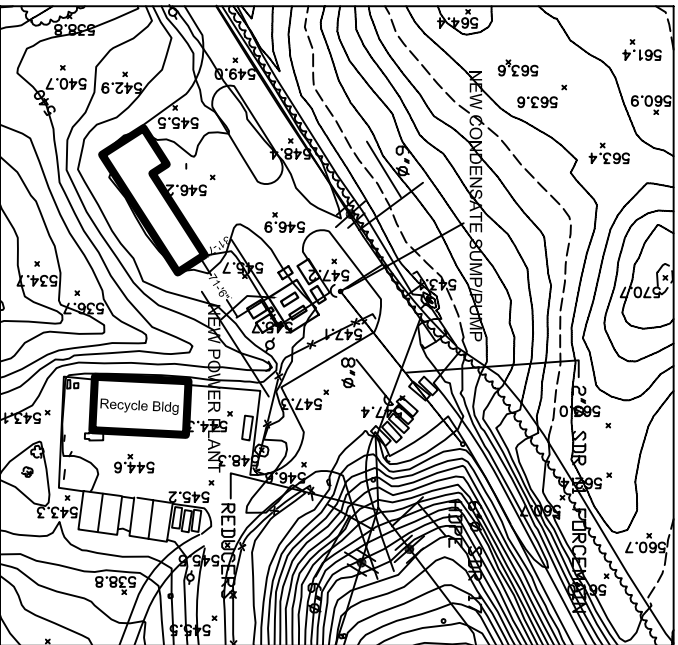


LANDFILL GAS ENERGY RECOVERY FACILITY

FAUQUIER COUNTY LANDFILL
 6438 COLLEGE STREET
 WARRENTON, VA. 20187

- DRAWING SCHEDULE**
- C-1 SITE PLAN
 - S-1 SLAB & FOUNDATION PLAN
 - M-1 MECHANICAL PIPE LAYOUT
 - M-2 COMPRESSOR PIPING SCHEMATIC
 - E-1 ELECTRICAL SERVICE/CONDUIT LAYOUT PLAN
 - E-2 LOW VOLTAGE/GROUNDING ELECTRICAL PLAN



LEGEND

⊙	5/8" x 8" COPPER CLAD GROUND ROD V/EXOTHERMIC WELD
⊥	1/2" BARE COPPER WITH EXOTHERMIC WELD
⊕	2BA LERVAC MURLEY REC-MOUNT 18" TO CENTER
⊕	2BA LERVAC MURLEY REC WITH GROUND PAULT INTERRUPTER AND EXOTHERMIC WELD/EXOTHERMIC WELD 18" TO CENTER
⊕	2BAV 277VOLT TORQUE SWITCH-HD 54" TO CENTER
⊕	3WAY 277VOLT TORQUE SWITCH-HD 54" TO CENTER
⊕	GAS VALVE EMERGENCY SHUT DOWN SWITCH
⊕	175WATT/277 VOLT WALL PACK V/PHOTO CELL-MOUNT BELOW EAVE
⊕	EXIT-DRNG EMERGENCY BATTERY LIGHT-277V MOUNT ABOVE DOORWAY
⊕	HOME RUN PANEL AND CIRCUIT NUMBER- SEE PANEL SCHEDULE
⊕	UNDERGROUND PVC CONDUIT SCHEDULE 40
⊕	EMERGENCY SHUT OFF VALVE-180V A.C.

