



1. ALL EQUIPMENT AND INSTRUMENT NUMBERS ON THIS DRAWING PRECEDED BY Z41.
2. DESCRIPTION OF CASES: 1 NORMAL MODE
II EMERGENCY MODE
3. ALL CFM SHALL BE ADJUSTED $\pm 5\%$.
4. DUCTING TO BE WELDED CONSTRUCTION UP TO FD-F035
5. DELETED
6. * FURNISHED WITH ASSOCIATED EQUIPMENT.
7. DELETED
8. RETURN AIR PENETRATES WALL THROUGH OPENING LOCATED ABOVE THE DROP CEILING. RETURN AIR ENTERS CEILING SPACE THROUGH REGISTERS.

REFERENCES

TITLE	MPL No.	DWG.
1. CONTROL BLDG. - CONTROL & CABLE SPREADING ROOMS A/C: P&ID	Z41-1050	H-16042
2. SERVICE WATER SYS. P&ID SHEET 2		H-11609
3. CONTROL BLDG. - CABLE SPREADING ROOM EL. 147'-0" A/C PROCESS FLOW DIAGRAM	Z41-1090	H-16045
4. CONTROL ROOM SHIFT SUPERVISOR OFFICE HVAC - PLANS & SECTION		H-26117

CRITICAL DOCUMENT

MPL NO. Z41-1010

ACAD14 H26116

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COMPANY

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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 1 & 2
CONTROL ROOM SHIFT SUPERVISOR'S AREA
H.V.A.C. P&ID & P.F.D.

Revision:2	Date: 11-16-99
Converted To Vector Format, Verified By TRM.	

				NAME	DESIGNED	LOCATION	ISSUING NUMBER	ALPHA
				DGA	KRL	10-502	H-26116	2
				DATE	SCALE			
TRM	LCF	WKK	REV. SIGNATURES.	10/27/81	None			

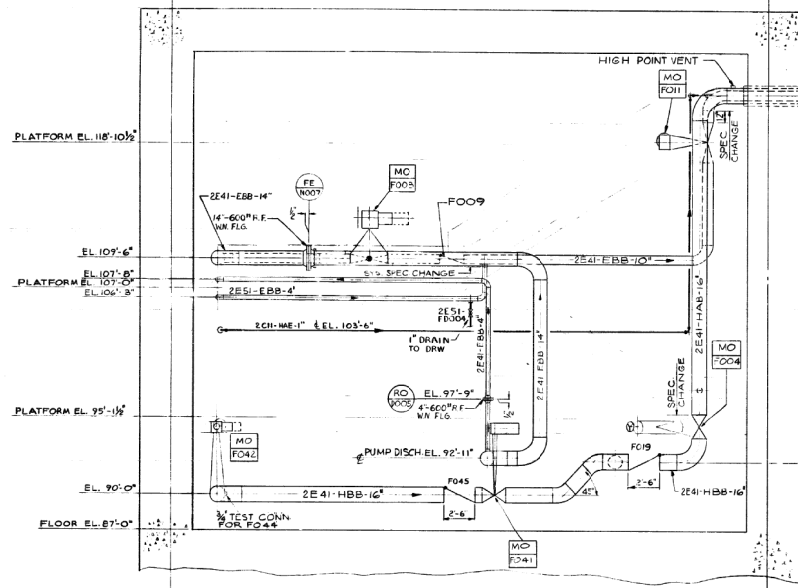
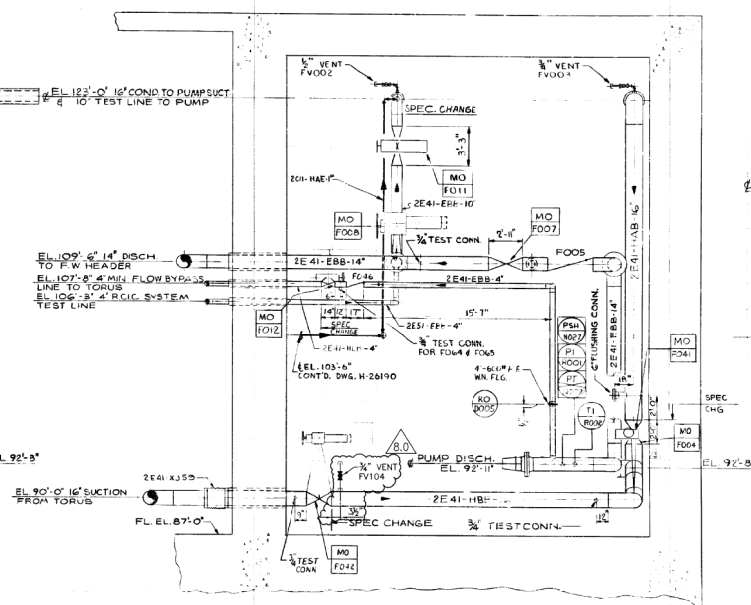
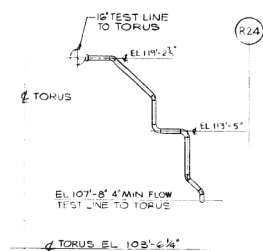
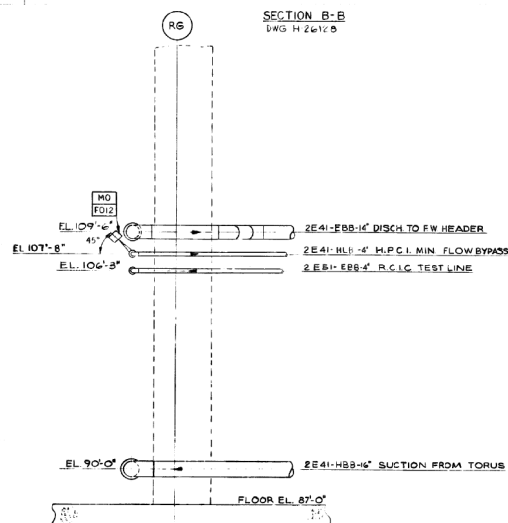
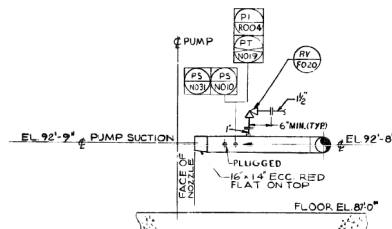
06192-H

RG

RL

R24

R25

SECTION B-B
DWS H-2612BSECTION A-A
DWS H-2612BSECTION E-E
DWS H-2612BSECTION C-C
DWS H-2612BSECTION D-D
DWS H-2612B

FOR NOTES REFERENCES SEE DWS H-2612B

WORK THIS DWS WITH DWS H-2612B, H-2612C,
H-2613, H-2627A, H-2627S & H-2627E

ACADOVY H26130

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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
H. P. C. I SYSTEM
SECTIONS

Version: 8.0 Date: 05/01/09
REVISED PER ABN
2081711101M014, VER. 1.0

NO.	DATE	BY	CHKD	REV	DESCRIPTION
1	05/01/09	JMR	JMR	1	ISSUED FOR CONSTRUCTION

NO.	DATE	BY	CHKD	REV	DESCRIPTION
1	05/01/09	JMR	JMR	1	ISSUED FOR CONSTRUCTION

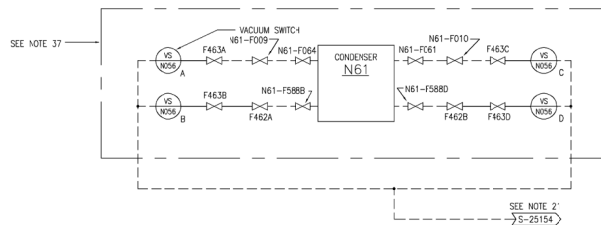
NO.	DATE	BY	CHKD	REV	DESCRIPTION
1	05/01/09	JMR	JMR	1	ISSUED FOR CONSTRUCTION

TABLE 6

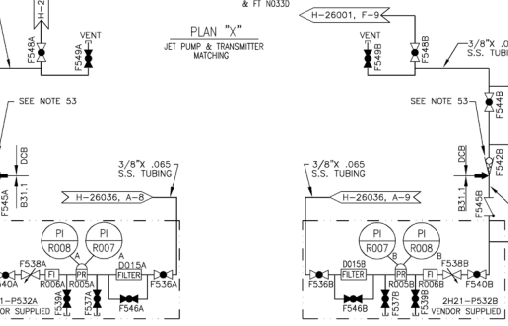
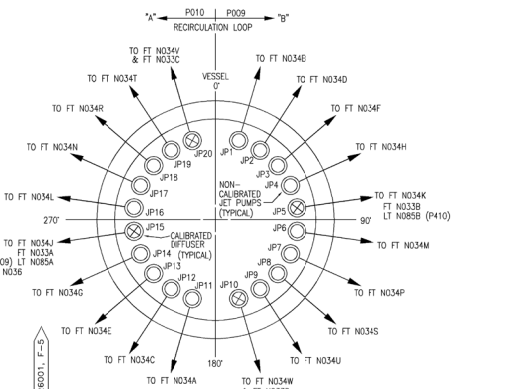
JET PUMP	ISOLATION VALVE	EFCV	DRAIN VALVE
J1	F058B	F059B	F099B
J2	F058D	F059D	F099D
J3	F058F	F059F	F099F
J4	F058H	F059H	F099H
J5	F058B	F051B	F096B
J6	F058B	F051B	F096B
J7	F058P	F059P	F099P
J8	F058S	F059S	F099S
J9	F058U	F059U	F099U
J10	F058U	F051D	F096D
J11	F058A	F059A	F099A
J12	F058C	F059C	F099C
J13	F058E	F059E	F099E
J14	F058G	F059G	F099G
J15	F058A	F051A	F096A
J16	F058L	F059L	F099L
J17	F058R	F059R	F099R
J18	F058R	F059R	F099R
J19	F058T	F059T	F099T
J20	F058C	F051C	F096C
	F052C	F053C	F095C

TABLE 5

TYPE T THERMOCOUPLE TAG NOS.	
2821-N028A	2821-N030D
2821-N028B	2821-N030E
2821-N028C	2821-N030F
2821-N028D	2821-N030G
2821-N028E	2821-N030H
2821-N028F	2821-N030I
2821-N028G	2821-N030J
2821-N028H	2821-N030K
2821-N028I	2821-N030L
2821-N028J	2821-N030M
2821-N028K	2821-N030N
2821-N028L	2821-N030O
2821-N028M	2821-N030P
2821-N028N	2821-N030Q
2821-N028O	2821-N030R
2821-N028P	2821-N030S
2821-N028Q	2821-N030T
2821-N028R	2821-N030U
2821-N028S	2821-N030V
2821-N028T	2821-N030W
2821-N028U	2821-N030X
2821-N028V	2821-N030Y
2821-N028W	2821-N030Z



POWER DISTRIBUTION

TABLE 2
ELEVATION CORRELATION CHART (SEE NOTE 5)

REFERENCE	(COLD VESSEL) INCHES ABOVE VESSEL ZERO	DESCRIPTION OF TRIPS	INSTRUMENT (S) PROVIDING TRIP	REACTOR VESSEL LEVEL (2821-2821S)	INDICATED LEVEL (NOTE 4)
NOZZLE N3A, B, C, D	640.0				
NOZZLE N12A, B	586.75				
FEEDWATER SYSTEM & REACTOR PROTECTION SYSTEM FULL SCALE	577.2				
		1. TRIP HPCI TURBINE	US N693B		
		1. TRIP RCIC TURBINE	US N693D		
		2. CLOSE MAIN TURBINE STOP VALVES	US N693C		
		1. HIGH LEVEL ALARM	2C32-PY-K624A-C		
		1. NORMAL LEVEL	2C32-L/PR-6608		
		1. LOW LEVEL ALARM	2C32-L/PR-6608		
		1. SCRAM	US-N680A-D		
		2. CLOSE POS VALVES (SEE NOTE 47)	US-N680A-D		
		3. CLOSE RHR SHUTDOWN COOLING ISOLATION VALVES	US-N680A-D		
		1. AUTO DEPRESSURIZATION SYS. (ADS) PERMISSIVE	US-N695A, B		
FEEDWATER SYSTEM & REACTOR PROTECTION SYSTEM INSTRUMENT ZERO BOTTOM OF DRYER SKIRT	517.2				
NOZZLE N11A, B	508.0				
		1. INITIATE HPCI	US N692A-D		
		2. INITIATE RCIC	US N692A-D		
		3. INITIATE ATWS-ARI	US N692A-D		
		1. CLOSE RWCU ISOL VALVES	US N682A-D		
		2. START SBT SYSTEM	US N682A-D		
		3. CLOSE REACTOR BLDG. VENTILATION SYSTEM DAMPERS	US N682A-D		
		1. TRIP RECIRCULATION PUMPS	US N694A-D		
		1. INITIATE RHR SYSTEM	US N694A-D		
		2. INITIATE CORE SPRAY SYSTEM	US N694A-D		
		3. CONTRIBUTE TO ADS	US N694A-D		
		4. START STANDBY DIESEL	US N694A-D		
		1. CLOSE MSIV'S	US N681A-D		
		2. CLOSE MSU DRAIN ISOL VALVES	US N681A-D		
		3. CLOSE REACTOR WATER SAMPLE ISOL VALVES	US N681A-D		
REACTOR PROTECTION SYSTEM FULL SCALE	367.0				
NOZZLE N16A,B	21.0				
TOP OF ACTIVE FUEL	358.0				
LOWER JET PUMP TAP	354.5				
NOZZLE N8A,B	132.0				
		1. CONTAINMENT SPRAY PERMISSIVE	US N685A,B		

FOR REFERENCES SEE DWG. H-26000 (SHT. 1)
WORK THIS DRAWING WITH H-26000 (SHT. 1)
AND H-26001 (SHT. 2).

NOTES:

CONTINUED

1. ALL EQUIPMENT & INSTRUMENTS ARE PRECEDED BY MPL NO. 2821 UNLESS OTHERWISE NOTED.
2. STEAM LINES, ENCLOSED IN BOXES SHALL HAVE PART NOS. CORRESPONDING TO ITS RESPECTIVE LINE NO. UNLESS OTHERWISE NOTED. EXAMPLE: XX03 IS ON LINE "C".
3. WHERE GV-NUMBERS ARE SHOWN THE VALVES ARE TAGGED WITH THESE NUMBERS. WHERE GV-NUMBERS ARE NOT SHOWN THE VALVES ARE TAGGED WITH THE MPL NUMBER.
4. ANY ADDITIONAL HIGH POINT VENTS AND LOW POINT DRAINS TO BE ADDED BY FIELD AS REQUIRED.
5. INDICATED LEVEL TRIP SETTINGS VERSUS ACTUAL LEVEL INSIDE DRYER SEAL SHORT IS BASED UPON:
 - A. CALIBRATION OF DEVICES AT 1000 PSIG REACTOR DOME PRESSURE & 135 F. DRYWELL AMBIENT TEMPERATURE X & 20 BTU/LB. SUBCOOLING IN VESSEL BELOW NOZZLE 1 & SATURATED COND. ABOVE NO. 2, 11.
 - B. ΔP DRYER PRESSURE DROP AT RATED LOA=10" HOT WATER
 - C. CARRY-UNDER CORRECTION BASED ON 0.3% BY WEIGHT CARRY-UNDER=5.5% DENSITY.
 - D. DEVIATED LEVEL SENSOR ERROR BAND $\pm 2\%$ RANGE.
 - E. SAFEGUARDS LEVEL SENSOR ERROR BAND $\pm 3\%$ RANGE.
6. 1/2" JUNCTION BOX LOCALLY MOUNTED (BY OTHERS) EACH 1/2" JUNCTION BOX TO HAVE OWN SET OF TERMINALS.
7. LOCATE PRESSURE TEST POINTS AS CLOSE AS POSSIBLE TO 2821-F028A, B, C, D.
8. AN EXPANSION LEG SHALL BE PROVIDED IN INSTRUMENT SENSING LINE BETWEEN POT (PART 0022) AND THE BRANCH CONNECTION TO THE VESSEL HEAD VENT LINE. THE EXPANSION LEG & PIPING INSTALLATION SHALL BE DESIGNED TO ALLOW FOR MAXIMUM CHANGE OF VESSEL LENGTH WITH TEMPERATURE TO AVOID OVERSTRESSING THE PIPING ON THE SEAL OR DAMAGE TO THE INSULATION AROUND THE VESSEL.
9. FOR LOCATION & IDENTIFICATION OF INSTRUMENTS SEE INSTRUMENT DATA SHEET LISTED IN MPL. FOR EACH INSTRUMENT.
10. ALL RELIEF AND SAFETY VALVE DISCHARGE THERMOCOUPLES SHALL BE CONNECTED TO TEMPERATURE RECORDER R614.
11. INSTRUMENTS, INSTRUMENT PIPING AND VALVING MUST COMPLY WITH THE REQUIREMENTS OF REF. 19.
12. ALL MOTOR AND SOLENOID OPERATED VALVES ARE NORMAL AC UNLESS OTHERWISE NOTED.
13. LINES TO DIFFERENTIAL PRESSURE TRANSMITTERS SHOULD BE AS SHORT AS PRACTICAL.
14. INSTALL TEMPERATURE EQUALIZING COLUMN AND LEVEL INSTRUMENT PIPING AS DIRECTED BY VENDORS INSTALLATION DRAWING.
15. ALARMS ASSOCIATED WITH THE SYSTEMS INITIATED BY THE REACTOR PROTECTION SYSTEM OR SAFEGUARD SYSTEM LEVEL AND PRESSURE SWITCHES ARE SHOWN ON THE P&ID FOR THE PARTICULAR SYSTEM.
16. TRIP RCIC AND HPCI TURBINES ON HIGH LEVEL (REF. 13, 14 & 15).
17. SEE NOTE 47.
18. CORE SPRAY AND RHR SYSTEM VALVE OPENING PERMISSIVE (REF. 17 & 49).
19. INITIATE CLOSURE OF RWCU ISOLATION VALVES, START SBT SYSTEM, AND INITIATE CLOSURE OF REACTOR BUILDING VENT SYSTEM DAMPERS.
20. INITIATE HPCI SYSTEM (REF. 13), RCIC SYSTEM (REF. 15), RHR SYSTEM (REF. 1).
21. INITIATE CLOSURE OF MAIN STEAM LINE ISOLATION VALVES (REF. 48).
22. CONTRIBUTE TO AUTO BLOWDOWN (REF. 48), INITIATE CORE SPRAY (REF. 17) RHR SYSTEM (REF. 49) AND START STANDBY DIESEL GENERATOR (REF. 17).
23. WATER TIGHT JUNCTION BOX TO BE LOCATED INSIDE DRYWELL.
24. SUMMER K606 & K607 INPUTS SHALL BE INTERLOCKED WITH REACTOR PUMP AND VALVES TO ADD INPUT WHEN BOTH PUMPS ARE RUNNING AND THEIR DISCHARGE VALVES ARE OPEN OR SUBTRACT ONE INPUT WHEN THE CORRESPONDING PUMP IS STOPPED OR ITS DISCHARGE VALVE IS CLOSED.
25. NOZZLES 8A & 8B MAY BE INTERCHANGED.
26. TYPICAL FOR ALL (16) NON-CALIBRATED JET PUMPS EXCEPT FOR ASSIGNMENT LETTER SUFFIXES. FOR LETTER SUFFIX ASSIGNMENT SEE PLAN "C" AND TABLE 6.
27. TYPICAL FOR ALL (4) CALIBRATED JET PUMPS EXCEPT FOR ASSIGNMENT LETTER SUFFIXES. FOR LETTER SUFFIX ASSIGNMENT SEE PLAN "C" AND TABLE 6.
28. CONTAINMENT SPRAY MODE RHR INTERLOCK (REF. 49).
29. REACTOR PROTECTION SYS. SCRAM SIGNAL (REF. 18).
30. RHR INTERLOCK (LPO MODE) (REF. 49).
31. LIS N685A & LIP R615, LIS N685B & LIP R616 SHALL CORRESPOND TO COLD SHUT DOWN CONDITIONS (129F & ABOVE).
32. INSTRUMENTS READ FULL SCALE WHEN JET PUMPS ARE IN OPERATION.
33. RECIRCULATION LINES TO HOTWELL TO COMPLY WITH REF. 20, WATER QUALITY SECTION 7.

CRITICAL DOCUMENT

MPL NO. 2821-1010

ACAD2000 H26189



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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
NUCLEAR BOILER SYSTEM P&ID
SHEET 3

Version: 21.0 Date: 11-17-14

REVISED PER ABN-H03683, VER. 1.0.

