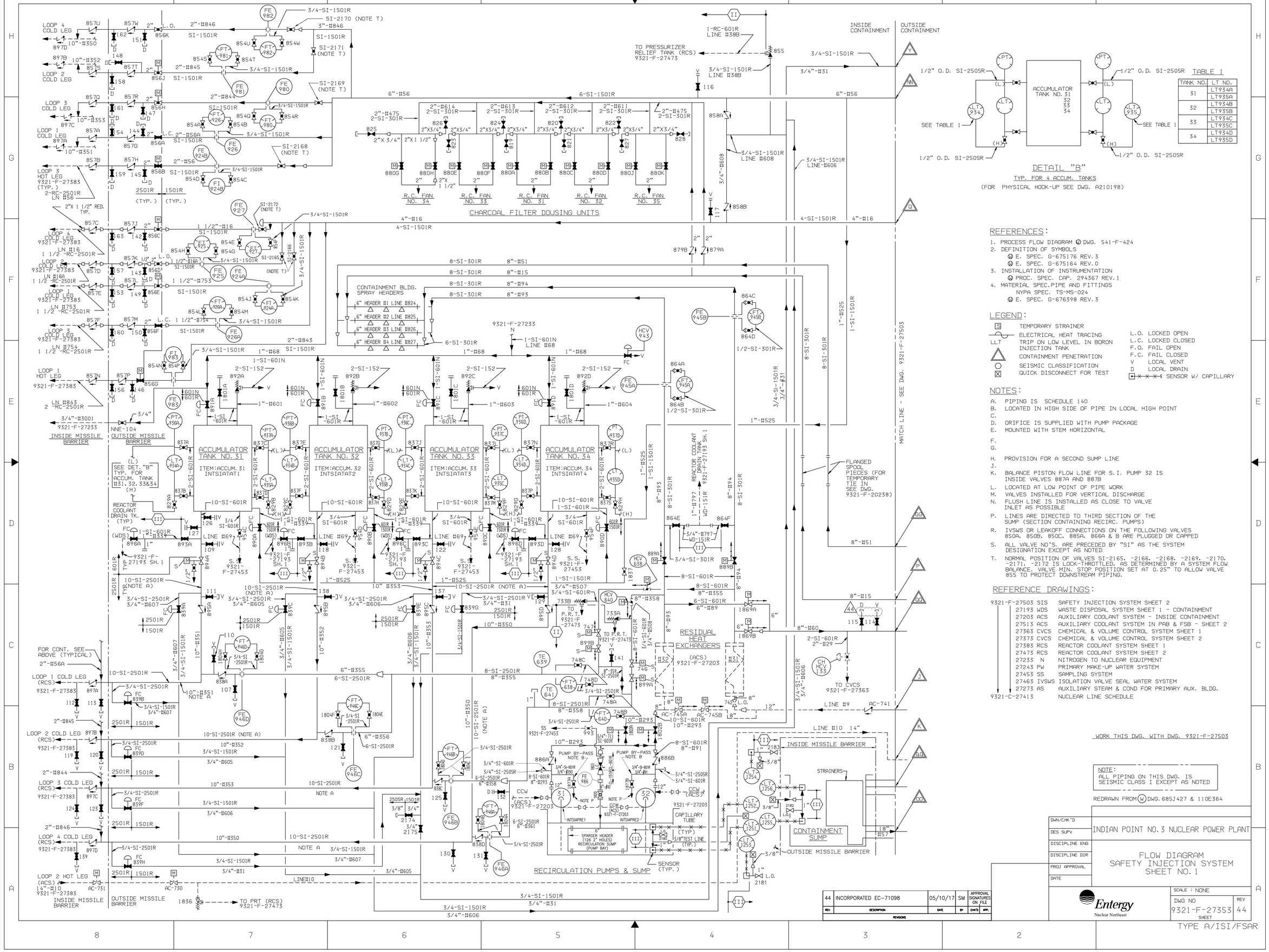


REFERENCES:

1. PROCESS FLOW DIAGRAM (W) DWG. 541-F-424
2. DEFINITION OF SYMBOLS
   - (W) E. SPEC. G-675176 REV. 3
   - (W) E. SPEC. G-675164 REV. 0
3. INSTALLATION OF INSTRUMENTATION
   - (W) PROC. SPEC. CAP. 294367 REV. 1
4. MATERIAL SPEC. PIPE AND FITTINGS
   - NYPA SPEC. TS-MS-024
   - (W) E. SPEC. G-676398 REV. 3

LEGEND:

- [S] TEMPORARY STRAINER
- ELECTRICAL HEAT TRACING
- LLT 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
- [+X-X-X-X-] SENSOR W/ CAPILLARY

NOTES:

A. PIPING IS SCHEDULE 140
B. LOCATED IN HIGH SIDE OF PIPE IN LOCAL HIGH POINT
C.
D. ORIFICE IS SUPPLIED WITH PUMP PACKAGE
E. MOUNTED WITH STEM HORIZONTAL
F.
G.
H. PROVISION FOR A SECOND SUMP LINE
J.
K. BALANCE PISTON FLOW LINE FOR S.I. PUMP 32 IS INSIDE VALVES 887A AND 887B
L. LOCATED AT LOW POINT OF PIPE WORK
M. VALVES INSTALLED FOR VERTICAL DISCHARGE
N. FLUSH LINE IS INSTALLED AS CLOSE TO VALVE INLET AS POSSIBLE
P. LINES ARE DIRECTED TO THIRD SECTION OF THE SUMP (SECTION CONTAINING RECIRC. PUMPS)
R. IVSWS OR LEAKOFF CONNECTIONS ON THE FOLLOWING VALVES 850A, 850B, 850C, 885A, 866A & B ARE PLUGGED OR CAPPED
S. ALL VALVE NO'S. ARE PRECEDED BY "SI" AS THE SYSTEM DESIGNATION EXCEPT AS NOTED
T. 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	IVSWS ISOLATION VALVE SEAL WATER SYSTEM
	27273	AS AUXILIARY STEAM & COND FOR PRIMARY AUX. BLDG.
9321-C-27413		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. 685J427 & 110E364

