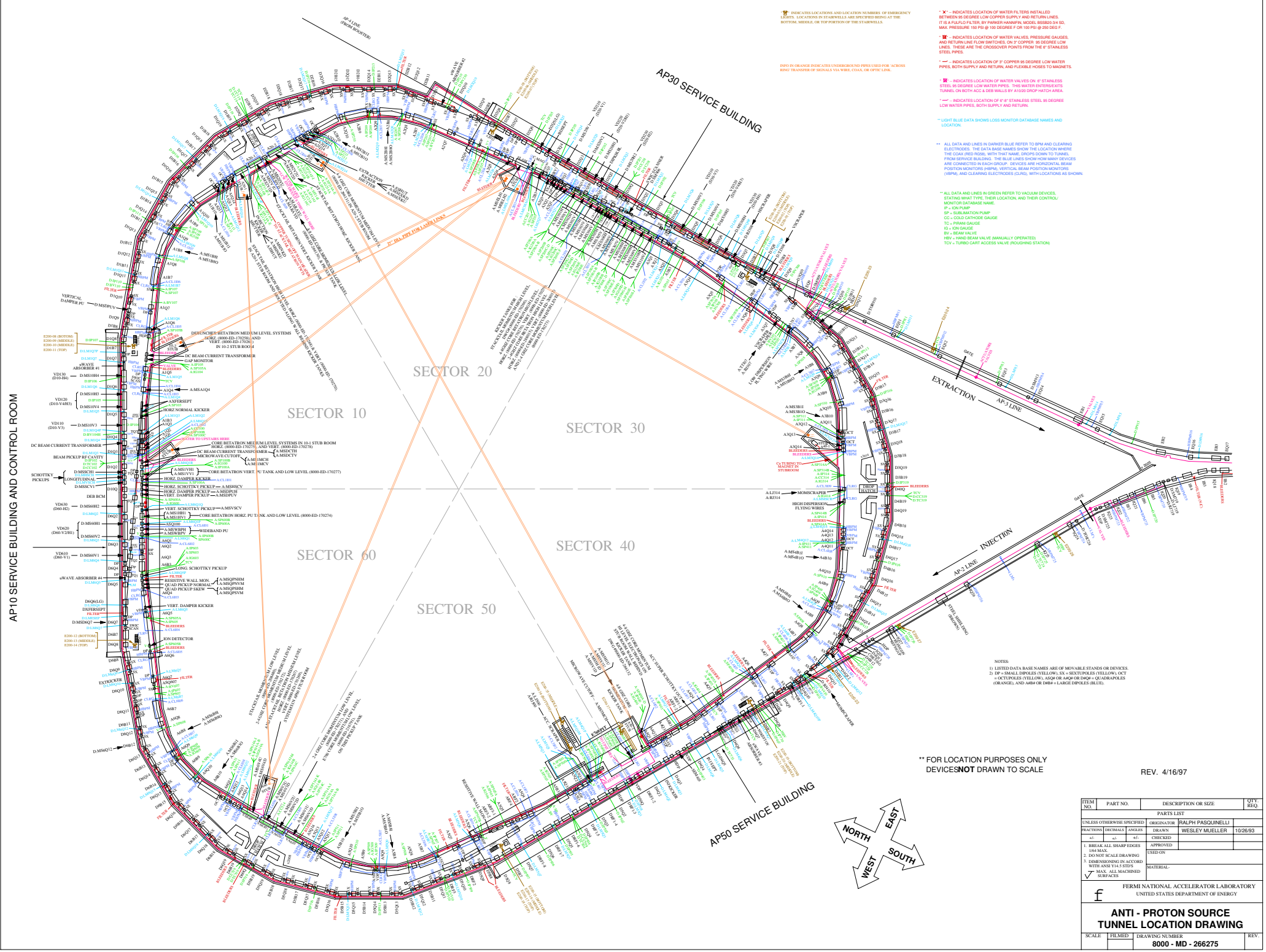
REV.	DESCRIPTION	DRAWN / APPD.	DATE / DATE



INDICATES LOCATIONS AND LOCATION NUMBERS OF EMERGENCY LIGHTS. LOCATIONS IN STAIRWELLS ARE SPECIFIED BEING AT THE BOTTOM, MIDDLE, OR TOP PORTION OF THE STAIRWELLS.

