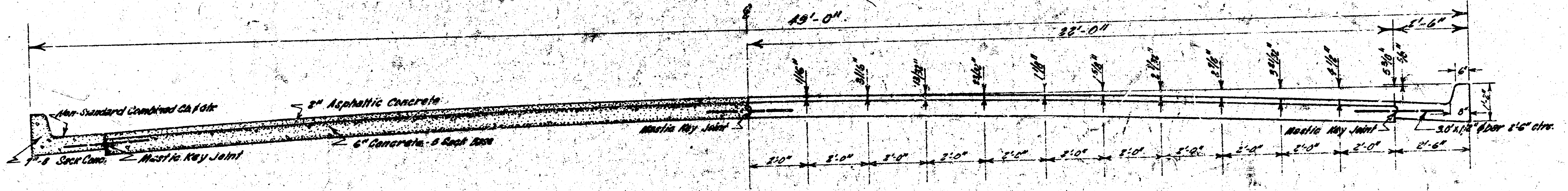
# THIRTEENTH STREET

## E.L. ST. PAUL AVE. --- W.L. McLEAN BLVD.

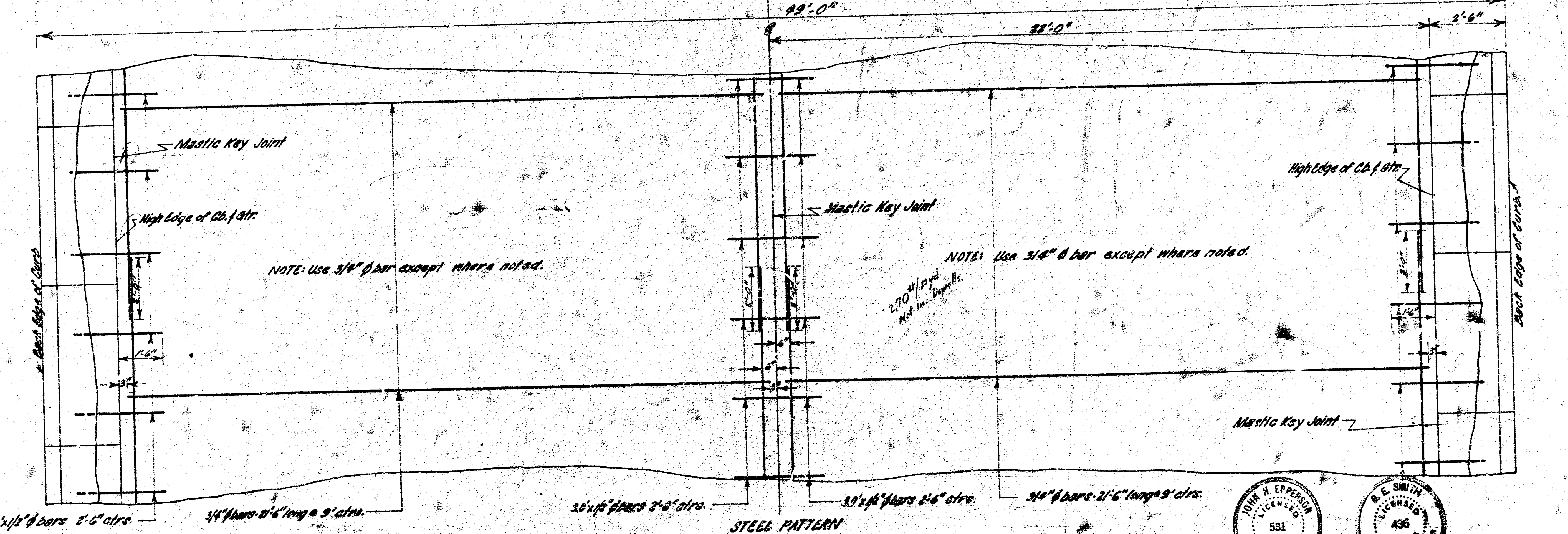
## 26'-2'-30' A.C. WIDEN TO 48' (8")

PROJ. NO. C.10-35



49'-0"
22'-0"
2'-6"
Non-Standard Combined Cb. & Gtr.
2" Asphaltic Concrete
6" Concrete - 6 Sack Base
1"-6 Sack Conc.
Mastic Key Joint
Mastic Key Joint
1/16"
3/16"
13/32"
23/32"
1 1/8"
1 5/8"
2 7/32"
2 7/16"
3 21/32"
4 1/2"
5 3/8"
5/8"
6"
1'-2"
8"
Mastic Key Joint
3.0'x1/2" ϕ bar 2'-6" ctrs.
2'-0"
2'-0"
2'-0"
2'-0"
2'-0"
2'-0"
2'-0"
2'-0"
2'-0"
2'-0"
2'-0"
2'-6"

TYPICAL SECTION
Scale: 1" = 2'-0"



49'-0"
22'-0"
2'-6"
Mastic Key Joint
High Edge of Cb. & Gtr.
Back Edge of Curb
NOTE: Use 3/4" ϕ bar except where noted.
1'-6"
3"
2'-0"
6"
6"
3"
Mastic Key Joint
NOTE: Use 3/4" ϕ bar except where noted.
High Edge of Cb. & Gtr.
Back Edge of Curb
2'-0"
1'-6"
3"
Mastic Key Joint
3.0'x1/2" ϕ bars 2'-6" ctrs.
3/4" ϕ bars-21'-6" long @ 9" ctrs.
3.0'x1/2" ϕ bars 2'-6" ctrs.
3.0'x1/2" ϕ bars 2'-6" ctrs.
3/4" ϕ bars-21'-6" long @ 9" ctrs.

270#/yd
Not inc. Dowells

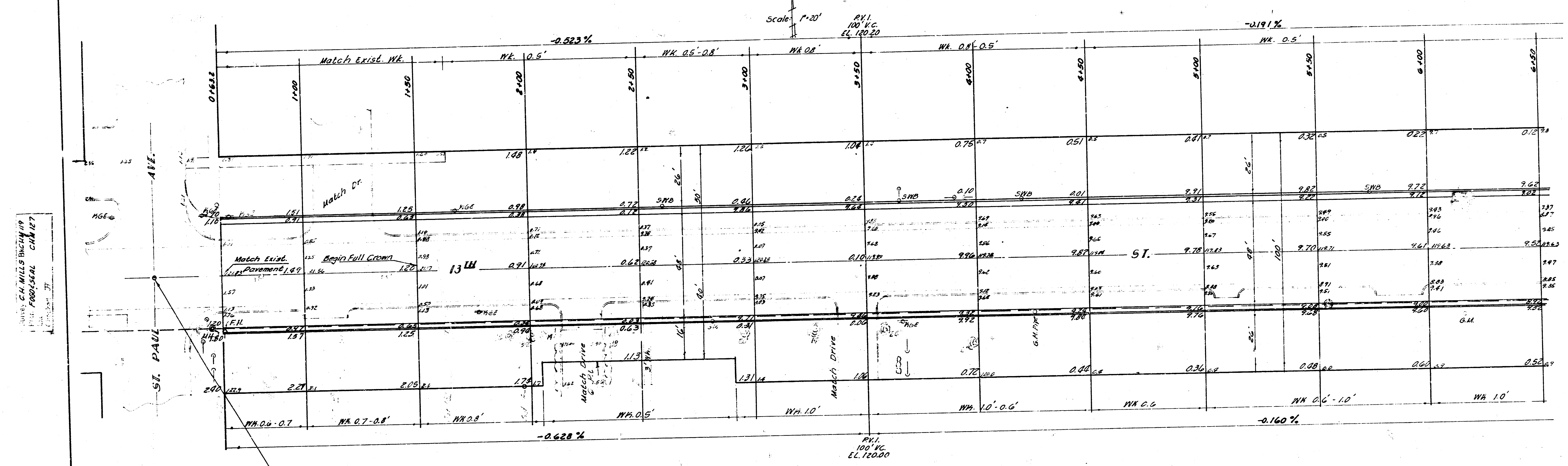
STEEL PATTERN
Scale: 1" = 2'-0"