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

REVISIONS

DWN/CHK'D
DES SUPV
DISCIPLINE ENG
DISCIPLINE DIR
PROJ APPROVAL
DATE

INDIAN POINT NO. 3 NUCLEAR POWER PLANT

FLOW DIAGRAM
SAFETY INJECTION SYSTEM
SHEET NO. 1

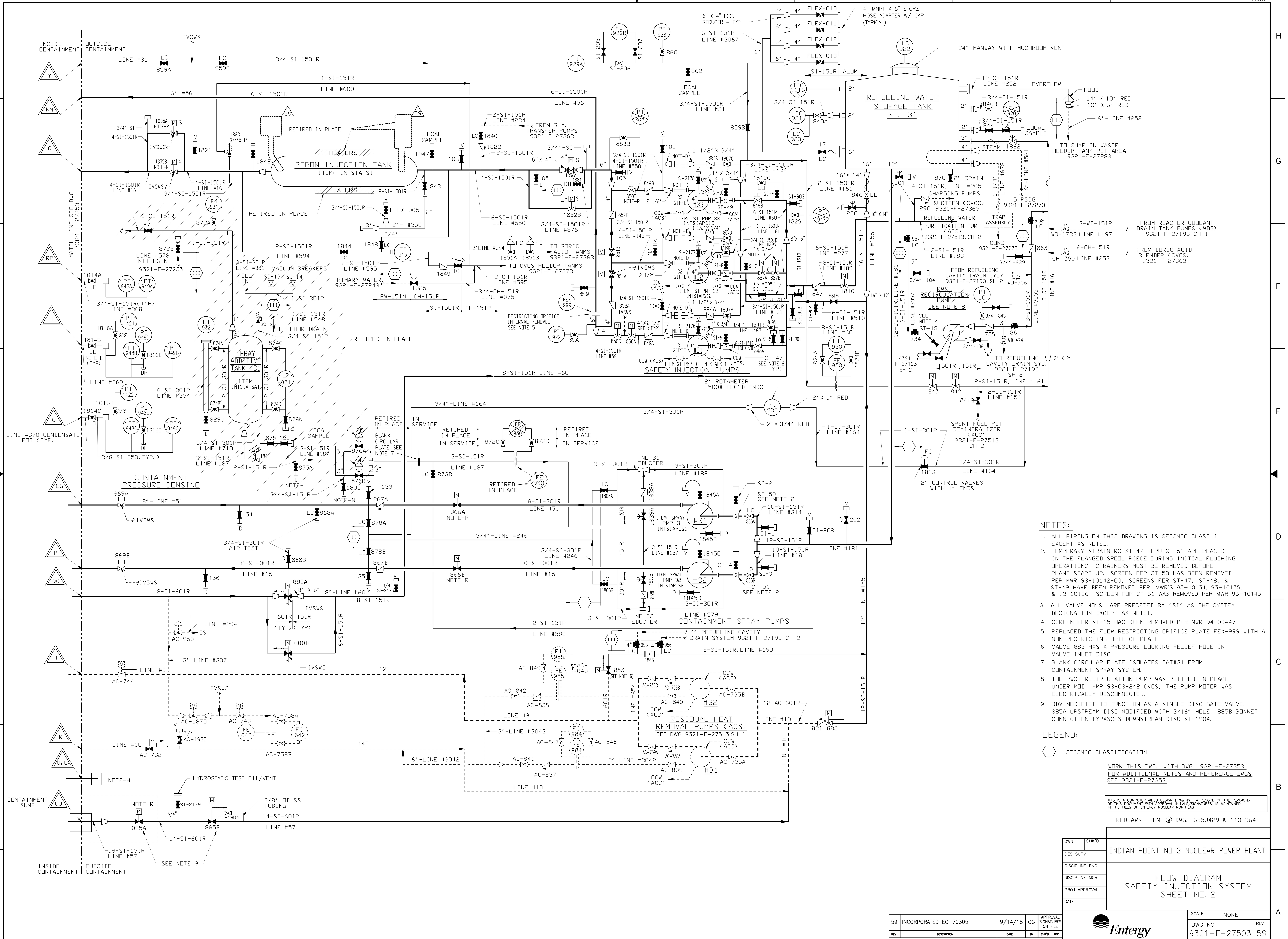
Entergy
Nuclear Northeast

SCALE : NONE

DWG NO 9321-F-27353 SHEET

REV 44

TYPE A/ISI/FSAR



NOTES:

1. ALL PIPING ON THIS DRAWING IS SEISMIC CLASS I EXCEPT AS NOTED.
2. 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.
3. ALL VALVE NO'S. ARE PRECEDED BY "SI" AS THE SYSTEM DESIGNATION EXCEPT AS NOTED.
4. SCREEN FOR ST-15 HAS BEEN REMOVED PER MWR 94-03447
5. REPLACED THE FLOW RESTRICTING ORIFICE PLATE FEX-999 WITH A NON-RESTRICTING ORIFICE PLATE.
6. VALVE 883 HAS A PRESSURE LOCKING RELIEF HOLE IN VALVE INLET DISC.
7. BLANK CIRCULAR PLATE ISOLATES SAT#31 FROM CONTAINMENT SPRAY SYSTEM.
8. THE RWST RECIRCULATION PUMP WAS RETIRED IN PLACE. UNDER MOD. MMP 93-03-242 CVCS, THE PUMP MOTOR WAS ELECTRICALLY DISCONNECTED.
9. DDV MODIFIED TO FUNCTION AS A SINGLE DISC GATE VALVE. 885A UPSTREAM DISC MODIFIED WITH 3/16" HOLE, 885B BONNET CONNECTION BYPASSES DOWNSTREAM DISC SI-1904.

LEGEND:

