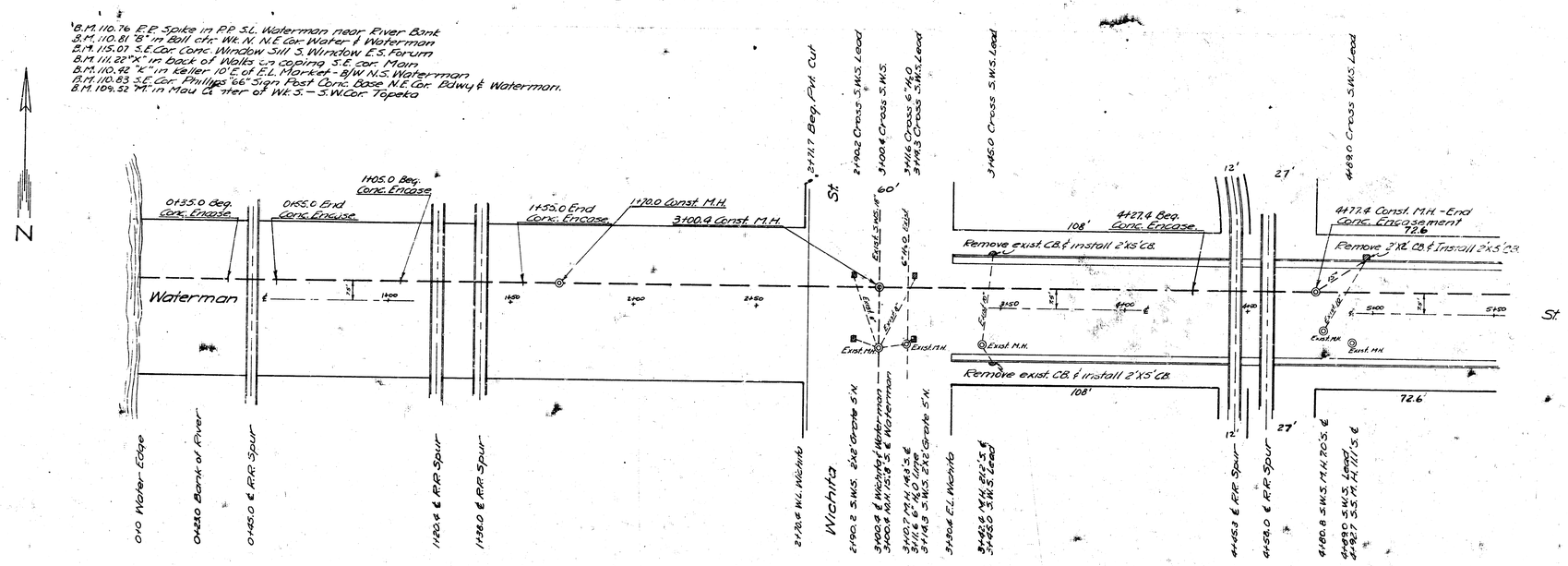
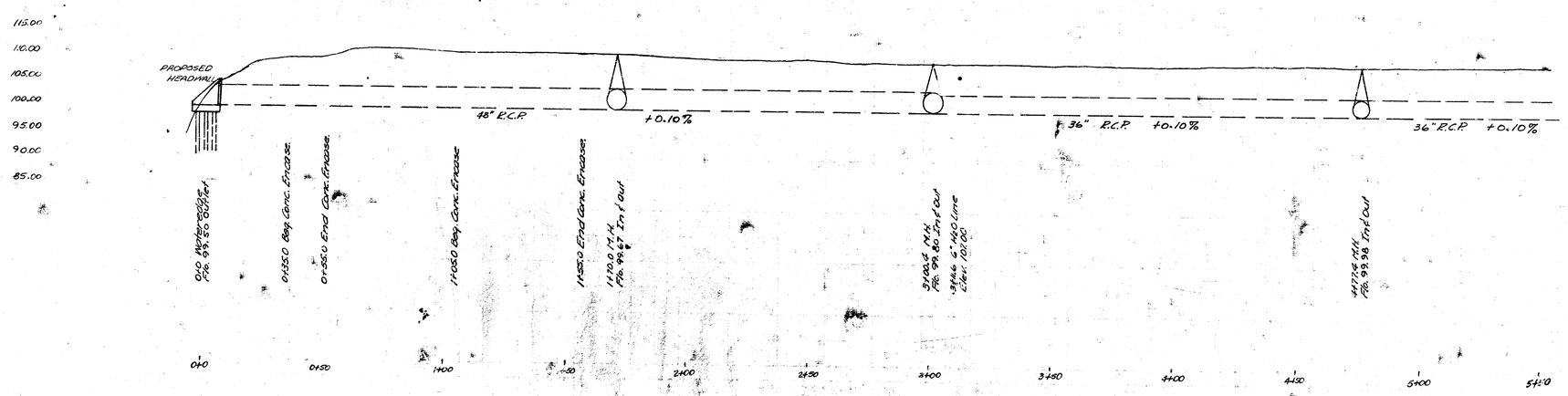
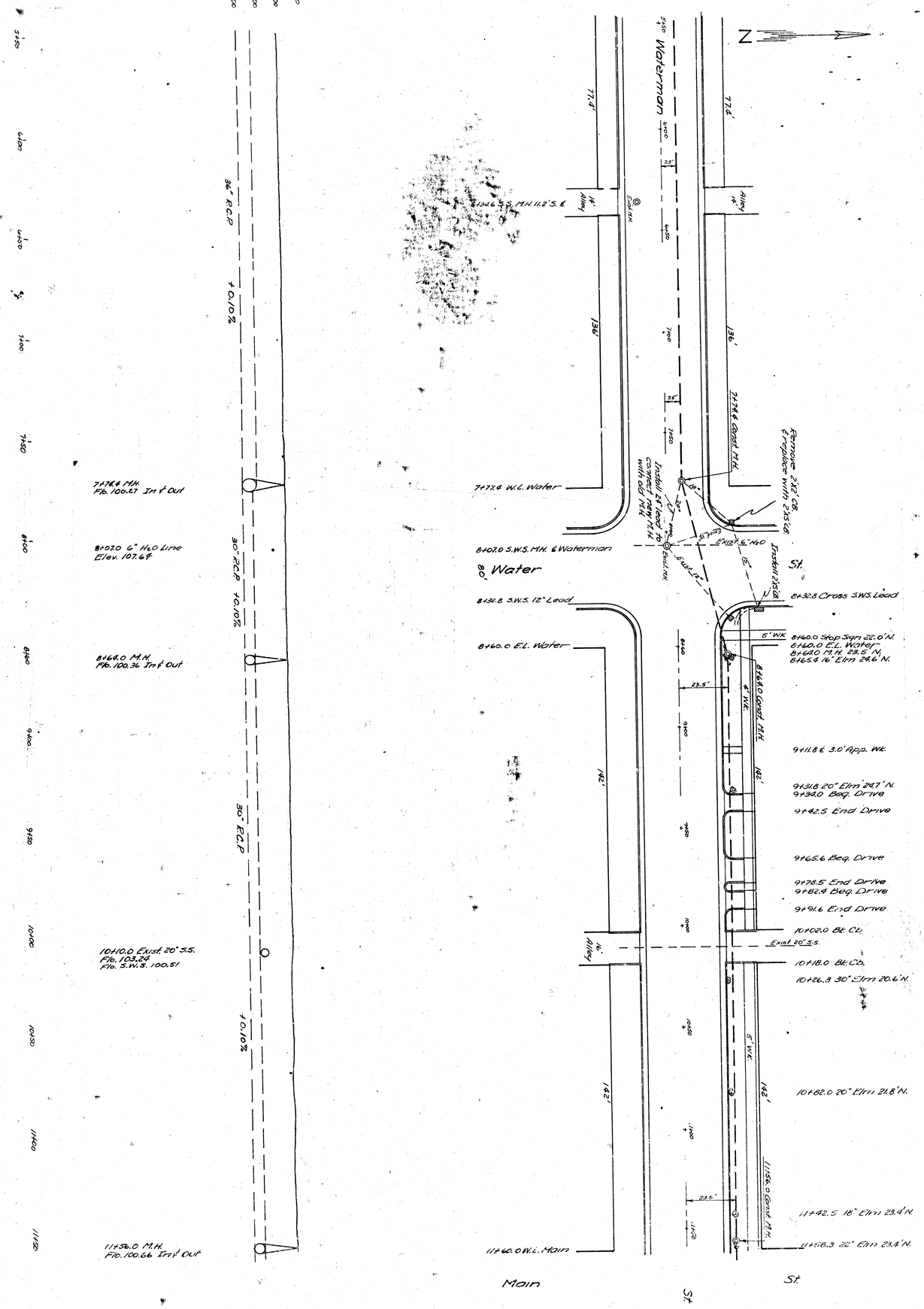
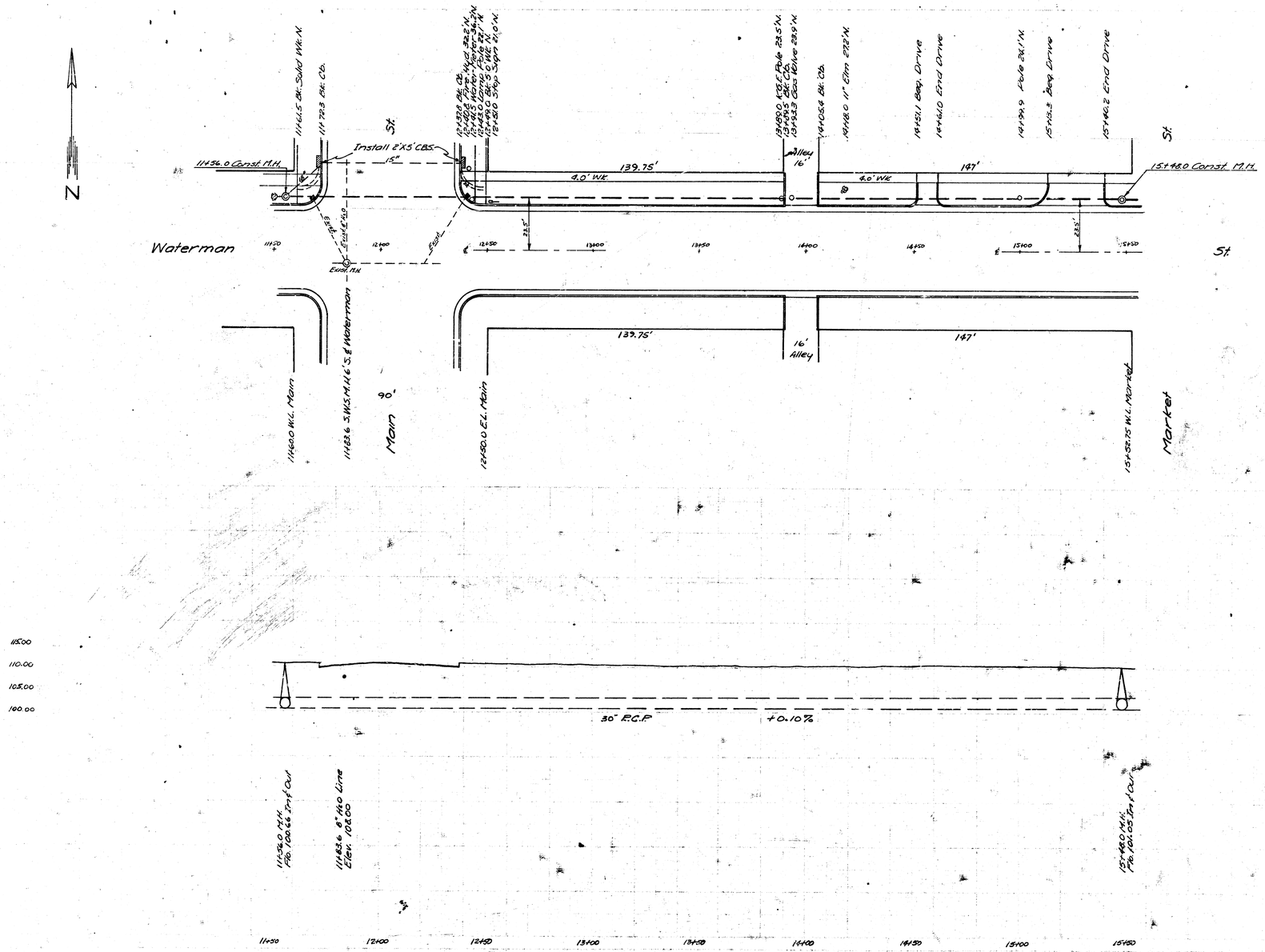
B.M. 110.76 E.E. Spike in P.P. S.L. Waterman near River Bank
B.M. 110.81 "B" in Bolt ctr. Wk. N. N.E. Cor. Water & Waterman
B.M. 115.07 S.E. Cor. Conc. Window Sill S. Window E.S. Forum
B.M. 111.22 "X" in back of Walls on coping S.E. cor. Main
B.M. 110.42 "K" in Keller 10' E. of E.L. Market - B/W N.S. Waterman
B.M. 110.83 S.E. Cor. Phillips '66' Sign Post Conc. Base N.E. Cor. Bdwy & Waterman.
B.M. 109.52 "M" in Man Ca ter of Wk. S. - S.W. Cor. Topeka

