

Polyvinyl chloride (PVC) pipe and fittings of 8-inch, 10-inch, 12-inch and 15-inch diameter for mains and 4-inch and 6-inch for services conforming to ASTM D3034-81 may be used under this standard with installation conforming to ASTM recommended practice D2321; ASTM D3034-81 and D2321 are subject to City Standards for trenching and backfill and the modifications below:

1. Elastomeric gasket joints are required (ASTM F477).
2. A minimum SDR value of 35 is required.
3. The sewer main shall be shown to conform to specifications, by a mandrel test, after subgrade and base compaction, and before streets are paved.
4. Maximum allowable deflections for installed sewer main pipe is 5 percent of average inside diameter as follows:

<u>Nominal</u>	<u>SDR-35 Average</u>	<u>Minimum Mandrel Diameter</u>
8-inch	7.891	7.496
10-inch	9.864	9.371
12-inch	11.737	11.150
15-inch	14.374	13.655

5. The Contractor shall take the necessary precautions required to prevent excavated or other foreign material from getting into the pipe during the laying operation. At all times, when laying operations are not in progress, at the close of the day's work, or whenever the workmen are absent from the job, close and block the open end of the last section of pipe placed to prevent entry of foreign material or creep of the gasketed joints.
6. Stubouts from manholes and for future connection by others shall be plugged or closed off with temporary plugs.
7. The Contractor shall take all precautions necessary to prevent the "uplift" or floating of the line prior to the completion of the backfilling operation.
8. A standard pipe joint shall be located not more than 1.5 feet from the outside edge of the structure or manhole on each pipe connection to a structure or manhole.
9. PVC pipe is only allowed where sewer will carry flow from residential developments. Neither PVC pipe, nor any other flexible pipe accepted by City for particular applications, shall be utilized in horizontal and/or vertical curve sections. These types of pipe are only allowed where entire length, between two manholes, is straight.
10. Sewer mains for industrial and commercial development shall be VCP or cement lined, epoxy coated, DIP.

ENGINEERING DEPARTMENT

CITY OF MERCED, CA.

PVC SANITARY SEWER

S-11

DRAWN: KGE

APPROVED BY:

DATE

DATE: 12/05

David L. Tucker

3/17/08

REVISED: 3/17/08

CITY ENGINEER

SHEET

OF