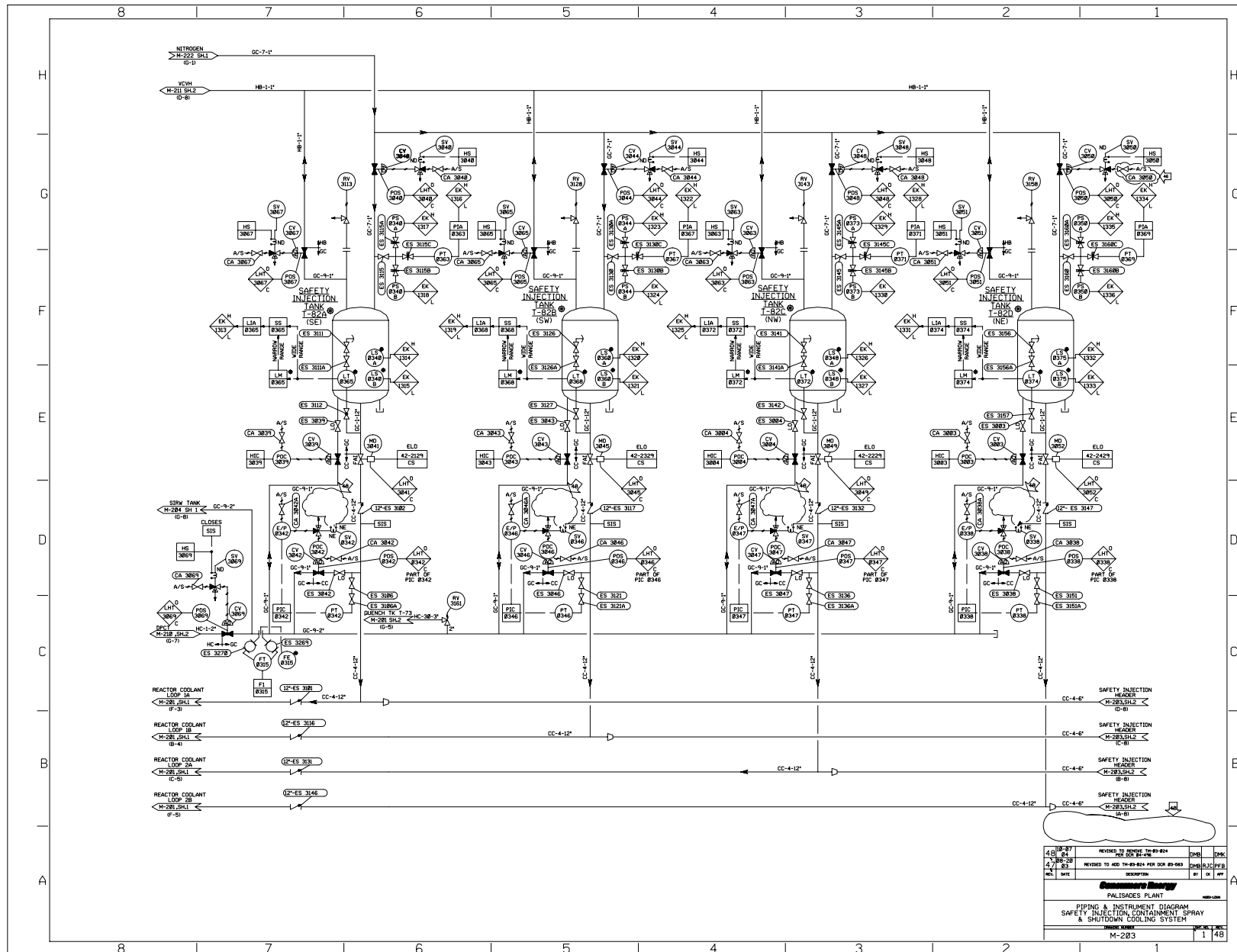
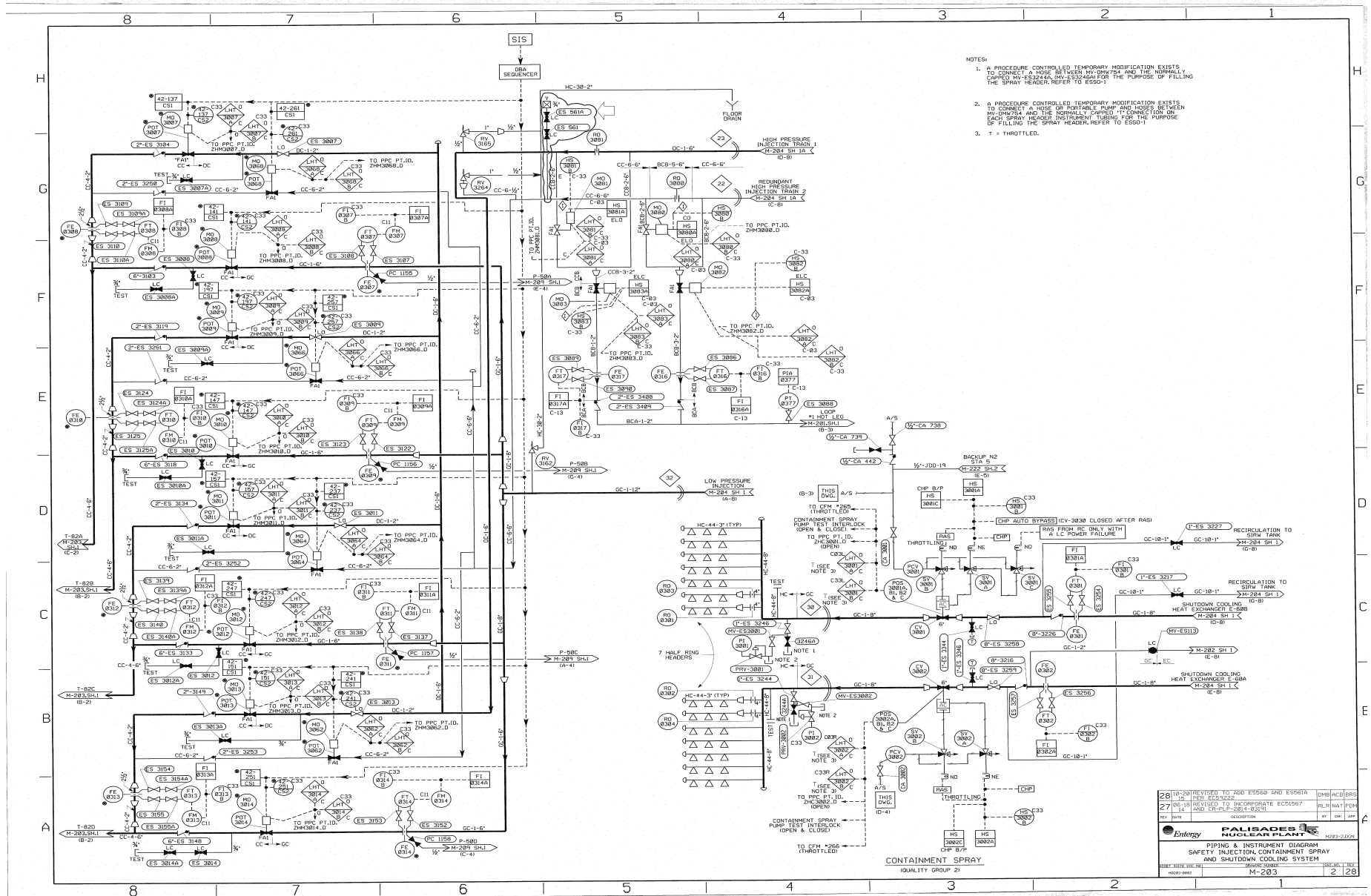


