

# City of Maryville Water Plans Review Checklist

Project: \_\_\_\_\_

Date of Review: \_\_\_\_\_

Engineer: \_\_\_\_\_

Phone #: \_\_\_\_\_

Developer: \_\_\_\_\_

Phone #: \_\_\_\_\_

\_\_\_\_\_

**The list below is intended as a guide to the critical items required by Tennessee State requirements and the Rules, Regulations, Rate and Policies of the City of Maryville Water Quality Control Department. The engineer is responsible for being familiar with and meeting the design standards of the City and State. It is strongly suggested that a predesign conference be schedule with a preliminary development layout including topography and water features available for the conference.**

## State of Tennessee requirements General Plan of Water and Detail Plans of Water Distribution Systems:

- Approximate plan size 24" x 36"
- Maximum Scale 100 feet per inch for plans and profiles – maximum vertical scale of 10 feet per inch
- Name of water system and county in which located
- Engineer name, address and phone on first sheet of plans – plans signed and stamped by Engineer
- A Vicinity Map (location map) showing location of the project if a complete system map is not included
- A Key map showing location of detailed drawings when project is comprehensive
- Location, size and material of all water lines and appurtenances relative to the project – both existing and for construction (City of Maryville uses Class 51 Cement Mortar Lined Ductile Iron Pipe for all new construction – older pipes may be of different materials please check with WQC engineering for existing pipe materials.)
- Stream crossings providing profiles with elevations of the stream bed and the normal and extreme high and low water levels if this information is available.
- Location of proposed water lines in relations to roads, bridges and other identifiable objects
- Location of valves, fire hydrants, tees, reducers/enlargers, bends and other appurtenances (Stationing).
- Hydraulic profile or data and computations showing hydraulics or proposed additions to the distribution system. **(NOTE City of Maryville Minimum standards are 750 G.P.M. fire flow with 30 PSI residual pressure- this exceeds the State of Tennessee minimums. The City of Maryville also requires the lowest and highest static and residual pressure to be calculated and shown on the plans.)**
- Plans are clear and legible.

**City of Maryville Additional requirements not listed above:**

- Project layout Map with Project Name and Design Date
- Developer and property owner's name, address and phone on first sheet of plans
- Utility name, address and phone on first sheet of plans (City of Maryville Water Quality Control Department, 332 Home Avenue, Maryville, TN 37801, (865) 981-3300)
- Minimum pipe size is 6" if gridded with maximum leg length of 800 feet otherwise all pipe shall have a minimum diameter of 8".
- Right-of-ways and Easements needed for the water that falls outside of the property owned or controlled by the developer.
- Lot lines and locations shown on all plan views including lot numbers.
- Street Names and edge of payment locations as well as right-of-way.
- Location of proposed service connections - - City of Maryville sets individual taps on the same side of the road as the water line and double settings on the opposite side of the road from the water line. Taps should be spaced to avoid conflict with sanitary sewer laterals.
- 100 foot stationing of water lines and stationing of all appurtenances on plan and any included profile views
- Sufficient detail shown on the plans to allow for material take off and location of lines in the field by a third party.
- Plan/Profile sheets shall be drawn for water lines 10 inches in diameter and larger. Existing lines shall be field located whenever reasonable and the source of the utility locations noted on the plans.
- For all lines 8 inches in diameter and smaller the relevant elevations of all pipe lines and conflicting structures at utility crossings shall be shown – This shall include a short profile view of all utility crossings of the water line where new utility lines are being constructed.
- Where profiles are provided they shall be on the same sheet as the plan and oriented in generally the same direction. (They may be included as inserts on a plan sheet to save drawing a separate plan/profile sheet.)
- Inclusion of City of Maryville Detail sheets or similar relevant detail sheets – details must match City of Maryville standards.
- Note on plans – “All Construction is to be in conformance with WQC Rules, Regulations, Rates and Policies.” (Note if the standards details are included as part of the plan this not is already on the City of Maryville Standard Detail sheets and does not need to be included on any other sheets.)
- Revisions tabulated on re-submittals

NOTE: Please include the radius of any turns where joint deflection is to be used to curve the water line – For eight inch pipe, the maximum deflection per joint is 5 degrees. For curves tighter than this, please include appropriate bends as part of the plans.