⬡ SEISMIC CLASSIFICATION

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

REDRAWN FROM Ⓦ DWG. 685J429 & 110E364

REV	DESCRIPTION	DATE	BY	CHK'D	APP.
59	INCORPORATED EC-79305	9/14/18	OG	APPROVAL SIGNATURES ON FILE	

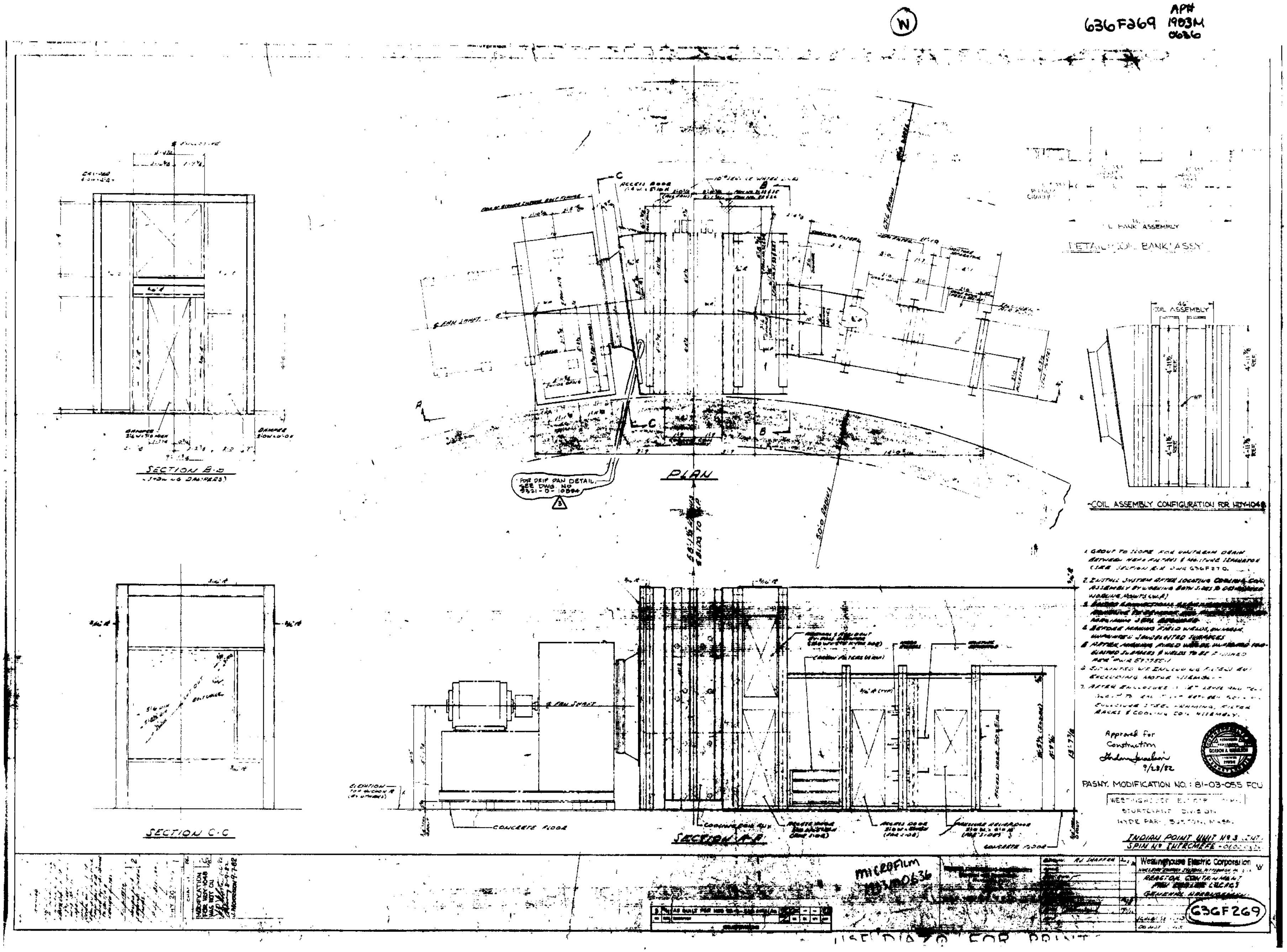
REVISIONS

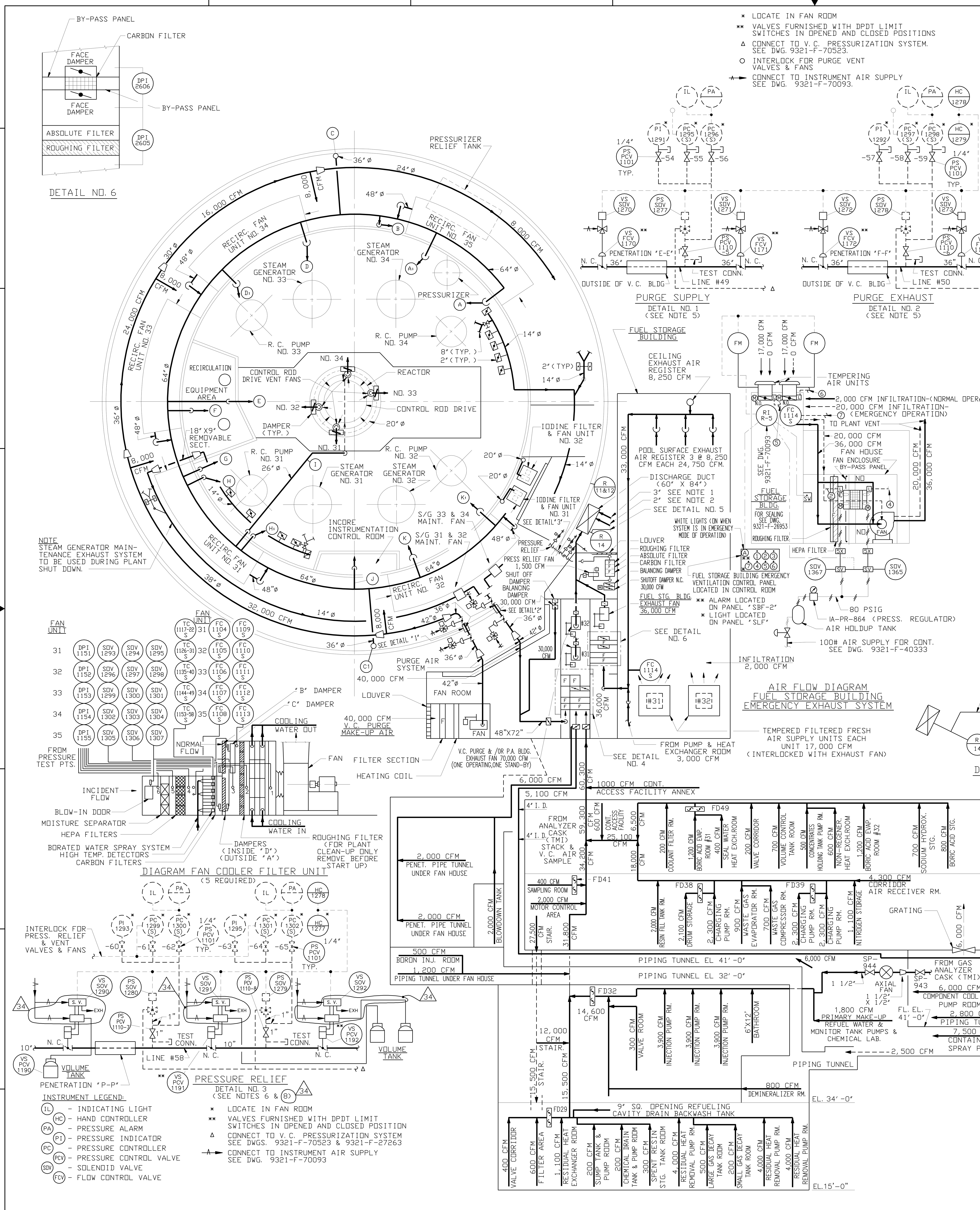
DWN / CHK'D	INDIAN POINT NO. 3 NUCLEAR POWER PLANT
DES SUPV	
DISCIPLINE ENG	FLOW DIAGRAM SAFETY INJECTION SYSTEM SHEET NO. 2
DISCIPLINE MGR.	
PROJ APPROVAL	
DATE	

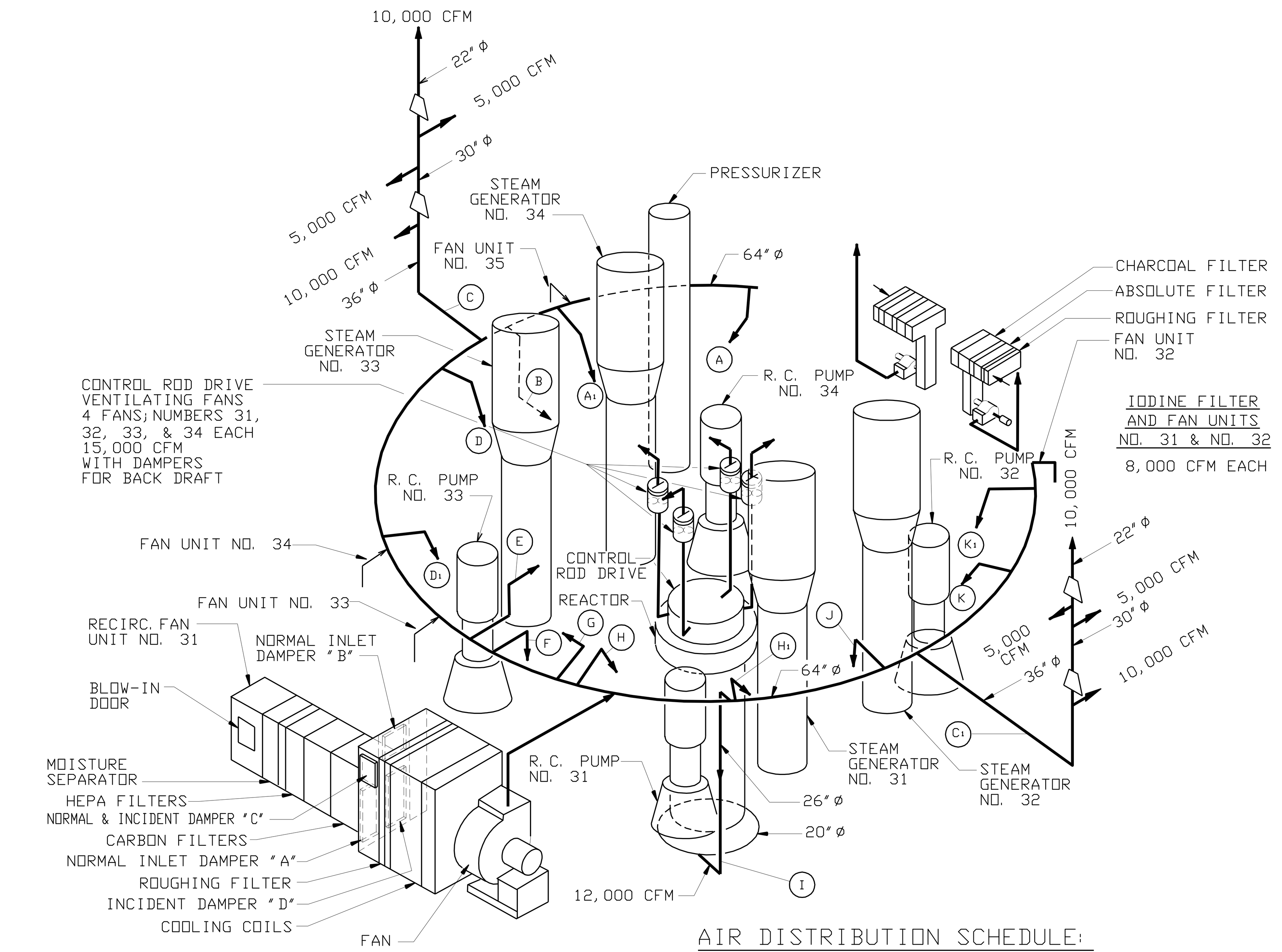
Entergy Nuclear Northeast

SCALE NONE
DWG NO 9321-F-27503 REV 59
SHEET

TYPE A


Ⓦ
636F269
AP#
1903M
0636
SECTION B-B
PLAN
FOR DRIP PAN DETAIL, SEE DWG. NO.
COIL ASSEMBLY
COIL ASSEMBLY CONFIGURATION FOR HDY-1048
SECTION C-C
CONCRETE FLOOR
SECTION A-A
Approved for Construction
9/28/82
PASNY. MODIFICATION NO.: 81-03-055 FCU
INDIAN POINT UNIT NO 3
Westinghouse Electric Corporation
REACTOR CONTAINMENT
MICROFILM
63GF269



