

Figure 7.2-9 Reactor Protection System IED (Sheet 1 of 11)

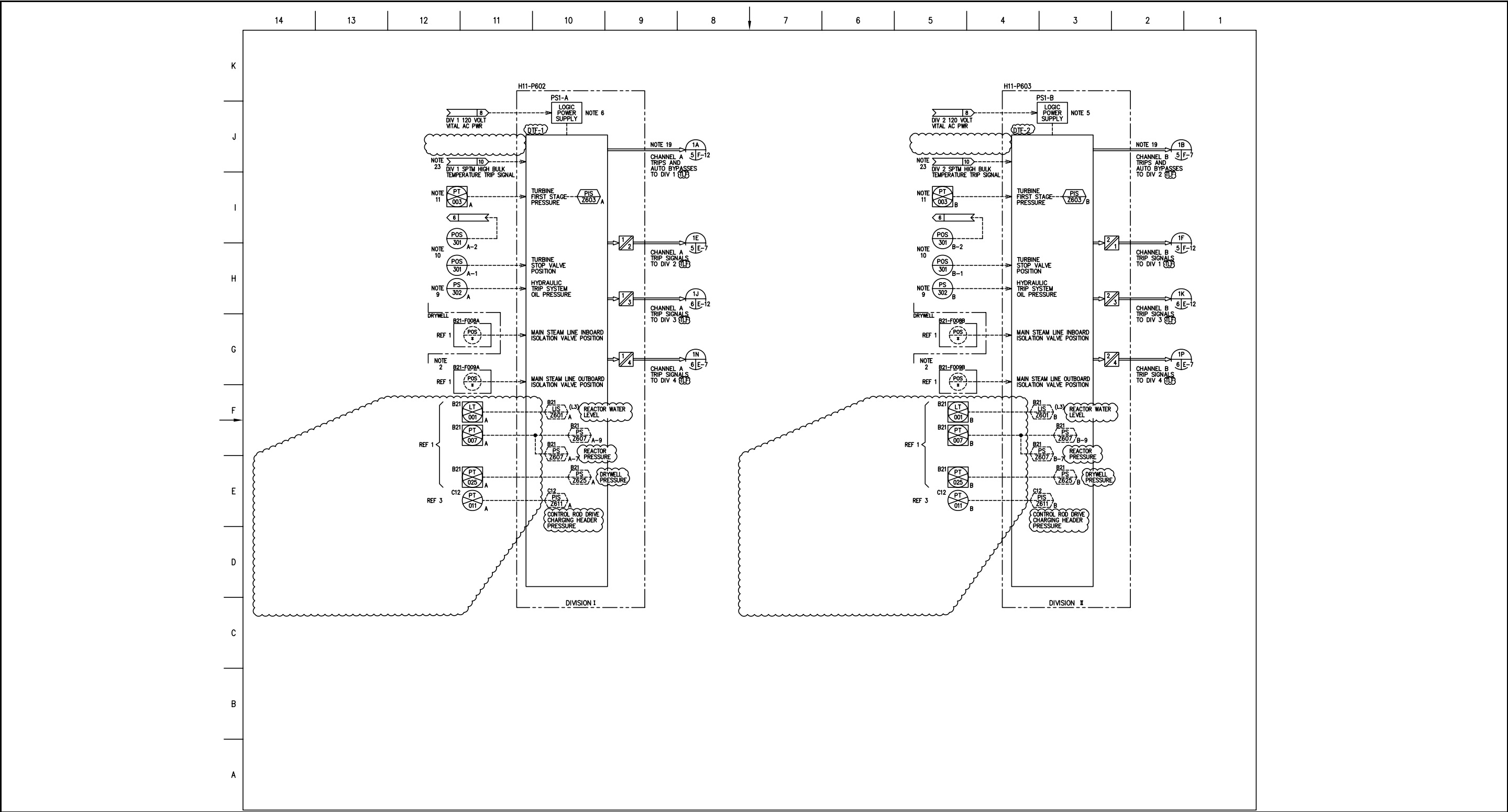


Figure 7.2-9 Reactor Protection System IED (Sheet 2 of 11)

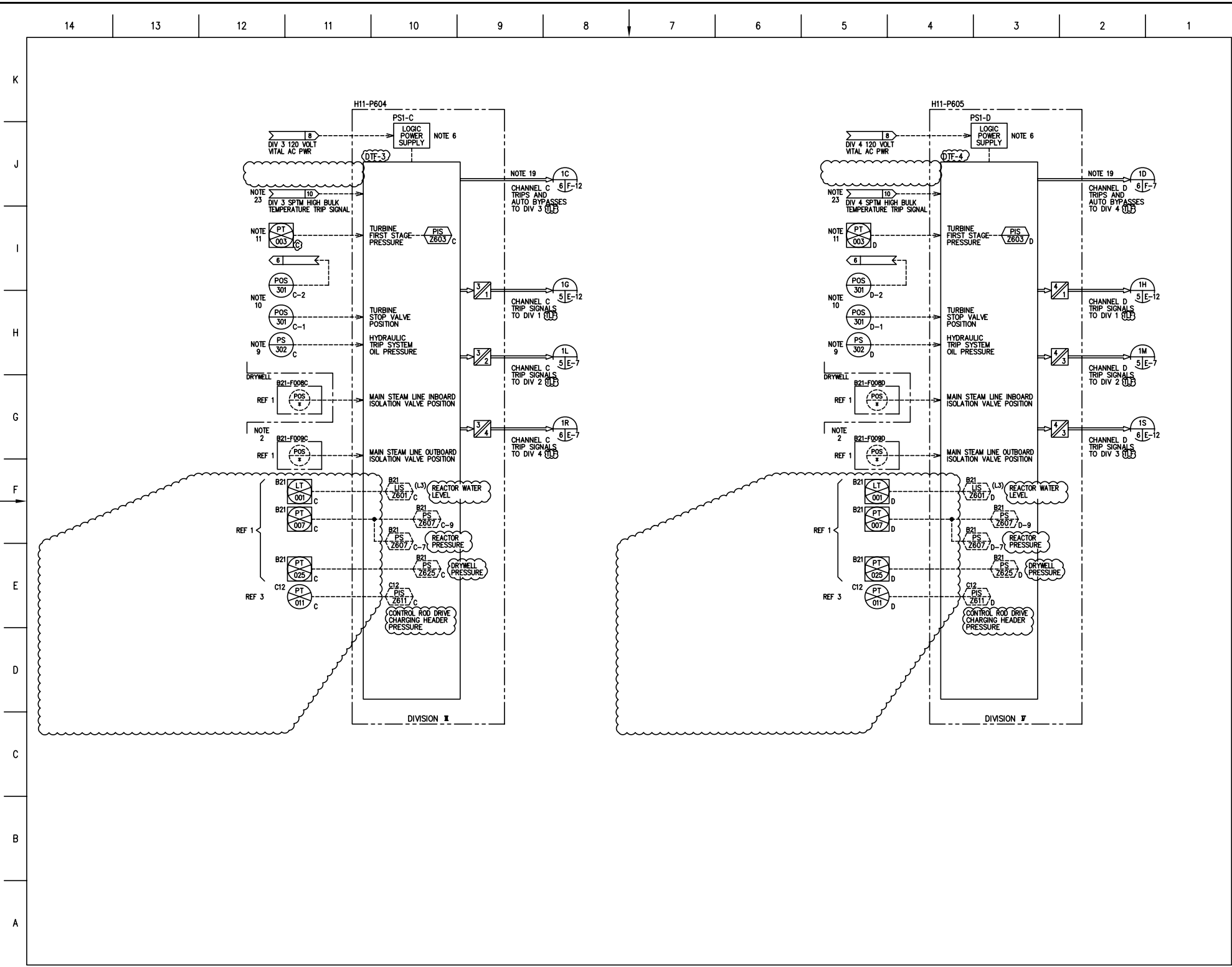


Figure 7.2-9 Reactor Protection System IED (Sheet 3 of 11)

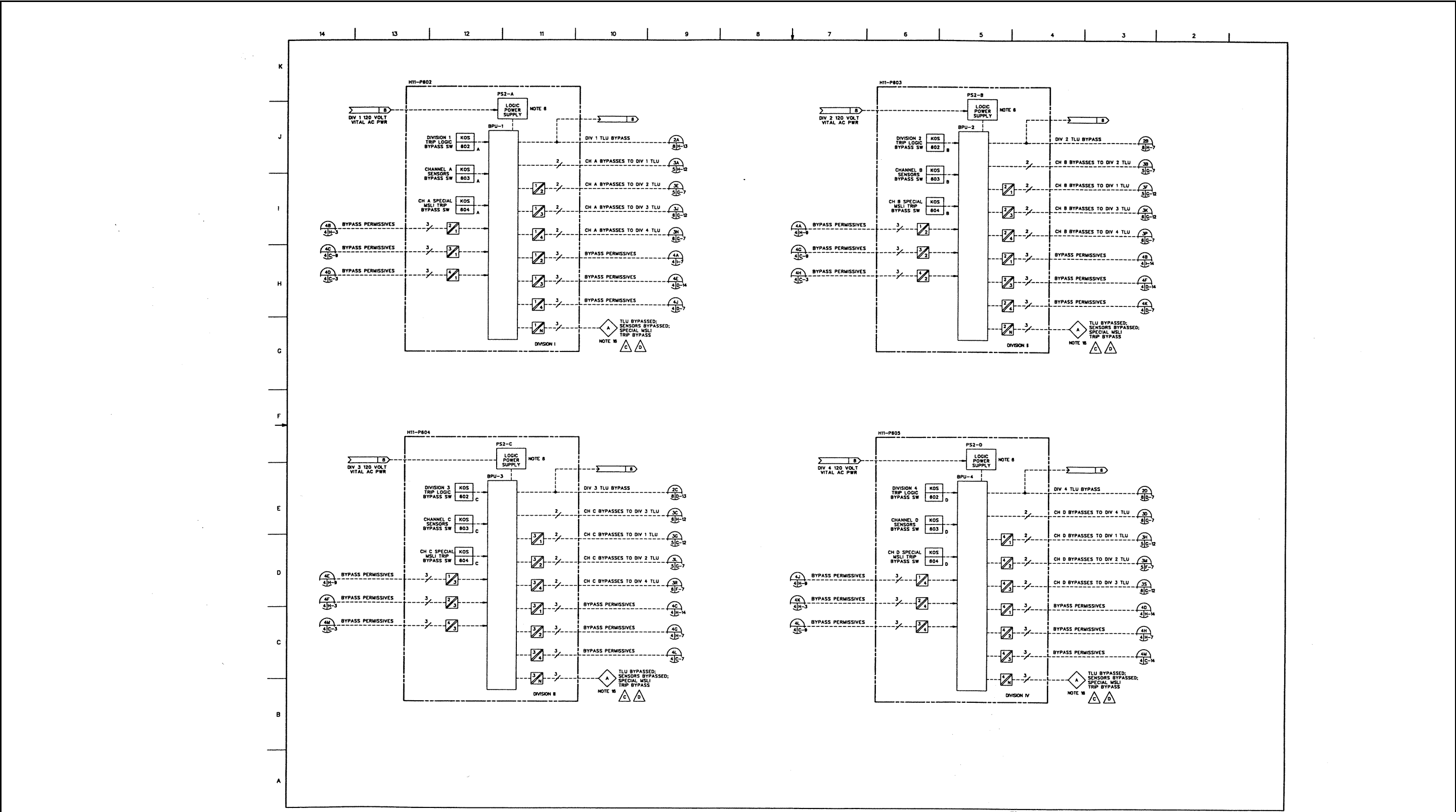


Figure 7.2-9 Reactor Protection System IED (Sheet 4 of 11)

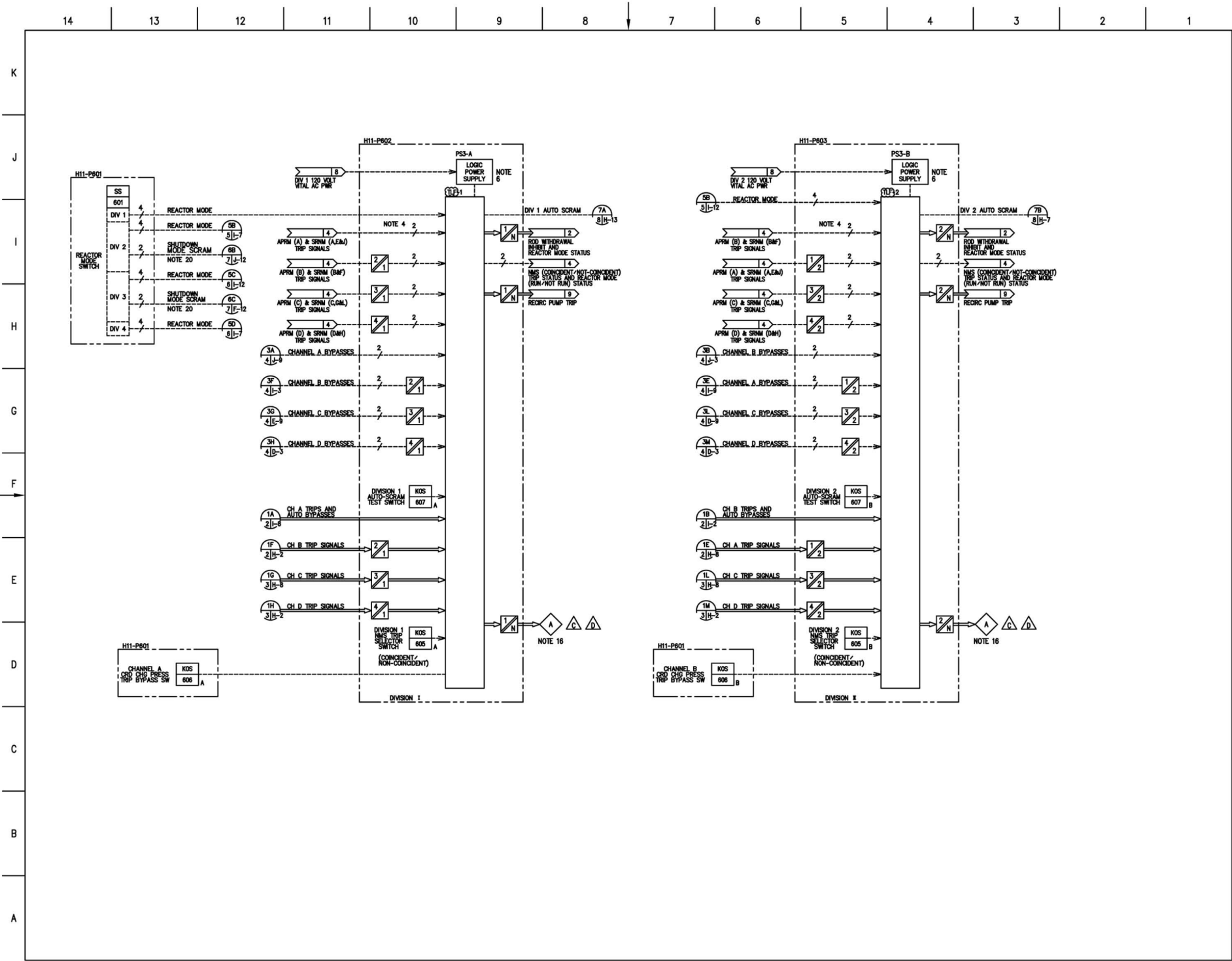


Figure 7.2-9 Reactor Protection System IED (Sheet 5 of 11)

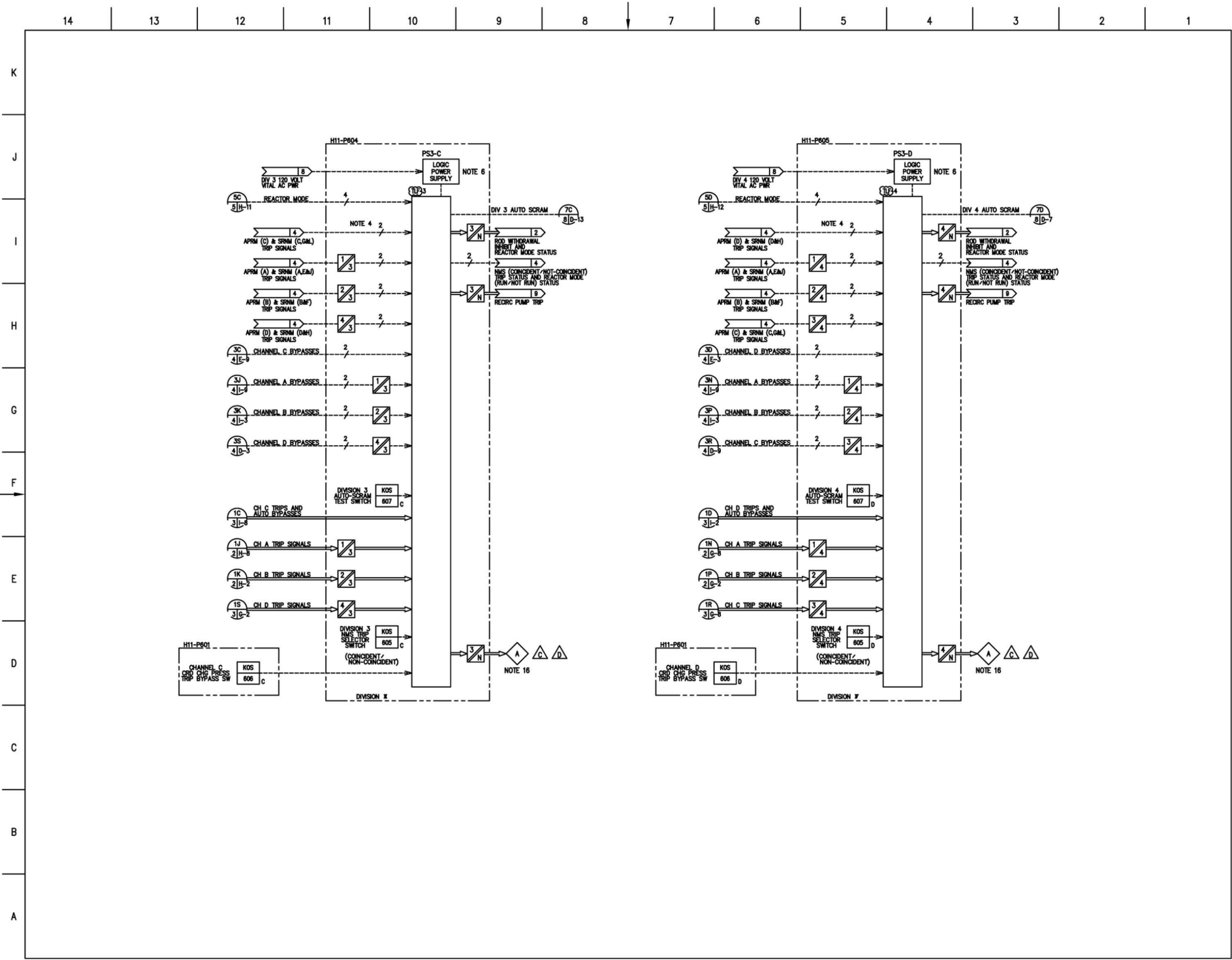


Figure 7.2-9 Reactor Protection System IED (Sheet 6 of 11)

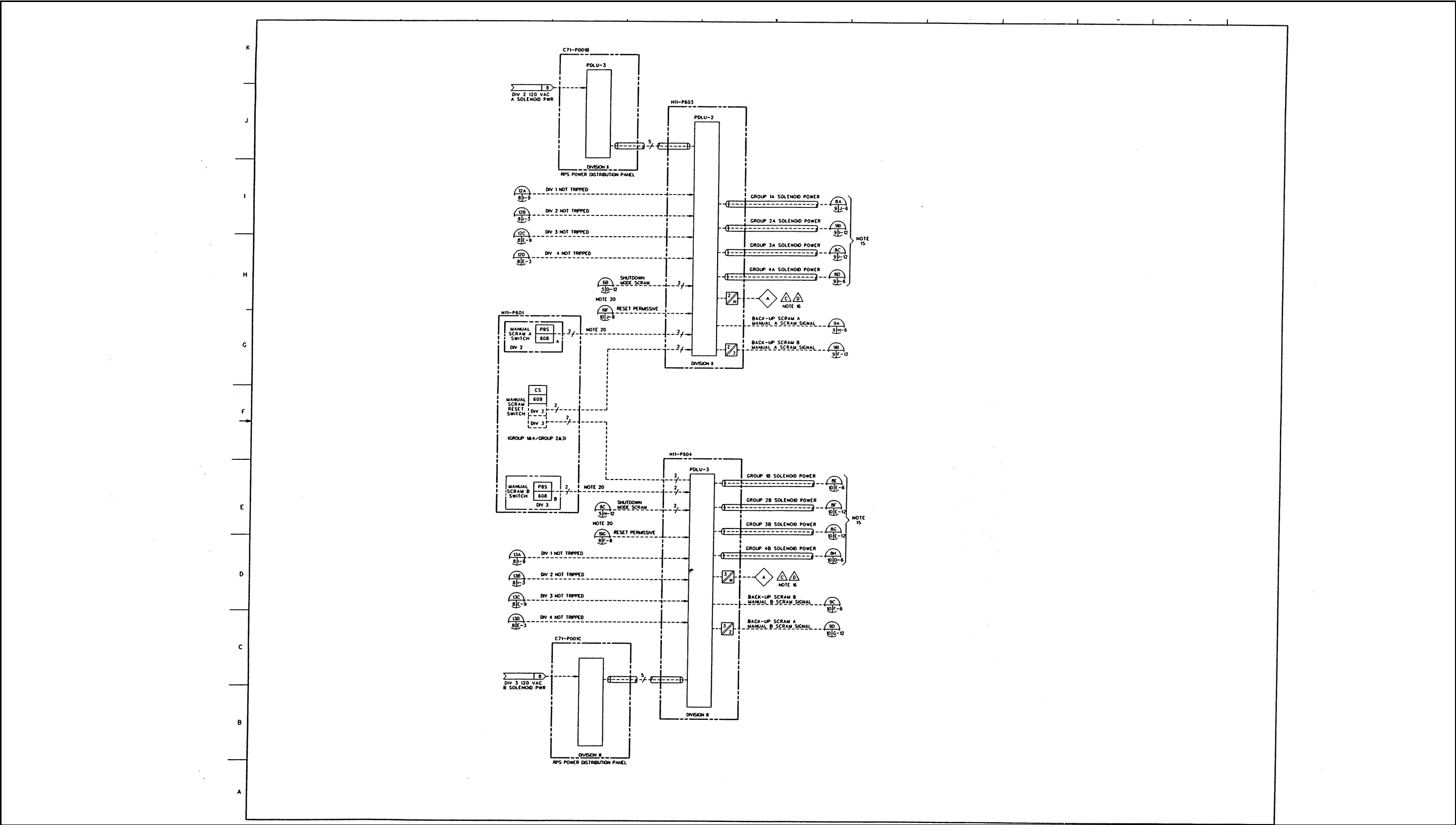


Figure 7.2-9 Reactor Protection System IED (Sheet 7 of 11)

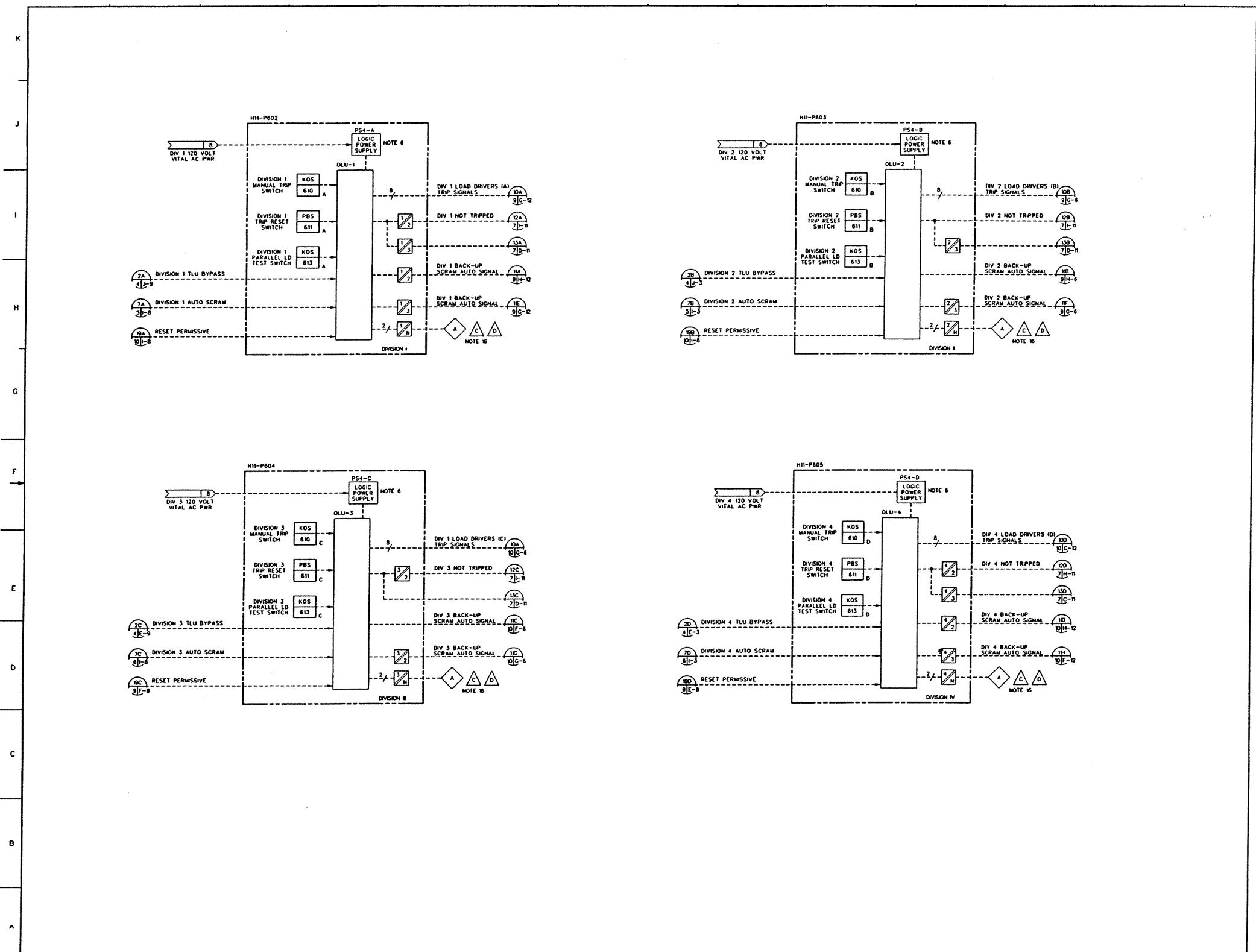


Figure 7.2-9 Reactor Protection System IED (Sheet 8 of 11)

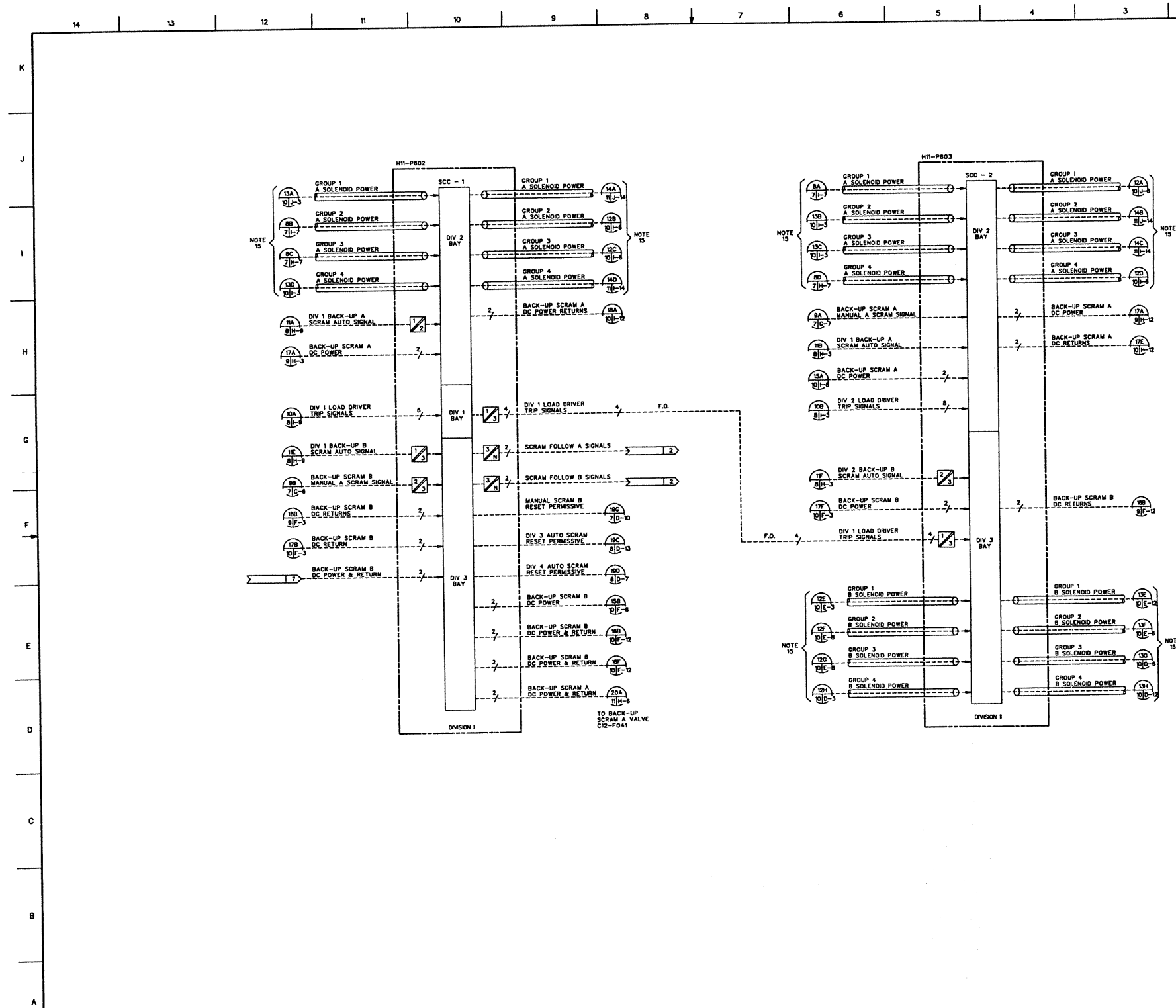


Figure 7.2-9 Reactor Protection System IED (Sheet 9 of 11)

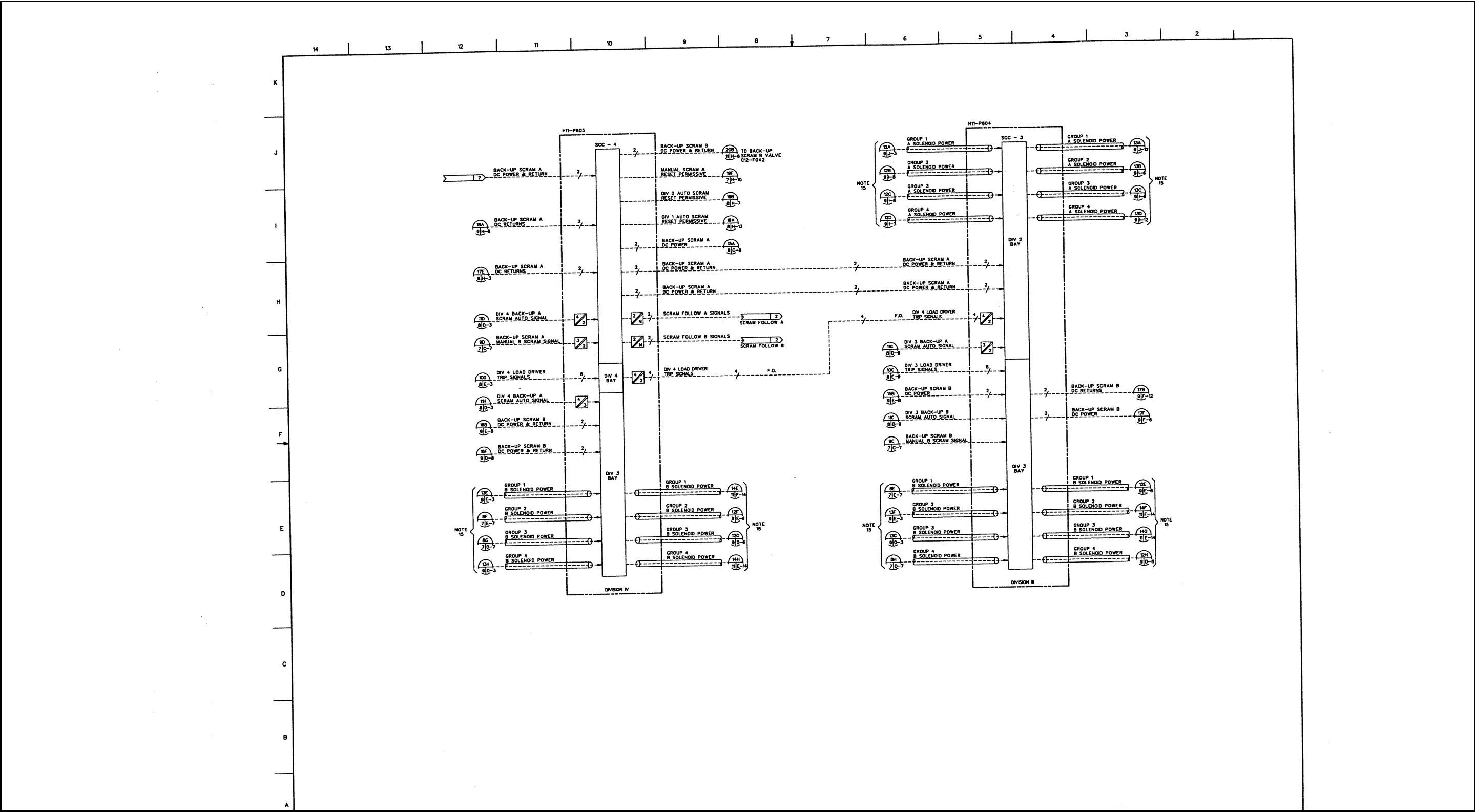


Figure 7.2-9 Reactor Protection System IED (Sheet 10 of 11)

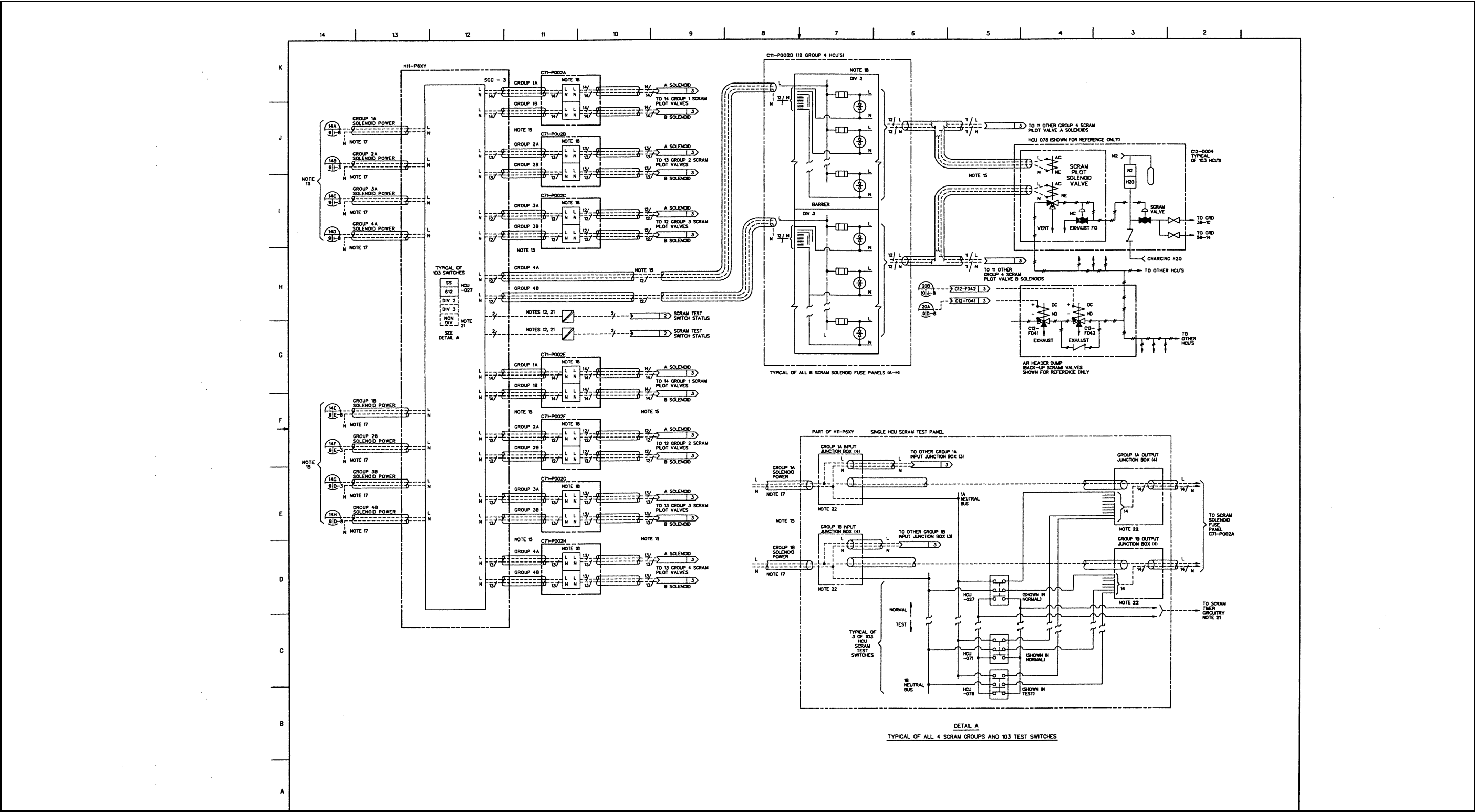


Figure 7.2-9 Reactor Protection System IED (Sheet 11 of 11)

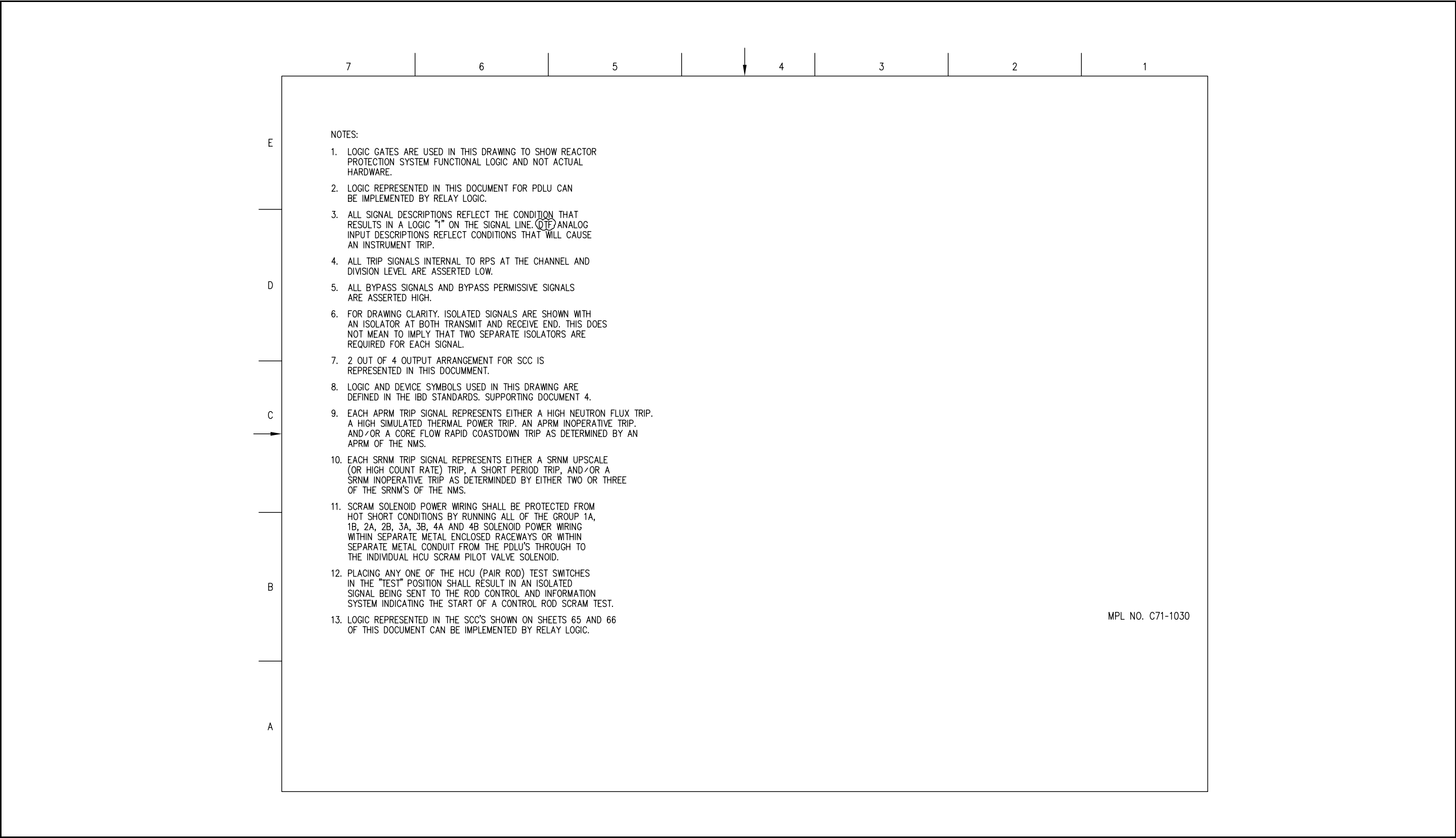
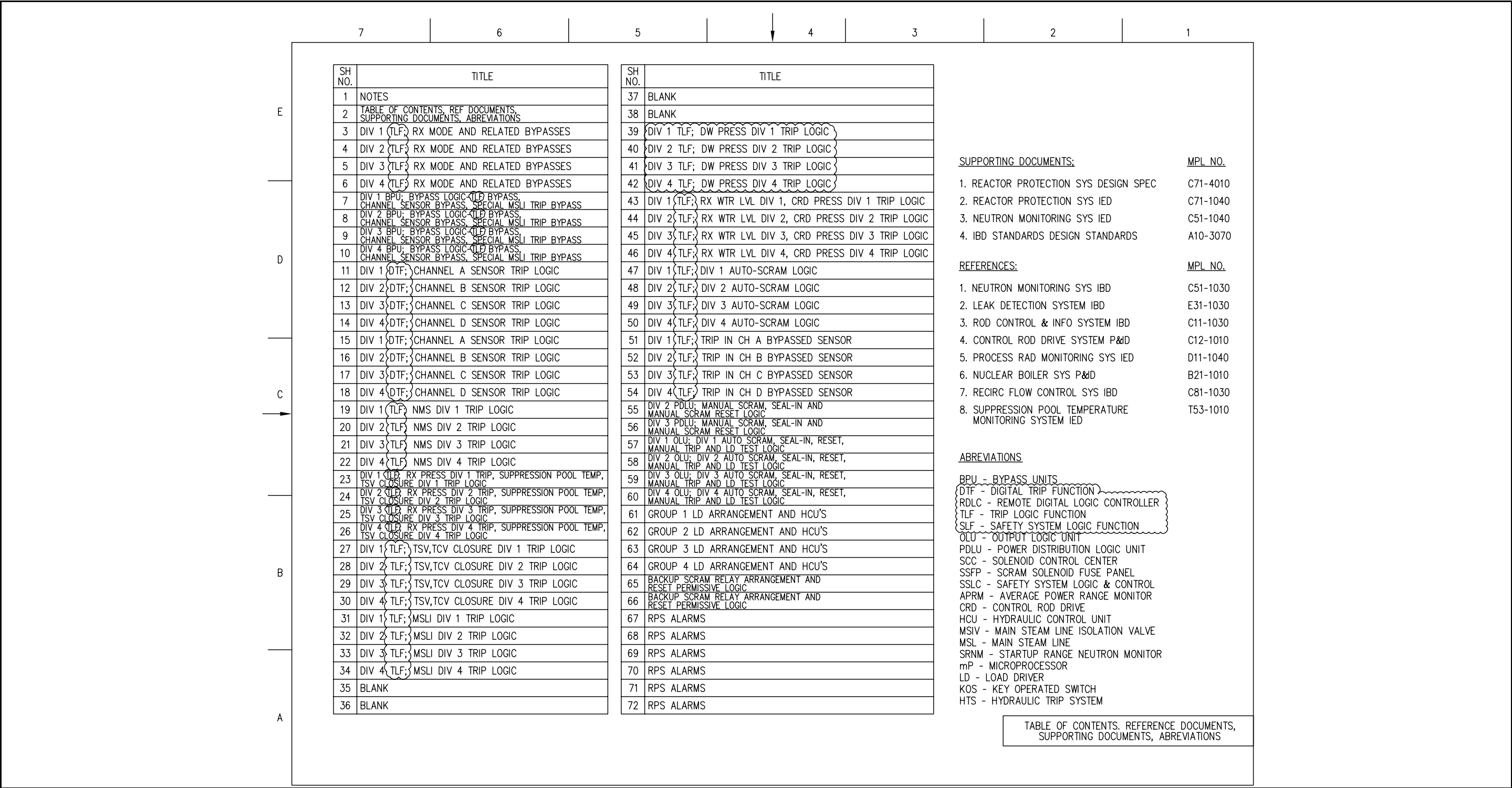


Figure 7.2-10 Reactor Protection System IBD (Sheet 1 of 72)



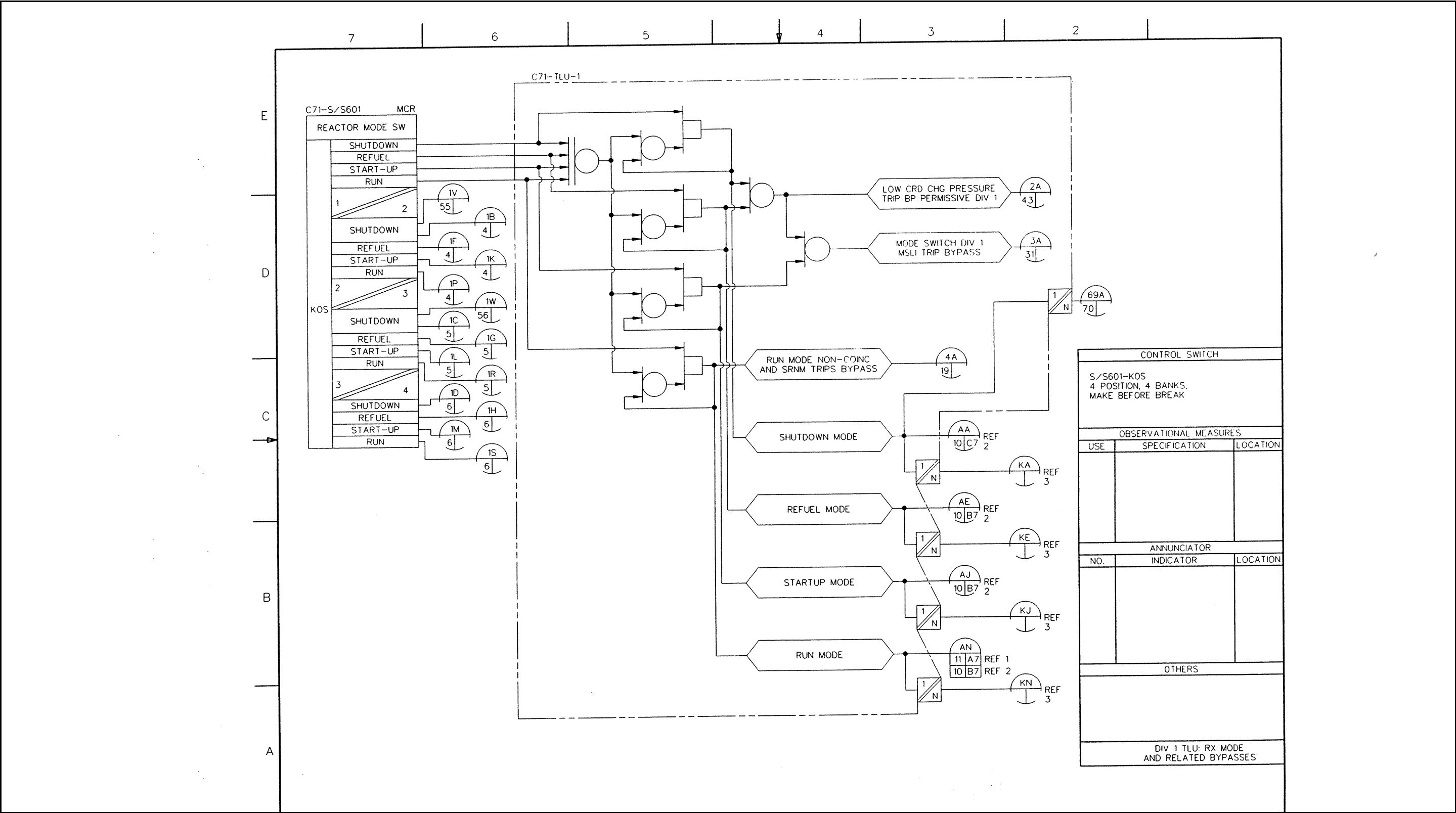


Figure 7.2-10 Reactor Protection System IBD (Sheet 3 of 72)

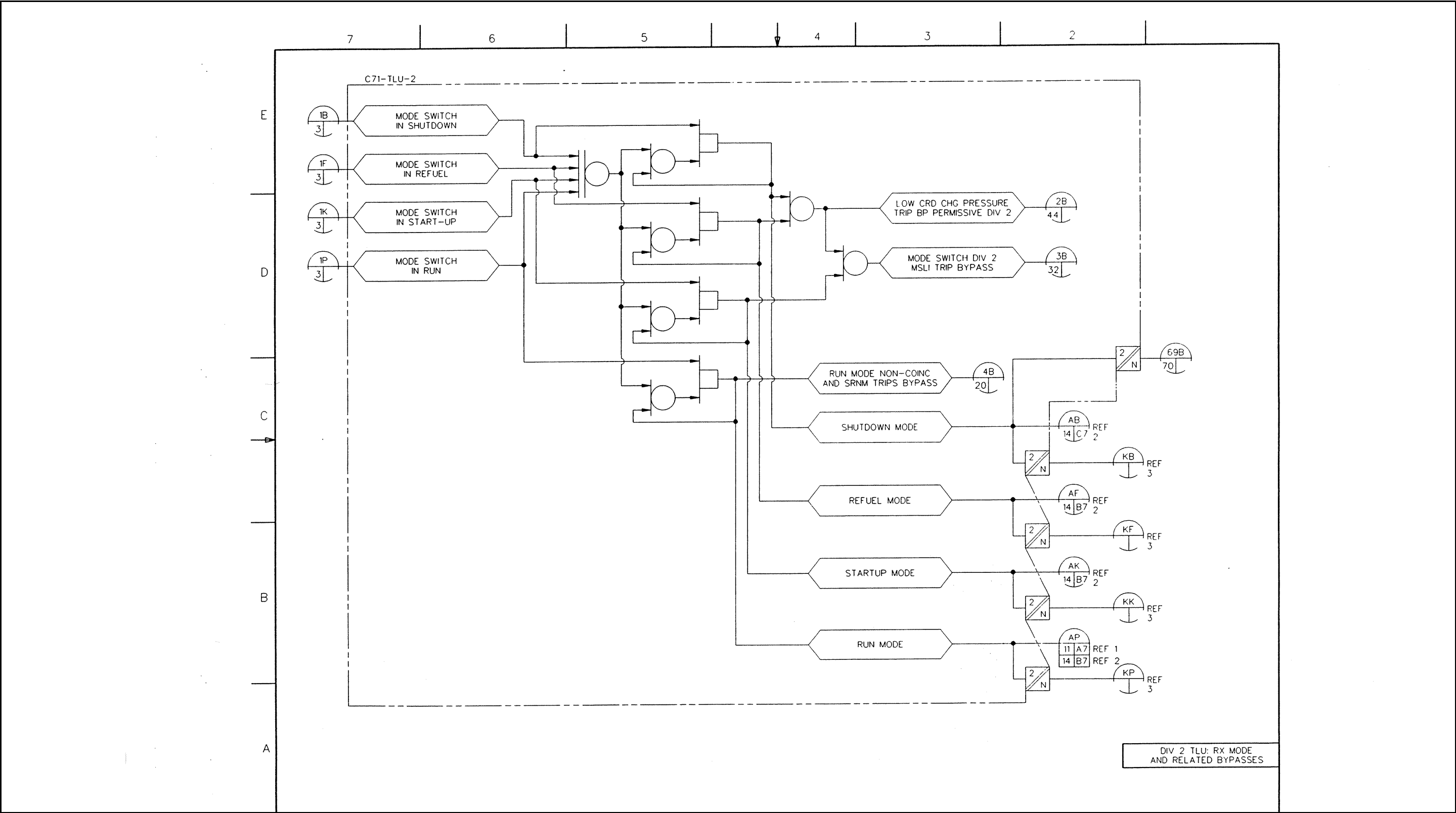


Figure 7.2-10 Reactor Protection System IBD (Sheet 4 of 72)

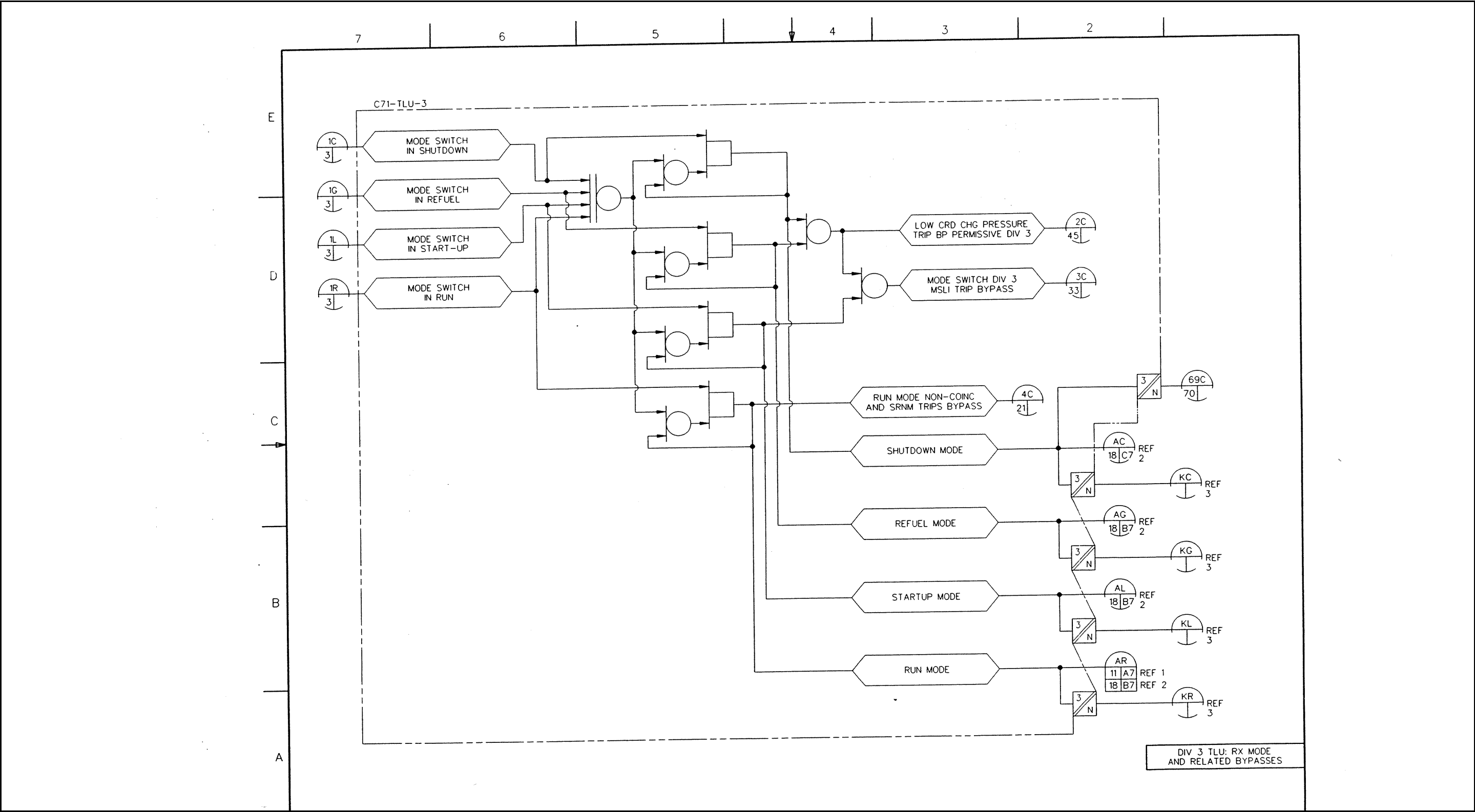


Figure 7.2-10 Reactor Protection System IBD (Sheet 5 of 72)

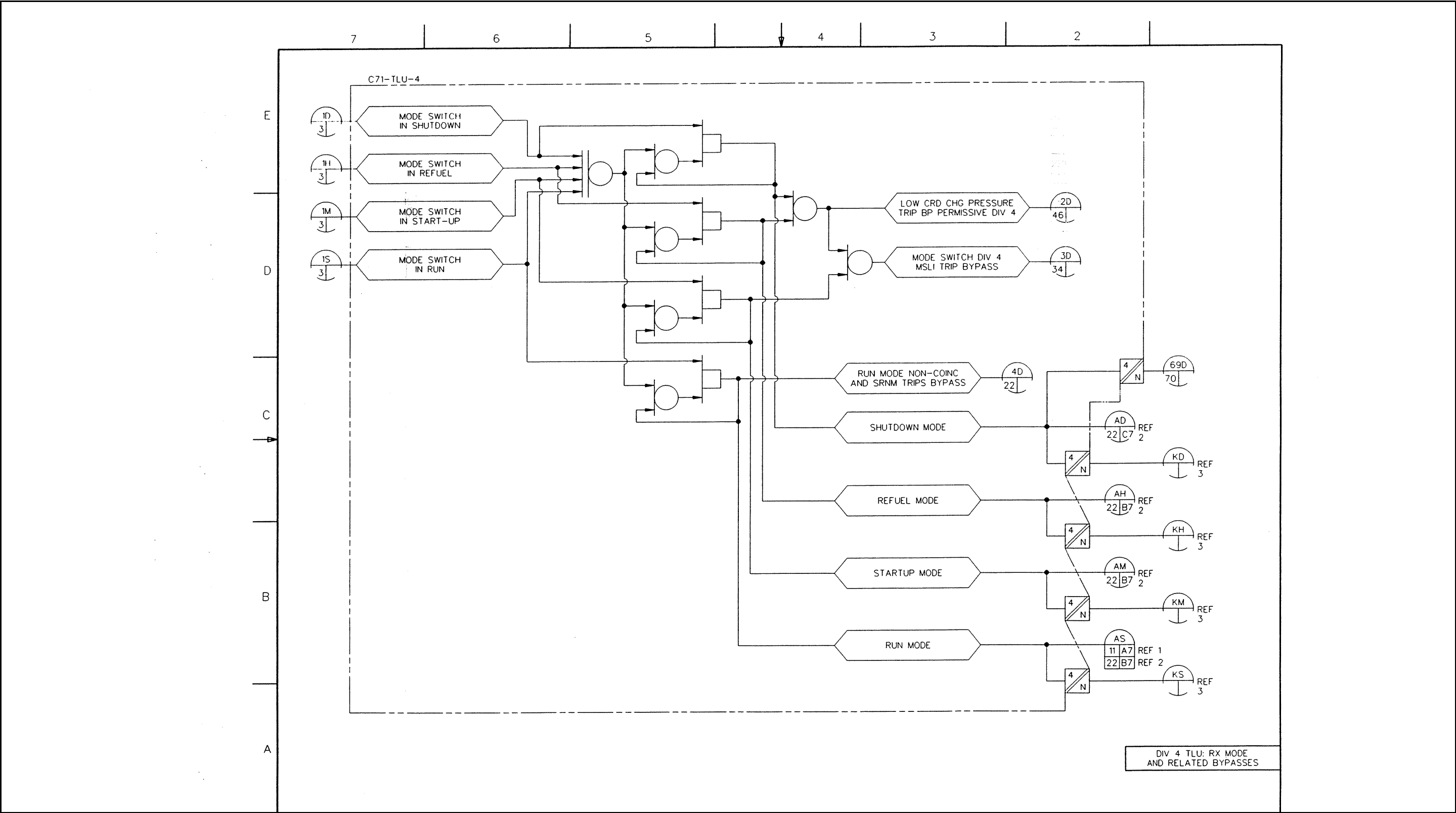


Figure 7.2-10 Reactor Protection System IBD (Sheet 6 of 72)

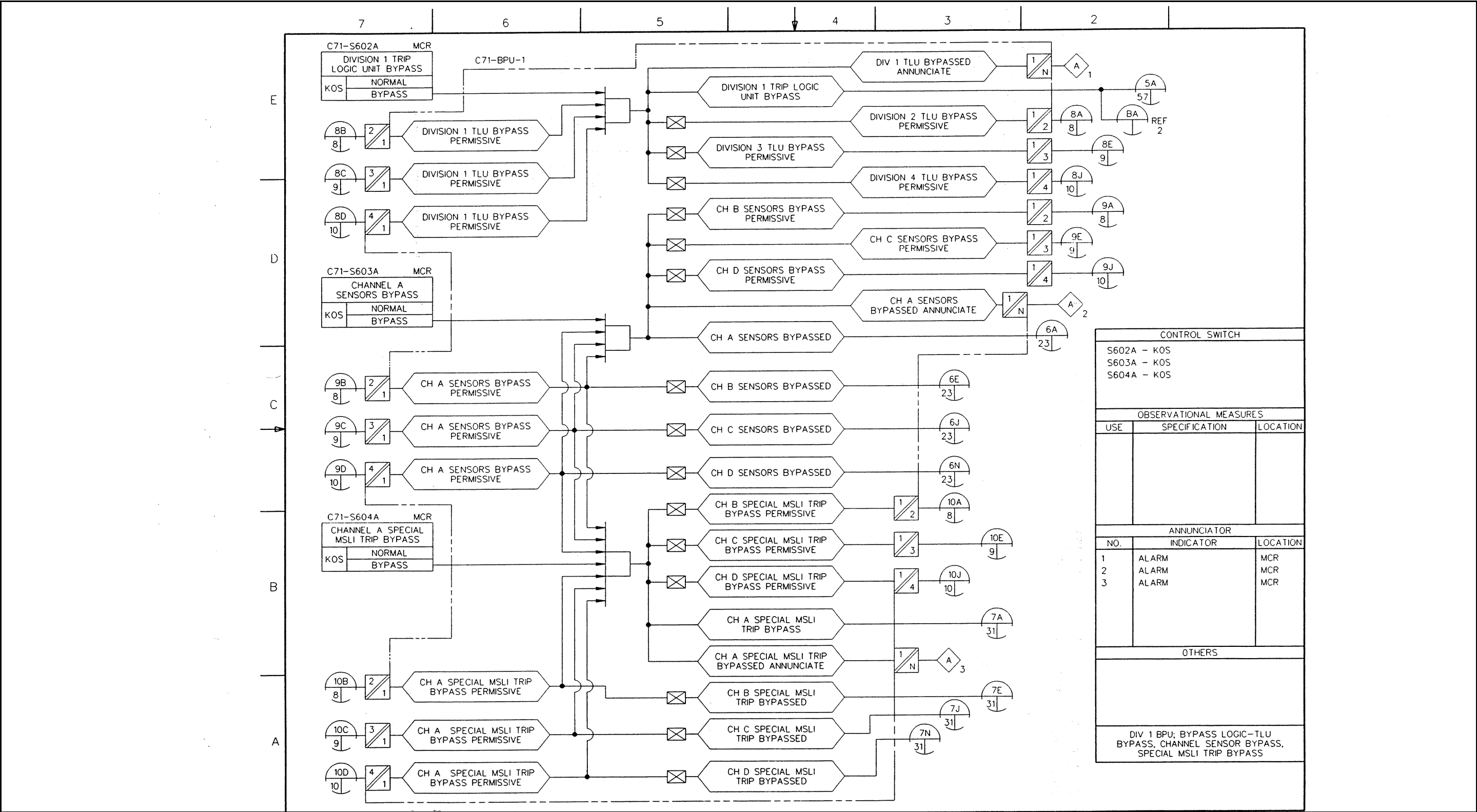


Figure 7.2-10 Reactor Protection System IBD (Sheet 7 of 72)

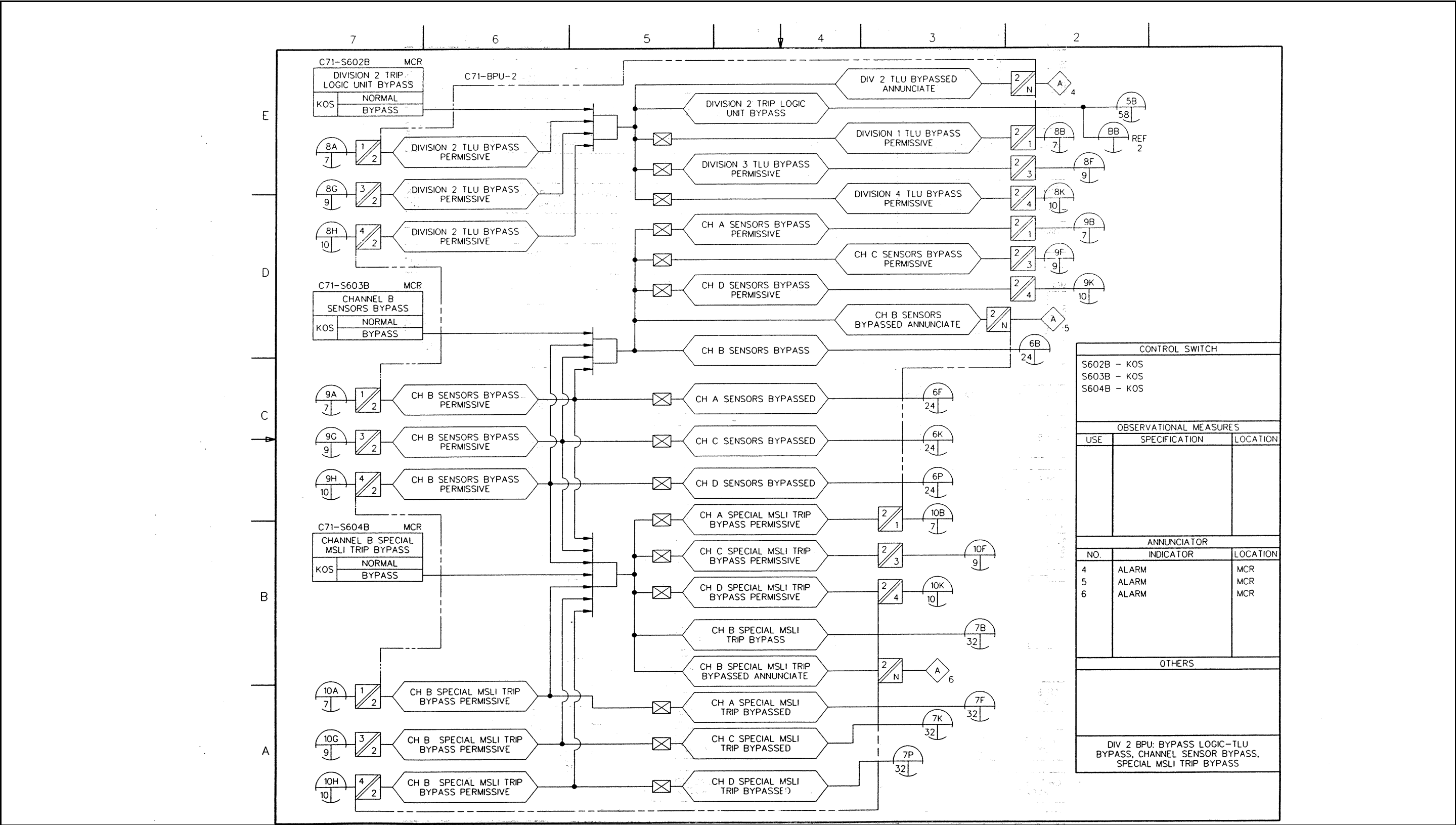


Figure 7.2-10 Reactor Protection System IBD (Sheet 8 of 72)

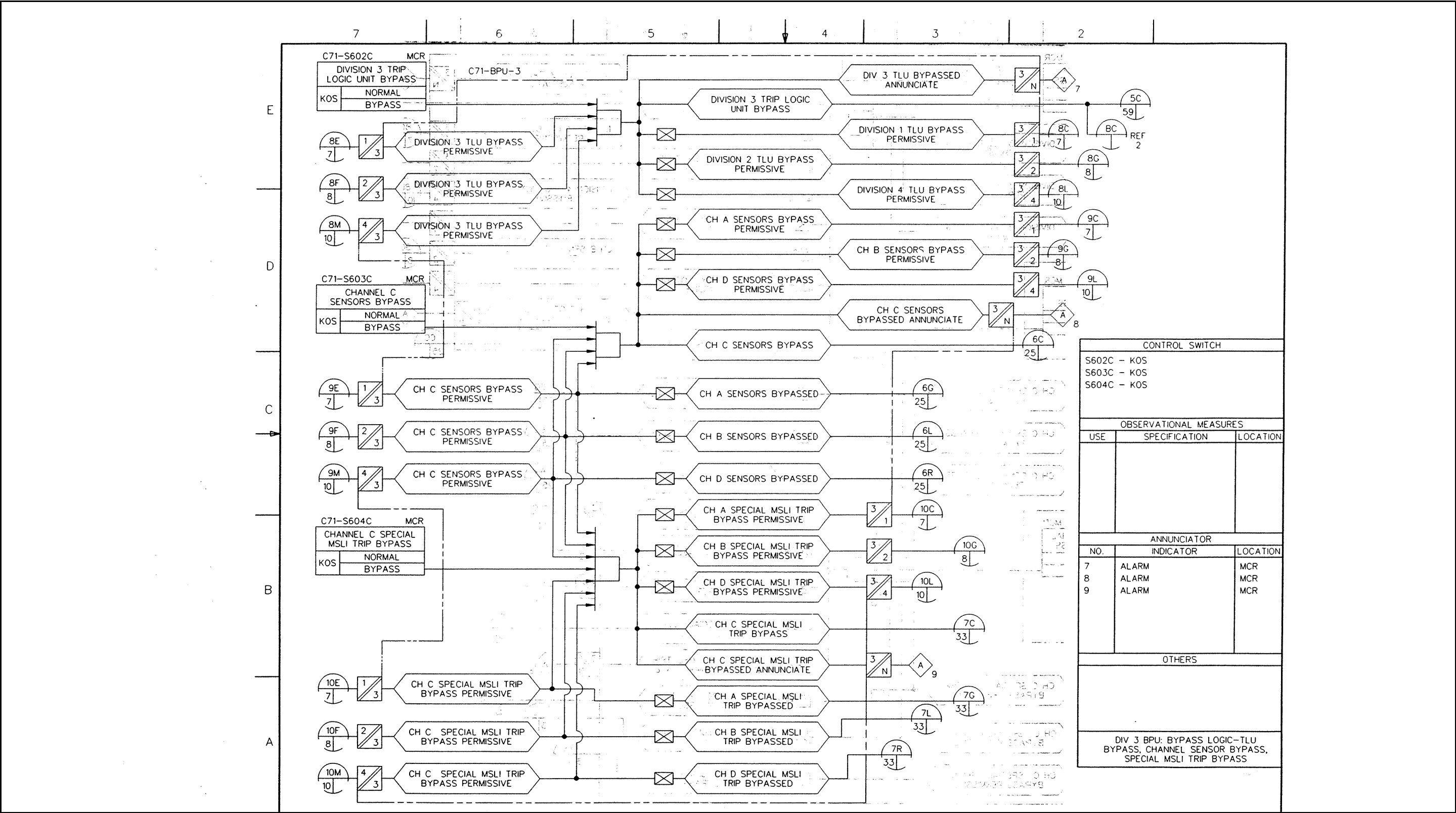


Figure 7.2-10 Reactor Protection System IBD (Sheet 9 of 72)

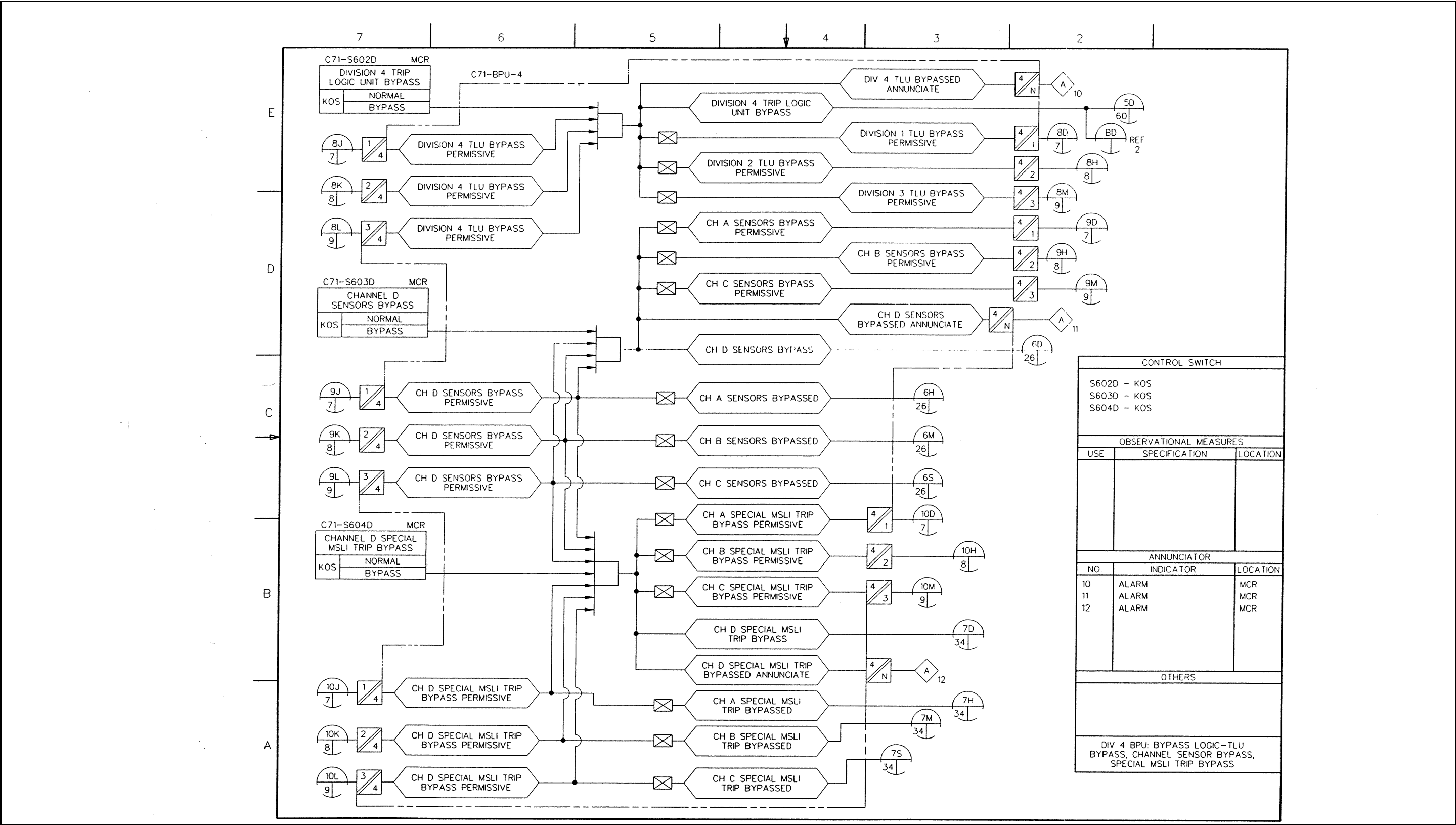


Figure 7.2-10 Reactor Protection System IBD (Sheet 10 of 72)

