

REFERENCES:

1. PROCESS FLOW DIAGRAM @ DWG. 541-F-424
2. DEFINITION OF SYMBOLS
 - ⊙ E. SPEC. G-675176 REV. 3
 - ⊙ E. SPEC. G-675164 REV. 3
3. INSTALLATION OF INSTRUMENTATION
 - ⊙ PROC. SPEC. CAP. 294367 REV. 1
4. MATERIAL SPEC. PIPE AND FITTINGS
 - NYPA SPEC. TS-MS-024
 - ⊙ E. SPEC. G-676398 REV. 3

LEGEND:

- ⊠ TEMPORARY STRAINER
- ⊠ ELECTRICAL HEAT TRACING
- ⊠ TRIP ON LOW LEVEL IN BORON INJECTION TANK
- ⊠ CONTAINMENT PENETRATION
- ⊠ SEISMIC CLASSIFICATION
- ⊠ QUICK DISCONNECT FOR TEST
- L.O. LOCKED OPEN
- L.C. LOCKED CLOSED
- F.O. FAIL OPEN
- F.C. FAIL CLOSED
- V LOCAL VENT
- D LOCAL DRAIN
- ⊠ * * * * * SENSOR W/ CAPILLARY

NOTES:

- PIPING IS SCHEDULE 140
- LOCATED IN HIGH SIDE OF PIPE IN LOCAL HIGH POINT
- ORIFICE IS SUPPLIED WITH PUMP PACKAGE
- MOUNTED WITH STEM HORIZONTAL
- PROVISION FOR A SECOND SUMP LINE
- BALANCE PISTON FLOW LINE FOR S.I. PUMP 32 IS INSIDE VALVES 887A AND 887B
- LOCATED AT LOW POINT OF PIPE WORK
- VALVES INSTALLED FOR VERTICAL DISCHARGE
- FLUSH LINE IS INSTALLED AS CLOSE TO VALVE INLET AS POSSIBLE
- LINE ARE DIRECTED TO THIRD SECTION OF THE SUMP (SECTION CONTAINING RECIRC. PUMPS)
- IVSW OR LEAKOFF CONNECTIONS ON THE FOLLOWING VALVES 850A, 850B, 850C, 865A, 866A & B ARE PLUGGED OR CAPPED
- ALL VALVE NO.'S. ARE PRECEDED BY "SI" AS THE SYSTEM DESIGNATION EXCEPT AS NOTED
- NORMAL POSITION OF VALVES SI-2165, -2166, -2168, -2169, -2170, -2171, -2172 IS LOCK-THROTTLED, AS DETERMINED BY A SYSTEM FLOW BALANCE. VALVE MIN. STOP POSITION SET AT 0.25" TO ALLOW VALVE 855 TO PROTECT DOWNSTREAM PIPING.

REFERENCE DRAWINGS:

- 9321-F-27503 SIS SAFETY INJECTION SYSTEM SHEET 2
- 27193 WDS WASTE DISPOSAL SYSTEM SHEET 1 - CONTAINMENT
- 27203 ACS AUXILIARY COOLANT SYSTEM - INSIDE CONTAINMENT
- 27513 ACS AUXILIARY COOLANT SYSTEM IN PAB & FSB - SHEET 2
- 27363 CVCS CHEMICAL & VOLUME CONTROL SYSTEM SHEET 1
- 27373 CVCS CHEMICAL & VOLUME CONTROL SYSTEM SHEET 2
- 27383 RCS REACTOR COOLANT SYSTEM SHEET 1
- 27473 RCS REACTOR COOLANT SYSTEM SHEET 2
- 27233 N NITROGEN TO NUCLEAR EQUIPMENT
- 27243 PW PRIMARY MAKE-UP WATER SYSTEM
- 27453 SS SAMPLING SYSTEM
- 27463 IVSW ISOLATION VALVE SEAL WATER SYSTEM
- 27273 AS AUXILIARY STEAM & COND FOR PRIMARY AUX. BLDG. NUCLEAR LINE SCHEDULE

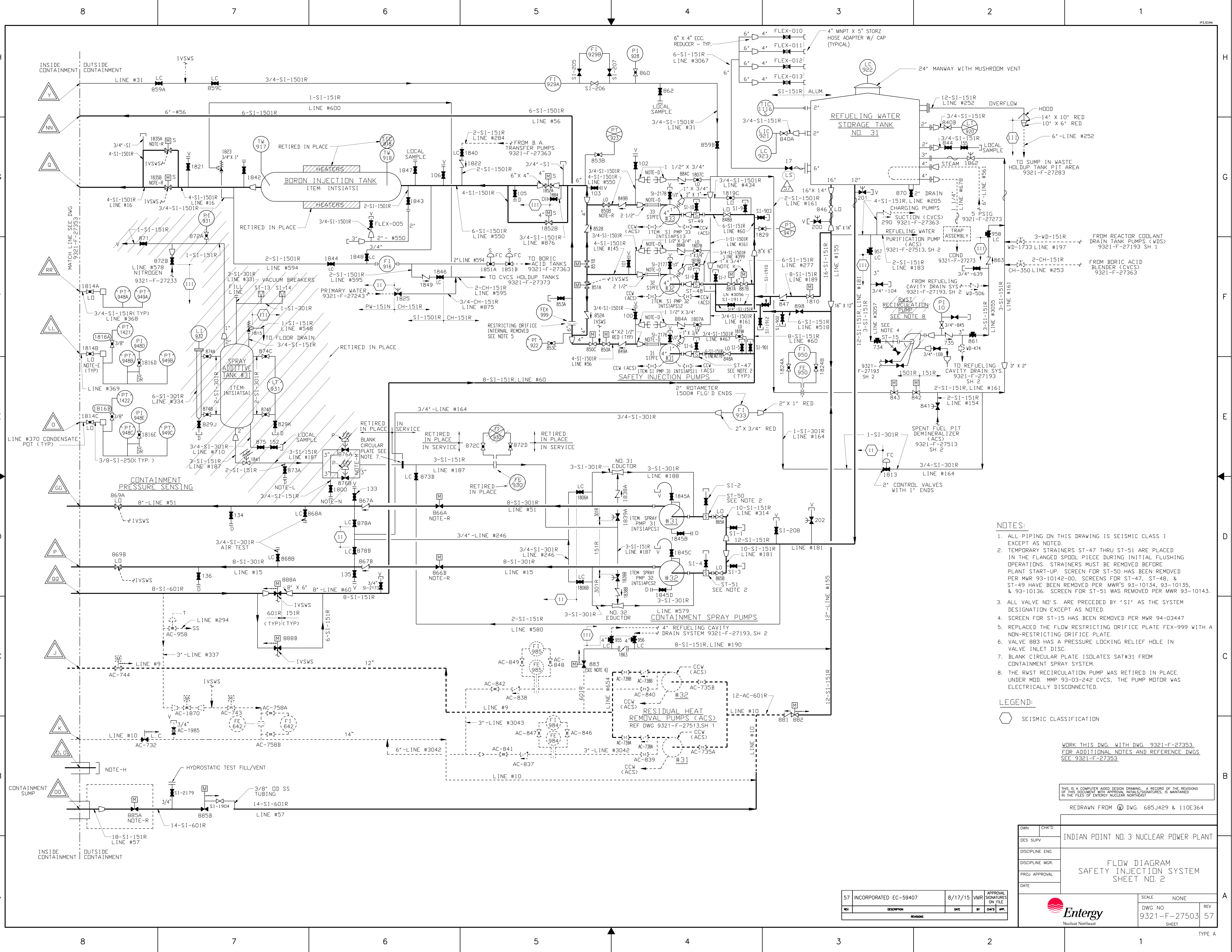
WORK THIS DWG. WITH DWG. 9321-F-27503

NOTE: ALL PIPING ON THIS DWG. IS SEISMIC CLASS I EXCEPT AS NOTED

REDRAWN FROM (W) DWG. 6851427 & 110E364

DWG/CHK'D	INDIAN POINT NO. 3 NUCLEAR POWER PLANT
DES SUPV	
DISCIPLINE ENG	
DISCIPLINE DIR	
PROJ APPROVAL	
DATE	
FLOW DIAGRAM SAFETY INJECTION SYSTEM SHEET NO. 1	
SCALE: NONE	
DWG NO	REV
9321-F-27353	44
SHEET	
TYPE A/ISI/FSAR	

