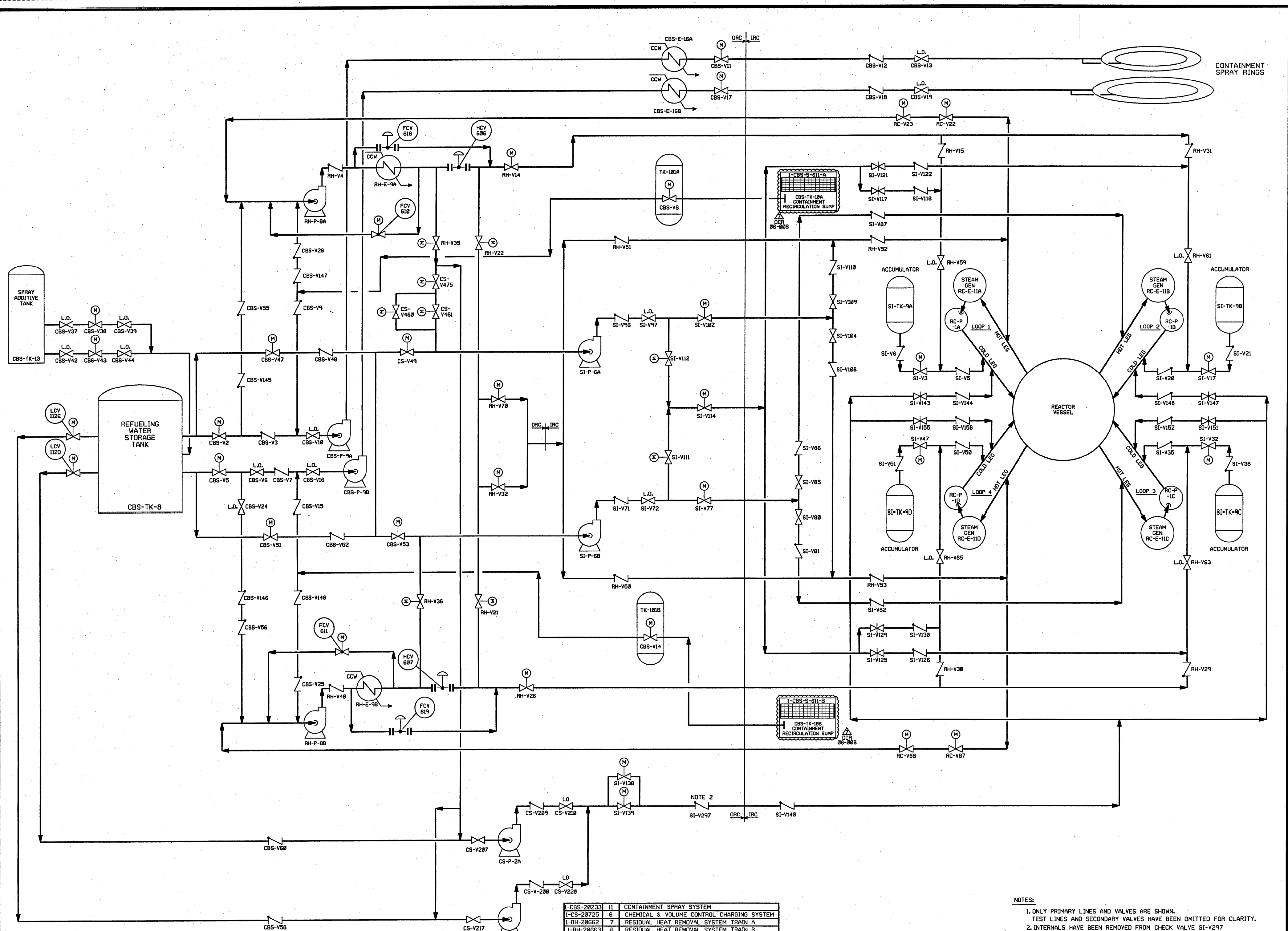


FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
- ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION HAVE SYSTEM PREFIX CBS, UNLESS NOTED OTHERWISE.
  - THE CBS IS A ONE (1) DRAWING SYSTEM, AN OVERVIEW IS NOT REQUIRED. PORTIONS OF THIS DRAWING ARE DUPLICATED ON DWG. SI-20448 DUE TO DUAL SYSTEM FUNCTIONS.
  - INSTRUMENTATION SYMBOLS.  
(A) THIS DRAWING  
(B) CONTAINMENT SPRAY SIGNAL P  
(C) INTERLOCK FROM RC-V22, RC-V23 ON DWG. RC-20841  
(D) INTERLOCK FROM RC-V87, RC-V88 ON DWG. RC-20844  
(E) INTERLOCK FROM RH-V35, ON DWG. RH-20662 AND V8 THIS DRAWING  
(F) INTERLOCK FROM RH-V36, ON DWG. RH-20663 AND V14 THIS DRAWING  
(G) CS-TK-1 LEVEL LT-185, LT-112 ON DWG. CS-20725  
(H) STEAM SUPPLY VLV. AS TV-9232 ON DWG. AS-20571  
(I) STEAM SUPPLY VLV. AS TV-9231 ON DWG. AS-20571
  - VENT AND DRAIN CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-NHY-60511 UNLESS NOTED OTHERWISE.
  - DELETED
  - INDICATES REVISION LEVEL
  - DELETED
  - CLASS BREAK OF THE OVERFLOW LINE IS AT THE TANK TO NOZZLE WELD.
  - CONNECTION USED FOR PRE-PLANNED MAKEUP STRATEGY. SEE FFS9989.
  - BLIND FLANGE IS INSTALLED WHEN HOSE IS NOT CONNECTED.

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

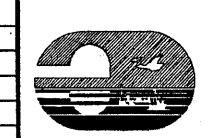
37	11/12/12	JM	BCS	STB	INCORP EC*274961
36	5/2/11	JM	BCS	STB	INCORP EC*145086
35	9/29/09	JM	BCS	TAS	INCORP EC*12725
34	9/24/09	JM	BCS	TAS	PARTIAL INCORP EC*12725
33	7/27/09	GPS JM	BCS	TAS	REINCORP. EC12585 & EC5463 (06DCR10 DCN 00 & 03) ADDED VALVE FUNCTION LABELS & CLASS BREAKS. INCORP. AR*6779
32	04/30/08	BCS	JM	TMD	INCORP. DCR 06-008 DCN-00
31	1-9-08	BCS	JM	TMD	INCORP. MSE 07-144 REV. 00, MSE 07-183 REV. 00, DCR 06-10 DCN-21
30	6-29-07	BCS	JM	RRB	INCORP. DCR 06-010 DCN-00 & 03
29	10-17-06	JM	BCS	RRB	INCORP. DCR 02-009 DCN 00 & MM0D 03-504 DCN 00
28	6/23/05	BCS	MW	WAK	INCORP. MSE 04-205 REV. 00
27	4-6-05	JM	MPW	RRB	INCORP. MSE 04-196 REV. 01
26	5/11/02	JM	MPW	RRB	INCORP. DCR 01-0012 DCN*00 AND MSE 99-0324 REV. 00
25	2/14/02	BCS	JM	DJM	INCORP. CR 01-02531 REV. 00
24	10/4/00	BCS	JM	HWM	INCORP. DCR 99-036 DCN-00
23	8/23/00	BCS	MPW	AB	PARTIAL INCORP. DCR 99-036 DCN-00
22	8/13/99	MPW	DWS	GRM	INCORP. DCR 97-31 DCN-05, 06
21	8/11/98	BCS	DWS	GRM	INCORP. DCR 97-31 DCN-00, 04
20	11/30/95	BCS	MPW	DMQ	INCORP. MM0D 95-509 CA0
19	11/11/95	MPW	BCS	RRB	PARTIAL INCORP. MM0D 95-509 CA0
18	12/9/94	MPW	BCL	MHO	INCORP. MM0D 93-545 CA0
17	4/23/92	MRB	BCL	JEV	INCORP. MM0D 91-515 CA0
16	9/5/91	GPM	JM	IW	INCORP. DCR 86-239 CA0
15	5/1/90	MRB	JM	RPN	INCORP. MM0D 89-0552 CA 0
14	11/11/89	MRB	GPM	GRM	INCORP. DCR 87-311 CA19 TRAIN B REVISIONS.
13	9/6/89	MRB	APL	WFD	PARTIAL INCORP. DCR 87-311 CA07 TRAIN A REVISIONS.
REV	DATE	DSGN	CHKD	CE	DESCRIPTION



1	11	CONTAINMENT SPRAY SYSTEM
1	6	CHEMICAL & VOLUME CONTROL CHARGING SYSTEM
1	7	RESIDUAL HEAT REMOVAL SYSTEM TRAIN A
1	6	RESIDUAL HEAT REMOVAL SYSTEM TRAIN B
1	6	REACTOR COOLANT SYSTEM LOOP 1
1	5	REACTOR COOLANT SYSTEM LOOP 2
1	6	REACTOR COOLANT SYSTEM LOOP 3
1	6	REACTOR COOLANT SYSTEM LOOP 4
1	5	SAFETY INJECTION SYSTEM INTERMEDIATE HEAD
1	6	SAFETY INJECTION SYS. HIGH HEAD INJECTION SYS.
1	6	SAFETY INJECTION SYS. LOW HEAD INJECTION (ACCUMULATORS)
DRAWING	REV	DESCRIPTION

REV	DATE	DRWN	CHKD	ENG	DESCRIPTION
1	4/30/88	JM	BS	TW	INCORP. DCR 87-008 DCN 00
2	12/5/95	MPW	BSC	DMQ	INCORP. MMOD 90-598 CA0
3	11/11/89	MRB	RMC	APL	INCORP. DCR 87-311 CA19, 87-422 CA13
4	9/6/89	MRB	JM	BCL	INCORP. DCR'S 87-311 CA07, 87-422 CA08
5	9/15/88	MRB	RMC	GPM	COMPLETE REDRAW, SUPERCEDES UE&C DRAWING 9763-F-804979

NOTES:  
 1. ONLY PRIMARY LINES AND VALVES ARE SHOWN. TEST LINES AND SECONDARY VALVES HAVE BEEN OMITTED FOR CLARITY.  
 2. INTERNALS HAVE BEEN REMOVED FROM CHECK VALVE SI-V297



