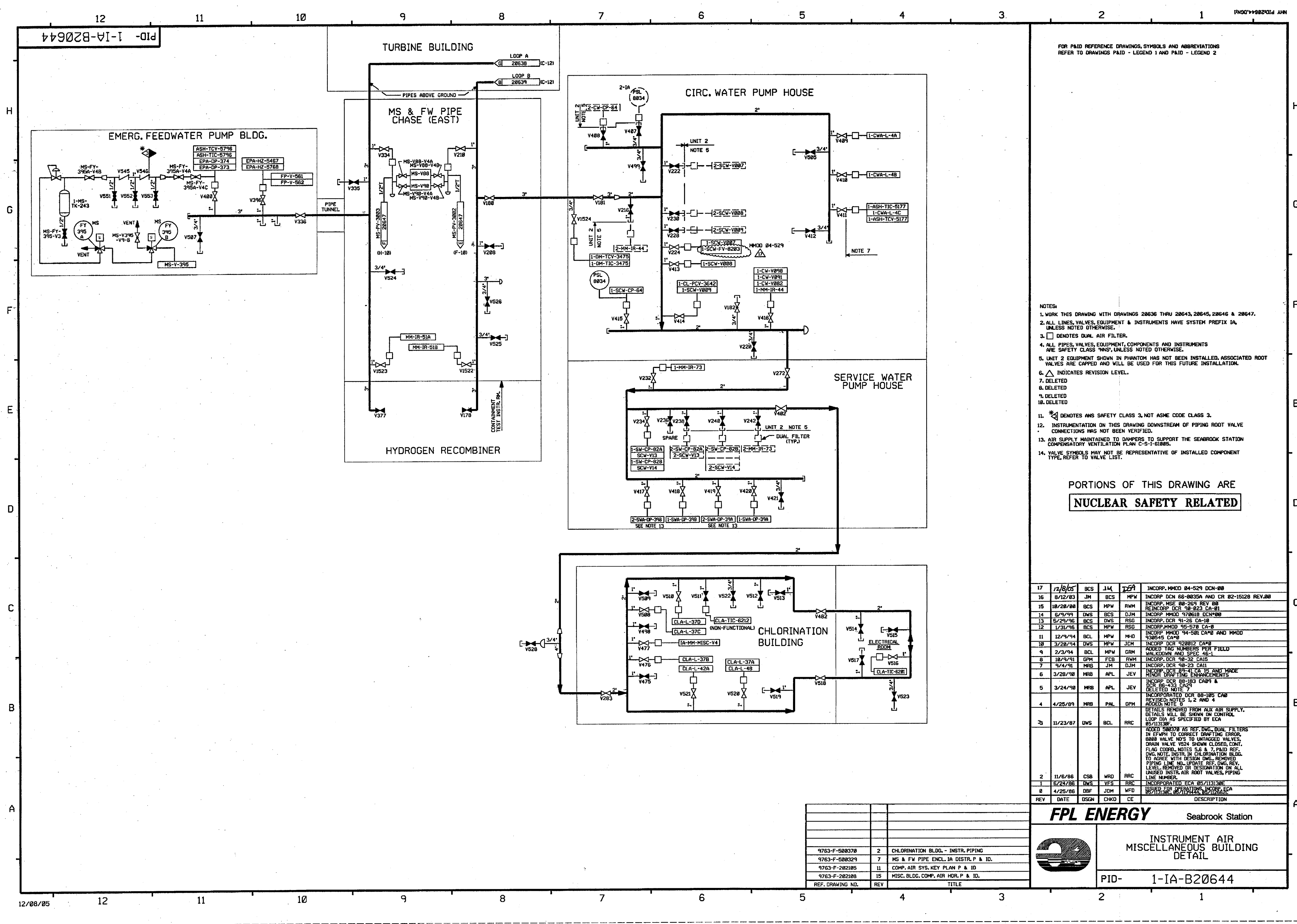




TURBINE BUILDING

MS & FW PIPE CHASE(WEST)

RADIOACTIVE TUNNEL

REACTOR
CONTAINMENT

14	1/15/06	BCS	JM	JM	REINCRP CR 95-95041 REV.8
13	6/7/85	BCS	JM	RRB	INCRP CR 95-85041 REV.8
12	1/31/86	BCS	MPW	RSB	INCRP MM00 95-578 CAB
11	6/12/85	BCL	DWS	DJM	INCRP MM00 94-578 CAB
10	12/19/94	BCL	MPW	MJM	REINCRP DCR 980004 CA#8 AND INCRP MM00 930641 CA#8
9	7/18/94	MPW	BCL	JCM	INCRP DCR 96-420 CA 8 AND REINCRP. DCR 90-804 CA 8
8	2/2/94	BCL	MRB	GRM	ADDED TAG NUMBERS PER FIELD WALKDOWN AND SPEC 45-1
7	4/5/93	MRB	BCL	JM	INCRP MM00 92-553 CAB
6	10/21/91	MRB	BCL	IW	INCRP DCR 90-804 CA#8
5	10/9/91	MRB	FCB	RWM	INCRP DCR 90-32 CAB REVISED NOTE 4 PER ENR DSGN STD. 31780 SEC. 3.0.
4	8/18/90	MRB	GPM	GRM	INCRP DCR-96-320 CAB
3	11/23/87	DWS	BCL	RRC	DETAILS REMOVED FROM AUX AIR SUPPLY, DETAILS WILL BE SHOWN IN CONTROL LOOP DIAG. AS SPECIFIED BY ECA 95-113138P.
2	1/14/86	WRJ	PAL	RRC	ADDED NOTE 6 & CHANGED NOTE 5. ADDED CONT FLAG CODES V8904 THRU V8941, NIPPLES & CAPS, ABANDONED CONNS, ADDITIONAL DIAL FILTERS AND AIR USERS, REVISED L/C TAKE- OFFS & TUBING SIZES PER AS-INSTALLED CONDITIONS. INCRP ECA 95/113138P & 74/107152A, CORRECTED TYPING ERRORS.
1	6/23/86	DBF	VNK	RRC	INCORPORATED ECA 95/113138P
0	4/25/86	DBF	JDM	WFO	ISSUED FOR OPERATIONS INCRP ECA 95/113138A, 95/113138B, 95/113138C
REV	DATE	DSGN	CHKD	CD	DESCRIPTION

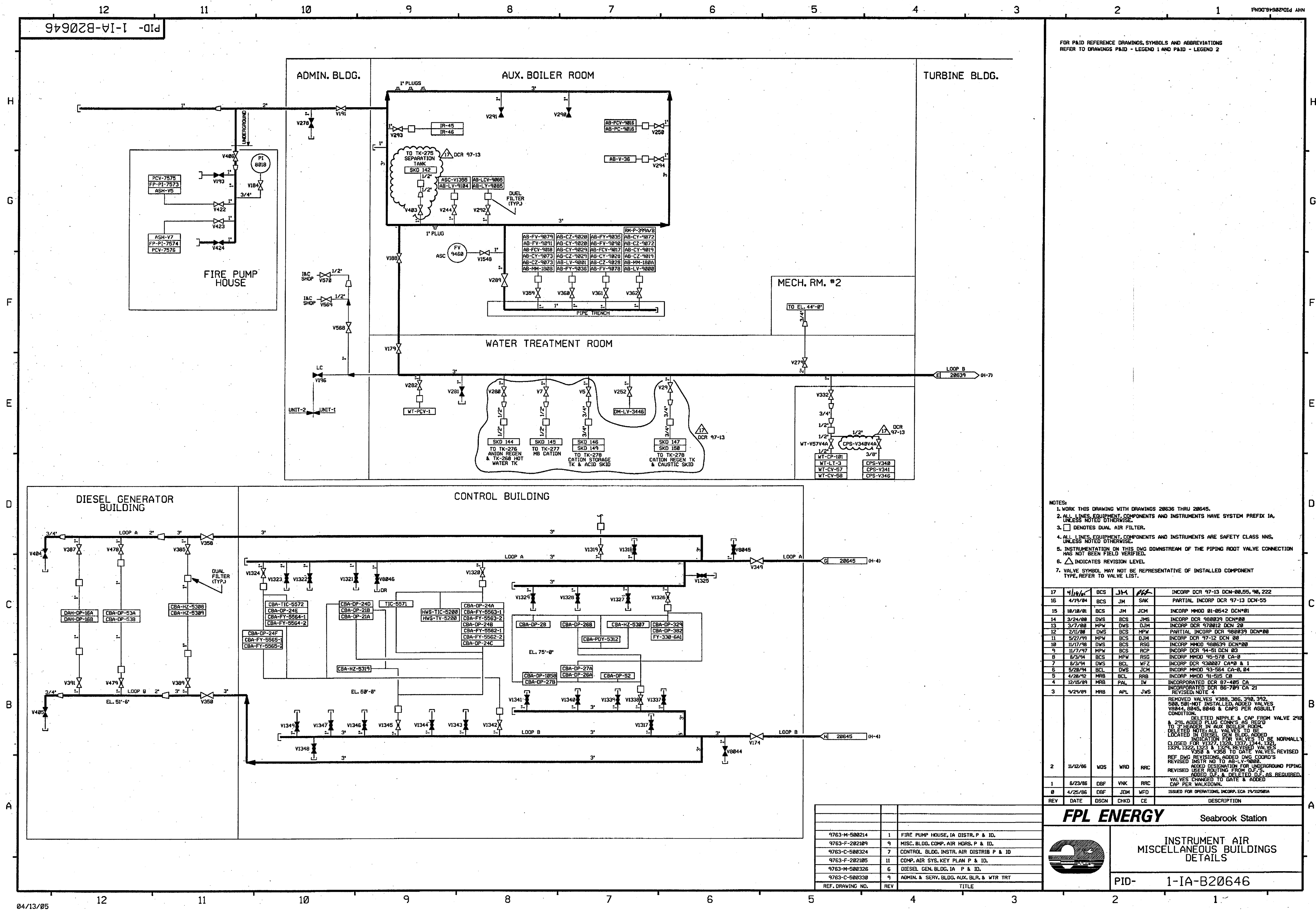
FPL ENERGY

Seabrook Station

INSTRUMENT AIR
MISCELLANEOUS BUILDING
DETAILS

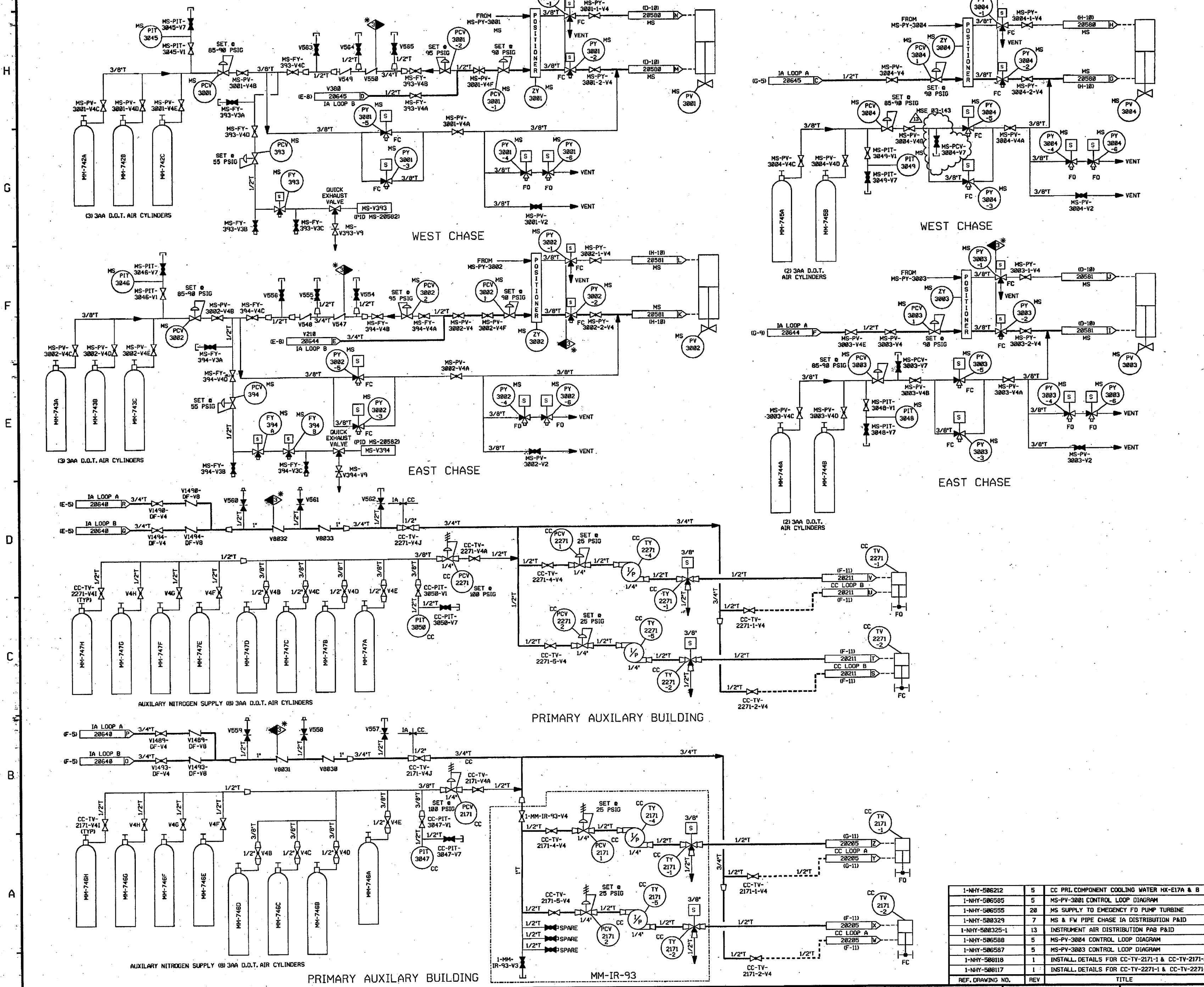
PID- 1-IA-B20645

9763-F-202105	11	COMP AIR SYS KEY PLAN P & ID
9763-F-508335	4	RHR VAULTS 1A DISTRIB P & ID
9763-F-508379	4	RADIOACTIVE TUNNEL 1A DISTRIB P & ID
9763-F-508329	7	MS & FW PIPE CHASE 1A DISTRIB P & ID
9763-F-202108	15	MISC BLDGS COMP AIR HEADERS P & ID
REF. DRAWING NO.	REV	TITLE



PID-1-1A-B20647

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWING P&ID-LEGEND 1 AND P&ID-LEGEND 2



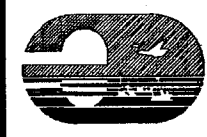
- NOTES:
1. ALL LINES, VALVES, EQUIPMENT & INSTRUMENTS HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
 2. ALL PIPES, VALVES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS "NS", UNLESS NOTED OTHERWISE.
 3. WORK THIS DRAWING WITH DRAWINGS 20636 THRU 20646.
 4. * DENOTES ANS SAFETY CLASS 3, NOT ASME CODE CLASS 3.
 5. Δ INDICATES REVISION LEVEL.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
13	2-21-93	BCS	JMA	FEB	INCORP. MSE 03-143 REV 00
12	12/21/95	JM	BCS	JC	INCORP. CR 05-13408 REV 00
11	9/16/94	BCS	JM	MRJ	PARTIAL INCORP. MSE 03-143 REV 00
10	10/11/93	MPW	MAP	RRB	INCORP. MSE 02-296 REV 00
9	11/15/92	JM	BCS	RRB	INCORP. CR 01-10700 REV 00 & CR 02-08438 REV 00
8	6/27/92	BCS	MPW	PEB	INCORP. DCR 01-017 DCM 07
7	5/25/92	MPW	BCS	RRB	INCORP. DCR 01-017 DCM 06
6	5/14/92	MPW	JM	MAP	INCORP. DCR 01-017 DCM 00
5	5/15/91	BCS	MPW	RPV	INCORP. MMOD 99-510 DCM 00 & 01
4	6/02/90	DRL	BCS	JWS	INCORP. MMOD 99-550 CA 01 & 02
3	6/20/97	MPW	DWS	BAW	INCORP. MMOD 96-550 CA 01 & DCR 97-004 DCM 00
2	10/30/96	MPW	BCS	VWS	INCORP. MMOD 96-550 CA 0
1	11/13/95	BCL	MPW	RMW	INCORP. DCR 94-029 CA 6
0	11/29/94	MPW	MHD		ISSUED FOR OPERATIONS, MMOD 93-545 CA 0

FPL ENERGY

Seabrook Station

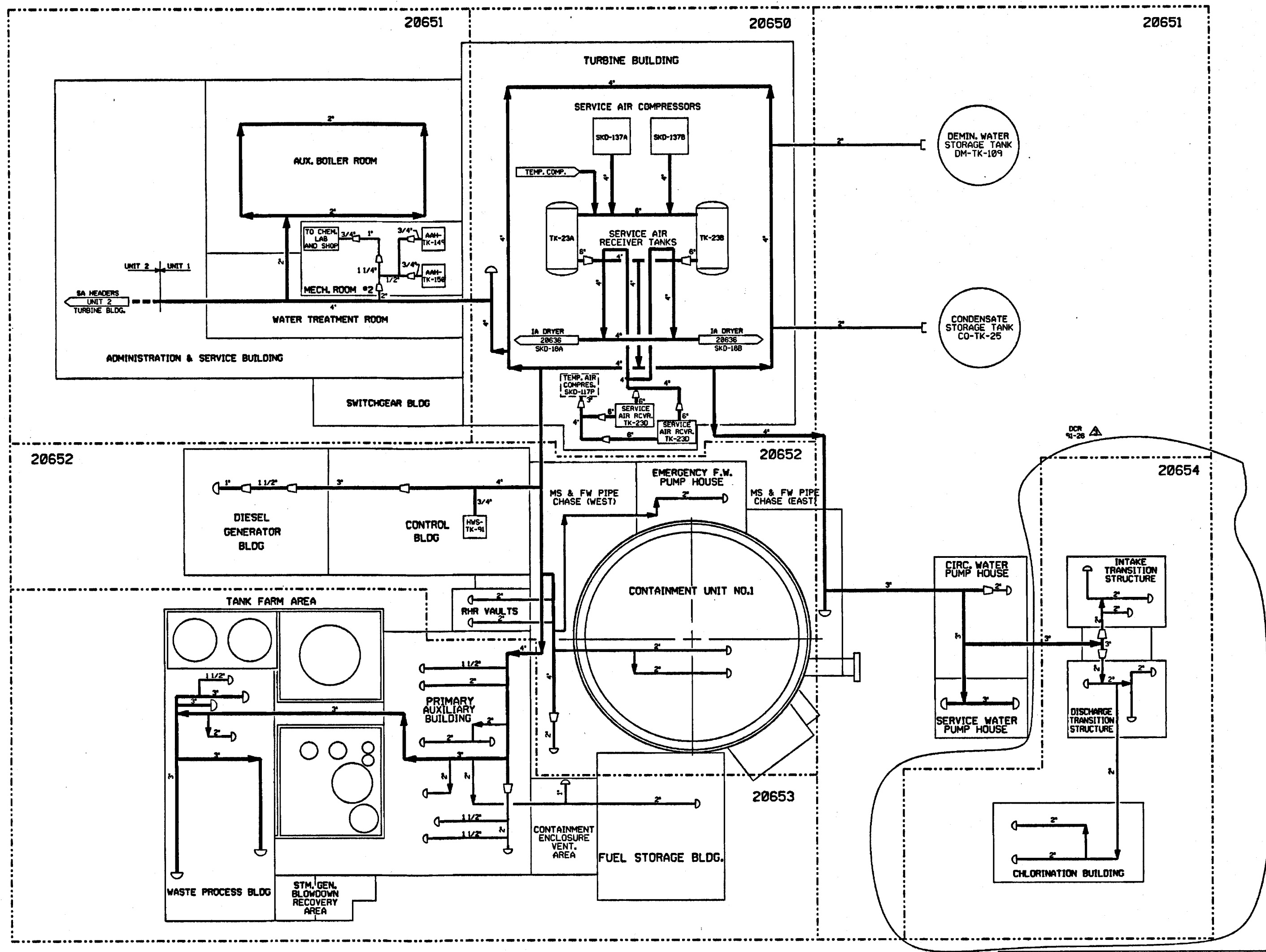


INSTRUMENT AIR
BOTTLE SUPPLY

PID- 1-1A-B20647

REF. DRAWING NO.	REV	TITLE
1-NHY-506212	5	CC PRL COMPONENT COOLING WATER HX-E17A & B
1-NHY-506585	5	MS-PV-3001 CONTROL LOOP DIAGRAM
1-NHY-506595	20	MS SUPPLY TO EMERGENCY FD PUMP TURBINE
1-NHY-500329	7	MS & FW PIPE CHASE 1A DISTRIBUTION P&ID
1-NHY-500325-1	13	INSTRUMENT AIR DISTRIBUTION P&ID
1-NHY-506588	5	MS-PV-3004 CONTROL LOOP DIAGRAM
1-NHY-506587	5	MS-PV-3003 CONTROL LOOP DIAGRAM
1-NHY-500118	1	INSTALL. DETAILS FOR CC-TV-2171-1 & CC-TV-2171-2
1-NHY-500117	1	INSTALL. DETAILS FOR CC-TV-2171-1 & CC-TV-2171-2

PID-1-SA-B20649



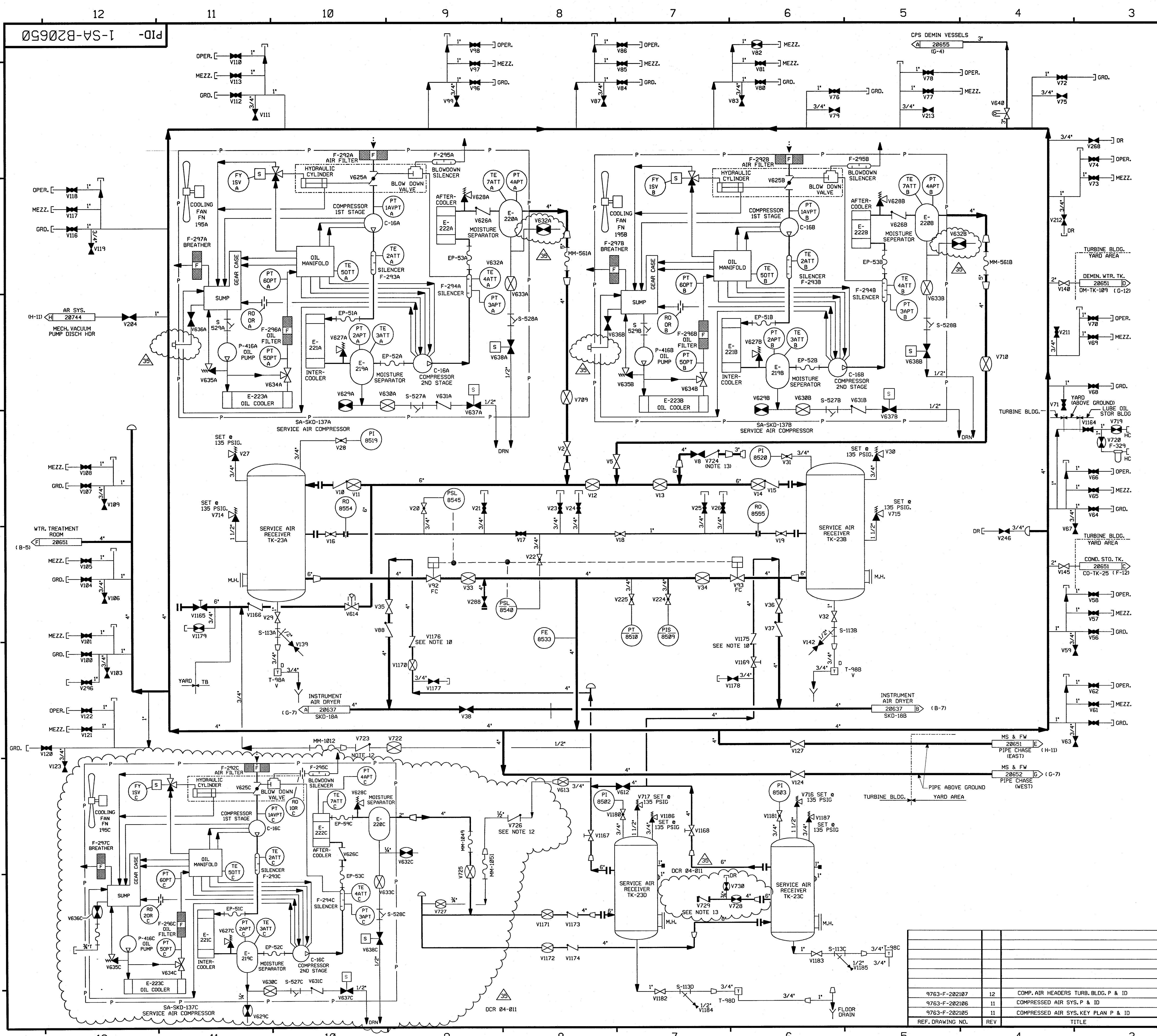
- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20650, 20651, 20652, 20653 & 20654
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SA, UNLESS NOTED OTHERWISE.
 3. Δ INDICATES REVISION LEVEL.

REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
3	1/28/87	BCS	DWS	MPW	WFD	INCORP	DCR 91-26 CA-81
2	3/24/84	DWS	BCL	MPW	WFD	INCORP	DCR 930016 CA#8 & 1
1	1/28/87	MOS	OPD	MPD	BCL	RRC	REVISED REF. DNG. REVISIONS ADDED
0	3/21/86	TAK	MRB	JDM	DFH	WFD	NOTE 3. REVISED PER LATEST SYS. DWGS.
							ISSUED FOR OPERATIONS

North Atlantic Energy Service Corporation

SERVICE AIR SYSTEM OVERVIEW

PID- 1-SA-B20649



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20649, 20651, 20652 & 20653.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SA, UNLESS NOTED OTHERWISE.
 3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
 4. INSTRUMENT REFERENCES:
 (A) TO SCC-V126, FV-7060 (DWG. SCC-20078)
 (B) TO SCC-V129, FV-7061 (DWG. SCC-20078)
 (C) TO SCC-V132, FV-7062 (DWG. SCC-20078)
 5. ALL PIPING RUNNING BETWEEN BUILDINGS OR TO OUTSIDE EQUIPMENT IS BELOW GROUND EXCEPT AS NOTED.
 6. Δ INDICATES REVISION LEVEL.
 7. DELETED
 8. PIPE CAPS OR QUICK DISCONNECTS MAY BE INSTALLED ON SERVICE AIR STATIONS AS DEEMED NECESSARY BY STATION STAFF.
 9. DELETED
 10. INTERNALS OF CHECK VALVES, SA-V1175 & 1176 HAVE BEEN REMOVED.
 11. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.
 12. EXCESS FLOW CHECK VALVES 1-SA-V-723 & V-726 SEATS IF FLOW EXCEEDS 120 SCFM @ 100 PSIG INLET PRESSURE.
 13. CHECK VALVE HAS 0.285" HOLE IN DISC TO SUPPORT AUTO START OF PORTABLE COMPRESSOR.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
35	10/16/07	BCS	JM	DA	INCOMP. DCR 04-011 DCM-00, 04, 13 & ASBUILT INFO
34	8/7/07	BCS	JM	MAP	PARTIAL INCOMP. MSE 04-147 REV. 02
33	6/21/07	BCS	JM	RWM	INCOMP. CR 07-03416 REV. 0
32	10/6/06	BCS	JM	RRB	PARTIAL INCOMP. MMOD 04-147 DCM 00
31	7/27/06	BCS	JM	DEA	INCOMP. MSE 06-046 DCM-00
30	12/15/05	JM	BCS	DEA	INCOMP. MMOD 05-520 DCM 00
29	11/17/05	BCS	JM	DEA	PARTIAL INCOMP. MSE 04-147 REV 03
28	10/05/05	BCS	JM	RRB	INCOMP. MSE 05-135 REV.00 & REMOVED INCOMPLETE ITEM #1 PER SA OP. PROCED. (DN042.01 & 03)
27	4/19/05	BCS	JM	RRB	INCOMP. DCR-97-13 DCM-00, 54; MMOD 95-570 DCM-00; PARTIAL INCOMP. MSE 04-147 REV 00
26	2/27/04	JM	BCS	SAK	INCOMP. INCORP. DCR 97-13, DCM-00
25	11/3/03	JM	BCS	MR	INCOMP. MSE 03-0205 REV 00
24	8/18/03	MPW	JM	JGC	INCOMP. MMOD 01-537 DCM 00
23	7/14/03	BCS	JM	JGC	PARTIAL INCOMP. MMOD 01-537 DCM 00
22	6/17/03	MPW	JM	JC	PARTIAL INCOMP. MMOD 01-537 DCM 00
21	12/19/02	BCS	JM	DEA	INCOMP. MSE 02-0216 REV.0
20	5/29/02	BCS	MPW	RRB	INCOMP. MSE 00-0247 REV.0, CR 01-09349
19	9/15/00	BCS	MPW	JCM	INCOMP. MMOD 99-626 DCM-00
18	8/22/00	BCS	DWS	JCM	PARTIAL INCOMP. MMOD 99-626 DCM-00
17	1/20/97	BCS	DWS	RWM	INCOMP. MMOD 96-669 CA-0
16	1/31/96	BCS	MPW	RRB	INCOMP. MMOD 95-570 CA-0
15	9/14/95	BCL	MPW	JCM	INCOMP. MMOD 95-552 CA-0
14	1/17/95	BCL	DWS	WFZ	INCOMP. DCR 93-16 CA-21
13	3/24/93	MRB	BCL	WFZ	INCOMP. DCR 93-16 CA0.01
12	3/24/93	BCL	MRB	JCM	REINCOMP. DCR-91-31, CA-0
11	2/12/93	BCL	MRB	JCM	INCOMP. DCR-91-31, CA-0
10	1/25/93	BCL	MRB	JCM	PARTIAL INCOMP. DCR-91-31, CA-0
9	5/11/92	MRB	BCL	GPM	INCOMP. MMOD 90-582 CA00
8	7/18/91	MRB	JM	GRM	INCOMP. MMOD 90-582 CA00
7	11/7/88	GPM	MRB	RRC	INCOMP. ECA 74/1131738
6	8/26/87	MPW	BCL	RRR	REVISED NOTE 3 ADDED FILTERS 8000, 8001 & 8002 PER # 20441, V204 PER UE & C 12 & 10 200293, NOTE 3 & INCOMPLETE ITEM 1 CHANGED VALVES V1180 & V1181 FROM GATE TO GLOBE VALVES PER ECA 95/117267E, CHANGED VALVES V253, V254 & V251 FROM GATE TO GLOBE VALVES AND CORRECTED VALVE TAG NO. PER ECA 95/10802C.
5	6/1/87	MPW	DWS	VMS	INCOMP. ECA 19/118567B
0	3/21/86	TAK	JDM	WFD	ISSUED FOR OPERATIONS & INCOMP. ECA 74/1131738

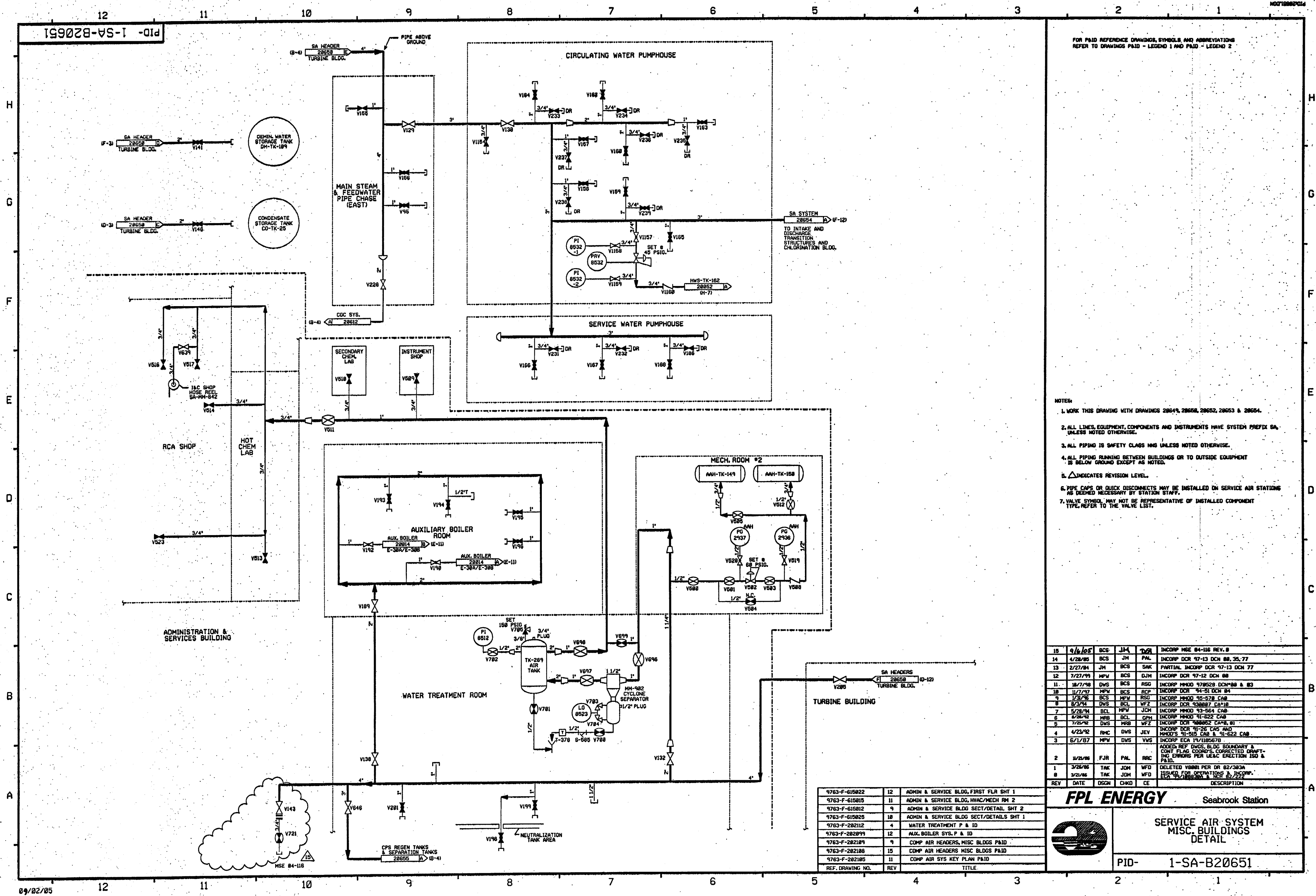
FPL ENERGY

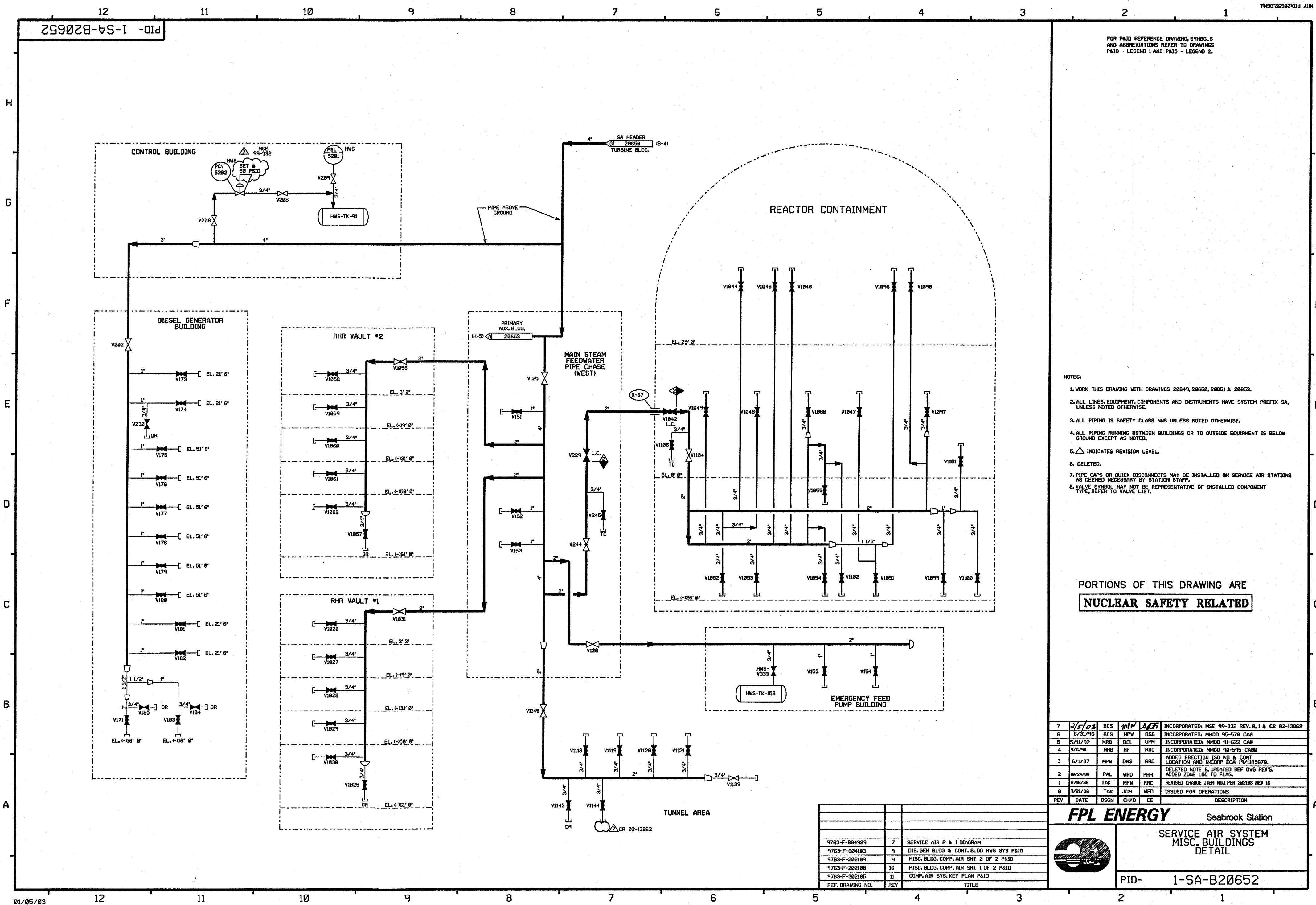
Seabrook Station

SERVICE AIR SYSTEM
TURBINE BUILDING
DETAIL

PID-

1-SA-B20650



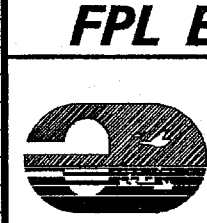


FOR P&ID REFERENCE DRAWING, SYMBOLS
AND ABBREVIATIONS REFER TO DRAWINGS
P&ID - LEGEND 1 AND P&ID - LEGEND 2.

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20649, 20650, 20651 & 20653.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SA, UNLESS NOTED OTHERWISE.
 3. ALL PIPING IS SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
 4. ALL PIPING RUNNING BETWEEN BUILDINGS OR TO OUTSIDE EQUIPMENT IS BELOW GROUND EXCEPT AS NOTED.
 5. Δ INDICATES REVISION LEVEL.
 6. DELETED.
 7. PIPE CAPS OR QUICK DISCONNECTS MAY BE INSTALLED ON SERVICE AIR STATIONS AS DEEMED NECESSARY BY STATION STAFF.
 8. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.

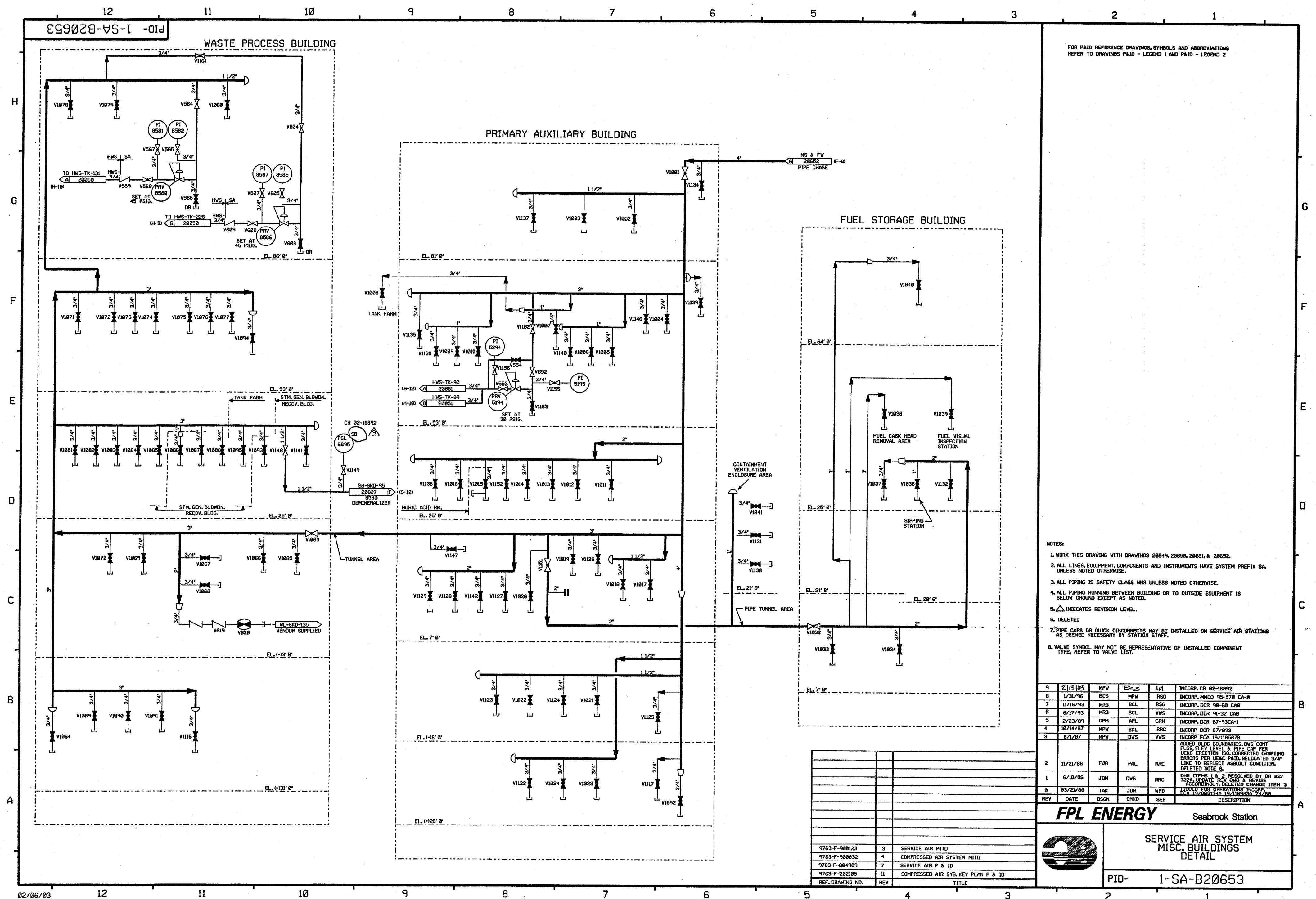
PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

7	2/5/03	BCS	MPW	AS	INCORPORATED: MSE 99-332 REV. 0, 1 & CR 02-13862
6	6/31/96	BCS	MPW	RSG	INCORPORATED: MM00 95-570 CA0
5	5/11/92	MRB	BCL	GPM	INCORPORATED: MM00 91-622 CA0
4	9/11/90	MRB	HP	RRC	INCORPORATED: MM00 90-595 CA00
3	6/1/87	MPW	DWS	RRC	ADDED ERECTION ISD NO. & CONT LOCATION AND INCOMP. ECR 19/1185678.
2	10/24/86	PAL	WRD	PHH	DELETED NOTE 6, UPDATED REF DWG REV'S.
1	6/16/86	TAK	MPW	RRC	REVISED CHANGE ITEM MLI PER 202108 REV 16
0	3/21/86	TAK	JOM	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION



FPL ENERGY Seabrook Station
SERVICE AIR SYSTEM
MISC. BUILDINGS
DETAIL
PID- 1-SA-B20652

REF. DRAWING NO.	REV	TITLE
9763-F-884989	7	SERVICE AIR P & I DIAGRAM
9763-F-884103	9	DIE. GEN BLDG & CONT. BLDG HWS SYS P&ID
9763-F-202104	9	MISC. BLDG. COMP. AIR SHT 2 OF 2 P&ID
9763-F-202108	16	MISC. BLDG. COMP. AIR SHT 1 OF 2 P&ID
9763-F-202105	11	COMP. AIR SYS. KEY PLAN P&ID



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

NOTES:

1. WORK THIS DRAWING WITH DRAWINGS 28649, 28650, 28651, & 28652.
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SA, UNLESS NOTED OTHERWISE.
3. ALL PIPING IS SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
4. ALL PIPING RUNNING BETWEEN BUILDING OR TO OUTSIDE EQUIPMENT IS BELOW GROUND EXCEPT AS NOTED.
5.  INDICATES REVISION LEVEL.
6. DELETED
7. PIPE CAPS OR QUICK DISCONNECTS MAY BE INSTALLED ON SERVICE AIR STATIONS AS DEEMED NECESSARY BY STATION STAFF.
8. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.

9	2/13/03	MPW	BSS	JM	INCPOR. CR 02-16892
8	1/31/96	BCS	MPW	RSR	INCPOR. MM0D 95-570 CA-8
7	11/16/93	MRB	BCL	RSR	INCPOR. DCR 90-60 CA-0
6	6/17/93	MRB	BCL	VWS	INCPOR. DCR 91-32 CA8
5	2/23/89	GPM	APL	GRH	INCPOR. DCR 87-93CA-1
4	10/14/87	MPW	BCL	RRC	INCPOR. DCR 87/893
3	6/1/87	MPW	DWS	VWS	INCPOR. ECA 19/1185678
					ADDED BLDG BOUNDARIES, DWG CONT FLLS, ELEV LEVEL, & PIPE CAP PER JEAN ERECTION ISL CORRECTED DRAFTING ERRORS PER USE& PAID, RELOCATED 3/4" PAL TO REFLECT ASBUILT CONDITION. DELETED NOTE 5.
2	11/21/86	FJR	PAL	RRC	
1	6/18/86	JDM	DWS	RRC	CHG ITEMS 1 & 2 RESOLVED BY DR 82/ 322A, UPDATE REV DWG & REVISE ACCORDLY, DELETED CHANGE ITEM 3
0	03/21/86	TAK	JDM	WFD	ISSUED FOR OPERATIONS INCPOR. ECA 13/2886133, 14/27 CHG 72/88
REV	DATE	DSGN	CHKD	SER	DESCRIPTION

FPL ENERGY

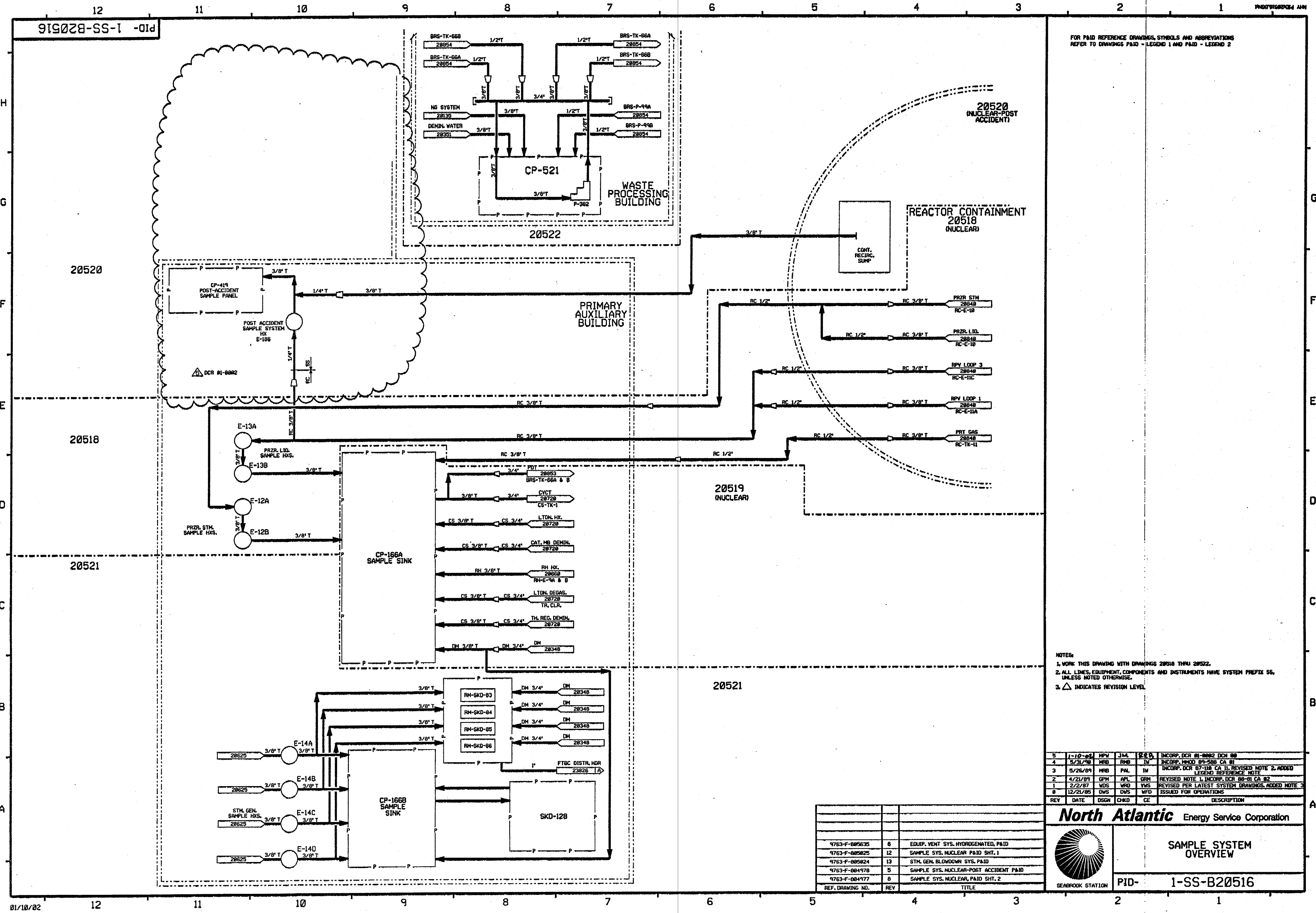
Seabrook Station



SERVICE AIR SYSTEM
MISC. BUILDINGS
DETAIL

PID- 1-SA-B20653

[illegible]



FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

- NOTES:
- 1. WORK THIS DRAWING WITH DRAWINGS 20518 THRU 20522.
 - 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SS, UNLESS NOTED OTHERWISE.
 - 3. Δ INDICATES REVISION LEVEL.

5	1-10-82	MPV	JML	225	INCORP. DCR 81-0002 DCM 08
4	5/31/79	NRB	RMB	IV	INCORP. HXCD 81-550 CA 81
3	5/26/81	NRB	PNL	IV	INCORP. DCR 87-118 CA 11 REVISED NOTE 2 ADDED
2	4/21/81	GRM	AFL	GRM	REVISED NOTE 1 INCORP. DCM 88-81 CA 82
1	2/2/87	WDS	WMD	WMS	REVISED PER LATEST SYSTEM DRAWINGS ADDED NOTE 3
0	12/21/85	DWS	DWS	MFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

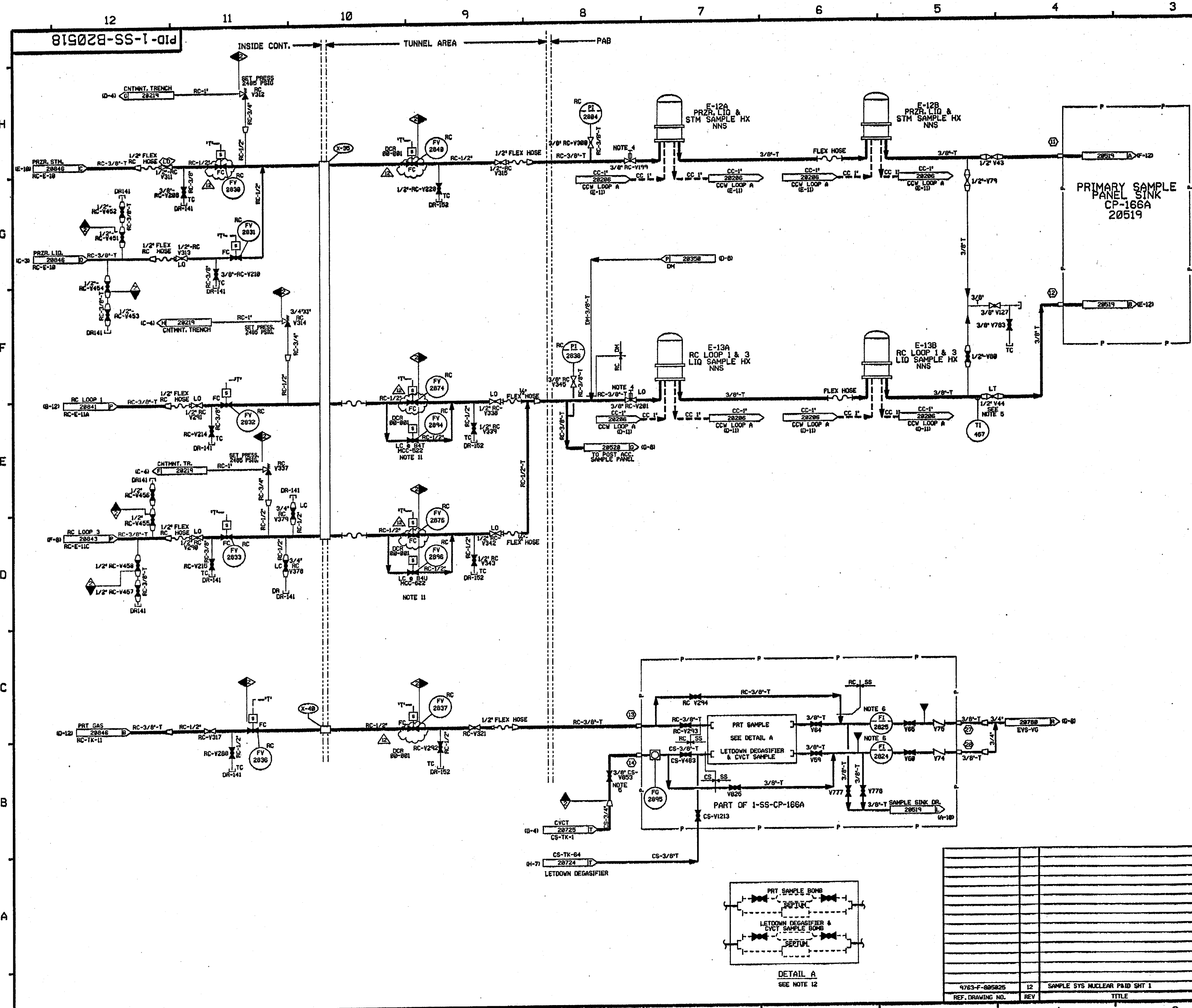


North Atlantic Energy Service Corporation

SAMPLE SYSTEM OVERVIEW

PID- 1-SS-B20516

REF. DRAWING NO.	REV	TITLE
9763-F-005635	8	EQUIP. VENT. SYS. HYDROGENATED, PAID
9763-F-005825	12	SAMPLE SYS. NUCLEAR PAID SHT. 1
9763-F-005824	13	STM. GEN. BLOWDOWN SYS. PAID
9763-F-004978	5	SAMPLE SYS. NUCLEAR-POST ACCIDENT PAID
9763-F-004977	8	SAMPLE SYS. NUCLEAR, PAID SHT. 2



- FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS PABD - LEGEND 1 AND PABD - LEGEND 2
- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20516, 20519 THRU 20522.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SS, UNLESS NOTED OTHERWISE.
 3. ALL SAMPLE INSTRUMENTATION IDENTIFICATION SHALL BE LOCATED ON A PANEL AT THE SAMPLE SINK.
 4. REACH ROD OPERATED FROM THE SAMPLE ROOM SIDE OF THE SAMPLE HX BODY-SAMPLE WALL.
 5. THIS VALVE SHALL BE ADJUSTED AND SET TO GIVE A 0.5 GPM SAMPLE FLOW FROM RPV LOOP 1 OR 3.
 6. ALL FLOW INDICATORS ON SS-CP-166A & B HAVE INTEGRAL NEEDLE VALVES WHICH ARE NOT SHOWN ON THE P&ID.
 7. ○ TYPICAL CONNECTION IDENTIFICATION FOR SS-CP-166A & B
 8. DELETED
 9. △ INDICATES REVISION LEVEL
 10. VENTS, DRAINS AND TEST CONNECTION CODEBREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE FOR 1-WAY-040111 UNLESS OTHERWISE NOTED.
 11. VALVE DISABLED IN THE LOCKED CLOSED POSITION BY LOCKING BREAKERS B41 & B41 OPEN.
 12. SAMPLE BOMBS AND SEPTUMS ARE INSTALLED DURING SAMPLING FUNCTIONS. EITHER THE SAMPLE BOMB OR THE SAMPLE SEPTUM MAY BE USED, SEE DETAIL A (W-18).

