# **Development Services**

# From Concept to Construction

Phone: 503-823-7300 Email: bds@portlandoregon.gov 1900 SW 4th Ave, Portland, OR 97201 More Contact Info (http://www.portlandoregon.gov//bds/article/519984)

APPEAL	SUMMARY
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Status: Decision Rendered

Appeal ID: 18977	Project Address: 901 SW King Ave
Hearing Date: 2/13/19	Appellant Name: Dave Bateman
Case No.: B-001	Appellant Phone: 503-227-1171
Appeal Type: Building	Plans Examiner/Inspector: Preliminary
Project Type: commercial	Stories: 12 Occupancy: R-2 Construction Type: 1-A
Building/Business Name: Celio Apartments	Fire Sprinklers: No
Appeal Involves: Alteration of an existing structure	LUR or Permit Application No.:
Plan Submitted Option: pdf [File 1] [File 2]	Proposed use: Apartment Building

# APPEAL INFORMATION SHEET

# Appeal item 1

Code Section	Multiple
Requires	OFC 914.3.1 Requires high-rise buildings to be equipped with an automatic fire sprinkler system ir
	accordance with OFC 903.3.1.1, and a secondary water supply in accordance with OFC 903.3.5.2
	OFC 903.3.1.1 Requires sprinkler systems to be installed in accordance with NFPA 13 NFPA 13
	8.1.1 (1) Requires sprinklers throughout the premises
	NFPA 101 31.3.5.9 Describes "Standard Q" system (corridor, heads over dwelling unit doors)
	OFC 903.3.5.2 Requires secondary water supply for high-rise buildings, with a duration in
	accordance with the occupancy hazard classification per NFPA 13 (minimum 30 minutes)
	OFC 905.3.1 Class III Standpipes are required in buildings where the floor level is located more
	than 30 feet above the lowest level of fire department vehicle access.
	OFC 905.2 Standpipe systems shall be installed in accordance with NFPA 14
	NFPA 14 5.4.1.2.1 Standpipes in high-rise buildings shall be automatic or semi-automatic.
	OFC 905.8 Dry standpipes shall not be installed unless in accordance with NFPA 14
	Portland Design Manual, Page 31 item (28) "Where areas served by standpipes are subject to
	freezing, an automatic dry system must be used."
	OFC 905.4.2 Where more than one standpipe is required, they shall be interconnected per NFPA
	14 NFPA 14 7.4 Separate standpipes shall be provided in each required exit stair
	NFPA 14 7.5.1 Standpipes shall be interconnected
	OFC 914.3.1.2 Required pumps shall be supplied by connections to a minimum of two water
	mains located in different streets.

https://www.portlandoregon.gov/bds/appeals/index.cfm?action=entry&appeal\_id=18977





#### Appeals | The City of Portland, Oregon

Viking proposes that this building is equipped with new automatic sprinkler systems. A new 6" fire
service will be installed supplied by a single main in King St. A double-check valve assembly will
be installed at the property line and equipped with a Fire Department Connection located on King
St installed in a visible and accessible location in accordance with NFPA 13. Fire Department
Connection will be equipped with signage indicating the fire pump design requirements.
The 6" fire service will terminate in the existing mechanical room in the basement. A single electric
fire pump with Automatic Transfer Switch will be installed to provide sprinkler system demand. The
fire pump system will be installed in accordance with NFPA 20 and include a jockey make-up
pump, a metered test loop and test header, and an automatic city bypass.
Each level of the building will be provided with a zoned floor control assembly in accordance with
NFPA 13 for multi-story buildings. Viking proposes that one of the existing Class II hose cabinets
per floor be converted for the use of the floor riser assembly connected to a sprinkler riser supplied
by the fire pump system.
The sprinkler riser will supply wet sprinkler systems at every occupied level (Bmst-12). Floors 1-12
will be provided with a partial "life safety" arrangement per NFPA 101 31.3.5.9 (2006ed). Fire
sprinklers will be provided in the corridors spaced in accordance with NFPA 13. A single fire
sprinkler will be provided within each dwelling unit located above the unit doorway. The system to
be hydraulically calculated using the "Room Design Method" (most remote 5 heads in the corridor
per NFPA 13 11.2.3.3.6). All piping proposed in this project to be sized to accommodate future
sprinkler expansion.
Common and utility areas on Bsmt and Level 1 to be equipped with fire sprinkler systems
designed to the appropriate hazard per NFPA 13. The intent of this project is to completely protect
the building with fire sprinklers with the exception of within each unit beyond the single head
described.
Existing dry standpipes to remain.

#### Reason for alternative This is a voluntary life-safety upgrade.

This proposed system will provide a fully automatic life safety sprinkler system for all tenantoccupied floors. The existing dry standpipes, and one of the existing Class II hose cabinets will provide responding fire department personnel with functionality similar to a Class III standpipe system.

