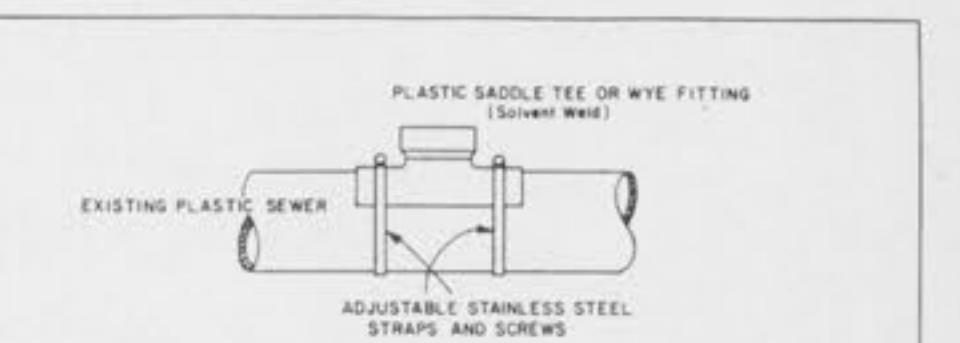


Note: The opening shall be cut by the contractor in a sufficient size to permit inserting a tee saddle or short length of pipe of the required elevation and angle to allow at least two (2) inches space around the pipe. This space will be solidly filled with 1-3 cement-sand mortar and the new pipe neatly trimmed and pointed up with mortar to the level of the main sewer.
If there are existing bolts in the sewer wall, only those preventing insertion of the pipe may be cut. All others shall be bent into a Class X concrete collar at the junctions of the connection pipe and the main sewer.

HOUSE CONNECTIONS ALLOWED BY TEE SADDLE
METROPOLITAN ST LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. A.E.S. Ch. J.C.K. April 1978 Sheet 52

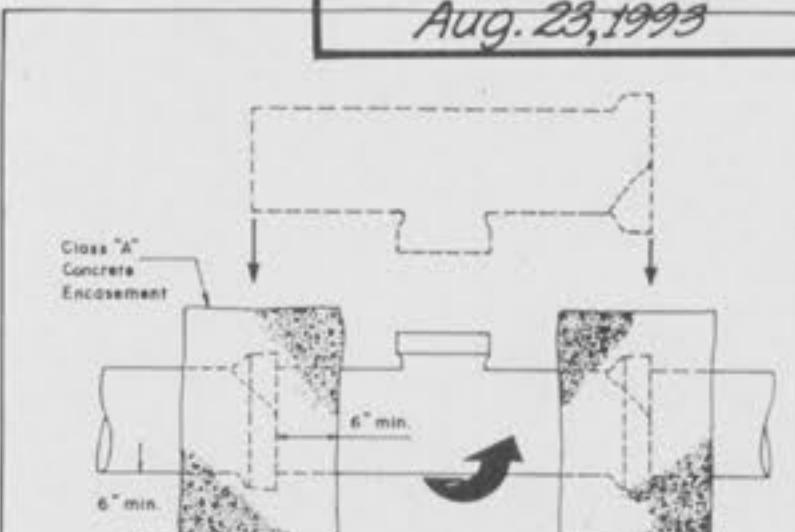


When a connection to a plastic pipe is allowed and a connection is larger than 6" in diameter, a solvent weld wye or tee fitting of a similar material must be used. (Example: 10" x 8")

This is accomplished by carefully cutting a hole with a saw in the side of the required location. After cutting and shaping the hole to the size of the fitting, the following steps should be taken:

- Clean and dry both inside saddle wye surface and pipe surface to be solvent cemented.
- Important: Apply a liberal, heavy coat of ONE-STEP SOLVENT CEMENT to the inside surface of wye or tee fitting of a similar material to be used.
- Without delay, move wye and to the exterior welding surface to be solvent cemented.
- Using a ring or paper, cover wye head and any excess solvent cement off pipe and wye.
- Allow 30-60 minutes for set-up time before backfilling. Cure time depends on size and fit of materials being installed and various cold/damp conditions.
- Discard old solvent if it becomes yellow or lumpy.
- A clean, dry bedding material is required around the completed connection before backfilling. The bedding material should be one of the following:
A. M.S.D. #1 Bedding
B. 1 to 3 Cement to Sand Mix
C. "Pre-mix" Concrete

