



NOTE: ALL ITEMS MARKED THUS [A] ARE "AS BUILT" ITEMS AND ARE NOT SHOWN ON PIPING DRAWINGS.

NOTES:

- INSTRUMENT SENSING LINES UP TO AND INCLUDING THE ROOT VALVES SHALL BE FURNISHED AND INSTALLED UNDER CONTRACT E89-4.
- FLOOR AND EQUIPMENT DRAIN FITTINGS AND PORTIONS OF EMBEDDED PIPING FURNISHED AND INSTALLED BY OTHERS AS SHOWN ON DRAWINGS 2183, 2184, 2185, 2186 AND 2187.
- DIFFUSER PIPE IN SUMPS TO BE 2" DIA. ENCIRCLING SUMP. DIFFUSER HOLES TO BE 3/4" DIA. APPROXIMATELY 1" O.C.
- ALL "MS-1" PIPING SYSTEMS SHOWN HEREON SHALL BE CLASS "N" NUCLEAR CLASSIFICATION.
- ALL EQUIPMENT DRAINS EXTERIOR TO DRYWELL TO BE FURNISHED WITH LOOP SEALS.
- ALL VR-1 SYSTEM PIPING INSIDE OF THE DRYWELL IS SUPPORTED TO CLASS IS RESTRAINED CRITERIA.
- ALL VALVE NUMBERS IN PARENTHESIS () ARE NUMBERS USED IN OPERATING PROCEDURES. THESE NUMBERS ARE ASSIGNED BY NPPD AND WILL NOT BE SHOWN ON PIPING DRAWINGS.
- 1" PI-15 REACTOR VESSEL FLANGE LOW PRESSURE SEAL LEAK-OFF PIPING CONFORMS TO CLASS "N" REQUIREMENTS FOR MATERIALS, EXPLANATION AND FABRICATION (EXCEPT THAT THREADED JOINTS ARE PERMISSIBLE WITHOUT SEAL WELDING). THIS LINE IS ATMOSPHERIC DRAIN LINE, AND NO HYDROSTATIC TESTING IS REQUIRED.
- TYPICAL VALVE NUMBERING CODE FOR 10" VACUUM BREAKERS (LOCATED DOWNSTREAM FROM RV 71A THROUGH H) IS 10V359F.
- FOR 1A CONNECTION, SEE DETAIL A. TYPICAL FOR MS-71, ARV, 71BRV, 71CRV, 71DRV, 71FRV, 71GRV, 71HRV.
- INSTRUMENT, SAMPLE, TEST, DRAIN AND VENT LINES ARE NOT ALWAYS THE SAME CLASS AS THE MAIN LINE AND THESE DRAWINGS ARE TOO NUMEROUS TO IDENTIFY IN THIS MANNER (SEE ISI PROGRAM BOUNDARY DESCRIPTIONS FOR DETAILS).
- CB IS PRIMARY CONTAINMENT BOUNDARY.
- WHERE LINES INTERCONNECT AND ARE CONTINUED ON OTHER DRAWINGS, ZONE NUMBERS ARE APPROXIMATE ONLY.

REVISIONS TO THIS DRAWING
REQUIRES A REVISION TO THE
CORRESPONDING ISOKEY.

NO.	DESCRIPTION	ORDER/DFT	DATE	ENG
1	2/2/2019-2019-0001		01/16/19	LAURENCE
2	2/2/2019-2019-0001		02/07/19	LAURENCE
3	2/2/2019-2019-0001		02/07/19	LAURENCE
4	2/2/2019-2019-0001		02/07/19	LAURENCE

AS BUILT

SIGNIFICANT NUMBER

GROUP	1	2	3	4	5	6	7	8	9	10	11	12
DATE												
DRAWN												
CHECKED												
DATE												
APPROVED												
DATE												
FILED												

**COOPER NUCLEAR STATION
FLOW DIAGRAM
REACTOR BUILDING & DRYWELL
EQUIPMENT DRAIN SYSTEM**

BURNS & ROE

2028

454003618

STATUS: Release
STATUS DATE: 10/20/2022
DS APPROVED: EDSOREN
REV: AF REV: 56 SIGN: F