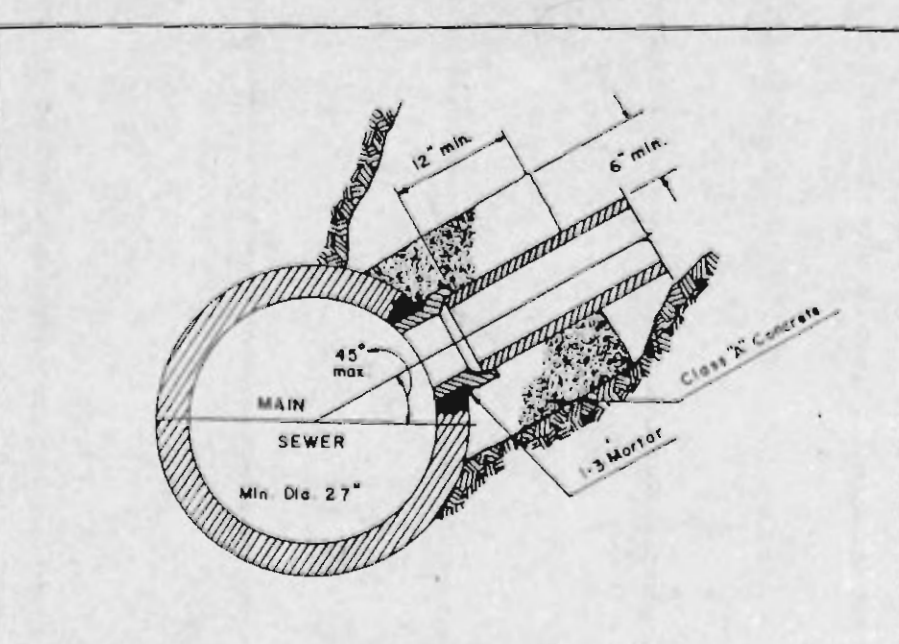
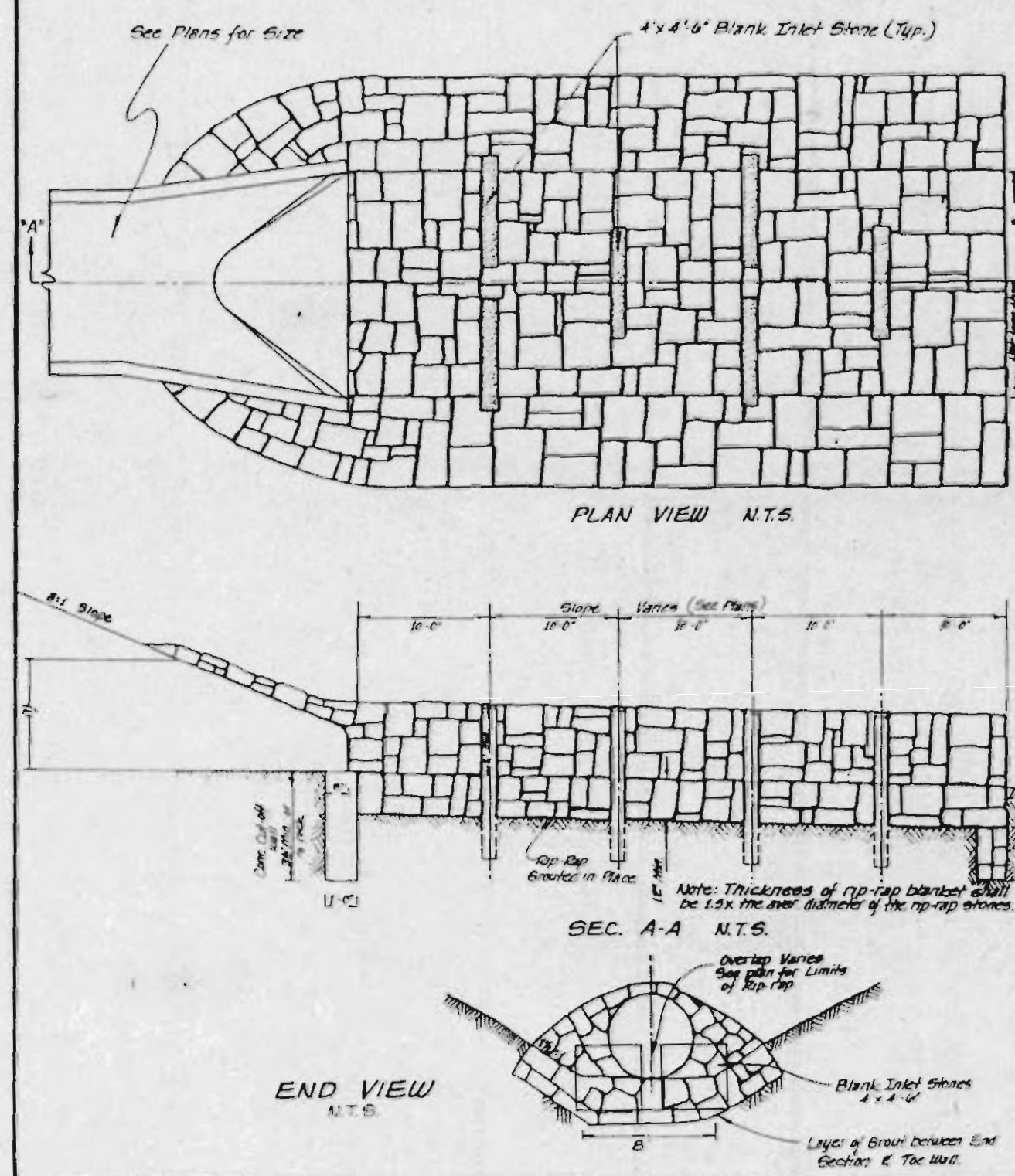