JOHN H. EPPERSON
LICENSED
531
KANSAS
PROFESSIONAL ENGINEER

B. E. SMITH
LICENSED
436
KANSAS
PROFESSIONAL ENGINEER

1/7

B.M. 124.13 R.R. Spike W.S. of P.Pole N.E. Cor. St. Paul & 13th
B.M. 122.25 "□" E.S. Inter. □ N.E. Cor. St. Paul & 13th
B.M. 120.25 "□" on N.W. Cor of Lt. Post N.L. 13th Edwords
B.M. 118.339 Std. S.E. Cor. 13th & Meridian


Scale 1"=20'
P.V.I.
100' V.C.
EL. 120.20
-0.523%
-0.191%
Match Exist. Wk.
Wk. 0.5'
Wk. 0.5'-0.8'
Wk. 0.8'
Wk. 0.8'-0.5'
Wk. 0.5'
0+63.2
1+00
1+50
2+00
2+50
3+00
3+50
4+00
4+50
5+00
5+50
6+00
6+50
ST. PAUL AVE.
13th ST.
Match Exist. Pavement
Begin Full Crown
Match Dr.
Match Drive
F.H.
SWB
G.M.
Wk. 0.6-0.7
Wk. 0.7-0.8'
Wk. 0.8'
Wk. 0.5'
Wk. 1.0'
Wk. 1.0'-0.6'
Wk. 0.6
Wk. 0.6'-1.0'
Wk. 1.0'
-0.628%
-0.160%
P.V.I.
100' V.C.
EL. 120.00
C.H. MILLS

TIES TO IRON ℄ ST. PAUL & 13TH:
1. 50.00' N. to Nail ℄ St. Paul Pav.
2. 50.00 N.E. to * on frt of Wk.
3. 50.00 N.W. to * on frt of Wk.

EARTHWORK QUANTITIES

| | PROPERTY | CITY | IMPROVE. |
|---|---|---|---|
| EXCAVATION -- | $3194^{5}$ C.Y. | $519^{5}$ C.Y. | $2233^{7}$ C.Y. |
| +10% | $319^{9}$ C.Y. | $51^{9}$ C.Y. | $223^{3}$ C.Y. |
| TOTAL | $3514^{0}$ C.Y. | $571^{0}$ C.Y. | $2457^{0}$ C.Y. |

NOTE: FIELD ENGINEER TO DETERMINE AMOUNT OF DRIVES TO BE REMOVED AND REPLACED.

JOHN A. EPPERSON 531

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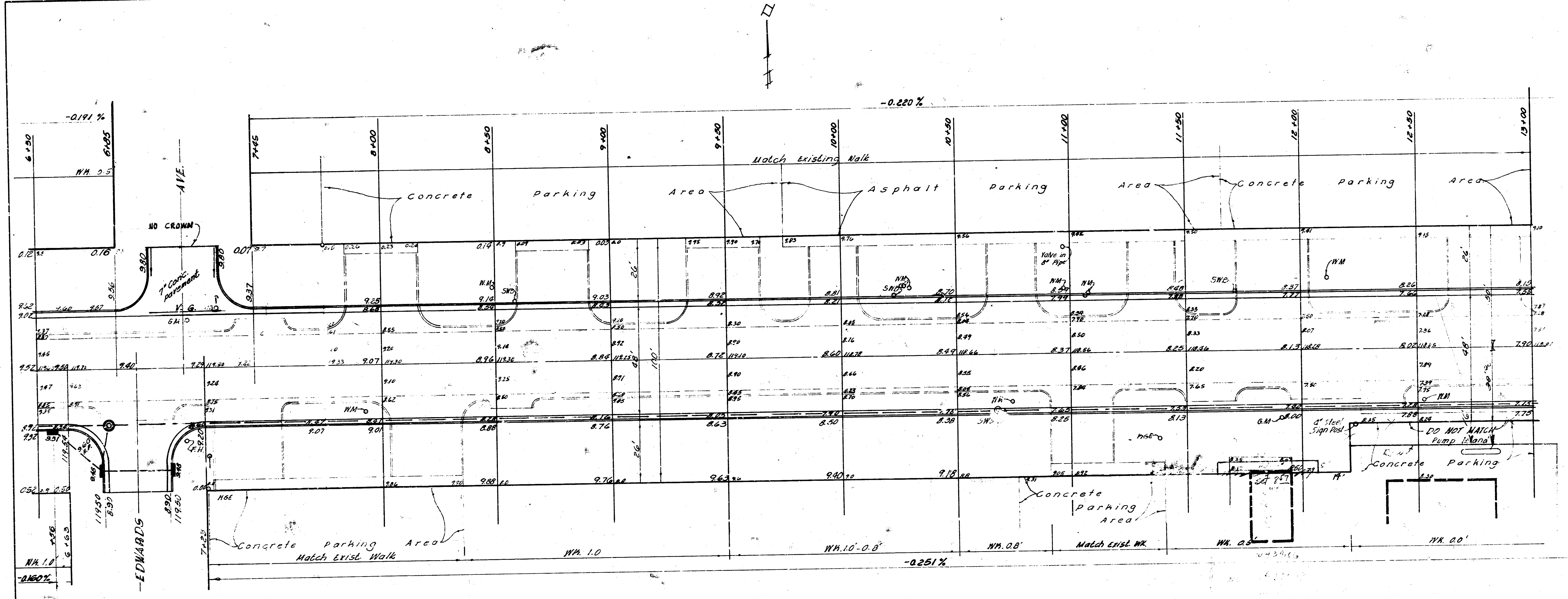
# THIRTEENTH ST.