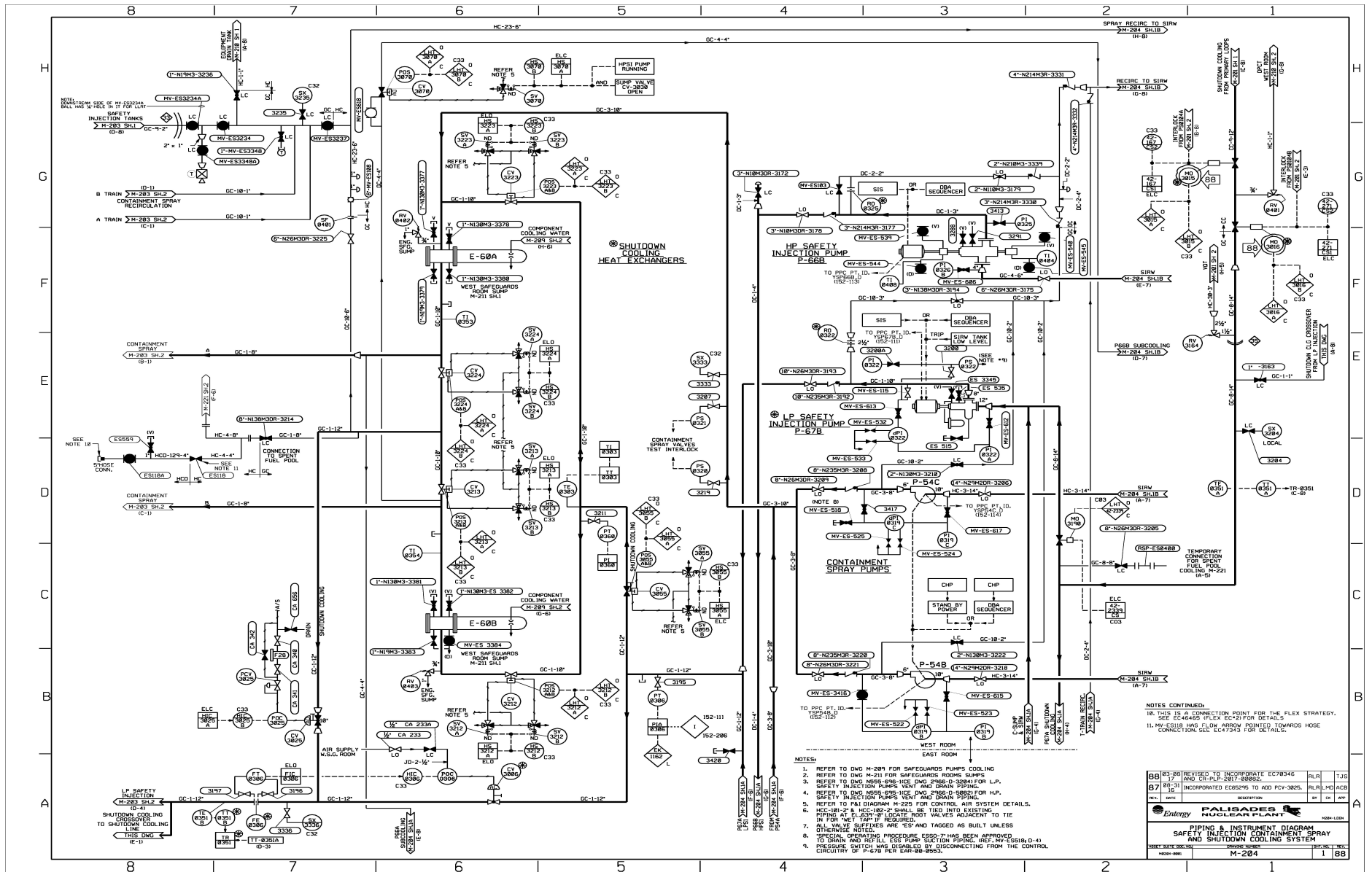
PIPING & INSTRUMENT DIAGRAM
SAFETY INJECTION CONTAINMENT SPRAY AND SHUTDOWN COOLING SYSTEM



