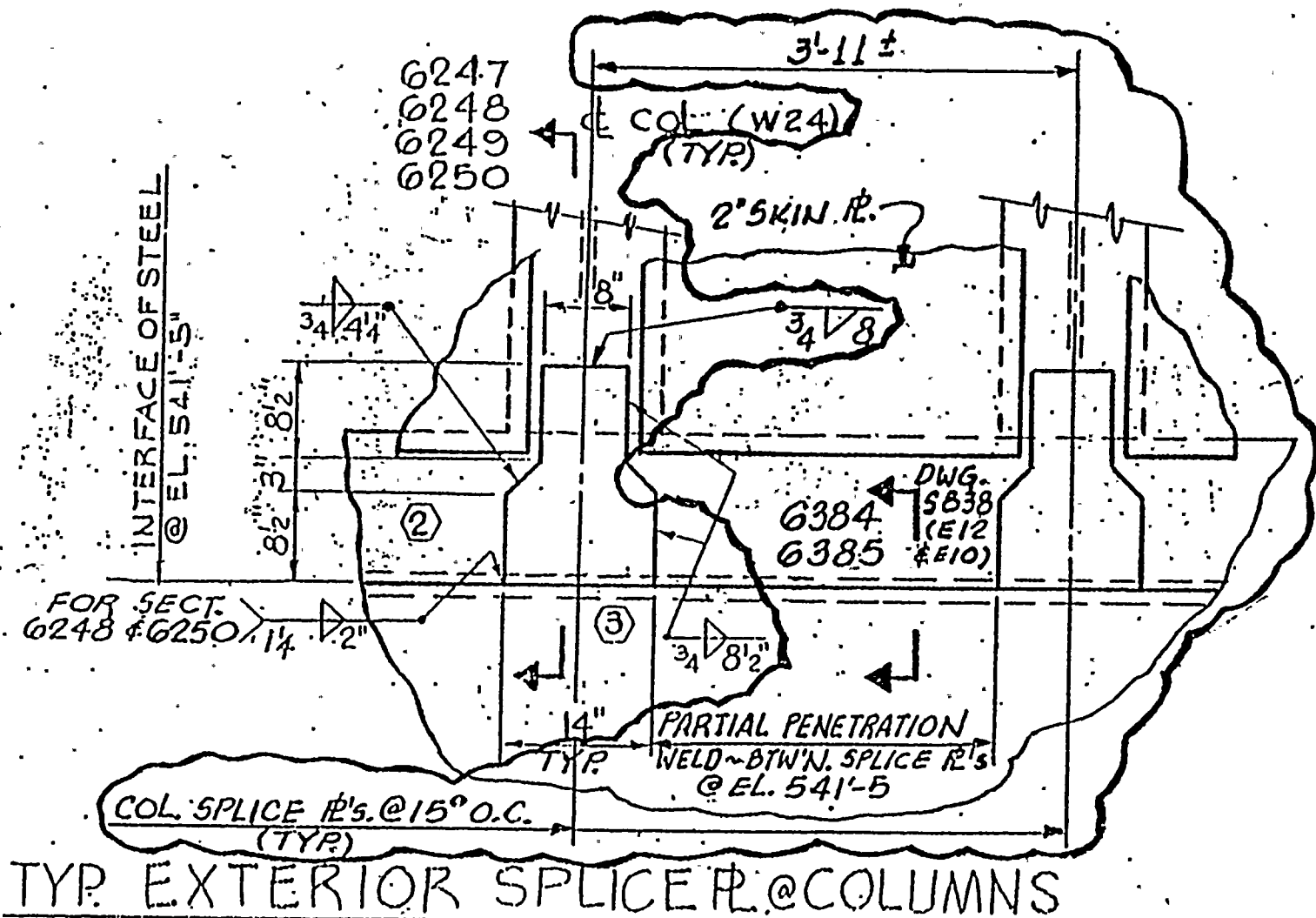
