MEMO TO: City Council

FROM: John Marchione, Mayor

DATE: June 1, 2010

SUBJECT: AMENDING RMC 15.06, THE REDMOND FIRE CODE, TO BE

CONSISTENT WITH THE WASHINGTON STATE FIRE CODE, AS MANDATED BY THE STATE BUILDING CODE COUNCIL, AND AMENDING THE FIRE DEPARTMENT FEE SCHEDULE

TO REFLECT THE CHANGES TO RMC 15.06

I. RECOMMENDED ACTION:

Adopt the ordinance to update the RMC 15.06, Fire Code, to be consistent with the State Fire Code, as mandated by the State under RCW 19.27.031, with an established effective date of July 1, 2010.

Adopt the resolution amending the Fire Department Fee Schedule to reflect the changes in RMC 15.06, the Redmond Fire Code.

II. DEPARTMENT CONTACTS:

Tim Fuller, Fire Chief, 425-556-2202 Bob Lovett, Fire Marshal, 425-556-2207 Lynn Sjolander, Assistant Fire Marshal, 425-556-2236

III. DESCRIPTION:

The City of Redmond adopts the State Fire Code to update Redmond Fire Codes to the latest editions and technical standards. Redmond's local RMC 15.06, Fire Code, is being amended to include the updated State Code and our own administration, enforcement, and technical provisions. In addition, adoption of these codes will help protect life safety and protect property by establishing a minimum level of quality and safety. Updated and consistent fire codes and standards will help the design and construction community, provide the newest technologies, and develop products around a common set of codes and standards. Amending the Fire Department Fee Schedule will address the changes in RMC 15.06, the Redmond Fire Code, regarding operational and installation permits.

This matter came before the Public Safety Committee on May 12, 2010, and was forwarded to the June 1, 2010 regular Council meeting for consideration.

IV. IMPACT:

- A. <u>Service Delivery</u>: Changes to the Fire Code will have an initial impact on the design and construction community, as well as on code officials, while gaining an improved understanding of code application and enforcement; however, the amended Fire Code and standards will help achieve a higher level of uniform design criteria and life safety.
- B. <u>Fiscal</u>. If we do not adopt the amendments to the code, there could be a negative fiscal impact on Redmond's Washington Survey and Rating Bureau (WSRB) grading schedule. The WSRB Municipal Fire Protection rating may be used by property/casualty insurers in determining rates paid by building owners in our jurisdiction. Also, training dollars have already been allocated to assist staff in preparation for new code implementation and enforcement. Additional expenditures will be required to update forms and customer information.

V. ALTERNATIVES:

- A. Adopt as proposed.
- B. Adopt with modifications recommended by Council.
- C. Do not adopt and be noncompliant with state law.

VI. TIME CONSTRAINTS:

The Washington State Legislature enacted legislation updating the State Building Code. This legislation will become effective on July 1, 2010. All cities, counties, and fire districts are responsible to enforce these codes. Adoption of this ordinance with an effective date of July 1, 2010, will provide consistency with the State's code adoption process. The resolution regarding fee revisions will become effective upon approval.

VII. LIST OF ATTACHMENTS:

Attachment A - Redmond Fire Code RMC 15.06 Ordinance Attachment B - Fee Schedule Resolution

/s/		05/21/10
Tim Fuller, Fire Chief		Date
Approved for Council Agenda	/s/	05/25/10
ripproved for Council rigendu	John Marchione, Mayor	Date

CODE ORDINANCE

CITY OF REDMOND ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF REDMOND, WASHINGTON, AMENDING RMC CHAPTER 15.06, FIRE CODE, TO COORDINATE WITH THE 2009 INTERNATIONAL FIRE CODE AND SUBSEQUENT STATE AMENDMENTS

WHEREAS, the Fire Department has recommended that the City adopt the 2009 International Fire Code, with certain deletions and amendments, as required by RCW 19.27.031; and

WHEREAS, the City Council, through adoption of this ordinance, concurs with the recommendations of the Fire Department.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF REDMOND, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. Classification. This ordinance is of a general and permanent nature and shall become a part of the City Code.

Section 2. Amendment of Subsections. Subsections RMC 15.06.010 - .017 and 15.06.024 of the City of Redmond Fire Code are hereby amended to read as follows:

Sections:

15.06.010 Short title.

15.06.011 Adoption.

<u>15.06.012</u> Restrictions.

15.06.013 Amendments.

15.06.014 DELETIONS Reserved for future use.

15.06.015 Fire detection systems.

15.06.016 Fire Sprinkler systems.

- 15.06.018 Preventable fire alarms.
- 15.06.019 New materials, processes or occupancies which may require permits.
- 15.06.020 Wellhead protection ordinance coordination.
- 15.06.021 Appeals.
- 15.06.022 Penalties and enforcement.
- 15.06.023 Building permit issuance and occupancy.
- 15.06.024 Non-conforming structures.

15.06.010 Short title.

This chapter and amendments hereto shall constitute the Redmond Fire Code and may be cited as such.

15.06.011 Adoption.

The International Fire Code, [2006] 2009 Edition, published by the International Code Council including Appendices F and I, together with the amendments, modifications, exceptions and in Chapter 51-54 excluding the changes to IFC Section 503, [AND THE UNIFORM FIRE CODE, 1997 EDITION, PUBLISHED BY THE IFCI, APPENDIX II E, in their entirety as the same now exist or as they may be hereafter amended, except such portions as are hereinafter by this chapter deleted, modified, amended or added to, are hereby adopted and incorporated as fully as if set out at length herein.

15.06.012 Restrictions.

(1) Occupancies Prohibited. No Group H, Division 1 [Θ R 5 OCCUPANCIES] occupancy as defined in Section 307, International Building Code, [2006] 2009 Edition, shall be permitted.

Exception No. 1: A Group H, Division 1 occupancy may be allowed when approved by the Chief and the Building Official and authorized by a valid Fire Code Permit.

(2) Bulk Plants. Bulk plants referred to in Section 3402 of the International Fire Code, [2006] 2009 Edition, shall be prohibited throughout the City except in areas zoned Manufacturing Park (MP) or Industry (I) pursuant to the City of Redmond Community Development Guide and shall be limited to underground storage only.

Exception No. 1: Unless prohibited by the City of Redmond Wellhead Protection Ordinance.

- (3) Liquefied Petroleum Gas Storage. The limits referred to in Section 3804.2 of the International Fire Code, [2006] 2009 Edition, in which bulk storage of liquefied petroleum gas is restricted are established throughout the City limits except areas zoned Manufacturing Park (MP) or Industry (I) pursuant to the Community Development Guide.
- (4) Flammable Cryogenic Fluids. Flammable cyrogenic fluids referred to in Section 3506 of the International Fire Code 2009 edition shall be prohibited throughout the City except in areas zoned Manufacturing Park (MP) or Industry (I), or when approved by the Fire Code Official and the Building Official and authorized by a valid Fire Code Permit.

15.06.013 Amendments.

The following are modifications or amendments to the International Fire Code, [2006] 2009 Edition, as adopted in RMC $\underline{15.06.011}$ and shall correspond to the context of said International Fire Code as if set out at length in their respective sections in lieu of or in addition to published sections or subsections. Where an amendment or modification

replaces a published section or subsection, the published section or subsection shall be deemed void and deleted.