**FPL ENERGY** Seabrook Station  
 ENGINEERED SAFETY  
 FEATURES FLOW DIAGRAM  
 1-NHY-804979

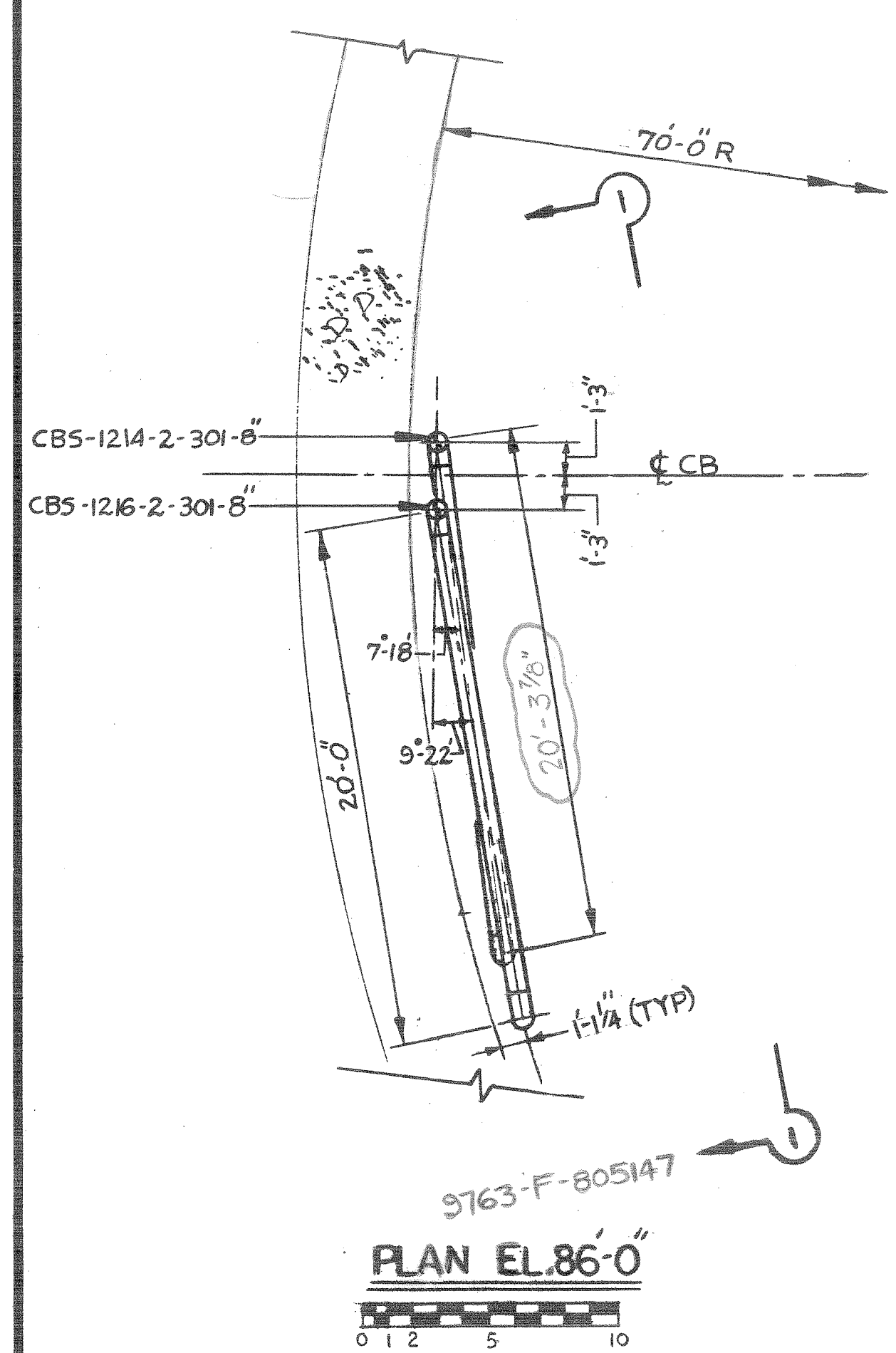
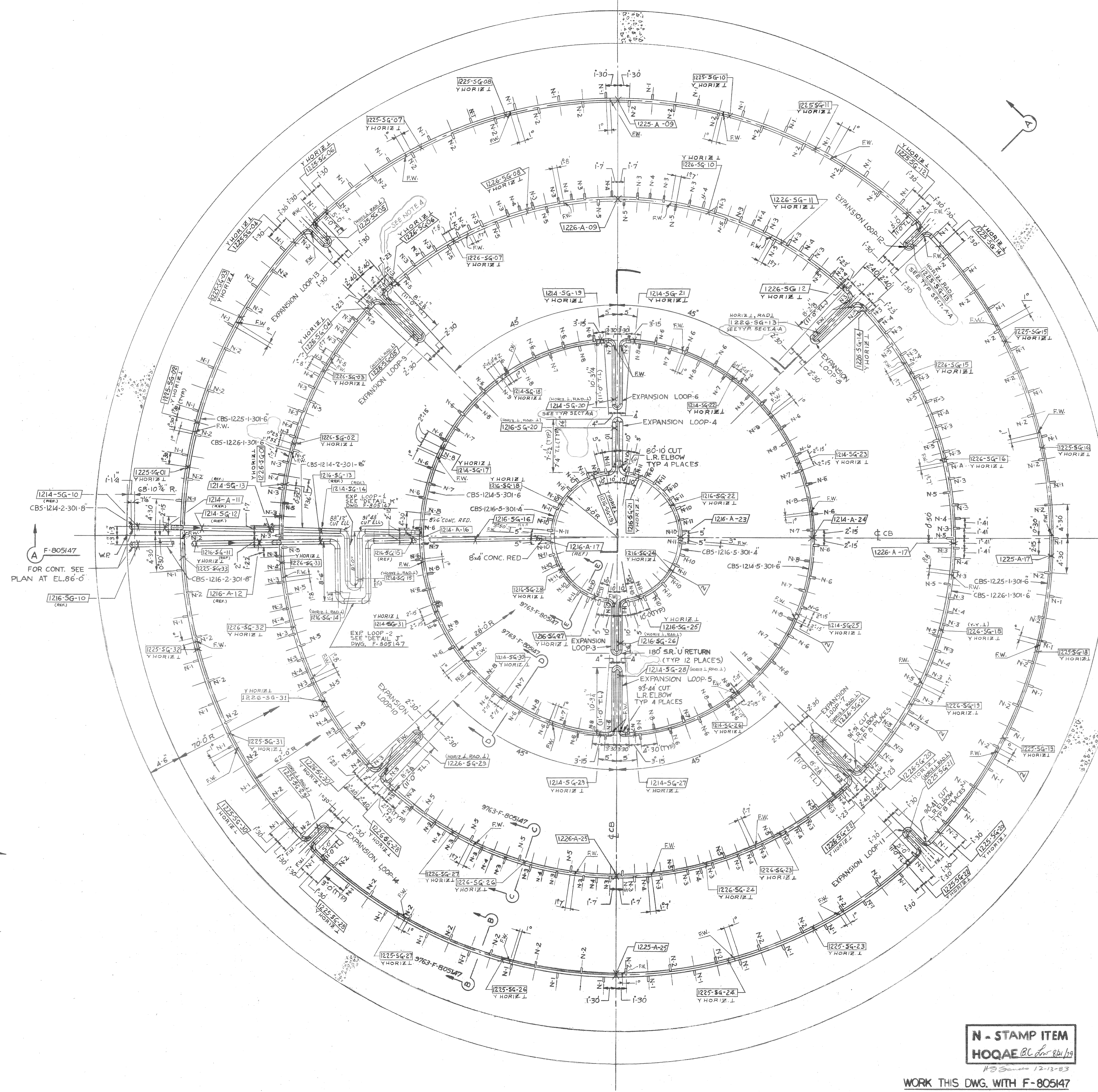




GENERAL NOTES:  
1. NUMBER OF SPRAY NOZZLES ARE

NOZZLE NO.	QUANT.
N-1	59
N-2	59
N-3	80
N-4	41
N-5	41
N-6	40
N-7	16
N-8	20
N-9	4
N-10	18
N-11	18

2. FOR ALL ANCHORS SEE DETAIL 10461F DWG.  
9763-F-10461.  
3. FOR ALL SU SUPPORTS SEE DETAIL 10461E DWG.  
9763-F-10461.  
4. SPRAY NOZZLE N-4 MAY BE TRIMMED UP TO 3/4" TO ALLOW FOR INSTALLATION PER ECA 19/801607A.



REFERENCE DWGS  
9763-F-805147-CONTAINMENT SPRAY PIPING.  
F-805023-CONTAINMENT SPRAY SYSTEM P&I.  
DIAGRAM.  
F-10461-CONTAINMENT LINER-DETAILS & ATTACHMENTS.  
F-805097-PIPING-FIRST LEVEL- WEST PLAN  
ELEV. 11'-0" ZONE 53 B.

NOTES:  
ALL PIPING TO BE IN ACCORDANCE WITH  
U.E. & C. SPECIFICATIONS 9763-248-1 &  
9763-248-51

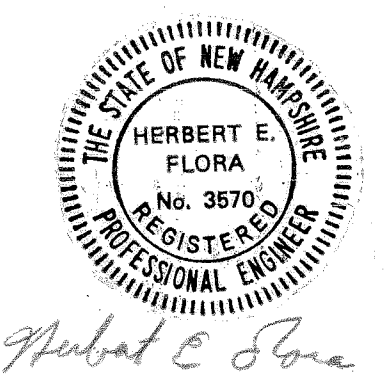
N - STAMP ITEM  
HOQAEC BC for 8/1/19

WORK THIS DWG. WITH F-805147

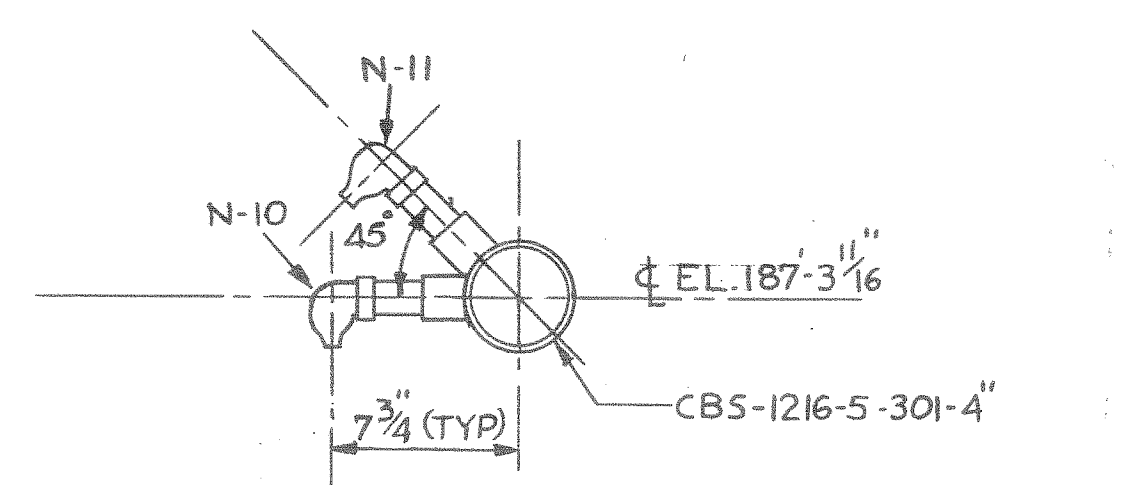
PLAN  
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

REV.	DATE	DESCRIPTION	BY	CHKD.	DATE
1	11-2-83	ADDED UNIT 2 REFERENCE	PH	PH	11-2-83
2	8-21-77	REV. PER DEC. 28/77	DC	PH	8-21-77
3	11-2-83	DWG. REVISED TO SUIT	H.V.	PH	11-2-83
4	11-2-83	ISSUED FOR CONSTRUCTION	C.C.	PH	11-2-83
5	4-16-76	ISSUED FOR BIDDING	L.B.	PH	4-16-76

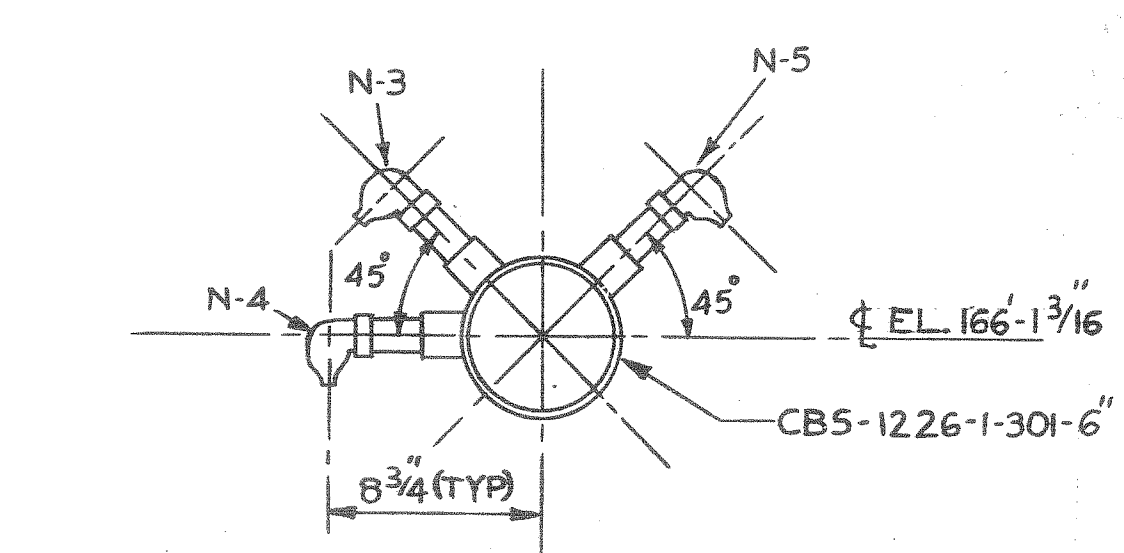
FOR UNIT 2 SEE F-825146  
CONTAINMENT STRUCTURE  
PIPING ZONE 57F PLAN EL. 119'-0"  
LINE NOS. 1214, 1216, 1225 & 1226  
PUBLIC SERVICE CO. OF NEW HAMPSHIRE  
SEABROOK STATION  
UNIT 1 9763-F-805146