REV	DESCRIPTION	DATE	BY	CHK'D	APP.
44	INCORPORATED EC-71098	05/10/17	SM		APPROVAL SIGNATURES ON FILE



- NOTES:**
- ALL PIPING ON THIS DRAWING IS SEISMIC CLASS 1 EXCEPT AS NOTED.
 - TEMPORARY STRAINERS ST-47 THRU ST-51 ARE PLACED IN THE FLANGED SPOOL PIECE DURING INITIAL FLUSHING OPERATIONS. STRAINERS MUST BE REMOVED BEFORE PLANT START-UP. SCREEN FOR ST-50 HAS BEEN REMOVED PER MWR 93-10142-00. SCREENS FOR ST-47, ST-48, & ST-49 HAVE BEEN REMOVED PER MWR'S 93-10134, 93-10135, & 93-10136. SCREEN FOR ST-51 WAS REMOVED PER MWR 93-10143.
 - ALL VALVE NO.'S. ARE PRECEDED BY 'S1' AS THE SYSTEM DESIGNATION EXCEPT AS NOTED.
 - SCREEN FOR ST-15 HAS BEEN REMOVED PER MWR 94-03447
 - REPLACED THE FLOW RESTRICTING DRIFICE PLATE FEX-999 WITH A NON-RESTRICTING DRIFICE PLATE.
 - VALVE 883 HAS A PRESSURE LOCKING RELIEF HOLE IN VALVE INLET DISC.
 - BLANK CIRCULAR PLATE ISOLATES SATH#31 FROM CONTAINMENT SPRAY SYSTEM.
 - THE RWST RECIRCULATION PUMP WAS RETIRED IN PLACE. UNDER MOD. MMP 93-03-242 CVCS, THE PUMP MOTOR WAS ELECTRICALLY DISCONNECTED.

LEGEND:

○ SEISMIC CLASSIFICATION

WORK THIS DWG. WITH DWG. 9321-F-27353. FOR ADDITIONAL NOTES AND REFERENCE DWGS. SEE 9321-F-27353.

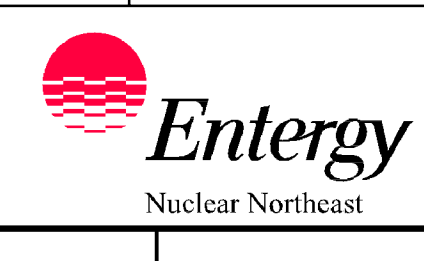
THIS IS A COMPUTER AIDED DESIGN DRAWING. A RECORD OF THE REVISIONS OF THIS DOCUMENT WITH APPROVAL INITIALS/SIGNATURES, IS MAINTAINED IN THE FILES OF ENERGY NUCLEAR NORTHEAST.

REDRAWN FROM DWG. 685J429 & 110E364

DWN	CHK'D	INDIAN POINT NO. 3 NUCLEAR POWER PLANT	
DES SUPV		FLOW DIAGRAM SAFETY INJECTION SYSTEM SHEET NO. 2	
DISCIPLINE ENG			
DISCIPLINE MGR.			
PROJ APPROVAL			
DATE			

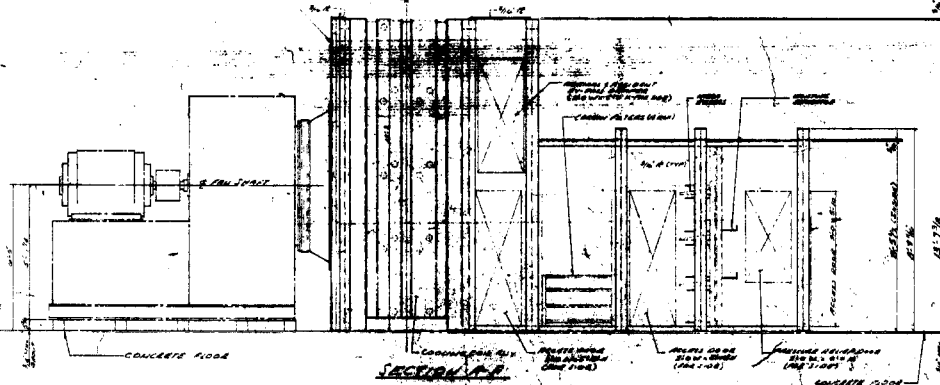
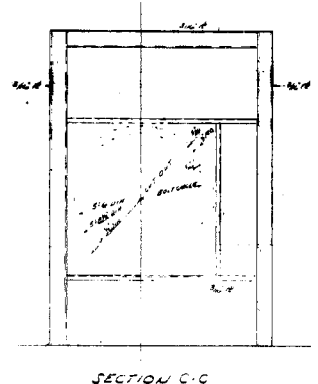
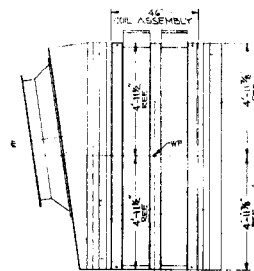
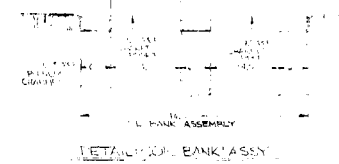
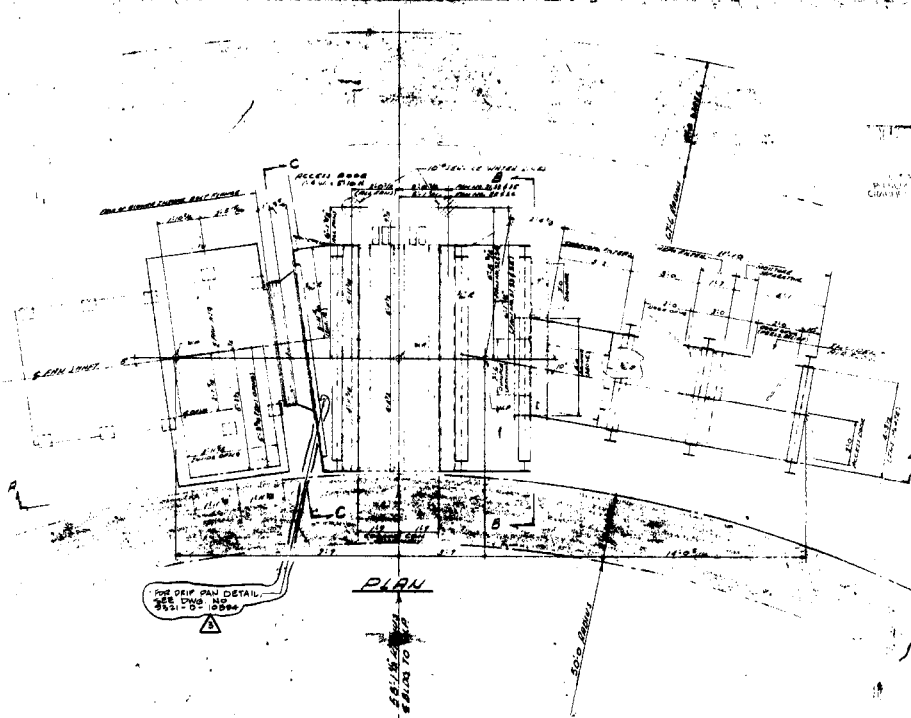
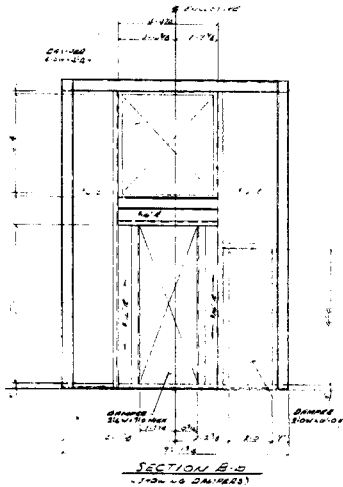
57	INCORPORATED EC-59407	8/17/15	VMR	APPROVAL SIGNATURES ON FILE
REV	DESCRIPTION	DATE	BY	CHK'D

SCALE	NONE
DWG NO	9321-F-27503
SHEET	57



(N)

636F369 APH
1903M
0686



1. DRAW TO SHOW HOW WINDOW DRAW SERVICE SHALL BE MADE & HOW TO BE MADE (SEE SECTION B-B FOR DETAILS)
2. INSTALL WINDOW WITH LOCATING CHANNELS ASSEMBLY BY USING A BATH LINE & COORDINATE WINDOW ASSEMBLY
3. WINDOW ASSEMBLY SHALL BE MADE UP TO THE WINDOW HEAD & SILL
4. WINDOW ASSEMBLY SHALL BE MADE UP TO THE WINDOW HEAD & SILL
5. WINDOW ASSEMBLY SHALL BE MADE UP TO THE WINDOW HEAD & SILL
6. WINDOW ASSEMBLY SHALL BE MADE UP TO THE WINDOW HEAD & SILL
7. WINDOW ASSEMBLY SHALL BE MADE UP TO THE WINDOW HEAD & SILL
8. WINDOW ASSEMBLY SHALL BE MADE UP TO THE WINDOW HEAD & SILL
9. WINDOW ASSEMBLY SHALL BE MADE UP TO THE WINDOW HEAD & SILL
10. WINDOW ASSEMBLY SHALL BE MADE UP TO THE WINDOW HEAD & SILL

Approved for Construction
Handwritten Signature
 7/13/52

FASNY, NUMBER NO: B1-03-055 FOU
 WESTINGHOUSE ELECTRIC COMPANY
 EAST PITTSBURGH, PA.
 MADE IN U.S.A.

