

Separation Distances Section 700

710 General Requirements

Separation distances criteria are the minimum requirements to be used within the jurisdiction of the City of Burnet. The jurisdiction of the City of Burnet is defined as the area bound by the ETJ of the City of Burnet.

720 Separation Distances - Wastewater and Water Lines

Separation Distances Between Wastewater Lines and Water Lines; and Manholes and Water Lines. Where new wastewater lines or manholes are installed in compliance with the requirements of this subchapter, they shall be installed no closer than nine feet, in any direction, from any water lines, measured from the outside of the wastewater line or manhole to the outside of the water line. Wastewater lines shall be installed in separate trenches from water lines. Where nine feet of separation cannot be achieved, the project shall comply with the requirements in paragraphs (720.01) – (720.04) of this subsection.

720.01 New Wastewater Lines - Parallel Lines. Where new wastewater lines are installed parallel to an existing water line, the horizontal separation distance shall be no less than four feet and the vertical separation shall be no less than 2 feet (outside to outside), with the water line above the wastewater line. The wastewater line shall be constructed of pipe material and joints having a minimum pressure rating of 150 psi.

720.02 New Wastewater Lines - Wastewater Lines Crossing Water Lines. Where new wastewater lines are installed crossing an existing waterline, the vertical separation shall be no less than two feet or more below a water line, at a crossing angle between 75 degrees and 90 degrees, with pipe segment lengths of 18 feet or greater. With these types of installations, one segment of the wastewater pipe shall be centered under the potable water line such that the joints of the wastewater pipe are equidistant from the center line of the potable water line. Whenever possible, the crossing shall be centered between the joints of the potable water line. All wastewater pipe within a distance of 9 feet from the water line, in every direction as measured perpendicularly from any point on the water pipe to the wastewater pipe, shall have either a pressure rating for both joints and pipe of 150 psi or have a pipe stiffness of at least 115 psi with compatible joints.

720.03 New Wastewater Lines - Other Crossings. Any wastewater line crossing which is not installed two feet or more below the water line, installed at a crossing angle of less than 75 degrees, or which uses pipe segment lengths less than 18 feet in length, shall be installed with the same requirements as those detailed in section 720.02 of this item, with the addition that the minimum distance between the outside of any wastewater line and the outside of any water line shall be 6 inches and that all portions of wastewater pipe, which are not rated at a minimum pressure of 150 psi for both joints and pipe, which are within 9 feet of the water line, as measured perpendicularly from any point on the water pipe to the wastewater pipe, shall be embedded in cement stabilized sand. Where cement stabilized sand is used, the sand shall have a minimum of 10 percent cement per cubic yard of cement stabilized sand mixture, based on loose dry weight volume (at least 2.5 bags of cement per cubic yard of mixture). The cement stabilized sand bedding shall be a minimum of 6 inches above and one quarter of the pipe diameter on either side and below the sewer pipe.

720.04 Manholes and Water Lines. If a manhole is to be placed at a distance of less than 9 feet from a water line, the water line shall be encased in a new encasement, a minimum of 18 feet long, with a pressure rating of at least 150 psi with a nominal diameter of at least two sizes larger than the existing or proposed water line. The space around the carrier pipe shall be supported at 5 foot intervals with spacers or be filled to the spring line with washed sand. The encasement pipe shall be centered on the crossing and both ends sealed with cement grout or manufactured seal.

730 Separation Distances – Type I Reclaimed Water

730.01 Potable Water Line. Reclaimed water piping shall be separated from potable water piping by a horizontal distance of at least nine feet. Where the nine foot separation distance cannot be achieved, the reclaimed water piping must meet the line separation requirements of Section 720 of this section. The requirements of Section 720 of these specifications shall be followed, with “reclaimed water line” substituted for “wastewater line”.

730.02 Wastewater Line. Where a reclaimed water line parallels a wastewater line, the reclaimed water line shall be constructed in accordance with these specifications. The horizontal separation distance shall be three feet (outside to outside) with the reclaimed water line at the level of or above the sewer line. Reclaimed water lines which parallel sewer lines may be placed in the same benched trench provided the three feet separation is provided.

All construction plans shall be reviewed for compliance with TCEQ Chapter 210 requirements by the City Engineer.

730.03 Acceptance Testing. Acceptance testing shall conform to Section 800 of Standard Specifications.

730.04 TCEQ Special Design Criteria for Reclaimed Water Systems. All construction plans shall be reviewed for compliance with TCEQ Chapter 210 requirements.