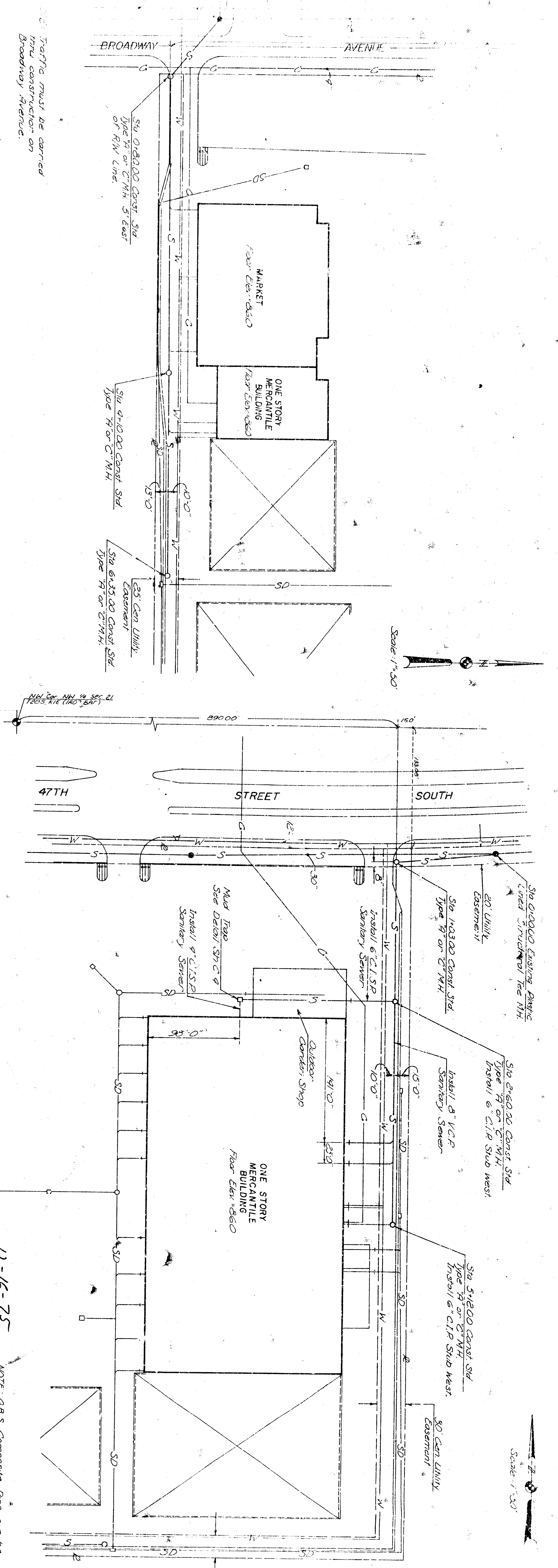
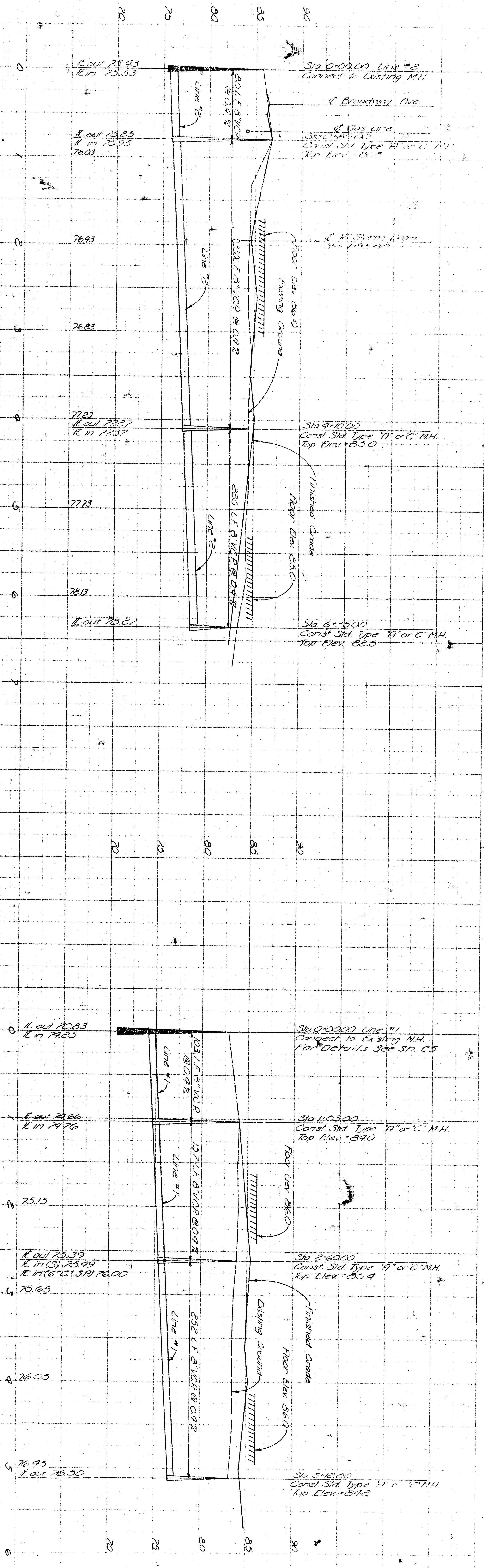


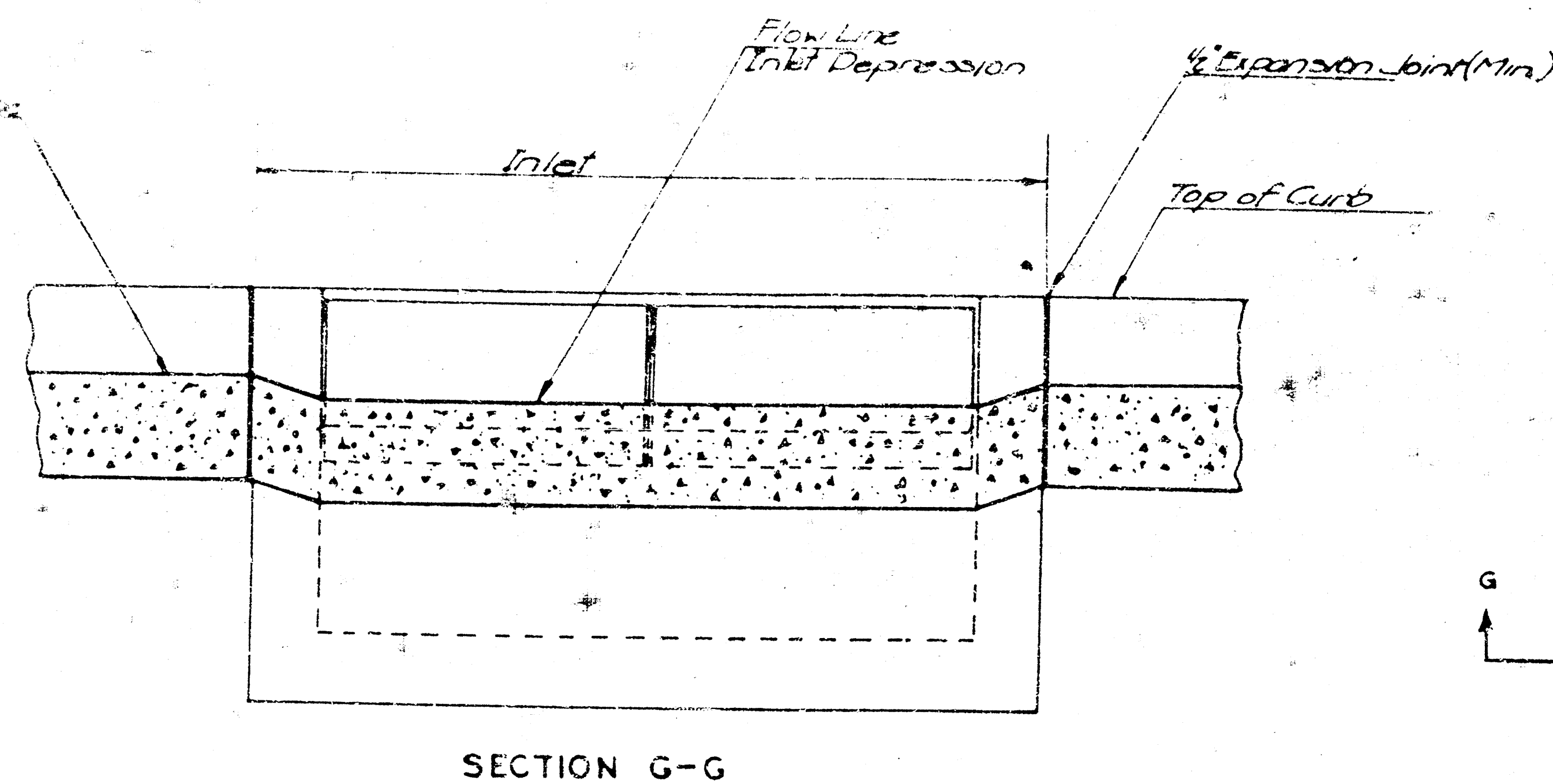


Traffic must be carried thru construction on Broadway Avenue.

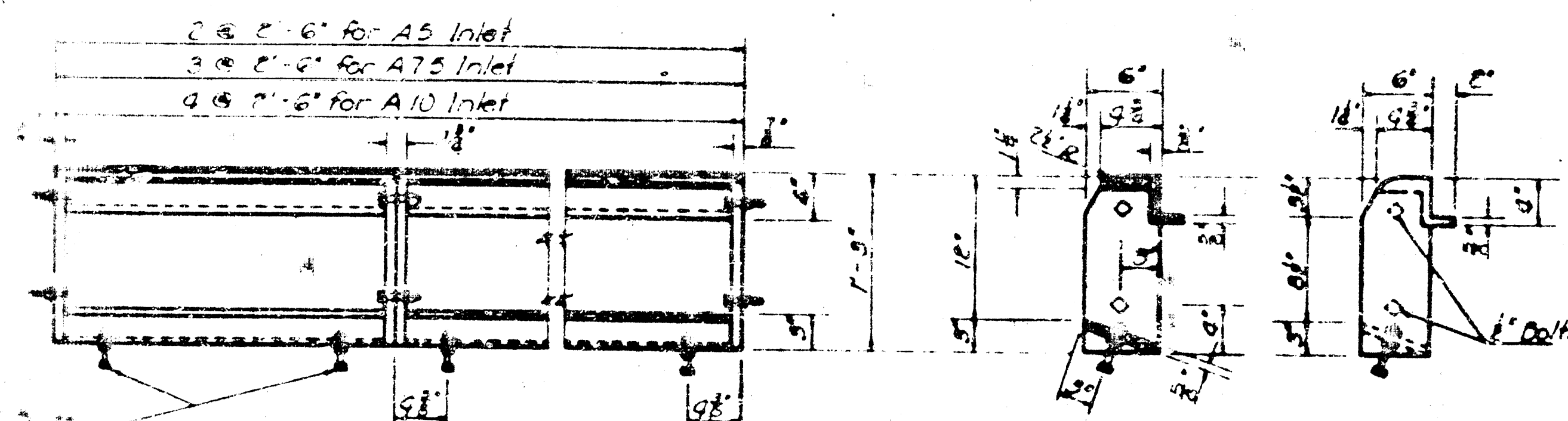
BM Line 19 City B.M. Disc. 28 ft East & 28.3 ft North of Sect. Corner Elev. 66.945

12-16-75
NOTE: ABS Composite Pipe can be used as an alternate.





SECTION G-G



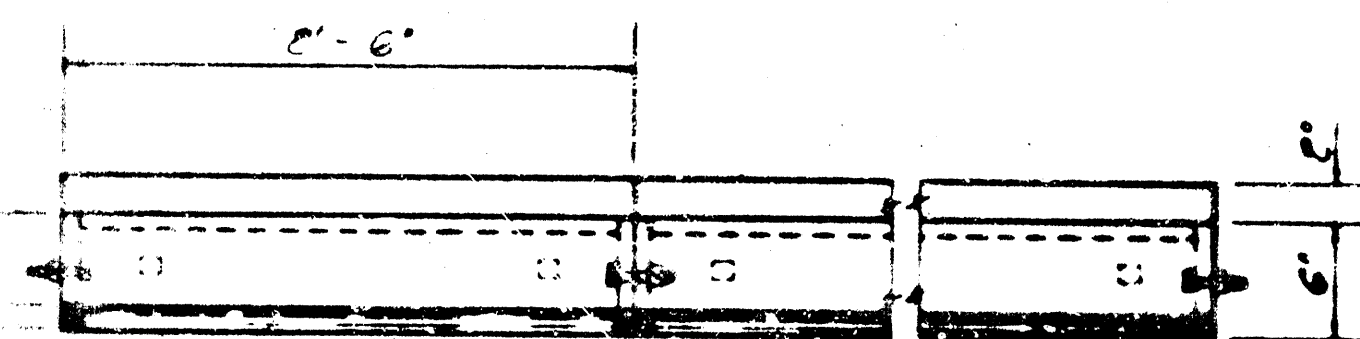
ELEVATION

TYPES A5-1, A75-1 & A10-1

END VIEW

TYPES A5-1, A75-1 & A10-1

NOTE: All bolts and nuts shall be galvanized and meet the requirements of sub-section 1006.14 of the Standard Specifications. All weights of castings are calculated weights with no allowance for fillets, overruns, anchor bars and bolts. Weights of cast iron as shown on this sheet are minimum. Heavier weights of cast iron may be used, but payment for cast iron shall be made on the weight as shown on this sheet. Minor variations of design will be permitted on castings.

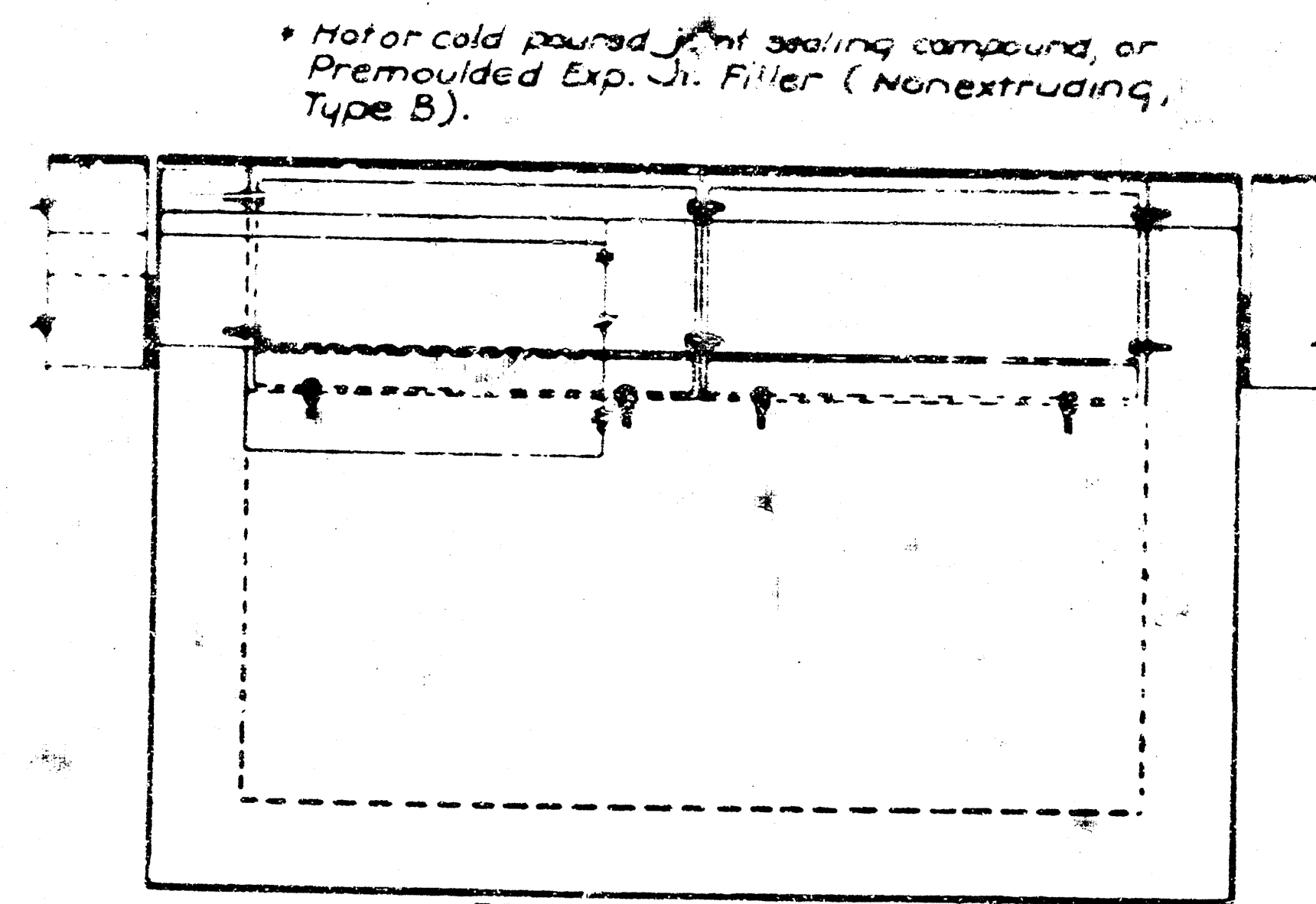


PLAN

TYPES A5-1, A75-1 & A10-1

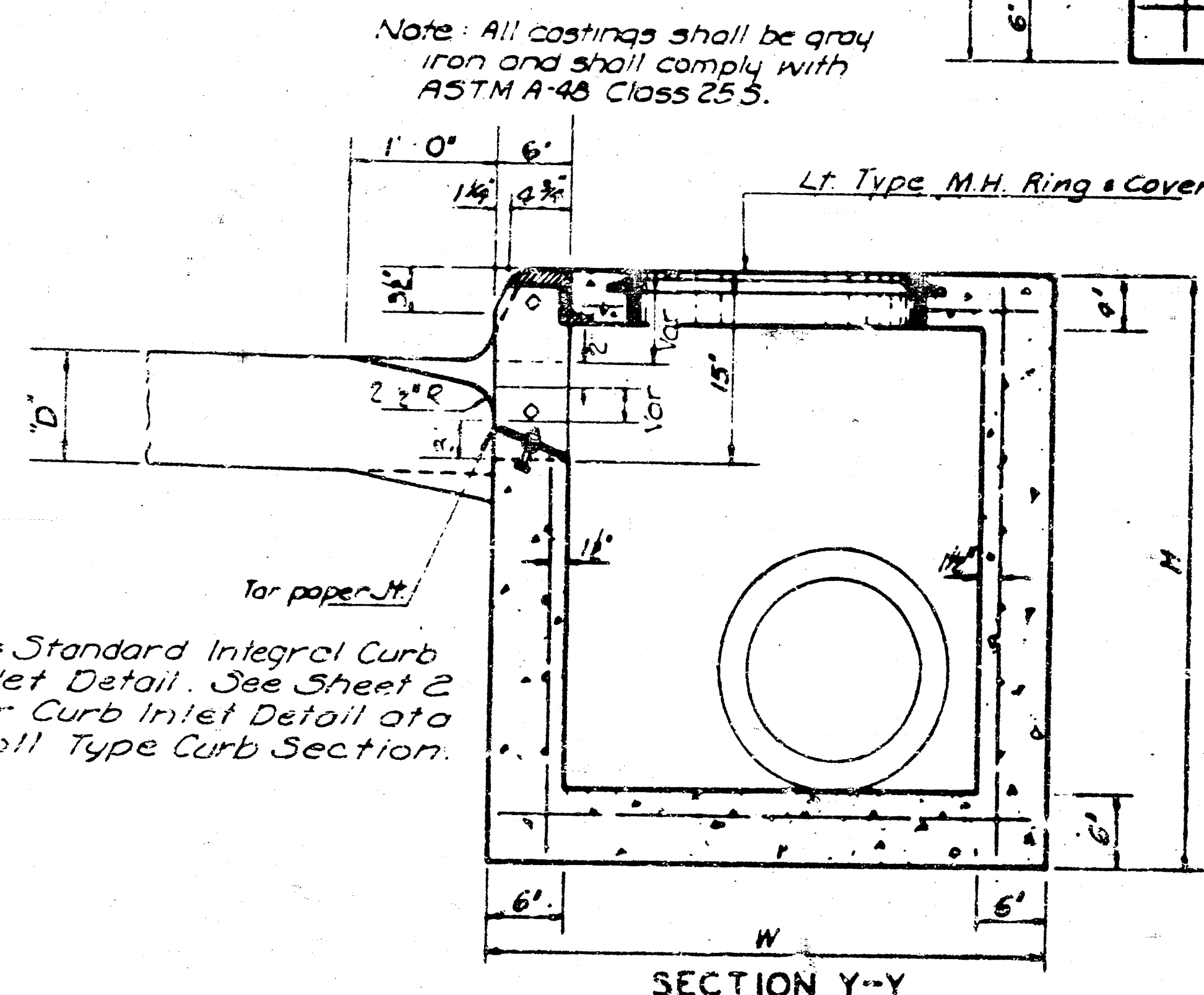
Weight: 129 Lbs per 2'-6" section

DETAILS OF CURB CASTING (IRON)