JCP JLF JTL

JCP JLF JTL

JCP JLF JTL

JCP JLF JTL

JCP JLF JTL

JCP JLF JTL

JCP JLF JTL

JCP JLF JTL

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JCP JLF JTL

JCP JLF JTL

JCP JLF JTL

WC/CAD

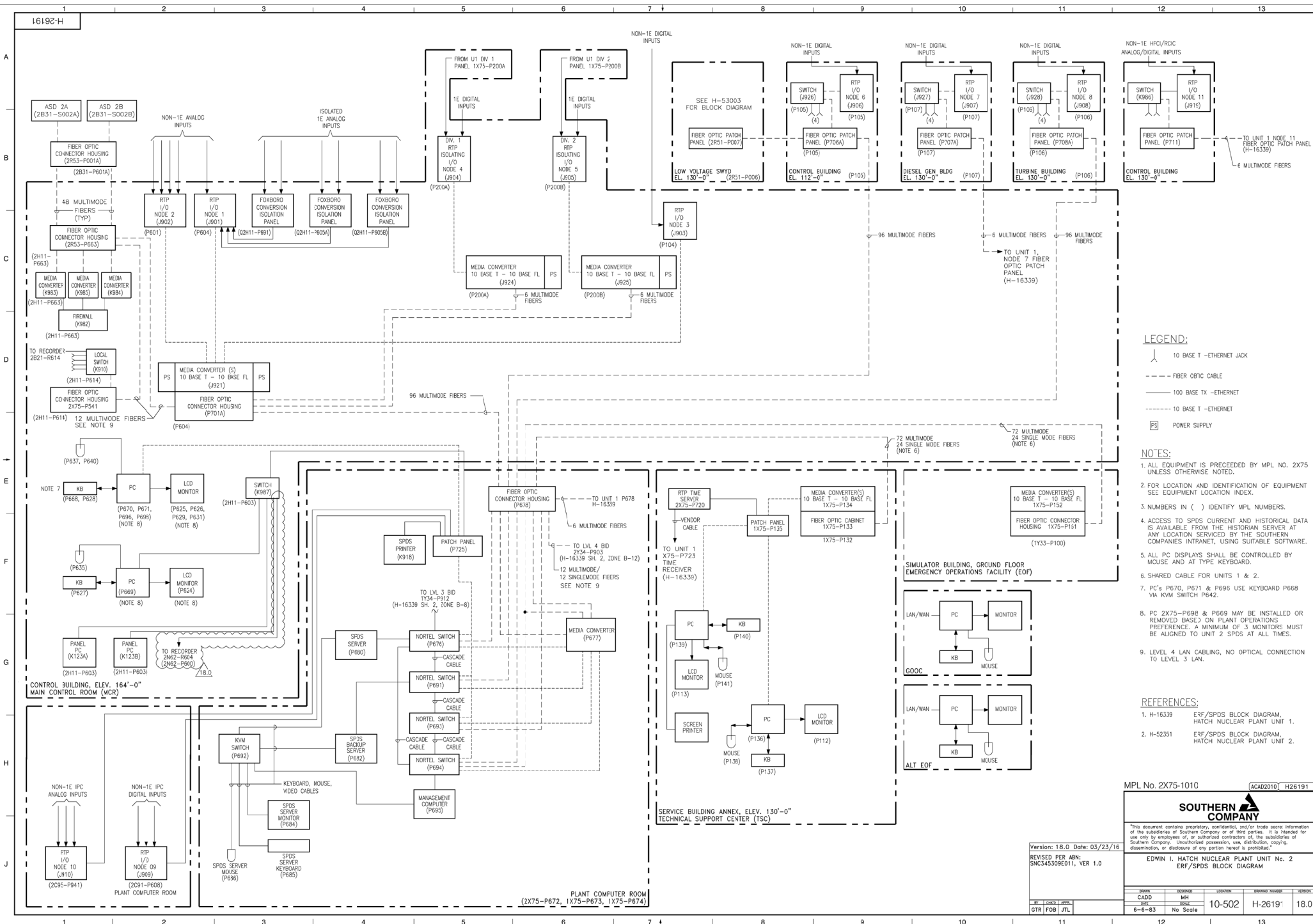
10-502 H-26189 21.0

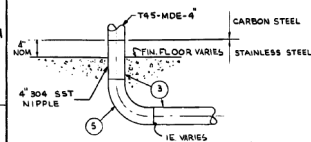
2-7-83

JCP JLF JTL

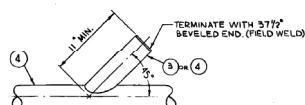
JCP JLF JTL

JCP JLF JTL



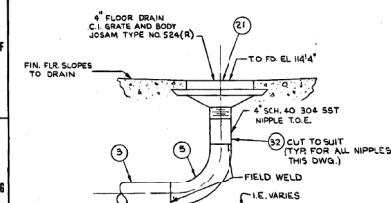


DETAIL 1
NO SCALE
CLOSED DRAINS ONLY
REQ'D - DRW
REQ'D - CRW

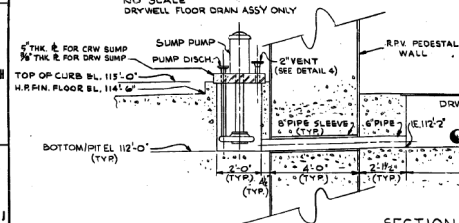


DETAIL 2
NO SCALE
TYPICAL BRANCH STUB-IN

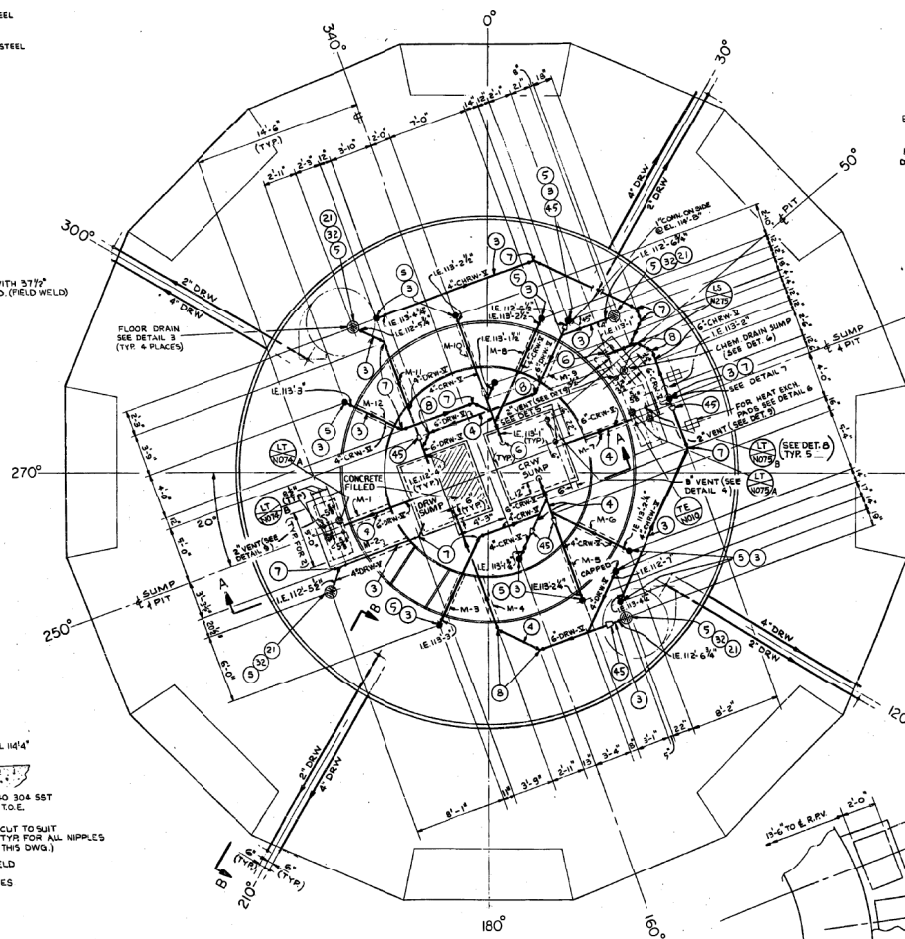
	PEDESTAL WALL		PENETRATIONS	
	INNER (OUTER)	AXIMUM	OFFSET	PIPE DIA
M-1	114" 114"	69"	—	8-1/2"
M-2	114" 114"	210"	—	8-1/2"
M-3	114" 114"	205"	—	11-7/8"
M-4	114" 114"	205"	—	11-7/8"
M-5	114" 114"	115"	—	11-7/8"
M-6	114" 114"	115"	—	11-7/8"
M-7	114" 114"	70"	—	11-7/8"
M-8	114" 114"	26"	—	11-7/8"
M-9	114" 114"	340"	—	11-7/8"
M-10	114" 114"	340"	—	11-7/8"
M-11	114" 114"	295"	—	11-7/8"
M-12	114" 114"	295"	—	11-7/8"



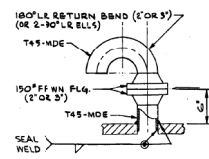
DETAIL 3
NO SCALE
DRYWELL FLOOR DRAIN ASSY ONLY



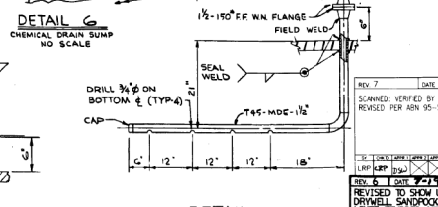
SECTION A-A
SCALE: 1/2\"/>



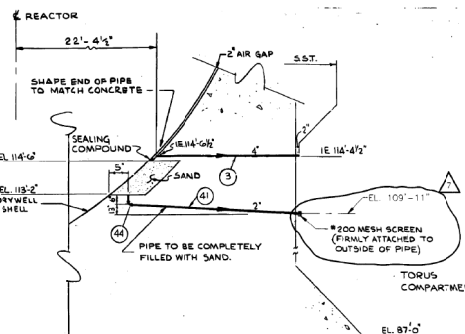
PLAN VIEW
SCALE: 1/4\"/>



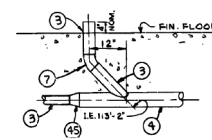
DETAIL 4
NO SCALE
VENT



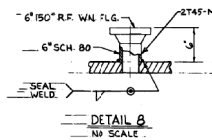
DETAIL 5
NO SCALE
HEAT EXCHANGER RETURN SPARGER



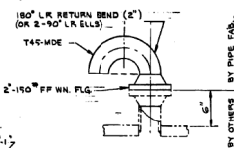
SECTION B-B
SCALE: NONIS
TYPICAL 4 PLACES



DETAIL 7
NO SCALE



DETAIL 8
NO SCALE



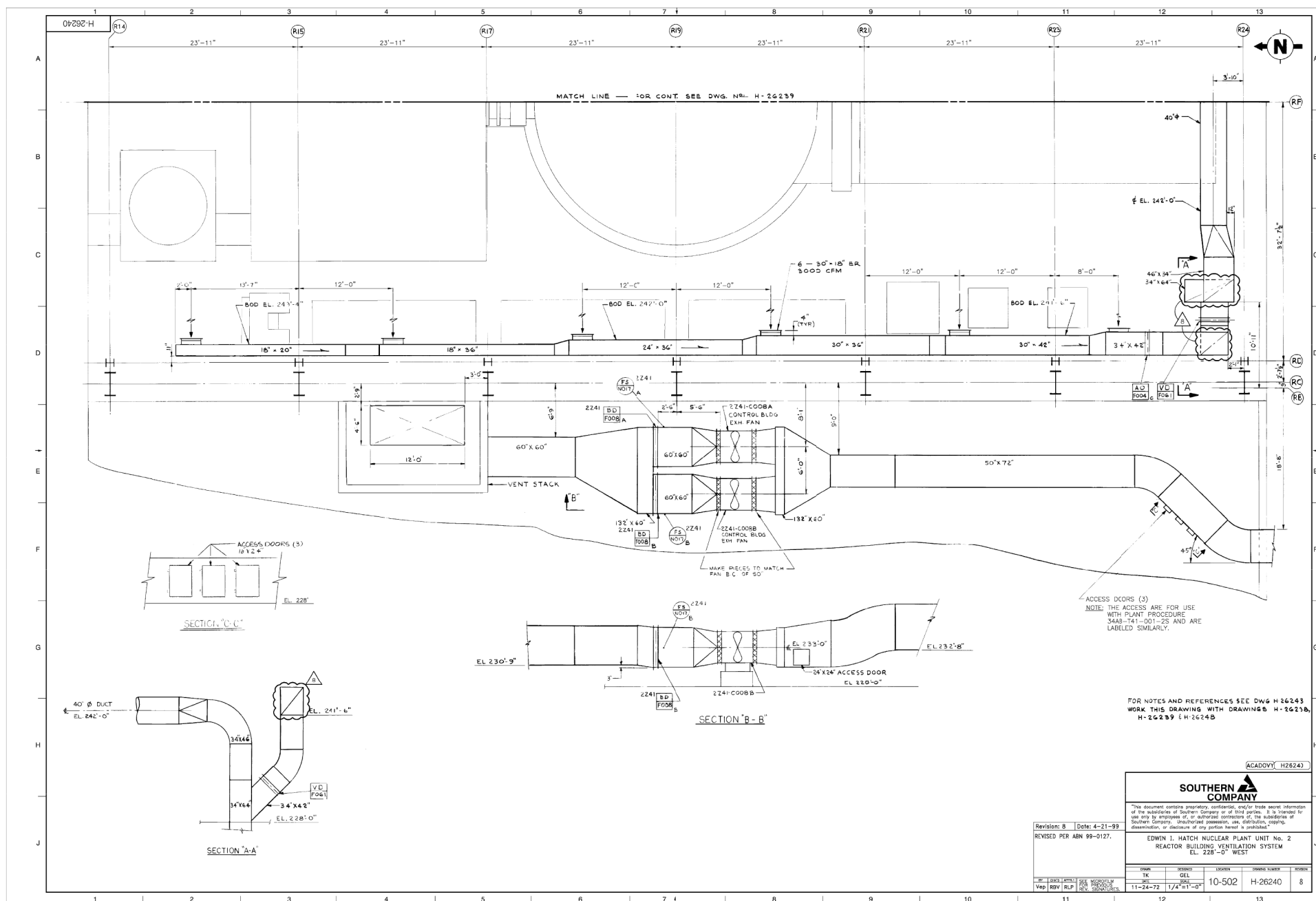
DETAIL 9
NO SCALE

NOTES:
1. ALL DRAINAGE LINES 4\"/>

REFERENCE DWGS:
H-26026-- RADWASTE SYSTEM P.E.D. SHT. 1 OF 2.
H-26027-- RADWASTE SYSTEM P.E.D. SHT. 2 OF 2.
H-26028-- REACTOR & RADWASTE BLDGS EMBEDDED FLOOR & EQUIPMENT DRAINAGE SYSTEM.
H-26029-- EQUIPMENT DRAINAGE IN DRYWELL.
H-26030-- REACTOR BLDG DRYWELL SUMP DISCH. PIPING.
H-26031-- R.P.V. FOUNDATION CONCRETE PEDESTAL BASE HEAT LINES.
H-26032-- R.P.V. FOUNDATION CONCRETE REINFORCING PLANS, SECTIONS & DETAILS.

LEGEND:
D-- DRAIN STUB-UP, SEE DETAIL 1.
O-- FLOOR DRAIN (F.O.), SEE DETAIL 3.
C-- CLEAN RADIOACTIVE WASTE.
DR-- DIRTY RADIOACTIVE WASTE.
CH-- CHEMICAL (ACID) RADIOACTIVE WASTE.
I.E-- INVERT ELEVATION.

BIGHTEL ASSOCIATES JOB 6511	
SOUTHERN SERVICES INC. FOR	
GEORGIA POWER CO., ATLANTA, GA. GENERAL ENGINEERING DEPARTMENT	
EDWIN I. HATCH NUCLEAR PLANT UNIT NO. 2 DRYWELL FLOOR & EQUIPMENT DRAINAGE SYSTEM, EL. 114'-6"	
DATE: 3-7-74 REVISED TO SHOW UPPER DRYWELL SANDPOCKET DRAIN LINES SUBBED OFF JUST OUTSIDE CONCRETE TOP ABN 90-25 (NO DCR)	SCALE: 1/4" = 1'-0" DRAWING NUMBER: 10-502 SHEET NO: 4-26202





NOTES:
1. FOR NOTES AND REFERENCES SEE DWG. H-26260.

WORK THIS DRAWING WITH DWGS. H-26260,
H-26262, H-26263 & H-26264.
MPL. UN. 2P52-1000

BECHTEL
JOB 6511 GAITHERSBURG, MARYLAND
SOUTHERN SERVICES INC.
FOR
GEORGIA POWER CO., ATLANTA, GA.
GENERAL ENGINEERING DEPARTMENT
EDWIN LATCH NUCLEAR PLANT UNIT NO.2
REACTOR BLDG. INSTRUMENT AIR SYSTEM
PLAN & SECTIONS EL.130'-0"

NO.	DESCRIPTION	DATE	BY	CHKD.	APP'D.
1	ISSUED FOR CONSTRUCTION	11-26-64	W. L. LATCH	J. E. LATCH	J. E. LATCH
2	ISSUED FOR CONSTRUCTION	11-26-64	W. L. LATCH	J. E. LATCH	J. E. LATCH
3	ISSUED FOR CONSTRUCTION	11-26-64	W. L. LATCH	J. E. LATCH	J. E. LATCH
4	ISSUED FOR CONSTRUCTION	11-26-64	W. L. LATCH	J. E. LATCH	J. E. LATCH
5	ISSUED FOR CONSTRUCTION	11-26-64	W. L. LATCH	J. E. LATCH	J. E. LATCH
6	ISSUED FOR CONSTRUCTION	11-26-64	W. L. LATCH	J. E. LATCH	J. E. LATCH
7	ISSUED FOR CONSTRUCTION	11-26-64	W. L. LATCH	J. E. LATCH	J. E. LATCH
8	ISSUED FOR CONSTRUCTION	11-26-64	W. L. LATCH	J. E. LATCH	J. E. LATCH
9	ISSUED FOR CONSTRUCTION	11-26-64	W. L. LATCH	J. E. LATCH	J. E. LATCH
10	ISSUED FOR CONSTRUCTION	11-26-64	W. L. LATCH	J. E. LATCH	J. E. LATCH
11	ISSUED FOR CONSTRUCTION	11-26-64	W. L. LATCH	J. E. LATCH	J. E. LATCH
12	ISSUED FOR CONSTRUCTION	11-26-64	W. L. LATCH	J. E. LATCH	J. E. LATCH

2P52

REVISIONS 3 OF 12

SECTION 'A-A'
SCALE: NONE

SECTION 'B-B'
SCALE: NONE

SECTION 'C-C'
SCALE: 1/4" = 1'-0"

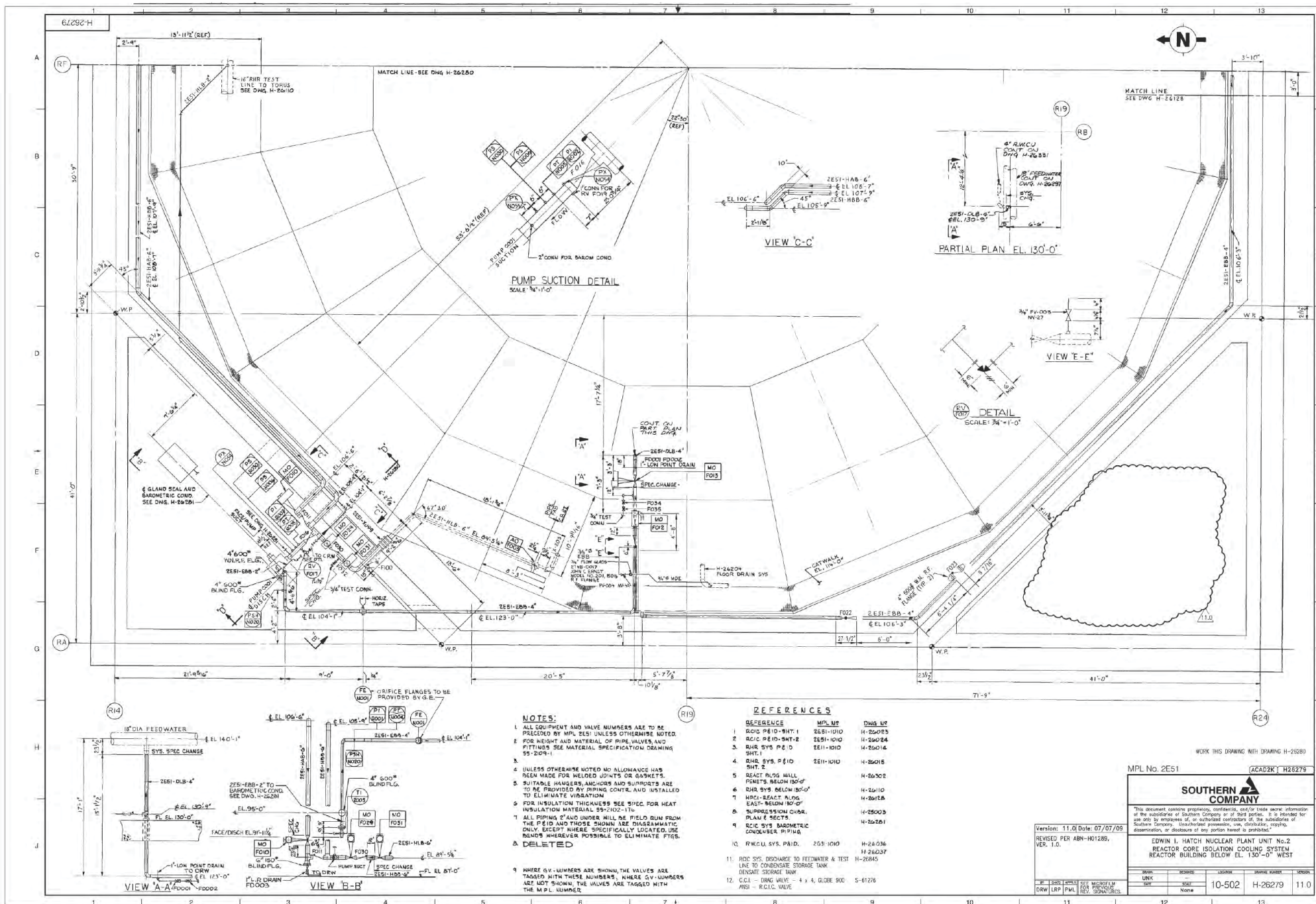
SECTION 'D-D'
SCALE: 1/4" = 1'-0"

SECTION 'E-E'
SCALE: 1/4" = 1'-0"

SECTION 'F-F'
SCALE: 1/4" = 1'-0"

PLAN EL.130'-0"

DETAIL #2
SCALE: 1/4" = 1'-0"



