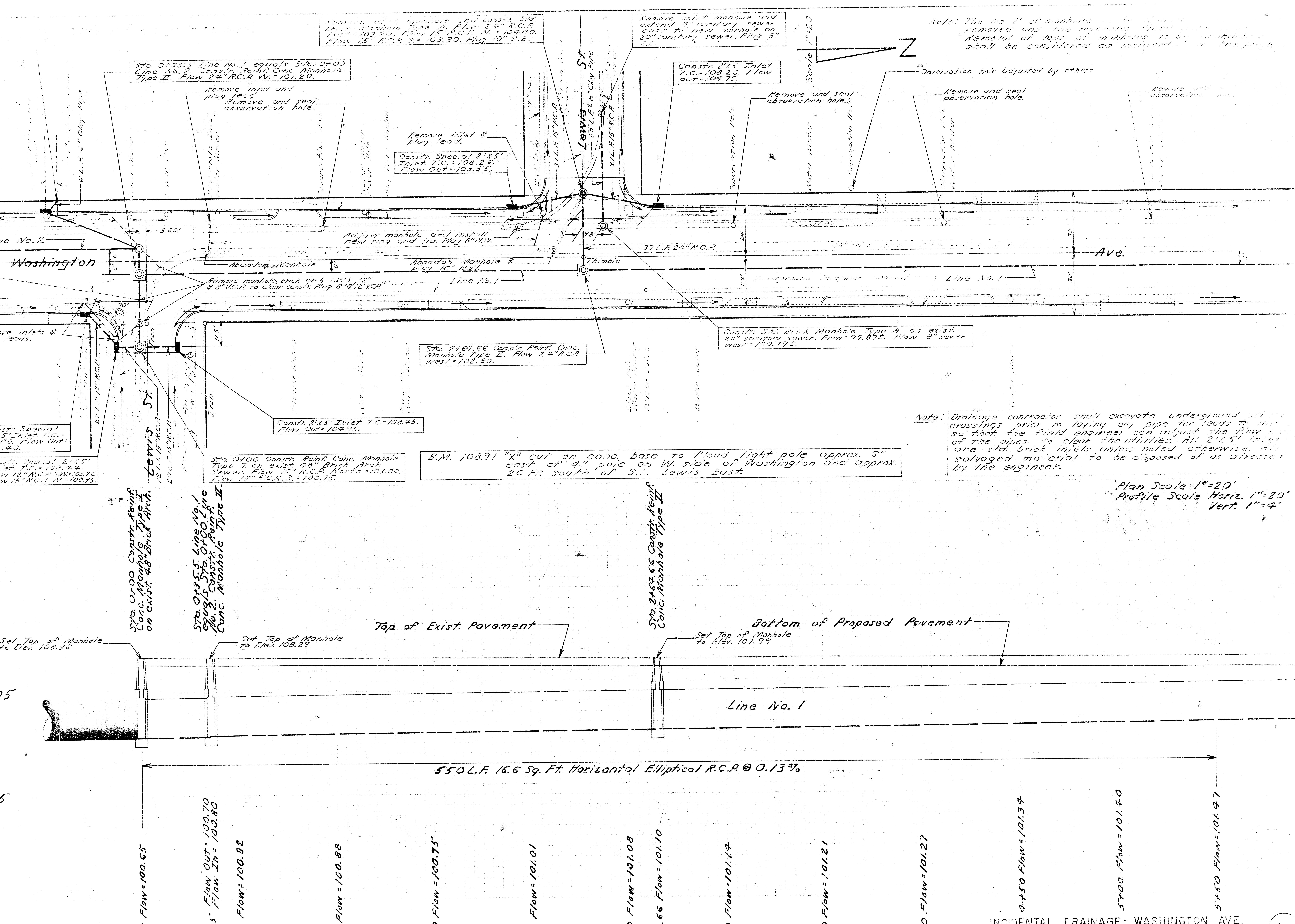
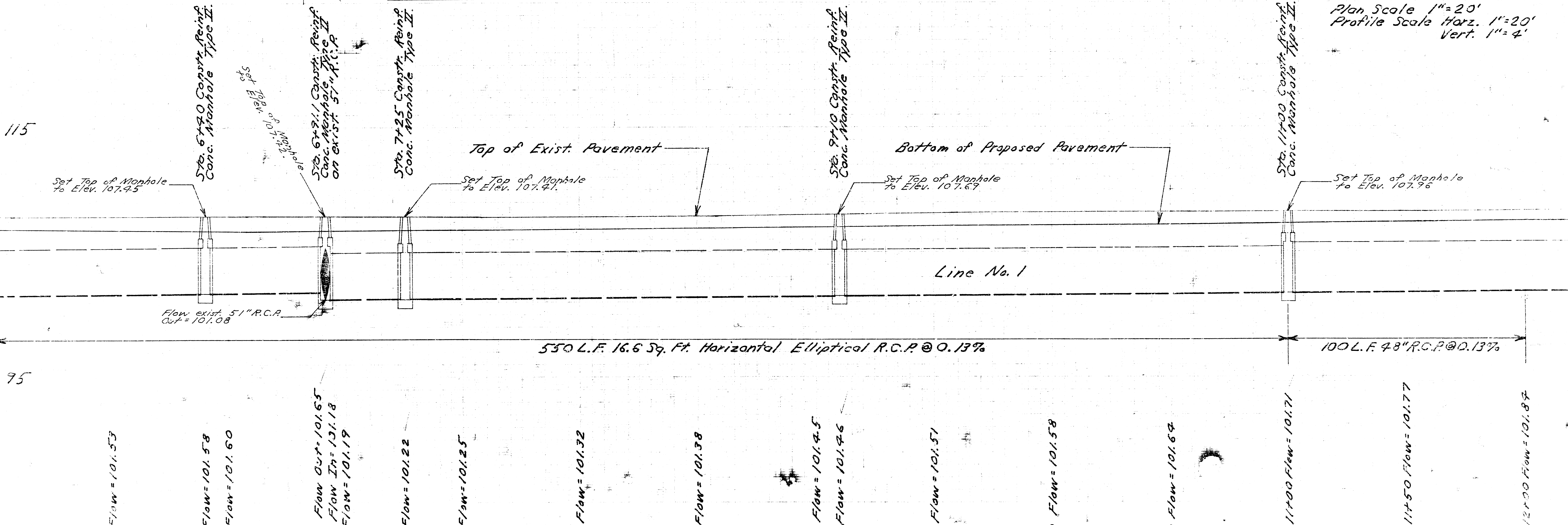
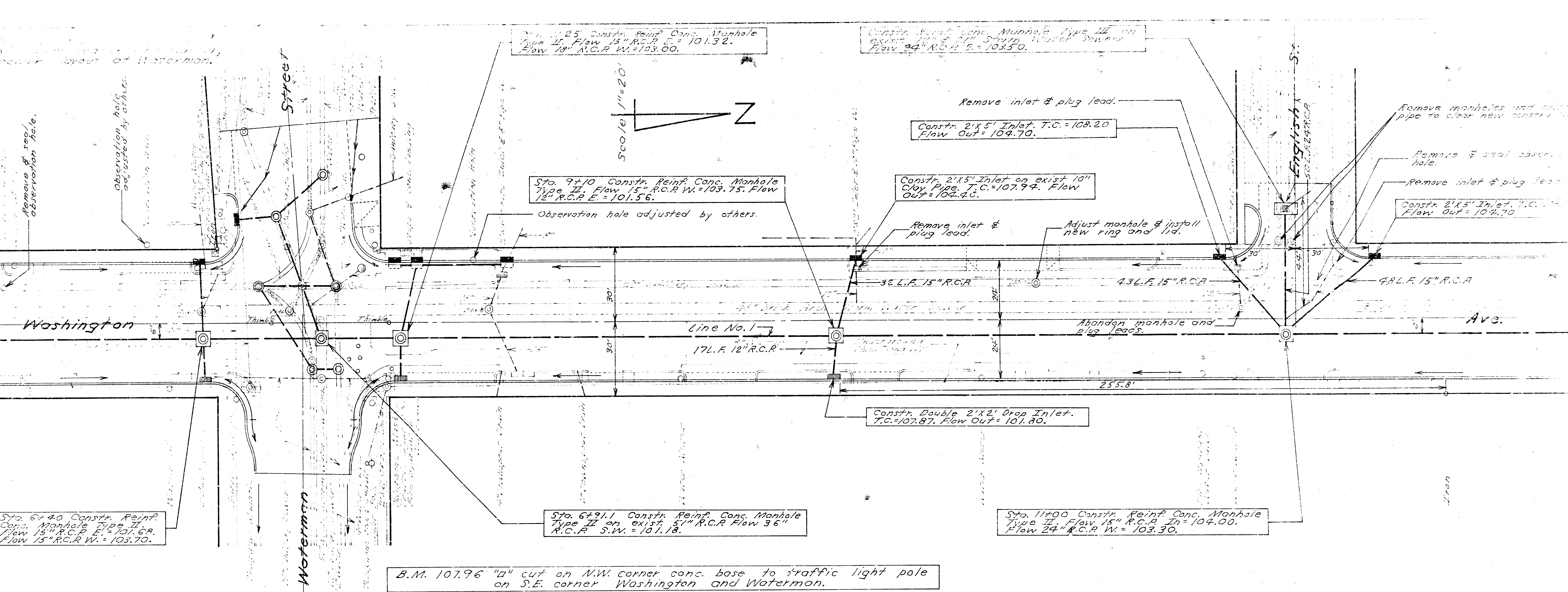
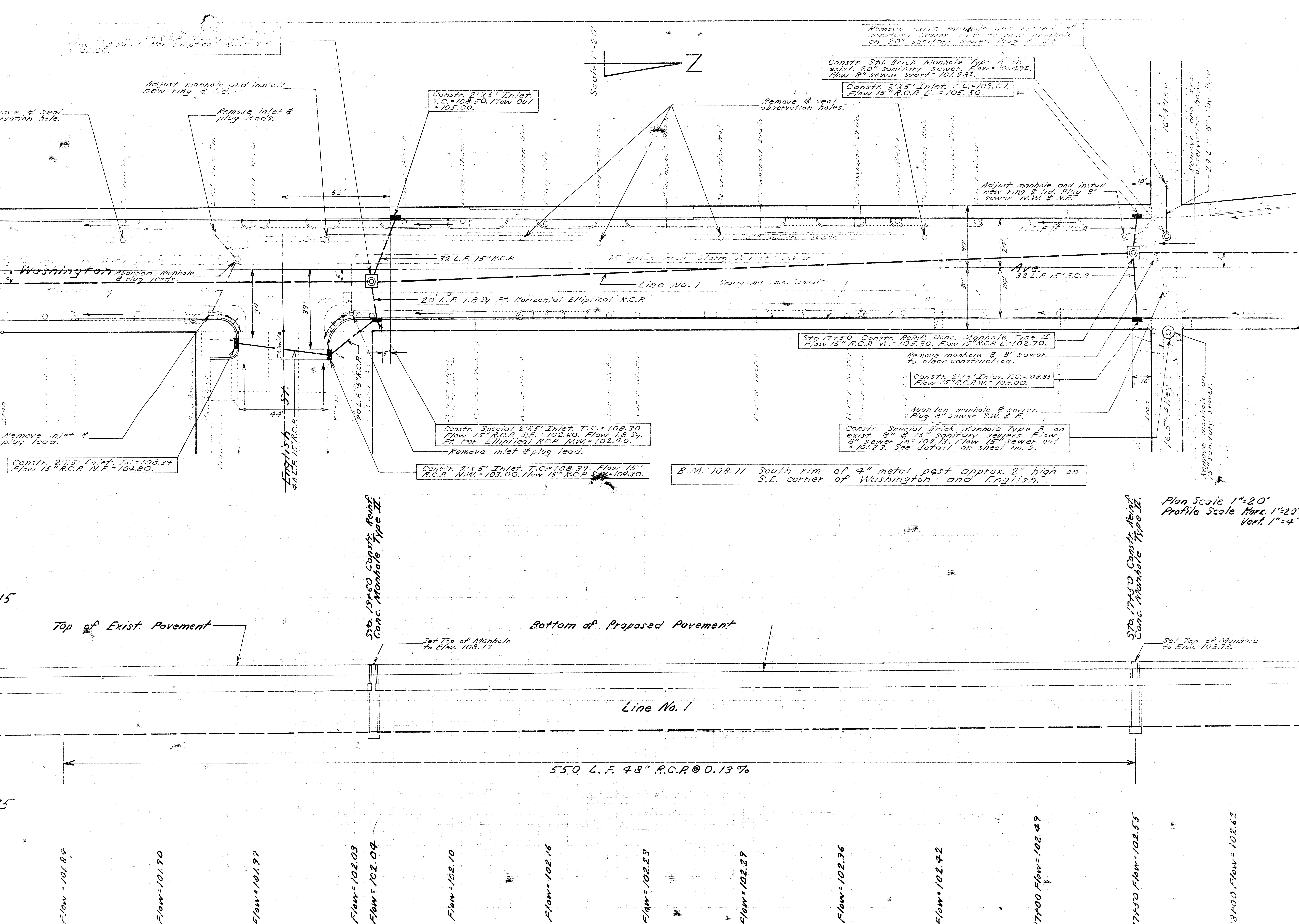








Scale 1"=20'

Remove exist. manhole and install 2'x5' inlet on 20" sanitary sewer. Plug 8" sewer.

Constr. Std. Brick Manhole Type A on exist. 20" sanitary sewer. Flow = 101.49 ft. Flow 8" sewer west = 101.88 ft.

Constr. 2'x5' Inlet, T.C.=109.01, Flow 15" R.C.P. E.=105.50.

Remove & seal observation holes.

Adjust manhole and install new ring & lid. Plug 8" sewer N.W. & N.E.

Remove and seal observation hole. 24 L.F. 8" Clay Pipe

Adjust manhole and install new ring & lid.

Remove inlet & plug leads.

Constr. 2'x5' Inlet, T.C.=108.50, Flow Out = 105.00.

32 L.F. 15" R.C.P.

Line No. 1 Underground Tele. Conduit

20 L.F. 1.8 Sq. Ft. Horizontal Elliptical R.C.P.

Ave. 32 L.F. 15" R.C.P.

Sta 17+50 Constr. Reinf. Conc. Manhole Type II, Flow 15" R.C.P. W.=105.30, Flow 15" R.C.P. E.=102.70.

Remove manhole & 8" sewer to clear construction.

Constr. 2'x5' Inlet, T.C.=108.85, Flow 15" R.C.P. W.=103.00.

Abandon manhole & sewer. Plug 8" sewer S.W. & E.

Constr. Special Brick Manhole Type B on exist. 8" & 15" sanitary sewers. Flow 8" sewer in = 102.13, Flow 15" sewer out = 101.23. See detail on sheet no. 5.