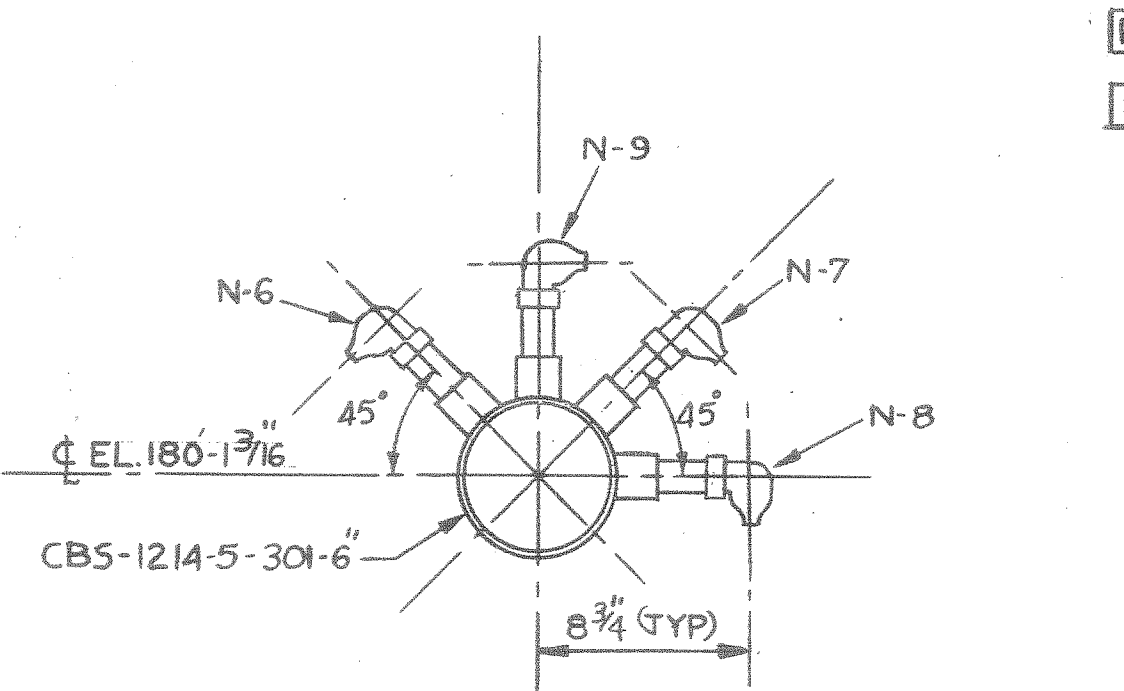




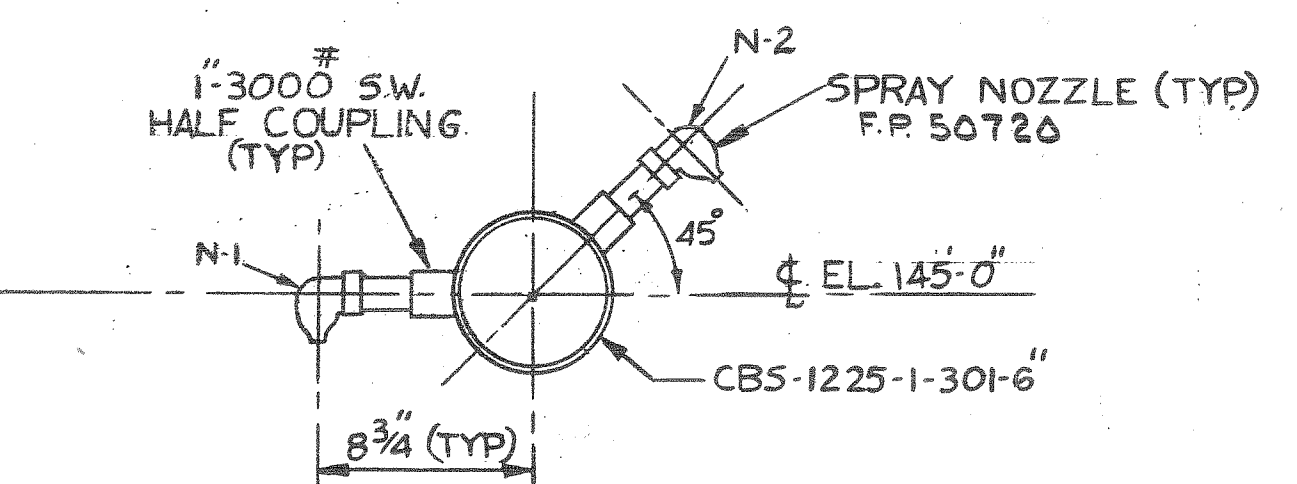
SECTION E-E



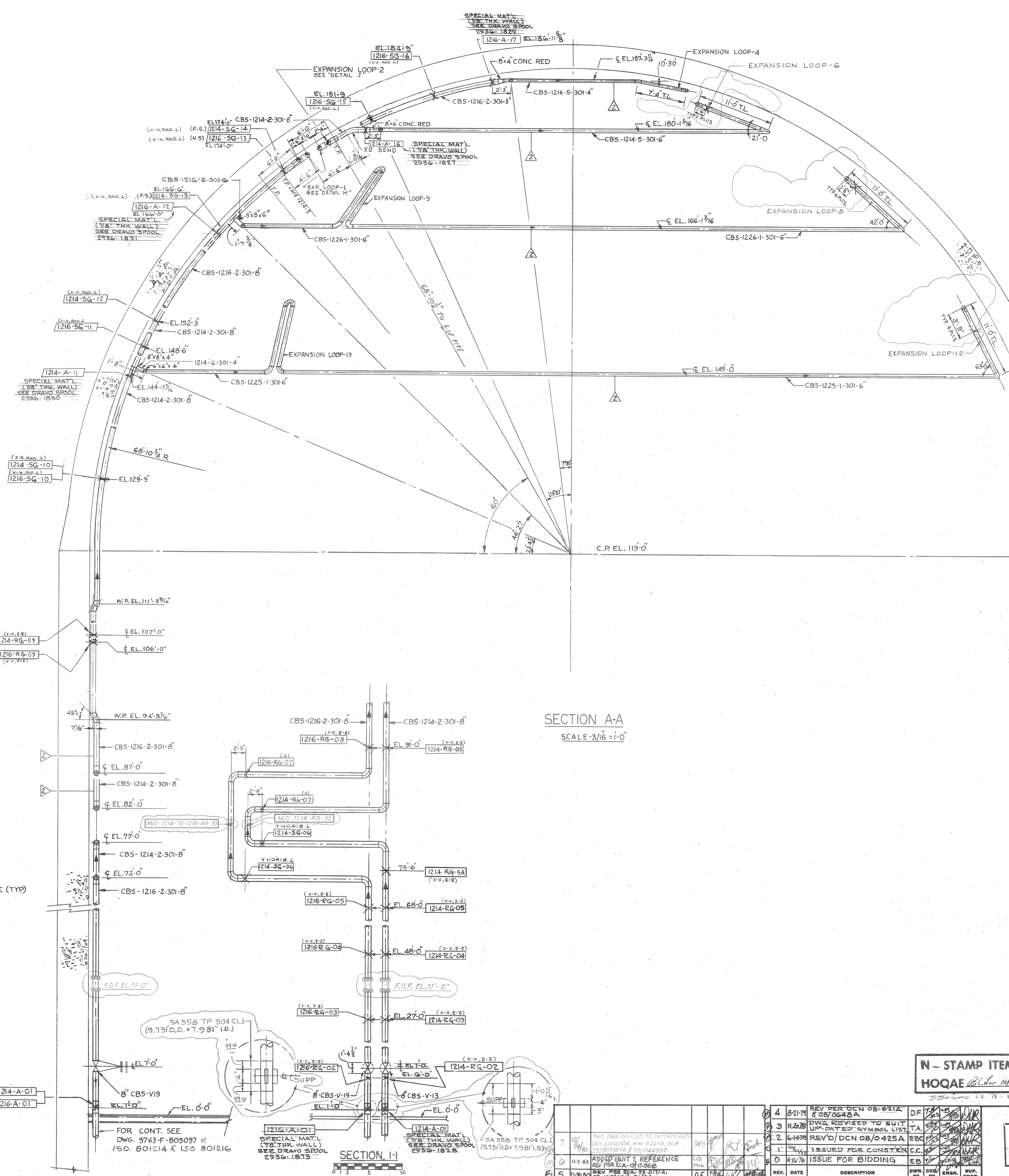
SECTION C-C



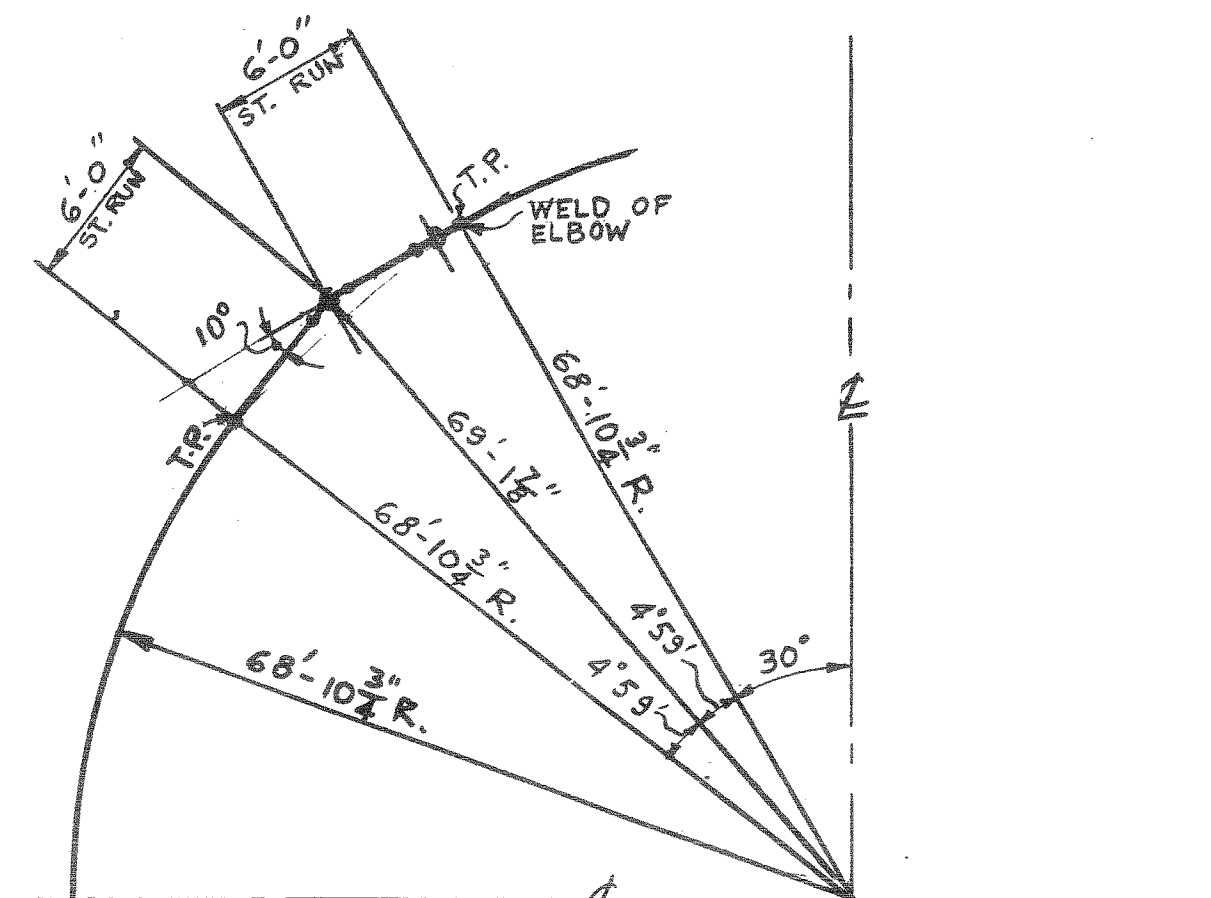
SECTION D-D



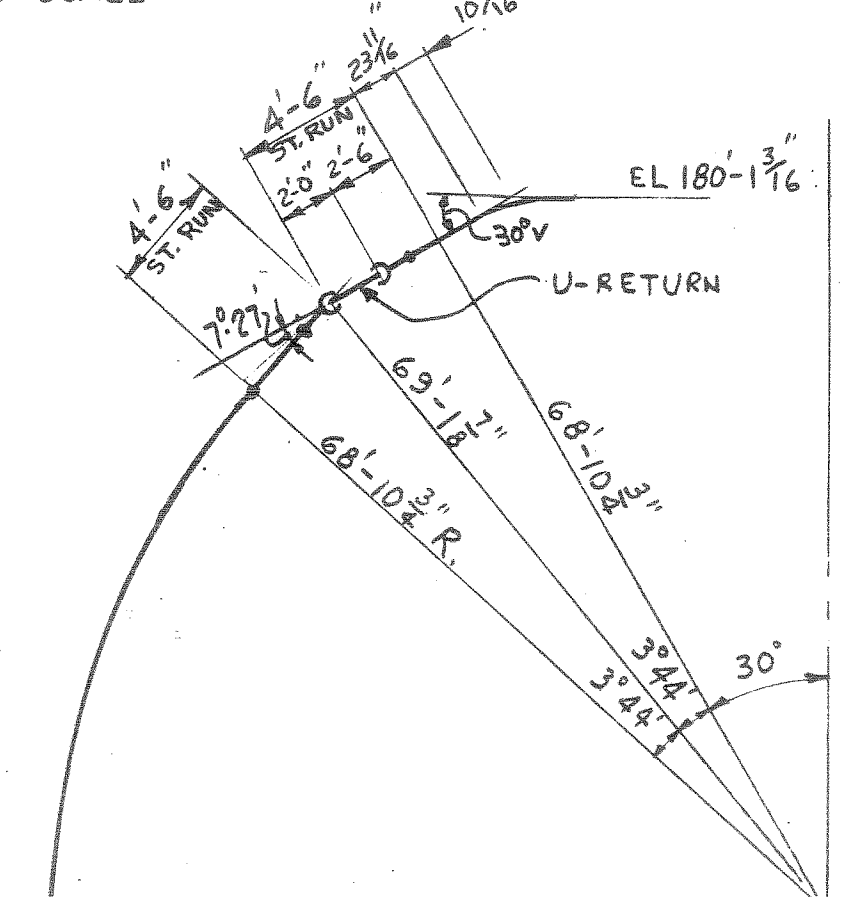
SECTION B-B



SECTION A-A  
SCALE 3/16" = 1'-0"