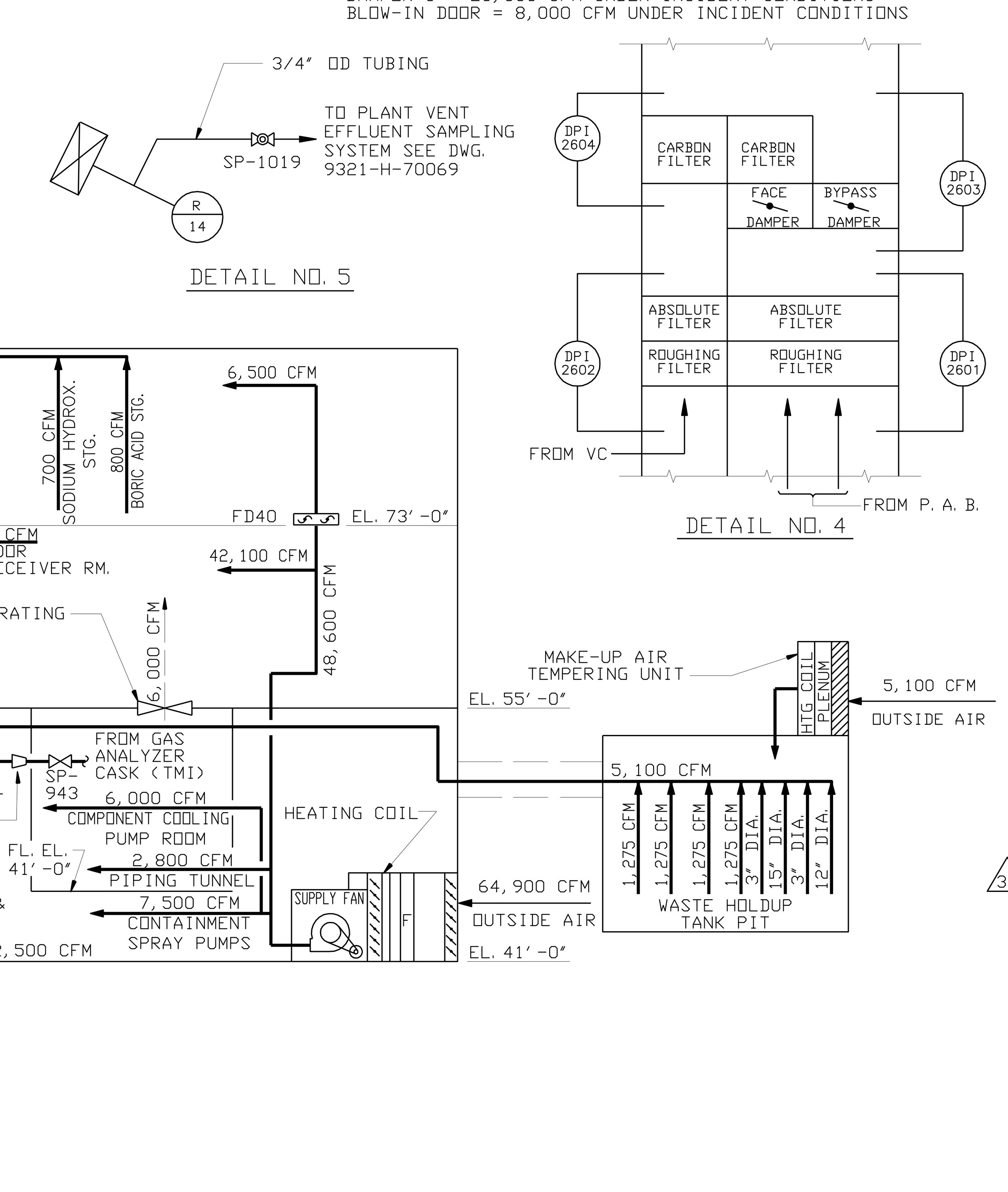


FAN-COOLER-FILTER UNIT (TYPICAL)

DIAGRAM OF CONTAINMENT AIR RECIRCULATION SYSTEM
PURGE SYSTEM NOT SHOWN

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

AIR FLOW THRU FAN COOLER FILTER UNITS
(TYPICAL FOR EACH UNIT)
DAMPERS A+B+C=70,000 CFM UNDER NORMAL CONDITIONS
DAMPER D = 8,000 CFM UNDER INCIDENT CONDITIONS
DAMPER C = 26,000 CFM UNDER INCIDENT CONDITIONS
BLOW-IN DOOR = 8,000 CFM UNDER INCIDENT CONDITIONS



AIR DISTRIBUTION SCHEDULE:

(A)+(A1) 58,675 CFM TO R.C. PUMP, STM. GEN. & PRESSURIZER AREA
(B)= 2,000 CFM TO PRESS. RELIEF TANK AREA
(C)+(C1) 60,000 CFM TO DOME AREA
(D)+(D1) 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)+(H1) 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)+(K1) 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
- L — LIMIT SWITCH
- FD__ -FIRE DAMPERS
- M — AIR OPERATED MOTOR
- A — HIGH RADIATION ALARM
- N.O. — NORMALLY OPEN
- N.C. — NORMALLY CLOSED
- ELECT. SUPPLY
- ELECT. SIGNAL
- S.V. — SOLENOID VALVE
- FC — FLOW SWITCH
- FM — FAN MOTOR
- SW — SWITCH FOR MANUALLY PLACING SYSTEM IN EMERGENCY MODE OF OPERATION.
- R.I. — RADIATION INDICATOR
- PNEUMATIC SIGNAL
- INST. AIR SUPPLY

NOTES

1. 3" FROM POST ACCIDENT CONTAINMENT VENTING SYSTEM
2. 2" #131, FROM GAS DECAY TANKS
3. ALL VALVE NO'S ARE PRECEDED BY "VS" AS THE SYSTEM DESIGNATION EXCEPT AS NOTED.
4. ALL HVAC SYSTEMS ARE SEISMIC CLASS I EXCEPT PAB SUPPLY HEATING COILS, WASTE HOLD-UP AIR TEMPERING UNIT, FSB STEAM SUPPLY AND CONDENSATE.
5. CONTAINMENT ISOLATION VALVES FCV-1170 & FCV-1171 (PURGE SUPPLY) AND FCV-1172 & FCV-1173 (PURGE EXHAUST) ARE CLOSED DURING NORMAL OPERATIONS.
6. 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.
7. THE VC PURGE AIR SYSTEM WAS DESIGNED FOR 40,000 CFM. THE MEASURED FLOW RATE WAS APPROXIMATELY 28,000 CFM.
34 8. 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)

