GUIDELINES FOR THE PREPARATION OF FIRE PROTECTION REPORTS

This guideline was developed from the fire code amendments in an effort to assist those responsible for preparing and submitting such reports with the information sought by the City of North Las Vegas Building and Fire Safety Division, Fire Safety Section (NLVFSS) as the Authority Having Jurisdiction (AHJ). Fire Protection Reports (FPR) are considered technical assistance and are generally requested and developed to assist and aid the fire code official in determining the acceptability of technologies, processes, products, facilities, materials and uses attending the design, operation or use of a building or premises subject to inspection by the fire code official. FPR's shall be prepared by a person or company that the AHJ deems competent to prepare and submit such reports. The fire code official is authorized by the fire code to require any FPR prepared and submitted to bear the stamp of a Nevada registered design professional.

901.2.2 Fire Protection Reports. All high-rise, covered mall, and atrium buildings, in addition to other complex or major facilities as determined by the fire code official, shall have a Fire Protection Report submitted and approved prior to construction, demolition, or significant work stoppage. Fire Protection Reports shall be prepared by an architect or professional engineer working in their area of expertise.

The report shall be a written summary description of the building use, construction and life safety features. It should be written in a clear conversational format.

BASIS OF DESIGN

Methodology

Construction Documents/Building Description

Identify specific features of a building that contributes to the overall understanding of the fire protection systems and features required to be identified in the report.

a) Building "Use" Group
b) Total square footage of building
c) Building height
d) Number of floors above grade
e) Number of floors below grade
f) Square footage per floor
g) Type(s) of occupancies (hazards) within the building
h) Type(s) of construction
i) Hazardous material usage and storage
j) Height of storage of commodities within a building
k) Site access arrangement for emergency response vehicles

Applicable Codes, Ordinances and Standards

Identify regulatory codes and standard that systems shall conform with.

Design Responsibility for Fire Protection Systems

Identify the accountability for a specific fire protection system design and the accountability for the integration of the fire protection systems constituting a building life safety system. The project requires an engineer of record to assume responsibility for the coordination of each specific fire protection system requiring integration, forming an entire building life safety system.

Fire Protection Systems to be Installed

Identify key "performance design criteria" and features for each specific fire protection system

a) Water supply, fire mains and hydrants
b) Automatic sprinkler systems and components
c) Standpipe systems and components
d) Fire alarm systems and components
e) Automatic fire extinguishing systems
f) Manual suppressions systems
g) Smoke control/management systems
h) Kitchen cooking equipment and exhaust systems
i) Emergency power equipment
j) Hazardous material monitoring equipment
k) Seismic considerations

The description (specific features) for the above fire protection systems shall also indicate if the system is:

- Required by Regulations, Law or "approved" by-law or Ordinance
- Non-required, developer provides voluntarily
- A complete new system
- An addition or expansion to existing system
- A modification/repair to existing system
- Level of protection to be provided, 100% or partial protection or exempt by regulatory code

Features Used in the Design Methodology

Identify the designer's intent in the overall design and criteria development of either a required or a non-required system.

a) Building occupant notification and evacuation procedures
b) Emergency response personnel, site and systems features
c) Safeguards, fire prevention and emergency procedures during new construction and impairment plans associated with existing systems modifications.
d) Method for future testing and maintenance of systems and documentation

Special Consideration and Description

Identify the designer's intent to deviate from prescriptive requirements of regulatory codes and standards.

a) Alternative materials and methods.

SEQUENCE OF OPERATION

Identify the specific operation of system devices and equipment and their related integration.

a) An operational description of either a system or specific devices within a system and the "resulting action" associated with the operation of the system or specific devices
b) The operational description shall include all interconnected (integrated) fire protection systems and devices required or non-required forming an entire *building life safety system* - a combination of fire protection systems and other building fire protection features such as automatic door closers, emergency generators, emergency egress lighting, elevator systems, etc., interconnected or integrated with multiple fire protection systems functioning simultaneously when activated.
c) All signage indicating equipment location, operational and design features and certified documents attesting to system installation integrity

TESTING CRITERIA

Identify the individual in charge who will coordinate the final acceptance testing to be witnessed by appropriate party.

Equipment and Tools

Identify the necessary equipment available on site at time of witnessing the operational features of the fire protection systems, integrated building life safety and systems that require validation from code officials to expedite the acceptance testing.

Approval Requirements

Documentation to be submitted to code officials at completion verifying that systems are in compliance with all laws, regulations and standards and preapproved fire protection report.