

| ROUND PIPE | | | HORIZONTAL ELLIPTICAL PIPE | | | |
|------------------------|-------------------------------|----------------------------------|----------------------------|-------------------------------|----------------------------------|-------|
| PIPE DIAMETER (INCHES) | PAVING WIDTH OF TRENCH (FEET) | PAY-QUANTITIES (CU. YD. PER FT.) | PIPE DIMENSIONS (INCHES) | PAVING WIDTH OF TRENCH (FEET) | PAY-QUANTITIES (CU. YD. PER FT.) | |
| 4 | 3.0 | 3.28 | | | | |
| 6 | 3.0 | 3.59 | | | | |
| 8 | 3.0 | 3.87 | | | | |
| 10 | 3.0 | 4.09 | | | | |
| 12 | 3.0 | 4.25 | | | | |
| 15 | 3.0 | 5.55 | | | | |
| 18 | 3.0 | 5.77 | 14 x 23 | 41 | 3.42 | 5.94 |
| 21 | 3.0 | 6.81 | | | | |
| 24 | 3.0 | 7.39 | 19 x 30 | 49 | 4.08 | 7.68 |
| 27 | 4.5 | 8.18 | 22 x 34 | 53 | 4.42 | 8.61 |
| 30 | 4.5 | 9.20 | 24 x 38 | 58 | 4.83 | 9.70 |
| 33 | 4.5 | 10.53 | 27 x 42 | 62 | 5.17 | 10.71 |
| 36 | 4.5 | 11.43 | 29 x 45 | 66 | 5.50 | 11.72 |
| 39 | 4.5 | 13.34 | 32 x 49 | 71 | 5.92 | 13.14 |
| 42 | 6.3 | 13.36 | 34 x 53 | 75 | 6.25 | 14.05 |
| 45 | 7.0 | 15.67 | 36 x 60 | 83 | 6.92 | 16.18 |
| 54 | 7.7 | 18.15 | 43 x 68 | 92 | 7.67 | 18.61 |
| 60 | 8.4 | 20.73 | 48 x 76 | 101 | 8.42 | 21.58 |
| 66 | 9.1 | 23.45 | 53 x 83 | 109 | 9.08 | 24.35 |
| 72 | 9.8 | 26.37 | 58 x 91 | 118 | 9.83 | 27.45 |
| 78 | 10.5 | 29.39 | 63 x 98 | 128 | 10.50 | 30.50 |
| 84 | 11.2 | 32.57 | 68 x 106 | 135 | 11.25 | 33.91 |
| 90 | 11.9 | 35.90 | 72 x 113 | 143 | 11.92 | 36.93 |
| 96 | 12.6 | 39.37 | 77 x 121 | 152 | 12.67 | 40.69 |
| 102 | 13.3 | 42.99 | 82 x 128 | 160 | 13.33 | 44.45 |
| 108 | 14.0 | 46.75 | 87 x 136 | 168 | 14.00 | 47.79 |
| 114 | 14.7 | 50.66 | 92 x 143 | 176 | 14.67 | 51.70 |
| 120 | 15.4 | 54.72 | 97 x 151 | 185 | 15.42 | 56.01 |
| 126 | 16.1 | 58.92 | 106 x 166 | 202 | 16.83 | 64.48 |
| 132 | 16.8 | 63.27 | 116 x 180 | 218 | 18.17 | 73.59 |
| 144 | 18.2 | 72.40 | | | | |

TABLE 1
PAVING WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. B.E.B. Ch. J.C.K. 1992 SHEET 1