- (1) Amend [102.6] **102.7** to read **as follows:**
- 102.7 Referenced codes and standards. The codes and standards referenced in this code shall be the Redmond Fire Department Standards and those that are listed in Chapter [45] 47. Such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each reference as determined or modified by the Fire Code Official. Redmond Fire Department Standards shall constitute the primary reference document and guideline. Where differences occur between the provisions of this code and the referenced standards, the provisions of this code shall apply.
- (2) Add Section [102.6.1] **102.7.1** as follows:
- 102.7.1 Supplemental Rules and Regulations.

The Chief is authorized to render interpretations of this code and to make and enforce rules and supplemental regulations in order to carry out the application and intent of its provisions. Such interpretations, rules, and regulations <a href="mailto:shall-be-known as 'Redmond Fire Department-be-known as 'Redmond Fire Department-be-known as 'Redmond Fire Department-be-known as 'Redmond Fire Department and purpose of this code and shall be available to the public during normal business hours.

{(3) AMEND SECTION 104.10.1 AFTER "INVESTIGATION OF FIRES"
AS FOLLOWS:

OR THE ENFORCEMENT OF THIS CODE AS REQUESTED BY THE FIRE CODE OFFICIAL

AND RENUMBER AS 104.12;

[(4)AMEND SECTION 104.11.2 AFTER "EXTINGUISHMENT" AS

CONTROL, OR INVESTIGATION OF ANY FIRE]

(3) Amend Section 104.11.2 to read as follows:

104.11.2 Obstructing operations.

No person shall obstruct the operations of the fire department in connection with extinguishment, control, or investigation of any fire or control of any fire, or actions relative to other emergencies, or disobey any lawful command of the fire chief or officer of the fire department in charge of the emergency, or any part thereof, or any lawful order of a police officer assisting the fire department.

(4) Add Section 104.12 as follows:

104.12 Assistance from other agencies.

Police and other enforcement agencies shall have authority to render necessary assistance in the enforcement of this code as requested by the Fire Code Official.

[(5) AMEND SECTION 105.6.23BY ADDING A SECOND EXCEPTION AS FOLLOWS:

LESS THAN 16 OUNCE IN SELF CONTAINED, HAND HELD DEVICES
THAT DO NOT ALLOW GAS FLOW OR FLAME WHEN THE TRIGGER IS
RELEASED

(5) Amend Section 105.6.23 to read as follows:

105.6.23 Hot work operations.

An operational permit is required for hot work including, but not limited to:

- 1. Public exhibitions and demonstrations where hot work is conducted.
- 2. Use of portable hot work equipment inside a structure.
- Exception 1: Work that is conducted under a construction permit.

Exception 2: Less than 16 ounces in self contained, hand held devices that do not allow gas flow or flame when the trigger is released

- 3. Fixed-site hot work equipment such as welding booths.
 - 4. Hot work conducted within a wildfire risk area.
- 5. Application of roof coverings with the use of an open-flame device.
- 6. When approved, the fire code official shall issue a permit to carry out a Hot Work Program. This program allows approved personnel to regulate their facility's hot work operations. The approved personnel shall be trained in the fire safety aspects denoted in this chapter and shall be responsible for issuing permits requiring compliance with the requirements found in Chapter 26. These permits shall be issued only to their employees or hot work operations under their supervision.

[(6) AMEND SECTION 105.6.27 BY ADDING A SECOND EXCEPTION AS FOLLOWS:

IN OTHER THAN R 3 OCCUPANCIES A PERMIT IS NOT REQUIRED IN NONCOMMERCIAL OUTDOOR USE OF PROPANE BARBECUE GRILLS.]

(6) Amend Section 105.6.27 to read as follows:

105.6.27 LP-gas.

An operational permit is required for:

1. Storage and use of LP-gas.

Exception 1: A permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less serving occupancies in Group R-3.

Exception 2: In other than R-3 occupancies a permit is not required in noncommercial outdoor use of propane barbecue grills.

Operation of cargo tankers that transport LP-gas.

(7) Add Section 105.6.47 [BATTERY SYSTEMS:] as follows:

105.6.47 Battery systems.

An operational permit is required to operate a stationary storage battery system having a liquid capacity of more than 50 gallons (189 L).

(8) Add Section 105.6.48 to read as follows:

105.6.48 Fire alarm systems:

An operational permit is required when using an approved Central Station Service alternative.

(9) Add Section 105.6.49 Emergency responder radio coverage system as follows:

Section 105.6.49 Emergency responder radio coverage system.

An operational permit is required to operate an emergency responder radio coverage system as prescribed in Section 510.

(10) Amend Section 105.7.4 to read as follows:

105.7.4 Cryogenic fluids.

A construction permit is required for installation of or alteration to stationary cryogenic fluid storage systems where the system capacity exceeds the amounts listed in Table 105.6.10. Maintenance performed in accordance with this code is not considered an alteration and does not require a construction permit.

 $\frac{(8)}{(11)}$ Add Section [$\frac{105.7.14}{105.7.15}$ as follows:

[105.7.14] 105.7.15 HPM Facilities.

A construction permit is required to install equipment or facilities that store, handle or use hazardous production materials.

 $\frac{(9)}{(12)}$ (12) Add Section [$\frac{105.7.15}{(105.7.15)}$ 105.7.16 as follows:

[105.7.15] **105.7.16** High Piled Storage.

A construction permit is required to establish and construct high piled storage areas exceeding 500 square feet in a building or portion thereof.

 $\frac{(10)}{(13)}$ Add Section [$\frac{105.7.16}{105.7.17}$ as follows:

[105.7.16] 105.7.17 Refrigeration Equipment.

A construction permit is required to install a mechanical refrigeration unit or system regulated by Chapter 6 of the IFC.

[(11)] (14) Add Section [105.7.17] 105.7.18 [PLACES OF ASSEMBLY.] as follows:

105.7.18 Places of Assembly.

A construction permit is required for all new Place of Assembly uses.

[(12)] (15) Add Section [105.7.18] 105.7.19 [SMOKE CONTROL SYSTEM.] as follows:

105.7.19 Smoke Control System. A construction permit is required for all new installations of [(SECTION 909)] smoke control systems regulated by Section 909.

(16) Add Section 105.7.20 Emergency responder radio coverage systems as follows:

105.7.20 Emergency responder radio coverage systems. A construction permit is required for installation of, or modification to, emergency responder radio coverage systems and related equipment as identified in Section 510.

(13) ADD SECTION 105.7.19 CRYOGENIC FLUIDS.

A CONSTRUCTION PERMIT IS REQUIRED FOR ALL NEW STORAGE TANKS

AND PIPING THAT ARE USED IN CONJUNCTION WITH QUANTITIES OF

CRYOGENIC FLUIDS IN EXCESS OF AMOUNTS IDENTIFIED IN TABLE

105.6.10.1

 $\{(14)\}$ (17) Add Section 110.5 as follows:

110.5 Fire or explosion damaged buildings. The owner, occupant or other person having under his control any property or materials on a property damaged by fire or explosion shall, when ordered by the Chief, immediately secure the property against entry or unauthorized access by the public, by boarding up all openings, fencing, barricading or utilizing other appropriate measures. Within 30 days after written notice to do so has been served, all debris and/or damaged materials shall be removed from the property and proof furnished that contractual arrangements have been made for prompt demolition, replacement or repair of all fire or explosion damaged structures remaining on the property involved in the fire or explosion.

{(15) ADD/ TO SECTION 202

- "FACILITY" DEFINITION BY INSERTING, AFTER "TANK FARMS," AS FOLLOWS:

PARKS, PLAZAS, SPORT FIELDS OR OTHER PUBLIC ASSEMBLY AREAS.]