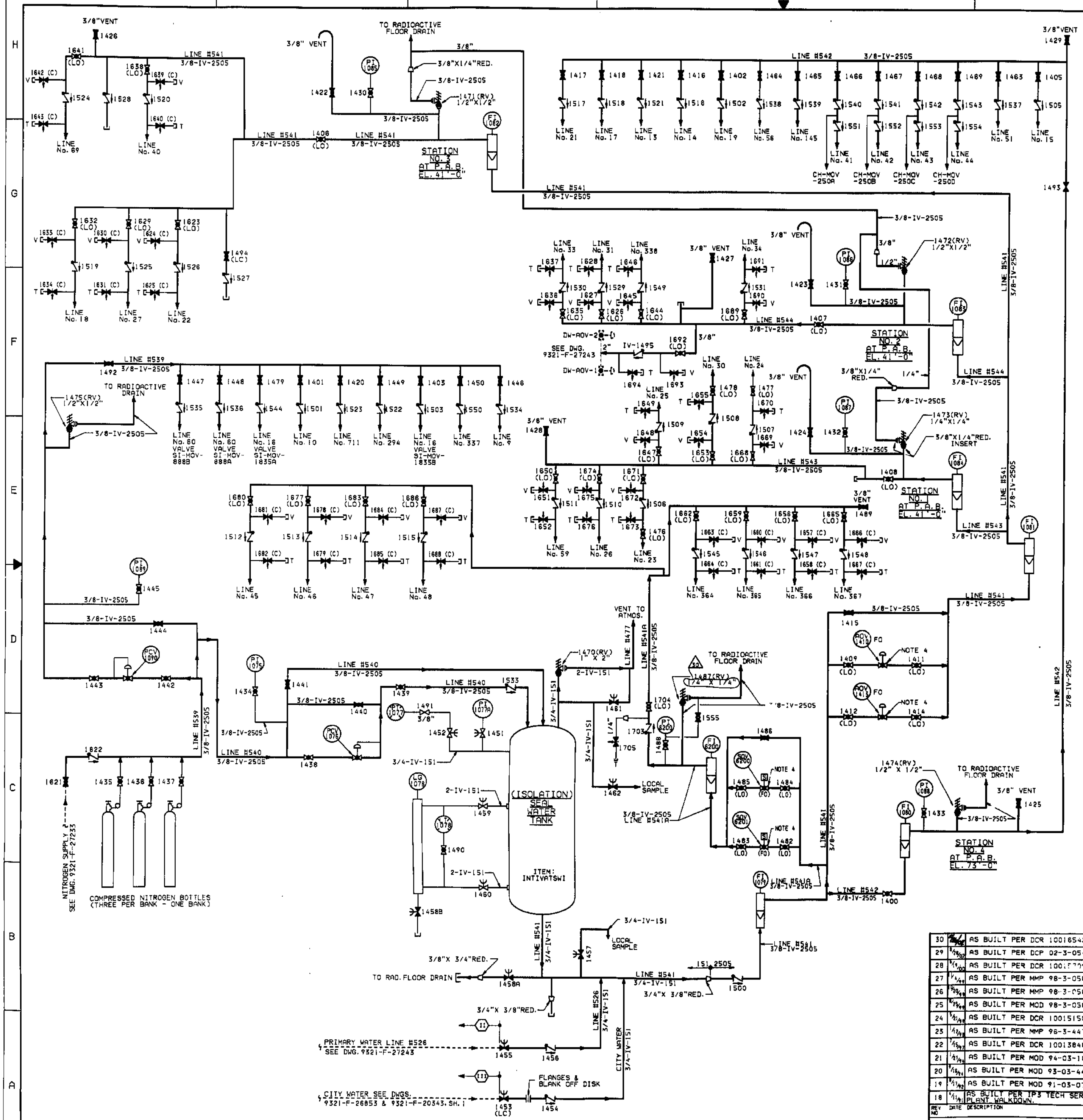
REV	DESCRIPTION	DATE	BY	CHK'D	APP.
34	INCORPORATED EC-33393 & EC-43615	3/26/13	RM	APPROVAL SIGNATURES ON FILE	

REVISIONS

DWN/CHK'D	INDIAN POINT NO. 3 NUCLEAR POWER PLANT
DES SUPV	
DISCIPLINE ENG	FLOW DIAGRAM VENTILATION SYSTEM FOR CONTAINMENT, PRIMARY AUXILIARY AND FUEL STORAGE BUILDINGS
DISCIPLINE DIR	
PROJ APPROVAL	
DATE	

Entergy Nuclear Northeast

SCALE: NONE
DWG NO 9321-F-40223 REV 34
SHEET 1



PENETRATION LIST

SEAL CONN. TO LINE No.	INJECTION POINT LOCATION	CONTAINMENT PENETRATION SLEEVE No.	LINE DESCRIPTION	INJECTION POINTS (SEE NOTE 6)	REMARKS
9	PIPE TRENCH	J	RESIDUAL HEAT REMOVAL LOOP IN	AC-MOV-744	N_2 INJ.
10	PIPE TRENCH	K	RESIDUAL HEAT REMOVAL LOOP OUT	AC-732	N_2 INJ.
337	PIPE TRENCH	NONE	RHR PUMP MINIFLOW OUT	AC-MOV-743 & AC-MOV-1870	N_2 INJ.
13	PIPE TRENCH	N	R.C. PUMPS COOLING WATER IN	AC-797 & AC-769	
14	PIPE TRENCH	O	R.C. PUMPS COOLING WATER OUT	AC-MOV-784 & AC-MOV-786	
21	PIPE TRENCH	O	R.C. PUMPS COOLING WATER OUT	AC-FCV-625 & AC-MOV-789	
15	PIPE TRENCH	P	CONTAINMENT SPRAY HEADER	SI-869B	
16	PIPE TRENCH	Q	SAFETY INJECTION LINE FROM BORON INJECTION TANK	SI-MOV-1835A	N_2 INJ.
17	PIPE TRENCH	R	R.C. PUMPS SEAL WATER RETURN	CH-MOV-222	
18	PIPE TRENCH	R	EXCESS LETDOWN HEAT EXCH. COOLING WATER RETURN	AC-AOV-793 & AC-AOV-796	
19	PIPE TRENCH	R	CHARGING LINE	CH-MOV-205 & CH-MOV-226	
		S	SPARE		
		T	SPARE		
22	PIPE TRENCH	U	EXCESS LETDOWN HEAT EXCH. COOLING WATER SUPPLY	AC-AOV-791 & AC-AOV-798	
23	PIPE TRENCH	V	CONTAINMENT VENT HEADER	WD-AOV-1786 & WD-AOV-1787	
24	PIPE TRENCH	V	P.R.T. GAS ANALYZER LINE	RC-MOV-548 & RC-MOV-549	
25	PIPE TRENCH	W	PRESSURIZER STEAM SAMPLE	SP-AOV-956A & SP-AOV-956B	
26	PIPE TRENCH	W	PRESSURIZER LIQUID SAMPLE	SP-AOV-956C & SP-AOV-956D	
27	PIPE TRENCH	X	LETDOWN LINE	CH-AOV-201 & CH-AOV-202	
30	PIPE TRENCH	V	R.C. DRAIN TANK GAS ANALYZER LINE	WD-AOV-1788 & WD-AOV-1789	
31	PIPE TRENCH	Y	S.I.S. TEST LINE	SI-859A & SI-859C	
33	PIPE TRENCH	Y	P.R.T. MAKE-UP LINE	RC-AOV-519 & RC-AOV-552	
34	PIPE TRENCH	Y	STATION AIR	SA-24-1 & SA-24-2	
40	PIPE TRENCH	Z	R.C. DRAIN TANK PUMP DISCHARGE	WD-AOV-1702 & WD-AOV-1705	
41	PIPE TRENCH	Z	R.C. PUMP 31 SEAL INJECTION SUPPLY	CH-MOV-441 & CH-MOV-250A	
42	PIPE TRENCH	Z	R.C. PUMP 32 SEAL INJECTION SUPPLY	CH-MOV-442 & CH-MOV-250B	
43	PIPE TRENCH	Z	R.C. PUMP 33 SEAL INJECTION SUPPLY	CH-MOV-443 & CH-MOV-250C	
44	PIPE TRENCH	Z	R.C. PUMP 34 SEAL INJECTION SUPPLY	CH-MOV-444 & CH-MOV-250D	
45	PIPE TRENCH	AA	STEAM GENERATOR 32 BLOWDOWN LINE	BD-PCV-1215 & BD-PCV-1215A	
46	PIPE TRENCH	BB	STEAM GENERATOR 31 BLOWDOWN LINE	BD-PCV-1214 & BD-PCV-1214A	
47	PIPE TRENCH	CC	STEAM GENERATOR 33 BLOWDOWN LINE	BD-PCV-1216 & BD-PCV-1216A	
48	PIPE TRENCH	DD	STEAM GENERATOR 34 BLOWDOWN LINE	BD-PCV-1217 & BD-PCV-1217A	
51	PIPE TRENCH	GG	CONTAINMENT SPRAY HEADER	SI-869A	
16	IN PAB	Q	SAFETY INJECTION LINE FROM BORON INJECTION TANK	SI-MOV-1835B	N_2 INJ.
145	IN PAB	NN	SAFETY INJECTION LINE FROM SAFETY INJECTION PUMPS	SI-851A	
56	PIPE TRENCH	NN	SAFETY INJECTION LINE FROM SAFETY INJECTION PUMPS	SI-MOV-850A & SI-MOV-850C	
59	PIPE TRENCH	W	REACTOR COOLANT SAMPLE LINE	SP-AOV-956E & SP-AOV-956F	
60	PIPE TRENCH	QQ	RESIDUAL HEAT EXCH. TO SAFETY INJECTION PUMPS	SI-MOV-888A	N_2 INJ.
60	PIPE TRENCH	QQ	RESIDUAL HEAT EXCH. TO SAFETY INJECTION PUMPS	SI-MOV-888B	N_2 INJ.
69	PIPE TRENCH	RR	ACCUMULATOR SAMPLE LINE	SP-AOV-956G & SP-AOV-956H	
338	PIPE TRENCH	Y	V.C. SUMP PUMP DISCHARGE	WD-AOV-1723 & WD-AOV-1728	
364	PIPE TRENCH	W	STEAM GENERATOR 31 BLOWDOWN SAMPLE	BD-PCV-1223 & BD-PCV-1223A	
365	PIPE TRENCH	W	STEAM GENERATOR 32 BLOWDOWN SAMPLE	BD-PCV-1224 & BD-PCV-1224A	
366	PIPE TRENCH	W	STEAM GENERATOR 33 BLOWDOWN SAMPLE	BD-PCV-1225 & BD-PCV-1225A	
367	PIPE TRENCH	W	STEAM GENERATOR 34 BLOWDOWN SAMPLE	BD-PCV-1226 & BD-PCV-1226A	
711	PIPE TRENCH	TT	RECIRC. PUMP DISCHARGE SAMPLE	SP-MOV-990A & SP-MOV-990B	N_2 INJ.
294	PIPE TRENCH	NONE	RESIDUAL HEAT REMOVAL LOOP SAMPLE	AC-MOV-958 & SP-AOV-959	N_2 INJ

