

CHART B

VALVE NO	A	B	C	D	E	F
310	ZC-310-IS	ZC-310-2S	SOV-310		IA-857	
FCV-110B	ZC-FCV-110B-IS	ZC-FCV-110B-2S	SOV-110B		IA-856	
FCV-111B	ZC-FCV-111B-IS	ZC-FCV-111B-2S	SOV-111B		IA-849	
LCV-112A	ZC-LCV-112A-IS	ZC-LCV-112A-2S	SOV-112A		IA-848	
LCV-112B	ZC-LCV-112B-IS	ZC-LCV-112B-2S	SOV-112B		IA-852	
PCV-113B	ZC-PCV-113B-IS	ZC-PCV-113B-2S	SOV-113B		IA-870	
TCV-149	ZC-TCV-149-IS	ZC-TCV-149-2S	SOV-149		IA-847	IA-1699

REFERENCE DRAWINGS:

- FP9321-2293 - RCS - REACTOR COOLANT SYSTEM
- 9321-F-2720 - ACS - AUXILIARY COOLANT SYSTEM
- 9321-F-2745 - SS - SAMPLING SYSTEM
- 9321-F-2725 - GA - GAS ANALYZER SYSTEM
- 9321-F-2502 - SIS - SAFETY INJECTION SYSTEM
- 9321-F-2719 - WDS - WASTE DISPOSAL SYSTEM (SHT. 1)
- 9321-F-2730 - WDS - WASTE DISPOSAL SYSTEM (SHT. 2)
- 208158 - CVCS - CHEMICAL & VOLUME CONTROL SYSTEM (SHT. 2)
- 235309 - CVCS - CHEMICAL & VOLUME CONTROL SYSTEM (SHT. 4)
- 9321-F-2737 - CVCS - CHEMICAL & VOLUME CONTROL SYSTEM (SHT. 3)
- 9321-F-2724 - PW - PRIMARY MAKE-UP WATER
- 9321-F-2728 - (DH) - NUCLEAR EQUIPMENT DRAINS
- 9321-C-2016 - FLOW DIAGRAM SYMBOLS
- 9321-F-2746 - IVSWS - ISOLATION VALVE SEAL WATER SYSTEM

- NOTES:
- VALVES FAILS WITH FLOW TO VOLUME CONTROL TANK.
  - SPECIAL VALVE - FUNCTIONS AS BOTH ISOLATION RELIEF VALVE.
  - SPECIAL SPRING LOADED CHECK VALVE.
  - ELECTROMAGNETIC - LOCATE METER IN VERTICAL PIPE RUN.
  - 1/2" HOLE OR 0.18" WIDE X 0.09" DEEP GROOVE IN DISC
  - ADDITIONAL VENTS & DRAINS MAY BE REQUIRED BY THE PIPE LAYOUT.
  - GLOBE VALVES ARE NORMALLY INSTALLED WITH FLOW UNDER THE SEAT. EXCEPTIONS ARE VALVES NO. 230, 232, 233, 235, 236, 238, 240A, 250A, 250B, 250C & 250D.
  - STEAM TRAP AND STRAINER SUPPLIED BY UE & C.
  - ITEM NO'S IN PARENTHESIS ARE PRECEDED BY IPP. L. DRAIN, CHARGING PUMPS LEAKAGE COLLECTIVE SYSTEM.
  - M... INDICATES CONTROL VALVE HAS ADDITIONAL ASSOCIATED CONTROL EQUIPMENT IS REPRESENTED ON CONTROL VALVE HOOD-UP DETAIL DWG. 9321-F-7096.
  - THE QUALITY GROUP A,B,C AND SEISMIC BOUNDARIES EXTEND TO THE FIRST SEISMIC SUPPORT/RESTRAINT BEYOND THE BOUNDARIES SHOWN.
- INSERVICE INSPECTION NOTES:
- 1CP-CONTAINMENT PENETRATIONS, ASME CLASS MC APPLIES.
  - 2FOR NON-CODE PIPING PENETRATING CONTAINMENT & NDT CLASSIFIED QUALITY GROUP "A", "B" OR "C" QUALITY GROUP "MC" DESIGNATION SHALL BE APPLIED.

CHART A

FI/FE/FXE	A	B	C	D	E	F	G	H	O
116	239C	240C	5026	5027	5028	5029	5030	5031	
115	239D	240D	5032	5033	5034	5035	5036	5037	
143	239B	240B	5038	5039	5040	5041	5042	5043	
144	239A	240A	5044	5045	5046	5047	5048	5049	
168	4916	4917				5076	5078	5079	
158	4918	4919				5077	5078	5079	
145B	4914	4913				5072	5075	5076	
144B	4912	4911				5080	5079	5078	

THIS DWG. TO BE REVISED ONLY IN AUTOCAD

DATE	BY	CHKD	APP.	REVISION
06/13/16	130			INCORPORATED EC-50139

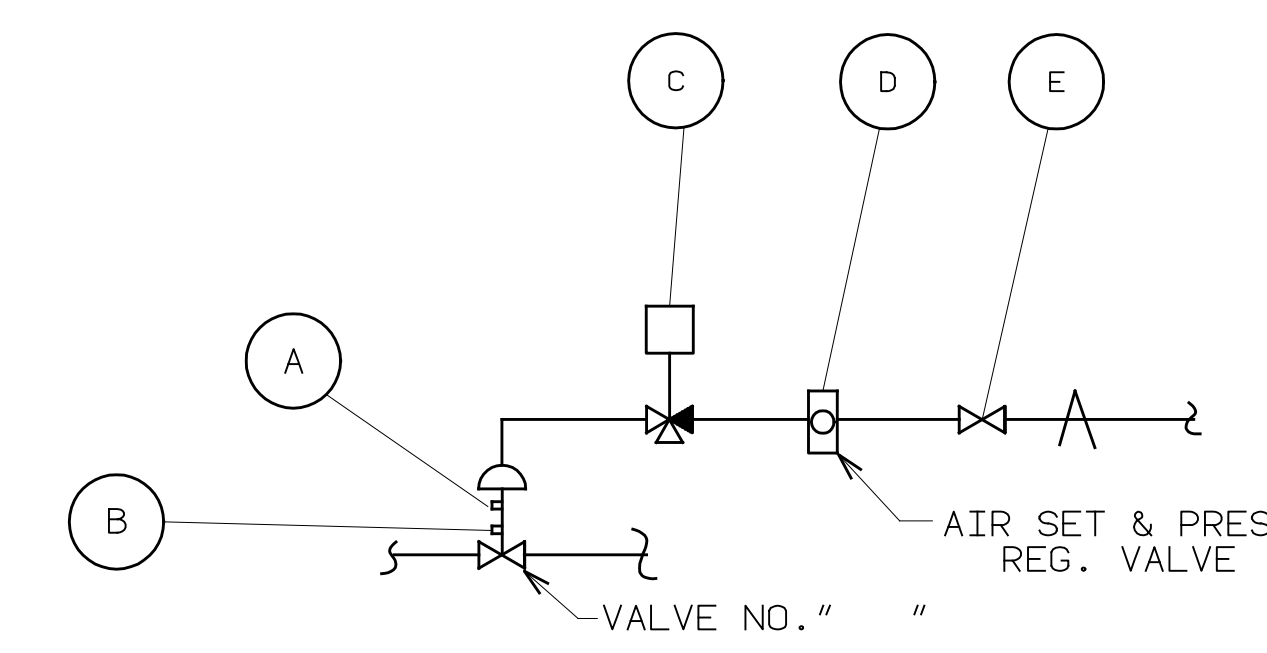
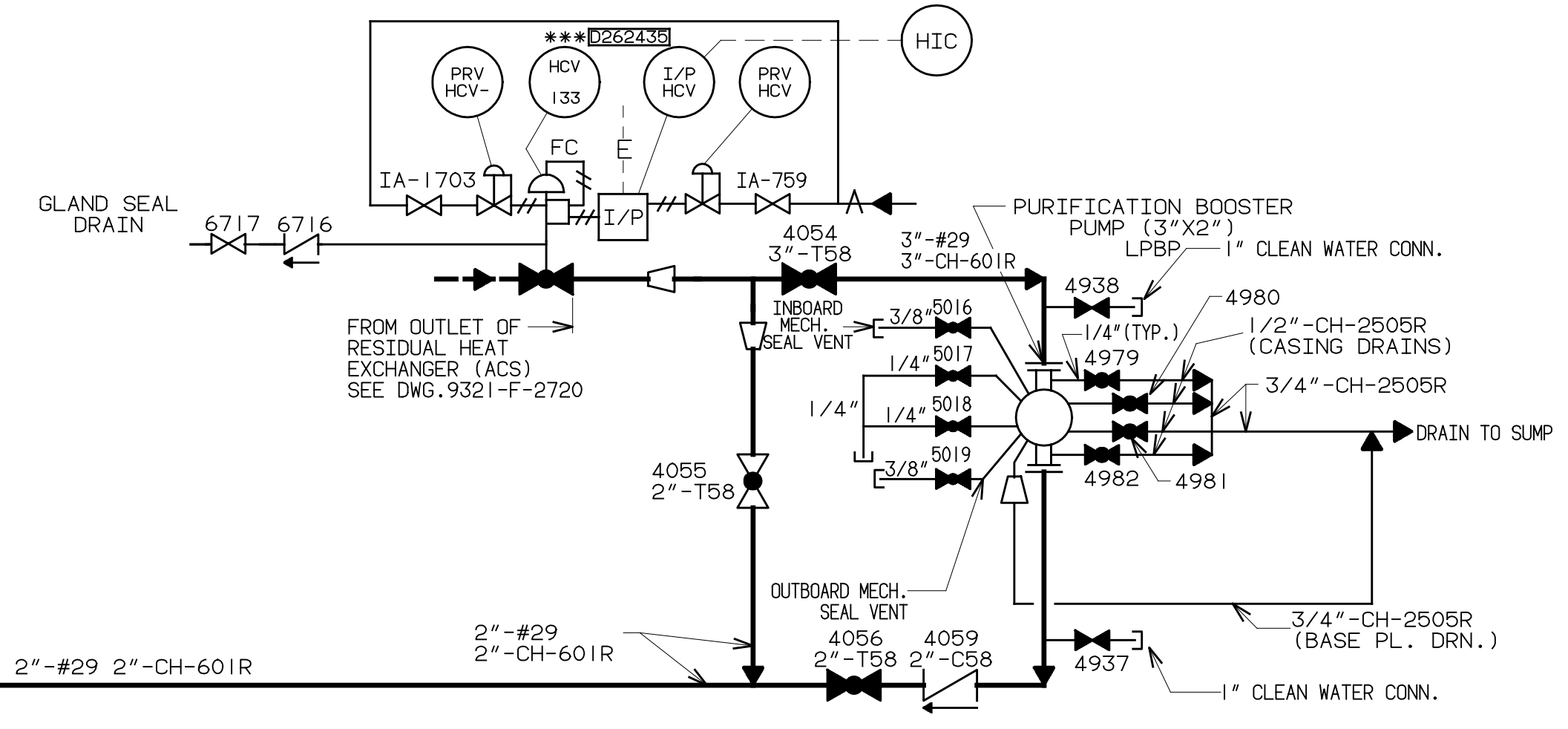
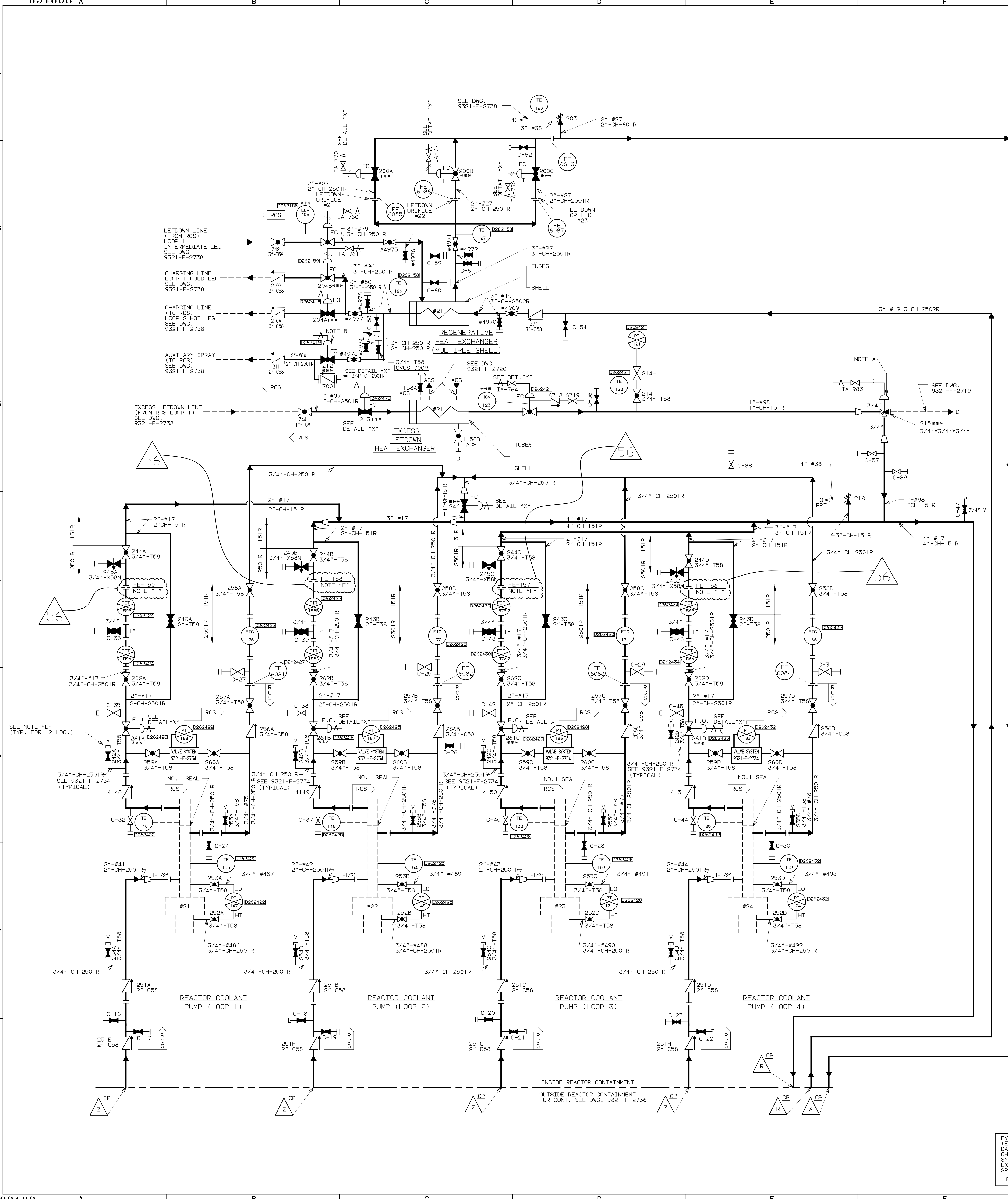
APPROVALS:

DATE	BY	CHKD	APP.
06/13/16	130		

TITLE: FLOW DIAGRAM  
CHEMICAL & VOLUME CONTROL SYSTEM -  
LFSAR FIGURE NO. 9.2-1 (SHT. 1)

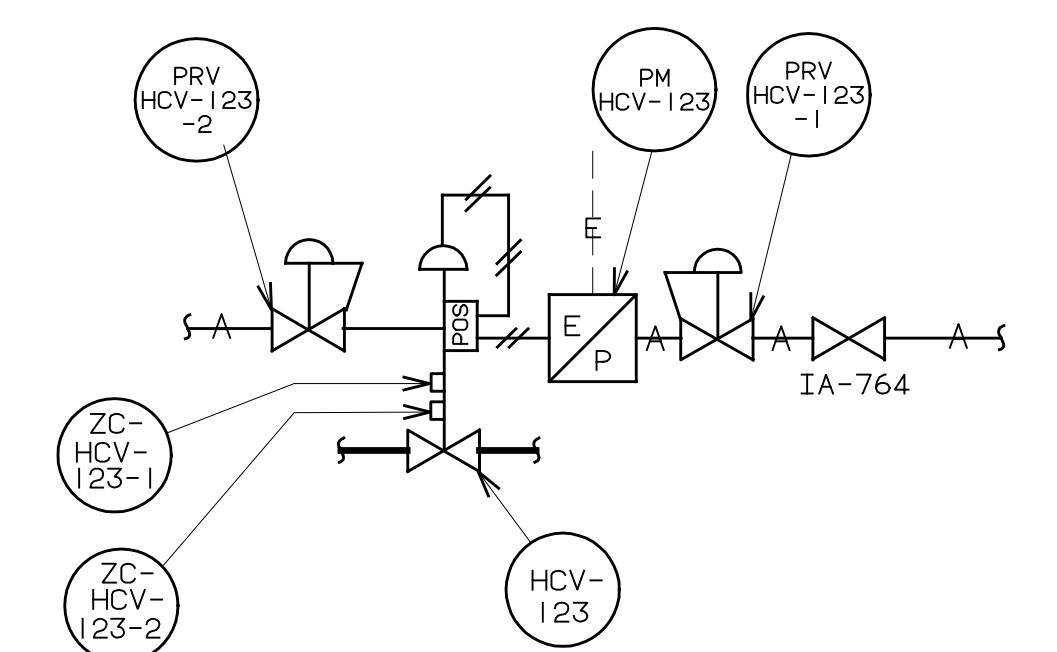
STATION: INDIAN POINT

DWG. NO. 9321-F-2736-130



VALVE NO	A	B	C	D	E
246	ZC-246-1	ZC-246-2	SOV-246	PRV-246	IA-773
261A	ZC-261A-1S	ZC-261A-2S	SOV-261A	PRV-261A	IA-766
261B	ZC-261B-1S	ZC-261B-2S	SOV-261B	PRV-261B	IA-767
261C	ZC-261C-1S	ZC-261C-2S	SOV-261C	PRV-261C	IA-768
261D	ZC-261D-1S	ZC-261D-2S	SOV-261D	PRV-261D	IA-769
212	ZC-212-1S	ZC-212-2S	SOV-212	PRV-212	IA-1312
213	ZC-213-1S	ZC-213-2S	SOV-213	PRV-213	IA-765
200A	ZC-200A-1	ZC-200A-2	SOV-200A	PRV-200A	IA-770
200B	ZC-200B-1	ZC-200B-2	SOV-200B	PRV-200B	IA-771
200C	ZC-200C-1	ZC-200C-2	SOV-200C	PRV-200C	IA-772
215	ZC-215-1	ZC-215-2	SOV-215	PRV-215	IA-983
204A	ZC-204A-1	ZC-204A-2	SOV-204A	PRV-204A	IA-762
204B	ZC-204B-1	ZC-204B-2	SOV-204B	PRV-204B	IA-761
LCV-459	ZC-LCV-459-1	ZC-LCV-459-2	SOV-459	PRV-LCV-459	IA-760

DETAIL "X"



DETAIL "Y"

- NOTES
- A. VALVE FAILS WITH FLOW TO VOLUME CONTROL TANK & RELIEF VALVE
  - B. SPECIAL VALVE FUNCTIONS AS BOTH ISOLATION & RELIEF VALVE
  - C. \*\*\* INDICATES CONTROL VALVE HAS ADDITIONAL ASSOCIATED CONTROL EQUIPMENT & IS REPRESENTED ON CONTROL VALVE HOOK-UP DETAIL DRAWING 9321-F-7056.
  - D. FOR CONTINUATION SEE DWG. 9321-F-2734 (TYP. FOR 12 LOC.)
  - E. THE QUALITY GROUP A, B, C AND SEISMIC BOUNDARIES EXTEND TO THE FIRST SEISMIC SUPPORT/RESTRAINT BEYOND THE BOUNDARIES SHOWN.
  - F. FE-156, FE-157, FE-158, AND FE-159 ARE FLOW RESTRICTION ORIFICES INSTALLED PER EC 56002.

