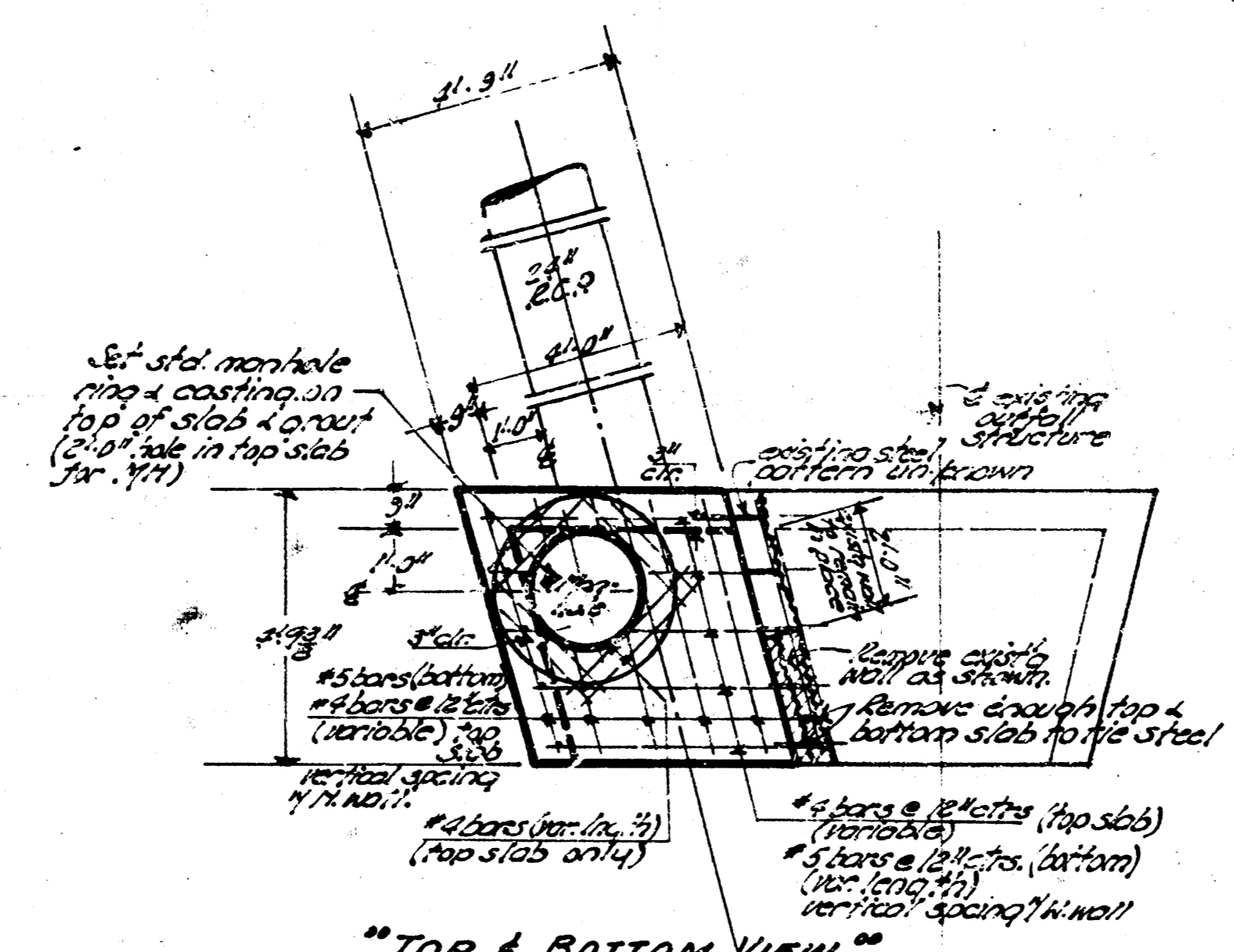
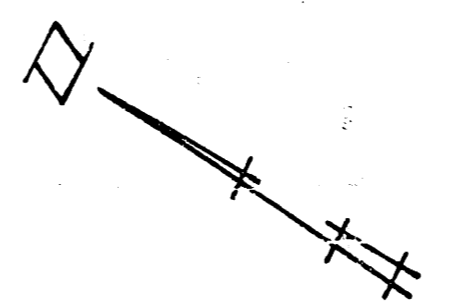
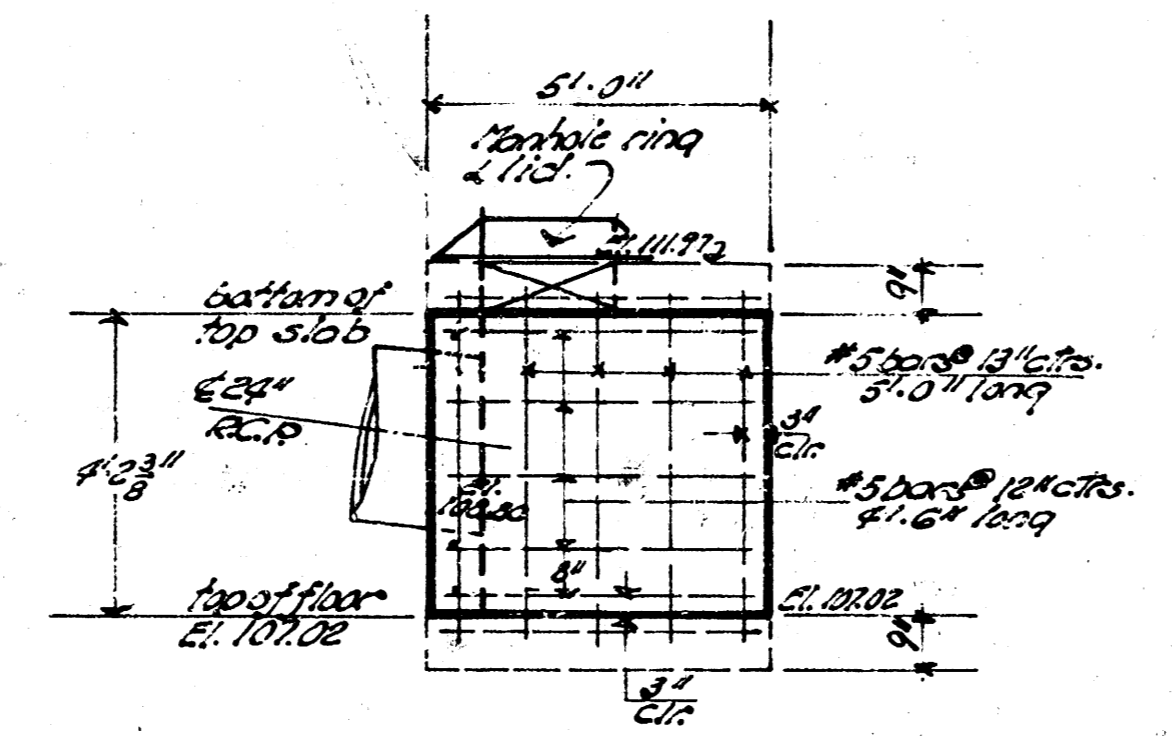


