TOTAL FW 24

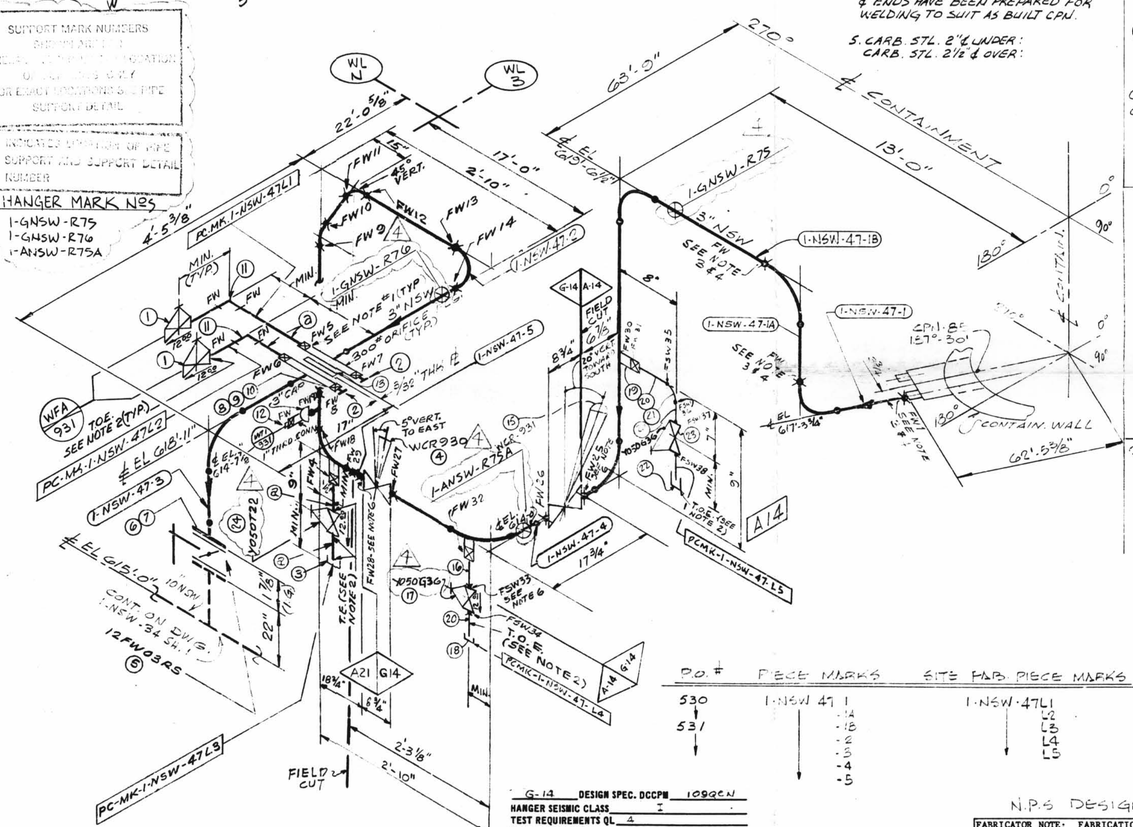
NOTES:

1. BORE OUT THREADS ON ORIFICE FLANGES TO SUIT 1/2" S.W. CONNECTIONS.
2. USE CRANE 425A COMPOUNDS ON ALL THREADED CONNECTIONS.
3. FABRICATOR TO MAKE THIS END OF SPOOL 6" LONGER WITH PLAIN END TO FACILITATE INSTALLATION.
4. FW'S PERTAINING TO THIS NOTE ARE TO BE MADE AFTER PIPE IS PREALIGNED & ENDS HAVE BEEN PREPARED FOR WELDING TO SUIT AS BUILT CPN.
5. CARB. STL. 2" & UNDER: CARB. STL. 2 1/2 & OVER:
6. PROVIDE BI-METALLIC WELDS (STAINLESS STEEL-CARBON STEEL)
7. REMOVE BONNET ASSEMBLY BEFORE WELDING VALVE BODY TO PIPE LINE
8. BUTTWELDS = RT-100% TESTING SOCKET WELDS = PT-100% TESTING

MATERIAL 190. SHT NO. 1307

QSL	ITEM	QTY	SIZE	DESCRIPTION	TAG NO. OR ASTM MAT'L	HEAT NO
01	1	2	1/2"	200# BRONZE OR BRASS THREADED GLOBE VALVE	Y050T23	
	2	2	1/2"	3000# C.S. S.W. PLUG	A-181 OR A-105 GR I OR II	
	3	2	1/2"	3000# C.S. SCRD. CAP		
04	4	1	3"	B.W. DIAPH. CONTROL VA. S.S.	WCR030	
01	5	1	3"	125# C.S. BUTTERFLY VALVE	12FW03RS	
	6	4	5/8"	φ x 5" LG. MACH. BOLT W/HEX. HD.	A-307 GR. B	
	7	4	5/8"	HEAVY HEX. NUT CL. 2 TO	A-307 GR. B	
	8	8	3/4"	φ x 4 1/4" LG. STUD BOLTS	A-193 GR. B7	
	9	16	3/4"	HEAVY HEX. NUT	A-194 GR. 2H	
	10	2	3"	300# 1/16" THK. FLEXITALLIC GASKET STAE CG.		
	11	2	1/2"	3000# C.S. 90° ELL S.W.	A-105 OR A-181 GR. I OR II	
	12	1	1"	THERMOWELL	WTI-931	
	13	1	8"	300# 3/8" THK. PL. d = 1.5921	WFA-931	
01	14	AS REQ'D	1/2"	PIPE (SCH. 80 SMLS.) C.S.	A-106 GR. B	
04	15	1	3"	B.W. DIAPH. CONTROL VA. S.S.	WCR031	
	16	AS REQ'D.	1/2"	PIPE (SCH. 40S) SMLS. S.S.	A-312 GR. TP-304	
	17	1	1/2"	600# C.S. S.W. GATE VALVE	Y050G36	
	18	1	1/2"	3000# C.S. SCRD. CAP	A-181 GR. I OR II	
	19	1	1/2"	3000# C.S. S.W. HALF C.P.L.G.		
04	20	AS REQ'D	1/2"	PIPE (SCH. 80, SMLS) C.S.	A-106 GR. B	
	21	1	1/2"	3000# C.S. S.W. 90° ELL	A-181 GR. I OR II	
	22	1	1/2"	3000# C.S. SCRD. CAP		
	23	1	1/2"	600# C.S. S.W. GATE VALVE	Y050G36	
	24	1	1/2"	150# THD. GLOBE VALVE, BRONZE OR BRASS	Y050T22	

