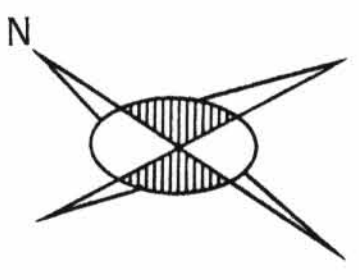
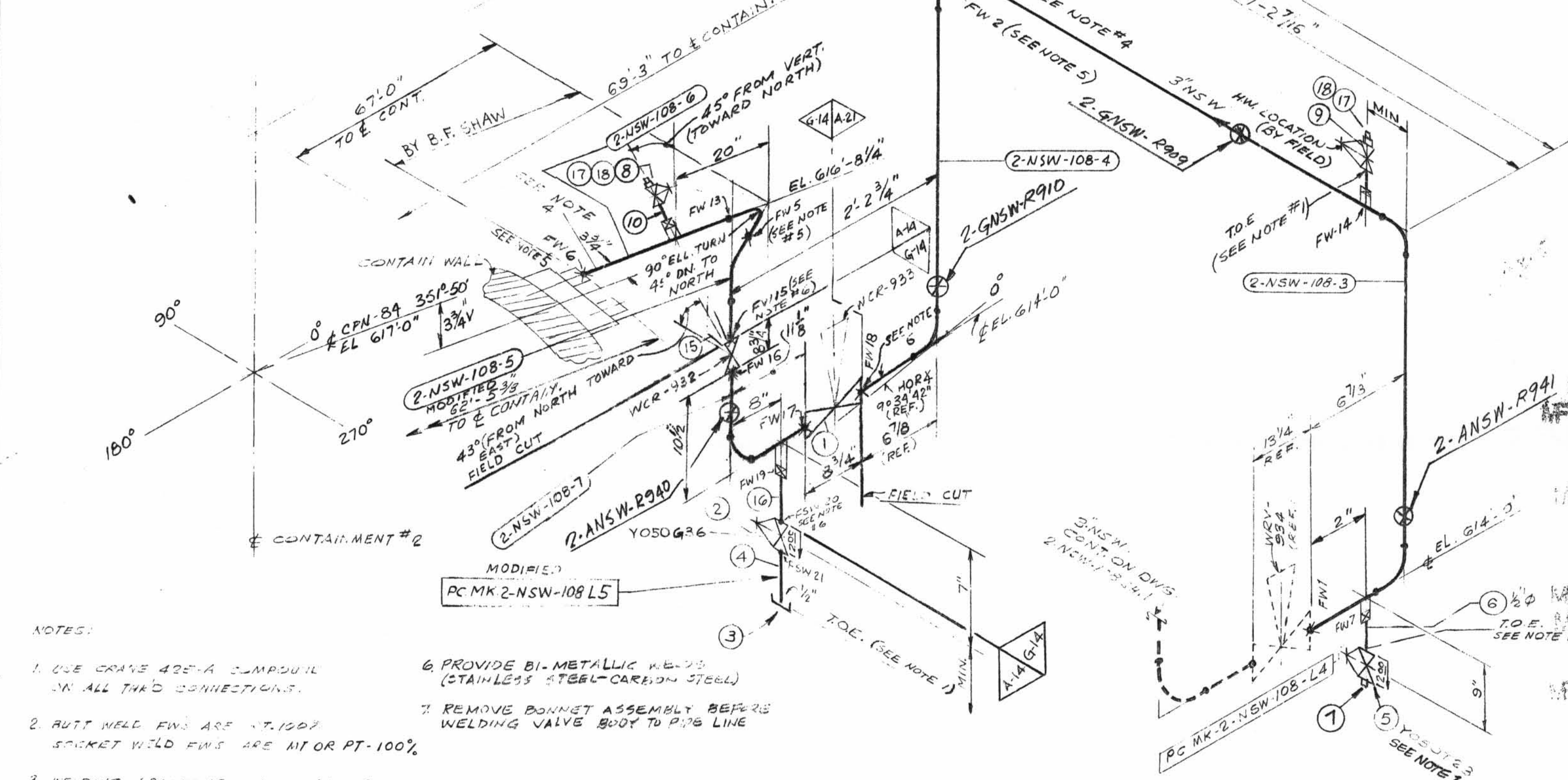


TOTAL FW 14



| SIZE | QUAN | FW |
|--------|------|----|
| 3" | 2 | 4 |
| 1 1/2" | 1 | 3 |



NOTES:

- USE CRANE 42E-A COMPRESSOR ON ALL TUBO CONNECTIONS.
- PUTT WELD FWS ARE 17.100% SOCKET WELD FWS ARE N10R PT-100%
- WELDING PROCEDURE AS FOLLOWS:
2" & UNDER - 2 1/2" & OVER -
- FABRICATOR TO MAKE THIS END OF SPOOL 6' LONGER WITH PLAIN END TO FACILITATE INSTALLATION
- FWS PERTAINING TO THIS NOTE ARE TO BE MADE AFTER PIPE IS CUT, PRE-ALIGNED & ENDS HAVE BEEN PREPARED FOR WELDING TO SUIT AS-BUILT CHN.