EXP. LOOP-2  
DETAIL J  
NO SCALE



EXP. LOOP-1  
DETAIL K  
NO SCALE

NOTES:  
1. ALL PIPING TO BE IN ACCORDANCE WITH U.E. & C. SPECIFICATIONS 9763-248-1 & 248-51

FOR UNIT 2 SEE F-825147

N - STAMP ITEM  
HOQAE *[Signature]*

N  
STAMP  
ITEM

CONTAINMENT STRUCTURE  
PIPING ZONES 57E & F  
LINE NOS. 1214, 1216, 1225 & 1226.  
PUBLIC SERVICE CO. OF NEW HAMPSHIRE  
SEABROOK STATION  
UNIT 1 9763-F-805147

REV.	DATE	DESCRIPTION	BY	CHKD.	DATE
4	8-21-77	REV PER DCN 08-621A	DF		
3	11-2-78	DWG REVISED TO SUIT UP-DATED SYMBOL LIST	DF		
2	6-14-78	REV'D/DCN 08/0425A	EBC		
1	1-15-77	ISSUED FOR CONSTRUCTION	CC		
0	4-16-76	ISSUED FOR BIDDING	EB		

DISCIPLINE	CHKD. BY	DATE	DISCIPLINE	CHKD. BY	DATE
STRUCT.	DF	8-21-77	INST. & CONTR.	N/A	N/A
MECH.	N/A	N/A	ELECT.	N/A	N/A
NUCLEAR	N/A	N/A	MECH. SVCS.	N/A	N/A

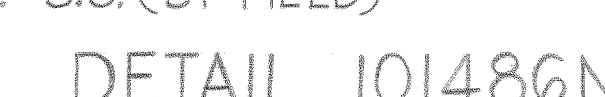




$\frac{1}{4}'' = 1.0$   
TOP OF STEEL ( $-\frac{3}{8}''$ ) UNLESS NOTED



FLAT BAR  $\frac{3}{4} \times \frac{5}{8}$   $\frac{1}{2}$   $\frac{3}{8}$  REMOVABLE  $\frac{1}{4} = 11.0$   
EL (-) 26-0



FOR EMBEDDED  $\Phi$  DETAILS & NOTE  
SEE DWG. F-101698.  
ALL ANCHOR  $\Phi$ 'S & CONCRETE INSERT  
FOR UNIT #2 TO BE FIELD STOCK U.O.

REFERENCE DRAWINGS

F-101405 PLAN AT ELEV (-) 26'-0"

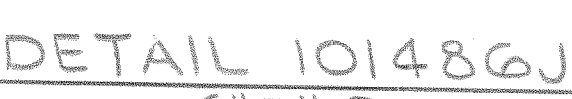
F-102316 PLAN AT ELEV 0'-0" STEEL

F-101882 STEEL STANDARD DETAILS

UNITS 1 AND 2 9763-F-101486


$$\frac{2}{4} = 1 - 0$$

$$1\frac{1}{2}'' = 1'-0''$$

$$3'' = 1' - 0$$

$$6'' = 1' - 0$$

$$1\frac{1}{2}'' = 1'-0$$


$$3'' = 1 - 0$$

$$3^n = 1 - 0$$

$$3'' = 1.0$$

SECTION 101480  
SCALE: 1/2"=1'-0"

2	1-21-84	GENERAL REVISION RELEASED HOLD ON STEEL FOR CONSTRUCTION
3	5-2-79	CLARIFIED PLAN AT ELEV. ADDED DETAIL 101486L HOLD ON EMBEDMENT
4	9/21/78	RELEASED FOR CONSTRUCTION AT ELEV. (C) 20'-0"
REV.	DATE	DESCRIPTION

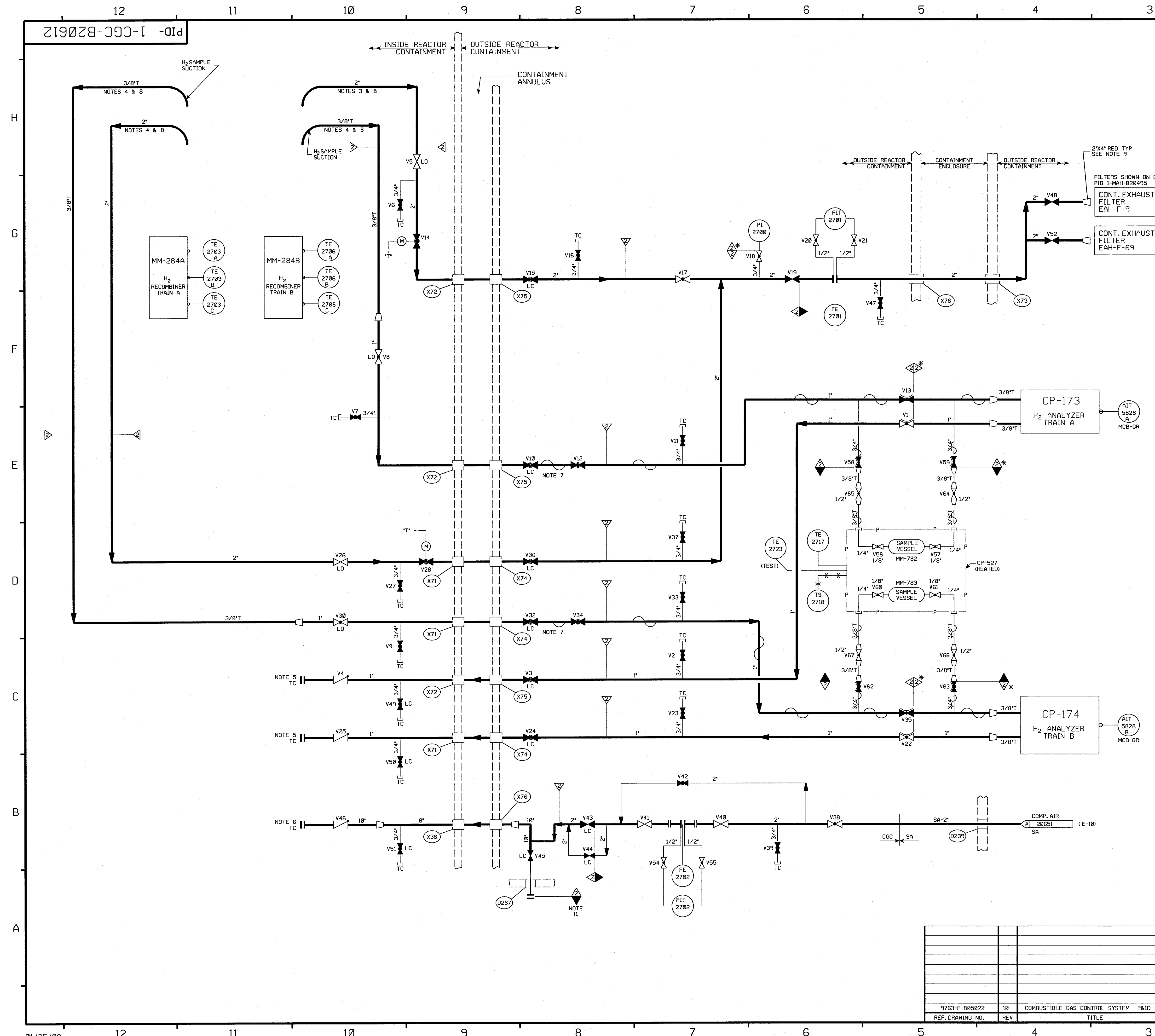


THE STATE OF NEW HAMPSHIRE  
 ALLEN  
 J.  
 HULSCHIZER  
 No. 3300  
 REGISTERED  
 PROFESSIONAL ENGINEER

C. SAFETY RELATED ITEM

UNITS 1 AND 2 9763-F-101486





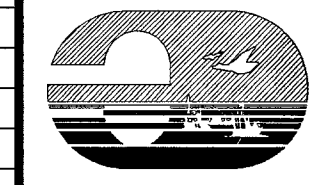
NOTES:

PORTIONS OF THIS DRAWING ARE

<b>NUCLEAR SAFETY RELATED</b>
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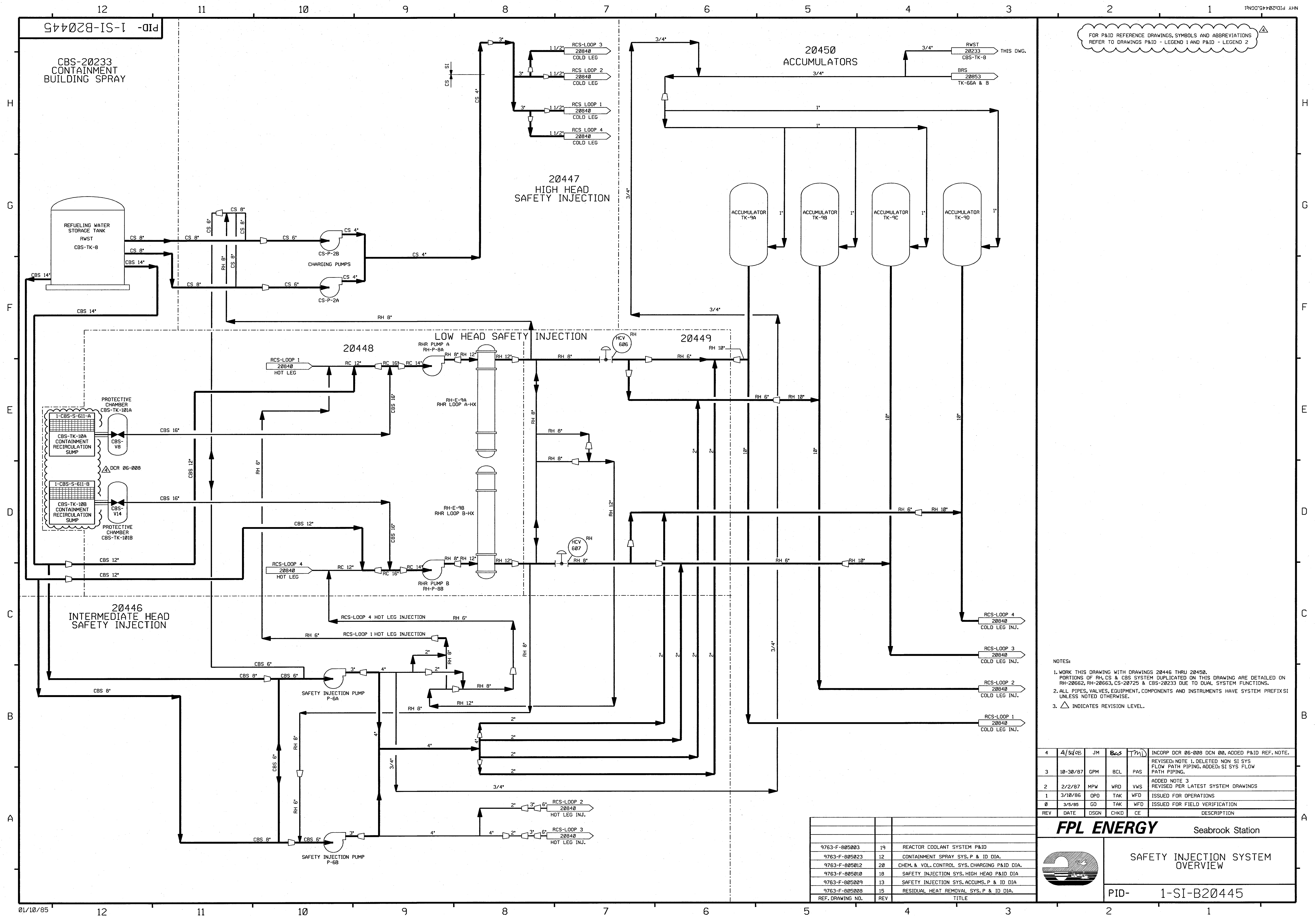
**FPL ENERGY**

