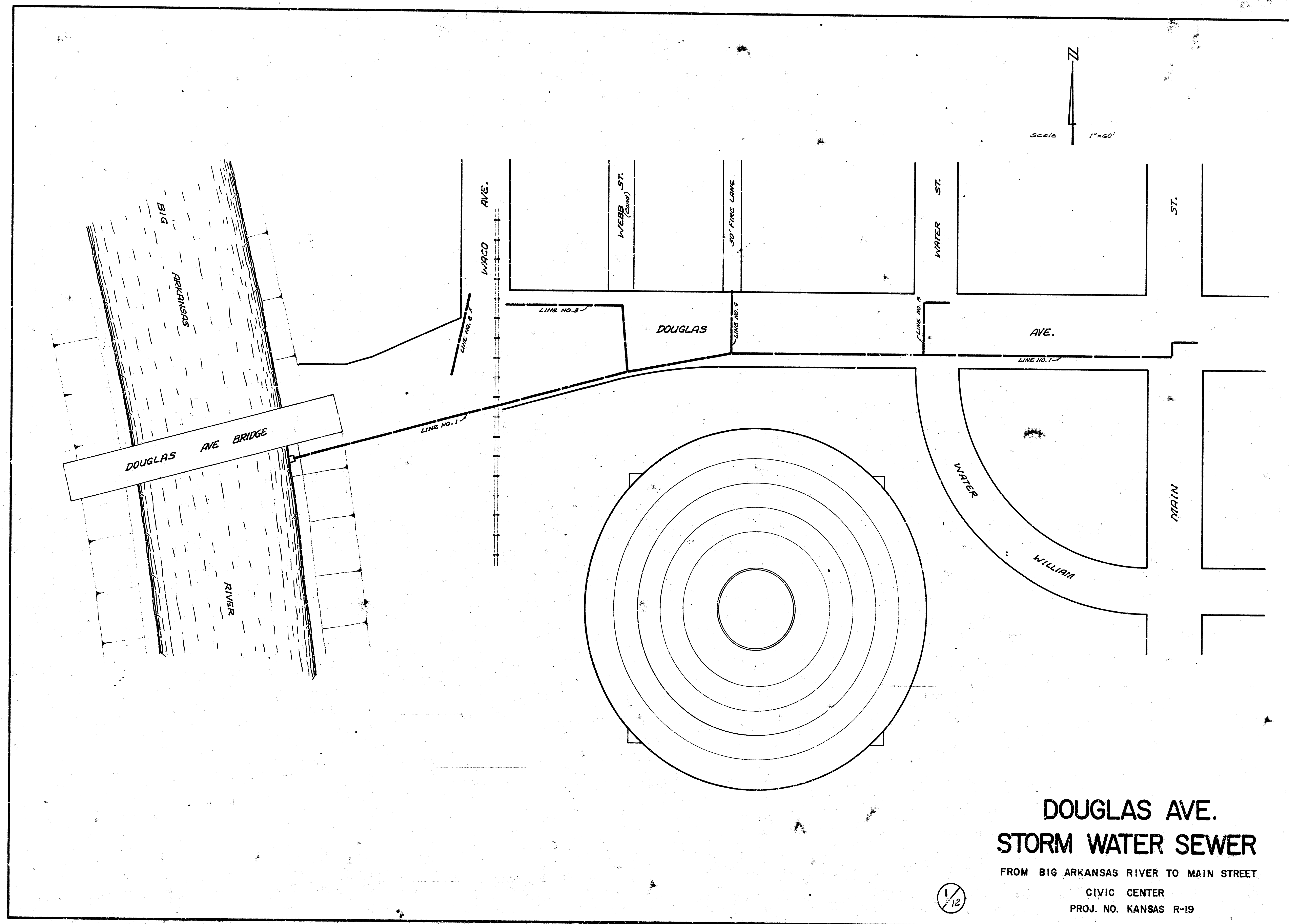
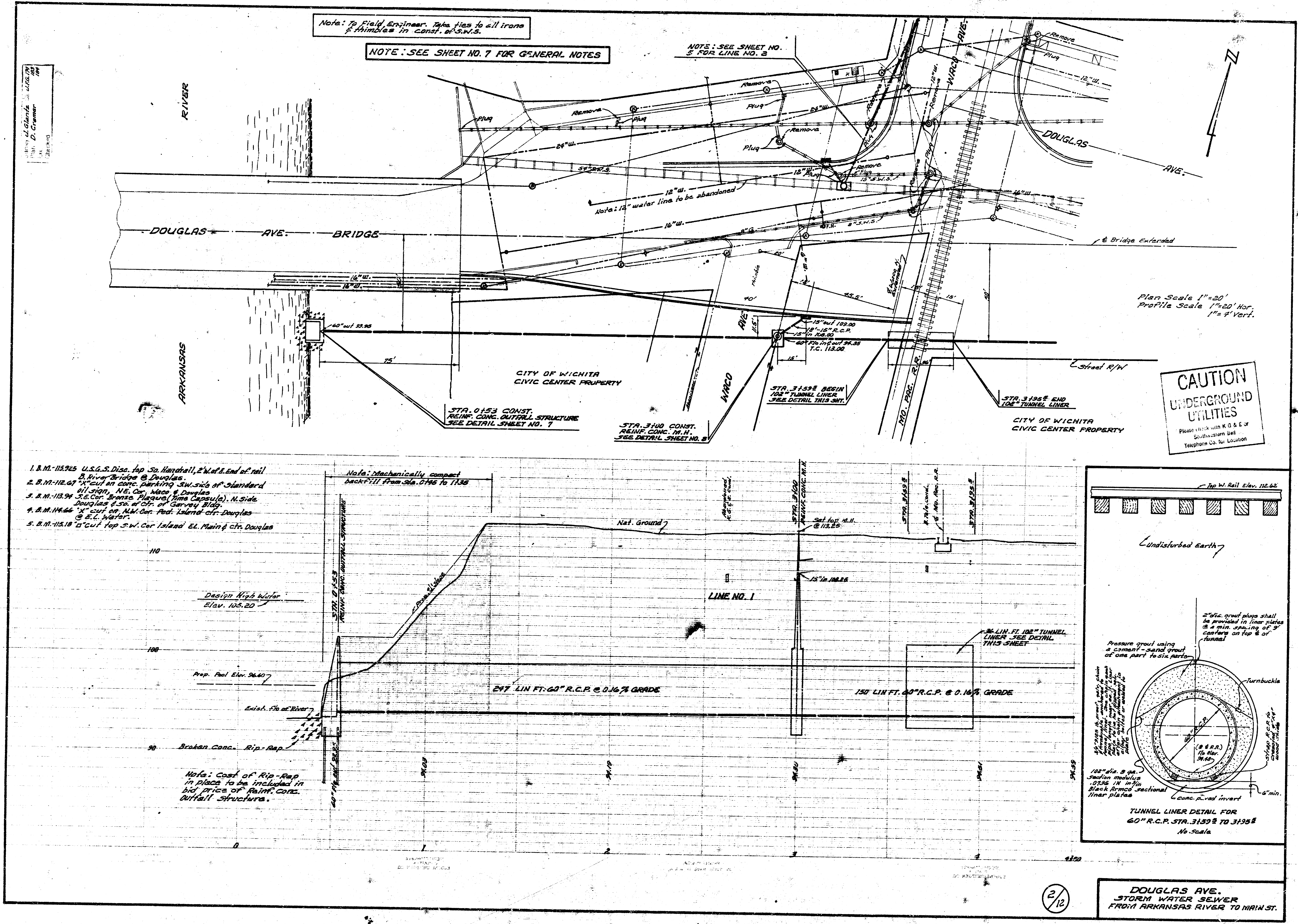
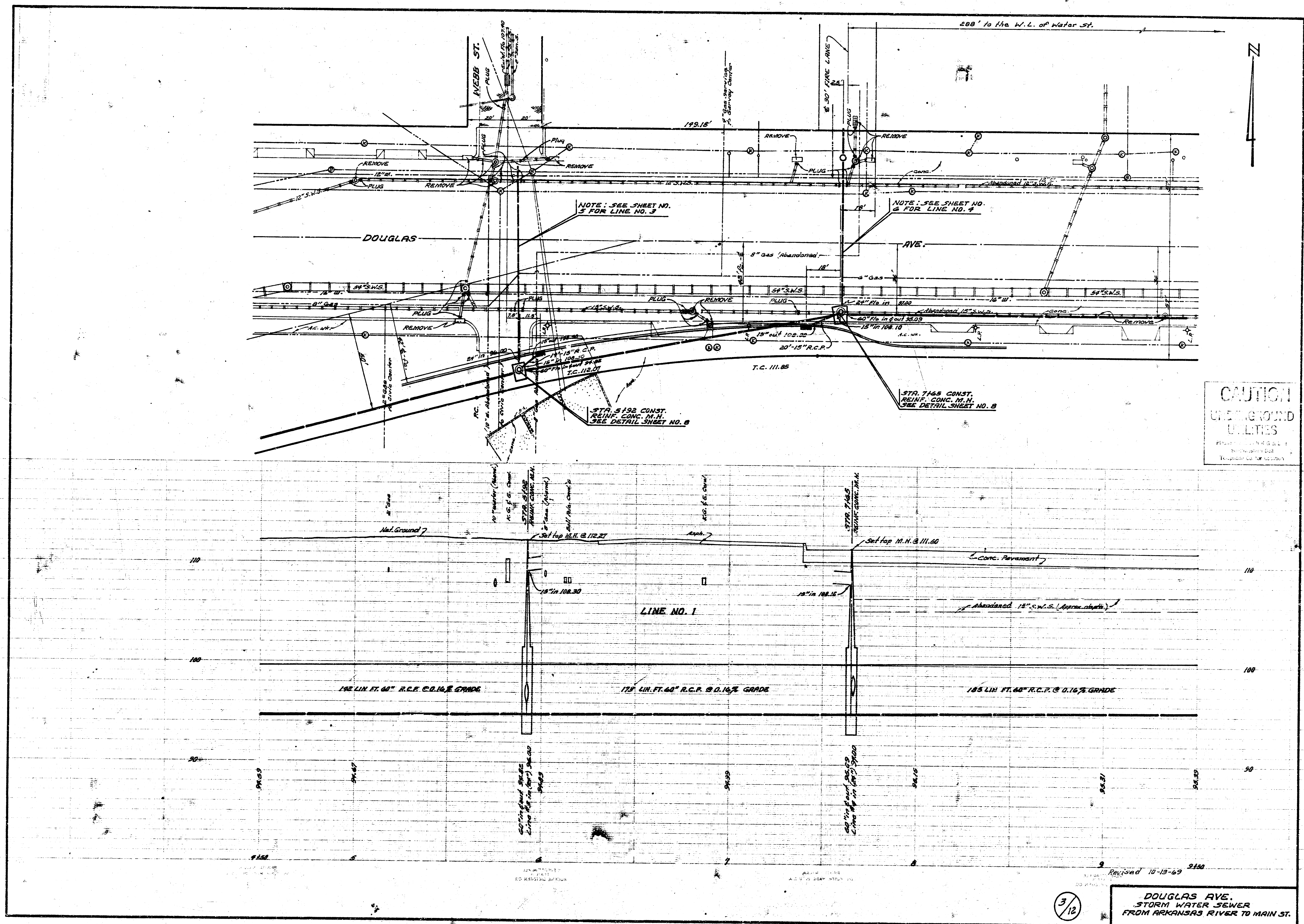
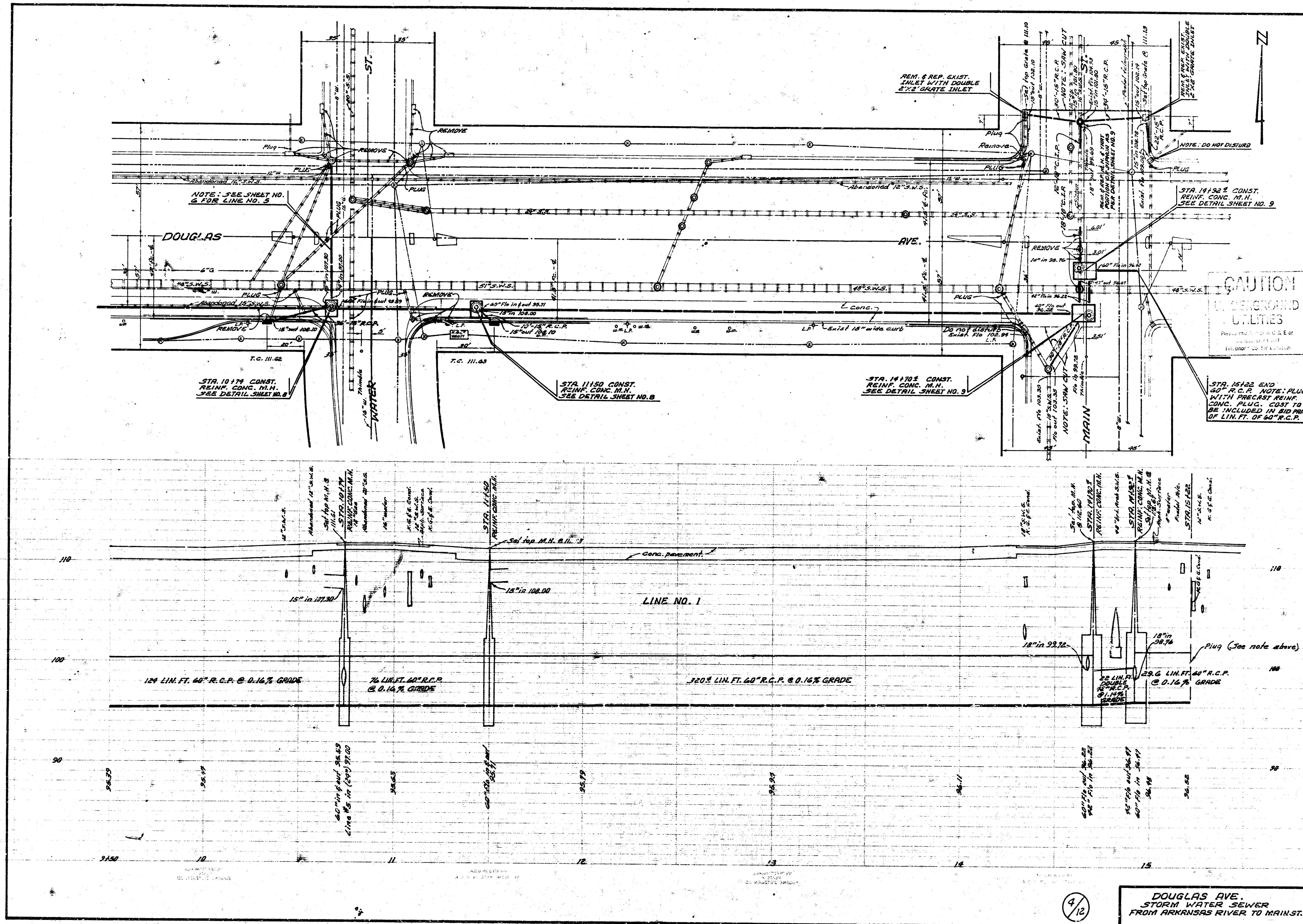
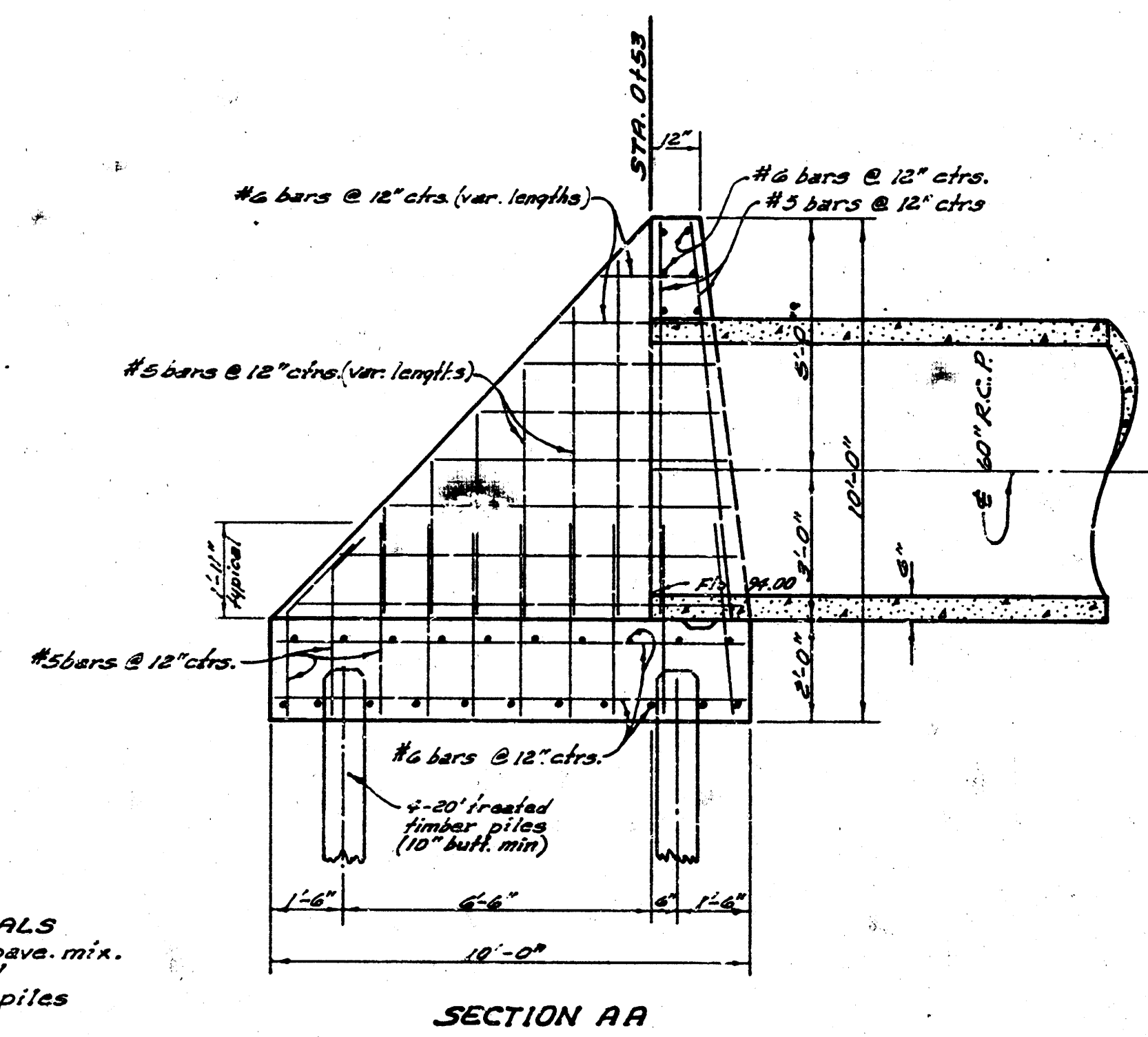
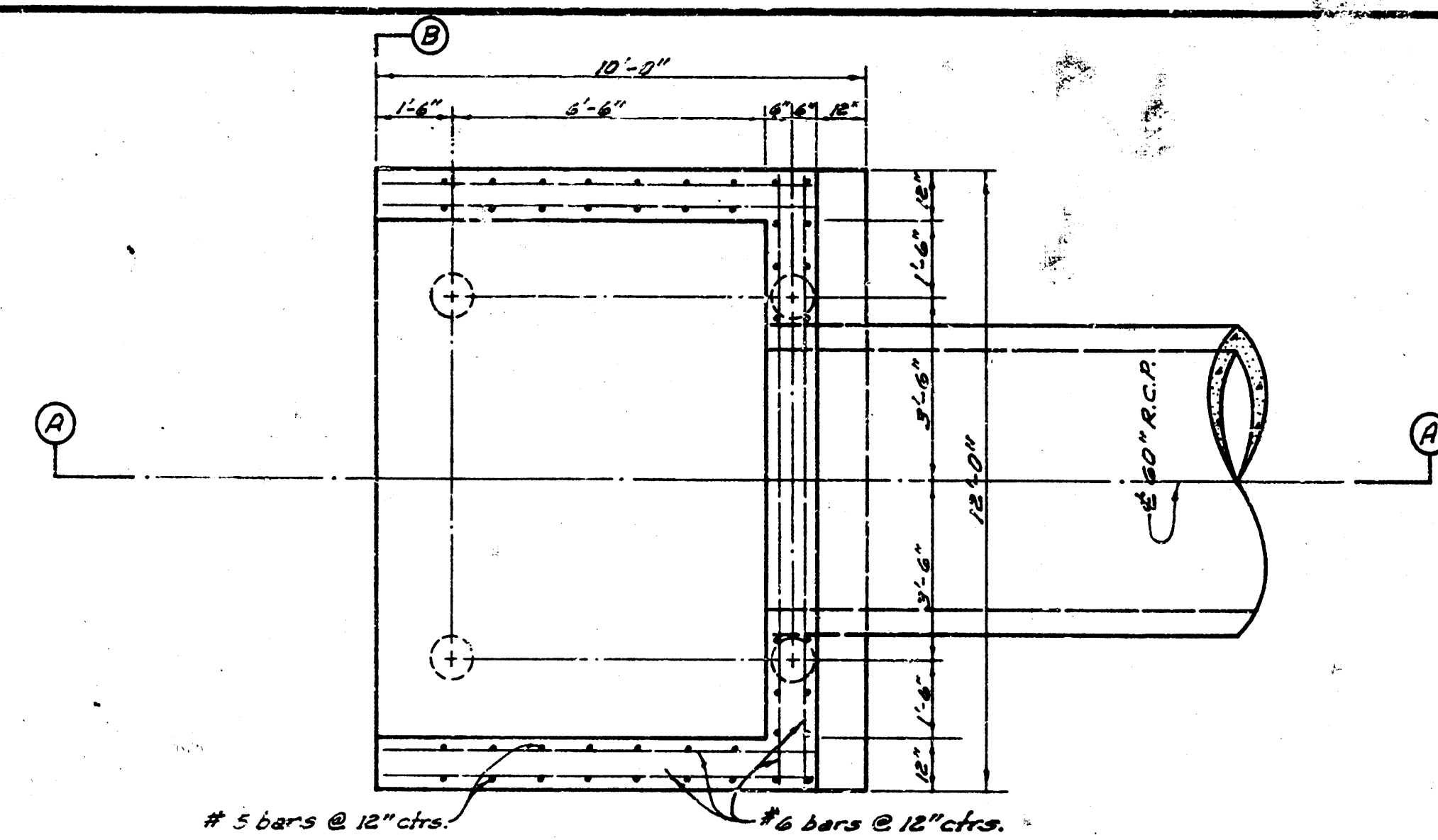