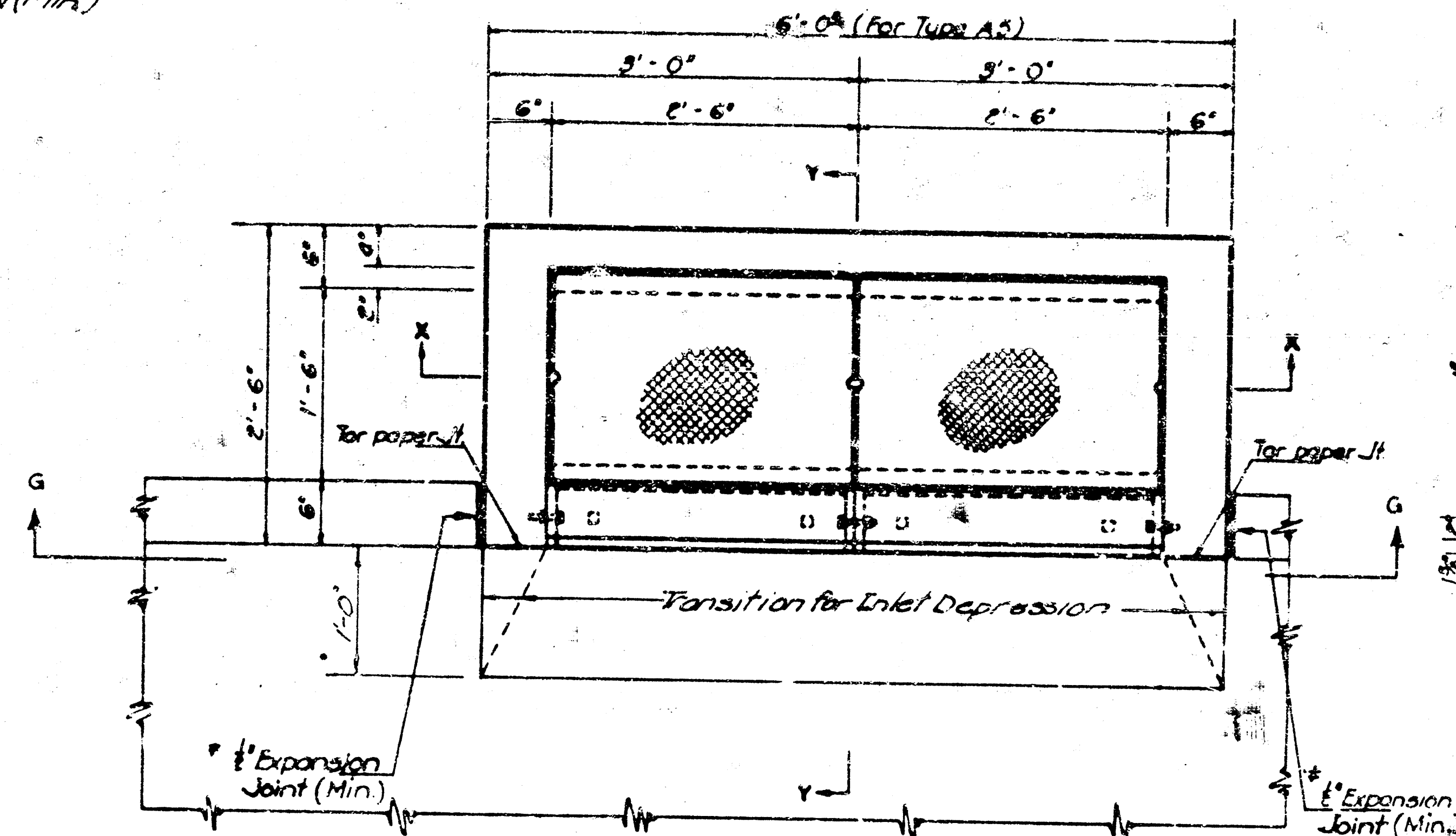
FRONT ELEVATION

NOTE: Standard Integral Curb Inlet Detail. See Sheet 2 for Curb Inlet Detail at Roll Type Curb Section.



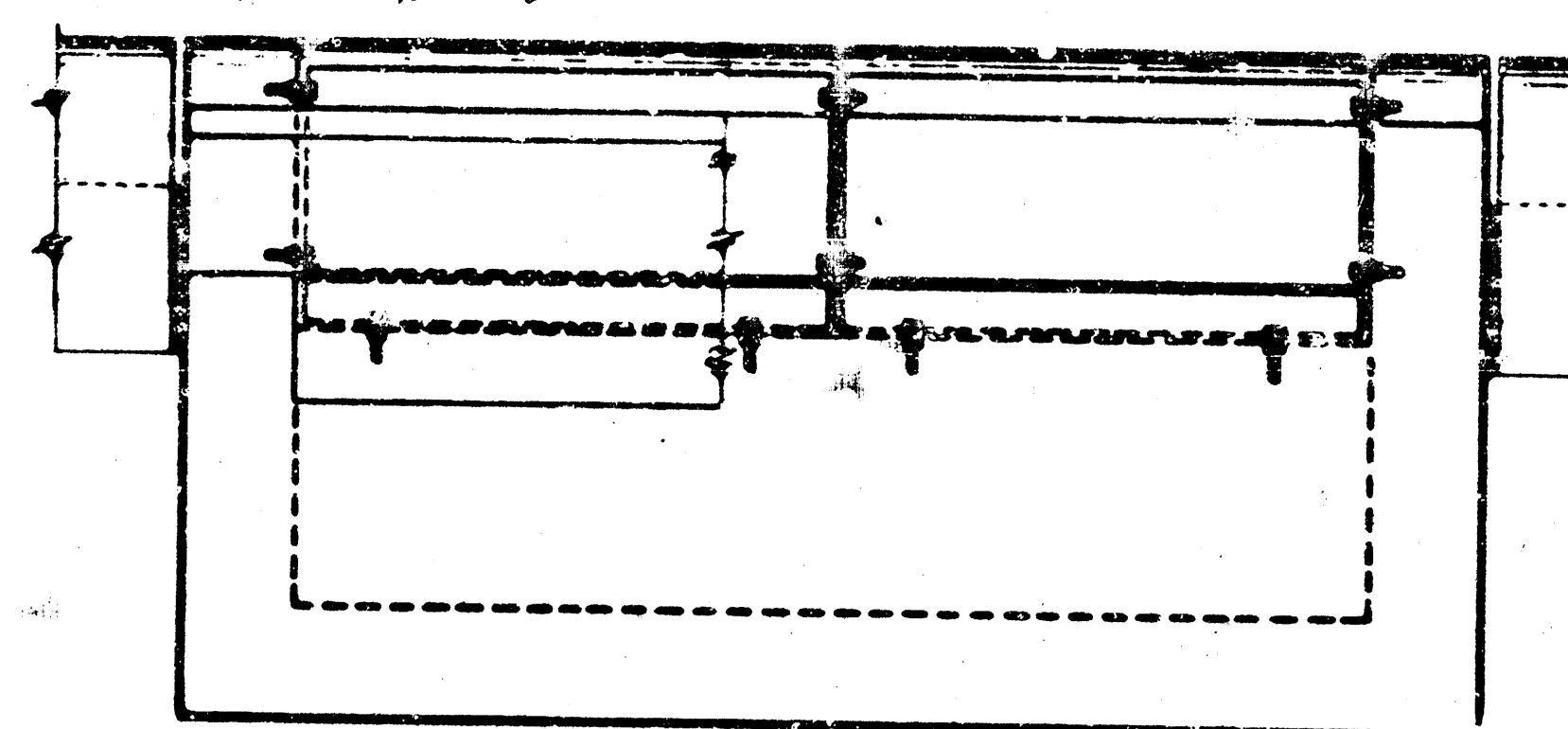
SECTION Y-Y

NOTE: See standard sheet for Concrete Pavement Auxiliary Details, for shaping gutter approaching and leaving inlets. This shaping will be required at all 1/2" A inlets, unless otherwise noted on the plans. This work will be paid for as follows: where combined curb & gutter is used the entire length of the shaped gutter and the curb, together with the concrete under the gutter casting, shall be paid for as "Combined Curb & Gutter, Type 1". Where concrete pavement and edge curb is used the shaped approaches and the edge curb, together with the concrete under the gutter casting, shall be paid for as "Concrete Pavement" and "Edge Curb". See Standard Sheet No. 34 for Details of Manholes.

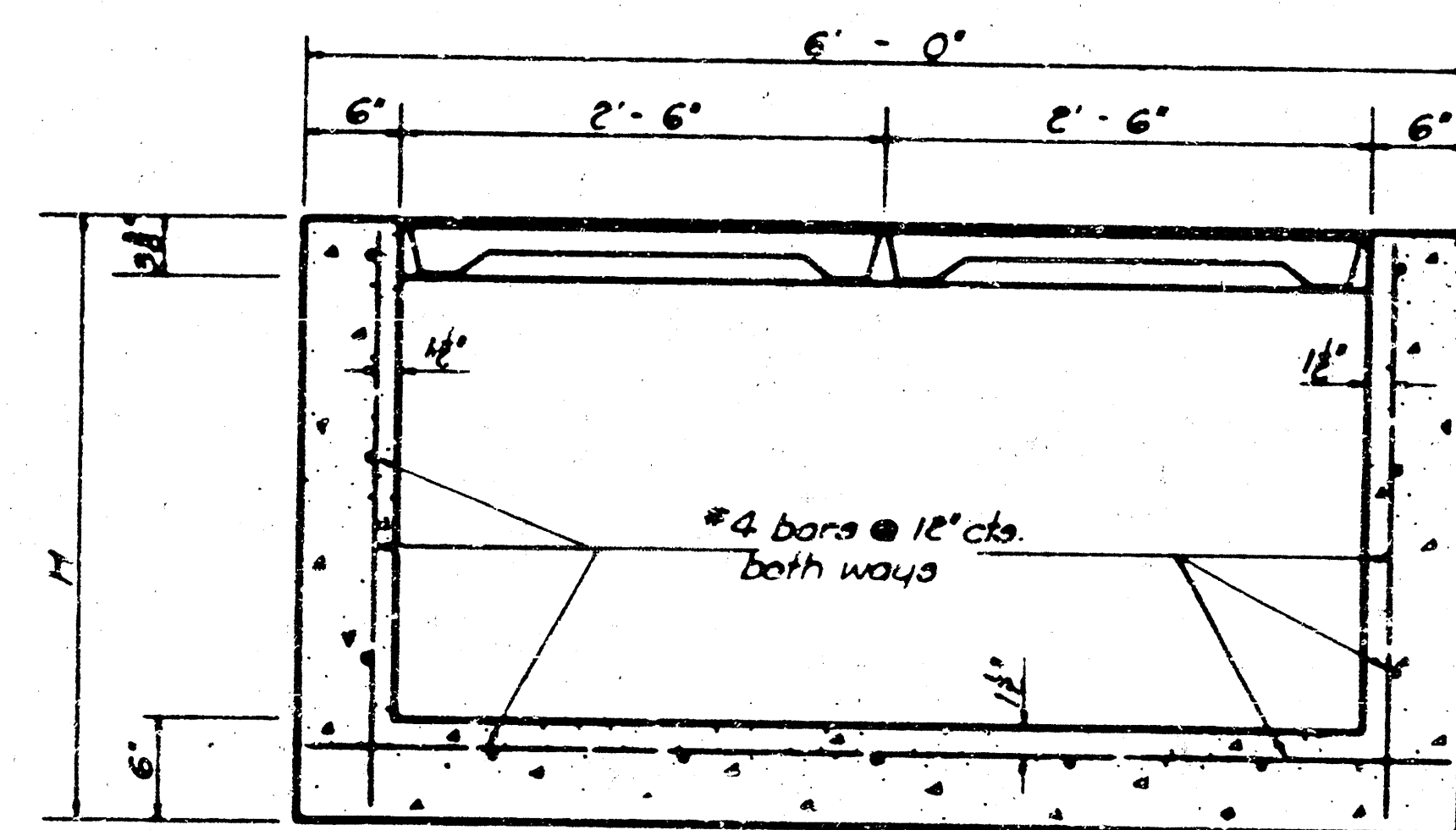


PLAN

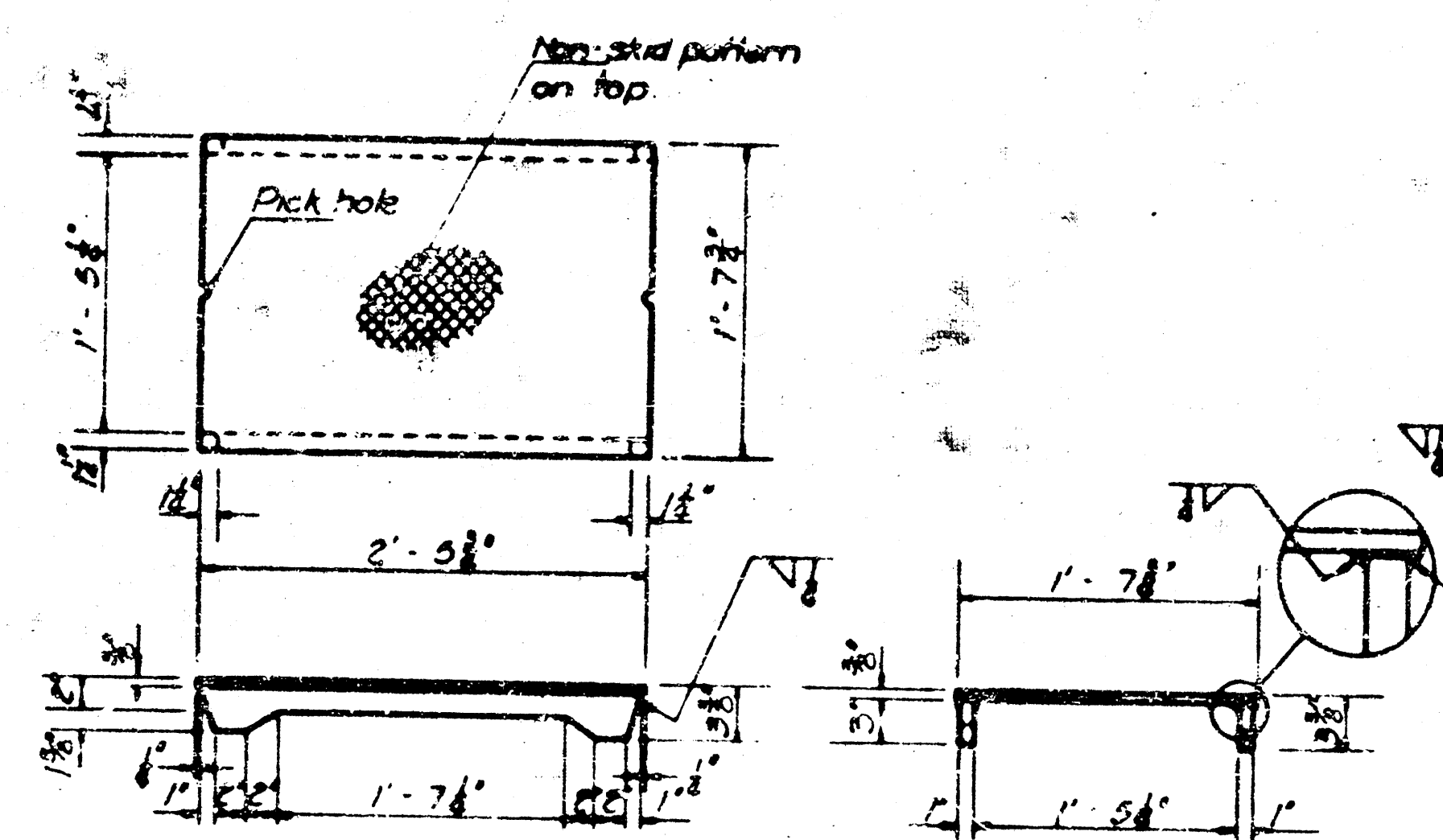
* Hot or cold poured joint sealing compound, or Premoulded Exp. Jt. Filler (Non-extruding, Type B).