C-1

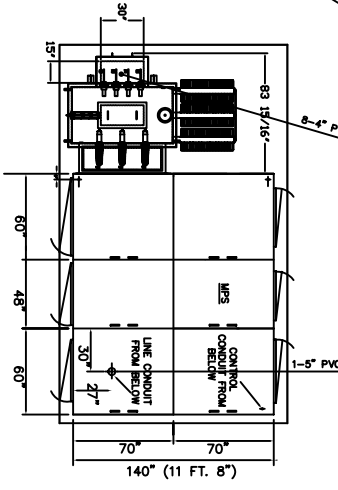
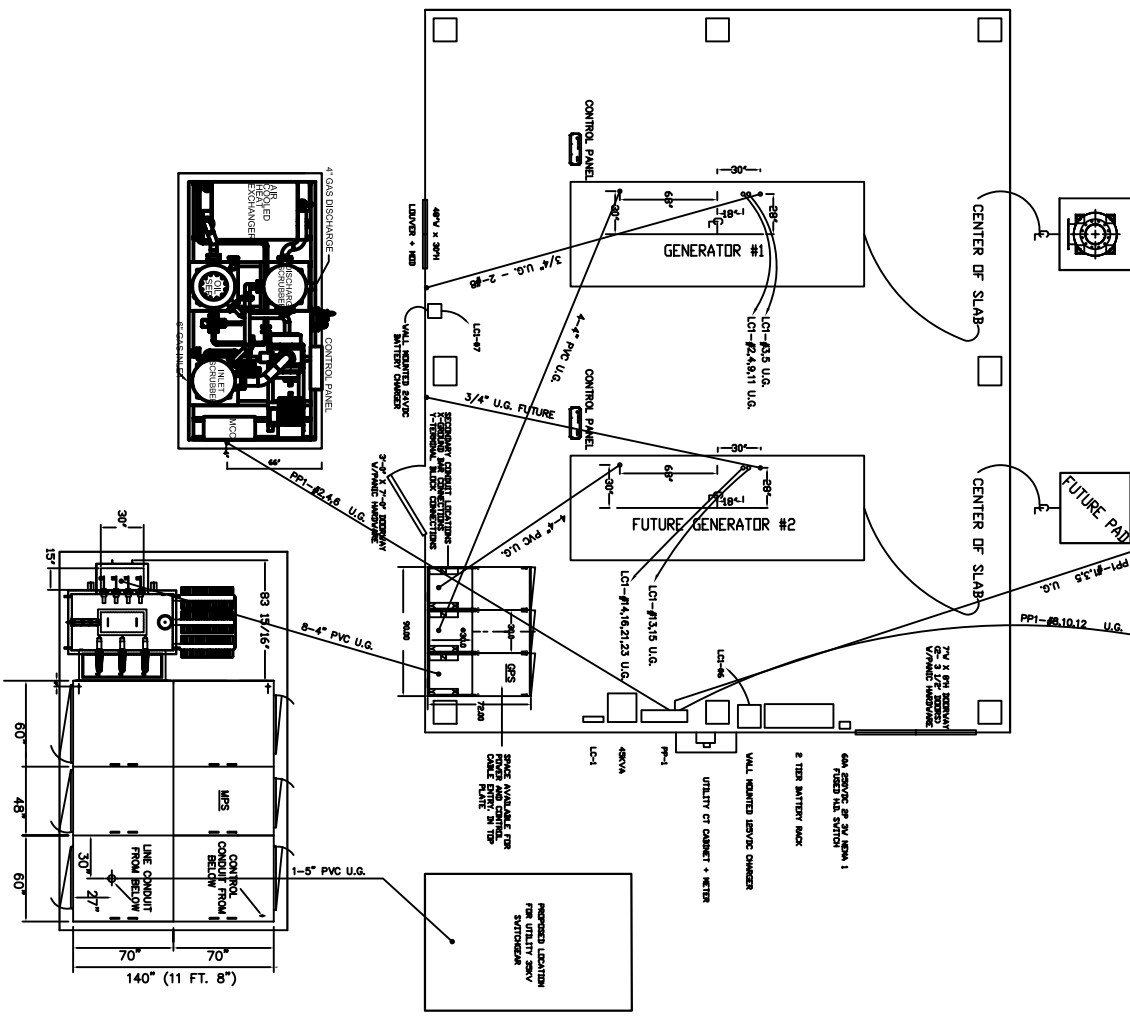
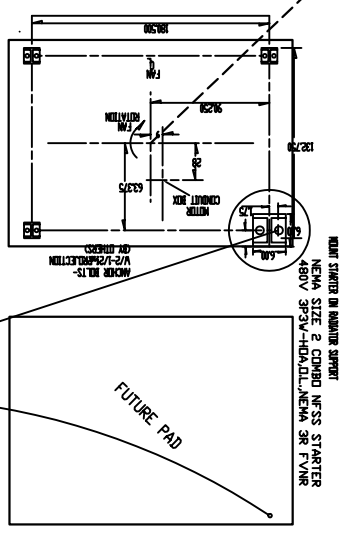
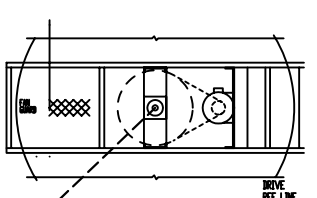
DATE:	9/10/03
DRAWN BY :	ACS
REVISIONS :	