(18) Add/amend Section 202 as follows:

1. Amend the definition(s) of "Facility" to read as
follows:

FACILITY.

A building or use in a fixed location including exterior storage areas for flammable and combustible substances and hazardous materials, piers, wharves, tank farms, parks, plazas, sport fields or other public assembly areas and similar uses. This term includes recreational vehicles, mobile home and manufactured housing parks, sales and storage lots.

2. Add the following definition(s):

GROSS AREA:

The gross area means the total area of all floors, measured from the exterior face, outside dimensions or exterior column line of a building, including basements, cellars and balconies, but not including unexcavated areas. Where walls and columns are omitted in the construction of a building, such as an open shed or marquee, the exterior wall of the open side or sides, for the purpose of calculating gross area, will be the edge of the roof, including gutters

(16) ADD TO SECTION 305.2.1 AS FOLLOWS:

ALL ASHTRAYS SHALL BE OF NON-COMBUSTIBLE CONSTRUCTION WHERE ASHES ARE CONTAINED. WASTE SMOKING MATERIAL OR ANY OTHER PREVIOUSLY IGNITED OR SPONTANEOUSLY IGNITABLE MATERIAL SHALL BE DISCARDED INTO SOLID, NON-COMBUSTIBLE CONTAINERS HAVING TIGHT FITTING LIDS OF THE SAME CONSTRUCTION.]

(17) ADD 308.3.7 EXCEPTION 4 TO READ AS FOLLOWS:

WHERE IN COMPLIANCE WITH 308.3.1.2 OF THE REDMOND FIRE CODE AND APPROVED BY THE FIRE CODE OFFICIAL.]

[(18) AMEND 314.4 TO READ AS FOLLOWS:

"LIQUID- OR GAS-FUELED VEHICLES, FUELED EQUIPMENT,

BOATS..." THE REMAINDER THE SAME]

(19) Amend 314.4 to read as follows:

314.4 Vehicles.

Liquid- or gas-fueled vehicles, fueled equipment, boats or other motorcraft shall not be located indoors except as follows:

- 1. Batteries are disconnected.
- 2. Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (19 L) (whichever is least).
- 3. Fuel tanks and fill openings are closed and sealed to prevent tampering.
- 4. Vehicles, boats or other motorcraft equipment are not fueled or defueled within the building.
- (19) (20) Add Section 503.1.1.1 to read as follows:

503.1.1.1 Extent of access.

The fire apparatus access roadway shall extend to [WITHIN 150 FEET OF ALL PORTIONS OF THE EXTERIOR WALLS OF THE FIRST STORY OF ANY BUILDING AND] within 50 feet of at least 25 percent of the perimeter of the building. Where access roadway cannot be provided, the Fire Code Official is authorized to require an approved fire protection system or systems as provided in RMC 15.06.017.

Exception: Detached one and two family dwelling units.

(20)21 Add Section 503.1.1.2 to read as follows:

503.1.1.2 Easements.

[ANY REQUIRED] When directed by the Fire Code Official, emergency vehicle access routes or areas, including Emergency Vehicle Operations Areas, turnarounds, overhang areas, firefighter access, emergency egress, or similar, that are not within a public right-of-way shall be maintained in an approved and recorded Emergency Vehicle Access and/or Firefighter Access Easement.

(21)(22) Add Section 503.2.7.1 as follows:

503.2.7.1 Maximum grade.

All required access roadways shall be constructed so that the maximum gradient is 10 percent. Where this requirement cannot be met, the Fire Code Official is authorized to require an approved fire protection system or systems as may be required by the Chief in RMC 15.06.017. [NO ACCESS ROADWAY OR ACCESS ROAD APPROACH TO A PUBLIC WAY SHALL HAVE AN ARC HIGHER THAN 12 INCHES IN LESS THAN 18 FEET. WHERE THESE REQUIREMENTS CANNOT BE PROVIDED, THE FIRE CODE OFFICIAL IS AUTHORIZED TO REQUIRE AN APPROVED FIRE PROTECTION SYSTEM OR SYSTEMS AS MAY BE REQUIRED BY THE CHIEF IN RMC 15.06.017.]

(23) Ammend Section 503.2.8, to read as follows:

503.2.8 Angles of approach and departure.

The angles of approach and departure for fire apparatus access roads shall be within the limits established by the fire code official based on the fire department's apparatus. No access roadway or access road approach to a

public way shall have an arc higher than 12 inches in less than 20 feet. Where these requirements cannot be provided, the Fire Code Official is authorized to require an approved fire protection system or systems as may be required by the Chief in RMC 15.06.017.

 $\{(22)\}$ (24) Add Section 503.4.1 as follows:

503.4.1 Fire lanes. The Chief shall have the power and authority to remove or cause to be removed without notice, any vehicle, vessel or thing parked or placed in violation of Section 503.4 of the International Fire Code. The Chief may direct a property owner or property manager of a commercial or multi-family development to have such vehicles towed and/or contract with a towing company to have such vehicles towed when necessary to maintain fire access unobstructed. The owner of any item so removed shall be responsible for all towing, storage and other charges connected therewith.

 $\frac{(23)}{(25)}$ (25) Add [A] Section 505.3 to read as follows:

505.3 Street and road designations. Street and road designations shall be as determined and assigned by the Chief.

(26) Amend Section 507.5 to read as follows:

507.5 Fire hydrant systems.

Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6. Hydrant spacing in commercial and multifamily shall be 300' on center, spacing for single family residences shall be 600' on center.

(24) AMEND 508.5.1 AS FOLLOWS:

IN THE FIRST PARAGRAPH CHANGE 400 FEET TO 150 FEET; IN EXCEPTION 1 CHANGE 600 FEET TO 300 FEET;

AND AMEND EXCEPTION 2 TO READ:

FOR GROUP R 3 AND U, OCCUPANCIES]EQUIPPED THROUGHOUT WITH AN APPROVED AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3, THE DISTANCE REQUIREMENT SHALL BE 600 FEET (183 M).]

(27) Amend Section 507.5.1 to read as follows:

507.5.1 Where required.

Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 150 feet from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

Exceptions:

- 1. For group R-3, Group U and one and two family dwellings the distance requirement shall be 300 feet.
- 2. For Group R-3, Group U, and one and two family dwellings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3, the distance requirement shall be 600 feet.

(28) Replace the existing language in section 510 with the following:

Section 510 Emergency responder radio coverage.

Emergency responder radio coverage systems shall be provided in buildings if it is determined by the fire code official that there is inadequate emergency radio coverage within the building. Such systems shall be installed as required in Redmond Fire Department Standards.

 $\frac{(25)}{(25)}$ Add to 602, definitions as follows:

Power Tap. A listed device for indoor use consisting of an attachment plug on one end of a flexible cord and two or more receptacles on the opposite end, and has overcurrent protection.

(30) Amend Section 603.3 to read as follows:

603.3 Fuel oil storage systems.

Fuel oil storage systems shall be installed in accordance with this code. Fuel oil piping systems shall be installed in accordance with the International Mechanical Code.

Secondary containment shall be provided for all new installations of storage tanks and associated piping.

Exception: Piping that is integral to the fuel fired appliance.

[(26) AMEND 803.1 TO READ AS FOLLOWS:

"GENERAL REQUIREMENTS. THE PROVISIONS OF SECTION 803.1.1

THROUGH 803.1.4 SHALL BE APPLICABLE..." THE REMAINDER THE SAME!