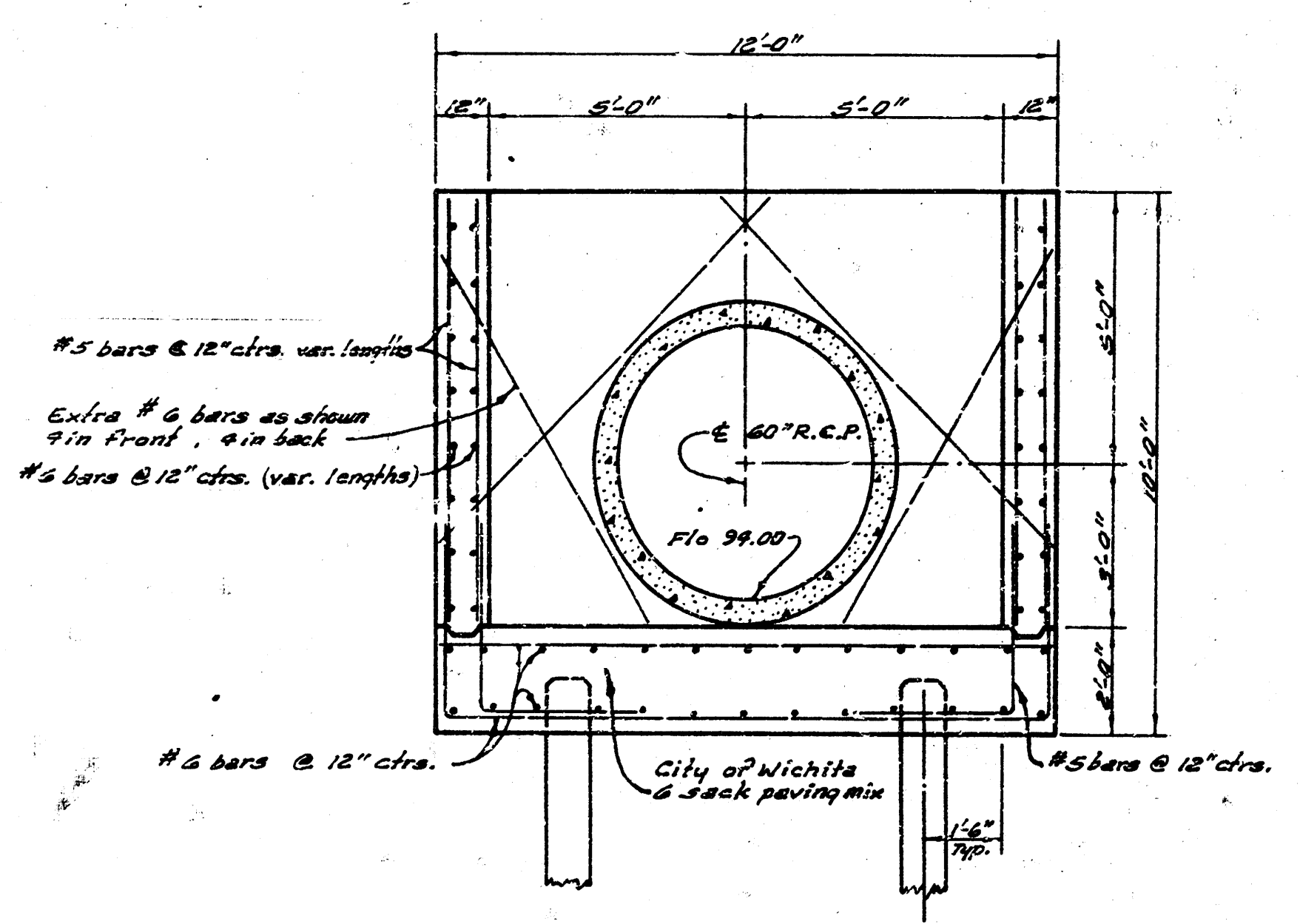




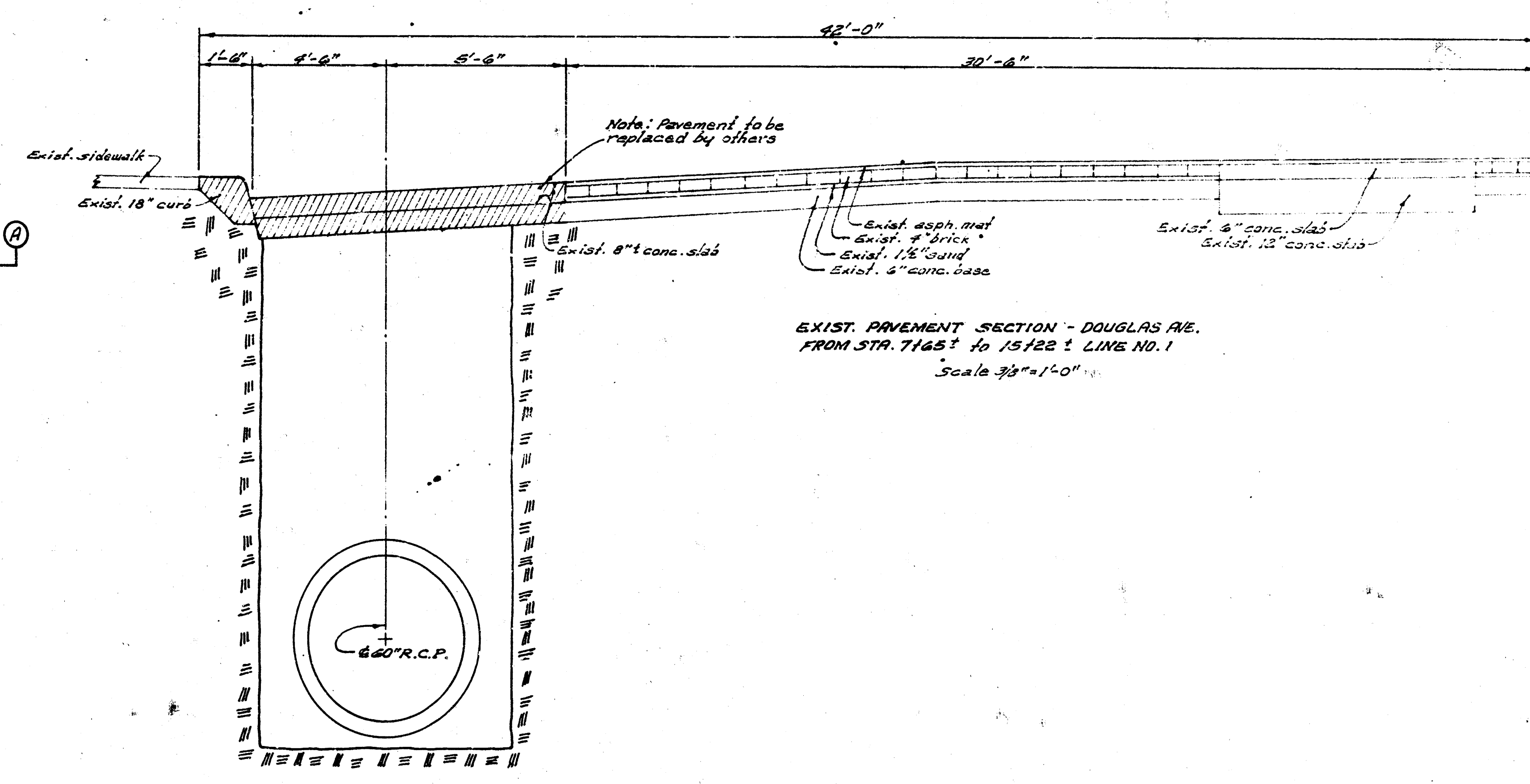




BILL OF MATERIALS
 1/4 Cu. yds. 1/4 sack pava. mix.
 1,500 lbs. reinf. steel
 4-20' treated timber piles
 (10' built min.)