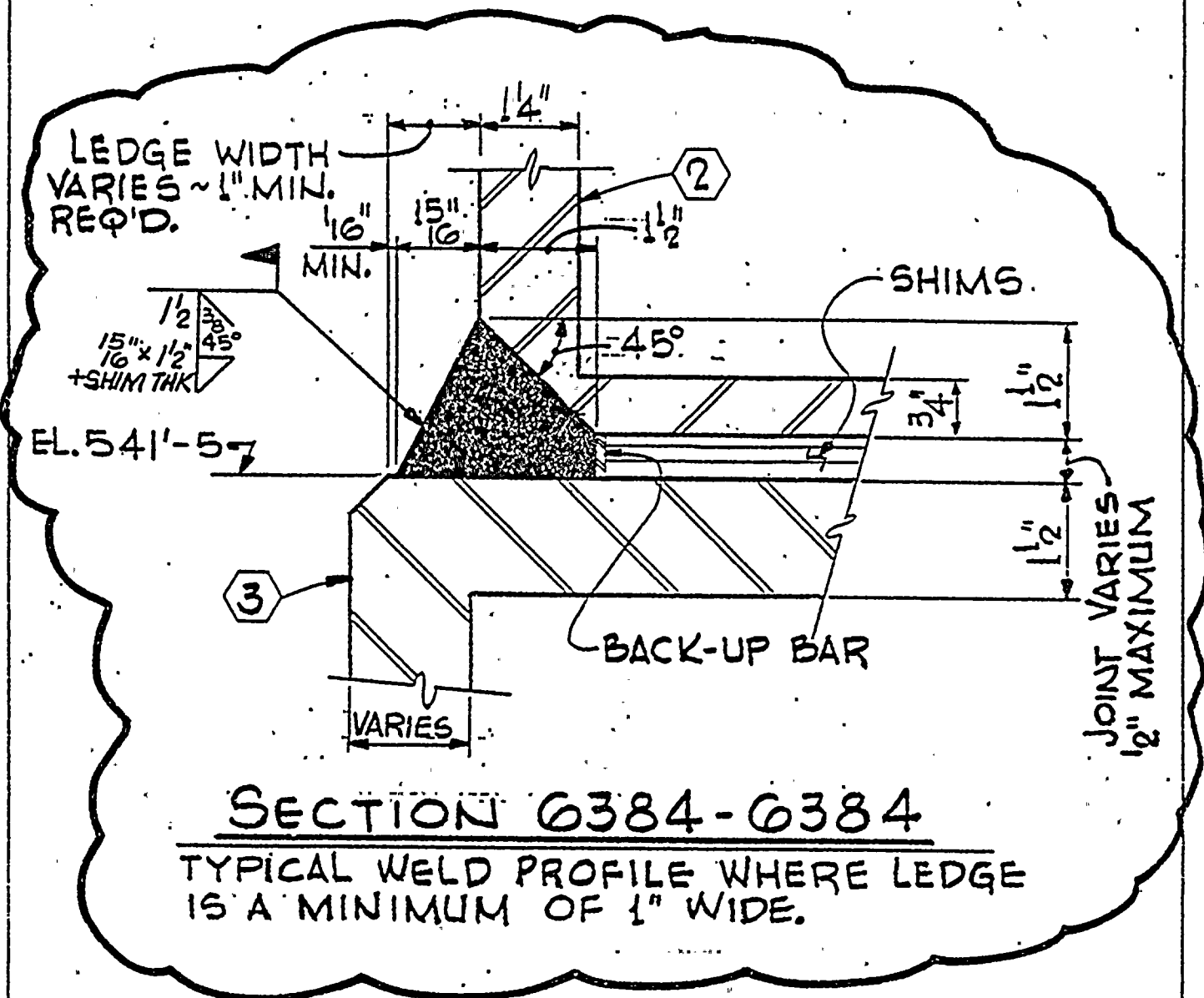