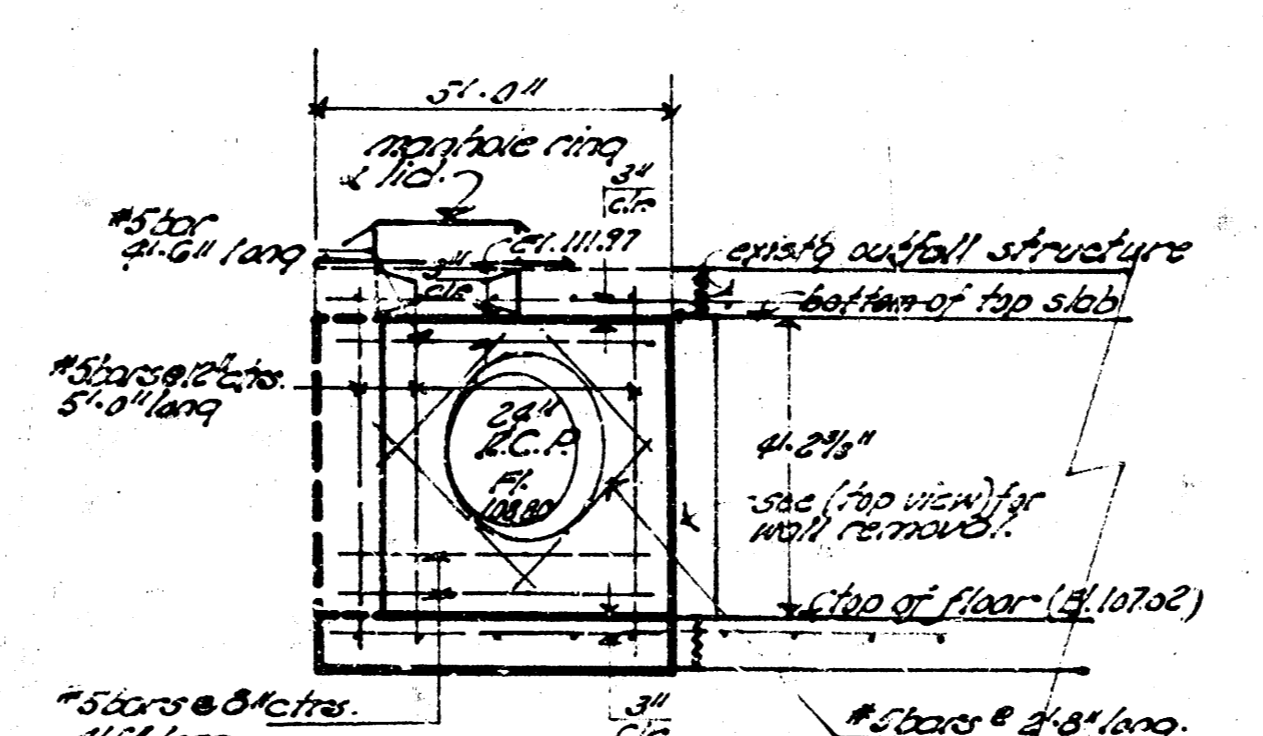
S. 7, 10-46 R.R. Spine, as proposed by free on SE cor. 10th.  
 12' x 10' x 10' of prop. cast iron.



"TOP & BOTTOM VIEW"



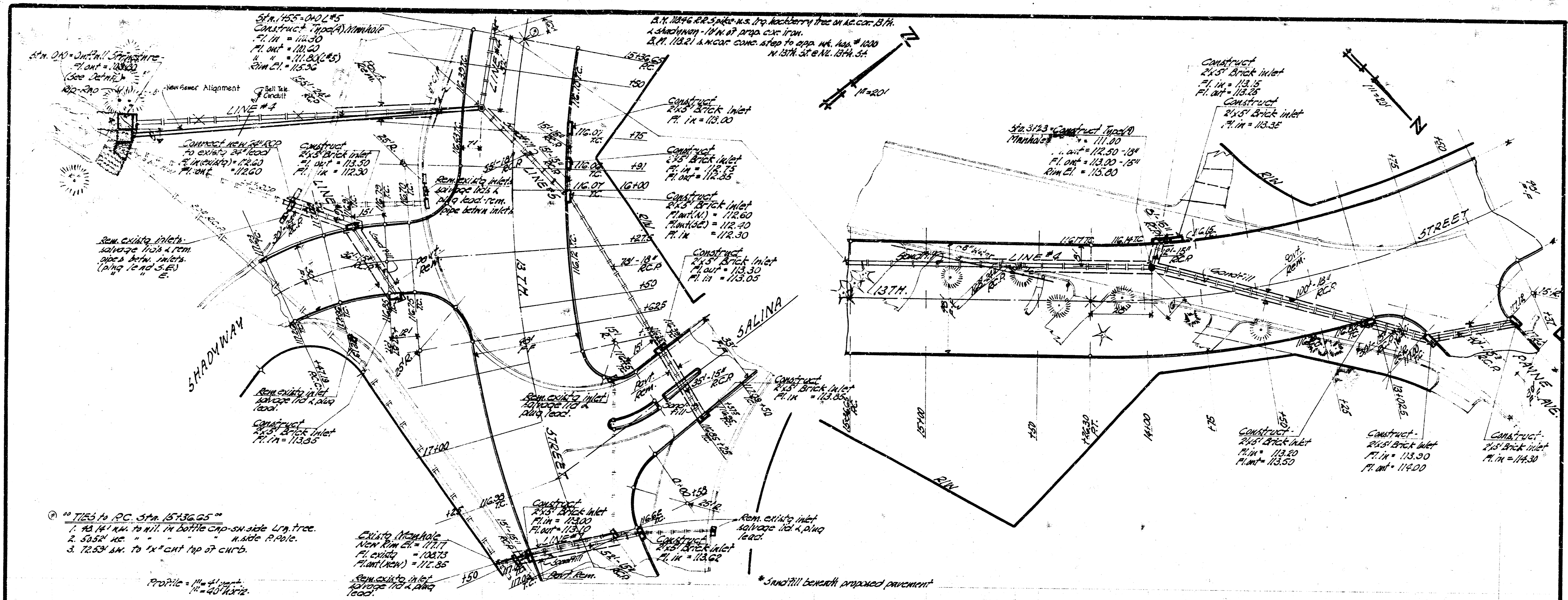
"Wall Section"



"Headwall Section"

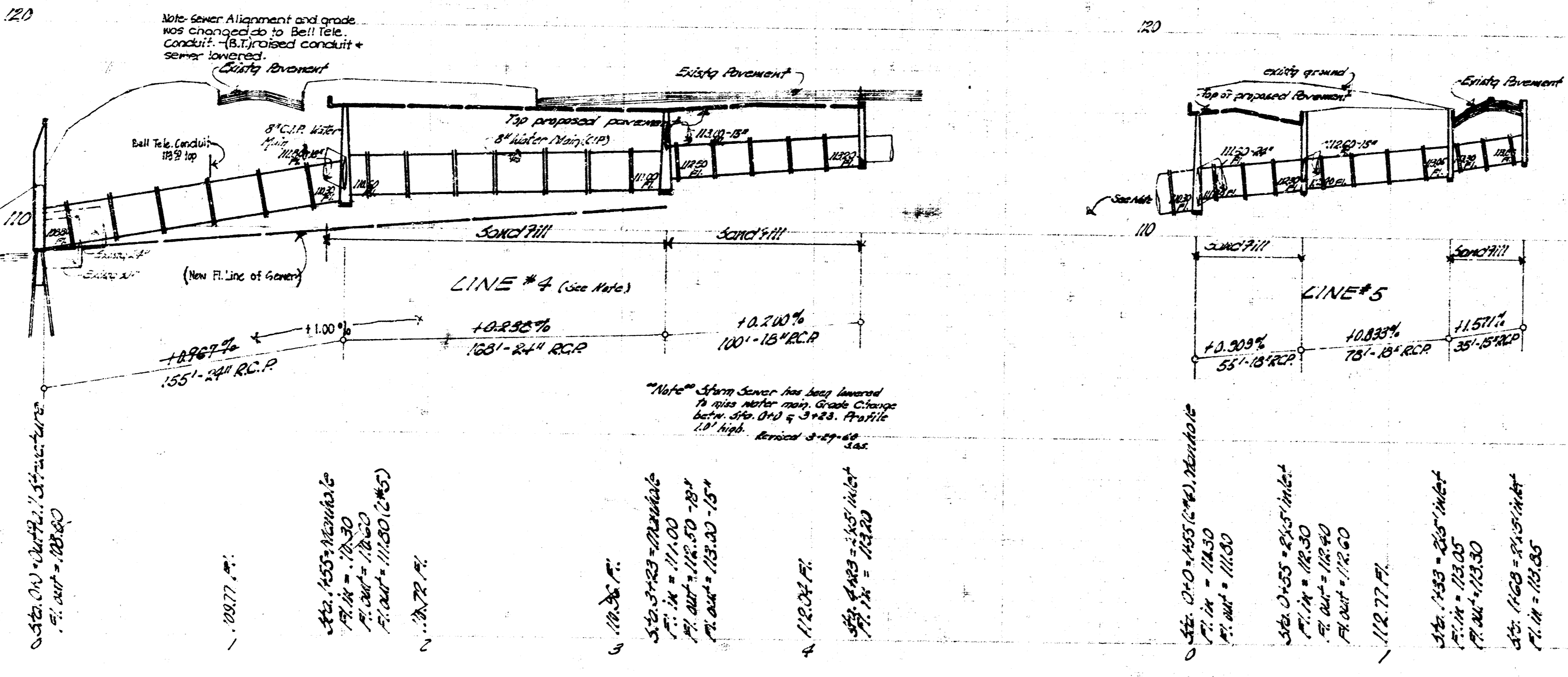
"REVISED OUTFALL STRUCTURE"  
 for Line #4 Incidental Drainage to  
 13TH STREET - Over Boulevard to Bithing St.  
 Revised 5-29-68