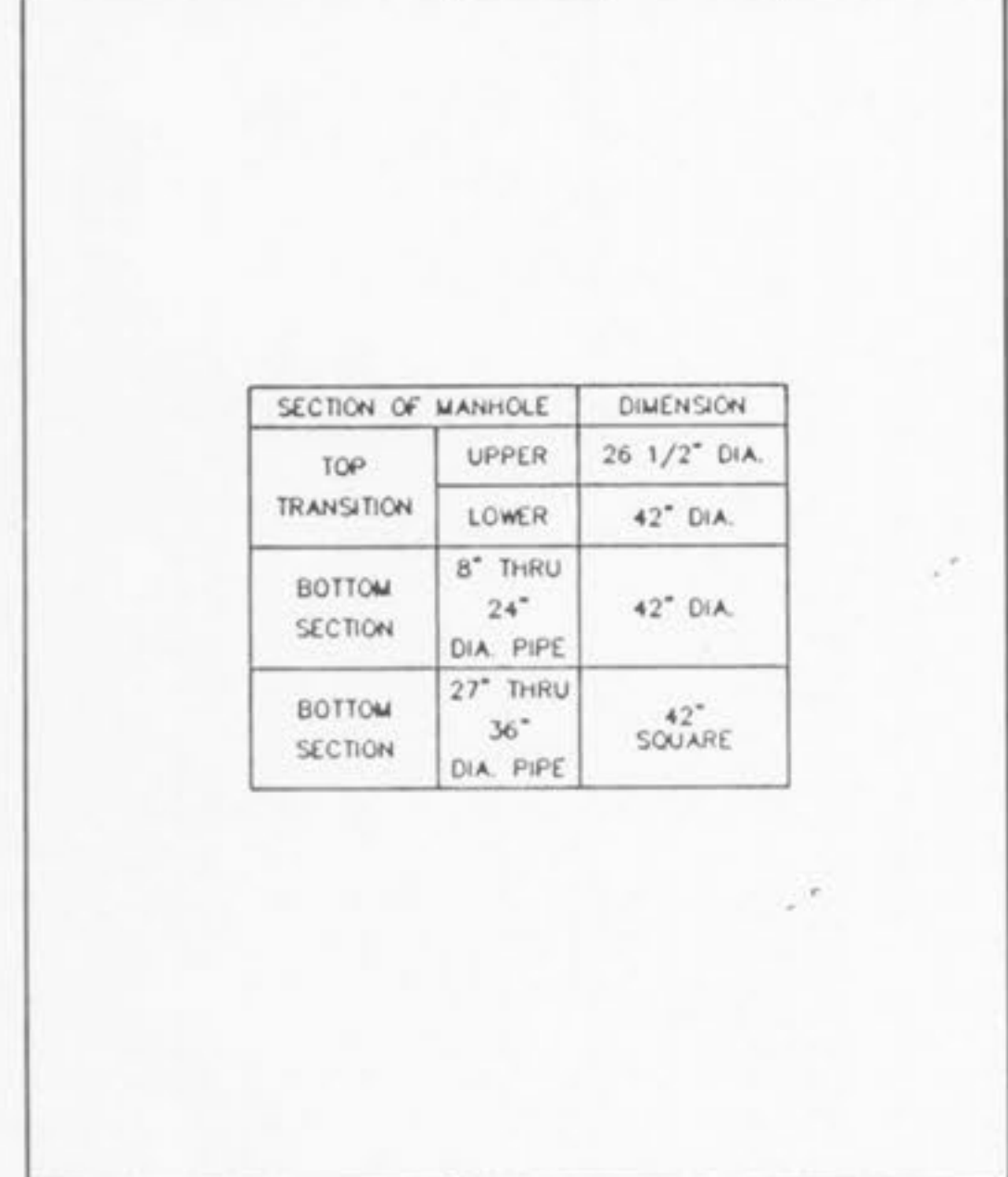
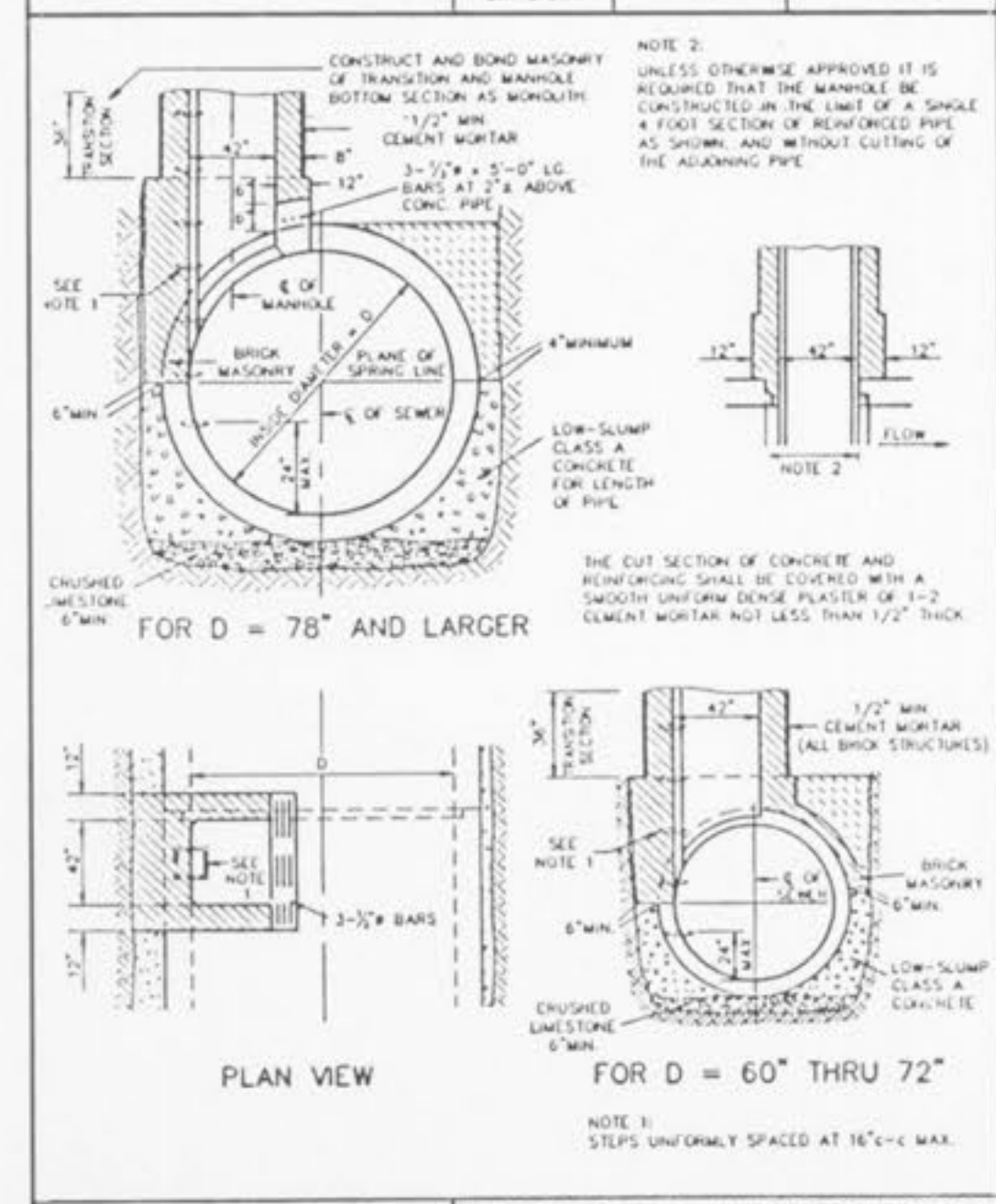
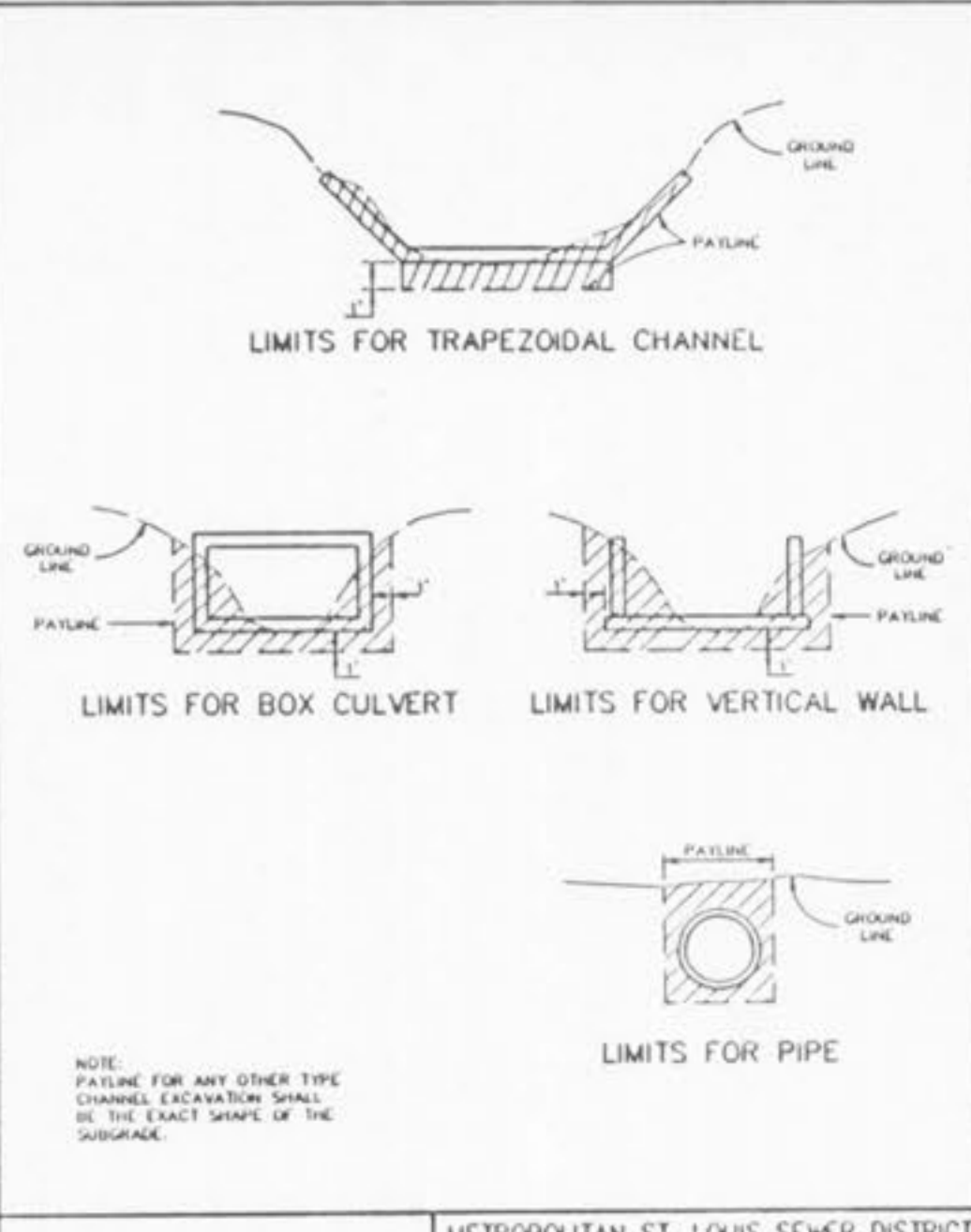


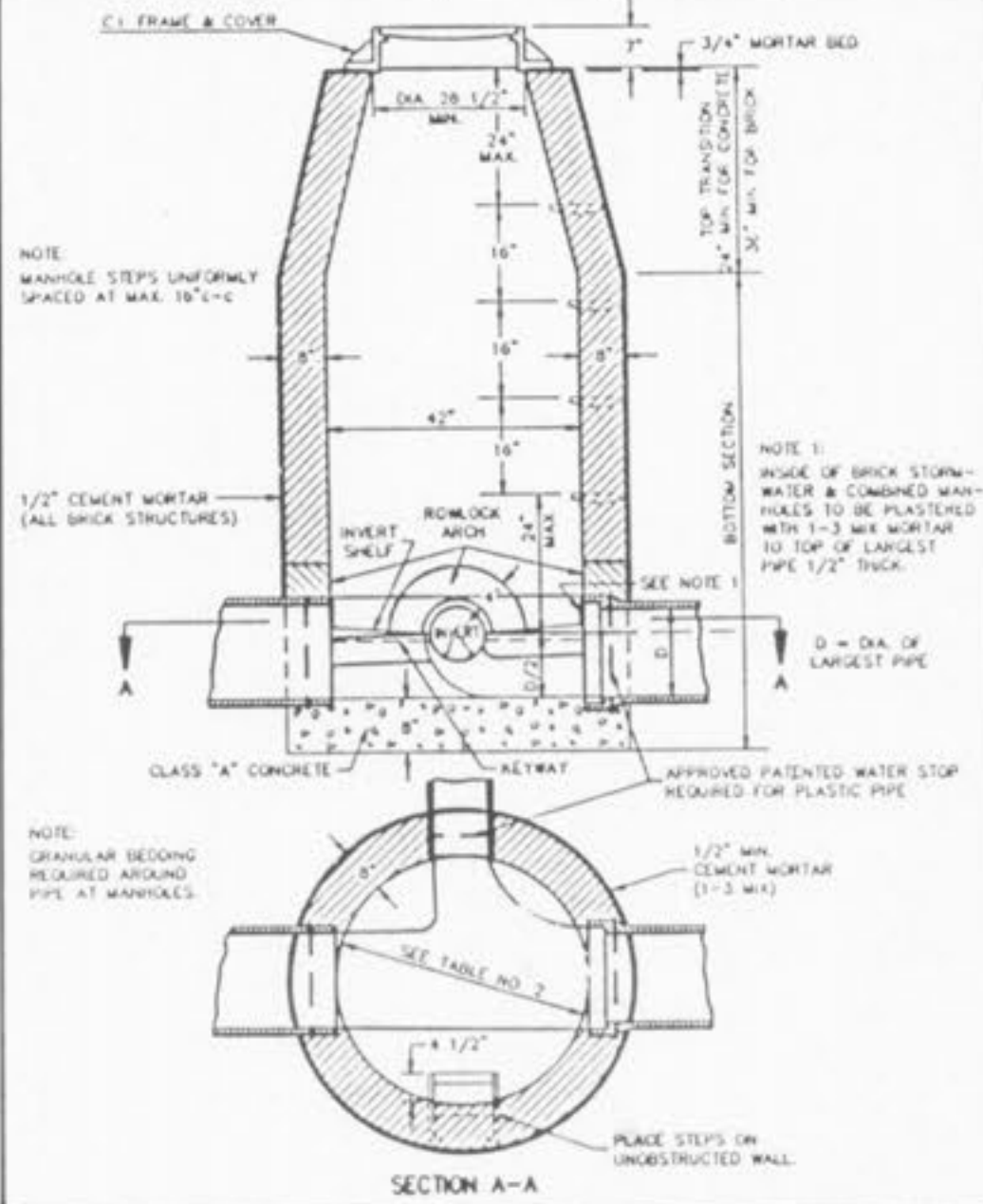
TABLE NO. 2
STANDARD MANHOLE DIMENSIONS
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. R.C.W. Ch. J.C.K. 1992 SHEET 7