- INSERVICE INSPECTION NOTES:
- 1. CP=CONTAINMENT PENETRATIONS, ASME CLASS MC APPLIES.
  - 2. FOR NON-CODE PIPING PENETRATING CONTAINMENT & NOT CLASSIFIED QUALITY GROUP "A", "B" OR "C" QUALITY GROUP "MC" DESIGNATION SHALL BE APPLIED.

WORK THIS DRAWING WITH DWG. 9321-F-2734 AND DWG. 9321-F-2736

EVERYTHING ON THIS DRAWING (EXCLUDING THOSE PORTIONS WITH DASHED LINES) IS PART OF THE CHEMICAL AND VOLUME CONTROL SYSTEM (CVCS) LISTED IN EXHIBIT A, CI-240-1 EXCEPT AS SPECIFICALLY INDICATED HEREIN

RCS REACTOR COOLANT SYSTEM

REF. DWG:

9321-C-2016	FLOW DIAGRAM SYMBOLS
9321-F-2538	CONTAINMENT BLDG PRIMARY COOLANT PRESSURIZER PIPING PLAN (SOUTH HALF)
9321-F-2734	PIPING AT REACTOR COOLANT PUMPS

DWG. NO. **A208168-56**

DWG. SIZE **A** DWG. TYPE COMPANY **STATION**

**Entergy** INDIAN POINT

BORO: WESTCHESTER

TITLE: FLOW DIAGRAM CHEMICAL & VOLUME CONTROL SYSTEM UPSAR FIGURE No. 9.2-1 (SHT. 2)

APPROVALS

ENGINEERING

DESIGN

DESIGN MANAGER: W.J. KING 11-6-87

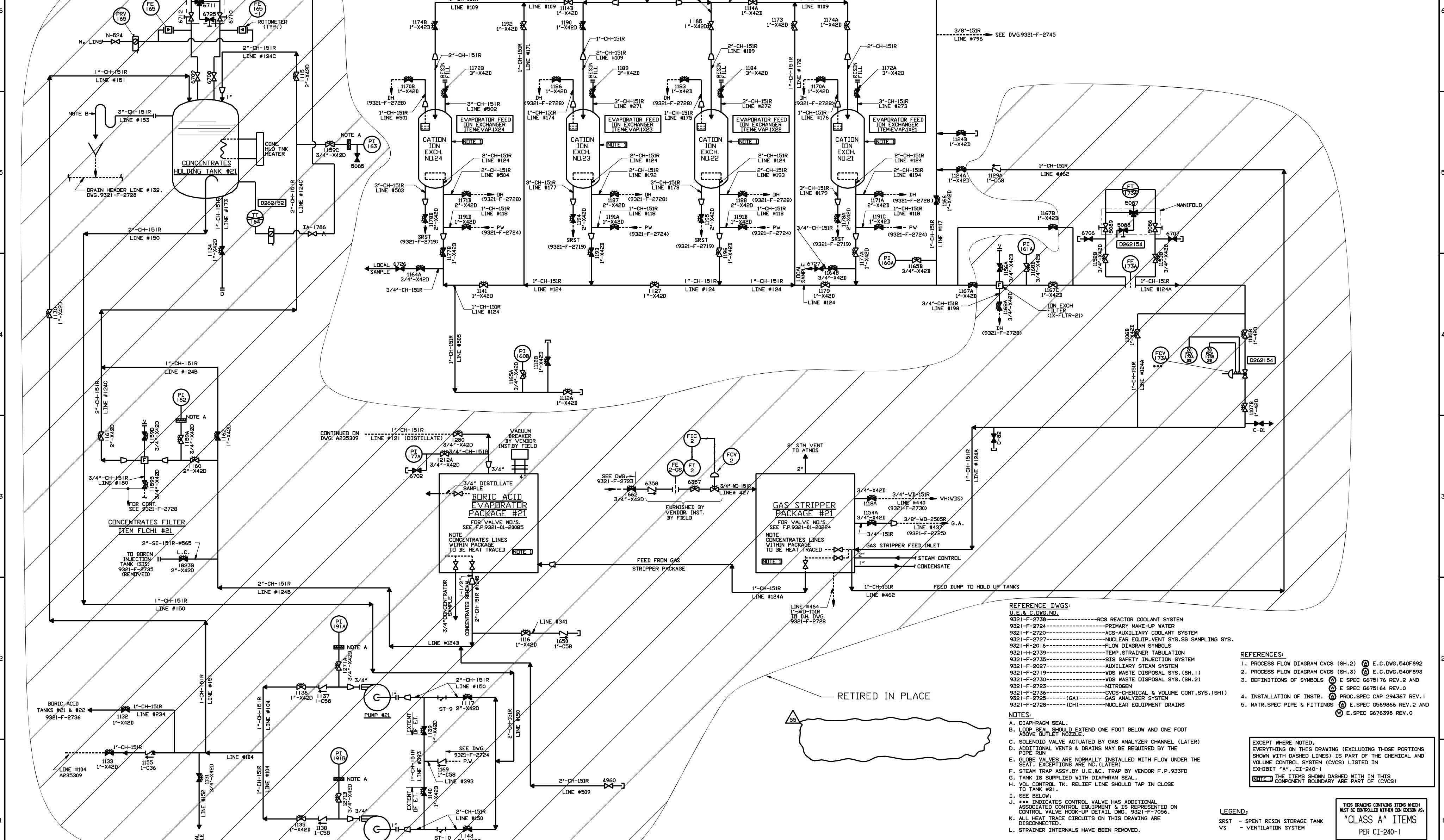
DESIGN SUPERVISOR: F.A. 8-17-90

DRAWN BY: MARZULLO 8-17-90

DESIGN CHECKER: L.H. 8-17-90

SCALE: NONE DISCIPLINE CODE: MY

9321-F-2737



- REFERENCE DWGS:**  
 U.E. & C. DWG. NO.  
 9321-F-2738-----RCS REACTOR COOLANT SYSTEM  
 9321-F-2724-----PRIMARY MAKE-UP WATER  
 9321-F-2720-----ACS-AUXILIARY COOLANT SYSTEM  
 9321-F-2727-----NUCLEAR EQUIP. VENT. SYS. SS SAMPLING SYS.  
 9321-F-2016-----FLOW DIAGRAM SYMBOLS  
 9321-H-2739-----TEMP. STRAINER TABULATION  
 9321-F-2735-----SIS SAFETY INJECTION SYSTEM  
 9321-F-2027-----AUXILIARY STEAM SYSTEM  
 9321-F-2719-----WDS WASTE DISPOSAL SYS. (SH. 1)  
 9321-F-2730-----WDS WASTE DISPOSAL SYS. (SH. 2)  
 9321-F-2723-----NITROGEN  
 9321-F-2736-----CVCS-CHEMICAL & VOLUME CONT. SYS. (SH. 1)  
 9321-F-2726-----GAS ANALYZER SYSTEM  
 9321-F-2728-----NUCLEAR EQUIPMENT DRAINS
- REFERENCES:**  
 1. PROCESS FLOW DIAGRAM CVCS (SH. 2) E.C. DWG. 540F892  
 2. PROCESS FLOW DIAGRAM CVCS (SH. 3) E.C. DWG. 540F893  
 3. DEFINITIONS OF SYMBOLS E SPEC G675176 REV. 2 AND E SPEC G675164 REV. 0  
 4. INSTALLATION OF INSTR. PROC. SPEC CAP 294367 REV. 1  
 5. MATR. SPEC PIPE & FITTINGS E. SPEC C569866 REV. 2 AND E. SPEC G676398 REV. 0

- NOTES:**  
 A. DIAPHRAGM SEAL.  
 B. LOOP SEAL SHOULD EXTEND ONE FOOT BELOW AND ONE FOOT ABOVE OUTLET NOZZLE.  
 C. SOLENOID VALVE ACTUATED BY GAS ANALYZER CHANNEL (LATER)  
 D. ADDITIONAL VENTS & DRAINS MAY BE REQUIRED BY THE PIPE RUN  
 E. GLOBE VALVES ARE NORMALLY INSTALLED WITH FLOW UNDER THE SEAT. EXCEPTIONS ARE N.C. (LATER)  
 F. FLOW TRAP ASSY. BY U.E. & C. TRAP BY VENDOR F.P. 933FD  
 G. TANK IS SUPPLIED WITH DIAPHRAGM SEAL.  
 H. VOL. CONTROL TK. RELIEF LINE SHOULD TAP IN CLOSE TO TANK #21.  
 I. SEE BELOW.  
 J. \*\*\* INDICATES CONTROL VALVE HAS ADDITIONAL ASSOCIATED CONTROL EQUIPMENT & IS REPRESENTED ON CONTROL VALVE HOOK-UP DETAIL DWG. 9321-F-7056.  
 K. ALL HEAT TRACE CIRCUITS ON THIS DRAWING ARE DISCONNECTED.  
 L. STRAINER INTERNALS HAVE BEEN REMOVED.

EXCEPT WHERE NOTED, EVERYTHING ON THIS DRAWING (EXCLUDING THOSE PORTIONS SHOWN WITH DASHED LINES) IS PART OF THE CHEMICAL AND VOLUME CONTROL SYSTEM (CVCS) LISTED IN EXHIBIT "A", CI-240-1

NOTE: THE ITEMS SHOWN DASHED WITH IN THIS COMPONENT BOUNDARY ARE PART OF (CVCS)

**LEGEND:**  
 SRST - SPENT RESIN STORAGE TANK  
 VS - VENTILATION SYSTEM

THIS DRAWING CONTAINS ITEMS WHICH MUST BE CONTROLLED WITH CON EDISON AS "CLASS A" ITEMS PER CI-240-1

COMPUTER GENERATED DRAWING NOT TO BE HAND REVISED WORK THIS DRAWING WITH DWG. A235309

55 INCORPORATED EC0000003112	11/07/07 CLG	APPROVAL	DATE	DESIGN	DATE	SCALE	REV. NO.	REV. DATE

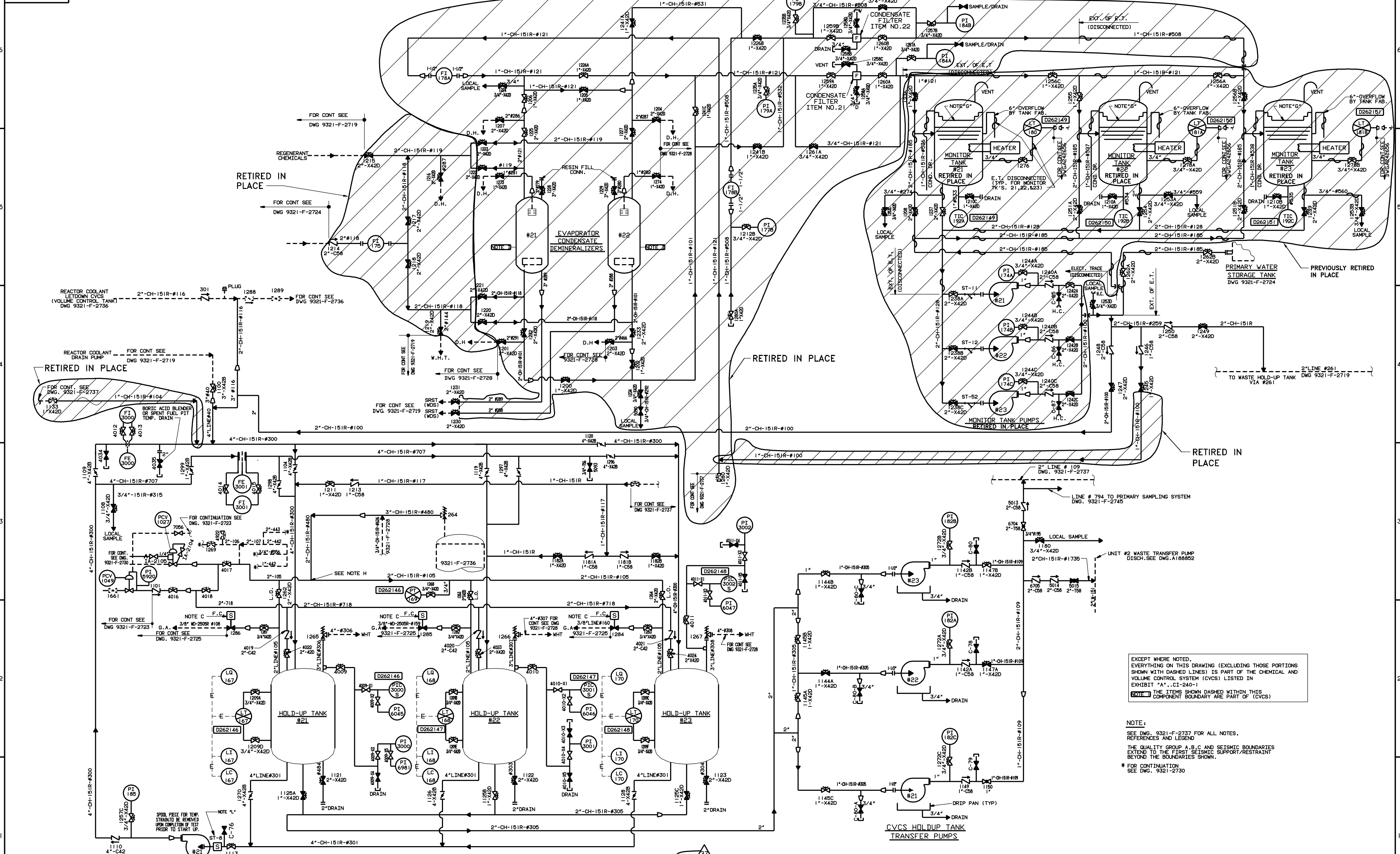
THIS REVISION IS NON-CLASS PER CI-240-1 UPDATED DWG. TO SHOW RETIRED BORON RECOVERY EQUIPMENT PER CBS #199806527. RELEASE AS CONSTRUCTED. P/N 69901-AF D.B./Y.J. 2/09/01

DATE: 2/9/88  
 DESIGNED BY: W.J. KING  
 CHECKED BY: G. BULLA  
 APPROVED BY: [Signature]

TITLE: FLDW DIAGRAM  
 CHEMICAL & VOLUME CONTROL SYSTEM - SH. No. 2  
 UFSAR FIGURE No. 9.2-1 (SHT. 3)  
 SCALE: NONE  
 REV. NO.: 9321-F-2737-55

STATION: INDIAN POINT  
 CON EDISON

609327



EXCEPT WHERE NOTED, EVERYTHING ON THIS DRAWING (EXCLUDING THOSE PORTIONS SHOWN WITH DASHED LINES) IS PART OF THE CHEMICAL AND VOLUME CONTROL SYSTEM (CVCS) LISTED IN EXHIBIT "A", CI-240-1. THE ITEMS SHOWN DASHED WITHIN THIS NOTE COMPONENT BOUNDARY ARE PART OF (CVCS)

NOTE:  
 SEE DWG. 9321-F-2737 FOR ALL NOTES, REFERENCES AND LEGEND.  
 THE QUALITY GROUP A, B, C AND SEISMIC BOUNDARIES EXTEND TO THE FIRST SEISMIC SUPPORT/RESTRAINT BEYOND THE BOUNDARIES SHOWN.  
 \* FOR CONTINUATION SEE DWG. 9321-F-2730

