

GUTTER SUMPS FOR VERTICAL CURB	METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction	Dr. W.S.H. Ch. J.C.K.	1992	SHEET 55
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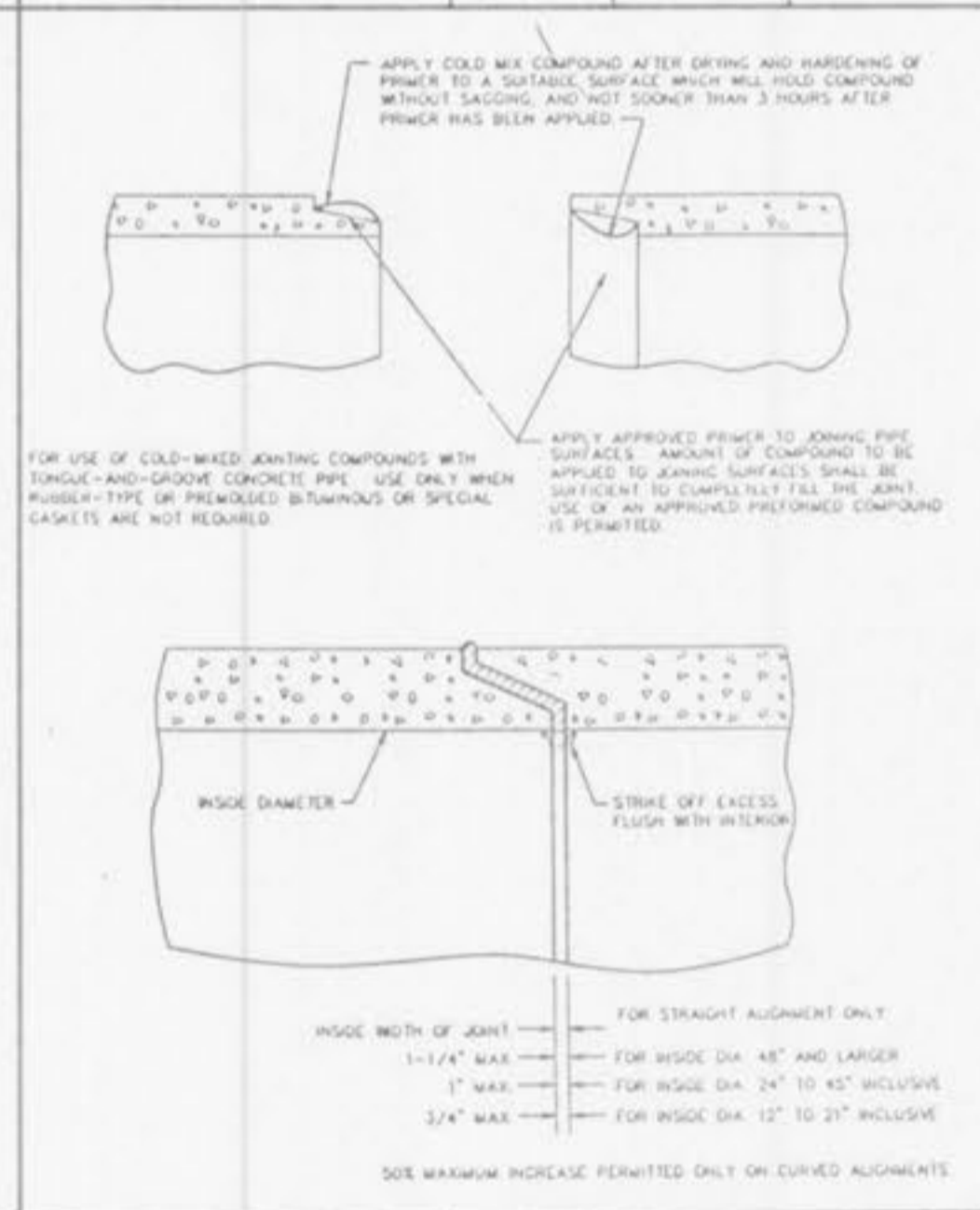
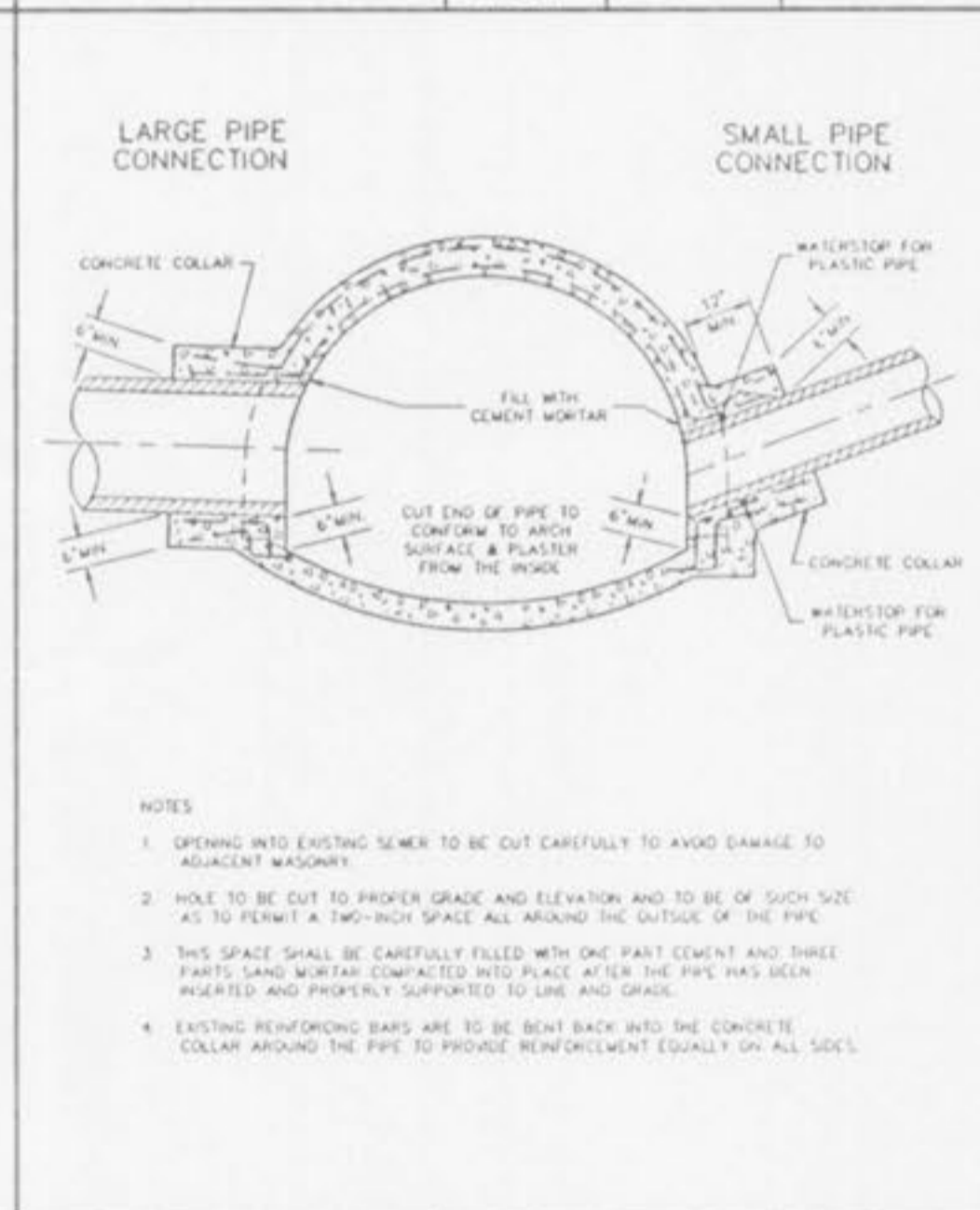
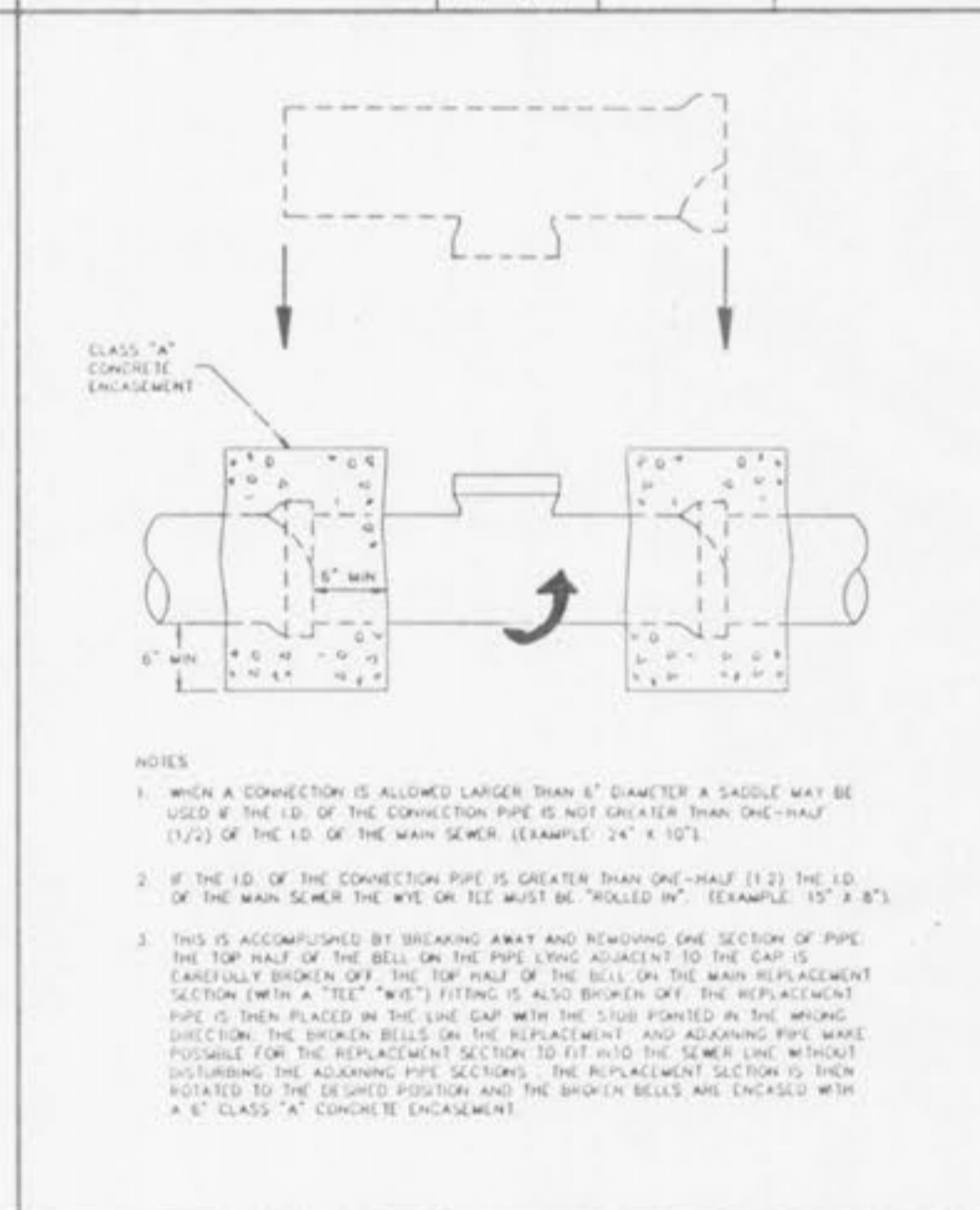
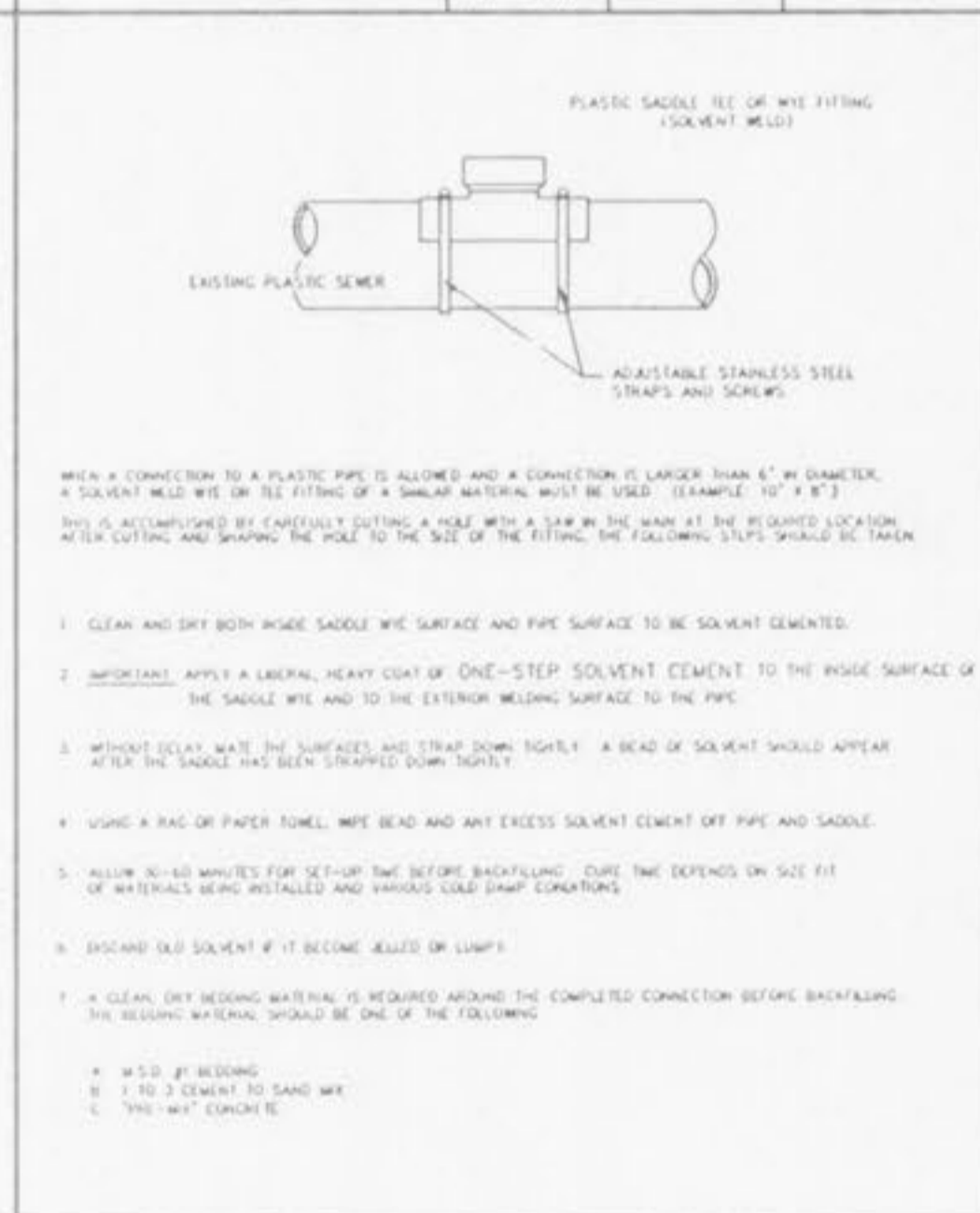
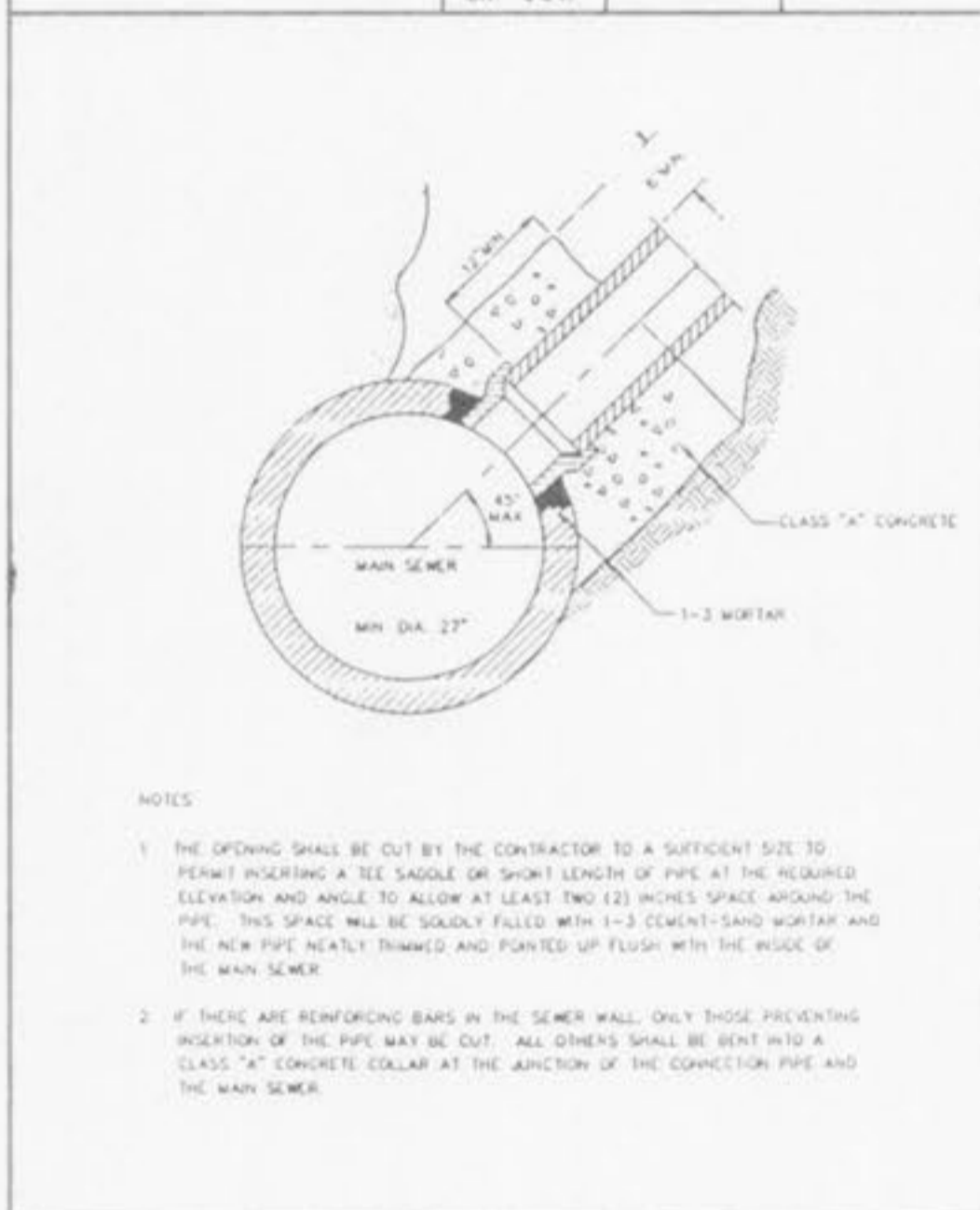
GUTTER SUMP FOR LIP CURB	METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction	Dr. R.C.W. Ch. J.C.K.	1992	SHEET 56
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FLARED END SECTION	METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction	Dr. W.S.H. Ch. J.C.K.	1992	SHEET 57
