

REVISIONS		
NO.	DESCRIPTION	DATE

STANDARD 60" R. & S. SPIGOT

PRINTED  
APR 6 1955

APPROVED: APPROVAL DOES NOT RELIEVE THE CONTRACTOR FROM ANY RESPONSIBILITY FOR ERRORS OR DEVIATIONS FROM THE CONTRACT REQUIREMENTS OR FOR ANY DEFICIENCIES OF EQUIPMENT, WORK OR MATERIALS.

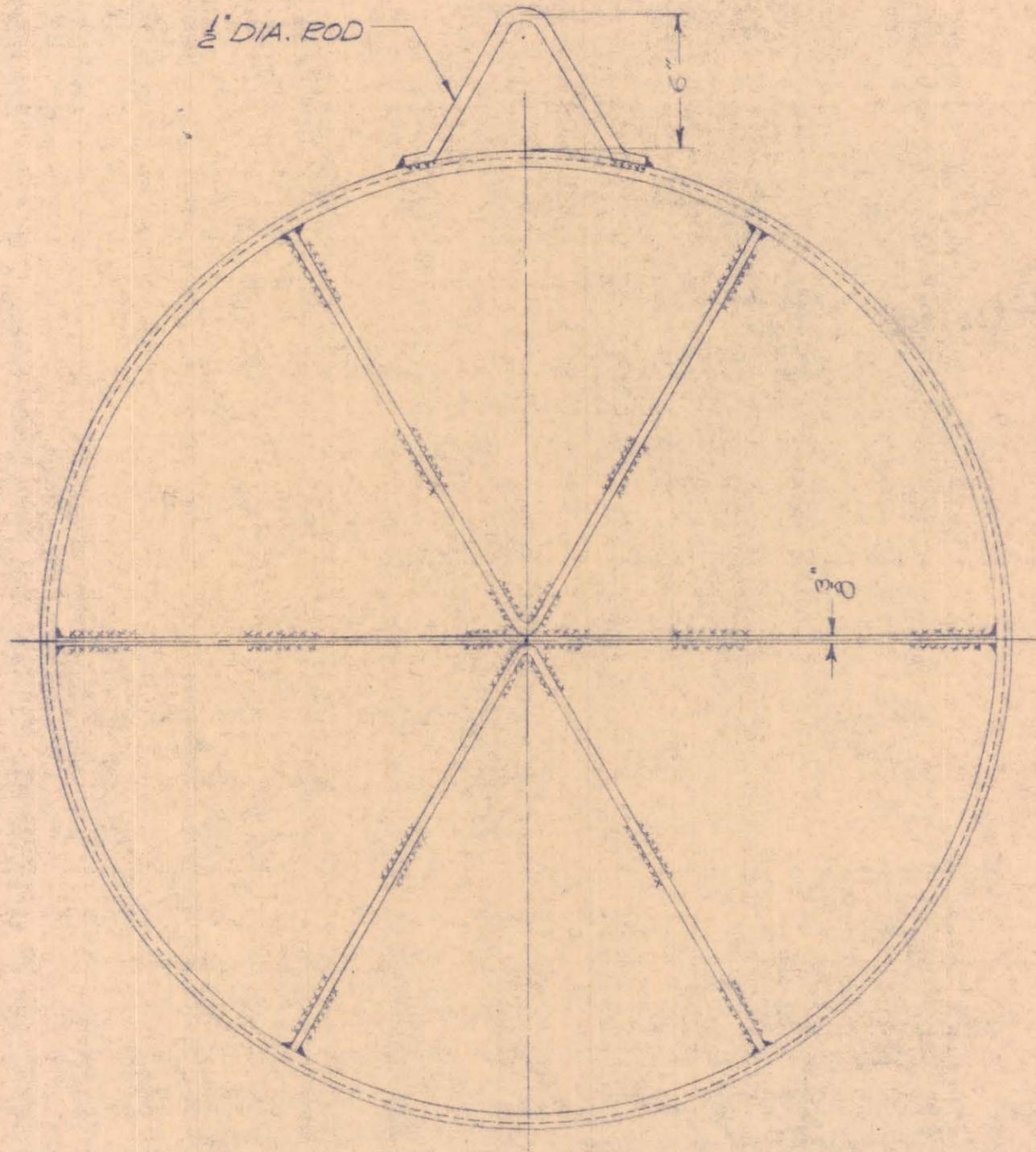
MAY 16 1955

BLACK & VEATCH, By WRC

**LOCK JOINT PIPE COMPANY**  
150 RUTLEDGE AVE. EAST ORANGE, N. J.

60" REINFORCED SPIGOT PLUG FOR R.C. PRESSURE OR CYLINDER PIPE - R. & S. JOINT.

DRAWN: AA	DATE: 1-11-51	SCALE: 1/2" = 1'-0"
CHECKED: EWK	DATE: 1-11-51	DRAWING NUMBER
APPROVED: R.R.	DATE: 1-11-51	E-3-273-60



SPIGOT SHAPE  
M-3516

REVISIONS		
NO.	DESCRIPTION	DATE

PRINTED  
APR 13 1955

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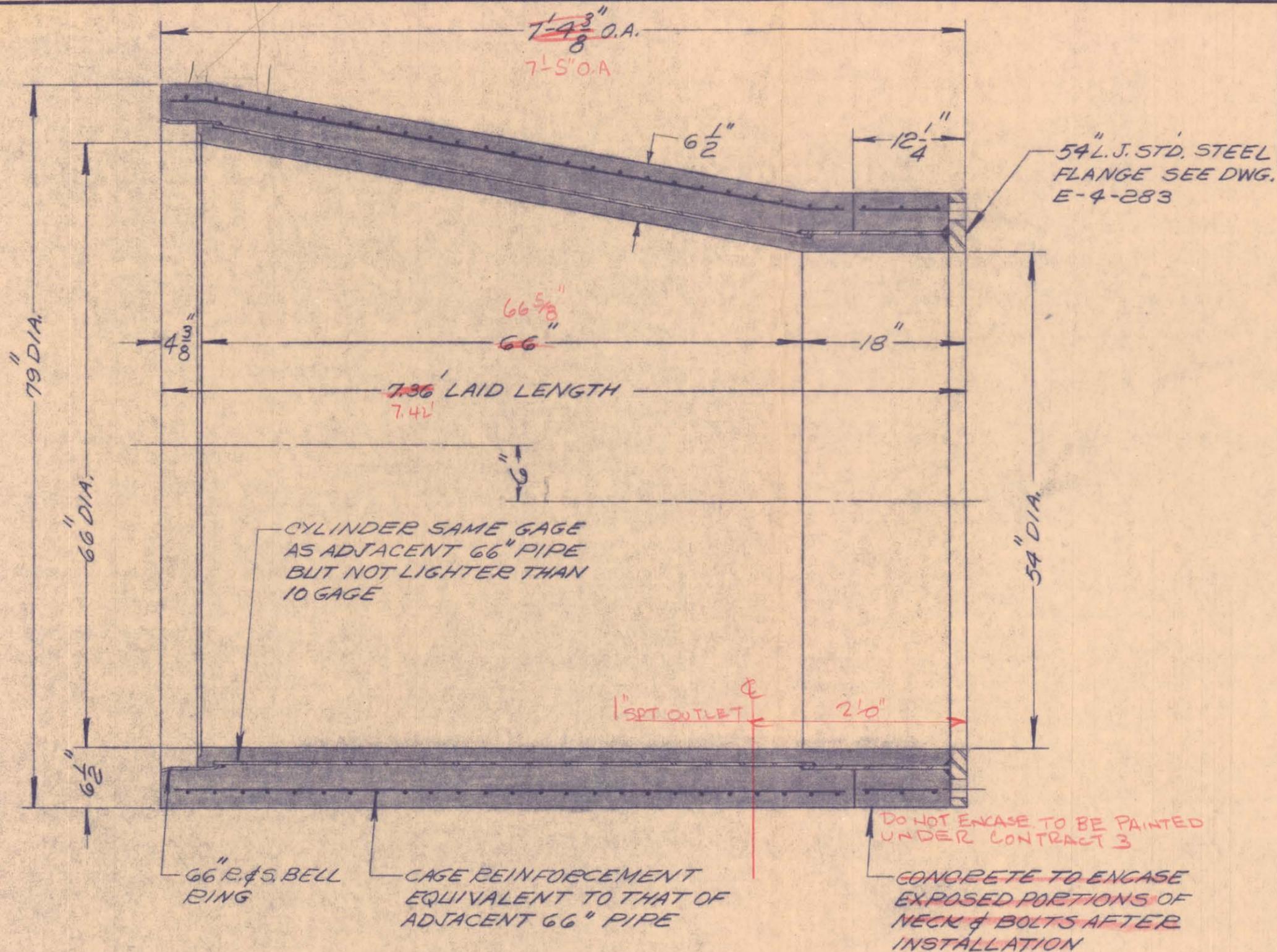
MAY 16 1955

BLACK & VEATCH, By *WIZC*

**LOCK JOINT PIPE COMPANY**  
150 RUTLEDGE AVE. EAST ORANGE, N. J.

36" REINFORCED SPIGOT  
PLUG FOR PRESTRESSED  
CONCRETE CYLINDER PIPE

DRAWN: <i>E.P.O.</i>	DATE: 12-5-51	SCALE: 2" = 1'-0"
CHECKED: <i>A.E.L.</i>	DATE: 12-6-51	DRAWING NUMBER
APPROVED: <i>PUB.</i>	DATE: 12-6-51	E-3-360-36



REVISIONS		
NO.	DESCRIPTION	DATE

PRINTED  
MAY 23 1955

APPROVED: APPROVAL DOES NOT RELIEVE THE CONTRACTOR FROM ANY RESPONSIBILITY FOR ERRORS OR DEVIATIONS FROM THE CONTRACT REQUIREMENTS OR FOR ANY DEFICIENCIES OF EQUIPMENT, WORK OR MATERIALS.

JUN 8 1955

BLACK & VEATCH, BY WRL

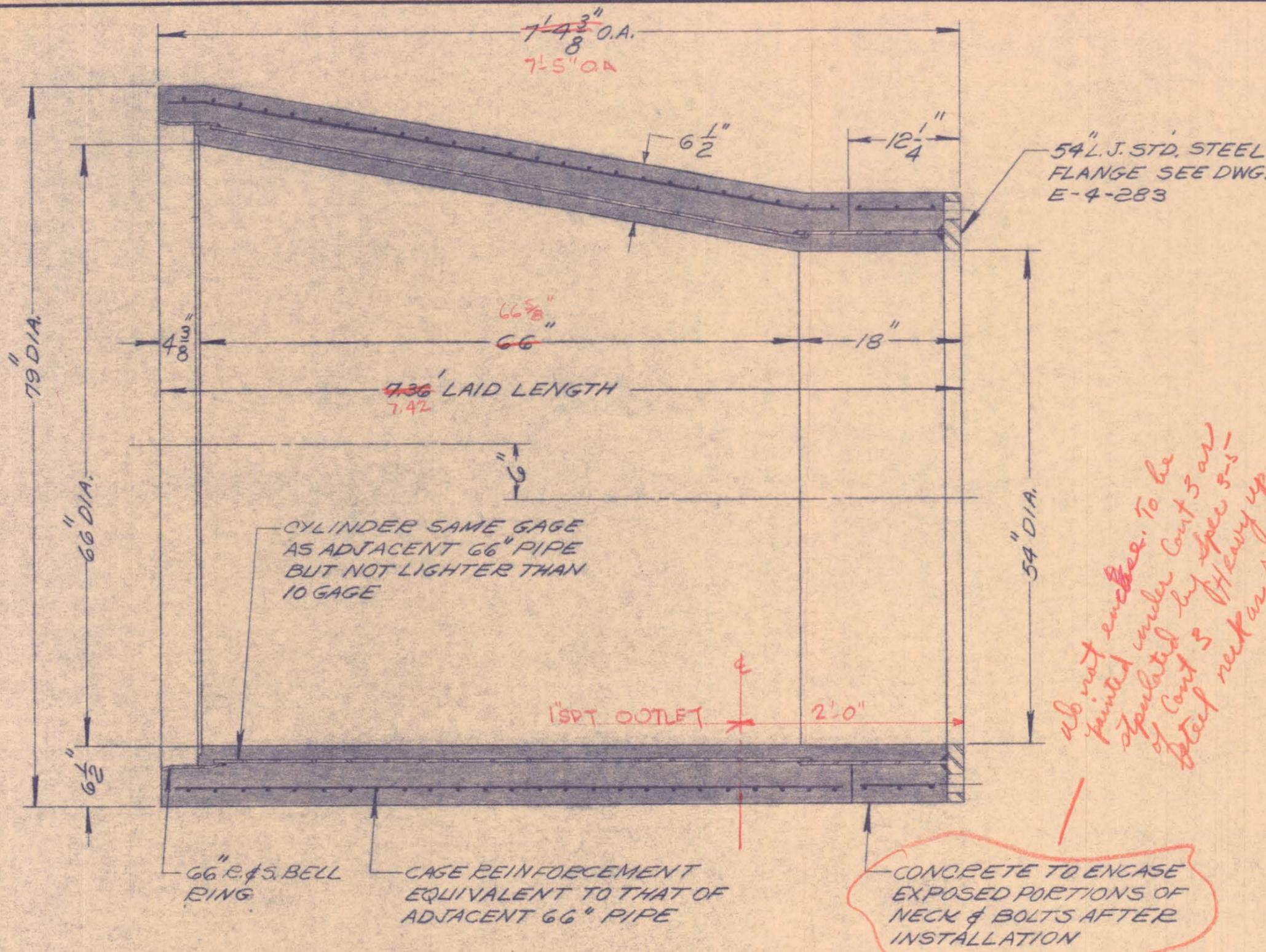
NOTE:  
LINING AND COATING TO BE GUNITED OR HAND PLASTERED

**LOCK JOINT PIPE COMPANY**  
150 RUTLEDGE AVE. EAST ORANGE, N. J.

66" x 54" ECCENTRIC REDUCER  
(6 1/2" WALL) RUBBER & STEEL  
BELL AND FLANGE.

DRAWN: AA	DATE: 3-2-55	SCALE: 1" = 1'-0"
CHECKED: RLT	DATE: 3-3-55	DRAWING NUMBER
APPROVED: BRT	DATE: 3-8-55	E-3-535

MK'D 5-27-55



REVISIONS		
NO.	DESCRIPTION	DATE

*As Noted*

**APPROVED** APPROVAL DOES NOT RELIEVE THE CONTRACTOR FROM ANY RESPONSIBILITY FOR ERRORS OR DEVIATIONS FROM THE CONTRACT REQUIREMENTS OR FOR ANY DEFICIENCIES OF EQUIPMENT, WORK OR MATERIALS.

MAY 16 1955

BLACK & VEATCH, By WIRC

*do not encase. To be painted under Cont 3 and of Cont 5. Heavy up detail neck as required*

**NOTE:**  
LINING AND COATING TO BE GUNITED OR HAND PLASTERED

**LOCK JOINT PIPE COMPANY**  
150 RUTLEDGE AVE. EAST ORANGE, N. J.

66" x 54" ECCENTRIC REDUCER  
(6 1/2" WALL) RUBBER & STEEL  
BELL AND FLANGE.

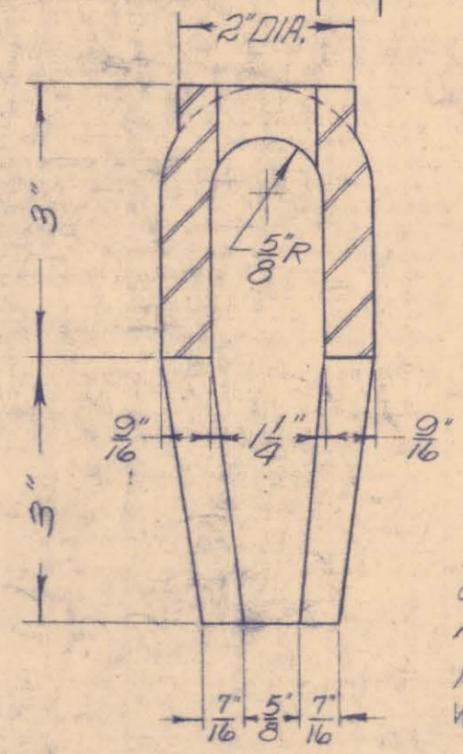
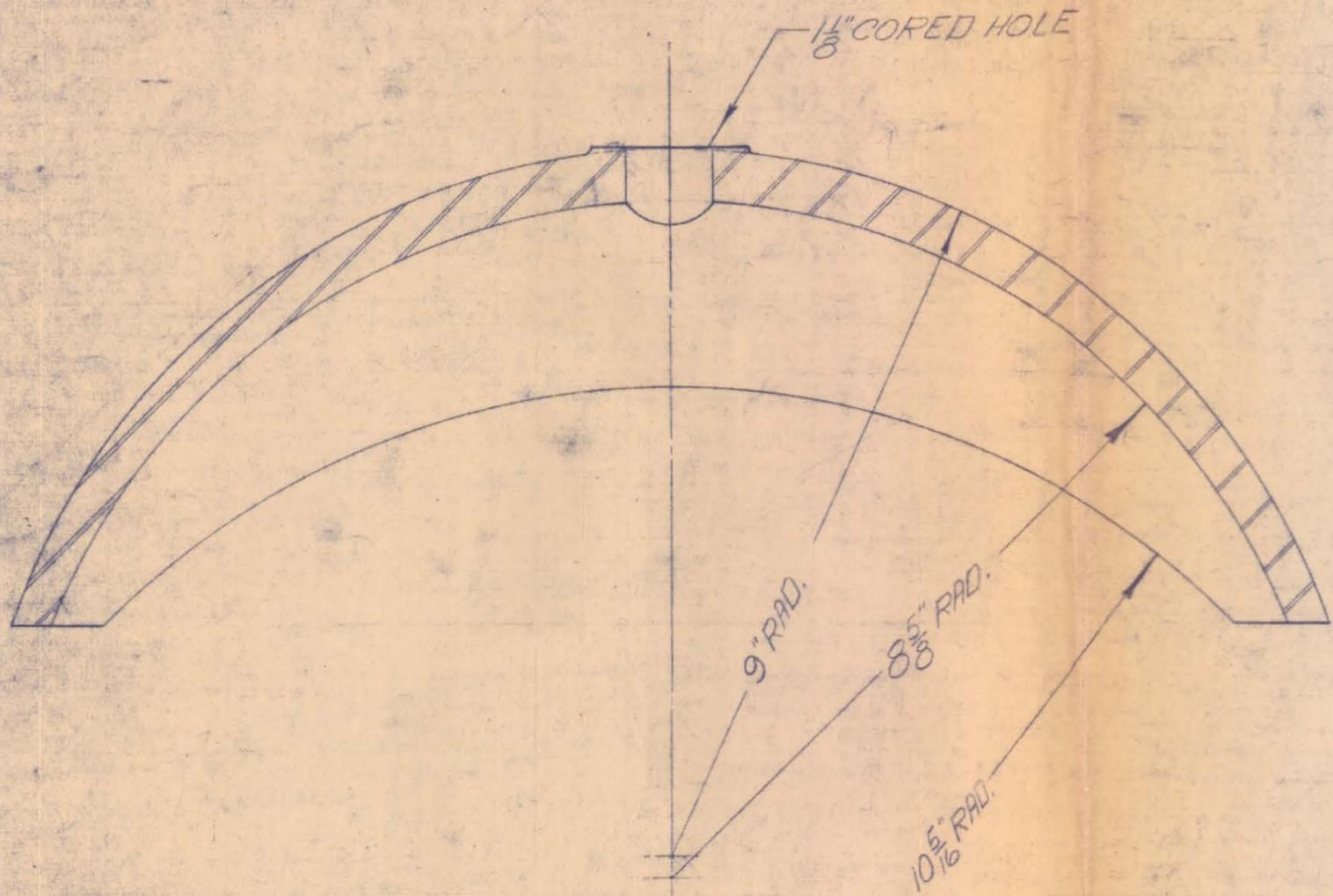
DRAWN: <u>AA</u>	DATE: 3-2-55	SCALE: 1" = 1'-0"
CHECKED: <u>RLH</u>	DATE: 3-3-55	DRAWING NUMBER
APPROVED: <u>BST</u>	DATE: 3-8-55	<u>E-3-535</u>

*MK'D 3/31/55*



REVISIONS

NO.	DESCRIPTION	DATE

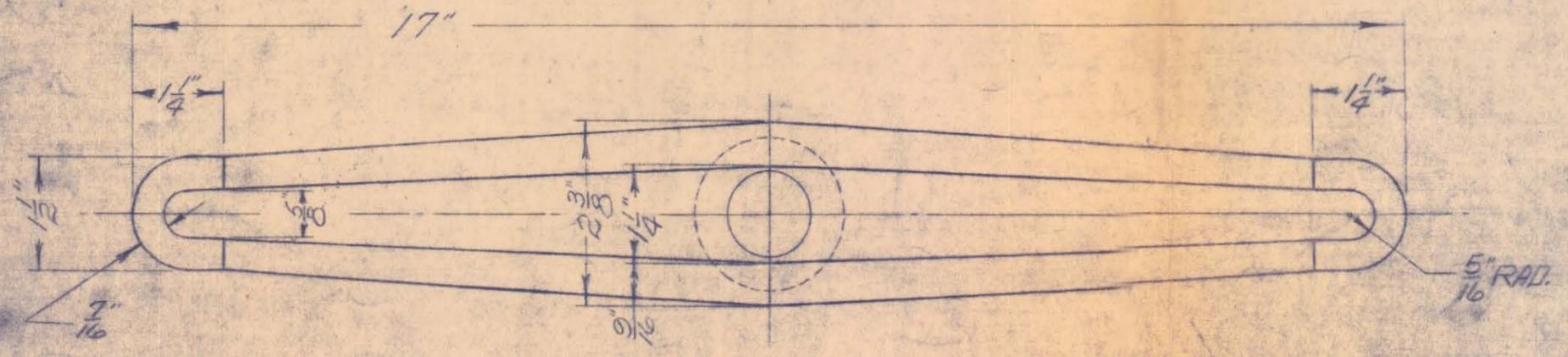


A.S.T.M. SPEC. A-27-50T, GR70-36  
OR SUBSEQUENT REVISION  
NORMALIZED, SULFUR MAX. 0.05%  
NOTE: THIS ARCH ALSO USED  
WITH 16" x 20" FRAMES & COVERS

**APPROVED:** APPROVAL DOES NOT RELIEVE THE CONTRACTOR FROM ANY RESPONSIBILITY FOR ERRORS OR DEVIATIONS FROM THE CONTRACT REQUIREMENTS OR FOR ANY DEFICIENCIES OF EQUIPMENT, WORK OR MATERIALS.

MAY 16 1955

BLACK & VEATCH, By *WIPC*



CAST STEEL

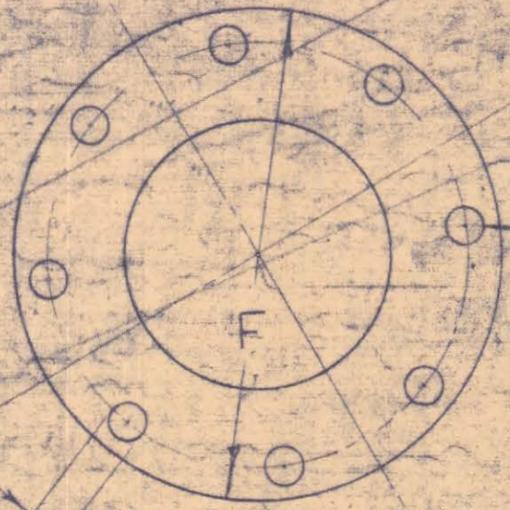
**LOCK JOINT PIPE COMPANY**  
150 RUTLEDGE AVE. EAST ORANGE, N. J.

ARCH FOR 16" x 18"  
MANHOLE COVERS

DRAWN: <i>DWH</i>	DATE: 11-26-41	SCALE: 6" = 1'-0"
CHECKED: <i>DA</i>	DATE: 12-2-47	DRAWING NUMBER
APPROVED: <i>RWR</i>	DATE: 1-14-48	B-3-407

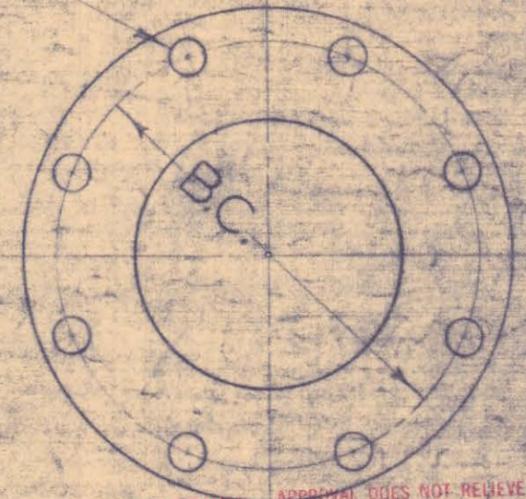
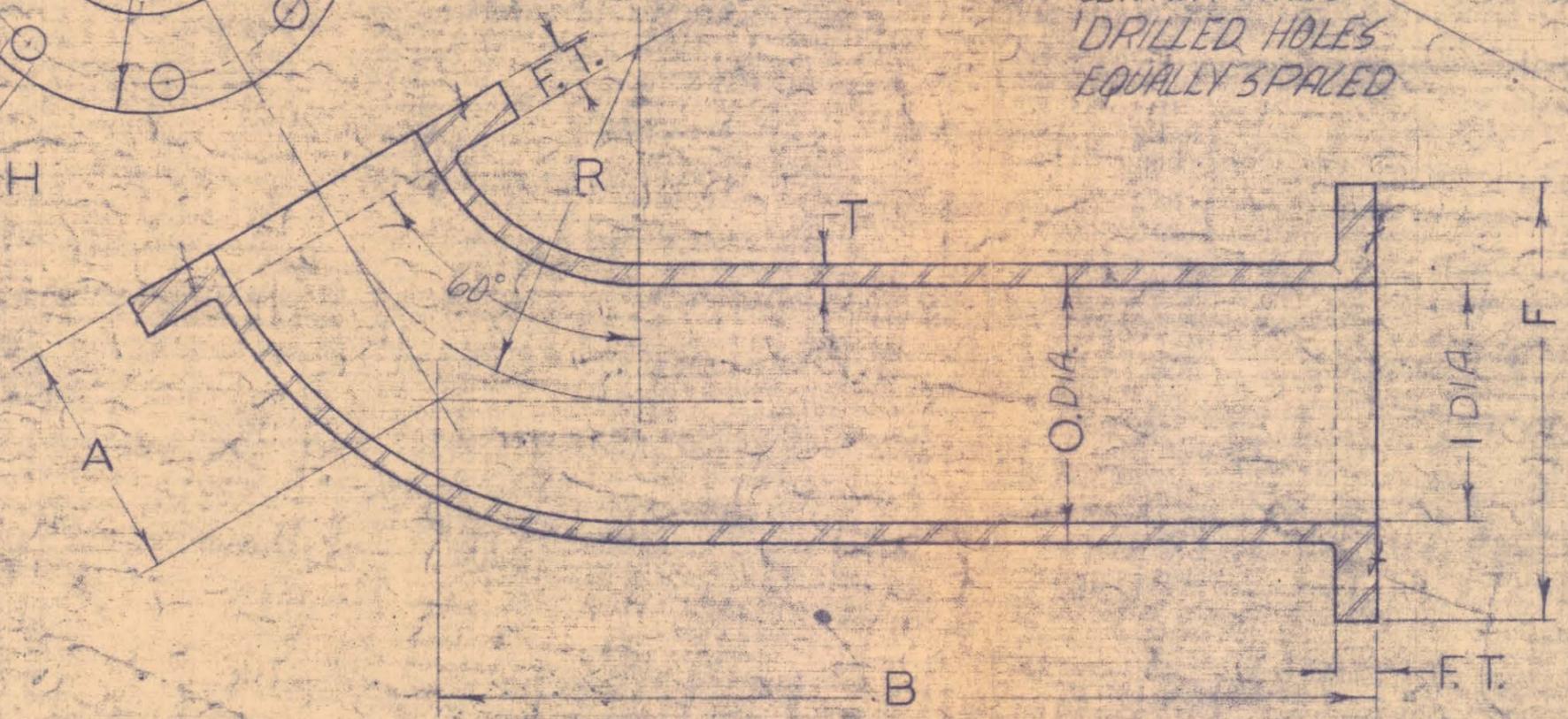
2	B-3-407	B-2-646
NO	PART	NEXT ASSEM.