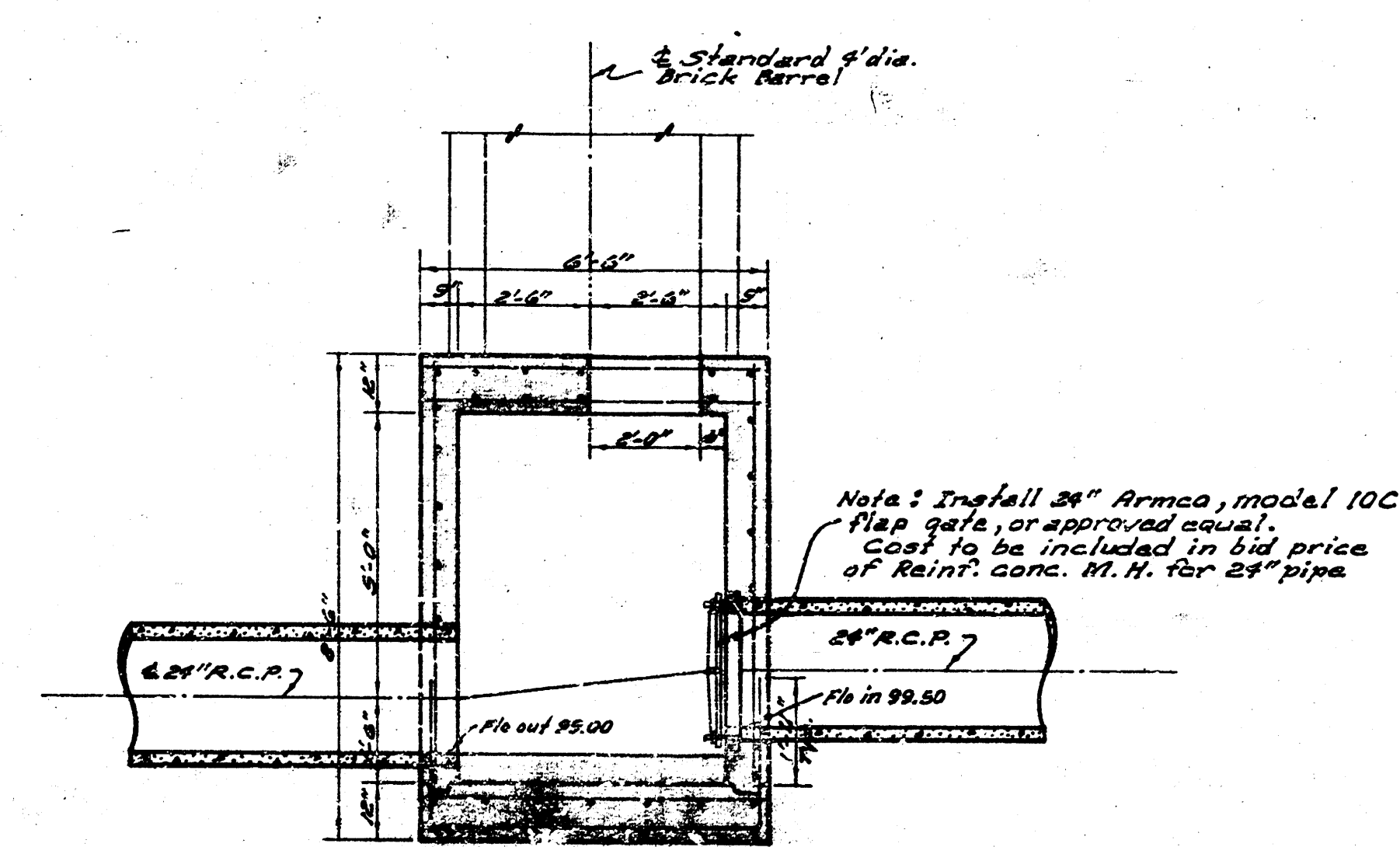
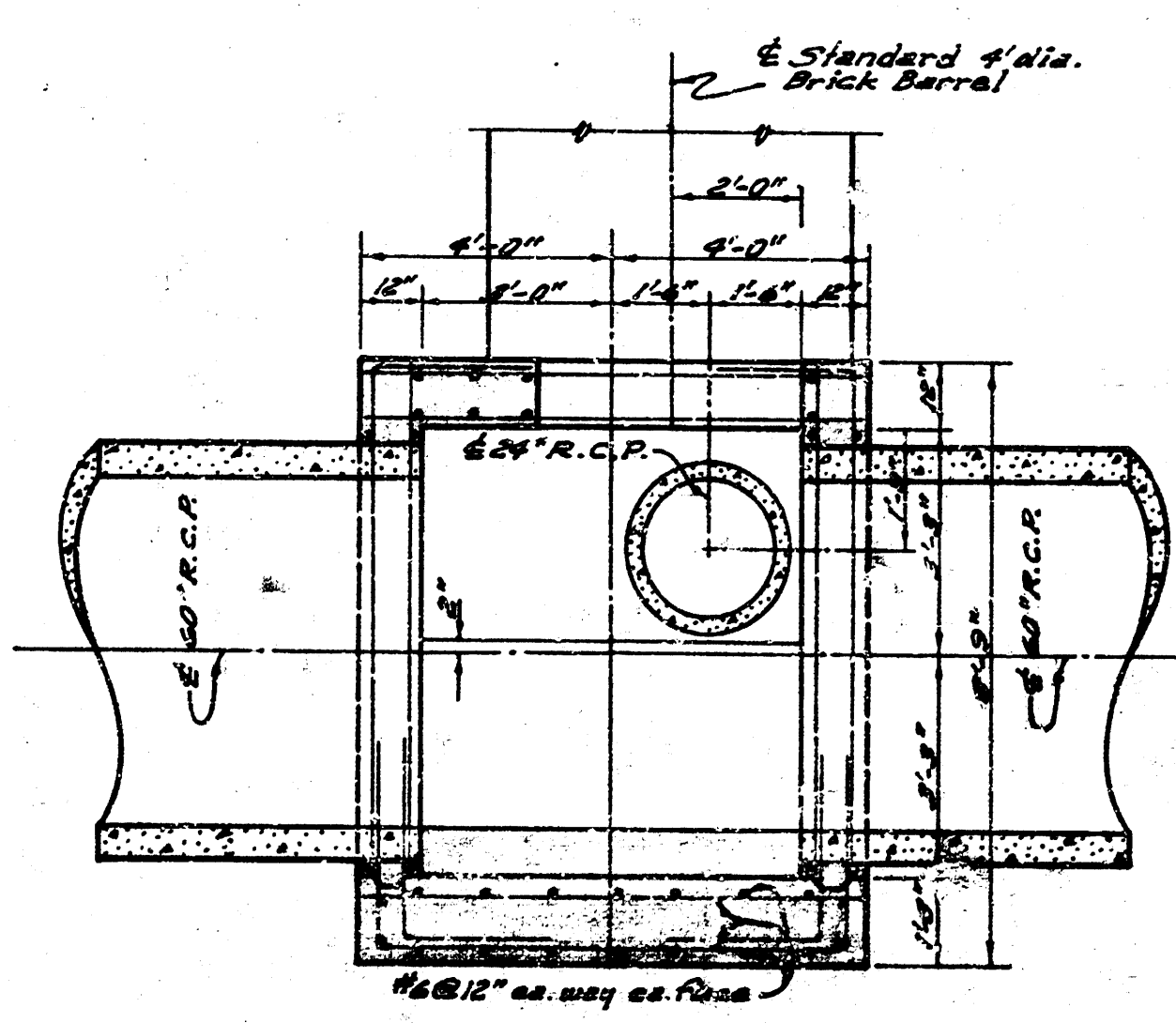
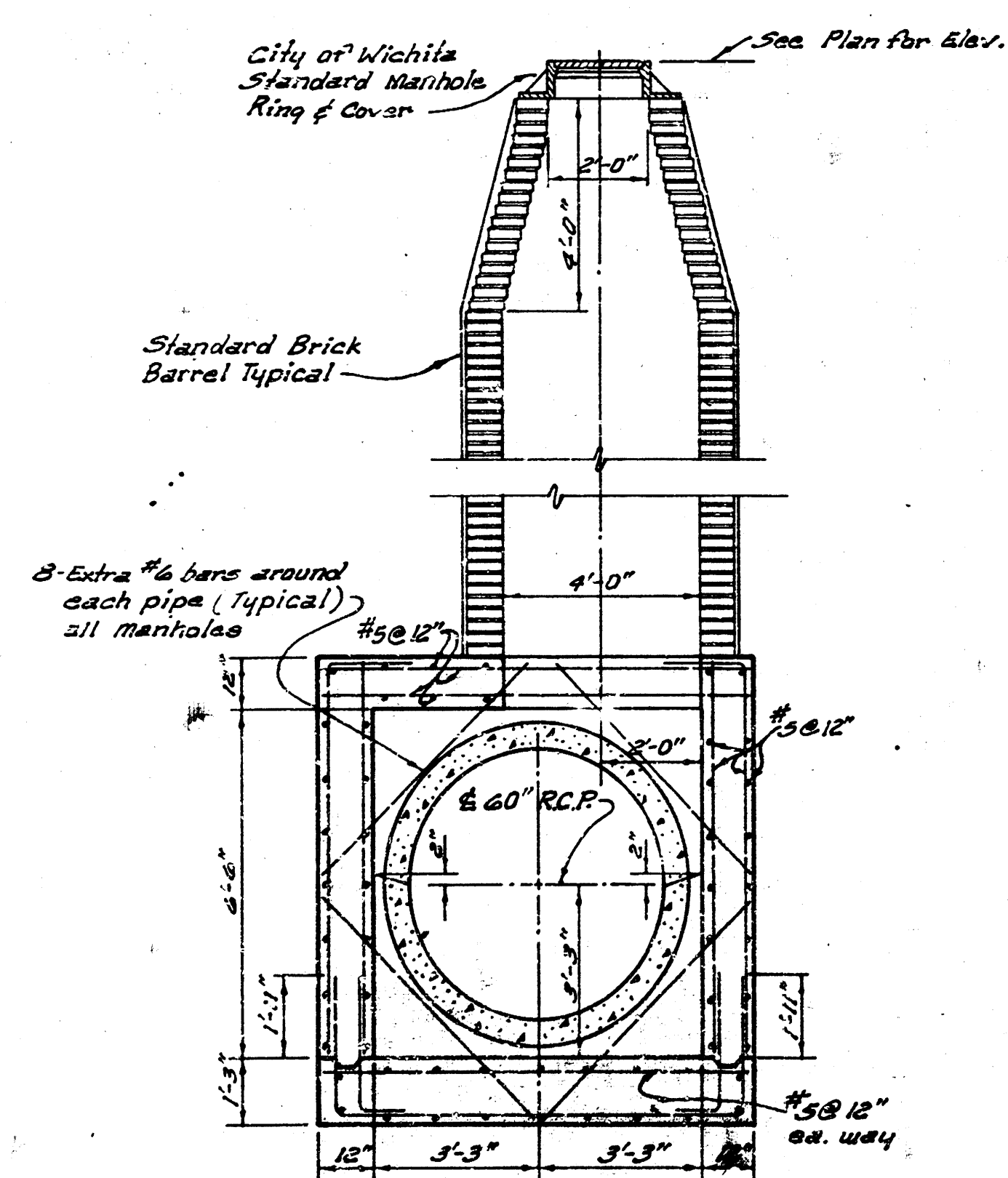
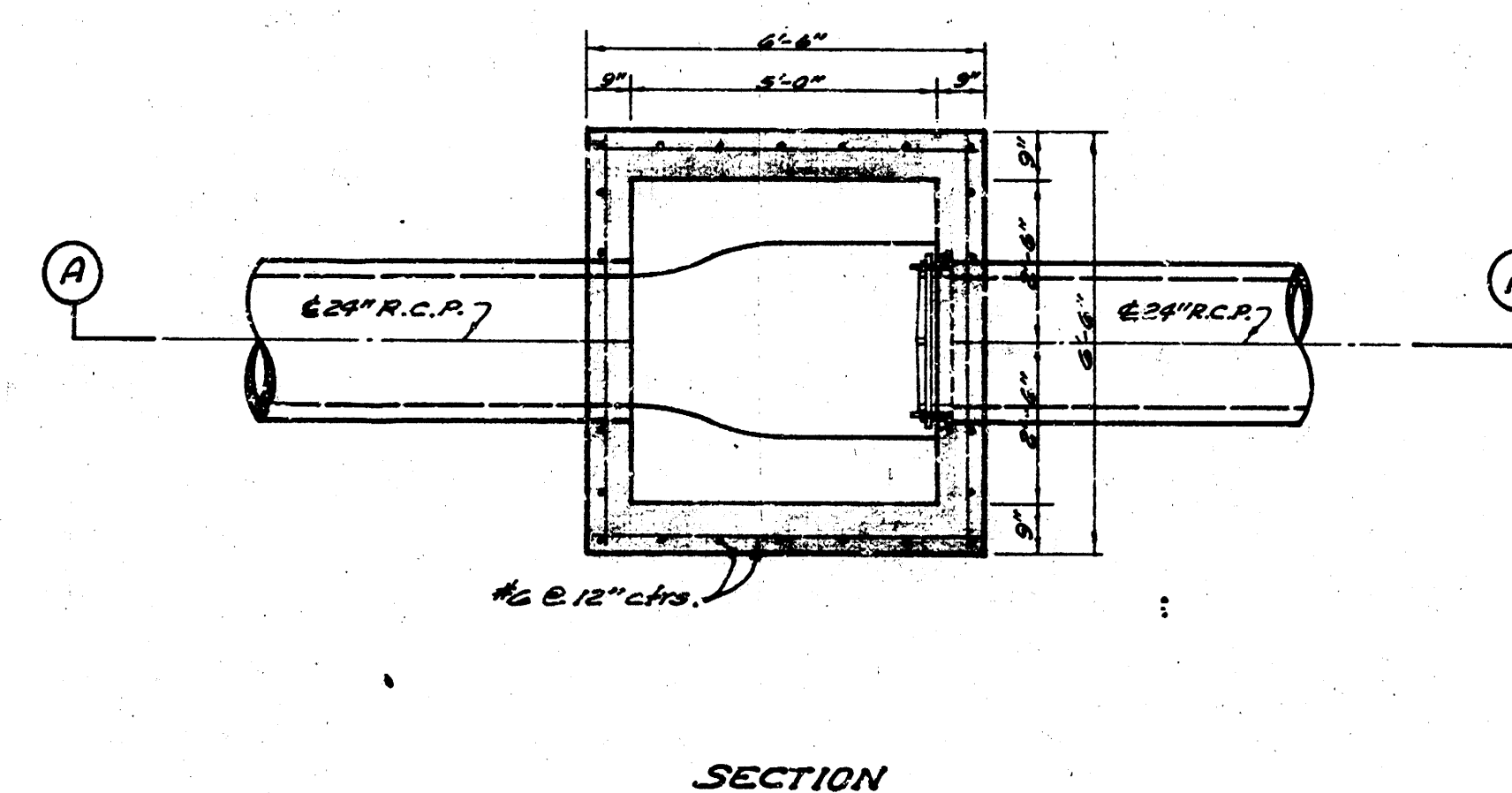
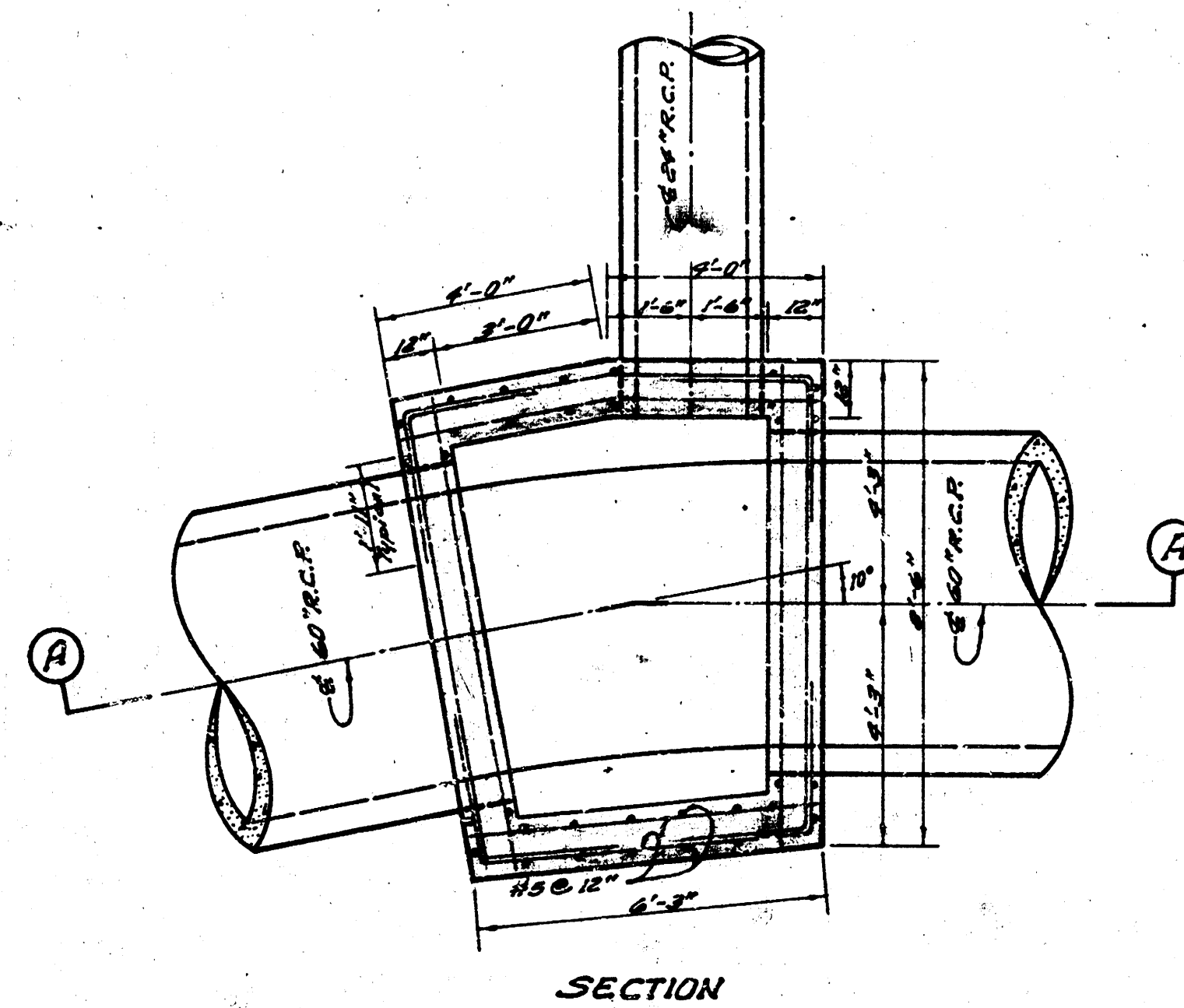