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

12	11/2/82	BCS	---	JM	---	INCORP DCR 88-081 DCMH
11	6/13/81	DMS	---	HPV	---	INCORP DCR 87-088 DCMH
10	12/2/80	DMS	---	BCL	---	INCORP DCR 86-045 CAP
9	1/21/80	HRB	---	BCL	---	INCORP DCR 85-015 CAP
8	8/23/79	HRB	---	JM	---	INCORP DCR 84-015 CAP
7	10/25/78	HRB	---	JM	---	INCORP DCR 83-015 CAP
6	6/21/78	HRB	---	JM	---	INCORP DCR 82-015 CAP
5	12/28/77	HRB	---	FCB	---	INCORP DCR 81-015 CAP
4	2/1/77	GPH	---	RMC	---	INCORP DCR 80-015 CAP
3	3/22/76	GPH	---	RMC	---	INCORP DCR 79-015 CAP
2	10/1/75	JHM	---	DMS	---	INCORP DCR 78-015 CAP
1	5/22/75	DMS	---	WES	---	INCORP DCR 77-015 CAP
0	1/3/75	DMS	---	HRB	---	INCORP DCR 76-015 CAP
REV	DATE	DSGN	DRWN	CHKD	CDR	SES

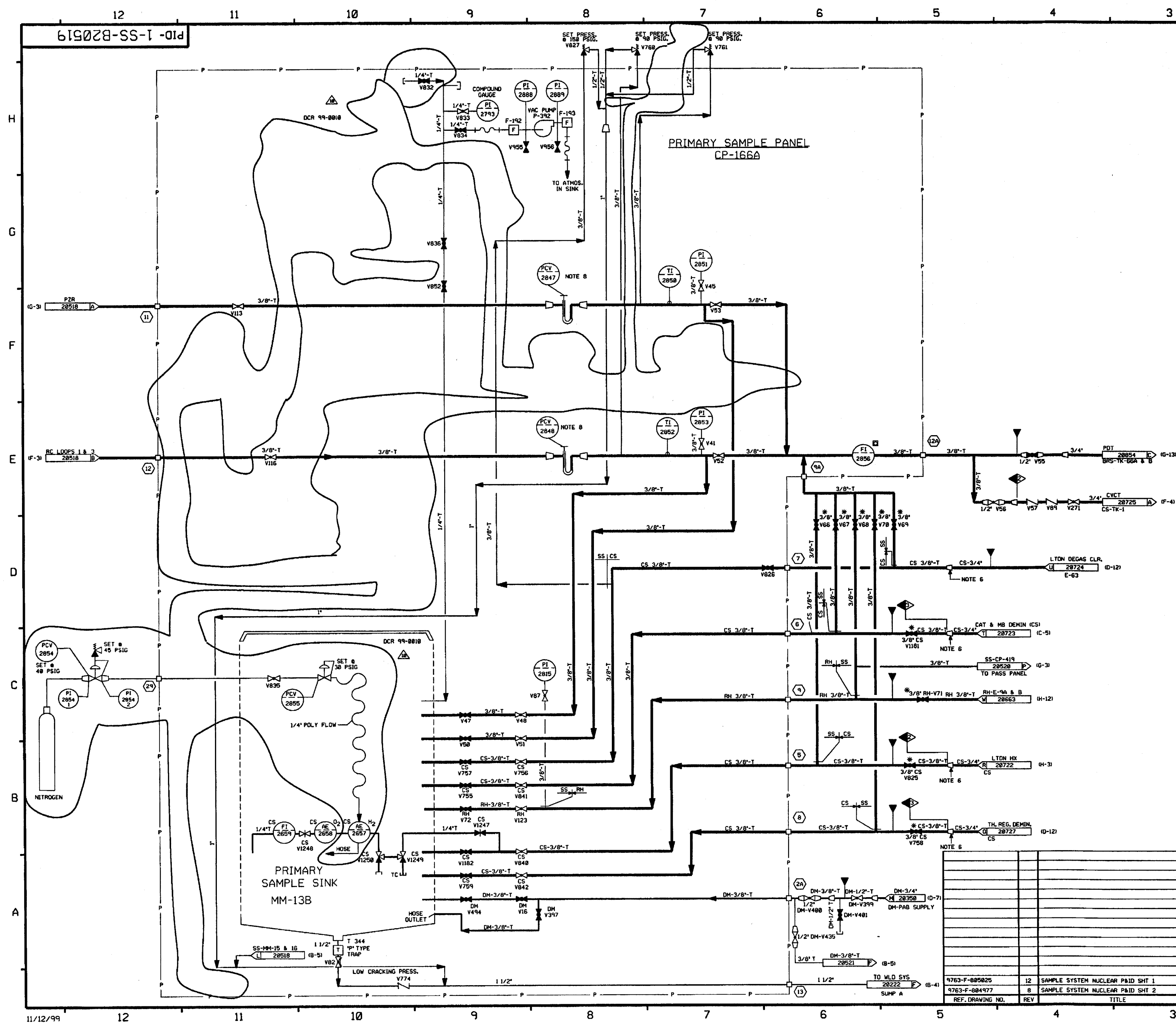
North Atlantic Energy Service Corporation

SEABROOK STATION

SAMPLE SYSTEM (NUCLEAR-NORMAL OPERATION) DETAIL

PID- 1-SS-B20518

9763-F-005025 12 SAMPLE SYS NUCLEAR P&ID SHT 1



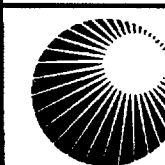
FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

- NOTES:
1. WORK THIS DRAWING WITH DRAWING 28518, 28519, 28520 THRU 28522.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX "SS" UNLESS OTHERWISE NOTED.
 3. ALL TUBING 3/8" T AND MAT'L 2508 UNLESS OTHERWISE NOTED.
 4. DELETED
 5. DELETED
 6. THESE REDUCERS ARE TO BE AS CLOSE AS POSSIBLE TO ROOT VALVE.
 7. *THIS VALVE TO BE REACH ROD OPERATED FROM THE SAMPLE RM SIDE OF THE SAMPLE HX ROOM - SAMPLE WALL.
 8. THIS EQUIPMENT HAS 1/4" TUBING CONNECTORS.
 9. INDICATES REVISION LEVEL. DCR 99-0818
 10. DELETED.
 11. CONTINUATION CONNECTION SEE FP-74082.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
10	11/12/99	BCS	---	---	---	---	INCORP. DCR 99-0818 DCH-08, 01
9	8/18/97	HPW	---	---	---	---	INCORP. HMOO 98-558 DCH 01
8	8/3/95	DWS	---	---	---	---	INCORP. HMOO 920550 CA#8
7	4/3/91	GPM	FCB	JM	HMB	RRC	INCORP. HMOO 98-597 CAB1
6	5/23/91	MRB	RMC	JM	CCN	BCL	INCORPORATED HMOO 98-586 CAB4
5	1/4/91	MRB	RMC	JM	DWS	BCL	INCORPORATED HMOO 98-639 CAB1
4	2/23/90	MRB	JM	NPL	MPV	IV	INCORPORATED DCR 87-76, CAB1
INCORPORATED DCR 88-51 REV 1							
REVISED DNG CONT NUMBER, NOTES 1 & 2							
ADDED: P & ID LEGEND NOTE, NOTE 9							
DNG CONT COORDS & SYSTEM INTERFACE							
DELETED: NOTES 4 & 5, NNS-1 CL							
BOUNDARY, INCOMPLETE ITEM ECA							
95/11/49878 SUPERCEDED BY DCR 88-51							
3	2/1/89	GPM	RMC	MRB	NPL	DJM	RE-INCORP. PORTION OF ECA 95/11/49878
RE-INCORP. PORTION OF ECA 95/11/49878							
REMAINS AS PARTIALLY INCORPORATED							
2	9/17/88	BCL	TAK	MAP	VNK	RRC	INCORP. ECA 95/11/49878 AND PARTIAL
INCORP. ECA 95/11/49878, REV PER							
VENDOR FP-71448, ADDED NOTE 8.							
1	8/12/86	JDM	TAK	MRD	BCL	RRC	ISSUED FOR OPERATIONS
0	12/31/85	DWS	MRB	JDM	JVC	WFD	

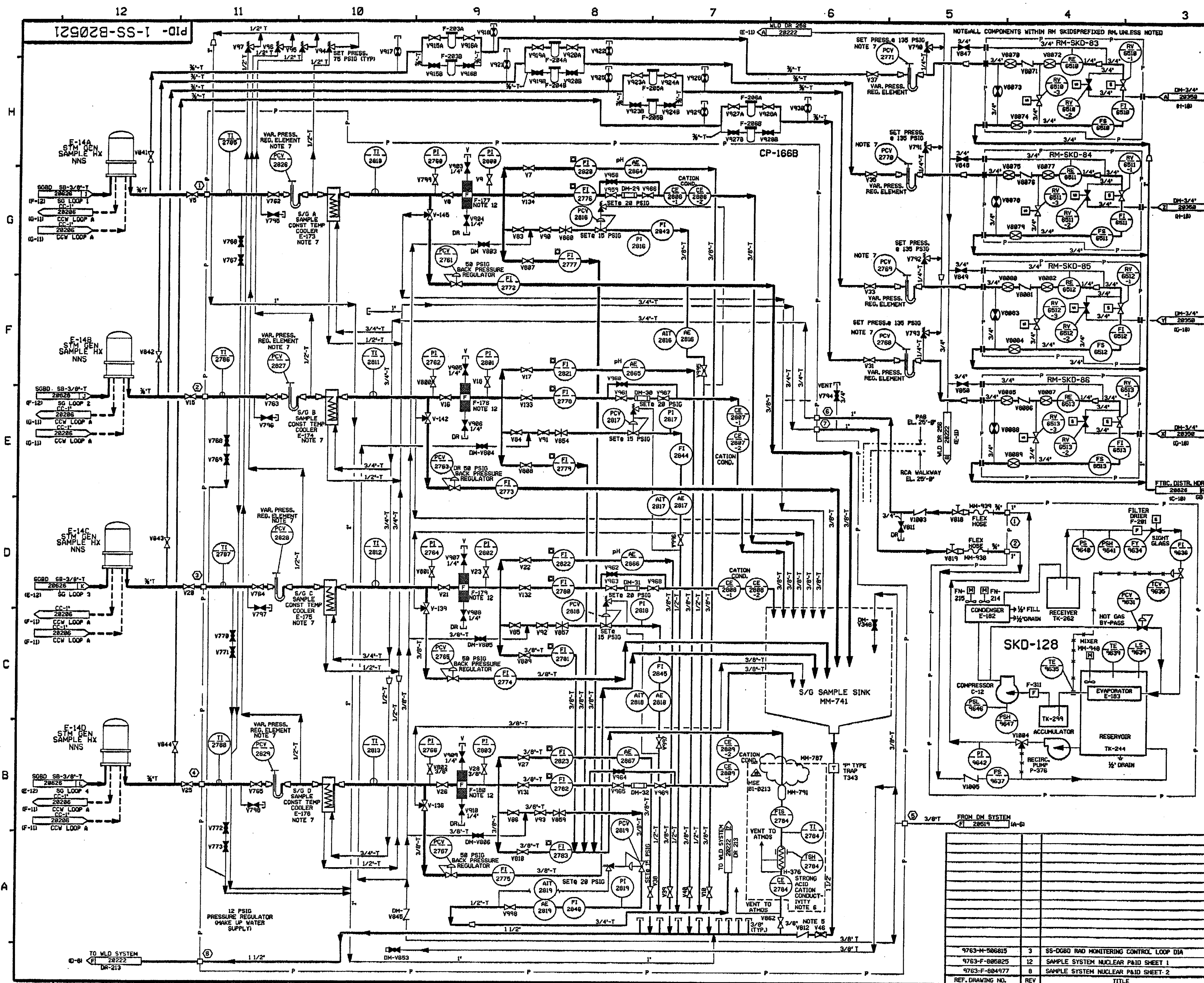
North Atlantic Energy Service Corporation



SAMPLE SYSTEM
PRIMARY SAMPLE PANEL
CP-166A

PID- 1-SS-B20519

REF. DRAWING NO.	REV	TITLE
9763-F-885025	12	SAMPLE SYSTEM NUCLEAR PAID SHT 1
9763-F-884977	8	SAMPLE SYSTEM NUCLEAR PAID SHT 2



FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

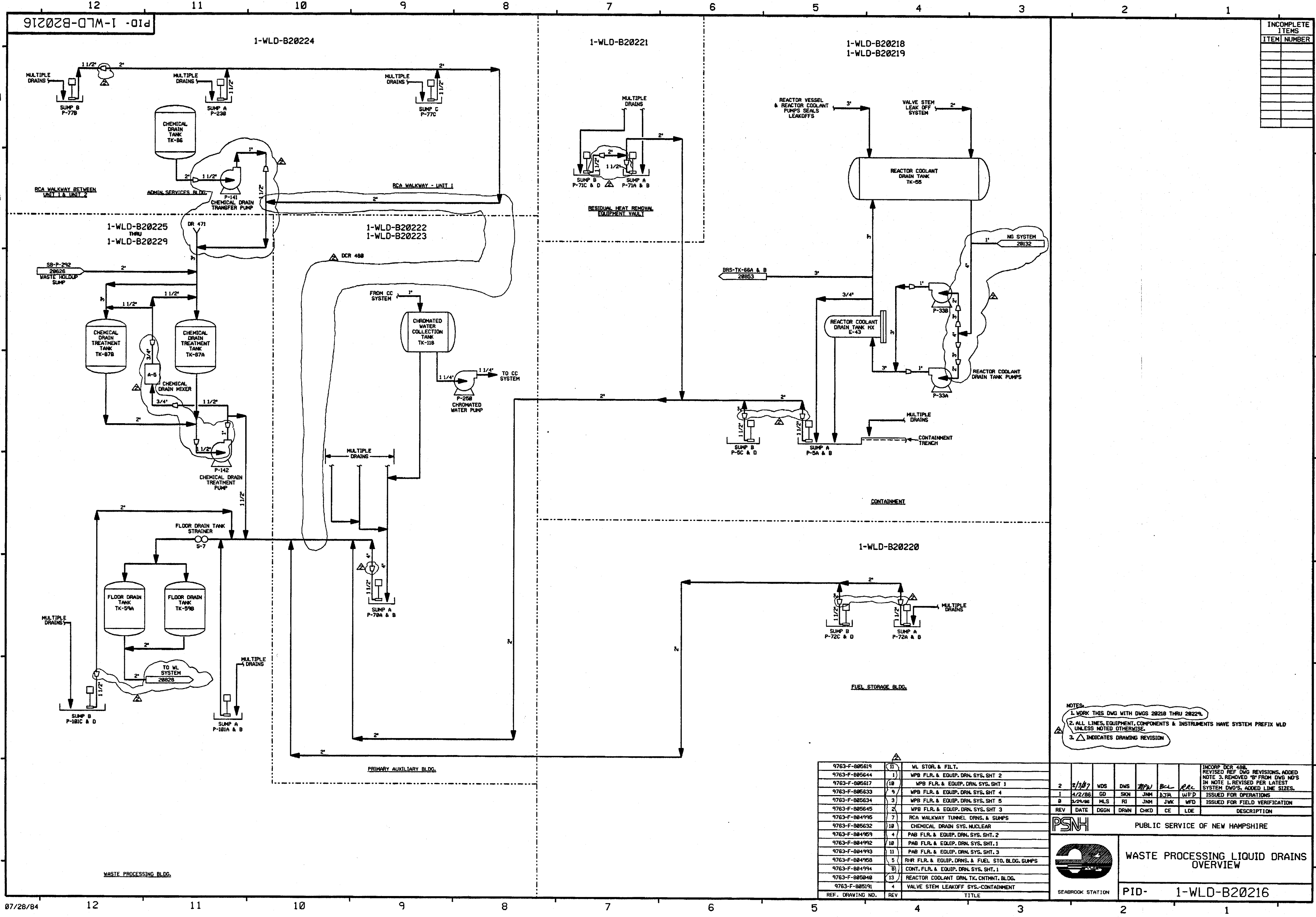
- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28516, 28518, 28519, 28520 & 28522.
 2. ALL LINES, EQUIPMENT COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SS, UNLESS NOTED OTHERWISE.
 3. ALL TUBING 3/8" T AND MATL CLASS 2500.
 4. SEE DMS 28518 FOR ADDITIONAL NOTES.
 5. LOW CRACKING PRESSURE VALVE.
 6. ONLY ONE S/G AT A TIME IS LINED UP TO THE SACC ANALYZER.
 7. THIS EQUIPMENT HAS 1/4" TUBING CONNECTIONS.
 8. DISPOSE OF COOLANT IN A PROPER CONTAINER FOR OFF SITE DISPOSAL DO NOT DIRECT TO FLOOR DRAINS.
 9. DRAINS ARE SLOPED TO OUTLET CONNECTION (N/A).
 10. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
 11. Δ INDICATES REVISION LEVEL.
 12. FILTER ELEMENTS OF THE FOLLOWING FILTERS MAY BE OPTIONALLY INSTALLED PER THE DIRECTION OF CHEMISTRY: 1-SS-F-177, 178, 179, 180.

REV	DATE	DSGN	CHKD	SES	DESCRIPTION
15	12/6/01	BCS	mhu	SEA	INCORP. MSE 01-0231 REV. 00
14	6/22/01	BCS	BCS	SEA	INCORP. DCR 00-0820, DCR-081, 08
13	11-2-96	BCL	NPV	RCP	INCORP. DCR 92-12 CDR-4, 5
12	6/25/93	MRS	BCL	JWB	INCORP. DCR 90-39 CDRB
REV	DATE	DSGN	CHKD	SES	DESCRIPTION
9763-N-506815	3	SS-0880 RAD MONITORING CONTROL LOOP DIA			
9763-F-805825	12	SAMPLE SYSTEM NUCLEAR P&ID SHEET 1			
9763-F-804977	8	SAMPLE SYSTEM NUCLEAR P&ID SHEET 2			
REF. DRAWING NO.	REV	TITLE			

**North Atlantic** Energy Service Corporation

**SAMPLE SYSTEM
STEAM GENERATOR
SAMPLE PANEL 1668 P&ID**

PID- 1-SS-B20521



INCOMPLETE ITEMS	
ITEM	NUMBER

NOTES:
1. WORK THIS DWG WITH DWGS 20218 THRU 20229.
2. ALL LINES, EQUIPMENT, COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX WLD UNLESS NOTED OTHERWISE.
3. Δ INDICATES DRAWING REVISION

REF.	DRAWING NO.	REV	TITLE
9763-F-805619	(1)	1	WL STOR. & FILT.
9763-F-805644	(1)	1	WPB FLR. & EQUIP. DRN. SYS. SHT. 2
9763-F-805617	(10)	1	WPB FLR. & EQUIP. DRN. SYS. SHT. 1
9763-F-805633	(9)	1	WPB FLR. & EQUIP. DRN. SYS. SHT. 4
9763-F-805634	(3)	1	WPB FLR. & EQUIP. DRN. SYS. SHT. 5
9763-F-805645	(2)	1	WPB FLR. & EQUIP. DRN. SYS. SHT. 3
9763-F-804995	(7)	1	RCA WALKWAY TUNNEL DRNS. & SUMP'S
9763-F-805632	(10)	1	CHEMICAL DRAIN SYS. NUCLEAR
9763-F-804959	(4)	1	PAB FLR. & EQUIP. DRN. SYS. SHT. 2
9763-F-804992	(10)	1	PAB FLR. & EQUIP. DRN. SYS. SHT. 1
9763-F-804993	(11)	1	PAB FLR. & EQUIP. DRN. SYS. SHT. 3
9763-F-804958	(5)	1	RWR FLR. & EQUIP. DRNS. & FUEL STO. BLDG. SUMP'S
9763-F-804994	(8)	1	CONT. FLR. & EQUIP. DRN. SYS. SHT. 1
9763-F-805040	(13)	1	REACTOR COOLANT DRN. TK. CONTNMT. BLDG.
9763-F-805191	(4)	1	VALVE STEM LEAKOFF SYS.-CONTAINMENT

2

2/3/87

WDS

DWS

JMM

B-L

WFD

INCORP DCR 488, REVISED REF DWG REVISIONS, ADDED NOTE 3, REMOVED "S" FROM DWG NO'S IN NOTE 1, REVISED PER LATEST SYSTEM DWG'S, ADDED LINE SIZES.

1

4/2/86

GD

SKN

JMM

B-JA

WFD

ISSUED FOR OPERATIONS

0

2/29/80

MLS

RU

JMM

JMK

WFD

ISSUED FOR FIELD VERIFICATION

REV

DATE

DSGN

DRWN

CHKD

CE

LDE

DESCRIPTION

PSNH

PUBLIC SERVICE OF NEW HAMPSHIRE

SEABROOK STATION

WASTE PROCESSING LIQUID DRAINS OVERVIEW

PID- 1-WLD-B20216

PID-1-WLD-B20218

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

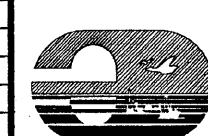
- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20216, & 20219 THRU 20229.
 2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX WLD UNLESS NOTED OTHERWISE.
 3. VALVES V69 THRU V73 ARE REACH ROD OPERATED.
 4. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
 5. Δ INDICATES REVISION LEVEL
 6. REFER TO DRAWING VSL-20774 FOR VALVE LEAKOFFS.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

14	11/10/08	JM	BCL	RRR	INCORP MMOD 07-523 DCN 00
13	8/13/07	DWS	MPW	DDO	INCORP DCR 970008 DCN*00
12	1/31/97	DWS	BCS	AM	INCORP DCR 970005 CA*0
11	11/27/95	MPW	BCS	DDO	INCORP DCR 95-23 CA-6
10	11/13/95	BCS	MPW	RJF	PARTIAL INCORP DCR 95-23 CA-6
9	6-3-94	MPW	DWS	JLD	INCORP DCR 91-13 CAB & DCR 93-23 CA 3
8	4-3-92	DWS	BCL	ES	INCORP DCR'S 90-3 CAB
7	9-24-91	MRB	RMC	JEV	INCORP MMOD 91-610 CAB
6	4/28/88	MPW	BCL	RRR	REVISED: DRAIN LINES TO SUMP CONTINUATION LETTER REF. COORD AND DUPLICATED PIPING SHOWN IN PHANTOM.
5	7/2/87	GPM	PAL	VMS	REVISED: PIPING TO REFLECT AS INSTALLED CONFIG. ADDED NOTE 6
4	2/27/87	DWS	PAL	VMS	INCORP. WR 87-W000155
3	1/19/87	MAP	PAL	VMS	ADDED VSL CONT FLAGS & REF COORD'S & WR TO ILI RELOCATED PIPING FROM V112 & V58 REMOVED CAPILLARY FROM PER AS-BUILT CONDITION. PLUGGED TE-304 SHOWN PER USE&C ISOMETRIC. ADDED REF COORD TO REF FLAG. UPDATED REF DWG BLOCK & ADDED NOTE 5.
2	6/17/86	TAK	BCL	RRR	ADDED REF. RWG. 804994
1	4/2/86	GD	JOM	WFD	ISSUED FOR OPERATIONS
0	3/29/85	MLS	JNM	WFD	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

