

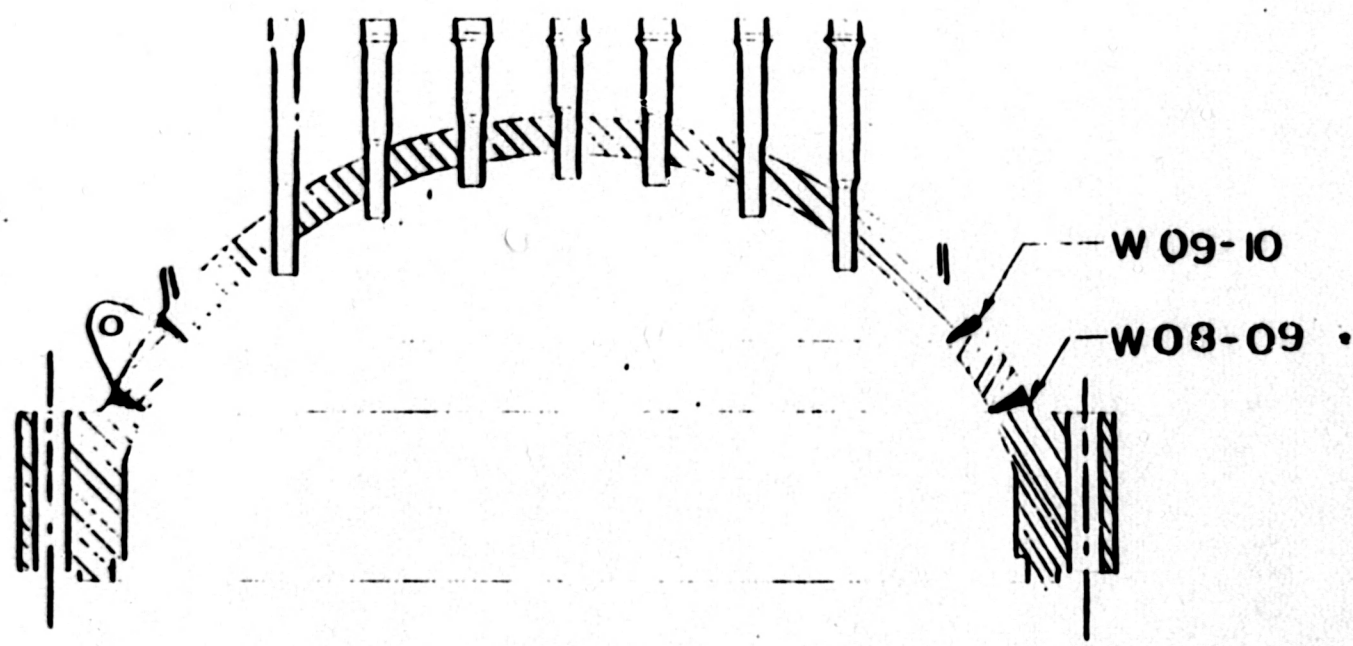
TABLE C
LIST OF DRAWINGS UNIT #2

<u>DRAWING NO.</u>	<u>TITLE</u>	<u>APPENDIX A PAGE NO.</u>
<u>REACTOR VESSEL</u>		
CHM-2549-A	Reactor Vessel Closure Head	15
CHM-2551-A	Reactor Vessel	16-22
CHM-2684-C	Upperhead Penetrations	31
CHM-2685-B	Auxiliary Head Adapter	32
ISI-0012-A	Control Rod Drive Housing	33
<u>REACTOR COOLANT PUMP</u>		
ISI-0048-B	Reactor Coolant Pump Casing Weld Locations	34
CHM-2672-B	RCP Main Flange Bolt Circle	30
<u>PRESSURIZER</u>		
CHM-2574-A	Pressurizer	23-26
<u>STEAM GENERATORS</u>		
CHM-2660-B	Steam Generator	27-28
<u>RESIDUAL HEAT REMOVAL HEAT EXCHANGERS</u>		
CHM-2662-A	Residual Heat Removal Heat Exchanger Channel Welds	29
<u>BORON INJECTION TANK</u>		
ISI-0146-B	Boron Injection Tank Weld Locations	47
<u>LETDOWN HEAT EXCHANGER</u>		
ISI-0075-A	Letdown Heat Exchanger Weld Locations	35
<u>EXCESS LETDOWN HEAT EXCHANGER</u>		
ISI-0076-A	Excess Letdown Heat Exchanger Weld Location	36

TABLE C (CONTINUED)
LIST OF DRAWINGS - UNIT #2

REACTOR VESSEL

<u>DRAWING NO.</u>	<u>TITLE</u>	<u>APPENDIX A PAGE NO.</u>
<u>REGENERATIVE HEAT EXCHANGER</u>		
ISI-0077-A	Regenerative Heat Exchanger Weld Locations	37-39
<u>PIPING AND VALVE WELD MAPS</u>		
ISI-0081-A	Mainsteam Relief Valve	30
ISI-0082-A	Feedwater Check Valve	41
CHM-2566-B	Reactor Coolant Piping	48-49
ISI-0051-C	Residual Heat Removal	50-58
ISI-0178-C	Mainsteam	73-76
ISI-0135-C	Feedwater	77-84
ISI-0052-C	Safety Injection	59-72
ISI-0141-C	Chemical and Volume Control	85-86
ISI-0055-C	Reactor Coolant System	87-93
ISI-0142-C	CVCS Seal Water Injection	94-97
<u>HANGER LOCATION DRAWING CLASS 1 AND CLASS 2</u>		
Later	Reactor Coolant System	
Later	Residual Heat Removal	
Later	Mainsteam	
Later	Feedwater	
Later	Safety Injection	
Later	Chemical and Volume Control	
Later	CVCS Seal Water Injection	
ISI-0117-A	Residual Heat Removal Pump Supports	42
ISI-0118-A	Centrifugal Charging Pump Supports	43
ISI-0119-A	Reciprocation Charging Pump Supports	44
ISI-0120-A	Safety Injection Pump Supports	45
ISI-0121-A	Reactor Coolant Pump Supports	46
Later	Pressurizer Surge Line	



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TENNESSEE VALLEY AUTHORITY
 DIVISION OF POWER PRODUCTION
WATTS BAR NUCLEAR PLANT
UNITS #1 & #2
REACTOR VESSEL
CLOSURE HEAD

SCALE: NTS
 DRAWN: [illegible]
 CHECKED: [illegible]
 APPROVED: *YJB*
 DATE: 10/1/83

REFERENCE DRAWINGS

W686J487
RPV MAN. FIG. 7-18

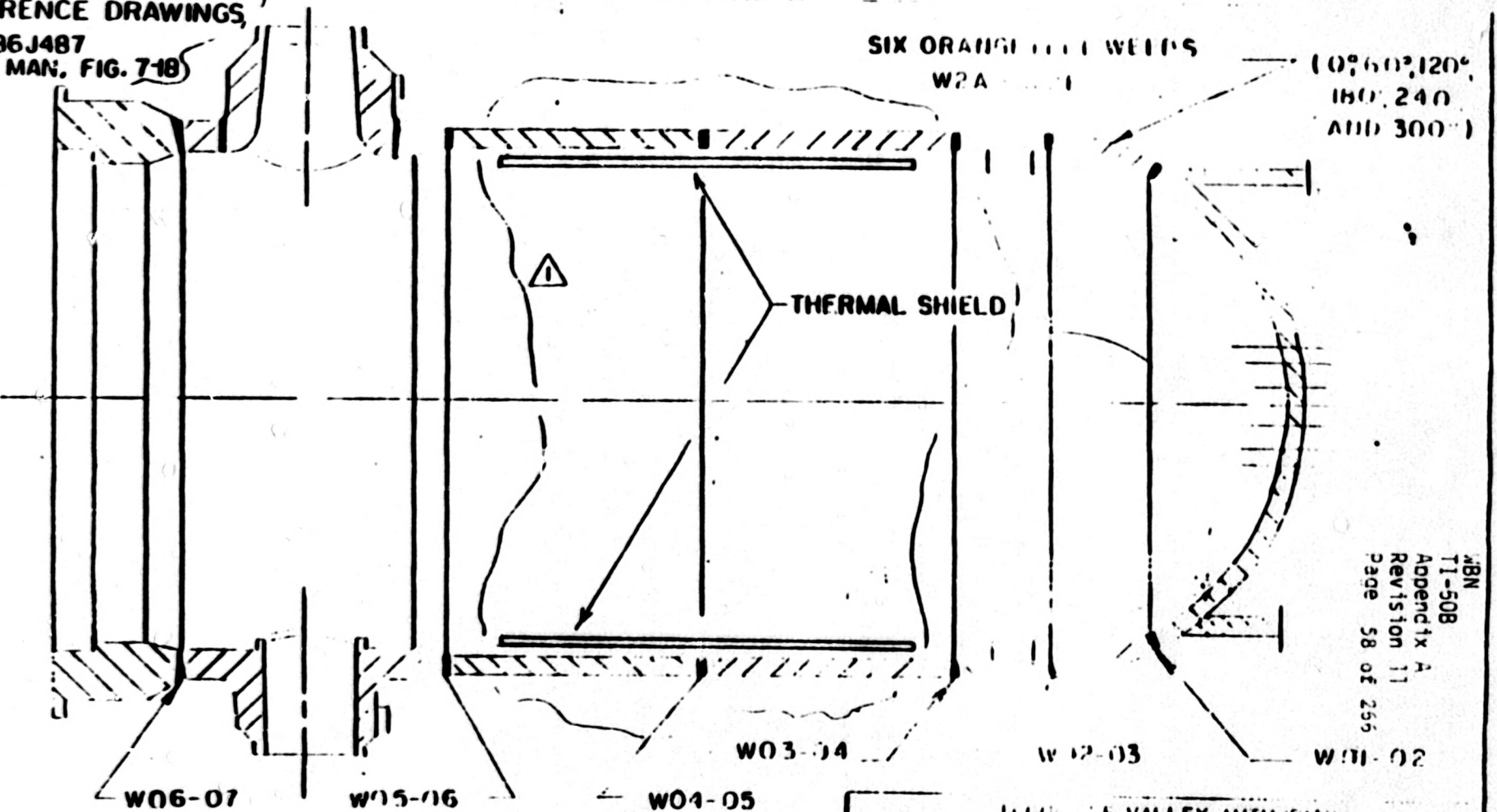
SIX ORANGE LINE WELDS

W2A

(0°, 60°, 120°,
180°, 240°
AND 300°)



THERMAL SHIELD



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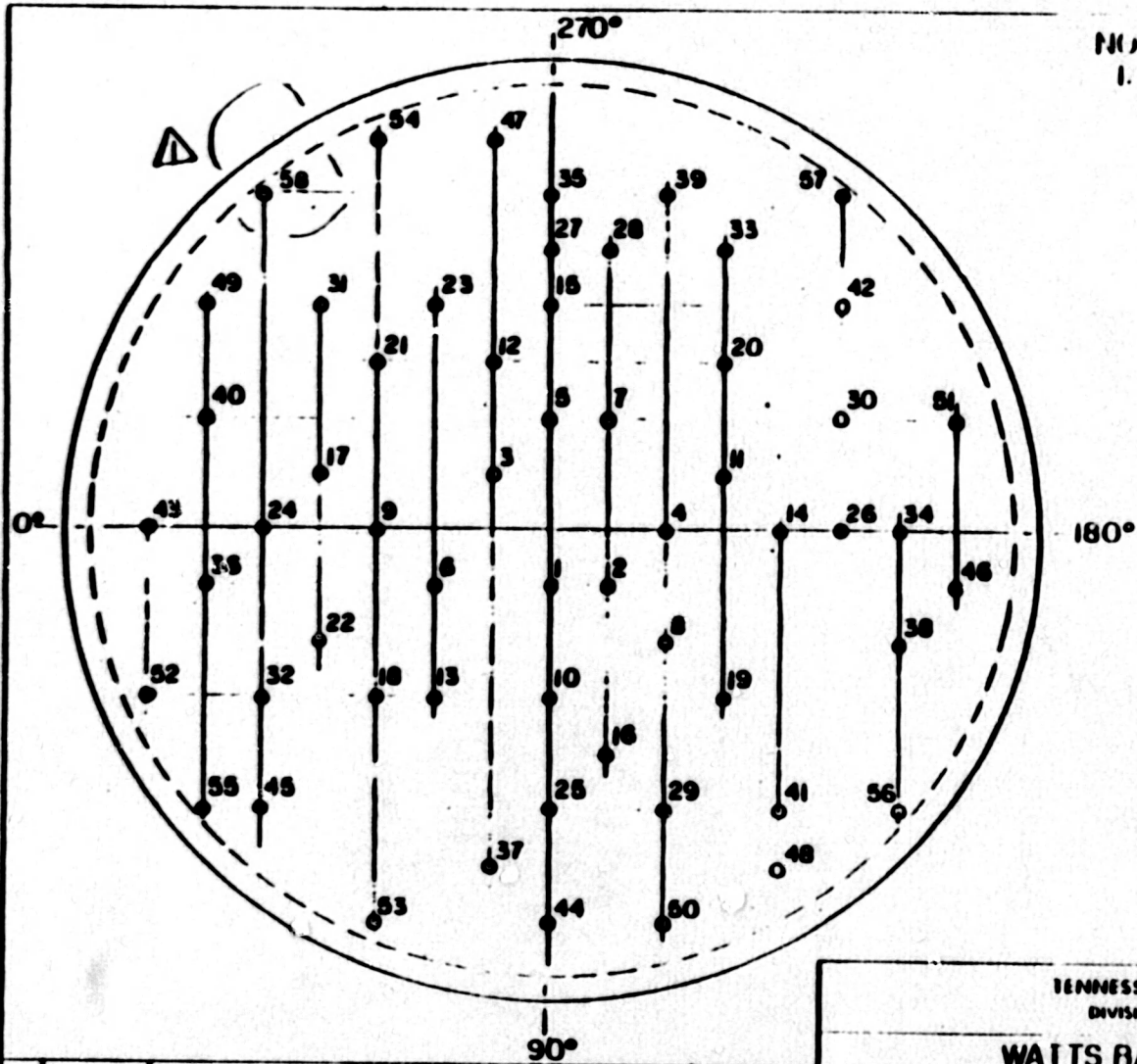
NO.	DATE	REVISIONS	BY	CHK'D
1	4-7-82	ADD THERMAL SHIELD AND REF. DWG	DAV	MB

SCALE: N.T.S.
DRAWN
TRACED R.F.S.

UTAH VALLEY AUTHORITY
DIVISION OF POWER PLANTS
WATT BAR NUCLEAR PLANT
UNITS #1 & #2
REACTOR VESSEL
(SEAM WELDS)

APPROVED
YAB

10-3-83
1-7-83



NOTES:
 1. FINI PENETRATION DETAIL SEE SHEET 3

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TENNESSEE VALLEY AUTHORITY
 DIVISION OF NUCLEAR POWER

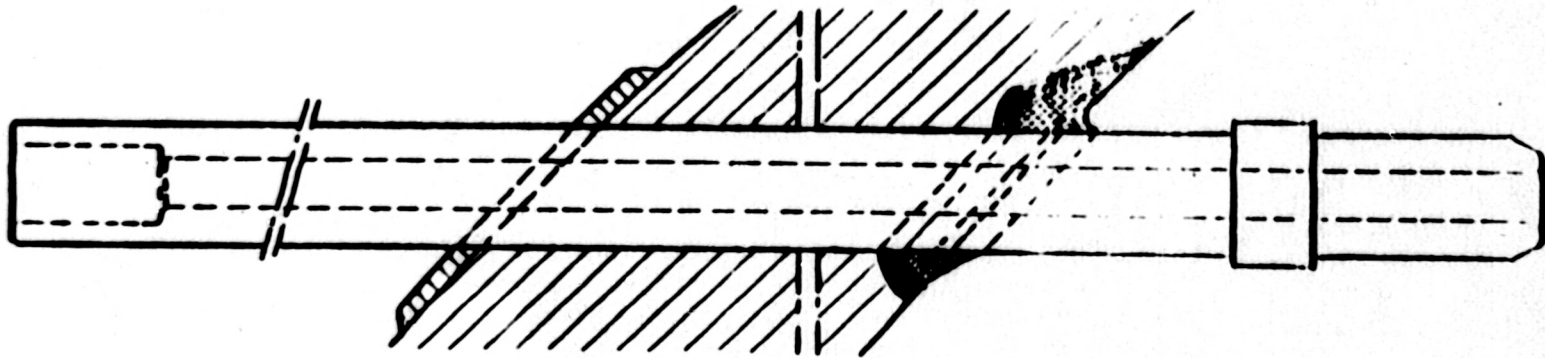
WATTS BAR NUCLEAR PLANT
 UNITS #1 & #2
 REACTOR VESSEL
 (BOTTOM HEAD PENETRATIONS)

DATE	7-11-84	CORRECTED PENETRATION #	114	VS	Z
		TSI		KI	

SCALE: NTS
 DRAWN: RV
 CHECKED: [Signature]

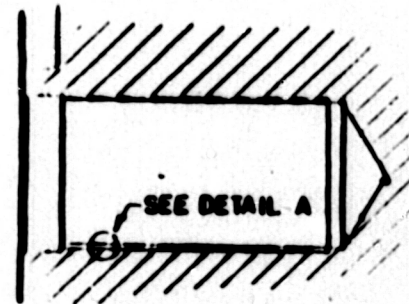
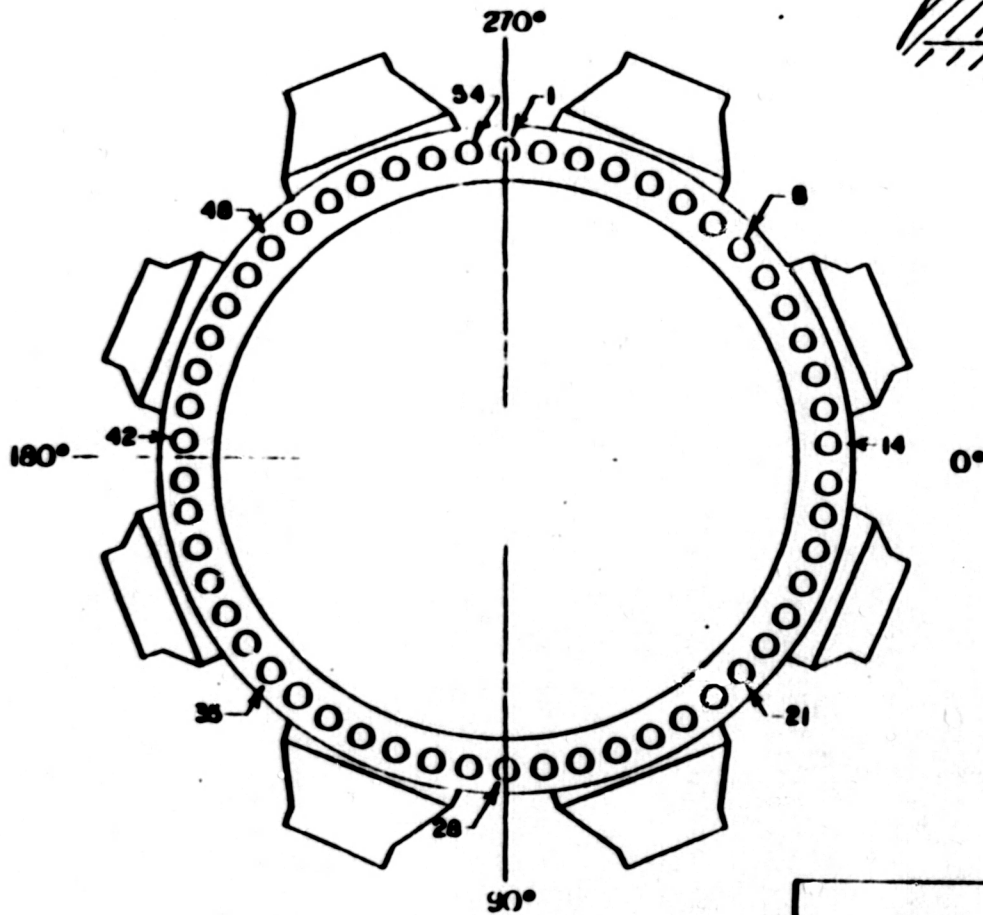
APPROVED: [Signature]

DATE: 12/23/80
 SHEET: 2 OF 7
 M-



VBI
 T1-502
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TENNESSEE VALLEY AUTHORITY DIVISION OF NUCLEAR POWER			
WATTS BAR NUCLEAR PLANT UNITS #1 & #2 REACTOR VESSEL (BOTTOM HEAD PENETRATION DETAIL)			
SCALE: NTS DRAWN: KEV CHECKED: J.C.	SUBMITTED:	APPROVED: <i>HAB</i>	DATE: 12/24/00 SHEET 3 OF 7 CH-M-2551-A



DETAIL OF STUD HOLE

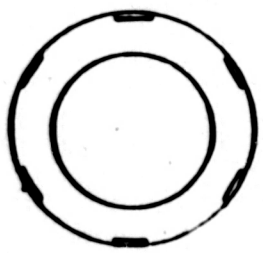
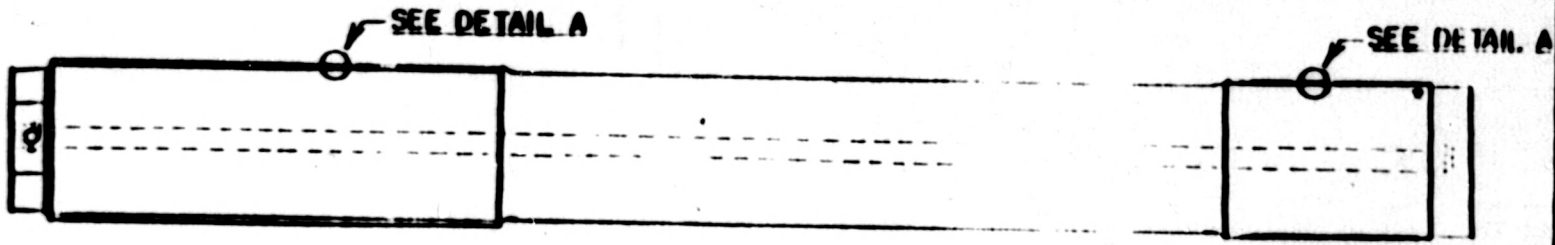
MBN
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TENNESSEE VALLEY AUTHORITY
 DIVISION OF NUCLEAR POWER

WATTS BAR NUCLEAR PLANT
 UNITS #1 & #2
 REACTOR VESSEL
 (LAYOUT PATTERN)

SCALE: NTS
 DRAWN: ACV
 CHECKED: JAD
 SUBMITTED:

DATE: 12/24/80
 SHEET: 4 OF 7
 CH-M-2551-1



DETAIL A



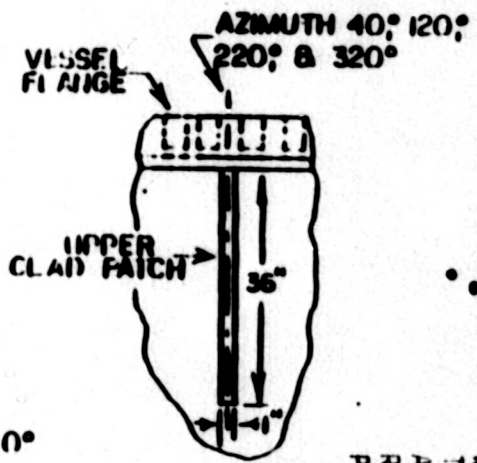
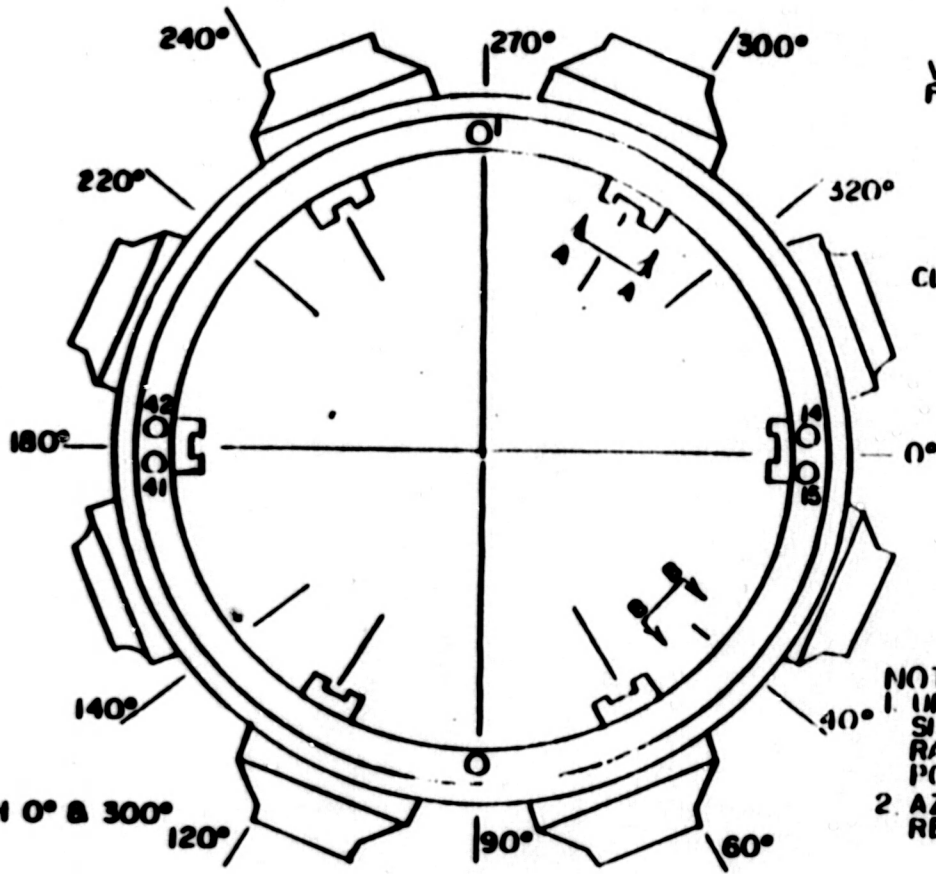
DETAIL B

JBN
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TENNESSEE VALLEY AUTHORITY
 DIVISION OF NUCLEAR POWER

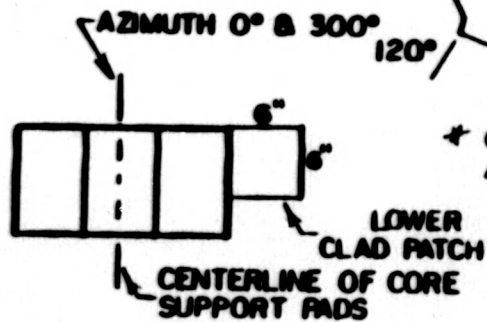
WATTS BAR NUCLEAR PLANT
 UNITS #1 & #2
 REACTOR VESSEL
 (CLOSURE STUDS,
 NUTS, AND WASHERS)

DESIGN: <i>NTS</i>	DRAWN: <i>RL</i>	CHECKED: <i>RL</i>	DATE: 12/24/80
APPROVED: <i>ELB</i>	REVISION: 5 OF 7	CH-M-2551 A	



SECTION B-B

- NOTES:**
1. UPPER CLAD PATCH EXAMINATIONS SHALL BE DONE THROUGH THE RADIATION SPECIMEN ACCESS PORTS.
 2. AZIMUTHS ARE TAKEN OFF OF REACTOR CENTERLINE.