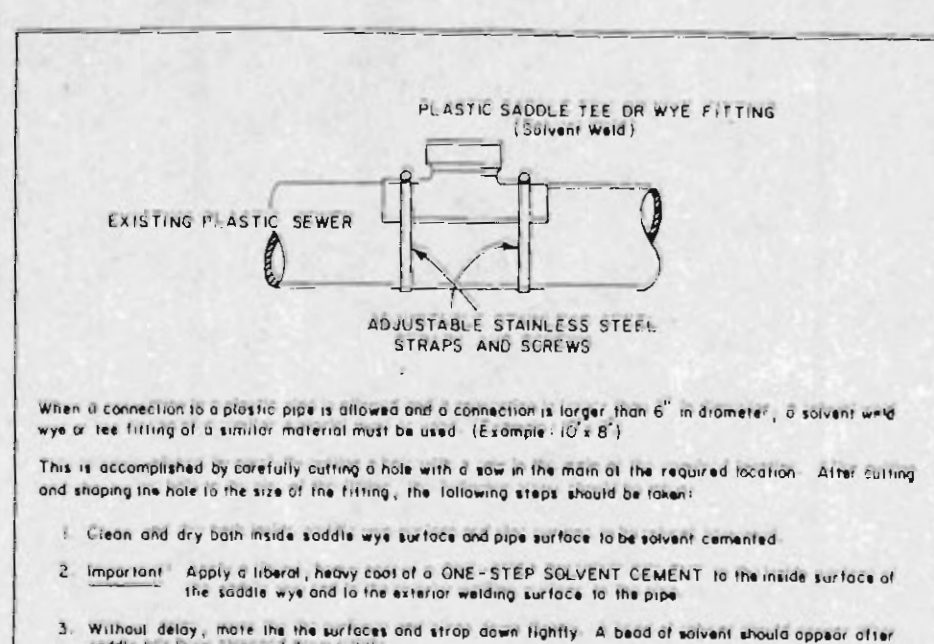
ENERGY DISSIPATOR DETAIL
FOR LARGE DIA. PIPES



Note: The opening shall be cut by the contractor to 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 neatly filled with 1:3 cement sand mortar and the new pipe neatly trimmed and pointed to flush with the inside of the main sewer.

