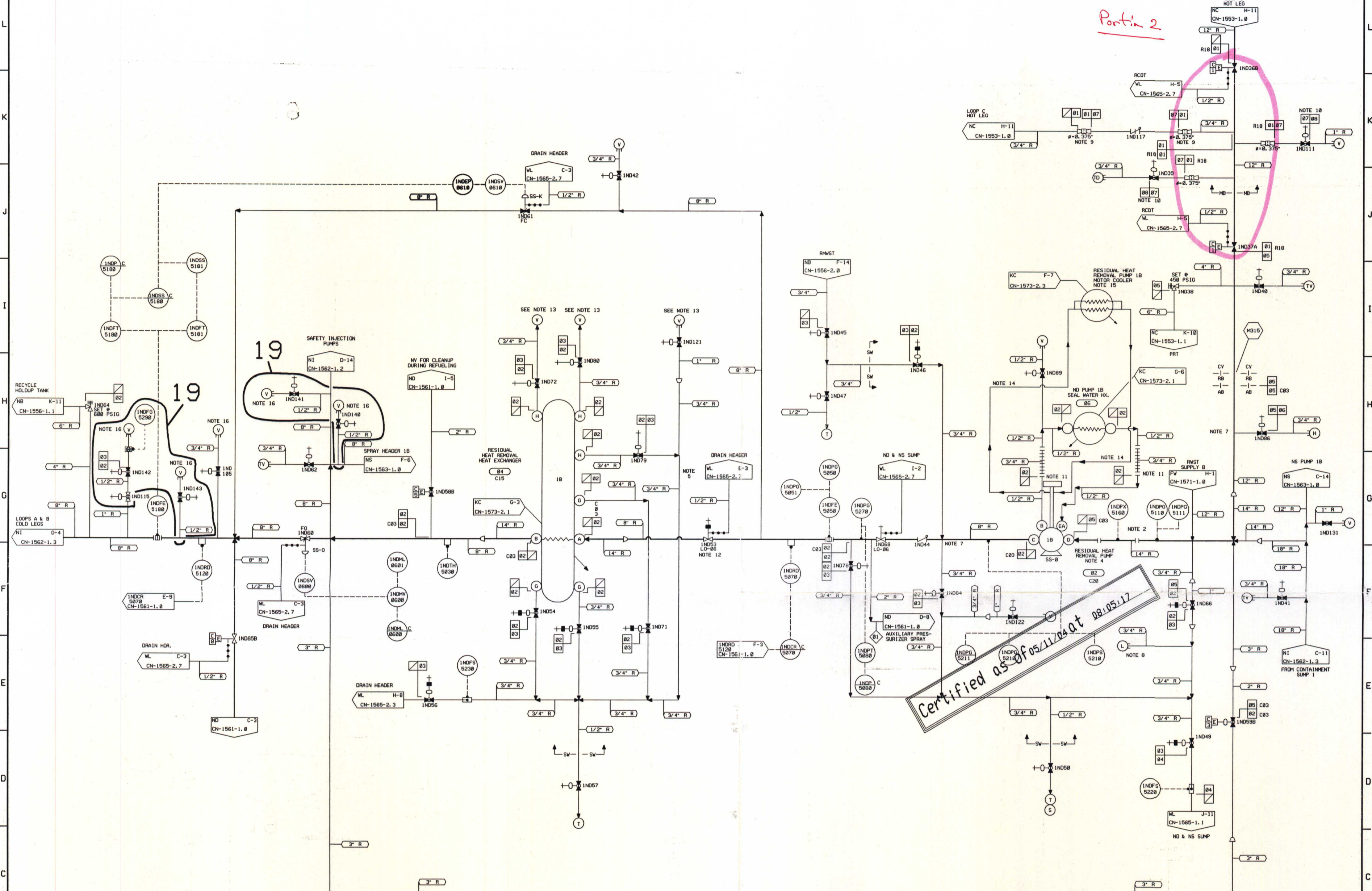


Part 2



- NOTES:
- REFER TO EQUIPMENT LISTING CN-1561 FOR EQUIPMENT DATA.
 - TEMPORARY STRAINER IS PLACED IN THE SPOOL PIECE DURING INITIAL FLUSHING OPERATIONS. STRAINER MUST BE REMOVED BEFORE PLANT START UP. CAPED LINE IS CONNECTED TO PRESSURE GAUGE DURING INITIAL FLUSHING.
 - SAMPLE LINE SHOULD BRANCH OFF NEAR PUMP DISCHARGE.
 - SEE CN-1571-11 FOR ADDITIONAL CONNECTIONS ON PIPING.
 - VENT STACKPIPIES TO EXTEND AT LEAST ONE FOOT ABOVE TOP OF HEAT EXCHANGER. VENT OVERFLOW TO BRANCH OFF AT SAME LEVEL AS TOP OF EXCHANGER ON OUTLET SIDE VENT.
 - LOW POINT DRAIN.
 - HIGH POINT OF PIPING AT TOP OF PIPE.
 - PORTABLE PUMP HOODUP TO TRANSFER WATER BACK TO RWST FOR LINE MAINTENANCE. THIS LINE MUST NOT BE USED AFTER LOCAL FLOW RESTRICTOR DETAIL PROVIDED ON DRAWING CN-1561-4.
 - REF. DESIGN ENGR., POWER PIPING SECTION, EJR NO. PPS-JR-24.
 - 3/4" LAPPEDED JOINT FLANGES.
 - IND007 HAS AN 1/8" HOLE DRILLED IN THE UPSTREAM DIRECTION FOR DONNET OVERPRESSURE RELIEF.
 - VALVE IS NOW UNIDIRECTIONAL SEALING.
 - TO FACILITATE VENTING OR DRAINING EVOLUTIONS, FLEXIBLE TUBING ON WELLS IS ACCEPTABLE TO REMAIN CONNECTED TO THE VENT OR DRAIN PIPING FOR VALVES IND072, IND073, IND074, AND IND080. FOR THE LINE CONTAINING IND075 THE ATTACHMENT WILL BE AT VALVE IND021. PIPE CAPS SHOWN ON THIS DRAWING MUST BE REINSTALLED WHEN THE FLEXIBLE TUBING OR HOSE IS REMOVED.
 - VENDOR SUPPLIED PIPING. PROCESS FLUID NOT IN THESE LINES.
 - COOLER SHOWN FOR INFORMATION ONLY. REFERENCE KC SYSTEM FLOW DIAGRAM FOR SPECIFIC INFORMATION.