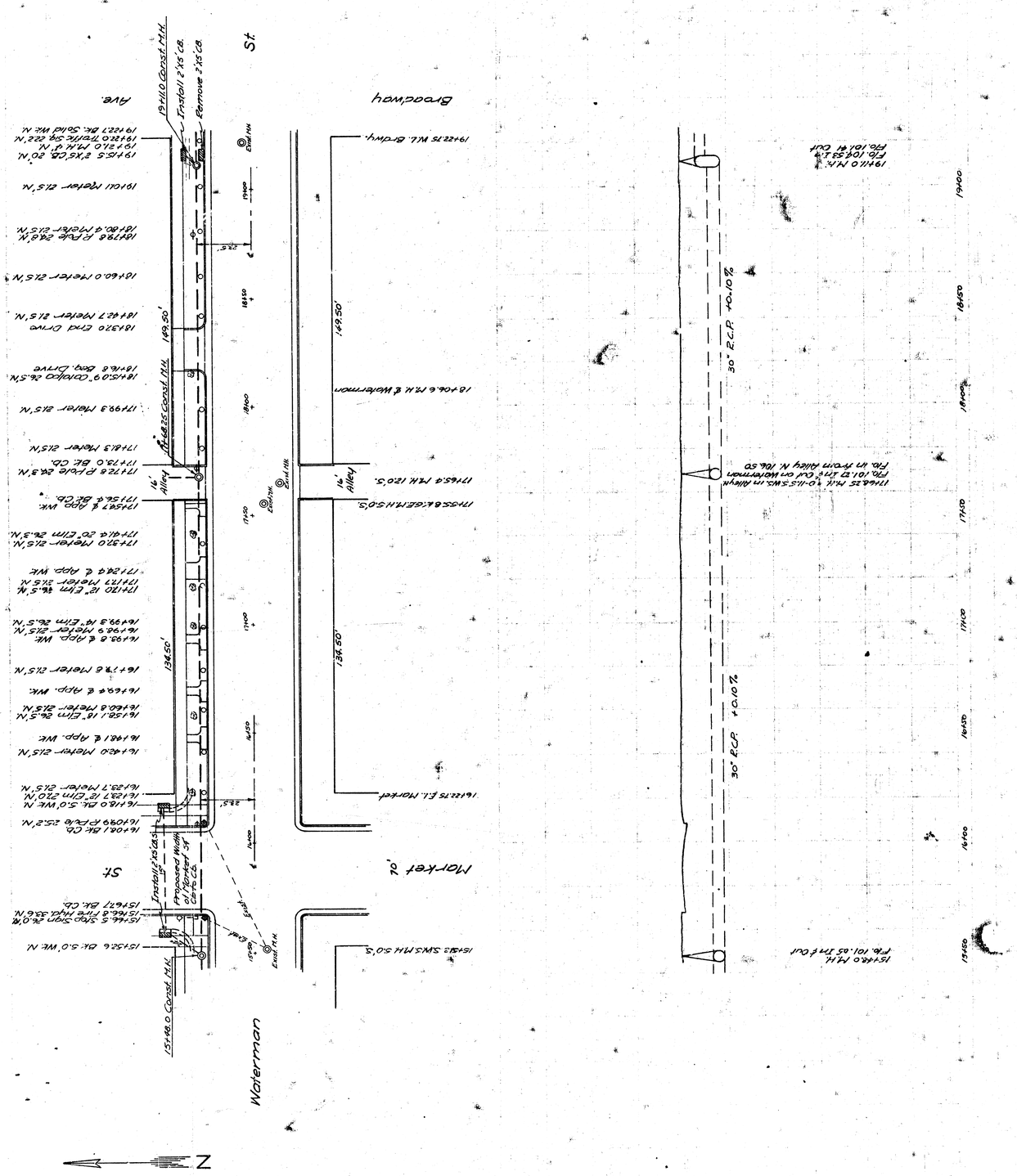


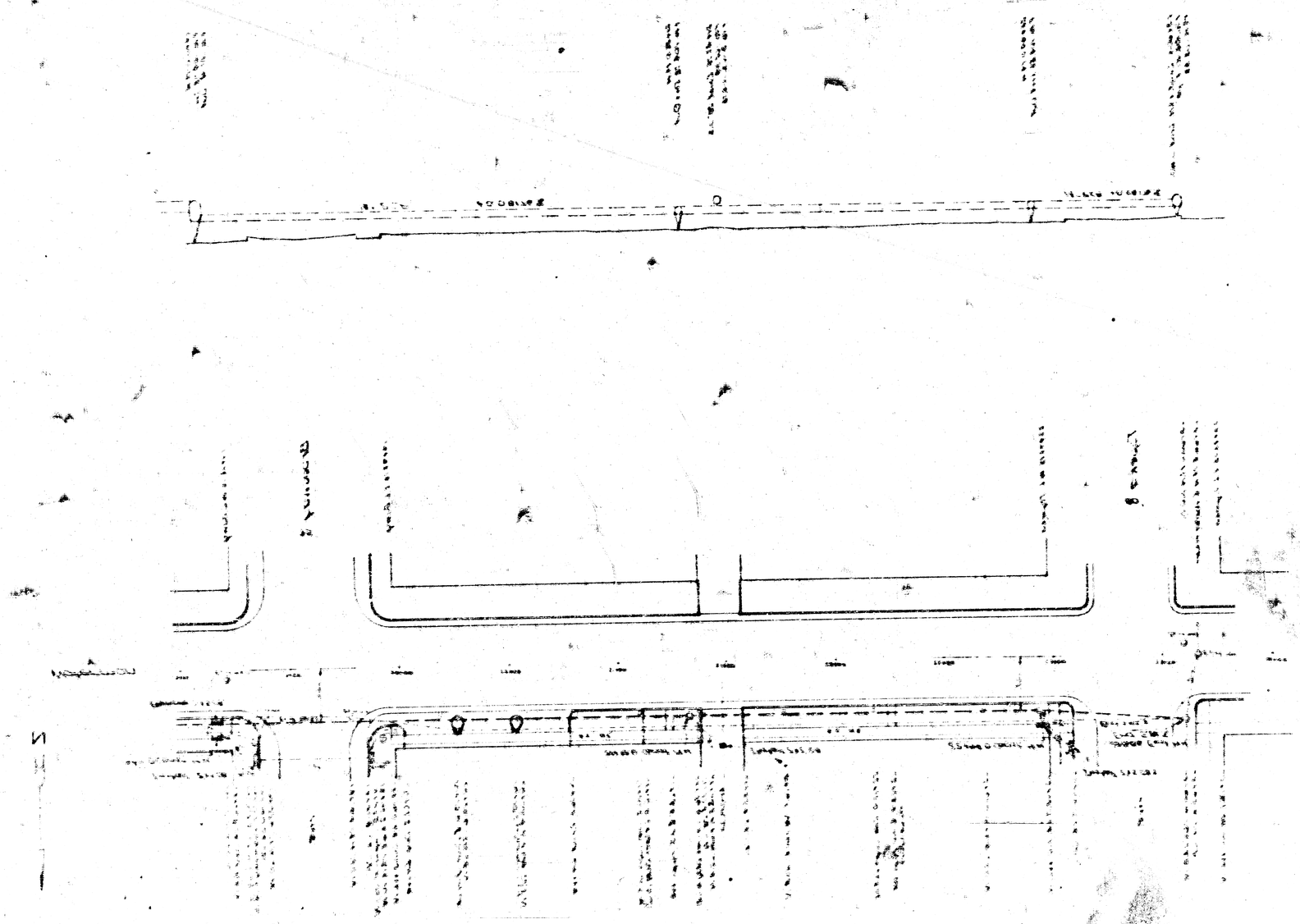
INCIDENTAL DRAINAGE
WATERMAN
TOPEKA TO ARKANSAS RIVER

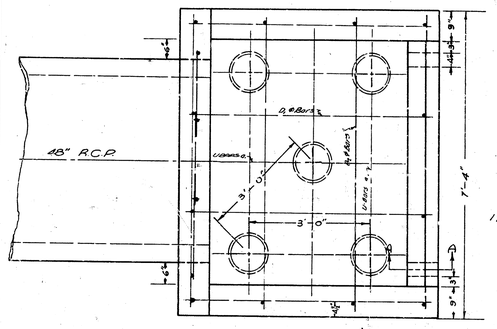



Waterman
Main St.
Water
Alley
136'
77.4'
142'
N
7+77.4 M.H. Flo. 100.27 In & Out
8+07.0 6" H2O Line Elev. 107.6'
8+68.0 M.H. Flo. 100.36 In & Out
10+10.0 Exist. 20" S.S. Flo. 103.28 Flo. S.W.S. 100.51