Constr. Special 2'x5' Inlet, T.C.=108.30, Flow 15" R.C.P. S.E.=102.60, Flow 1.8 Sq. Ft. Hor. Elliptical R.C.P. N.W.=102.40.

Remove inlet & plug lead.

Constr. 2'x5' Inlet, T.C.=108.39, Flow 15" R.C.P. N.W.=103.00, Flow 15" R.C.P. S.W.=104.30.

B.M. 108.71 South rim of 4" metal post approx. 2" high on S.E. corner of Washington and English.

Plan Scale 1"=20'
Profile Scale Horiz. 1"=20'
Vert. 1"=4'

Top of Exist. Pavement

Bottom of Proposed Pavement

Sta. 13+00 Constr. Reinf. Conc. Manhole Type II.

Set Top of Manhole to Elev. 108.17

Line No. 1

550 L.F. 48" R.C.P. @ 0.13%

Sta. 17+50 Constr. Reinf. Conc. Manhole Type II.

Set Top of Manhole to Elev. 108.13.

Flow = 101.89

Flow = 101.90

Flow = 101.97

Flow = 102.03

Flow = 102.04

Flow = 102.10

Flow = 102.16

Flow = 102.23

Flow = 102.29

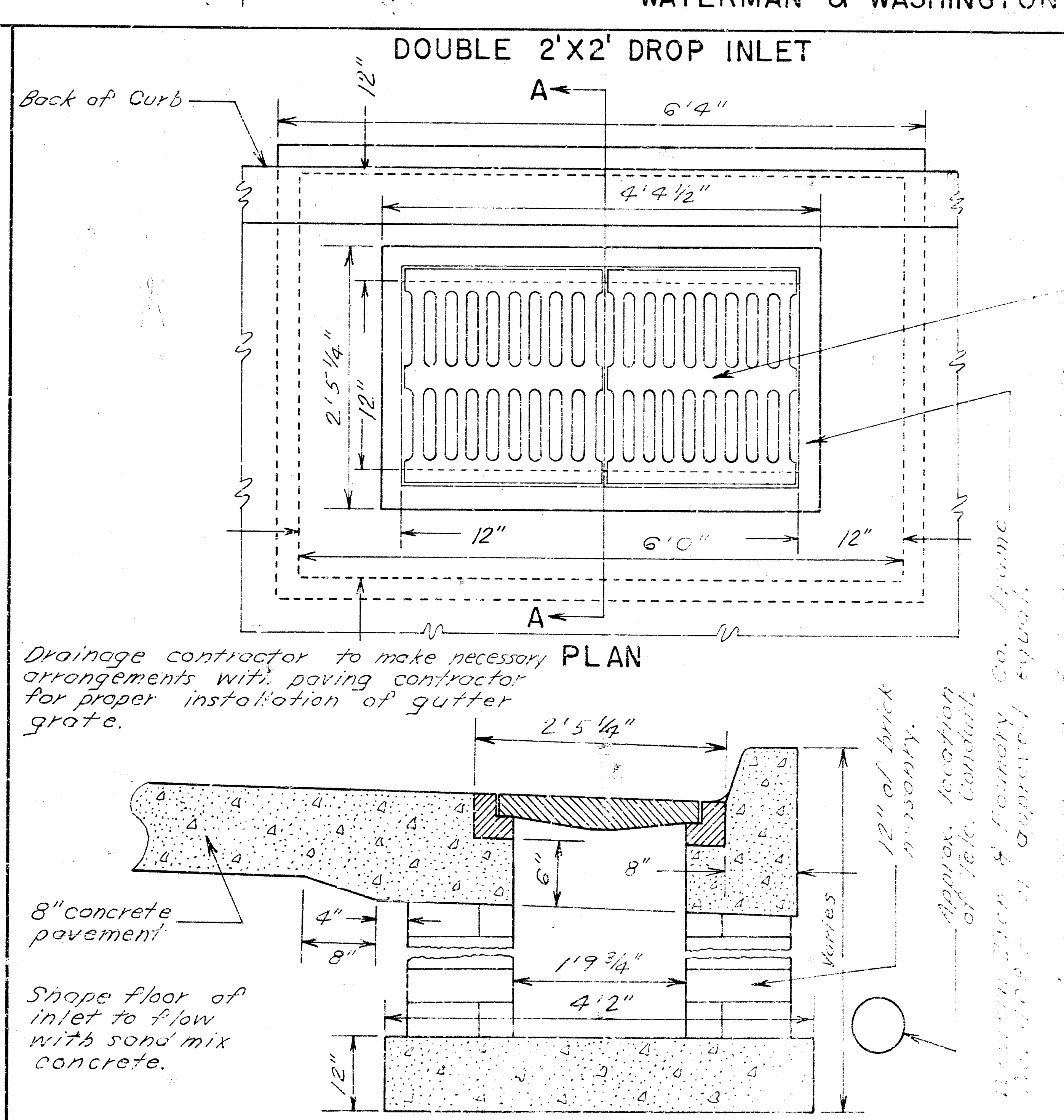
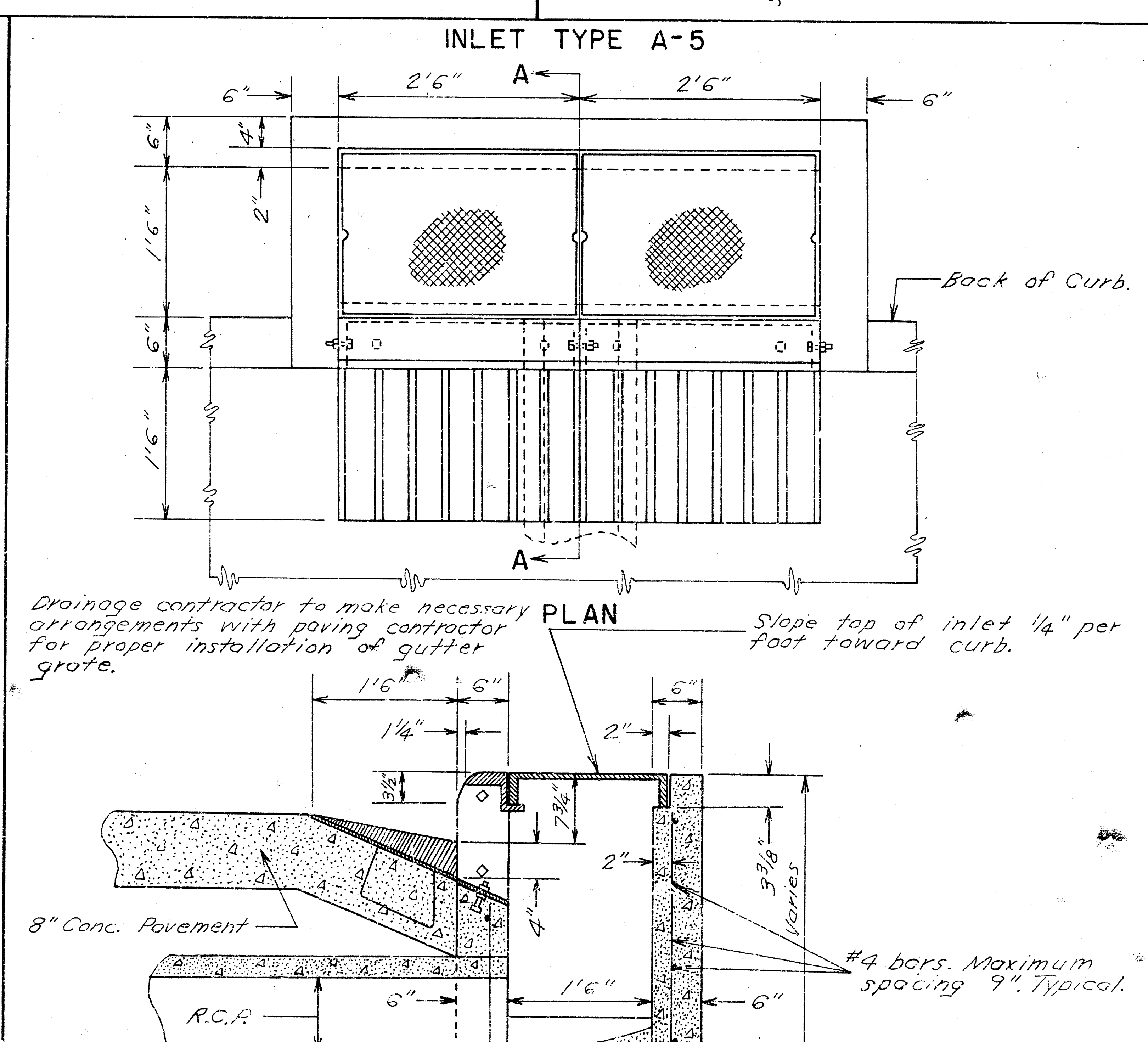
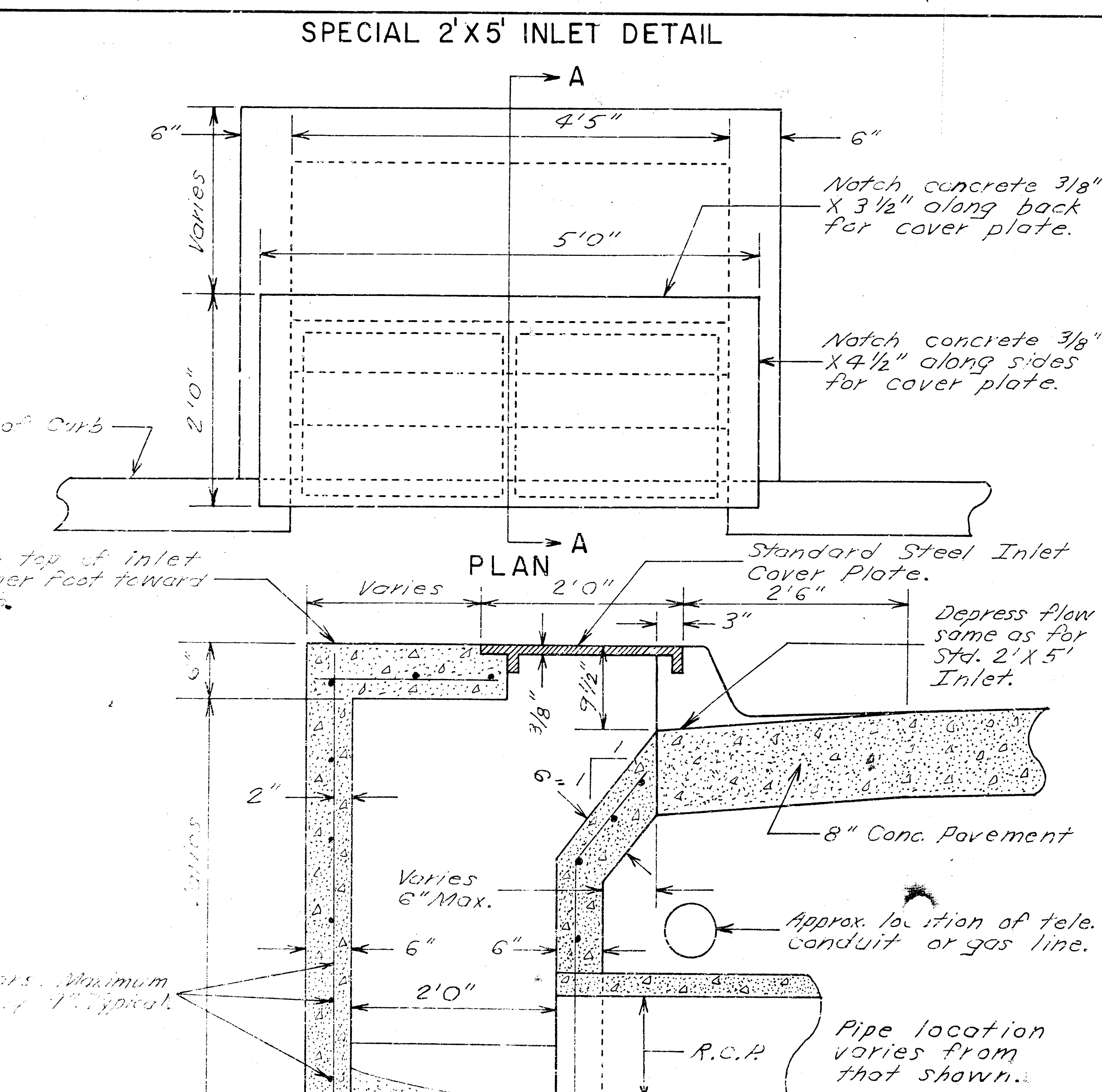
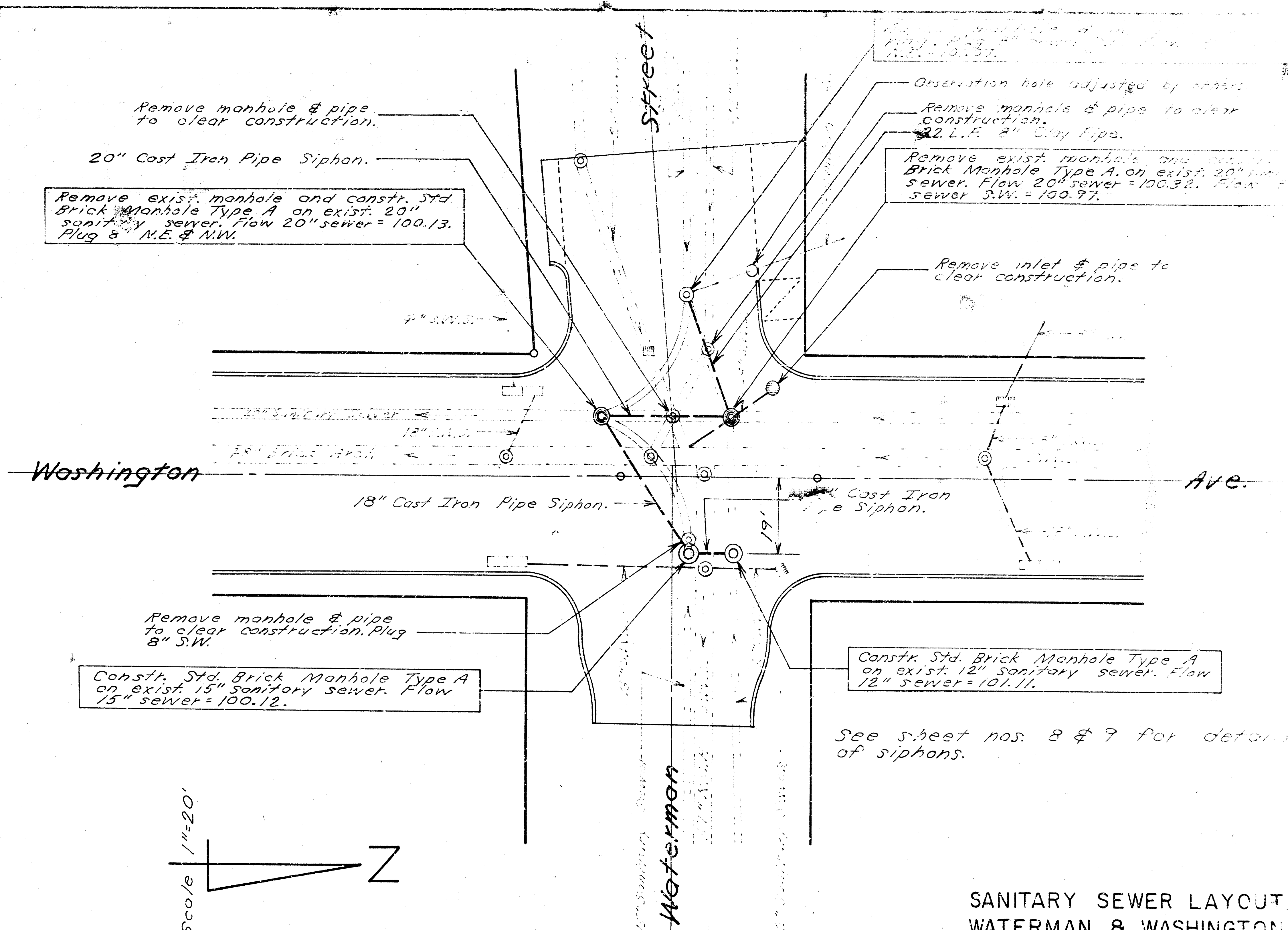
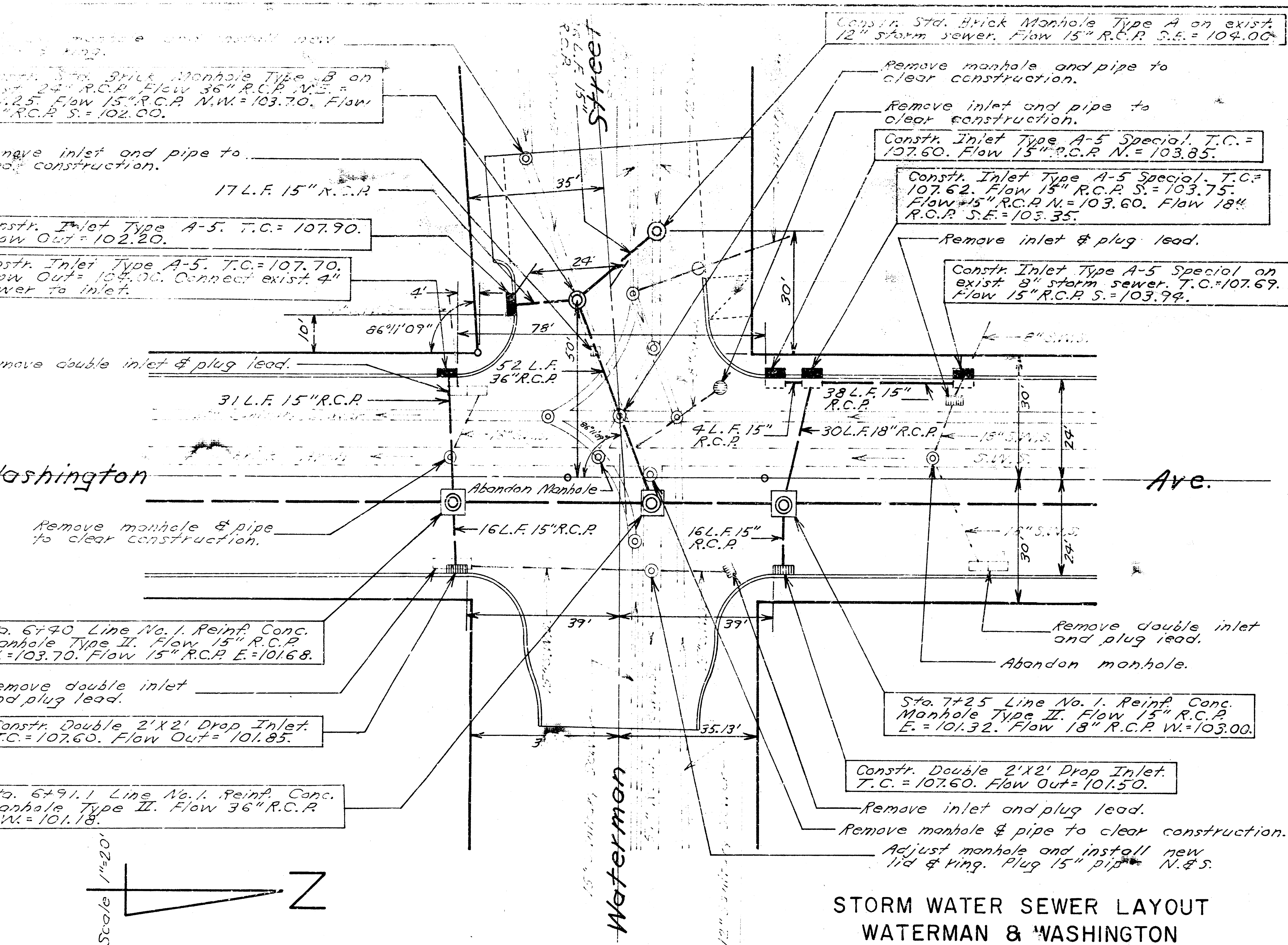
Flow = 102.36

