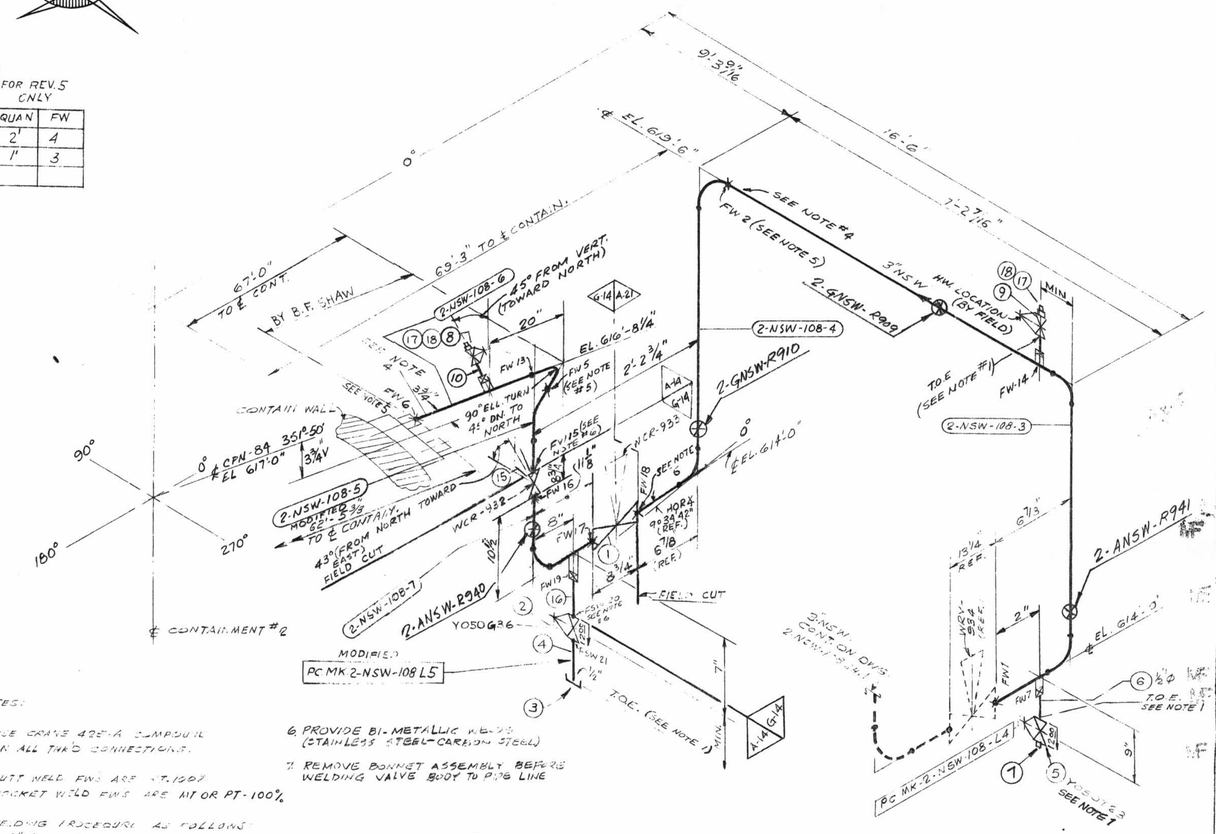
TOTAL FW
14

TOTAL FW	FOR REV. 5 ONLY	
7		
SIZE	QUAN	FW
3"	2'	4
1/2"	1'	3



NOTES:

1. USE GRAVE AZEMA COMPOUND ON ALL THR'D CONNECTIONS.
2. BUTT WELD FW'S ARE RT-100% SOCKET WELD FW'S ARE MT OR PT-100%
3. WELDING PROCEDURE AS FOLLOWS: 2" & UNDER - 2 1/2" & OVER -
4. FABRICATOR TO MAKE THIS END OF SPOOL & LONGER WITH PLAN AND TO FACILITATE INSTALLATION
5. FW'S PERTAINING TO THIS NOTE ARE TO BE MADE AFTER PIPE IS CUT, PRE-ALIGNED & ENDS HAVE BEEN PREPARED FOR WELDING TO SUIT AS-BUILT CPN.
6. PROVIDE BI-METALLIC WELDS (STAINLESS STEEL-CARBON STEEL)
7. REMOVE BONNET ASSEMBLY BEFORE WELDING VALVE BODY TO PIPE LINE

SIZE	QUANT	FW
3"	27	8
1"	—	2
1/2"	4	4

P.O. #	PIECE MARK
	2-NSW-108-3
	-4
	-5 MODIFIED
	-6 (MK. E. SHAW.)
	-7

SITE FAB. PIECE MARK
2-NSW-108-L4
-L5

SUPPORT MARK NOS.