8" (6" LARGER) CONNECTION TO PLASTIC MAIN
METROPOLITAN ST LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. A.E.S. Ch. J.C.K. JUNE, 1985 Sheet 53

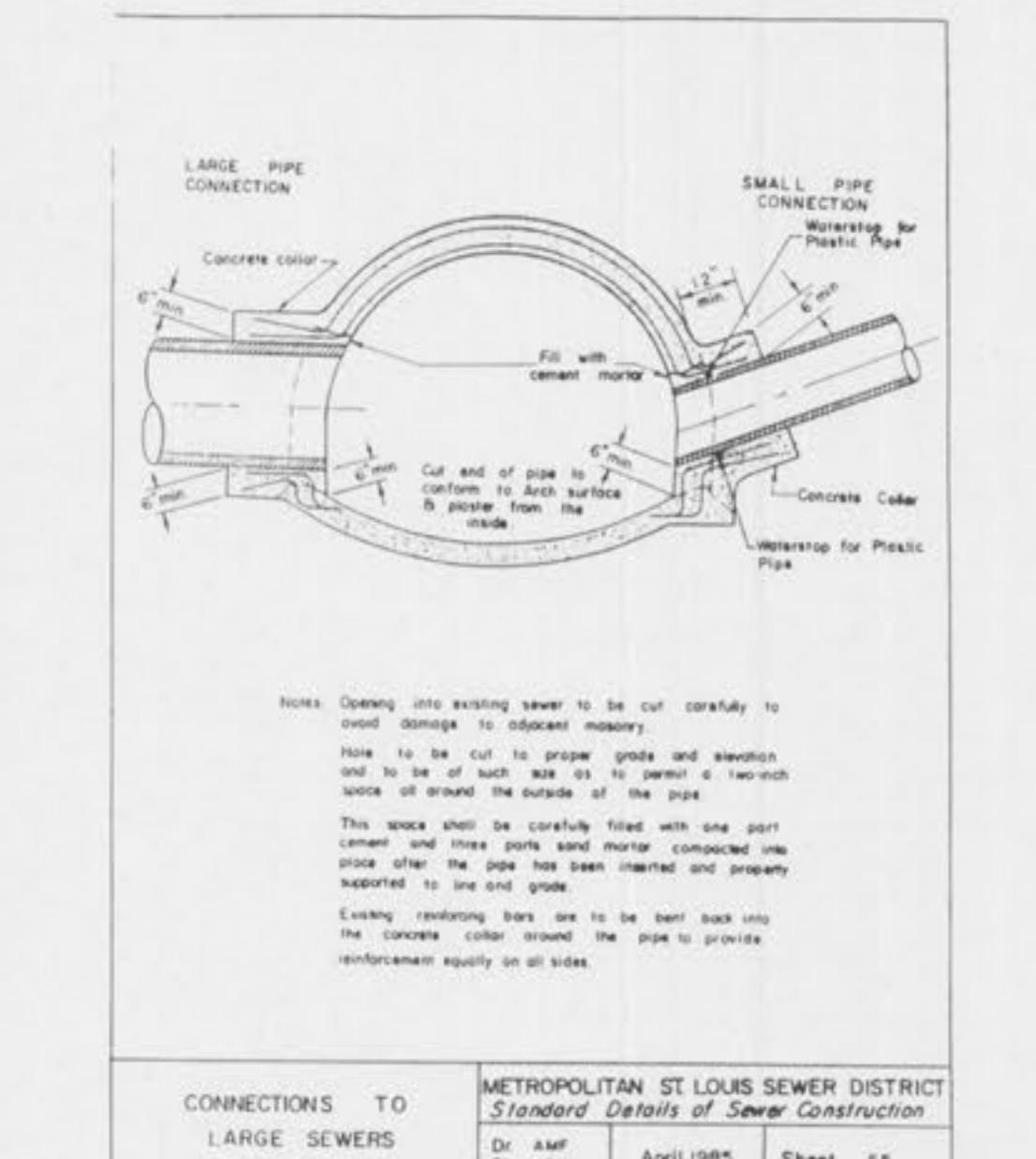


When a connection is allowed larger than 6" diameter, a saddle may be used if the I.D. of the connection pipe is not greater than one-half (1/2) the I.D. of the main sewer. (Example: 10" x 8")