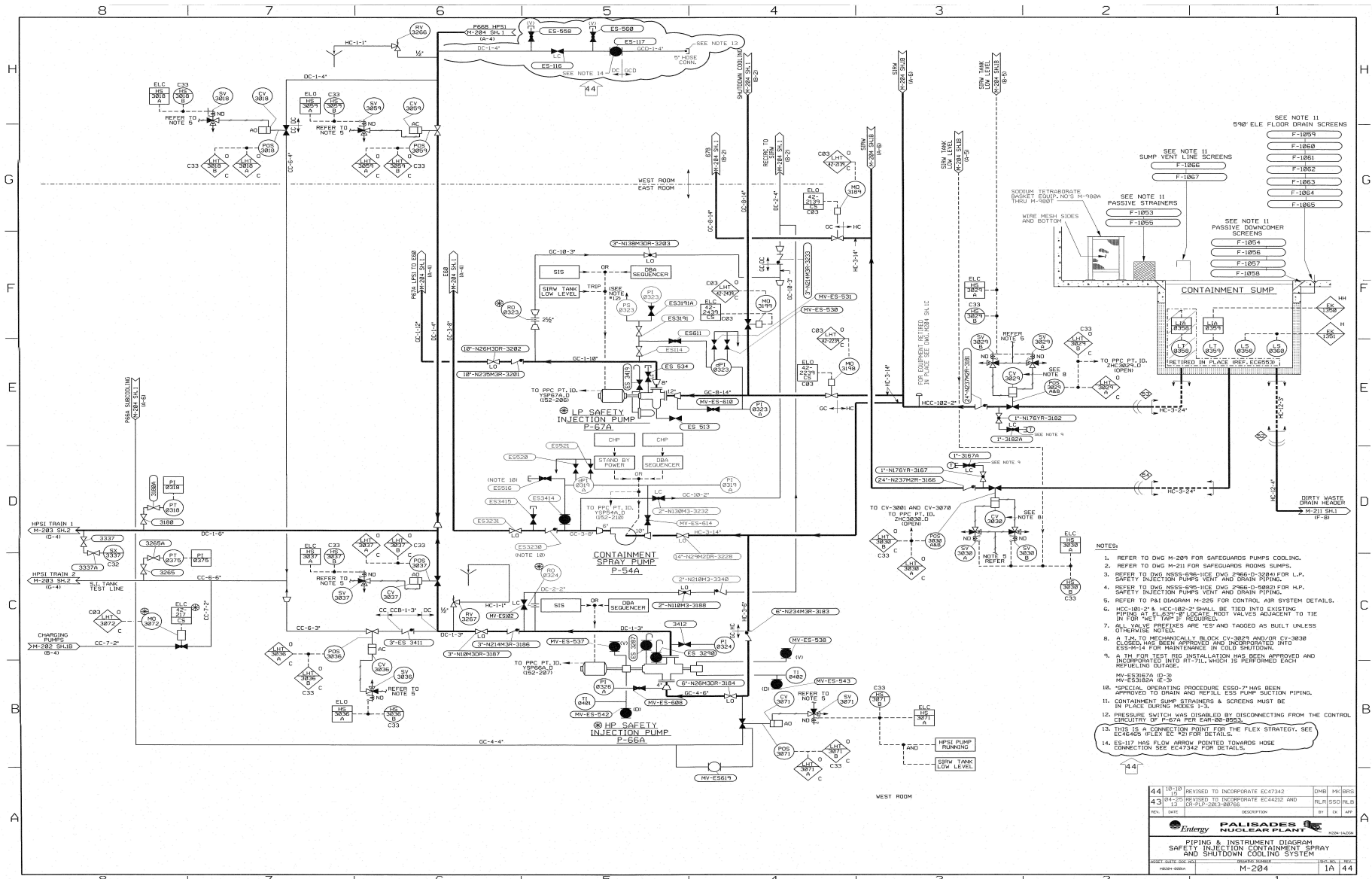
PIPING & INSTRUMENT DIAGRAM
SAFETY INJECTION CONTAINMENT SPRAY AND SHUTDOWN COOLING SYSTEM



PIPING & INSTRUMENT DIAGRAM
SAFETY INJECTION CONTAINMENT SPRAY AND SHUTDOWN COOLING SYSTEM



PIPING & INSTRUMENT DIAGRAM
SAFETY INJECTION CONTAINMENT SPRAY AND SHUTDOWN COOLING SYSTEM



- NOTES:
1. REFER TO DWG M-209 FOR SAFEGUARDS PUMPS COOLING.
 2. REFER TO DWG M-211 FOR SAFEGUARDS ROOMS SLUMPS.
 3. REFER TO DWG M-210 FOR SAFEGUARDS PUMPS VENT AND DRAIN PIPING.
 4. REFER TO DWG M-208 FOR SAFEGUARDS PUMPS VENT AND DRAIN PIPING.
 5. REFER TO P&I DIAGRAM M-220 FOR CONTROL AIR SYSTEM DETAILS.
 6. HCC-101-2-A HCC-102-2-A SHALL BE TIED INTO EXISTING PIPING AT 1/2" DIA. 1/2" HOLE DWG. 2988-D-028A FOR HP SAFETY INJECTION PUMPS VENT AND DRAIN PIPING.
 7. ALL VALVE PREFIXES ARE 'ES' AND TAGGED AS BUILT UNLESS OTHERWISE NOTED.
 8. A 1/4" DIA. MECHANICALLY BLOCK CV-3024 AND/OR CV-3030 (ES-112) HAS BEEN APPROVED AND INCORPORATED INTO ES-112 FOR MAINTENANCE IN COLLOCATION.
 9. A 1/4" FOR TEST RID INSTALLATION HAS BEEN APPROVED AND INCORPORATED INTO RID-17 WHICH IS PERFORMED EACH REFUELING OUTAGE.
 10. MV-ES132A (E-3) MV-ES135A (E-3)
 11. SPECIAL OPERATING PROCEDURE ESSO-7 HAS BEEN APPROVED TO DRAIN AND REFILL ESS PUMP Suction PIPING.
 12. CONTAINMENT SUMP STRAINERS & SCREENS MUST BE IN PLACE DURING MEXES 3-5.
 13. THIS IS A CONNECTION POINT FOR THE FLEX STRATEGY. SEE EC48405 FLEX EC 42 FOR DETAILS.
 14. ES-112 HAS FLOW ARROW POINTED TOWARDS HOSE CONNECTION SEE EC47342 FOR DETAILS.

44	10-19	REVISED TO INCORPORATE EC47342	DHB	HL/SSC
43	01-20	REVISED TO INCORPORATE EC44132 AND EC44133	HL/SSC	HL/SSC
REV.	DATE	DESCRIPTION	BY	CHK