FRONT ELEVATION

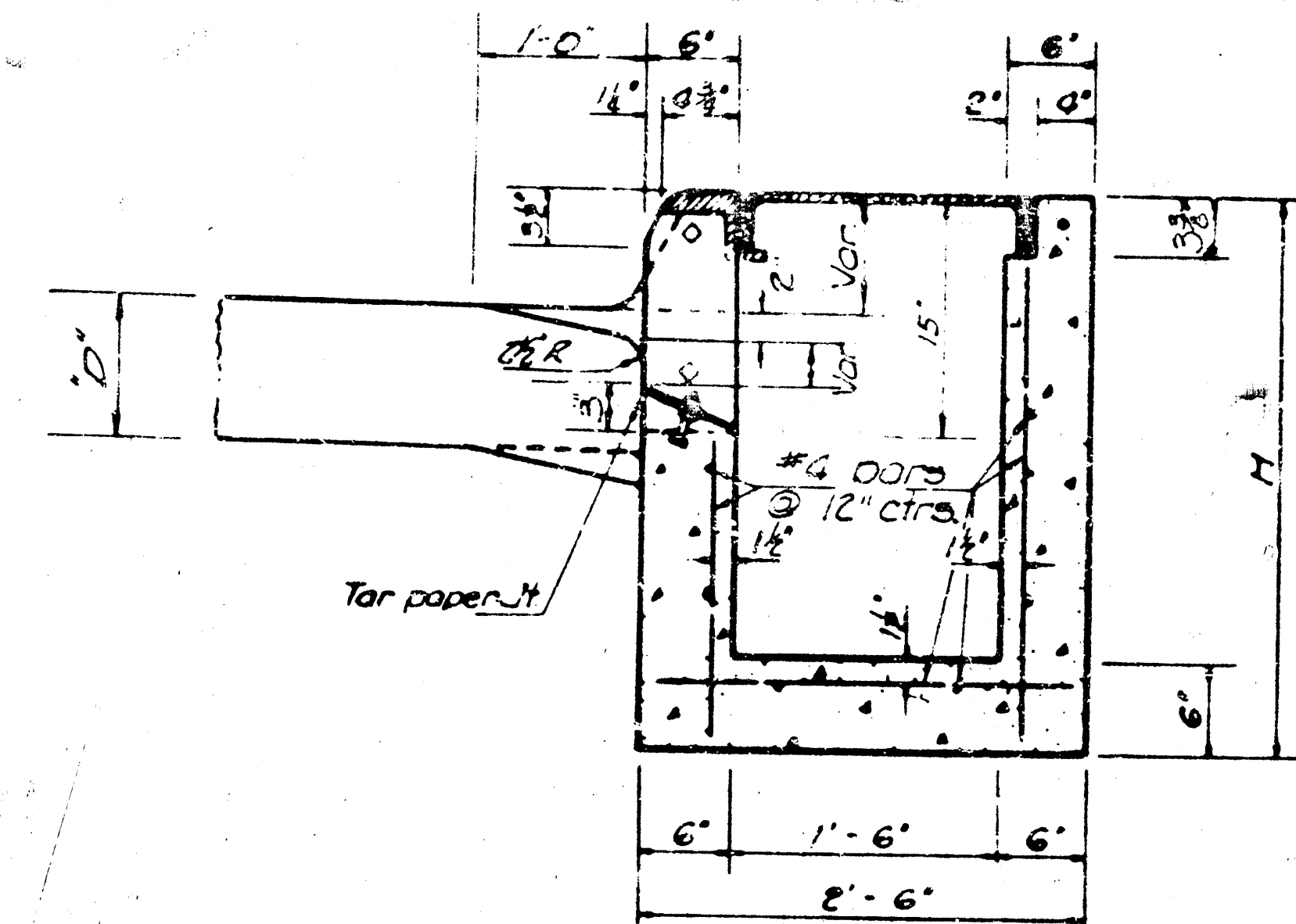


SECTION X-X



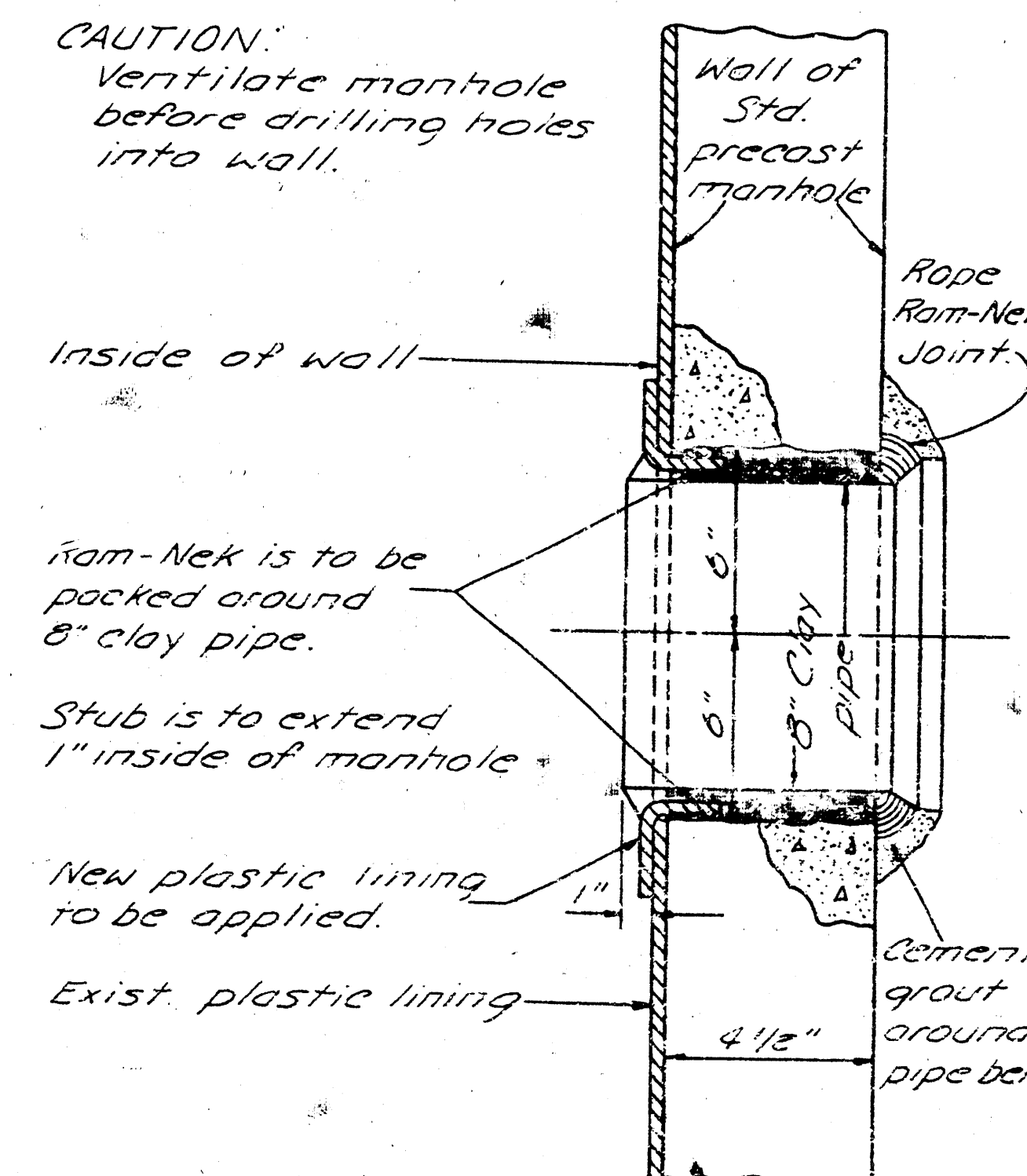
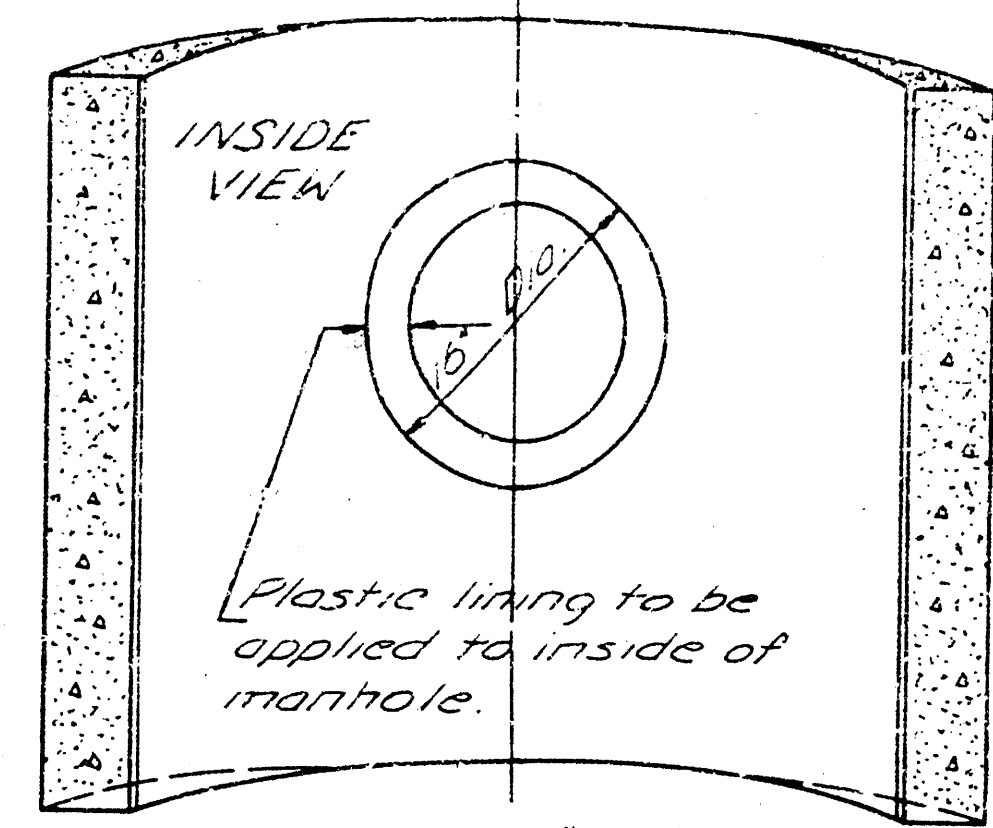
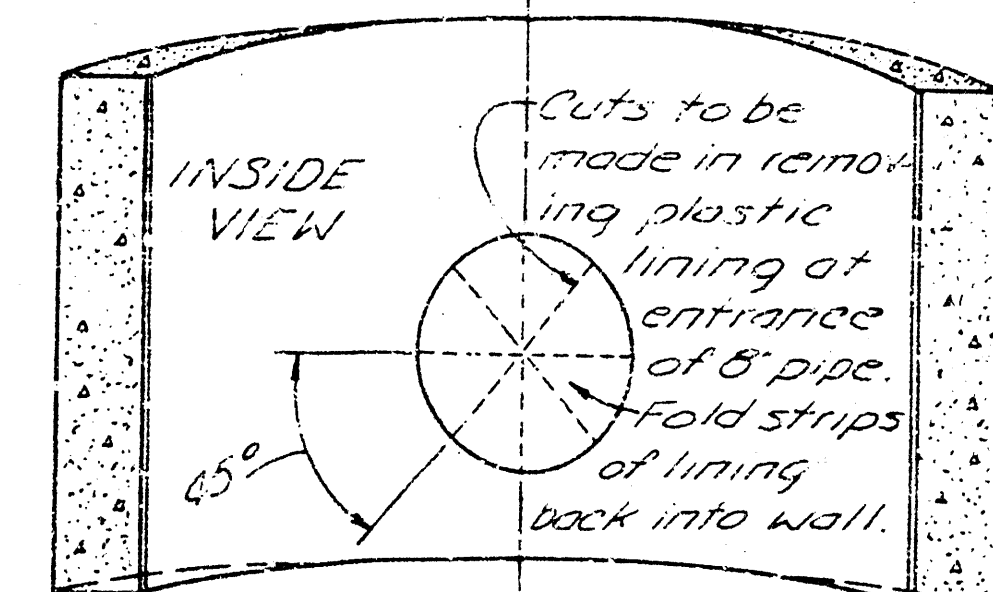
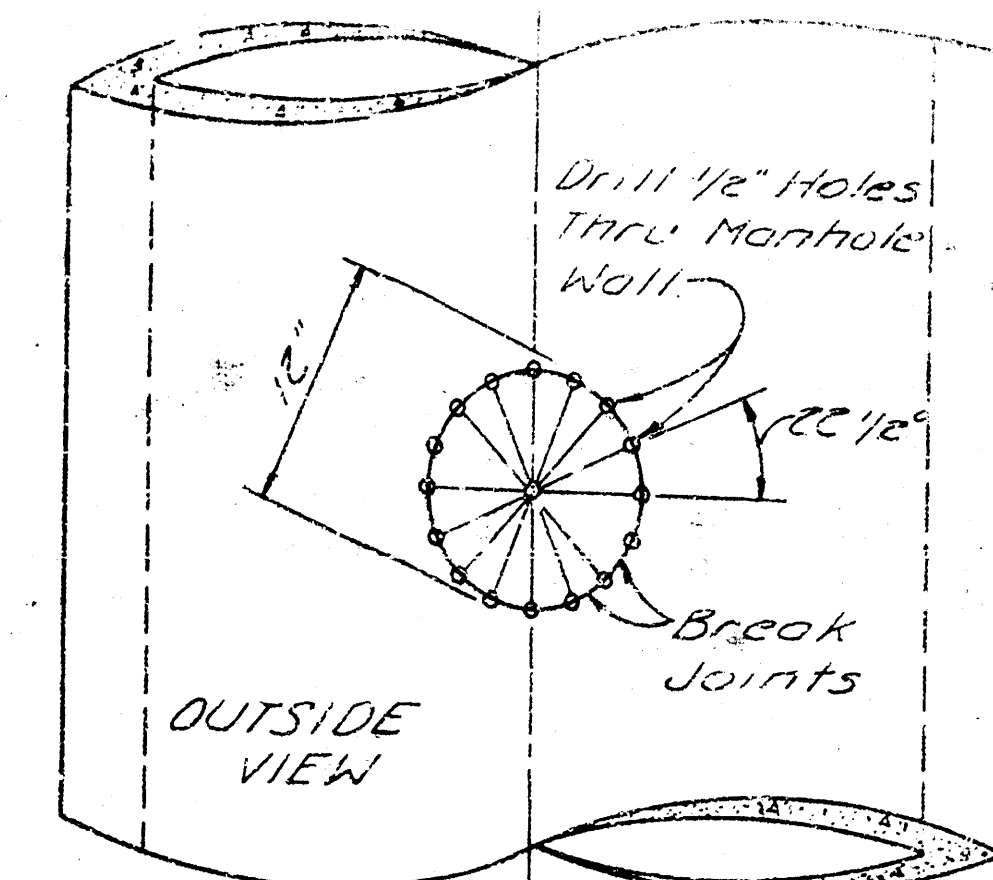
* STRUCTURAL STEEL COVER PLATE

Weight: 98 Lbs Each
** At the contractor's option, the supports on the cover plate may be made of 2" stock with the "feet" portions welded to the 2" steel bars. The weld shall be 1/4" full length, each side and ground smooth on the out side.
* Nonskid steel floor plate (Commercial grade), welded to steel (ASTM A7, A36, A242 or A441) bars.

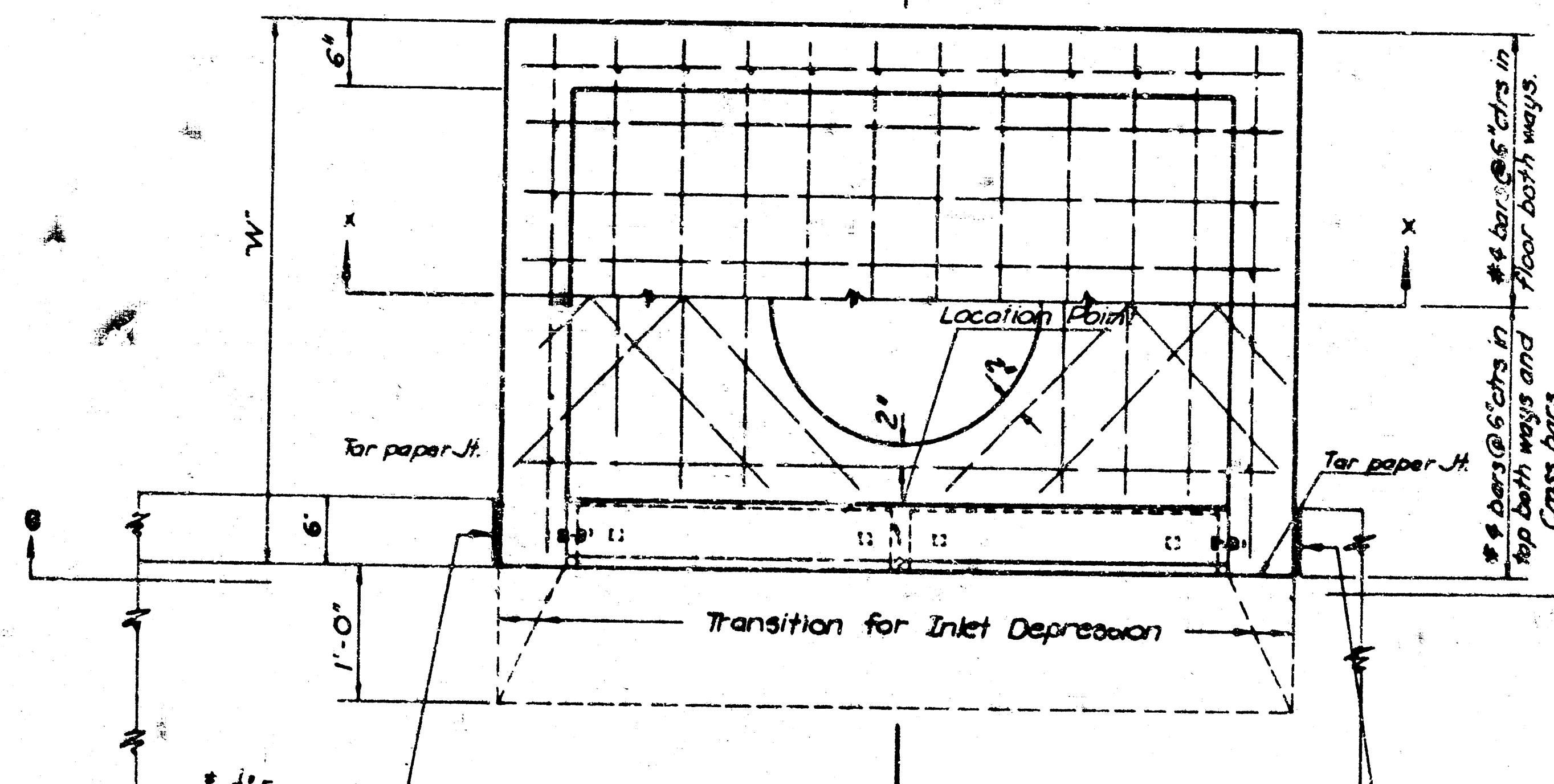


SECTION Y-Y

NOTE: See this sheet for shaping of depression at inlet. This work shall be paid for as "Concrete Pavement". Floor of Inlet shall be shaped as shown in various "EXAMPLES" on Reinforced Concrete Manhole Standard No. 633. Concrete used for shaping shall be unreinforced Class "A" concrete. No addition in concrete quantities shall be made for shaping floor of inlets.

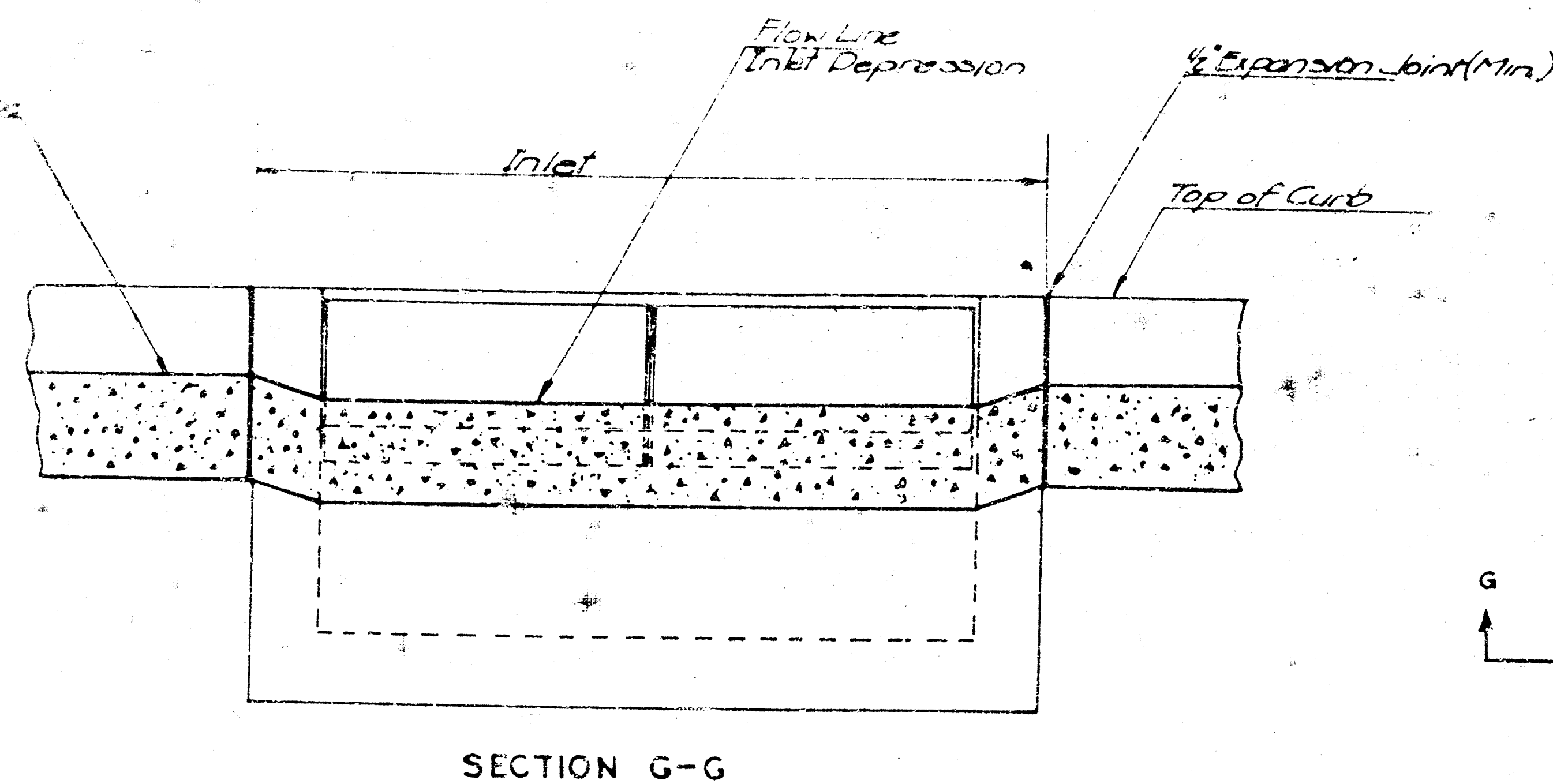


DETAIL - TIE IN
FOR PLASTIC LINED SAN. SEWER MANHOLE
NO SCALE

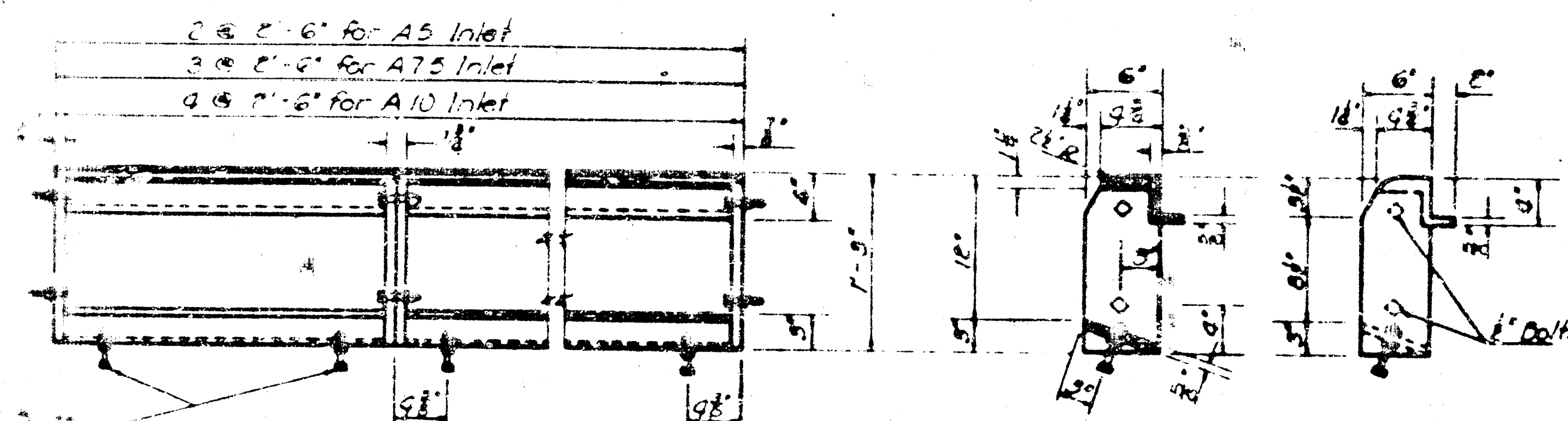


Note: Use Class A Concrete throughout. Bevel all exposed edges with a 3/4" triangular moulding. Reinforcing bars shall be bent around pipe. No deductions in concrete quantities shall be made for pipe openings.

