTROL, SCHEMATIC DIAGRAM		
6475-5309-D	GENERATOR 3 DC CONTROL, SCHEMATIC DIAGRAM		



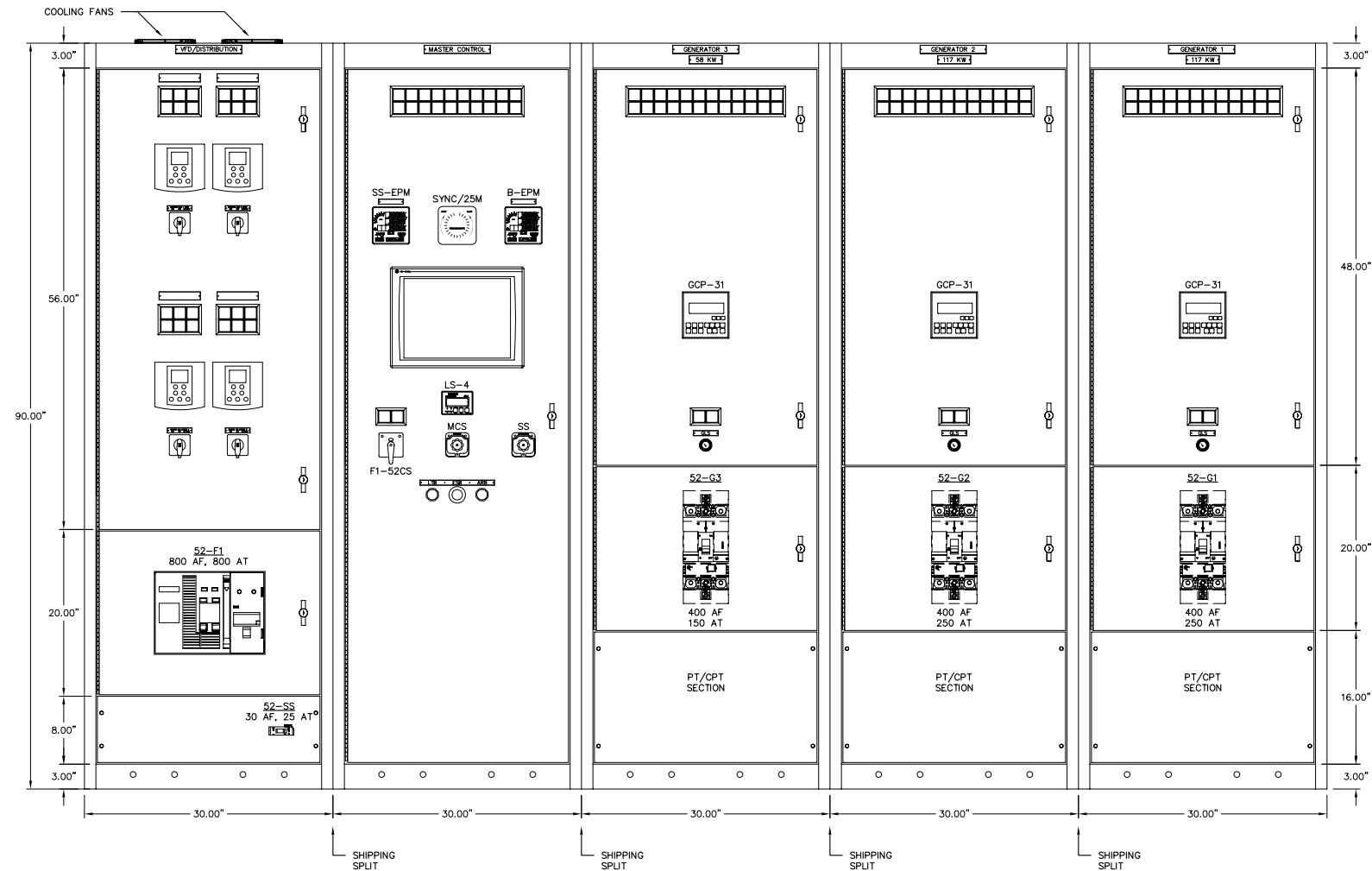
NOTES:

- SCHEMATIC IS SHOWN AS FOLLOWS:
  - ALL AC AND DC POWER REMOVED
  - ALL RELAY CONTACTS DE-ENERGIZED
  - ALL CIRCUIT BREAKERS IN THE OPEN/RESET POSITION
  - ALL MODE SWITCHES IN THE "OFF" POSITION
  - ALL EMERGENCY STOP SWITCHES IN THE "NORMAL" POSITION
  - ALL PRESSURE SWITCHES SHOWN WITHOUT PRESSURE PRESENT
  - ALL LEVEL SWITCHES SHOWN WITHOUT FLUID PRESENT
  - ALL TEMPERATURE SWITCHES SHOWN AT AMBIENT
- ⊙ INDICATES FIELD TERMINALS IN GENERATOR CONTROL SECTION.
- ⊠ INDICATES TERMINALS AT ENGINE/GENERATOR.
- ⊡ INDICATES INTERCONNECT TERMINALS IN MASTER SECTION.
- ⊣ INDICATES FIELD TERMINALS IN MASTER SECTION.
- ⊤ INDICATES INTERCONNECT TERMINALS IN GENERATOR CONTROL SECTION.
- ⊥ INDICATES INTERCONNECT TERMINALS IN VFD/DIST SECTION.
- ⊦ INDICATES FIELD TERMINALS IN VFD/DIST SECTION.
- ⊧ INDICATES FIELD WIRING BY OTHERS
- ⊨ INDICATES FIELD WIRING BY OTHERS
- ALL CONTROL WIRING TO BE No. 14 AWG, 600 VOLT, TYPE SIS EXCEPT AS NOTED
- SHIELDED WIRING TO BE No. 18 AWG, 300 VOLT, TWISTED LINE WITH 100% FOIL COVERAGE
- ALL DIODES ARE 1N4007 EXCEPT AS NOTED

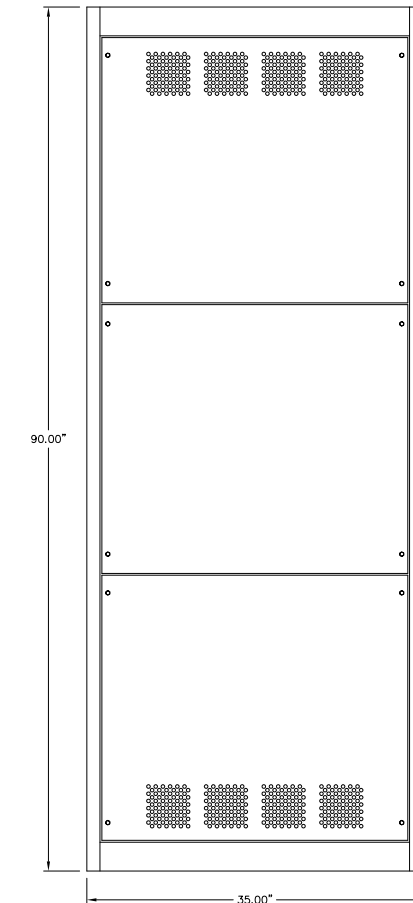
REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026			CONTROLLED POWER JOB No. 6475
TITLE: SCHEMATIC LEGEND & NOTES			
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN	
DWG. No: 6475-3101-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHITINA			

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GENERATOR SWITCHGEAR – FRONT VIEW  
277/480V, 1000A, COPPER BUS, 3 $\phi$ , 4W 35 KAIC



SIDE VIEW

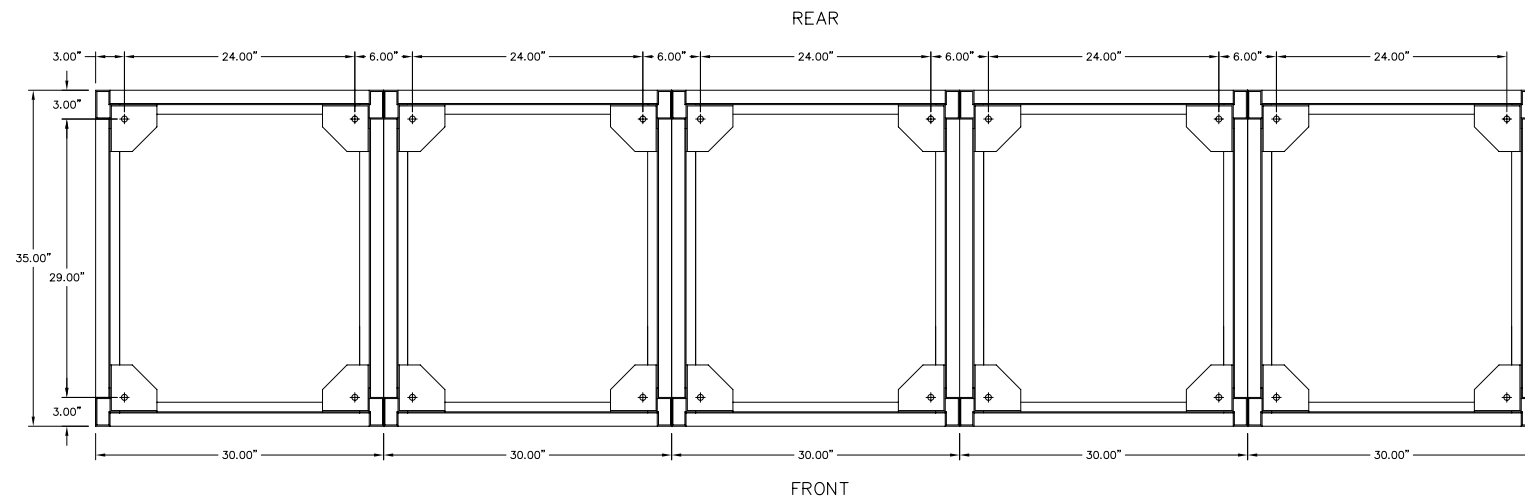
NOTES:

1. EACH SECTION SHIPPED INDIVIDUALLY.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026 CONTROLLED POWER JOB No. 6475			
TITLE: GENERATOR SWITCHGEAR ELEVATION VIEW, OUTLINE DIAGRAM			
SCALE: 1/10		DATE: 06-12-08	DWN. BY: GPN
DWG. No: 6475-4101-D		SHEET: 1 OF 1	CKD. BY: JMD
JOB: CHITINA			

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GENERATOR SWITCHGEAR - PLAN VIEW

NOTES:

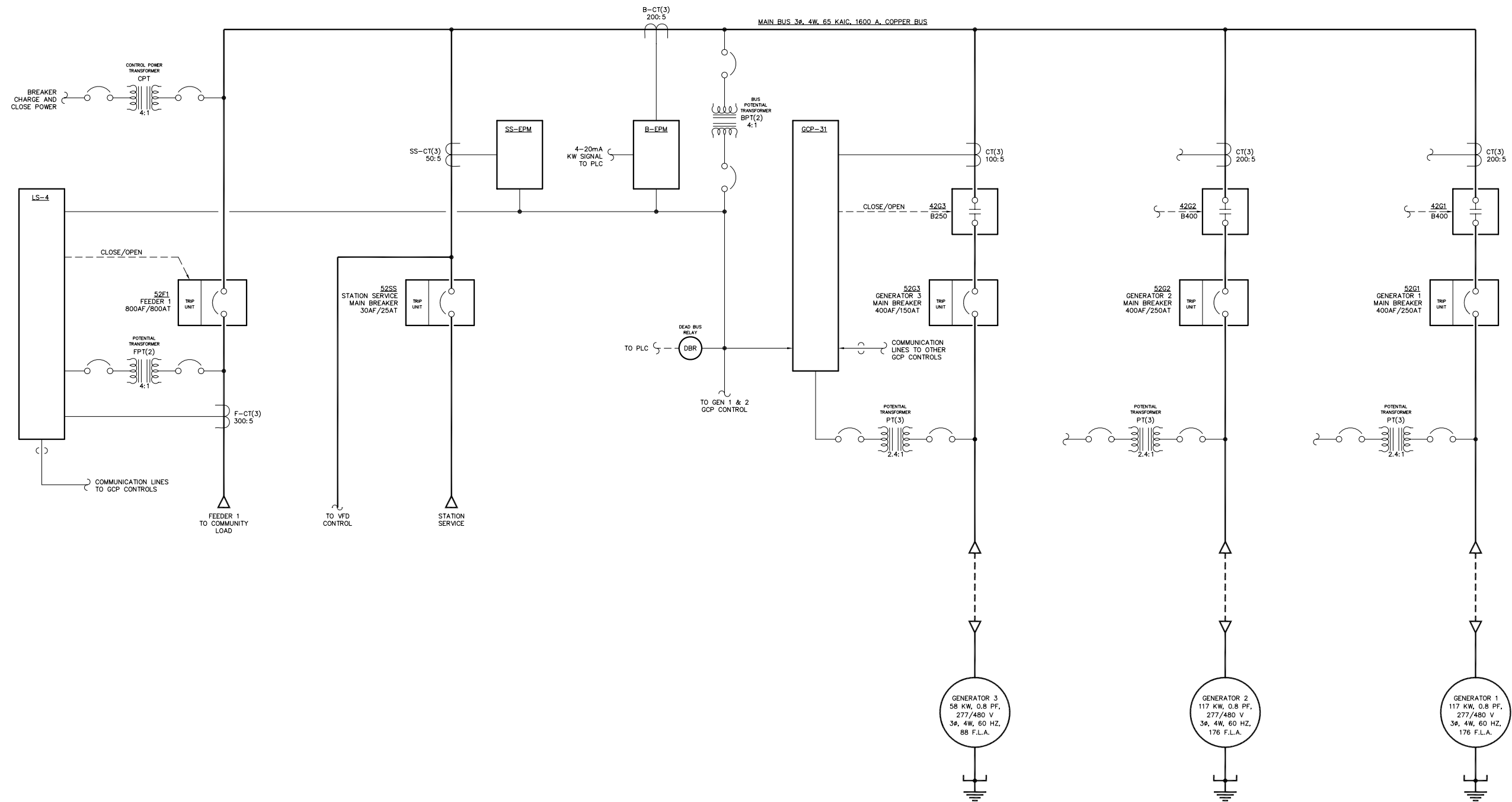
1. EACH SECTION SHIPPED INDIVIDUALLY.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026 CONTROLLED POWER JOB No. 6475			
TITLE: GENERATOR SWITCHGEAR PLAN VIEW, OUTLINE DIAGRAM			
SCALE: 1/10		DATE: 06-12-08	DWN. BY: GPN
DWG. No: 6475-4201-D		SHEET: 1 OF 1	CKD. BY: JMD
JOB: CHITINA			

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**NOTES:**  
 1. GENERATORS 1 & 2 SIMILAR TO GENERATOR 3.

**NOTE:**  
 1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN

AEA PURCHASE ORDER No. REG-08-026 CONTROLLED POWER JOB No. 6475

TITLE: GENERATOR SWITCHGEAR SINGLE LINE, SCHEMATIC DIAGRAM

SCALE: NONE DATE: 06-12-08 DWN. BY: GPN

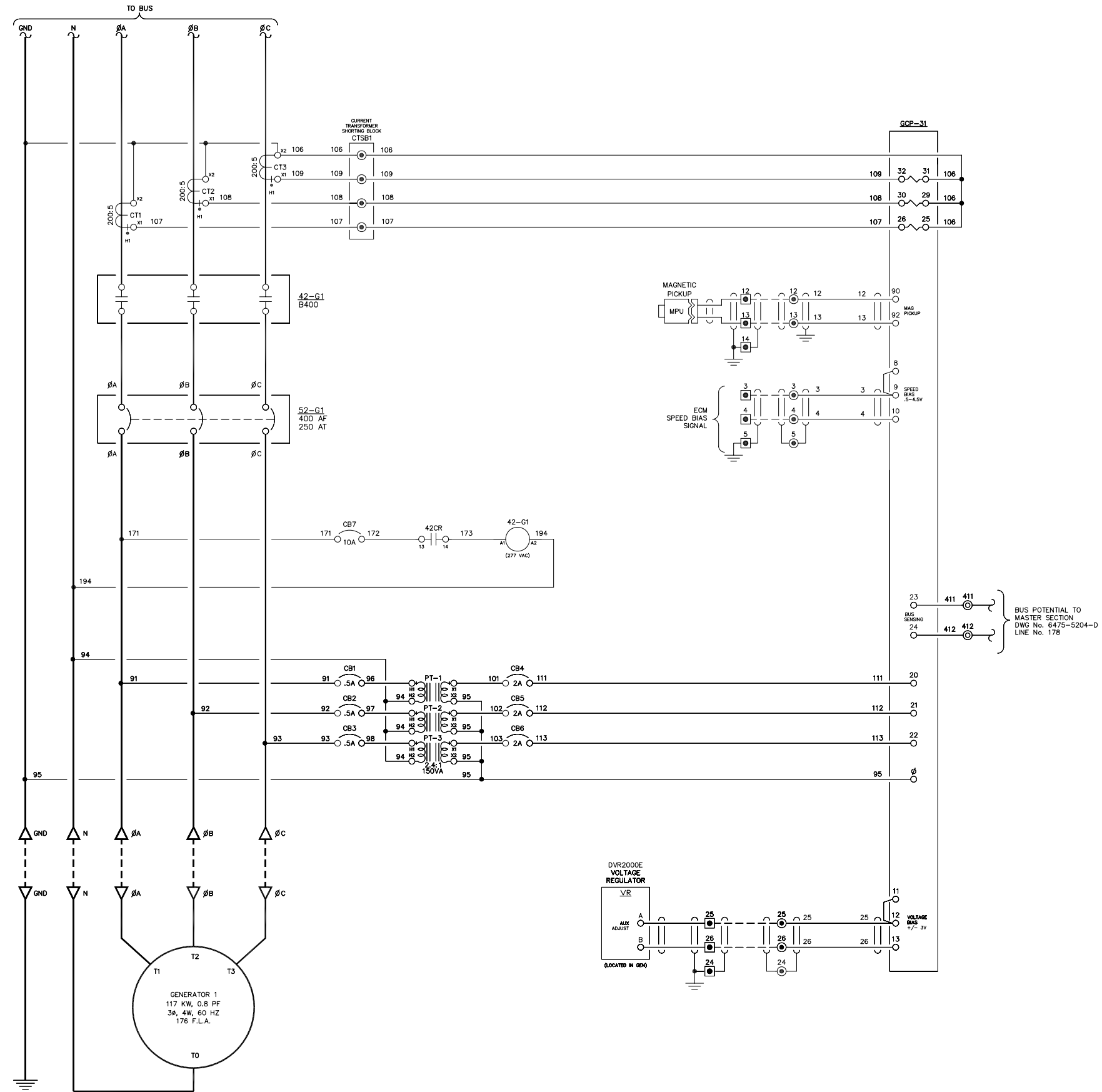
DWG. No: 6475-5101-D SHEET: 1 OF 1 CKD. BY: JMD

JOB: CHITINA

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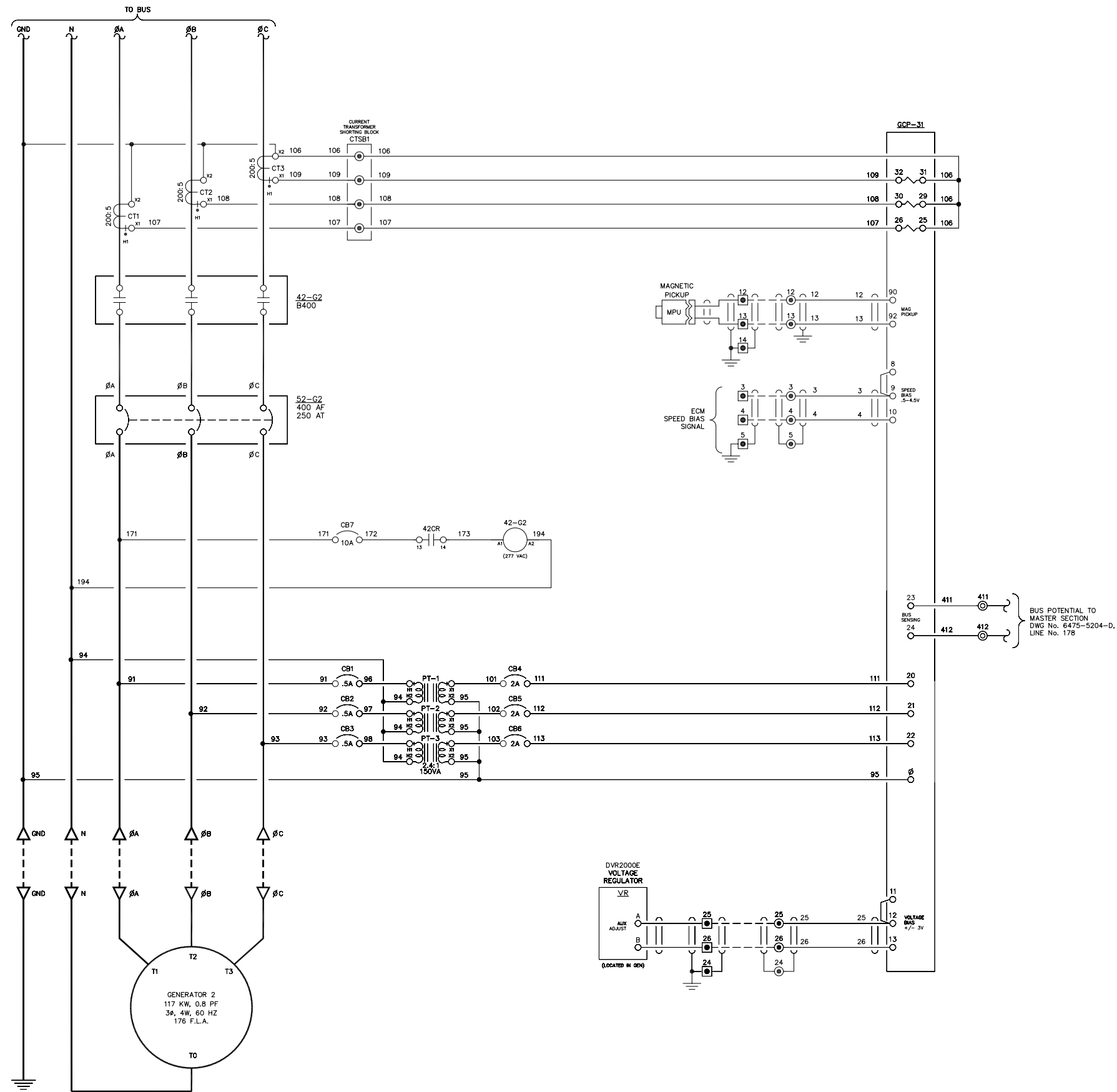
NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: GENERATOR 1 AC THREE LINE, SCHEMATIC DIAGRAM			
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN	
DWG. No: 6475-5201-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHITINA			

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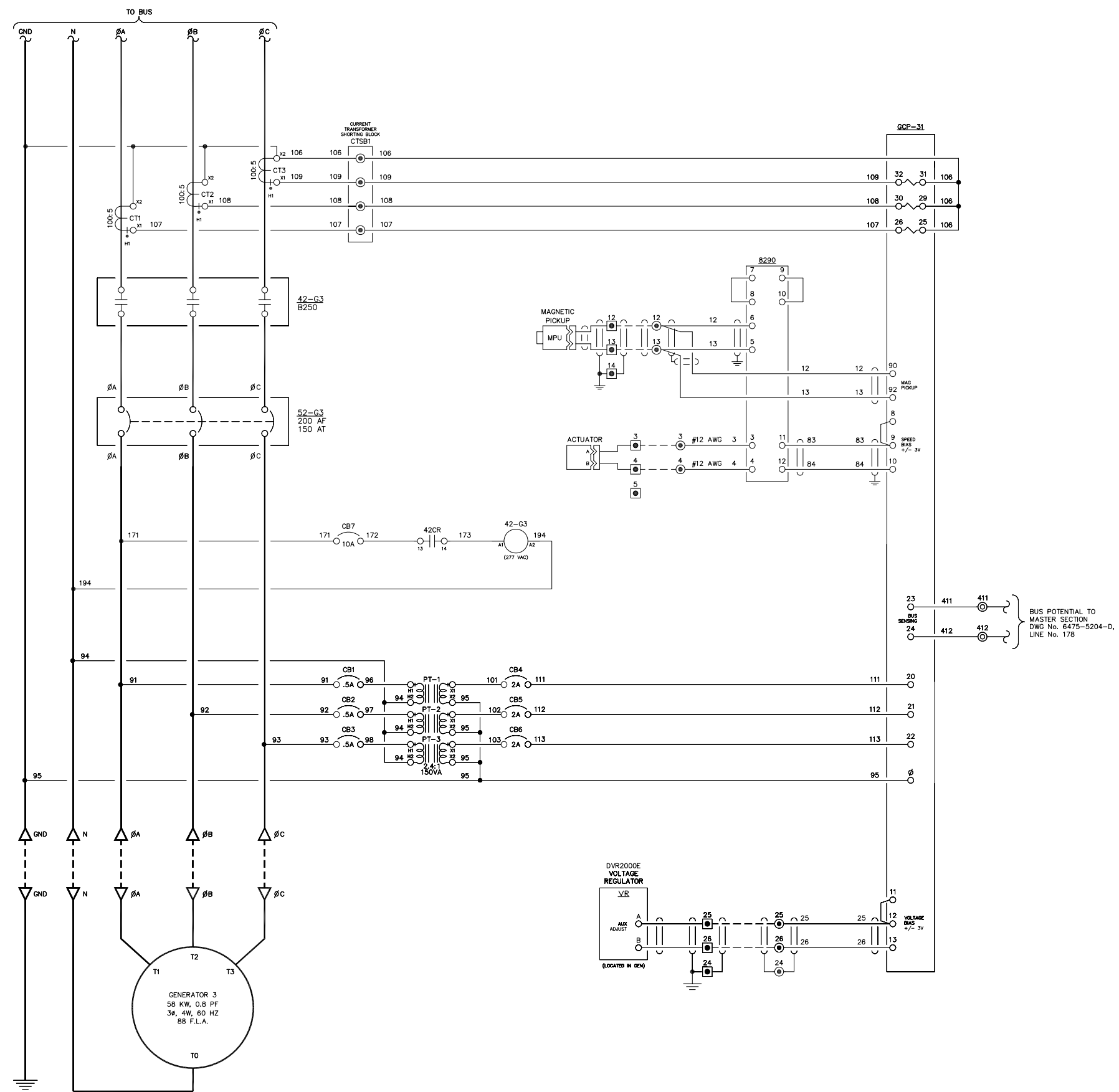
NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: GENERATOR 2 AC THREE LINE, SCHEMATIC DIAGRAM			
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN	
DWG. No: 6475-5202-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHITINA			

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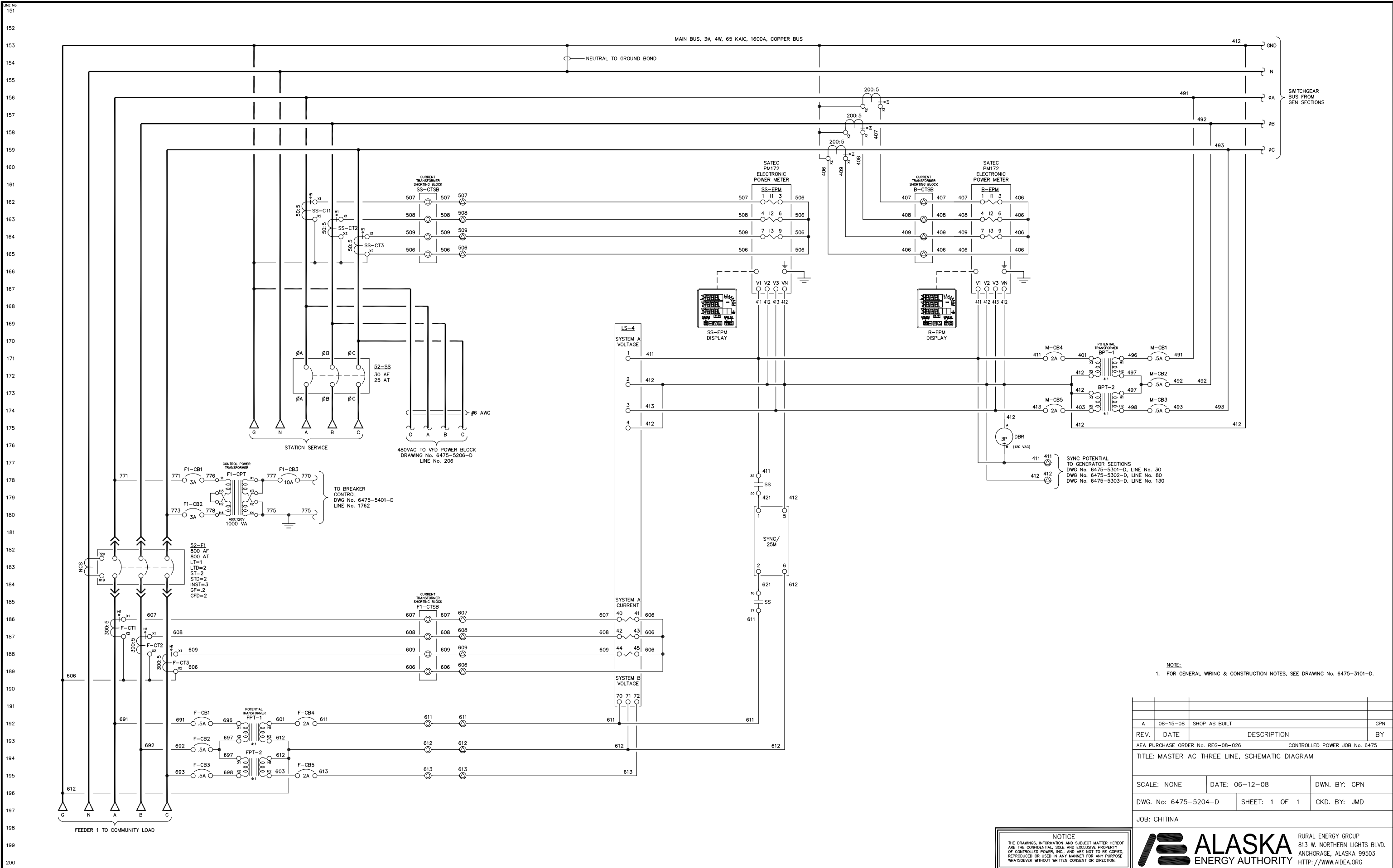


NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: GENERATOR 3 AC THREE LINE, SCHEMATIC DIAGRAM			
SCALE: NONE	DATE: 04-11-08	DWN. BY: GPN	
DWG. No: 6475-5203-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHIGNIK BAY			

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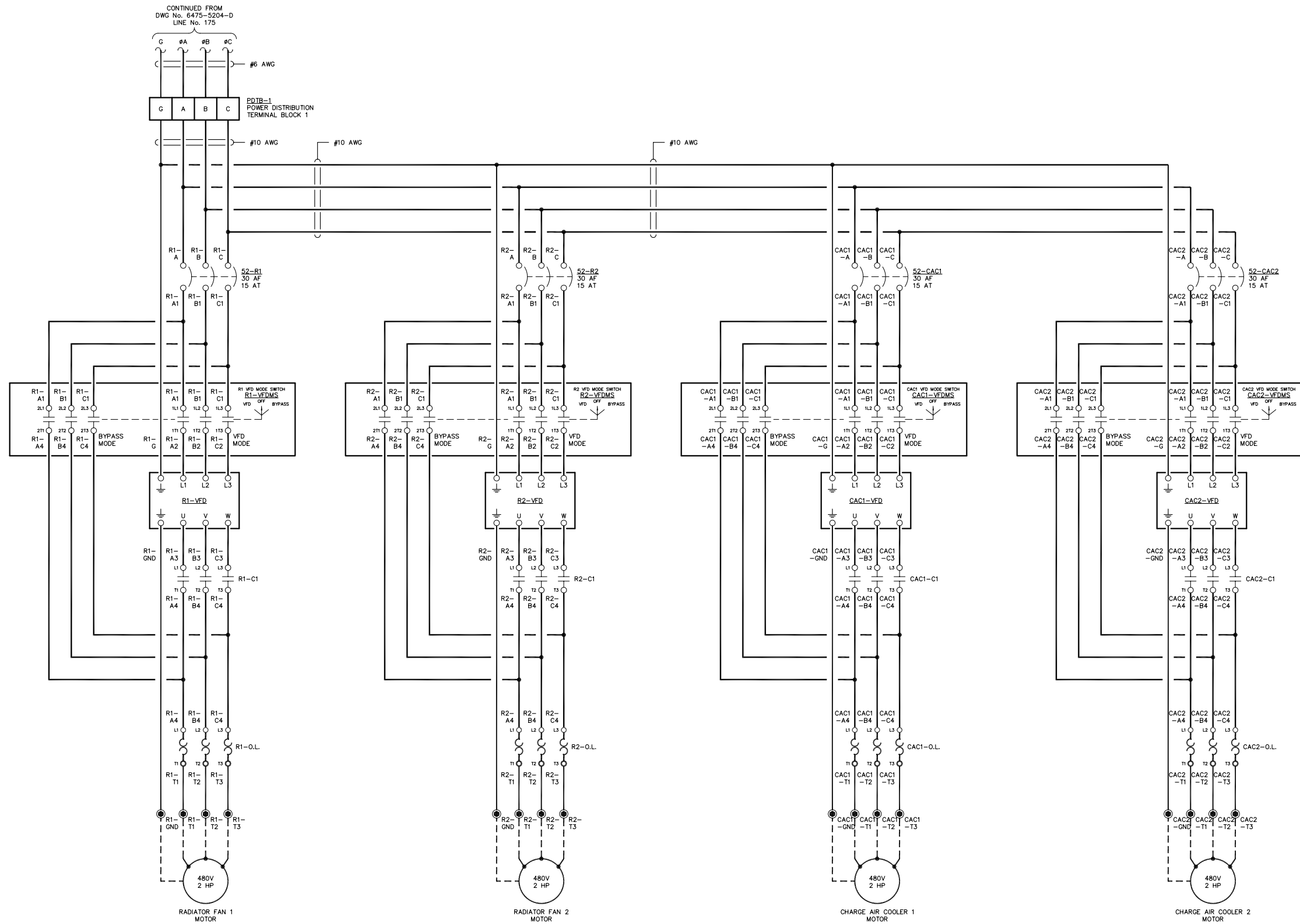
NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
TITLE: MASTER AC THREE LINE, SCHEMATIC DIAGRAM		AEA PURCHASE ORDER No. REG-08-026 CONTROLLED POWER JOB No. 6475	
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN	
DWG. No: 6475-5204-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHITINA			

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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN

AEA PURCHASE ORDER No. REG-08-026 CONTROLLED POWER JOB No. 6475

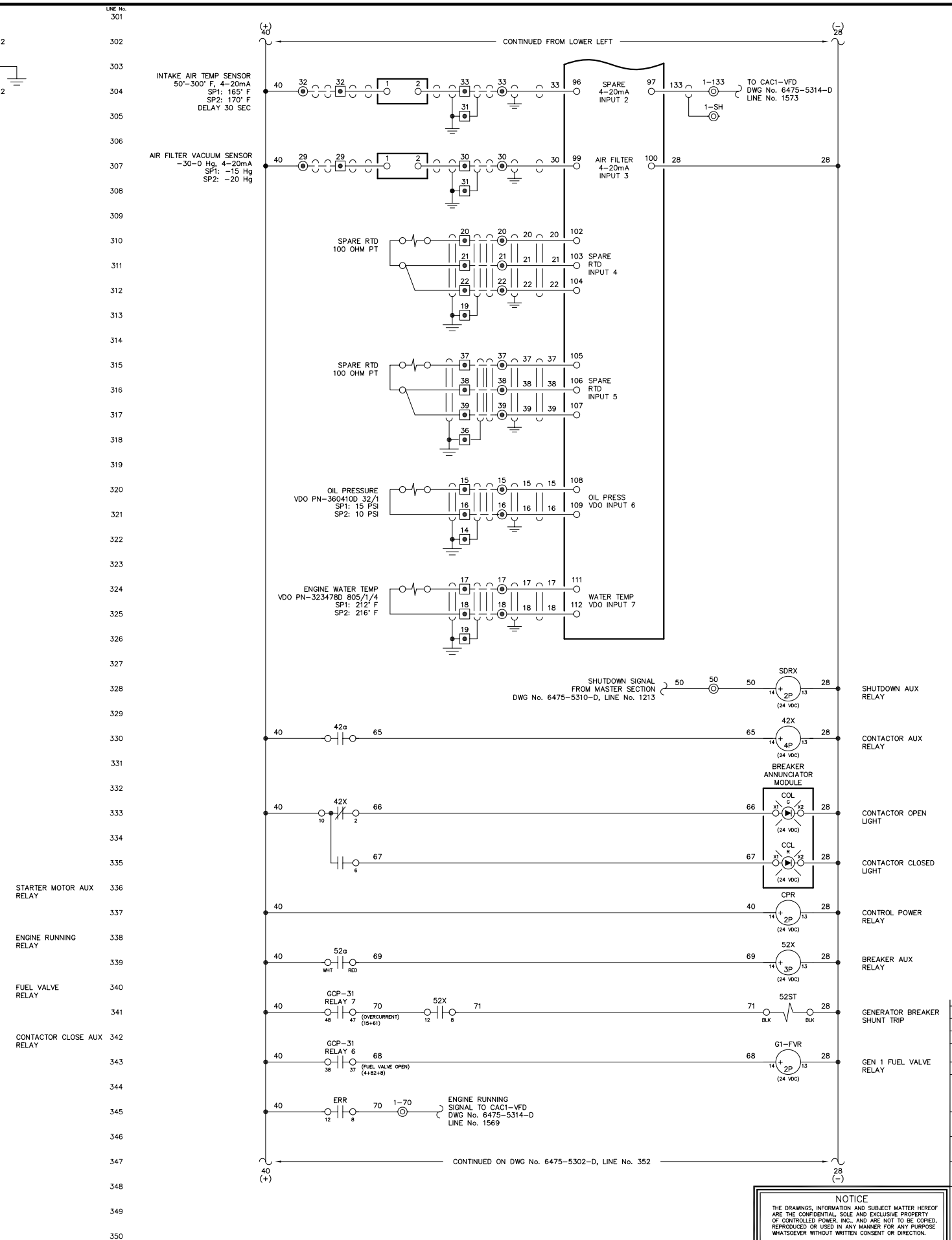
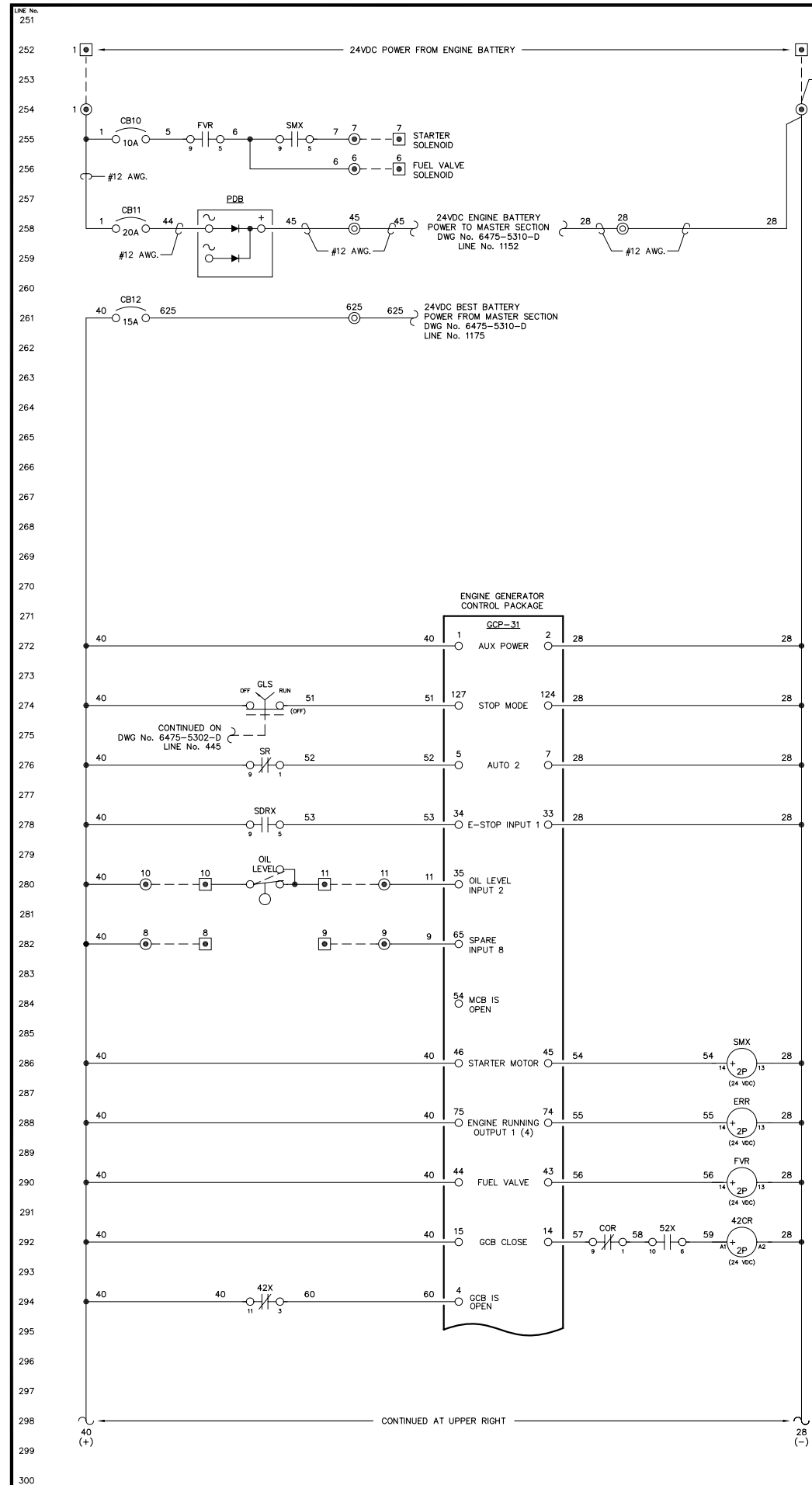
TITLE: VFD THREE LINE, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN
DWG. No: 6475-5205-D	SHEET: 1 OF 1	CKD. BY: JMD
JOB: CHITINA		

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ENERGY AUTHORITY

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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: GENERATOR 1 DC CONTROL, SCHEMATIC DIAGRAM			
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN	
DWG. No: 6475-5301-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHITINA			