REVISIONS		
NO.	DESCRIPTION	DATE
A	REDRAWN & REVISED	DEW 2-12-46
B	IN O.D. DIA COLUMN FOR 12" SIZE DIMENSION WAS 13 1/4"	9-29-47
C	DIMENSION FOR SIZE 4" COLUMN 'A' WAS 5 1/2"	1-26-48



NOTE  
 MAKE BOLT HOLES STRADDLE  
 CENTER LINES  
 DRILLED HOLES  
 EQUALLY SPACED

PRINTED  
 APR 7 1955



APPROVED. APPROVAL DOES NOT RELIEVE THE CONTRACTOR FROM ANY RESPONSIBILITY FOR ERRORS OR DEVIATIONS FROM THE CONTRACT REQUIREMENTS OR FOR ANY DEFICIENCIES OF EQUIPMENT, WORK OR MATERIALS.

MAY 16 1955

BLACK & VEATCH, BY WIZ

MATERIAL: CAST STEEL  
 A.S.T.M. A-27-50T SPECIFICATION  
 OR SUBSEQUENT REVISION GRADE  
 70-36 NORMALIZED WITH SULFUR  
 MAX. 0.05%

SIZE	DIMENSIONS										
	BEND			FLANGE				HOLES			
	I.D.IA.	O.D.IA.	A	R	T	F	F.T.	BC	NO.	H	B
4"	4"	5"	5 9/16"	8"	1/2"	9"	15/16"	7 1/2"	8	3/4"	24"
6"	6"	7 1/8"	6 1/16"	9"	3/16"	11"	1"	9 1/2"	8	7/8"	24"
8"	8"	9 1/4"	6 7/8"	10"	5/8"	13 1/2"	1 1/8"	11 3/4"	8	7/8"	24"
10"	10"	11 3/8"	7 9/16"	11"	11/16"	14"	1 3/16"	14 1/4"	12	1"	24"
12"	12"	13 1/2"	8 3/16"	12"	3/4"	19"	1 7/8"	17"	12	1 1/4"	24 1/2"

**LOCK JOINT PIPE COMPANY**  
 150 RUTLEDGE AVE. EAST ORANGE, N. J.

60° DOUBLE FLANGED  
 BLOW-OFF BENDS  
 (125° DRILLING)

DRAWN: N.T. DATE: 9-11-36 SCALE: 3/4" = 1'-0"  
 CHECKED: S.L.B. DATE: 2-13-46 DRAWING NUMBER:  
 APPROVED: W.W. DATE: 2-14-46 D-3-165 C

Office Copy

Lock Joint Pipe Company  
 East Orange, New Jersey  
 HB: BAS 5-13-55  
 Sheet 1 of 3

WICHITA, KANSAS  
 66" P.S. CONC. EMBEDDED CYLINDER PIPE W/R&S JOINT  
 JOB NO. WIC 55-1

Rev. RLH: bas 6-17-55

PIPE SUMMARY

Description	Average	Units	Total
	L.L.		L.L.
<b>STRAIGHTS:</b>	16.03	6,275	100,588.25
w/1" S.P.T. Outlets, @ 12' from face of bell.	16.03	2	32.06
w/2" Flange Outlets top, @ 4' from face of bell.	16.03	10	160.30
w/4" Flange Outlets top, @ 4' from face of bell.	16.03	3	48.09
w/4" Flange Outlets top, @ 12' from face of bell.	16.03	1	16.03
w/6" Flange Outlet & Flange Blow-Off Bend right with 16" x 18" Manhole top @ 4' from face of bell.	16.03	1	16.03
w/8" Flange Outlet & Flange Blow-Off Bend right with 16" x 18" Manhole top, @ 12' from face of bell.	16.03	1	16.03
w/12" Flange Outlet & Flange Blow-Off Bend right with 16" x 18" Manhole top, @ 12' from face of bell.	16.03	2	32.06
w/12" Flange Outlet & Flange Blow-Off Bend right with 16" x 18" Manhole top, @ 4' from face of bell.	16.03	1	16.03
* w/36" L.J. Bell Outlet, from face of bell.	16.03	1	16.03
* w/30" L.J. Bell Outlet, from face of bell.	16.03	1	16.03
w/16" x 18" Manhole top, @ 12' from face of bell.	16.03	8	128.24
w/16" x 18" Manhole top, @ 4' from face of bell.	16.03	3	48.09
*(Location of Outlets Determined In Field)			
<b>SHORTS:</b>			
( 3' - 4" O.A.)	3.00	1	3.00
( 4' - 4" O.A.)	4.00	1	4.00
( 5' - 4" O.A.)	5.00	1	5.00
( 6' - 4" O.A.)	6.00	1	6.00
( 7' - 4" O.A.)	7.00	1	7.00
( 9' - 4" O.A.)	9.00	1	9.00
(11' - 4" O.A.)	11.00	2	22.00
(15' - 4" O.A.)	15.00	1	15.00
<b>BEVELS:</b>			
5-1/2"	15.80	9	142.20
w/16" x 18" Manhole top, @ 12' from face of bell on long side of bevel	15.80	1	15.80
2-3/4"	15.92	73	1,162.16
w/16" x 18" Manhole top, @ 12' from face of bell on long side of bevel	15.92	1	15.92
<b>REDUCERS:</b>			
66" L.J.S. x 54" Dresser Eccentric Reducer w/1" S.P.T. 7'-4" O.A. Outlet top, @ 2'-6" from end of dresser coupling	7.00	5	35.00
66" L.J.B. x 54" Flange Eccentric Reducer w/1" S.P.T. Outlet top, @ 2'-0" from face of flange. 7'-5" O.A.	7.42	5	37.10
<b>Straights:</b>			
w/12" Flange Outlet & Flg. B.O. Bend left w/16" x 18" M.H. top @ 4'-0" from face of bell.	16.03	3	48.09
w/12" Flange Outlet & Flg. B.O. Bend left w/16" x 18" M.H. top @ 12'-0" from face of bell.	16.03	2	32.06

WICHITA, KANSAS  
 66" P.S. CONG. EMBEDDED CYLINDER PIPE W/R&S JOINT  
 JOB NO. WIG 55-1

PIPE SUMMARY

<u>Description</u>	Average	Units	Total
	L.L.		L.L.
<u>TEES:</u>			
66" x 66" x 48" L.J.B. x L.J.S. x L.J.S. (9'-0-1/4"OA)	8.70	1	8.70
66" x 66" x 48" L.J.B. x L.J.S. x L.J.B. (9'-0-1/4"OA)	8.70	1	8.70
66" x 66" x 60" L.J.B. x L.J.S. x L.J.B. (9'-6-1/4"OA)	9.19	1	9.19
<u>ELBOWS:</u>			
90°-00'	11.69 ✓	1	11.69
11°-30'	1.84	1	1.84
11°-01'	1.83	1	1.83
9°-15'	1.78	2	3.56
46°-17'	5.40	1	5.40
15°-28'	2.13	1	2.13
21°-06'	2.73	1	2.73
51°-23'	5.98	1	5.98
45°-00'	5.25	2	10.50
41°-42'	4.87	1	4.87
30°-11'	3.63	2	7.26
43°-12'	5.05	1	5.05
<u>ADAPTERS:</u>			
Flange x Dresser Coupling 1'-5" O.A.	1.42	5	7.10
<u>CLOSURES:</u>			
Bell To Spigot	6.00	2	12.00
	8.00	1	8.00
	9.00	1	9.00
	12.00	1	12.00
	13.00	1	13.00
	14.00	1	14.00
<u>SPIGOT PLUGS:</u>			
36" Prestressed Pipe		1	
60" Prestressed Pipe		1	
<u>SUB TOTAL</u>		6,449	102,857.13

Lock Joint Pipe Company  
 East Orange, New Jersey  
 HB:BAS 5-13-55  
 Sheet 3 of 3

Rev. RLH:bas 6-17-55

WICHITA, KANSAS  
 66" P.S. CONC. EMBEDDED CYLINDER PIPE W/R&S JOINT  
 JOB NO. WIC 55-1

PIPE SUMMARY

<u>Description</u>	<u>Average L.L.</u>	<u>Units</u>	<u>Total L.L.</u>
BRIDGES NO. 1 TO NO. 4 CONTRACT #5			
<u>STRAIGHTS:</u> 13'-4-3/4"	16.03	4	64.12
w/8" Flange Outlet top, & A from face of bell.	16.03	4	64.12
<u>BOWS:</u> 90°-00'	11.69	8	93.52
<u>ADAPTERS:</u>			
L.J.S. x Steel Pipe 1'-2-3/4" O.A.	0.89	4	3.56
L.J.B. x Steel Pipe 1'-2" O.A.	1.17	4	4.68
SUB TOTAL		24	230.00
TOTAL		6,473	103,060.13

*Specs. show 102,775 lin ft.*

NOTE: ALL LAYING INSTRUCTIONS GIVEN LOOKING IN THE DIRECTION OF LAYING.

LOCK JOINT PIPE COMPANY  
EAST ORANGE, NEW JERSEY  
HB: BAS 5-13-55  
SHEET 1 OF

WICHITA, KANSAS  
66" P.S. CONC. EMBEDDED CYLINDER PIPE W/R&S JOINT  
JOB NO. WIC 55-1

REV. RLH: BAS 6-17-55

BEGINNING AT STA. 1/44 &  
LAYING UP STA. TO STA. 1052/26.

PCS.	DESCRIPTION	APPROX. STATION	ELEV.
1	STRAIGHT W/1" S.P.T. OUTLET TOP, & 12' FROM FACE OF BELL.	1/45	1298.2
14	STRAIGHTS	1/61	
1	STRAIGHT W/2" FLANGE OUTLET TOP, & 4' FROM FACE OF BELL.	3/85	
11	STRAIGHTS	4/01	
1	SHORT (4'-4" O.A.)	5/77	
1	STRAIGHT	5/81	
1	90°-00' ELBOW LEFT, ROTATE DOWN FOR 11°-30' VERT. DEFL.	5/97	
1	SHORT (9'-4" O.A.)	6/09	1297.0
1	11°-30' ELBOW, UP	6/18	1295.2
19	STRAIGHTS	6/20	
1	SHORT (7'-4" O.A.)	9/25	
1	STRAIGHT	9/32	
1	11°-01' ELBOW	9/48	
1	66" L.J.S. x 66" L.J.B. x 48" L.J.S. Tee (9'-0-1/4" O.A.)	9/50	1295.2
1	9°-15' ELBOW DOWN	9/59	
2	STRAIGHTS	9/61	
1	9°-15' ELBOW UP	9/93	1289.8
1	5-1/2" BEVEL UP	9/95	
1	5-1/2" BEVEL UP	10/11	1291.1
1	5-1/2" BEVEL DOWN W/16" x 18" M.H. ON TOP & 12' FROM FACE OF BELL (M.H. ON LONG SIDE OF BEVEL)	10/27	1293.7
1	5-1/2" BEVEL DOWN	10/43	1295.0
1	STRAIGHT	10/58	
1	SHORT (6'-4" O.A.)	10/74	
1	STRAIGHT	10/80	
1	16°-17' ELBOW RIGHT	10/96	
81	STRAIGHTS	11/01 = 10/99	add 2'
1	STRAIGHT UP, OPEN JOINT 1/8" ON BOTTOM	23/97	1295.5
61	STRAIGHTS	24/13	
1	STRAIGHT DOWN, OPEN JOINT 3/8" ON TOP W/4" FLANGE OUTLET TOP & 4' FROM FACE OF BELL	33/91	1298.0
19	STRAIGHTS	34/07	
1	15°-28' ELBOW LEFT	37/12	1297.2
6	STRAIGHTS	37/14	1297.0
1	CLOSURE (BELL TO SPIGOT) (9'-4" O.A.)	38/10	
1	66" L.J.S. x 54" DRESSER ECCENTRIC REDUCER (7'-4" O.A.) W/1" SPT OUTLET TOP & 2'-6" FROM END OF DRESSER COUPLING	38/19	
1	FLANGE x DRESSER ADAPTER (1'-5" O.A.)	38/26	
240	54" VALVE (BY OTHERS)	38/27	
1	66" LJB x 54" FLANGE ECCENTRIC REDUCER W/1" SPT OUTLET TOP & 2'-0" FROM FACE OF FLANGE (7'-5" O.A.)	38/28	
1	STRAIGHT	38/35	
1	STRAIGHT W/6" FLANGED OUTLET & FLANGE & FLANGE B.O. BEND RIGHT & 16" x 18" MANHOLE & 4' FROM FACE OF BELL.	38/51	1297.0
		38/67	1296.7

NOTE: ALL LAYING INSTRUCTIONS GIVEN LOOKING IN THE DIRECTION OF LAYING.

LOCK JOINT PIPE COMPANY  
EAST ORANGE, NEW JERSEY  
HB: BAS 5-13-55  
SHEET 2 OF

WICHITA, KANSAS  
66" P.S. CONC. EMBEDDED CYLINDER PIPE W/R&S JOINT  
JOB NO. WIC 55-1

REV. RLH: BAS 6-17-55

PGS.	DESCRIPTION	APPROX. STATION	ELEV.
	BRIDGE NO. I		
5 3	1 STRAIGHT WITH 12" FLANGED OUTLET & FLANGE & FLANGE B.O. BEND RIGHT & 16" x 18" MANHOLE TOP & 12' FROM FACE OF BELL	42/18	1296.8
	1 SHORT (3'-4" O.A.)	42/34	
	1 ELBOW 21° -06' LEFT	42/37	
	1 STRAIGHT UP, OPEN JOINT 5/16" ON BOTTOM	42/40	
	27 STRAIGHTS	42/56	
	1 STRAIGHT	46/89	
	1 STRAIGHT DOWN, OPEN JOINT 5/16" ON TOP W/2" FLANGED OUTLET TOP 1/4' FROM FACE OF BELL	47/05	1298.8
	1 STRAIGHT DOWN, OPEN JOINT 1/4" ON TOP	47/21	
	29 STRAIGHTS	47/37	
	1 STRAIGHT UP, OPEN JOINT 1/2" ON BOTTOM	52/02	1295.8
	1 STRAIGHT UP, OPEN JOINT 1/2" ON BOTTOM	52/18	
	29 STRAIGHTS	52/34	
	1 STRAIGHT DOWN, OPEN JOINT 1/2" ON TOP	56/99	1300.3
	155 STRAIGHTS	57/15	
	12 STRAIGHTS	82/00	1302.2
	1 SHORT (15'-4" O.A.)	83/92	
	1 ELBOW 51° -23' RIGHT	84/07 P.I. 84/10	
	3 STRAIGHTS UP, OPEN 7/16" ON BOTTOM	84/13	
	3 STRAIGHTS	84/61	1303.2
	3 STRAIGHTS DOWN, OPEN 7/16" ON TOP	85/09	1304.2
	64 STRAIGHTS	85/57	
	1 STRAIGHT W/2" FLANGE OUTLET ON TOP & 4' FROM FACE OF BELL	95/83	
	2 2-3/4" BEVELS DOWN, OPEN JOINT ON TOP 15.92 LL	95/99	1304.7
	1 2-3/4" BEVEL DOWN, W/16" x 18" M.H. & 12' FROM FACE OF BELL ON LONG SIDE 15.92 LL	96/31	
	3 2-3/4" BEVELS UP, OPEN JOINT ON BOTTOM 15.92 LL (ca)	96/47	
	3 2-3/4" BEVELS UP, OPEN JOINT ON BOTTOM 15.92 LL (ca)	96/95	
	3 2-3/4" BEVELS DOWN, OPEN JOINT ON TOP 15.92 LL (ca)	97/43	
	58 STRAIGHTS	97/91	1304.7
	2 STRAIGHTS	107/21	
	3 STRAIGHTS UP, OPEN JOINT 7/16" ON BOTTOM	107/53	1304.7
	6 STRAIGHTS	107/01	
	2 STRAIGHTS DOWN, OPEN JOINT 7/16" ON TOP	108/97	
	1 STRAIGHT DOWN, OPEN JOINT 7/16" ON TOP	109/29	1307.7
	1 STRAIGHT W/2" FLANGE OUTLET TOP & 4' FROM FACE OF BELL	109/45	
	3 STRAIGHTS	109/61	
	3 STRAIGHTS DOWN, OPEN JOINT 7/16" TOP	110/09	1307.7
	3 STRAIGHTS	110/57	
	3 STRAIGHTS, UP, OPEN JOINT 7/16" ON BOTTOM	111/05	1305.7
	54 STRAIGHTS	111/53	
	12 2-3/4" BEVELS LEFT, OPEN JOINT 1/8" LEFT	120/19	1305.7
	6 2-3/4" BEVELS RIGHT, OPEN JOINT 1/8" RIGHT	122/11	
	1 2-3/4" BEVEL RIGHT, ROTATE COUNTER CLOCKWISE 8-1/2"	123/07	1305.7
		123/23	

NOTE: ALL LAYING INSTRUCTIONS GIVEN LOOKING IN THE DIRECTION OF LAYING.

LOCK JOINT PIPE COMPANY  
EAST ORANGE, NEW JERSEY  
HB: BAS 5-13-55  
SHEET 3 OF  
REV. RLH: BAS 6-17-55

WICHITA, KANSAS  
66" P.S. CONC. EMBEDDED CYLINDER PIPE W/R&S JOINT  
JOB NO. WIC 55-1

PCS.	DESCRIPTION	APPROX. STATION	ELEV.
5	2-3/4" BEVELS RIGHT OPEN 1/8" RIGHT	123/23	
31	STRAIGHTS	124/03	
1	STRAIGHT DOWN, OPEN JOINT 5/16" ON TOP	129/00	1311.0
1	STRAIGHT DOWN, OPEN JOINT 5/16" ON TOP	129/16	
88	STRAIGHTS	129/32	
1	STRAIGHT 36" LOCK JOINT BELL OUTLET LEFT, FROM FACE OF BELL W/36" SPIGOT PLUG	143/43	1311.0
3	STRAIGHTS (LOCATION OF OUTLET TO BE DETERMINED IN FIELD)	143/59	
1	STRAIGHT UP, OPEN 5/16" ON BOTTOM	144/07	1311.0
1	STRAIGHT UP, OPEN 1/4" ON BOTTOM	144/23	
10	STRAIGHTS	144/39	
1	STRAIGHT DOWN, W/16" x 18" MANHOLE & TOP 12' FROM FACE OF BELL	145/99	
3	STRAIGHTS	146/15	
1	STRAIGHT DOWN, OPEN JOINT 5/16" ON TOP	146/63	1313.0
1	STRAIGHT DOWN, OPEN JOINT 1/4" ON TOP	146/79	
1	CLOSURE (6' 2'-7 1/2" ?)	146/95	
1	STRAIGHT	147/01	
	BRIDGE NO. 2	147/17	1313.0
1	STRAIGHT with 36" outlet to left.	153/51	153+44
1	66" L.J.S. x 54" DRESSER REDUCER (7'-4" O.A.) W/1" SPT OUTLET TOP & 2'-6" FROM END OF DRESSER COUPLING	153/67	1313.0
1	FLANGE & DRESSER ADAPTER (1'-5" O.A.)	153/74	
	54" VALVE BY OTHERS	153/75	
1	66" L.J.B. x 54" FLANGE ECCENTRIC REDUCER W/1" SPT OUTLET 2" FROM FACE OF FLANGE	153/76	
1	STRAIGHT W/12" FLANGE OUTLET & FLG. & FLG. B.O. BEND RIGHT & 16" x 18" M.H. 4' FROM FACE OF BELL.	153/84	
12	STRAIGHTS	154/00	
1	STRAIGHT DOWN, OPEN JOINT 1/2" ON TOP	155/92	1313.0
18	STRAIGHTS	156/08	
3	STRAIGHTS UP, OPEN JOINT 3/8" ON BOTTOM	157/96	
3	STRAIGHTS	158/44	
2	STRAIGHTS UP, OPEN JOINT 3/8" ON BOTTOM	158/92	1311.0
30	STRAIGHTS	159/24	
1	STRAIGHT DOWN, OPEN JOINT 1/2" ON TOP	164/05	1315.2
74	STRAIGHTS	164/21	
1	STRAIGHT UP, OPEN JOINT 3/16" ON BOTTOM	176/07	1316.2
1	STRAIGHT UP, OPEN JOINT 3/16" ON BOTTOM	176/23	
28	STRAIGHTS	176/39	
1	STRAIGHT W/2" FLANGE OUTLET TOP & 4' FROM FACE OF BELL	180/88	
3	STRAIGHTS, DOWN, OPEN 7/16" ON TOP	181/04	1319.2
1	STRAIGHT DOWN, OPEN 1/2" ON TOP	181/52	
8	STRAIGHTS	181/68	
3	STRAIGHTS UP, OPEN 7/16" ON BOTTOM	182/96	
1	STRAIGHT UP, OPEN 1/2" ON BOTTOM	183/44	1314.7
3	STRAIGHTS	183/64	
		184/12	

142+50  
Add 16"  
flanged outlet  
tee to right.

Move from 143+55  
to approx  
sta. 153+60  
field check

36" L.J. Bell  
outlet left  
at about 153+60

147+10

153+44

NOTE: ALL LAYING INSTRUCTIONS GIVEN LOOKING IN THE DIRECTION OF LAYING.

LOCK JOINT PIPE COMPANY  
EAST ORANGE, NEW JERSEY  
HB: BAS 5-13-55  
SHEET 4 OF

WICHITA, KANSAS  
66" P.S. CONC. EMBEDDED CYLINDER PIPE W/R&S JOINT  
JOB NO. WIC 55-1

REV. RLH: BAS 5-17-55

PCS.	DESCRIPTION	APPROX. STATION	ELEV.
1	45°-00' ELBOW RIGHT	184/12	
7	STRAIGHTS	184/15	
1	SHORT (5'-4" O.A.)	P.I. 184/18	
1	66" x 66" x 60" B.S.B. TEE w/60" SPIGOT PLUG	185/30	
10	STRAIGHTS	185/35	
1	2-3/4" BEVEL DOWN, OPEN 1/2" ON TOP	P.T. 185/40	
1	SHORT (11'-4" O.A.) UP, OPEN 7/16" ON BOTTOM	185/45	
1	45°-00' ELBOW LEFT (STA. 187/41 BECOMES 186/00.)	187/05	1314.7
1	STRAIGHT UP, OPEN JOINT ON BOTTOM 7/16"	187/21	
1	STRAIGHT 30" LJB OUTLET RIGHT, FROM FACE OF BELL	187/38	
4	STRAIGHTS (LOCATION OF OUTLET DETERMINED IN FIELD)	P.I. 187/41 = 186/00	add 141
1	STRAIGHT W/16" x 18" MANHOLE & 12' FROM FACE OF BELL	186/03	
18	STRAIGHTS	186/19	
75	STRAIGHTS	186/35	
3	STRAIGHTS UP, OPEN JOINT 1/2" ON BOTTOM	186/99	1312.7
1	STRAIGHT UP, OPEN JOINT 3/16" ON BOTTOM	187/15	
8	STRAIGHTS	190/04	1315.2
3	STRAIGHTS DOWN, OPEN JOINT 7/16" ON TOP	202/06	1315.2
1	STRAIGHT DOWN, OPEN JOINT 3/16" ON TOP	202/54	
36	STRAIGHTS	202/70	
1	STRAIGHT W/2" FLANGED OUTLET TOP & 4' FROM FACE OF BELL	203/98	1319.2
40	STRAIGHTS	204/46	
1	STRAIGHT DOWN, OPEN JOINT 3/16" ON TOP	204/62	1319.2
63	STRAIGHTS	210/39	
1	STRAIGHT UP, OPEN JOINT 1/8" ON BOTTOM	210/55	
4	STRAIGHTS	216/96	
4	STRAIGHTS DOWN, OPEN 1/2" ON TOP	217/12	1319.2
8	STRAIGHTS UP, OPEN 1/2" ON BOTTOM	227/22	1316.2
1	STRAIGHT DOWN, OPEN JOINT 1/2" ON TOP W/12" & 4' FROM FACE OF BELL, FLANGE OUTLET & FLANGE & FLANGE B.O. BEND, 16" x 18" MANHOLE 4' FROM FACE OF BELL	227/38	
3	STRAIGHTS DOWN, OPEN JOINT 1/2" ON TOP	228/02	
1	STRAIGHT UP, OPEN JOINT 3/16" ON BOTTOM	228/66	
170	STRAIGHTS	229/94	
1	STRAIGHT UP, OPEN JOINT 1/16" ON BOTTOM	230/10	
59	STRAIGHTS	230/58	
1	STRAIGHT OPEN JOINT 3/16" ON TOP	230/74	
102	STRAIGHTS	257/99	1319.7
1	STRAIGHT DOWN	258/15	
117	STRAIGHTS	267/61	1322.0
1	STRAIGHT UP, OPEN JOINT 5/16" ON BOTTOM	267/77	
1	STRAIGHT UP, OPEN JOINT 5/16" ON BOTTOM	284/12	
30	STRAIGHTS	284/28	1322.0
5	STRAIGHTS	303/04	1323.9
		303/20	
		303/36	
		308/17	1327.9
		308/97	

*Use 1 straight  
Move 30" L.J.B to  
So. side of Brg # 4*

NOTE: ALL LAYING INSTRUCTIONS GIVEN LOOKING IN THE DIRECTION OF LAYING.