WORK THIS DRAWING WITH DRAWING H-26280

MPL No. 2E51

ACAD2K H26279

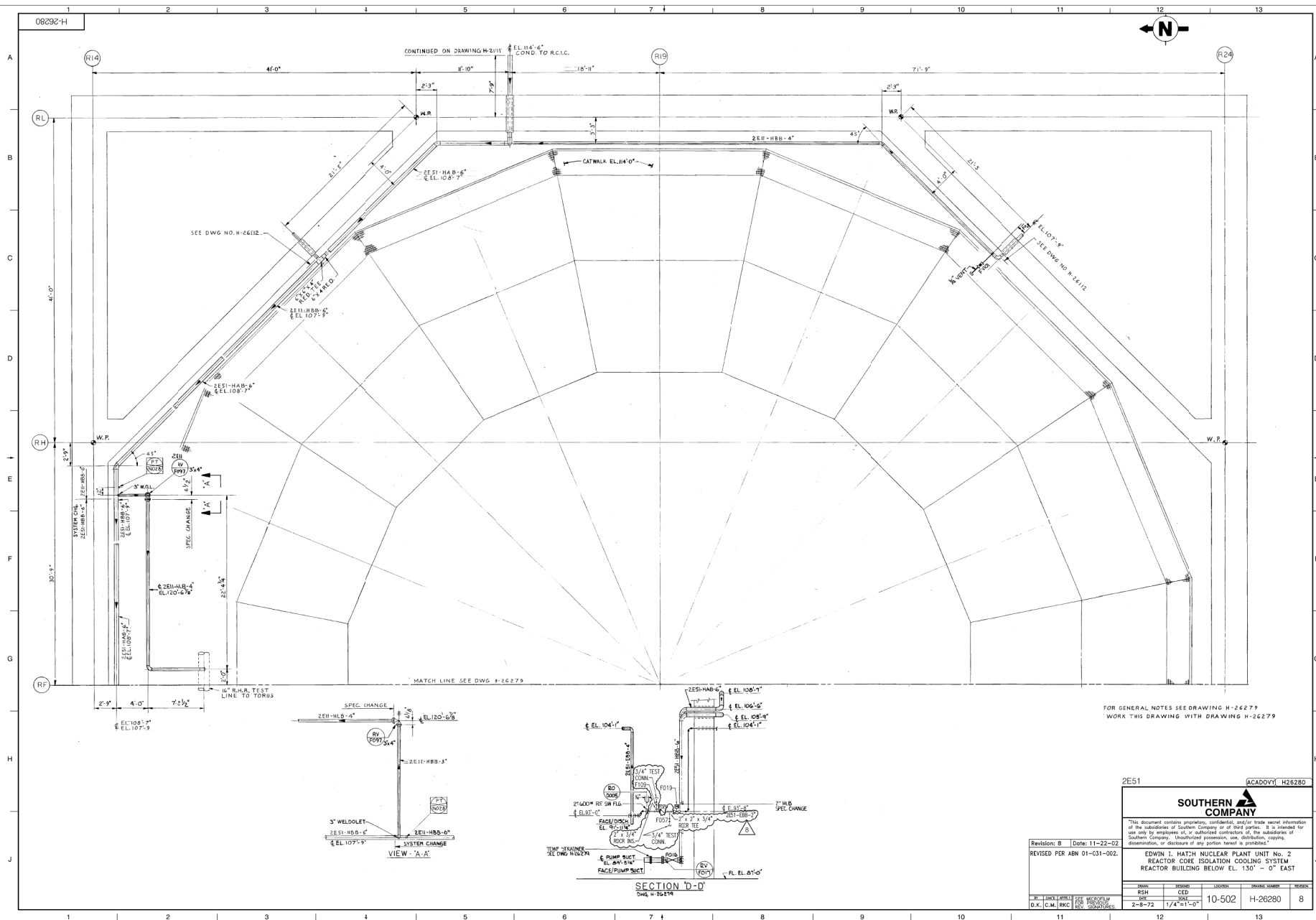
SOUTHERN COMPANY

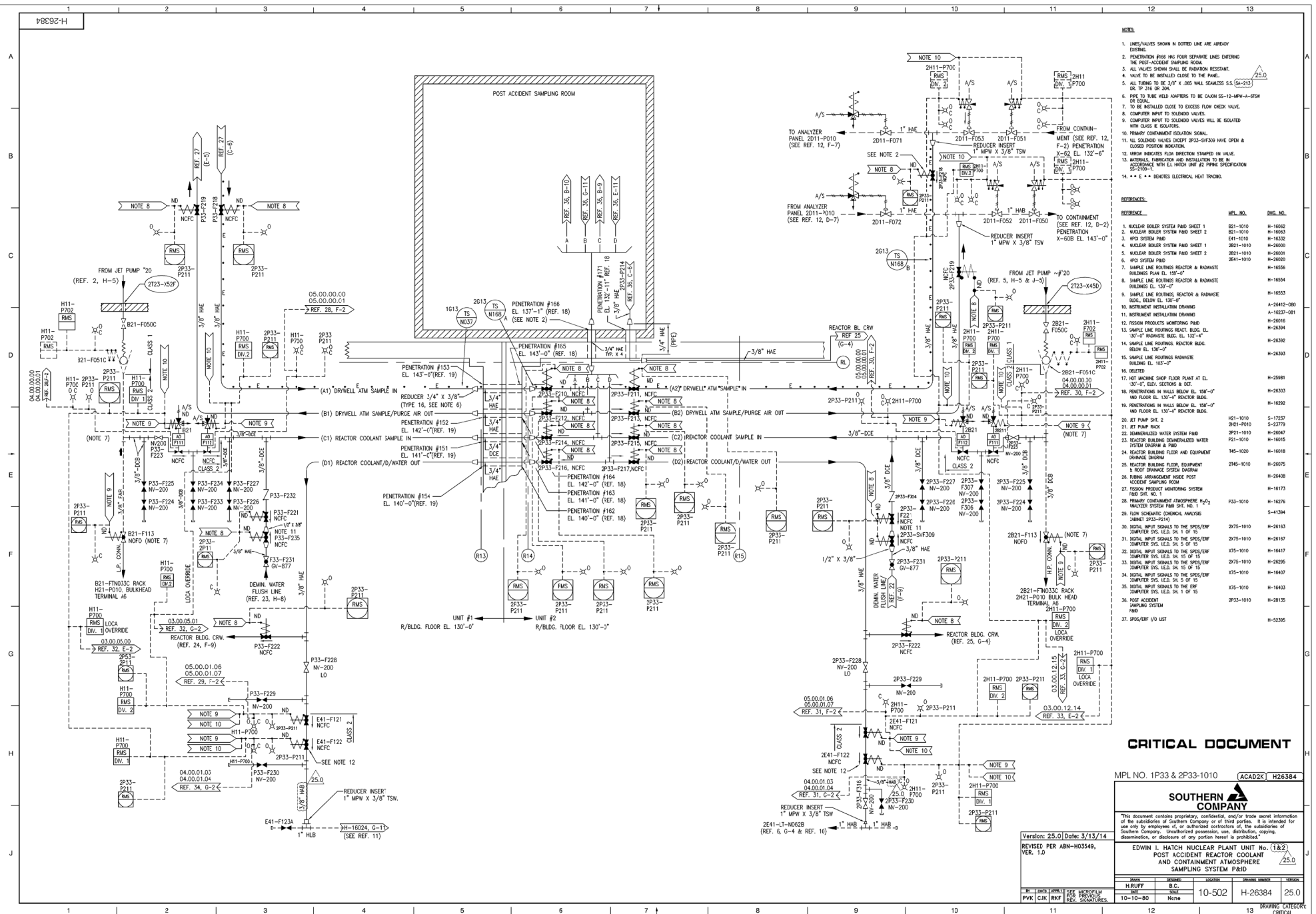
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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
REACTOR CORE ISOLATION COOLING SYSTEM
REACTOR BUILDING BELOW EL. 130'-0" WEST

Version: 11.0 Date: 07/07/09
REVISED PER ABN-H01285, VER. 1.0.

NO.	DATE	BY	CHKD	APPD	REVISION
1	10-502	10-502	10-502	10-502	11.0



**CRITICAL DOCUMENT**

MPL NO. 1P33 & 2P33-1010 ACAD2K H26384

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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 1&2
POST ACCIDENT REACTOR COOLANT
AND CONTAINMENT ATMOSPHERE
SAMPLING SYSTEM P&ID

Version: 25.0	Date: 3/13/14
REVISED PER ABN-H03549, VER. 1.0	

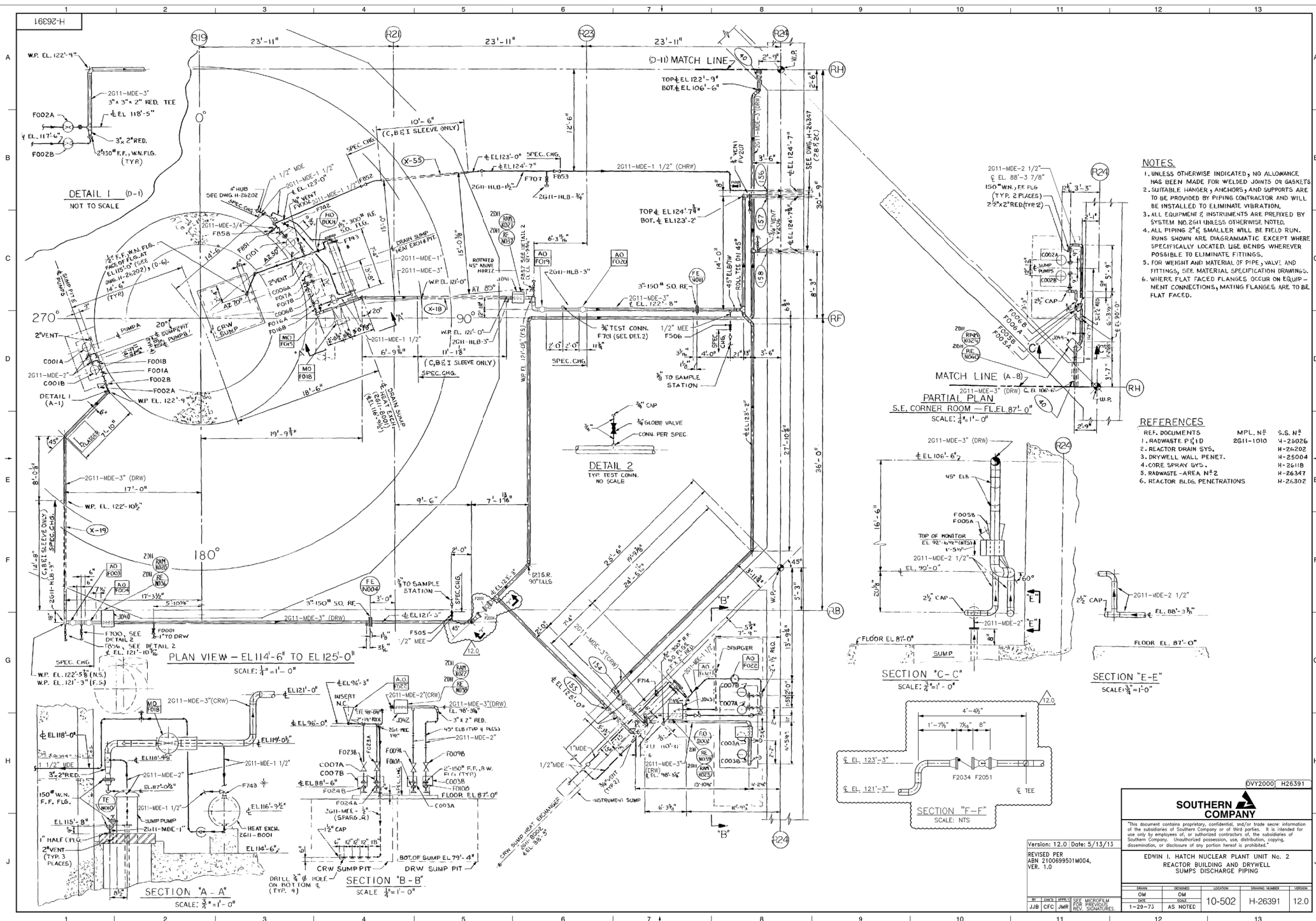
[illegible]

1000

IN	CH'D	APP.1	SEE MICROFILM
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PVK	CJK	RKF	FOR PREVIOUS REV. SIGNATURES
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11



NOTES.

1. UNLESS OTHERWISE INDICATED, NO ALLOWANCE HAS BEEN MADE FOR WELDED JOINTS OR GASKETS
2. SUITABLE HANGER, ANCHORS, AND SUPPORTS ARE TO BE PROVIDED BY PIPING CONTRACTOR AND WILL BE INSTALLED TO ELIMINATE VIBRATION.
3. ALL EQUIPMENT & INSTRUMENTS ARE PRELIMINARY. SEE 201 UNLESS OTHERWISE NOTED.
4. ALL PIPING 2" & SMALLER WILL BE FIELD RUN. RUNS SHOWN ARE DIAGRAMMATIC EXCEPT WHERE SPECIFICALLY LOCATED. USE BENDS WHEREVER POSSIBLE TO ELIMINATE FITTINGS.
5. FOR WEIGHT AND MATERIAL OF PIPE, VALVE, AND FITTINGS, SEE MATERIAL SPECIFICATION DRAWINGS.
6. WHERE FLAT FACED FLANGES OCCUR ON EQUIPMENT CONNECTIONS, MATING FLANGES ARE TO BE FLAT FLANGE.

REFERENCES

- | REF. DOCUMENTS | ML |
|-------------------------------|-----|
| 1. RADWASTE P&ID | 261 |
| 2. REACTOR DRAIN SYS. | |
| 3. DRYWELL WALL PENET. | |
| 4. CORE SPRAY SYS. | |
| 5. RADWASTE - AREA N#2 | |
| 6. REACTOR BLDG. PENETRATIONS | |

QVY2000 H26391

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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
REACTOR BUILDING AND DRYWELL
CLIMATE DISCHARGE RIDING

DESIGN	DESIGNED	LOCATION	DRAWING NUMBER	VERSION
OM	OM	10-502	H-26391	12.
DATE	SCALE			
1-29-73	AS NOTED			

1669Z-H

NOTES

- ALL EQUIPMENT AND INSTRUMENTS ARE PREVIEWED BY SYSTEM NO. 2C32, UNLESS OTHERWISE NOTED.
- REMOVED
- DEVICES K624A, B AND C TRIP CONTACTS TO BE WIRED IN A 2 OUT OF 3 TRIP SO THAT ANY TWO DEVICES MUST TRIP TO INMATE MAIN AND R.F.P. TURBINE STOP VALVE CLOSURE. MAIN TURBINE TRIP LOGIC AND INITIATION IS PERFORMED IN MARK VI EHC.
- REMOVED
- THE POWER SOURCE FOR THE FEEDWATER INSTRUMENTATION AND CONTROL SYSTEM SHALL HAVE AT LEAST THE SAME DEGREE OF RELIABILITY AS THE POWER SOURCES FOR THE REACTOR/FEED/BOOSTER/CONDENSATE PUMPS.
- A/C CUSTOMER SHALL PROVIDE TWO NORMALLY OPEN CONTACTS PER TURBINE DRIVEN REACTOR FEED PUMP TO OPERATE WHEN TURBINE FEED PUMP UNIT HAS TRIPPED OR BEEN SHUT DOWN. THE CONTACTS SHALL PREFERABLY BE DERIVED FROM A FLOW SWITCH MOUNTED ACROSS THE R.F.P. LOW OR R.F.P. DISCHARGE VALVES. IF THESE AUTOMATICALLY RUN CLOSED ON R.F.P. TRIP, G.E. (BWR'S) REQUIRES THESE CONTACTS FOR INITIATION ON REACTOR RECIRCULATION PUMP RUNBACK IN EVENT ONE OUT OF TWO R.F.P. TRIP AT HIGH LOADS.
- REMOVED.
- A/C POWER TO "H" G.C. POWER SUPPLIES MUST BE FROM INDEPENDENT SOURCES.
- THREE SWITCHES TO SELECT ONE ELEMENT, THREE ELEMENTS, PUMP DIFFERENTIAL PRESS. CONTROL, CONTROLLER R600 NOT USED IN DIFFERENTIAL PRESSURE CONTROL. CONTROL FROM REF. 12.
- DELETED

REFERENCES

- | TITLE | MARK NO. | DATE |
|--|-------------------|---------|
| 1. FEEDWATER CONTROL SYS. | 2C32-400 | |
| 2. NUCLEAR BOILER | (SHT.1) 2A21-1000 | H-16000 |
| 3. REACTOR RECIRC. | (SHT.1) 2A31-1010 | H-16003 |
| 4. CONTROL ROD DRIVE | 2C11-1030 | |
| 5. FEEDWATER SYS. P.I.D. | BY OTHERS | H-21038 |
| 6. MAIN TURBINE GENERATOR TRIP LOGIC ELEM. | BY OTHERS | |
| 7. RFP TURBINE SPEED CONTROLLER MECH. DIAG. | BY OTHERS | |
| 8. RFP TURBINE SPEED CONTROLLER WIRING DIAG. | BY OTHERS | |
| 9. INSTRUMENT SYMBOLS | 2A41-1020 | |
| 10. PIPING / INSTRUMENT SYMBOLS | 2A41-1010 | |
| 11. AUX. TURBINE FEED PUMP TRIP LOGIC ELEM. | BY OTHERS | |
| 12. AUX. SYS. BOP I.E.D. | 12010-131 | |
| 13. ANNUNCIATOR SIGNALS TO TSC I.E.D. | 2A15-1010 | H-16159 |
| 14. DELETED | | |
| 15. DELETED | | |
| 16. GE ELEMENTARY DIAGRAM - MARK VI I/O | S-63834 | |
| 17. GE WIRING DOCUMENTATION - MARK VI I/O | | |
- RFP TRIP: S-64107 & S-64108, RFP TRIP: S-64108 & S-64110

THIS DRAWING WAS DEVELOPED FROM G.E. DRAWING NO. 741966, SHEET 1, REV. 4 951
ACCESSION DRAWING NO. S-25338

CRITICAL DOCUMENT

MPL NO 2C32-1010

0VY2007 H26991

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EDWIN I. HATCH NUCLEAR PLANT UNIT No.2
FEEDWATER CONTROL SYSTEM
TURBINE DRIVEN FEEDPUMPS I.E.D.

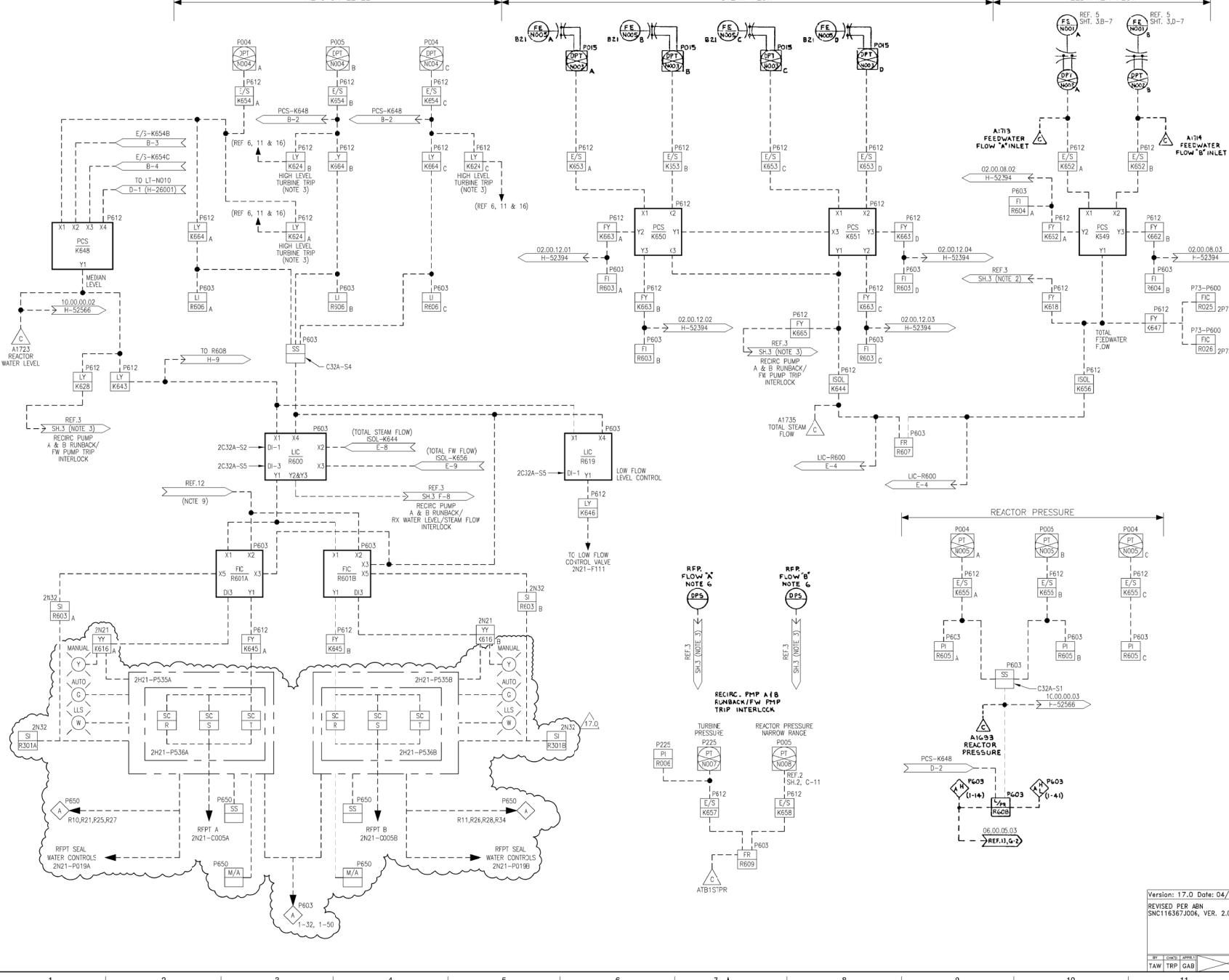
Version: 17.0 Date: 04/03/15
REVISED PER ASN
SNC116367.0004, VER. 2.0

DATE	REVISION	LOCATION	DESCRIPTION	BY
10/20/82	No Scale	10-502	H-26991	17.0

REACTOR LEVEL

STEAM FLOW

FEEDWATER FLOW



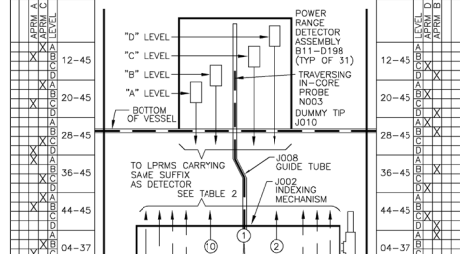
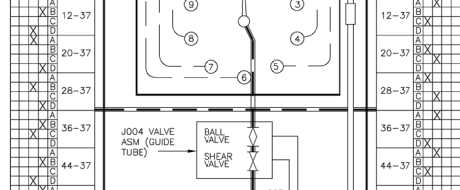
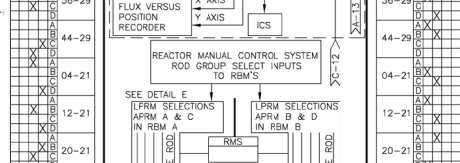
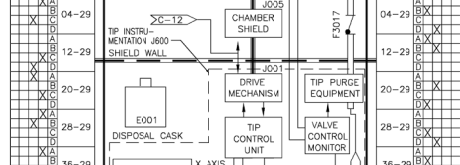


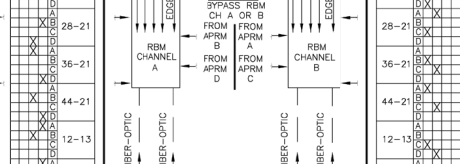
TABLE 2 ASSIGNMENTS OF TIP INDEXING MECHANISM PORTS TO POWER RANGE DETECTOR ASMS



APRM CHANNEL D	RBM CHANNEL A	APRM CHANNEL B	APRM CHANNEL C	APRM CHANNEL A
	RBM CHANNEL B			

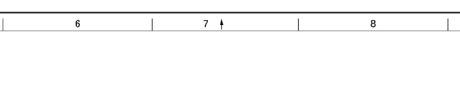
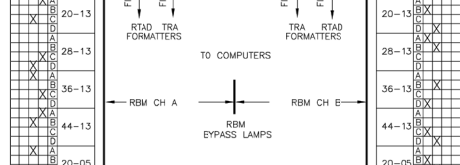


The diagram shows a central block labeled "LPRMS (DETAL C)". To the left, there is an input signal "SIG" and a feedback signal "SS" (labeled "SS" in the diagram). To the right, there is an output signal "SIG" and a feedback signal "BYPASS" (labeled "BYPASS" in the diagram). Arrows indicate the flow of signals: "SIG" enters from the left, "SS" enters from the right, "SIG" exits to the right, and "BYPASS" enters from the right.



SEE TABLE 1B FOR LPRM TO APRM ASSIGNMENTS

	BYPASS	SIG	BYPASS	SIG		BYPASS	SIG



0 TO 1MA
TO BFCIR

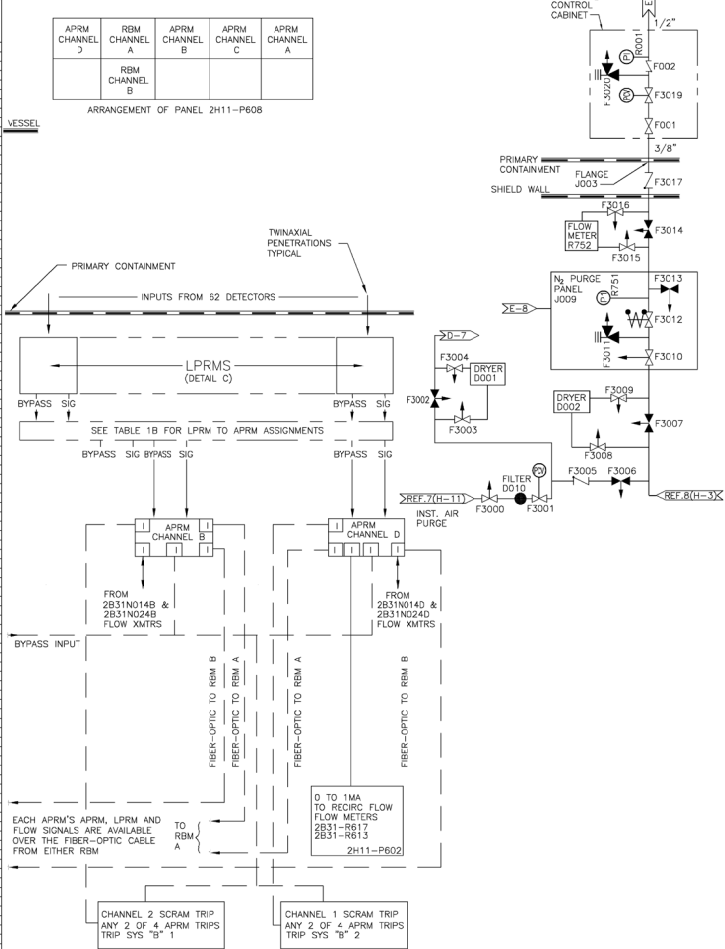
FLOW

FIBER-OPTIC

FIBER-OPTIC

FIBER-OPTIC

FIBER-OPTIC



NOTES:
1. FOR NOTES AND REFERENCES SEE DRAWING H-26992.

