

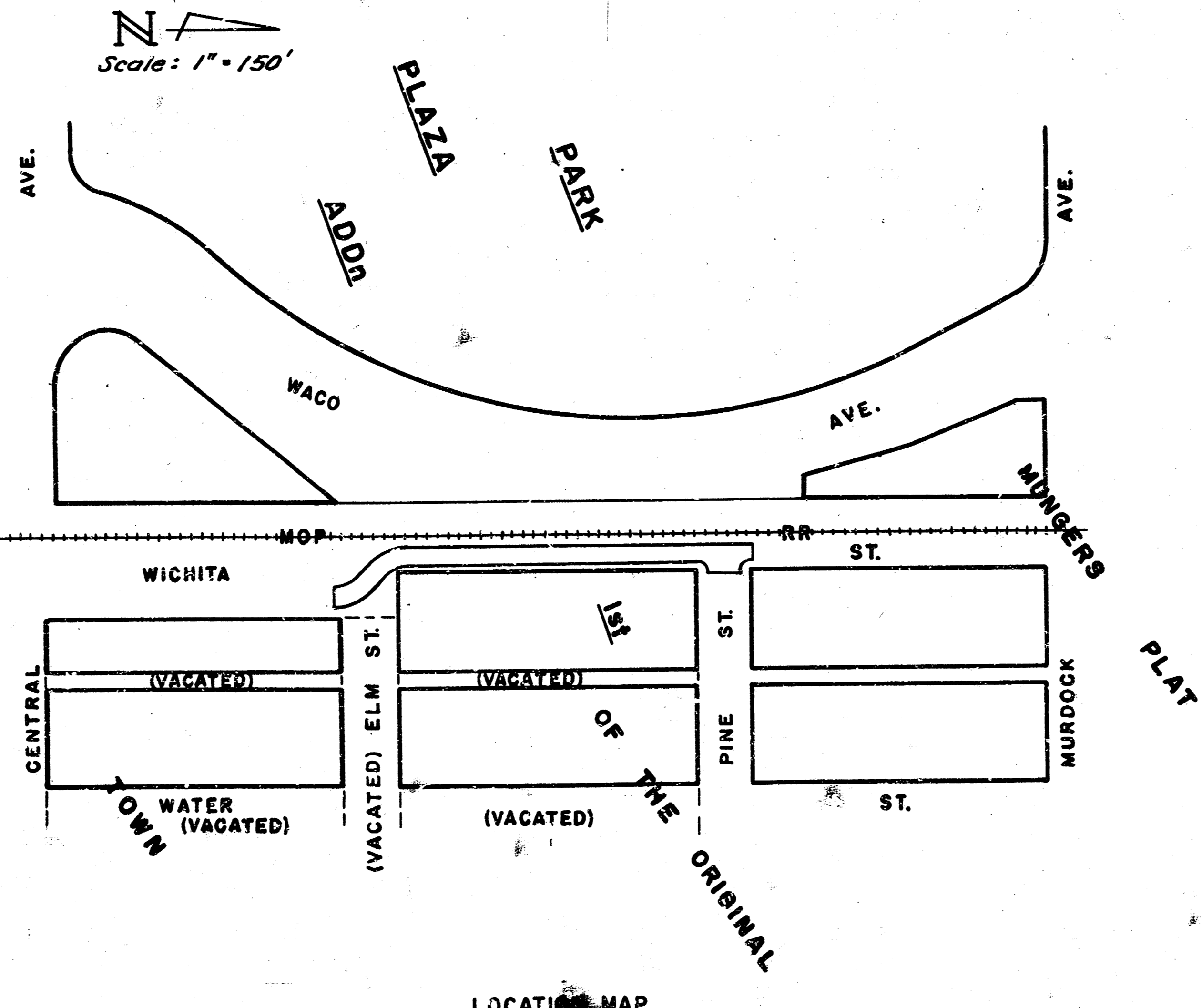
WICHITA STREET  
 10' S. OF S.L. ELM ST. TO N.L. PINE ST.  
 PARK PLAZA 1st ADDn

CITY OF WICHITA, KANSAS

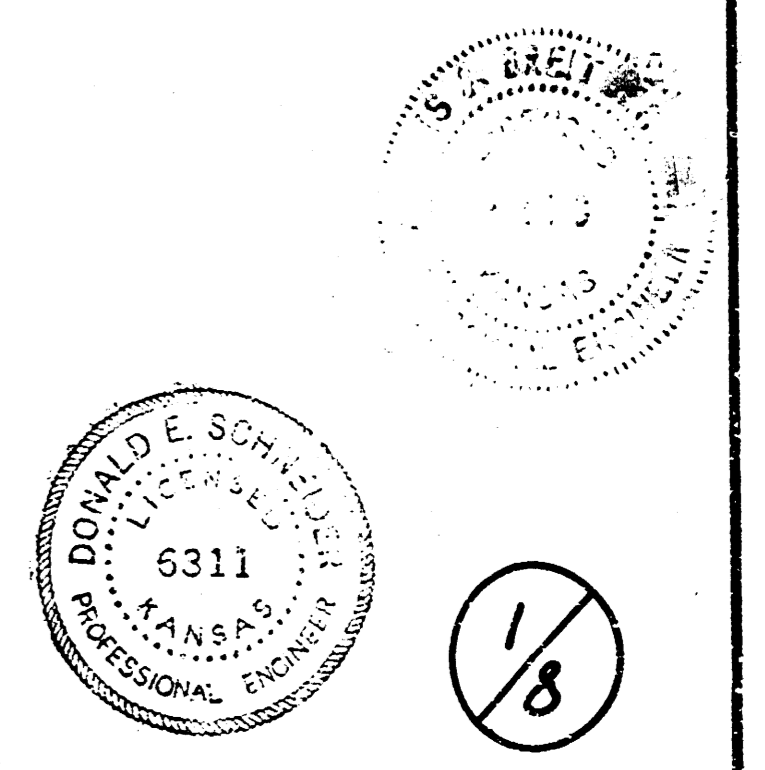
R.W. BRUGGEMAN DIRECTOR OF ENGINEERING / CITY ENGINEER

DATE:

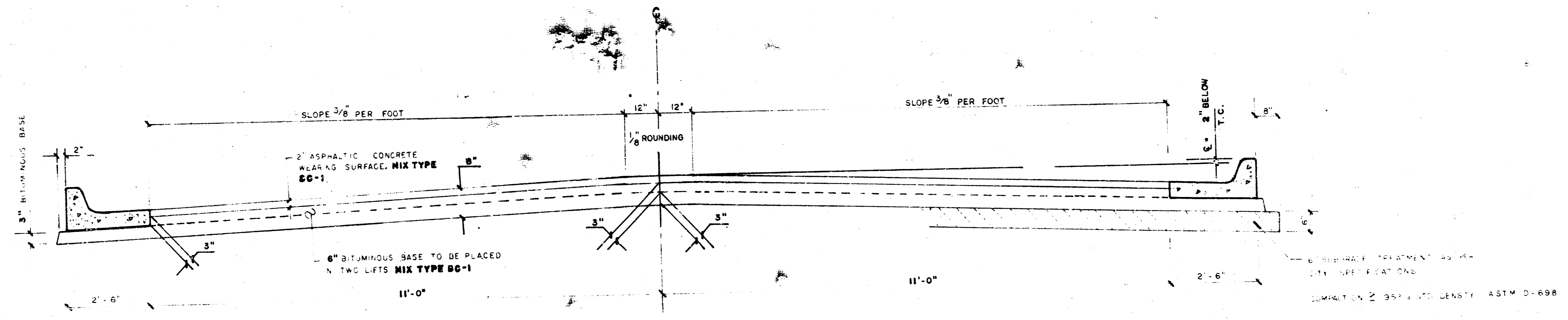
PROJ. NO. 472 76 245 81183 000 000 001



LOCATION MAP



PROJECT DESCRIPTION	
WICHITA STREET 10' S. OF S.L. ELM ST. TO N.L. PINE ST. PARK PLAZA 1st ADDn	
PROJECT NUMBER	
472 76 245 81183 000 000 001	
BOOK NO. <i>ECG 266</i>	APPROVED BY
DRAWN BY <i>DEC</i>	DATE
	REVISED
CITY OF WICHITA DEPARTMENT OF ENGINEERING	
DIRECTOR OF ENG./CITY ENGINEER R. W. BRUGGEMAN	
	SCALE



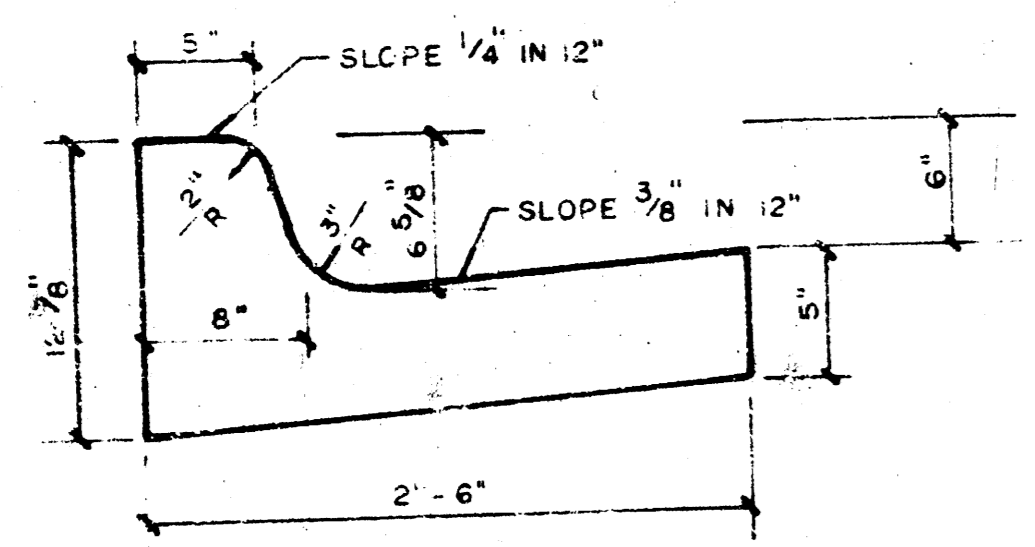
**TYPICAL SECTION**

**27' ASPHALTIC CONCRETE PAVEMENT WITH BITUMINOUS BASE**

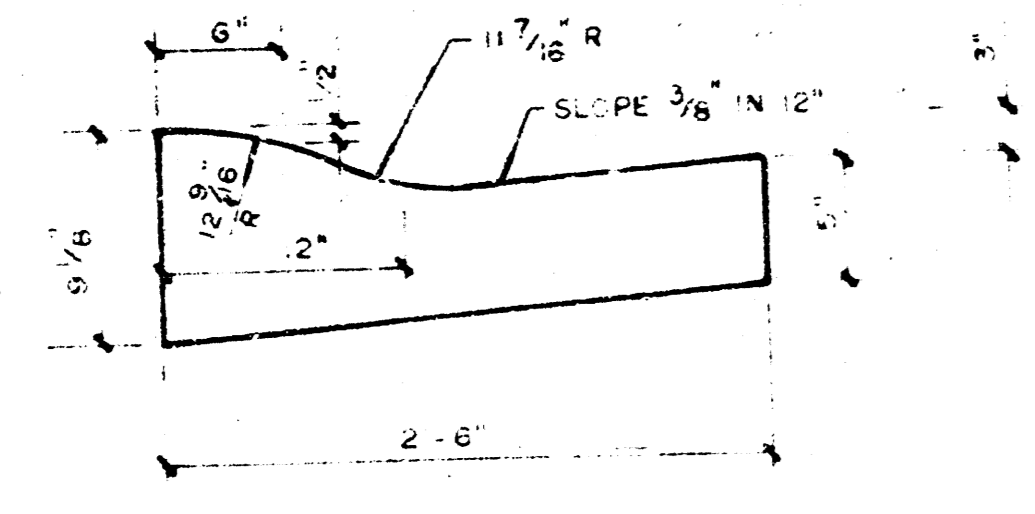
A TACK COAT OF EMULSIFIED ASPH(SS-1H or CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE 0.05 GALLONS PER SQ YD BETWEEN LIFTS OF ASPHALTIC MATERIALS WHEN ORDERED BY THE ENGINEER. TACK COAT WILL NOT BE PAID DIRECTLY AND SHALL BE CONSIDERED AS SUBSIDIARY TO PRICE BID FOR ASPHALTIC PAVEMENT. BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR CROWN AND GRADE. CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF 10' WITH JOINTS IN PRECEDING LIFTS AND PLACED SUCH THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE IN THE TOP LIFT.