REV.	DATE	DR CHK	DESCRIPTION	REMARKS
1	5-17-72	J.Q. DR	REMOVED "HOLD" ADDED PC MK. 1-NSW-47-1A & 1B. NOTES 3, 4 & 5. ITEMS 4 THRU 18 TO B/M. REVISED PC MKS. 1-NSW-47 L1 & L2 REF. # DWG. 1-5497	FIELD ACTION REQ'D
2	1-20-76	HAI	REVISED BY A.E.P. DESIGN PER RFC-DC-12-57 TO REFLECT AS BUILT WHEN ISOLATION VALVE WAS ADDED	NO ACTION REQ'D.
3	1/13/82	A.G. DR	PER RFC-DC-12-2549 ADDED: PIPE SPEC G-14 DIM'S, PC MK 4 & 5, L-4 & L5 WELD BOX NOTES 6, 7 & 8 FIELD WELDS FW 28 TO 30 FSW 33 TO 38. ITEMS 15 TO 23 IN B/M REVISED ITEM 4 IN B/M DELETED ITEM 14 FROM B/M	FIELD ACTION REQ'D.
4	5/11/86	DK/ BOW LB	PER RFC-DC-12-2876 REV'D VALVE TYPE ADDED SUPPORT MARK NOS, SUPERSEDED HGR. 150 1-GNSW-47. ALL ABOVE TO REFLECT AS-BUILT CONDITIONS.	NO FIELD ACTION REQ'D



P.O. #	PIECE MARKS	SITE FAB. PIECE MARKS
530	1-NSW-47 1	1-NSW-47L1
531	-1A	L2
	-1B	L3
	-2	L4
	-3	L5
	-4	
	-5	

N.P.S DESIGNS

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

LABOR COST CONTROL	
USE ONLY WITH	
PIPE SIZE	
SCHEDULE	
TYPE	
ISO START DATE	
ISO FINISH DATE	
WORK OPERATION	LINE ITEM NUMBER
HANGER INST.	
ERECT	
WELD	
RADIO-G – X-RAY	
STRESS RELIEVE	
MISC. WORK	

LABOR COST CONTROL	
USE ONLY WITH	
PIPE SIZE	
SCHEDULE	
TYPE	
ISO START DATE	
ISO FINISH DATE	
WORK OPERATION	LINE ITEM NUMBER
HANGER INST.	
ERECT	
WELD	
RADIO-G – X-RAY	
STRESS RELIEVE	
MISC. WORK	

SIZE	QUAN.	FW
3"	18'	15
1"	0	1
1/2"	0	8

TOTAL FW 14	FOR REV. 3 ONLY	
SIZE	QUAN.	FW
3"	2'	5
1/2"	3'	9

G-14 DESIGN SPEC. DCCPM 109QCN
HANGER SEISMIC CLASS I
TEST REQUIREMENTS QL 4
WELD PROCEDURE
QSL 04 TESTING SEE NOTE 8

A-14 DESIGN SPEC. DCCPM 103QCN
HANGER SEISMIC CLASS I
TEST REQUIREMENTS QL 4
WELD PROCEDURE SEE NOTE 6
QSL 04 TESTING RT-100%

A-21 DESIGN SPEC. DCCPM 102QCS
HANGER SEISMIC CLASS II
TEST REQUIREMENTS QL 1
WELD PROCEDURE SEE NOTE 5
QSL 01 TESTING N/A

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

B.P. : BORING POINT
T.O.E. : THREAD ONE END
T.B.E. : THREAD BOTH ENDS
P.O.E. : PLAIN ONE END
P.O.P. : TOP OF PIPE ELEV.
G.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. : SWAGE 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
S = AUTOMATIC SHOP WELD
I = MANUAL SHOP WELD
V = VERIFY DIMENSION IN FIELD

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

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

TESTING			
N.D.T. SEE DESIGN CODE STAMP			
M.T.	P.T.	R.T.	U.T.
PRESSURE TEST			
MED.	PRESS.	DURATION	

ADDITIONAL

POUR/ZONE No. A-14
REQUIRED COMPLETION DATE
FABRICATED BY TUBECO

FLOW DIAGRAM 1-5114A
QSL SEE DESIGN
WELD PROCEDURE CODE STAMP

REVISION RECORD

NO	DATE	DESCRIPTION

1NSW-47
Upper Containment Ventilation Unit 3 Return Line

LIVSEY & COMPANY, INC.
DONALD C. COOK NUCLEAR PLANT

DWN: WLP DATE 5-11-71 A. L. LIVSEY ELDER
CKD: GN DATE 5-27-71
ISSUED
REF. DWG. 1-5497
DWG. NO. 1-NSW-47-4
REV.

D-79