FPL ENERGY

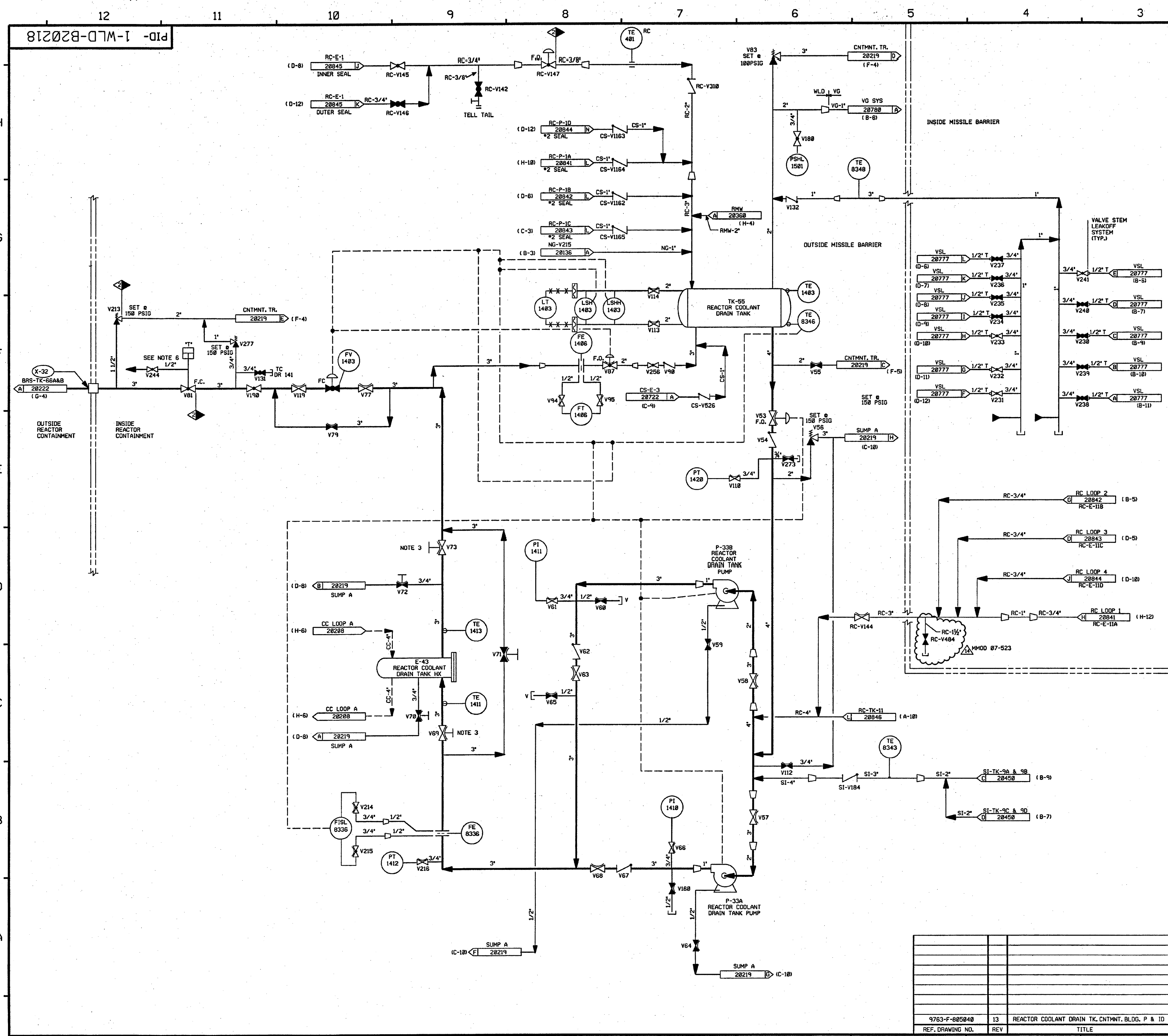
Seabrook Station



WASTE PROCESSING LIQUID DRAINS
REACTOR COOLANT SYSTEM

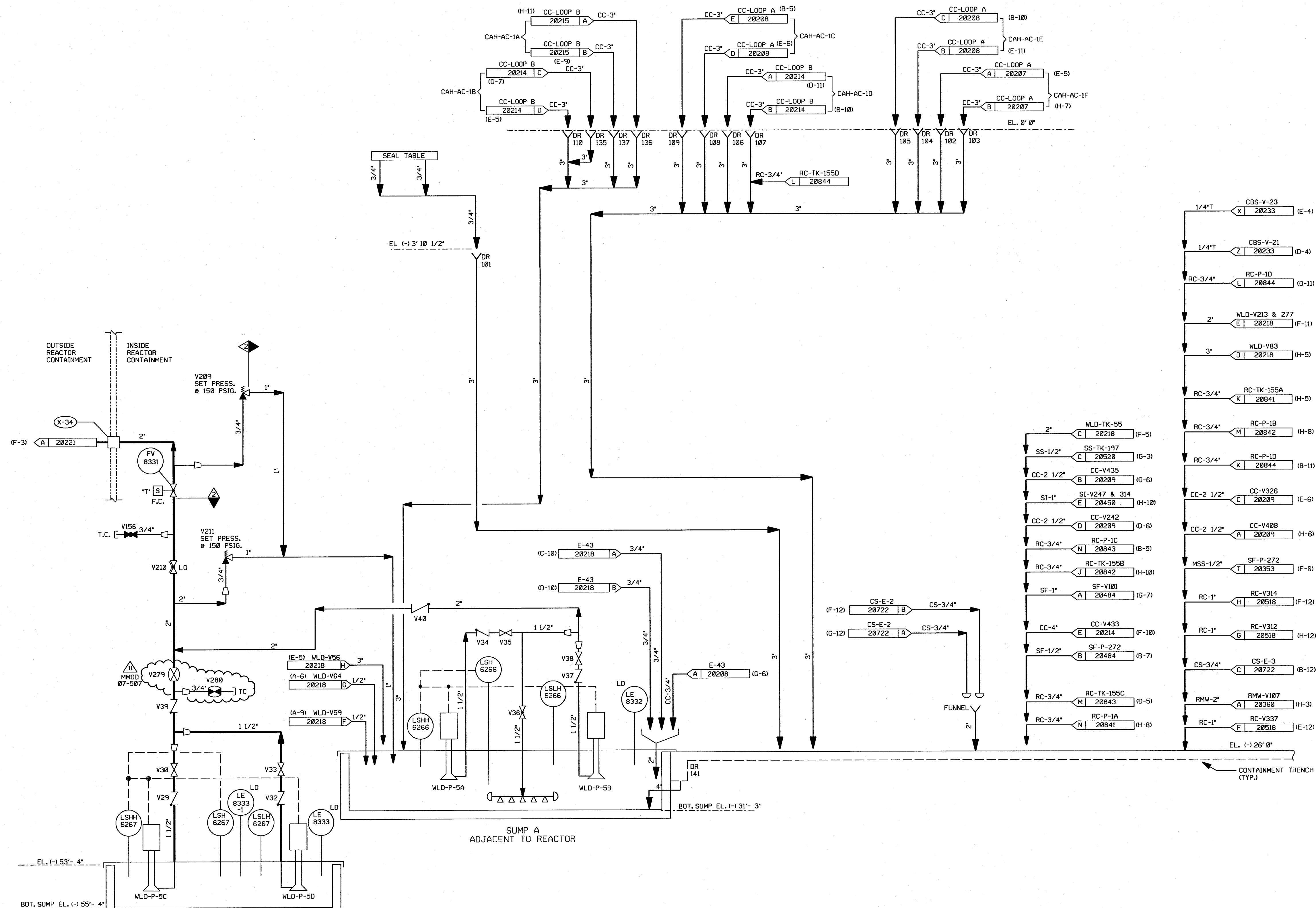
PID- 1-WLD-B20218

REF. DRAWING NO.	REV	TITLE
9763-F-805040	13	REACTOR COOLANT DRAIN TK. CNTMNT. BLDG. P & ID



PID-1-WLD-B20219

FOR P&ID REFERENCE DRAWINGS, SYMBOLS
AND ABBREVIATIONS REFER TO DRAWINGS
P&ID - LEGEND 1 AND P&ID - LEGEND 2.



DRAINS SHOWN ON THIS DRAWING

101	106	135
102	107	136
103	108	137
104	109	141
105	110	

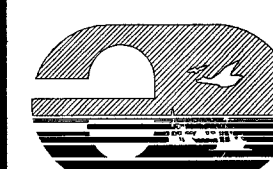
- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20216, 20218 & 20220 THRU 20229.
 2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX WLD UNLESS NOTED OTHERWISE.
 3. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS UNLESS NOTED OTHERWISE.
 4. Δ INDICATES REVISION LEVEL.
 5. DELETED

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

11	4/14/88	JM	Bos	JME	INCRP MMD 07-507 DCN 00.01
10	4/6/85	JM	MPW	RRB	INCRP MSE 04-196 REV 01.00
9	8/18/97	MPW	BCS	VWS	INCRP MMD 96-550 DCN 01
8	6/13/97	DWS	MPW	DMQ	INCRP DCR 970008 DCN*00
7	1/17/97	DWS	MPW	DMQ	INCRP DCR 970002 CA*0 & 1
6	10/14/88	MRB	GPM	RRR	INCRP NCR 96-508 REV 1 DELETED NOTE 5
5	4/28/88	MPW	BCL	RRR	ADDED: LINE SIZES; REVISED: DRAIN LINES TO SUMP A AND NOTE 3. DELETED REF. DOC. REVISED DRAFTING ERRORS; DRAIN LOC. FOR HX-E-43; ADDED DRAIN FOR RC-P-1D, NOTE 5 & DESIGNATION AND NCR 88/600 AS INCOMP. ITEM, INCRP NCR 96/111 REV.0 & NCR 88/112 REV.0
4	12/22/86	WDS	WRD	RRR	DELETED VG DRAIN LINE, ADDED CONT. REF. LOCATIONS AND NOTE 4. INCRP'D ECA 19/10341A, 19/110443A
3	10/10/86	JDM	MPW	RRR	REMOVED CHANGE ITEM #1 PER ECA 19/108566A, INCRP. ECA 19/116102A & 74/102536B & C
2	6/16/86	TAK	DWS	RRR	INCRP. ECA 19/108566A ISSUED FOR OPERATIONS
1	4/2/86	GD	JDM		INCRP. ECA 19/108566A ISSUED FOR OPERATIONS
0	3/29/85	MLS	JNM	WFD	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

FPL ENERGY

Seabrook Station



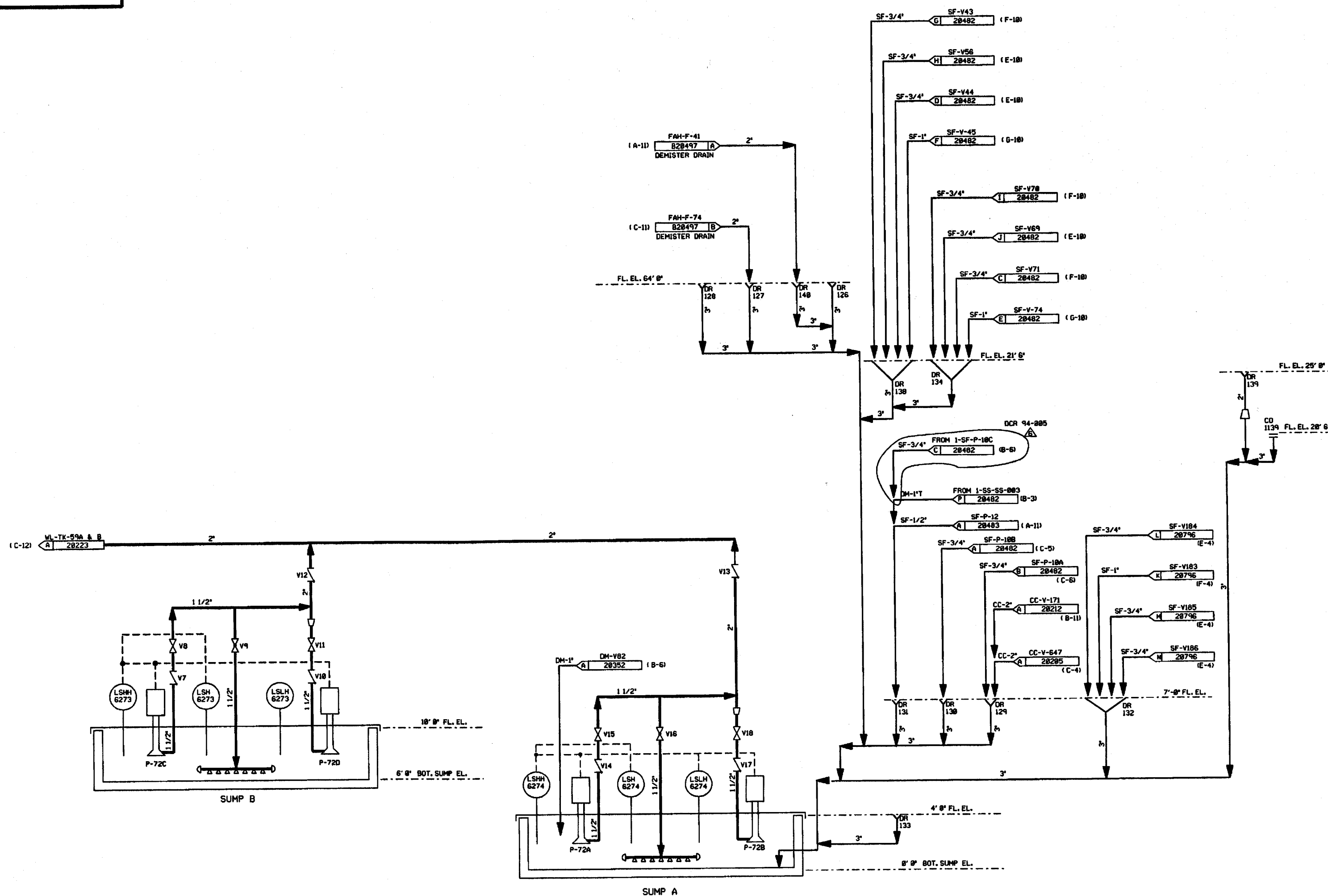
WASTE PROCESSING LIQUID DRAINS
CONTAINMENT BUILDING SUMPS

PID- 1-WLD-B20219

9763-F-004994	8	CONTNMT. FLR. & EQUIP. DR. SYS. SHT. 1 P & ID
REF. DRAWING NO.	REV	TITLE

PID-1-WLD-B20220

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2



DRAINS ON THIS DRAWING

126	132
127	133
128	134
129	135
130	136
131	137

CLEANOUT ON THIS DRAWING

1139

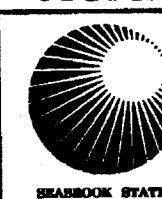
NOTES:

1. WORK THIS DRAWING WITH DRAWINGS 20216, 20218, 20219, & 20221 THRU 20224.
2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX WLD UNLESS NOTED OTHERWISE.
3. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS NNS.

4. △ - INDICATES REVISION LEVEL.

REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
6	3/21/97	BCS	MRB	MPW	RRC	INCORP. DCR 94-005 C40	
5	12/03/96	JM	MRB	MPW	RRC	INCORP. DCR 90-42 CA32	
4	8/14/96	MRB	JM	FCB	QPM	BCL	INCORP. DCR 90-42 CA04
3	5/21/96	MRB	RMC	APL	BCL	GRM	INCORP. DCR 87-294 C404
2	12/12/88	FJR	TAK	MRJ	BCL	RRC	ADDED CONTINUATION FLAG COORDS, REFERENCE DRAWINGS AND NOTE 4.
1	4/2/88	GD	CJS	JDM	DFH	WFD	ISSUED FOR OPERATIONS
0	3/24/85	MLS	MRB	JNM	JMK	WFD	ISSUED FOR FIELD VERIFICATION

North Atlantic Energy Service Corporation



WASTE PROCESSING LIQUID DRAINS
FUEL STORAGE BUILDING

PID- 1-WLD-B20220

REF. DRAWING NO.	REV	TITLE
9763-F-004958	4	RHR FLR & EQUIP DRNS & FUEL STO. BLDG SUMP-PAID

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

DRAINS ON THIS DRAWING

151	156	161
152	157	162
153	158	163
154	159	164
155	160	165

CLEANOUT ON THIS DRAWING

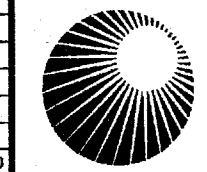
1152

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28216, 28218 THRU 28228, & 28222 THRU 28224.
 2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX WLD UNLESS NOTED OTHERWISE.
 3. DELETED.
 4. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
 5. Δ INDICATES REVISION LEVEL.
 6. V263 IS A SPRING LOADED, SELF-CLOSING VALVE, PROVIDING MELB PROTECTION FROM CROSS-TRAIN FLOODING OF VAULTS.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

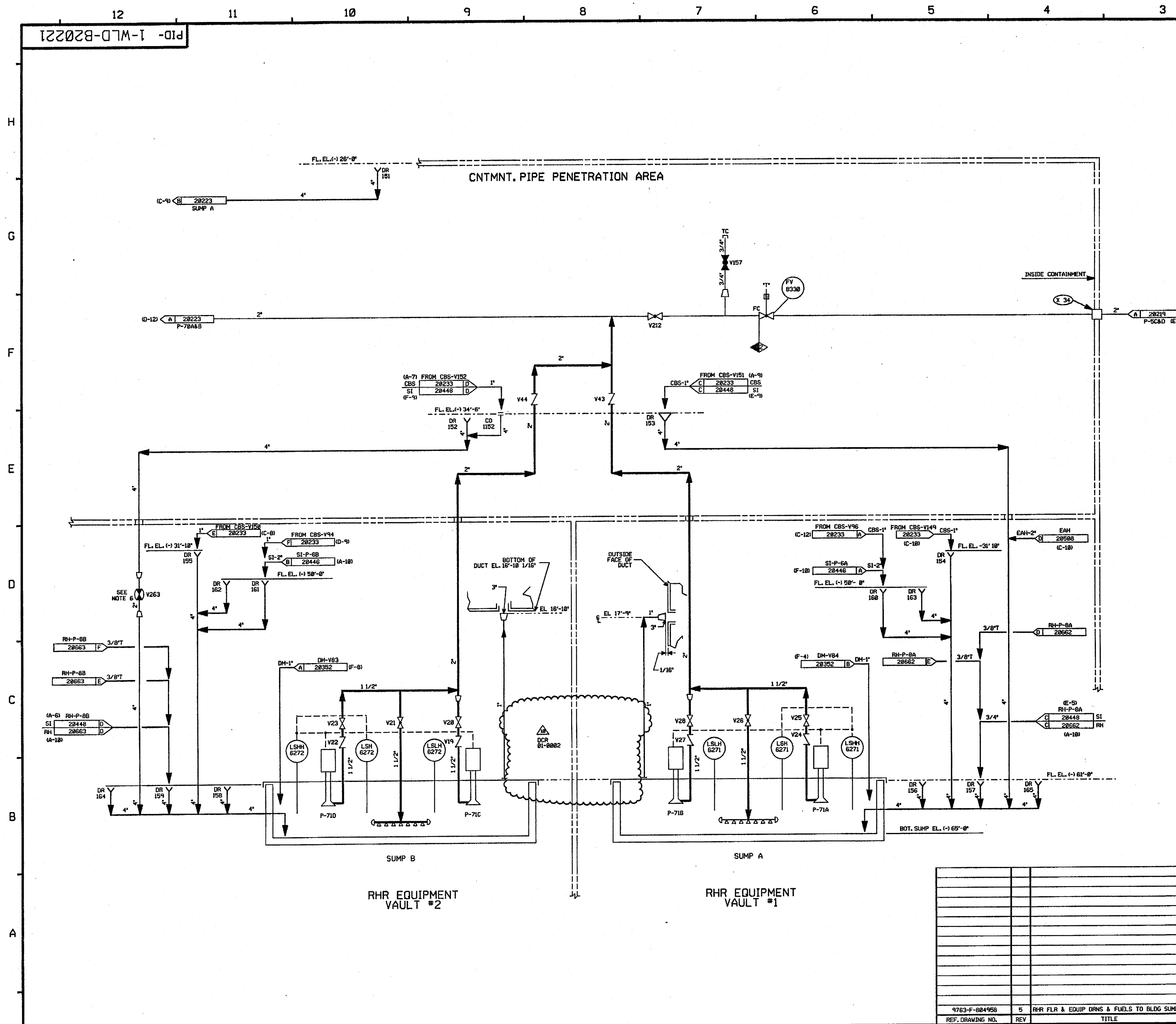
18	1-10-80	MPW	---	BS	---	RS	INCORP. DCR 81-8882 DCN 88
9	3/25/91	BCL	---	MRB	DWS	GPM	INCORP. MM00 92-552 CAG
8	8/25/90	MRB	FCB	JM	APL	BCL	INCORP. MM00 90-681 CAG
7	11/1/89	MRB	FCB	APL	WCL	GRM	COMPLETE INCORP. DCR 87-311 CAG
6	9/6/89	MRB	RMC	APL	BCL	WFD	PARTIAL INCORP. OF DCR 87-311 CA 87
5	4/21/89	MPW	RMC	APL	MRB	GPM	ADDED LINES FROM DWG 22652 SHOWN ON THIS DWG. PER CHEMISTRY REQUEST REVISED. CONT. REF. COORD. EAM CONT. & NOTE 4 DELETED PIPE SPECS.
4	7/18/87	MPW	RIW	PAL	BCL	VNS	INCORP. DCR 86-482.
3	11/4/86	MAP	OPD	VRD	BCL	RRC	REVISED REF. DWG REV. ADDED P&ID LEGEND NOTE, DWG COORDS. REMOVED ALFA FROM DWG REF. NOTE L.
2	9/2/86	MAP	WES	JDM	BCL	RRC	DELETED NOTE 3 & INCORP. ECA 74/1165678
1	4/2/86	GD	GJS	JDM	DLM	WFD	ISSUED FOR OPERATIONS
9	3/24/85	MLS	MRB	JNM	JWK	WFD	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION

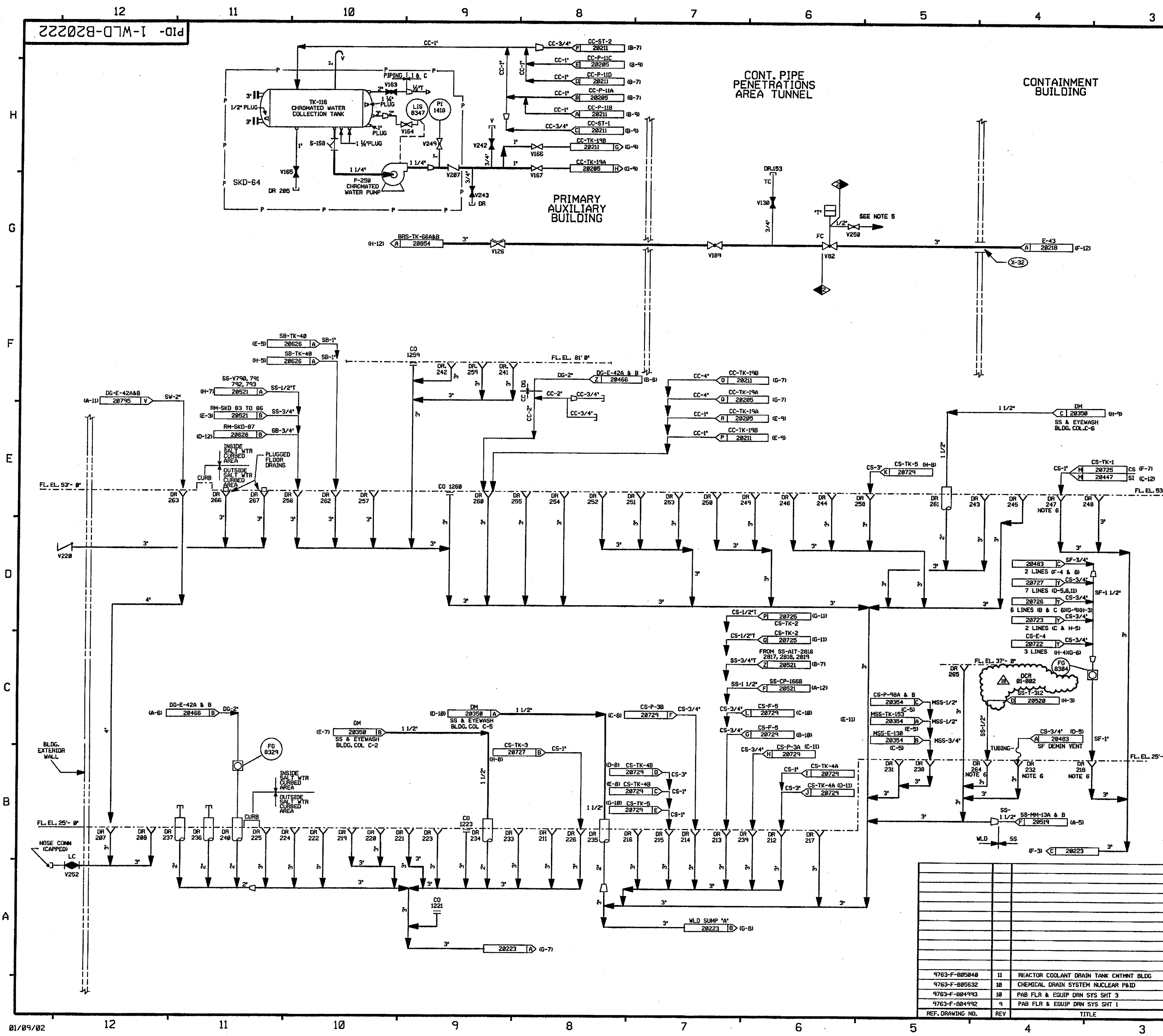
North Atlantic Energy Service Corporation



WASTE PROCESSING LIQUID DRAINS
RHR
EQUIPMENT VAULTS #1 & #2

PID- 1-WLD-B20221





FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

DRAINS ON THIS DRAWING

207	219	233	243	253	263
208	220	234	244	254	264
211	221	235	245	255	265
212	222	236	246	256	266
213	223	237	247	257	267
214	224	238	248	258	268
215	225	239	249	259	269
216	226	240	250	260	270
217	231	241	251	261	271
218	232	242	252	262	272

CLEANOUTS ON THIS DRAWING

1221
1223
1259
1260

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20216, 20218 THRU 20221 & 20223 THRU 20224.
 2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTATION HAVE SYSTEM PREFIX UNLESS NOTED OTHERWISE.
 3. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTATION ARE SAFETY CLASS UNLESS NOTED OTHERWISE.
 4. Δ INDICATES REVISION LEVEL.
 5. REFER TO DRAWING VSL-20774 FOR VALVE LEAKOFF.
 6. THIS DRAIN HAS A GAS CONTAINMENT DEVICE ADDED PER MM00 96-055.

**PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED**

REV	DATE	DSGN	DRWN	CHKD	SES	DESCRIPTION
18	1/1/88	MPW	---	P&S	---	INCORP DCR 01-002 DCH 00
17	10/3/88	BCS	---	MPW	MRB	INCORP MM00 94-507 DCH 00
16	3/4/88	BCS	---	DWS	MPW	VVS INCORP MM00 96-055 DCH 03
15	8/10/87	DWS	---	MPW	FAC	VVS INCORP OF DCR 960016 CAP#
14	5/28/87	DWS	---	MPW	FAC	VVS PARTIAL INCORP OF DCR 960016 CAP#
13	5/18/87	MPW	---	BCS	MRB	VVS INCORP MM00 96-055 CAP#
12	1/18/87	MPW	---	BCS	DWS	MRB INCORP DCR 87-055 CAP#
11	11/2/86	BCL	---	MPW	RCP	MRB INCORP DCR 92-42 CAP#
10	7/26/86	BCL	---	DWS	MPW	VVS INCORP MM00 94-547 CAP#
9	8/3/85	MRB	---	BCL	DWS	DMO INCORP MM00 91-516 CAP#
8	4/16/85	BCL	---	MPW	MRB	MPW INCORP MM00 91-507 CAP#
7	4/21/82	MRB	---	BCL	DWS	REV INCORP MM00 91-515 CAP#
6	8/18/81	MRB	---	FCB	DWS	GRM INCORP MM00 89-530 REV 0
5	4/21/80	GPM	---	RMC	APL	BCL POS INCORP DCR 86-401CAI
4	12/3/86	MAP	---	OPD	MPW	BCL RRC REVISED PER U&C ERECTION ISO. ADDED ISO. REF. DWGS., DWG. LOC. COORD'S & NOTE 4.
3	9/2/86	MAP	---	TAK	MAP	YMK RRC INCORP ECA 99/105494A
2	6/16/86	JDM	---	GJS	DWS	JMS RRC ADD LETTER DESIG. TO CONTRACTIONS INCORP ECA 17/186629A
1	4/2/86	GD	---	GJS	JDM	DM WFO INCORP ECA 88/114678B
0	3/29/85	MMS	---	MRB	JMK	WFO ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CDE	SES DESCRIPTION

North Atlantic Energy Service Corporation

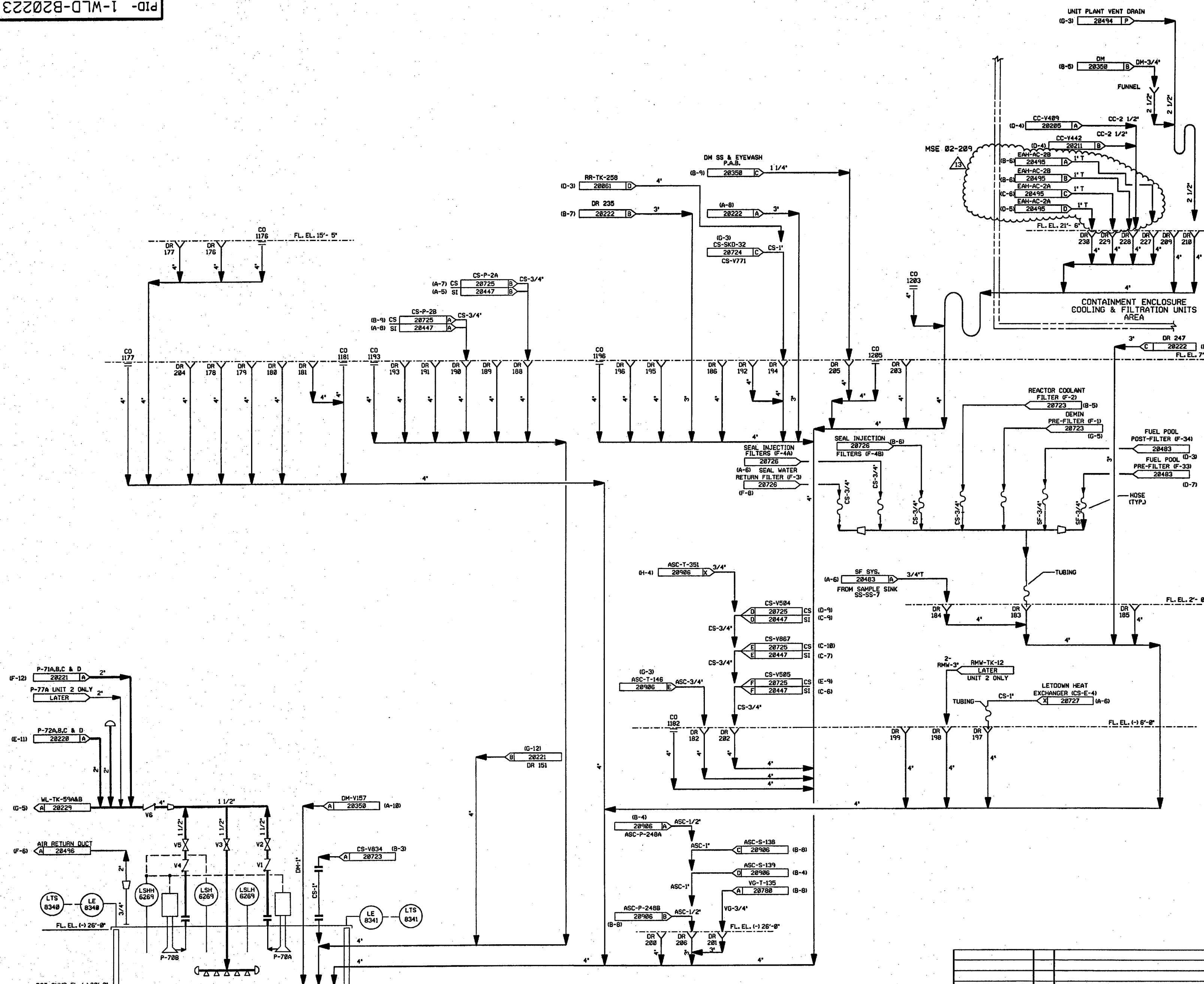
**WASTE PROCESSING LIQUID DRAINS
PRIMARY AUXILIARY BLDG.
SHT. 1 OF 2**

PID- 1-WLD-B20222

CATEGORY 1

PID-1-WLD-B20223

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2



DRAINS ON THIS DRAWING

176	183	191	198	205	238
177	184	192	199	206	
178	185	193	208	209	
179	186	194	201	210	
180	188	195	202	227	
181	189	196	203	228	
182	190	197	204	229	

CLEANOUTS ON THIS DRAWING

1176	1193	1446 (UNIT #2)
1177	1196	
1181	1203	
1182	1205	

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28216, 28218 THRU 28222, & 28224 THRU 28229.
 2. ALL LINES, EQUIPMENT, COMPONENTS, & INSTRUMENTS HAVE SYSTEM PREFIX WLD UNLESS NOTED OTHERWISE.
 3. ALL LINES, EQUIPMENT, COMPONENTS, & INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
 4. Δ INDICATES REVISION LEVEL.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
13	10-21-88	BCS	JMA	MSB	INCORP. MSE 02-209 REV. 00
12	1/18/82	MPW	BCS	RRB	INCORP. DCR 01-0086 CEN 00
11	8/18/97	BCL	BCS	VWS	INCORP. MM00-91-507 CA-0
10	11/2/92	BCL	DWS	DJM	INCORP. DCR 88-179 CAB
9	4/23/92	MRB	BCL	JEV	INCORP. MM00-91-515 CAB
8	7/25/91	MRB	JH	JEV	INCORP. DCR 88-244 CAB
7	3-16-90	MRB	APL	RSG	INCORP. DCR 87-33 CA7 REVISED NOTE 3 ADDED: CONTINUATION TAG DESCRIPTIONS
6	3/22/88	MPW	BCL	RRR	LINE FROM DWG 28528 SHOWN GOING TO SUMP PER CHEMISTRY REQUEST.
5	2/3/87	JDM	MPW	RRR	INCORP. DCR 488
4	12/1/86	VDS	MRJ	RRR	REVISED REF. DWG. REVISIONS, ADDED FLANGES AT SUMP A
3	10/18/86	MAP	JDM	RRR	ADDED DWG. LOCATION COORD. & NOTE 4. RE-INCORPORATED ECA 99/114510A INC. ECA'S 99/886183C, 99/180049A
2	6/13/86	TAK	DWS	RRR	INC ECA'S 99/114510A & 99/886183A
1	4/2/86	GD	JDM	WFO	ISSUED FOR OPERATIONS
0	3/24/85	MLS	RSL	WFO	ISSUED FOR FIELD VERIFICATION

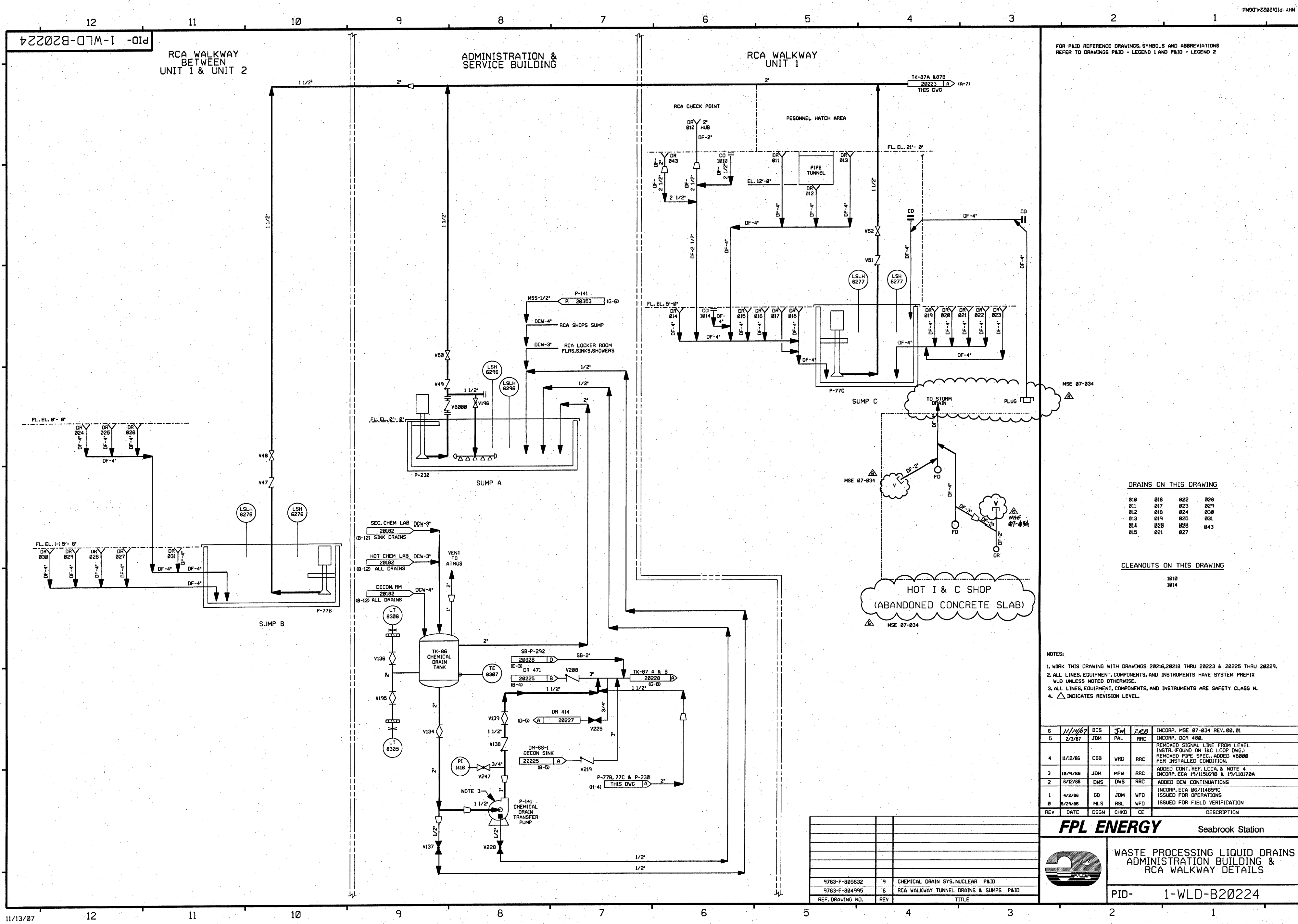
FPL ENERGY

Seabrook Station

WASTE LIQUID DRAINS
PRIMARY AUXILIARY BLDG.
SHT. 2 OF 2

PID- 1-WLD-B20223

REF. DRAWING NO.	REV	TITLE
9763-F-884993	10	PAB FLR & EQUIP DRN SYS SHT 3 PAID
9763-F-884994	4	PAB FLR & EQUIP DRN SYS SHT 2 PAID
9763-F-884992	10	PAB FLR & EQUIP DRN SYS SHT 1 PAID



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

DRAINS ON THIS DRAWING

010	015	022	028
011	017	023	029
012	018	024	030
013	019	025	031
014	020	026	032
015	021	027	033

CLEANOUTS ON THIS DRAWING

1010
1014

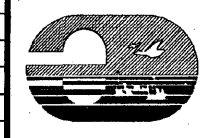
NOTES:

1. WORK THIS DRAWING WITH DRAWINGS 20216, 20218 THRU 20223 & 20225 THRU 20229.
2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX UNLESS NOTED OTHERWISE.
3. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS N.
4. Δ INDICATES REVISION LEVEL.

6	11/14/07	BCS	JW	200	INCRP. MSE 07-034 REV. 00, 01
5	2/3/07	JDM	PAL	RRC	INCRP. DCR 408.
4	11/12/06	CSB	WRD	RRC	REMOVED SIGNAL LINE FROM LEVEL INSTR. (FOUND ON I&C LOOP DWG.) REMOVED PIPE SPEC. ADDED V8000 PER INSTALLED CONDITION.
3	10/9/06	JDM	MPW	RRC	ADDED CONT. REF. LOCA. & NOTE 4 INCRP. ECA 19/11516/98 & 19/11817/0A
2	6/12/06	DWS	DWS	RRC	ADDED DCW CONTINUATIONS
1	4/2/06	GD	JDM	WFO	INCRP. ECA 06/11485/9C
0	2/24/06	M.S.	RSL	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

FPL ENERGY

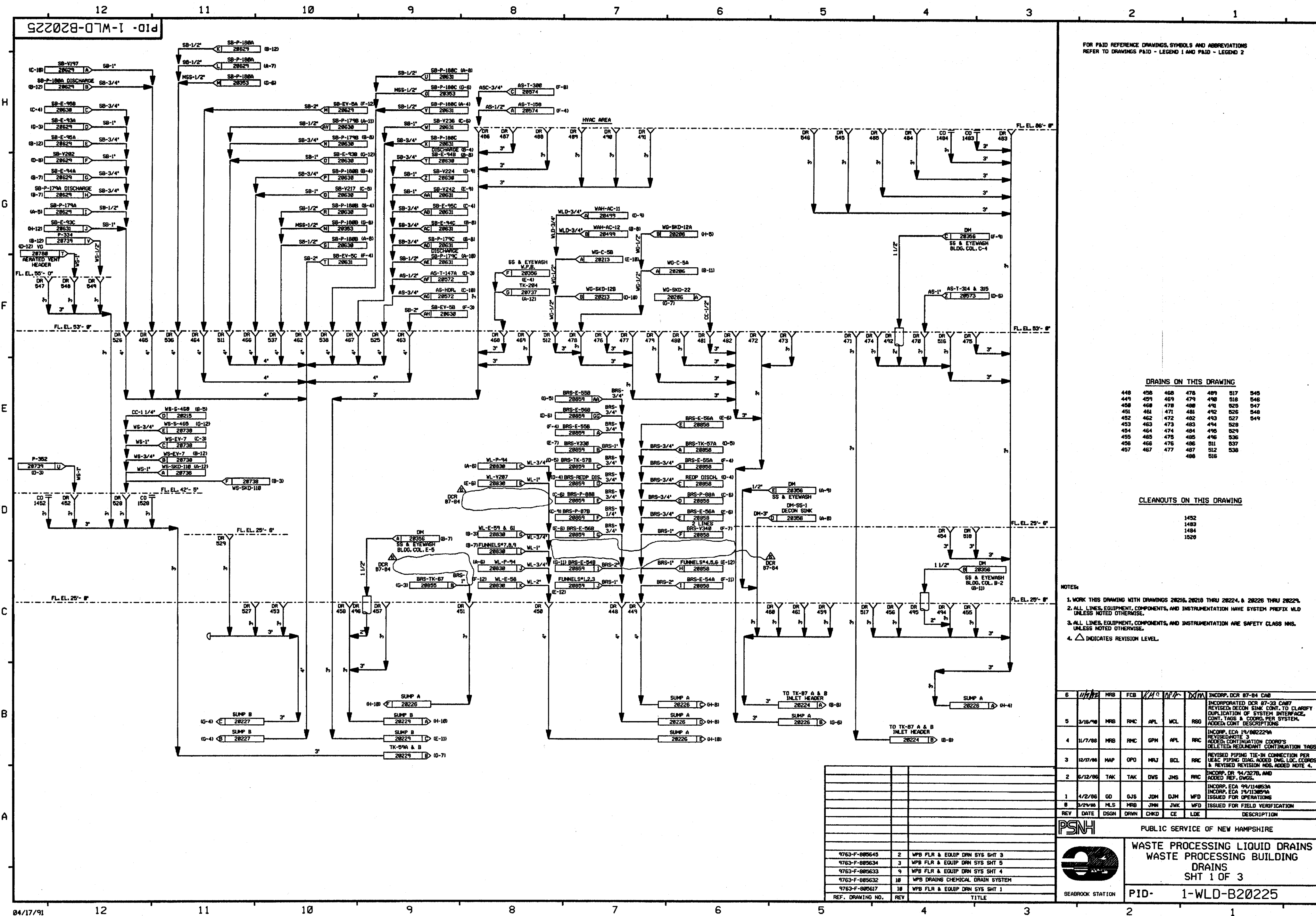
Seabrook Station



WASTE PROCESSING LIQUID DRAINS
ADMINISTRATION BUILDING &
RCA WALKWAY DETAILS

PID- 1-WLD-B20224

9763-F-080632	9	CHEMICAL DRAIN SYS. NUCLEAR P&ID
9763-F-084995	6	RCA WALKWAY TUNNEL DRAINS & SUMPS P&ID
REF. DRAWING NO.	REV	TITLE



FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

DRAINS ON THIS DRAWING

448	458	468	478	488	517	548
449	459	469	479	489	518	549
450	460	470	480	490	525	547
451	461	471	481	492	526	548
452	462	472	482	493	527	549
453	463	473	483	494	528	
454	464	474	484	495	529	
455	465	475	485	496	536	
456	466	476	486	497	537	
457	467	477	487	498	538	
				499	539	

CLEANOUTS ON THIS DRAWING

1452
1483
1484
1526

NOTES

1. WORK THIS DRAWING WITH DRAWINGS 28216, 28218 THRU 28224, & 28226 THRU 28229.
2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTATION HAVE SYSTEM PREFIX WLD UNLESS NOTED OTHERWISE.
3. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTATION ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
4. Δ INDICATES REVISION LEVEL.

6	4/18/91	MRS	FCB	WLD	WLD	INCORP. DCR 87-84 C&B
5	3/15/90	MRS	RMC	WLD	WLD	INCORPORATED DCR 87-33 C&B REVISED DCR SINK CONT. TO CLARIFY DUPLICATION OF SYSTEM INTERFACE, CONT. TAGS & COORD. PER SYSTEM, ADDED CONT. DESCRIPTIONS
4	11/7/88	MRS	RMC	WLD	WLD	INCORP. ECA 19/082229A REVISED NOTE 3 ADDED CONTINUATION COORDS (DELETED REDUNDANT CONTINUATION TAGS)
3	12/17/88	MRS	OPD	WLD	WLD	REVISED PIPING TIE-IN CONNECTION PER USAC PIPING DIAG. ADDED DME LOC. COORDS & REVISED REVISION NOS. ADDED NOTE 4.
2	6/12/88	TAK	TAK	DVS	JMS	INCORP. DR 94/3278, AND ADDED REF. DWS.
1	4/2/88	GO	DJS	JDM	DJM	INCORP. ECA 99/114853A INCORP. ECA 19/113859A ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CE	DESCRIPTION
PSNH						PUBLIC SERVICE OF NEW HAMPSHIRE
						WASTE PROCESSING LIQUID DRAINS WASTE PROCESSING BUILDING DRAINS SHT 1 OF 3
						PID- 1-WLD-B20225



SEABROOK STATION

9763-F-885645	2	WPS FLR & EQUIP DRAIN SYS SHT 3
9763-F-885634	3	WPS FLR & EQUIP DRAIN SYS SHT 6
9763-F-885633	9	WPS FLR & EQUIP DRAIN SYS SHT 4
9763-F-885632	10	WPS DRAINS CHEMICAL DRAIN SYSTEM
9763-F-885617	10	WPS FLR & EQUIP DRAIN SYS SHT 1
REF. DRAWING NO.	REV	TITLE

PID-1-WLD-B20226

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

DRAINS ON THIS DRAWING

416	431	440	500	508
417	432	441	501	509
420	433	442	502	519
421	434	443	503	530
422	435	444	504	531
423	436	445	505	533
429	437	446	506	532
430	439	447	507	

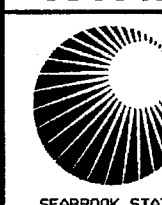
CLEANOUTS ON THIS DRAWING

1421
1430
1442
1509

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20216, 20218 THRU 20225, 20227 THRU 20229.
 2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTATION HAVE SYSTEM PREFIX WLD, UNLESS NOTED OTHERWISE.
 3. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
 4. Δ INDICATES REVISION LEVEL.

6	7/1/00	BCS	—	MRB	DEA	INCORP 99-594 DCN-00
5	11/1/99	MRB	—	BCL	DWS	INCORP DCR 87-84 C&D
4	3/27/99	MRB	RMC	JM	GPM	WFO
3	12/4/98	MPW	OPO	MRD	BCL	RRC
2	5/24/98	GD	GJS	VFS	JMS	RRC
1	3/24/95	GD	GJS	JDM		
0	3/24/95	MLS	MRB	JNM	JWK	WFO
REV	DATE	DSGN	DRWN	CHKD	SES	DESCRIPTION

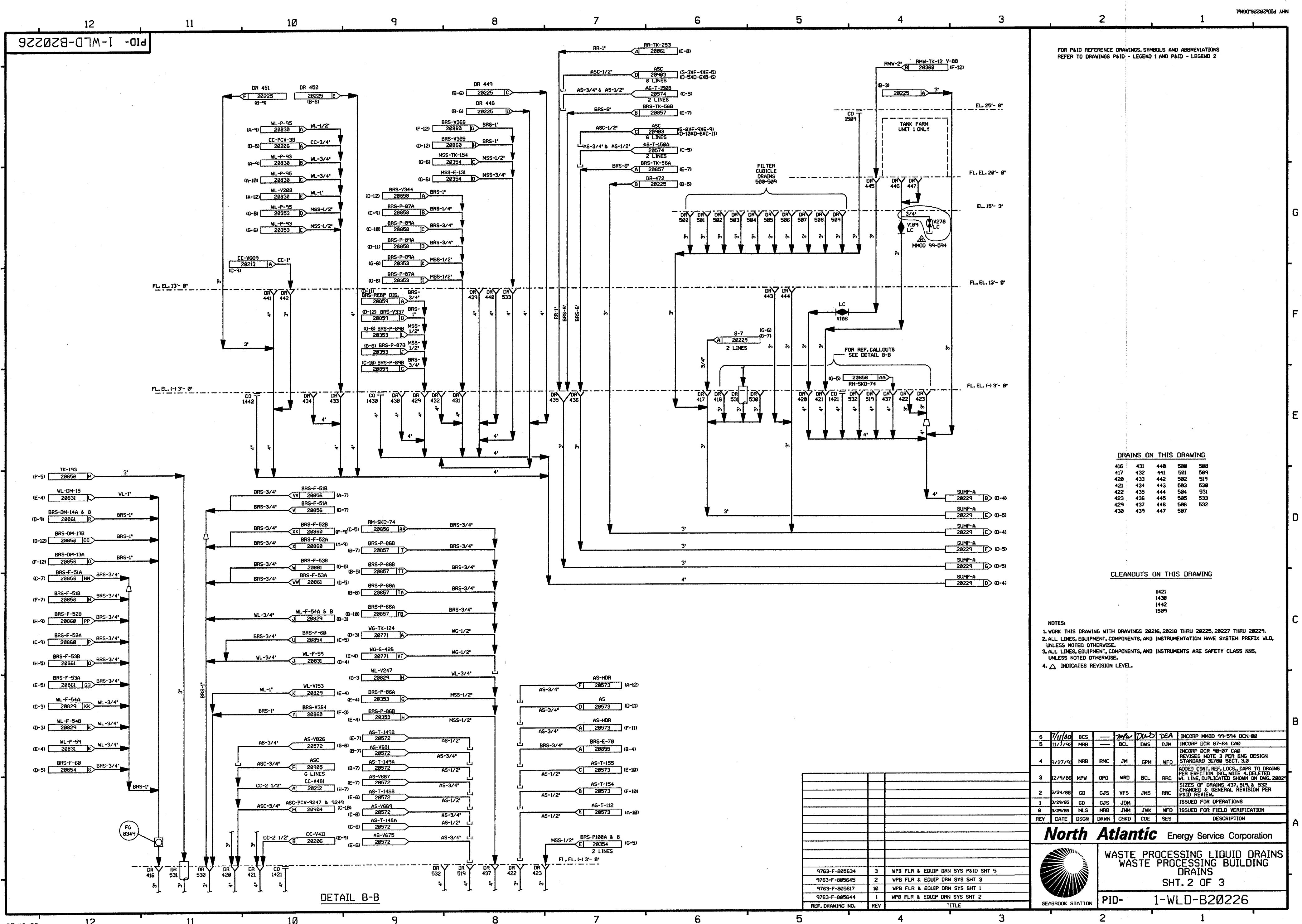
North Atlantic Energy Service Corporation



WASTE PROCESSING LIQUID DRAINS
WASTE PROCESSING BUILDING
DRAINS
SHT. 2 OF 3

PID-1-WLD-B20226

9763-F-805634	3	WPB FLR & EQUIP DRN SYS SHT 5
9763-F-805645	2	WPB FLR & EQUIP DRN SYS SHT 3
9763-F-805617	10	WPB FLR & EQUIP DRN SYS SHT 1
9763-F-805644	1	WPB FLR & EQUIP DRN SYS SHT 2
REF. DRAWING NO.	REV	TITLE



DETAIL B-B

PID-1-WLD-B20227

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

DRAINS ON THIS DRAWING

414	425	497	522	540	553	558
415	426	510	523	541	554	559
418	427	514	534	542	555	
419	428	520	535	543	556	
424	438	521	539	544	557	

CLEANOUTS ON THIS DRAWING

1520

NOTES

1. WORK THIS DRAWING WITH DRAWINGS 20216, 20218 THRU 20226, 20228 & 20229.
2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX UNLESS NOTED OTHERWISE.
3. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
4. Δ INDICATES REVISION LEVEL.
5. DELETED

14	11-2-07	BCS	JM	222	INCORP MSE 04-152 REV. 0
13	7-24-03	BCS	JM	MKC	INCORP MSE 03-147 REV. 0
12	1-21-94	DWS	MRB	RSQ	INCORP DCR 86-174 CA 0
11	7-17-92	MRB	BCL	RSQ	INCORP DCR 86-538 CA 0
10	3/23/92	MRB	BCL	RSQ	INCORP MMD 91-501 CA 0
9	8/21/91	MRB	JM	PEB	INCORPORATED 90-7 CA 03
8	5/16/90	MRB	APL	RSQ	INCORPORATED 87-33 CA 5
7	5/26/89	GPM	PAL	IV	INCORPORATED 87-110 CA 11
6	11/7/88	MRB	GPM	RRC	REVISED NOTE 3 ADDED CONTINUATION TAG AND LOCATION COORDINATE MADE MINOR DRAFTING ENHANCEMENTS FOR CLARITY
5	10/23/87	MPW	BCL	PAG	ADDED DRAIN LINES FROM P-39 A&B CONT. DNG NUMBERS AND LOCATION COORDINATES. DELETED UNIT 2 LINE, AS LINES (SHOWN ON DWG. 20576)
4	4/8/87	WDS	MRJ	VWS	INCORP DCR 87-0013.
3	12/1/86	CSB	WRD	RRC	ADDED PAID REF DWG NOTE, DRAIN LINES TO DR 419 PER ECA 19/111538C, CONT P.D. COORDS, UNIT 2 DRAIN LINE PER LINE BY LINE VERIFICATION.
2	8/19/86	JDM	DWS	JMS	REV PER UEC P&ID 805637 REV-7
1	4/2/86	GD	JDM	WFO	ISSUED FOR OPERATIONS
0	3/29/86	MLS	JNM	WFO	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

FPL ENERGY

Seabrook Station

WASTE PROCESSING BUILDING
DRAINS
SHT. 3 OF 3

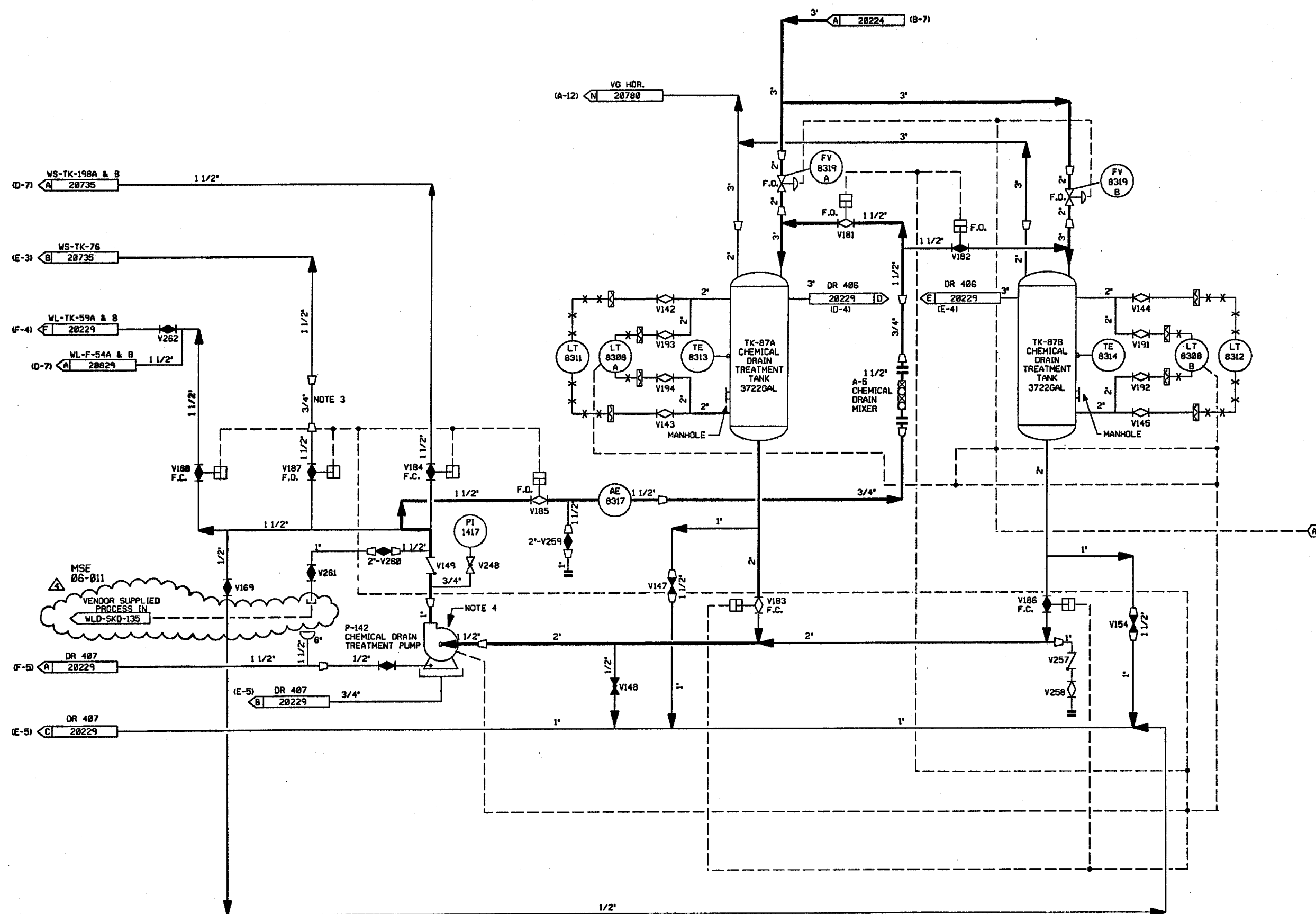
PID- 1-WLD-B20227

REF. DRAWING NO.	REV	TITLE
9763-F-805637	8	STEAM GEN. BLDWN. REC. SHT. 4
9763-F-805633	9	WPB FLR & EQUIP DRAIN SYS SHT 4
9763-F-805634	2	WPB FLR & EQUIP DRAIN SYS SHT 5

10/28/04

PID-1-WLD-B20228

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2



INSTRUMENTATION IDENTIFICATION
A TO WLD-LT-8305 & WLD-P-141 ON DWG. B28224.