[(27) ADD SECTION 901.4.1.1 TO READ AS FOLLOWS:

THE INSTALLATION, MODIFICATION, AND MAINTENANCE OF ANY FIRE PROTECTION SYSTEM OR COMPONENT SHALL BE IN ACCORDANCE WITH APPLICABLE STANDARDS. THE REDMOND FIRE DEPARTMENT STANDARDS APPLICABLE TO THE PARTICULAR SYSTEM SHALL CONSTITUTE THE PRIMARY REFERENCE DOCUMENT.

(31) Amend Section 901.4.1 to read as follows:

901.4.1 Required fire protection systems.

Fire protection systems required by this code or the International Building Code shall be installed, repaired, operated, tested and maintained in accordance with this code. The Redmond Fire Department Standards applicable to the particular system shall constitute the primary reference document.

(32) Amend Section 901.7 to read as follows:

901.7 Systems out of service.

Where a fire protection system is out of service, the fire department and the fire code official shall be notified immediately and, where required by the fire code official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service.

Where utilized, fire watches shall be provided with at least one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

 $\frac{(28)}{(33)}$ Add Section 901.10 to read as follows:

901.10 Problematic Fire Protection Systems: In the event <u>of</u> <u>repeated</u> [WHERE 3 OR MORE PREVENTABLE] system malfunctions or maintenance-related activations [OCCUR IN ANY 30 DAY PERIOD], the Fire Code Official may declare the system to be a problematic system and is authorized to direct corrective action to be taken. The Fire Code Official is authorized to have the fire protection system placed out of service. The procedures found in Section 901.7 "Systems out of service" shall be followed.

(34) Amend Section 903.2 to read as follows:

903.2 Where Required.

Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in the Redmond Municipal Code Section 15.06.016, and Sections 903.2.1 through 903.2.12.

(29) ADD SECTION 903.2.14 AS FOLLOWS:

AN APPROVED FIRE SPRINKLER SYSTEM IS REQUIRED IN ANY STRUCTURE OTHER THAN DETACHED ONE AND TWO FAMILY DWELLINGS OR TOWNHOUSES (PER THE IRC) WHERE THE TOTAL AREA IS 3,000 SQUARE FEET OR MORE GROSS FLOOR AREA.]

(30) ADD SECTION 903.2.15 AS FOLLOWS:

AN APPROVED FIRE SPRINKLER SYSTEM IS REQUIRED IN ANY STRUCTURE WHERE THE REQUIRED FIRE FLOW AS DETERMINED BY THE CHIEF IN ACCORDANCE WITH REDMOND FIRE DEPARTMENT STANDARDS IS 3,500 GALLONS PER MINUTE OR MORE, OR EXCEEDS AVAILABLE FIRE FLOW.]

[(31)] (35) Amend Section 903.4.2 to read as follows: "903.4.2 Alarms.

Approved audible and visible alarm notification appliances shall be provided for every automatic sprinkler system in accordance with Section 907 and throughout areas designated by the Fire Code Official. Sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. [...]" [THE REMAINDER THE SAME.]

[AND ADD THE FOLLOWING EXCEPTION:]

Exception: With approval of the Fire Code Official, audible and visible alarm notification appliances may be omitted for approved residential sprinkler systems in 1 or 2 dwelling units if not otherwise specifically required.

[(32) ADD TO SECTION 903.4.3 THE FOLLOWING EXCEPTION:

EXCEPTION: WHEN APPROVED BY THE FIRE CODE OFFICIAL IN NFPA 13D AND NFPA 13 R SYSTEMS.]

(36) Amend Section 903.4.3 to read as follows:

903.4.3 Floor control valves.

Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor in multi-story buildings.

Exception: When specifically approved by the Fire Code Official.

[(33)] (37) Add Section 905.3.8 to read as follows:

905.3.8 High Rise Building Standpipes.

High rise standpipe risers shall be combination standpipe/sprinkler risers using a minimum pipe size of 6 in. Two 2 1/2 in. hose connections shall be provided on every intermediate floor level landing in every required stairway. Where pressure reduction valves (prv) are required, each hose connection shall be provided with its own prv. The system shall be designed to provide a minimum flow of 300 gpm at a minimum pressure of 150 psi (maximum 200 psi) at each standpipe connection, in addition to the flow and pressure requirements contained in NFPA 14.

[(34) AMEND SECTION 905.8 TO READ AS FOLLOWS:

905.8 DRY STANDPIPES. DRY STANDPIPES, WHEN APPROVED BY THE FIRE CODE OFFICIAL, ARE ACCEPTABLE WHERE THE STANDPIPE MAY BE SUBJECT TO TEMPERATURES OF LESS THAN 40 DEGREES (F) AND SHALL BE IN ACCORDANCE WITH NFPA 14.1

(38) Amend Section 907.2 to read as follows:

907.2 Where required - new buildings and structures.

An approved fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in new buildings and structures where there is a required sprinkler system, except one and two family dwellings as defined in the IRC, and in accordance with Sections 907.2.1 through 907.23 and provide occupant notification in accordance with Section 907.6, unless required by another section of this code.

A minimum of one manual fire alarm box shall be provided in an approved location to initiate a fire alarm signal to fire alarm systems employing automatic fire detectors or water-flow detection devices. Where other sections of this code allow elimination of fire alarm boxes due to sprinklers, a single fire alarm box shall be installed.

Exceptions:

- 1. The manual fire alarm box is not required for fire alarm systems dedicated to elevator recall control and supervisory service.
- 2. The manual fire alarm box is not required for Group R-2 occupancies unless required by the fire code official to provide a means for fire watch personnel to initiate an alarm during a sprinkler system impairment event. Where provided, the manual fire alarm box shall not be located in an area that is accessible to the public.

(39) Amend Section 907.5.1 to read as follows:

907.5.1 Protection of fire alarm control unit.

In areas that are not continuously occupied, a single smoke detector shall be provided at the location of each fire

alarm control unit, notification appliance circuit power extender and supervising station transmitting equipment.

Exception: Where ambient conditions prohibit installation of a smoke detector, a heat detector shall be permitted.

(35) ADD SECTION 907.15.1 AS FOLLOWS:

MONITORING AND SUPERVISION OF FIRE PROTECTION SYSTEMS SHALL

BE WITH APPROVED CENTRAL STATION SERVICE, INCLUDING

PROVISIONS FOR THIRD PARTY CERTIFICATION PER REDMOND FIRE

DEPARTMENT STANDARDS. 1

 $\frac{(36)}{(40)}$ Add Section 1011.1.1 as follows:

1011.1.1 Sign color.

All exit sign letters shall be green on a contrasting background.

(37) ADD SECTION 1028.7, BLOCKING OF SELF OR AUTOMATIC CLOSING DOORS, AS FOLLOWS:

ANY DOOR WHICH IS AN INTEGRAL PART OF A RATED ASSEMBLY AND WHICH IS NORMALLY SELF OR AUTOMATIC CLOSING SHALL NOT BE BLOCKED, OBSTRUCTED OR OTHERWISE IMPAIRED OR MADE INOPERATIVE. SEE ALSO SECTION 703.2.]

[(38) AMEND SECTION 1404.5 TO READ AS FOLLOWS:

"WHEN REQUIRED BY THE FIRE CODE OFFICIAL FOR BUILDING CONSTRUCTION OR DEMOLITION THAT IS HAZARDOUS IN NATURE, QUALIFIED..." THE REMAINDER THE SAME!

(41) Amend Section 1404.5 to read as follows:

1404.5 Fire watch.

When required by the fire code official for building construction or demolition that is hazardous in nature, qualified personnel shall be provided to serve as an onsite fire watch. Fire watch personnel shall be provided with at least one approved means for notification of the fire department and their sole duty shall be to perform constant patrols and watch for the occurrence of fire.