E.L. ST. PAUL - W.L. McLEAN BLVD.
26-2-30 A.C. WIDEN TO 48' (8")
CITY OF WICHITA, KANS.
D. E. SMITH CITY ENGINEER
DATE: [illegible] PROJ. NO. C 10-35


-0.191 %
6+30
6+85
WK. 0.5
NO CROWN
7" Conc. pavement
AVE.
EDWARDS
V. G.
F.H.
WK. 1.0
-0.160%
6+63
7+45
7+23
8+00
8+50
9+00
9+50
10+00
10+50
11+00
11+50
12+00
12+50
13+00
-0.220 %
Match Existing Walk
Concrete Parking Area
Asphalt Parking Area
Concrete Parking Area
Valve in 8" Pipe
W.M.
SWB
WM
26'
48'
100'
9.80
9.37
9.25
8.68
9.14
8.54
9.03
8.92
8.81
8.70
8.59
7.99
8.48
8.37
7.77
8.26
7.66
8.15
9.52
9.50
9.40
9.29
119.50
9.07
8.96
119.30
8.84
8.72
8.60
8.49
8.37
8.25
8.13
8.02
7.90
9.07
9.01
8.88
8.76
8.63
8.50
8.38
8.25
8.13
8.00
7.88
7.75
9.88
9.76
9.63
9.40
9.18
H6E
4" Steel Sign Post
G.M.
DO NOT MATCH Pump Island
Concrete Parking
Concrete Parking Area
Set 8.57
WK. 1.0
WK. 1.0'-0.8'
WK. 0.8'
Match Exist. WK.
WK. 0.5'
WK. 0.0'
-0.251%
Concrete Parking Area
Match Exist. Walk

Thirteenth Street
St. Paul -- McLean

3
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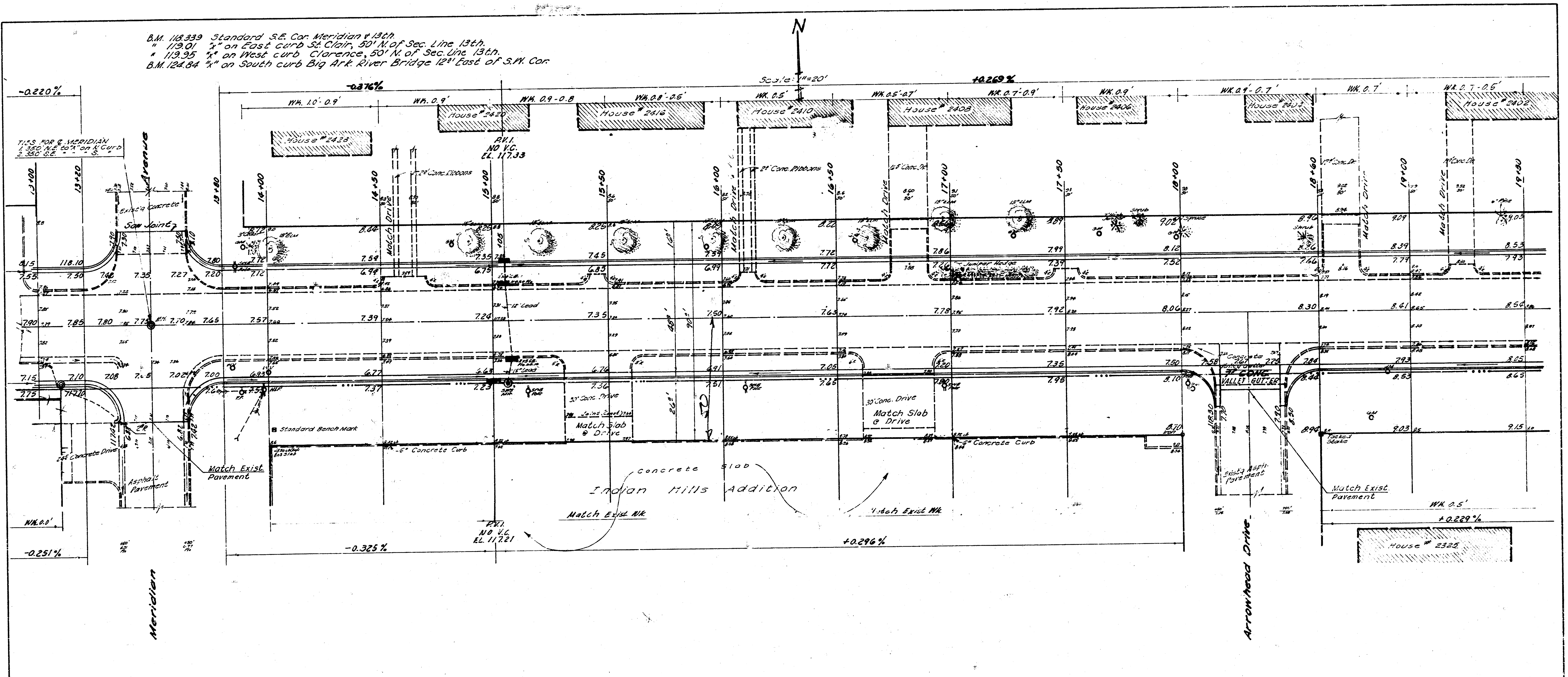
B.M. 118.339 Standard S.E. Cor. Meridian & 13th.
" 119.01 "x" on East curb St. Clair, 50' N. of Sec. Line 13th.
" 119.95 "x" on West curb Clarence, 50' N. of Sec. Line 13th.
B.M. 124.84 "x" on South curb Big Ark. River Bridge 12.0' East of S.W. Cor.


N
Scale: 1"=20'
-0.220%
-0.376%
+0.269%
-0.251%
-0.325%
+0.296%
+0.229%
WK. 1.0'-0.9'
WK. 0.9'
WK. 0.9-0.8
WK. 0.8'-0.5'
WK. 0.5'
WK. 0.5'-0.7'
WK. 0.7'-0.9'
WK. 0.9'
WK. 0.9'-0.7'
WK. 0.7'
WK. 0.7'-0.5'
WK. 0.0'
WK. 0.5'
House #2428
House #2420
House #2416
House #2410
House #2408
House #2406
House #2404
House #2402
House #2325
P.V.I.
NO V.C.
EL. 117.33
P.V.I.
NO V.C.
EL. 117.21
TIES FOR ℄ MERIDIAN
1. 35.0' N.E. to "x" on N. Curb
2. 35.0' S.E. " " " S. "
13+00
13+20
13+80
14+00
14+50
15+00
15+50
16+00
16+50
17+00
17+50
18+00
18+60
19+00
19+50
Avenue
Exist'g Concrete
Saw Joint
Match Drive
2" Conc. Ribbons
12" Lead
15" Lead
Juniper Hedge
15" ELM
Shrub
Spruce
Tacked Stake
Standard Bench Mark
6" Concrete Curb
24' Concrete Drive
Asphalt Pavement
Match Exist. Pavement
30' Conc. Drive
Match Slab @ Drive
Concrete Slab
Indian Hills Addition
Match Exist. Wk.
Concrete Valley Gutter
7" CONC. VALLEY GUTTER
Exist'g Asph. Pavement
Meridian
Arrowhead Drive

NOTE: INTERSECTION @ MERIDIAN TO BE CONSTRUCTED & OPEN TO NORTH-SOUTH TRAFFIC BEFORE CLOSING REMAINDER OF 13TH ST. TO EAST-WEST TRAFFIC. INTERSECTION OF 13TH ST. & McLEAN BLVD. (PROJ. NO. C19-15) TO BE CONSTR. SIMULTANEOUSLY WITH MERIDIAN INTERSECTION.