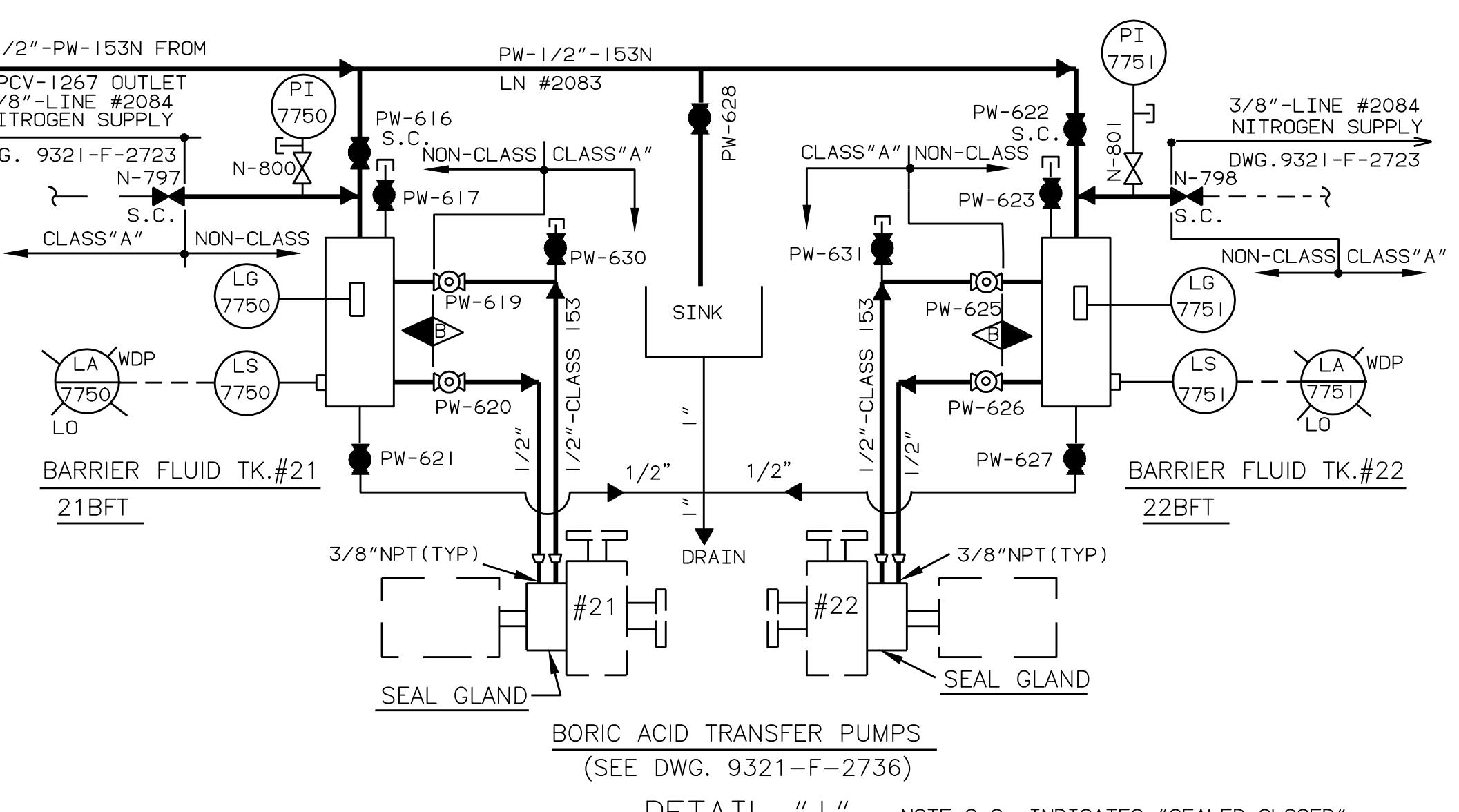
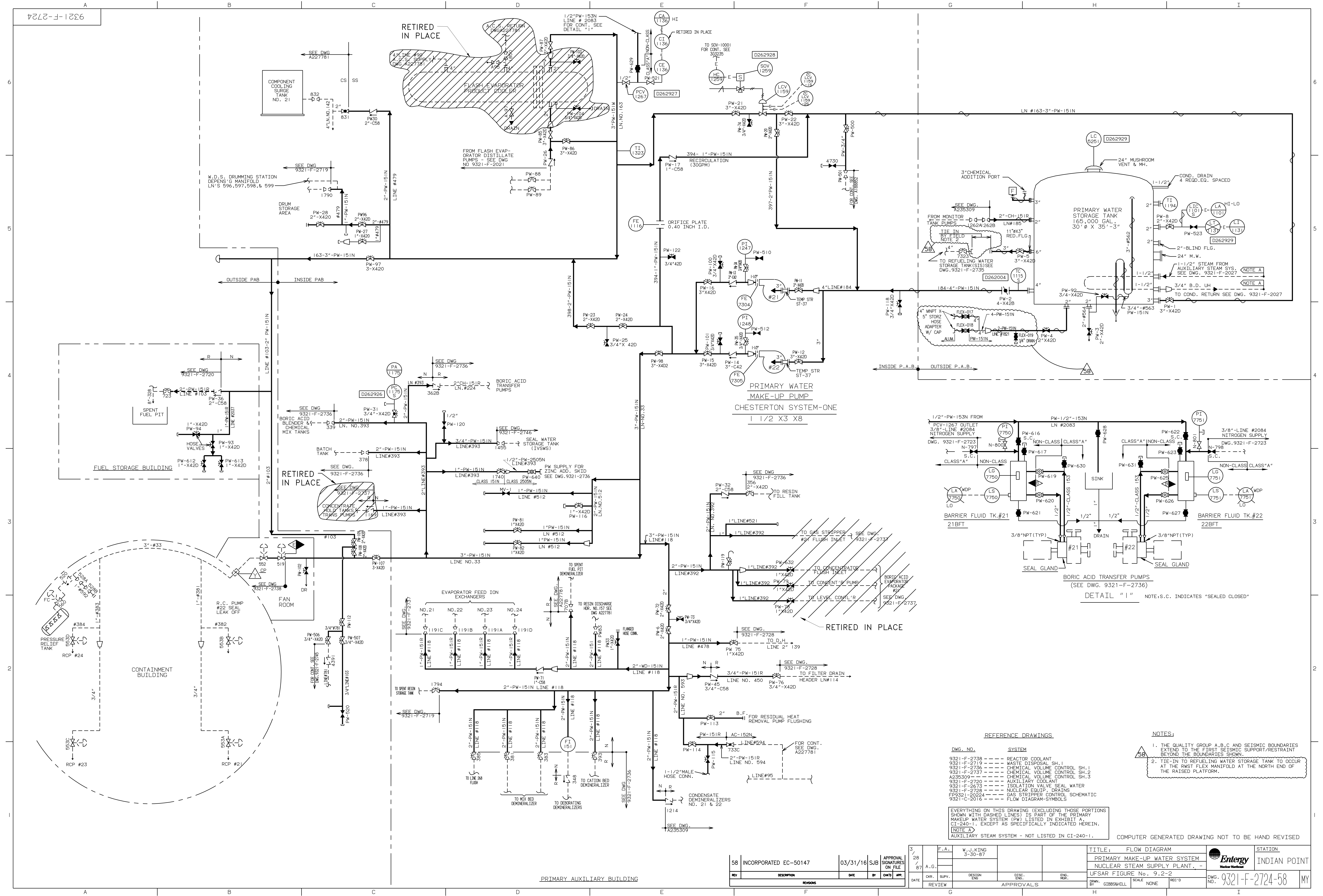
WORK THIS DRAWING WITH 9321-F-2737

REV	DESCRIPTION	REVISION
37	INCORPORATED EC 16545	

DATE	BY	CHK'D	APP'D
03/12/01	S. BHALLA		

DATE	DR.	SLV.	DESIGN	ENG.	DISC.	ISS.	REV.
03/12/01							

TITLE:	FLOW DIAGRAM CHEMICAL & VOLUME CONTROL SYSTEM	STATION	INDIAN POINT
UFSAR FIGURE No.	9.2-1 (SHT. 4)	DWG. No.	A235309-37

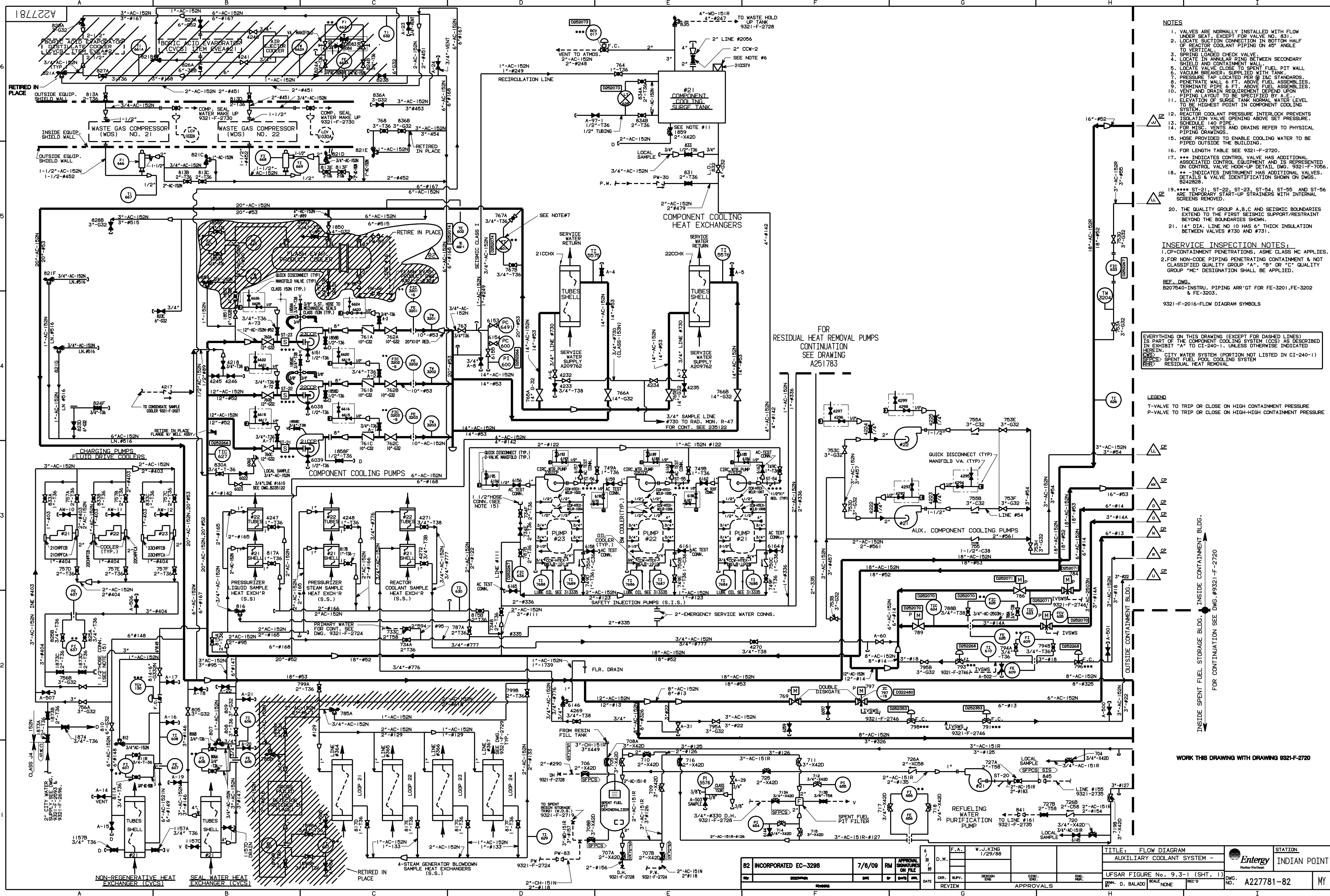


- REFERENCE DRAWINGS.**
- | DWG. NO.    | SYSTEM                         |
|-------------|--------------------------------|
| 9321-F-2738 | REACTOR COOLANT                |
| 9321-F-2719 | WASTE DISPOSAL SH.1            |
| 9321-F-2736 | CHEMICAL VOLUME CONTROL SH.1   |
| 9321-F-2737 | CHEMICAL VOLUME CONTROL SH.2   |
| A235309     | CHEMICAL VOLUME CONTROL SH.3   |
| 9321-F-2720 | AUXILIARY COOLANT              |
| 9321-F-2673 | ISOLATION VALVE SEAL WATER     |
| 9321-F-2728 | NUCLEAR EQUIP. DRAINS          |
| F9321-20624 | GAS STRIPPER CONTROL SCHEMATIC |
| 9321-C-2016 | FLOW DIAGRAM-SYMBOLS           |
- NOTES:**
1. THE QUALITY GROUP A, B, C AND SEISMIC BOUNDARIES EXTEND TO THE FIRST SEISMIC SUPPORT RESTRAINT BEYOND THE BOUNDARIES SHOWN.
  2. TIE-IN TO REFUELING WATER STORAGE TANK TO OCCUR AT THE FIRST FLEX MANIFOLD AT THE NORTH END OF THE RAISED PLATFORM.
- EVERYTHING ON THIS DRAWING (EXCLUDING THOSE PORTIONS SHOWN WITH DASHED LINES) IS PART OF THE PRIMARY MAKEUP WATER SYSTEM (PW) LISTED IN EXHIBIT A, CI-240-1, EXCEPT AS SPECIFICALLY INDICATED HEREIN.
- NOTE A  
AUXILIARY WATER SYSTEM - NOT LISTED IN CI-240-1.

58	INCORPORATED EC-50147	03/31/16	SJB	APPROVAL SIGNATURES ON FILE	DATE	CHK.	REV.	SESSION	DATE	SCALE	REC'D	BY	61889SHILL	SCALE	NONE	REC'D	BY	61889SHILL
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PRIMARY AUXILIARY BUILDING

TITLE:	FLOW DIAGRAM	STATION:	INDIAN POINT
	PRIMARY MAKE-UP WATER SYSTEM		
	NUCLEAR STEAM SUPPLY PLANT, -		
	LFSAR FIGURE NO. 9.2-2		
DWG. NO.:	9321-F-2724-58	DWG. NO.:	9321-F-2724-58



- NOTES**
1. VALVES ARE NORMALLY INSTALLED WITH FLOW UNDER SEAT, EXCEPT FOR VALVE # 831.
  2. LOCATE SUCTION CONNECTION IN BOTTOM HALF OF REACTOR COOLANT PIPING ON 45° ANGLE TO VERTICAL.
  3. SPRING LOADED CHECK VALVE.
  4. LOCATE IN ANNULAR RING BETWEEN SECONDARY SHIELD AND CONTAINMENT WALL.
  5. PRESSURE TAP LOCATED PER 8" IAC STANDARDS.
  6. PENETRATE WALL 6 FT. ABOVE FUEL ASSEMBLIES.
  7. TERMINATE PIPE 6 FT. ABOVE FUEL ASSEMBLIES.
  8. VENT AND DRAIN REQUIREMENT DEPEND UPON PIPING LAYOUT TO BE SPECIFIED BY A.E.
  9. ELEVATION OF SURGE TANK NORMAL WATER LEVEL TO BE HIGHEST POINT IN COMPONENT COOLING SYSTEM.
  10. REACTOR COOLANT PRESSURE INTERLOCK PREVENTS ISOLATION VALVE OPENING ABOVE SET PRESSURE.
  11. SCHEDULE 140 PIPE.
  12. FOR MISC. VENTS AND DRAINS REFER TO PHYSICAL PIPING DRAWINGS.
  13. HOSE PROVIDED TO ENABLE COOLING WATER TO BE PIPED OUTSIDE THE BUILDING.
  14. FOR LENGTH TABLE SEE 9321-F-2720.
  15. \*\*\* INDICATES CONTROL VALVE HAS ADDITIONAL ASSOCIATED CONTROL EQUIPMENT AND IS REPRESENTED ON CONTROL VALVE HOOD-UP DETAIL DWG. 9321-F-7056.
  16. \*\* INDICATES INSTRUMENT HAS ADDITIONAL VALVES. DETAILS & VALVE IDENTIFICATION SHOWN ON DWGS. B242828.
  17. ST-21, ST-22, ST-23, ST-54, ST-55 AND ST-56 ARE TEMPORARY START-UP STRAINERS WITH INTERNAL SCREENS REMOVED.
  18. THE QUALITY GROUP A, B, C AND SEISMIC BOUNDARIES EXTEND TO THE FIRST SEISMIC SUPPORT/RESTRAINT BEYOND THE BOUNDARIES SHOWN.
  19. 1 1/2" DIA. LINE NO 10 HAS 6" THICK INSULATION BETWEEN VALVES #730 AND #731.

**INSERVICE INSPECTION NOTES:**

1. CP-CONTAINMENT PENETRATIONS, ASME CLASS MC APPLIES.
2. FOR NON-CODE PIPING PENETRATING CONTAINMENT & NOT CLASSIFIED QUALITY GROUP "A", "B" OR "C" QUALITY GROUP "MC" DESIGNATION SHALL BE APPLIED.

REF. DWG. B207540-INSTRU. PIPING ARR'GT FOR FE-3201, FE-3202 & FE-3203.

9321-F-2016-FLOW DIAGRAM SYMBOLS

EVERYTHING ON THIS DRAWING (EXCEPT FOR DASHED LINES) IS PART OF THE COMPONENT COOLING SYSTEM (CCS) AS DESCRIBED IN EXHIBIT "A" TO CI-240-1, UNLESS OTHERWISE INDICATED HEREIN.

SPENT FUEL PURIFICATION PUMP (SFPP)  
RESIDUAL HEAT REMOVAL

**LEGEND**

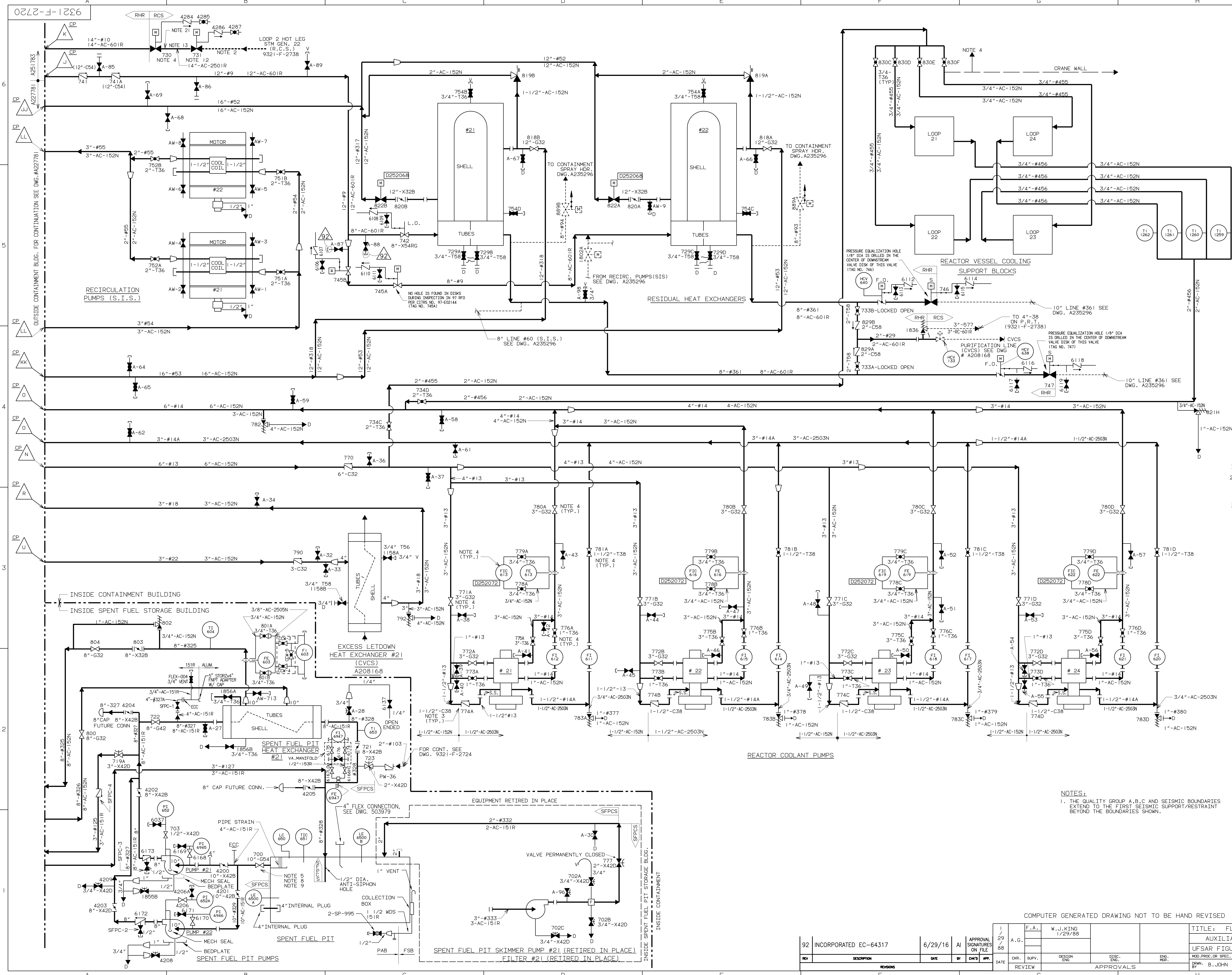
T-VALVE TO TRIP OR CLOSE ON HIGH CONTAINMENT PRESSURE  
P-VALVE TO TRIP OR CLOSE ON HIGH-HIGH CONTAINMENT PRESSURE

FOR CONTINUATION SEE DWG. #9321-F-2720

INSIDE SPENT FUEL STORAGE BLDG. INSIDE CONTAINMENT BLDG. OUTSIDE CONTAINMENT BLDG.

