



Clark County Fire Prevention

Mission Statement: "To provide the highest level of fire protection and related services"

1001.3.1-1

TITLE: SUBMITTAL OF FIRE PROTECTION REPORTS

SCOPE: This guideline sets forth the procedures for submitting Fire Protection Reports for Clark County Fire Department review. The guideline covers initial submittals, re-submittals, and revisions for project Fire Protection Reports, tenant improvement Fire Protection Reports, Alternate Materials and Methods narratives, and other narrative submittals that require Clark County Fire Department review.

Note: There are instances where the term "Life Safety Package" is used in the codes and guidelines. The term "Fire Protection Report" and the term "Life Safety Package" are, for the purposes of this guideline, interchangeable.

PURPOSE: Standardize Fire Department requirements regarding submittal of Fire Protection Reports.

CODE REQUIREMENTS. The 2005 Clark County Fire Code requires the submittal of Fire Protection Reports in Section 1001.3, as follows:

...All high rise, covered mall and atrium buildings, in addition to other complex or major facilities as determined by the Chief, shall have a Fire Protection Report submitted to the Fire Prevention Bureau and be approved prior to construction.

In addition, there are numerous scenarios where an interior remodel of an existing space will require the submittal of a Fire Protection Report to CCFD. Refer to Appendix A of this document for the list of remodel scenarios that would trigger this requirement.

Further, it is required that Alternate Materials and Methods Requests be submitted to CCFD under certain scenarios. Refer to Appendix B of this document for a list of scenarios that would trigger this requirement.

Fire Protection Reports are required to follow the guideline set forth by the Clark County Department of Development Services – Building Division. These guidelines can be found at the following link: http://dsnet.co.clark.nv.us/dsweb/guides_bldg/FireProtRpt.pdf.

~~In addition,~~ Fire Protection Reports are required to address the items listed in Appendix ~~A~~ C of this document. These items, set forth by the Clark County Fire Department, will be periodically updated in an effort to communicate all issues that are of primary importance to the Clark County Fire Department.

DEFINITIONS

Alternate Materials and Methods: Narratives submitted in accordance with Section 103.1.2 of the Clark County Fire Code. In addition, submittals made to the Clark County Fire Department in accordance with Section 22.02.075 of the Clark County Building Administrative Code.

Expedited Review: A review that occurs in advance of normal reviews. These are charged an additional fee to be reviewed.

Expedited Resubmittal: Resubmittals can be expedited regardless of the type of initial plan review. Permit fees are not assessed for expedite resubmittal, but all applicable expedite fees are assessed for each separate expedite resubmittal.

Fire Protection Report: A narrative describing the life safety features that will be provided in the construction of a project.

Initial Submittal: The first submittal made for a project. Generally, each submittal that is associated with a distinct Building Department permit number is considered a separate submittal.

Life Safety Package: Another term for Fire Protection Report, with equal scope as Fire Protection Report. The term "Fire Protection Report" is preferred.

Normal Review: Normal reviews are in second priority to expedited reviews, and turnaround time is dependent on the number of submittals that precede the submittal.

Re-submittal: A submittal subsequent to the initial submittal that is intended to address review comments from an initial submittal that was disapproved.

Revision: A submittal subsequent to the initial submittal that is intended to address design and field changes that have occurred after an initial submittal has received approval.

Tenant Improvement (TI): A subproject within a project that itself requires a Fire Protection Report. Generally, the tenant improvement is associated with a distinct Building Department permit number. Tenant improvement fire protection reports for projects that involve building alterations, changes in boundaries for any fire protection systems, and completion shell space requiring modification to the smoke control system, require review by the Clark County Fire Department.

SUBMITTAL REQUIREMENTS

All submittals covered by this guideline shall be submitted directly to the Fire Department. The primary submittal location is at Fire Station 18 at 575 East Flamingo Road. Each submittal shall provide a minimum of two copies of the entire submittal package. Alternately, for companies with prepaid accounts with the Clark County Fire Department, submittal may be made by e-mail to Plan Intake at PERMITS@co.clark.nv.us. E-mail submittals shall have a filled-out application as an attachment to the e-mail. A draft submittal is appropriate for initial submittals. A Fire Prevention Bureau Permit Application shall be completed and submitted with the Fire Protection Report submittal. See Appendix B for a sample of the Permit Application. Permit fees, and if applicable, expedite fees, shall be remitted or be deducted from a prepaid account upon submittal of the Fire Protection Report submittal package.

