



- NOTES:
1. ALL EQUIPMENT NUMBERS ON THIS DRAWING ARE PREPARED BY IN21 UNLESS OTHERWISE NOTED.
 2. ALL INSTRUMENT NUMBERS ON THIS DRAWING ARE PREPARED BY IN21 UNLESS OTHERWISE NOTED.
 3. FLOW ELEMENTS FE 0001A, B FLANGED ENDS ORIGINALLY PROVIDED BY BECHTEL. FLOW ELEMENTS HAVE BEEN MODIFIED TO REMOVE DOWNSTREAM FLANGES FOR BUTT-WELDED INSTALLATION OF NEW FLOW MEASUREMENT SPOOLS.
 4. ALL PIPING 2" AND SMALLER IS CLASSIFIED AS III-B" RADIATION LEVEL.
 5. ALL START-UP STRAINERS SHALL BE REPLACED BY RING SPACERS IN ACCORDANCE WITH THE LATEST REVISION OF MS-83, SECTION 4.7.
 6. ALL INSTRUMENT LINES PENETRATING THE STEAM TUNNEL SHALL HAVE ROOT VALVES LOCATED OUTSIDE OF THE STEAM TUNNEL. INSTRUMENT TUBING SHALL BE RUN BETWEEN THE ROOT VALVES AND INSTRUMENTS LOCATED OUTSIDE THE STEAM TUNNEL.
 7. FOR I-22-P171/P172 INFO SEE DWG J-909.0 SERIES.
 8. THE LEADING EDGE FLOW MONITOR (LEFM) TRANSDUCERS ARE NON-INTRUSIVE ULTRASONIC FLOW SENSORS. LEFM METERING SECTION C34N008A FOR FEEDWATER LINE "A" HOUSES TRANSDUCERS C34N008A-1 THRU C34N008A-8. LEFM METERING SECTION C34N008B FOR FEEDWATER LINE "B" HOUSES TRANSDUCERS C34N008B-1 THRU C34N008B-8.
 9. LEADING EDGE FLOW MONITOR (LEFM) CHECK PLUS SPOOL PIECE IC34N010A FOR FEEDWATER LINE "A" HOUSES TRANSDUCERS IC34N010A-1 THRU IC34N010A-15. LEFM SPOOL PIECE IC34N010B FOR FEEDWATER LINE "B" HOUSES TRANSDUCERS IC34N010B-1 THRU IC34N010B-15.
 10. EQUIPMENT WASHDOWN CONNECTION DRAINS HAVE BEEN CONFIGURED FOR A 2 1/2" FIREHOSE CONNECTION SEE DRAWINGS FSK-5-1054-001-A AND FSK-5-1054-002-A.

COMPONENTS SUBJECT TO AMR

NON-SAFETY RELATED SYSTEMS & COMPONENTS AFFECTING SAFETY RELATED SYSTEMS AM20

038	AS-BUILT PER EC 24452	WC	N/A	N/A	SP	MM	9-9-10
037	AS-BUILT PER EC 2431	WC	N/A	N/A	SP	MM	9-11-00
036	AS-BUILT PER EC 5085	WC	N/A	N/A	SP	MM	4-20-00

GRAND GULF NUCLEAR STATION	
UNIT 1	
NUCLEAR PLANT ENGINEERING	
UPDATED FINAL SAFETY ANALYSIS REPORT	
FIGURE NUMBER - 10.4-013	
P & I DIAGRAM	
FEEDWATER SYSTEM	
SCALE:	DRAWING No.
NONE	M-1054
REV.	038

0	9-23-2011				
NO.	DATE	DESCRIPTION	BY	ENG	CHK
REVISIONS					
LRA-M-1054					
CAD FILE					
m1054.dgn					
PLOT FILE					

0141