Flow = 102.42

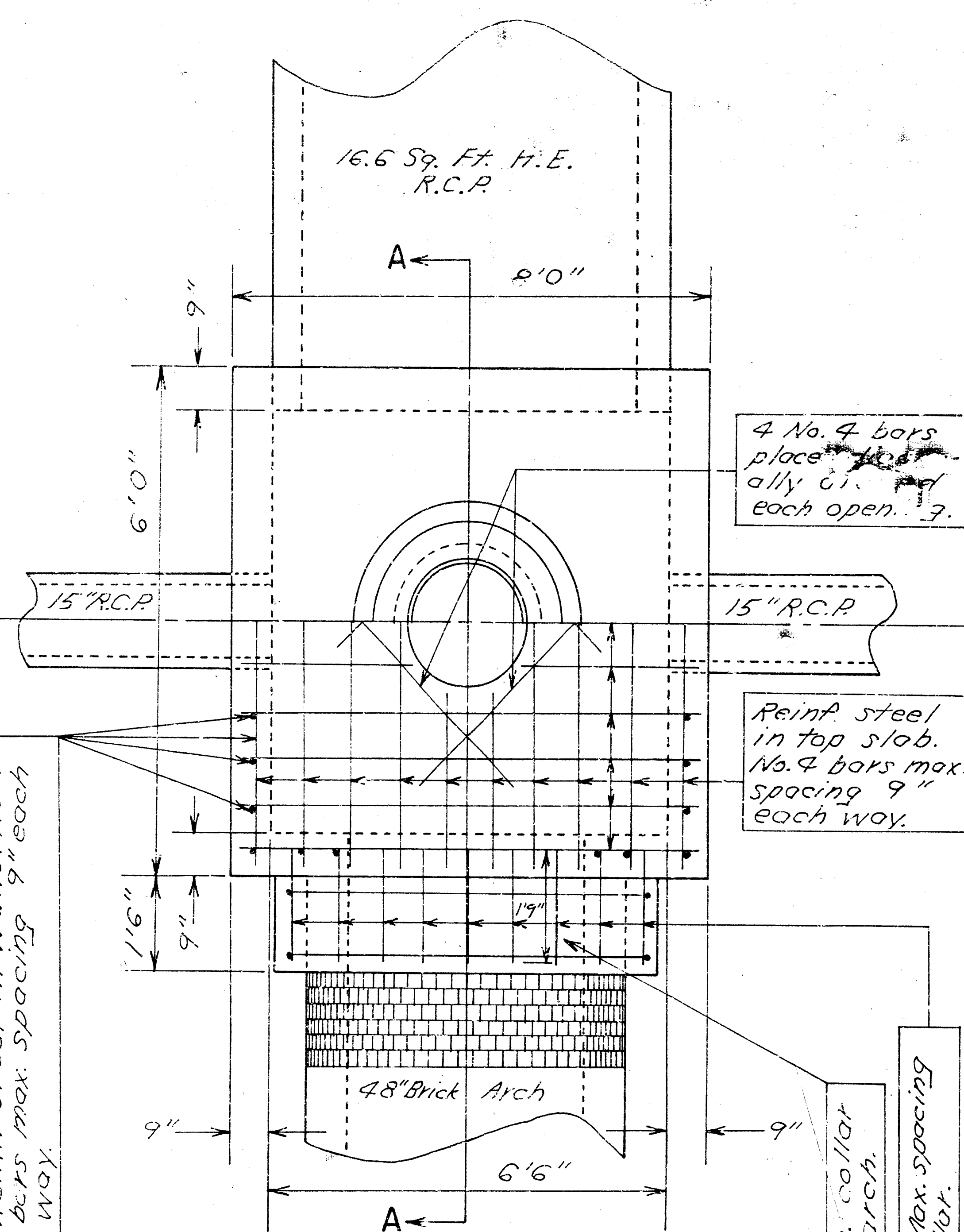
17+00 Flow = 102.49

17+50 Flow = 102.55

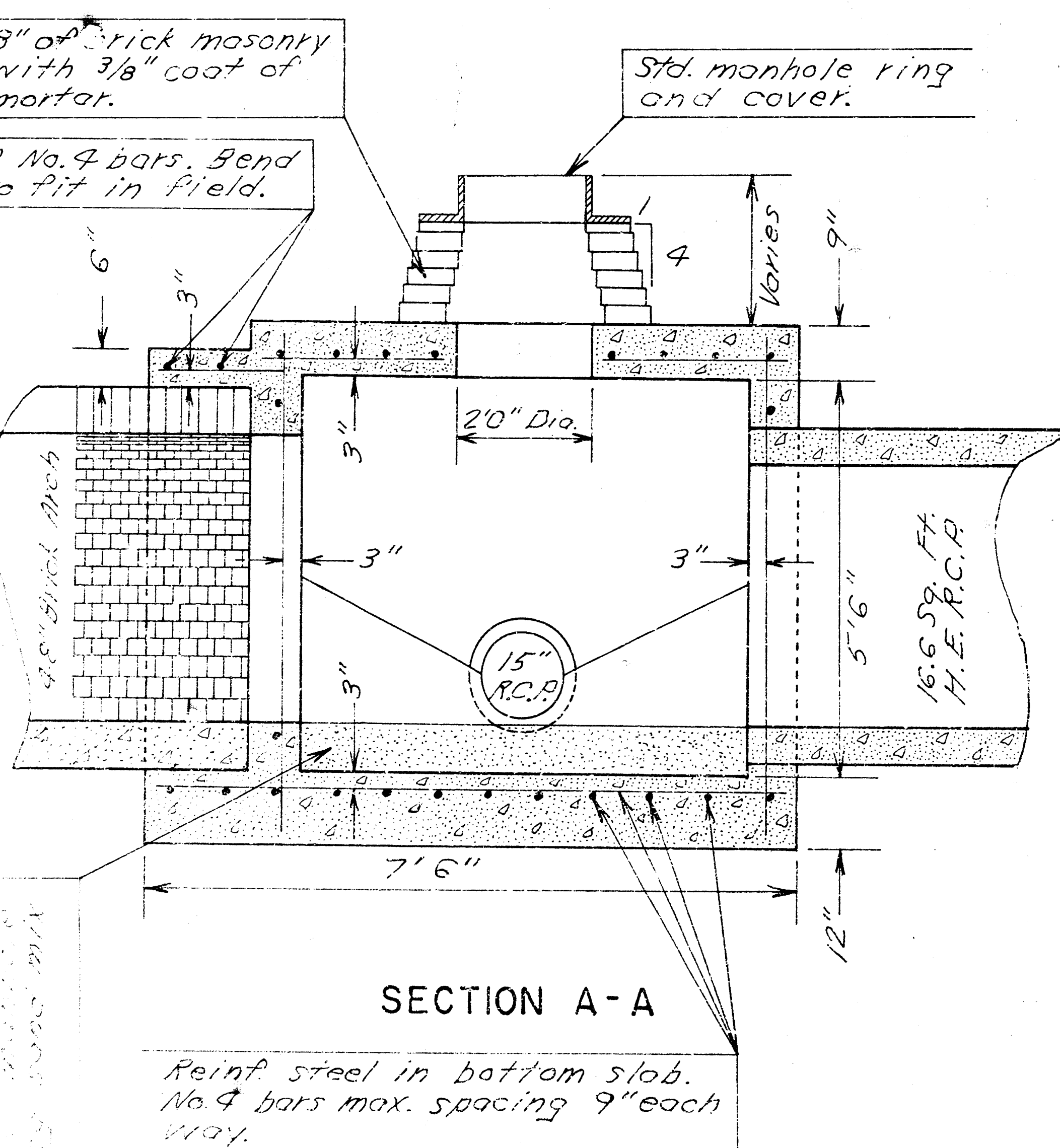
18+00 Flow = 102.62



REINF. CONC. MANHOLE TYPE I



PLAN

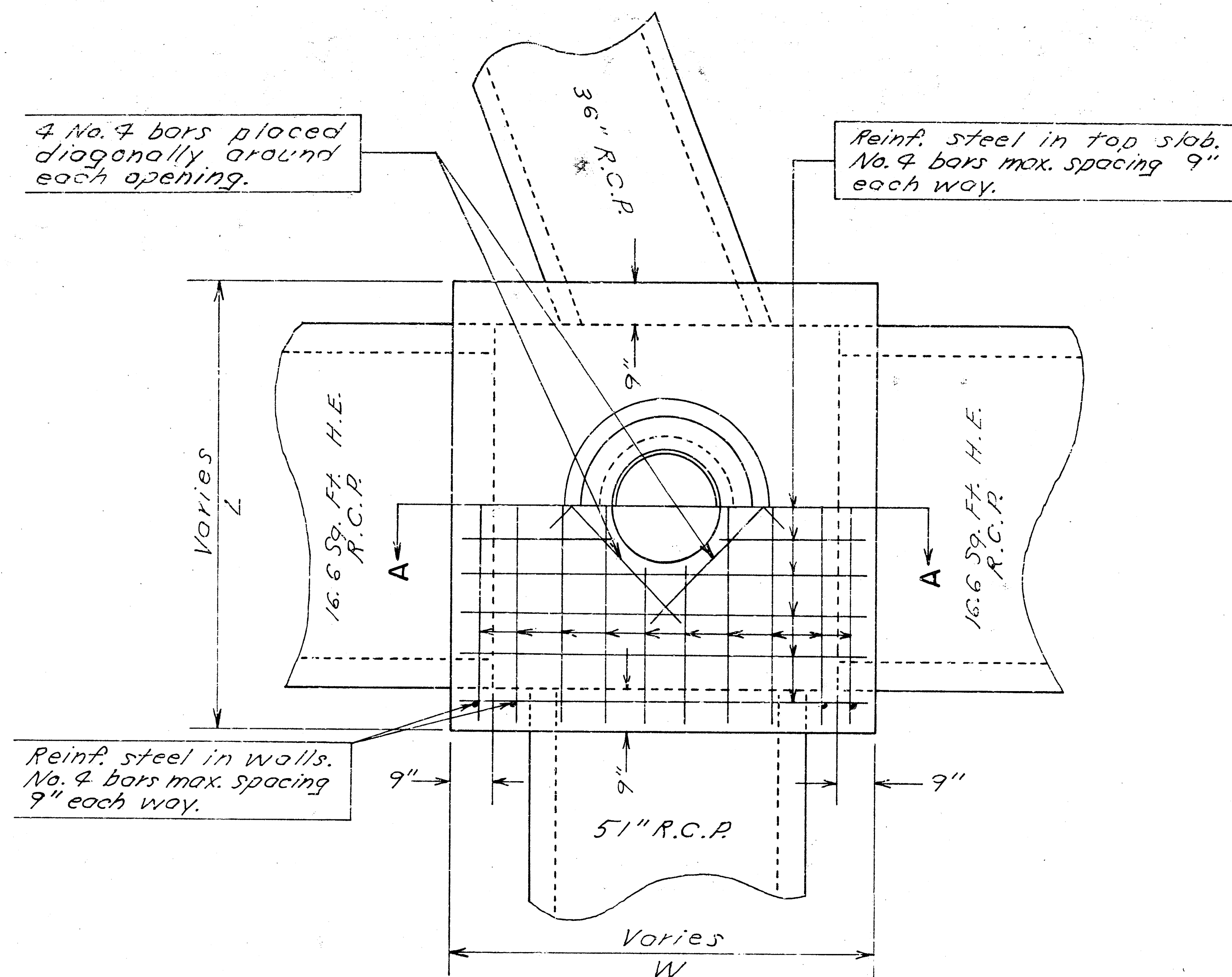


SECTION A-A

Reinf. steel in bottom slab.
No. 4 bars max. spacing 9" each way.