Fire Prevention Bureau Permit Application

Submittal for Fire Protection Report review must include a completed Fire Prevention Bureau Permit Application. Refer to Appendix B for a sample of the Fire Prevention Bureau Permit Application. To fill out the application, please complete the following steps:

1. Under the category “Systems”, select “Fire Protection Report.” Also select Alternate Means & Methods or Tenant Improvements if applicable.
2. Fill in the “Application Date” with today’s date.
3. Fill in the “Prepaid Account No.,” if your company has prepaid account.
4. Circle Y or N at “Expedite Y or N.” Ignore “OTC” as FPR’s are not done Over the Counter. An expedite plan review fee will be required if Y is circled. Expedite plan review can be selected at the time of initial application and/or at the time of application for a revision and a resubmittal.
5. Circle “New” or “Revised” at “Plans: New Revised Resubmitted.” For either a revised or resubmitted submittal, copy the original CCFD permit number (begins with “C-“) onto the application.
6. Indicate the company name and contact name for the associated submittal next to “Submitting Contractor/Company Name.”
7. Fill in the contact phone number next to “Phone.” This will be CCFD’s point of contact for the submittal.
8. Provide the “Major Project Name” addressed in the submittal and the PAC number issued by the Building Department.
9. Provide the “Sub Project Name” addressed in the submittal package and the category of FPR, Tenant Improvement FPR, Project Alternate, or Tenant Improvement Alternate.
10. Fill in the street address for the project, or indicate the major cross streets where the project is located.
11. Leave “Mailing Address”, “Event Name”, “Event Dates: Begin: End:” blank, as they are not necessary information for this type of submittal.
12. Please sign the application and print the applicant name and job title at the bottom of the page.

Fees

Fees for review of Fire Protection reports are set forth in the Permit and Service Fee Schedule, as adopted with the Clark County Fire Code. The current fee schedule for Fire Protection Reports is as follows:

Project Fire Protection Report

Type of Submittal	Permit Fee Schedule	Due at Time of Submittal
Non-Expedite, Initial Submittal	\$150	\$150
Non-Expedite, Resubmittal	\$0	\$0
Non-Expedite, Revisions	\$150	\$150
Expedite, Initial Submittal	\$300 plus \$85/hr of plan review	\$385
Expedite, Revisions	\$300 plus \$85/hr of plan review	\$385
Expedite, Resubmittal	\$150 plus \$85/hr of plan review	\$235

Tenant Improvement Fire Protection Report

Type of Submittal	Permit Fee Schedule	Due at Time of Submittal
Non-Expedite, Initial Submittal	\$75	\$75
Non-Expedite, Resubmittal	\$0	\$0
Non-Expedite, Revisions	\$75	\$75
Expedite, Initial Submittal	\$150 plus \$85/hr of plan review	\$235
Expedite, Revisions	\$150 plus \$85/hr of plan review	\$235
Expedite, Resubmittal	\$70 plus \$85/hr of plan review	\$160

Alternate Means and Methods

Type of Submittal	Permit Fee Schedule	Due at Time of Submittal
Non-Expedite, Initial Submittal	\$150	\$150
Non-Expedite, Resubmittal	\$0	\$0
Non-Expedite, Revisions	\$150	\$150
Expedite, Initial Submittal	\$300 plus \$85/hr of plan review	\$385
Expedite, Revisions	\$300 plus \$85/hr of plan review	\$385
Expedite, Resubmittal	\$150 plus \$85/hr of plan review	\$235

Prepaid Account

The Clark County Fire Department provides the option of operating a prepaid account. This allows for a company to fund an account, and to draw from that account at each submittal. This option is required for submittal of Fire Protection Reports via e-mail.