(42) Amend Section 1411.1 to read as follows:

1411.1 Stairways required.

Where a building has been constructed to a building height of 50 feet or four stories as measured from the lowest level of fire department vehicle access, or where an existing building exceeding 50 feet in building height is altered, at least one temporary lighted stairway shall be provided unless one or more of the permanent stairways are erected as the construction progresses.

(43) Ammend Section 2701.5.1 to read as follows:

2701.5.1 Hazardous Materials Management Plan.

Where required by the fire code official, an application for a permit shall include a Hazardous Materials Management Plan (HMMP). The HMMP shall include a facility site plan designating the following:

- 1. Access to each storage and use area.
- 2. Location of emergency equipment.
- 3. Location where liaison will meet emergency responders.

- 4. Facility evacuation meeting point locations.
- 5. The general purpose of other areas within the building.
- 6. Location of all above-ground and underground tanks and their appurtenances including, but not limited to, sumps, vaults, below grade treatment systems and piping.
 - 7. The hazard classes in each area.
- 8. Locations of all control areas and Group Hoccupancies.
 - 9. Emergency exits.
 - 10 Location of spill control equipment.

(44) Amend Section 2701.5.2 to read as follows:

2701.5.2 Hazardous Materials Inventory Statement (HMIS).

Where required by the fire code official, an application for a permit shall include an HMIS. The HMIS shall be provided using a Redmond Fire Department approved format. The HMIS shall include the following information:

- Manufacturer's name.
- 2. Chemical name, trade names, hazardous ingredients.
- 3. Hazard classification.
- 4. MSDS or equivalent.
- 5. United Nations (UN), North America (NA) or the Chemical Abstract Service (CAS) identification number.
 - 6. Maximum quantity stored or used on-site at one time.
- 7. Storage conditions related to the storage type, temperature and pressure.

(45) Amend Section 2703.1 to read as follows:

2703.1 Scope. The storage, use and handling of all hazardous materials shall be in accordance with this section and shall comply with the provisions of the City of Redmond Wellhead Protection Ordinance.

(46) Add section 2703.9.11 as follows:

2703.9.11 Manufacturers limitations. The storage and use of hazardous materials shall not exceed the manufacturer's limitations on shelf life and any other restrictions on use.

(39) ADD SECTION 2704.2.2.7 AS FOLLOWS:

SECONDARY CONTAINMENT SHALL BE PROVIDED FOR ALL NEW INSTALLATIONS OF STORAGE TANKS AND ASSOCIATED PIPING. 1

(47) Amend Section 2704.2.2 to read as follows:

2704.2.2 Secondary containment for hazardous material liquids and solids.

Where required by Table 2704.2.2 buildings, rooms, areas, tanks and associated piping or areas used for the storage of hazardous materials liquids or solids shall be provided with secondary containment in accordance with this section when the capacity of an individual vessel or the aggregate capacity of multiple vessels exceeds the following:

- 1. Liquids: Capacity of an individual vessel exceeds
 55 gallons (208 L) or the aggregate capacity of multiple
 vessels exceeds 1,000 gallons (3785 L); and
- 2. Solids: Capacity of an individual vessel exceeds 550 pounds (250 kg) or the aggregate capacity of multiple vessels exceeds 10,000 pounds (4540 kg).

 $\{(40)\}\$ (48) Add Section 3308.1.1 as follows:

33080.1.1 Fireworks.

Refer to Chapter 9.26 RMC (Fireworks) and to RCW 70.77.120 et seq. (State Fireworks Law).

[(41)] (49) Add Section 3403.4.1, [SECONDARY CONTAINMENT,]
to read as follows:

3403.4.1, Secondary Containment.

Secondary containment shall be provided for all new installations of storage tanks and associated piping.

15.06.014 DELETIONS. Reserved for future use.

THE FOLLOWING PORTIONS CITED FROM THE INTERNATIONAL FIRE CODE, [2006] EDITION, AS ADOPTED IN RMC 15.06.011, ARE HEREBY DELETED:

[(1) IN SECTIONS 603.1.7, 604.2.16.1, 604.2.16.2, 605.1, 605.3 EXCEPTION 1, 605.4, 605.9, AND 606.15 DELETE THE REFERENCE TO "ICC" AND LEAVE THE REFERENCE TO THE ELECTRICAL CODE.]

- (2) IN SECTION 901.7 DELETE THE WORD "REQUIRED" IN THE FIRST LINE, PRECEDING "FIRE PROTECTION SYSTEM."
- (3) IN SECTION 903.2 DELETE THE EXCEPTION IN ITS ENTIRETY.
- [(4) IN SECTION 903.4.3 DELETE "IN HIGH RISE BUILDINGS.]"
- [(5) IN SECTION 906.1 ITEM #1 DELETE THE EXCEPTION.]

15.06.015 Fire detection systems.

The following regulations constitute general requirements of fire detection and alarm systems and supervisory and alarm requirements for [SPRINKLERED] buildings with automatic fire sprinklers. Specific requirements may be found in the Redmond Fire Department Standards, Redmond Fire Code and NFPA 72.

Where Required:

(1) In structures with an approved fire sprinkler system.

Exception 1: Fire Sprinkler System with 10 or less heads with the approval of the Fire Marshal

Exception 2: 1 & 2 Family dwellings per IRC

(2) Structures in Annexed areas:

Any—structure with a gross area of 6,000 square feet or more annexed to the City shall install a fire detection system within one year from the date of annexation.

Exception: Single family and multi-family residential occupancies.

- (3) Where required elsewhere by the Redmond Fire Code or the IBC
- [(1) GENERAL REQUIREMENTS. AN APPROVED SUPERVISED FIRE DETECTION SYSTEM SHALL HAVE DETECTORS SENSITIVE TO ANY OF THE PRODUCTS OF COMBUSTION OR FIXED TEMPERATURE AND RATE OF RISE DETECTORS; A FIRE ALARM PANEL; AUDIBLE AND VISUAL ALARM NOTIFICATION DEVICES; CONTRACTUAL ARRANGEMENTS FOR CONTINUOUS CENTRAL STATION SERVICE MONITORING, MAINTENANCE

AND REPAIR; AND EXTERIOR AUDIBLE AND VISUAL SIGNALING AS REQUIRED BY REDMOND FIRE DEPARTMENT STANDARDS FOR THE PARTICULAR OCCUPANCY. ALARM REQUIREMENTS FOR AN APPROVED SUPERVISED FIRE SPRINKLER SYSTEM SHALL INCLUDE WATER FLOW SWITCHES OR PRESSURE SWITCHES AS APPLICABLE; APPLICABLE SUPERVISORY SWITCHES; TAMPER SWITCHES; A FIRE ALARM PANEL; AUDIBLE AND VISUAL ALARM NOTIFICATION DEVICES; CONTRACTUAL ARRANGEMENTS FOR CONTINUOUS CENTRAL STATION SERVICE MONITORING, MAINTENANCE AND REPAIR; AND EXTERIOR AUDIBLE AND VISUAL SIGNALING AS REQUIRED BY REDMOND FIRE DEPARTMENT STANDARDS FOR THE PARTICULAR OCCUPANCY.