PROJECT : LANDFILL GAS ENERGY RECOVERY FACILITY
 FAUQUIER COUNTY LANDFILL
 6438 COLLEGE STREET
 WARRENTON, VA. 20187

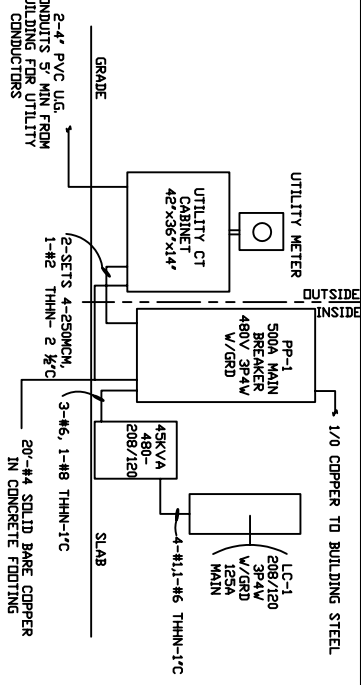
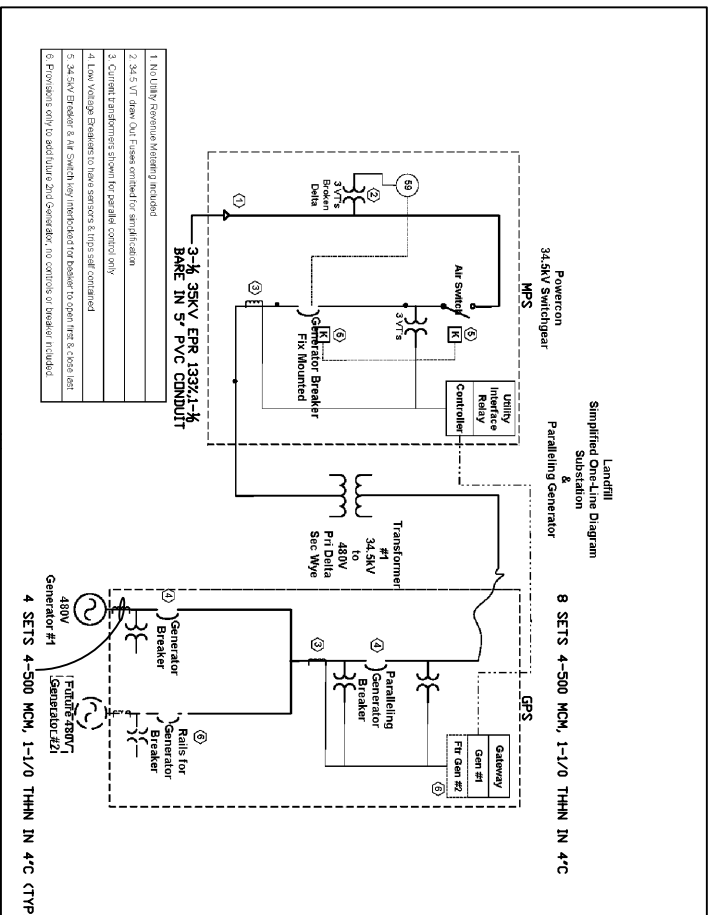
DRAWING NAME: SITE PLAN



303 Najoles Road, Suite 112
 Millersville, Md. 21108
 Phone : 410-729-1010
 Fax : 410-729-0077



SCALE: 1/4" = 1'-0"