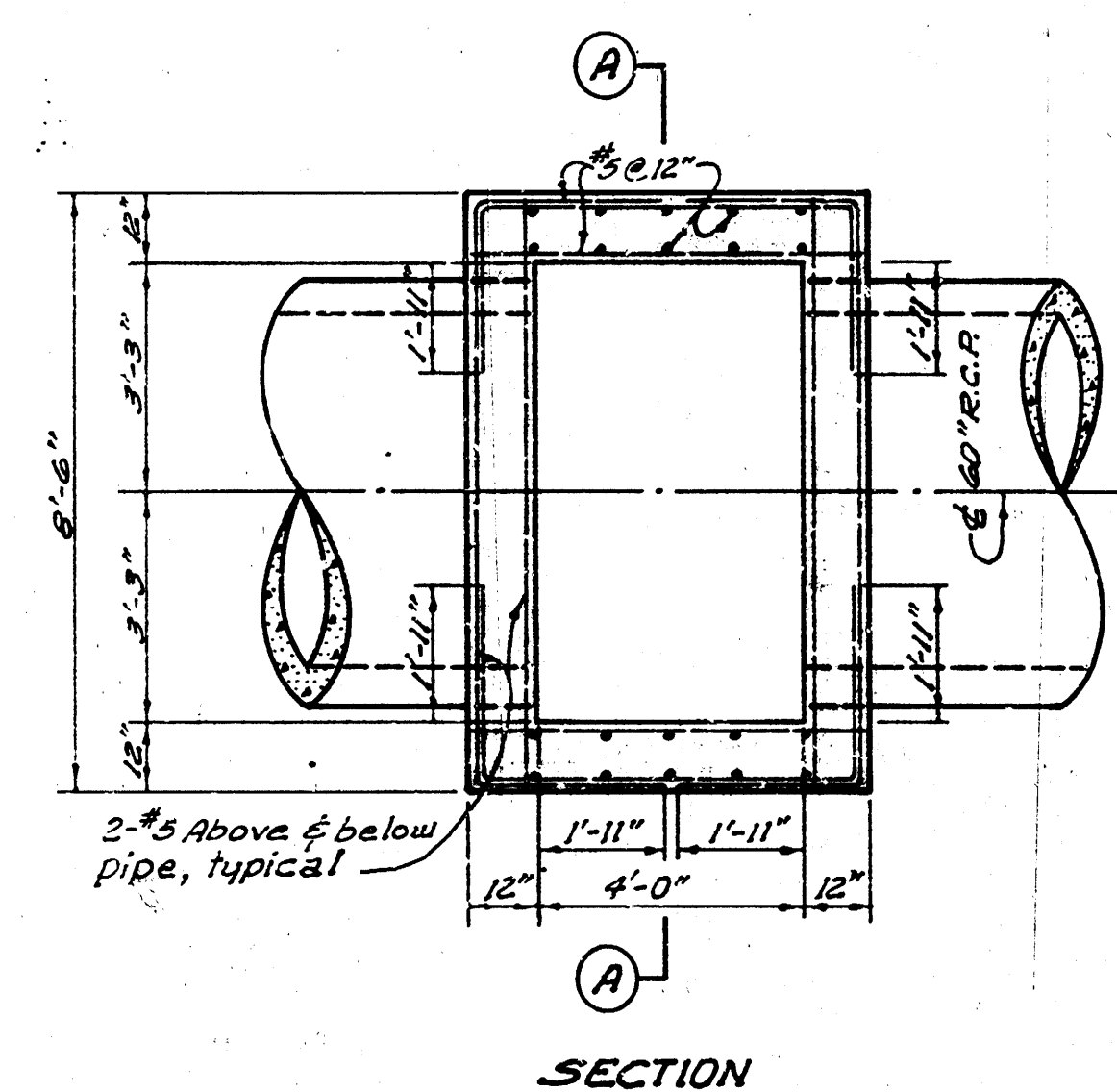
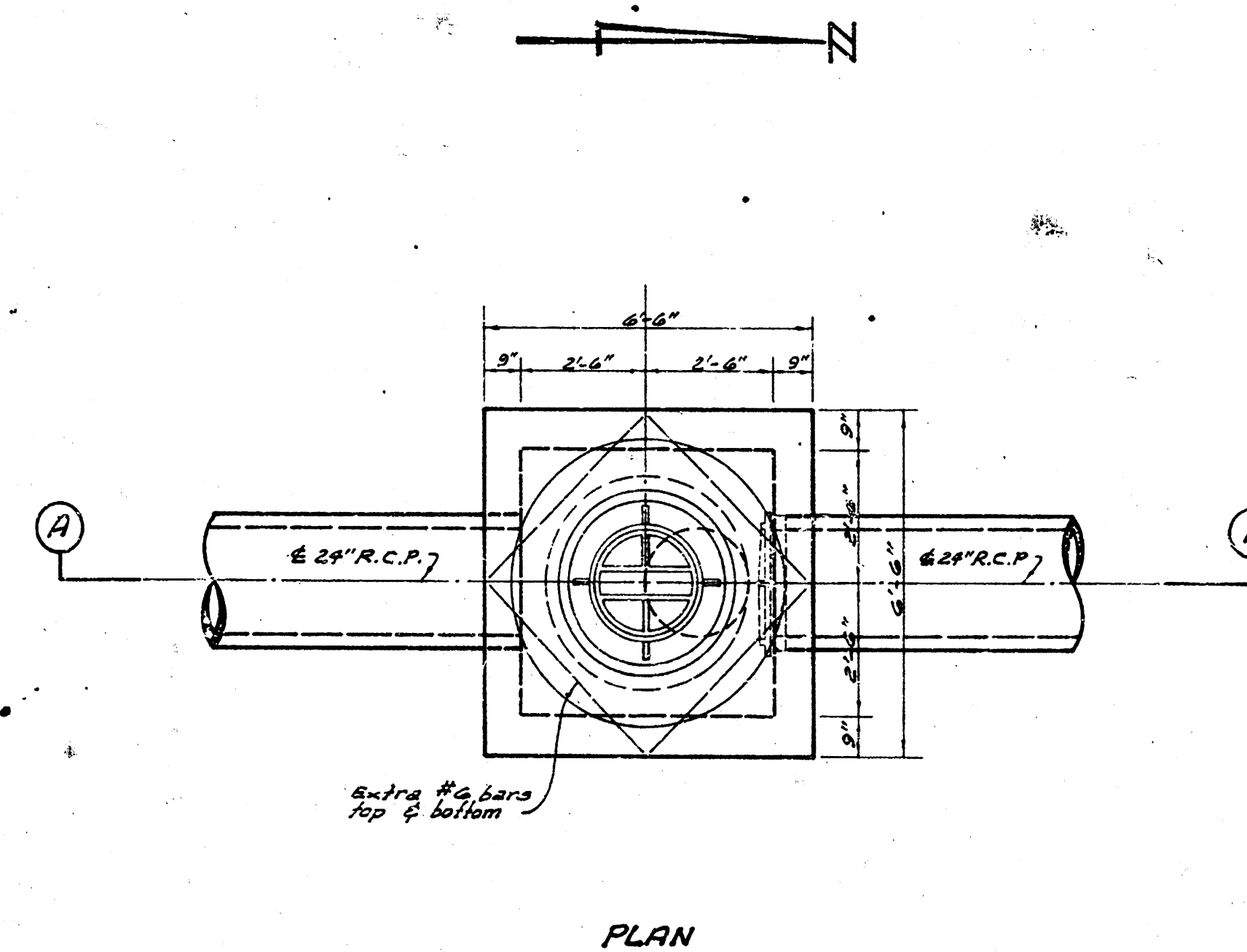
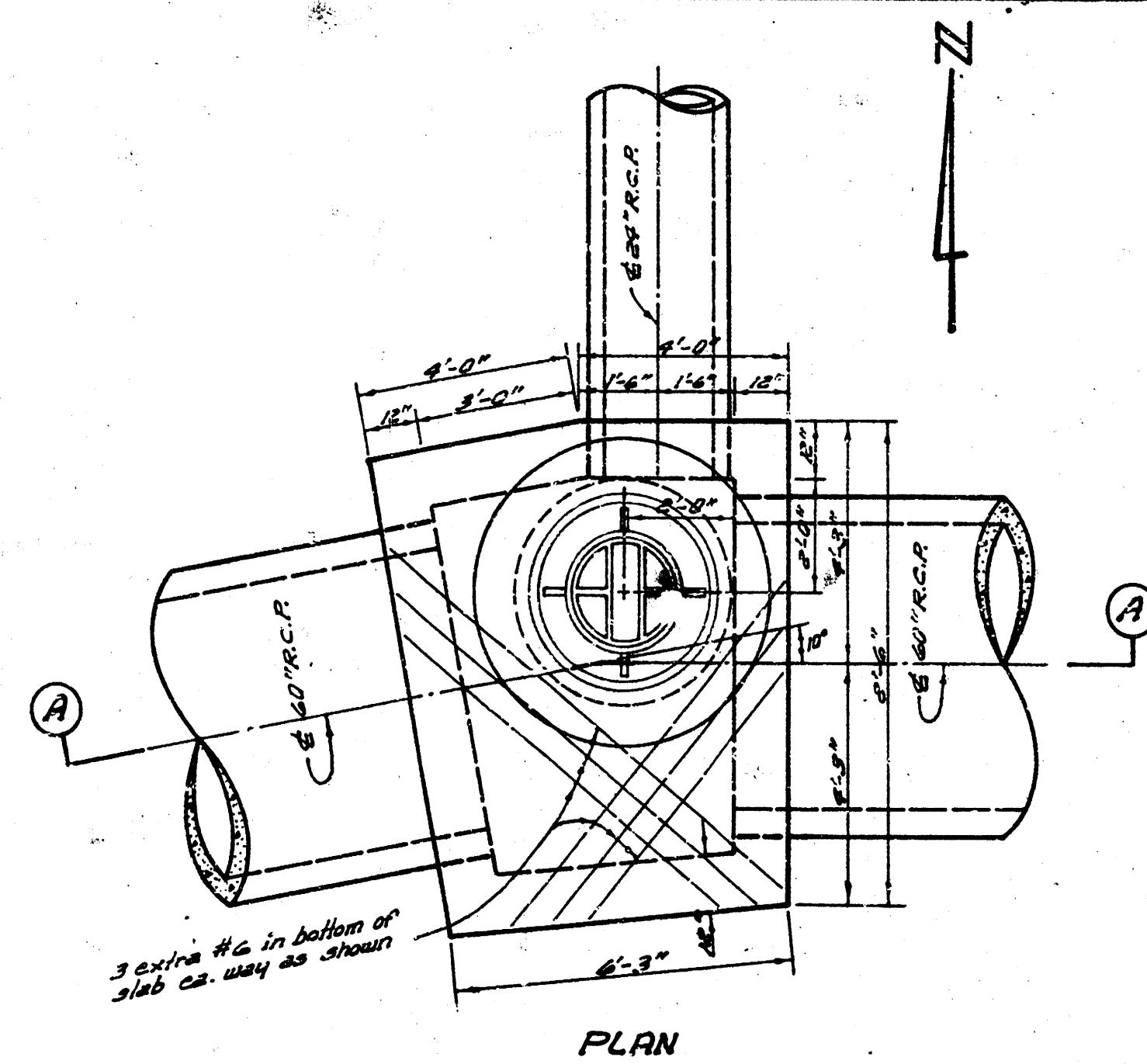
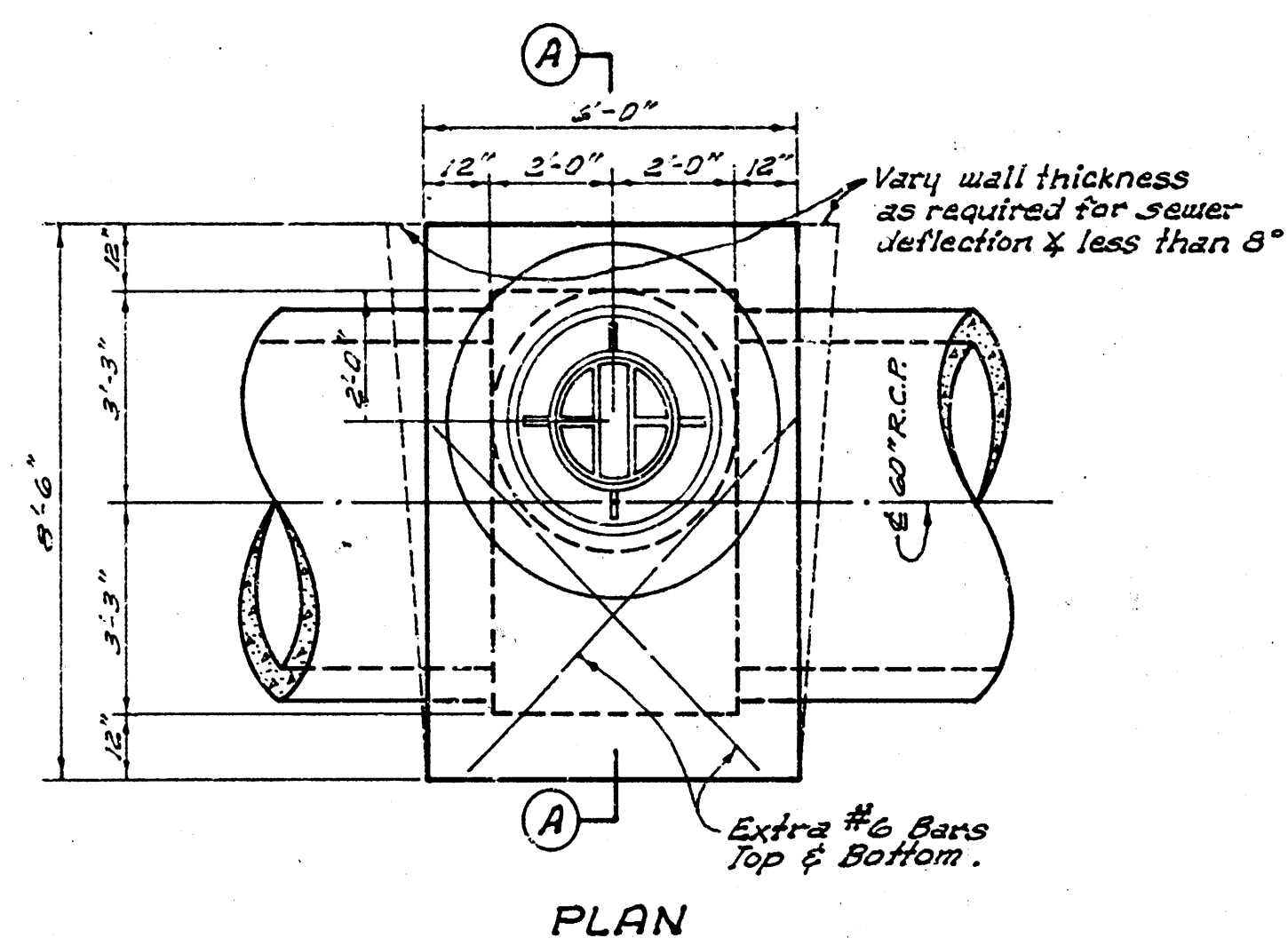
REINF. CONC. OUTFALL STRUCTURE STA. 0+53
 Scale 3/4" = 1'-0"