LOCK JOINT PIPE COMPANY  
EAST ORANGE, NEW JERSEY  
HB: BAS 5-14-55  
SHEET 5 OF

WICHITA, KANSAS  
66" P.S. CONC. EMBEDDED CYLINDER PIPE W/R&S JOINT  
JOB NO. WIC 55-1

REV. RLH: BAS 6-17-55

PCS.	DESCRIPTION	APPROX. STATION	ELEV.
1	STRAIGHT W/16" x 18" MANHOLE 12' FROM FACE OF BELL	308/97	
75	STRAIGHTS	309/13	
1	STRAIGHT UP, OPEN JOINT 1/2" ON BOTTOM	321/16	1329.5
1	STRAIGHT UP, OPEN JOINT 1/2" ON BOTTOM	321/32	
10	STRAIGHTS	321/48	
1	STRAIGHT DOWN, OPEN JOINT TOP 9/16"	323/08	1331.0
305	STRAIGHTS	323/24	
1	STRAIGHT UP, OPEN JOINT 7/16" ON BOTTOM	372/13	1335.9
1	STRAIGHT UP, OPEN JOINT 5/16" ON BOTTOM	372/29	
17	STRAIGHTS	372/45	
1	STRAIGHT DOWN, OPEN JOINT 1/2" ON TOP	375/18	1339.2
29	STRAIGHTS	375/34	
1	STRAIGHT W/4" FLANGE OUTLET 12' FROM FACE OF BELL	379/99	
1	STRAIGHT DOWN, OPEN JOINT ON TOP 1/2"	380/15	1340.7
52	STRAIGHTS	380/31	
1	13' CLOSURE	388/65	
1	STRAIGHT W/16" x 18" MANHOLE & TOP 12' FROM FACE OF BELL	388/78	
1	66" LJS x 54" DRESSER REDUCER (7'-4" O.A.) w/1" SPT OUTLET TOP & 2'-6" FROM END OF DRESSER COUPLING	388/94	
1	FLANGE x DRESSER ADAPTER (1'-5" O.A.)	389/01	
1	54" VALVE (BY OTHERS)	389/02	
1	66" LJB x 54" FLANGE ECCENTRIC REDUCER W/1" SPT OUTLET & 2' FROM FACE OF FLANGE	389/03	
1	STRAIGHT UP, OPEN JOINT 3/16" ON BOTTOM	389/10	
1	STRAIGHT W/12" FLANGE OUTLET RIGHT, FLG. & FLG. B.O. & 16" x 18" M.H. & 12' FROM FACE OF BELL	389/26	
3	STRAIGHTS	389/42	
1	STRAIGHT 5/16" OPEN JOINT ON BOTTOM	389/90	1337.7
125	STRAIGHTS	390/06	
81	STRAIGHTS	410/10	1340.2
1	STRAIGHT UP, OPEN JOINT 1/8" ON BOTTOM	423/08	1340.2
42	STRAIGHTS	423/24	
1	STRAIGHT W/12" FLANGE OUTLET LEFT & FLG. & FLG. - B.O. BEND 16" x 18" M.H. 12' FROM FACE OF BELL	429/97	
5	STRAIGHTS	430/13	
1	STRAIGHT OPEN JOINT 1/4" ON BOTTOM	430/93	1341.4
44	STRAIGHTS	431/09	
1	STRAIGHT DOWN, OPEN JOINT 1/4" ON TOP	438/14	1343.2
124	STRAIGHTS	438/20	
1	STRAIGHT UP, OPEN JOINT 1/4" ON TOP	458/08	1343.2
61	STRAIGHTS	458/24	
1	STRAIGHT DOWN, OPEN JOINT 1/4" ON TOP	468/02	1347.2
23	STRAIGHTS	468/18	
1	5-1/2" BEVEL LEFT 1/8" OPEN ON RIGHT	471/87	
1	5-1/2" BEVEL LEFT 1/8" OPEN ON RIGHT	472/03	
11	STRAIGHTS	472/19	
1	STRAIGHT UP, OPEN JOINT 1/8" ON BOTTOM	473/95	1348.2
50	STRAIGHTS	474/11	
		482/13	1350.2

NOTE:

ALL LAYING INSTRUCTIONS GIVEN LOOKING  
IN THE DIRECTION OF LAYING.LOCK JOINT PIPE COMPANY  
EAST ORANGE, NEW JERSEY  
HB: BAS 5-14-55  
SHEET 6 OFWICHITA, KANSAS  
66" P.S. CONC. EMBEDDED CYLINDER PIPE W/R&S JOINT  
JOB NO. WIC 55-1

PCS.	DESCRIPTION	APPROX. STATION	± ELEV.
		482/13	1350.2
1	STRAIGHT DOWN, OPEN JOINT 1/8" ON TOP	482/29	
50	STRAIGHTS	490/31	1350.2
1	STRAIGHT UP, OPEN JOINT 3/16" ON BOTTOM	490/47	
41	STRAIGHTS	497/04	1351.2
1	STRAIGHT, UP	497/20	
86	STRAIGHTS	510/99	
1	5-1/2" BEVEL RIGHT, OPEN ON LEFT 1/2"	511/15	
1	5-1/2" BEVEL RIGHT OPEN ON LEFT 1/2"	511/31	
23	STRAIGHTS	515/00	1353.7
1	STRAIGHT DOWN, OPEN JOINT 1/8" ON TOP	515/16	
30	STRAIGHTS	519/97	
1	STRAIGHT, 16" x 18" MANHOLE & TOP 12" FROM FACE OF BELL.	520/13	
74	STRAIGHTS	531/99	1353.7
1	STRAIGHT UP, OPEN JOINT 1/2" ON BOTTOM	532/15	
18	STRAIGHTS	535/04	1355.7
1	STRAIGHT DOWN, OPEN JOINT 1/2" ON TOP	535/20	
30	STRAIGHTS	540/01	1355.7
1	STRAIGHT UP, OPEN JOINT 3/16" ON BOTTOM	540/17	
24	STRAIGHTS	544/05	1356.7
1	STRAIGHT DOWN, OPEN JOINT 3/16" ON TOP	544/21	1356.7
68	STRAIGHTS	555/11	1356.7
1	STRAIGHT UP, OPEN JOINT 1/8" ON BOTTOM	555/27	
186	STRAIGHTS	585/08	1361.7
1	STRAIGHT DOWN, OPEN JOINT 3/16" ON TOP	585/24	
64	STRAIGHTS	595/50	1361.7
1	STRAIGHT UP, OPEN JOINT 3/16" ON BOTTOM	595/66	
35	STRAIGHTS	601/27	
1	STRAIGHT W/2" FLANGE OUTLET TOP & 4' FROM FACE OF BELL	601/43	1363.5
1	2-3/4" BEVEL DOWN, OPEN JOINT 1/4" ON TOP	601/59	
6	STRAIGHTS	602/55	
1	2-3/4" BEVEL UP, OPEN JOINT 1/4" ON BOTTOM	602/71	
1	STRAIGHT	602/87	
1	STRAIGHT W/16" x 18" MANHOLE & 4' FROM FACE OF BELL	603/03	
3	STRAIGHTS	603/51	1359.2
1	2-3/4" BEVEL UP, OPEN JOINT 1/2" ON TOP	603/67	
2	STRAIGHTS	603/99	1360.5
1	2-3/4" BEVEL DOWN OPEN JOINT 1/2" ON BOTTOM	604/15	1360.5
4	STRAIGHTS	611/04	
1	2-3/4" BEVEL UP, OPEN JOINT 1/8" ON BOTTOM	611/20	
5	STRAIGHTS	612/00	1364.7
1	2-3/4" BEVEL DOWN, OPEN JOINT 1/2" ON TOP	612/16	
80	STRAIGHTS	624/98	1364.7
1	STRAIGHT 1/4" OPEN JOINT ON BOTTOM	625/14	
8	STRAIGHTS	625/42	

NOTE: ALL LAYING INSTRUCTIONS GIVEN LOOKING IN THE DIRECTION OF LAYING.

LOCK JOINT PIPE COMPANY  
EAST ORANGE, NEW JERSEY  
HB: BAS 5-14-55  
SHEET 7 OF

WICHITA, KANSAS  
66" P.S. CONC. EMBEDDED CYLINDER PIPE W/R&S JOINT  
JOB NO. WIC 55-1

PCS.	DESCRIPTION	APPROX. STATION	ELEV.
1	STRAIGHT 1/4" OPEN JOINT ON TOP	625/42	
34	STRAIGHTS	625/58	1363.2
1	2-3/4" BEVEL LEFT CLOSE JOINT 1/4"	631/03	
80	STRAIGHTS	631/19	
1	STRAIGHT UP, OPEN JOINT 3/16" ON BOTTOM	644/01	1363.2
61	STRAIGHTS	644/17	
1	STRAIGHT, DOWN, OPEN JOINT 3/16" ON TOP	653/95	1366.7
99	STRAIGHTS	654/11	
1	STRAIGHT W/4" FLANGE OUTLET & TOP 12' FROM FACE OF BELL	669/98	
11	STRAIGHTS	670/14	
1	6" CLOSURE	671/90	
1	STRAIGHT	671/96	
1	STRAIGHT	672/12	
1	STRAIGHT W/16" x 18" M.H. & TOP 12' FROM FACE OF BELL	672/28	
1	66" x LJS x 54" DRESSER ECCENTRIC REDUCER (7'-4" O.A.) W/1" SPT OUTLET TOP & 2'-6" FROM END OF REDUCER COUPLING	672/44	
1	FLANGE x DRESSER ADAPTER (1'-5" O.A.)	672/51	
	54" VALVE (BY OTHERS)	672/52	
1	66" LJB x 54" FLANGE ECCENTRIC REDUCER W/1" SPT OUTLET TOP & 2'-0" FROM FACE OF BELL	672/53	
2	STRAIGHTS	672/60	1366.7
1	5-1/2" BEVEL UP, OPEN JOINT 1/2" ON BOTTOM	672/92	
2	STRAIGHTS	673/08	
1	5-1/2" BEVEL DOWN, OPEN JOINT 1/2" ON TOP	673/40	
3	STRAIGHTS	673/56	1396.5
1	ELBOW 41°-42° RIGHT	674/04	
	PI STATION 674/08 BK = PI STATION 674/03	P.I. 674/03	
1	STRAIGHT	674/06	
	<u>BRIDGE NO. 3</u>	674/22	1369.5
1	STRAIGHT W/8" FLANGE OUTLET & FLG. & FLG. B.O. BEND RIGHT 16" x 18" MANHOLE & 12' FROM FACE OF BELL	676/31	1369.5
27	STRAIGHTS	676/47	
3	2-3/4" BEVELS DOWN, OPEN JOINT 1/2" ON BOTTOM	680/80	
3	2-3/4" BEVEL UP, OPEN JOINT 1/2" ON TOP	681/28	
3	2-3/4" BEVELS UP, OPEN JOINT 1/2" ON TOP	681/76	
2	2-3/4" BEVELS DOWN, OPEN JOINT 1/2" ON TOP	682/24	
3	STRAIGHTS DOWN, OPEN JOINT 1/2" ON TOP	682/56	
1	STRAIGHT DOWN OPEN JOINT 3/16" ON TOP	683/08	1369.5
267	STRAIGHTS	683/24	
1	2-3/4" BEVEL LEFT / 1/4" OPEN JOINT	726/04	
4	STRAIGHTS	726/20	
1	STRAIGHT W/16" x 18" MANHOLE & TOP 4' FROM FACE OF BELL	726/84	
3	STRAIGHTS	727/00	
1	2-3/4" BEVEL DOWN, OPEN JOINT 1/2" ON BOTTOM	727/48	1373.7
7	STRAIGHTS	727/64	
1	2-3/4" BEVEL RIGHT / 1/4" OPEN JOINT	728/76	
1	2-3/4" BEVEL UP, OPEN JOINT 1/2" ON TOP	728/92	
		729/08	

NOTE: ALL LAYING INSTRUCTIONS GIVEN LOOKING IN THE DIRECTION OF LAYING

LOCK JOINT PIPE COMPANY  
EAST ORANGE, NEW JERSEY  
HB:bas 5-14-55  
SHEET 8 OF

WICHITA, KANSAS  
66" P.S. CONC. EMBEDDED CYLINDER PIPE W/R&S JOINT  
JOB NO. WIC 55-1

REV. PLH:GAS 6-17-55

PCS.	DESCRIPTION	APPROX. STATION	ELEV.
1	2-3/4" BEVEL UP, OPEN JOINT 1/2" ON TOP	729/08	
1	STRAIGHT (30" L.J.B Outlet Left) - Determine location in field. →	729/24	
2	STRAIGHTS	729/56	
1	8' CLOSURE	729/64	
1	2-3/4" BEVEL DOWN, OPEN JOINT 1/2" ON BOTTOM	729/80	
1	STRAIGHT W/16" x 18" MANHOLE & TOP 4' FROM FACE OF BELL	729/96	1371.5
1	BRIDGE NO. 4	744/97	1372.1
1	30° -11' ELBOW RIGHT	P.I. 744/99	
3	STRAIGHTS	745/00	
1	30° -11' ELBOW LEFT	745/48	
1	STRAIGHT W/12" FLANGED OUTLET FLG. & FLG. B.O. BEND 16" x 18" M.H. & 4' FROM FACE OF BELL	P.I. 745/50	
71	STRAIGHTS	745/51	1372.7
2	2-3/4" BEVELS DOWN, OPEN JOINT 1/2" ON TOP	757/05	
2	STRAIGHTS	757/37	
2	2-3/4" BEVELS UP, OPEN JOINT 1/2" ON BOTTOM	757/69	
1	STRAIGHT	758/01	
2	2-3/4" BEVELS UP, OPEN JOINT 1/2" ON BOTTOM	758/17	
2	STRAIGHTS	758/49	
2	2-3/4" BEVELS DOWN, OPEN JOINT 1/2" ON TOP	758/81	
80	STRAIGHTS	759/13	
1	STRAIGHT UP, OPEN JOINT 3/16" ON BOTTOM	771/95	1372.7
15	STRAIGHTS	772/11	
1	2-3/4" BEVEL LEFT, OPEN JOINT 1/2" ON RIGHT	774/51	
1	STRAIGHT LEFT, OPEN JOINT 1/2" ON RIGHT	774/67	
32	STRAIGHTS	774/83	
1	STRAIGHT 1/8" OPEN JOINT ON BOTTOM	779/96	
1	2-3/4" BEVEL RIGHT, OPEN JOINT 5/8" ON LEFT	780/12	1374.7
1	STRAIGHT RIGHT, OPEN JOINT 1/2" ON LEFT	780/28	
47	STRAIGHTS	780/44	
1	STRAIGHT DOWN, OPEN JOINT 5/16" ON TOP	787/97	1377.2
143	STRAIGHTS	788/13	
1	STRAIGHT UP, OPEN JOINT 5/16" ON BOTTOM	811/05	1377.2
11	STRAIGHTS	811/21	
1	STRAIGHT DOWN, OPEN JOINT 5/16" ON TOP	812/98	
117	STRAIGHTS	813/14	1378.2
1	STRAIGHT W/4" FLANGED OUTLET & TOP 4' FROM FACE OF BELL	831/90	
2	STRAIGHTS	832/06	1378.2
1	12' CLOSURE	832/38	
1	STRAIGHT W/16" x 18" M.H. & TOP 12' FROM FACE OF BELL	832/50	
1	66" x LJS x 54" DRESSER REDUCER (7'-4" O.A.) w/1" SPT OUTLET TOP & 2'-6" FROM END OF DRESSER COUPLING	832/66	
1	FLANGE X DRESSER ADAPTER (1'-5" O.A.)	832/73	
	54" VALVE (BY OTHERS)	832/74	
1	66" LJB x 54" FLG. ECCENTRIC REDUCER W/1" SPT OUTLET TOP & 2'-0" FROM FACE OF FLG.	832/75	
1	STRAIGHT	832/82	
		832/98	

## NOTE:

ALL LAYING INSTRUCTIONS GIVEN LOOKING  
IN THE DIRECTION OF LAYING.

LOCK JOINT PIPE WORK  
EAST ORANGE, NEW JERSEY  
HB: BAS 5-14-55  
SHEET 9 OF

WICHITA, KANSAS  
66" P.S. CONC. EMBEDDED CYLINDER PIPE W/R&S JOINT  
JOB NO. WIC 55-1

PCS.	DESCRIPTION	APPROX. STATION	ELEV.
1	ELBOW 43° -12' LEFT	832/98	
6	STRAIGHTS	P.I. 833/00 833/03	
1	STRAIGHT 5/16" OPEN JOINT ON TOP	833/99	1378.2
2	STRAIGHTS	834/15	
1	STRAIGHT W/12" FLANGE OUTLET LEFT, & FLG. & FLG. B.O. 16" x 18" MANHOLE & 12' FROM FACE OF BELL	834/47	
15	STRAIGHTS	834/63	
1	STRAIGHT DOWN, OPEN JOINT 1/4" ON TOP	837/03	1379.7
49	STRAIGHTS	837/19	
1	STRAIGHT DOWN, OPEN JOINT 3/16" ON TOP	845/04	1380.7
67	STRAIGHTS	845/20	
1	STRAIGHT UP, OPEN JOINT 1/8" ON BOTTOM	855/94	1380.7
81	STRAIGHTS	856/10	
1	STRAIGHT UP, OPEN JOINT 1/4" ON BOTTOM	869/08	1382.0
17	STRAIGHTS	869/24	
1	STRAIGHT DOWN, OPEN JOINT 3/8" ON BOTTOM	871/97	1383.5
111	STRAIGHTS	872/13	
1	STRAIGHT UP, OPEN JOINT 3/16" ON BOTTOM	889/92	1382.5
37	STRAIGHTS	890/08	
1	STRAIGHT DOWN, OPEN JOINT 3/16" ON TOP	896/01	1385.3
49	STRAIGHTS	896/17	
1	14' CLOSURE	904/02	
1	66" BELL x 66" SPIGOT x 48" BELL TEE	904/16	
9	STRAIGHTS	P.I. 904/20 904/24	
1	STRAIGHT W/2" FLG. OUTLET & TOP 4' FROM FACE OF BELL	905/68	
1	STRAIGHT W/12" Flanged Outlet with Flg. & Flg. B.O. Bend, 16" x 18" Manhole & 4' from face of bell, left	905/84	
1	2-3/4" BEVEL DOWN, OPEN JOINT 1/4" ON BOTTOM	906/00	1385.3
5	STRAIGHTS	906/16	
1	2-3/4" BEVEL UP, OPEN JOINT 1/8" ON BOTTOM	906/96	1381.7
5	STRAIGHTS	907/12	
2	STRAIGHTS UP, OPEN JOINT 1/2" ON BOTTOM	907/92	1382.3
5	STRAIGHTS	908/24	
3	STRAIGHTS DOWN, OPEN JOINT 1/2" ON TOP	909/04	1384.7
84	STRAIGHTS	909/52	
1	STRAIGHT DOWN, OPEN JOINT 1/8" ON TOP	922/99	1387.7
49	STRAIGHTS	923/15	
1	STRAIGHT UP, OPEN JOINT 1/8" ON BOTTOM	931/00	1387.7
61	STRAIGHTS	931/16	
1	STRAIGHT 1/8" OPEN JOINT ON TOP	940/94	1389.7
1	STRAIGHT W/2" FLANGED OUTLET & TOP 4' FROM FACE OF BELL	941/10	
1	STRAIGHT	941/26	
4	STRAIGHTS DOWN, OPEN JOINT 1/2" ON TOP	941/42	
5	STRAIGHTS OPEN JOINT 1/2"	942/06	
4	STRAIGHTS UP, OPEN JOINT 5/8" ON TOP	942/86	
		943/50	

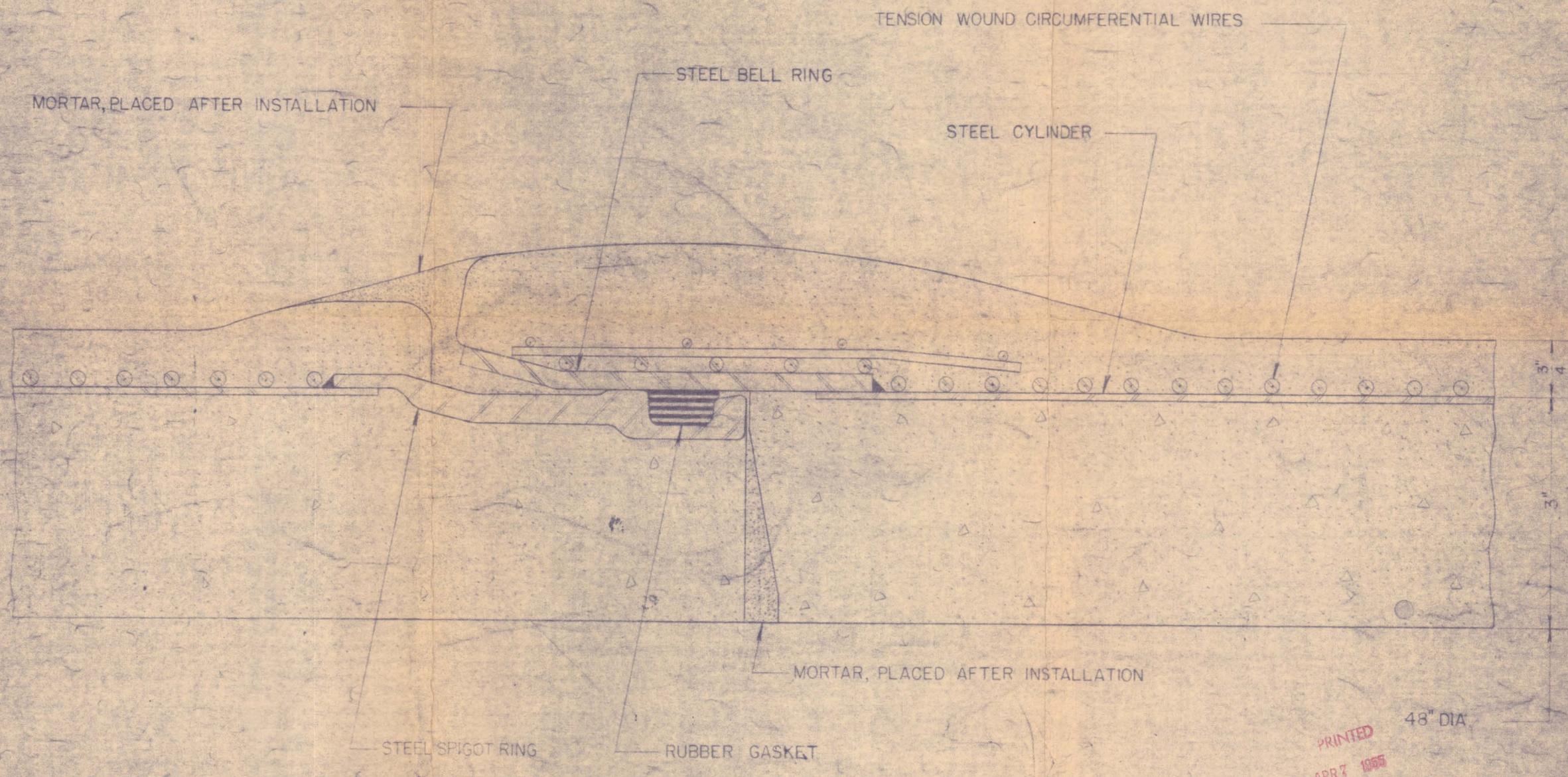
NOTE: ALL LAYING INSTRUCTIONS GIVEN LOOKING  
IN THE DIRECTION OF LAYING.