If one-half the connection pipe is greater than one-half (1/2) the I.D. of the main sewer, the wye or tee must be "roll-in". (Example: 10" x 8")

This is accomplished by breaking away and removing one section of pipe. The top half of the below the pipe lying adjacent to the gap is carefully broken away and removed. The remaining pipe is then solvent cemented with a "tee" or "wye" fitting. The replacement pipe is then placed in the line gap with hub pointed in the wrong direction. The broken bells on the replacement and the adjoining pipe make it possible for the replacement pipe to fit into the sewer line without disturbing the existing pipe sections. The replacement section is then rotated into the desired position and the broken bells are encased with a 6" Class X concrete encasement.

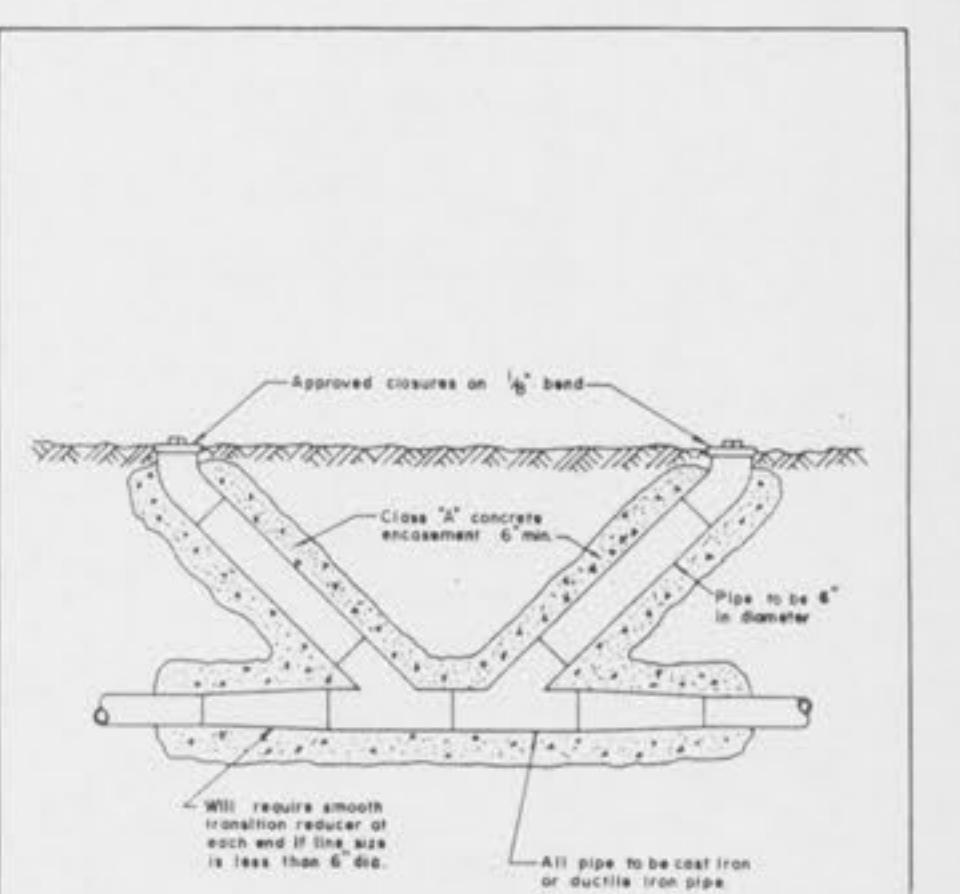
"ROLL-IN"(FOR EXISTING CLAY OR CONCRETE PIPE)
METROPOLITAN ST LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. A.E.S. Ch. J.C.K. April 1985 Sheet 54