Entergy PALISADES NUCLEAR PLANT

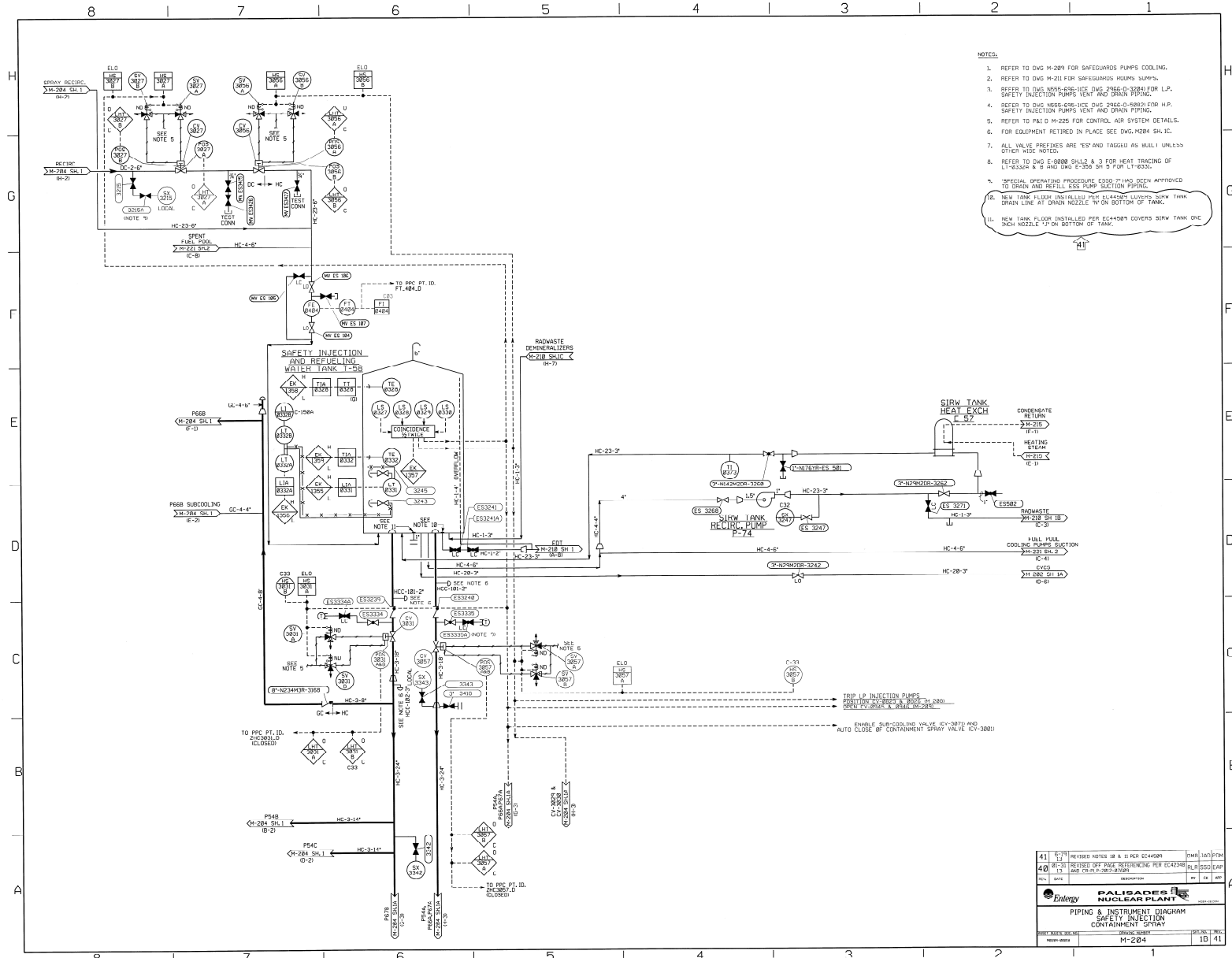
 PIPING & INSTRUMENT DIAGRAM

 SAFETY INJECTION CONTAINMENT SPRAY

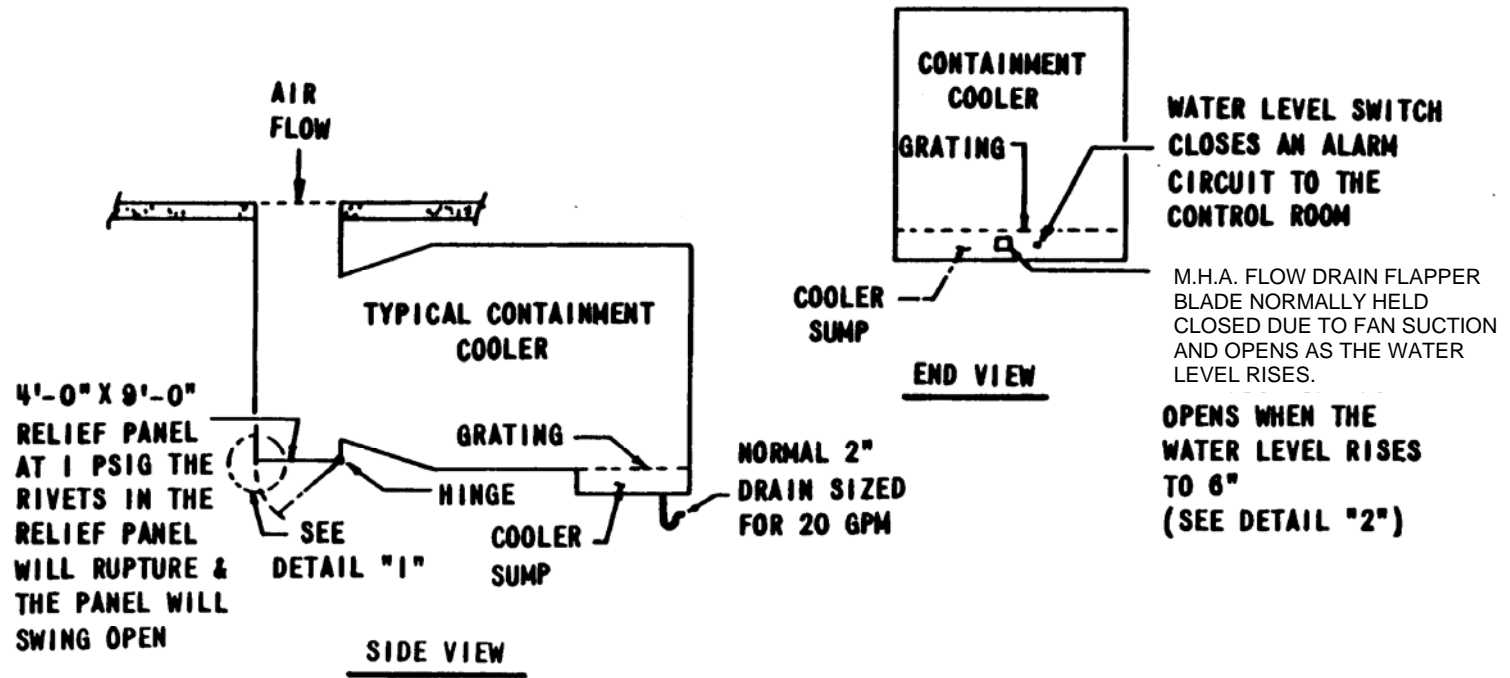
 AND SHUTDOWN COOLING SYSTEM

 SHEET NO. M-204 1A 44

PIPING & INSTRUMENT DIAGRAM