To open a prepaid account, the following steps are required:

1. Contact Clark County Fire Prevention Bureau in writing requesting a prepaid account, using the prepaid account application (see Appendix C).
2. When the prepaid account is established, an account number will be assigned. This account number must be included on all applications.
3. A company may establish more than one prepaid account if they choose to prepay by department or division within the company. If you use this option, please ensure the appropriate account is indicated on each application.
4. Monthly statements will be sent out for each account holder and will provide detail of monthly transactions.
5. The account holder may request an account statement at any time during the month to ensure account balance is sufficient to cover upcoming activity.
6. The account holder may deposit into the prepaid account at any time deemed necessary. Please include the account number on the

check. Deposit may be made in person or mailed to the following address:

Clark County Fire Department
Attn: Permit Intake Office, Fire Prevention Bureau
575 East Flamingo Road
Las Vegas, NV 89119

7. The account holder may request in writing at any time to close the prepaid account. If a balance remains, a refund will be mailed to the address provided in the request letter. The request letter must include the contact person's signature and the account number.

REVIEW PROCEDURE

Reviews of Fire Protection Reports will occur on a priority and first-in, first-reviewed basis. The priority for submittals is as follows:

1. **Expedite Resubmittals:** First in, by date of receipt at a Clark County Fire Department permit intake station, expedite resubmittals.
2. **Normal Resubmittal:** First in, by date of receipt at a Clark County Fire Department permit intake station, normal resubmittals.
3. **Expedite Initial and Revision Submittals:** First in, by date of receipt at a Clark County Fire Department permit intake station, expedite initial and revision submittals.
4. **Normal Initial and Revision Submittal:** First in, by date of receipt at a Clark County Fire Department permit intake station, normal initial and revision submittals. Normal initial and revision submittals are reviewed exclusively during normal business hours.

Please note that once review has begun on a submittal, that review will not be interrupted due to receipt of another submittal that may have a higher priority.

Upon approval of a submittal, the applicant will be called to receive a "Plan Review Acceptance" from the Clark County Fire Department, as well as a minimum of one stamped copy of the Fire Protection Report. The stamped copy is intended to be used as a basis for the final sealed copy of the report. Upon denial of a submittal, the applicant will be called to receive a review letter and one copy of the submittal with mark-ups. The letter and the mark-ups will contain the same comments. Upon request, the letter will be sent via fax or e-mail. Due to their size, marked submittals will be returned in person only.

Appendix A

A Fire Protection Report shall be submitted to CCFD when any one of the following occurs within a building that would normally require a Fire Protection Report.

1. The area of remodel occurs over a floor area exceeding 20,000 square feet.
2. The area of remodel is an assembly occupancy with an occupant load that exceeds 1,000 persons.
3. The area of remodel occurs within spaces dedicated to or affecting CCFD response areas, such as exit enclosures, elevators, elevator lobbies, fire command centers, secondary response points, fire riser rooms, and the fire pump room.
4. The remodel area requires specific engineered fire suppression and/or alarm systems that will require an alternate means of system design that is not supported by NFPA codes adopted by CCFD.
5. The remodel area includes clean agent suppression systems, new or existing.
6. The remodel includes kitchen exhaust systems that are used for smoke control and thereby requiring coordination of exhaust fan functioning.
7. The remodel area contains hazardous materials storage and/or use areas.
8. The remodel area includes high-piled storage.
9. The remodel area includes delayed egress systems that require interconnection with fire protection systems.
10. The remodel area modifies existing smoke control system boundaries.

Appendix B

An Alternate Materials and Methods Request shall be submitted to CCFD when any of the following items are involved.

1. All instances where active fire protection features are offered as a mitigation in support of an alternative solution.
2. All requests relating to or referencing the Clark County Fire Code or NPFA codes adopted by the CCFD.
3. All requests that involve alternate installation requirements of any active fire protection system governed by either the Clark County Fire Code or Chapter 9 of the Southern Nevada Building Code, such as: automatic sprinkler systems, alternative automatic fire extinguishing systems, standpipe systems, fire alarm and detection systems, emergency alarm systems, fire department connections and smoke control graphic annunciator panels. Additionally, requests involving the modification of the following items shall be submitted to CCFD: smoke and heat vents, fire command centers, thin combustibles ceilings, hazardous materials, and alternate hardware when it may affect entry into a building by CCFD suppression crews.

