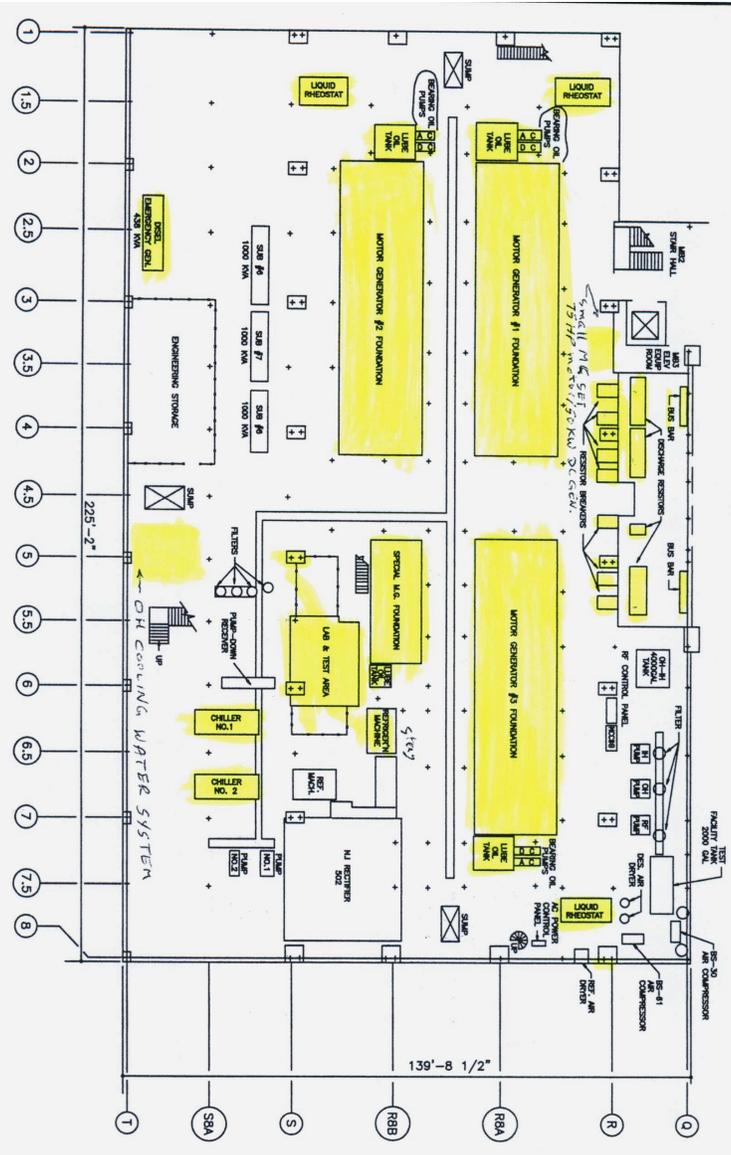


NO.	DATE	REVISION	BY	CH	APPROVED
1	6/03	REVISED PER ECN-4772	JUN S.F. CAP	J.S.	
2	3/24/08	REVISED SQUARE FOOTAGE PER ECN-5342	JUN		



C-SITE M.G. BSMT. 30,566 GSF 30,200 NSF

BLDG. C51

PRINCETON PLASMA PHYSICS LABORATORY			
C & D SITES			
BUILDING FLOOR PLANS			
M.G. BUILDING BASEMENT			
DR. P.M. & E.	LOCAL CAD NO.	DATE:	10/5/02
ENG. C. POTENSKY	ZBAD3025.DWG	B-AD300	
DR. J. SIEGEL	APPROVALS	CP	SF
CH. S. FLOHR		SF	JS
		SHEET NO. 25	

LIST OF MG SETS / AUXILIARIES AND OTHER EQUIPMENTS WITH PICTURES

1. Three (3) Large Pulse Motor Generators storage energy sets and a smaller MG set.
2. Associated switchgear:
3. Sixteen (16) ITE SWGR- model FB 60 – High speed breakers
4. Sixteen (16) ITE SWGR- model KF / A
5. Sixteen (16) Discharging Resistor load, .02 Ω , 30,000 A, 3 sec.
6. DC Copper buses
7. Duplex Panel Boards, panel # 6 to #17, front and rear, containing meters, relays, recording instruments, annunciators, and all associated control wires / cables.
8. Two DC Panel Boards, total of 31 panels, front and rear, containing 14 DC Field contactors, potentiometers, stick resistors, magnetic amplifiers, relays, and meters
9. One frequency converter consisting of a 200 VDC power supply, 2 Amps, a 15 HP synchronous motor, and a 365 KVA 480 cycles Synchronous generator.
- 10.(36) Motorized DC Disconnect Switches, MEMCO, 1200 VDC, 5500 A
- 11.Eight (8) AC / DC Bearing oil pumps & six (6) jacking pumps
- 12.Three (3) large bearing oil tanks and one (small) tank
- 13.Thirty four (34) heat exchangers and cooling water pipes
- 14.One (1) AC Relay boards, six (6) panels & two (2) DC Relay Boards, ten (10) panels. All contains relays and control wires / cables.
- 15.Twelve (12) Transfer Control Panels contain grove switches and cables.
- 16.Generators and motors air blowers and air filters consist of one motor drives two blower. Total of 32 blowers and 16 motors, 20 HP each, 1200 rpm.
- 17.Three (3) Motor Generator Exciter Sets and one (1) small set.
- 18.Two (2) Motor Generator Sets 400 cycles.
- 19.One (1) Dynamic Brake Motor Generator Set and associated switchgears.
- 20.Three (3) large Liquid Rheostat and one (1) small and four (4) control panel boards.
- 21.CARDOX Fire Extinguisher System consists of CO₂ tank (4 ton storage capacity), refrigerant compressor and associated piping, controls, and alarms.
- 22.Voltage regulator
- 23.Imperial MG set consists of 75 HP motor and 50 KW DC Generator.
- 24.Two (2) Worthington Chillers including reduced starting voltage, two (2) wound-rotor slip-ring induction motors (1750 HP each), two

- (2) Evaporators (16' long, 4' OD, 46.5" ID, and two (2) condensers 12' long, 5' diameter.
- 25.350 KW Diesel Generator manufacture by Caterpillar, model D 39 (1)
- 26.OH Cooling water systems consist of 11'x8' aluminum tank, pump, filter, heat exchanger and piping.
- 27.OH Dummy load consist of copper bus and control cables.
- 28.Obsolete 480 V Motor Control Center
- 29.Two (2) Controls/Instrument panels for cooling water.
- 30.Water Cool Bus and six concrete blocks.
- 31.S-1 enclosure, contains copper bus bars and resistors
- 32.HALON fire extinguisher system
- 33.Two air conditioning units, Carrier, model # 50D024600. Each weights 3,000. lb.