Seabrook Station

COMBUSTIBLE GAS  
CONTROL SYSTEM

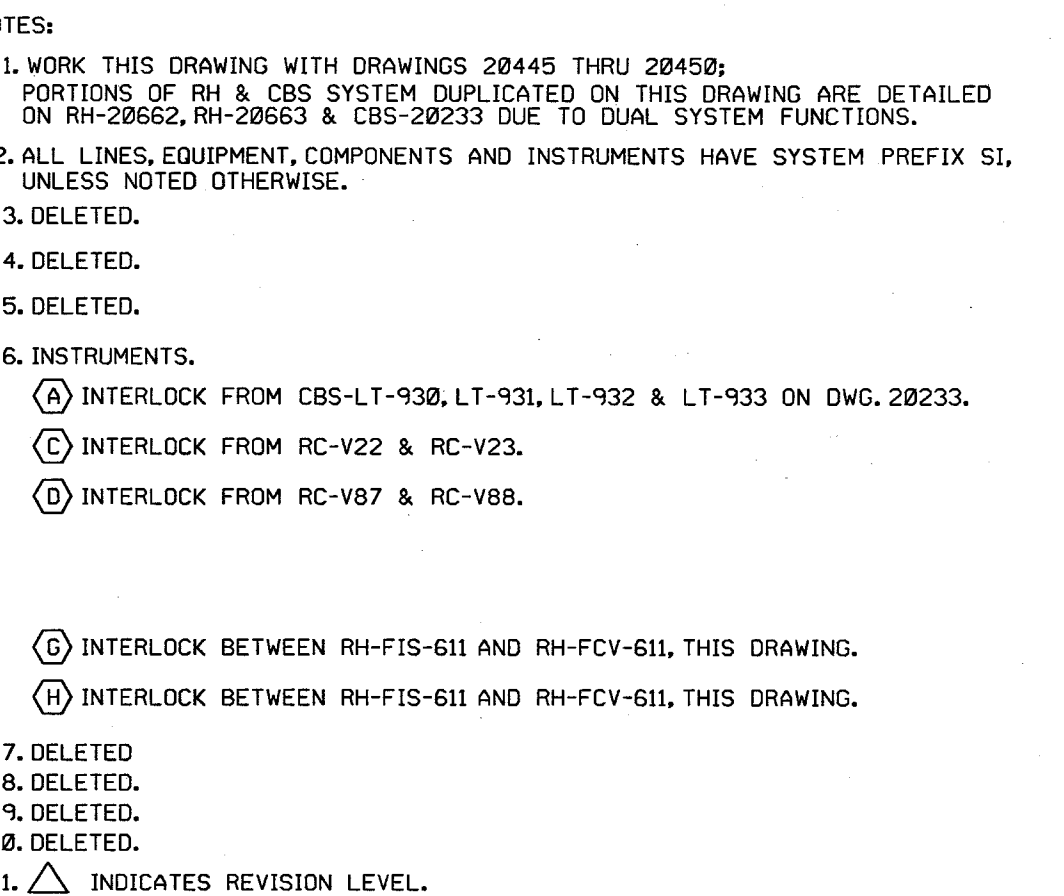
PID- 1-CGC-B20612







7115181C



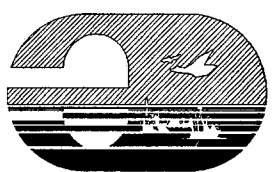
PORTIONS OF THIS DRAWING ARE

<b>NUCLEAR SAFETY RELATED</b>
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11	4/30/08	BCS	JW	THD	INCPOR DCR 06-008 DCN#00, MMOD 03-504 REV. 00.
10	9/5/08	BCS	MPW	MAP	INCPOR MMOD 91-555 DCN#93
9	5/7/99	DWS	BCS	HWM	INCPOR MMOD 970518 DCN#08
8	12/7/94	MFG	BCL	MMD	INCPOR MMOD 930545 CA#02
7	5/24/94	BCL	DWS	DHQ	PARTIAL INCPOR MMOD 91-555 CA-02
6	11/11/94	MRB	GRM	GRM	INCPOR DCR 87-311 CA 19, 87-422 CA 13 AND REINCPOR DCR 87-349
5	9/6/89	MRB	APL	WFO	INCPOR DCR 87-311 CAB7 REV. VALU. NO. 15, & INCPOR DCR 87-349 00.
4	12/15/87	GPM	DWS	PAG	REVISED-REDUNDANT PIPING, NOTE 1, REF DWG REV. NO. RC-V153 & 154 AS OPENED PER LOOP DIA 586650. ADDED CONT. CORDS. INST'S, INST'S SYS. DESIGNATION 5, FUNCTION INFO PER UAE# P&ID, SYSTEM INFO, NOTE 11, DELETED- NON SI. CONF. PIPING, DUPLICATED NOTES 3, 4, 5, 7, 8 & 10, NMS-1 CL. BOUNDARY.
3	10/28/86	PAL	MAP	RRC	REVISED 80.95 BOUNDARY IDENTIFICATION, INCPOR EGY'S 99/197AC, 19/11412C & 00/116525C, REVISED TO CORRECT VALVE N0-RH-V446, RH-V411, C8S-V93, C8S-V92 & RH-V9 PER PIPING ERECTION ISO, ADDED VALVE NO. C8-V929 & PLUG PER PIPING ERECTION ISO'S
2	7/2/86	JDM	BCL	RRC	INCCAS 99/1120C & 99/11517B, 99/11518B AND UPDATE PER UAE# P&ID REVIEW
1	3/18/85	OPD	TAK	WFO	ISSUED FOR OPERATIONS
0	3/5/85	GO	TAK	WFO	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**FPL ENERGY**

Seabrook Station

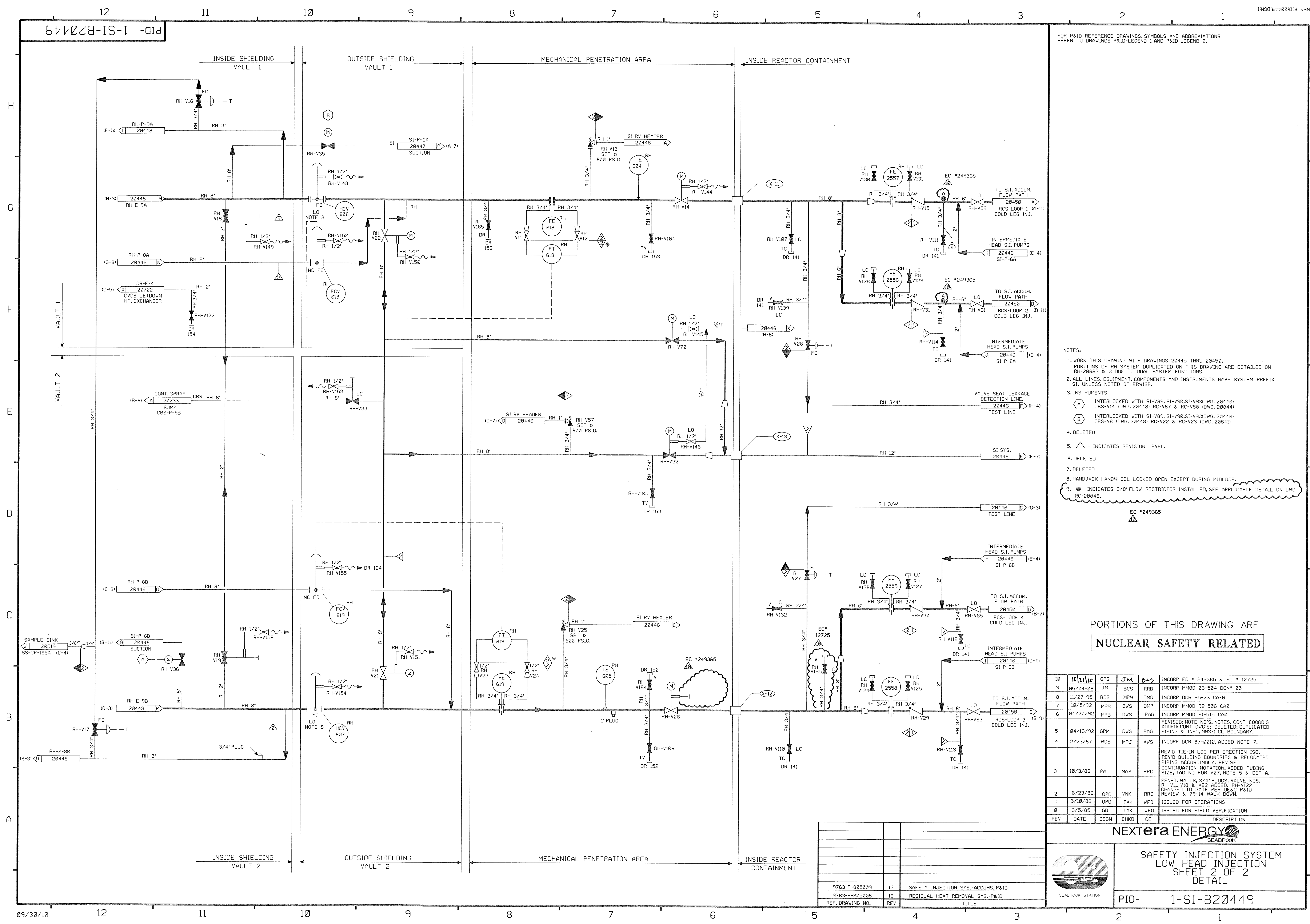


SAFETY INJECTION SYSTEM  
LOW HEAD INJECTION-SHT.1 OF 2  
DETAIL

PID- 1-SI-B20448

9763-F-805003	19	REACTOR COOLANT SYSTEM P&ID
9763-F-805023	13	CONTAINMENT SPRAY SYS. P&ID
9763-F-805006	15	RESIDUAL HEAT REMOVAL SYS.-PID.
REF. DRAWING NO.	REV.	TITLE



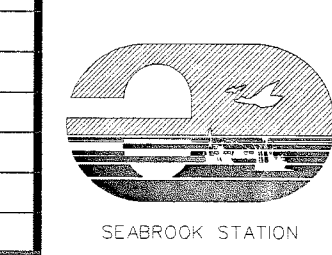


FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID-LEGEND 1 AND P&ID-LEGEND 2.

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20445 THRU 20450. PORTIONS OF RH SYSTEM DUPLICATED ON THIS DRAWING ARE DETAILED ON RH-20662 & 3 DUE TO DUAL SYSTEM FUNCTIONS.
  2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SI, UNLESS NOTED OTHERWISE.
  3. INSTRUMENTS
    - (A) INTERLOCKED WITH SI-V89, SI-V90, SI-V93 (DWG. 20446) CBS-V14 (DWG. 20448) RC-V87 & RC-V88 (DWG. 20844)
    - (B) INTERLOCKED WITH SI-V89, SI-V90, SI-V93 (DWG. 20446) CBS-V8 (DWG. 20448) RC-V22 & RC-V23 (DWG. 20841)
  4. DELETED
  5.  $\Delta$  - INDICATES REVISION LEVEL.
  6. DELETED
  7. DELETED
  8. HANDJACK HANDWHEEL LOCKED OPEN EXCEPT DURING MIDLOOP.
  9.  $\bullet$  - INDICATES 3/8" FLOW RESTRICTOR INSTALLED, SEE APPLICABLE DETAIL ON DWG RC-20848.

