

The following standard specification is intended to be edited according to the specifics of the project. Brackets [ ] and areas shaded in gray [e.g. format] indicate requirements that are optional depending upon the type of system being provided or per instructions associated with the [ ] and project requirements. Consult with University's Representative and campus stakeholders.

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## SECTION 33 12 19 FIRE HYDRANTS

### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Fire hydrants.

#### 1.2 RELATED SECTIONS

- A. Section 01 33 23 Shop Drawings, Product Data and Samples
- B. Section 01 43 00 Quality Assurance
- C. Section 09 90 00 Painting and Coating

#### 1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM) A536 - Standard Specification for Ductile Iron Casting.
- B. American Water Works Association (AWWA) C503 - Wet-Barrel Fire Hydrants.
- C. National Fire Protection Association (NFPA) 13 - Standard for the Installation of Sprinkler Systems
- D. NFPA 14 - Standard for the Installation of Standpipe and Hose Systems
- E. NFPA 24 - Standard for the Installation of Private Fire Service Mains and Their Appurtenances
- F. Underwriters Laboratories, Inc (UL) 246 - Hydrants for Fire Protection Service

#### 1.4 SUBMITTALS

- A. See Section 01 33 23 Shop Drawings, Product Data and Samples for submittal procedures.
- B. Product Data: Provide data acknowledging that products meet requirements of standards referenced.
- C. Manufacturer's Installation Instructions: Indicate special procedures required to install Products specified.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Project Record Documents:
  - 1. Record location of fire hydrants

### PART 2 - PRODUCTS

#### 2.1 FIRE HYDRANTS

- A. Fire hydrants shall conform to AWWA C503 and shall be listed by Underwriters Laboratories, Inc. in accordance with UL 246.
- B. Hydrants shall be wet barrel type, low silhouette, with two 2-1/2 inch outlets and one 4-1/2 inch outlet. All outlets shall have National Standard fire hose thread.
- C. Hydrants shall be ductile cast iron conforming to ASTM A536.
- D. Hydrants shall be Clow Corporation Model #92 (Slim Line), or equal (no known equal).

- E. Break away bolts or spool, and swivel adapter shall be provided.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

Note to specifier: coordinate and specify work to comply with University Standard Detail DW-07.

- A. Hydrants shall be installed per manufacturer recommendations and as detailed. Set hydrants plumb; locate pumper nozzle perpendicular to and facing roadway.
- B. Hydrants shall be installed with the outlets facing the street, with 4-1/2 inch opening no less than 2 feet or more than 7 feet from the street curb or edge of pavement.
- C. The center of the lowest outlet shall be no less than 18 inches above finished grade.
- D. Street valve serving the hydrant shall be located at point of connection to the main and no less than 10 feet from the hydrant.

Note to specifier: coordinate painting with Section 09 90 00. If Section 09 90 00 is not provided, sufficient information shall be provided under this paragraph to fully instruct the contractor on the requirements for painting ferrous materials, including preparatory work and proper conditions for conducting the work. Confirm the fire department requirements prior to final publication of the specifications

- E. Hydrants to be painted by the Contractor in accordance with NFPA 24 requirements and University Fire Prevention Services specifications. Hydrant body shall be painted white (ICI Devoe Devflex-659 Semi Gloss 4206 or equal) and comply with Section 09 90 00 Painting and Coating.
- F. Where subject to mechanical injury, hydrants shall be protected in accordance with the requirements of the applicable editions of NFPA 13, 14, and 24, and the appropriate editions of the California Building Code and the California Fire Code, so as not to interfere with connection to the outlets.

#### 3.2 TESTING

- A. Hydrant testing shall be conducted by the Contractor. Coordinate witness test with University's Representative to have a University Fire Prevention Services representative in attendance. Fire hydrants shall meet the factory and field test provisions of AWWA C503. At least 48 hours notice of tests shall be given.
- B. Perform field inspection and testing in accordance with Section 01 43 00 Quality Assurance.

END OF SECTION 33 12 19