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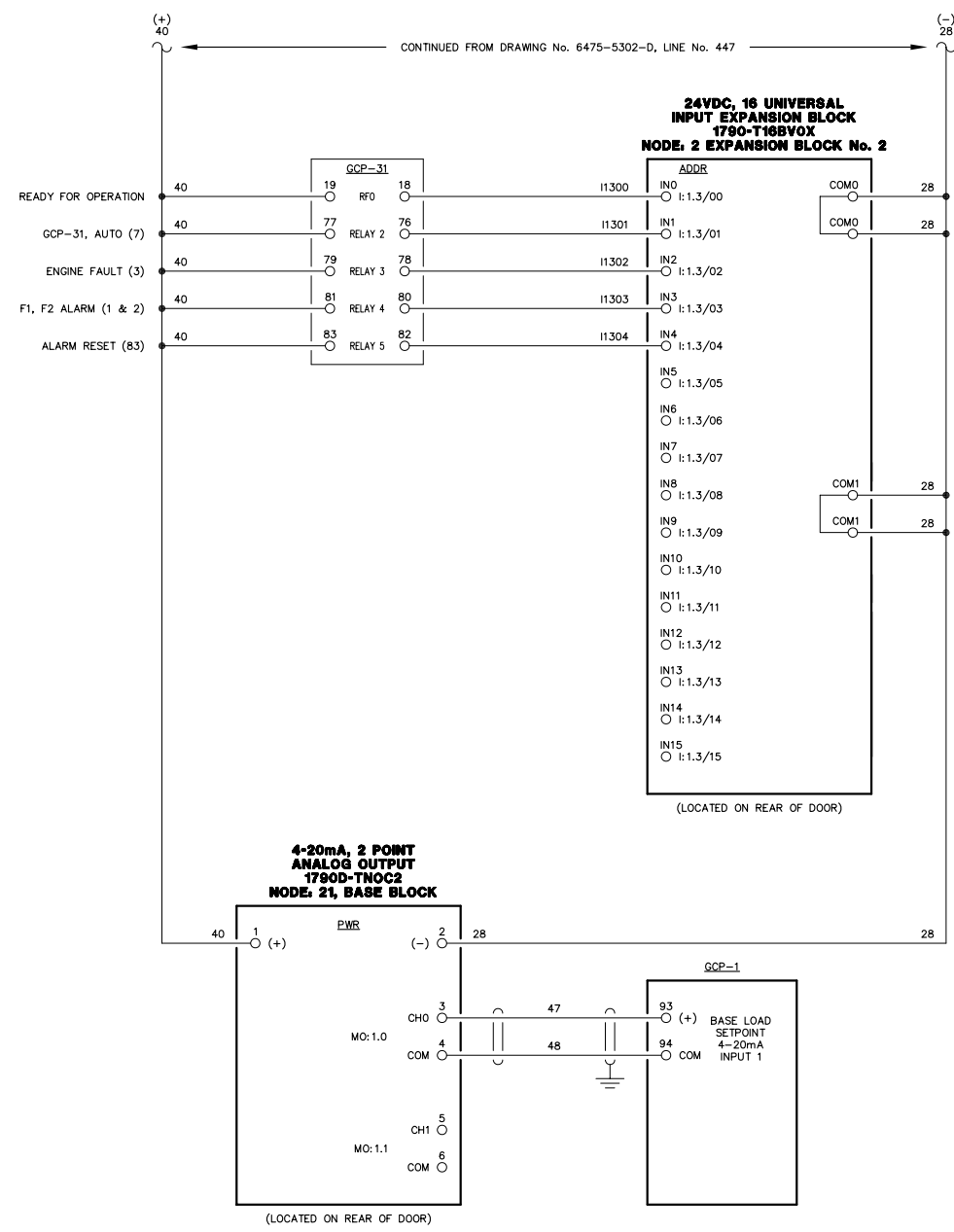






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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN

AEA PURCHASE ORDER No. REG-08-026 CONTROLLED POWER JOB No. 6475

TITLE: GENERATOR 1 DC CONTROL, SCHEMATIC DIAGRAM

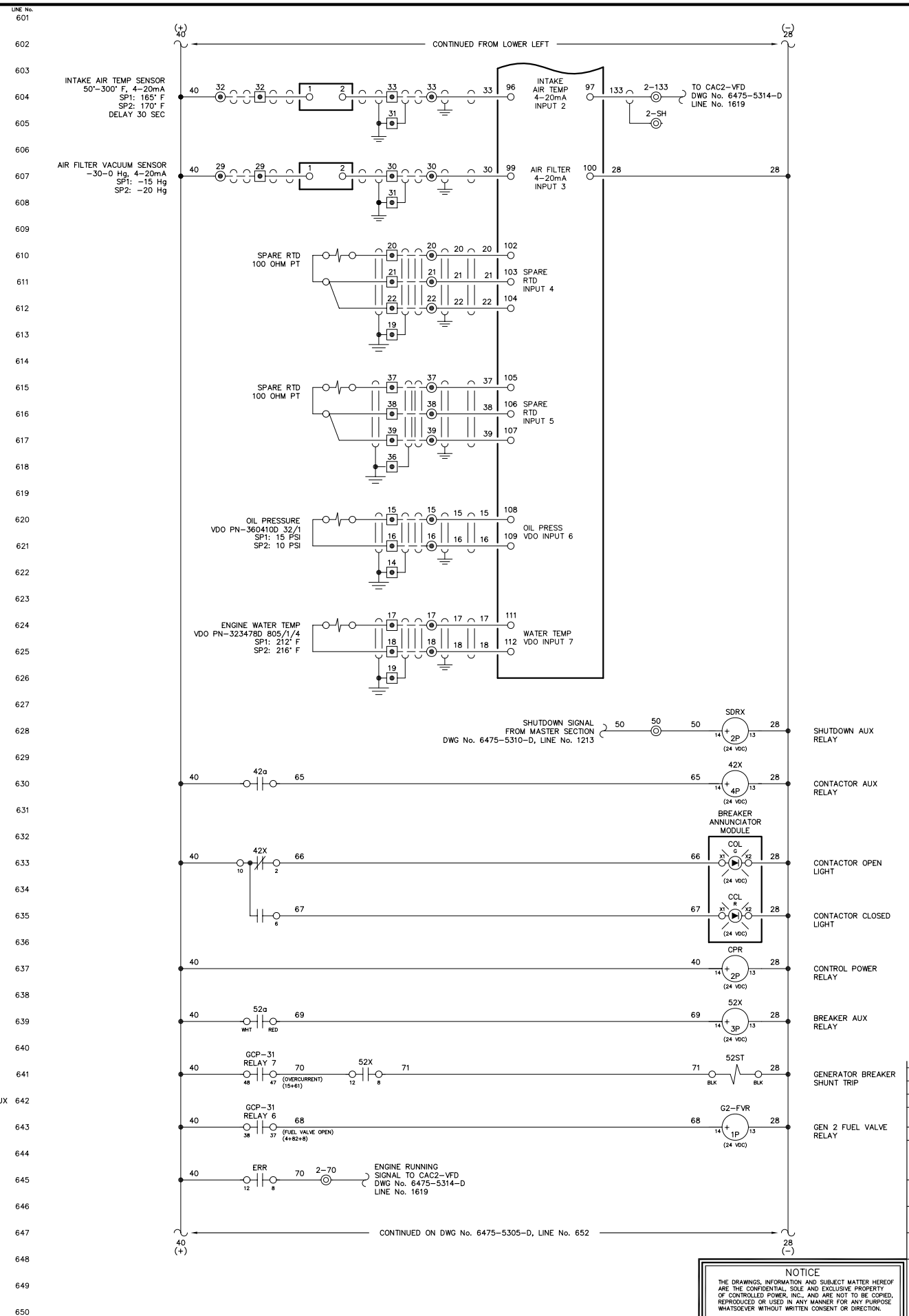
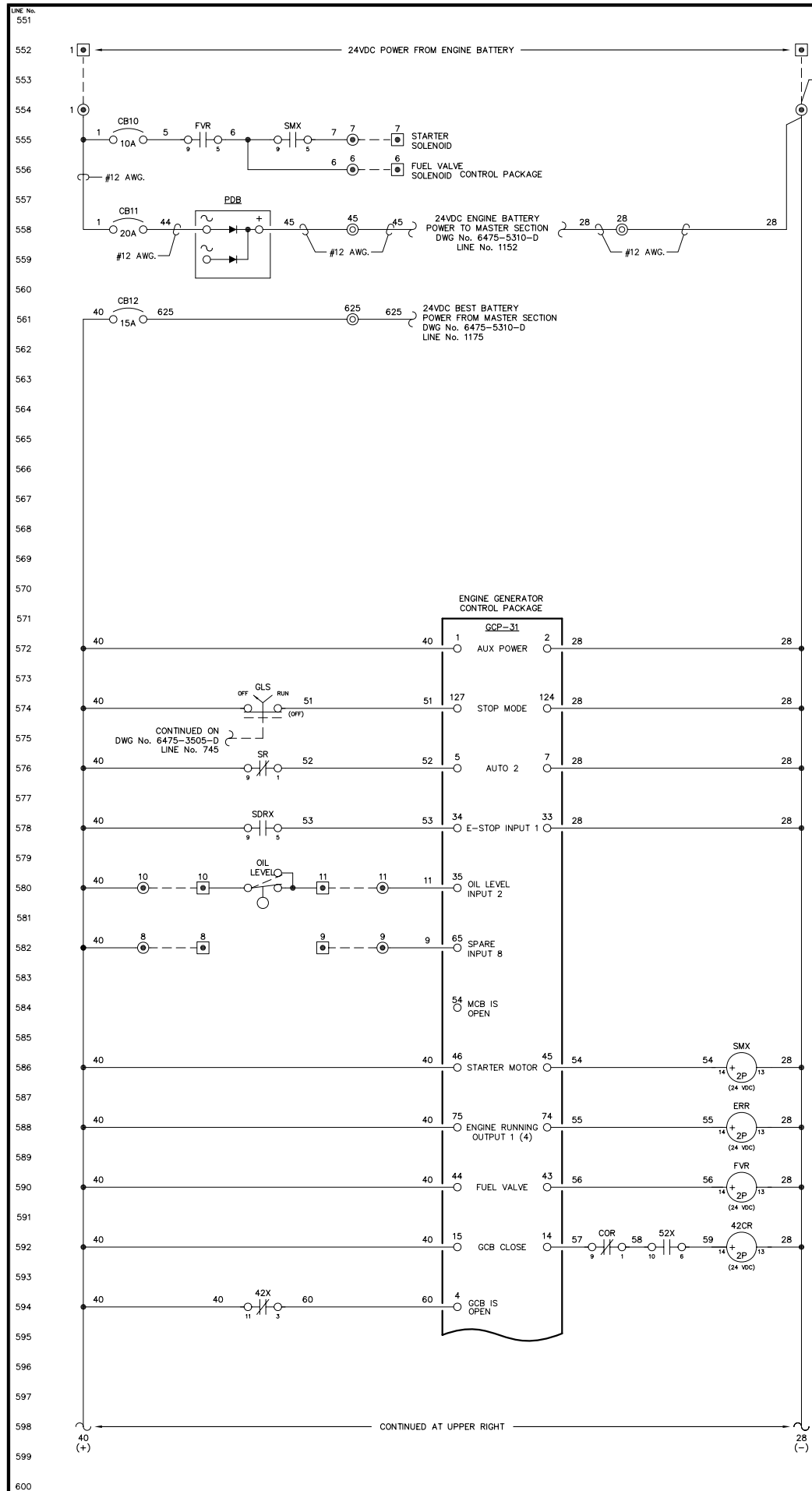
SCALE: NONE DATE: 06-12-08 DWN. BY: GPN

DWG. No: 6475-5303-D SHEET: 1 OF 1 CKD. BY: JMD

JOB: CHITINA

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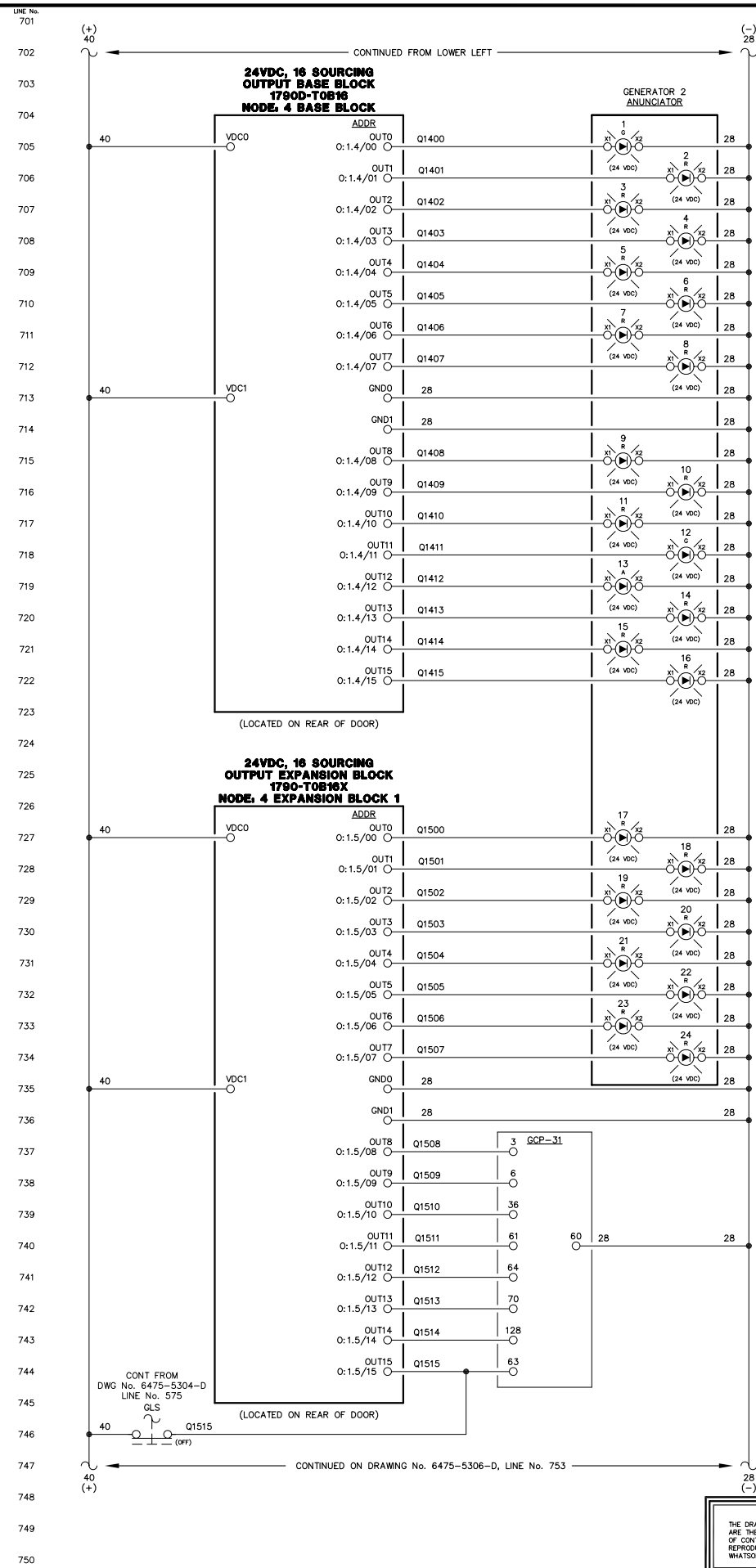
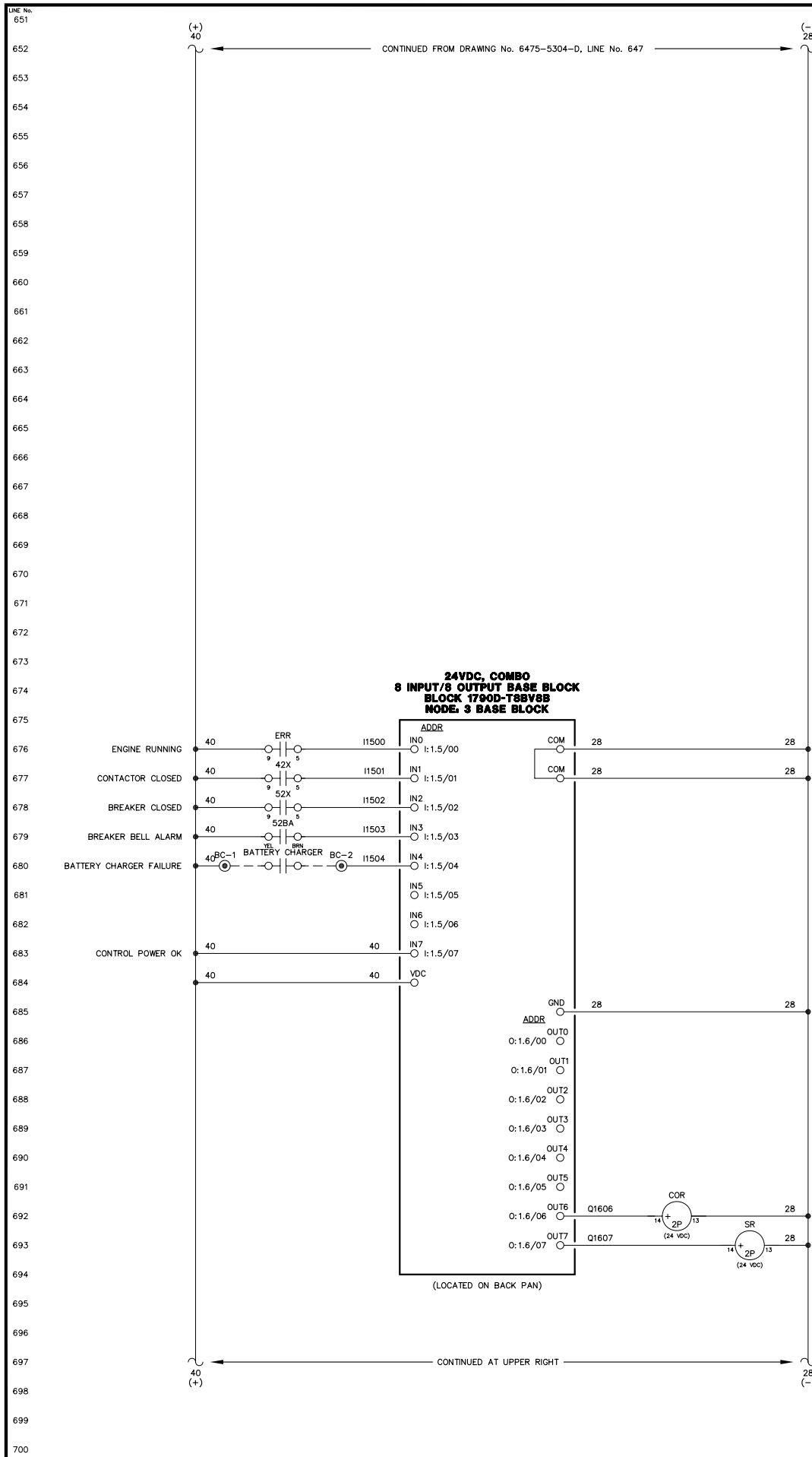


NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REC-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: GENERATOR 2 DC CONTROL, SCHEMATIC DIAGRAM			
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN	
DWG. No: 6475-5304-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHITINA			

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- ENGINE RUNNING LIGHT
- ALARM/LOCKOUT LIGHT
- LOW OIL PRESSURE LIGHT
- OIL LEVEL LIGHT
- HIGH WATER TEMPERATURE LIGHT
- OVERSPEED LIGHT
- OVERCRANK LIGHT
- RUNNING TIMEOUT LIGHT
- BATTERY CHARGER FAIL LIGHT
- AIR FILTER PLUGGED LIGHT
- HIGH CHARGE AIR TEMP LIGHT
- LEAD GEN LIGHT
- NORMAL STOP LIGHT
- NOT IN AUTO LIGHT
- GEN BREAKER OPEN LIGHT
- FAIL TO SYNC LIGHT
- OVERCURRENT LIGHT
- UNDER VOLTAGE LIGHT
- OVER VOLTAGE LIGHT
- UNDER FREQUENCY LIGHT
- OVER FREQUENCY LIGHT
- REVERSE POWER LIGHT
- CHARGE AIR VFD BREAKER OPEN LIGHT
- CHARGE AIR VFD FAILURE LIGHT
- AUTO 1
- MULTIFUNCTION (REMOTE ACK)
- INPUT 3 - COOLDOWN/LOCKOUT
- INPUT 4 - MASTER SHUTDOWN
- INPUT 7 - BREAKER LOGIC
- INPUT 13 - CAC VFD FAULT
- AUTOMATIC MODE
- MODE SELECTION LOCK

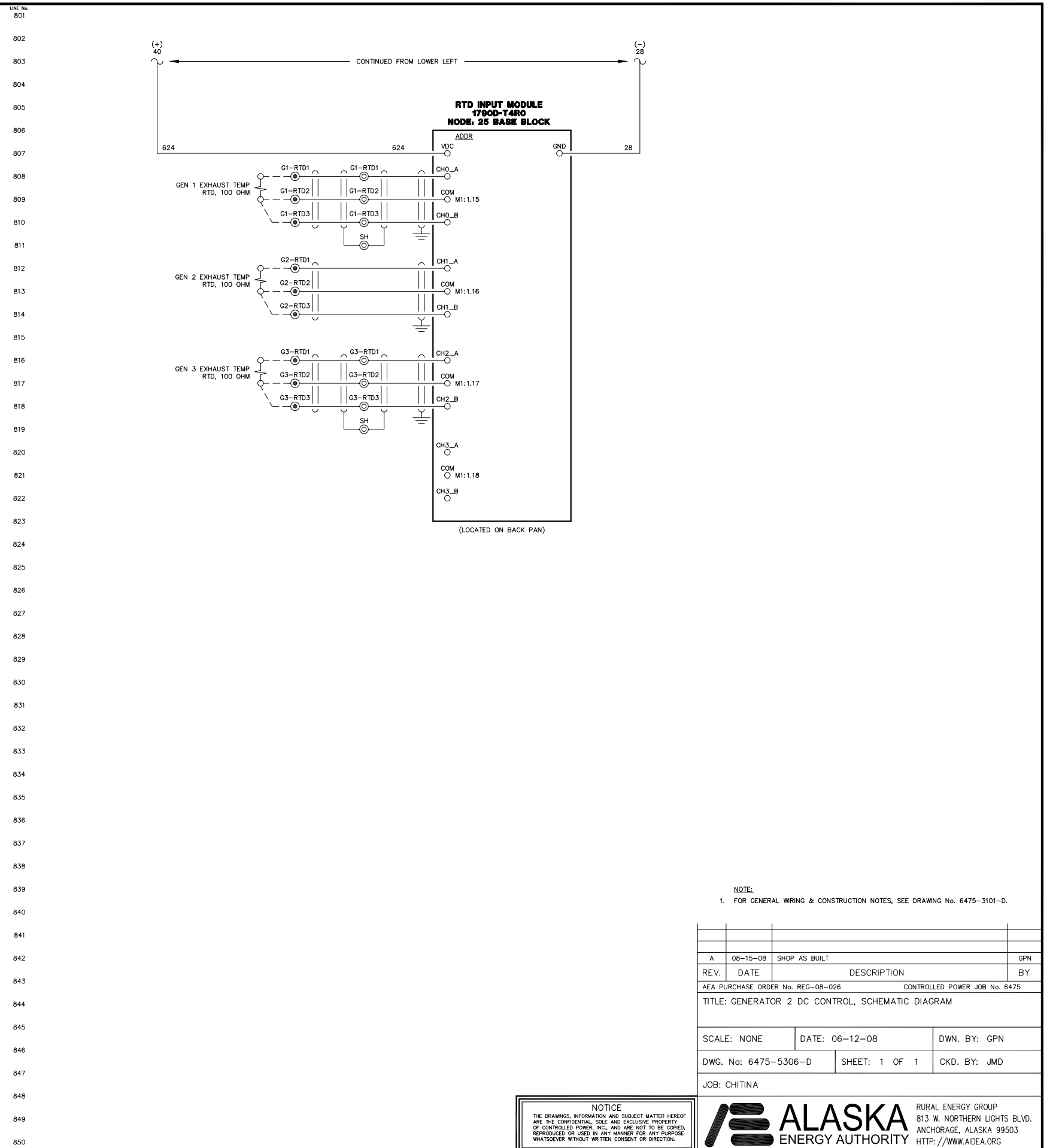
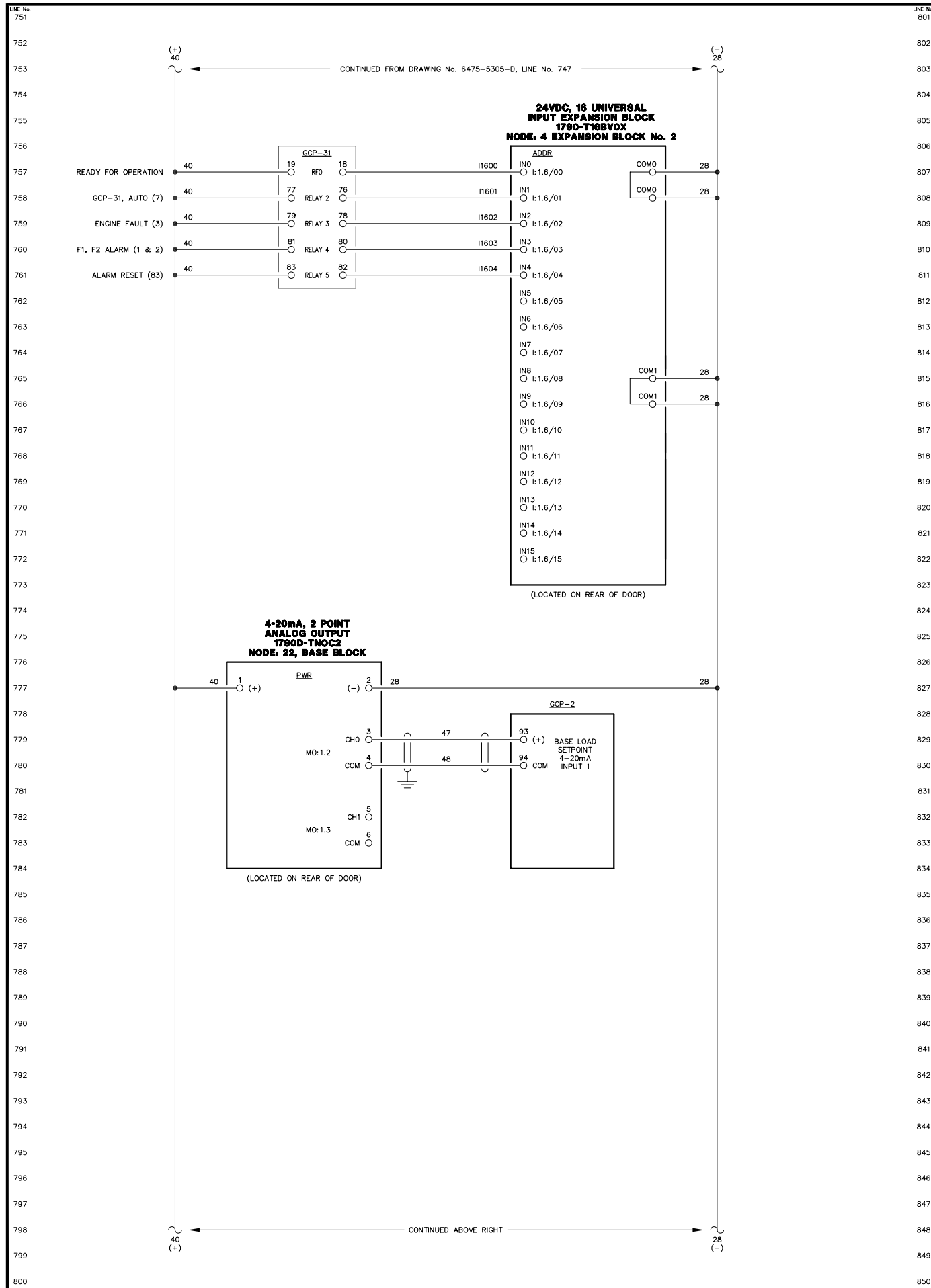
NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: GENERATOR 2 DC CONTROL, SCHEMATIC DIAGRAM			

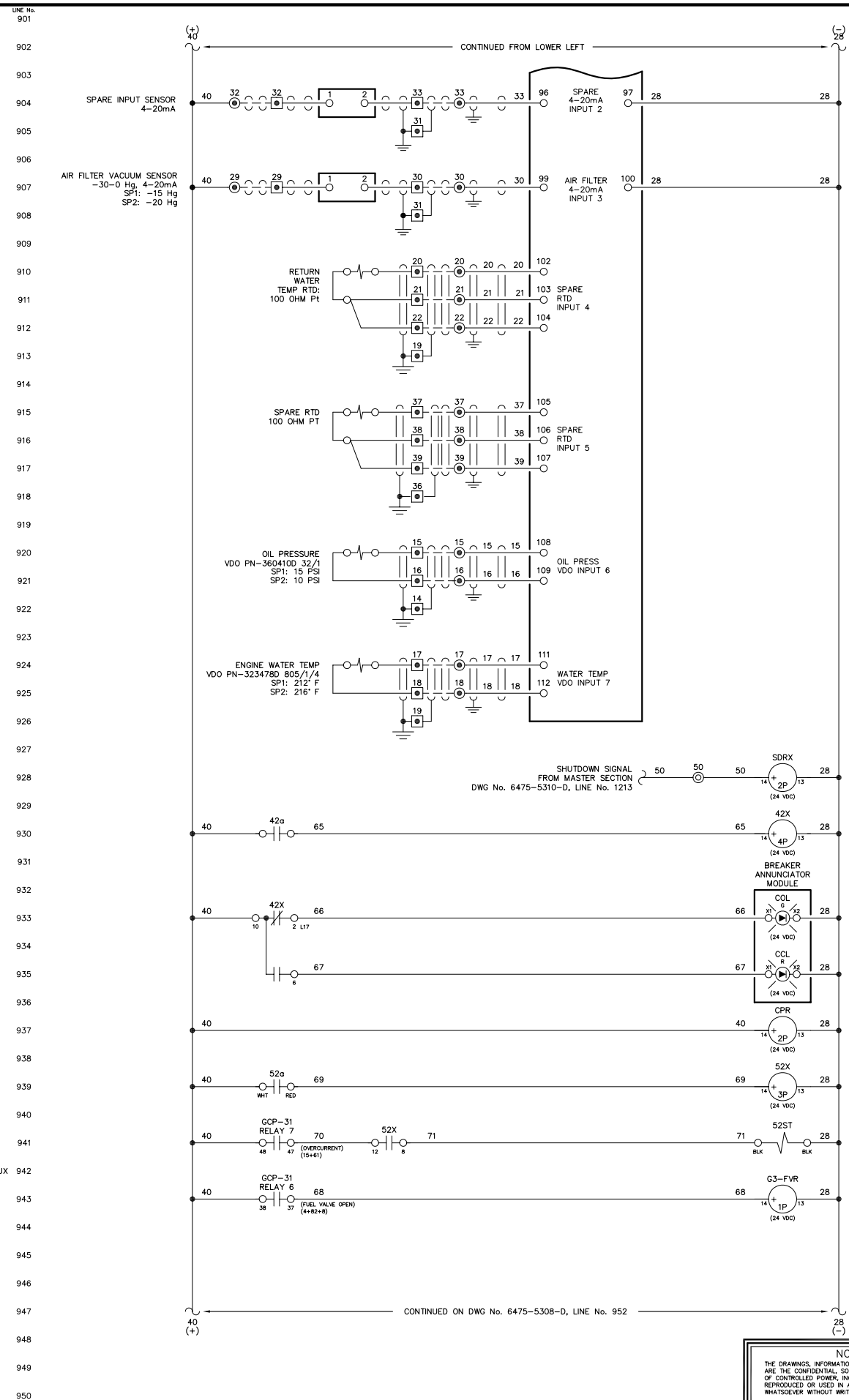
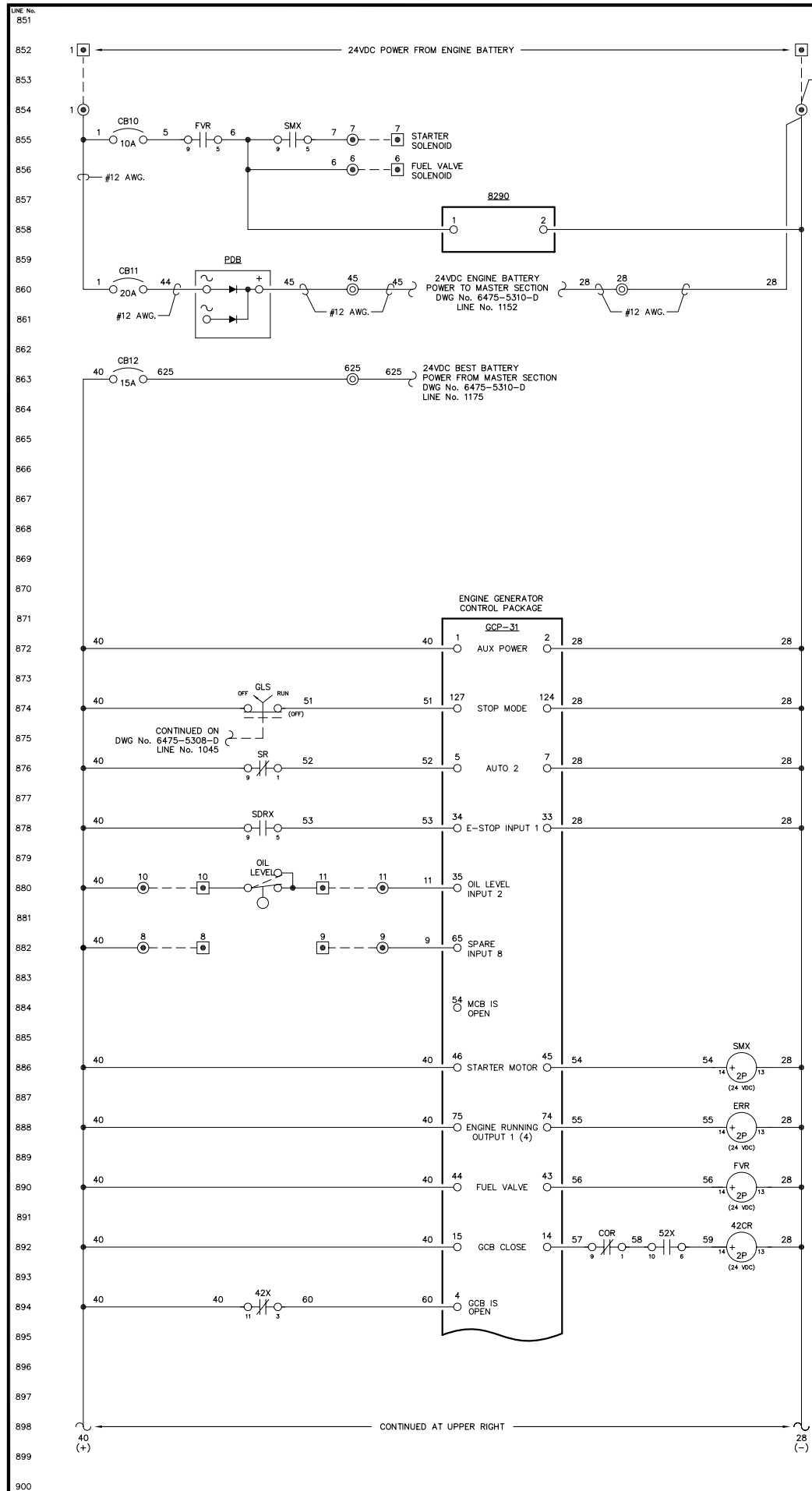
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN
DWG. No: 6475-5305-D	SHEET: 1 OF 1	CKD. BY: JMD
JOB: CHITINA		

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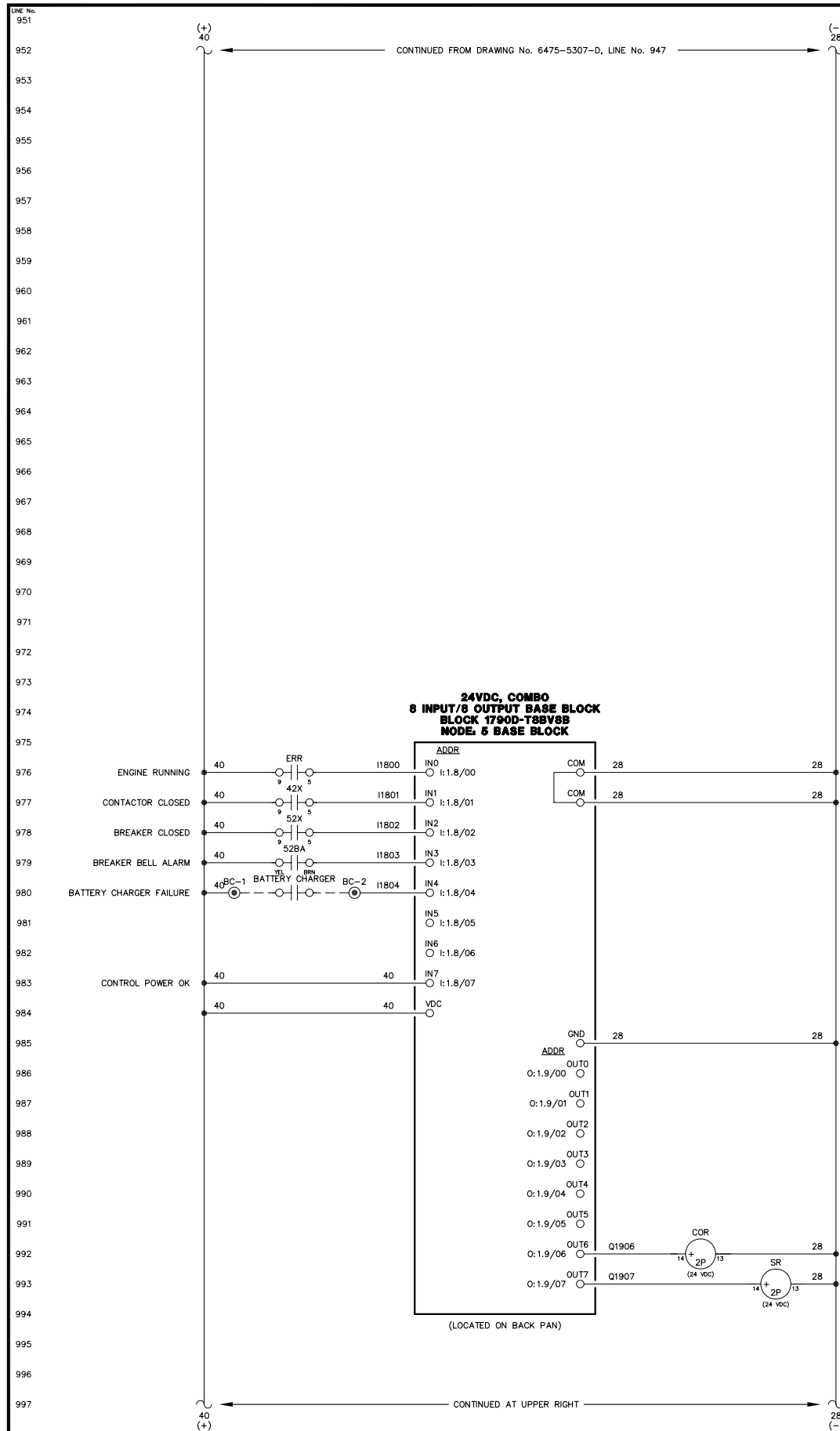
NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REC-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: GENERATOR 3 DC CONTROL, SCHEMATIC DIAGRAM			

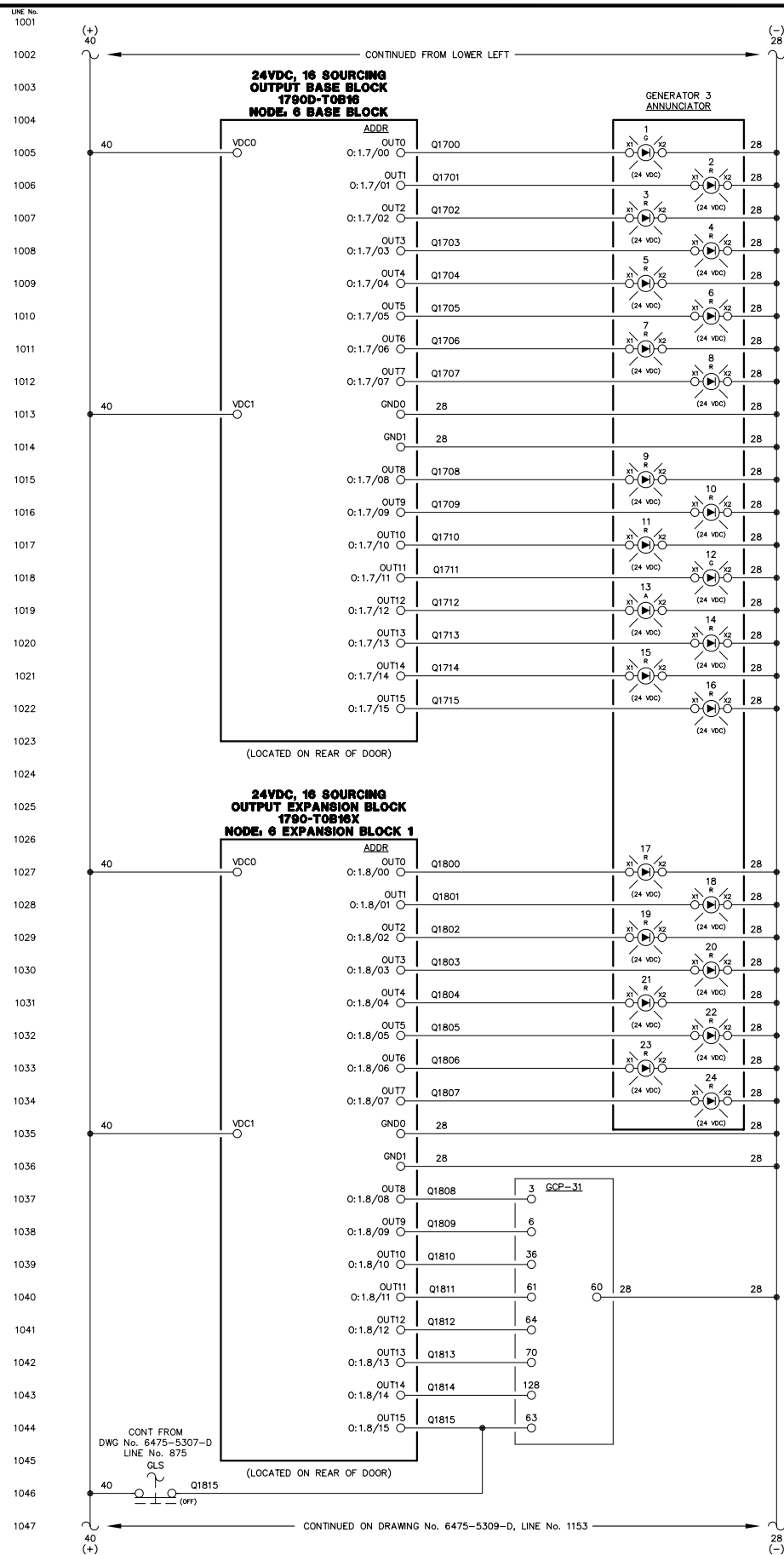
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN
DWG. No: 6475-5307-D	SHEET: 1 OF 1	CKD. BY: JMD
JOB: CHITINA		

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CONTACTOR OPEN RELAY  
STOP RELAY



