



## CLT WATER QUICK REFERENCE DEVELOPMENT GUIDELINES

### DONATED PROJECTS:

- CAP required (1.5" meters and larger)
- Buildings shall remain 15' from Water Mains
- Tree locations to be coordinated with CLT Water in relation to water lines
- No permanent structures within 10' of publicly maintained water/sewer infrastructure (minimum, new easement width criteria will be released with new design manual)
- No tree pits directly over water main or sewer main.
- If adding pavement over water/sewer infrastructure, soft digs are required to verify depth to ensure it meets NCDEQ and CLTWater's Design Standards.
- No private infrastructure (water/sewer) is allowed to cross a Public R/W.
- Any grading inside our easement will be approved on a case-by-case basis. A profile showing the proposed/existing grades will be required.
- No utility nor utility structure is permitted to be above water mains or sewer mains
- Min 12" vertical separation between all utilities
- Min 5' horizontal separation between all utilities
- Traversable slope is required above Charlotte Water utilities
- No underground BMP within 15' of Water Main or sewer mains
- No BMP easement within Charlotte Water easement
- Utility pole locations must follow Duke's excavation guidelines for horizontal distance.

### NEW SERVICES:

- Service line/meter vault locations shall be designed for the following:
  - Design space to account for full meter assembly, including valves in front of and after meters.
    - Reference CLT Water design manual for meter vault sizes
  - Provide adequate spacing between trees (including planters) to avoid conflict
  - Installation of meter vaults to remain outside of sidewalks unless all options have been exhausted
  - Meter vaults may not straddle sidewalks/planting strips
- Service lines to remain outside of radius points and ADA ramps
- Proposed sidewalk locations conflicting with existing water/sewer infrastructure (i.e. meter vaults, fire hydrants, etc.) to be coordinated with CLT Water.
- No permanent structures within 10' of publicly maintained water/sewer infrastructure
- Confirm sewer lateral installation will not conflict with existing utilities
- Confirm water service installation will not conflict with existing utilities



#### BACKFLOW PREVENTION:

- Backflow Prevention compliance is enforced via the County Code Enforcement Department's permitting and plan review processes – not the City or County land development permitting processes.
- Submittals for Backflow Prevention plan approval must include a completed Backflow Prevention Service Application and civil plans that conform to the requirements listed at the following link:  
<https://charlottenc.gov/Water/Development/Pages/BackflowConstructionGuidelines.aspx>
- Backflow Prevention compliance is generally enforced on a tax parcel basis. When enforced, compliance must be met for all water services remaining on the property. Projects that entail new construction, any addition, any outdoor underground piping work (water, sewer, or fire protection), any interior fire protection piping work, the installation of more than 19 new fire sprinkler heads, or certain changes-of-use (typically residence to commercial) "trigger" enforcement of CLTWater BP requirements.
- The location of a meter drives the required location of backflow prevention assembly
- If the location proposed for a new meter is non-standard or involves construction of a new water main (incl. extensions), documentation of its approval by the IDS division will be required for Backflow Prevention approval
- BP's are required to be located outside on the private property, opposite the water meters, and just after the Zoning-required setback line. Side yards, rear yards, and buffers may also apply. If Charlotte Water determines there is no room outside to install a BP, refer to the following link for guidance on the criteria for an indoor installation:  
<https://charlottenc.gov/Water/Development/Documents/Inside%20installation%20criteria%20bulletin%20-%20Final%202-8-19.pdf>