2-GNSW-R909
2-GNSW-R910
2-ANSW-R940
2-ANSW-R941

G-14 DESIGN SPEC: 1CCPM 109QCN
HANGER SEISMIC CLASS: I
TEST REQUIREMENTS: QL-4
WELD PROCEDURE:
QSL-04 TESTING: SEE NOTE #2
A-14 [illegible] 109QCN
HANGER SEISMIC CLASS: I
TEST REQUIREMENTS: QL-4
WELD PROCEDURE: SEE NOTE 3
QSL-04 TESTING: SEE NOTE 2
A-21 [illegible] 102QCS
HANGER SEISMIC CLASS: II
TEST REQUIREMENTS: N/A
WELD PROCEDURE: SEE NOTE 3
QSL-01 TESTING: N/A.

DESIGN SPEC.	SEE
HANGER SEISMIC CLASS	DESIGN
TEST REQUIREMENTS	CODE
MATERIAL CLASS	STAMP

N.P. = NORKING POINT
T.O.E. = THREAD ONE END
T.B.E. = THREAD BOTH ENDS
B.O.E. = BEVEL ONE END
T.O.P. = TOP OF PIPE ELEV.
Q.S.L. = MATERIAL QUALITY REQUIREMENTS
T.L. = TRUE LENGTH

B.B.E. = BEVEL BOTH ENDS
P.O.E. = PLAIN ONE END
P.B.E. = PLAIN BOTH ENDS
S.O.E. = SHAPE ONE END
B.O.P. = BOTTOM OF PIPE ELEV.

FW = FIELD WELD
H = HORIZONTAL
V = VERTICAL
SW = SHOP WELD
FSW = FIELD SHOP WELD

B = FIELD WELD
O = AUTOMATIC SHOP WELD
M = MANUAL SHOP WELD
E = VERIFY DIMENSION IN FIELD

PIPE													
A-53		A-106		A-376		A-312							
		GR. B				GRTP 304							
STD.	XY	XXY	10	20	30	40	60	80	100	120	140	160	
SMLS		WLDD											

FITTINGS		
A-105	A-234	A-182
A-403	A-181	

TESTING			
N.D.T. PER DATA SHEET CODE STAMP			
M.T.	P.T.	R.T.	U.T.
PRESSURE TEST			
MED.	PRESS.	DURATION	

ADDITIONAL

ISO SHT. NO. 2						
QSL	ITEM	QTY.	SIZE	MATERIAL DESCRIPTION	TAG No. OR ASTM MAT'L.	HEAT NO.
04	1	1	3"	B.W. DIAPH. CONTROL VA. S.S.	WCR 933	
	2	1	1/2	600# S.W. C.S. GATE VA	Y050G36	
	3	1	1/2"	3000# THR'D CAP C.S.	A-105 GR. B	
	4	AS REQD	1/2"	PIPE (SCH. 80) SMLS C.S.	A-106 GR I OR II	
01	5	1	1/2"	200# THR'D GLOBE VA BRONZE OR BRASS	Y050T23	
	6	AS REQD	1/2"	PIPE (SCH. 80) SMLS. C.S.	A-106 GR. B	
	7	1	1/2"	3000# THR'D. PLUG, C.S.	A-181 GR. B	
04	8	1	1"	600# SW. C.S. GLOBE VALVE	Y-100T36	
01	9	1	1"	600# S.W., C.S., GLOBE VALVE	Y-100T36	
04	10	AS REQD	1"	PIPE (SCH 80) SMLS C.S.	A-106 GR. B	
04	15	1	3"	B.W. DIAPH. CONTROL VA. S.S.	WCR-932	
	16	AS REQD	1/2"	PIPE SCH 40S SMLS	A 312 GRTP 304	
	17	2		1"SW X 3/4" THR'D 3000# RED INSERT	A-181 GR I OR II	
	18	2		3/4" 3000# THR'D PLUG		

