TITLE: SPRINKLER SYSTEM – TENANT IMPROVEMENT/REMODEL REQUIREMENTS

SCOPE: Fire Prevention requirements for the submittal and approval of sprinkler tenant improvement/remodels to fire sprinkler systems which are installed in accordance NFPA 13 and the Clark County Fire Code as adopted and amended.

For new work in existing buildings, see the “New Work in Existing Buildings” guideline.

PURPOSE: To standardize plan/permit requirements required by the Fire Department in accordance with the Clark County Fire Code. Permits are valid through the duration of construction. Work must commence within 180 days, and remain active with no period of inactivity exceeding 180 days, or the permit becomes invalid.

DEFINITIONS:

ASSESSOR’S PARCEL NUMBER (APN): A unique number assigned to each property by the Clark County Assessor’s office.

NFPA: National Fire Protection Association is a nationally recognized code-developing organization.

NICET: National Institute for Certification in Engineering Technologies is a nationally recognized engineer technician certification organization.

PERMIT FEES:

Permit fees shall be assessed in accordance with the Permit Fee Schedule as adopted in the Clark County Fire Code. For applications that are expedited, additional fees shall apply.

SPECIFICATIONS AND SUBMITTAL REQUIREMENTS:

An application must be completed for each submittal. A minimum of three sets of plans shall be submitted with the permit application. Plans shall show compliance in accordance with Section 903 of the Clark County Fire Code and NFPA 13, as adopted and amended. All submittals must be legible and readable or the plan shall be issued a correction letter for cause.
Plans shall address the following:

1. Name of owner and occupant.
2. Location, including street address and APN number.
3. Name, address, phone number, and contractor’s license number of installing contractor.
4. Signature and NICET number, or engineer’s seal, of the designer.
5. General notes as required by the AHJ.
6. Point of compass.
7. A graphic representation of the scale used on all plans.
8. The plan must show a top view of the new area where fire sprinklers are to be installed on a common architectural scale, (ie. 1/4”, 1/8” 3/16”, etc.), the “North” arrow, the existing system pressure and name and address of the building where work is to be accomplished.
9. Verify that the area under consideration is a Light Hazard or Ordinary Hazard occupancy, in accordance with Section A.5.1 of NFPA 13.
10. Verify that the sprinkler legend is accurate, and indicates the model, id number, response type, sprinkler orientation, temperature rating, orifice size, K-factor, and quantity of each sprinkler head installed.
12. Tenant improvement/remodels that utilize standard spray sprinklers (1/2” orifice) and that comply with the spacing criteria above do not require supporting hydraulic calculations.
13. Tenant improvement/remodels that utilize extended coverage sprinklers, flexible piping, K-factor different than overhead sprinkler system, or Extra Hazard occupancies require supporting hydraulic calculations in order to prove that the minimum required flow is provided to each sprinkler head.
14. Verify that the hanger detail indicates a code compliant hanger assembly. Verify that the attachment to the structure is as specified in Section 9.1 of NFPA 13 or complies with a manufacturer information sheet. Where flexible piping is used, provide detail on the approved hangers. Where the method of attachment is specific to a manufacturer product, verify that the manufacturer name and product model number is indicated on the plan. Verify that the rod size is correct in accordance with Table 9.1.2.1 of NFPA 13. Verify that the hanger assembly is capable to support the correct diameter of pipe for which the assembly is intended. Where surge restraint is required, provide a hanger detail showing method of surge restraint.
15. If there are multiple hanger details, verify that each detail is labeled and that each hanger on the plan is also labeled to identify which hanger assembly is proposed for each hanger location.
16. Verify correct spacing of hangers and bracing, as applicable.
17. Verify the system pressure for the shell system.
18. Provide a note on plans that notification devices and monitored control valves are provided in accordance with the Fire Code.
19. Verify compliance with NFPA 13 Section 8.2.7 with respect to having a separate control valve for each tenant space having access through public assembly area such as through a covered mall building or casino space.
20. Indicate on the plans whether the existing system is a wet or dry system.
21. Indicate on the plans the requirements for a hydrostatic test, as necessary. See
22. Pipe sizes for sprinkler systems protecting tenant improvements must be in accordance with the pipe schedule method for the occupancy; Section 22.5.2 for Light Hazard, and Section 22.5.3 for Ordinary Hazard.

PERMIT REVISIONS AND RESUBMITTALS:

Revisions to approved plans are required to be submitted and approved. Revisions will be assessed additional plan review fees. A copy of the previously approved plan shall accompany the revised submittal to facilitate the review. Clearly indicate all changes to the revised plans by clouding the change with a delta number to signify the date of plan change. When several changes have been made, a detailed list of changes is required.

Re-submittals to address a Letter of Correction will require a full submittal. These plans require a copy of the red lined plan from the previous submittal to facilitate the review. Clearly indicate all changes by clouding the change with the delta number to signify the date of plan change.

PLANS CHECK STATUS INSTRUCTIONS:

The status of the review can be checked by logging on to: www.clarkcountynv.gov/building/fire-prevention

INSPECTION SCHEDULING INSTRUCTIONS:

If approved, an inspection will need to be scheduled. To schedule an inspection, go to: www.clarkcountynv.gov/building/fire-prevention

A fire inspector will review your site in accordance with the approved plans and this guideline.

The Fire Prevention (FP) may witness and accept inspection, testing and maintenance of fire and life safety systems conducted by approved individuals as required by and within the scope and authority of the Clark County Fire Code.

This Guideline does not take the place of the Fire Code and does not take precedence over any Fire Code requirement or position taken by the Fire Chief. When a conflict exists between the requirements of this Guideline and the Fire Code or the opinion of the Fire Chief, the Fire Code or opinion of the Fire Chief prevails.
Technical Assistance, when required by the Fire Chief, will require a Technical Opinion and Report prepared by a State of Nevada licensed: qualified engineer, specialist, laboratory, or fire safety specialty organization acceptable to the Fire Chief and the owner. The Fire Chief is authorized to require design submittals to bear the Wet Stamp and Signature of a professional engineer.

Acceptance of Alternative Materials and Methods requires a Technical Opinion and Report prepared by a State of Nevada licensed: qualified engineer, specialist, laboratory, or fire safety specialty organization acceptable to the Fire Chief and the owner. The Fire Chief is authorized to require design submittals to bear the Wet Stamp and Signature of a professional engineer.