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### **CHEROKEE COUNTY WATER AND SEWERAGE AUTHORITY POTABLE WATER SYSTEM CONSTRUCTION GENERAL NOTES**

1. All potable water system construction must follow the current Cherokee County Water and Sewerage Authority Water Main Standards.
2. All water mains shall be ductile iron pipe, except where the Construction Manager approves otherwise. Ductile iron pipe shall be thickness Class 50, designed in accordance with AWWA C150 and manufactured in accordance with AWWA C151. All ductile iron pipe shall have an outside bituminous coating per AWWA C151 and an inside standard cement lining with bituminous seal coat per AWWA C104. All references to AWWA standards shall mean latest revisions published.
3. All line valves shall be marked by concrete valve markers and by a "V" cut into the curbing, with the point of the "V" aimed at the valve.
4. A concrete valve marker is to be placed directly above the plug on all dead-end water mains.
5. Information regarding underground utilities on these plans is not guaranteed as to accuracy or completeness. Prior to beginning work, the Contractor shall request a field location through the utilities protection center and any utility owners thought to have facilities in the area. The Contractor shall promptly compare these field-marked locations with the project plans and then notify the Designer of any anticipated problems or need for contract changes. It is the Contractor's responsibility to excavate or cause the utility owner to excavate for the purpose of determining exact elevations or locations at utility crossings and other critical locations well in advance of the work under this contract. Damage to existing utilities resulting from the Contractor's negligence shall be repaired at the Contractor's expense.
6. All service lines under pavement shall be encased in Schedule 40 PVC casing with a minimum diameter of 2", extending a minimum of 3 feet beyond the pavement and/or sidewalk on each side of the road. 2" services shall be encased in 4" PVC casings. All water service laterals 2" and smaller shall be Type K copper tubing with compression fittings as specified in the Water Standards.
7. Concrete thrust blocking shall be placed at all bends, tees, valves, reducers and all other fittings. Prior to blocking, fittings shall be wrapped with polyethylene film.
8. The Developer/Contractor shall meet with the Chief Inspector at least 24 hours before beginning construction. The Contractor shall notify the Chief Inspector or his designated representative by 8:30 a.m. of each workday when work is scheduled unless authorized otherwise.
9. Water mains shall be installed so that the top of the pipe is a minimum of four feet below final grade, four feet below the edge of the pavement, or four feet below the ditch paralleling the road, whichever is deepest.
10. Contractor shall place a vertical piece of 2" PVC pipe on top of the water main at all tees, bends, fittings, elevation transitions, and every fifty feet along the length of the main for the purpose of collecting elevation data for record drawings. The top of the 2" PVC shall be capped or taped to prevent dirt and other debris from clogging the 2" pipe before the depth can be measured.
11. All fittings and valves are to be mechanical joint with retainer glands unless otherwise approved. Retainer glands shall be EBAA Mega-Lug or approved equal.

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12. Type 4 bedding is required at all restrained pipe installations.
13. Contractor must show proof of insurance in the amount specified by the CCWSA.
14. All backflow preventer devices are to be tested by a CCWSA approved tester. A list of testers is available from the CCWSA. Any tester not on the list is subject to approval by the CCWSA. Contact Mr. Greg Long with the CCWSA for more information.
15. All meters, backflow preventers and double detector check valve assemblies are to be purchased from the CCWSA.
16. A horizontal separation of at least 10 feet is required between existing or proposed water mains and existing or proposed sanitary sewer lines.
17. A vertical separation of at least 18 inches is required where a water main crosses an existing or proposed sanitary sewer line. A full joint of water main is required to be centered at the sanitary sewer line crossing.
18. No portion of this project is being constructed on or near an existing landfill, abandoned landfill, or any other site used for waste disposal.
19. Potable water and sanitary sewer structures are not allowed within a dam. Utility pipelines and structures must be a minimum of 30 feet outside the toe of slope of the dam.
20. Hydrant flow tests are valid for one year and only apply to a single phase of this project.
21. Existing County roads shall not be open cut unless permission is granted by the Cherokee County Department of Public Transportation.
22. Plan approval is valid for 12 months without beginning construction. Plans shall be subject to beginning the process of review and approval if 12 months expire prior to the start of construction.
23. Record drawings of water and sanitary sewer facilities are required to be submitted to the CCWSA upon completion of the project.
24. If construction plans are stamped for a full project, and then the Developer revises the plans to build the development in phases, no construction or field inspection will be allowed to begin until the revised, phased plans are re-approved and stamped for the phased construction.
25. If an existing water main is to be paved over by a new entrance or accel/decel lanes, the water main is to be abandoned and replaced with a new DIP water main located five feet or more behind the new back of curb.
26. New water mains installed along County or State roads, within 80 feet of steel gas main crossings, or in any wetland areas must be encased in polyethylene tubing (Polywrap 8 mil).
27. All streams and protective buffers shall be crossed in accordance with current County and State regulations.
28. Fire hydrants shall be designed to be placed within 200 feet of new entrances, in all cul-de-sacs, and at every proposed intersection.

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29. New fire hydrants shall be Mueller Super Centurion 250, M&H AWWA C502 Style 129 Traffic Model, or US Pipe Metropolitan 250 Model 94. All hydrants shall be rated for 250 psi working pressure and shall be equipped with a 5¼" valve opening, two 2½" hose nozzles and one 4½" pumper nozzle.
30. Inside of steel casings, pipe joints shall be restrained using Fast-Grip gaskets or approved equal.
31. All new water mains must pass leakage testing and disinfection testing witnessed by a CCWSA representative before a project is released and accepted.
32. All water meter vaults and DDCV assembly vaults are to be located off of the road right-of-way in a permanent easement dedicated to the CCWSA. The easement shall be dimensioned to be 10 feet off each corner of the vault. Smaller domestic use meters adjacent to a DDCV assembly can be located within the 10 foot spacing between the vault and the edge of the easement.
33. Inside of developments with curb and gutter, the Contractor shall cut a "V" into the top of the curb for all water valves (line valves and hydrant valves) with the point of the "V" aimed at the valve. The Contractor shall also cut a "W" in the top of the curb above all water service laterals.
34. The report stating the results of the hydrant flow test and the 24 hour pressure recording chart shall be shown within the plans for this project.
35. Horizontal locations will be referenced to Georgia State Plane Coordinates System (NAD 83 West Zone Feet).
36. Vertical locations will be referenced to North American Vertical Datum (NAVD 88).
37. Orthometric locations will be referenced to GEOID 99/03.
38. No landscaping or structures will be allowed in CCWSA easements.
39. Contractor shall provide meter stubs.