THE A.C. PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQ YDS 8" A.C. PAVEMENT (6" BITUMINOUS BASE). THE BITUMINOUS BASE UNDER THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQ YDS 3" BITUMINOUS BASE.

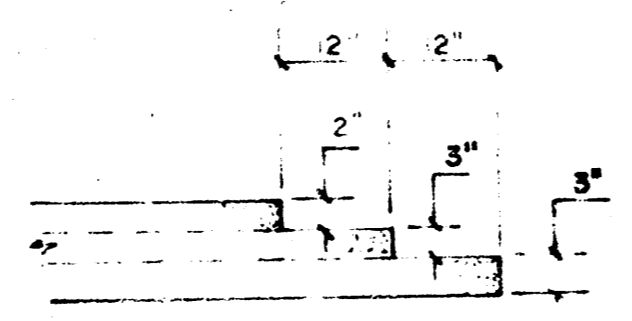
COMBINED CURB & GUTTER



ROLL TYPE CURB & GUTTER



**DETAIL OF TRANSVERSE CONSTRUCTION JOINTS**



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT TEMPORARILY ENDS TO FACILITATE FUTURE PAVEMENT CONSTRUCTION AS SHOWN BY DETAIL. THE COST OF CONSTRUCTING THE TRANSVERSE CONSTRUCTION JOINTS SHALL NOT BE MEASURED OR PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS OF A.C. PAVEMENT.

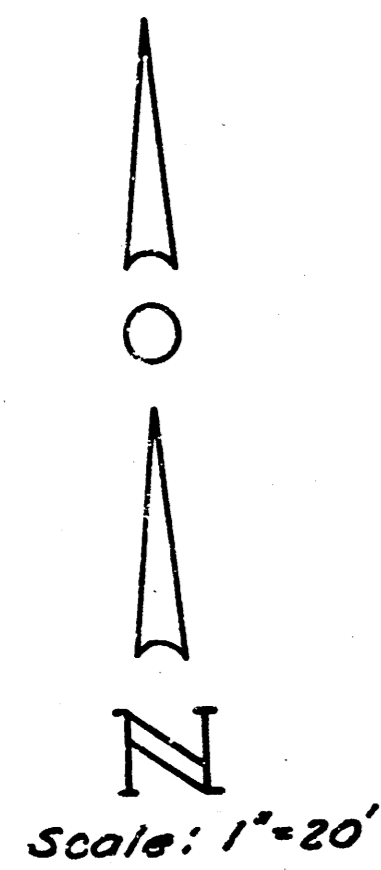
CITY OF WICHITA, KANSAS  
 WICHITA STREET  
 10' S. OF S.L. ELM ST. TO N.L. PINE ST.  
 PARK PLAZA 1st ADDN  
 472 76 245 81183 000 000 001

B.M. 118.82 Std. in N. end sidewalk @ N.W. Cor. Arkansas River Bridge @ Murbok (Stamped 1306.22)  
 B.M. 116.47 on top curb @ S. end Median @ N. Side Murbok on Waco  
 B.M. 113.36 Top curb @ N. end, E. side Wichita @ N. end Pine curb

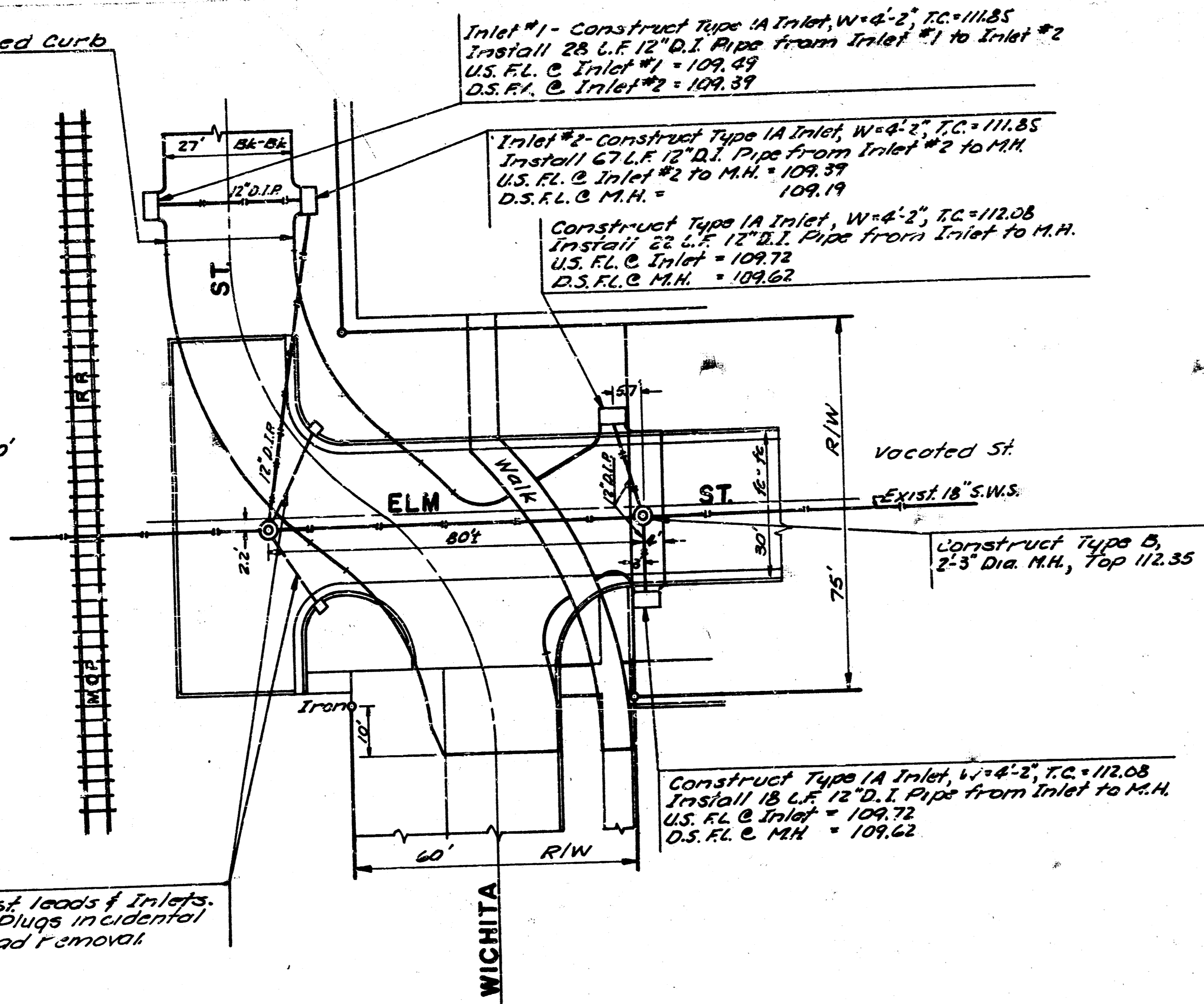
$\Delta = 52.28^\circ$  R. = 60.86' T. = 30.00' L. = 55.75' LC. = 53.82'