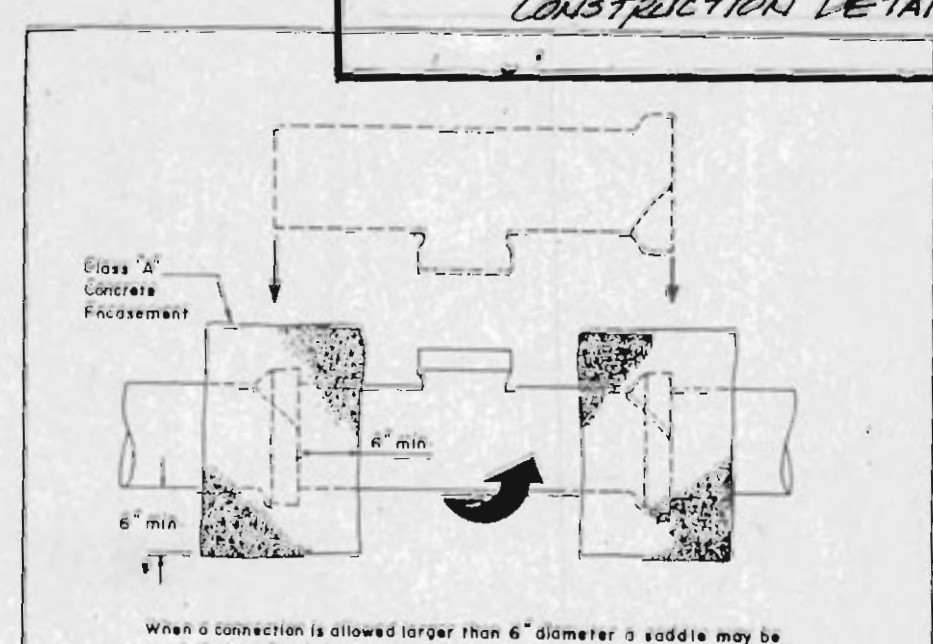
If there are reinforcing bars in the sewer wall, only those bars intersecting the pipe may be cut. All others shall be bent into a Class 'A' concrete collar at the junction of the connection pipe and the main sewer.

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



1. Clean old dry both inside saddle and pipe surface to be solvent cemented.
2. Important: Apply a liberal heavy coat of ONE - STEP SOLVENT CEMENT to the inside surface of the saddle and to the exterior working surface to the pipe.
3. Without delay, mate the surfaces and strip down lightly. A bed of solvent should appear after saddle has been stripped down lightly.
4. Using a ray or paper towel, wipe bed and only solvent cement off pipe and saddle.
5. Allow 30-60 minutes for set up time before backfilling. Cure time depends on size and fit of materials being installed and various cold-weather conditions.
6. Discard old solvent if it becomes gummy or lumpy.
7. A heavy, dry bedding material required around the completed connection before backfilling. The bedding material should be one of the following:
 - A. 4" M.S.D. #3 Bedding
 - B. 1" to 2" Cement or Sand Mix
 - C. "Pre-Mix" Concrete