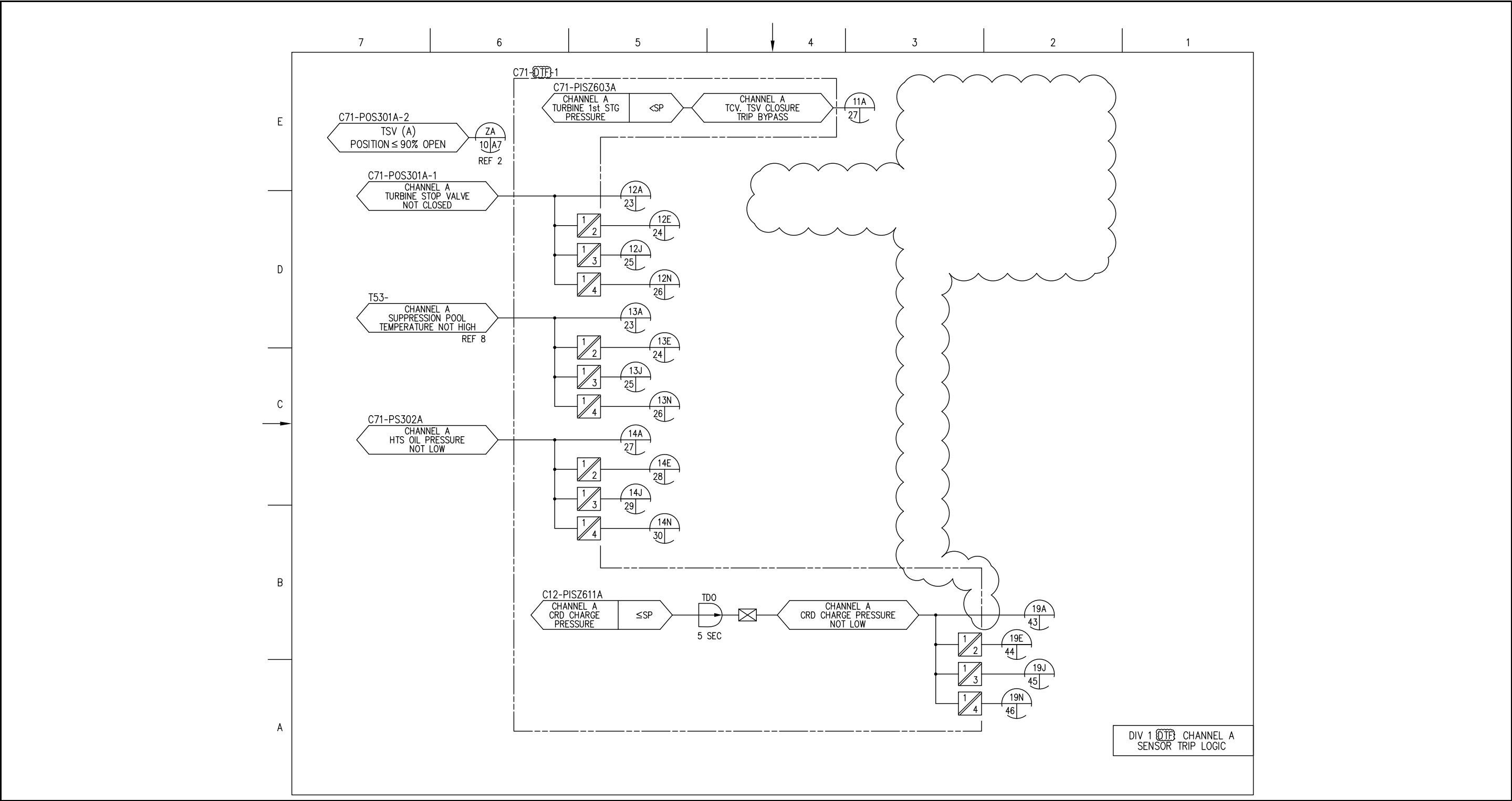


Figure 7.2-10 Reactor Protection System IBD (Sheet 11 of 72)

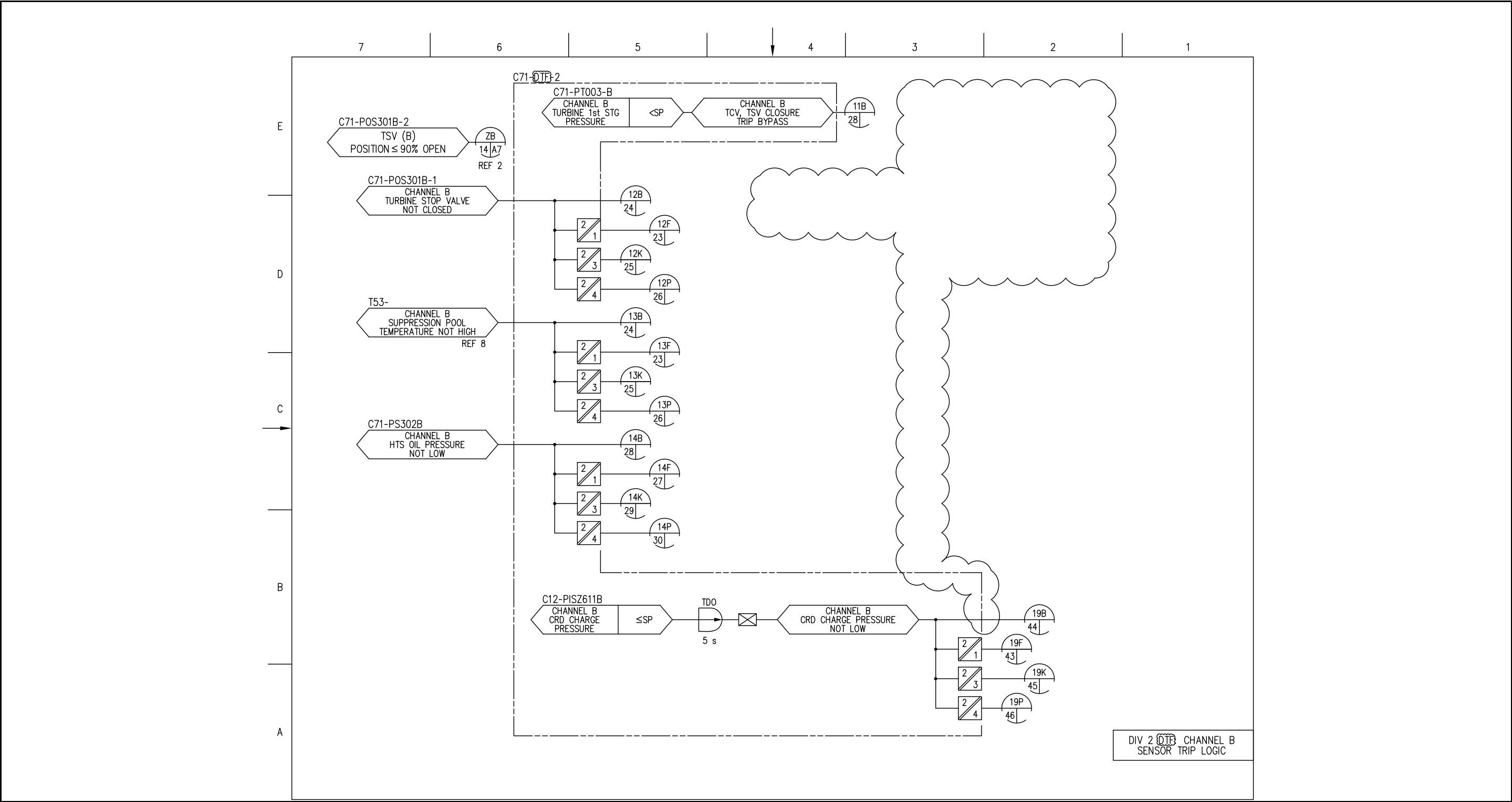


Figure 7.2-10 Reactor Protection System IBD (Sheet 12 of 72)

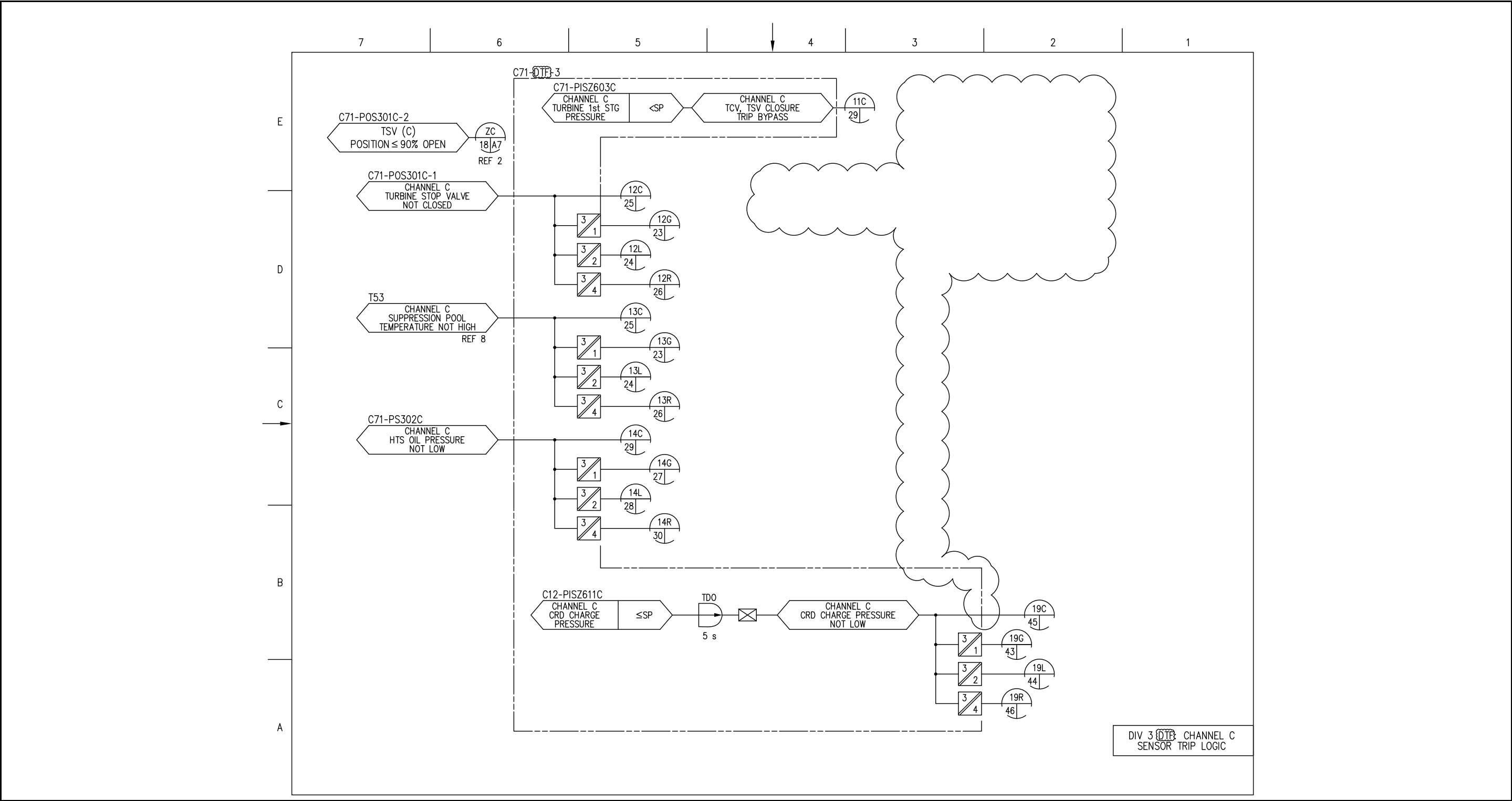


Figure 7.2-10 Reactor Protection System IBD (Sheet 13 of 72)

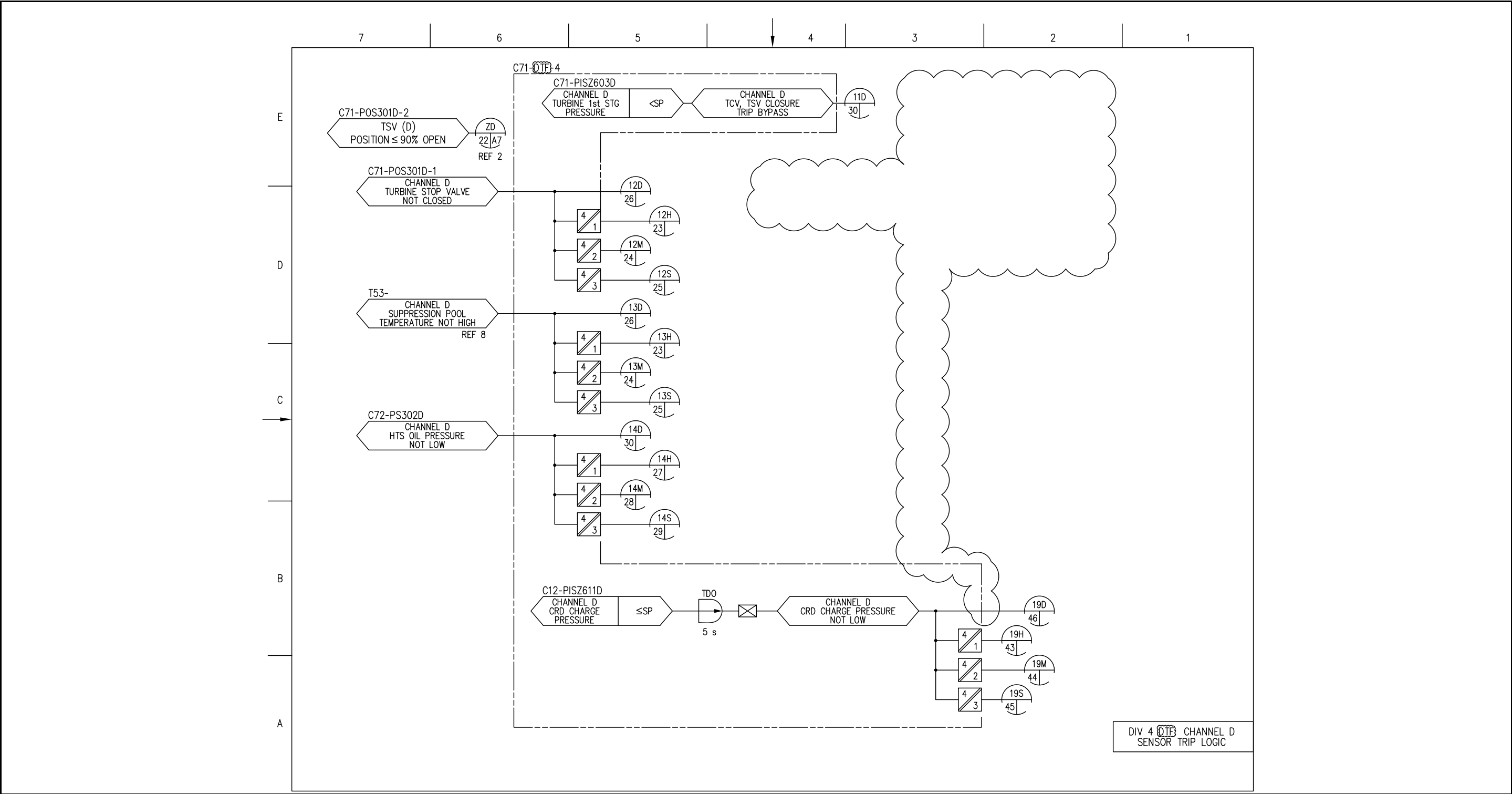


Figure 7.2-10 Reactor Protection System IBD (Sheet 14 of 72)

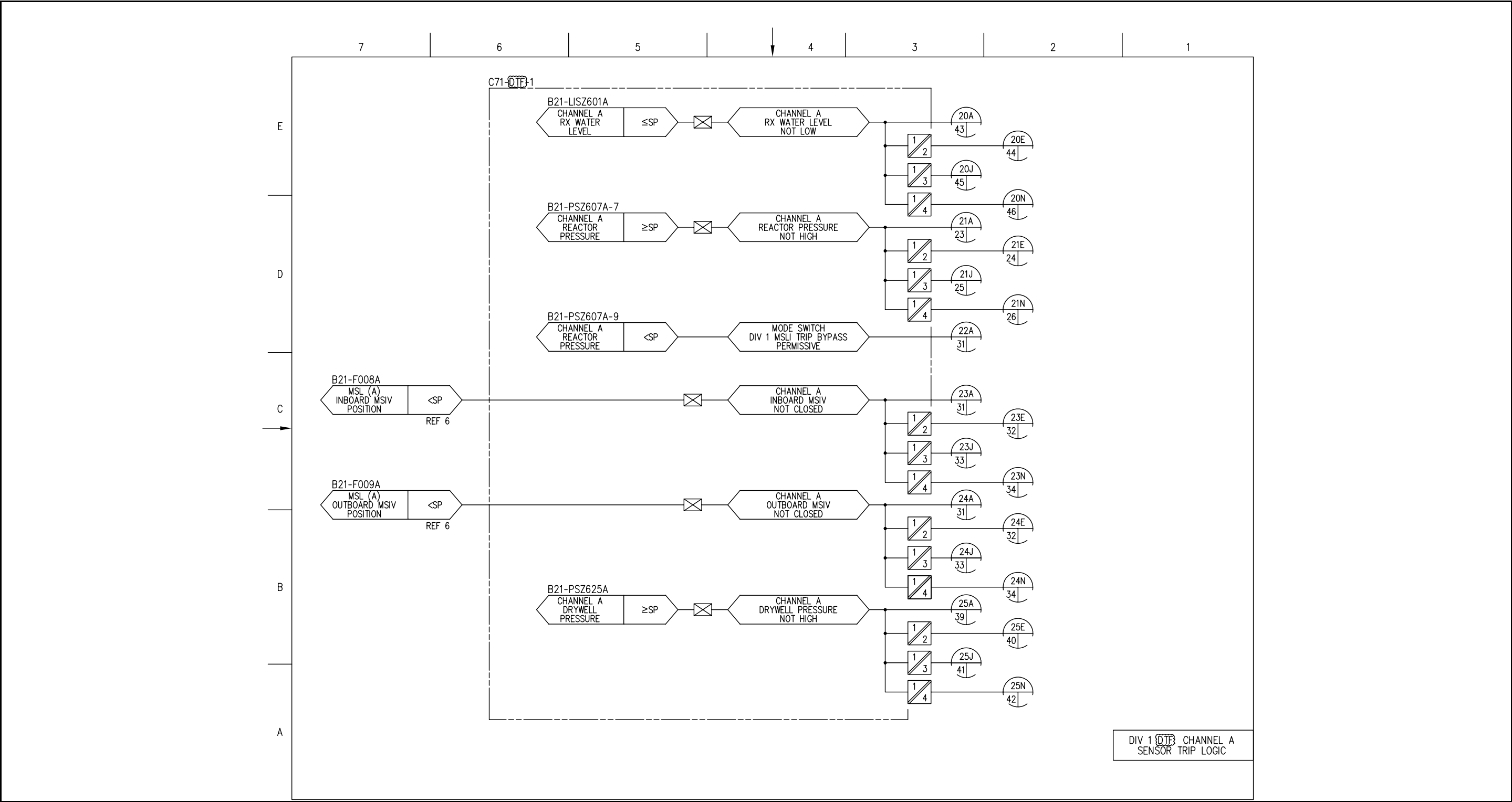


Figure 7.2-10 Reactor Protection System IBD (Sheet 15 of 72)

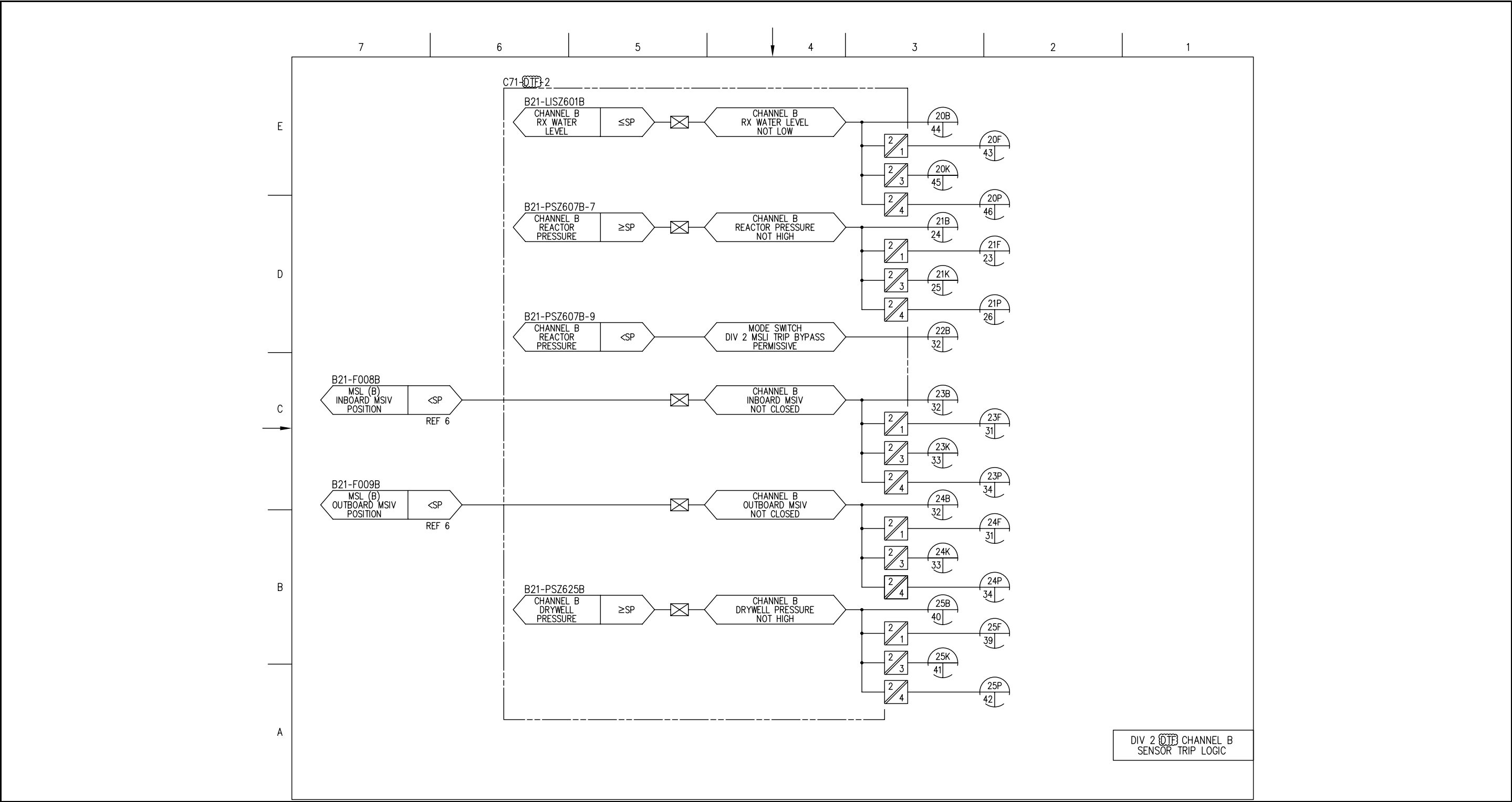


Figure 7.2-10 Reactor Protection System IBD (Sheet 16 of 72)

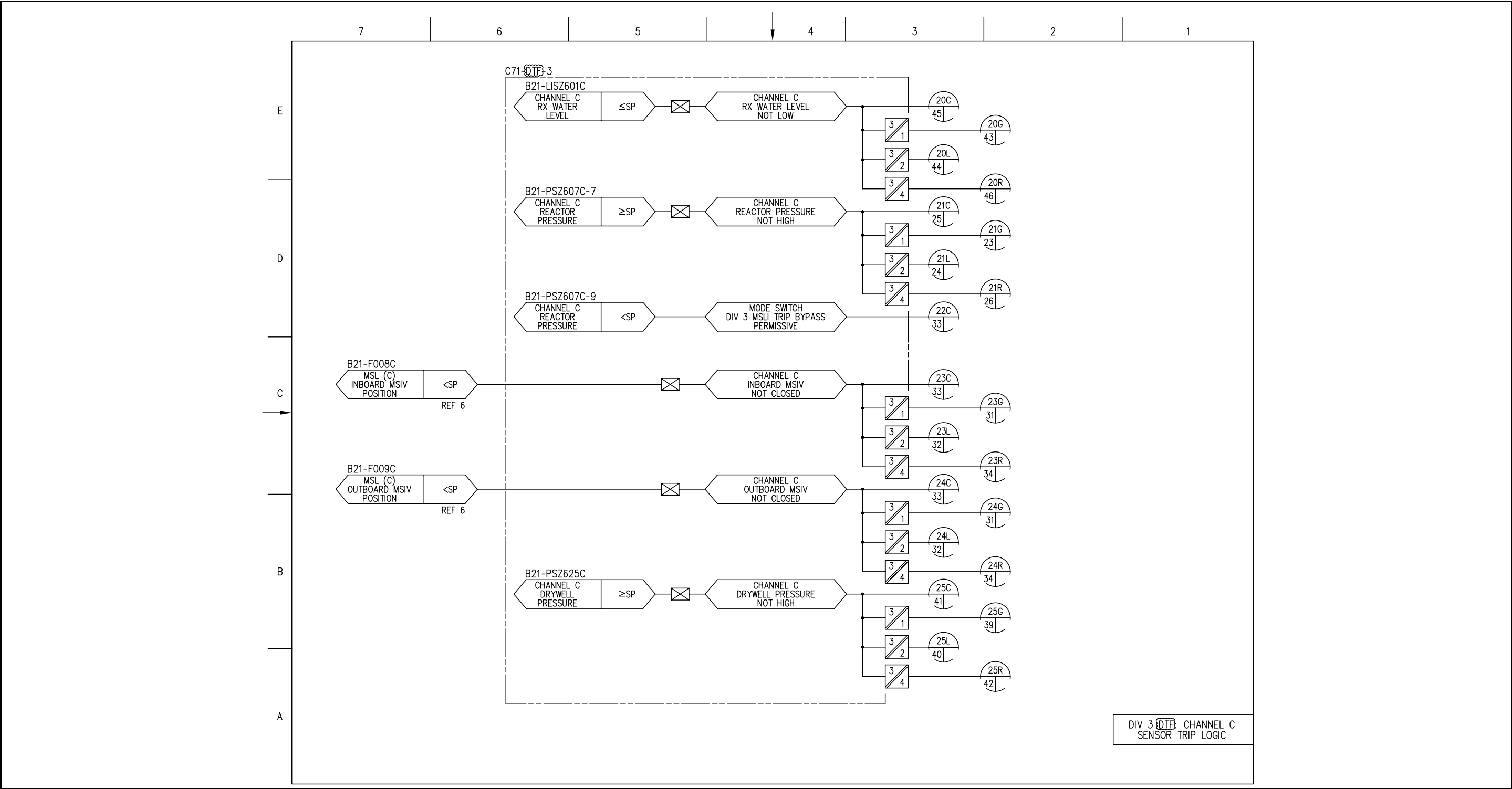


Figure 7.2-10 Reactor Protection System IBD (Sheet 17 of 72)

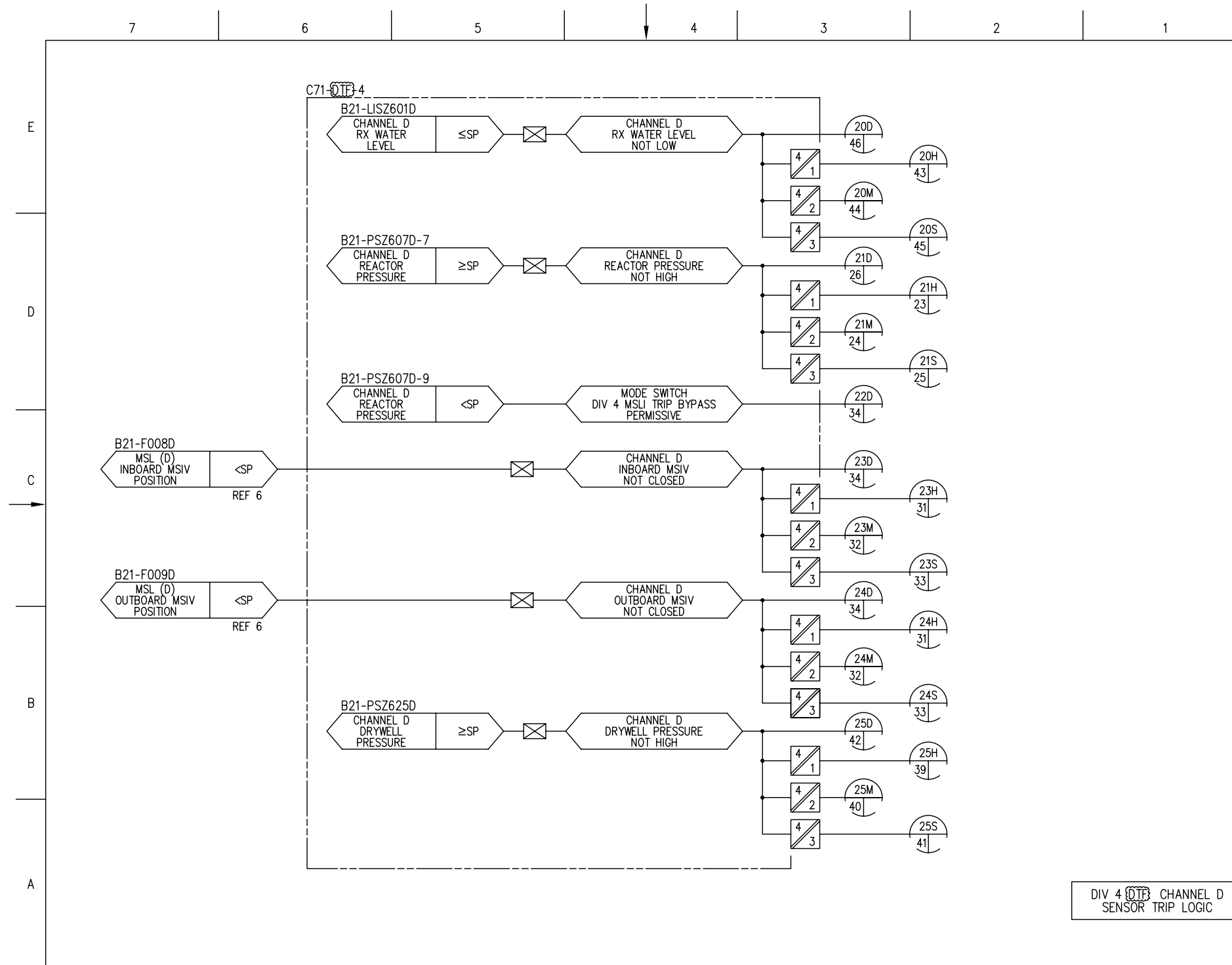


Figure 7.2-10 Reactor Protection System IBD (Sheet 18 of 72)

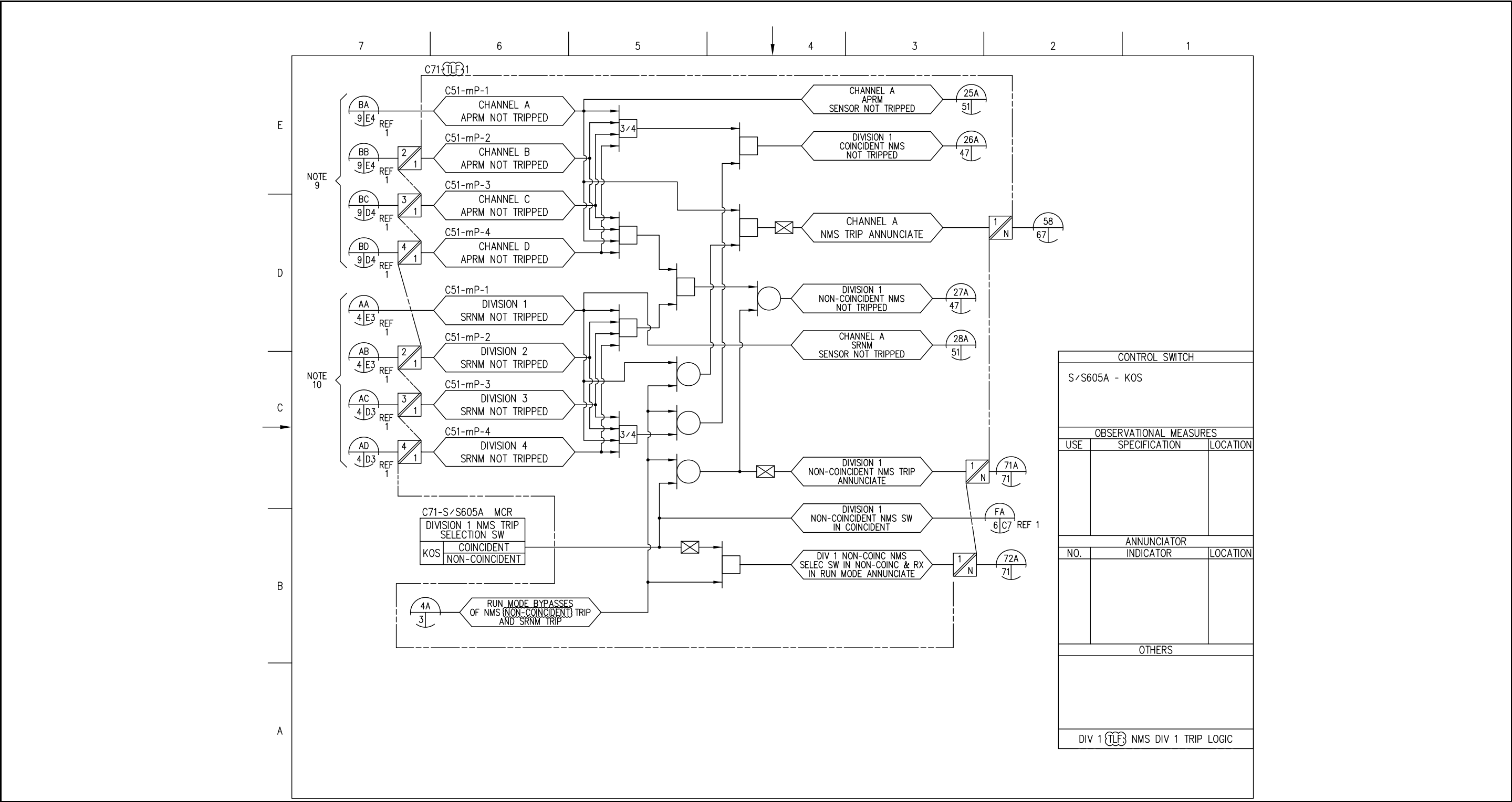


Figure 7.2-10 Reactor Protection System IBD (Sheet 19 of 72)

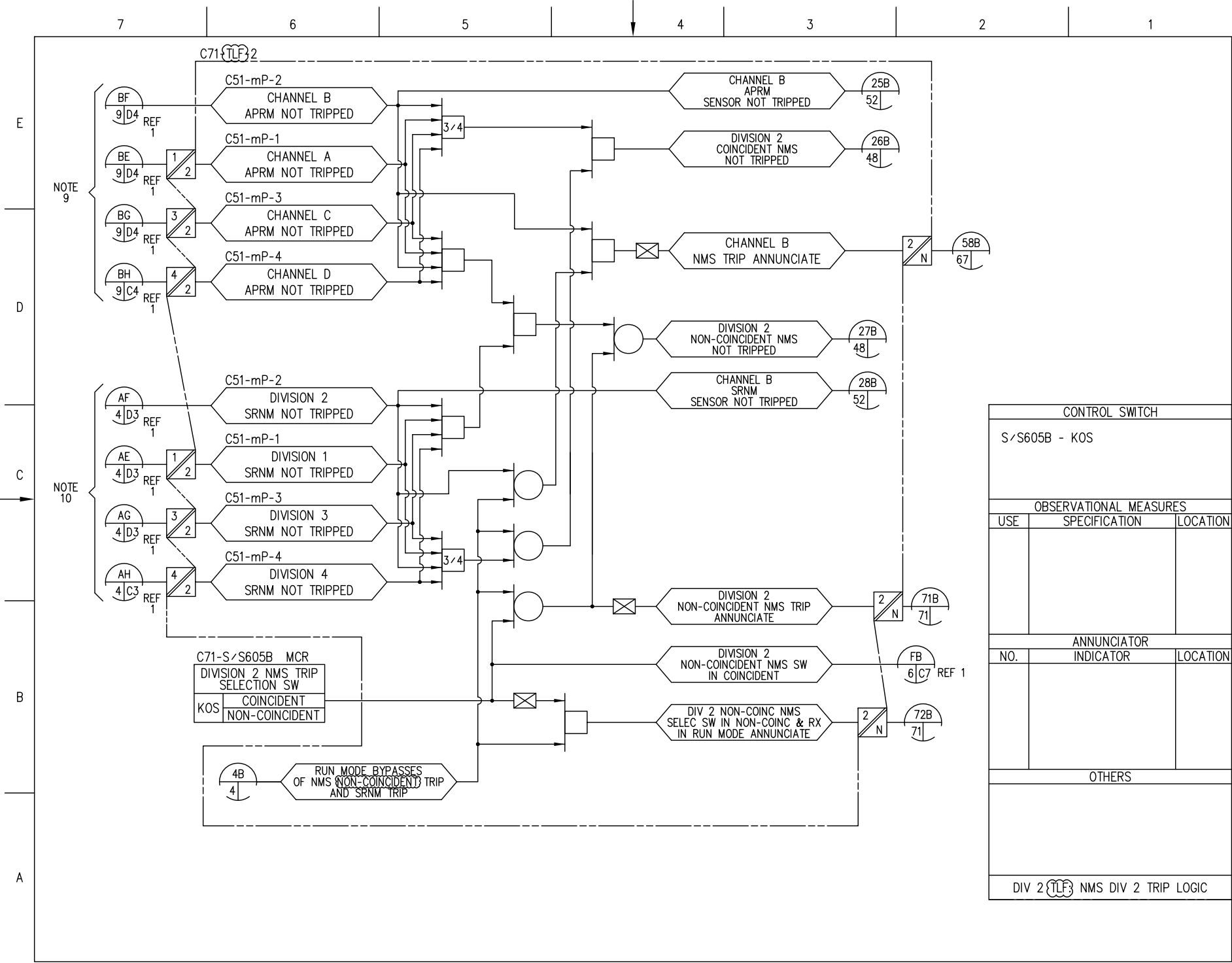


Figure 7.2-10 Reactor Protection System IBD (Sheet 20 of 72)

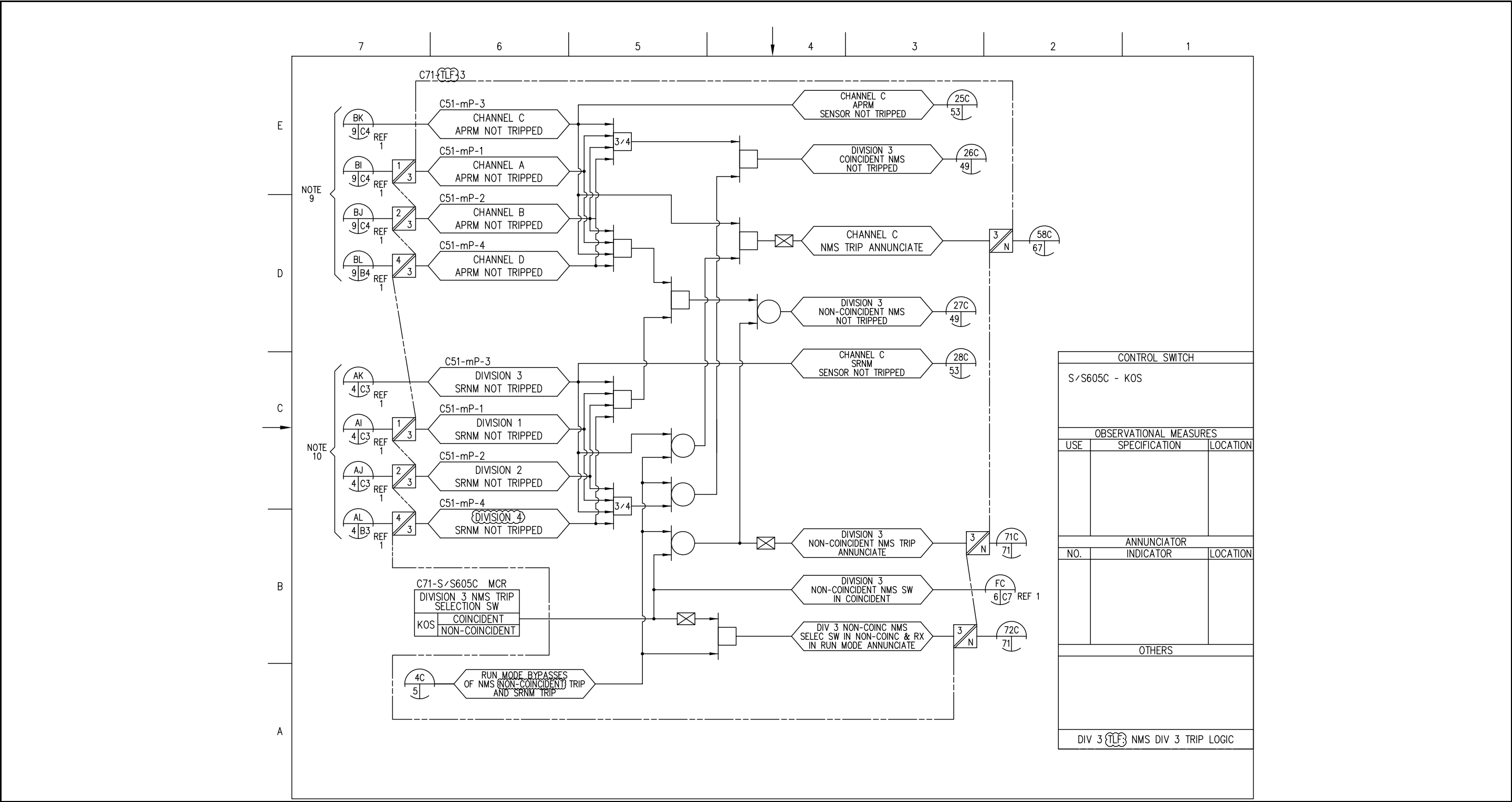


Figure 7.2-10 Reactor Protection System IBD (Sheet 21 of 72)

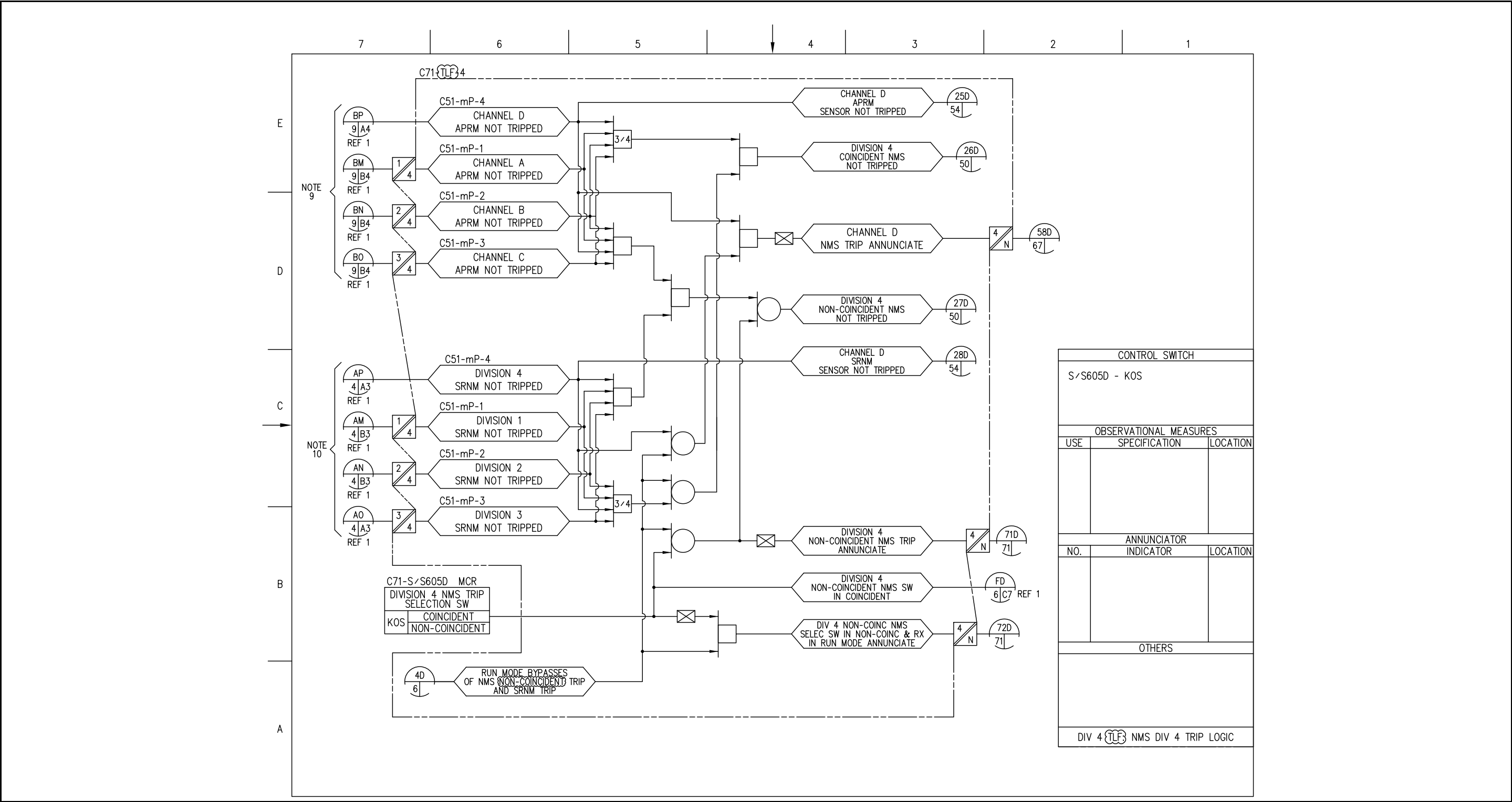


Figure 7.2-10 Reactor Protection System IBD (Sheet 22 of 72)

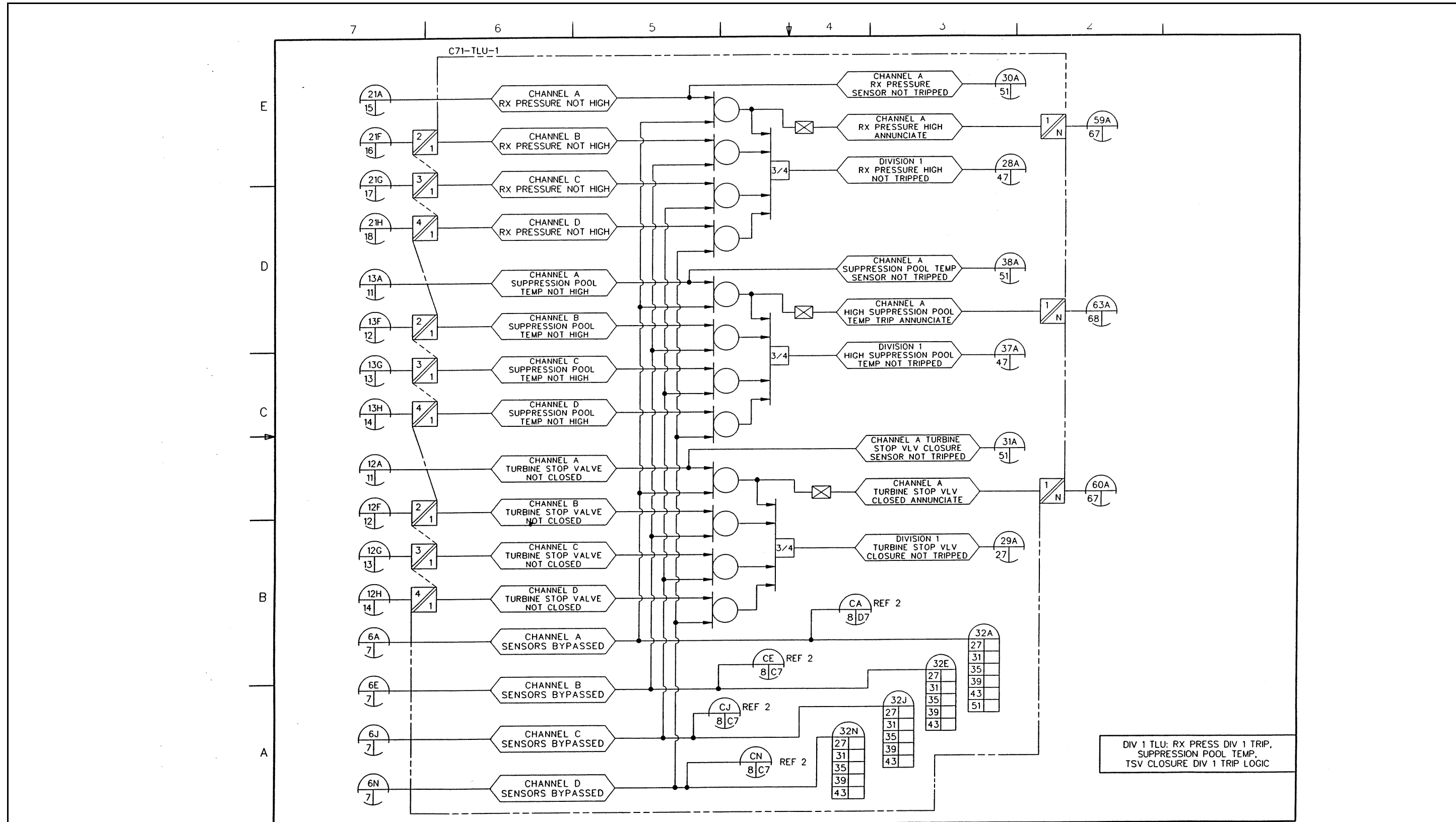


Figure 7.2-10 Reactor Protection System IBD (Sheet 23 of 72)

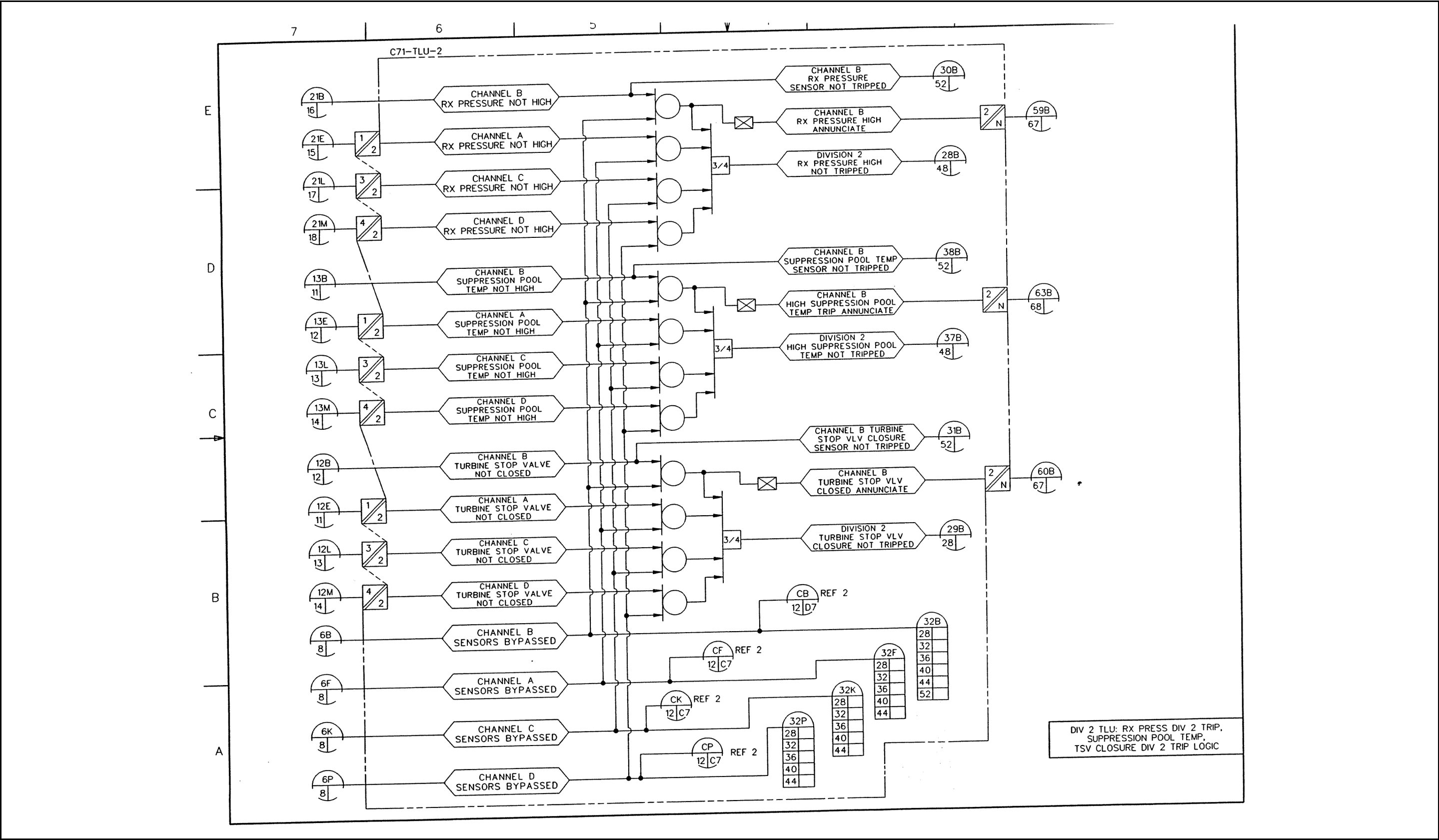


Figure 7.2-10 Reactor Protection System IBD (Sheet 24 of 72)

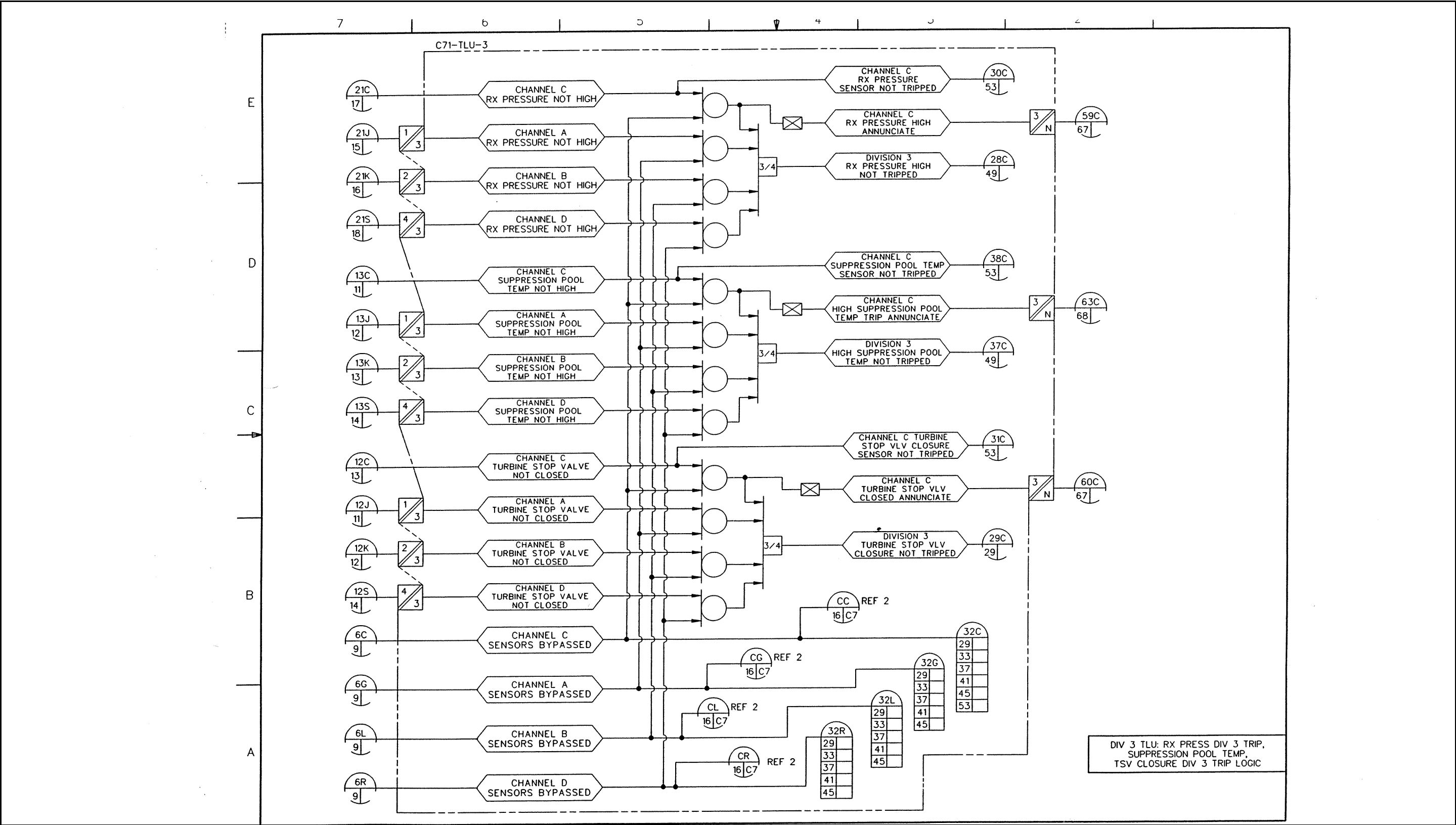


Figure 7.2-10 Reactor Protection System IBD (Sheet 25 of 72)

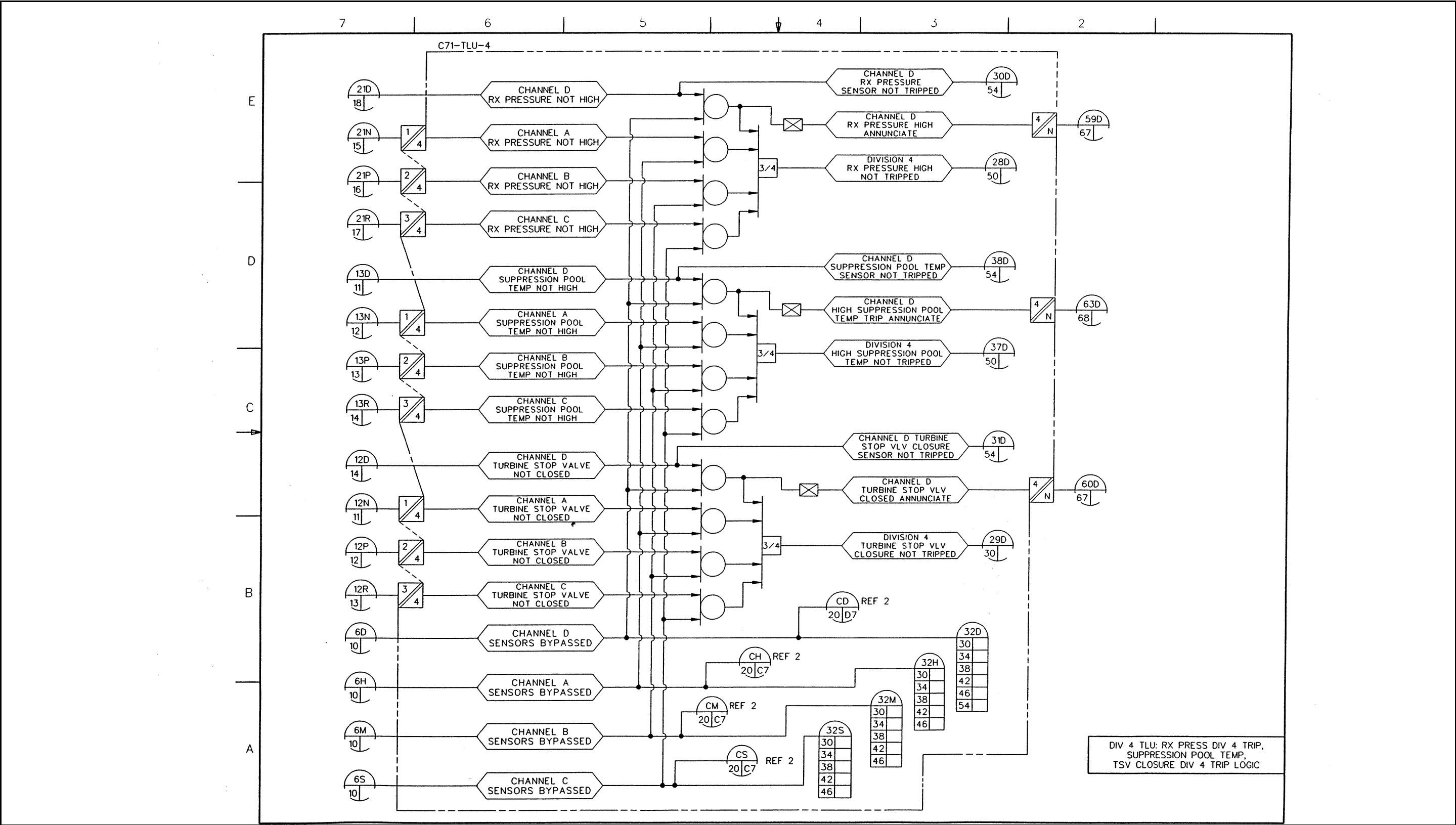


Figure 7.2-10 Reactor Protection System IBD (Sheet 26 of 72)

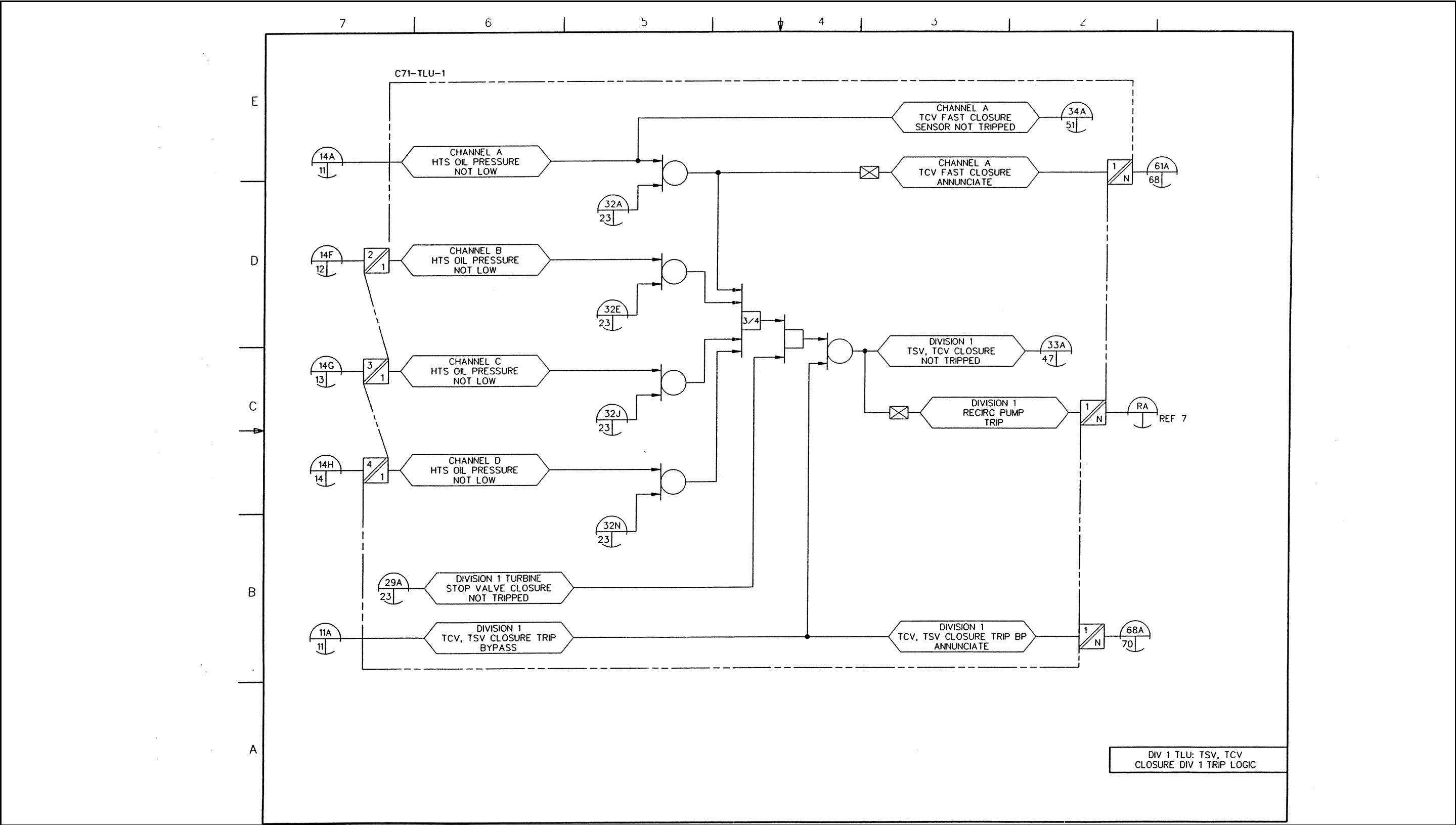


Figure 7.2-10 Reactor Protection System IBD (Sheet 27 of 72)

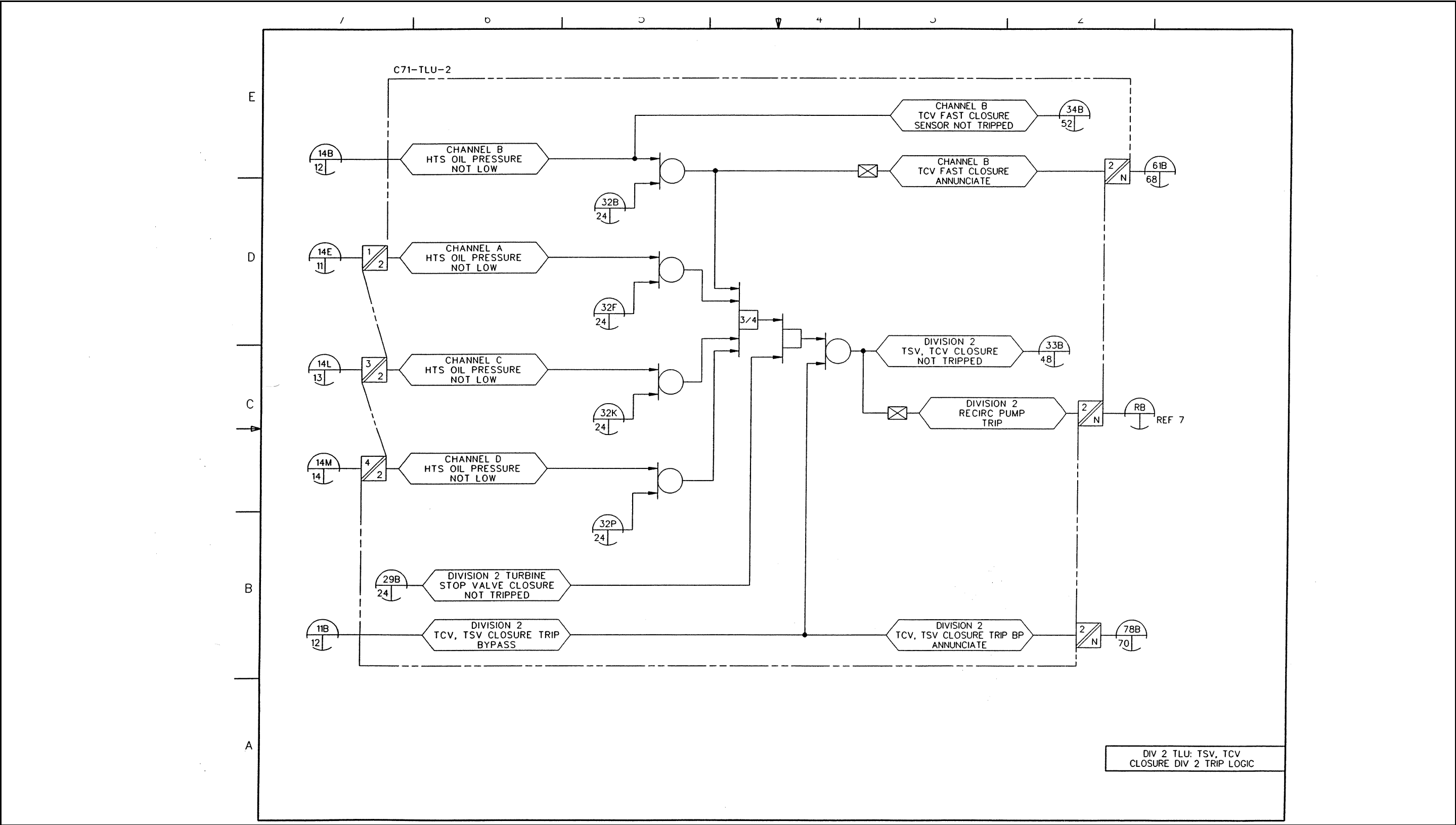


Figure 7.2-10 Reactor Protection System IBD (Sheet 28 of 72)

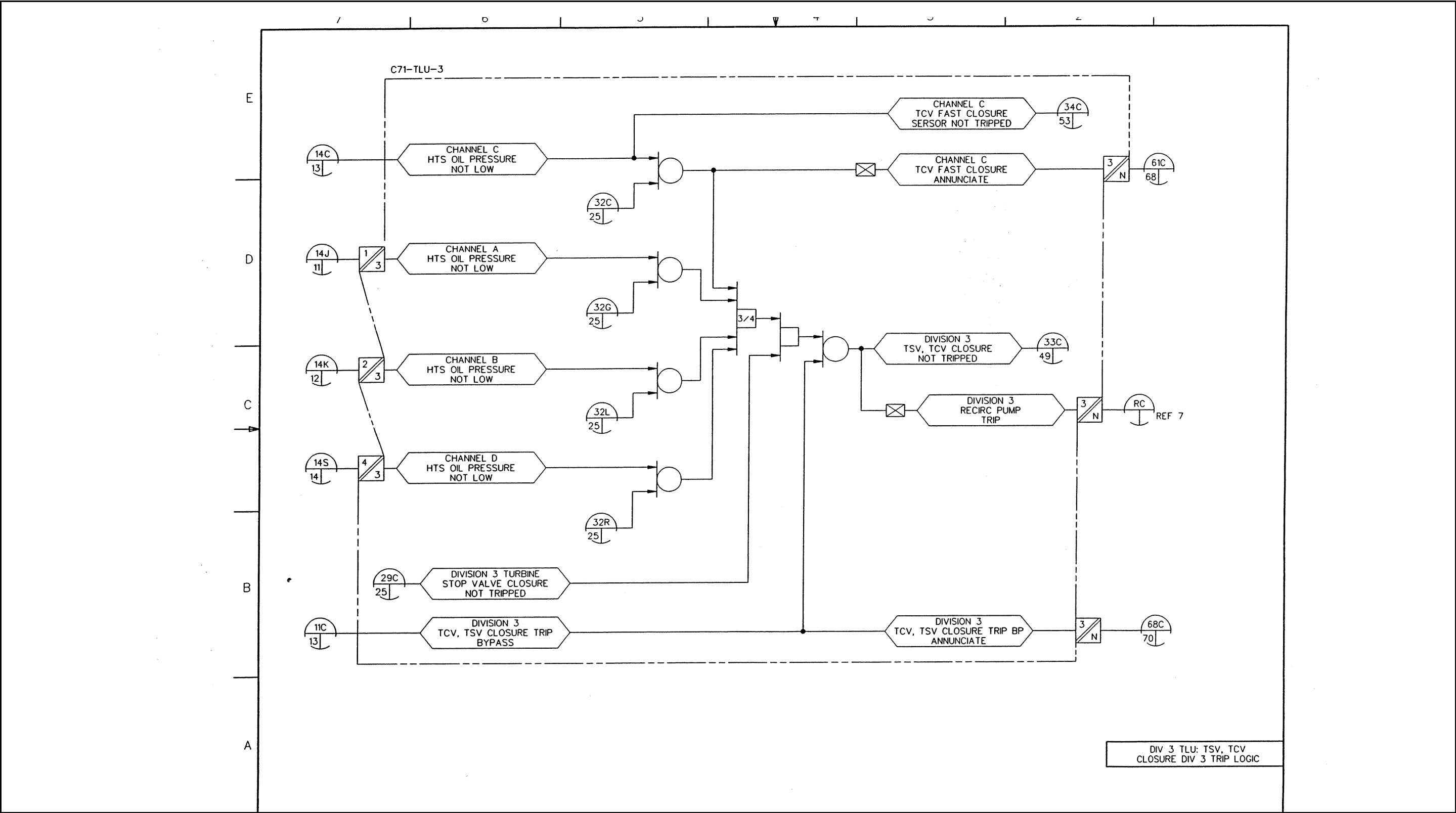


Figure 7.2-10 Reactor Protection System IBD (Sheet 29 of 72)

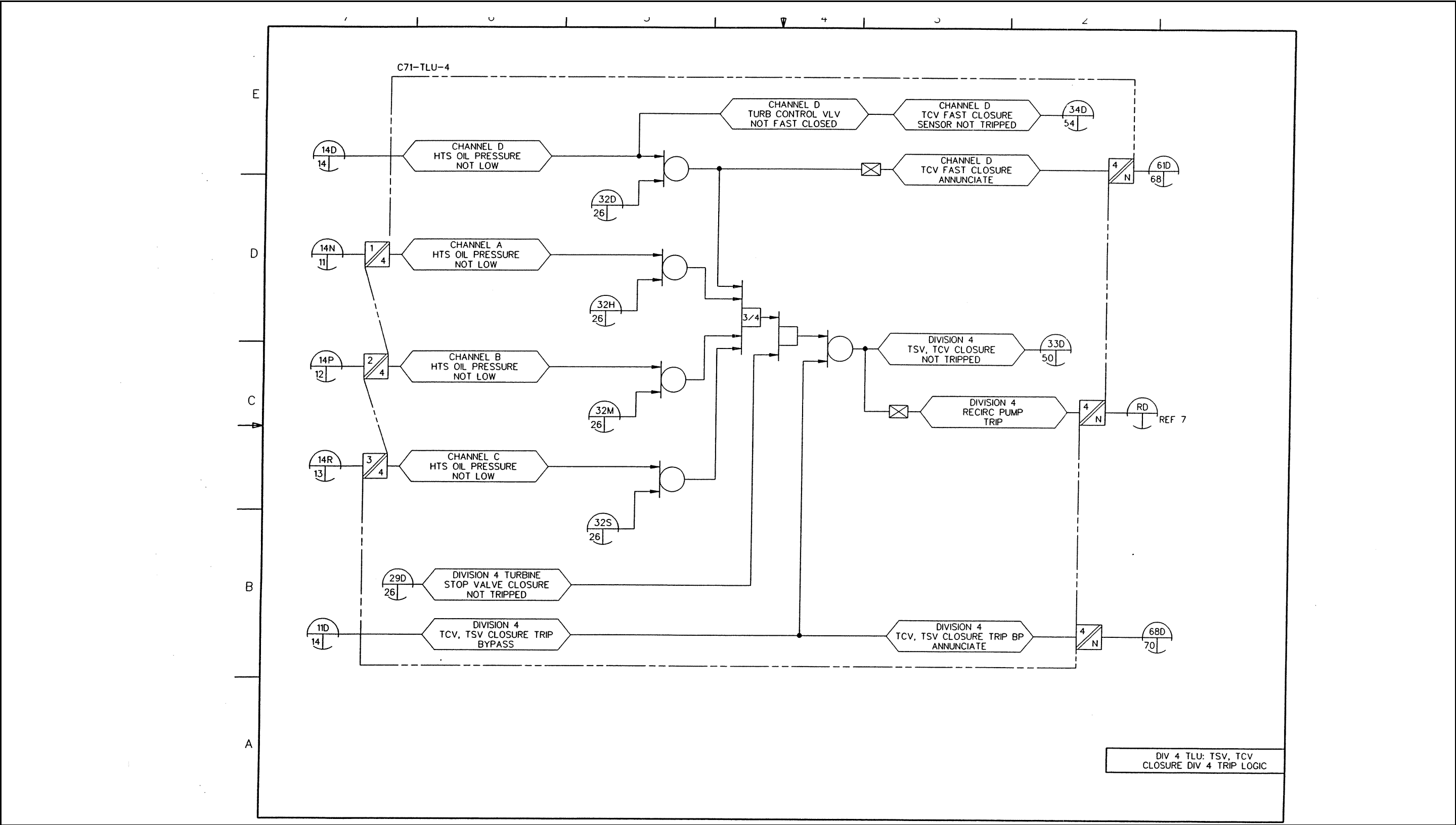


Figure 7.2-10 Reactor Protection System IBD (Sheet 30 of 72)