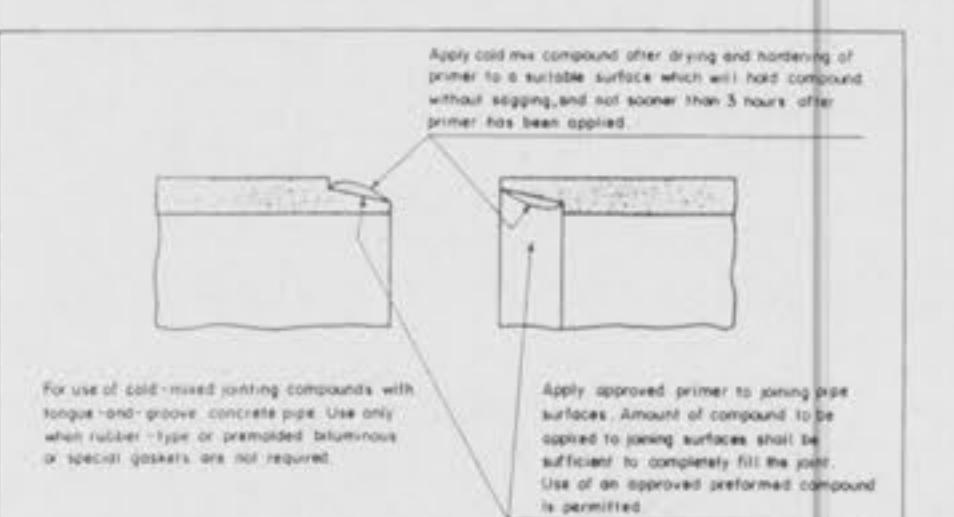
Notes: Opening into existing sewer to be cut carefully to avoid damage to adjacent masonry.
Note: To be cut to proper grade and elevation and to be cut to provide a smooth surface for the pipe and two-inch wide band around the outside of the pipe.
This pipe shall be carefully fitted with one part cement and three parts sand mortar compacted into position after the pipe has been inserted and properly supported to the ground.

Existing reinforcing bars are to be bent back into the concrete collar around the pipe to provide reinforcement equally on all sides.

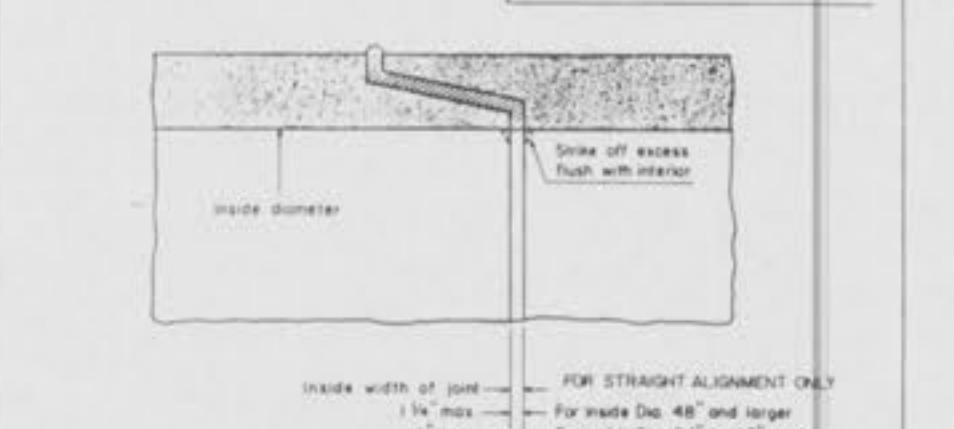
CONNECTIONS TO LARGE SEWERS
METROPOLITAN ST LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. A.M.P. Ch. J.C.K. April 1985 Sheet 55



1800' MAXIMUM SPACING
FORCE MAIN CLEANOUT (6" DIA. & SMALLER)
METROPOLITAN ST LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. R.N. Ch. J.C.K. JAN. 1987 Sheet 56