8" (B 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

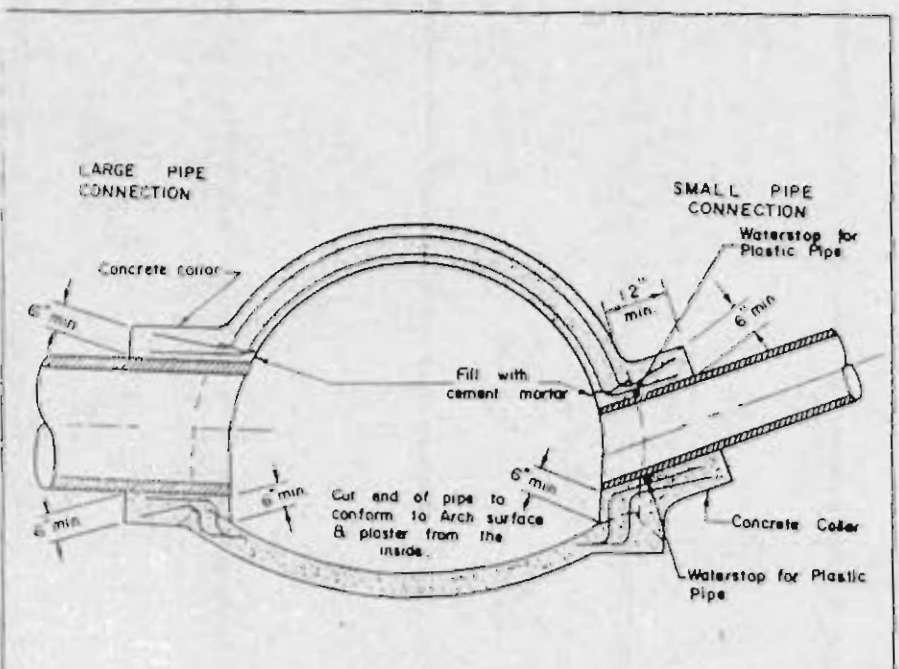


Note: When a connection is allowed longer than 6" diameter a saddle may be used if the I.D. of the connection pipe is less than one-half (1/2) the I.D. of the main sewer. (Example: 12" x 8")

If the I.D. of the connection pipe is greater than one-half (1/2) the I.D. of the main sewer the pipe or man may be "rolled-in". (Example: 15" x 8")

This is accomplished by breaking away and removing one section of pipe. The top half of the bell on the pipe lying adjacent to the gap is carefully broken off. The top half of the bell on the main replacement section (with a "tee" or "wye" fitting) is also broken off. The replacement pipe is then placed in the line gap with the end pointed in the wrong direction. The broken ends on the replacement and the existing pipe ends are sawed flat for the replacement section to fit into the sewer line without disturbing the existing pipe section. The replacement section is then returned to the desired position and the broken bell is encased with a 4" Class 'A' 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



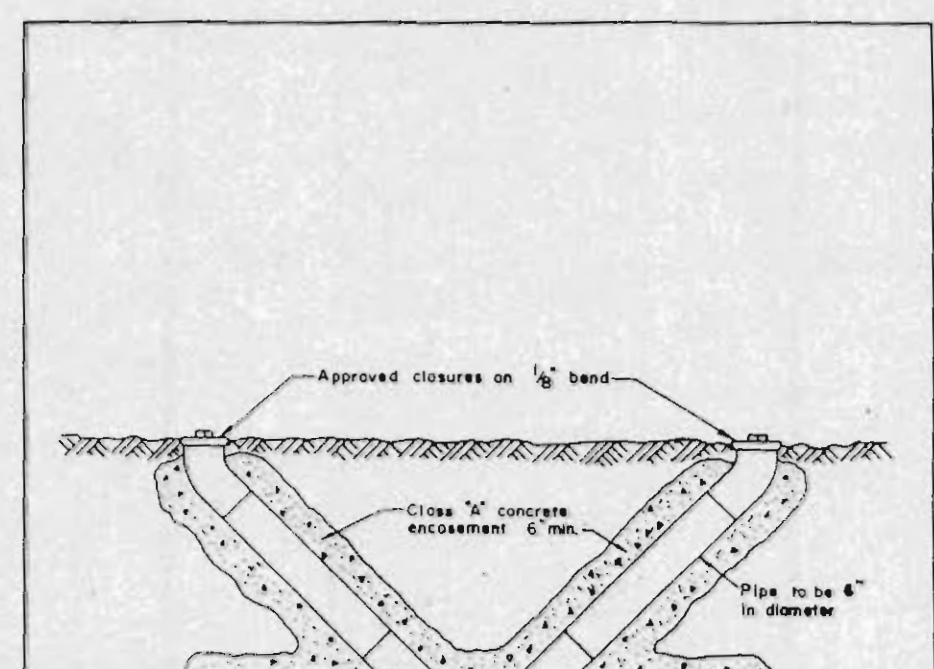
Note: Opening into existing sewer to be cut carefully to avoid damage to adjacent masonry.

