

SECTION 6000 – WATER SYSTEMS

CITY OF BELTON, MISSOURI

DESIGN CRITERIA

The City of Belton hereby adopts the American Water Works Association Standards, current edition. The following additions supersede any discrepancies with AWWA Standards for use within Belton.

1. *Water system supplemental standards.*

- a. *Location.* Water mains shall be installed six feet from the back of curb where practical on the opposite side of the street of the sewer and storm sewer. The location shall avoid excessive bends, maintain straight alignments, and locate the fittings and valves behind the curb. Fire hydrants shall be installed two feet back from curb with 90-degree sets and the bury line mark on hydrant shall be at one-half inch per foot above the nearest back of curb or as approved. The proper length of the hydrant barrel shall be used; no extensions are allowed.

2. *Water distribution systems.*

- a. Water distribution systems, including the number and location of fire hydrants, shall be designed by a registered Professional Engineer and approved by the City Engineer and installed by the subdivider.
- b. The minimum requirement for water systems is the extension of eight inch water distribution mains and service connections to all adjacent lots according to the city's minimum specifications.
 - i. Developments must meet and maintain the fire flow as required by the fire code.
 - ii. Fire hydrant distribution and layout must be in accordance with the adopted fire code.
- c. A subdivision connecting to the city water system shall comply with the requirements of the City Engineer and Fire Marshal.

3. *Private lines.*

General: Water lines serving only one building are typically deemed private. Classification of water lines as public or private are determined through development review processes and are at the discretion of the Public Works Director. All water lines and hydrants classified as private shall conform to the design criteria and specifications of water mains per the City of Belton Design and Construction Manual.

Private fire lines: A private fire line shall be defined as a fire protection water main which has connections to hydrants and/or building fire sprinklers.

1. Construction of all private fire lines requires installation of an isolation valve and a backflow prevention device. If the private fire line length is 100 feet or less, the backflow prevention

device is allowed to be inside the building. If the private fire line length is greater than 75 feet, the backflow prevention device must be located outside and at the point of connection to the main on private property. External backflow prevention devices must be provided in a buried vault per City standard details. Maintenance of the backflow prevention device and private fire line shall be the responsibility of the property owner.

2. Domestic water service lines shall not be connected to private fire lines. Private fire lines are for fire protection only and are considered non-potable.
3. Cross connections between a private fire line and a public water main shall be prohibited.

END OF SECTION