CURVE DATA BASED ON $\Delta$ RAD. = 26.1428				
STA.	ARC.	CHORD LENGTH	DEFLECTION	TOTAL DEFLECTION
		$\Delta$ OFF. $\Delta$ CH.	$\Delta$ OFF. $\Delta$ CH.	
0+00			0°00'00"	0°00'00"
0+06.36	6.36	8.16	8.55	2°59'37"
0+12.71	12.71	16.35	17.03	4°38'16"
0+19.07	19.07	24.54	25.52	7°12'05"
0+25.42	25.42	32.73	34.01	9°45'54"
0+31.78	31.78	40.92	42.50	12°19'43"
0+38.13	38.13	49.11	50.99	14°53'32"
0+44.49	44.49	57.30	59.48	17°27'21"
0+50.84	50.84	65.49	67.97	20°01'10"
0+57.20	57.20	73.68	76.46	22°34'59"
0+63.55	63.55	81.87	84.95	25°08'48"
0+70.00	70.00	90.00	93.44	27°42'37"
0+76.36	76.36	98.19	101.93	30°16'26"
0+82.71	82.71	106.38	110.42	32°50'15"
0+89.07	89.07	114.57	118.91	35°24'04"
0+95.42	95.42	122.76	127.40	37°57'53"
1+01.78	101.78	130.95	135.89	40°31'42"
1+08.13	108.13	139.14	144.38	43°05'31"
1+14.49	114.49	147.33	152.87	45°39'20"
1+20.84	120.84	155.52	161.36	48°13'09"
1+27.20	127.20	163.71	169.85	50°46'58"
1+33.55	133.55	171.90	178.34	53°20'47"
1+40.00	140.00	180.00	186.83	55°54'36"
1+46.36	146.36	188.19	195.32	58°28'25"
1+52.71	152.71	196.38	203.81	61°02'14"
1+59.07	159.07	204.57	212.30	63°36'03"
1+65.42	165.42	212.76	220.79	66°09'52"
1+71.78	171.78	220.95	229.28	68°43'41"
1+78.13	178.13	229.14	237.77	71°17'30"
1+84.49	184.49	237.33	246.26	73°51'19"
1+90.84	190.84	245.52	254.75	76°25'08"
1+97.20	197.20	253.71	263.24	78°58'57"
2+03.55	203.55	261.90	271.73	81°32'46"
2+10.00	210.00	270.00	280.22	84°06'35"
2+16.36	216.36	278.19	288.71	86°40'24"
2+22.71	222.71	286.38	297.20	89°14'13"
2+29.07	229.07	294.57	305.69	91°48'02"
2+35.42	235.42	302.76	314.18	94°21'51"
2+41.78	241.78	310.95	322.67	96°55'40"
2+48.13	248.13	319.14	331.16	99°29'29"
2+54.49	254.49	327.33	339.65	102°03'18"
2+60.84	260.84	335.52	348.14	104°37'07"
2+67.20	267.20	343.71	356.63	107°10'56"
2+73.55	273.55	351.90	365.12	109°44'45"
2+80.00	280.00	360.00	373.61	112°18'34"
2+86.36	286.36	368.19	382.10	114°52'23"
2+92.71	292.71	376.38	390.59	117°26'12"
2+99.07	299.07	384.57	399.08	120°00'01"
3+05.42	305.42	392.76	407.57	122°33'50"
3+11.78	311.78	400.95	416.06	125°07'39"
3+18.13	318.13	409.14	424.55	127°41'28"
3+24.49	324.49	417.33	433.04	130°15'17"
3+30.84	330.84	425.52	441.53	132°49'06"
3+37.20	337.20	433.71	450.02	135°22'55"
3+43.55	343.55	441.90	458.51	137°56'44"
3+50.00	350.00	450.00	467.00	140°30'33"
3+56.36	356.36	458.19	475.49	143°04'22"
3+62.71	362.71	466.38	483.98	145°38'11"
3+69.07	369.07	474.57	492.47	148°12'00"
3+75.42	375.42	482.76	500.96	150°45'49"
3+81.78	381.78	490.95	509.45	153°19'38"
3+88.13	388.13	499.14	517.94	155°53'27"
3+94.49	394.49	507.33	526.43	158°27'16"
4+00.84	400.84	515.52	534.92	161°01'05"
4+07.20	407.20	523.71	543.41	163°34'54"
4+13.55	413.55	531.90	551.90	166°08'43"
4+20.00	420.00	540.00	560.39	168°42'32"
4+26.36	426.36	548.19	568.88	171°16'21"
4+32.71	432.71	556.38	577.37	173°50'10"
4+39.07	439.07	564.57	585.86	176°24'00"
4+45.42	445.42	572.76	594.35	178°57'49"
4+51.78	451.78	580.95	602.84	181°31'38"
4+58.13	458.13	589.14	611.33	184°05'27"
4+64.49	464.49	597.33	619.82	186°39'16"
4+70.84	470.84	605.52	628.31	189°13'05"
4+77.20	477.20	613.71	636.80	191°46'54"
4+83.55	483.55	621.90	645.29	194°20'43"
4+90.00	490.00	630.00	653.78	196°54'32"
4+96.36	496.36	638.19	662.27	199°28'21"
5+02.71	502.71	646.38	670.76	202°02'10"
5+09.07	509.07	654.57	679.25	204°36'00"
5+15.42	515.42	662.76	687.74	207°09'49"
5+21.78	521.78	670.95	696.23	209°43'38"
5+28.13	528.13	679.14	704.72	212°17'27"
5+34.49	534.49	687.33	713.21	214°51'16"
5+40.84	540.84	695.52	721.70	217°25'05"
5+47.20	547.20	703.71	730.19	219°58'54"
5+53.55	553.55	711.90	738.68	222°32'43"
5+60.00	560.00	720.00	747.17	225°06'32"
5+66.36	566.36	728.19	755.66	227°40'21"
5+72.71	572.71	736.38	764.15	230°14'10"
5+79.07	579.07	744.57	772.64	232°48'00"
5+85.42	585.42	752.76	781.13	235°21'49"
5+91.78	591.78	760.95	789.62	237°55'38"
5+98.13	598.13	769.14	798.11	240°29'27"
6+04.49	604.49	777.33	806.60	243°03'16"
6+10.84	610.84	785.52	815.09	245°37'05"
6+17.20	617.20	793.71	823.58	248°10'54"
6+23.55	623.55	801.90	832.07	250°44'43"
6+30.00	630.00	810.00	840.56	253°18'32"
6+36.36	636.36	818.19	849.05	255°52'21"
6+42.71	642.71	826.38	857.54	258°26'10"
6+49.07	649.07	834.57	866.03	261°00'00"
6+55.42	655.42	842.76	874.52	263°33'49"
6+61.78	661.78	850.95	883.01	266°07'38"
6+68.13	668.13	859.14	891.50	268°41'27"
6+74.49	674.49	867.33	900.00	271°15'16"
6+80.84	680.84	875.52	908.49	273°49'05"
6+87.20	687.20	883.71	916.98	276°22'54"
6+93.55	693.55	891.90	925.47	278°56'43"
7+00.00	700.00	900.00	933.96	281°30'32"
7+06.36	706.36	908.19	942.45	284°04'21"
7+12.71	712.71	916.38	950.94	286°38'10"
7+19.07	719.07	924.57	959.43	289°12'00"
7+25.42	725.42	932.76	967.92	291°45'49"
7+31.78	731.78	940.95	976.41	294°19'38"
7+38.13	738.13	949.14	984.90	296°53'27"
7+44.49	744.49	957.33	993.39	299°27'16"
7+50.84	750.84	965.52	1001.88	302°01'05"
7+57.20	757.20	973.71	1010.37	304°34'54"
7+63.55	763.55	981.90	1018.86	307°08'43"
7+70.00	770.00	990.00	1027.35	309°42'32"
7+76.36	776.36	998.19	1035.84	312°16'21"
7+82.71	782.71	1006.38	1044.33	314°50'10"
7+89.07	789.07	1014.57	1052.82	317°24'00"
7+95.42	795.42	1022.76	1061.31	319°57'49"
8+01.78	801.78	1030.95	1069.80	322°31'38"
8+08.13	808.13	1039.14	1078.29	325°05'27"
8+14.49	814.49	1047.33	1086.78	327°39'16"
8+20.84	820.84	1055.52	1095.27	330°13'05"
8+27.20	827.20	1063.71	1103.76	332°46'54"
8+33.55	833.55	1071.90	1112.25	335°20'43"
8+40.00	840.00	1080.00	1120.74	337°54'32"
8+46.36	846.36	1088.19	1129.23	340°28'21"
8+52.71	852.71	1096.38	1137.72	343°02'10"
8+59.07	859.07	1104.57	1146.21	345°36'00"
9+05.42	865.42	1112.76	1154.70	348°09'49"
9+11.78	871.78	1120.95	1163.19	350°43'38"
9+18.13	878.13	1129.14	1171.68	353°17'27"
9+24.49	884.49	1137.33	1180.17	355°51'16"
9+30.84	890.84	1145.52	1188.66	358°25'05"
9+37.20	897.20	1153.71	1197.15	360°58'54"
9+43.55	903.55	1161.90	1205.64	363°32'43"
9+50.00	910.00	1170.00	1214.13	366°06'32"
9+56.36	916.36	1178.19	1222.62	368°40'21"
9+62.71	922.71	1186.38	1231.11	371°14'10"
9+69.07	929.07	1194.57	1239.60	373°48'00"
9+75.42	935.42	1202.76	1248.09	376°21'49"
9+81.78	941.78	1210.95	1256.58	378°55'38"
9+88.13	948.13	1219.14	1265.07	381°29'27"
9+94.49	954.49	1227.33	1273.56	384°03'16"
10+00.84	960.84	1235.52	1282.05	386°37'05"
10+07.20	967.20	1243.71	1290.54	389°10'54"
10+13.55	973.55	1251.90	1299.03	391°44'43"
10+20.00	980.00	1260.00	1307.52	394°18'32"
10+26.36	986.36	1268.19	1316.01	396°52'21"
10+32.71	992.71	1276.38	1324.50	399°26'10"
10+39.07	999.07	1284.57	1332.99	402°00'00"
10+45.42	1005.42	1292.76	1341.48	404°33'49"
10+51.78	1011.78	1300.95	1349.97	407°07'38"
10+58.13	1018.13	1309.14	1358.46	409°41'27"
10+64.49	1024.49	1317.33	1366.95	412°15'16"
10+70.84	1030.84	1325.52	1375.44	414°49'05"
10+77.20	1037.20	1333.71	1383.93	417°22'54"
10+83.55	1043.55	1341.90	1392.42	419°56'43"
10+90.00	1050.00	1350.00	1400.91	422°30'32"
10+96.36	1056.36	1358.19	1409.40	425°04'21"
11+02.71	1062.71	1366.38	1417.89	427°38'10"
11+09.07	1069.07	1374.57	1426.38	430°12'00"
11+15.42	1075.42	1382.76	1434.87	432°45'49"
11+21.78	1081.78	1390.95	1443.36	435°19'38"
11+28.13	1088.13	1399.14	1451.85	437°53'27"
11+34.49	1094.49	1407.33	1460.34	440°27'16"
11+40.84	1100.84	1415.52	1468.83	443°01'05"
11+47.20	1107.20	1423.71	1477.32	445°34'54"
11+53.55	1113.55	1431.90	1485.81	448°08'43"
11+60.00	1120.00	1440.00	1494.30	450°42'32"
11+66.36	1126.36	1448.19	1502.79	453°16'21"
11+72.71	1132.71	1456.38	1511.28	455°50'10"
11+79.07	1139.07	1464.57	1519.77	458°24'00"
11+85.42	1145.42	1472.76	1528.26	460°57'49"
11+91.78	1151.78	1480.95	1536.75	463°31'38"
11+98.13	1158.13	1489.14	1545.24	466°05'27"
12+04.49	1164.49	1497.33	1553.73	468°39'16"
12+10.84	1170.84	1505.52	1562.22	471°13'05"
12+17.20	1177.20			

Back of Proposed Curb



Scale: 1"=20'



Inlet #1 - Construct Type 1A Inlet, W=4'-2", T.C.=111.85  
Install 28 L.F. 12" D.I. Pipe from Inlet #1 to Inlet #2  
U.S. F.L. @ Inlet #1 = 109.89  
D.S. F.L. @ Inlet #2 = 109.39

Inlet #2 - Construct Type 1A Inlet, W=4'-2", T.C.=111.85  
Install 67 L.F. 12" D.I. Pipe from Inlet #2 to M.H.  
U.S. F.L. @ Inlet #2 = 109.37  
D.S. F.L. @ M.H. = 109.19

Construct Type 1A Inlet, W=4'-2", T.C.=112.08  
Install 22 L.F. 12" D.I. Pipe from Inlet to M.H.  
U.S. F.L. @ Inlet = 109.72  
D.S. F.L. @ M.H. = 109.62

Construct Type B, 2'-3" Dia. M.H., Top 112.35

Construct Type 1A Inlet, W=4'-2", T.C.=112.08  
Install 18 L.F. 12" D.I. Pipe from Inlet to M.H.  
U.S. F.L. @ Inlet = 109.72  
D.S. F.L. @ M.H. = 109.62

Remove exist. leads & Inlets.  
Plug @ M.H. Plugs incidental  
to Inlet & Lead Removal.

