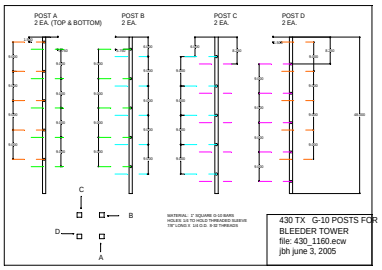
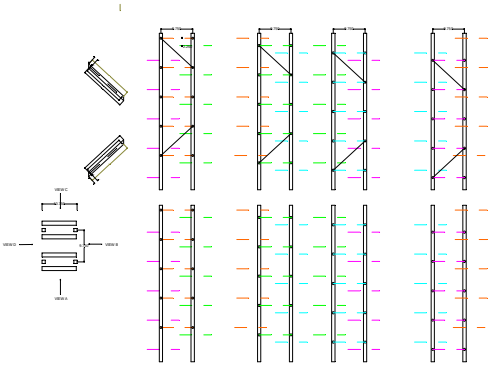
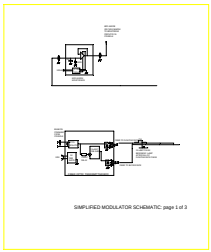
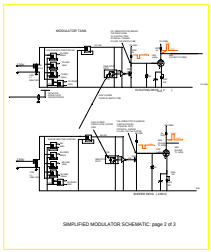
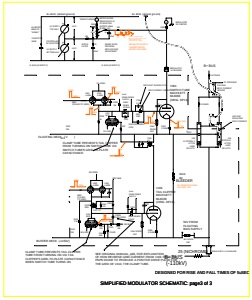
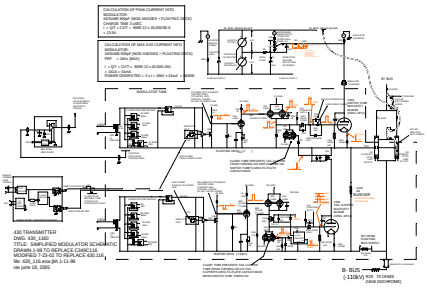

POST A
2 EA. (TOP & BOTTOM)
POST B
2 EA.
POST C
2 EA.
POST D
2 EA.
C
B
D
A
MATERIAL: 1" SQUARE G-10 BARS
HOLES: 1/4 TO HOLD THREADED SLEEVE
7/8" LONG X 1/4 O.D. 8-32 THREADS
430 TX G-10 POSTS FOR
BLEEDER TOWER
file: 430_1160.ecw
jbh june 3, 2005

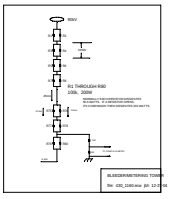
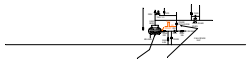



SIMPLIFIED MODULATOR SCHEMATIC: page 1 of 3


SIMPLIFIED MODULATOR SCHEMATIC: page 2 of 3


SIMPLIFIED MODULATOR SCHEMATIC: page3 of 3
DESIGNED FOR RISE AND FALL TIMES OF 5uSEC


CALCULATION OF PEAK CURRENT INTO
MODULATOR
CHARGE TIME (MOD ANODE = FILDATRX3 GRID)
CHARGE TIME 5 uSEC
I = QT = CVT = 5000 12 x 45,000/38 =
I = 1.58A
CALCULATION OF MAX AVG CURRENT INTO
MODULATOR
DISCHARGE TIME (MOD ANODE = FILDATRX3 GRID)
PRF = 1kHz (MAX)
I = QT = CVT = 5000 12 x 45,000/ 300
= 300 x 45mA
POWER DISSIPATED = V x I = 45kV x 0.0045 = 203kW
430 TRANSMITTER
DWG. 430_1161
SIMPLIFIED MODULATOR SCHEMATIC
DRAWN 1-99 TO REPLACE C1001C116
MODIFIED 7-22-02 TO REPLACE 430.116
file: 430_116.ecw jbh 1-11-99
rev june 18, 2005
B- BUS
(-110kV)
POS. 25 DAVIS
5MW (NICHROME)


90kV
R1 THROUGH R30
10lb. 200W
BLEEDER/METERING TOWER
file: 430_1160.ecw jbh 12-12-04