Thirteenth Street
St. Paul -- McLean

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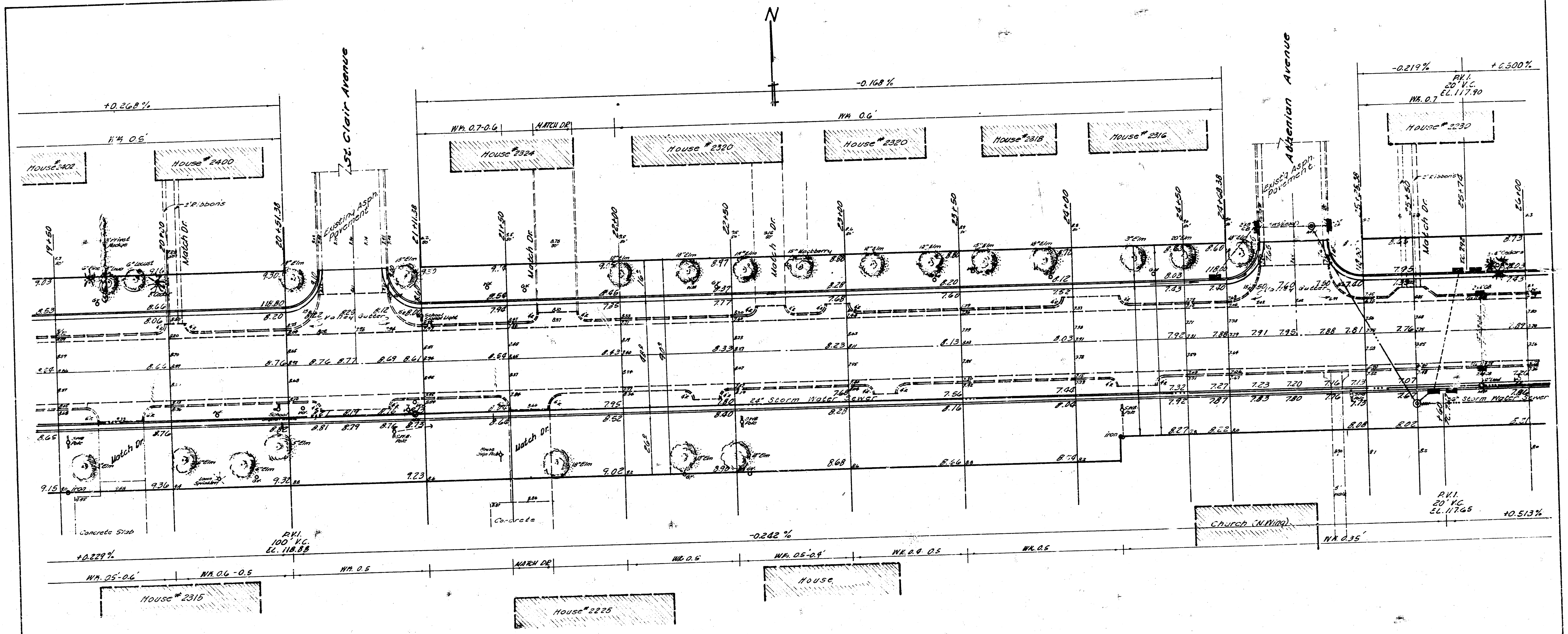