BURNS AND ROE, INC. WPPSS NUCLEAR PROJECT NO. 2		PROJECT ENGINEERING DIRECTIVE		CODE 211 215 103 114 1810 1617 1619 2021 I		PROJECT ENGINEERING DIRECTIVE 211 215 103 114 1810 1617 1619 2021 I																					
REASON FOR P. E. D.: This PED is to allow the contractor to prepare for welding to be done by Dual Shield FCAW Process.				INFORMATION COPIES _____		SHEET 1 OF 1																					
				REFERENCES																							
				SUBJECT: Dual Shield FCAW Qualification																							
				LOCATION: E/S4/S																							
				ENG. SYSTEM: N/A																							
				S/U SYSTEM: N/A																							
				QUALITY CLASS: I																							
				ORIGINATING DOCUMENTS: KR-215-5688																							
DESCRIPTION OF WORK: Contractor shall obtain machinery, welding wire and test materials to qualify a procedure and personnel, suitable to perform necessary capacity of welding to be done on the Sac. Wall. Contractor shall coordinate all operations with Burns and Roe Welding Engineer in contractors establishment for qualifying procedures and personnel, to inable this program to be expedited. The procedure and personnel shall be qualified in the horizontal position. The test plate for qualifying the procedure and personnel shall be in accordance with AWS D1.1 and Spec. 215-17D. A 2'x 2' mock-up of the plate thickness (as close as possible), and joint design shall be welded by each welder prior to welding on the Sac. Wall.																											
<table border="0"><tr><td>Type of Machinery Required</td><td>Type of Filler Metal Required</td></tr><tr><td>12</td><td>25 lb. spools</td></tr><tr><td>Manufacturer: Airco Flux</td><td>(1500 lbs)</td></tr><tr><td>Core Welding Machines</td><td>(Dia. .045)</td></tr><tr><td>John Brosnann</td><td>Dual Shield</td></tr><tr><td>(415) 658-5010</td><td>(E-70T-1)</td></tr><tr><td></td><td>Manufacturer: Chemetrom Welding Supply</td></tr><tr><td></td><td>(206) 682-2880</td></tr><tr><td></td><td>Gas - Argon - CO₂</td></tr><tr><td></td><td>98-2%</td></tr></table>								Type of Machinery Required	Type of Filler Metal Required	12	25 lb. spools	Manufacturer: Airco Flux	(1500 lbs)	Core Welding Machines	(Dia. .045)	John Brosnann	Dual Shield	(415) 658-5010	(E-70T-1)		Manufacturer: Chemetrom Welding Supply		(206) 682-2880		Gas - Argon - CO ₂		98-2%
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NOTES	1. THIS PED REVISES DIRECTION PREVIOUSLY PROVIDED BY THE FOLLOWING PED(s): N/A			REVISE: NONE _____ DRAWINGS _____ SPECIFICATION _____																							
	2. THIS PED VOIDS DIRECTION PREVIOUSLY PROVIDED BY THE FOLLOWING PED(s): N/A			APPROVALS:																							
	3. THIS PED WORK SHOULD BE COORDINATED WITH KNOWN OTHER WORK UNDER THE FOLLOWING PED'S: N/A			DISCIPLINE ENGINEER _____ DATE 3-24-80																							
	4. THIS PED DEPENDS ON THE PRIOR INSTALLATION OF THE FOLLOWING PED'S: N/A			LEAD DISCIPLINE ENGINEER _____ DATE 3-25-80																							
				S/U LIAISON ENGINEER _____ DATE																							
				RESIDENT PROJECT ENGINEER _____ DATE																							