CRITICAL DOCUMENT

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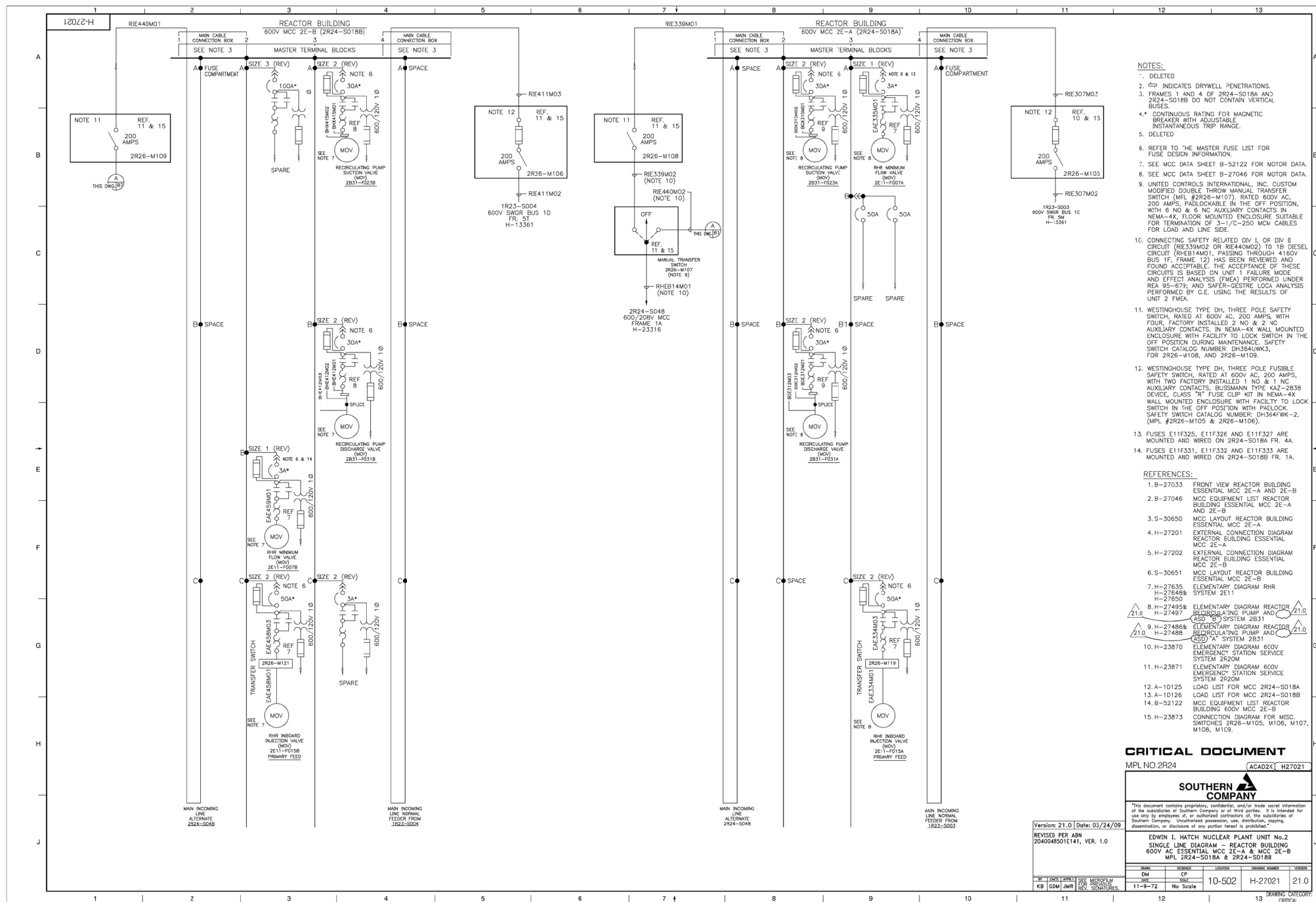
EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
NEUTRON MONITORING
SYSTEM LOG SHEET 2 OF 2

Version: 7.0	Date: 03/09/15
REVISED PER ABN SNC345312J035, VER. 1.0	

				DRAWN		DESIGNED		LOCATION		DRAWING NUMBER		VERSION	
				D.KINBROUGH		C.C.S.		10-502		H-26993		7.0	
BY DATE APPR.				DATE		SCALE							
JJF DAB JTL				None		None							

DRAWING CATEGORY

DRAWING CATEGORY
CRITICAL



NOTES:

2. DELETED
3. * INDICATES DRYWELL PENETRATIONS.
FRAMES 1 AND 4 OF 2R24A-S0118A AND
F02-S01018A DO NOT CONTAIN VERTICAL
BURNES.
4. CONTINUOUS RATING FOR EQUIPMENT
BREAKER WITH ADJUSTABLE
INSTANTANEOUS TRIP RANGE.
5. DELETED
6. REFER TO THE MASTER FUSE LIST FOR
FUSE DESIGNATION.
7. SEE MCC DATA SHEET B-52122 FOR MOTOR DATA.
8. SEE MCC DATA SHEET B-52106 FOR MOTOR DATA.
9. UNITED CONTROLS INTERNATIONAL, INC.
COMPACTED DOUBLE THROW MANUAL TRANSFER
SWITCH (MPL #2R26M01) RATED 600V AC,
200 AMPS, PADLOCKABLE IN THE OFF POSITION.
MOUNTED ON THE OFF POSITION OF THE
MOTOR. NO 6. FUSE MOUNTED ENCLOSURE
NEMA-4X, FLOOR MOUNTED ENCLOSURE
SUITABLE FOR TERMINATION OF 3-1/2" (3-250 MCC
LOADS AND 1/2" (1-250 MCC) LOADS
10. CONNECTING SAFETY RELATED DIV I, OR DIV II
CIRCUIT (RE339M02 OR RE440M02) TO 1B DIESEL
GENERATOR. THE SAFETY SWITCH IS RATED
BUS 1F, FRAME 12. HAS BEEN REVIEWED AND
FOUND ACCEPTABLE. THE ACCEPTANCE OF THESE
RESULTS IS BASED ON THE RESULTS OF THE
ANALYSIS AND EFFECT ANALYSIS (FMEA) PERFORMED UNDER
REQUIREMENTS OF SAFETY-GEISTRE LOG ANALYSIS
PERFORMED BY G.E. USING THE RESULTS OF
UNIT 2 FMEA.
11. WESTINGHOUSE TYPE DH, THREE POLE SAFETY
SWITCH, RATED AT 600V AC, 200 AMPS, WITH
FOUR, FACTORY INSTALLED 20 AND 20 NC
CONTACTS. SAFETY SWITCH IS MOUNTED
ENCLOSURE WITH FACILITY TO LOCK SWITCH IN
THE OFF POSITION DURING MAINTENANCE. SAFETY
SWITCH CATALOG NUMBER DH344K-70,
FOR 2R26-M109, AND 2R26-M109.
12. WESTINGHOUSE TYPE DH, THREE POLE FUSIBLE
SAFETY SWITCH, RATED AT 600V AC, 200 AMPS,
WITH FOUR FACTORY INSTALLED 20 AND 20 NC
AUXILIARY CONTACTS. BUSSMANN TYPE KAZ-2638
FUSE MOUNTED ON THE OFF POSITION OF THE
WALL MOUNTED ENCLOSURE WITH FACILITY TO
LOCK SWITCH IN THE OFF POSITION WITH PADLOCK.
SAFETY SWITCH CATALOG NUMBER DH344K-70,
(MPL #2R26-M105 & 2R26-M106).
13. FUSES I11F325, I11F326 AND I11F327 ARE
MOUNTED AND WIRED ON 2R24-S0118A FR. 4A.
14. FUSES I11F331, I11F332 AND I11F333 ARE
MOUNTED AND WIRED ON 2R24-S0118A FR. 4A.

REFERENCES:

- | | | |
|------------|---|------|
| 1.B-27033 | FRONT VIEW RECTOR BUILDING
ESSENTIAL MCC 2E-A AND 2E-B | |
| 2.B-27046 | MCC ESSENTIAL LINE REACTOR
BUILDING ESSENTIAL MCC 2E-A
AND 2E-B | |
| 3.S-30655 | MCC LAYOUT RECTOR BUILDING
ESSENTIAL MCC 2E-A | |
| 4.H-27201 | EXTERNAL CONNECTION DIAGRAM
MCC 2E BUILDING ESSENTIAL
MCC 2E-A | |
| 5.H-27202 | EXTERNAL CONNECTION DIAGRAM
RECTOR BUILDING ESSENTIAL
MCC 2E-B | |
| 6.S-30651 | REACTOR LAYOUT RECTOR BUILDING
ESSENTIAL MCC 2E-B | |
| 7.H-27635 | ELEMENTARY DIAGRAM RHR | |
| 8.H-27648 | ELC SYSTEM 2E1 | |
| 9.H-27650 | ELEMENTARY DIAGRAM | |
| 9.H-27495 | ELEMENTARY DIAGRAM REACTOR
REDUCING PUMP AND
ASD "B" SYSTEM 2B31 | 21.0 |
| 10.H-27488 | ELEMENTARY DIAGRAM REACTOR
REDUCING PUMP AND
ASD "A" SYSTEM 2143 | 21.0 |
| 10.H-27488 | ELEMENTARY DIAGRAM REACTOR
REDUCING PUMP AND
ASD "A" SYSTEM 2143 | 21.0 |
| 10.H-23870 | EMERGENCY SERVICE STATION
SYSTEM 2620A | |
| 11.H-23871 | ELEMENTARY DIAGRAM ECV
EMERGENCY SERVICE STATION
SYSTEM 2620B | |
| 14.A-10125 | LOAD LIST FOR MCC 2R24-S018A | |
| 14.A-10126 | LOAD LIST FOR MCC 2R24-S018B | |
| 14.B-52122 | MCC EQUIPMENT LIST REACTOR
BUILDING MCC 2E-A | |
| 15.H-23873 | CONNECTION DIAGRAM FOR MISC.
SWITCHES 262-M105, M106, M107,
M108, M109. | |

CRITICAL DOCUMENT

MPL NO.2R24 ACAD2K H27021

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EDWIN I. HATCH NUCLEAR PLANT UNIT No.2
SINGLE LINE DIAGRAM - REACTOR BUILDING
600V AC ESSENTIAL MCC 2E-A & MCC 2E-B
MPL 2R24-S018A & 2R24-S018B

DATE	DESIGNED	LOCATION	DRAWING NUMBER	VERSION
DM	CP	10-502	H-27021	21.0
DATE	SCALE			

Version: 21.0 | Date: 03/24/09
REVISED PER ABN
2040048501E141, VER. 1.0

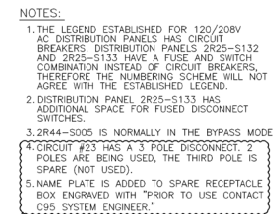
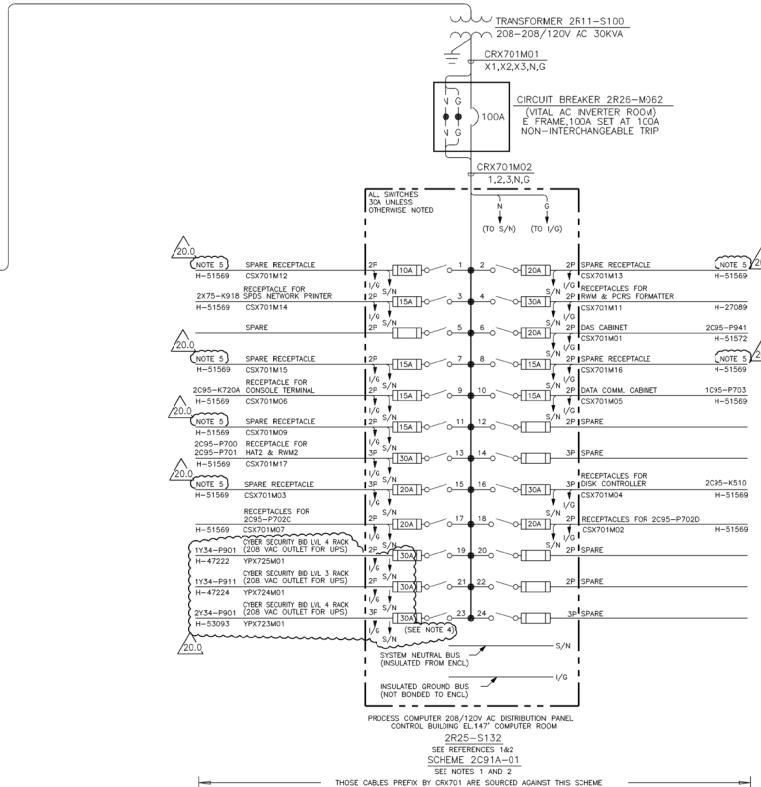
Figure 1

[illegible]

KB	GDM	JMR	FOR REV	PREVIOUS SIGNATURE
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REV. JOURNAL

11



- | REFERENCES: | |
|--------------|---|
| 1. H-27089 | WIRING DIAGRAM ERF & PROCESS MINI-COMPUTER (2R25-S132 & 2R25-S133) |
| 2. S-42501-4 | GENERAL SPECIFICATIONS FUSIBLE SWITCH PANELBOARD (2R25-S132) |
| 3. H-24559 | ELEMENTARY DIAGRAM ERF SYSTEM 2X75 SHEET 1 |
| 4. H-24560 | ELEMENTARY DIAGRAM ERF SYSTEM 2X75 SHEET 2 |
| 5. A-20252 | LOAD LIST FOR DISTRIBUTION PANEL 2R25-S132 |
| 6. A-20253 | LOAD LIST FOR DISTRIBUTION PANEL 2R25-S133 |
| 7. S-42883 | INSTRUCTION MANUAL ELGAR MODEL 7542-1-105 |
| 8. H-47222 | CYBER SECURITY BID RACKS-SYSTEM 1Y34-WIRING DIAGRAM-PANEL 1Y34 (SHEET 1 OF 2) |
| 9. H-47224 | CYBER SECURITY BID RACKS-SYSTEM 1Y34-WIRING DIAGRAM-PANEL 1Y34 (SHEET 1 OF 2) |
| 10. H-53093 | CYBER SECURITY BID RACKS-SYSTEM 1Y34-WIRING DIAGRAM-PANEL 1Y34 (SHEET 1 OF 2) |

MPL NO. 2R25 4CAD2K H27057

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EDWIN I. HATCH NUCLEAR PLANT UNIT No.2
EMERGENCY RESPONSE FACILITY AND PROCESS

TABLE	DESIGNED	LOCATION	TABLE NUMBER	DESCRIPTION
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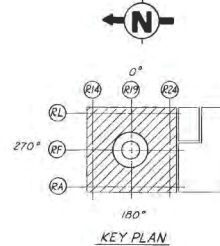
Version: 20.0 | Date: 12-14-12

REVISED PER ABN
SNC365567E026, VER. 1.0

[illegible]

REV	CHK'D	APPR. 1	SEE MICROFILM FOR PREVIOUS REV. SIGNATURES.	CAD	RM	10-502	H-27057	20.0
CFC	JWM	JMR		DATE	SCALE			
				4-30-82	None			

3 2 1 DRAWING CATEGORY CRITICAL



NOTES:

FOR NOTES AND REFERENCES SEE DWG H-27380/
H-27383 & H-27389

REVISION NOTES:

1. ADDED: 2MR-9459-2A, 2MR9457-2A, 2MR2G15-1I
2H21-P3000R, 2H21-P3000P.
REVERSE LOCATION OF STA. 209 & STA. 209E,

REV 13	DATE 5-24-88
ADDED 2H21-P331, 2JE1150, 2JE1277, 2MRI507, 2MRI512 & 2MR2799 PER ABN 82-153, REV. 0, 1, 2 & SUP. 3 (DCR 78-403, REV. 1)	

BY	CKD	API	AP2	AP3	AP4
JRD	KDH	CGE	0911	X	

10	NO	11	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
10	NO	11	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

MPL NO. 2R51

BECHTEL

JOB 6511 **GAITHERSBURG, MARYLAND**

SOUTHERN SERVICES INC.
FOR

GEORGIA POWER CO., ATLANTA, GA.
GENERAL ENGINEERING DEPARTMENT

EDWIN I. HATCH NUCLEAR PLANT UNIT NO. 1
COMMUNICATIONS SECTION

REACTOR BLDG. EL. 130'-0"		
OSCR	DR	CHK. <i>RV</i>

1/8" SCALE	DATE
1-7-74	
DRAWING NUMBER	
LOCATION	SHEET
10-502	H-273

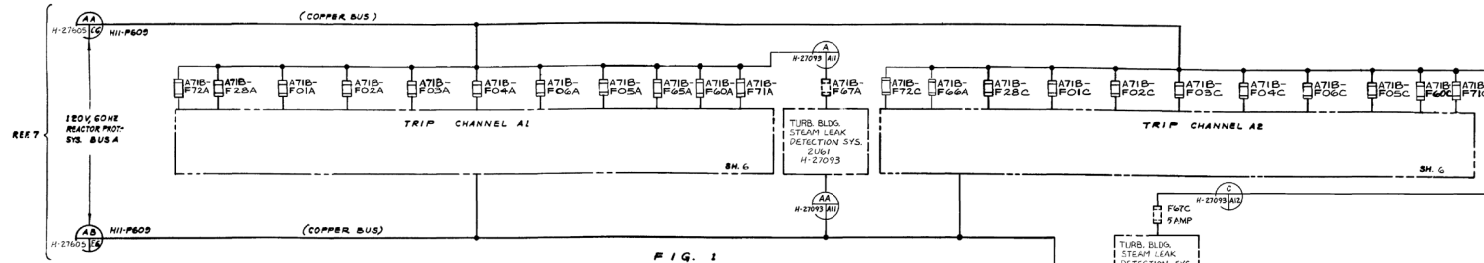


FIG. 1

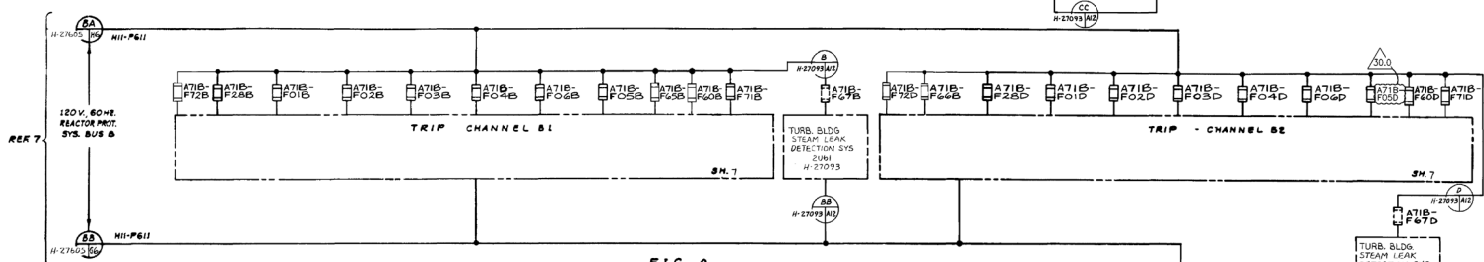


FIG. 2

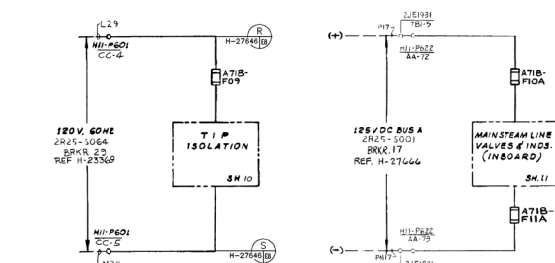


FIG. 3
(PART OF SCHEME 14)

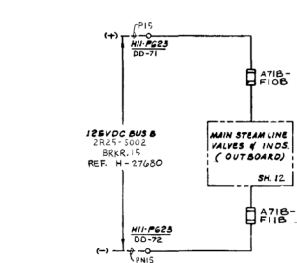


FIG. 4 (DIV. I)
SCHEME 29

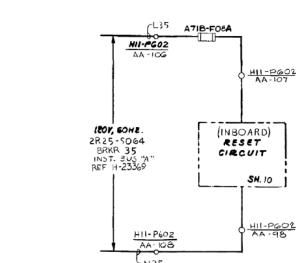


FIG. 5 (DIV. II)
SCHEME 30

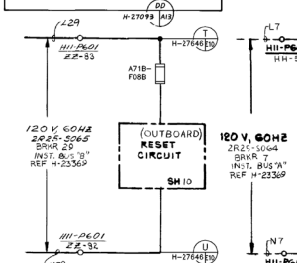


FIG. 6
(PART OF SCHEME 13)

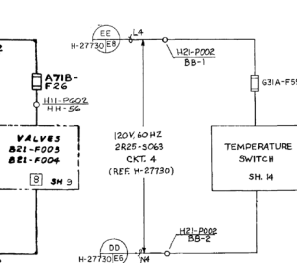


FIG. 7
(PART OF SCHEME 12)

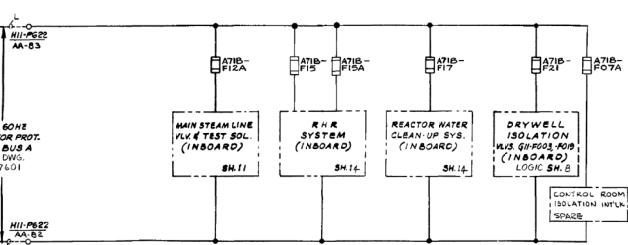


FIG. 8
(PART OF SCHEME 15)

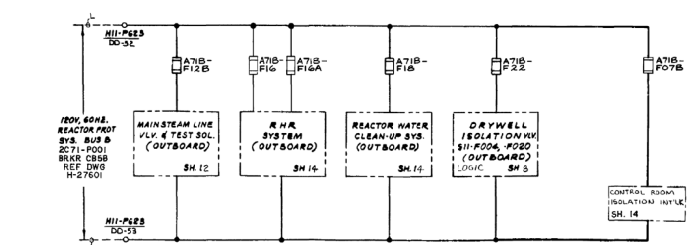


FIG. 9
(PART OF SCHEME 16)

POWER DISTRIBUTION DIAGRAM

FOR NOTES AND REFERENCES SEE H-27450.