B.M. 113.36 Top curb @ N. end, E. side Wichita & N. end Pine curb  
B.M. 116.57 " on top curb @ S. end Median @ N. side Murdock on Waco  
B.M. 118.82 Std. in N. end sidewalk @ N.W. Cor. Arkansas River Bridge @ Murdock (Stamped 1306.22)

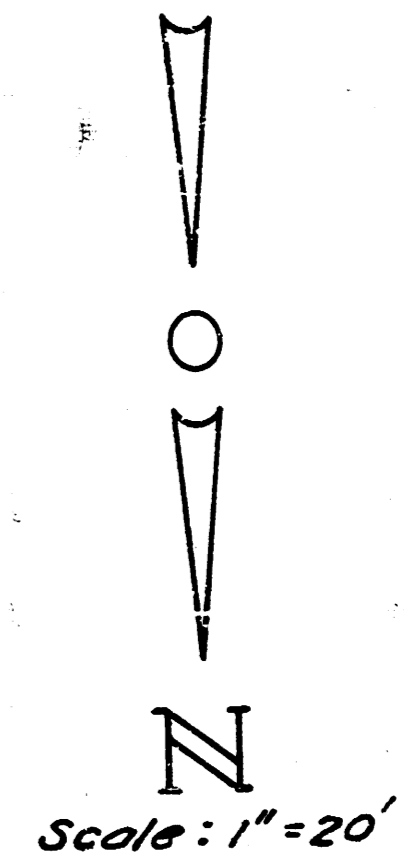
Construct Type 1A Inlet, W=4'-2", T.C.=112.91  
Install 28 L.F. 12" D.I. Pipe from Inlet to M.H.  
U.S. F.L. @ Inlet = 110.55  
D.S. F.L. @ M.H. = 110.45

Construct Type B, 2'-3" Dia. M.H., Top 113.37

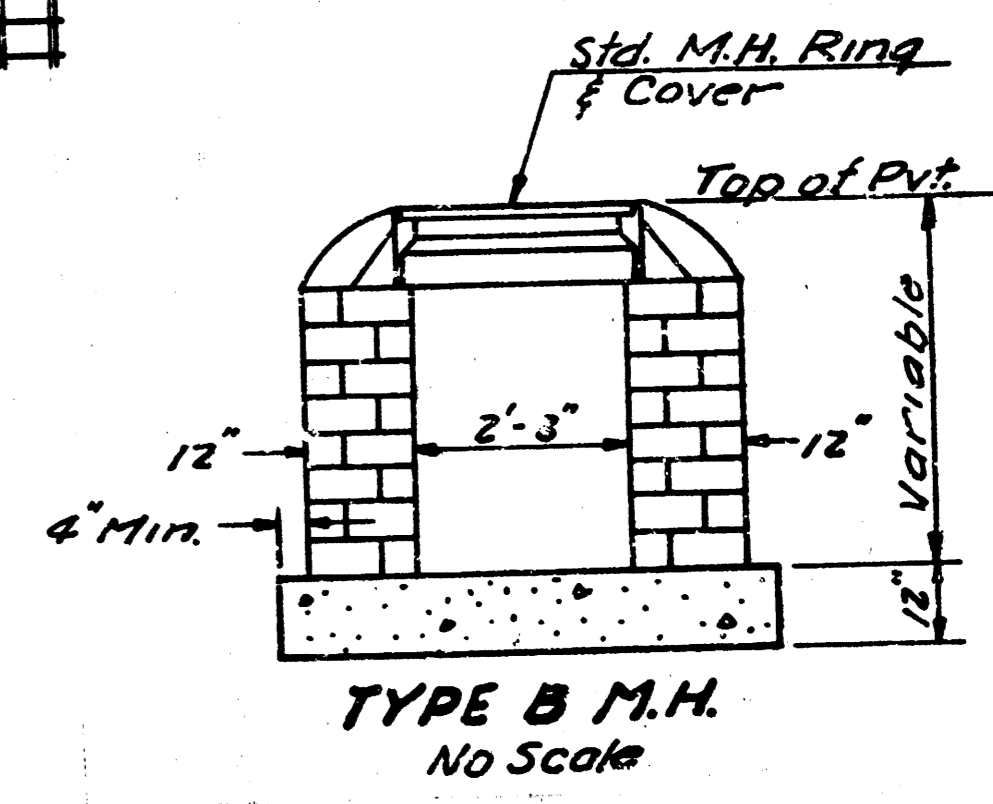
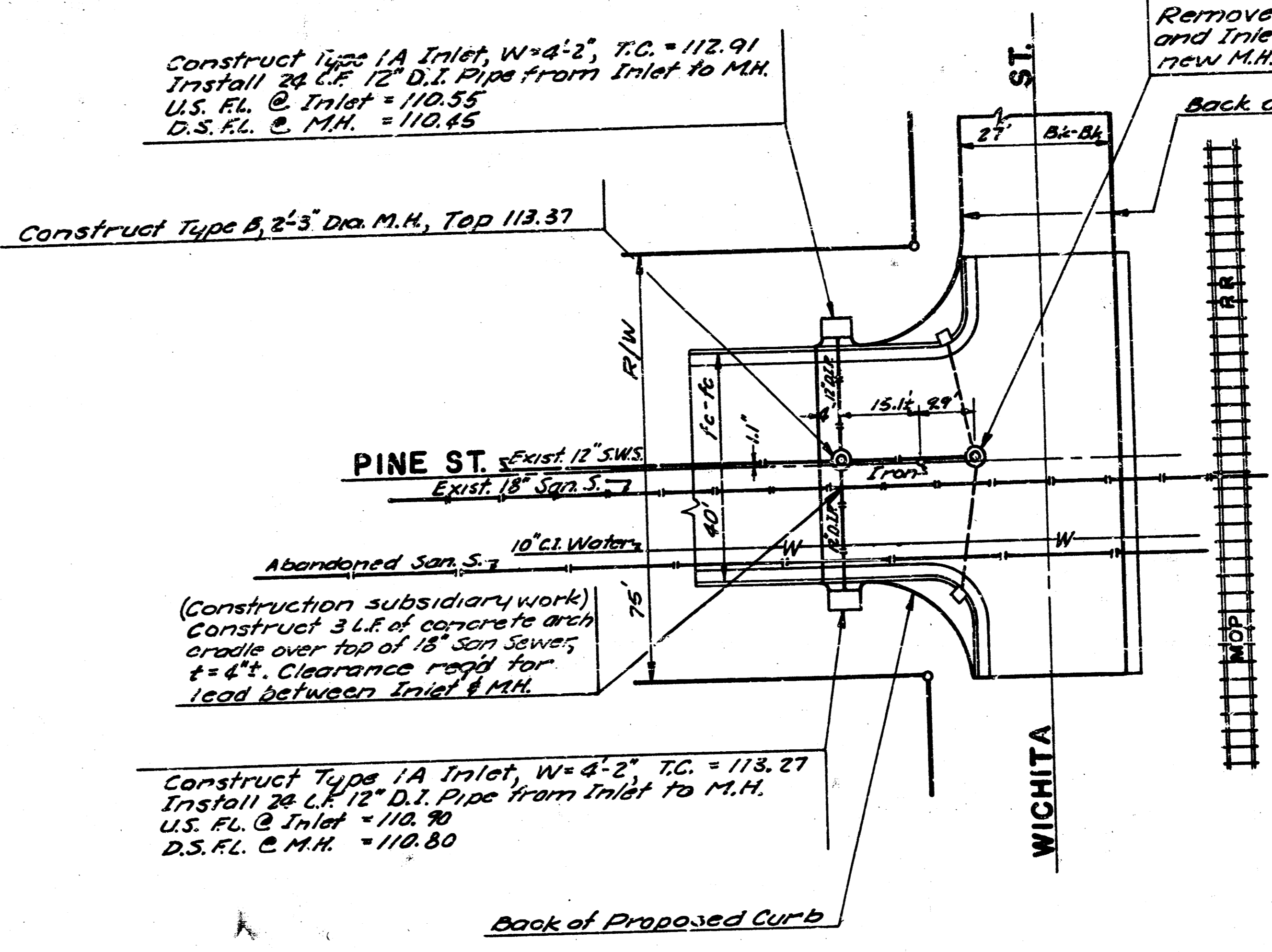
Construct Type 1A Inlet, W=4'-2", T.C.=113.27  
Install 28 L.F. 12" D.I. Pipe from Inlet to M.H.  
U.S. F.L. @ Inlet = 110.90  
D.S. F.L. @ M.H. = 110.80

Remove exist. M.H., exist. leads  
and Inlets & 12" S.W.S. between  
new M.H. & exist. M.H.