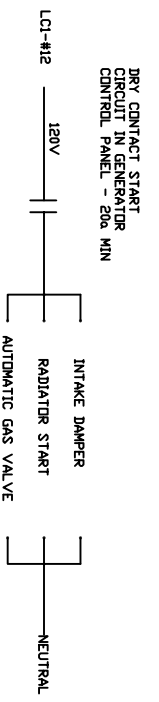
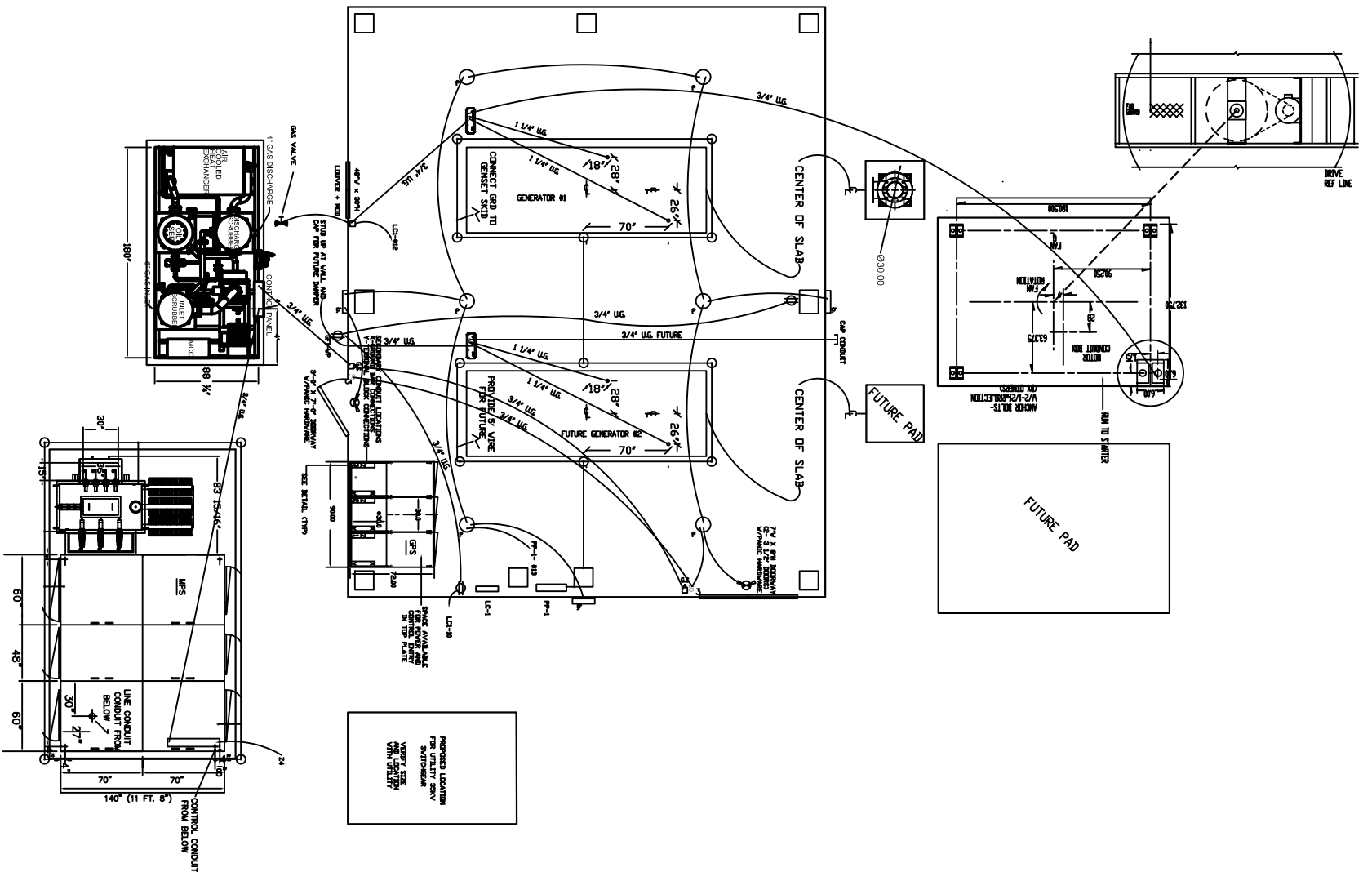
Panel "PP-1" 800 amp, 480V, 377 Volt, 3P4W, 3-Phase, 18KVA, Rated	Rating	Panel Frame Pk. A, Pk. B, Pk. C	Wire and Conduit Size	Notes
1 15KV water jacket heater circuit-1000 watt-120	60	3	1-00 31	3-48 thin and 1-1/2 thin and 1"-C
2 15KV water jacket heater-250watts-240	20	2	20	104
3 15KV water jacket heater-250watts-240	20	2	20	104
4 15KV water jacket heater-250watts-240	20	2	20	104
5 15KV water jacket heater-250watts-240	20	2	20	104
6 15KV water jacket heater-250watts-240	20	2	20	104
7 15KV water jacket heater-250watts-240	20	2	20	104
8 15KV water jacket heater-250watts-240	20	2	20	104
9 15KV water jacket heater-250watts-240	20	2	20	104
10 15KV water jacket heater-250watts-240	20	2	20	104
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17 15KV water jacket heater-250watts-240	20	2	20	104
18 15KV water jacket heater-250watts-240	20	2	20	104
19 15KV water jacket heater-250watts-240	20	2	20	104
20 15KV water jacket heater-250watts-240	20	2	20	104
21 15KV water jacket heater-250watts-240	20	2	20	104
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99 15KV water jacket heater-250watts-240	20	2	20	104
100 15KV water jacket heater-250watts-240	20	2	20	104

