



- NOTES
1. ALL COMPONENTS MARK NUMBERS PREFIXED 20 UNLESS OTHERWISE NOTED.
 2. ALL MANUAL VALVES PREFIXED RDW UNLESS OTHERWISE NOTED.
 3. EQUIPMENT DRAINS & PUMP SEALS SHALL BE ROUTED TO EQUIPMENT DRAIN OR FLOOR DRAIN SYSTEM AND NOT FLOW FREELY ACROSS THE FLOOR.
 4. ALL RADWASTE ALARMS WILL BE ON AN ANNUNCIATOR ON THE RADWASTE CONTROL ROOM PANEL, EXCEPT DRYWELL EQUIPMENT SHALL ALARM IN MAIN CONTROL ROOM. A COMMON TROUBLE ALARM FROM THE RADWASTE ANNUNCIATOR SHALL ALARM IN THE MAIN CONTROL ROOM.
 5. ALL CONTROLLERS TO HAVE "MANUAL AUTOMATIC" CONTROL STATIONS.
 6. ALL VALVES WITH AIR OR MOTOR OPERATORS ARE TO HAVE POSITION INDICATING LIGHTS ON THE ASSOCIATED PANEL, FOR BOTH OPEN & CLOSED POSITIONS.
 7. OPERATING STATUS LIGHTS FOR DRYWELL SUMP PUMPS WILL BE LOCATED ON MAIN CONTROL PANEL. ALL OTHER PUMPS, CENTRIFUGALS, MIXERS & CONVEYORS WILL HAVE OPERATING STATUS LIGHTS ON THE RADWASTE PANEL.
 8. SUMP PUMPS WILL START AUTOMATICALLY ON HIGH LEVEL AND STOP AUTOMATICALLY ON LOW LEVEL. OPERATING TIME WILL BE TOTALIZED ON EACH SUMP PUMP.
 9. COLLECT DRAIN PIPING TO SUMPS AND REVISE TO CONFORM TO PIPING LAYOUT. THE ONLY DRAINS REQUIRING DIRECT ROUTING ARE THOSE INDICATED COMING FROM OTHER DRAWINGS.
 10. INCOMING PIPING TO SUMPS SHALL TERMINATE BELOW LOW WATER LEVEL TO PROVIDE A WATER SEAL. ALL GAS LINE DRAINS SHALL BE SPREAD AS ABOVE OR WITH LOGS SUFFICIENT TO PREVENT OIL GASES FROM ENTERING SUMP.
 11. ALL PIPING AND VALVES PRESSURE/TEMPERATURE REQUIREMENTS ARE APPROXIMATE 150 PSIG/150°F.
 12. ALL LIFT CONNECTIONS (D) ARE PIPING CLASS 10-NR BEGINNING AT THE DOWNSTREAM SIDE OF THE REDUCER TO THE 3/8" ILRT CONNECTION.
 13. ALL PIPING CLASS 151 & 153 WILL BE RADIOGRAPHED IN SYS. 20 PER AP-2.3.
 14. PIPE CLASS 136 WILL USE BONDSTRAND SERIES 2000 PIPE.
 15. ALL SYSTEM 20 PUMPS WHICH REQUIRE SEAL WATER WILL HAVE SOFTENED VALVES ON SEAL WATER LINES WHICH OPEN DURING PUMP OPERATION. THE SEAL WATER WILL BE CONDENSATE.
 16. F.O. DENOTES FLUSH OUTALL F.O.'S ARE 1" CONNECTIONS & HAVE 1" VCS-60B UNLESS OTHERWISE NOTED.
 17. ALL OUTDOOR PIPING IN THE AREA OF THE WASTE SURGE TANK TK-18, WILL BE HEAT TRACED.
 18. FCS DENOTES CLOSE ON AIR FAILURE.
 19. VALVE ADV-95 OPENS DURING PUMP OUT OF THE DRYWELL EQUIPMENT SUMP. MANUAL OPERATING MECHANISM LOCKED DISENGAGED.

REFERENCES:

1. FLOW DIAGRAM SYMBOLS FM 14A.

SYSTEM INTENDED FUNCTION BOUNDARY

COMPONENTS SUBJECT TO AMR

PRIMARY CONTAINMENT PENETRATIONS AMM-17

QA CAT. I, II, III

NUCLEAR SAFETY RELATED
James A. Fitzpatrick
NUCLEAR POWER PLANT

DATE	3/5/80
DESIGN	AS BUILT PER DCR-03-020 & DCR-03-055
DISCIPLINE ENG	AS BUILT PER MGD NO. JD-69-093
DISCIPLINE MGR.	AS BUILT PER MGD NO. JD-69-093
PROD. APPROVAL	AS BUILT PER DCR-03-020 & DCR-03-055
DATE	3/5/80



SCALE	NONE
DWG NO.	FM-17A
REV	35

REV	NO.	DATE	DESCRIPTION	BY	CHK	APP
35	3/5/80		AS BUILT PER DCR-03-020 & DCR-03-055	KMB	JB	KM
34	12/8/79		AS BUILT PER MGD NO. JD-69-093	RVB	KJ	KM
33	6/7/79		AS BUILT PER DCR-03-020 & DCR-03-055	PUB	KMB	KM
32	10/2/78		AS BUILT PER MOD. NO. M1-98-081	RVB	JB	KJ
31	3/2/78		AS BUILT PER DCR-98-018	KMB	RVB	KF

NO.	DATE	DESCRIPTION	BY	CHK	APP
35	3/5/80				
34	12/8/79				
33	6/7/79				
32	10/2/78				
31	3/2/78				

LRA-FM-17A-0

LRA-FM-17A-35.DGN

FM-17A-35.CAL