REFERENCES:

1. DEFINITION OF SYMBOLS ----- (W)E. SPEC. G.675176 REV. 2
2. INSTRUMENT & CONTROL STD. -- (W)SYMBOLS & APPLICATIONS FOR INST. DIAG. SECTION 1.1, ISSUED AUG. 12, 1966
   INSTRUMENT & CONTROL STD. -- (W)INST. INSTALLATION: SECTION 3.0 ISSUED IN JUNE, 1966.
3. MATERIAL SPEC. & FITTINGS-- NYPA SPEC. TS-MS-024

REFERENCE DRAWINGS:

9321-C-27413	NUCLEAR LINE SCHEDULE
9321-F-27473	REACTOR COOLANT SYSTEM SHEET NO. 2
9321-F-27363	CHEMICAL & VOLUME CONTROL SYSTEM SHEET NO. 1
9321-F-27193	WASTE DISPOSAL SYSTEM SHEET NO. 1-CONTAINMENT
9321-F-27503	SAFETY INJECTION SYSTEM SHEET NO. 2
9321-F-27453	SAMPLING SYSTEM
9321-F-27293	STEAM GEN. BLOWDOWN SYSTEM SHEETS NO. 1 & 2
9321-F-40523	STEAM & COND. DISTRIBUTION HEADERS SHEET NO. 2
9321-F-27513	AUXILIARY COOLANT SYSTEM SHEET NO. 2
9321-F-27243	PRIMARY MAKE-UP WATER SYSTEM
9321-F-27683	ISOLATION VALVE SEAL WATER PIPING SHEET NO. 1
9321-F-27693	ISOLATION VALVE SEAL WATER PIPING SHEET NO. 2

LEGEND:

PW -----PRIMARY WATER
FC------FAIL CLOSED
FO -----FAIL OPEN
CW -----CITY WATER
LO -----LOCKED OPEN
D ------LOCAL DRAIN
LC -----LOCKED CLOSED
(hexagon) -----SEISMIC CLASSIFICATION
V -----VENT
T -----TEST

GENERAL NOTES:

1. ALL PIPING IS 3/8" S.S., O.D. TUBING (LINE DESIGNATIONS) 3/8-IV-2505 EXCEPT AS NOTED.
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 AOV-1410 & AOV-1413 & SOV-6200 & SOV-6201 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 PIPING BETWEEN TWO VALVES. ONE AND TWO VALVE NO'S. ARE THEREFORE FURNISHED RESPECTIVELY.

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

REVISIONS

REV NO	DATE	DESCRIPTION	DWN/CHK	DS	DE/DD	PROJ MGR
30		AS BUILT PER DCR 100165423				
29		AS BUILT PER DCP 02-3-054				
28		AS BUILT PER DCR [illegible]				
27		AS BUILT PER MMP 98-3-056 IVSWS				
26		AS BUILT PER MMP 98-3-056 IVSWS				
25		AS BUILT PER MOD 98-3-056 IVSWS				
24		AS BUILT PER DCR 100151508				
23		AS BUILT PER MMP 96-3-447 IVSW				
22		AS BUILT PER DCR 100138485				
21		AS BUILT PER MOD 94-03-186SIS.				
20		AS BUILT PER MOD 93-03-442CVCS.				
19		AS BUILT PER MOD 91-03-072IVSW.				
18		AS BUILT PER IP3 TECH SERV. #TS-504M & PLANT WALKDOWN.				

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 THE NEW YORK POWER AUTHORITY.