WORK THIS DRAWING WITH DRAWING 9321-F-2720

82 INCORPORATED EC-3298		7/6/09	RM	APPROVAL	F.A. W.J. KING 1/29/88	STATION	INDIAN POINT
UFSAR FIGURE No. 9.3-1 (SHT. 1)		DATE		DR. SUPV. DESIGN	DATE	DWG. NO.	A227781-82
REV		DESCRIPTION	DATE	BY	CHKD	APPVALS	MY



- REFERENCES**
1. PROCESS FLOW DIAGRAM SHEET #1 (DWG. 540F889)
  2. DEFINITION OF SYMBOLS
  3. INSTALLATION OF INSTRUMENTATION
  4. MATERIAL SPEC. PIPE AND FITTINGS
- INSERVICE INSPECTION NOTES:**
1. CP-CONTAINMENT PENETRATIONS, ASME CLASS MC APPLIES.
  2. FOR NON-CODE PIPING PENETRATING CONTAINMENT & NOT CLASSIFIED QUALITY GROUP "A", "B" OR "C" QUALITY GROUP "MC" DESIGNATION SHALL BE APPLIED.
- REFERENCE DRAWINGS**
- 9321-F-2719 ----- WDS- WASTE DISPOSAL SYSTEM SHT #1
  - 9321-F-2730 ----- WDS- WASTE DISPOSAL SYSTEM SHT #2
  - 9321-F-2724 ----- PW- PRIMARY MAKE-UP WATER SYSTEM
  - 9321-F-2720 ----- AUX. STM. SUPPLY & COND. RETURN SYSTEM
  - 9321-F-2735 ----- SIS- SAFETY INJECTION SYSTEM
  - 9321-F-2736 ----- CVCS- CHEM. & VOLUME CONTROL SYS. SHT #1
  - 9321-F-2737 ----- CVCS- CHEM. & VOLUME CONTROL SYS. SHT #2
  - 9321-F-2748 ----- RCS- REACTOR COOLANT SYSTEM
  - 9321-F-2745 ----- SS- SAMPLING SYSTEM
  - 9321-F-2746 ----- IWVS- ISOLATION VALVE SEAL WATER SYS.
  - 9321-F-2734 ----- PIPING AT REACTOR COOLANT PUMPS
  - 9321-C-2016 ----- FLOW DIAGRAM SYMBOLS
  - 9321-F-783 ----- AUXILIARY COOLANT SYSTEM RESIDUAL HEAT REMOVAL PUMPS

EVERYTHING ON THIS DRAWING (EXCEPT FOR DASHED LINES) IS PART OF THE COMPONENT COOLING SYSTEM AS DESCRIBED IN EXHIBIT A TO C1-240-1 UNLESS OTHERWISE INDICATED

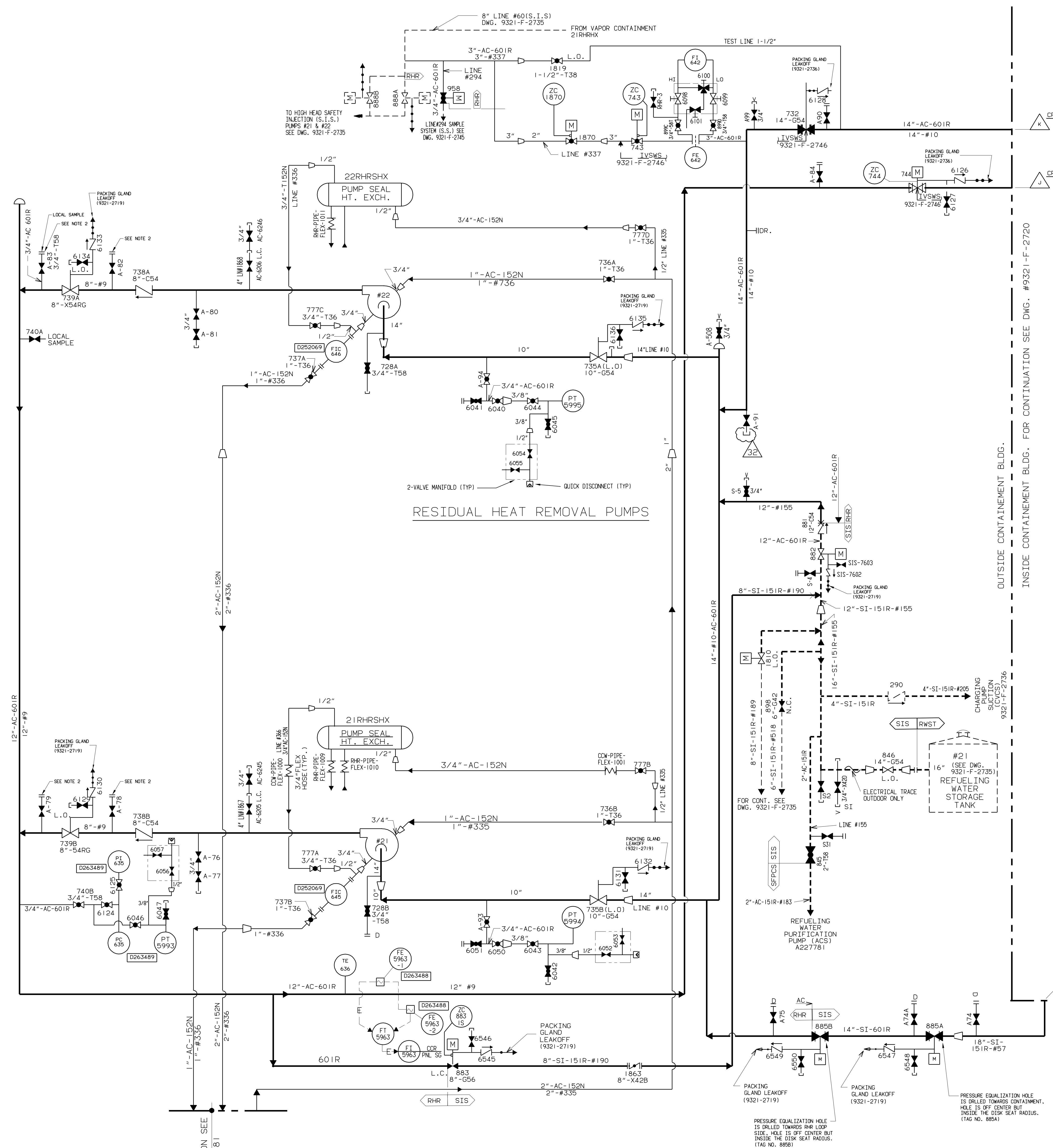
[SIFCS] > SPENT FUEL POOL COOLING SYSTEM  
 [RHR] > RESIDUAL HEAT REMOVAL SYSTEM  
 [RCS] > REACTOR COOLANT SYSTEM

**NOTES:**

1. THE QUALITY GROUP A,B,C AND SEISMIC BOUNDARIES EXTEND TO THE FIRST SEISMIC SUPPORT/RESTRAINT BEYOND THE BOUNDARIES SHOWN.

WORK THIS DWG. WITH DWG. A-227781 FOR NOTES SEE DRAWING #A-227781

COMPUTER GENERATED DRAWING NOT TO BE HAND REVISED				TITLE: FLOW DIAGRAM AUXILIARY COOLANT SYSTEM - UFSAR FIGURE No. 9.3-1 (SHT. 2)		STATION INDIAN POINT	
REV	DESCRIPTION	DATE	BY	APPROVAL SIGNATURES ON FILE	DESIGN	SCALE	REC'D
92	INCORPORATED EC-64317	6/29/16	AI		DESIGN	NONE	
					APPROVALS		



RESIDUAL HEAT REMOVAL PUMPS

INSIDE CONTAINMENT BLDG. FOR CONTINUATION SEE DWG. #9321-F-2720

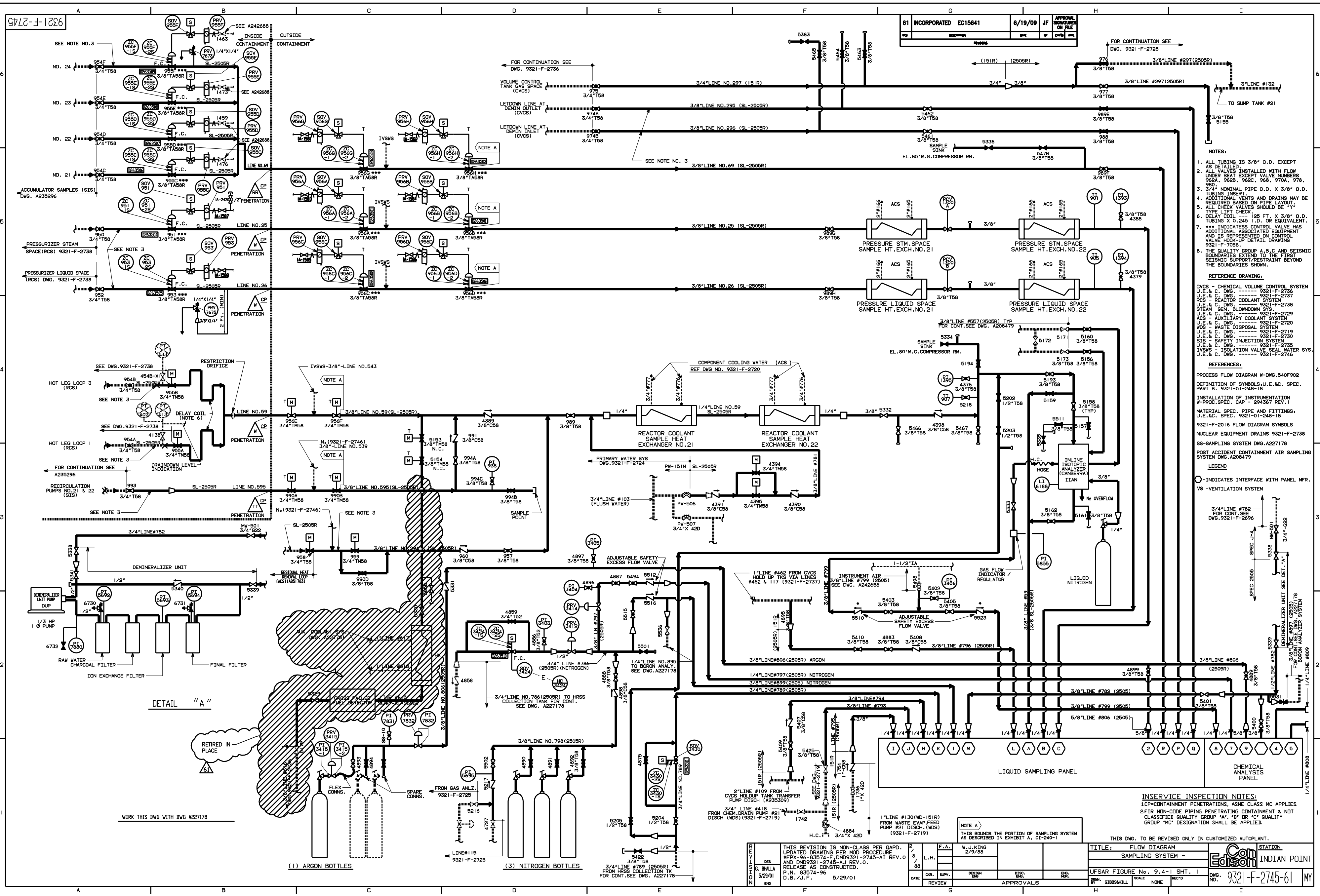
OUTSIDE CONTAINMENT BLDG.

- NOTES:
1. THE QUALITY GROUP A,B,C AND SEISMIC BOUNDARIES EXTEND TO THE FIRST SEISMIC SUPPORT/RESTRAINT BEYOND THE BOUNDARIES SHOWN.
  2. FLANGES HAVE A 1500W RATING (ONLY WHERE NOTED).
- INSERVICE INSPECTION NOTES:
1. CP=CONTAINMENT PENETRATIONS, ASME CLASS MC APPLIES.
  2. FOR NON-CODE PIPING PENETRATING CONTAINMENT & NOT CLASSIFIED QUALITY GROUP "A", "B" OR "C" QUALITY GROUP "MC" DESIGNATION SHALL BE APPLIED.

FOR NOTES AND REF. DWGS. SEE DWG. A227781

THIS DWG. TO BE REVISED ONLY IN AUTOCAD.				DESIGNED BY: M.RADWANSKY DATE: 04/10/03		APPROVED BY: W.J. KING DATE: 6-26-92		TITLE: FLOW DIAGRAM AUXILIARY COOLANT SYSTEM RESIDUAL HEAT REMOVAL PUMPS - UFSAR FIGURE No. 9.3-1 (SHT. 3)		STATION: INDIAN POINT	
32 INCORPORATED EC-58811 4/6/16 VMR APPROVAL SIGNATURES ON FILE	M.RADWANSKY 04/10/03		W.J. KING 6-26-92		J. SESE NONE		SCALE: NONE		DWG. NO.: A251783-32		MY





61	INCORPORATED EC15641	6/18/09	JF	APPROVAL SIGNATURES ON FILE
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- NOTES:
1. ALL TUBING IS 3/8" O.D. EXCEPT AS DETAILED.
  2. ALL VALVES INSTALLED WITH FLOW UNDER SEAT EXCEPT VALVE NUMBERS 962A, 962B, 962C, 968, 970A, 978, 980.
  3. 3/4" NOMINAL PIPE O.D. X 3/8" O.D. TUBING INSERT.
  4. ADDITIONAL VENTS AND DRAINS MAY BE REQUIRED BASED ON PIPE LAYOUT.
  5. ALL CHECK VALVES SHOULD BE TYPE "LIFT CHECK".
  6. \*\*\* TIGHTNESS CONTROL VALVE HAS ADDITIONAL ASSOCIATED EQUIPMENT AND IS REPRESENTED ON CONTROL VALVE HOOD-UP DETAIL DRAWING 9321-F-7056.
  7. THE QUALITY GROUP A, B, C AND SEISMIC BOUNDARIES EXTEND TO THE FIRST SEISMIC SUPPORT/RESTRAINT BEYOND THE BOUNDARIES SHOWN.

REFERENCE DRAWING:

CVCS - CHEMICAL VOLUME CONTROL SYSTEM  
 U.E. & C. DWG. ----- 9321-F-2736  
 U.E. & C. DWG. ----- 9321-F-2737  
 RCS - REACTOR COOLANT SYSTEM  
 U.E. & C. DWG. ----- 9321-F-2738  
 STEAM GEN. BLOWDOWN SYS.  
 U.E. & C. DWG. ----- 9321-F-2729  
 ACS - AUXILIARY COOLANT SYSTEM  
 U.E. & C. DWG. ----- 9321-F-2720  
 WDS - WASTE DISPOSAL SYSTEM  
 U.E. & C. DWG. ----- 9321-F-2719  
 U.E. & C. DWG. ----- 9321-F-2730  
 SIS - SAFETY INJECTION SYSTEM  
 U.E. & C. DWG. ----- 9321-F-2735  
 IVSWS - ISOLATION VALVE SEAL WATER SYS.  
 U.E. & C. DWG. ----- 9321-F-2746

REFERENCES:

PROCESS FLOW DIAGRAM W-DWG. 540F902  
 DEFINITION OF SYMBOLS, U.E. & C. SPEC. PART B. 9321-01-248-18  
 INSTALLATION OF INSTRUMENTATION W-PROC. SPEC. CAP - 294367 REV. 1  
 U.E. & C. SPEC. 9321-01-248-18  
 9321-F-2016 FLOW DIAGRAM SYMBOLS  
 NUCLEAR EQUIPMENT DRAINS 9321-F-2738  
 SS-SAMPLING SYSTEM DWG. A227178  
 POST ACCIDENT CONTAINMENT AIR SAMPLING SYSTEM DWG. A208479

LEGEND

○ - INDICATES INTERFACE WITH PANEL MFR.  
 VS - VENTILATION SYSTEM

INSERVICE INSPECTION NOTES:

1. CP-CONTAINMENT PENETRATIONS, ASME CLASS MC APPLIES.
2. FOR NON-CODE PIPING PENETRATING CONTAINMENT & NOT CLASSIFIED QUALITY GROUP "A", "B" OR "C" QUALITY GROUP "MC" DESIGNATION SHALL BE APPLIED.