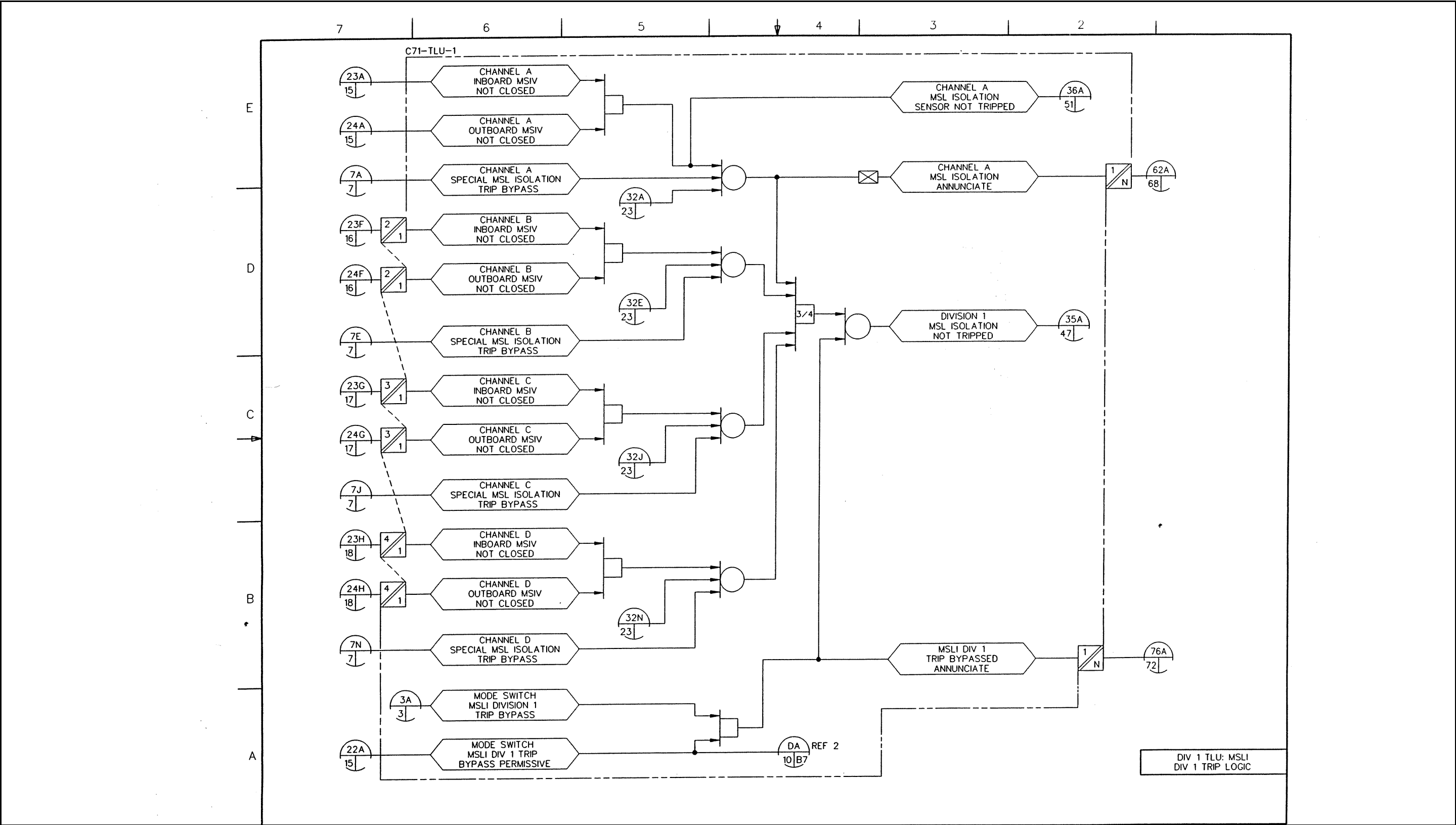


Figure 7.2-10 Reactor Protection System IBD (Sheet 31 of 72)

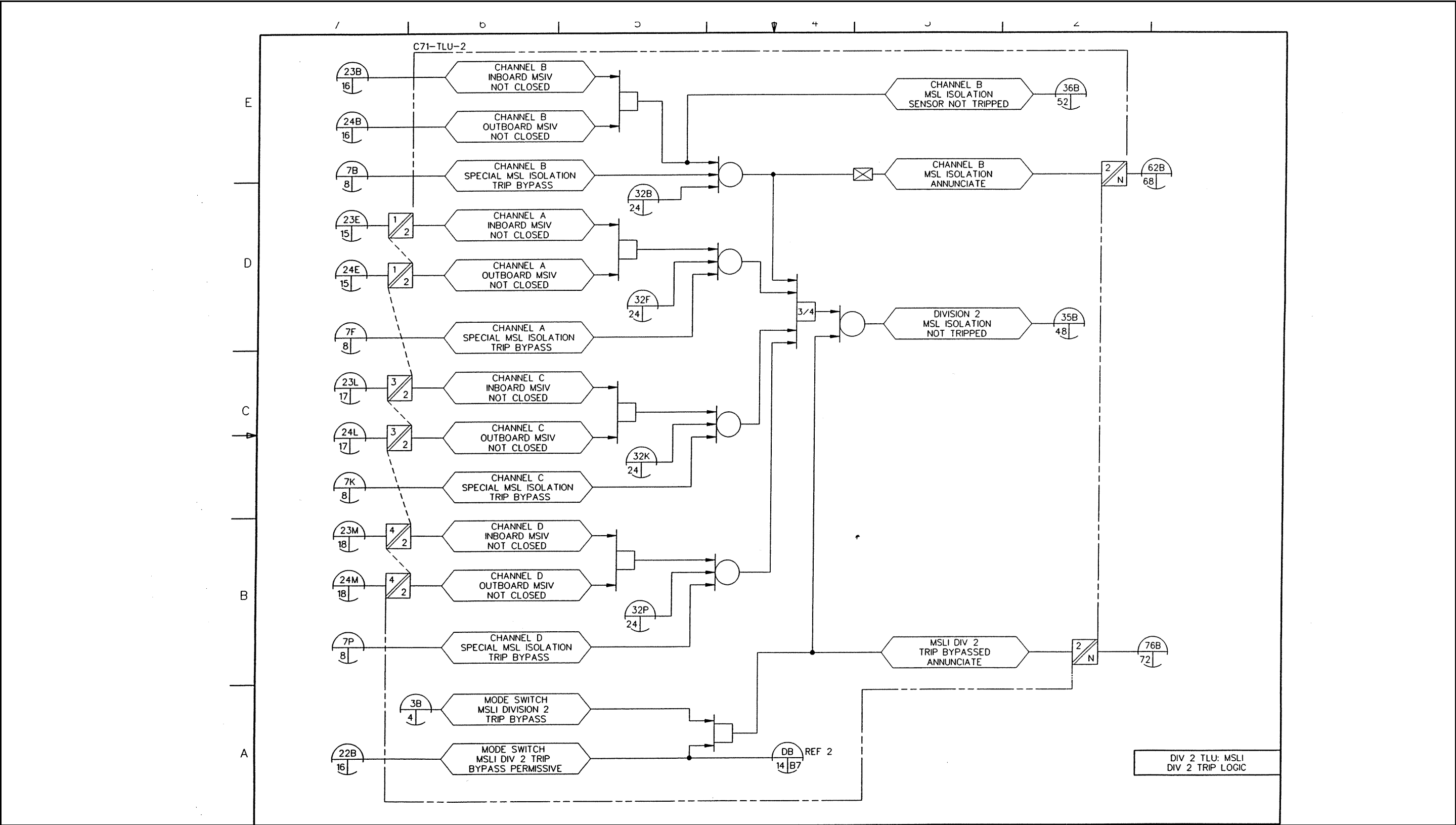


Figure 7.2-10 Reactor Protection System IBD (Sheet 32 of 72)

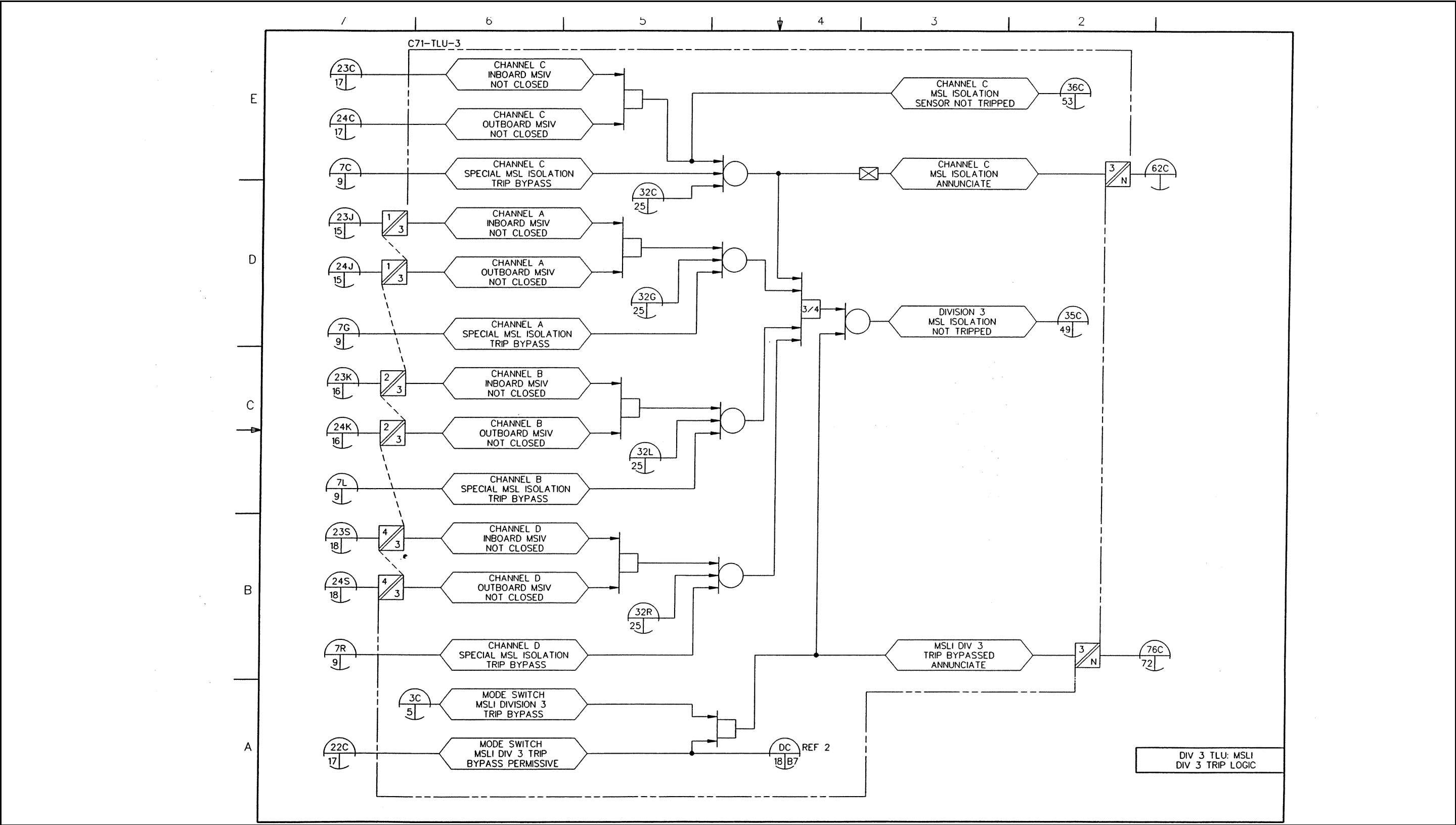
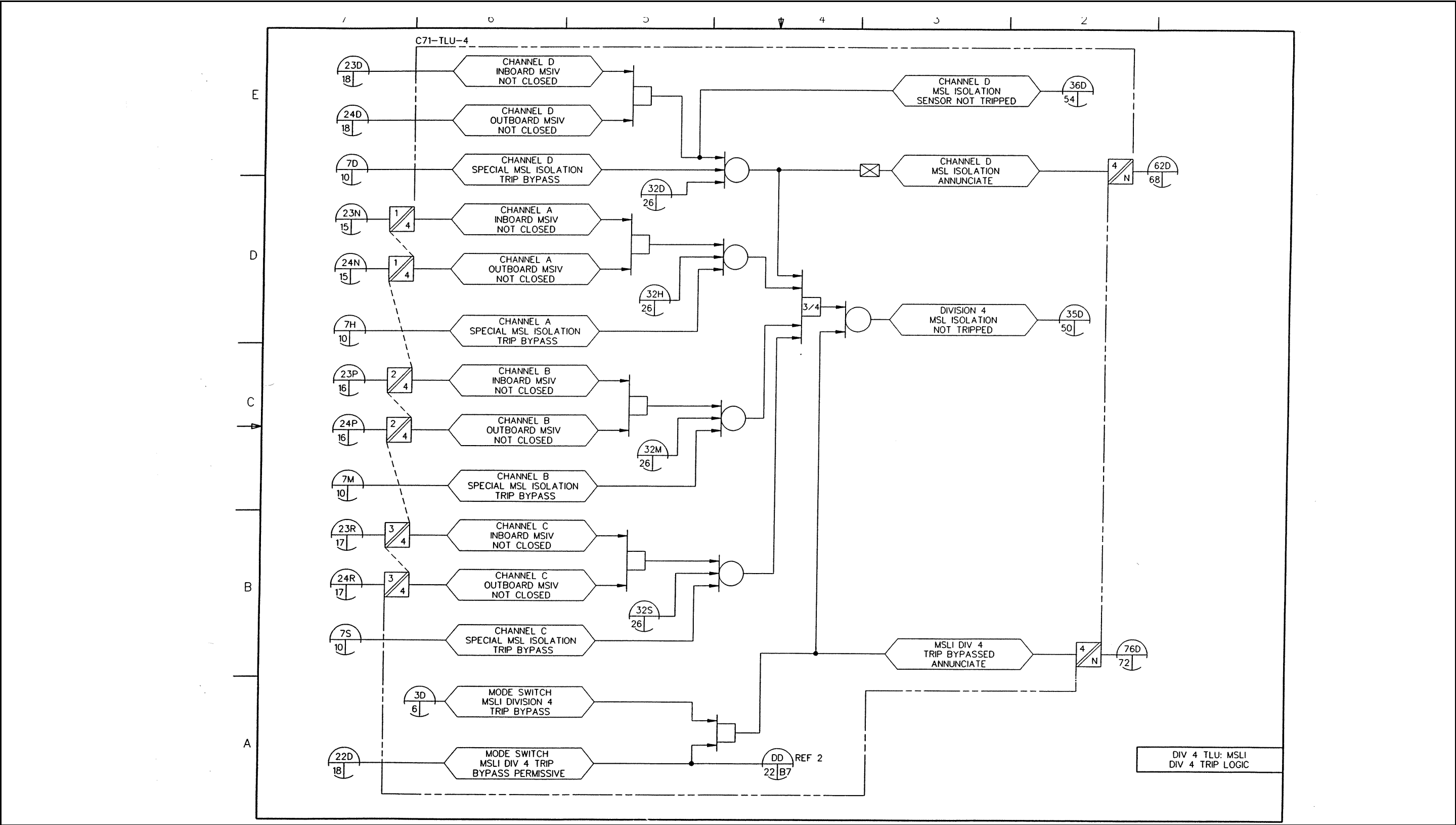


Figure 7.2-10 Reactor Protection System IBD (Sheet 33 of 72)



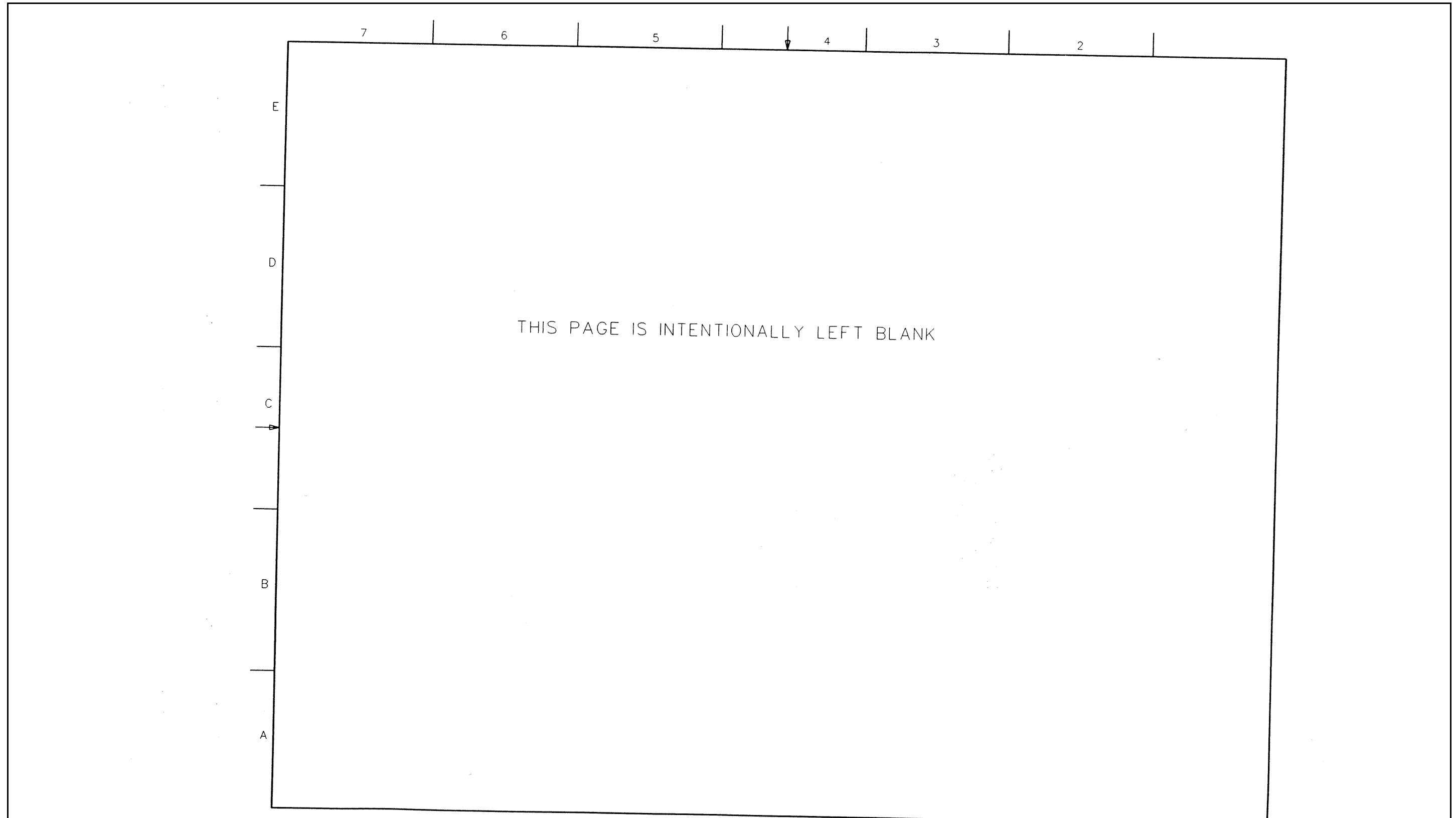


Figure 7.2-10 Reactor Protection System IBD (Sheet 35 of 72)

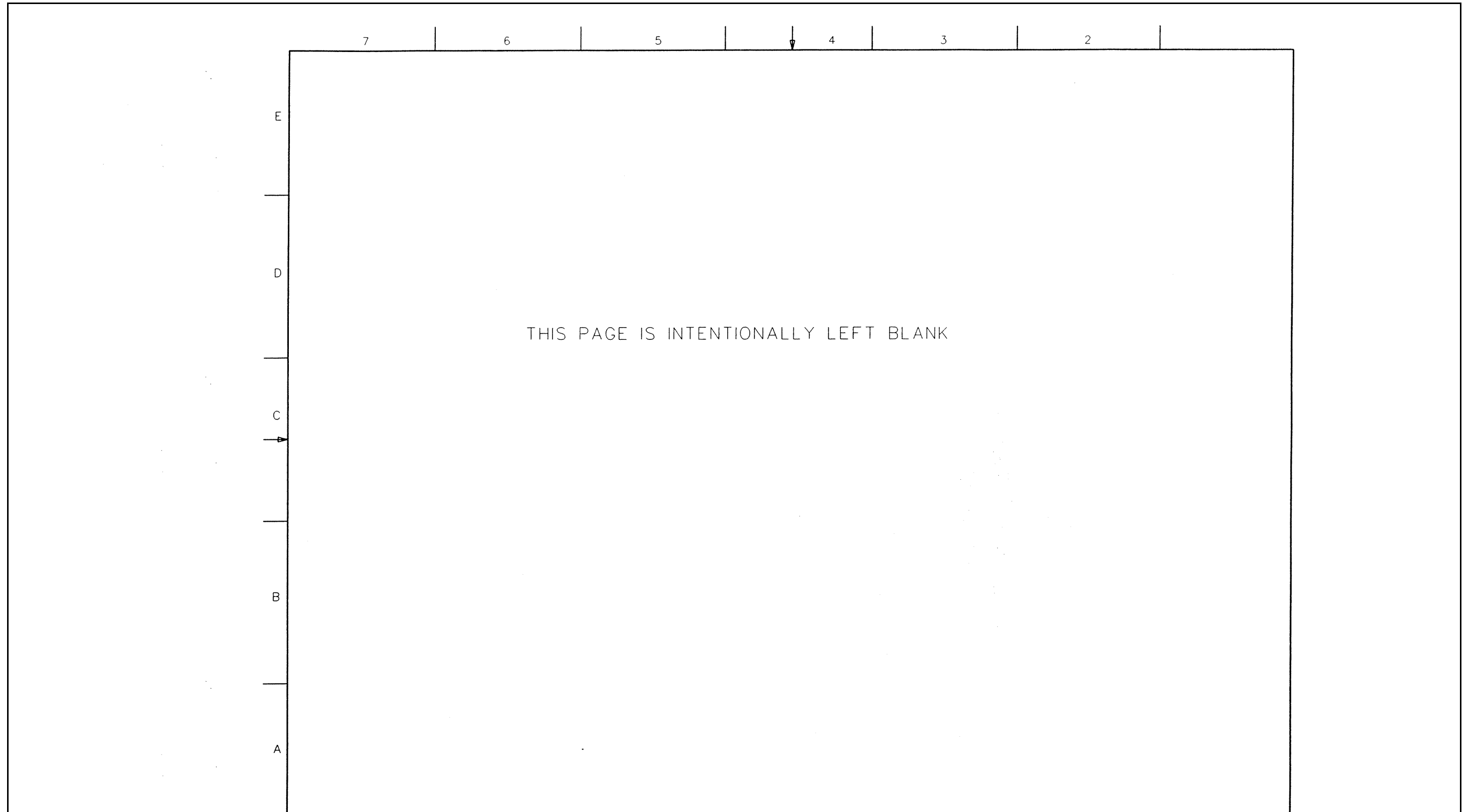


Figure 7.2-10 Reactor Protection System IBD (Sheet 36 of 72)

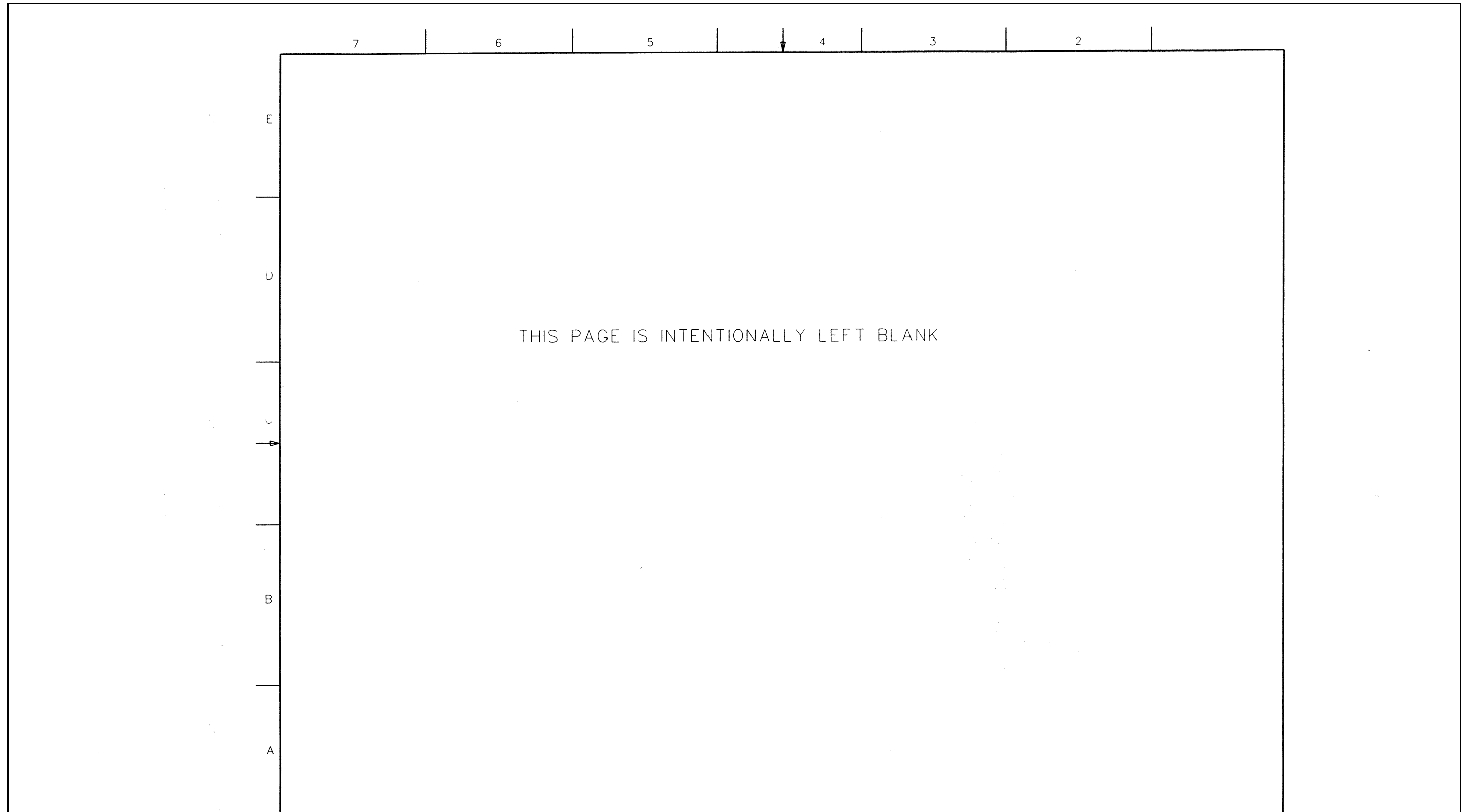


Figure 7.2-10 Reactor Protection System IBD (Sheet 37 of 72)

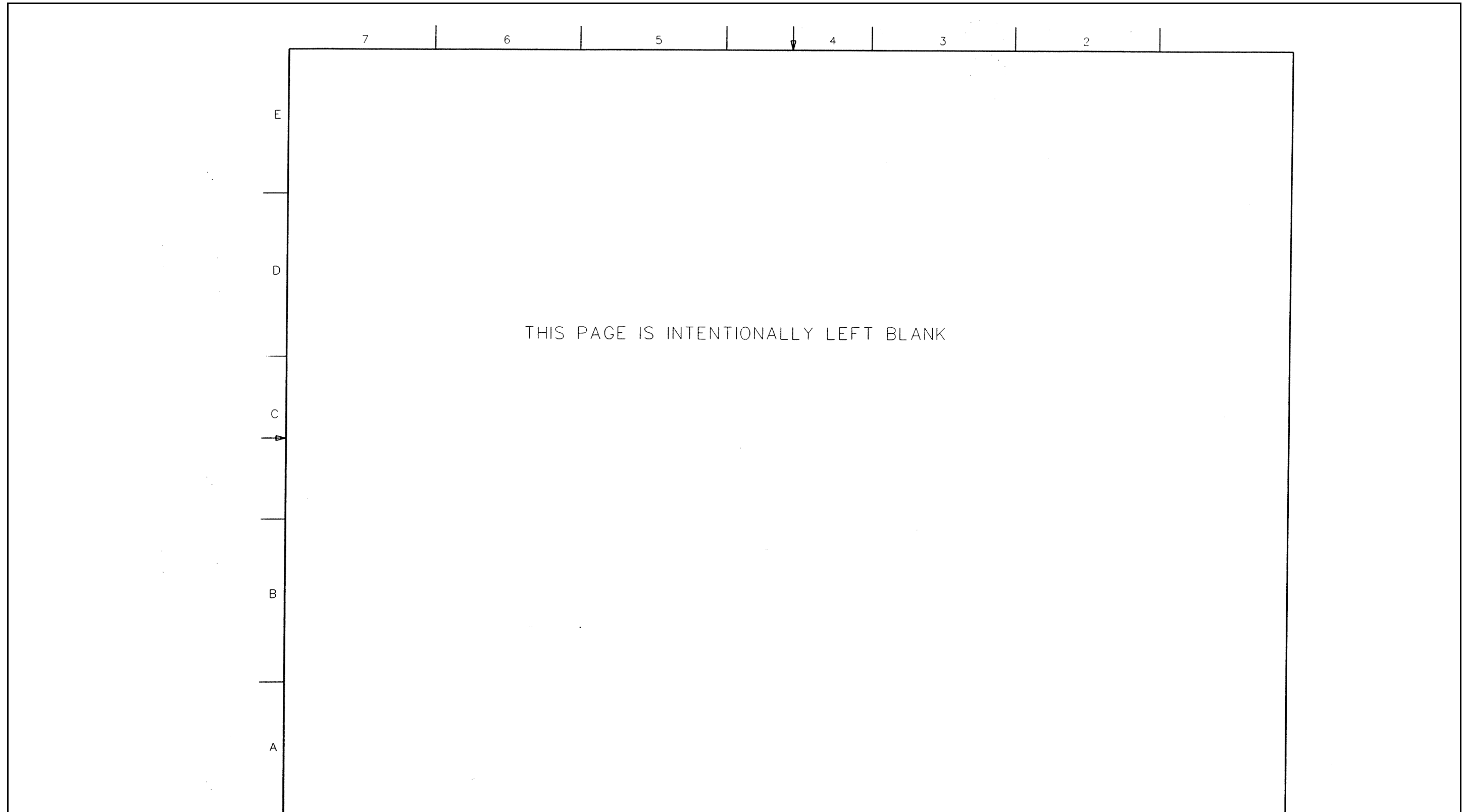


Figure 7.2-10 Reactor Protection System IBD (Sheet 38 of 72)

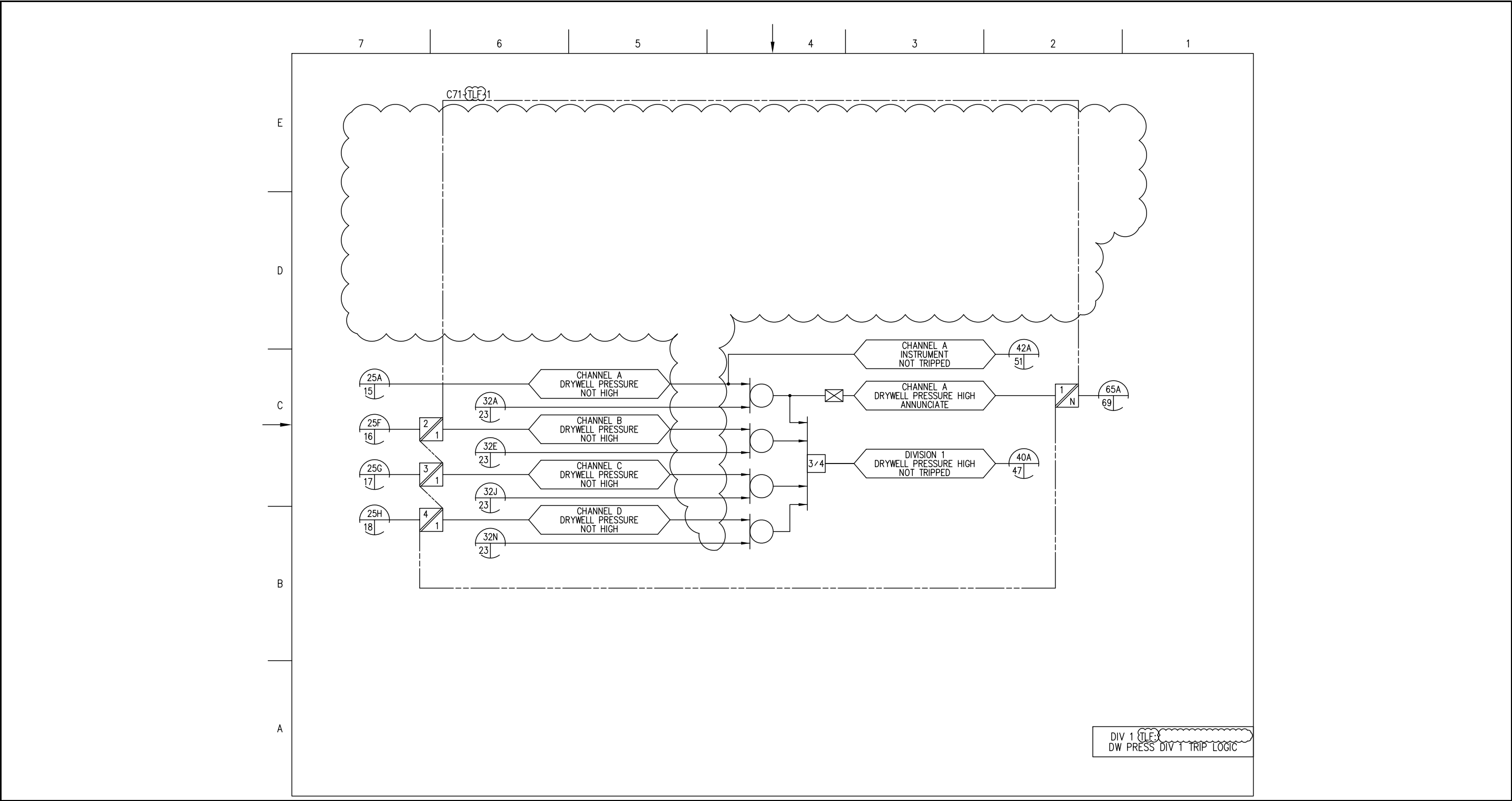


Figure 7.2-10 Reactor Protection System IBD (Sheet 39 of 72)

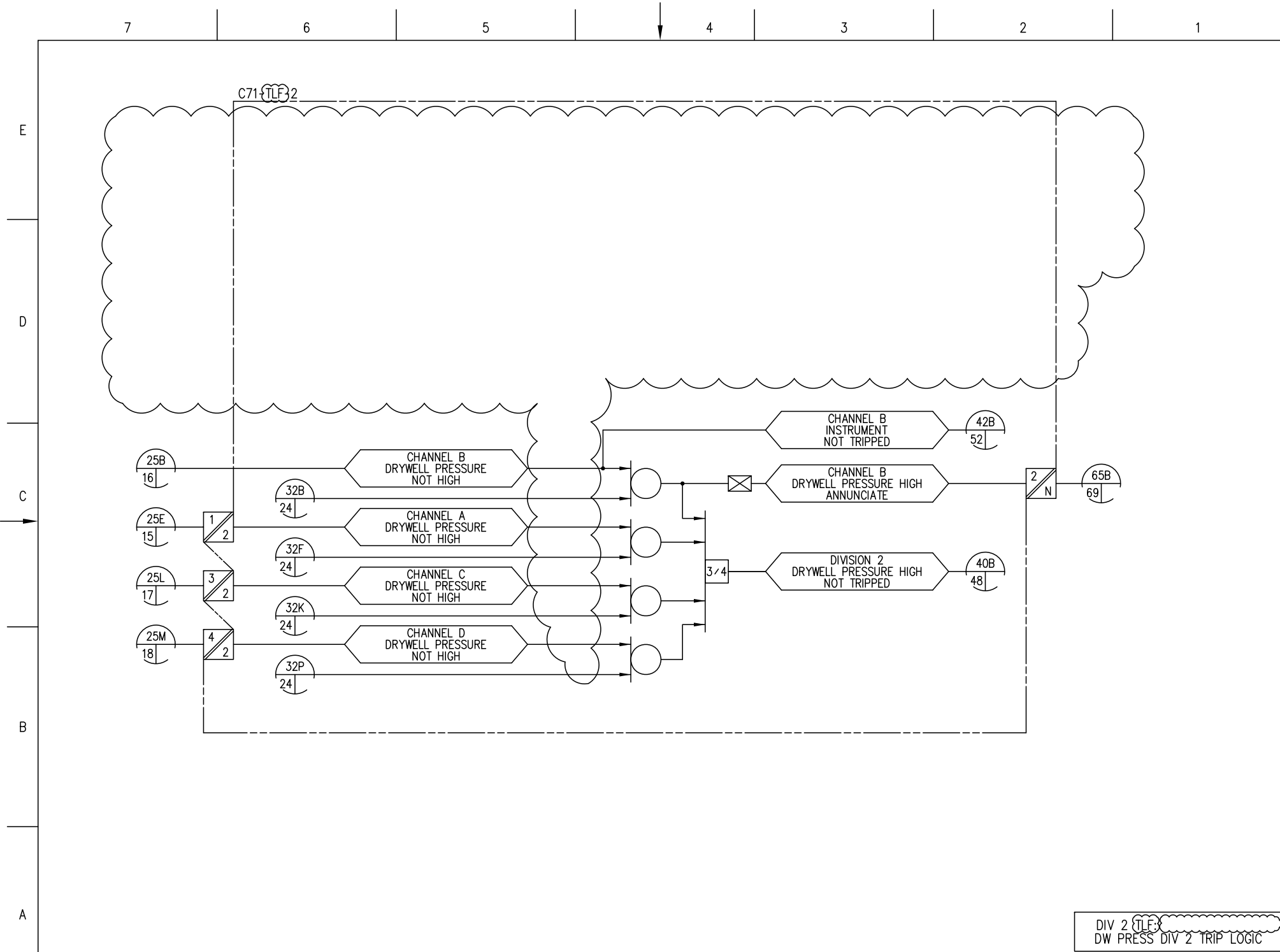


Figure 7.2-10 Reactor Protection System IBD (Sheet 40 of 72)

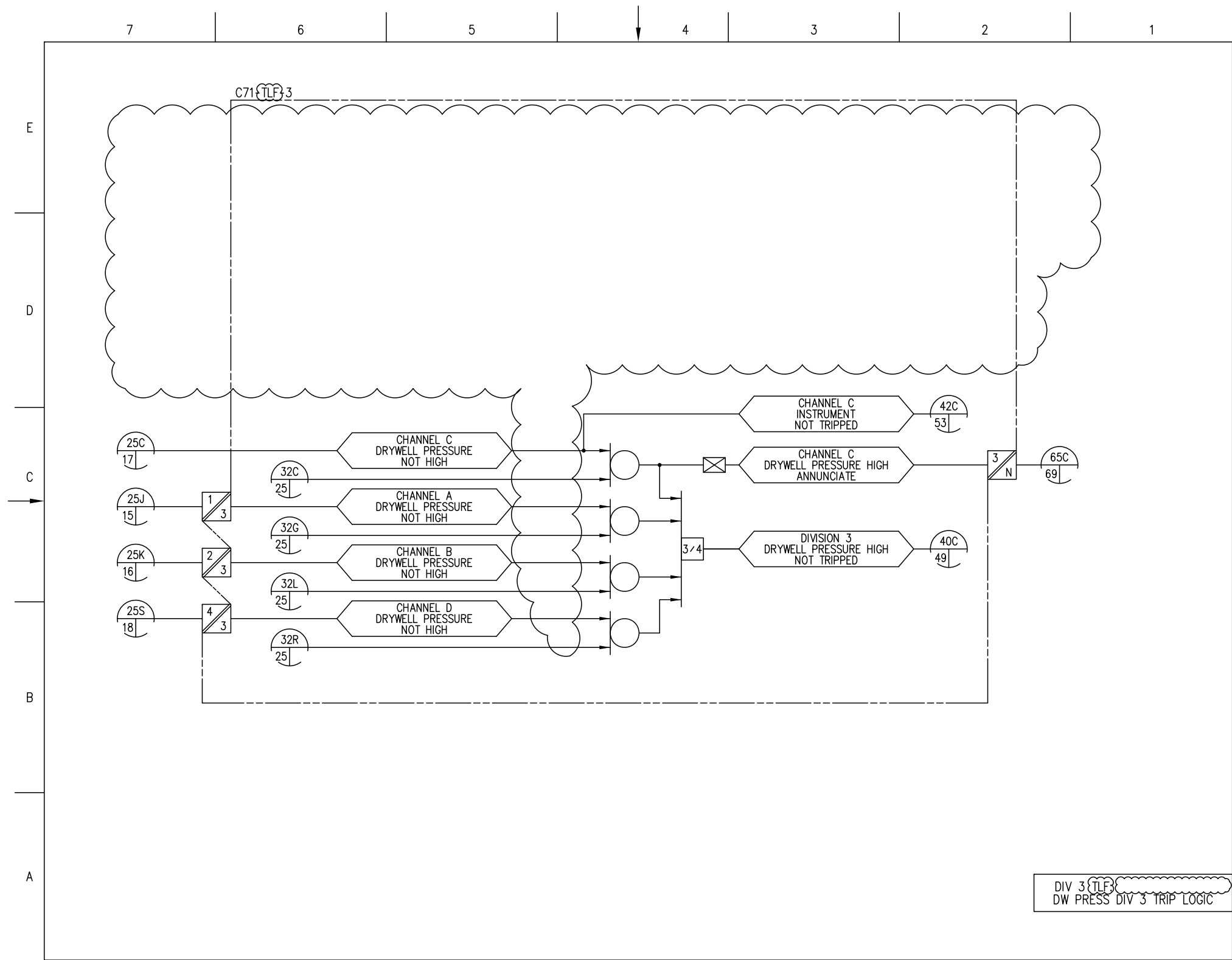


Figure 7.2-10 Reactor Protection System IBD (Sheet 41 of 72)

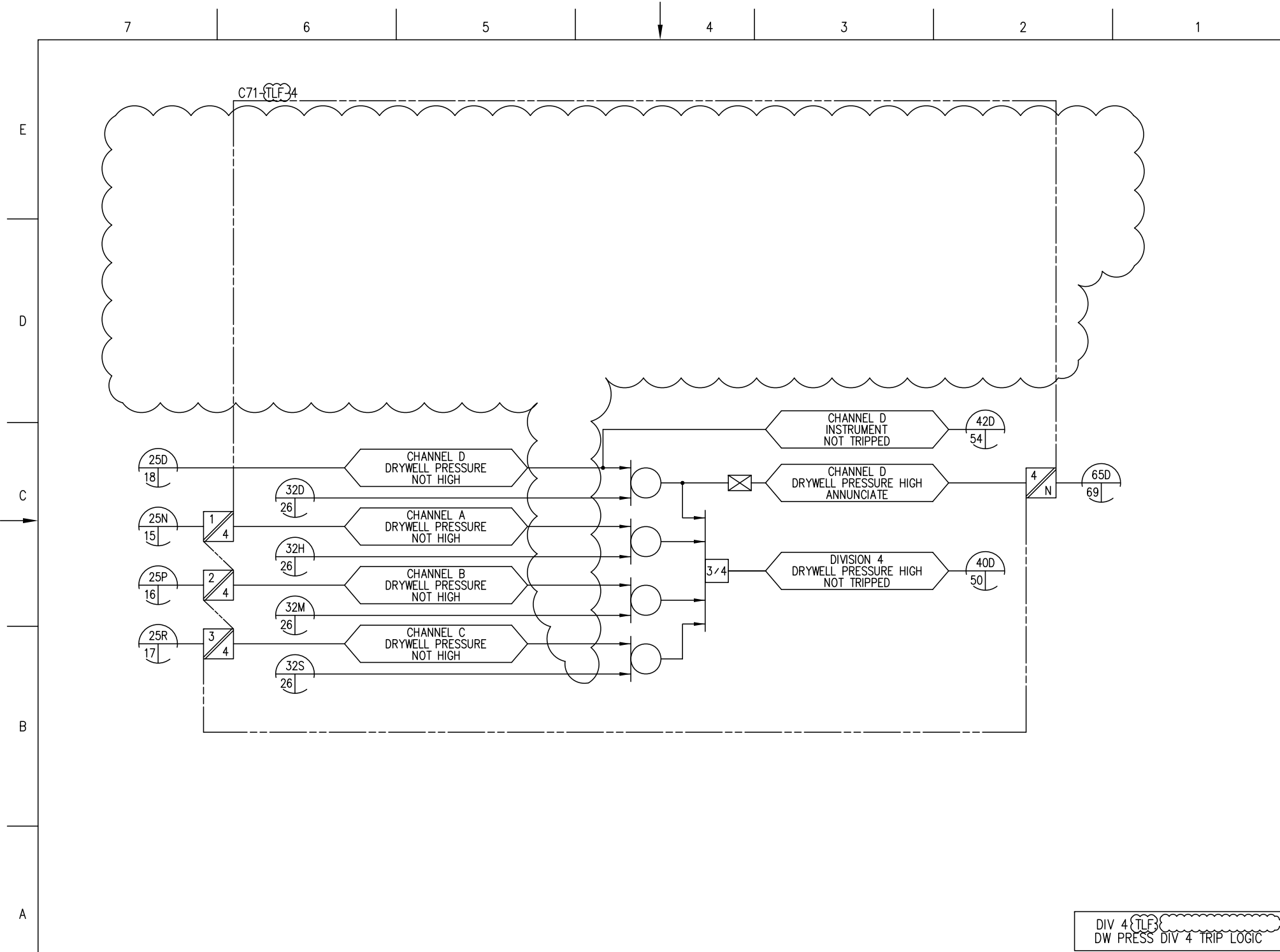


Figure 7.2-10 Reactor Protection System IBD (Sheet 42 of 72)

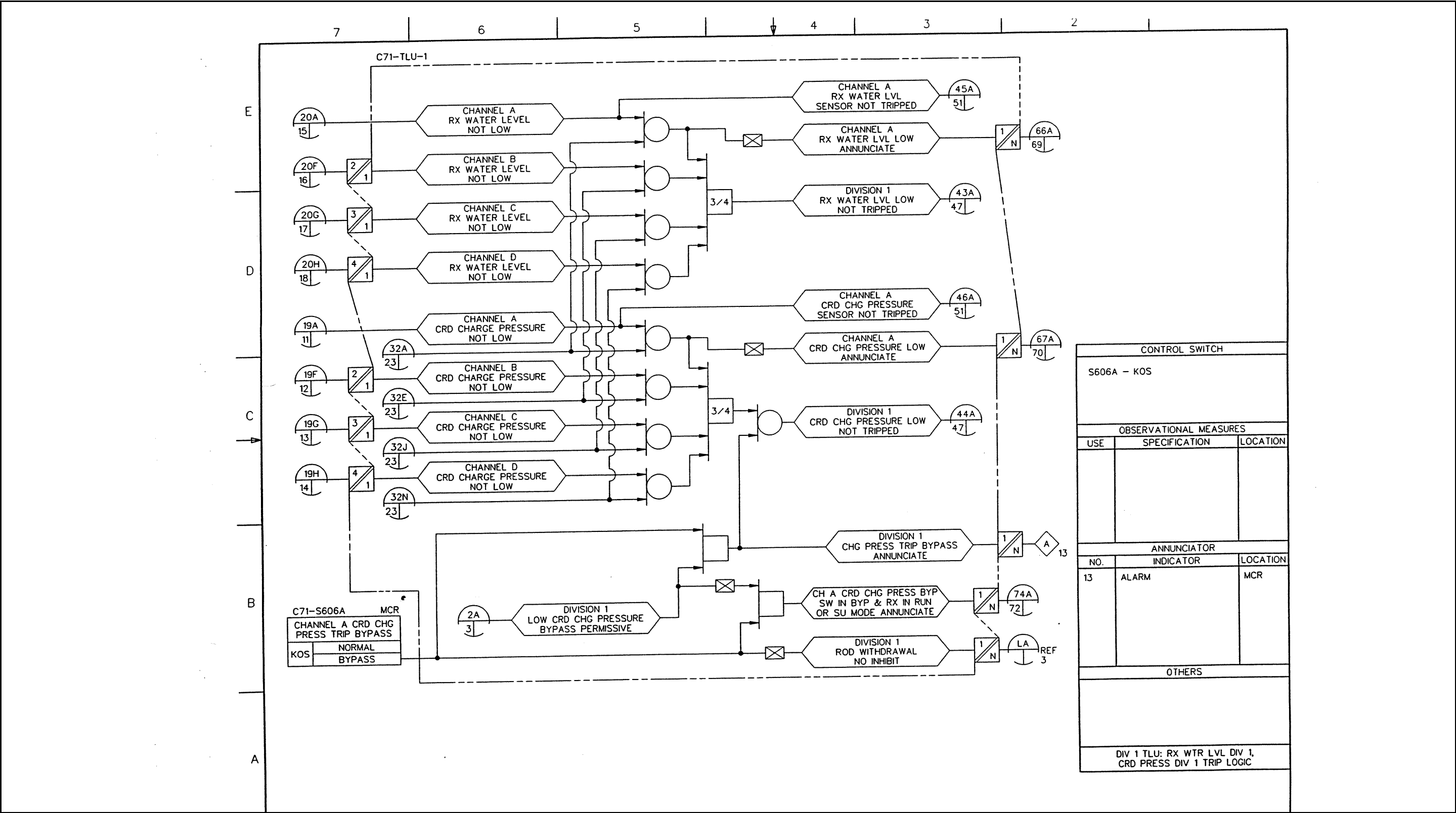


Figure 7.2-10 Reactor Protection System IBD (Sheet 43 of 72)

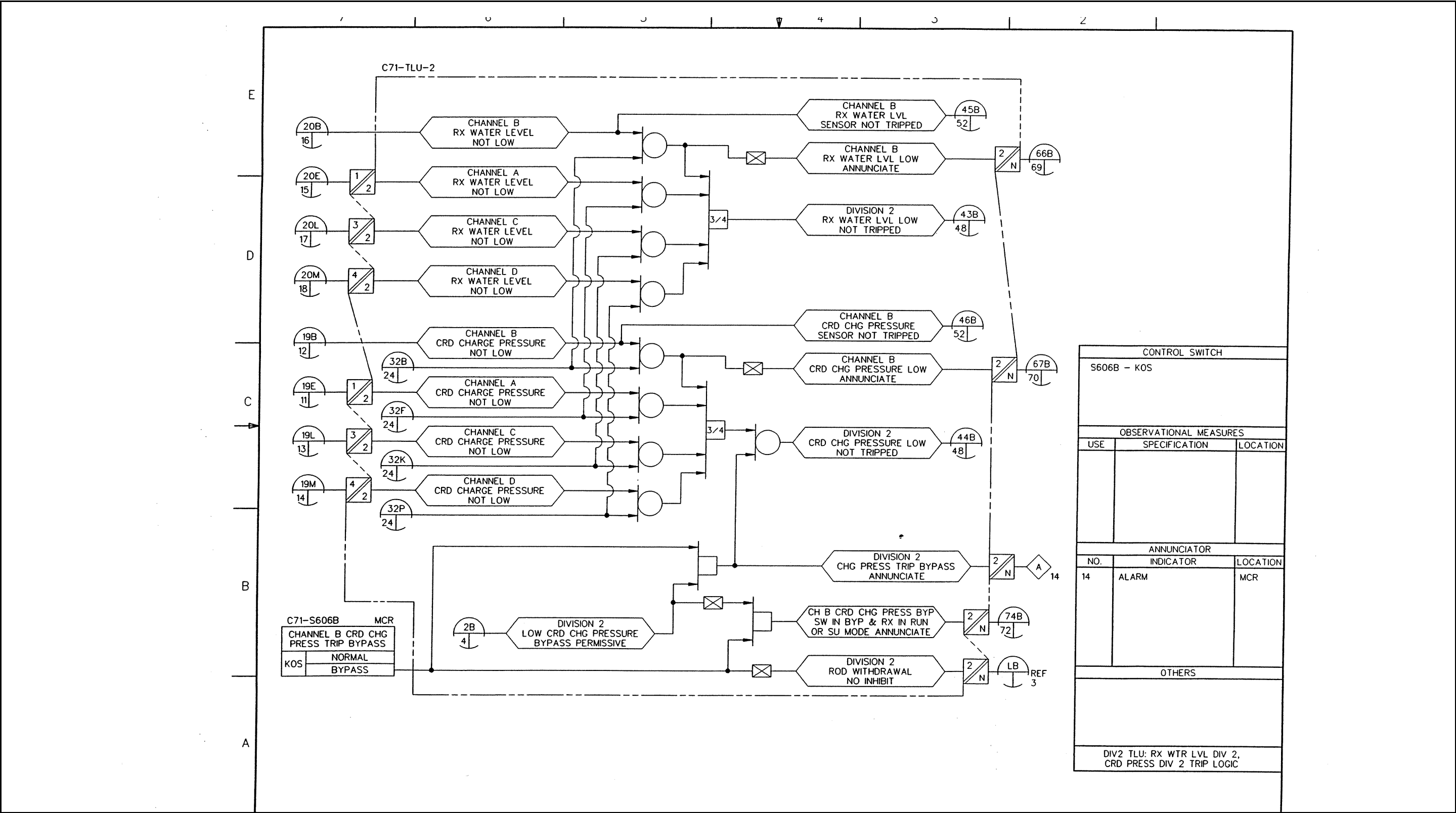


Figure 7.2-10 Reactor Protection System IBD (Sheet 44 of 72)

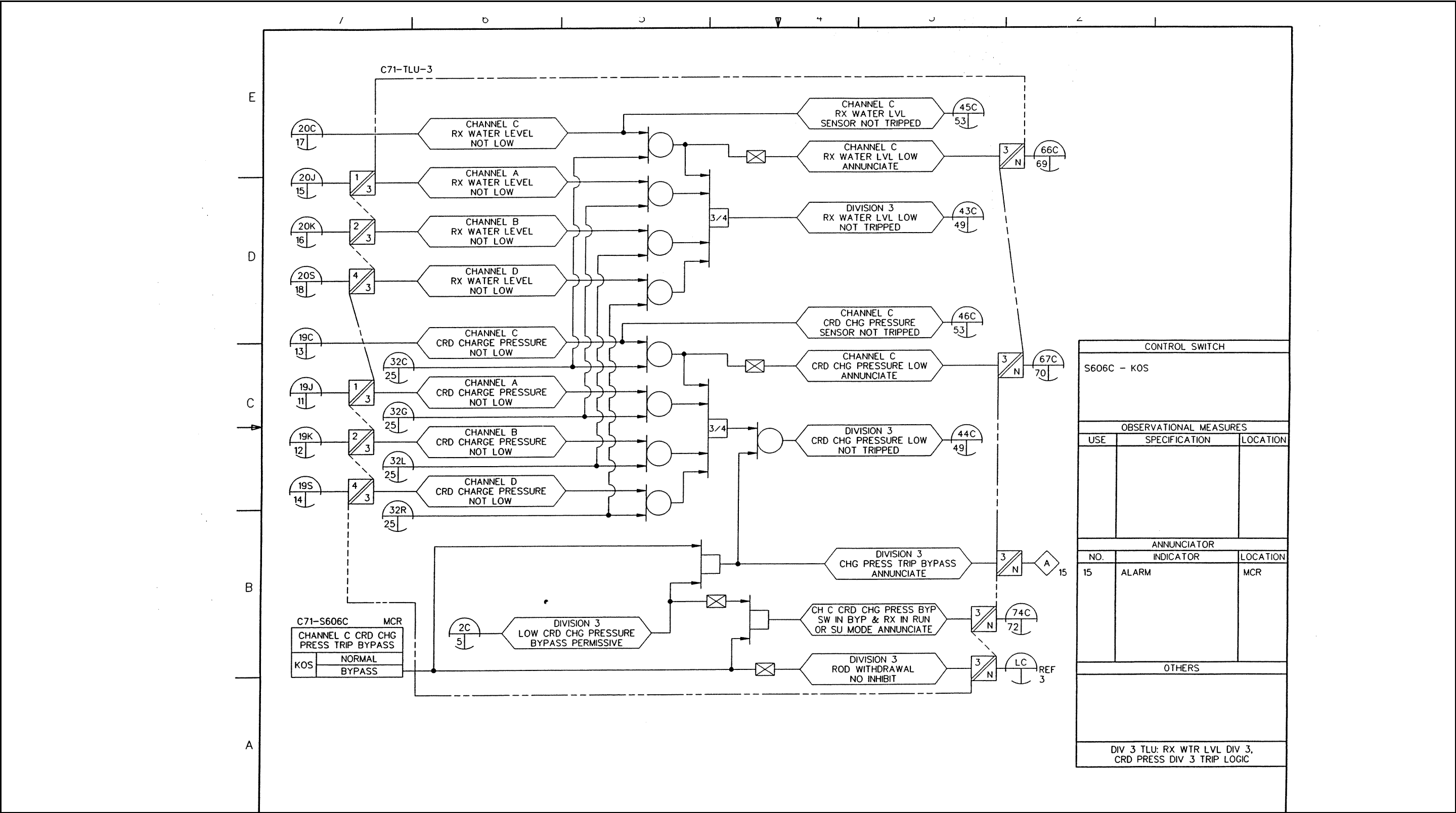


Figure 7.2-10 Reactor Protection System IBD (Sheet 45 of 72)

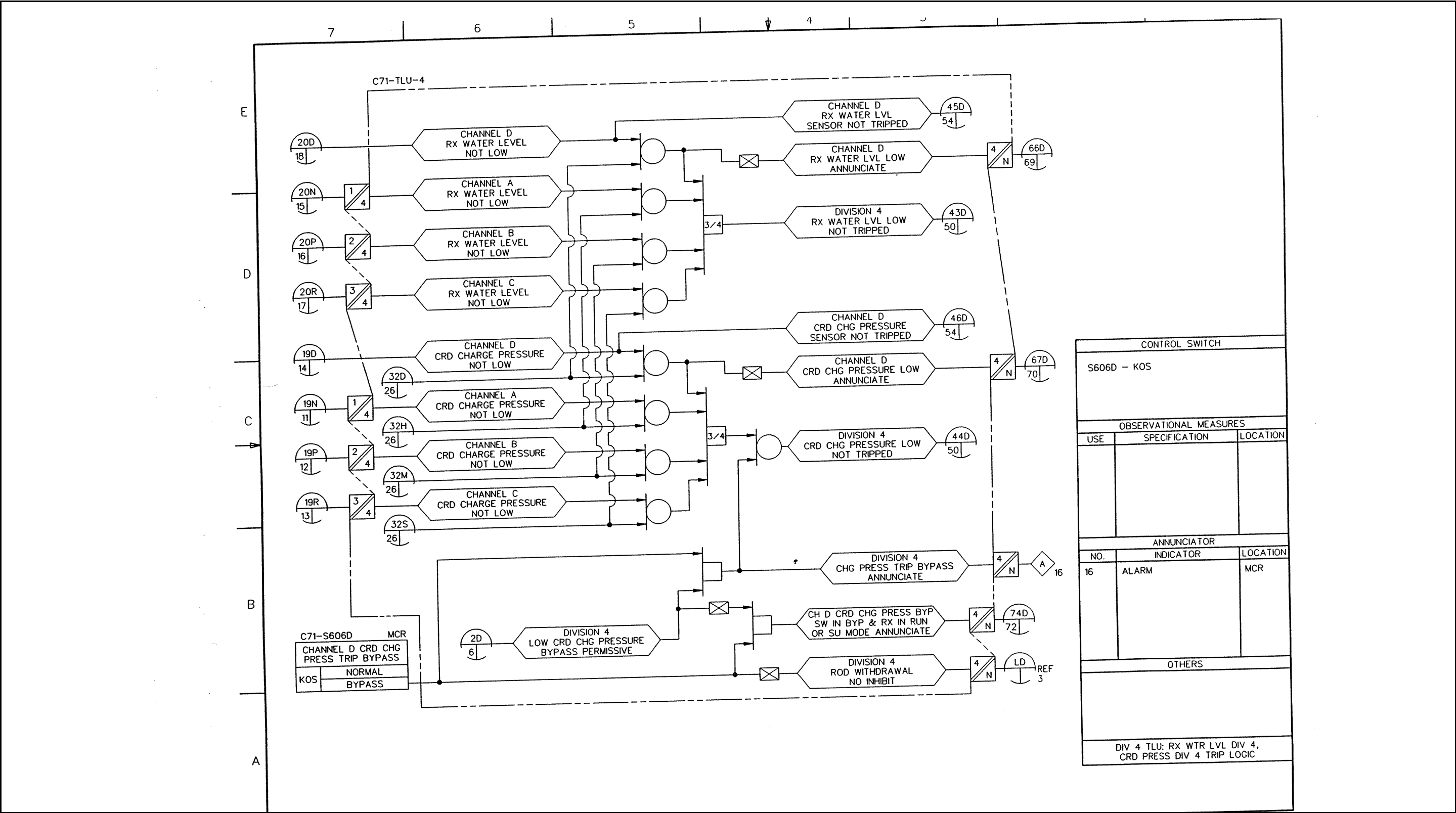


Figure 7.2-10 Reactor Protection System IBD (Sheet 46 of 72)

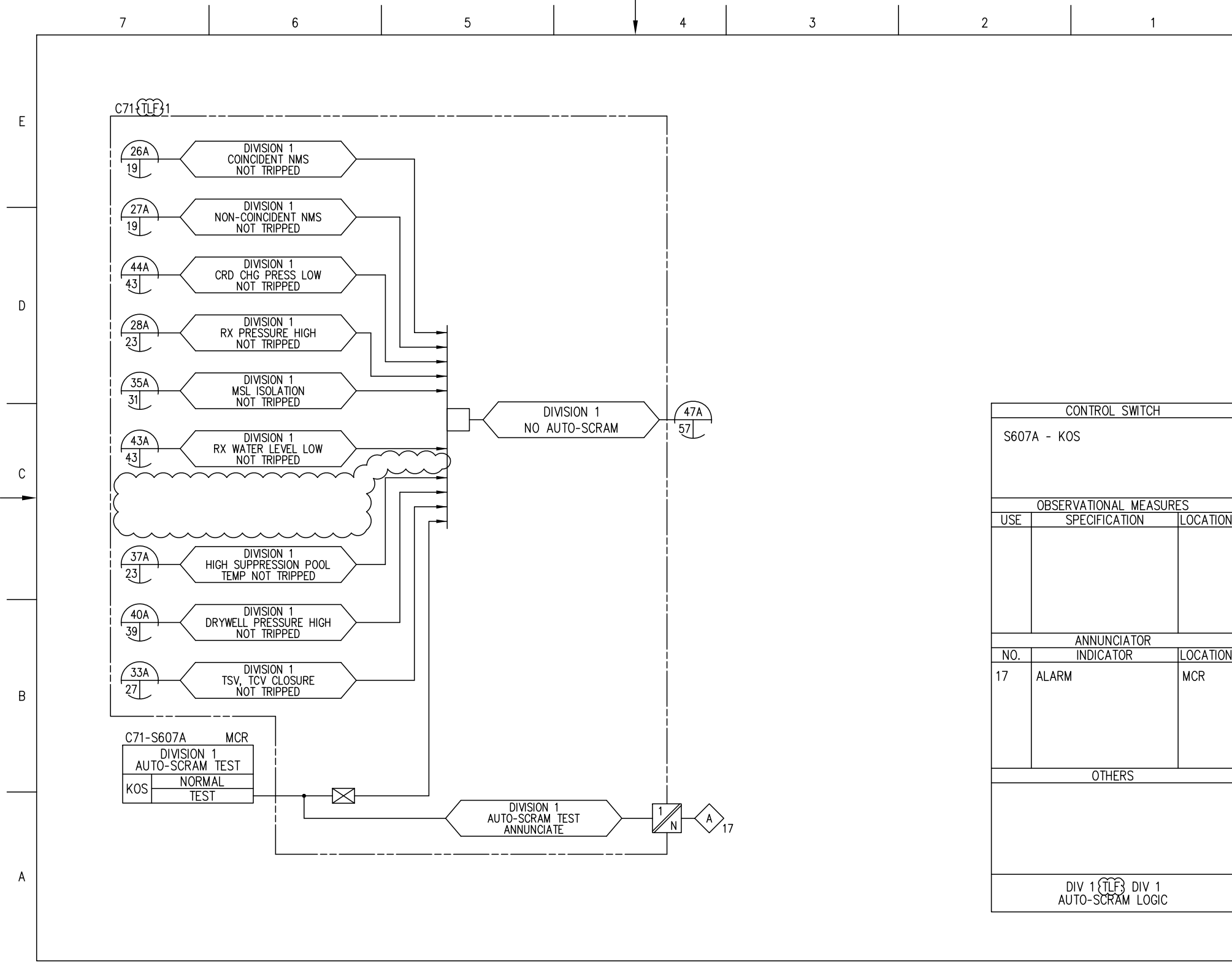


Figure 7.2-10 Reactor Protection System IBD (Sheet 47 of 72)

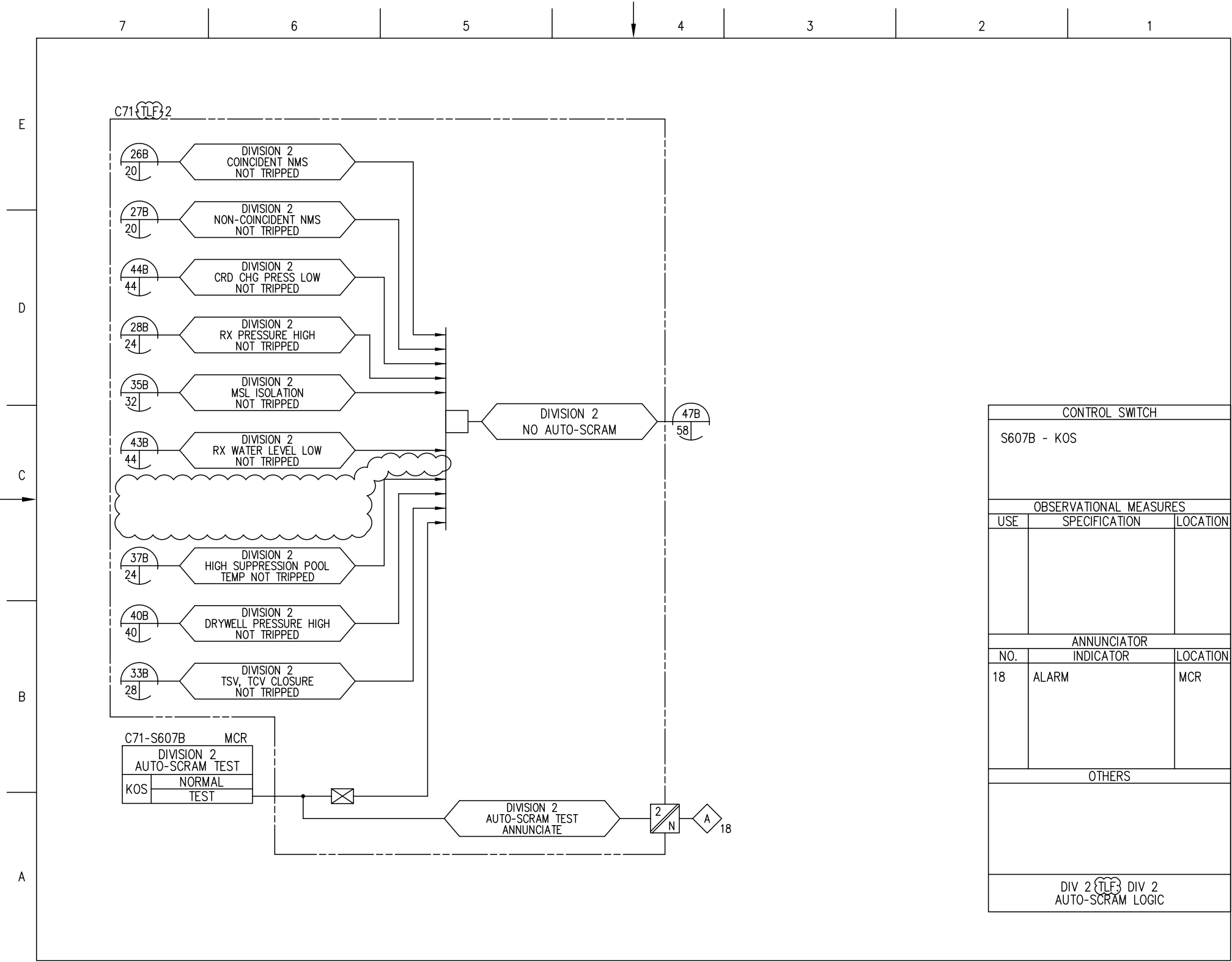


Figure 7.2-10 Reactor Protection System IBD (Sheet 48 of 72)

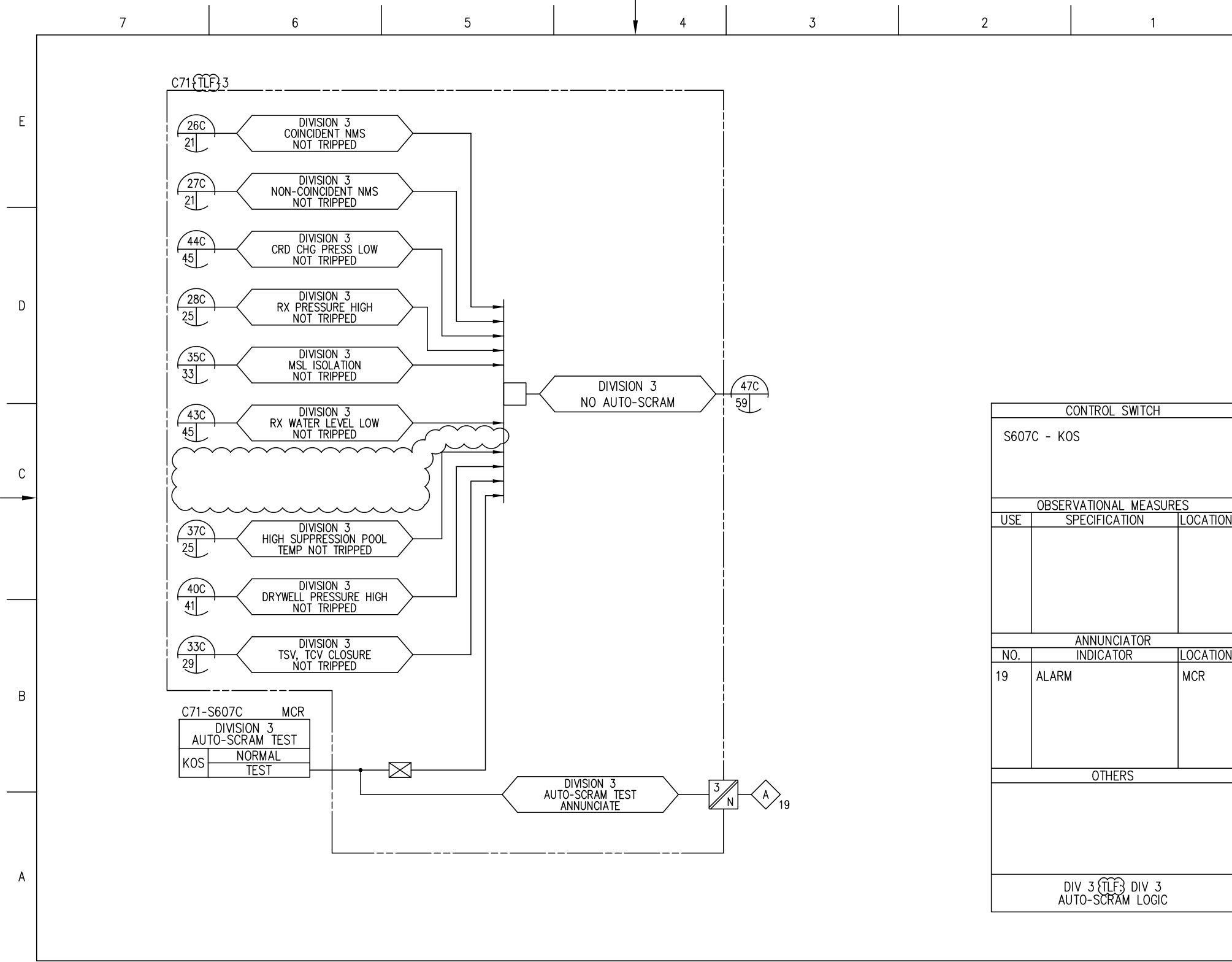


Figure 7.2-10 Reactor Protection System IBD (Sheet 49 of 72)

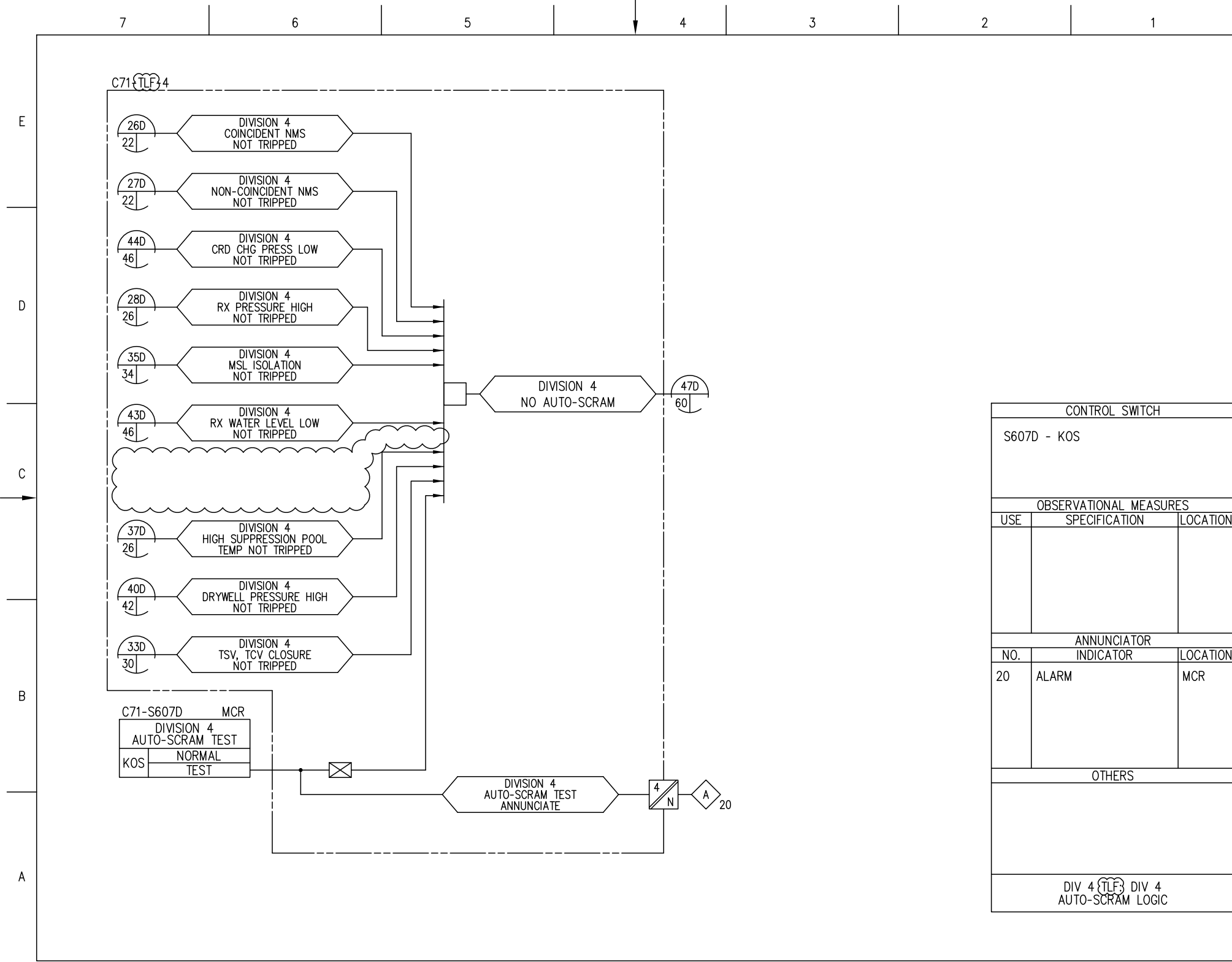


Figure 7.2-10 Reactor Protection System IBD (Sheet 50 of 72)