SAFETY INJECTION CONTAINMENT SPRAY

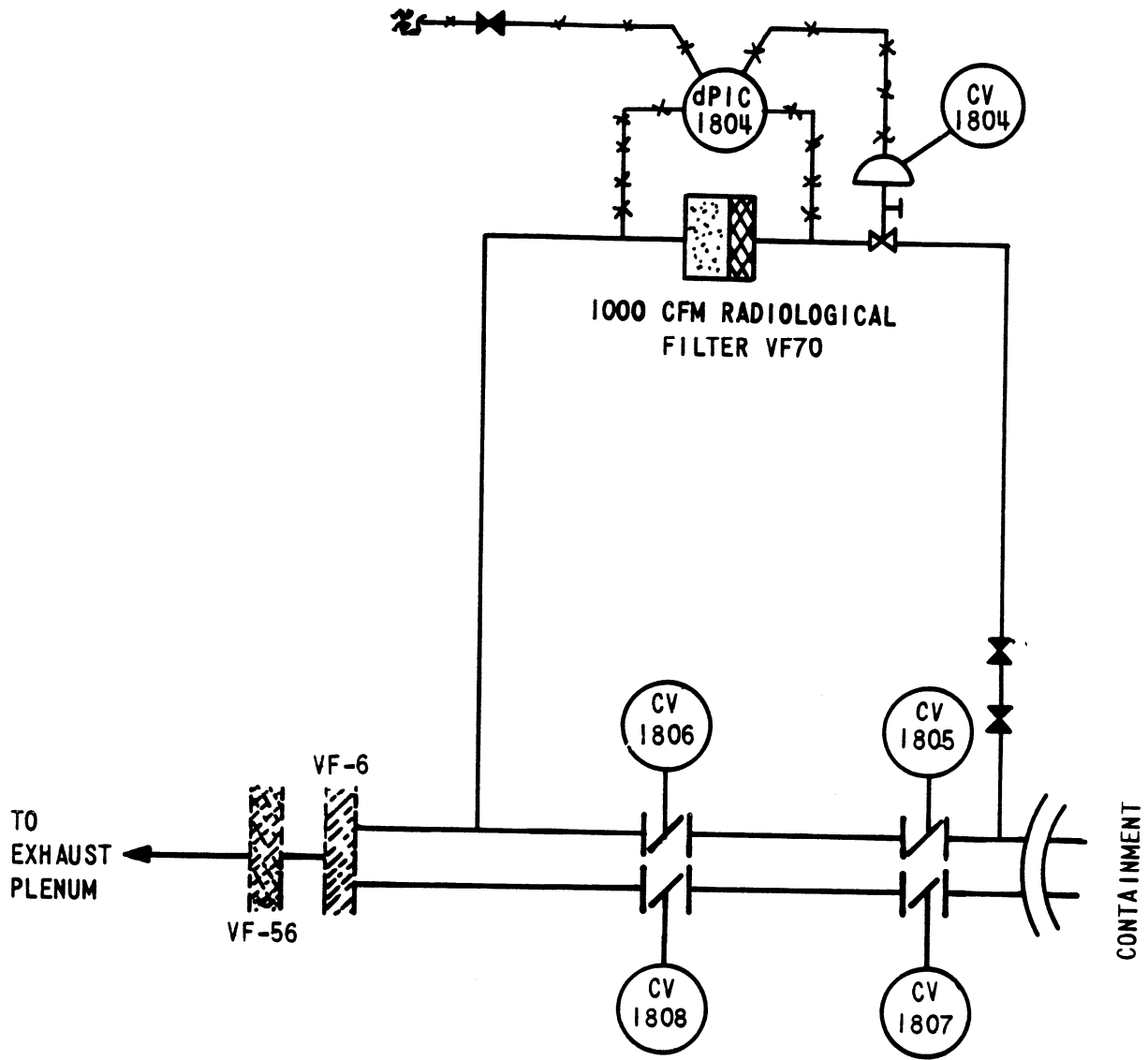


CONTAINMENT AIR COOLERS RELIEF PANEL & CONDENSATE DRAIN

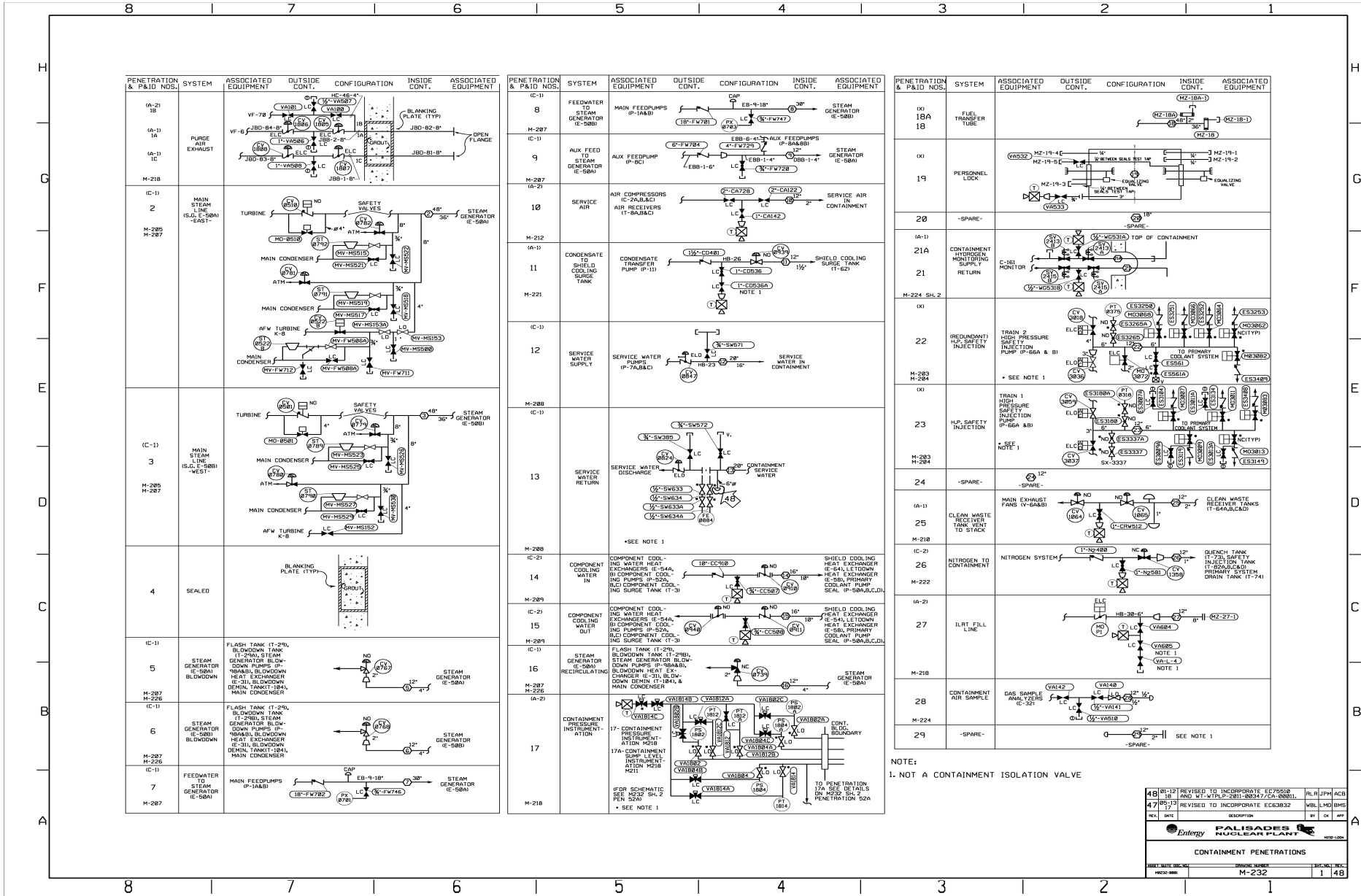


(TYPICAL - SEE PLANT DRAWING M-123 AND M-124 FOR ACTUAL "AS-BUILT" FOR EACH PANEL.)