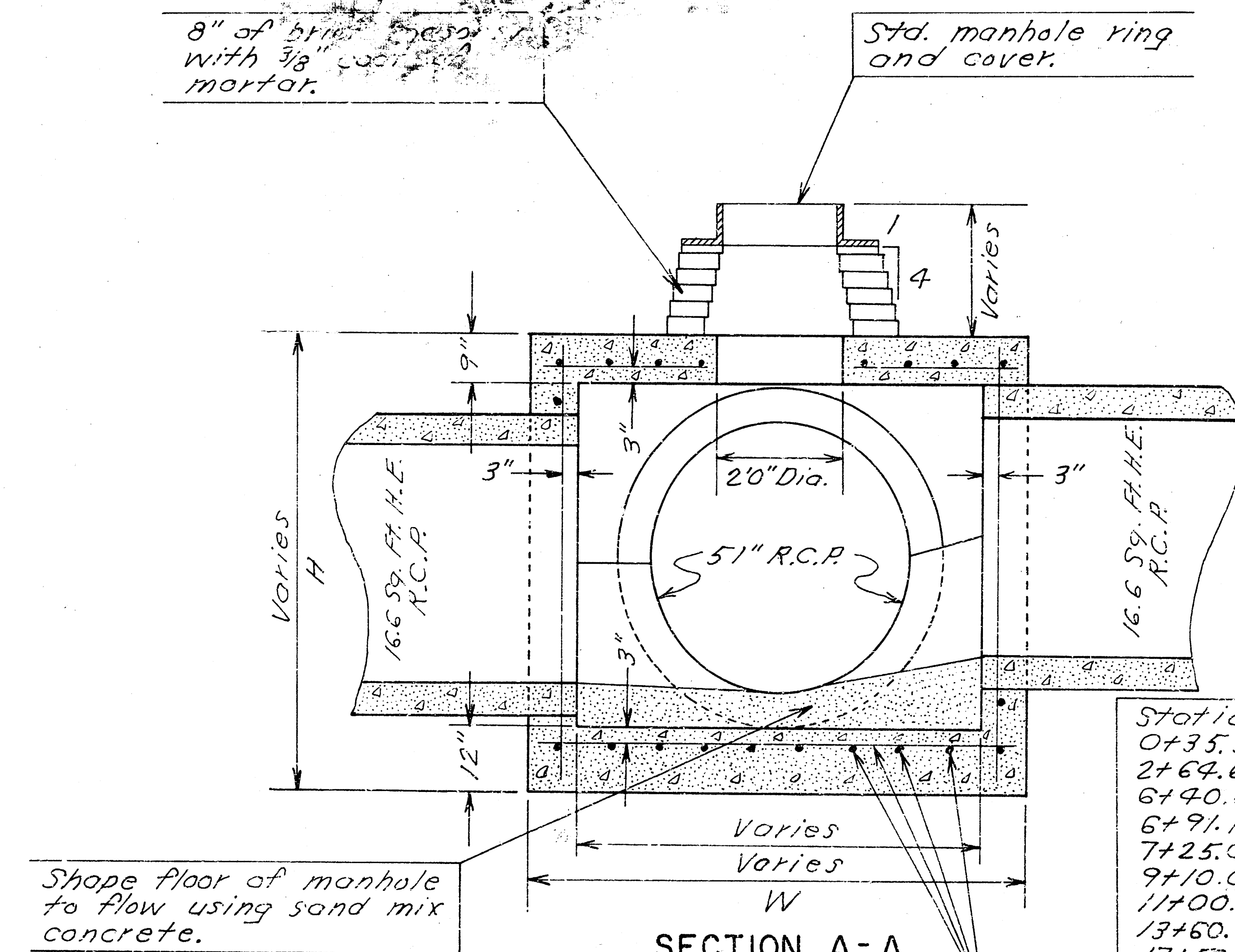
"Z" Bar Bending Diagram

REINF. CONC. MANHOLE TYPE II



PLAN

Note: Top sizes and locations shown are for manhole at Sta. 5+91.10. Pipe locations and sizes vary from those shown for manholes at other locations.



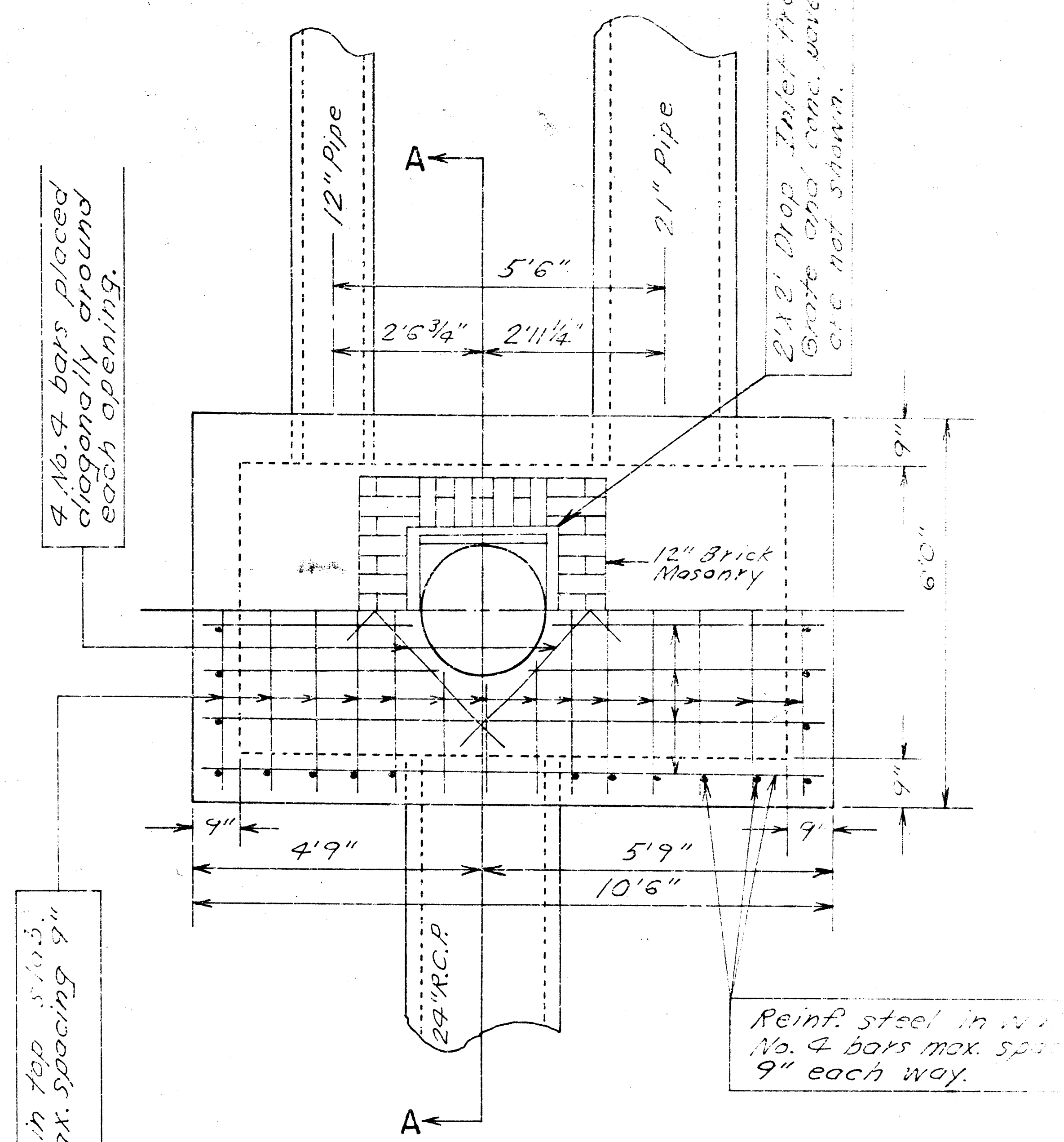
SECTION A-A

Shape floor of manhole to flow using sand mix concrete.

Reinf. steel in bottom slab.
No. 4 bars max. spacing 9" each way.

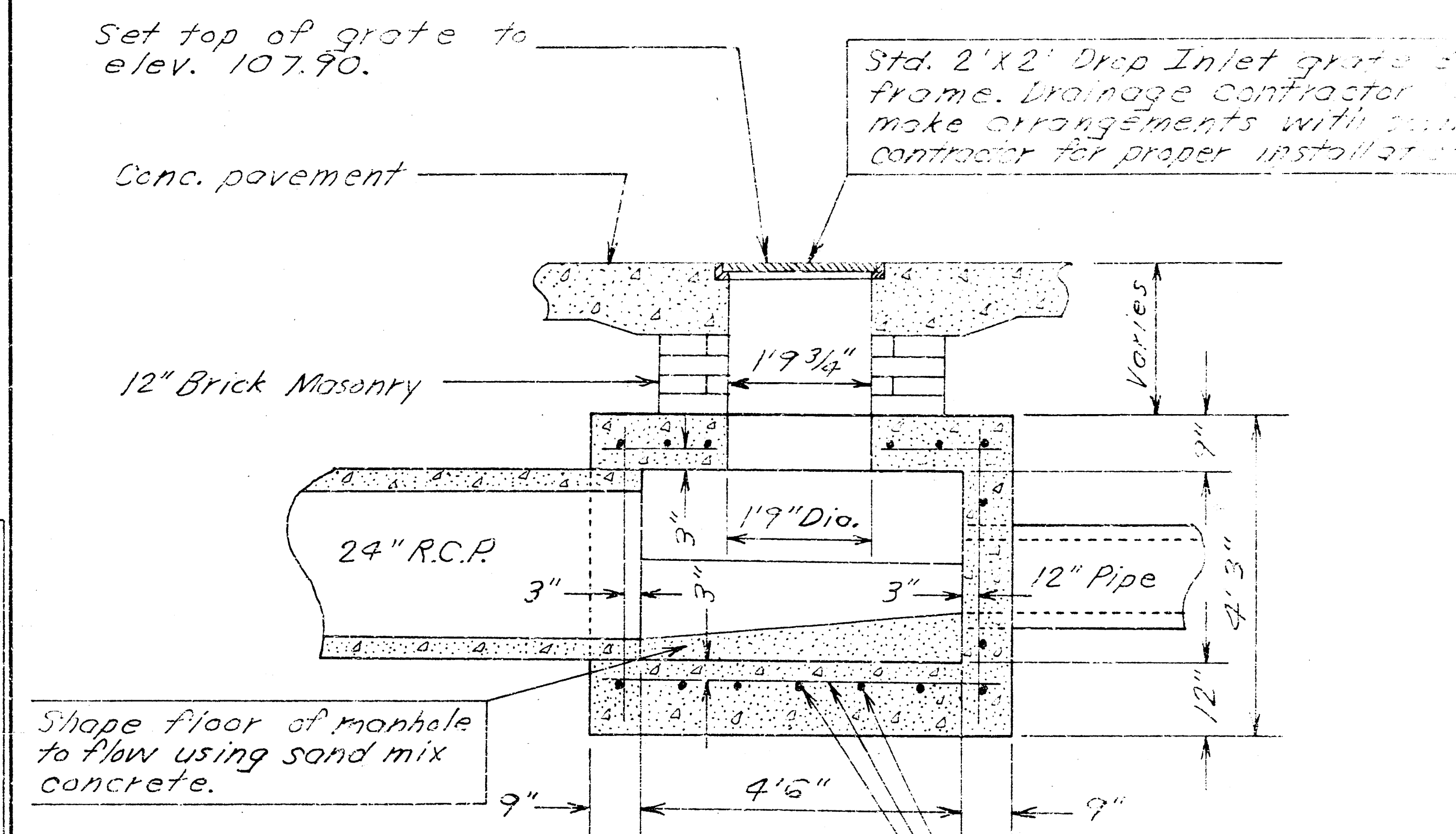
Note: Dimension "L" is perpendicular to

REINF. CONC. MANHOLE TYPE III



PLAN

Note: Installation of inlet frame to be same as for Std. 2'x2' Drop Inlet.