SECTION A-A

* CLAD PATCH EXAMINATIONS NOT REQUIRED

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 Page 63 of 266

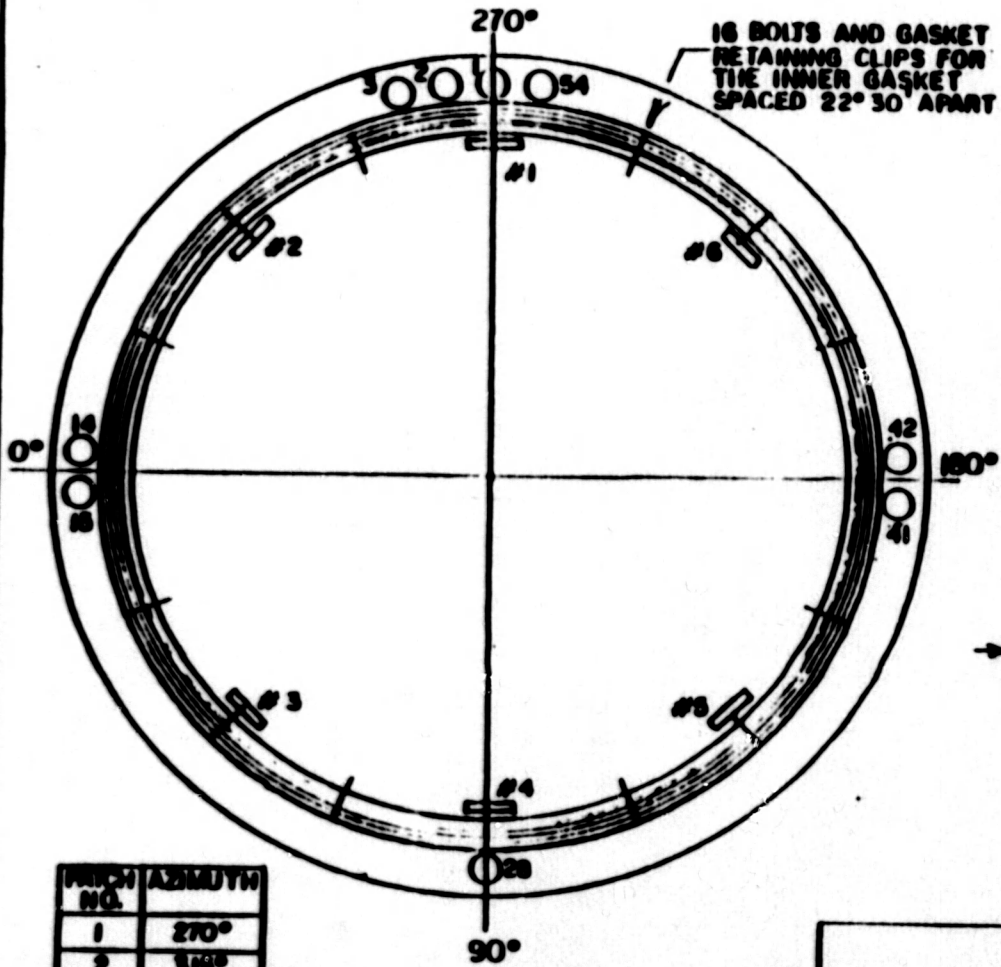
TENNESSEE VA. REG. AUTHORITY
 DIVISION OF NUCLEAR POWER

WATTS BAR NUCLEAR PLANT
 UNITS #1 & #2
 REACTOR VESSEL
 (CLAD PATCHES)

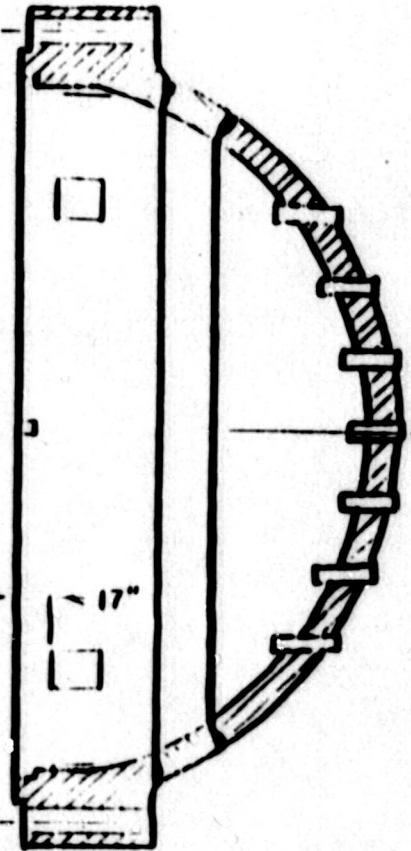
SCALE: NTS
 DRAWN: MFL
 CHECKED: MFL

APPROVED: *[Signature]*

DATE: 12/24/80
 SHEET: 6 OF 7
 CH-M-2551A



16 BOLTS AND GASKET
RETAINING CLIPS FOR
THE INNER GASKET
SPACED 22° 30' APART



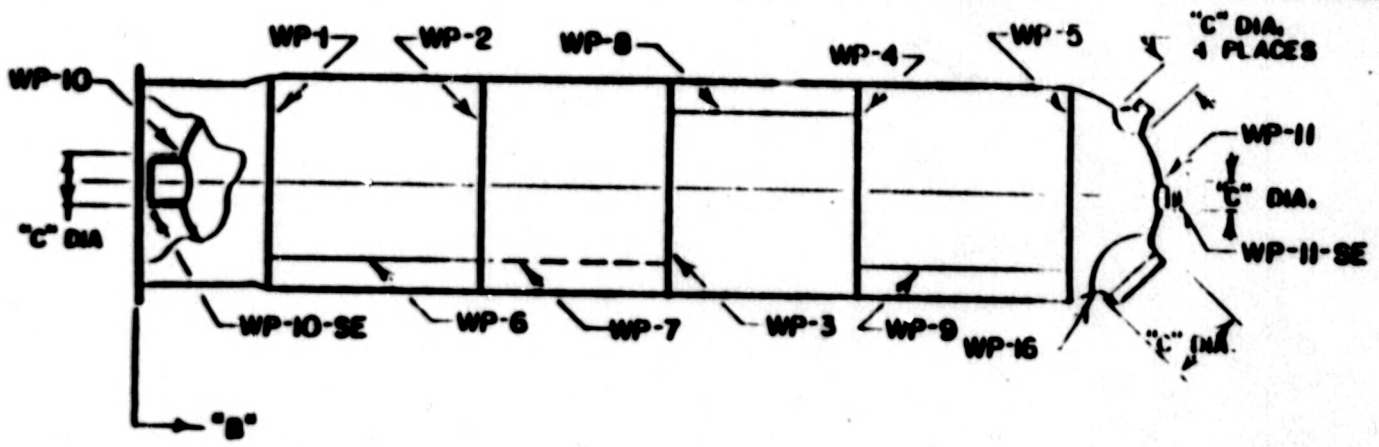
PATCH NO.	AZIMUTH
1	270°
2	315°
3	45°
4	90°
5	135°
6	225°

* CLAD PATCH EXAMING
NOT REQUIRED

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T1-508
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Revision 11
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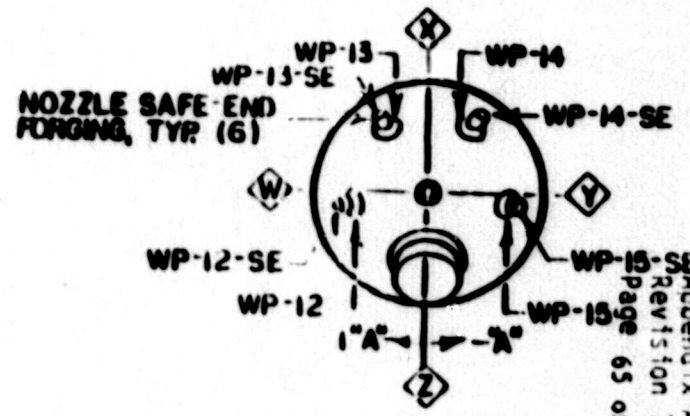
TENNESSEE VALLEY AUTHORITY
 DIVISION OF NUCLEAR POWER
WATTS BAR NUCLEAR PLANT
 UNITS #1 & #2
 REACTOR VESSEL
 (CLOSURE HEAD CLADDING PATCHES)

SCALE: NTS
 DATE: 1/5/01
 DRAWN BY: JAB
 CHECKED BY: JAB
 REVISION: 7 OF 7
 CH-M-2551-A



AS BUILT DIMENSIONS

TITLE	WELD NO.	"A"	"B"	"C" DIA.
GIRTH WELDS	1		87.00"	
	2		193.00"	
	3		322.00"	
	4		449.50"	
	5		588.00"	
LONGITUDINAL WELDS	6	+18°		
	7	-27° 30'		
	8	+133° 30'		
	9	+83°		
SLURGE NOZ.	10	0°		24.50"
SPRAY NOZ.	11	0°		12.75"
SAFETY NOZ.	12	+81° 30'		18.00"
SAFETY NOZ.	13	+151° 40'		18.00"
SAFETY NOZ.	14	-152° 25'		18.00"
RELIEF NOZ.	15	-82°		18.00"
MANWAY	16	0°		32.80"



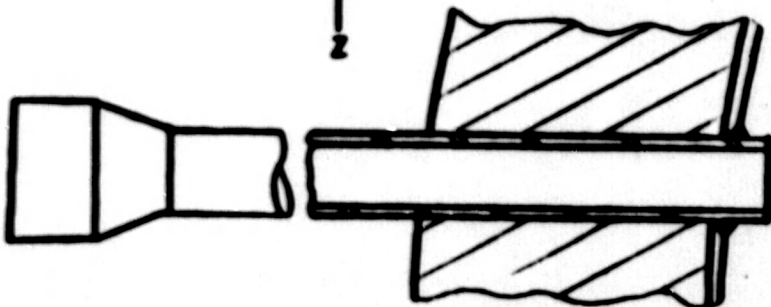
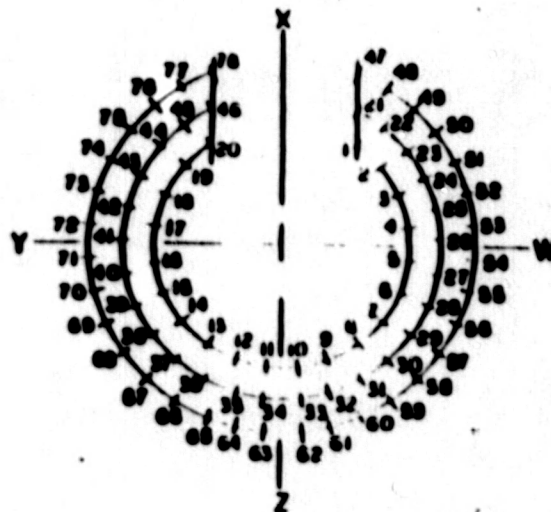
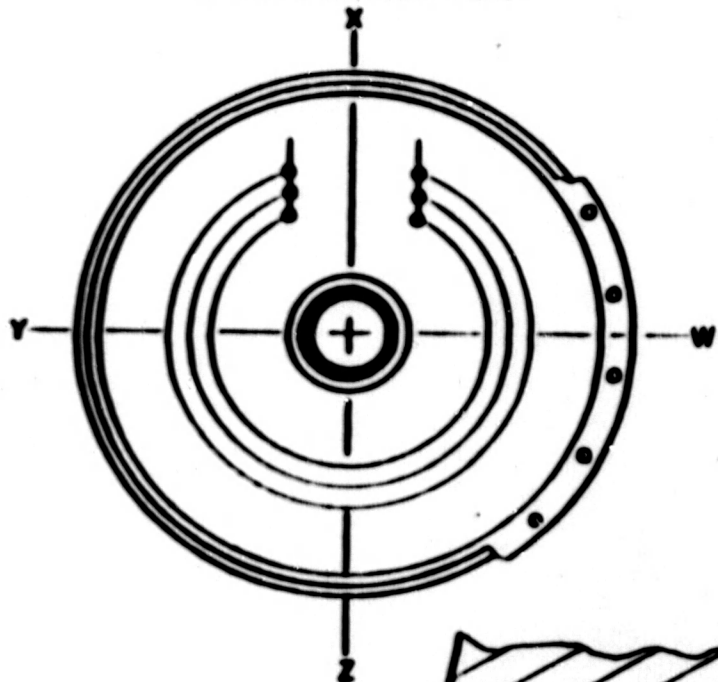
Appendix 1
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 11-50B
 ABH

TENNESSEE VALLEY AUTHORITY
 DIVISION OF NUCLEAR POWER

WATTS BAR NUCLEAR PLANT
 UNIT #2
PRESSURIZER
 (WELDS)

DESIGNED BY NTS <small>Engineering</small> <small>0400</small>	DRAWING NO. <small>11</small>	APPROVED BY <small>11</small>	DATE 1/7/81
--	----------------------------------	----------------------------------	-----------------------

PARTIAL BOTTOM VIEW



HEATER PENETRATION DETAIL

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TENNESSEE VALLEY AUTHORITY
 DIVISION OF NUCLEAR POWER

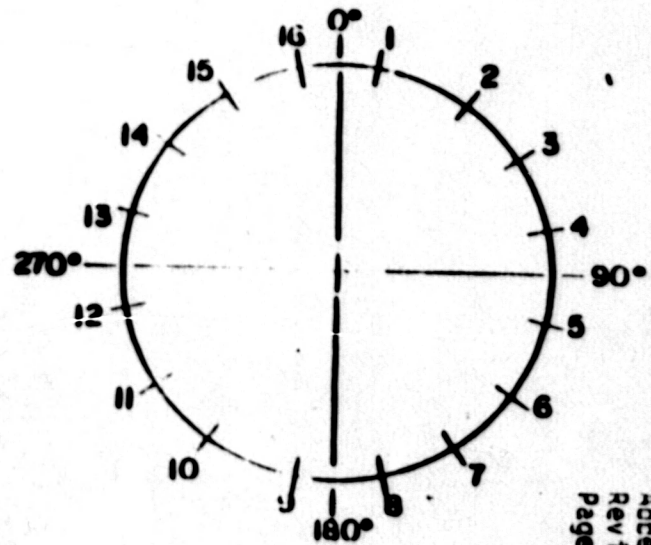
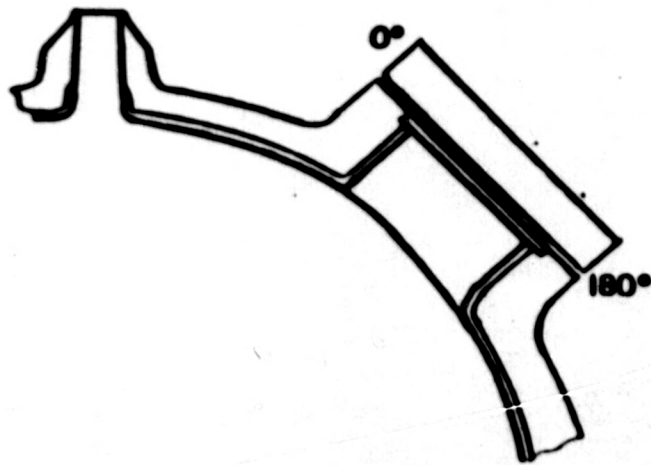
WATTS BAR NUCLEAR PLANT
 UNIT #2
 PRESSURIZER
 (HEATER PENETRATIONS)

SCALE: N/S
 DRAWING
 CHECKED
 CONTROL

DATE: 11/11

APPROVED: JHC

DATE: 1/7/81
 SHEET: 2 OF 4
 DT-M-2574-A



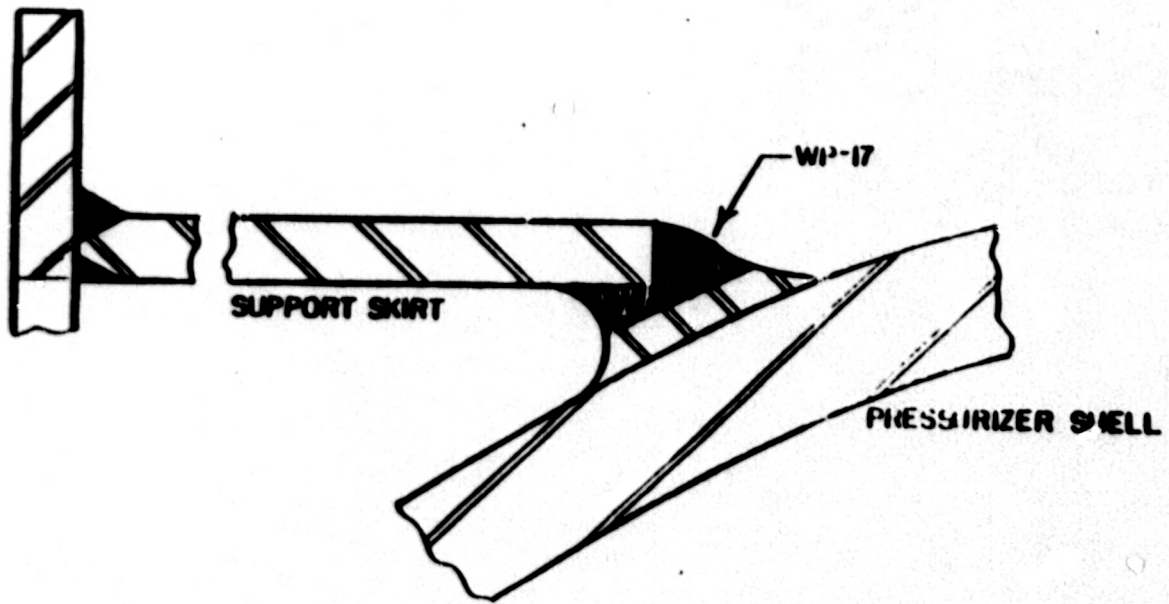
NOTE:
 TO DO THE CLAD PATCH INSPECTION,
 PLACE THE CLAD PATCH FRAME (SEE
 DRAWING NO. CH-M-2825-A) ON
 STUDS #8 AND #9.

MAN
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TENNESSEE VALLEY AUTHORITY
 DIVISION OF NUCLEAR POWER

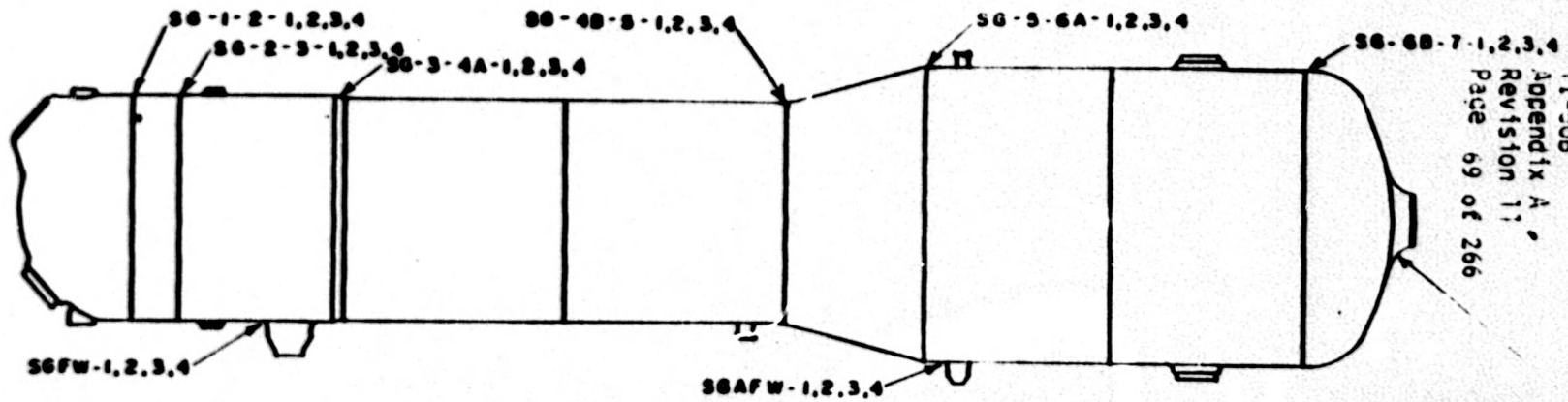
WATTS BAR NUCLEAR PLANT
 UNIT #2
 PRESSURIZER
 (MANWAY INLET PATTERN)

DESIGN BY CHECKED DATE	NTS BYV 1/14/81	APPROVED DATE	1/15/81 DATE
---------------------------------	-----------------------	------------------	-----------------

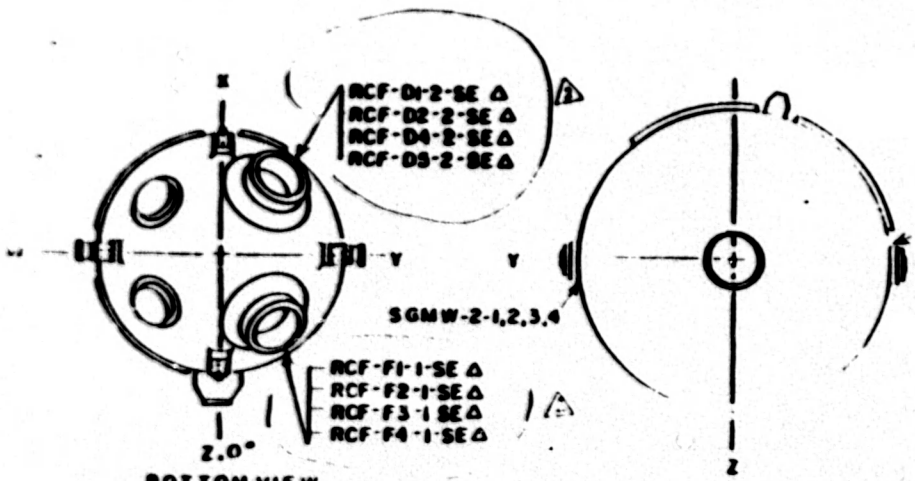


LBN
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TENNESSEE VALLEY AUTHORITY DIVISION OF NUCLEAR POWER			
WATTS BAR NUCLEAR PLANT UNIT #2 PRESSURIZER (SUPPORT SKIRT WELD)			
SCALE: <i>NIS</i> DRAWN: CHECKED: <i>REV</i> CONCEPT:	SUBMITTED: <i>SKM</i>	APPROVED: <i>Five</i>	DATE: <i>1/7/01</i> SHEET: <i>9</i> of <i>4</i> (11) CH-M-2574 A



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NOTE:
 FOR ACTUAL HEAD AND
 SHELL THICKNESS SEE
 BASE LINE DATA.