JUDSON POINT UNIT #43
 SPARKS TURBINE - 636F369



microfilm
 636F369

636F269

NO.	DATE	REVISION

USE DIAZO FOR PRINT

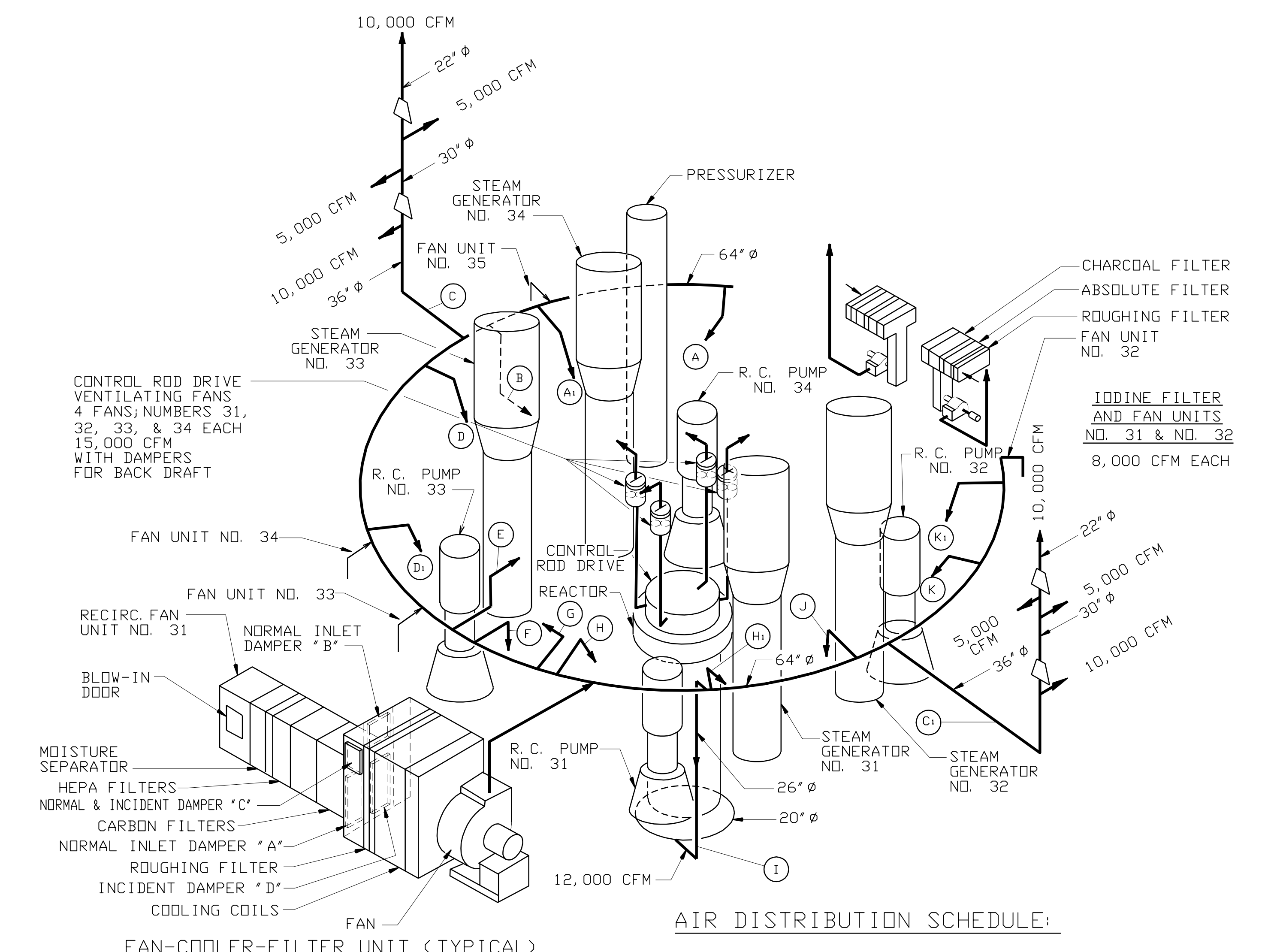
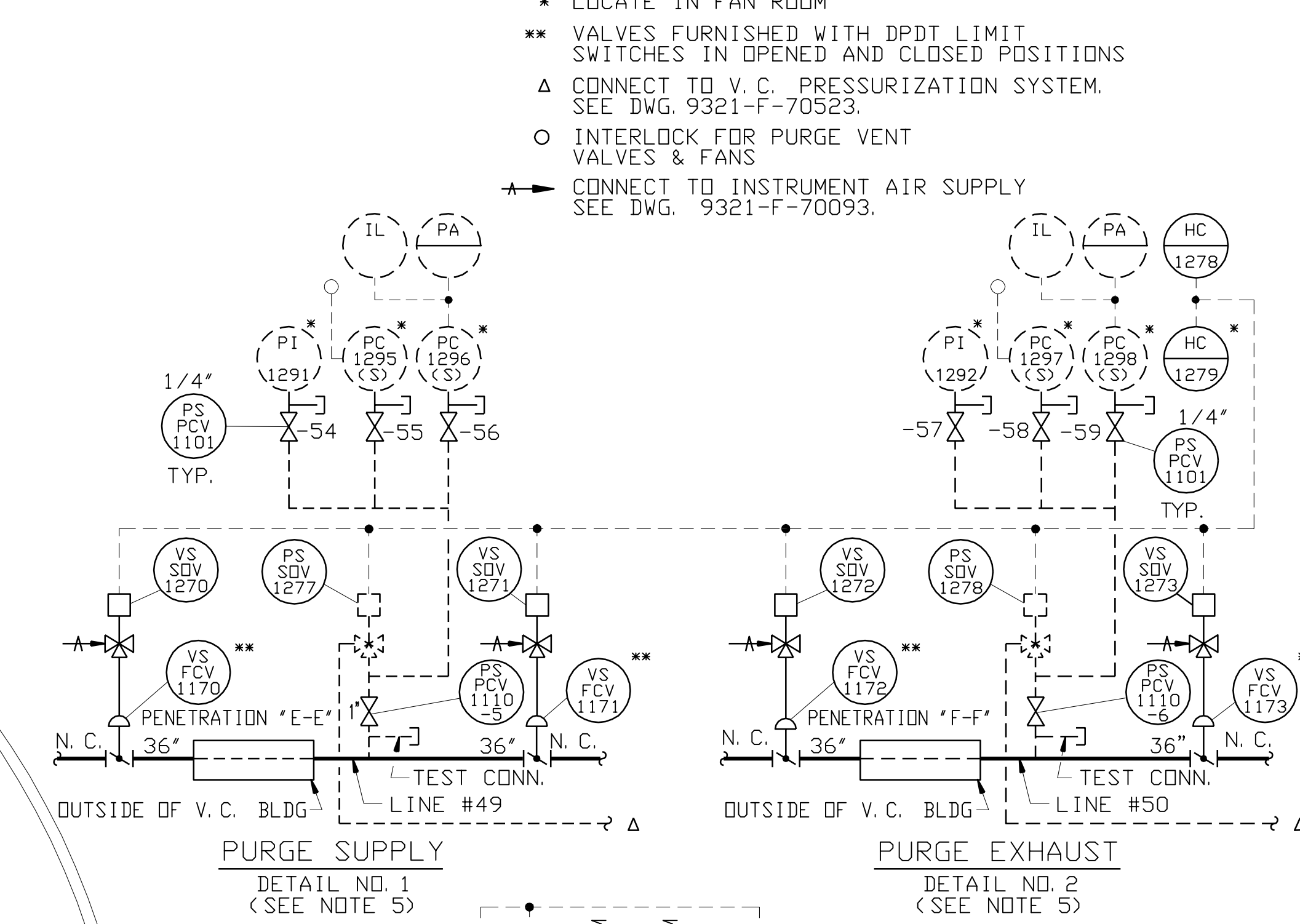
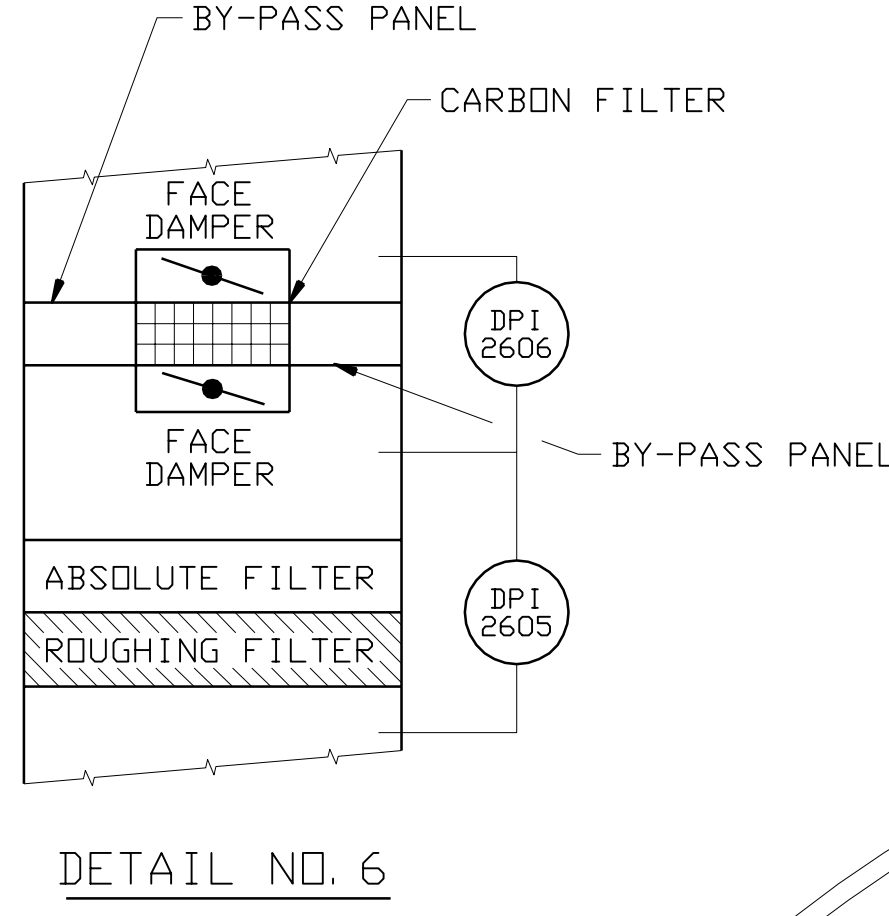
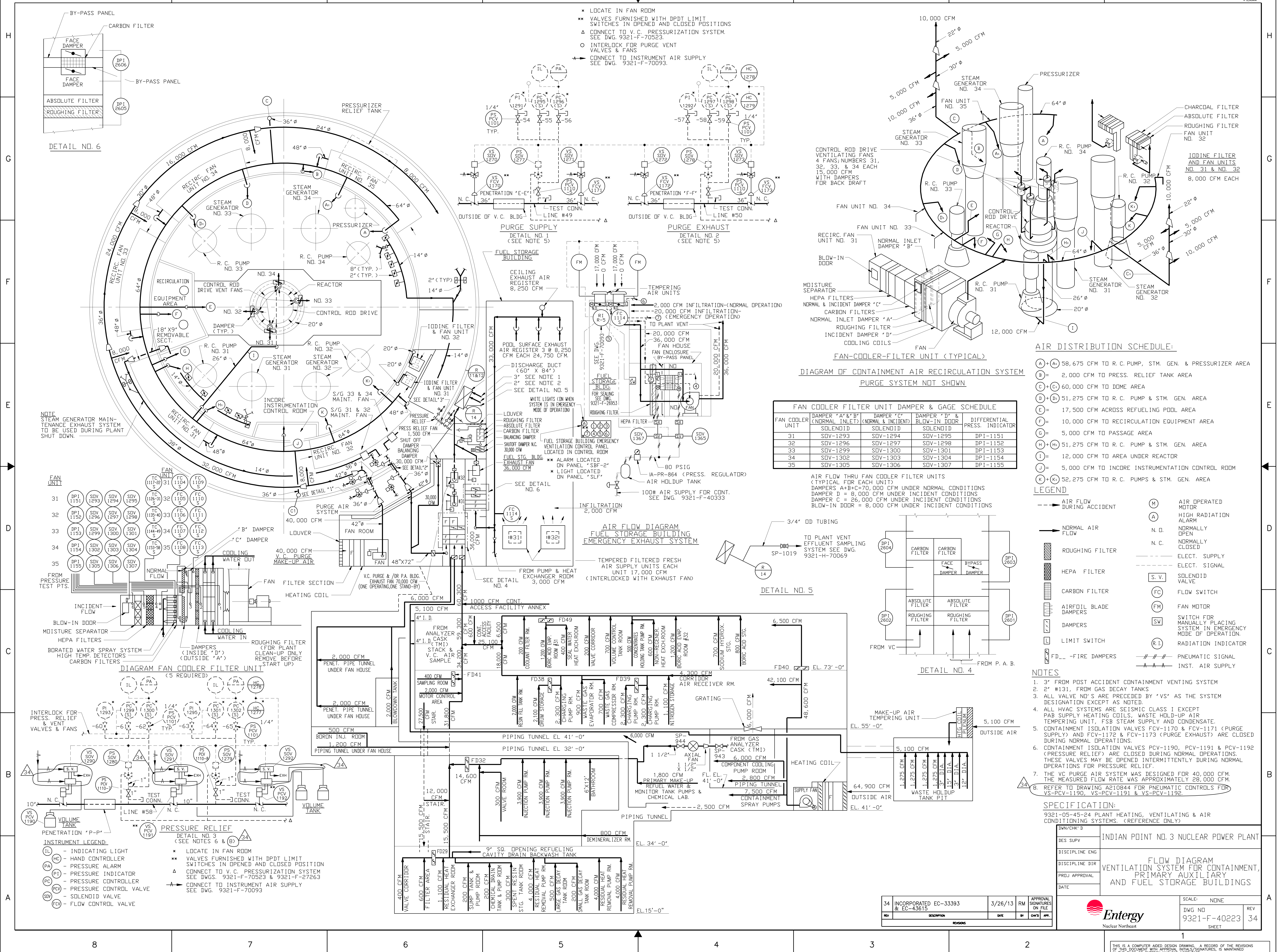