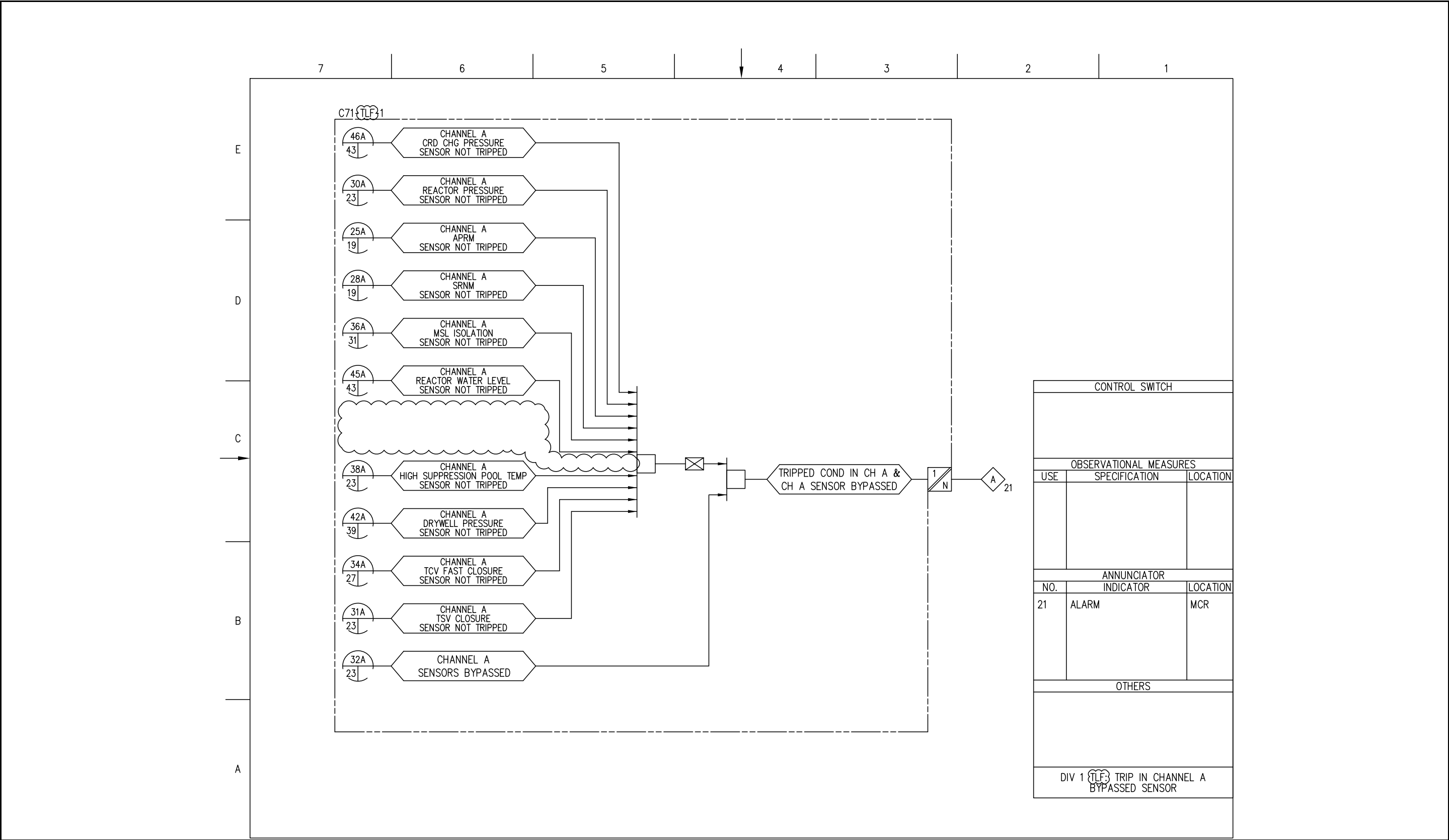


Figure 7.2-10 Reactor Protection System IBD (Sheet 51 of 72)

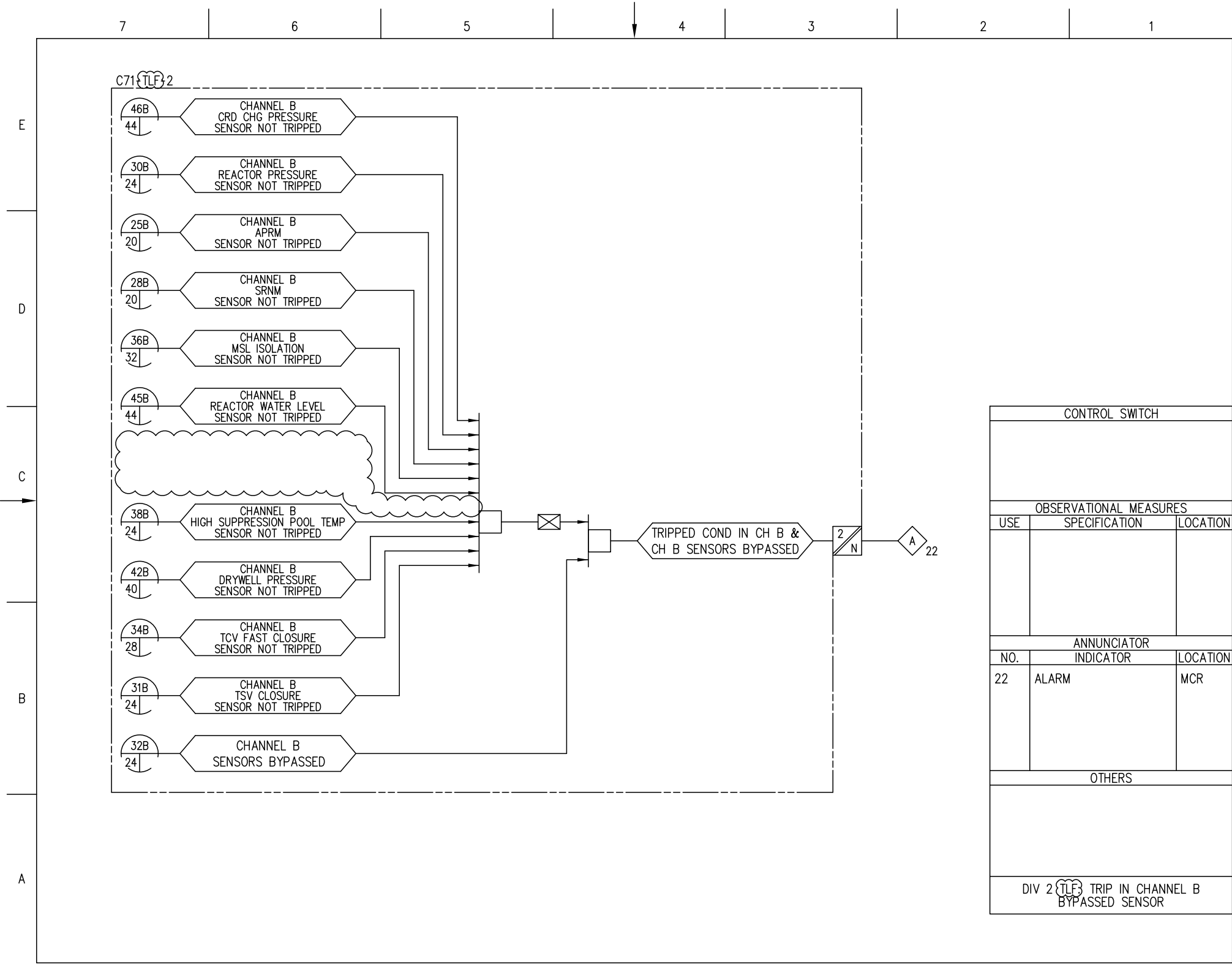


Figure 7.2-10 Reactor Protection System IBD (Sheet 52 of 72)

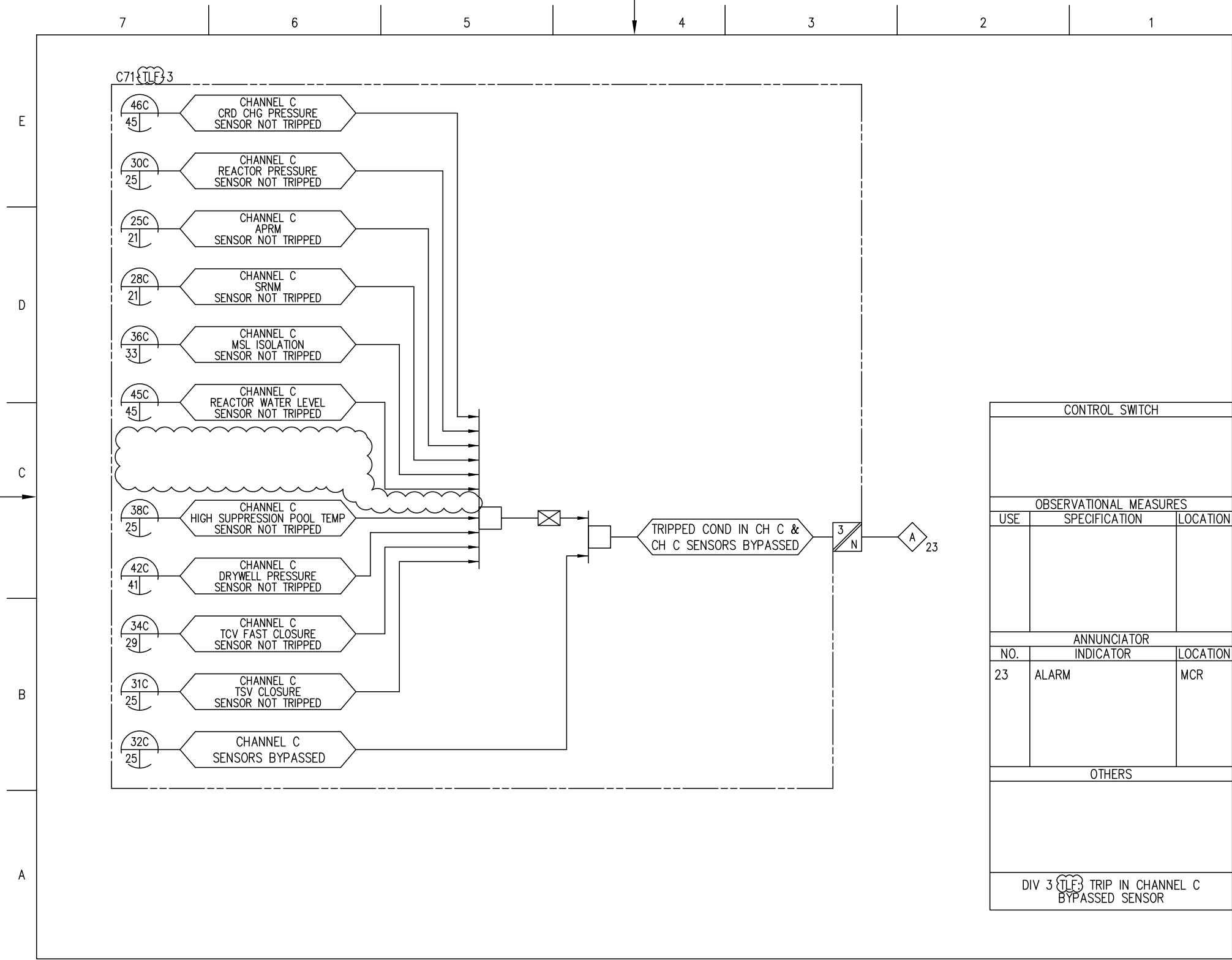


Figure 7.2-10 Reactor Protection System IBD (Sheet 53 of 72)

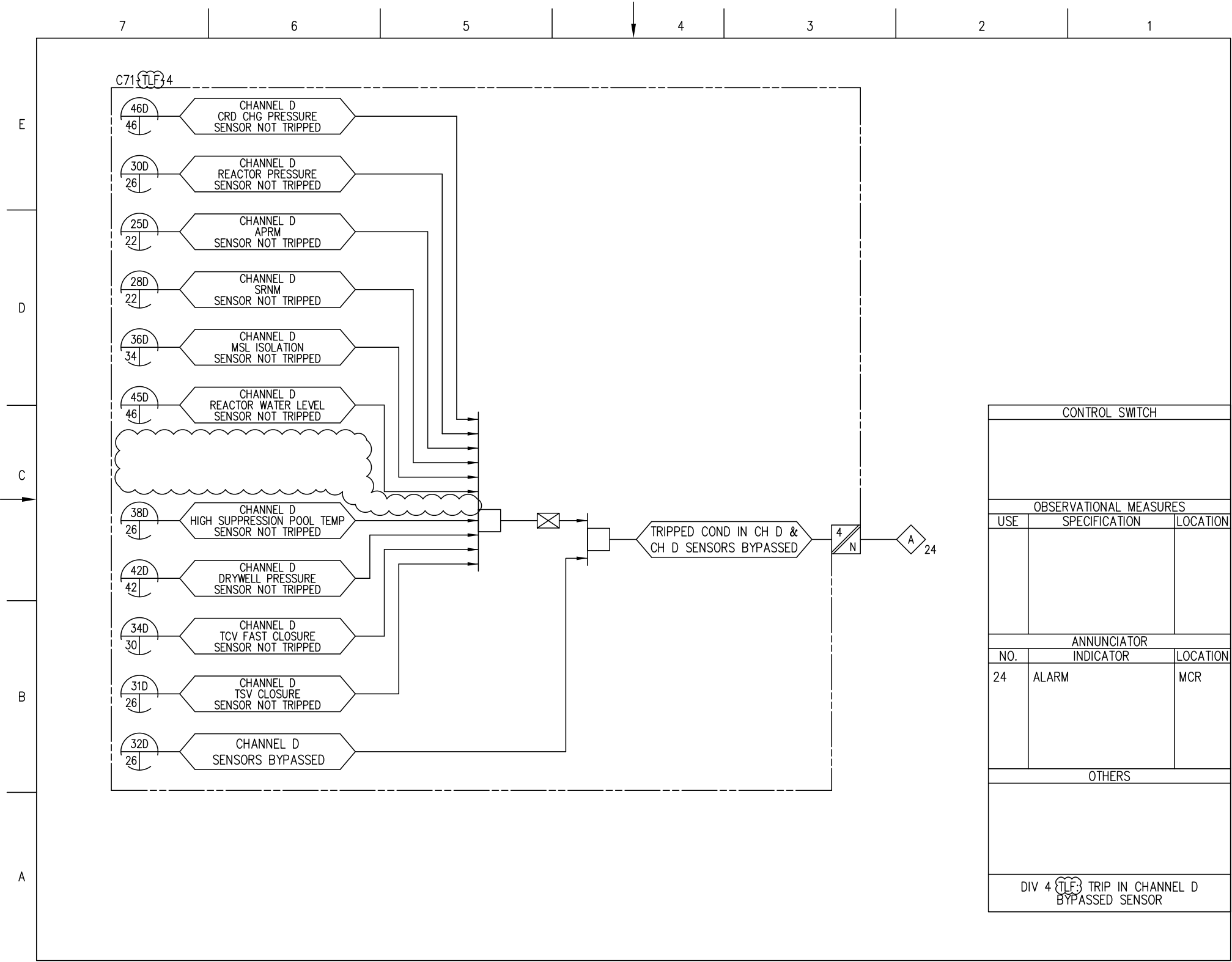


Figure 7.2-10 Reactor Protection System IBD (Sheet 54 of 72)

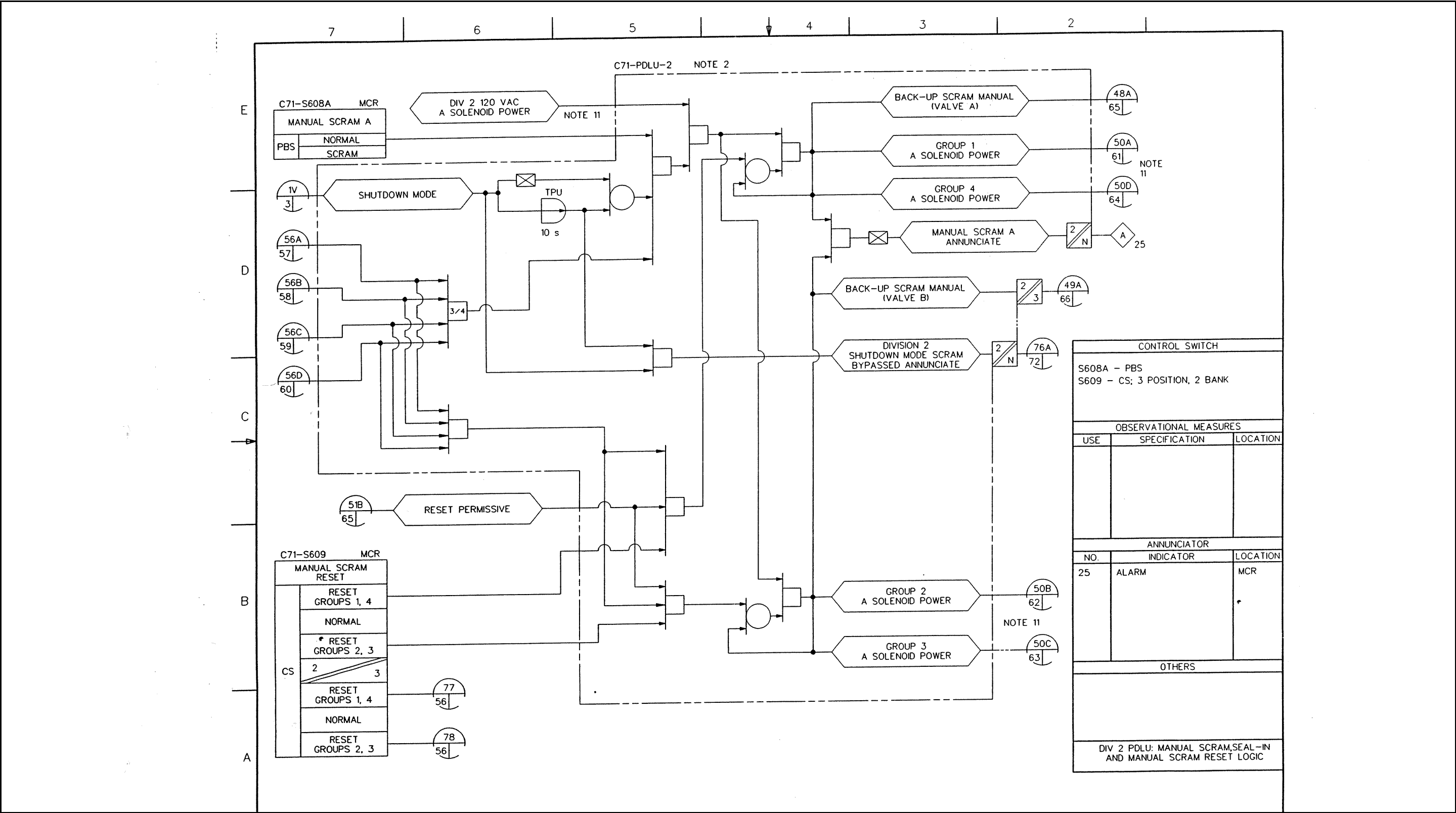


Figure 7.2-10 Reactor Protection System IBD (Sheet 55 of 72)

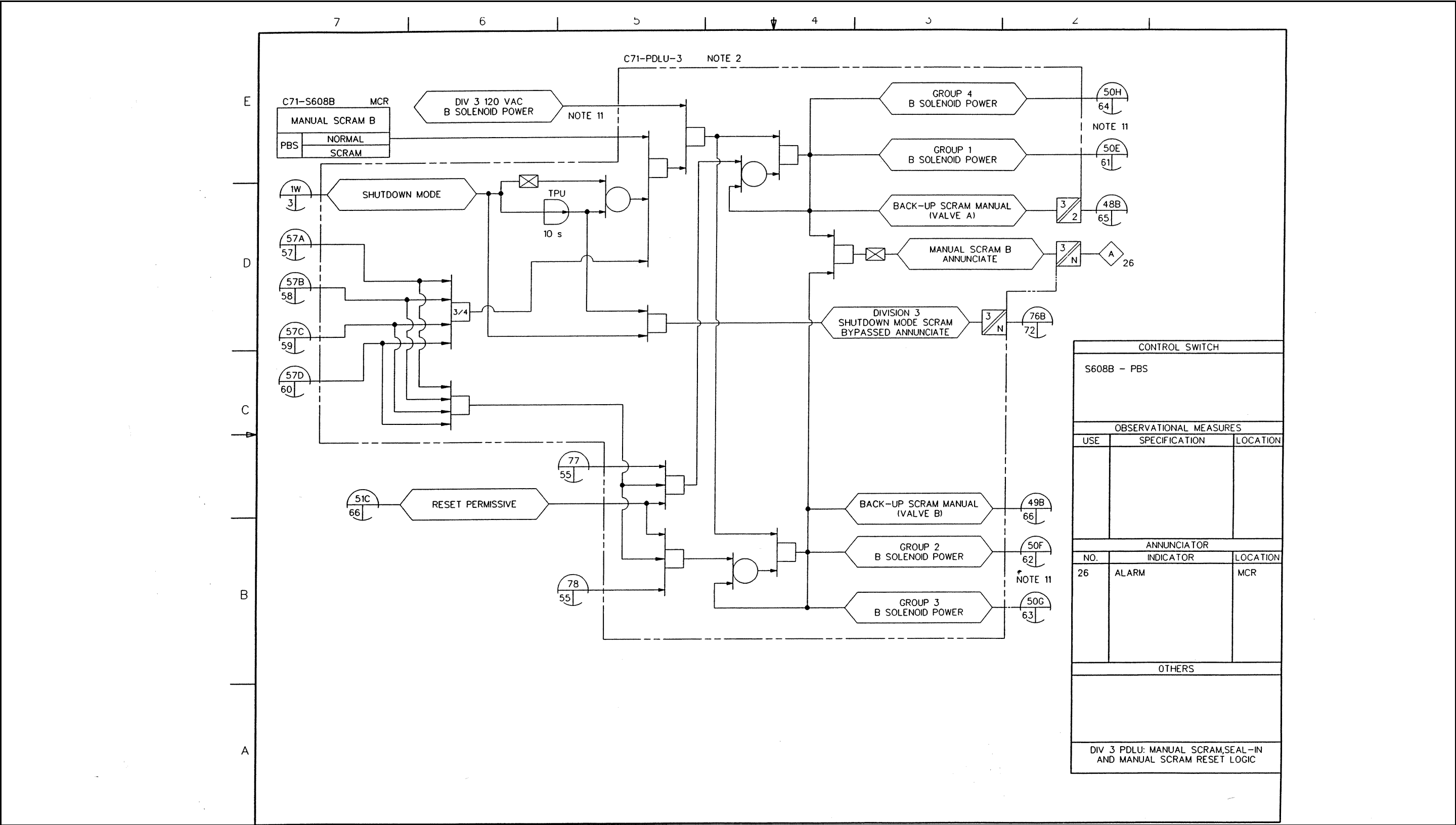


Figure 7.2-10 Reactor Protection System IBD (Sheet 56 of 72)

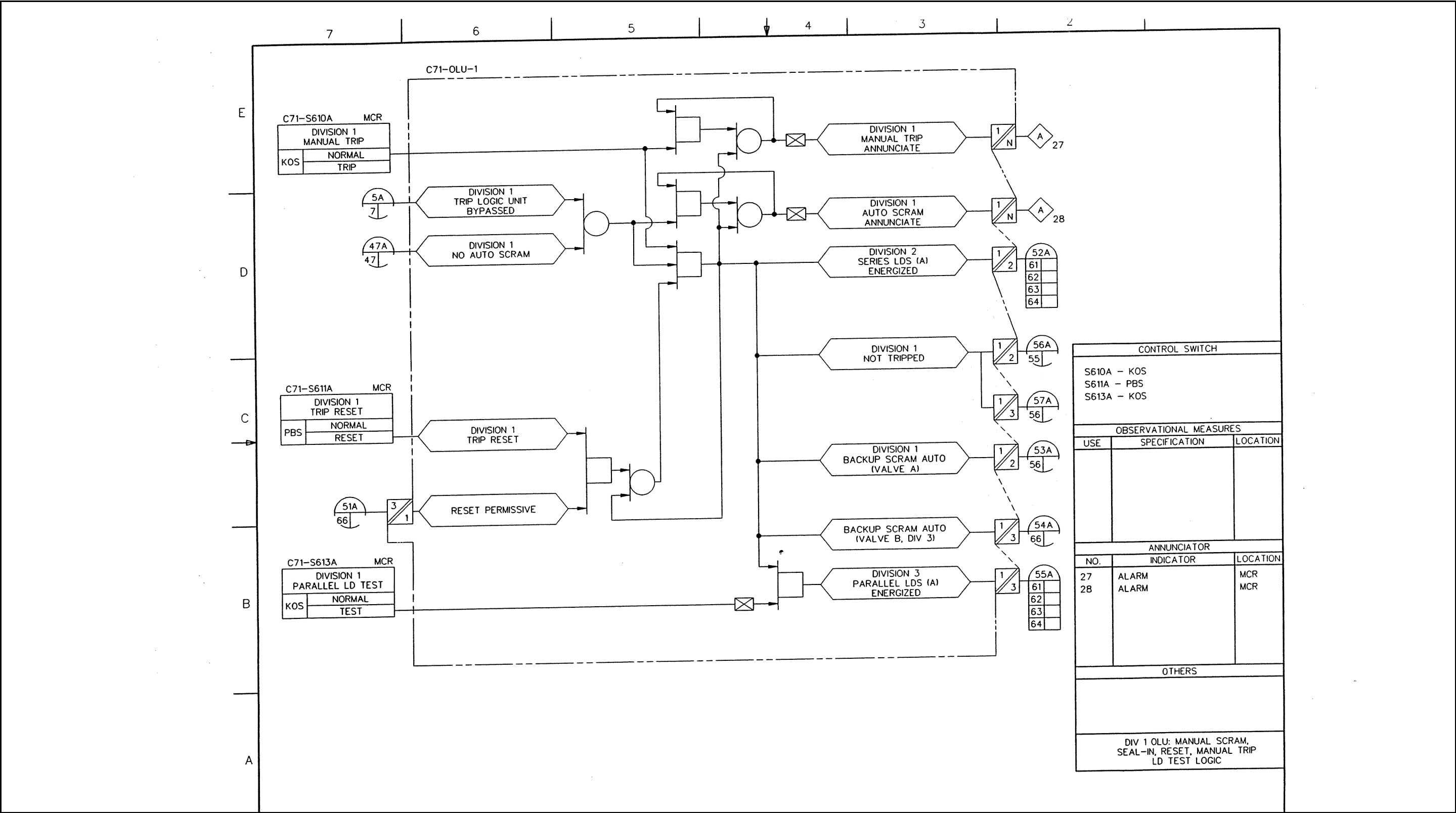


Figure 7.2-10 Reactor Protection System IBD (Sheet 57 of 72)

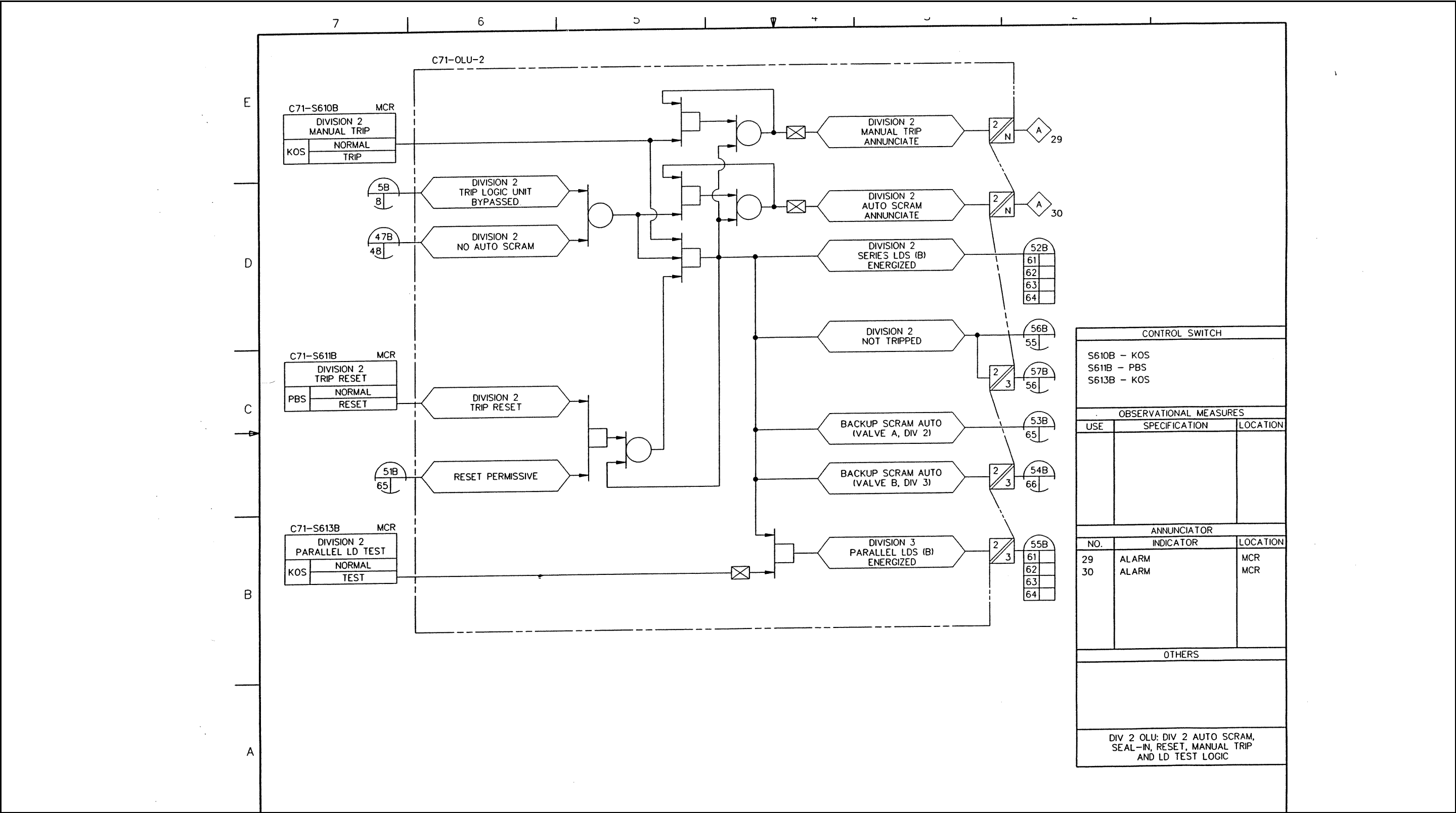


Figure 7.2-10 Reactor Protection System IBD (Sheet 58 of 72)

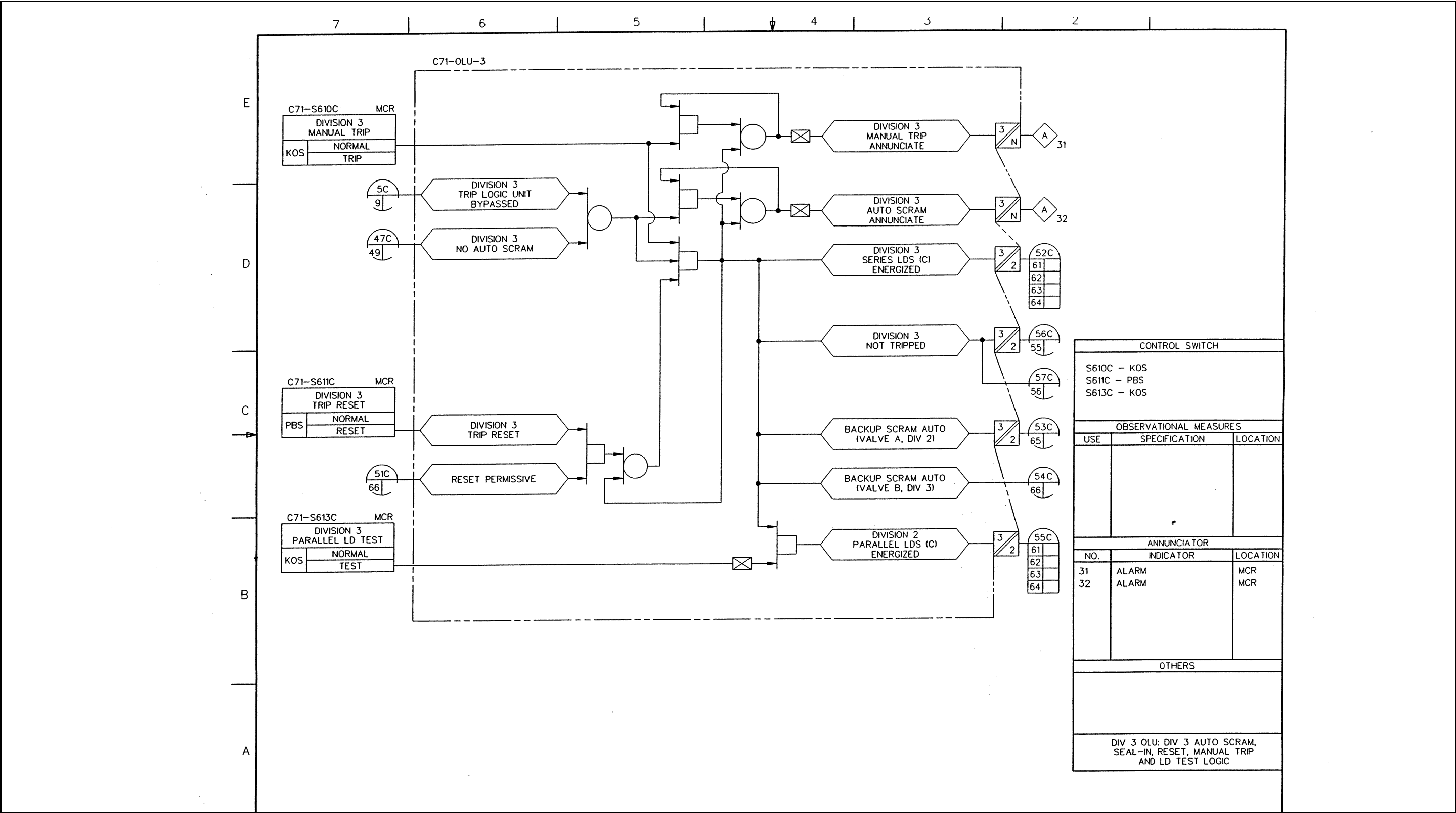


Figure 7.2-10 Reactor Protection System IBD (Sheet 59 of 72)

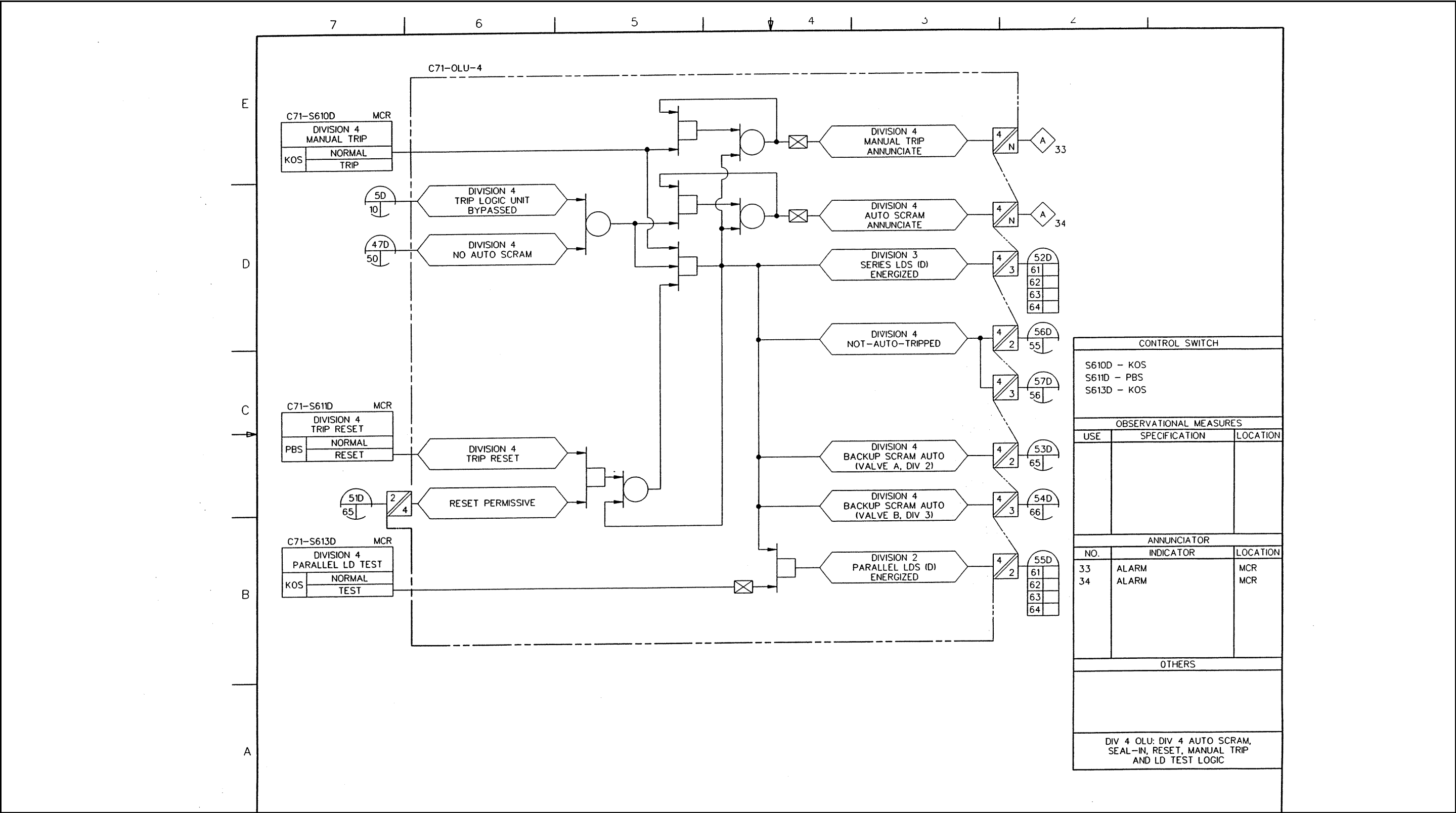


Figure 7.2-10 Reactor Protection System IBD (Sheet 60 of 72)

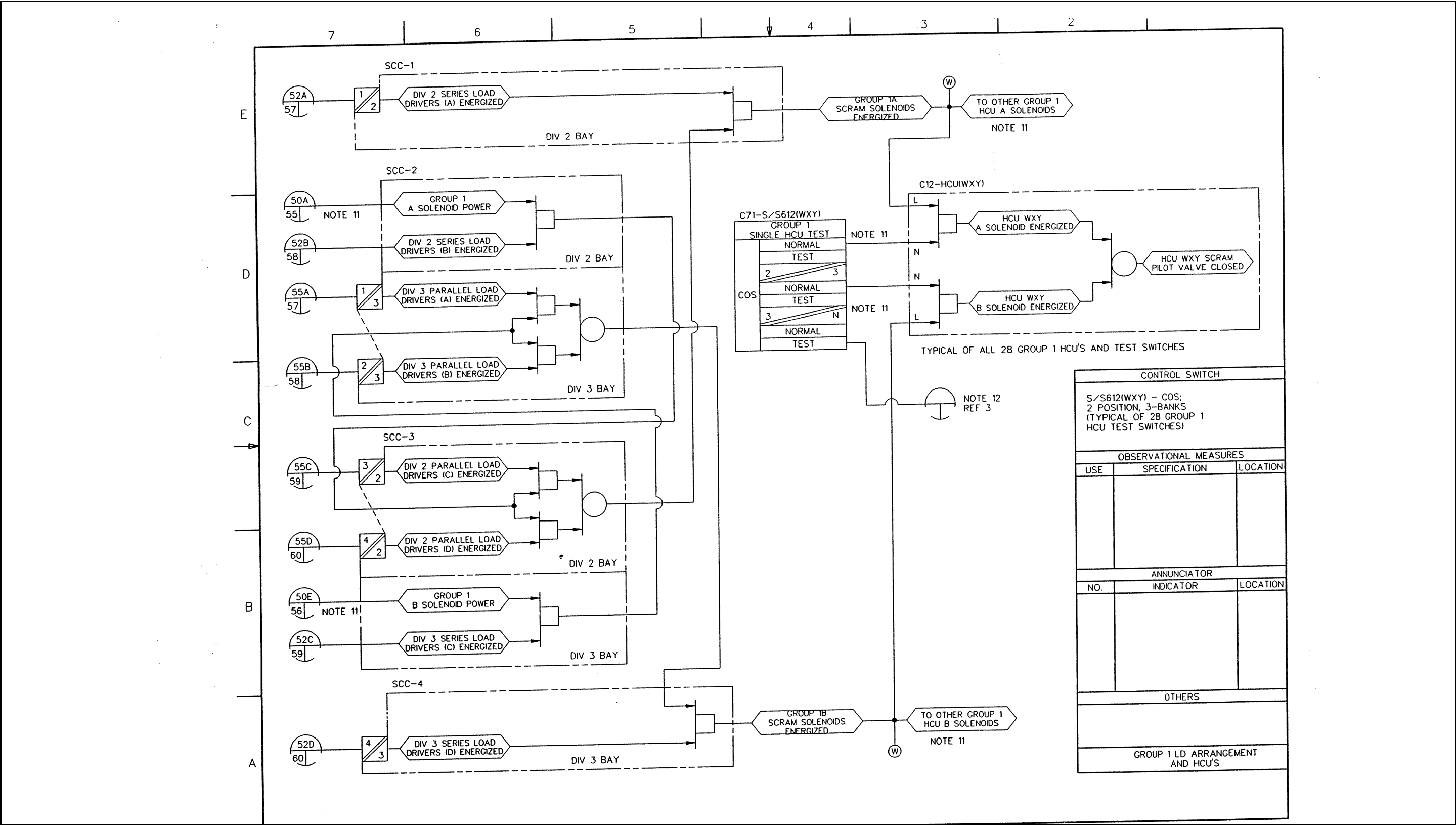


Figure 7.2-10 Reactor Protection System IBD (Sheet 61 of 72)

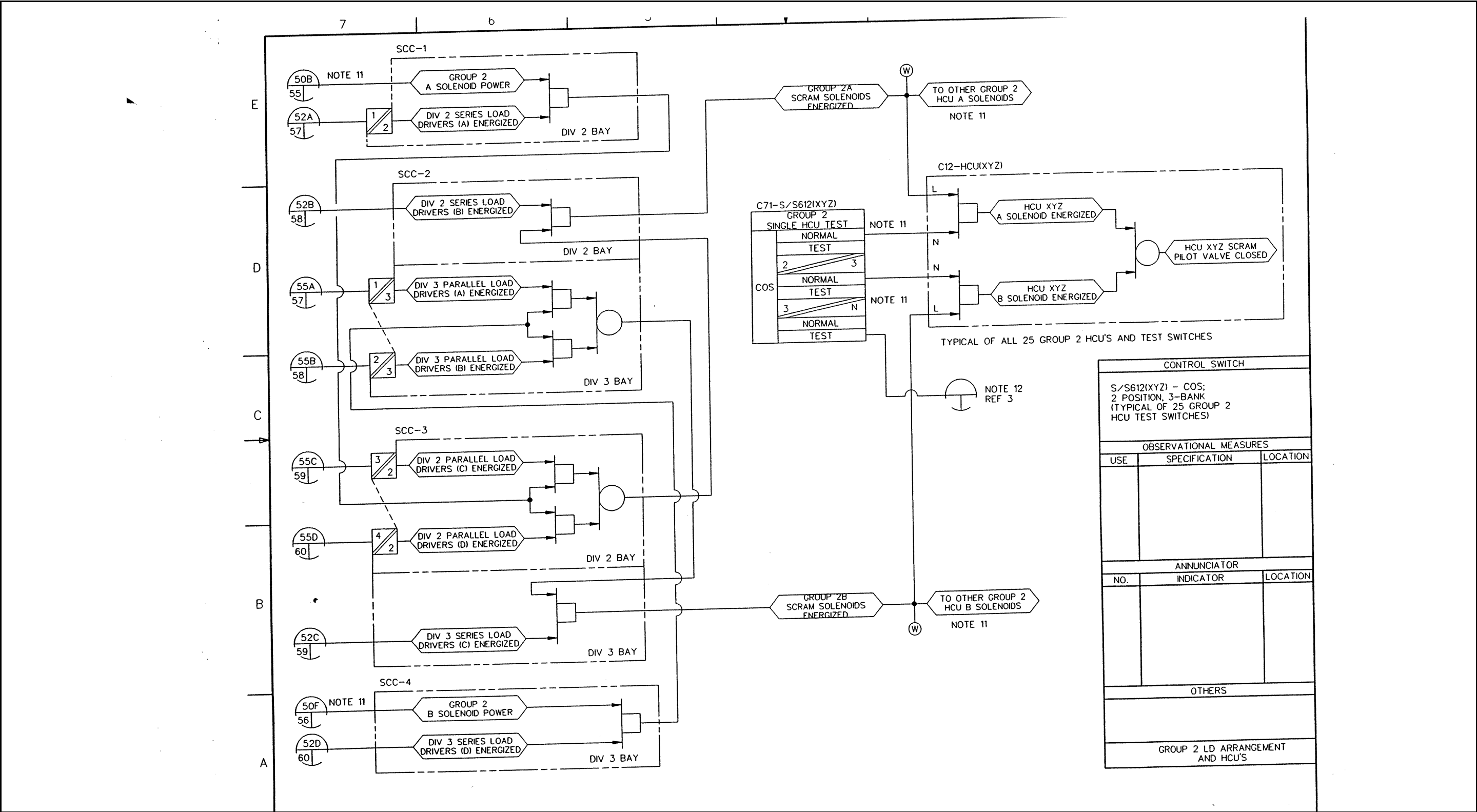


Figure 7.2-10 Reactor Protection System IBD (Sheet 62 of 72)

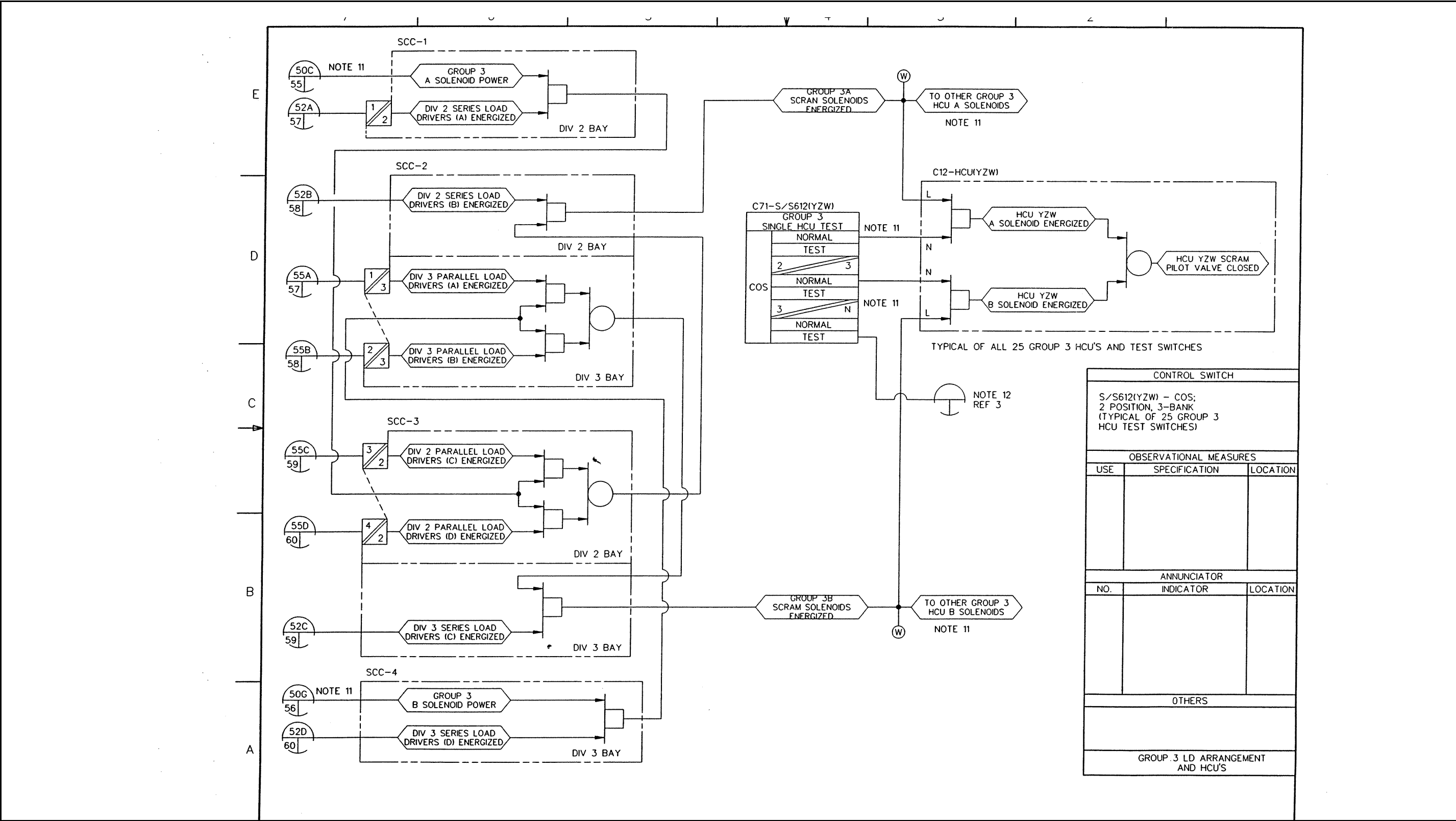


Figure 7.2-10 Reactor Protection System IBD (Sheet 63 of 72)

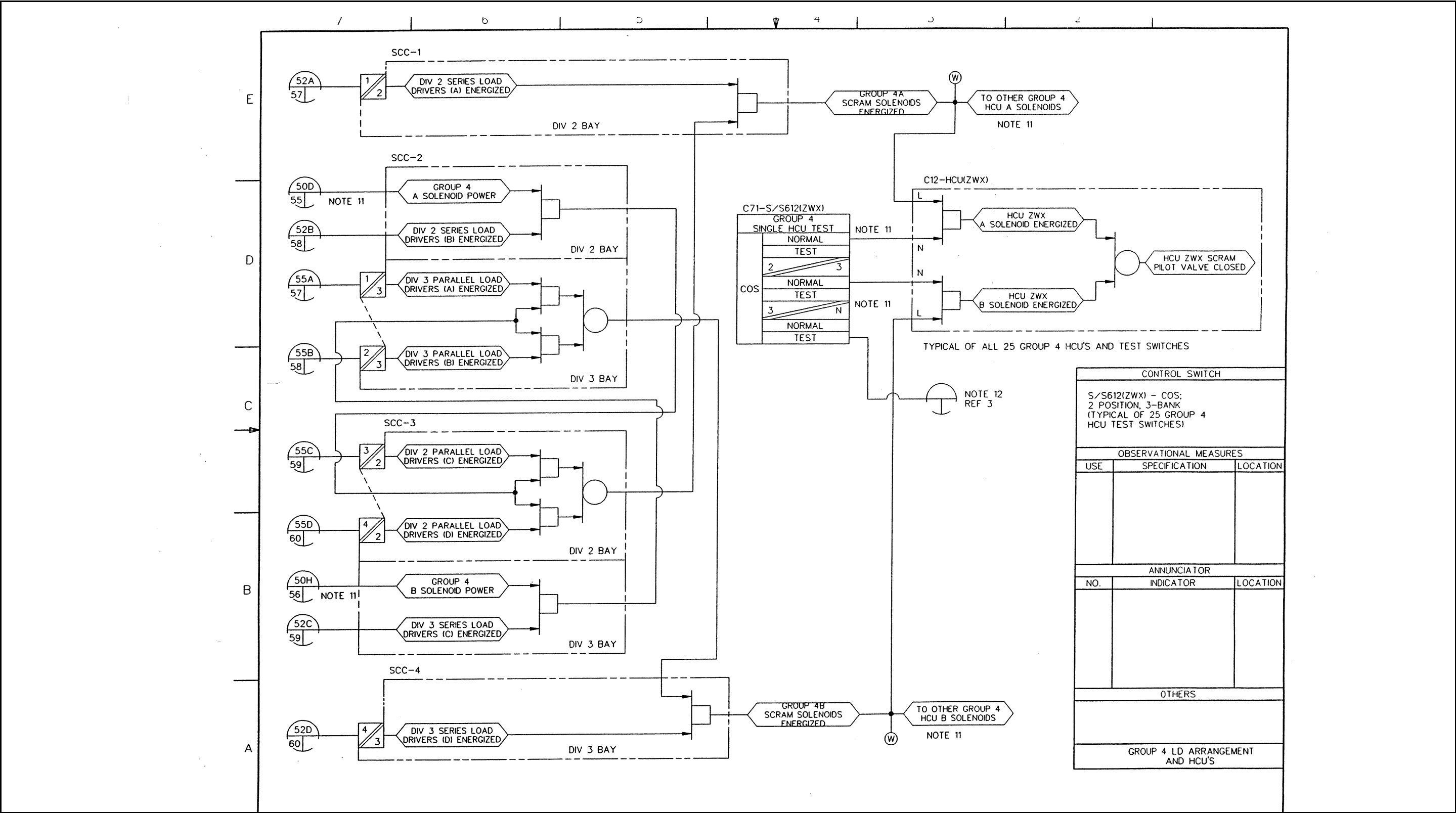


Figure 7.2-10 Reactor Protection System IBD (Sheet 64 of 72)

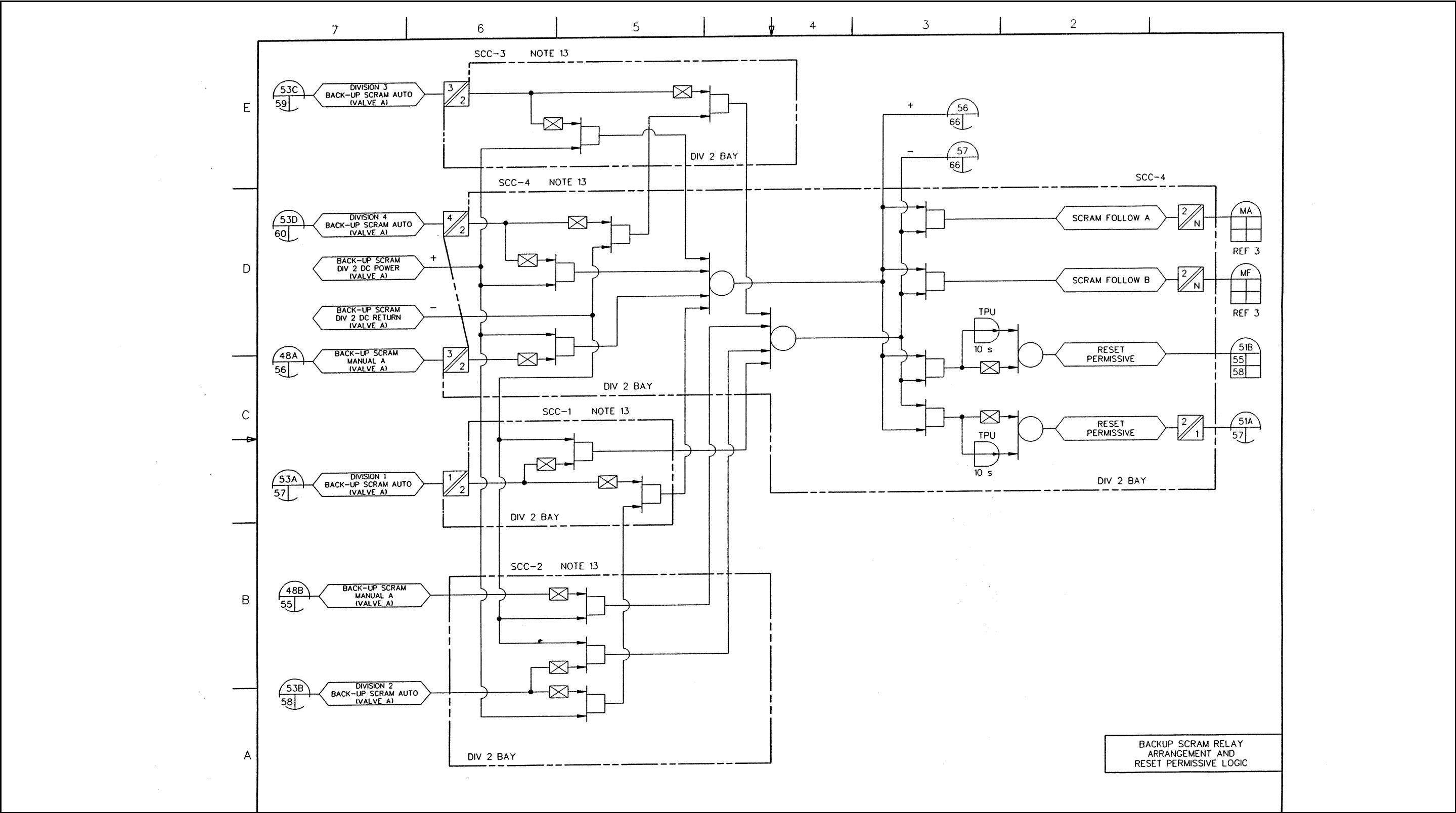


Figure 7.2-10 Reactor Protection System IBD (Sheet 65 of 72)

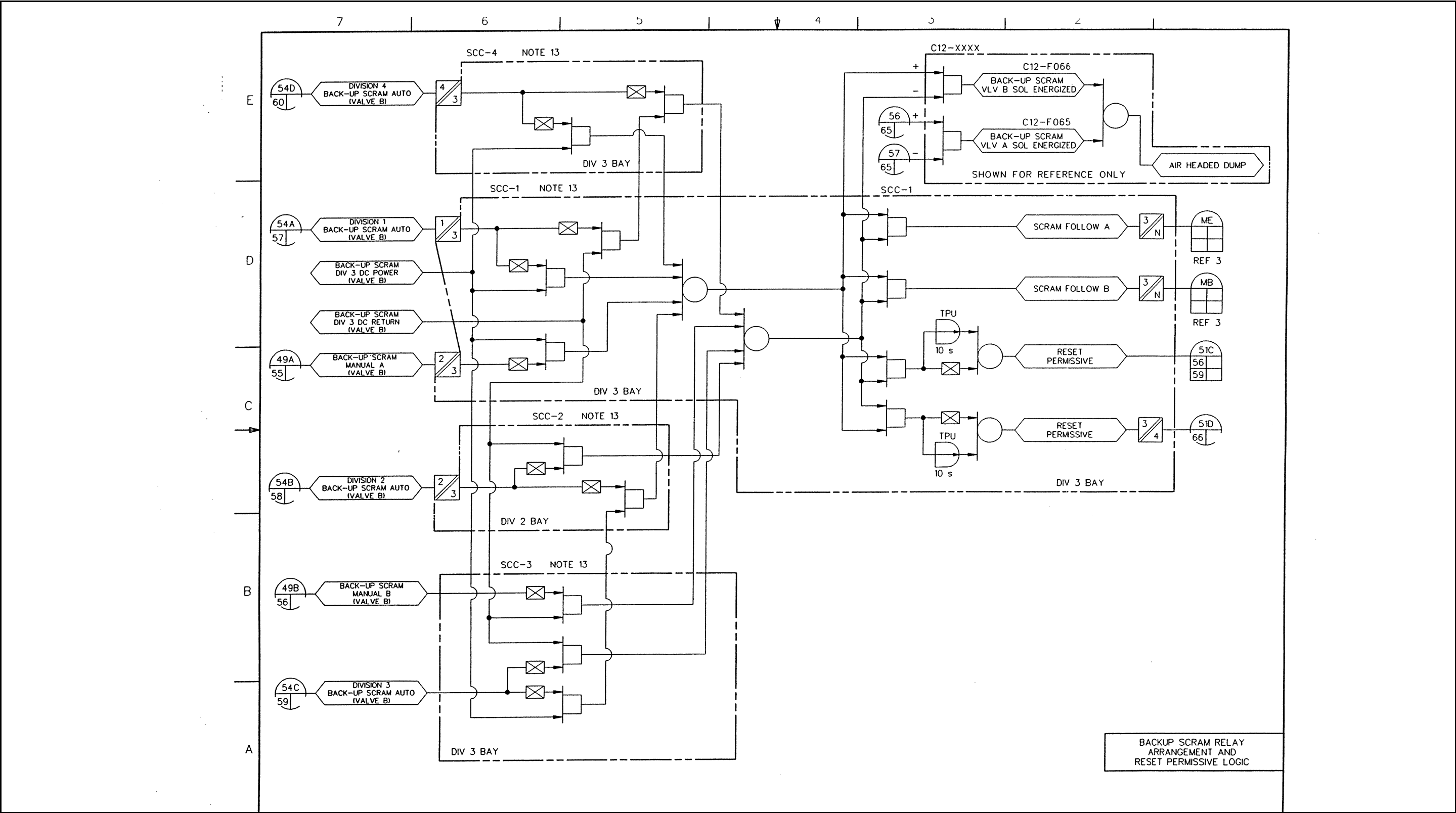
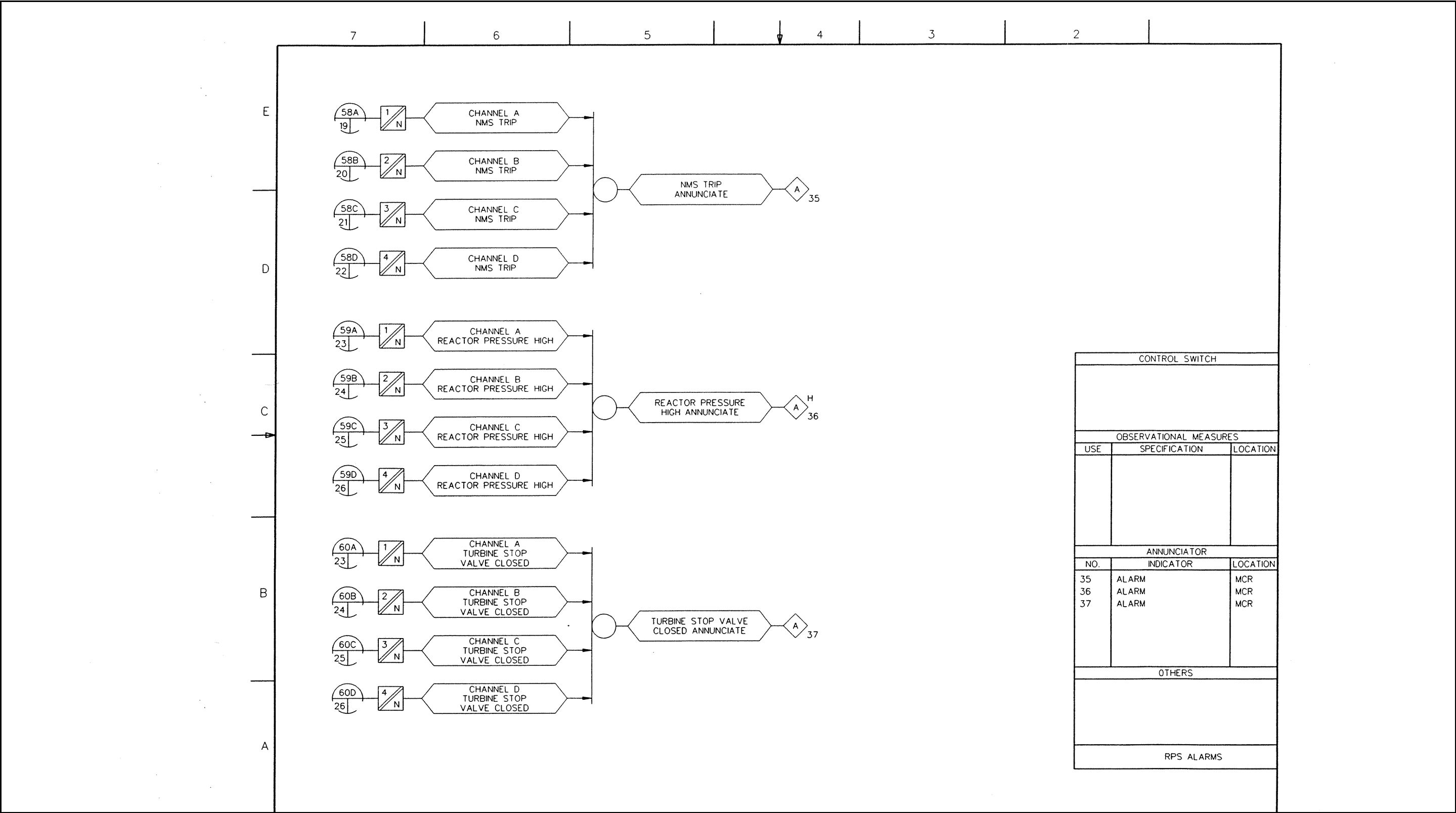
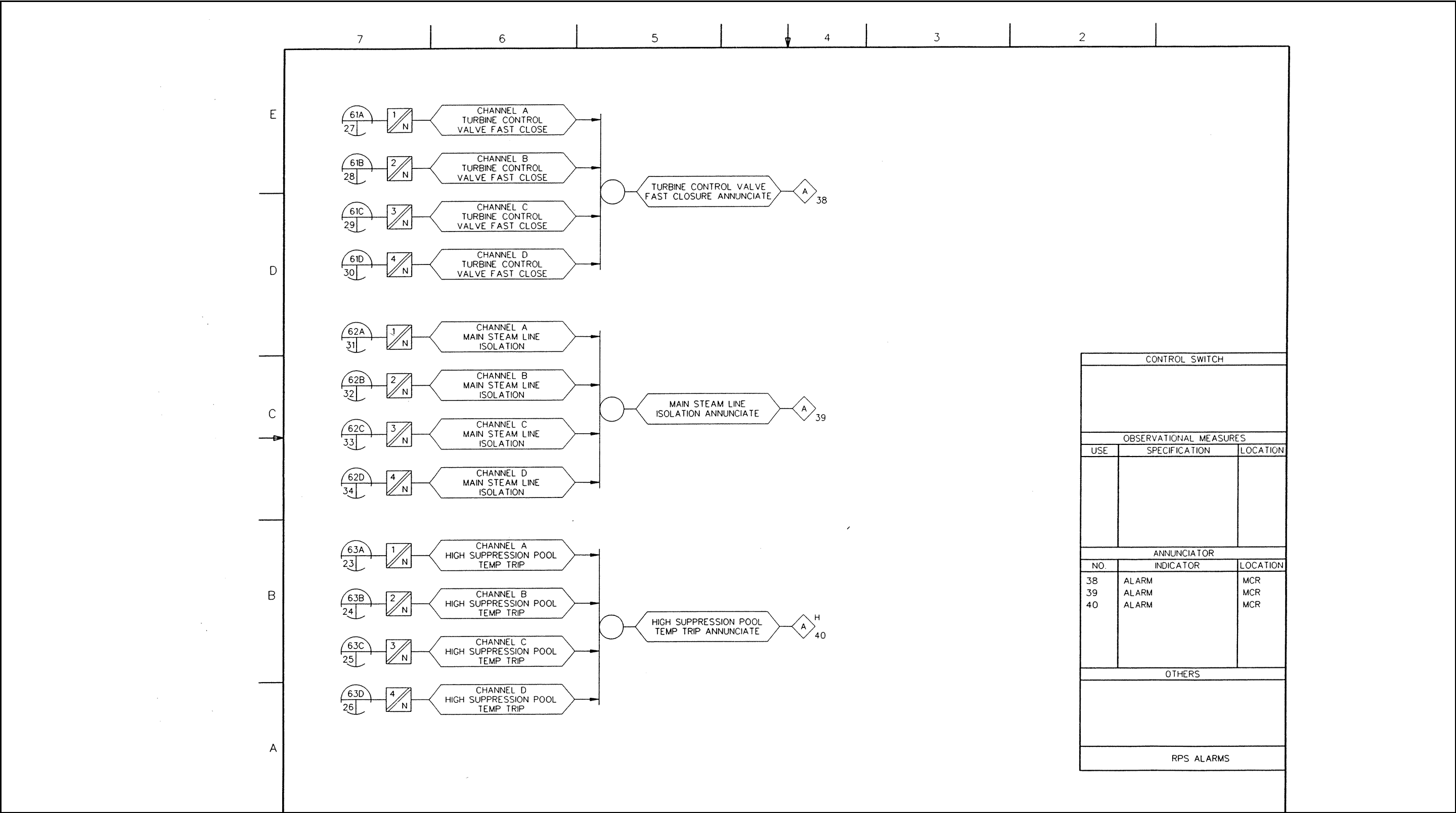


Figure 7.2-10 Reactor Protection System IBD (Sheet 66 of 72)





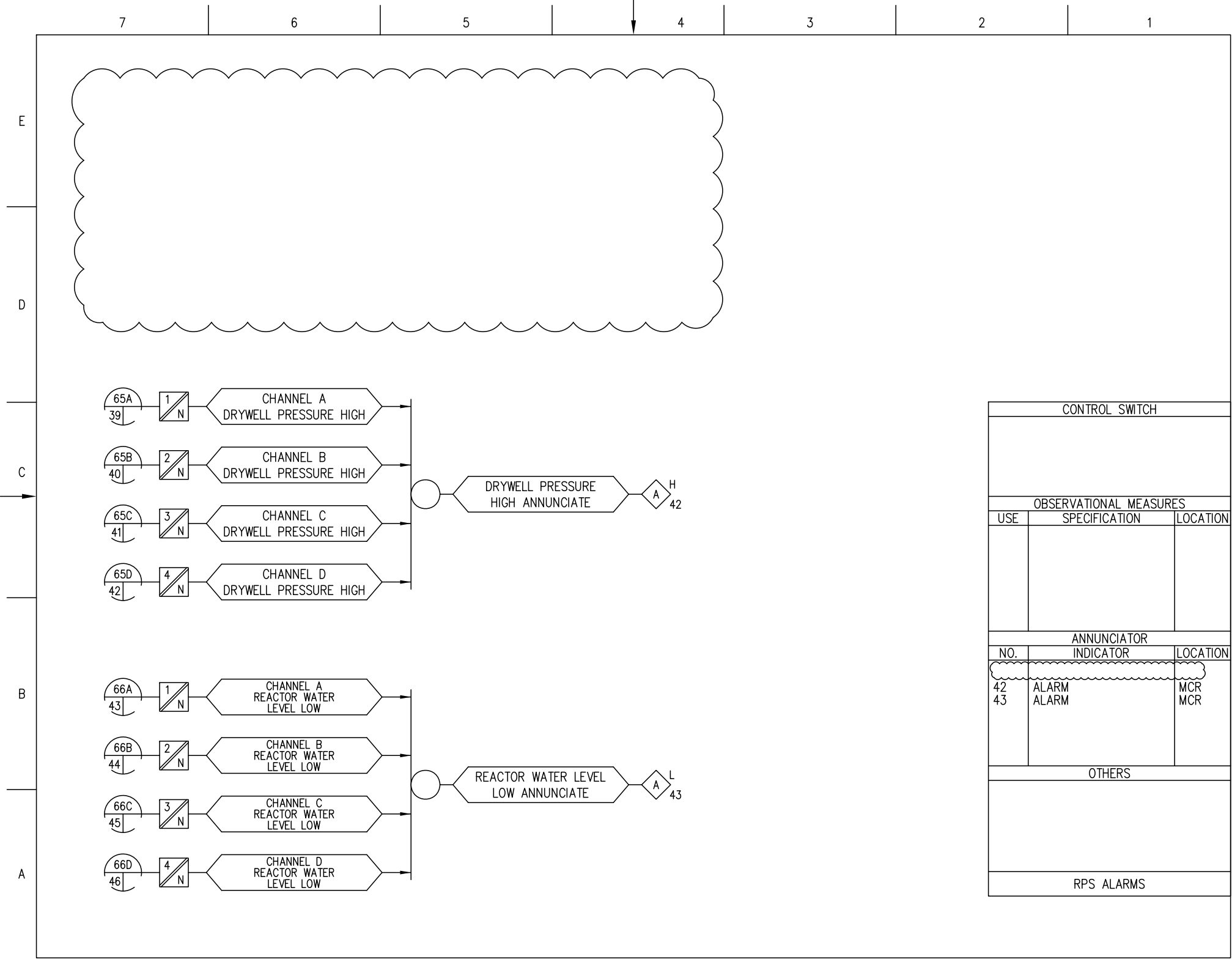
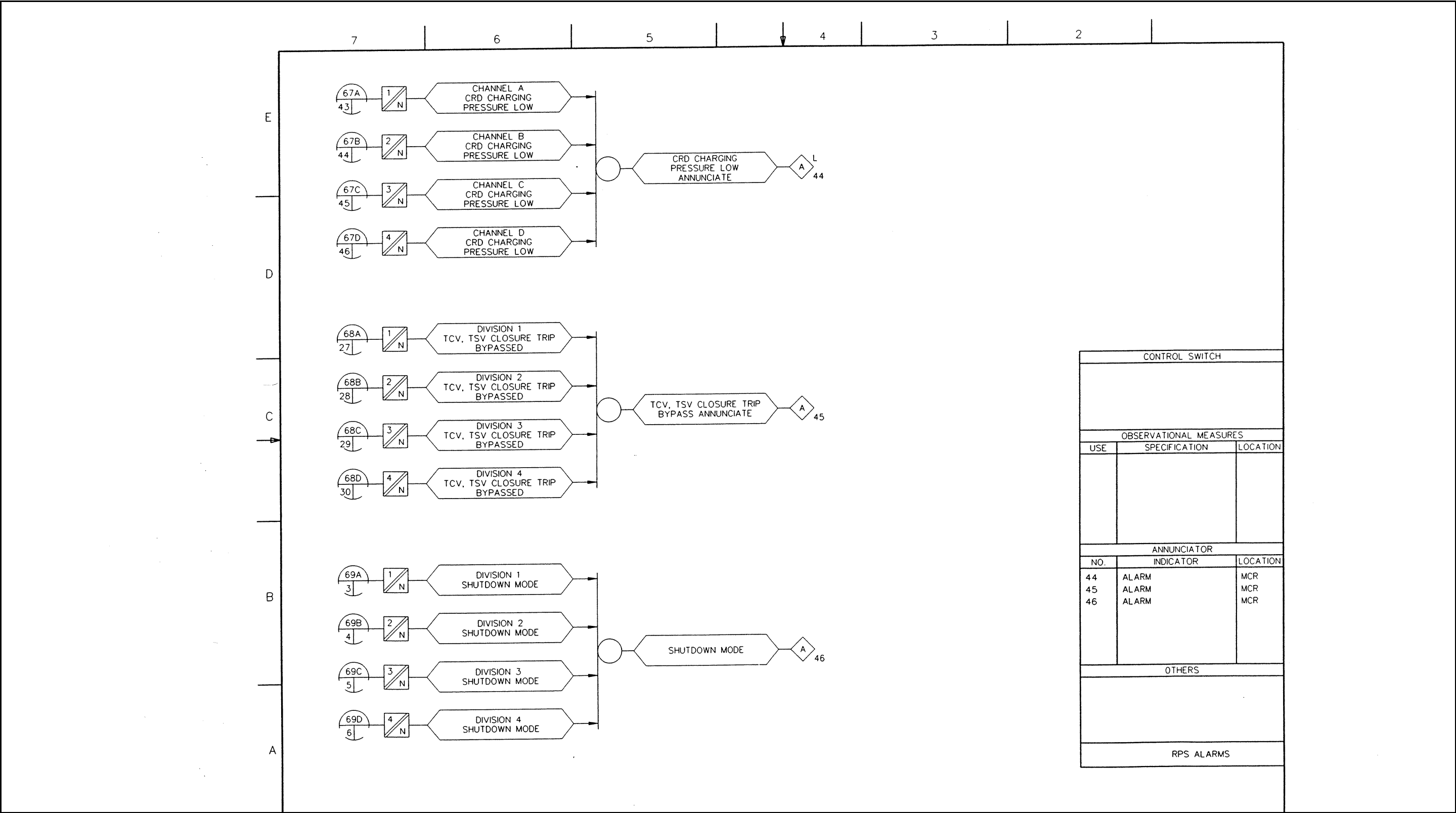


Figure 7.2-10 Reactor Protection System IBD (Sheet 69 of 72)