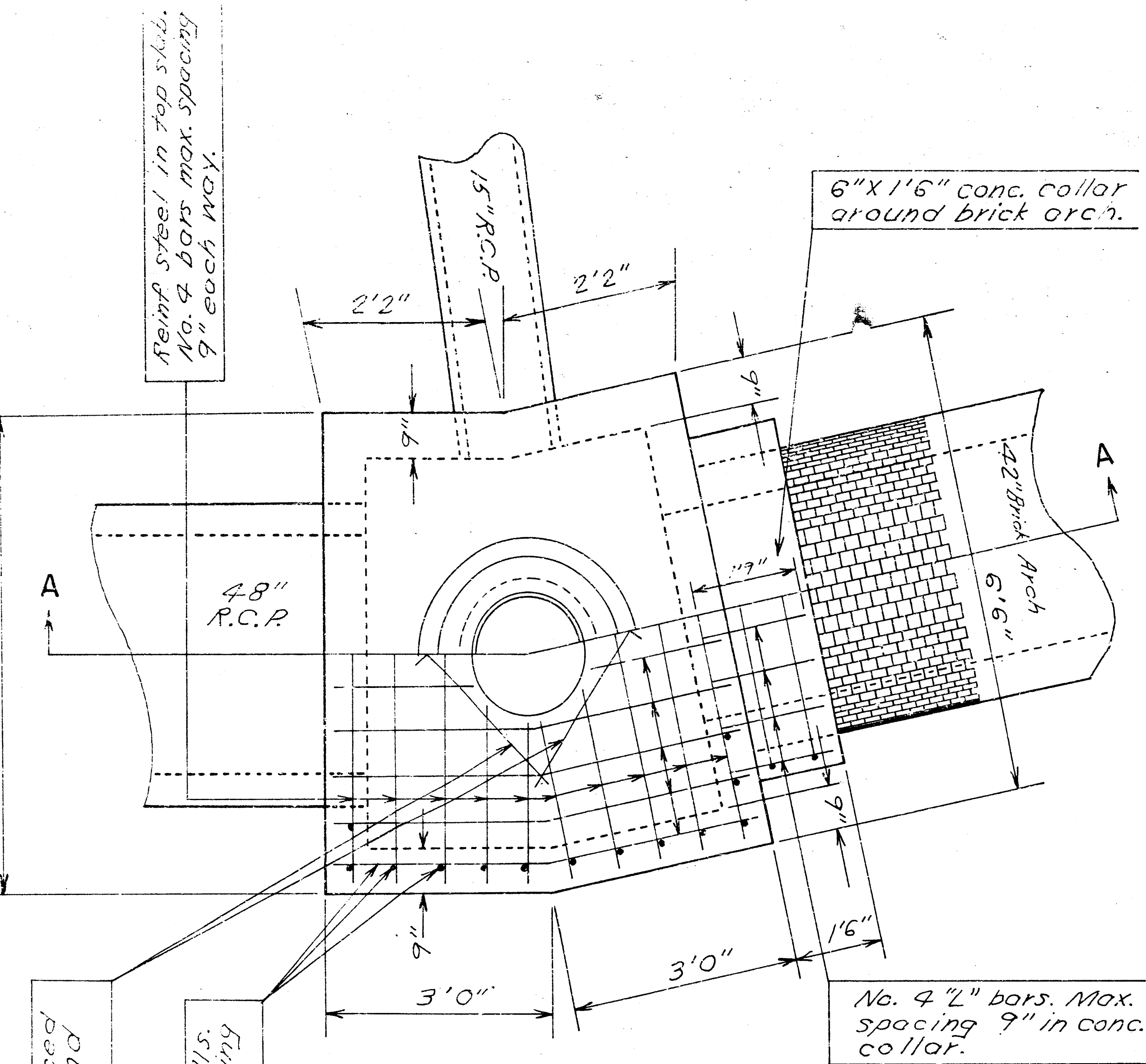


SECTION A-A

Shape floor of manhole to flow using sand mix concrete.

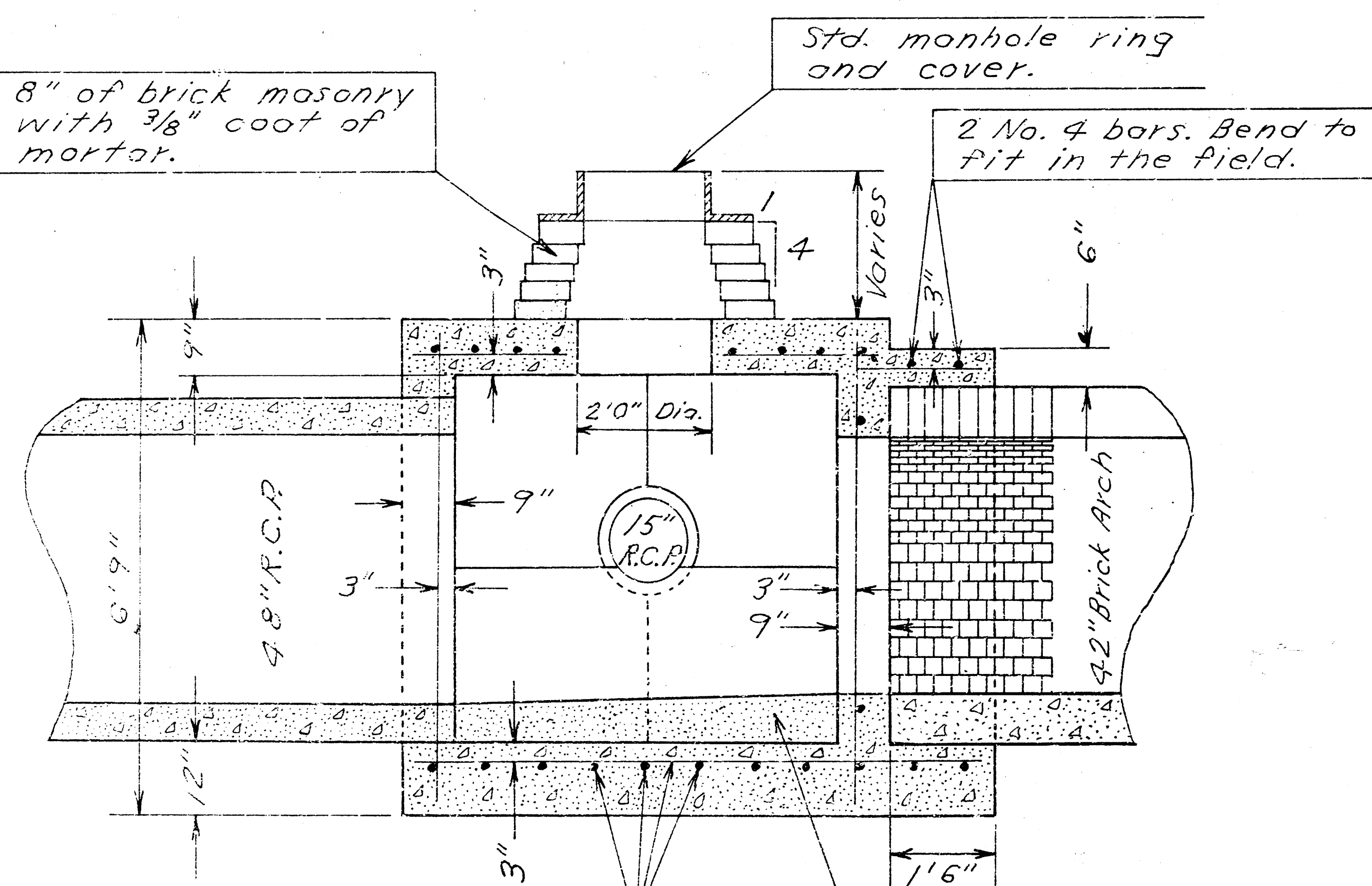
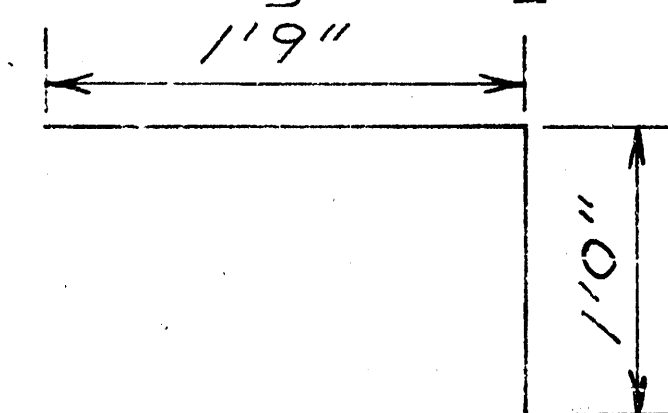
Reinf. steel in bottom slab.
No. 4 bars max. spacing 9" each way.

REINF. CONC. MANHOLE TYPE IV



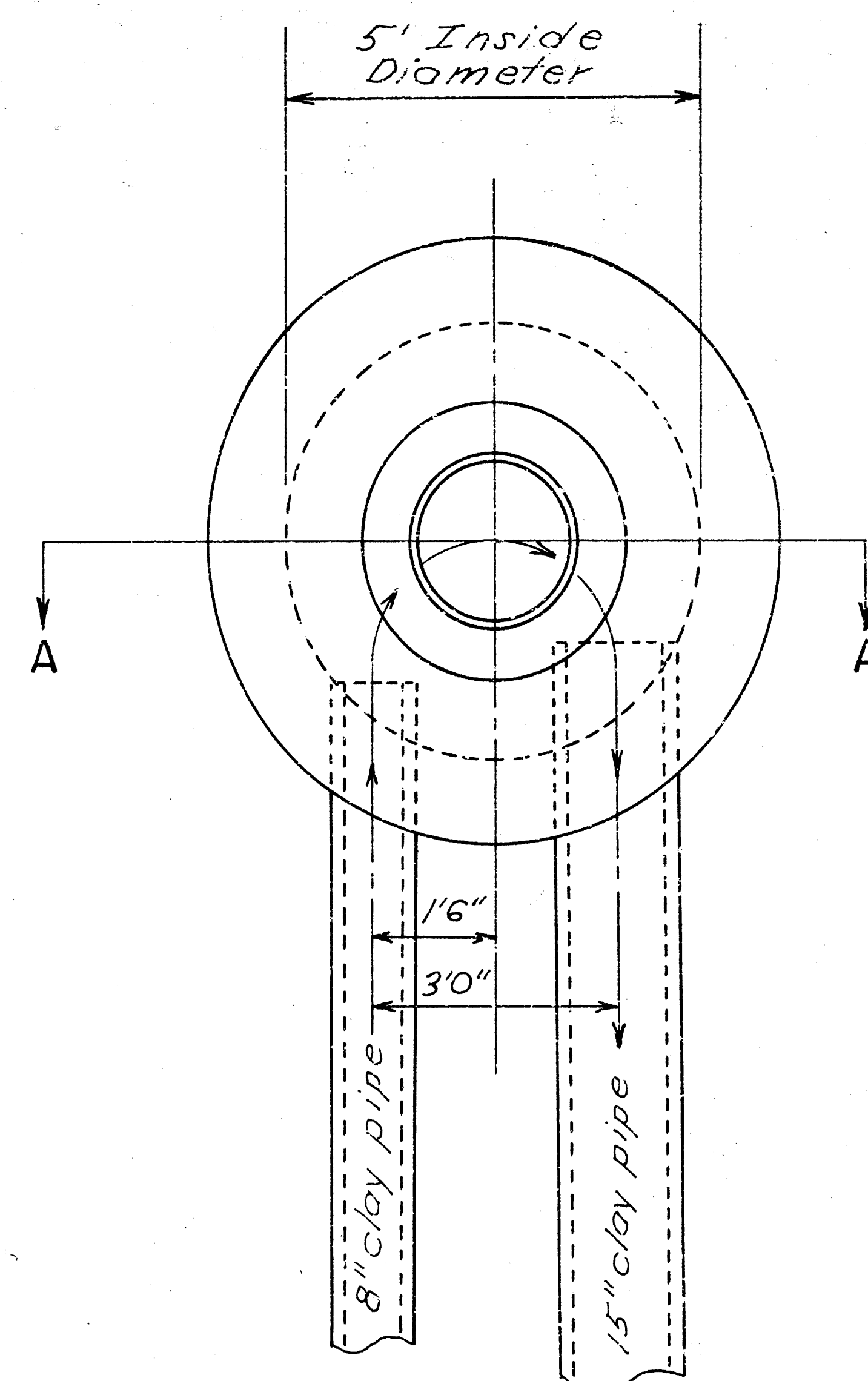
PLAN

"L" Bar Bending Diagram



SECTION A-A

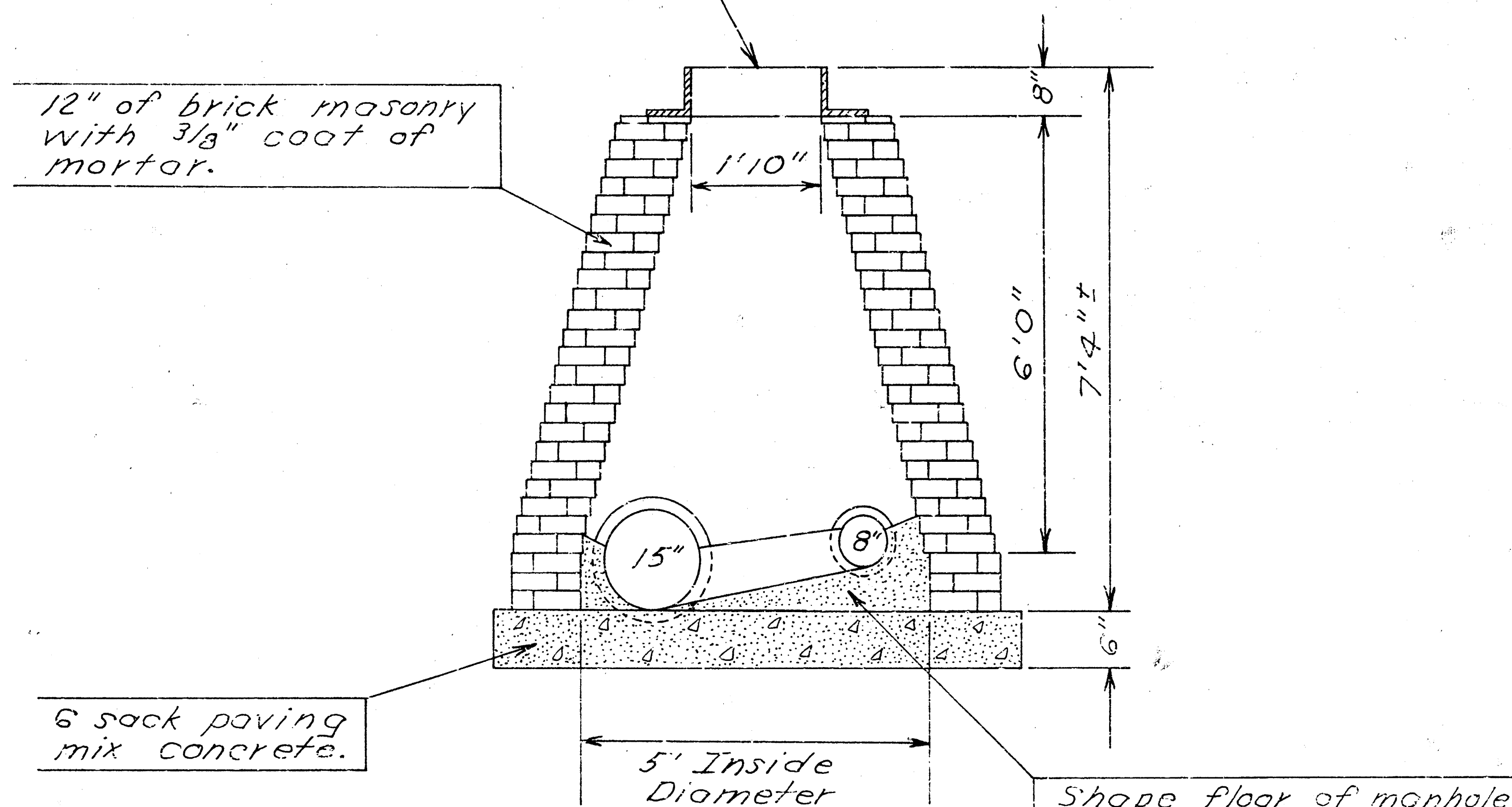
SPECIAL BRICK MANHOLE TYPE B



PLAN

Std. manhole ring and cover.