- ENGINE RUNNING LIGHT
- ALARM/LOCKOUT LIGHT
- LOW OIL PRESSURE LIGHT
- OIL LEVEL LIGHT
- HIGH WATER TEMPERATURE LIGHT
- OVERSPEED LIGHT
- OVERCRANK LIGHT
- RUNNING TIMEOUT LIGHT
- BATTERY CHARGER FAIL LIGHT
- AIR FILTER PLUGGED LIGHT
- HIGH CHARGE AIR TEMP LIGHT
- SPARE LIGHT
- NORMAL STOP LIGHT
- NOT IN AUTO LIGHT
- GEN BREAKER OPEN LIGHT
- FAIL TO SYNC LIGHT
- OVERCURRENT LIGHT
- UNDER VOLTAGE LIGHT
- OVER VOLTAGE LIGHT
- UNDER FREQUENCY LIGHT
- OVER FREQUENCY LIGHT
- REVERSE POWER LIGHT
- CHARGE AIR VFD BREAKER OPEN LIGHT
- CHARGE AIR VFD FAILURE LIGHT
- AUTO 1
- MULTIFUNCTION (REMOTE ACK)
- INPUT 3 - COOLDOWN/LOCKOUT
- INPUT 4 - MASTER SHUTDOWN
- INPUT 7 - BREAKER LOGIC
- INPUT 13 - CAC VFD FAULT
- AUTOMATIC MODE
- MODE SELECTION LOCK

NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN

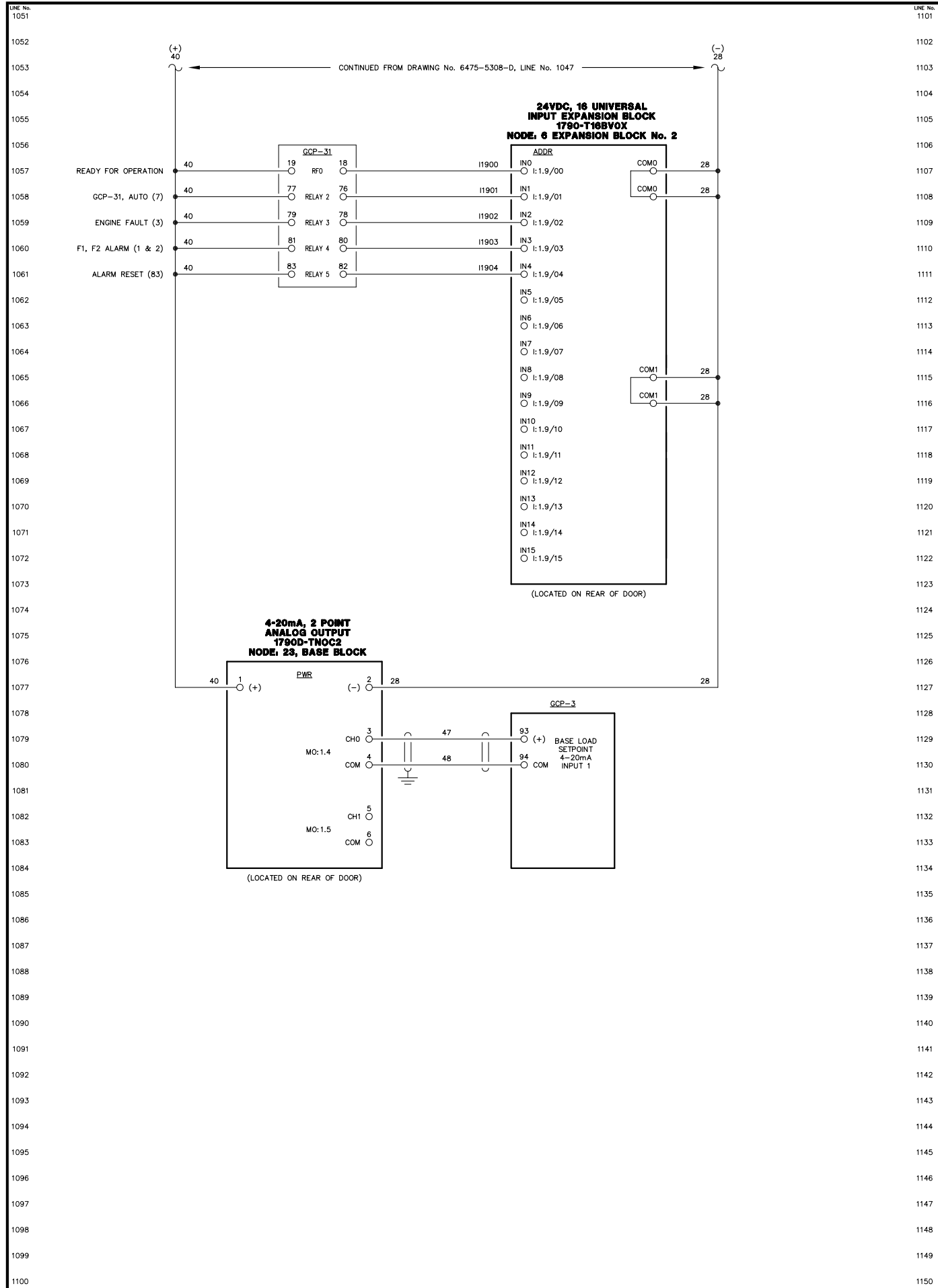
AEA PURCHASE ORDER No. REG-08-026 CONTROLLED POWER JOB No. 6475

TITLE: GENERATOR 3 DC CONTROL, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN
DWG. No: 6475-5308-D	SHEET: 1 OF 1	CKD. BY: JMD
JOB: CHITINA		

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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN

AEA PURCHASE ORDER No. REG-08-026 CONTROLLED POWER JOB No. 6475

TITLE: GENERATOR 3 DC CONTROL, SCHEMATIC DIAGRAM

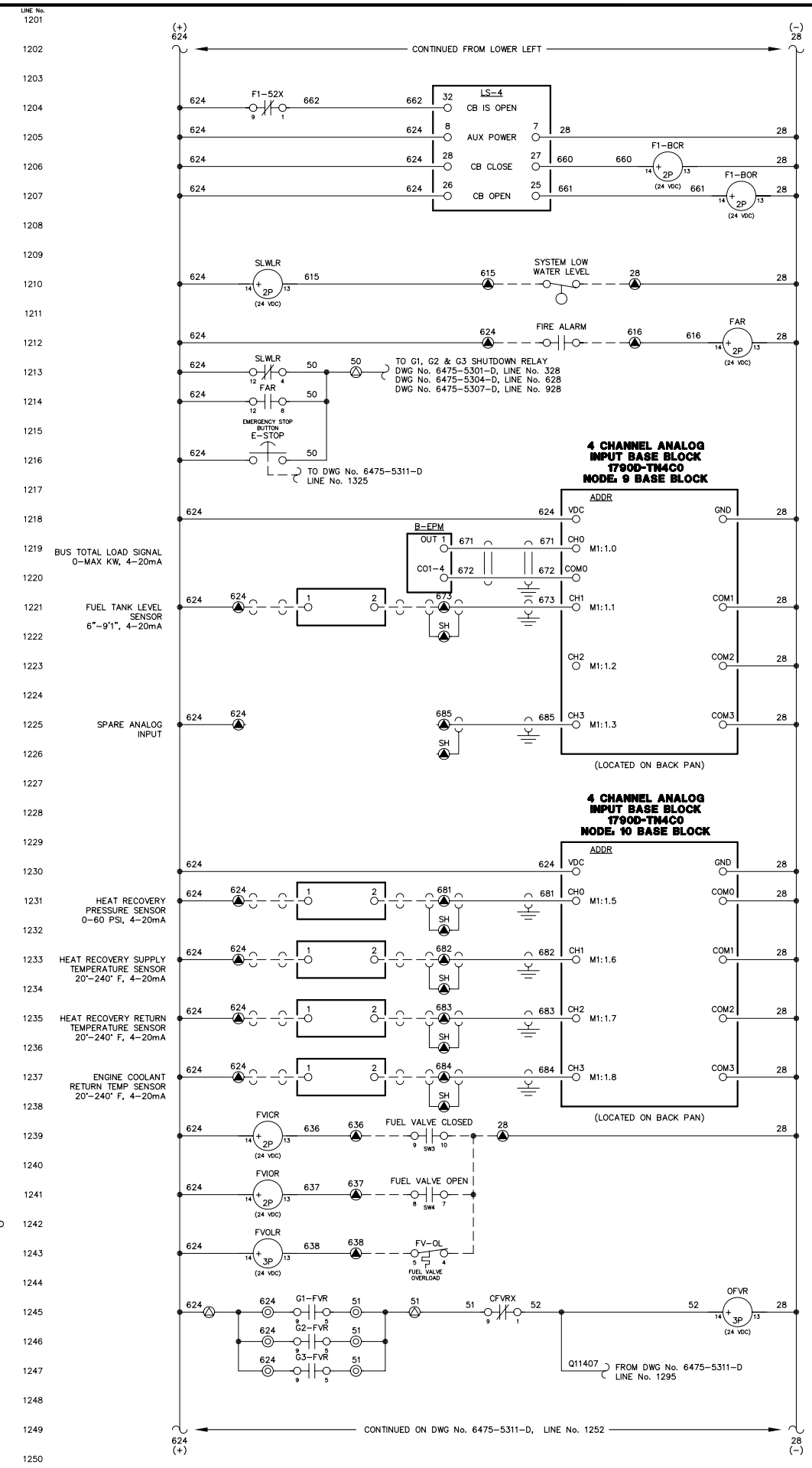
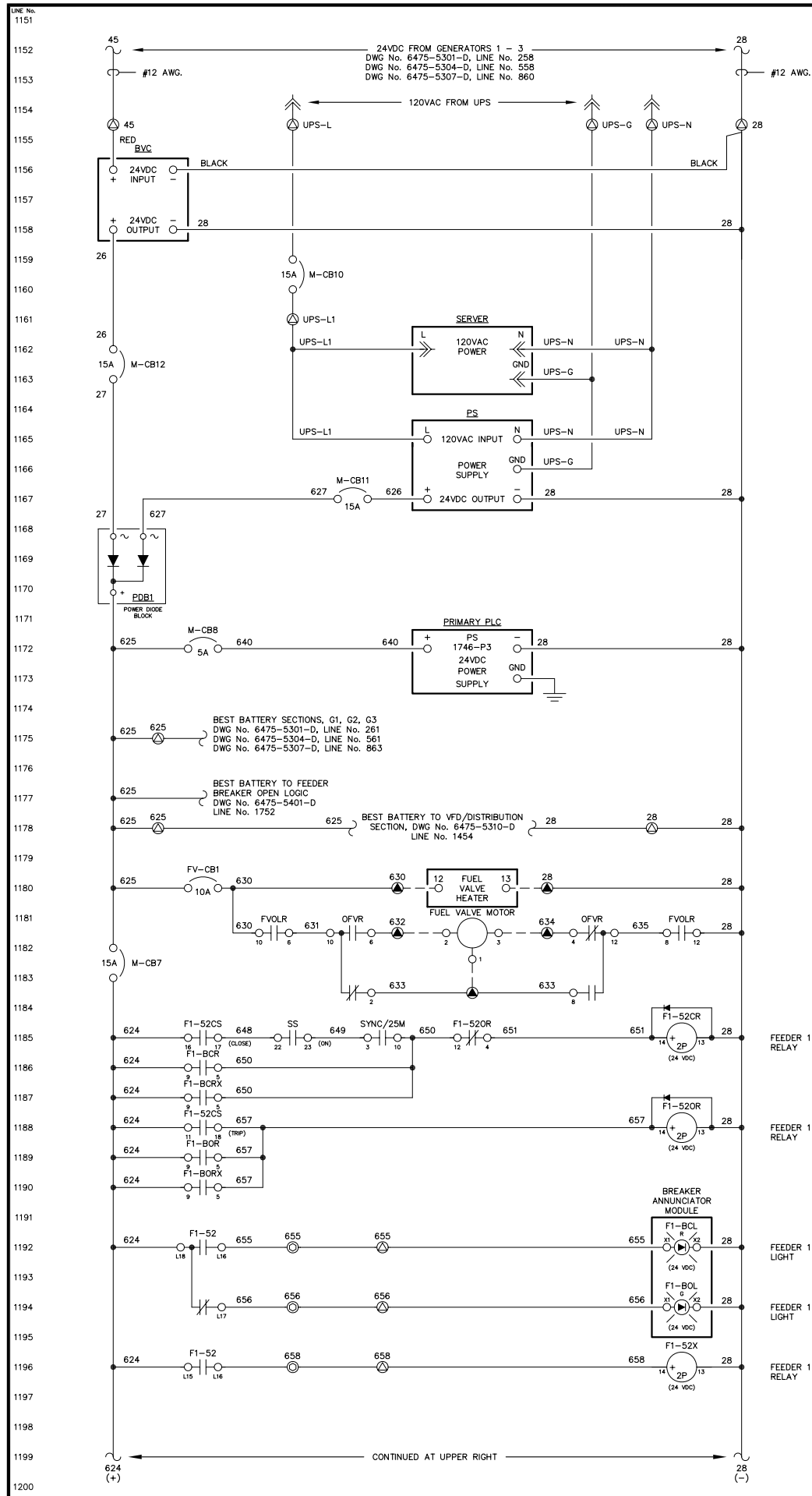
SCALE: NONE DATE: 06-12-08 DWN. BY: GPN

DWG. No: 6475-5309-D SHEET: 1 OF 1 CKD. BY: JMD

JOB: CHITINA

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HTTP://WWW.AIDEA.ORG



NOTE:  
 1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN

AEA PURCHASE ORDER No. REG-08-026 CONTROLLED POWER JOB No. 6475

TITLE: MASTER DC CONTROL, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN
DWG. No: 6475-5310-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: CHITINA

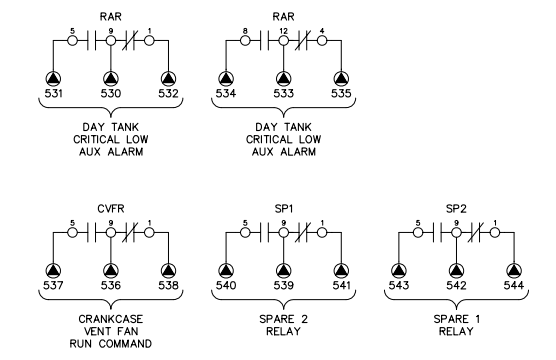
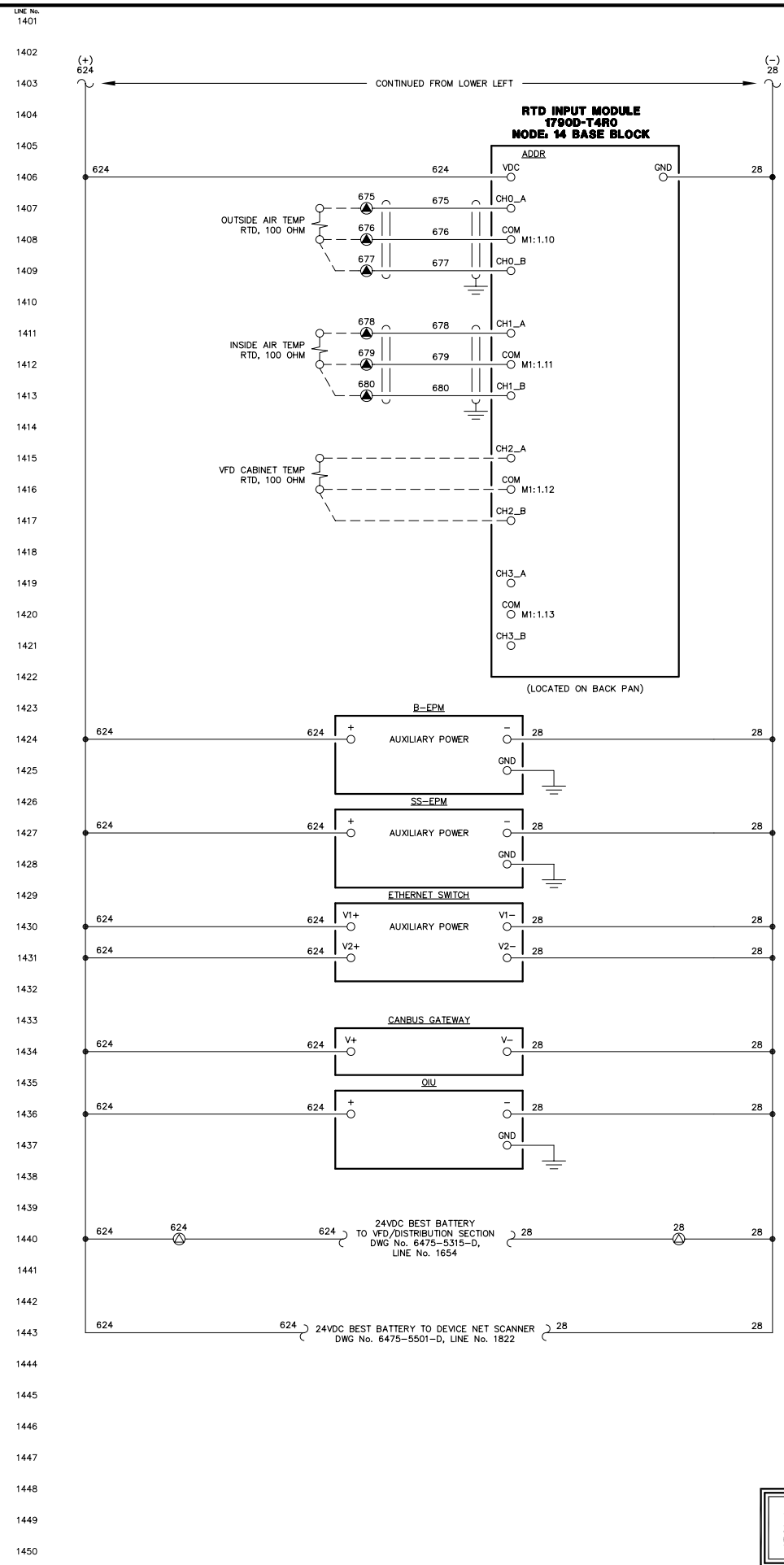
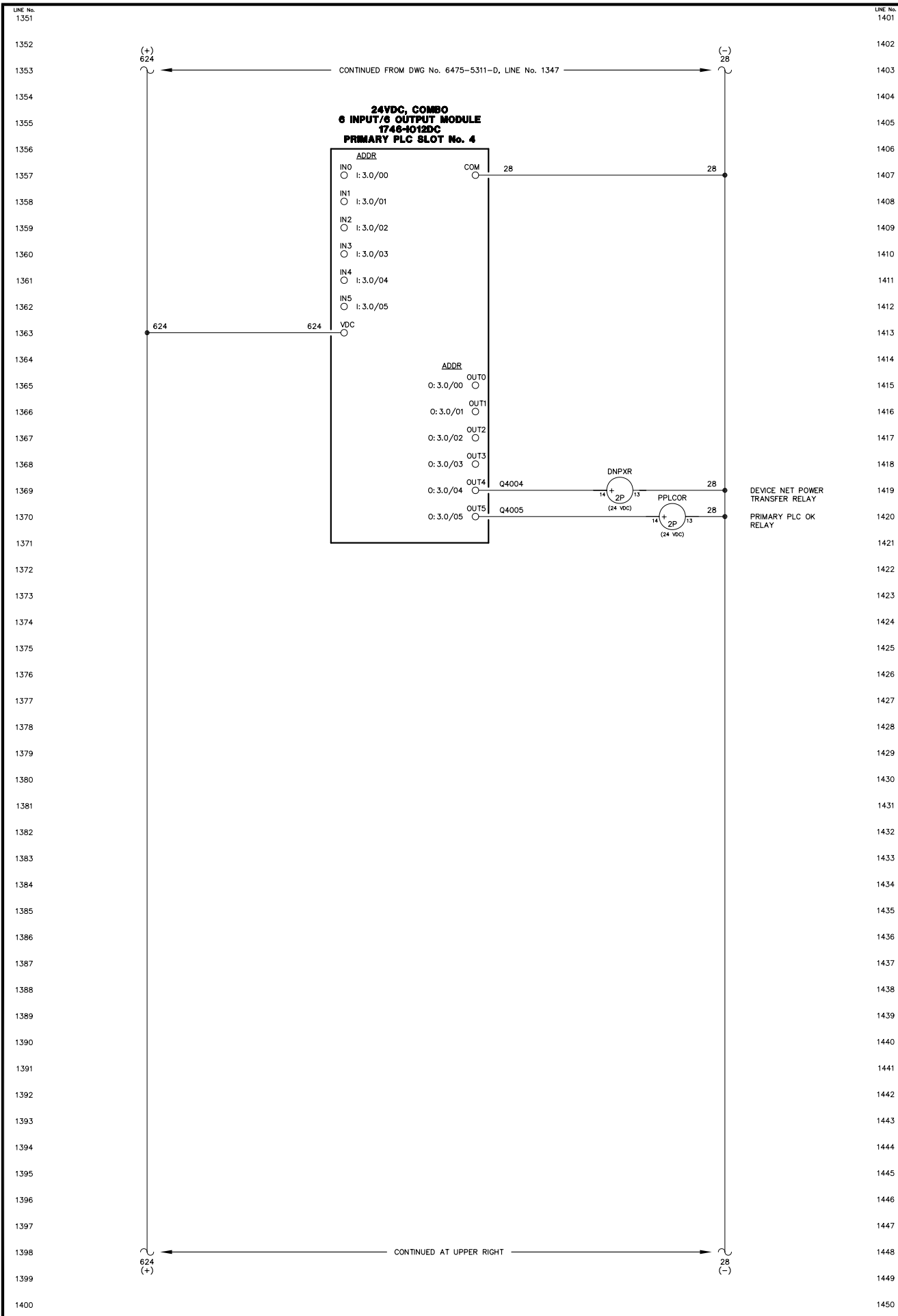
NOTICE  
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Plot date: 2008/8/19 - 10:14







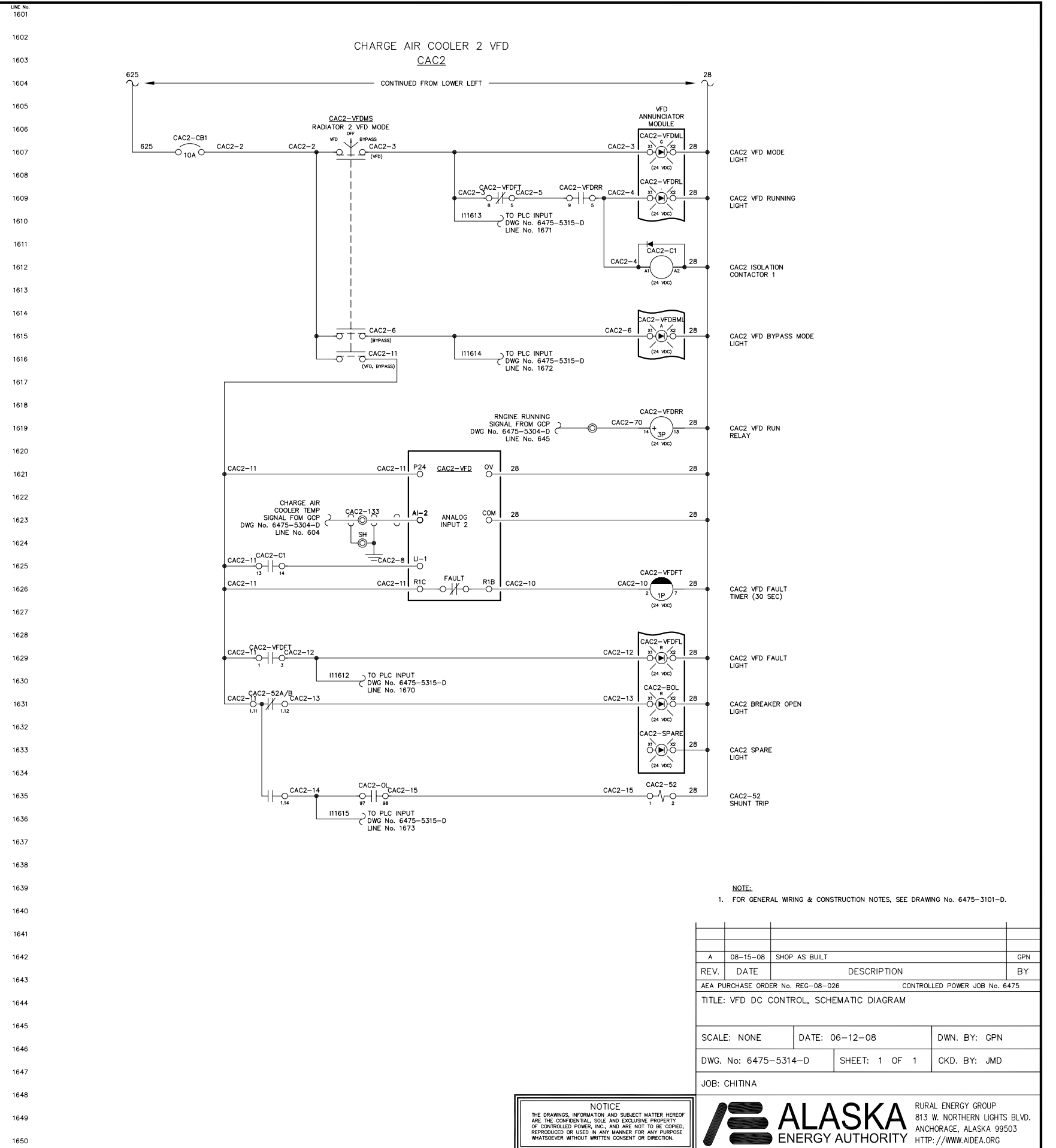
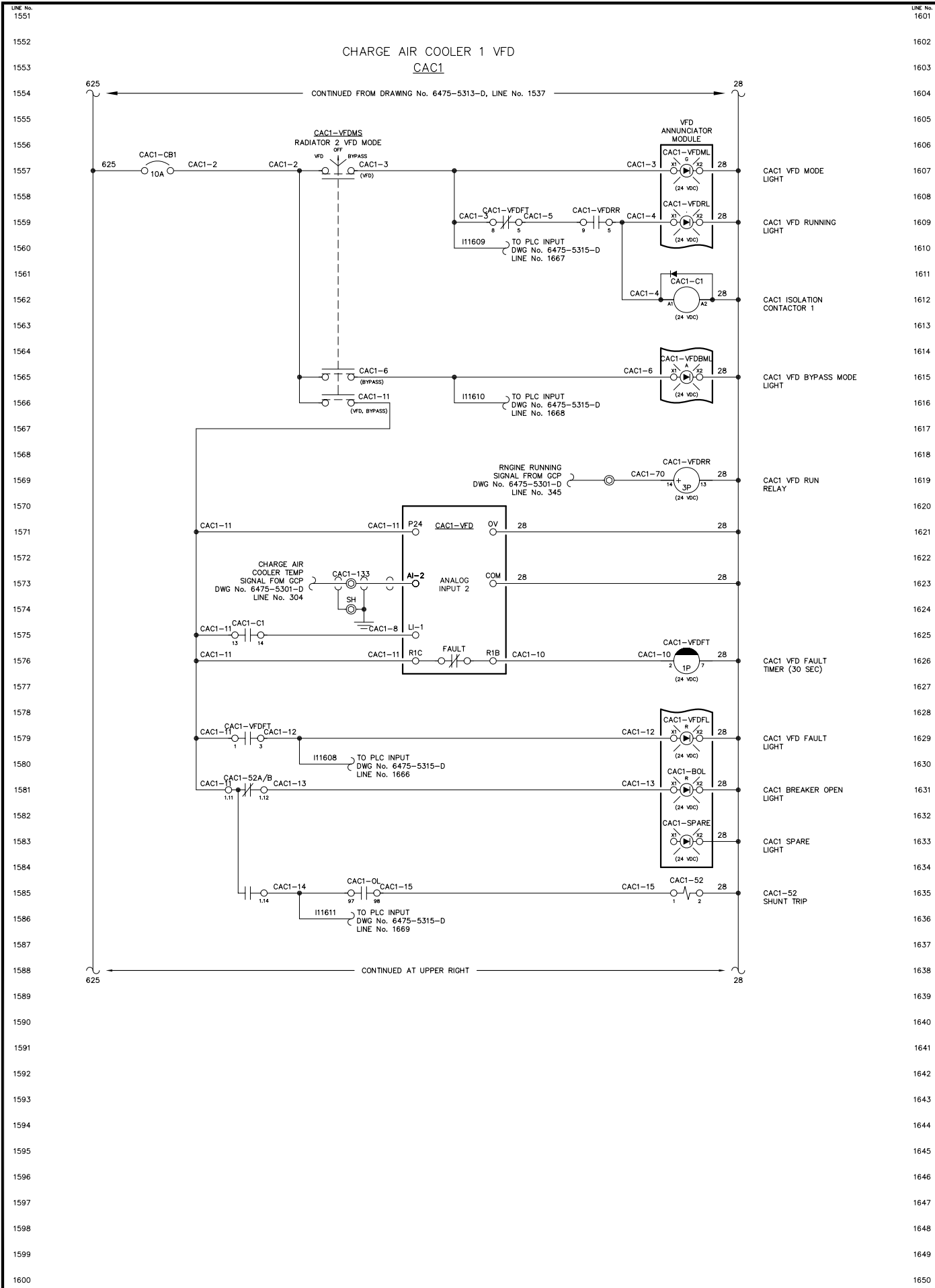
NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: MASTER DC CONTROL, SCHEMATIC DIAGRAM			
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN	
DWG. No: 6475-5312-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHITINA			

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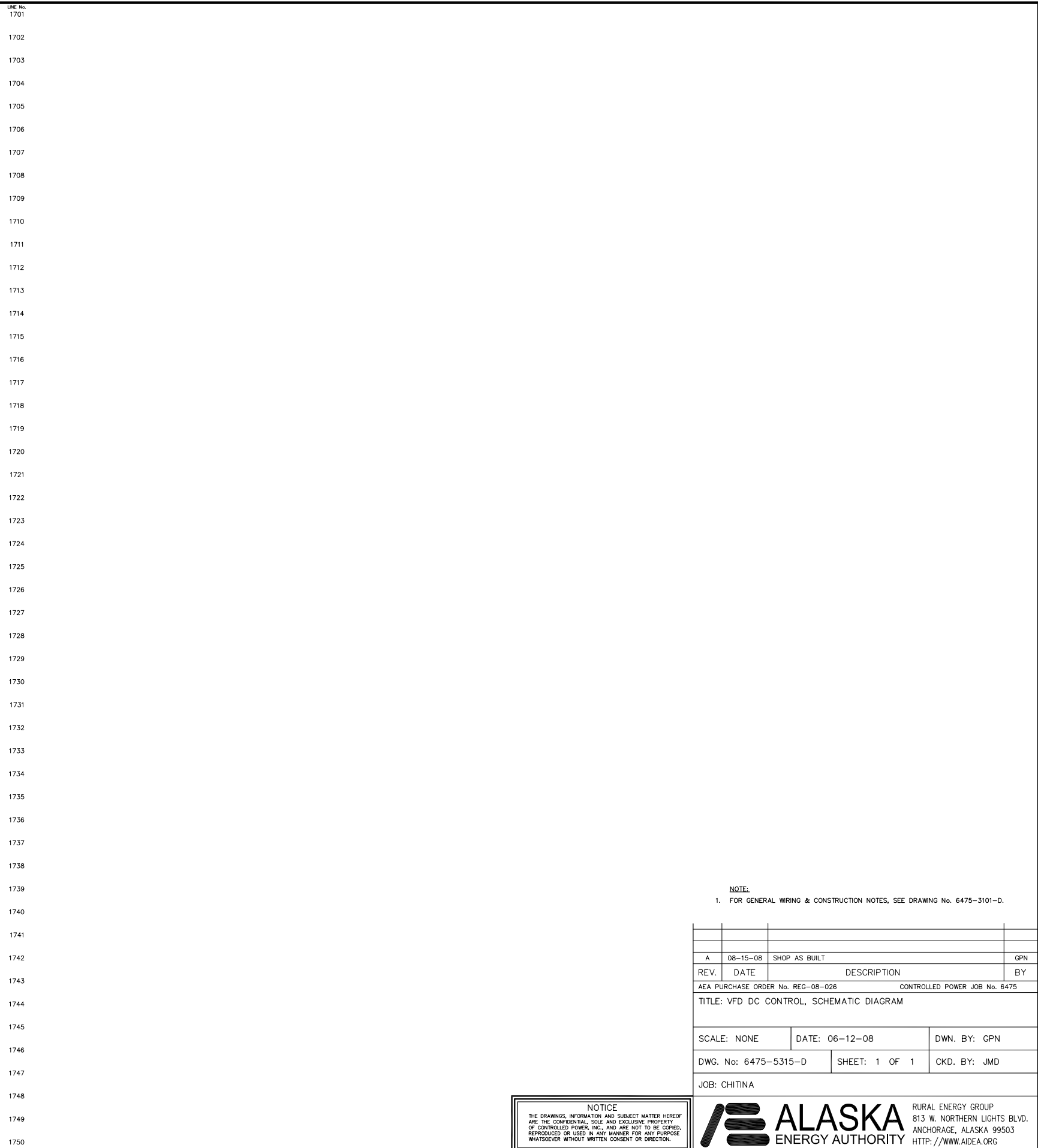
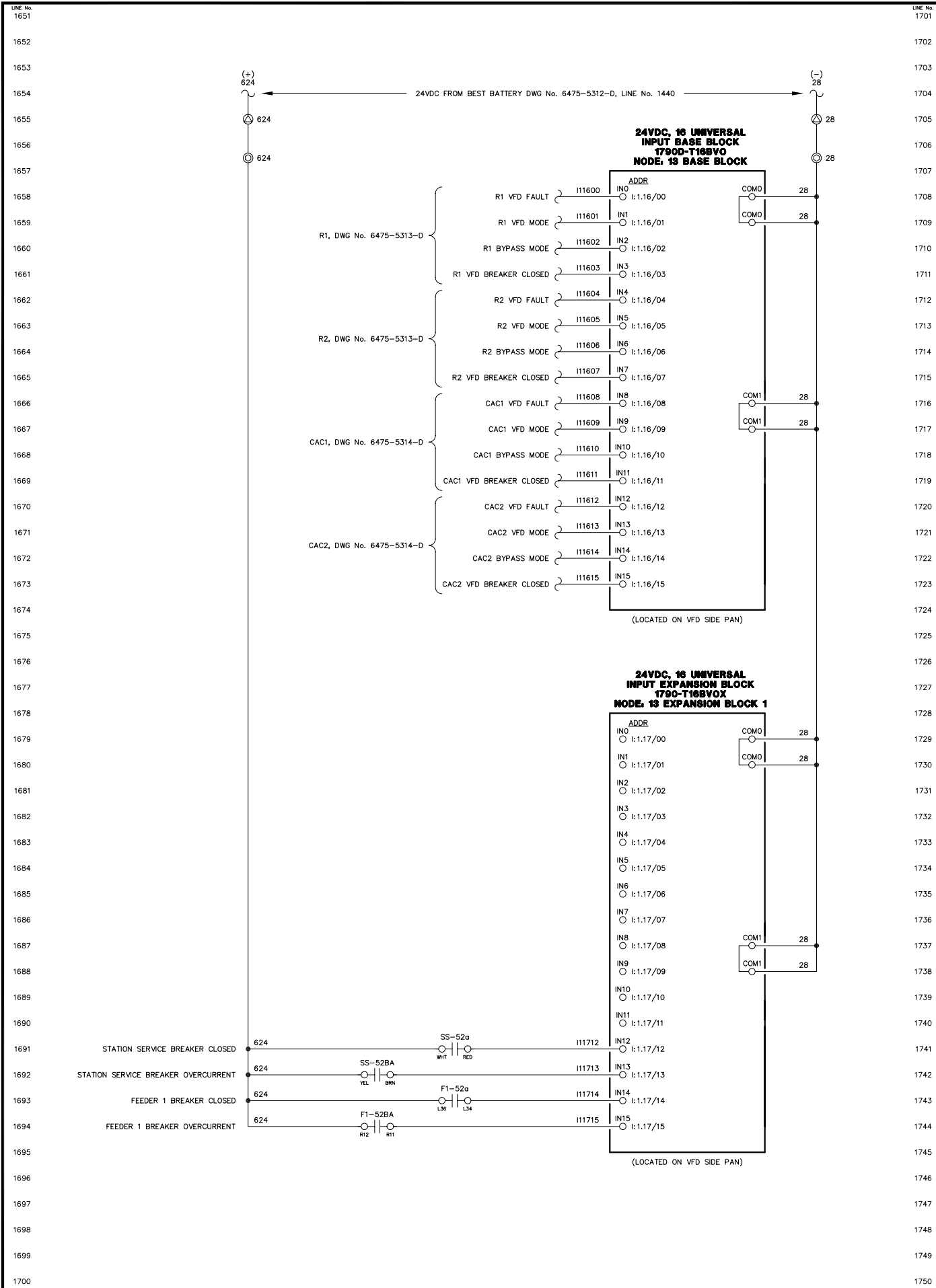


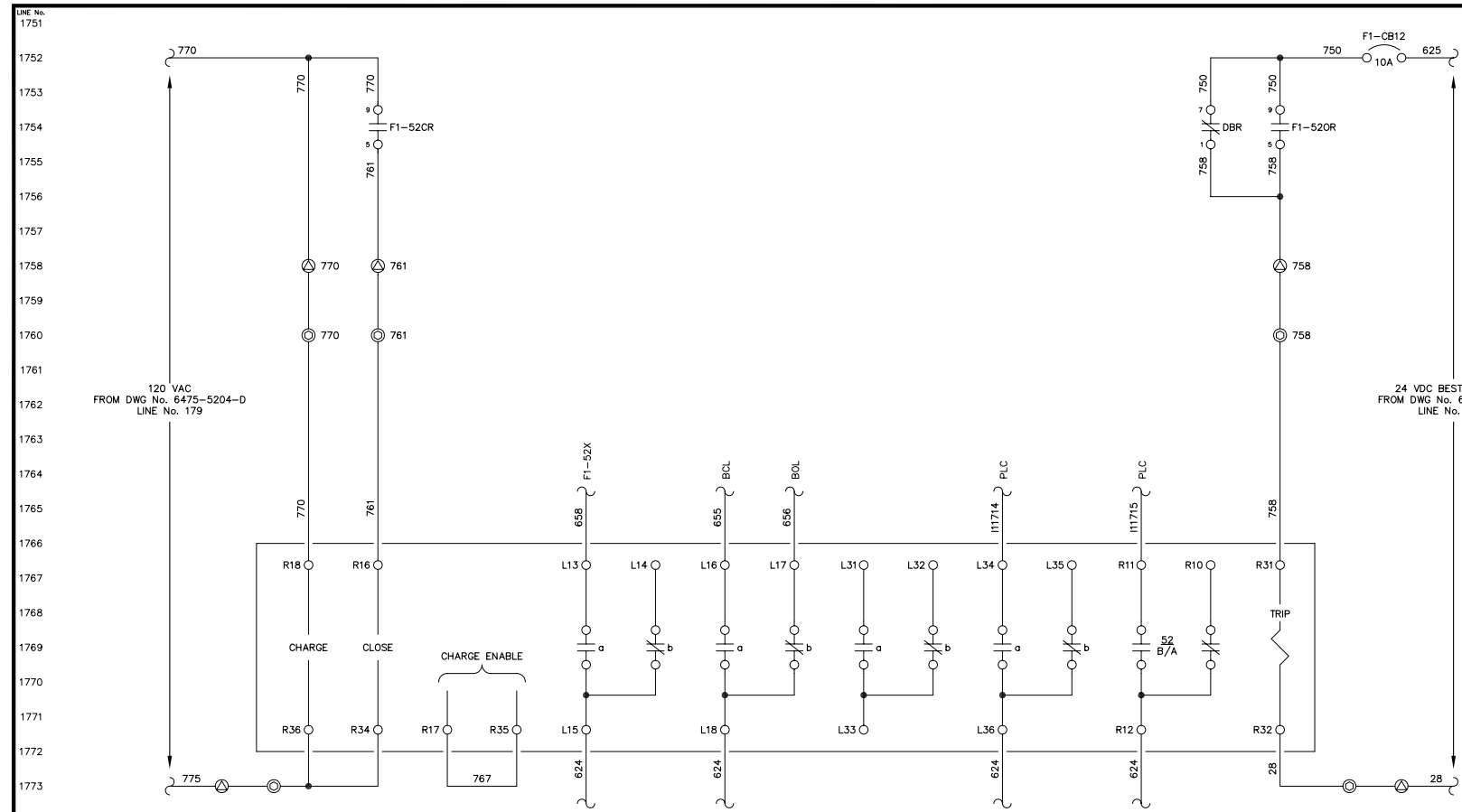
**NOTE:**  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REC-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: VFD DC CONTROL, SCHEMATIC DIAGRAM			
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN	
DWG. No: 6475-5314-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHITINA			

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FEEDER BREAKER  
POWER BREAK II

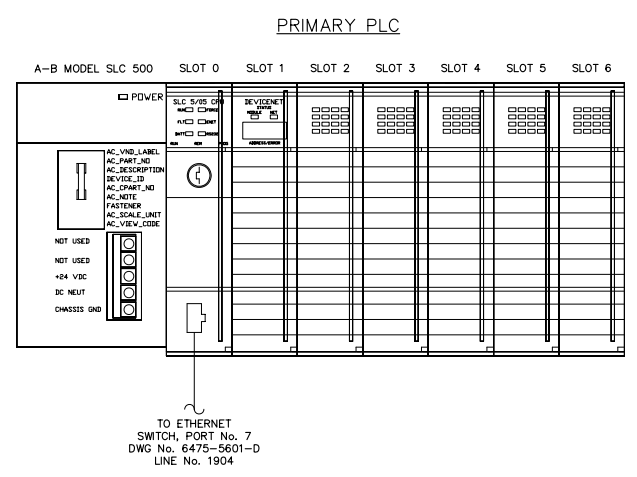
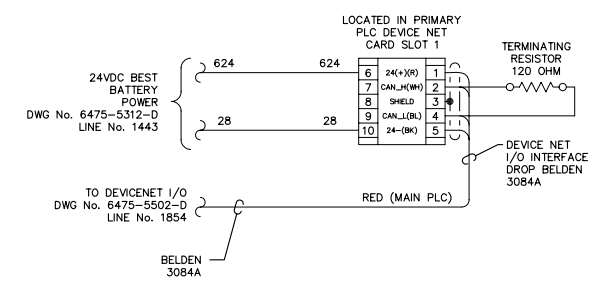
NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: FEEDER BREAKER CONTROL, SCHEMATIC DIAGRAM			
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN	
DWG. No: 6475-5401-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHITINA			