DIAGRAM OF CONTAINMENT AIR RECIRCULATION SYSTEM
PURGE SYSTEM NOT SHOWN

FAN COOLER UNIT	DAMPER 'A' & 'B' (NORMAL INLET)	DAMPER 'C' (NORMAL & INCIDENT)	DAMPER 'D' & 'E' (BLow-IN DOOR)	DIFFERENTIAL PRESS. INDICATOR
31	SDV-1293	SDV-1294	SDV-1295	DPI-1151
32	SDV-1296	SDV-1297	SDV-1298	DPI-1152
33	SDV-1299	SDV-1300	SDV-1301	DPI-1153
34	SDV-1302	SDV-1303	SDV-1304	DPI-1154
35	SDV-1305	SDV-1306	SDV-1307	DPI-1155

- AIR DISTRIBUTION SCHEDULE:**
- (A) + (H) 58,675 CFM TO R.C. PUMP, STM. GEN. & PRESSURIZER AREA
 - (B) = 2,000 CFM TO PRESS. RELIEF TANK AREA
 - (C) + (L) 60,000 CFM TO DOME AREA
 - (D) + (N) 51,275 CFM TO R.C. PUMP & STM. GEN. AREA
 - (E) = 17,500 CFM ACROSS REFUELING POOL AREA
 - (F) = 10,000 CFM TO RECIRCULATION EQUIPMENT AREA
 - (G) = 5,000 CFM TO PASSAGE AREA
 - (H) + (H) 51,275 CFM TO R.C. PUMP & STM. GEN. AREA
 - (I) = 12,000 CFM TO AREA UNDER REACTOR
 - (J) = 5,000 CFM TO INCORE INSTRUMENTATION CONTROL ROOM
 - (K) + (K) 52,275 CFM TO R.C. PUMPS & STM. GEN. AREA