REDRAWN FROM (W) DWG. 113E285

DWN/CHK'D | DES SUPV | DISCIPLINE ENG | DISCIPLINE DIR | PROJ APPROVAL | DATE

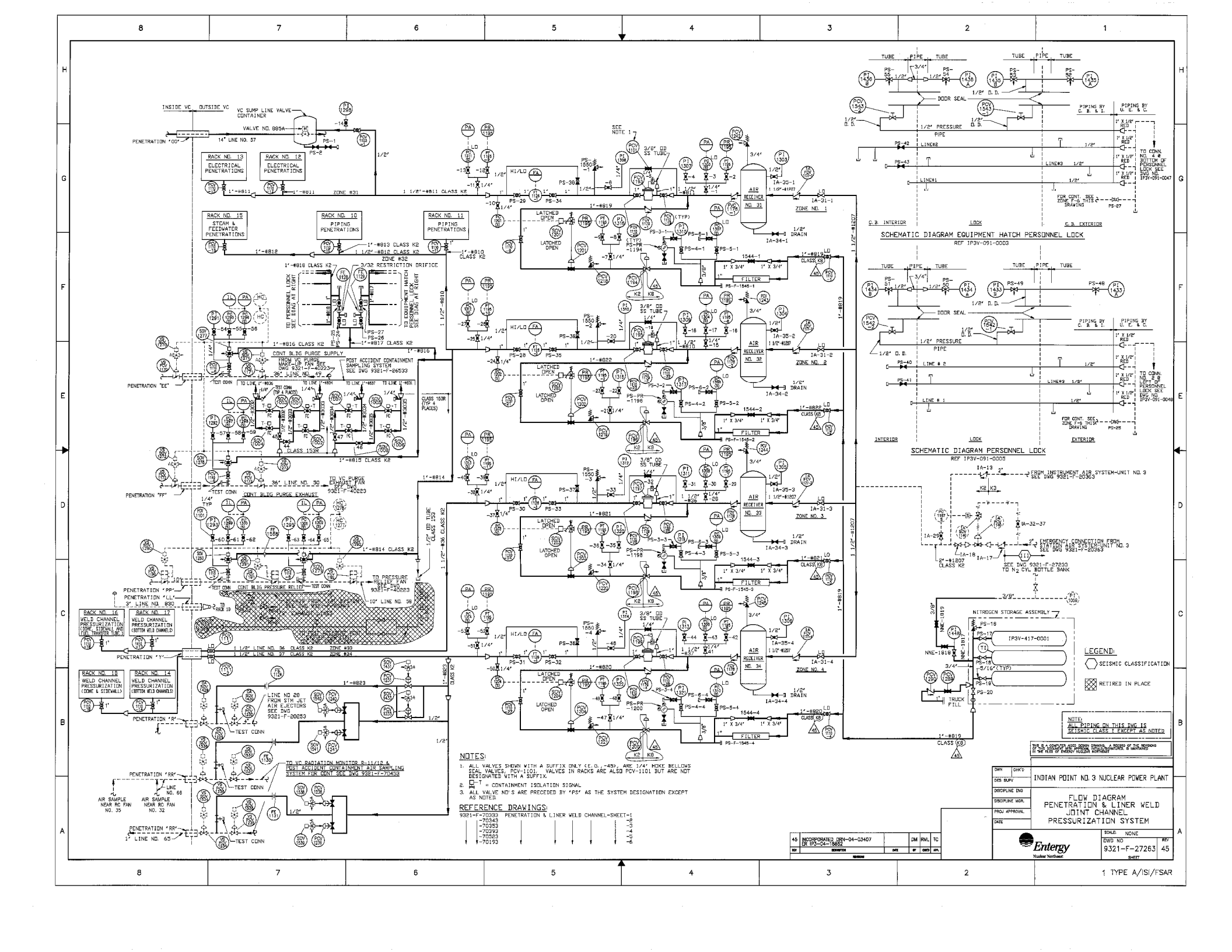
INDIAN POINT NO. 3 NUCLEAR POWER PLANT

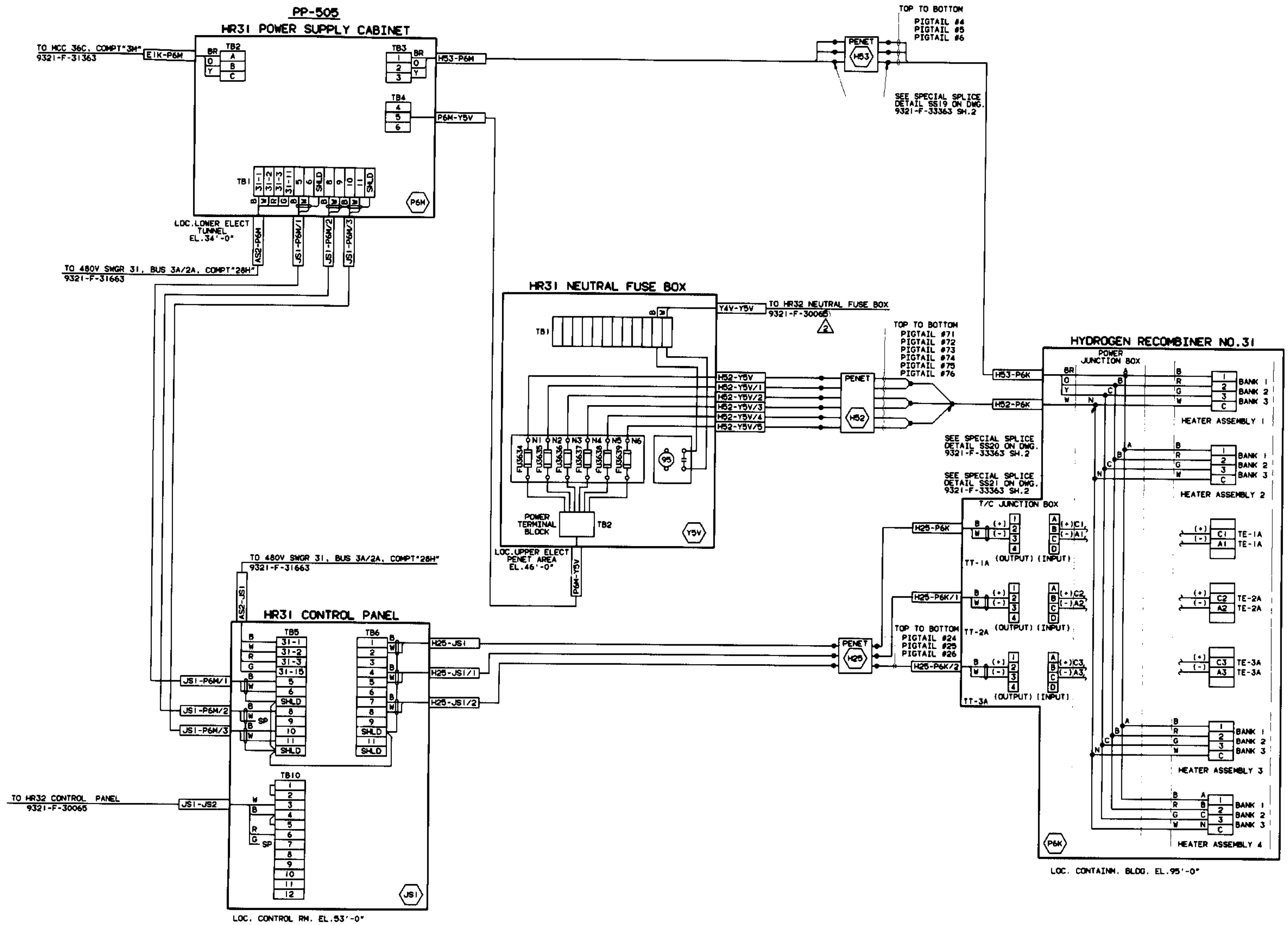
FLOW DIAGRAM ISOLATION VALVE SEAL WATER SYSTEM