LOCK JOINT PIPE COMPANY  
EAST ORANGE, NEW JERSEY  
HB: BAS 5-14-55  
SHEET 10 OF 10

WICHITA, KANSAS  
66" P.S. CONC. EMBEDDED CYLINDER PIPE W/R&S JOINT  
JOB NO. WIC 55-1

PCS.	DESCRIPTION	APPROX. STATION	ELEV.
4	STRAIGHTS OPEN JOINT 1/2"	943/50	
37	STRAIGHTS	944/14	1389.7
1	STRAIGHT DOWN, OPEN JOINT 1/8" ON BOTTOM	950/07	1389.7
48	STRAIGHTS	950/23	
1	STRAIGHT UP, OPEN JOINT 1/8" ON BOTTOM	957/92	1390.7
92	STRAIGHTS	958/08	
1	STRAIGHT W/2" FLANGE OUTLET & TOP 4' FROM FACE OF BELL	972/83	1393.7
1	STRAIGHT DOWN, OPEN JOINT 1/2" ON TOP	972/99	
43	STRAIGHTS	973/15	
1	STRAIGHT UP, OPEN JOINT 1/2" ON BOTTOM	980/04	1390.0
30	STRAIGHTS	980/20	
1	2-3/4" BEVEL UP, OPEN JOINT 1/8" ON TOP	985/01	1390.0
1	STRAIGHT WITH 16" x 18" MANHOLE & TOP 4' FROM FACE OF BELL	985/17	
4	STRAIGHTS	985/33	
1	2-3/4" BEVEL DOWN, OPEN JOINT 1/8" ON BOTTOM	985/97	1393.7
43	STRAIGHTS	986/13	
1	STRAIGHT UP, OPEN JOINT 1/8" ON BOTTOM	993/02	1394.2
173	STRAIGHTS	993/18	
1	STRAIGHT DOWN, OPEN JOINT 1/8" ON TOP	1020/91	1397.0
43	STRAIGHTS	1021/07	
1	STRAIGHT UP, OPEN JOINT 3/16" ON BOTTOM	1027/96	
18	STRAIGHTS	1028/12	
1	STRAIGHT DOWN, OPEN JOINT 3/16" ON TOP	1031/00	1398.2
55	STRAIGHTS	1031/16	
1	STRAIGHT UP, OPEN JOINT 3/16" ON BOTTOM	1039/88	
74	STRAIGHTS	1040/13	
1	STRAIGHT W/1" SPT OUTLET & 12' FROM FACE OF BELL	1051/99	
1	SHORT (11'-4" O.A.)	1052/15	
		1052/26	

REVISIONS		
NO.	DESCRIPTION	DATE



DETAIL OF JOINT

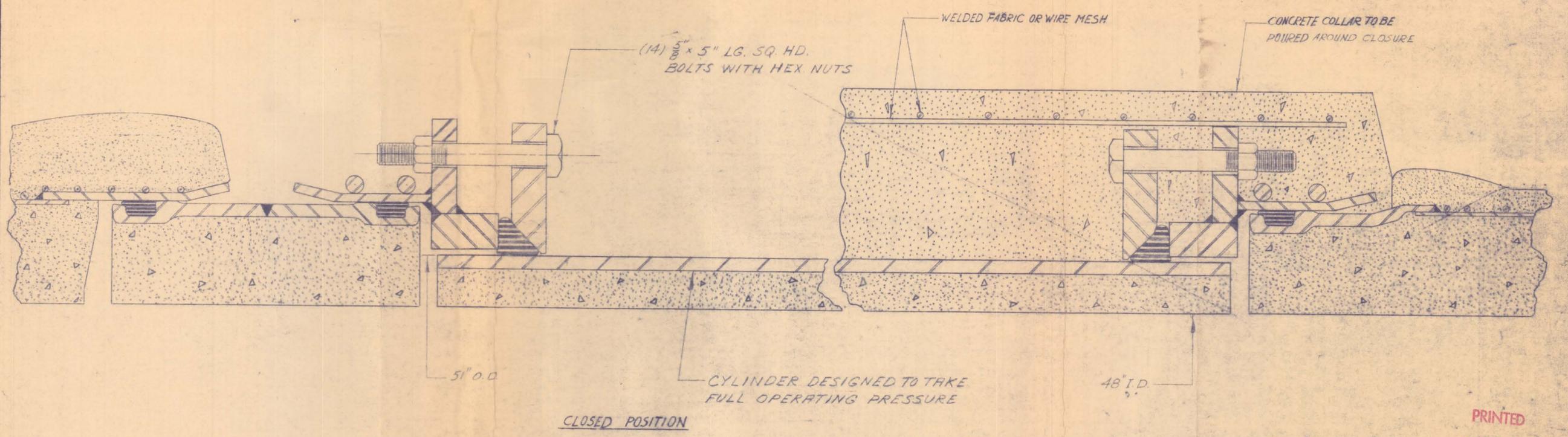
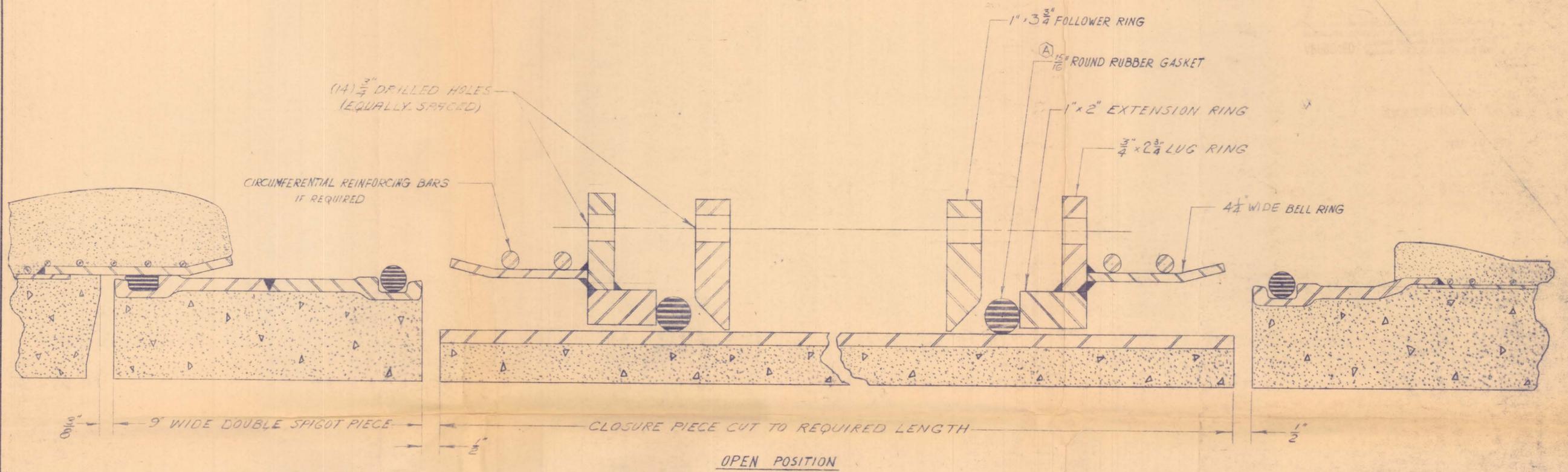
PRINTED  
APR 7 1955

48" DIA.

<b>LOCK JOINT PIPE COMPANY</b>		
150 RUTLEDGE AVE.		EAST ORANGE, N. J.
48" PRESTRESSED CONCRETE CYLINDER PIPE WITH RUBBER & STEEL EXPANSION JOINT		
DRAWN: V. J. A.	DATE: 5-4-50	SCALE:
CHECKED: <i>[Signature]</i>	DATE: 5-12-50	DRAWING NUMBER
APPROVED: <i>[Signature]</i>	DATE: 7-1-50	D-2-630-48

FOR DETAILS SEE SPECIFICATION SHEET NO. TU 55-14-1

REVISIONS		
NO.	DESCRIPTION	DATE
A	WAS 1"	J.S. 3-2-53
B	CO #330	E.M.P. 12-11-53



CYLINDER THICKNESS (IN.)	
1/4	93
5/16	122
3/8	147
7/16	171
1/2	196

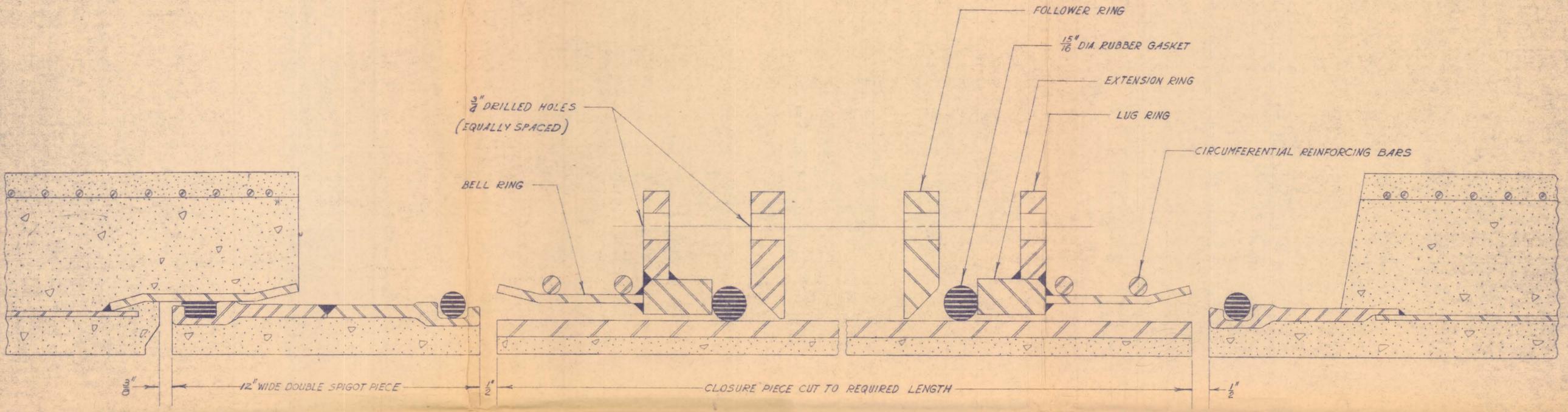
- NOTES:-
1. CLOSURE PIECE TO BE CUT IN FIELD BY OTHERS
  2. ADDITIONAL DOUBLE SPIGOT PIECE TO BE PROVIDED IF CLOSURE IS BELL TO BELL.
  3. BELL RINGS TO BE PULLED HOME BY CHAIN HOIST AND CABLES.
  4. IF TEST IS CONDUCTED BEFORE CONCRETE COLLAR IS PLACED, PROPERLY DISTRIBUTED COMPRESSION STRIPS MUST BE PLACED BETWEEN FOLLOWER RINGS.

PRINTED  
APR 16 1955

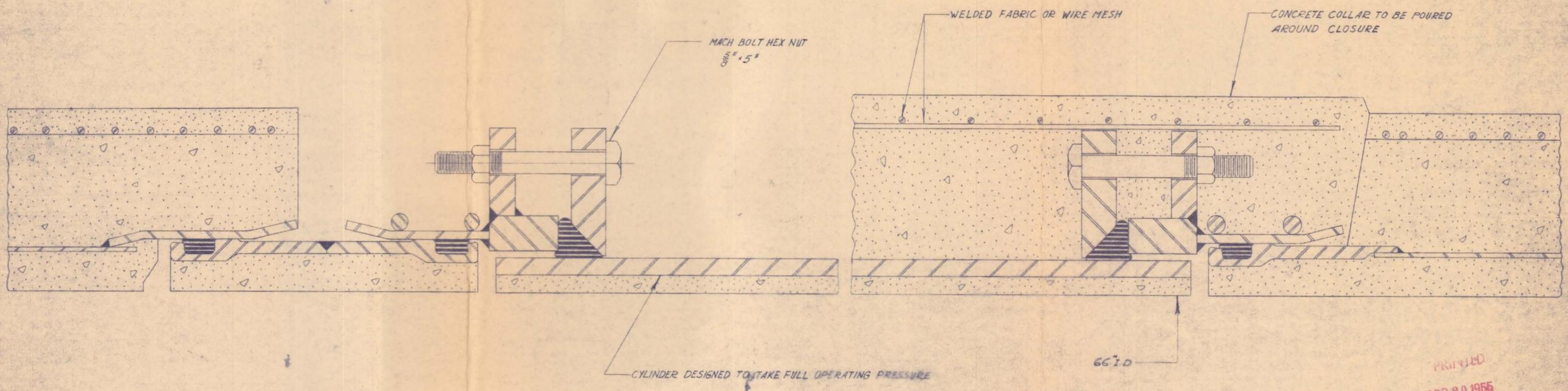
**LOCK JOINT PIPE COMPANY**  
150 RUTLEDGE AVE. EAST ORANGE, N. J.

48" FOLLOWER RING CLOSURE FOR PRESTRESSED CONCRETE CYLINDER PIPE

DRAWN: FID	DATE: 5-28-52	SCALE: 6"=1'-0"
CHECKED: [Signature]	DATE: 9-17-52	DRAWING NUMBER: D-2-816-48" D
APPROVED: [Signature]	DATE: 9-22-52	SHEET 1 of 2



OPEN POSITION



CLOSED POSITION

NOTES

1. CLOSURE PIECE TO BE CUT IN FIELD BY OTHERS
2. ADDITIONAL DOUBLE SPIGOT PIECE TO BE PROVIDED IF CLOSURE IS BELL TO BELL
3. BELL RINGS TO BE PULLED HOME BY CHAIN HOIST AND CABLES
4. IF TEST IS CONDUCTED BEFORE CONCRETE COLLAR IS PLACED, PROPERLY DISTRIBUTED COMPRESSION STRUTS MUST BE PLACED BETWEEN FOLLOWER RINGS

<b>LOCK JOINT PIPE COMPANY</b>			
150 RUTLEDGE AVE.		EAST ORANGE, N. J.	
<u>FOLLOWER RING CLOSURE</u>			
<u>FOR PRESTRESSED CONCRETE</u>			
<u>EMBEDDED CYLINDER PIPE</u>			
SCALE: 6" = 12' 0"	DRAWING NUMBER		REV.
DR. JMK: 4-18-55	APP. [Signature]	4-18-55	D-2-845-66
CH. W.B. 4-18-55	APP.		

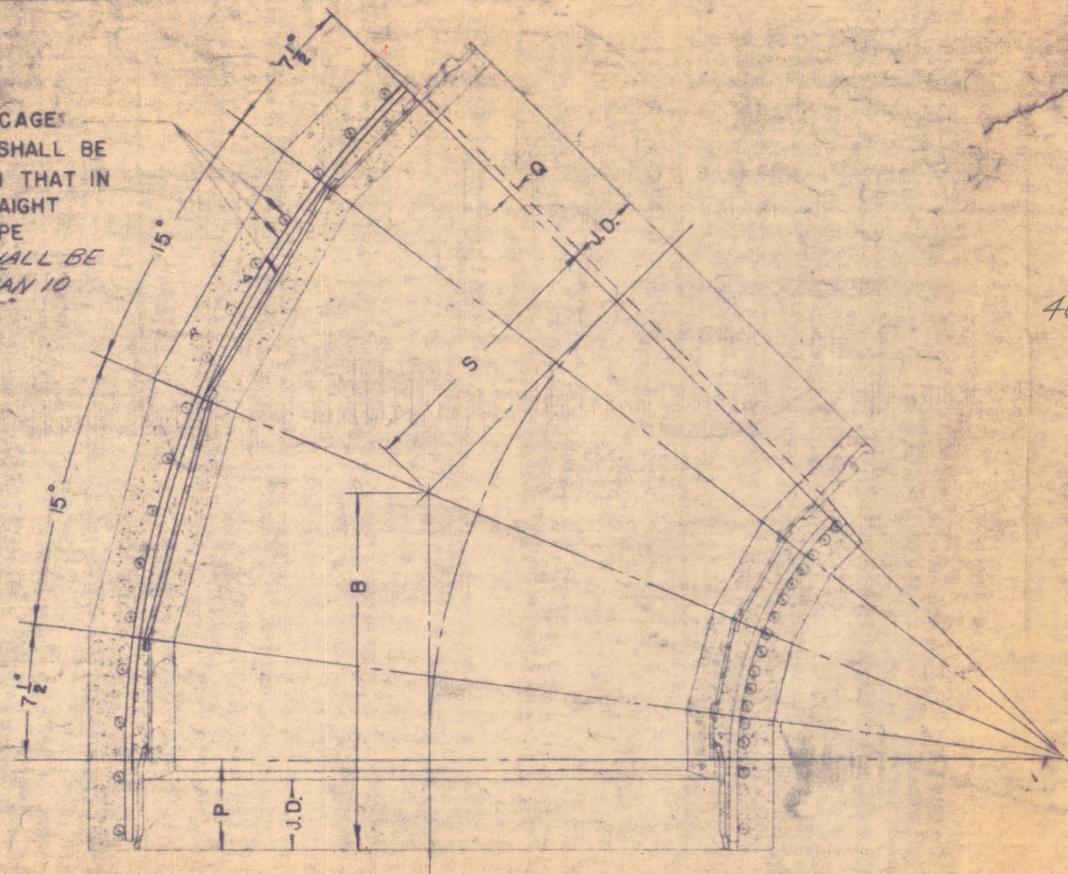
PRINTED  
APR 20 1955

REV.	DESCRIPTION	REV.	DESCRIPTION





CYLINDER AND CAGE REINFORCEMENT SHALL BE NOT LESS THAN THAT IN ADJACENT STRAIGHT LENGTHS OF PIPE  
CYLINDER SHALL BE NOT LESS THAN 10 GAGE



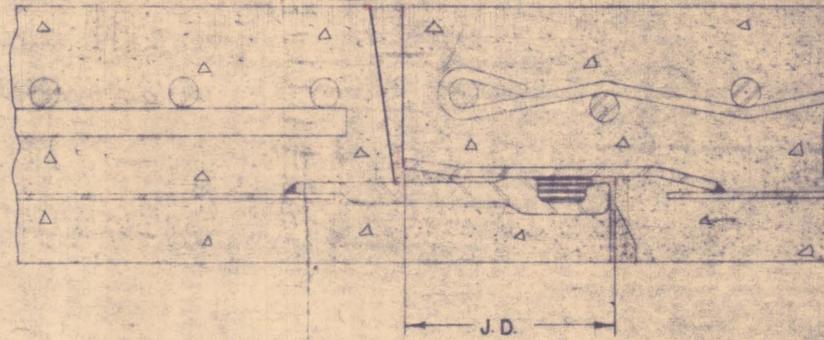
$$21^{\circ}6' - S = 16\frac{1}{2}'' = 1.37$$

$$B = 17'' = 1.42$$

$$46^{\circ}17' - S = 30.4 = 2.53$$

$$B = 34.4 = 2.87$$

JEM



SECTION THRU JOINT

DIMENSIONS IN INCHES

PIPE SIZE	RAD.	SPIGOT		BELL		J.D.	P	Q	7°-30'		15°		22°-30'		30°		37°-30'		45°		52°-30'		60°		67°-30'		75°		82°-30'		90°	
		SHAPE	WIDTH	SHAPE	WIDTH				B	S	B	S	B	S	B	S	B	S	B	S	B	S	B	S	B	S	B	S	B	S	B	S
16"	24"	M-3516	4	D-4-55	5"	3 1/2"	4 1/2"	1 1/2"	5.82	2.07	7.41	3.66	9.02	5.27	10.68	6.93	12.40	8.65	14.19	10.44	16.09	12.34	18.11	14.36	20.29	16.54	22.67	18.92	25.30	21.55	28.25	24.50
18"	26"	M-3516	4	D-4-55	5"	3 1/2"	4 1/2"	1 1/2"	5.95	2.20	7.67	3.92	9.42	5.67	11.22	7.47	13.08	9.33	15.02	11.27	17.07	13.32	19.26	15.51	21.62	17.87	24.20	20.45	27.05	23.30	30.25	26.50
20"	28"	M-3516	4	D-4-55	5"	3 1/2"	4 1/2"	1 1/2"	6.08	2.33	7.94	4.19	9.82	6.07	11.75	8.00	13.75	10.00	15.85	12.10	18.06	14.31	20.42	16.67	22.96	19.21	25.74	21.99	28.81	25.06	32.25	28.50
24"	30"	M-3516	4	D-4-55	5"	3 1/2"	4 1/2"	1 1/2"	6.22	2.47	8.20	4.46	10.22	6.47	12.29	8.54	14.43	10.68	16.68	12.93	19.04	15.29	21.57	17.82	24.30	20.55	27.27	23.52	30.56	26.81	34.25	30.50
27"	32"	M-3516	4	D-4-55	5"	3 1/2"	4 1/2"	1 1/2"	6.35	2.60	8.46	4.71	10.62	6.87	12.82	9.07	15.11	11.36	17.50	13.75	20.03	16.28	22.73	18.98	25.63	21.88	28.80	25.05	32.31	28.56	36.25	32.50
30"	34"	M-3516	4	D-4-55	5"	3 1/2"	4 1/2"	1 1/2"	6.48	2.73	8.73	4.98	11.01	7.26	13.36	9.61	15.79	12.04	18.33	14.58	21.02	17.27	23.88	20.13	26.97	23.22	30.34	26.59	34.07	30.32	38.25	34.50
34"	36"	M-3516	4	D-4-55	5"	3 1/2"	4 1/2"	1 1/2"	6.61	2.86	8.99	5.24	11.41	7.66	13.90	10.15	16.47	12.72	19.16	15.41	22.00	18.25	25.03	21.28	28.30	24.55	31.87	28.12	35.82	32.07	40.25	36.50
36"	38"	M-3516	4	D-4-55	5"	3 1/2"	4 1/2"	1 1/2"	6.74	2.87	9.25	5.38	11.81	7.94	14.43	10.55	17.15	13.27	19.99	16.12	22.99	19.12	26.19	22.31	29.6	25.76	33.41	29.53	37.58	33.70	42.25	38.38
39"	40"	M-3516	4	D-4-55	5"	3 1/2"	4 1/2"	1 1/2"	6.87	2.99	9.52	5.65	12.21	8.33	14.97	11.09	17.83	13.96	20.82	16.95	23.98	20.11	27.34	23.46	30.98	27.11	34.94	31.07	39.33	35.45	44.25	40.38
42"	42"	M-3818	5	D-4-73	5 1/2"	3 1/2"	4 1/2"	1 1/2"	7.50	3.75	10.28	6.53	13.10	9.35	16.00	12.25	19.01	15.26	22.15	18.40	25.46	21.71	29.00	25.25	32.81	29.06	36.98	33.23	41.58	37.83	46.75	43.00
46"	46"	M-3818	5	D-4-73	5 1/2"	3 1/2"	4 1/2"	1 1/2"	7.76	3.89	10.81	6.93	13.90	10.02	17.08	13.21	20.36	16.48	23.80	19.92	27.43	23.56	31.31	27.44	35.49	31.62	40.05	36.17	45.09	41.21	50.75	46.88
48"	48"	M-3818	5	D-4-73	5 1/2"	3 1/2"	4 1/2"	1 1/2"	7.90	4.02	11.07	7.20	14.30	10.43	17.61	13.73	21.04	17.17	24.63	20.75	28.42	24.54	32.46	28.58	36.82	32.95	41.58	37.70	46.84	42.96	52.75	48.88
51"	51"	M-3818	5		6"	4"	5 1/2"	2 1/2"	8.59	4.09	11.96	7.46	15.39	10.89	18.92	14.42	22.56	18.06	26.37	21.87	30.40	25.90	34.69	30.19	39.33	34.83	44.38	39.88	49.98	45.48	56.25	51.75
54"	54"	M-1960	7		6"	4"	5 1/2"	2 1/2"	8.79	5.92	12.36	9.48	15.99	13.12	19.72	16.85	23.58	20.70	27.62	24.74	31.88	29.00	36.43	33.56	41.33	38.45	46.69	43.82	52.61	49.74	59.25	56.38
57"	57"	M-1960	7		6 1/2"	4 1/2"	5 1/2"	2 1/2"	9.48	6.11	13.25	9.88	17.09	13.72	21.02	17.64	25.10	21.72	29.36	25.98	33.86	30.48	38.66	35.28	43.84	40.46	49.49	46.11	55.74	52.36	62.75	59.38
60"	60"	M-1960	7		6 1/2"	4 1/2"	5 1/2"	2 1/2"	9.68	6.18	13.65	10.15	17.68	14.18	21.83	18.33	26.12	22.62	30.60	27.10	35.34	31.84	40.39	36.89	45.84	42.34	51.79	48.29	58.37	54.87	65.75	62.25
66"	66"	M-1960	7		6 1/2"	4 1/2"	5 1/2"	2 1/2"	10.07	6.45	14.44	10.81	18.88	15.25	23.43	19.80	28.15	24.53	33.09	29.46	38.30	34.67	43.86	40.23	49.85	46.22	56.39	52.76	63.63	60.00	71.75	68.13
72"	72"	M-1960	7		6 1/2"	4 1/2"	5 1/2"	2 1/2"	10.47	6.72	15.23	11.48	20.17	16.32	25.04	21.29	30.19	26.44	35.57	31.82	41.26	37.51	47.32	43.57	53.86	50.11	61.00	57.25	68.89	65.14	77.75	74.00
78"	78"	M-1960	7		6 1/2"	4 1/2"	5 1/2"	1 1/2"	10.86	6.98	16.02	12.15	21.27	17.40	26.65	22.77	32.23	28.36	38.06	34.18	44.22	40.35	50.78	46.91	57.87	53.99	65.60	61.72	74.15	70.28	83.75	79.88
84"	84"	M-1960	7		7"	4 1/2"	6 1/2"	1 1/2"	11.75	7.13	17.31	12.69	22.96	18.34	28.76	24.14	34.76	30.14	41.04	36.42	47.67	43.15	54.75	50.13	62.38	57.75	70.71	66.09	79.92	75.30	90.25	85.63
90"	90"	M-1960	7		7"	5"	6 1/2"	1 1/2"	12.15	7.40	18.10	13.35	24.15	19.40	30.37	25.62	36.80	32.05	43.53	38.78	50.63	45.88	58.21	53.46	66.39	61.64	75.31	70.56	85.18	80.43	96.25	91.50
96"	96"	M-1960	7		7 1/2"	5 1/2"	6 1/2"	1 1/2"	13.04	7.66	19.39	14.01	25.85	20.48	32.47	27.09	39.34	33.97	46.51	41.14	54.09	48.72	62.18	56.80	70.90	65.53	80.41	75.03	90.94	85.56	102.75	97.38
102"	102"	M-3836	9		7 1/2"	5 1/2"	6 1/2"	2 1/2"	13.44	9.56	20.18	16.30	27.04	23.17	34.08	30.20	41.37	37.50	49.00	45.13	57.05	53.17	65.64	61.76	74.90	71.02	85.02	81.14	96.20	92.32	108.75	104.88
108"	108"	M-3836	9		8"	5 1/2"	7 1/2"	2 1/2"	14.33	9.83	21.47	16.97	28.73	24.23	36.18	31.69	43.91	39.41	51.99	47.49	60.51	56.01	69.60	65.10	79.41	74.91	90.12	85.62	101.96	97.46	115.25	110.75

REVISIONS		
NO.	DESCRIPTION	DATE

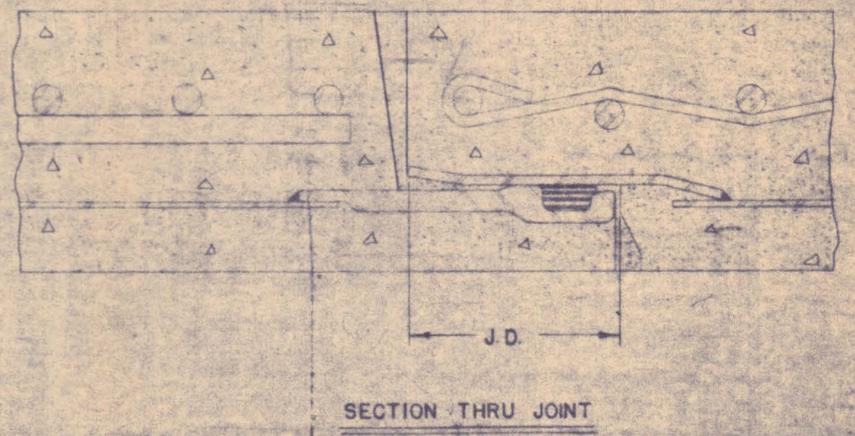
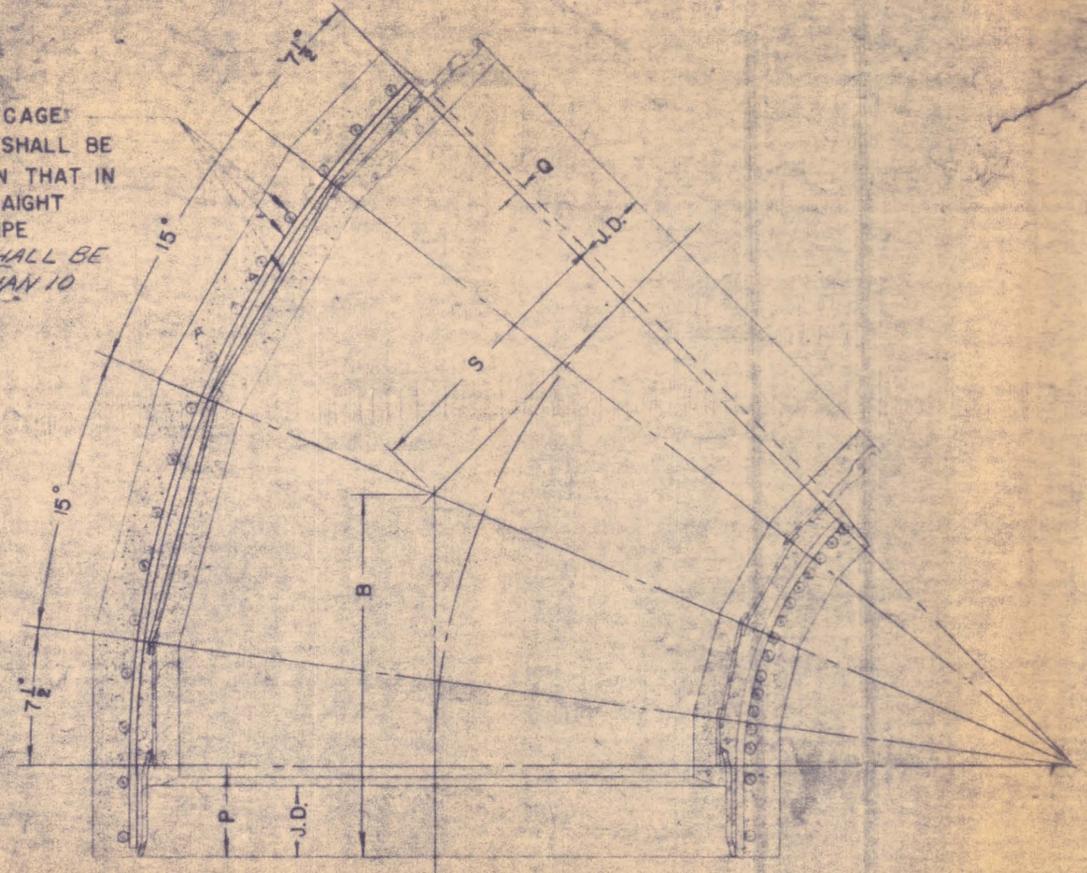
**LOCK JOINT PIPE COMPANY**  
150 RUTLEDGE AVE. EAST ORANGE, N. J.

