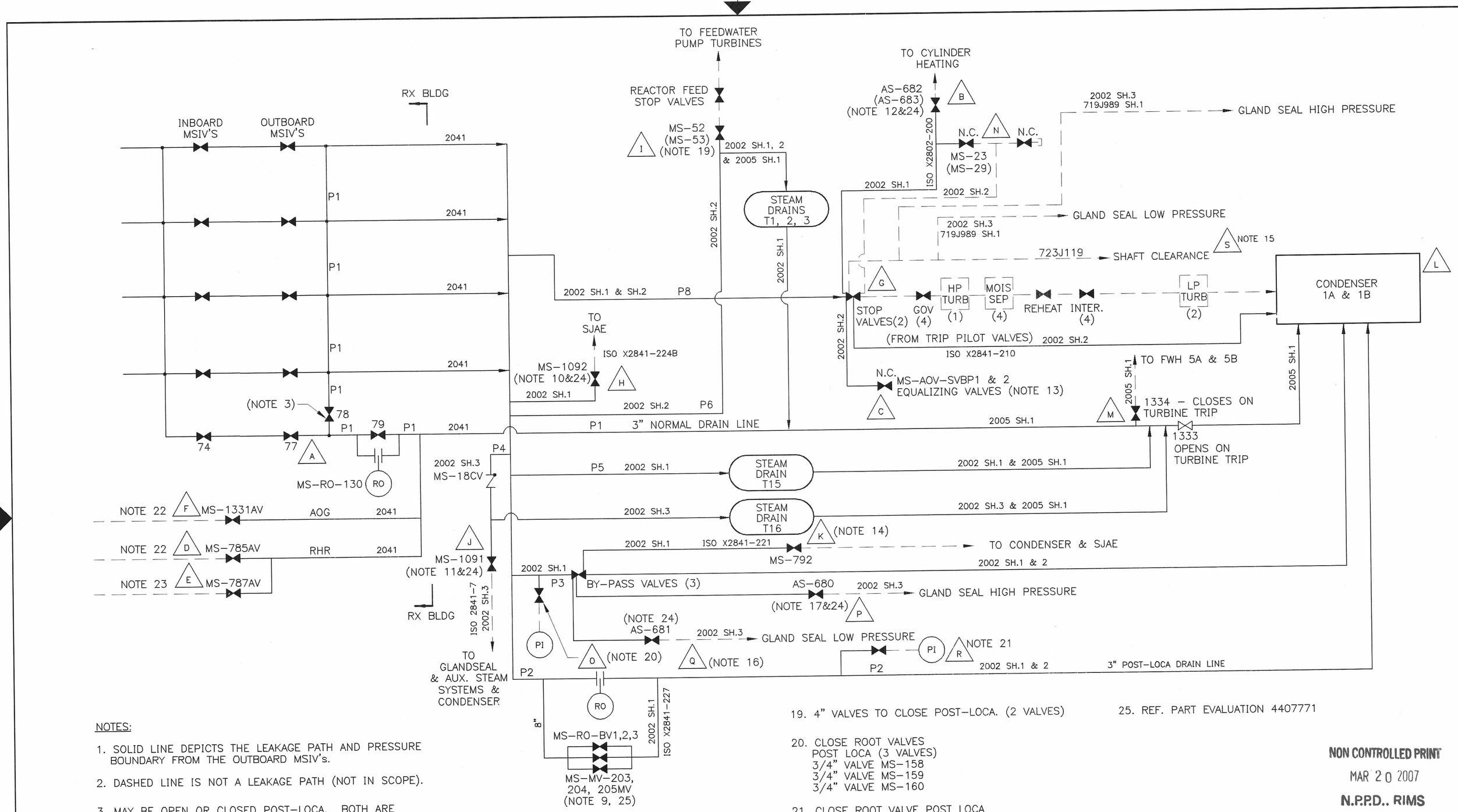

NOTES:

1. SOLID LINE DEPICTS THE LEAKAGE PATH AND PRESSURE BOUNDARY FROM THE OUTBOARD MSIV's.
2. DASHED LINE IS NOT A LEAKAGE PATH (NOT IN SCOPE).
3. MAY BE OPEN OR CLOSED POST-LOCA. BOTH ARE ACCEPTABLE.
4. POST-LOCA VALVE MANIPULATIONS ARE PER PROCEDURE 5.2 FUEL
5. NOT ALL LINES SHOWN (e.g. INSTRUMENT AND SENSING LINES). VALVE ON THESE LINES NORMALLY CLOSED SEE NEDC 00-029 TABLE 2).
6. FLOW DRAWING NUMBERS SHOWN ON LINE e.g.: 2041
7. POTENTIAL LEAKAGE PATHS SHOWN WITH A "P" DESIGNATION, EXAMPLE: P1.
8. BOUNDARY CONDITIONS SHOWN WITH A LETTER IN A TRIANGLE EXAMPLE: A.
9. 2" NORMALLY CLOSED, OPEN POST-LOCA. (3 VALVES)
10. ADDED 2" VALVE TO CLOSE POST-LOCA. (1 VALVE)
11. ADDED 5" VALVE TO CLOSE POST-LOCA. (1 VALVE)
12. ADDED 1 1/2" VALVES TO CLOSE POST-LOCA. (2 VALVES)
13. 4" EQUALIZING VALVES NORMALLY CLOSED.
14. 2" VALVE TO CLOSE POST-LOCA. (1 VALVE)
15. INSTALL AND MANIPULATE SHAFT ADJUSTMENT SYSTEM POST-LOCA.
16. ADDED 1 1/4" VALVE TO CLOSE POST-LOCA. (1 VALVE)
17. ADDED 4" VALVE TO CLOSE POST-LOCA. (1 VALVE)
18. VALVES SHOWN IN POST LOCA POSITION.
19. 4" VALVES TO CLOSE POST-LOCA. (2 VALVES)
20. CLOSE ROOT VALVES POST LOCA (3 VALVES)
    3/4" VALVE MS-158
    3/4" VALVE MS-159
    3/4" VALVE MS-160
21. CLOSE ROOT VALVE POST LOCA 3/4" VALVE MS-180 (1 VALVE)
22. 1" VALVE TO CLOSE POST-LOCA (2 VALVES)
23. 1" VALVE MS-787AV IS NORMALLY CLOSED (1 VALVE)
24. CED 6007261 INSTALLED THE FOLLOWING VALVES
    AS-680 AS-682 MS-1091
    AS-681 AS-683 MS-1092
25. REF. PART EVALUATION 4407771

NON CONTROLLED PRINT
MAR 20 2007
N.P.P.D.. RIMS

D-64 AS BUILT 452244766

CADD DRAWING
DO NOT REVISE MANUALLY

CALC NEDC 00-029

REVISIONS BY N.P.P.D.

NO.	REVISIONS	DFT	CKD	APP	DATE
N01	CED 6007261 (DCN 03-0983)	RGA	DLR	KG	7/15/03
N02	NEDC 00-029 (DCN 03-0765)	PAM	DJF	KG	3-1-04
N03	PE 4407771 (DCN 04-2903)	KPB	DJF	KG	7-29-05

SIGNIFICANT NUMBER						
GROUP	1	2	3	4	5	6

LEAKAGE PATHS FROM OUTBOARD MSIV's COOPER NUCLEAR STATION

DRAWN RA/KJD	DATE 10/16/02
CHECKED PKA FOR RLY	DATE 10-28-02
APPROVED TPM FOR TDS	DATE 3-6-03
FILMED	

Nebraska Public Power District

CNS-MS-43 REVISION N03

CADD FILE: C0043212

REVISIONS NO.