WORK THIS DWG WITH DWG A227178

DETAIL "A"

RETIRED IN PLACE

(1) ARGON BOTTLES

(3) NITROGEN BOTTLES

THIS REVISION IS NON-CLASS PER GARD. UPDATED DRAWING PER MOD PROCEDURE W/FPX-96-83574-F, DMD9321-2745-A1 REV. 0 AND DMD9321-2745-A1 REV. 0. RELEASE AS CONSTRUCTED. P.N. 83574-96 D.B./J.F.F. 5/29/01		F.A. W.J. KING 2/3/88 L.H.	TITLE: FLOW DIAGRAM SAMPLING SYSTEM -	INDIAN POINT
DATE 5/29/01 DR. S. BHALLA DESIGNED	DATE 5/29/01 DR. S. BHALLA DESIGN	DATE 5/29/01 DR. S. BHALLA DESIGN	UFSAR FIGURE No. 9.4-1 SHT. 1 SCALE NONE REC'D	DWG. NO. 9321-F-2745-61 MY

A227178

4

3

2

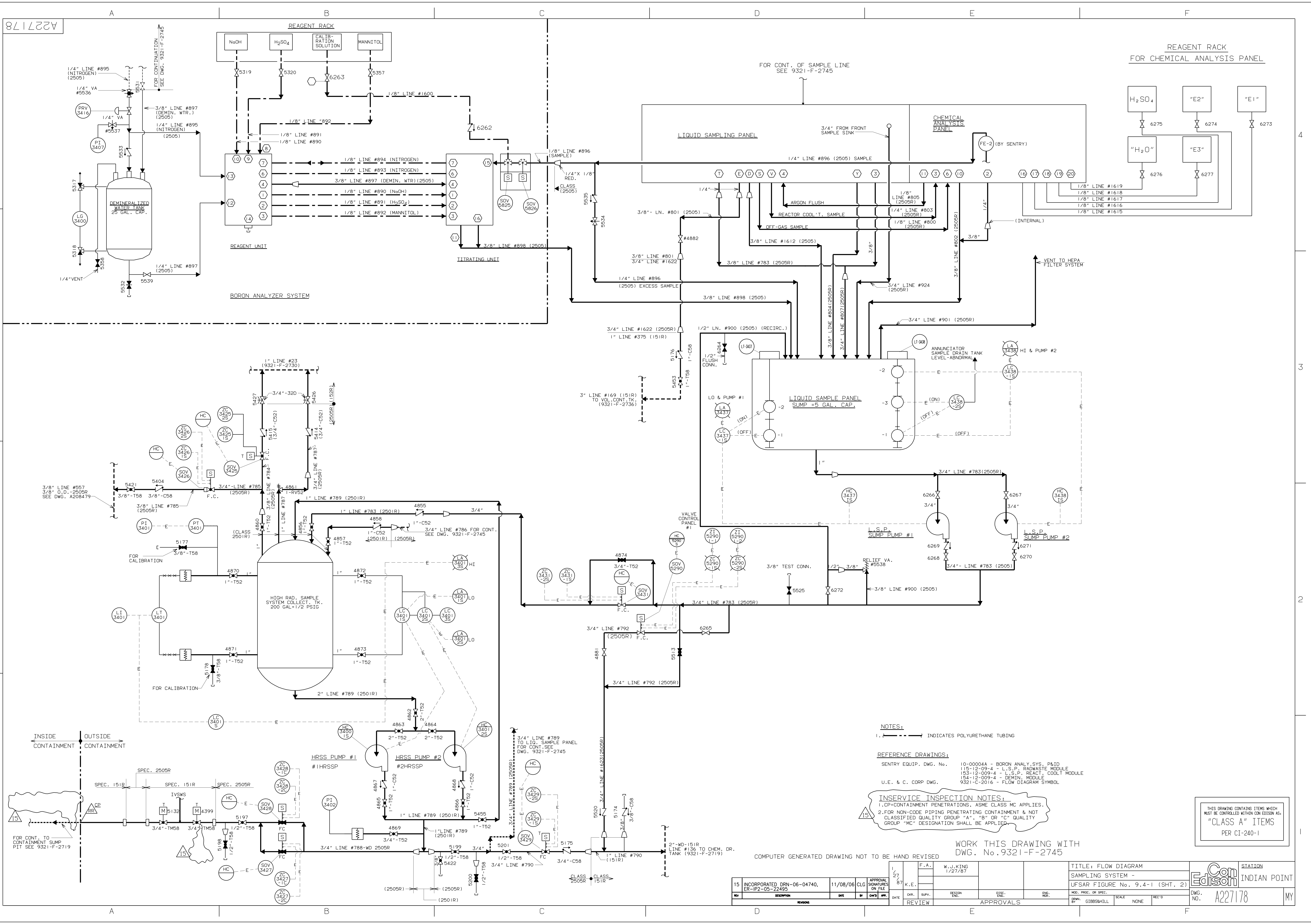
1

4

3

2

1



**NOTES:**  
 1. --- INDICATES POLYURETHANE TUBING

**REFERENCE DRAWINGS:**  
 SENTRY EQUIP. DWG. No. 10-00004A - BORON ANALY. SYS. P&ID  
 115-12-09-4 - L.S.P. RADWASTE MODULE  
 153-12-009-4 - L.S.P. REACT. COOL. MODULE  
 154-12-009-4 - DEMIN. MODULE  
 9321-C-2016 - FLOW DIAGRAM SYMBOL

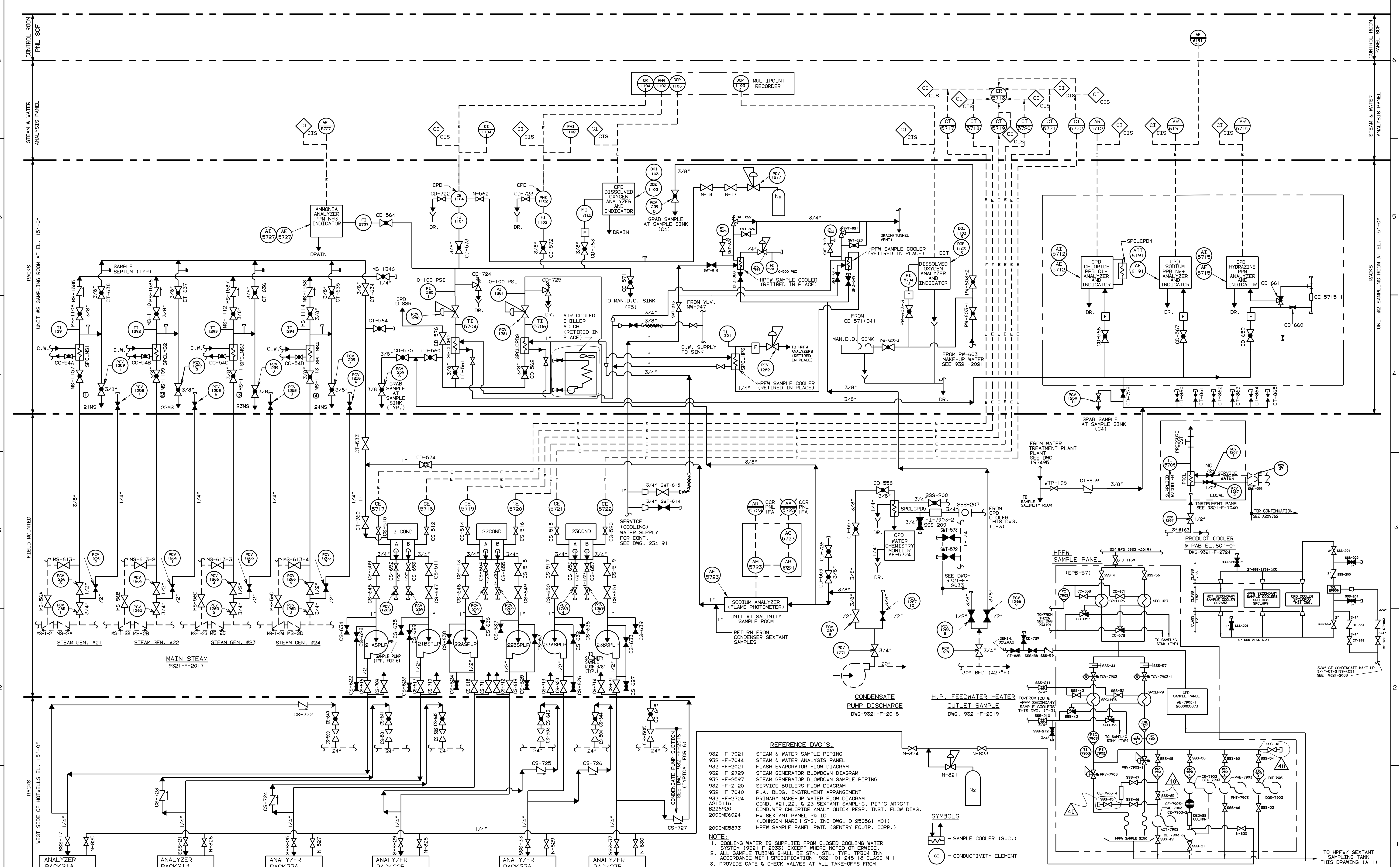
**INSERVICE INSPECTION NOTES:**  
 1. CP-CONTAINMENT PENETRATIONS, ASME CLASS MC APPLIES.  
 2. FOR NON-CODE PIPING PENETRATING CONTAINMENT & NOT CLASSIFIED QUALITY GROUP "A", "B" OR "C" QUALITY GROUP "MC" DESIGNATION SHALL BE APPLIED.

WORK THIS DRAWING WITH  
 DWG. No. 9321-F-2745

COMPUTER GENERATED DRAWING NOT TO BE HAND REVISED

15	INCORPORATED DRN-06-04740, ER-IP2-05-22495	11/08/06	CLG	APPROVAL SIGNATURES ON FILE	DATE	DR.	SRV.	REGION	SCALE	REC'D	REV.	NO.	A227178	MY
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TITLE: FLOW DIAGRAM SAMPLING SYSTEM - UFSAR FIGURE No. 9.4-1 (SHT. 2)		STATION INDIAN POINT	
DWG. NO. A227178		REV. NO.	



**REFERENCE DWG'S.**

- 9321-F-7021 STEAM & WATER SAMPLE PIPING
- 9321-F-7044 STEAM & WATER ANALYSIS PANEL
- 9321-F-2021 FLASH EVAPORATOR FLOW DIAGRAM
- 9321-F-2729 STEAM GENERATOR BLOWDOWN SAMPLE PIPING
- 9321-F-2597 STEAM GENERATOR BLOWDOWN SAMPLE PIPING
- 9321-F-2120 SERVICE BOILERS FLOW DIAGRAM
- 9321-F-7040 P.A. BLDG. INSTRUMENT ARRANGEMENT
- 9321-F-2724 PRIMARY MAKE-UP WATER FLOW DIAGRAM
- A215116 COND. #21, #22, & #23 SEXTANT SAMPL'G. PIP'G ARR'G'T
- B226920 COND. WTR. CHLORIDE ANALY. QUICK RESP. INST. FLOW DIAG.
- 2000MC6024 HW SEXTANT PANEL P&ID (JOHNSON MARCH SYS. INC. DWG. D-280561-M01)
- 2000MC6873 HFW SAMPLE PANEL P&ID (SENTRY EQUIP. CORP.)

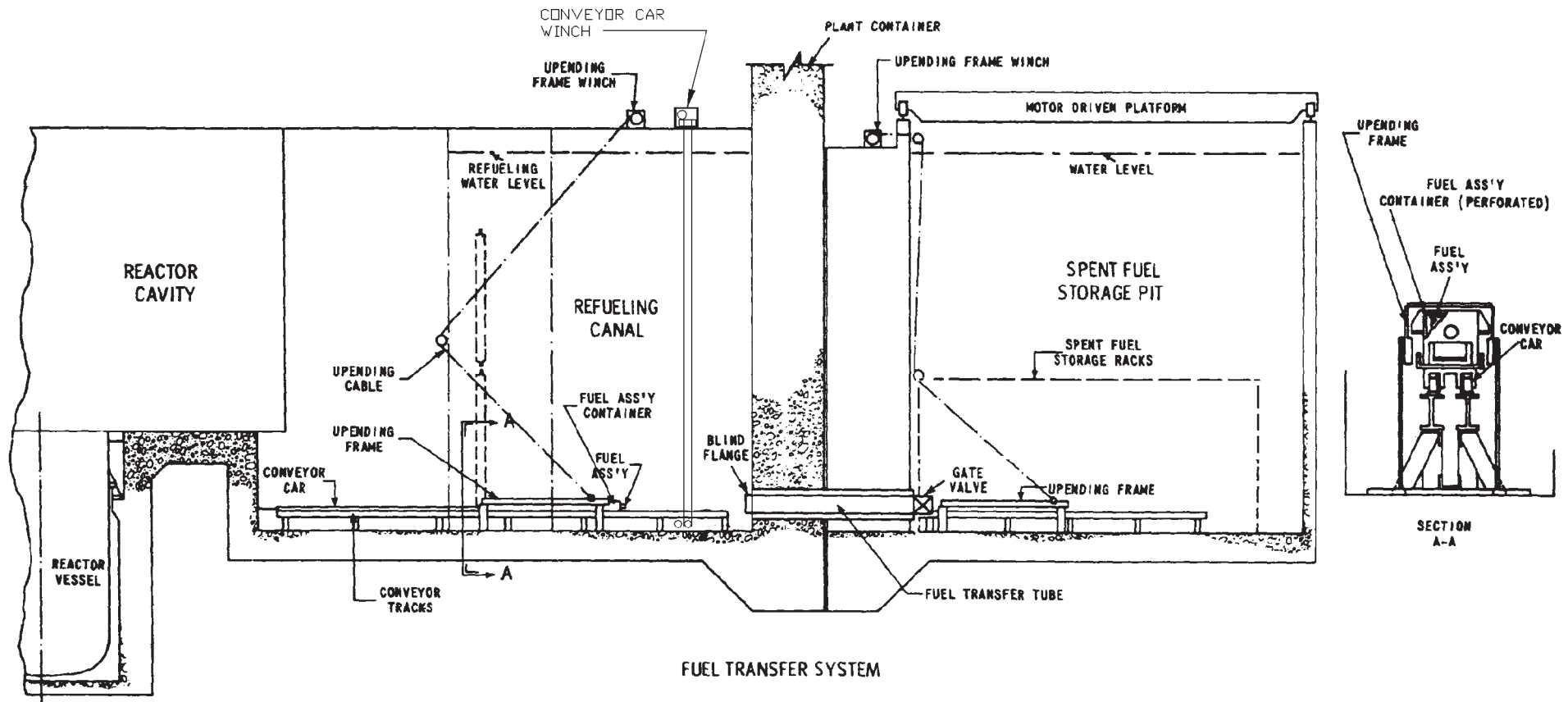
**NOTE:**

- COOLING WATER IS SUPPLIED FROM CLOSED COOLING WATER SYSTEM (9321-F-2033) EXCEPT WHERE NOTED OTHERWISE.
- ALL SAMPLE TUBING SHALL BE STN. STL. TYP. TP304 INN. ACCORDANCE WITH SPECIFICATION 9321-01-248-18 CLASS M-1 CITY WATER LINES
- PROVIDE GATE & CHECK VALVES AT ALL TAKE-OFFS FROM CITY WATER LINES

**SYMBOLS**

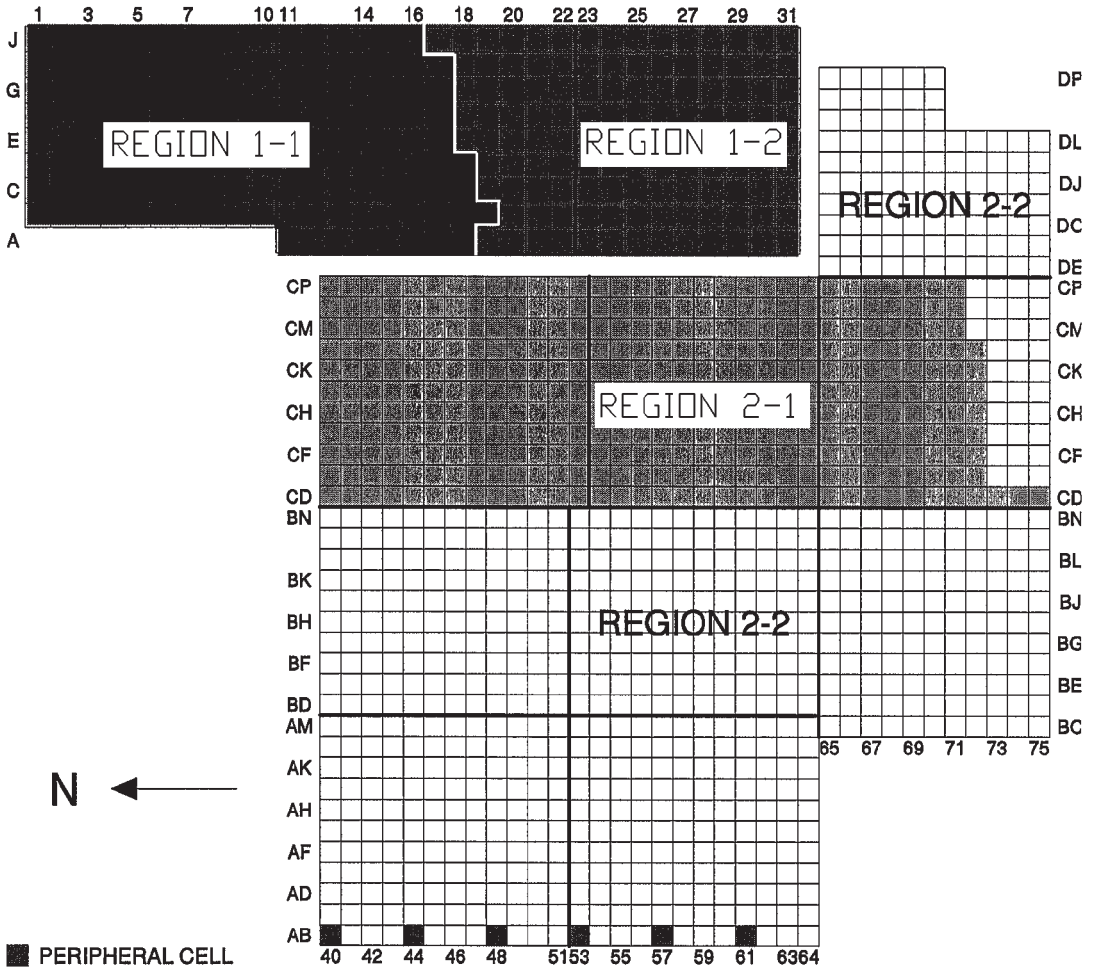
- (SC) - SAMPLE COOLER (S.C.)
- (CE) - CONDUCTIVITY ELEMENT
- (B) - BULKHEAD, SEE DWG. 9321-F-7044

FROM HFW SAMPLE PANEL THIS DWG. (I-1)		TO HW SEXTANT SAMPLE TANK (TYP.)		TO HOTWELL SEXTANT SAMPLING TANK		TO HFW/ SEXTANT SAMPLING TANK THIS DRAWING (A-1)	
<p>ANALYZER RACK #21A P&amp;ID DWG. 2000MC6024</p> <p>ANALYZER RACK #22A P&amp;ID DWG. 2000MC6024</p> <p>ANALYZER RACK #23A P&amp;ID DWG. 2000MC6024</p> <p>ANALYZER RACK #23B P&amp;ID DWG. 2000MC6024</p> <p>ANALYZER RACK #23C P&amp;ID DWG. 2000MC6024</p>				<p>CONDENSATE PUMP SECTION (TYPICAL FOR C1)</p> <p>CONDENSATE PUMP DISCHARGE DWG-9321-F-2018</p> <p>H.P. FEEDWATER HEATER OUTLET SAMPLE DWG. 9321-F-2019</p>			
<p>COMPUTER GENERATED DRAWING NOT TO BE HAND REVISED</p> <p>TITLE: STEAM &amp; WATER ANALYSIS SYSTEM SAMPLING DIAGRAM</p> <p>INSTRUMENTATION -</p> <p>UFSAR FIGURE No. 9.4-2</p> <p>SCALE NONE</p> <p>REC'D</p>							
<p>40 INCORPORATED EC-54306</p> <p>12/4/14</p> <p>APPROVAL SIGNATURES ON FILE</p>		<p>WVR</p> <p>CHK</p> <p>APP</p>		<p>DATE</p> <p>BY</p> <p>APP</p>		<p>STATION INDIAN POINT</p> <p>DWG. NO. 9321-F-7020-40</p>	



