FIRE CONSTRUCTION PERMIT SUBMITTAL CHECKLIST

SERVING THE CITIES OF LAKE STEVENS, MONROE AND SULTAN

AUTOMATIC FIRE SUPPRESSION SYSTEMS – NFPA 13D, 13R AND 13 SYSTEMS

PROJECT INFORMATION	
Site address:	**Associated Permits:**
Project Name / Tenant:	**Property Owner:**

Electronic file standards

File naming standard: Electronic plans and documents shall be named as specified in bold type under "permitting requirements". For example, the seating plan must be named "Seating Plan".

Acceptable file types: Plans, calculations, specifications and supporting documents shall be uploaded as a PDF file.

Document Orientation: All plans must be uploaded in "Landscape" format in the horizontal position. All other documents can be in "Portrait" format.

CODE EDITIONS

□ 2021 Washington State Fire Code and Building Code, IRC Section P2904 & IBC amended code, 2019 NFPA 13, 13R, 13D and as adopted by each cities municipal code - Lake Stevens 14.84.020, Monroe 15.04.110 and Sultan 15.05.

PERMITTING REQUIREMENTS

A Fire Construction Permit is required to install or modify an ***Automatic fire-extinguishing Systems*** required by Section 105.6.1 of the 2021 Washington State Fire Code and local code amendments. **The following information is required at time of application for the Fire Construction Permit. Note – some requirements may be N/A.**

- □ Completed Fire Construction permit submittal application
- □ Completed "Automatic fire-suppression system NFPA 13/13R submittal checklist"
- □ Current copy of the WA State Patrol Sprinker License
- □ Current copy of the Department of Labor and Industries contractor's License
- □ Plans - Stamped and signed by the system designer certified by Washington State Fire Marshal's office or a registered PE:
  NFPA 13D - Level I Certificate
  NFPA 13R - Level II Certificate
  NFPA 13 - Level III Certificate.
- □ Water system calculations shall be no more than one year old, reflect the "worst case" demand scenario on the water supply, and should be taken as near the point of connection to the sprinkler system as possible.
  Lake Stevens - Contact SnoPUD Integrated 3 for system information.
  Monroe – Contact the City of Monroe Water System for system information.
  Sultan - Contact the City of Sultan Water System for system information.
- □ Drawings shall be legible, scaled, and contain only the fire sprinkler components and those structural and building components necessary to provide proper sprinkler layout
- □ Hydraulic calculations - shall show the water system calculation back to the point of connection to the water supply.
  Contractor shall provide a Contractor's Material and Test Certificate for the aboveground piping. Signed copies of these forms shall be provided to the AHJ before the system is accepted. Installing contractor must provide copy of NFPA 25 to building owner, along with manufacturer instructions and literature.
- □ Cut sheets for fire sprinklers, valves, connectors, hanger, bracing and risers **HIGHLIGHT THE CUT SHEETS FOR ALL SYSTEM COMPONENTS TO BE INSTALLED.**
- □ **OWNERS CERTIFICATE** - Supply the owners certificate as found in NFPA 13 Section 4.2
- □ Seismic bracing calculation form.

NOTE – A PRE-ENGINEERED KITCHEN FIRE-SUPPRESION SYSTEM SUBMITTAL HAS ITS OWN PERMIT CHECKLIST

Underground supply piping (FDC piping and downstream piping after the dcda backflow assembly) to be submitted on and "*Underground Supply Piping for automatic fire sprinkler system" submittal.*

The following is a list of information required on all plan submittals for review of an "Automatic Fire Suppression System" permit application. The plan shall be drawn to 1/8"=1'-0" minimum scale. The applicant is required to submit all of this information so an accurate and timely review may be done:

- □ Stamp and signature of system designer on layout drawings and calculations
- □ Code editions utilized for design of system
- □ Type of system installed (NFPA 13, 13R, 13D)
- □ Plan of each floor required
- □ Name of owner and occupant
- □ Location, including street address
- □ Point of compass
- □ Full height cross section or schematic diagram, including structural member information of required for clarity and including ceiling construction and method of protection for nonmetallic piping
- □ Location of partitions
- □ Location of fire walls
- □ Occupancy classification of each area or room
- □ Location and size of concealed spaces, closets, attics, and bathrooms
- □ Any small enclosures in which no sprinklers are to be installed
- □ Show distances between fire sprinklers and other sprinklers, walls, and obstructions
- □ Explanation of why omissions (if any) are being proposed with code reference
- □ Show location of bracing and hangers
- □ Show location of risers and valves, ILLUSTRATE RISER DIAGRAM ON PLANS
- □ Make, type, model, and nominal K-factor of sprinklers, including sprinkler identification number

- □ Temperature rating and location of high-temperature sprinklers
- □ Total area protected by each system on each floor
- □ Number of sprinklers on each riser per floor
- □ Total number of sprinklers on each dry pipe system, pre-action system, combined dry pipe-pre-action system or deluge system.
- □ Approximate capacity in gallons of each dry pipe system
- □ Pipe type and schedule of wall thickness
- □ Nominal pipe size and cutting lengths of pipe (or center to center dimensions). Where typical branch lines prevail, it shall be necessary to size only one typical line
- □ Type and locations of hangers, sleeves, braces, and methods of securing sprinklers when applicable
- □ All control valve, check valves, drain pipes, and test connections
- □ Make, type, model, and size of backflow prevention assembly, and **MEANS TO FORWARD FLOW TEST AT SYSTEM DEMAND**
- □ Make, type, model, and size of alarm or dry pipe valve
- □ Make, type, model, and size of pre-action or deluge valve
- □ Kind and location of alarm bells
- □ Size and location of standpipe risers, hose outlets, hand hose, monitor nozzles, and related equipment
- □ Piping provisions for flushing
- □ Where the equipment is to be installed as an addition to an existing system, enough of the existing system indicated on the plans to make all conditions clear
- □ For hydraulically designed systems, the information on the hydraulic data nameplate
- □ A graphic representation of the scale used on all plans – EACH SHEET TO HAVE SCALE
- □ Name, address, and phone numbers of the contractors
- □ Hydraulic reference points shown on the plan that correspond with comparable reference points on the hydraulic calculation sheets
- □ The minimum rate of water application (density or flow or discharge pressure), the design area of water application, in-rack sprinkler demand, and the water required for hose streams both inside and outside
- □ The total quantity of water and the pressure required noted at a common reference point for each system
- □ Relative elevation of sprinklers, junction points, and supply or reference points
- □ Calculation of loads for sizing and details of sway bracing
- □ The setting for pressure-reducing valves
- □ Method of air removal for wet systems

NFPA 13-D SYSTEMS SPECIFIC DETAILS

- □ Indicate on the plan near the sprinkler system shut off valve that there will be a placard installed stating:

  WARNING: The water system for this home supplies fire sprinklers that require certain flows and pressures to fight a fire. Devices that restrict the flow or decrease the pressure or automatically shut-off the water to the fire sprinkler system, such as water softeners, filtration systems, and automatic shut-off valves, shall not be added to this system without a review of the fire sprinkler system by a fire protection specialist. Do not remove this sign.

- □ A control valve shall be installed on the dwelling water supply piping and locked in the open position. A separate control valve shall be installed on the domestic supply. SEE BELOW. The dwelling supply control valve shall not turn off the fire sprinkler system. The dwelling supply control valve shall be labeled with a placard stating "Fire sprinkler system shut off"
  NOTE - For systems designed with a double backflow check valve, the system side shutoff valve on the backflow is allowed to be the sprinkler system shut-off valve. This valve shall be identified with a placard stating "Fire Sprinkler system shut off".
- □ A permanent fire sprinkler system drain shall be installed and be a minimum of ½" internal diameter, located on the system side of the control valve. The drain shall be extended to an approved location, to allow the home owner to drain the system expeditiously. The valve shall be labeled with a placard stating "fire sprinkler system drain".
- □ The installer shall provide the occupant instructions on inspecting, testing, and maintaining the system. This document shall be stored in a storage location near the sprinkler system control valve.