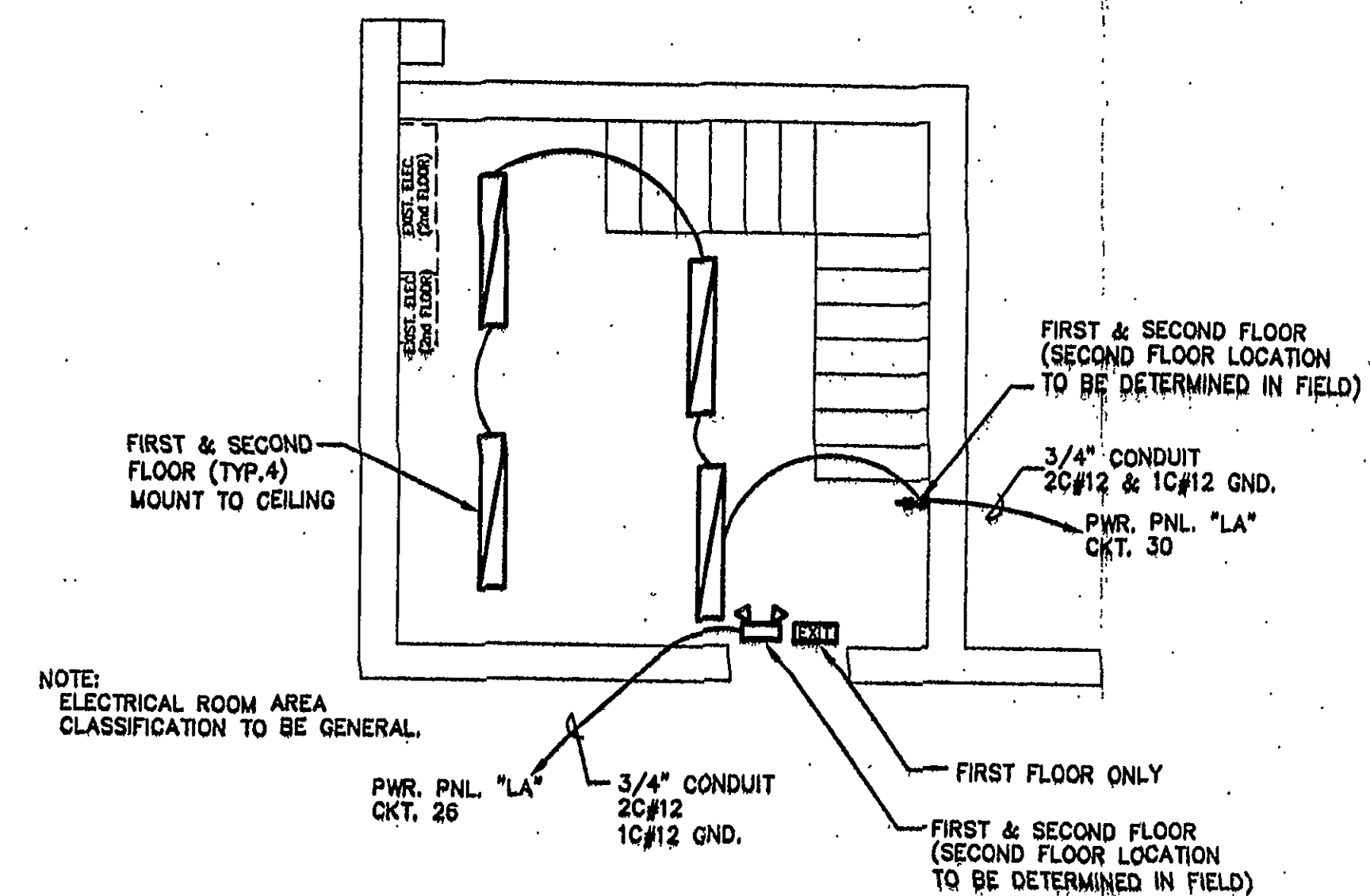