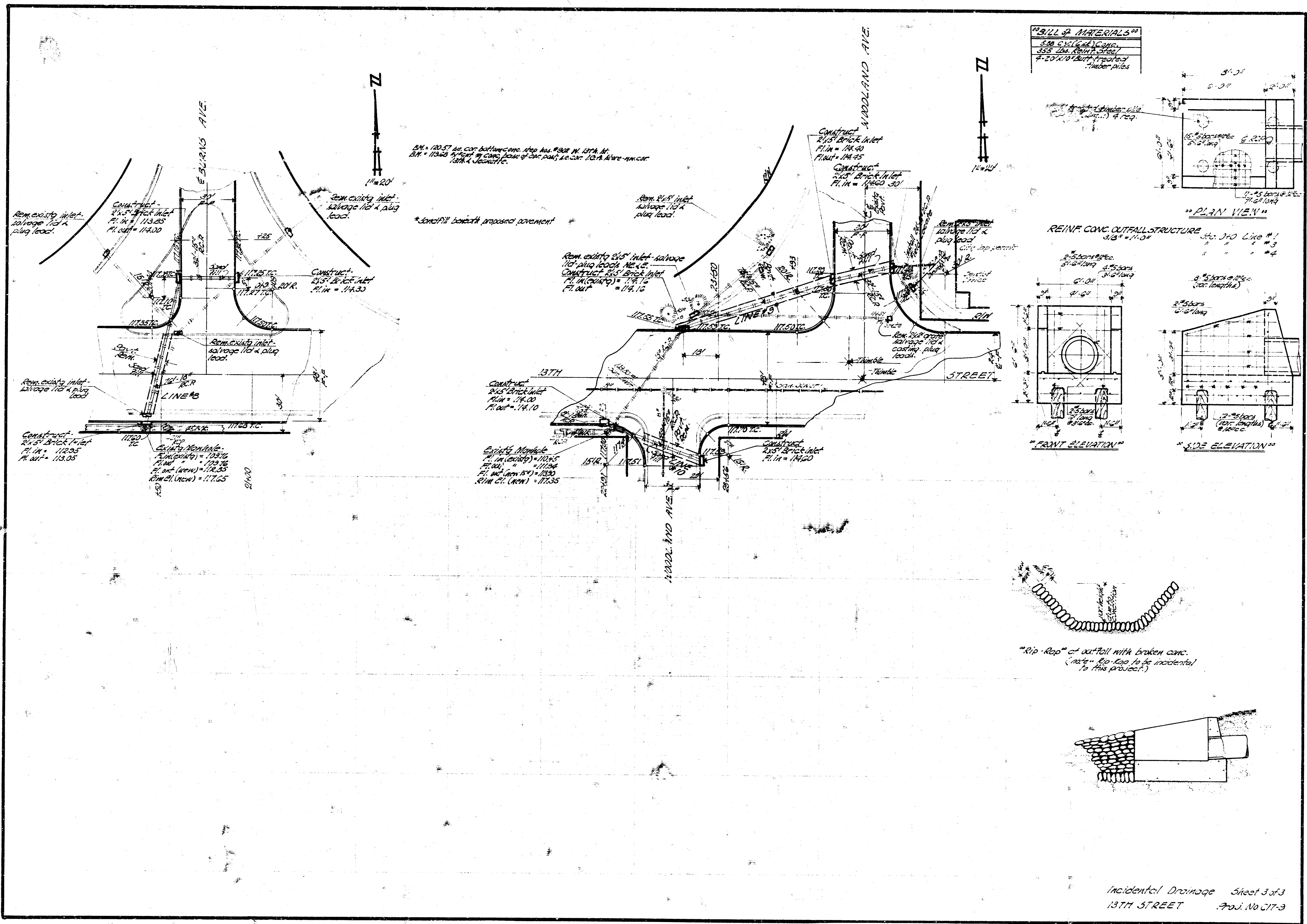




- ① TIES to R.C. Sta. 1536.65
  1. 14.14' AM. to 11.14' in bottle cap on side of tree.
  2. 5.52' AM. to 11.14' on side of R.Pole.
  3. 72.53' AM. to 11.14' on top of curb.