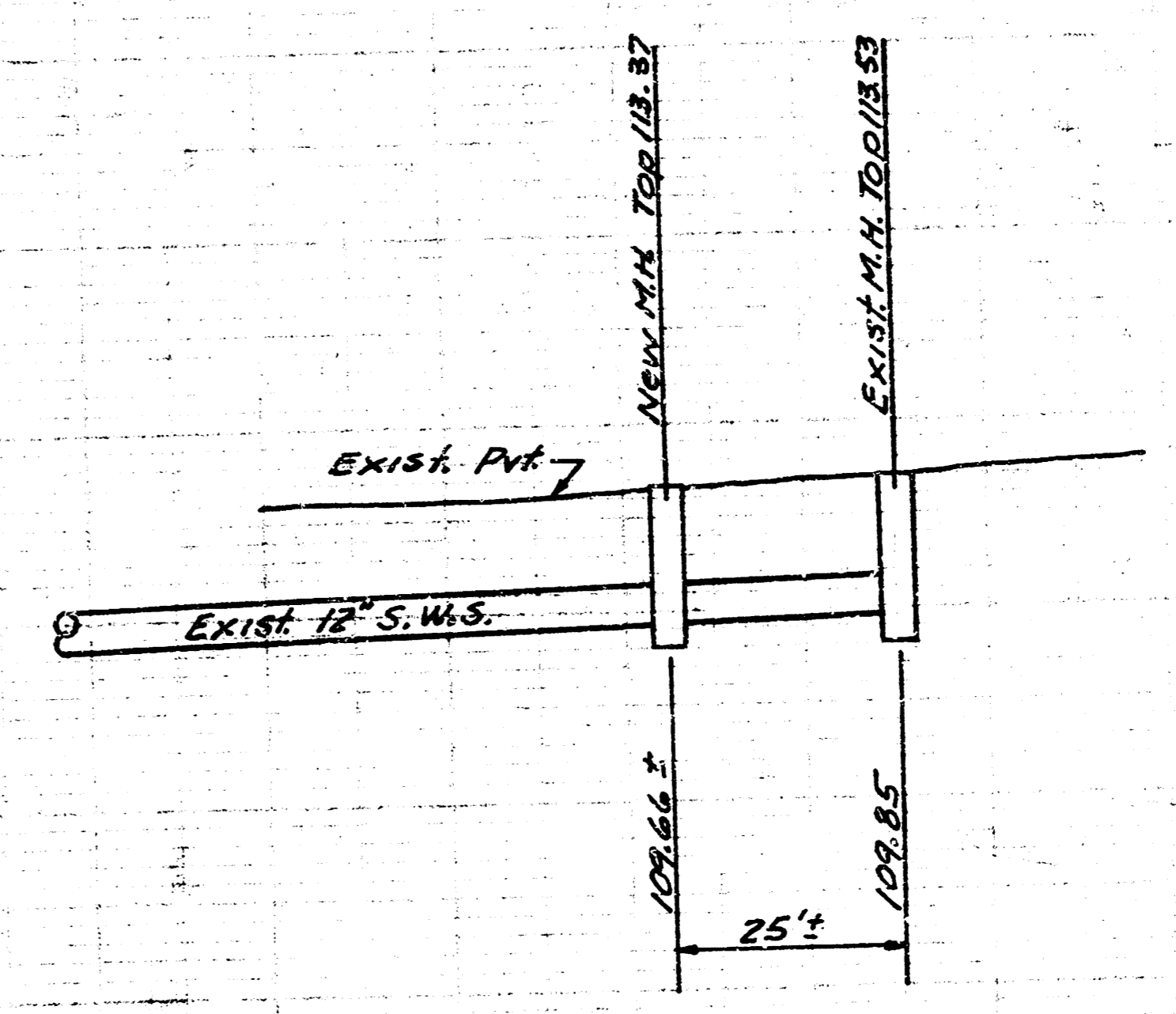
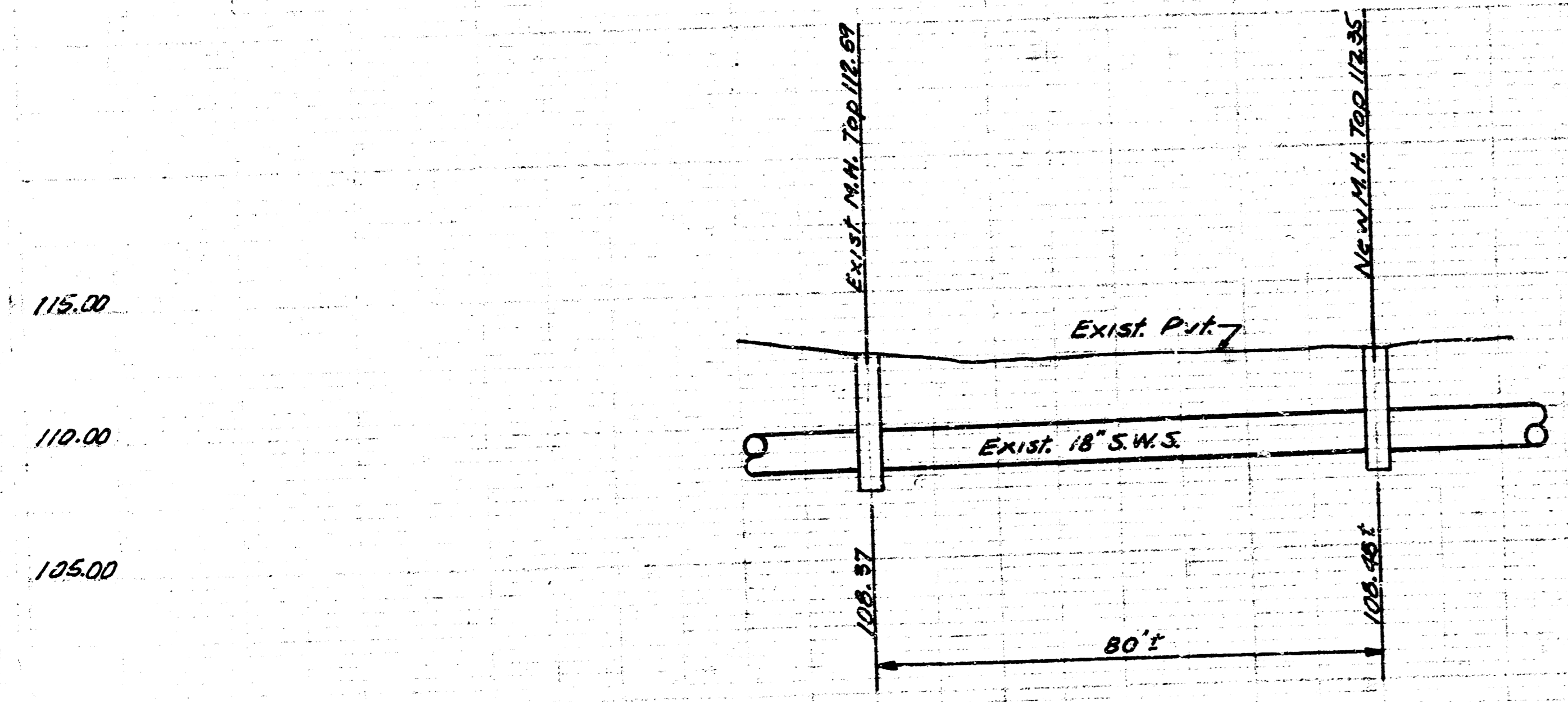
Back of Proposed Curb



Scale: 1"=20'

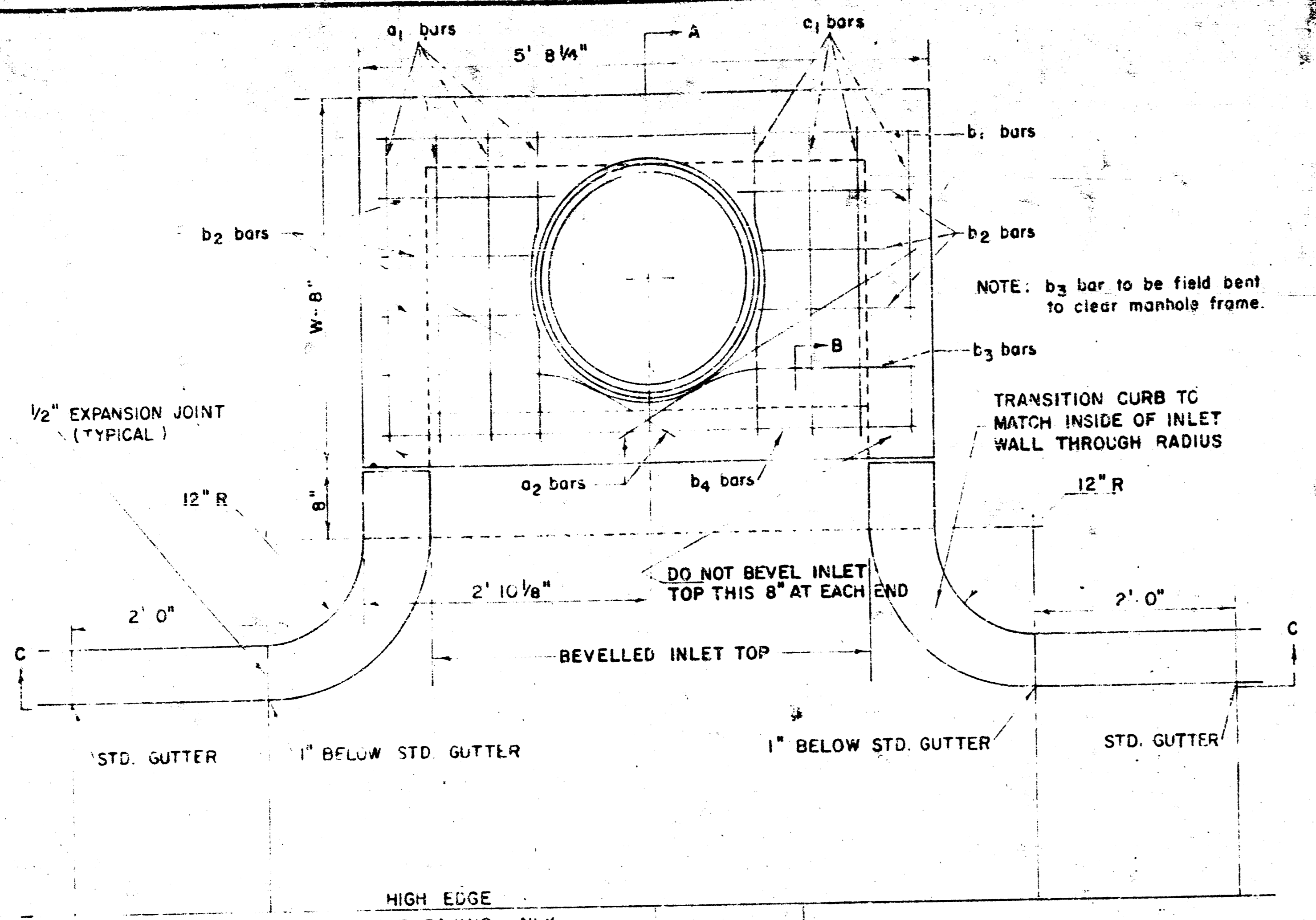


TYPE B M.H.  
No Scale

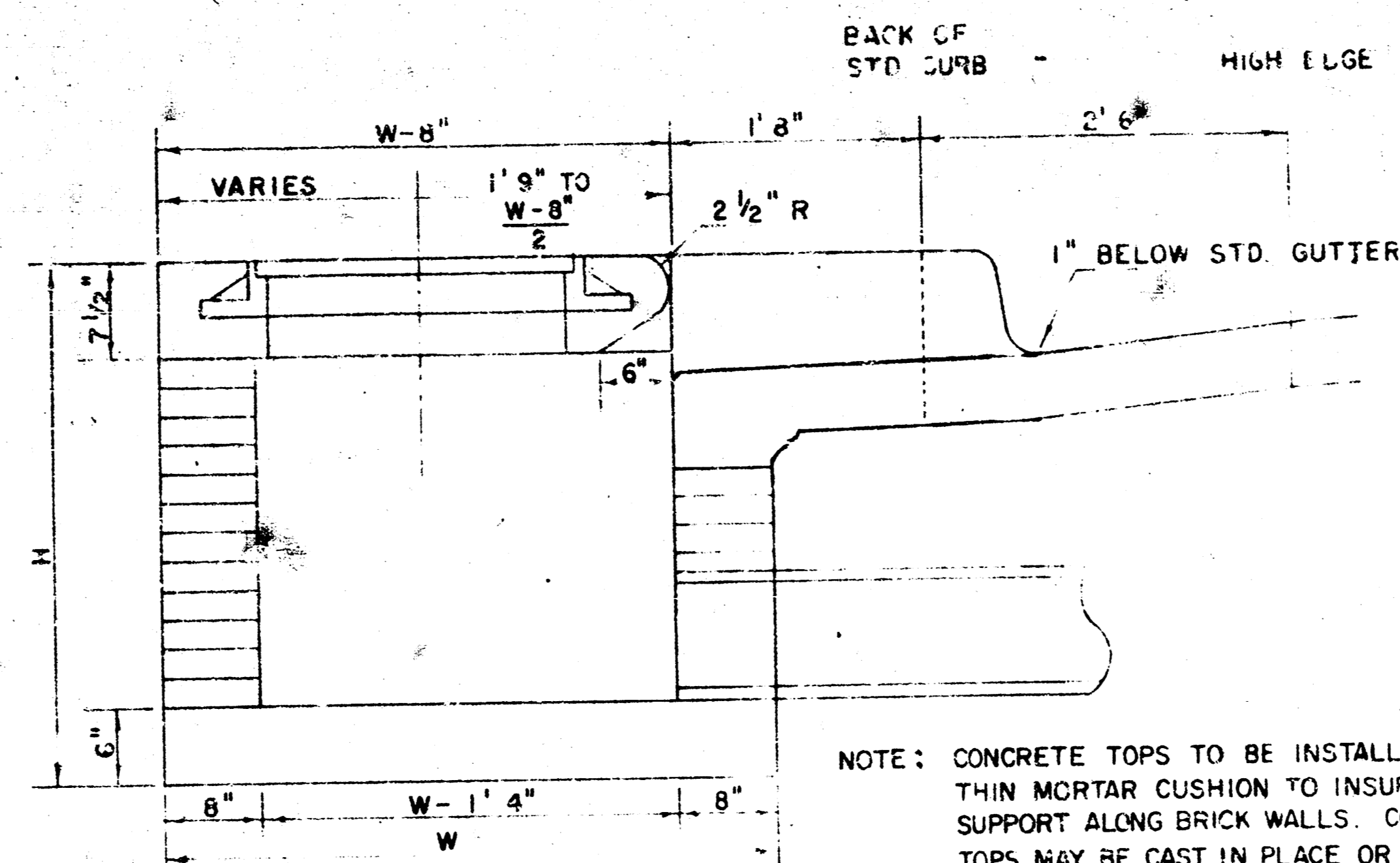


PROJECT DESCRIPTION  
WICHITA STREET - DRAINAGE  
10' S. OF S.L. ELM ST TO N.L. PINE ST.  
PARK PLAZA 1st ADDn  
PROJECT NUMBER  
472 76 245 81183 000 300 001