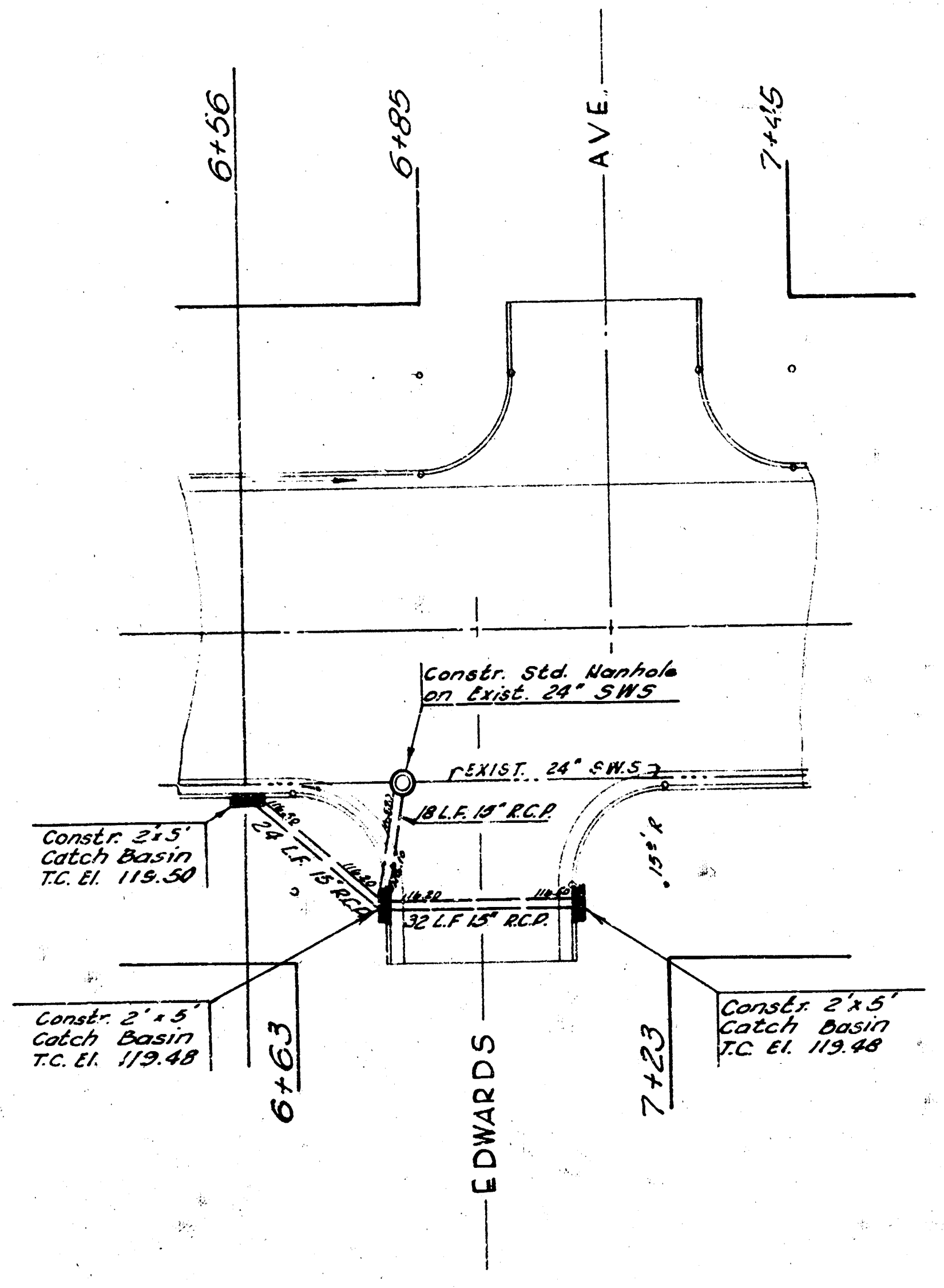
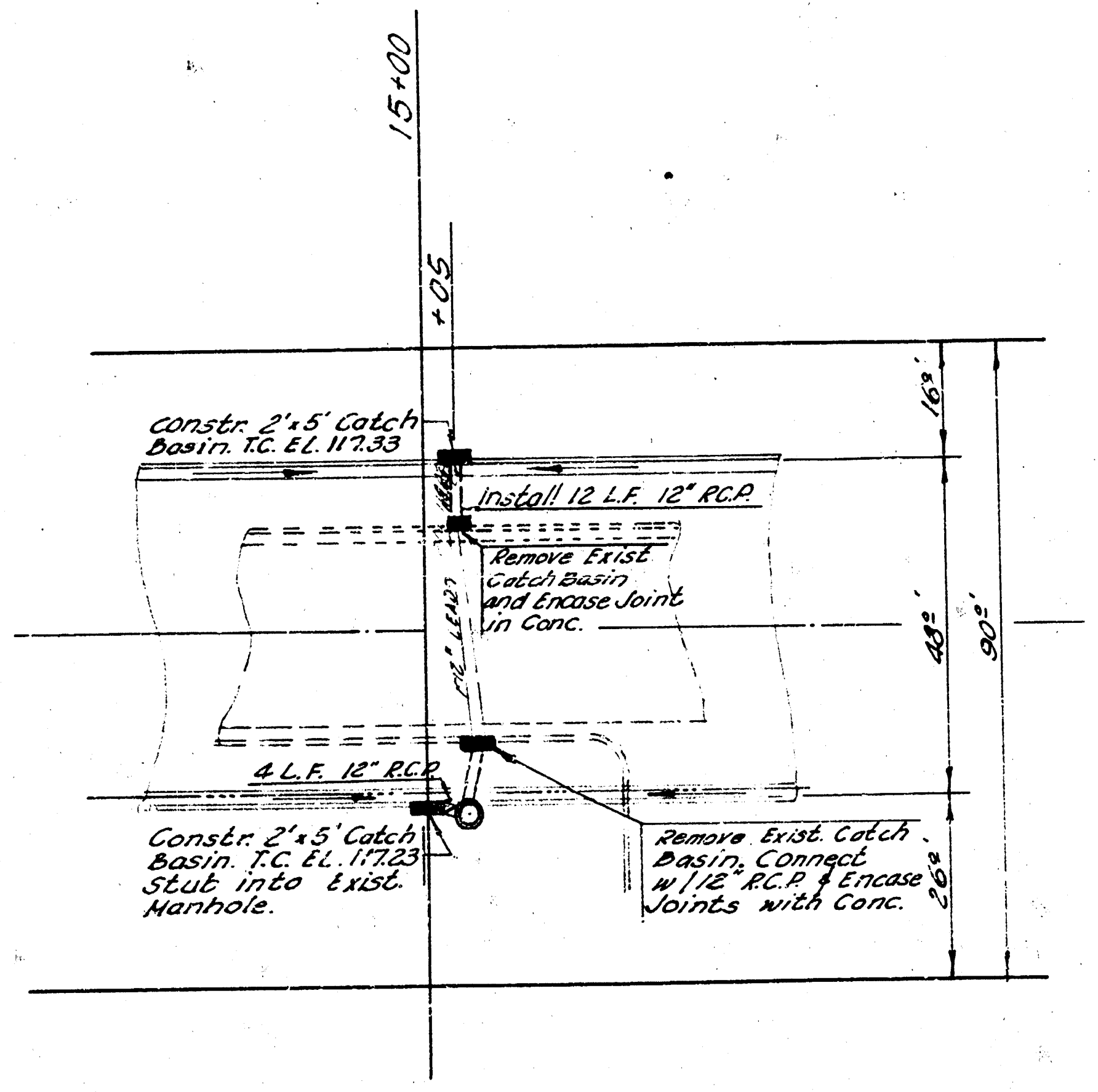
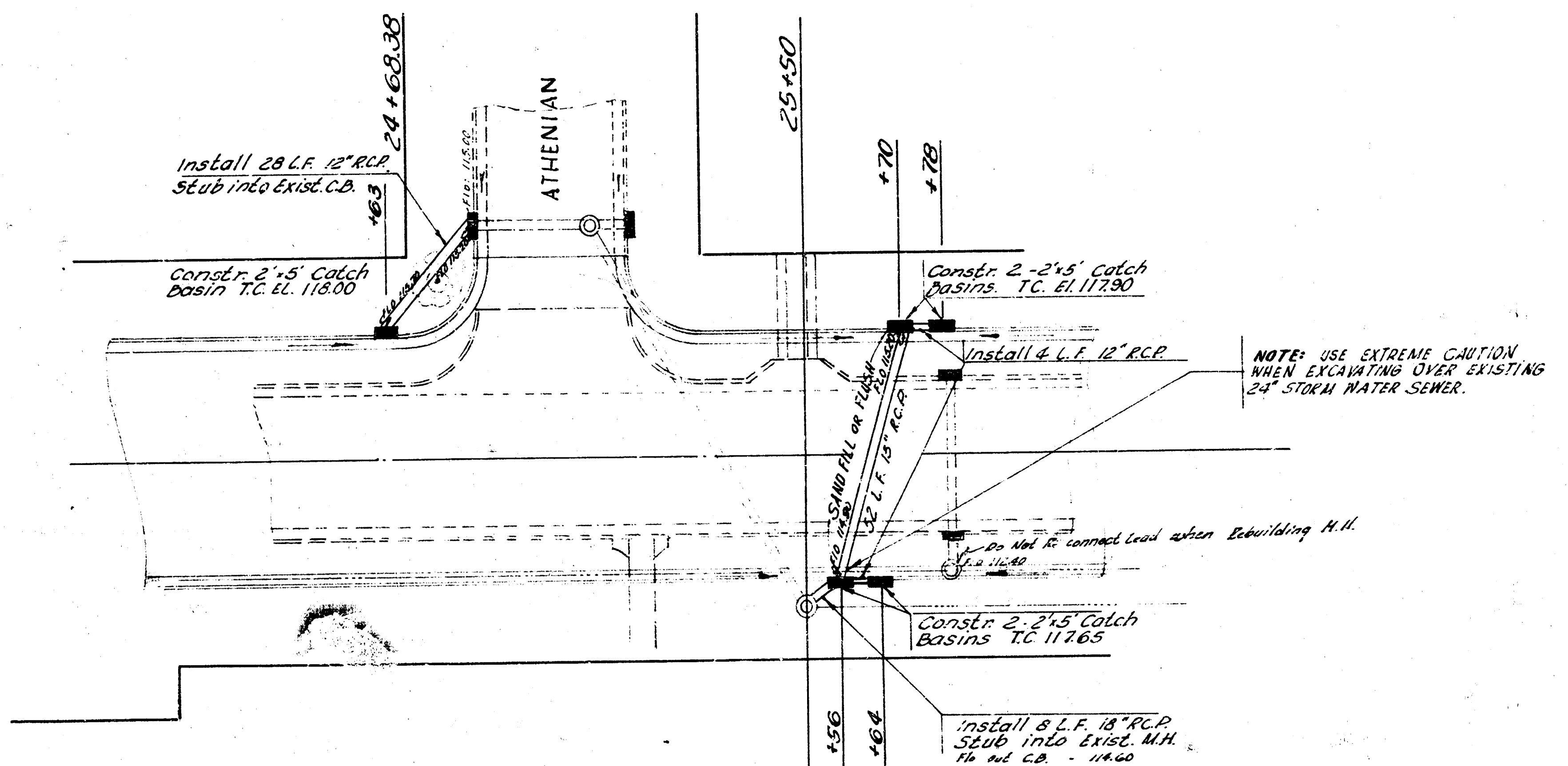