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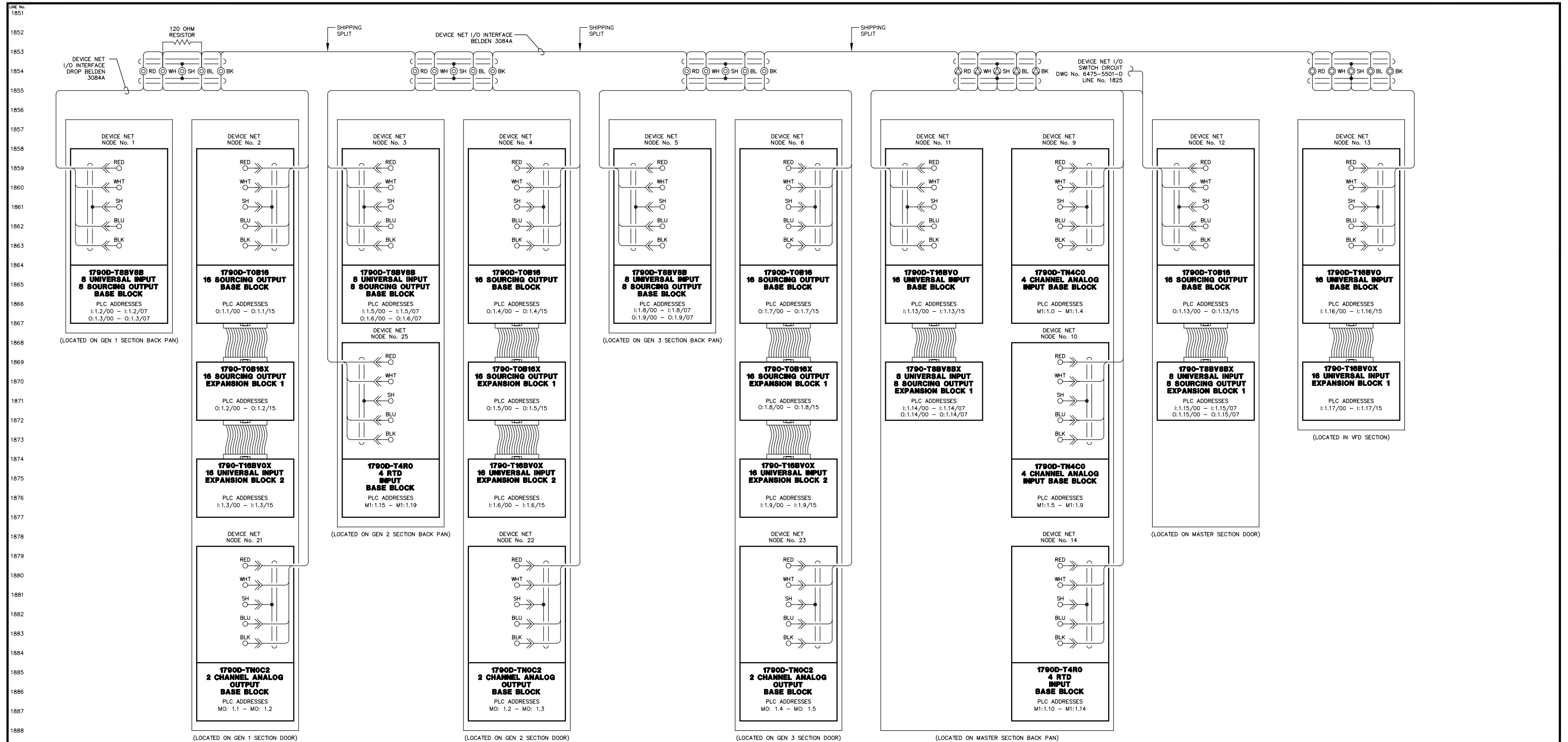
- LEGEND:**
- POWER SPPLY, 1746-P3
  - SLOT 0 CPU, 1774-LS52
  - SLOT 1 DEVICE NET SCANNER, 1747-SDN
  - SLOT 2 MV46-MNET
  - SLOT 3 MV46-MNET
  - SLOT 4 6 IN, 6 OUT, I/O MODULE, 1746-I012DC
  - SLOT 5 (SPACE)
  - SLOT 6 (SPACE)

**NOTE:**  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026 CONTROLLED POWER JOB No. 6475			
TITLE: PLC COMMUNICATION, SCHEMATIC DIAGRAM			
SCALE: NONE		DATE: 06-12-08	DWN. BY: GPN
DWG. No: 6475-5501-D		SHEET: 1 OF 1	CKD. BY: JMD
JOB: CHITINA			

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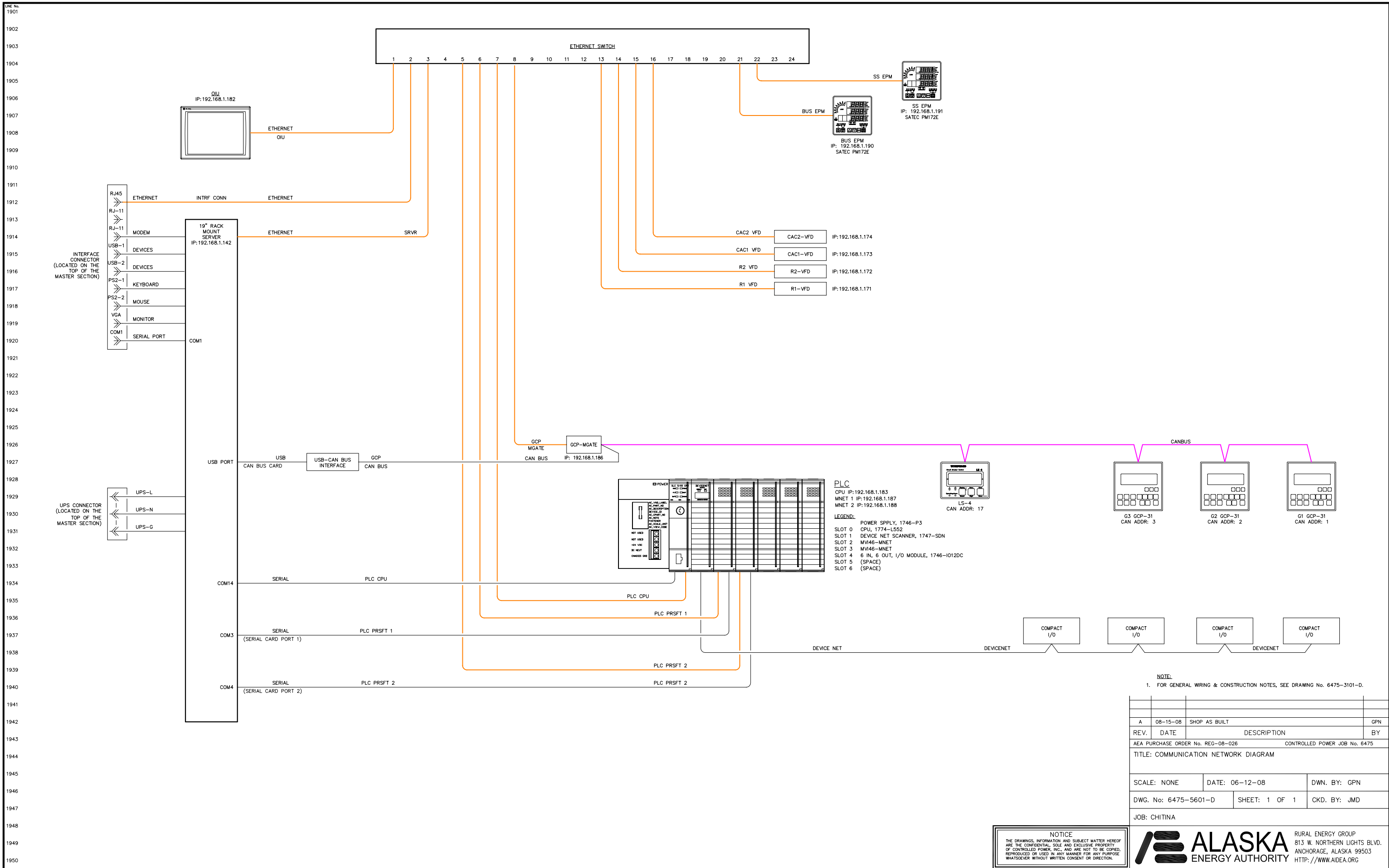
NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: PLC COMMUNICATION, SCHEMATIC DIAGRAM			
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN	
DWG. No: 6475-5502-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHITINA			

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REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN

AEA PURCHASE ORDER No. REC-08-026 CONTROLLED POWER JOB No. 6475

TITLE: COMMUNICATION NETWORK DIAGRAM

SCALE: NONE DATE: 06-12-08 DWN. BY: GPN

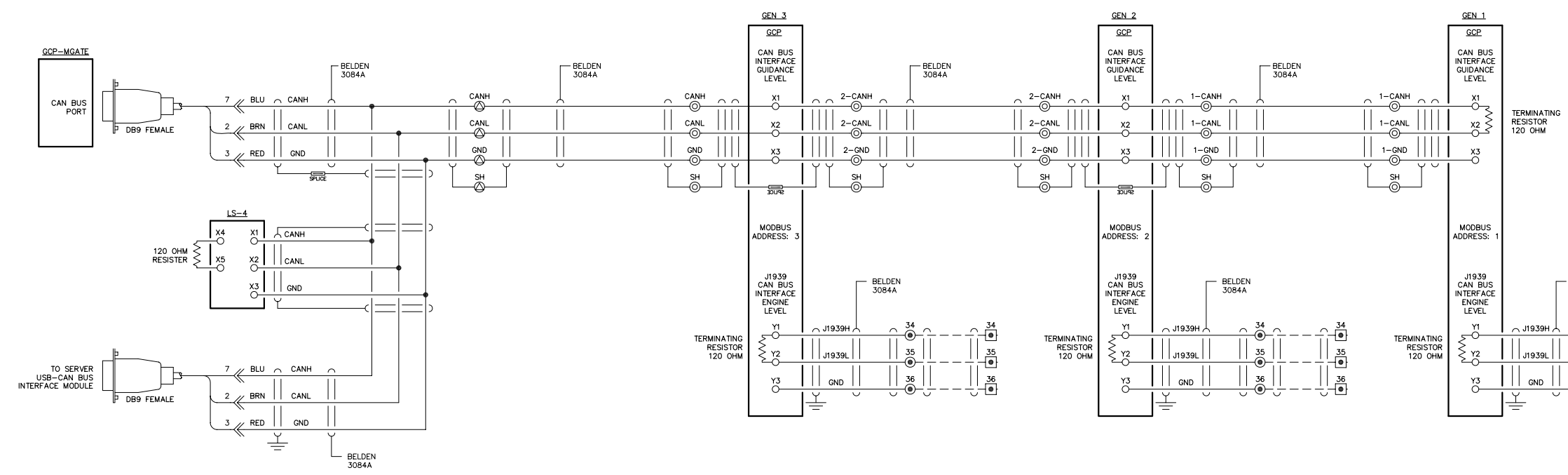
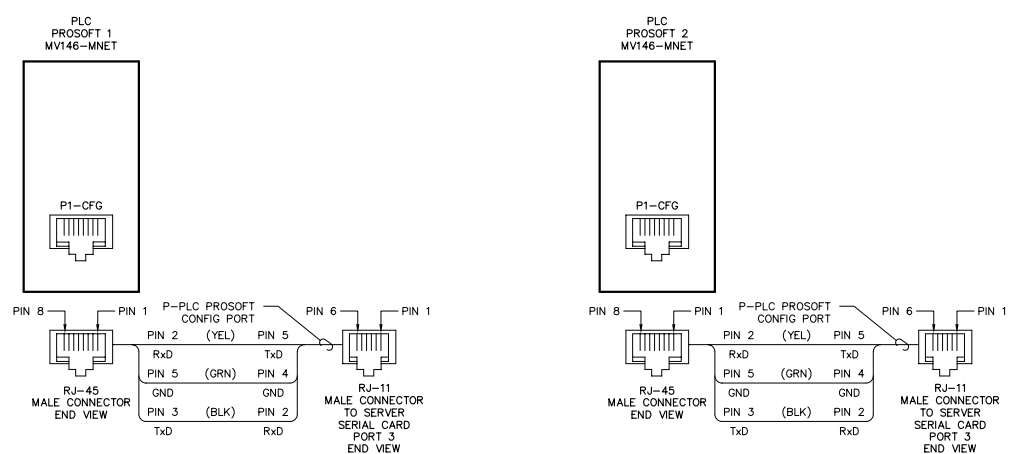
DWG. No: 6475-5601-D SHEET: 1 OF 1 CKD. BY: JMD

JOB: CHITINA

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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

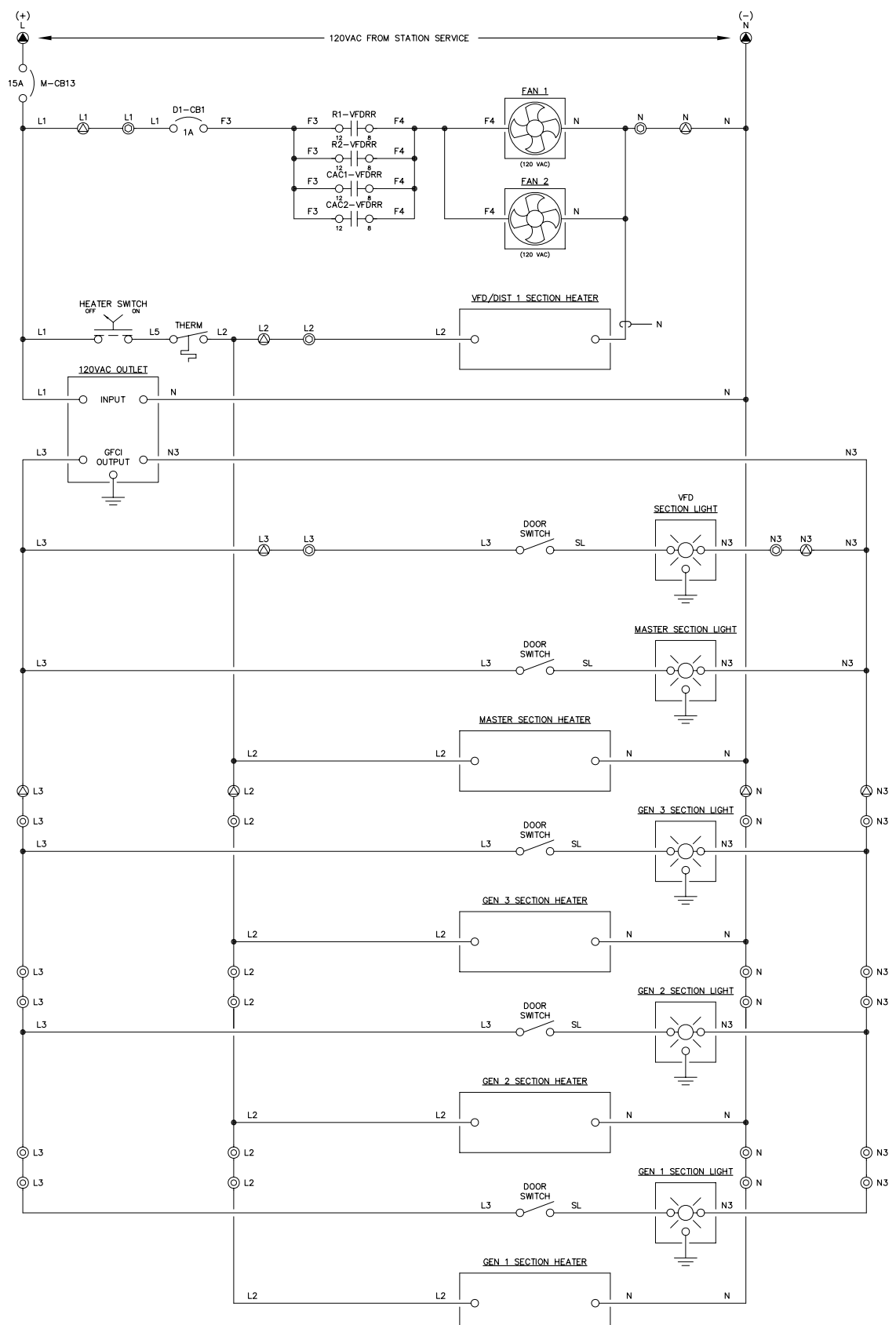
REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: COMMUNICATION NETWORK DIAGRAM			
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN	
DWG. No: 6475-5602-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHITINA			

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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: HEATER, LIGHTING & FAN CONTROL, SCHEMATIC DIAGRAM			
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN	
DWG. No: 6475-5701-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHITINA			

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MANUFACTURED BY:



**CONTROLLED POWER, INC.**  
 17909 BOTHELL EVERETT HWY. S.E. #102  
 BOTHELL, WA. 98012  
 (425)-485-1778  
 SERIAL NUMBER: 6475

MASTER CONTROL

GENERATOR 1

GENERATOR 2

GENERATOR 3

VFD/DISTRIBUTION

117 KW

58 KW

RADIATOR FAN 1

RADIATOR FAN 2

GENERATOR 1  
CHARGE AIR COOLER

GENERATOR 2  
CHARGE AIR COOLER

GENERATOR LOCKOUT FOR SERVICE  
OFF RUN

GENERATOR 1

GENERATOR 2

GENERATOR 3

BUS TOTALIZING

FEEDER 1

STATION SERVICE

LAMP TEST      EMERGENCY STOP      ALARM RESET

RADIATOR FAN 1  
VFD OFF BYPASS

RADIATOR FAN 2  
VFD OFF BYPASS

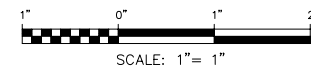
GEN 1 CHARGE AIR COOLER  
VFD OFF BYPASS

GEN 2 CHARGE AIR COOLER  
VFD OFF BYPASS

HEATER  
OFF ON

- NOTES:
1. ALL NAMEPLATES SHALL BE BLACK FACE WITH WHITE LETTERS EXCEPT AS NOTED.
  2. ALL NAMEPLATES SHALL HAVE PRESSURE SENSITIVE ADHESIVE ON BACK, 100 % COVERAGE.
  3. ALL NAMEPLATES SHALL HAVE MOUNTING HOLES DRILLED AS INDICATED.
- ▲ INDICATES THAT NAMEPLATE SHALL BE BRUSHED ALUMINUM WITH BLACK ENGRAVED LETTERS.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: NAMEPLATE ENGRAVING SCHEDULE, FABRICATION DIAGRAM			
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN	
DWG. No: 6475-6201-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHITINA			



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ENGINE RUNNING	ALARM LOCKOUT	LOW OIL PRESSURE	OIL LEVEL	HIGH WATER TEMPERATURE	OVERSPEED	OVERCRANK	RUNNING TIMEOUT	BATTERY CHARGER FAIL	AIR FILTER PLUGGED	HIGH CHARGE AIR TEMPERATURE	LEAD GENERATOR
NORMAL STOP	NOT IN AUTO	GENERATOR BREAKER OPEN	FAIL TO SYNC	OVERCURRENT	UNDER VOLTAGE	OVER VOLTAGE	UNDER FREQUENCY	OVER FREQUENCY	REVERSE POWER	CHARGE AIR VFD BREAKER OPEN	CHARGE AIR VFD FAILURE

GENERATOR 1 & 2 ANNUNCIATOR

ENGINE RUNNING	ALARM LOCKOUT	LOW OIL PRESSURE	OIL LEVEL	HIGH WATER TEMPERATURE	OVERSPEED	OVERCRANK	RUNNING TIMEOUT	BATTERY CHARGER FAIL	AIR FILTER PLUGGED	HIGH CHARGE AIR TEMPERATURE	
NORMAL STOP	NOT IN AUTO	GENERATOR BREAKER OPEN	FAIL TO SYNC	OVERCURRENT	UNDER VOLTAGE	OVER VOLTAGE	UNDER FREQUENCY	OVER FREQUENCY	REVERSE POWER	CHARGE AIR VFD BREAKER OPEN	CHARGE AIR VFD FAILURE

GENERATOR 3 ANNUNCIATOR

FIRE ALARM	EMERGENCY STOP	SYSTEM LOW WATER LEVEL		HIGH/LOW FUEL LEVEL	PLC FAILURE		HIGH COOLANT TEMPERATURE	SYSTEM NOT IN AUTO	STATION SERVICE BREAKER OPEN
CRANKCASE VENT FAN FAILURE		FUEL VALVE OPEN	FUEL VALVE CLOSED	FEEDER BREAKER TRIP	FEEDER BREAKER FAIL TO CLOSE	NO LOAD ON HEAT RECOVERY	HEAT RECOVERY LOSS OF PRESSURE	HEAT RECOVERY LOSS OF FLOW	HYDRO ALARM/COMM FAULT

MASTER ANNUNCIATOR

VFD MODE	VFD RUNNING	BYPASS MODE
VFD FAULT	VFD BREAKER OPEN	

VFD ANNUNCIATOR

GENERATOR 1 CONTACTOR OPEN	GENERATOR 1 CONTACTOR CLOSED
----------------------------------	------------------------------------

GEN 1 BREAKER ANNUNCIATOR

GENERATOR 2 CONTACTOR OPEN	GENERATOR 2 CONTACTOR CLOSED
----------------------------------	------------------------------------

GEN 2 BREAKER ANNUNCIATOR

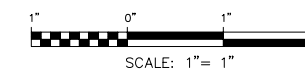
GENERATOR 3 CONTACTOR OPEN	GENERATOR 3 CONTACTOR CLOSED
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GEN 3 BREAKER ANNUNCIATOR

FEEDER BREAKER OPEN	FEEDER BREAKER CLOSED
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FEEDER BREAKER ANNUNCIATOR

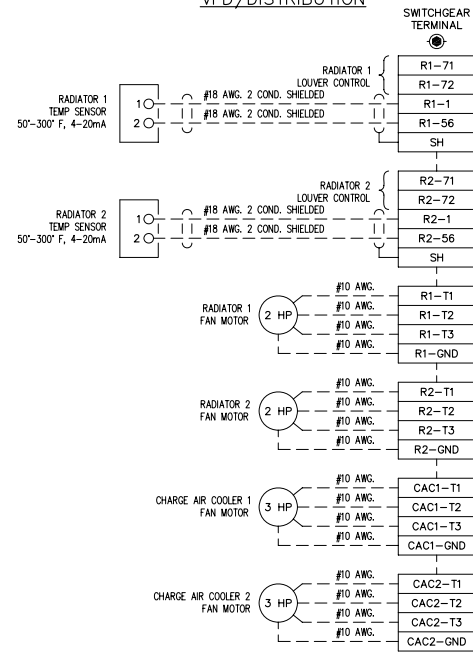
REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REG-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: ANNUNCIATOR WINDOWS, FABRICATION DIAGRAM			
SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN	
DWG. No: 6475-6202-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: CHITINA			



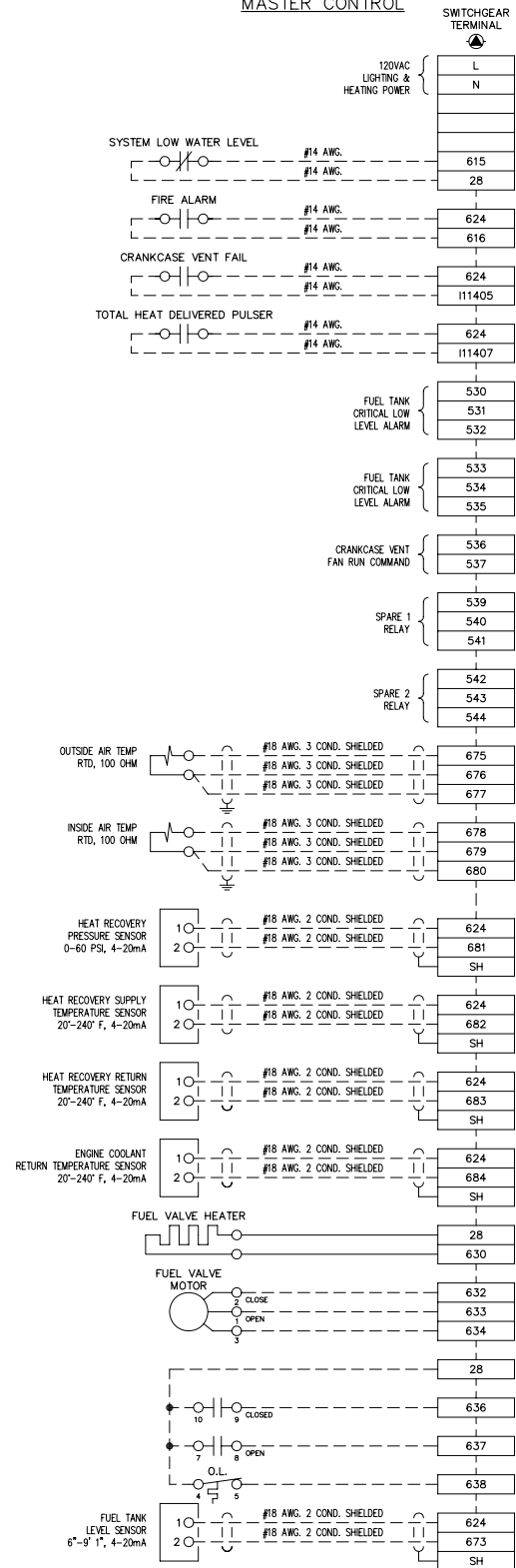
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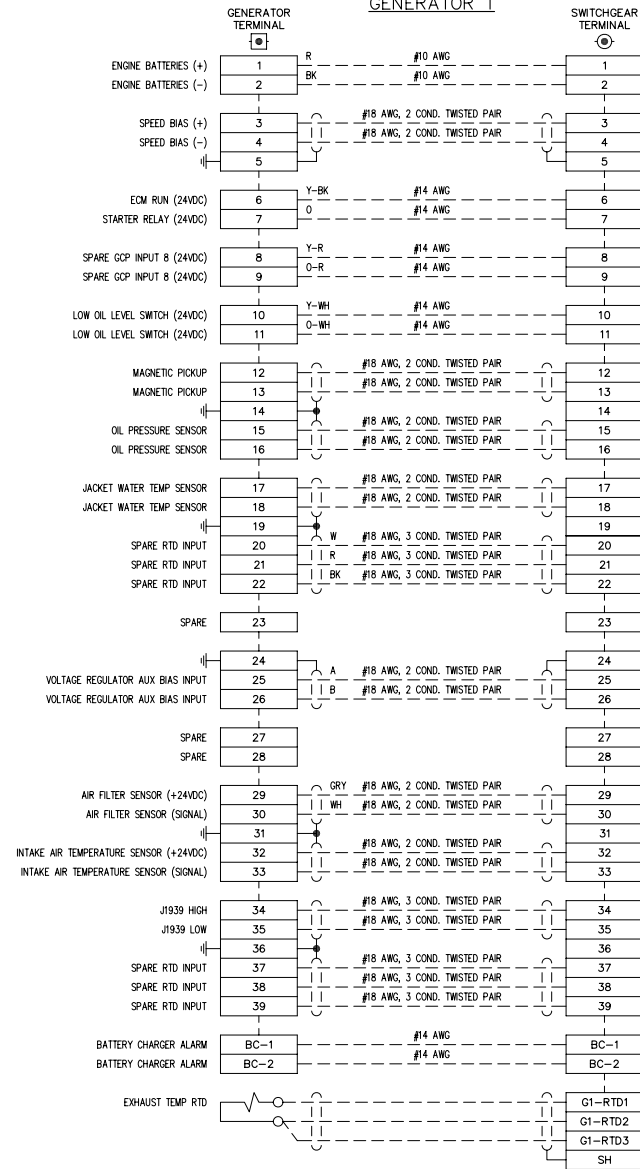
VFD/DISTRIBUTION



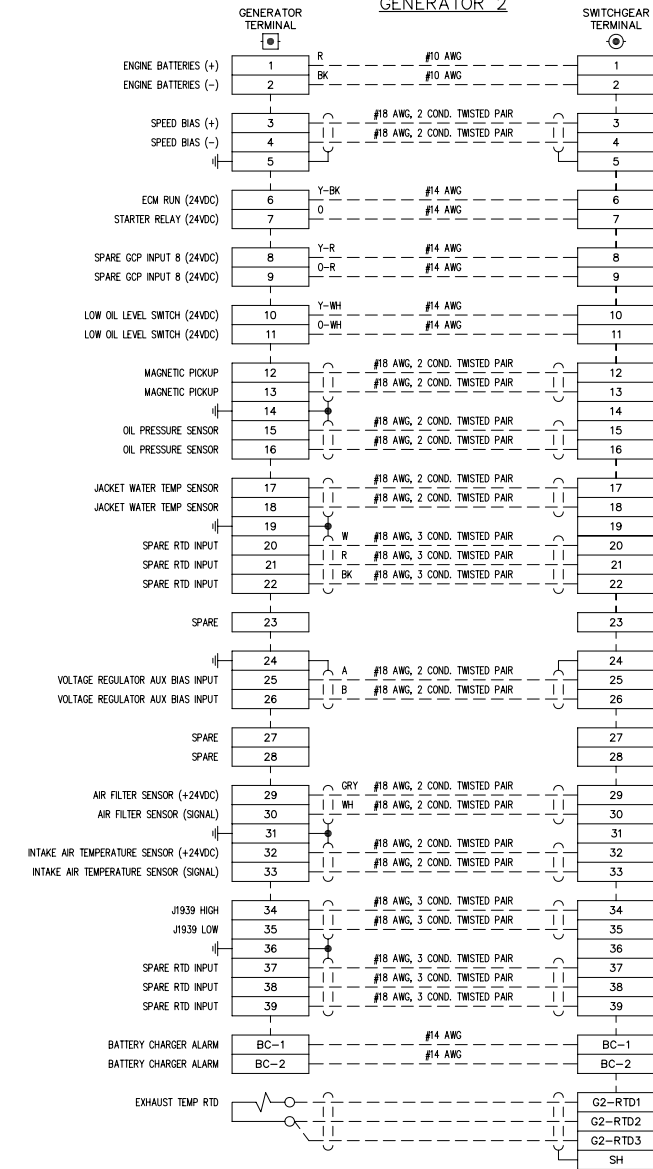
MASTER CONTROL



GENERATOR 1



GENERATOR 2



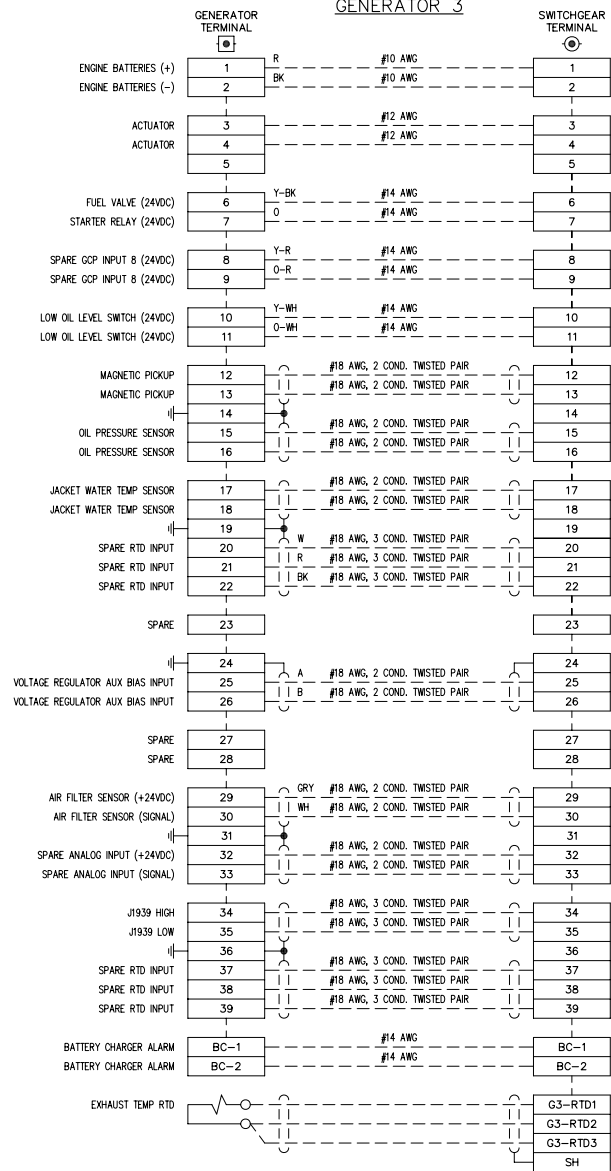
NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN
AEA PURCHASE ORDER No. REC-08-026		CONTROLLED POWER JOB No. 6475	
TITLE: INTERCONNECTION DIAGRAM			
SCALE: NONE		DATE: 06-12-08	DWN. BY: GPN
DWG. No: 6475-7101-D		SHEET: 1 OF 1	CKD. BY: JMD
JOB: CHITINA			

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**GENERATOR 3**



- NOTE:**  
 1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 6475-3101-D.

REV.	DATE	DESCRIPTION	BY
A	08-15-08	SHOP AS BUILT	GPN

AEA PURCHASE ORDER No. REG-08-026 CONTROLLED POWER JOB No. 6475

TITLE: INTERCONNECTION DIAGRAM

SCALE: NONE	DATE: 06-12-08	DWN. BY: GPN
DWG. No: 6475-7102-D	SHEET: 1 OF 1	CKD. BY: JMD
JOB: CHITINA		

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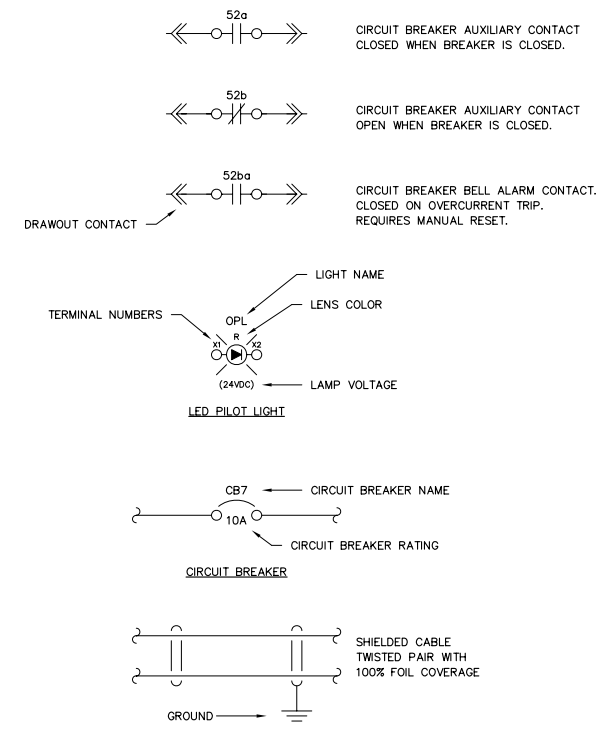
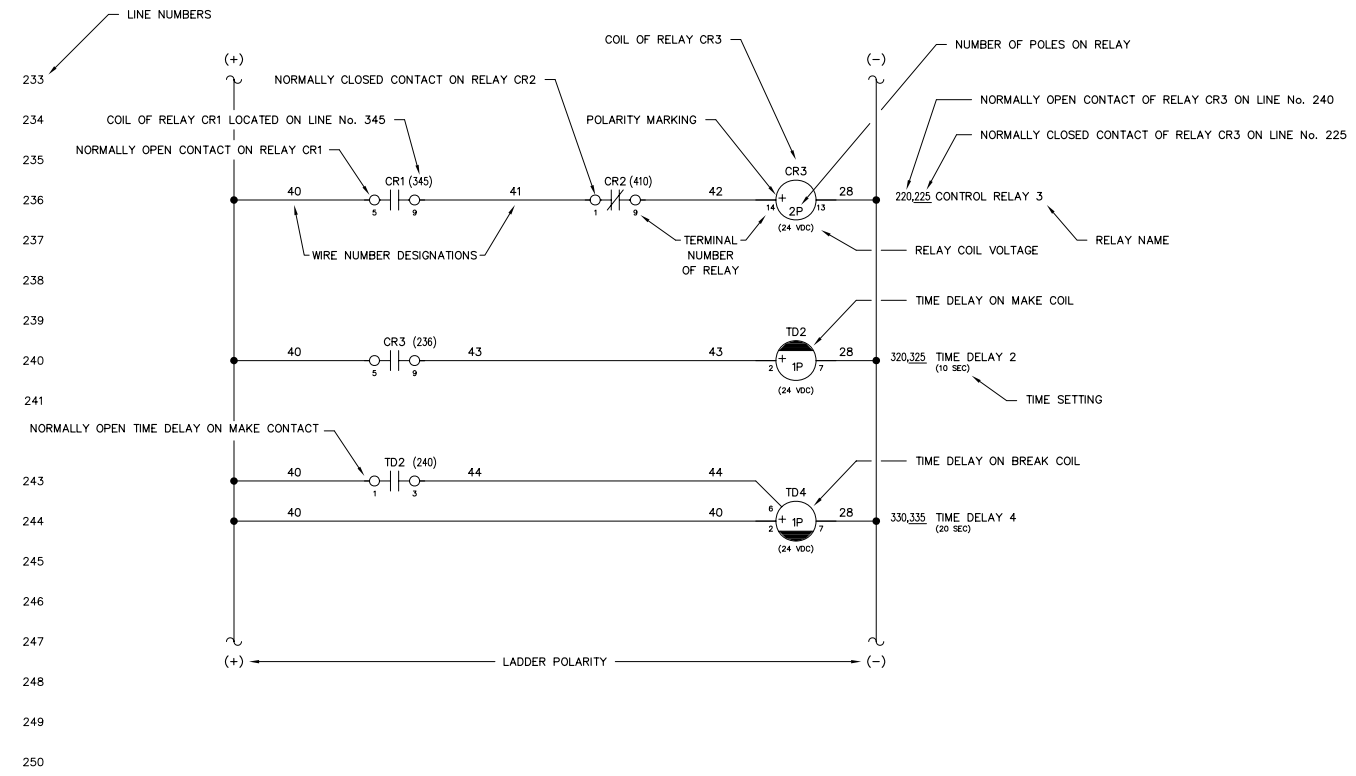


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**IGIUGIG GENERATOR SWITCHGEAR**  
**ALASKA ENERGY AUTHORITY PURCHASE ORDER No. REG-11-044**  
**CONTROLLED POWER, INC. JOB No. 7147**

<u>DRAWING No.</u>	<u>DRAWING TITLE</u>
7147-2101-D	COVER SHEET
7147-3101-D	SCHEMATIC LEGEND AND NOTES
7147-4101-D	GENERATOR SWITCHGEAR ELEVATION VIEW, OUTLINE DIAGRAM
7147-4201-D	GENERATOR SWITCHGEAR PLAN VIEW, OUTLINE DIAGRAM
7147-5101-D	GENERATOR SINGLE LINE, SCHEMATIC DIAGRAM
7147-5201-D	GENERATOR 1 AC THREE LINE, SCHEMATIC DIAGRAM
7147-5202-D	GENERATOR 2 AC THREE LINE, SCHEMATIC DIAGRAM
7147-5203-D	GENERATOR 3 AC THREE LINE, SCHEMATIC DIAGRAM
7147-5204-D	MASTER AC THREE LINE, SCHEMATIC DIAGRAM
7147-5205-D	VFD AC THREE LINE, SCHEMATIC DIAGRAM
7147-5301-D	GENERATOR 1 DC CONTROL, SCHEMATIC DIAGRAM
7147-5302-D	GENERATOR 1 DC CONTROL, SCHEMATIC DIAGRAM
7147-5303-D	GENERATOR 1 DC CONTROL, SCHEMATIC DIAGRAM
7147-5304-D	GENERATOR 2 DC CONTROL, SCHEMATIC DIAGRAM
7147-5305-D	GENERATOR 2 DC CONTROL, SCHEMATIC DIAGRAM
7147-5306-D	GENERATOR 2 DC CONTROL, SCHEMATIC DIAGRAM
7147-5307-D	GENERATOR 3 DC CONTROL, SCHEMATIC DIAGRAM
7147-5308-D	GENERATOR 3 DC CONTROL, SCHEMATIC DIAGRAM
7147-5309-D	GENERATOR 3 DC CONTROL, SCHEMATIC DIAGRAM
7147-5310-D	MASTER DC CONTROL, SCHEMATIC DIAGRAM
7147-5311-D	MASTER DC CONTROL, SCHEMATIC DIAGRAM
7147-5312-D	MASTER DC CONTROL, SCHEMATIC DIAGRAM
7147-5313-D	MASTER DC CONTROL, SCHEMATIC DIAGRAM
7147-5314-D	MASTER DC CONTROL, SCHEMATIC DIAGRAM
7147-5315-D	VFD DC CONTROL, SCHEMATIC DIAGRAM
7147-5316-D	VFD/DISTRIBUTION DC CONTROL, SCHEMATIC DIAGRAM
7147-5401-D	FEEDER BREAKER CONTROL, SCHEMATIC DIAGRAM
7147-5501-D	PLC COMMUNICATION, SCHEMATIC DIAGRAM
7147-5502-D	PLC COMMUNICATION, SCHEMATIC DIAGRAM
7147-5601-D	COMMUNICATION NETWORK DIAGRAM
7147-5602-D	COMMUNICATION NETWORK DIAGRAM
7147-5701-D	HEATER, LIGHTING & FAN CONTROL, SCHEMATIC DIAGRAM
7147-6101-D	CONTROL SWITCH TARGET DIAGRAM
7147-6201-D	NAMEPLATE ENGRAVING SCHEDULE, FABRICATION DIAGRAM
7147-6202-D	ANNUNCIATOR WINDOWS, FABRICATION DIAGRAM
7147-7101-D	INTERCONNECTION DIAGRAM