4 MAIN STEAM NOZZLES
 WELD NOS. (TYPICAL):
 LOOP 1, SGMS-1
 LOOP 2, SGMS-2
 LOOP 3, SGMS-3
 LOOP 4, SGMS-4

BOTTOM VIEW
 TOP VIEW
 LOOPS 1 & 3 AS SHOWN
 LOOPS 2 & 4 OPPOSITE HAND

1	12 81	ADD NOTES - CORRECT WELD NOS.	
1	6 13 81	ADD BUTTERED SAFE END	
1	11 11	REVISION	

REF. DWG.: CH-M-2547-B

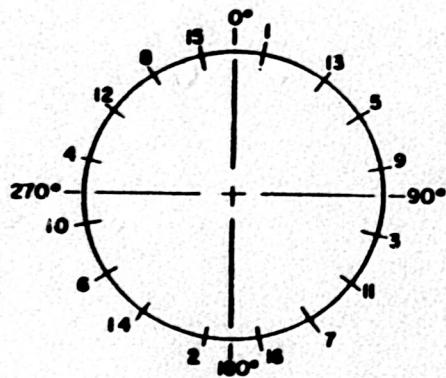
WATTS BAR NUCLEAR PLANT
 UNITS #1 & #2
 STEAM GENERATOR

Δ BUTTERED SAFE END
 SEE DETAIL A ON SHEET 2

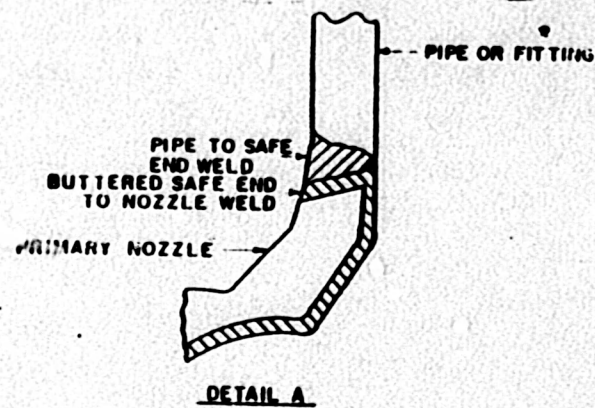
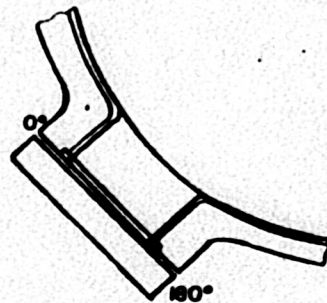
HBB
 4 26 79
 1 2
 CH-M-2547-B

NOTES

1 PROCEED THE BOLT NUMBER WITH
 50X-Y WHERE X=STEAM GENERATOR
 NUMBER & Y=C FOR COLD LEG MANWAY
 OR H FOR HOT LEG MANWAY



PRIMARY MANWAY BOLTING
 SEE NOTE 1



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NO	DATE	REVISIONS	CK'D/APP
1	3-6-85	ADD NOTES AND REFERENCES TO THE NOTES HW	UJ
	6-4-84	ADD DETAIL A <i>UJ</i>	J.D. <i>UJ</i>
1	7-13-84	CORRECT BOLT NUMBER REFERENCE AND DELETED NOTE <i>JA</i>	UJ <i>UJ</i>

TENNESSEE VALLEY AUTHORITY
 DIVISION OF NUCLEAR POWER

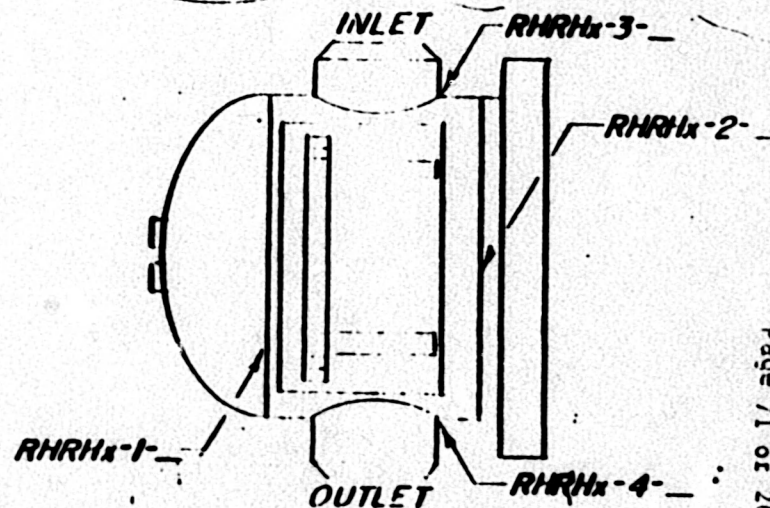
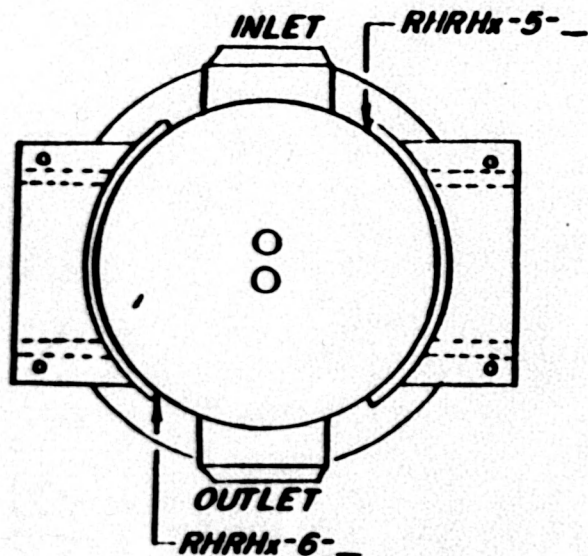
WATTS BAR NUCLEAR PLANT
 UNITS #1 & #2
 STEAM GENERATOR

SCALE: 1/4" = 1"	DESIGNED BY: <i>UJ</i>	DATE: 12/3/81
CHECKED BY: <i>UJ</i>	APPROVED BY: <i>UJ</i>	PAGE: 2 of 2
DATE: 7-9-84		FIG. NO.: CII-M-2660-B

REFERENCE DRAWINGS

MATERIAL IDENTIFICATION

CL A
 HEAD SA-240 TIG
 TUBES SA-240 TIG
 FLANGE A-304
 FITTING SA-240



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NOTE: PLACE HEAT EXCHANGER NUMBERS
 AT END OF WELD NUMBER

17-11-84	ADD MATERIAL SPECS.	<i>[Signature]</i>	<i>[Signature]</i>
00			

THE VALLEY AUTHORITY
 THE POWER PROGRAM DIV.
WATTS BAR NUCLEAR PLANT
UNITS #1 & #2
RESIDUAL HEAT REMOVAL
HEAT EXCHANGER
CHANNEL WELDS

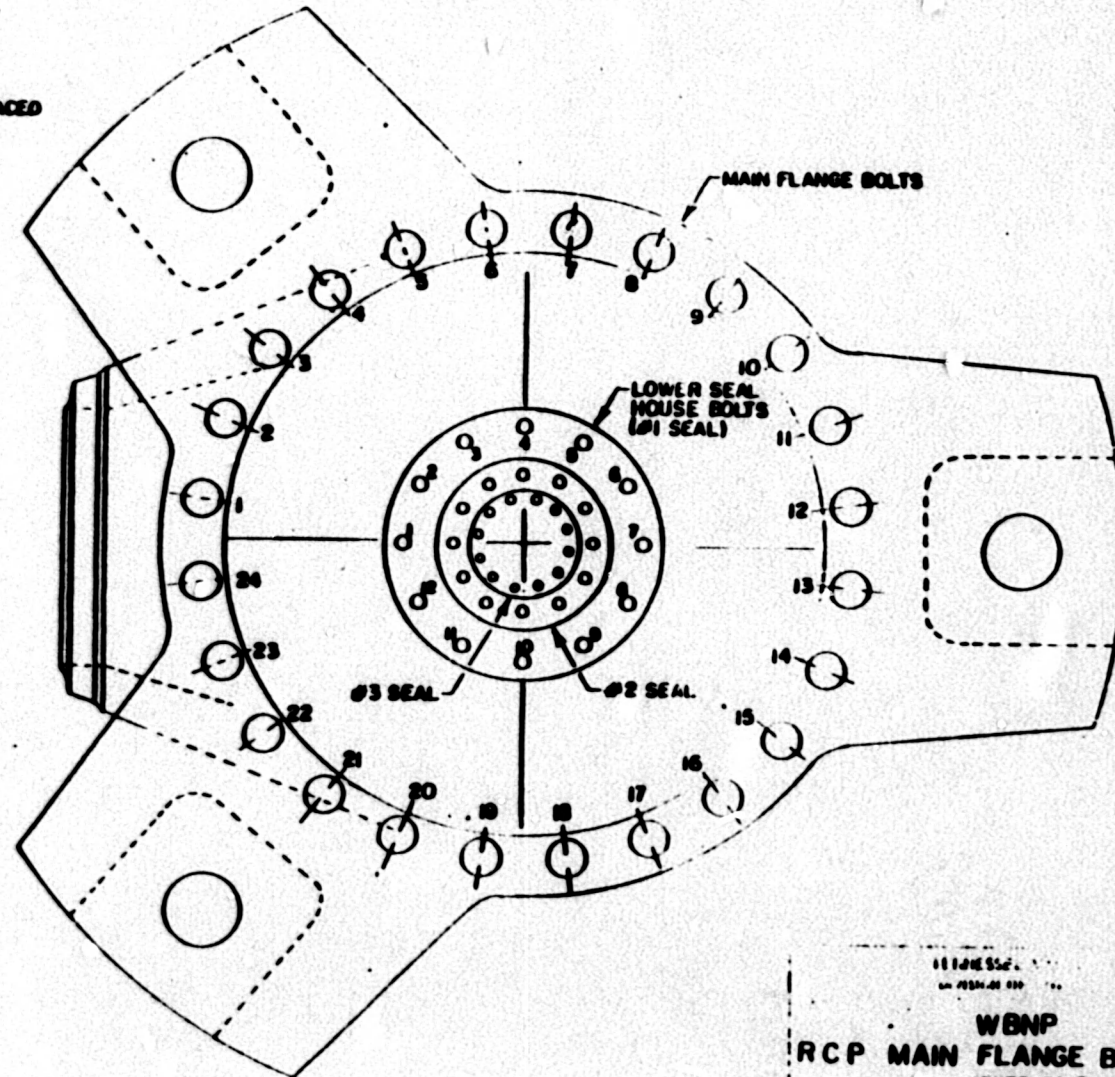
SCALE: NTS
 DRAWN KEY
 TRIP
 CHECK

APPROVED
[Signature]

DATE: 5/3/79

NOTES

1. ALL MAIN FLANGE BOLTS ARE PRECEDED BY RCP-X-Y, WHERE X IS REPLACED BY THE UNIT NUMBER AND Y IS REPLACED BY THE PUMP NUMBER.
2. THE LOWER SEAL HOUSE CAP SCREWS ARE PRECEDED BY LSH-X-Y, WHERE X IS REPLACED BY THE UNIT NUMBER AND Y IS REPLACED BY THE PUMP NUMBER



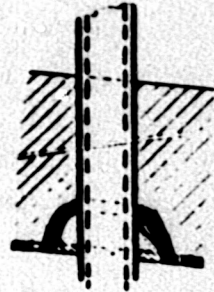
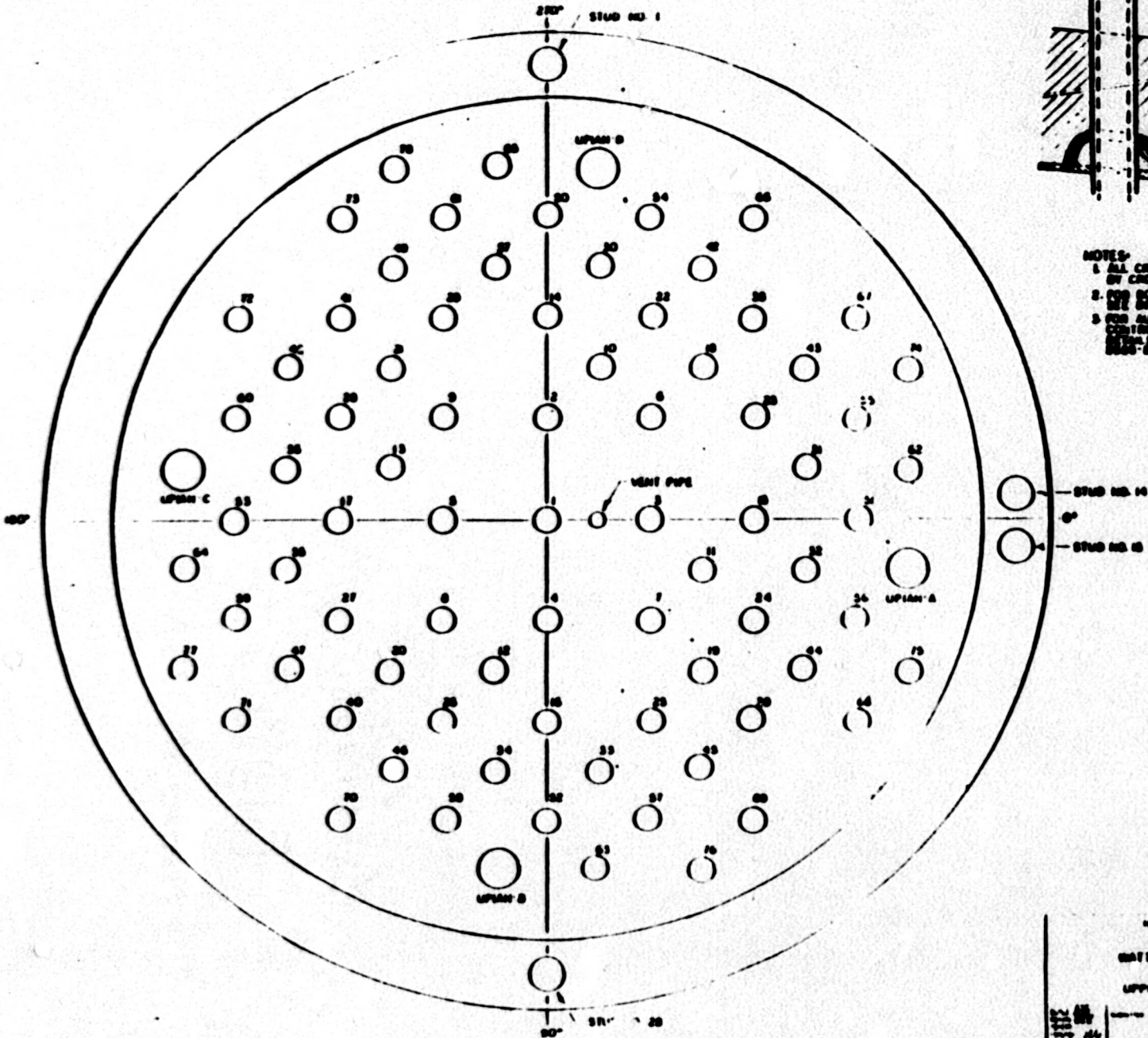
JBN
 11-502
 Accend'x 2
 Revision 11
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WBNP
 RCP MAIN FLANGE BOLT CIRCLE
 UNITS #1 & #2

5-25-1919
 CIM-2672 U 40

JFB

FORM 100-100-100



VENT PIPE PENETRATION DETAIL

- NOTES:
1. ALL CROWN NUMBERS AND WELDS TO BE CROWN FOR THE WELD NUMBERS
 2. FOR BOTTOM HEAD PENETRATIONS SEE DRAWING NO. CH-250-A
 3. FOR UPPER HEAD PENETRATIONS AND OTHERS SEE DRAWING NO. CH-250-B AND CH-250-C RESPECTIVELY

JEN
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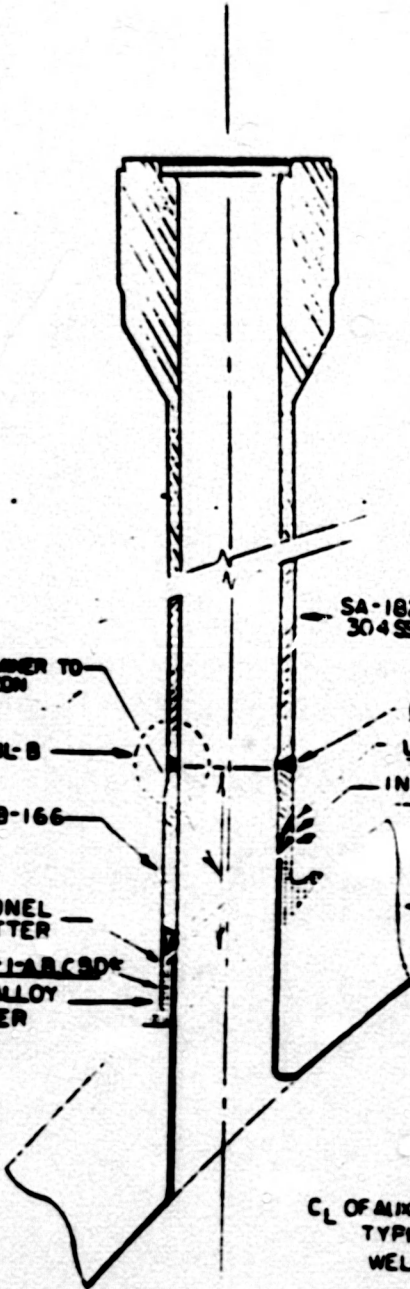
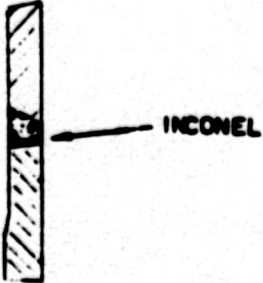
REVISIONS

NO.	DATE	DESCRIPTION
1	11-508	APPENDIX A
2	11-508	REVISION 11

DATE BAR FOR EXAMINATION
 UNIT: 01 IN 01
 UPPER HEAD PENETRATIONS

7/18

DETAIL-B



APPROXIMATELY 6" EXAMINER TO DETERMINE EXACT LOCATION ULTRASONICALLY

SEE DETAIL-B

SB-166

INCONEL BUTTER
UP1AM-1-A,B,C&D
LOW ALLOY BUTTER

SA-182
304SS

UP1AM-4-A,B,C&D

UP1AM-3-A,B,C&D

INCONEL
UP1AM-2-A,B,C&D

SA-182

CL OF AUXILIARY HEAD ADAPTER
TYPICAL FOR WELDS
WELD NOS UP1AM-12,28-4

REF. TO CHM-268-C FOR
LOCATION ON ML-2

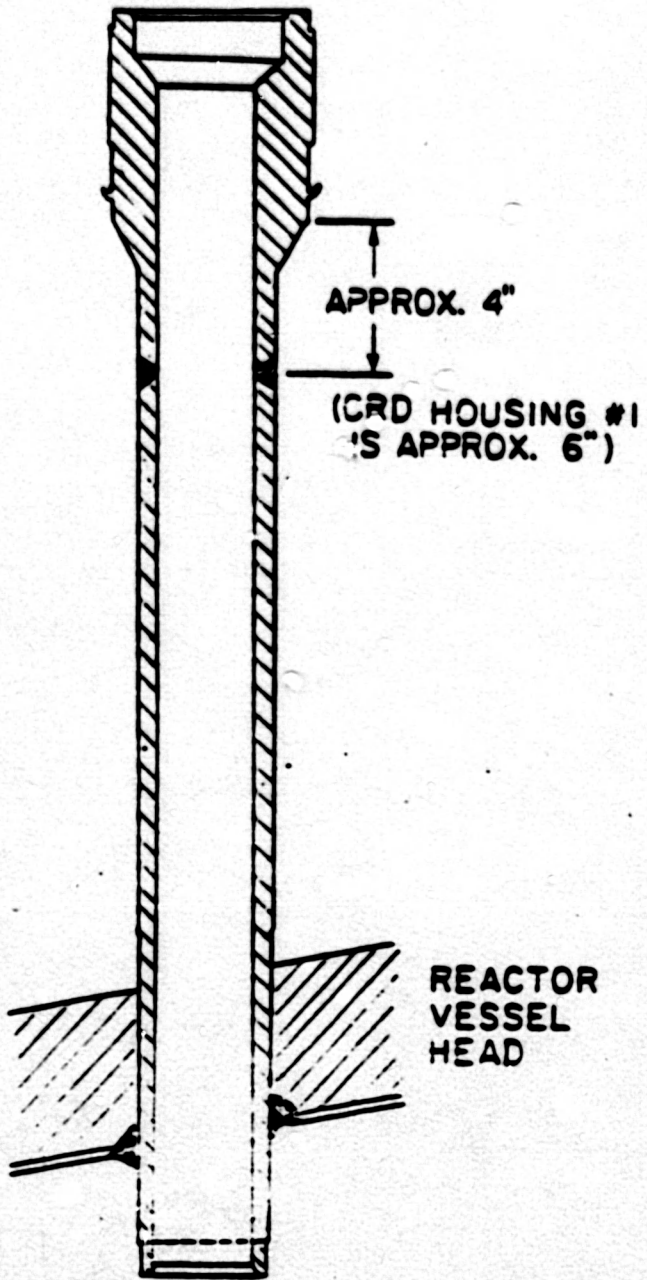
NO	DATE	REVISIONS
1	1/11/73	REVISED TO REFLECT REVISIONS TO CHM-268-C
2	1/11/73	REVISED TO REFLECT REVISIONS TO CHM-268-C
3	1/11/73	REVISED TO REFLECT REVISIONS TO CHM-268-C
4	1/11/73	REVISED TO REFLECT REVISIONS TO CHM-268-C
5	1/11/73	REVISED TO REFLECT REVISIONS TO CHM-268-C
6	1/11/73	REVISED TO REFLECT REVISIONS TO CHM-268-C
7	1/11/73	REVISED TO REFLECT REVISIONS TO CHM-268-C
8	1/11/73	REVISED TO REFLECT REVISIONS TO CHM-268-C
9	1/11/73	REVISED TO REFLECT REVISIONS TO CHM-268-C
10	1/11/73	REVISED TO REFLECT REVISIONS TO CHM-268-C

WANTS SAN NUCLEAR PLANT
UNITS #1 & #2
AUXILIARY HEAD ADAPTER

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CHM-268-B

Handwritten initials: RRB



APPROX. 4"

(CRD HOUSING #1
'S APPROX. 6")

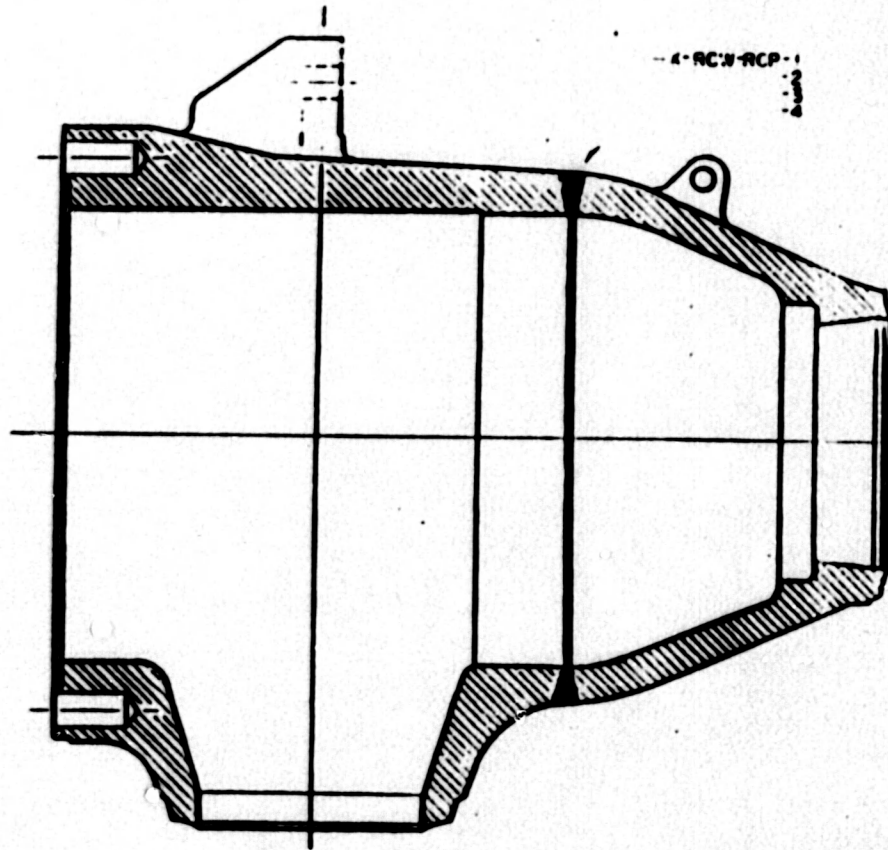
REACTOR
VESSEL
HEAD

Scale: NIS
 WATTS BAR NUCLEAR PLANT
 UNITS #1 & #2
 CONTROL ROD
 DRIVE HOUSING
 12-22-60
 MJB

M8N
 T1-50B
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NOTES

1. REPLACE THE X IN THE WELD NUMBER WITH THE APPROPRIATE UNIT NUMBER



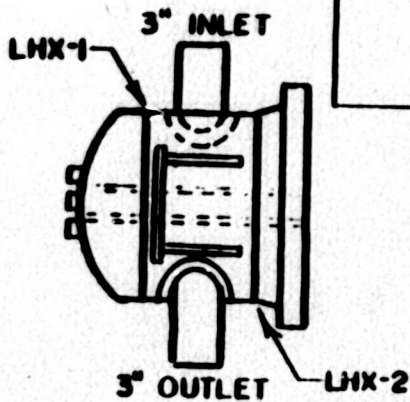
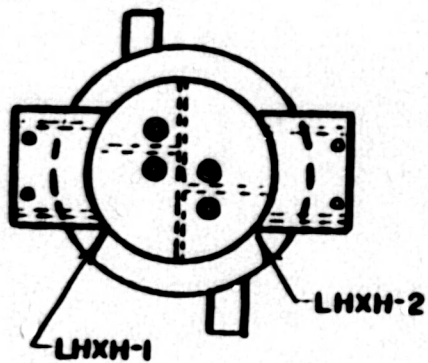
MBN
T1-508
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VERNON VALLEY-APPLEBY
DIVISION OF NUCLEAR POWER

WATTS BAR NUCLEAR PLANT
UNITS #1 & #2
REACTOR COOLANT PUMP CASING
WELD LOCATIONS

Rev. No.	DATE	BY	APP'D
1	11/8/82	JJB	
2			
3			

11/8/82
10048-10



**LETDOWN HEAT EXCHANGER
ROOM 1A**

REFERENCE DRAWINGS

C-4149-1
D-4054-6

MATERIAL SPECIFICATIONS

CLASS 2

HEAD

SA 240 TP 304
.375" THK.