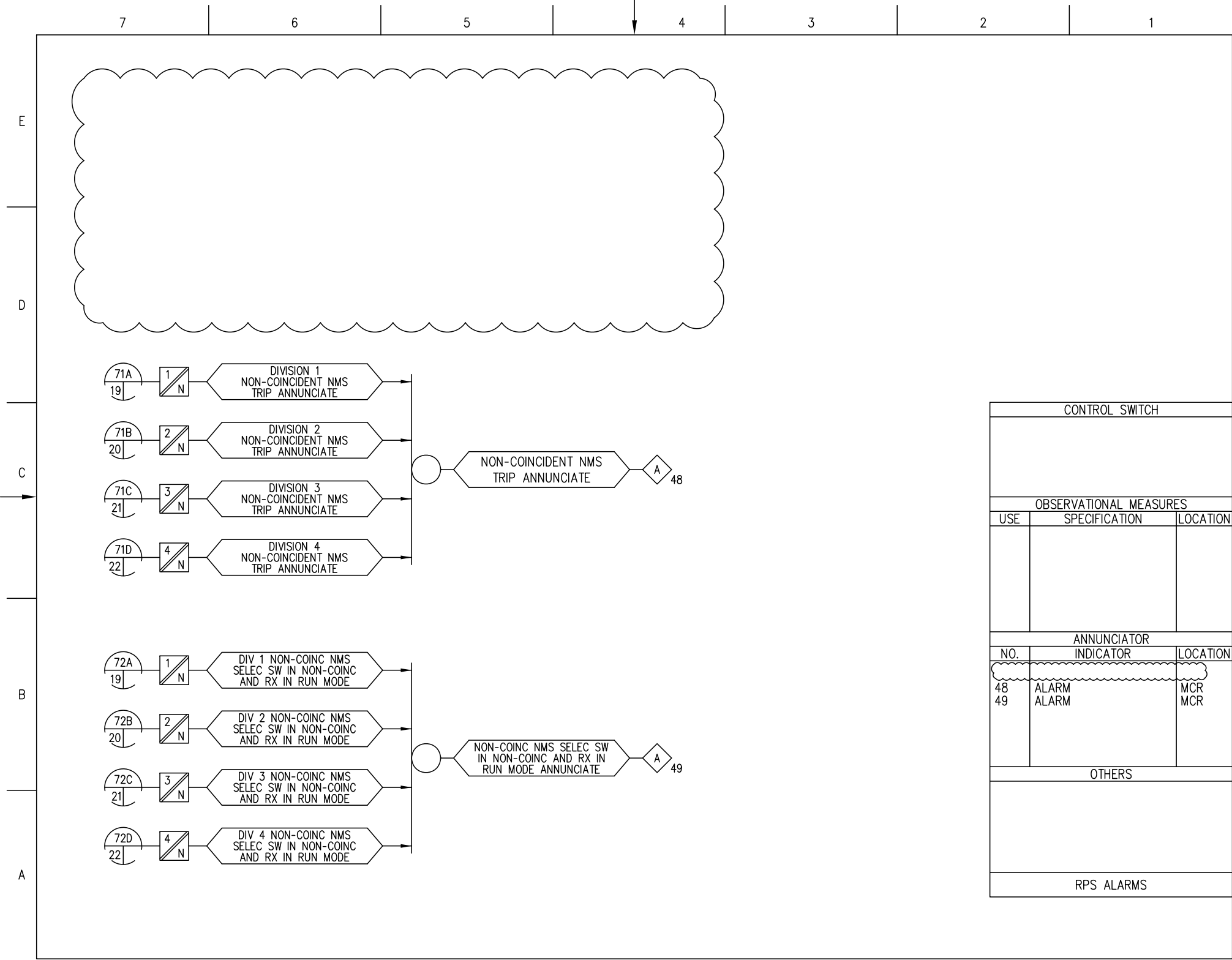


Figure 7.2-10 Reactor Protection System IBD (Sheet 71 of 72)

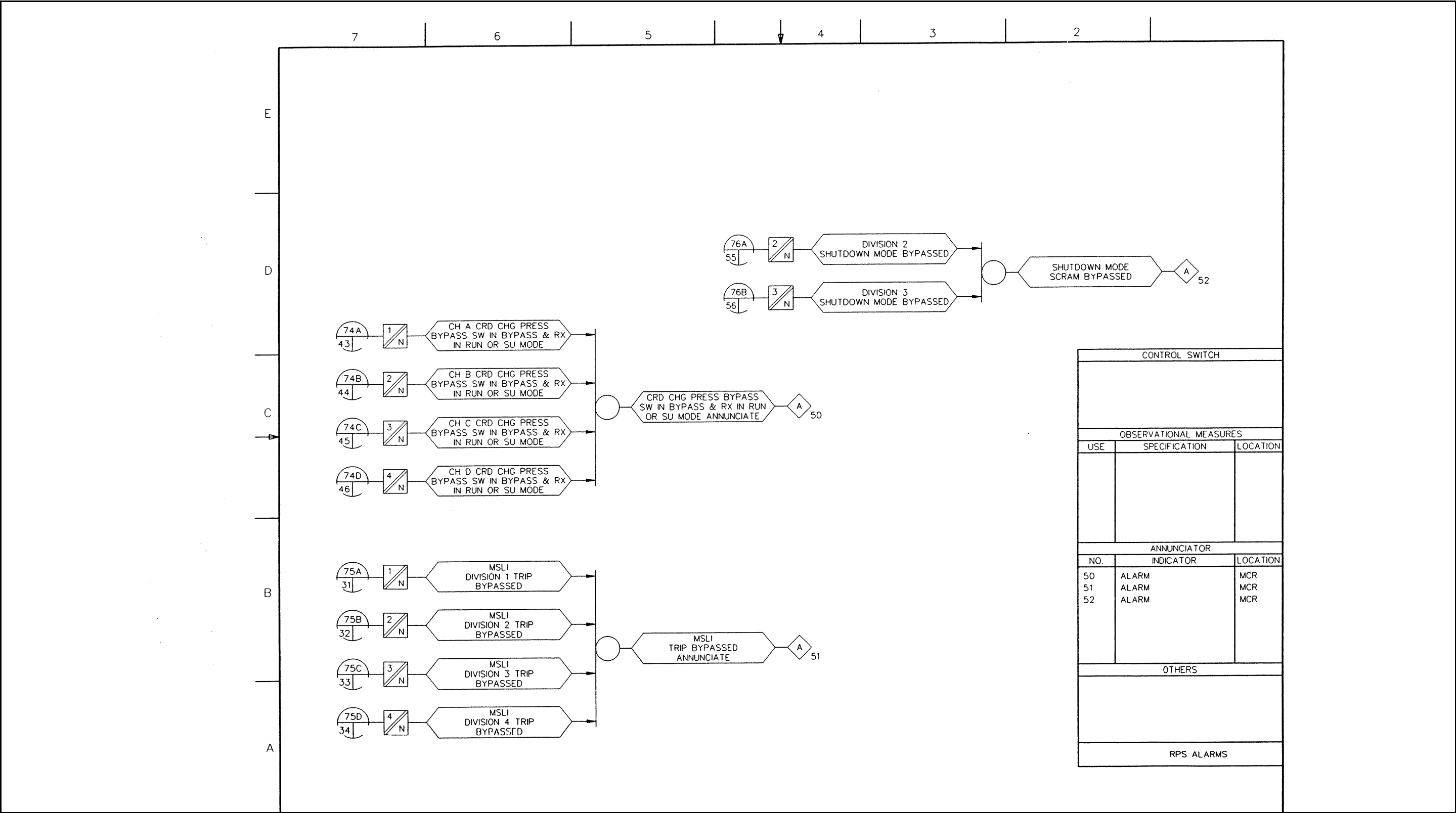


Figure 7.2-10 Reactor Protection System IBD (Sheet 72 of 72)

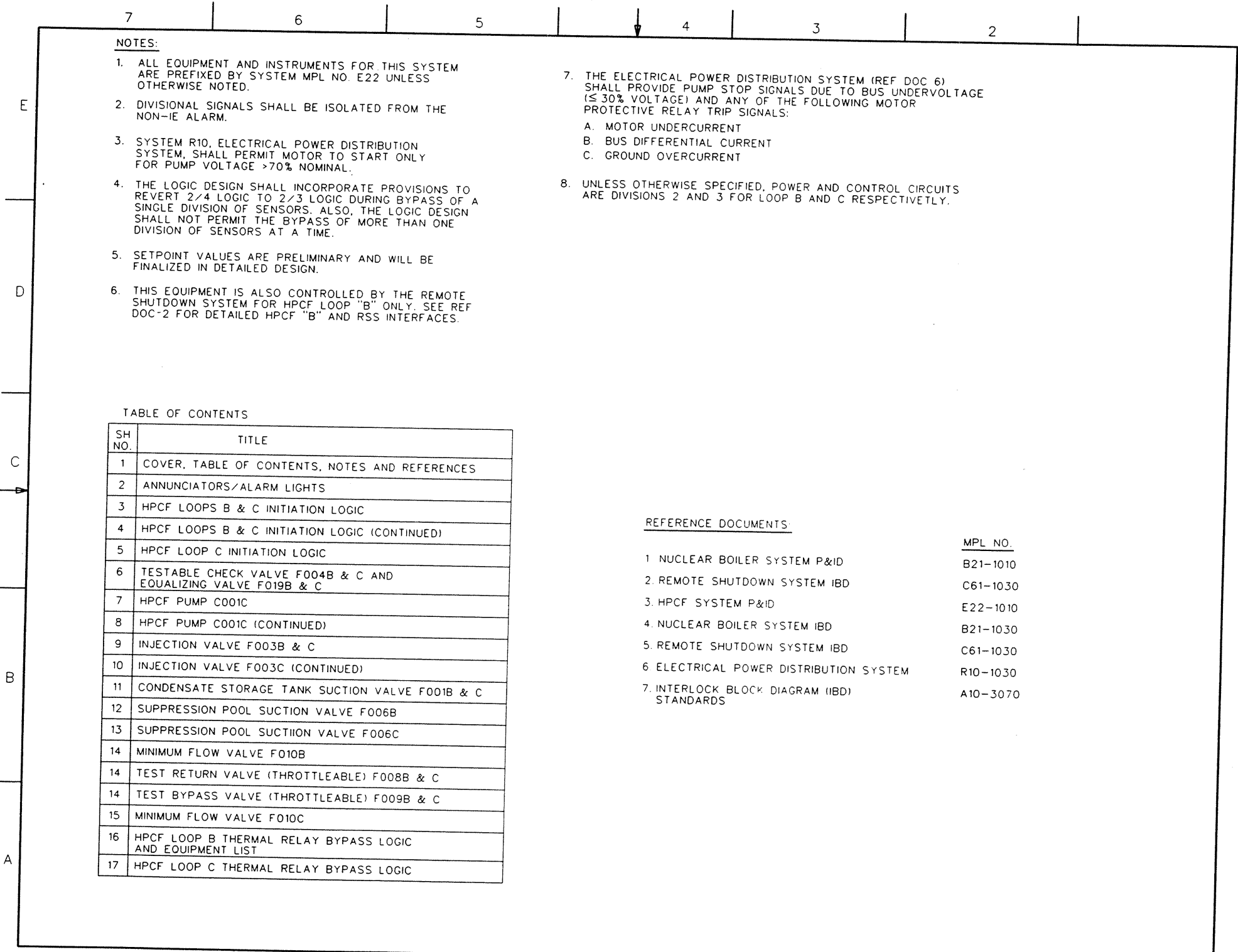


Figure 7.3-1 High Pressure Core Flooder IBD (Sheet 1 of 17)



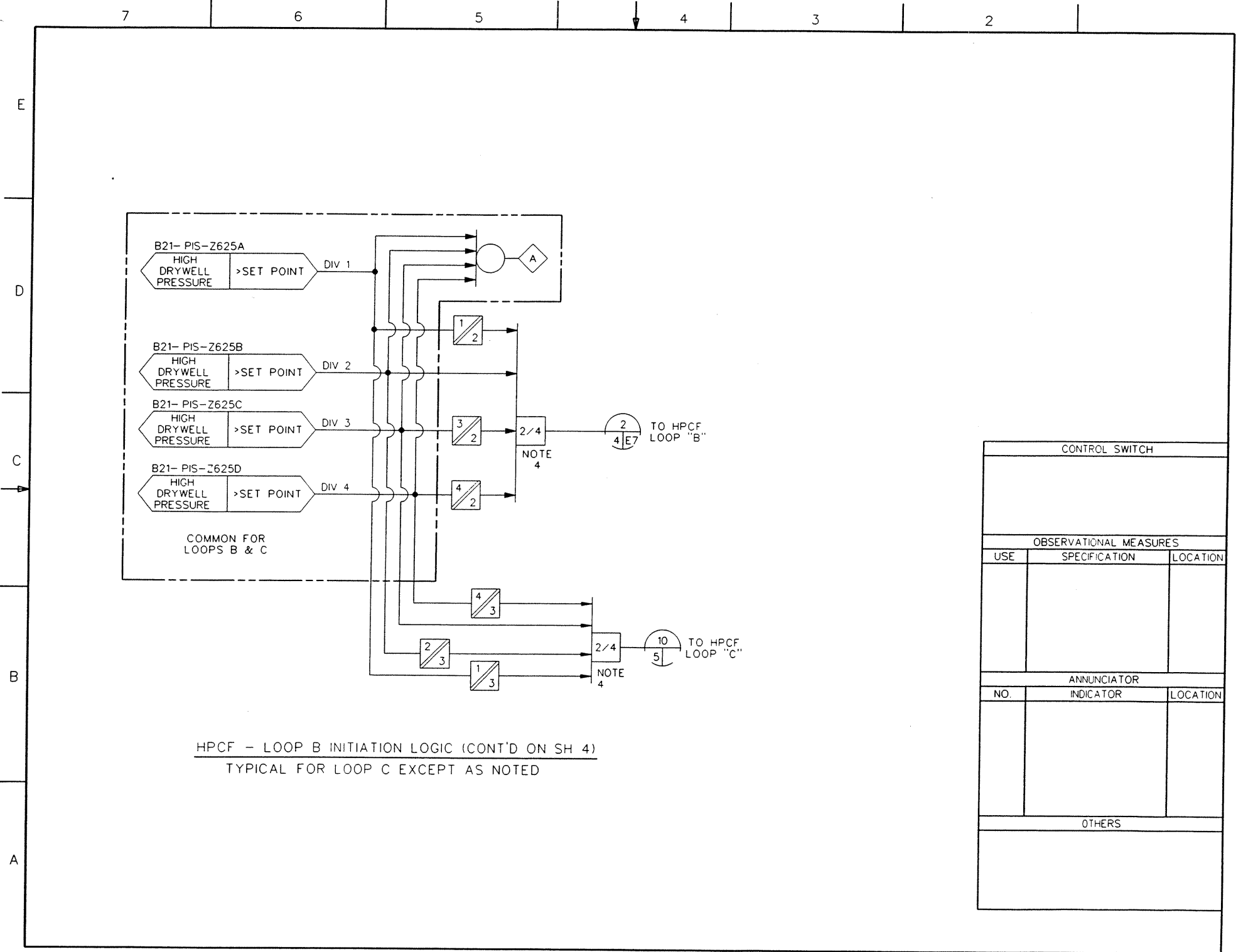


Figure 7.3-1 High Pressure Core Flooder IBD (Sheet 3 of 17)

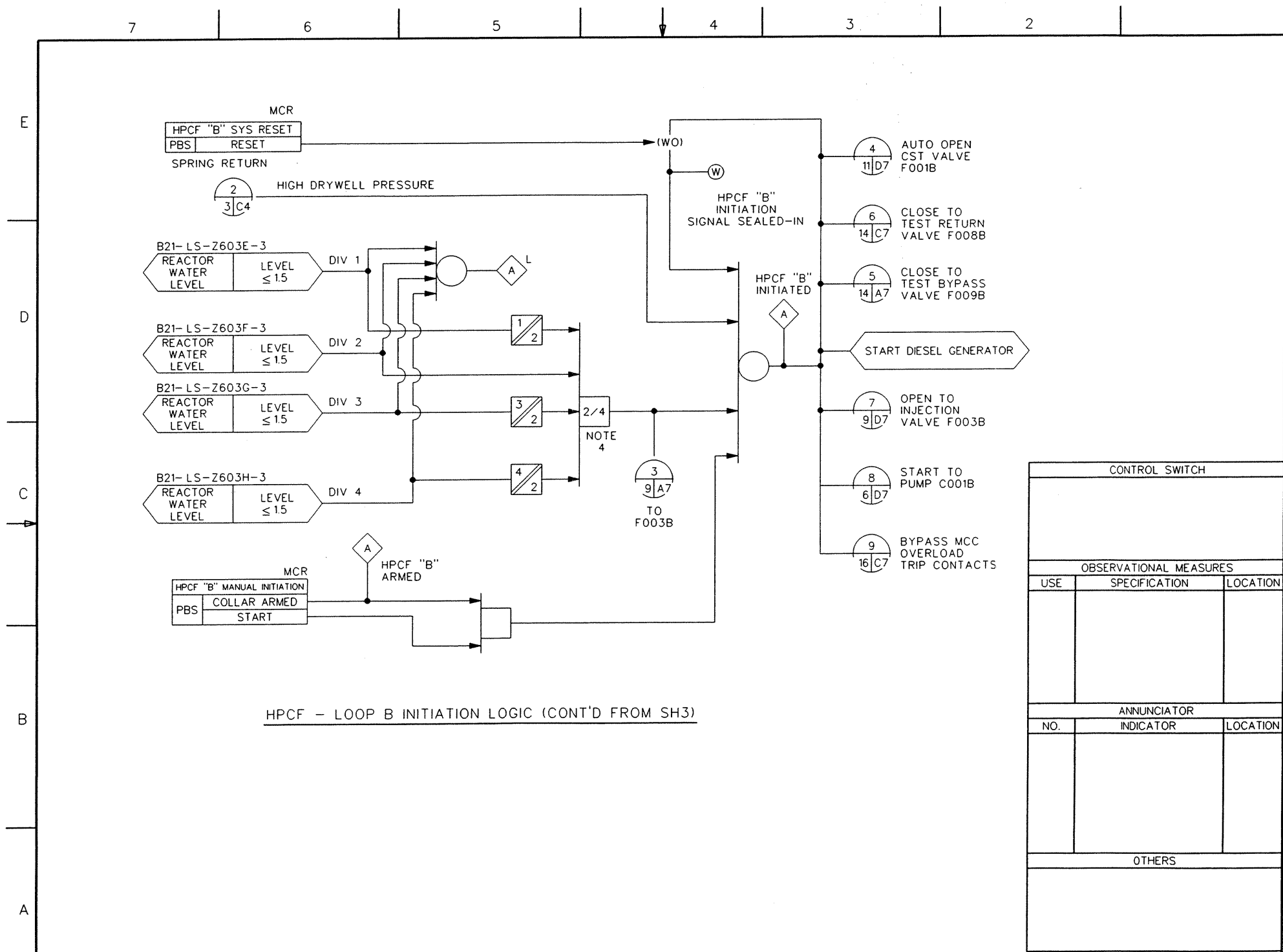


Figure 7.3-1 High Pressure Core Flooder IBD (Sheet 4 of 17)

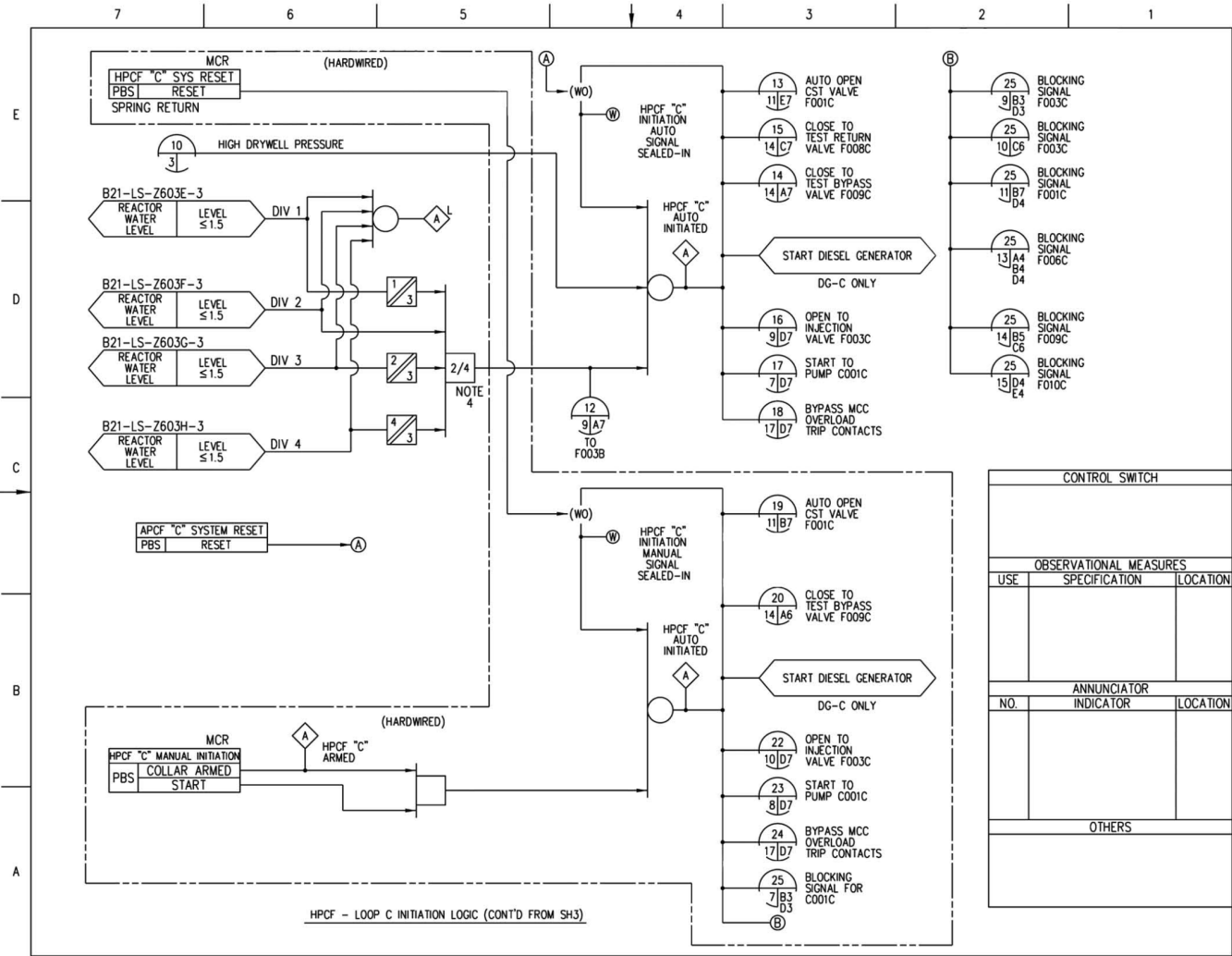


Figure 7.3-1 High Pressure Core Flooder IBD (Sheet 5 of 17)

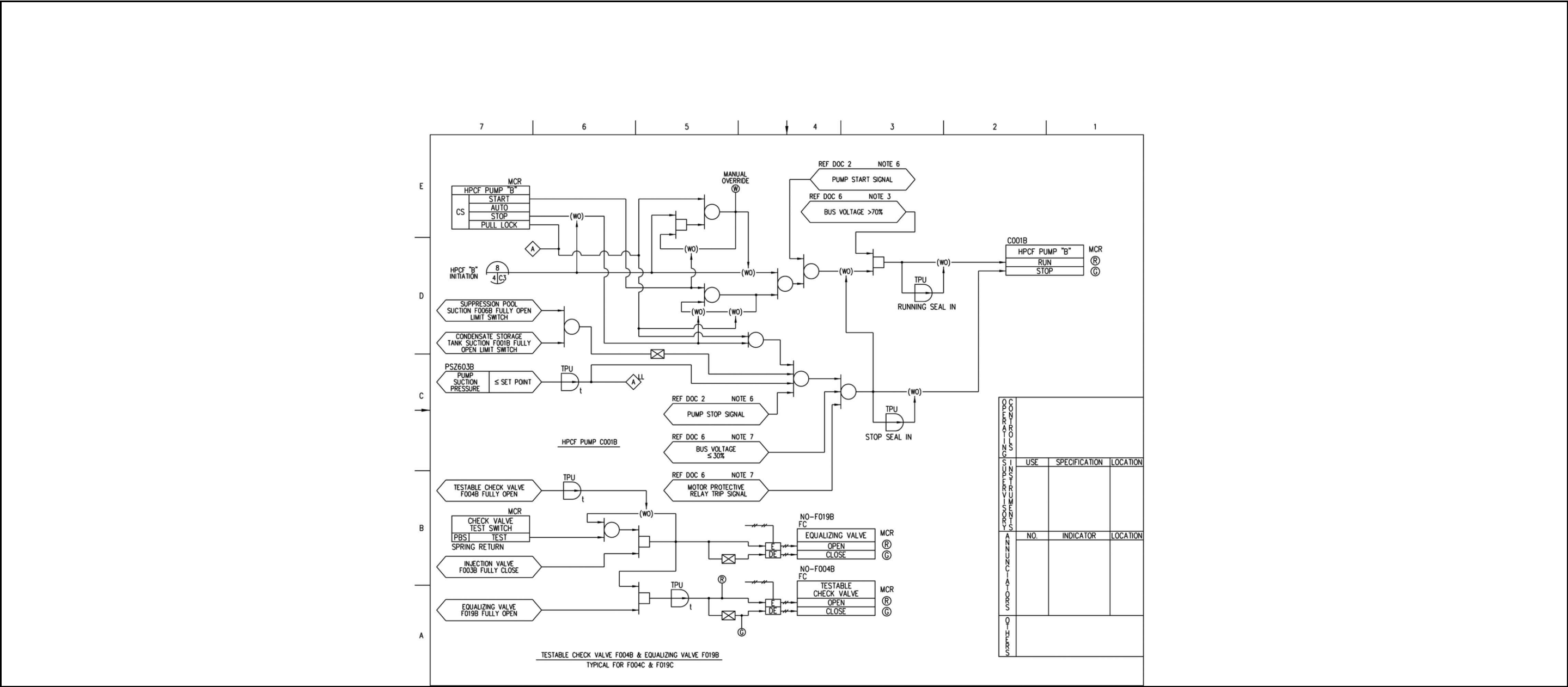


Figure 7.3-1 High Pressure Core Flooder IBD (Sheet 6 of 17)

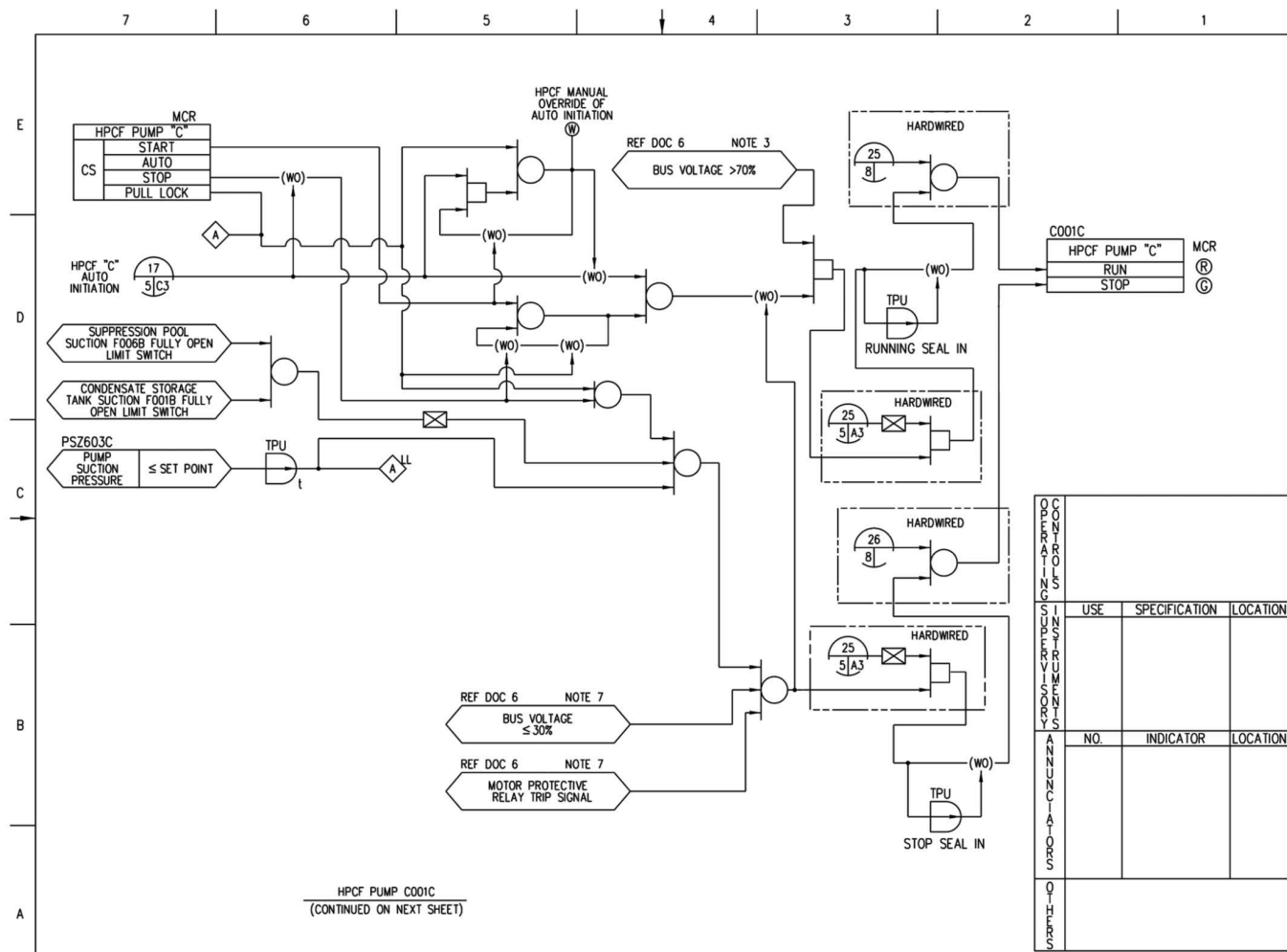


Figure 7.3-1 High Pressure Core Flooder IBD (Sheet 7 of 17)

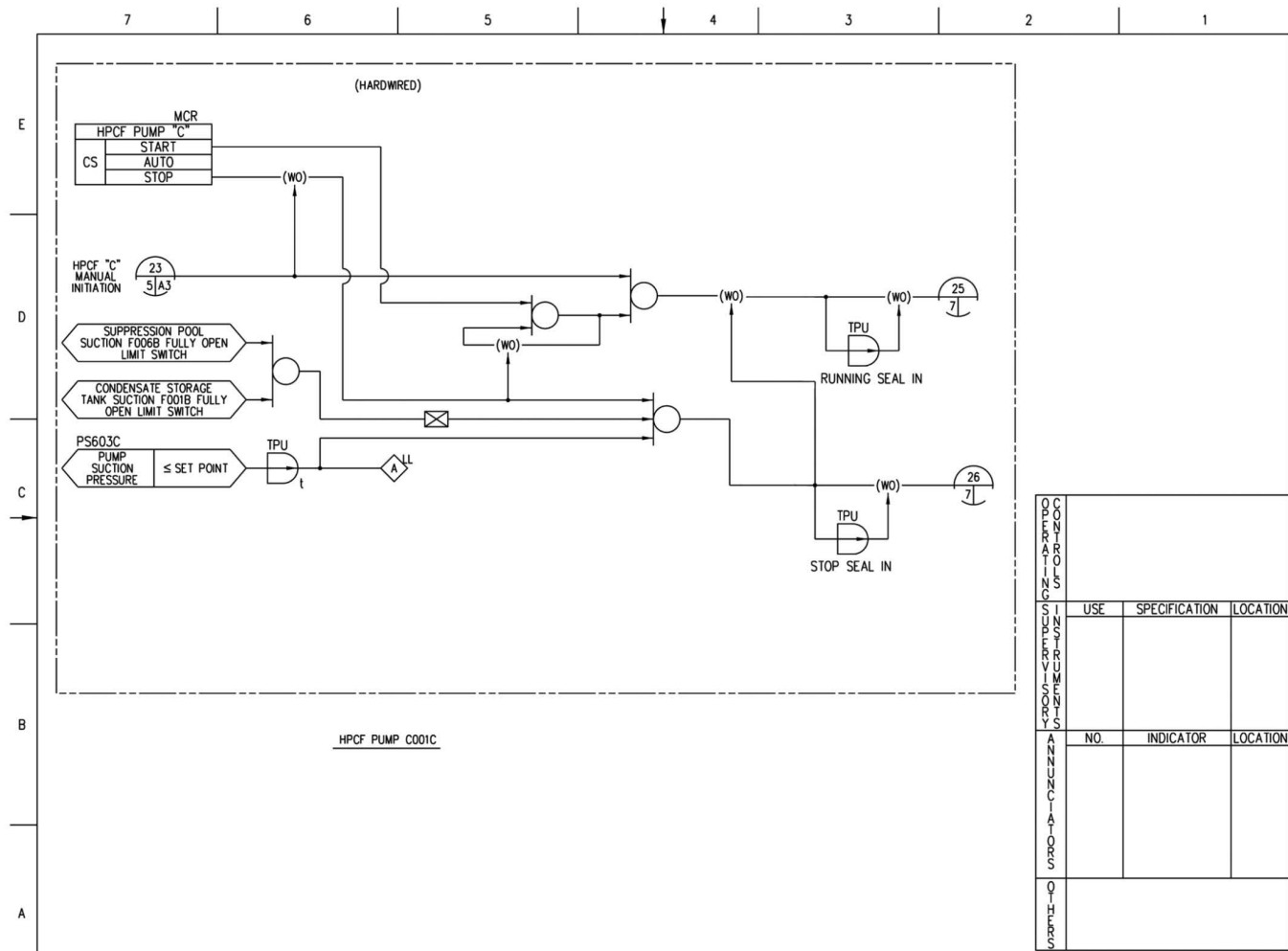
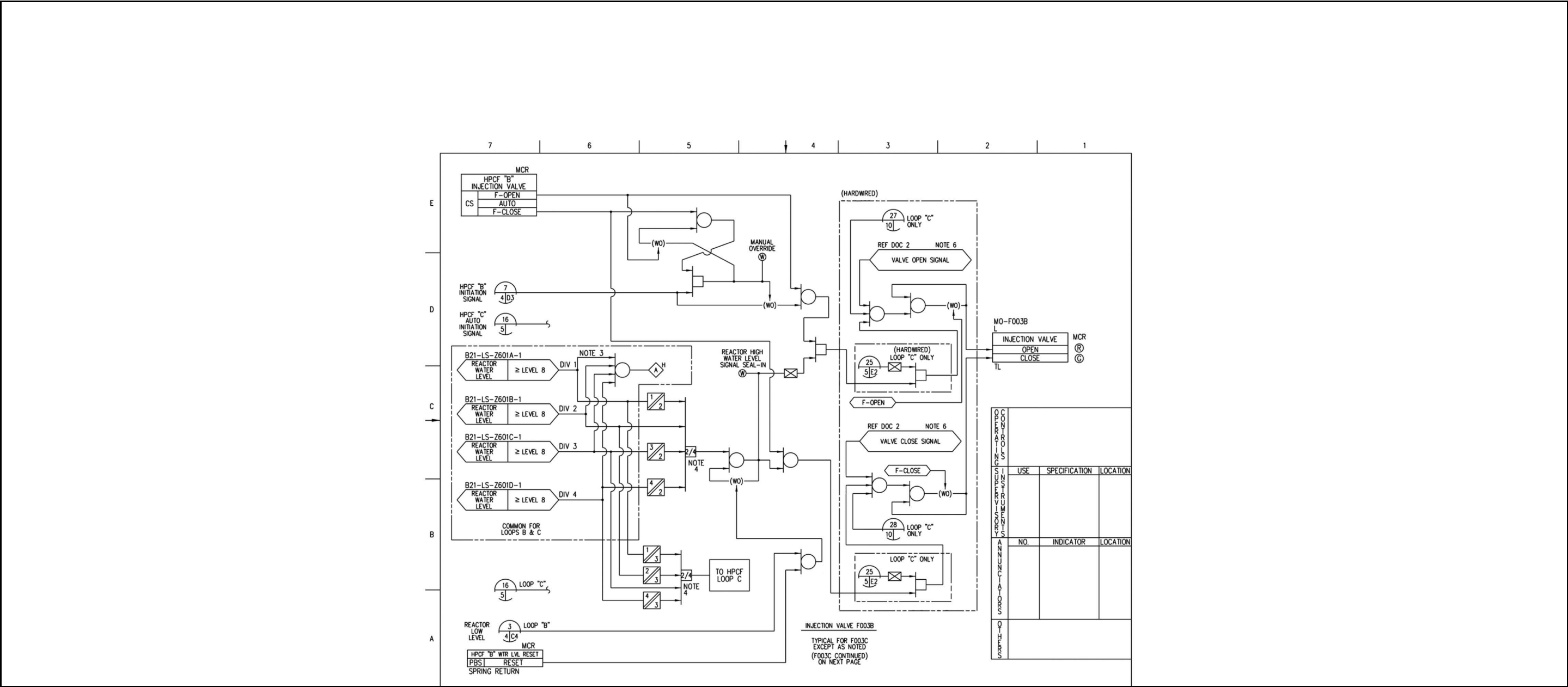


Figure 7.3-1 High Pressure Core Flooder IBD (Sheet 8 of 17)





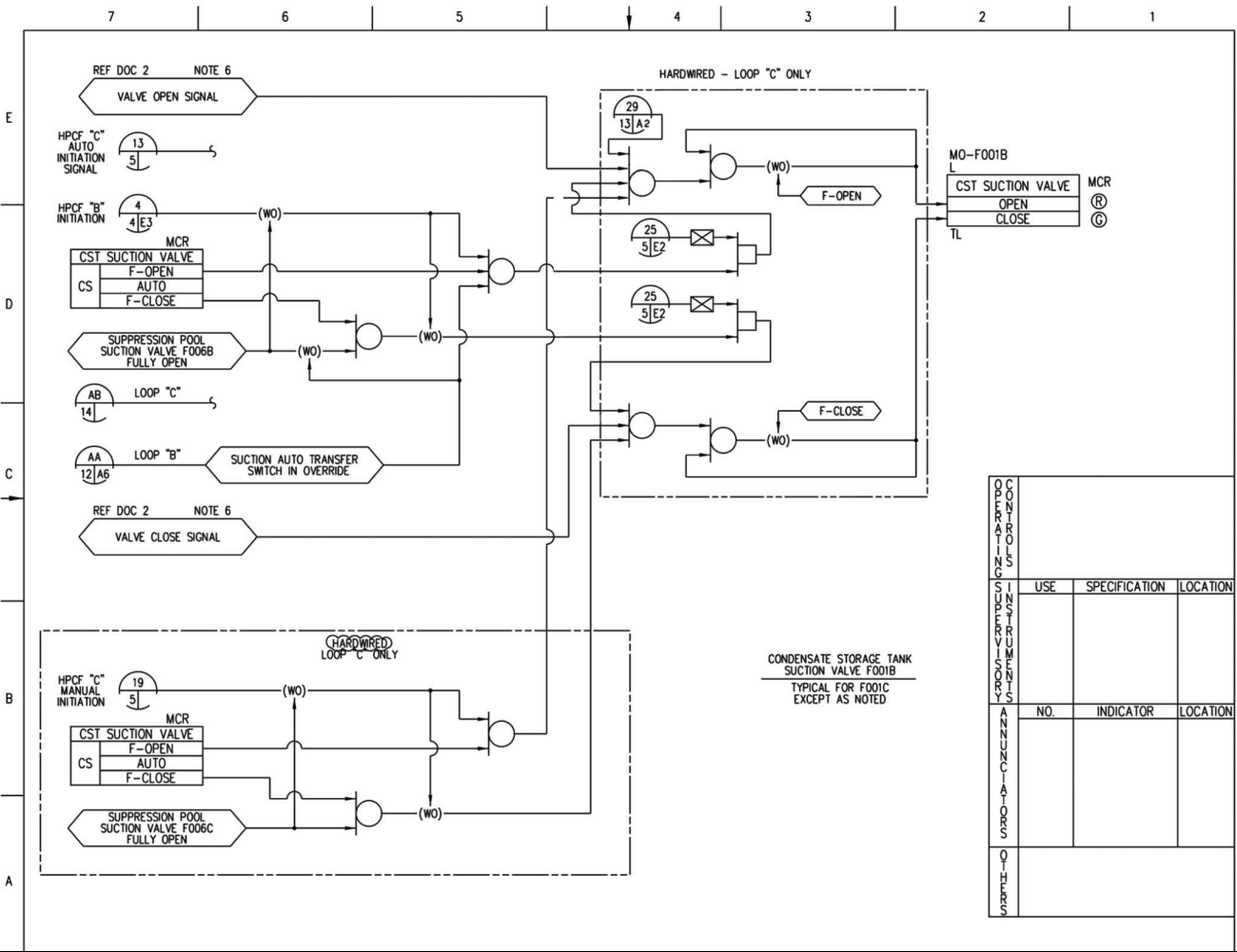


Figure 7.3-1 High Pressure Core Flooder IBD (Sheet 11 of 17)

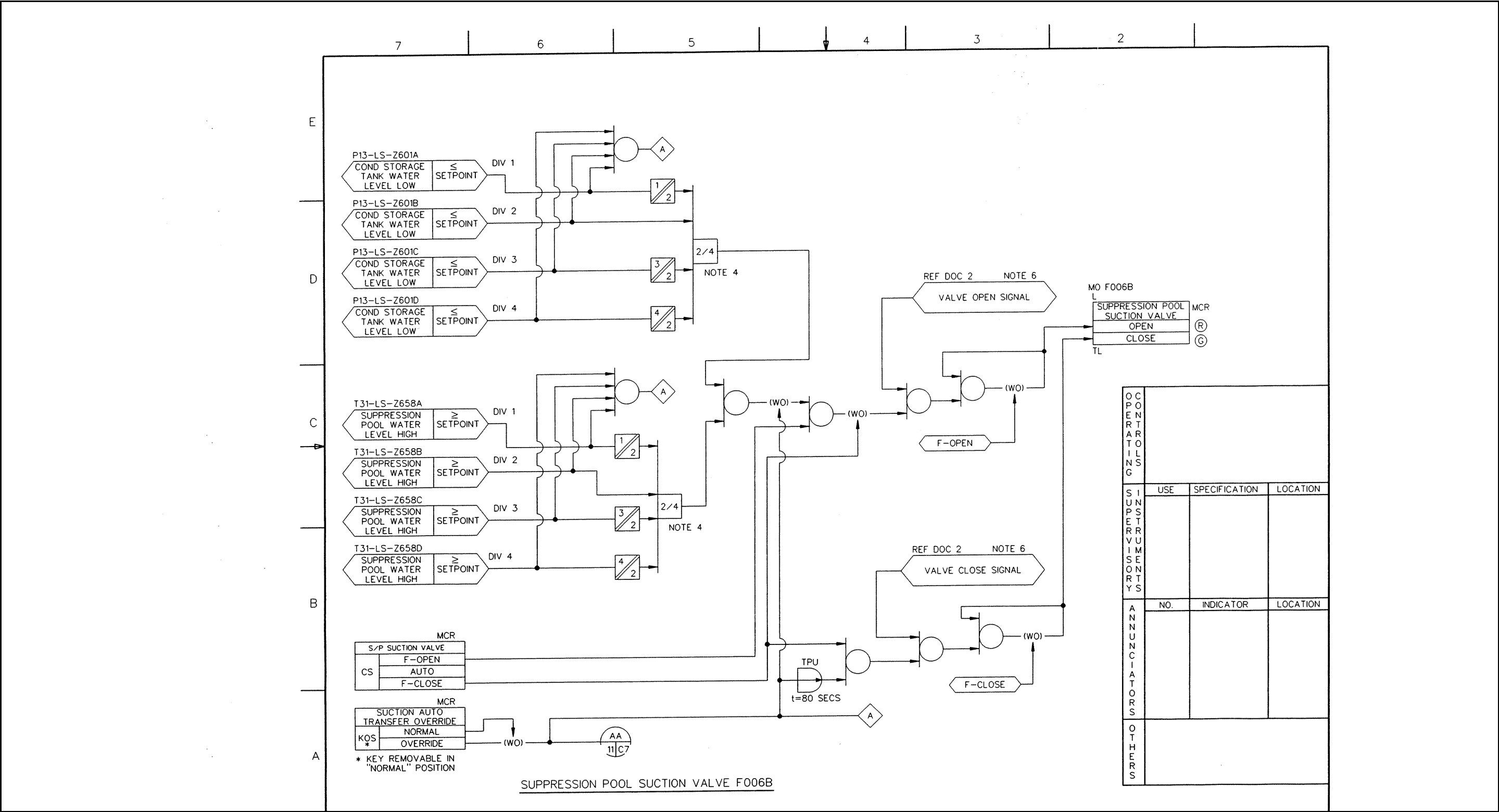


Figure 7.3-1 High Pressure Core Flooder IBD (Sheet 12 of 17)

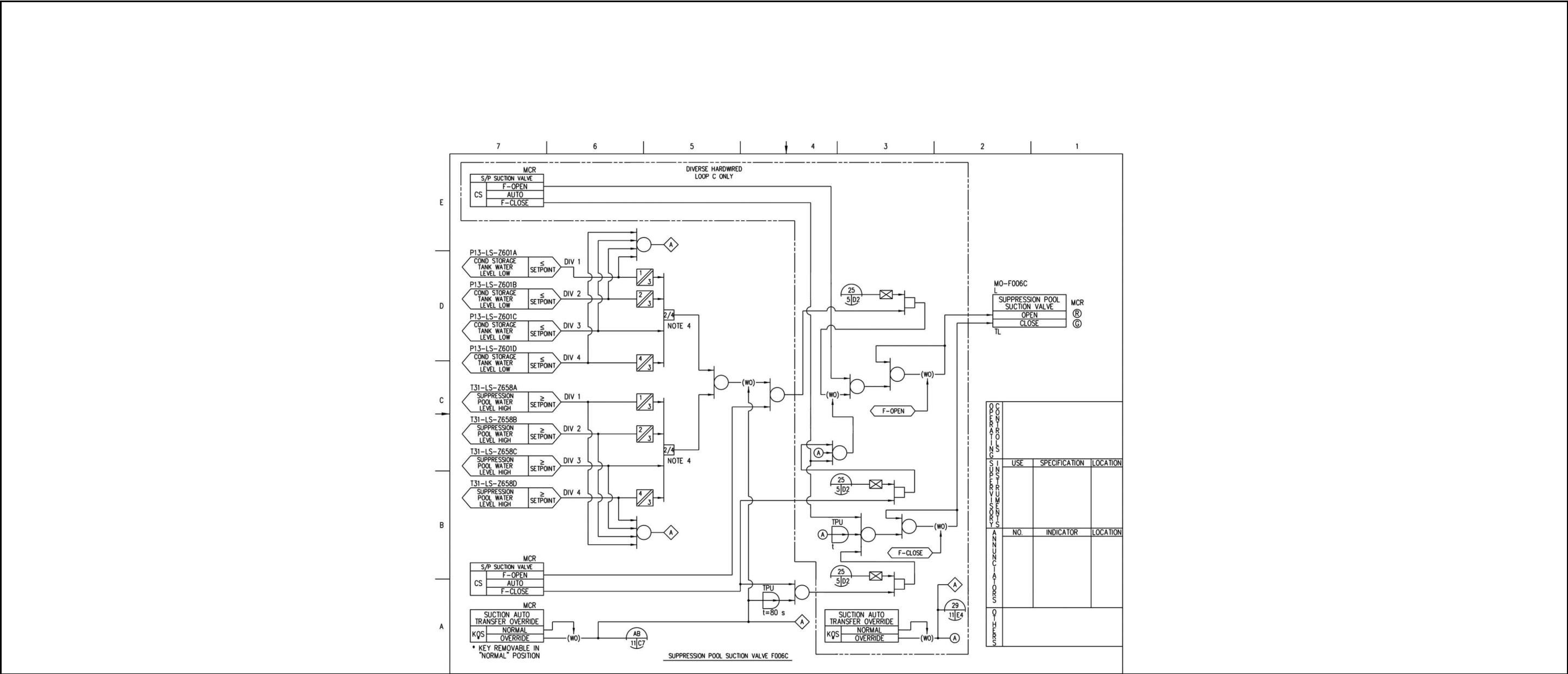


Figure 7.3-1 High Pressure Core Flooder IBD (Sheet 13 of 17)

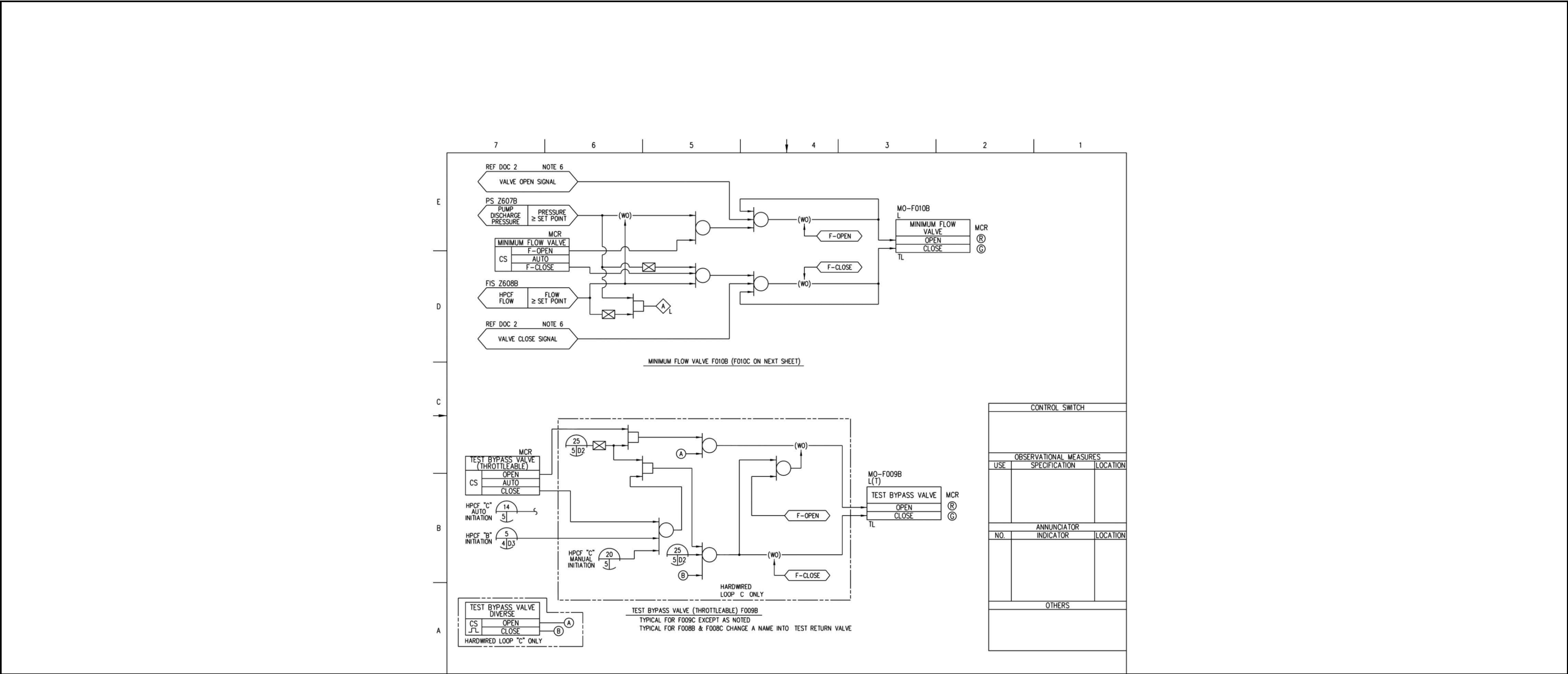


Figure 7.3-1 High Pressure Core Flooder IBD (Sheet 14 of 17)

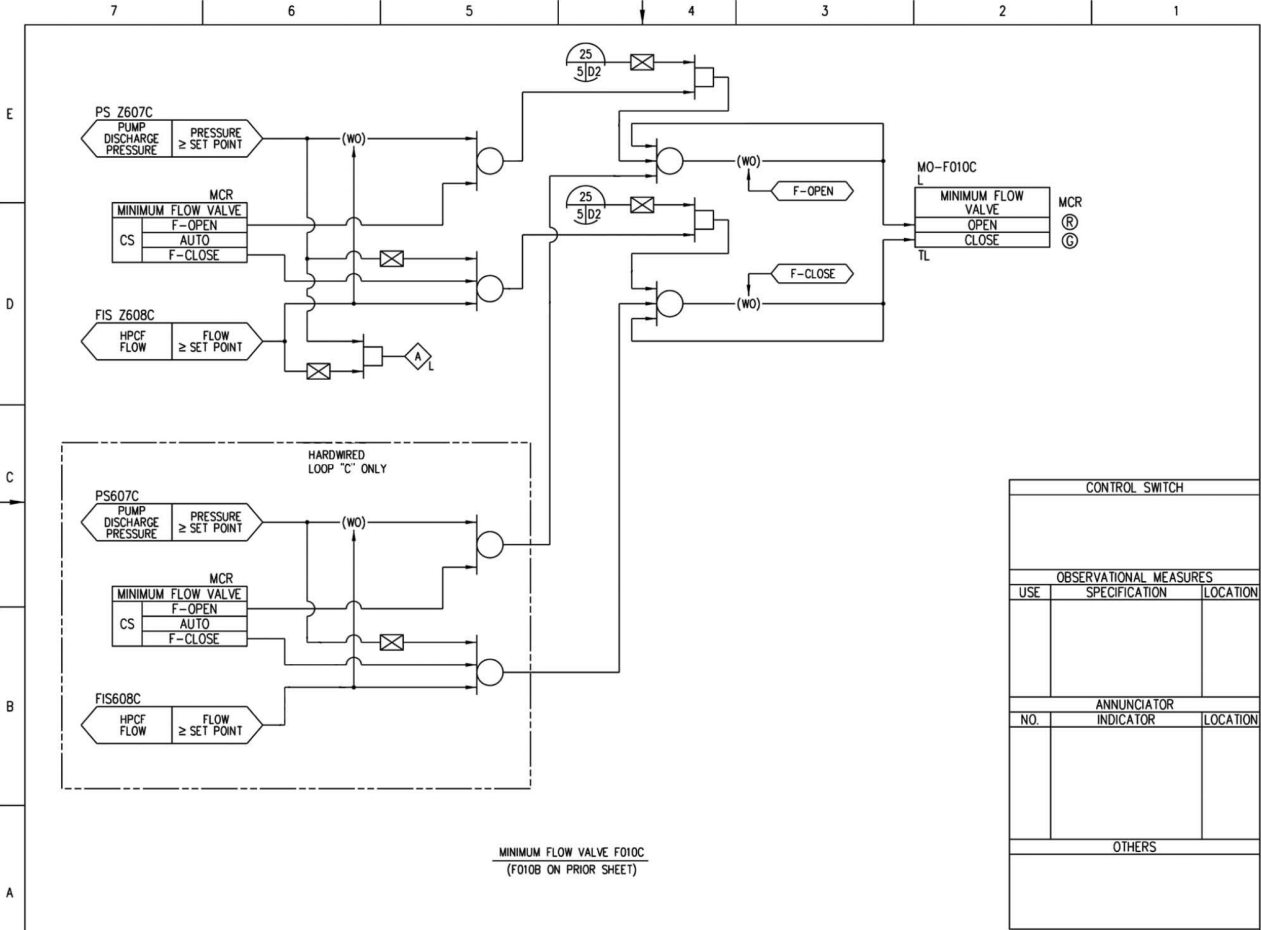


Figure 7.3-1 High Pressure Core Flooder IBD (Sheet 15 of 17)

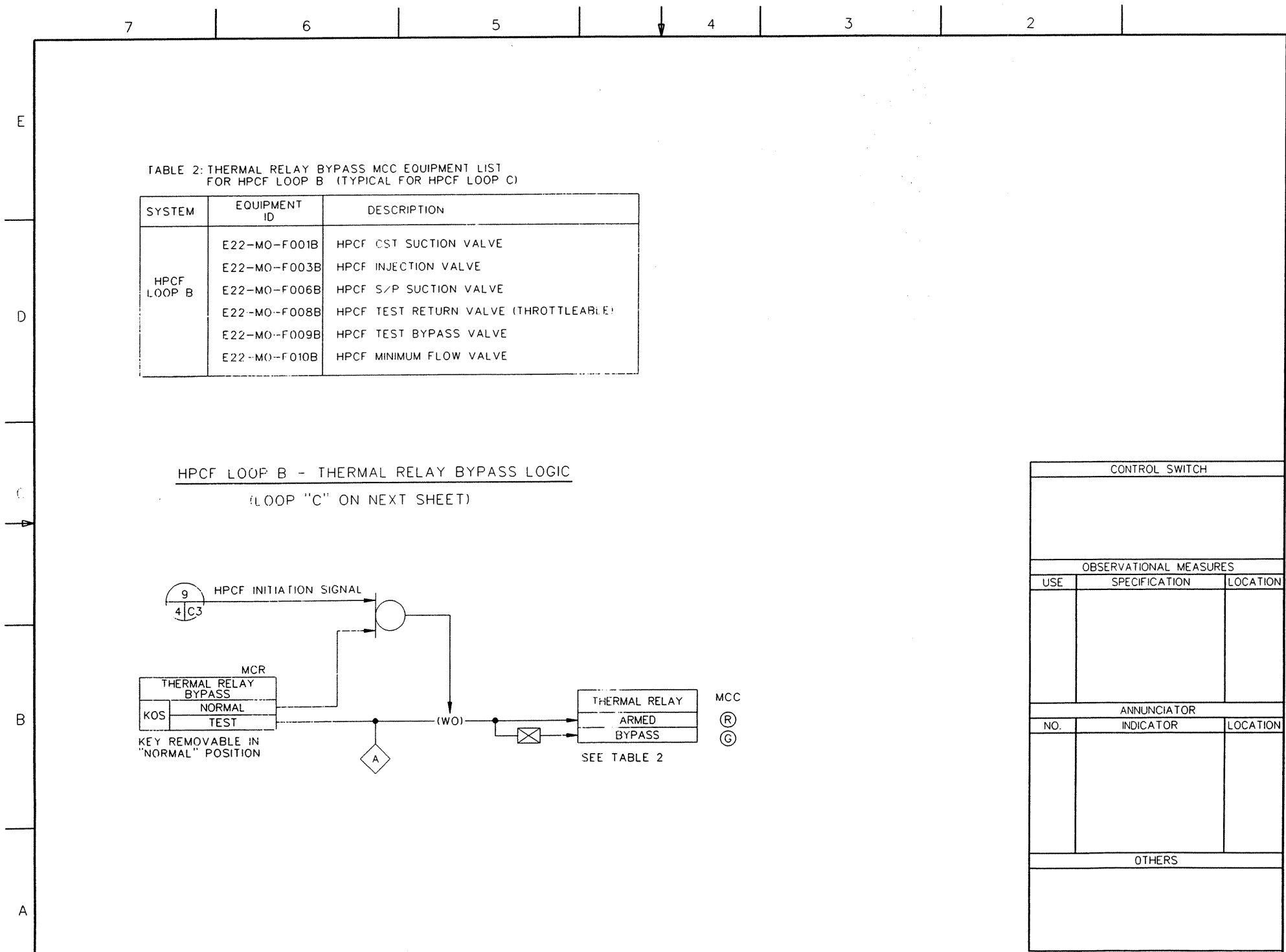


Figure 7.3-1 High Pressure Core Flooder IBD (Sheet 16 of 17)

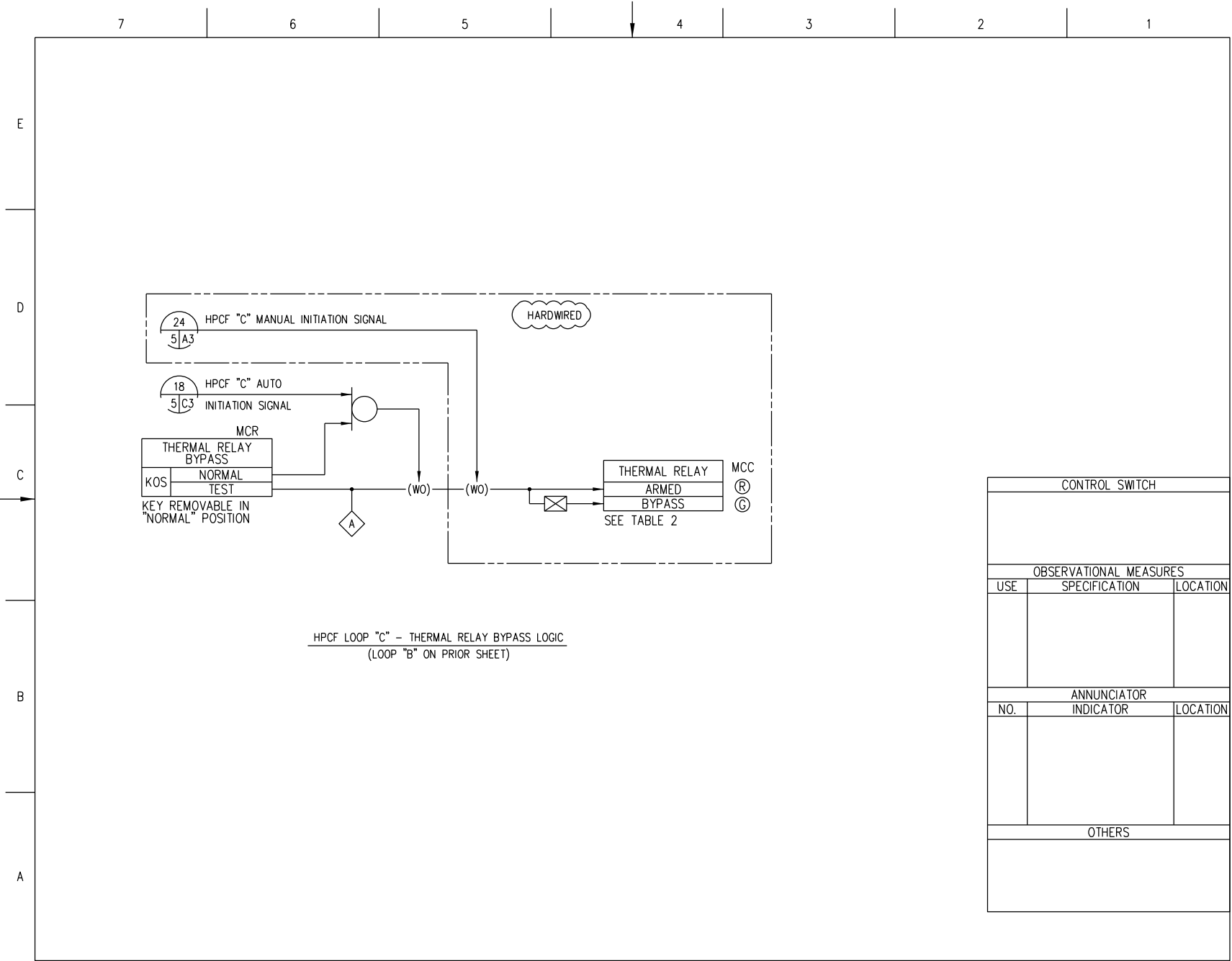


Figure 7.3-1 High Pressure Core Flooder IBD (Sheet 17 of 17)

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21-272

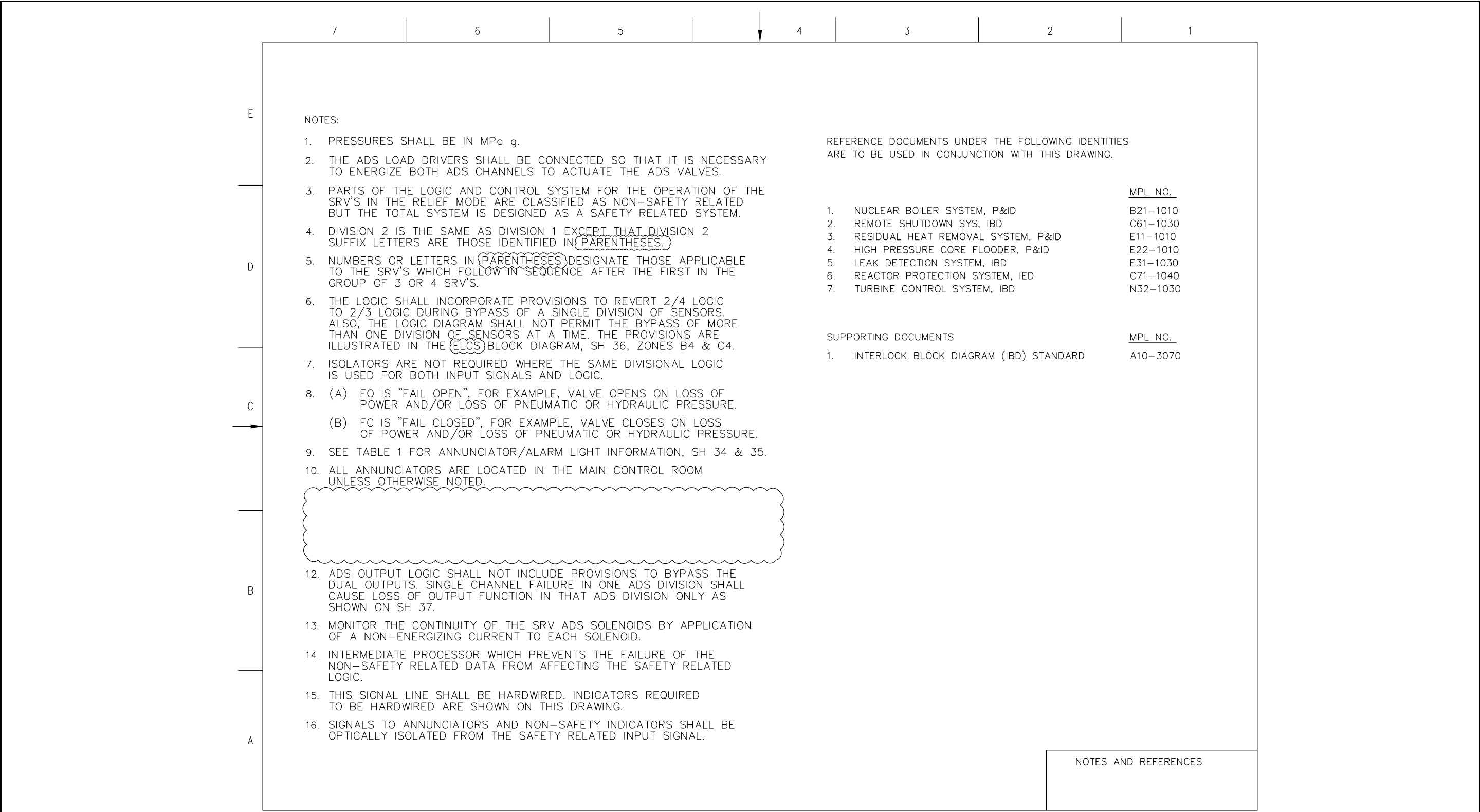


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 2 of 37)

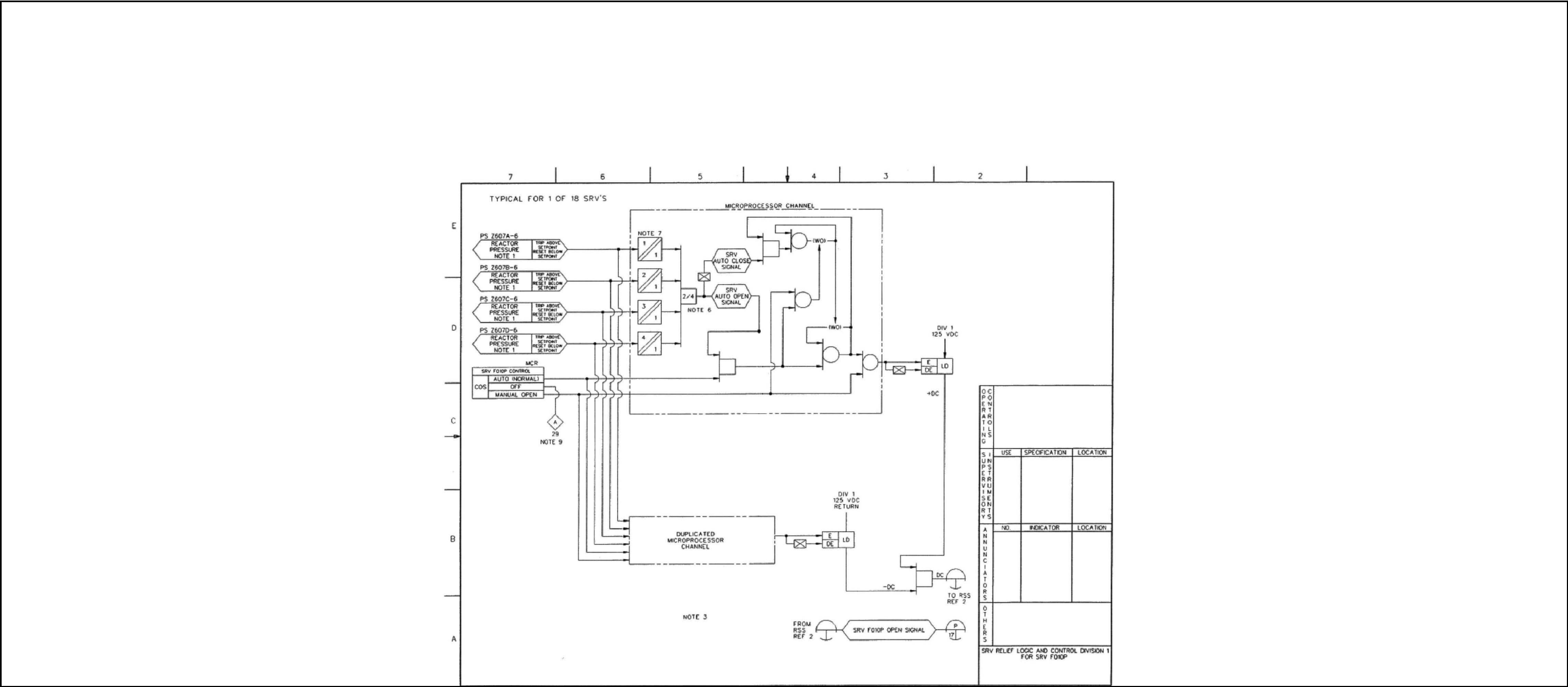


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 3 of 37)

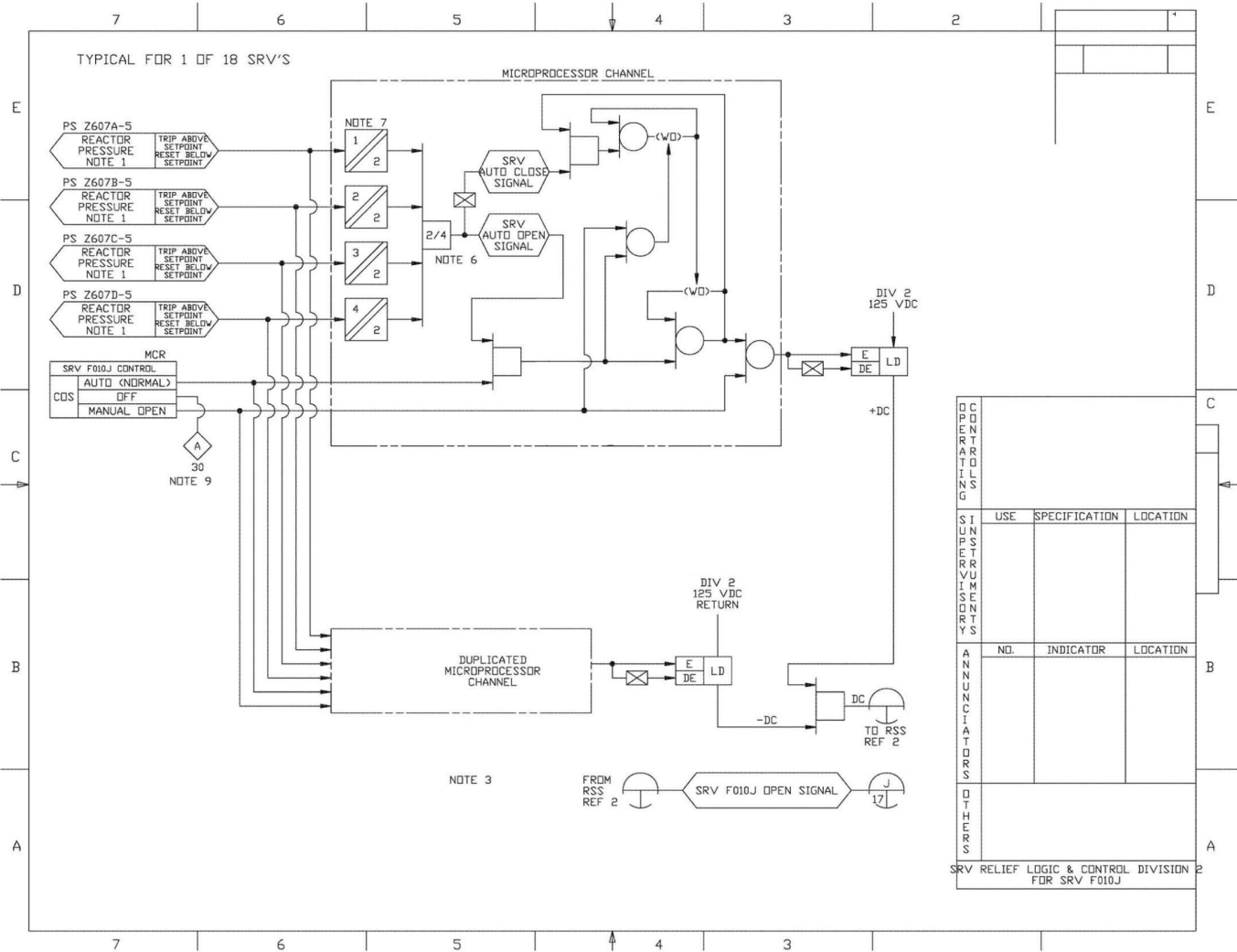


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 4 of 37)

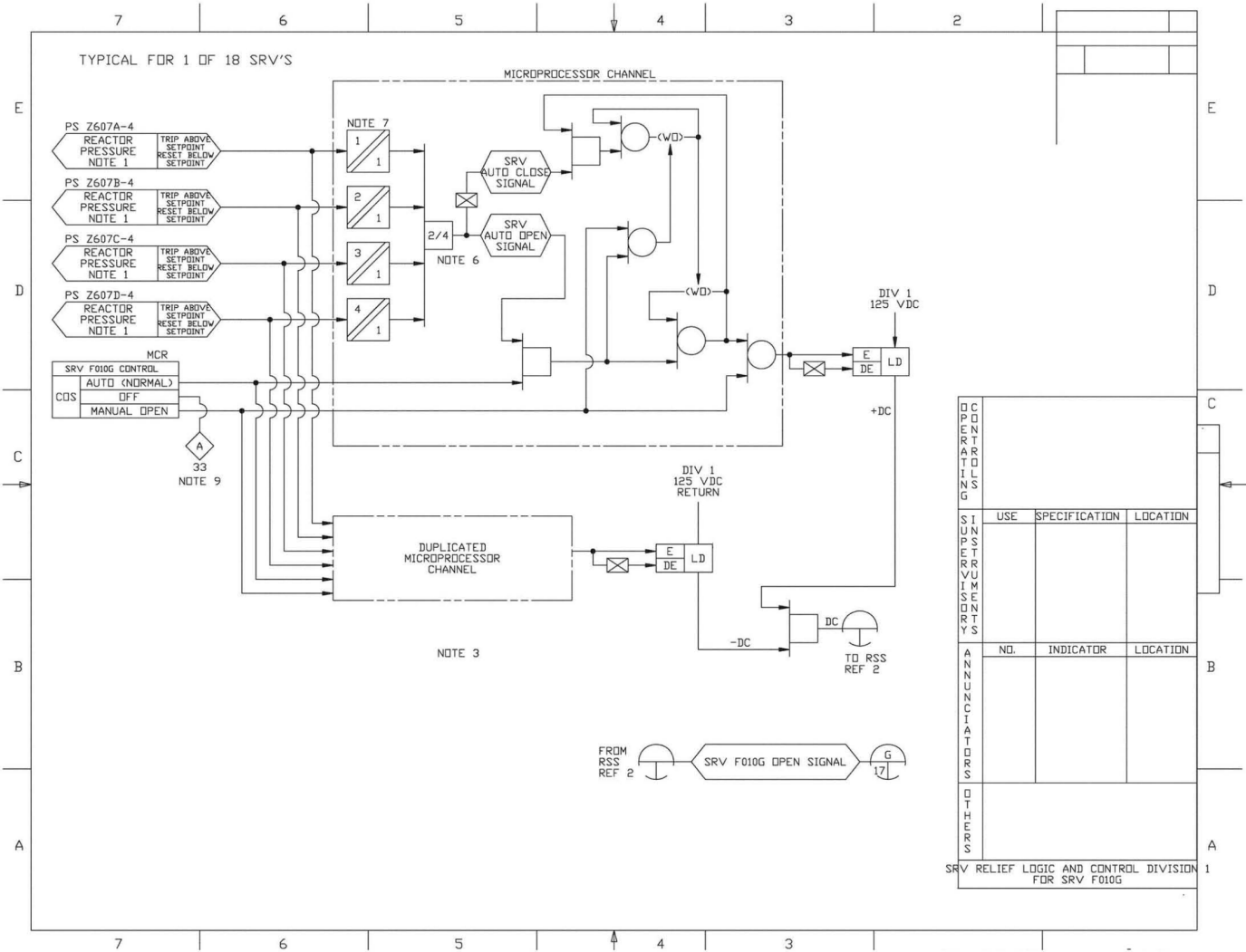


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 6 of 37)