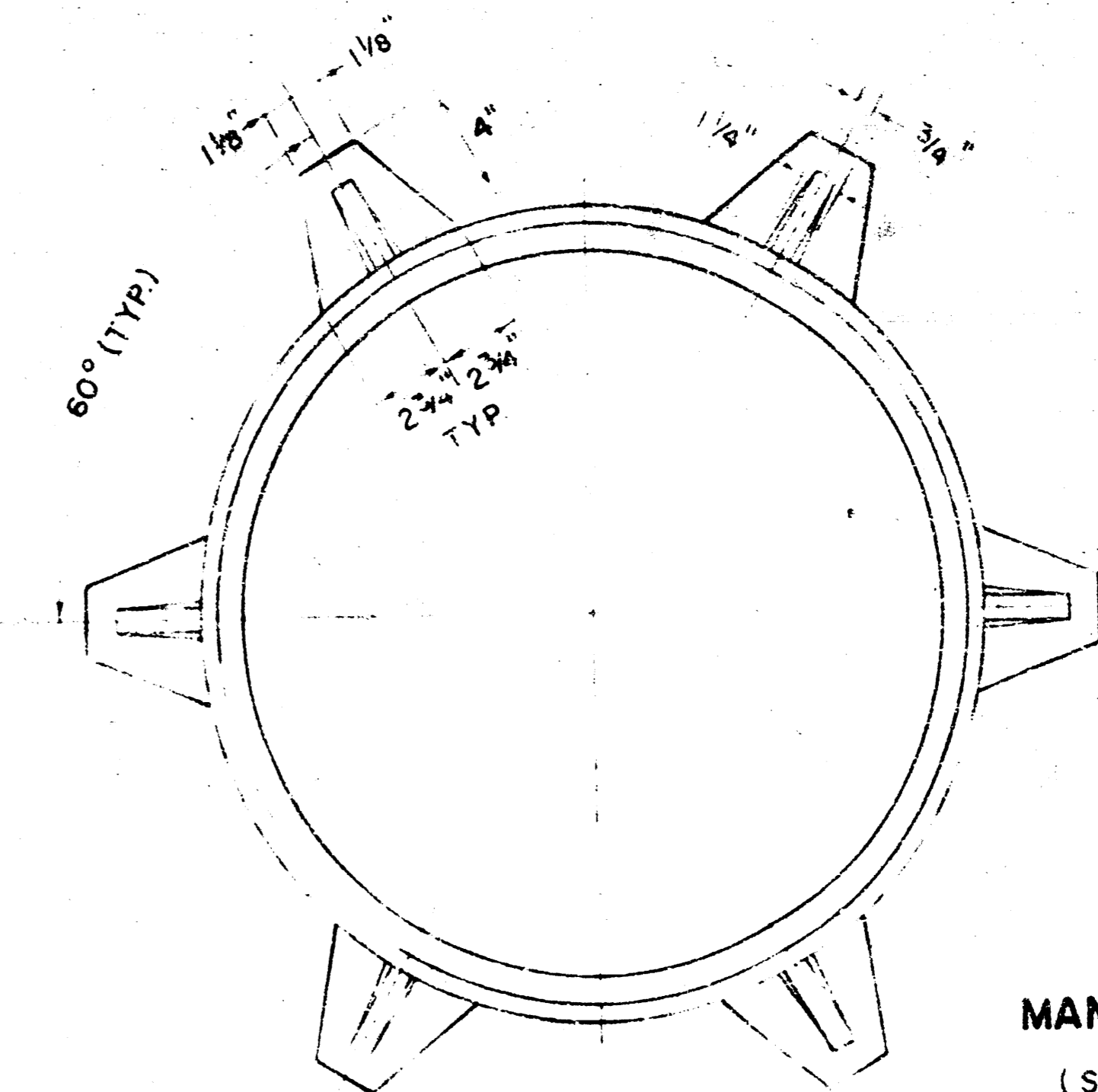
4/8



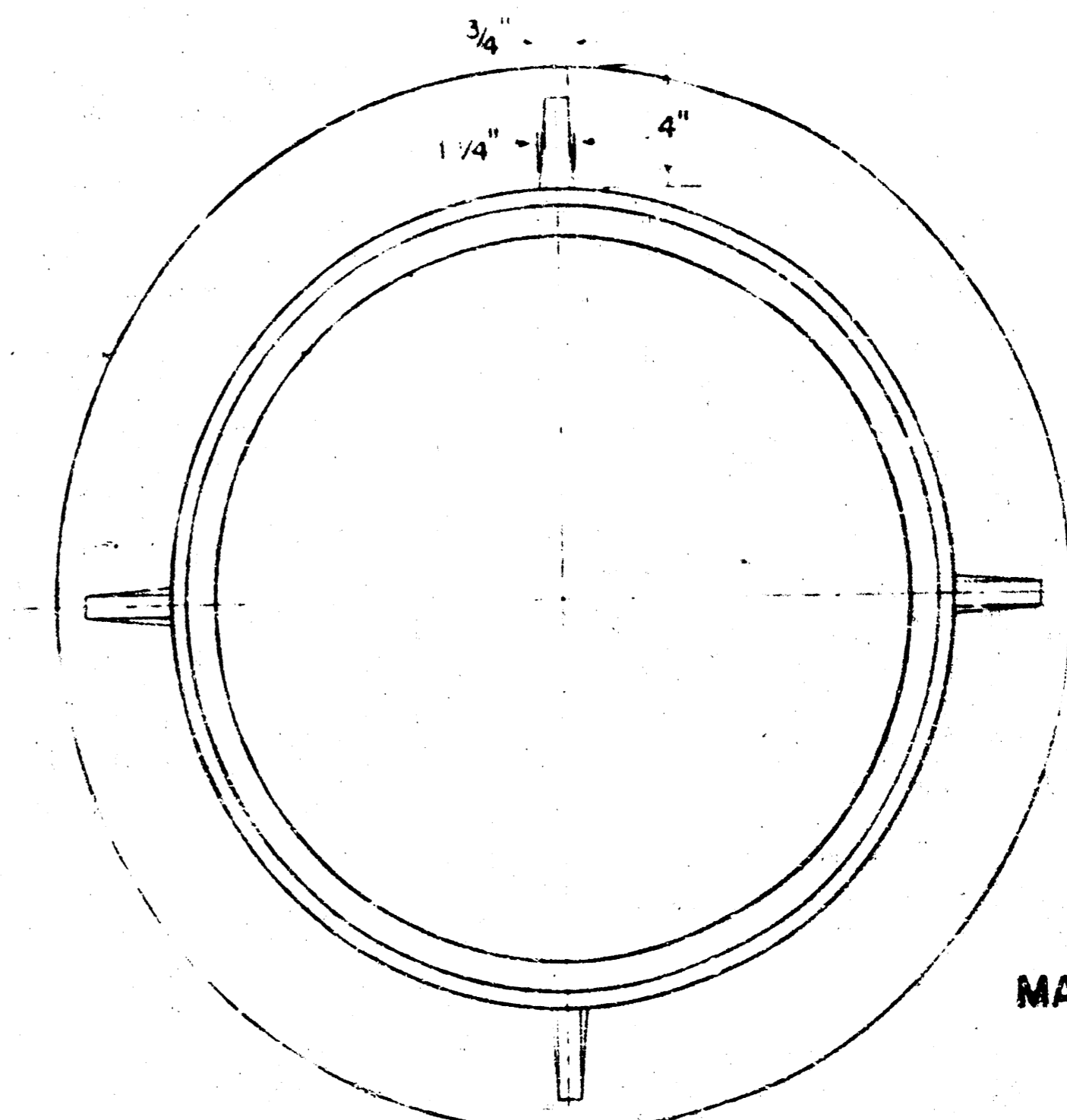
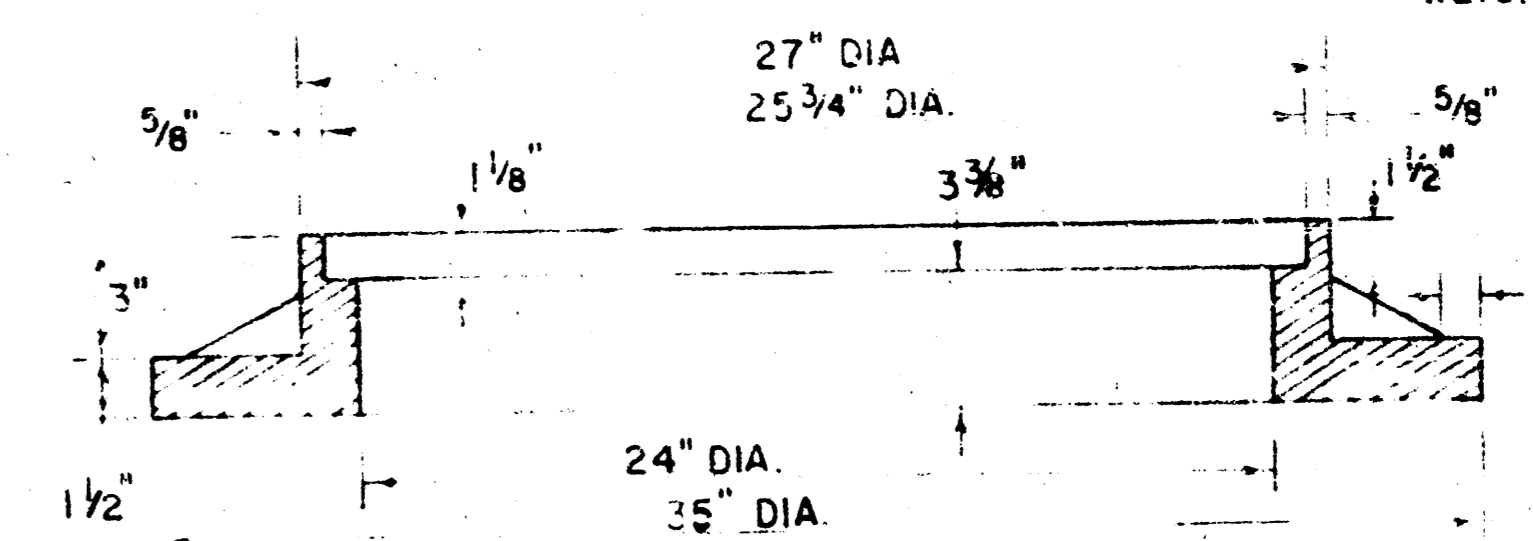
PLAN (SCALE 1" = 1'0")



SECTION A-A (SCALE 1" = 1'0")



MANHOLE FRAME (SCALE 1" = 6") WEIGHT = 180 LBS.