SHELL

SA 240 TP 304
.375" THK.

16" DIA.

FLANGE

SA 182 F 304

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TI-508
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NO.	DATE	REVISIONS	CK'D	APP'D
2	9-7-84	ADD 16" DIA TO MATERIAL SPECS		
1	1-19-83	CHANGED CLASSIFICATION	JCL	

TENNESSEE VALLEY AUTHORITY
DIVISION OF NUCLEAR POWER

**WATTS BAR NUCLEAR PLANT
UNITS #1 & #2
LETDOWN HEAT EXCHANGER**

SCALE: NTS
DRAWN: M&V
CHECKED: M&V
DATE: 1/11

APPROVED: [Signature]

DATE: 8-4-82
PAGE: 1 OF 1
NO. 107

REFERENCE DRAWINGS

D-4060-6

MATERIAL SPECIFICATIONS

CLASS 2

HEAD

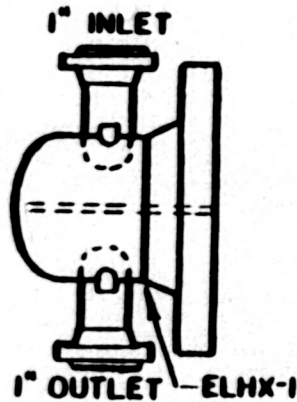
SA 240 TP 304

.750" THK.

9.5" DIA.

FLANGE

SA 105 II



REGENERATIVE AND EXCESS LETDOWN
HEAT EXCHANGER ROOM

MBN
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NO.	DATE	REVISIONS	CR'D	APP.
2	9-7-84	ADD IIIA MATERIAL SPECS	DA	WSP
1	1-14-84	CHANGED CLASS DESIGNATION KEY	JCG	WSP

TENNESSEE VALLEY AUTHORITY
DIVISION OF NUCLEAR POWER

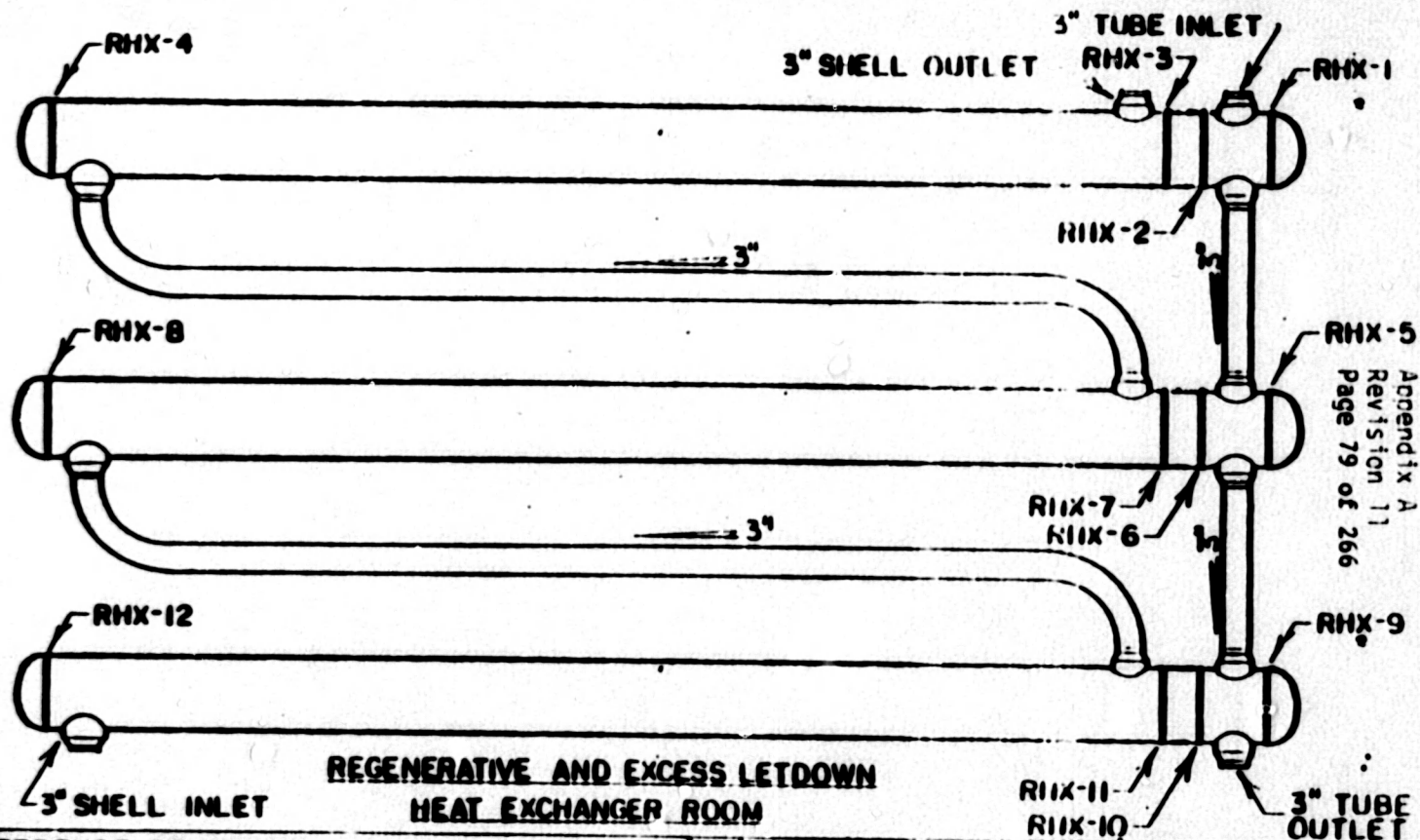
WATTS BAR NUCLEAR PLANT
UNITS #1 & #2
EXCESS LETDOWN HEAT EXCHANGER

SCALE: NTS
DRAWN BY: KEY
CHECKED BY: DAD

DATE: 8-4-82
BY: JAB

SI-0076-A

SI-0076-A



MBN
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REFERENCE DRAWINGS

- 5578
- 5579
- 5580

MATERIAL SPECIFICATIONS

- CLASS (2)
- SHELL
- SA 351 CF 8
- HEADS
- SA 240 TP 304L
- TUBE SHEET
- SA 192 F 304

NO.	DATE	REVISIONS	CK'D	APP
1	1-14-84	CHANGED CLASSIFICATION SIGNATURES KEY	KC	MBN

TENNESSEE VALLEY AUTHORITY
DIVISION OF NUCLEAR POWER

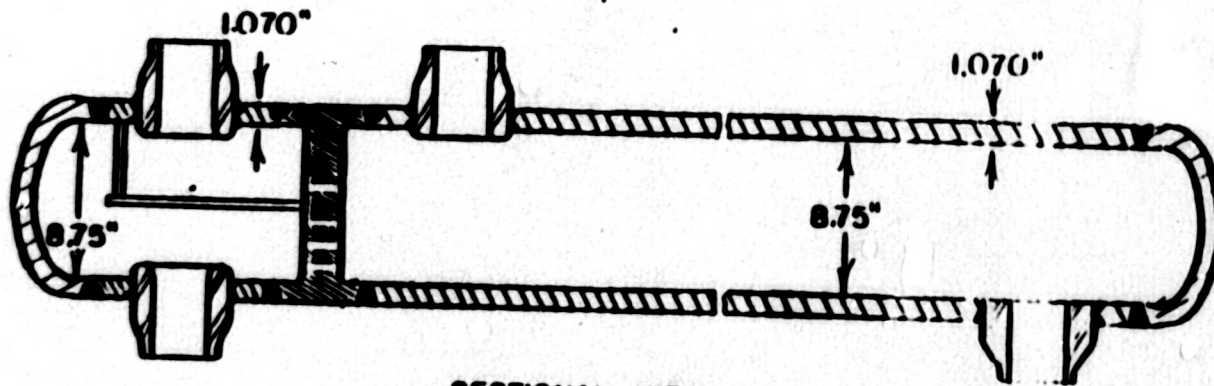
WATTS BAR NUCLEAR PLANT
UNITS #1 & #2
REGENERATIVE HEAT EXCHANGER

SCALE: NTS
DRAWN BY: KEY
CHECKED: J.M.L.
DESIGNED BY: DAJ

APPROVED

DATE: 8-5-82
SHEET: 1 OF 1
NSI-0077-

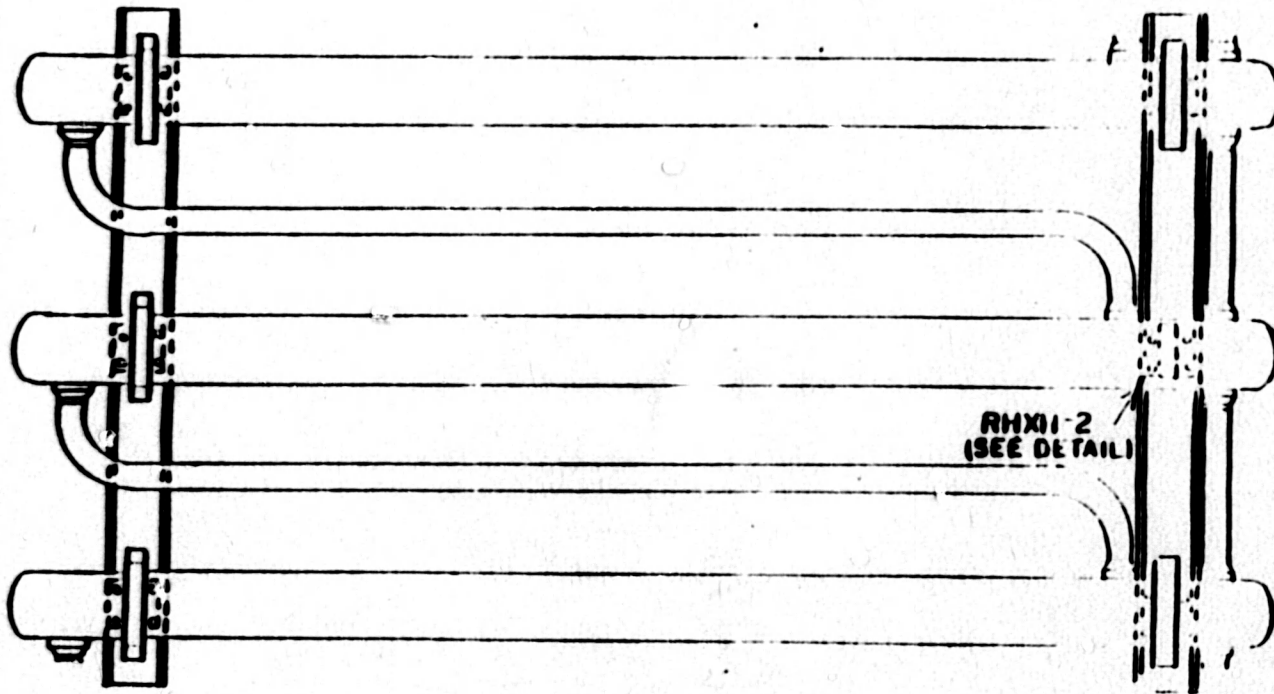
RI



SECTIONAL VIEW

MEN
 T1-50B
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TENNESSEE VALLEY AUTHORITY DIVISION OF NUCLEAR POWER			
WATTS BAR NUCLEAR PLANT UNITS #1 & #2 REGENERATIVE HEAT EXCHANGER			
DESIGNED DRAWN CHECKED CONFORMED	NTS RER JAK	SUBMITTED DATE JAL	APPROVED [Signature] DATE 8-5-82 2 3 101-0077-0

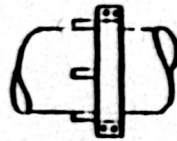


RHXH-2
(SEE DETAIL)

RHXH-1
(SEE DETAIL)



NBN
T1-508
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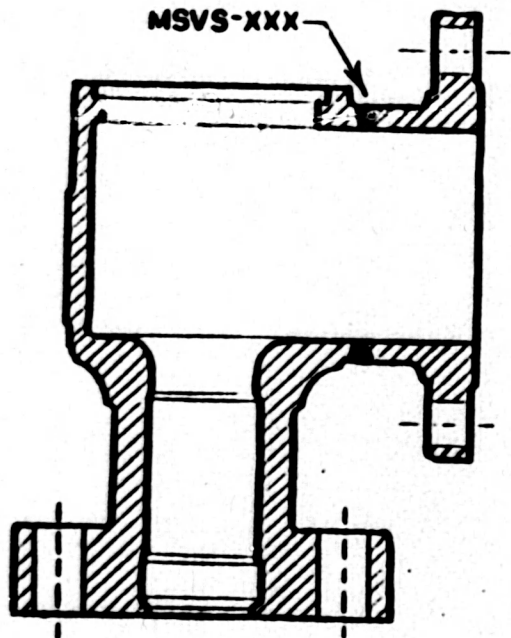


RHXH-1



RHXH-2

TENNESSEE VALLEY AUTHORITY DIVISION OF NUCLEAR POWER			
WATTS BAR NUCLEAR PLANT UNITS #1 & #2 REGENERATIVE HEAT EXCHANGER			
SCALE	DATE	SUBMITTED	APPROVED
1/4" = 1"	NTS	2/10	[Signature]
DRAWN	REV	BY	DATE
TRACY	NEW	TRACY	8-5-82
CHECKED	NO	DATE	SHEET
			3 OF 3
			V0011
			101-0077



REFERENCE DRAWINGS

3NC-040
 CHM-2669-C (UNIT #1)
 ISI-0063-C (UNIT #2)

MATERIAL SPECIFICATIONS

CLASS 2
 VALVE BODY AND FLANGE
 SA 105

NOTES

1. REPLACE XXX WITH THE VALVE IDENTIFICATION NUMBER.
2. VALVE NUMBERS

1-512
 1-513
 1-514
 1-515
 1-516

1-517
 1-518
 1-519
 1-520
 1-521

1-522
 1-523
 1-524
 1-525
 1-526

1-527
 1-528
 1-529
 1-530
 1-531

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 T1-508
 MBM

NO.	DATE	REVISIONS	CHK'D APP.
1	1-19-84	CHANGED CLASS DESIGNATION AND ADD NOTE NO. 2 NEW	JCG MAR 20 1984

TENNESSEE VALLEY AUTHORITY
 DIVISION OF NUCLEAR POWER

WATTS BAR NUCLEAR PLANT
 UNITS #1 & #2
 MAINSTEAM RELIEF VALVE
 WELD LOCATIONS

SCALE: NTS
 DRAWN BY: KEV
 CHECKED BY: [Signature]

SUBMITTED BY: [Signature]

APPROVED BY: [Signature]

DATE: 11-24-82
 SHEET: 1 OF 1
 ISI-0081-A


R1

WBN
 TI-50B
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REFERENCE DRAWINGS

455KAB1-001
 CHM-2671-C (UNIT #1)
 ISI-0082 (UNIT #2)

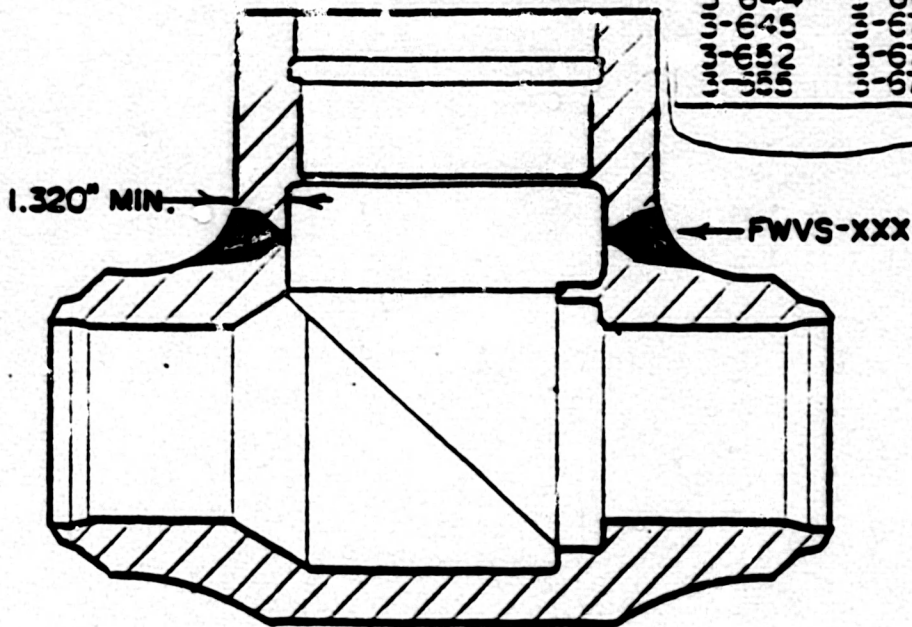
MATERIAL SPECIFICATIONS

CLASS 2 
 VALVE BODY AND NECK
 SA 350 GR. LF 1

NOTES

- REPLACE XXX WITH THE VALVE IDENTIFICATION NUMBER
- VALVE NUMBERS

455KAB1-001	ISI-0082
455KAB1-002	ISI-0082
455KAB1-003	ISI-0082
455KAB1-004	ISI-0082
455KAB1-005	ISI-0082
455KAB1-006	ISI-0082
455KAB1-007	ISI-0082
455KAB1-008	ISI-0082
455KAB1-009	ISI-0082
455KAB1-010	ISI-0082
455KAB1-011	ISI-0082
455KAB1-012	ISI-0082
455KAB1-013	ISI-0082
455KAB1-014	ISI-0082
455KAB1-015	ISI-0082
455KAB1-016	ISI-0082
455KAB1-017	ISI-0082
455KAB1-018	ISI-0082
455KAB1-019	ISI-0082
455KAB1-020	ISI-0082



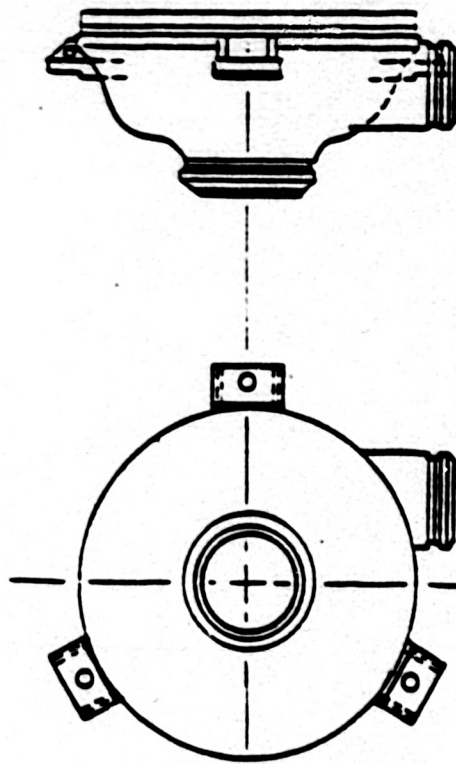
NO.	DATE	REVISIONS	ICK'DIAFF
1	1-14-84	CHANGED CLASS DESIGNATION AND ADD NOTE NO. 2 REV	JLG
TENNESSEE VALLEY AUTHORITY DIVISION OF NUCLEAR POWER WATTS BAR NUCLEAR PLANT UNITS #1 & #2 FEEDWATER CHECK VALVE WELD LOCATIONS			
DESIGNED	BY	APPROVED	DATE 11-26-82
DRAWN	BY	CHECKED	SHEET 1 OF 1 SHEETS
TRACED	KEY		ISI-0082-A
CHECKED			

WBN
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REFERENCE DRAWINGS
C-8X2COWDF86X9-D

NOTES

1. THE THREE PUMP FEET ARE BOLTED TO A COMMON SUPPORT.
2. PUMP SUPPORT NUMBERS
RHRPH-1A-A
RHRPH-1B-B
RHRPH-2A-A
RHRPH-2B-B
3. THE PUMP FEET ARE INTERGRALLY WELDED TO THE CASING.



BOTTOM VIEW

TENNESSEE VALLEY AUTHORITY			
DIVISION OF NUCLEAR POWER			
WATTS BAR NUCLEAR PLANT			
UNITS #1 & #2			
RESIDUAL HEAT REMOVAL PUMP SUPPORTS			
SCALE: <i>NYS</i>	DESIGNED	APPROVED	DATE: 8-31-83
DRAWN	-----	<i>JKB</i>	SHEET OF SHEETS
CHECKED: <i>RGV</i>	-----	-----	ISI-0117-A
DATE: <i>8-31-83</i>	-----	-----	-----

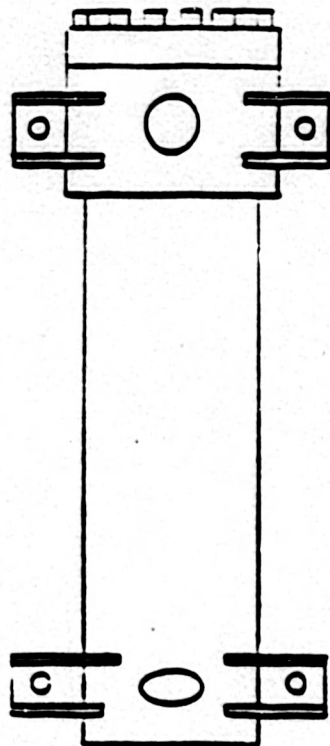
WBN
TI-50B
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REFERENCE DRAWINGS

FC-48590

NOTES

1. THE PUMP FEET ARE BOLTED TO A COMMON SUPPORT.
2. PUMP SUPPORT NUMBERS
CCPH-1A-A
CCPH-1B-B
CCPH-2A-A
CCPH-2B-B
3. THE PUMP FEET ARE INTERGALLY WELDED TO THE CASING.



