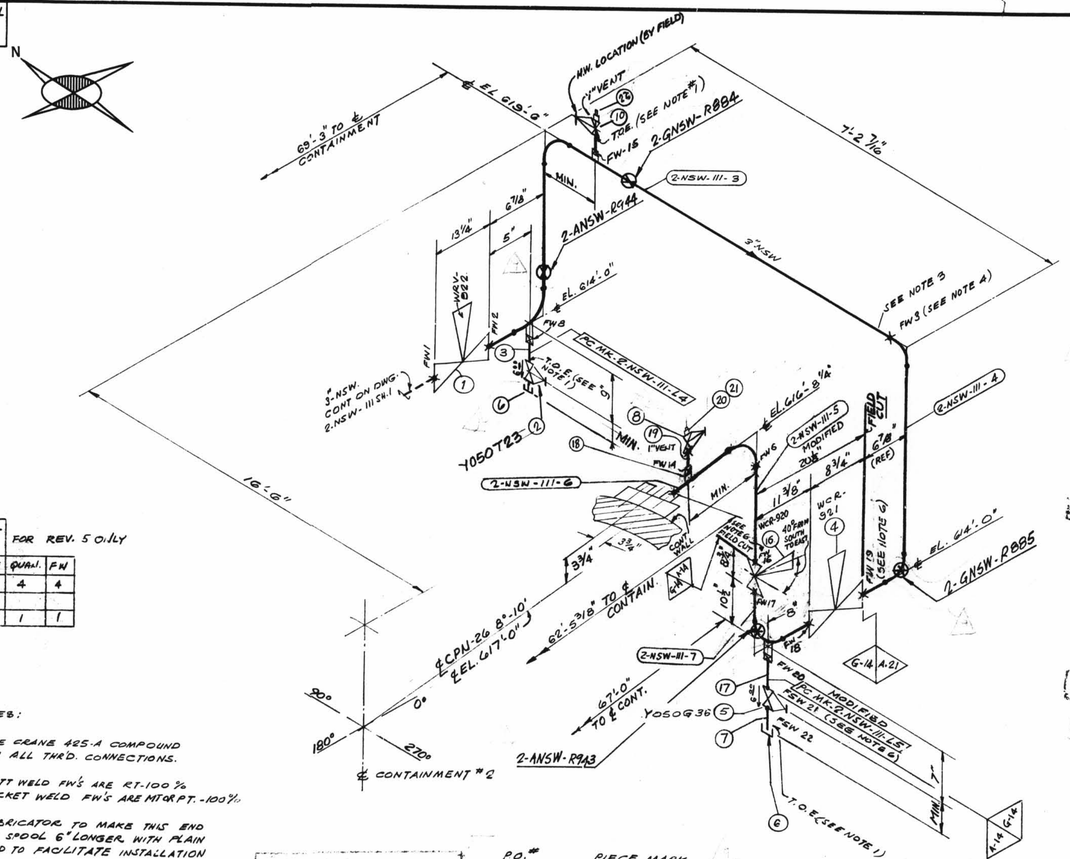
| TOTAL FW 15 |
|---|




| TOTAL FW 5 | | |
|---|---|---|
| SIZE | QUAN. | FW |
| 3" | 4 | 4 |
| | | |
| 1/2" | 1 | 1 |

FOR REV. 5 ONLY

NOTES:

1. USE CRANE 425-A COMPOUND ON ALL THR'D. CONNECTIONS.
2. BUTT WELD FW'S ARE RT-100% SOCKET WELD FW'S ARE MT OR PT. -100%.
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 CUT, PRE-ALIGNED AND ENDS HAVE BEEN PREPARED FOR WELDING TO SUIT AS-BUILT CPN
5. WELD PROCEDURE AS FOLLOWS: C/S-2" & UNDER- C/S-2 1/2" & OVER-
6. PROVIDE BI-METALLIC WELDS (STAINLESS STEEL-CARBON STEEL)
7. REMOVE BONNET ASSEMBLY BEFORE WELDING VALVE BODY TO PIPE LINE.