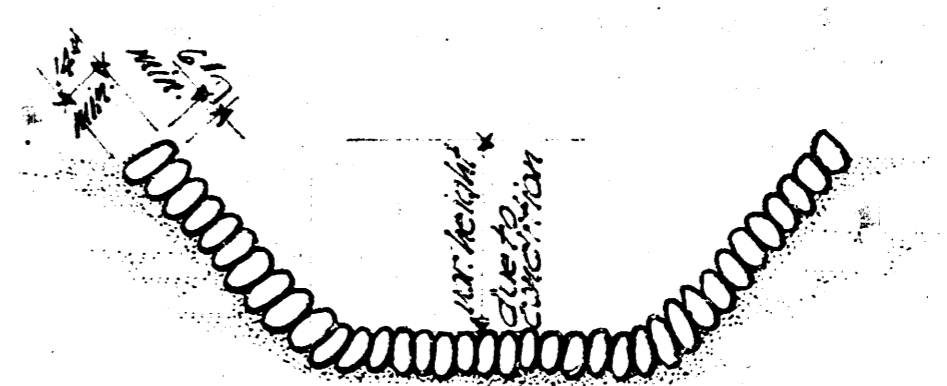
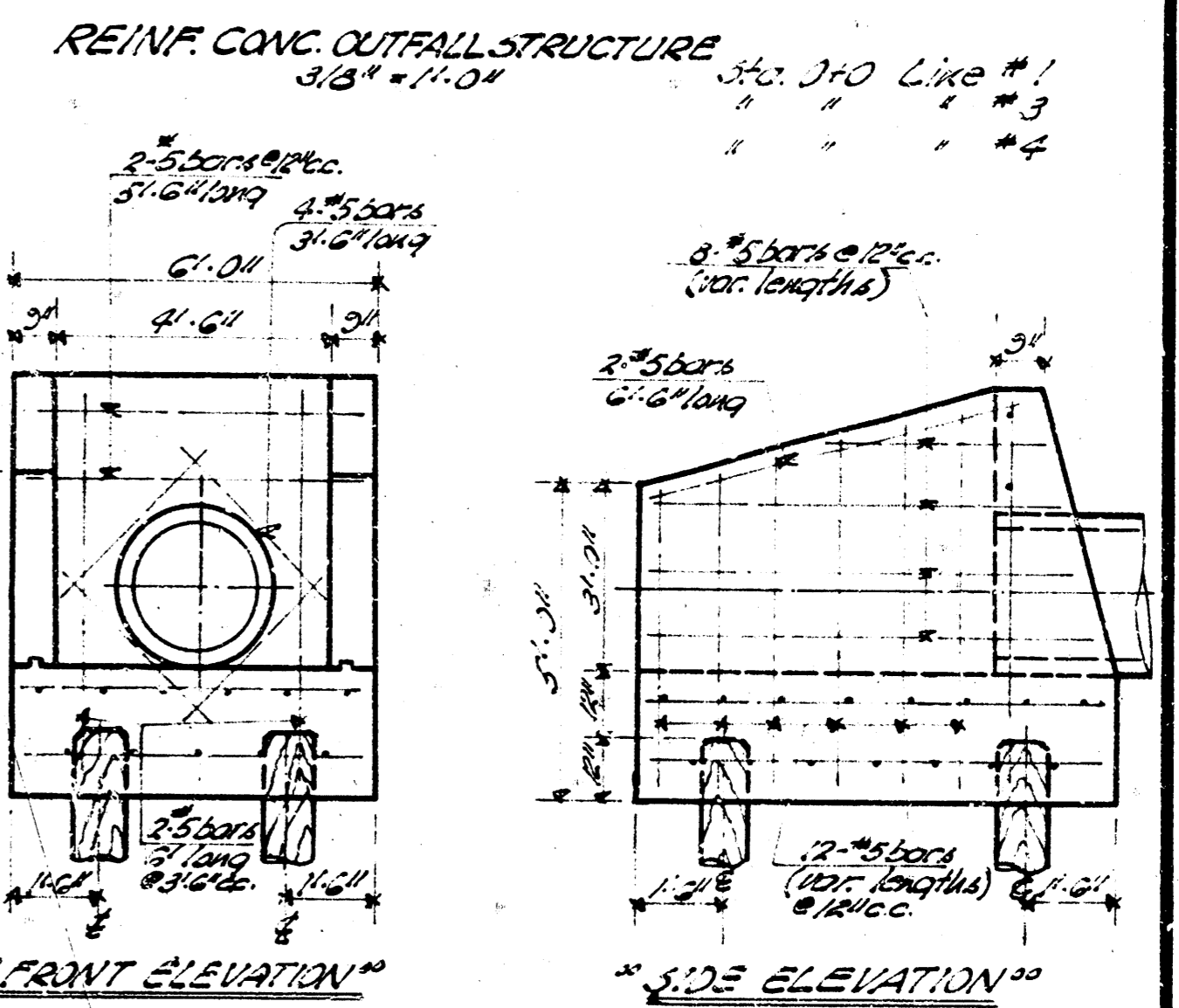
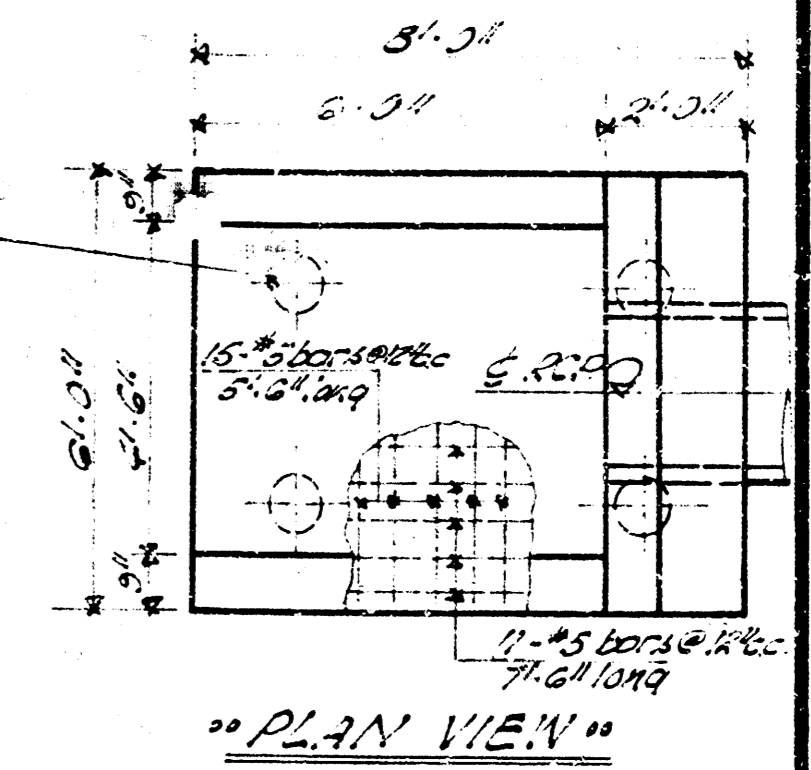
Profile = 11' 4" high  
N = 40' R/W



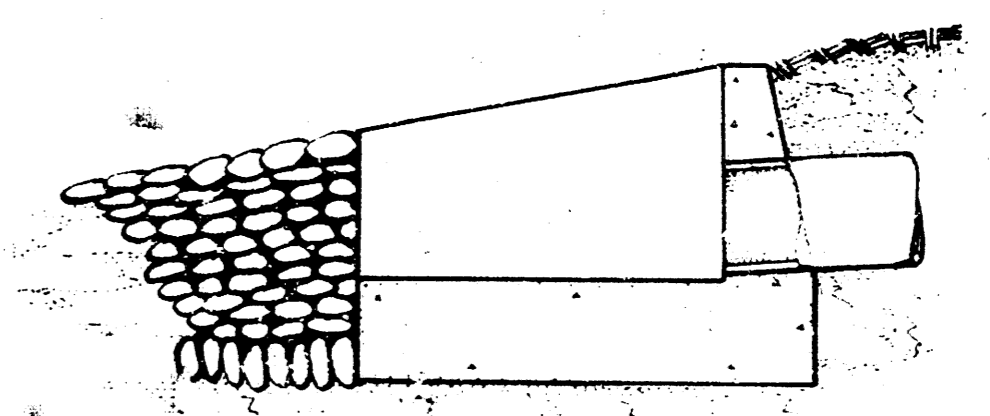


**BILL OF MATERIALS**

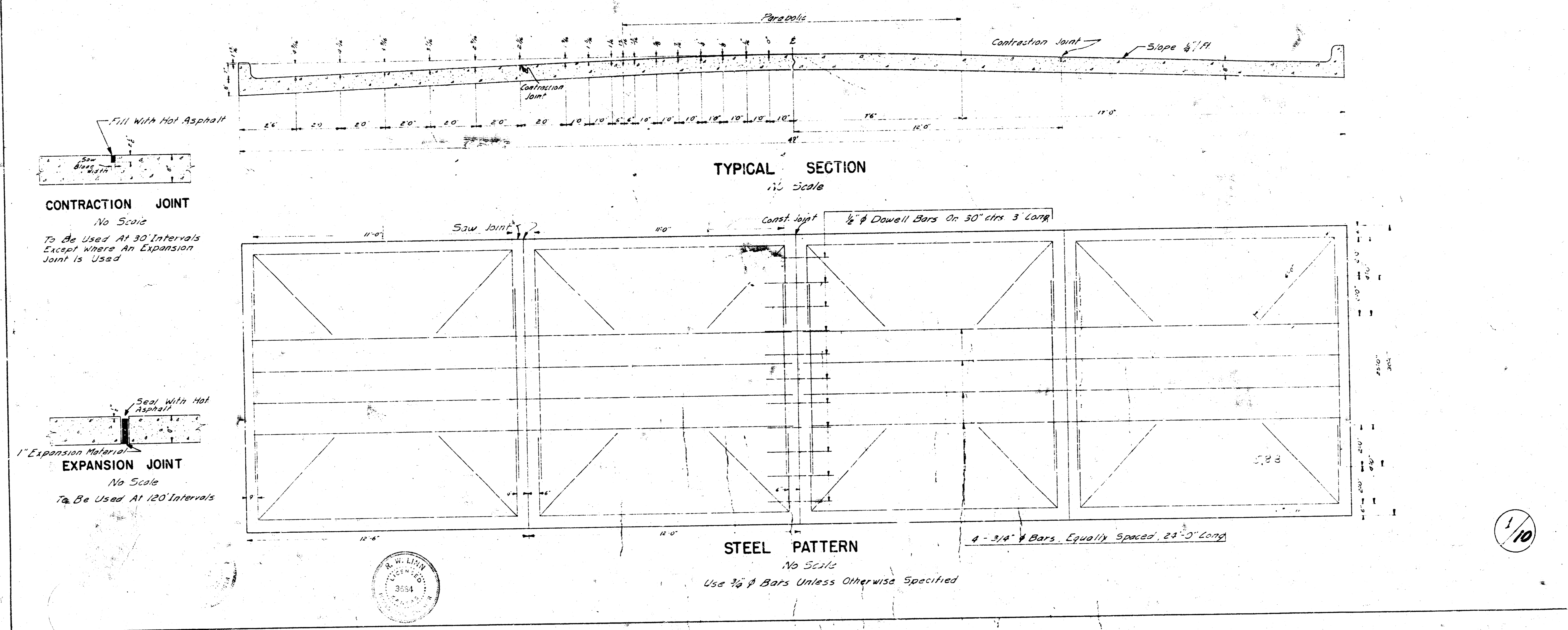
500 c/y (est) Conc.
355 lbs. Reinf. Steel
#20x10' (est) 1" pipes
Number pipes



"Rip-Rap" of outlet with broken conc. (note: this is to be incidental to this project.)