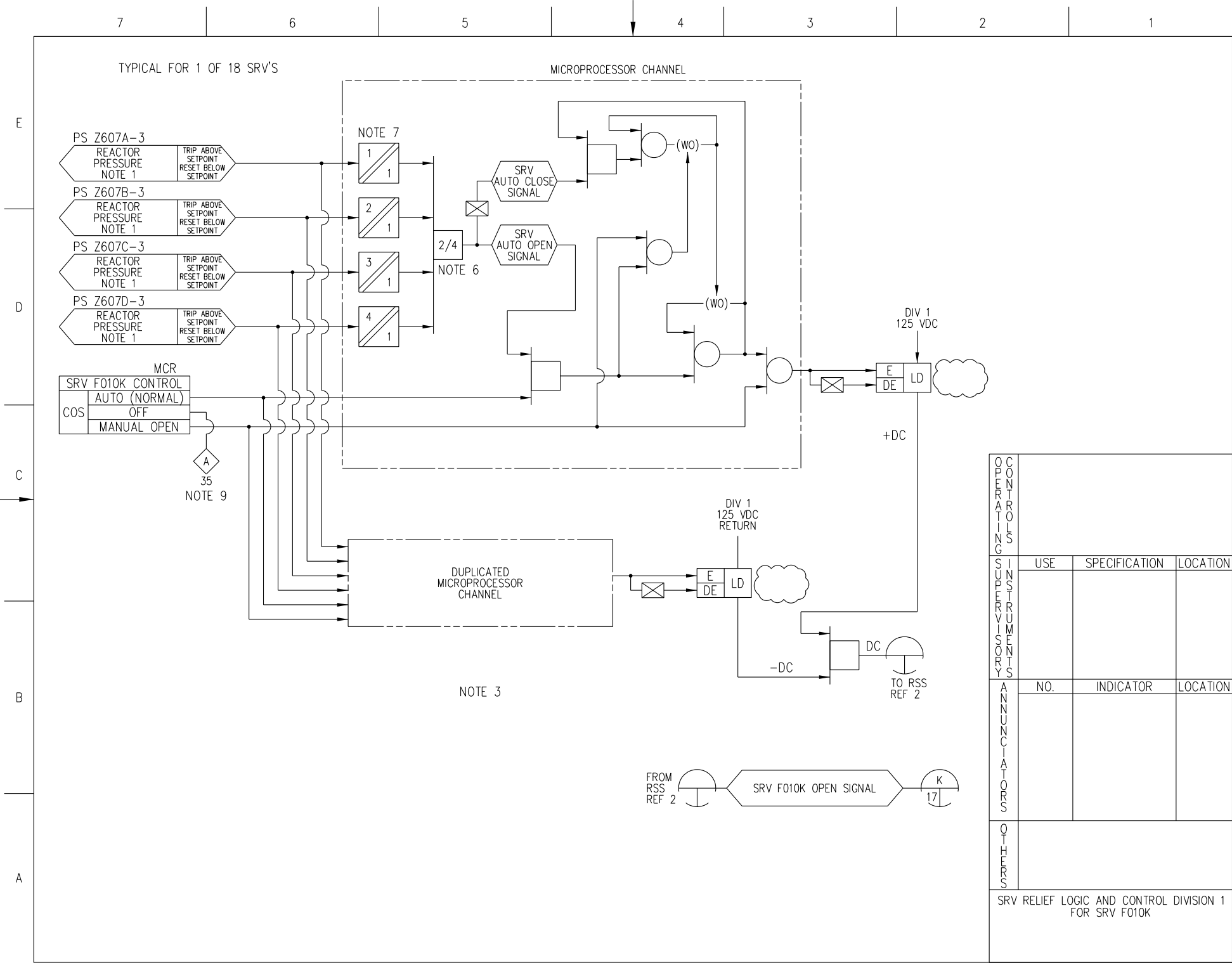


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 7 of 37)

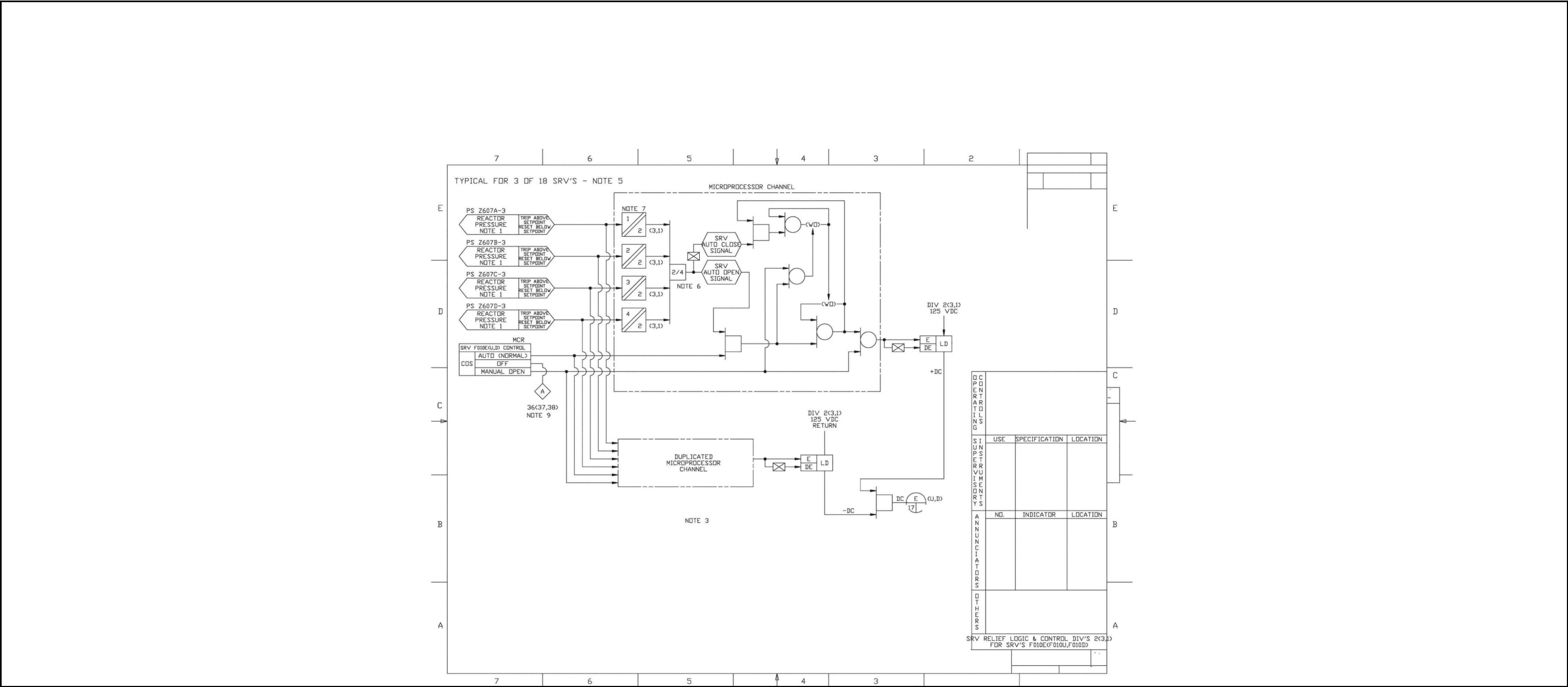


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 8 of 37)

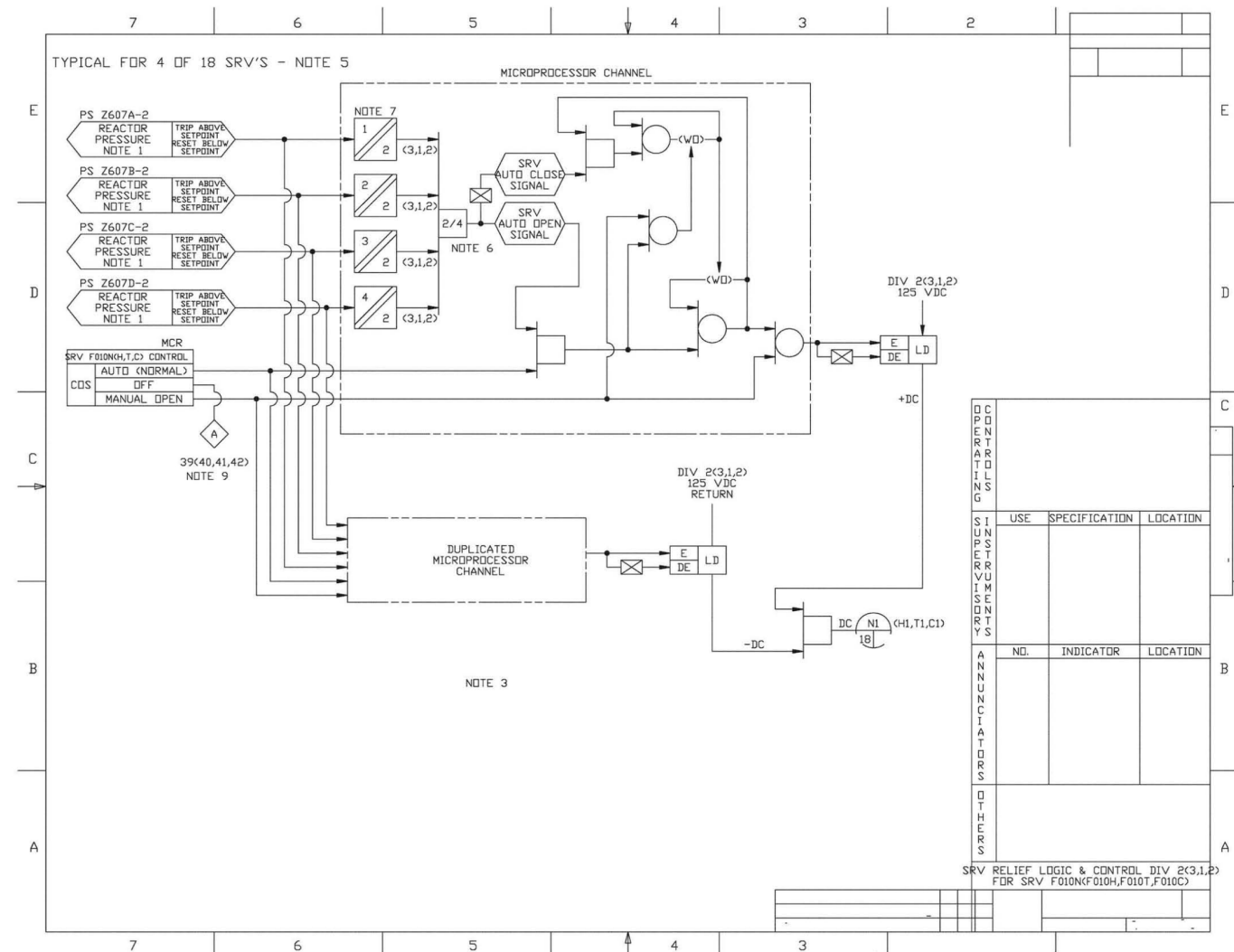


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 9 of 37)

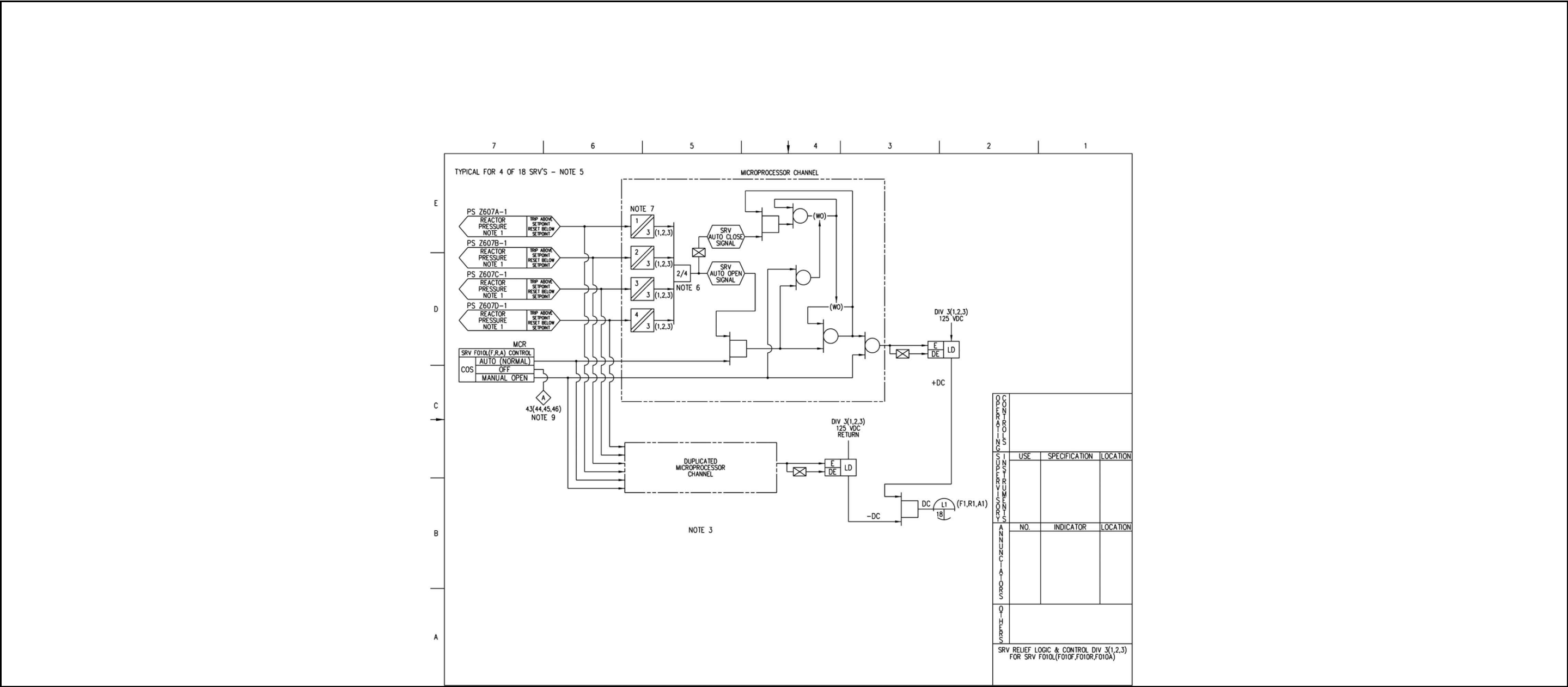
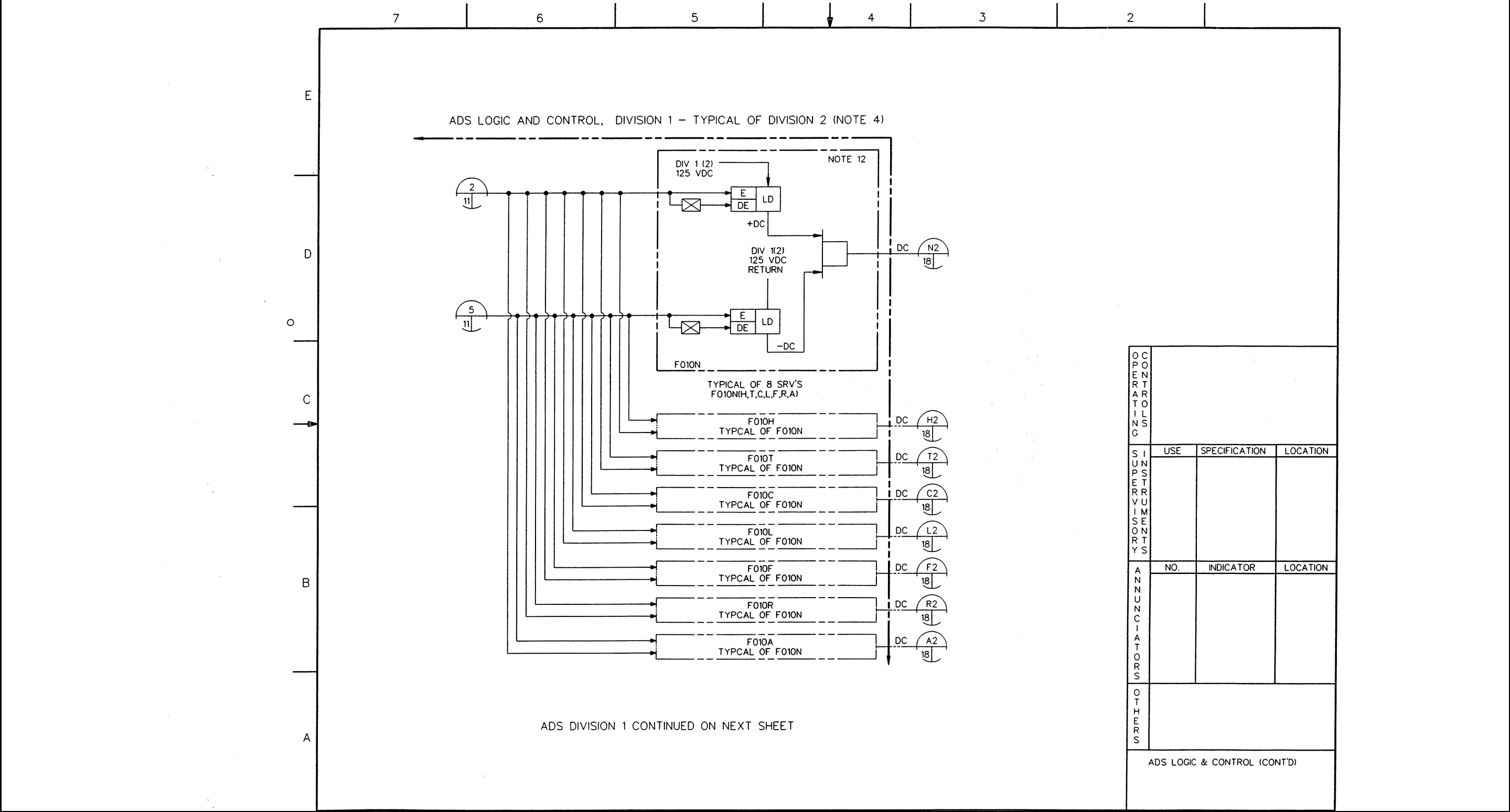


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 10 of 37)





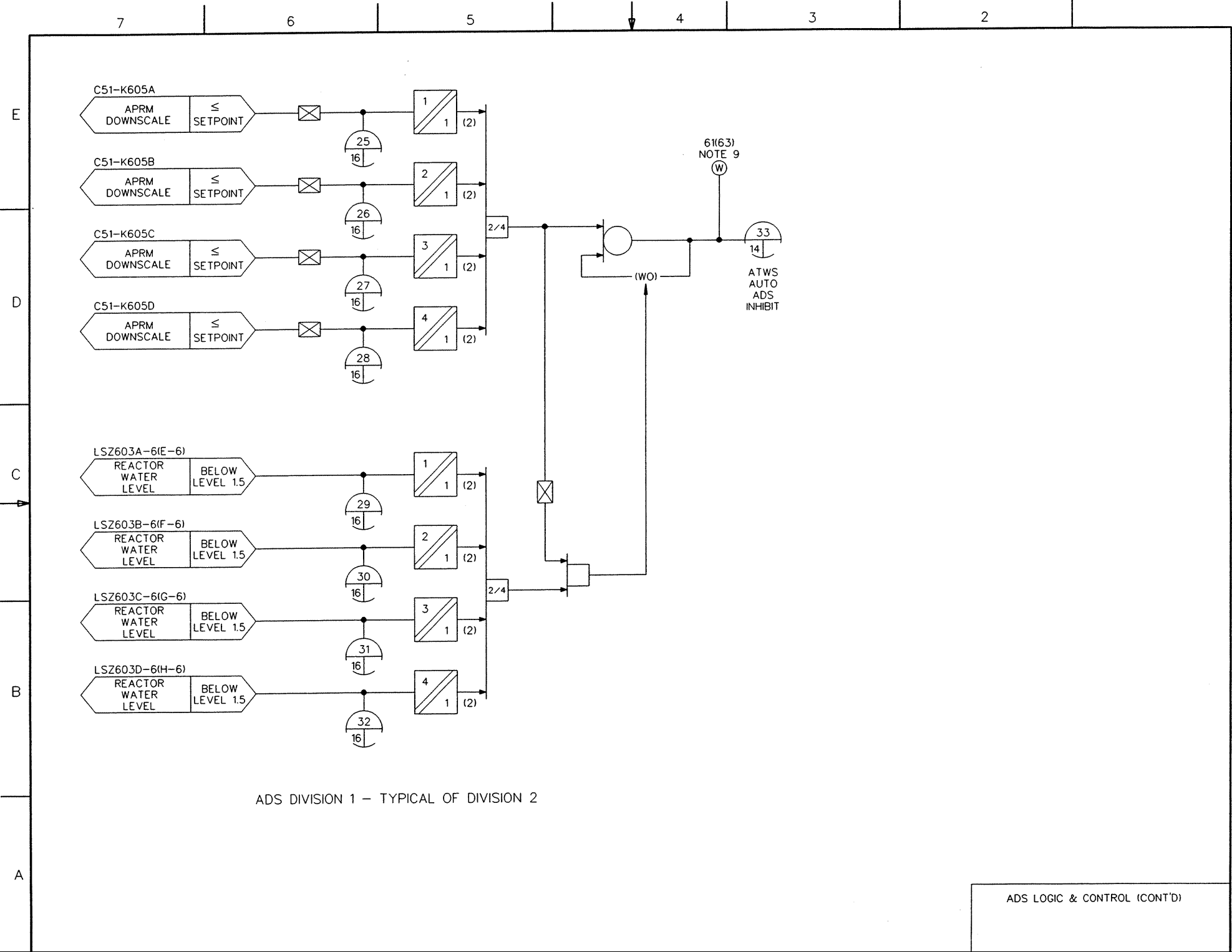


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 13 of 37)

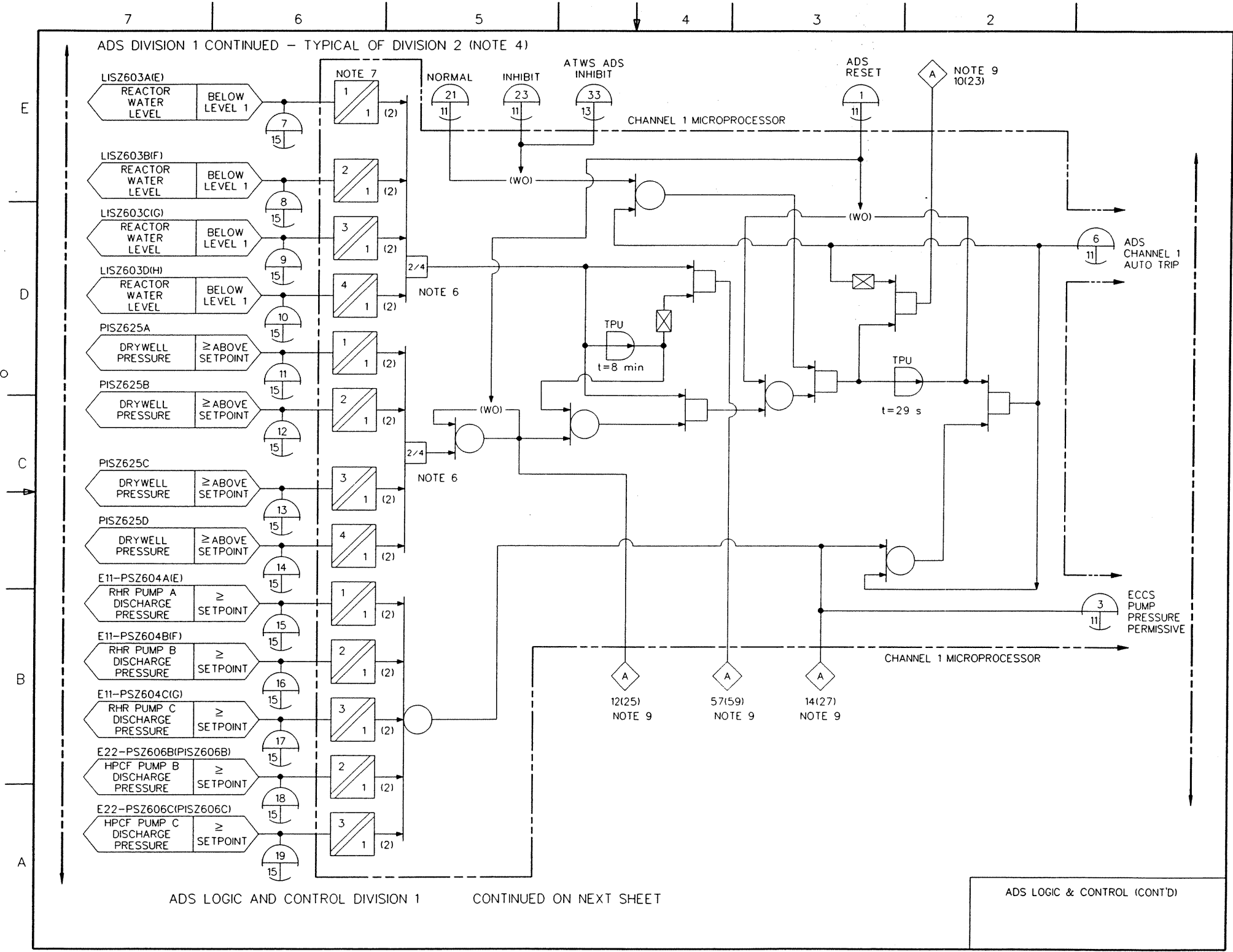
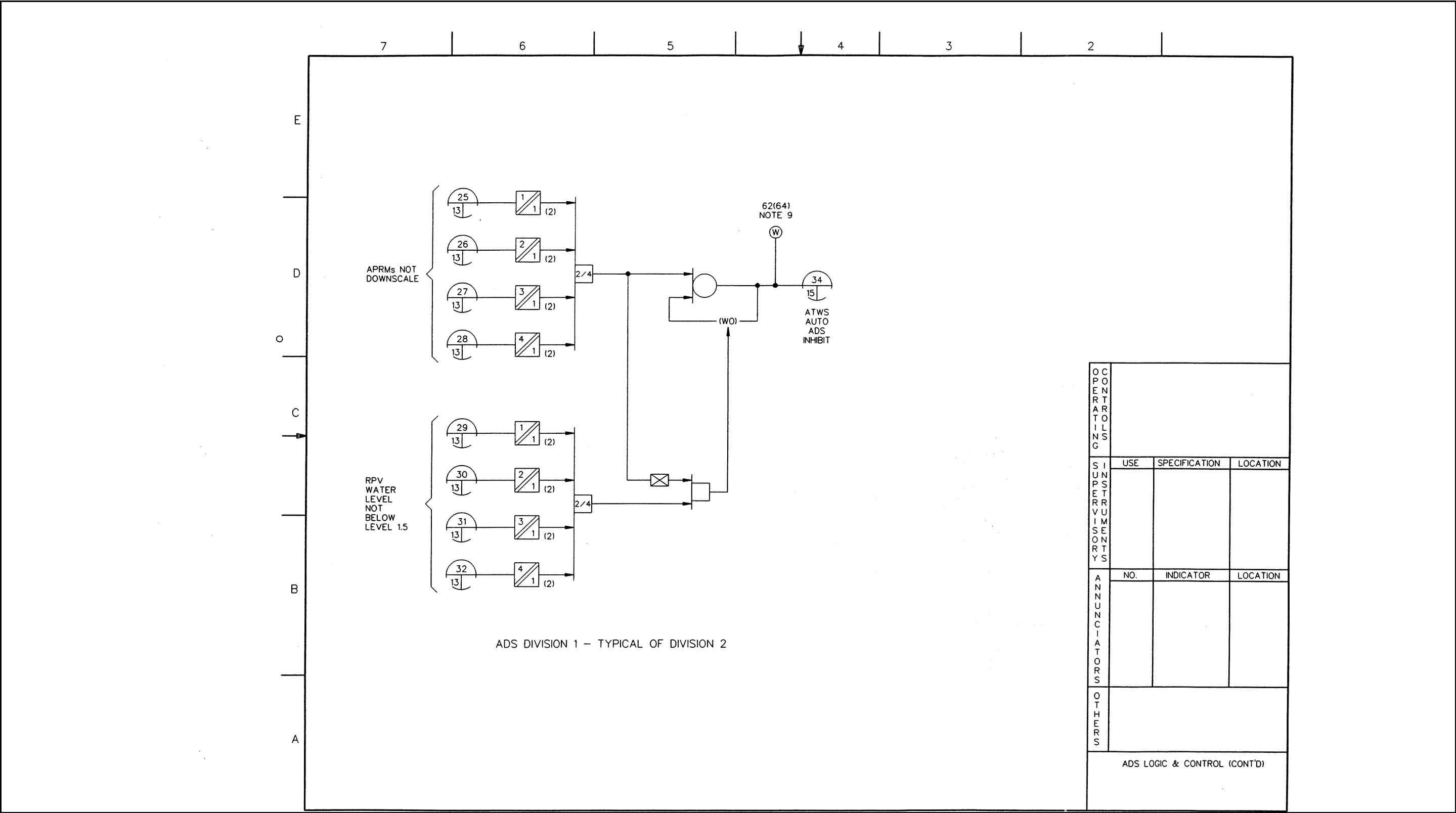


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 14 of 37)

Figure 7.3-2 Nuclear Boiler System IBD (Sheet 15 of 37)



OPERATING

STOPPING

ANNUNCIATORS

OTHERS

USE

SPECIFICATION

LOCATION

NO.

INDICATOR

LOCATION

ADS LOGIC & CONTROL (CONT'D)

Figure 7.3-2 Nuclear Boiler System IBD (Sheet 16 of 37)

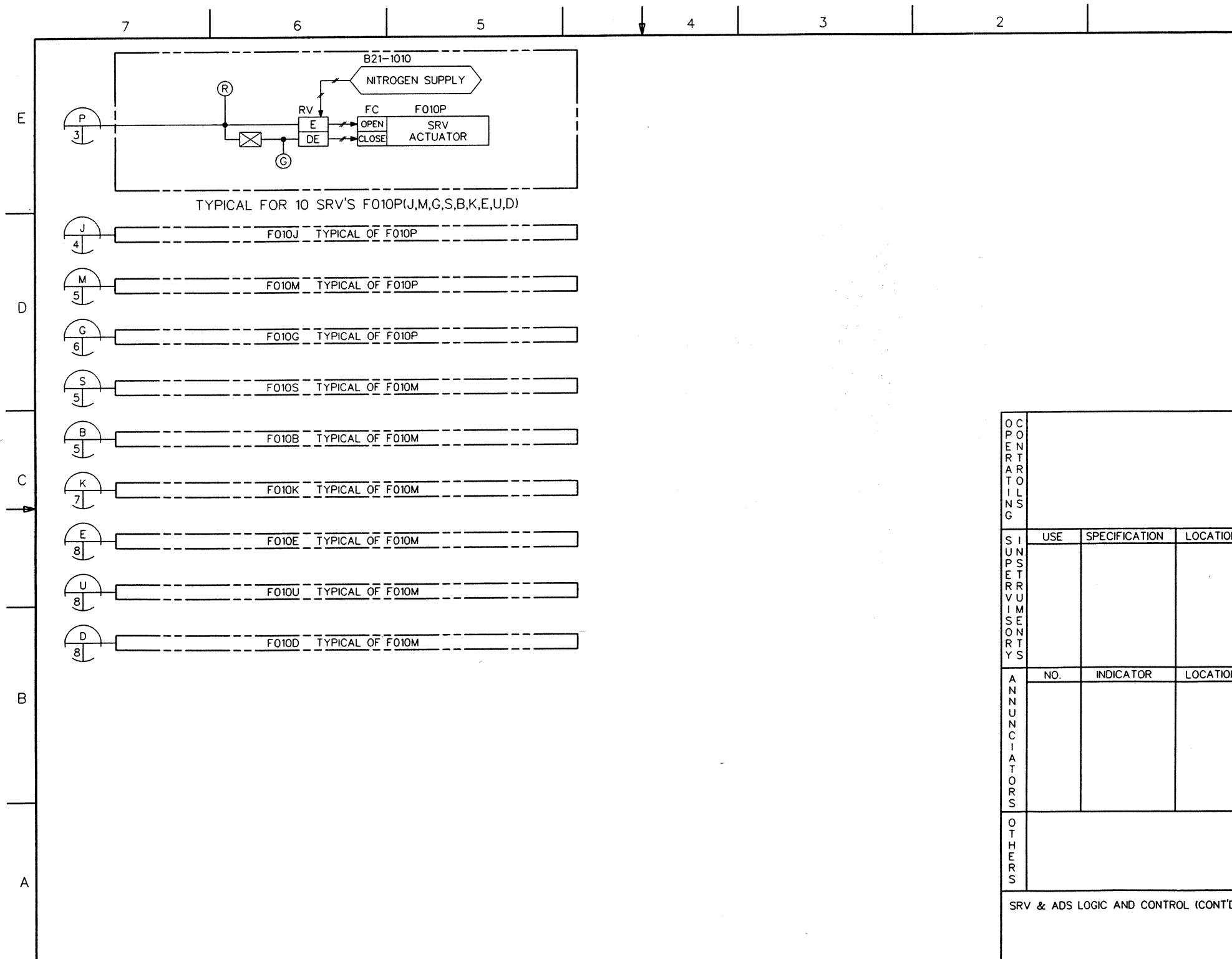


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 17 of 37)

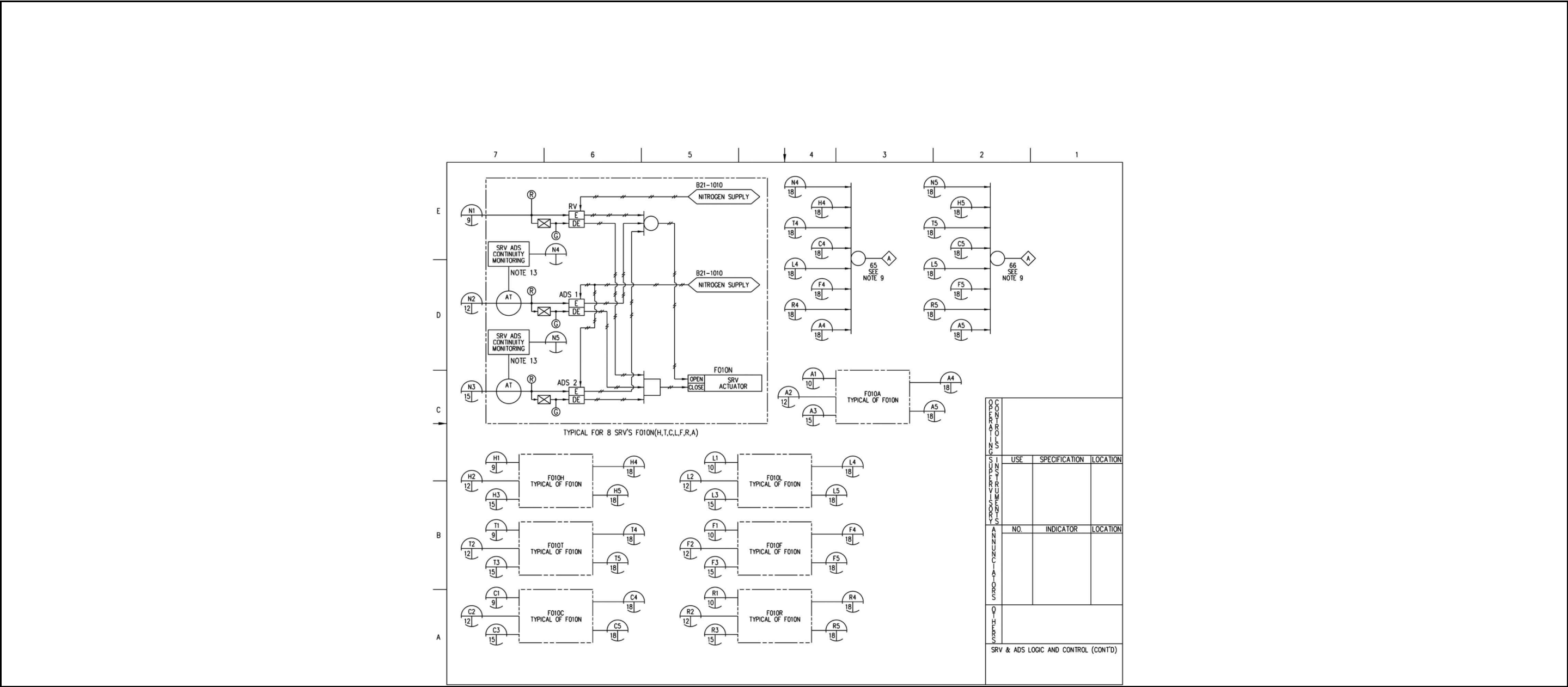
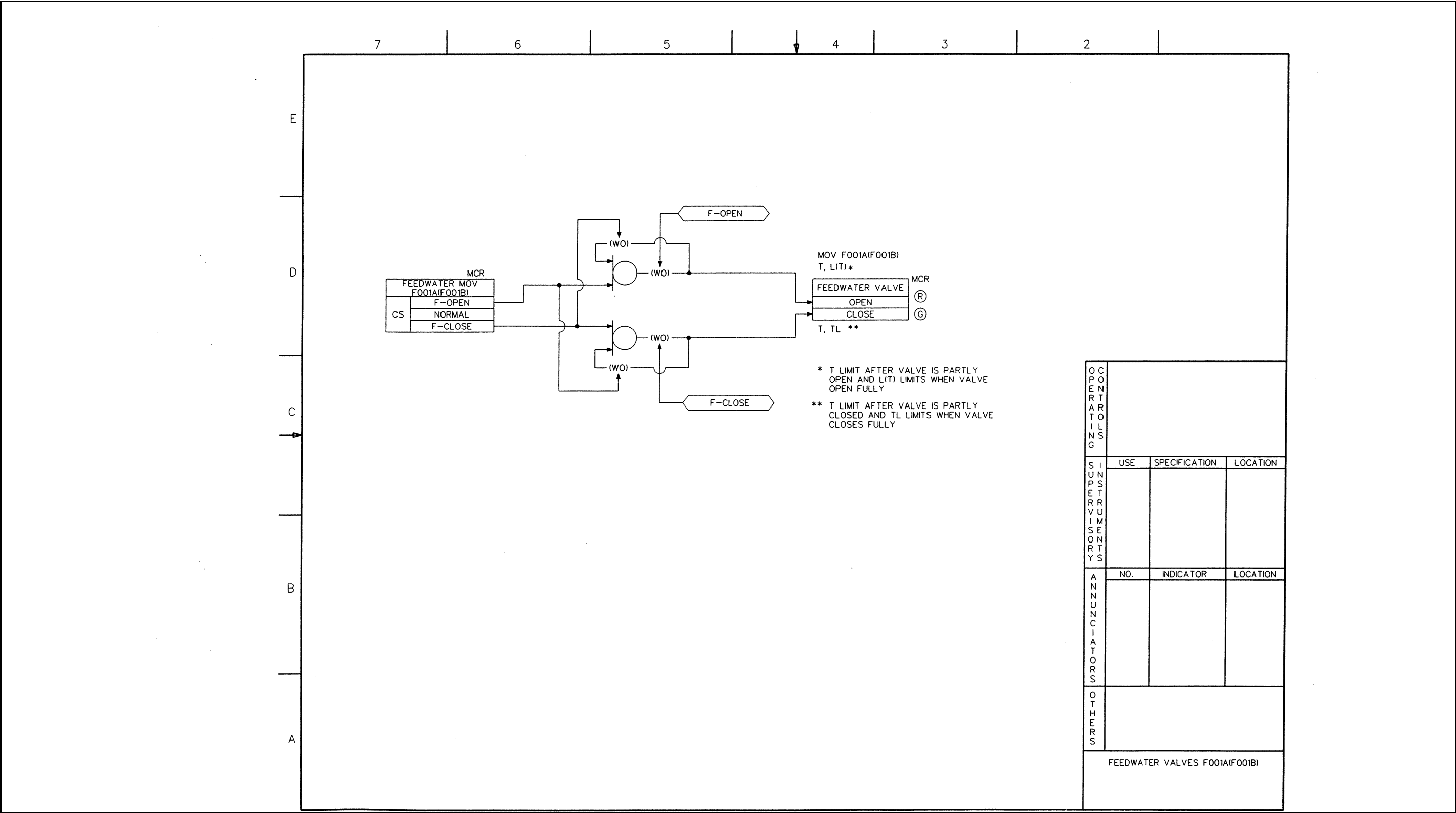


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 18 of 37)





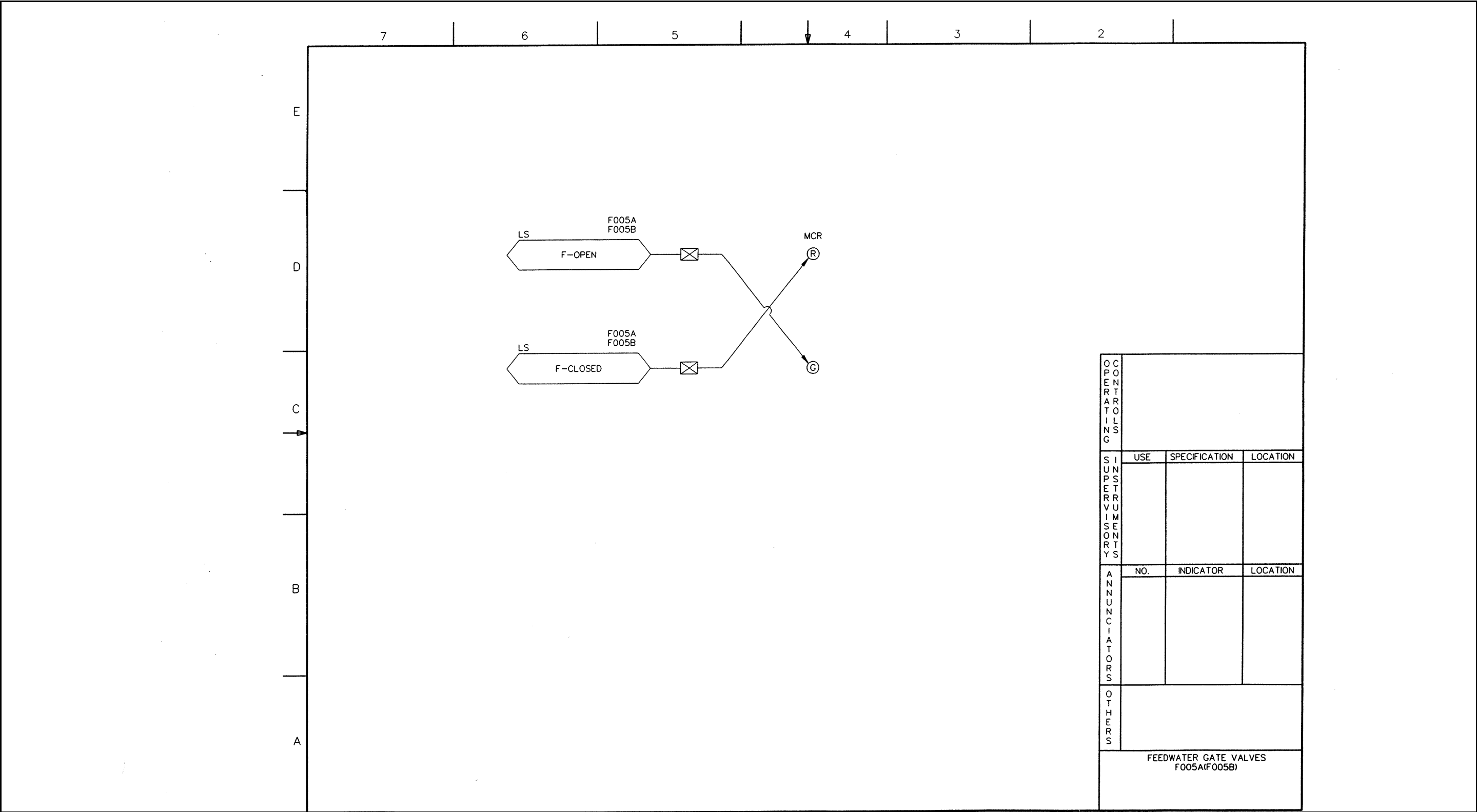
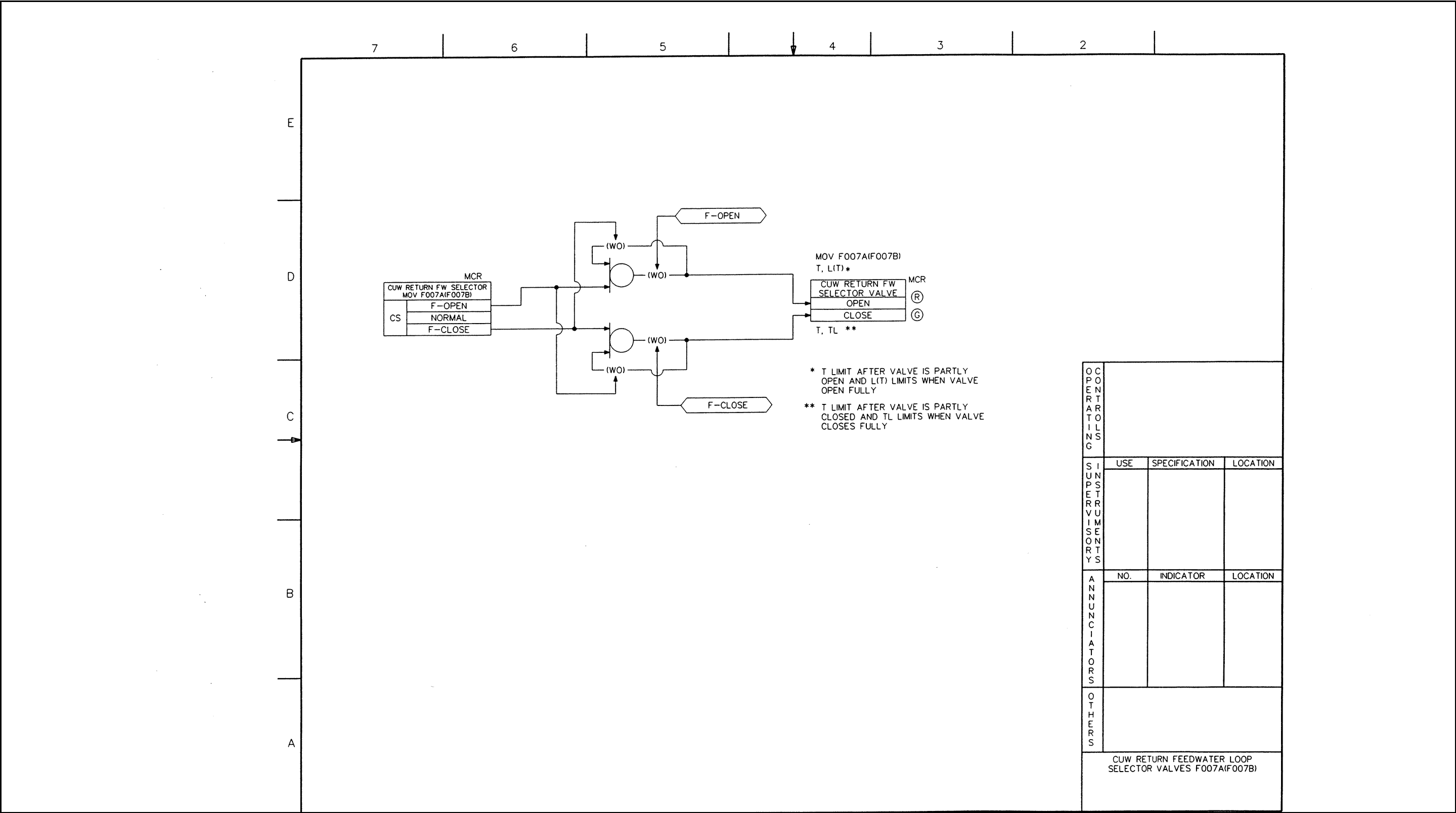
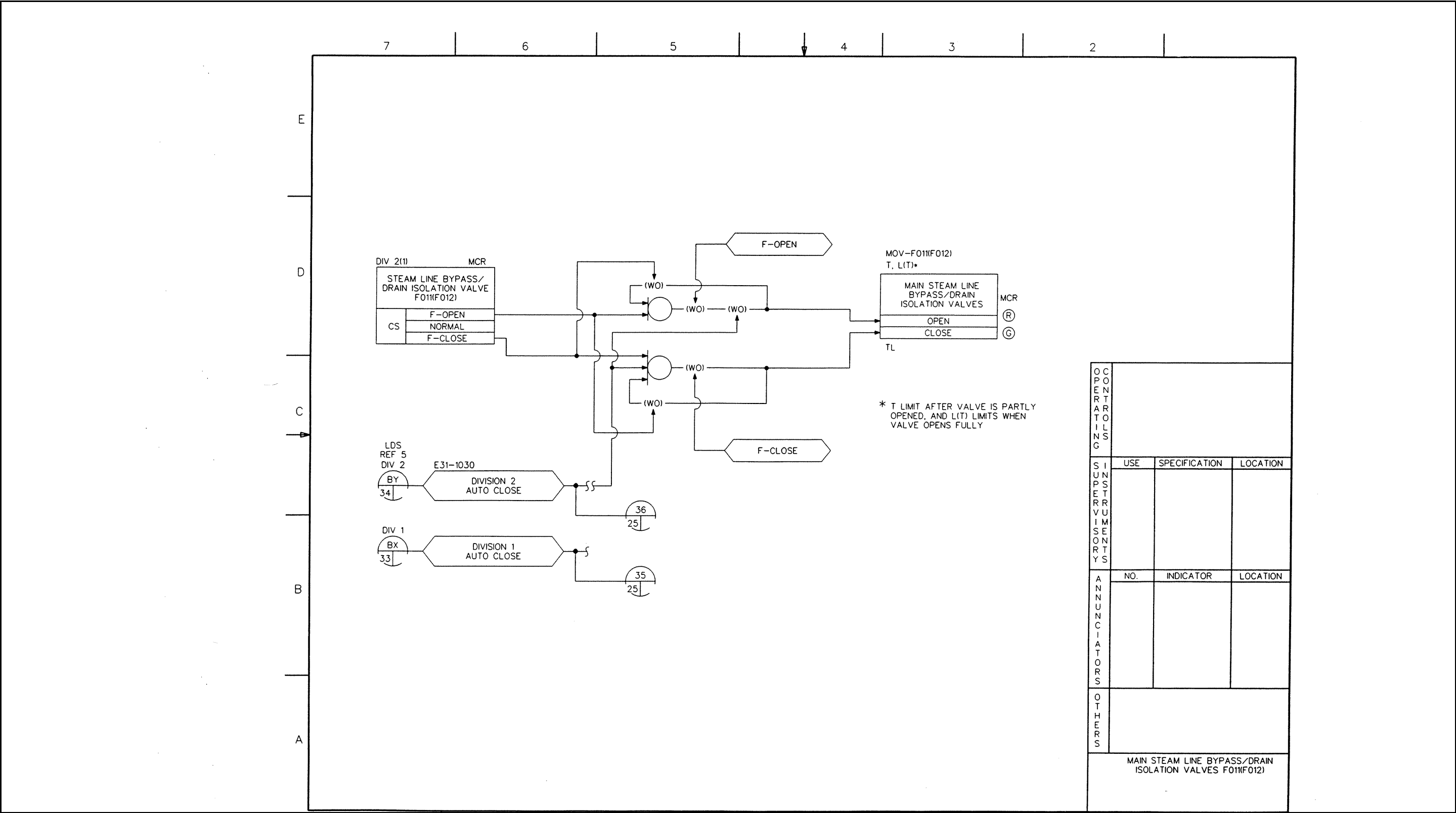


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 21 of 37)





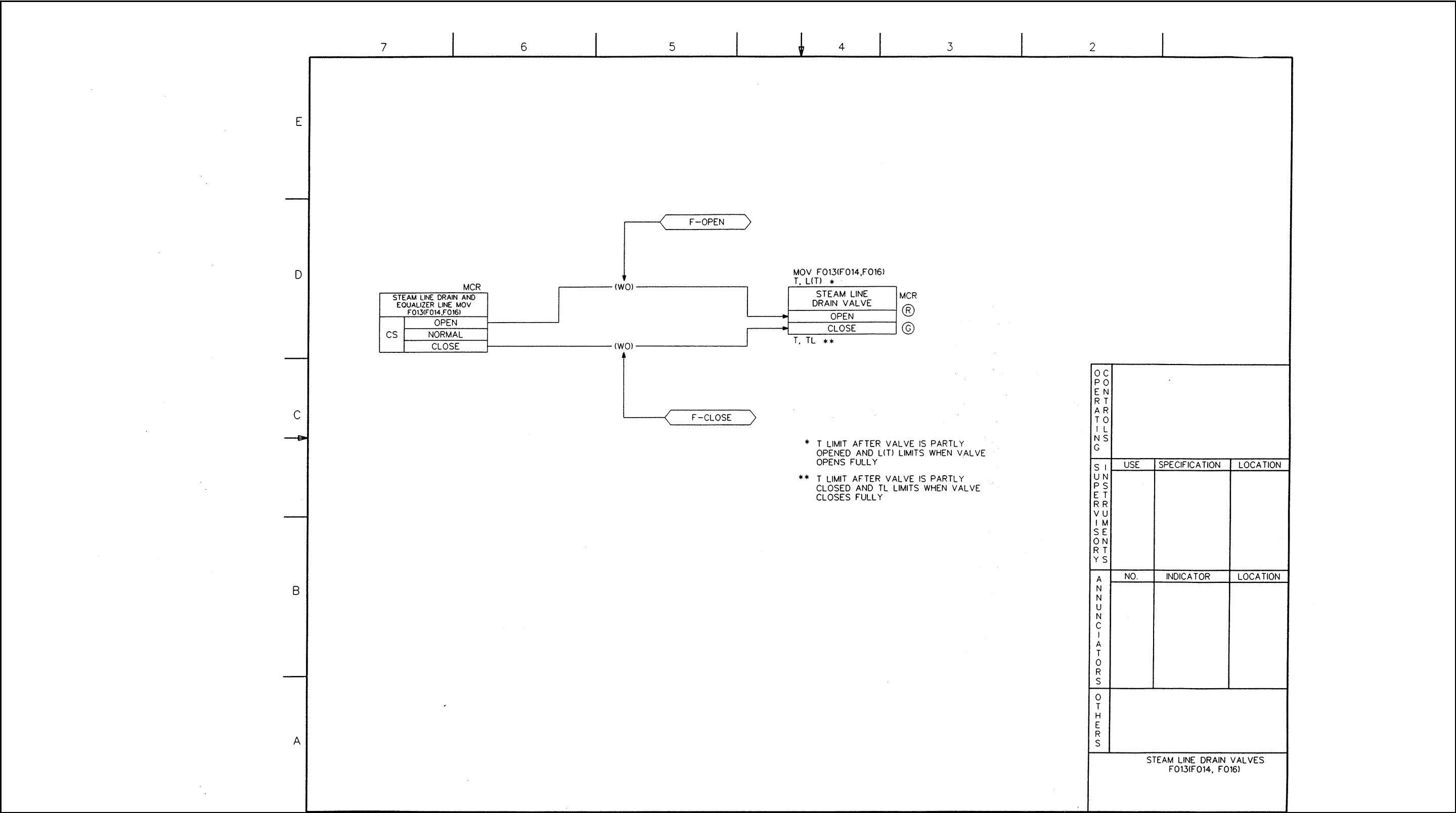


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 24 of 37)

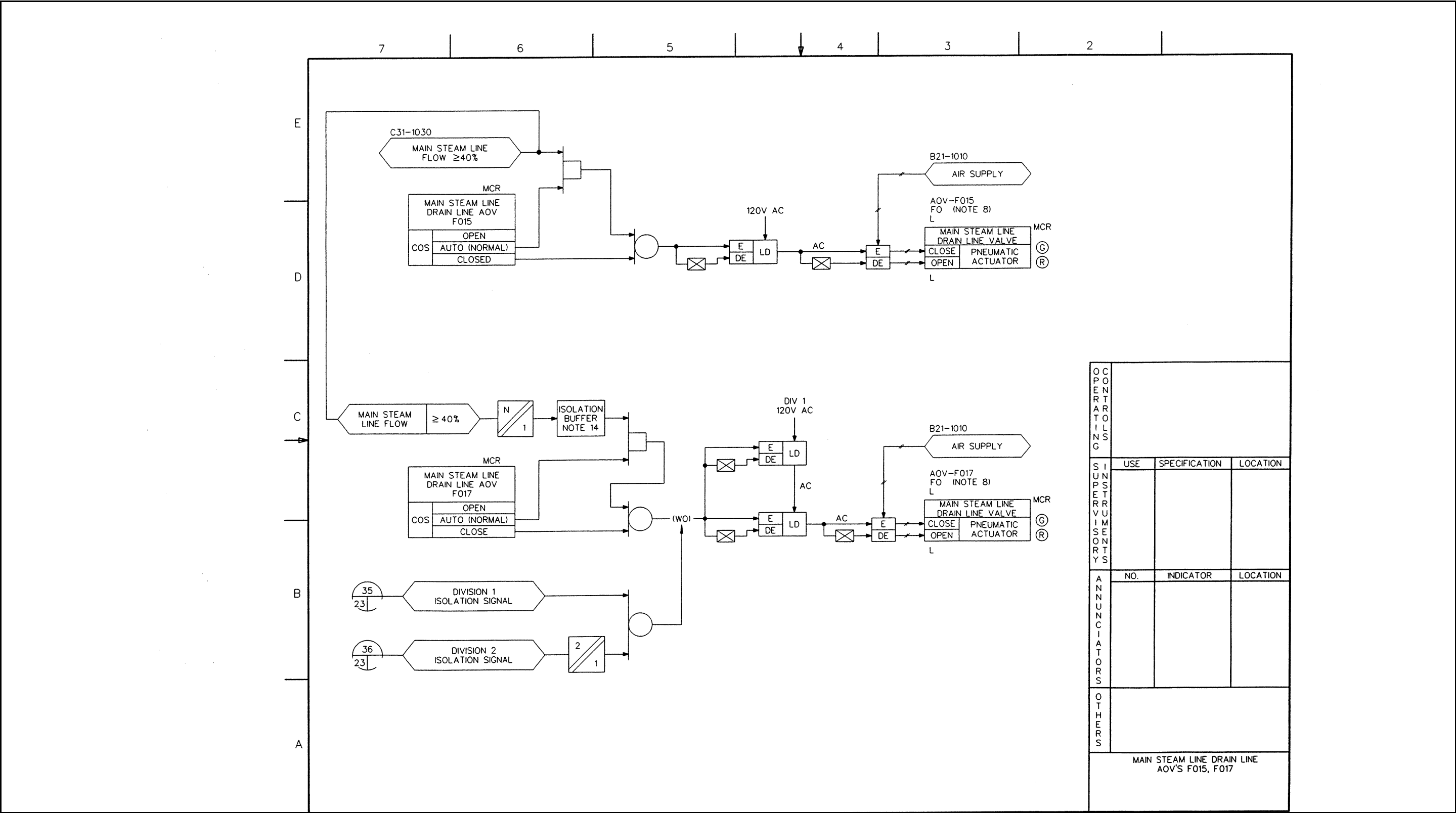
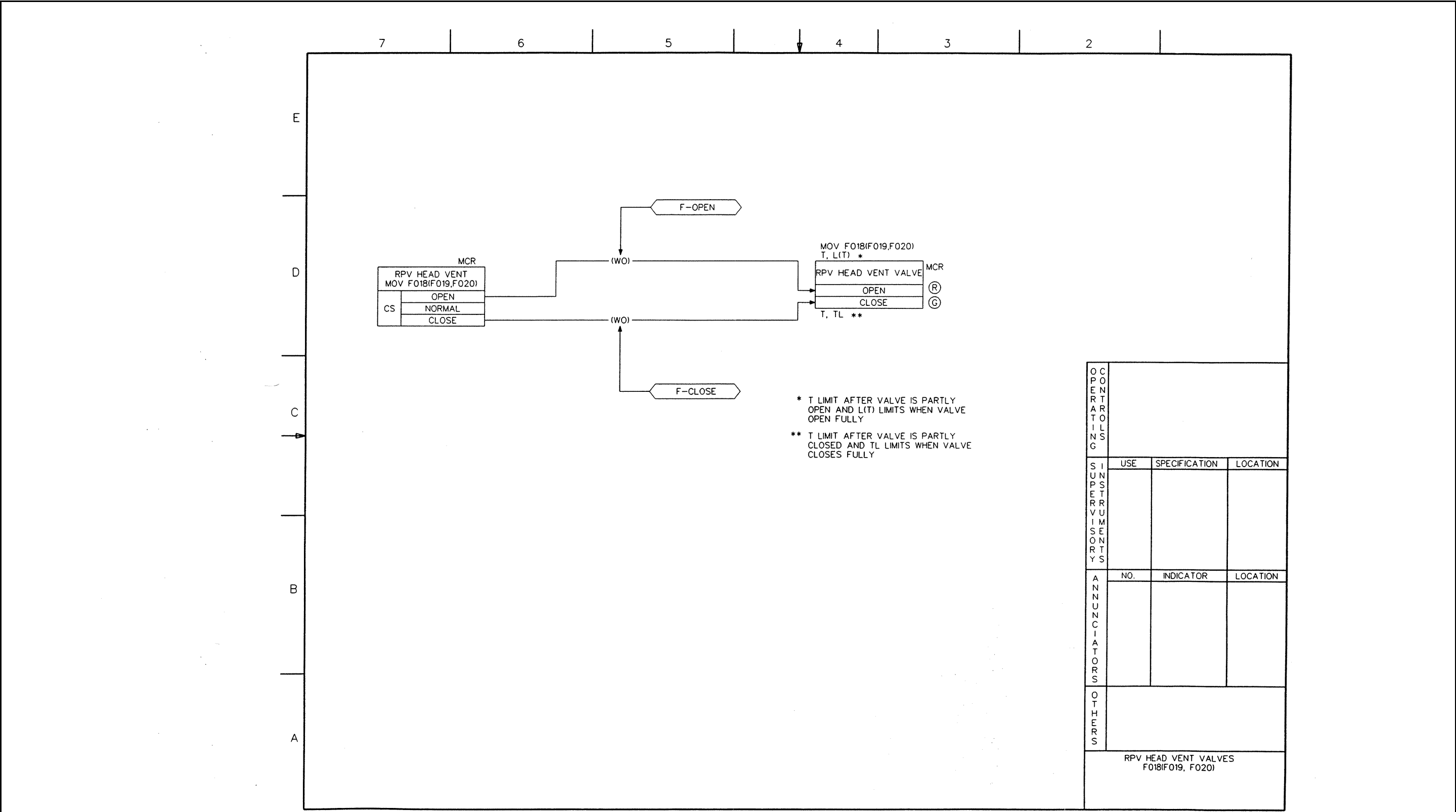
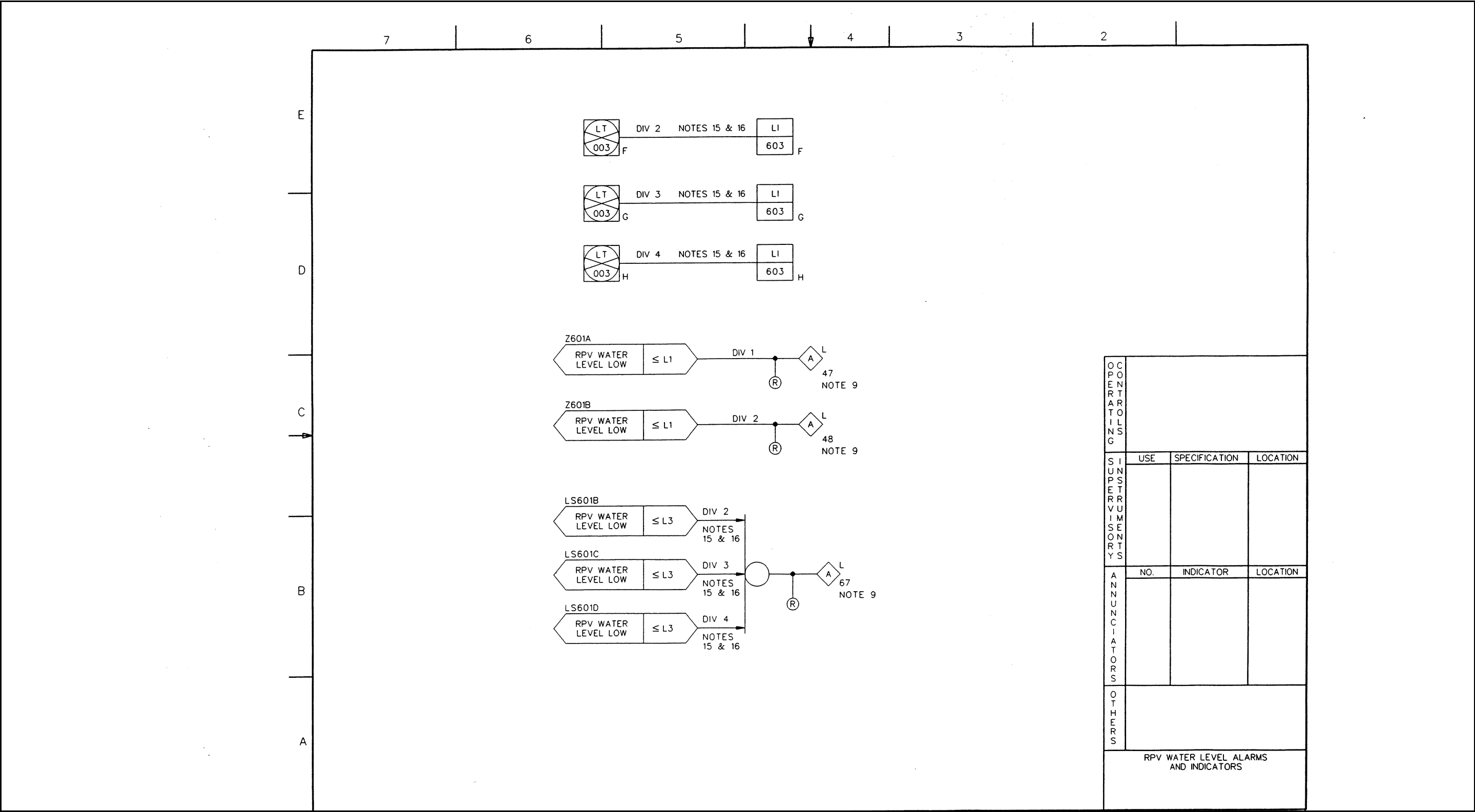


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 25 of 37)





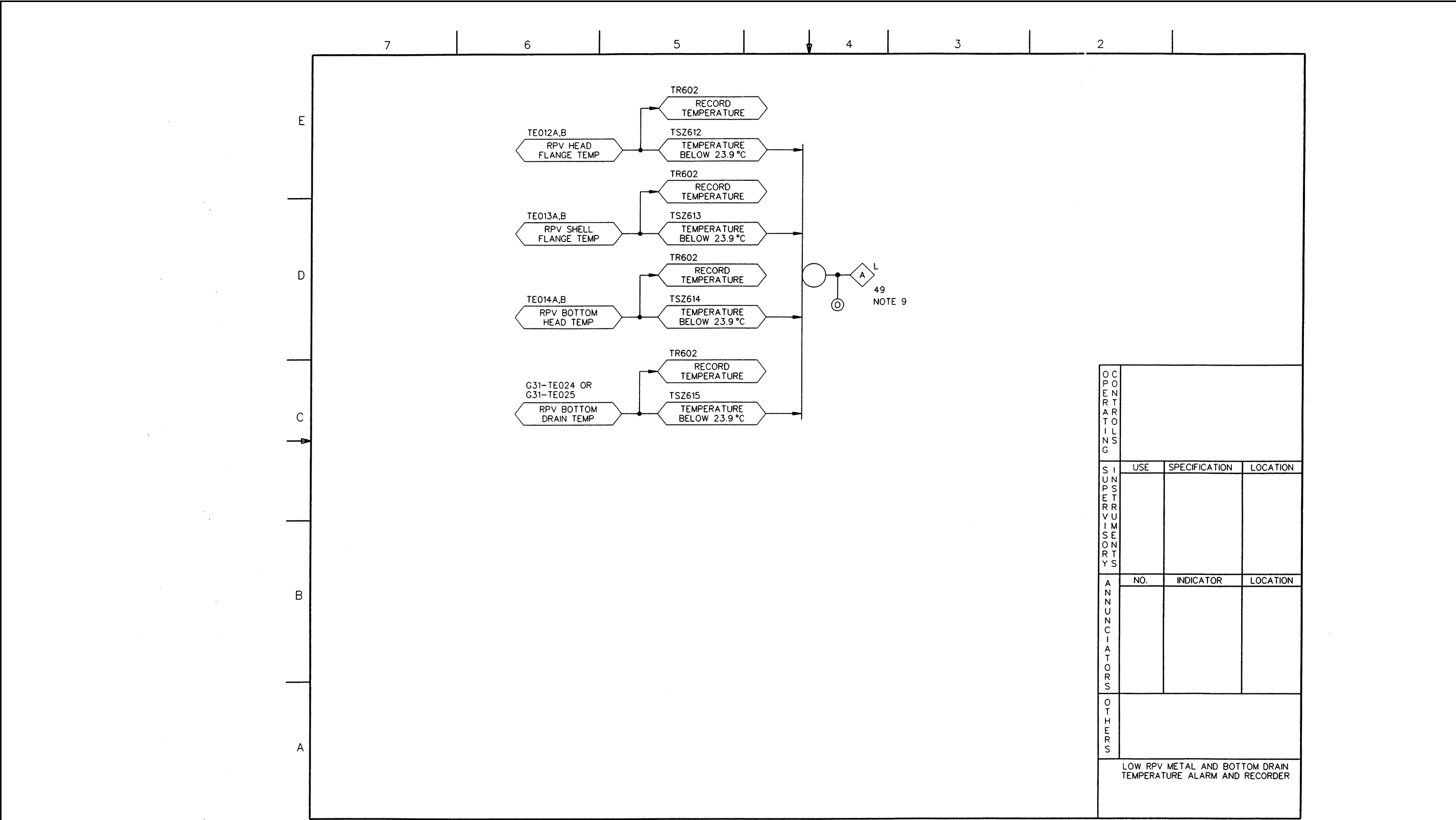
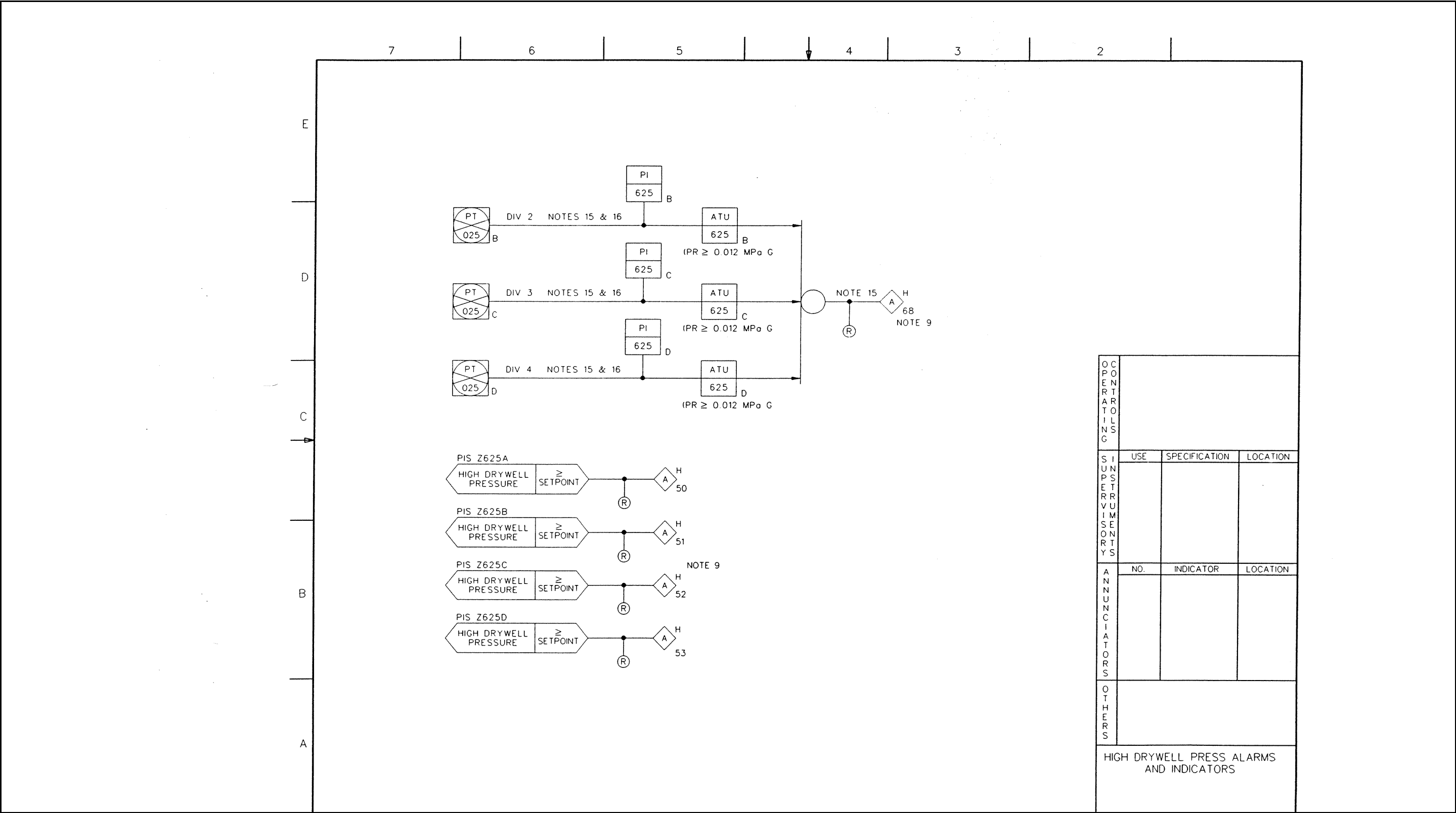


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 28 of 37)



PIS Z625A

HIGH DRYWELL PRESSURE

\geq

SETPOINT

A

H

50

PIS Z625B

HIGH DRYWELL PRESSURE

\geq

SETPOINT

A

H

51

PIS Z625C

HIGH DRYWELL PRESSURE

\geq

SETPOINT

A

H

52

NOTE 9

PIS Z625D

HIGH DRYWELL PRESSURE

\geq

SETPOINT

A

H

53

OPERATING			
	USE	SPECIFICATION	LOCATION
SUPERVISORY			
	NO.	INDICATOR	LOCATION
ANNUNCIATORS			
OTHERS			
HIGH DRYWELL PRESS ALARMS AND INDICATORS			

Figure 7.3-2 Nuclear Boiler System IBD (Sheet 29 of 37)