MANHOLE FRAME (ALTERNATE) (SCALE 1" = 6") WEIGHT = 180 LBS.

STEEL SCHEDULE

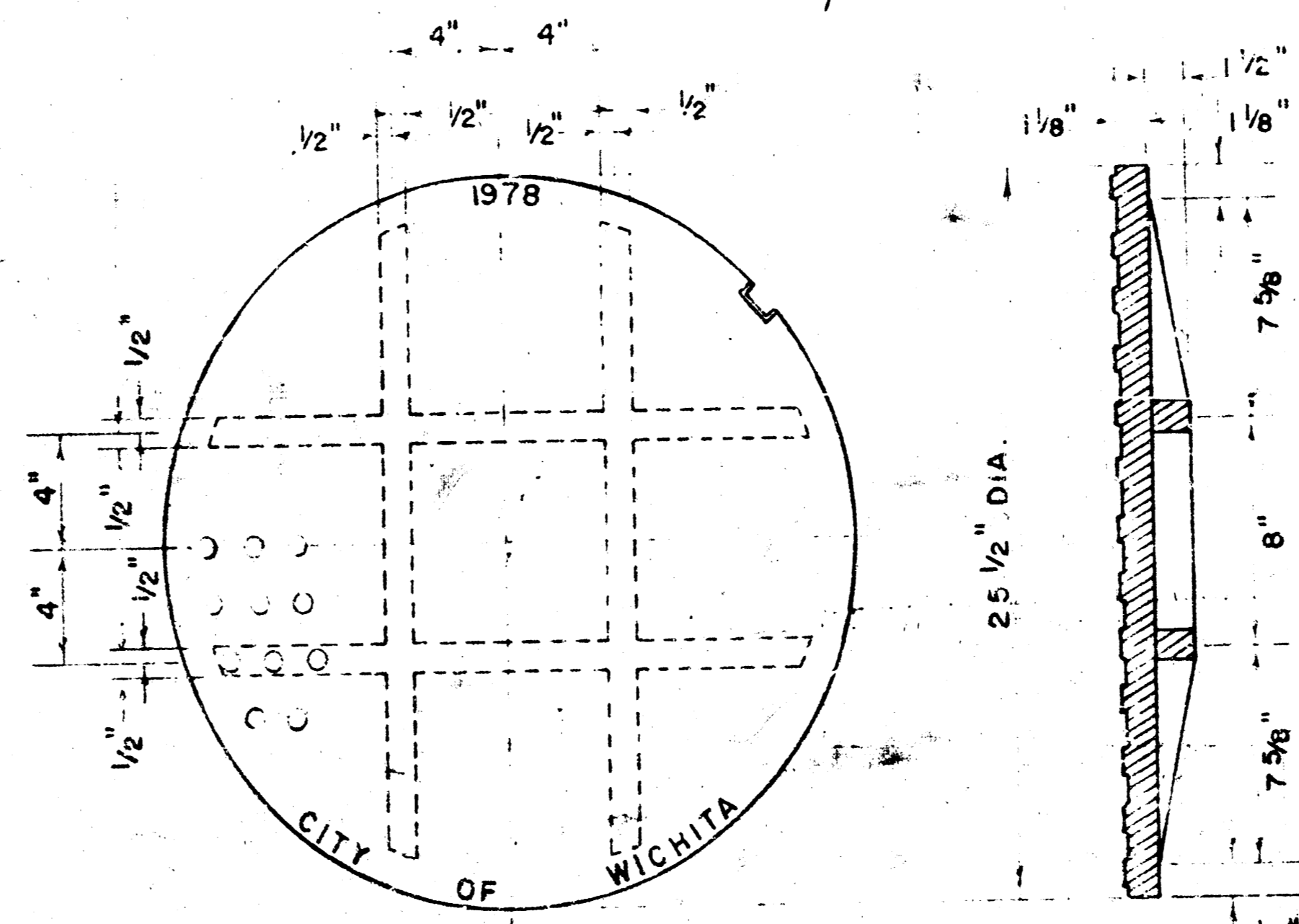
BAR NUMBER	a <sub>1</sub>	a <sub>2</sub>	b <sub>1</sub>	b <sub>2</sub>	b <sub>3</sub>	b <sub>4</sub>	WT. LBS.
8	2	1	3	5	7	9	60*
SIZE	#4	#4	#4	#4	#4	#4	
W=4'2"	6'5"	3'4"	5'5"	-	-	1'5"	5'6"
W=5'0"	8'1"	4'4"	5'5"	-	-	1'5"	5'6"
W=5'0"	8'1"	4'4"	5'5"	-	-	1'5"	5'6"
W=6'0"	10'1"	5'4"	5'5"	-	-	1'5"	5'6"
W=7'0"	11'1"	6'4"	5'5"	-	-	1'5"	5'6"
W=8'0"	12'1"	7'4"	5'5"	-	-	1'5"	5'6"

\* NOTE: a<sub>2</sub> BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

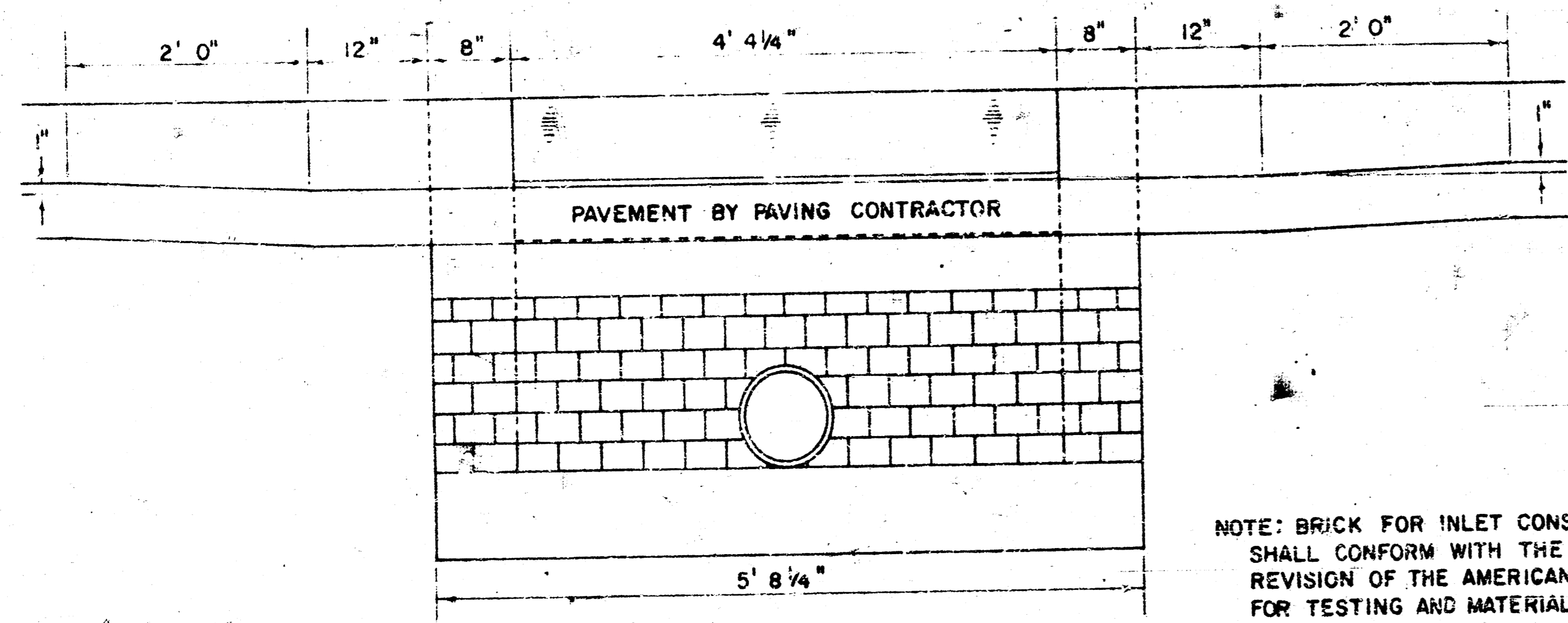
BENCH MARK DIAGRAM

W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 2"	36" x 5' 8 1/4" x 7 1/2"	21" & SMALLER	0.46 *
5' 0"	44" x 5' 8 1/4" x 7 1/2"	24" & 30"	0.57 *
6' 0"	54" x 5' 8 1/4" x 7 1/2"	36" & 42"	0.71 *
7' 0"	64" x 5' 8 1/4" x 7 1/2"	48" & 54"	0.84 *
8' 0"	74" x 5' 8 1/4" x 7 1/2"	60" & 66"	0.97 *