How to be cut to proper grade and elevation and to be at least 6" or 18" above a two-inch space all around the outside of the pipe.

This space shall be carefully filled with one part cement and three parts sand mortar compacted one piece after the pipe has been inserted and properly supported to line and grade.

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

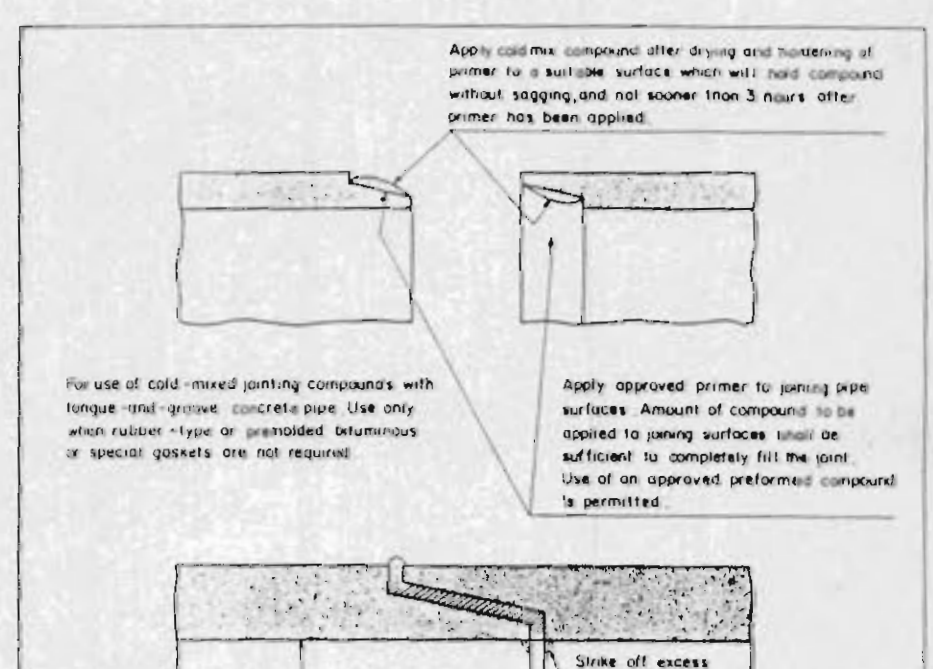
CONNECTIONS TO LARGE SEWERS METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction Dr. A.E.S. Ch. J.C.K. April 1985 Sheet 55



Will require smooth transition reducer at each end if line size is less than 6" dia.

All pipe to be cast iron or ductile iron pipe.