- (2) MAINTENANCE. ALL APPROVED SYSTEMS SHALL BE
 MAINTAINED AND SHALL BE UNDER SUPERVISION OF A RESPONSIBLE
 AND QUALIFIED PERSON OR ORGANIZATION HAVING A SPECIALTY LOW
 VOLTAGE LICENSE ISSUED BY THE STATE OF WASHINGTON, HAVING A
 CITY OF REDMOND BUSINESS LICENSE, AND SATISFYING THE
 REQUIREMENTS OF THE REDMOND FIRE DEPARTMENT STANDARDS.
 INSPECTIONS, TESTS, REPAIRS, NOTIFICATIONS OF TROUBLE AND
 ALARM, RECORDS OF ALL NOTIFICATIONS AND WORK DONE SHALL BE
 AS REQUIRED IN THE REDMOND FIRE DEPARTMENT STANDARDS.
- (3) WHERE REQUIRED. AN APPROVED, SUPERVISED AND MAINTAINED FIRE DETECTION SYSTEM SHALL BE REQUIRED IN THE FOLLOWING STRUCTURES. FOR THE PURPOSES OF THIS SECTION, AN AREA SEPARATION WALL OR FIRE WALL, OR OCCUPANCY SEPARATION OR FIRE BARRIER WALL, OR A DISTANCE OF 10 FEET OR LESS SHALL NOT CONSTITUTE A SEPARATION BETWEEN TWO STRUCTURES ON THE SAME PROPERTY.
- (A) THROUGHOUT EVERY STRUCTURE USED FOR
 RESIDENTIAL OCCUPANCY CONTAINING FIVE OR MORE DWELLING
 UNITS, AND NOT HAVING AN APPROVED SPRINKLER SYSTEM.
- (B) THROUGHOUT EVERY STRUCTURE USED FOR ANY
 PURPOSE WHERE THE TOTAL AREA IS 6,000 SQUARE FEET OR MORE
 AND THERE IS NOT AN APPROVED SPRINKLER SYSTEM. COMPUTATION

OF SQUARE FOOTAGE SHALL BE ACCORDING TO REDMOND FIRE DEPARTMENT STANDARDS.

(C) THROUGHOUT ANY STRUCTURE WHERE THE TOTAL AREA IS 3,000 SQUARE FEET OR MORE AND THERE IS NOT AN APPROVED SPRINKLER SYSTEM EXCEPT R 3 SINGLE FAMILY RESIDENCES; AND PROVIDED, THAT THIS SECTION SHALL HAVE NO APPLICATION TO ANY STRUCTURE FOR WHICH A BUILDING PERMIT APPLICATION WAS ON FILE WITH THE CITY AS OF JULY 1, 1986. COMPUTATION OF SQUARE FOOTAGE SHALL BE ACCORDING TO REDMOND FIRE DEPARTMENT STANDARDS.

(D) WHERE REQUIRED ELSEWHERE BY THE REDMOND FIRE CODE, IBC OR THE STATE OF WASHINGTON.

(4) RETROACTIVE APPLICATION OF REGULATIONS. THE REQUIREMENTS SET FORTH IN SUBSECTION (3) OF THIS SECTION ARE INTENDED TO APPLY RETROACTIVELY TO THOSE EXISTING STRUCTURES IDENTIFIED BELOW. THE DATE BY WHICH ALL SUCH STRUCTURES ARE REQUIRED TO BE IN COMPLIANCE IS AS INDICATED BELOW:

USE/STRUCTURE	COMPLIANCE DATE			
ANY OCCUPANCY EXCEPT				
RESIDENTIAL WITH A TOTAL AREA	1/1/88			
OF 6,000 SQUARE FEET OR MORE				

NOTWITHSTANDING THE FOREGOING PROVISIONS, STRUCTURES

IN AREAS ANNEXED TO THE CITY SHALL NOT BE REQUIRED TO

COMPLY WITH THIS CHAPTER UNTIL THE EXPIRATION OF ONE YEAR

FROM THE DATE OF ANNEXATION. EXCEPT AS PROVIDED ABOVE,

SUBSECTION (3) OF THIS SECTION SHALL APPLY PROSPECTIVELY

ONLY, COMMENCING UPON THE EFFECTIVE DATE OF THE ORDINANCE

CODIFIED IN THIS CHAPTER.

(5) APPROVAL REQUIREMENTS.

(A) PRIOR TO THE INSTALLATION OF A FIRE ALARM

SYSTEM, SPECIFICATIONS, CALCULATIONS AND A MINIMUM OF THREE

COPIES OF PLANS PER REDMOND FIRE DEPARTMENT STANDARDS SHALL
BE SUBMITTED TO THE FIRE DEPARTMENT FOR APPROVAL AND
PERMIT. THE PLANS SHALL INDICATE THE LAYOUT OF ALL
EQUIPMENT TO BE USED, AND AN ACCURATE, SCALED AND
DIMENSIONED REPRESENTATION OF FLOOR AND CEILING
CONFIGURATIONS, AND WALL, CEILING, ATTIC AND ROOF SUPPORT
DETAILS WHICH COULD AFFECT LAYOUT. THE MANUFACTURER AND
MODEL NUMBER OF EACH COMPONENT OF THE SYSTEM SHALL BE
INDICATED. AN ACCURATE ACCOUNTING OF ALL WIRES AND DEVICES
USED SHALL BE LISTED. THE AMBIENT SOUND LEVEL USED FOR THE
DESIGN SHALL BE INDICATED.

(B) PRIOR TO OCCUPANCY OF THE BUILDING, THE FIRE

ALARM SYSTEM SHALL BE TESTED AND/OR INSPECTED IN THE

PRESENCE OF, AND SHALL BE APPROVED BY, THE CHIEF.

(6) MODIFICATIONS.

- (A) WHEN A BUILDING REMODEL OR ADDITION CREATES
 SPACES WHICH WOULD OTHERWISE BE REQUIRED TO HAVE DETECTORS,
 THE SYSTEM SHALL BE MODIFIED IN AN APPROVED MANNER SO THAT
 THE BUILDING IN ITS ENTIRETY WILL MEET ALL THE REQUIREMENTS
 FOR AN APPROVED SYSTEM.
- (B) PRIOR TO MODIFICATIONS, PLANS SHALL BE SUBMITTED AS PER SUBSECTION (5)(A) OF THIS SECTION FOR APPROVAL AND PERMIT.
- (C) PRIOR TO OCCUPANCY OF THE REMODELED OR ADDED PORTION, THE MODIFIED ALARM SYSTEM SHALL BE TESTED AND/OR INSPECTED IN THE PRESENCE OF, AND APPROVED BY, THE CHIEF AS OUTLINED IN REDMOND FIRE DEPARTMENT STANDARDS.
- (7) SUPERVISORY AND ALARM REQUIREMENTS FOR SPRINKLER SYSTEMS. ANY STRUCTURE WHICH HAS INSTALLED AN APPROVED SPRINKLER SYSTEM SHALL HAVE THE FLOW AND CONTROL VALVES MONITORED AND SUPERVISED USING APPROVED CENTRAL STATION SERVICE PER REDMOND FIRE DEPARTMENT STANDARDS.

EXCEPTIONS:

(1) APPROVED DOMESTICALLY SUPPLIED LOCAL SYSTEMS WITH 10 HEADS OR LESS PER BUILDING, IF NOT OTHERWISE REQUIRED.

(2) APPROVED ONE AND TWO FAMILY RESIDENTIAL SPRINKLER SYSTEMS, IF NOT OTHERWISE REQUIRED.

(A) THE FIRE ALARM SYSTEM SHALL ALSO SUPERVISE ALL ABOVE GROUND EXTERIOR CONTROL VALVES FOR TAMPER AND SUPERVISE LOW/HIGH AIR PRESSURE ON DRY SPRINKLER SYSTEMS, AS REQUIRED IN THE REDMOND FIRE DEPARTMENT STANDARDS.