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

10	10/21/10	GPS	JM	BCS	INCORP EC # 249365 & EC # 12725
9	05/24/08	JM	BCS	RRB	INCORP MMOD 03-504 DCN# 00
8	11/27-95	BCS	MPW	DMO	INCORP DCR 95-23 CA-0
7	10/5/92	MRB	DWS	DMP	INCORP MMOD 92-506 CA0
6	04/20/92	MRB	DWS	PAG	INCORP MMOD 91-515 CA0
5	04/13/92	GPM	DWS	PAG	REVISED NOTE NO'S NOTES, CONT. COORD'S ADDED; CONT. DWG'S; DELETED; DUPLICATED PIPING & INFO, NNS-1 CL. BOUNDARY.
4	2/23/87	WDS	MRJ	VWS	INCORP DCR 87-0012, ADDED NOTE 7.
3	10/3/86	PAL	MAP	RRR	REV'D TIE-IN LOC PER ERECTION ISO. REV'D BUILDING BOUNDRIES & RELOCATED PIPING ACCORDINGLY. REVISED CONTINUATION NOTATION, ADDED TUBING SIZE, TAG NO FOR V27, NOTE 9 & DET A.
2	6/23/86	OPD	VNK	RRR	PENET. WALLS, 3/4" PLUGS, VALVE NOS. RH-V11, V18 & V22 ADDED. RH-V122 CHANGED TO GATE PER USC P&ID REVIEW & 79-14 WALK DOWN.
1	3/10/86	OPD	TAK	WFD	ISSUED FOR OPERATIONS
0	3/5/85	GD	TAK	WFD	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

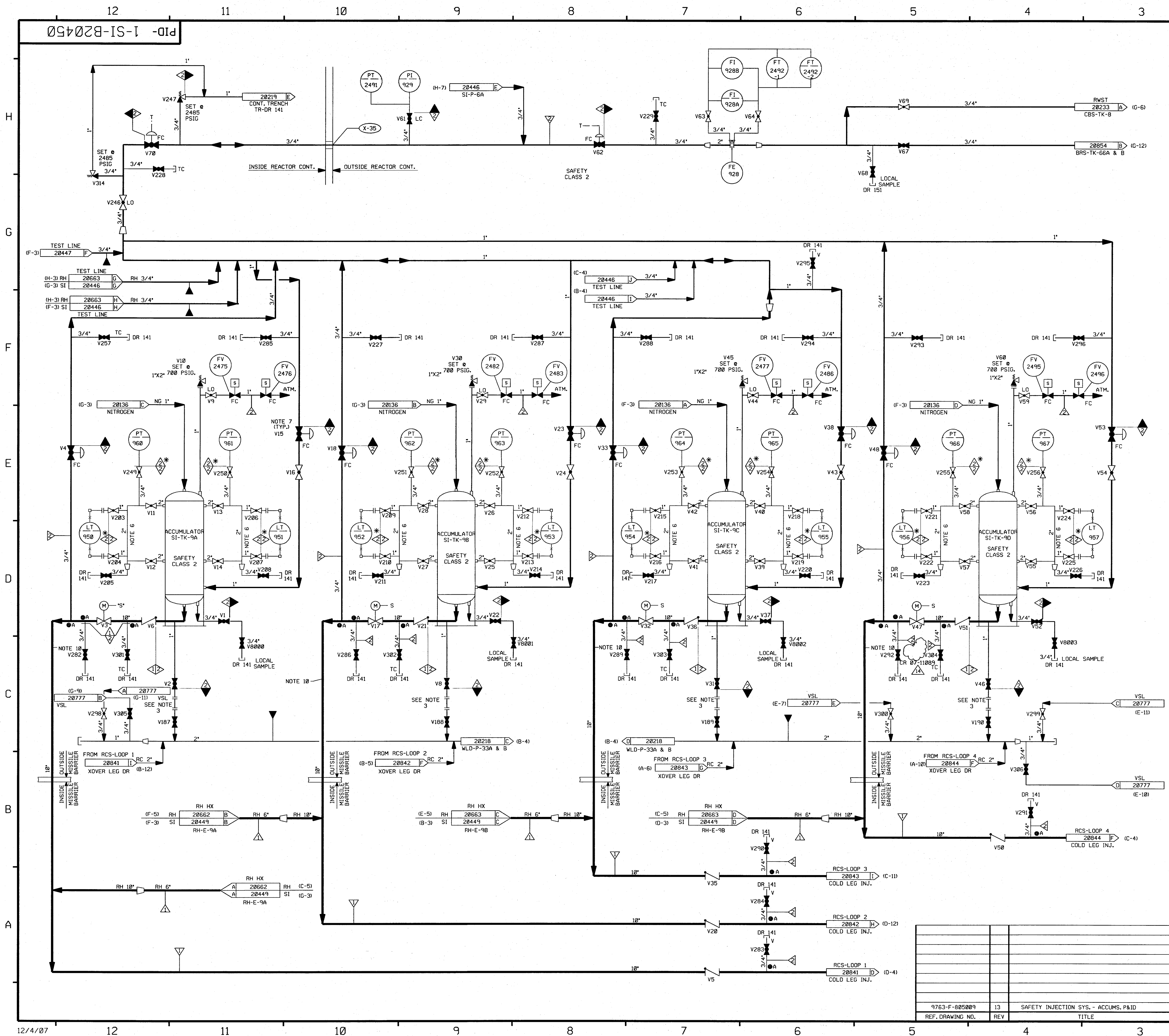


**SAFETY INJECTION SYSTEM**  
**LOW HEAD INJECTION**  
**SHEET 2 OF 2**  
**DETAIL**

PID- 1-SI-B20449

9763-F-005009	13	SAFETY INJECTION SYS.-ACCUMS.P&ID
9763-F-005008	16	RESIDUAL HEAT REMOVAL SYS.-P&ID
REF. DRAWING NO.	REV	TITLE



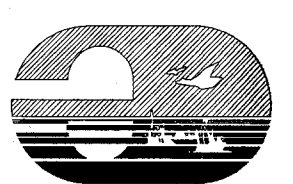


FOR P&ID REFERENCES DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID-LEGEND 1 AND P&ID - LEGEND 2.

- NOTES:
1. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX SI, UNLESS NOTED OTHERWISE.
  2. WORK THIS DRAWING WITH DRAWINGS 20445 THRU 20449.
  3. ACCUMULATOR DRAIN TO BE PROVIDED WITH BLIND FLANGE. SPOOL PIECE TO BE INSTALLED ONLY WHEN ACCUMULATOR IS TO BE DRAINED.
  4. DELETED
  5. DELETED
  6. 66" MINIMUM STANDPIPE TO BE PROVIDED BY A/E WITH MARK INDICATING NORMAL WATER LEVEL AS DEFINED IN THE PLANT SETPOINT DOCUMENT. LEVEL TRANSMITTER TAPS ARE LOCATED 8 INCHES ABOVE AND BELOW THE SCRIBE MARK.
  7. DELETED
  8. 8" A INDICATES 3/8" FLOW RESTRICTOR INSTALLED. SEE APPLICABLE DETAIL ON DWG RC-20848.
  9. DELETED
  10. PIPING SCHEDULE 140 MUST BE ADHERED TO DUE TO SAFETY ANALYSIS FLOW REQUIREMENTS.
  11. DELETED
  12. DELETED
  13. Δ INDICATES REVISION LEVEL
  14. VENT, DRAIN & TEST LINE CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-NHY-800111 UNLESS NOTED OTHERWISE.

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

14	12-7-07	BCS	JM	RRB	INCORP CR 07-11089 REV. 0
13	10/24/06	BCS	JM	JC	INCORP MMOD 03-504 DCN-00
12	6/13/97	DWS	MPW	DMO	INCORP DCR 970002 DCN-00
11	1/17/97	DWS	BCS	DMO	INCORP DCR 970002 DCN-00 & 1
10	5/7/96	BCS	DWS	RRB	INCORP DCR 95-23 CA-6
9	11/13/95	BCS	MPW	RJF	PARTIAL INCORP. DCR 95-23 CA-6
8	9/27/90	MRB	HP	RRC	INCORP MMOD 90-595 CA-01
7	8/24/90	MRB	APL	RRC	INCORPORATED MMOD 90-595 CA-00
6	12/15/87	GPM	DWS	PAG	REVISED NOTE 8 & 14; ADDED DWG CONT. NO'S, TEST LINE, FLOW RESTRICTOR INDICATOR SYMBOL, DELETED NOTES 4, 7, 11 & 12, NNS-1 CL. BOUNDARY.
5	5/20/87	GPM	DWS	VWS	VALVES SI-V8000, 8001, 8002 & 8003 REVISED TO BE SHOWN NORMALLY CLOSED, REVISED CLASS BREAK FOR DRAIN LINES ON VALVES SI-V282, 286, 289 & 292, DELETED NOTE 9 FOR SAME DRAIN LINES & REPLACED WITH NEW FLOW RESTRICTOR INDICATOR SYMBOL. DELETED NOTE 8 FOR DRAIN LINES ON VALVES SI-V301, 302, 303, & 304. REPLACED WITH NEW FLOW INDICATOR SYMBOL, DELETED FLOW ARROW ON HI & LOW SOURCE LINES FOR LT'S ON SI-TK-9A, B, C & D.
4	1/30/87	JDM	MRJ	VWS	INCORP DCR 860033 CA-001
3	10/9/86	MRJ	MAP	RRC	REV PER PIPING ERECTION ISO, (DELETED TEST LINE), CORRECTED INSTRUMENT MOUNTING, ADDED NOTE 14 & DWG LOC COORD.
2	6/27/86	DWS	BCL	RRC	CHANGED VALVE TYPE, ADDED VSL CONT., OPENED VALVES V280 & V306 PER LATEST USRC P&ID, UPDATED DWG. AND GEN. REV.
1	3/18/86	OPD	TAK	WFO	INCORP. DCN 8/340C
0	3/5/85	GD	TAK	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**FPL ENERGY**

Seabrook Station

SAFETY INJECTION SYSTEM  
LOW HEAD INJECTION (ACCUMULATORS)  
DETAIL

PID- 1-SI-B20450

9763-F-805009	13	SAFETY INJECTION SYS. - ACCUMS. P&ID
REF. DRAWING NO.	REV	TITLE



PID-1-SI-B20446

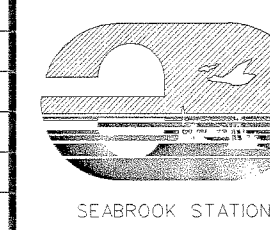
FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS  
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20445, 20447 THRU 20250. PORTIONS OF RH SYSTEM DUPLICATED ON THIS DRAWING ARE DETAILED ON RH-20663 DUE TO DUAL SYSTEM FUNCTIONS.
  2. ALL PIPES, VALVES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX SI UNLESS NOTED OTHERWISE.
  3. (A) = VALVE INTERLOCK FROM RH-V35, RH-V36 (DWG. 20449).
  4. PERMANENT SPOOL PIECE INSTALLATION SHOWN. TEMPORARY STRAINER IS USED IN PLACE OF SPOOL PIECE DURING INITIAL FLUSHING OPERATION. STRAINER TO BE REMOVED BEFORE PLANT START UP CONNECTION USED FOR PRE-PLANNED MAKEUP STRATEGY. SEE FP59989.
  5. VENT, DRAIN, TEST CONNS AND ORIFICE TAP PIPING CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-NHY-805111 UNLESS NOTED OTHERWISE.
  6. DELETED
  7. ADJUST VALVES IN FIELD TO LIMIT PUMP RUN OUT THEN LOCK.
  8. MINIMUM FLOW ORIFICE SUPPLIED WITH PUMP.
  9. Δ - INDICATES REVISION LEVEL
  10. ● - INDICATES 3/8" FLOW RESTRICTOR INSTALLED, SEE APPLICABLE DETAIL ON DWG RC-20848.