FUEL TRANSFER SYSTEM

INDIAN POINT UNIT No. 2	
UFSAR FIGURE 9.5-1	
FUEL TRANSFER SYSTEM	
MIC. No. 1999MC3886	REV. No. 17B

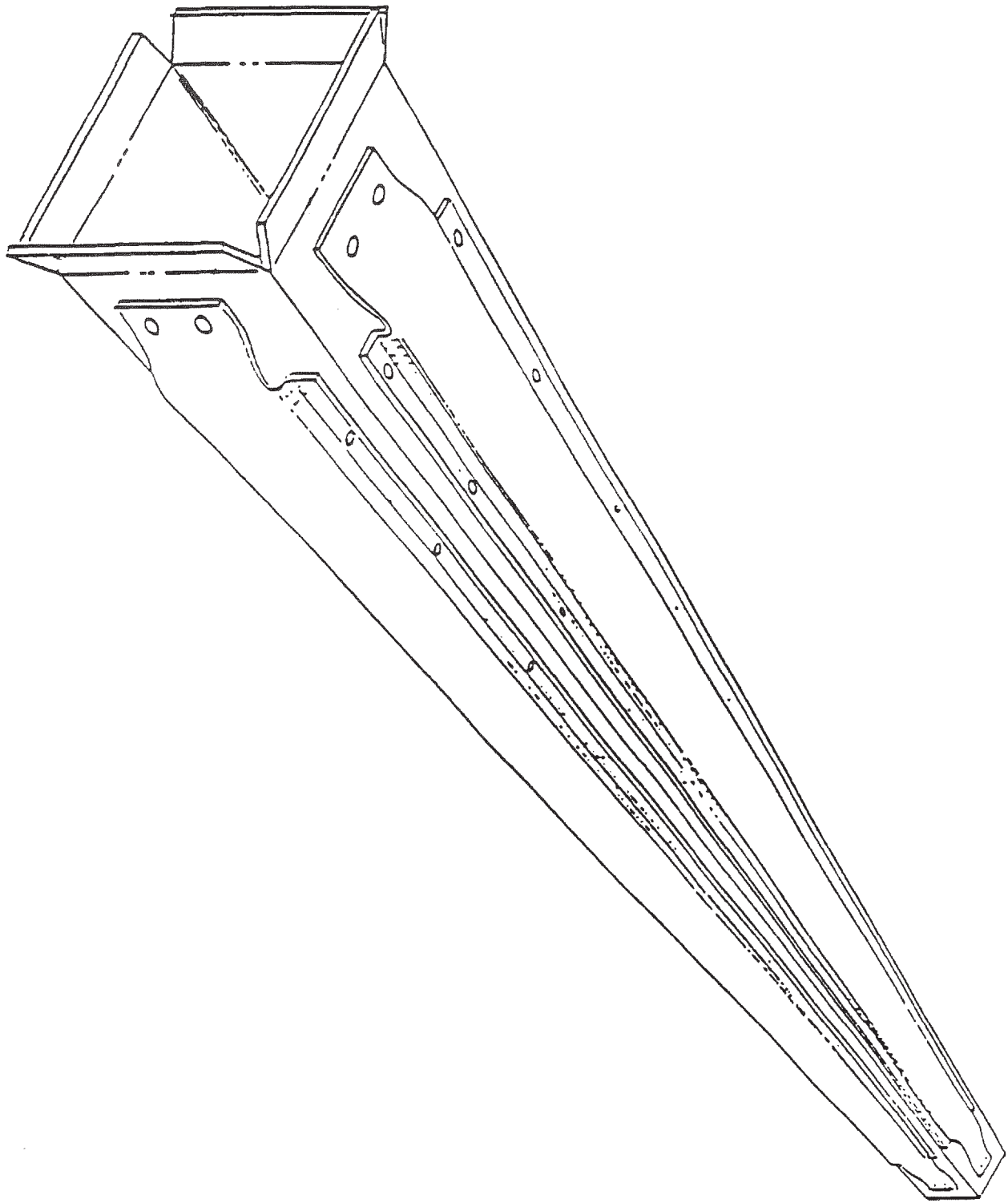


INDIAN POINT UNIT No. 2

UFSAR FIGURE 9.5-2

SPENT FUEL STORAGE RACK LAYOUT

MIC. No. 1999MC3887 | REV. No. 17B



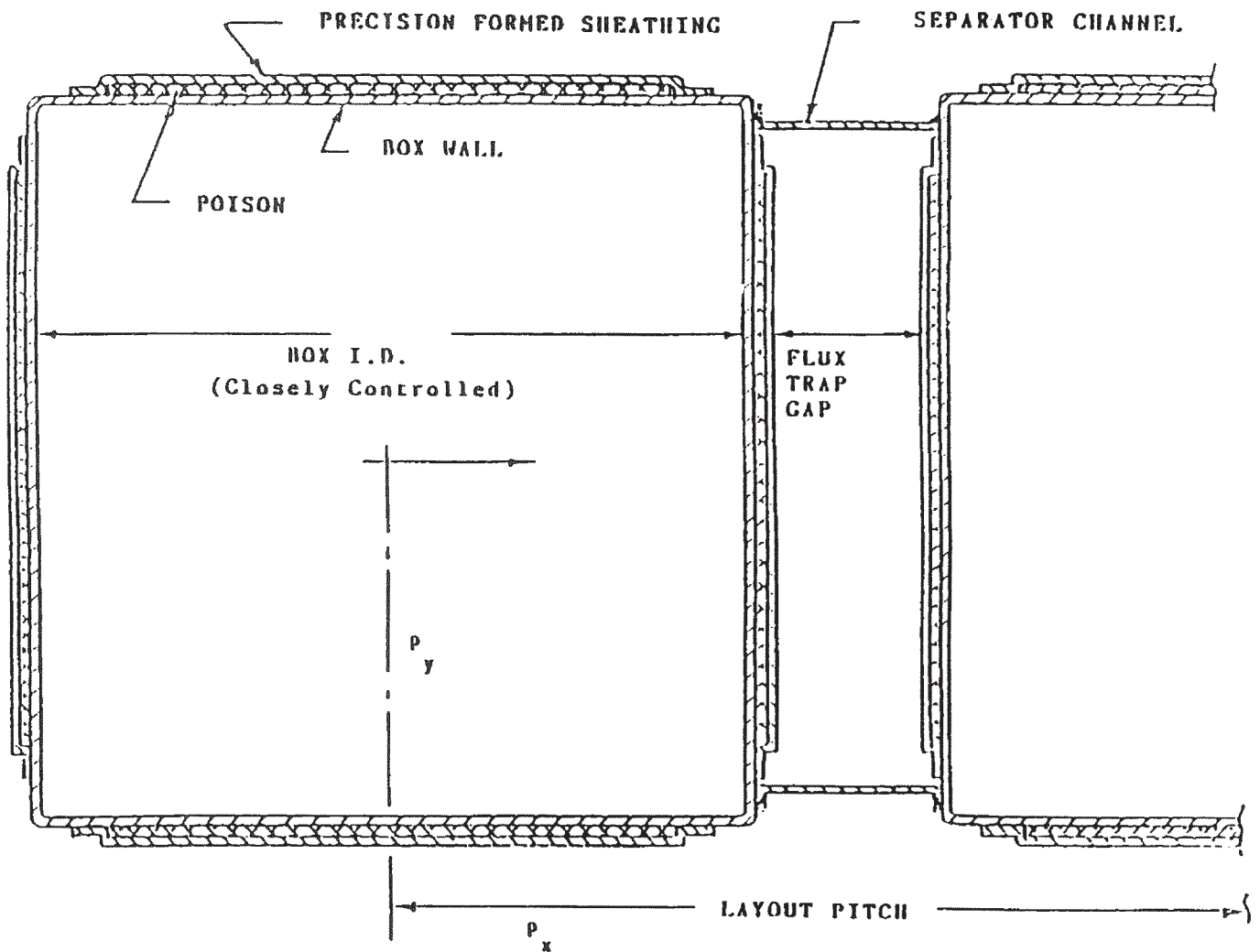
INDIAN POINT UNIT No. 2

UFSAR FIGURE 9.5-3

SPENT FUEL STORAGE CELL  
REGION I

MIC. No. 1999MC3888

REV. No. 17A



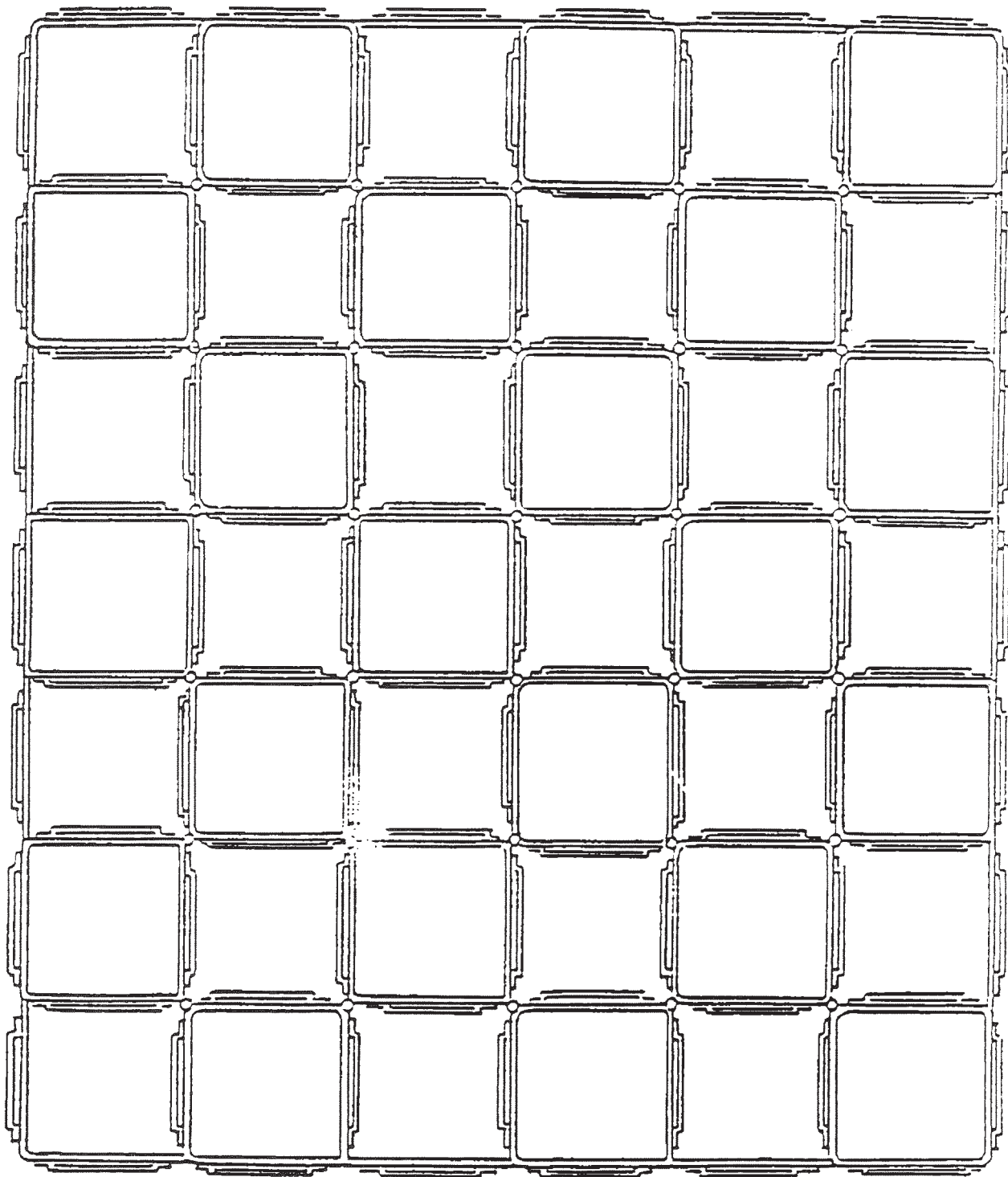
INDIAN POINT UNIT No. 2

UFSAR FIGURE 9.5-4

REGION I CELL  
CROSS SECTION

MIC. No. 1999MC3889

REV. No. 17A



INDIAN POINT UNIT No. 2

UFSAR FIGURE 9.5-5

REGION II  
CROSS SECTION

MIC. No. 1999MC3890

REV. No. 17A



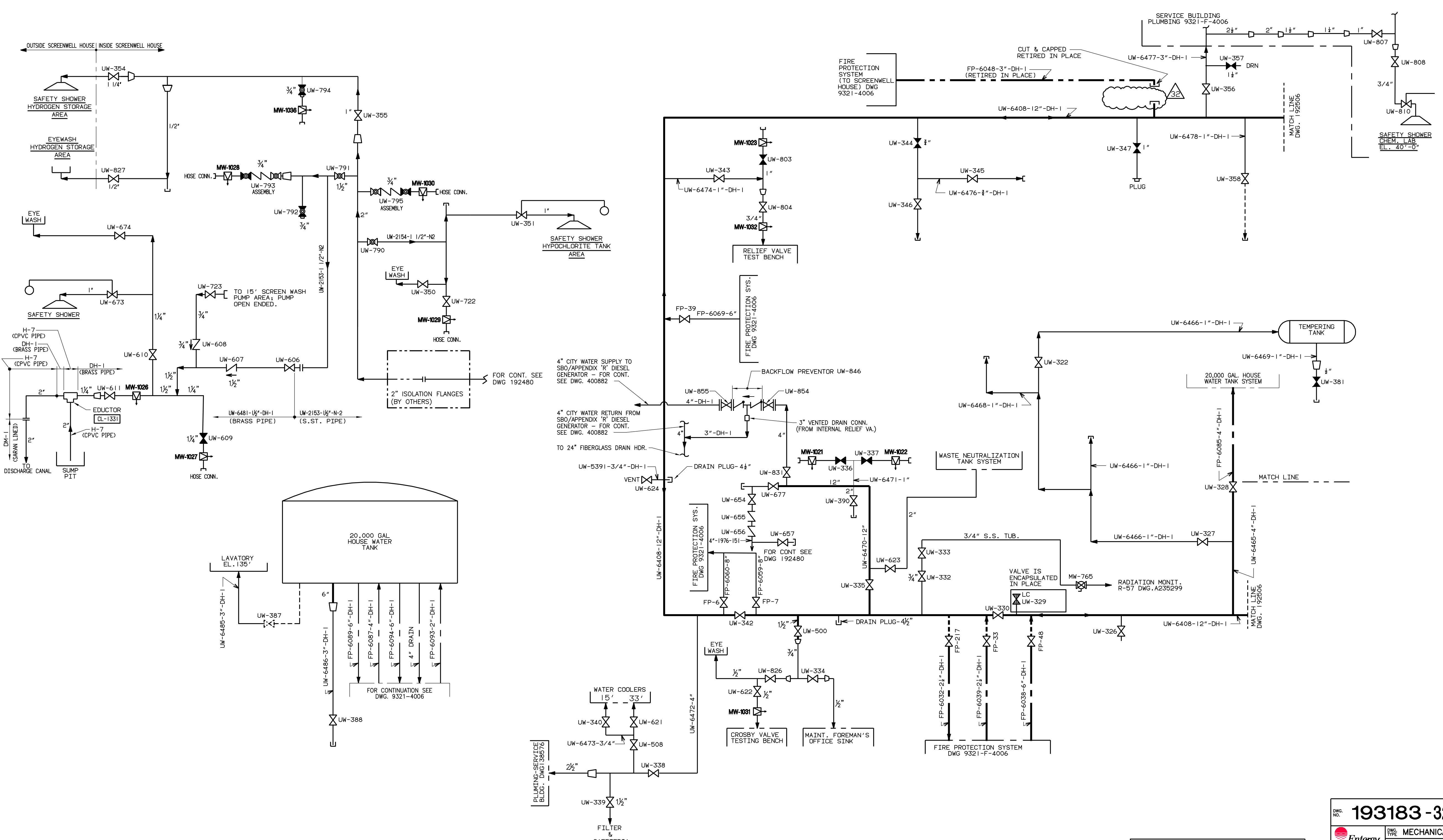








193183-32



REFERENCE DRAWINGS	
NUMBER	TITLE
192477	PIPING & INSTR. NOTES & SYMBOLS
192505	FLOW DIA-CITY WATER SYS. -SHT#1
192480	PIPING LINE LIST CITY WATER SYS. -SHT#2
192482	RIVER WTR SERVICE SYS DIAG. -SHT#1
192483	MAIN CONDENSATE CIRC. WATER DIAG.
192484	MAIN CONDENSATE CIRC. WATER DIAG. -SHT#2
192486	CONDENSATE RETURN SYS. DIAG. -SHT#1
192489	CONDENSATE AIR REMOVAL DIAG.
193159	PIPING LINE LIST CITY WATER SYS. -SHT#3
9321-F-4006	YARD FIRE PROT PIPING-DIAG.
A227551	FIRE PROT. SYS.-DET.-DIAG. SH.1
A227552	SH.2
A227553	SH.3
A227554	SH.4
A231568	SCREEN WELL HOUSE #1 EL. 1360"

**193183-32**

**Entergy** MECHANICAL  
 DWG. TYPE: A  
 DWG. SIZE: A

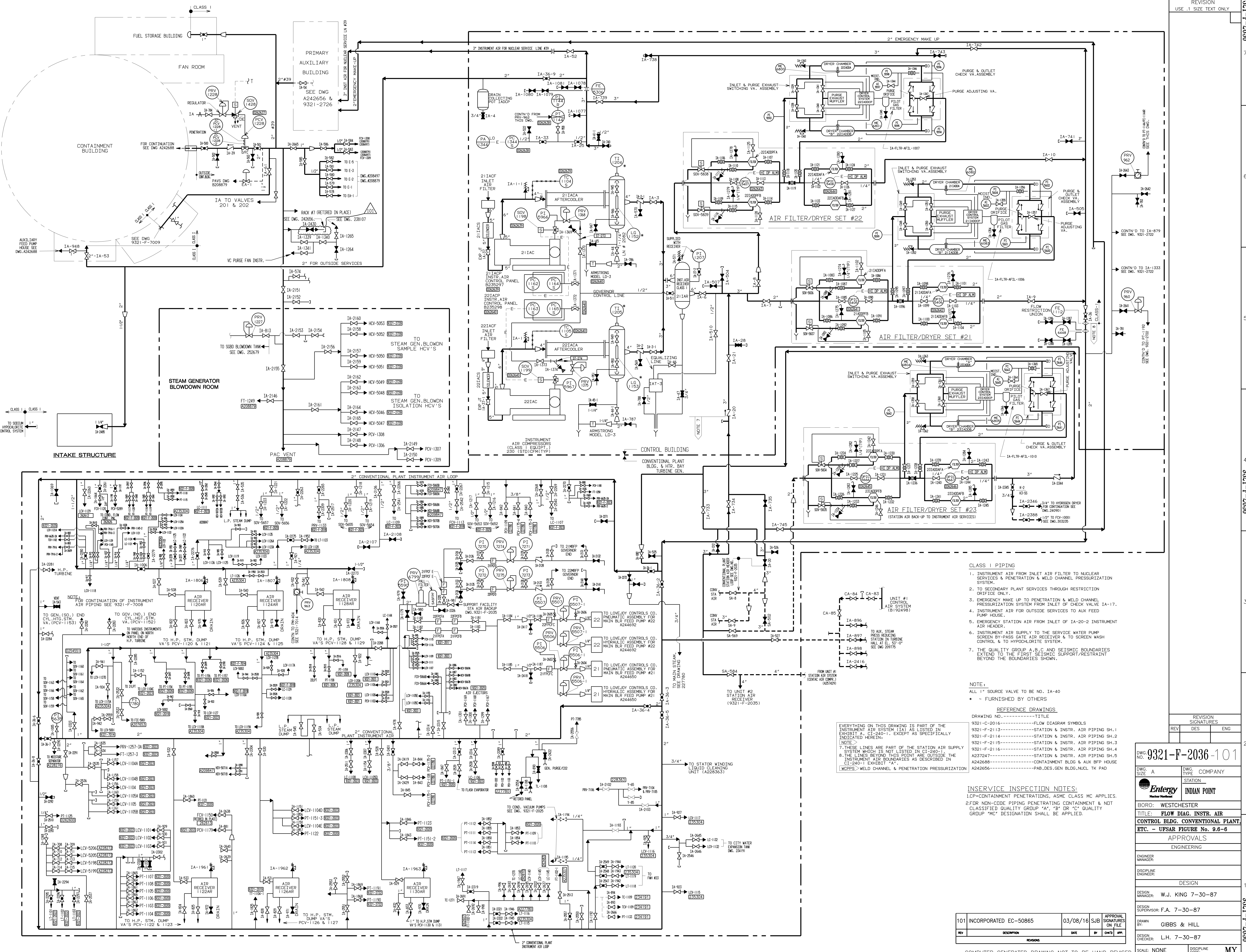
LOCATION: INDIAN POINT

TITLE: UNIT No. 1 PIPING FLOW DIAG.  
 CITY WATER SYSTEM SHEET No. 3  
 UFSAR Fl. No. 9.6-5 (SHT. 3)