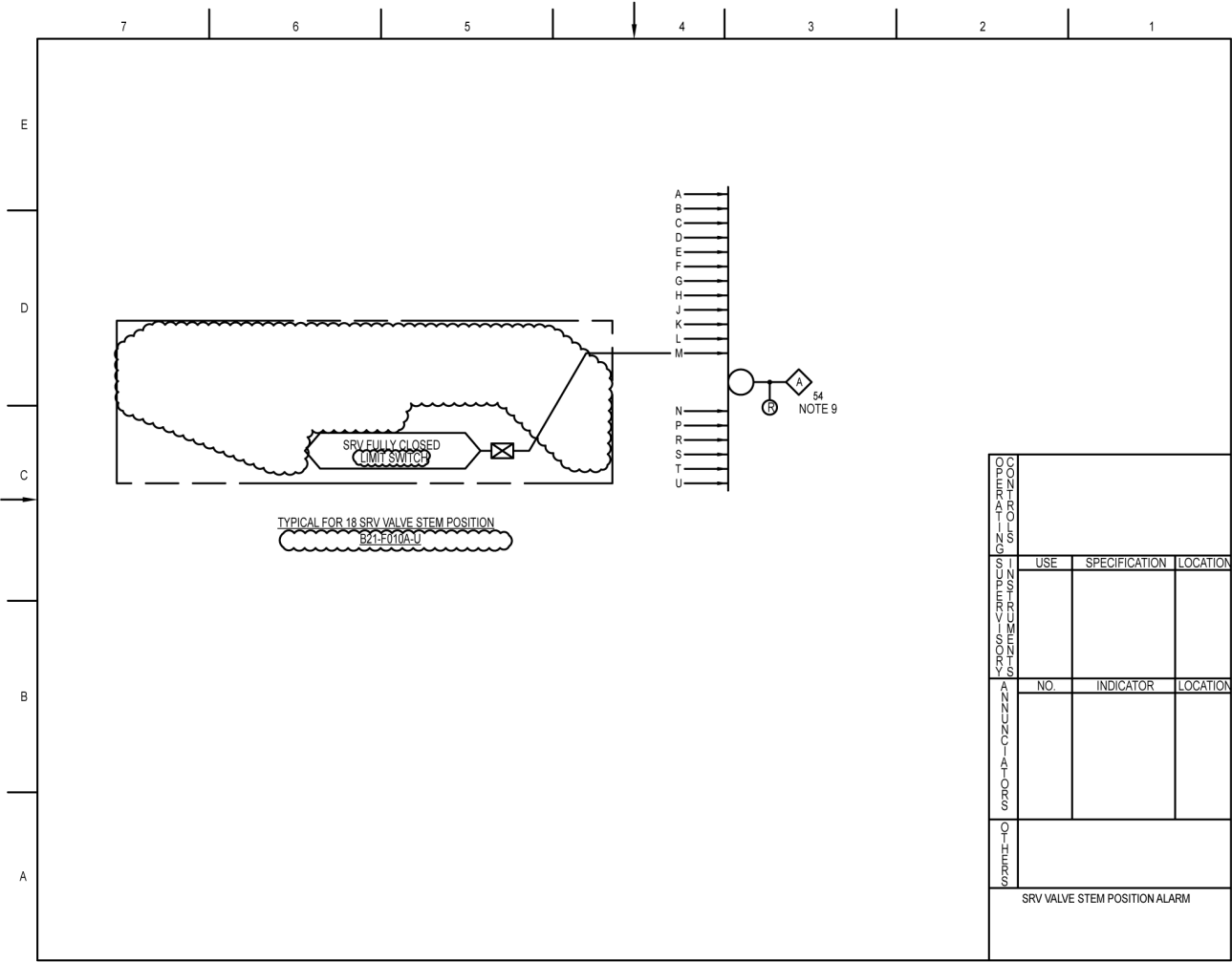
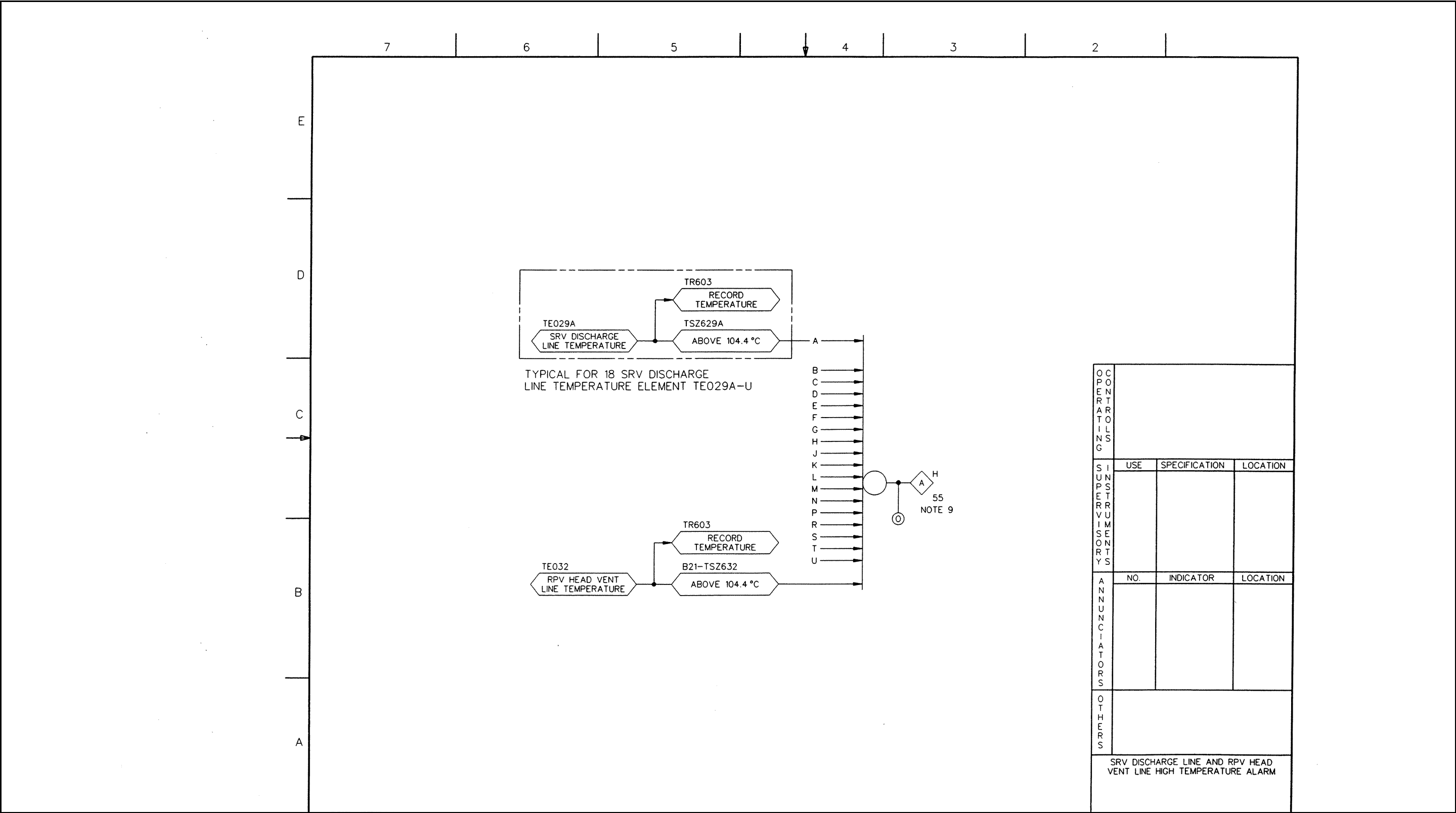


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 30 of 37)



OPERATING

DISCREPANCIES

ANNUNCIATORS

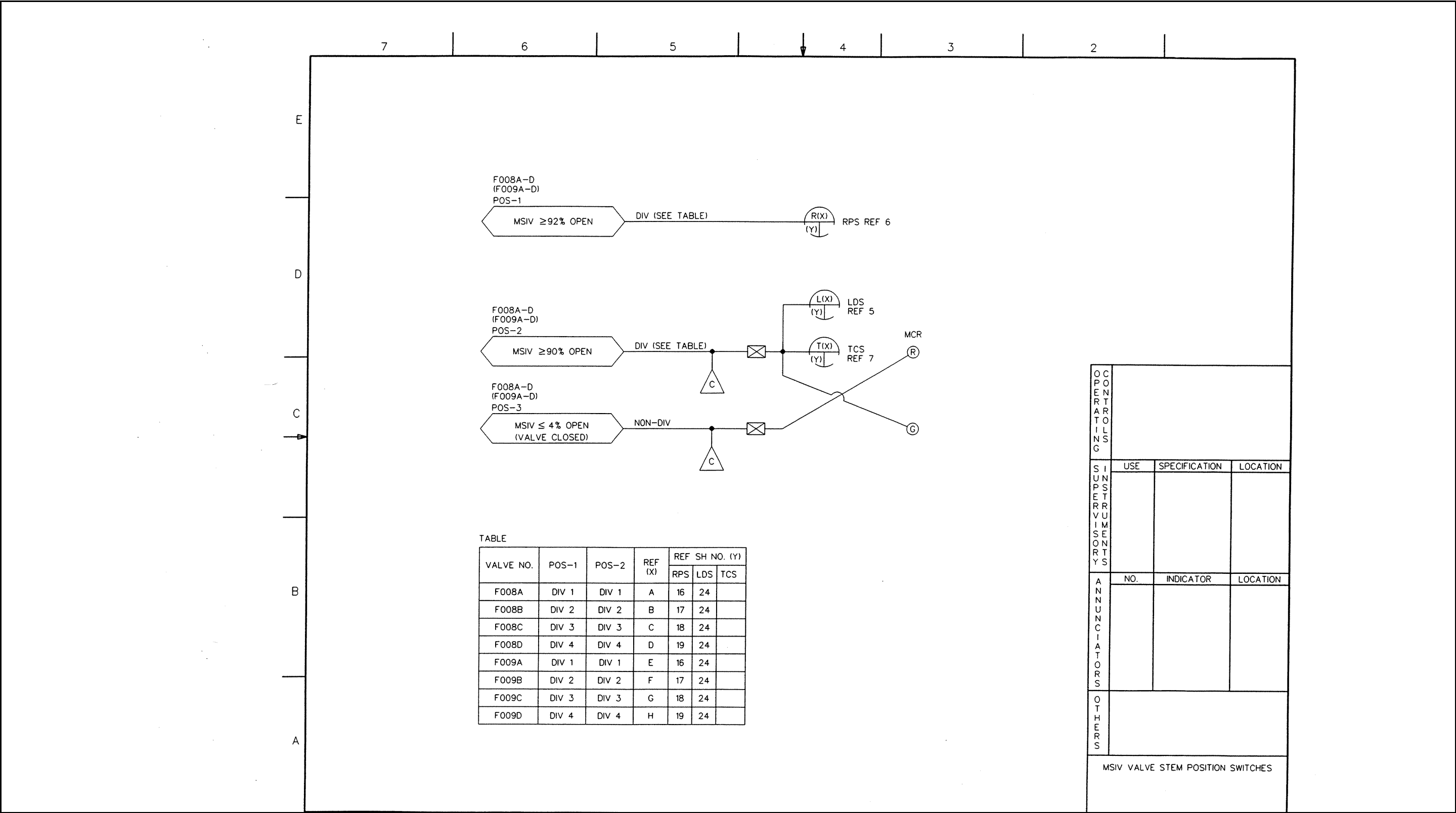
OTHERS

USE	SPECIFICATION	LOCATION

NO.	INDICATOR	LOCATION

SRV DISCHARGE LINE AND RPV HEAD
VENT LINE HIGH TEMPERATURE ALARM

Figure 7.3-2 Nuclear Boiler System IBD (Sheet 31 of 37)



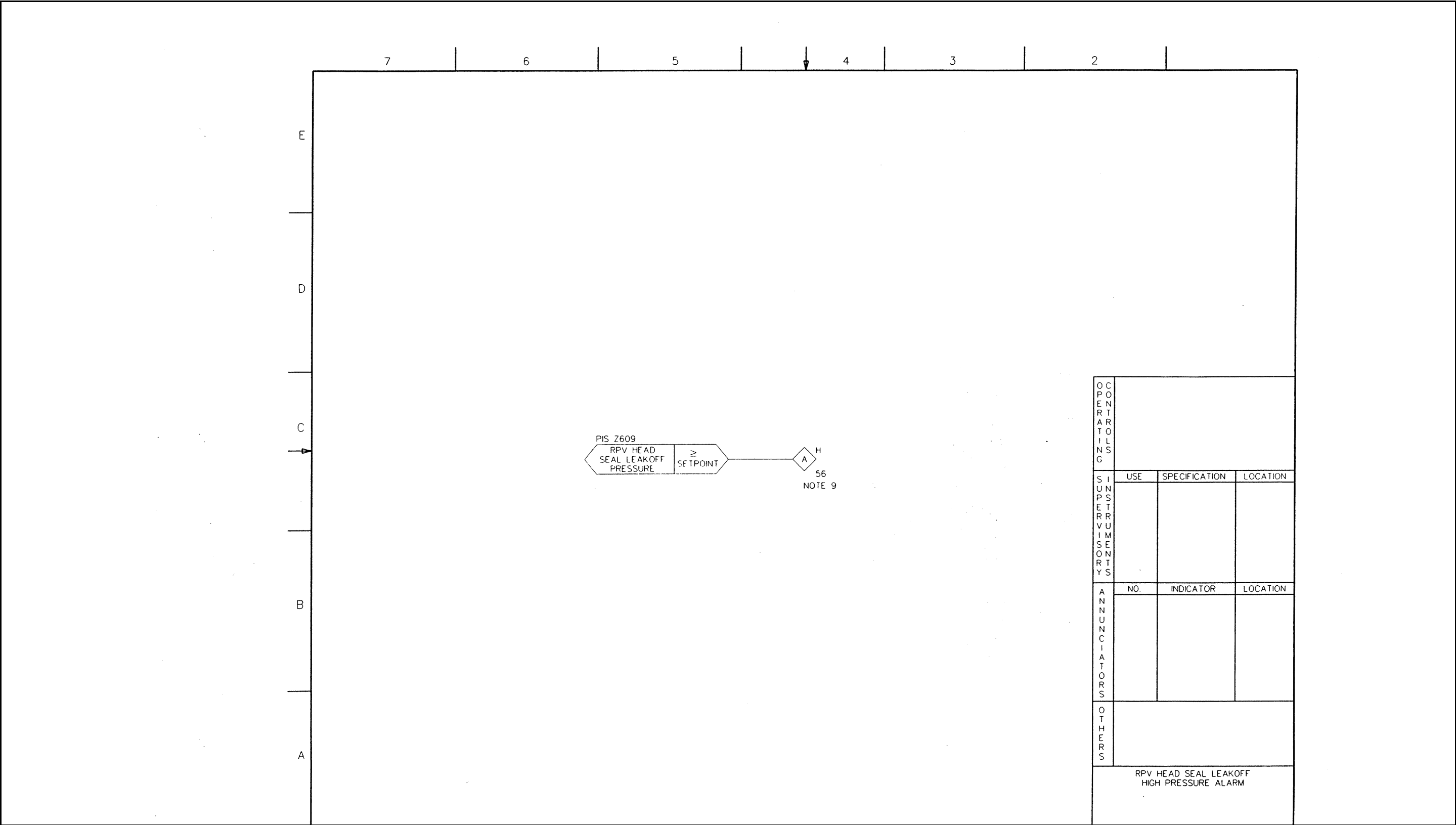


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 33 of 37)

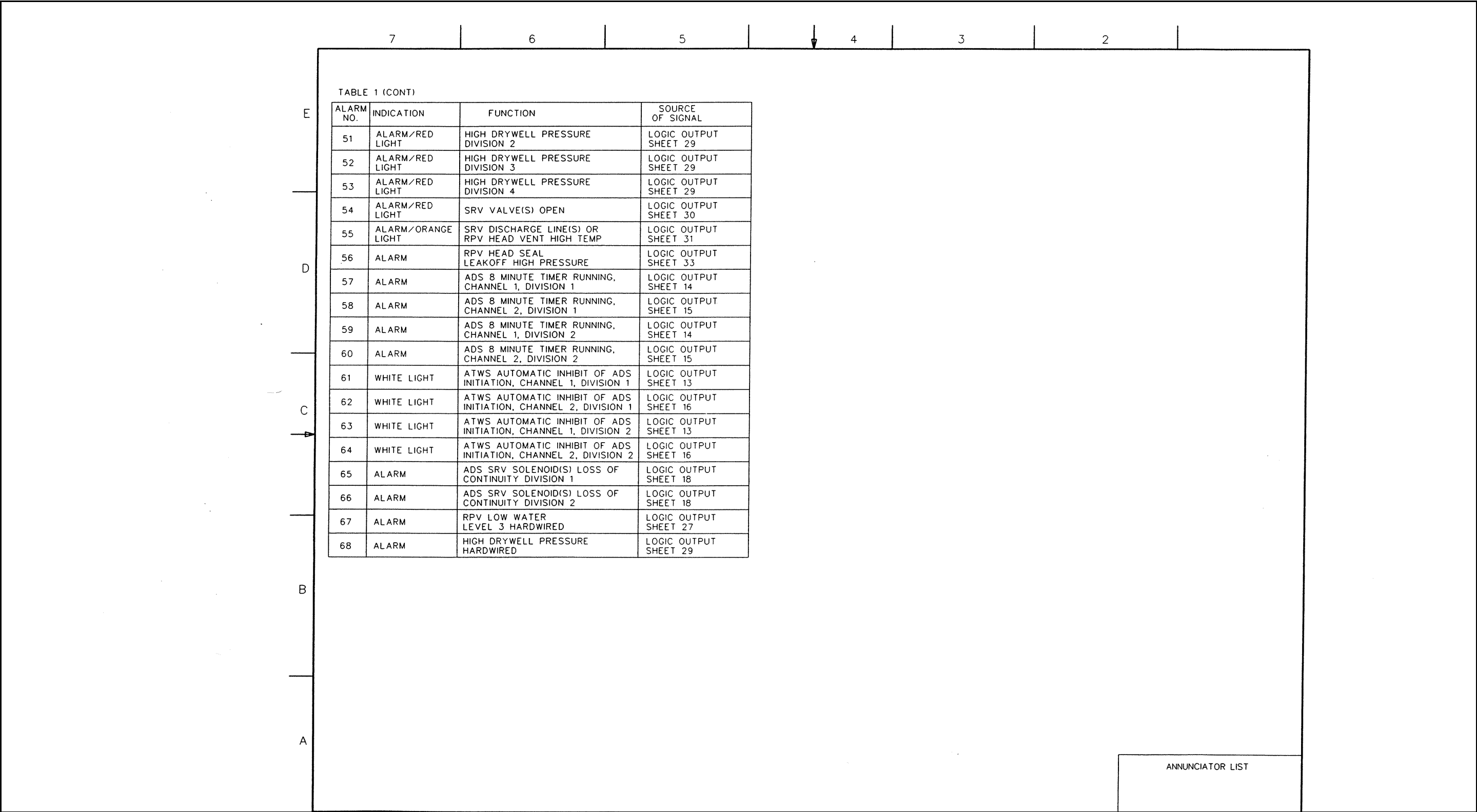


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 35 of 37)

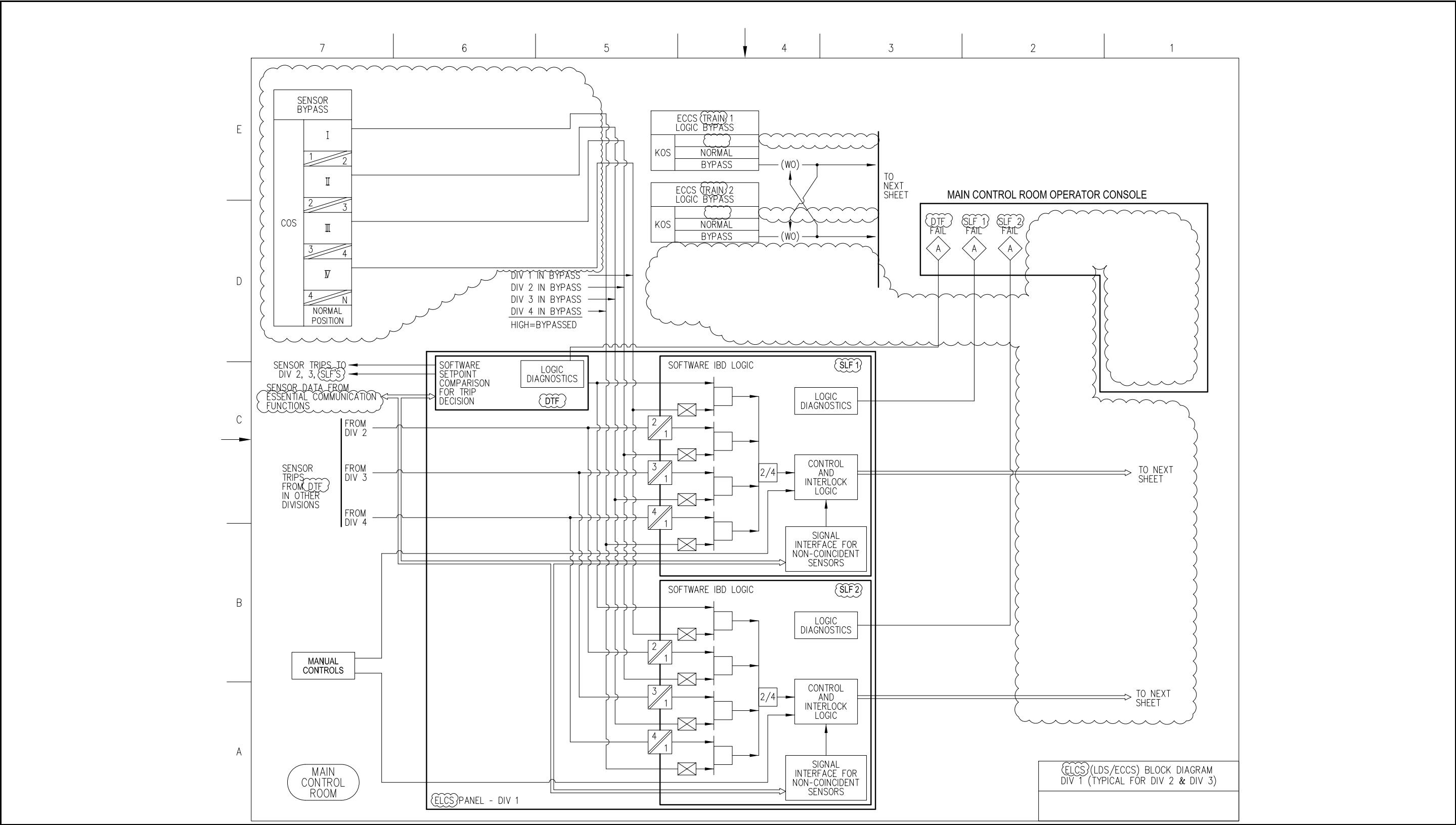


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 36 of 37)

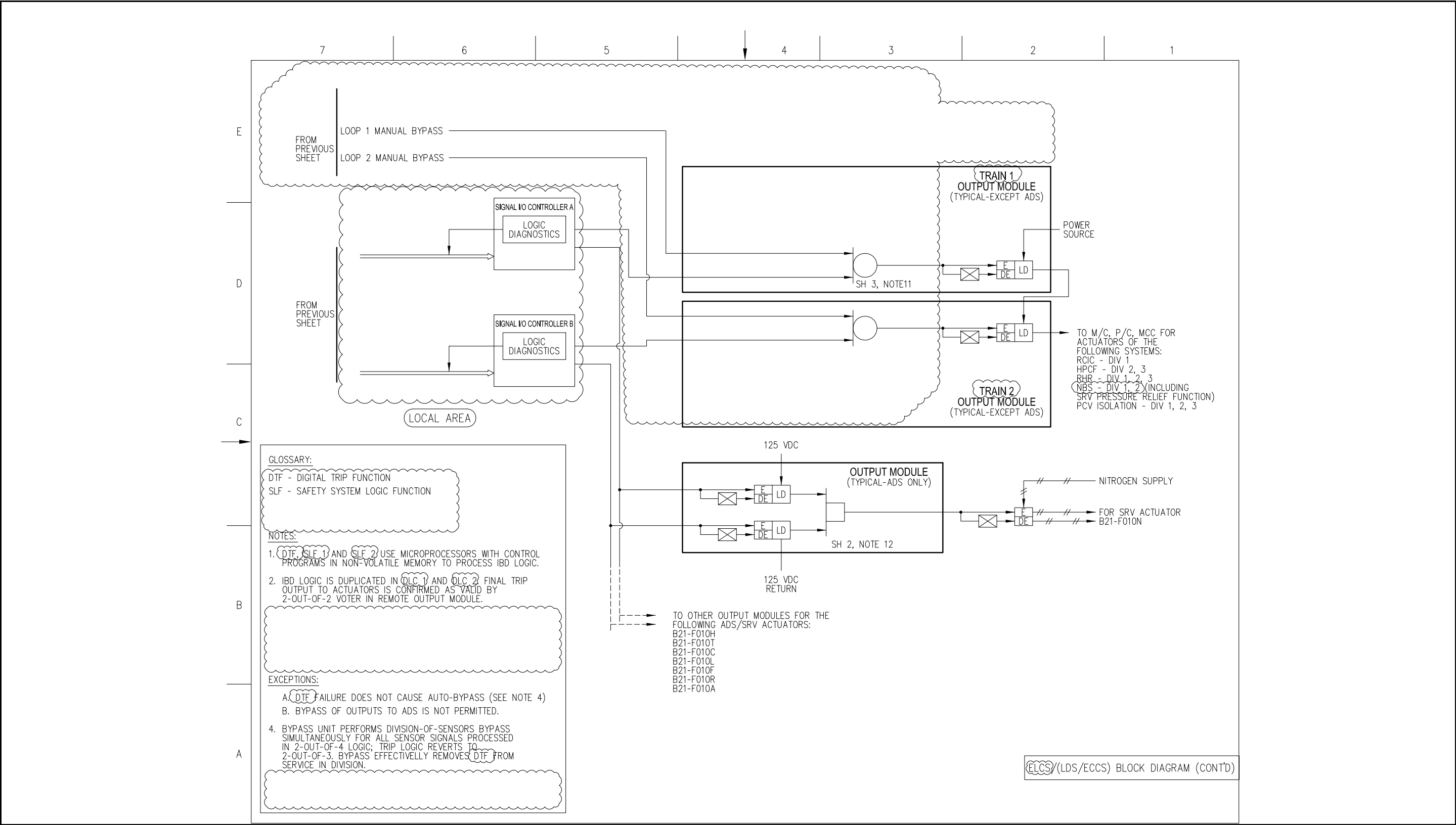


Figure 7.3-2 Nuclear Boiler System IBD (Sheet 37 of 37)

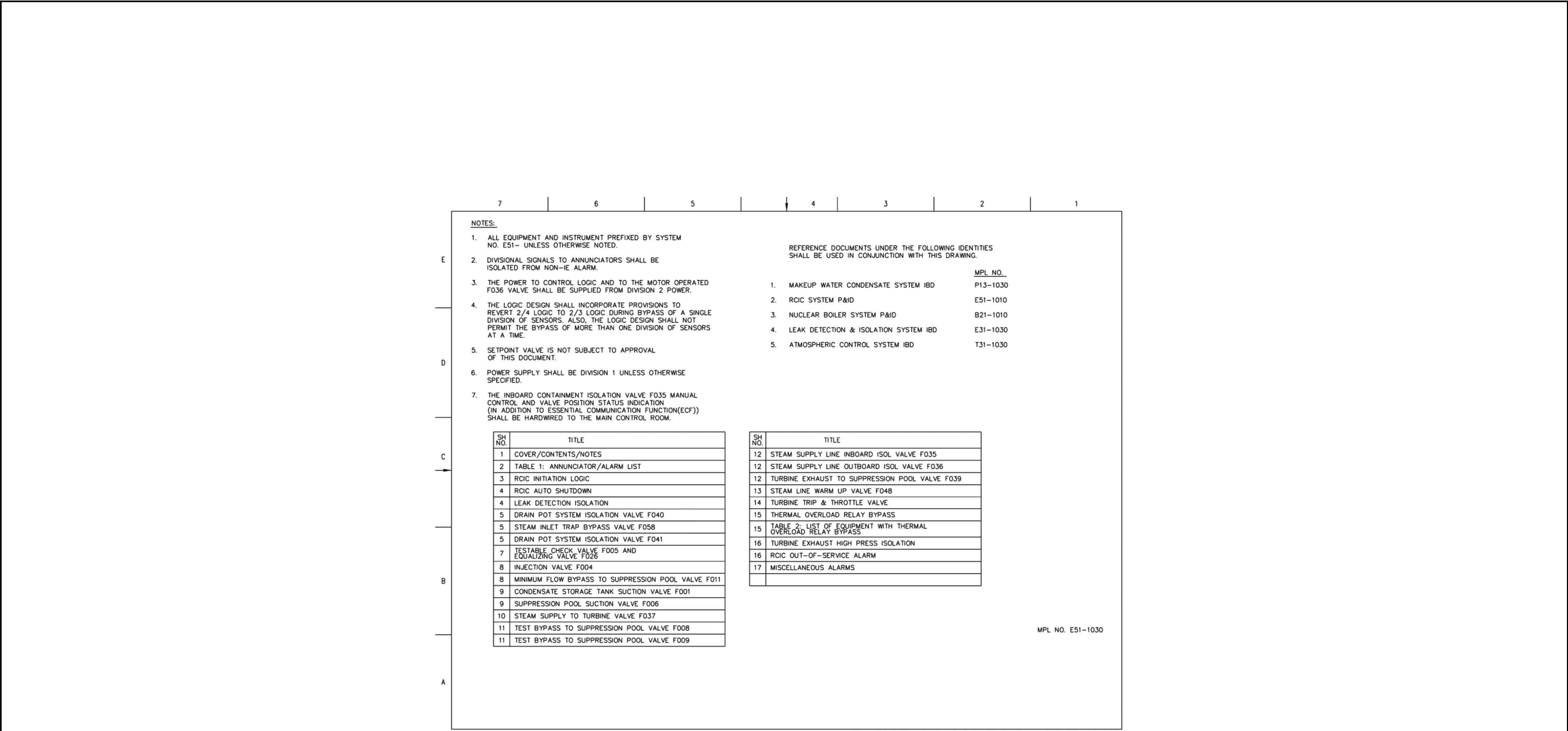


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 1 of 17)

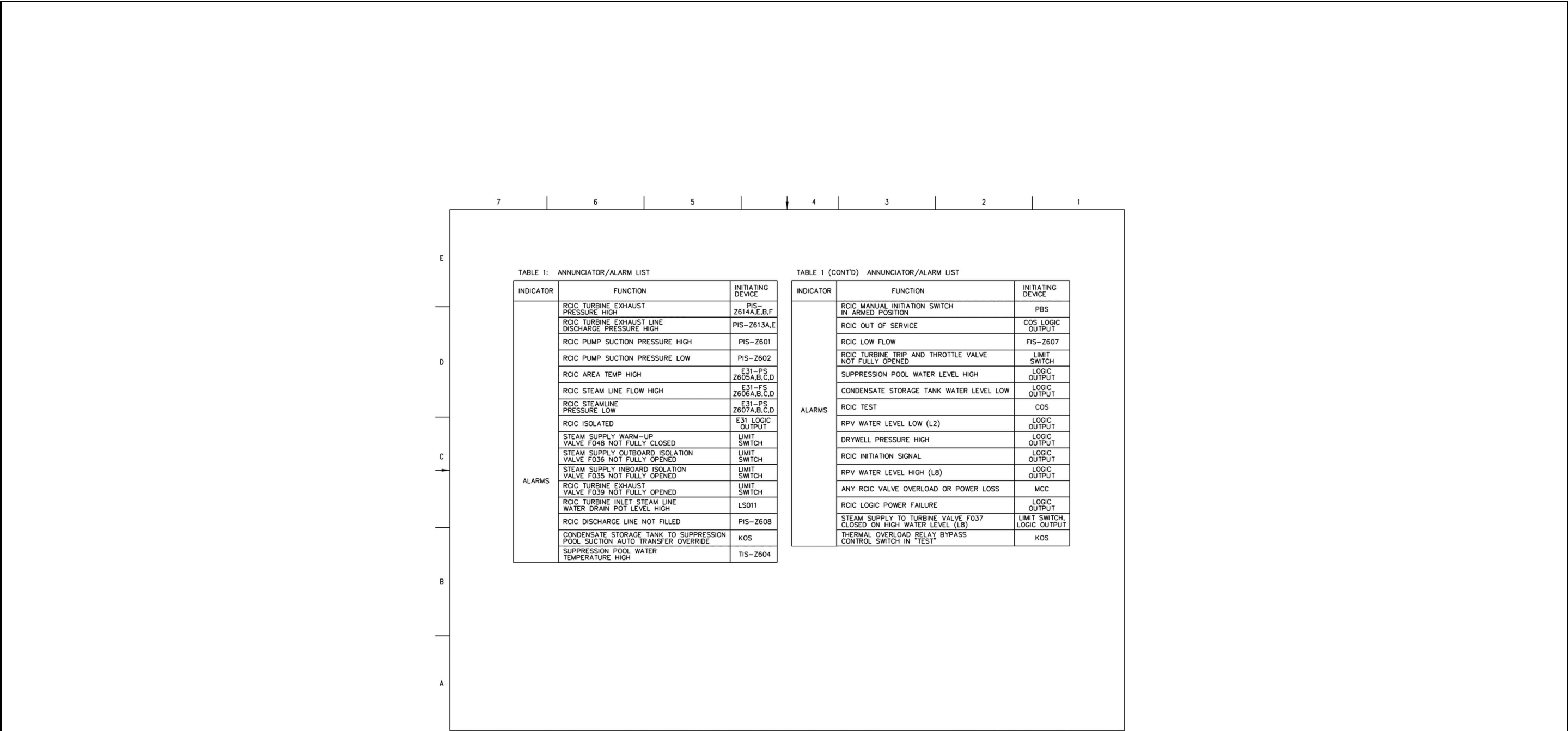


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 2 of 17)

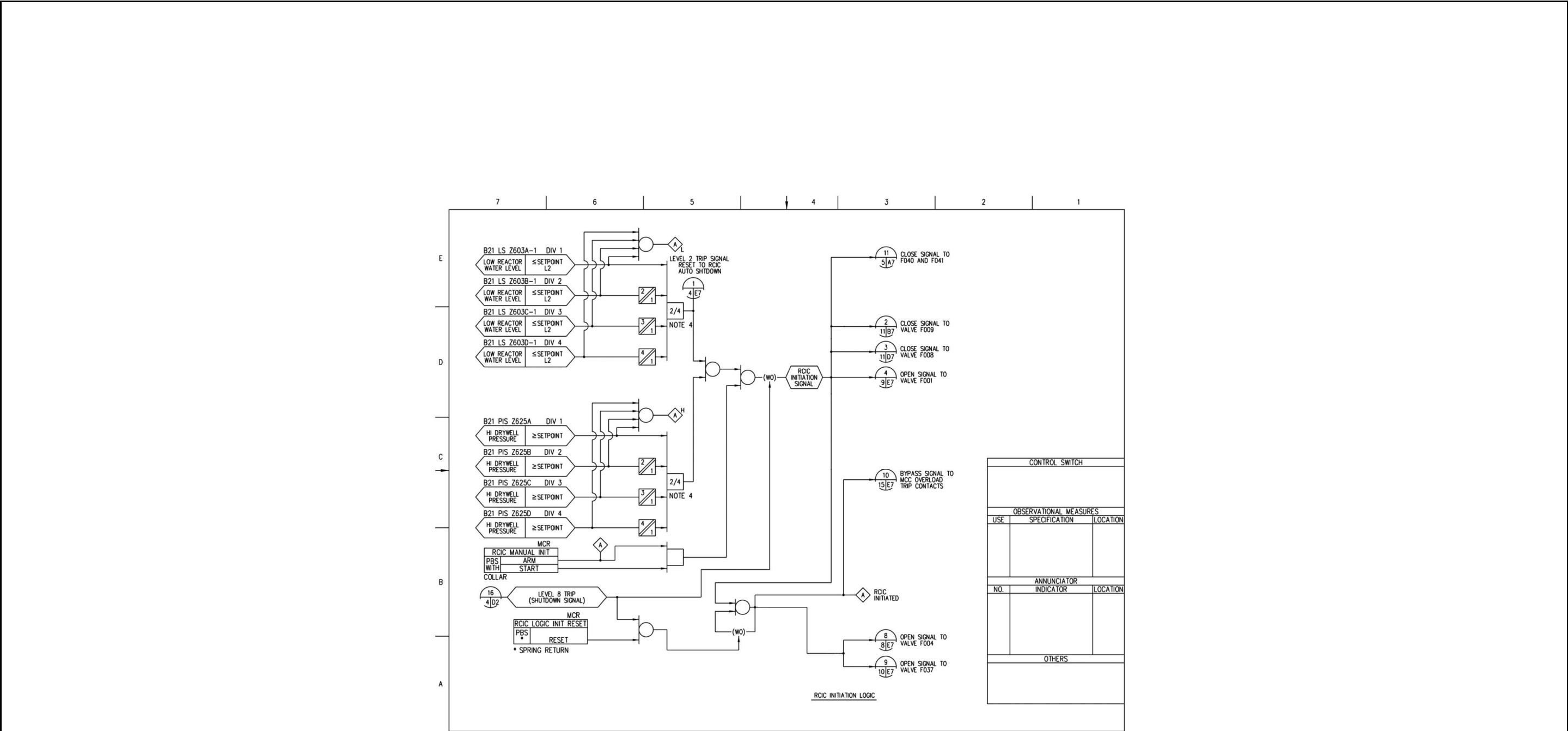


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 3 of 17)

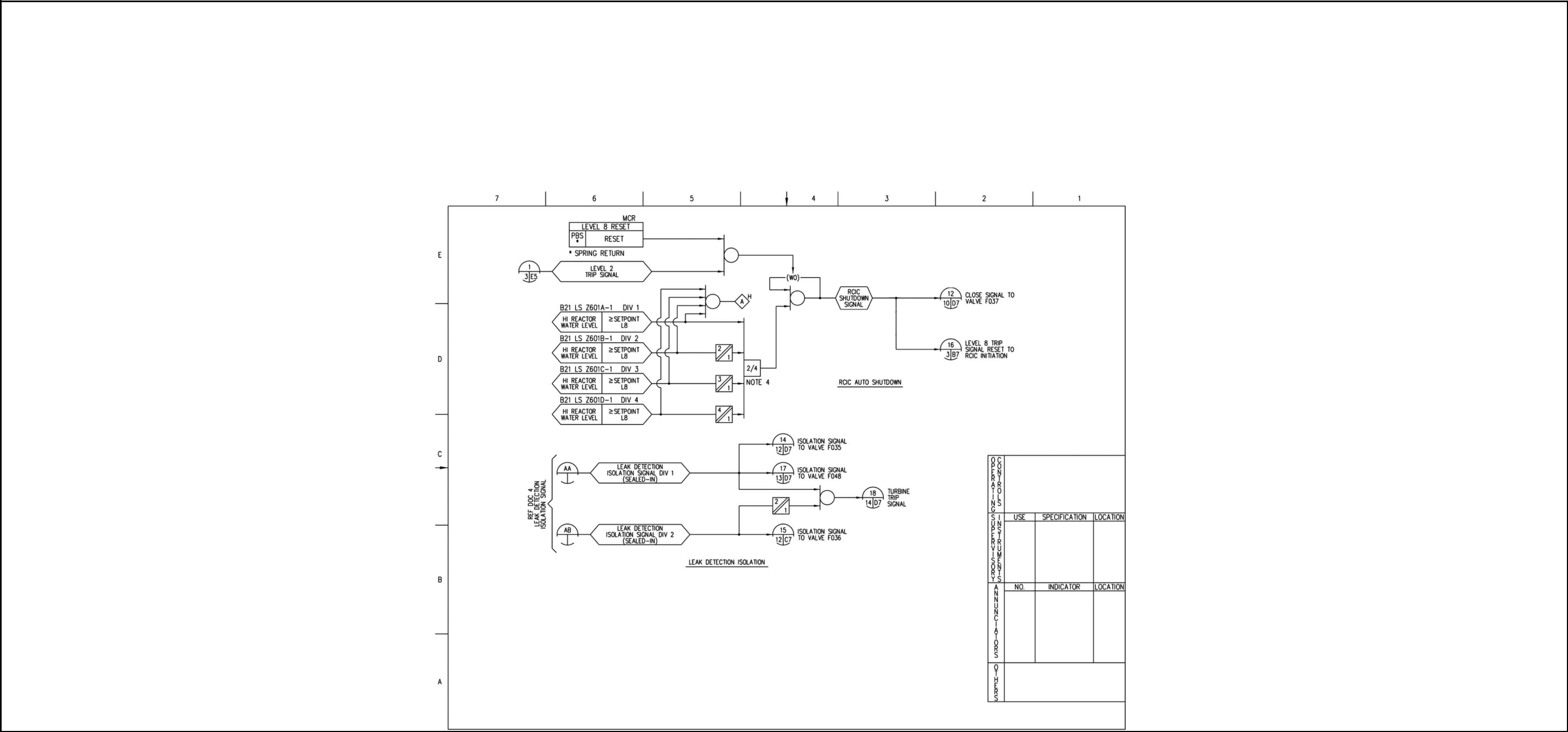


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 4 of 17)

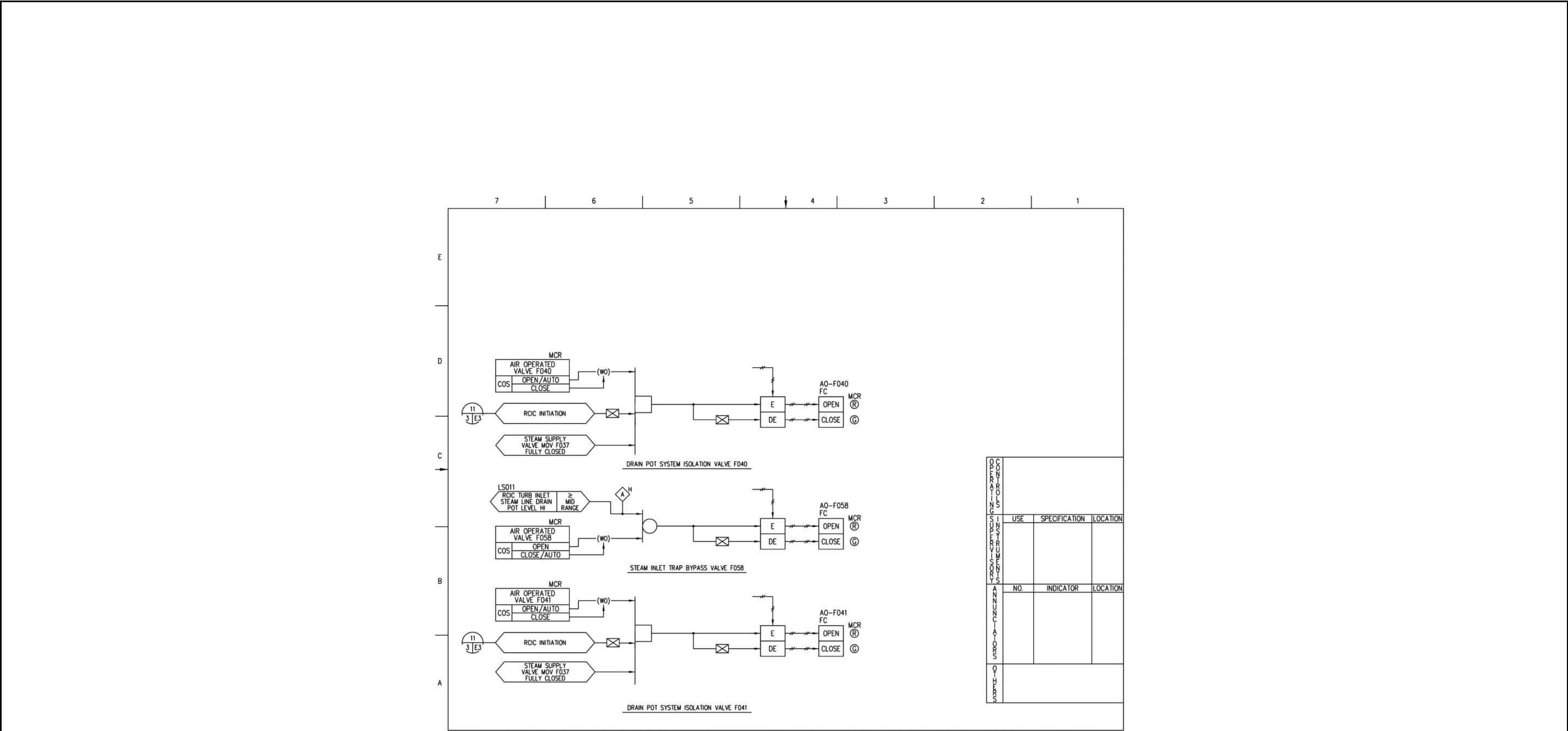


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 5 of 17)

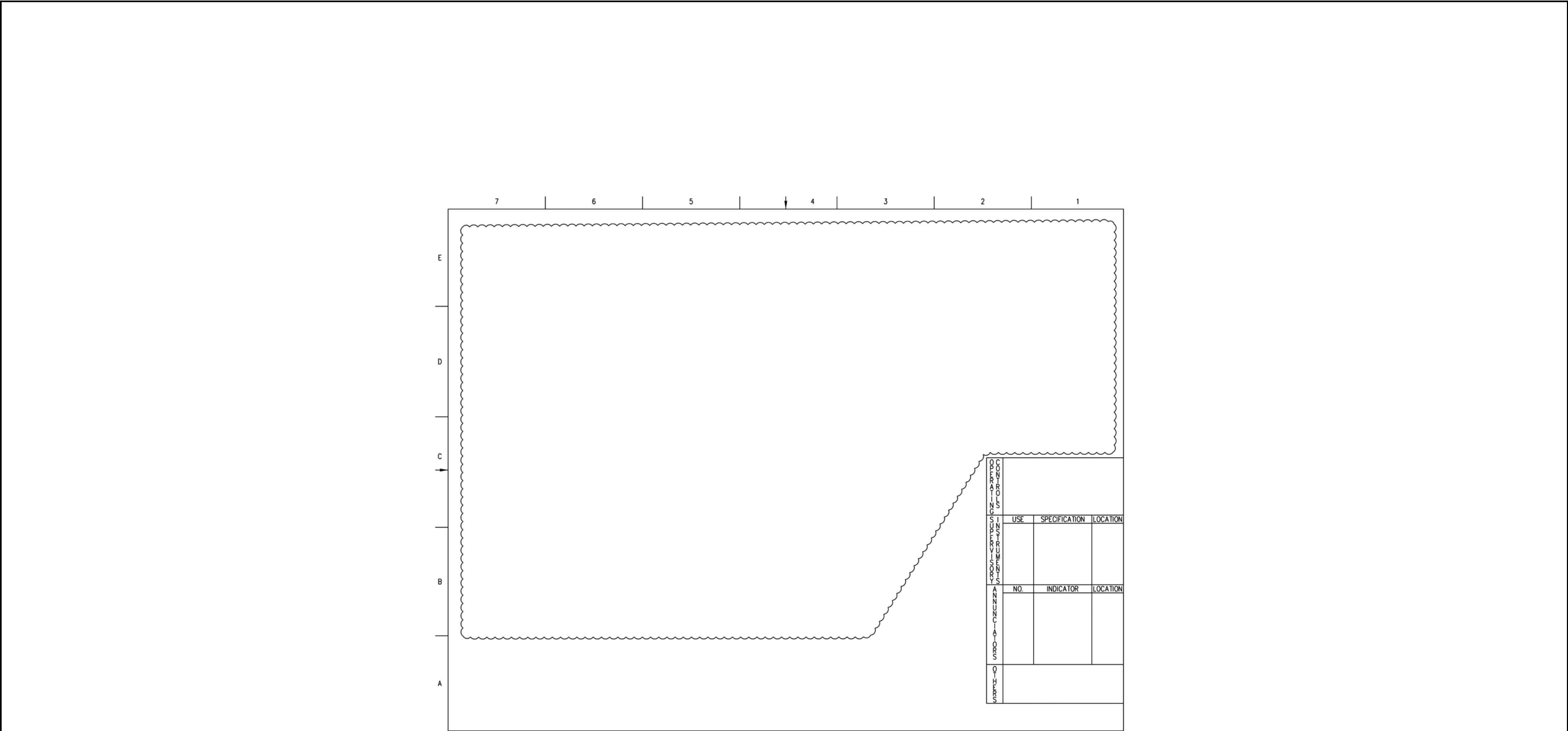


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 6 of 17)

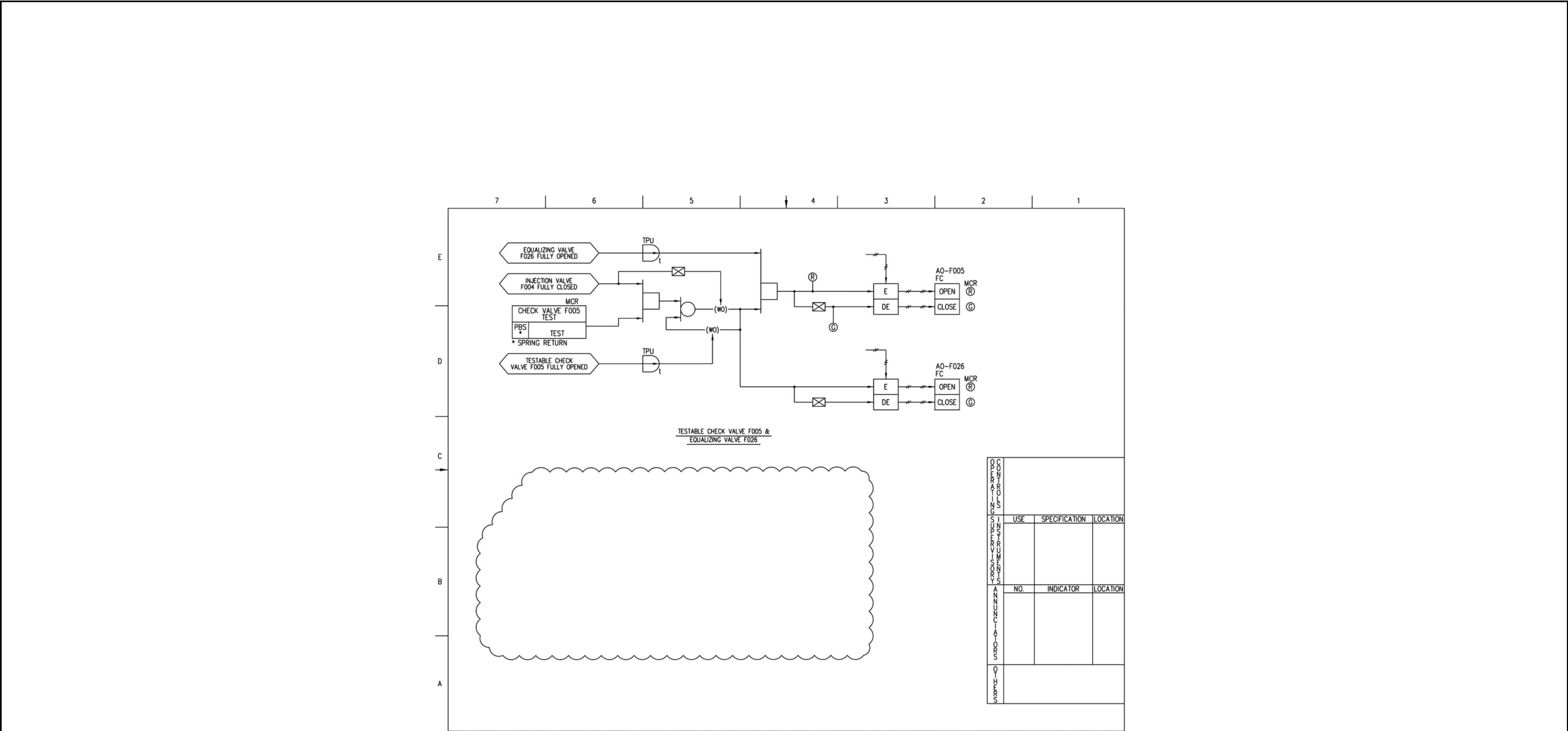


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 7 of 17)

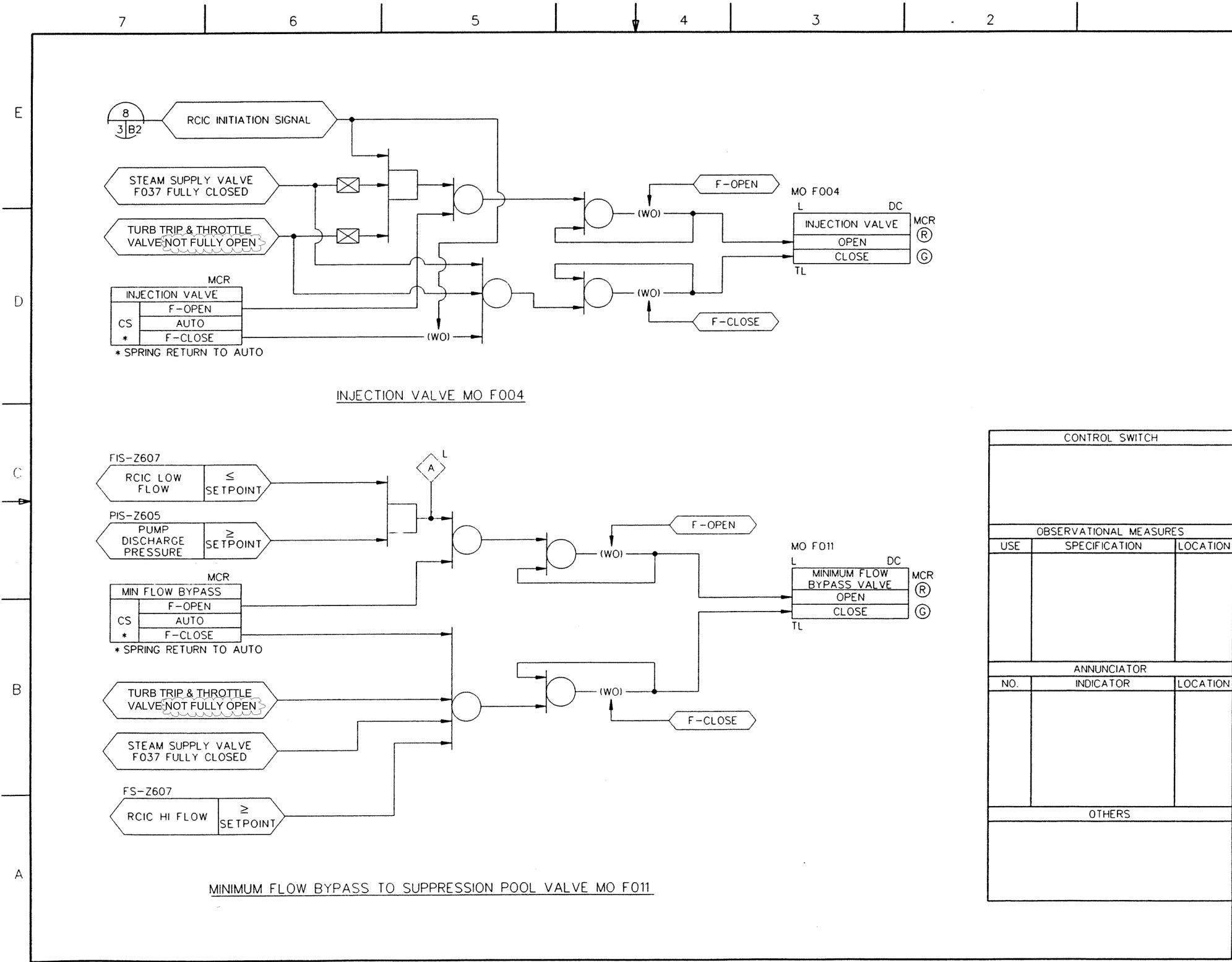


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 8 of 17)

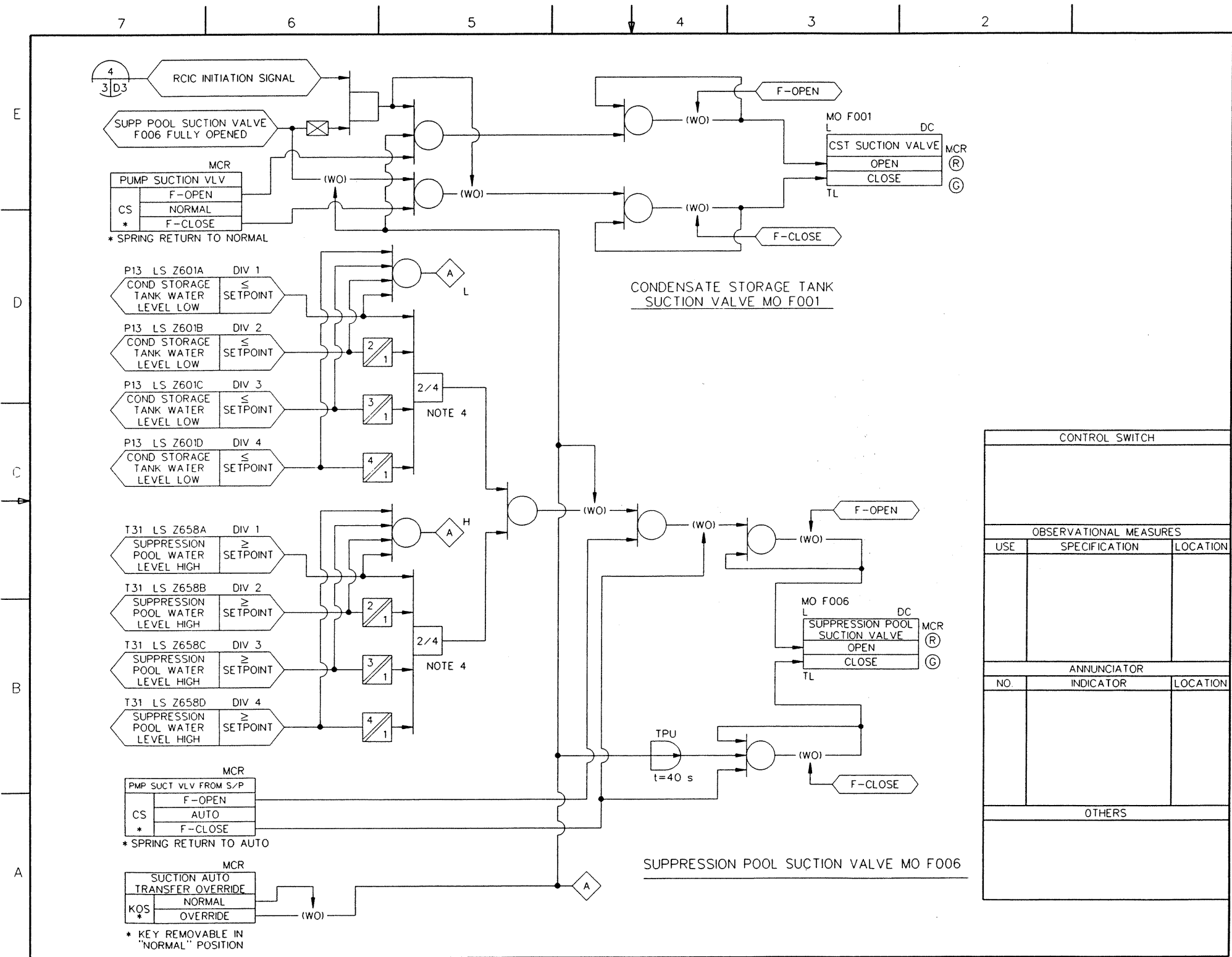


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 9 of 17)

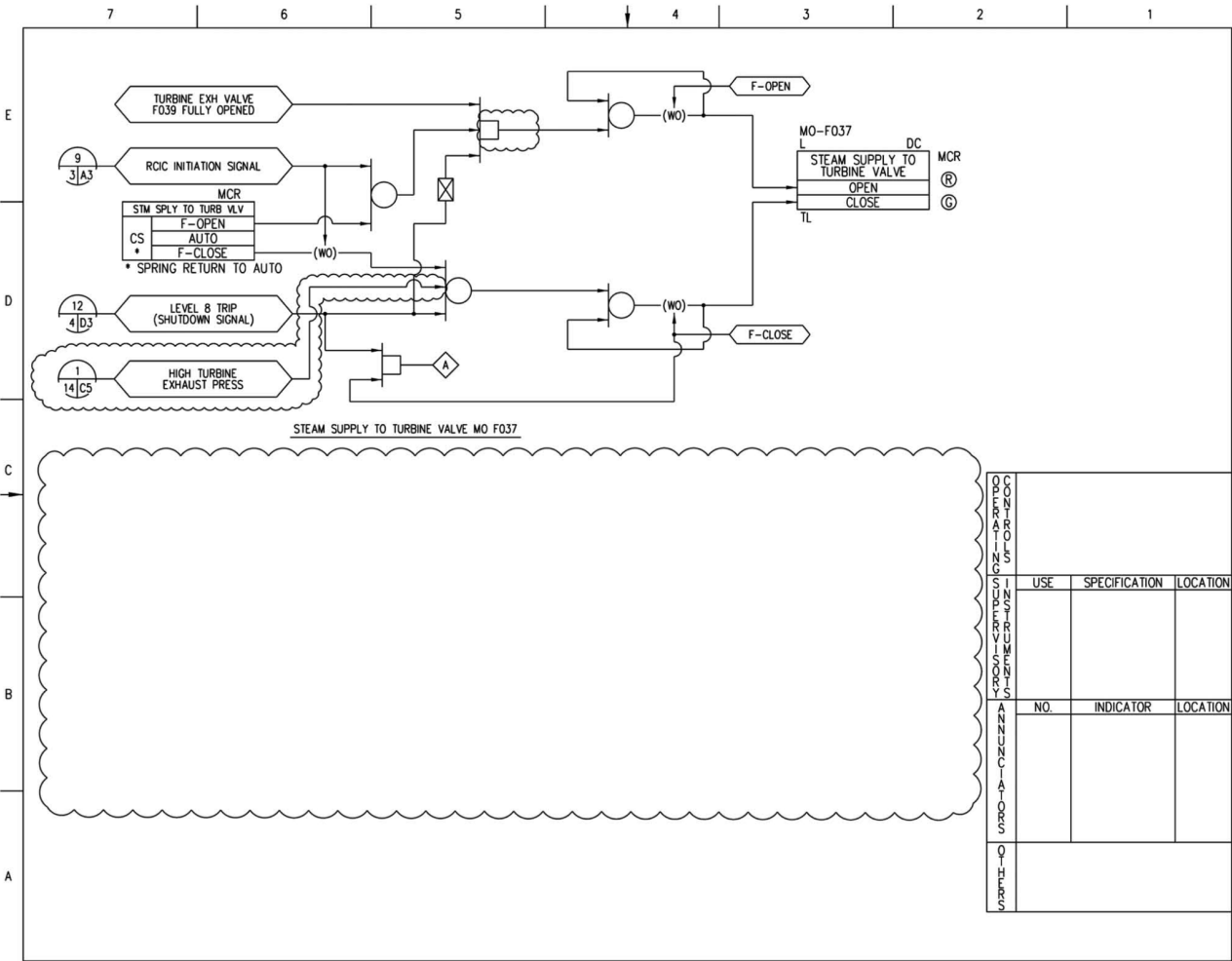
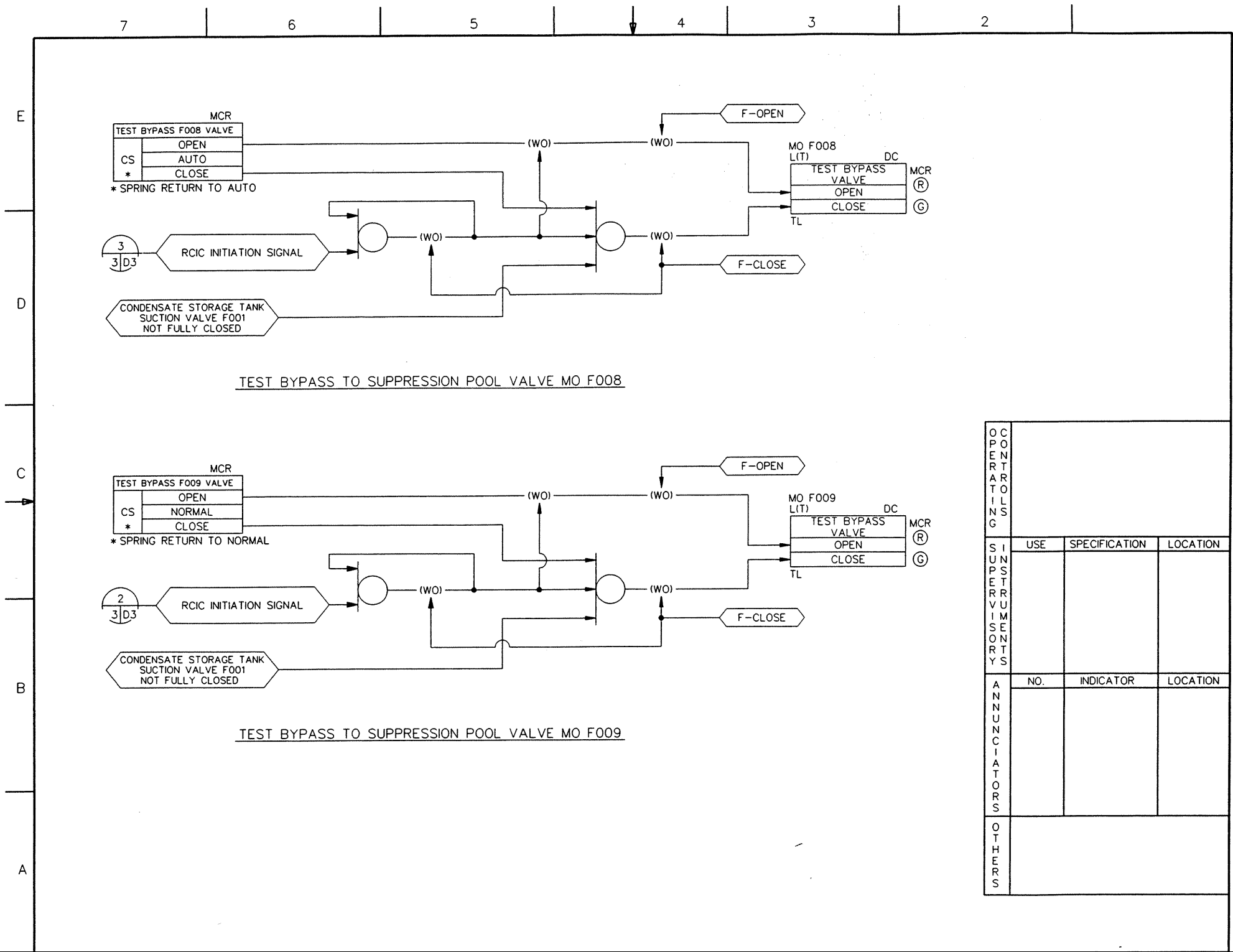


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 10 of 17)



OPERATOR TOOLS			
	USE	SPECIFICATION	LOCATION
INSTRUMENT SYMBOLS			
ANNUNCIATORS	NO.	INDICATOR	LOCATION
OTHERS			

Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 11 of 17)

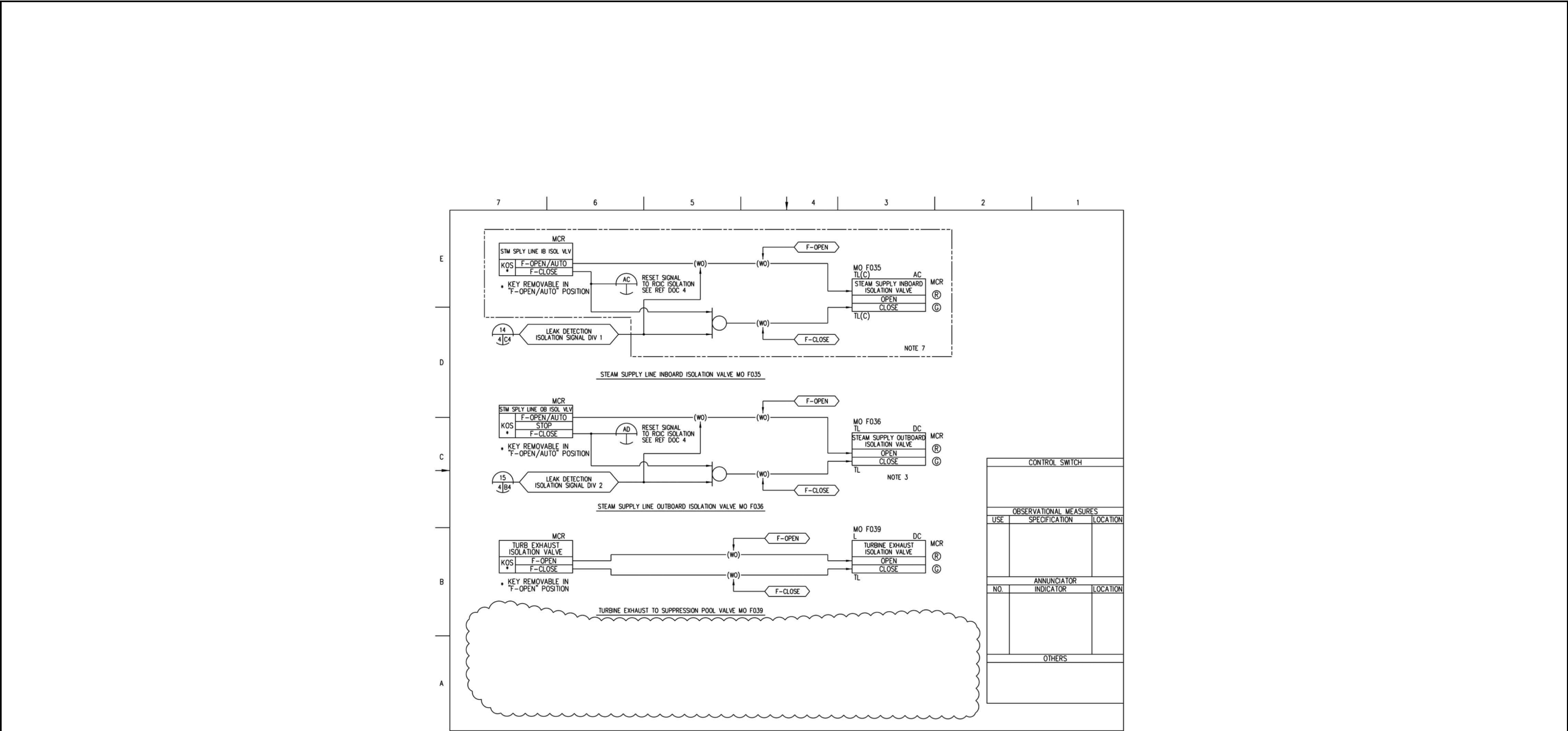


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 12 of 17)

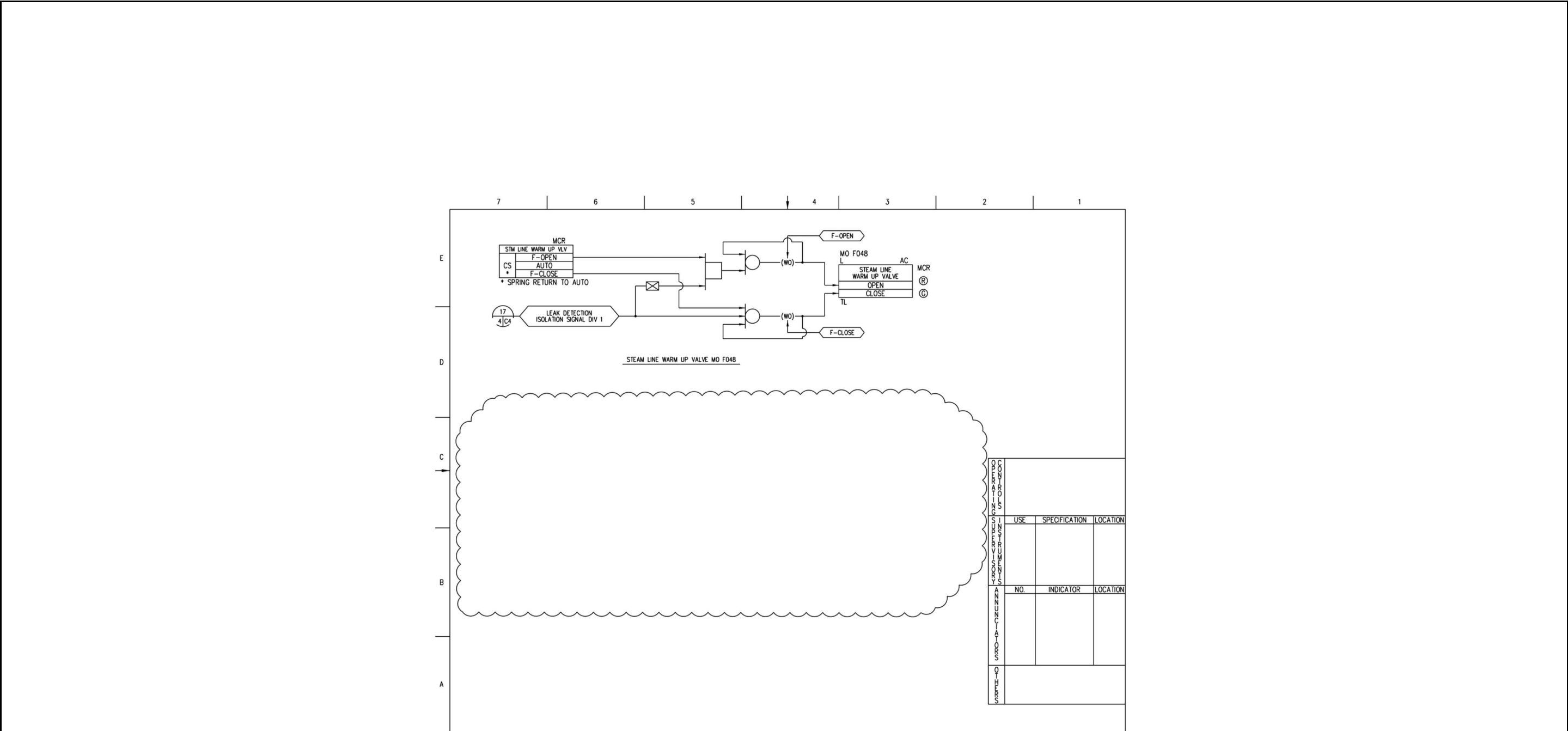


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 13 of 17)

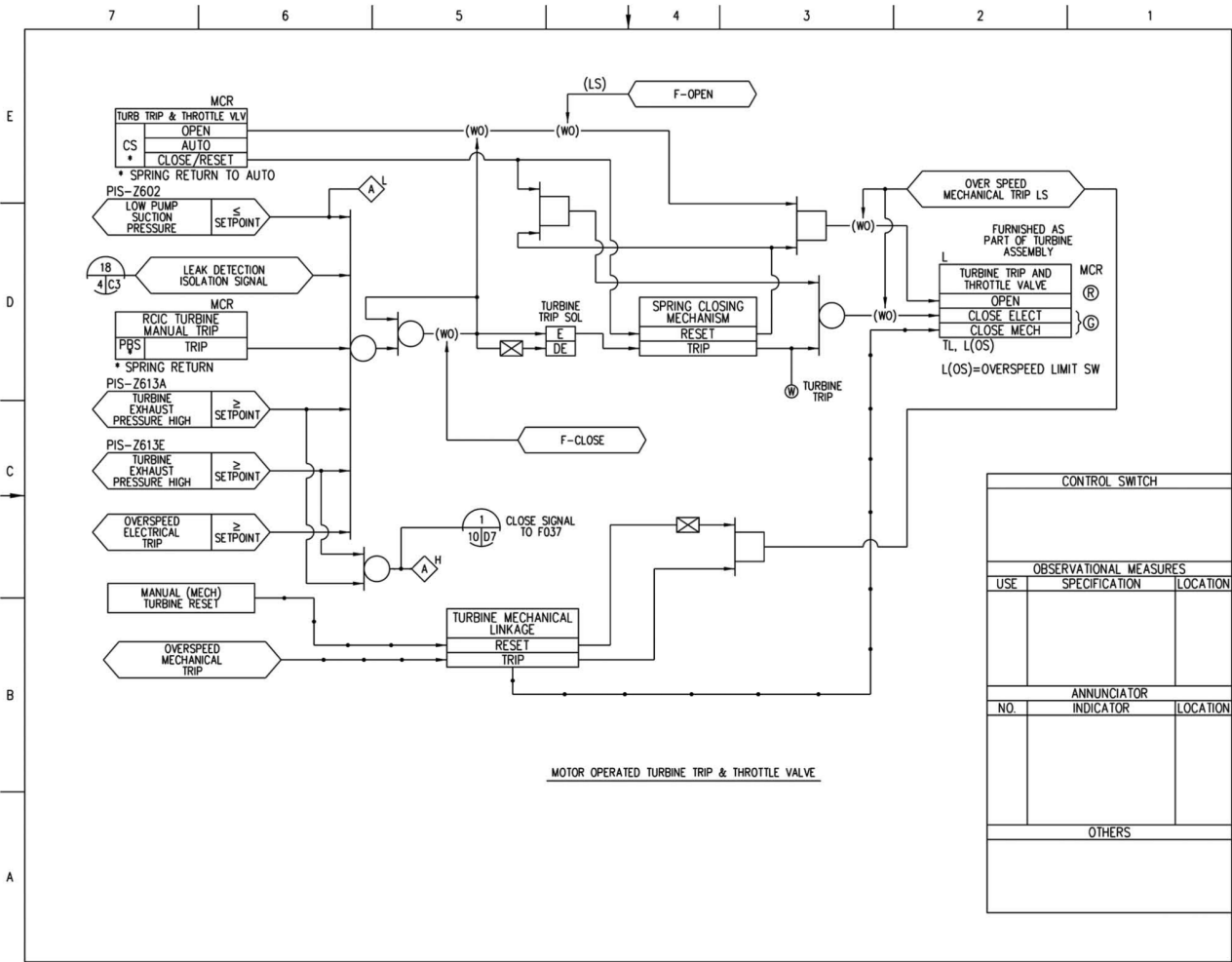


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 14 of 17)