N
+0.268 %
Wk. 0.5'
House # 2402
House # 2400
2' Ribbons
3' Privet Hedge
6" Pine
6" Locust
Match Dr.
St. Clair Avenue
Existing Asph. Pavement
Valley Gutter
School Signal Light
19+50
20+20
20+51.38
21+11.38
21+50
22+00
22+50
23+00
23+50
24+00
24+50
24+68.38
25+26.38
25+50
25+74
26+00
9.03
8.53
9.16
8.66
8.06
9.30
118.80
8.20
8.76
8.77
8.69
8.61
8.64
8.65
8.76
8.81
8.79
8.73
9.15
9.36
9.32
9.23
Wk. 0.7-0.6
MATCH DR.
House # 2324
House # 2320
House # 2320
House # 2318
House # 2316
-0.168 %
Wk. 0.6'
18" Elm
15" Elm
15" Hackberry
12" Elm
3" Elm
20" Elm
9.05
8.46
7.85
8.43
7.95
8.52
9.02
8.97
8.37
7.77
8.33
7.80
8.40
8.90
8.88
8.28
7.68
8.23
8.68
8.80
8.20
7.60
8.13
7.56
8.16
8.66
8.12
7.52
8.03
7.44
8.04
8.54
24" Storm Water Sewer
S.W.B. Pole
Lawn Sprinkler
House Sign Post
iron
Concrete Slab
Concrete
P.V.I.
100' V.C.
EL. 118.83
+0.229 %
Wk. 0.5'-0.6'
Wk. 0.6-0.5
Wk. 0.5
MATCH DR.
Wk. 0.5
Wk. 0.5'-0.4'
Wk. 0.4 0.5
Wk. 0.5
-0.242 %
House # 2315
House # 2225
House
Church (N. Wing)
Wk. 0.35'
5' walk
Athenian Avenue
Exist'g Asph. Pavement
2'x5' CB
8.63
8.60
8.03
118.00
7.83
7.40
7.92
7.88
7.91
7.95
7.88
7.81
7.76
7.89
7.32
7.27
7.23
7.20
7.16
7.13
7.07
7.92
7.87
7.83
7.80
7.76
7.73
8.27
8.22
8.08
8.02
8.21
8.65
7.95
8.73
8.03
7.43
7.84
-0.219 %
+0.300 %
P.V.I.
20' V.C.
EL. 117.90
Wk. 0.7
House # 2230
2' Ribbons
3-4" Cedars
2'x4' CB
36" Storm Water Sewer
P.V.I.
20' V.C.
EL. 117.65
+0.513 %

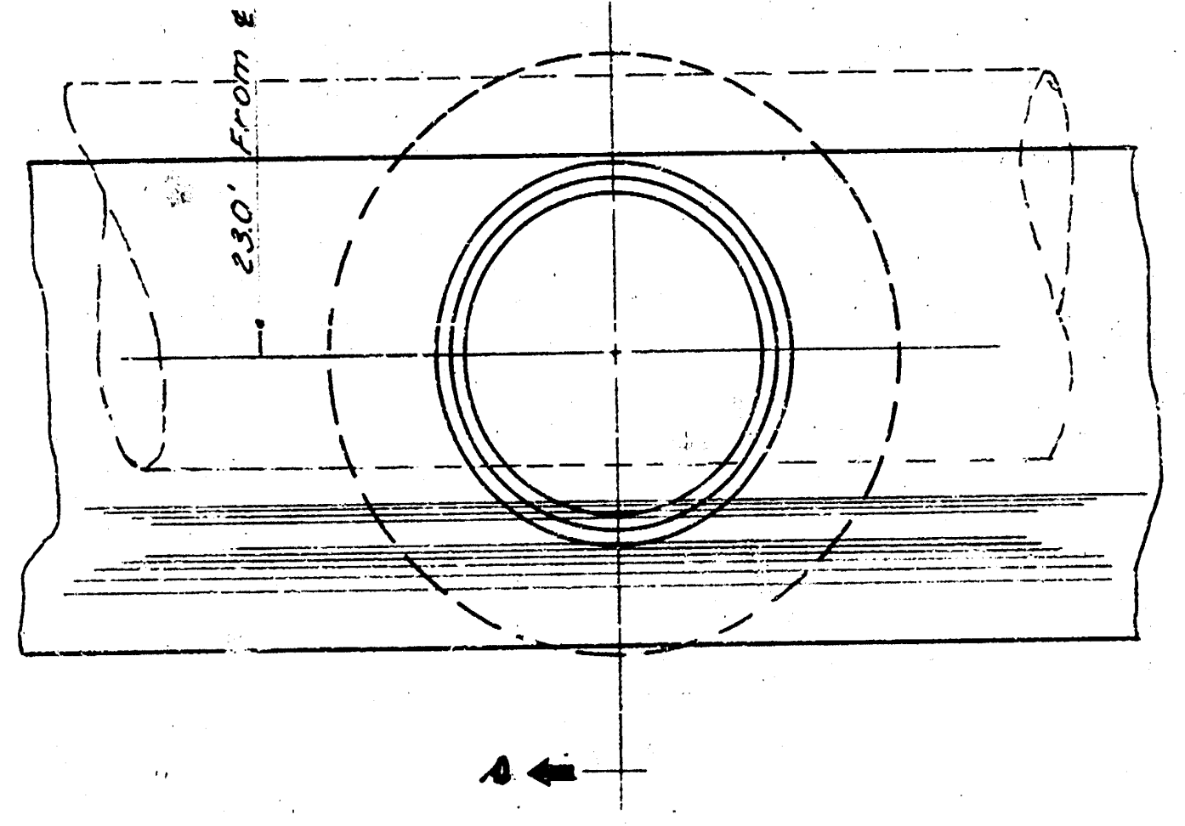
Thirteenth Street
St. Paul---McLean


6+56
6+85
AVE.
7+45
Constr. Std. Manhole on Exist. 24" SWS
EXIST. 24" SWS
18 L.F. 15" R.C.P.
24 L.F. 15" R.C.P.
32 L.F. 15" R.C.P.
15' R
Constr. 2'x5' Catch Basin T.C. El. 119.50
Constr. 2'x5' Catch Basin T.C. El. 119.48
Constr. 2'x5' Catch Basin T.C. El. 119.48
6+63
EDWARDS
7+23