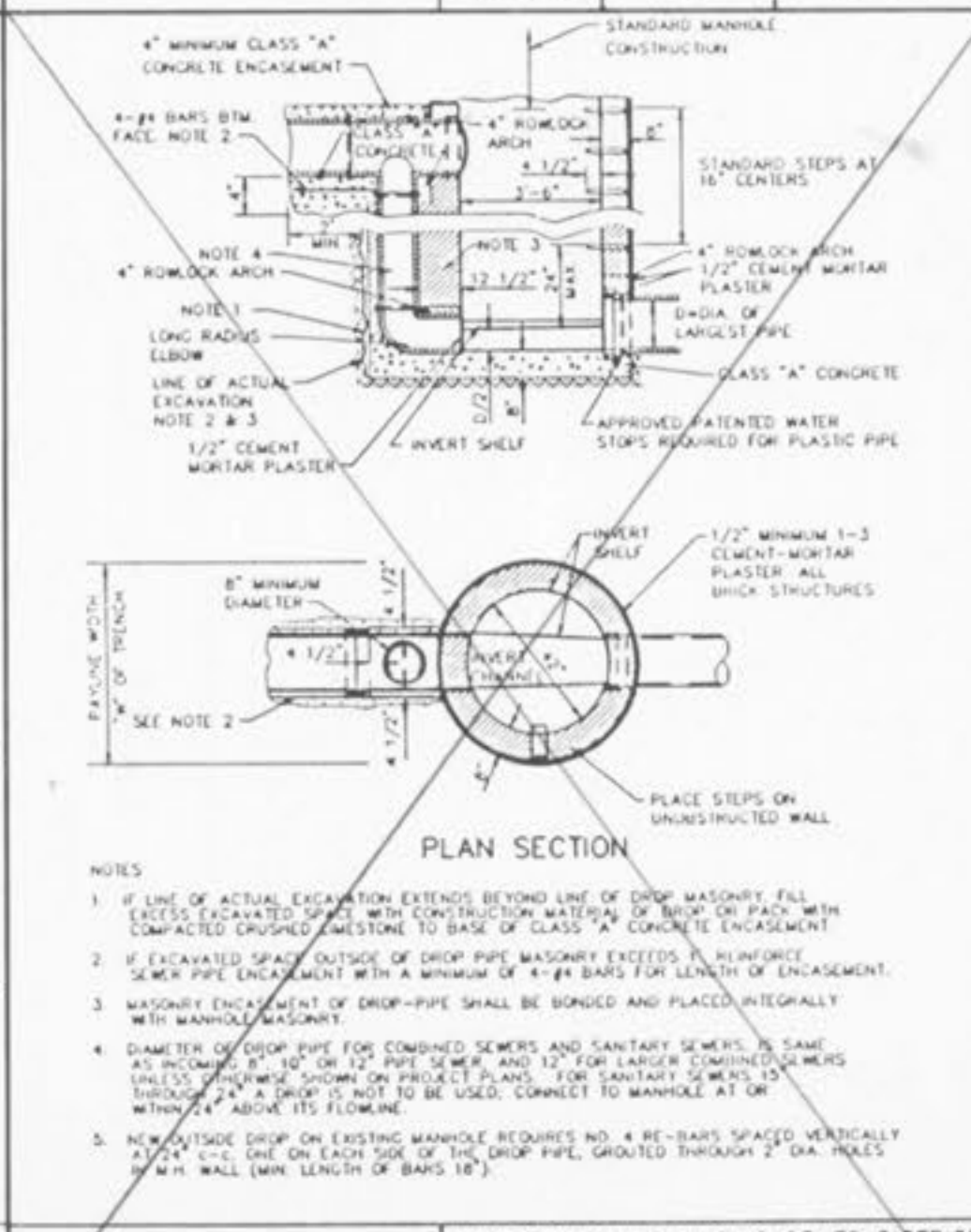
TYPICAL MANHOLE BASE REINFORCED CONCRETE PIPE SEWERS 60" AND LARGER IN DIAMETER
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 13



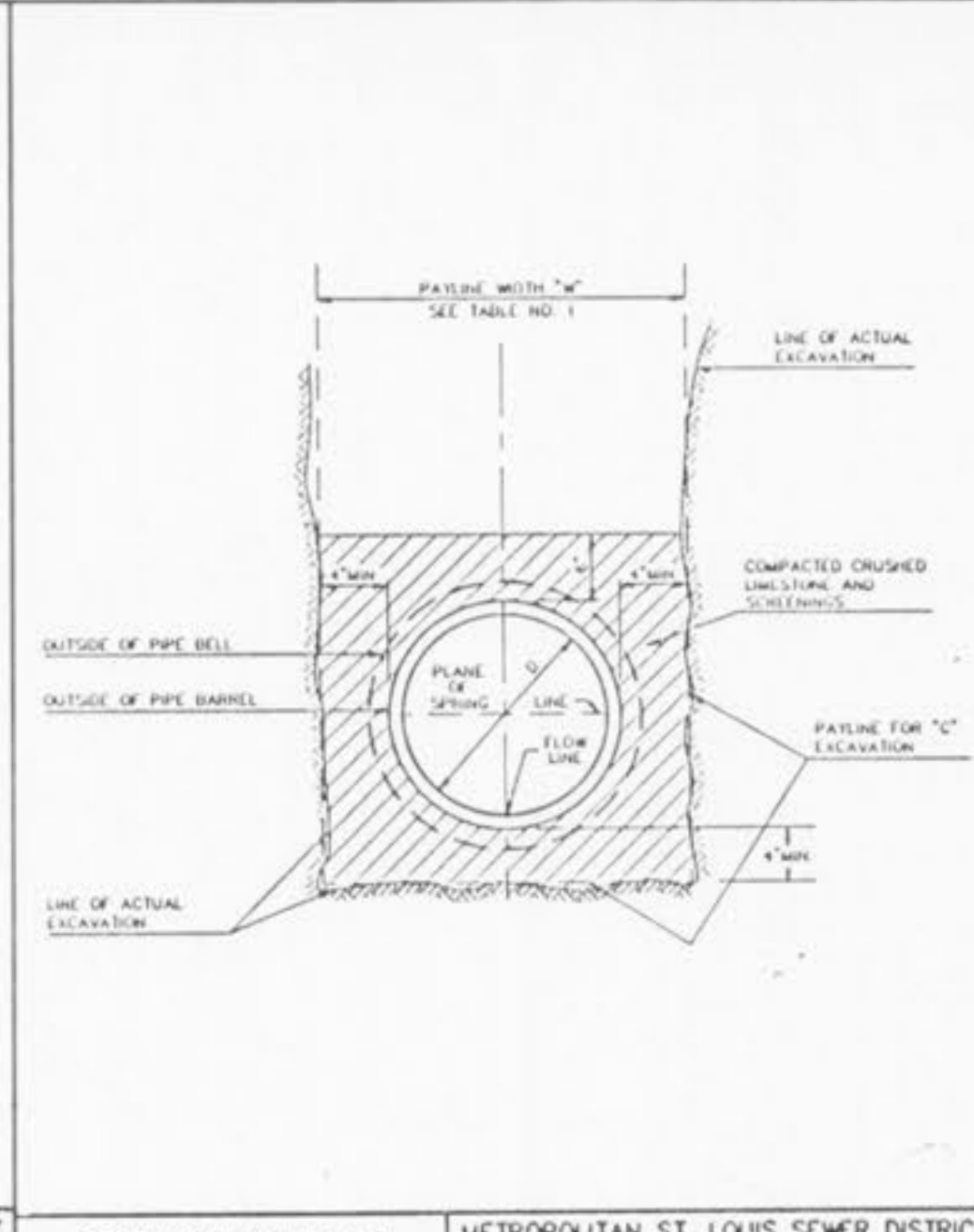
PAYLINE LIMITS FOR EXCAVATION
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 2