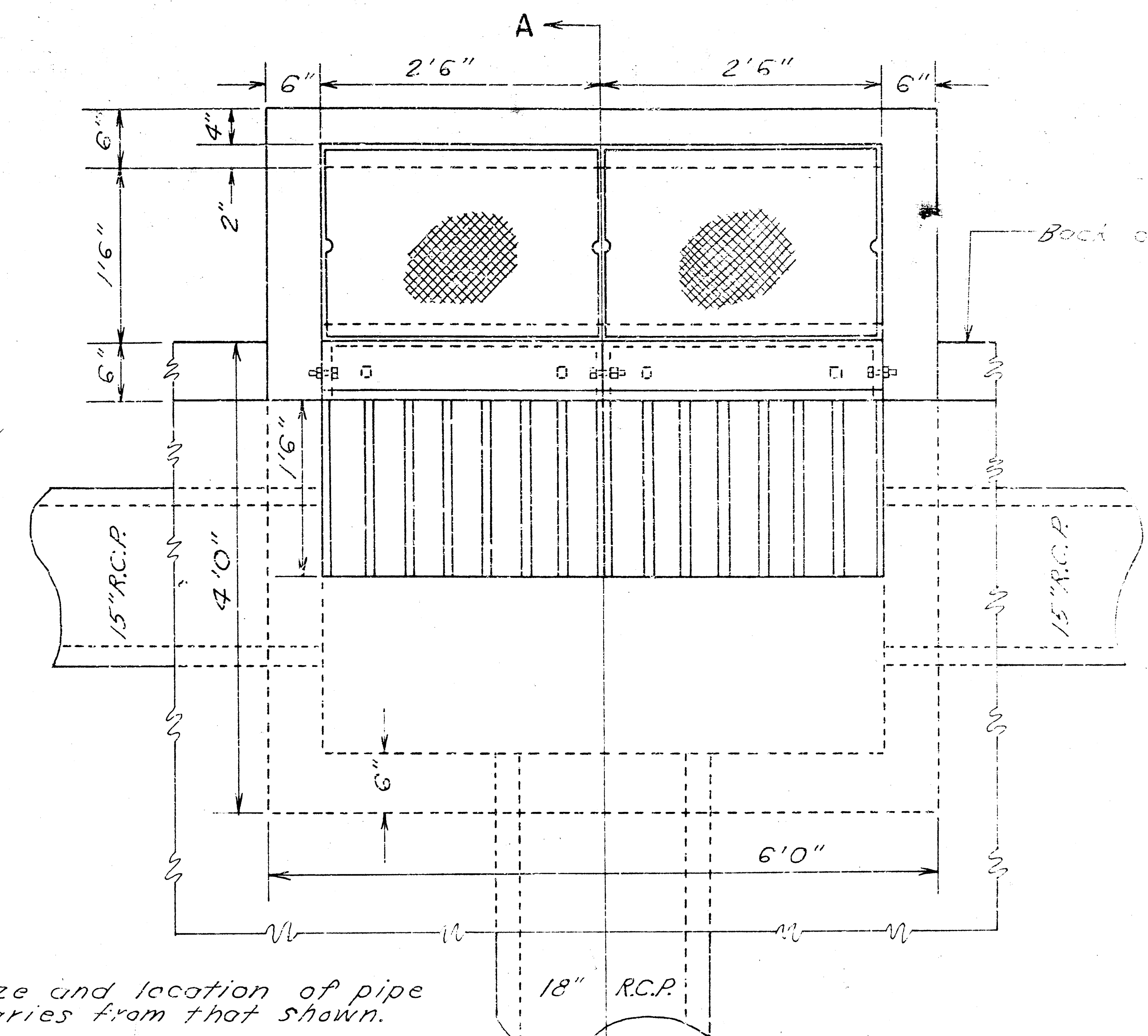
12" of brick masonry with 3/8" coat of mortar.



SECTION A-A

Note: Concrete for inlets and manholes shall be six sack paving mix. The bid price for each type of conc. manhole and inlet shall include the cost of excavation, furnishing and placing concrete, brick, all castings, cover plates and reinforcing steel. All observation holes on 20" sanitary sewer shall be removed completely to tee or wye in 20" sewer. The tee or wye shall be plugged with a standard clay pipe plug and a concrete collar shall be constructed around the 20" sewer such that the tee or wye section will be completely enclosed.

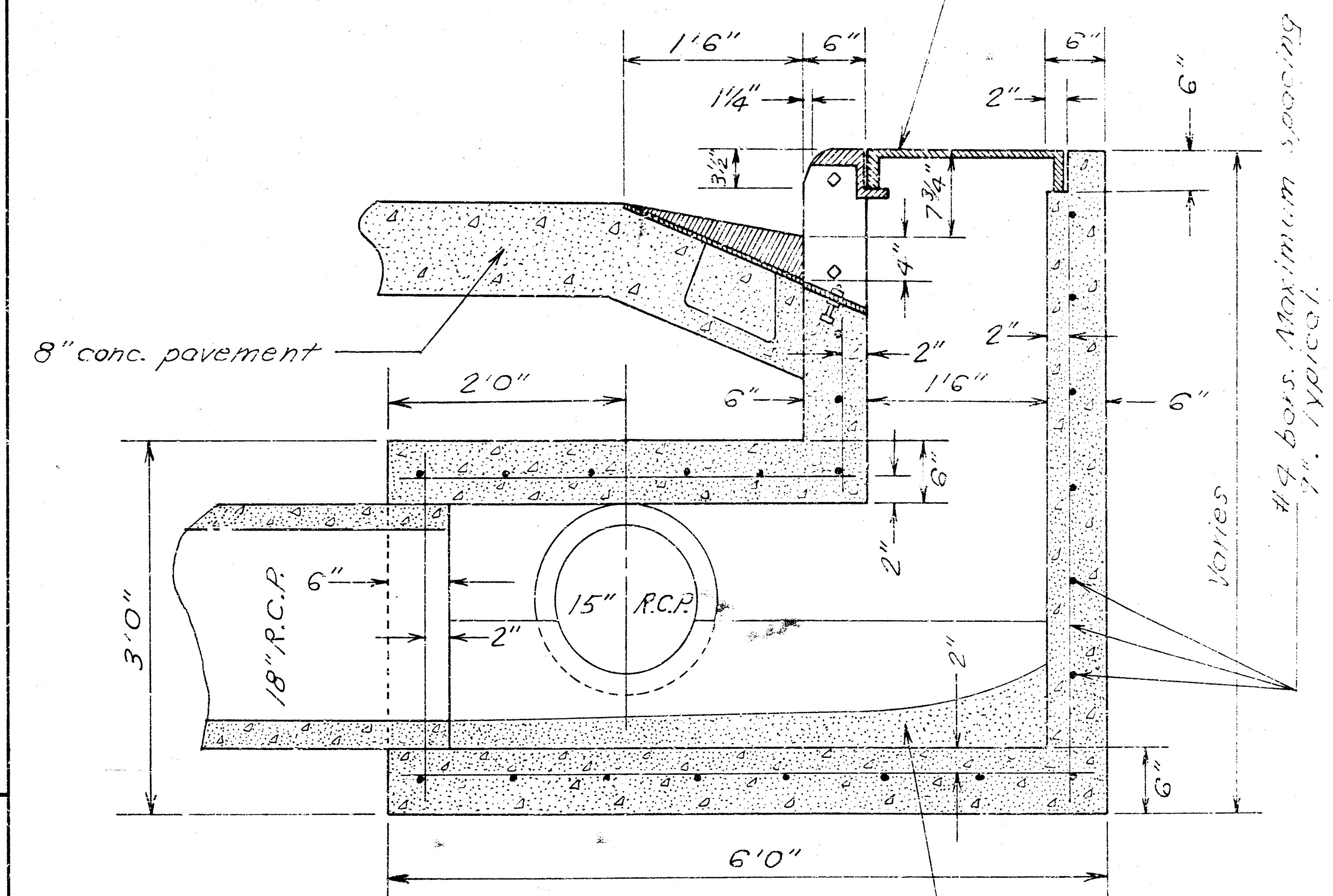
INLET TYPE A-5 SPECIAL



Size and location of pipe varies from that shown.

PLAN

Slope top of inlet 1/4" per foot toward curb.



SECTION A-A

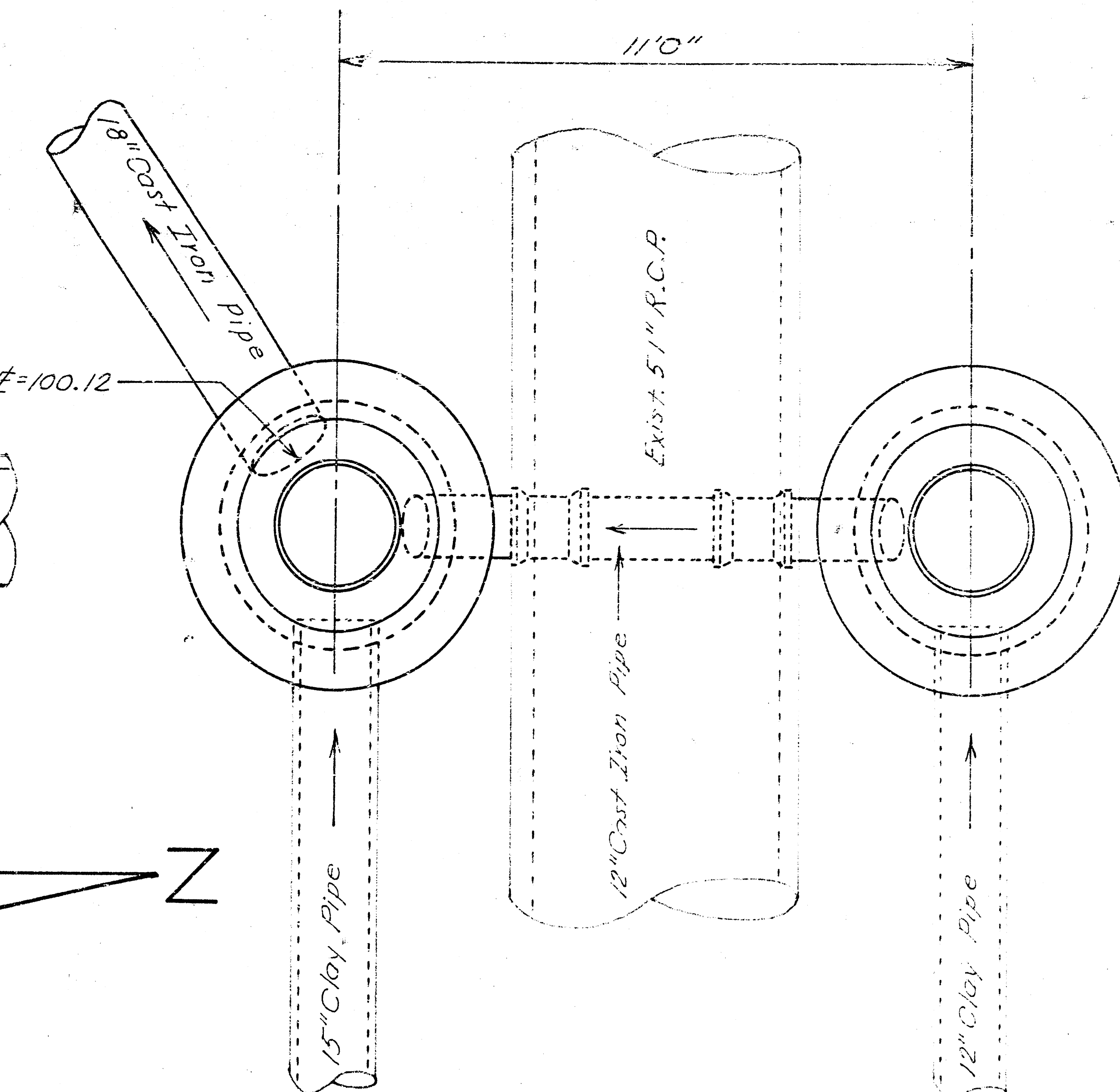
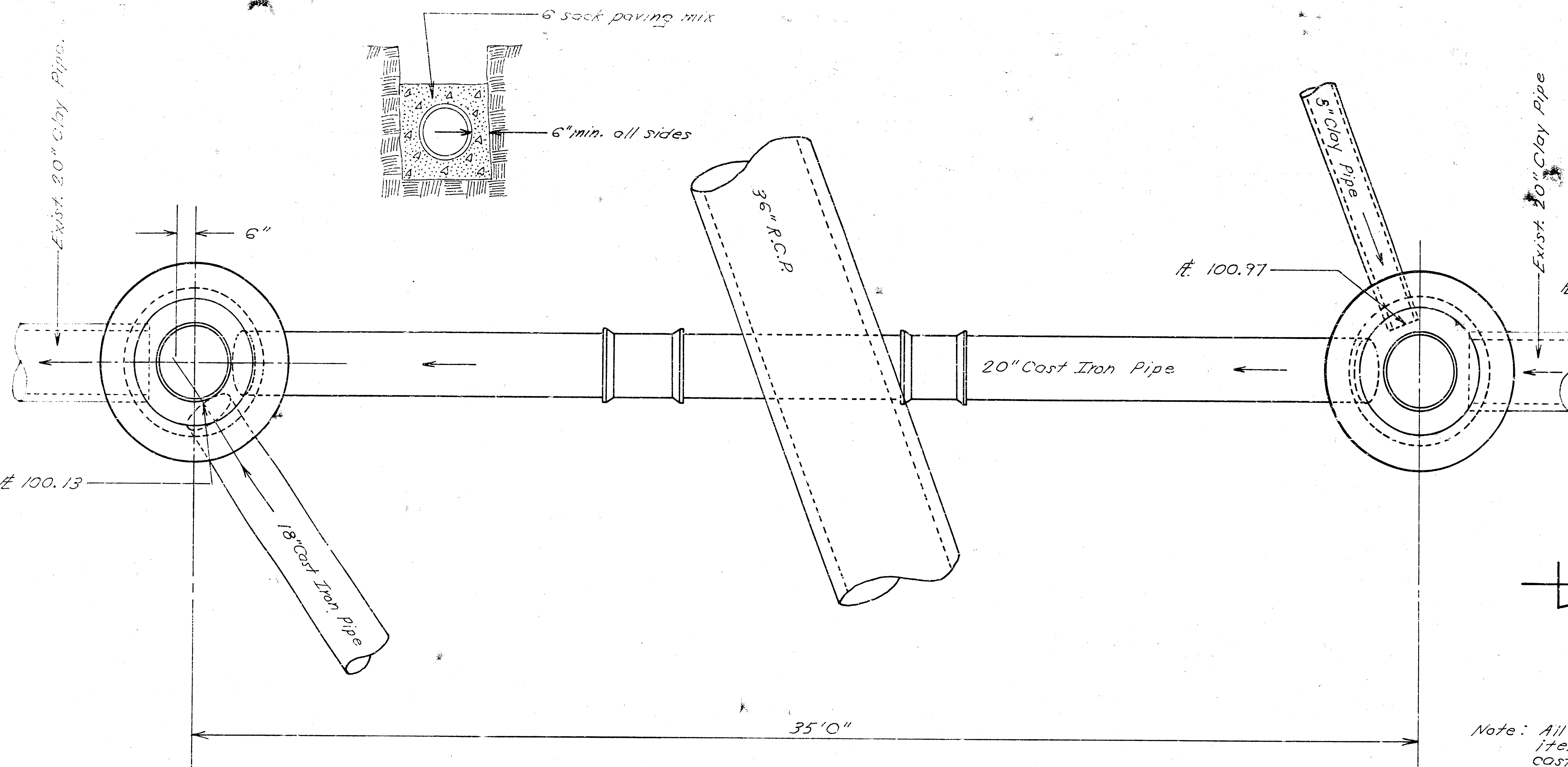
Shape floor of inlet to flow using sand mix concrete.