Appendix C

Mandatory information to be included in a base Fire Protection Report: To be revised as required by direction of the Chief.

GENERAL DESCRIPTION:

- Major Use(s) and Occupancy Classification per the SNBC
- Means of treating mixed use occupancies
- Building height in feet
- Height of highest walking surface above the lowest level of CCFD response
- Number of stories
- Number of subterranean levels
- Locations of mezzanines
- Building area

- Number of residential units (as applicable)
- Gross leasable area (as applicable)
- All locations where the ceiling height(s) exceed 25 feet above the finished floor
- Locations of storage of hazardous materials, including pool chemicals, cooling water treatments, oxy/acetylene welding, LP-gas and fuels

APPLICABLE CODES:

Statement of the project codes and standards of record. These will include, but not be limited to the following:

- Fire Code of Clark County (2000 edition of the Uniform Fire Code with CCFD 2005 amendments)
- Southern Nevada Building Code (2006 International Building Code with Southern Nevada
- Nevada State Fire Marshal requirements (NRS 477 and NAC 477)
- Standard on Hand Portable Fire Extinguishers, NFPA 10, 2000 edition
- Standard for the Installation of Automatic Sprinklers, NFPA 13, 2002 edition
- Standard for the Installation of Standpipe Systems, NFPA 14, 2003 edition
- Standard for the Installation of Stationary Fire Pumps, NFPA 20, 1999 edition
- Standard for the Installation of Water Storage Tanks for Fire Protection Service, NFPA 22, 2003 edition
- National Fire Alarm Code, NFPA 72, 2002 edition

SITE ACCESS:

- Minimum widths of Fire Department Access Roads and turning radii
- Major abutting public streets and roadways
- Points of access from public streets and roadways
- Locations of all Reciprocal Easement Agreement (REA's) with adjacent properties

PASSIVE FIRE PROTECTION:

- Note that the Fire Command Center has 2-hour rating
- Note that the Fire Pump Room has 2-hour rating
- Identify locations of Horizontal Exit Walls

EGRESS:

When meeting rooms and ballrooms do not have sufficient exit capacity accommodate occupant loading at a factor of 7 square feet per person, the FPR or TI FPR must state that assembly events with seating in rows of chairs (only) as noted in SNBC Table 1004.1.1 are not permitted in the assembly occupancy.

SIGNAGE:

Locations of signs including, but not limited to the following:

- At each FDC; stating the zones served, required pressure and flow

- Fire pump room door
- Fire command center (FCC) door
- Emergency generator door
- Main Electrical Room with service disconnect
- Stairway signage, in accordance with IBC Section 1005.3.2.4 and FCCC Section 1210.4
- Elevator bank signage indicating to not use the elevator in case of fire
- Statement requiring coordination between floor levels, stairs, elevators, and fire alarm annunciation (consistent labeling)

ACTIVE FIRE SUPPRESSION:

- State compliance with the 2002 edition of NFPA 13
- Description of the design of sprinkler systems throughout
- State all design densities and areas of application
- Describe freeze protection as applicable
- Clearly discuss protection for areas with ceiling exceeding 25 feet in height.
- Describe protection of vertical systems (i.e. trash and linen chutes) and protection with separate dedicated sprinkler risers to address CCFD concerns about multiple flow alarms from a single fire area
- State protection methods for commercial cooking equipment; including exhaust ducts exceeding 75 linear feet (sprinklers required when exceeding 75 feet)
- Describe CCFD preferred method for elevator hoistway and machine room protection (no sprinklers at the top of the elevator hoistway or within the elevator machine room so that shunt trip is not provided)
- Provide an analysis of possible commodities in storage areas, and a requirement for sprinkler demand for the possible commodities for exhibition halls
- Casinos required OH-2 sprinkler system with QR heads
- Malls, require separate auxiliary control valves for tenant spaces
- Note the seismic category for purposes of determining clearances around sprinkler penetrations through ceilings per ASCE 7 (2005) 13.5.6

STANDPIPES:

- State compliance with the 2003 edition of NFPA 14
- Automatic standpipes required for buildings higher than 55 feet from lowest level of fire access to the highest walking level
- The minimum outlet pressure for automatic systems is 125 psi.
- Class I hose valves required within the stair enclosures at every level, within the stair enclosure and not in vestibules of high-rise buildings
- Class I outlets required to cover all floor area with 100 feet of hose and 30 feet of spray
- Class I standpipe outlets required on both sides of horizontal exits
- Describe temporary standpipes. Temporary standpipe outlets required adjacent to useable stairs when construction is taller than 35 feet. Pump supply required for temporary standpipe when the height of construction exceeds 150 feet.
- State if pressure-reducing valves (PRV's) are used and locations of drain valves
- Note that standpipe outlets will be provided at the entrance from exit passageways and at mall entrances according to SNBC Section 905.4

WATER SUPPLY:

- State compliance with the 2003 edition of NFPA 22 and the 2004 edition of NFPA 24
- Describe two remote connections to public water system
- Describe the secondary supply, detail volume; minimum volume is 15,000 gallons, or 30 minutes of largest sprinkler system demand (include deluge sprinkler systems) plus 100 gpm of hose for 30 minutes
- Describe the location of secondary water supply tank and show the location on a small-scale drawing to be included

FIRE PUMPS:

- State compliance with the 1999 edition of NFPA 20
- Provided a minimum of two fire pumps where the pumping system supplies more than one high-rise building/tower.
- Describe how the roof top standpipe outlet for buildings over 450 feet high are supplied with the minimum demand of 125 psi when flowing standpipes per NFPA 14. Be advised that the fire pump churn pressure must exceed 350 psi and address the maximum rated working pressure of fittings and pressure loss due to hydraulic friction.
- State that the fire pump room has direct access from the exterior.
- State that emergency power for electric pumps will be provided within 10 seconds of loss of normal power. The minimum duration of back-up electrical supply is eight (8) hours at 100% of motor rating.

FIRE DETECTION SYSTEM:

- State compliance with the 2002 edition of NFPA 72
- State all devices that will provide input into the Fire Alarm Control Panel (FACP)
- Provide a matrix describing inputs and outputs controlled by the FACP

FIRE ALARM SYSTEM:

- Indicate compliance with the 2002 edition of NFPA 72
- Describe locations of speakers and strobes
- Describe the required performance criteria of the notification system
- Describe the alarm zones that are initiated simultaneously
- State if the voice alarm system is single channel or dual channel
- Describe any zoning of notification that does not comply with customary “floor of incident and floors above and below incident” zoning

FIRE DEPARTMENT COMMUNICATIONS:

- State methods of fire department communications (i.e. phone jacks, radio repeater system etc.)
- State coverage areas for fire department communications
- State if fire phone jacks are provided in smokeproof enclosure vestibules, in each elevator lobby and in each elevator cab.
- Note that warden phones are required in the fire pump room, emergency generator room, and at the secondary response point.

- Note that phone receivers are required at the FCC and Secondary Response Point(s) (SRP's)
- Note that radio repeater systems require 95% coverage is to all floor areas and the fire pump room, FCC, stairs, and service elevator staging lobbies required 98% coverage.

SECONDARY RESPONSE POINT

- Note that these are required in every building requiring an FCC.
- Required near at least one main entrance; preferably in a location not immediately accessible to the general public.
- Provide an all-call microphone at the secondary response point
- Provide a fire alarm annunciator at the secondary response point
- Provide a warden phone at the secondary response point (when fire phones are used)
- Indicate a fire phone receiver panel at the secondary response point (where fire phones are used)

FIRE COMMAND CENTER:

State that the floor area of the FCC in not less than 150 square feet. Additions to existing FCC's are to be a the minimum 150 square feet as approved for the existing area, plus a 0.015% ratio on new building area added to the original FCC square footage above the 150 square feet.

The FCC shall have direct access to the building's exterior.

