



- NOTES
1. LOCATE VLV'S AS CLOSE AS POSSIBLE TO CONVEYER CONNECTION AND AT APPROXIMATELY THE SAME ELEVATION. KEEP PIPING AS SHORT AND STRAIGHT AS POSSIBLE.
 2. 1/2" PIPING TO EXTEND VERTICALLY INTO SUMP FROM ELEVATION 525' TO 537'. KEEP PIPING AS STRAIGHT AS POSSIBLE. CONNECT AS FEED TO PIPE AT ELEVATION 525' AND NOT 1/2" PIPE.
 3. LOCATE END POINT OF LINE NEAR THE END POINT OF PIPING FROM CRACK GROUND TRAVEL PUMP TO THE PORTABLE CRACK LITER APPROX. COLUMN LINES 12-13.
 4. FOLLOW PIPING DESIGN CRITERIA RECOMMENDATIONS FOR BEST PRACTICE PIPING LAYOUT.
 5. ALL VLV'S SHOULD BE INSTALLED SO AS TO BE OPERABLE WHILE OPERATING VALVE 288224.
 6. LOCATE DRAIN VALVE 288224 IN SERIES WITH EXTENSION 288224. LOCATE VLV'S NEARLY AND HORIZONTAL LOCATE 288224 AS NEAR THE TOP OF THE SHIELD WALL SURROUNDING THE SHIELD.
 7. 288224 IS A 1/2" LINE.
 8. LOCATE 288224 AS CLOSE TO DRAIN AS POSSIBLE AND 500' OUTSIDE SHIELD WALL TOWARD SURROUNDING SHIELD TO THE SOUTH BETWEEN THE SHIELD AND THE DRAIN.
 9. LOCATE 288224 AS CLOSE TO 288224 AS POSSIBLE.
 10. CONNECTION FOR RESIN FEED TROUGH TO BE LOCATED ON THE SOUTH SIDE OF COLUMN LINE 12. DO NOT BETWEEN COLUMN LINES 6 & 8. RESIN SUITE.
 11. LOCATE AS NEARLY AS POSSIBLE AND SLOPED AS SHARPLY AS POSSIBLE. FLANGE TO BE NO HIGHER THAN EL. 530.
 12. LOCATE VENT AS NEAR AS POSSIBLE TO COLUMN LINE 20 AND BETWEEN COLUMN LINES 6 & 8.
 13. LOCATE P.V. INSTRUMENTATION OUTSIDE SHIELD WALLS.
 14. DO NOT INSULATE DOWNSTREAM OF HEAT AND DRAIN VALVES.
 15. INSULATE B&B FOR 288224 SIDE CHAMBER. BUT EXCEPT ONLY.

DESIGN PARAMETERS

NO.	PIPE SPEC.	PRESSURE	TEMPERATURE	CLASS	MATERIAL
06	300.4	500 PSIA	430°F	C	CS
16	150.4	100 PSIA	110°F	C	CS
17	150.4	115 PSIA	110°F	C	CS

TY APERTURE CARD

UNCONTROLLED
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SYSTEM CHANGE ORDER NUMBER **CH-280-11.001**

REQUIRED BY: START-UP YES [] NO []

REASON FOR CHANGE: **AS CHANGED TO SHIELD WALL TROUGH**

APPROVED BY: **WJS**

CHECKED BY: **WJS**

DATE: **11/17/83**

DESIGNER: **WJS**

DATE: **11/17/83**

PROJECT: **DUKE POWER COMPANY CATAWBA NUCLEAR STATION UNIT 2**

FLOW DIAGRAM OF STEAM GENERATOR SHUTDOWN SYSTEM (88)

DWG. NO. **CH-280-11.0**

8406270212

PDR RIDS

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