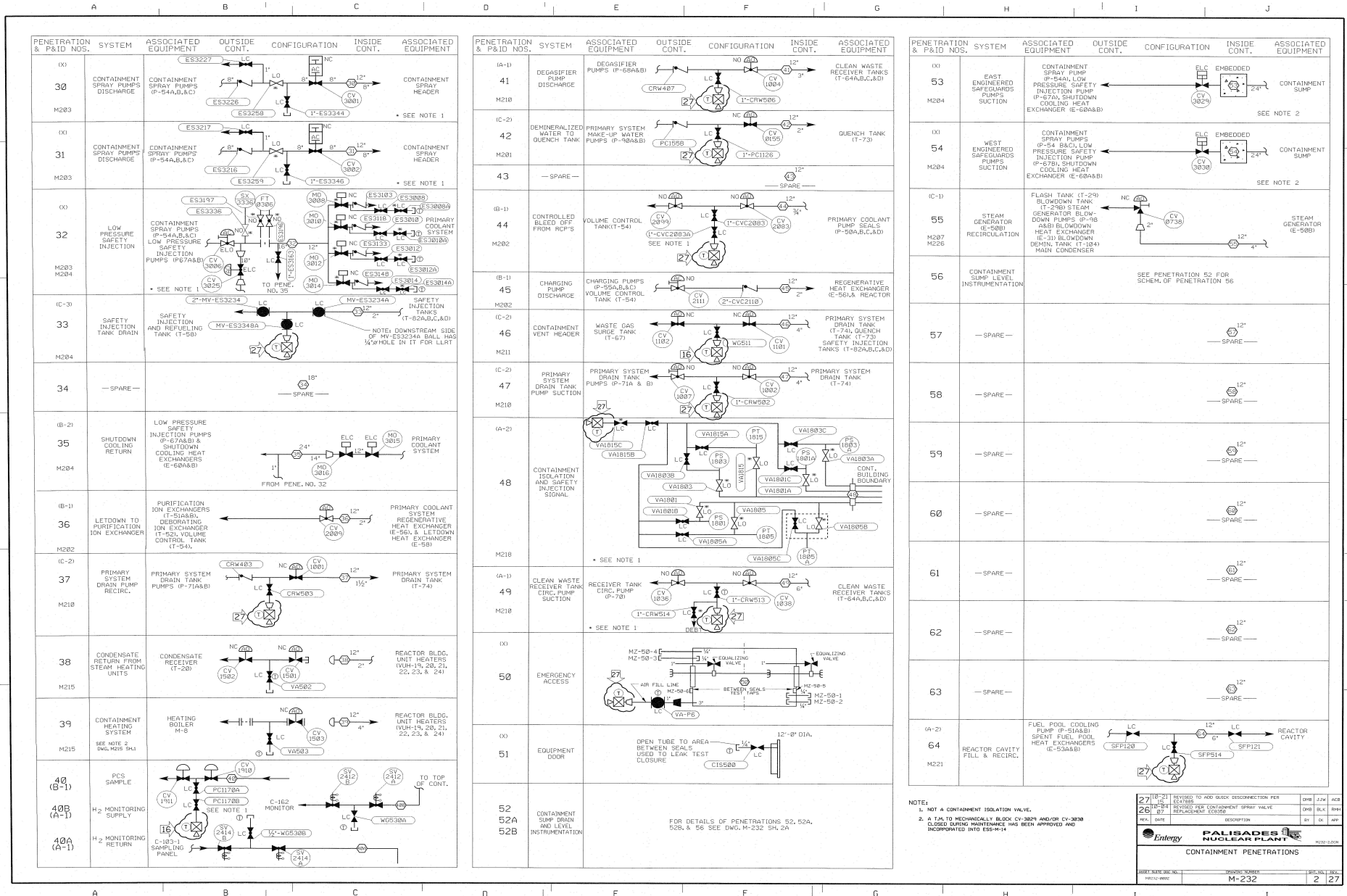
CONTAINMENT VENT FILTER



CONTAINMENT PENETRATIONS



CONTAINMENT PENETRATIONS



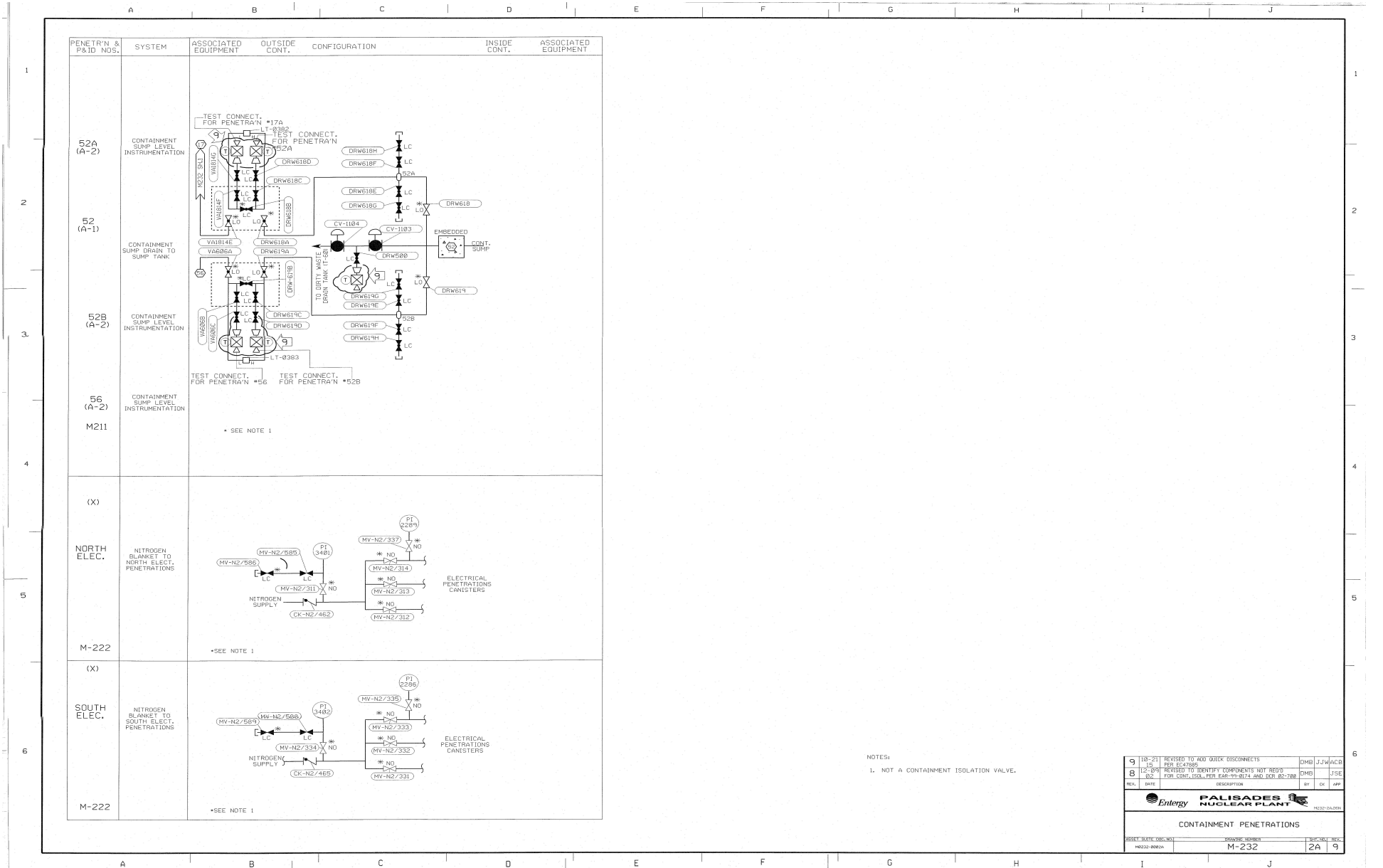
NOTE:
1. NOT A CONTAINMENT ISOLATION VALVE.
2. A T&L TO MECHANICALLY BLOCK CV-3024 AND/OR CV-3030 CLOSED DURING MAINTENANCE HAS BEEN APPROVED AND INCORPORATED INTO ES3614.

FOR DETAILS OF PENETRATIONS 52, 52A, 52B, & 56 SEE DWG. M-232 SH.2A

27	10-21	REVISED TO ADD QUICK DISCONNECTION PER EC4388	DWG	JWA	4/83
28	03-81	REVISED FOR CONTAINMENT SPRAY VALVE REPLACEMENT	DWG	BLK	8/84
REV.	DATE	DESCRIPTION	BY	DL	APP