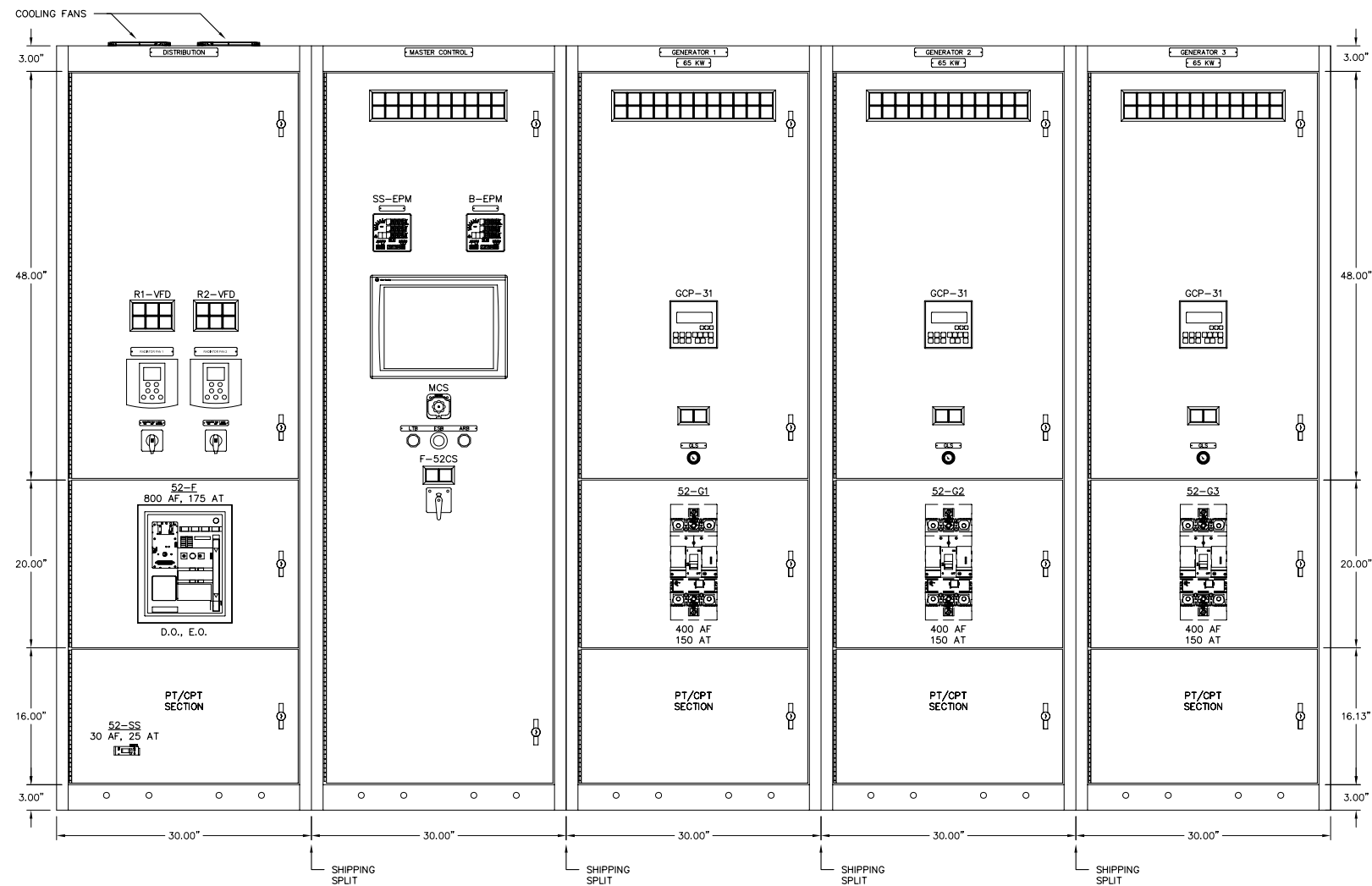


- NOTES:**
- SCHEMATIC IS SHOWN AS FOLLOWS:
    - ALL AC AND DC POWER REMOVED
    - ALL RELAY CONTACTS DE-ENERGIZED
    - ALL CIRCUIT BREAKERS IN THE OPEN/RESET POSITION
    - ALL MODE SWITCHES IN THE "OFF" POSITION
    - ALL EMERGENCY STOP SWITCHES IN THE "NORMAL" POSITION
    - ALL PRESSURE SWITCHES SHOWN WITHOUT PRESSURE PRESENT
    - ALL LEVEL SWITCHES SHOWN WITHOUT FLUID PRESENT
    - ALL TEMPERATURE SWITCHES SHOWN AT AMBIENT
  - ⊙ INDICATES FIELD TERMINALS IN GENERATOR CONTROL SECTION.
  - ⊠ INDICATES TERMINALS AT ENGINE/GENERATOR.
  - ⊡ INDICATES INTERCONNECT TERMINALS IN MASTER SECTION.
  - ⊕ INDICATES FIELD TERMINALS IN MASTER SECTION.
  - ⊖ INDICATES FIELD TERMINALS IN MASTER SECTION.
  - ⊗ INDICATES INTERCONNECT TERMINALS IN GENERATOR CONTROL SECTION.
  - ⊘ INDICATES INTERCONNECT TERMINALS IN VFD/DIST SECTION.
  - ⊙ INDICATES FIELD TERMINALS IN VFD/DIST SECTION.
  - - - INDICATES FIELD WIRING BY OTHERS
  - ALL CONTROL WIRING TO BE No. 14 AWG, 600 VOLT, TYPE SIS EXCEPT AS NOTED
  - SHIELDED WIRING TO BE No. 18 AWG, 300 VOLT, TWISTED LINE WITH 100% FOIL COVERAGE
  - ALL DIODES ARE 1N4007 EXCEPT AS NOTED

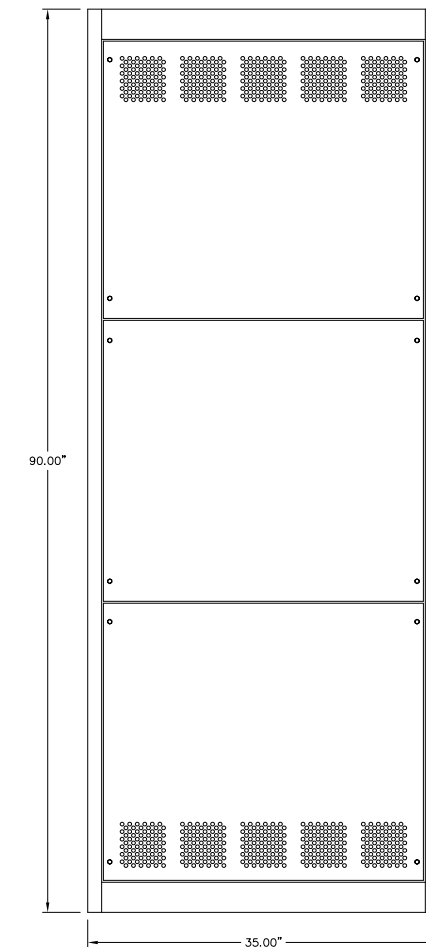
REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN
AEA PURCHASE ORDER No. REG-11-044		CONTROLLED POWER JOB No. 7147	
TITLE: SCHEMATIC LEGEND & NOTES			
SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN	
DWG. No: 7147-3101-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: IGIUGIG GENERATOR SWITCHGEAR			

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GENERATOR SWITCHGEAR – FRONT VIEW  
 277/480V, 1600A, COPPER BUS, 3Ø, 4W 65 KAIC



SIDE VIEW

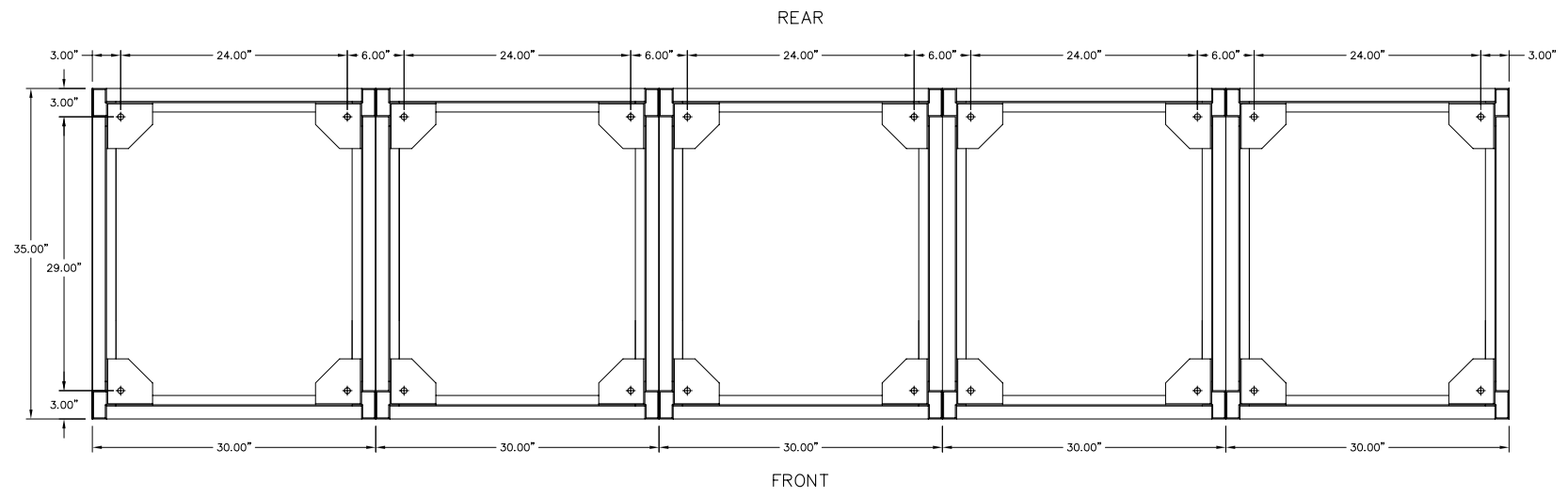
NOTES:

1. EACH SECTION SHIPPED INDIVIDUALLY.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN
AEA PURCHASE ORDER No. REG-11-044		CONTROLLED POWER JOB No. 7147	
TITLE: GENERATOR SWITCHGEAR ELEVATION VIEW, OUTLINE DIAGRAM			
SCALE: 1/10	DATE: 05-05-11	DWN. BY: GPN	
DWG. No: 7147-4101-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: IGIUGIG GENERATOR SWITCHGEAR			

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GENERATOR SWITCHGEAR - PLAN VIEW

- NOTES:  
 1. EACH SECTION SHIPPED INDIVIDUALLY.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

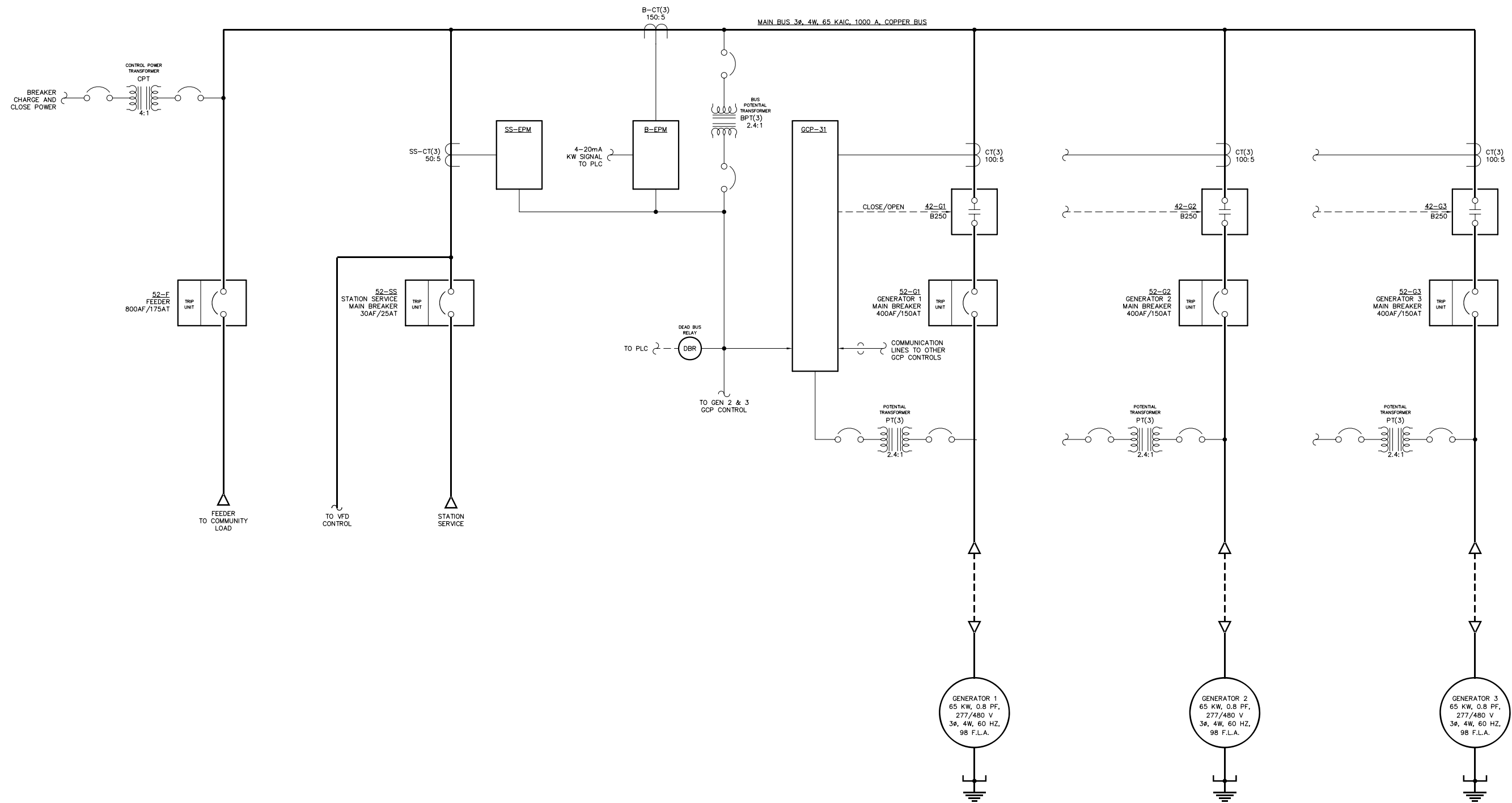
TITLE: GENERATOR SWITCHGEAR PLAN VIEW, OUTLINE DIAGRAM

SCALE: 1/10	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-4201-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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NOTES:  
1. GENERATORS 1 & 2 SIMILAR TO GENERATOR 3.

NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: GENERATOR SWITCHGEAR SINGLE LINE, SCHEMATIC DIAGRAM

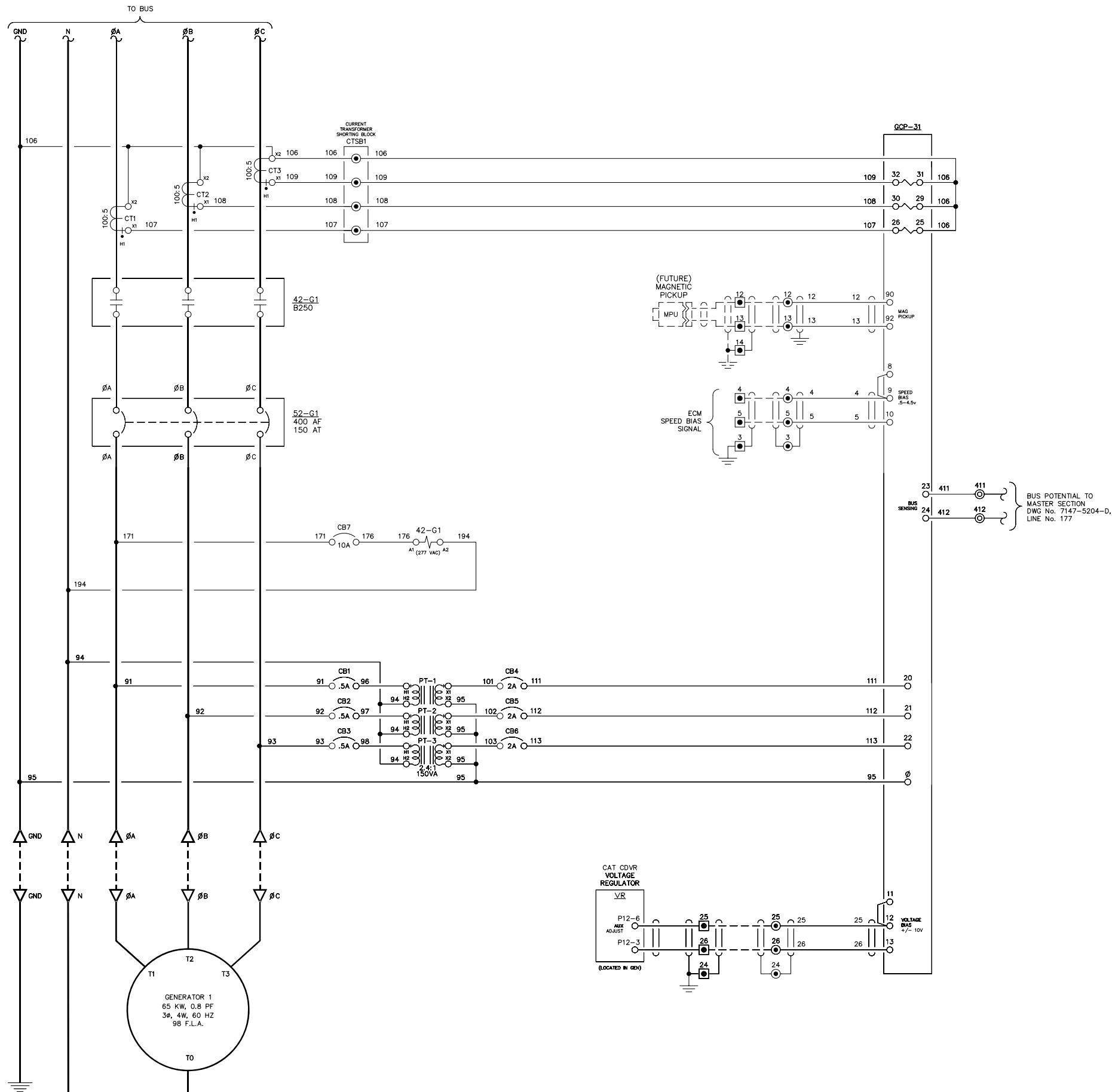
SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5101-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: GENERATOR 1 AC THREE LINE, SCHEMATIC DIAGRAM

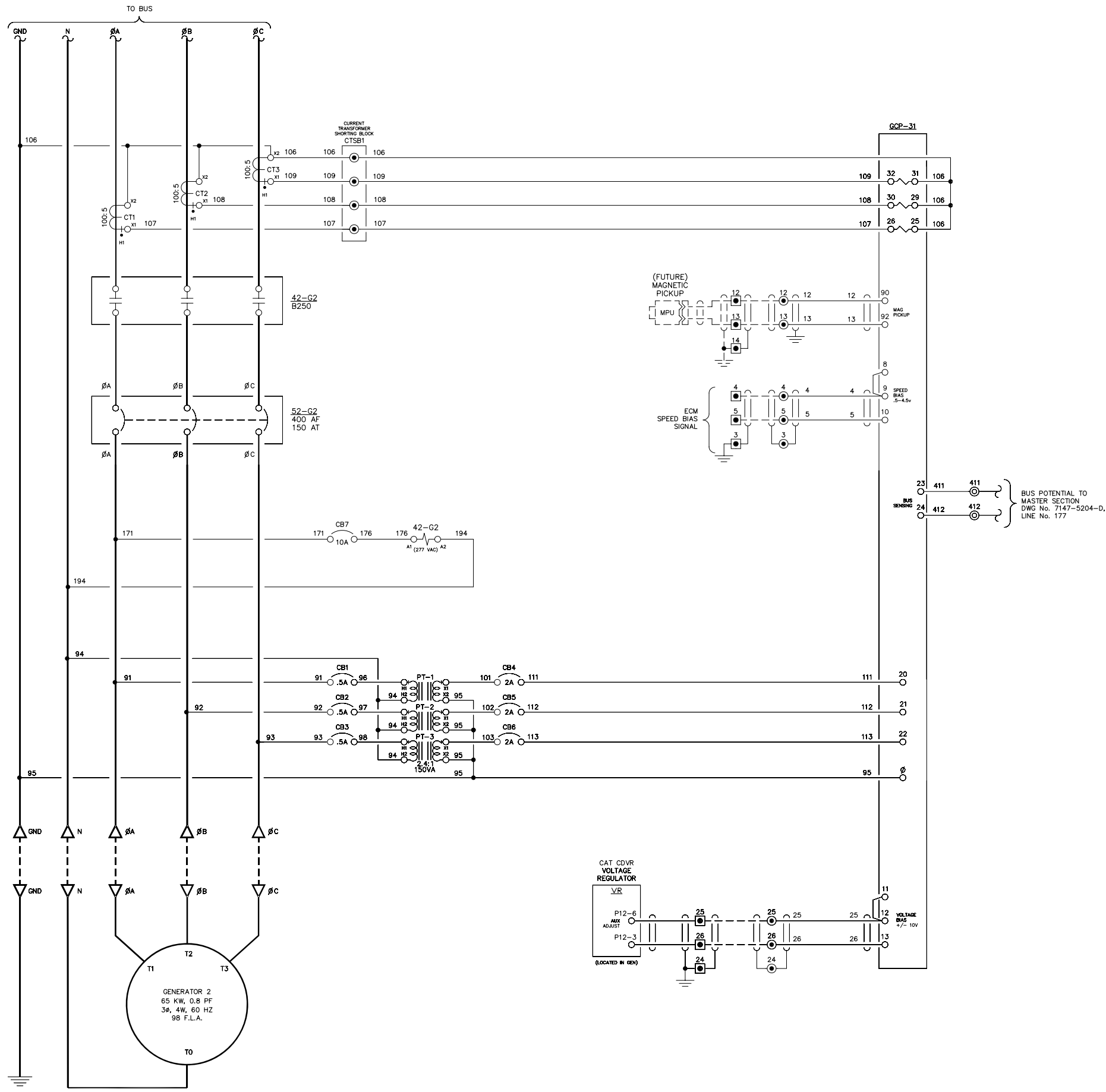
SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5201-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: GENERATOR 2 AC THREE LINE, SCHEMATIC DIAGRAM

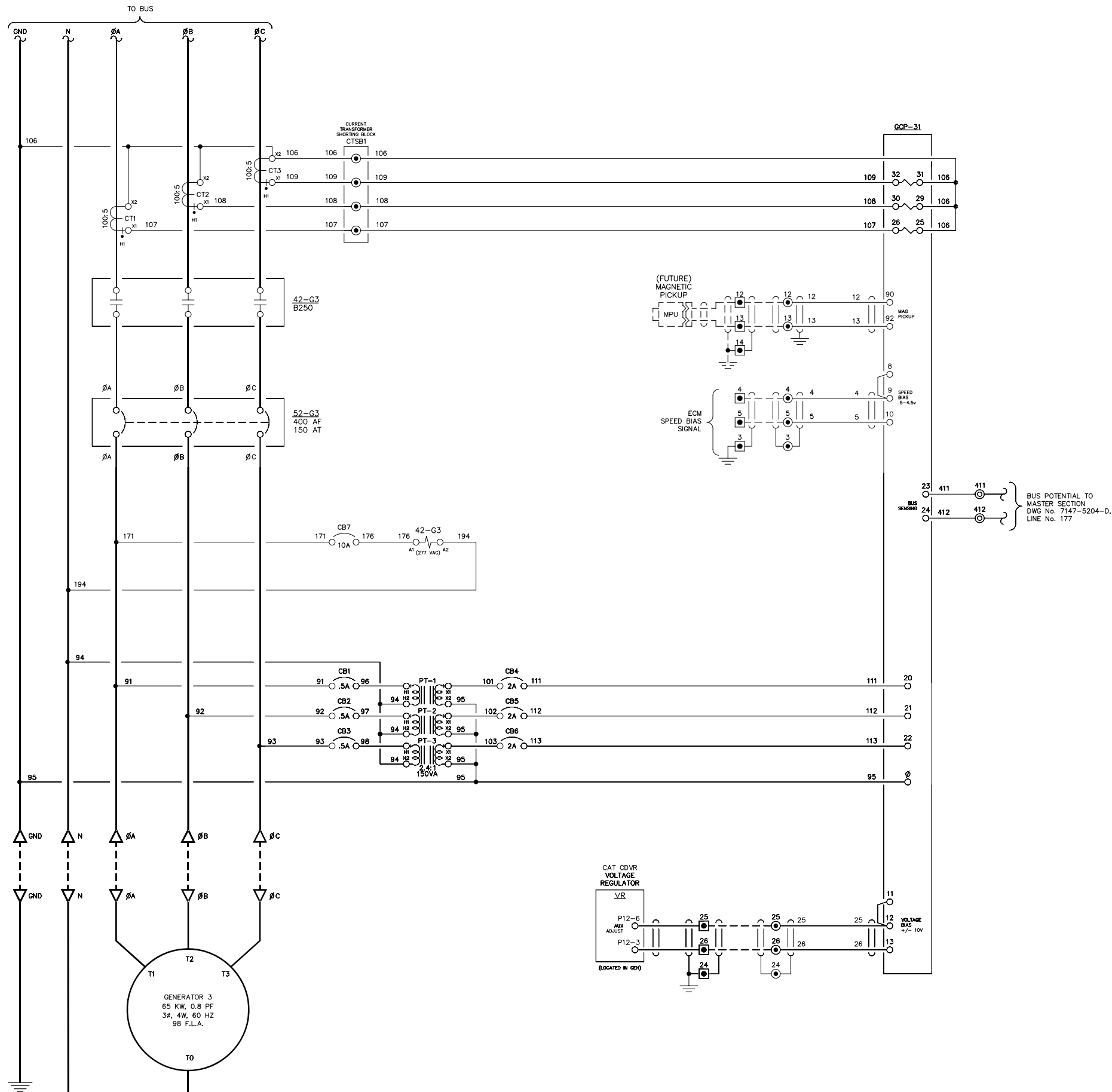
SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5202-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: GENERATOR 3 AC THREE LINE, SCHEMATIC DIAGRAM

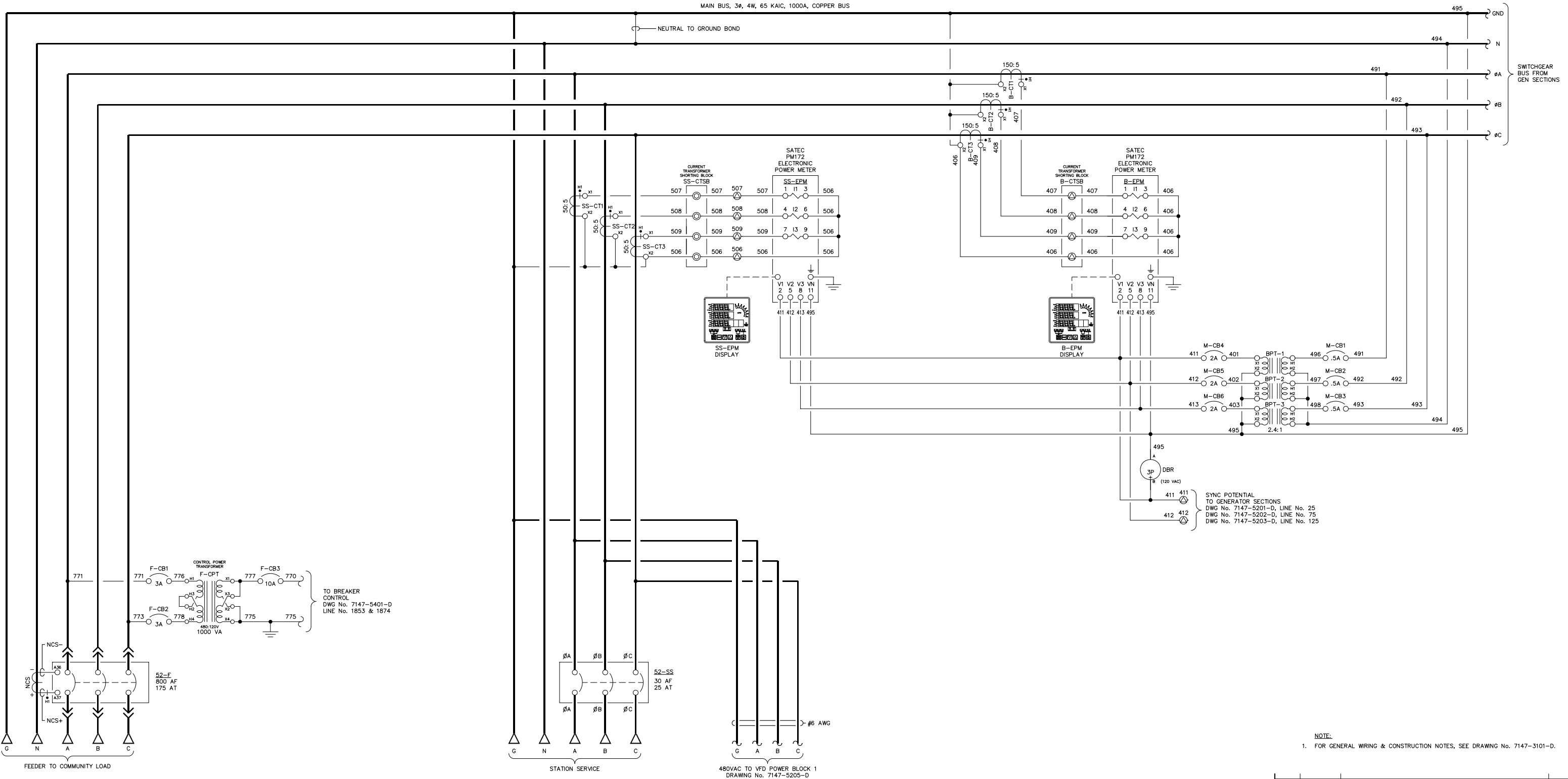
SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5203-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: MASTER AC THREE LINE, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5204-D	SHEET: 1 OF 1	CKD. BY: JMD

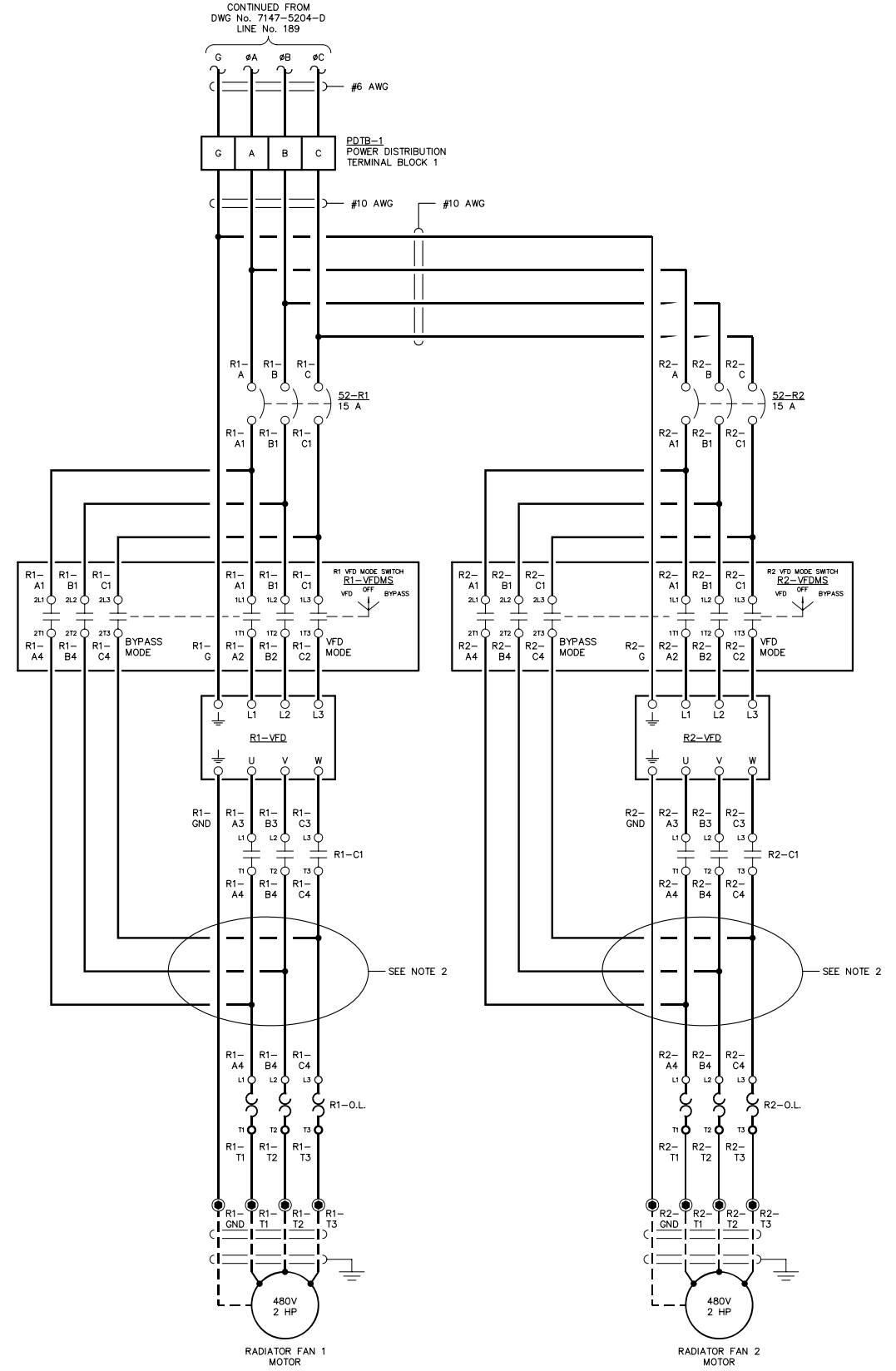
JOB: IGIUGIG GENERATOR SWITCHGEAR

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- NOTE:
- FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.
  - VFD LOAD WIRES SHALL BE ROUTED SEPARATE FROM ALL OTHER WIRING OR SHIELDED TO AVOID RF INTERFERENCE.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

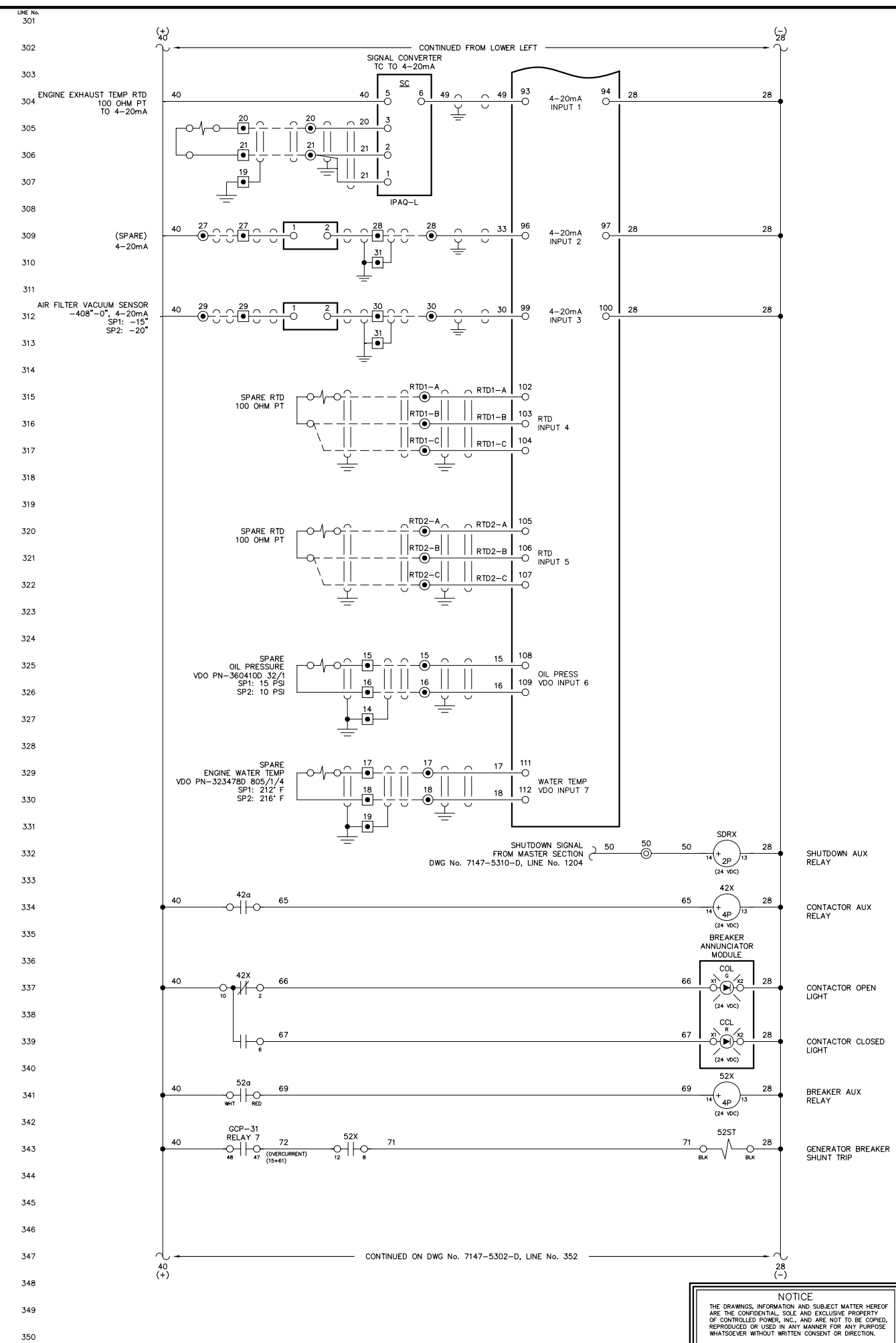
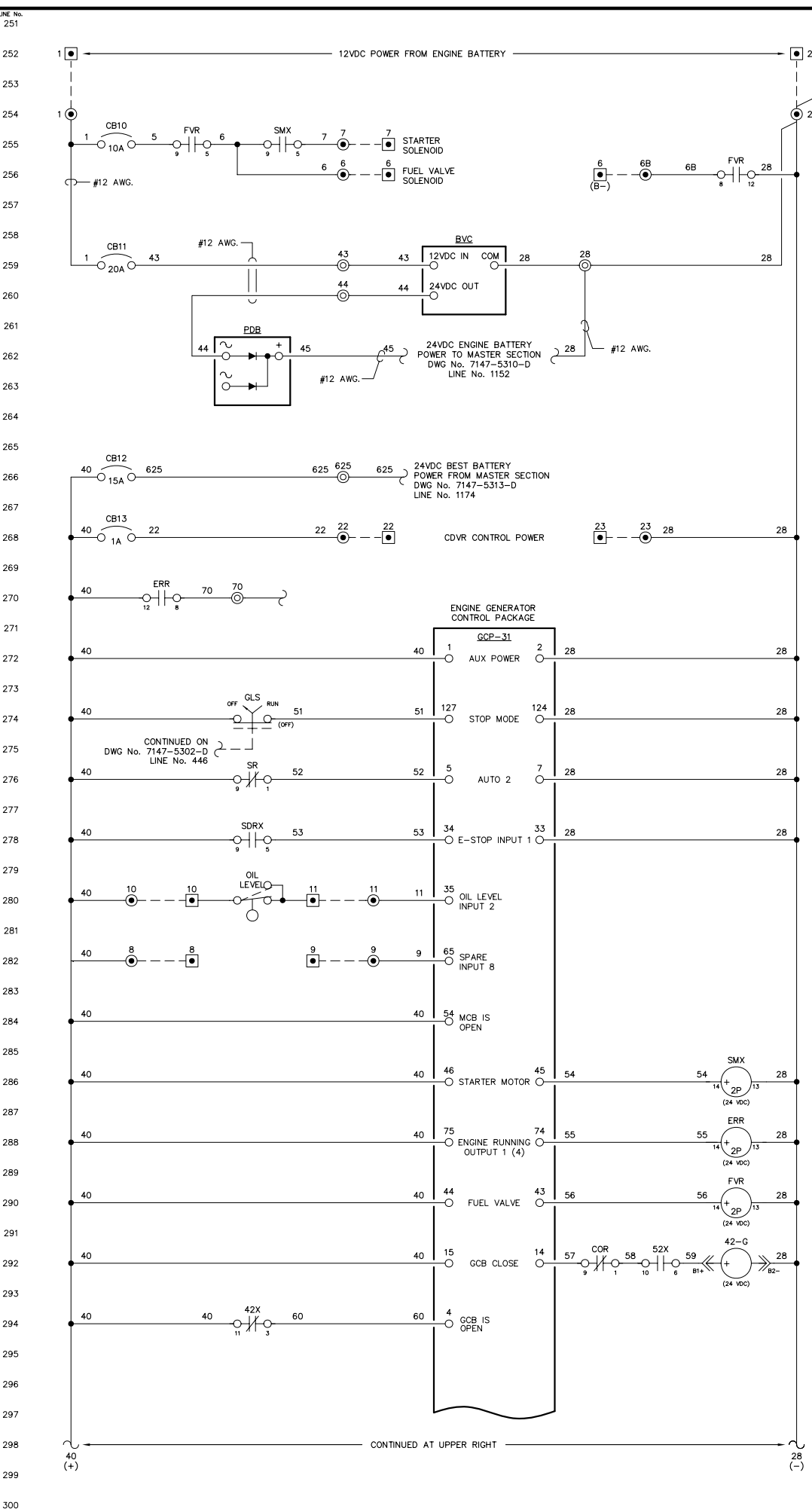
TITLE: VFD THREE LINE, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5205-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGUGIG GENERATOR SWITCHGEAR

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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

