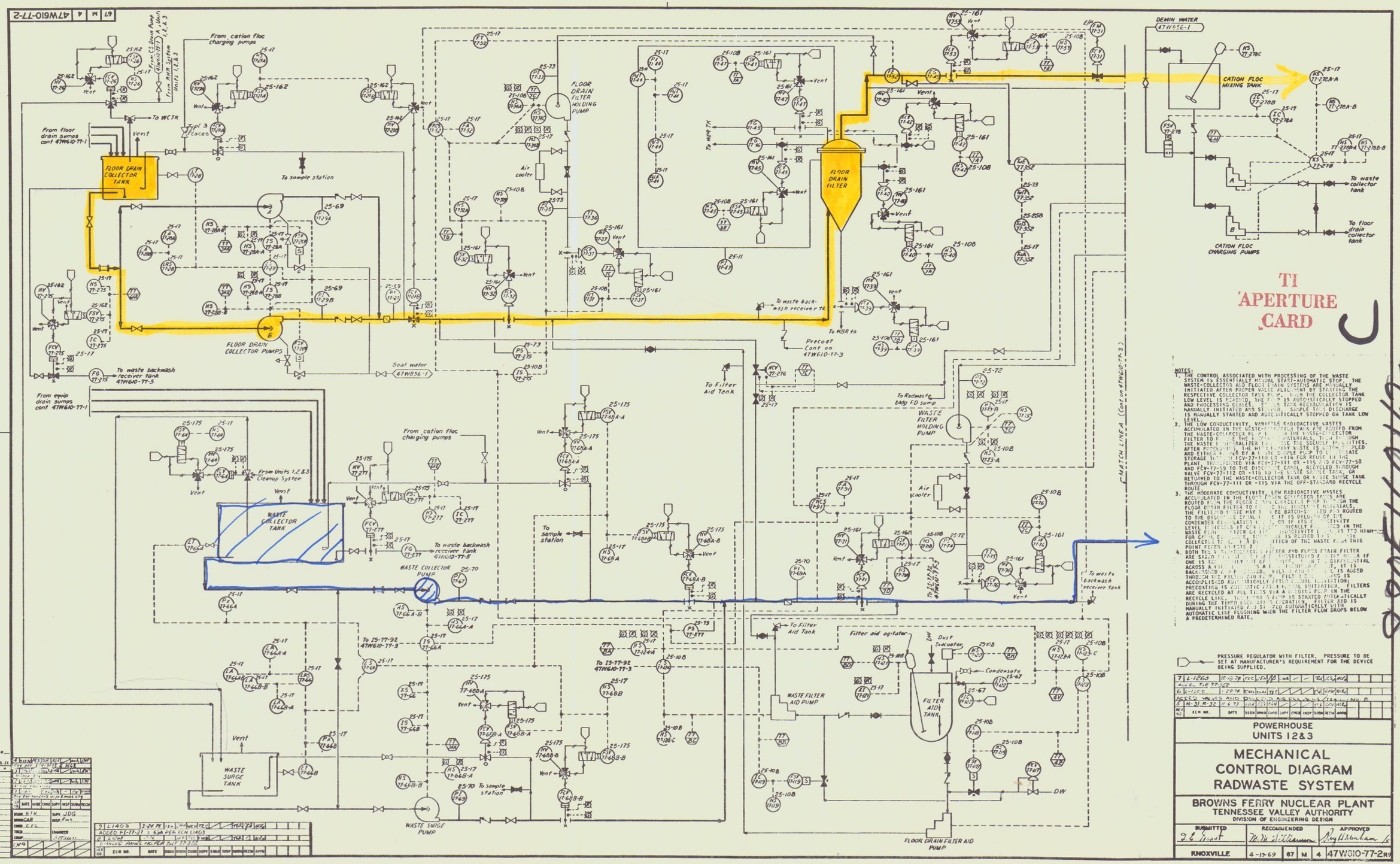

TI APERTURE CARD

NOTES:

1. THE CONTROL ASSOCIATED WITH PROCESSING OF THE WASTE SYSTEM IS ESSENTIALLY MANUAL START-AUTOMATIC STOP. THE WASTE-COLLECTOR AND FLOOR DRAIN SYSTEMS ARE MANUALLY INITIATED AFTER PROPER VALVE ALIGNMENT BY STARTING THE RESPECTIVE COLLECTOR TANK PUMP. WHEN THE COLLECTOR TANK LOW LEVEL IS REACHED, THE PUMP IS AUTOMATICALLY STOPPED AND PROCESSING CEASES. [illegible] TANK RECIRCULATION IS MANUALLY INITIATED AND STOPPED. SAMPLE TANK DISCHARGE IS MANUALLY STARTED AND AUTOMATICALLY STOPPED ON TANK LOW LEVEL.
2. THE LOW CONDUCTIVITY, VARIABLE RADIOACTIVE WASTES ACCUMULATED IN THE WASTE-COLLECTOR TANK ARE ROUTED FROM THE WASTE-COLLECTOR PUMP [illegible] THE WASTE-COLLECTOR FILTER TO REMOVE THE INSOLUBLE MATERIALS, THROUGH THE WASTE DEMINERALIZER TO REMOVE THE SOLUBLE IMPURITIES. AFTER PROCESSING, THE HIGH PURITY WASTE IS COLLECTED, SAMPLED AND EITHER PUMPED BY A WASTE SURGE PUMP TO CONDENSATE STORAGE THROUGH FCV-77-110 OR -114 FOR REUSE IN THE PLANT, TRANSFERRED VIA FCV-77-111 OR -115 AND FCV-77-58 AND FCV-77-59 TO THE DISCHARGE CANAL, RECYCLED THROUGH VALVE FCV-77-112 OR -116 TO THE WASTE SURGE TANK, OR RETURNED TO THE WASTE-COLLECTOR TANK OR WASTE SURGE TANK THROUGH FCV-77-111 OR -115 VIA THE OFF-STANDARD RECYCLE ROUTE.
3. THE MODERATE CONDUCTIVITY, LOW RADIOACTIVE WASTES ACCUMULATED IN THE FLOOR DRAIN COLLECTOR TANKS ARE ROUTED FROM THE FLOOR DRAIN COLLECTOR PUMP THROUGH THE FLOOR DRAIN FILTER TO REMOVE THE INSOLUBLE MATERIALS. THE FILTERED WASTE MAY THEN BE BATCH-SAMPLED AND ROUTED TO THE DISCHARGE CANAL IF IT IS DILUTED TO THE CONDENSER CIRCULATING WATER OR IF ITS CONDUCTIVITY LEVEL INDICATES IT CAN BE RECEIVED IN THE WASTE FILTER. WHEN CONDUCTIVITY LEVEL IS TOO HIGH FOR CANAL DISCHARGE, IT IS ROUTED TO THE COLLECTOR TANK FOR DISPOSITION OF THE WASTE FROM THIS POINT REFER TO NOTE 2.
4. BOTH THE WASTE-COLLECTOR FILTER AND FLOOR DRAIN FILTER ARE SIZED [illegible] SUBSTITUTED FOR THE OTHER IF ONE IS REQUIRED. THERE IS A DIFFERENTIAL ACROSS A FILTER. WHEN IT IS BACKWASHED AND PRECOATED, FILTER AID IS ADDED THROUGH THE FILTER AID PUMP. FILTERING IS ACCOMPLISHED AUTOMATICALLY AFTER MANUAL INITIATION. PRECOATING IS AUTOMATIC AFTER MANUAL INITIATION. FILTERS ARE RECYCLED AT ALL TIMES VIA A DIFFERENTIAL PUMP IN THE RECYCLE LINE. THE PRECOAT PUMP IS STARTED AUTOMATICALLY DURING THE TIMED BACKWASH CYCLE. FILTER AID IS MANUALLY INITIATED AND STOPPED AUTOMATICALLY WITH AUTOMATIC LINE FLUSHING WHEN THE FILTER FLOW DROPS BELOW A PREDETERMINED RATE.

PRESSURE REGULATOR WITH FILTER. PRESSURE TO BE SET AT MANUFACTURER'S REQUIREMENT FOR THE DEVICE BEING SUPPLIED.

REV NO.	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	INSP	SUBM	RECM	APPR
7	L-1263	10-15-76	TEC	LEA	JD	LMB	—	—	RC	JCS	[illegible]
6	L-1206	1-29-74	CMB	JCM	TEC				RK	CPM	WEC
5	M-31, M-32	11-6-73	JHB	[illegible]					TEC	CPM	WEC

ADDED VALVES AND DELETED AIR ESCAPES (Eng. No. 6)

POWERHOUSE
UNITS 1 2 & 3

MECHANICAL CONTROL DIAGRAM RADWASTE SYSTEM

BROWNS FERRY NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

SUBMITTED	RECOMMENDED	APPROVED
J. E. Grant	W. H. Sellemson	Roy H. Sternhaus Jr.

KNOXVILLE | 4-17-69 | 67 | M | 4 | 47W610-77-2 R9

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