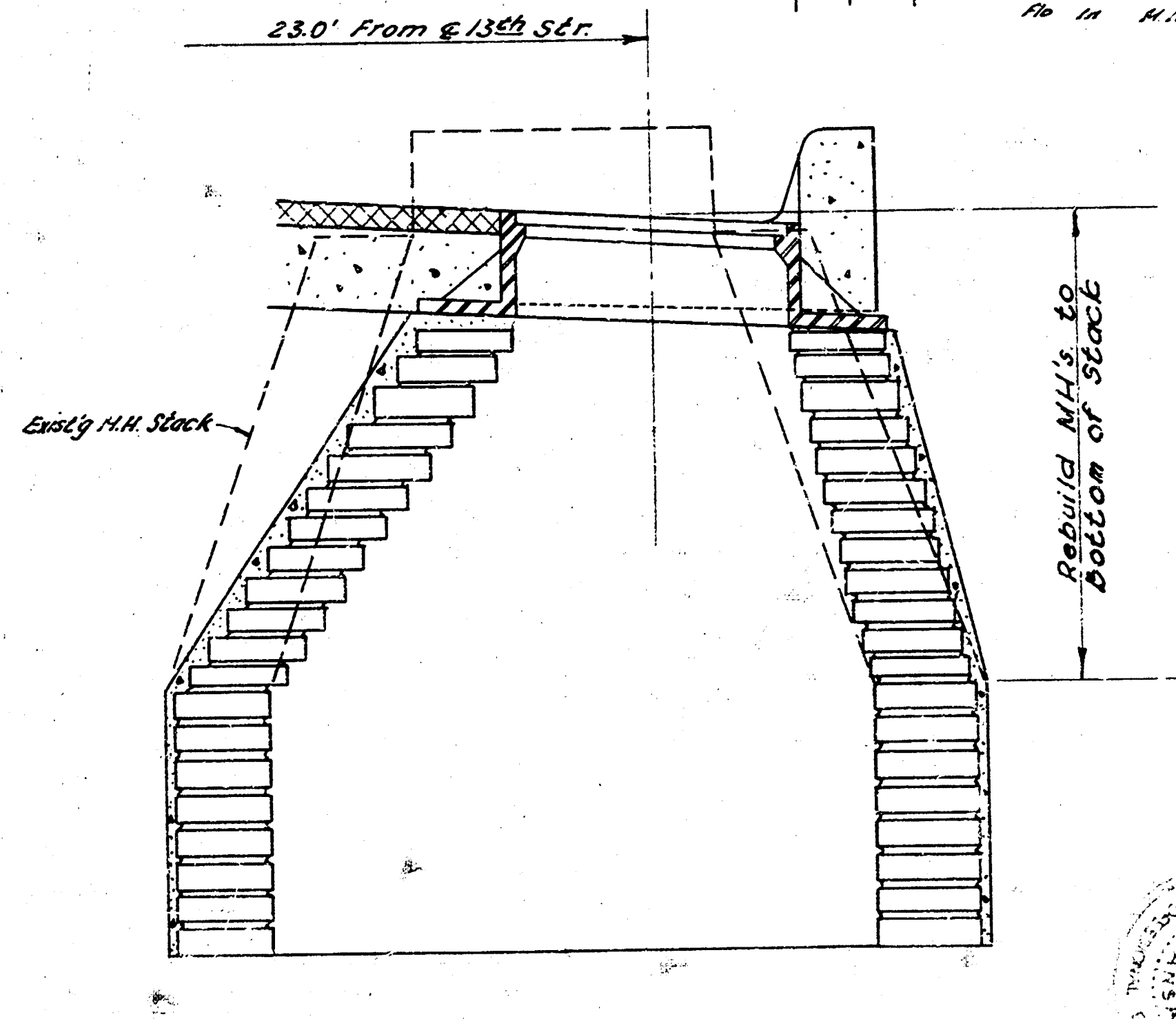

15+00
+05
Constr. 2'x5' Catch Basin. T.C. EL. 117.33
Install 12 L.F. 12" RCP
Remove Exist Catch Basin and Encase Joint in Conc.
12" LEAD
4 L.F. 12" R.C.P.
Constr. 2'x5' Catch Basin. T.C. EL. 117.23 Stub into Exist. Manhole.
Remove Exist. Catch Basin. Connect w/12" R.C.P. & Encase Joints with Conc.
16'
48'
26'
90'


24+68.38
+63
ATHENIAN
Install 28 L.F. 12" R.C.P. Stub into Exist. C.B.
Constr. 2'x5' Catch Basin T.C. EL. 118.00
25+50
+70
+78
Constr. 2-2'x5' Catch Basins. T.C. El. 117.90
Install 4 L.F. 12" R.C.P.
NOTE: USE EXTREME CAUTION WHEN EXCAVATING OVER EXISTING 24" STORM WATER SEWER.
SAND FILL OR FLUSH
32 L.F. 15" R.C.P.
Do Not Re connect Lead when Rebuilding M.H.
Constr. 2-2'x5' Catch Basins T.C. 117.65
+56
+64
Install 8 L.F. 18" R.C.P. Stub into Exist. M.H.
Flo out C.B. - 114.60
Flo in M.H. 114.50

NOTE: REBUILD MANHOLES ON 24" SEWER AS SHOWN IN SECTION A-A. APPROX. STATION OF MH'S TO BE REBUILT: STA 5+54; STA 10+68; STA. 13+10; STA 21+08 & STA. 25+80. MANHOLE AT STA 25+06 TO BE REBUILT OUTSIDE OF CURB IF NECESSARY.