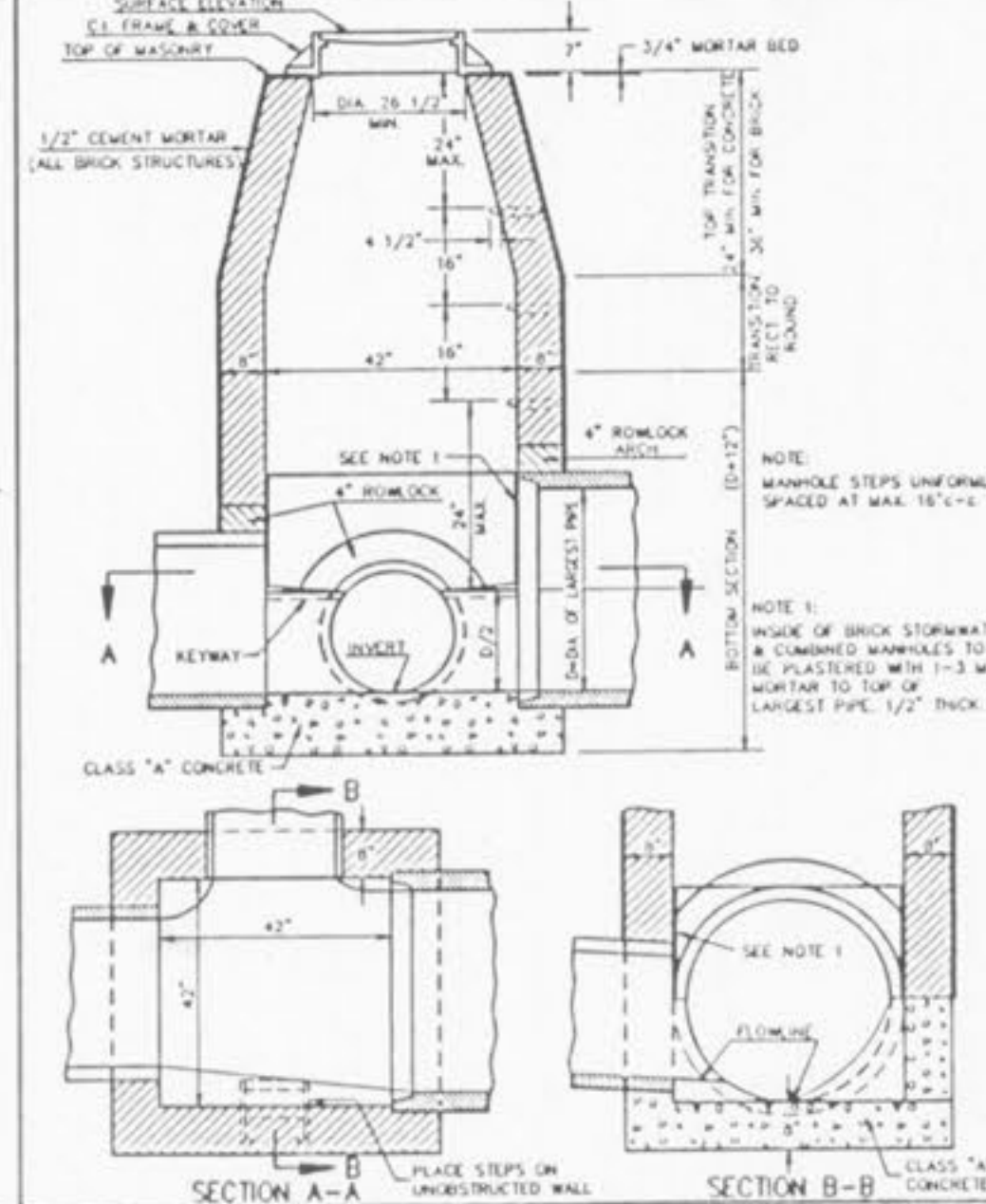
LINE MANHOLE PIPE SEWERS 8"-24" DIA.
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 8



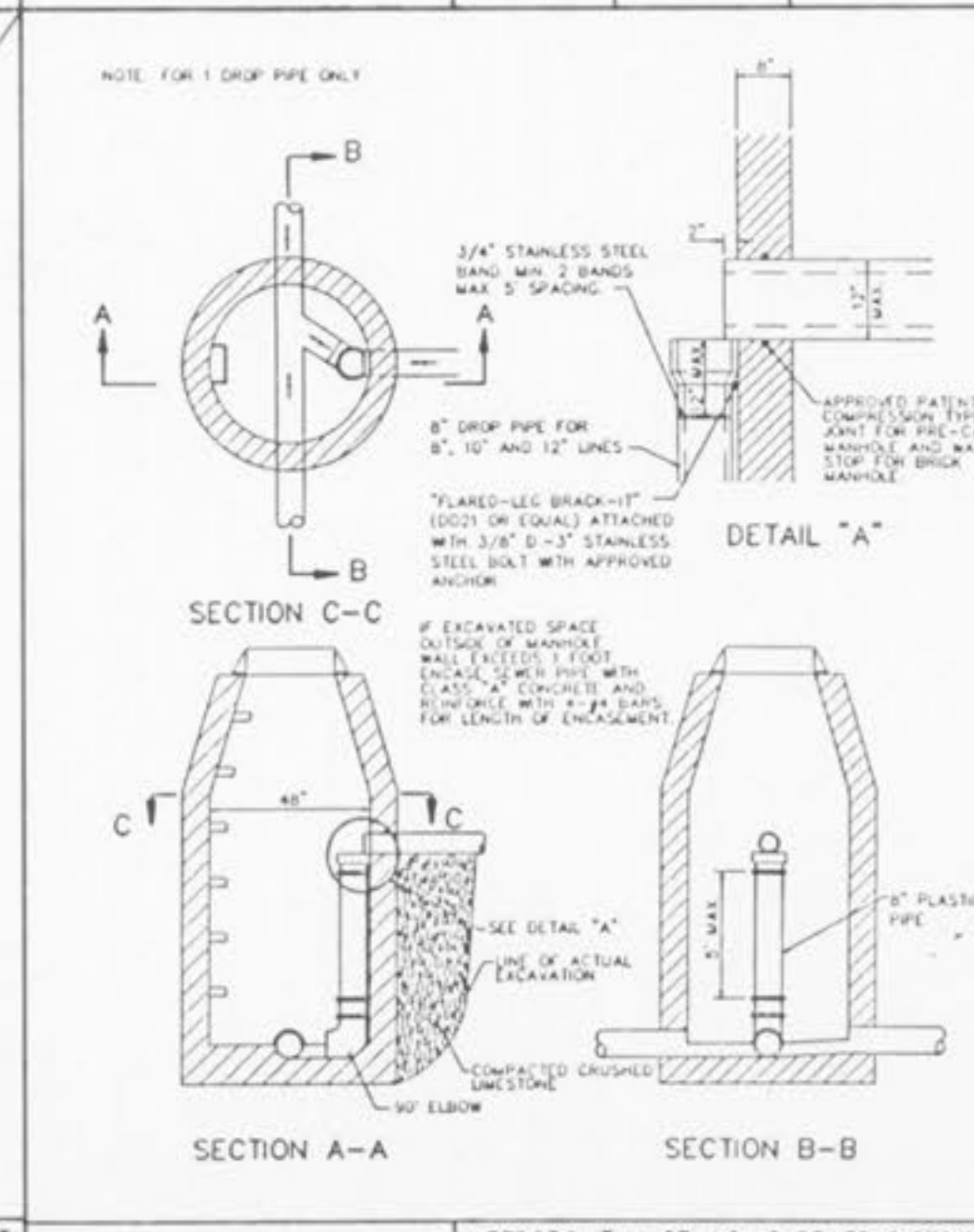
OUTSIDE FOULWATER DROP MANHOLE
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. R.C.W. Ch. J.C.K. 1992 SHEET 14