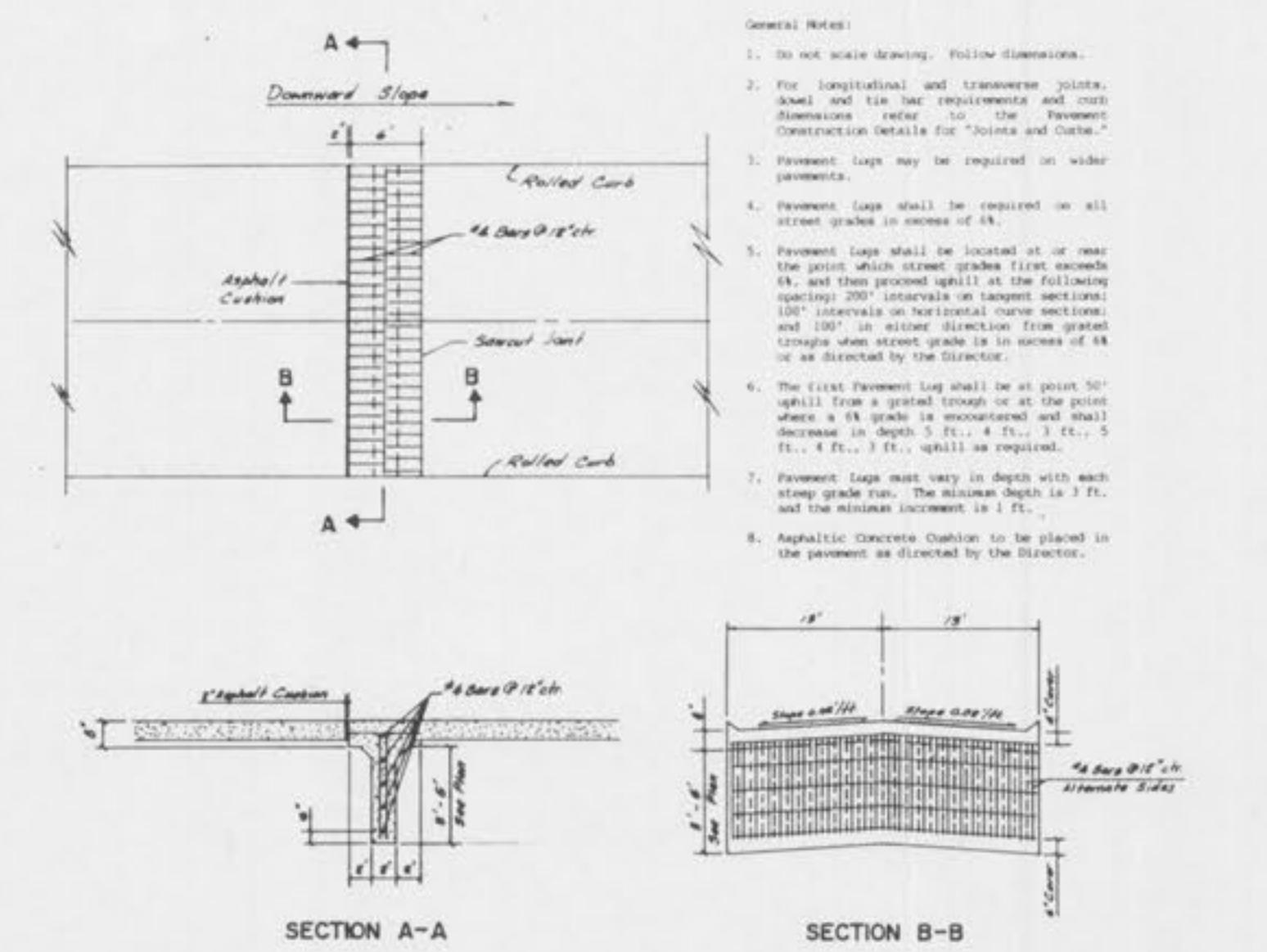


Apply cold mix compound after drying and hardening of primer to a suitable surface which will hold compound without sagging and not sooner than 3 hours after primer has been applied.

