

Supplement to the Iowa Statewide Urban Design and Specifications (SUDAS)

City of Coralville, Iowa

Revised January 13, 2021

Sanitary Sewer

1. Regardless of depth, all sanitary manholes shall have steps installed.
2. Sanitary manhole castings within pavement shall be 3-piece floating with an internal chimney seal.
3. Tee sanitary service connections are not allowed. Use a wye.
4. Anti-microbial additive (ConShield) is required in concrete mix for all concrete sanitary manholes and all concrete sanitary sewer pipe up to 36" diameter.

Sidewalks and Shared Use Paths

1. Curb ramps and common panels shall be installed by the Developer as part of the subdivision public improvements.
2. Do not design to the maximum or minimum cross slopes and run slopes. Design cross slope shall be 1.5%. As-built cross slope shall be 2.0% maximum and 1.0% minimum, except where noted on the plans.
3. Sidewalk/Shared Use Path Thickness:
 - a. 5' wide or less must be minimum 4" PCC. Can be on grade.
 - b. 6' wide must be minimum 5" PCC. Can be on grade.
 - c. Wider than 6' needs to be minimum 6" PCC. Granular subbase required on case-by-case basis. When required, the subbase shall be 4" thick minimum.

Storm Sewer

1. Use Bedding Class R-2 for all storm sewer unless otherwise specified.
2. Use Class 1 Backfill within ROW and under pavement. Use Class 2 Backfill outside ROW.
3. Storm manholes shall have steps installed when depth exceeds 48 inches.
4. Subdrain connections shall only be made on the upstream side of intakes boxes except:
 - a. When subdrain daylights immediately downstream of an intake.
 - b. When intake is in a sump condition.
5. Subdrain outlets (SUDAS Figure 4040.233): Use Removable Grate (Diamond Mesh Cap).

Storm Sewer (continued)

6. Subdrain is not required on the same side of the street as storm sewer with fabric-wrapped joints as long as there is a connection between modified subbase and granular trench backfill.

Water Main

1. Water main shall be installed after street paving, except for water main crossings.
2. Water services shall be installed after public improvements are accepted and shall only be installed for a property with an active Building Permit.
3. Include three valves at every tee. Include four valves at every cross.
4. Existing or proposed water valve boxes that will fall within new or reconstructed pavement shall be slip-type.
5. Bed water main on native material, dig in bells, and backfill with suitable native material.
6. For water main 16" diameter or smaller: If mechanical joints are used, poured concrete thrust blocks are required. If restrained mechanical joints are used, solid concrete blocks may be used for thrust restraint instead of poured concrete. Solid concrete blocks must have minimum common dimensions 4" x 8" x 16" (*standard size available from Lowes, Menards, etc.*) and must be installed firmly against undisturbed ground with no wood shims or other fillers.
7. For public water main and hydrants, install two mainline gate valves at all hydrant assemblies. At tees or crosses that include a hydrant assembly, install mainline gate valves on all legs of the fitting and place hydrant assembly within the valve cluster. For private water main and hydrants, install one mainline gate valve at all hydrant assemblies. At tees or crosses that include a hydrant assembly, install mainline gate valves on all legs of the fitting and place hydrant assembly within the valve cluster.
8. Use City's fire hydrant note: Hydrant assemblies shall have three nozzles (two 2 ½" and one 4 ½" pumper nozzle). Pumper nozzle shall be STORZ style. Minimum barrel size and valve opening shall be no less than 5 ¼" diameter. Operating nut shall be tapered 11/16" to ¾" square nut, opening right (clockwise). Run tracer wire outside of the hydrant valve box, then drill hole just below valve box top and terminate tracer wire inside valve box.
9. Tapping saddles: Triple Tap, stainless steel, Type 304, stainless steel nuts and bolts. Nylon tapping saddles are prohibited.
10. Service saddles: Mueller Nylon Coated Saddle.

Water Main (continued)

11. Tracer wire: Use Kris-Tech (K-T) tracer wire (AWG 12) on all water main except when directionally-drilled. For those installations, refer to SUDAS Specifications.
12. On cul-de-sacs, extend water main a minimum of 3' into the frontage of the last lot to allow that lot's water service to connect to the main before the hydrant assembly, instead of having to bore the service under the street.
13. To minimize the potential for stagnant water, when designing the water main layout for a site, ensure there is:
 - a. No more than 50' of dead-end water main beyond where the water service (or combined water service/fire line) tees off from the site's internal water main.
 - b. No more than 50' of dead-end water main for any hydrant locations. Looping of the water main within the site, including around the building, may be required.
14. All meters and backflow devices are required to be located in an easily accessible, heated room to which the Water Department will be given access. This room can have exterior or interior access. If the units are metered individually, all meters must have shut off valves before and after the meter set. Generally, all meters are located in the same room.
15. The City of Coralville does not allow irrigation meters. All water is billed at the regular rate and there is no deduction of irrigation water.
16. Hydrant meters will only be issued when no other reasonable source of water is available. Contact the Coralville Water Department at 319.248.1770 to submit a request. Hydrant meters can be used from April 16 to October 14. From October 15 to April 14, hydrant meters can only be used with approval from the Water Superintendent and must be located within a heated structure.