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28216, 28218, 28227 & 28229.
 2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX WLD UNLESS NOTED OTHERWISE.
 3. FLOW RESTRICTION PIPE SECTION.
 4. SEE DWG. DM-20353 FOR DM SUPPLY TO MECHANICAL SEALS.
 5. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS N.
 6. Δ INDICATES REVISION LEVEL.

4	4/22/86	BCS	JM	WLD	INCRP MSE 86-811 REV. 00
3	6/30/87	MPW	DWS	RRR	INCRP DCR 86-673 AND DCR 86-266 CAG3.
2	11/18/86	FJR	WRO	RRR	ADDED CONT. FLAG COORD'S. & NOTE 6.
1	4/2/86	GD	JDM	WFD	ISSUED FOR OPERATIONS
0	2/24/85	MLS	JNM	WFD	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

FPL ENERGY

Seabrook Station

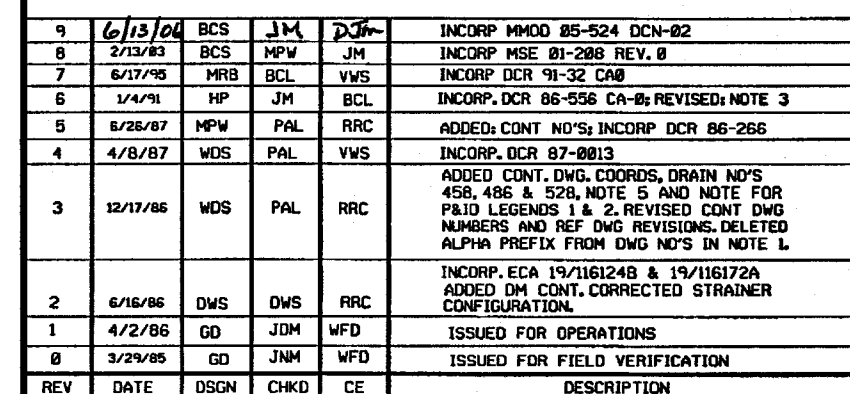


WASTE PROCESSING LIQUID DRAINS
WASTE PROCESSING BUILDING
CHEMICAL DRAIN SYSTEM

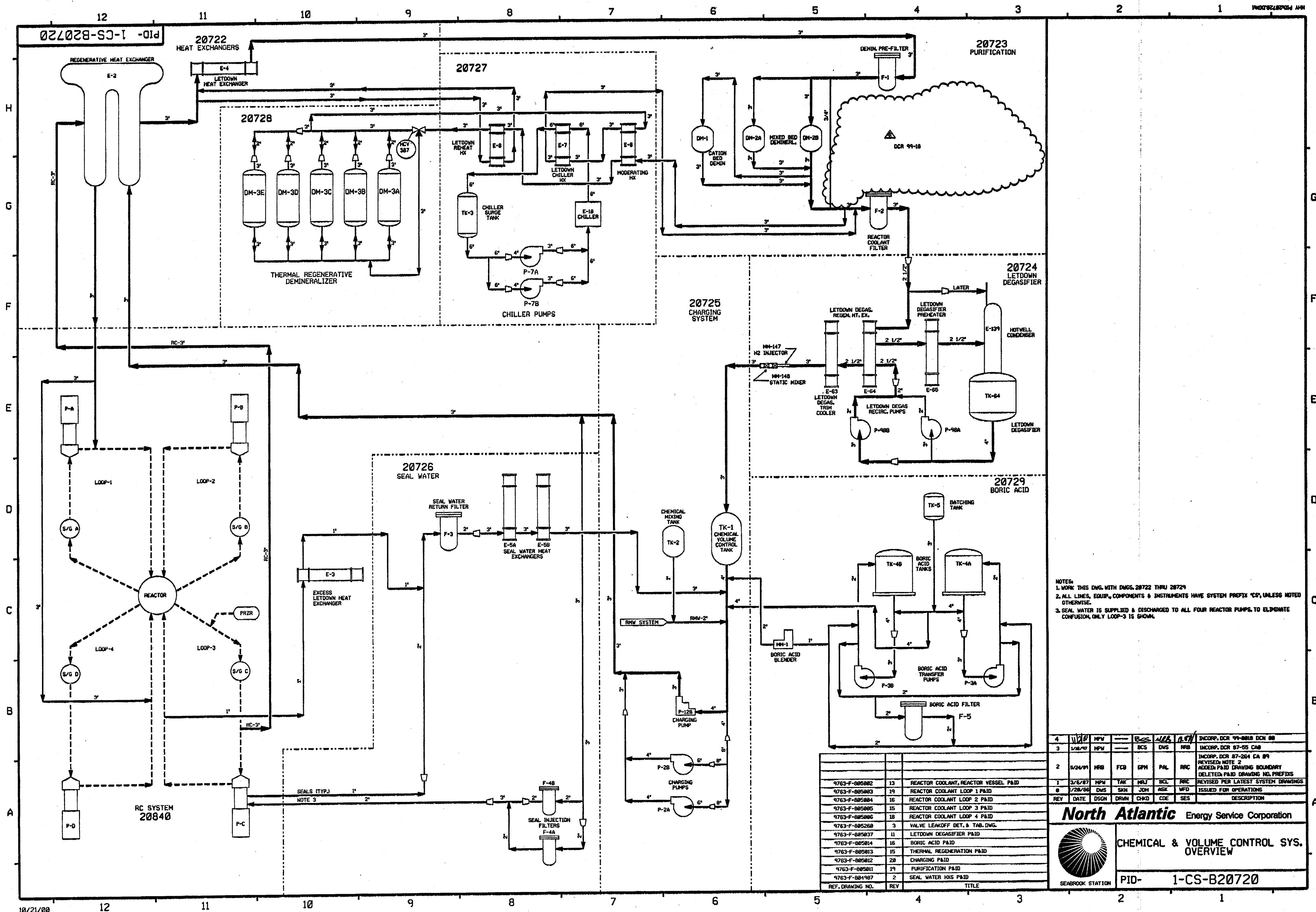
PID- 1-WLD-B20228

9763-F-805632	18	CHEMICAL DRN SYSTEM NUCLEAR
REF. DRAWING NO.	REV	TITLE

PID- 1-WLD-B20229



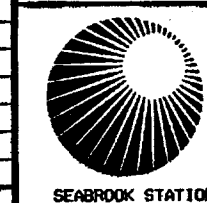
9763-F-805633	9	WPB FLR. & EQUIP. DRAIN SYS. SHT. 4
9763-F-805619	11	WL STOR. & FILT.
9763-F-805644	1	WPB FLR. & EQUIP. DRAIN SYS. SHT. 2
9763-F-805634	3	WPB FLR. & EQUIP. DRAIN SYS. SHT. 5
REF. DRAWING NO.	REV	TITLE



NOTES:
1. WORK THIS DNG. WITH DNGS. 20722 THRU 20729
2. ALL LINES, EQUIP., COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX 'CS', UNLESS NOTED OTHERWISE.
3. SEAL WATER IS SUPPLIED & DISCHARGED TO ALL FOUR REACTOR PUMPS TO ELIMINATE CONFUSION, ONLY LOOP-3 IS SHOWN.

REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
4	1/18/70	NPV	---	---	---	---	INCORP. DCR 99-0018 DCM 00
3	1/18/70	NPV	---	---	---	---	INCORP. DCR 97-05 CAB
2	5/20/69	MRB	FCB	GPH	PAL	RRC	INCORP. DCR 87-264 CA 09 REVISED NOTE 2 ADDED PAID DRAWING BOUNDARY DELETED PAID DRAWING NO. PREFFIS
1	3/6/67	NPV	YAK	MRJ	SEL	RRC	REVISED PER LATEST SYSTEM DRAWINGS
0	1/28/66	DWS	SKN	JDM	ASK	WFD	ISSUED FOR OPERATIONS

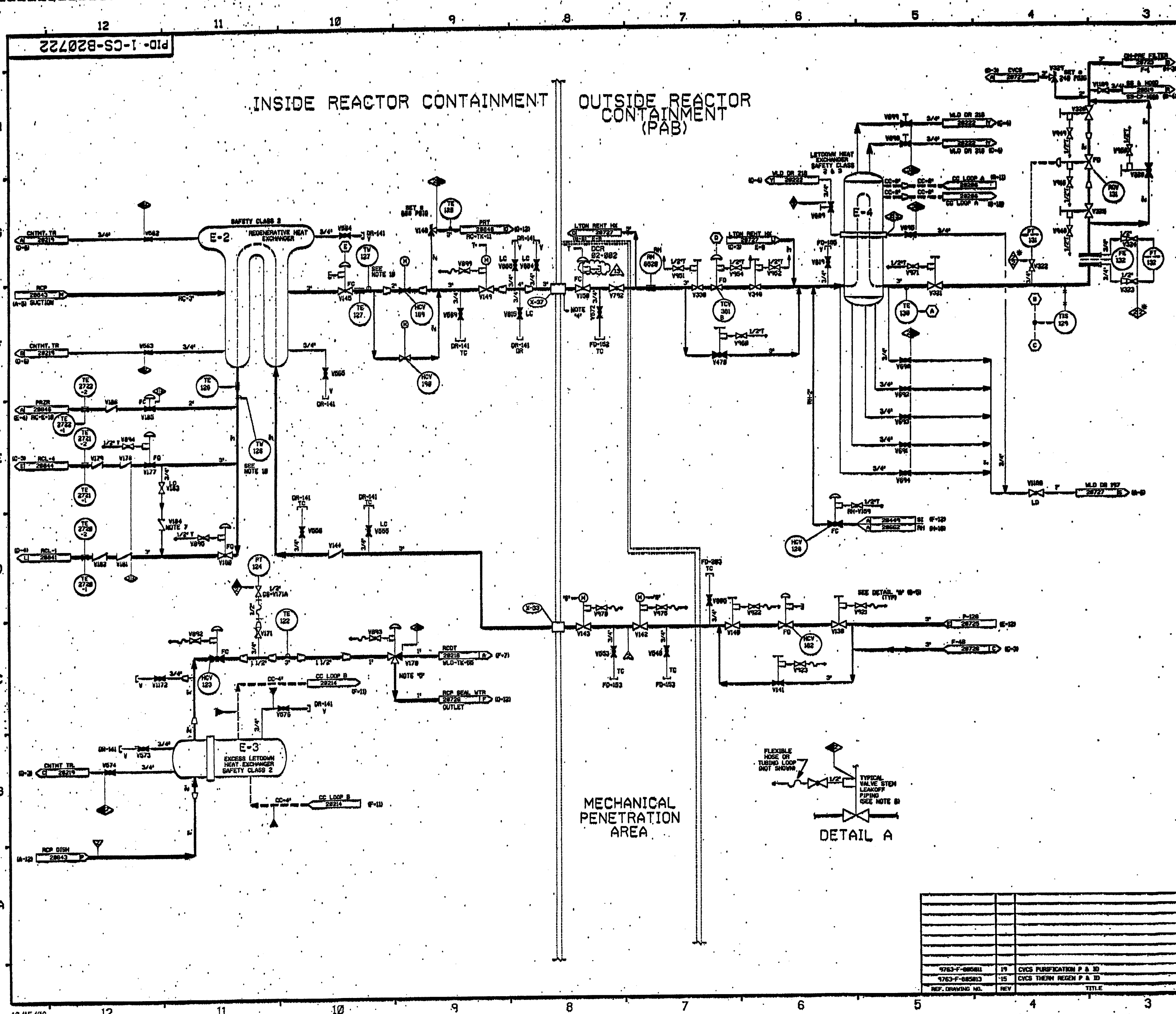
North Atlantic Energy Service Corporation



CHEMICAL & VOLUME CONTROL SYS. OVERVIEW

PID- 1-CS-B20720

REF. DRAWING NO.	REV	TITLE
9763-F-005002	13	REACTOR COOLANT, REACTOR VESSEL P&ID
9763-F-005003	19	REACTOR COOLANT LOOP 1 P&ID
9763-F-005004	16	REACTOR COOLANT LOOP 2 P&ID
9763-F-005005	15	REACTOR COOLANT LOOP 3 P&ID
9763-F-005006	18	REACTOR COOLANT LOOP 4 P&ID
9763-F-005260	3	VALVE LEAKOFF DET. & TAB. DNG.
9763-F-005037	11	LETDOWN DEGASIFIER P&ID
9763-F-005014	16	BORIC ACID P&ID
9763-F-005013	15	THERMAL REGENERATION P&ID
9763-F-005012	20	CHARGING P&ID
9763-F-005011	19	PURIFICATION P&ID
9763-F-004907	2	SEAL WATER HXS P&ID



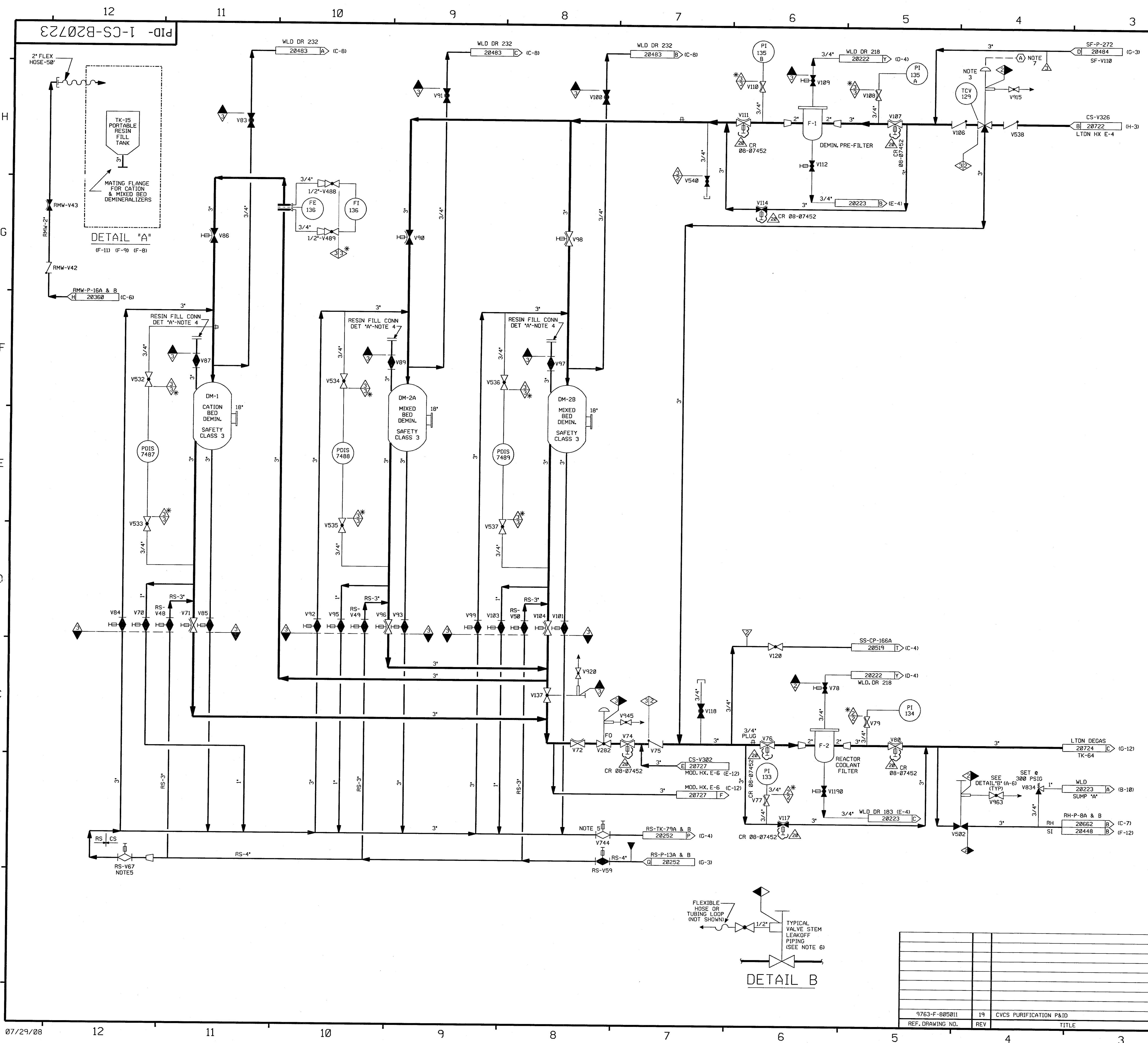
FOR FIELD REFERENCE: DRAWING SYMBOLS AND ABBREVIATIONS REFER TO DRAWING P&ID - LEGEND 1 AND P&ID - LEGEND 2

NOTES:
1. WORK THIS DRAWING WITH DMS 20720 & 20723 THRU 20724.
2. ALL LINE, EQUIP., COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX (S), UNLESS NOTED OTHERWISE.
3. HENT AND DRAIN CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-MIN-DRAIN UNLESS NOTED OTHERWISE.
4. DELAY TIME BCS TO HENT MUST BE 45 SECONDS MIN.
5. VALVE FAILS WITH FLOW TO SEAL WATER RETURN FILTER.
6. DELETED.
7. SPRING LOADED CHECK VALVE.
8. REFER TO DRAWING V&L-20774 FOR VALVE LEAKOFFS.
9. INSTRUMENT REFERENCE.
10. TO CONTROL VALVE TV-127 ON DMS 20720.
11. TO 3-MIN VALVE TV-127 ON DMS 20723.
12. TO T&S-202 ON DMS 20726.
13. TO T&S-202A, T&S-202, T&S-202 & T&S-202 ON DMS 20727.
14. FOR AUTO CLOSE SIGNALS SEE LOGIC 1-MIN-DRAIN.
15. TV-126 AND TV-127 TO BE ANNOUNCED IN PLACE.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

NO.	DATE	BY	CHKD	APPD	DESCRIPTION
13	4/2/85	SCS	JM	RMS	INCORP. DCR 82-082 DCM 89
12	10/14/85	SCS	JM	RMS	INCORP. DCR 82-082 DCM 89 & 10-000 82-084 DCM 89
11	10/14/85	SCS	JM	RMS	PARTIAL INCORP. DCR 82-082 DCM 89
10	1/12/82	SCS	JM	TAS	INCORP. DCR 82-082 DCM 82, 82.03
9	6/11/80	NPV	SCS	RMS	INCORP. DCR 82-082 DCM 80
8	5/18/79	DMS	RMS	SCS	INCORP. DCR 79-10 DCM 80
7	4/13/72	HRS	SCS	JEV	INCORP. M&SD 170800 DCM 80
6	12/5/71	HRS	SCS	JEV	INCORP. M&SD 17-015 CAS
5	5/4/71	HRS	SCS	JEV	INCORP. DCR 67-274 CA 84
4	10/28/67	OPN	DMS	PMS	REVISION NOTE 3 REVISION NOTE 4 REVISION NOTE 5 REVISION NOTE 6 REVISION NOTE 7 REVISION NOTE 8 REVISION NOTE 9 REVISION NOTE 10 REVISION NOTE 11 REVISION NOTE 12 REVISION NOTE 13 REVISION NOTE 14 REVISION NOTE 15 REVISION NOTE 16 REVISION NOTE 17 REVISION NOTE 18 REVISION NOTE 19 REVISION NOTE 20 REVISION NOTE 21 REVISION NOTE 22 REVISION NOTE 23 REVISION NOTE 24 REVISION NOTE 25 REVISION NOTE 26 REVISION NOTE 27 REVISION NOTE 28 REVISION NOTE 29 REVISION NOTE 30 REVISION NOTE 31 REVISION NOTE 32 REVISION NOTE 33 REVISION NOTE 34 REVISION NOTE 35 REVISION NOTE 36 REVISION NOTE 37 REVISION NOTE 38 REVISION NOTE 39 REVISION NOTE 40 REVISION NOTE 41 REVISION NOTE 42 REVISION NOTE 43 REVISION NOTE 44 REVISION NOTE 45 REVISION NOTE 46 REVISION NOTE 47 REVISION NOTE 48 REVISION NOTE 49 REVISION NOTE 50 REVISION NOTE 51 REVISION NOTE 52 REVISION NOTE 53 REVISION NOTE 54 REVISION NOTE 55 REVISION NOTE 56 REVISION NOTE 57 REVISION NOTE 58 REVISION NOTE 59 REVISION NOTE 60 REVISION NOTE 61 REVISION NOTE 62 REVISION NOTE 63 REVISION NOTE 64 REVISION NOTE 65 REVISION NOTE 66 REVISION NOTE 67 REVISION NOTE 68 REVISION NOTE 69 REVISION NOTE 70 REVISION NOTE 71 REVISION NOTE 72 REVISION NOTE 73 REVISION NOTE 74 REVISION NOTE 75 REVISION NOTE 76 REVISION NOTE 77 REVISION NOTE 78 REVISION NOTE 79 REVISION NOTE 80 REVISION NOTE 81 REVISION NOTE 82 REVISION NOTE 83 REVISION NOTE 84 REVISION NOTE 85 REVISION NOTE 86 REVISION NOTE 87 REVISION NOTE 88 REVISION NOTE 89 REVISION NOTE 90 REVISION NOTE 91 REVISION NOTE 92 REVISION NOTE 93 REVISION NOTE 94 REVISION NOTE 95 REVISION NOTE 96 REVISION NOTE 97 REVISION NOTE 98 REVISION NOTE 99 REVISION NOTE 100
3	1/28/66	HRS	SCS	JEV	ISSUED FOR OPERATIONS
2	1/28/66	HRS	SCS	JEV	ISSUED FOR OPERATIONS
1	1/28/66	HRS	SCS	JEV	ISSUED FOR OPERATIONS

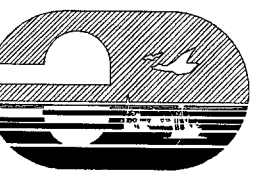
FPL ENERGY Seabrook Station
CHEMICAL & VOLUME CONTROL SYS
HEAT EXCHANGERS
DETAIL
PID- 1-CS-B20722



- FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2
- NOTES:
1. WORK THIS DWG WITH DWGS. 20720, 20722, & 20724 THRU 20729.
 2. ALL LINES, EQUIPMENT, COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX "CS", UNLESS NOTED OTHERWISE.
 3. VALVE FAILS WITH FLOW BY-PASSING THE DEMINERALIZERS & GOING TO CS-F-2
 4. BLIND FLOS. INSTALLED WITHOUT GASKET
 5. THIS VALVE TO BE CLOSED PRIOR TO ANY RESIN SLUICING OPERATIONS.
 6. REFER TO DRAWING VSL-20774 FOR VALVE LEAKOFFS.
 7. INSTRUMENT REFERENCE
A LETDOWN EXCHANGER CS-E-4 & CS-E-8 OUTLET TEMP. TIS-129 & TIS-382 ON DWG. 20722
 8. VENTS, DRAINS AND TEST CONNECTION CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-NHY-805111, UNLESS NOTED OTHERWISE.
 9. Δ INDICATES REVISION LEVEL.
 10. DELETED
 11. DELETED