BURNS AND ROE, INC. WPPSS NUCLEAR PROJECT NO. 2	PROJECT ENGINEERING DIRECTIVE	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">CODE</td> <td colspan="15">PROJECT ENGINEERING DIRECTIVE</td> </tr> <tr> <td>2</td><td>1</td><td colspan="13"></td><td>2</td><td>1</td><td>5</td><td>-</td><td>C</td><td>5</td><td>-</td><td>2</td><td>7</td><td>4</td><td>1</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td> <td colspan="2">DATE</td> <td>0</td><td>3</td><td>/</td><td>1</td><td>3</td><td>/</td><td>8</td><td>0</td> <td colspan="2">PRIORITY</td> <td colspan="2">II</td> </tr> <tr> <td colspan="2"><input checked="" type="checkbox"/></td><td>16</td><td>17</td><td colspan="2"><input checked="" type="checkbox"/></td><td>18</td><td>19</td><td colspan="2"><input checked="" type="checkbox"/></td><td>20</td><td>21</td><td colspan="4"></td> </tr> </table>	CODE	PROJECT ENGINEERING DIRECTIVE															2	1														2	1	5	-	C	5	-	2	7	4	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	DATE		0	3	/	1	3	/	8	0	PRIORITY		II		<input checked="" type="checkbox"/>		16	17	<input checked="" type="checkbox"/>		18	19	<input checked="" type="checkbox"/>		20	21				
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REASON FOR P. E. D.: <div style="font-size: 1.2em; font-family: cursive;"> SLOT WELDS REQUIRED PER DETAIL D-2038 (5782) MADE TO TOP OF SHIMS AND DO NOT CONNECT RING 3 (BEAM TYPE ③) AND RING 4 (BEAM TYPE ②) AS REQUIRED. </div>		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;"> INFORMATION COPIES <u>N/A</u> </td> <td style="width:40%;"> SHEET 1 OF <u>6</u> </td> </tr> <tr> <td colspan="2" style="height: 40px;"> <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">REFERENCES</div> <table border="1" style="width:100%; border-collapse: collapse; font-size: 0.8em;"> <tr><td>SUBJECT</td><td>SAC. SHIELD WALL WELDS</td></tr> <tr><td>LOCATION</td><td>EL. 541.5 ALL AROUND</td></tr> <tr><td>ENG. SYSTEM</td><td>N/A</td></tr> <tr><td>S/U SYSTEM</td><td></td></tr> <tr><td>QUALITY CLASS</td><td>I</td></tr> </table> </td> </tr> <tr> <td colspan="2"> ORIGINATING DOCUMENTS <u>NCR 215-5688</u> </td> </tr> </table>	INFORMATION COPIES <u>N/A</u>	SHEET 1 OF <u>6</u>	<div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">REFERENCES</div> <table border="1" style="width:100%; border-collapse: collapse; font-size: 0.8em;"> <tr><td>SUBJECT</td><td>SAC. SHIELD WALL WELDS</td></tr> <tr><td>LOCATION</td><td>EL. 541.5 ALL AROUND</td></tr> <tr><td>ENG. SYSTEM</td><td>N/A</td></tr> <tr><td>S/U SYSTEM</td><td></td></tr> <tr><td>QUALITY CLASS</td><td>I</td></tr> </table>		SUBJECT	SAC. SHIELD WALL WELDS	LOCATION	EL. 541.5 ALL AROUND	ENG. SYSTEM	N/A	S/U SYSTEM		QUALITY CLASS	I	ORIGINATING DOCUMENTS <u>NCR 215-5688</u>																																																																								
