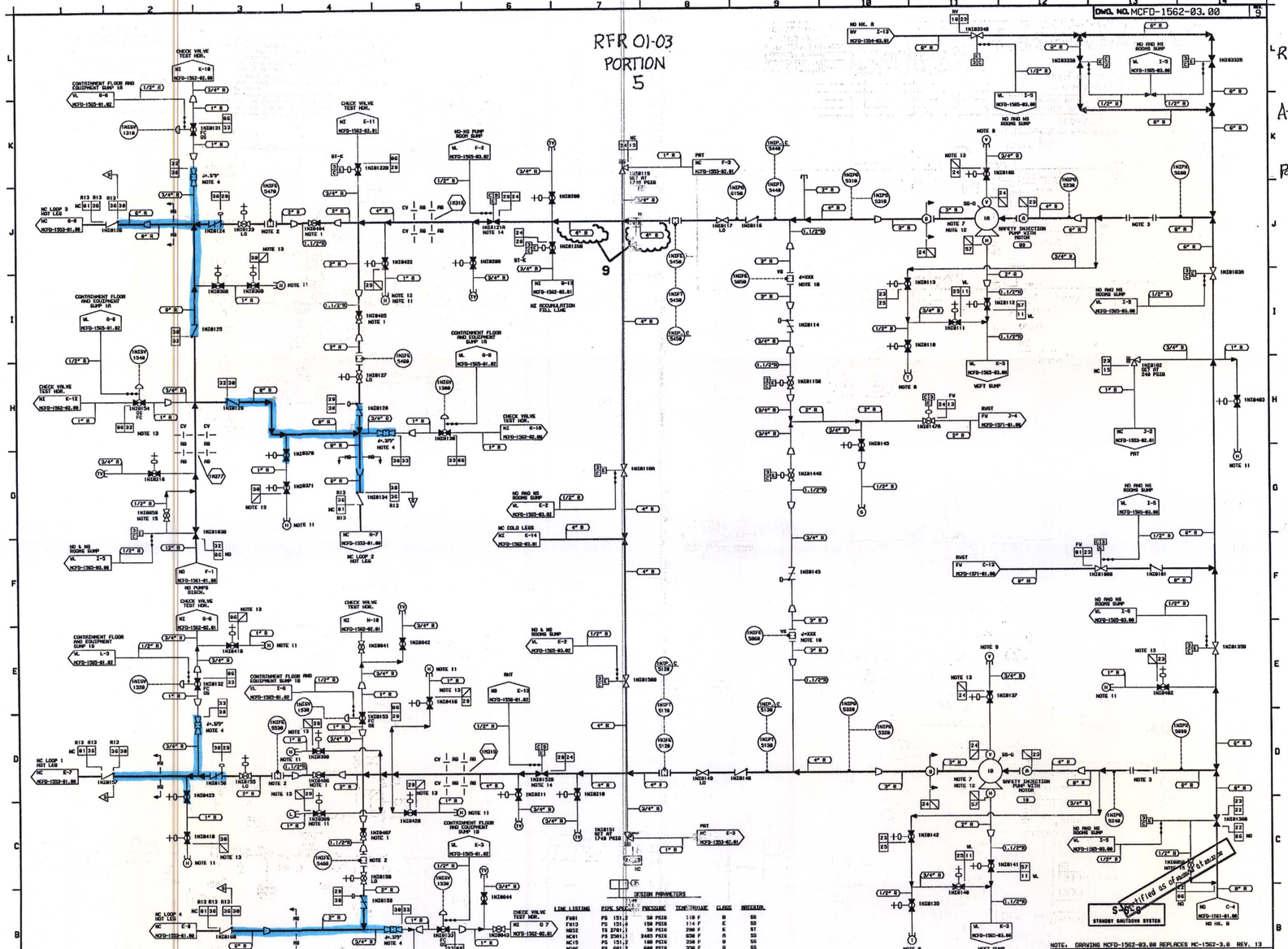
RFR 01-03
PORTION
5

DWG. NO. MCFD-1562-03.00



NOTES:

1. ADJUST VALVES IN FIELD TO LIMIT PUMP RUNOUT. THEN LOCK.
2. FLOW METERING ORIFICE TO VERIFY FLOW DURING PROGRAMMATIC TESTING.
3. TEMPORARY STRAINER IS PLACED IN SPOOL PIECE DURING INITIAL FLUSHING OPERATIONS. STRAINER MUST BE REMOVED BEFORE PLANT START-UP. STRAINER AND SPOOL PIECE SUPPLIED BY DUKE.
4. 3/8 INCH I.D. FLOW RESTRICTION REQUIRED AS NOTED ON DWG. MCM-1201.03-2.
5. DELETE.
7. SEE FLOW DIAGRAMS MCFD-1573-01.00 AND MCFD-1574-01.00 FOR COOLING WATER CONNECTIONS TO SAFETY INJ. PUMPS.
8. ARRANGE TELL-TALE FOR EASY DRAINAGE INTO HPHO CONTAINED VESSEL.
9. DROP VENT SO THAT CAP IS 2 INCHES ABOVE BED PLATE AND DUMPS OVERFLOW INTO BED PLATE.
10. MINIFLOW ORIFICE SUPPLIED BY PUMP MANUFACTURER.
11. VENTS AND DRAINS ADDED BY CONSTRUCTION FOR FLUSH AND HYDRO.
12. THIS COMPONENT WAS NOT BUILT TO ASME III. HOWEVER, IT WAS BUILT TO THE APPLICABLE CODE AT THE TIME OF PURCHASE AS PER McGUIRE FSAR TABLE 1A.4-2.
13. VENT AND DRAIN ASSEMBLIES ARE TO BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MCS-1206.00-02-0002 USING ENGINEERING SPECIFICATION MCS-ES-1A, 1B, 1C AND 1D.
14. VALVES 1NI8121B AND 1NI8132B HAVE A MAX STROKE TIME OF 12 SECONDS.
15. VALVE BONNET EQUALIZATION LINE. MECHANISTICALLY LOCKED. OPEN. IF NECESSARY TO CLOSE, DO NOT OVER TIGHTEN.

DESIGN PARAMETERS

LINE LISTING	PIPE SPEC.	PRESSURE	TEMPERATURE	CLASS	MATERIAL
FW01	PS 151.2	50 PSIG	110 F	B	SS
FW12	PS 151.6	150 PSIG	114 F	C	SS
NC02	TS 2701.1	50 PSIG	200 F	E	S1
NC01	PS 2501.1	2485 PSIG	650 F	A	SS
NC15	PS 151.2	100 PSIG	200 F	D	SS
NC06	PS 601.2	600 PSIG	350 F	D	SS
NI06	PS 2501.4	2485 PSIG	650 F	C	SS
NI28	PS 2501.2	2485 PSIG	300 F	B	SS
NI22	PS 601.2	600 PSIG	350 F	B	SS
NI23	PS 301.2	248 PSIG	100 F	B	SS
NI24	PS 151.2	248 PSIG	100 F	B	SS
NI25	PS 151.4	248 PSIG	100 F	C	SS
NI29	PS 2501.1	2485 PSIG	650 F	D	SS
NI30	PS 2501.1	2485 PSIG	650 F	A	SS
NI32	PS 2501.2	2485 PSIG	650 F	B	SS
NI33	PS 2501.2	2485 PSIG	650 F	A	SS
NI36	PS 2501.1	2485 PSIG	650 F	A	SS
NI37	PS 151.4	50 PSIG	300 F	E	SS
NV18	PS 151.2	230 PSIG	100 F	B	SS
VL11	PS 151.2	50 PSIG	200 F	E	SS
VL35	TS 2701.1	50 PSIG	200 F	E	S1
VL43	TS 2701.1	100 PSIG	200 F	E	S1

NO.	REVISIONS	DRN	DATE	CHKD	DATE	APPR	DATE
9	AS-BUILT PER MCM-12943	MHP	01-26	JRC	01-26	RDH	01-26

ARS MCM BSH
CIVIL ELEC. MECH.
INSPECTED

NOTE: DRAWING MCFD-1562-03.00 REPLACES MC-1562-3.0 REV. 13

QA CONDITION 1 AND 2

DUKE POWER COMPANY
MCGUIRE NUCLEAR STATION UNIT 1

FLOW DIAGRAM OF
SAFETY INJECTION SYSTEM
(NI)

DESIGNED BY NICHOLS DATE 08-25-83 INDR. M. ELIAS DATE 08-25-83
DRAWN BY WILLIAMS DATE 08-25-83 INDR. MR. DICKS DATE 10-25-85
CHECKED BY D.SEO DATE 08-25-83 MCES SA.HAMBIN DATE 10-25-85
SCALE DWG. NO. MCFD-1562-03.00

ERN: MC089085

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Attachment
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