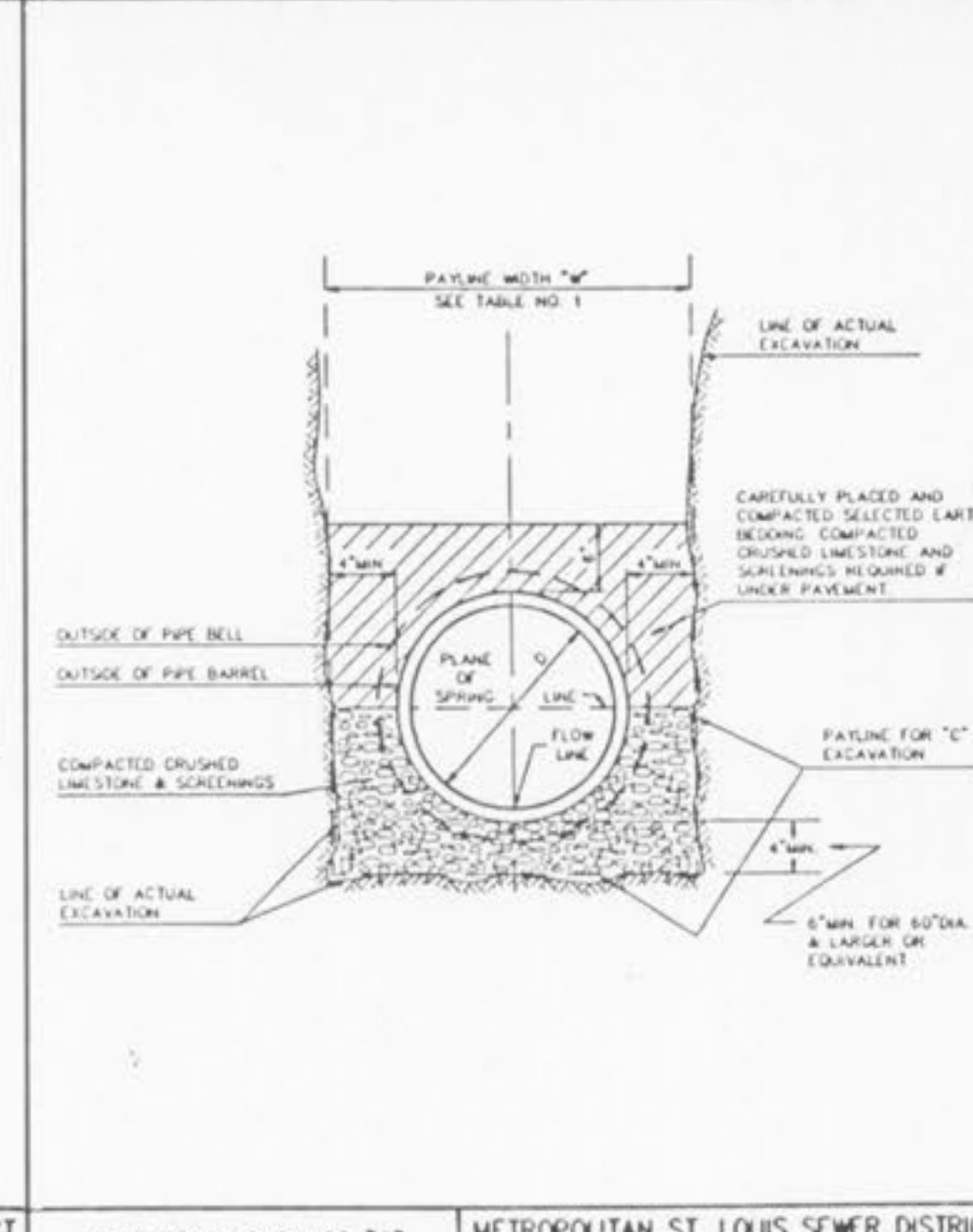
PIPE BEDDING CLASS "C" (FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 3



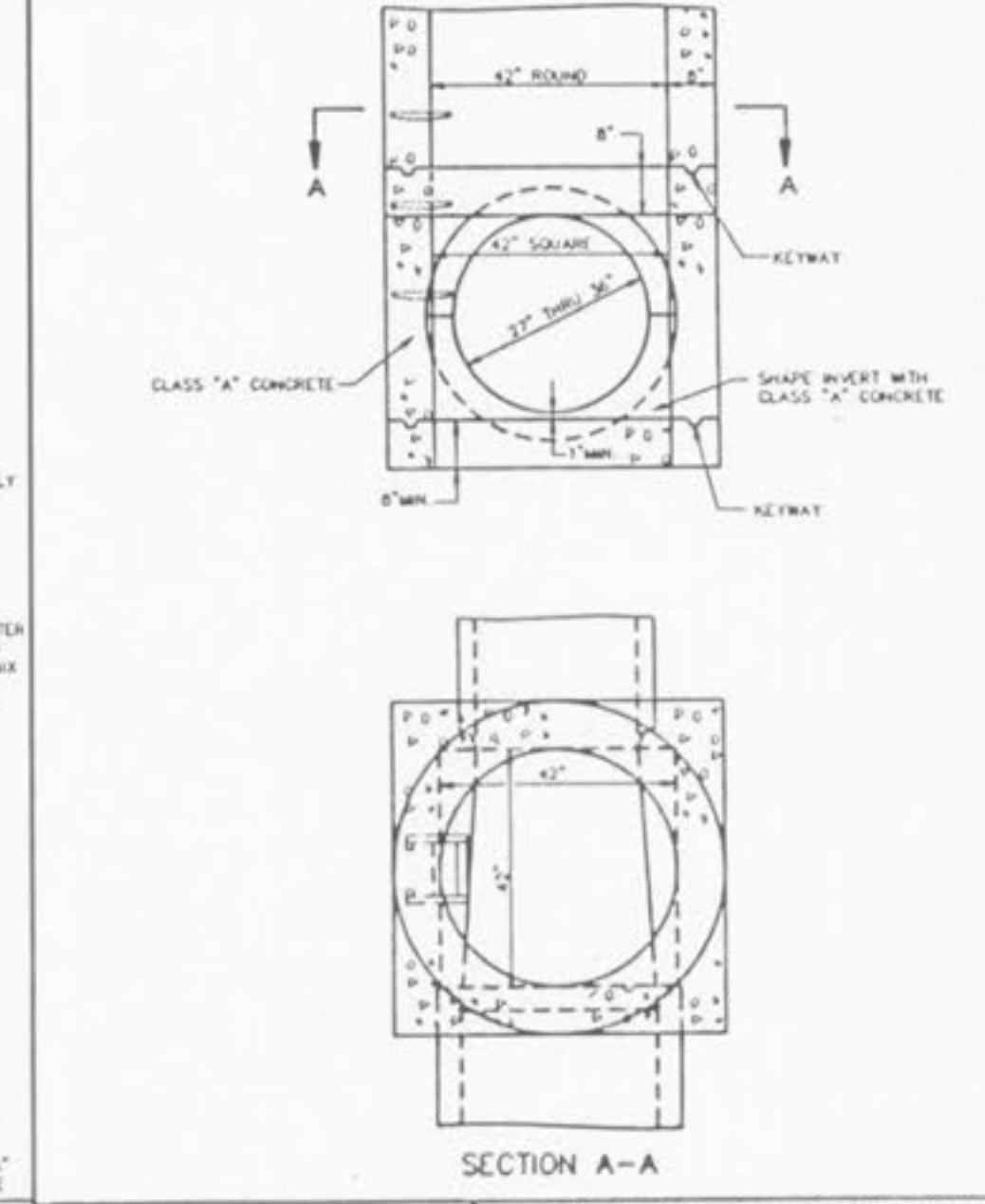
TYPICAL LINE MANHOLE ON PIPE SEWER 27" THRU 36" IN DIAMETER
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 9