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DESCRIPTION OF WORK: <div style="font-size: 1.2em; font-family: cursive;"> REPLACE SLOT WELDS WITH A PARTIAL PENETRATION WELD BETWEEN THE UPPER AND LOWER RINGS AS DETAILED ON SHEETS 3 THRU 5 OF THIS P.E.D. WELD PREPARATION SHALL BE AS DIRECTED ON P.E.D. 215-W-2742. WELD QUALIFICATION SHALL BE AS DIRECTED ON P.E.D. 215-W-2749. REPAIR OF GAPS AT SHIMS (NCR 215-4884) SHALL BE AS DIRECTED ON PED 215-M-2746. WELD SHALL BE MADE AS DIRECTED ON P.E.D. 215-W-1604. </div>																																																																																									
NOTES	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%; text-align: center;">1.</td> <td style="width:45%;">THIS PED REVISES DIRECTION PREVIOUSLY PROVIDED BY <u>N/A</u> THE FOLLOWING PED(s):</td> </tr> <tr> <td style="text-align: center;">2.</td> <td>THIS PED VOIDS DIRECTION PREVIOUSLY PROVIDED BY <u>N/A</u> THE FOLLOWING PED(s):</td> </tr> <tr> <td style="text-align: center;">3.</td> <td>THIS PED WORK SHOULD BE COORDINATED WITH KNOWN WORK UNDER THE FOLLOWING PED'S: <u>215-W-1604</u> <u>215-W-2742</u> <u>215-W-2749</u> <u>215-M-2746</u></td> </tr> <tr> <td style="text-align: center;">4.</td> <td>THIS PED DEPENDS ON THE PRIOR INSTALLATION OF THE FOLLOWING PED'S: <u>N/A</u></td> </tr> </table>	1.	THIS PED REVISES DIRECTION PREVIOUSLY PROVIDED BY <u>N/A</u> THE FOLLOWING PED(s):	2.	THIS PED VOIDS DIRECTION PREVIOUSLY PROVIDED BY <u>N/A</u> THE FOLLOWING PED(s):	3.	THIS PED WORK SHOULD BE COORDINATED WITH KNOWN WORK UNDER THE FOLLOWING PED'S: <u>215-W-1604</u> <u>215-W-2742</u> <u>215-W-2749</u> <u>215-M-2746</u>	4.	THIS PED DEPENDS ON THE PRIOR INSTALLATION OF THE FOLLOWING PED'S: <u>N/A</u>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">REVISE:</td> </tr> <tr> <td style="width:50%;">NONE</td> <td style="width:50%; text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>DRAWINGS</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>SPECIFICATION</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td colspan="2">APPROVALS:</td> </tr> <tr> <td style="width:70%; text-align: center;"> <div style="font-family: cursive; font-size: 1.1em;"> [Signature] DISCIPLINE ENGINEER </div> </td> <td style="width:30%; text-align: center;"> <u>3/24/80</u> DATE </td> </tr> <tr> <td style="text-align: center;"> <div style="font-family: cursive; font-size: 1.1em;"> [Signature] LEAD DISCIPLINE ENGINEER </div> </td> <td style="text-align: center;"> <u>3.24.80</u> DATE </td> </tr> <tr> <td style="text-align: center;">S/U LIAISON ENGINEER</td> <td style="text-align: center;">DATE</td> </tr> <tr> <td style="text-align: center;">RESIDENT PROJECT ENGINEER</td> <td style="text-align: center;">DATE</td> </tr> </table>	REVISE:		NONE	<input checked="" type="checkbox"/>	DRAWINGS	<input checked="" type="checkbox"/>	SPECIFICATION	<input type="checkbox"/>	APPROVALS:		<div style="font-family: cursive; font-size: 1.1em;"> [Signature] DISCIPLINE ENGINEER </div>	<u>3/24/80</u> DATE	<div style="font-family: cursive; font-size: 1.1em;"> [Signature] LEAD DISCIPLINE ENGINEER </div>	<u>3.24.80</u> DATE	S/U LIAISON ENGINEER	DATE	RESIDENT PROJECT ENGINEER	DATE																																																													
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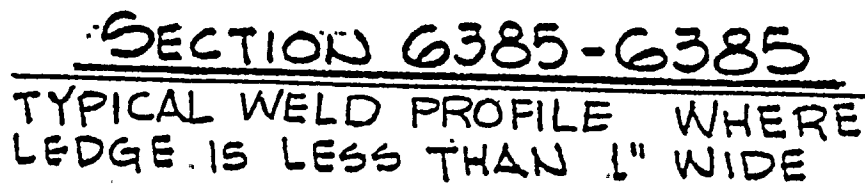