All components will be installed to the appropriate NFPA standards. Future conversion to 100% sprinkler coverage will require no rework of piping or equipment installed under this proposal. Installation of a fully conforming system is cost prohibitive and will not be undertaken as a voluntary upgrade. This proposal provides substantial improvement in the life-safety protection of this building.

Please see attached: Typical floor plan

#### APPEAL DECISION

#### Alternate Type 13 sprinkler, standpipe and fire pump system: Granted as proposed.

The Administrative Appeal Board finds that the information submitted by the appellant demonstrates that the approved modifications or alternate methods are consistent with the intent of the code; do not lessen health, safety, accessibility, life, fire safety or structural requirements; and that special conditions unique to this project make strict application of those code sections impractical.

Pursuant to City Code Chapter 24.10, you may appeal this decision to the Building Code Board of Appeal within 180 calendar days of the date this decision is published. For information on the appeals process and costs, including forms, appeal fee, payment methods and fee waivers, go to www.portlandoregon.gov/bds/appealsinfo, call (503) 823-7300 or come in to the Development Services Center.

https://www.portlandoregon.gov/bds/appeals/index.cfm?action=entry&appeal\_id=18977

# **Code/Policy Requirements:**

OFC 914.3.1 Requires high-rise buildings to be equipped with an automatic fire sprinkler system in accordance with OFC 903.3.1.1, and a secondary water supply in accordance with OFC 903.3.5.2

OFC 903.3.1.1 Requires sprinkler systems to be installed in accordance with NFPA 13

NFPA 13 8.1.1 (1) Requires sprinklers throughout the premises

NFPA 101 31.3.5.9 Describes "Standard Q" system (corridor, heads over dwelling unit doors)

OFC 903.3.5.2 Requires secondary water supply for high-rise buildings, with a duration in accordance with the occupancy hazard classification per NFPA 13 (minimum 30 minutes)

OFC 905.3.1 Class III Standpipes are required in buildings where the floor level is located more than 30 feet above the lowest level of fire department vehicle access.

OFC 905.2 Standpipe systems shall be installed in accordance with NFPA 14

NFPA 14 5.4.1.2.1 Standpipes in high-rise buildings shall be automatic or semi-automatic.

OFC 905.8 Dry standpipes shall not be installed unless in accordance with NFPA 14

Portland Design Manual, Page 31 item (28) "Where areas served by standpipes are subject to freezing, an automatic dry system must be used."

OFC 905.4.2 Where more than one standpipe is required, they shall be interconnected per NFPA 14

NFPA 14 7.4 Separate standpipes shall be provided in each required exit stair

NFPA 14 7.5.1 Standpipes shall be interconnected

OFC 914.3.1.2 Required pumps shall be supplied by connections to a minimum of two water mains located in different streets.

# **Proposed Design:**

Viking proposes that this building is equipped with new automatic sprinkler systems. A new 6" fire service will be installed supplied by a single main in King St. A double-check valve assembly will be installed at the property line and equipped with a Fire Department Connection located on King St installed in a visible and accessible location in accordance with NFPA 13. Fire Department Connection will be equipped with signage indicating the fire pump design requirements.

The 6" fire service will terminate in the existing mechanical room in the basement. A single electric fire pump with Automatic Transfer Switch will be installed to provide sprinkler system demand. The fire pump system will be installed in accordance with NFPA 20 and include a jockey make-up pump, a metered test loop and test header, and an automatic city bypass.

Each level of the building will be provided with a zoned floor control assembly in accordance with NFPA 13 for multi-story buildings. Viking proposes that one of the existing Class II hose cabinets per floor be converted for the use of the floor riser assembly connected to a sprinkler riser supplied by the fire pump system.

The sprinkler riser will supply wet sprinkler systems at every occupied level (Bmst-12). Floors 1-12 will be provided with a partial "life safety" arrangement per NFPA 101 31.3.5.9 (2006ed). Fire sprinklers will be provided in the corridors spaced in accordance with NFPA 13. A single fire sprinkler will be provided within each dwelling unit located above the unit doorway. The system to be hydraulically calculated using the "Room Design Method" (most remote 5 heads in the corridor per NFPA 13 11.2.3.3.6). All piping proposed in this project to be sized to accommodate future sprinkler expansion.

Common and utility areas on Bsmt and Level 1 to be equipped with fire sprinkler systems designed to the appropriate hazard per NFPA 13. The intent of this project is to completely protect the building with fire sprinklers with the exception of within each unit beyond the single head described.

Existing dry standpipes to remain.

# **Reason for Alternate:**

This is a voluntary life-safety upgrade.