CRITICAL DOCUMENT

MPL NO. 2A71 ACADOVY H27454

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EDWIN I. HATCH NUCLEAR PLANT UNIT No.2
NUCLEAR STEAM SUPPLY SHUTOFF SYS. 2A71
ELEMENTARY DIAGRAM SH. 5 OF 20

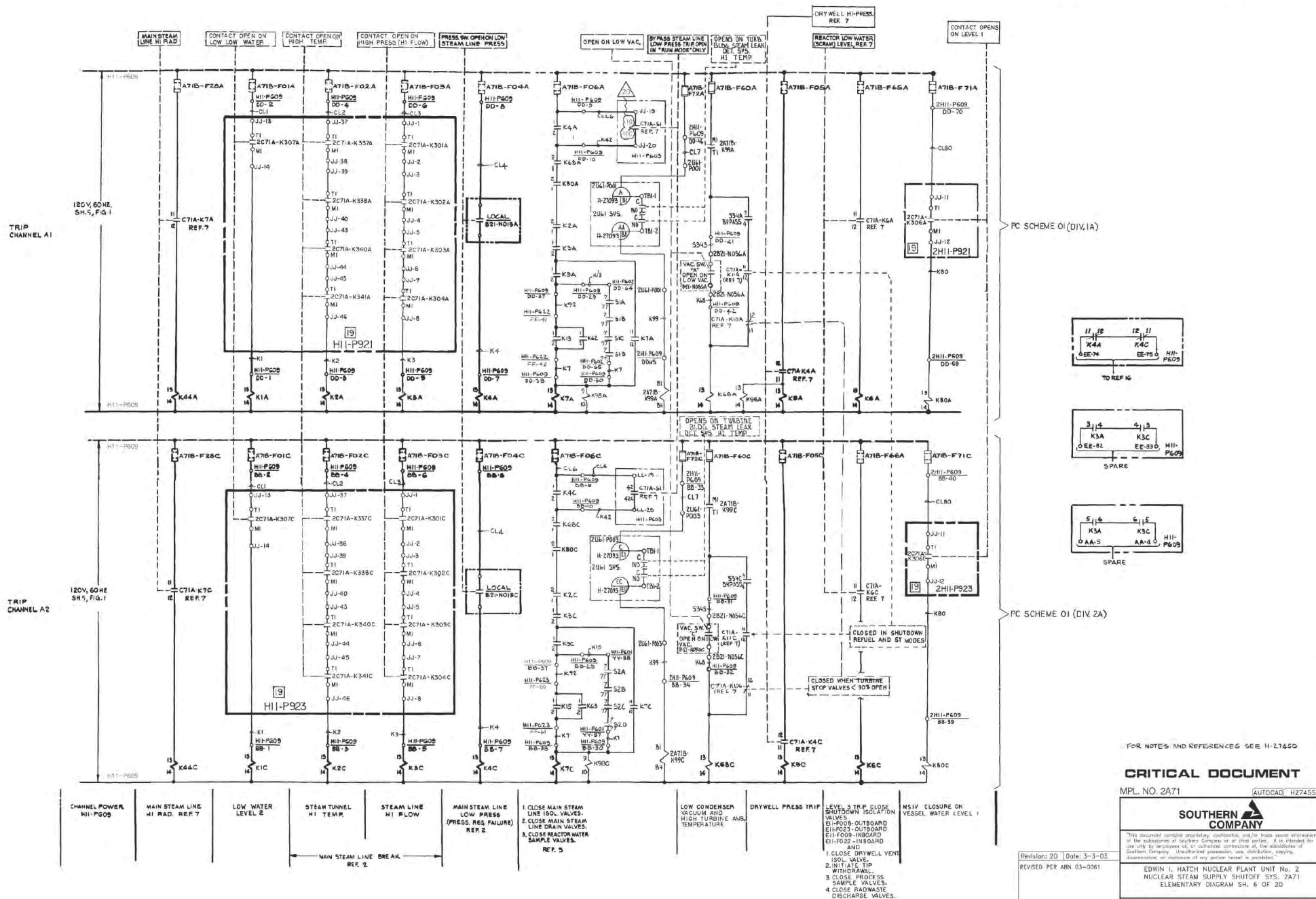
REV	DATE	BY	CHKD	APPD	DESCRIPTION
1	9-21-73	JEM	RKF		SEE MICROFILM FOR REVISIONS

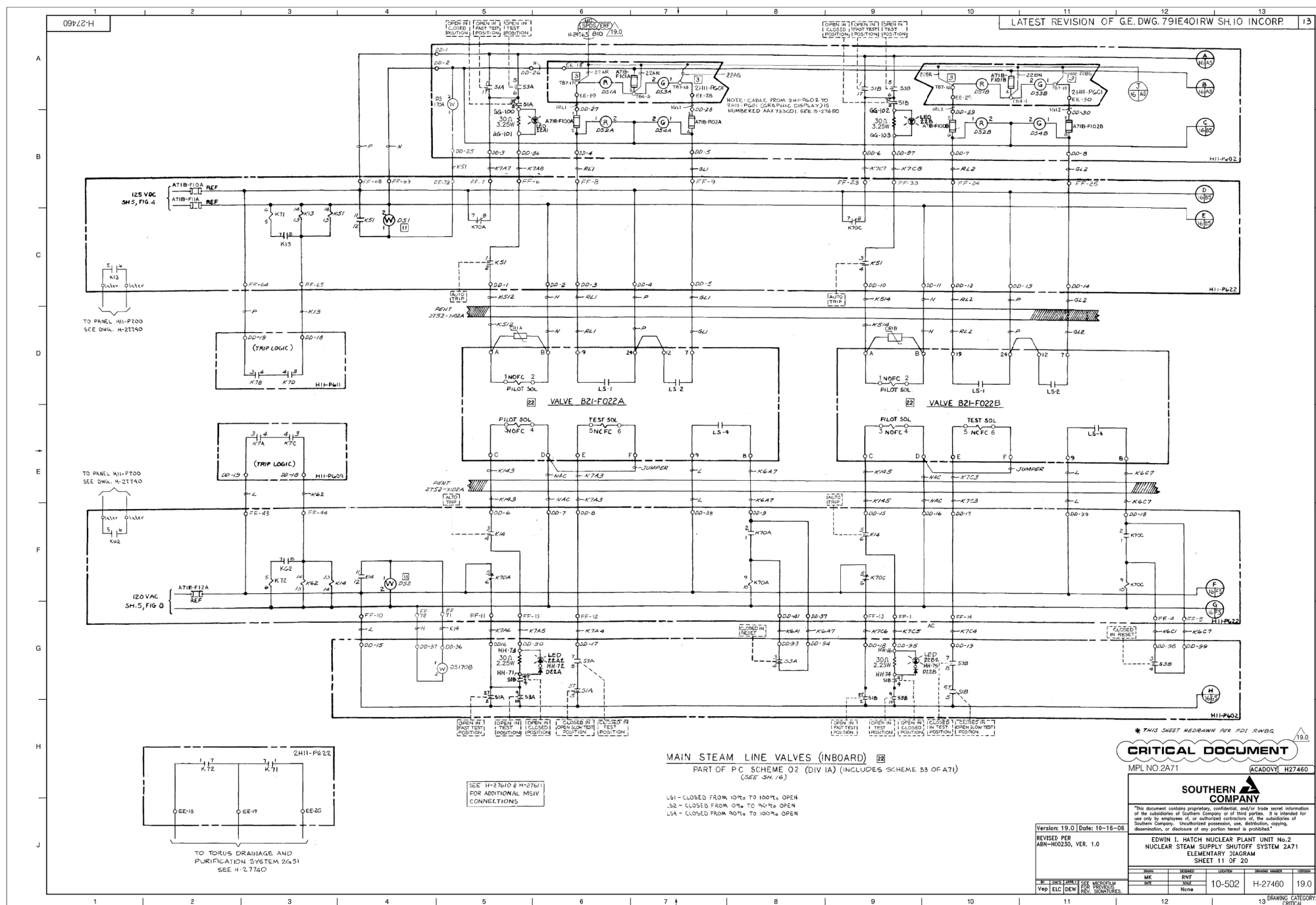
REV	DATE	BY	CHKD	APPD	DESCRIPTION
1	9-21-73	JEM	RKF		SEE MICROFILM FOR REVISIONS

Version: 30.0 Date: 1/24/13
REVISED PER ABN-H03-27, VER. 1.3

10-502 H-27454 30.0

ENC. CATEGORY: CRITICAL






**CRITICAL DOCUMENT**

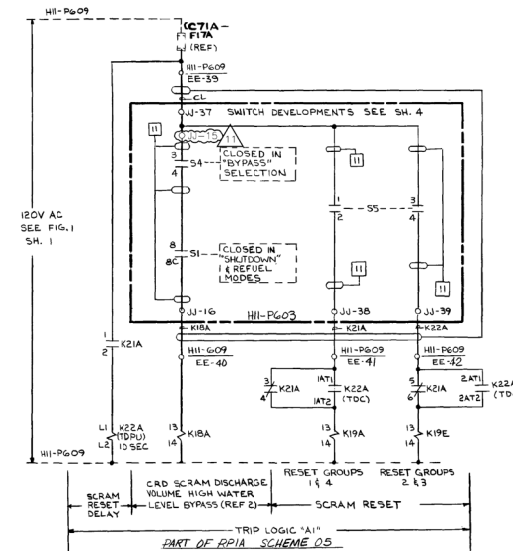
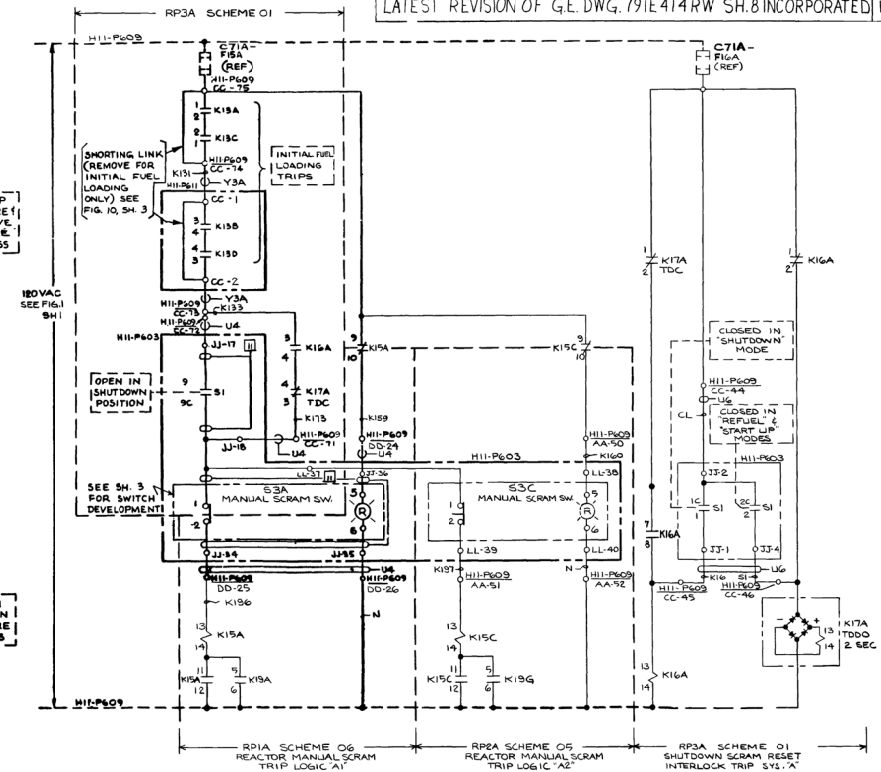
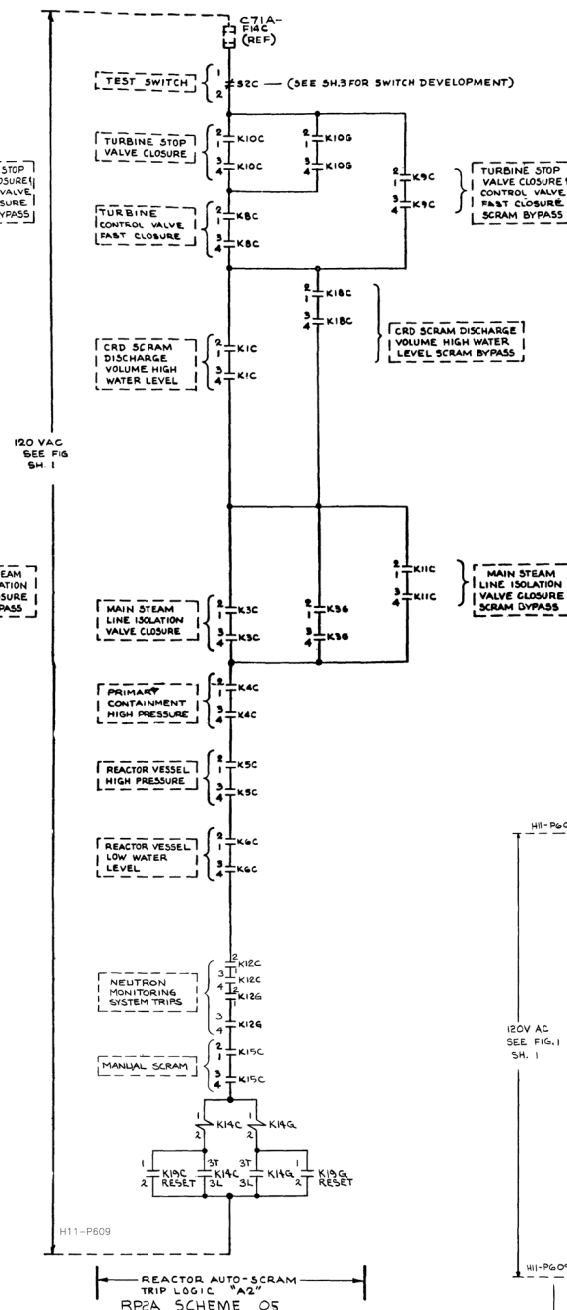
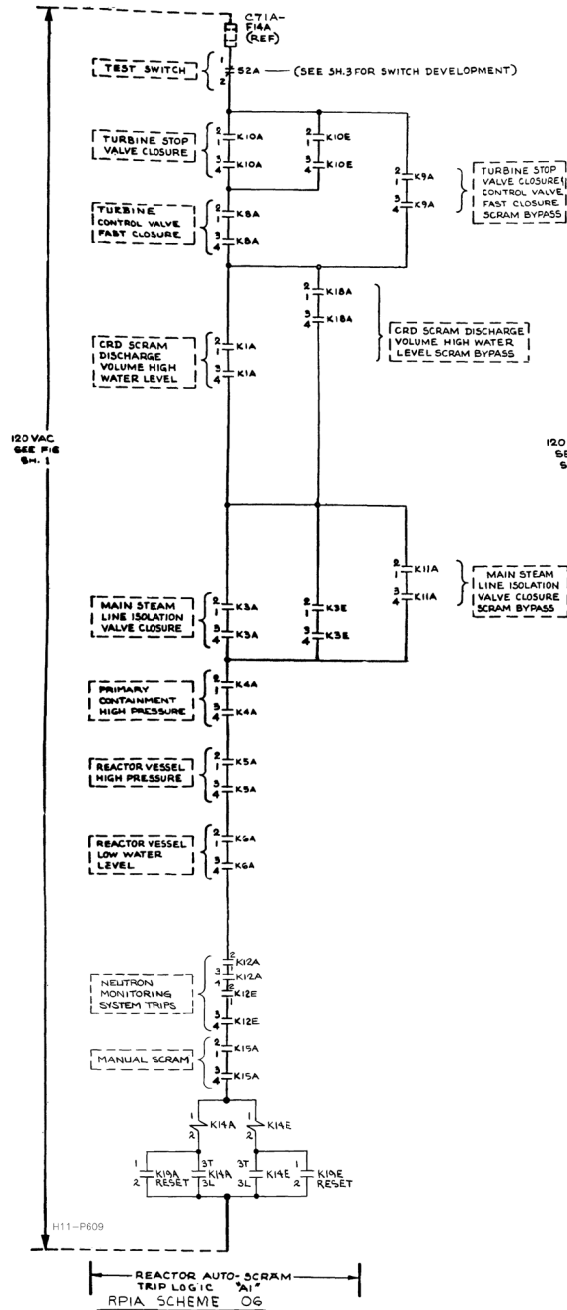
ACADOVY H27461

L51 - CLOSED FROM 10% TO 100% OPEN
L52 - CLOSED FROM 0% TO 90% OPEN
L54 - CLOSED FROM 90% TO 100% OPEN

06	<div data-bbox="1829 1299 1925 1308" style="text-align: center;">  <p>SOUTHERN COMPANY</p> </div> <div data-bbox="1764 1308 1990 1317" style="border: 1px solid black; padding: 5px;"> <p><i>"This document contains proprietary, confidential, and/or trade secret information of the subsidiaries of Southern Company or of third parties. It is intended for use only by employees of, or authorized contractors of, the subsidiaries of Southern Company. Unauthorized possession, use, distribution, copying, dissemination, or disclosure of any portion hereof is prohibited."</i></p> </div> <div data-bbox="1764 1317 1990 1328" style="text-align: center; padding: 10px;"> <p>EDWIN I. HATCH NUCLEAR PLANT Unit No.2 NUCLEAR STEAM SUPPLY SHUT OFF SYS. 2A71 ELEMENTARY DIAGRAM SHT. 12 OF 20</p> </div>
----	--

DWG.

CATEGOR



FOR NOTES AND REFERENCE SEE DRAWING H-27612

CRITICAL DOCUMENT

AUTOCAD H27612



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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
REACTOR PROTECTION SYSTEM 2C71
ELEMENTARY DIAGRAM S-1, 8 OF 16

Revision: 11 Date: 3-5-03
REVISED PER ABN 03-0061

REV	BY	CHKD	APPD	DATE	REASON	LOCATION	REVISION
1	J.C.	G.H.		9-24-73	NONE	10-502	H-27612 11



CRITICAL DOCUMENT

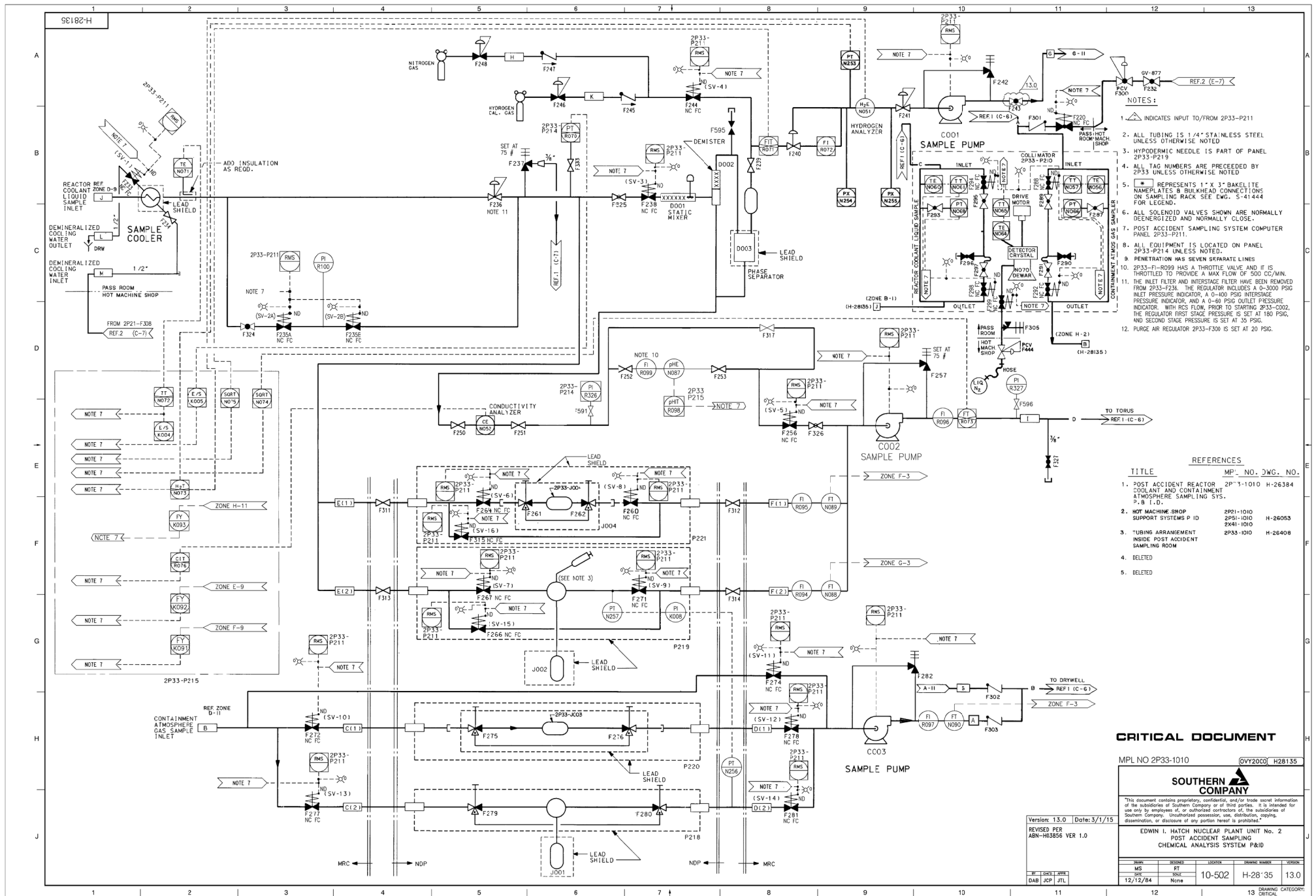


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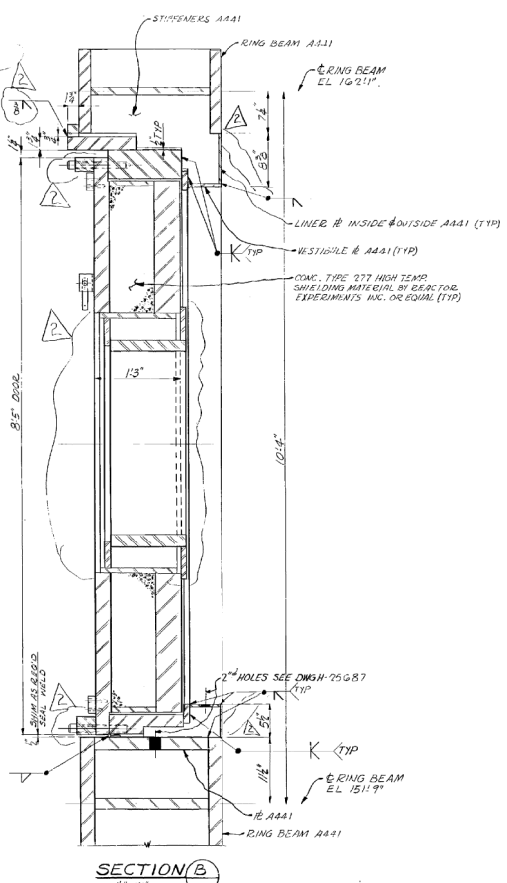
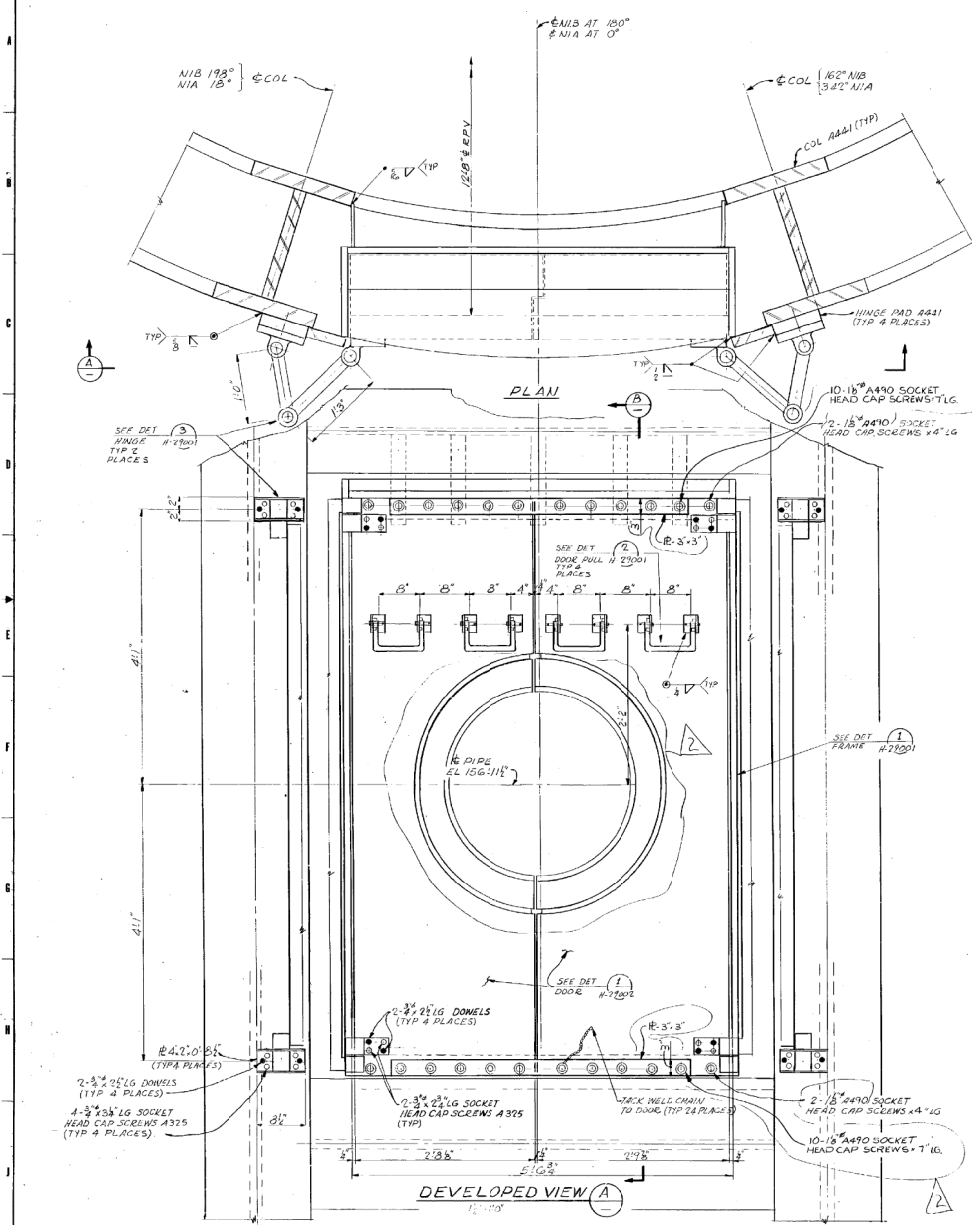
EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
REACTOR PROTECTION SYSTEM 2C71
ELEMENTARY DIAGRAM SH. 9 OF 16