| SIZE | QUANT | FW |
|--------|-------|----|
| 3" | 27 | 8 |
| 1" | - | 2 |
| 1 1/2" | 4 | 4 |

G-14 DESIGN SPEC: DCCPM 109QCN
HANGER SEISMIC CLASS I
TEST REQUIREMENTS Q4-4
WELD PROCEDURE:
QSL-C4 TESTING: SEE NOTE #4
A-14 DESIGN SPEC: DCCPM 109QCN
HANGER SEISMIC CLASS I
TEST REQUIREMENTS Q4-4
WELD PROCEDURE:
QSL-C4 TESTING: SEE NOTE #4
A-21 DESIGN SPEC: DCCPM 109QCS
HANGER SEISMIC CLASS II
TEST REQUIREMENTS Q4-4
WELD PROCEDURE:
QSL-C4 TESTING: SEE NOTE #4
A-01 DESIGN SPEC: DCCPM 109QCS
HANGER SEISMIC CLASS I
TEST REQUIREMENTS Q4-4
WELD PROCEDURE:
QSL-C4 TESTING: SEE NOTE #4

| DESIGN SPEC. | SEE | W.P. WORKING POINT | B.B. BEVEL BOTH ENDS | F.W. FIELD WELD | S. FIELD WELD |
|----------------------|--------|--|-------------------------------|--------------------------|-------------------------------|
| HANGER SEISMIC CLASS | DESIGN | T.O.E. - THREAD ONE END | P.O.E. - PLAIN ONE END | H - HORIZONTAL | O - AUTOMATIC SHOP WELD |
| TEST REQUIREMENTS | CODE | T.B.E. - THREAD BOTH ENDS | P.B.E. - PLAIN BOTH ENDS | V - VERTICAL | M - MANUAL SHOP WELD |
| MATERIAL CLASS | STAMP | B.O.E. - BEVEL ONE END | S.O.E. - SHAPE ONE END | S.W. - SHOP WELD | F - VERIFY DIMENSION IN FIELD |
| | | T.O.P. - TOP OF PIPE ELEV. | B.O.P. - BOTTOM OF PIPE ELEV. | F.S.W. - FIELD SHOP WELD | |
| | | Q.S.L. - MATERIAL QUALITY REQUIREMENTS | T.L. - TRUE LENGTH | | |

| QSL | ITEM | QTY. | SIZE | MATERIAL DESCRIPTION | TAG No. OR ASTM MATL. | 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# THRD CAP C.S. | A-13 GR.B | |
| | 4 | AS REQD | 1/2" | PIPE (SCH. 80) SMLS C.S. | A-106 GR10R II | |
| 01 | 5 | 1 | 1/2" | 200# THRD 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# THRD. 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 40 SMLS | A-312 GRTP 304 | |
| | 17 | 2 | | 1" SW X 3/4" THRD 3000# RED INSERT | A-181 GR10R II | |
| | 18 | 2 | | 3/4" 3000# THRD PLUG | | |

| REVISION RECORD | | | | |
|-----------------|---------|----------|--|------------------------|
| NO. | DATE | GR. CHK. | DESCRIPTION | REMARKS |
| 1 | 7-11-75 | DR | REV'D BY AEP DESIGN: PER RFC-DC-12-671: REV'D; ITEM #2 Y-050G36 WAS CY-050G36. ADDED; 3" CHECK VALVE - CISCE03A, (2) 1" VENTS - VALVE NO Y-100T23. | ACTION REQ'D. |
| 2 | 5-27-76 | BH. H.G. | REVISED FABRICATION RESPONSIBILITY OF SPOOL PC. 2-NSW-108-6. | |
| 3 | | | 6" G 3/4" HAS 6" 1/8" 1/2" ADDED TO RETAIN ITEM 8. | |
| 4 | 2-17-82 | GP LB | AS PER RFC-12-1430 DELETED VALVE TAG NO. CISCE03A, ADDED VALVE TAG NO. CISCE03A & ITEMS 11 THRU 14 AND REVISED RELATED PIPING. | FIELD ACTION REQ'D |
| 5 | 9/1/81 | KA | PER RFC DC-12-2549 REPLACED 3" CHECK VA. & WCR-933 WITH DIAPH. VA.'S WCR-932 & 293. ADDED: PIPE SPEC. G-14, NOTES G & T, FIELD WELD BOX, FIELD WELDS FW 15 TO 19, FSW 20 & 21, 2-NSW-108-7, ITEMS N5 & 16 TO B.M. DELETED ITEM N5 7, 11, 12, 13 & 14 FROM B.M. MODIFIED PEAK 2-NSW-108-5 & 2-NSW-108-L7, REVISED ITEM N5'S 1 & 9 | FIELD ACTION REQ'D. |
| 6 | 9/1/81 | KA | PER RFC DC-12-2549 ROTATED VALVE ACTUATOR. ADDED DIM 1138 & REF NOTE | FIELD ACTION REQ'D. |
| 7 | 1/2/81 | J.L. | PER RFC DC-12-2549 DIM. 7-2716" WAS 7-23716" AND ADDED DIM'S. | NO FIELD ACTION REQ'D. |
| 8 | 6/14/82 | DR. | 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. | FIELD ACTION REQ'D. |
| 9 | 7/12/80 | EPB | TO REFLECT AS-FOUND CONDITIONS FOR RFC-DC-12-3010 PER FWR#750 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. 2-5 FLOW DIAGRAM 2-511A
REQUIRED COMPLETION DATE O.S.L. SEE DESIGN
FABRICATED BY TUBCO WELD PROCEDURE CYCLE 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. DATE: 8/6/81
CKD: LDB DATE: 2-25-72
ISSUED
REF. DWG. 2-5437A

CONTAIN. VICINITY
DWG. NO. 2-NSW-108
SH. 20F2