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STORMWATER CHANNELS	METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction	Dr. R.C.W. Ch. J.C.K.	1992	SHEET 58
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HOUSE CONNECTION TO EXISTING TEE OR WYE	METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction	Dr. D.A.B. Ch. J.C.K.	1992	SHEET 59
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MACHINE TAP	METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction	Dr. W.S.H. Ch. J.C.K.	1992	SHEET 60
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HOUSE CONNECTIONS ALLOWED BY TEE SADDLE	METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction	Dr. D.A.B. Ch. J.C.K.	1992	SHEET 61
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8" (& LARGER) CONNECTION TO PLASTIC MAIN	METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction	Dr. D.A.B. Ch. J.C.K.	1992	SHEET 62
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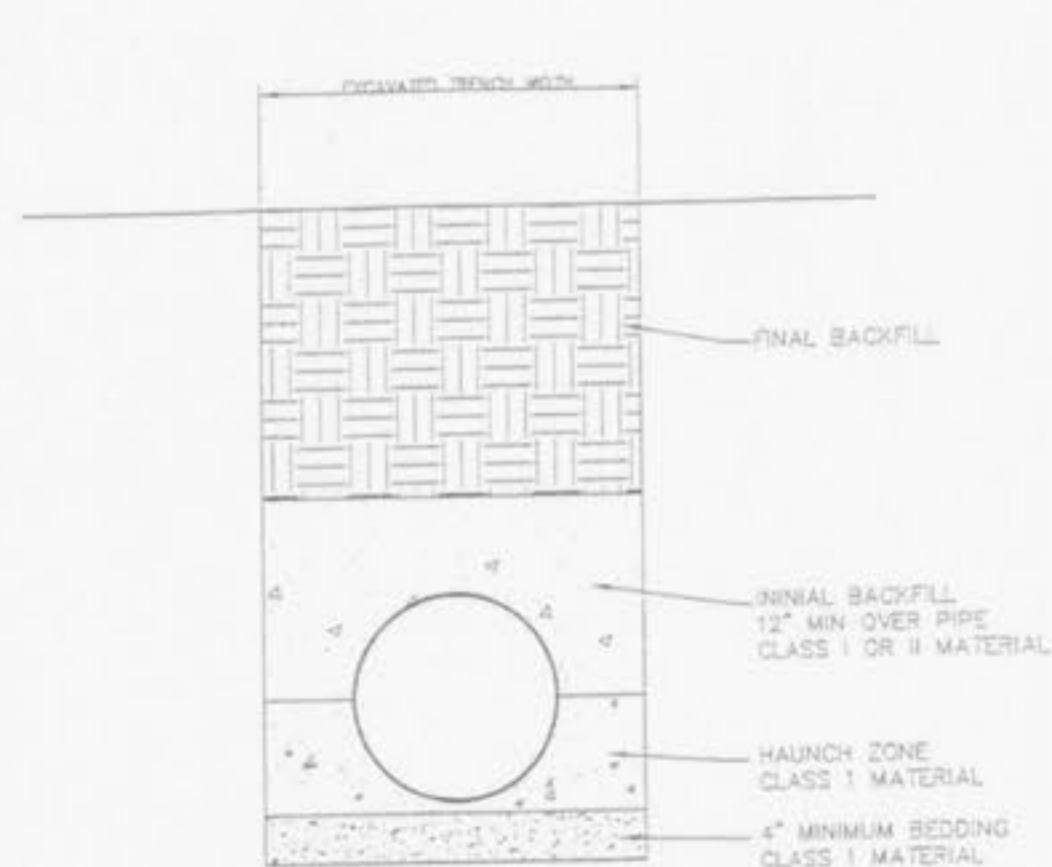
"ROLL-IN" (FOR EXISTING CLAY OR CONCRETE PIPE)	METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction	Dr. D.A.B. Ch. J.C.K.	1992	SHEET 63