EXIST. PAVEMENT SECTION - DOUGLAS AVE.
 FROM STA. 7+65 TO 15+22 LN. NO. 1
 Scale 3/4" = 1'-0"

GENERAL NOTES:

- #1 All sand backfill is to be flushed & vibrated
- #2 Bid price of inlets & manholes removed is to include the cost of plugging pipe, removing castings & lids & removing necessary amount of brick to allow for pavement or sewer construction
- #3 All castings, grates & lids removed to be delivered to City of Wichita material yard.
- #4 Abandoned sewer pipes, cut by the storm water sewer construction, are to be plugged with concrete & masonry. These plugs shall be bid as "Pipe Plugs".
- #5 Contractor to patch ditch cuts with 2" asphaltic conc., where necessary, to maintain traffic prior to paving.
- #6 Contractor to co-ordinate work so traffic can be maintained on 1/2 street at all times.
- #7 Compacted backfill from Sta. 0+45 to 1+35 Line No. 1, shall be a non bid item & shall be included in bid price of 60" R.C.P.
- #8 Conc. encasement between Sta. 14+70 & 14+92 shall be included in bid price of Lin. of 42" R.C.P.
- #9 Reinf. conc. encasement @ Sta. 0+100 Line No. 2 on exist. 54" brick arch S.W.S. shall be included in bid price of Non Standard R.H., type "H".
- #10 Contractor to remove minimum amount of walk, drive & pavement to allow for sewer construction.
- #11 The 60" R.C.P. between the outfall structure @ Sta. 0+53 & the manhole @ Sta. 14+70 is to have rubber gasket joints, Interface Specification SP-29, or approved equal.
- #12 The bid price for lin. ft. of tunnel liner is to include placing of liner, pressure grouting, paved invert & all necessary tools & equipment to complete liner in place, except the cost of 60" R.C.P.
- #13 Broken concrete, asphalt, brick, rubble & excavated material will be disposed of on the east bank of the Big Arkansas River in the vicinity of Harry Street. The Contractor shall contact the Flood Control Division for directions on the disposal of material.
- #14 Asphalt walk removed will be paid as sq. ft. of walk & drive removed.



