	Presidio Trust **Fire Marshal's Office** *1750 Lincoln Blvd. San Francisco, California 94129*	**Date**: September 9, 2020 **Revision**: Sept 28, 2026 **Standard**: ***FES-004***
Title: **Alterations to Existing Fire Sprinkler Systems**	**Approved By**: *Randy Amores*	

SCOPE:

Alterations, modifications, or additions (changes) to previously approved and installed fire sprinkler systems, may go beyond the approved system design outlined by the following National Fire Protection Association (NFPA) Standards:

- National Fire Protection Association, NFPA 13, Installation of Sprinkler Systems
- National Fire Protection Association, NFPA 13R, Installation of Sprinkler Systems for Residential Occupancies

Such systems, are subject to the following requirements:

1. **FOR CHANGES OF 10 OR FEWER FIRE SPRINKLER HEADS:**
   - 1.1. System changes will be designed and completed in accordance with NFPA 13/13R
   - 1.2. Shop drawings, piping diagrams and equipment specifications will be submitted for review and approval
   - 1.3. Hydraulic calculations will not be required
   - 1.4. System will not be required to undergo a hydrostatic pressure test
   - 1.5. System will be required to pass a visual inspection upon completion of work

2. **FOR CHANGES OF MORE THAN 10 AND UP TO 20 FIRE SPRINKLER HEADS:**
   - 2.1. System changes will be designed and installed in accordance with NFPA 13/13R
   - 2.2. Shop drawings, piping diagrams and equipment specifications will be submitted for review and approval
   - 2.3. Hydraulic calculations will be required
   - 2.4. System will not be required to undergo a hydrostatic pressure test
   - 2.5. System will be required to pass a visual inspection upon completion of work

3. **FOR CHANGES OF MORE THAN 20 FIRE SPRINKLER HEADS:**
   - 3.1. System changes will be designed and installed in accordance with NFPA 13/13R
   - 3.2. Shop drawings, piping diagrams and equipment specifications will be submitted for review and approval
   - 3.3. Hydraulic calculations will be required
   - 3.4. System will be required to undergo a hydrostatic pressure test
   - 3.5. System will be required to pass a visual inspection upon completion of work

Alterations, modifications, or additions (changes) to previously approved and installed fire sprinkler systems, may go beyond the approved system design outlined by the following National Fire Protection Association (NFPA) Standards:

- National Fire Protection Association, NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes

Such systems, are subject to the following requirements:

4. FOR ANY MINOR CHANGES TO THE MOST REMOTE AREA OR THE CALCULATED AREA:

4.1. System changes will be designed and completed in accordance with NFPA 13D

4.2. Shop drawings, piping diagrams and equipment specifications will be submitted for review and approval

4.3. Hydraulic calculations will be required

4.4. System may be required to undergo a hydrostatic pressure test

4.5. System will be required to pass a visual inspection upon completion of work

5. FOR ANY MAJOR CHANGES TO THE FIRE SPRINKLER SYSTEM (FIRE MARSHAL WILL DETERMINE IF IT IS A MAJOR OR MINOR ALTERATIONS):

5.1. System changes will be designed and installed in accordance with NFPA 13D

5.2. Shop drawings, piping diagrams and equipment specifications will be submitted for review and approval

5.3. Hydraulic calculations will be required

5.4. System will be required to undergo a hydrostatic pressure test

5.5. System will be required to pass a visual inspection upon completion of work

DEFINITIONS:

Hydraulic Calculations: Hydraulic calculations verify that the water through piping networks for the purpose of suppressing or extinguishing a fire will be sufficient to meet design objectives.

Hydrostatic Pressure Testing: Pressure testing to verify system strength against unwanted rupture.