- LEGEND**
- AIR FLOW DURING ACCIDENT
 - NORMAL AIR FLOW
 - ROUGHING FILTER
 - HEPA FILTER
 - CARBON FILTER
 - AIRFOIL BLADE DAMPERS
 - DAMPERS
 - LIMIT SWITCH
 - FIRE DAMPERS
 - AIR OPERATED MOTOR
 - HIGH RADIATION ALARM
 - N.D. NORMALLY OPEN
 - N.C. NORMALLY CLOSED
 - ELEC. SUPPLY
 - ELEC. SIGNAL
 - S.V. SOLENOID VALVE
 - FC FLOW SWITCH
 - FM FAN MOTOR
 - SW SWITCH FOR MANUALLY PLACING SYSTEM IN EMERGENCY MODE OF OPERATION
 - RI RADIATION INDICATOR
 - PNEUMATIC SIGNAL
 - INST. AIR SUPPLY

- NOTES**
- 3" FROM POST ACCIDENT CONTAINMENT VENTING SYSTEM
 - 2" #131, FROM GAS DECAY TANKS
 - ALL VALVE NO'S ARE PRECEDED BY 'VS' AS THE SYSTEM DESIGNATION EXCEPT AS NOTED
 - ALL HVAC SYSTEMS ARE SEISMIC CLASS I EXCEPT PAB SUPPLY HEATING COILS, WASTE HOLD-UP AIR TEMPERING UNIT, FSB STEAM SUPPLY AND CONDENSATE.
 - CONTAINMENT ISOLATION VALVES FCV-1170 & FCV-1171 (PURGE SUPPLY) AND FCV-1172 & FCV-1173 (PURGE EXHAUST) ARE CLOSED DURING NORMAL OPERATIONS.
 - CONTAINMENT ISOLATION VALVES PCV-1190, PCV-1191 & PCV-1192 (PRESSURE RELIEF) ARE CLOSED DURING NORMAL OPERATIONS. THESE VALVES MAY BE OPENED INTERMITTENTLY DURING NORMAL OPERATIONS FOR PRESSURE RELIEF.
 - THE VC PURGE AIR SYSTEM WAS DESIGNED FOR 40,000 CFM. THE MEASURED FLOW RATE WAS APPROXIMATELY 28,000 CFM.
 - REFER TO DRAWING A210844 FOR PNEUMATIC CONTROLS FOR VS-PCV-1190, VS-PCV-1191 & VS-PCV-1192.

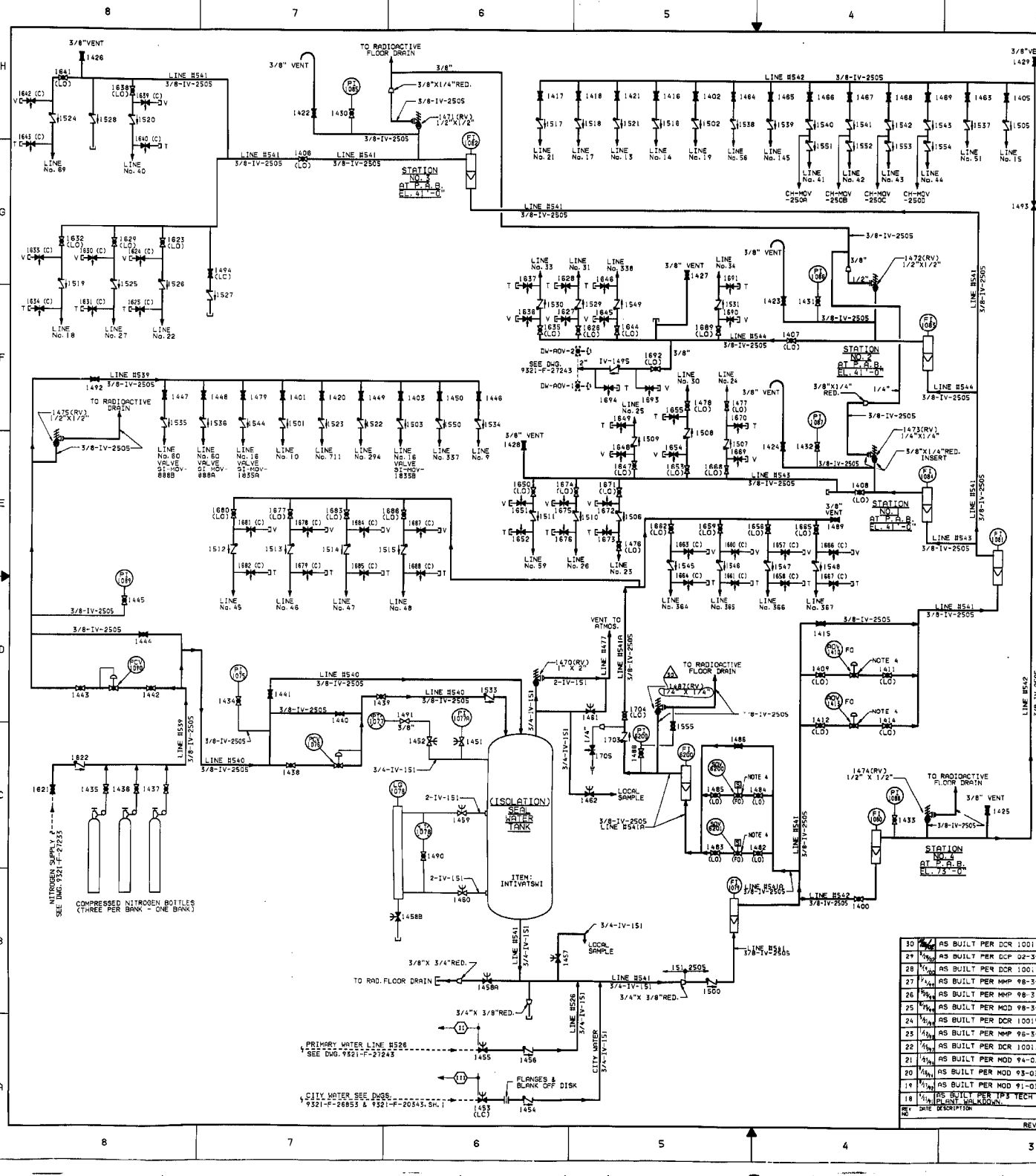
SPECIFICATION:
9321-05-45-24 PLANT HEATING, VENTILATING & AIR CONDITIONING SYSTEMS. (REFERENCE ONLY)