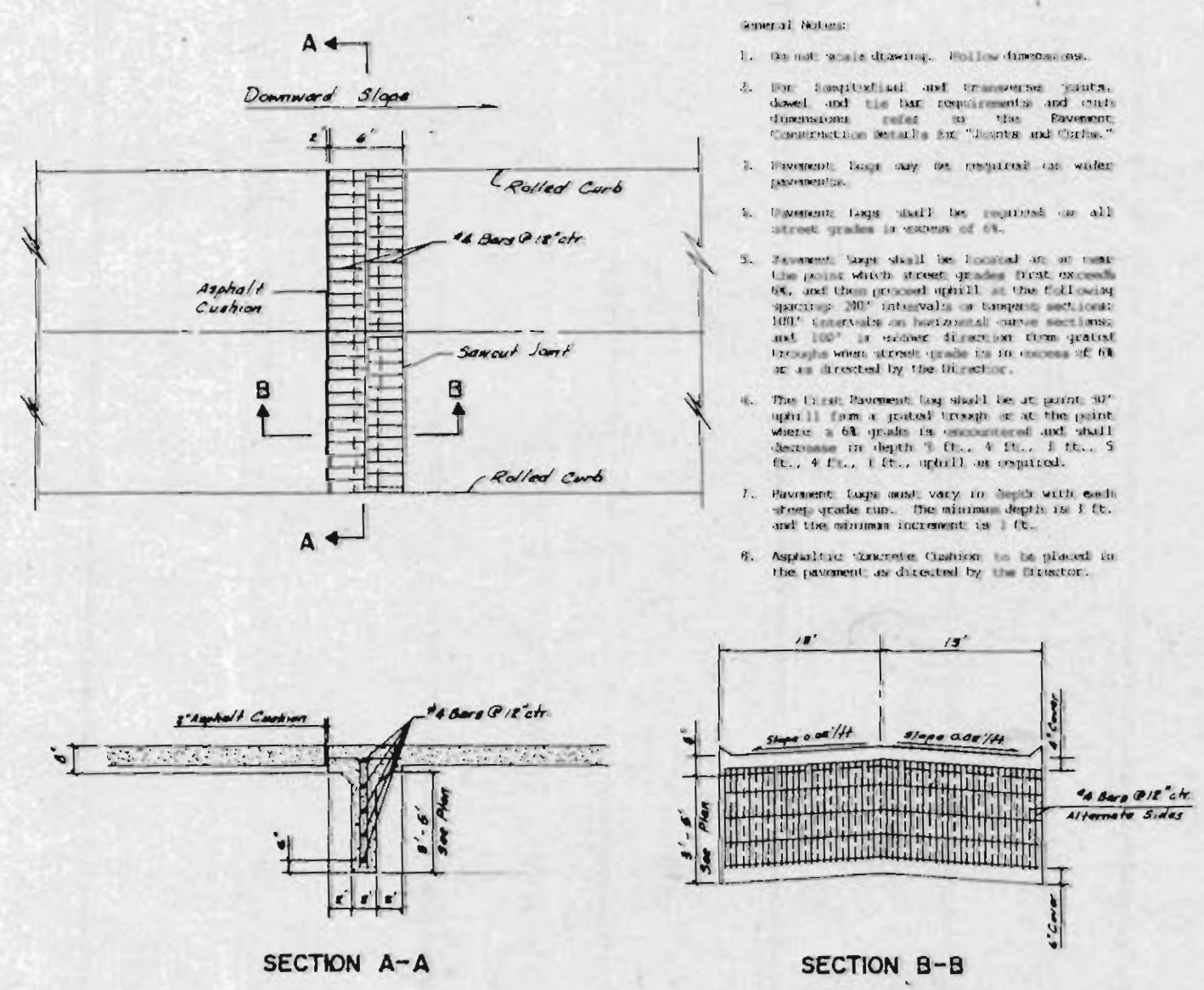
FORCE MAIN CLEANOUT (6" DIA. & SMALLER) METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction Dr. A.E.S. Ch. J.C.K. JAN. 1987 Sheet 56