DATE:	9/10/03
DRAWN BY:	ACS
REVISIONS:	
11/3/03	

PROJECT : LANDFILL GAS ENERGY RECOVERY FACILITY
 FAUQUIER COUNTY LANDFILL
 6438 COLLEGE STREET
 WARRENTON, VA. 20187
 DRAWING NAME: ELECTRICAL SERVICE/CONDUIT LAYOUT PLAN

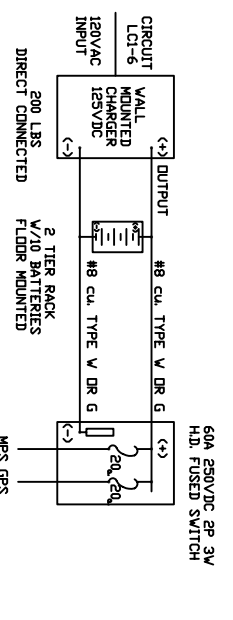
303 Najoles Road, Suite 112
 Millersville, Md. 21108
 Phone : 410-729-1010
 Fax : 410-729-0077

E-1

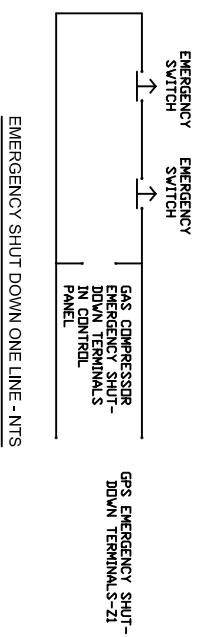


120 VOLT AUXILIARY EQUIPMENT ONE LINE - NTS

NOTE: PROVIDE 3/4" U.G. CONDUIT FOR FUTURE GENERATOR #2 DAMPER AND RADIATOR START CIRCUIT



ALL INTERIER AND INTERACK CABLES, CONNECTORS, RACK, BATTERIES, CHARGER, ETC. ARE TO BE FURNISHED BY POWERSON CORP.