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

18	10/21/10	GPS	JM	BJS	INCORP EC* 249365 & EC* 144983
17	01/31/08	GPS	JM	RJF	INCORP MSE 07-183 REV* 00
16	08/31/06	JM	BCS	RRB	INCORP MMOD 03-504 DCN 00 ADDED: COMMON CONTINUATION FLOW ARROW
15	5/8/02	JM	MPW	TAS	INCORP DCR 01-0216 DCN*00
14	10/19/00	BCS	MPW	MKC	INCORP DCR 99-0036 DCN*00
13	9-14-00	BCS	MPW	DWS	PARTIAL INCORP DCR 99-0036 DCN*00
12	5-7-99	DWS	BCS	RRB	INCORP MMOD 97-0618 DCN*00
11	5-26-97	MPW	DWS	RRB	INCORP DCR 96-21 DCN*00
10	12/27/95	BCS	MPW	RJF	REINCORP DCR 95-23 CA-0
9	11/27/95	BCL	MPW	RRB	INCORP DCR 95-23 CA-0
8	6/7/94	BCL	MPW	RRB	INCORP MMOD 94-511 CA-0
7	4/4/94	BCL	MPW	DMP	INCORP MMOD 93-517 CA-0
6	4/20/92	MRB	DWS	JEV	INCORP MMOD'S 91-511 CA0, 91-515 CA0 & 91-622 CA0 REVISED: PIPING TO CLARIFY REDUNDANT SYS DUPLICATION, NOTES 1, 5 & 10; ADDED: PIPING TO CLARIFY REDUNDANT SYS DUPLICATION, DWG CONT COORD'S, REF. DWG'S, FLOW RESTRICTOR DETAIL ALPHA DESIGNATION DELETED; NNS-1 CLASS BOUNDARY, PIPING CODE BREAKS PER NOTE 5 & 6.
5	12/15/87	GPM	DWS	BAS	ADDED P&ID LEGEND NOTE, ADDED CONT DWG REF COORDINATES, INCORP DCR 87-0022.
4	2/23/87	WDS	MRJ	VWS	ADDED NOTE 10, ADDED & REVISED CONTINUATION REFERENCES, REVISED BUILDING BOUNDARY, REVISED LOCATION OF VALVE V248 TO SHOW INSIDE VAULT #2.
3	9/12/86	MRJ	MAP	RRR	ADD NOTE 7 TO V104 & V109
2	4/4/86	DWS	TAK	WFO	ADD NOTE 7 TO V104 & V109
1	3/10/86	OPD	TAK	WFO	ISSUED FOR OPERATIONS
0	3/5/85	GD	TAK	WFO	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

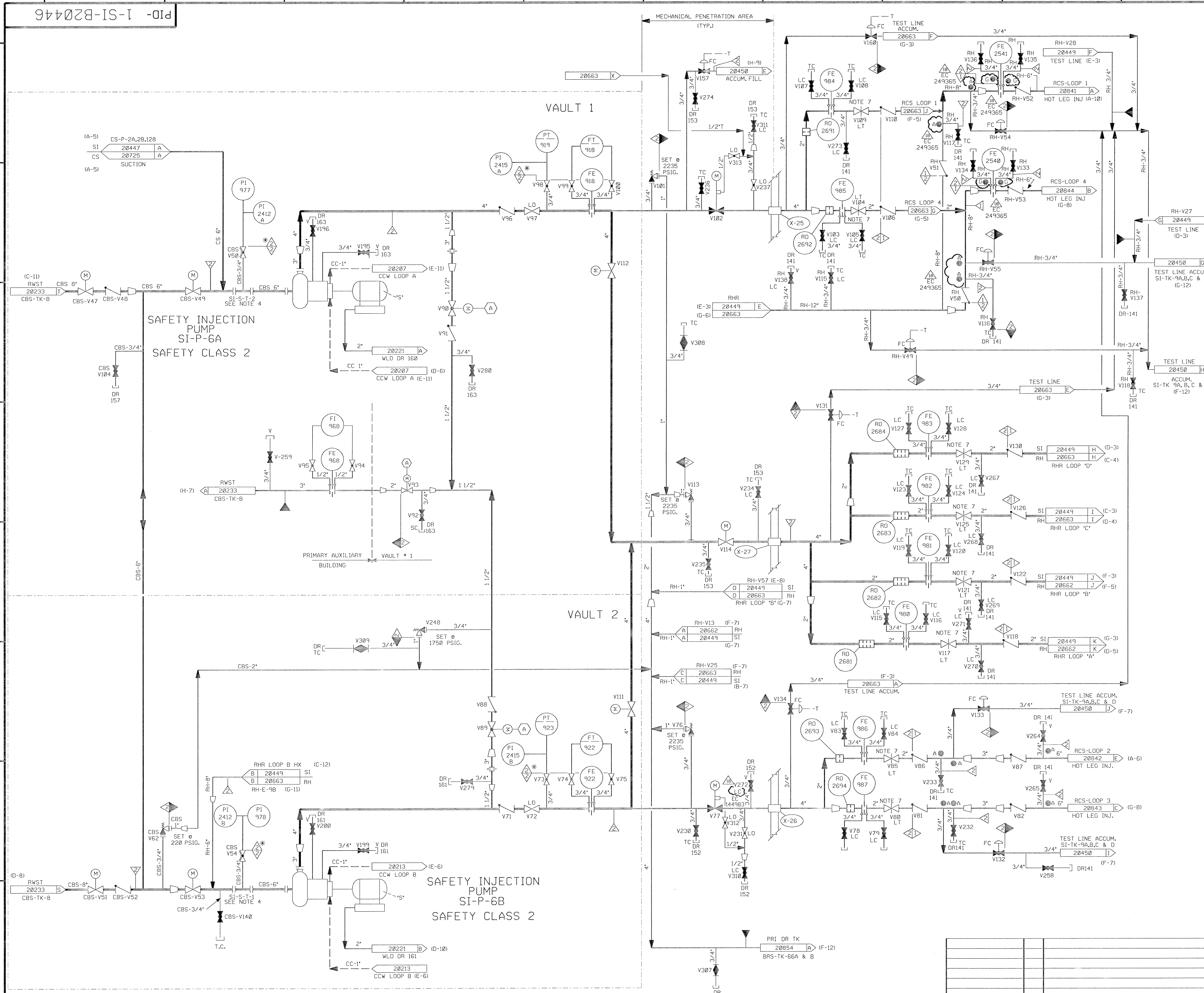
**NEXTERA ENERGY**  
SEABROOK



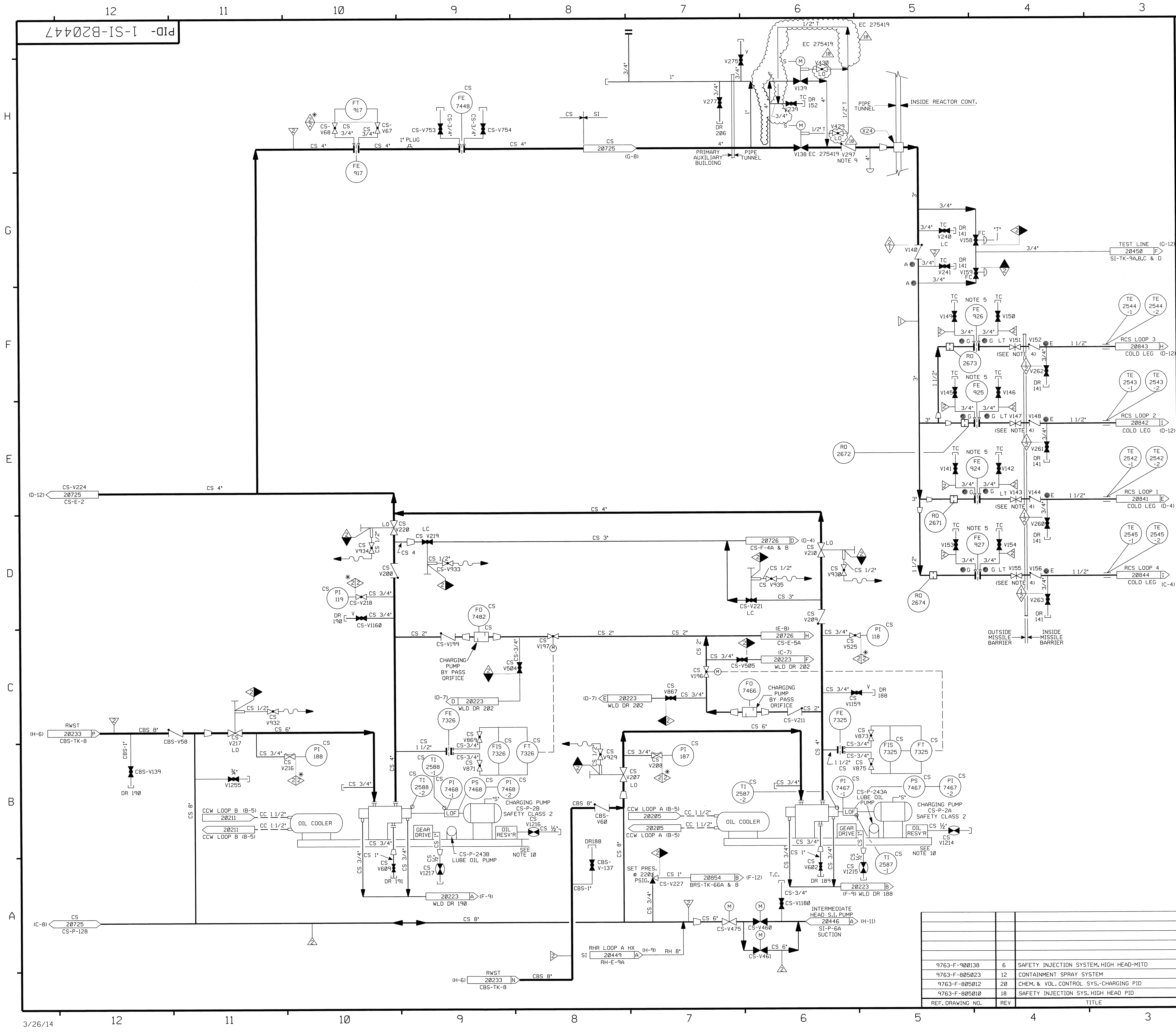
**SAFETY INJECTION SYSTEM  
INTERMEDIATE HEAD INJECTION  
SYSTEM DETAIL**

PID- 1-SI-B20446

REF. DRAWING NO.	REV	TITLE
9763-F-805023	13	CONTAINMENT SPRAY SYS P&ID
9763-F-805010	18	SAFETY INJECT. SYS. HIGH HEAD P & ID





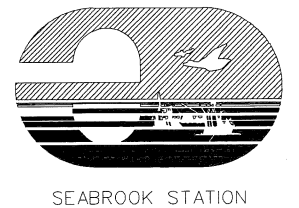


FOR P&ID REFERENCE DRAWINGS, SYMBOLS, AND ABBREVIATIONS REFER TO DRAWINGS P&ID-LEGEND 1 AND P&ID-LEGEND 2.

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20445 THRU 20450. PORTIONS OF THE CS SYSTEM DUPLICATED ON THIS DRAWING ARE DETAILED ON CS-20725 DUE TO DUAL SYSTEM FUNCTIONS.
  2. ALL PIPES, VALVES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SI, UNLESS NOTED OTHERWISE.
  3. DELETED
  4. ADJUST VALVES IN FIELD TO LIMIT PUMP RUN OUT, THEN LOCK.
  5. FLOWMETER ORIFICE TO VERIFY FLOW DURING PREOPERATIONAL TEST.
  6. VENT AND DRAIN CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-NHY-005111 UNLESS NOTED OTHERWISE.
  7. INDICATES REVISION LEVEL
  8. INDICATES 3/8" FLOW RESTRICTOR INSTALLED, SEE APPLICABLE DETAIL ON DRAWING RC-20848.
  9. INTERNALS REMOVED FROM CHECK VALVE SI-V297
  10. LUBE OIL SYSTEM IS

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

18	4/14/14	BCS	JM	CIT	INCORP. EC 275419
17	3/7/13	JM	BCS	CIT	INCORP. EC 275419
16	10/2/12	JM	BCS	CIT	INCORP. EC 275419
15	10/9/08	BCS	JM	TAS	INCORP. MM00 03-504 DCN 00
14	4/22/99	RWS	DWS	GRM	INCORP. DCR 980045 DCN 00 & 04
13	5/28/97	MPW	DWS	RRB	INCORP. DCR 96-21 DCN 0
12	11/12/95	BCL	MPW	RSG	INCORP. MM00 90-598 CA0
11	4/14/94	BCL	MPW	DMQ	INCORP. MM00 93-517 CA0
10	10/8/92	BCL	DWS	DMP	INCORP. DCR 89-73 CA0
9	4/20/92	MRB	DWS	JEV	INCORP. MM00 91-515 CA0
8	12/5/89	MRB	PAL	WFO	INCORP. DCR 89-12 CA02
7	8/18/89	MRB	DWS	CM	INCORP. MM00 89-530 REV 00
6	6/30/88	GPM	APL	PAS	ADDED: 'S' SIGNAL FOR V138 PER NHY DWG 509048
5	11/23/87	GPM	DWS	RRC	INCORPORATED: DCR 87-159, REV'D; NOTES 1 & 6 ADDED; NOTES 8, CONT. DWG, NO'S & COORD'S, FLOW RESTRICTOR INDICATOR SYM., CONTINUATION COORD. DELETED; NOTE 3, NON SI FLOW PATH PIPING, REDUNDANT DWG, CONT., NNS-1 CL. BRK.; DUPLICATED TECH. INFO.
4	2/6/87	MRJ	PAL	VWS	REVISED FLOW INSTR. SYS. PREFIX PER DWG. M-506291
3	10/10/86	WDS	BCL	RRC	REMOVED SAFETY CLASS BRKS PER NOTE 6. ADDED DWG COOR FOR CONT.
2	6/23/86	PFG	VNK	RRC	INCORPORATED NCR 82/417A, ECA 08/22468 & UPDATED PER LATEST P & I'D
1	3/10/85	OPD	TAK	WFO	ISSUED FOR OPERATIONS
0	3/5/85	GO	TAK	WFO	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	CHKD	CE	DESCRIPTION