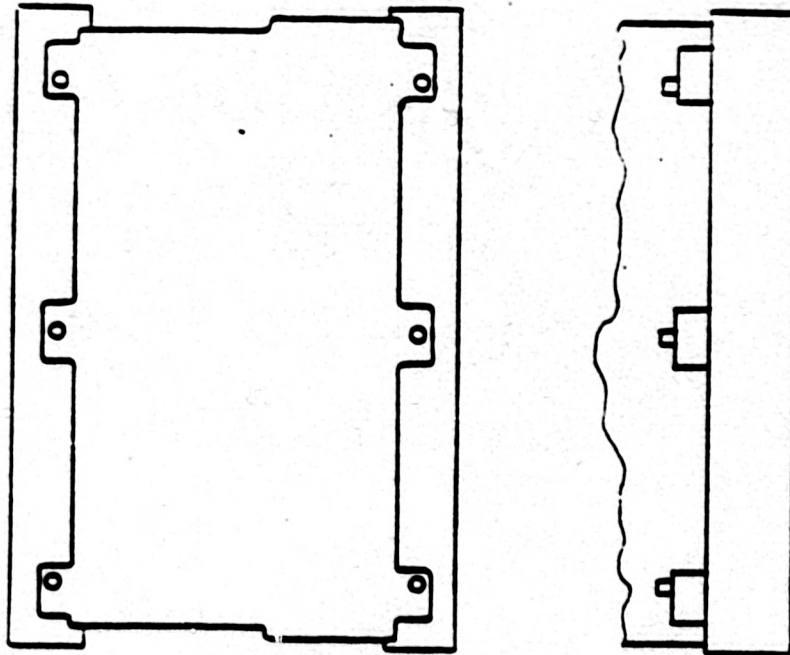
TENNESSEE VALLEY AUTHORITY			
DIVISION OF NUCLEAR POWER			
WATTS BAR NUCLEAR PLANT			
UNITS #1 & #2			
CENTRIFUGAL CHARGING PUMP SUPPORTS			
SCALE	DESIGNED	APPROVED	DATE
N/S			9-2-83
EDGER			SHEET
TRACER			OF
CHICHO			SHEETS
			ISI-0118-A

WBN
TI-508
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REFERENCE DRAWINGS
OP-EN742865

NOTES

1. THE PUMP FEET ARE BOLTED TO A COMMON SUPPORT.
2. PUMP SUPPORT NUMBERS
PDPH-1C
PDPH-2C



TENNESSEE VALLEY AUTHORITY
DIVISION OF NUCLEAR POWER

WATTS BAR NUCLEAR PLANT
UNITS #1 & #2
RECIPROCATING CHARGING PUMP SUPPORTS
(POSITIVE DISPLACEMENT PUMP)

SCALE: NTS	DESIGNED	APPROVED	DATE: 9-2-83
DRAWN: REV		<i>[Signature]</i>	SHEET OF SHEETS
TRACED			
CHECKED: CC			ISI-0119-A

WBN
TI-508
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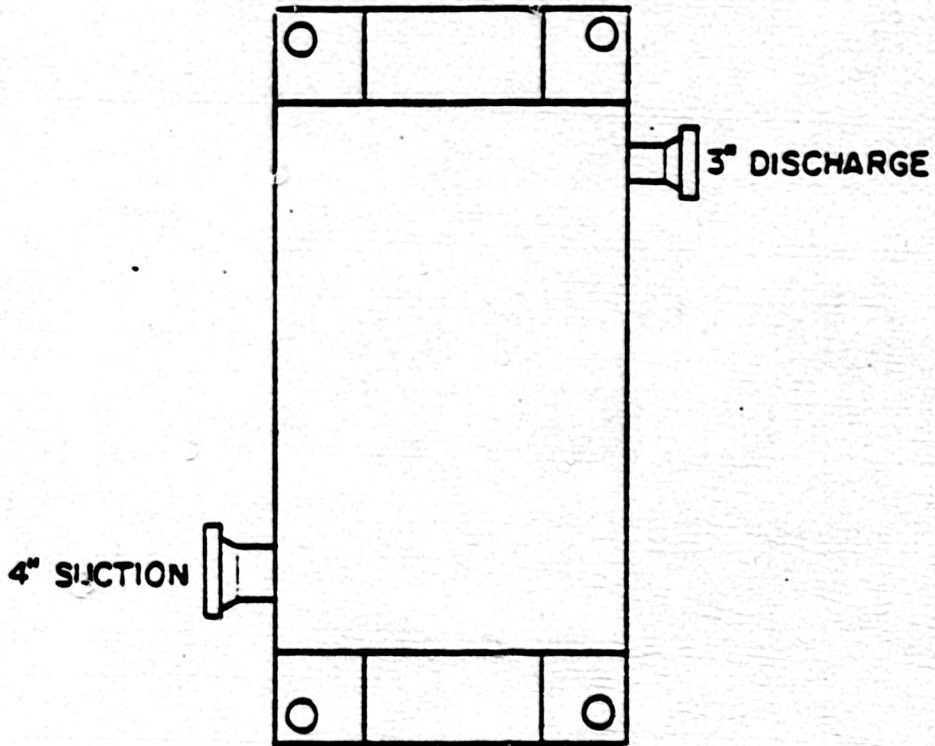
REFERENCE DRAWINGS

FC-49351

NOTES

1. THE PUMP FEET ARE BOLTED TO A COMMON SUPPORT
2. PUMP SUPPORT NUMBERS

SIPH-1A-A
SIPH-1B-B
SIPH-2A-A
SIPH-2B-B

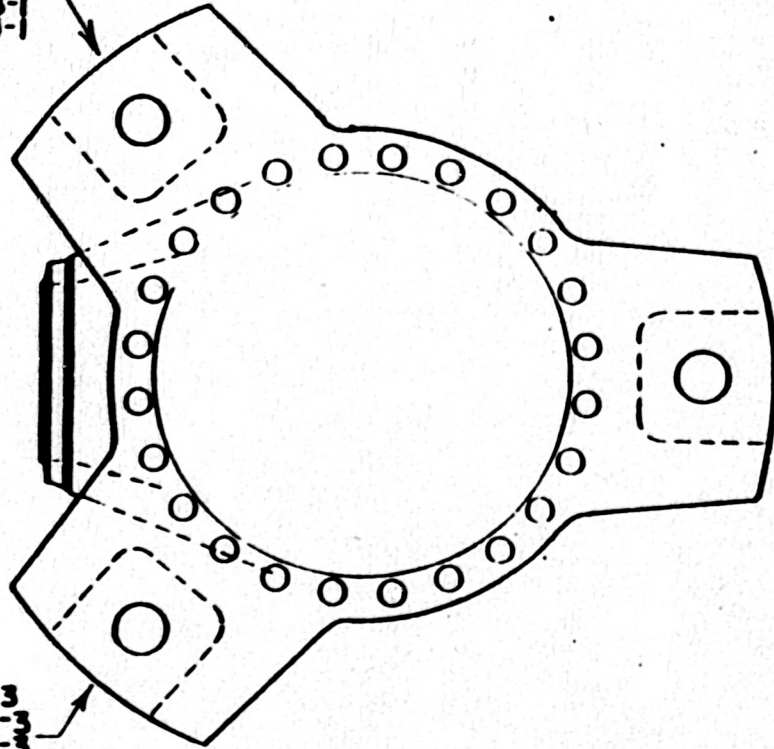


TENNESSEE VALLEY AUTHORITY			
DIVISION OF NUCLEAR POWER			
WATTS BAR NUCLEAR PLANT			
UNITS #1 & #2			
SAFETY INJECTION PUMP SUPPORTS			
DESIGN <i>NTS</i>	DRAWN <i>SPV</i>	APPROVED <i>[Signature]</i>	DATE <i>9-5-83</i>
TRACED			SHEET <i>1</i> OF <i>1</i> SHEETS
CHECKED <i>[Signature]</i>			ISI-0120-A

NOTES

I. REPLACE X WITH UNIT NUMBER

X-RCPH-1-1
X-RCPH-2-1
X-RCPH-3-1
X-RCPH-4-1



X-RCPII-1-2
X-RCPII-2-2
X-RCPII-3-2
X-RCPII-4-2

X-RCPH-1-3
X-RCPH-2-3
X-RCPH-3-3
X-RCPH-4-3

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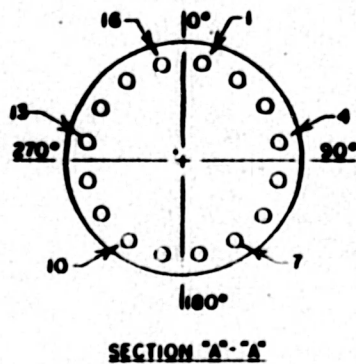
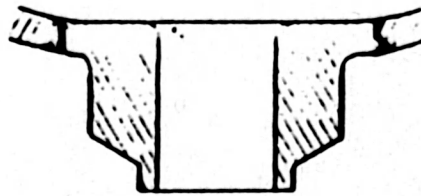
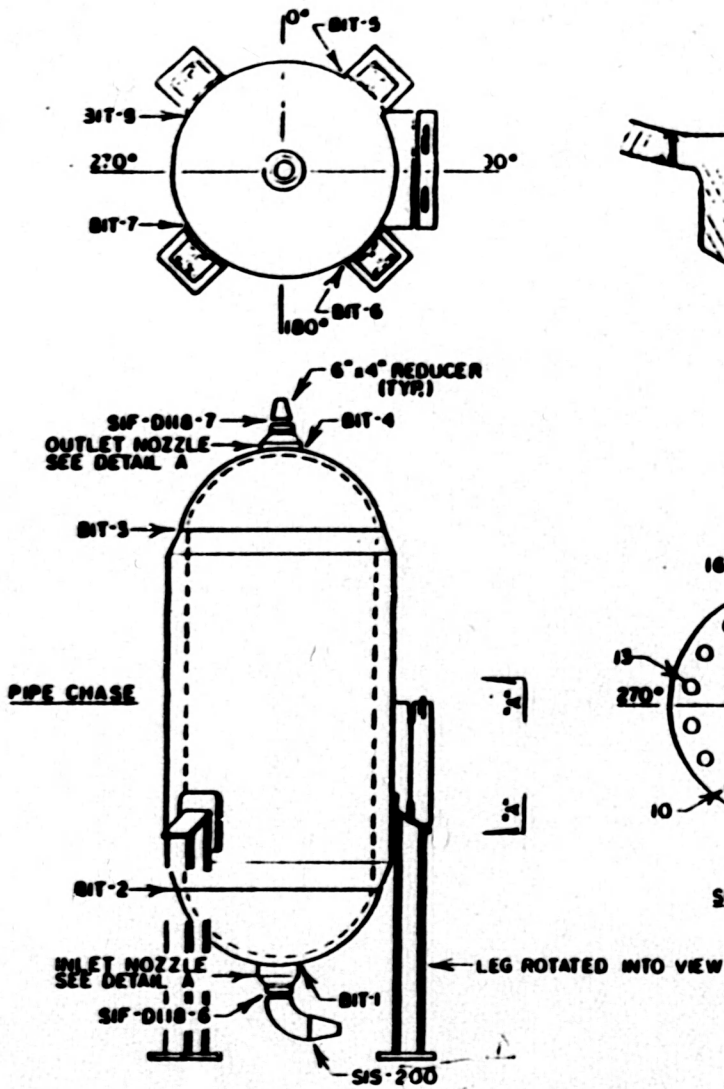
TENNESSEE VALLEY AUTHORITY
DIVISION OF NUCLEAR POWER

WATTS BAR NUCLEAR PLANT
UNITS #1 & #2
REACTOR COOLANT PUMP SUPPORTS

SCALE: *NTS*
DRAWN: *MS*
CHECKED: *RT*
SUBMITTED

APPROVED: *HJB*
DATE: 9-6-83
REVISION: 11
WATT
ISI-0121-A

KU



REFERENCE DRAWINGS

HOCE48
WBN E-2882 IC-118

MATERIAL SPECIFICATIONS

CLASS 2

TANK

HELL

SA-351 C79A

3.12" M.M.

HEADS

SA-240 TP-304

2.00 NOM.

NOZZLES

SA-182 F-304

BOLTING

STUDS

SA-193 GR. B7

2.50-BUN-2As 13-50

NUTS

SA-193 GR. 2H

2.50-BUN-2B HVY.

FITTINGS

SA-403 WP-304

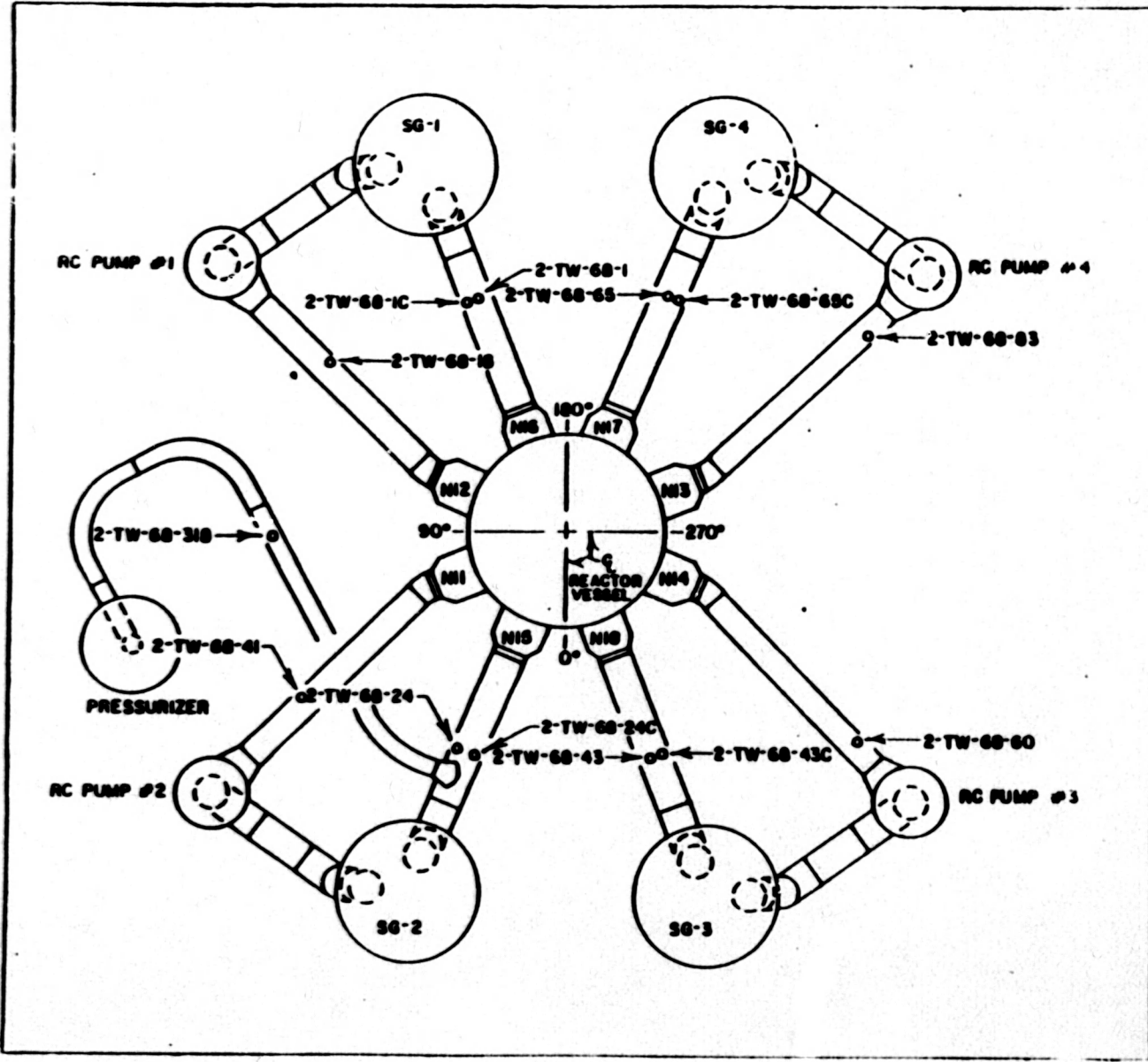
6" SCH 160

WBN
 T1-508
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NO.	DATE	REVISIONS	CHK'D	DATE
1	5-21-88	CORRECTED WELD NO. T1A	WBN	5-19-88
SERRANO VALLEY AUTHORITY DIVISION OF NUCLEAR POWER WATTS BAR NUCLEAR UNIT #2 UNIT #2 BORON INJECTION TANK				
DESIGN	WBN	DATE	5-19-88	BY
APP'D	WBN	DATE	5-19-88	BY
REV'D	WBN	DATE	5-19-88	BY

REFERENCE DRAWINGS
 SK 304-2 SH 1 THRU 8
 MATERIAL SPECIFICATIONS
 CLASS I
 TEMPERATURE WELLS
 SA 182 F 316
 2 1/2" O.D. BOSS

JBN
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NO	DATE	REVISIONS	CK'D	APP

TENNESSEE VALLEY AUTHORITY
 DIVISION OF NUCLEAR POWER
WATTS BAR NUCLEAR PLANT
 UNIT #2
REACTOR COOLANT PIPING
WELD LOCATIONS

E 51 1-12-85 2-12-85 3-12-85	[Signature] [Signature]	[Signature]	1-12-85 2-12-85 3-12-85 CIM-2566 B
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REFERENCE DRAWING

WSP-2002-15-11
 MATERIAL SPECIFICATIONS

CLASS A

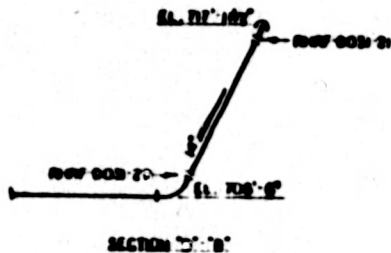
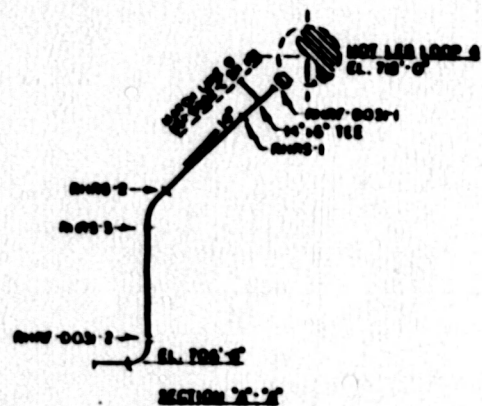
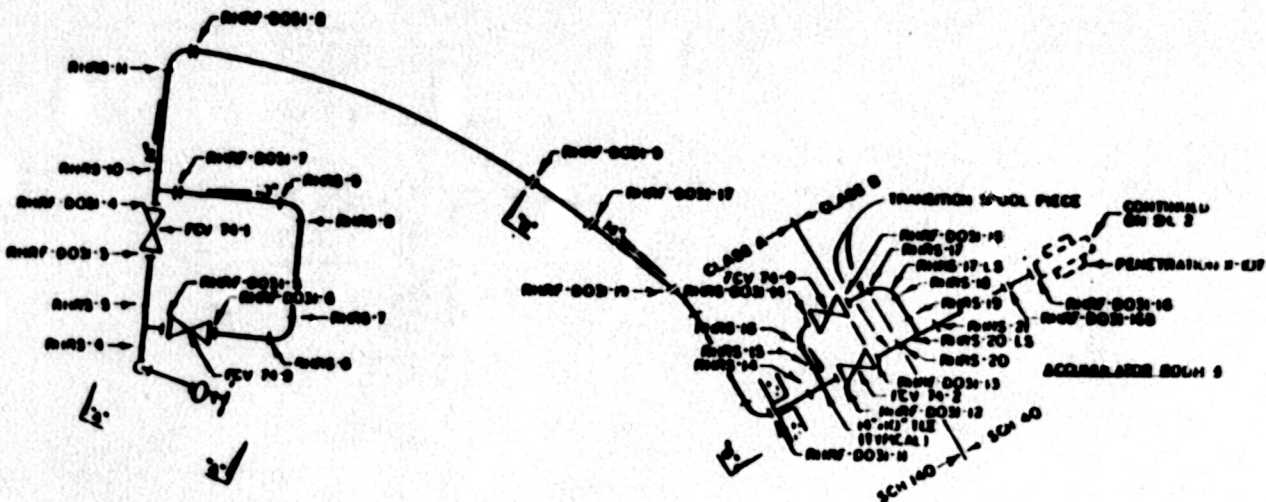
- PIPE
- SA 375 TP 316
- 14" SCH 140
- 10" SCH 140

CLASS B

- PIPE
- SA 375 TP 316
- 14" SCH 140
- 10" SCH 140
- S 1 304 CL. 1 TP 304
- 14" SCH 40
- SA 312 TP 304 W/S
- 10" SCH 40

FITTINGS

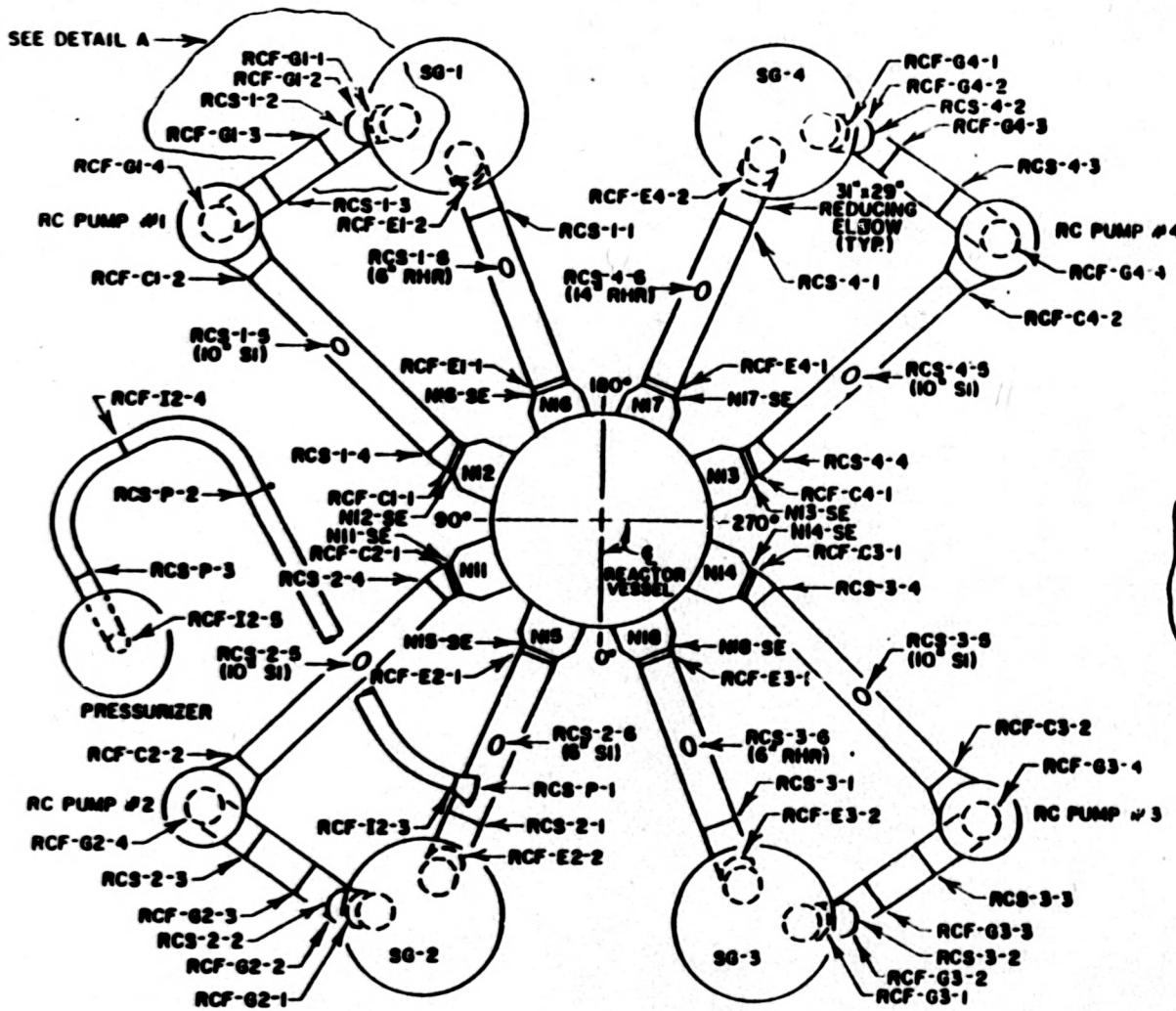
- SA 403 WP 304 W/S
- 14" SCH 40
- 10" SCH 40



WBN
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WSP-2002-15-11 (CLASS A) RMS-10 (CLASS B) RMS-10 (CLASS A) RMS-10

NO.	DATE	REVISIONS	BY
WATTS BAR NUCLEAR PLANT UNIT #2 RESIDUAL HEAT REMOVAL SYSTEM WELD CONNECTIONS			
DATE	BY	CHKD BY	

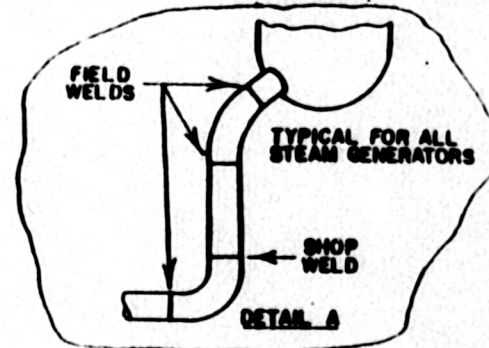


REFERENCE DRAWINGS
 SK 304-2 SH 1 THRU 12
 MATERIAL SPECIFICATIONS

CLASS 1
 PRESSURIZER SURGE LINE
 SA 376 14" SCH 160
 HOT LEG
 SA 351 CF-8A
 29" I.D. 2.33" M.W.
 CROSSOVER LEG
 SA 351 CF-8A
 31" I.D. 2.48" M.W.
 COLD LEG
 SA 351 CF-8A
 27.9" I.D. 2.81" M.W.

NOTES

- SEE DETAIL A ON DRAWING CHM-2660-B SHEET 2 FOR THE STEAM GENERATOR TO PIPING WELDS.