(B) ALL MONITORED SYSTEMS SHALL HAVE AN APPROVED ALARM PANEL AND TRANSMITTER. ALL PANELS SHALL HAVE BATTERY BACK-UP. REFER TO REDMOND FIRE DEPARTMENT STANDARDS.

(C) ALL SPRINKLER SYSTEMS SHALL BE PROVIDED
WITH APPROVED AUDIBLE AND VISUAL ALARM DEVICES THROUGHOUT
OCCUPTABLE SPACES.

(8) NONCONFORMING BUILDINGS.

(A) THE USE OF ANY BUILDING NOT CONFORMING TO THE PROVISIONS OF THIS SECTION AND TO WHICH THE PROVISIONS OF THIS SECTION WOULD APPLY SHALL BE TERMINATED ON OR BEFORE JANUARY 1, 1988, UNLESS THE BUILDING HAS BEEN MADE TO COMPLY WITH THE REQUIREMENTS OF THIS SECTION. BUILDINGS IN PORTIONS OF THE CITY ANNEXED SUBSEQUENT TO JANUARY 1, 1986, SHALL NOT BE SUBJECT TO THE PROVISIONS OF THIS SECTION UNTIL THE EXPIRATION OF ONE YEAR FROM THE DATE OF ANNEXATION. SEE SUBSECTION (4) OF THIS SECTION FOR RETROACTIVE APPLICATION REGULATIONS.

EXCEPTION: ALARM SYSTEMS WHICH ARE REQUIRED UNDER SUBSECTION (3)(C) OF THIS SECTION UNTIL SUCH TIME AS THE OCCUPANCY USE CHANGES.

(B) EXCEPT AS PROVIDED IN SUBSECTION (8)(A) OF THIS SECTION, STRUCTURES WHICH ARE NONCONFORMING TO THESE REQUIREMENTS SHALL BE REQUIRED TO MEET CURRENT STANDARDS WHEN ALTERATION OR EXPANSION OF THE STRUCTURE TAKES PLACE AND THE FOLLOWING TAKES PLACE WITHIN ANY THREE YEAR PERIOD: THE CROSS FLOOR AREA OF THE STRUCTURE IS INCREASED BY 100 PERCENT OR MORE; OR THE COSTS STATED ON ALL APPROVED BUILDING PERMIT APPLICATIONS FOR THE STRUCTURE EQUAL OR EXCEED THE ASSESSED VALUE OF THE STRUCTURE AT THE BEGINNING OF THAT THREE-YEAR PERIOD. WHEN SUCH A NONCONFORMING STRUCTURE HAS BEEN DESTROYED, DAMAGED OR HAS INCURRED A LOSS EQUAL TO OR GREATER THAN 50 PERCENT OF ITS ASSESSED OR APPRAISED VALUE, WHICHEVER IS GREATER, IT SHALL THEREAFTER CONFORM TO CURRENT REQUIREMENTS.

(9) SMOKE DETECTION DEVICES. COMPLIANCE WITH STATE LAW IS REQUIRED. COMPLIANCE WITH THE REQUIREMENTS OF THIS SECTION SHALL NOT RELIEVE THE OWNER OR TENANT OF ANY STRUCTURE GOVERNED BY THE LAWS OF THE STATE OF WASHINGTON, RELATING TO INSTALLATION AND MAINTENANCE OF SMOKE DETECTION DEVICES, FROM THE DUTY TO COMPLY WITH SAID STATUTE. (ORD. 2357 § 1 (PART), 2007: ORD. 2220 § 1, 2004).]

15.06.016 Fire Sprinkler systems.

The following regulations constitute general requirements for **fire** sprinkler systems[:].

(1) [GENERAL REQUIREMENTS.] All approved <u>fire</u> sprinkler systems shall meet the requirements of the Redmond Fire Department Standards. [AND THE] Redmond Fire Code <u>and the applicable NFPA Standards</u>. All systems shall have an adequate water supply, system of piping, and sprinkler heads designed to discharge water on a fire at an appropriate time and in an effective manner [AND, WHEN

APPLICABLE, A DOH-APPROVED, MAINTAINED, AND TESTED BACKFLOW PREVENTER INSTALLED IN EITHER AN EXTERIOR VAULT OR INSIDE THE BUILDING AT THE RISER]. All underground sprinkler supply piping shall be included on civil drawings and shall be approved by the water supplier and the Redmond Fire Department.

An area separation wall or fire wall, or occupancy separation or fire barrier wall, or a distance of 10 feet or less shall not constitute a separation between two structures on the same property.

For the purposes of this section, the following definition shall apply:

Gross Area: The gross area means the total area of all floors, measured from the exterior face, outside dimensions or exterior column line of a building, including basements, cellars and balconies, but not including unexcavated areas. Where walls and columns are omitted in the construction of a building, such as an open shed or marquee, the exterior wall of the open side or sides, for the purpose of calculating gross area, will be the edge of the roof, including gutters.

[(2) MAINTENANCE. ALL APPROVED SYSTEMS SHALL BE MAINTAINED PER REDMOND FIRE DEPARTMENT STANDARDS. ADDITIONALLY, THOSE WHO PERFORM REQUIRED MAINTENANCE AND REPAIR SHALL KEEP ACCURATE RECORDS OF ALL NOTIFICATIONS AND WORK DONE AND SHALL MAKE SUCH REPORTS TO THE FIRE DEPARTMENT AS REQUIRED BY THE REDMOND FIRE DEPARTMENT STANDARDS.]

[(3)] Where Required. An approved **fire** sprinkler system shall be required in the following structures.

[FOR THE PURPOSES OF THIS SECTION, AN AREA SEPARATION WALL OR FIRE WALL, OR OCCUPANCY SEPARATION OR FIRE BARRIER WALL, OR A DISTANCE OF 10 FEET OR LESS SHALL NOT CONSTITUTE A SEPARATION BETWEEN TWO STRUCTURES ON THE SAME PROPERTY.]

[(A) ALL HIGH RISE BUILDINGS CONSTRUCTED IN REDMOND SHALL BE PROVIDED WITH AN APPROVED SPRINKLER SYSTEM THROUGHOUT.]

1) Commercial

(a) In any structure where the gross area is 3,000 square feet or more

[(B) IN ANY STRUCTURE WHERE THE TOTAL AREA IS 3,000 SQUARE FEET, EXCEPT DETACHED ONE AND TWO FAMILY DWELLINGS OR TOWNHOMES (IRC), COMPUTATION OF SQUARE FOOTAGE SHALL BE ACCORDING TO THE REDMOND FIRE DEPARTMENT STANDARDS).

{(c)} (b) In any structure where [THE REQUIRED FIRE FLOW AS DETERMINED BY THE CHIEF IN ACCORDANCE WITH REDMOND FIRE DEPARTMENT STANDARDS IS 3,500 GALLONS PER MINUTE OR MORE, OR the calculated fire flow demand exceeds available flow.

[(D) WHEN REQUIRED BY THE CHIEF FOR THE PROTECTION OF EXPOSURES, ETC., EXTERIOR SPRINKLERS MAY BE REQUIRED WHEN COMBUSTIBLE MATERIALS ARE STORED NEXT TO A FULLY SPRINKLERED BUILDING.]

(e) (c) In buildings with an A-2 occupancy where one or
more of the following exists:

[WITH GREATER THAN A 100 OCCUPANT LOAD, OR]

• An occupant load greater than 100

- {IN BUILDINGS WHERE THE} An A-2 fire area exceeds 5,000 square feet, or
- [IN BUILDINGS WHERE THE] An A-2 fire area is located on a floor other than the level of exit discharge.