**RUBBER & STEEL JOINT BENDS**

DRAWN: VJA DATE: 7-13-50 SCALE: \_\_\_\_\_  
 CHECKED: [Signature] DATE: 7-25-50 DRAWING NUMBER: \_\_\_\_\_  
 APPROVED: [Signature] DATE: 7-25-50 SPEC: 4058

REVISIONS		
NO.	DESCRIPTION	DATE

CYLINDER AND CAGE REINFORCEMENT SHALL BE NOT LESS THAN THAT IN ADJACENT STRAIGHT LENGTHS OF PIPE  
 CYLINDER SHALL BE NOT LESS THAN 10 GAGE



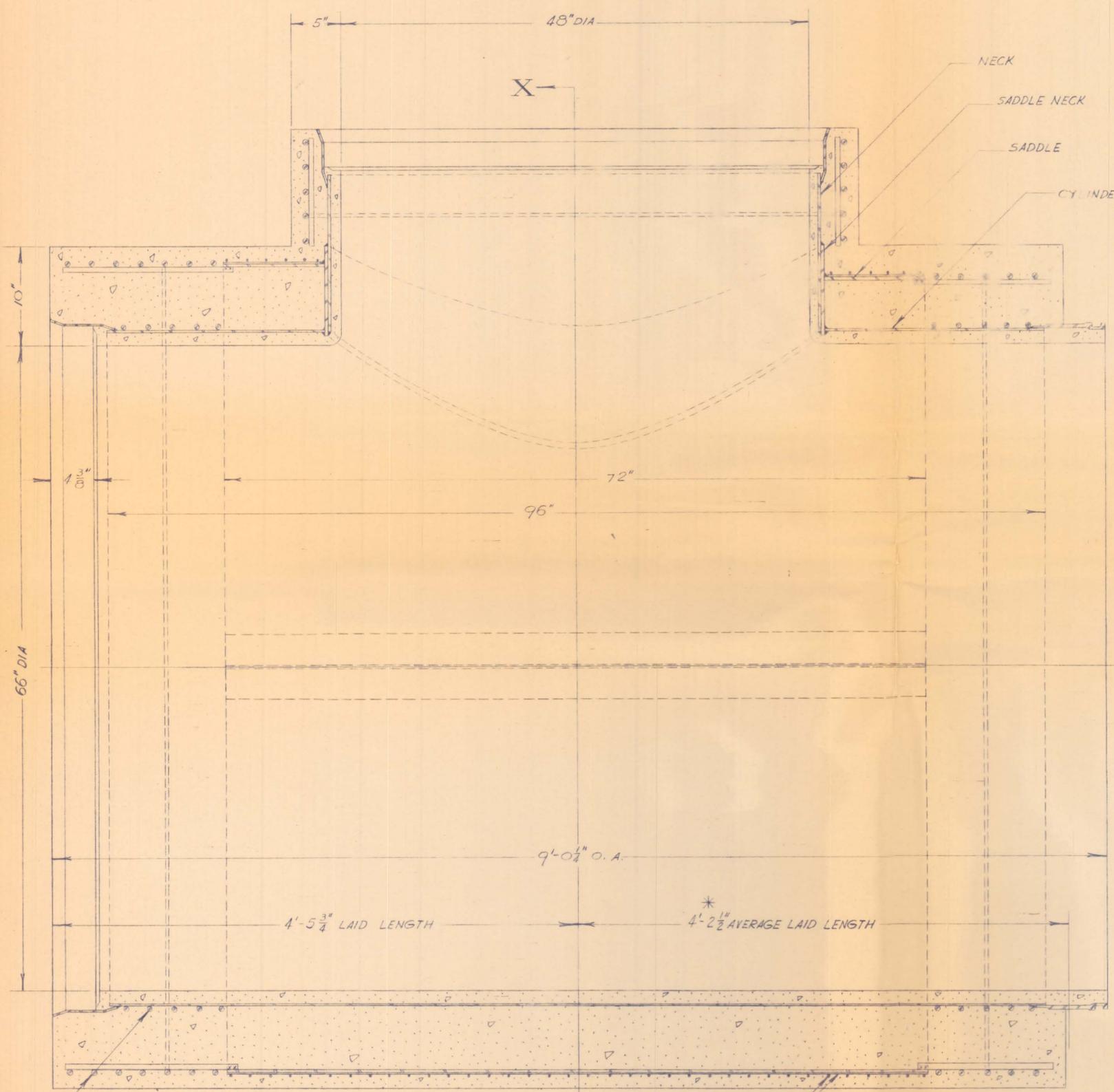
PIPE SIZE	RAD.	SPIGOT		BELL		J.D.	P	Q	DIMENSIONS IN INCHES																							
		SHAPE	WIDTH	SHAPE	WIDTH				B 7°-30°	B 15°	B 22°-30°	B 30°	B 37°-30°	B 45°	B 52°-30°	B 60°	B 67°-30°	B 75°	B 82°-30°	B 90°												
16"	24"	M-3516	4 1/2"	D-4-55	5"	3 1/4"	4 1/4"	4 1/4"	5.82	2.07	7.41	3.66	9.02	5.27	10.68	6.93	12.40	8.65	14.19	10.44	16.09	12.34	18.11	14.36	20.29	16.54	22.67	18.92	25.30	21.55	28.25	24.50
18"	26"	M-3516	4 1/2"	D-4-55	5"	3 1/4"	4 1/4"	4 1/4"	5.95	2.20	7.67	3.92	9.42	5.67	11.22	7.47	13.08	9.33	15.02	11.27	17.07	13.32	19.26	15.51	21.62	17.87	24.20	20.45	27.05	23.30	30.25	26.50
20"	28"	M-3516	4 1/2"	D-4-55	5"	3 1/4"	4 1/4"	4 1/4"	6.08	2.33	7.94	4.19	9.82	6.07	11.75	8.00	13.75	10.00	15.85	12.10	18.06	14.31	20.42	16.67	22.96	19.21	25.74	21.99	28.81	25.06	32.25	28.50
24"	30"	M-3516	4 1/2"	D-4-55	5"	3 1/4"	4 1/4"	4 1/4"	6.22	2.47	8.20	4.45	10.22	6.47	12.29	8.54	14.43	10.68	16.68	12.93	19.04	15.29	21.57	17.82	24.30	20.55	27.27	23.52	30.56	26.81	34.25	30.50
27"	32"	M-3516	4 1/2"	D-4-55	5"	3 1/4"	4 1/4"	4 1/4"	6.35	2.60	8.46	4.71	10.62	6.87	12.82	9.07	15.11	11.36	17.50	13.75	20.03	16.28	22.73	18.98	25.63	21.88	28.80	25.05	32.31	28.56	36.25	32.50
30"	34"	M-3516	4 1/2"	D-4-55	5"	3 1/4"	4 1/4"	4 1/4"	6.48	2.73	8.73	4.98	11.01	7.26	13.36	9.61	15.79	12.04	18.33	14.58	21.02	17.27	23.88	20.13	26.97	23.22	30.34	26.59	34.07	30.32	38.25	34.50
34"	36"	M-3516	4 1/2"	D-4-55	5"	3 1/4"	4 1/4"	4 1/4"	6.61	2.86	8.99	5.24	11.41	7.66	13.90	10.15	16.47	12.72	19.16	15.41	22.00	18.25	25.03	21.28	28.30	24.55	31.87	28.12	35.82	32.07	40.25	36.50
36"	38"	M-3516	4 1/2"	D-4-55	5"	3 1/4"	4 1/4"	4 1/4"	6.74	2.87	9.25	5.38	11.81	7.94	14.43	10.55	17.15	13.27	19.99	16.12	22.99	19.12	26.19	22.31	29.6	25.76	33.41	29.53	37.58	33.70	42.25	38.50
39"	40"	M-3516	4 1/2"	D-4-55	5"	3 1/4"	4 1/4"	4 1/4"	6.87	2.99	9.52	5.65	12.21	8.33	14.97	11.09	17.83	13.96	20.82	16.95	23.98	20.11	27.34	23.46	30.98	27.11	34.94	31.07	39.33	35.46	44.25	40.50
42"	42"	M-3818	5"	D-4-73	5 1/2"	3 1/2"	4 1/2"	4 1/2"	7.50	3.75	10.28	6.53	13.10	9.35	16.00	12.25	19.01	15.26	22.15	18.40	25.46	21.71	29.00	25.25	32.81	29.06	36.98	33.23	41.58	37.83	46.75	43.00
46"	46"	M-3818	5"	D-4-73	5 1/2"	3 1/2"	4 1/2"	4 1/2"	7.76	3.89	10.81	6.93	13.90	10.02	17.08	13.21	20.36	16.48	23.80	19.92	27.43	23.56	31.31	27.44	35.49	31.62	40.05	36.17	45.09	41.21	50.75	46.88
48"	48"	M-3818	5"	D-4-73	5 1/2"	3 1/2"	4 1/2"	4 1/2"	7.90	4.02	11.07	7.20	14.30	10.43	17.61	13.73	21.04	17.17	24.63	20.75	28.42	24.54	32.46	28.58	36.82	32.95	41.58	37.70	46.84	42.96	52.75	48.88
51"	51"	M-3818	5"	D-4-73	6"	4"	5 1/2"	4 1/2"	8.59	4.09	11.96	7.46	15.39	10.89	18.92	14.42	22.56	18.06	26.37	21.87	30.40	25.90	34.69	30.19	39.33	34.83	44.38	39.88	49.98	45.48	56.25	51.75
54"	54"	M-1960	7 1/4"	D-4-73	6 1/2"	4 1/2"	5 1/2"	4 1/2"	8.79	5.92	12.36	9.48	15.99	13.12	19.72	16.85	23.58	20.70	27.62	24.74	31.88	29.00	36.43	33.56	41.33	38.45	46.69	43.82	52.61	49.74	59.25	56.38
57"	57"	M-1960	7 1/4"	D-4-73	6 1/2"	4 1/2"	5 1/2"	4 1/2"	9.48	6.11	13.25	9.88	17.09	13.72	21.02	17.64	25.10	21.72	29.36	25.98	33.86	30.48	38.66	35.28	43.84	40.46	49.49	46.11	55.74	52.36	62.75	59.38
60"	60"	M-1960	7 1/4"	D-4-73	6 1/2"	4 1/2"	5 1/2"	4 1/2"	9.68	6.18	13.65	10.15	17.68	14.18	21.83	18.33	26.12	22.62	30.60	27.10	35.34	31.84	40.39	36.89	45.84	42.34	51.79	48.29	58.37	54.87	65.75	62.25
66"	66"	M-1960	7 1/4"	D-4-73	6 1/2"	4 1/2"	5 1/2"	4 1/2"	10.07	6.45	14.44	10.81	18.88	15.25	23.43	19.80	28.15	24.53	33.09	29.46	38.30	34.67	43.86	40.23	49.85	46.22	56.39	52.76	63.63	60.00	71.75	68.13
72"	72"	M-1960	7 1/4"	D-4-73	6 1/2"	4 1/2"	5 1/2"	4 1/2"	10.47	6.72	15.23	11.48	20.17	16.32	25.04	21.29	30.19	26.44	35.57	31.82	41.26	37.51	47.32	43.57	53.86	50.11	61.00	57.25	68.89	65.14	77.75	74.00
78"	78"	M-1960	7 1/4"	D-4-73	6 1/2"	4 1/2"	5 1/2"	4 1/2"	10.86	6.98	16.02	12.15	21.27	17.40	26.65	22.77	32.23	28.36	38.06	34.18	44.22	40.35	50.78	46.91	57.87	53.99	65.60	61.72	74.15	70.28	83.75	79.88
84"	84"	M-1960	7 1/4"	D-4-73	6 1/2"	4 1/2"	5 1/2"	4 1/2"	11.75	7.13	17.31	12.69	22.96	18.34	28.76	24.14	34.76	30.14	41.04	36.42	47.67	43.15	54.75	50.13	62.38	57.75	70.71	66.09	79.92	75.30	90.25	85.63
90"	90"	M-1960	7 1/4"	D-4-73	6 1/2"	5"	6 1/4"	4 1/2"	12.15	7.40	18.10	13.35	24.15	19.40	30.37	25.62	36.80	32.05	43.53	38.78	50.63	45.88	58.21	53.46	66.39	61.64	75.31	70.56	85.18	80.43	96.25	91.50
96"	96"	M-1960	7 1/4"	D-4-73	6 1/2"	5 1/2"	6 1/4"	4 1/2"	13.04	7.66	19.39	14.01	25.85	20.48	32.47	27.09	39.34	33.97	46.51	41.14	54.09	48.72	62.18	56.80	70.90	65.53	80.41	75.03	90.94	85.56	102.75	97.38
102"	102"	M-3836	9"	D-4-73	7 1/2"	5 1/2"	6 1/4"	4 1/2"	13.44	9.56	20.18	16.30	27.04	23.17	34.08	30.20	41.37	37.50	49.00	45.13	57.05	53.17	65.64	61.76	74.90	71.02	85.02	81.14	96.20	92.32	108.75	104.88
108"	108"	M-3836	9"	D-4-73	8"	5 1/2"	7 1/4"	4 1/2"	14.33	9.83	21.47	16.97	28.73	24.23	36.18	31.69	43.91	39.41	51.99	47.49	60.51	56.01	69.60	65.10	79.41	74.91	90.12	85.62	101.96	97.46	115.25	110.75

**LOCK JOINT PIPE COMPANY**  
 150 RUTLEDGE AVE. EAST ORANGE, N. J.

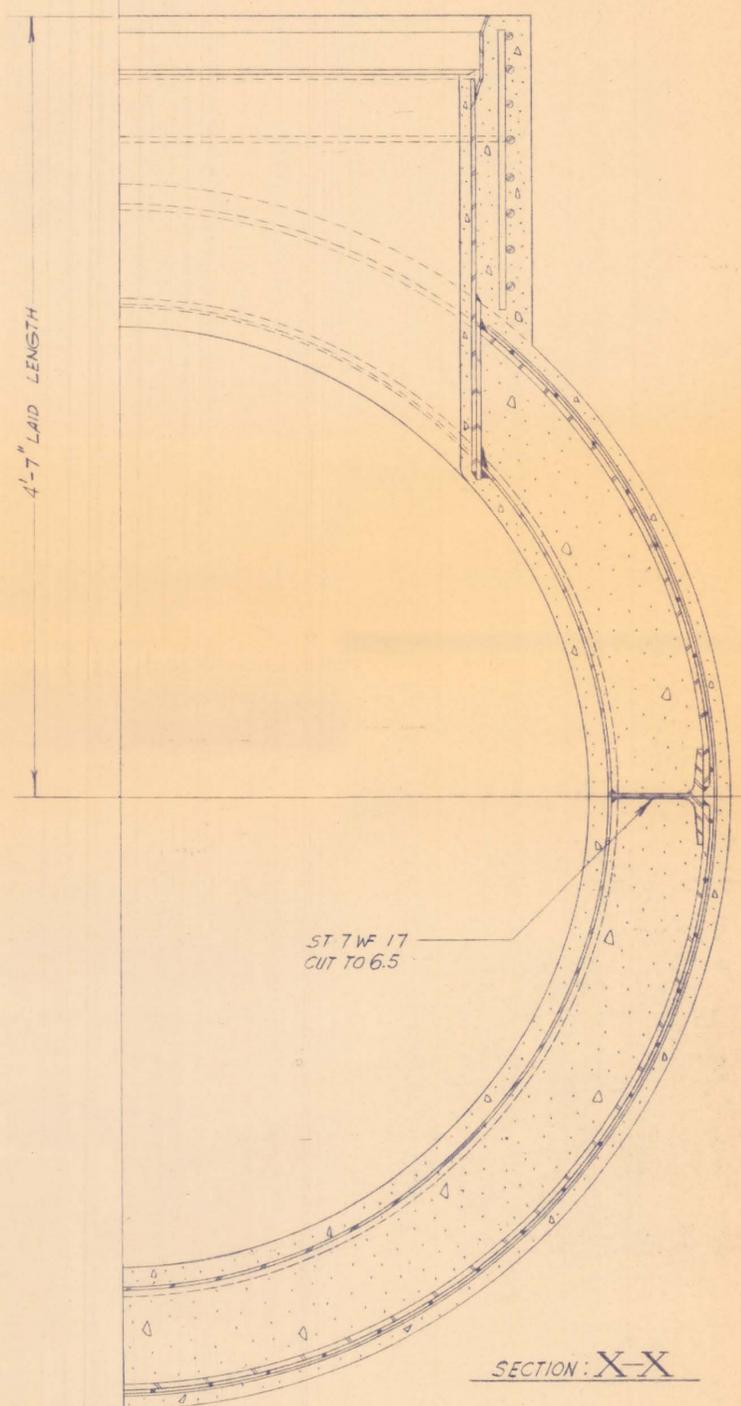
**RUBBER & STEEL JOINT BENDS**

DRAWN: Y.J.A. DATE: 7-13-50  
 CHECKED: [Signature] DATE: 7-28-50  
 APPROVED: [Signature] DATE: 7-28-50

SCALE: \_\_\_\_\_  
 DRAWING NUMBER: E-2-160  
 SHEET 3 OF 5



LONGITUDINAL SECTION



SECTION: X-X

CIRCUMFERENTIAL REINFORCEMENT  
1/2" DIA @ 2.50" C.C.

WELDED FABRIC OR WIRE MESH  
TACK WELDED TO SADDLE

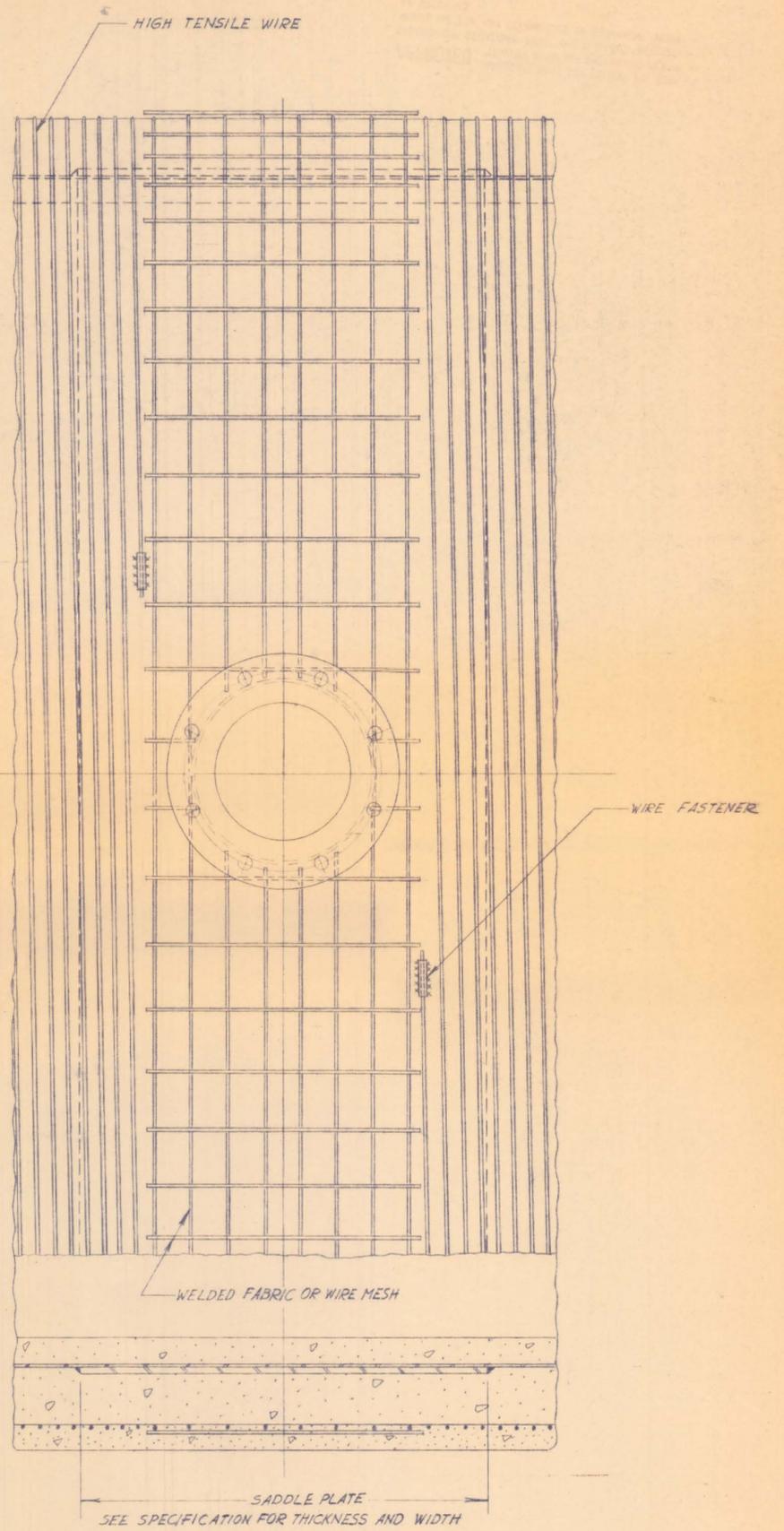
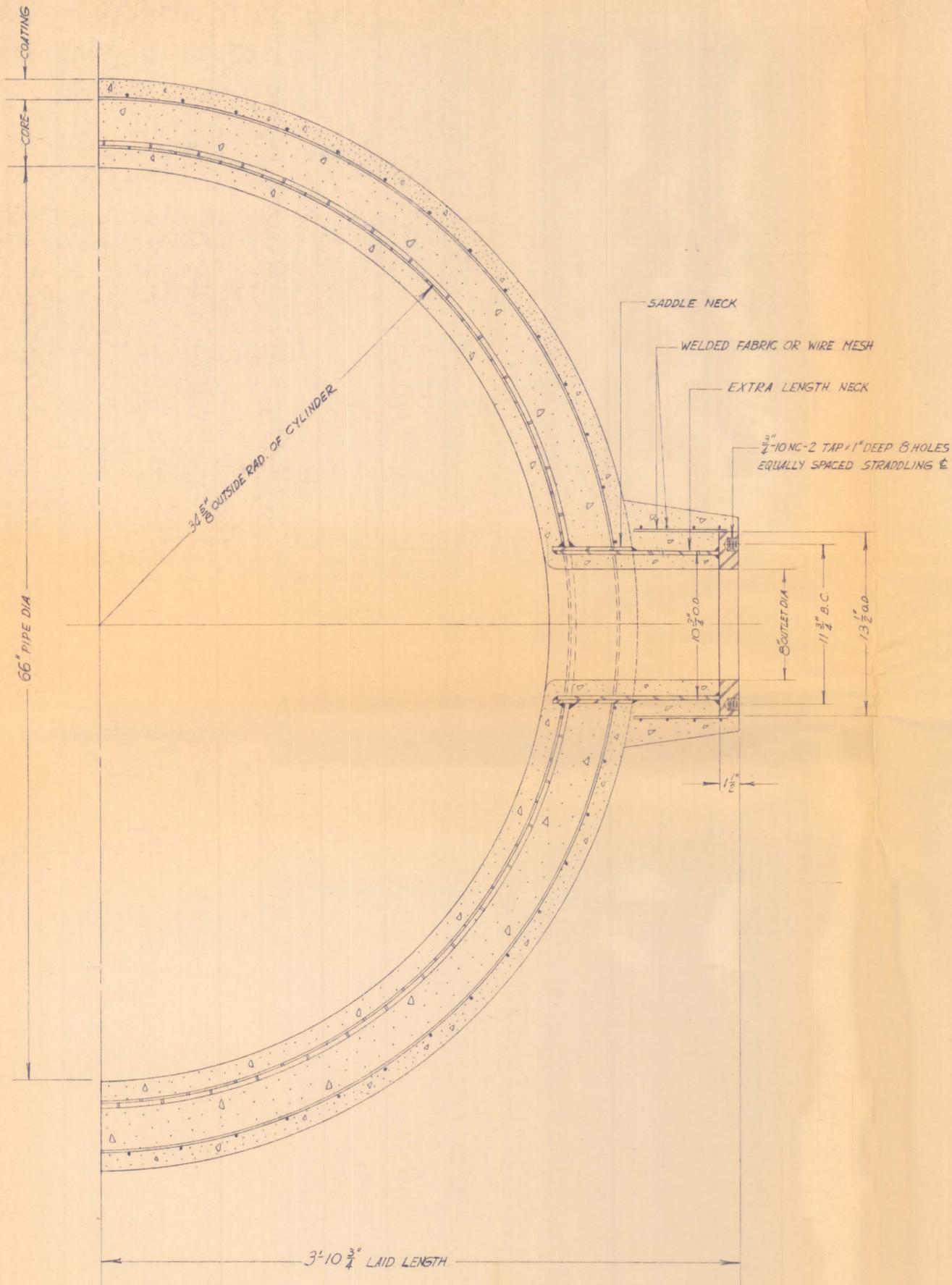
\* INCLUDES 3/8" CREEP

<b>LOCK JOINT PIPE COMPANY</b>			
150 RUTLEDGE AVE.		EAST ORANGE, N. J.	
66" x 66" x 48" TEE			
LJB x LJS x LJB			
CYLINDER PIPE-RUBBER AND STEEL JOINT			
SCALE: 1 1/2" = 1'-0"		DRAWING NUMBER	
DR. J.S.	3-9-55	APP. <i>PRJ</i>	3-29-55
CH. R.H.	3-11-55	APP.	
			REV. E-2-471-66"

REV.	DESCRIPTION	REV.	DESCRIPTION

FOR DETAILS SEE SPECIFICATION SHEET NO.