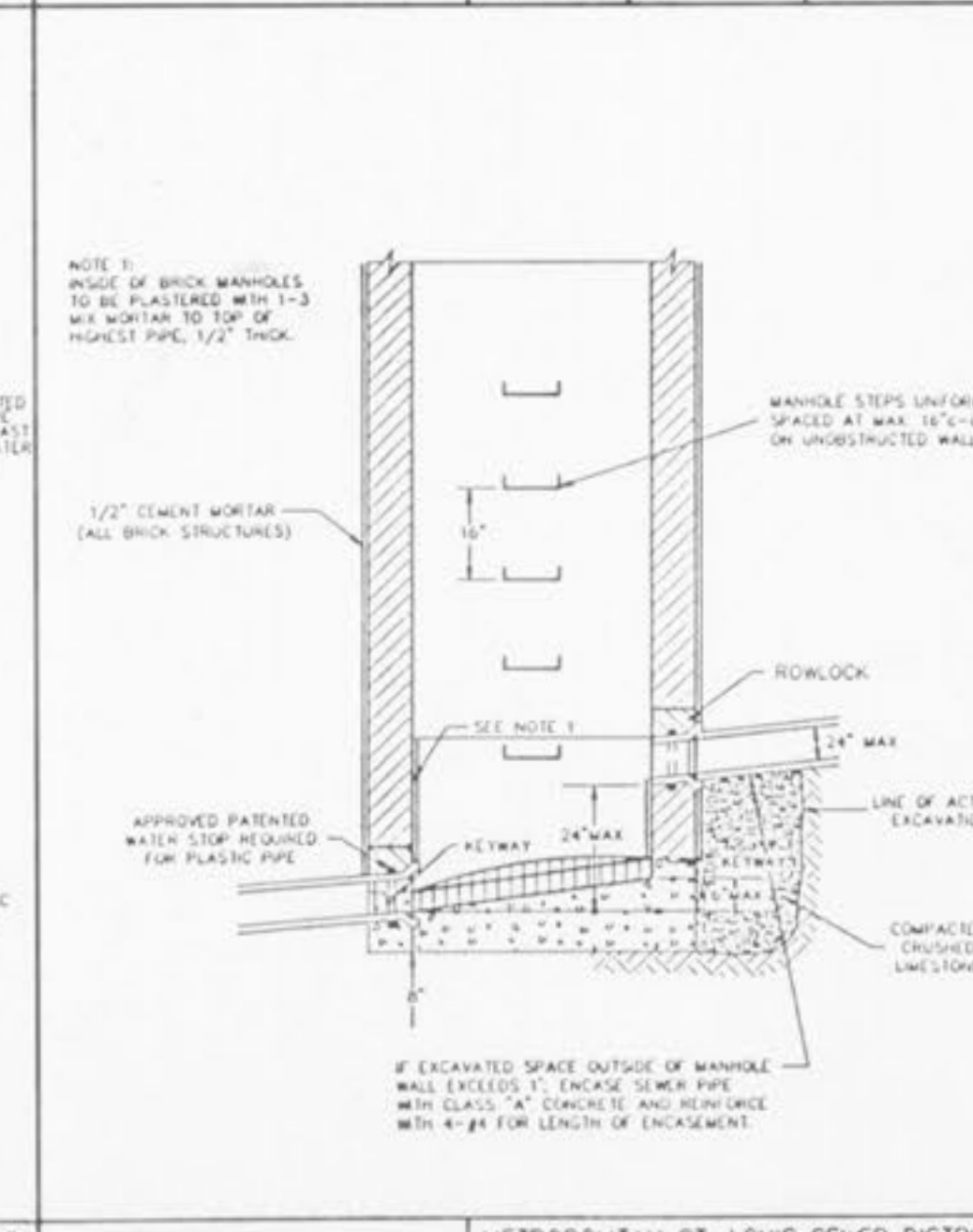
INSIDE FOULWATER DROP MANHOLE
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. R.C.W. Ch. J.C.K. 1992 SHEET 15



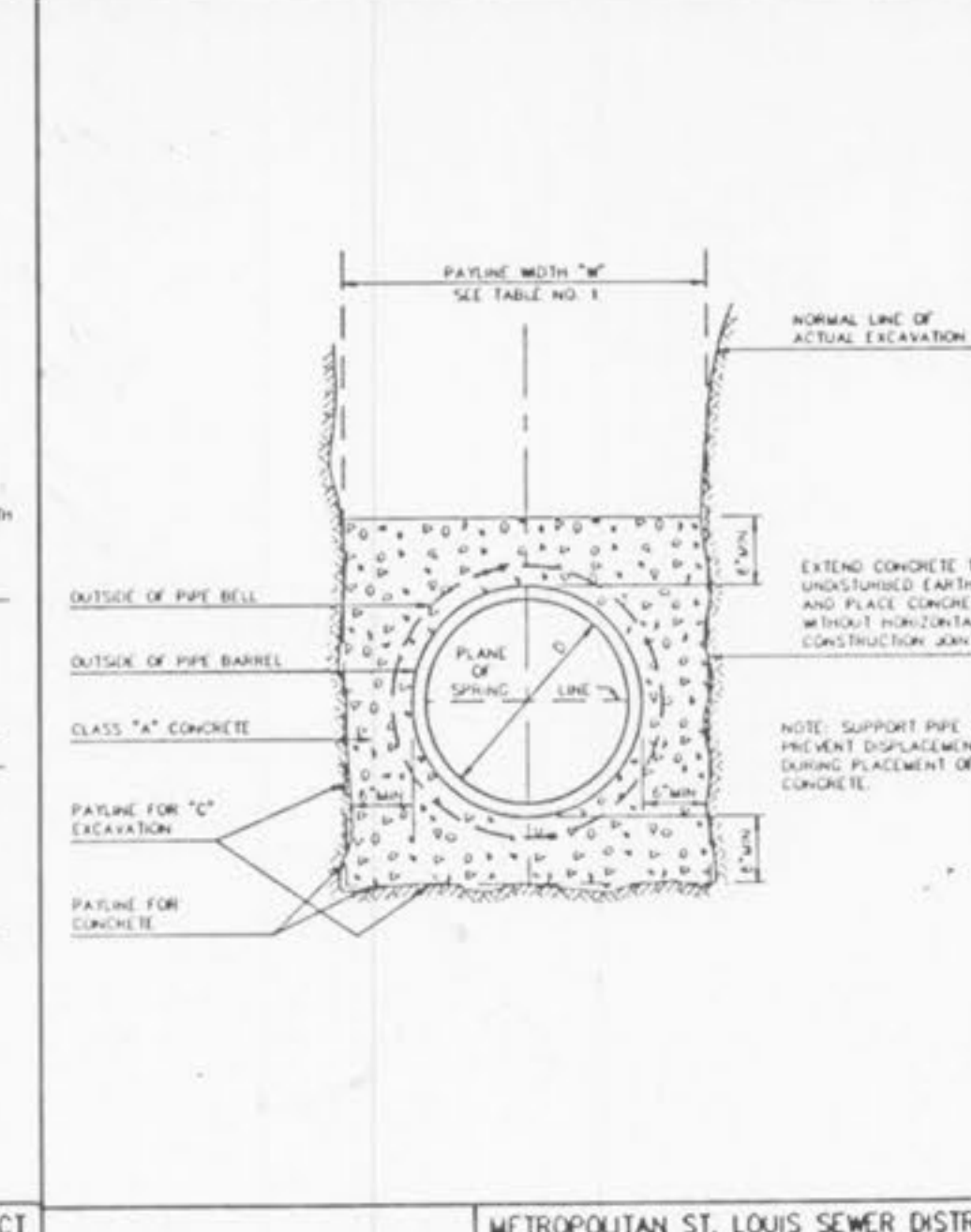
PIPE BEDDING CLASS "C" (MODIFIED FOR REINFORCED CONCRETE PIPE)
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 4



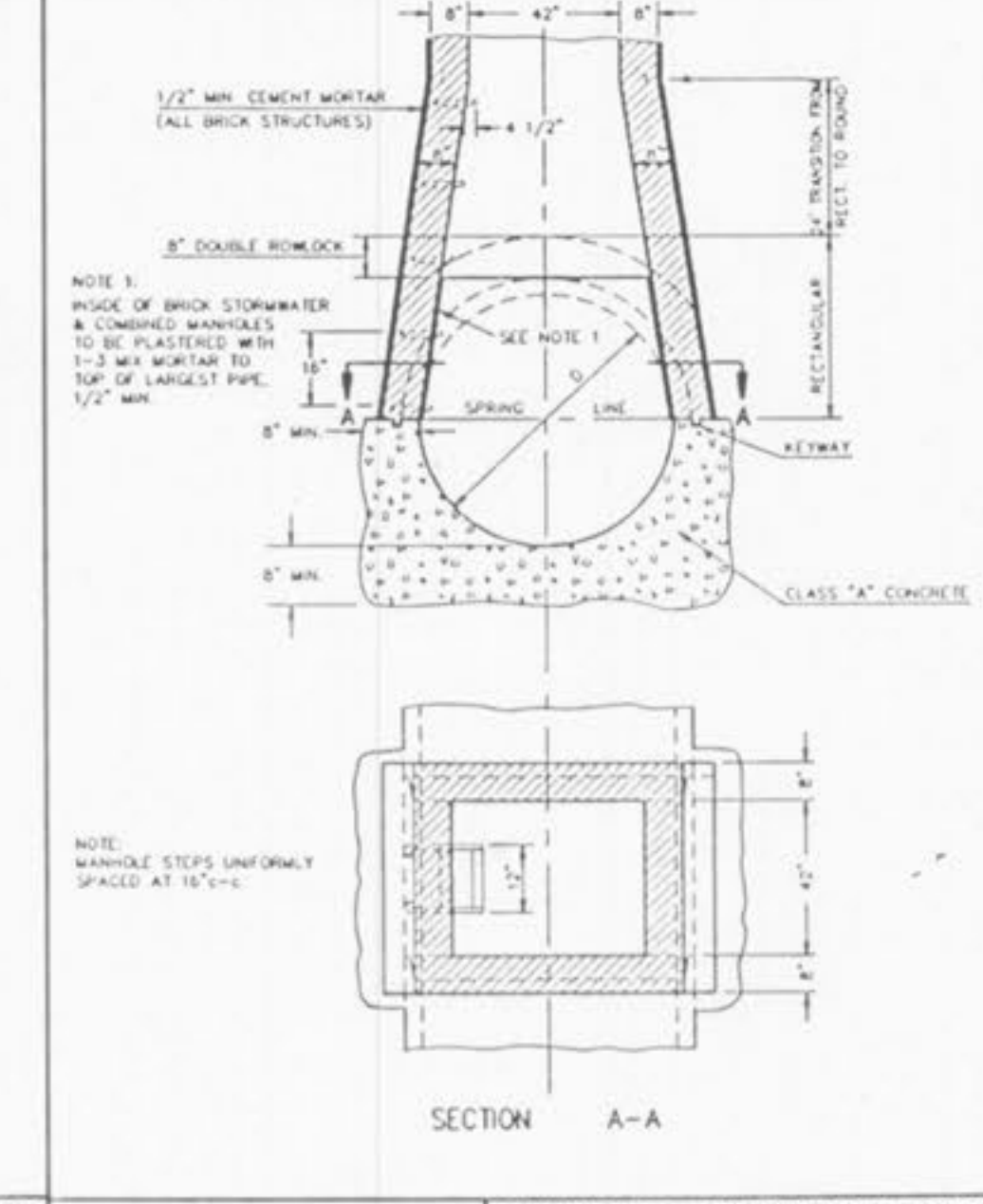
MANHOLE ON PIPE SEWER 27" THRU 36" (ALTERNATE)
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. D.A.B. Ch. J.C.K. 1992 SHEET 10