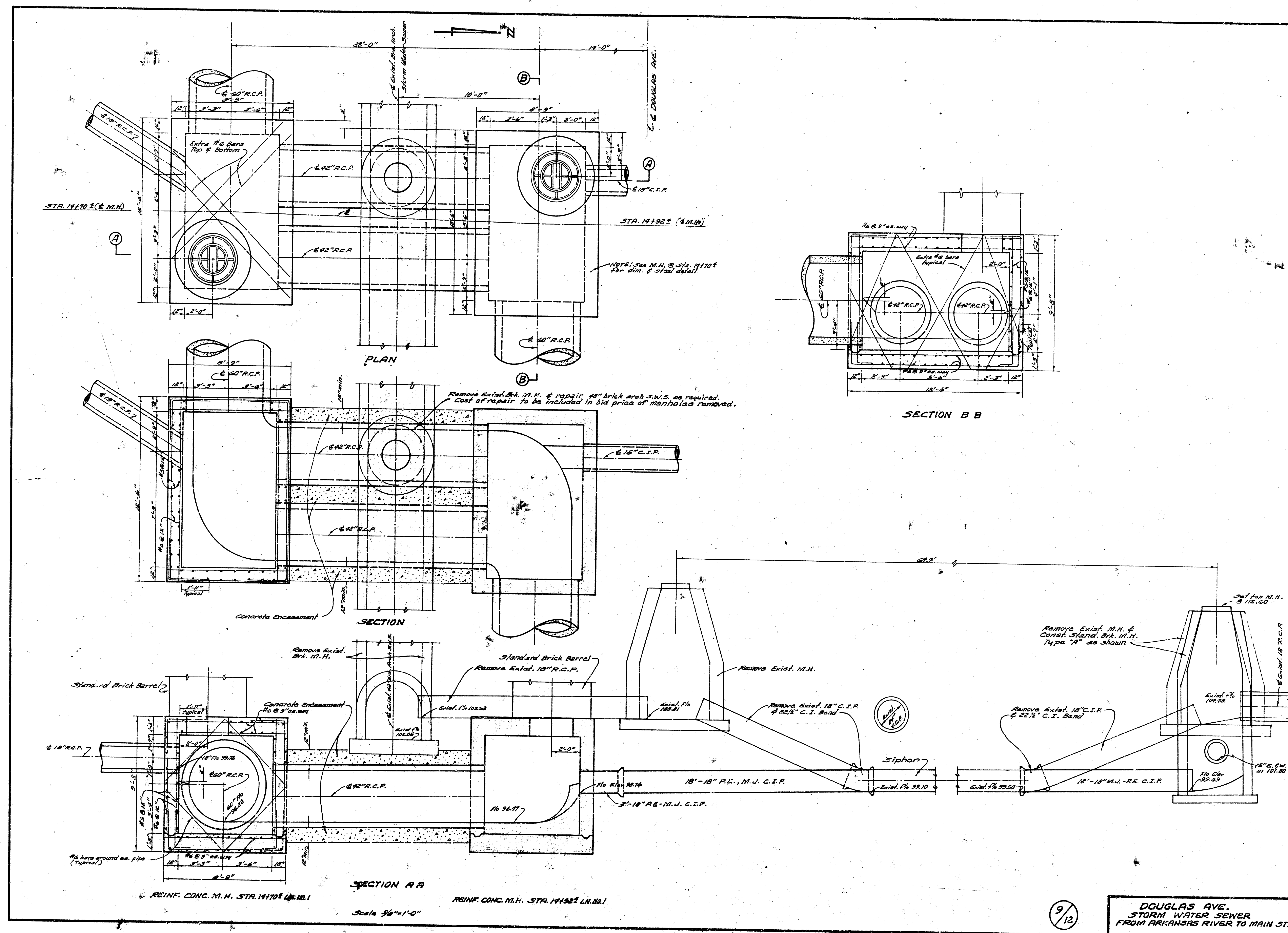
SECTION AA
REINF. CONC. M.H. FOR STA. 3100, 5198, 10174 & 11150 LN. NO. 1
Scale 3/8"=1'-0"

SECTION AA
REINF. CONC. M.H. FOR STA. 7165 LN. NO. 1
Scale 3/8"=1'-0"

SECTION AA
REINF. CONC. M.H. FOR STA. 0180 LN. NO. 4
Scale 3/8"=1'-0"

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DOUGLAS AVE.
STORM WATER SEWER
FROM ARKANSAS RIVER TO MAIN ST.

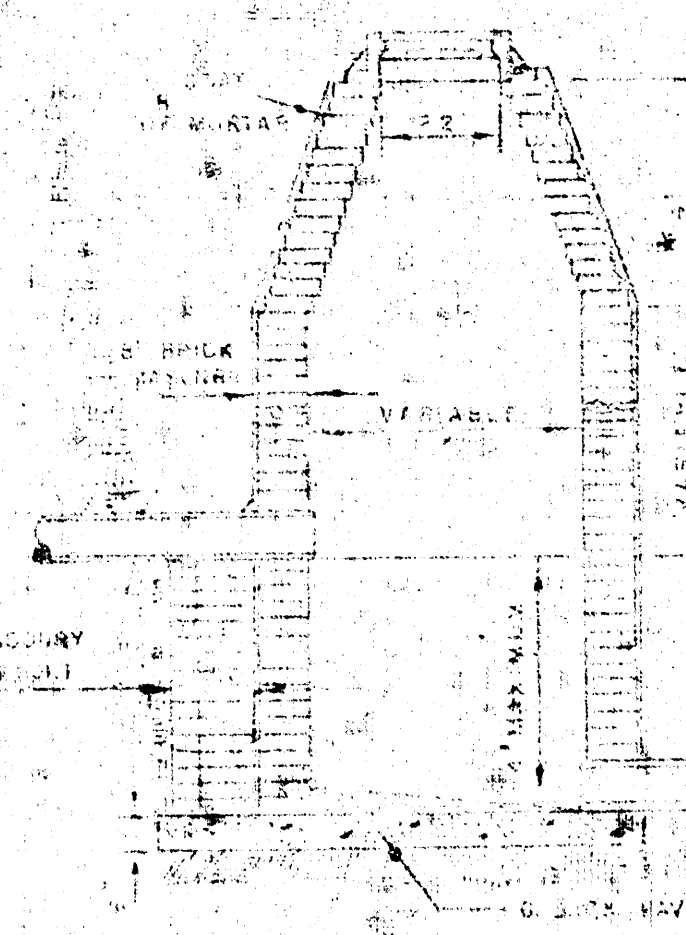




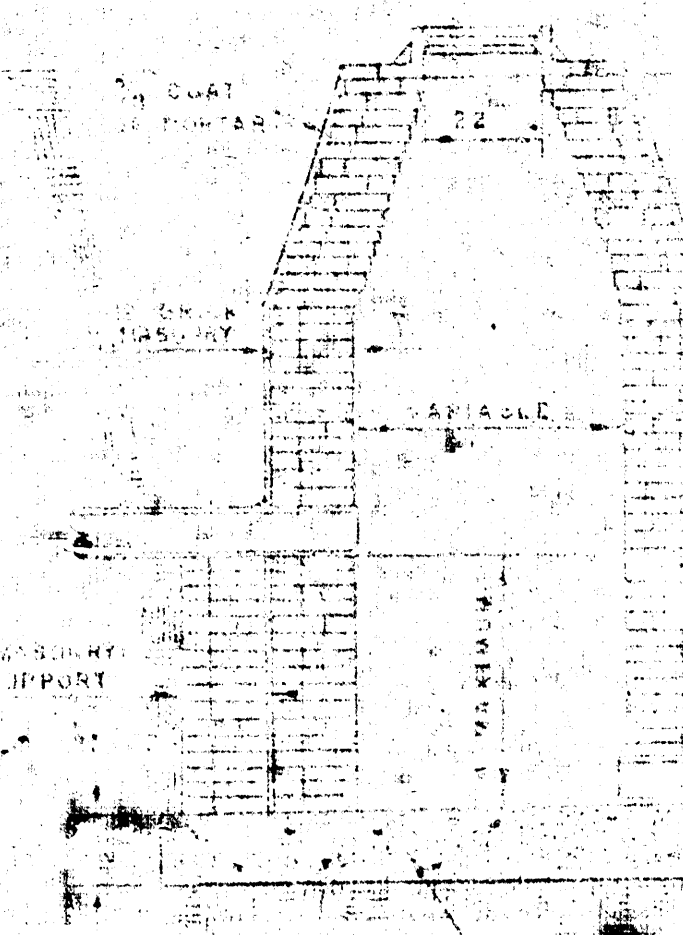
STANDARD MANHOLE
TYPE "A"



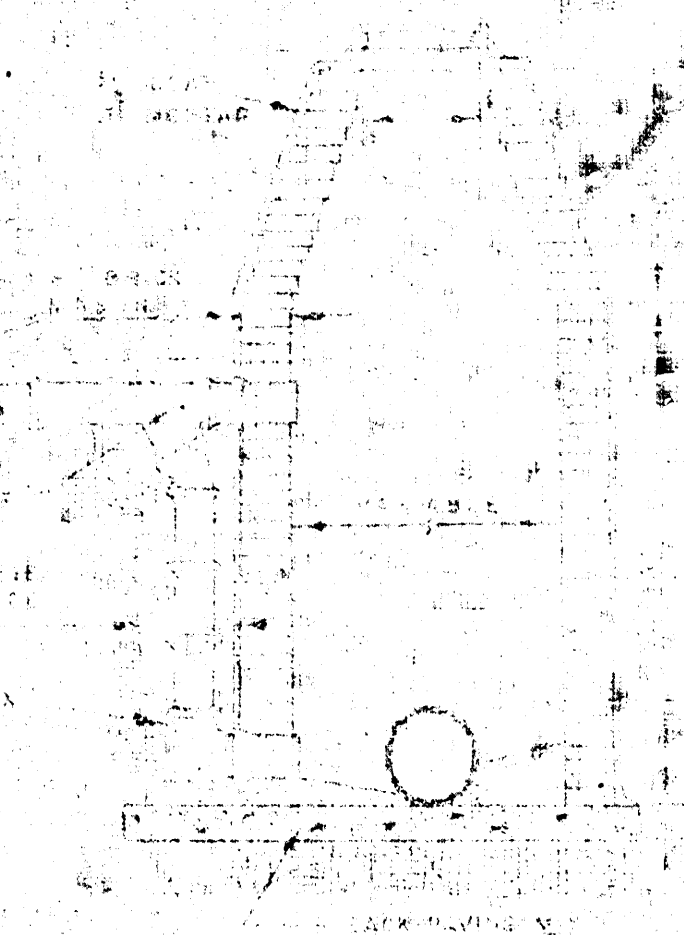
STANDARD MANHOLE
TYPE "B"



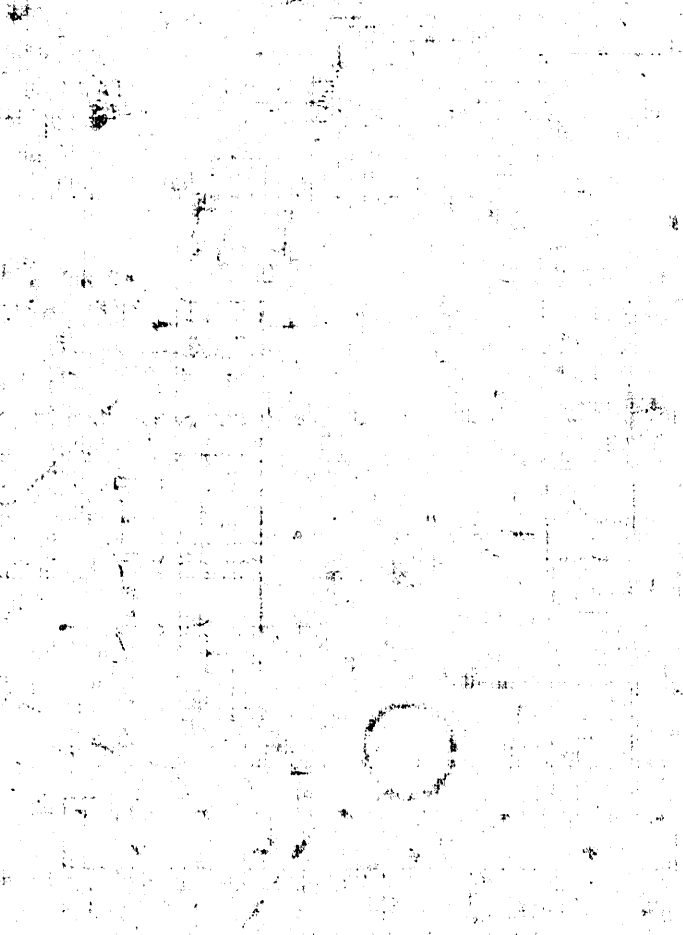
DROP MANHOLE
TYPE "A"



DROP MANHOLE
TYPE "B"