| SIZE | QUAN. | FW |
|---|---|---|
| 3" | 27' | 9 |
| 1/2" | 1 | 4 |
| 1" | 2 | 2 |

SEE SUPPORT DRAWINGS FOR LOCATION OF SUPPORTS ONLY. FOR EXACT LOCATION OF PIPE SUPPORT, CONTACT

| P.O.# | PIECE MARK |
|---|---|
| | 2-NSW-111-3 |
| | -4 |
| | -5 |
| | -6 |
| | -7 |

SITE FAB. PIECE MARK

2-NSW-111-L4
-L5

SUPPORT MARK NOS.

2-GNSW-R884
" R885
2-ANSW-R943
" R944

SUPPORT DRAWING NUMBER

G-14 DESIGN SPEC DCCPM 102 QCN
HANGER SEISMIC CLASS I
TEST REQUIREMENTS QL-4
WELD PROCEDURE
QSL-04 TESTING SEE NOTE 2

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

A-14 DESIGN SPEC DCCPM 102 QCN
HANGER SEISMIC CLASS I
TEST REQUIREMENTS QL- 4
WELD PROCEDURE SEE NOTE 5
QSL- 04 TESTING SEE NOTE 2

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

K.P. = KINKING POINT
T.O.E. = THREAD ONE END
B.O.E. = BEVEL BOTH ENDS
R.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
I = MANUAL SHOP WELD
E = VERIFY DIMENSION IN FIELD

| PIPE | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A-53 | | A-106 | | | A-376 | | A-312 | | | | | | |
| | | GR B | | | | | GR TP304 | | | | | | |
| STC. | 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. SEE DESIGN CODE STAMP | | | | |
| M.T. | P.T. | E.T. | U.T. | |
| PRESSURE TEST | | | | |
| MED. | PRESS. | DURATION | | |

ADDITIONAL

POUR/ZONE No. 2C5
REQUIRED COMPLETION DATE
FABRICATED BY LABECO

FLOW DIAGRAM 2-5114
Q.S.L. SEE DESIGN
WELD PROCEDURE CODE STAMP

NPS DESIGNS INC.
NEW YORK, N.Y.

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

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

DWN. SCS DATE 12-21-73
CKD. LDB DATE 3/1/74
ISSUED
REF. DWG. 2-5437A

CONTAIN. VICINITY
DWG. NO. 2-NSW-111 SH. 2 OF 2
REV. 9

ISO SHT. NO. 2117

| QSL | ITEM | QTY. | SIZE | MATERIAL DESCRIPTION | TAG No. OR ASTM MAT'L. | HEAT NO. |
|---|---|---|---|---|---|---|
| 01 | 1 | 1 | 3" | B.W. REGULATING VA. | WRV-922 | |
| | 2 | 1 | 1/2" | 200# THR'D. GLOBE VA. BRONZE OR BRASS | Y050T23 | |
| | 3 | AS REQ'D | 1/2" | PIPE (SCH. 80) SMLS C.S. | A-106 GR. B. | |
| 04 | 4 | 1 | 3" | B.W. DIAPH. CONTROL VA. S.S. | WCR-921 | |
| | 5 | 1 | 1/2" | 600# C.S. S.W. GATE VA. | CY050G36 | |
| | 6 | 2 | 1/2" | 3000# C.S. THR'D. CAP | A-181 GR. I OR II | |
| | 7 | AS REQ'D | 1/2" | PIPE (SCH. 80) SMLS. C.S. | A-106 GR. B. | |
| | 8 | 1 | 1" | 600# S.W. GLOBE VA. C.S. | Y-100T36 | |
| | | | | | | |
| 01 | 10 | 1 | 1" | 200# THR'D. GLOBE VA BRONZE OR BRASS | Y-100T23 | |
| | | | | | | |
| | | | | | | |
| | 20 | 1 | | 1" SW X 3/4" THR'D 3000# RED. INSERT | A-181 GR. I OR II | |
| | 21 | 1 | | 3/4" 3000# THR'D PLUG | | |
| | 22 | 1 | 1" | 3000# THR'D. PLUG | A-181 GR. I OR II | |
| 04 | 16 | 1 | 3" | B.W. DIAPH. CONTROL VA. S.S. | WCR-920 | |
| | 17 | AS REQ'D. | 1/2" | PIPE SCH. 40S SMLS | A-312 GR. TP 304 | |
| | 18 | 1 | 1" | 3000 C.S. HALF CPLG. | A-181 GR. I OR II | |
| | 19 | AS REQ'D | 1" | PIPE (SCH. 80) SMLS C.S. | A-106 GR. B | |
| | | | | | | |
| | | | | | | |