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NO	DATE	REVISIONS	CK'D	APP
1	1-17-85	REWORK AND GENERAL REVISION	WJS	WJS

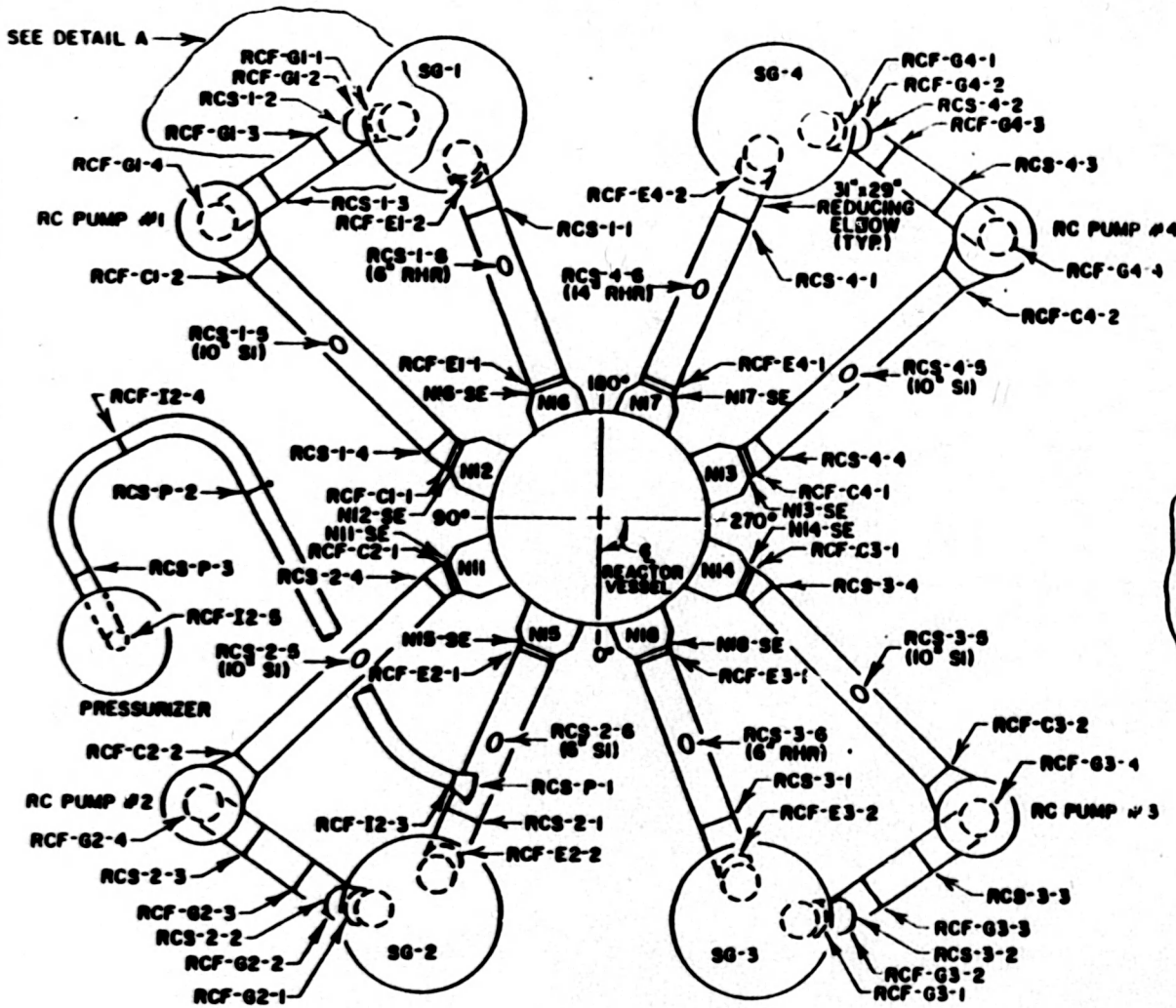
UNIVERSITY WASTEV AUTHORITY
 DIVISION OF NUCLEAR POWER

WATTS BAR NUCLEAR PLANT
 UNIT #2
 REACTOR COOLANT PIPING

WELD LOCATIONS

WELDED BY	WELDED DATE	WELDED TIME	WELDED BY	WELDED DATE	WELDED TIME

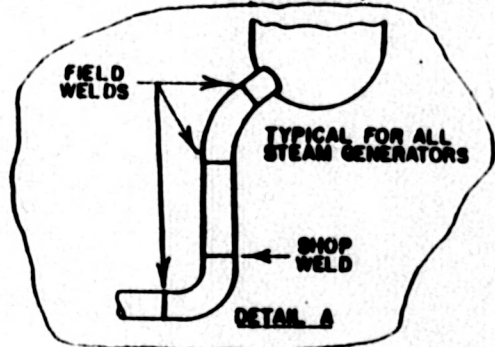
CHM-2566 B



REFERENCE DRAWINGS
 SK 304-2 SH 1 THRU 12
 MATERIAL SPECIFICATIONS

CLASS 1
 PRESSURIZER SURGE LINE
 SA 376 14" SCH 160
 HOT LEG
 SA 351 CF-8A
 29" I.D. 2.33" M.W.
 CROSSOVER LEG
 SA 351 CF-8A
 31" I.D. 2.48" M.W.
 COLD LEG
 SA 351 CF-8A
 27.5" I.D. 2.21" M.W.

NOTES
 1. SEE DETAIL A ON DRAWING CHM-2660-B SHEET 2 FOR THE STEAM GENERATOR TO PIPING WELDS.



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NO	DATE	REVISIONS	CHK'D	APP
1	1-12-05	ADDITION AND GENERAL REVISION	WJS	WJS

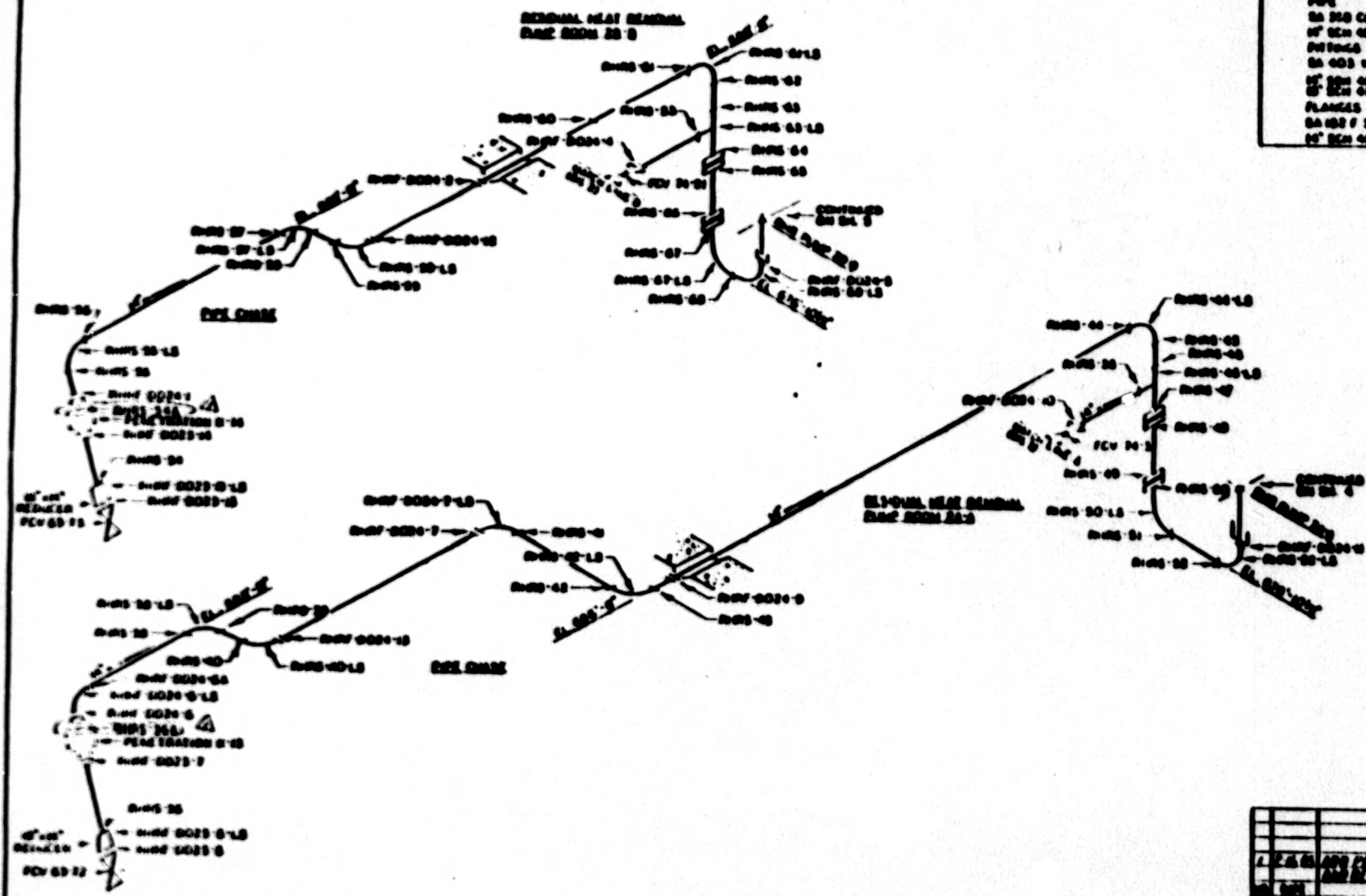
FEDERATED WASTEV AUTHORITY
 DIVISION OF NUCLEAR POWER

WATTS BAR NUCLEAR PLANT
 UNIT #2
 REACTOR COOLANT PIPING

WELD LOCATIONS

DATE: 1-12-05	BY: WJS	CHK'D: WJS	DATE: 1-12-05
CHM-2566 B			

REFERENCE TO
 UNIT 2000 S.
 INTERNAL SPECIFICATIONS
 CLASS 0
 PIPE
 SA 304 CL. 1 UP 204
 UP 204 00
 SA 304 CL. 1 UP 204
 UP 204 00
 SA 304 CL. 1 UP 204
 UP 204 00
 FLANGES
 SA 304 F 00
 UP 204 00



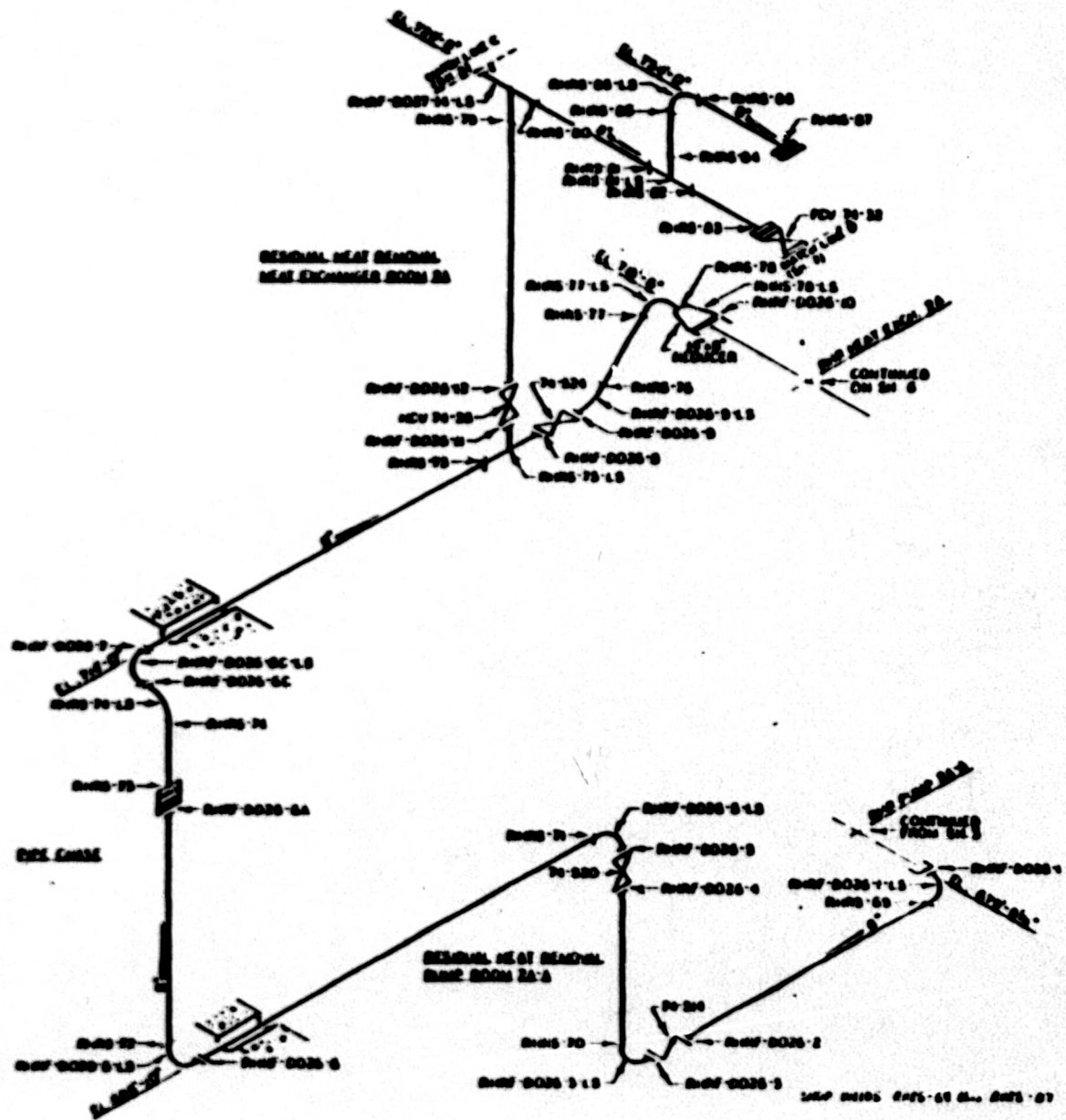
T1-508
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SHOP NUMBER 2000-20.000-20.000 TO 20.000.000

NO.	DESCRIPTION	DATE	BY	CHECKED

UNIT 2000 S. AM PLANT
 UNIT 02
 RESIDUAL HEAT EXCHANGER SYSTEM
 SHEET 10 OF 10

REVISIONS
 NEW 1-2000 E-75
 GENERAL SPECIFICATIONS
 CLASS 0
 PIPE
 SA 312 TP 304/30
 6" SCH 40S
 FITTINGS
 SA 403 TP 304 W/30
 1/2" SCH 40
 1" SCH 40S
 FLANGES
 SA 402 F 304
 6" SCH 50S

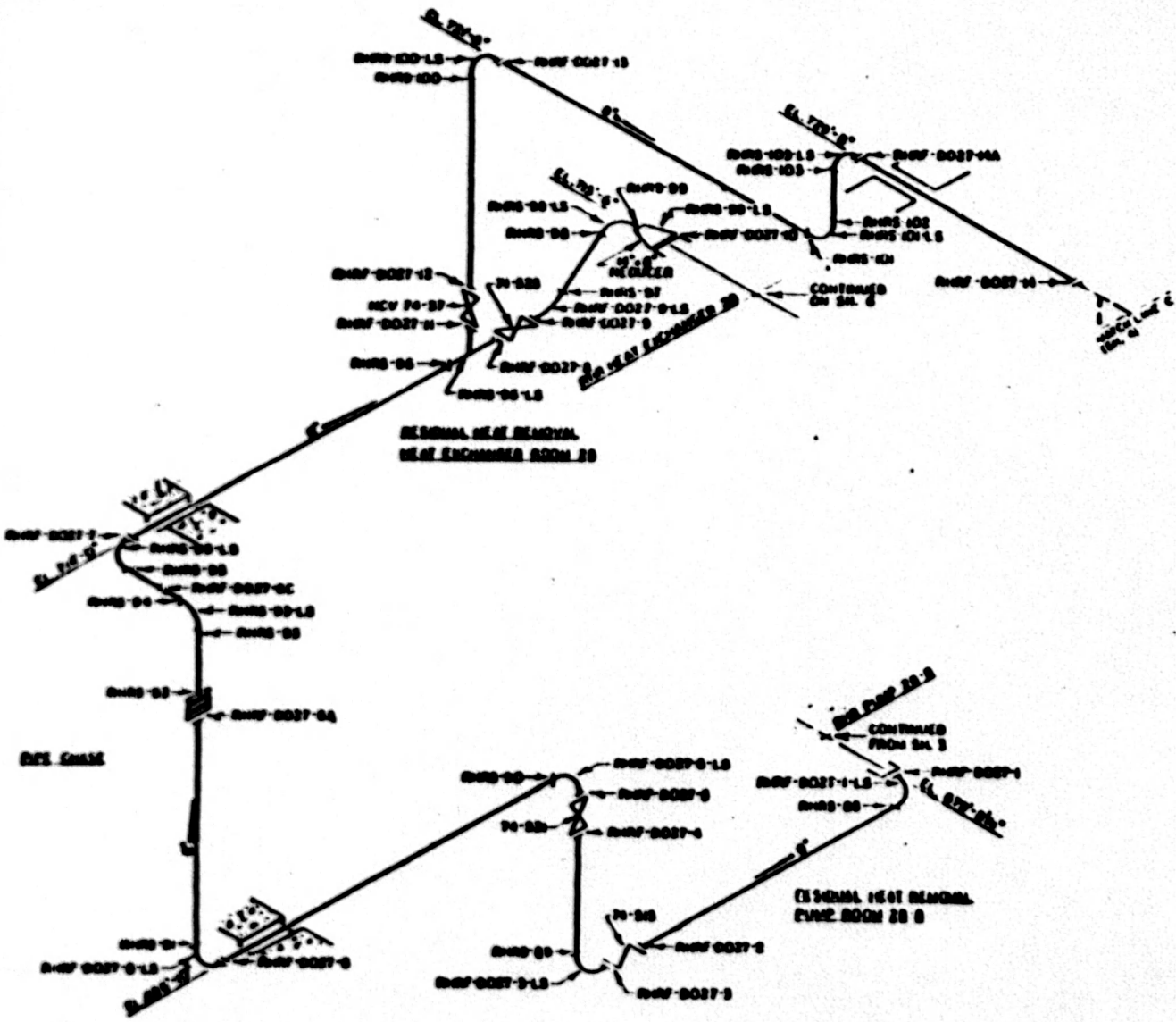


MGN
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NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

WATTS BAR NUCLEAR PLANT
 UNIT #2
 RESIDUAL HEAT REMOVAL SYSTEM
 WELD SPECIFICATIONS

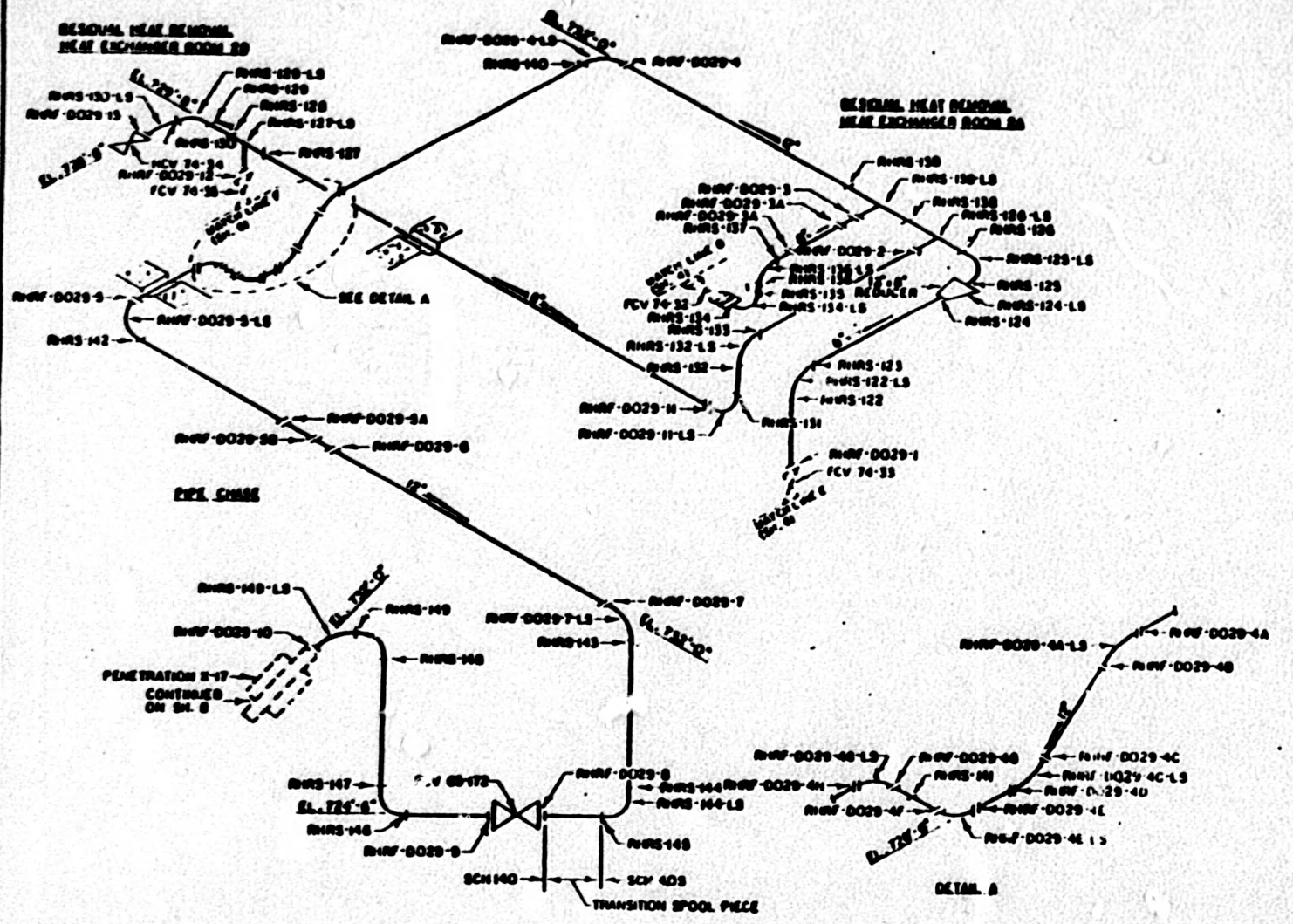
REFERENCE DRAWING
 WHS E-2002 K-27
MATERIAL SPECIFICATIONS
CLASS B
 PIPE
 SA 312 TP 304w/s
 3" SCH 40S
FITTINGS
 SA 403 WP 304w/s/s
 1/2" SCH 40
 2" SCH 40S
FLANGES
 SA 182 F 304
 6" SCH 40S



SHP PAGES SHS-20 SH. 20. 03

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REVISIONS	
NO.	DATE
ENGINEER: [Signature] CHECKED BY: [Signature] DESIGNED BY: [Signature] DRAWN BY: [Signature]	
DATE	



REFERENCE DRAWING:
 W-1002 IS-77

MATERIAL SPECIFICATIONS

CLASS B
 PIPE
 SA 376 TP 316
 18" SCH 140
 SA 312 TP 304W/S
 12" SCH 409
 8" SCH 409

FITTINGS/SEE NOTE H
 SA 403 WP 316
 12" SCH 140
 SA 403 WP 304W/S
 12" SCH 409
 8" SCH 409

FLANGES
 SA 182 F 316
 18" SCH 409

NOTES
 L THE FITTING BETWEEN WELDS RW-149 AND RW-1029-10 HAS A LONGITUDINAL SEAM.