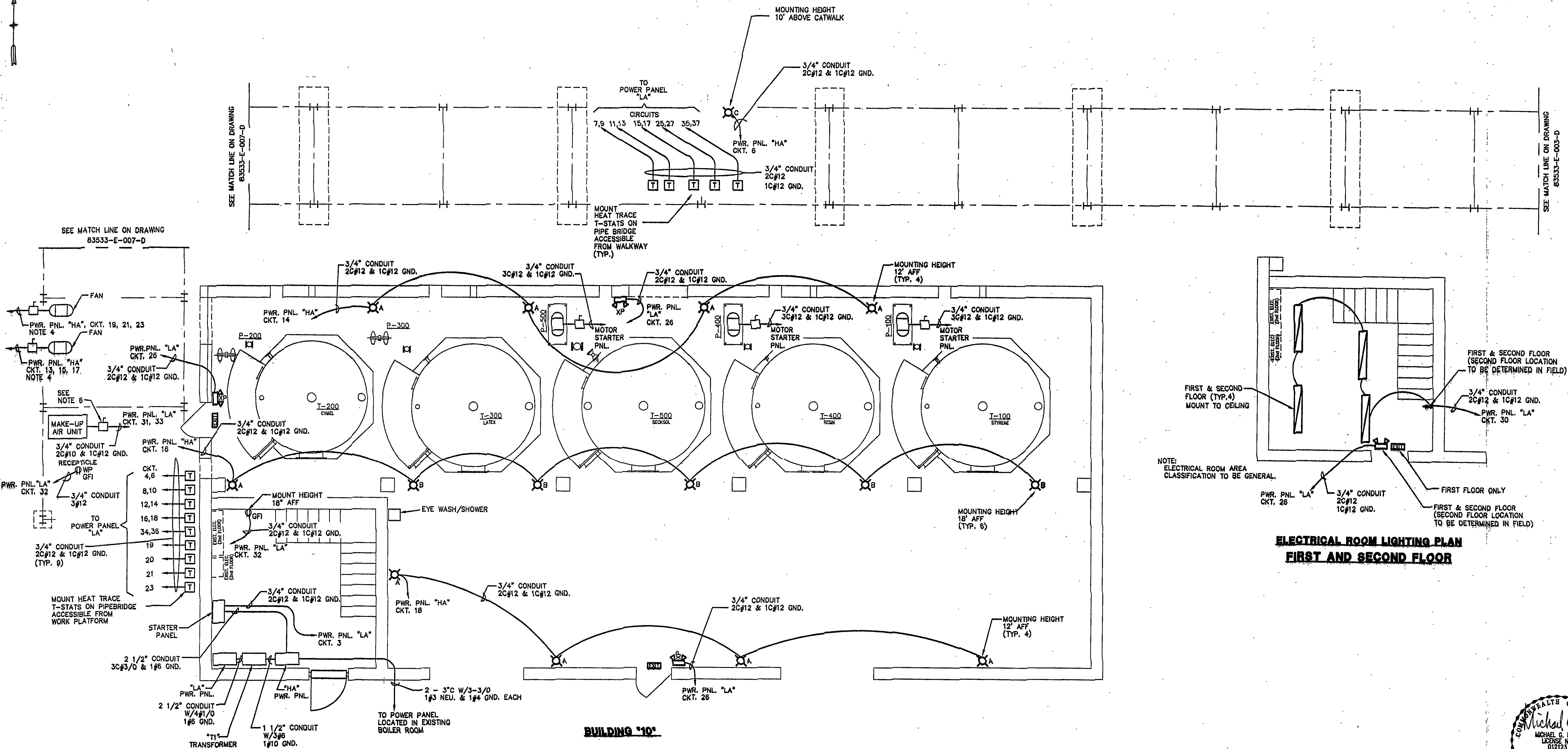




