

LCWSA Water Notes:

1. Contractor must verify the location of existing utilities prior to beginning construction.
2. All water installations and materials are to be in accordance with the latest approved Limestone County Water and Sewer Authority (LCWSA) standard specification and design criteria.
3. All construction materials must be submitted to LCWSA for approval prior to ordering.
4. Water mains shall have a 5.00 ft horizontal and 2.00 ft vertical clearance from sanitary sewers and shall have a 3.00 ft horizontal and 1.00 ft vertical clearance from other underground structures. Separation between sanitary sewer and primary electrical lines shall be a minimum of 10.00 ft (edge to edge). Sewer pipes shall pass beneath water lines.
5. Top of meter boxes are to be set 2-3 inches above lot subgrade.
6. Services crossing a roadway are to be encased in 2-inch Sch 40 PVC casing. Services and casing shall extend to a point 2.00 ft behind the sidewalk on each side of the roadway.
7. The water lines are to be located a minimum 4.00 ft from back of curb and/or sidewalk.
8. All valves are to be located outside paved areas.
9. All water main must maintain a minimum cover of 3.00 ft at all times.
10. All valve boxes, hydrants, and related appurtenances shall be adjusted to match final grade.
11. All water mains and related appurtenances shall be installed inside a dedicated easement and or right-of-way boundary.
12. No service tees shall be installed back to back. Tees installed consecutively must be separated by at least 6.00 ft of main line pipe.
13. No service tees shall be installed within 6.00 ft of a manhole.
14. Contractor to install fittings on water line as needed in order to transition around corners. Restrained joints are required at fitting. Maximum 45-degree bends used for transitions.
- ~~15. Water meters must be installed at the center of the lots.~~
16. All water lines in development shall be 8-inch class 350 ductile iron pipe.
17. Maximum deflection of water main around a cul-de-sac is 5 degrees per 20 ft of pipe.
18. All ductile iron pipes shall be with push on joints conforming to ASTM A746, Class 350.
19. All ductile iron pipes shall be lined with enamine or a thin cement lining as specified in ANSI A21.4/AWWA C104 and include a bituminous seal coat or asphalt emulsion spray coat 1 mil thick in accordance with LCWSA specification.
20. An LCWSA representative must always be on site when tying into an existing water main.
21. All piping shall be pressure tested and disinfected in accordance with LCWSA standard specifications and design criteria.
22. All water lines (DIP or PVC), including service lines, shall be installed with a 10 gauge, blue coated copper wire, installed directly above the pipe. Adequate wire shall be terminated inside valve boxes for connection to line detection equipment.

LCWSA Sewer Notes:

1. Contractor must verify the location of existing utilities prior to beginning construction.
2. All sewer installations and materials are to be in accordance with the latest approved Limestone County Water and Sewer Authority (LCWSA) standard specification and design criteria.
3. All construction materials must be submitted to LCWSA for approval prior to ordering.
4. Separation between sanitary sewer and primary electrical lines shall be a minimum of 10.00 ft (edge to edge). Sanitary sewers crossing under storm drains shall have a minimum of 18" vertical clearance. Water mains shall have a 5.00 ft horizontal and 2.00 ft vertical clearance from sanitary sewers. Sewer pipes shall pass beneath water lines.
5. At locations where multiple service laterals enter manhole, coordinate with manufacturer to ensure adequate sidewall separation is maintained between connections.
6. No service laterals to be installed on the sewer main within 6' of a manhole.
7. An LCWSA representative must always be on site when tying into an existing manhole.
8. Sanitary sewer lines shall have a minimum of 36" of cover in non-traffic area and 48" in paved areas subjected to vehicular traffic.