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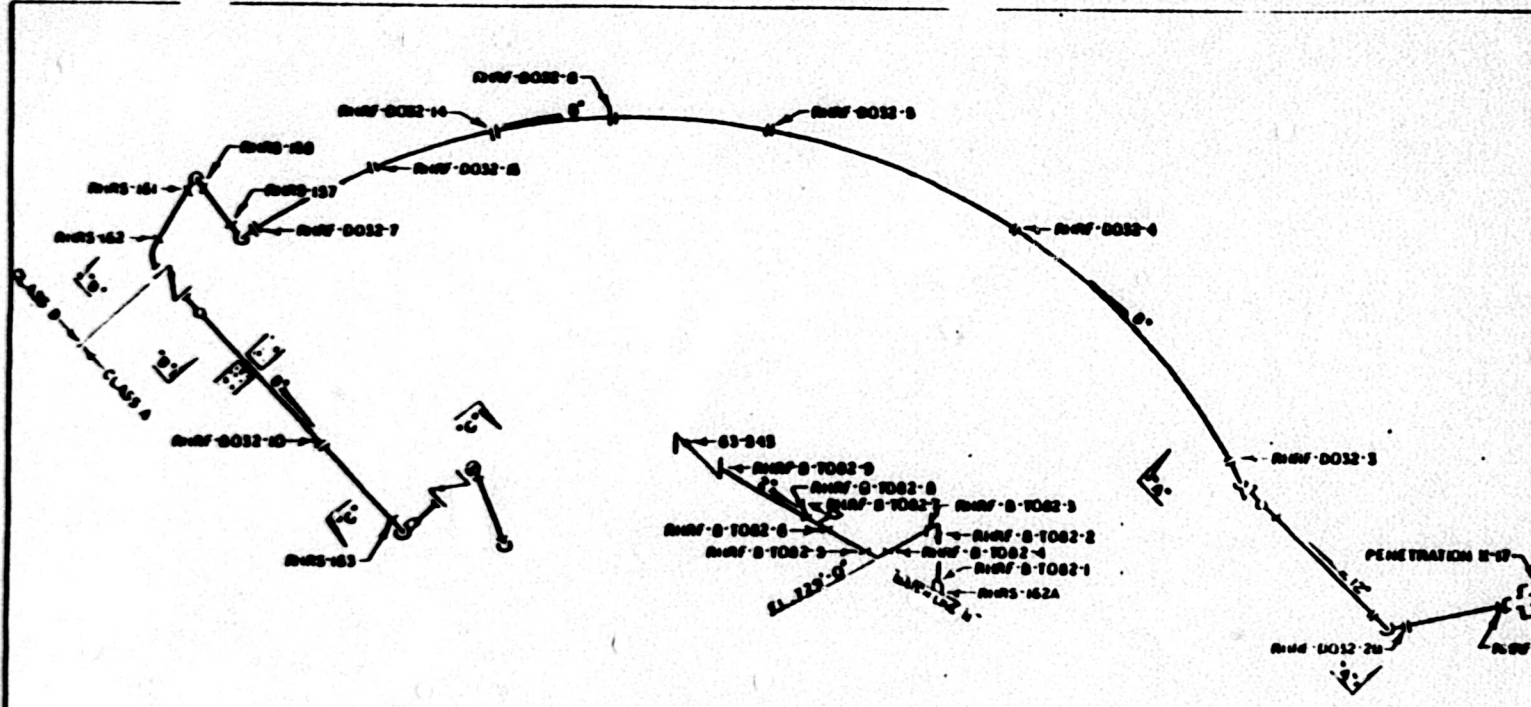
NO.	DATE	REVISIONS	BY

DESIGNED BY: [Signature]
 CHECKED BY: [Signature]
 DATE OF THIS DRAWING: [Date]

WATTS BAR NUCLEAR PLANT
 UNIT #2
 RESIDUAL HEAT REMOVAL SYSTEM
 WELD INCINERATOR

APP. BY: [Signature]
 DATE: [Date]

SHOP WELDS AND-132 (See RW-141)

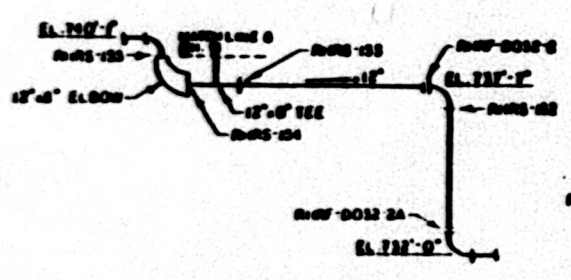


REFERENCE DRAWING
 WDM E-2002 IC-12
 REVISION 11

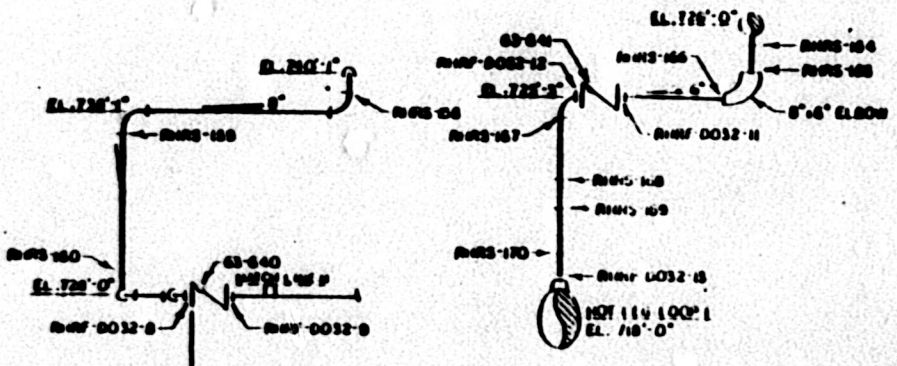
MATERIAL SPECIFICATIONS

CLASS A
 PIPE
 SA 376 TP 304
 8" SCH 160
 6" SCH 160
 4" SCH 160
 FITTINGS
 SA 403 WP 304
 8" SCH 160
 6" SCH 160
 SA 182 F 304
 8" BORED SCH 160

CLASS B
 PIPE
 SA 376 TP 316
 12" SCH 140
 SA 376 TP 304
 8" SCH 160
 FITTINGS
 SA 403 WP 316
 12" SCH 140
 SA 403 WP 304
 8" SCH 160



SECTION X-X



SECTION Y-Y

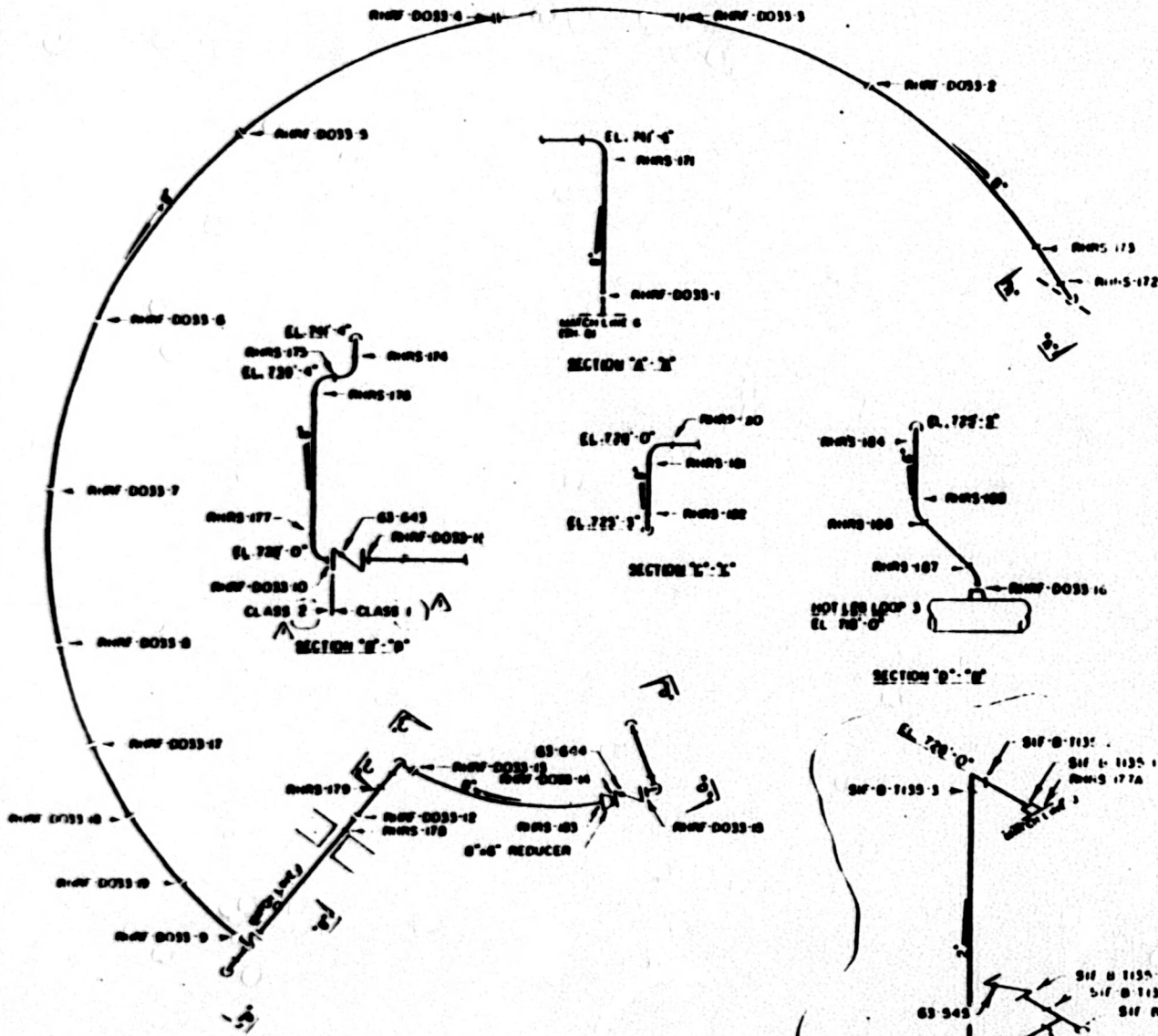
WDM E-2002 IC-12 REVISION 11

WDM E-2002 IC-12 REVISION 11

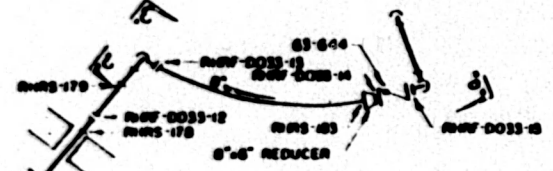
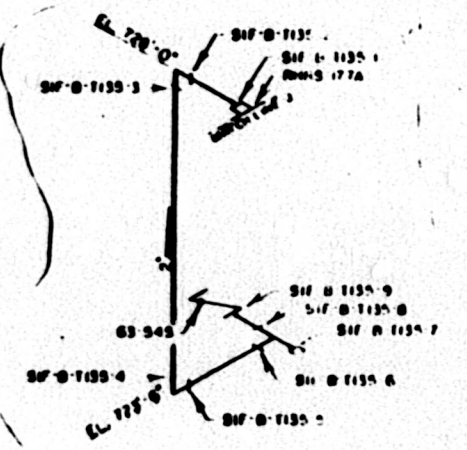
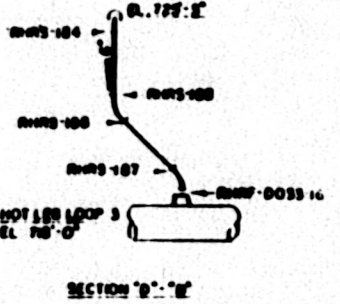
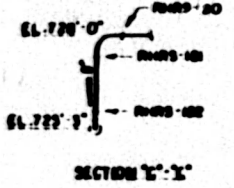
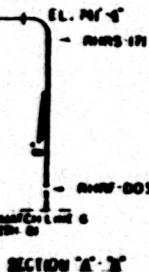
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NO.	DATE	REVISION	BY	APP.

UNITED STATES ATOMIC ENERGY COMMISSION
 WASTES MANIPULATION PLANT
 UNIT #2
 RESIDUAL HEAT REMOVAL SYSTEM
 WELD LOCATIONS



- REFERENCE DRAWINGS
 MBI 2 2002 IC 33
 SH 435-14 SAL 9
- MATERIAL SPECIFICATIONS
 CLASS 1 1/2
 PIPE
 SA 375 TP 304
 8" SCH 80
 6" SCH 80
 4" SCH 80
 FITTINGS
 SA 475 WP 374
 8" SCH 80
 6" SCH 80
 4" SCH 80
 SA 475 F 304
 2" 90-RED SCH 80
 CLASS 2 1/2
 PIPE
 SA 375 TP 374
 8" SCH 80
 SA 403 WP 304
 8" SCH 80



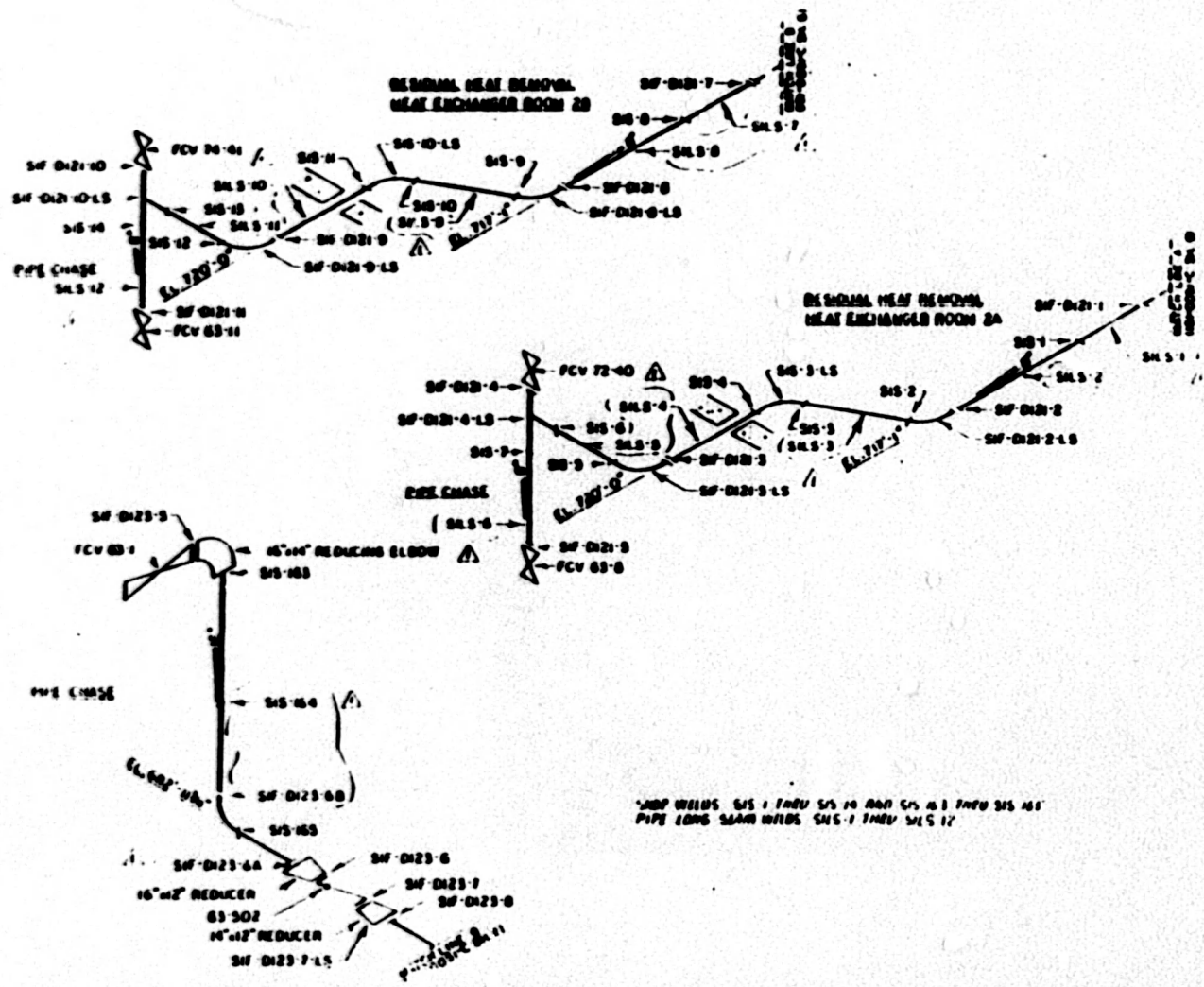
SWP UNITS: RWD 17 FROM RWD 183

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NO	DATE	BY	CHKD	APP'D
1	08/08/02	MBN		
2	08/08/02	MBN		
3	08/08/02	MBN		
4	08/08/02	MBN		
5	08/08/02	MBN		
6	08/08/02	MBN		
7	08/08/02	MBN		
8	08/08/02	MBN		
9	08/08/02	MBN		
10	08/08/02	MBN		

WATTS BAR WIRE AND PLANT
 UNIT #2
 REMOVAL HEAT REMOVAL SYSTEM
 WELD & CLEANING
 11/13/02

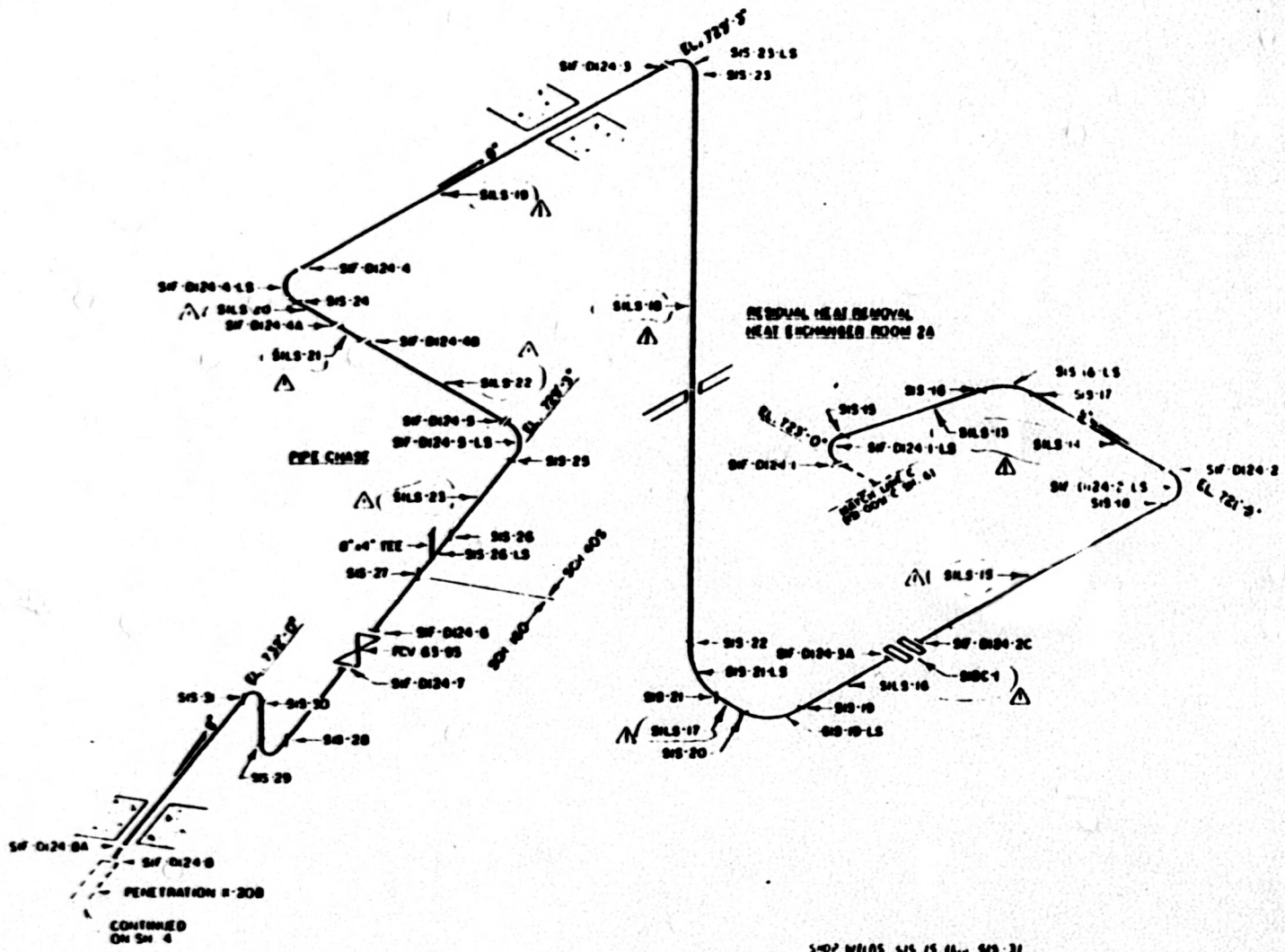
REFERENCE DRAWINGS
 SHEET 1-2000 IC-121
 SHEET 1-2000 IC-123
 MATERIAL SPECIFICATIONS
 CLASS 2 / 1
 PIPE
 SA 308 CL. 1 TP 304
 16" SCH 80S
 SA 312 TP 304W
 8" SCH 40S
 FITTINGS
 SA 403 WP 304
 16" SCH 80S
 16" 90° RED. ELL. SCH 40
 16" 45° RED. SCH 40
 SA 403 WP 304W
 8" SCH 40S



WDP WELDS S/S 1 THRU S/S 10 AND S/S 11 THRU S/S 16
 PIPE LONG SEAM WELDS S/S 1 THRU S/S 17

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1	270	DO	TARGET WHEN WELDED, BUT NOT
2	270	DO	WELD SEAM WELDS, THIS INCLUDES
3	270	DO	TPSS OF SEAM WELDS
4	270	DO	REWORKING
5	270	DO	REWORKING
6	270	DO	REWORKING
7	270	DO	REWORKING
8	270	DO	REWORKING
9	270	DO	REWORKING
10	270	DO	REWORKING
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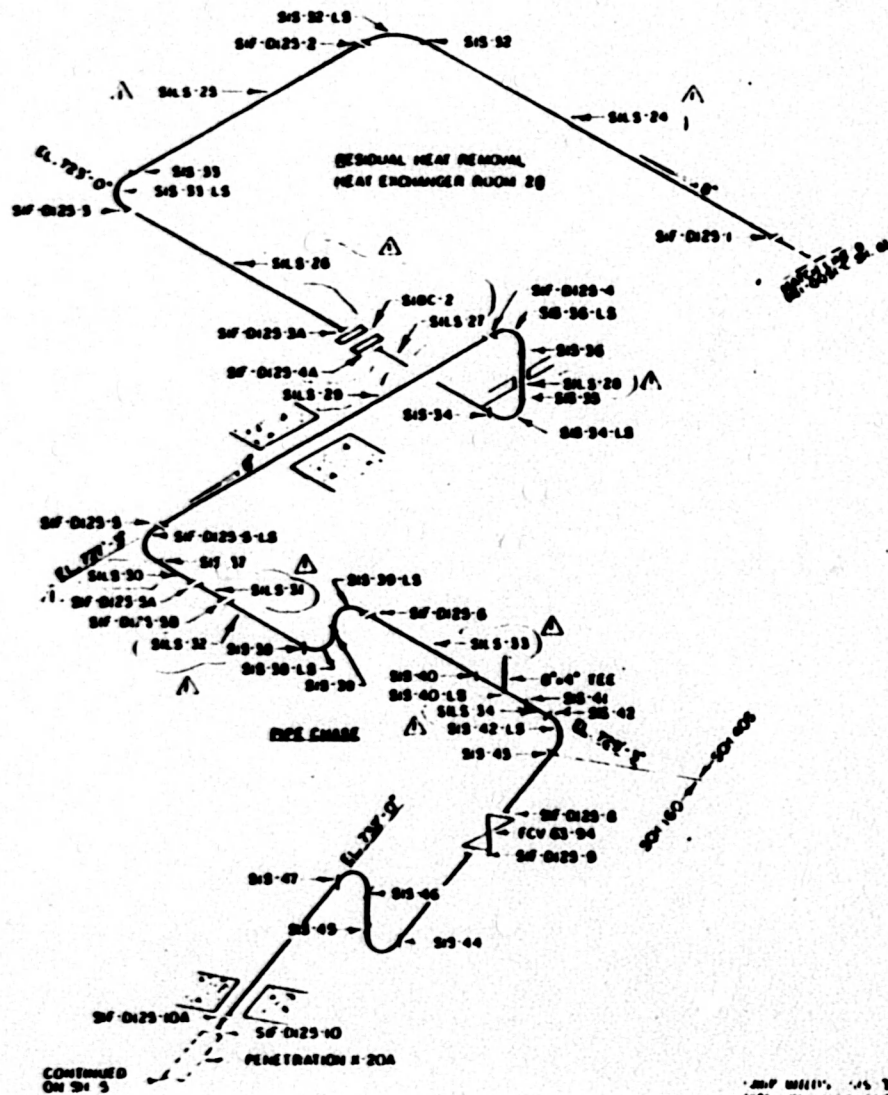


REFERENCE DRAWING:
 MBE E-2002 IC 124
 MATERIAL SPECIFICATION:
 CLASS 2
 PIPE
 SA 336 1P 304
 6" SCH 40
 SA 312 1P 3040
 6" SCH 40S
 FITTINGS
 SA 403 WP 314
 6" SCH 40
 SA 403 WP 3140
 6" SCH 40S
 FLANGES
 SA 182 F 304
 6" SCH 40S

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SHOW WELDS S15 IS 61... S15-31
 PIPE LONG WARM WELDS S15 25 THRU S15-31

NO	DATE	BY	REVISION
1	24	MB	ADD PPT 1006 JAN 1986
2			REVISION
3			REVISION
4			REVISION
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7			REVISION
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96			REVISION
97			REVISION
98			REVISION
99			REVISION
100			REVISION



REFERENCE DRAWINGS
 MBN E-2002 IC 123
 MATERIAL SPECIFICATIONS
 CLASS 2, /,
 PIPE
 SA 312 TP 304
 8" SCH 160
 SA 312 TP 304W
 8" SCH 40S
 FITTINGS
 SA 403 WP 304
 8" SCH 160
 SA 403 WP 304W
 8" SCH 41S
 FLANGES
 SA 182 F 304
 8" SCH 40S

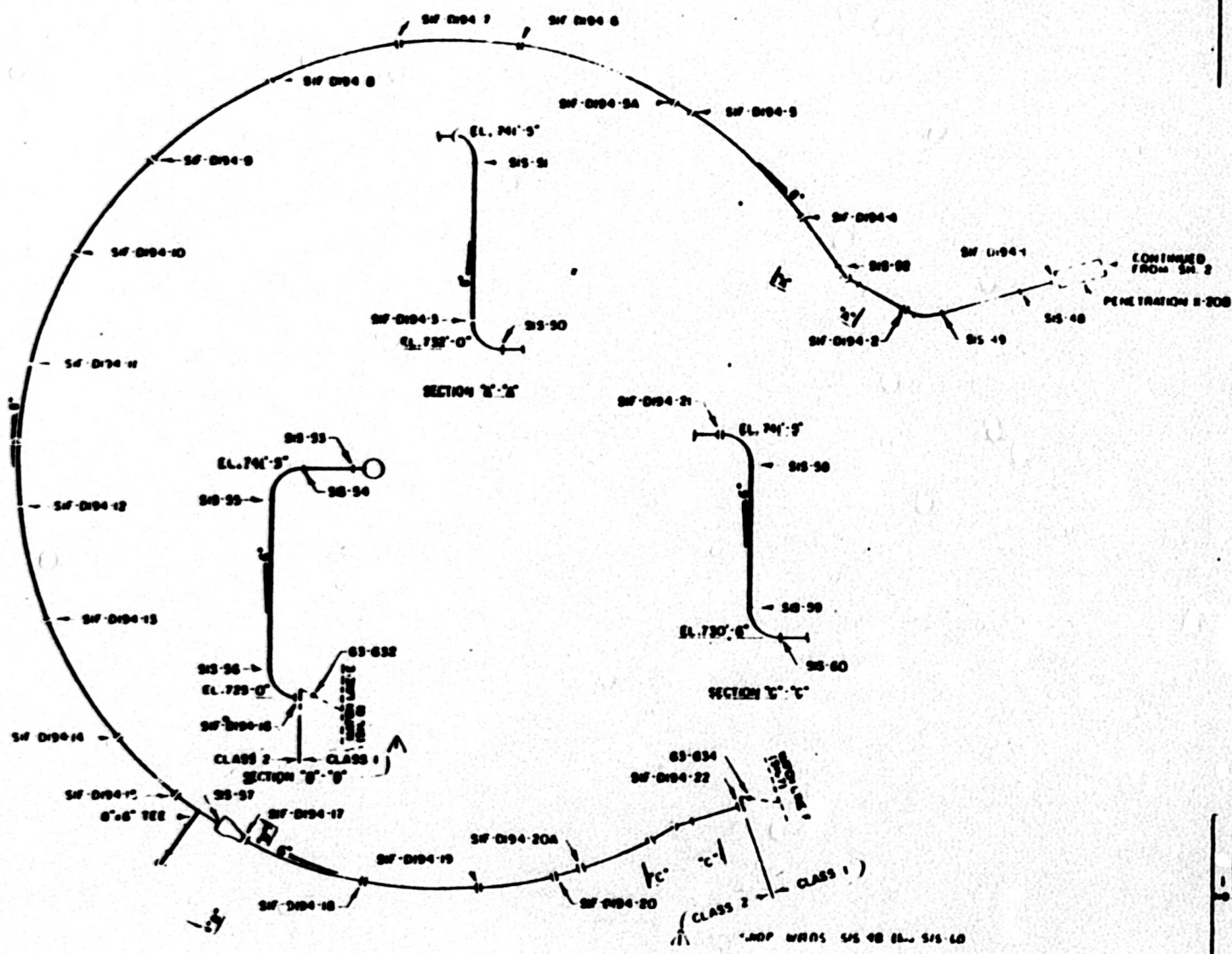
MBN
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DATE: 10/15/97 BY: JLS/STP
 10/15/97 10:00 AM

NO	DATE	BY	DESCRIPTION
1	10/15/97	JLS/STP	ISSUED FOR CONSTRUCTION
2	10/15/97	JLS/STP	REVISION 11

WATER PUMP ROOM 10A
 SAFETY SYSTEM
 WELD LINE ALPHAS

REFERENCE DRAWING:
 WPI 2-2002 R. 170
 MATERIAL: STEEL WATERS
 CLASS 2
 PIPE
 SA 370 TP 304
 8" SCH 40
 0.375 THK
 0.010 IN. S.S.
 0.010 IN. S.S.
 0.010 IN. S.S.
 0.010 IN. S.S.