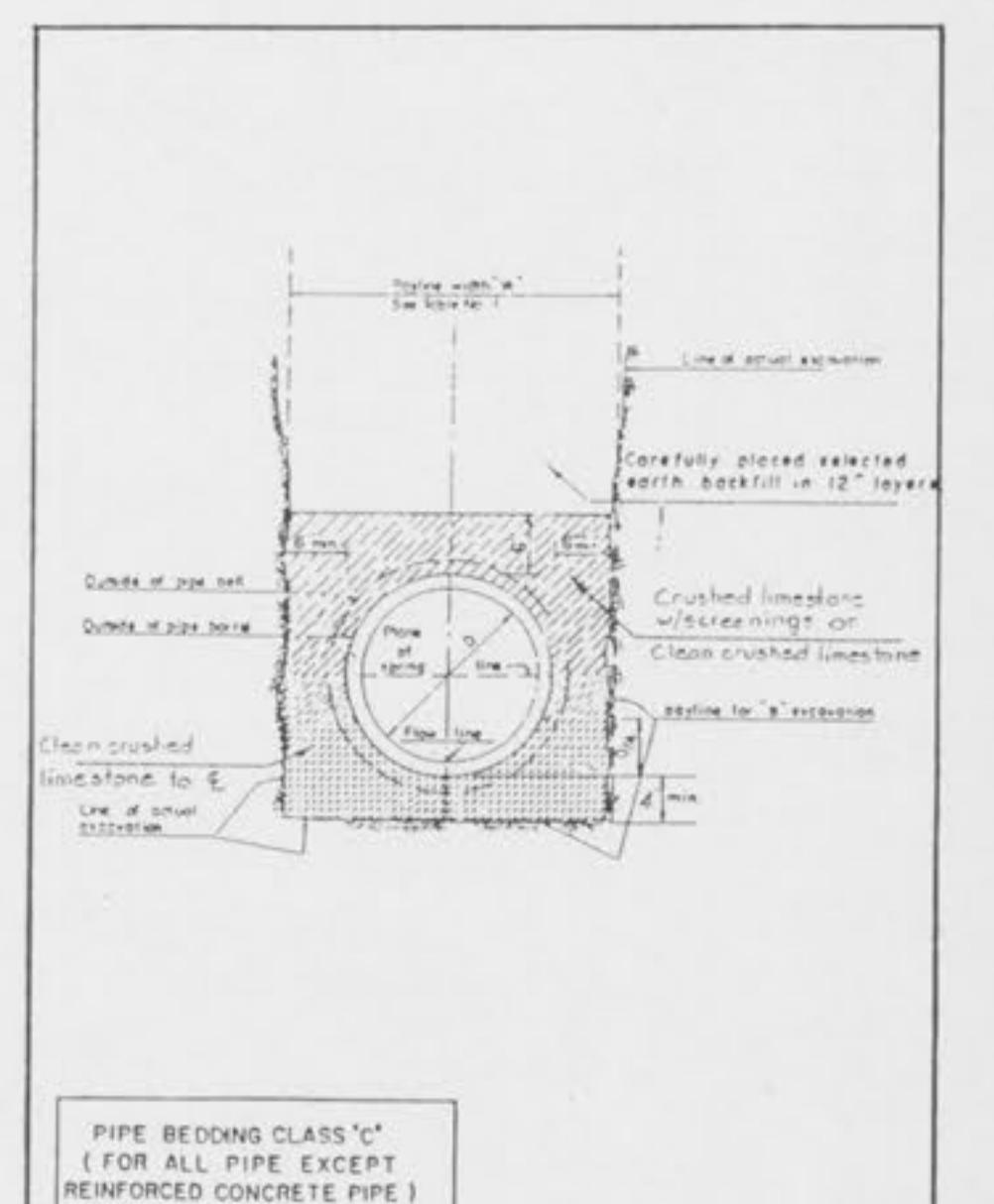


For use of cold mixed joining compounds with tongue-and-groove concrete pipe. Use only when roller-type or premixed aluminum or flexible gaskets are not required.