At the contractor's option, Class A Concrete (AC) may be used throughout, but payment shall be made as Curb of Class A Concrete miscellaneous. A small opening may be required in the back of the inlet to drain a low area, if ordered by the Engineer. Reinforcing bars will extend through the opening. No deduction in concrete quantities will be made for this opening. When so ordered by the Engineer, the top of the inlet shall be sloped slightly to approximately fit the ground line or other conditions. All exposed cast iron surfaces shall be painted either in the shop or in the field with one coat of a zinc dust paint, followed by two field coats of aluminum paint.



SECTION G-G



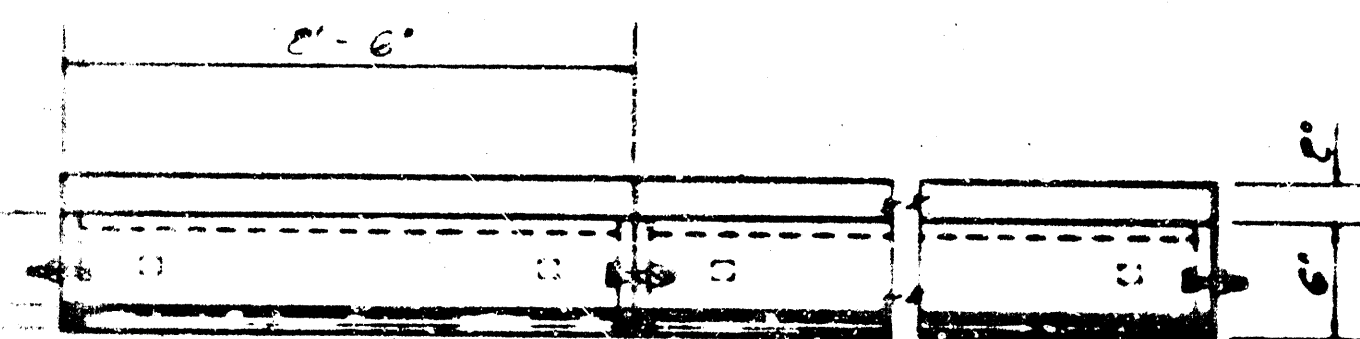
ELEVATION

TYPES A5-1, A75-1 & A10-1

END VIEW

TYPES A5-1, A75-1 & A10-1

NOTE: All bolts and nuts shall be galvanized and meet the requirements of sub-section 1006.14 of the Standard Specifications. All weights of castings are calculated weights with no allowance for fillets, overruns, anchor bars and bolts. Weights of cast iron as shown on this sheet are minimum. Heavier weights of cast iron may be used, but payment for cast iron shall be made on the weight as shown on this sheet. Minor variations of design will be permitted on castings.

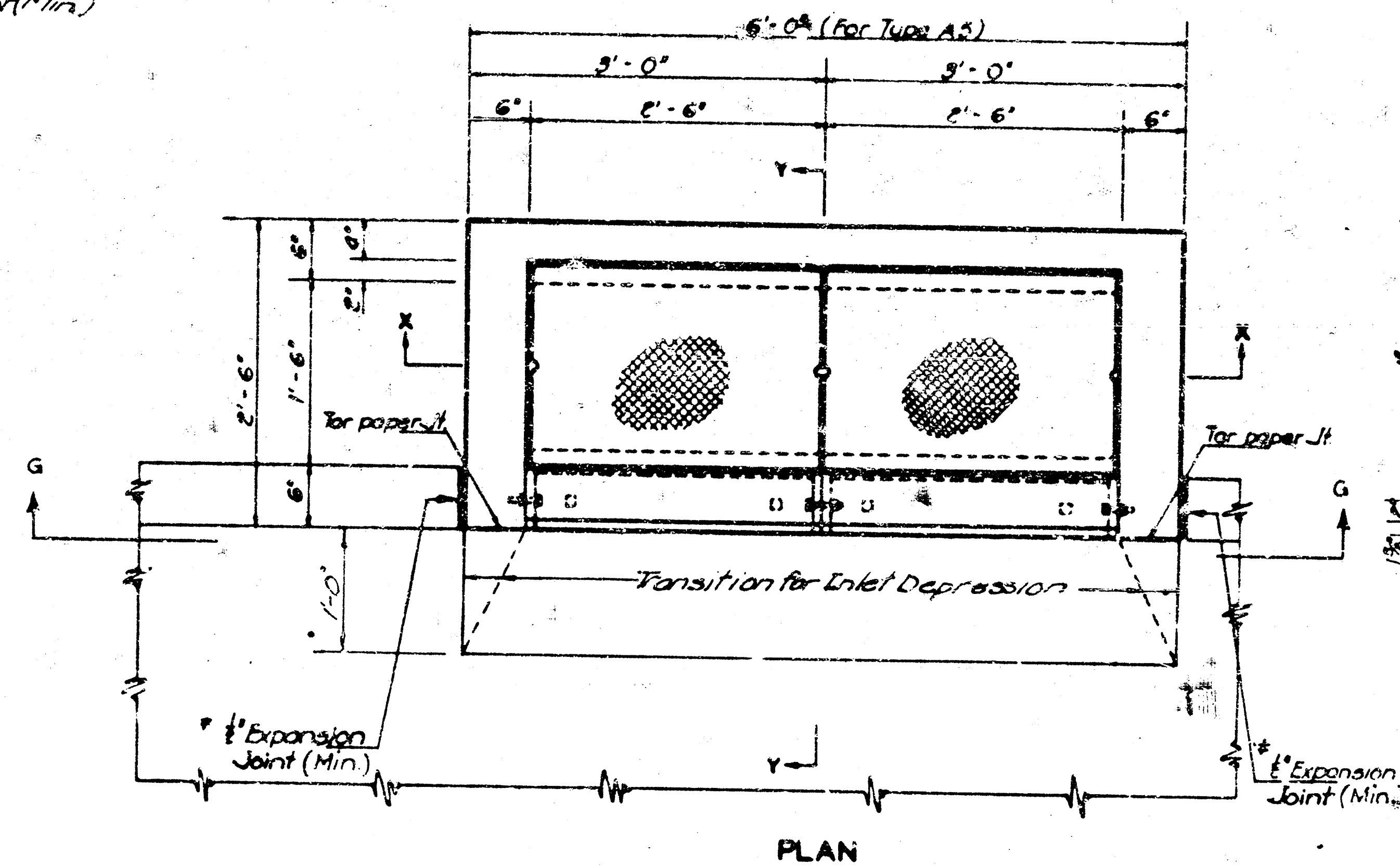


PLAN

TYPES A5-1, A75-1 & A10-1

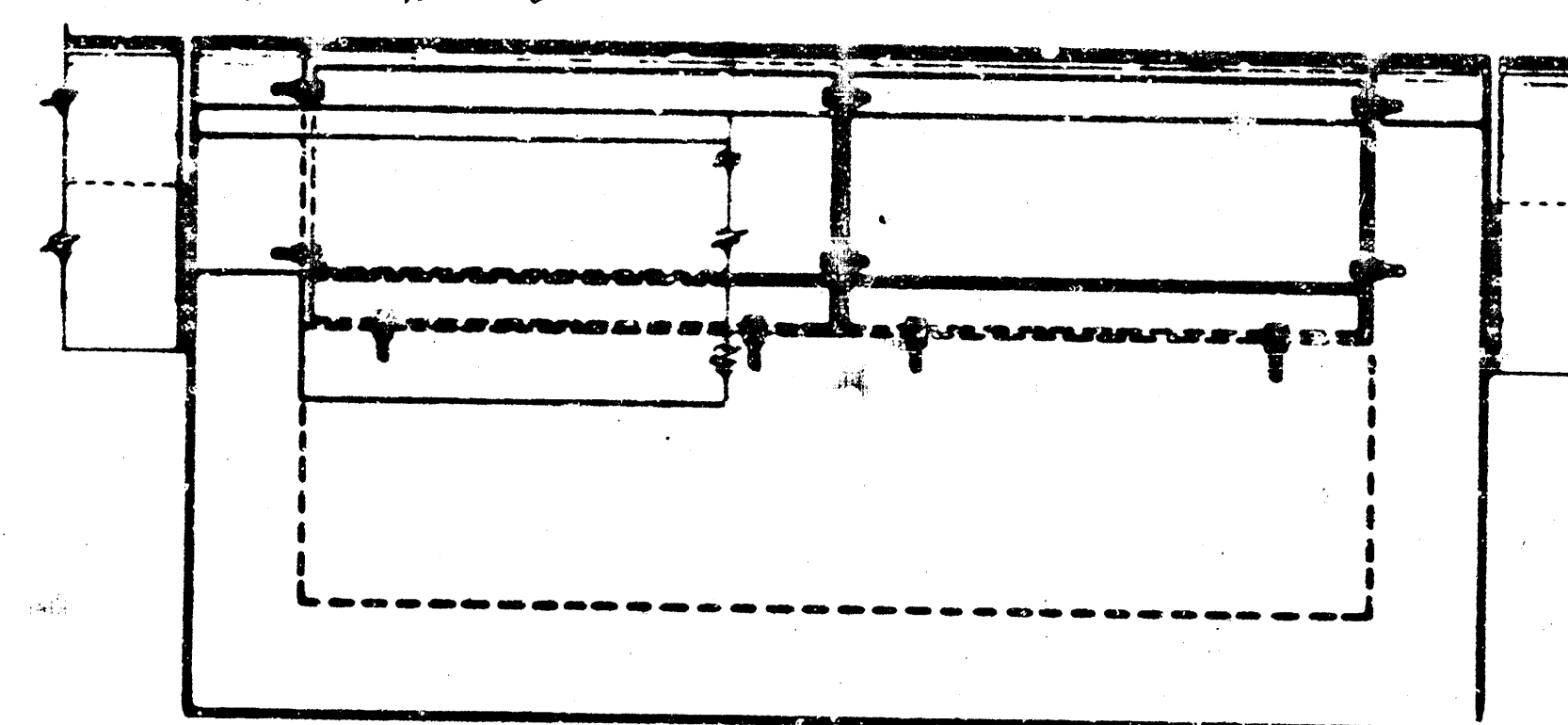
Weight: 129 Lbs per 2'-6" section

DETAILS OF CURB CASTING (IRON)

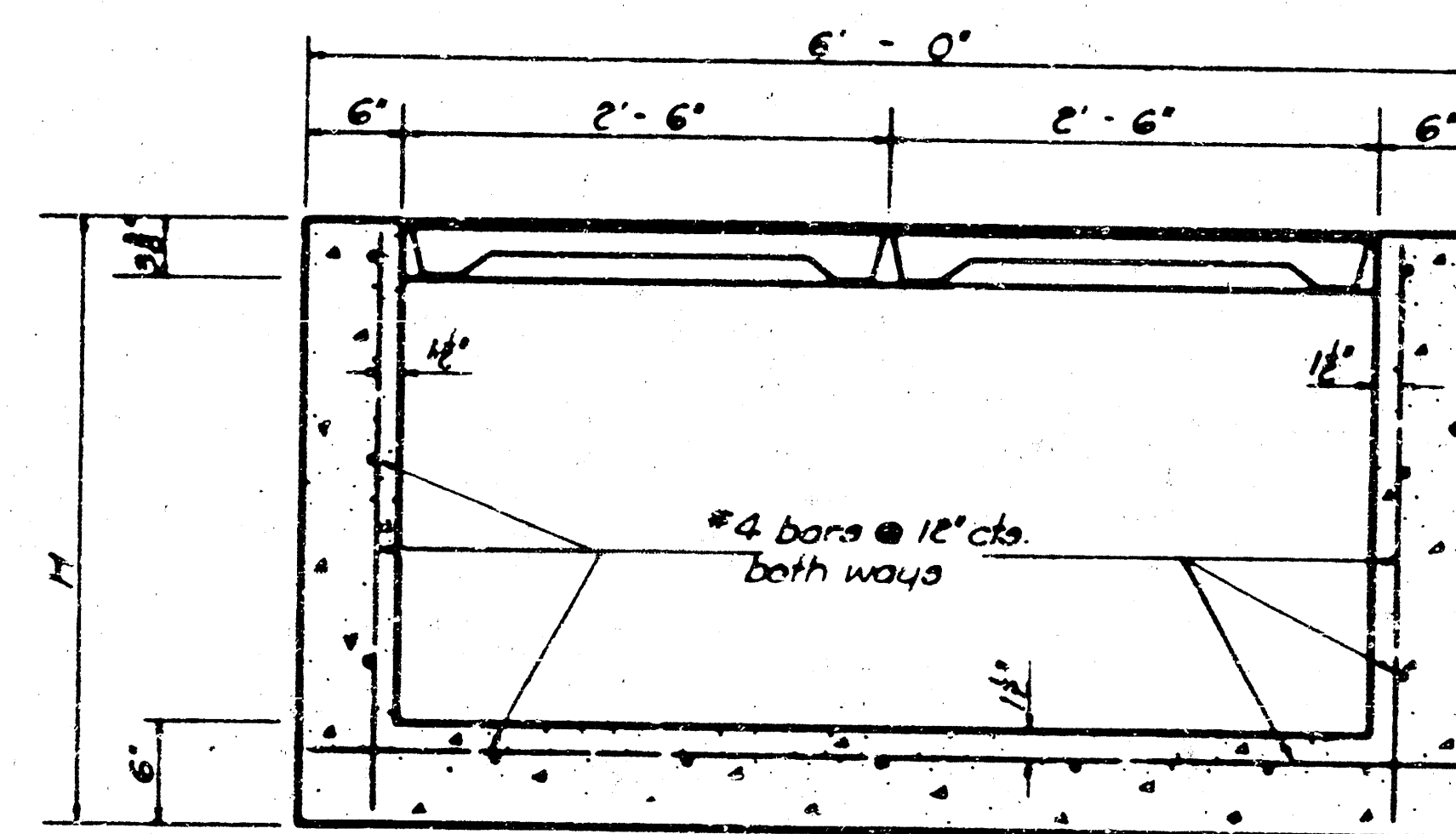


PLAN

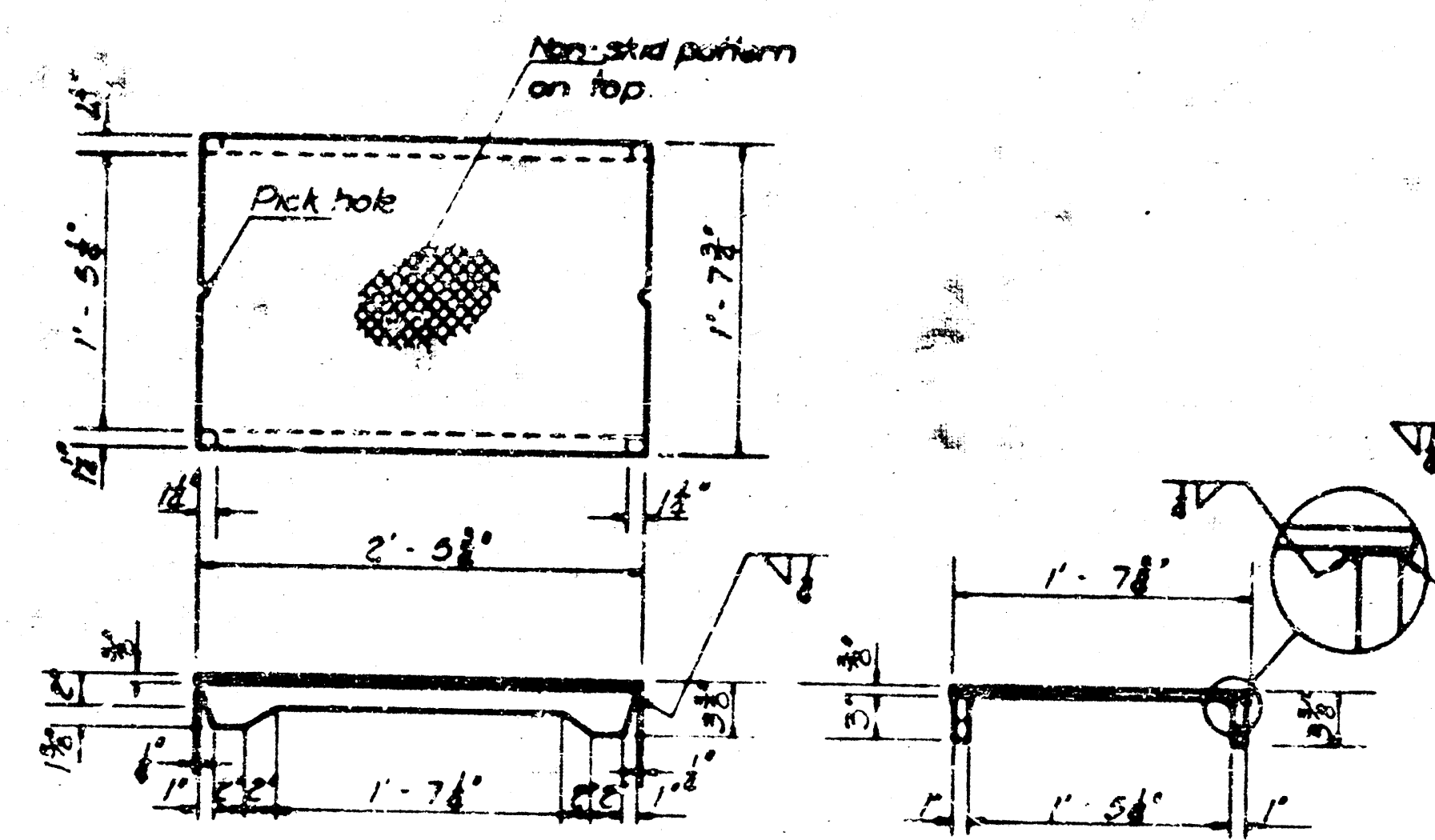
* Hot or cold poured joint sealing compound, or Premoulded Exp. Jt. Filler (Non-extruding, Type B).