Drainage contractor to make necessary arrangements with paving contractor for proper installation of gutter grate.

Concrete Encasement Detail

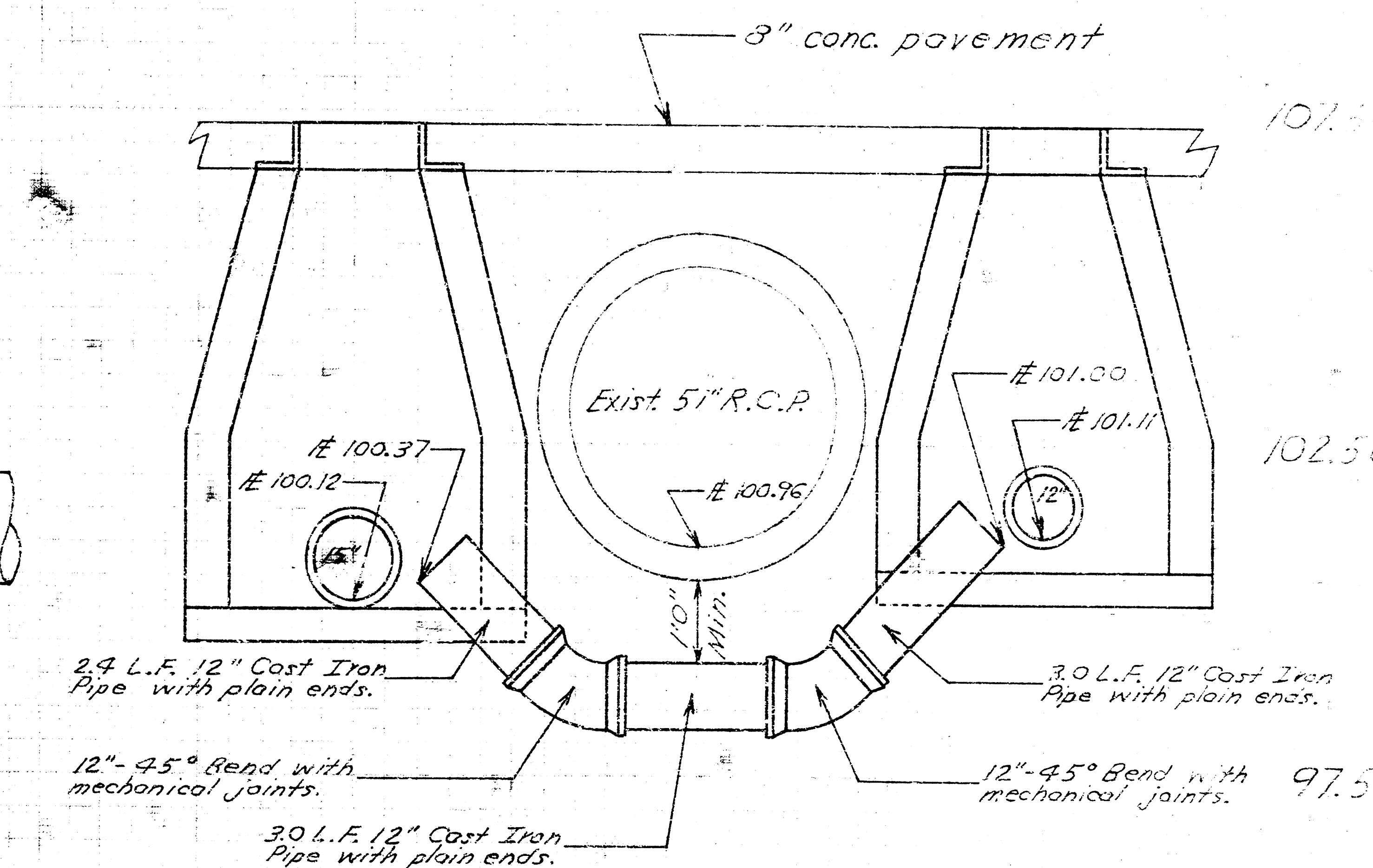
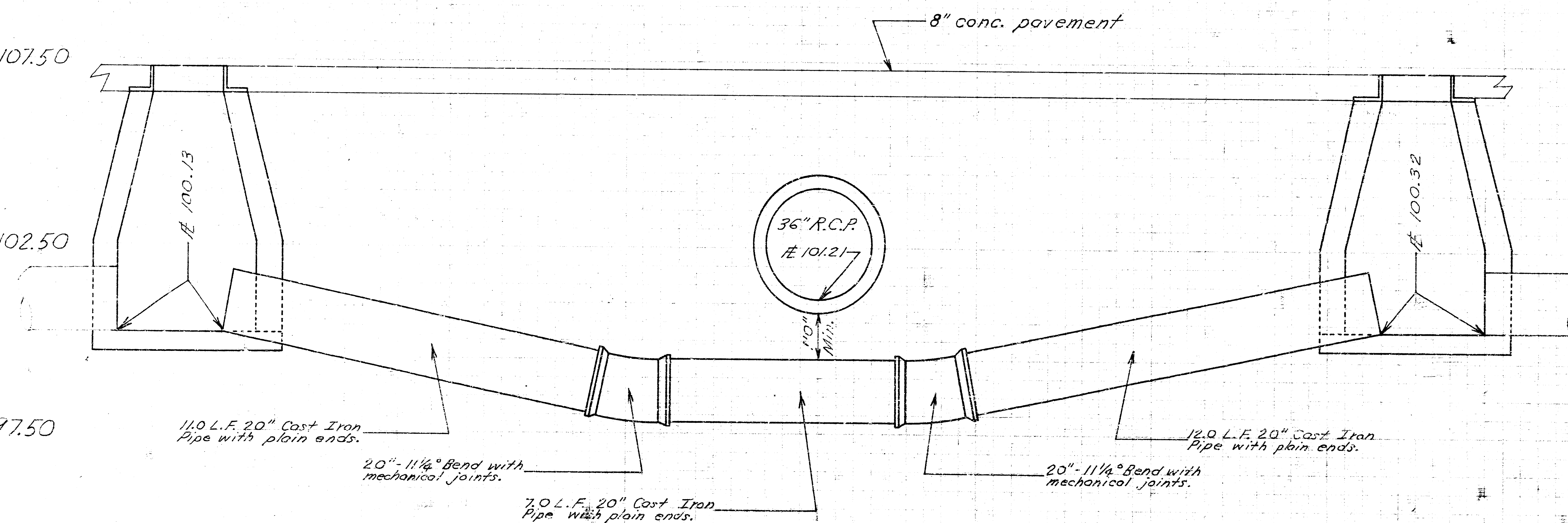
20" SIPHON DETAIL

12" SIPHON DETAIL

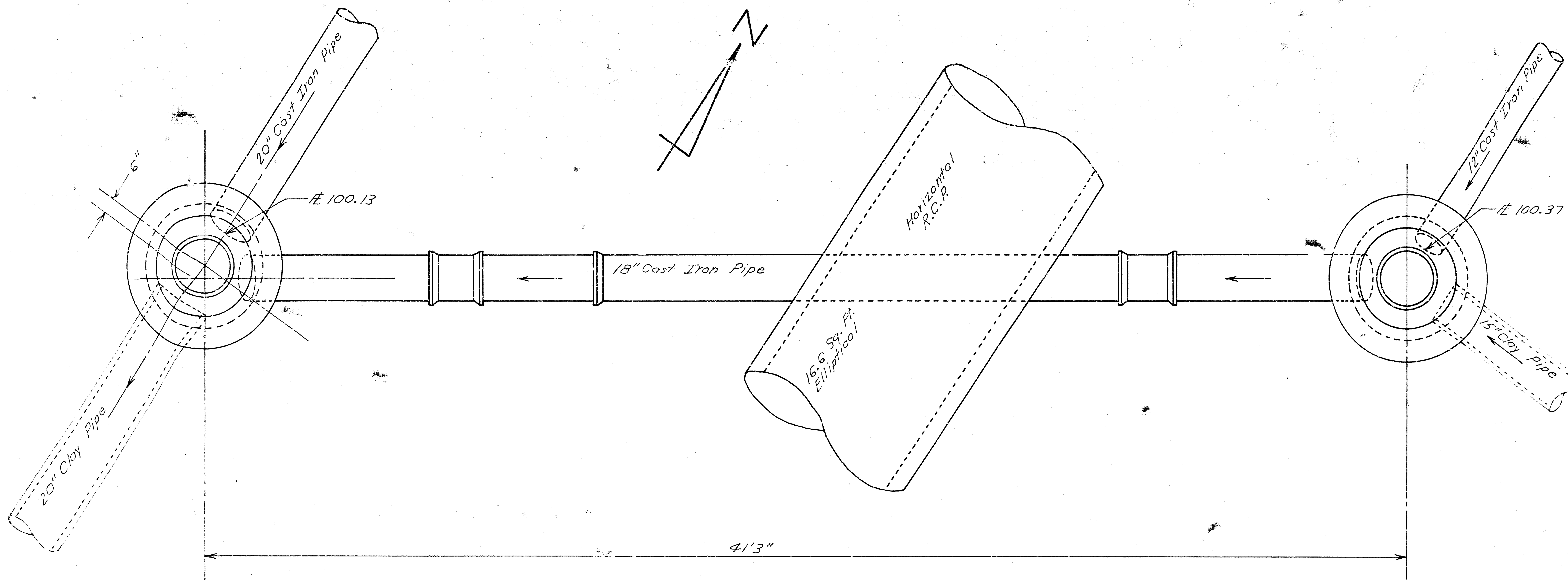


Note: All cast iron pipe siphons shall be encased with concrete. Lump sum bid item for the various size siphons shall include furnishing and placing cast iron pipe, all fittings, cast iron benches, and concrete encasement. Manholes will be paid for separately.

Plan Scale 1"=2'
Profile Scale Horiz. & Vert.