REF. DOC.: PCN	REF. SPEC. SECTION:	PAGE:	PARA:	WPSS NUCLEAR PROJECT NO. 2
REF. DWG.: 5835	REV. 5	DWG. ZONE: B14		BURNS AND ROE, INC.
SCALE: N.T.S.	DRAWN BY: HERNER	DATE: 9/24/79	CHD BY: J. J. J.	PED 215-C5-2741 SH 3 OF 6
	DATE: 3/13/80	APPROV. W. J. M.	DATE: 3/24	TITLE: REACTOR BUILDING
				SAC SHIELD WALL SH. 8

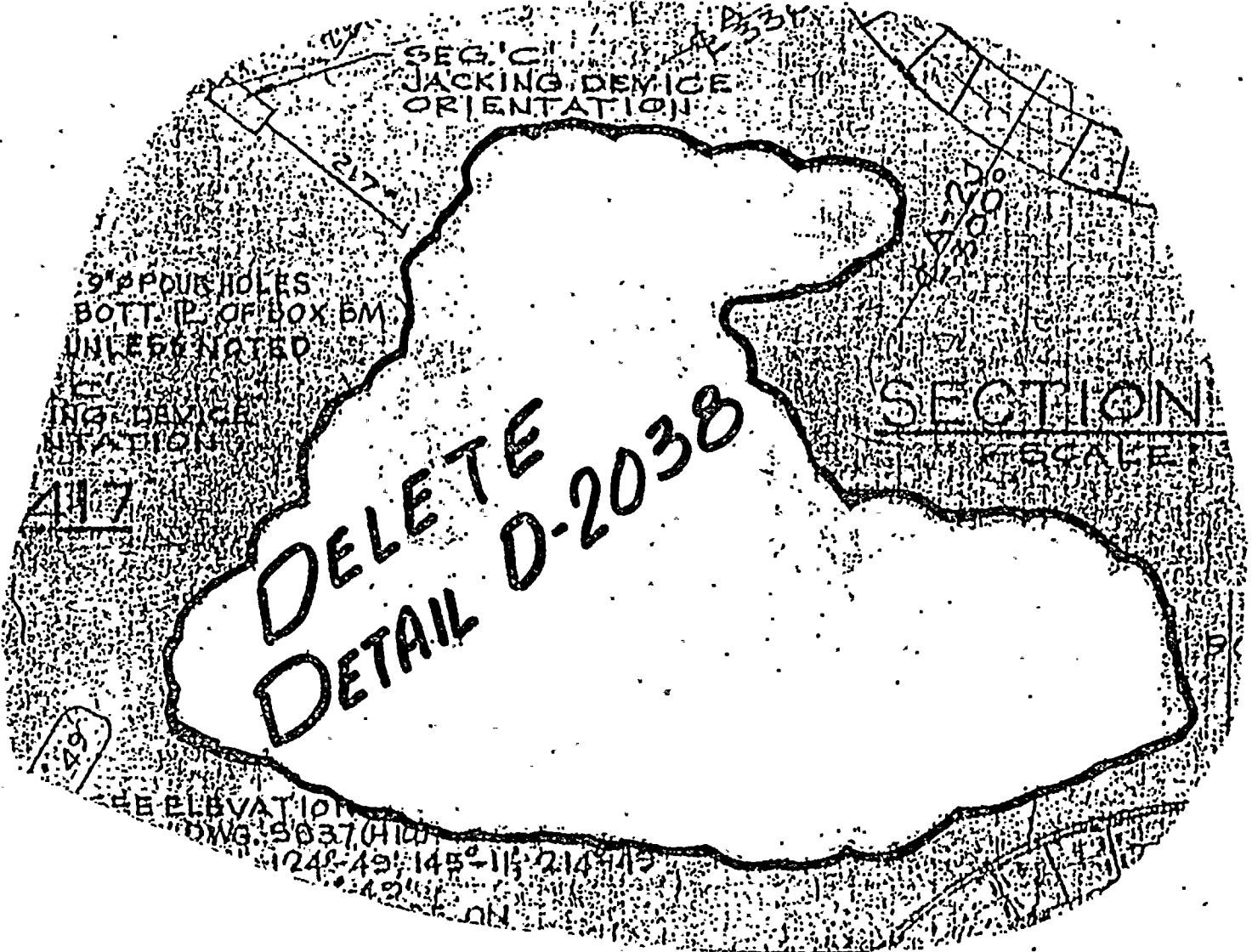


SECTION 6384-6384
TYPICAL WELD PROFILE WHERE LEDGE IS A MINIMUM OF 1" WIDE.

REF. DOC.: PCN		REF. NCR 215-5688		WPPSS NUCLEAR PROJECT NO. 2	
REF. SPEC. SECTION:		PAGE:	PARA:	BURNS AND ROE, INC.	
REF. DWG.: 5838 REV. 1		DWG. ZONE: E1.2		PED 215-CS-2741	SHT. 4 OF 6
SCALE: N.T.S.	DRAWN BY: KERNER	DATE: 9/29/79	CHKD BY: JORDAN	DATE: 3/3/80	TITLE: REACTOR BUILDING SAC. SHIELD WALL SHT. 11



REF. DOC.: PCN		REF. NCR 215-5688		WPPSS NUCLEAR PROJECT NO. 2	
REF. SPEC. SECTION:		PAGE:		PARA:	
REF. DWG.: 5838		REV. 1		DWG. ZONE: E10	
SCALE: N.T.S.		DRAWN BY: KERNER		DATE: 3/12/80	
CHKD BY: JORDAN		DATE: 3/13/80		APPROVED: Wm	
				DATE: 3/24	
				TITLE: REACTOR BLDG.	
				SAC. SHIELD WALL SHT. 11	



**DELETE
DETAIL D-2038**

**SECTION
SCALE**

9" POUR HOLES
BOTT. OF BOX BM
UNLESS NOTED

JACKING DEVICE
ORIENTATION

SEE ELEVATION
DWG. 5037 (H10)
124°-49' 145°-11' 214°-15'
42°-11' ON

REF. DOC: PCN		REF. SPEC. SECTION: PAGE: PARA:		REF. DWG.: 5182 REV. 12		DWG. ZONE: D5		WPPSS NUCLEAR PROJECT NO. 2	
SCALE: N.T.S.		DRAWN BY: KERRUEE DATE: 12/21/79		CHKD BY: J. J. J. DATE: 3/1/80		APPROVED: W. J. J.		BURNS AND ROE, INC.	
TITLE: REACTOR BUILDING		SAC. SHIELD WALL SHT. 1		PED 215-C5-2741		SHT. 6 OF 6			