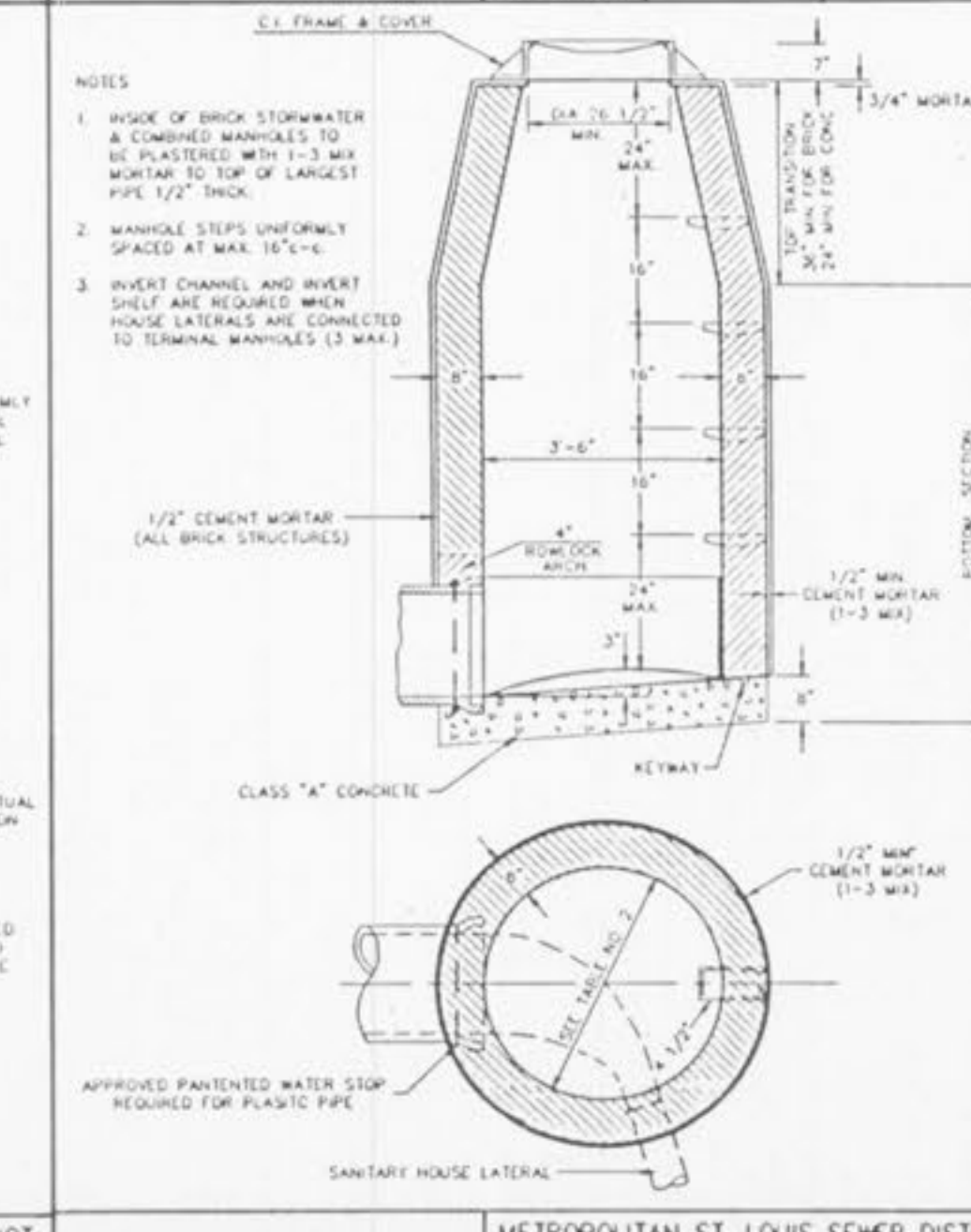
INSIDE FOULWATER DROP MANHOLE (FOR FREE-FALL)
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 16



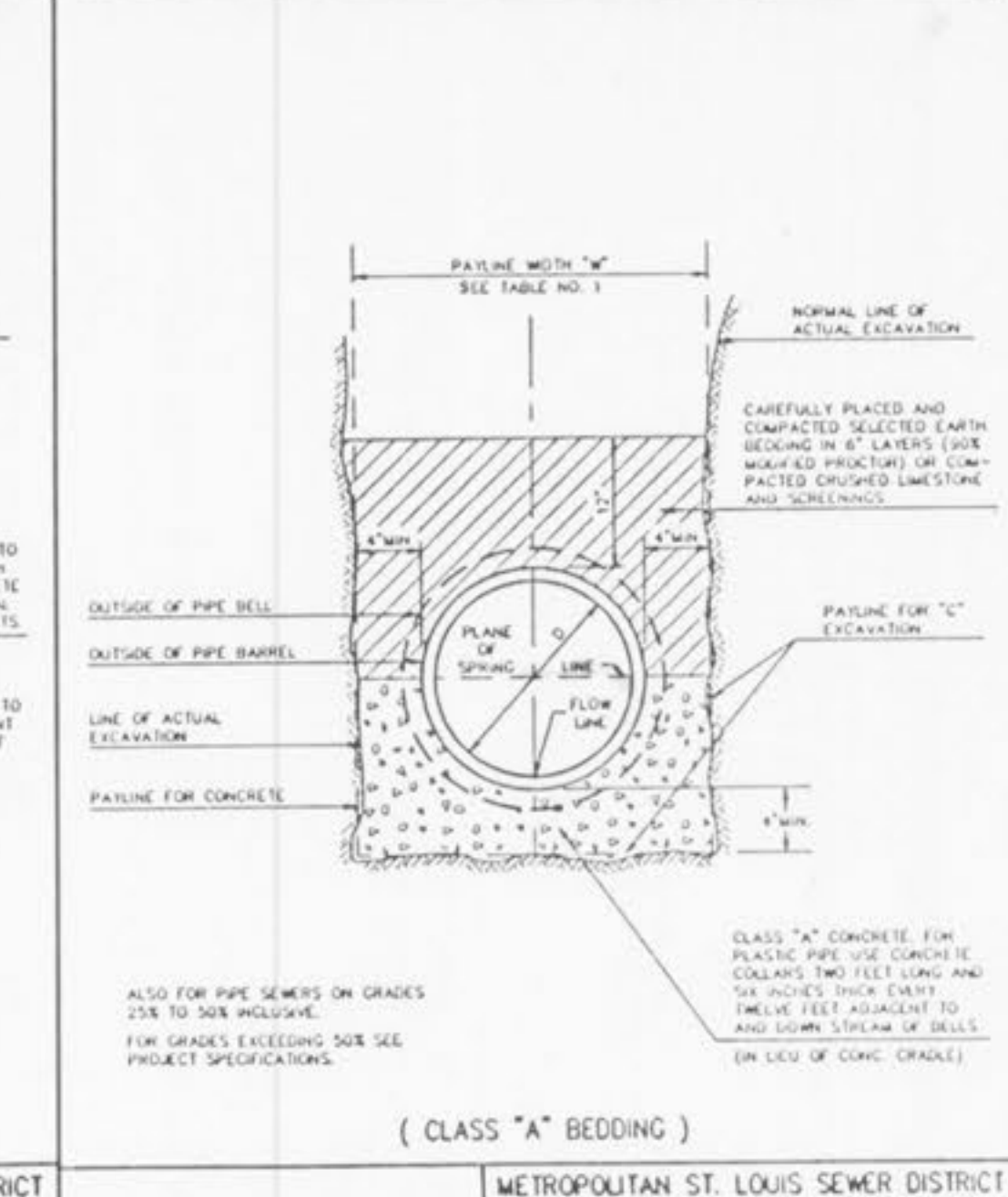
CONCRETE ENCASEMENT
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 5