DRAWN	DESIGNED	LOCATION	DRAWING NUMBER	VERSION
J.C.	SJH	10-502	H-27613	13.0
DATE	SCALE			
9-24-73	NCNE			

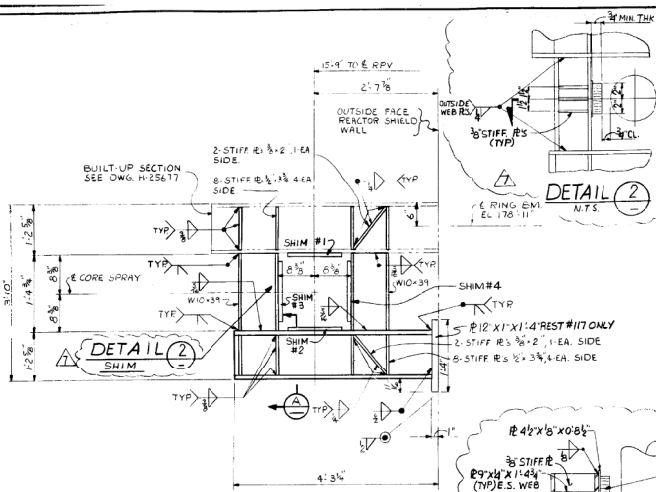
DRAWING CATEGORY



NOTES
 1. TYPE GENERAL NOTES AND REFERENCE DWGS.
 2. SEE DWG. H-23001

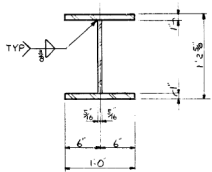


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JOB 6511	GAITHERSBURG, MARYLAND
SOUTHERN SERVICES INC.	
FOR	
GEORGIA POWER CO., ATLANTA, GA.	
GENERAL ENGINEERING DEPARTMENT	
DOWNTOWN NUCLEAR PLANT UNIT NO. 7	
REACTOR BUILDING	
IN SERVICE INSPECTION DOORS	
NIA & NIB SHT 1	
DATE	10-5-72
LOCATION	10-5-02
SHEET NO.	10-5-02

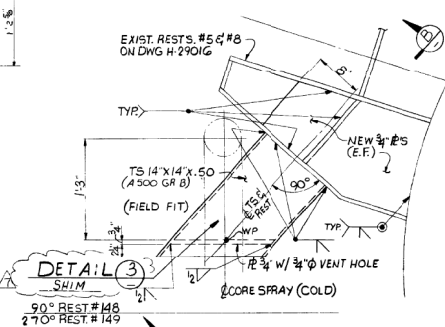


PIPE RESTRAINTS 117, 118

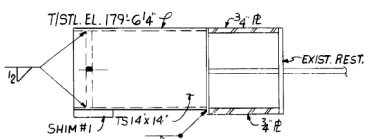
DETAIL (1)
1 1/2\"/>



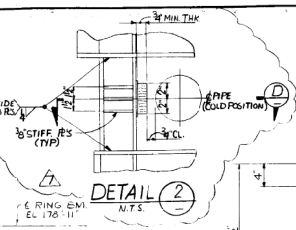
SECTION A
1 1/2\"/>



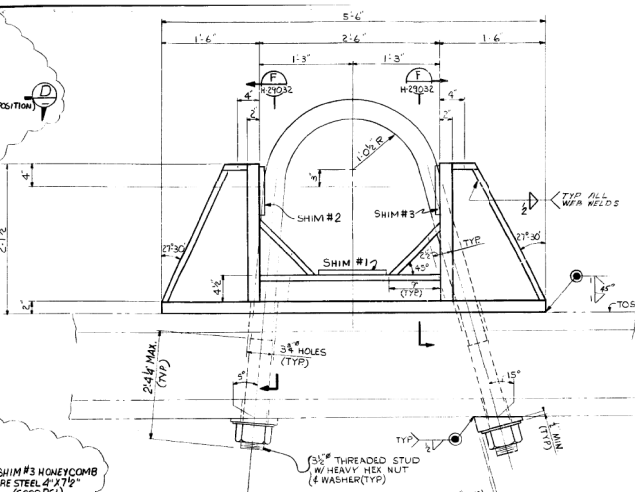
PIPE RESTRAINTS #148 & #149
BY FIELD



SECTION B
N.T.S.

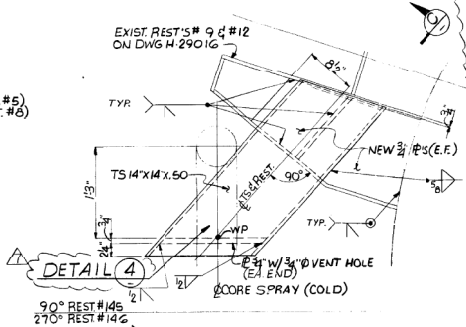


SECTION D
N.T.S.

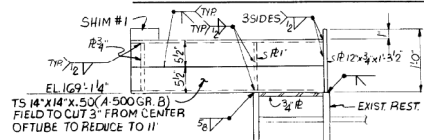


PIPE RESTRAINT #15

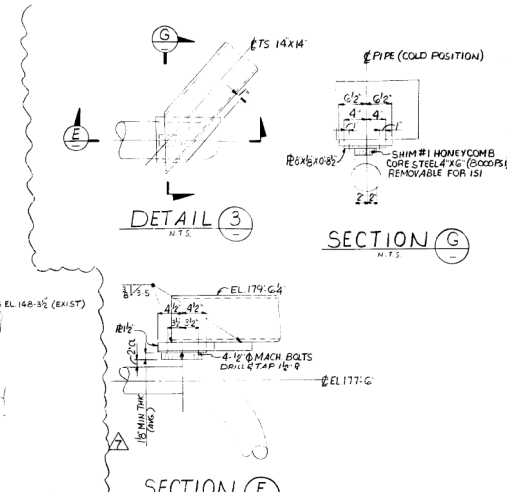
SECTION B
1 1/2\"/>



PIPE RESTRAINTS #145 & #146 (BY FIELD)

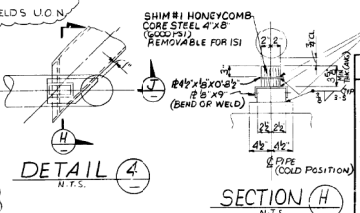


SECTION C
N.T.S.



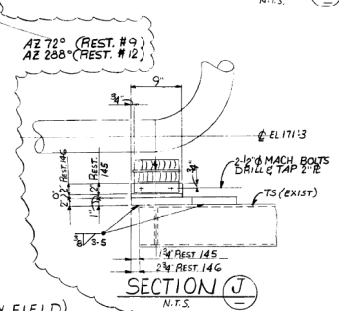
DETAIL 3
N.T.S.

SECTION E
N.T.S.



DETAIL 4
N.T.S.

SECTION H
N.T.S.



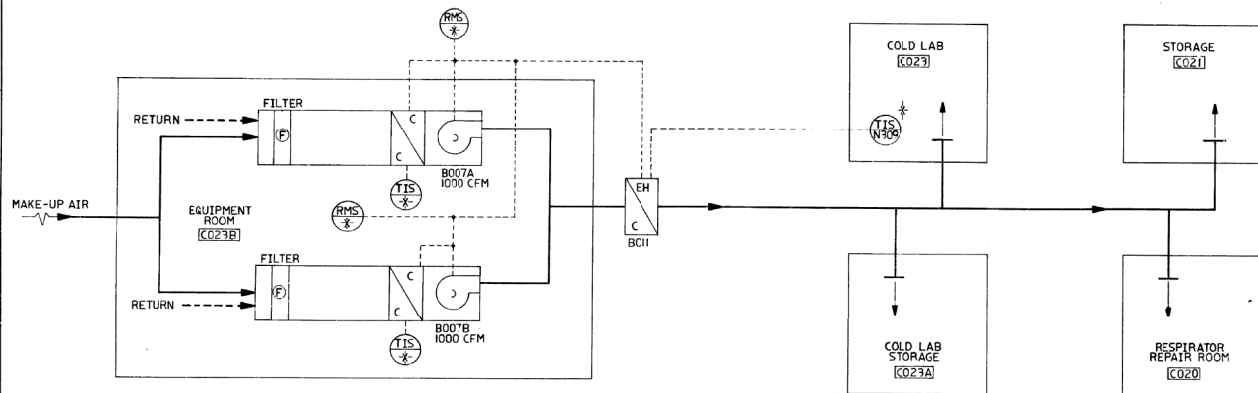
SECTION J
N.T.S.

NOTES

- ALL STRUCTURAL STEEL SHOWN ON THIS DWG SHALL BE ASTM A36 STEEL.
- FOR GENERAL NOTES AND REFERENCE DWGS SEE DWG H-25680.
- FOR RESTRAINT SHIM & WIRE ROPE ADJUSTMENT INFORMATION SEE DWG H-29015.



BECHTEL 100 6511 GAITHERSBURG, MARYLAND	
SOUTHERN SERVICES INC. FOR	
GEORGIA POWER CO., ATLANTA, GA. GENERAL ENGINEERING DEPARTMENT EDWIN HATCH NUCLEAR PLANT UNIT NO. 2 REACTOR BUILDING PIPE WHIP RESTRAINT DETAILS SHT 1	
DATE: 5/1/84 DRAWN: [Signature] CHECKED: [Signature] APPROVED: [Signature]	SHEET NO. 10-502 H-29015



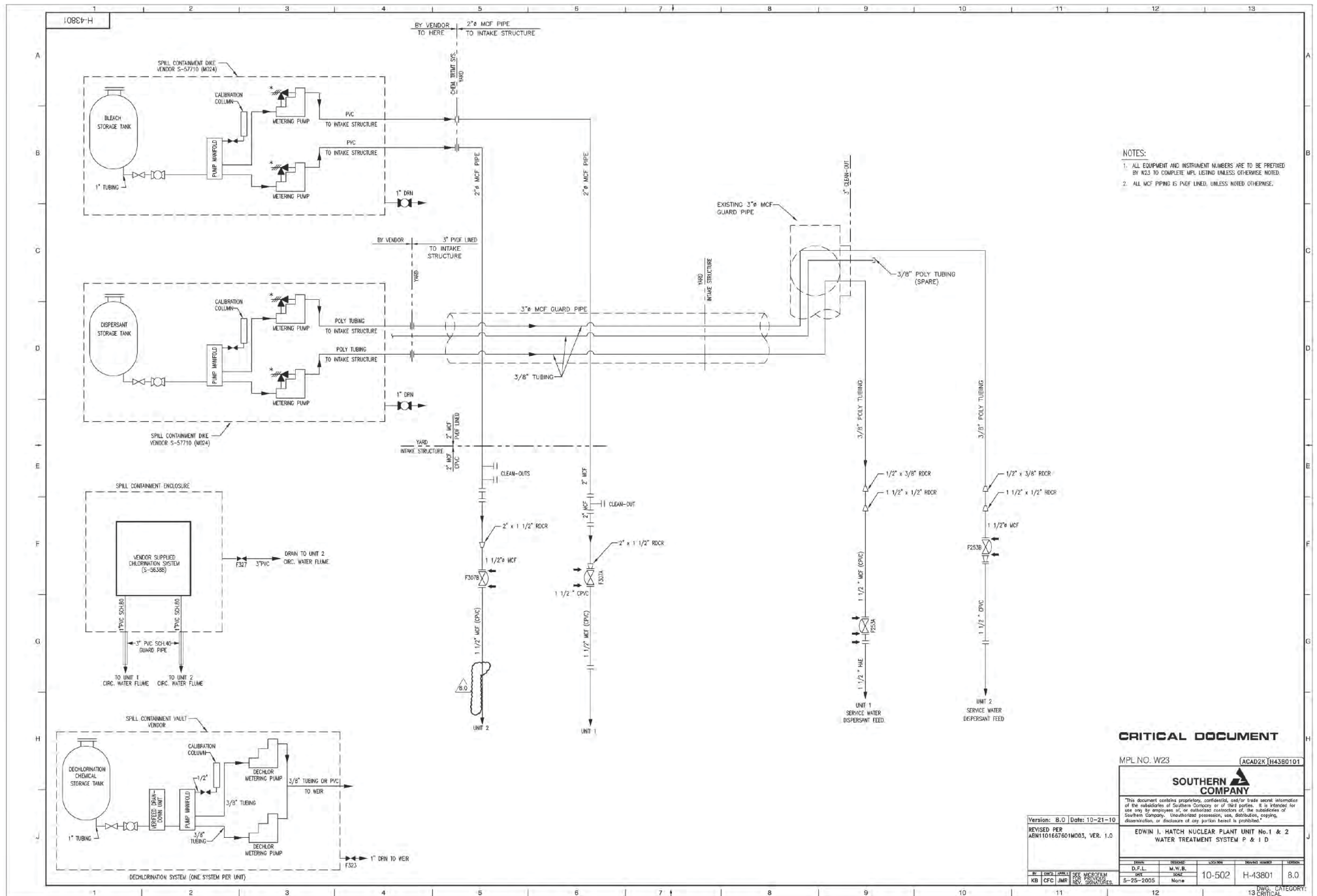
COLD LAB P&ID
PACKAGE AIR CONDITIONING UNITS

- NOTES:
1. SEE DWG H40050 FOR SYMBOL REFERENCES.
 2. ALL EQUIPMENT AND INSTRUMENT NOS. ON THIS DWG PRECEDED BY Z4I- EXAMPLE: Z4I-B004B
 3. FOR EQUIPMENT LOCATION SEE DWG H-16053 & H-16055
 4. WORK THIS DWG WITH DWG H-16095

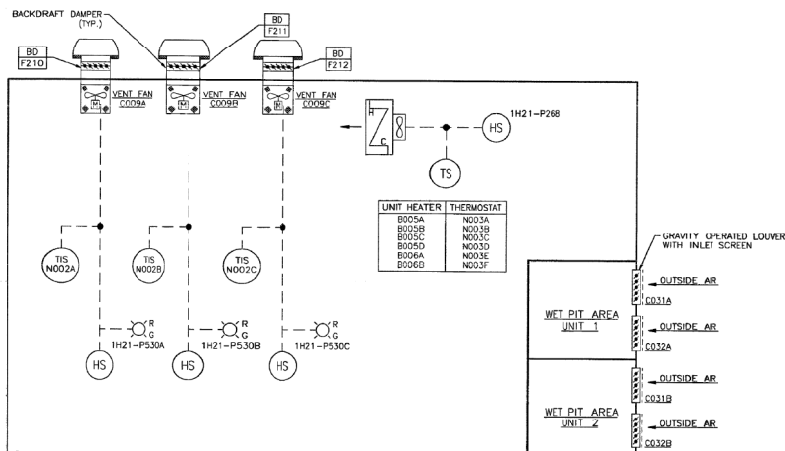
REFERENCES:	MPL NO.	SCS DWG NO.
CONTROL BLDG COMPUTER	Z4I-1020	H-16095
WATER ANALYSIS HOT		
INSTRUMENT SHOP ROOMS P&ID		

SYSTEM NO Z4I

Georgia Power Company, Atlanta, Ga. General Engineering Department			
EDWIN I. HATCH NUCLEAR PLANT-UNIT 1 CONTROL BLDG. COLD LAB EL 112' 0" HVAC P&ID			
DESIGNED BY J. W. WILSON	CHECKED BY J. W. WILSON	DATE 6/19/87	BY J. W. WILSON
APPROVED BY J. W. WILSON		SCALE NONE	DATE 1-25-85
LOCATION 10-502		SHEET NO. H40056	



ΣΔ09PH



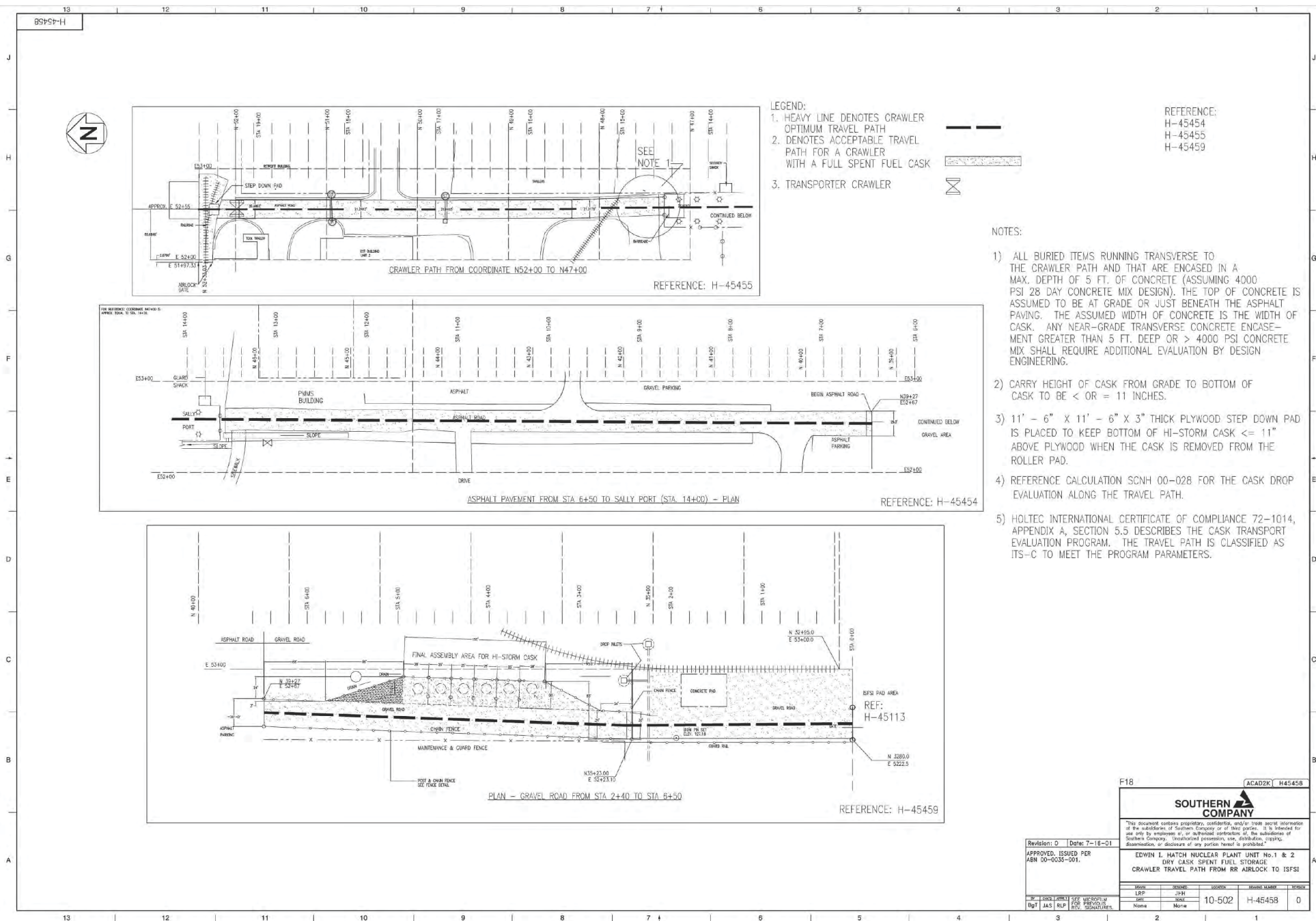
NOTE:
1. ALL EQUIPMENT/INSTRUMENTS ARE PREFIXED WITH 1X41, UNLESS OTHERWISE SPECIFIED