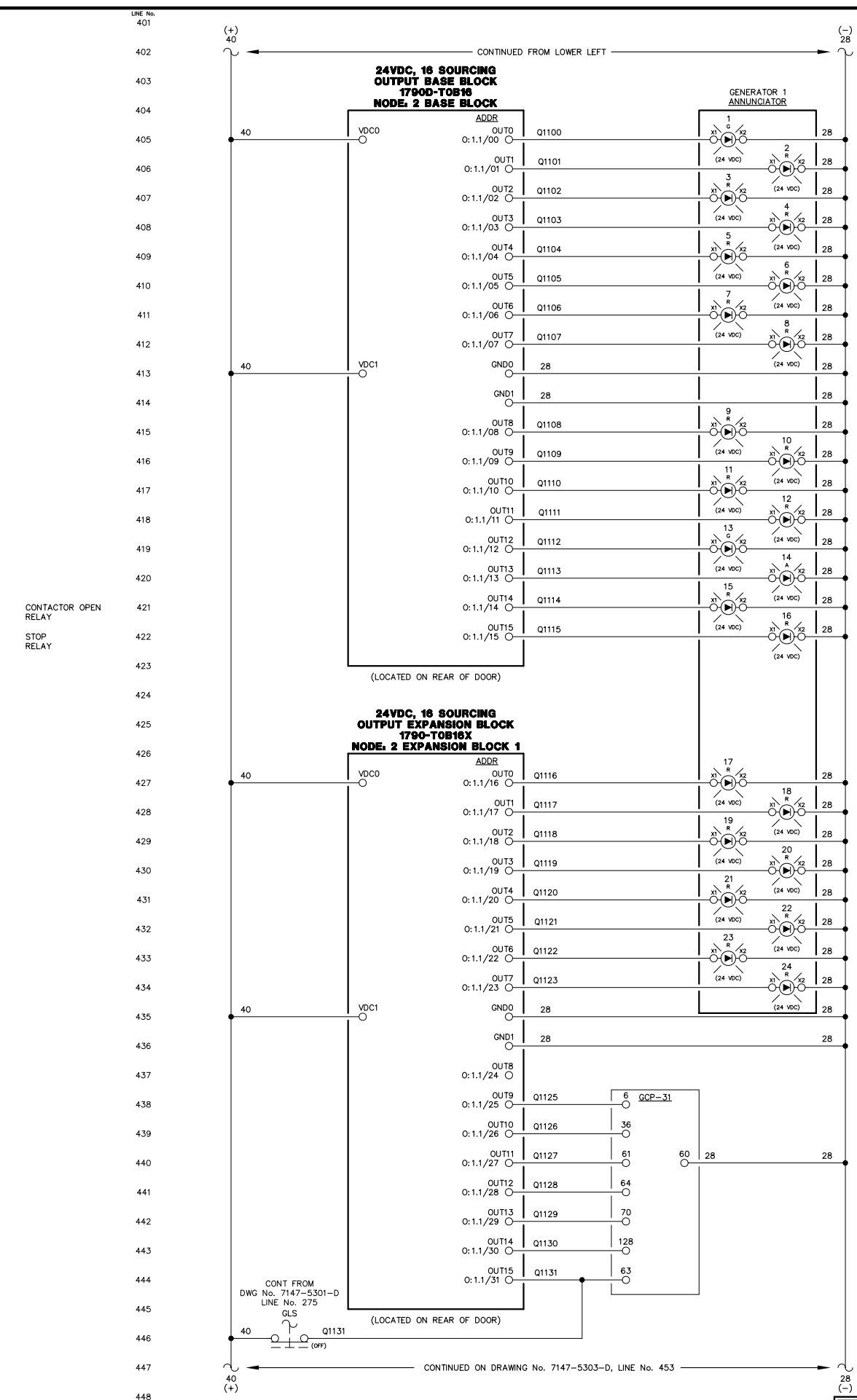
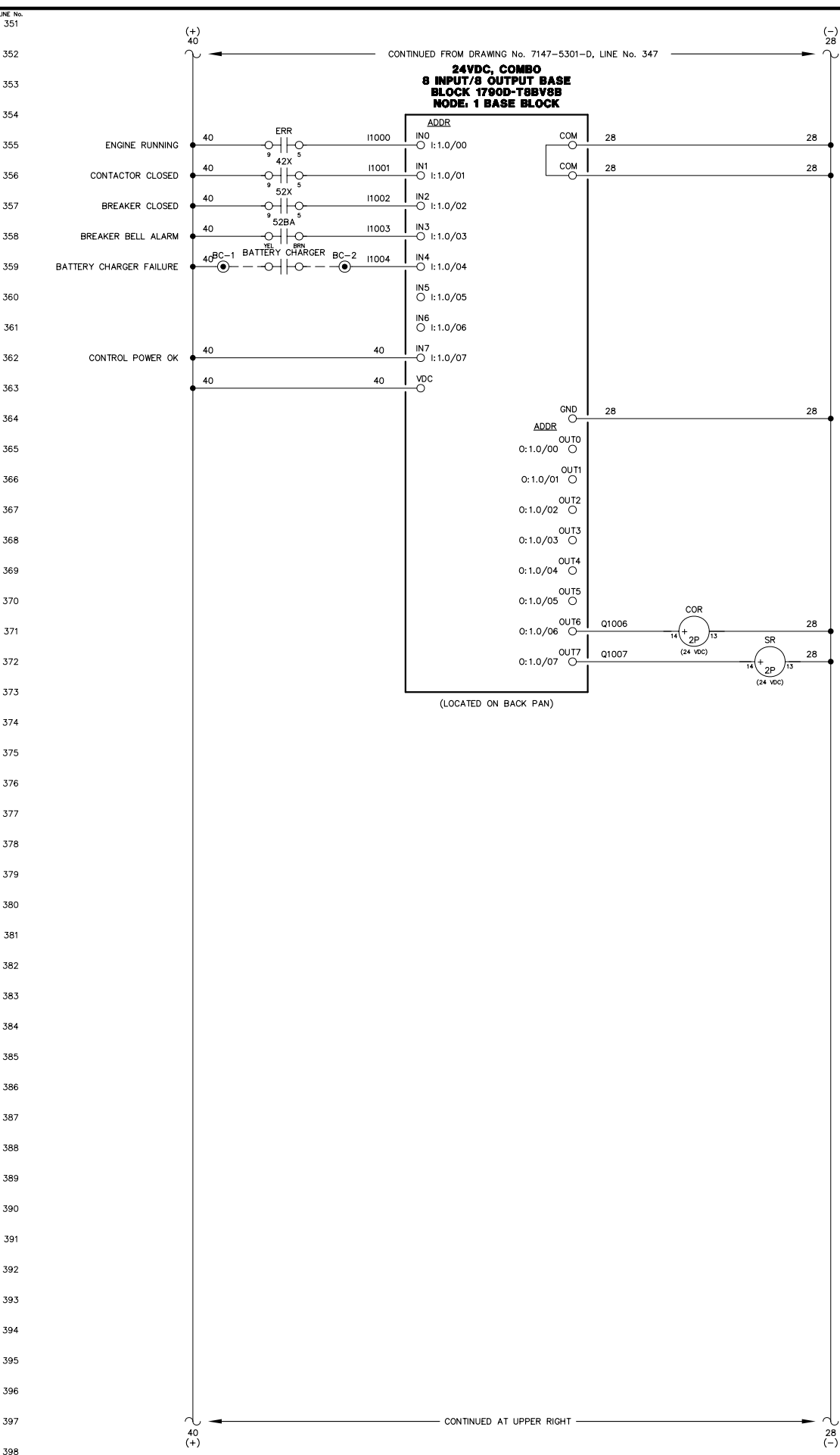
TITLE: GENERATOR 1 DC CONTROL, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5301-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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- ENGINE RUNNING LIGHT
- ALARM/LOCKOUT LIGHT
- LOW OIL PRESSURE LIGHT
- OIL LEVEL LIGHT
- HIGH COOLANT TEMPERATURE LIGHT
- OVERSPEED LIGHT
- OVERCRANK LIGHT
- RUNNING TIMEOUT LIGHT
- BATTERY CHARGER FAILURE LIGHT
- AIR FILTER PLUGGED LIGHT
- HIGH EXHAUST TEMPERATURE LIGHT
- (SPARE) LIGHT
- LEAD ENGINE LIGHT
- NORMAL STOP LIGHT
- NOT IN AUTO LIGHT
- GENERATOR BREAKER TRIP LIGHT
- FAIL TO SYNCHRONIZE LIGHT
- OVERCURRENT LIGHT
- UNDER VOLTAGE LIGHT
- OVER VOLTAGE LIGHT
- UNDER FREQUENCY LIGHT
- OVER FREQUENCY LIGHT
- REVERSE POWER LIGHT
- (SPARE) LIGHT
- MULTIFUNCTION (REMOTE ACK)
- INPUT 3 - RUNNING TIMEOUT
- INPUT 4 - MASTER SHUTDOWN
- INPUT 7 - BREAKER LOGIC
- INPUT 13 - (SPARE)
- AUTOMATIC MODE
- MODE SELECTION LOCK

NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: GENERATOR 1 DC CONTROL, SCHEMATIC DIAGRAM

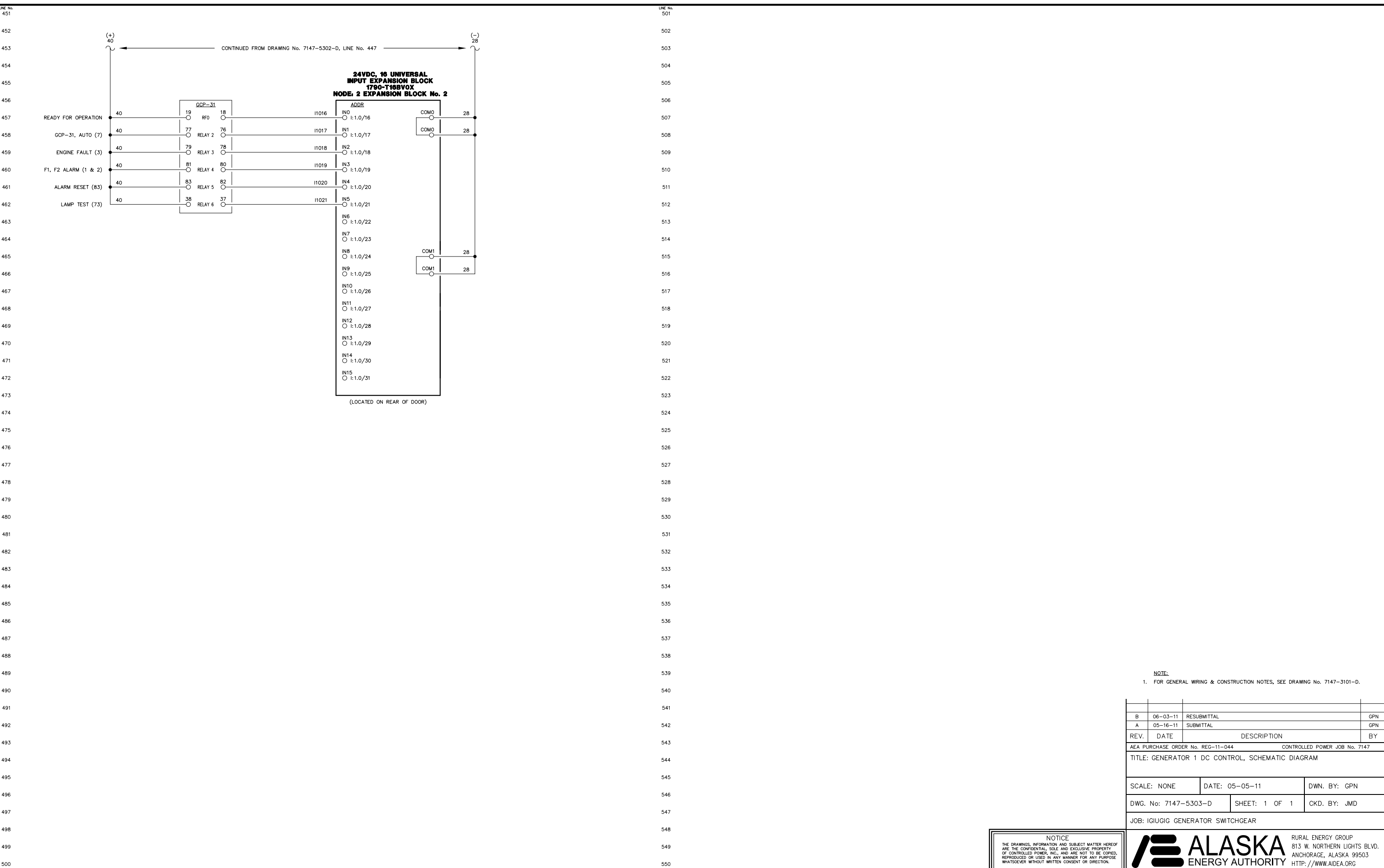
SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5302-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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**ALASKA ENERGY AUTHORITY**  
RURAL ENERGY GROUP  
813 W. NORTHERN LIGHTS BLVD.  
ANCHORAGE, ALASKA 99503  
HTTP://WWW.AIDEA.ORG

Plot date: 2011/5/23 - 8:50



**NOTE:**  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

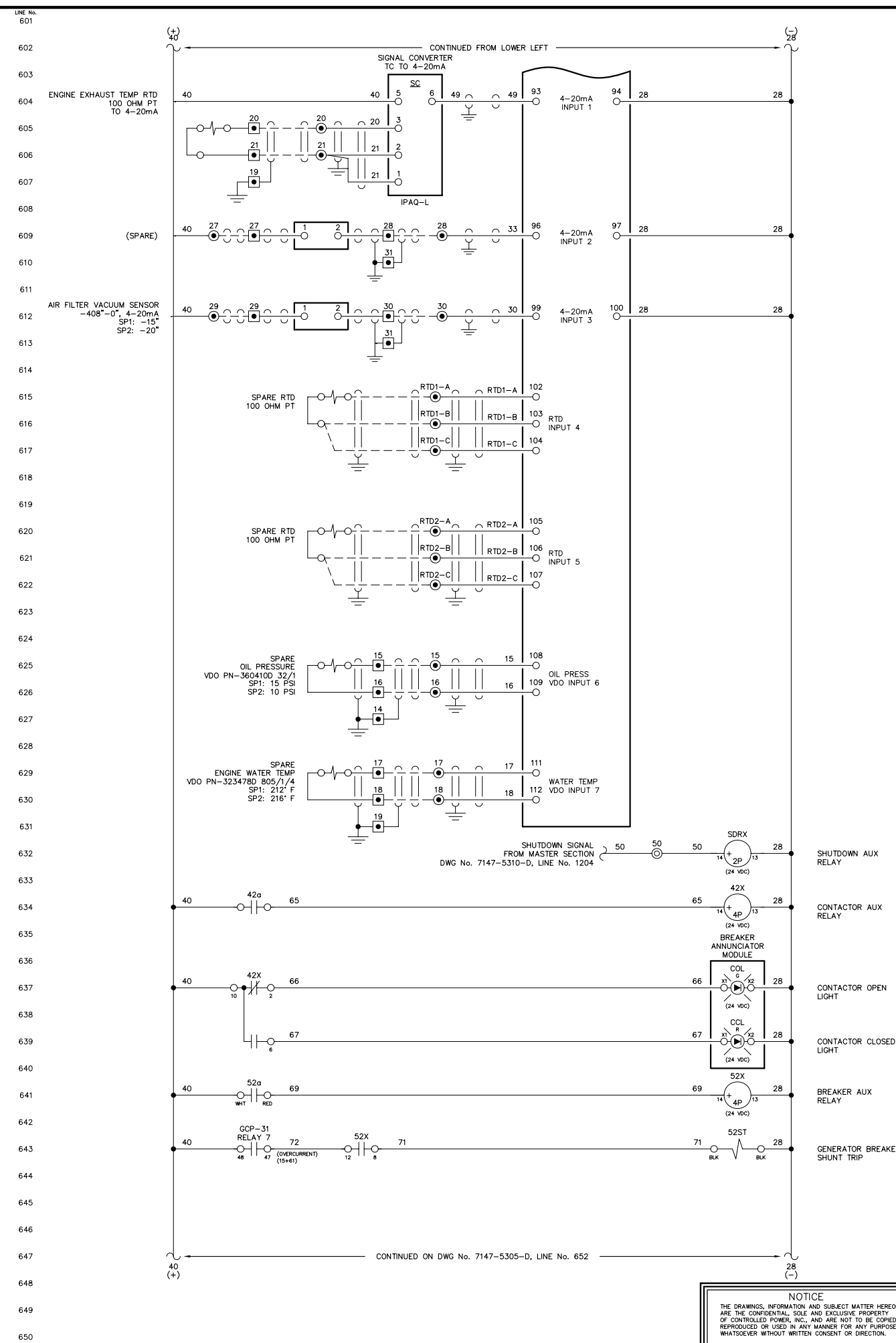
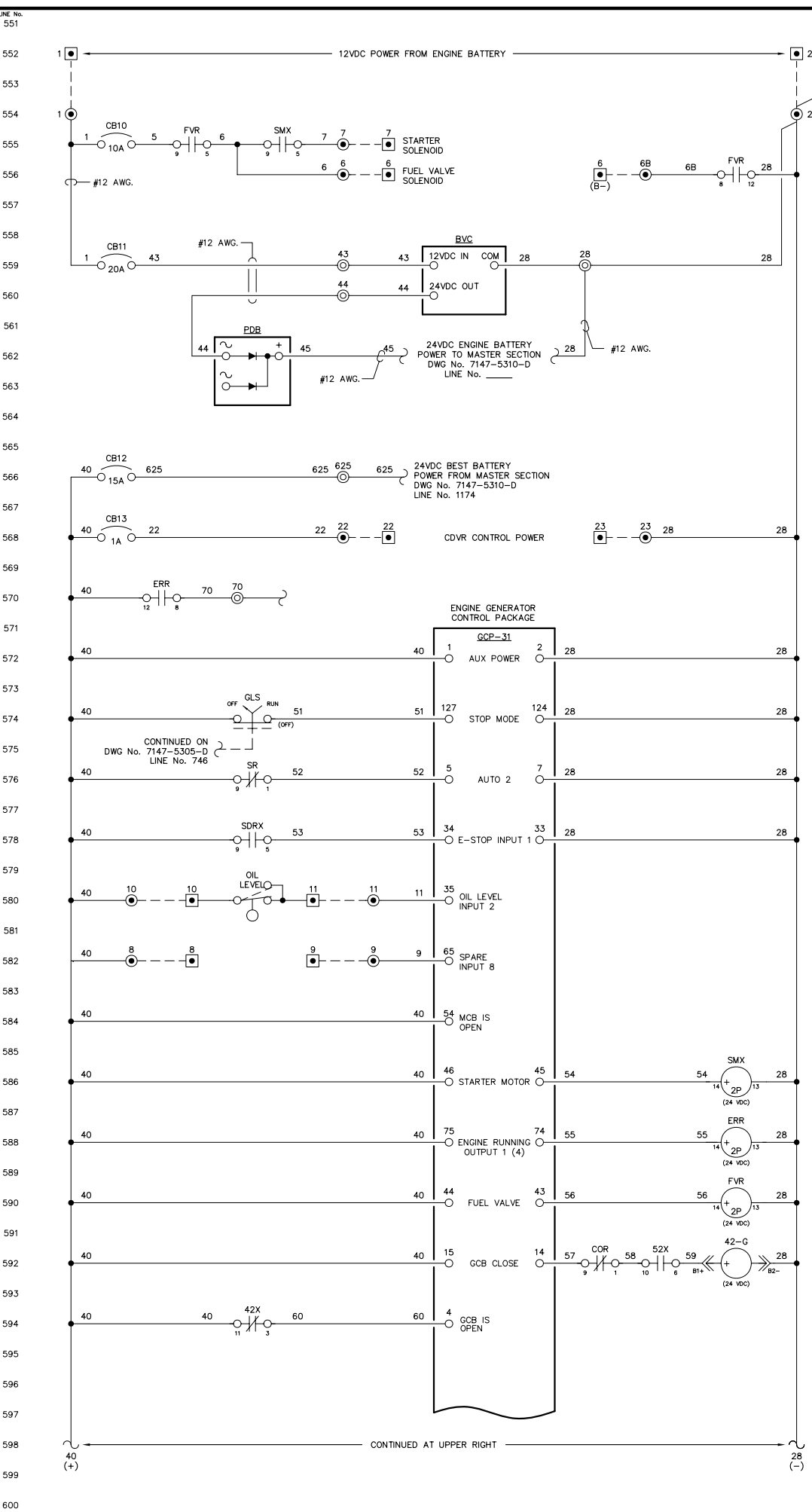
TITLE: GENERATOR 1 DC CONTROL, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5303-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147  
TITLE: GENERATOR 2 DC CONTROL, SCHEMATIC DIAGRAM

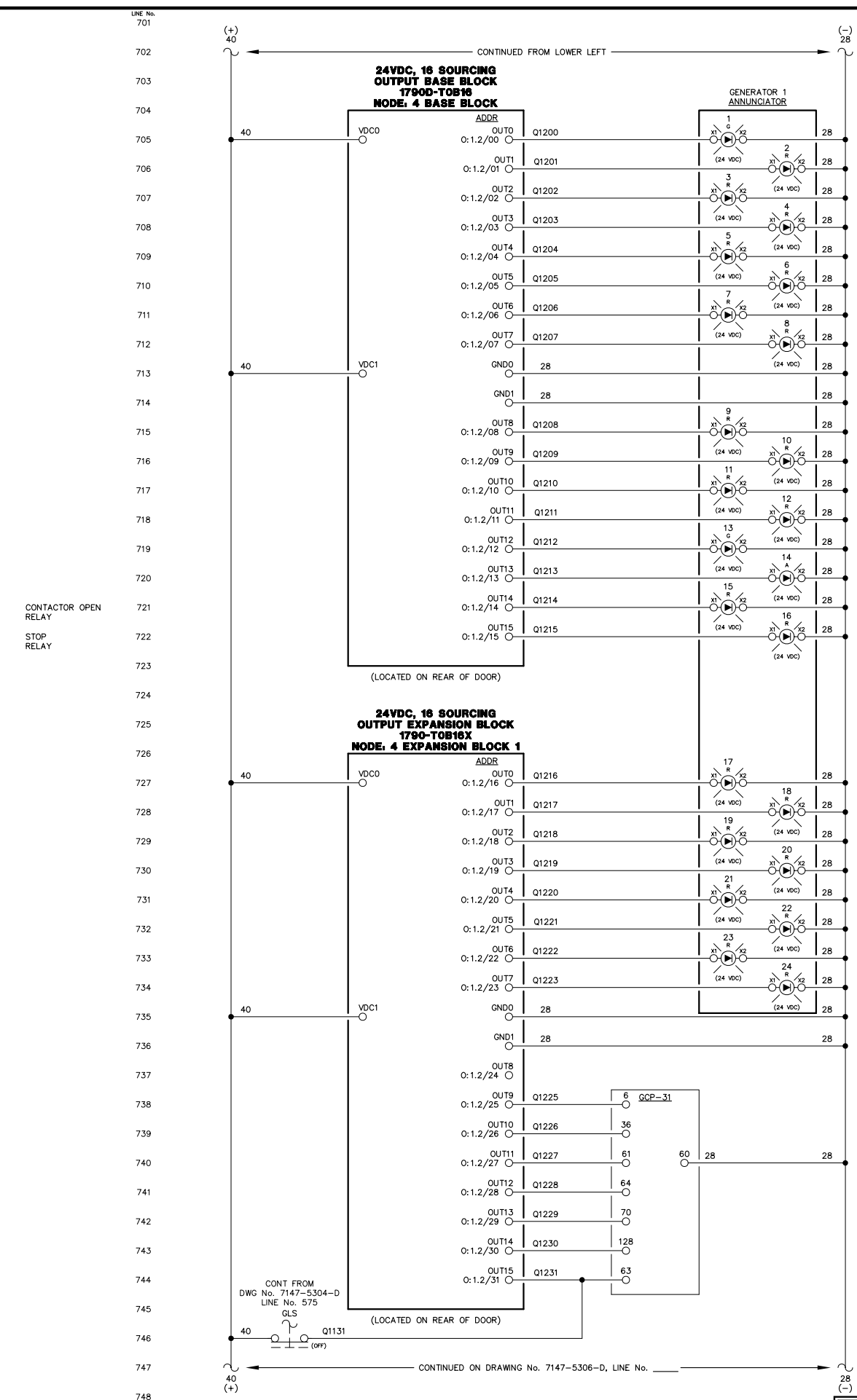
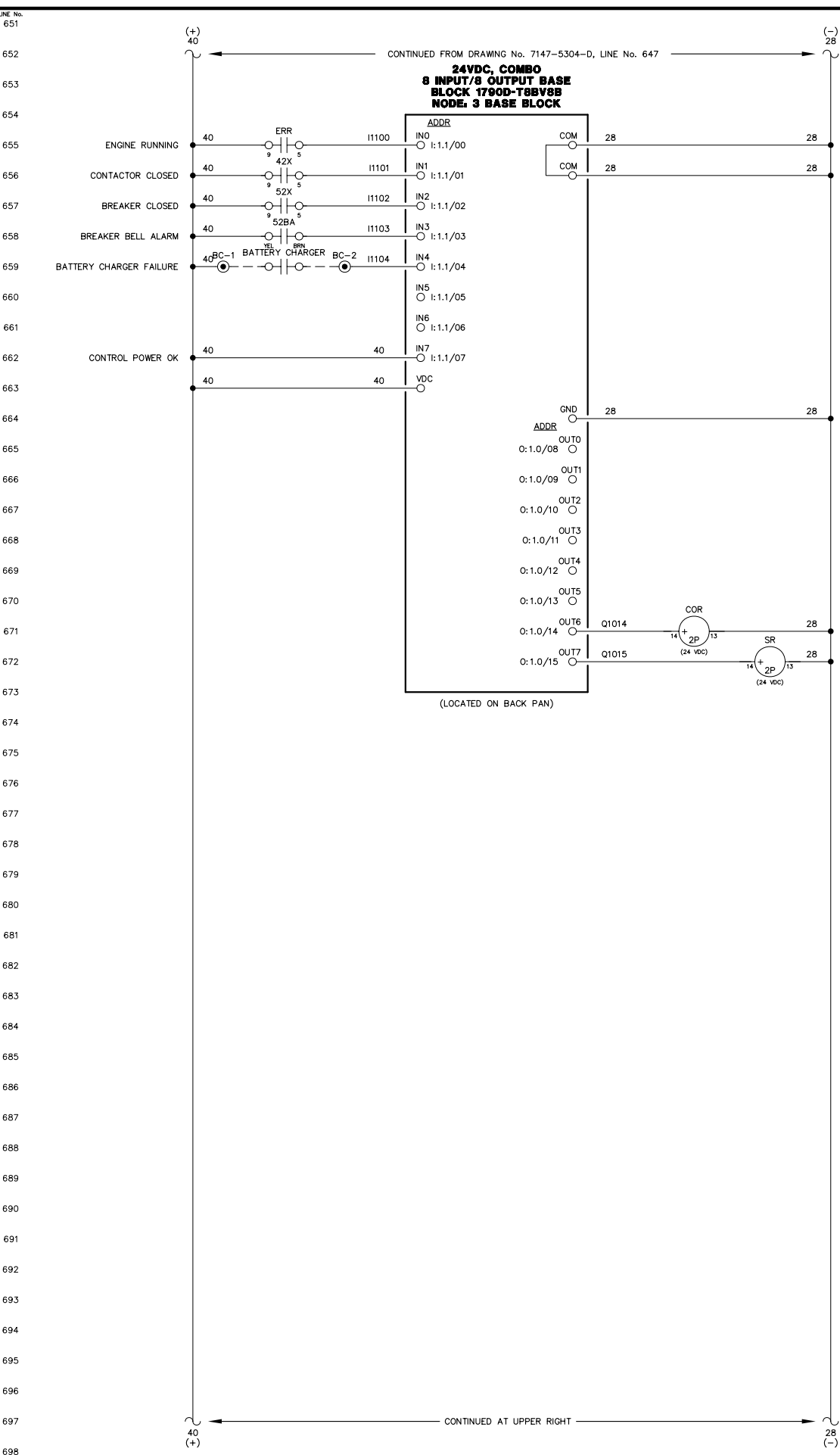
SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5304-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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RURAL ENERGY GROUP  
813 W. NORTHERN LIGHTS BLVD.  
ANCHORAGE, ALASKA 99503  
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- ENGINE RUNNING LIGHT
- ALARM/LOCKOUT LIGHT
- LOW OIL PRESSURE LIGHT
- OIL LEVEL LIGHT
- HIGH COOLANT TEMPERATURE LIGHT
- OVERSPEED LIGHT
- OVERCRANK LIGHT
- RUNNING TIMEOUT LIGHT
- BATTERY CHARGER FAILURE LIGHT
- AIR FILTER PLUGGED LIGHT
- HIGH EXHAUST TEMPERATURE LIGHT
- (SPARE) LIGHT
- LEAD ENGINE LIGHT
- NORMAL STOP LIGHT
- NOT IN AUTO LIGHT
- GENERATOR BREAKER TRIP LIGHT

- FAIL TO SYNCHRONIZE LIGHT
- OVERCURRENT LIGHT
- UNDER VOLTAGE LIGHT
- OVER VOLTAGE LIGHT
- UNDER FREQUENCY LIGHT
- OVER FREQUENCY LIGHT
- REVERSE POWER LIGHT
- (SPARE) LIGHT

- MULTIFUNCTION (REMOTE ACK)
- INPUT 3 - RUNNING TIMEOUT
- INPUT 4 - MASTER SHUTDOWN
- INPUT 7 - BREAKER LOGIC
- INPUT 13 - (SPARE)
- AUTOMATIC MODE
- MODE SELECTION LOCK

**NOTE:**  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: GENERATOR 2 DC CONTROL, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5305-D	SHEET: 1 OF 1	CKD. BY: JMD

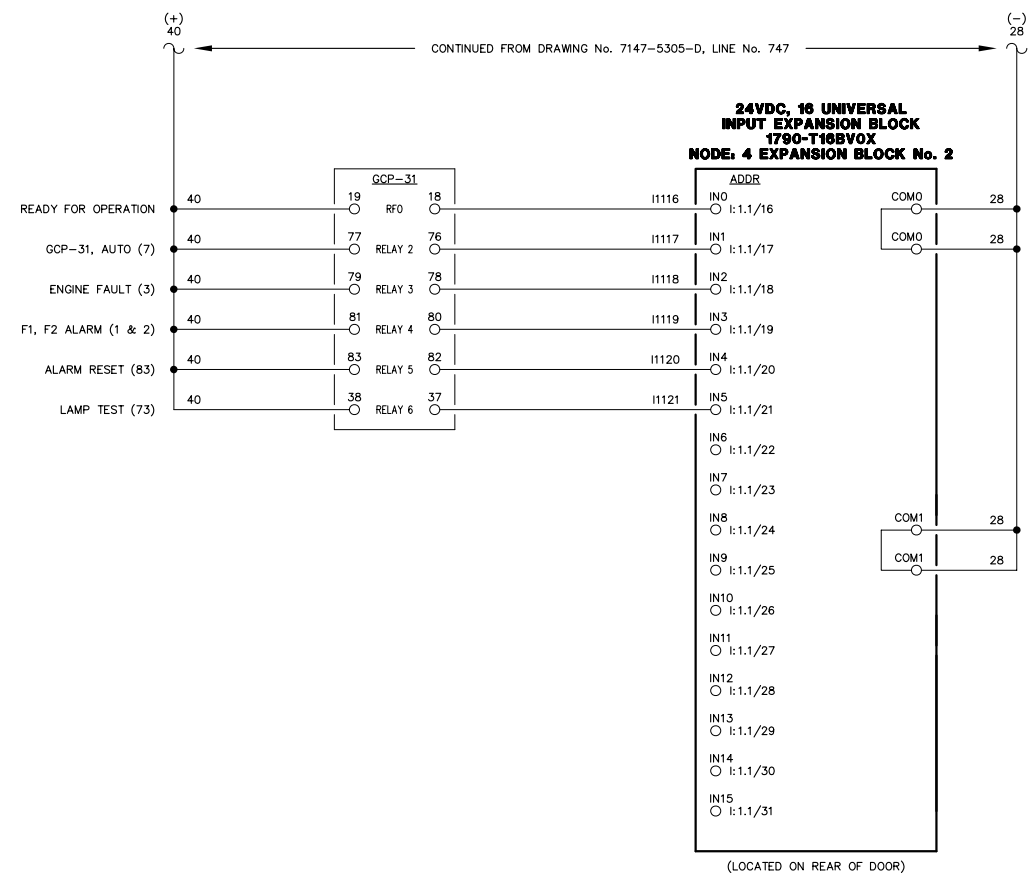
JOB: IGIUGIG GENERATOR SWITCHGEAR

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**NOTE:**  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

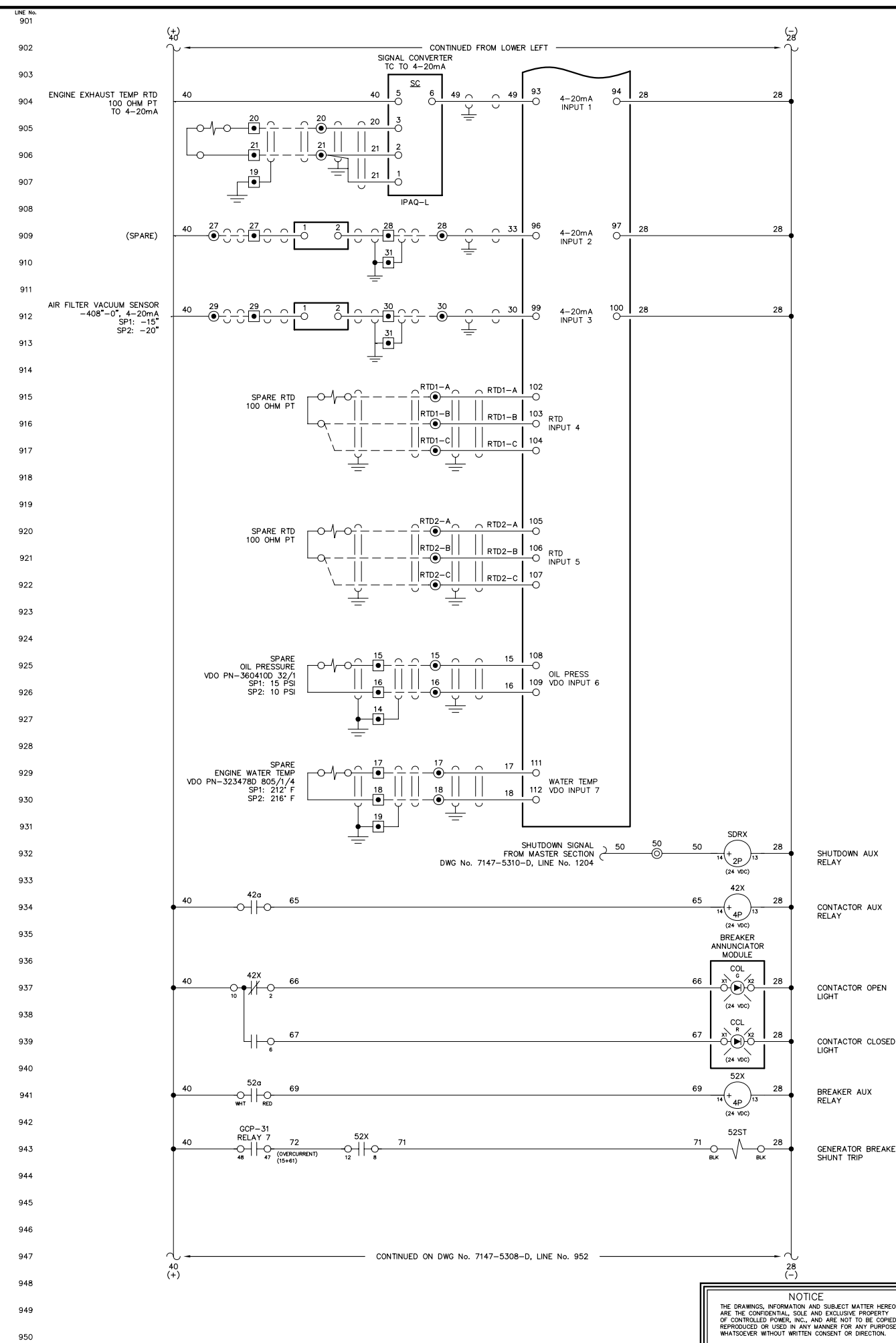
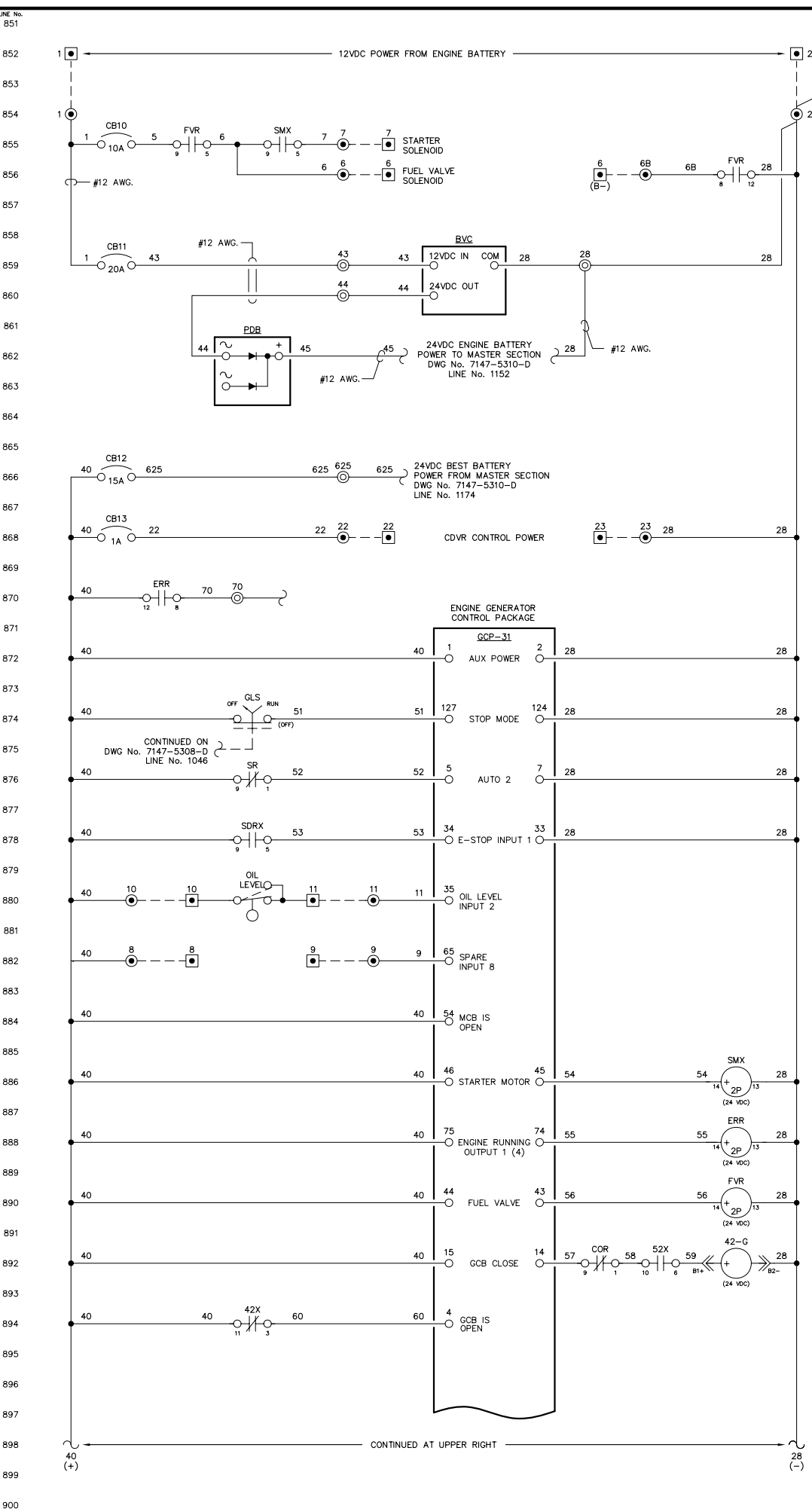
TITLE: GENERATOR 2 DC CONTROL, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5306-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147  
TITLE: GENERATOR 3 DC CONTROL, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5307-D	SHEET: 1 OF 1	CKD. BY: JMD

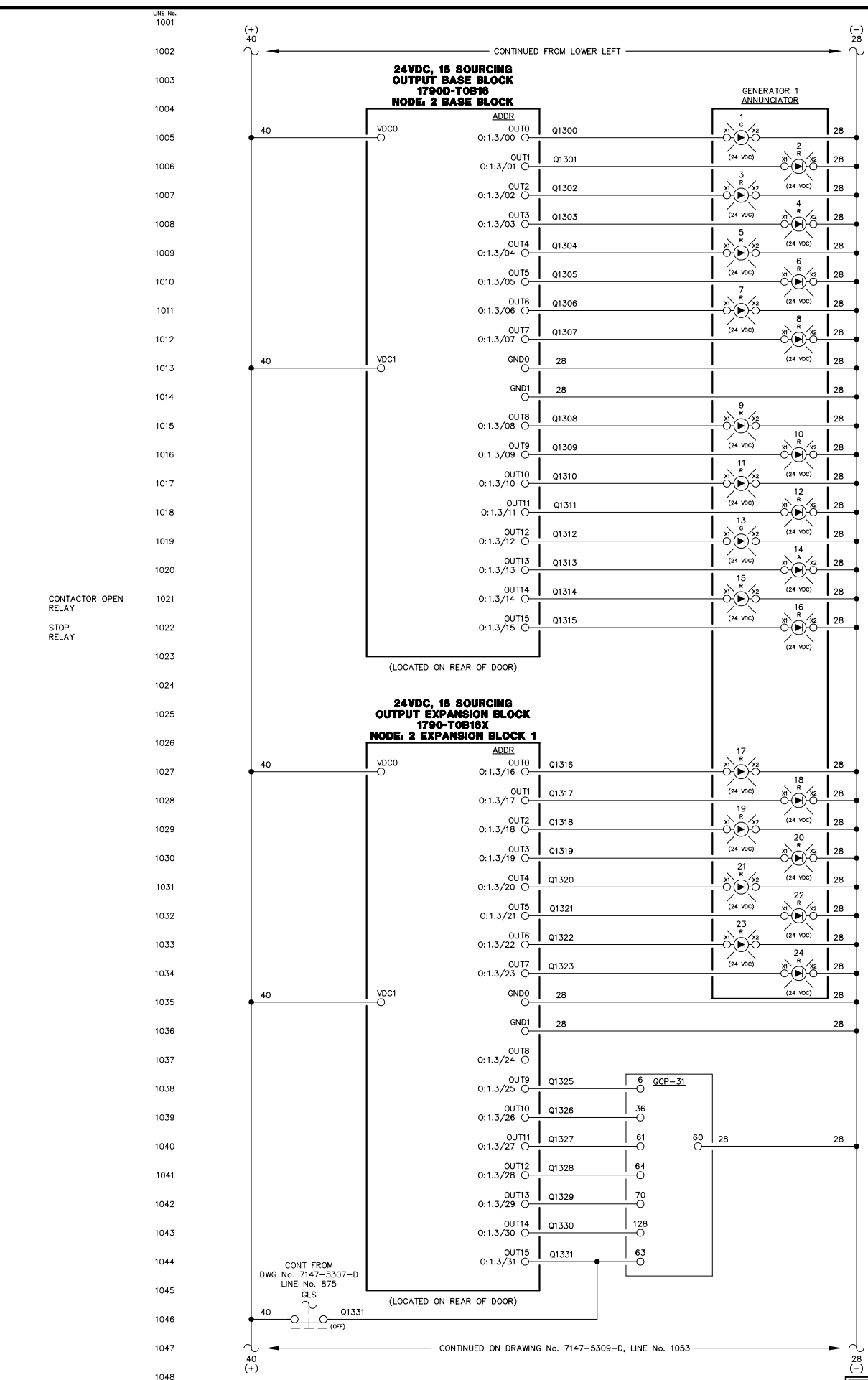
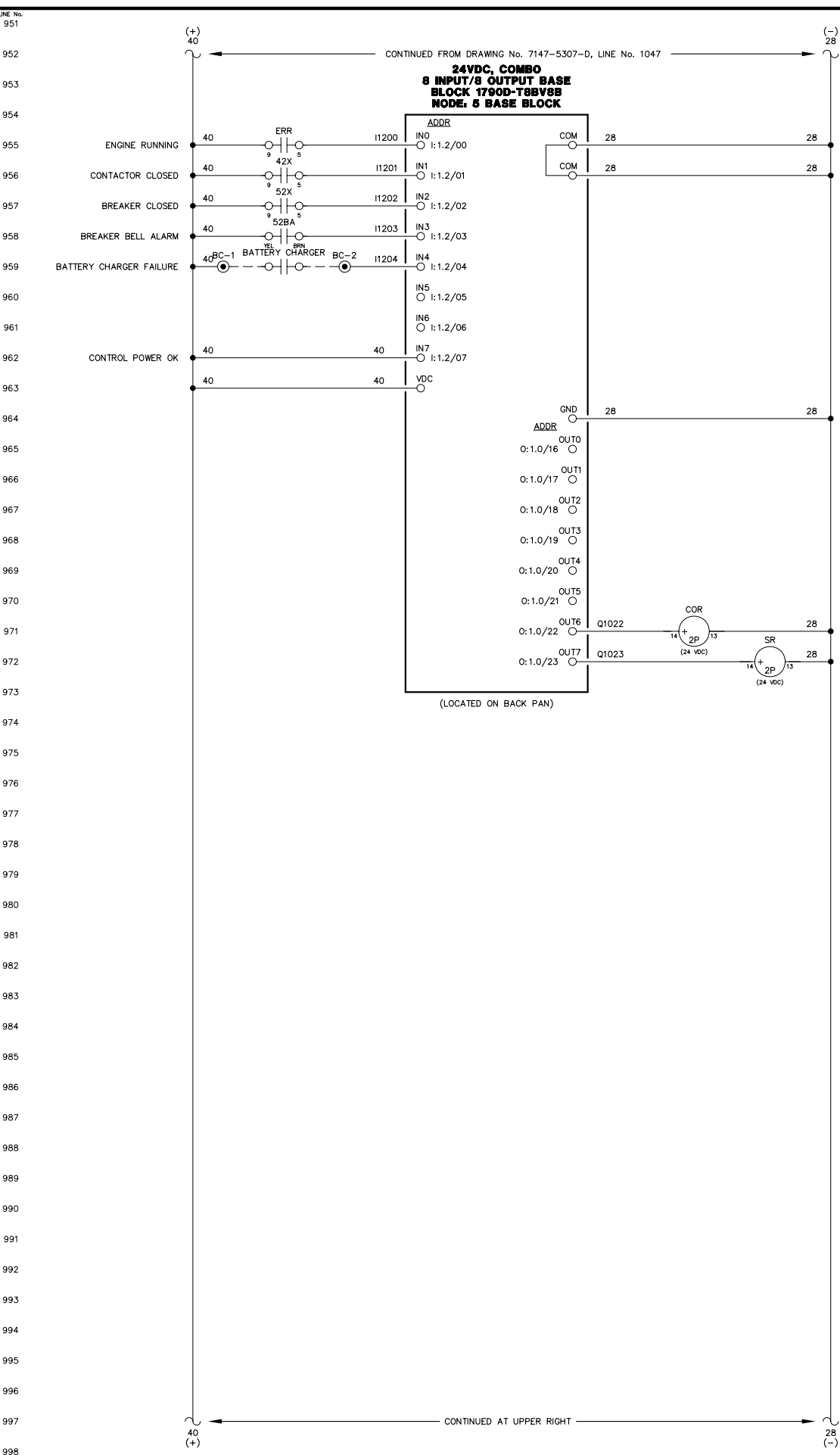
JOB: IGIUGIG GENERATOR SWITCHGEAR