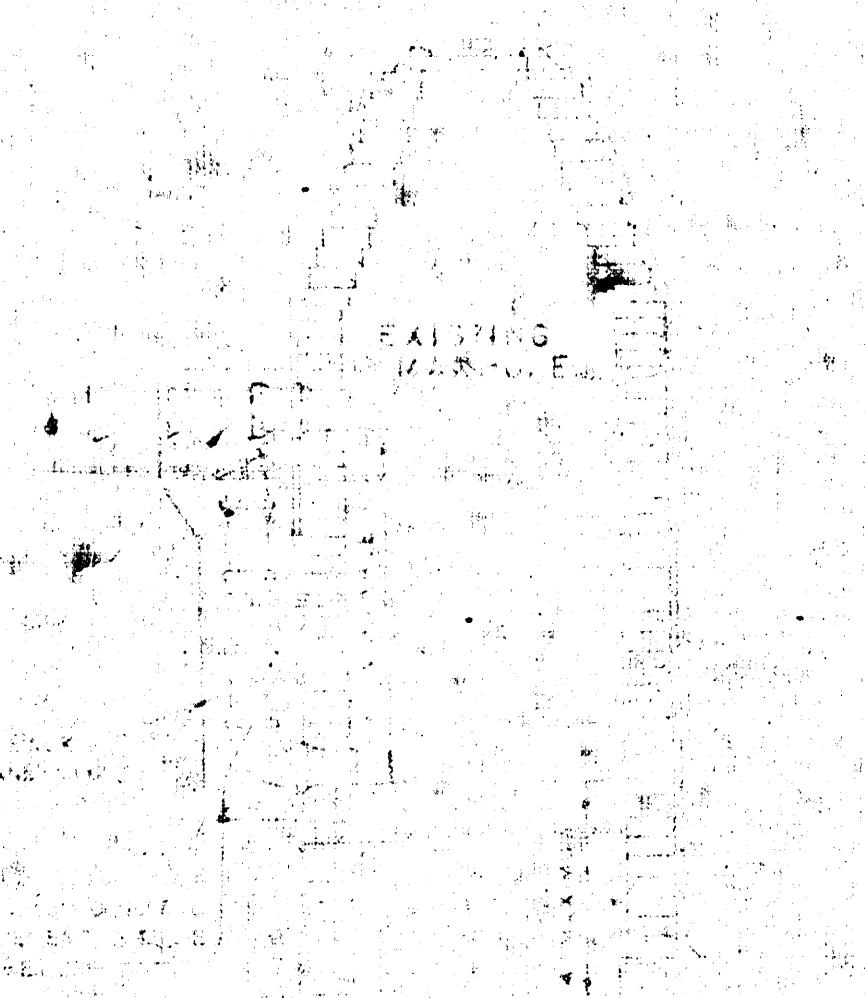


OUTSIDE DROP MANHOLE
TYPE "A"

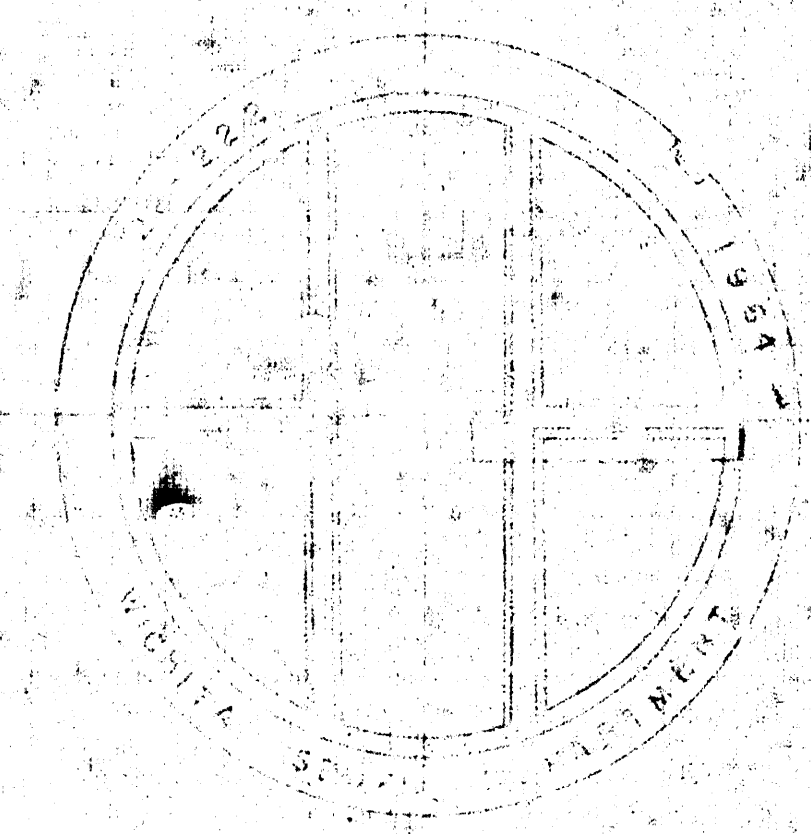


OUTSIDE DROP MANHOLE
TYPE "B"

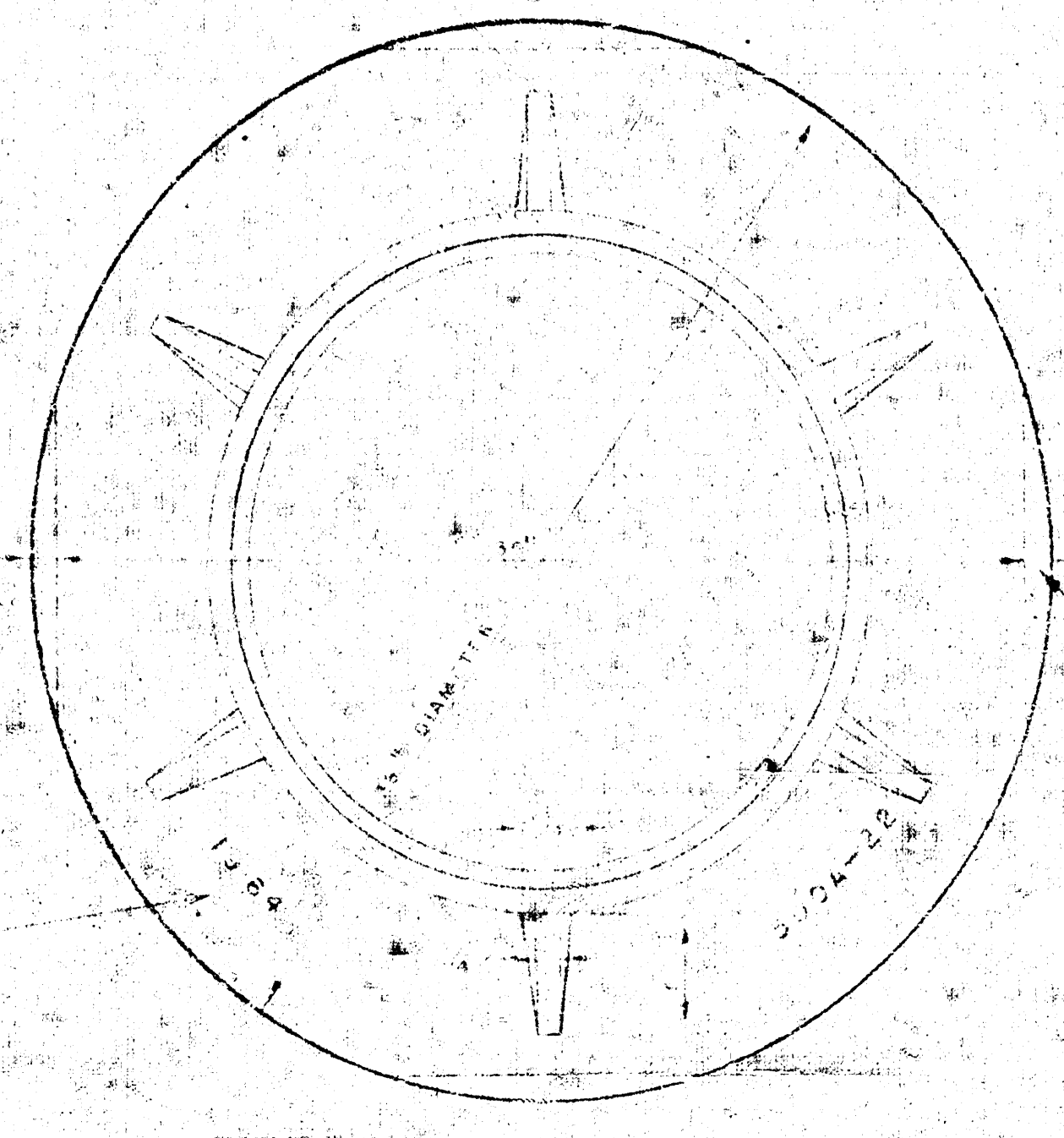
* DRAW # 6 ON S' DIA. W.H.