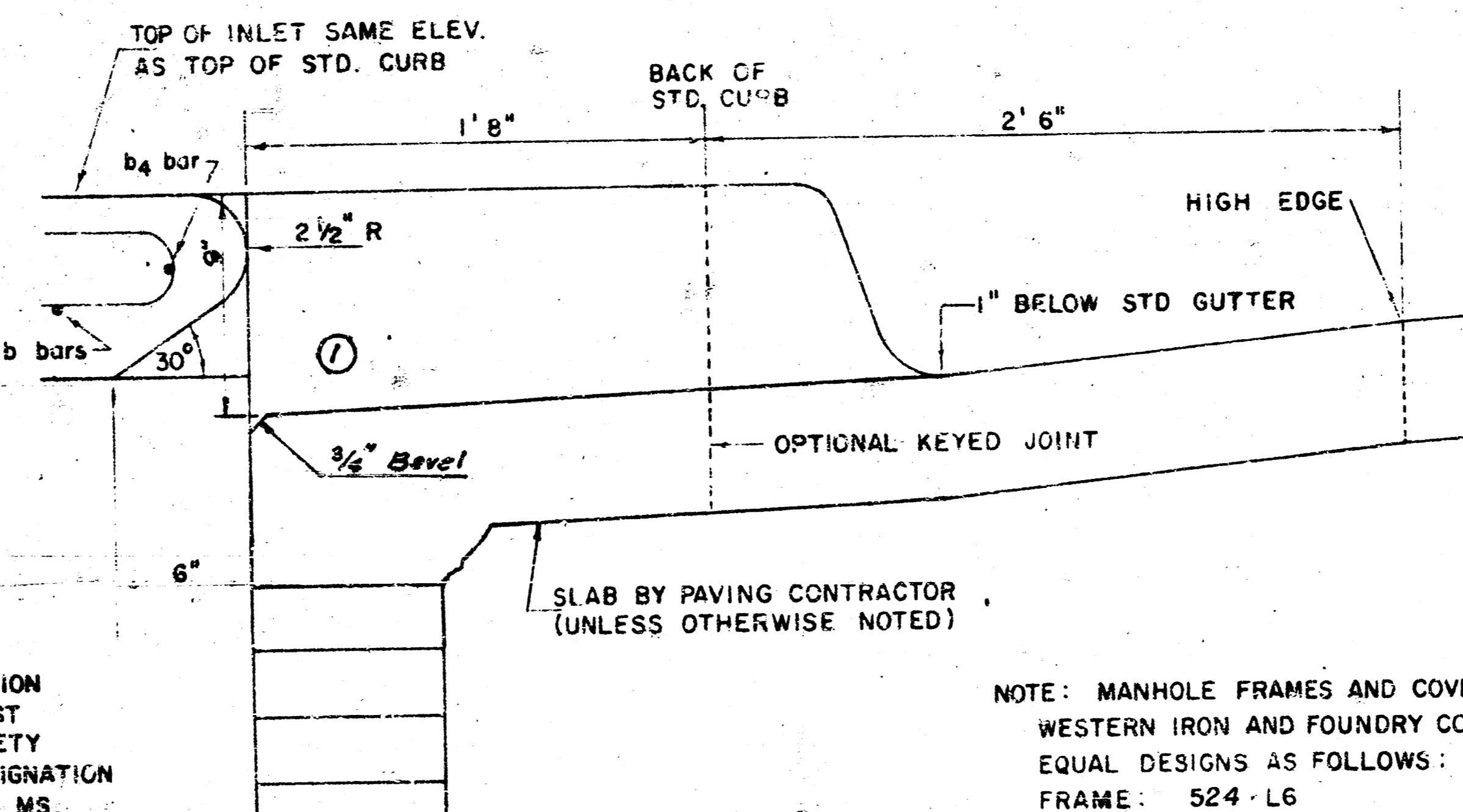
\* GROSS VOLUME



MANHOLE COVER (SCALE 1" = 3") WEIGHT = 170 LBS.



SECTION C-C (SCALE 1" = 1'0")



SECTION B-B (SCALE 1" = 6")

NOTE: BRICK FOR INLET CONSTRUCTION SHALL CONFORM WITH THE LATEST REVISION OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS DESIGNATION C-32 FOR MANHOLE BRICK GRADE MS.

NOTE: MANHOLE FRAMES AND COVER ARE WESTERN IRON AND FOUNDRY CO. INC. OR EQUAL DESIGNS AS FOLLOWS:  
 FRAME: 524-L6  
 FRAME (ALTERNATE): 500-A4  
 COVER: 222-S4 "NOBBY"

① Rev. 5-18-81

**DETAIL STANDARD TYPE IA CURB INLET**

CITY OF WICHITA, KANSAS

R.W. BRUGGEMAN, DIRECTOR OF ENGINEERING/  
 CITY ENGINEER

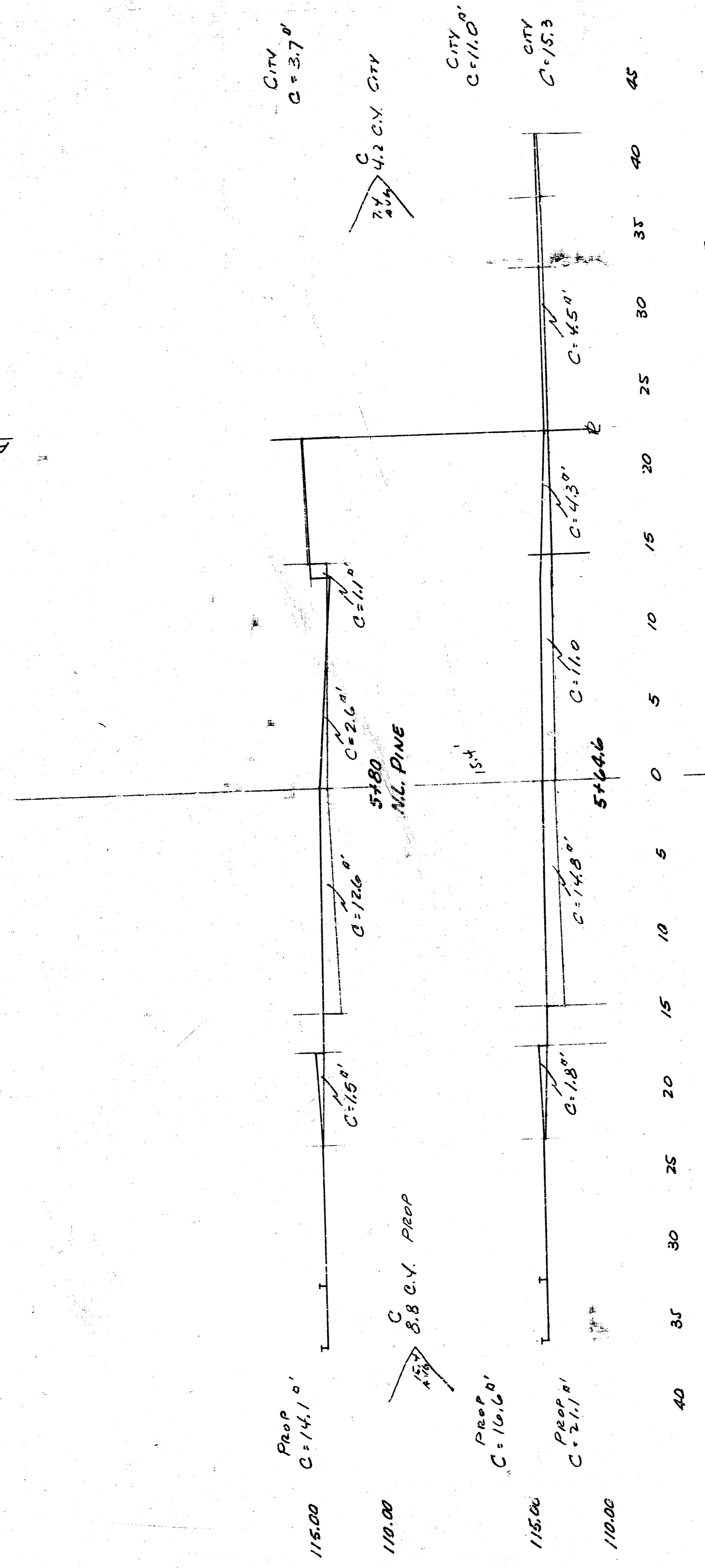
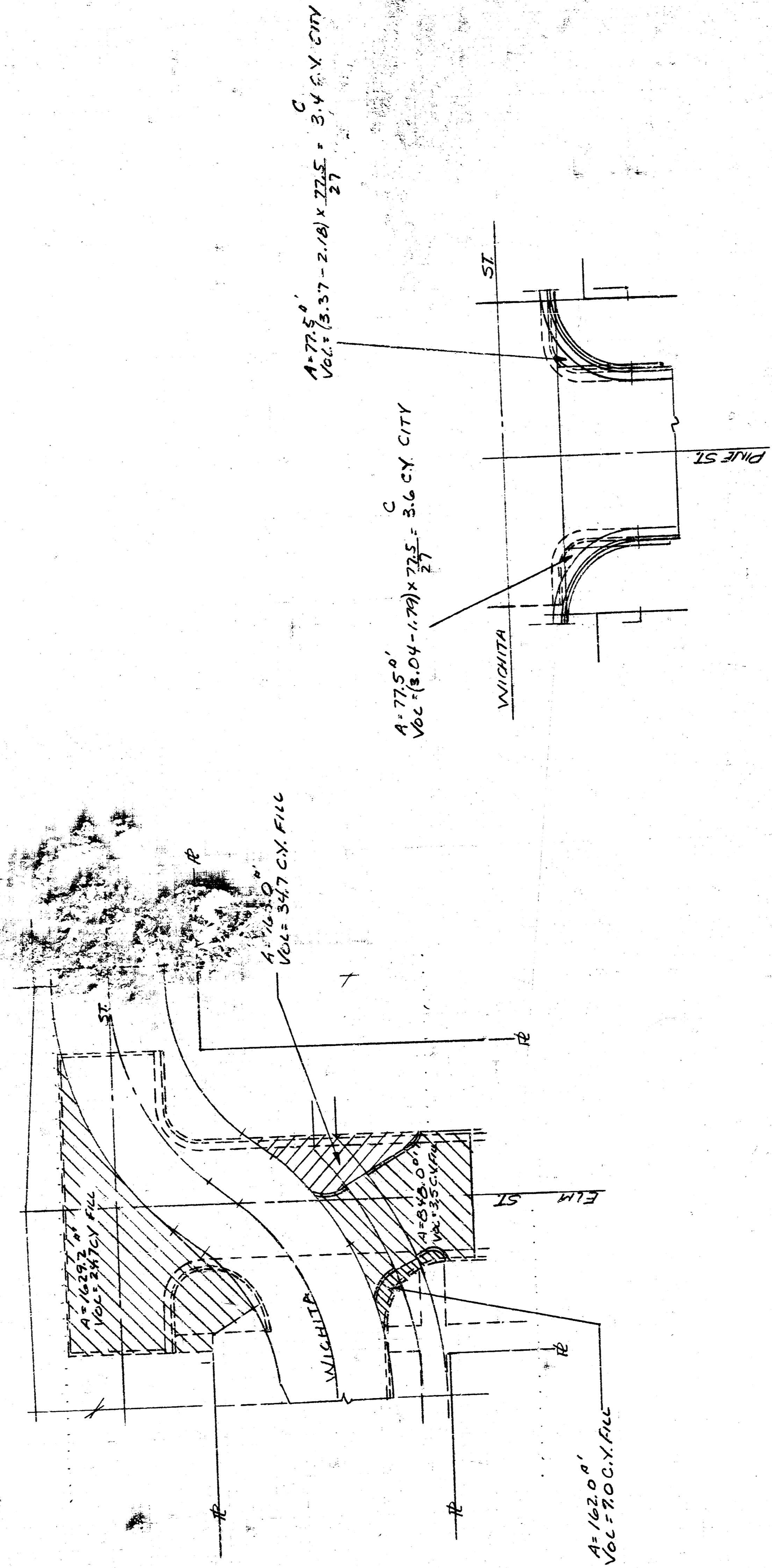
JUNE, 1981

472 76 245 8183 000 000 001

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EARTHWORK - THIS SHEET

EXCAV.	FILL
PROP 8.8 C.Y.	PROP 09.9 C.Y.
CITY 11.2 C.Y.	CITY 0

WICHITA STREET  
 10' S. OF S.L. ELM ST. TO N.L. PINE ST.  
 PARK PLAZA 1st ADDn  
 472 76 245 81183 000 000 001

01 1 3 10

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1/10