REVISION RECORD

| NO. | DATE | BY CHK | DESCRIPTION | REMARKS |
|---|---|---|---|---|
| 1 | 1-20-76 | DLB B.R. | REVISED BY AEP. DESIGN: PER RFC-DC-12-671: REV'D: ITEM #5 Y-050G36 WAS CY-050G36. ADDED; 3" CHECK VALVE - C15CE03A, 1" VENTS - VALVE NO Y-100T23. Y-100 T-36 | ACTION REQ'D. |
| 2 | 12-30-76 | W.R. | ADDED: PLUG TO DRAIN VALVE, ITEM 11, @ 6'-6 3/4" DIMEN. W.R. | |
| MF 3 | 9/21/78 | G.P. L.B. | AS PER RFC-12-1730 DELETED VALVE TAG NO. C15CE03A, ADDED VALVE TAG NO. C15CW03A & ITEMS 12 THRU 15 AND REUSED RELATED PIPING. | FIELD ACTION REQ'D |
| MF 4 | 9/11/80 | A.G. | PER RFC DC-12-2549 REPLACED 3" CHECK VA. & WCR 921 WITH DIA PH. CONTROL VA'S. WCR-920, 921, ADDED PIPE SPEC. G-14. NOTES 6 & 7, WELD BOX, WELDS FW16 & 22, 25, FSW 23, 24 2-NSW-111-7, ITEMS NO. 16 TO 19 TO B/M DIM'S. | FIELD ACTION REQ'D. |
| MF 5 | 9/28/81 | K.A. DLF | PER RFC DC-12-2549 RELOCATED VALVE WCR-920 ADDED: DIM. PC MK 2-NSW-111-7, REF NOTE, REV. WELD BOX, MODIFIED TO PC MK. 2-NSW-111-5, REINSTATED PC MK 2-NSW-111-5. | FIELD ACTION REQ'D |
| MF 6 | 10/28/81 | J.L. J.H. | PER RFC DC-12-2549 DIM. 7'-2 7/16" WAS 7'-2 3/16" AND ADDED DIM. | NO FIELD ACTION REQ'D |
| MF 7 | 5/4/82 | K.J. J.H. | PER RFC. DC-12-2549 RELOCATED FIRST CONN. | FIELD ACTION REQ'D |
| MF 8 | 6/1/82 | K.E. J.M. | PER RFC DC-12-2549 ADDED RED. INSERT & PLUG TO ITEM 19 & B/M. | |
| MF 9 | 7/12/89 | R.B.B. D.W.M. L.B. | TO REFLECT AS-FOUND CONDITIONS FOR RFC-DC-12-3010 PER FWR # 759 REV. 1, ADDED: 1" PLUG & ITEM NO. 22 ON B/M. REVISED: 1/2" PLUG TO 1/2" CAP & B/M TO SUIT. ADDED: SUPPORT MARK NOS. & SUPERSEDES HGR. 150. # 2-GNSW-III SH. NO. 2. | NO FIELD ACTION REQ'D. |

D-238

2NSW-111 (sheet 2 of 2)
Upper Containment Ventilation
Unit 1 Supply Line