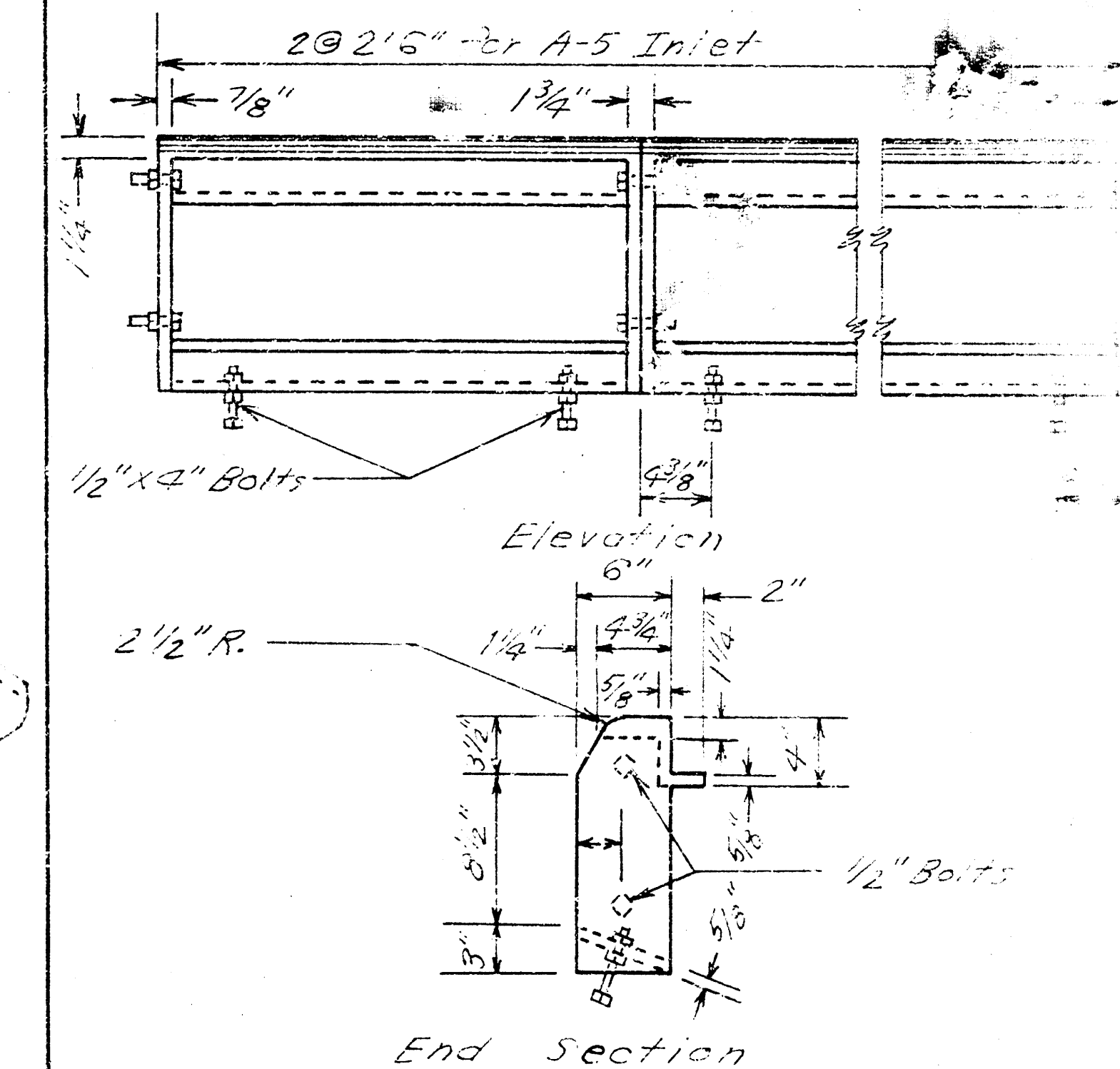
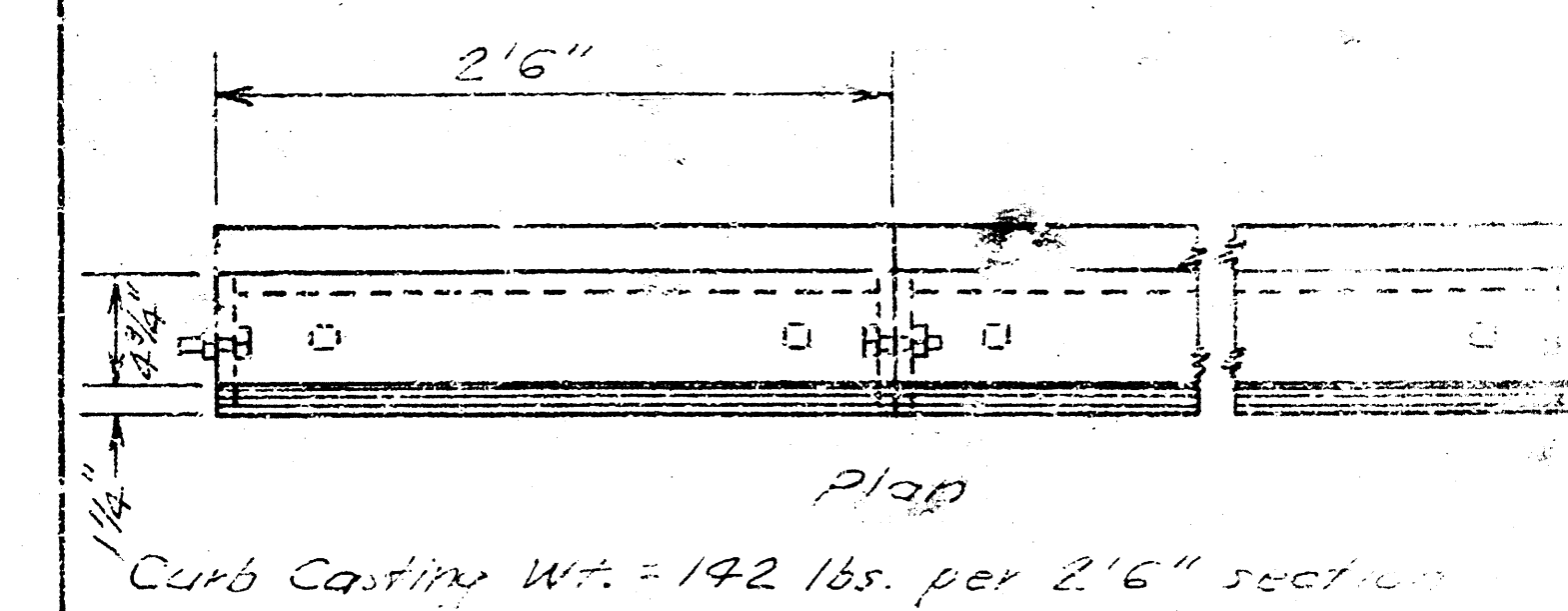


18" SIPHON DETAIL

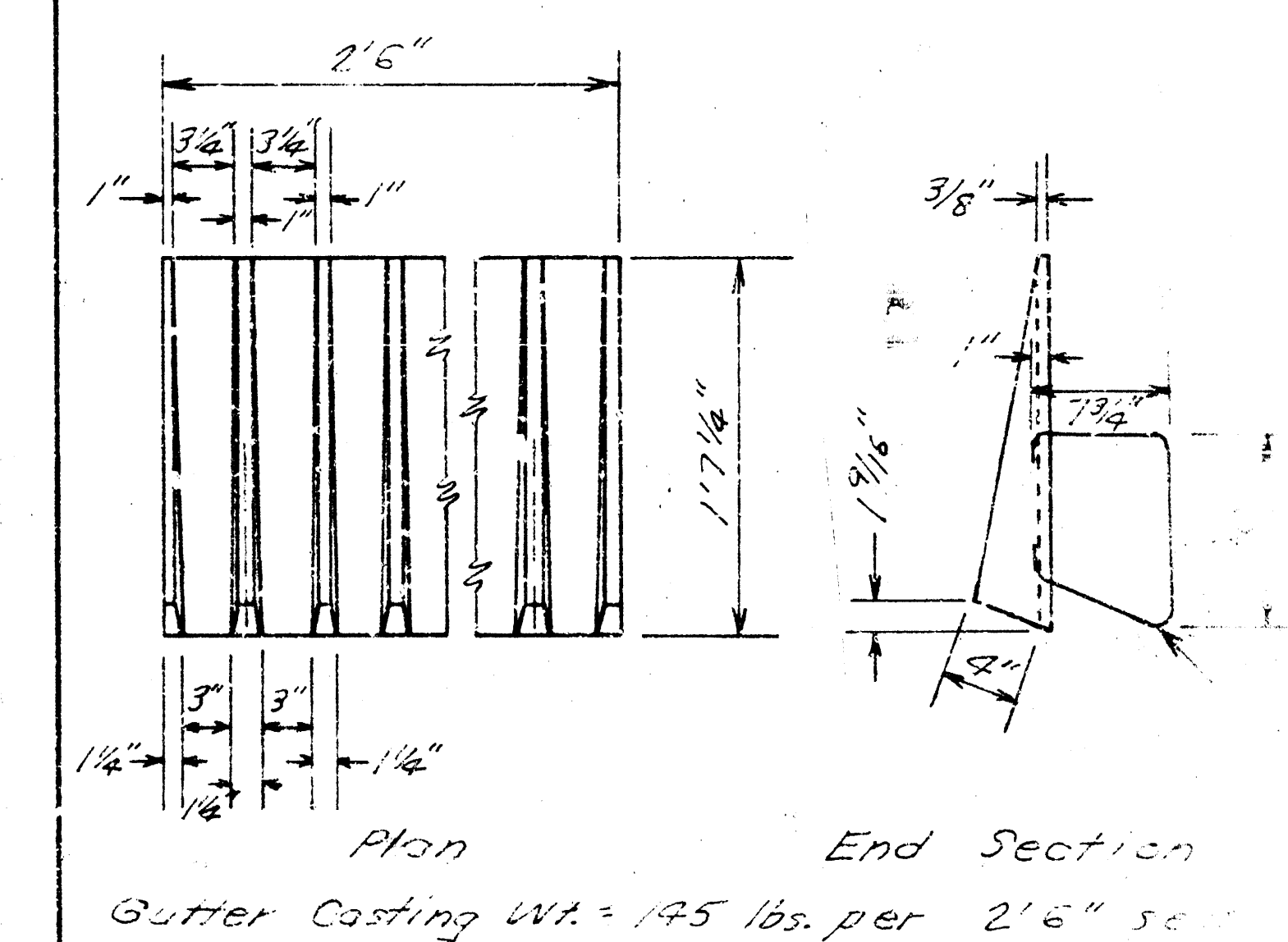


CURB & GUTTER CASTING DETAILS TYPE A-5 INLET

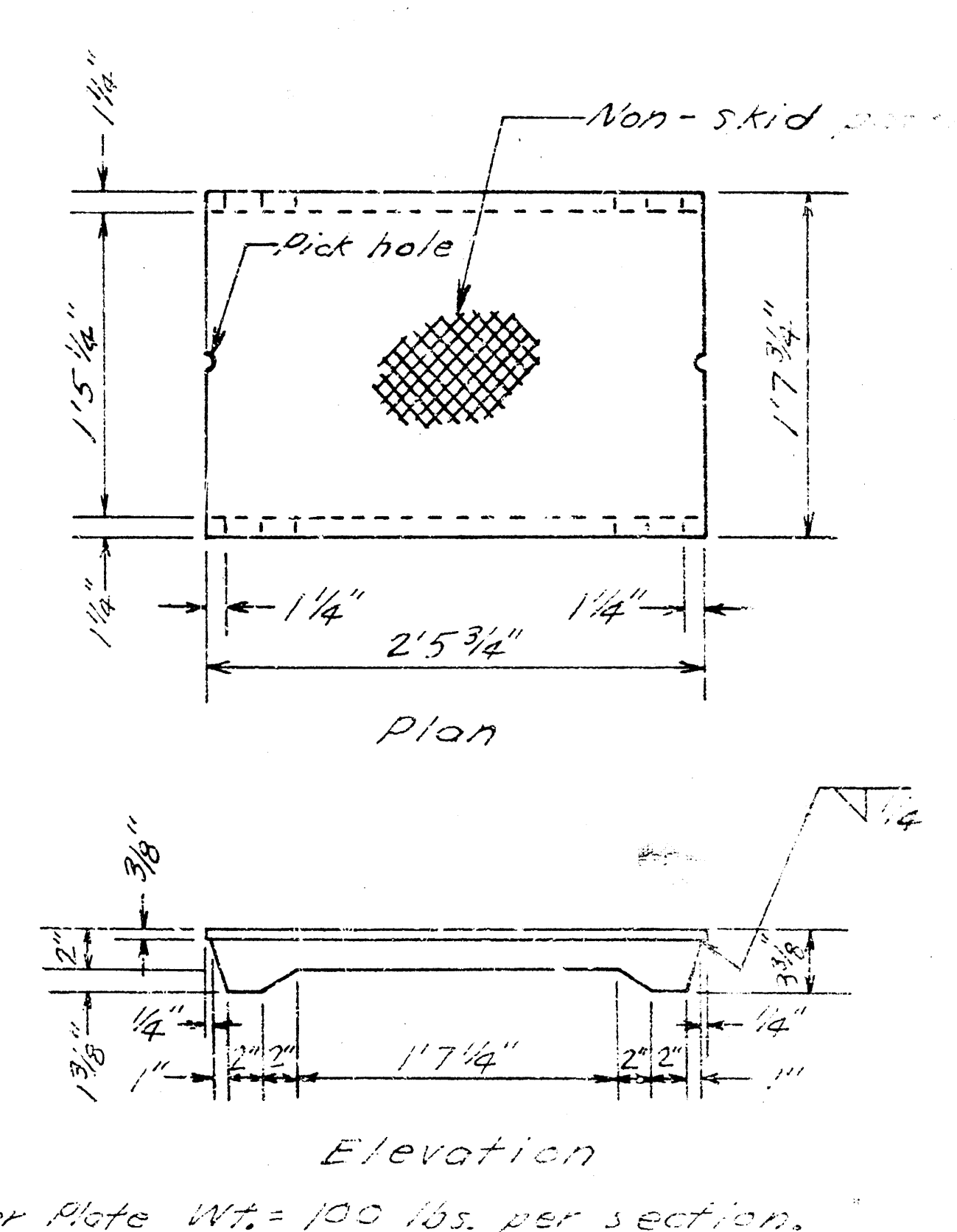
CURB CASTING



GUTTER CASTING



COVER PLATE

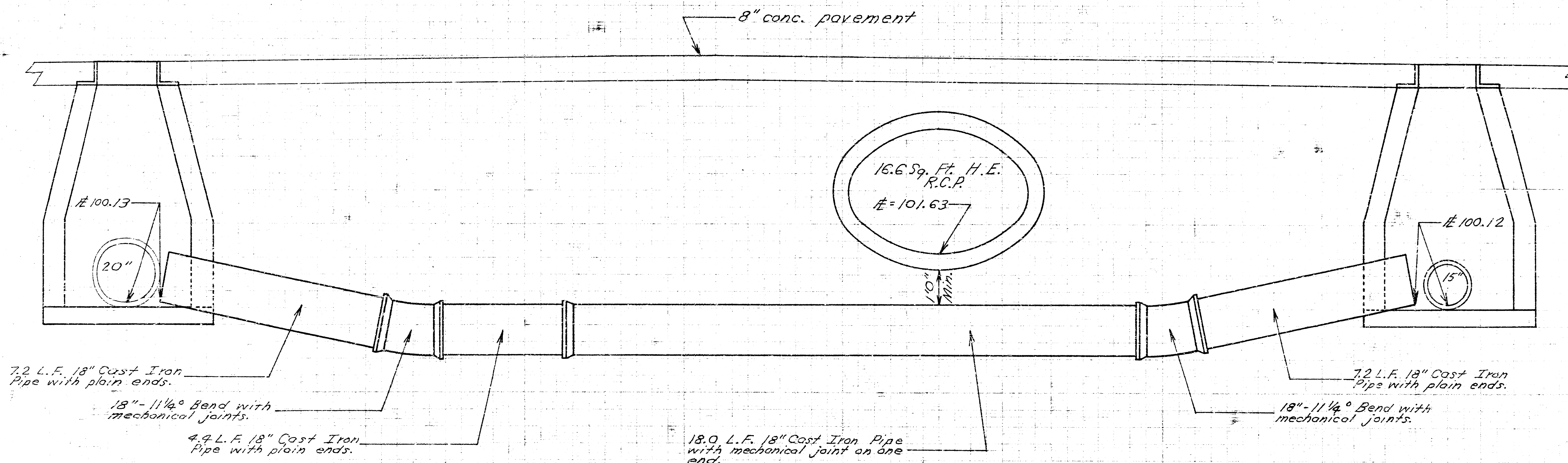


Plan Scale 1" = 2'
Profile Scale Horiz. & Vert. 1" = 2'

107.50

102.50

97.50



General Notes

Drainage contractor to mound all excess excavated material over sewer trenches if the excavated material is used as backfill for the sewer trenches. If the sewer trenches are sand filled, the drainage contractor shall mound approx. 1,000 C.Y. of the excavated material uniformly over the sewer trenches and the remainder of the excavated material shall be disposed of by the drainage contractor. All pipe plugs shall be considered as incidental to the project. The adjustment of existing manholes and installation of new rings and covers shall be done by others. Observation holes shall be removed and sealed as shown. The brick arch sewer shall be removed where necessary to clear new construction. Brick arch sewer to be abandoned in place shall be filled with sand. The method of filling the brick arch sewer with sand