FRONT ELEVATION

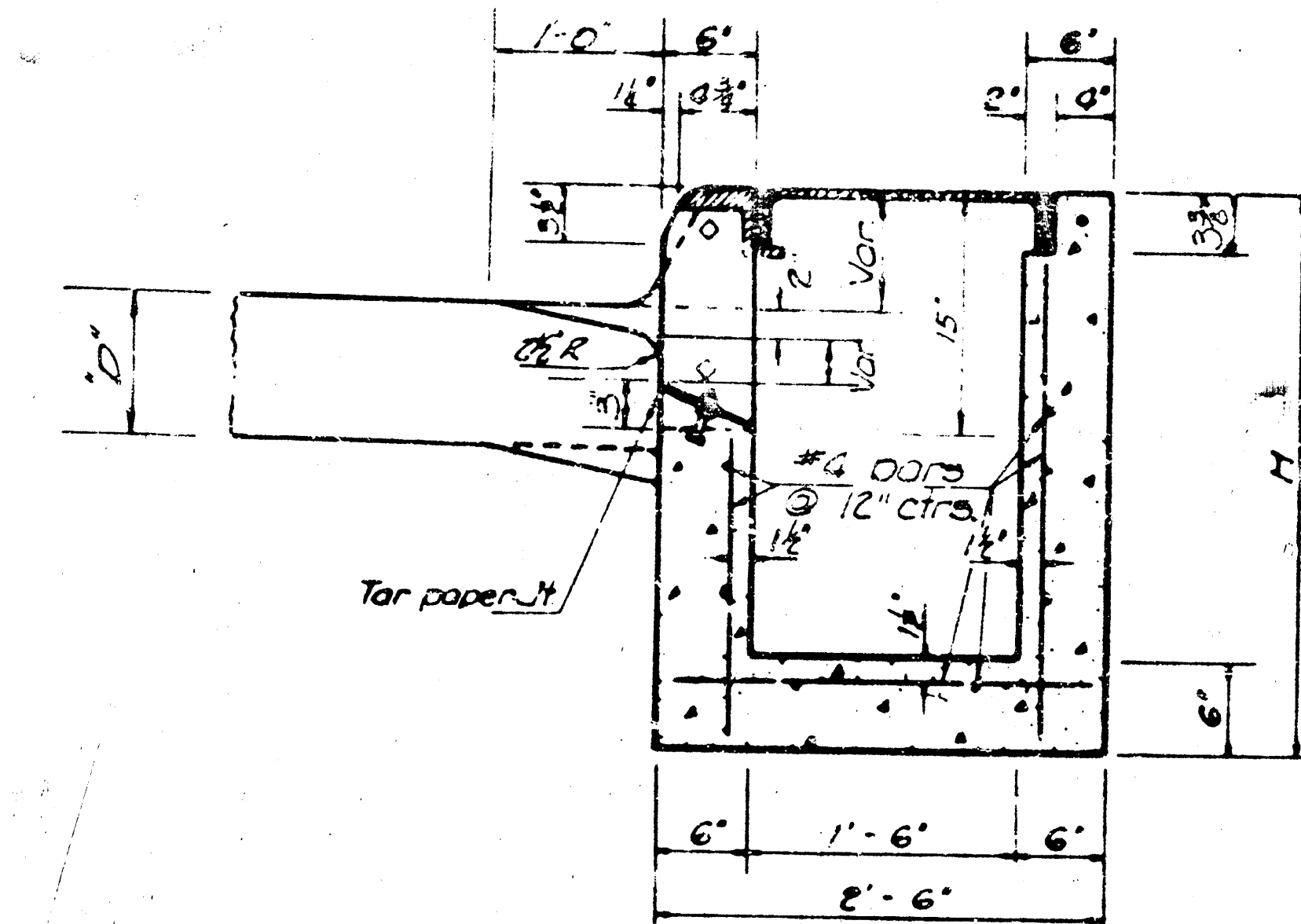


SECTION X-X



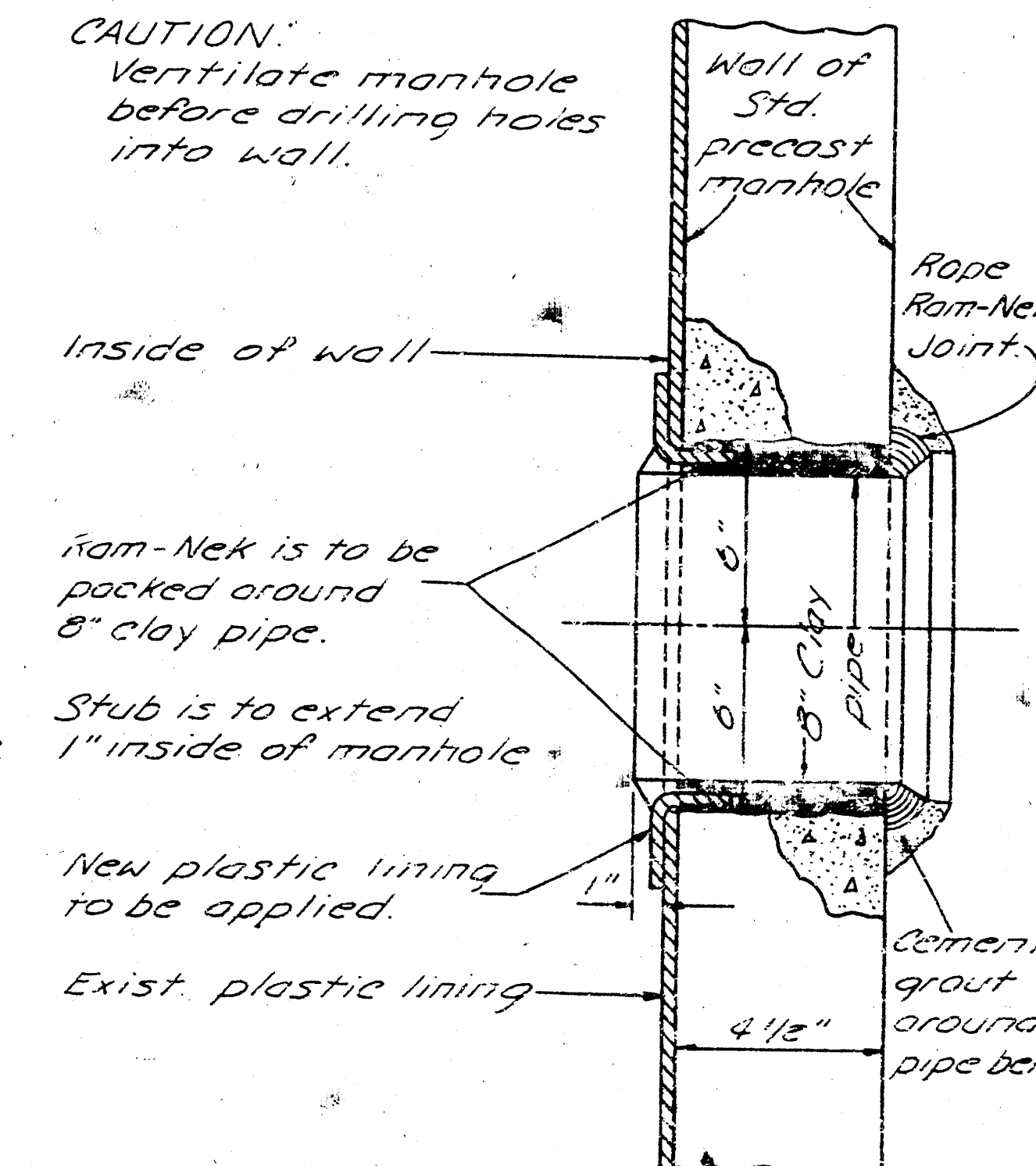
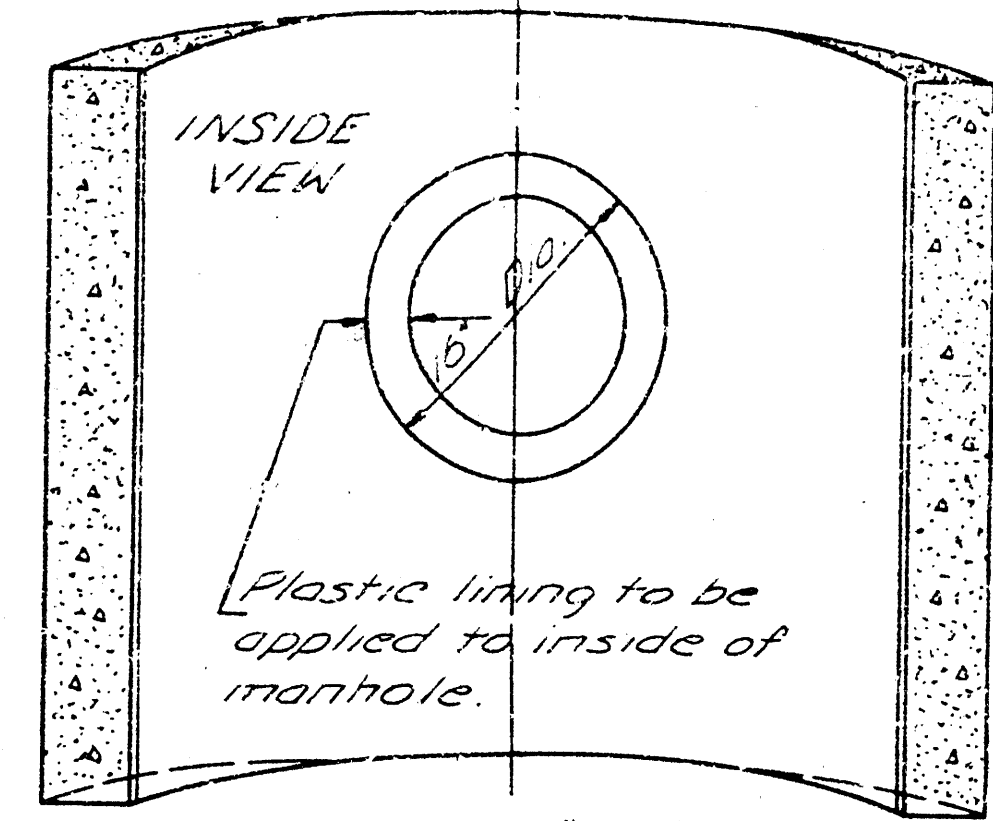
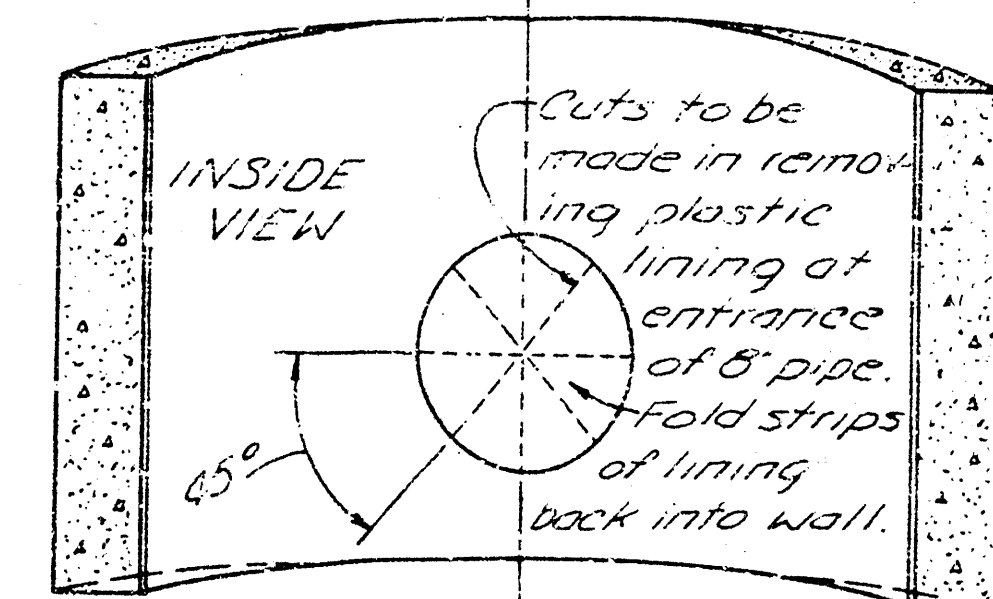
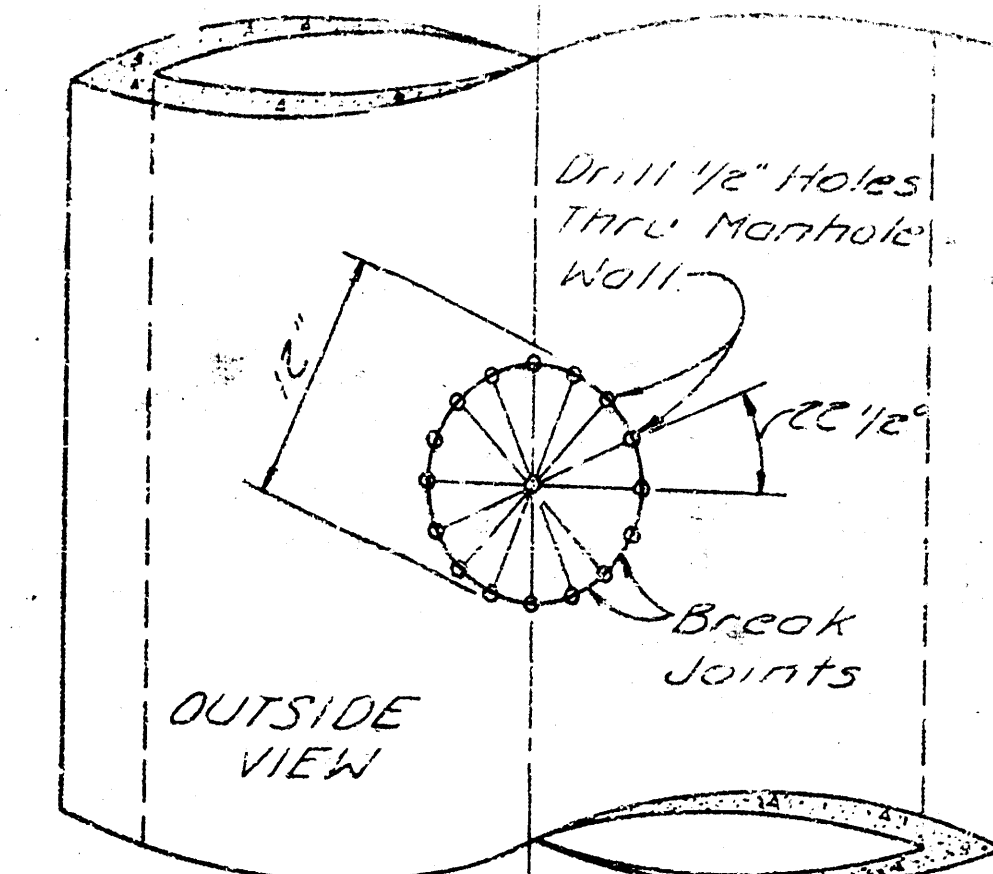
* STRUCTURAL STEEL COVER PLATE

Weight: 98 Lbs Each
** At the contractor's option, the supports on the cover plate may be made of 2" stock with the "feet" portions welded to the 2" steel bars. The weld shall be 1/4" full length, each side and ground smooth on the out side.
* Nonskid steel floor plate (Commercial grade), welded to steel (ASTM A7, A36, A242 or A441) bars.

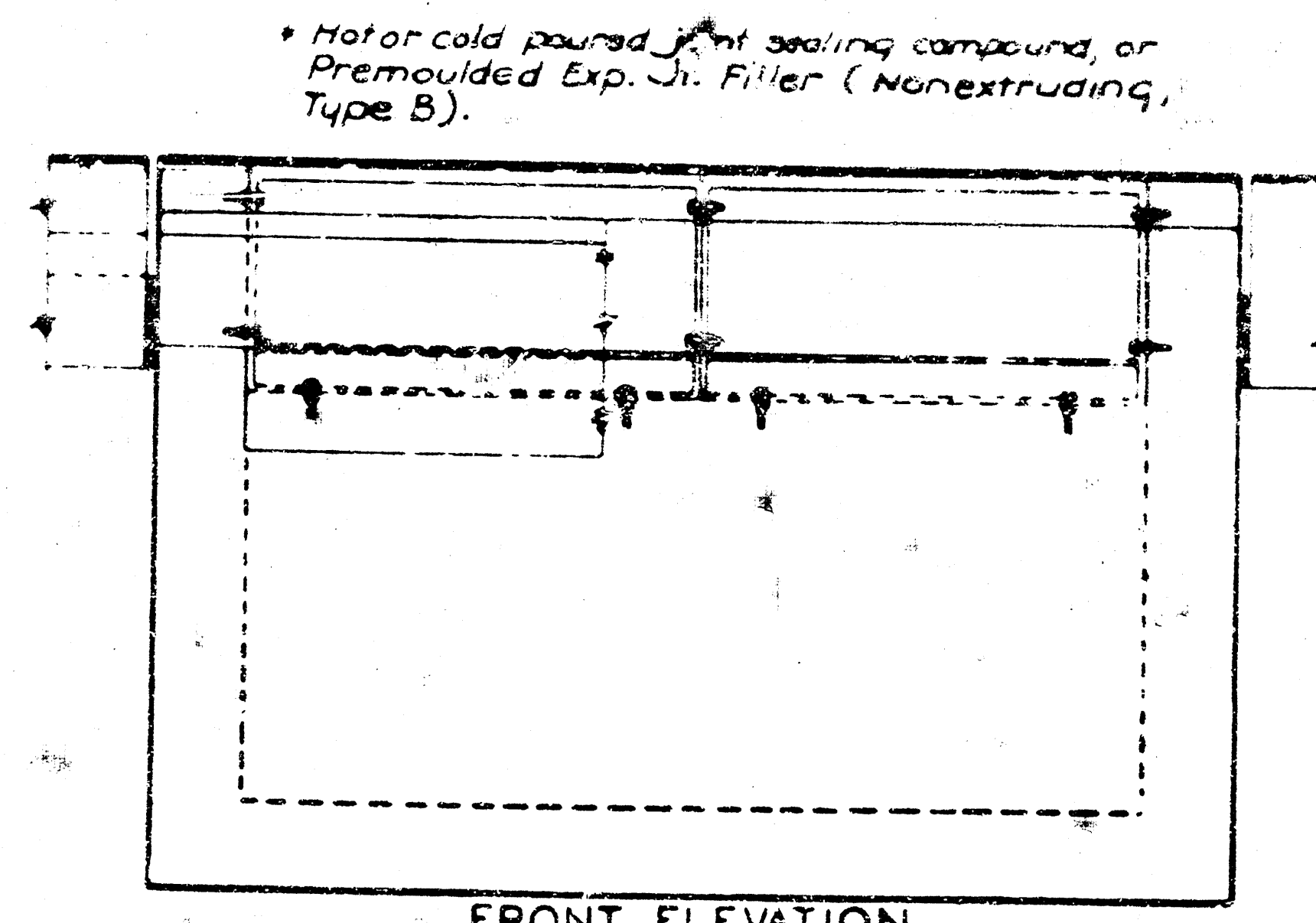


SECTION Y-Y

NOTE: See this sheet for shaping of depression at inlet. This work shall be paid for as "Concrete Pavement".
Floor of Inlet shall be shaped as shown in various "EXAMPLES" on Reinforced Concrete Manhole Standard No. 633.
Concrete used for shaping shall be unreinforced Class "A" concrete.
No addition in concrete quantities shall be made for shaping floor of inlets.