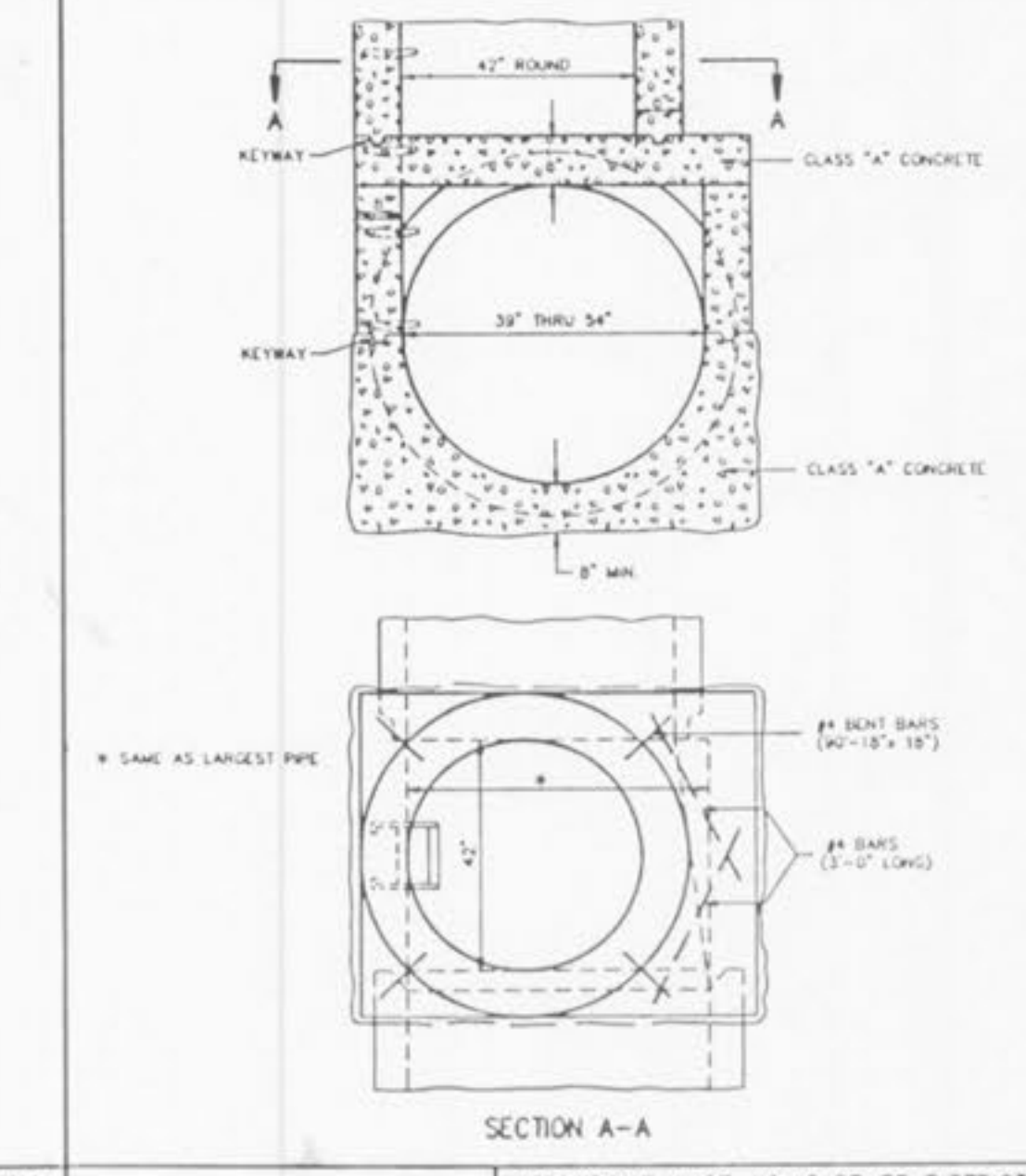
MANHOLE ON CONCRETE PIPE SEWERS 39" THRU 54" DIAMETER
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 11



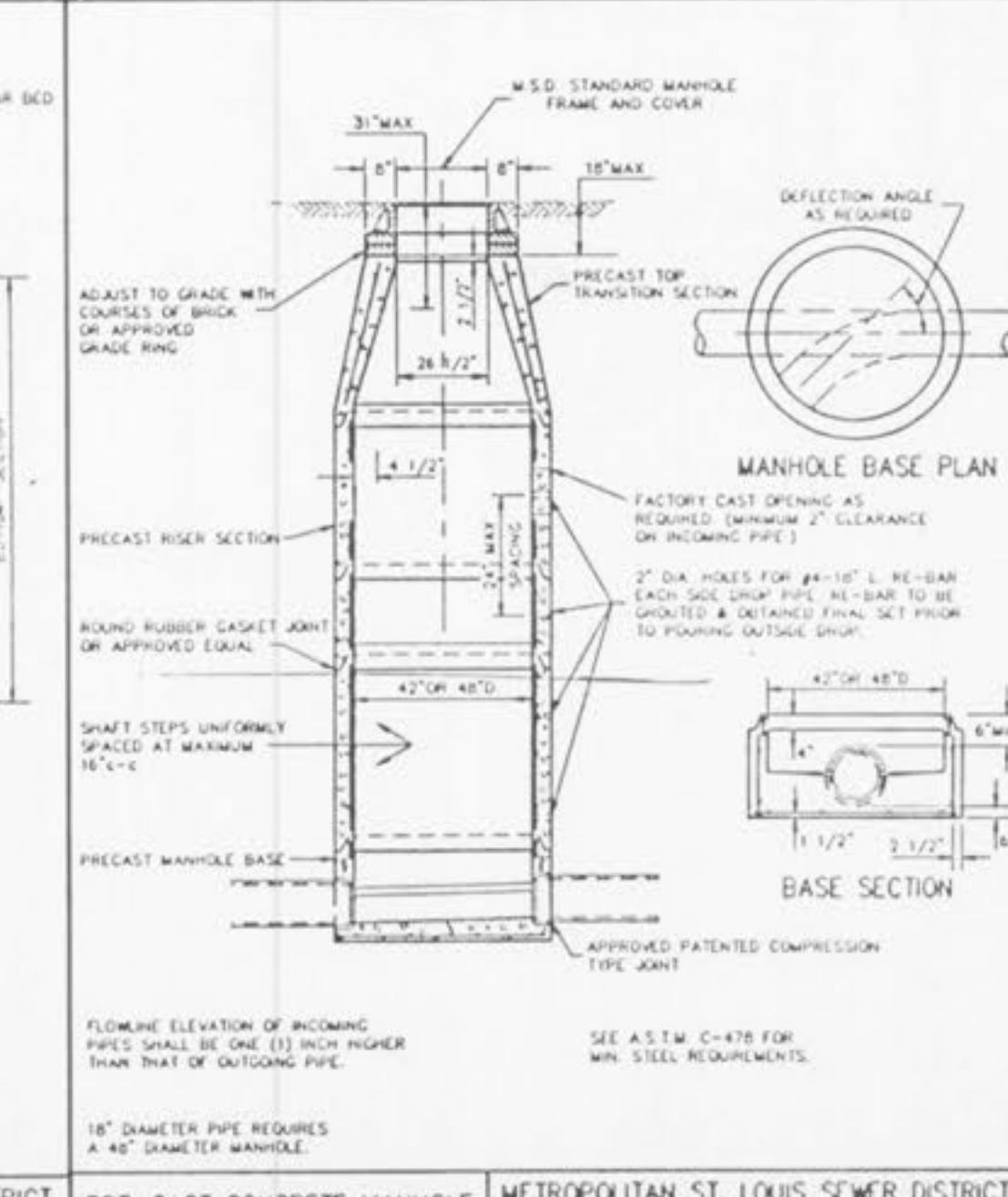
TERMINAL MANHOLE
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 17



CONCRETE CRADLE
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 6



MANHOLE ON CONC. PIPE 39" THRU 54" (ALTERNATE)
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 12



PRE-CAST CONCRETE MANHOLE FOR SEWERS 8" THROUGH 18"
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 18