

construction of standpipe systems to include combination standpipe systems. This document is not intended to serve as a guide specification.

- B. The design guidelines contained herein include the requirements for fire protection systems at SHSU. It is the intention of this document to provide a minimum standard for fire protection systems at the University so as to provide the highest level of fire safety possible.

1.02 Scope of Work

- A. Provide all design and materials required to provide a complete fire protection system to protect the specified building in accordance with design requirements. Antifreeze loops are not permitted. The preference of the University is to connect to the campus Fire Water Distribution System (FWDS) provide code compliant combination wet automatic fire sprinkler and, where possible, automatic standpipe systems.

B. Reference Standards

Utilize latest adopted code editions available.

- C. Standpipe systems shall be installed where required by NFPA 101 or the latest edition of the International Building Code. All standpipe systems shall be Class I in all cases, regardless of minimum code requirements, and designed per the latest edition of NFPA 14. 2-1/2" hose valves are required at the intermediate stair landings within the required stairwells per NFPA 14 unless approved by the City of Huntsville. This may require a standpipe riser in each intermediate landing of all stairs and a separate fire sprinkler riser located in one main stair landing. Provide standpipe isolation control valves with tamper switches for each standpipe as required per NFPA 14. Locate isolation control valves within the stair enclosure and exposed for maintenance purposes.

- D. The work addressed in this section consists of a fire protection system, which may include coordination with one or more of the following:

1. Fire Alarm Systems
2. HVAC and smoke control systems and fire, smoke, and combination fire/smoke dampers.
3. Emergency power systems.
4. Elevator installation. See the Texas State Elevator Code ASME/ANSI A17.1 and ASME/ANSI A17.3.
5. Central control and monitoring system.

1.03 Related Work: References/Quality Assurance

- A. The University, the International Building Code, National Fire Codes as published by the National Fire Protection Association (NFPA), State Fire Marshal, and SHSU Personnel requirements contain fire protection criteria and requirements for the design of all fire suppression systems.

1.04 Submittals

- A. Not Used
- B. Refer to provisions established in the Project Specifications and in related section of Division 01 – General Requirements. All product data shall be submitted under provisions of Division 01.
- C. Manufacturer's data sheets shall be provided for all materials and equipment for approval before purchase or installation. Data sheets shall describe the type of material, capacities, manufacturer, part numbers of equipment, and give information necessary for verifying equipment approval.
- D. The Contractor shall submit detailed and accurate shop drawings prepared in accordance with NFPA 13, NFPA 14, NFPA 20, and NFPA 24 for approval of all equipment to be constructed and

- A. System design and installation shall be supervised by a licensed NICET Level III sprinkler system technician or fire protection engineer with not less than five (5) years experience with sprinkler systems. Accurate As-Built drawings shall be required in the form of three hard copies and two copies on CD in the specified AutoCAD format. The signature of the RME or engineer constitutes an affidavit that the statements, representations, and information presented in the submittal constitute a complete operational system conforming to applicable state laws and recognized good engineering practices. All field installation work shall be continuously supervised by a NICET Level II or III sprinkler system technician.

3.03 Microbiological Influenced Corrosion (MIC)

- A. Provide testing on the City of Huntsville water supply in accordance with the University for MIC testing procedures. Upon substantial completion contractor shall provide both free and total ATP counts in the standpipe system.
- B. Utilize methods and procedures for flushing sprinkler and standpipe piping as required by SHSU for MIC testing.

3.04 System Acceptance Testing and Commissioning

- A. Perform acceptance tests according to NFPA 13 and SHSU Third Party Testing Guidelines that apply to fire sprinkler system testing with a representative of SHSU Fire Prevention Services and FSSS (Fire Safety System Specialist) present. Prior to acceptance, accurate red-lines must be submitted and required training for SHSU personnel completed. Provide copies of test reports to the SHSU AHJ and FSSS, as tests are completed. Provide a complete set of all test results to the University at the completion of the project and a copy in each O&M Manual.

3.05 Warranty

- A. Warranty shall be good for one year.
- B. Contractor to respond to all warranty calls within 24 hours. If equipment cannot be repaired at this time, FSSS shall be updated daily with the progress and/or status.
- C. See Fire Alarm Warranty

END OF STANDARD