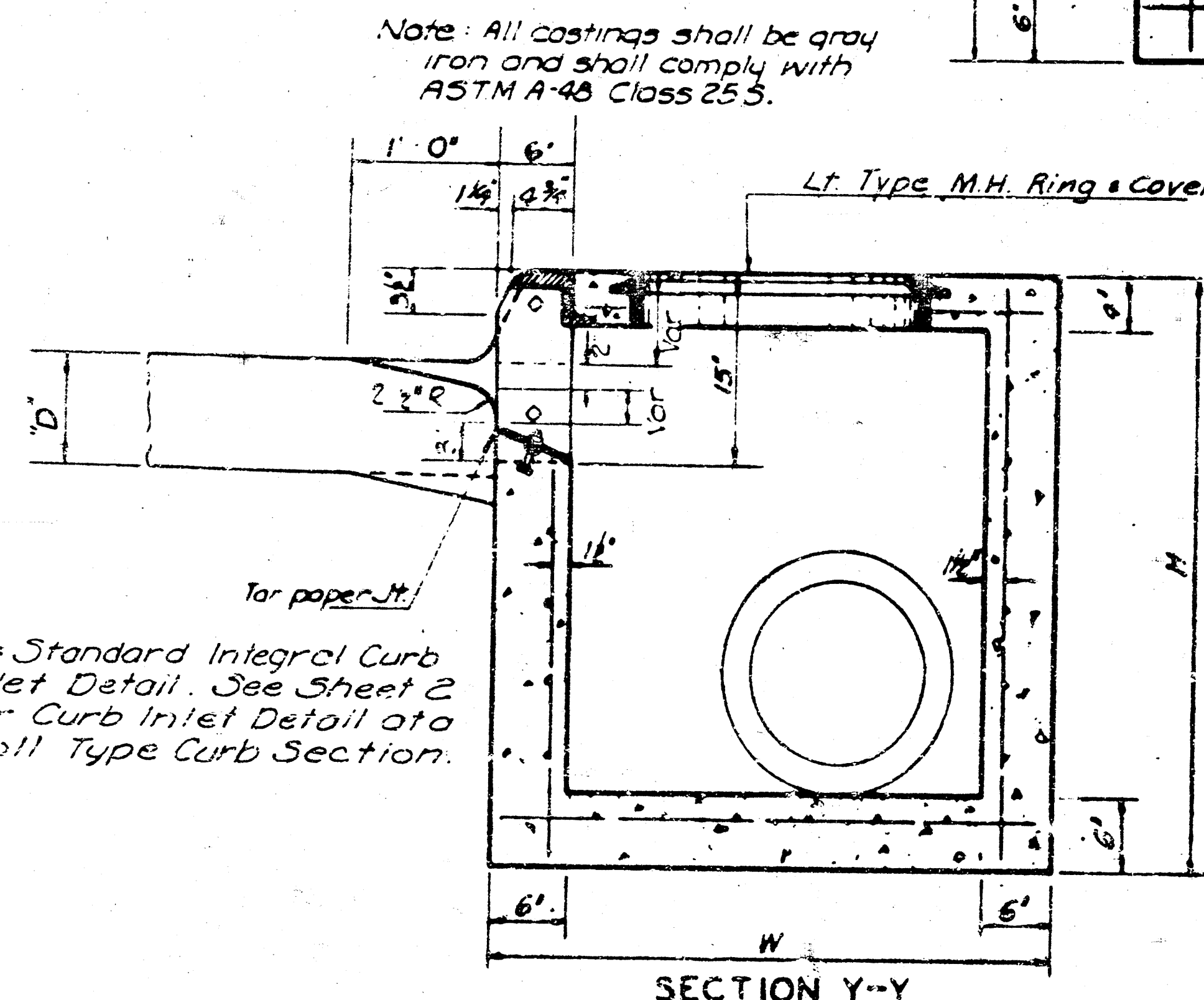


DETAIL - TIE IN
FOR PLASTIC LINED SAN. SEWER MANHOLE
NO SCALE



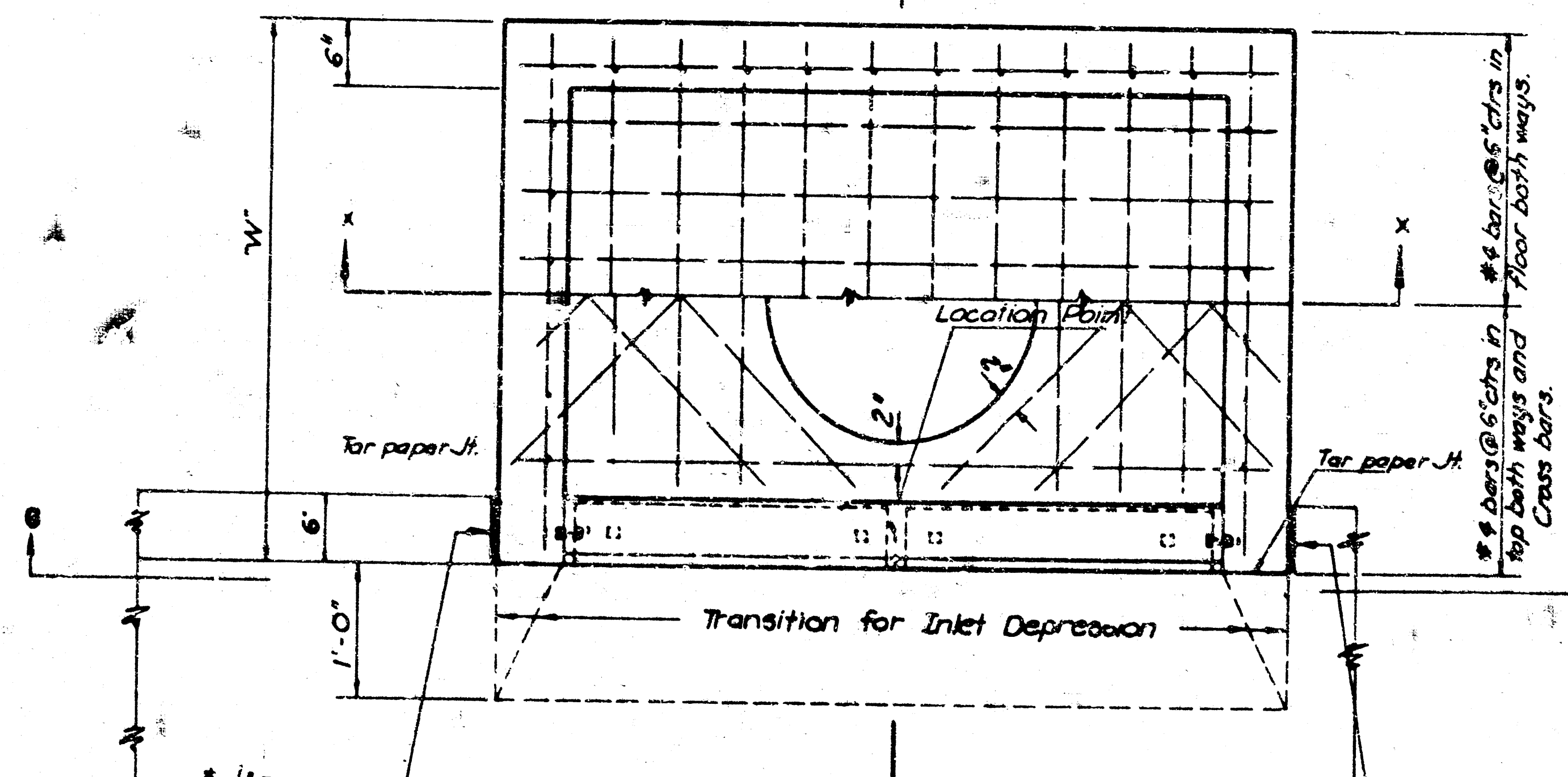
FRONT ELEVATION

NOTE: Standard Integral Curb Inlet Detail. See Sheet 2 for Curb Inlet Detail at Roll Type Curb Section.



SECTION Y-Y

NOTE: See standard sheet for Concrete Pavement Auxiliary Details, for shaping gutter approaching and leaving inlets. This shaping will be required at all 1/2" A inlets, unless otherwise noted on the plans. This work will be paid for as follows: where combined curb & gutter is used the entire length of the shaped gutter and the curb, together with the concrete under the gutter casting, shall be paid for as "Combined Curb & Gutter, Type 1". Where concrete pavement and edge curb is used the shaped approaches and the edge curb, together with the concrete under the gutter casting, shall be paid for as "Concrete Pavement" and "Edge Curb". See Standard Sheet No. 34 for Details of Manholes.

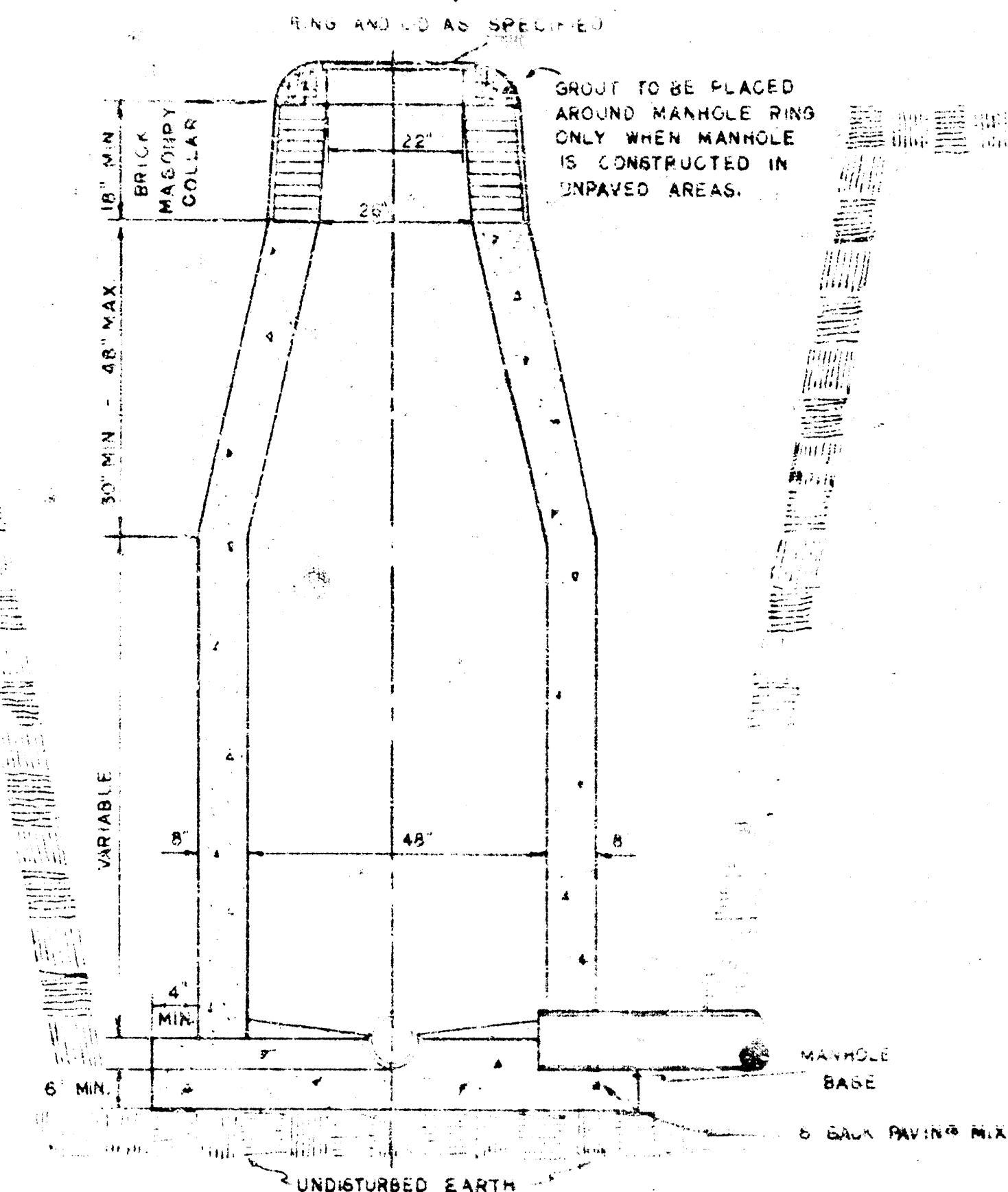


Transition for Inlet Depression

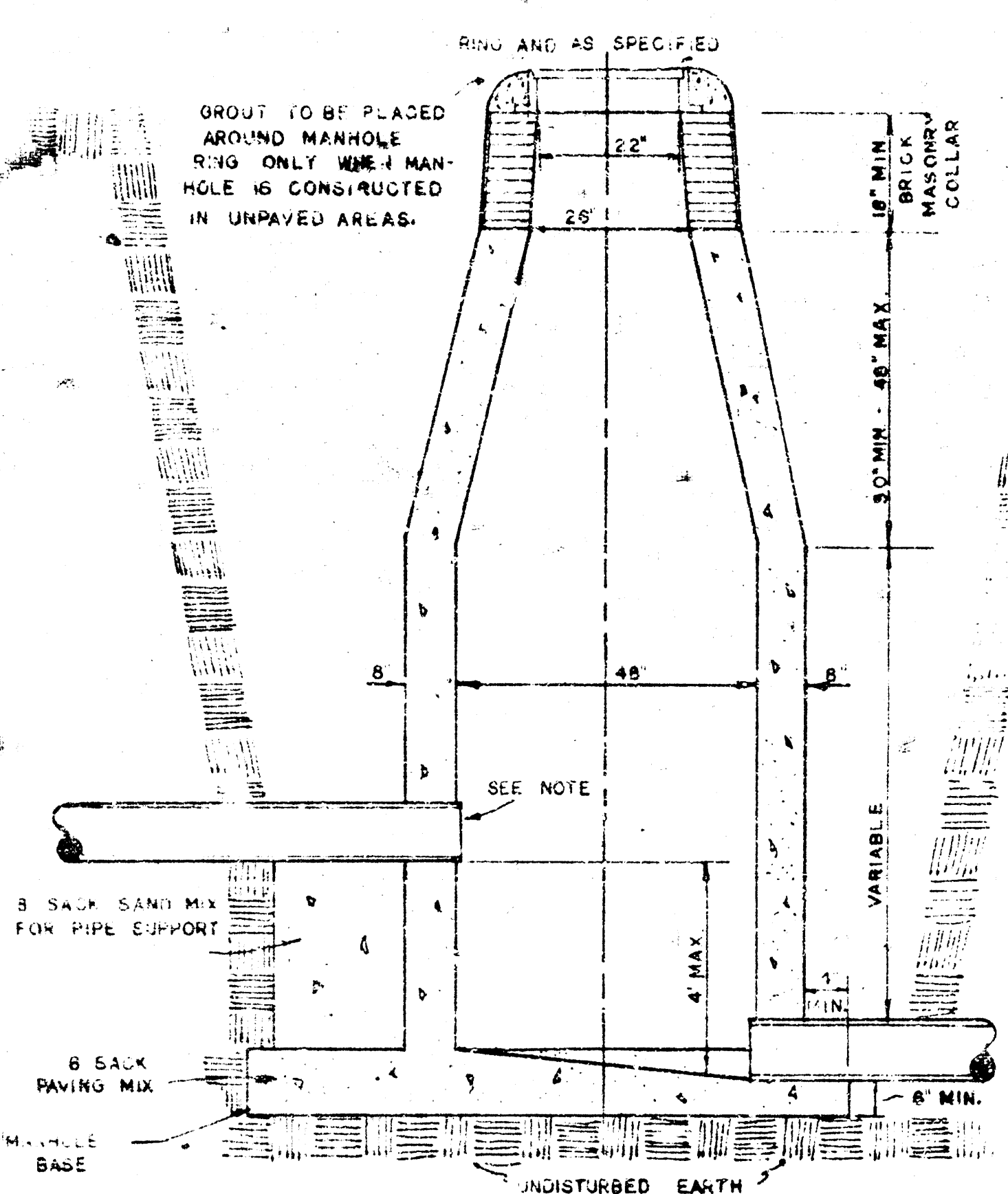
Note: Use Class A Concrete throughout. Bevel all exposed edges with a 3/4" triangular moulding. Reinforcing bars shall be bent around pipe. No deductions in concrete quantities shall be made for pipe openings.

At the contractor's option, Class A Concrete (AC) may be used throughout, but payment shall be made as Curb of Class A Concrete miscellaneous. A small opening may be required in the back of the inlet to drain a low area, if ordered by the Engineer. Reinforcing bars will extend through the opening. No deduction in concrete quantities will be made for this opening. When so ordered by the Engineer the top of the inlet shall be sloped slightly to approximately fit the ground line or other conditions. All exposed cast iron surfaces shall be painted either in the shop or in the field with one coat of a zinc dust paint, followed by two field coats of aluminum paint.

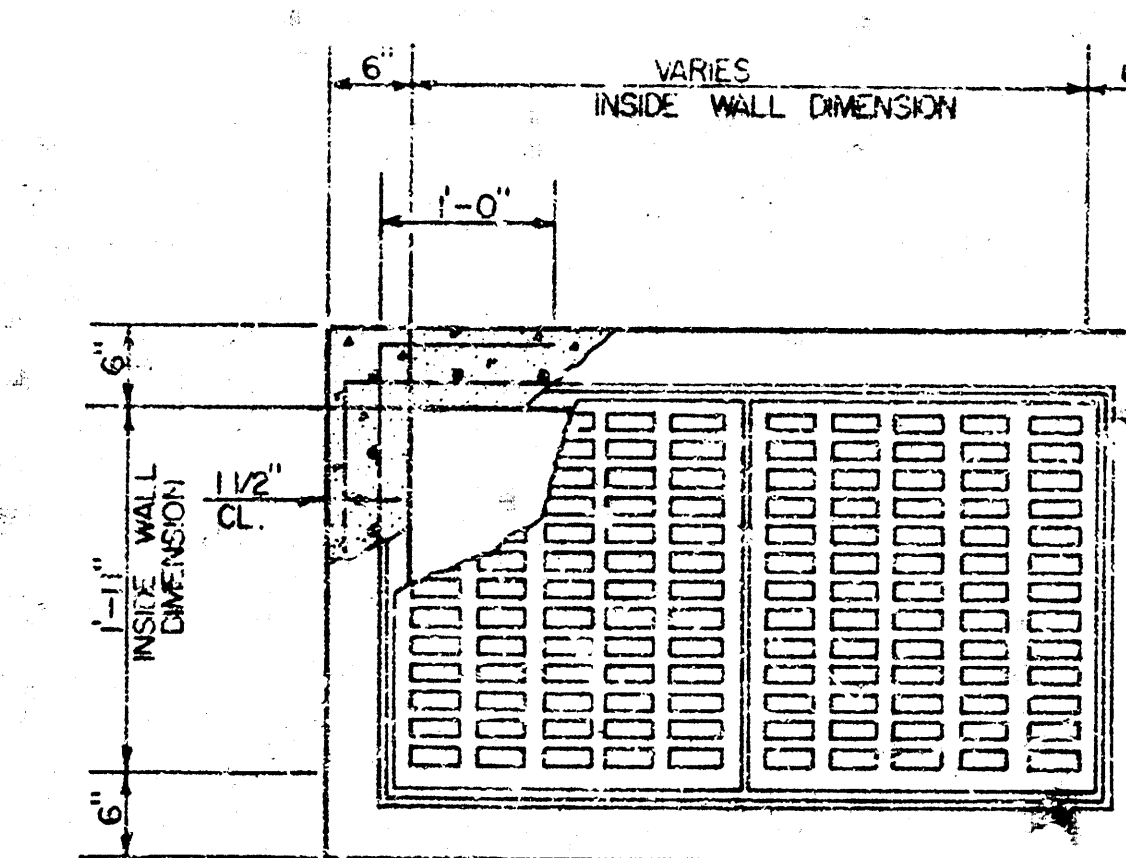
STANDARD MANHOLE, TYPE "C"



DROP MANHOLE, TYPE "C"