SEABROOK STATION

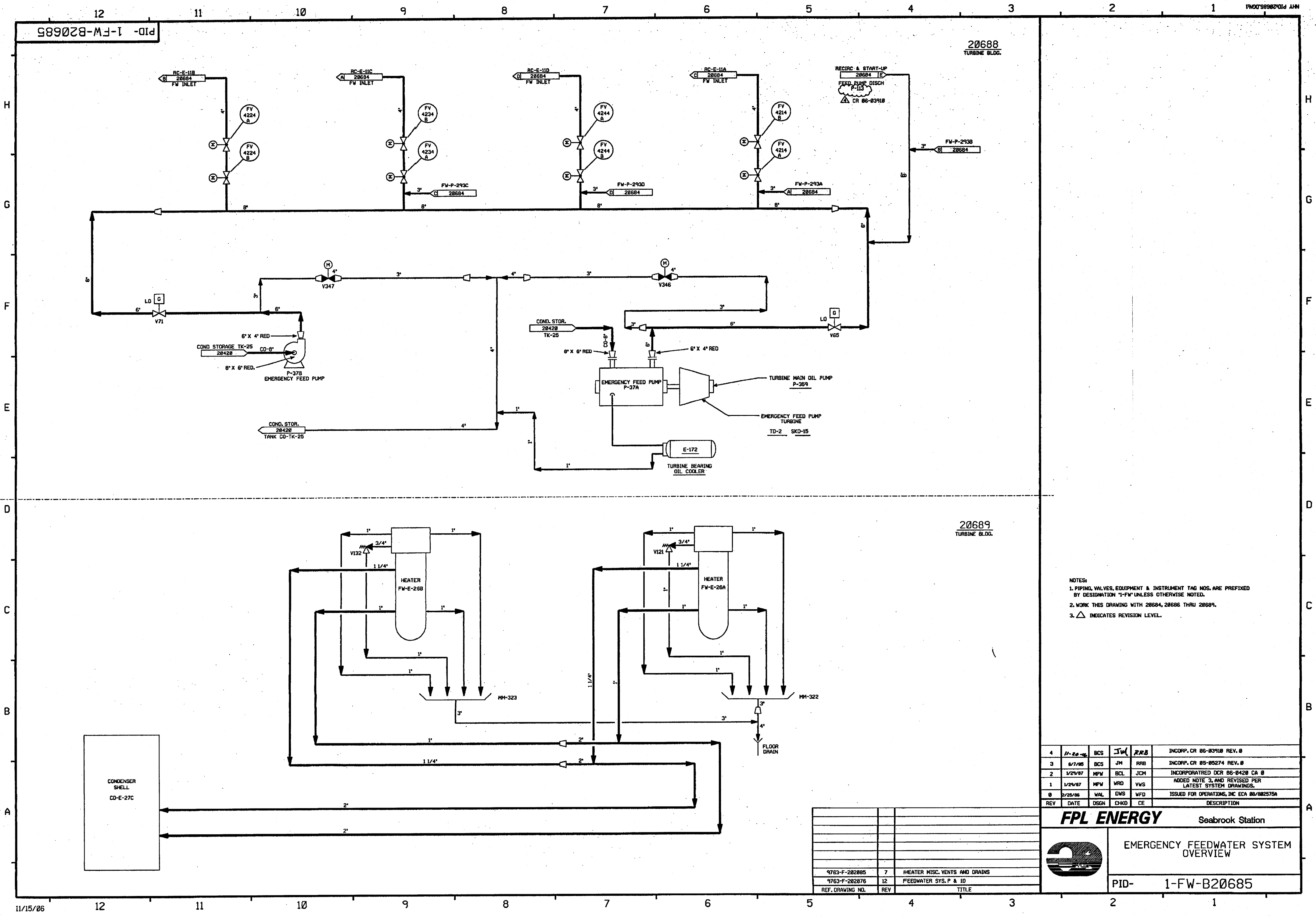
**NEXTERA ENERGY**  
SEABROOK

**SAFETY INJECTION SYSTEM  
HIGH HEAD INJECTION SYSTEM  
DETAIL**

PID- 1-SI-B20447

9763-F-900138	6	SAFETY INJECTION SYSTEM, HIGH HEAD-MITO
9763-F-805023	12	CONTAINMENT SPRAY SYSTEM
9763-F-805012	20	CHEM. & VOL. CONTROL SYS.-CHARGING PID
9763-F-805010	18	SAFETY INJECTION SYS. HIGH HEAD PID
REF. DRAWING NO.	REV	TITLE



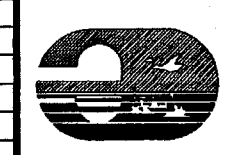


NOTES:  
1. PIPING, VALVES, EQUIPMENT & INSTRUMENT TAG NOS. ARE PREFIXED BY DESIGNATION "1-FW" UNLESS OTHERWISE NOTED.  
2. WORK THIS DRAWING WITH 20684, 20686 THRU 20689.  
3.  $\Delta$  INDICATES REVISION LEVEL.

4	11-20-85	BCS	JW	RFB	INCORP. CR 86-83918 REV. 0
3	8/7/85	BCS	JM	RFB	INCORP. CR 85-85274 REV. 0
2	1/25/87	MPV	BCL	JCM	INCORPORATED DCR 86-8420 CA 0
1	1/25/87	MPV	VRD	VWS	ADDED NOTE 3, AND REVISED PER LATEST SYSTEM DRAWINGS.
0	2/25/86	WAL	DWS	WFD	ISSUED FOR OPERATIONS, INC ECA 86/882575A
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**FPL ENERGY**

Seabrook Station

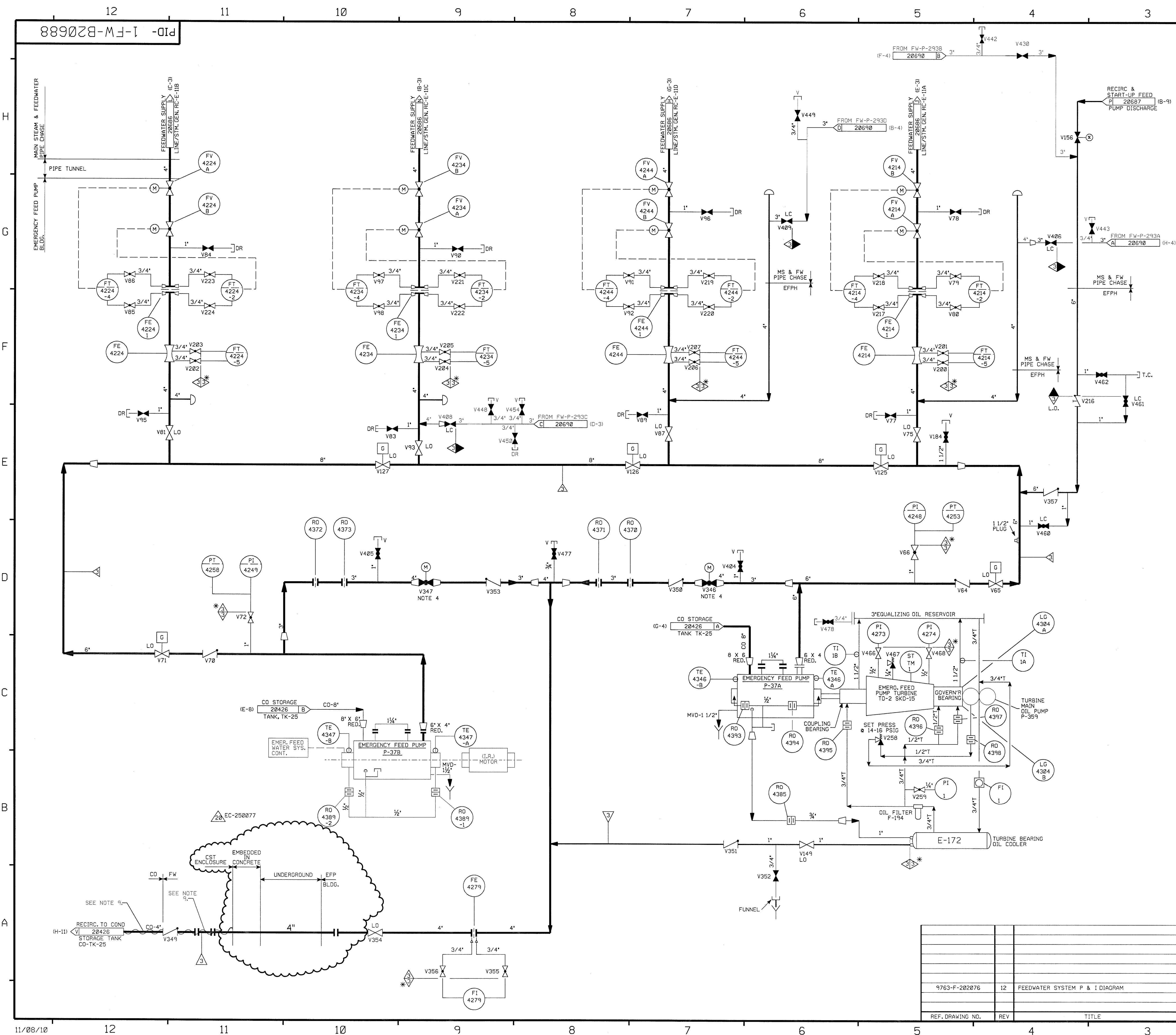


EMERGENCY FEEDWATER SYSTEM OVERVIEW

PID- 1-FW-B20685

9763-F-202085	7	HEATER MISC. VENTS AND DRAINS
9763-F-202076	12	FEEDWATER SYS. P & ID
REF. DRAWING NO.	REV	TITLE





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

- NOTES:
1. PIPING, VALVES, EQUIPMENT & INSTRUMENT TAG NUMBERS ARE PREFIXED BY DESIGNATION OF "FW" UNLESS NOTED OTHERWISE.
  2. WORK THIS DWG WITH 20684 THRU 20687, & 20689.
  3. VENTS & DRAINS CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE, PER 1-NHY-80511 UNLESS NOTED OTHERWISE.
  4. FW-V346, V347 ARE NORMALLY CLOSED MOTOR OPERATED GLOBE VALVES WHICH ARE OPERABLE FROM THE MAIN CONTROL BOARD & REMOTE SAFE SHUTDOWN PANEL.
  5.  $\Delta$  INDICATES REVISION LEVEL.
  6. ALL PIPING AND COMPONENTS ASSOCIATED WITH P-37A ARE ASME III CL. 3.
  7. ALL PIPING AND COMPONENTS ASSOCIATED WITH T-2 ARE ANS-3.
  8. DELETED
  9. THIS HEAT TRACING IS NONFUNCTIONAL

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

20	11/08/10	GPS	BCS	JMT	INCORP EC-250077
19	5/04/08	JM	BCS	RRB	INCORP MMOD 03-504 DCN 00
18	5/19/03	BCS	JM	MPW	INCORP CR-02-02414
17	11/8/00	BCS	MPW	RRB	INCORP DCR 98-31 DCN-00
16	4/27/99	DWS	RWS	HWM	INCORP MMOD 970618 DCN*00 & DCR 96-0028 DCN 00
15	7/3/98	DWS	MPW	JWB	INCORP MMOD 980505 DCN*00
14	10/23/95	BCL	MPW	GRM	INCORP DCR 94-027 CA-0
13	6/12/95	BCL	DWS	DJM	INCORP MMOD 94-570 CA-0
12	5/23/94	DWS	BCL	JCM	INCORP MMOD 920539 CA*0
11	4/14/94	MPW	BCL	DMQ	INCORP DCR 860420 CA 0, 21 & MMOD 93-517 CA-0
10	11/4/92	DWS	MRB	JCM	(PARTIAL) INCORP DCR 860420 CA*0, 21
9	10/17/92	MRB	BCL	JEV	INCORP MMOD 92-545 CA0
8	5/8/92	MRB	MPW	BCL	INCORP MMOD 91-511 CA2
7	2/24/86	WAL	DWS	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

NEXTera ENERGY		SEABROOK	
EMERGENCY FEEDWATER SYSTEM DETAILS		PID-1-FW-B20688	
9763-F-202076	12	FEEDWATER SYSTEM P & I DIAGRAM	
REF. DRAWING NO.	REV	TITLE	