New York Power Authority

SCALE NONE
DWG NO 9321-F-27463 REV 30

TYPE O/1SI/FSAR


INSIDE VC
OUTSIDE VC
VC SUMP LINE VALVE CONTAINER
VALVE NO. 885A
14" LINE NO. 57
PENETRATION "DD"
RACK NO. 13 ELECTRICAL PENETRATIONS
RACK NO. 12 ELECTRICAL PENETRATIONS
RACK NO. 15 STEAM & FEEDWATER PENETRATIONS
RACK NO. 10 PIPING PENETRATIONS
RACK NO. 11 PIPING PENETRATIONS
ZONE #31
ZONE #32
3/32 RESTRICTION ORIFICE
CONT BLDG PURGE SUPPLY
FROM VC PURGE FAN SEE DWG 9321-F-40223
POST ACCIDENT CONTAINMENT SAMPLING SYSTEM SEE DWG 9321-F-26533
PENETRATION "EE"
PENETRATION "FF"
TO VC PURGE EXHAUST FAN SEE DWG 9321-F-40223
CONT BLDG PURGE EXHAUST
CONT BLDG PRESSURE RELIEF
TO PRESSURE RELIEF FAN SEE DWG 9321-F-40223
PENETRATION "PP"
PENETRATION "LL"
PENETRATION "Y"
RACK NO. 16 WELD CHANNEL PRESSURIZATION (DOME & SIDEWALL AND TIGH TRANSFER TUBE)
RACK NO. 17 WELD CHANNEL PRESSURIZATION (BOTTOM WELD CHANNEL)
RACK NO. 18 WELD CHANNEL PRESSURIZATION (DOME & SIDEWALL)
RACK NO. 14 WELD CHANNEL PRESSURIZATION (BOTTOM WELD CHANNEL)
PENETRATION "R"
LINE NO. 26 FROM STM JET AIR EJECTORS SEE DWG 9321-F-20253
TO VC RADIATION MONITOR R-11/12 & POST ACCIDENT CONTAINMENT AIR SAMPLING SYSTEM FOR CONT. SEE DWG 9321-F-71438
PENETRATION "RR"
LINE NO. 66
AIR SAMPLE NEAR RC FAN NO. 35
AIR SAMPLE NEAR RC FAN NO. 32
PENETRATION "RR"
LINE NO. 65
AIR RECEIVER NO. 31
AIR RECEIVER NO. 32
AIR RECEIVER NO. 33
AIR RECEIVER NO. 34
ZONE NO. 1
ZONE NO. 2
ZONE NO. 3
ZONE NO. 4
LATCHED OPEN
FILTER
DRAIN
SCHEMATIC DIAGRAM EQUIPMENT HATCH PERSONNEL LOCK
REF IP3V-091-0003
SCHEMATIC DIAGRAM PERSONNEL LOCK
REF IP3V-091-0005
DOOR SEAL
INTERIOR
LOCK
EXTERIOR
FROM INSTRUMENT AIR SYSTEM-UNIT NO. 3 SEE DWG 9321-F-20363
EMERGENCY CONNECTION FROM INSTRUMENT AIR SYSTEM-UNIT NO. 3 SEE DWG 9321-F-20363
SEE DWG 9321-F-27233 TO N2 CYL. BOTTLE BANK
NITROGEN STORAGE ASSEMBLY
IP3V-417-0001
TRUCK FILL
LEGEND:
SEISMIC CLASSIFICATION
RETIRED IN PLACE
NOTE: ALL PIPING ON THIS DWG IS SEISMIC CLASS I EXCEPT AS NOTED
NOTES:
1. ALL VALVES SHOWN WITH A SUFFIX ONLY (E.G., -45), ARE 1/4" MOKE BELLOWS SEAL VALVES, PCV-1101, VALVES IN RACKS ARE ALSO PCV-1101 BUT ARE NOT DESIGNATED WITH A SUFFIX.
2. T = CONTAINMENT ISOLATION SIGNAL
3. ALL VALVE NO'S ARE PRECEDED BY "PS" AS THE SYSTEM DESIGNATION EXCEPT AS NOTED.
REFERENCE DRAWINGS:
9321-F-70333 PENETRATION & LINER WELD CHANNEL-SHEET-1
-70343
-70353
-70393
-70523
-70193
45 INCORPORATED DRN-04-03407 ER IP3-04-18862 DM RML TC
INDIAN POINT NO. 3 NUCLEAR POWER PLANT
FLOW DIAGRAM PENETRATION & LINER WELD JOINT CHANNEL PRESSURIZATION SYSTEM
Entergy Nuclear Northeast
DWG NO 9321-F-27263 REV 45
SCALE NONE
1 TYPE A/ISI/FSAR



REV NO	DATE	DESCRIPTION
2	12-18-99	AS BUILT PER DCR100146280
1	11-6-97	ORIGINAL ISSUE-AS BUILT PER MOD 91-3-098HR

REVISIONS

INDIAN POINT NO.3 NUCLEAR POWER PLANT

HYDROGEN RECOMBINER
NO.31
WIRING DIAGRAM

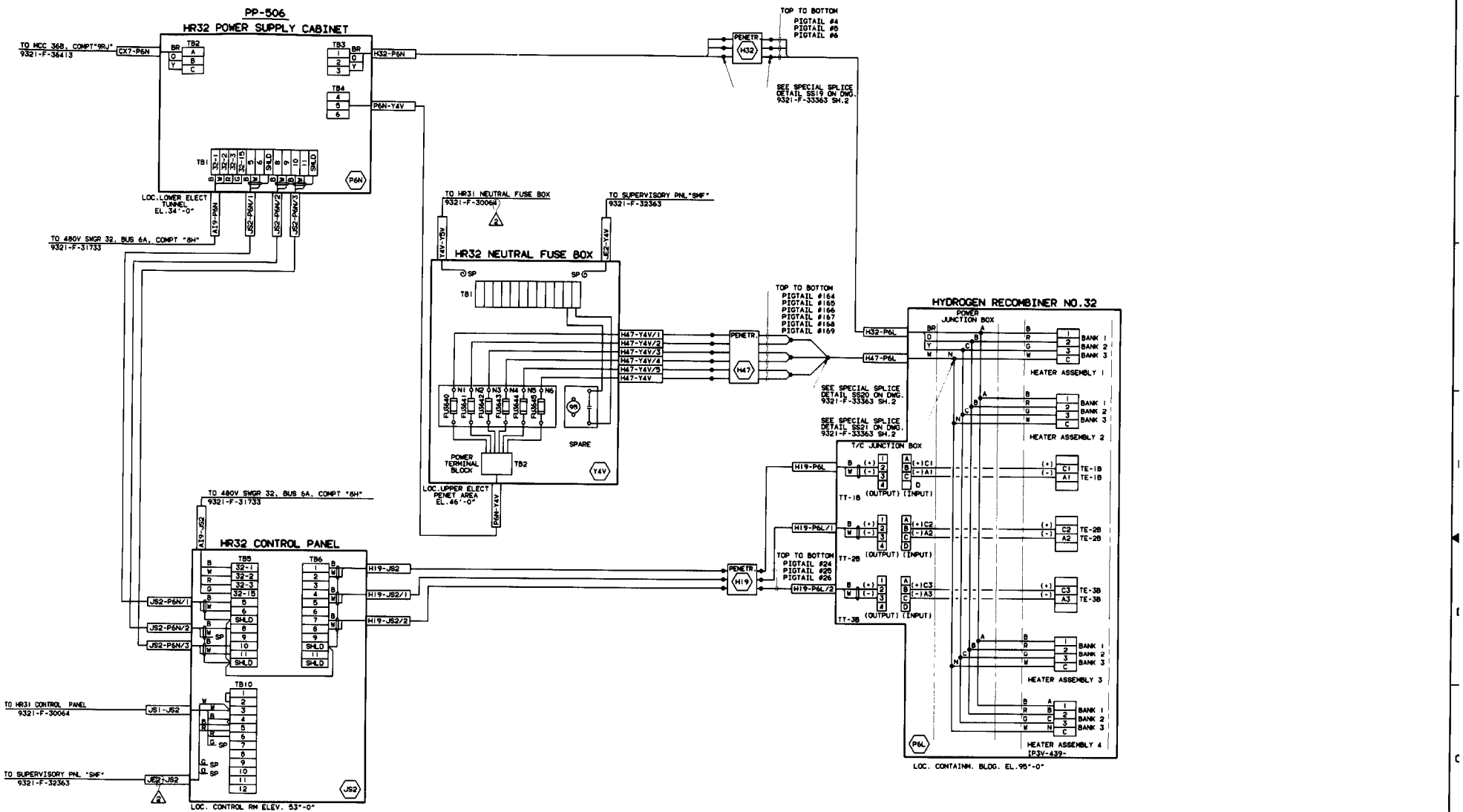
NewYorkPower Authority

SCALE NONE

DWG NO 9321-F-30064 REV 2

(FSAR)

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 THE NEW YORK POWER AUTHORITY.



REV NO	DATE	DESCRIPTION	DWN	CHK'D	APP.
2	11/16	AS BUILT PER DCR 100146277	RA	NL	RB
1	11/16	ORIGINAL ISSUE-AS BUILT PER MOD 91-03-03MM	DH	FR	RES

REVISIONS

DWN	CHK'D
DES SUPV	
DISCIPLINE END	
DISCIPLINE MGR.	
PROJ APPROVAL	
DATE	

INDIAN POINT NO.3 NUCLEAR POWER PLANT

HYDROGEN RECOMBINER NO.32 WIRING DIAGRAM

NewYorkPower Authority

SCALE NONE

DWG NO 9321-F-30065 REV 2

SHEET

(FSAR)