

# **SANITARY SEWER SYSTEM CRITERIA**

## **General**

All sanitary sewer facilities shall be designed and constructed in accordance with City standards and specifications as well as the rules and regulations of the Texas Commission on Environmental Quality. The term "City" as used herein shall mean the City Engineer of the City of Nacogdoches or his/her designated representative.

## **Minimum Size**

All sanitary sewer mains shall be a minimum of six (6") inches in inside diameter.

## **Pipe Material**

All gravity flow sanitary sewer piping shall be minimum SDR 26 PVC. All sanitary sewer force main piping shall be minimum Class 160 PVC pressure pipe.

## **Future Extensions**

Sanitary sewer systems shall be designed to serve both the subject property and the full drainage area tributary to the system. When required by the City, sanitary sewer lines shall be extended to the boundary of the development if such lines are to be further extended in the future. Refer to current City Code for extension and oversizing policy.

## **Manholes**

Manholes shall be a minimum of 48 inches in inside diameter and shall be installed at the intersection of all other sewer lines six (6") inches in diameter or larger and at intermediate spacings along the line. Manhole spacing shall be in accordance with the current state regulations. Manholes shall be placed at all changes in line grade and at the ends of all main lines designed for future extension. Manholes may be precast concrete or fiberglass (minimum H20 loading). A manufactured watertight gasket shall be used at all manhole penetrations.

## **Metallic Location Tape**

Metallic location and detector tape shall be installed in the trench above the sanitary sewer line. The tape shall be within the top 18 inches of the trench and shall be for the purpose of excavation warning and line location detection.

## **Depth of Cover**

The minimum depth of cover over sanitary sewer mains shall be 48 inches below finished grade, unless otherwise approved by the City.

## **Alignment**

Sanitary sewers shall be designed with straight horizontal and vertical alignments between manholes. All sanitary sewer lines shall be located five- (5') feet inside the street right-of-way or in the middle of the line easement unless otherwise approved by the City Engineer. Sanitary sewer lines shall be located on the opposite side of the street from potable water lines.

## **Prohibited Connection**

No connection to any sanitary sewerage system shall be made that permits the entrance of surface water, roof drainage or waste of other than domestic sewage characteristics without the specific authorization of the City.

## **Lift Stations**

Lift stations or separate treatment facilities may only be constructed if such facilities are more beneficial to the City than constructing an adequate gravity system or outfall. In determining benefit, the City shall consider power cost for operation, land cost and all other costs of the facility based on a ten-year life.

## **Service Connections**

Individual sanitary sewer service connections (sewer "taps") shall be installed for each building in a development at the time of construction of the new sewer main lines. Individual taps shall be provided for each dwelling unit in duplex or two-family buildings. Buildings containing more than two dwelling units may provide a common sewerage collection system from the building to the public sewer main for each building. The minimum size for a sewer tap shall be four (4") inches in inside diameter. The connection shall be made with a wye fitting for four (4") inch taps and with a manhole for all taps of greater than four (4") inch diameter.

## **Trench Safety**

The design and construction of all new sanitary sewer facilities shall provide for trench safety as required by local, state and federal regulations. Trench safety shall be the sole responsibility of the developer and/or the contractor.

## **Stormwater Management and Surface Restoration**

The design and construction of all new sanitary sewer facilities shall provide for stormwater management and restoration of the construction sites. Drainage and erosion control measures shall be approved by the City and shall meet all requirements of the state and federal government.

All areas disturbed by the construction work shall be restored to a condition equal to or better than that which existed prior to the start of the project. At a minimum, all

disturbed areas shall be graded smooth (mowable), seeded, fertilized and maintained until a healthy stand of vegetation is achieved, as determined by the City.

### **Easements**

All sanitary sewer facilities shall be placed in public easements dedicated to the City. The minimum width for a sanitary sewer line easement is twenty (20') feet. Additional width may be required due to trench depth, topography, alignment, etc and as determined by the City.

**End Of Section**