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

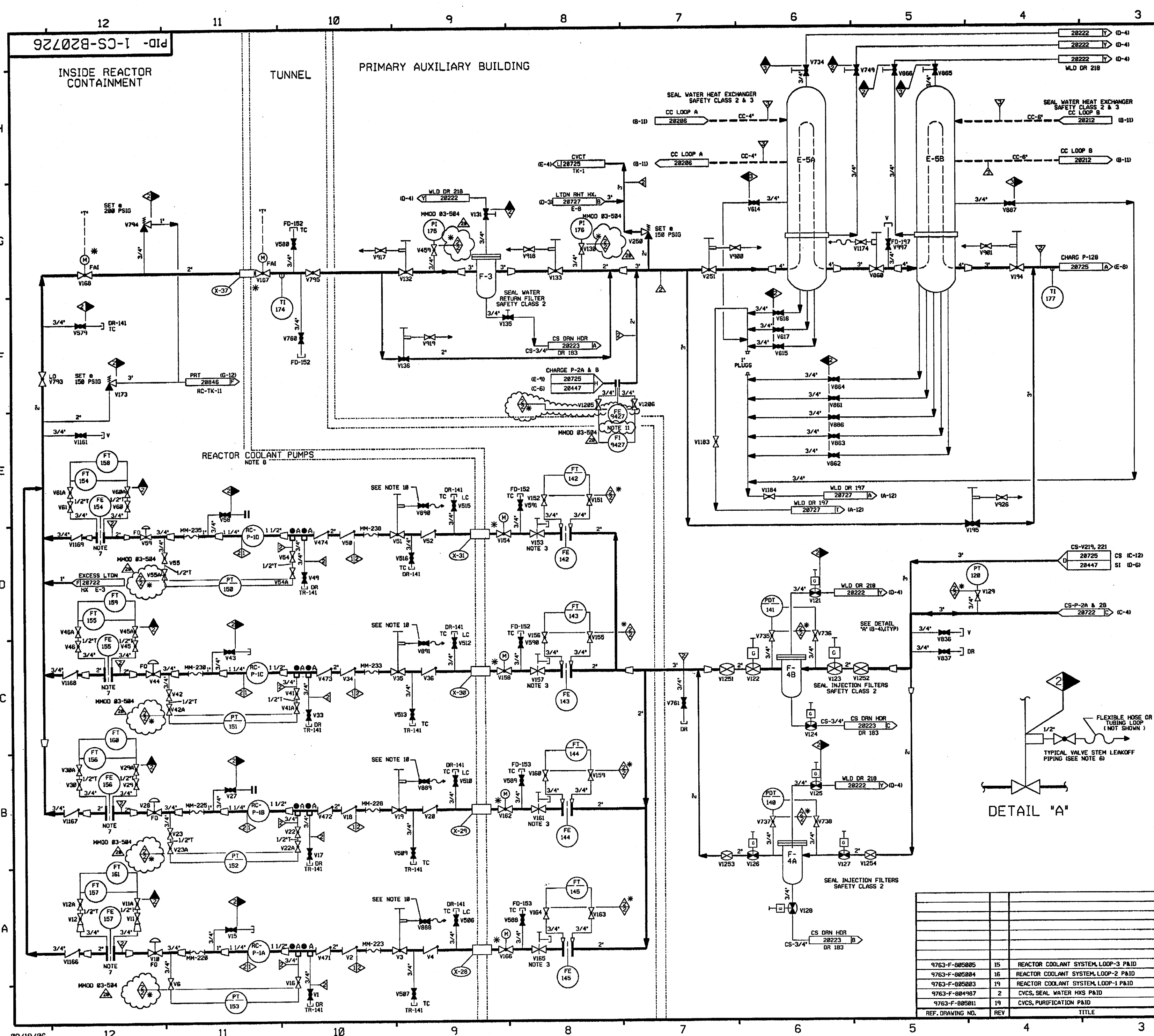
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19	11/16/06	JM	BCS	INCORP MMOD 03-504 DCR 00	
18	11/2/00	MPW	BCS	INCORP DCR 99-18 DCR 00	
17	6/12/00	BCS	DWS	PARTIAL INCORP DCR 99-18 DCR 00	
16	1/10/97	MPW	BCS	INCORP DCR 87-55 CA0 AND DCR 01	
15	3/21/96	BCS	DWS	INCORP MMOD 940574 CA#01	
14	2/28/96	DWS	BCS	INCORP MMOD 940574 CA#0	
13	3/4/94	MRB	BCL	INCORP. MMOD 92-553, CA01	
12	4/5/93	BCL	MPW	MMOD 91-507, CA0	
11	4/13/92	MRB	BCL	MMOD 91-515, CA0	
10	10/8/91	MRB	JM	INCORP. MMOD 91-511 CA0 AND MMOD 91-625, CA0	
9	2/26/91	MRB	RMC	INCORP. MMOD 90-648 CA01	
8	9/24/90	MRB	BMC	INCORP MMOD 90-516 CA0	
7	5/24/89	MRB	GPM	INCORPORATED DCR 87-264 CA 09 REVISED NOTE 2	
6	5/25/88	GPM	APL	INCORP. DCR 87-323 REV'D PIPING PER AS INSTALLED CONF.; VALVE POSITION PER DWG. 506272 ADDED DETAIL B, NOTE AT CS-V963 & CLASS DESIGNATION DELETED, REF. DWG. NNS-1 CL. BOUNDARY	
5	3/20/87	MRJ	WDS	ADDED 3" AND FLANGE PER ECA 99/116756A ADDED NOTE AND DWG COORD'S. FOR DETAIL A, ADDED CONT FLAG LETTERS AND NOTE 9, DELETED DETAIL "B".	
4	12/12/86	JDM	PAL	INCORP ECA 99/116756A	
3	10/17/86	MAP	WRD	ADDED DWG LOC COORD, DELETED CLASS BREAKS & CODE BREAKS, ADDED NOTE 8 REVISED TO CLARIFY DUPLICATION OF ASSOCIATED SYSTEMS.	
2	8/22/86	MPW	GRD	REINCORP. ECA 99/114510A, INCORP. NCR 82/11787, DCR 88/177A, ADDED VALVES RM-V8026 THRU V8030, ADDED VALVE V8069 PER 17-11272 CORRECTED CONTINUATIONS & REV'D PER AS-BUILT CONFIG.	
1	6/23/86	WES	DWS	INCORPORATED ECA 99/114510A, 99/100849A, INCORP. 805011-REV 19	
0	1/22/86	DWS	JDM	ISSUED FOR OPERATIONS	
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**FPL ENERGY**

Seabrook Station

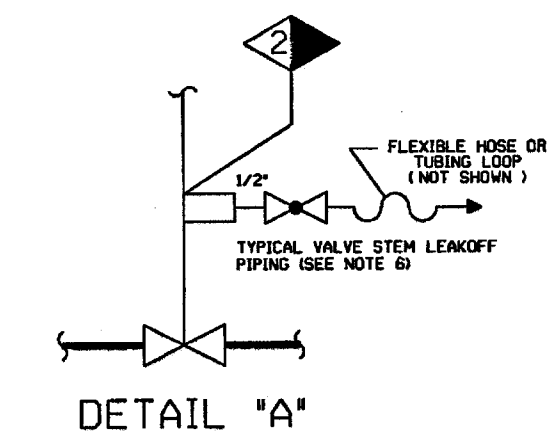
CHEMICAL & VOLUME CONTROL SYS.
PURIFICATION
DETAIL

PID- 1-CS-B20723



- FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2
- NOTES:
1. WORK THIS DWG WITH DWGS. 28720, 28722 THRU 28725 & 28727 THRU 28729.
 2. ALL PIPING, VALVES, EQUIP. & INSTRUMENTS HAVE SYSTEM PREFIX 'CS', UNLESS NOTED OTHERWISE.
 3. 2" NEEDLE VALVE WITH 1" INTERNALS.
 4. * INDICATES 3/8" FLOW RESTRICTOR INSTALLED. SEE APPLICABLE DETAIL ON DWG RC-28846.
 5. VENTS, DRAINS & TEST CONN. CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-MW-58811, UNLESS NOTED OTHERWISE.
 6. REFER TO DRAWING VSL-28774 FOR VALVE LEAKOFFS.
 7. ORIFICE PLATE IS NON-ASME.
 8. REACTOR COOLANT PUMPS SHOWN ON DWG'S.
 9. Δ INDICATES REVISION LEVEL.
 10. VALVE STEM LEAK-OFF ISOLATION VALVES V888, V889, V890 & V891 ARE TO BE MAINTAINED CLOSED. VALVE STEM LEAK-OFF TO BE CONSIDERED INOPERABLE.
 11. NON-ASME FLOW ELEMENT. MMOD 83-584

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED



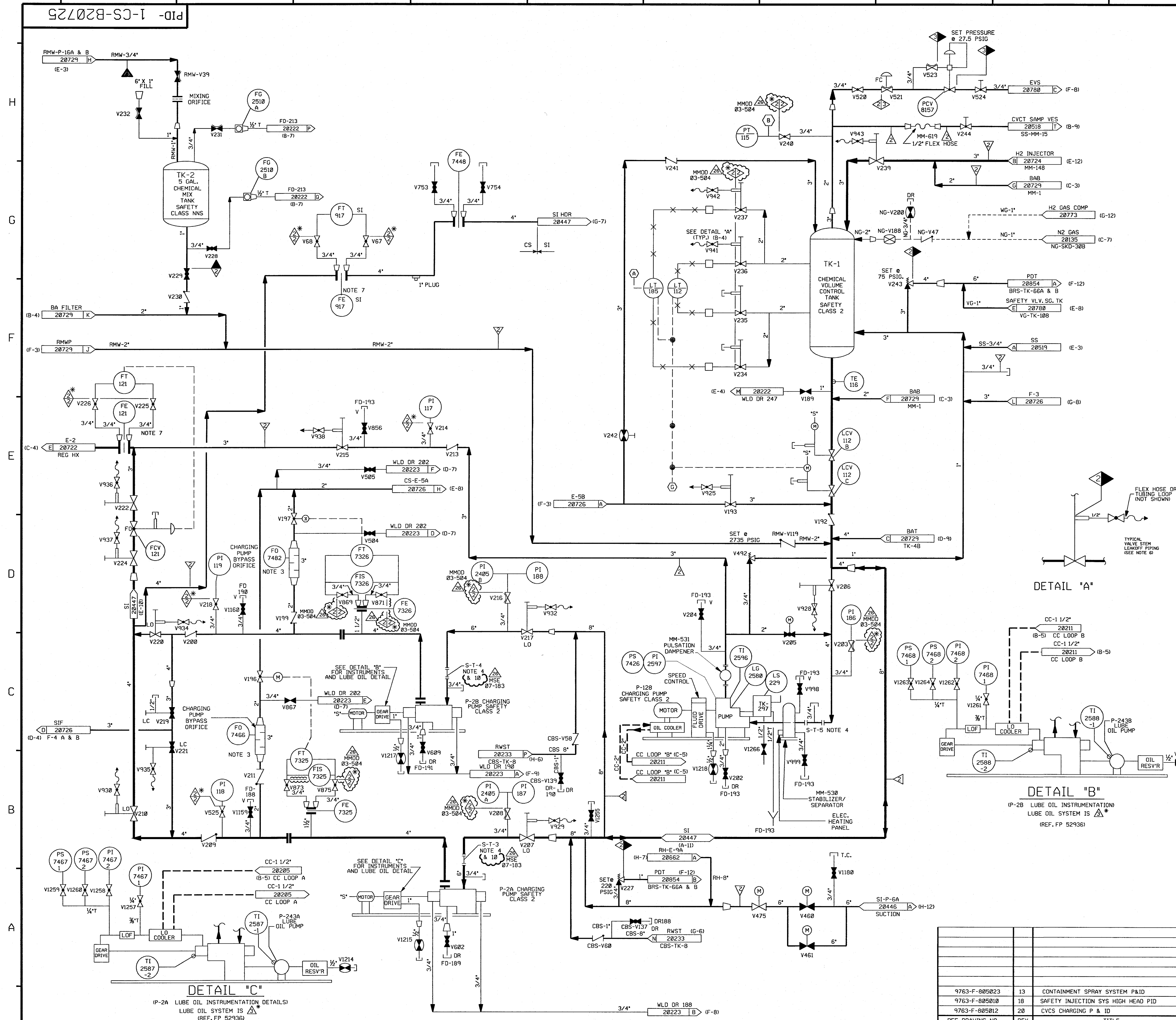
REV	DATE	DSGN	CHKD	CE	DESCRIPTION
28	9/22/06	BCS	JM	PJT	INCCORP MMOD 83-584 DCN-88
19	4/23/99	DWS	BCS	GRM	INCCORP DCR 980045 DCN-84
18	7/1/97	MPW	DWS	JEV	DCR 980087 CA-88 (FINAL)
17	6/13/97	DWS	MPW	JEV	INCCORP DCR 970088 DCN-88 & DCR 980087 CA-88 (PARTIAL)
16	5/16/97	MPW	DWS	WFZ	INCCORP DCR 97-16 CA-8
15	2/25/97	BCS	MPW	RCP	INCCORP DCR 94-46 CA-8
14	11/28/96	MPW	BCS	RBB	INCCORP DCR 88-118 CA-8
13	4-24-94	BCL	MPW	MMOD	INCCORP MMOD-93-517 CA-8
12	4-5-93	BCL	MPW	WFZ	INCCORP MMOD-91-587 CA-8

FPL ENERGY Seabrook Station

CHEMICAL & VOLUME CONTROL SYS.
SEAL WATER
DETAIL

PID- 1-CS-B20726

REF. DRAWING NO.	REV	TITLE
9763-F-805805	15	REACTOR COOLANT SYSTEM, LOOP-3 P&ID
9763-F-805804	16	REACTOR COOLANT SYSTEM, LOOP-2 P&ID
9763-F-805803	19	REACTOR COOLANT SYSTEM, LOOP-1 P&ID
9763-F-804987	2	CVCS, SEAL WATER HXS P&ID
9763-F-805801	19	CVCS, PURIFICATION P&ID



NOTES:

1. WORK THIS DWG WITH 20728 THRU 20724 & 20726 THRU 20729.
PORTIONS OF THIS DRAWING ARE DUPLICATED ON DRAWING SI-20444
DO TO DUAL SYSTEM FUNCTIONS.
2. AL LINES, EQUIPMENT, COMPONENTS & INSTRUMENTS HAVE
SYSTEM PREFIX "CS" UNLESS NOTED OTHERWISE.
3. MIN. OF 5' OF STRAIGHT RUN AFTER MIN. FLOW ORIFICE.
4. PERMANENT SPOOL PIECE INSTALLATION SHOWN TEMP.
SPOOL PIECE WITH STRAINER, PRESSURE INSTRUMENTS,
VENTS & DRAINS INSTALLED ONLY DURING FLUSHING
OPERATIONS & IS REMOVED BEFORE START-UP.
5. VENT AND DRAIN COCK BREAKS ARE AT THE DOWNSTREAM
END OF THE DRAIN ISOLATION VALVE PER 1-NHY-805111 UNLESS
NOTED OTHERWISE.
6. REFER TO DRAWING VSL-20774 FOR VALVE LEAKOFFS.

7. ORFICE PLATE NON-ASME
8. INSTRUMENT REFERENCE

- A TO LCV-112A & LV-112A ON DWG. 20724.
- B TO WG-PIC-8156 ON P&ID WG-20773
- G TO LCV-112E & LCV-112D ON DWG. 20233.

9.  INDICATES REVISION LEVEL.
10. CONNECTION USED FOR PRE-PLANNED MAKEUP STRATEGY. SEE FP59989.
-  26
MSE
07-183

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

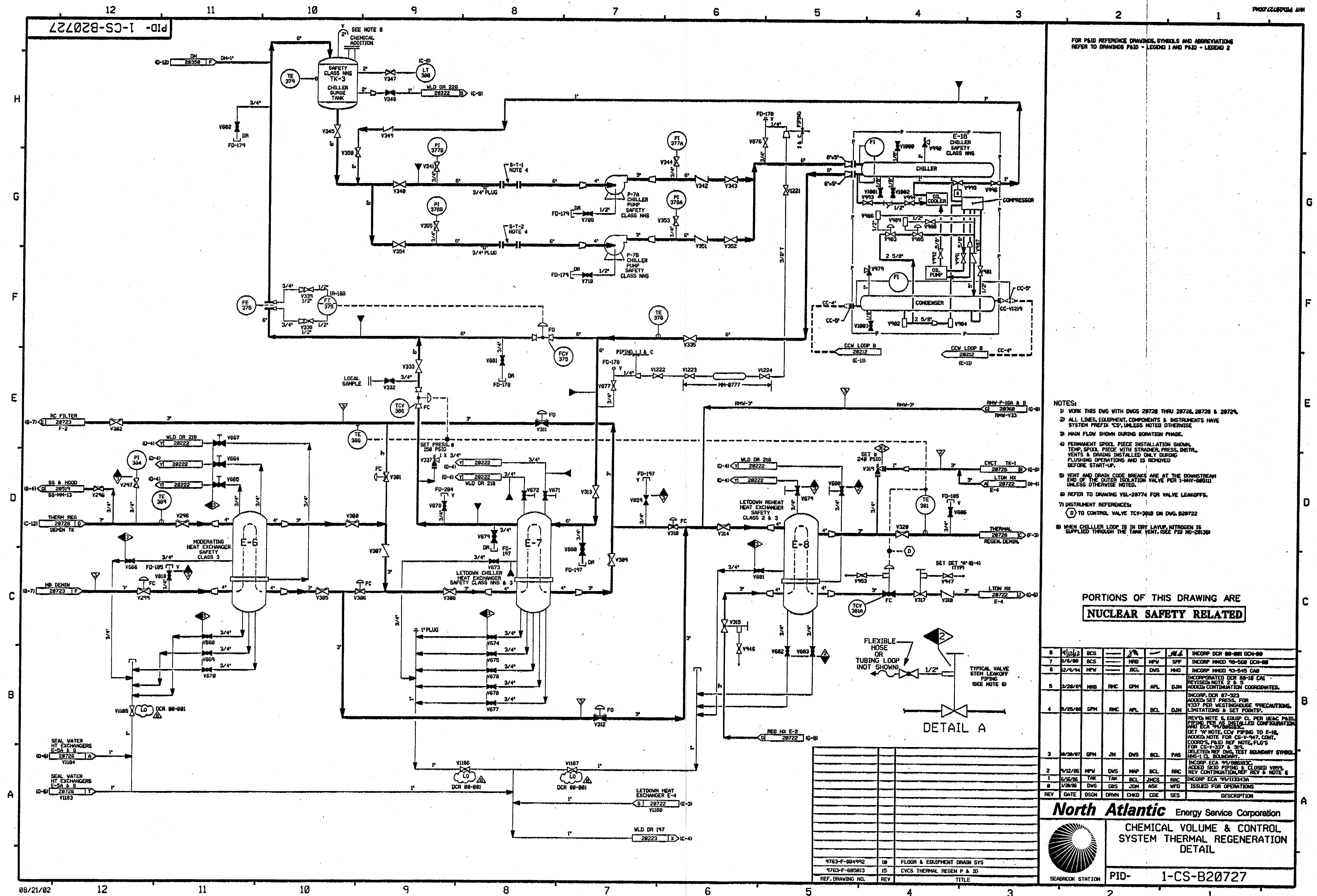
26	1-31-08	JM	GPS	BYF	INCORP. MMOD 03-504 DCN00 & MSE 07-183 REV 00
25	5/19/03	BCS	JM	MPW	REINCORP. MSE 02-312 REV. 00
24	3/5/03	BCS	JM	MPW	INCORP. MSE 02-312 REV. 00
23	5/12/02	MPW	JM	RRB	PARTIAL INCORP. DCR 02-0002 DCN 00
22	8/08/01	JM	BCS	RRB	INCORP. DCR 98-0048 DCN 00
21	4/05/01	BCS	MPW	RRB	PARTIAL INCORP. DCR 98-0048 DCN 00
20	11/7/00	BCS	MPW	RRB	INCORP. DCR 98-0052 DCN 00
19	11/2/00	MPW	BCS	RPN	INCORP. DCR 99-0018 DCN 00
18	10/10/00	BCS	MPW	WA	INCORP. DCR 99-0036 DCN-00
17	10/13/00	BCS	MPW	JCM	INCORP. MMOD 99-507 DCN-00
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

FPL ENERGY

Seabrook Station

CHEMICAL & VOLUME CONTROL
CHARGING SYSTEM
DETAIL

PID- 1-CS-B20725



FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

NOTES:

- 1) WORK THIS DWG WITH DWGS 28720 THRU 28726, 28728 & 28724.
- 2) ALL LINES, EQUIPMENT, COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX 'CS', UNLESS NOTED OTHERWISE
- 3) MAIN FLOW SHOWN DURING BORATION PHASE.
- 4) PERMANENT SPOOL, PIECE INSTALLATION SHOWN, TEMP. SPOOL, PIECE WITH STRAINER, PRESS. INSTR., VENTS & DRAINS INSTALLED ONLY DURING FLUSHING OPERATIONS AND IS REMOVED BEFORE START-UP.
- 5) VENT AND DRAIN CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-INCH-60611 UNLESS OTHERWISE NOTED.
- 6) REFER TO DRAWING YSL-28774 FOR VALVE LEAKOFFS.
- 7) INSTRUMENT REFERENCES:
 - (D) TO CONTROL VALVE TCV-3818 ON DWG. B2972
- 8) WHEN CHILLER LOOP IS IN DRY LAYUP, NITROGEN IS SUPPLIED THROUGH THE TANK VENT, SEE FIG. NY-28139

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

8	9/12/72	BCS		Y/N	—	SL	INCORP DCR 88-881 DCM-88
2	5/6/88	BCS		NBL	MPW	SFO	INCORP INMCO 88-568 DCM-88
6	2/4/84	MPW		MCL	DWS	MPH	INCORP INMCO 93-545 CAB
5	3/28/84	NBL	RMC	GPM	APL	DJM	INCORPORATED DCR 88-18 CMI REVISED NOTE 2 & 3 ADDED CONTINUATION COORDINATES.
4	5/25/86	GPM	RMC	APL	BCL	DJM	INCORP. DCR 87-323 ADDED SE PRESS. FOR NOTES FOR WESTINGHOUSE PRECAUTIONS. LIMITATIONS & SET POINTS.
3	10/28/87	GPM	JM	DWS	BCL	PMS	REV'D NOTE 6 EQUIP CL PER IEAC PAID. PIPING PER AS INSTALLED CONFIGURATION AND ECA 94/88183C. DET "A" NOTE, CCW PIPING TO E-16, ADDED NOTE FOR CS-V-947, CONT. COORDS, PAID REF NOTE, FLTG'S FOR CS-V-337 & 34. DELETED REF NOTE SET BOUNDARY SYMBOL NMS-1 CL BOUNDARY.
2	9/12/85	MPW	DWS	MAP	BCL	RRC	INCORP ECA 94/88183C ADDED SCW PIPING & ADDED VESS. REV CONTINUOUSLY. REV & NOTE 6
1	6/8/86	YAK	TAK	DCL	JMCS	RBC	INCORP ECA 94/13343A
8	1/28/86	DWS	GBS	JDM	ASK	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CDE	SECS	DESCRIPTION

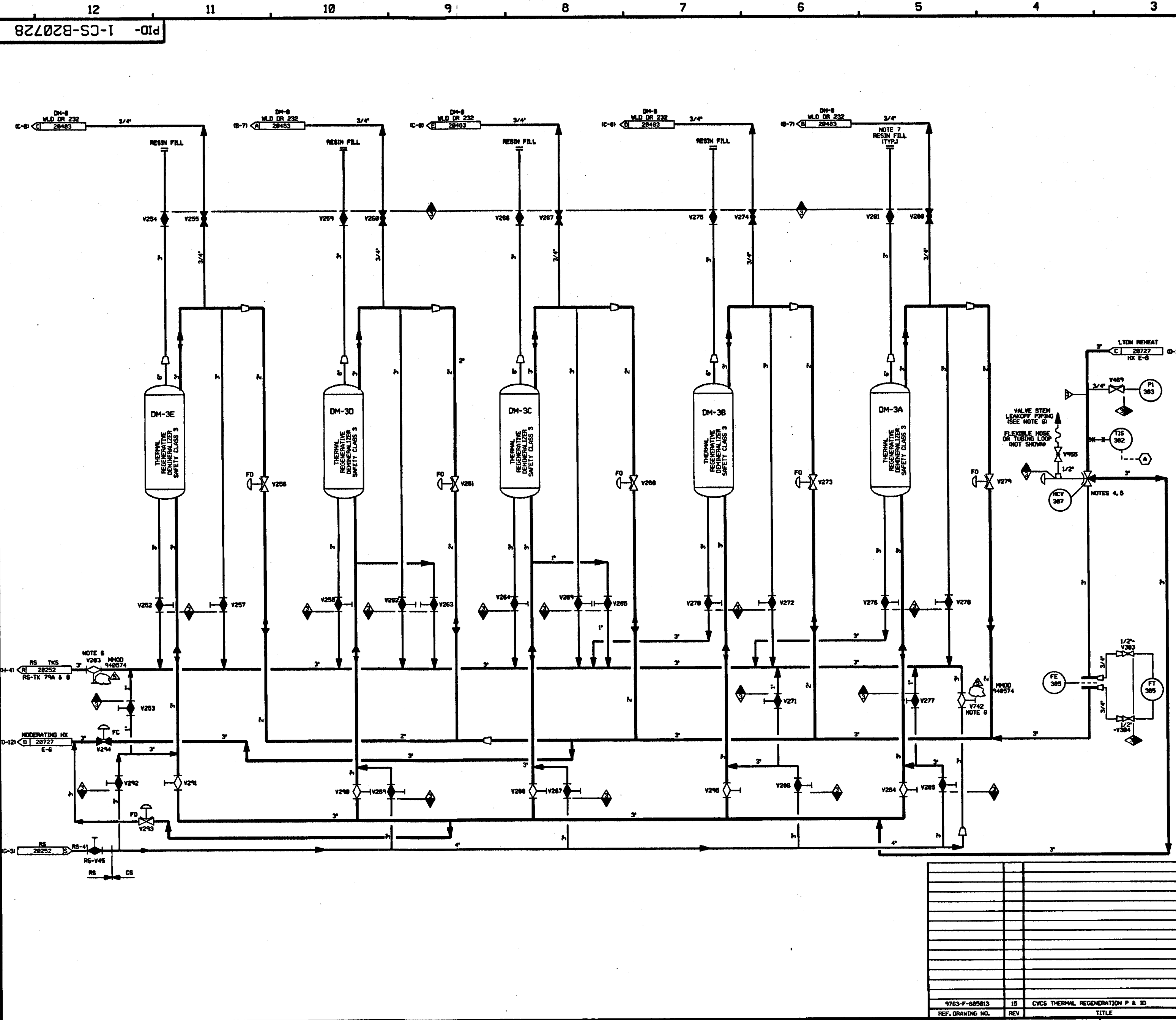
North Atlantic Energy Service Corporation

CHEMICAL VOLUME & CONTROL SYSTEM THERMAL REGENERATION DETAIL



SEABROOK STATION

PID- 1-CS-B20727



FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

- NOTES:
- 1) WORK THIS DWG WITH DWGS 28728, 28722 THRU 28727 & 28729.
 - 2) ALL PIPING, VALVES, EQUIPMENT & INSTRUMENTS HAVE SYSTEM PREFIX 'CS' UNLESS NOTED OTHERWISE.
 - 3) MAIN FLOW IS SHOWN IN THE BORATION PHASE.
 - 4) ALL VALVES ALIGNED FOR BORON REMOVAL DILUTION.
 - 5) FAILS TO BORON RELEASE POSITION (BORATION).
 - 6) THESE VALVES TO BE CLOSED PRIOR TO ANY RESIN SLICING OPERATIONS.
 - 7) INSTALLED BLIND FLANGES WITHOUT GASKET.
 - 8) REFER TO DRAWING VSL-28774 FOR VALVE LEAKOFFS.
 - 9) INSTRUMENT REFERENCES:
 - A TO THERMOWELL TIS-129 ON DWG 28722

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

5	2/28/76	SCS	—	DAJ	WKS	WKS	INCORP 448574 CAP#
4	2/28/76	DWS	—	SCS	WKS	WKS	INCORP 448574 CAP#
3	2/28/76	WKS	—	SCS	WKS	WKS	INCORP 448574 CAP#
2	8/21/87	OPN	—	HIV	BCL	WKS	REV'D NOTE 1, 2 & 3. REF DWG REV NO. 1. ADDED PAID REF DWG NOTE CONT. CORRUPT & NOTES FOR VLV V273 DELETED. REF DWG 448574 CL. BOUNDARY.
1	8/22/88	BCL	—	TAK	WKS	PHI	ADDED CONTINUATION DETAILS, REVISED VALVE TYPE AND NOTE 8.
8	1/28/88	DWS	—	GJK	JDM	ASK	ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION