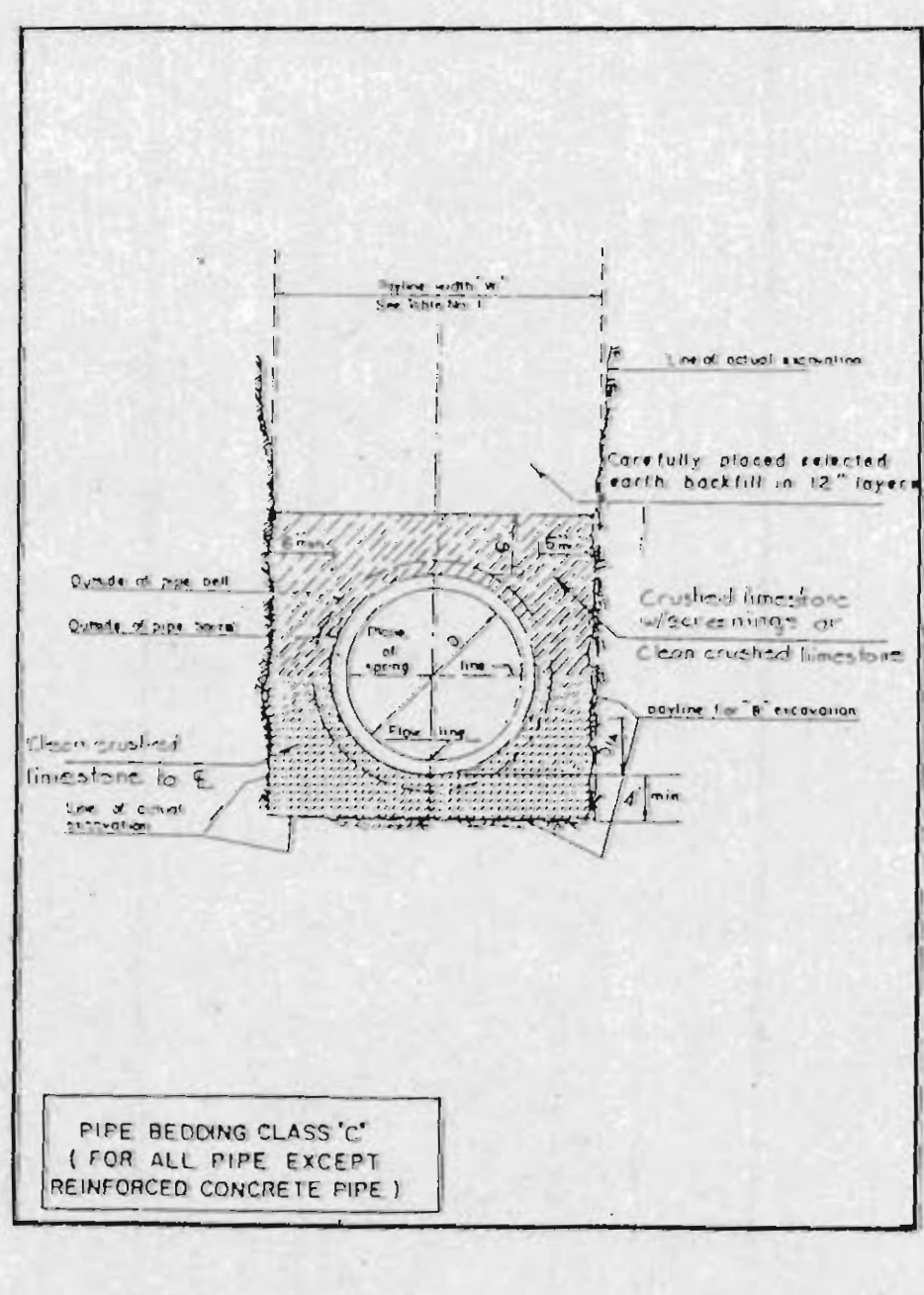
Apply approved primer to jointing pipe surfaces. Amount of compound to be applied to jointing surfaces shall be sufficient to completely fill the joint. Use of an approved petroleum compound is permitted.

Use of cold mixed jointing compounds with tongue and groove concrete pipe use only when rubber-type or preformed bituminous or special gaskets are not required.