NOTICE  
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RURAL ENERGY GROUP  
813 W. NORTHERN LIGHTS BLVD.  
ANCHORAGE, ALASKA 99503  
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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: GENERATOR 3 DC CONTROL, SCHEMATIC DIAGRAM

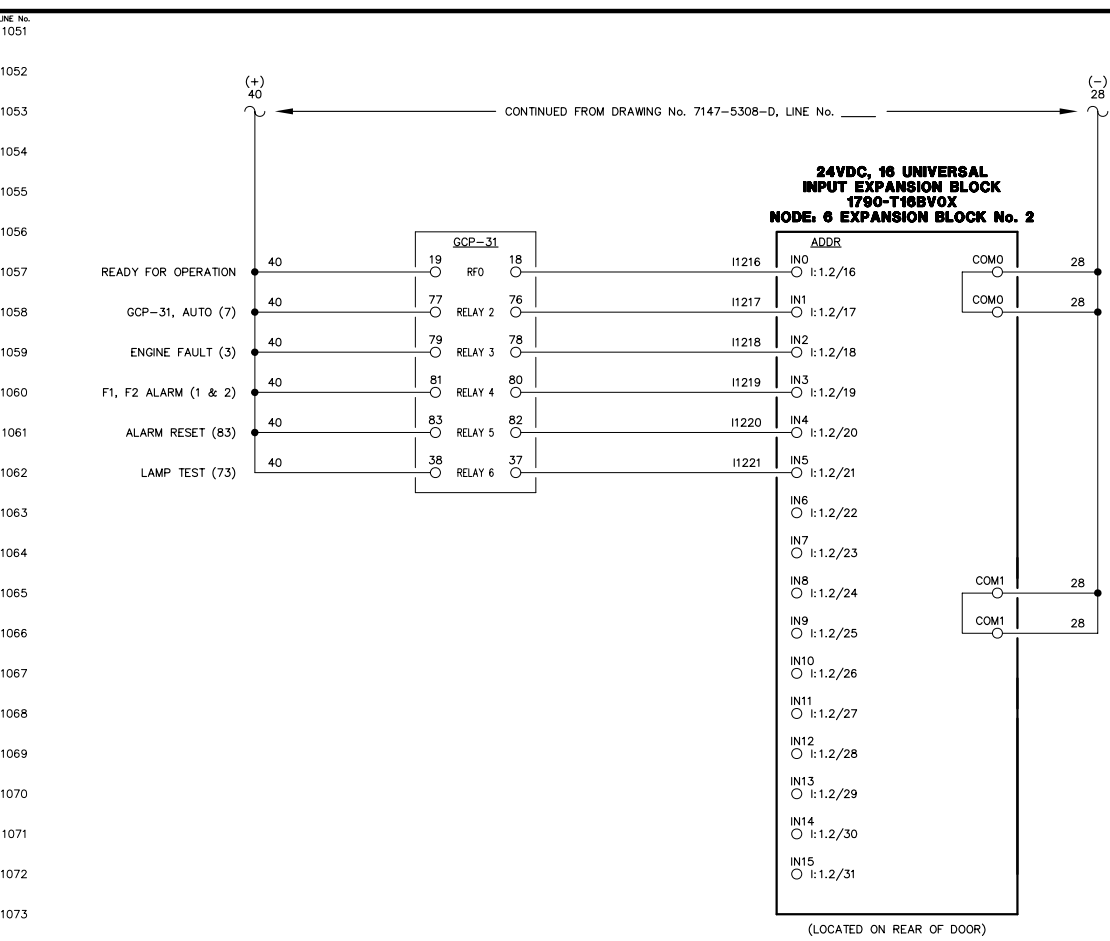
SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5308-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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813 W. NORTHERN LIGHTS BLVD.  
ANCHORAGE, ALASKA 99503  
HTTP://WWW.AIDEA.ORG

Plot date: 2011/5/23 - 9:32



(LOCATED ON REAR OF DOOR)

**NOTE:**  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

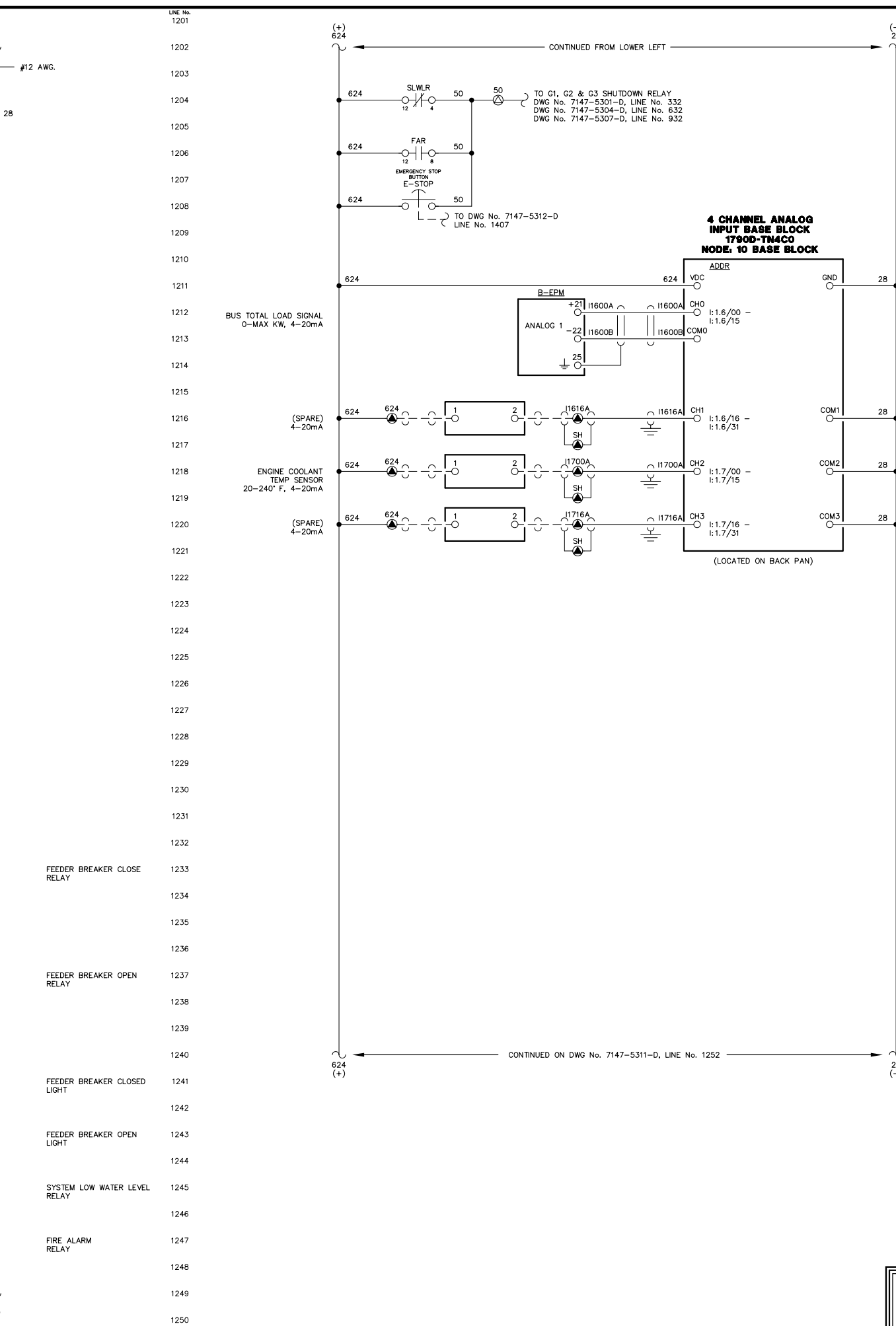
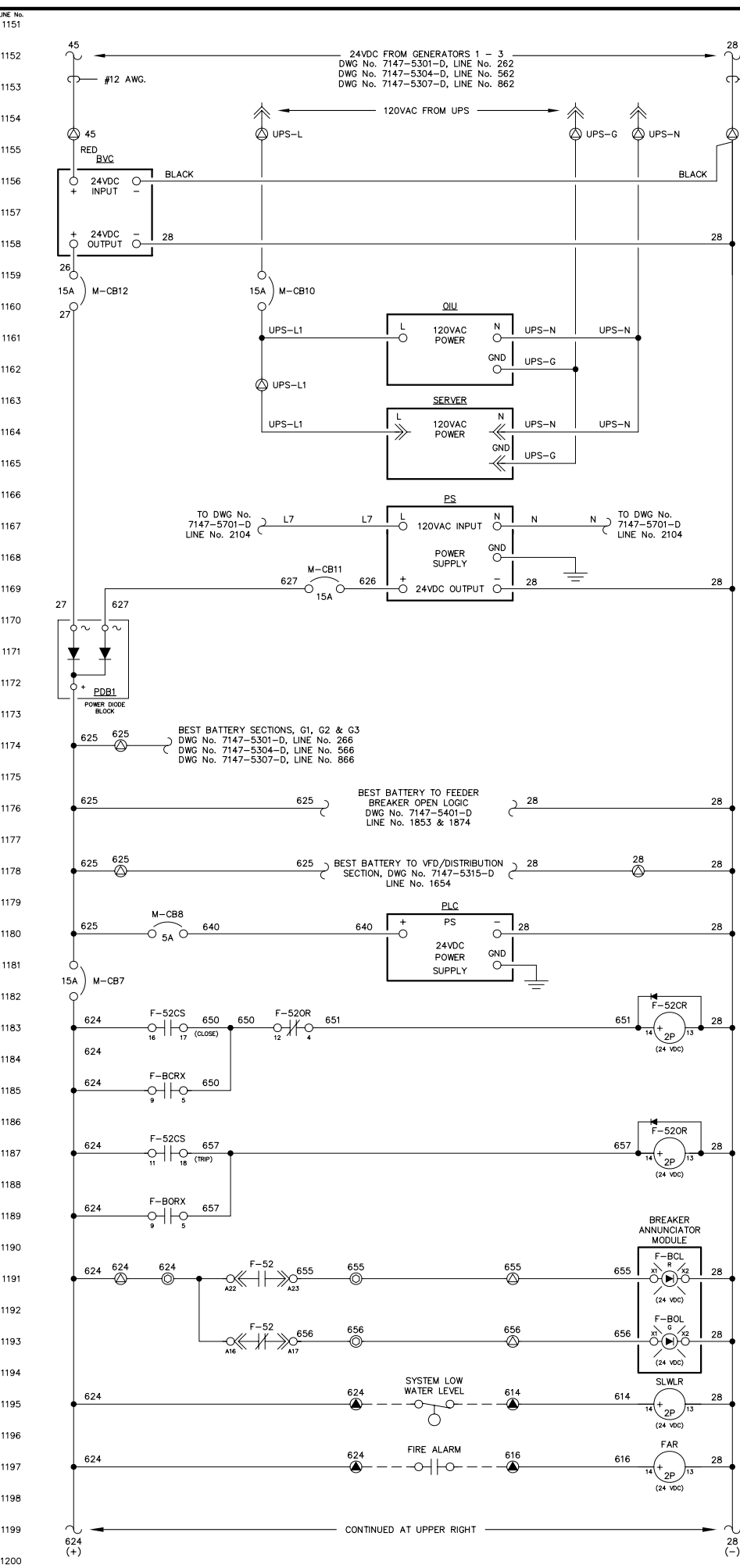
TITLE: GENERATOR 3 DC CONTROL, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5309-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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CONTINUED FROM LOWER LEFT

TO G1, G2 & G3 SHUTDOWN RELAY  
DWG No. 7147-5301-D, LINE No. 332  
DWG No. 7147-5304-D, LINE No. 632  
DWG No. 7147-5307-D, LINE No. 932

TO DWG No. 7147-5312-D  
LINE No. 1407

**4 CHANNEL ANALOG INPUT BASE BLOCK 1790D-TN4CO**  
NODE: 10 BASE BLOCK

ADDR

VDC

GND

CH0 i:1.6/00 -  
i:1.6/15

CH1 i:1.6/16 -  
i:1.6/31

CH2 i:1.7/00 -  
i:1.7/15

CH3 i:1.7/16 -  
i:1.7/31

(LOCATED ON BACK PAN)

CONTINUED ON DWG No. 7147-5311-D, LINE No. 1252

CONTINUED AT UPPER RIGHT

**NOTE:**  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: MASTER DC CONTROL, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5310-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

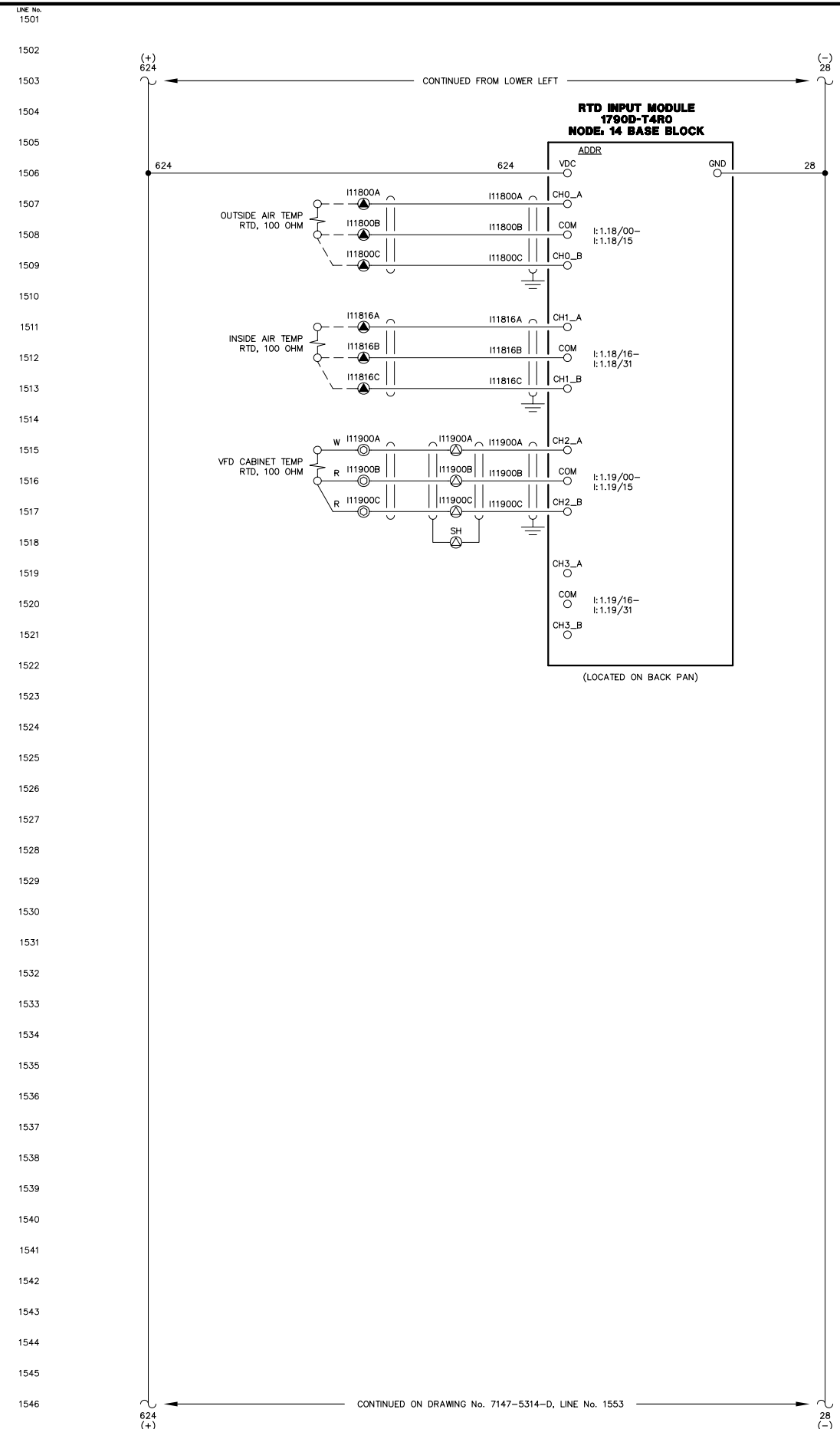
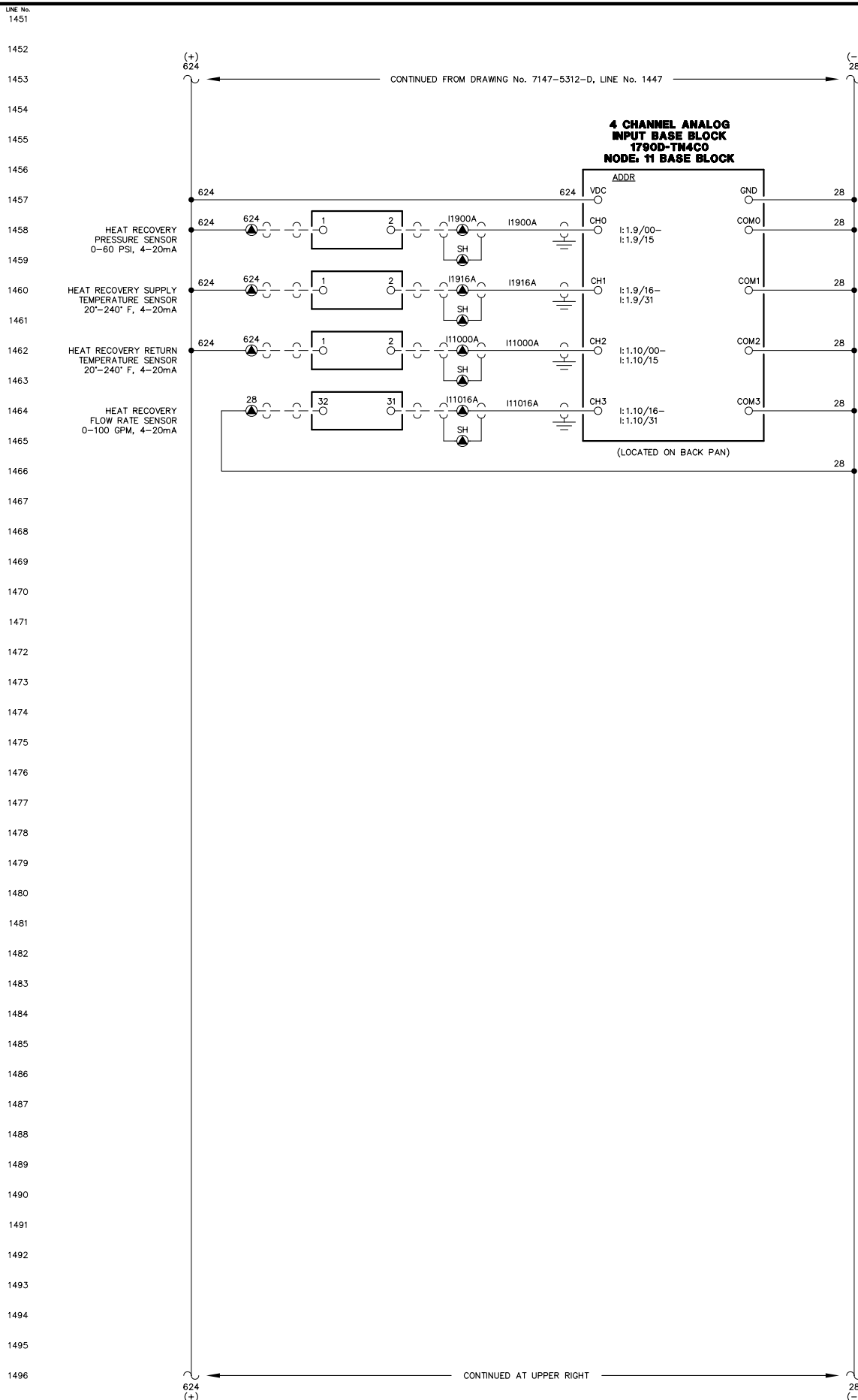
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**ALASKA ENERGY AUTHORITY**  
RURAL ENERGY GROUP  
813 W. NORTHERN LIGHTS BLVD.  
ANCHORAGE, ALASKA 99503  
HTTP://WWW.AIDEA.ORG

Plot date: 2011/5/23 - 9:32







**NOTE:**  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: MASTER DC CONTROL, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5313-D	SHEET: 1 OF 1	CKD. BY: JMD

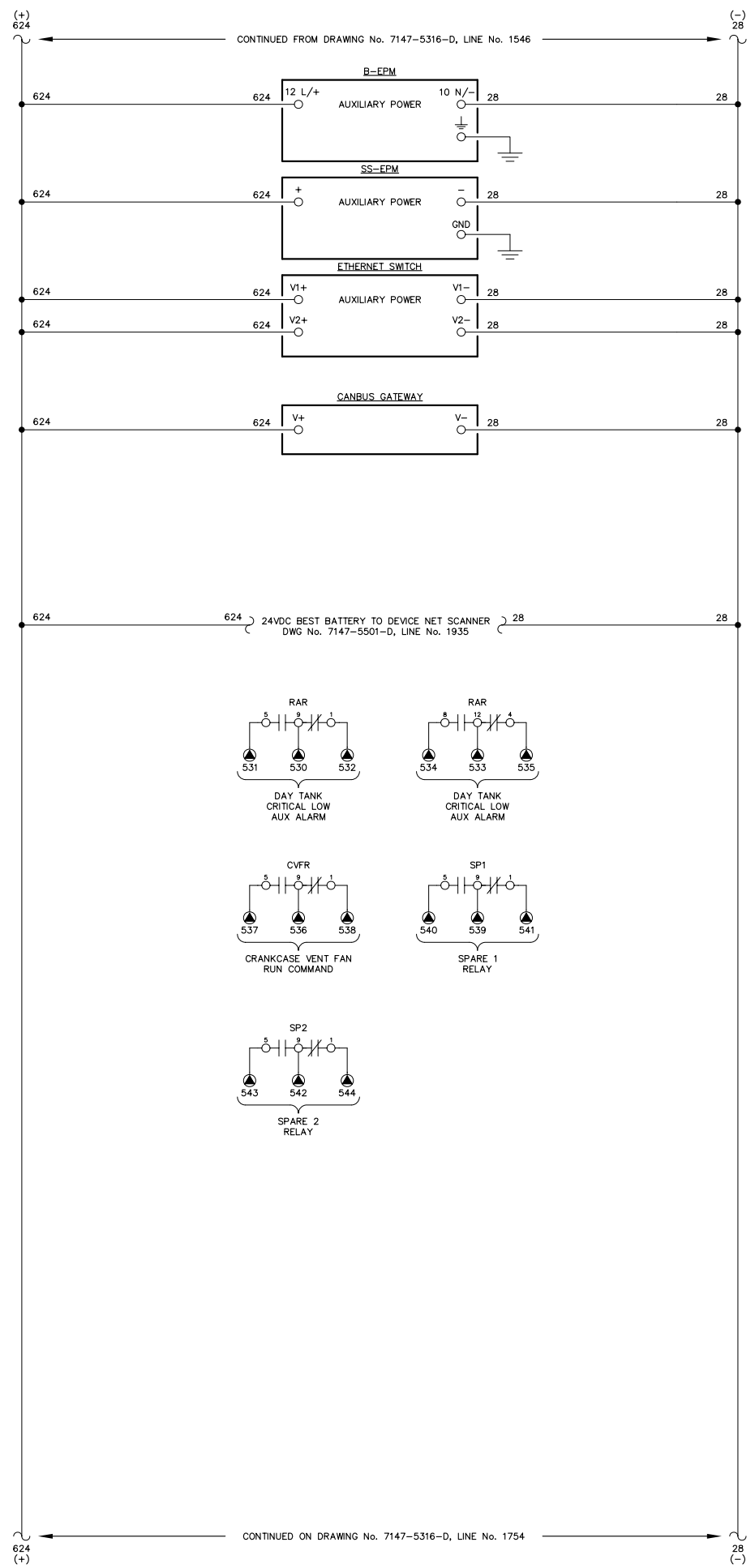
JOB: IGIUGIG GENERATOR SWITCHGEAR

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NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

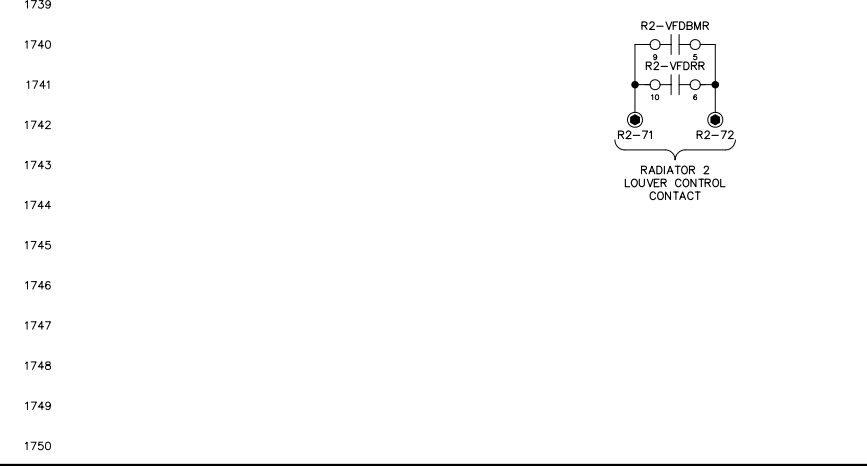
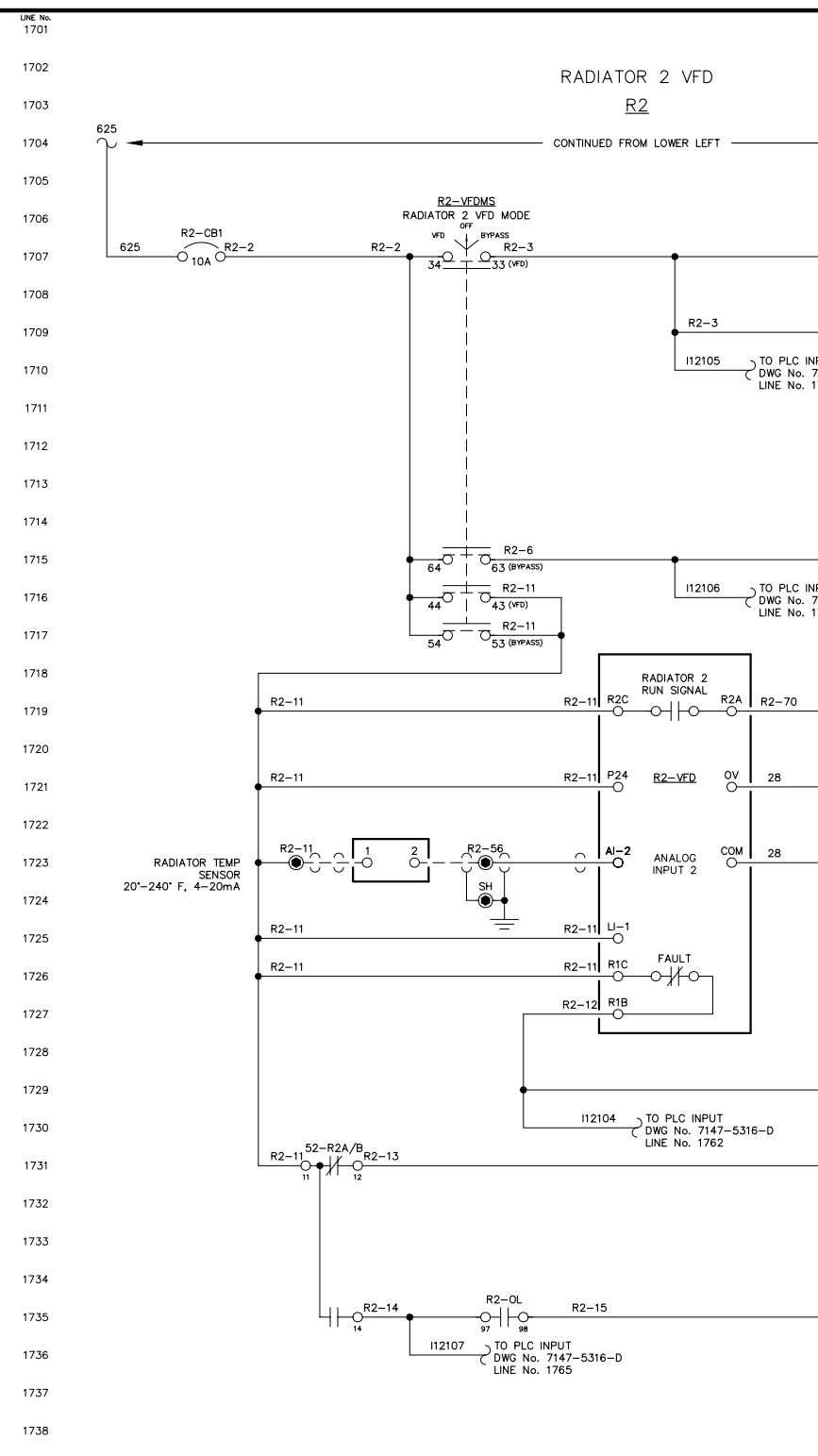
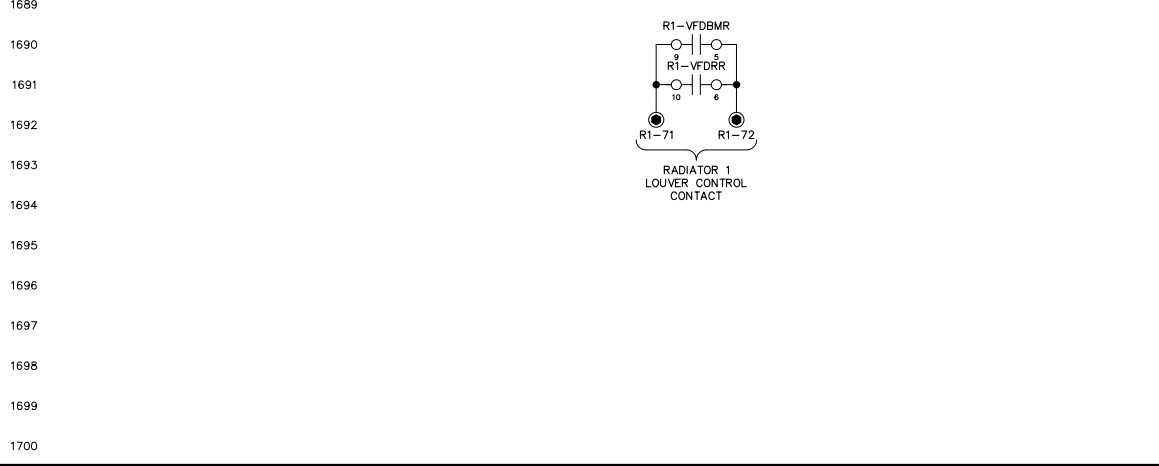
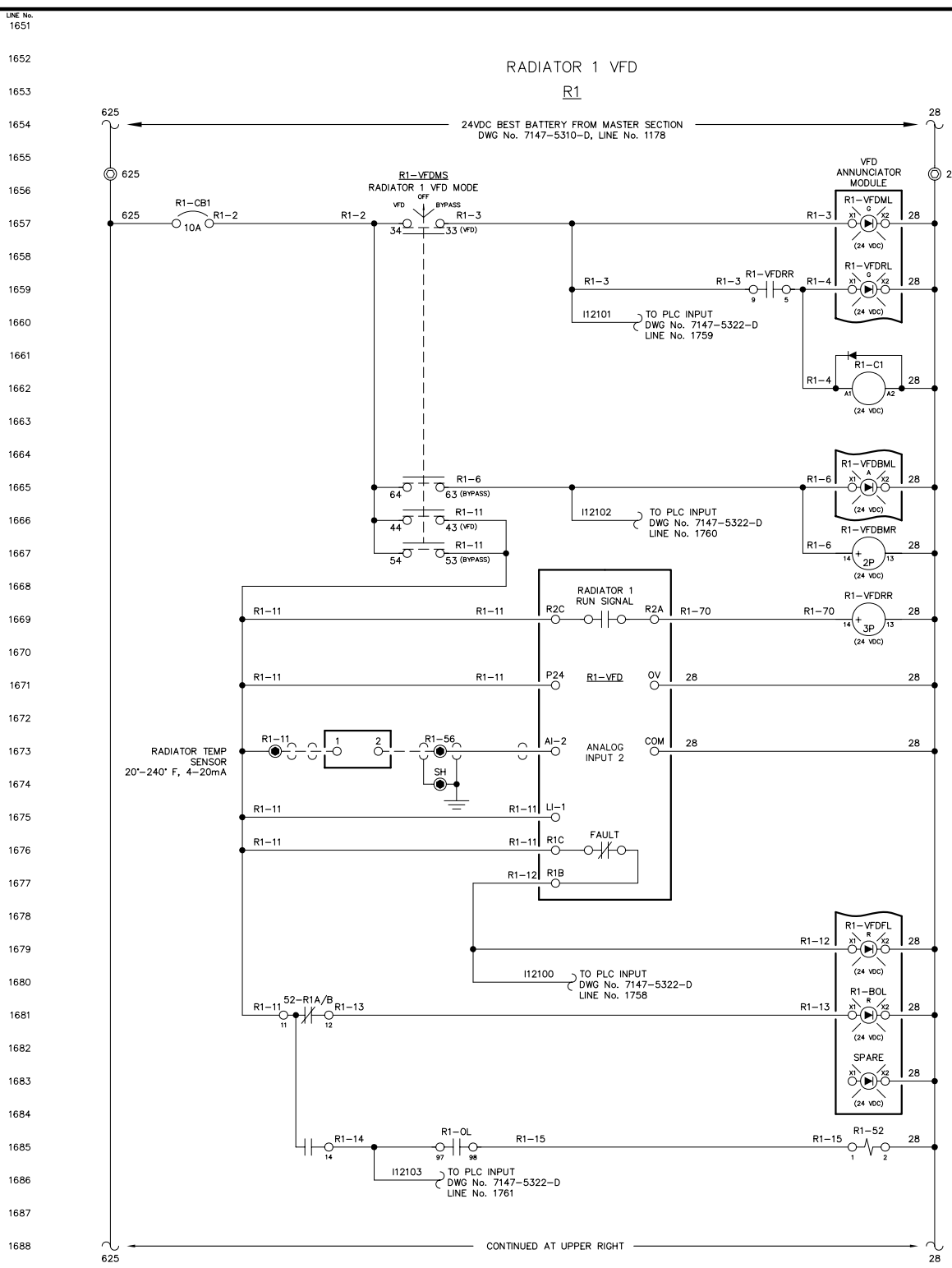
TITLE: MASTER DC CONTROL, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5314-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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**NOTE:**  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: VFD DC CONTROL, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5315-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

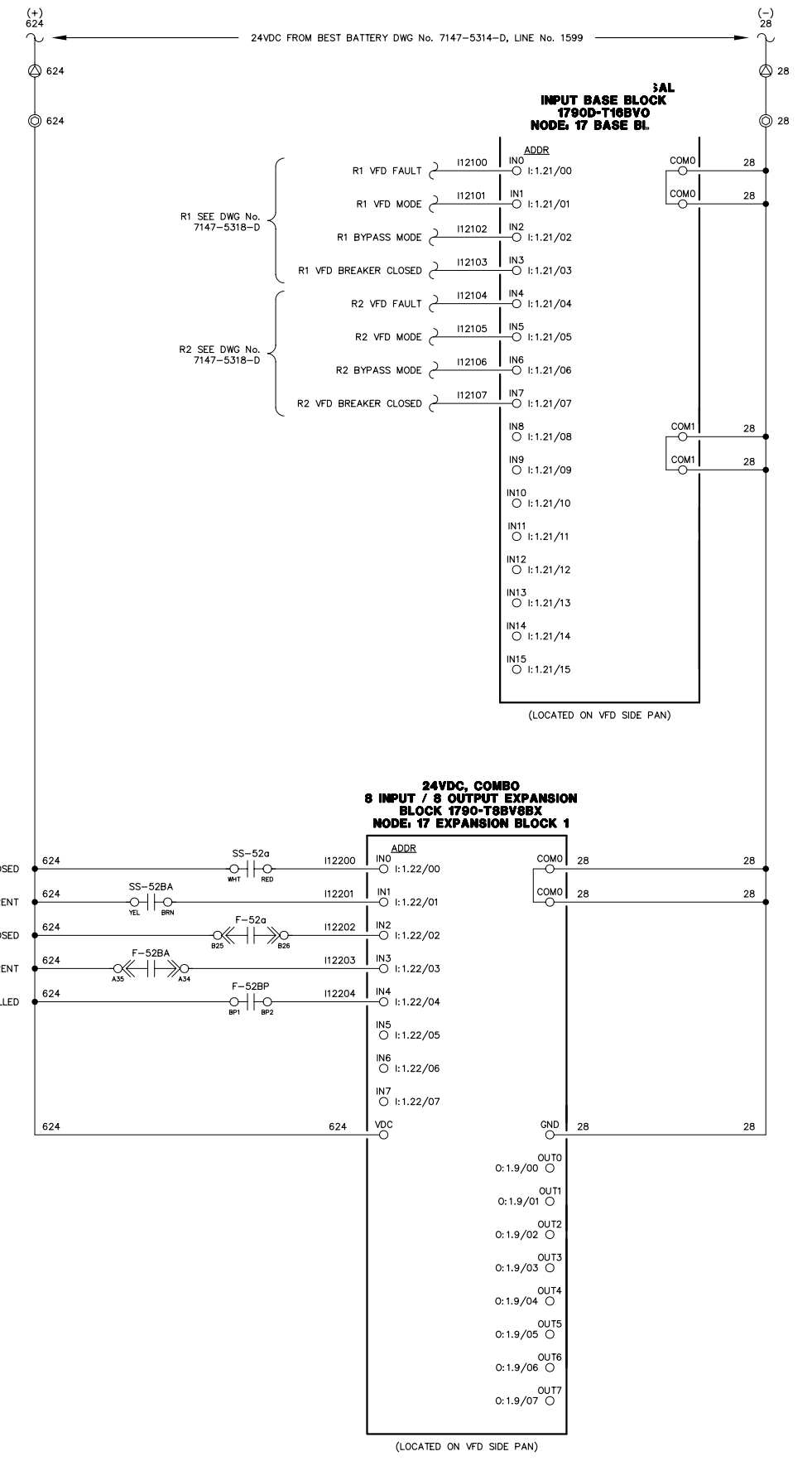
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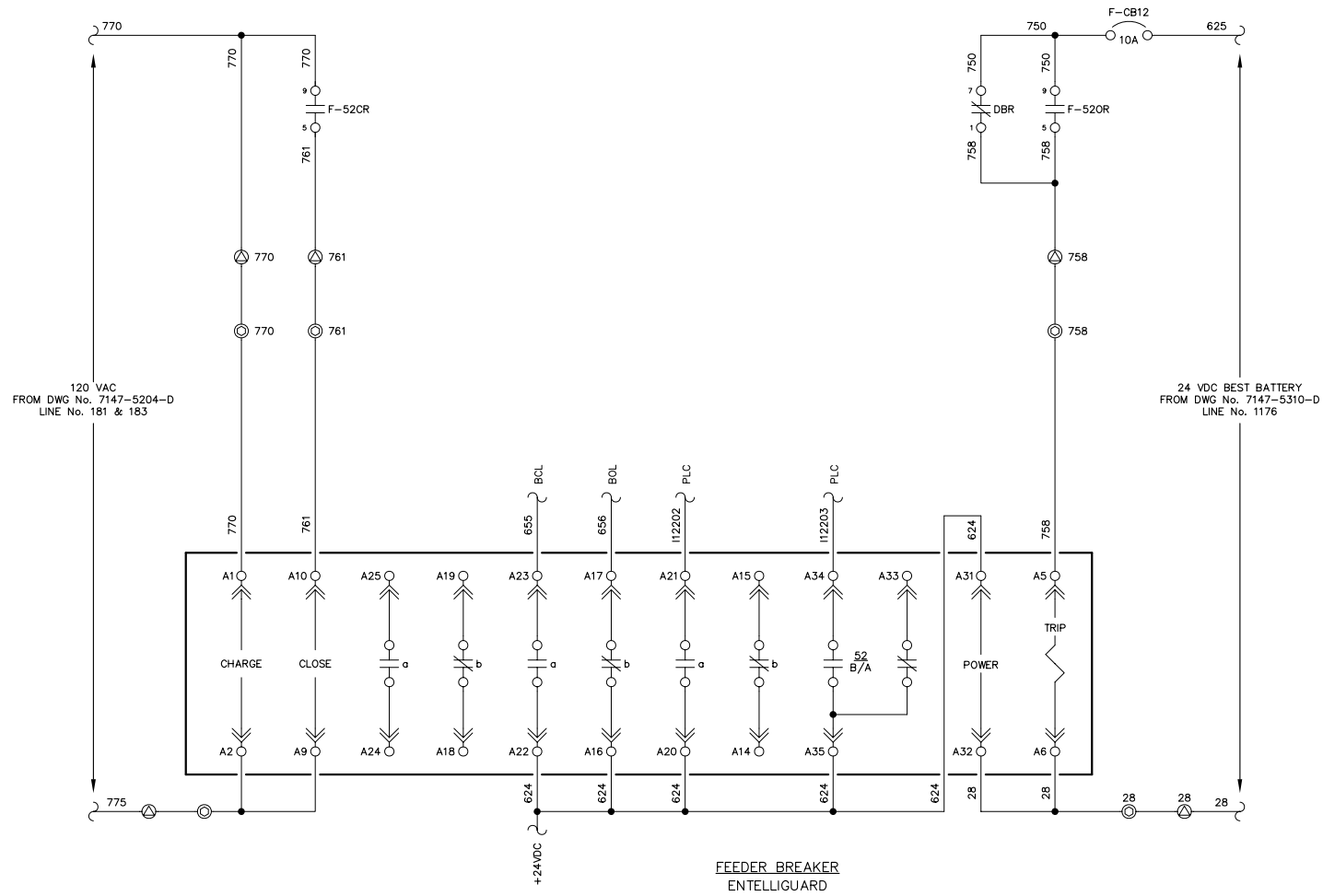
**NOTE:**  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN
REV.	DATE	DESCRIPTION	BY
AEA PURCHASE ORDER No. REG-10-042		CONTROLLED POWER JOB No. 7147	
TITLE: VFD/DISTRIBUTION DC CONTROL, SCHEMATIC DIAGRAM			
SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN	
DWG. No: 7147-5316-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: IGIUGIG GENERATOR SWITCHGEAR			