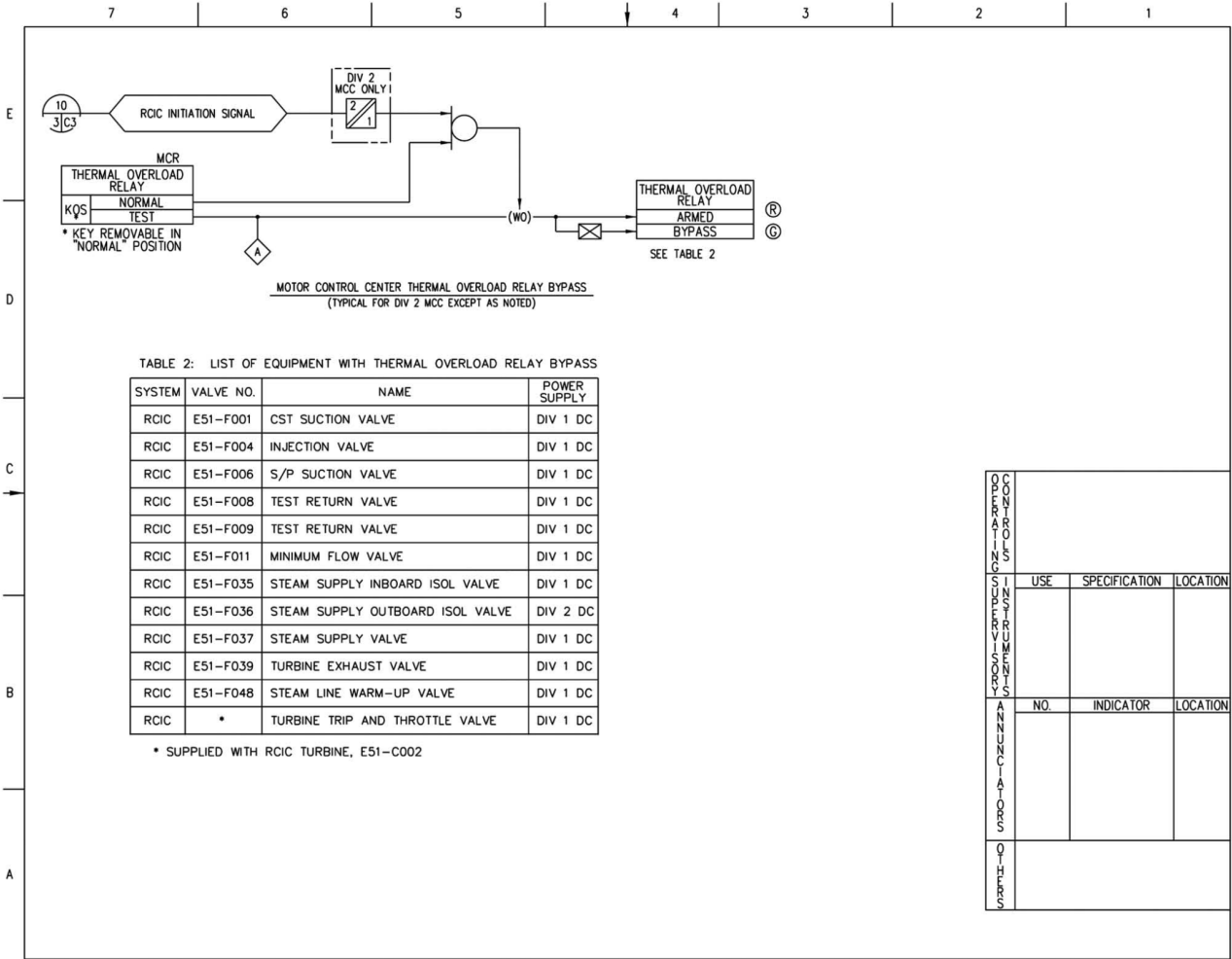


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 15 of 17)

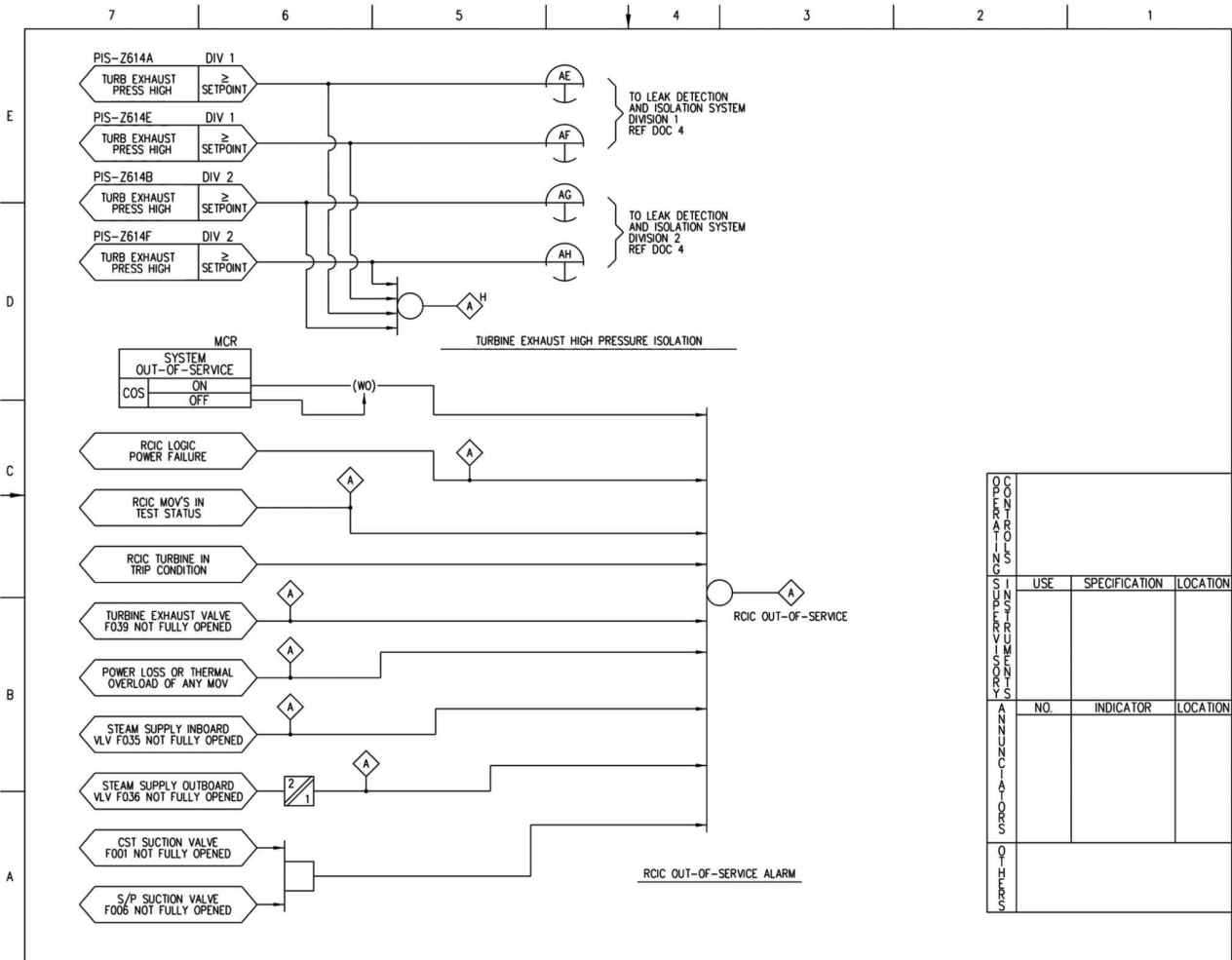


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 16 of 17)

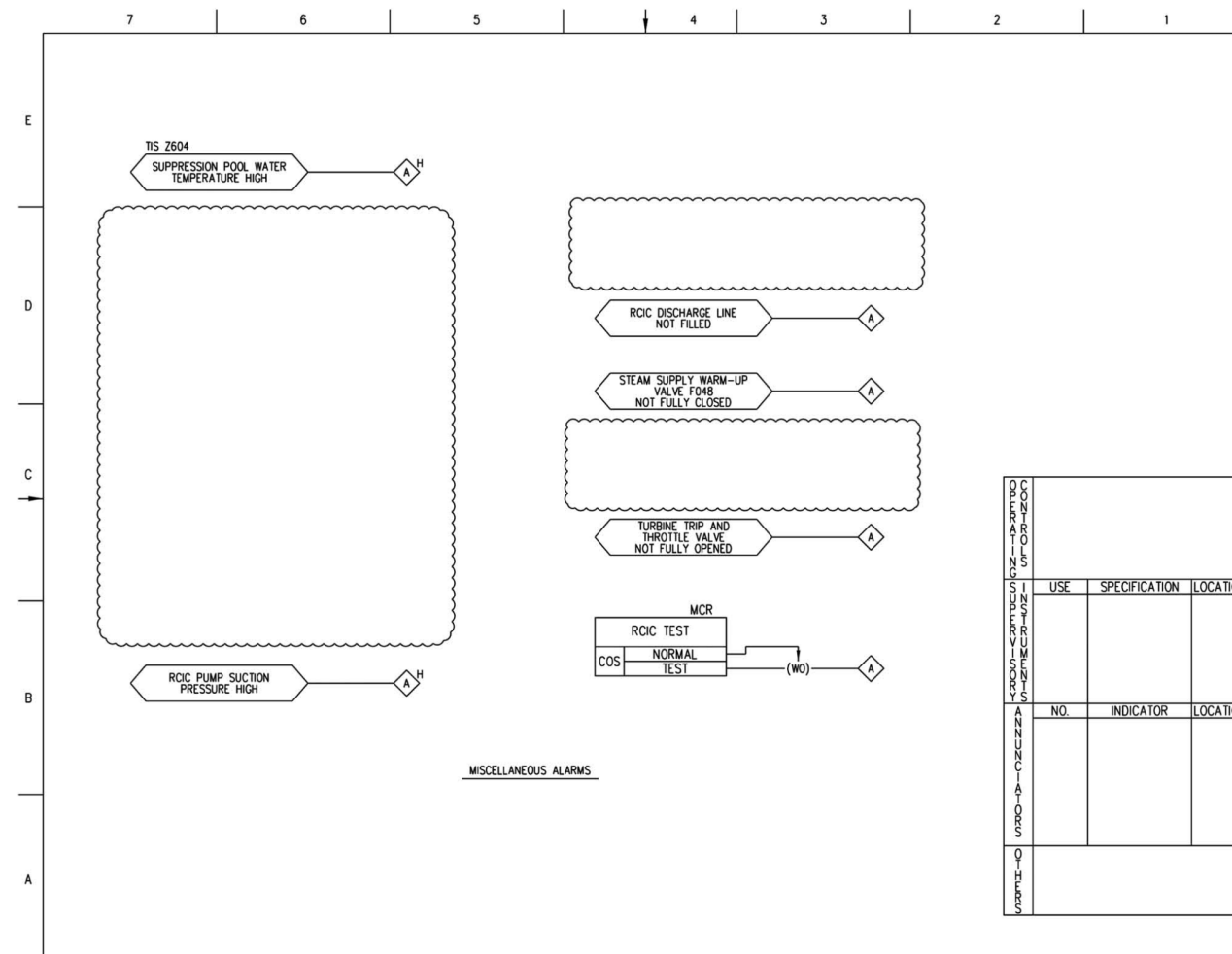


Figure 7.3-3 Reactor Core Isolation Cooling System IBD (Sheet 17 of 17)

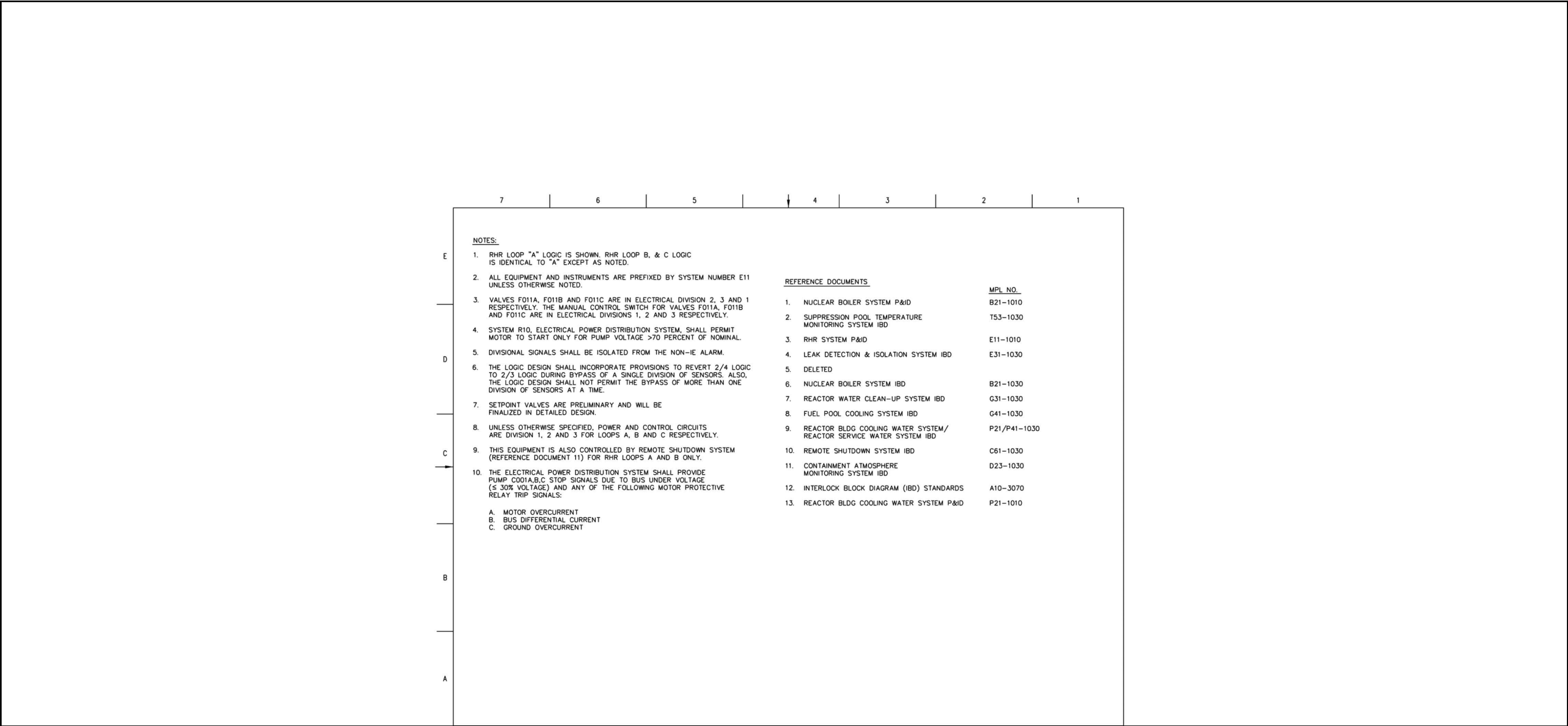
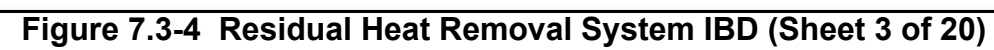


Figure 7.3-4 Residual Heat Removal System IBD (Sheet 1 of 20)

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	2	TABLE OF CONTENTS					
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	4	LOCA SIGNAL FOR RHR					
	5	MISCELLANEOUS ALARMS					
	6	PUMP C001A,B&C					
	6	PUMP SUCTION VALVE F001A,B&C					
	7	SHUTDOWN COOLING SUCTION VALVE F012A,B&C					
D	7	HEAT EXCHANGER TUBE SIDE OUTLET VALVE F004A,B&C					
	7	HEAT EXCHANGER TUBE SIDE BYPASS VALVE F013A,B&C					
	8	SHUTDOWN COOLING INBOARD SUCTION ISOLATION VALVE F010A,B&C					
	8	SHUTDOWN COOLING OUTBOARD SUCTION ISOLATION VALVE F011A					
	9	SHUTDOWN COOLING OUTBOARD SUCTION ISOLATION VALVE F011B					
	9	SHUTDOWN COOLING OUTBOARD SUCTION ISOLATION VALVE F011C					
	10	SUPPRESSION POOL RETURN VALVE F008A,B&C					
	10	TESTABLE CHECK VALVE F006A,B&C AND WARM-UP VALVE F036A,B&C					
C	11	WETWELL SPRAY VALVE F019B&C					
	11	RHR DISCHARGE LINE FILL PUMP C002A,B&C					
	12	MINIMUM FLOW VALVE F021A,B&C					
	12	FUEL POOL ISOLATION VALVE F014B&C					
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	16	SAMPLING VALVE F043A,B&C					
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	17	RHR THERMAL OVERLOAD BYPASS LOGIC AND EQUIPMENT LIST					
	18	OUT-OF-SERVICE ALARM FOR LOOP A,B&C					
	19	ANNUNCIATOR/ALARM LIGHTS/STATUS LIGHTS					
A	20	SUPPRESSION POOL COOLING AUTO INITIATION LOGIC					

Figure 7.3-4 Residual Heat Removal System IBD (Sheet 2 of 20)



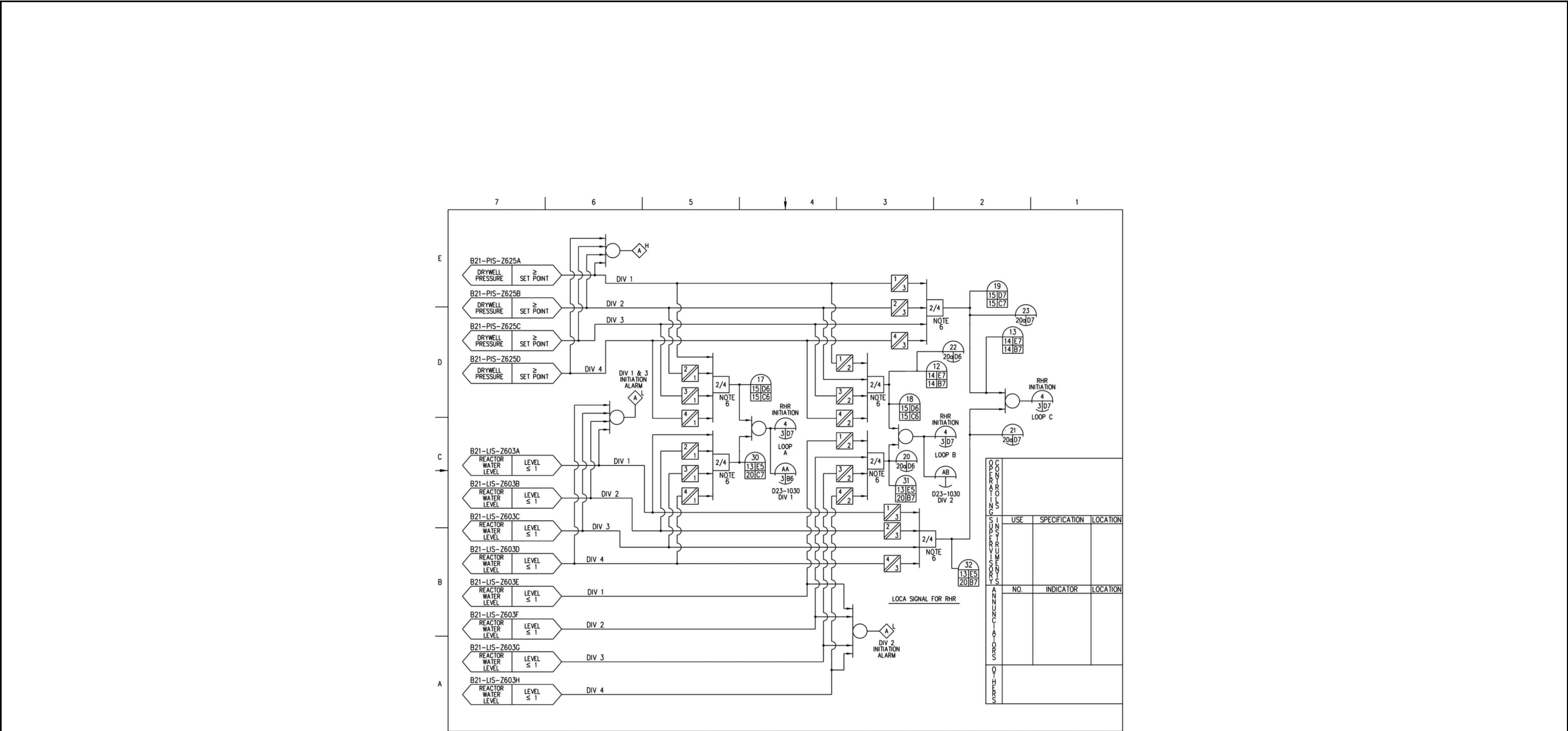


Figure 7.3-4 Residual Heat Removal System IBD (Sheet 4 of 20)

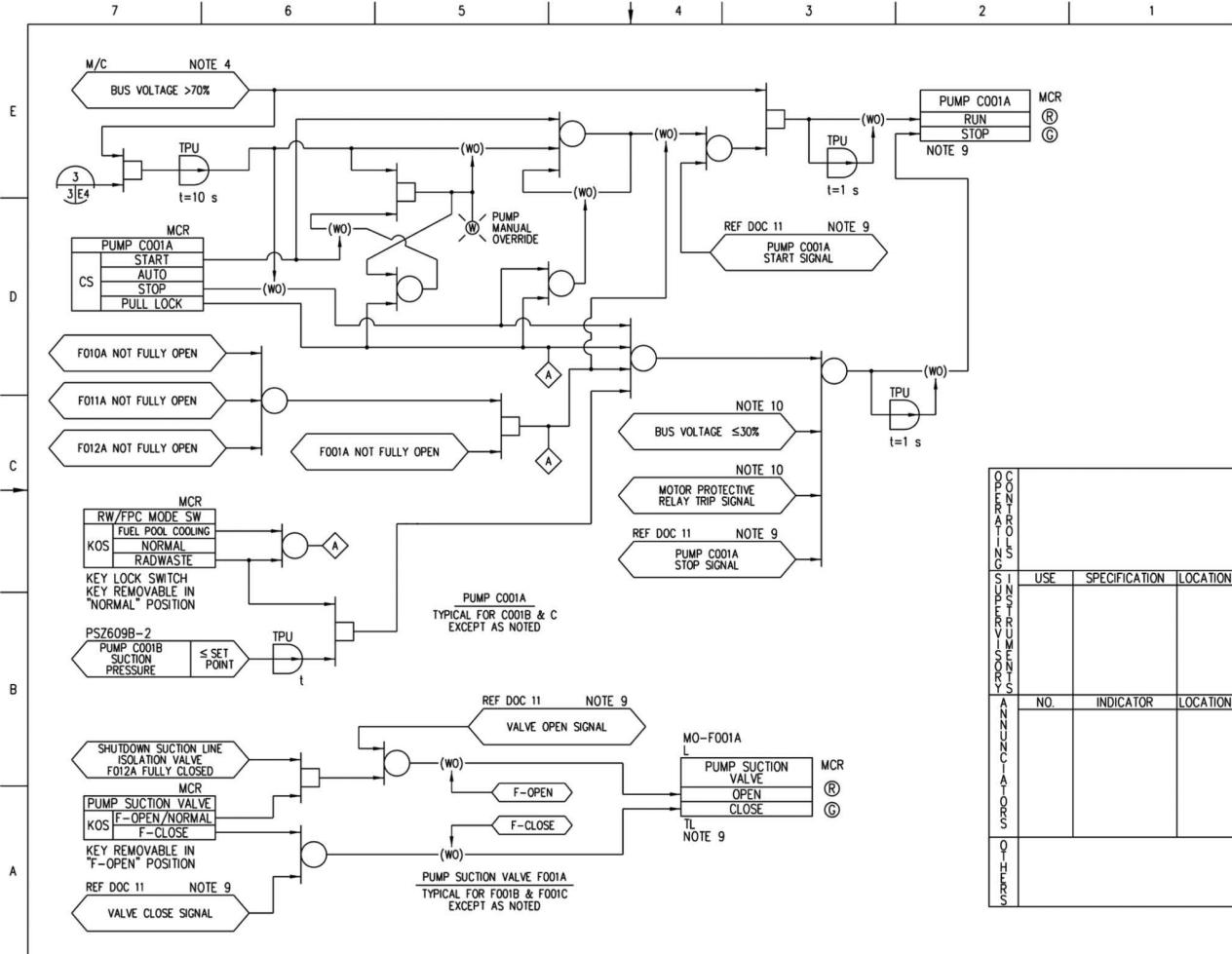


Figure 7.3-4 Residual Heat Removal System IBD (Sheet 6 of 20)

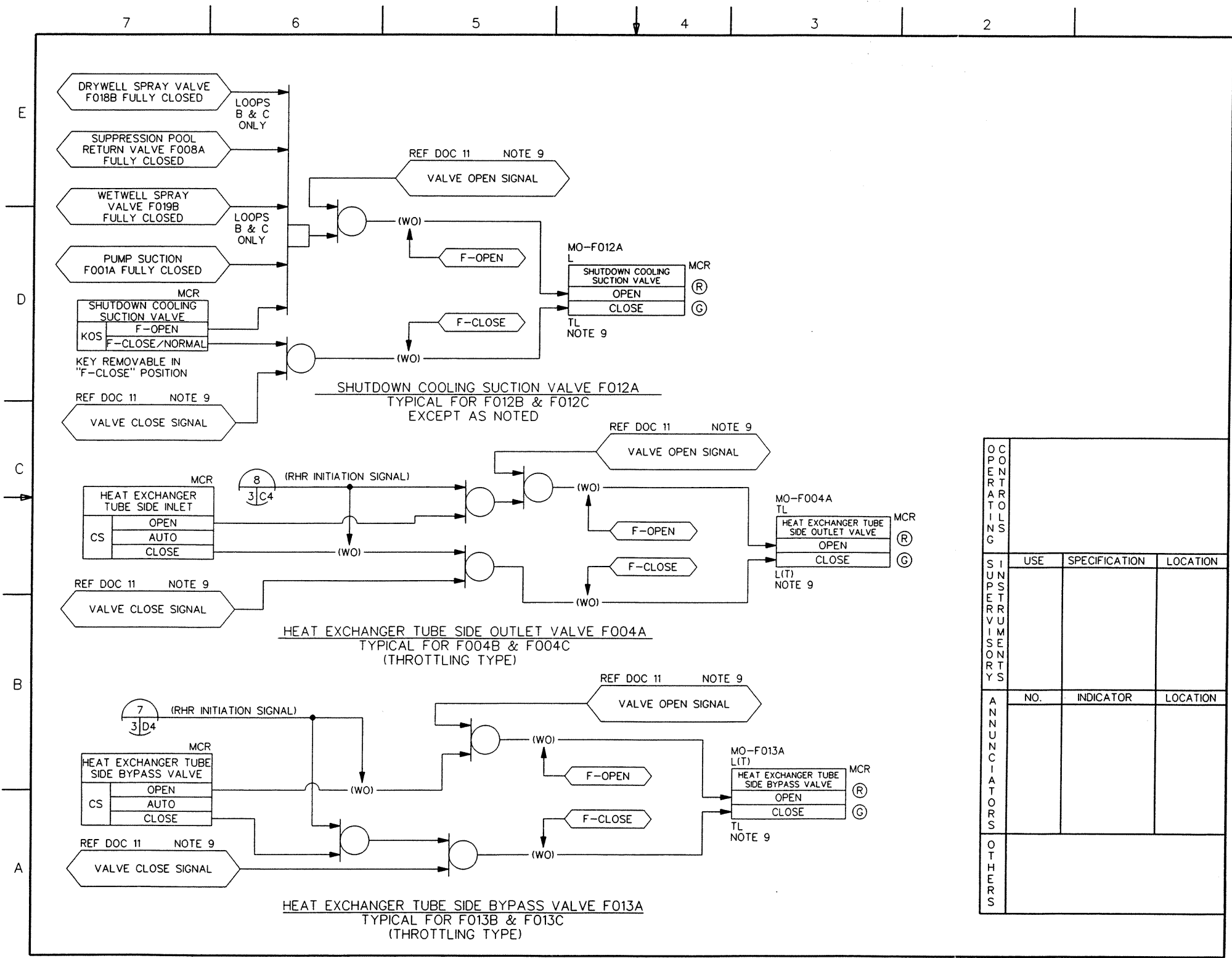
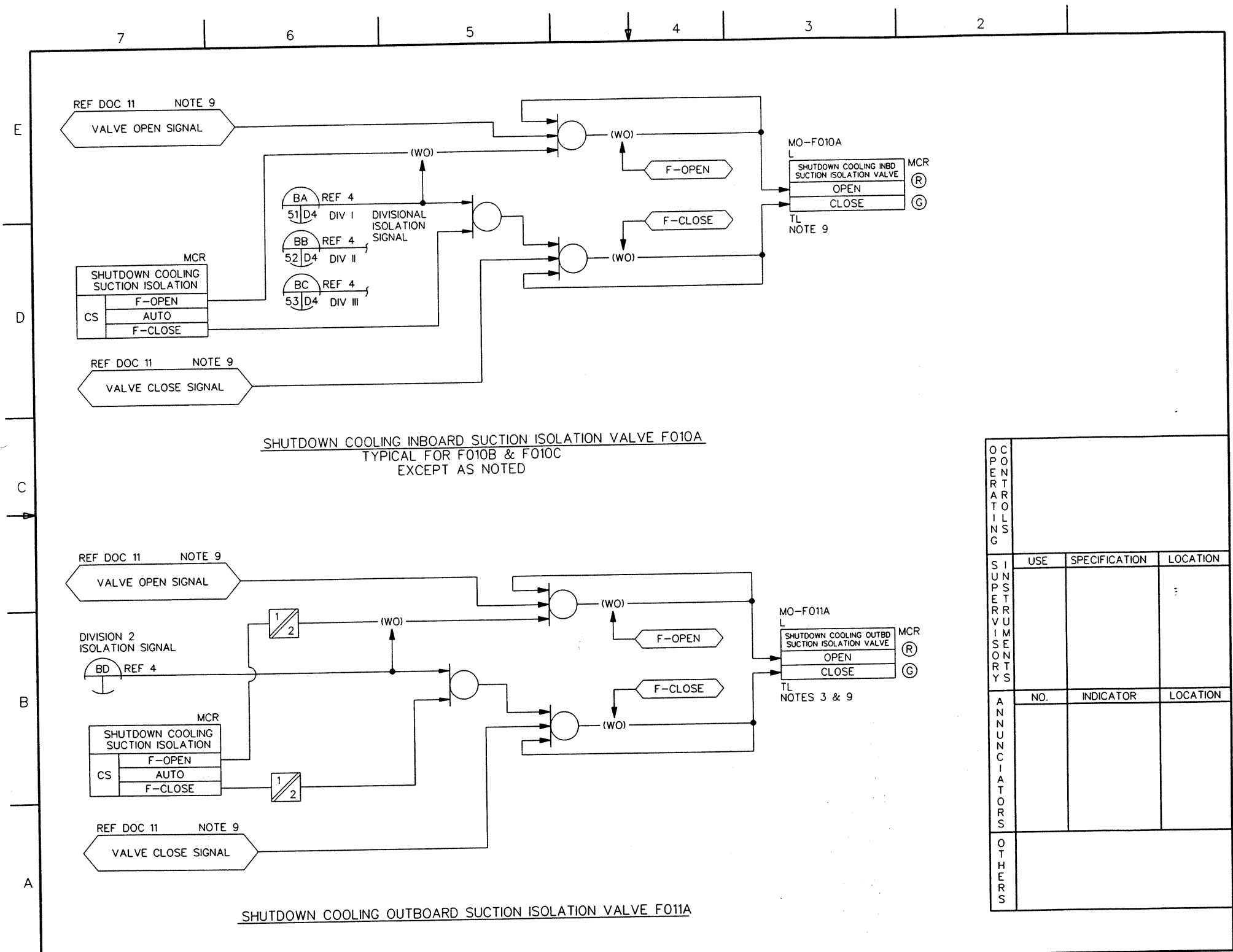


Figure 7.3-4 Residual Heat Removal System IBD (Sheet 7 of 20)

OPERATIONAL			
	USE	SPECIFICATION	LOCATION
SYSTEMS			
ANNUNCIATORS	NO.	INDICATOR	LOCATION
OTHERS			



OPERATIONAL			
	USE	SPECIFICATION	LOCATION
SUPPLEMENTARY			
ANNUNCIATORS	NO.	INDICATOR	LOCATION
OTHERS			

Figure 7.3-4 Residual Heat Removal System IBD (Sheet 8 of 20)

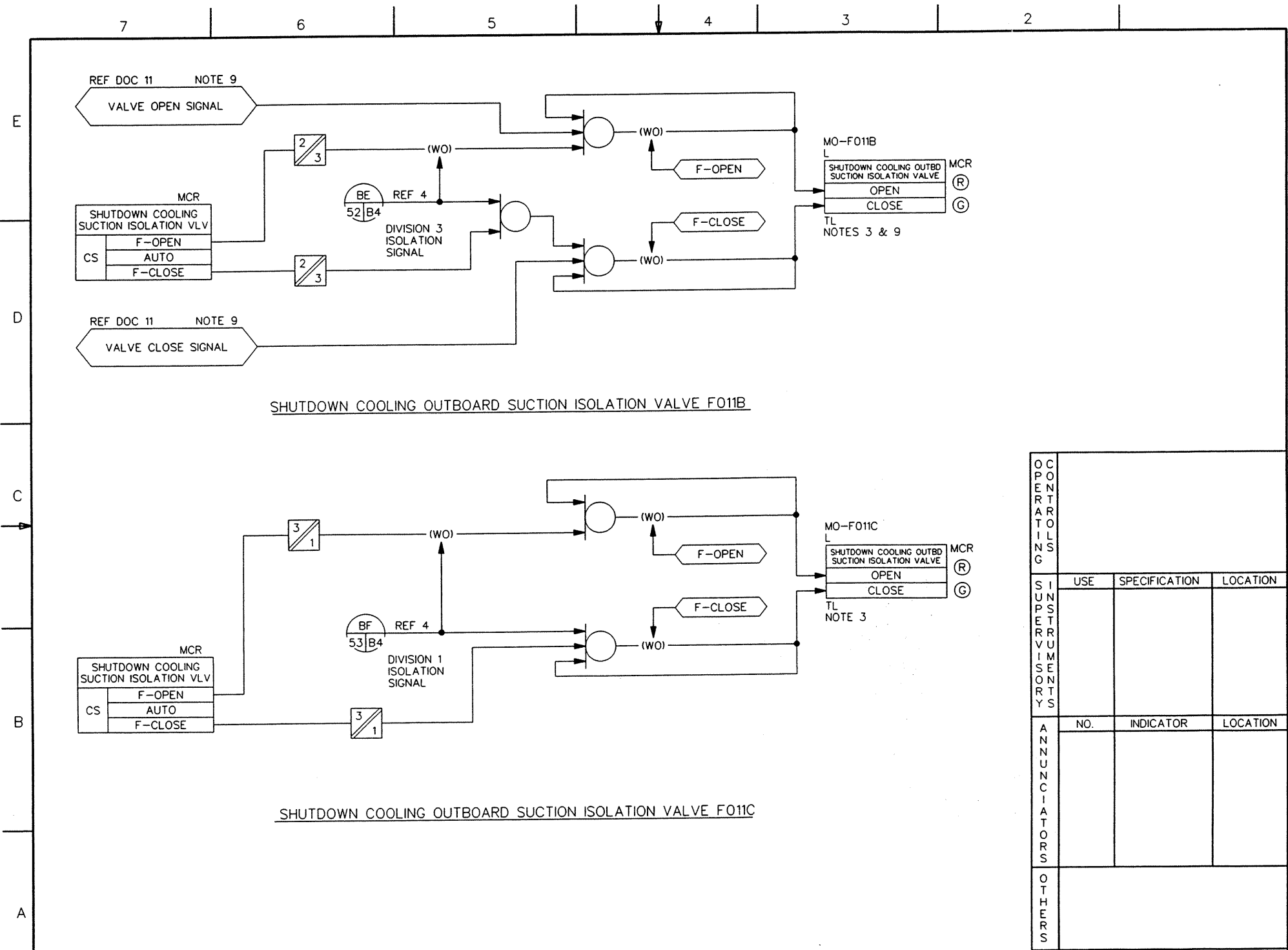


Figure 7.3-4 Residual Heat Removal System IBD (Sheet 9 of 20)

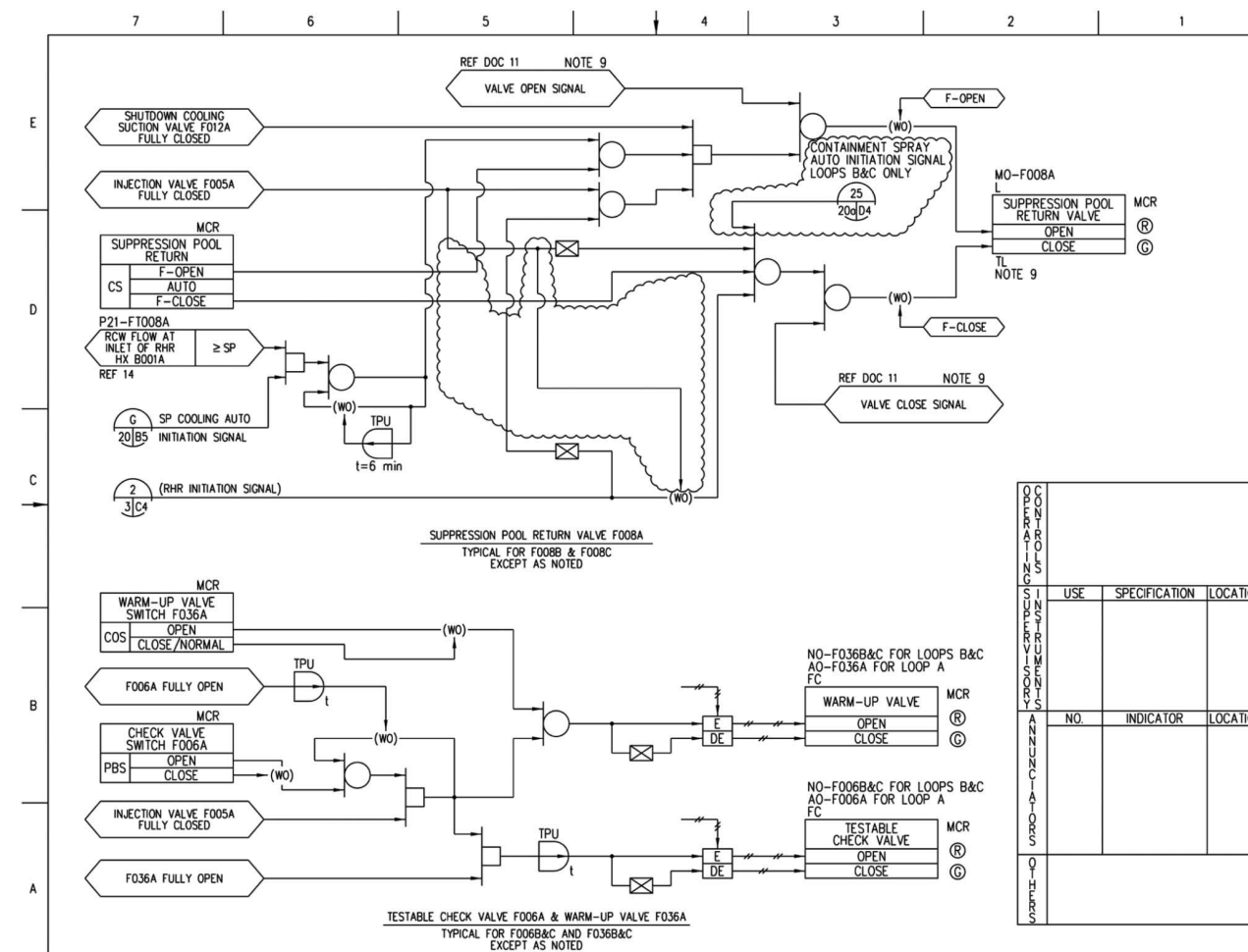


Figure 7.3-4 Residual Heat Removal System IBD (Sheet 10 of 20)

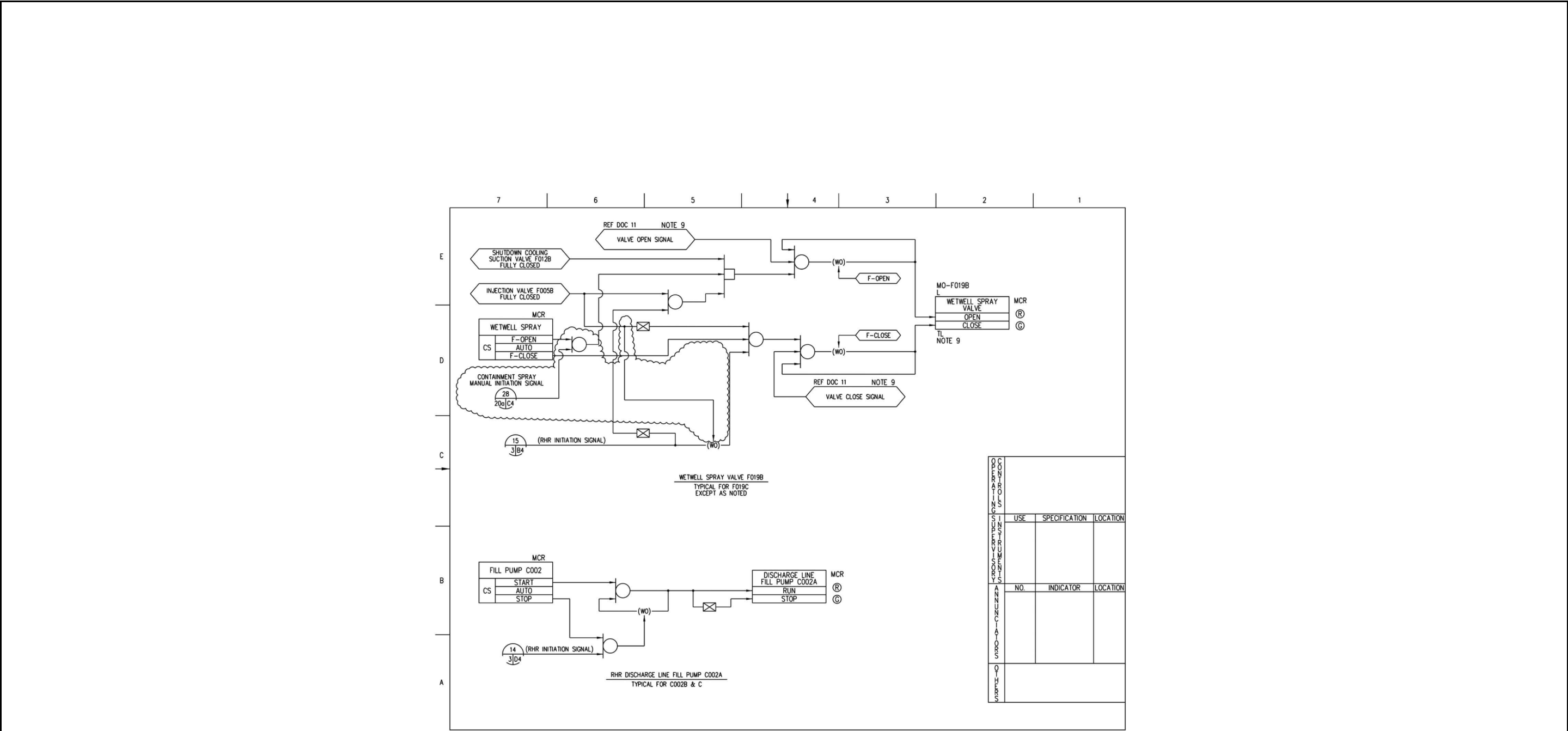


Figure 7.3-4 Residual Heat Removal System IBD (Sheet 11 of 20)



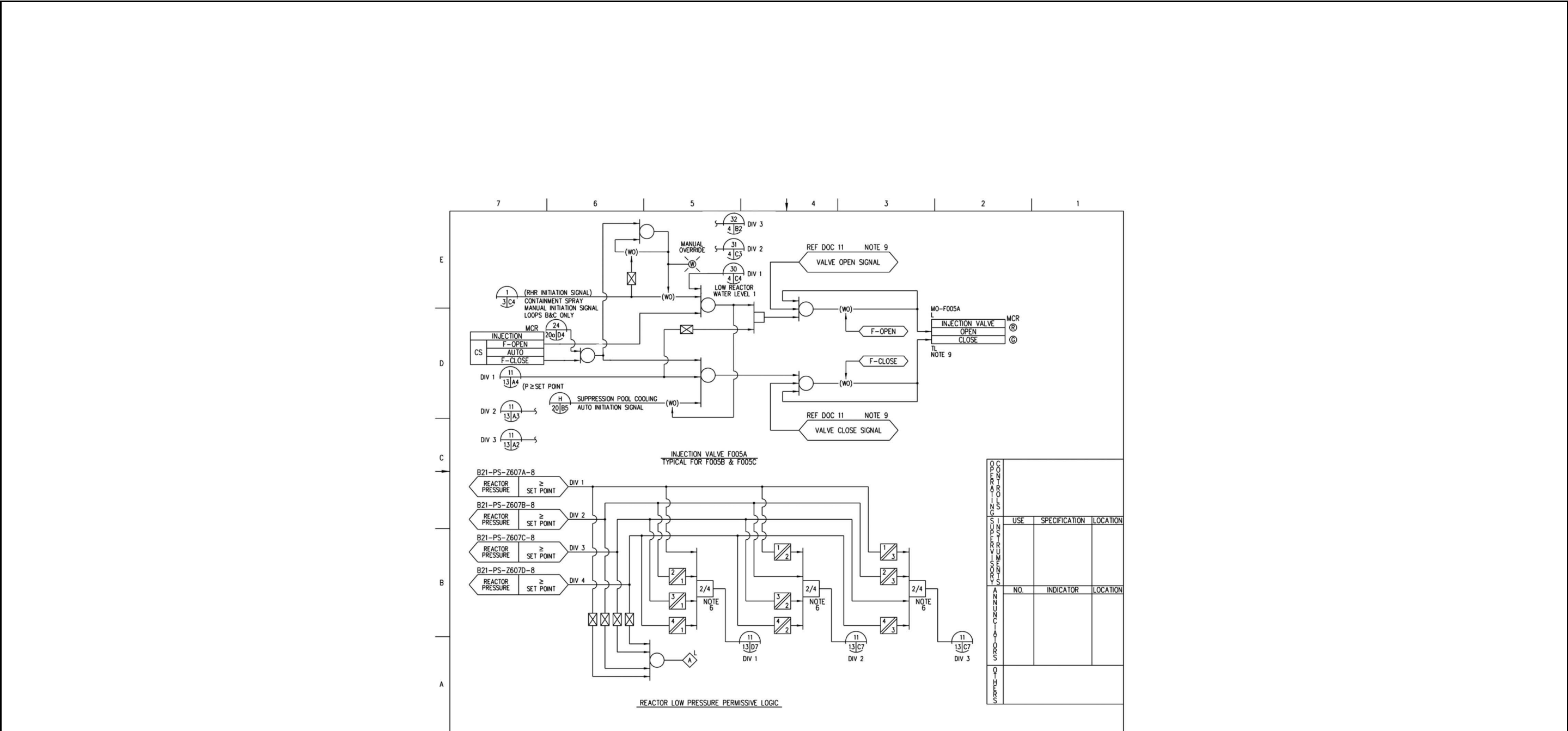


Figure 7.3-4 Residual Heat Removal System IBD (Sheet 13 of 20)

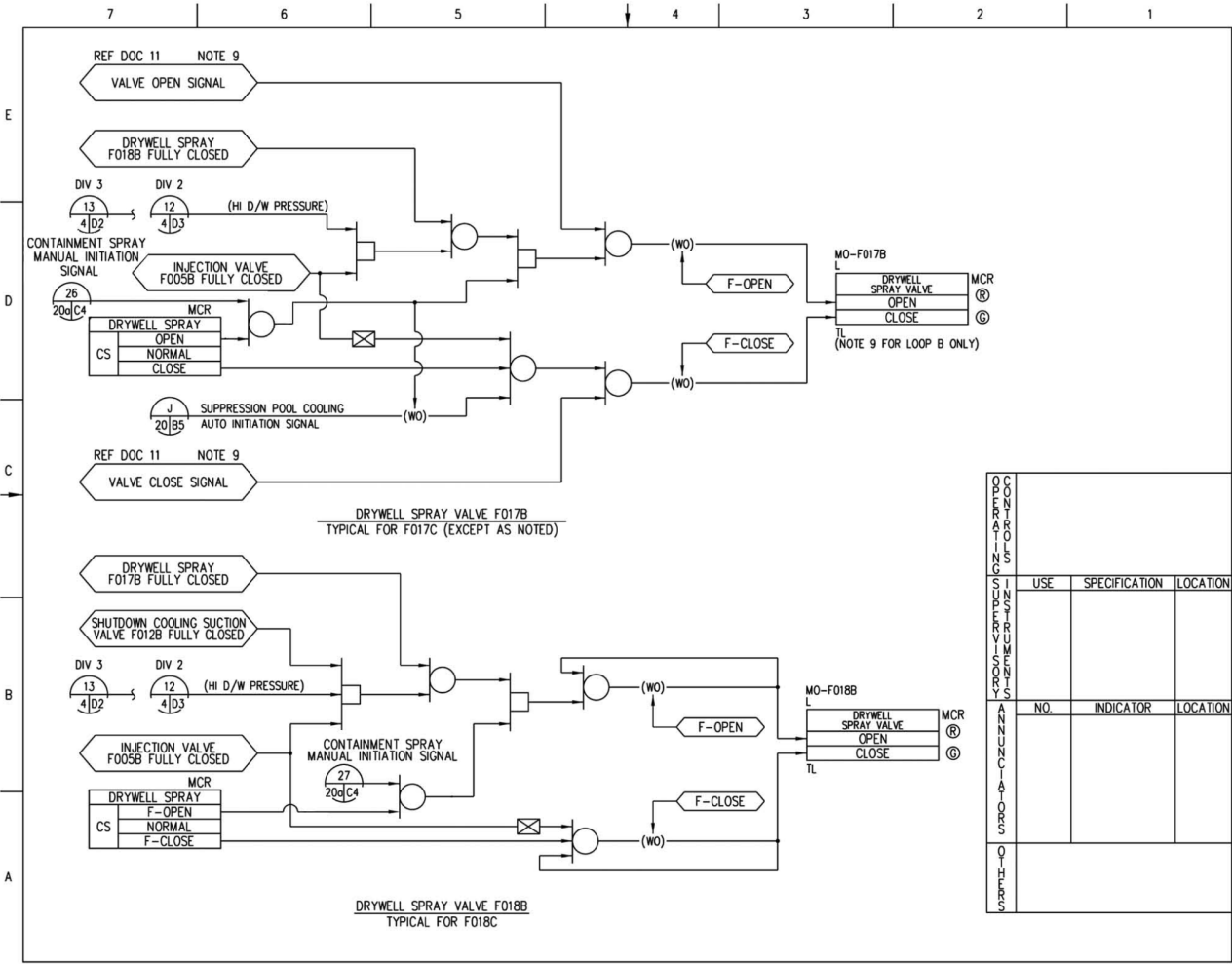
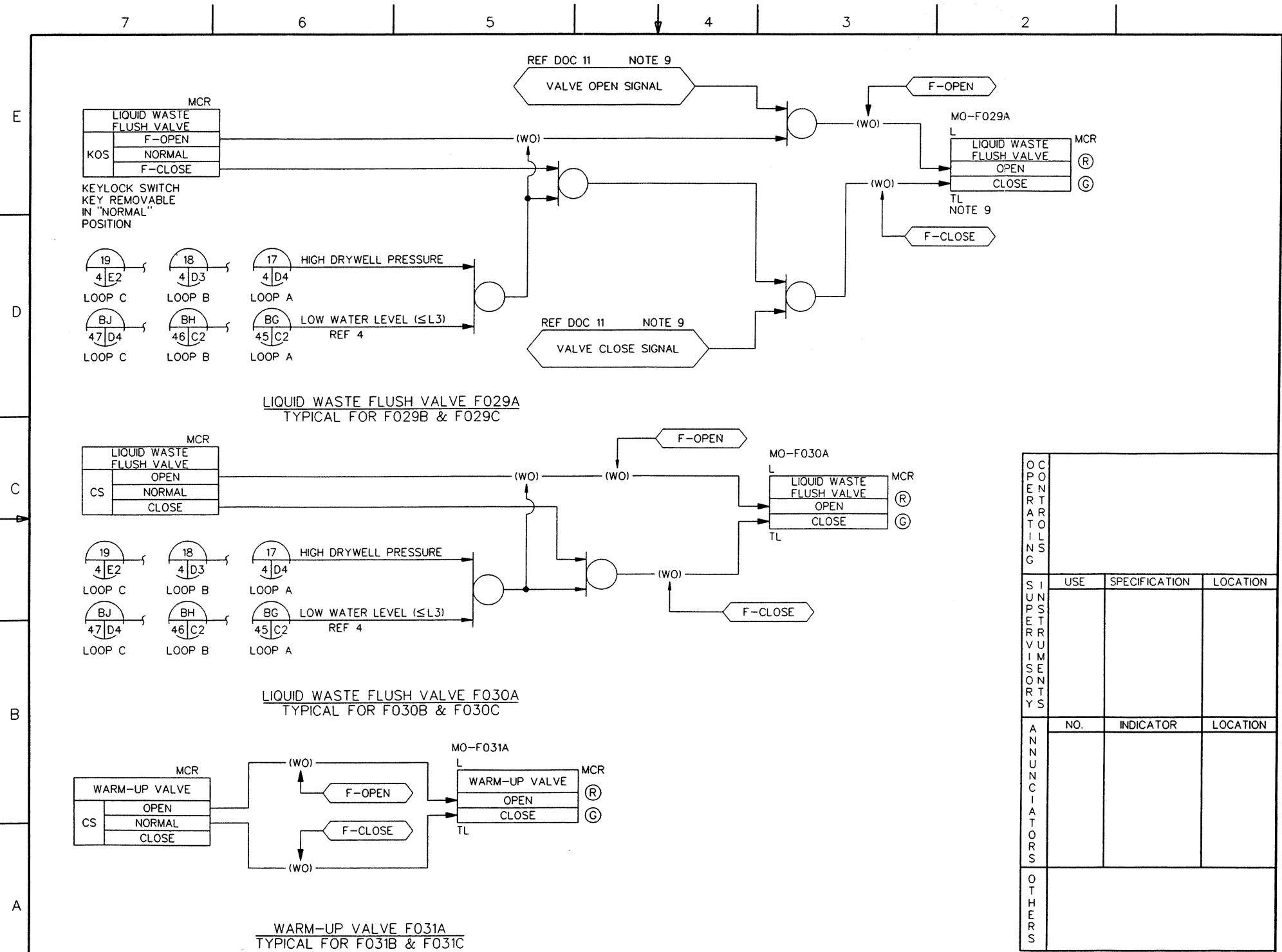
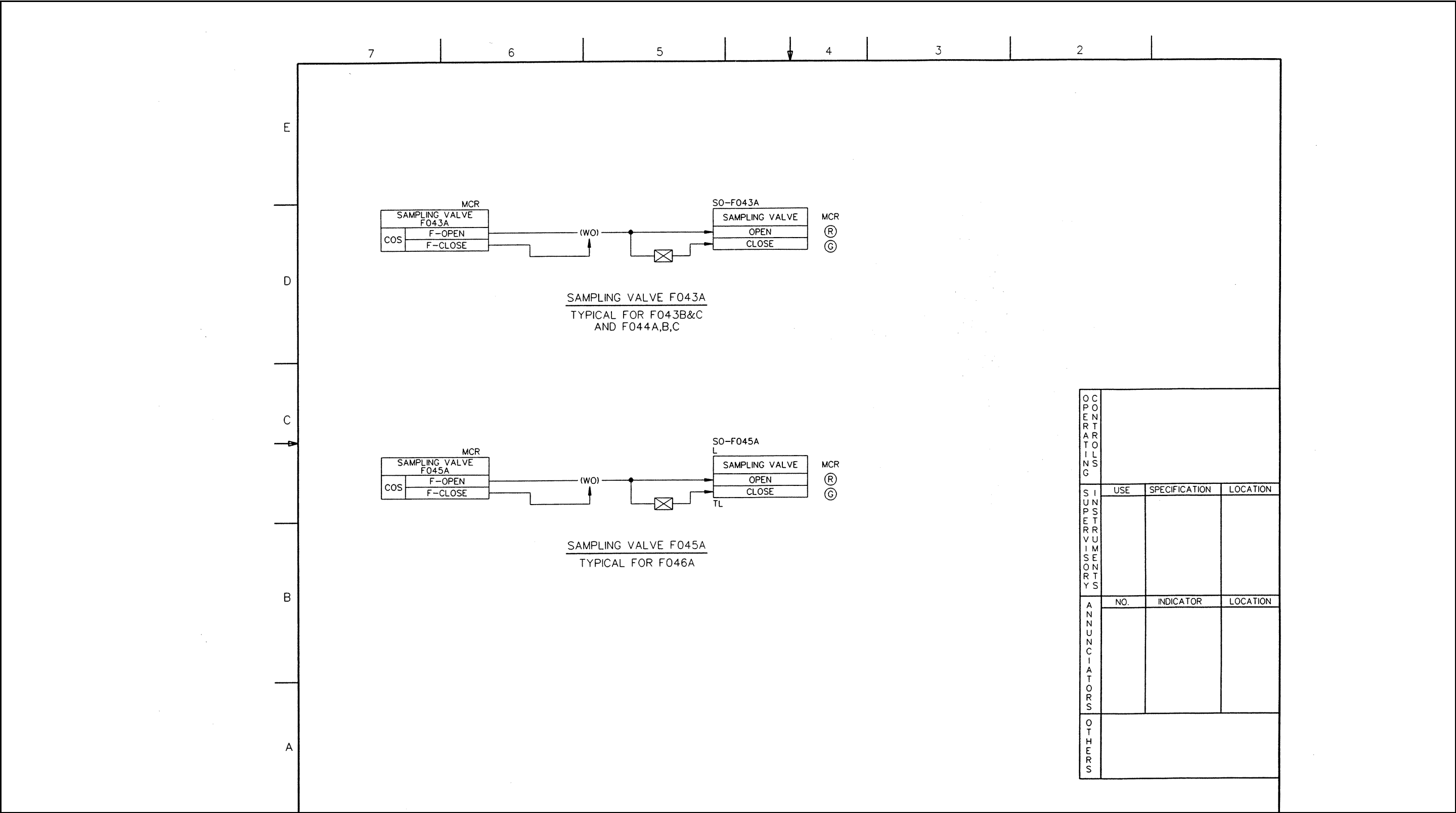


Figure 7.3-4 Residual Heat Removal System IBD (Sheet 14 of 20)



OPERATIONAL LOGS			
	USE	SPECIFICATION	LOCATION
SUPERVISORY SYSTEMS			
ANNUNCIATORS	NO.	INDICATOR	LOCATION
OTHERS			

Figure 7.3-4 Residual Heat Removal System IBD (Sheet 15 of 20)



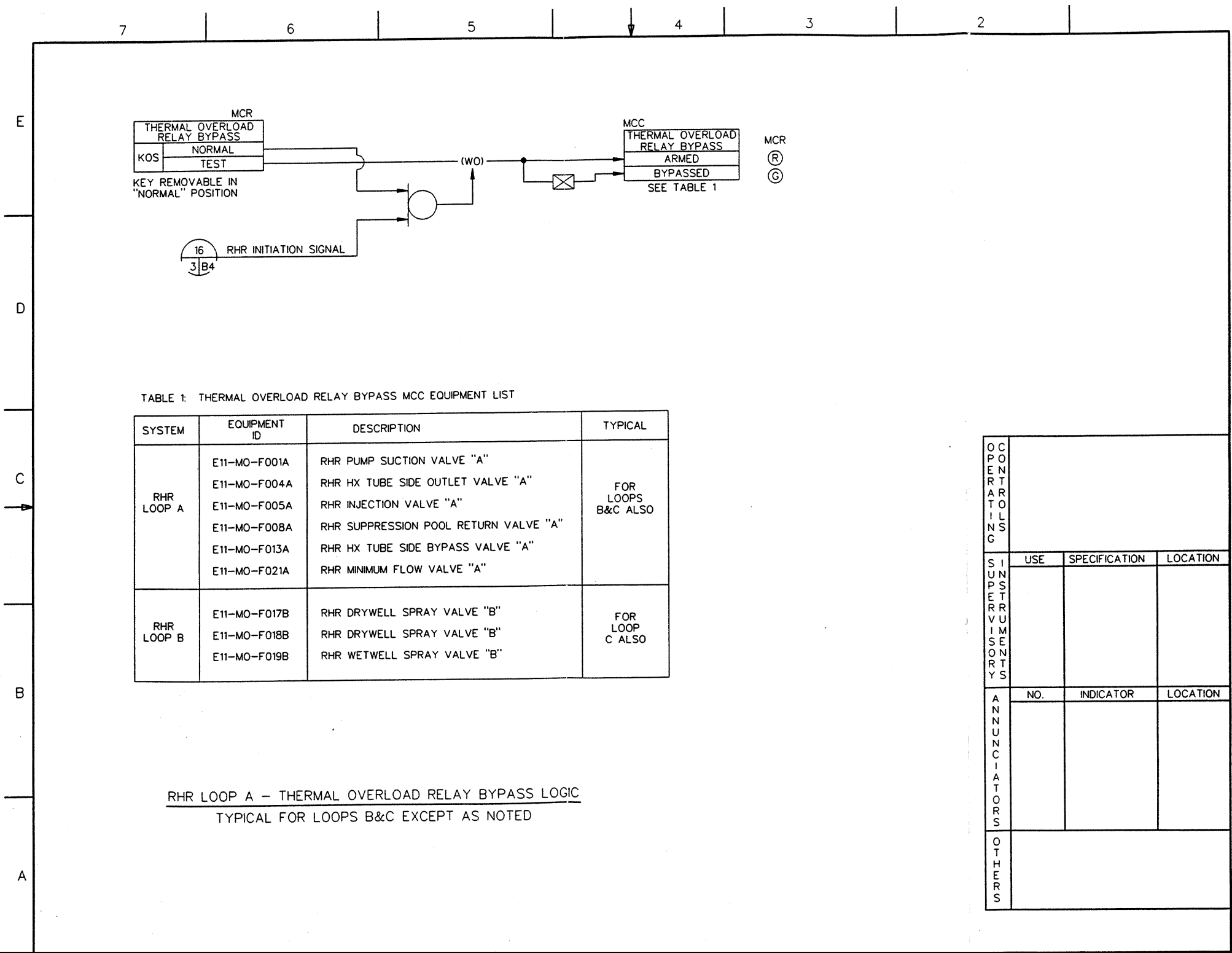


Figure 7.3-4 Residual Heat Removal System IBD (Sheet 17 of 20)

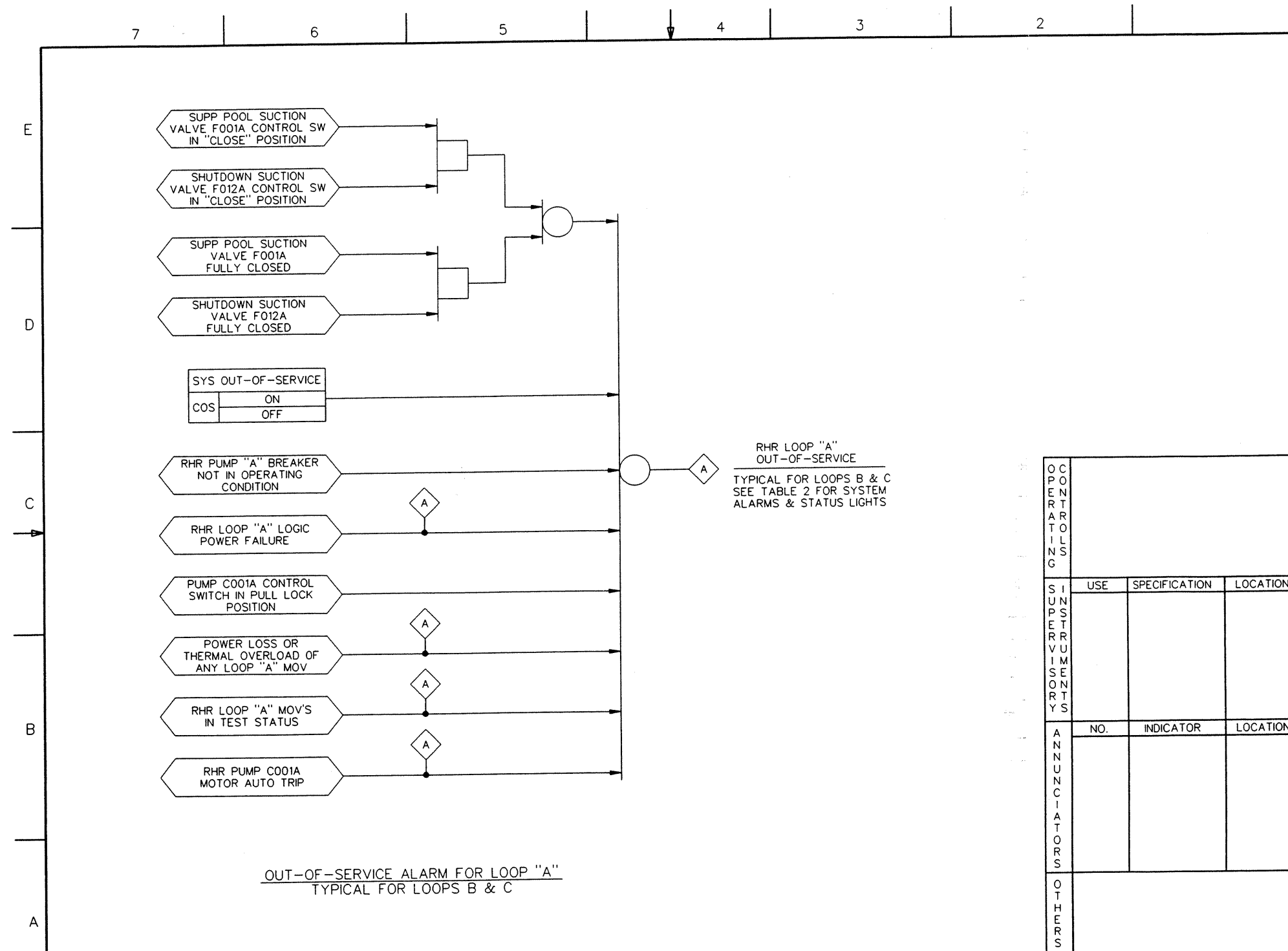


Figure 7.3-4 Residual Heat Removal System IBD (Sheet 18 of 20)

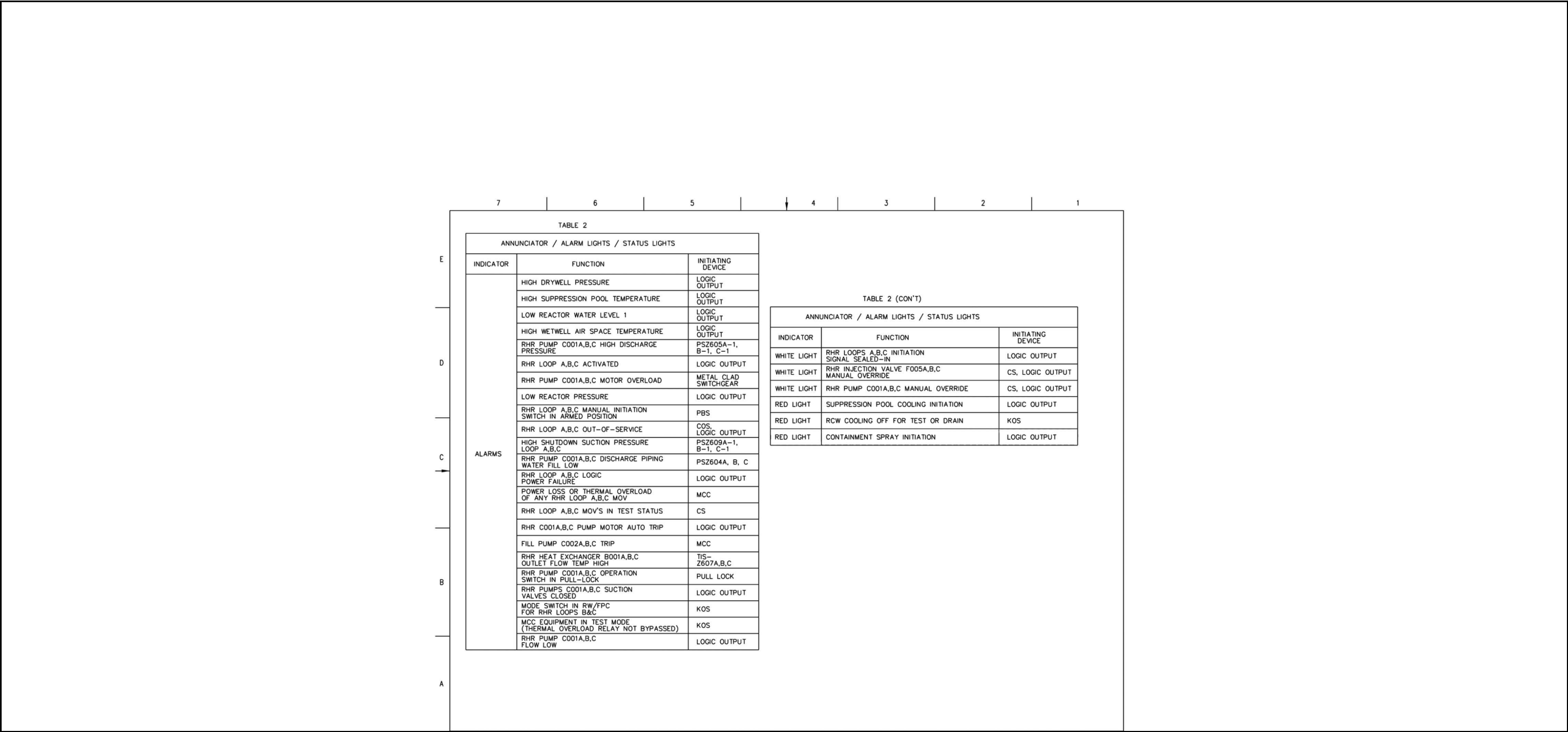


Figure 7.3-4 Residual Heat Removal System IBD (Sheet 19 of 20)

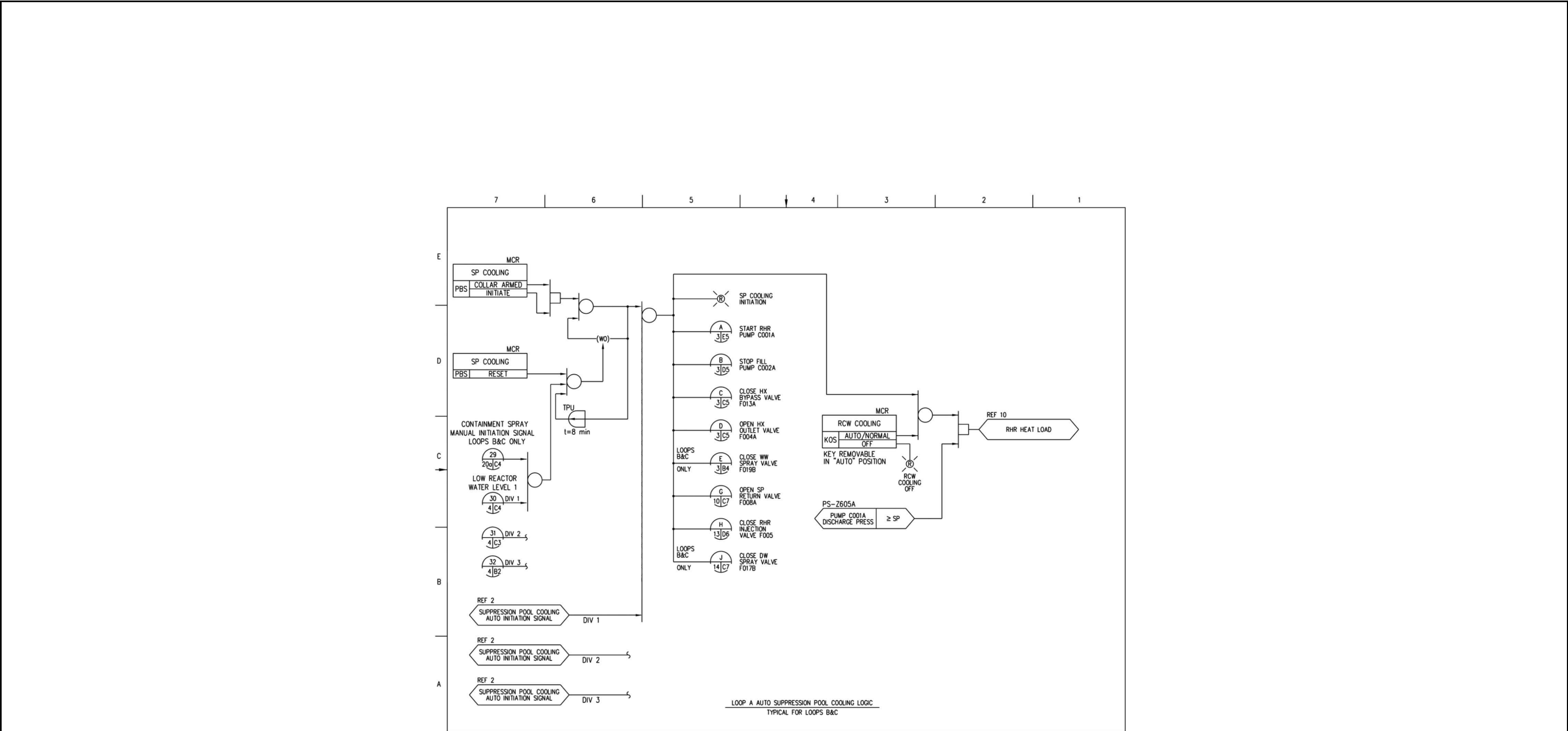


Figure 7.3-4 Residual Heat Removal System IBD (Sheet 20 of 20)

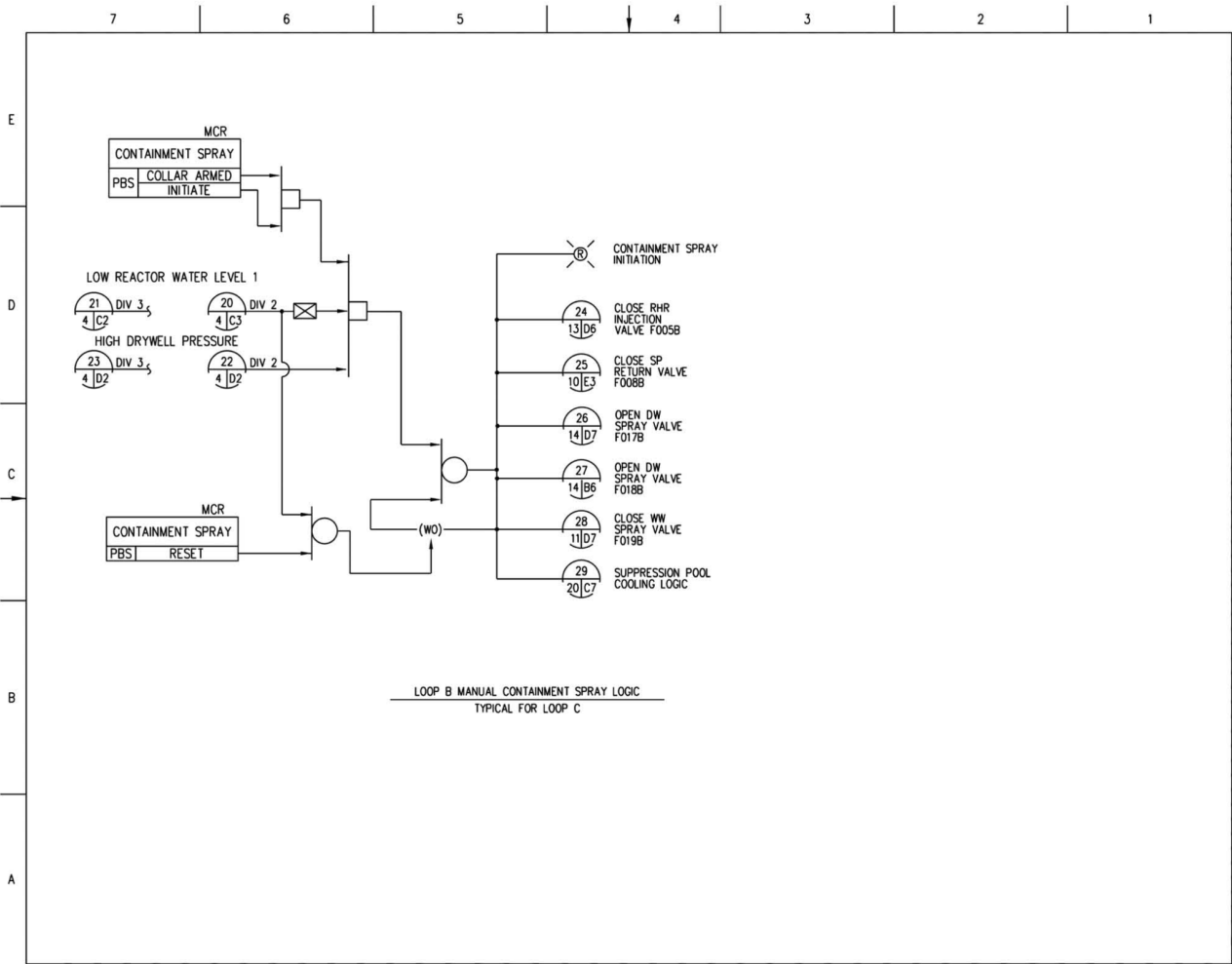


Figure 7.3-4 Residual Heat Removal System IBD (Sheet 20a of 20)