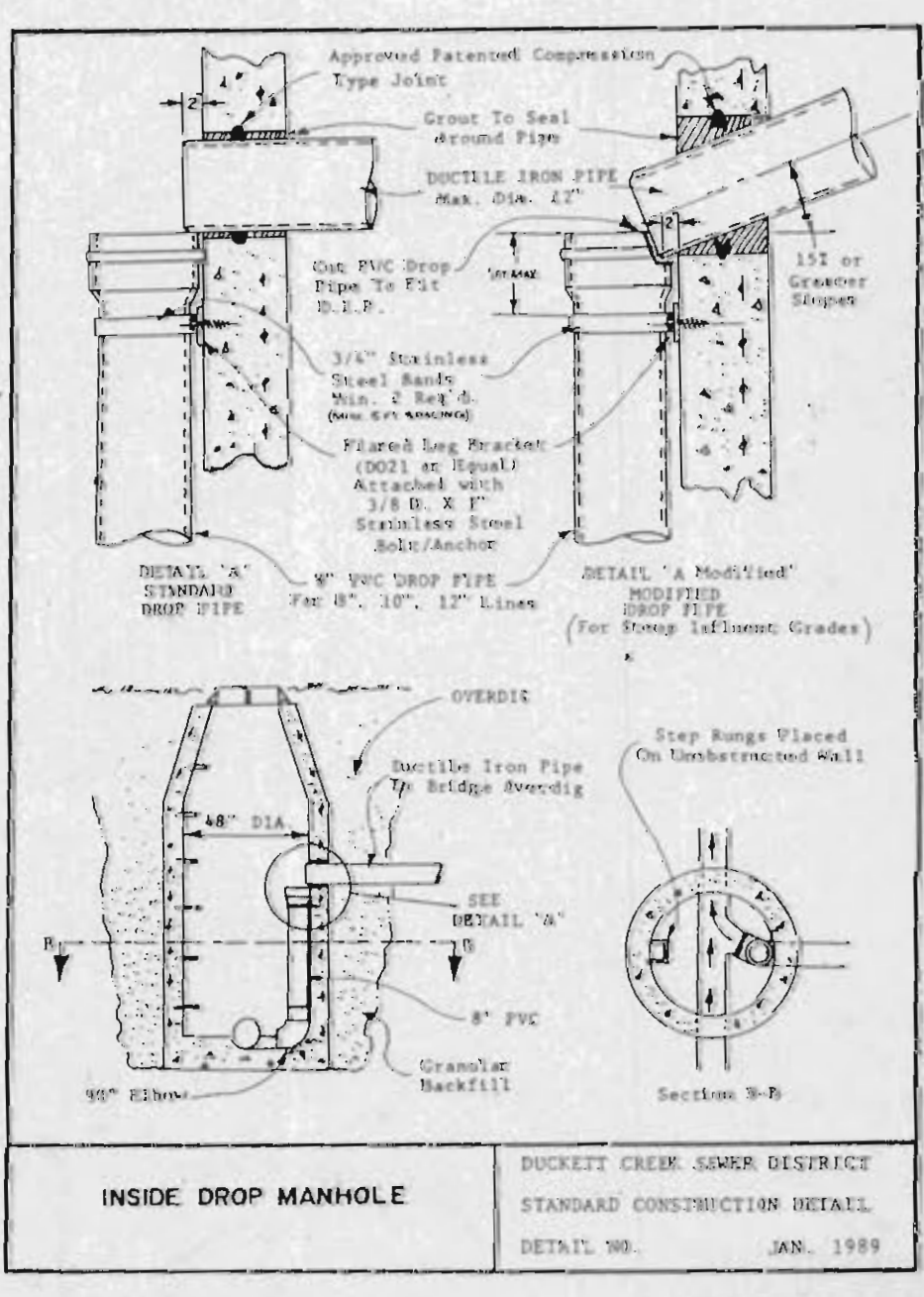
TONGUE AND GROOVE CONCRETE PIPE JOINTS METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction Dr. A.E.S. Ch. J.C.K. November 1966 Sheet 57



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