INDIAN POINT NO. 3 NUCLEAR POWER PLANT

FLOW DIAGRAM
VENTILATION SYSTEM FOR CONTAINMENT,
PRIMARY AUXILIARY
AND FUEL STORAGE BUILDINGS

SCALE: NONE
DVG NO: 9321-F-40223 34
SHEET

REV	DESCRIPTION	DATE	BY	CHK'D	APP.
34	INCORPORATED EC-33393 & EC-43615	3/26/13	RM		



PENETRATION LIST					
LINE NO.	INJECTION POINT LOCATION	CONTAINMENT GENERATION SCHEME NO.	LINE DESCRIPTION	INJECTION POINTS (SEE NOTE 6)	REMARKS
1	PIPE TRENCH J	K	RESIDUAL HEAT REMOVAL LOOP IN	AC-NOV-744	N ₂ INJ.
10	PIPE TRENCH K	J	RESIDUAL HEAT REMOVAL LOOP OUT	AC-732	N ₂ INJ.
137	PIPE TRENCH	NONE	RHM PUMP MAIN FLOW IN	AC-NOV-713 & AC-NOV-1875	N ₂ INJ.
13	PIPE TRENCH N	K	R.C. PUMPS COOLING WATER IN	AC-777 & AC-789	
14	PIPE TRENCH N	K	R.C. PUMPS COOLING WATER OUT	AC-777 & AC-789	
21	PIPE TRENCH C	C	R.C. PUMPS COOLING WATER OUT	AC-NOV-724 & AC-NOV-780	
15	PIPE TRENCH P	C	R.C. PUMPS COOLING WATER OUT	AC-NOV-925 & AC-NOV-787	
16	PIPE TRENCH Q	P	CONTAINMENT SPRAY HEADER	SI-889B	
16	PIPE TRENCH Q	P	SAFETY INJECTION LINE FROM BORDON INJECTION TRNK	SI-NOV-1835A	N ₂ INJ.
17	PIPE TRENCH R	R	R.C. PUMPS SEAL WATER RETURN	CH-NOV-222	
18	PIPE TRENCH R	R	EXCESS LETDOWN HEAT EXCH. COOLING WATER RETURN	AC-NOV-718 & AC-NOV-776	
19	PIPE TRENCH R	R	CH-NOV-205 & CH-NOV-222		
		S	SPARE		
		T	SPARE		
22	PIPE TRENCH U	V	EXCESS LETDOWN HEAT EXCH. COOLING WATER SUPPLY	AC-NOV-711 & AC-NOV-778	
23	PIPE TRENCH V	Y	CONTAINMENT VENT HEADER	BD-NOV-178 & BD-NOV-174	
24	PIPE TRENCH V	Y	P. R. T. GAS ANALYZER LINE	RC-NOV-548 & RC-NOV-547	
25	PIPE TRENCH V	Y	PRESSURIZER STEAM SAMPLE	SP-NOV-958 & SP-NOV-958B	
26	PIPE TRENCH V	Y	PRESSURIZER LIQUID SAMPLE	SP-NOV-958 & SP-NOV-958B	
27	PIPE TRENCH X	Y	LETDOWN LINE	CH-NOV-201 & CH-NOV-202	
30	PIPE TRENCH Y	Y	R.C. DRAIN TRNK GAS ANALYZER LINE	BD-NOV-178 & BD-NOV-178	
31	PIPE TRENCH Y	Y	S. J. S. TEST LINE	SI-899A & SI-899C	
33	PIPE TRENCH Y	Y	P. R. T. MAKE-UP LINE	RC-NOV-517 & RC-NOV-552	
34	PIPE TRENCH Y	Y	STATION AIR	SA-24-1 & SA-24-2	
40	PIPE TRENCH Z	Z	R.C. DRAIN TRNK PUMP DISCHARGE	BD-NOV-178 & BD-NOV-178	
41	PIPE TRENCH Z	Z	R.C. PUMP 31 SEAL INJECTION SUPPLY	CH-NOV-441 & CH-NOV-202	
42	PIPE TRENCH Z	Z	R.C. PUMP 32 SEAL INJECTION SUPPLY	CH-NOV-442 & CH-NOV-202	
43	PIPE TRENCH Z	Z	R.C. PUMP 33 SEAL INJECTION SUPPLY	CH-NOV-443 & CH-NOV-202	
44	PIPE TRENCH Z	Z	R.C. PUMP 34 SEAL INJECTION SUPPLY	CH-NOV-444 & CH-NOV-202	
45	PIPE TRENCH AA	AA	STEAM GENERATOR 32 BLOODLINE LINE	BD-NOV-121 & BD-NOV-121A	
46	PIPE TRENCH BB	BB	STEAM GENERATOR 31 BLOODLINE LINE	BD-NOV-121 & BD-NOV-121A	
47	PIPE TRENCH CC	CC	STEAM GENERATOR 33 BLOODLINE LINE	BD-NOV-121 & BD-NOV-121A	
48	PIPE TRENCH DD	DD	STEAM GENERATOR 34 BLOODLINE LINE	BD-NOV-121 & BD-NOV-121A	
51	PIPE TRENCH	DD	CONTAINMENT SPRAY HEADER	SI-889A	
18	IN PAB	Z	SAFETY INJECTION LINE FROM BORDON INJECTION TRNK	SI-NOV-1835B	N ₂ INJ.
18	IN PAB	NN	SAFETY INJECTION LINE FROM SAFETY INJECTION PUMPS	SI-NOV-850A	
56	PIPE TRENCH NN	NN	SAFETY INJECTION LINE FROM SAFETY INJECTION PUMPS	SI-NOV-850A & SI-NOV-850C	
59	PIPE TRENCH VV	VV	REACTOR COOLANT SAMPLE LINE	SP-NOV-958 & SP-NOV-958B	
60	PIPE TRENCH DD	DD	RESIDUAL HEAT EXCH. TO SAFETY INJECTION PUMPS	SI-NOV-888B	
62	PIPE TRENCH DD	DD	RESIDUAL HEAT EXCH. TO SAFETY INJECTION PUMPS	SI-NOV-888B	
69	PIPE TRENCH RR	RR	ACCUMULATOR SAMPLE LINE	SP-NOV-958 & SP-NOV-958B	
384	PIPE TRENCH Y	Y	V. C. SUMP PUMP DISCHARGE	BD-NOV-178 & BD-NOV-178	
384	PIPE TRENCH Y	Y	STEAM GENERATOR 31 BLOODLINE SAMPLE	BD-NOV-121 & BD-NOV-121A	
385	PIPE TRENCH V	V	STEAM GENERATOR 32 BLOODLINE SAMPLE	BD-NOV-121 & BD-NOV-121A	
386	PIPE TRENCH V	V	STEAM GENERATOR 33 BLOODLINE SAMPLE	BD-NOV-121 & BD-NOV-121A	
387	PIPE TRENCH V	V	STEAM GENERATOR 34 BLOODLINE SAMPLE	BD-NOV-121 & BD-NOV-121A	
711	PIPE TRENCH TT	TT	REACTOR PUMP DISCHARGE SAMPLE	SP-NOV-970 & SP-NOV-970B	N ₂ INJ.
714	PIPE TRENCH	NONE	RESIDUAL HEAT REMOVAL LOOP SAMPLE	RC-NOV-958 & SP-NOV-958B	N ₂ INJ.

REFERENCES:

1. DEFINITION OF SYMBOLS ----- G.E. SPEC. G. 675176 REV. 2
2. INSTRUMENT & CONTROL STD. --- G.E. SPEC. G. 675176 REV. 2
3. INSTRUMENT & CONTROL STD. --- INST. INST. LATING: SECTION 3.0
4. INSTRUMENT & CONTROL STD. --- INST. INST. LATING: SECTION 3.0
5. MATERIAL SPEC. & FITTINGS --- NYPA SPEC. TS-MS-024

REFERENCE DRAWINGS:

- 9321-F-2741X NUCLEAR LINE SCHEDULE
- 9321-F-2741Y REACTOR COOLANT SYSTEM SHEET NO. 2
- 9321-F-2742X CHEMICAL & VOLATILE SYSTEM SHEET NO. 1
- 9321-F-2742Y WASTE DISPOSAL SYSTEM SHEET NO. 1 - CONTAINMENT
- 9321-F-2743X SAFETY LINE SYSTEM SHEET NO. 2
- 9321-F-2743Y SAFETY LINE SYSTEM SHEET NO. 2
- 9321-F-2744X STEAM & COND. DISTRIBUTION SHEETS SHEET NO. 2
- 9321-F-2744Y STEAM & COND. DISTRIBUTION SHEETS SHEET NO. 2
- 9321-F-2745X PRIMARY MAKE-UP WATER SYSTEM SHEET NO. 2
- 9321-F-2745Y ISOLATION VALVE SEAL WATER PIPING SHEET NO. 1
- 9321-F-2746X ISOLATION VALVE SEAL WATER PIPING SHEET NO. 2
- 9321-F-2746Y ISOLATION VALVE SEAL WATER PIPING SHEET NO. 2

LEGEND:

- PW ----- PRIMARY WATER
- 3/8"-7V-2505 EXCEPT AS NOTED.
- FO ----- FAIL CLOSED
- FD ----- FAIL OPEN
- OW ----- CITY WATER
- LO ----- LOCKED OPEN
- D ----- LOCAL DRAIN
- LI ----- LOCKED CLOSED
- SEMI ----- SEISMIC CLASSIFICATION
- V ----- VENT
- T ----- TEST

GENERAL NOTES:

1. ALL PIPING IS 3/8" S.S. O.D. TUBING (LINE DESIGNATIONS)
2. ADDITIONAL VENTS AND DRAINS MAY BE INSTALLED. SEE PIPING LAYOUT.
3. THE INDIVIDUAL SEAL WATER LINES ARE ROUTED TO THE CONTAINMENT ISOLATION POINTS BY THE VALVE NUMBERS INDICATED.
4. VALVES RDV-1419 & RDV-1413 & SDV-8200 & SDV-8201 ARE OPENED AUTOMATICALLY BY A PHASE "A" CONTAINMENT ISOLATION SIGNAL.
5. ALL VALVE NO.'S ARE PRECEDED BY "IV" AS THE SYSTEM DESIGNATION EXCEPT AS NOTED.
6. SEAL WATER IS INJECTED BETWEEN THE SEATS AND STEM PACKING OF SINGLE VALVES AND INTO THE PIPELINE BETWEEN TWO VALVES. ONE AND TWO VALVE NO.'S ARE THEREFORE FURNISHED RESPECTIVELY.