Palisades Nuclear Plant
CONTAINMENT PENETRATIONS
M-232

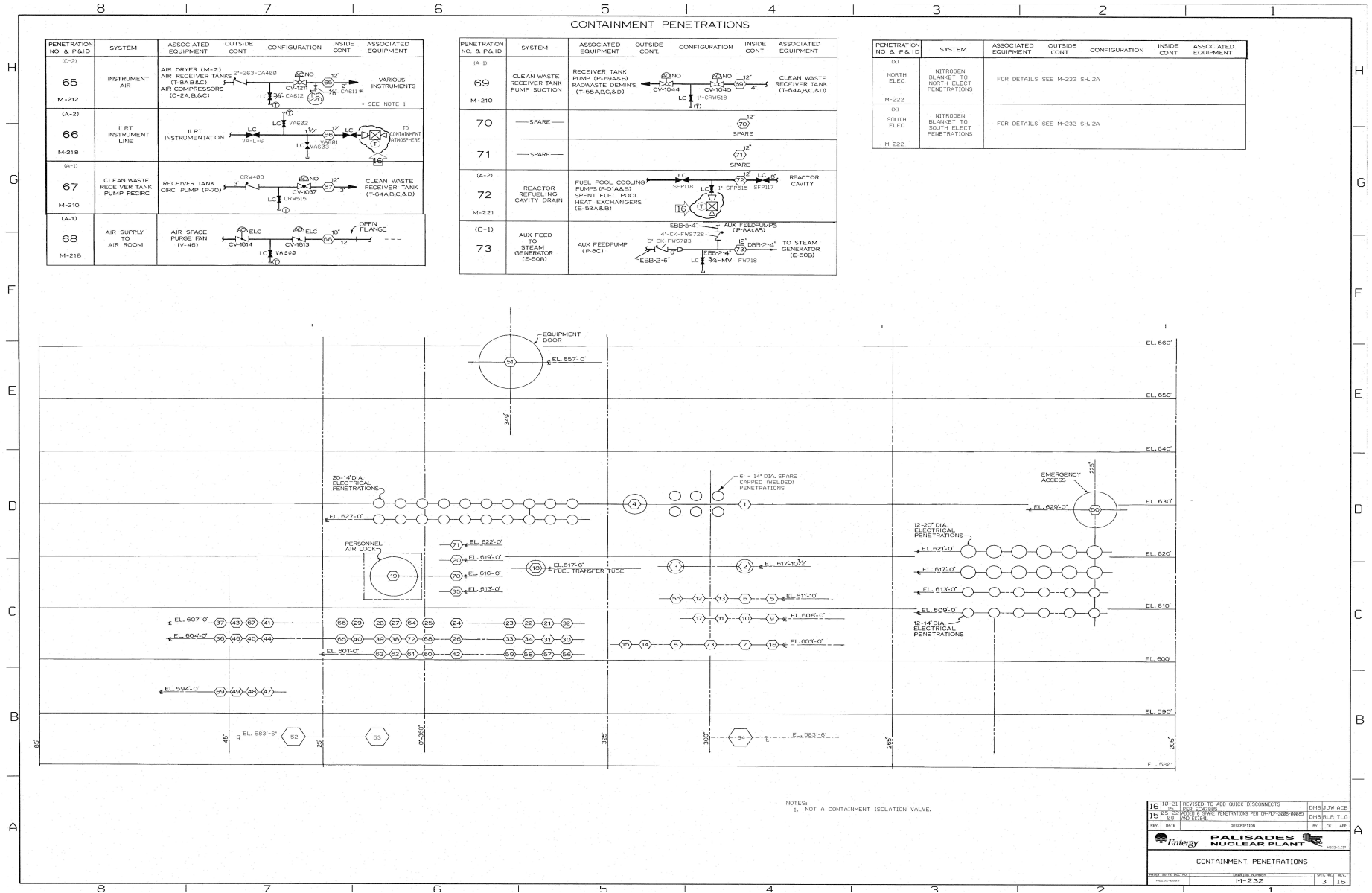
CONTAINMENT PENETRATIONS



NOTES:
1. NOT A CONTAINMENT ISOLATION VALVE.

9	10-21	REVISED TO ADD DDXK DISCONNECTS PER EC4788	DHD JJW/ACB
8	10-19	REVISED TO IDENTIFY COMPONENTS NOT REQUIRING CONT. ISOL. PER EAB-99-0174 AND DER 02-788	DHD JJC
REV.	DATE	DESCRIPTION	BY
FALISADES NUCLEAR PLANT			
CONTAINMENT PENETRATIONS			
DESIGN	DATE	ISSUE NUMBER	SHEET NO.
M-222-00000		M-232	2A 9

CONTAINMENT PENETRATIONS



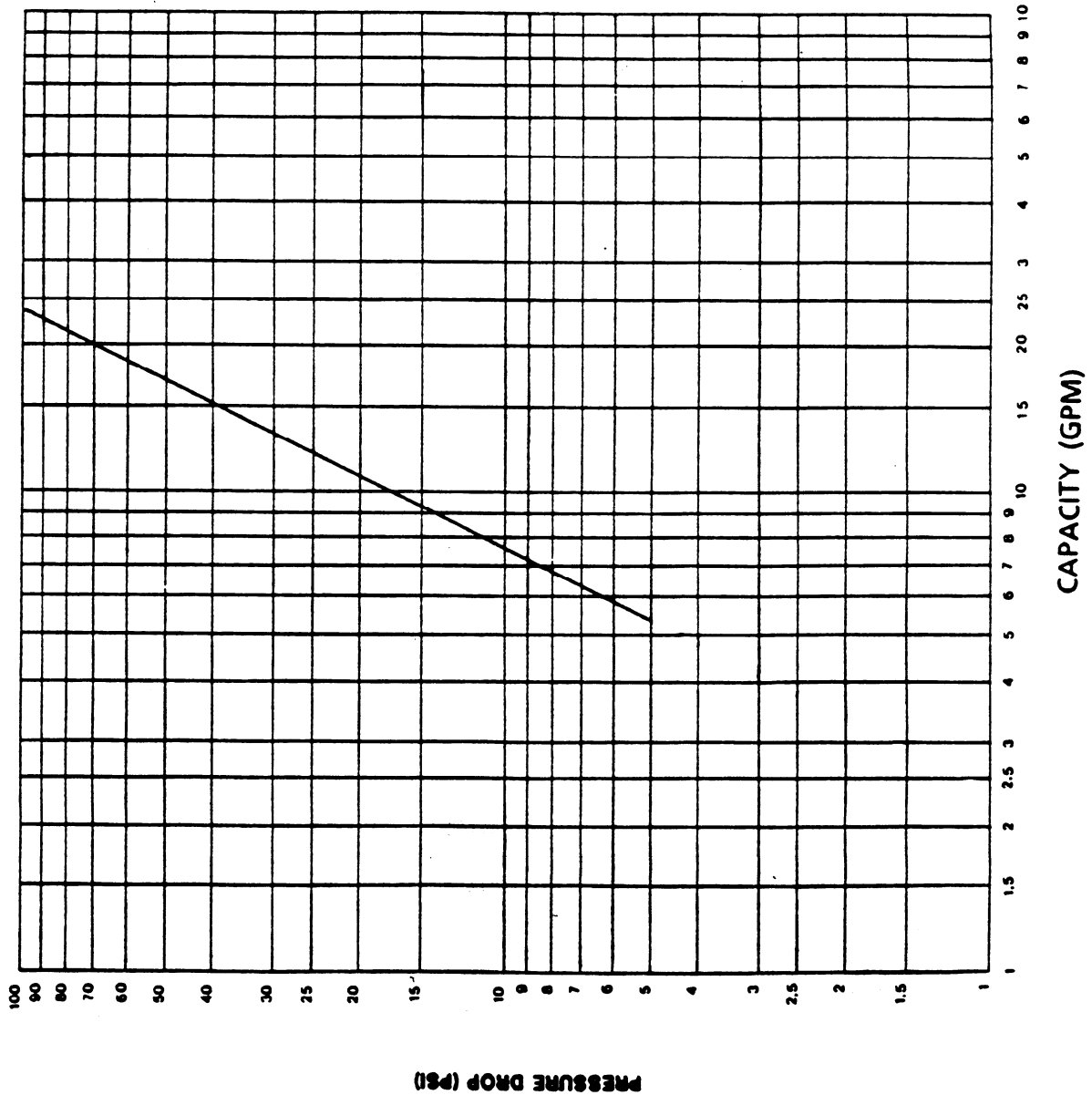
16	18-21	REVISED TO ADD "QUICK DISCONNECTS"	DMB/JW/JCB		
15	15	ADD DESCRIPTION	DMB/JW/JCB		
15	15-20	ADD "SPARE PENETRATIONS PER DS-REF-2088-88888"	DMB/JW/JCB		
REV.	DATE	DESCRIPTION	BY	CR	APP
Entergy		PALISADES NUCLEAR PLANT		3202-1011	
CONTAINMENT PENETRATIONS					
ISSUE NUMBER	REVISION NUMBER	DATE	BY	CR	APP
	M-232				16

REACTOR CAVITY FLOODING SYSTEM

Portions of this page have been
redacted per 10 CFR 2.390(d)(1).

CAPACITY CURVE 1713A NOZZLE

R-5334



NOTE:
MINIMUM FLOW IS 5.5 (GPM)

FLOW DATA

Pressure Drop (PSI)	Flow (GPM)
10	7.6
20	10.7
30	13.3
40	15.2
50	17.0