**THIRTEENTH STREET**  
**W.L. RIVER BOULEVARD TO W.L. BITTING AVENUE**  
**PROJECT No. C17-9**



4-5-68  
 13<sup>th</sup> Street Relocation (Continued)

Intersections 13<sup>th</sup> & ...  
 #1 - 4' x 11' 6" ...  
 Top 8" CIP = 114.10  
 Bot 8" CIP = 114.46  
 # 15" RCP = 114.45  
 Bot 15" RCP = 114.25  
 Top 15" RCP = 115.90

#2 - 11' SCL 13<sup>th</sup> & 4' W UCL woodland S.  
 Top 8" CIP = 114.65  
 Bot 8" CIP = 113.80  
 # 15" RCP = 114.20  
 Bot 15" RCP = 113.30  
 Top 15" RCP = 115.85

#3 - 1' x 11' 6" ...  
 Top 8" CIP = 113.99  
 Top 15" RCP = 117.05

13<sup>th</sup> Street Relocation (Continued)

Intersections 13<sup>th</sup> & ...  
 #1 - 21' W of Burns & 30' N NCL #3<sup>th</sup>  
 Top 8" CIP = 114.45  
 Bot 8" CIP = 113.60  
 # 18" RCP = 113.60  
 Bot 18" RCP = 113.40  
 Top 18" RCP = 115.30

#2 - Lower approx. 40' of 2" CIP on west side of Burns & north from 13<sup>th</sup> approx. 2' 6"

#3 - Relocate F.H. to N.E. Corner of 13<sup>th</sup> & Burns.

13<sup>th</sup> Street Relocation (Continued)

Intersections 13<sup>th</sup> & ...  
 #1 - Bank of West Curb on Garland  
 Top 8" CIP = 117.77  
 # Inlet = 117.42  
 Bot 15" V.P. = 117.34

#2 - 13' 6" of W Curb on Garland  
 Top 8" CIP = 117.29  
 Bot 8" CIP = 116.50  
 # 24" RCP = 115.16  
 Bot 24" RCP = 117.35  
 Top 24" RCP = 119.65

#3 - 6' 5" W of Curb Burns & 4' N.W. of Existing Curb.  
 Top 8" CIP = 119.25  
 Bot 8" CIP = 116.40  
 # 15" RCP = 116.30  
 Bot 15" RCP = 116.10  
 Top 15" RCP = 117.95

Intersections Payne & 13<sup>th</sup>  
 #1 - 47' E. of 2<sup>nd</sup> Drive East of Payne.  
 Top 8" CIP = 113.96  
 Bot 8" CIP = 113.20  
 # 24" RCP = 110.80  
 Bot 24" RCP = 110.50  
 Top 24" RCP = 113.10

68  
 Relocations of Hydrants & Manholes  
 13<sup>th</sup> St. From ...

Table 1 - 13<sup>th</sup> & ...  
 #1 - 40' N NCL 13<sup>th</sup> & 3' 6" W UCL Licemeth.  
 Top 6" CIP = 117.56  
 # T. Inlet = 118.60  
 Bot T. Inlet = 118.10

#2 - 62' W of Licemeth & 13' S of 13<sup>th</sup>  
 Top 8" CIP = 118.83  
 Bot 8" CIP = 118.00  
 # 15" RCP = 115.90  
 Top 15" RCP = 117.35  
 Bot 15" RCP = 113.70

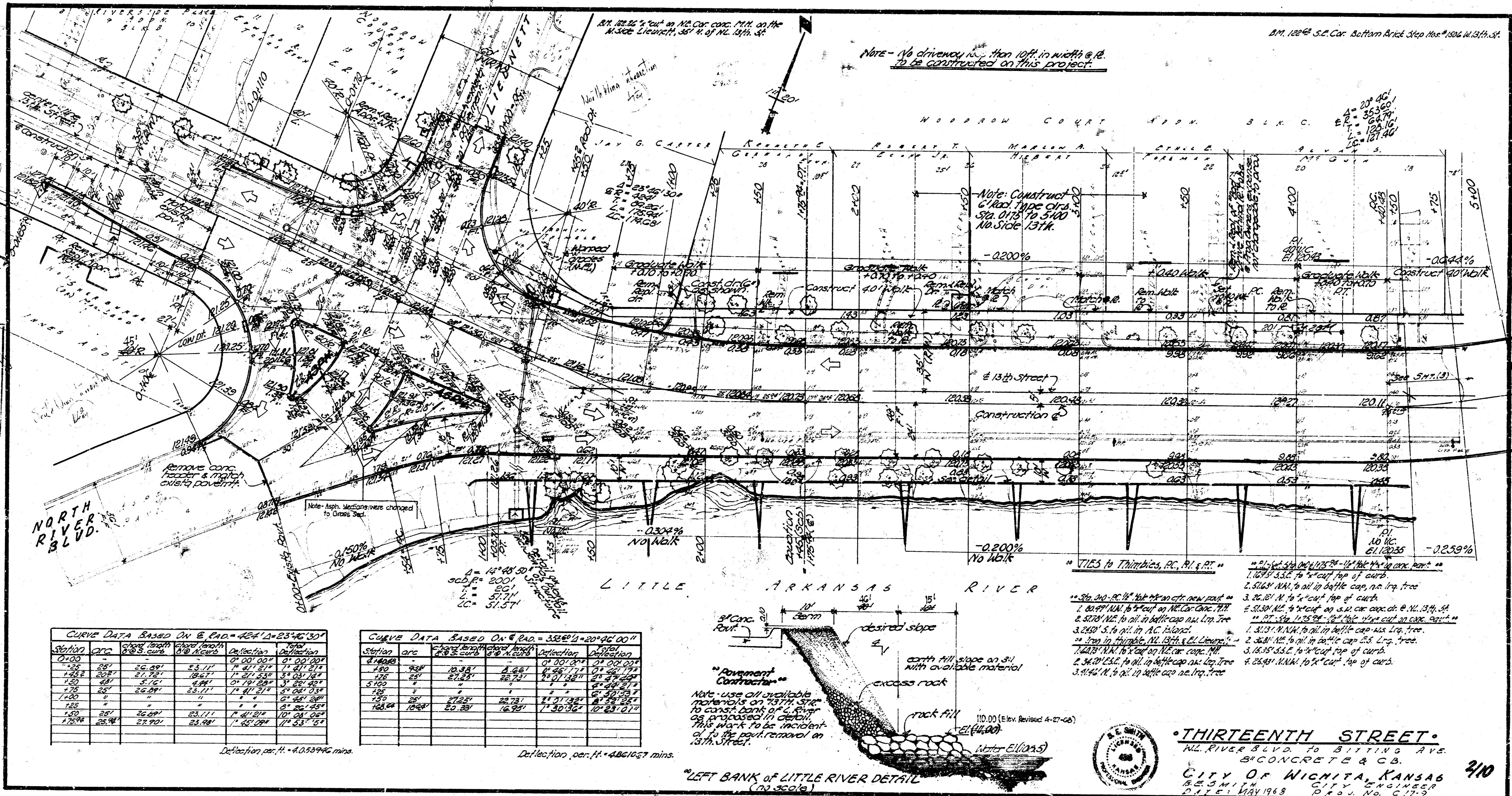
#3 - 11' S NCL 13<sup>th</sup>  
 Top 6" CIP = 119.10  
 Bot 6" CIP = 118.20  
 # 24" RCP = 110.67  
 Top 24" RCP = 112.90

#4 - 14' E of Licemeth  
 Top 8" CIP = 118.93  
 Bot 8" CIP = 118.00  
 # 24" RCP = 110.60  
 Top 24" RCP = 112.30

#5 - 56' S of Licemeth  
 Top 8" CIP = 119.11  
 # 12" RCP = 118.00  
 Bot 12" RCP = 114.80

#6 - Relocate Fire Hydrant @ S.W. Corner

#7 - Kill 2" CIP from Intersection East



Note - No driveway less than 10ft. in width is to be constructed on this project.

BM. 1226 S.E. Cor. Bottom Brick Shop Res. #104 W. 13th St.