NO.	DESCRIPTION	DATE	BY	CHKD.	APP'D.
10	AS BUILT PER DCR 100168-23		JH	JH	REG
21	AS BUILT PER DCP 02-3-05		JH	JH	REG
28	AS BUILT PER DCR 100177-95		JH	JH	REG
27	AS BUILT PER MMP 98-3-056 IVSWS		JH	JH	REG
26	AS BUILT PER MMP 98-3-056 IVSWS		JH	JH	REG
25	AS BUILT PER MOD 98-3-056 IVSWS		JH	JH	REG
24	AS BUILT PER DCR 100151-08		JH	JH	REG
23	AS BUILT PER NMP 98-3-447 IVSW		JH	JH	REG
22	AS BUILT PER DCR 100138-85		JH	JH	REG
21	AS BUILT PER MOD 94-03-18651S.		JH	JH	REG
20	AS BUILT PER MOD 93-03-442CVCS.		JH	JH	REG
19	AS BUILT PER MOD 91-03-027IVSW.		JH	JH	REG
18	AS BUILT PER TP3 TECH SERV. B7S-502M & B7S-502M		JH	JH	REG
17	AS BUILT PER MOD 91-03-027IVSW.		JH	JH	REG
16	AS BUILT PER MOD 91-03-027IVSW.		JH	JH	REG
15	AS BUILT PER MOD 91-03-027IVSW.		JH	JH	REG
14	AS BUILT PER MOD 91-03-027IVSW.		JH	JH	REG
13	AS BUILT PER MOD 91-03-027IVSW.		JH	JH	REG
12	AS BUILT PER MOD 91-03-027IVSW.		JH	JH	REG
11	AS BUILT PER MOD 91-03-027IVSW.		JH	JH	REG
10	AS BUILT PER MOD 91-03-027IVSW.		JH	JH	REG

NOTE: PIPING ON THIS Dwg. IS SEISMIC CLASS I EXCEPT AS NOTED.

REDRAIN FROM Dwg. 113E285

INDIAN POINT NO. 3 NUCLEAR POWER PLANT

FLOW DIAGRAM ISOLATION VALVE SEAL WATER SYSTEM

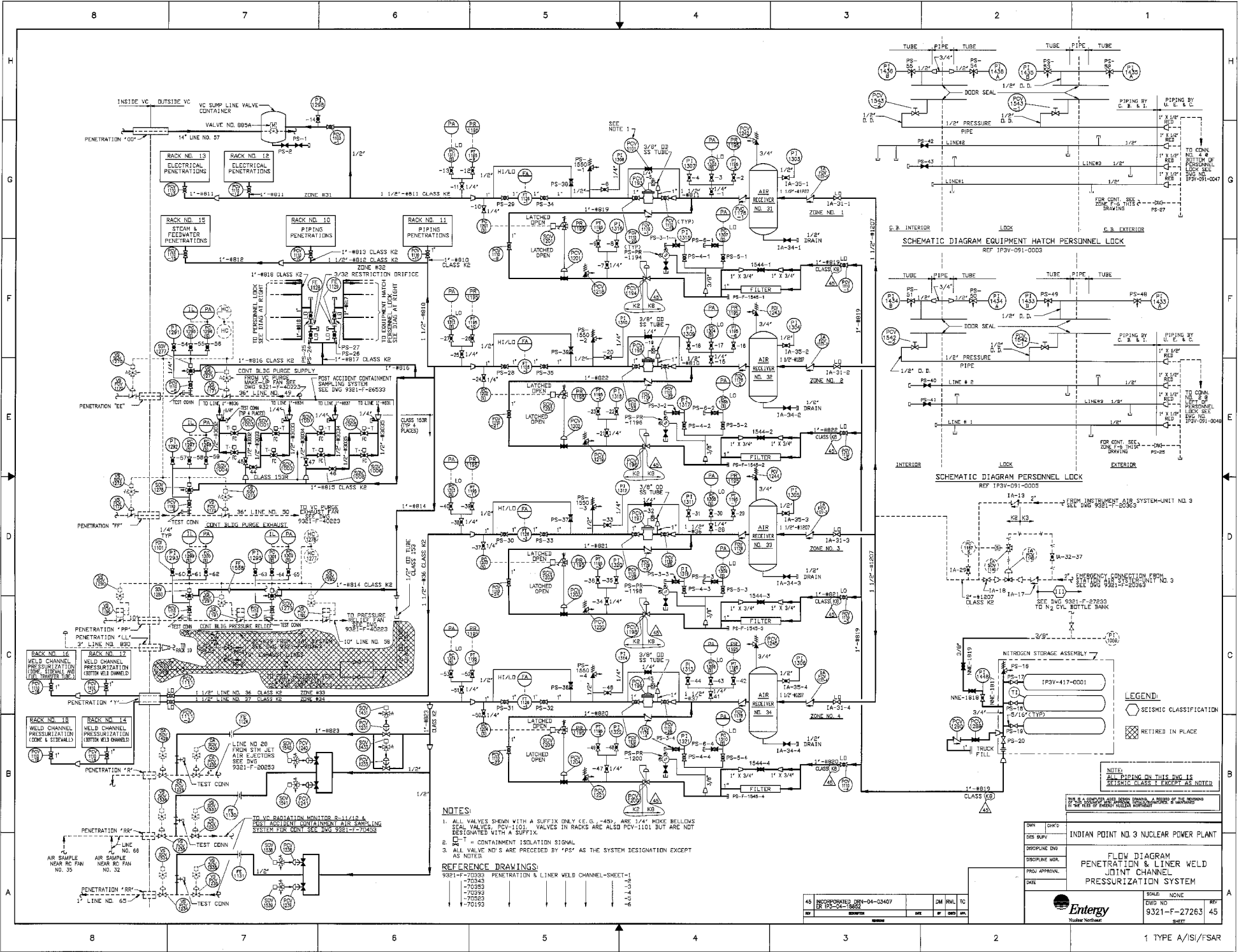
NewYorkPower Authority

DWG NO. 9321-F-27463 30 SHEET

SCALE: NONE

REV: 30

DATE: 11/15/85



NOTES

1. ALL VALVES SHOWN WITH A SUFFIX ONLY (E.G., -45). ARE 1 1/4" WIDE BELLOW SEAL VALVES, PCV-1101. VALVES IN RACKS ARE ALSO PCV-1101 BUT ARE NOT DESIGNATED WITH A SUFFIX.
2. "I" = CONTAINMENT ISOLATION SIGNAL.
3. ALL VALVE NO.'S ARE PRECEDED BY "PS" AS THE SYSTEM DESIGNATION EXCEPT AS NOTED.

REFERENCE DRAWINGS:

- 9321-F-70393
- 70394
- 70395
- 70396
- 70523
- 70524
- 70193

LEGEND:

- SEISMIC CLASSIFICATION
- ⊗ RETIRED IN PLACE

NOTE: ALL PIPING ON THIS DWG IS SEISMIC CLASS 1 EXCEPT AS NOTED.

THIS IS A CONTROL POINT DRAWING. A PORTION OF THE REGION OF THE POWER PLANT IS COVERED.