11+56.0 M.H. Flo. 100.66 In & Out
36" RCP
30" RCP
+0.10%
7+77.4 W.L. Water
8+36.5 S.S. M.H. 112.5'S.E.
8+07.0 S.W.S. M.H. & Waterman
8+32.8 S.W.S. 12" Lead
8+60.0 E.L. Water
11+60.0 W.L. Main
Remove 2x2 C.B. & replace with 2x5 C.B.
Install 24" lead to connect new M.H. with old M.H.
8+32.8 Cross S.W.S. Lead
8+60.0 Stop Sign 22.0'N.
8+60.0 E.L. Water
8+68.0 M.H. 23.5' N.
8+65.4 16" Elm 24.6' N.
9+11.8 E 3.0' App. Wk.
9+31.8 20" Elm 24.7' N.
9+34.0 Beg. Drive
9+42.5 End Drive
9+65.6 Beg. Drive
9+78.5 End Drive
9+82.4 Beg. Drive
9+91.6 End Drive
10+02.0 Bk. Cb.
10+18.0 Bk. Cb.
10+26.3 30" Elm 20.6' N.
10+82.0 20" Elm 21.8' N.
11+42.5 18" Elm 23.4' N.
11+58.3 22" Elm 23.4' N.
Exist. 20" S.S.
5' Wk.
8' Wk.
23.5'