WIC-SS-1-2

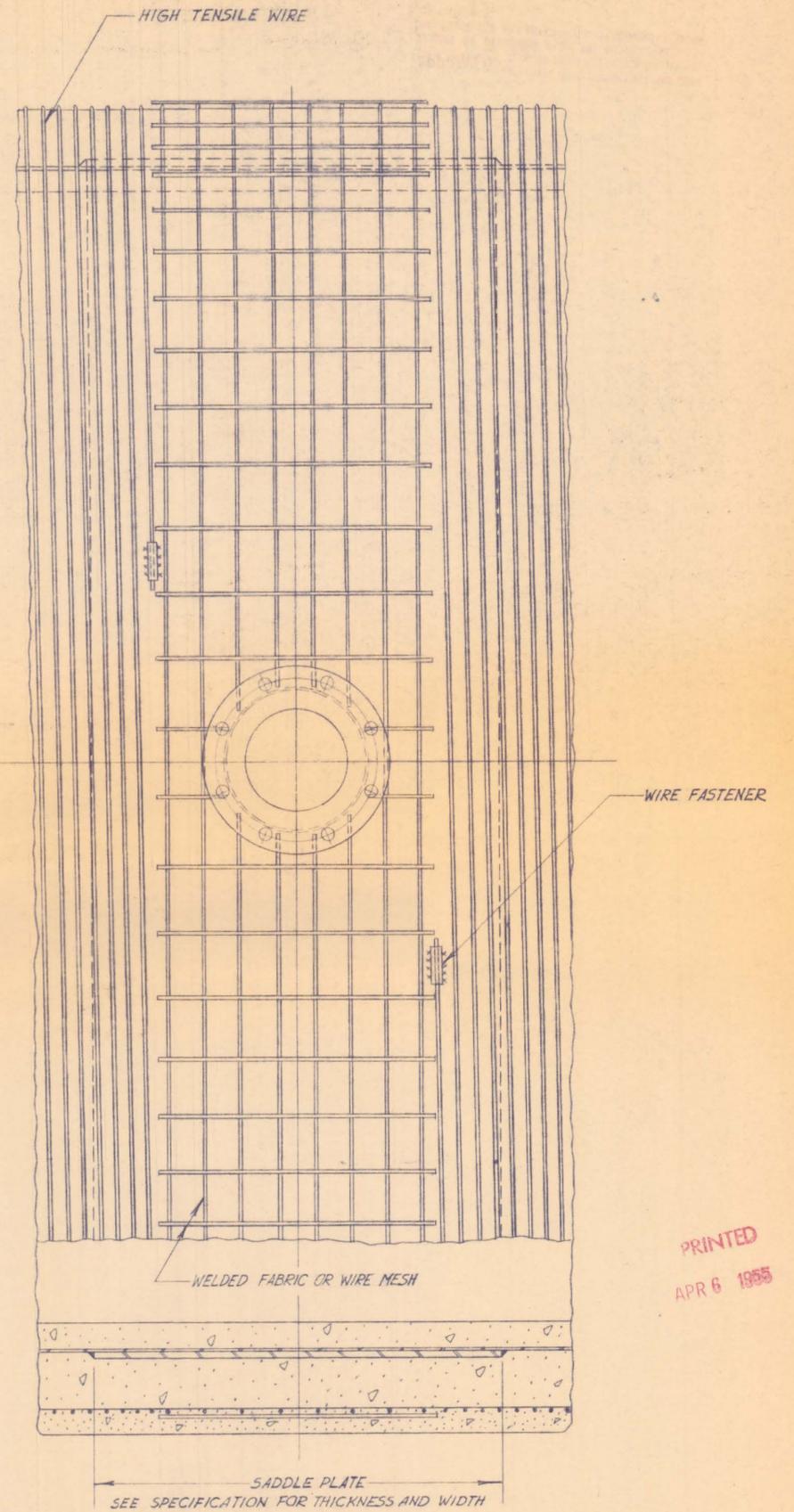
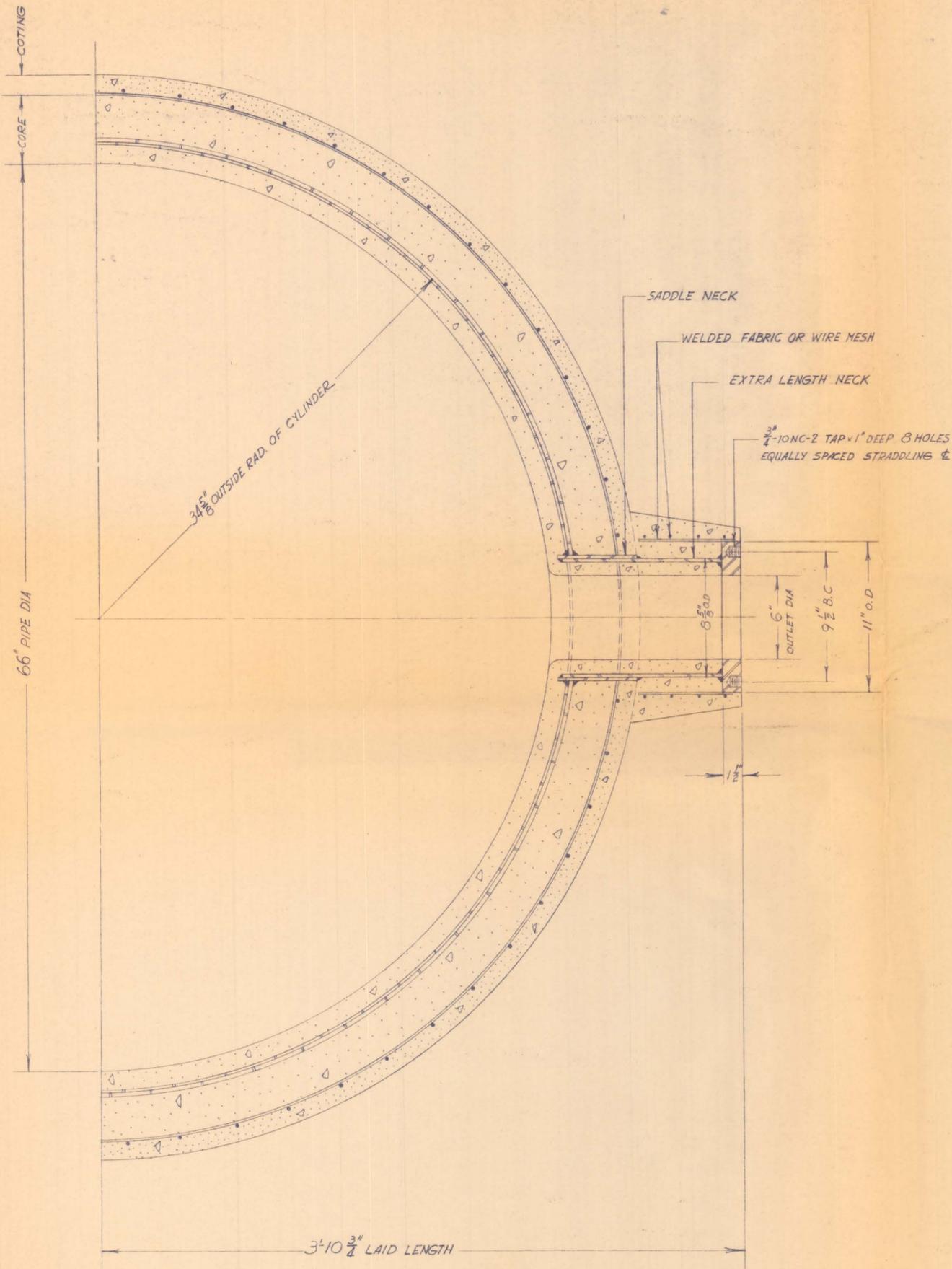


NOTE:  
 TAPPED HOLES AND DIAMETERS SAME AS  
 A.S.A. 125\* C.I. PIPE & A.S.A. 150\*  
 STEEL FLANGES

<b>LOCK JOINT PIPE COMPANY</b>			
150 RUTLEDGE AVE.		EAST ORANGE, N. J.	
8" TAPPED FLANGE OUTLET IN			
66" PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE			
SCALE: 2" = 1'-0"		DRAWING NUMBER	REV.
DR. J.S.	3-7-55	APP. <i>BAH</i>	9-23-55
CH. <i>BAH</i>	3-10-55	APP.	
			E-2-731-66"

FOR DETAILS SEE SPECIFICATION SHEET NO. **WIC-SS-1-2**

REV.	DESCRIPTION	REV.	DESCRIPTION



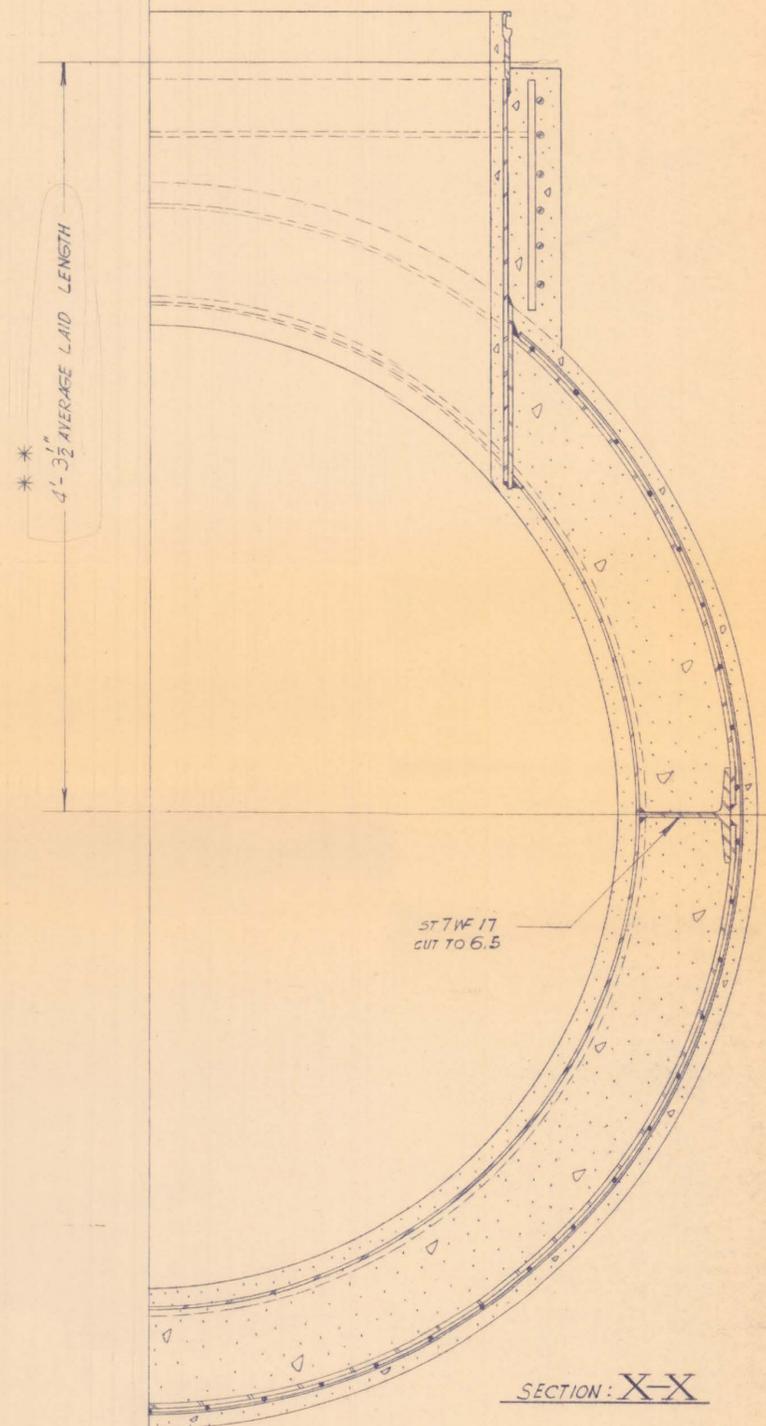
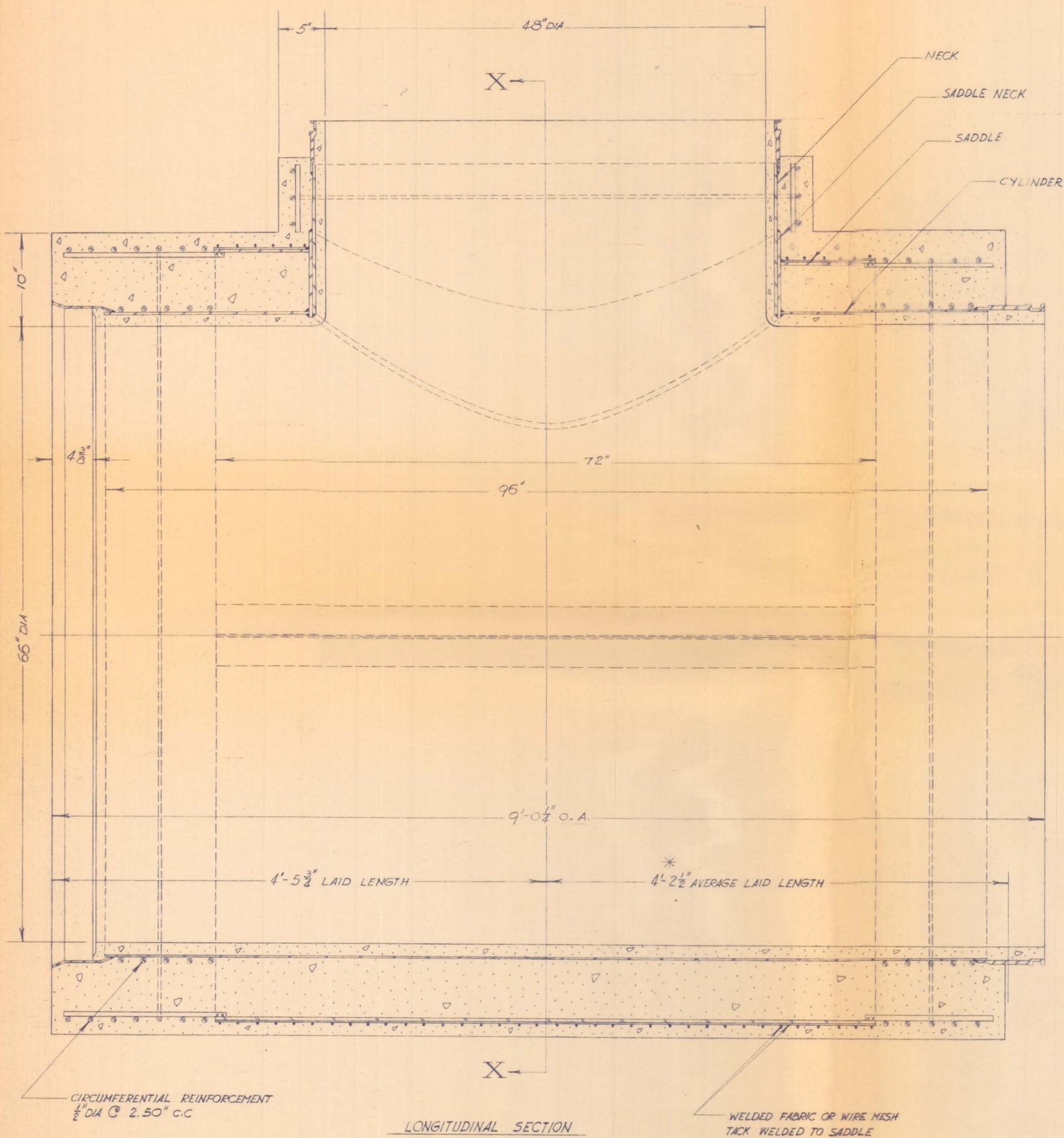
PRINTED  
APR 6 1955

NOTE:  
TAPPED HOLES AND DIAMETERS SAME AS  
A.S.A. 125\* C.I. PIPE & A.S.A. 150\*  
STEEL FLANGES

<b>LOCK JOINT PIPE COMPANY</b>			
150 RUTLEDGE AVE.		EAST ORANGE, N. J.	
<b>6" TAPPED FLANGE OUTLET IN</b>			
<b>66" PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE</b>			
SCALE: 2" = 1'-0"		DRAWING NUMBER	
DR. J. S.	3-7-55	APP. RAY	3-23-55
CH. RAY	3-10-55	APP.	
			REV. E-2-782-66"

FOR DETAILS SEE SPECIFICATION SHEET NO. **WJL 55-1-2**

REV.	DESCRIPTION	REV.	DESCRIPTION

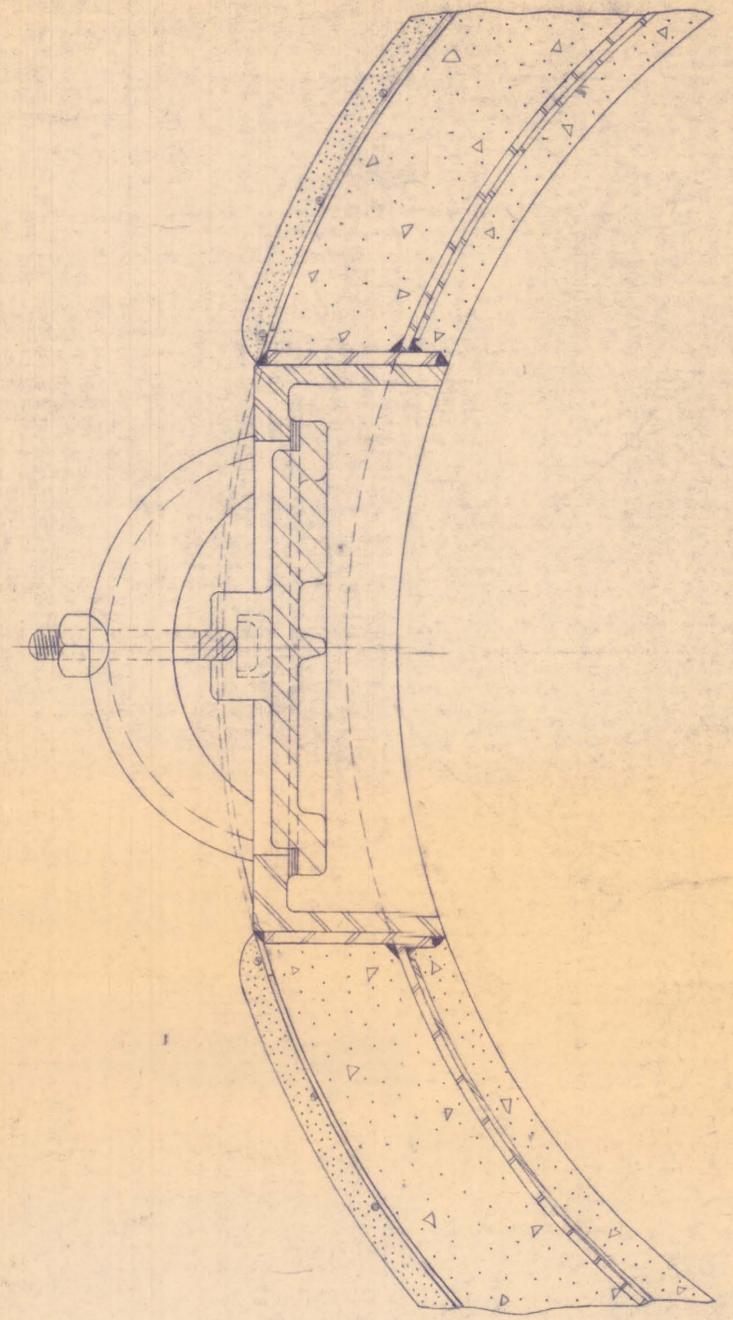
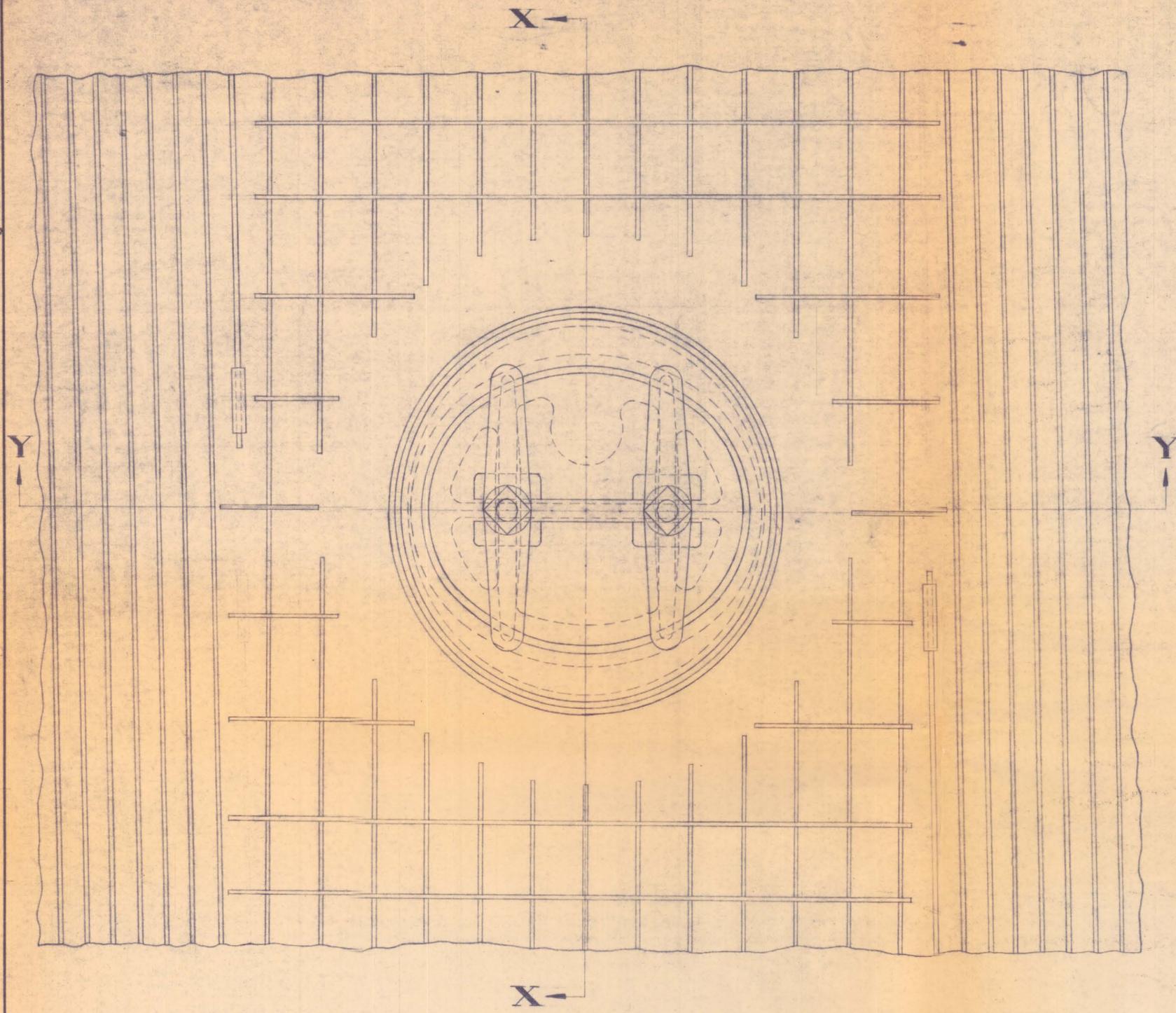