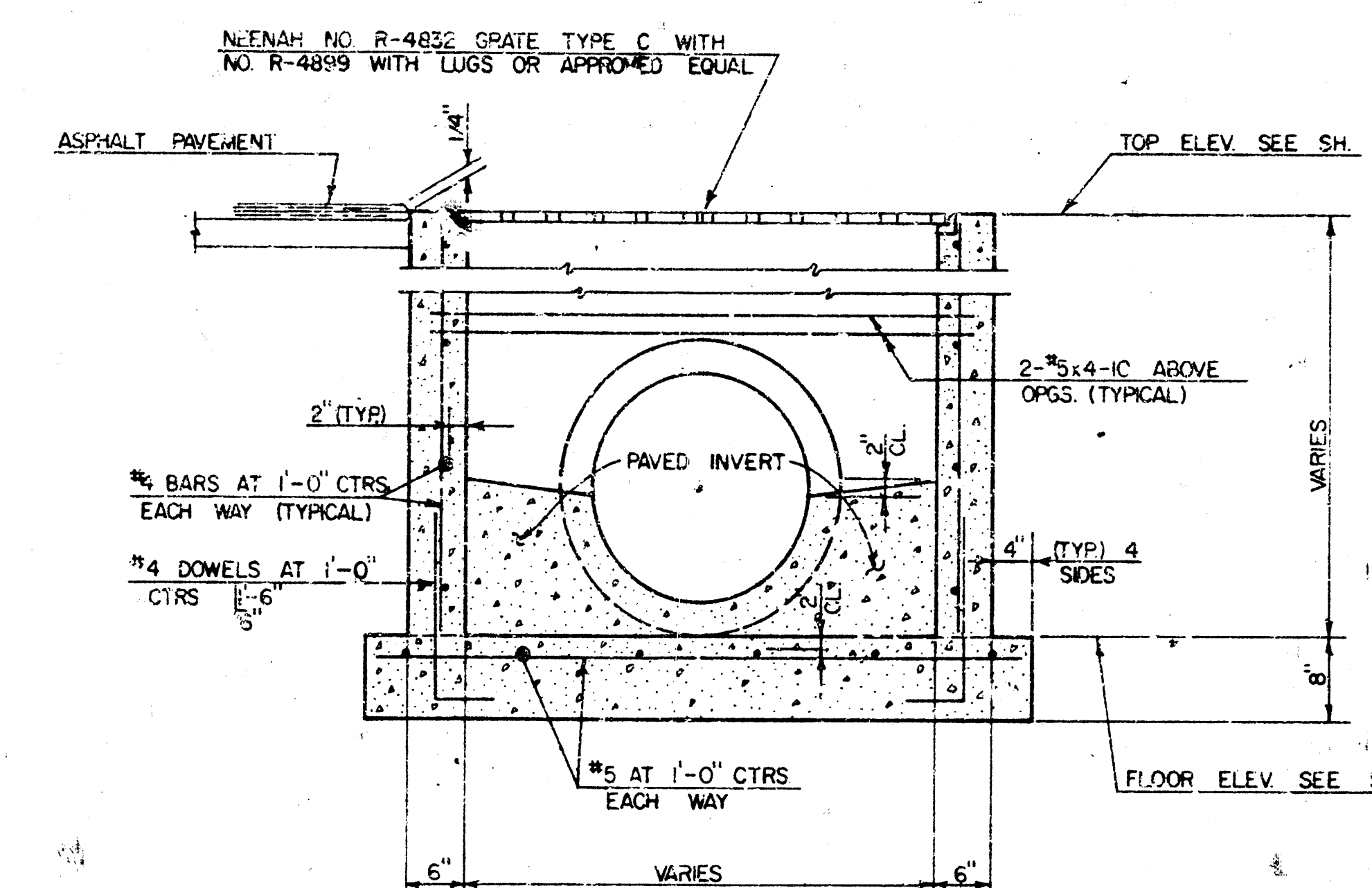


GENERAL NOTES
MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD.
STANDARD MANHOLES TYPE "C" AND STANDARD DROP MANHOLES TYPE "C" SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED.
OUTSIDE DROP MANHOLES TYPE "C" SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4 FT UNLESS INDICATED OTHERWISE. MANHOLES WITH PIPE SIZES LARGER THAN 24" SHALL BE 5 FT DIAMETER.
THE FLOORS OF ALL MANHOLES SHALL BE SHAPED TO INCREASE HYDRAULIC EFFICIENCY USING 8 SACK SAND MIX CONCRETE.
CAST IN PLACE CIRCULAR CONCRETE MANHOLES ARE TO BE CONSTRUCTED ONLY ON SEWERS NOT SUBJECT TO DETERIORATION OF CONCRETE DUE TO FORMATION OF HYDROGEN SULFIDE GAS AND IN LOCATIONS WHERE IT IS OBVIOUS THAT ANY ADJUSTMENT OF THE MANHOLE TOP ELEVATION WHICH MAY BE NECESSARY WILL NOT REQUIRE MODIFICATION OF THE CONCRETE BARREL.



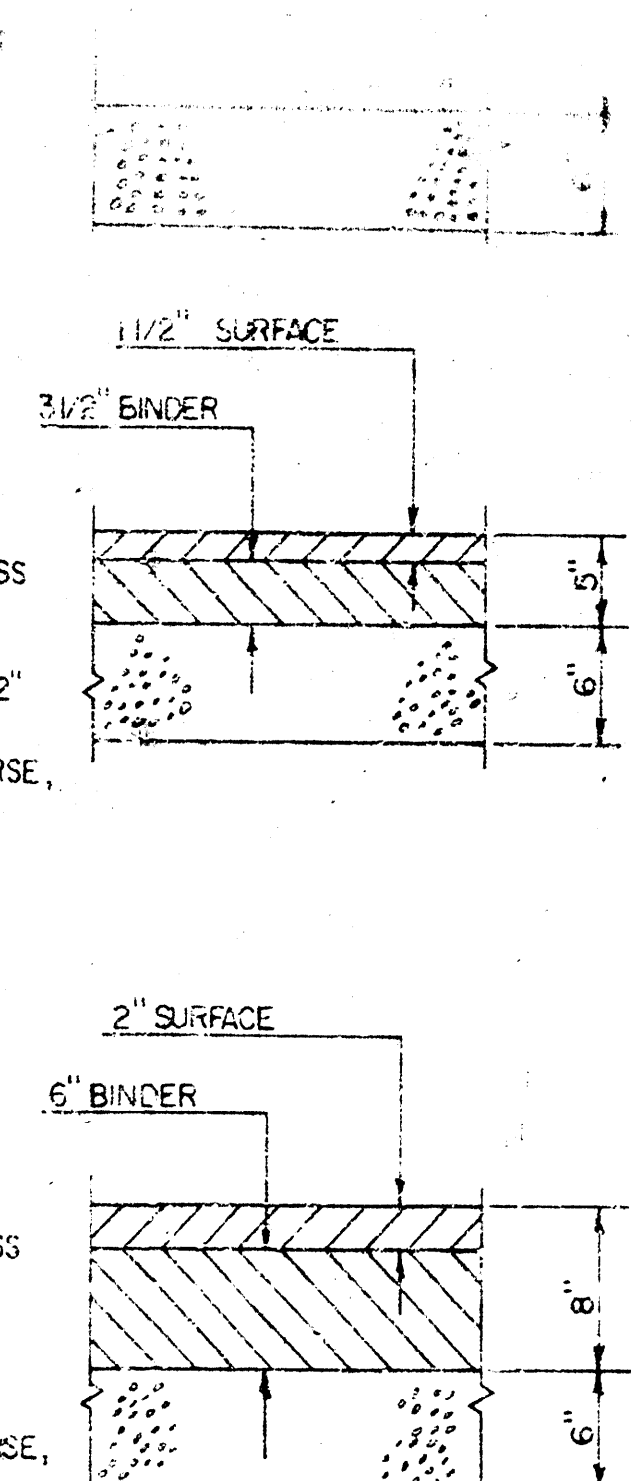
AREA INLET SCHEDULE	
TYPE I	INSIDE WIDTH - 1'-11"
TYPE II	INSIDE WIDTH - 3'-10 3/4"
TYPE III	INSIDE WIDTH - 5'-10 1/2"

PLAN

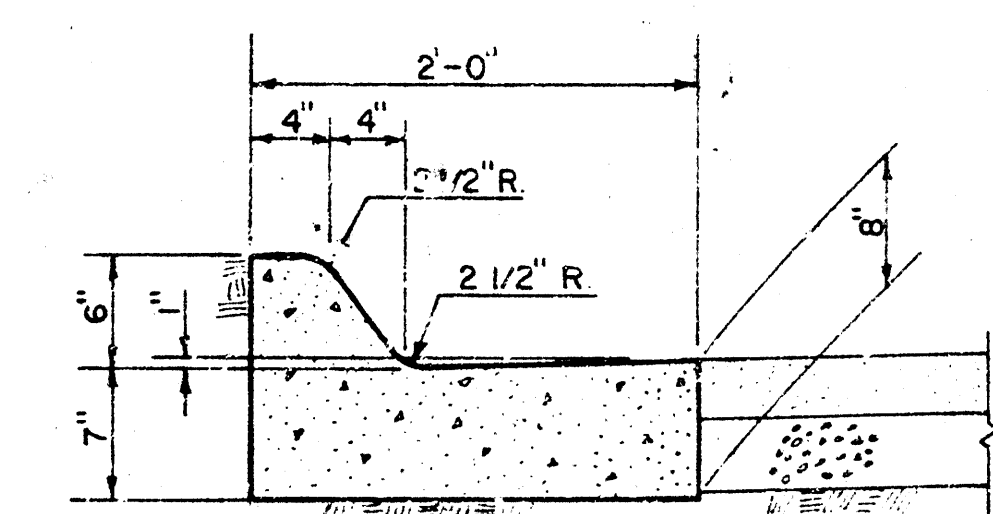


SECTION AREA INLET DETAIL

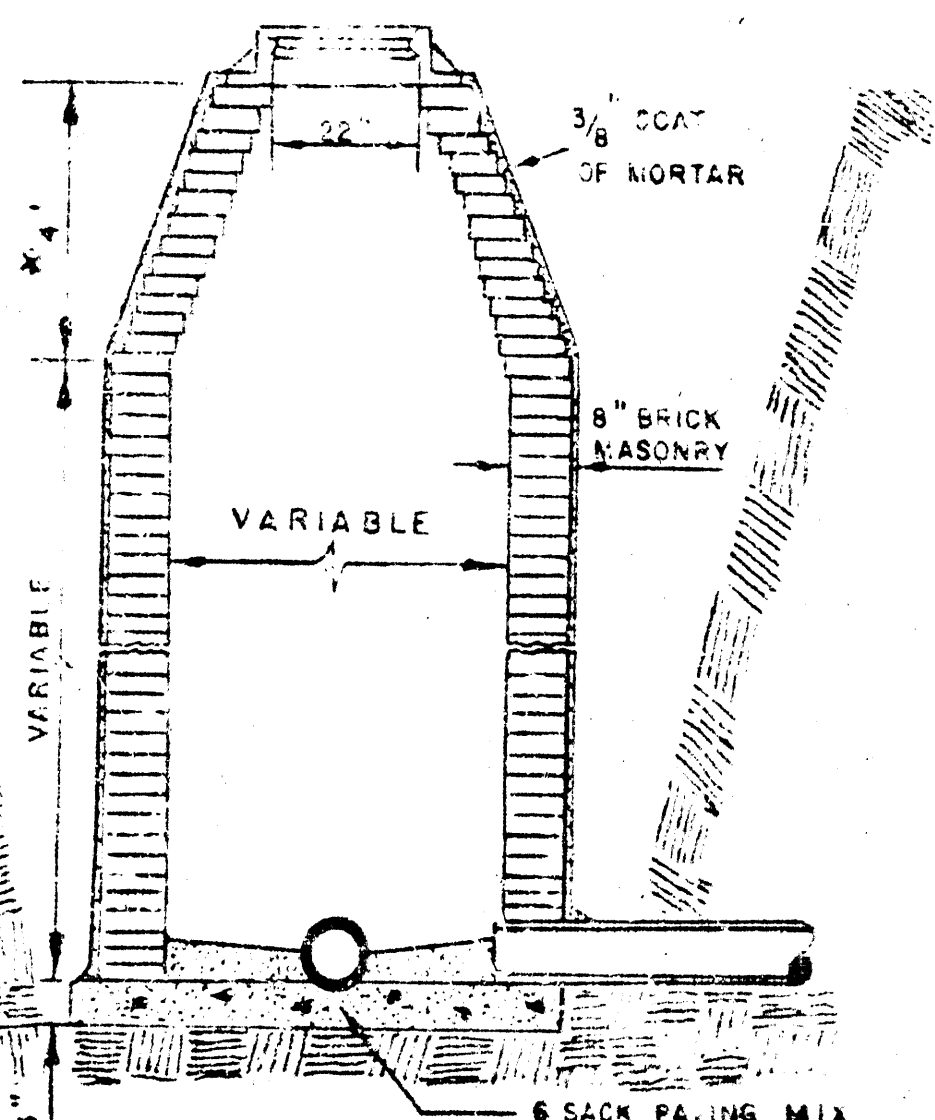
CONC. PAVEMENT PER DIV. 101.01
6" PORTLAND CEMENT CONCRETE
SUBGRADE - SIX (6) INCHES COMPACTED THICKNESS OF PORTLAND CEMENT TREATED SUBGRADE
PARKING LOT PAVEMENT
SUBGRADE - SIX (6) INCHES COMPACTED THICKNESS OF PORTLAND CEMENT TREATED SUBGRADE
BASE - CRUSHED AGGREGATE BASE COURSE, 3 1/2" COMPACTED THICKNESS
SURFACE - BITUMINOUS CONCRETE SURFACE COURSE, 1 1/2" COMPACTED THICKNESS



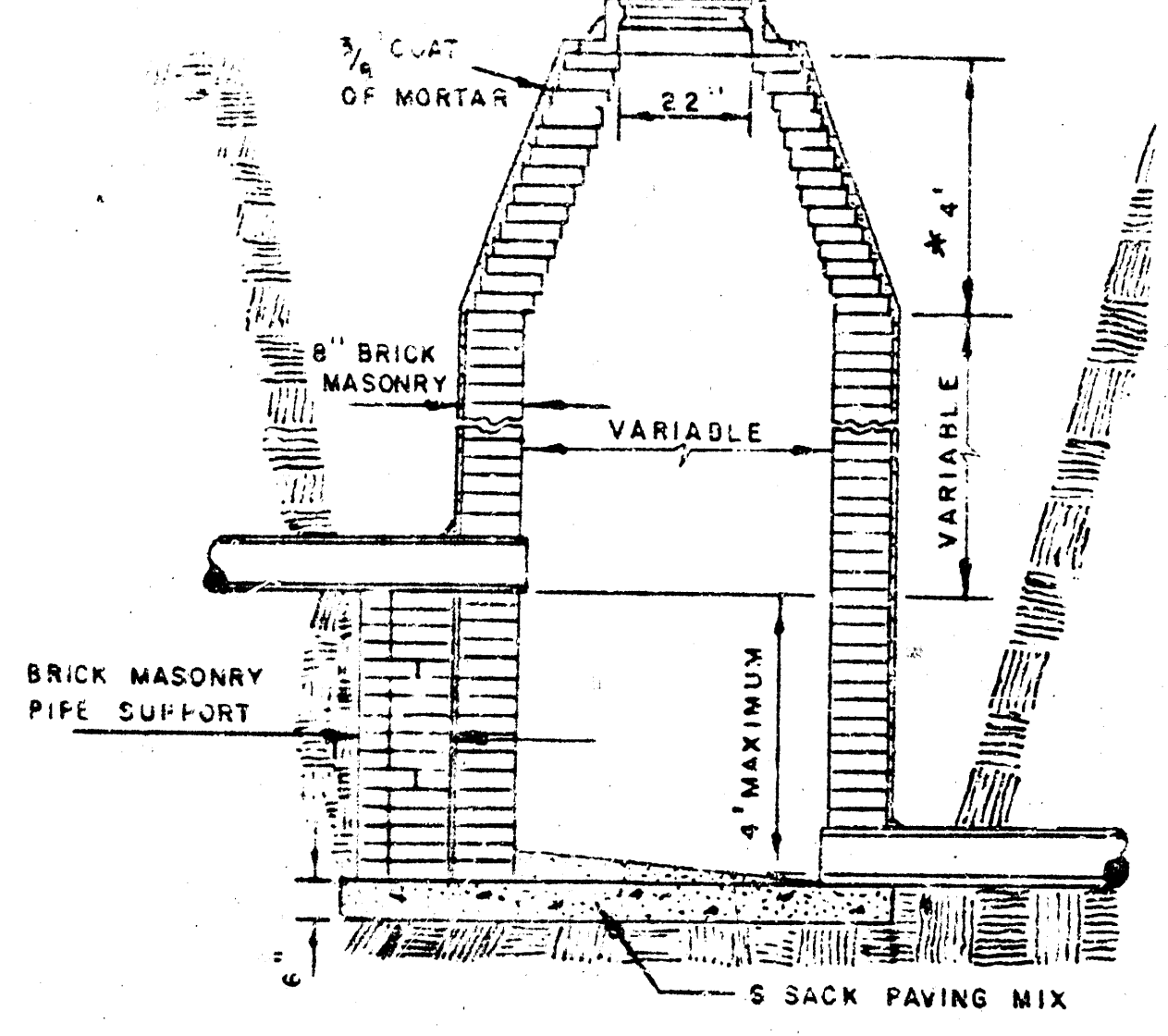
EXPANSION JOINT DETAIL



CURB AND GUTTER DETAIL



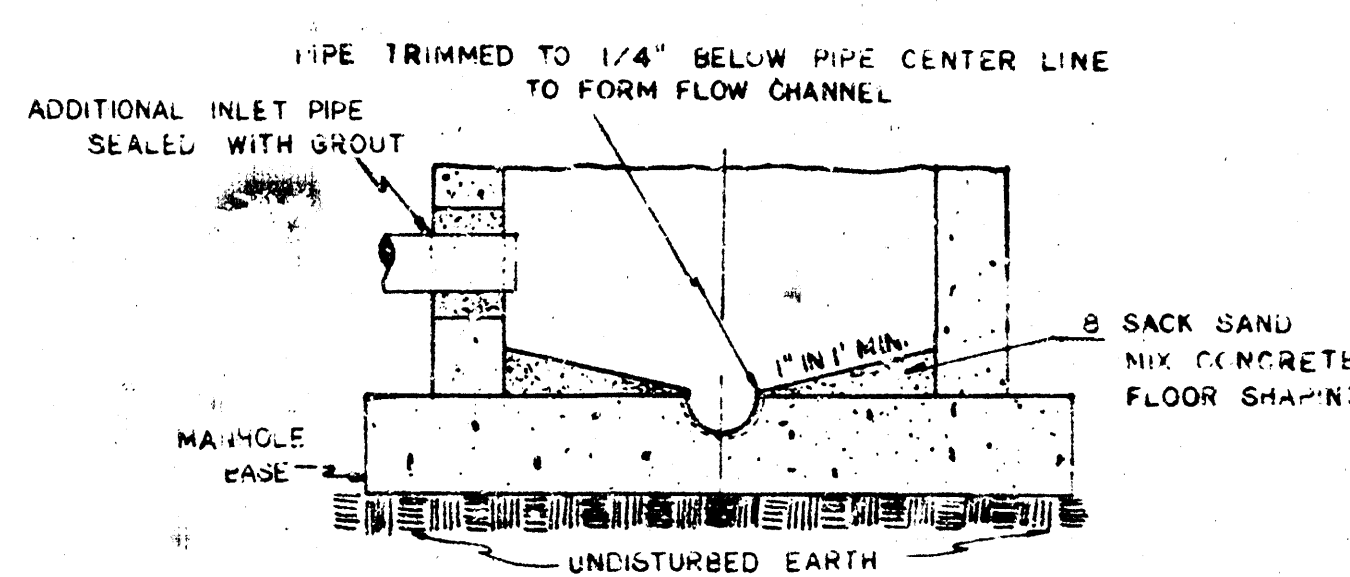
STANDARD MANHOLE TYPE "A"



DROP MANHOLE TYPE "A"