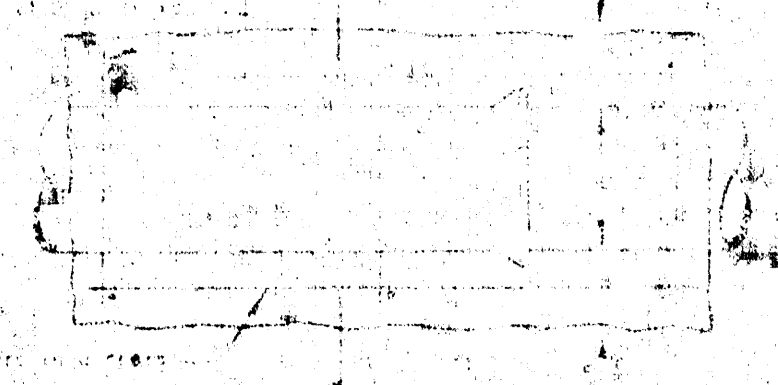
DETAIL OF DROP STACK



MANHOLE COVER



MANHOLE RING



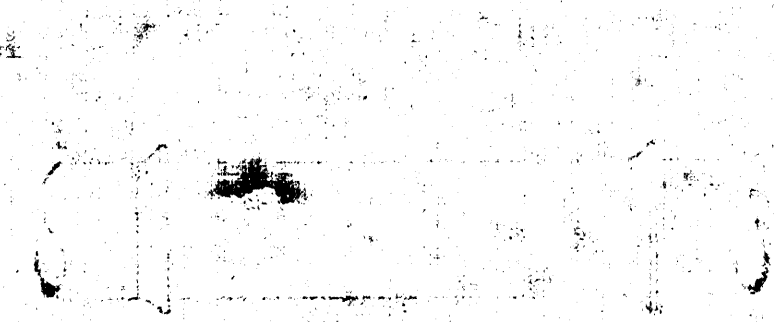
REINFORCED CONCRETE ENCASEMENT
FOR STRENGTH



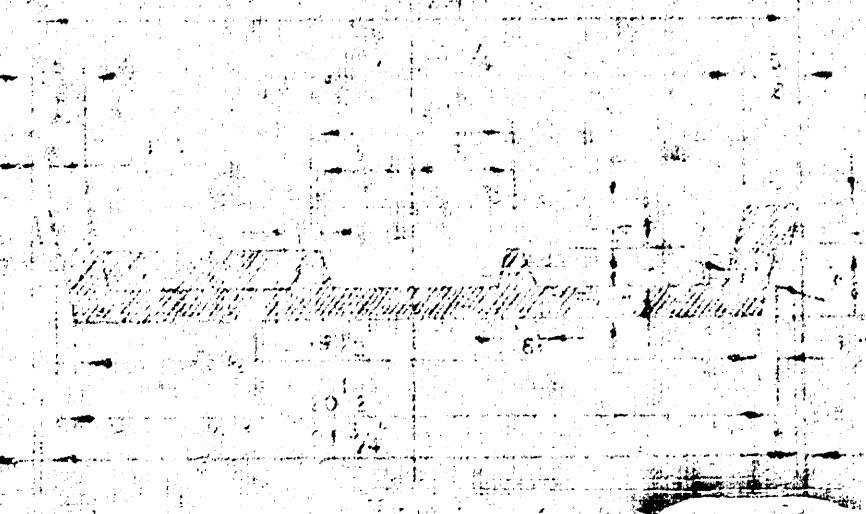
CONCRETE ENCASEMENT
FOR COVER



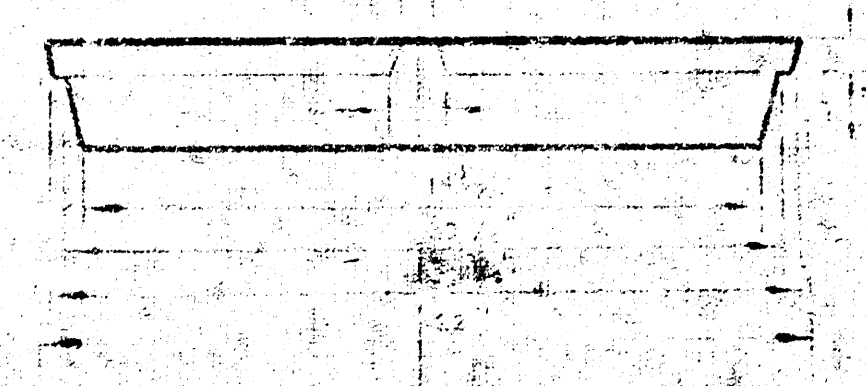
DETAIL OF CONCRETE CRADLE



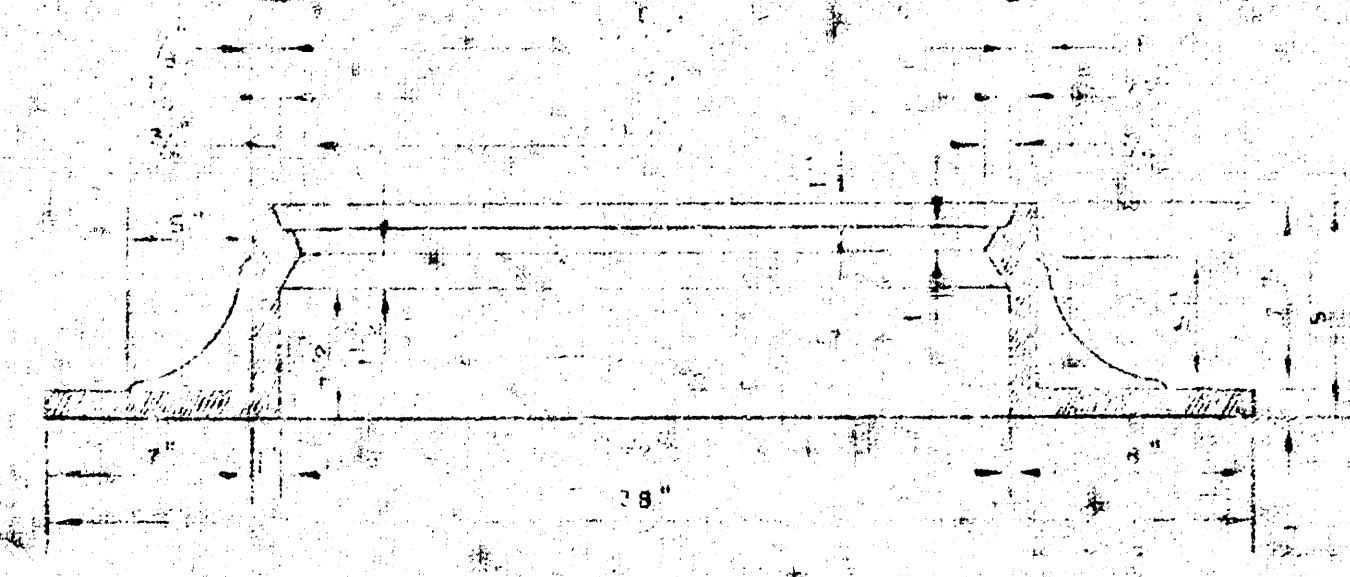
ORDINARY BEDDING METHOD



MANHOLE COVER

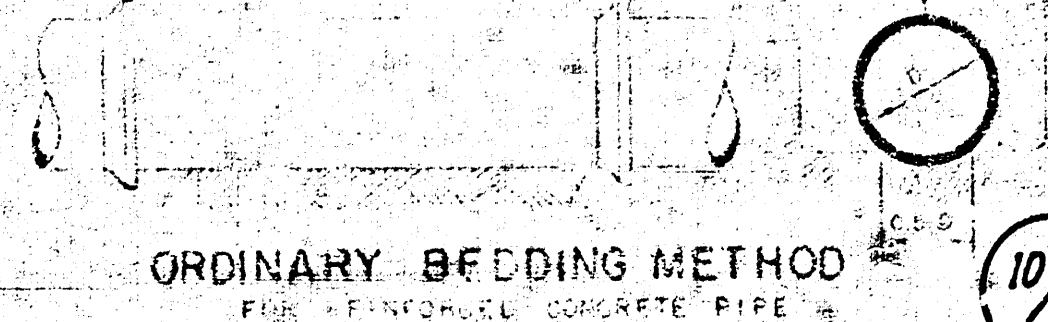


MANHOLE COVER



MANHOLE RING

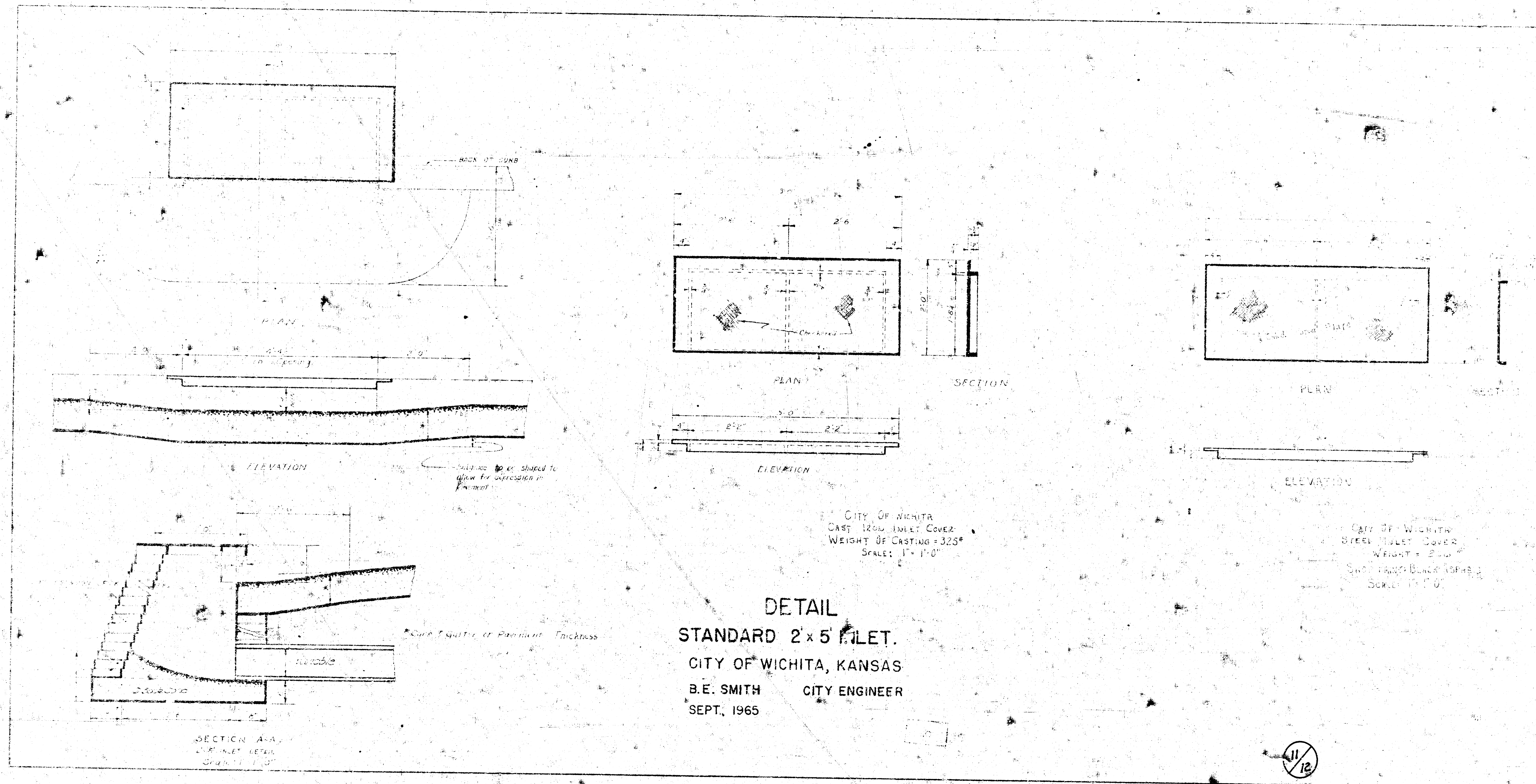
OUTSIDE DIFFERENCE OF COVER
AND THE INNER FACE AND TEST OF
RING IS THE MACHINE FIT.

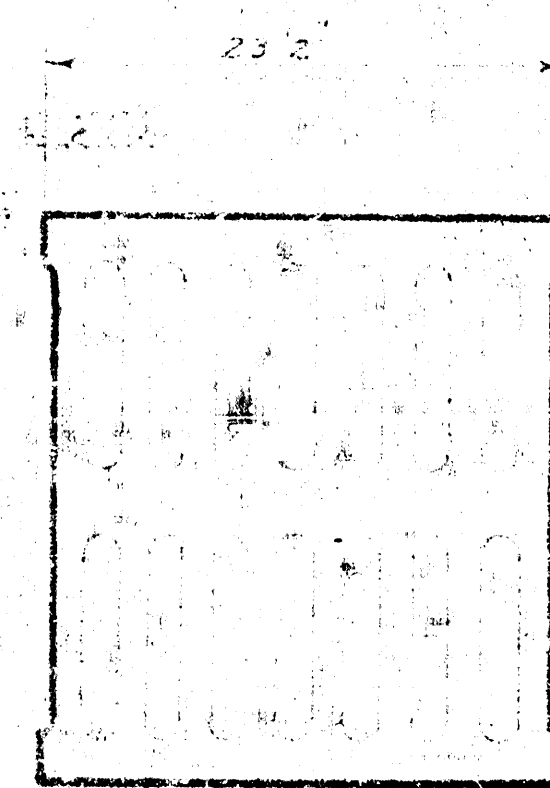
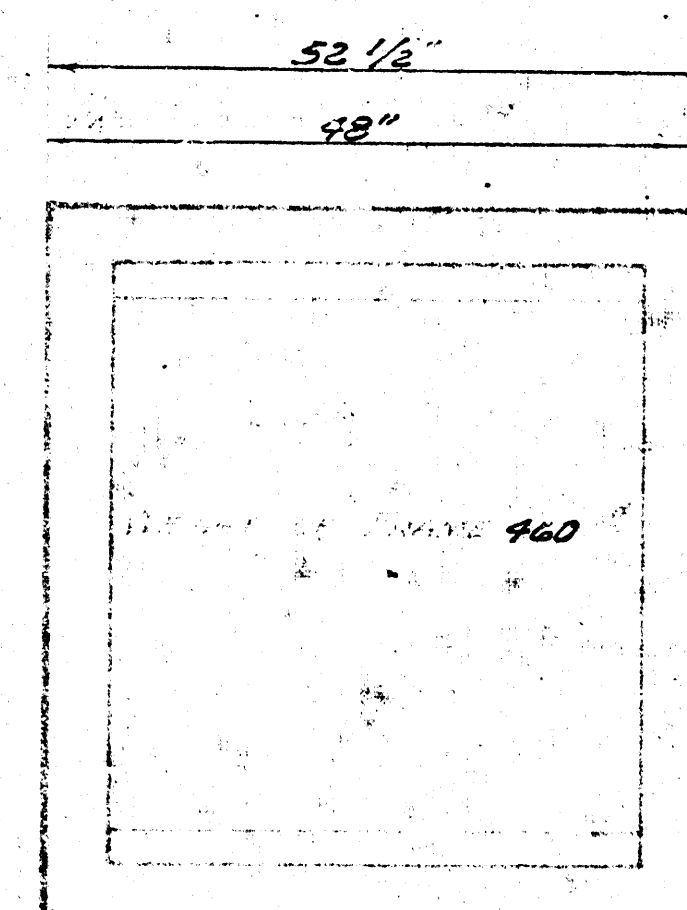


ORDINARY BEDDING METHOD
FOR REINFORCED CONCRETE PIPE

10/12

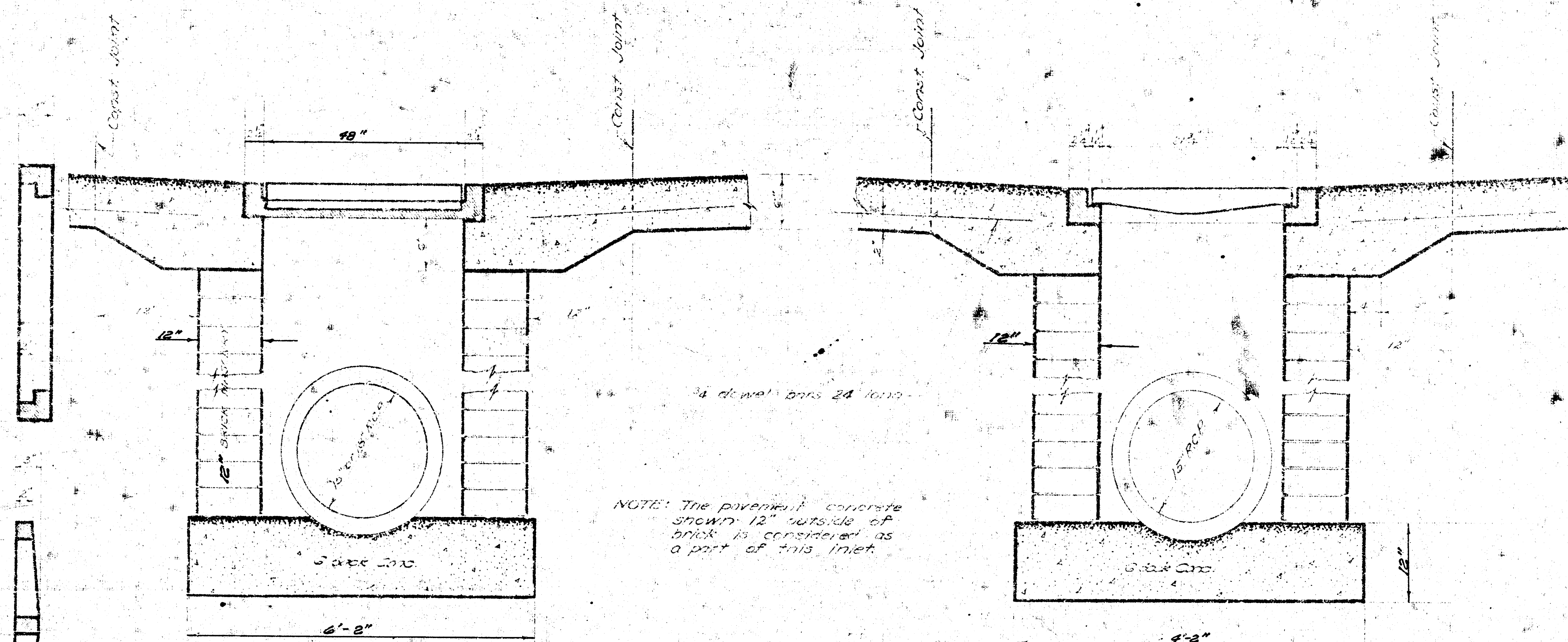
DETAILS OF
SEWER APPURTENANCES
ADOPTED AS STANDARD DESIGN
BY
ENGINEERING DIVISION
CITY OF WICHITA, KANSAS
B. E. SMITH CITY ENGINEER
1964





WEIGHT OF GRATE 180

FRAME & GRATE DETAILS
12/12/12



NOTE: The pavement concrete shown 12" outside of brick is considered as a part of this inlet.

Note: 2 grates required for double 2'x2' grate inlet

ELEVATION

DROP INLET DETAILS

No Scale

ELEVATION

DROP INLET DETAILS
CITY OF WICHITA KANSAS
B. SMITH CITY ENGINEER

12/12

13

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L.P.A.