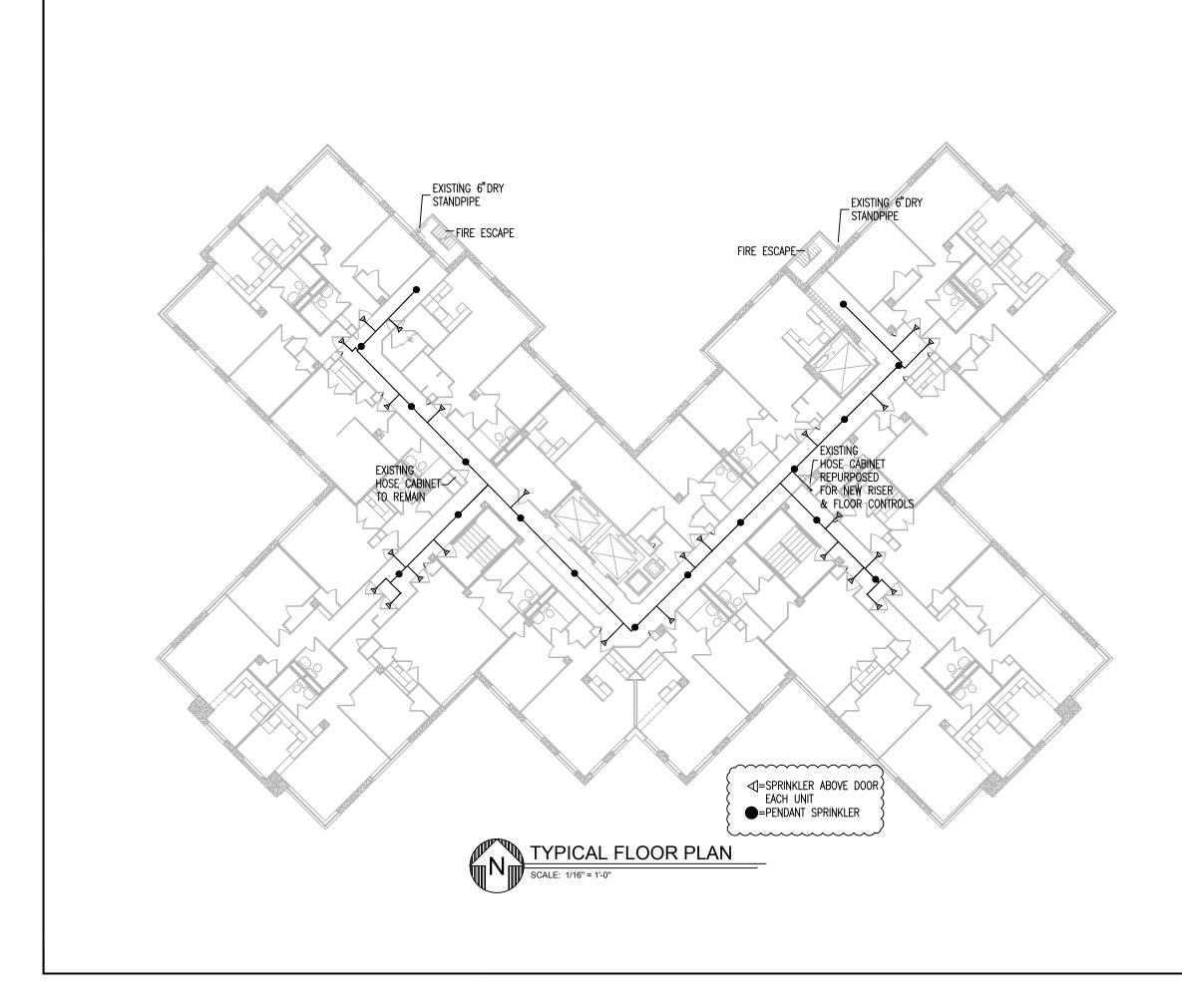
This proposed system will provide a fully automatic life safety sprinkler system for all tenant-occupied floors. The existing dry standpipes, and one of the existing Class II hose cabinets will provide responding fire department personnel with functionality similar to a Class III standpipe system.

All components will be installed to the appropriate NFPA standards. Future conversion to 100% sprinkler coverage will require no rework of piping or equipment installed under this proposal.

Installation of a fully conforming system is cost prohibitive and will not be undertaken as a voluntary upgrade. This proposal provides substantial improvement in the life-safety protection of this building.

Please see attached:

Typical floor plan



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SEATTLE MOTECTION MEDFORD PORTLAND											
VIKING AUTOMATIC SPRINKLER COMPANY											
3245 NW FRONT AVENUE PORTI AND. ORFGON 97210											
OREGON CCB # 64837 METRO LIC # 2216 • WASHINGTON LIC # VI-KI-NA-5373NT											
CELIO APARTMENTS											
901 SW KING AVE, PORTLAND OR 97205											
TYPICAL FLOOR PLAN											
Drawn By: Date Drawn: Scale: Job No: Drawing No:	TOTA	<b>L SPRINKLEF</b>	RS SHOWN	TOTAL SPRINKLERS SHOWN ON THIS SHEET	EET						
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