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CONNECTIONS TO LARGE SEWERS	METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction	Dr. W.S.H. Ch. J.C.K.	1992	SHEET 64
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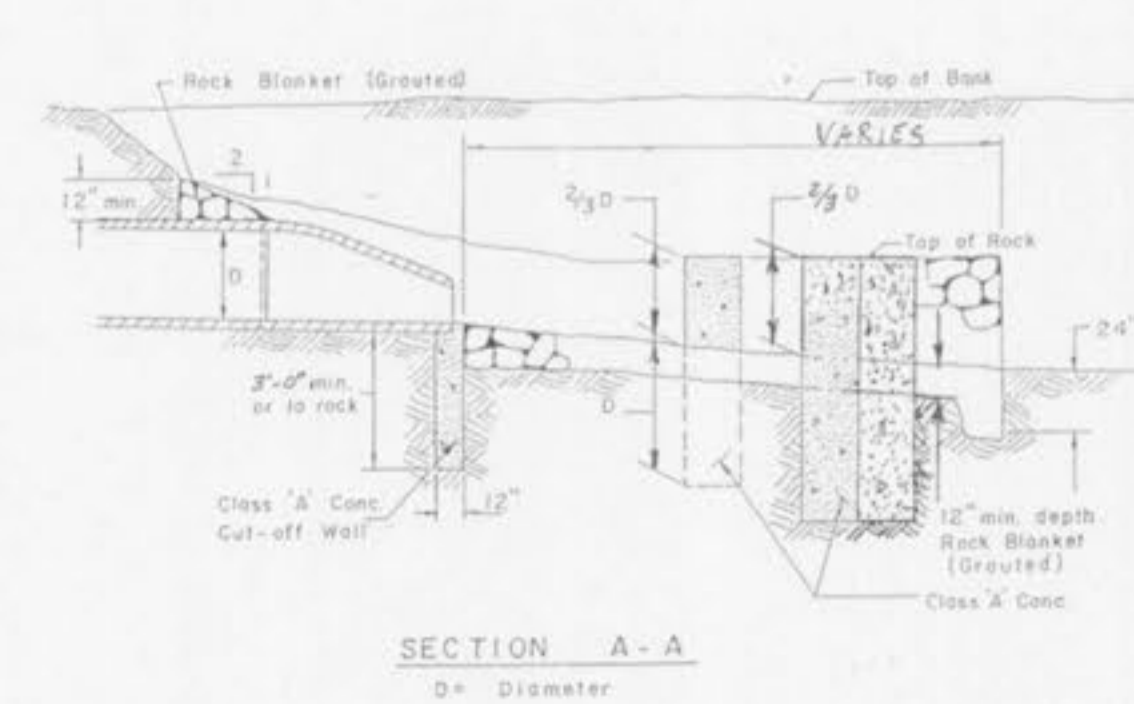
FORCE MAIN CLEANOUT (6" DIA. & SMALLER)	METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction	Dr. R.C.W. Ch. J.C.K.	1992	SHEET 65
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TONGUE AND GROOVE CONCRETE PIPE JOINTS	METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction	Dr. D.A.B. Ch. J.C.K.	1992	SHEET 66
