Davidson County Fire Marshal's Office
935 North Main Street Lexington, NC 27292
Phone: (336)242-2270 Fax: (336)249-7863

Construction Permit Application for:

Installation or modification of an NFPA 13 designed AES

Section I

General Requirements:

1. The Davidson County Fire Marshal (the Authority Having Jurisdiction) shall require the submission of this application completed in its entirety, and all required documentation listed in Section II of this document as applicable, for review and approval prior to the commencement of any installation, remodel, or modification to any equipment associated with an NFPA 13 designed automatic extinguishing system.
2. Any plan submitted for review shall meet the requirements set forth in the NC Building and Technical Codes and applicable standards of the National Fire Protection Association.
3. Documents shall be submitted digitally by email to plans.review@davidsoncountync.gov
4. Plan submittals will be rejected if **ANY** portion of this application is not completed or is not accompanied by required information listed in Section II at time of submission. Completion of application and information required to be submitted will be the applicant's responsibility.
5. Upon completion and approval, the applicant will be notified by email that the plans have been approved, and the permit has been issued. The permit will be available for pick up between the hours of 8:30 am & 4:30 pm at the Central Permitting Office located at 912 Greensboro St Lexington, NC 27292. The Central Permitting Office can be contacted at (336) 242-2230.
6. Any revisions or addendums to the original plan submittals will require documents to be re-submitted along with all applicable associated documentation
7. The permit fee is $75.00 payable upon receipt of the permit.

Section II

Required Submissions:

NFPA 13 Edition 2013 Chapter 23 Section 23.1.3

Plans shall be drawn to an indicated scale and be submitted digitally, with a plan of each floor, and shall show those items from the following list that pertain to the design of the system:

- ☐ **1.** Name of owner and occupant.
- ☐ **2.** Location of building, including street address.
- ☐ **3.** Point of Compass.
- ☐ **4.** Full height cross section, or schematic diagram, including structural member information if required for clarity and including ceiling construction and method of protection for non-metallic piping.
- ☐ **5.** Location of partitions.
- ☐ **6.** Location of fire walls.
- ☐ **7.** Occupancy class of each area or room.
- ☐ **8.** Location and size of concealed spaces, closets, attics & bathrooms.
- ☐ **9.** Any small enclosures in which sprinklers are not to be installed.
- ☐ **10.** Size of water main in street and whether dead end or circulating; if dead end direction and distance to circulating and water main test results and elevation relative to test hydrant.
- ☐ **11.** Other sources of water supply with pressure and elevation.
- ☐ **12.** Make, type, model and K-factor of sprinklers including sprinkler identification number.
- ☐ **13.** Temperature rating and location of high-temperature sprinklers.
- ☐ **14.** Total area of protection by each system on each floor.
- ☐ **15.** Number of sprinklers on each riser on each floor.
- ☐ **16.** Total number of sprinklers on each dry system, pre-action system, combined dry pipe/pre-action system, or deluge system.
- ☐ **17.** Approximate capacity in gallons of each dry pipe system.
- ☐ **18.** Pipe type and schedule of wall thickness.
- ☐ **19.** Nominal pipe size and cutting lengths of pipe or (center to center dimensions). Where typical branch lines prevail, it shall be only necessary to size one line.
- ☐ **20.** Location and size of riser nipples.
- ☐ **21.** Types of fittings and joints, and locations of all welds and bends. The contractor shall specify on the drawings of any specifications to be shop welded and the type of fittings of formations to be used.
- ☐ **22.** Type and locations of any hangers, sleeves, braces, and methods of securing sprinklers when applicable.
- ☐ **23.** All control valves, check valves, drain pipes and test connections.
- ☐ **24.** Make, type, model, and size of alarm or dry pipe valve.

- ☐ **25.** Make, type, model, and size of pre-action or deluge valve.
- ☐ **26.** Kind and location of alarm bells.
- ☐ **27.** Size and location of standpipe risers, hose outlets, hand hose, monitor nozzles, and related equipment.
- ☐ **28.** Private fire service main sizes, lengths, locations, weights, materials, point of connection to water main; sizes, types, and locations of valves, valve indicators, regulators, meters, and valve pits; and the depth that the top of the pipe is laid below grade.
- ☐ **29.** Piping provisions for flushing.
- ☐ **30.** Where the equipment is to be installed as an addition on an existing system, enough of the existing system indicated on the plans to make all conditions clear.
- ☐ **31.** For hydraulically designed systems, the information on the hydraulic data nameplate.
- ☐ **32.** A graphic representation of the scale used on all plans.
- ☐ **33.** Name and address of contractor.
- ☐ **34.** Hydraulic reference points shown on the plan that correspond with comparable reference points shown on the hydraulic calculation sheets.
- ☐ **35.** Minimum rate of water application (density or flow or discharge pressure), the design area of water application, in-rack sprinkler demand, the water required for hose streams both inside and outside.
- ☐ **36.** The total quantity of water required and the pressure required noted at a common reference point for each system.
- ☐ **37.** Relative elevations of sprinklers, junction points, and supply or reference points.
- ☐ **38.** If the room design method is used, all un-protected wall openings throughout the floor being protected.
- ☐ **39.** Calculations of loads for sizing and details of sway bracing.
- ☐ **40.** The setting for pressure reducing valves.
- ☐ **41.** Information about backflow preventers (size, type, and manufacturer).
- ☐ **42.** Information about listed anti-freeze solution (type and amount).
- ☐ **43.** Size and location of hydrants showing size and number of outlets, and if the outlets are to be equipped with independent gate valves. Whether hose houses and equipment are to be provided and by whom, shall be indicated. Static and residual hydrants used in flow tests shall be shown.
- ☐ **44.** Size, location, and piping arrangements of fire department connections.
- ☐ **45.** Ceiling/roof heights not shown in the full height cross section.
- ☐ **46.** Edition year of NFPA 13 to which the system is designed to.

Section III

Design Professional:

Name: _____
First Middle initial Last

Company: _____

Address: _____

_____
City State Zip

Phone: _____-_____-_____ Fax: _____-_____-_____ Other: _____-_____-_____

Email: _____ Application Date: _____/_____/_____

Section IV

Installation Contractor:

Name: _____
First Last Middle

Company: _____

Address: _____

_____
City State Zip

Phone: _____-_____-_____ Fax: _____-_____-_____ Other: _____-_____-_____

Email: _____ License #: _____

Section V

Project Location:

Project name: _____

Address: _____

_____
City State Zip

Section VI

Project Manager/General Contractor:

Name/Company: _____

Phone: _____-_____-_____ Email_____

Section VII

Davidson County Fire Marshal's Office use only:

Date Received: ___/___/___ Date Completed: ___/___/___

Reviewed By: _____ Contact Number: _____

Comments: _____

_____

_____