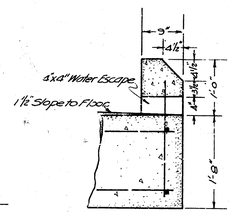

N
Waterman
St.
St.
St.
Market
Main
90'
11+36.0 Const. M.H.
11+41.5 Bk. Solid Wk. N.
11+72.3 Bk. Cb.
Install 2'X5' CBS.
15'
12+72.8 Bk. Cb.
12+80.0 Pole 14'x2' 32.2' N.
12+85.5 Water Valve 34.2' N.
12+94.0 Bend Pole 27.1' N.
13+00.0 Bk. 5' C Wk. N.
13+80.0 Stop Sign 21.0' N.
13+80.0 K.G.E. Pole 23.5' N.
13+83.5 Bk. Cb.
13+94.3 Gas Valve 23.9' N.
14+05.8 Bk. Cb.
14+18.0 11" Elm 27.2' N.
14+51.1 Beg. Drive
14+61.0 End Drive
14+89.9 Pole 26.1' N.
15+15.3 Beg. Drive
15+46.2 End Drive
15+48.0 Const. M.H.
139.75'
4.0' Wk.
16' Alley
4.0' Wk.
147'
23.5'
23.5'
Exist. 12"
Exist. 12"
Exist. 12"
Exist. M.H.
11+50
12+00
12+50
13+00
13+50
14+00
14+50
15+00
15+50
11+60.0 W.L. Main
11+83.6 S.W.S. M.H. 6'S. of Waterman
12+50.0 E.L. Main
15+35.75 W.L. Marked
139.75'
16' Alley
147'
115.00
110.00
105.00
100.00
30" R.C.P.
+0.10%
11+35.0 M.H.
Flo. 100.66 Inv. Out
11+83.6 8" PVC Line
Elev. 102.00
15+48.0 M.H.
Flo. 101.00 Inv. Out
11+50
12+00
12+50
13+00
13+50
14+00
14+50
15+00
15+50


Broadway
St.
Ave.
Market St.
Waterman
St.
Alley
Alley
134.50'
149.50'
134.50'
149.50'
30" R.C.P. +0.10%
30" R.C.P. +0.10%
Proposed Width of Parked 34'
Install 2'x3' Cb.
Remove 2'x3' Cb.
19+11.0 Const. H.H.
15+48.0 Const. H.H.
Z





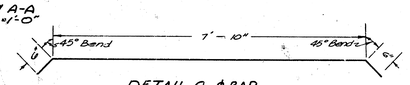
TOP VIEW
Scale = 3/4" = 1'-0"



SECTION A-A
Scale = 1" = 1'-0"

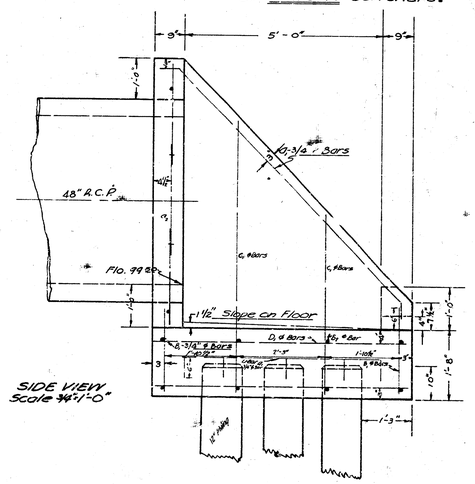
STEEL SPECIFICATIONS									
	a_1	a_2	B_1	B_2	C_1	C_2	D_1	D_2	D_3
NO.	2	7	8	8	2	2	6	3	3
LENGTH	8'-10"	2'-6"	2'-0"	6'-10"	4'-3"	5'-6"	6'-3"	6'-6"	7'-5"
TYPE	CONCRETE								
A	5.0 CU. YDS.								
NO. 5	PILINGS Length 20'								

DETAIL of HEADWALL for INCIDENTAL DRAINAGE ON WATERMAN - TOPEKA to RIVER

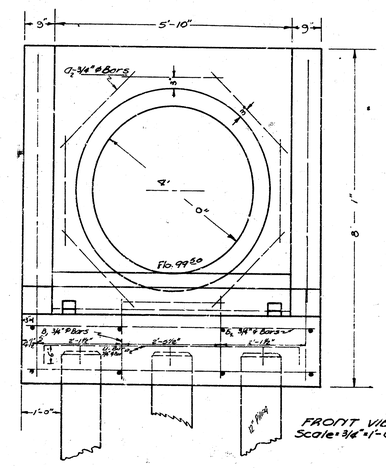


DETAIL D_1 ϕ BAR
Scale 3/4" = 1'-0"

HEADWALL TO BE CONSTRUCTED OF "TYPE-A" CONCRETE.



SIDE VIEW
Scale 3/4" = 1'-0"



FRONT VIEW
Scale = 3/4" = 1'-0"