North Atlantic Energy Service Corporation

**CHEMICAL VOLUME & CONTROL SYS
THERMAL REGENERATION
DETAIL**

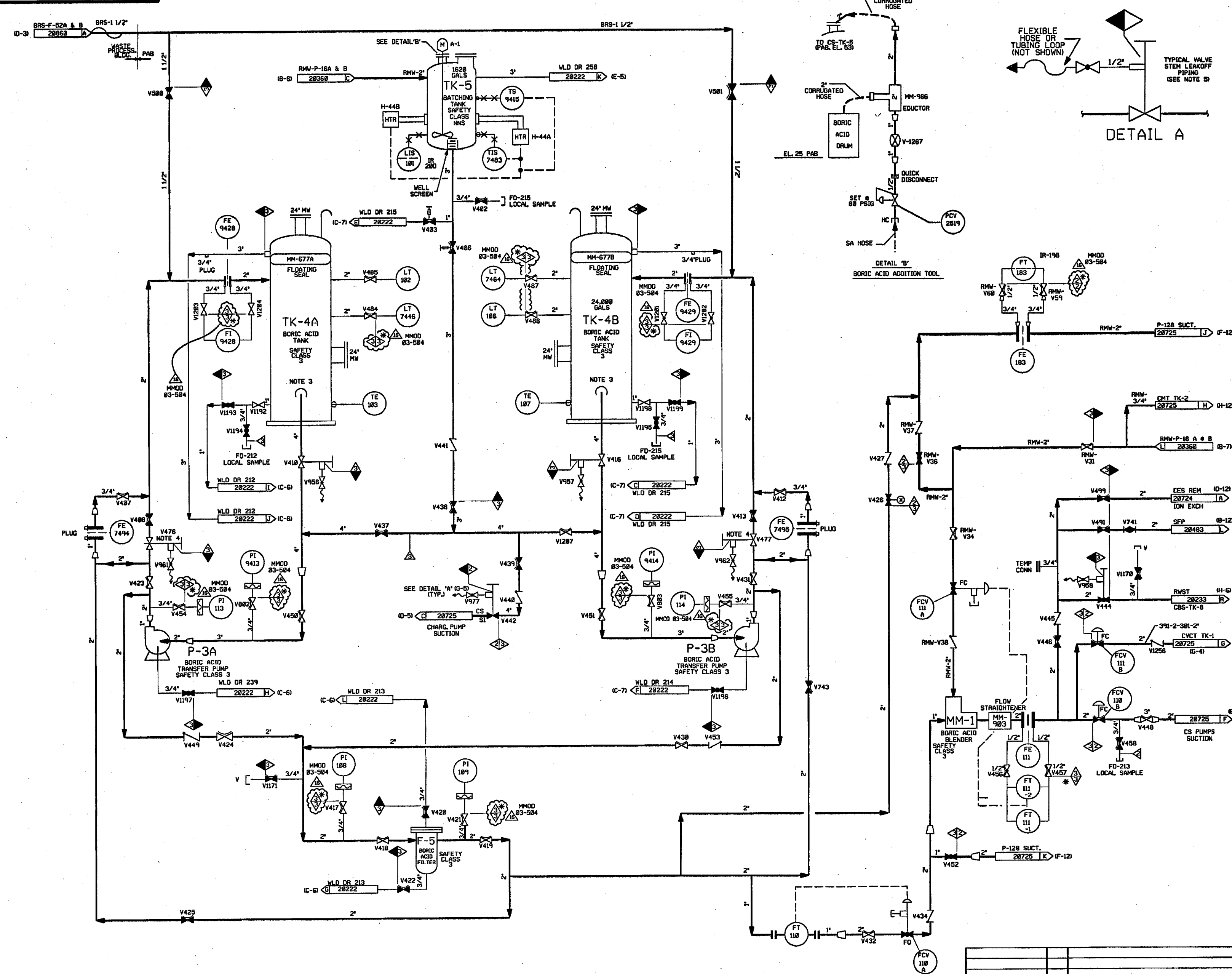
PID- 1-CS-B20728

9763-F-085813	15	CVCS THERMAL REGENERATION P & ID
REV. DRAWING NO.	REV.	TITLE

83/28/96

PID-1-CS-B20729

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2



- NOTES:
1. WORK THIS DWG WITH 20720 & 20722 THRU 20728.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX CS, UNLESS NOTED OTHERWISE.
 3. ALL BORIC ACID & BATCHING TANK EQUIP & PIPING SHOWN IS LOCATED IN AREA MAINTAINED AT A CONTROLLED TEMPERATURE.
 4. VALVE IS LOCKED INTO POSITION DURING OPERATIONAL TESTING TO LIMIT PUMP RUNOUT TO 75 GPM WHEN TRANSFERRING BATCHING TANK CONTENTS TO BORIC ACID TANK.
 5. REFER TO DWG VSL-20774 FOR VALVE LEAKOFFS.
 6. DELETED

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

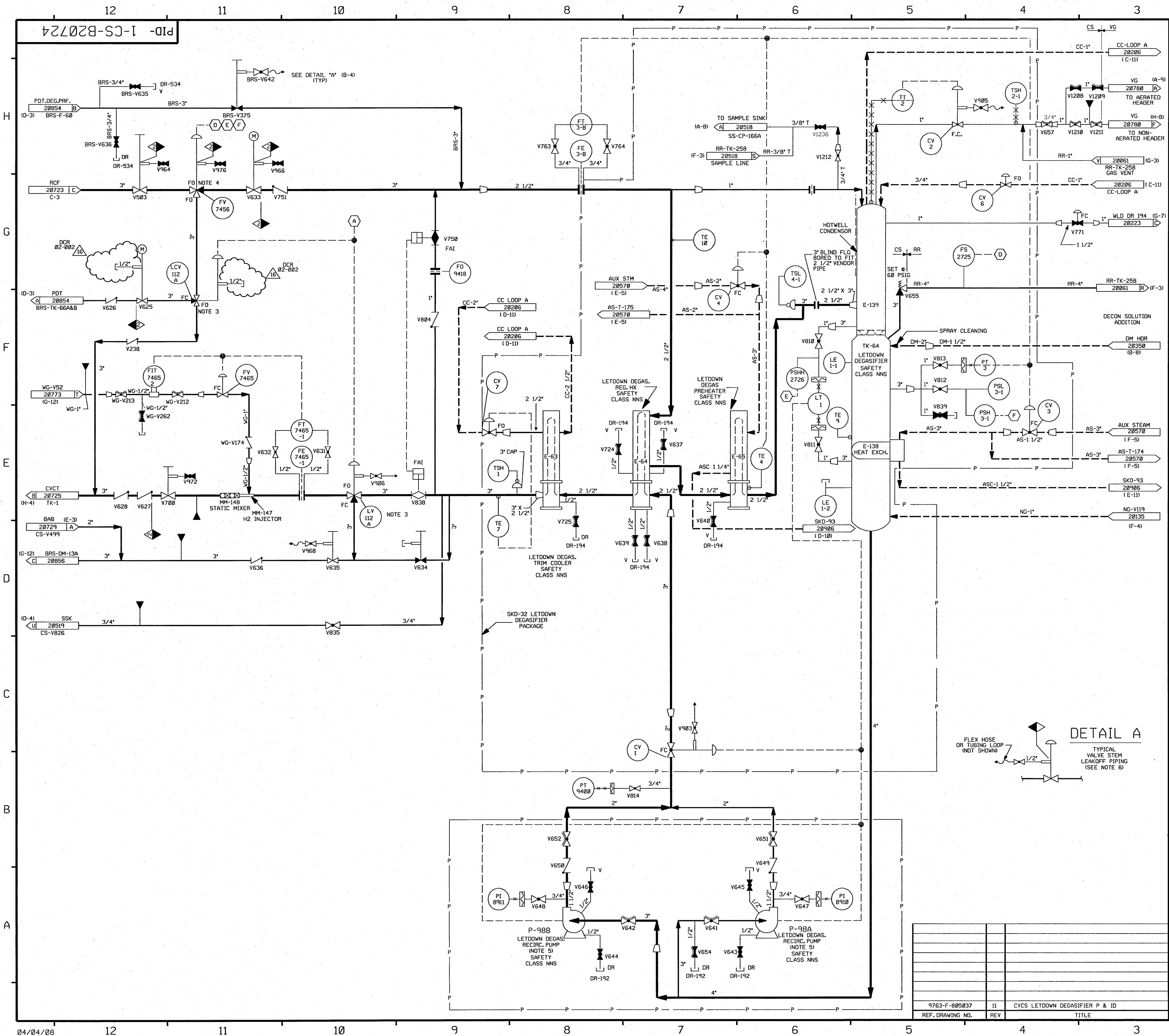
16	11/14/96	JM	BS	AB	INCORP MMOD 03-504 DCM 00
15	1/27/85	BS	JM	RRB	INCORP CR 05-00034 REV. 00
14	10/16/83	BS	MPW	RRB	INCORP DCR 02-013 DCM-00, 01, 02
13	8/27/83	BS	JM	MR	INCORP MMOD 03-515 DCM-00
12	5/12/83	JM	MPW	BS	INCORP CR 02-07592 REV 00
11	4/22/99	DWS	RWS	GRM	INCORP DCR 980052 DCM-00 DCR 980045 DCM-00 & REINCORPORATED DCR 980039 DCM-00
10	9/16/97	BS	MPW	BAW	INCORP DCR 95-30 DCM 03
9	6/13/97	MPW	DWS	WNF	INCORP DCR 95-30 DCM 00
8	10/0/92	DWS	MRB	DMP	INCORP DCR 090073 CA#0 & 1
7	4/28/92	MRB	BCL	RRB	INCORP MMOD 91-515 CA0
6	12/16/91	FCB	RMC	BCL	INCORP MMOD 91-511 CA0
5	3/18/89	MRB	GPM	MJY	INCORPORATED DCR 88-142 CA0 REVISED NOTE 2, V403 & V406 OPERATOR SYMBOL
4	12/15/87	GPM	DWS	PAG	REVISED NOTE 5, VALVE NO. ADDED FLS AT FT110, PLUGS AT 7494 & 7495, NOTE FOR V353, CONT. CDR'S CLASS DESIGNATION, PAID REF DWG NOTE & USE: PAID REF DWG DELETED REF DWG NNS-1 CL BOUNDARY, REDUNDANT SYS DWS CONT.
3	10/6/86	JDM	MAP	RRR	INCORP ECA'S 88/118317A & 88/118448A
2	8/22/86	BCL	WRD	PHH	REVISED TO REFLECT AS-BUILT CONFIGURATIONS, ADDED HEAT TRACING & CONTINUATION REF. REVISED NOTE 5.
1	6/13/86	JDM	DWS	RRR	UPDATE REF DWG REV NO. & REVISE ACCORDINGLY, INCORP ECA 82/1745 REVISED, RM SUPPLY TO TK-1, INCORP ECA 94/12018A & ECA 94/800202B.
0	1/22/86	DWS	JDM	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

FPL ENERGY Seabrook Station

**CHEMICAL & VOLUME CONTROL SYS.
BORIC ACID
DETAIL**

PID- 1-CS-B20729

REF. DRAWING NO.	REV	TITLE
9763-F-005017	12	SPENT FUEL POOL COOLING & CLEAN-UP
9763-F-005014	16	CVCS BORIC ACID P & ID



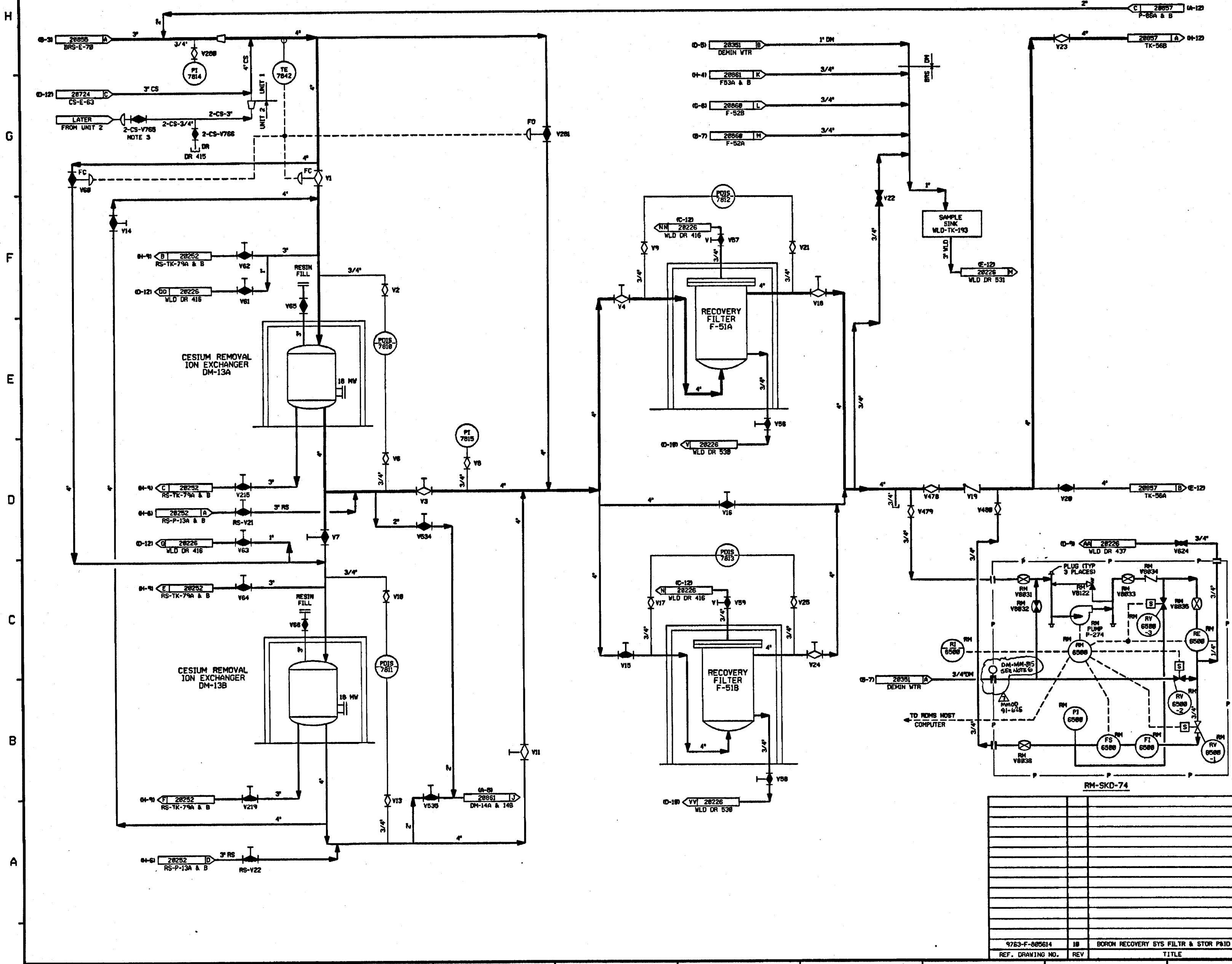
FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

NOTES:
1. WORK THIS DWG WITH DWGS 20720, 20722, 20723, & 20725 THRU 20729.
2. ALL PIPING, VALVES, EQUIP & INSTRUMENTS HAVE SYSTEM PREFIX 'CS', UNLESS NOTED OTHERWISE.
3. VALVE FAILS WITH FLOW TO CVCT
4. VALVE FAILS WITH FLOW TO LCV-112A
5. SEE DWG 20354 FOR WATER SUPPLY TO PUMP DOUBLE MECHANICAL SEALS.
6. REFER TO DWG VSL-20774 FOR VALVE LEAKOFFS.
7. INSTRUMENTATION REFERENCES
A CHEM VOL CONTROL TK (CS-TK-1) LEVEL LT-112E & LT-185
ON DWG CS-20725
B TO 1-CS-CV-3, 1-CS-CV-4 (AS-20570), 1-DM-V285 (DM-20350) AND 1-CS-FV-7456 (CS-20724).
8. Δ INDICATES REVISION LEVEL

PORTIONS OF THIS DRAWING ARE NUCLEAR SAFETY RELATED					
	4/16/08	JM	BS	JM	INCORP DCR 02-002 DCN-12, 15
	9/28/06	JM	SPF	RRB	INCORP MMOD 03-504 DCN 00
	3/21/06	BCS	JM	RRB	INCORP MSE 05-160, REV. 00
	2/27/01	BCS	MRB	RCP	INCORP MMOD 98-641 DCN-00
	4/23/99	DWS	BCS	GRM	INCORP DCR 980045 DCN-04
	3/3/93	BCL	MRB	DJM	INCORP DCR 880179 CA#16
	11/02/92	DWS	MRB	DJM	INCORP DCR 880179 CA#0
	10/26/92	DWS	BCL	WFZ	INCORP DCR 880091 CA#0, CHANGE SYS PREFIX ON CS-V52 TO WG-V52 PER DWG 20773.
	4/13/92	MRB	BCL	JEV	INCORP MMOD 91-515 CA0
	12/28/89	MRB	PAL	ES	INCORP DCR 86-113 CA 1
					REVISED: VALVE SYMBOLS V640, 638, 639, 725, 637, 724, 654, 641, 642, 651 & 652 PER FP 53072, ADDED LINE SIZE & RESTRICTING ORIFICE AND FLANGES TO INLET HOTWELL CONDENSOR PER 53758, FLANGES TO CLARIFY LINE SIZE BOUNDARY FOR INLET TO E-138 FROM E-65, F&I DESIGNATION FOR V750 AND V639 PER NHT DWG 508274 DELETED: F&I DESIGNATION FOR V625 AND V633 PER NHT DWG 508274 AND 508272 F&I DESIGNATION FOR V639 PER U&C DWG 085937.
6/30/88		GPM	APL	PAS	REVISED: EQUIP. CL PER U&C P&ID, REMOVED DUPLICATED PIPING, REV'D NOTE 6, DELETED FLEX HOSE & DESIGNATED VALVES AS CLOSED FOR CS-V907, 964, 965, 966, 976 & 972 PER NCR 86/145A, ADDED NOTE FOR CS-V907 & CAPILLARY SYMBOL.
12/15/87		GPM	DWS	PAS	
1/23/87		JDM	WRD	RRB	INCORP DCR 86-113, REVISED VALVE TYPE PER FP.
10/16/86		JDM	WRD	RRB	INCORP NCR 95/116A & 99/113027A & ECA 19/105527C, ADDED CON REFS NOTE 8, REMOVED DUPLICATED PIPING SHOWN ON NCR 95/116A, ADDED PREFIX TO CV-4, CV-5, CORRECTED VALVE TYPES PER U&C P&ID
8/22/86		MPW	WRD	PHH	REVISED CONTINUATIONS
6/16/86		DWS	DWS	RRB	DESIGN CHG1 RESOLVED PER F-805037-R11 & 2 RESOLVED PER ECA 19/104469A, REMOVED CS-SKD-93, DM-V285, DM-V234 & DM DRN (V382) FROM DWG, ADDED BRS, AS, ASS, CONT, INCORP ECA 05/1061028 & ECA 19/106028C.
1/22/86		DWS	JDM	WFD	ISSUED FOR OPERATION, ECA 19/104469A
DATE	DSGN	CHKD	CE	DESCRIPTION	
FPL ENERGY Seabrook Station					
CHEMICAL & VOLUME CONTROL SYS. LETDOWN DEGASIFIER DETAIL					
PID- 1-CS-B20724					

PID-1-BRS-B20856

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

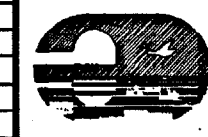


- NOTES:
- 1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX UNLESS NOTED OTHERWISE.
 - 2. WORK THIS DWG WITH DWGS 28053, 28054, 28055, 28057, 28058, 28059, 28060 & 28061.
 - 3. VALVE IS CLOSED DURING UNIT 2 CONSTRUCTION.
 - 4. Δ INDICATES REVISION LEVEL.
 - 5. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS UNLESS NOTED OTHERWISE.
 - 6. SPECTACLE FLANGE SHOWN IN NORMAL POSITION REVERSED ONLY DURING PURGING OPERATIONS.

7	10/1/91	MRB	FCB	JJA	APL	ES	INCCORP. HMOD 91-625 CMB
6	9/18/91	GPH	FCB	JH	MRB	MAC	INCCORP. DCR 98-14 CMB
5	2/28/91	MRB	FCB	RMC	APL	BCL	INCCORP. HMOD 98-648 CMB
4	10/29/90	MRB	FCB	JH	APL	BCL	INCCORP. HMOD 98-581 CMB ADDED NOTE 5 FOR INFORMATION
3	12/12/89	HPW	DWS	PAI	BCL	RRC	ADDED CONT. REF. LOC'S VALVE RM V8222 PER FP-71282 AND NOTE 4.
2	9/26/88	HAP	DWS	JDM	BCL	RRC	ADDED VALVING & INSTRUMENT INFO FOR RM-SKD-74 PER FP-71282. REVISED DWG CONTINUATION DELETED REF. DWGS 10/1/91.
1	6/23/88	GD	SKN	DWS	JMS	RRC	INCCORP. ECA 19/0828A & 19/082819A ITEM #1 RESOLVED PER ECA 19/082819A
0	1/13/88	GD	SKN	JDM	ASF	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION

PSNH

PUBLIC SERVICE OF NEW HAMPSHIRE



BORON RECOVERY SYSTEM
FILTRATION
DETAIL

SEABROOK STATION

PID- 1-BRS-B20856

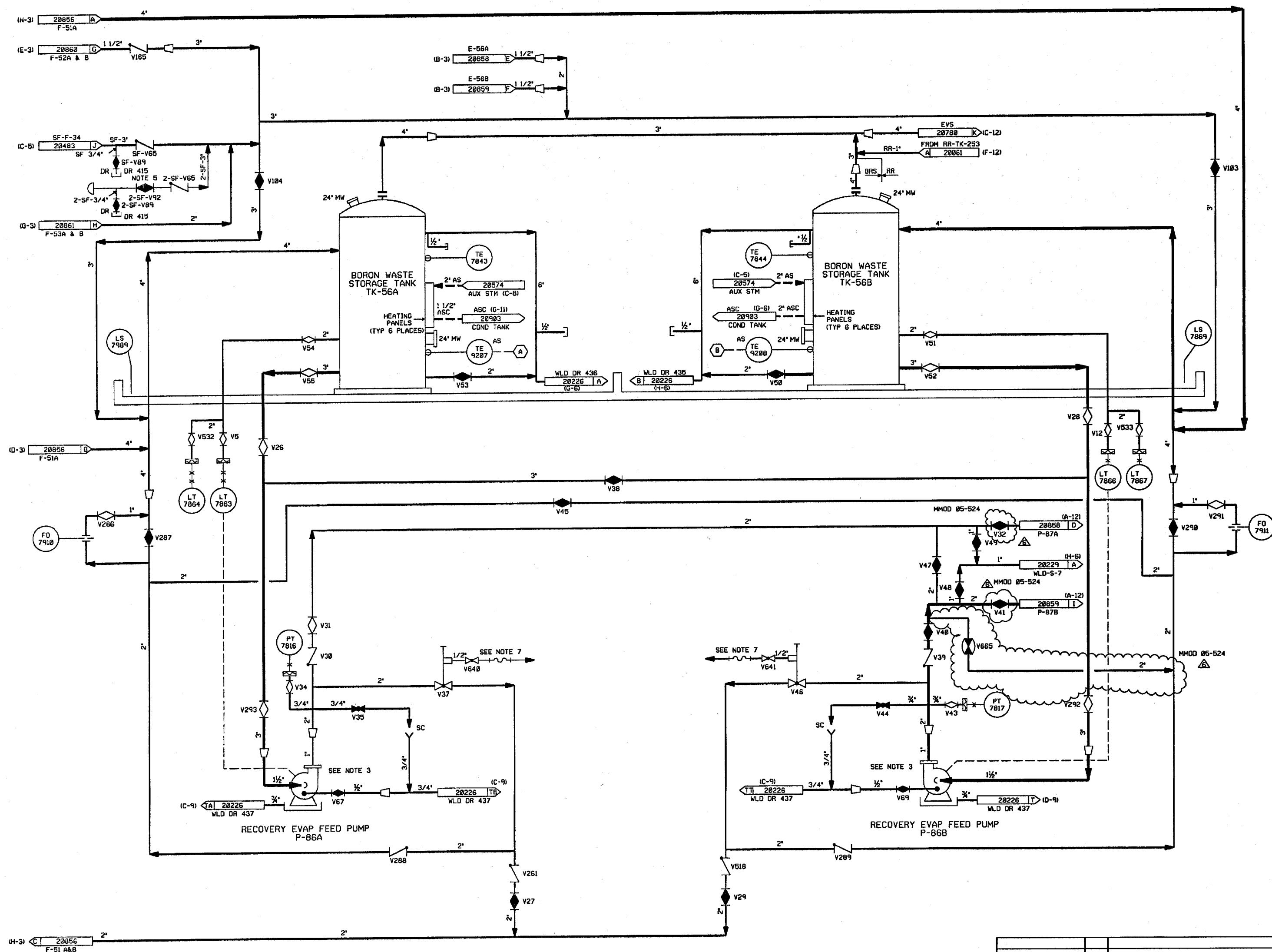
783-F-805614 18 BORON RECOVERY SYS FILTR & STOR P&ID
REF. DRAWING NO. REV TITLE

PID-1-BRS-B20857

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

H
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A



- NOTES:
1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX "BRS" UNLESS NOTED OTHERWISE.
 2. WORK THIS DWG WITH DWG'S 20853, 20854, 20855, 20856, 20858, 20859, 20860 & 20861.
 3. SEE DRAWING DM-20353 FOR WATER SUPPLY TO PUMP DOUBLE MECHANICAL SEALS.
 4. INSTRUMENT REFERENCES:
(A) TO TV-9287 ON DWG AS-20574 (D-11)
(B) TO TV-9288 ON DWG AS-20574 (E-10)
 5. VALVE IS CLOSED DURING UNIT 2 CONSTRUCTION
 6. Δ INDICATES REVISION LEVEL
 7. REFER TO DRAWING VSL-20774 FOR VALVE LEAKOFFS.
 8. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NMS, UNLESS NOTED OTHERWISE.

6	6/13/04	BCS	JLA	DJM	INCORP. MMOD 05-524 DCH-08, 03
5	11/17/02	MRB	BCL	DJM	INCORP. DCR 87-84 CAB REVISED NOTE 4, VALVE SYMBOL PER NOTE 5. ADDED: FLOW ARROWS, NOTE 6, DWG LDC COORDS. DELETED: NMS-1 SYMBOL.
4	5/28/02	MRB	MPW	DMS	INCORP. MMOD '91-511 CAB
3	6/18/87	GPH	BCL	VWS	REVISED TO CLARIFY DUPLICATION OF ASSOC. SYS. REF. LETTER FOR CONT. DWG'S ADDED NOTE 7, CONT. COORDS DELETED: REF. DWG'S.
2	4/12/86	MPW	BCL	RAC	ADDED CONTINUATIONS & REV. LOCATION OF PT-7816, 7817, 7863, 7864, 7866 & 7867 PER ERECTION 100'S 7914 VALVE DOWN
1	6/17/86	GO	JMCS	RAC	REVISED DWG ITEMS 1 & 2 PER REF DWG 085614-REV 10, INCORP. ECA 19/35890 & ECA 19/1161240, REV. VALVE TAG
0	1/13/86	GO	ASK	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHWD	CE	DESCRIPTION

FPL ENERGY

Seabrook Station



BORON RECOVERY SYSTEM
STORAGE
DETAIL

PID- 1-BRS-B20857

9763-F-885614	10	BORON RECOVERY SYS-FLTRA & STORG P&ID
REF. DRAWING NO.	REV	TITLE