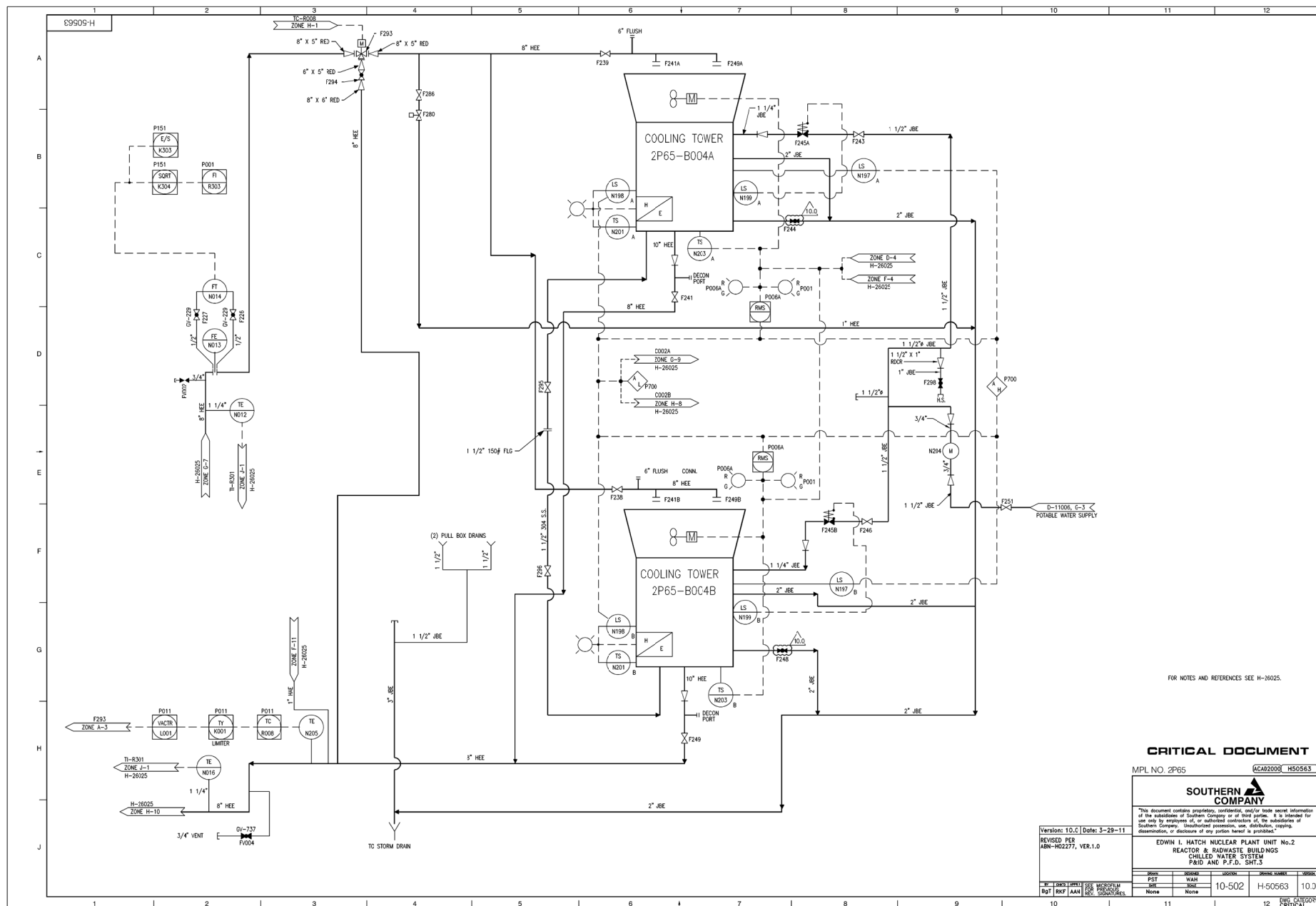
REFERENCES:
H-12610..... RIVER INTAKE STRUCTURE ARCHITECTURAL
H-12613..... RIVER INTAKE STRUCTURE PUMP ROOM - HEATING AND VENTILATION
H-13610..... ELEMENTARY DIAGRAM

CRITICAL DOCUMENT

REV. D	DATE 6/4/93
APPROVED PER WCH 92-0144-002	
TYP. 100%	

Southern Company Services, Inc. for Georgia Power Company, Atlanta, GA General Engineering Department	
EDWIN L. HATCH NUCLEAR PLANT UNIT No. RIVER INTAKE STRUCTURE HVAC P & ID	
REVISED	DATE
1	5-24-93
2	None
3	None
4	None
5	None
6	None
7	None
8	None
9	None
10	None
11	None
12	None
13	None





FOR NOTES AND REFERENCES SEE H-26025.

CRITICAL DOCUMENT

MPL NO. 2P65

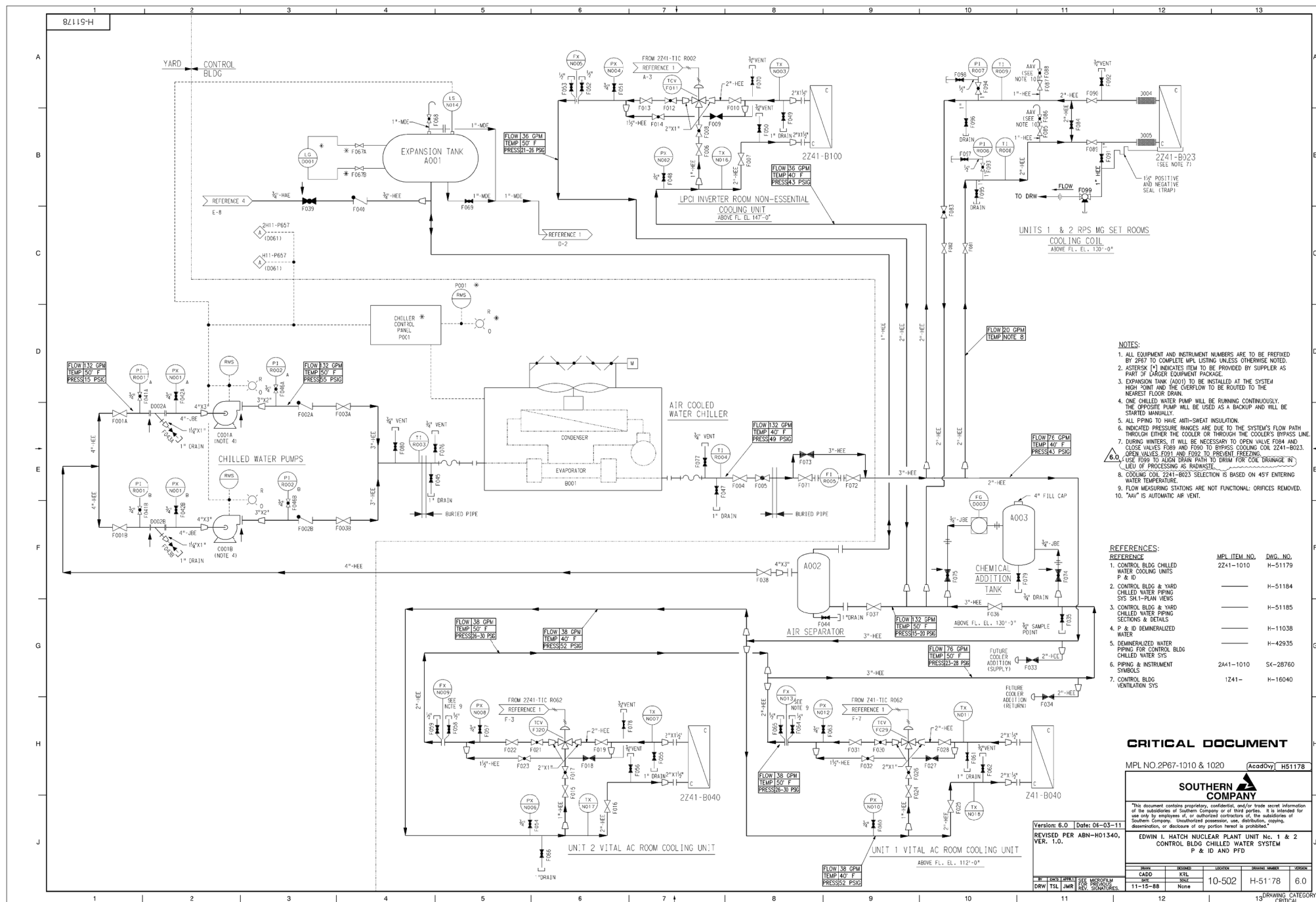
ACAD2000L H50563

SOUTHERN COMPANY

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Version: 10.C Date: 3-29-11		EDWIN I. HATCH NUCLEAR PLANT UNIT No.2	
REVISED PER ABN-H02277, VER.1.0		REACTOR & RADWASTE BUILDINGS	
		CHILLER WATER SYSTEM	
		P&ID AND P.F.D. SHT.3	
Rev	Issued	Revised	Revised
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12

DWG CATEGORY: CRITICAL



CRITICAL DOCUMENT

MPL NO.2P67-1010 & 1020

AcadOvy H51178

SOUTHERN 
COMPANY

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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 1 & 2 CONTROL BLDG CHILLED WATER SYSTEM P & ID AND PED
--

DRAWN	DESIGNED	LOCATION	DRAWING NUMBER	VERSION
CADD	KRL	10-502	H-5178	6.0
DAT	SOLE			

Version: 6.0	Date: 06-03-1
REVISED PER ABN-H01340 VER. 1.0.	

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1000

BT	CM2	APR 1	SEE MICROFILM
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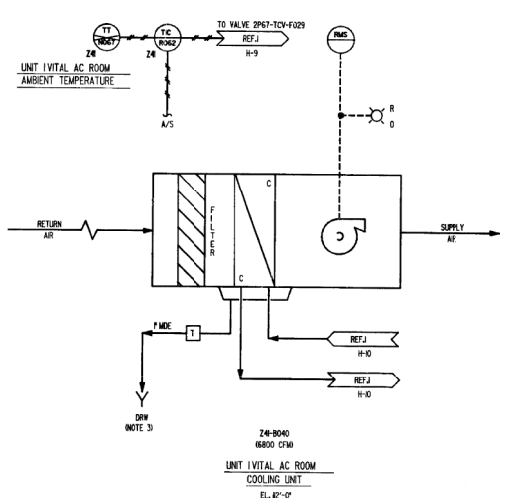
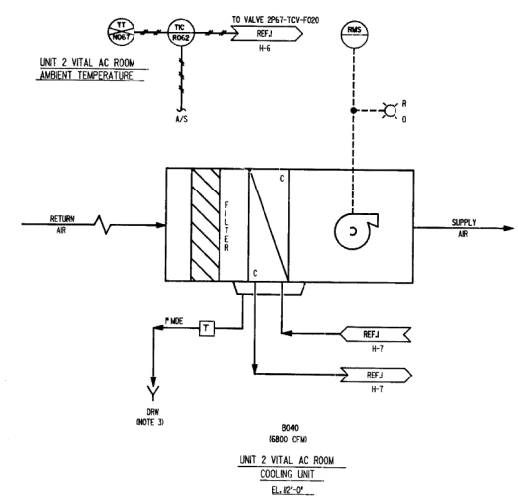
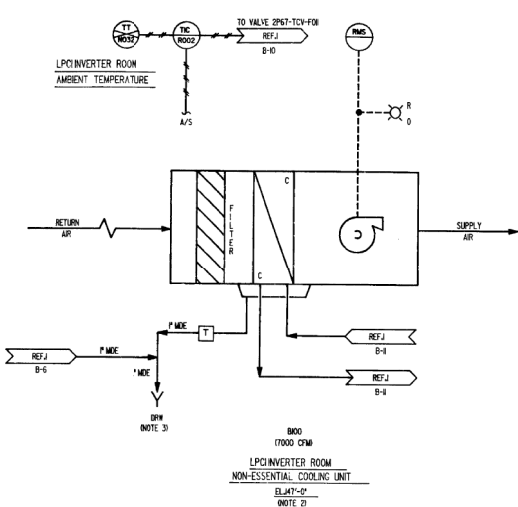
DRW	TSL	JMR	FOR PREVIOUS REV. SIGNATURES
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11

11-15-88	None	100000	100000	100000
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12	13	DRAWING CATEG CRITICAL
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65115-H



- NOTES:**
1. ALL EQUIPMENT AND INSTRUMENT NUMBERS ARE TO BE PROVIDED BY 224 TO COMPLETE WPL LISTING UNLESS OTHERWISE NOTED.
EXAMPLE: 224-8000
 2. SEE H-8040 FOR ESSENTIAL LPOINVERTER ROOM COOLING UNITS AND TEMPERATURE MONITORING THESE ESSENTIAL COOLING UNITS UTILIZE PLANT SERVICE WATER.
 3. ALL DRAINS FROM COOLING COILS SHALL BE ROUTED TO THE NEAREST FLOOR DRAIN.
 4. REVISION "N" ISSUED FOR REVIEW ONLY, NOT FOR CONSTRUCTION.

REFERENCES:

REFERENCE	WPL NO.	ENG. NO.
1. CONTROL BLDG CHILLED WATER SYSTEM P&ID AND PFD	2967-001	H-5879
2. CONTROL BUILDING VENTILATION P&ID	24-8030	H-8040
3. TURBINE BLDG INSTRUMENT AIR SYSTEM P&ID	2952-800	H-2077
4. CONTROL BLDG HVAC SYSTEM PLAN AT EL. 02'-0"		H-8053
5. CONTROL BLDG VENTILATION AND FIRE DAMPER DETAILS		H-26250
6. CONTROL BLDG & YARD CHILLED WATER PIPING - PLAN VES		H-5884
7. CONTROL BLDG & YARD CHILLED WATER PIPING - SECTIONS & DETAILS		H-5885
8. PIPING SERVICE & INST AIR AT H2 AIR COMPRESSORS		H-2825
9. INST. AIR PIPING FOR CONTROL BLDG CHILLED WATER SYSTEM		H-5876

CRITICAL DOCUMENT

WPL NO 224-800

BECHTEL

JOB 651 GAITHERSBURG, MARYLAND

SOUTHERN SERVICES INC. FOR

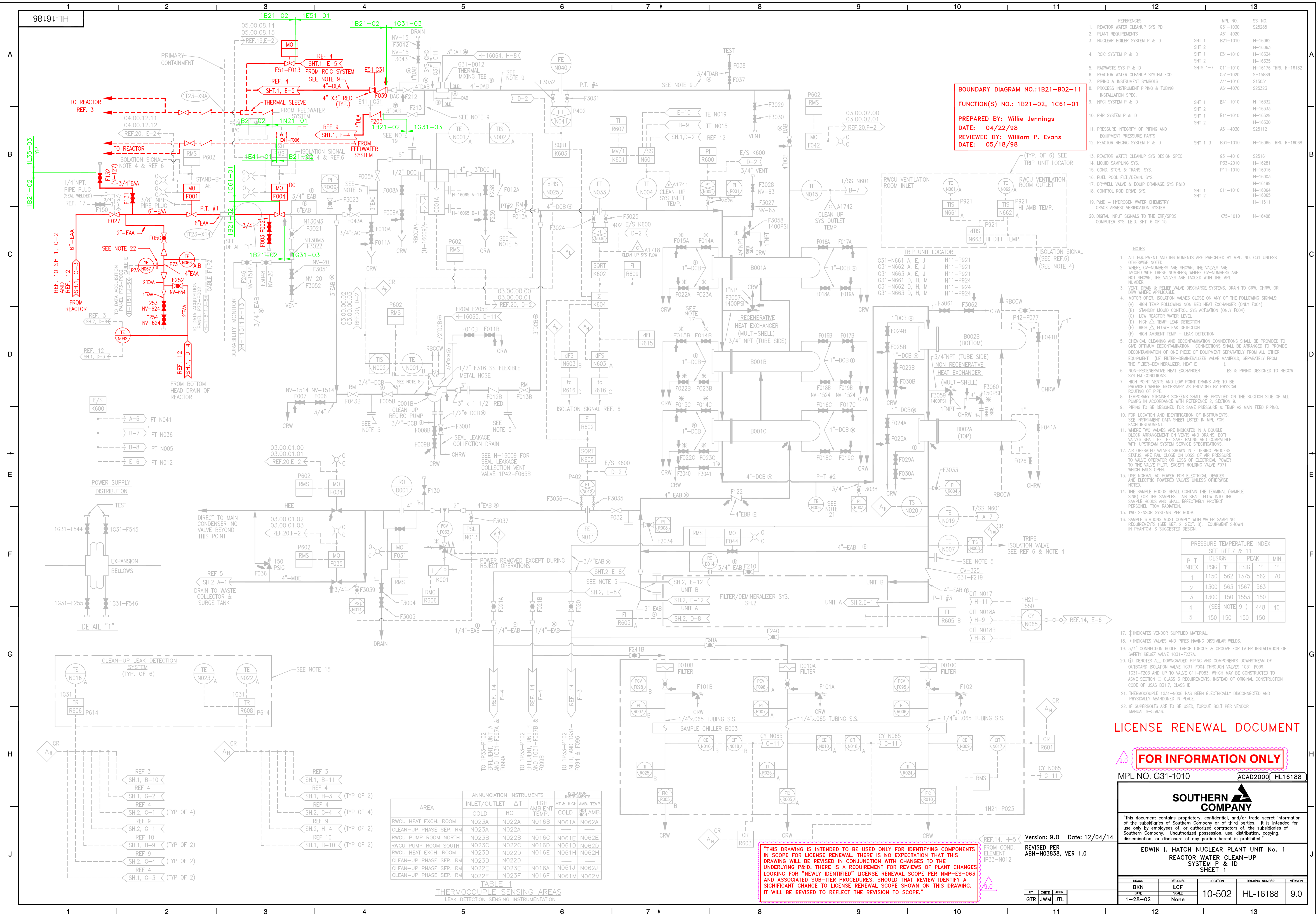
GEORGIA POWER CO., ATLANTA, GA.
GENERAL ENGINEERING DEPARTMENT

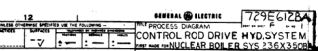
EDWIN L HATCH NUCLEAR PLANT UNITS 1 & 2
CONTROL BLDG CHILLED WATER COOLING UNITS P & ID

REV. 0 DATE 02-13-89
APPROVED IN RESPONSE TO WCN 88-146-01.

BY: [Signature] DATE: 02-13-89
CHECKED: [Signature] DATE: 02-13-89

SCALE: AS SHOWN
SHEET NO. 10-502
H-5879





- [illegible]

FRANCE DOCUMENTS	MFJ ITEM NO.	
CONTROL ROD DRIVE HYDRAULIC SYS. P&ID - - -	C11-1010	H16064/H16065
CONTROL ROD DRIVE HYDRAULIC SYS. FCD - - -	C11-1030	
DESIGN SPECIFICATIONS - - - - -	C11-4000	
HYDRAULIC CONTROL UNIT - - - - -	C11-0001	
PRESS. INTEGRITY OF PIPING & EQUIP. - - -	A61-4030	
PRESSURE PARTS		
PIPING & INSTRUMENT SYMBOLS - - - - -	A61-1010	

DEIVE SCRAMMING VALUES												DOOR 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100																																																																																									
DOOR 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100												DOOR 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100																																																																																									
FLOW, GPM	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
PRESS, PSI/G	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
TEMP, °C (MIN)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

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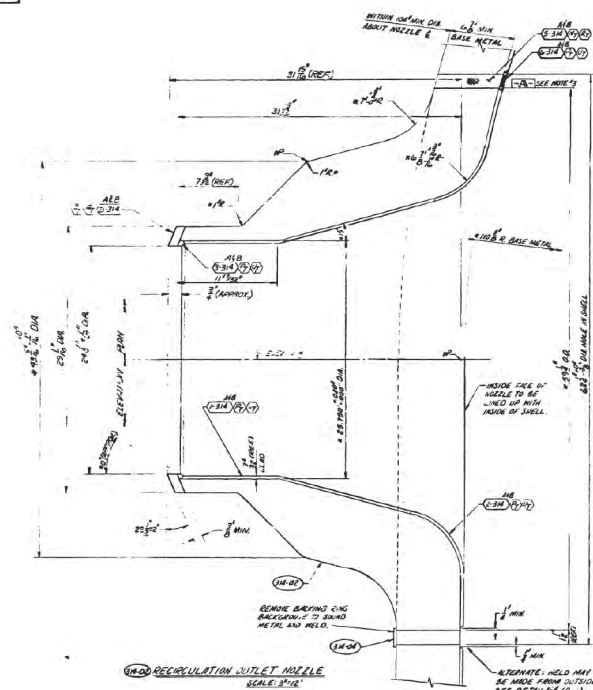
Poor Quality Original

THIS DWG. PART OF
VENDOR MANUAL N/A

TAB/SECT. N/A
PAGE N/A
FIGURE N/A

REVISION		1		DATE		4/22/04	
REVISED PIR ABN 99-0034-003.							
SEE MICROFILM FOR PREVIOUS REV. SIGNATURES.							
BY	CHKD	APPR.1	APPR.2	APPR.3	APPR.4	APPR.	
CYN	ASK	ASK					

E-234-243



NOTES:

1. ATMOSPHERIC PRESSURE OF 14.7 PSIA WAS USED IN CALCULATIONS.
2. WATER FLOWS ARE SHOWN IN GPM, STEAM FLOWS IN 1000 LB/HR.
3. THE MAXIMUM POOL WATER TEMPERATURE FOR CONTINUOUS SYSTEM OPERATION WILL NOT EXCEED 140°F. HOWEVER, DUE TO POTENTIAL SHORT TERM OPERATION AT HIGHER TEMPERATURES, PIPING EXPANSION SHALL BE BASED ON 170°F.
4. THE UNRECOVERED FLOW NOZZLE PRESSURE DROP OF 4.5 PSI IS A FIXED LOSS BETWEEN LOCATIONS ① AND ②.
5. THE LUBE OIL COOLER PRESSURE DROP OF 3.0 PSI IS A FIXED LOSS BETWEEN LOCATIONS ⑬ AND ⑭.
6. THE CONTROLLING MODES FOR LINE SIZING AND ARRANGEMENT ARE:
 SUCTION FROM COND STORAGE MODE A
 SUCTION FROM SUPPRESSION POOL MODE C
 PUMP DISCHARGE MODE C
 STEAM SUPPLY MODE A & B
 TURBINE EXHAUST MODE A & C & D
 TEST LINE MODE E
 COOLING SYSTEM MODE A
7. THERE ARE OTHER POTENTIAL OPERATING MODES WHICH DO NOT CONTROL PIPE OR VALVE SIZING, OR SYSTEM OPERATION AND NO DATA IS SHOWN. AMONG THESE MODES ARE OPERATION WITH THE PUMP SUCTION TAKEN FROM THE RHR STEAM CONDENSING HEAT EXCHANGERS AND OPERATION WITH INTERMEDIATE PRESSURES IN THE REACTOR VESSEL AND SUPPRESSION POOL.
8. PUMP MINIMUM FLOW REQUIREMENT MAY OCCUR DURING ANY OPERATING MODE. FLOW REQUIREMENT IS 50 GPM MINIMUM, DURING MODE A.

REFERENCE DOCUMENTS:

1. RDC SYSTEM P&ID - MPL ITEM NO. E51-1010

MODE A SUCTION FROM CONDENSATE STORAGE, REACTOR AT HIGH PRESSURE, SUPPRESSION POOL AT HIGH PRESS.

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FLOW - SEE NOTE 2	400	416	400	—	0	—	0	22.00	18.87	18.87	16	16	0.15	—	0.01	16*	—	0	—	0
PRESSURE - PSIA	14.7	*	11.75	6	—	—	—	11.70	*	7.5	7.5	*	4.5	*	3.8	*	*	*	*	*
TEMPERATURE °F	100	100	100	100	140	—	—	164	SAT	218	100	100	100	120	120	120	120	100	—	—

MODE B SUCTION FROM CONDENSATE STORAGE, REACTOR AT LOW PRESSURE, SUPPRESSION POOL AT HIGH PRESS.

