

# SANTA ROSA FIRE DEPARTMENT

## FIRE PREVENTION BUREAU PLAN REVIEW

July 1, 2010



### FIRE SPRINKLER SYSTEM MONITORING

#### FIRE ALARM SYSTEMS FIRE SPRINKLER SYSTEM MONITORING

##### PLAN SUBMITTAL REQUIREMENTS

The design and construction of the fire alarm system must comply with NFPA 72 (2002) and the California Fire Code as amended by the City of Santa Rosa. This list is NOT to be considered as all-inclusive or as a substitute for the requirements of NFPA 72 and the Fire Code.

*Plans will be reviewed over-the-counter by appointment only.* Plans must be logged-in by the clerical staff, fees paid, and licenses (C-10 and City of Santa Rosa Business license) and workers= compensation insurance verified prior to plan review.

The following information must be included on the plans or as an attachment on 8 X 11" paper. Items identified with an \* may be an attachment. All other items must be included **ON THE PLANS**.

- | Y                        | N                        |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Architectural plan (drawn to scale including dimensions) showing location of all devices and exits. Minimum #12 Font Size. Black print on white paper ONLY. Do not use color-coding. Where architectural plans are used as a background, all notes, details, information, etc., not related to the fire alarm plan must be removed. Plans must be reproduced. Pencil and ink are not acceptable.  |
| <input type="checkbox"/> | <input type="checkbox"/> | Indicate Project Name and complete street address.  |
| <input type="checkbox"/> | <input type="checkbox"/> | Installing contractor name, address, telephone, fax, C-10 License number. Provide an E-Mail address, if desired, to facilitate receipt of plan review comments. If the installing contractor did not prepare the plans, the plans must include the name, address, and telephone number of the designer and be stamped and stamped by a California registered professional engineer.   |
| <input type="checkbox"/> | <input type="checkbox"/> | Provide details of the 120 VAC supply to Fire Alarm Control Unit per Information Bulletin 94-040. Show the location of the 120 VAC electrical supply.   |
| <input type="checkbox"/> | <input type="checkbox"/> | FACU Panel Location - Access from exterior / near main entrance. The FACU must indicate the location of all devices.  |
| <input type="checkbox"/> | <input type="checkbox"/> | FACU Panel must be labeled to identify location of 120 VAC disconnect.  |
| <input type="checkbox"/> | <input type="checkbox"/> | Remote Annunciator Panel location - Required where the FACU is not in a common and accessible location (i.e., lobby). The remote Annunciator panel must indicate the location of the FACU and all devices.  |
| <input type="checkbox"/> | <input type="checkbox"/> | Supervising Station Information (Provide all information on the plans) <ul style="list-style-type: none"><li>- Type (Central Station, Remote Station, etc.),</li><li>- Name, Address, Telephone, etc.,</li></ul> For Central Station Service: <ul style="list-style-type: none"><li>- Runner service - Name address, telephone number, CA contractor=s license number. (Include a note on the plans that the supervising station will contact the runner service directly).</li></ul> |

Standard  
Fire Alarm Systems Fire Sprinkler System Monitoring

- Verification of UL listing.
  - The system must be certificated or placarded per NFPA 72: 8.2.4.1. & 8.2.4.2 Documentation must be provided to the Inspector.
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- Provide a description of the signal transmission to the supervising station per 8.2.4. If 2 telephone lines are used, the primary line must be dedicated and the secondary line must either be dedicated or shared with capture capability upon failure of primary line. If long distance carriers are used two separate telephone service providers must be used (indicate company names). This information must be provided on the plans.
  - Show the location of the Smoke detector at the FACP.
  - Pull Station (Double Action type) at FACP or in a common and accessible location (i.e., lobby) if the FACP is not in a common location.
  - Horn/Strobe at FACP or in a common and accessible location (i.e., lobby) if the FACP is not in a common location.
  - 12/24 VDC exterior bell activated by the FACP - Show location of bell and sign (A Fire Alarm - Call 911" - white letters on red background). If the bell is 120 VAC and installed by the sprinkler contractor and activated by a separate set of contacts in the flow switch, the plans must so indicate.
  - Show location of sprinkler system riser(s)
  - Tamper Switch supervision - show location (riser valves, PIV, Double Backflow Unit)
  - Flow Switch supervision - Show location
  - Indicate the wire type (THHN, FPL, FPLP, FPLR, etc.) and gauge. Where conduit is required, indicate location and diameter. Return air plenums must be identified unless wire is installed in conduit or FPLP wire is used. The plans must indicate whether or not the wire is to be installed in a return air plenum. If the building does not use return air plenums, the plans must include a note indicating A There are no return air plenums@.
  - Provide a Sequence of Operations matrix on the plans.
  - Provide a symbol legend including the manufacturer and model of the following:
    - FACP
    - Remote Enunciators Panel
    - Pull Station (Dual Action Required)
    - Horn/Strobe (Include the candela rating)
    - Smoke detector
    - Exterior Bell
    - Flow Switch
    - Tamper SwitchType and Gauge of wire for IDC, SLC, and NAC
  - Any device (FACU, Flow Switch, Tamper Switch, Horn/Strobe, Pull Station, etc which is installed must be in a weatherproof enclosure. The manufacturer=s data sheet must verify that it is a weatherproof enclosure.
  - Provide Voltage Drop Calculations
    - Wire resistance must be based on the temperature of the space where the wire is run. Use 80°F for floor/ceiling assemblies and conditioned roof assemblies and 150°F for attics and roof assemblies, which are not conditioned.

Standard

Fire Alarm Systems Fire Sprinkler System Monitoring

- Provide Battery Calculations - Indicate on the plans the required battery size and the size of the battery provided (Amp-Hr).
- Provide Manufacturer=s data sheets for ALL equipment (Including equipment supplied/installed by others)
- Provide CSFM Listing sheets (Including equipment supplied/installed by others)

Fire Alarm SPK MON.001