APPROVALS

ENGINEERING MANAGER: \_\_\_\_\_  
 PROJECT ENGINEER: \_\_\_\_\_  
 DESIGNER: \_\_\_\_\_

DRAWN BY: M. HEREDIA  
 SCALE: \_\_\_\_\_  
 DISCIPLINE CODE: MB



- CLASS I PIPING**
1. INSTRUMENT AIR FROM INLET AIR FILTER TO NUCLEAR SERVICES & PENETRATION & WELD CHANNEL PRESSURIZATION SYSTEM.
  2. TO SECONDARY PLANT SERVICES THROUGH RESTRICTION ORIFICE ONLY.
  3. EMERGENCY MAKE UP TO PENETRATION & WELD CHANNEL PRESSURIZATION SYSTEM FROM INLET OF CHECK VALVE IA-17.
  4. INSTRUMENT AIR FOR OUTSIDE SERVICES TO AUX FEED PUMP HOUSE.
  5. EMERGENCY STATION AIR FROM INLET OF IA-20-2 INSTRUMENT AIR HEADER.
  6. INSTRUMENT AIR SUPPLY TO THE SERVICE WATER PUMP SCREEN BY-PASS GATE AIR RECEIVER & TO SCREEN WASH CONTROL & TO HYDROCLORITE SYSTEM.
  7. THE QUALITY GROUP A,B,C AND SEISMIC BOUNDARIES EXTEND TO THE FIRST SEISMIC SUPPORT/RESTRAINT BEYOND THE BOUNDARIES SHOWN.

**NOTE:**  
ALL 1" SOURCE VALVE TO BE NO. IA-40  
- FURNISHED BY OTHERS

**REFERENCE DRAWINGS**  
DRAWING NO. .... TITLE  
9321-C-2016.....FLOW DIAGRAM SYMBOLS  
9321-F-2113.....STATION & INSTR. AIR PIPING SH.1  
9321-F-2114.....STATION & INSTR. AIR PIPING SH.2  
9321-F-2115.....STATION & INSTR. AIR PIPING SH.3  
9321-F-2116.....STATION & INSTR. AIR PIPING SH.4  
A237247.....STATION & INSTR. AIR PIPING SH.5  
A242688.....CONTAINMENT BLDG & AUX BFP HOUSE  
A242656.....PAB,DES GEN BLDG,NJCL TK PAD

EVERYTHING ON THIS DRAWING IS PART OF THE INSTRUMENT AIR SYSTEM (IA) AS LISTED IN EXHIBIT A, CI-240-1, EXCEPT AS SPECIFICALLY INDICATED HEREIN.  
(NOTE)  
7. THESE LINES ARE PART OF THE STATION AIR SUPPLY SYSTEM WHICH IS NOT LISTED IN CI-240-1.  
8. THE LINES BEYOND THIS POINT ARE OUTSIDE THE INSTRUMENT AIR BOUNDARIES AS DESCRIBED IN CI-240-1 EXHIBIT "A".  
(ICRPS)-WELD CHANNEL & PENETRATION PRESSURIZATION

**INSERVICE INSPECTION NOTES:**  
1.CP=CONTAINMENT PENETRATIONS, ASME CLASS MC APPLIES.  
2.FOR NON-CODE PIPING PENETRATING CONTAINMENT & NOT CLASSIFIED QUALITY GROUP "A", "B" OR "C" QUALITY GROUP "MC" DESIGNATION SHALL BE APPLIED.