Z1 DETAIL - ALL CONDUITS UNDER SLAB/GROUND

1-3/4" C 3-#14 THHN TO EMERGENCY SHUTDOWN SWITCH

Z2 DETAIL - ALL CONDUITS UNDER SLAB/GROUND

1-1" C 9-#14 THHN STRANDED FROM GENERATOR CONTROL PANEL

1-1" C 6 CONDUCTOR SPAIR #16 TWISTED/SHIELDED FROM GENERATOR CONTROL PANEL

Z3 DETAIL - ALL CONDUITS UNDER SLAB/GROUND

1-3/4" C 2-#12 THHN U.G. FROM MFS-24VDC (TO Z4)

1-1" C 6 CONDUCTOR 3 PAIR #16 TWISTED/SHIELDED FROM MFS (TO Z4)

1-3/4" C 125VDC BATTERY DISCONNECT 2-#10, 1-#12 GRD THHN STRANDED

1-1" C 6 CONDUCTOR SPAIR #16 TWISTED/SHIELDED FROM MFS (TO Z3)

1-1" C SPARE TO OUTSIDE BUILDING-CAPPED

1-1" C #2 GENERATOR BATTERY - FUTURE

1-1" C 14-#14 THHN CONTROL INTERLOCK AND TRANSFER TRIP FROM MFS (TO Z4)

2-1" C FUTURE FROM GENERATOR CONTROL PANEL-#2

Z4 DETAIL - ALL CONDUITS UNDER SLAB/GROUND

1-3/4" C SPARE STUB OUTSIDE SLAB AND CAP

1-1" C 14-#14 THHN CONTROL INTERLOCK AND TRANSFER TRIP FROM GFS (TO Z3)

1-3/4" C 125VDC BATTERY DISCONNECT 2-#10, 1-#12 GRD THHN STRANDED

1-1" C 6 CONDUCTOR SPAIR #16 TWISTED/SHIELDED FROM GFS (TO Z3)

1-1" C 6 CONDUCTOR SPAIR #16 TWISTED/SHIELDED FROM GFS (TO Z3)

1-3/4" C 125VDC BATTERY DISCONNECT 2-#10, 1-#12 GRD THHN

1-3/4" C 2-#10, 1-#12 GRD THHN FOR HEATER CIRCUIT LCI-1

1-3/4" C 3 #14 THHN CONTROL INTERLOCK FROM GAS SKID CONTROL PANEL

DATE:	9/10/03
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REVISIONS :	