INFO IN ORANGE INDICATES UNDERGROUND PIPES USED FOR ACROSS RING TRANSFER OF SIGNALS VIA WIRE, COAX, OR OPTIC LINK.

" X " – INDICATES LOCATION OF WATER FILTERS INSTALLED BETWEEN 95 DEGREE LOW COPPER SUPPLY AND RETURN LINES. IT IS A FULFLO FILTER, BY PARKER HANNIFIN, MODEL BSSB20-3/4 SD, MAX. PRESSURE 150 PSI @ 100 DEGREE F OR 100 PSI @ 250 DEG F.

" X " – INDICATES LOCATION OF WATER VALVES, PRESSURE GAUGES, AND RETURN LINE FLOW SWITCHES, ON 3" COPPER 95 DEGREE LOW LINES. THESE ARE THE CROSSOVER POINTS FROM THE 6" STAINLESS STEEL PIPES.

" — " – INDICATES LOCATION OF 3" COPPER 95 DEGREE LOW WATER PIPES, BOTH SUPPLY AND RETURN, AND FLEXIBLE HOSES TO MAGNETS.

" X " – INDICATES LOCATION OF WATER VALVES ON 6" STAINLESS STEEL 95 DEGREE LOW WATER PIPES. THIS WATER ENTERS/EXITS TUNNEL ON BOTH ACC & DEB WALLS BY A10/20 DROP HATCH AREA.

" — " – INDICATES LOCATION OF 6"-8" STAINLESS STEEL 95 DEGREE LOW WATER PIPES, BOTH SUPPLY AND RETURN.

** LIGHT BLUE DATA SHOWS LOSS MONITOR DATABASE NAMES AND LOCATION.

** ALL DATA AND LINES IN DARKER BLUE REFER TO BPM AND CLEARING ELECTRODES. THE DATA BASE NAMES SHOW THE LOCATION WHERE THE COAX (RED RG58), WITH THAT NAME, DROPS DOWN TO TUNNEL FROM SERVICE BUILDING. THE BLUE LINES SHOW HOW MANY DEVICES ARE CONNECTED IN EACH GROUP. DEVICES ARE HORIZONTAL BEAM POSITION MONITORS (HBPM), VERTICAL BEAM POSITION MONITORS (VBPM), AND CLEARING ELECTRODES (CLRG), WITH LOCATIONS AS SHOWN.

** ALL DATA AND LINES IN GREEN REFER TO VACUUM DEVICES, STATING WHAT TYPE, THEIR LOCATION, AND THEIR CONTROL/ MONITOR DATABASE NAME.
IP = ION PUMP
SP = SUBLIMATION PUMP
CC = COLD CATHODE GAUGE
TC = PIRANI GAUGE
IG = ION GAUGE
BV = BEAM VALVE
HBV = HAND BEAM VALVE (MANUALLY OPERATED)
TCV = TURBO CART ACCESS VALVE (ROUGHING STATION)

NOTES:
1) LISTED DATA BASE NAMES ARE OF MOVABLE STANDS OR DEVICES.
2) DP = SMALL DIPOLES (YELLOW), SX = SEXTUPOLES (YELLOW), OCT = OCTUPOLES (YELLOW), ASQ# OR A#Q# OR D#Q# = QUADRAPOLES (ORANGE), AND A#B# OR D#B# = LARGE DIPOLES (BLUE).

** FOR LOCATION PURPOSES ONLY
DEVICES **NOT** DRAWN TO SCALE

REV. 4/16/97

ITEM NO.	PART NO.	DESCRIPTION OR SIZE	QTY. REQ.
PARTS LIST			

UNLESS OTHERWISE SPECIFIED			ORIGINATOR	RALPH PASQUINELLI	
FRACTIONS	DECIMALS	ANGLES	DRAWN	WESLEY MUELLER	10/26/93
+/-	+/-	+/-	CHECKED		
1. BREAK ALL SHARP EDGES 1/64 MAX.			APPROVED		
2. DO NOT SCALE DRAWING			USED ON		
3. DIMENSIONING IN ACCORD WITH ANSI Y14.5 STD'S			MATERIAL-		
MAX. ALL MACHINED SURFACES					

FERMI NATIONAL ACCELERATOR LABORATORY
UNITED STATES DEPARTMENT OF ENERGY

ANTI - PROTON SOURCE TUNNEL LOCATION DRAWING

SCALE	FILMED	DRAWING NUMBER	REV.
		8000 - MD - 266275	