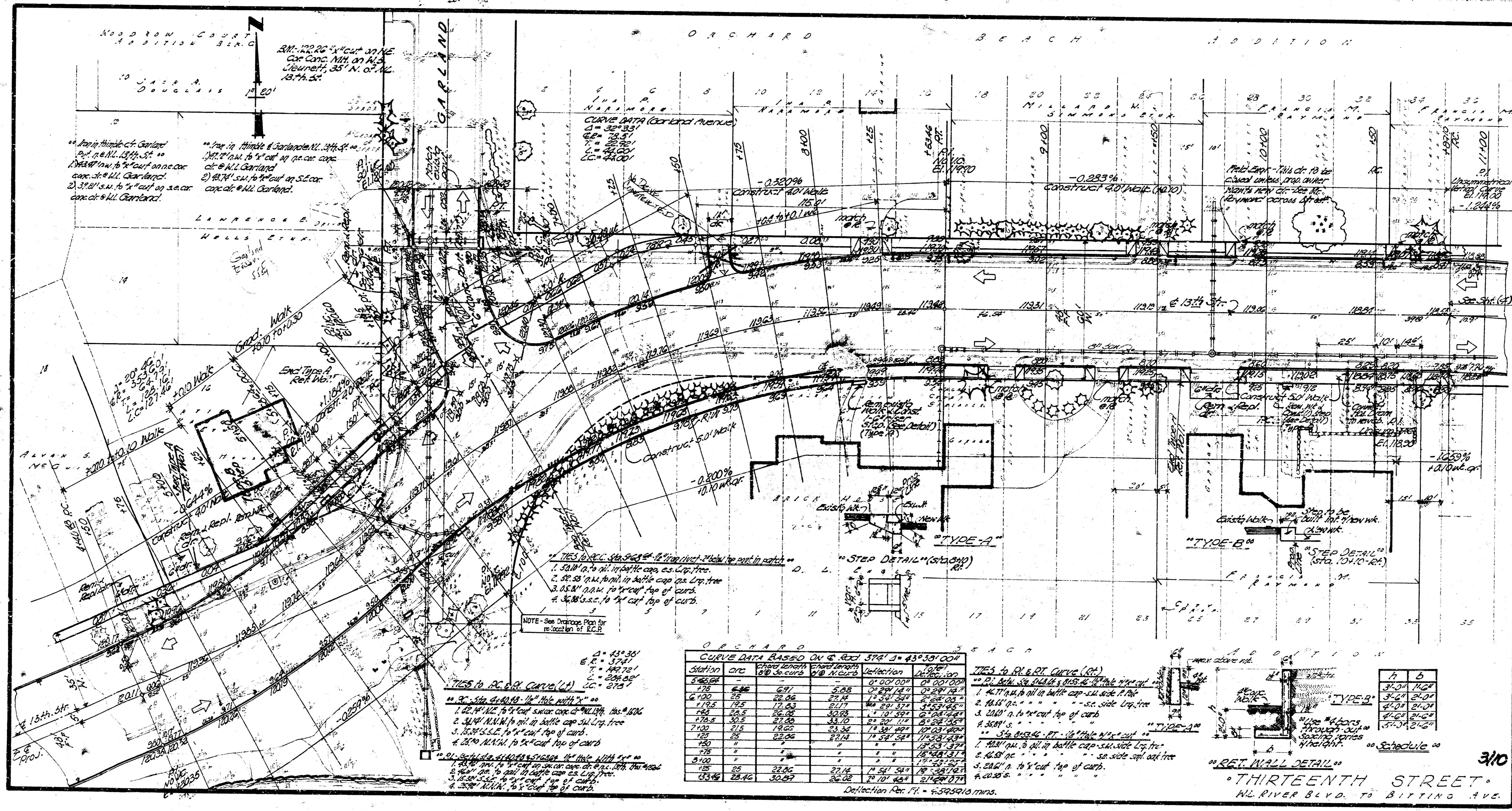
Survey of 1968  
 City Engineer  
 City of Wichita, Kansas