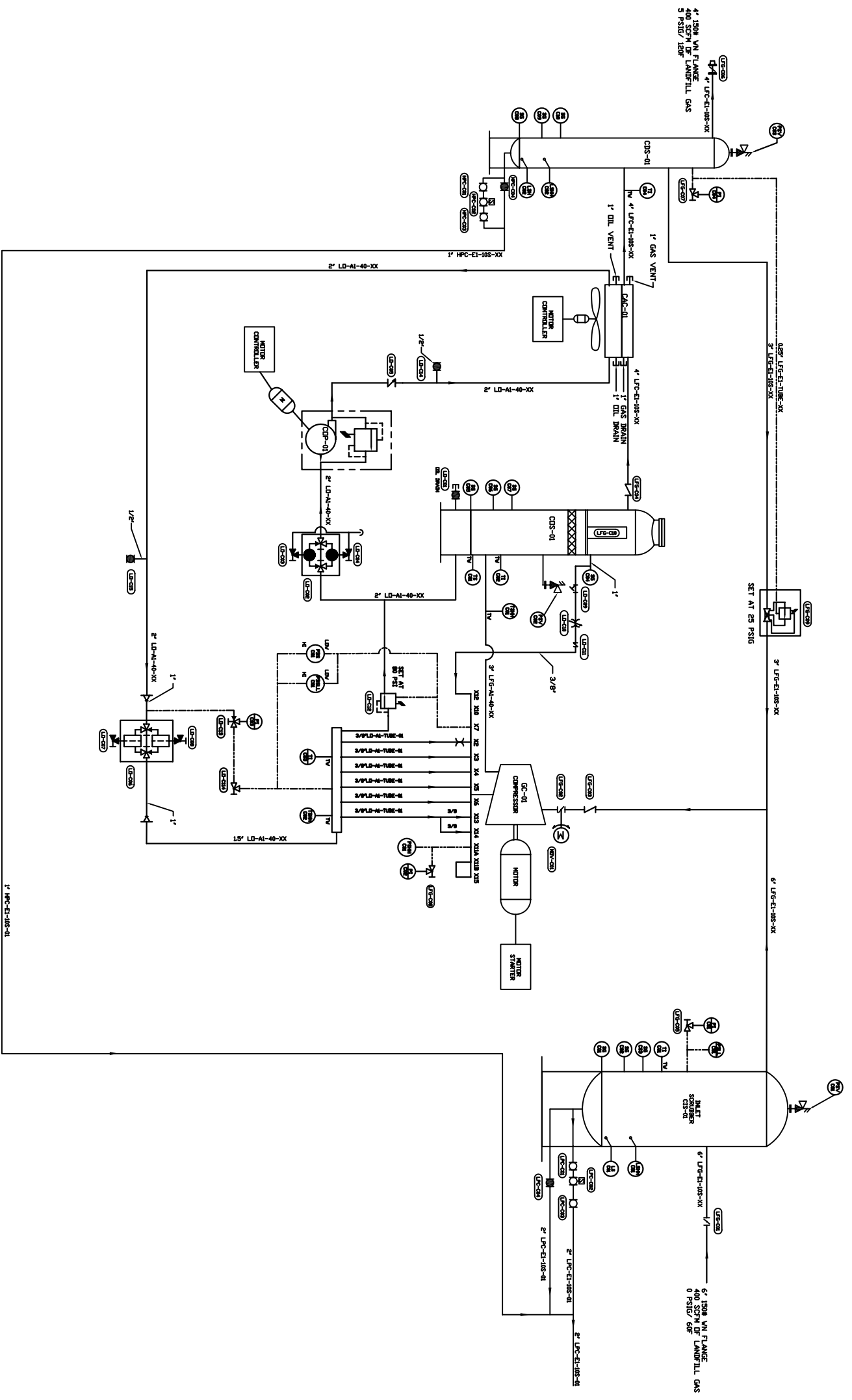
PROJECT : LANDFILL GAS ENERGY RECOVERY FACILITY
 FAUQUIER COUNTY LANDFILL
 6438 COLLEGE STREET
 WARRENTON, VA. 20187

DRAWING NAME: LOW VOLTAGE/GROUNDING ELECTRIC PLAN



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 Millersville, Md. 21108
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 Fax : 410-729-0077

E-2



DCS-01
 GAS DISCHARGE SCRUBBER
 30" X 8'
 DESIGN PRESSURE: 150 PSIG
 400 SCFH/150#
 INSULATE AND HEAT TRACE BOTTOM
 THIRD OF VESSEL

CAC-01
 GAS AND OIL COOLER
 48" X 24" X 12"
 MODEL 344-100
 400 SCFH/150#
 5/8" DIA

DCP-01
 TANK
 48" X 24" X 12"
 CAPACITY: 15 GPM
 MOTOR: 3/4 HP/450

DCS-01
 GAS OIL SEPARATOR
 30" X 8'
 DESIGN PRESSURE: 150 PSIG
 HEAT TRACE AND INSULATE BOTTOM
 THIRD OF VESSEL

GC-01
 GAS COMPRESSOR PACKAGE
 TYPE: OIL FILLED
 MOTOR: 3/4 HP/450
 DESIGN PRESSURE: 25 PSIA
 DESIGN FLOW: 400 SCFH

DCS-01
 GAS SEPARATOR
 30" X 8'
 DESIGN PRESSURE: 150 PSIG
 INSULATE AND HEAT TRACE BOTTOM
 THIRD OF VESSEL

M-2

DATE:	9/10/03
DRAWN BY:	ACS
REVISIONS:	

PROJECT : LANDFILL GAS ENERGY RECOVERY FACILITY
 FAUQUIER COUNTY LANDFILL
 6438 COLLEGE STREET
 WARRENTON, VA. 20187
 DRAWING NAME: COMPRESSOR PIPING SCHEMATIC



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