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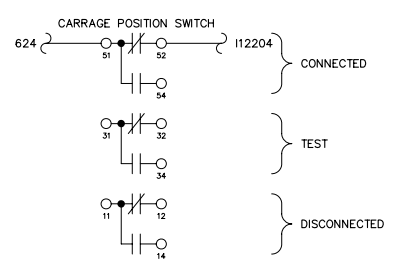
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120 VAC  
FROM DWG No. 7147-5204-D  
LINE No. 181 & 183

24 VDC BEST BATTERY  
FROM DWG No. 7147-5310-D  
LINE No. 1176

FEEDER BREAKER  
ENTELLIGUARD



NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: FEEDER BREAKER CONTROL, SCHEMATIC DIAGRAM

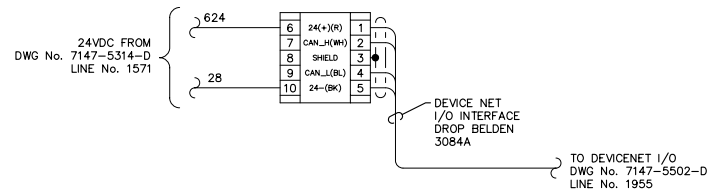
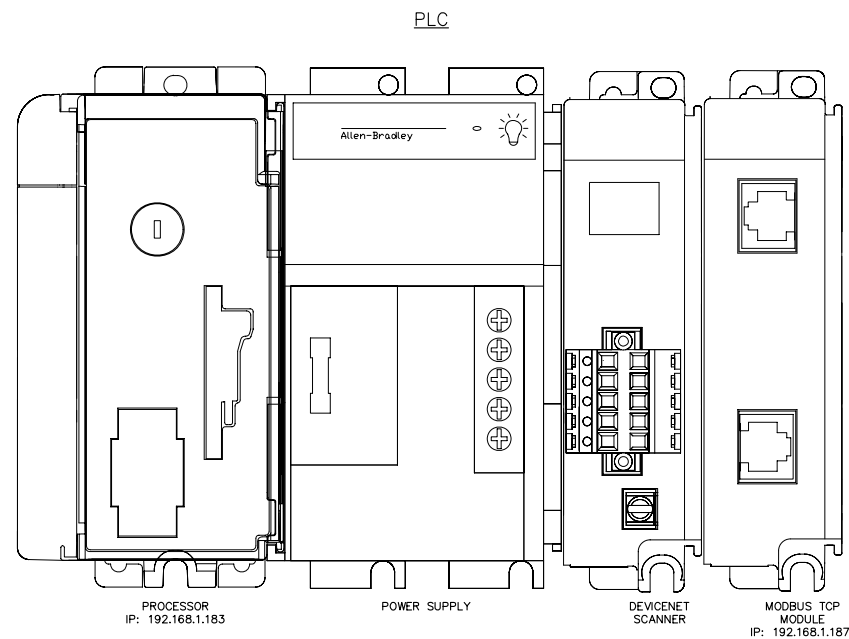
SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5401-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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**NOTE:**  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044      CONTROLLED POWER JOB No. 7147

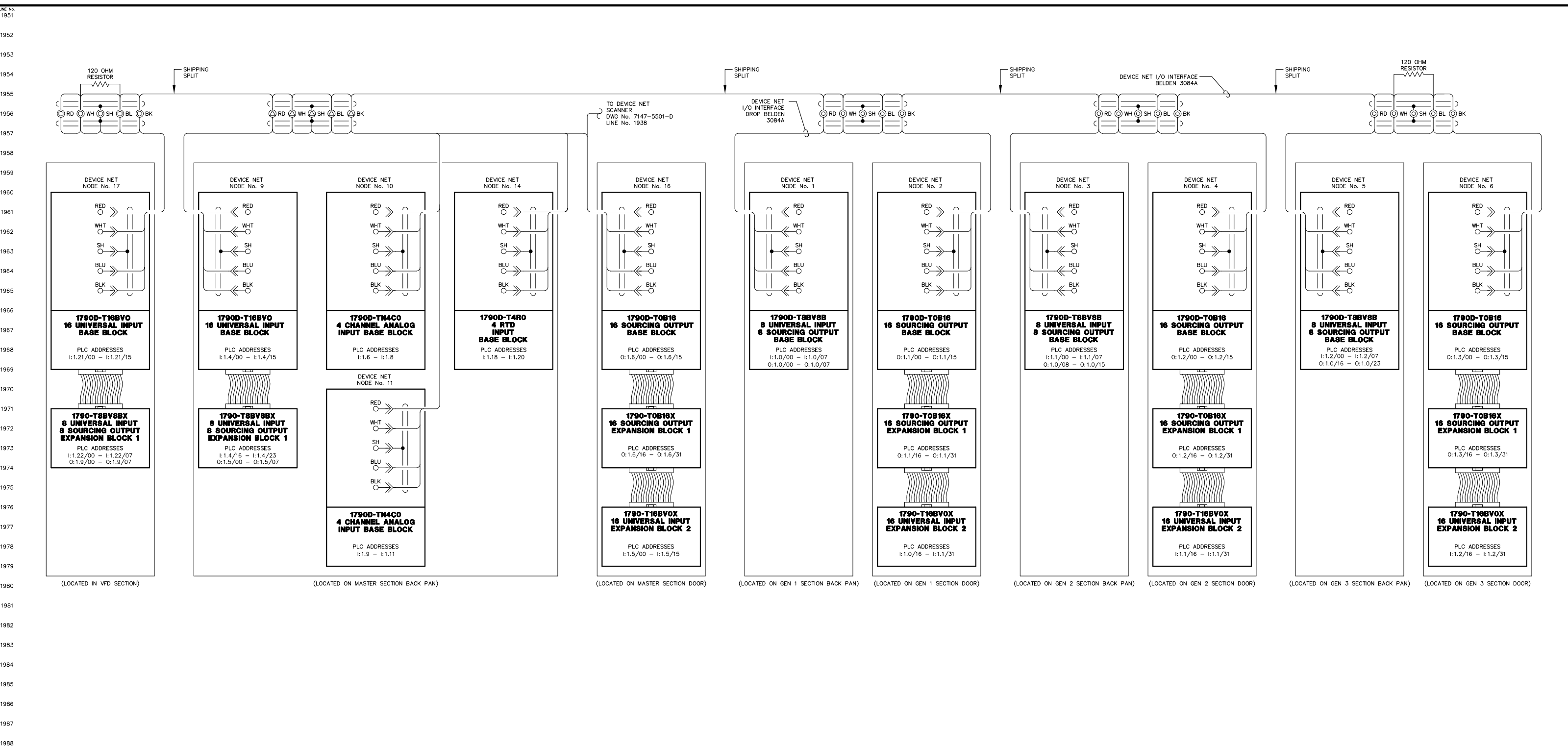
TITLE: PLC COMMUNICATION, SCHEMATIC DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5501-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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RURAL ENERGY GROUP  
813 W. NORTHERN LIGHTS BLVD.  
ANCHORAGE, ALASKA 99503  
HTTP://WWW.AIDEA.ORG



NOTE:  
 1. FOR GENERAL WRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: PLC COMMUNICATION, SCHEMATIC DIAGRAM

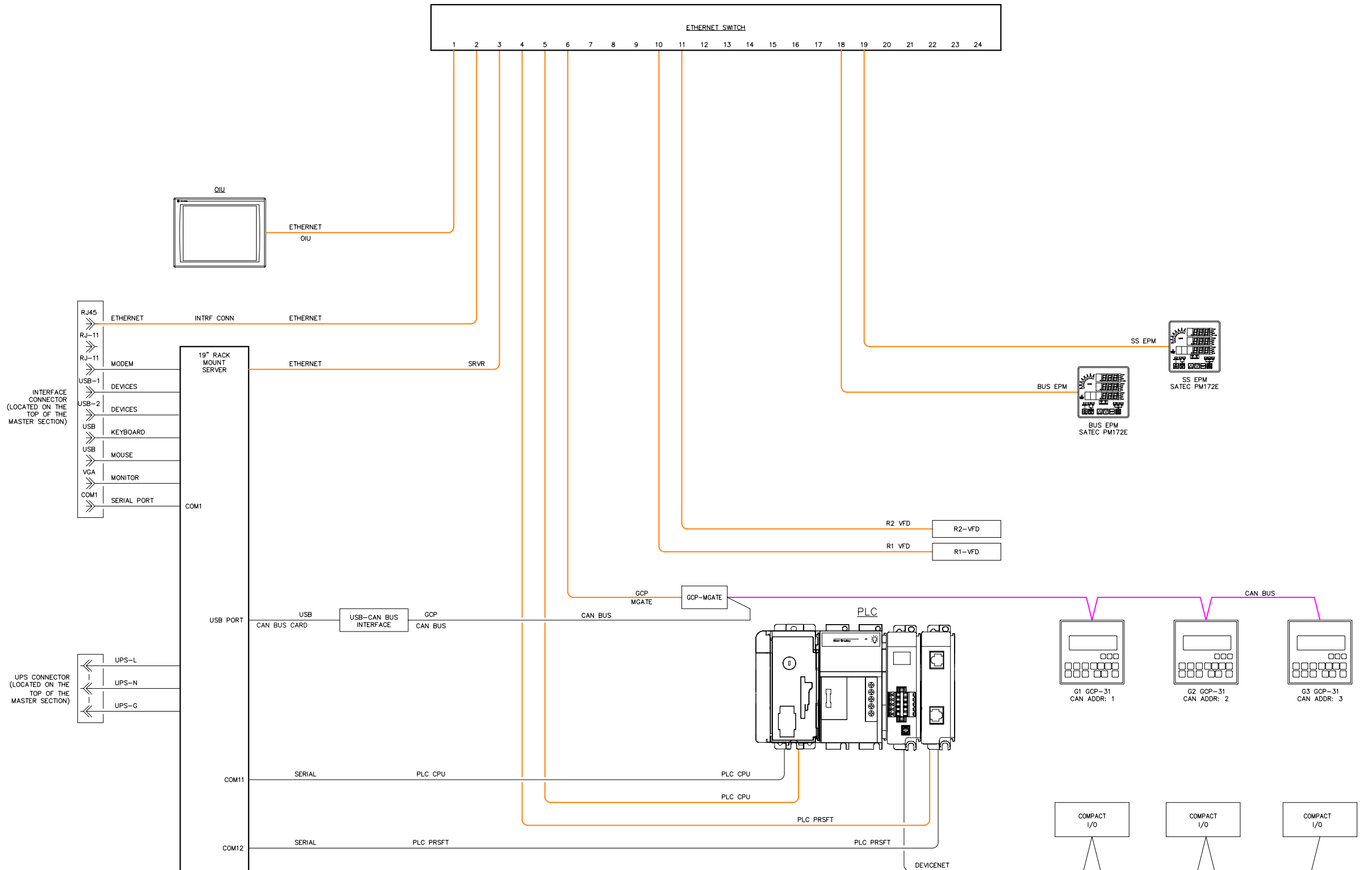
SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5502-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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DEVICE	IP ADDRESS
PLC CPU	192.168.1.183
MNET	192.168.1.187
R1 VFD	192.168.1.171
R2 VFD	192.168.1.172

DEVICE	IP ADDRESS
BUS EPM	192.168.1.190
SS EPM	192.168.1.191
SERVER	192.168.1.142
OIU	192.168.1.182
GCP MGATE	192.168.1.186

NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPB
A	05-16-11	SUBMITTAL	GPB

AEA PURCHASE ORDER No. \_\_\_\_\_ CONTROLLED POWER JOB No. 7147

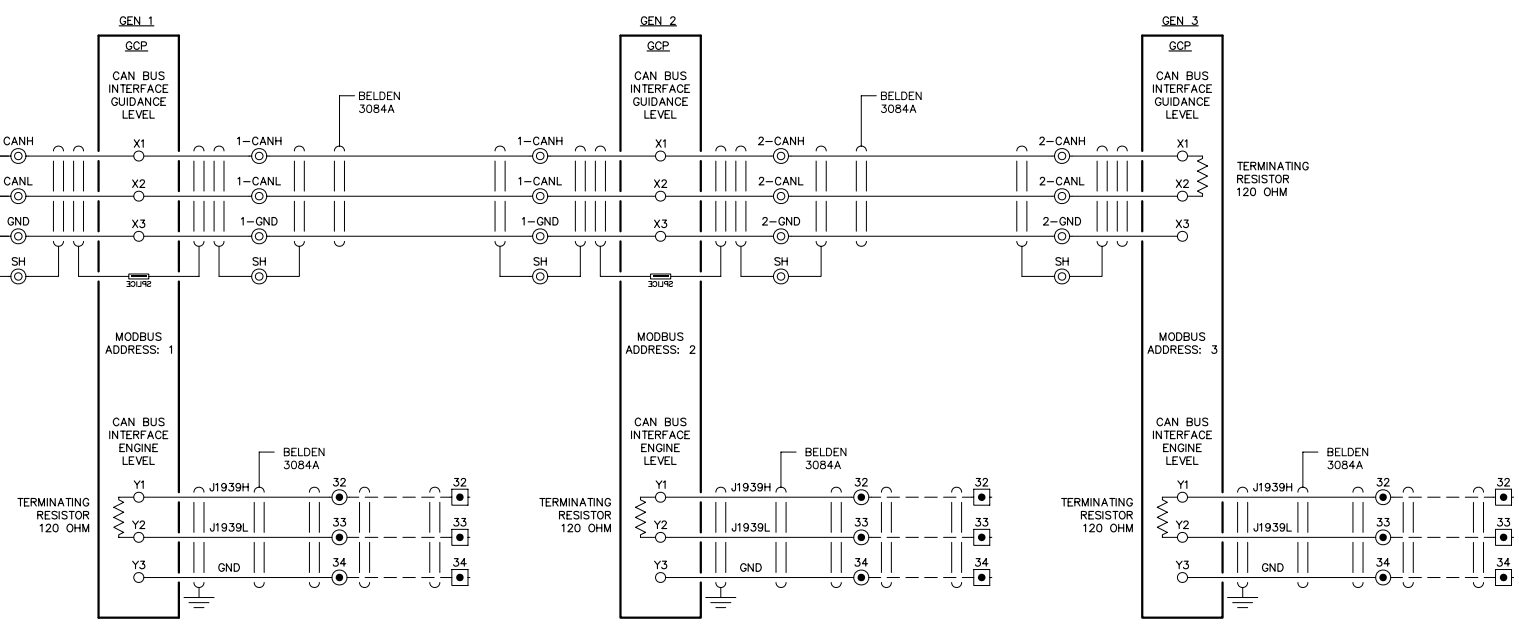
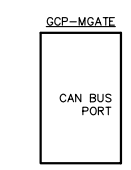
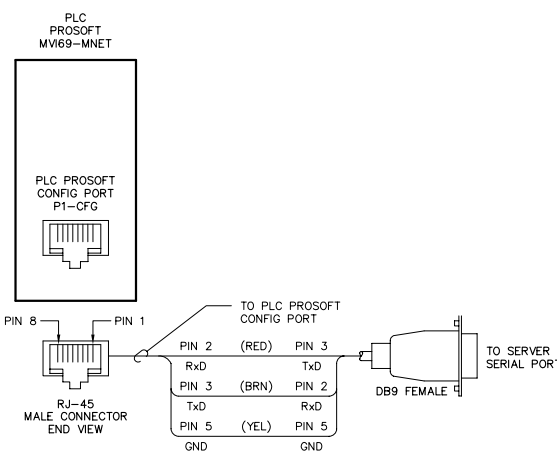
TITLE: COMMUNICATION NETWORK DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPB
DWG. No: 7147-5601-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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**ALASKA ENERGY AUTHORITY**  
RURAL ENERGY GROUP  
813 W. NORTHERN LIGHTS BLVD.  
ANCHORAGE, ALASKA 99503  
HTTP://WWW.AIDEA.ORG



NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: COMMUNICATION NETWORK DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5602-D	SHEET: 1 OF 1	CKD. BY: JMD

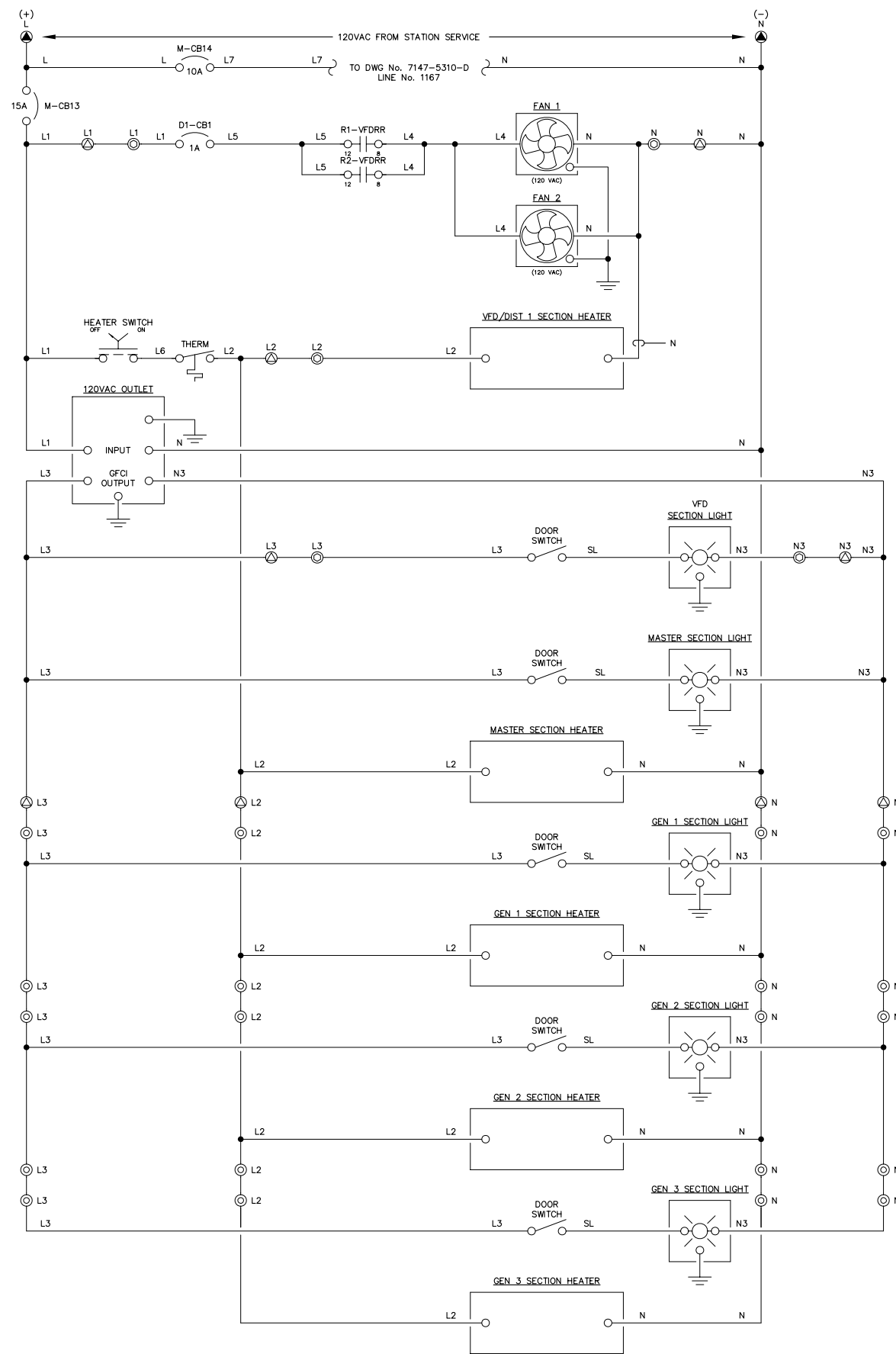
JOB: IGIUGIG GENERATOR SWITCHGEAR

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**NOTE:**  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: HEATER, LIGHTING & FAN CONTROL, SCHEMATIC DIAGRAM

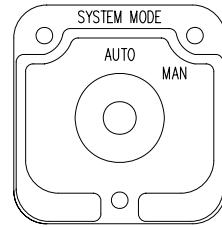
SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-5701-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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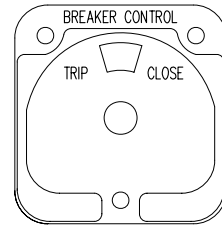
SYSTEM MODE SWITCH - SMS



(ELECTROSWITCH 24201C)  
KNURLED HANDLE  
QTY 1

DECK	CONTACTS		POS.	
	AUTO	MAN	AUTO	MAN
1	12	11	X	X
	13	13	X	X
1	16	15	X	X
	17	17	X	X
1	11	18	X	X
	12	12	X	X
1	15	14	X	X
	16	16	X	X

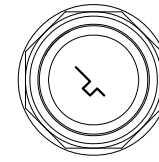
BREAKER CONTROL SWITCH - 52CS



(ELECTROSWITCH 2438D)  
PISTOL GRIP HANDLE  
SPRING RETURN TO CENTER  
QTY 1

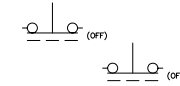
DECK	CONTACTS		POS.	
	TRIP	NORM. CLOSE	TRIP	CLOSE
1	11	18	X	X
	16	17	X	X

GENERATOR LOCKOUT SWITCH - GLS

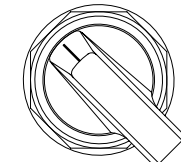


KEY OPERATED  
2 POS MAINTAINED  
QTY 3

POS	OFF	RUN
X		
X		
X		



HEATER CONTROL SWITCH - HCS

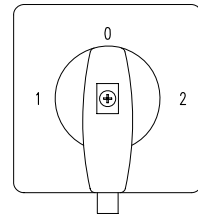


MAINTAINED  
LOCATED ON MASTER  
BACK PAN

POS	OFF	ON
X		
X		
X		



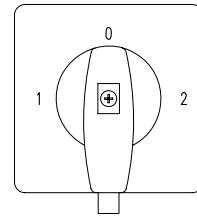
VARIABLE FREQUENCY DRIVE SWITCH - VFDS



3 POS MAINTAINED

71322	44	34	1L1	1L2	1L3	2L1	2L2	2L3	53	63	
POSITION											
SMD	1	MD	1T1	1T2	1T3	2T1	2T2	2T3	54	64	
			71300								
									ME	2	

VARIABLE FREQUENCY DRIVE SWITCH - VFDS



3 POS MAINTAINED

71322	44	34	1L1	1L2	1L3	2L1	2L2	2L3	53	63	
POSITION											
SMD	1	MD	1T1	1T2	1T3	2T1	2T2	2T3	54	64	
			71300								
									ME	2	

NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: CONTROL SWITCH TARGET DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-6101-D	SHEET: 1 OF 1	CKD. BY: JMD


JOB: IGIUGIG GENERATOR SWITCHGEAR

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**ALASKA ENERGY AUTHORITY**  
RURAL ENERGY GROUP  
813 W. NORTHERN LIGHTS BLVD.  
ANCHORAGE, ALASKA 99503  
HTTP://WWW.AIDEA.ORG



MANUFACTURED BY:



**CONTROLLED POWER, INC.**  
 17909 BOTHELL EVERETT HWY. S.E. #102  
 BOTHELL, WA. 98012  
 (425)-485-1778  
 SERIAL NUMBER: 7147

MASTER CONTROL

GENERATOR 1

GENERATOR 2

GENERATOR 3

VFD/DISTRIBUTION

65 KW

RADIATOR FAN 1

RADIATOR FAN 2

GENERATOR LOCKOUT FOR SERVICE  
OFF RUN

GENERATOR 1

GENERATOR 2

GENERATOR 3

BUS TOTALIZING

LAMP TEST      EMERGENCY STOP      ALARM RESET


FEEDER

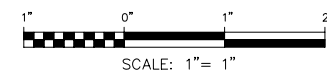
HEATER  
OFF ON

STATION SERVICE

RADIATOR FAN 1  
VFD OFF BYPASS

RADIATOR FAN 2  
VFD OFF BYPASS

- NOTES:
- ALL NAMEPLATES SHALL BE BLACK FACE WITH WHITE LETTERS EXCEPT AS NOTED.
  - ALL NAMEPLATES SHALL HAVE PRESSURE SENSITIVE ADHESIVE ON BACK, 100 % COVERAGE.
  - ALL NAMEPLATES SHALL HAVE MOUNTING HOLES DRILLED AS INDICATED.
-  INDICATES THAT NAMEPLATE SHALL BE BRUSHED ALUMINUM WITH BLACK ENGRAVED LETTERS.



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B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN
REV.	DATE	DESCRIPTION	BY

AEA PURCHASE ORDER No. REG-11-044      CONTROLLED POWER JOB No. 7147

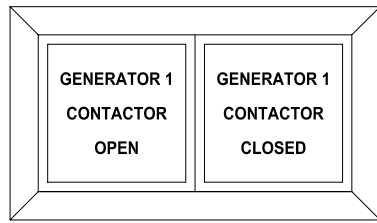
TITLE: NAMEPLATE ENGRAVING SCHEDULE, FABRICATION DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-6201-D	SHEET: 1 OF 1	CKD. BY: JMD

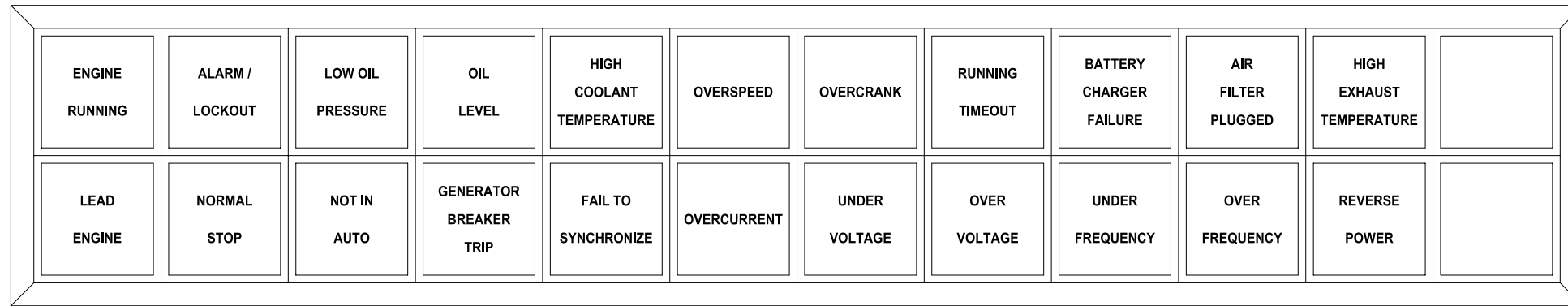
JOB: IGIUGIG GENERATOR SWITCHGEAR



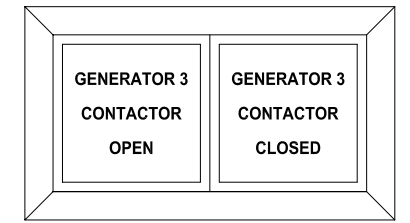
RURAL ENERGY GROUP  
 813 W. NORTHERN LIGHTS BLVD.  
 ANCHORAGE, ALASKA 99503  
 HTTP://WWW.AIDEA.ORG



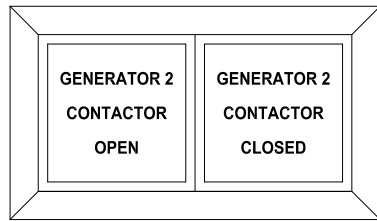
GEN 1 BREAKER ANNUNCIATOR  
QTY 1



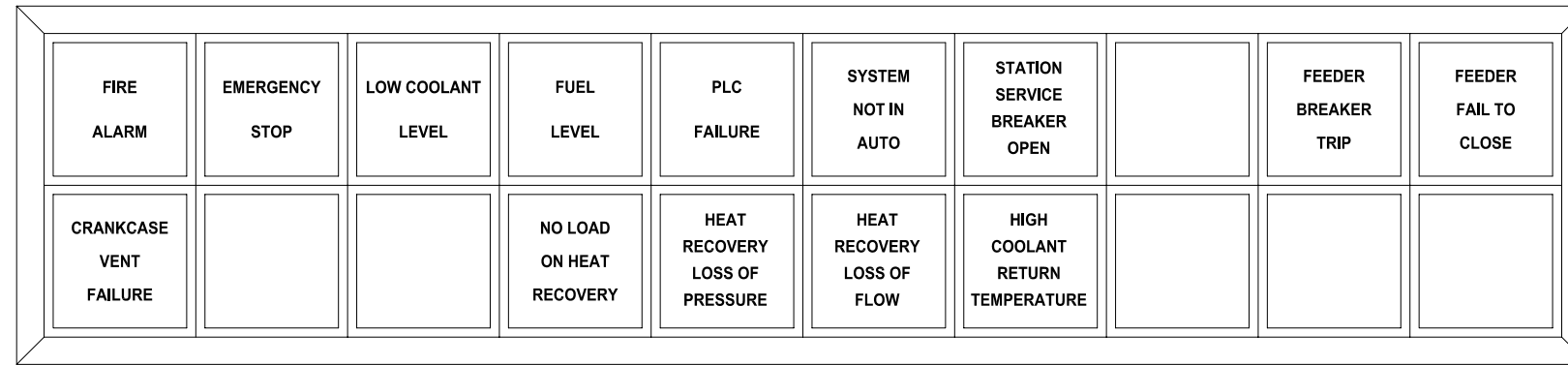
GENERATOR ANNUNCIATOR  
QTY 3



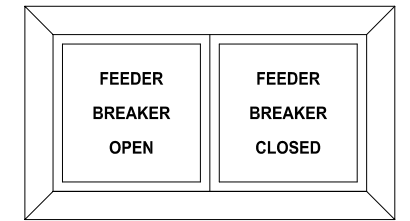
GEN 3 BREAKER ANNUNCIATOR  
QTY 1



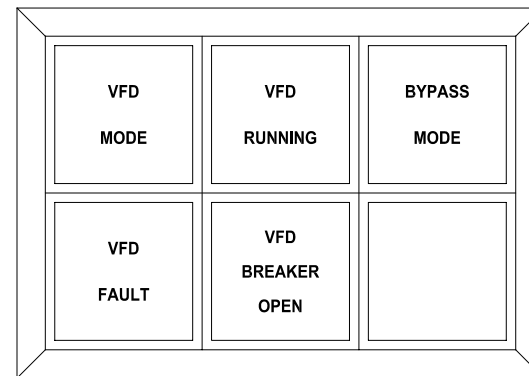
GEN 2 BREAKER ANNUNCIATOR  
QTY 1



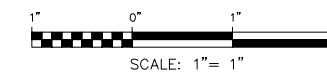
MASTER ANNUNCIATOR  
QTY 1



FEEDER BREAKER ANNUNCIATOR  
QTY 1



VFD ANNUNCIATOR  
QTY 2

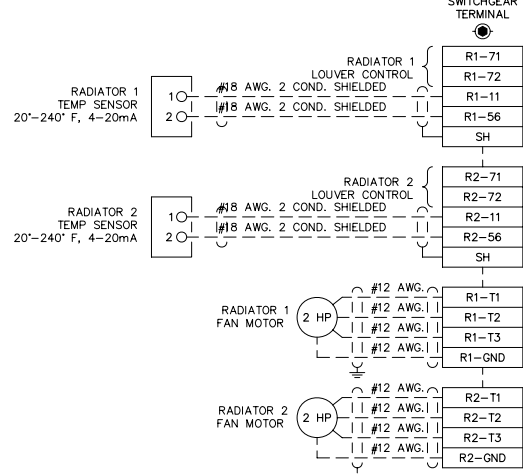


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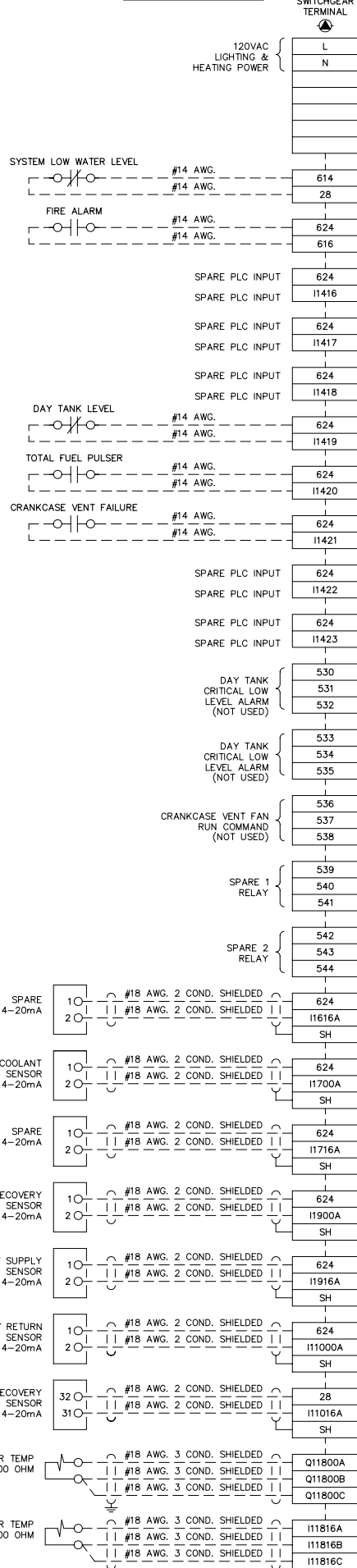
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN
REV.	DATE	DESCRIPTION	BY
AEA PURCHASE ORDER No. REG-11-044		CONTROLLED POWER JOB No. 7147	
TITLE: ANNUNCIATOR WINDOWS, FABRICATION DIAGRAM			
SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN	
DWG. No: 7147-6202-D	SHEET: 1 OF 1	CKD. BY: JMD	
JOB: IGIUGIG GENERATOR SWITCHGEAR			



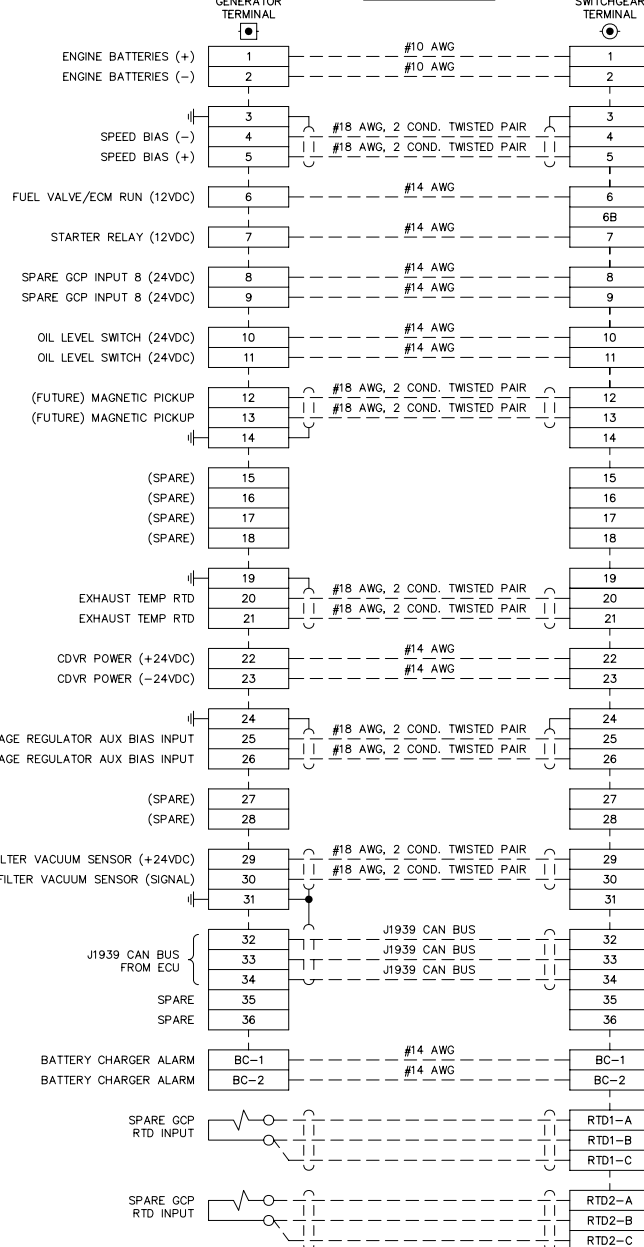
VFD/DISTRIBUTION



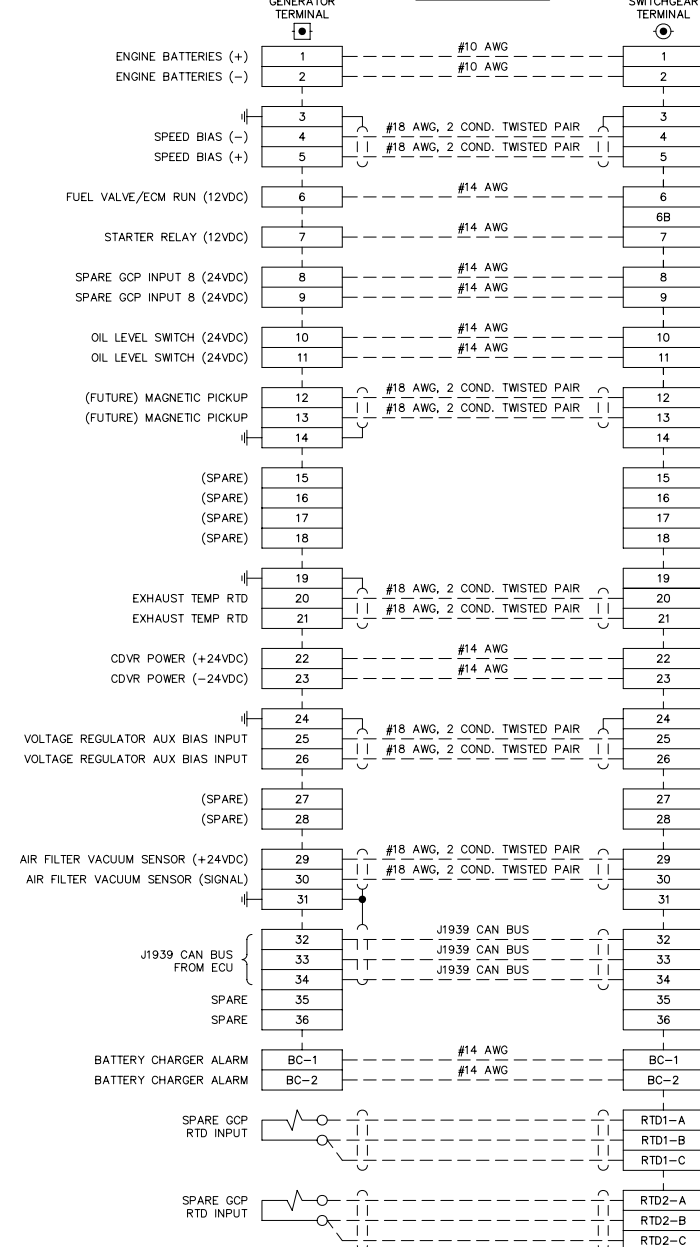
MASTER CONTROL



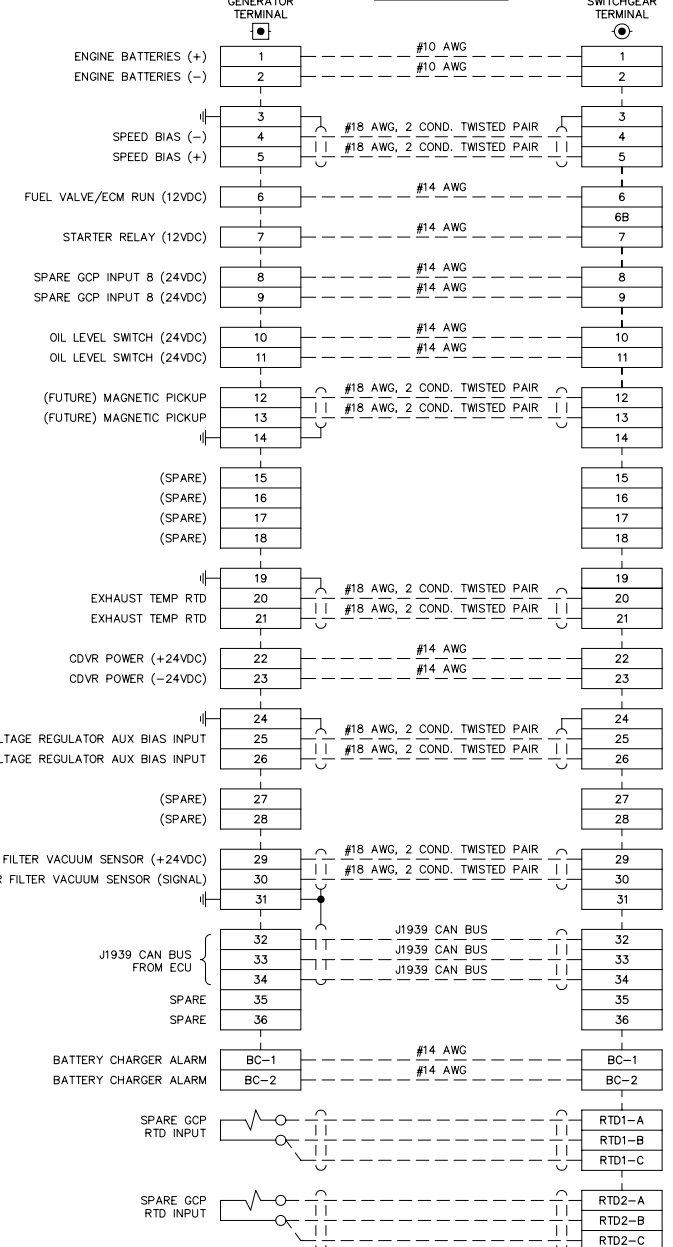
GENERATOR 1



GENERATOR 2



GENERATOR 3



NOTE:  
1. FOR GENERAL WIRING & CONSTRUCTION NOTES, SEE DRAWING No. 7147-3101-D.

REV.	DATE	DESCRIPTION	BY
B	06-03-11	RESUBMITTAL	GPN
A	05-16-11	SUBMITTAL	GPN

AEA PURCHASE ORDER No. REG-11-044 CONTROLLED POWER JOB No. 7147

TITLE: INTERCONNECTION DIAGRAM

SCALE: NONE	DATE: 05-05-11	DWN. BY: GPN
DWG. No: 7147-7101-D	SHEET: 1 OF 1	CKD. BY: JMD

JOB: IGIUGIG GENERATOR SWITCHGEAR

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