

DIVISION 33 - UTILITIES

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33 05 00 – MANHOLE STEPS

- A. All manhole steps shall be drop front type and meet all OSHA requirements.

33 05 26 – UTILITY IDENTIFICATION

- A. All buried pipes, wires and/or structures shall have a tracer wire or ribbon for location and identification. #12 copper locating wire with Rhinomarker hideout connection point.

33 10 00 – WATER DISTRIBUTION

A. Fire Hydrant Connections

1. New hydrants to have 2 – 2 ½“ nozzles meeting Cedar Falls Fire Department specs with one streamer nozzle. Acceptable model Mueller brand Super Centurion 200 A-423. Fire hydrants to be positioned with the large port facing fire truck access. Consultant to coordinate location of hydrants and Siamese connection locations with Cedar Falls Fire Department.

B. Color Code for Fire Hydrants

Green – more than 1,000 GPM
Yellow – 1,000 – 500 GPM
Red – less than 500 GPM

33 10 10 – DOMESTIC WATER DISTRIBUTION

A. Pipe Standards

1. Ductile Iron Pipe, Centrifugally Cast, For Water or Other Liquids

Ductile iron pipe shall be push-on joint or mechanical joint, centrifugally cast conforming to Specification ANSI/AWWA C151/A21.51, latest revision, plain end to be gage push-on. Pipe thickness shall be Class 52 for 12” size and smaller, Pressure Class 350 for sizes 14” through 20”, and Pressure Class 250 for 24” size and larger. Push-on pipe joints shall be provided with either dee or serrated silicon bronze wedges, and mechanical joints shall be provided with conductive-tip gaskets for electrical thawing. An exterior asphaltic coating shall be applied to all pipe conforming to Specification ANSI/AWWA C151/A21.51, current revision.

All ductile iron pipe shall be interior cement-mortar lined conforming to Specification ANSI/AWWA C104/A21.4, latest revision.

All pipe shall be marked with: name or manufacturer, date pipe was produced, size, class and spigot insertion depth gauge.

33 41 00 – STORM SEWER

A. Storm sewers shall be constructed in accordance with Iowa DOT standards.

B. Manholes

1. Storm sewer (traffic) RA-2
Storm sewer (pre-cast, non-traffic) RA-29.

C. Intakes

1. Non-traffic, grass area (use flat grate) RA-29.
2. Traffic, curb RA-3.
3. Traffic, curb RA-6 (use for curb with adjacent sidewalk) RA-6.