\* } INCLUDES 3/8" GREEP  
\*\*

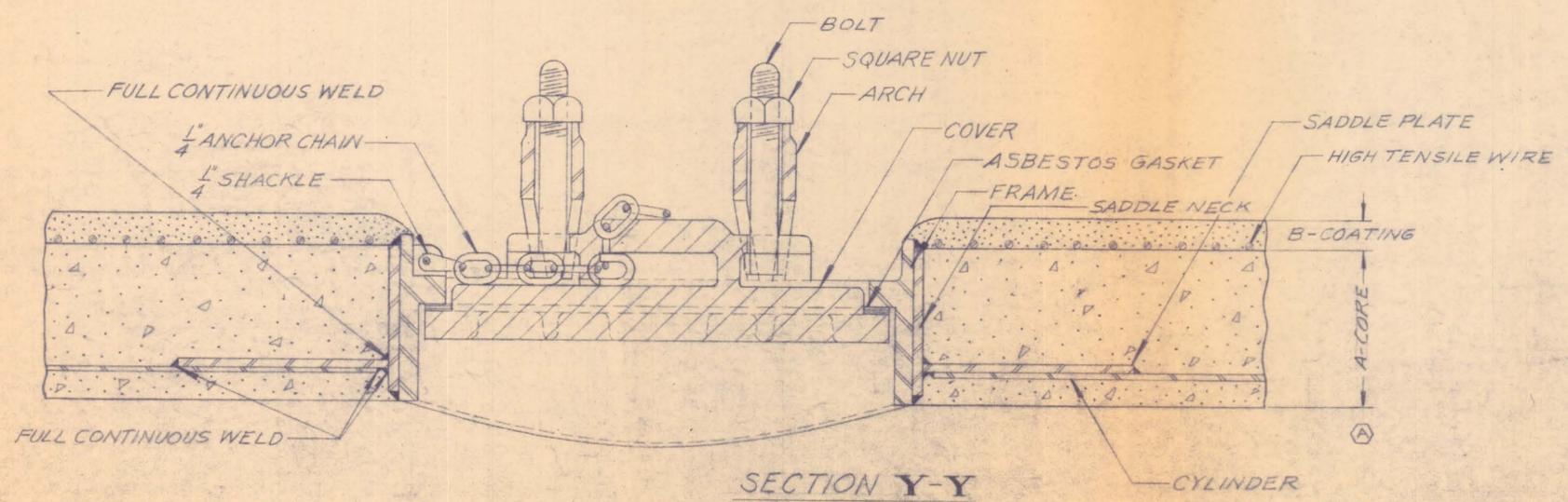
<b>LOCK JOINT PIPE COMPANY</b>			
150 RUTLEDGE AVE. EAST ORANGE, N. J.			
66" x 66" x 48" TEE			
LJB x LJS x LJS			
CYLINDER PIPE-RUBBER AND STEEL JOINT			
SCALE: 1 1/2" = 1'-0"	DRAWING NUMBER		REV.
DR. J. S.	3-11-55	APP. <i>[Signature]</i>	3-28-55
CH. <i>[Signature]</i>	3-11-55	APP.	E-2-800-66"

REV.	DESCRIPTION	REV.	DESCRIPTION

FOR DETAILS SEE SPECIFICATION SHEET NO. *W/C-55-1-2*



SECTION X-X

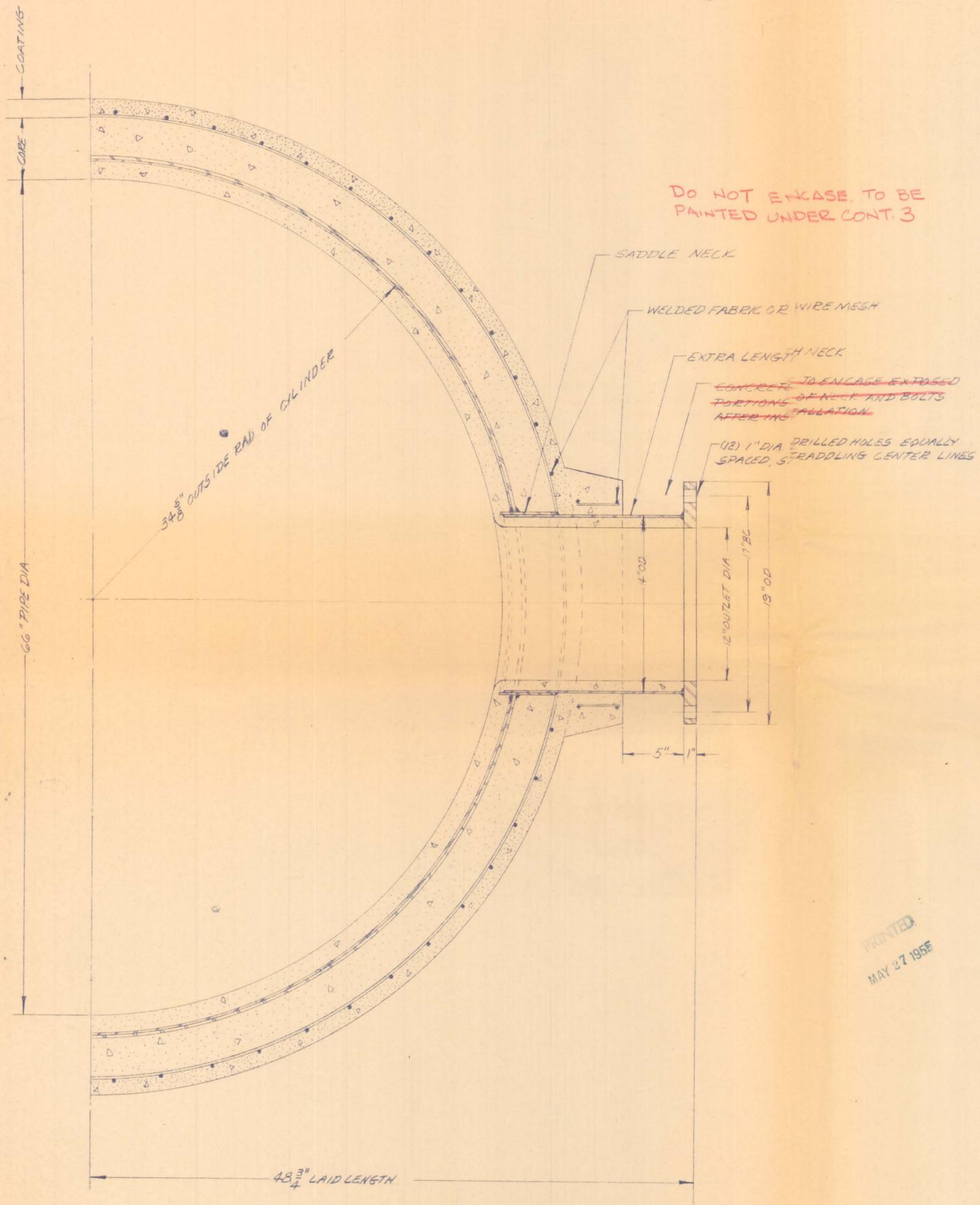


SECTION Y-Y

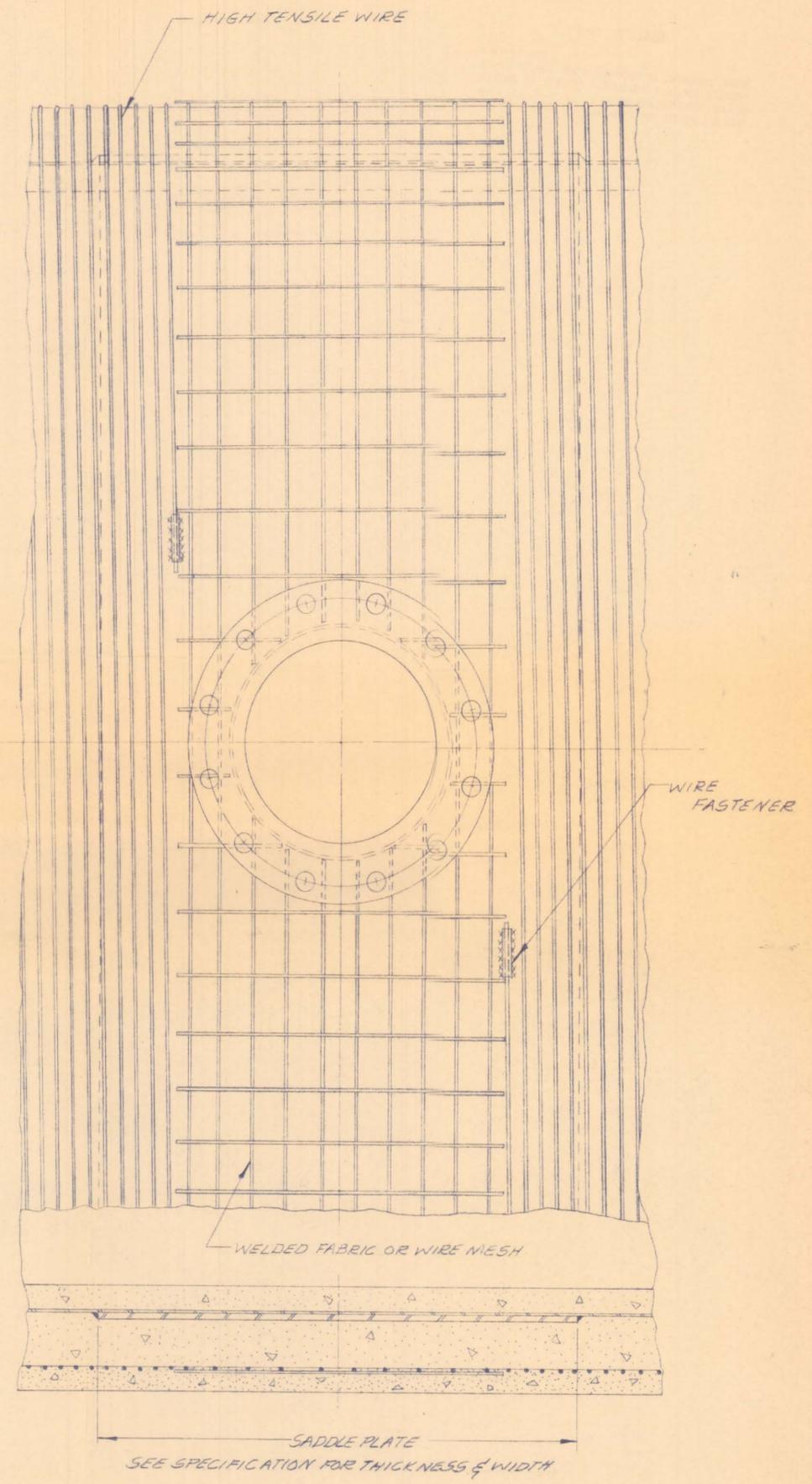
<b>LOCK JOINT PIPE COMPANY</b>			
150 RUTLEDGE AVE.		EAST ORANGE, N. J.	
TYPICAL MANHOLE ASSEMBLY IN PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE			
SCALE:		DRAWING NUMBER	REV.
DR. R.W.W. 3-9-54	APP. <i>[Signature]</i> 3-12-54	E-2-857	A
CH. <i>ML</i> 3-12-54	APP.	SHEET 1 OF 2	

FOR DETAILS SEE SPECIFICATION SHEET NO. XIC-SS-12

REV.	DESCRIPTION	REV.	DESCRIPTION
A	REMOVED 42" DIA. W.W. 5-19-94		



DO NOT ENCASE TO BE PAINTED UNDER CONT. 3



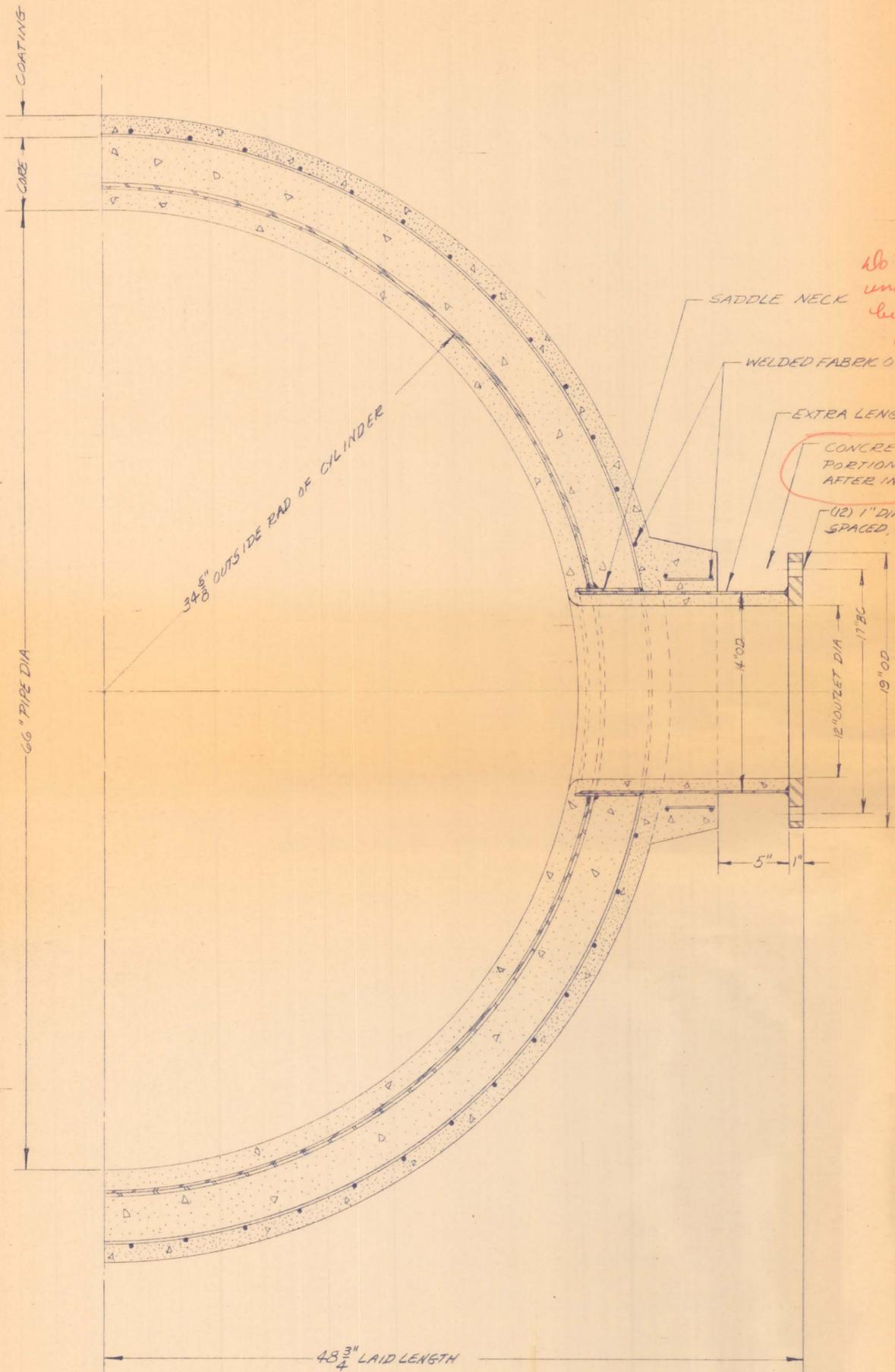
PRINTED  
MAY 27 1955

NOTE  
DRILLING IS A.S.A. 150# STANDARD  
FOR STEEL FLANGES

<b>LOCK JOINT PIPE COMPANY</b>			
150 RUTLEDGE AVE.		EAST ORANGE, N. J.	
12" DRILLED FLANGE OUTLET IN 66" PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE			
SCALE:	2" = 1'-0"	DRAWING NUMBER	REV.
DR. G.P.	3-11-55	APP. <i>BOA</i> 3-25-55	
CH. <i>DLN</i>	3-21-55	APP.	E-2-932-66"

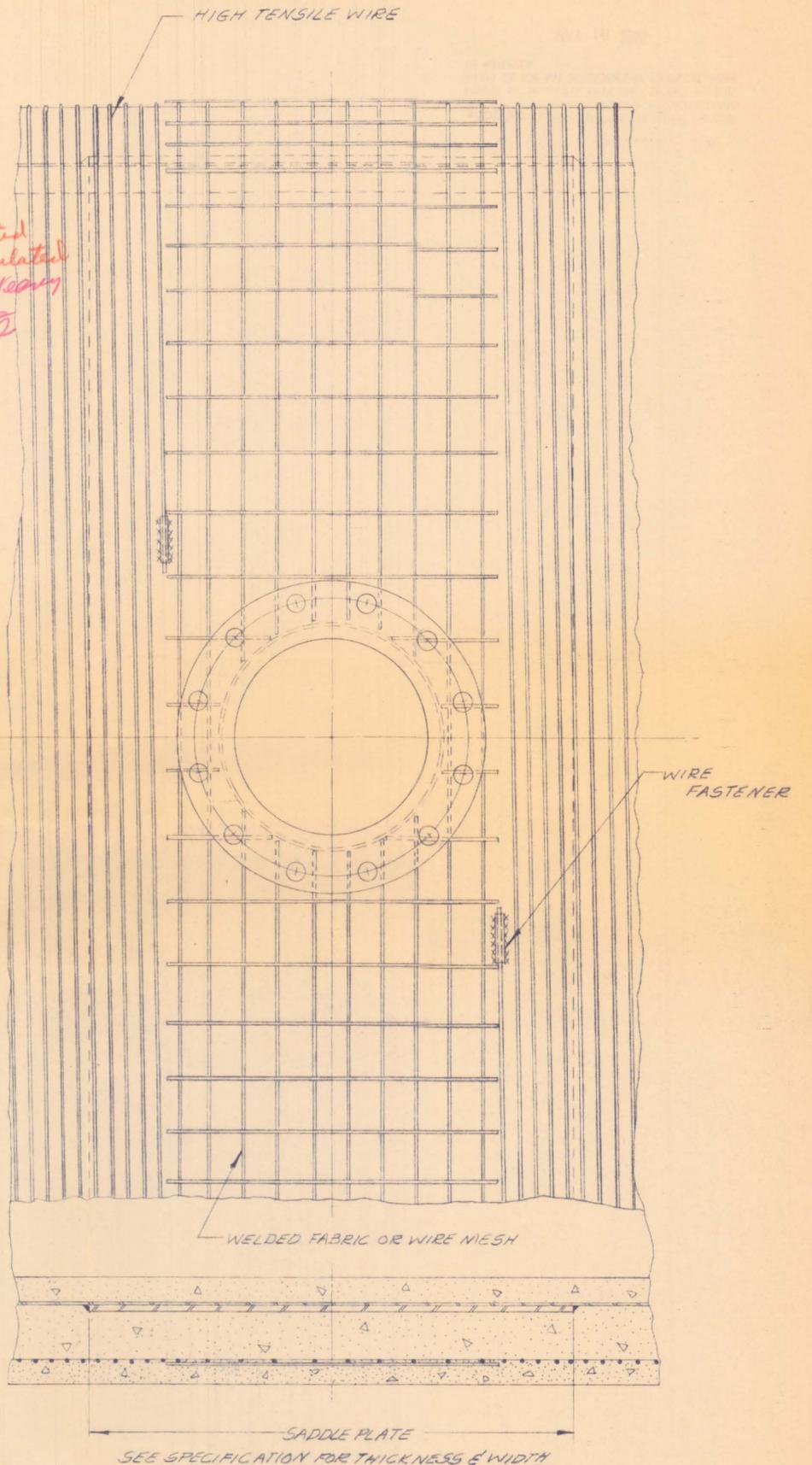
FOR DETAILS SEE SPECIFICATION SHEET NO. *WIC-55-1-2*

REV.	DESCRIPTION	REV.	DESCRIPTION



*do not encase. To be painted under contract 3 as stipulated by Spec. 3-5 of Cont 3. Heavy up. All neck as required*

SADDLE NECK  
 WELDED FABRIC OR WIRE MESH  
 EXTRA LENGTH NECK  
 CONCRETE TO ENCASE EXPOSED PORTIONS OF NECK AND BOLTS AFTER INSTALLATION  
 (12) 1" DIA DRILLED HOLES EQUALLY SPACED, STRADDLING CENTER LINES



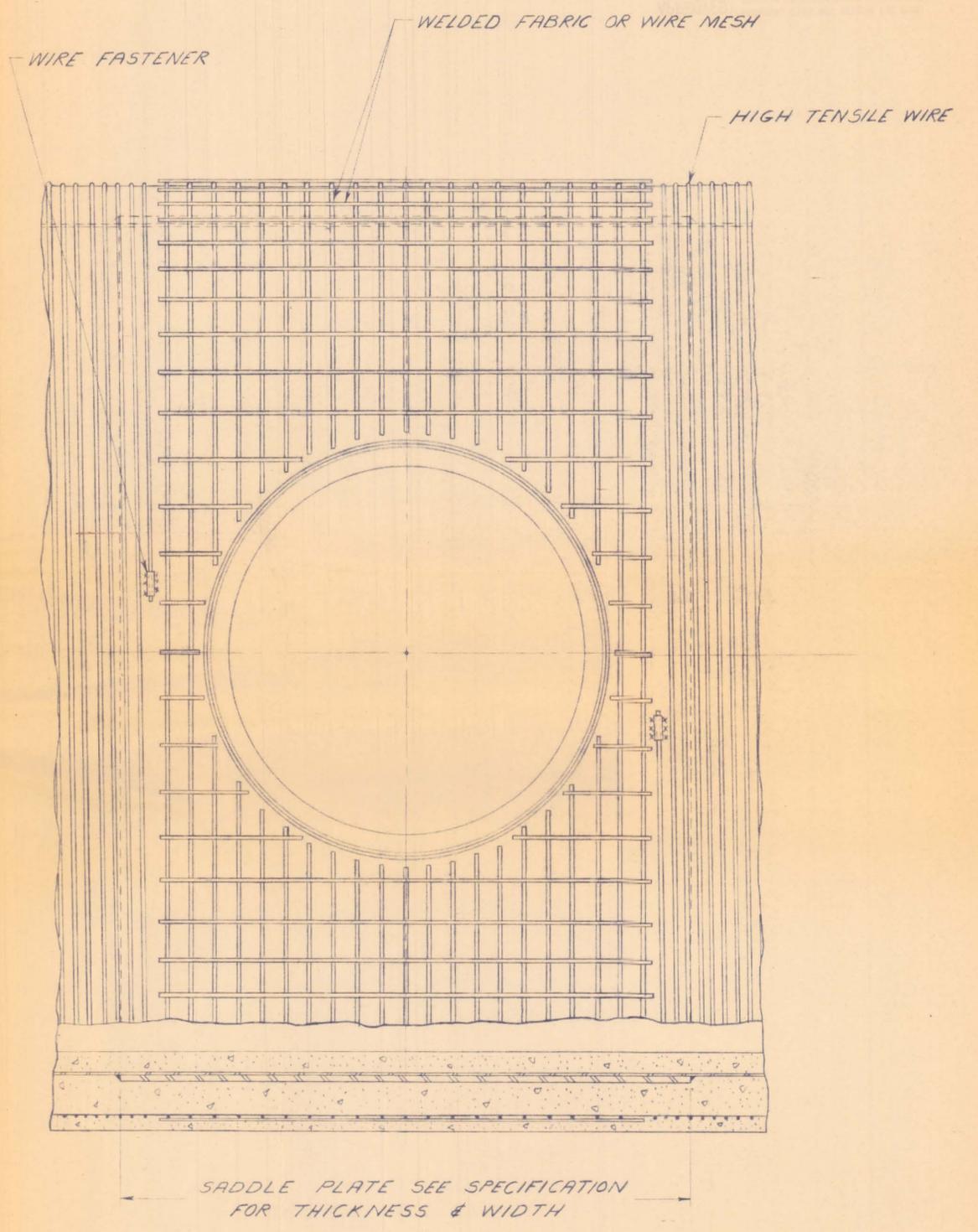
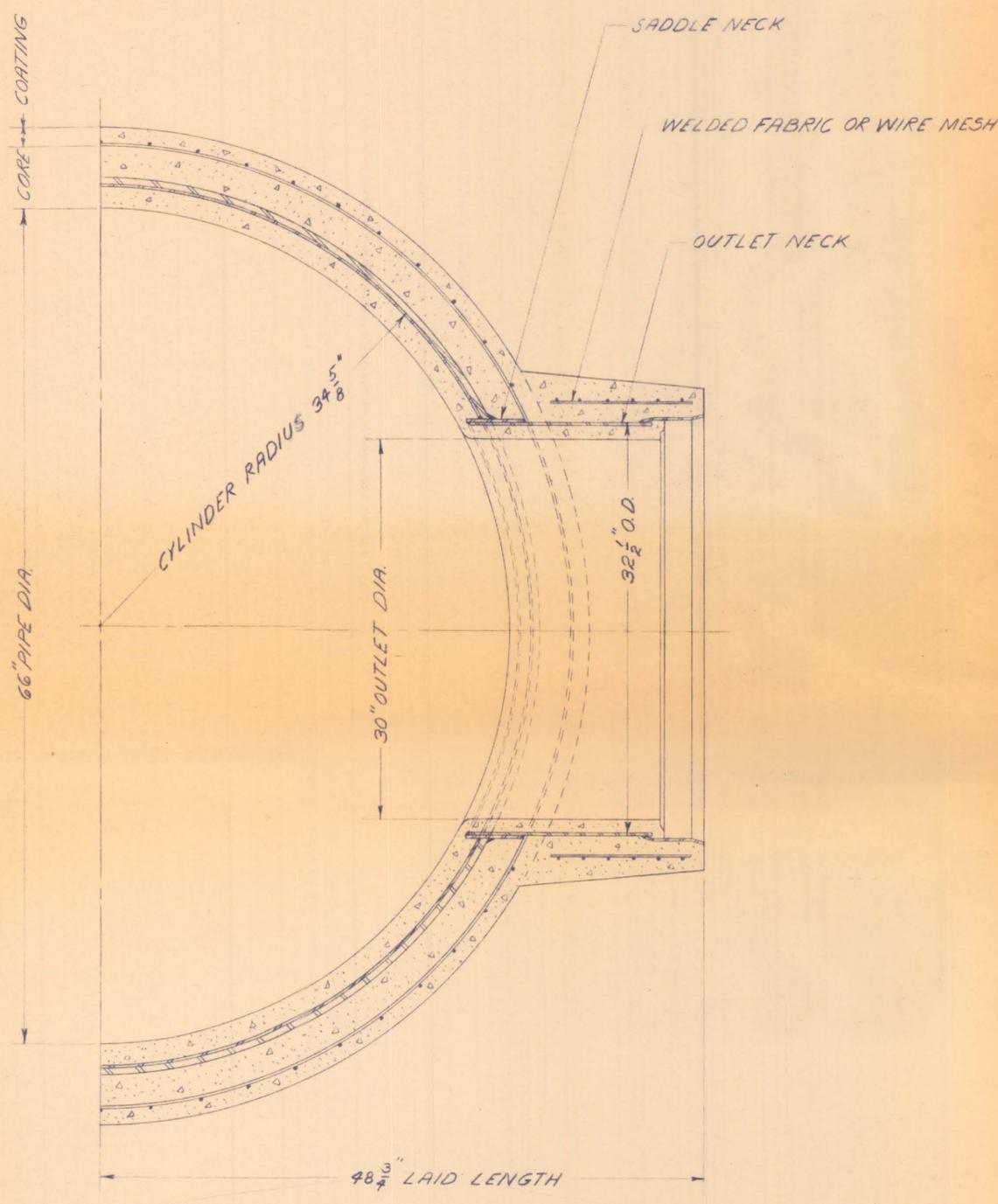
NOTE  
 DRILLING IS A.S.A. 150# STANDARD FOR STEEL FLANGES

<b>LOCK JOINT PIPE COMPANY</b>			
150 RUTLEDGE AVE.		EAST ORANGE, N. J.	
12" DRILLED FLANGE OUTLET IN 66" PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE			
SCALE:	2" = 1'-0"	DRAWING NUMBER	REV.
DR. G.P.	3-11-55	APP. <i>BAW</i>	3-25-55
CH. RCH	3-21-55	APP.	E-2-932-66"

FOR DETAILS SEE SPECIFICATION SHEET NO.