**CURVE DATA BASED ON E.P.C.D. = 484' Δ = 23°45'30"**

Station	Chord Length	Chord Bearing	Deflection	Station	Chord Length	Chord Bearing	Deflection
0+00	26.87	23.11	0° 00' 00"	0+20	26.87	23.11	0° 00' 00"
1+00	26.87	23.11	11° 01' 15"	1+20	26.87	23.11	22° 02' 30"
2+00	26.87	23.11	33° 03' 45"	2+20	26.87	23.11	44° 05' 00"
3+00	26.87	23.11	55° 06' 15"	3+20	26.87	23.11	66° 07' 30"
4+00	26.87	23.11	77° 08' 45"	4+20	26.87	23.11	88° 10' 00"
5+00	26.87	23.11	99° 11' 15"	5+20	26.87	23.11	110° 12' 30"
6+00	26.87	23.11	121° 13' 45"	6+20	26.87	23.11	132° 15' 00"
7+00	26.87	23.11	132° 16' 15"	7+20	26.87	23.11	143° 17' 30"
8+00	26.87	23.11	143° 19' 45"	8+20	26.87	23.11	154° 21' 00"
9+00	26.87	23.11	154° 24' 15"	9+20	26.87	23.11	165° 27' 30"
10+00	26.87	23.11	165° 30' 45"	10+20	26.87	23.11	176° 34' 00"
11+00	26.87	23.11	176° 37' 15"	11+20	26.87	23.11	187° 40' 30"
12+00	26.87	23.11	187° 43' 45"	12+20	26.87	23.11	198° 47' 00"
13+00	26.87	23.11	198° 50' 15"	13+20	26.87	23.11	209° 53' 30"
14+00	26.87	23.11	209° 56' 45"	14+20	26.87	23.11	220° 00' 00"
15+00	26.87	23.11	220° 03' 15"	15+20	26.87	23.11	230° 06' 30"
16+00	26.87	23.11	230° 09' 45"	16+20	26.87	23.11	240° 13' 00"
17+00	26.87	23.11	240° 16' 15"	17+20	26.87	23.11	250° 19' 30"
18+00	26.87	23.11	250° 22' 45"	18+20	26.87	23.11	260° 26' 00"
19+00	26.87	23.11	260° 29' 15"	19+20	26.87	23.11	270° 32' 30"
20+00	26.87	23.11	270° 35' 45"	20+20	26.87	23.11	280° 39' 00"
21+00	26.87	23.11	280° 42' 15"	21+20	26.87	23.11	290° 45' 30"
22+00	26.87	23.11	290° 48' 45"	22+20	26.87	23.11	300° 52' 00"
23+00	26.87	23.11	300° 55' 15"	23+20	26.87	23.11	310° 58' 30"
24+00	26.87	23.11	310° 01' 45"	24+20	26.87	23.11	320° 05' 00"
25+00	26.87	23.11	320° 08' 15"	25+20	26.87	23.11	330° 11' 30"
26+00	26.87	23.11	330° 14' 45"	26+20	26.87	23.11	340° 18' 00"
27+00	26.87	23.11	340° 21' 15"	27+20	26.87	23.11	350° 24' 30"
28+00	26.87	23.11	350° 27' 45"	28+20	26.87	23.11	360° 31' 00"
29+00	26.87	23.11	360° 34' 15"	29+20	26.87	23.11	370° 37' 30"
30+00	26.87	23.11	370° 44' 45"	30+20	26.87	23.11	380° 51' 00"
31+00	26.87	23.11	380° 58' 15"	31+20	26.87	23.11	390° 57' 30"
32+00	26.87	23.11	390° 04' 45"	32+20	26.87	23.11	400° 04' 00"
33+00	26.87	23.11	400° 11' 15"	33+20	26.87	23.11	410° 10' 30"
34+00	26.87	23.11	410° 17' 45"	34+20	26.87	23.11	420° 17' 00"
35+00	26.87	23.11	420° 24' 15"	35+20	26.87	23.11	430° 23' 30"
36+00	26.87	23.11	430° 30' 45"	36+20	26.87	23.11	440° 30' 00"
37+00	26.87	23.11	440° 37' 15"	37+20	26.87	23.11	450° 36' 30"
38+00	26.87	23.11	450° 43' 45"	38+20	26.87	23.11	460° 43' 00"
39+00	26.87	23.11	460° 50' 15"	39+20	26.87	23.11	470° 49' 30"
40+00	26.87	23.11	470° 56' 45"	40+20	26.87	23.11	480° 56' 00"
41+00	26.87	23.11	480° 03' 15"	41+20	26.87	23.11	490° 02' 30"
42+00	26.87	23.11	490° 09' 45"	42+20	26.87	23.11	500° 09' 00"
43+00	26.87	23.11	500° 16' 15"	43+20	26.87	23.11	510° 15' 30"
44+00	26.87	23.11	510° 22' 45"	44+20	26.87	23.11	520° 22' 00"
45+00	26.87	23.11	520° 29' 15"	45+20	26.87	23.11	530° 28' 30"
46+00	26.87	23.11	530° 35' 45"	46+20	26.87	23.11	540° 35' 00"
47+00	26.87	23.11	540° 41' 15"	47+20	26.87	23.11	550° 41' 30"
48+00	26.87	23.11	550° 48' 45"	48+20	26.87	23.11	560° 48' 00"
49+00	26.87	23.11	560° 54' 15"	49+20	26.87	23.11	570° 54' 30"
50+00	26.87	23.11	570° 61' 45"	50+20	26.87	23.11	580° 01' 00"
51+00	26.87	23.11	580° 68' 15"	51+20	26.87	23.11	590° 07' 30"
52+00	26.87	23.11	590° 74' 45"	52+20	26.87	23.11	600° 14' 00"
53+00	26.87	23.11	600° 81' 15"	53+20	26.87	23.11	610° 20' 30"
54+00	26.87	23.11	610° 87' 45"	54+20	26.87	23.11	620° 27' 00"
55+00	26.87	23.11	620° 94' 15"	55+20	26.87	23.11	630° 33' 30"
56+00	26.87	23.11	630° 100' 45"	56+20	26.87	23.11	640° 40' 00"
57+00	26.87	23.11	640° 107' 15"	57+20	26.87	23.11	650° 46' 30"
58+00	26.87	23.11	650° 113' 45"	58+20	26.87	23.11	660° 53' 00"
59+00	26.87	23.11	660° 120' 15"	59+20	26.87	23.11	670° 59' 30"
60+00	26.87	23.11	670° 126' 45"	60+20	26.87	23.11	680° 06' 00"
61+00	26.87	23.11	680° 133' 15"	61+20	26.87	23.11	690° 12' 30"
62+00	26.87	23.11	690° 139' 45"	62+20	26.87	23.11	700° 19' 00"
63+00	26.87	23.11	700° 146' 15"	63+20	26.87	23.11	710° 25' 30"
64+00	26.87	23.11	710° 152' 45"	64+20	26.87	23.11	720° 32' 00"
65+00	26.87	23.11	720° 159' 15"	65+20	26.87	23.11	730° 38' 30"
66+00	26.87	23.11	730° 165' 45"	66+20	26.87	23.11	740° 45' 00"
67+00	26.87	23.11	740° 172' 15"	67+20	26.87	23.11	750° 51' 30"
68+00	26.87	23.11	750° 178' 45"	68+20	26.87	23.11	760° 58' 00"
69+00	26.87	23.11	760° 185' 15"	69+20	26.87	23.11	770° 04' 30"
70+00	26.87	23.11	770° 191' 45"	70+20	26.87	23.11	780° 11' 00"
71+00	26.87	23.11	780° 198' 15"	71+20	26.87	23.11	790° 17' 30"
72+00	26.87	23.11	790° 204' 45"	72+20	26.87	23.11	800° 24' 00"
73+00	26.87	23.11	800° 211' 15"	73+20	26.87	23.11	810° 30' 30"
74+00	26.87	23.11	810° 217' 45"	74+20	26.87	23.11	820° 37' 00"
75+00	26.87	23.11	820° 224' 15"	75+20	26.87	23.11	830° 43' 30"
76+00	26.87	23.11	830° 230' 45"	76+20	26.87	23.11	840° 50' 00"
77+00	26.87	23.11	840° 237' 15"	77+20	26.87	23.11	850° 56' 30"
78+00	26.87	23.11	850° 243' 45"	78+20	26.87	23.11	860° 03' 00"
79+00	26.87	23.11	860° 250' 15"	79+20	26.87	23.11	870° 09' 30"
80+00	26.87	23.11	870° 256' 45"	80+20	26.87	23.11	880° 16' 00"
81+00	26.87	23.11	880° 263' 15"	81+20	26.87	23.11	890° 22' 30"
82+00	26.87	23.11	890° 269' 45"	82+20	26.87	23.11	900° 29' 00"
83+00	26.87	23.11	900° 276' 15"	83+20	26.87	23.11	910° 35' 30"
84+00	26.87	23.11	910° 282' 45"	84+20	26.87	23.11	920° 42' 00"
85+00	26.87	23.11	920° 289' 15"	85+20	26.87	23.11	930° 48' 30"
86+00	26.87	23.11	930° 295' 45"	86+20	26.87	23.11	940° 55' 00"
87+00	26.87	23.11	940° 302' 15"	87+20	26.87	23.11	950° 01' 30"
88+00	26.87	23.11	950° 308' 45"	88+20	26.87	23.11	960° 08' 00"
89+00	26.87	23.11	960° 315' 15"	89+20	26.87	23.11	970° 14' 30"
90+00	26.87	23.11	970° 321' 45"	90+20	26.87	23.11	980° 21' 00"
91+00	26.87	23.11	980° 328' 15"	91+20	26.87	23.11	990° 27' 30"
92+00	26.87	23.11	990° 334' 45"	92+20	26.87	23.11	1000° 34' 00"
93+00	26.87	23.11	1000° 341' 15"	93+20	26.87	23.11	1010° 40' 30"
94+00	26.87	23.11	1010° 347' 45"	94+20	26.87	23.11	1020° 47' 00"
95+00	26.87	23.11	1020° 354' 15"	95+20	26.87	23.11	1030° 53' 30"
96+00	26.87	23.11	1030° 360' 45"	96+20	26.87	23.11	1040° 00' 00"
97+00	26.87	23.11	1040° 367' 15"	97+20	26.87	23.11	1050° 06' 30"
98+00	26.87	23.11	1050° 373' 45"	98+20	26.87	23.11	1060° 13' 00"
99+00	26.87	23.11	1060° 380' 15"	99+20	26.87	23.11	1070° 19' 30"
100+00	26.87	23.11	1070° 386' 45"	100+20	26.87	23.11	1080° 26' 00"

**CURVE DATA BASED ON E.P.C.D. = 338' Δ = 20°41'00"**

Station	Chord Length	Chord Bearing	Deflection	Station	Chord Length	Chord Bearing	Deflection
0+00	10.88	10.88	0° 00' 00"	0+20	10.88	10.88	0° 00' 00"
1+00	10.88	10.88	11° 01' 15"	1+20	10.88	10.88	22° 02' 30"
2+00	10.88	10.88	33° 03' 45"	2+20	10.88	10.88	44° 05' 00"
3+00	10.88	10.88	55° 06' 15"	3+20	10.88	10.88	66° 07' 30"
4+00	10.88	10.88	77° 08' 45"	4+20	10.88	10.88	88° 10' 00"
5+00	10.88	10.88	99° 11' 15"	5+20	10.88	10.88	110° 12' 30"
6+00	10.88	10.88	121° 13' 45"	6+20	10.88	10.88	132° 15' 00"
7+00	10.88	10.88	132° 16' 15"	7+20	10.88	10.88	143° 17' 30"
8+00	10.88	10.88	143° 19' 45"	8+20	10.88	10.88	154° 21' 00"
9+00	10.88	10.8					



**CURVE DATA BASED ON C. & G. 3741 S. = 43°30'00"**

Station	arc	chord	chord length	deflection	1/2 deflection
5+00.00	100.00	100.00	100.00	0°00'00"	0°00'00"
5+100.00	100.00	100.00	100.00	0°00'00"	0°00'00"
5+200.00	100.00	100.00	100.00	0°00'00"	0°00'00"
5+300.00	100.00	100.00	100.00	0°00'00"	0°00'00"
5+400.00	100.00	100.00	100.00	0°00'00"	0°00'00"
5+500.00	100.00	100.00	100.00	0°00'00"	0°00'00"
5+600.00	100.00	100.00	100.00	0°00'00"	0°00'00"
5+700.00	100.00	100.00	100.00	0°00'00"	0°00'00"
5+800.00	100.00	100.00	100.00	0°00'00"	0°00'00"
5+900.00	100.00	100.00	100.00	0°00'00"	0°00'00"
6+000.00	100.00	100.00	100.00	0°00'00"	0°00'00"

Deflection Per 100' = 6.949416 mins.