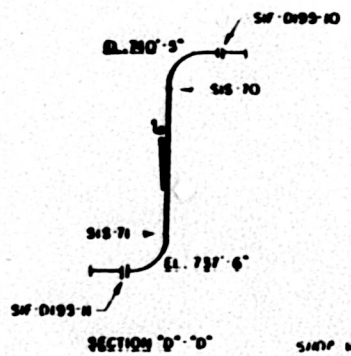
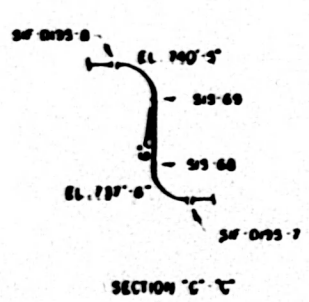
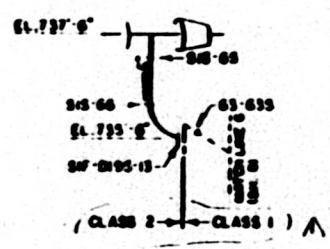
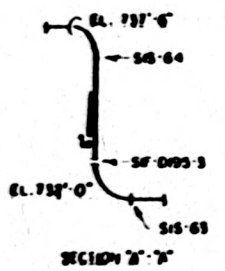
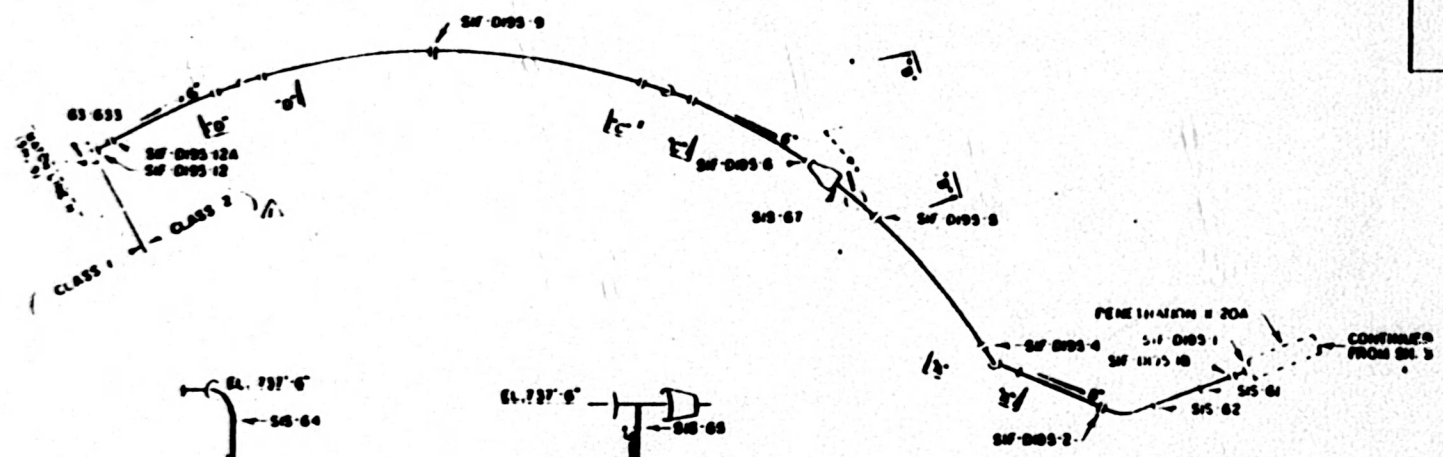


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1	2004	WATTS BAR NUCLEAR UNIT #2	...
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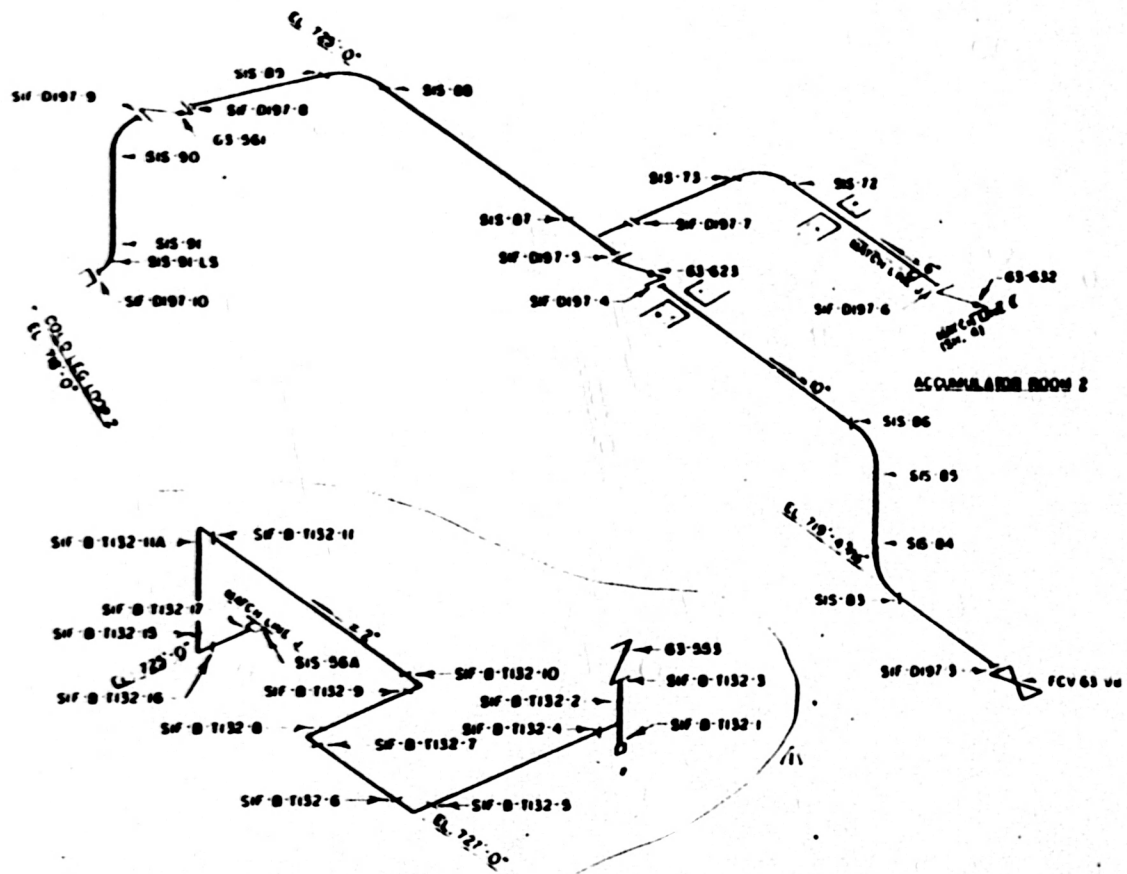
*TOP WINGS S/S 40 EL. S/S 40

REFERENCE DRAWING:
 WBN 1-2002 IC 175
 MATERIAL SPECIFICATIONS:
 CLASS 2 1/1
 PIPE
 SA 375 TP 304
 SC SCH 80
 SC SCH 80
 FITTINGS
 SA 403 WP 304
 SC SCH 80
 SC SCH 80



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DATE	BY	REVISION
WATTS BAR FOR LEAH 17401 UNIT #2 SAFETY INJECTION SYSTEM WELD LOCATIONS		
DATE	BY	



- REFERENCE DRAWINGS
 89N E-2002 IC-197
 435-14 SM 6
- MATERIAL SPECIFICATIONS
 CLASS I 1/1
 PIPE
 SA 316 TP 316
 1/2" SCH 160
 3/4" SCH 160
 SA 316 TP 304
 1" SCH 160
 FITTINGS (SEE NOTE 1)
 SA 403 WP 316
 1/2" SCH 160
 3/4" SCH 160
 SA 182 F 304
 1" BONED SCH 160
 NOTES

1. THE FITTING BETWEEN WELDS
 SF-01 AND SF-027-10 HAS A
 LONGITUDINAL SEAM.

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... 16A, SIS 12, SIS 11 AND SIS 03 TO SIS 01

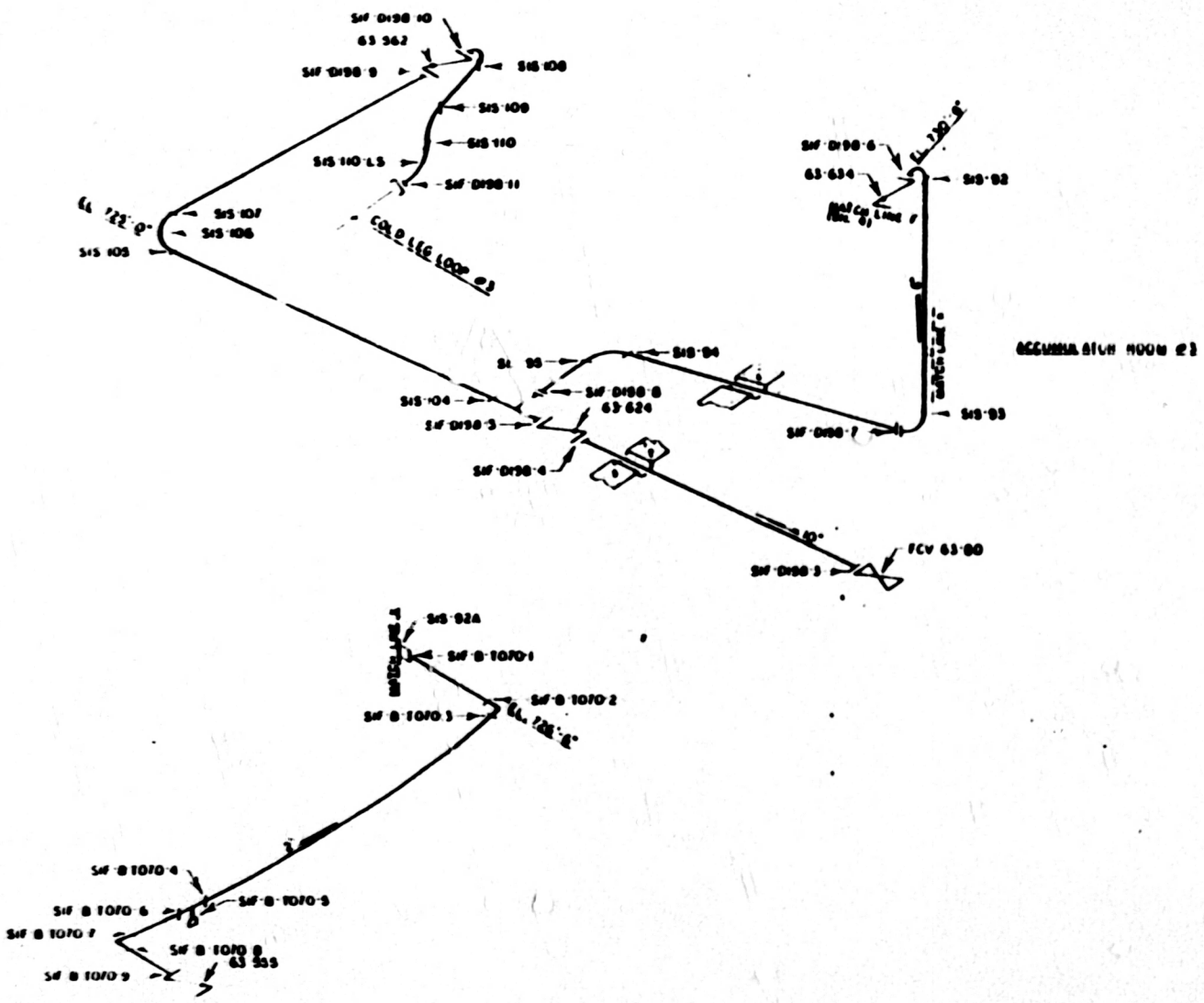
1	27	00	ADD	2" UNF. BRASS	...
...
WATTS BAR NUCLEAR PLANT UNIT #2 SAFETY INJECTION SYSTEM WELD LINE AIRS					
...	ATS
...

REFERENCE DRAWINGS

- MBN E-2002 K-150
- 435-75 SIF 7
- MATERIAL SPECIFICATIONS**
- CLASS 1
- PIPE
- SA-375 TP-316
- 12" SCH 160
- 6" SCH 160
- SA-375 TP-304
- 2" SCH 160
- FITTINGS (SEE NOTE 1)
- SA-403 WP-316
- 12" SCH 160
- 6" SCH 160
- SA-402 F-304
- 2" BORED SCH 160

NOTES

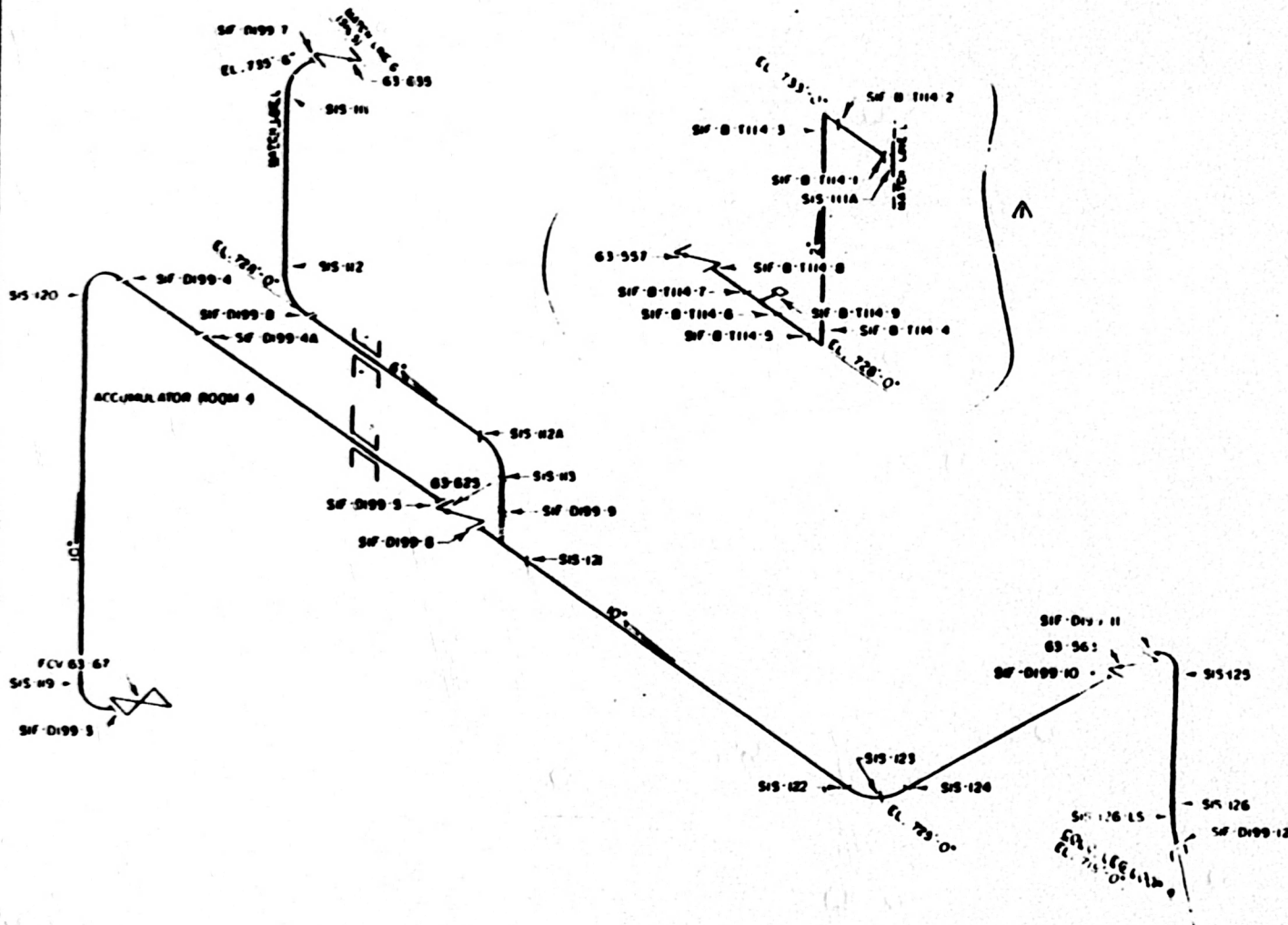
1 THE FITTING BETWEEN WELDS S15 110 AND SIF 0198-11 HAS A LONGITUDINAL BEAN.



SHEP WELDS S15 92 THRU S15 95, S15 99 THRU S15 102, AND S15 92A

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DATE	TIME	BY	APP
11/17/02	14:00	MBN	MBN
WATTS BAR FACILITY UNIT UNIT #2 SAFETY INSPECTION SYSTEM WELD LOCATION:			
REV	DATE	BY	APP
1	11/17/02	MBN	MBN



REFERENCE DRAWINGS:
 WHEE-7489 IC 173
 435-12 SH. 9
 MATERIAL SPECIFICATIONS:

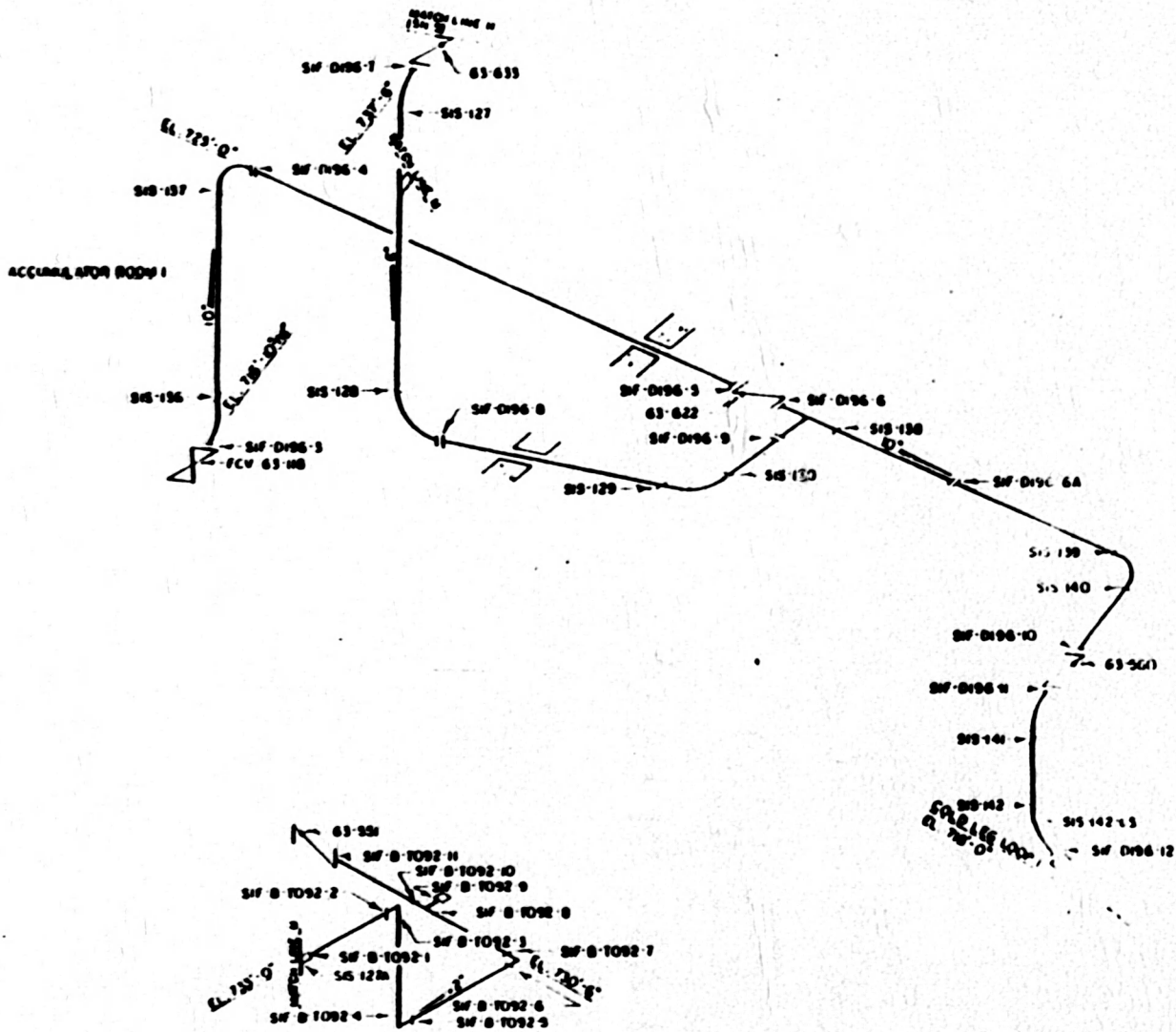
- CLASS I
 PIPE
 SA 376 TP 316
 1/2" SCH 160
 3/4" SCH 160
 SA 376 TP 304
 2" SCH 160
 FITTINGS (SEE NOTE 1)
 SA 403 WP 316
 1/2" SCH 160
 3/4" SCH 160
 SA 102 F 304
 2" BORED SCH 160

NOTES
 1. THE FITTING BETWEEN WELDS SIF-125 AND SIF-D199-12 HAS A LONGITUDINAL SEAM

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NO.	DATE	REVISIONS
1	10/2/88	ISSUE FOR CONSTRUCTION
2	10/2/88	ISSUE FOR CONSTRUCTION
3	10/2/88	ISSUE FOR CONSTRUCTION
4	10/2/88	ISSUE FOR CONSTRUCTION
5	10/2/88	ISSUE FOR CONSTRUCTION
6	10/2/88	ISSUE FOR CONSTRUCTION
7	10/2/88	ISSUE FOR CONSTRUCTION
8	10/2/88	ISSUE FOR CONSTRUCTION
9	10/2/88	ISSUE FOR CONSTRUCTION
10	10/2/88	ISSUE FOR CONSTRUCTION

WATTS PAR MHE MTTJAJ
 UNIT 02
 SAFETY INSPECTION SYSTEM
 WELDED BY: MBH
 DATE: 10/2/88



WELDS SWS-127 THRU SWS-130 SWS-131 THRU SWS-136 THRU SWS-142

REFERENCE DRAWING:
 WBN E-2002 IC-176
 SE 455-13 SM 2
 MATERIAL SPECIFICATION:

CLASS 1 /
 PIPE
 SA 376 TP 316
 2" SCH 160
 8" SCH 160
 SA 376 TP 304
 2" SCH 160
 FITTINGS (SEE NOTE 1)
 SA 403 WP 316
 10" SCH 160
 8" SCH 160
 SA 182 F 304
 2" SCH 160

NOTES
 1. THE FITTINGS BETWEEN WELDS
 SWS-142 AND SWS-144 HAS A
 LONGITUDINAL SEAM

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NO.	DATE	BY	CHKD
WATTS BAR NUCLEAR UNIT UNIT # 2 SAFETY INJECTION SYSTEM WELD REPAIRS			