*WIC-SS-1-2*

REV.	DESCRIPTION	REV.	DESCRIPTION

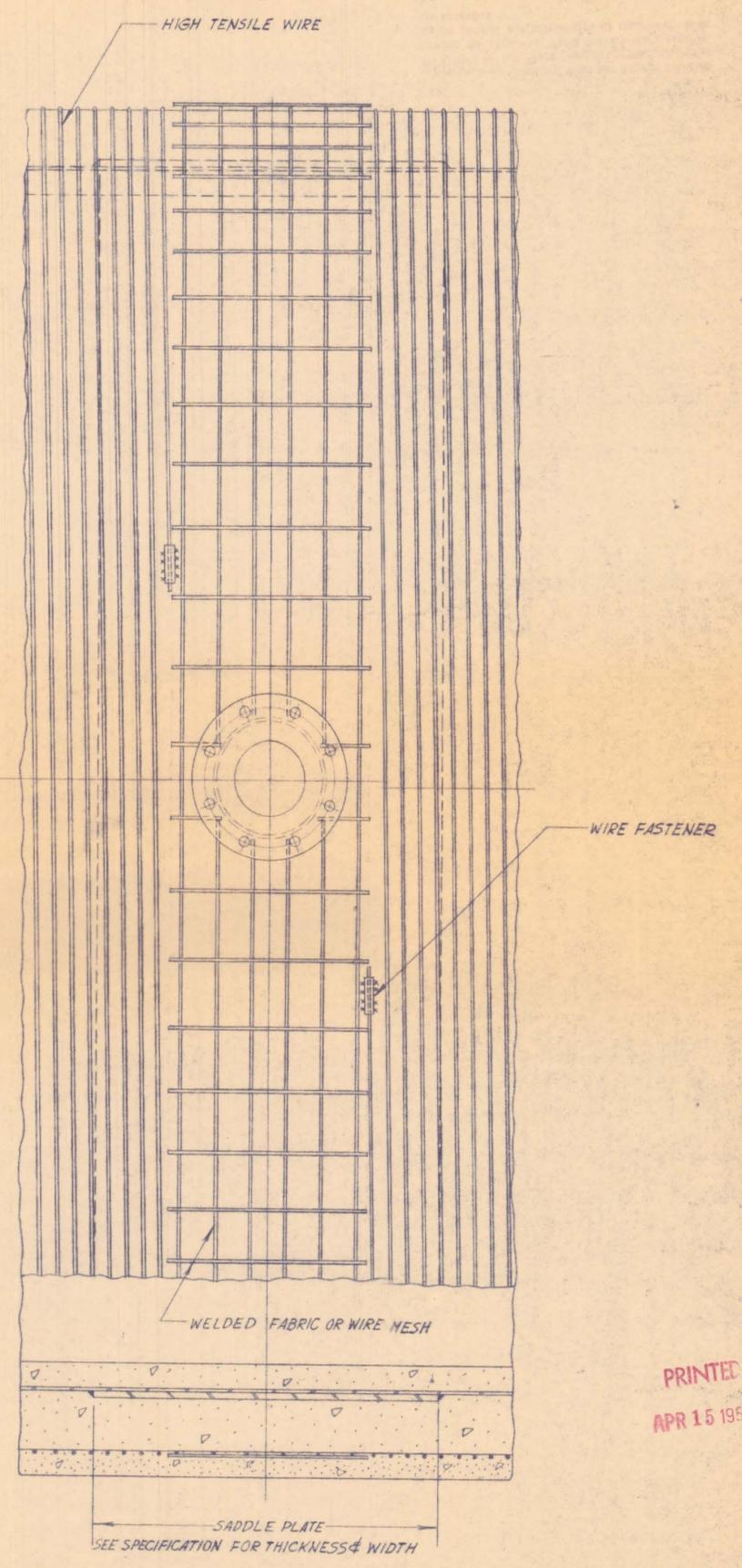
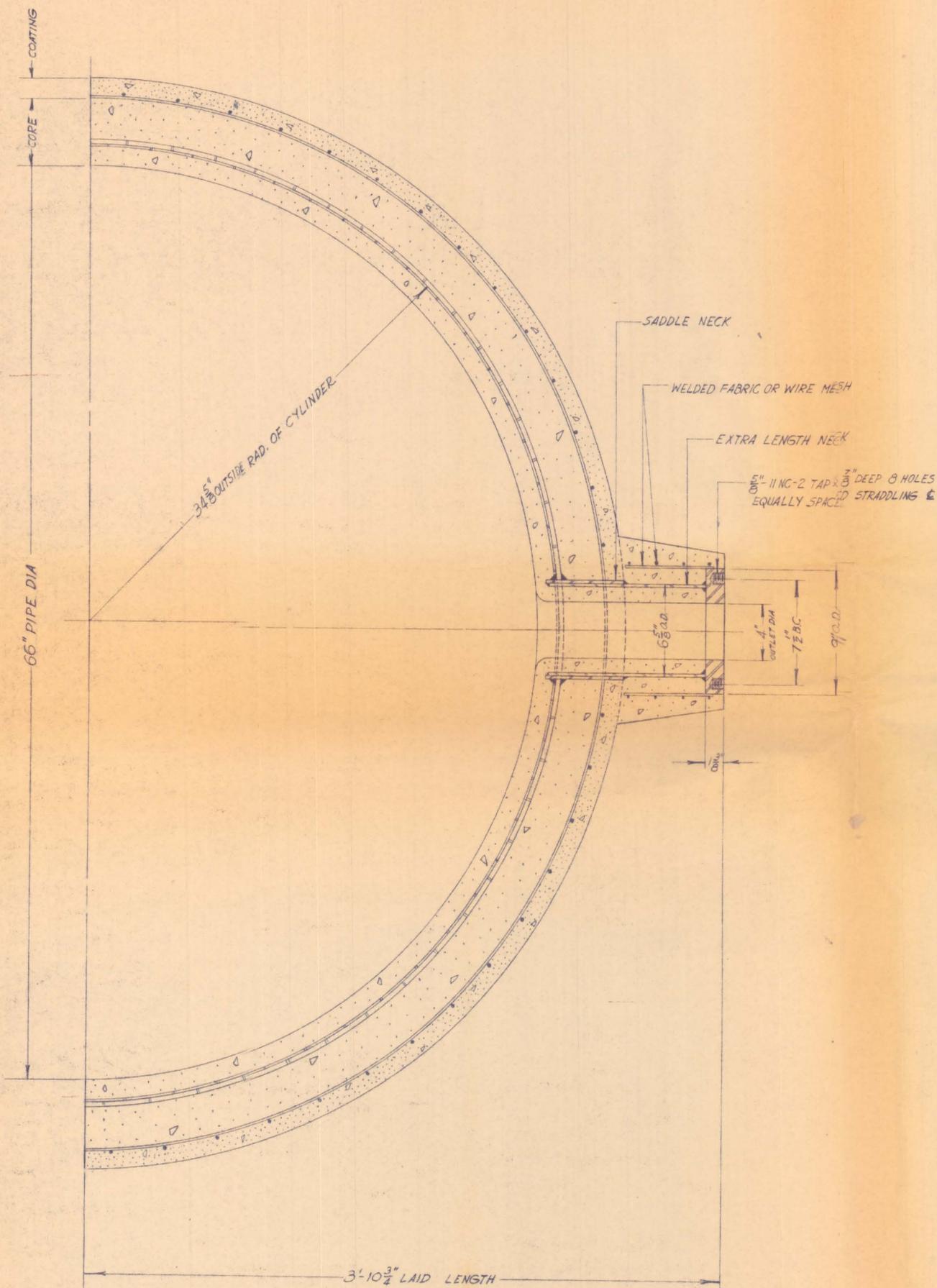


48 3/4  
48.75  
7 2/6  
56.01

<b>LOCK JOINT PIPE COMPANY</b> 150 RUTLEDGE AVE. EAST ORANGE, N. J.			
30" R#5 BELL OUTLET IN 66" PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE			
SCALE:	1 1/2" = 1'0"	DRAWING NUMBER	REV.
DR. F.M.P.	3-8-55	APP. <i>LOA</i>	3-28-55
CH. <i>DLH</i>	3-11-55	APP.	
			E-2-943-66"

FOR DETAILS SEE SPECIFICATION SHEET NO. **WIC-SS-1-2**

REV.	DESCRIPTION	REV.	DESCRIPTION



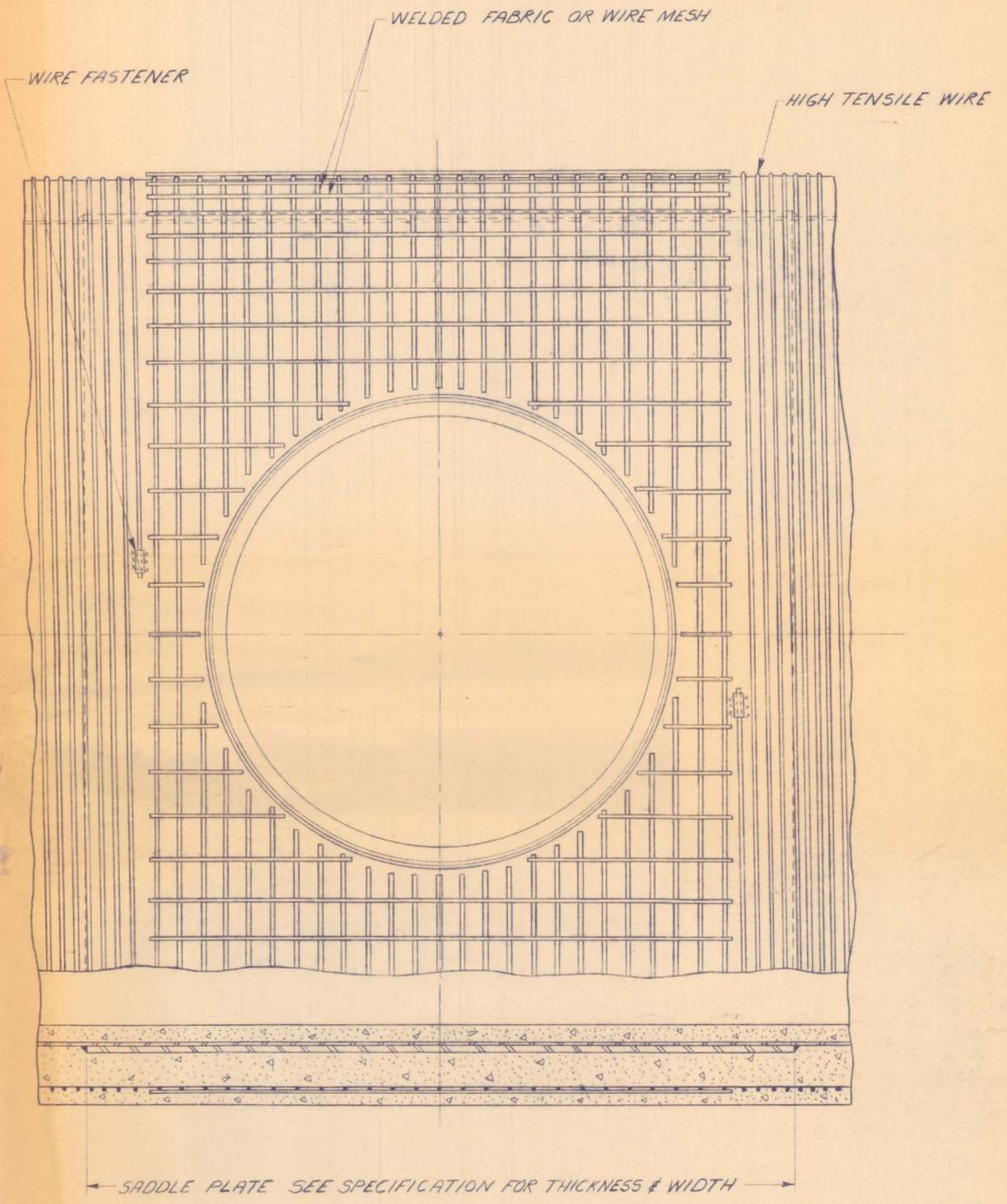
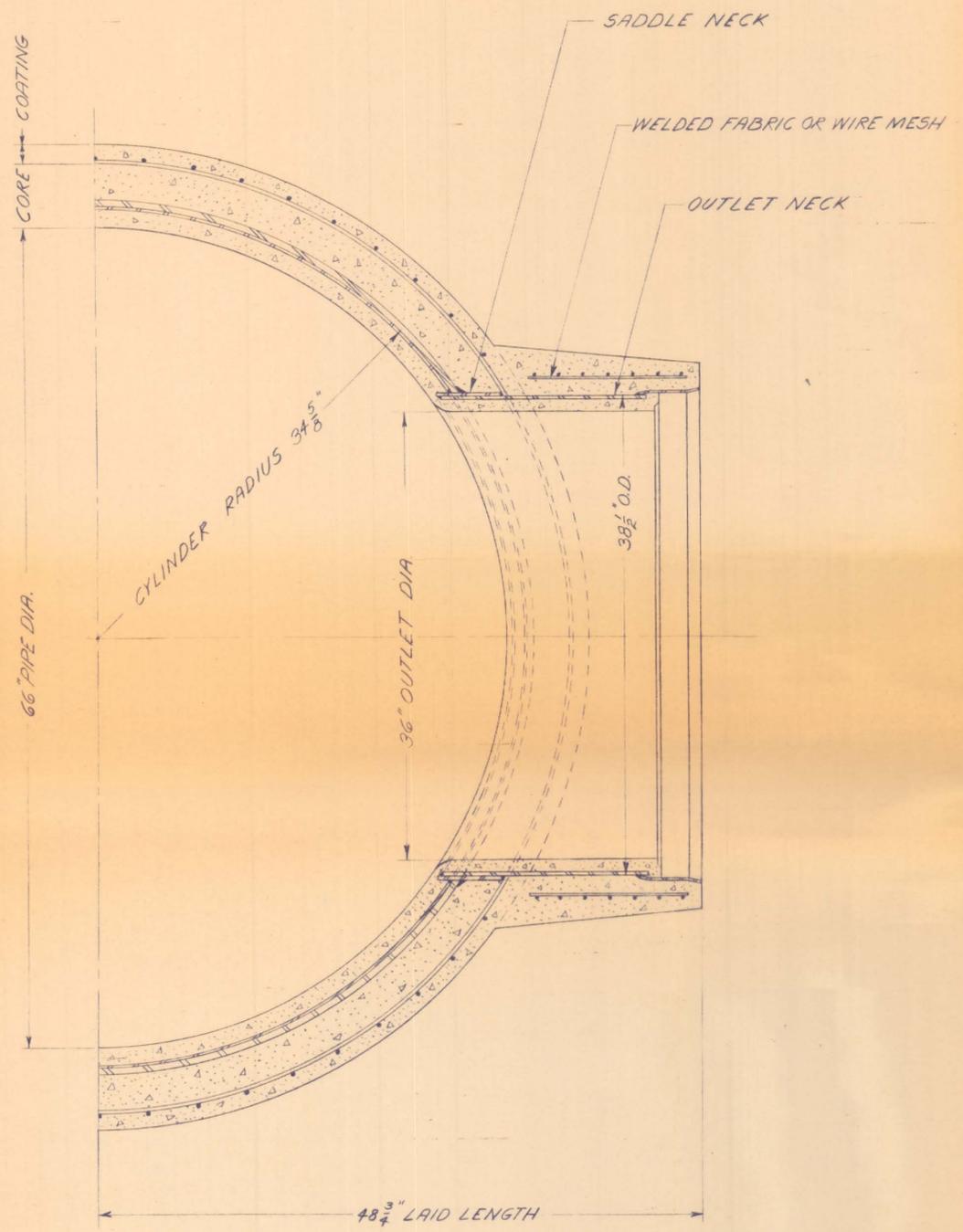
PRINTED  
APR 15 1955

NOTE:  
TAPPED HOLES AND DIAMETERS SAME AS  
A.S.A. 125# C.I. PIPE & A.S.A. 150#  
STEEL FLANGES

<b>LOCK JOINT PIPE COMPANY</b>			
150 RUTLEDGE AVE.		EAST ORANGE, N. J.	
4" TAPPED FLANGE OUTLET IN			
66" PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE			
SCALE: 2" = 1'-0"		DRAWING NUMBER	REV.
DR. J.S.	3-8-55	APP. <i>Boj</i>	3-23-55
CH. <i>Boj</i>	3-10-55	APP.	
			E-2-944-66"

FOR DETAILS SEE SPECIFICATION SHEET NO. *WLC 55-1-2*

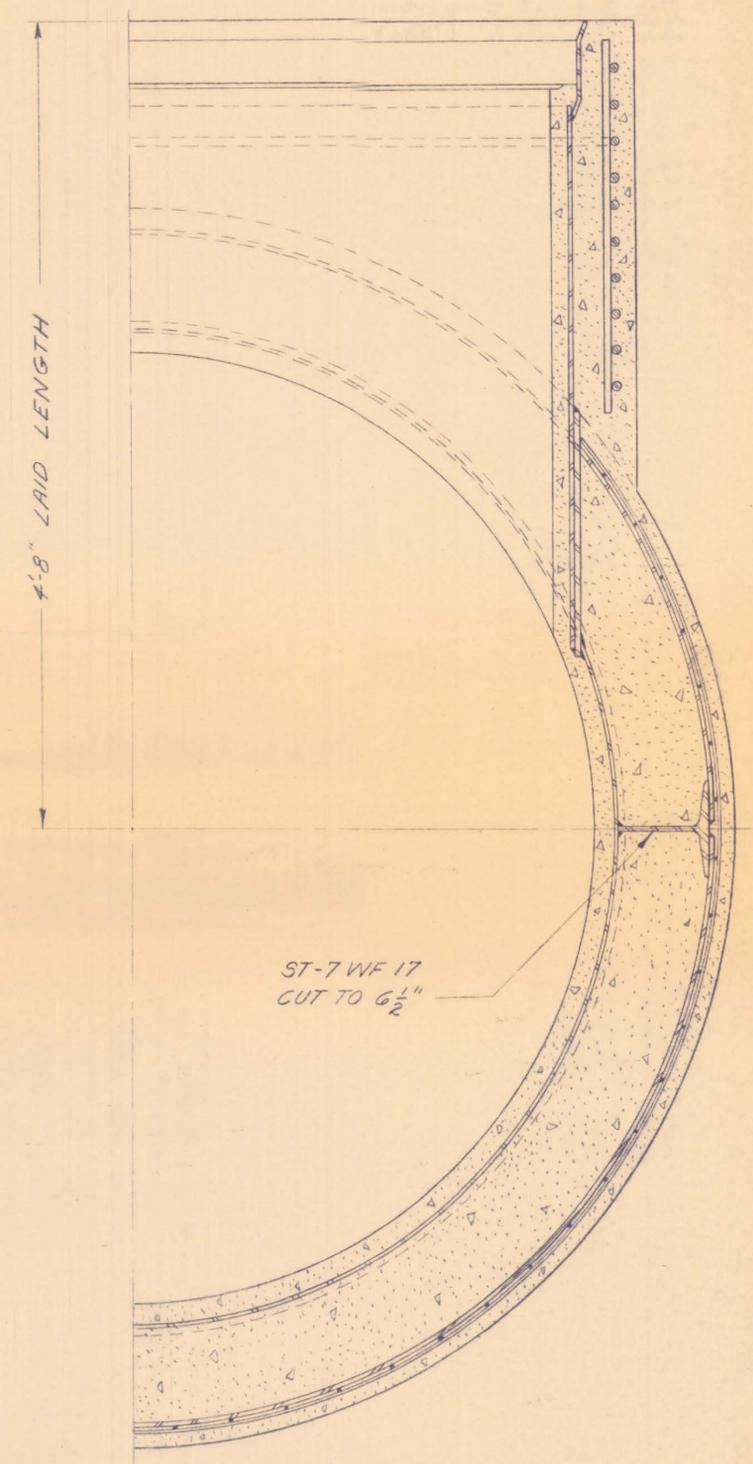
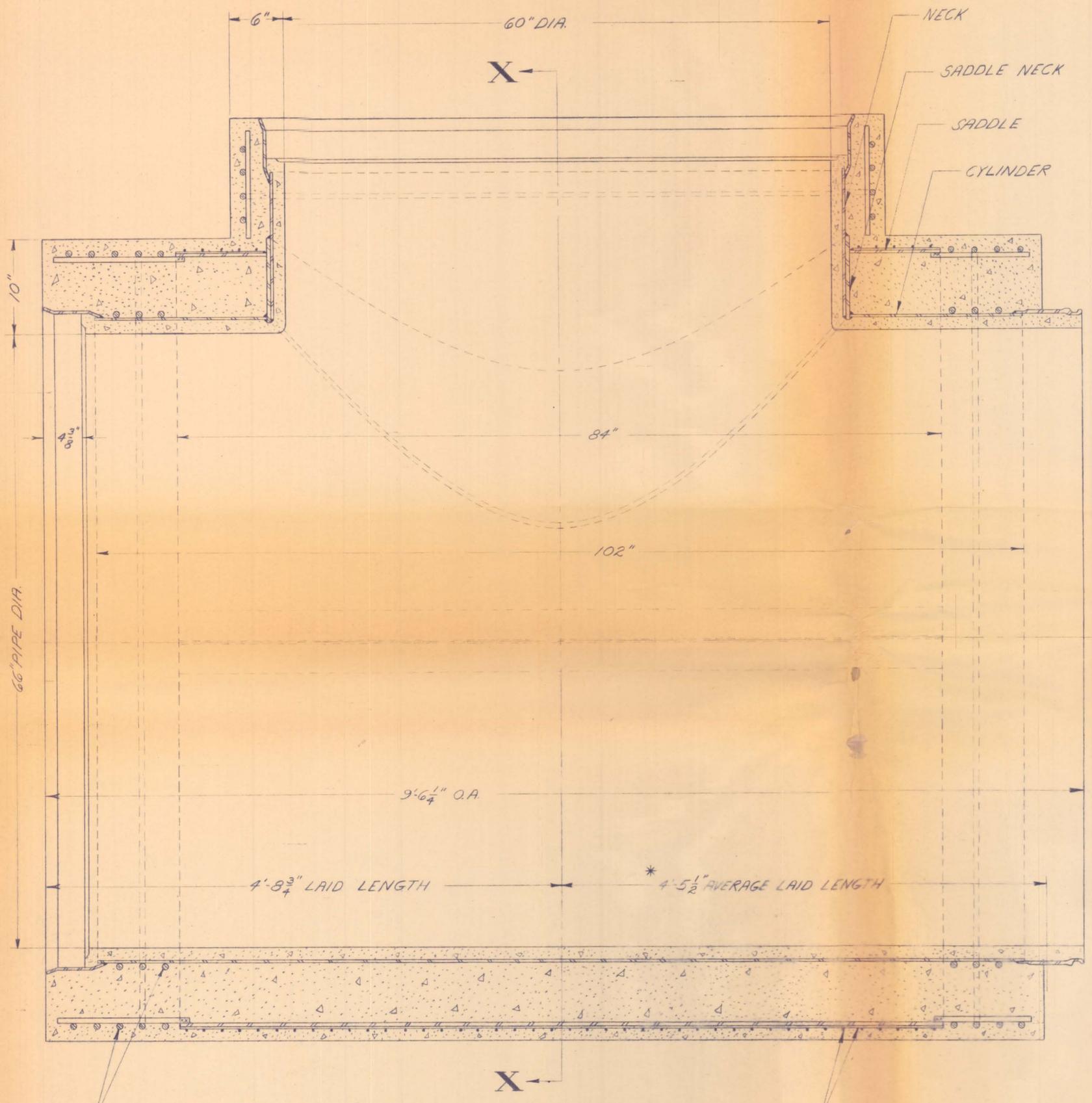
REV.	DESCRIPTION	REV.	DESCRIPTION



<b>LOCK JOINT PIPE COMPANY</b>			
150 RUTLEDGE AVE.		EAST ORANGE, N. J.	
36" R#5 BELL OUTLET IN 66" PRESTRESSED CONCRETE EMBEDDED CYLINDER PIPE			
SCALE:	1 1/2" = 1'0"	DRAWING NUMBER	REV.
DR. F.M.P.	9-9-55	APP. B.A.H.	3-23-55
CH. B.A.H.	3-11-55	APP.	
			E-2-945-66"

FOR DETAILS SEE SPECIFICATION SHEET NO. **WIC-SS-1-2**

REV.	DESCRIPTION	REV.	DESCRIPTION



CIRCUMFERENTIAL REINFORCEMENT  
 $\frac{1}{2}$ " DIA. @ 2.50" C.C.

WELDED FABRIC OR WIRE MESH  
 TACK WELDED TO SADDLE

LONGITUDINAL SECTION

SECTION X-X

\*INCLUDES  $\frac{3}{8}$ " CREEP

<b>LOCK JOINT PIPE COMPANY</b>			
150 RUTLEDGE AVE.		EAST ORANGE, N. J.	
66" x 66" x 60" TEE LJB x LJS x LJB CYLINDER PIPE-RUBBER & STEEL JOINT			
SCALE:	$\frac{1}{2}$ " = 1'0"	DRAWING NUMBER	REV.
DR. F.M.P.	3-11-55	APP. <i>AAH</i>	3-23-55
CH. <i>ROA</i>	3-11-55	APP.	
			E-2-947-66"

FOR DETAILS SEE SPECIFICATION SHEET NO. *WIC-SS-1-2*

REV.	DESCRIPTION	REV.	DESCRIPTION