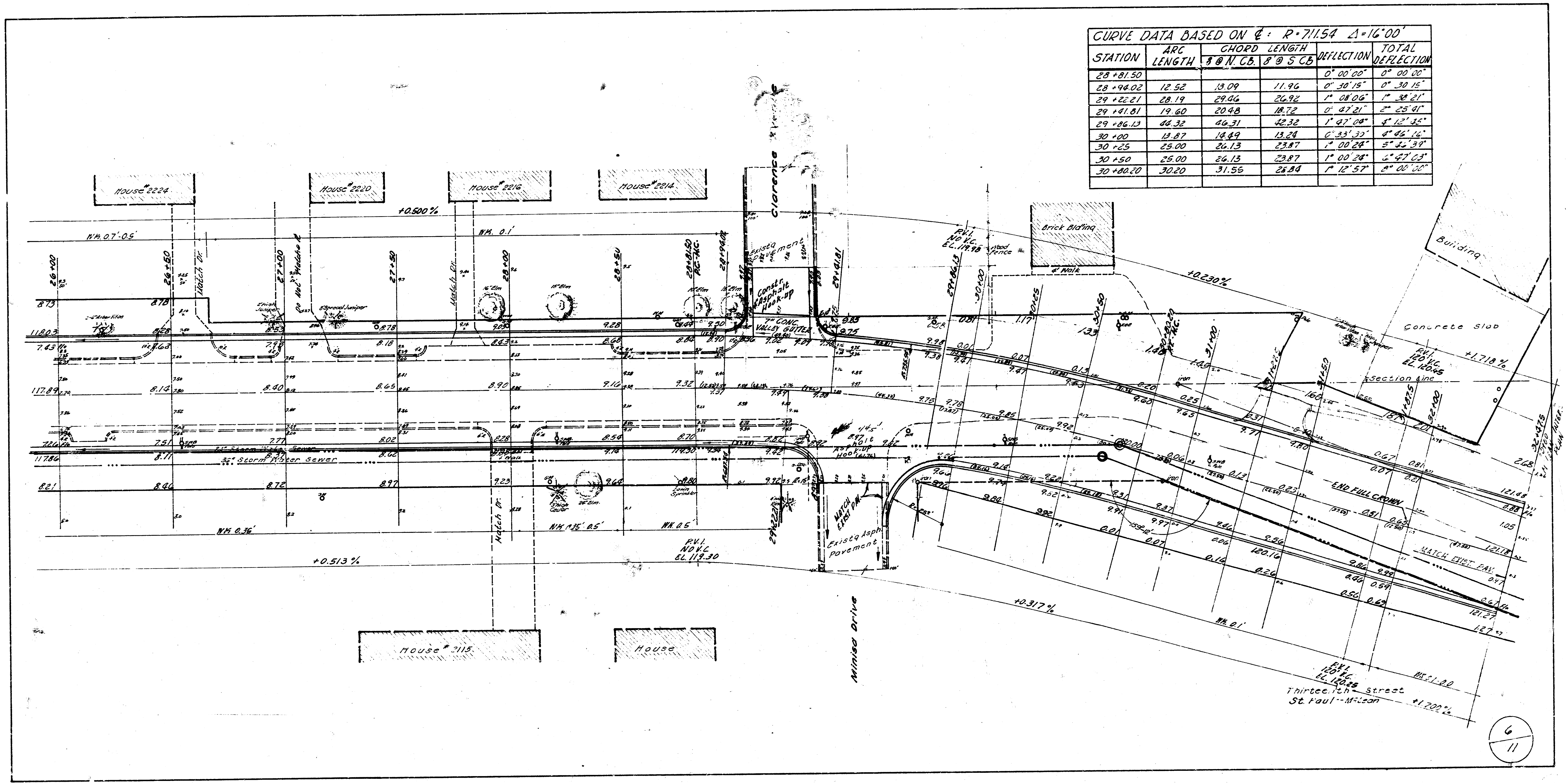

A
A
23.0' From ℄ 13th

**MANHOLE RING LOCATION DETAIL**


23.0' From ℄ 13th Str.
Exist'g M.H. Stack
Rebuild MH's to Bottom of Stack

**SECTION A-A**

INCIDENTAL DRAINAGE
13TH ST.
E.L. ST PAUL - W.L. McLEAN
CITY OF WICHITA, KS.
B.E. SMITH CITY ENGINEER
DATE: AUG. 60 PROJ. NO. C10-35


House #2224
House #2220
House #2216
House #2214
Clarence
+0.500 %
WK. 0.7'-0.5'
WK. 0.1'
26+00
26+50
27+00
27+50
28+00
28+50
28+81.50 P.C.-H.C.
28+94.02
29+41.81
29+86.13
30+00
30+25
30+50
30+80.20 P.T.-H.C.
31+00
31+50
31+87.5
32+00
32+47.5
Match Dr.
Do Not Match ℄
6" Arbor Vitae
2' high Juniper
8' Spread Juniper
16" Elm
15" Elm
10" Elm
18" Elm
Exist'g Pavement
Constr. Asphalt Hook-up
7" CONC. VALLEY GUTTER
117.89
118.03
117.86
21" Storm Water Sewer
36" Storm Water Sewer
4' Walk
3' high Cedar
24" Elm
Lawn Sprinkler
WK. 0.36'
WK. 0.35'-0.5'
WK. 0.5'
+0.513 %
P.V.I. NO V.C. EL. 119.30
MATCH EXIST DW.
Exist'g Asph. Pavement
Minisa Drive
House #2115
House
Asphalt Hook-up
P.V.I. NO V.C. EL. 119.98
Wood fence
Brick Bld'ing
4' Walk
+0.230 %
Building
Concrete Slab
P.V.I. 120' V.C. EL. 120.45
+1.718 %
Section Line
END FULL CROWN
MATCH EXIST. PAV.
121.48
121.18
121.27
120.16
WK. 0.1'
P.V.I. 120' V.C. EL. 120.25
WK. 0.1-0.0
Thirteenth Street
St. Paul -- McLean
+1.700 %
6
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CURVE DATA BASED ON ℄: R=711.54 Δ=16°00'

| STATION | ARC LENGTH | CHORD LENGTH |  | DEFLECTION | TOTAL DEFLECTION |
|---|---|---|---|---|---|
|  |  | 8' @ N. CB. | 8' @ S CB |  |  |
| 28 +81.50 |  |  |  | 0° 00' 00" | 0° 00' 00" |
| 28 +94.02 | 12.52 | 13.09 | 11.96 | 0° 30' 15" | 0° 30' 15" |
| 29 +22.21 | 28.19 | 29.46 | 26.92 | 1° 08' 06" | 1° 38' 21" |
| 29 +41.81 | 19.60 | 20.48 | 18.72 | 0° 47' 21" | 2° 25' 41" |
| 29 +86.13 | 44.32 | 46.31 | 42.32 | 1° 47' 04" | 4° 12' 45" |
| 30 +00 | 13.87 | 14.49 | 13.24 | 0° 33' 30" | 4° 46' 16" |
| 30 +25 | 25.00 | 26.13 | 23.87 | 1° 00' 24" | 5° 46' 39" |
| 30 +50 | 25.00 | 26.13 | 23.87 | 1° 00' 24" | 6° 47' 03" |
| 30 +80.20 | 30.20 | 31.55 | 25.84 | 1° 12' 57" | 8° 00' 00" |