REVISION RECORD				
NO.	DATE	DR. CHK	DESCRIPTION	REMARKS
1	7-1-75 / 2-20-76	DR. / B.R	REV'D BY AEP DESIGN: PER RFC-DC-12-671: REV'D; ITEM #2 Y-050G36 WAS CY-050G36. ADDED; 3" CHECK VALVE-CISCEO3A, (2) 1" VENTS-VALVE № Y-100T23.	ACTION REQ'D.
2	5-27-76	RH. H.C.	REVISED FABRICATION RESPONSIBILITY OF SPOOL PC. 2-NSW-108-6.	
3			6" G 3/4" WAS 6" 13/16 ADDED [illegible] TO REPAIR ITEM 8.	
4	2/12/78	GP LB	AS PER RFC-12-1439 DELETED VALVE TAG NO. CISCEO3A, ADDED VALVE TAG NO. CISCW03A & ITEMS 11 THRU 14 AND REVISED RELATED PIPING	FIELD ACTION REQ'D
5	9/6/81	K.A. Aud	PER RFC DC-12-2549 REPLACED 3" CHECK VA. & WCR-933 WITH DIAPH. VA'S WCR-932 933. ADDED: PIPE SPEC. G-14 NOTES 6 & 7, FIELD WELD BOX, FIELD WELDS FW 15 TO 19, FSW 20 & 21, 2-NSW-108-7, ITEMS №'S 15 & 16 TO B/M, DELETED ITEM №'S 7, 11, 12, 13 & 14 FROM B/M. MODIFIED PC MK 2-NSW-108-5 & 2-NSW-108-L7, REVISED ITEM №'S 1 & 9	FIELD ACTION REQ'D.
6	9/13/81	K.A. DLF	PER RFC DC-12-2549 ROTATED VALVE ACTUATOR ADDED DIM 11 3/8" & REF NOTE	FIELD ACTION REQ'D.
7	9/13/81	J.L. M	PER RFC DC-12-2549 DIM. 7'-2 7/16" WAS 7'-2 3/16" AND ADDED DIM'S.	NO FIELD ACTION REQ'D
8	6/4/82	DR. OZ	PER RFC-DC-12-2549: REVISED LOC. OF WCR-932 AND RELATED PIPING AS PER FIELD VERIFICATION & ADDED RED. INSERT & PLUG TO ITEM 8 & 9/14.	FIELD ACTION REQ'D.
9	7/12/90	EBD. CDM. LB	TO REFLECT AS-FOUND CONDITIONS FOR RFC-DC-12-3010 PER FWR # 759 REV. 1, ADDED: 1" X 3/4" RED. INSERT, 3/4" & 1/2" PLUG. REVISED: B/M TO SUIT. ADDED: SUPPORT MARK NOS. & SUPERSEDES HGR. 190. NO. 2-GNSW-108 SH. NO. 2.	NO FIELD ACTION REQ'D.

D-22B

2NSW-108 (sheet 2 of 2)
Upper Containment Ventilation
Unit 4 Supply Line

POUR/ZONE No. 2-PC
REQUIRED COMPLETION DATE
FABRICATED BY TUBECO
FLOW DIAGRAM 2-5114A
O.S.L. SEE DESIGN
WELD PROCEDURE CODE STAMP

NPS DESIGNS INC.
NEW YORK, N.Y.

LIVSEY & COMPANY, INC.
INDIANA & MICHIGAN ELECTRIC CO.
DONALD C. COOK NUCLEAR PLANT

FABRICATOR NOTE:
FABRICATION MUST CONFORM TO LATEST A.E.P. ARRGT. DWGS.

DWN. S.S.	DATE 8-4-11	CONTAIN. VICINITY	
CKD. LdB	DATE 2-25-72	DWG. NO. 2-NSW-108 SH. 2 OF 2	REV. 9
ISSUED			
REF. DWG. 2-5437A			