 - TO FACILITATE VENTING OR DRAINING EVOLUTIONS, A VENTING RIG(S) AS DESCRIBED ON CN05-1223, 11-NO-0005 CAN REMAIN CONNECTED TO VENT PIPING FOR VALVES IND046, IND048, IND049, IND050, AND IND051 ARE TO BE RE-INSTALLED WHEN VENTING RIG(S) IS REMOVED.

DESIGN PARAMETERS

NO.	PIPE SPEC.	PRESSURE	TEMPERATURE	CLASS.	MATERIAL	NO.	FLOW
01	2501-1	2500 PSIA	650°F	A	SS	01	05 GPM
02	081-2	515 PSIA	400°F	B	SS		
03	081-4	615 PSIA	400°F	B	SS		
04	151-4	95 PSIA	400°F	E	SS		
05	081-2	540 PSIA	400°F	B	SS		
06	081-4	540 PSIA	400°F	B	SS		
07	2501-2	2500 PSIA	650°F	B	SS		
08	2501-4	2500 PSIA	650°F	B	SS		

Certified as of 05/11/2004 at 08:05:17

ERN: CN000HLV

QA CONDITION 2

QA CONDITION 1

DUKE POWER COMPANY
CATAWBA NUCLEAR STATION UNIT 1

FLOW DIAGRAM OF
RESIDUAL HEAT REMOVAL
SYSTEM (ND)

DESIGNER: J.R. BARBERO, DATE 8-28-76, INSP. VALVE/DATE
DRAWN: B. CARSEY, DATE 9-28-76, INSP. IC/MOORE/DATE 10-28-76
CHECKED: J.R. BARBERO, DATE 8-28-76, INSP. J.F. MOORE, DATE 9-16-76

REVISIONS

NO.	DATE	CHG	DATE	APPR	DATE	BY	DATE	REVISION
19	REV PER CE-62130	IMP. DATE 11-29-03	VDC	A2-3	CL1	A2-3	ROW	A2-4 RFX PLC GSK
18	REV PER CE-71984	IMP. DATE 10-2-02	VDC	A2-3	CL1	A2-3	ROW	A2-4 RFX PLC MGL
17	REV PER CE-71612	IMP. DATE 5-2-02	VDC	A2-3	CL1	A2-3	ROW	A2-4 RFX PLC MGL
16	REV PER CE-71350	IMP. DATE 1-30-02	VDC	A2-3	CL1	A2-3	ROW	A2-4 RFX PLC MGL
15	REV PER CE-61686	IMP. DATE 1-24-02	VDC	A2-3	CL1	A2-3	ROW	A2-4 RFX PLC MGL
	ORIG. ORIGINAL	DRAWING RETIRED	VDC	A2-3	CL1	A2-3	ROW	A2-4 RFX PLC MGL

J.03