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FLOW - SEE NOTE 2	400	416	400	—	0	—	—	4.55	6.50	6.50	16	16	0.15	—	0.01	16*	—	0	—	0
PRESSURE - PSIA	14.7	*	11.70	6	—	—	—	16.5	*	7.5	7.5	*	4.5	*	3.8	*	*	*	*	*
TEMPERATURE °F	100	100	100	100	140	—	—	164	SAT	218	100	100	100	120	120	120	120	100	—	—

MODE C SUCTION FROM SUPPRESSION POOL, REACTOR AT HIGH PRESSURE, SUPPRESSION POOL AT LOW PRESS.

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FLOW - SEE NOTE 2	400	416	400	—	0	—	—	4.40	21.31	21.31	6	16	16	0.15	—	0.01	16*	—	0	—
PRESSURE - PSIA	*	*	11.75	4.7	11.75	11.70	*	*	12.4	7.5	*	4.5	*	3.8	*	*	*	*	*	*
TEMPERATURE °F	140	140	140	140	140	140	140	164	SAT	218	140	140	140	120	120	120	120	100	—	—

MODE D SUCTION FROM SUPPRESSION POOL, REACTOR AT LOW PRESSURE, SUPPRESSION POOL AT LOW PRESS.

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FLOW - SEE NOTE 2	400	416	400	—	0	—	—	6.10	5.98	5.98	16	16	16	0.15	—	0.01	16*	—	0	—
PRESSURE - PSIA	*	*	11.70	14.7	11.71	9.3	16.5	*	*	12.5	7.5	*	4.5	*	3.8	*	*	*	*	*
TEMPERATURE °F	140	140	140	140	140	140	140	164	SAT	218	140	140	140	120	120	120	120	100	—	—

MODE E TEST MODE: SUCTION FROM CONDENSATE STORAGE, REACTOR AT HIGH PRESSURE, SUPPRESSION POOL AT LOW PRESS.

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FLOW - SEE NOTE 2	400	416	400	—	0	—	—	18.70	18.50	18.50	16	16	16	0.15	—	0.01	16*	—	0	—
PRESSURE - PSIA	14.7	*	*	—	4.7	—	—	10.00	*	7.5	*	4.5	*	3.8	*	*	*	*	*	*
TEMPERATURE °F	100	100	100	—	100	—	—	151	SAT	218	100	100	100	120	120	120	120	100	—	—

* THE PRESSURE AT THIS LOCATION DEPENDS ON PIPING ARRANGEMENT, AND MAY BE VARIED WITHIN THE FOLLOWING LIMITS.

LOCATION

- ① MINIMUM NPSH AT PUMP SUCTION = 20 FEET
- ② MAXIMUM PRESSURE BLISE ACROSS PUMP = 250 FEET FOR MODES A & C
- ③ MAXIMUM PRESSURE DROP BETWEEN LOCATION ① AND ② = 11 PSI
- ④ MAXIMUM PRESSURE ALLOWED = 25 PSIA
- ⑤ MAXIMUM PRESSURE ALLOWED = 75 PSIA
- ⑥ SUFFICIENT VACUUM TO PREVENT TURBINE SHAFT-OUT-LEAKAGE, TO BE SPECIFIED ON TURBINE VENDOR DRAWINGS.
- ⑦ MAXIMUM PRESSURE AVAILABLE = 25 PSIA
- ⑧ VACUUM PRESSURE AVAILABLE = 45 PSIA
- ⑨ SUFFICIENT PRESSURE TO RETURN TO SUPPRESSION POOL
- ⑩ SUFFICIENT PRESSURE TO RETURN TO COND. STORAGE.

DATE	BY	CHK'D	APP'D	DATE	BY	CHK'D	APP'D	DATE	BY	CHK'D	APP'D	DATE	BY	CHK'D	APP'D	DATE	BY	CHK'D	APP'D	DATE	BY	CHK'D	APP'D
2/19/83	W. J. B.			2/19/83	W. J. B.			2/19/83	W. J. B.			2/19/83	W. J. B.			2/19/83	W. J. B.			2/19/83	W. J. B.		
2/19/83	W. J. B.			2/19/83	W. J. B.			2/19/83	W. J. B.			2/19/83	W. J. B.			2/19/83	W. J. B.			2/19/83	W. J. B.		

CAD S15066

Southern Company Services, Inc.

PLANT: HATCH

UNIT: 1

TITLE: PROCESS DIAGRAM-REACTOR CORE ISOLATION COOLANT SYSTEM

VENDOR: GENERAL ELECTRIC CO. P&ID: 00000002

S-15066 D

THIS DWG. PART OF VENDOR MANUAL N/A

TAB/SECT: N/A
 PAGE: N/A
 FIGURE: N/A

REVISION: D DATE: 10-27-99
 REVISED PER REA HT-98660.

SEE MICROFILM FOR PREVIOUS REV. SIGNATURES.
 (VENDOR REV. 6 BY SCS)

KB HNB WKK



CONDITION IV CORE SPRAY INJECTING AT REACTOR PRESS.												
LOCATION	1	2	3	4	5	6	7	8	9	10	11	12
FLOW-GPM	N/A	4725	→				4725	0	0	0	4725	4725
PRESS-PSIA	19.3						132.3					
TEMP-°F	195						195				195	195
SEE NOTE		5										
ΔP - FT		6.33	●	●	14	●	198	●				

CONDITION	VALVE NO.					
	F00	F002	F005	F015	F018	F020
I	C	C	C	P	C	
II	C	O	O	C	C	
III	C	C	C	C	C	
IV	C	C	O	C	C	

O-FULL OPEN
C-FULL CLOSED
P-PARTIALLY OPEN

REVISED PER ADIF 89
067 BASED ON G.E.
CALCULATIONS IN NEDC
30832. BY SCS.

5	D.K.
REV	REV
REV	GGI

S-15117

CAD	S15117
AutoCAD	

Southern Company Services, Inc.

PLANT: HATCH

UNIT: 1

TITLE: CORE SPRAY SYSTEM
PROCESS DIAGRAM

VENDOR:	P.O.#:
G E	PEH-002

S-15117 F

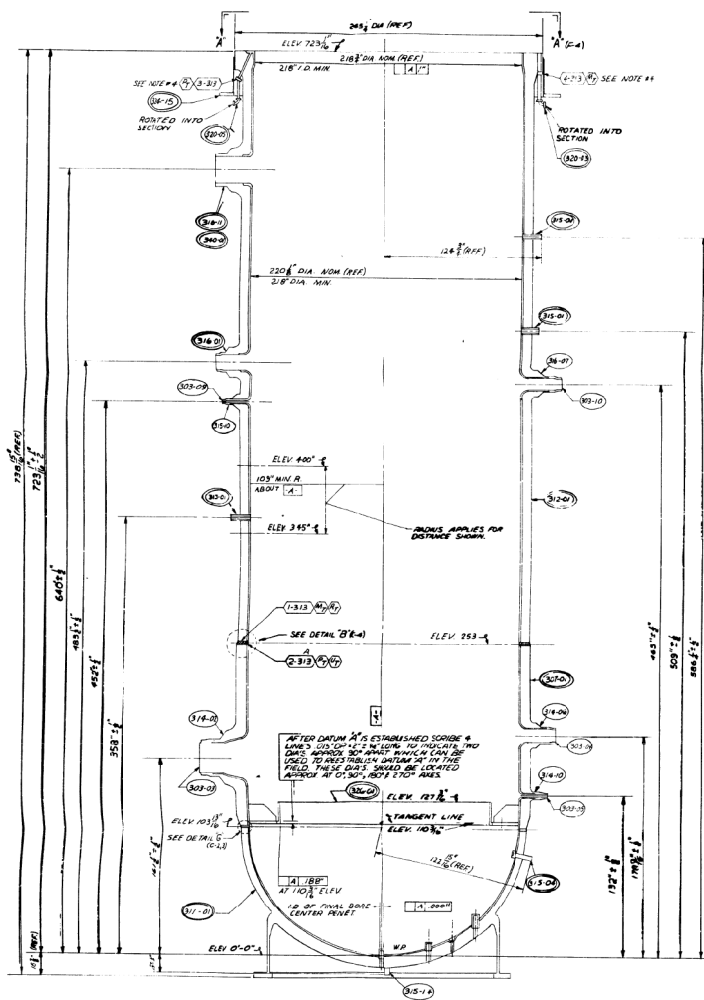
S-15117 F

THIS DWG. PART OF
VENDOR MANUAL N/A

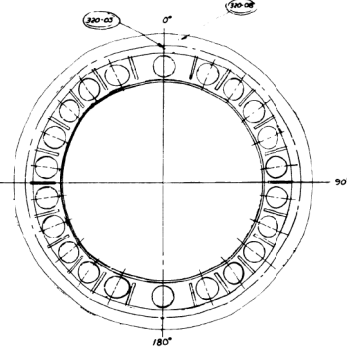
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PAGE N/A
FIGURE N/A

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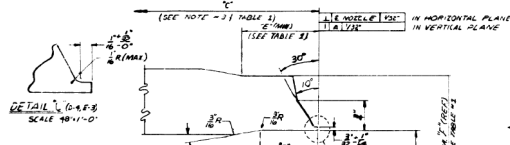
E-234-273



31-01 VESSEL ASSEMBLY - SECTIONAL ELEVATION
MODELS ARE ROTATED INTO SECTION FOR CLARITY
SCALE 1/4" = 1'-0"



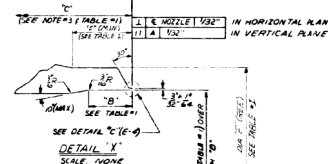
VIEW A-A
SCALE 1/4" = 1'-0"



DETAIL W
SCALE NONE



DETAIL B
SCALE 1/4" = 1'-0"



DETAIL X
SCALE NONE

ITEM NO.	SEE DETAIL	QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL PRICE
303-01	2	150.00	LB	WELD METAL	1.700	255.00
303-02	10	150.00	LB	WELD METAL	1.700	255.00
303-03	2	150.00	LB	WELD METAL	1.700	255.00
303-04	2	150.00	LB	WELD METAL	1.700	255.00
303-05	2	150.00	LB	WELD METAL	1.700	255.00
303-06	2	150.00	LB	WELD METAL	1.700	255.00
303-07	2	150.00	LB	WELD METAL	1.700	255.00
303-08	2	150.00	LB	WELD METAL	1.700	255.00
303-09	2	150.00	LB	WELD METAL	1.700	255.00
303-10	2	150.00	LB	WELD METAL	1.700	255.00
303-11	2	150.00	LB	WELD METAL	1.700	255.00
303-12	2	150.00	LB	WELD METAL	1.700	255.00
303-13	2	150.00	LB	WELD METAL	1.700	255.00
303-14	2	150.00	LB	WELD METAL	1.700	255.00
303-15	2	150.00	LB	WELD METAL	1.700	255.00
303-16	2	150.00	LB	WELD METAL	1.700	255.00
303-17	2	150.00	LB	WELD METAL	1.700	255.00
303-18	2	150.00	LB	WELD METAL	1.700	255.00
303-19	2	150.00	LB	WELD METAL	1.700	255.00
303-20	2	150.00	LB	WELD METAL	1.700	255.00

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	PRICE	TOTAL
303-01	WELD METAL	LB	150.00	1.700	255.00
303-02	WELD METAL	LB	150.00	1.700	255.00
303-03	WELD METAL	LB	150.00	1.700	255.00
303-04	WELD METAL	LB	150.00	1.700	255.00
303-05	WELD METAL	LB	150.00	1.700	255.00
303-06	WELD METAL	LB	150.00	1.700	255.00
303-07	WELD METAL	LB	150.00	1.700	255.00
303-08	WELD METAL	LB	150.00	1.700	255.00
303-09	WELD METAL	LB	150.00	1.700	255.00
303-10	WELD METAL	LB	150.00	1.700	255.00
303-11	WELD METAL	LB	150.00	1.700	255.00
303-12	WELD METAL	LB	150.00	1.700	255.00
303-13	WELD METAL	LB	150.00	1.700	255.00
303-14	WELD METAL	LB	150.00	1.700	255.00
303-15	WELD METAL	LB	150.00	1.700	255.00
303-16	WELD METAL	LB	150.00	1.700	255.00
303-17	WELD METAL	LB	150.00	1.700	255.00
303-18	WELD METAL	LB	150.00	1.700	255.00
303-19	WELD METAL	LB	150.00	1.700	255.00
303-20	WELD METAL	LB	150.00	1.700	255.00

GENERAL NOTES	CONTRACT	REF. DWG. #1	REF. DWG. #2	REF. DWG. #3	REF. DWG. #4	REF. DWG. #5
1. FOR STANDARD NOTES, SEE REF. DWG. #2.	31-01	31-01	31-01	31-01	31-01	31-01
2. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH THE STANDARD NOTES.						
3. THE INDIVIDUAL MODELS TO THE CENTER OF THE VESSEL SHALL BE MADE BEFORE ATTACHMENT OF BRIM SEAL ASSEMBLY #32-15.						

CONTRACT	REF. DWG. #1	REF. DWG. #2	REF. DWG. #3	REF. DWG. #4	REF. DWG. #5
31-01	31-01	31-01	31-01	31-01	31-01

CONTRACT	REF. DWG. #1	REF. DWG. #2	REF. DWG. #3	REF. DWG. #4	REF. DWG. #5
31-01	31-01	31-01	31-01	31-01	31-01

CONTRACT	REF. DWG. #1	REF. DWG. #2	REF. DWG. #3	REF. DWG. #4	REF. DWG. #5
31-01	31-01	31-01	31-01	31-01	31-01

CONTRACT	REF. DWG. #1	REF. DWG. #2	REF. DWG. #3	REF. DWG. #4	REF. DWG. #5
31-01	31-01	31-01	31-01	31-01	31-01

CONTRACT	REF. DWG. #1	REF. DWG. #2	REF. DWG. #3	REF. DWG. #4	REF. DWG. #5
31-01	31-01	31-01	31-01	31-01	31-01

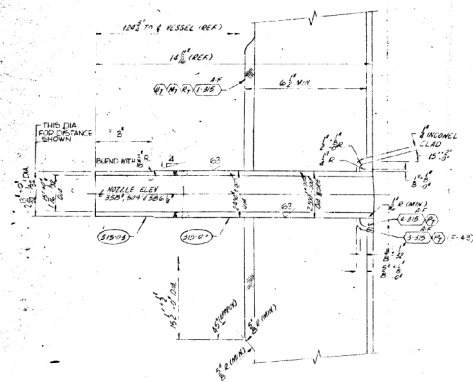
REVISIONS	DESCRIPTION	DATE	BY	APP'D
1	REVISED FOR 1/2" DIA. IN TABLE 1	1/2/83	JLC	1/2/83
2	REVISED FOR 1/2" DIA. IN TABLE 1	1/2/83	JLC	1/2/83
3	REVISED FOR 1/2" DIA. IN TABLE 1	1/2/83	JLC	1/2/83
4	REVISED FOR 1/2" DIA. IN TABLE 1	1/2/83	JLC	1/2/83
5	REVISED FOR 1/2" DIA. IN TABLE 1	1/2/83	JLC	1/2/83

1983-13-8

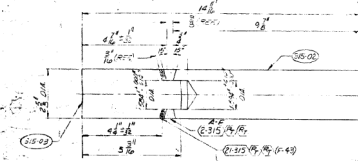
Southern Company Services
Clayton, Georgia
1983-13-8

CONSTRUCTION ENGINEERING INC.
CHATTANOOGA DIVISION
VESSEL ASSEMBLY
218" I.D. BWR
E 234-273
6

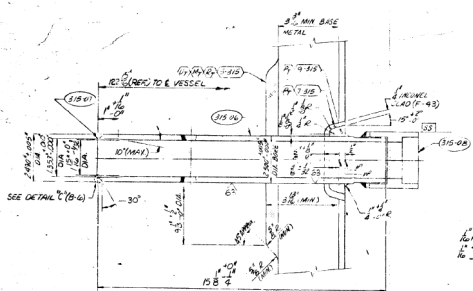
E-234-244



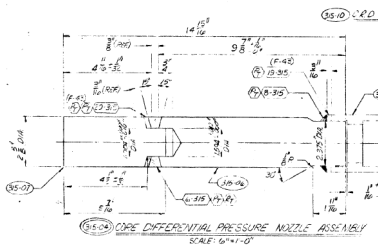
35-01 INSTRUMENTATION NOZZLE ASSEMBLY TO VESSEL
SCALE 6"=1'-0"



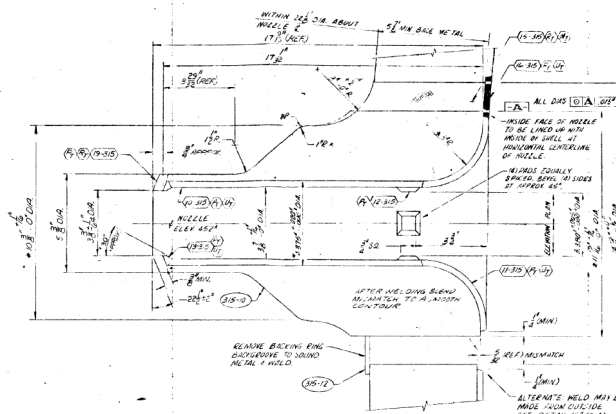
35-02 INSTRUMENTATION NOZZLE ASSEMBLY
SCALE 6"=1'-0"



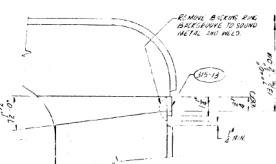
35-03 CORE DIFFERENTIAL PRESSURE NOZZLE ASSEMBLY TO VESSEL
SCALE 6"=1'-0"



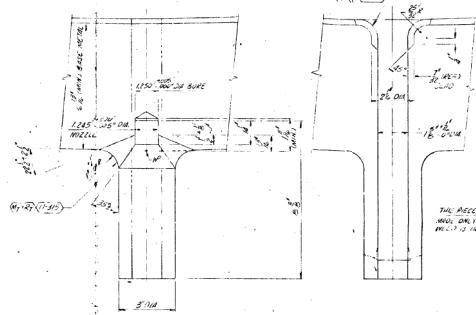
35-04 CORE DIFFERENTIAL PRESSURE NOZZLE ASSEMBLY
SCALE 6"=1'-0"



35-05 CORE DIFFERENTIAL PRESSURE NOZZLE ASSEMBLY
SCALE 6"=1'-0"



35-06 CORE DIFFERENTIAL PRESSURE NOZZLE ASSEMBLY
SCALE 6"=1'-0"



35-07 CORE DIFFERENTIAL PRESSURE NOZZLE ASSEMBLY
SCALE 6"=1'-0"

35-08 CORE DIFFERENTIAL PRESSURE NOZZLE ASSEMBLY
SCALE 6"=1'-0"

NO.	REVISIONS	DATE	APPROVED
1	ISSUED FOR FABRICATION	10/1/78	J. J. J.
2	REVISED DRAWING	10/1/78	J. J. J.
3	REVISED DRAWING	10/1/78	J. J. J.
4	REVISED DRAWING	10/1/78	J. J. J.
5	REVISED DRAWING	10/1/78	J. J. J.

RECORD COPY
RECORD SET
RETURN PROMPTLY

COORDINATING
PRINT

WITNESS DRAWING TO VESSEL
1. DRAWING NO. 10/1/78
2. DRAWING NO. 10/1/78
3. DRAWING NO. 10/1/78
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HATCH
BY 14-0001
BY 14-0005

1983-55-H

FOR MATERIAL WELD SEE REF. 10/1/78 IN APPLICABLE SPECIFICATION

NO.	REVISIONS	DATE	APPROVED
1	ISSUED FOR FABRICATION	10/1/78	J. J. J.
2	REVISED DRAWING	10/1/78	J. J. J.
3	REVISED DRAWING	10/1/78	J. J. J.
4	REVISED DRAWING	10/1/78	J. J. J.
5	REVISED DRAWING	10/1/78	J. J. J.

ALL CLADDING TO BE HIGH ALLOY STEEL (A7) UNLESS OTHERWISE NOTED

GENERAL NOTES

1. ALL CLADDING TO BE HIGH ALLOY STEEL (A7) UNLESS OTHERWISE NOTED
2. ALL CLADDING TO BE HIGH ALLOY STEEL (A7) UNLESS OTHERWISE NOTED
3. ALL CLADDING TO BE HIGH ALLOY STEEL (A7) UNLESS OTHERWISE NOTED
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9. ALL CLADDING TO BE HIGH ALLOY STEEL (A7) UNLESS OTHERWISE NOTED
10. ALL CLADDING TO BE HIGH ALLOY STEEL (A7) UNLESS OTHERWISE NOTED

CONTRACT

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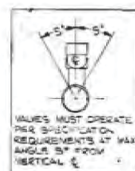
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NOZZLE DETAILS
OR 21010 BNR

E234-244-5

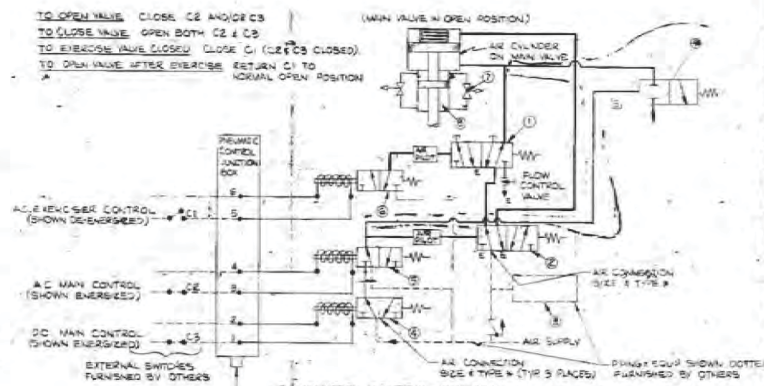


ALL SWITCHES NAMCO MODEL EAT40 TYPE LIMIT SWITCHES

13.17 & 14.15 NORMALLY OPEN, CLOSE WHEN VALVE IS 90% OPEN AND REMAIN CLOSED BETWEEN VALVE POSITIONS 90% OPEN & FULLY CLOSED.

9.24: 2022 NORMALLY CLOSED OPEN WHEN VALVE IS 10% OPEN AND REMAIN OPEN BETWEEN VALVE POSITIONS 10% OPEN & FULLY CLOSED.

9.23 & 9.21 NORMALLY OPEN CLOSE WHEN VALVE IS 10% OPEN AND REMAIN CLOSED BETWEEN VALVE POSITIONS 10% OPEN AND FULLY CLOSED.



¹ ELECTRICAL-CONDUIT CONNECTION FOR WIRING TO EXTERNAL SWITCHES

SCHEMATIC CONTROL DIAGRAM

- | LEGEND | | ② | |
|--------|---|---|--------------------------|
| ① | 3-WAY VALVE ON 4-WAY VALVE (SEE NOTE 5) | ③ | 2-WAY VALVE (SEE NOTE 5) |
| ② | 4-WAY VALVE (SEE NOTE 6) | | |
| | A-R STORAGE TANK (FURNISHED BY OTHERS) | | |
| | 3-WAY VALVE | | |
| | 3-WAY VALVE (F F SMALLER TO SPECIFY MANUALLY CONTINUOUS INFLATE (SEE NOTE 7)) | | |
| | 3-WAY VALVE | | |
| | SPEED CONTROL VALVE(S) (INCLUDES CHECK VALVES IF REQ'D) | | |
| | HYDRAULIC CYLINDER (INCLUDES HYDRAULIC ACCUMULATOR OR EQUIV.) | | |

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