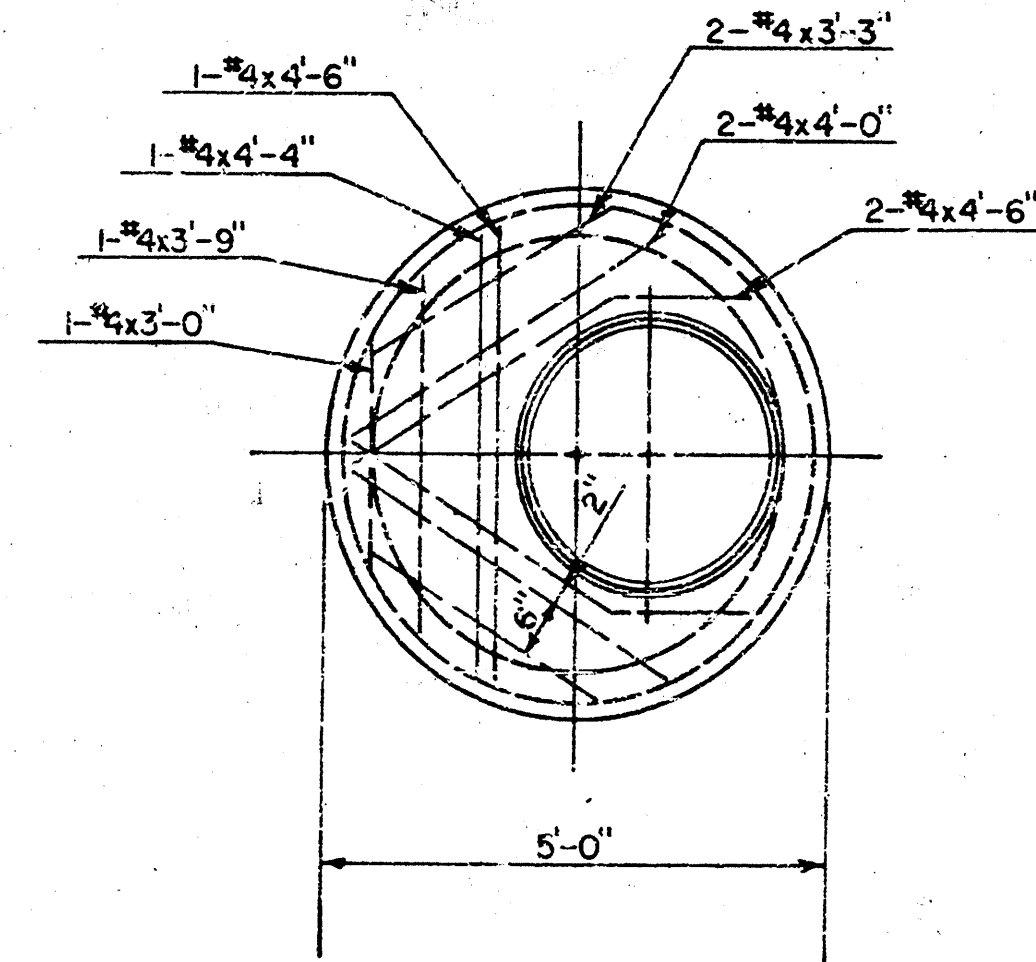
MANHOLES
THE CONCRETE USED FOR MORTAR IN MANHOLES SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD.
STANDARD MANHOLES AND DROP MANHOLES, REGARDLESS OF DIAMETER, SHALL BE BID AT ONE PRICE AS STANDARD MANHOLES.
SINGLE OR DOUBLE OUTSIDE DROP MANHOLES SHALL BE BID AT ONE PRICE AS OUTSIDE DROP MANHOLES.
ALL MANHOLES WITH PIPES LARGER THAN 24" SHALL BE 5' DIAMETER UNLESS OTHERWISE SPECIFIED ON PLAN. ALL M.H.'S WITH PIPES 24" & SMALLER SHALL BE 4' DIA.

NOTE: OPENING FOR INLET PIPE CUT IN MANHOLE WALL AND PIPE GROUTED IN PLACE WITH NON-SHRINKING GROUT. EXTERIOR OF COMPLETED CONNECTION TO BE SEALED WITH APPROVED COATING.

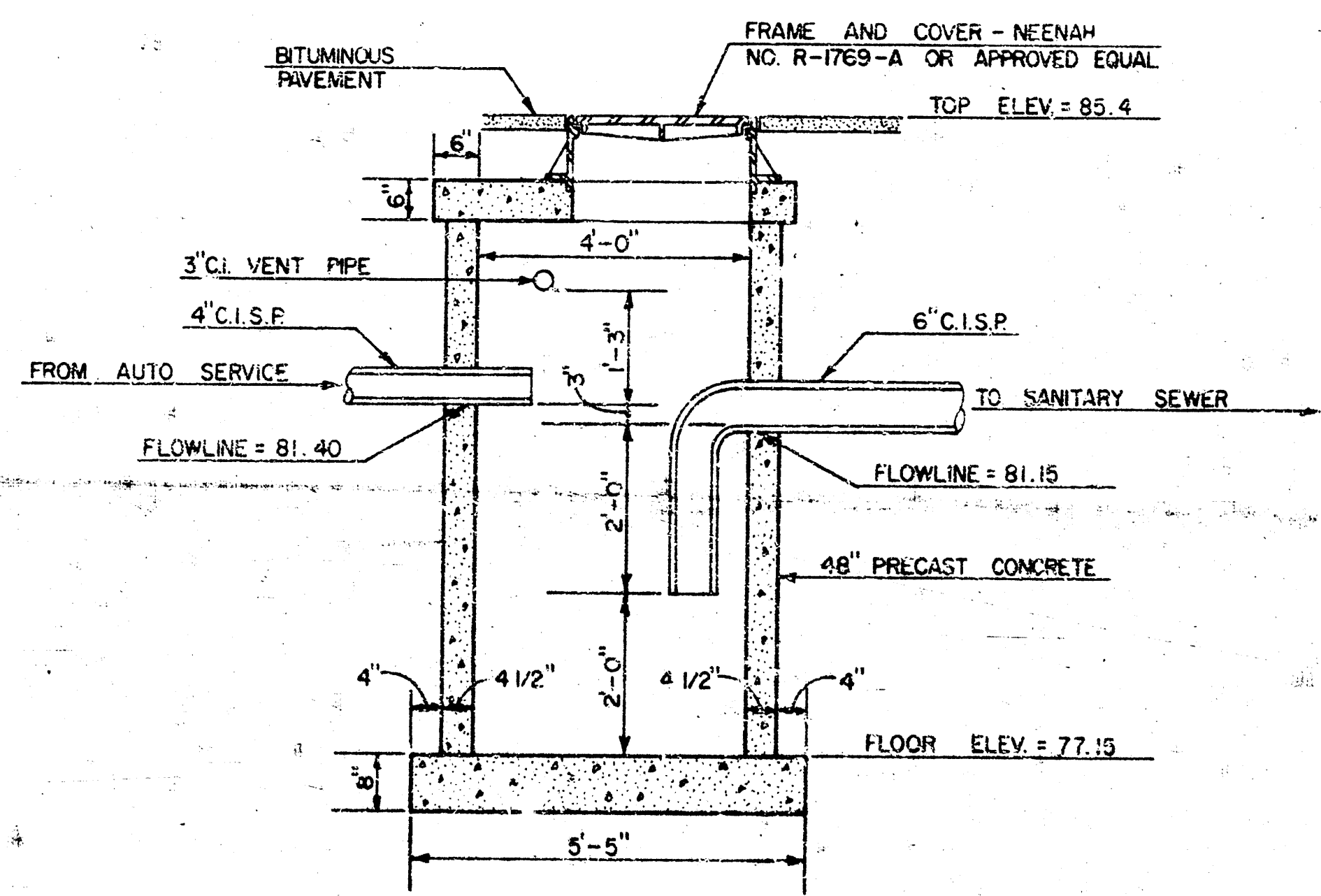


SECTIONAL ELEVATION-INVERT

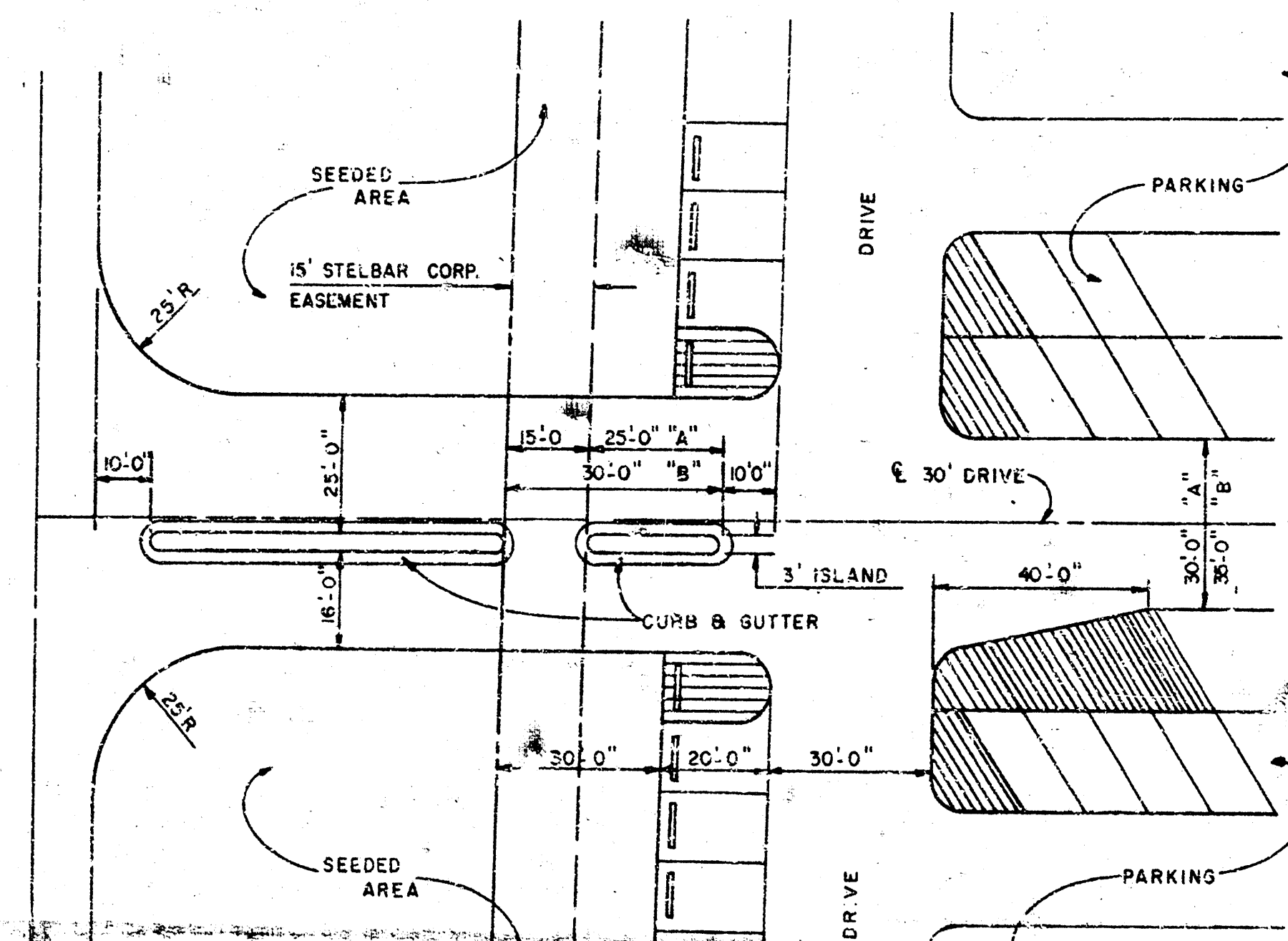
STORM SEWER SCHEDULE						
ST. NO.	TYPE	TOP ELEV.	FLOWLINE IN	FLOWLINE OUT	PIPE SIZE LENGTH & GRADE	PIPE CLASS & MATERIAL
AI-1	II	83.35		81.1	18" x 40.0' @ .6%	III R.C.P.
AI-2	III	82.85		80.1	24" x 38" - 200' @ .3%	III R.H.E.C.P.
AI-3	II	82.50	79.50	79.15	24" x 38" - 73' @ .375%	III R.H.E.C.P.
AI-4	I	82.50		80.00	18" x 35.0' @ .25%	"
AI-5	I	85.00		83.05	12" x 16.0' @ .5%	"
CI-1		85.20		79.7	12" x 14.0' @ .5%	"
CI-2		84.60	79.00	79.00	12" x 38.0' @ .5%	"
CI-3		85.00	82.20	81.95	18" x 13.0' @ .5%	"
CI-4		85.00	81.31	81.05	21" x 30.3' @ .5%	"
CI-5		81.70		76.94	29" x 45" x 239' @ .45%	III R.H.E.C.P.
MH-1	A or C	84.35	80.86	80.86	21" x 22.5' @ .5%	III R.C.P.
MH-2		81.33	79.50(N) 79.2(W)	79.00	27" x 42" x 140' @ .45%	III R.H.E.C.P.
MH-3		83.66	78.37(N) 79.2(W)	78.37	27" x 42" x 263' @ .45%	"
MH-4		83.00	77.2(N)	77.00	29" x 45" x 668' @ .45%	"
MH-5		81.00	75.63(W) 77.0(N)	75.63	29" x 45" x 45' @ .45%	"



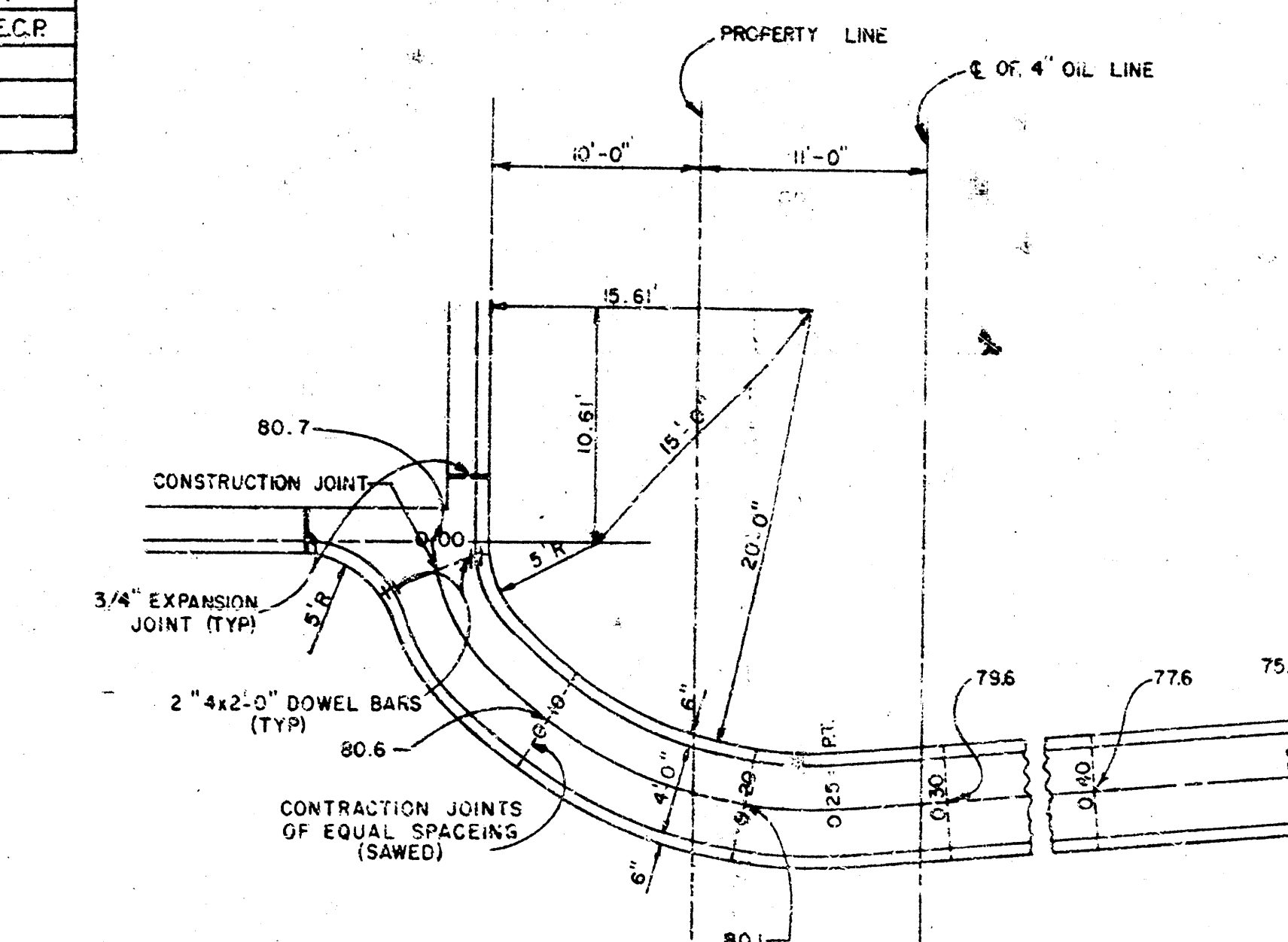
PLAN



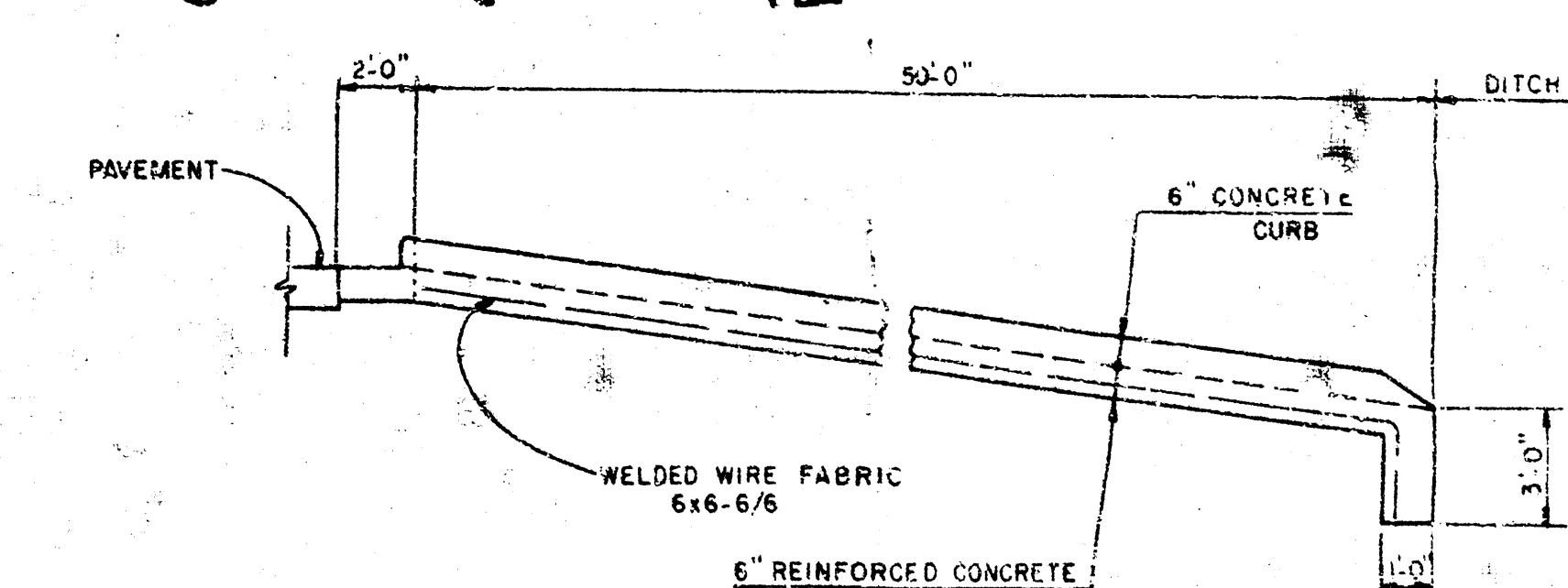
SECTION



DETAIL-DIVIDED ENTRANCE



DETAIL- DRAINAGE FLUME



PROFILE- DRAINAGE FLUME

