

Brushy Creek Municipal Utility District Easement and Infrastructure Crossings Standards

Brushy Creek Municipal Utility District (BCMUD) has prepared easement crossing standards to set forth the applicable criteria that should be followed by developers, landowners, utilities and any other persons or entities that intend to construct surface or subsurface improvements or utilities within BCMUD easements. Any person or entity that proposes to construct improvements within or across BCMUD easements is encouraged to contact the District to discuss the proposed project, secure any required approvals, and to avoid potential delays and conflicts that might otherwise occur if the project is not coordinated with BCMUD and impairs BCMUD's easement rights. The purpose of BCMUD's Crossing Standards is to provide the public general information that allows construction of a project to proceed in a manner that does not compromise critical water facilities and the provision of service to District customers.

General Information

BCMUD provides retail water service to approximately 20,000 residents and commercial customers within its boundaries. In addition, BCMUD supplies Raw Water to Cimarron Hills Golf Club and Williamson County Regional Park. BCMUD also provides treated wholesale water to the Brushy Bend subdivision as an out-of-district customer.

The primary source of the water supply for BCMUD comes from Lake Georgetown, which is transported to the District via a raw water line owned and operated by BCMUD and generally located within easements. In addition, the District has an existing raw water line along Sam Bass to transport raw water from BCMUD wells to the BCMUD water plant. The existing easements grant rights to the property owner and to BCMUD for the protection of the water infrastructure and any associated appurtenances. These easements do convey with the property as it is sold, transferred or subdivided.



BCMUD's water source includes raw water from Lake Georgetown and groundwater from water supply wells located east of the District. **Figure 1** shows the BCMUD out-of-district water system improvements, including the District boundaries and the following key water system components:

- Raw Water Intake on Lake Georgetown near Cedar Breaks Park
- Approximately 12 miles of 20-inch and 24-inch diameter ductile iron raw water pipeline, which transports raw surface water from the Lake Georgetown Intake to the raw water pond located at the BCMUD water treatment plant
- Three (3) active water wells located along Sam Bass Road with groundwater transported to the BCMUD water treatment plant raw water pond via a 12-inch diameter water line along Sam Bass Road

General Standards and Requirements

All utility work conducted within a BCMUD Easement or when crossing a BCMUD owned utility must be conducted in full compliance with applicable federal, state and local standards, regulations and requirements. The following rules and standards may be applicable:

- Texas Commission on Environmental Quality (TCEQ): 30 TAC 290 - PUBLIC DRINKING WATER 30 TAC 217 - DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS TCEQ WATER DISTRIBUTION SYSTEM, GENERAL CONSTRUCTION NOTES TCEQ WATER DISTRIBUTION CONSTRUCTION CHECKLIST
- City of Round Rock, Texas.
 Standard Specifications Manual, SERIES 500 UNDERGROUND PIPED UTILITIES Standard Specifications Manual, SERIES 1800 - PRIVATE DEVELOPMENT Standard Products List, Water, Wastewater and Drainage Utilities Criteria Manual, SECTION III – WORK IN OR ABOVE CITY CONTROLLED PROPERTY
 - Standard Construction Details
- International Association of Plumbing and Mechanical Officials: Uniform Plumbing Code, 2021 or latest Edition.

BCMUD has adopted the Uniform Plumbing Code and Round Rock Standard Specifications and Standard Details, except as may be modified under this guidance. It is recognized that certain utilities may be proposed for installation within BCMUD Easements that are part of the City of Georgetown or other utility's system. In those cases, the standards adopted by those utilities may be applicable.

Specifications and Design Criteria

These Standards set forth general specifications and design criteria for general use in the design and construction of proposed improvements within a BCMUD Easement to prevent conflict with the District's existing easement rights and for protection of BCMUD facilities. Persons are encouraged to contact the District prior to commencement of a project to secure any required approvals and for the District to communicate any special design considerations applicable to the project. These Standards are not to be considered all-inclusive but provide guidance to entities or developers proposing work within the BCMUD Easement or crossing a BCMUD-owned utility, addressing a few of the typical requests from entities.

A. General Standards

All products and materials proposed for use should be in full compliance with applicable federal, state and local requirements. BCMUD generally accepts products and materials meeting the standard specifications of the City of Round Rock. Pre-approved products and materials are located on the City of Round Rock's Standard Products List (SPL), which provides a list of pre-approved products and materials for items used in water, wastewater and drainage projects. In certain situations, BCMUD may request that different materials and products be used or that certain products and materials on the Round Rock's SPL or specifications are inappropriate in certain circumstances. Individual projects may be subject to the standards of other governmental jurisdictions depending on the location and owner of the project.

B. <u>Proposed Utility Line Crossing (for lines 18-inch in diameter or less)</u>

When an entity proposes the construction of a utility that will cross existing BCMUD water improvements, the following standards generally apply:

• The crossing should be generally perpendicular to the BCMUD utility.

- A proposed utility (except for sanitary sewage) is preferred to be located above the BCMUD utility with a vertical separation of at least 4 feet between the outside walls of each utility if possible.
- Crossing a BCMUD utility with pipelines containing sanitary sewage must comply with TCEQ rules under 30 TAC 290. Separation distances, installation methods, and materials utilized must meet §290.44(e)(1)-(4). BCMUD Raw Water Lines shall be considered equivalent to a potable water line for the purposes of compliance with TCEQ requirements.
- When crossing above the BCMUD utility cannot be practically achieved, construction techniques that minimize disturbance to the BCMUD utility should be employed. Such techniques may vary depending upon the soil conditions, utility depth and other factors. Directional drilling beneath the BCMUD utility with a separation of at least 4 feet between the outside walls of each utility line is a preferred construction method. Persons are encouraged to contact the District to identify any such techniques that will not interfere with BCMUD's easement rights.

C. <u>Proposed Utility Line Crossing</u> (for lines larger than 18-inch in diameter)

Standards will be determined on a case-by-case basis and geology conditions. A recommendation from a geotechnical engineer may be required to ensure BCMUD's easement rights are not impaired.

D. Proposed Utility Line Parallel to BCMUD Utility

When an entity proposes construction of a utility that will be placed parallel to the existing BCMUD utility, the following standards apply:

- The parallel utility be placed outside of the BCMUD easement, where BCMUD holds an exclusive easement.
- Where possible, the proposed utility and the existing BCMUD utility be separated by at least 10 feet horizontally between the outside walls of each utility line.

E. <u>Street/Driveway Construction</u>

When an entity proposes construction of a street or driveway within the BCMUD Easement, the following standards should be followed:

• Where possible, no excavation or fill placement shall occur within 4 feet of the top of an existing BCMUD utility.