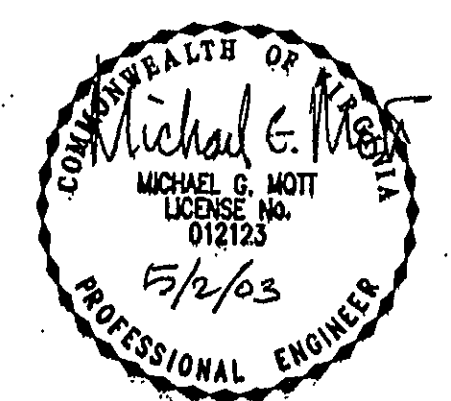
**ELECTRICAL ROOM LIGHTING PLAN
FIRST AND SECOND FLOOR**

ELECTRIC HEAT TRACING OF OUTDOOR PIPING:

1. SEE DWG. 83533-R-004-D FOR HEAT TRACE TEMPERATURE RATINGS. PROVIDE AND INSTALL WHERE INDICATED SELF-LIMITING HEAT TRACE CABLE WITH RATING OF 5 WATTS PER FOOT AT 50 DEGREES F. FOR 40' SERVICE AND 10 WATTS/FT FOR 100' SERVICE. RUN CABLE ALONG BOTTOM OF PIPE. SECURE TO PIPE WITH HEAT-RESISTANT FIBERGLASS TAPE AT 1-FOOT INTERVALS. COVER WITH FIBERGLASS INSULATION, 1-1/2 INCH THICK ON 3-INCH PIPE, 1-INCH THICK ON 2-INCH PIPE. THE DROPS FROM THE PIPE BRIDGE TO THE UNLOADING STATION VALVES SHALL BE INSULATED AND ELECTRICALLY HEAT TRACED AS INDICATED.
2. WHERE TRACED PIPE IS CLAMPED FOR SUPPORT, USE CELLULAR GLASS INSULATION WITH INSULATION SHIELD BENEATH. DO NOT COMPRESS THE CELLULAR GLASS INSULATION OVER THE HEAT-TRACE CABLE; INSTEAD, CUT OUT THE PATH REQUIRED BY CABLE.
3. WRAP HEAT TRACE CABLE AROUND VACUUM BREAKERS. CONTINUE INSULATION AND HEAT TRACING FOR THREE FEET INSIDE EACH BUILDING. PROVIDE ALUMINUM COVER ON ALL INSULATION.
4. LABEL ALL ELECTRICALLY HEAT-TRACED PIPE WITH "ELECTRIC TRACED" LABEL ON ALTERNATE SIDES OF PIPE EVERY 10 FEET.

NOTES:

1. ALL ELECTRICAL WORK IN THIS AREA SHALL CONFORM TO NFPA 70 (NEC) CLASS 1, DIVISION 2, GROUP D EXPLOSIVE ATMOSPHERE UNLESS OTHERWISE NOTED. PROVIDE SEALS AND EQUIPMENT RATED FOR AREA.
2. CONTRACTOR TO REMOVE EXISTING LIGHT FIXTURES & CONDUIT.
3. SEE DWG. 83533-E-001-D FOR MOTOR STARTER AND POWER PANEL LAYOUTS.
4. STARTERS & CONTROLS FOR FANS BY HVAC CONTRACTOR.
5. ELECTRICAL SIZING FOR ALL PUMPS ARE BASED ON 10 HORSEPOWER. CONTRACTOR TO COORDINATE WITH AKZO NOBEL FOR FINAL HORSEPOWERS.
6. AIR UNIT DISCONNECT TO BE FUSED. CONTRACTOR SHALL COORDINATE FUSE TYPE & SIZE WITH EQUIPMENT SUPPLIER.



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REV	DESCRIPTION		BY	DATE	APPROVAL
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			PENTA PENTA ENGINEERING, P.A. 7956 NORTH POINT BLVD. WINSTON-SALEM, N.C. 27108 (960)756-7401 (366)756-7402 (Fax)		
SCALE 1/4"=1'-0"			DATE		
DESIGNED BY D.C. DOBROWSKI			4/04/03		
DRAWN BY J.D. HELMS			4/04/03		
CHECKED BY K.G. LEPPERT			4/11/03		
APPROVAL M.G. MOTT					
APPROVAL					
CAD FILE NUMBER 533E005D.dwg					
			PROJECT NO. 83533		DRAWING NO. 83533-E-005-D
			CLIENT NO.		
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