**WOODROW COURT**  
 ADJUTANT BLDG.

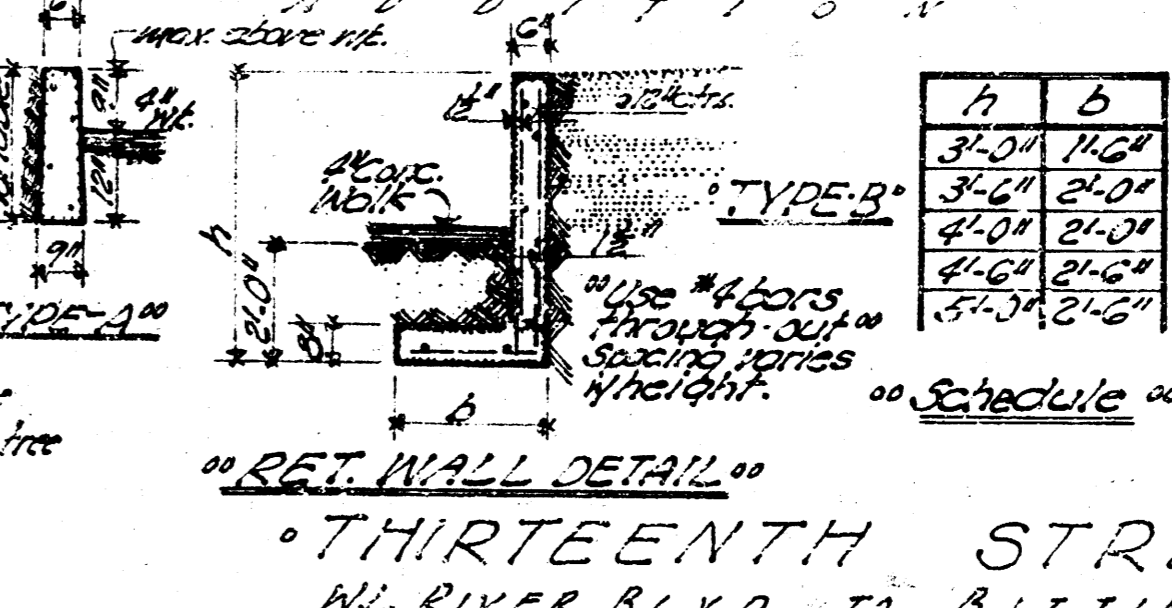
10 JAMES A. DOUGLASS 12 201

2M. 112.25' cut on NE Cor. Conc. Mt. on N.E. Corner; 35' N. of N.E. 187th St.

For in Middle of Lawrence St. 114-41  
 1. 112' cut on N.E. Cor. Conc. Mt. on N.E. Corner; 35' N. of N.E. 187th St.  
 2. 37' cut on N.E. Cor. Conc. Mt. on N.E. Corner; 35' N. of N.E. 187th St.  
 3. 37' cut on N.E. Cor. Conc. Mt. on N.E. Corner; 35' N. of N.E. 187th St.

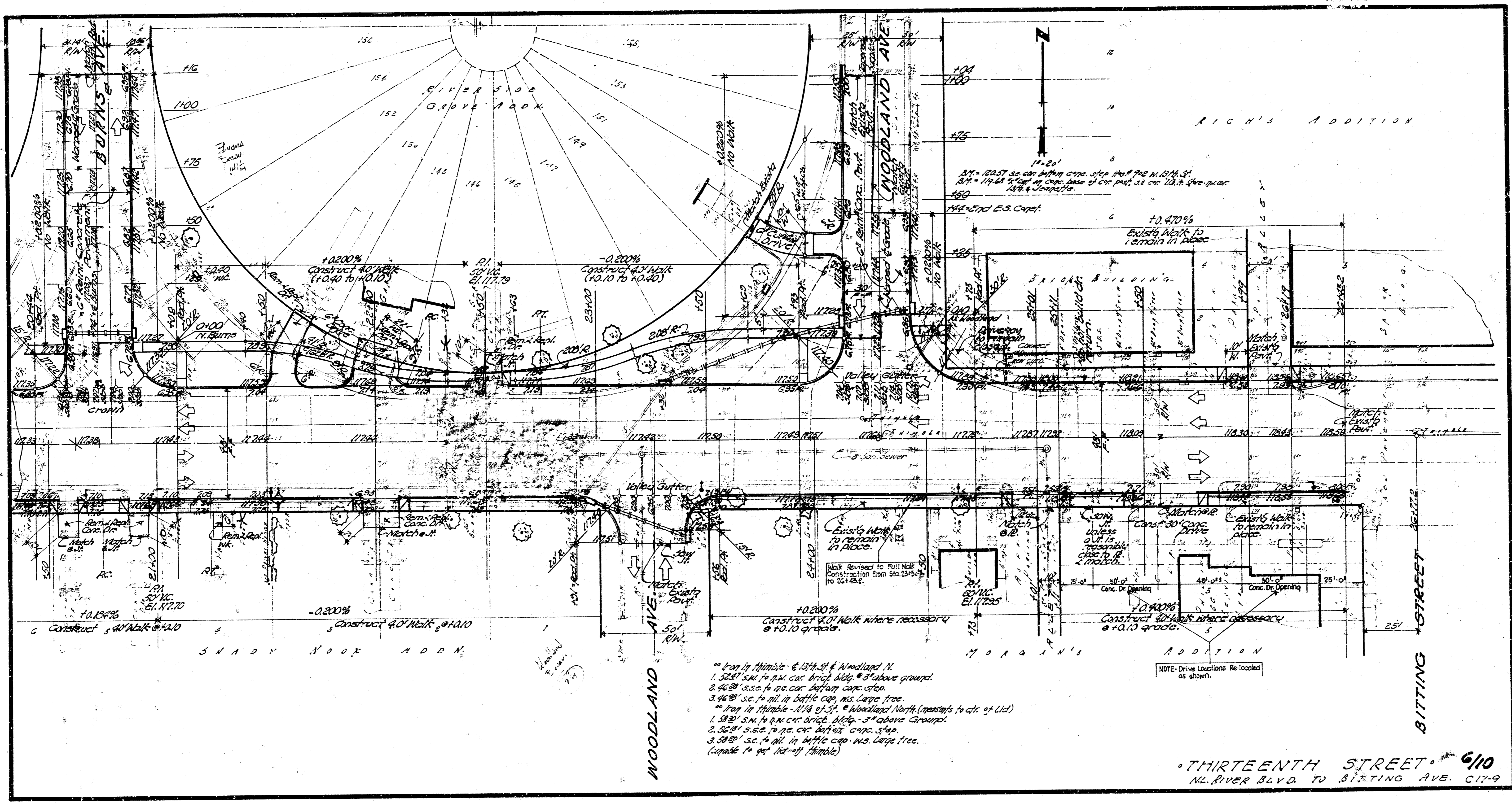
**TIES to R.C.P.T. Curve (A)**

1. 100' N. to all in full cap on side of curb  
 2. 100' N. to all in full cap on side of curb  
 3. 100' N. to all in full cap on side of curb  
 4. 100' N. to all in full cap on side of curb









- Iron in Middle - E. 17th St & Woodland N.
1. 32' x 1' s.e. to p.m. car. brick. bldg. @ 3' above ground.
  2. 46' x 2' s.e. to p.m. car. diff. cap. step.
  3. 46' x 2' s.e. to p.m. in battle cap. ms. large tree.
- Iron in Middle - N. 14th St & Woodland North (nearby to ctr. of lot)
1. 32' x 1' s.e. to p.m. car. brick. bldg. @ 3' above ground.
  2. 32' x 1' s.e. to p.m. car. diff. cap. step.
  3. 32' x 1' s.e. to p.m. in battle cap. ms. large tree.
- (Capable to get out of Middle)

THIRTEENTH STREET 6/10  
 N.W. RIVER BLVD TO BITING AVE. C17-9