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H.D.P.E. PIPE DETAIL



- The use of High Density Polyethylene Corrugated pipe A.D.S. N12 or Equid will be permitted as an acceptable alternative to reinforced concrete pipe. Pipe shall meet A.S.T.M. D-2321 and AASHTO M-294-92. Concrete flared end sections and inlet structures shall be required. Pipe must have smooth interior wall and is not to be used where the Public Right-of-Way.
- All concrete pipe or HDPE pipe shall be installed with o-ring rubber type gaskets per M.S.D. Standard Construction Specifications or Manufacturer.
- In typical conditions the minimum trench width is determined by the size of the pipe and the ability to get compaction equipment between the pipe and the trench walls. The minimum trench width should not be less than the outside diameter plus 16 inches or the pipe outside diameter times 1.25 plus 12 inches, whichever is greater. High speed trenchers may enable satisfactory installation of pipe in narrower trenches. Poor initial soil conditions such as peat, muck, running sands, or expansive clays will require substantially wider basins as well as deeper foundation and bedding. Trench width and foundation depth should be based on a thorough site investigation.
- Backfill in the area up to the springline should be carefully placed and compacted to achieve a minimum E value of 1,000 ps as detailed in ASTM D2321. A minimum of 12" of backfill should be placed and compacted above the crown of the pipe. It is typical for trenches to be backfilled entirely with Type I or Type II material when under pavement.
- Flexible pipe should never be installed in a concrete cradle, as done for rigid pipe in a Class A installation. This type of installation could create concentrated forces at the ends of the cradle when the pipe has deformed.



Flared End Section with Energy Dissipator