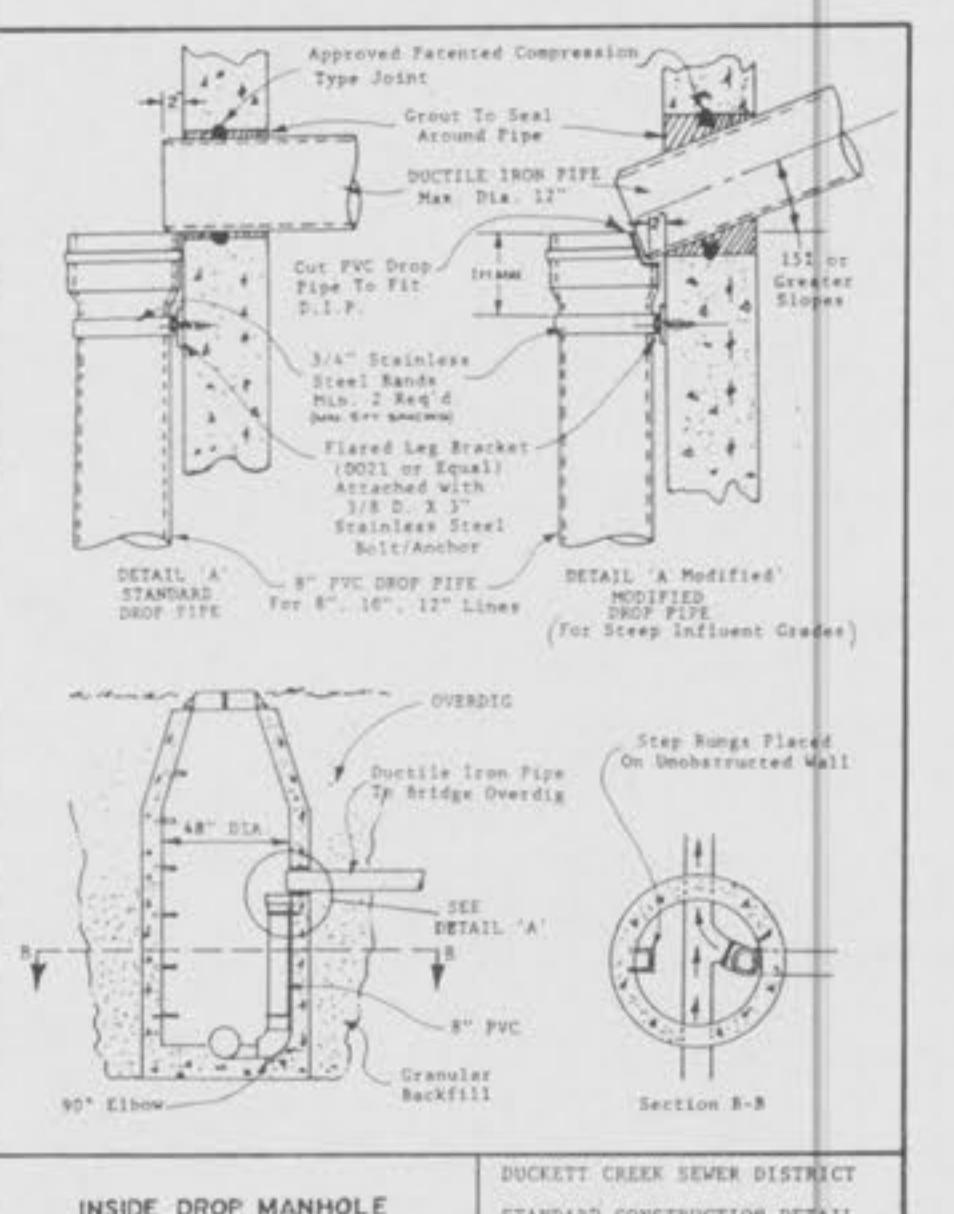
TONGUE AND GROOVE CONCRETE PIPE JOINTS
METROPOLITAN ST LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. A.O.S. Ch. J.H.S. November 1986 Sheet 57



SECTION A-A
SECTION B-B
PAVEMENT LUG



PIPE BEDDING CLASS 'C'
(FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)



INSIDE DROP MANHOLE
DUCKETT CREEK SEWER DISTRICT
STANDARD CONSTRUCTION DETAIL
DETAIL NO. JAN 1989