The controls, equipment and documents to be provided within the FCC shall include, but not be limited to:

- Fire Alarm Control Panel
- Emergency voice/alarm communication unit
- Fire Department Communications Unit (fire phone systems)
- Radio Repeater Cabinet (radio repeater systems)
- Fire Alarm LED Annunciator
- Elevator location annunciator
- Firefighter smoke graphics panel
- Control to unlock stair doors (where stair doors are normally locked)
- Emergency and standby power status annunciator
- Generator Manual control panels; shunt and start controls
- Shunt trip switches for all power feeds
- Fire pump status annunciator panels from fire pump controller manufacturer
- Direct dial telephone for CCFD use
- For proprietary monitoring stations, an auto-dial phone to Fire Dispatch
- Building Plans
- Approved Master Egress Diagram
- Smoke Control System mechanical plans and response matrix
- Mechanical Quality Assurance Agency (MQAA) Final Smoke Control Report
- Fire Protection System Plans
- Approved Fire Protection Report(s)
- Manufacturers' manuals for all fire and life safety systems

SMOKE CONTROL:

- Description of method of smoke control used in each smoke control zone
- State if the system uses dedicated or non-dedicated equipment
- State emergency power provisions for smoke control equipment including continuously running exhaust fans (i.e. toilet exhaust fans in shafts with sub-ducts)
- Note the source of make-up air and evaluation of air velocities
- Describe the design and operation of the smoke control graphics panel
- State that a single switch is provided for each smoke control zone, whether exhaust, pressurization, mop-up, or passive

Specific color-coded indicator lights on smoke graphics panels according to CCFD color-coding requirements as follows:

- RED: indicates positive status of smoke control function (fan running)
- GREEN: indicates normal status
- YELLOW: trouble/fault status
- BLUE: used for ancillary smoke control function, as applicable

- Indicate the sequencing of lights from green, to yellow and red, to red
- Provide the smoke control panel in the Smoke Control input/output matrix.
- Describe interaction between commercial cooking extinguishing system activations and the smoke control systems (i.e. do systems shut down on activation of smoke control). Also discuss whether the extinguishing system activates the smoke control system. Ensure that the activation of the kitchen suppression system does not result in shut-down of the kitchen exhaust system
- State that the required weekly preprogrammed testing for smoke control systems is designed into the smoke control system(s)

ELEVATORS:

- State initiation mechanisms for all recall functions
- State if a shunt trip is provided
- State if fire/smoke dampers are anticipated over hoist way vents
- If provided, hoist way dampers are to have automatic operation by elevator lobby smoke detectors. The damper status and manual controls must be provided on the smoke control graphics panel
- State the location of the elevator car(s) that are sized to accommodate an ambulance stretcher as required by SNBC Section 3002.4.
- State that the number of elevator cars sized to accommodate an ambulance stretcher complies with SNBC Table 3002.4 according to the number of stories in the building.

DRAWINGS:

FPR drawings are to be legible and not include color-coding that will not be discernable when the drawings are scanned for CCFD archives. The 11 x 17 inch paper size format in a “Z-fold” configuration is preferred. The drawings are to show at least the following information for CCFD use:

- Conceptual access plan – from major public streets or roadways
- Fire access lane (shaded or hatched) with respect to the building(s),
- FCC, with direct exterior access
- Fire Pump Room, with direct exterior access
- Site FDC(s)
- Hydrant(s) corresponding to each FDC
- Hydrant spacing
- Secondary Response Point(s)
- Emergency Generators
- Main Electric Room(s)
- Hazardous materials storage locations
- Fuel (for diesel engine driven fire pumps, generators etc)

**Clark County Fire Department
Fire Prevention Bureau
Application for Prepaid Account**

(Please type or print requested information)

Date: _____

Must select type: New Update Close

Busn/Account Name: _____

Dept/Division: _____

Mailing Address: _____

Contact Person: _____

Phone Number: _____

Fax Number: _____

E-mail Address: _____

Authorized Account Users: *(Individuals authorized to sign CCFD Permit Application form and/or access account information)*

Must select type: Add Inactivate

Name *(please print)*

Signature

**** Note: Prepaid account must contain funds in order for application/plans to be processed for review/permits ****

Return this form, with deposit if applicable, to:

Clark County Fire Department
Plans Intake / Finance
575 E Flamingo Rd, 2nd Floor
Las Vegas, NV 89119-6950
Fax: 702.735.0775

Questions? Please email Plans Intake/Finance personnel at "permits@co.clark.nv.us".

Account ID #: _____

CCFD FPB Finance Use Only

Date Opened: _____

Processed By: _____

Prepared by _____ Date _____

Approved by _____ Date _____