REV	DES	ENG

DWG NO. **9321-F-2036-101**

DWG SIZE: A      DWG TYPE: COMPANY

STATION: INDIAN POINT

BORO: WESTCHESTER

TITLE: **FLOW DIAG. INSTR. AIR CONTROL BLDG. CONVENTIONAL PLANT, ETC. - UFSAR FIGURE No. 9.6-6**

APPROVALS

ENGINEERING

DESIGN

DESIGN MANAGER: W.J. KING 7-30-87

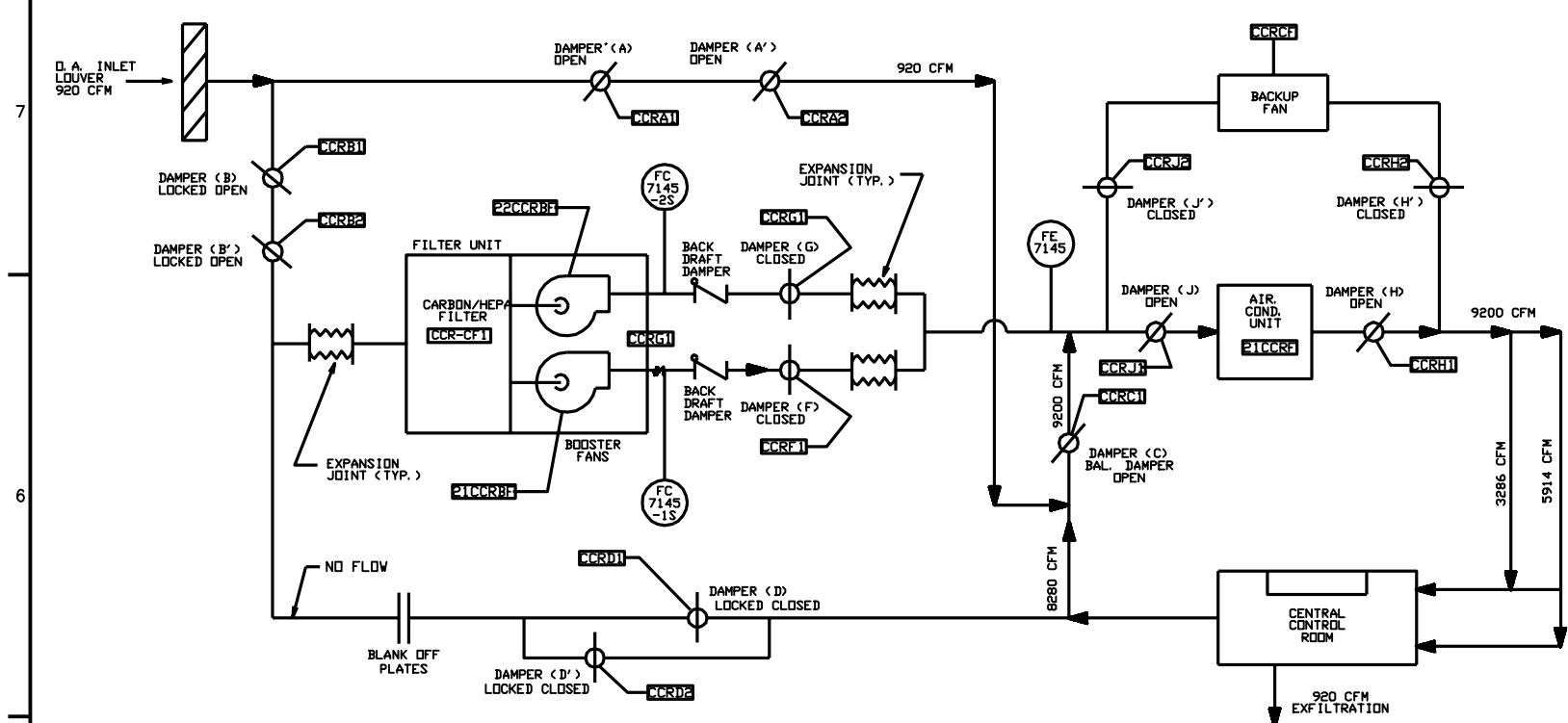
DESIGN SUPERVISOR: F.A. 7-30-87

DRAWN BY: GIBBS & HILL

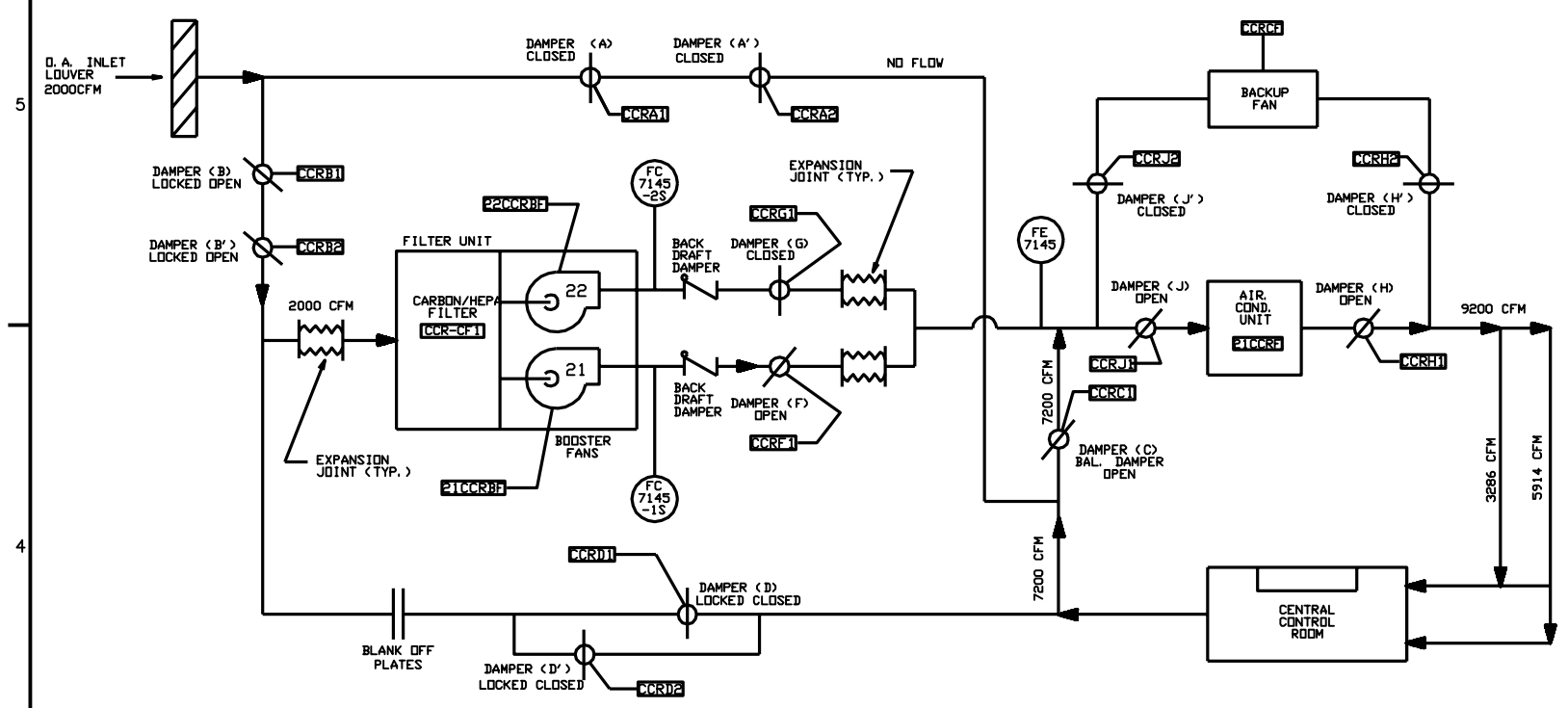
DESIGN CHECKER: L.H. 7-30-87

SCALE: NONE      DISCIPLINE CODE: MY

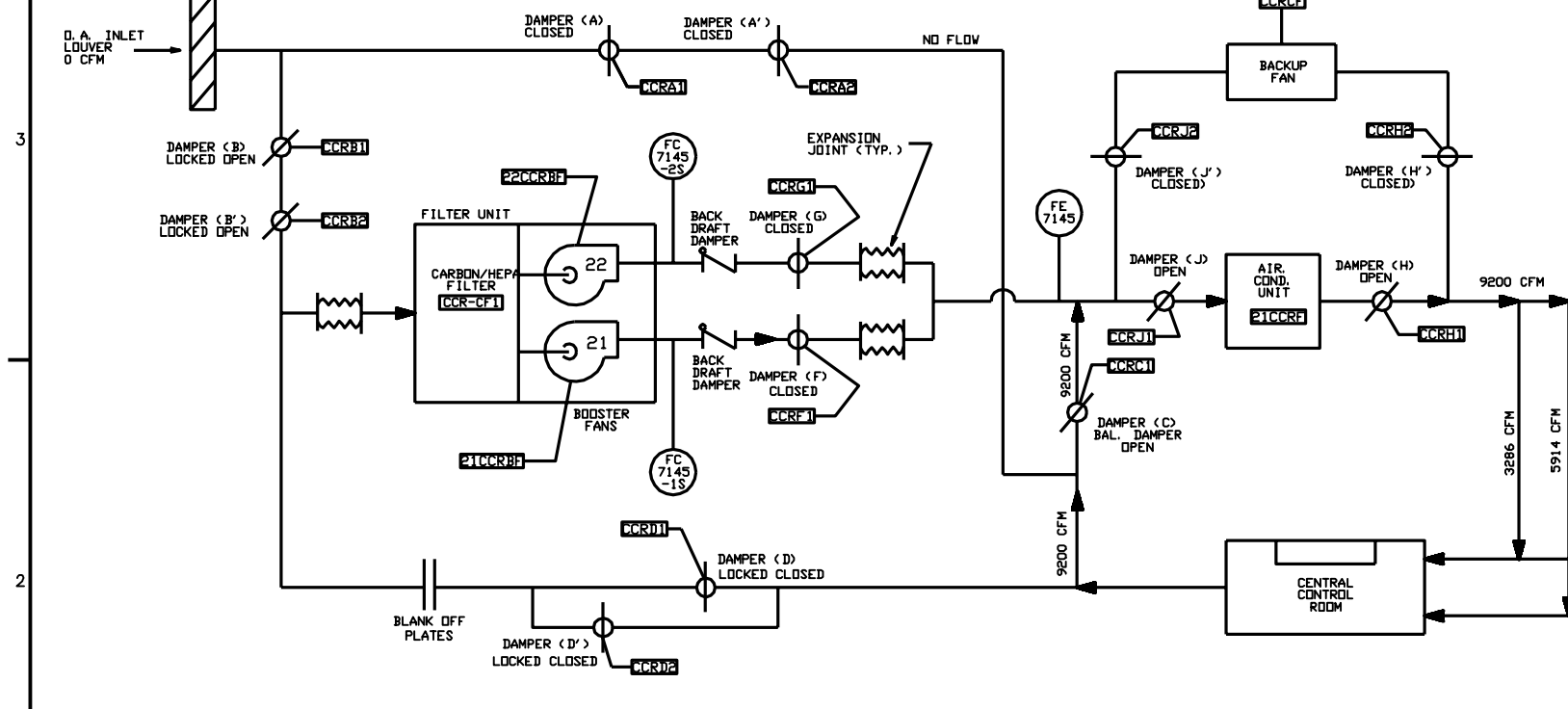




(1) NORMAL OPERATION  
OUTSIDE AIR MAKEUP

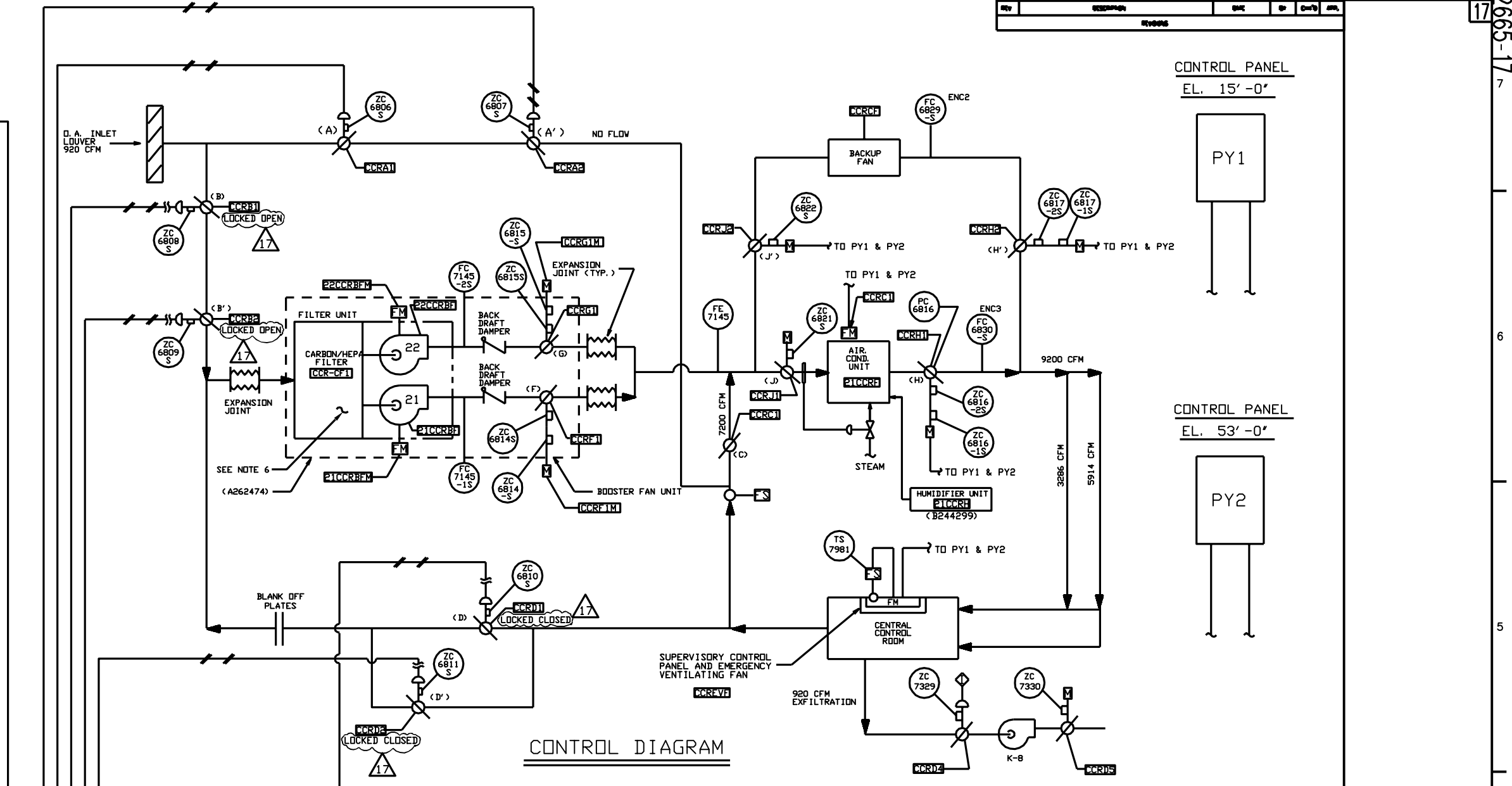


(2) INCIDENT - OUTSIDE  
AIR FILTERED PRESSURIZATION  
S. I. OR HIGH RADIATION



(3) INCIDENT 100% RECIRCULATION MODE  
TOXIC GAS OR SMOKE

AIR FLOW DIAGRAMS



CONTROL DIAGRAM

LEGEND

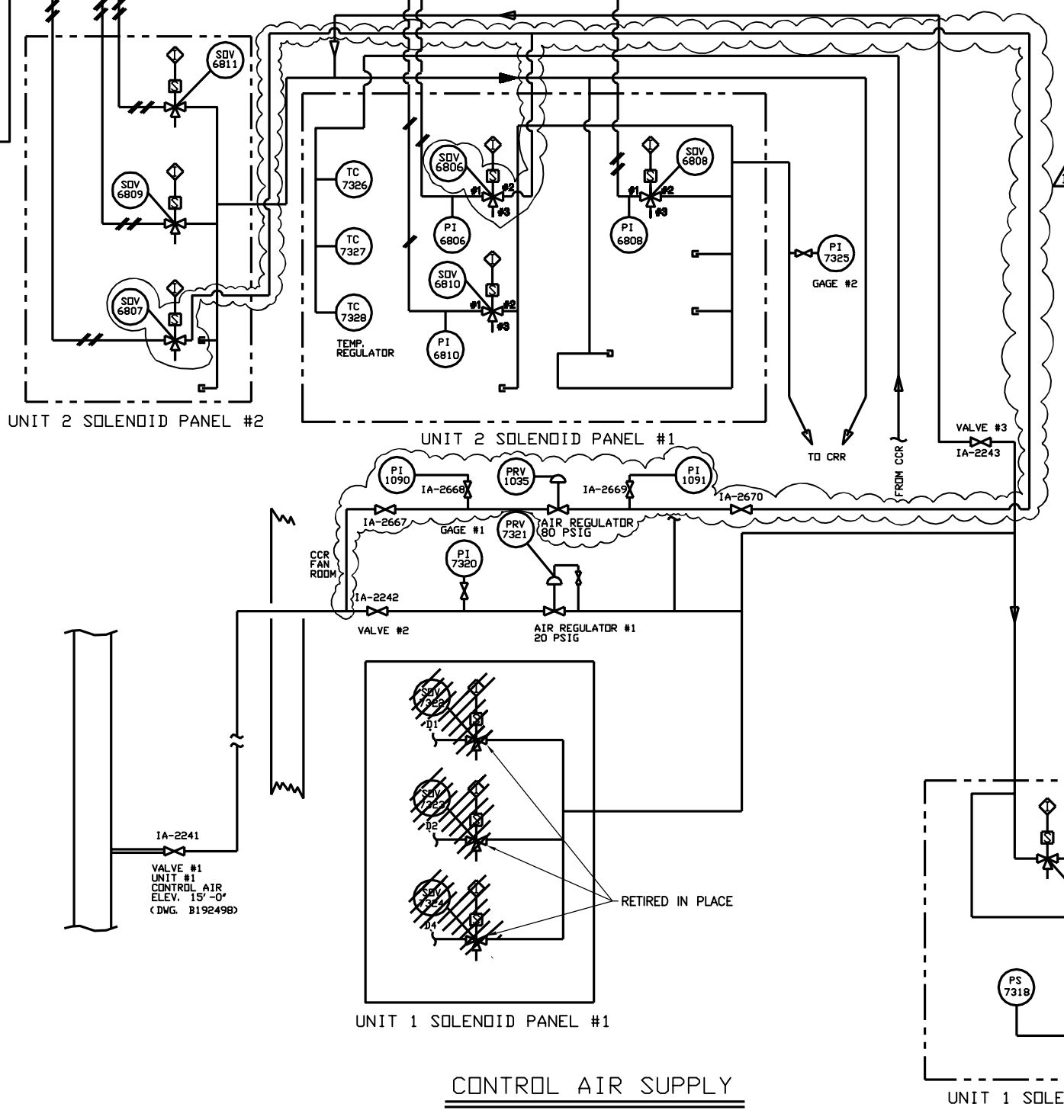
- D. A. - OUTSIDE AIR
- F. S. - FIRE STAT
- F. M. - FAN MOTOR
- ☐ - DAMPER MOTOR
- FC XXXX - FLOW SWITCH
- FE XXXX - FLOW MEASUREMENT DEVICE
- ☐ - SOLENOID VALVE
- ZC XXXX - POSITION CONTROLLER

REFERENCE DRAWINGS

- 9321-F-4017 - CONTROL BUILDING -HVAC- PLANS.
- 9321-F-4050 - CONTROL BUILDING -HVAC- SECTIONS.
- 9321-F-4055 - CONTROL BUILDING - COOLING WATER TO AIR COND. UNIT.
- A226948 - CENTRAL CONTROL RM. HVAC SYSTEM DAMPERS AND REDUNDANCY.
- A225636 - SUPPLY DWG MODIFICATION OF CCR VENTILATION SYSTEM.
- 9321-F-3147 - CONDUIT LAYOUT - CONTROL ROOM AIR CONDITIONING.
- A262474 - CARBON FILTER UNIT (SHEET 1 OF 2)
- B244299 - CCR HUMIDIFIER FLOW DIAGRAM
- 192498 - PIPING FLOW DIAGRAM-CONTROL AIR SYSTEM

NOTES

1. DAMPERS 'J' & 'H' ARE NORMALLY CLOSED. OPEN WHEN A. C. FAN IS OFF. (BACKUP FAN ON)
2. DAMPERS 'J' & 'H' ARE NORMALLY OPEN. CLOSED WHEN A. C. FAN OFF. (BACKUP FAN ON)
3. ☐ = 'Q' DESIGNATED EQUIPMENT NO.
4. AIRFLOW RATES (CFMs) SHOWN ON THIS FLOW DIAGRAM DRAWING ARE FOR DESIGN CONDITIONS ONLY.
5. DAMPER 'D' & 'D' WILL REMAIN CLOSED ON LOSS OF POWER OR AIR.
6. CCR-CF1 FILTER TAG NUMBERS:  
 - HEPA FILTER (CCRHF)  
 - CARBON FILTER STACK A (CCRCFA)  
 - CARBON FILTER STACK B (CCRCFB)  
 - POST FILTER (CCRCFP)



CONTROL AIR SUPPLY

REVISION SIGNATURES	
REV	DES
00	

DWG. NO. **252665-17**

DWG. SIZE: **A** DWG. COMPANY: **ENTERTY**

STATION: **INDIAN POINT**

BORO: **WESTCHESTER**

TITLE: **CONTROL BUILDING (CCR) CONTROL AND AIR FLOW DIAGRAMS**

-UFSAR FIGURE NO. 9.9-1

APPROVALS

ENGINEERING

DESIGN

DESIGN MANAGER: **M. J. CAPUTO**

DESIGN SUPERVISOR: **A. D.**

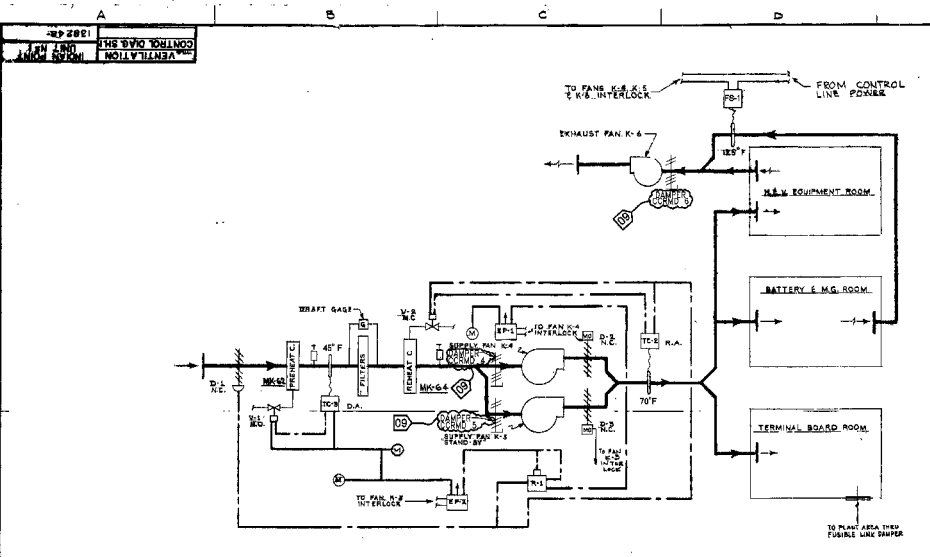
DATE: **12/30/93**

DESIGN BY:

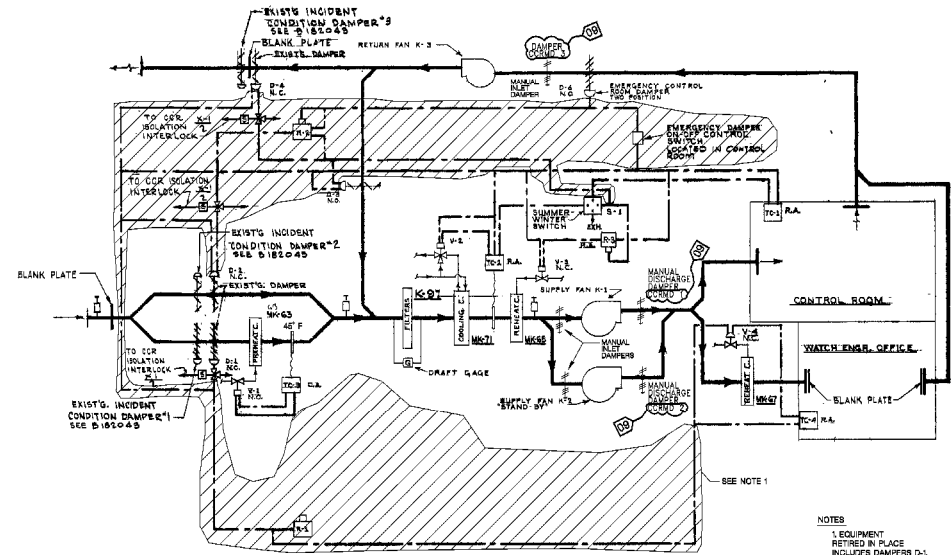
DESIGN CHECKER: **E. D.**

SCALE: **NDNE** DISCIPLINE CODE: **MY**

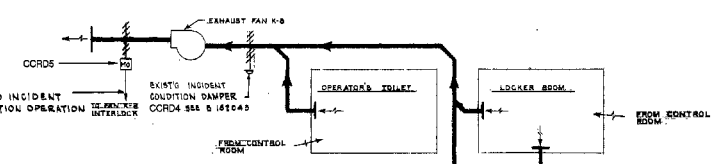




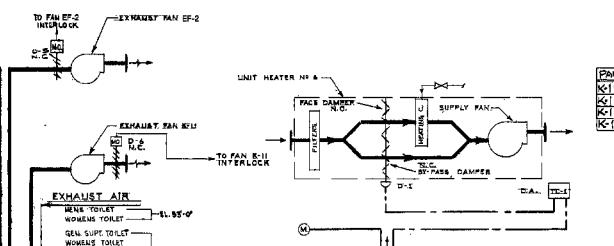
**CONTROL SCHEME No 1**  
M.G. TERMINAL BOARD  
& SECURITY OFFICE  
PANEL K-192



**CONTROL SCHEME No 3**  
WATCH ENGR. OFFICE & CONTROL ROOM  
PANEL K-193



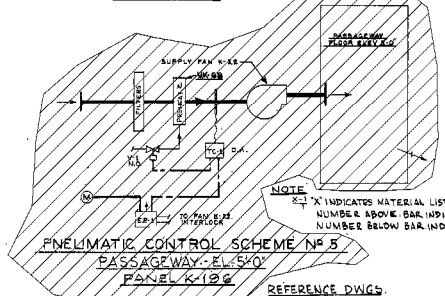
**CONTROL SCHEME No 2**  
SERVICE BUILDING



**PNEUMATIC CONTROL SCHEME No 4**  
TURBINE BAY AREA  
TWO REQUIRED  
K-56 I, K-57  
PANEL K-196

**PANEL SCHEDULE**

PANEL NO.	LOCATION
K192	COLLINGS A-7, BL 15'-0"
K197	M & V BL 52'-0"
K198	FAN ROOM BL 67'-6"
K199	VENT. EQ. RM. BL 72'-0"



**PNEUMATIC CONTROL SCHEME No 5**  
PASSAGEWAY - EL. 50'-0"  
PANEL K-195

REVISIONS
1 12/15/54 CLASS 1 THIS REVISION CONTAINS CLASS 1 ITEMS PER CI-154-C MOD. P.D.C. CPO-81-0761-00 P.L. 15. ADD'D SOLIDIFIED DAMPERS RE-CHANGED DAMPER OPERATION H. NEED NOTE RELEASE FOR CONSTRUCTION POLYTRONING/JM 4/18/55
2 12/15/54 CLASS 1 THIS REVISION CONTAINS CLASS 1 ITEMS PER CI-154-C UPDATED DWG. TO SHOW WORK OF KEY 3 & FIELD ENG. SKETCHES TELETYPE ROOMS FEBRUARY 1955 REVISION # 182005 REVISION # 182006 REVISION # 182007 REVISION # 182008 REVISION # 182009 REVISION # 182010 REVISION # 182011 REVISION # 182012 REVISION # 182013 REVISION # 182014 REVISION # 182015 REVISION # 182016 REVISION # 182017 REVISION # 182018 REVISION # 182019 REVISION # 182020 REVISION # 182021 REVISION # 182022 REVISION # 182023 REVISION # 182024 REVISION # 182025 REVISION # 182026 REVISION # 182027 REVISION # 182028 REVISION # 182029 REVISION # 182030 REVISION # 182031 REVISION # 182032 REVISION # 182033 REVISION # 182034 REVISION # 182035 REVISION # 182036 REVISION # 182037 REVISION # 182038 REVISION # 182039 REVISION # 182040 REVISION # 182041 REVISION # 182042 REVISION # 182043 REVISION # 182044 REVISION # 182045 REVISION # 182046 REVISION # 182047 REVISION # 182048 REVISION # 182049 REVISION # 182050 REVISION # 182051 REVISION # 182052 REVISION # 182053 REVISION # 182054 REVISION # 182055 REVISION # 182056 REVISION # 182057 REVISION # 182058 REVISION # 182059 REVISION # 182060 REVISION # 182061 REVISION # 182062 REVISION # 182063 REVISION # 182064 REVISION # 182065 REVISION # 182066 REVISION # 182067 REVISION # 182068 REVISION # 182069 REVISION # 182070 REVISION # 182071 REVISION # 182072 REVISION # 182073 REVISION # 182074 REVISION # 182075 REVISION # 182076 REVISION # 182077 REVISION # 182078 REVISION # 182079 REVISION # 182080 REVISION # 182081 REVISION # 182082 REVISION # 182083 REVISION # 182084 REVISION # 182085 REVISION # 182086 REVISION # 182087 REVISION # 182088 REVISION # 182089 REVISION # 182090 REVISION # 182091 REVISION # 182092 REVISION # 182093 REVISION # 182094 REVISION # 182095 REVISION # 182096 REVISION # 182097 REVISION # 182098 REVISION # 182099 REVISION # 182100

**138248-9**

**CONSOLIDATED EDISON CO.**  
OF NEW YORK, INC.

PREPARED BY: ENGINEERING DEPT. (104-K-1)  
BY: NEW YORK  
UNIT No. 1  
CONTROL DIAGRAMS SHEET I  
- USBAR FIGURE NO. 99-1

DATE: NONE  
BY: J. JAMES  
CHECKED: J. C. McLaughlin  
APPROVED: J. C. McLaughlin  
REVISIONS: 1-182005, 2-182006, 3-182007, 4-182008, 5-182009, 6-182010, 7-182011, 8-182012, 9-182013, 10-182014, 11-182015, 12-182016, 13-182017, 14-182018, 15-182019, 16-182020, 17-182021, 18-182022, 19-182023, 20-182024, 21-182025, 22-182026, 23-182027, 24-182028, 25-182029, 26-182030, 27-182031, 28-182032, 29-182033, 30-182034, 31-182035, 32-182036, 33-182037, 34-182038, 35-182039, 36-182040, 37-182041, 38-182042, 39-182043, 40-182044, 41-182045, 42-182046, 43-182047, 44-182048, 45-182049, 46-182050, 47-182051, 48-182052, 49-182053, 50-182054, 51-182055, 52-182056, 53-182057, 54-182058, 55-182059, 56-182060, 57-182061, 58-182062, 59-182063, 60-182064, 61-182065, 62-182066, 63-182067, 64-182068, 65-182069, 66-182070, 67-182071, 68-182072, 69-182073, 70-182074, 71-182075, 72-182076, 73-182077, 74-182078, 75-182079, 76-182080, 77-182081, 78-182082, 79-182083, 80-182084, 81-182085, 82-182086, 83-182087, 84-182088, 85-182089, 86-182090, 87-182091, 88-182092, 89-182093, 90-182094, 91-182095, 92-182096, 93-182097, 94-182098, 95-182099, 96-182100