INDIAN POINT NO. 3 NUCLEAR POWER PLANT

FLOW DIAGRAM
PENETRATION & LINER WELD
JOINT CHANNEL
PRESSURIZATION SYSTEM

DATE: _____

DESIGNED BY: _____

DRAWN BY: _____

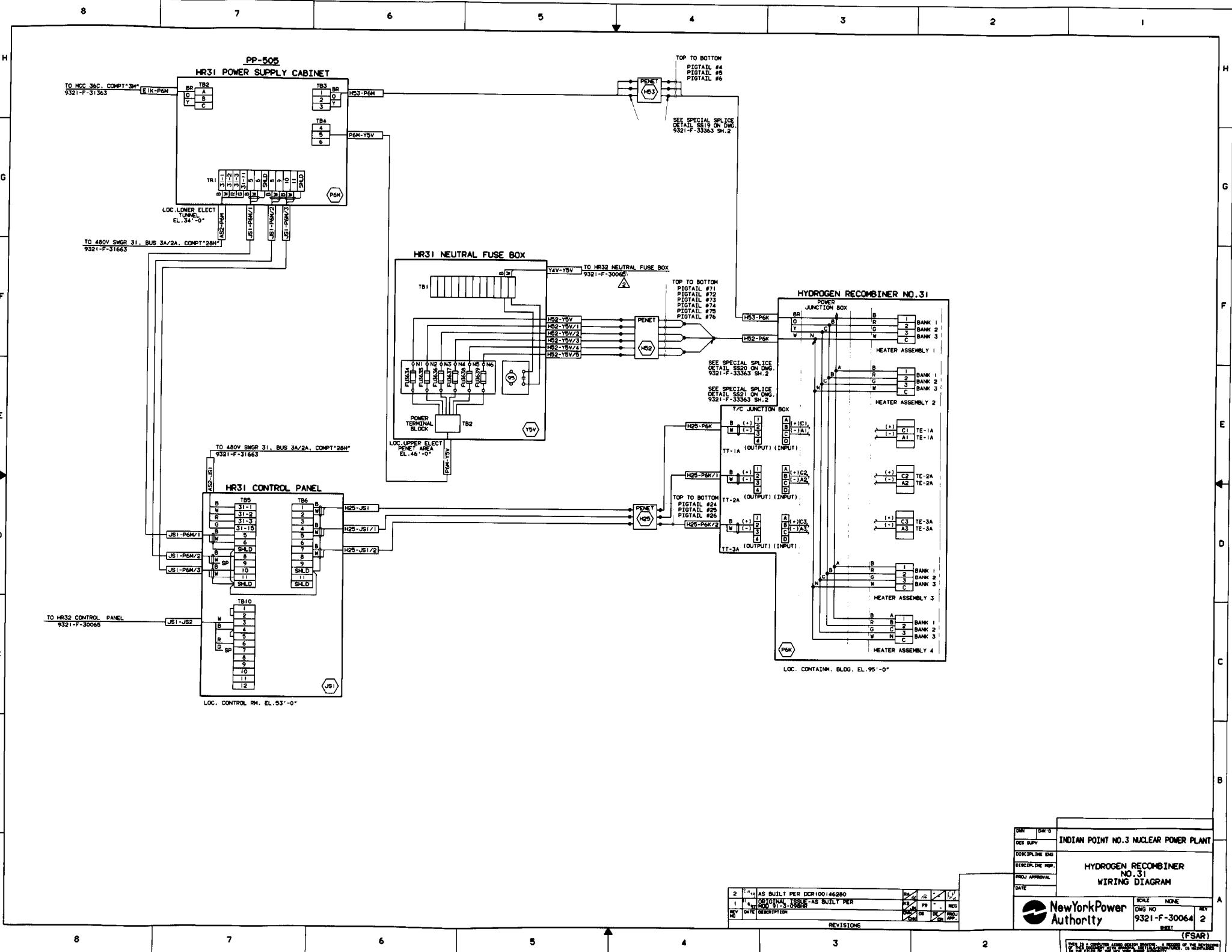
PROJ. APPROVAL: _____

DATE: _____

ENTEGRY Nuclear Services

9321-F-27263 45

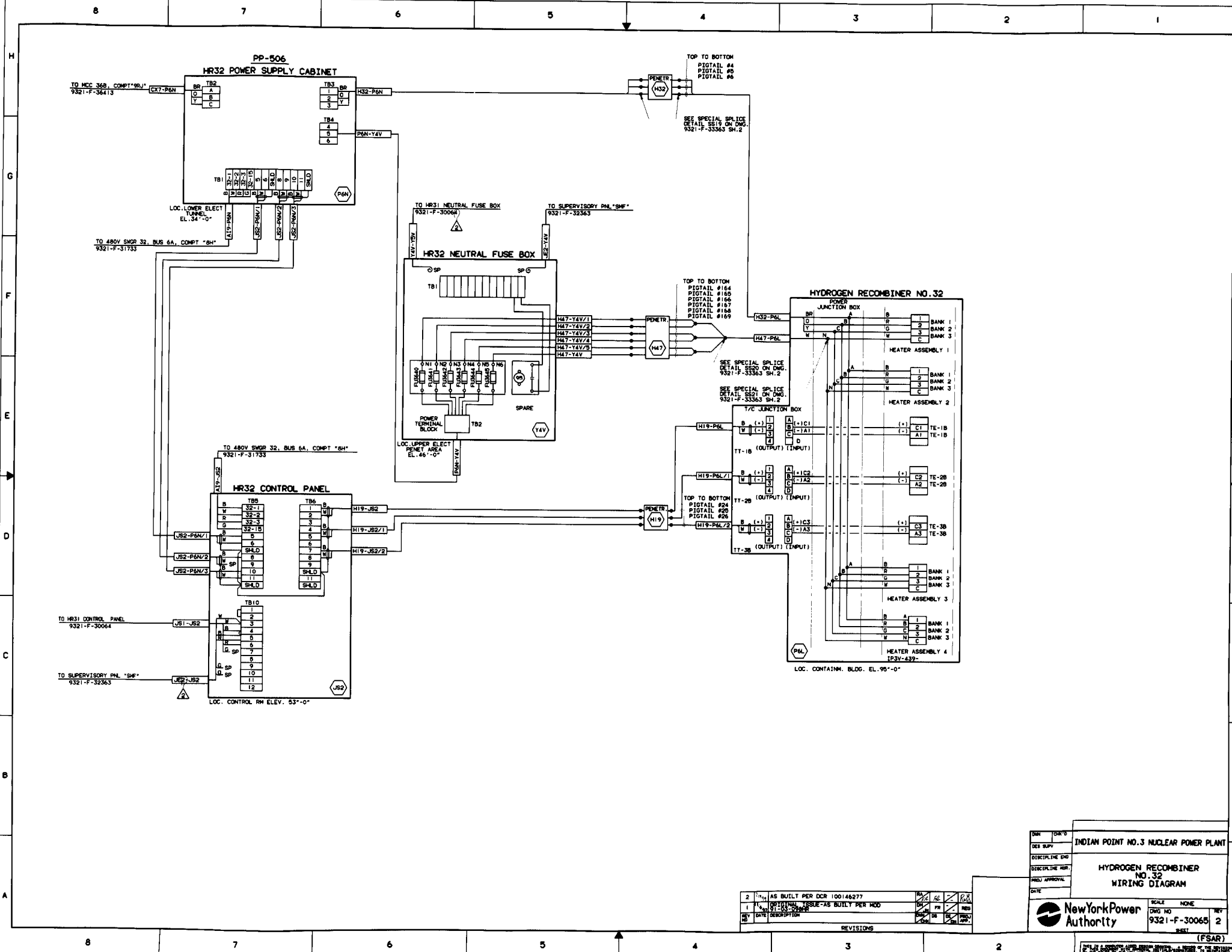
45	INCORPORATED	REV-04-03407	JM	PAJ	10
45	REV	PS-24-18682	SM	W	09/03/04



NO.	DATE	DESCRIPTION	BY	CHKD	APP'D
2		AS BUILT PER DCR100146280			
1		AS BUILT PER			
1		AS BUILT PER			

DATE	CHK'D	DESIGN	INDIAN POINT NO. 3 NUCLEAR POWER PLANT
DISCIPLINE ENG.			
DISCIPLINE MGR.			
PROJ. APPROVAL			
DATE			
			SCALE NONE DWG NO 9321-F-30064 SHEET 2 (FSAR)

THIS IS A CONTROL WIRING DIAGRAM. IT IS NOT TO BE USED FOR THE IDENTIFICATION OF THE WIRING IN THE FIELD.



INDIAN POINT NO. 3 NUCLEAR POWER PLANT

HYDROGEN RECOMBINER NO. 32 WIRING DIAGRAM

New York Power Authority

SCALE: NONE

DRG NO: 9321-F-30065

REV: 2

DATE: _____

APPROVAL: _____

DATE: _____

SCALE: NONE

DRG NO: 9321-F-30065

REV: 2

DATE: _____

APPROVAL: _____

DATE: _____

(FSAR)