(d) All nightclubs, defined as follows: NIGHTCLUB. An A-2 Occupancy use under the International Building Code in which the aggregate area of concentrated use of unfixed chairs and standing space that is specifically designated and primarily used for dancing or viewing performers exceeds three hundred fifty square feet, excluding adjacent lobby areas. "Nightclub" does not include theaters with fixed seating, banquet halls, or lodge halls.

 $\frac{\{(f)\}}{(e)}$ In any building with an assembly occupancy where the total occupant load of the building is over 200.

(f) Existing commercial buildings, where one of the following applies:

- Additions resulting in a gross area greater than 5,000 square feet, or
- Sprinklers may be required in buildings that undergo a change of use or occupancy, refer to IFC Section 102.3.

[(G) WHEN ANY NON SPRINKLERED STRUCTURE ADDS SQUARE FOOTAGE SO THAT THE TOTAL AREA EXCEEDS 10,000 SQUARE FEET.]

(2) Residential - One & Two Family dwellings:

 $\frac{\{(h)\}}{(a)}$ An approved automatic fire sprinkler system shall be installed in new one- and two-family dwellings and townhouses as described in the International Residential

Code in accordance with Section 903.3.1 of the International Fire Code, [2006] 2009 Edition.

Exception: This subsection $[\frac{H}]$ (a) does not require the installation of an approved fire sprinkler system in any mobile home or manufactured home. This exception is limited to this subsection $[\frac{H}]$ (a) and nothing herein exempts a mobile home or manufactured home from any other requirement to install an approved automatic fire sprinkler system under any other section or subsection of this code or of any international code adopted by the City.

{(I)} <u>(b)</u> Existing detached one- and two-family dwelling units where additions result in a gross [FLOOR] area greater than 6,000 square feet must be retrofitted with an automatic sprinkler system throughout.

Exception: Additions to detached one- or two-family dwellings of up to 500 square feet are permitted without compliance with this section. This is a one-time exemption and this exemption must be recorded with King County Records and Elections.

[(J) EXISTING BUILDINGS, OTHER THAN DETACHED ONE—AND TWO-FAMILY DWELLING UNITS WHERE ADDITIONS RESULT IN A GROSS FLOOR AREA GREATER THAN 5,000 SQUARE FEET MUST BE RETROFITTED WITH AN AUTOMATIC SPRINKLER SYSTEM THROUGHOUT. SUBJECT TO THE APPROVAL OF THE FIRE CHIEF, A PHASING PLAN OF UP TO FIVE YEARS IS PERMITTED EXCEPT FOR BUILDINGS TO WHICH SUBSECTION 15.06.016(3)(G) APPLIES.]

[(K)]

(3) Where required elsewhere by the Redmond Fire Code or the International Building Code.

FOR THE PURPOSES OF THE SECTION ABOVE THE FOLLOWING

*GROSS FLOOR AREA" SHALL BE DEFINED AS THE FLOOR AREA, WHETHER ABOVE OR BELOW GRADE, WITHIN THE INSIDE PERIMETER OF THE EXTERIOR WALLS OF THE BUILDING UNDER CONSIDERATION, EXCLUSIVE OF VENT SHAFTS AND COURTS, WITHOUT DEDUCTION FOR CORRIDORS, STAIRWAYS, CLOSETS, THE THICKNESS OF THE INTERIOR WALLS, COLUMNS OR OTHER FEATURES. THE FLOOR AREA OF A BUILDING, OR PORTION THEREOF, NOT PROVIDED WITH SURROUNDING EXTERIOR WALLS SHALL BE THE USABLE AREA UNDER THE HORIZONTAL PROJECTION OF THE ROOF OR FLOOR ABOVE. THE GROSS FLOOR AREA SHALL NOT INCLUDE SHAFTS WITH NO OPENINGS OR INTERIOR COURTS. FOR THE PURPOSES OF THIS SECTION, FIRE BARRIERS OF ANY TYPE DO NOT CONSTITUTE SEPARATE BUILDINGS.

(4) APPROVAL REQUIREMENTS.

(A) PRIOR TO THE INSTALLATION OF A SPRINKLER SYSTEM, SPECIFICATIONS, CALCULATIONS AND A MINIMUM OF THREE COPIES OF PLANS PER REDMOND FIRE DEPARTMENT STANDARDS SHALL BE SUBMITTED TO THE FIRE DEPARTMENT FOR APPROVAL. THE PLANS SHALL INDICATE THE LAYOUT OF ALL EQUIPMENT TO BE USED AND AN ACCURATE REPRESENTATION OF FLOOR AND CEILING PLANS, WITH WALL, CEILING, ATTIC AND ROOF SUPPORT CONFIGURATIONS. THE MANUFACTURER AND MODEL NUMBER OF EACH COMPONENT OF THE SYSTEM SHALL BE INDICATED. AN ACCURATE ACCOUNTING OF ALL HEADS, VALVES, AND SWITCHES SHALL BE LISTED. THE COMMODITY CLASS(ES) TO BE PROTECTED, THE DESIGN LAYOUT, THE DESIGN CRITERIA, AND THE WATER SUPPLY ASSUMPTIONS SHALL BE INDICATED.

(B) PRIOR TO THE OCCUPANCY OF THE BUILDING, THE SPRINKLER SYSTEM SHALL BE TESTED AND/OR INSPECTED IN THE PRESENCE OF, AND SHALL BE APPROVED BY, THE FIRE CODE

OFFICIAL. THIS APPLIES TO BOTH THE FLOW AND SUPERVISION PORTIONS OF THE SYSTEMS WHERE APPLICABLE.

(5) MODIFICATIONS.

- (A) WHEN THE REMODEL OF, OR ADDITION TO, A BUILDING TO WHICH THIS CODE APPLIES CREATES SPACES WHICH WOULD OTHERWISE BE PROTECTED BY SPRINKLER HEADS, THE SYSTEM SHALL BE MODIFIED IN AN APPROVED MANNER SO THAT THE BUILDING IN ITS ENTIRETY WILL MEET ALL THE REQUIREMENTS FOR AN APPROVED SYSTEM.
- (B) PRIOR TO MODIFICATIONS, PLANS SHALL BE SUBMITTED

 AS PER SUBSECTION (4)(A) OF THIS SECTION FOR APPROVAL.
- (C) PRIOR TO OCCUPANCY OF THE REMODELED OR ADDED PORTION, THE MODIFIED SPRINKLER SYSTEM SHALL BE TESTED IN THE PRESENCE OF, AND APPROVED BY, THE CHIEF AS PER SUBSECTION (4)(B) OF THIS SECTION.
- (6) NONCONFORMING BUILDINGS. EXCEPT AS PROVIDED IN THE INTERNATIONAL FIRE CODE, SECTION 102, REQUIREMENTS FOR NONCONFORMING USES AND STRUCTURES SHALL BE AS PROVIDED IN SUBSECTIONS (3)(G), (I) AND (J) OF THIS SECTION, AND COMMUNITY DEVELOPMENT GUIDE 20F.10.50-090(3). (ORD. 2357 § 1 (PART), 2007; ORD. 2324 § 1, 2007; ORD. 2220 § 1, 2004).]

15.06.017 Restricted access buildings.

(1) Where a building or portion of a building is so located or constructed with grades, elevations, vegetation or other natural or manmade obstacles which make exterior or interior access and/or use by fire apparatus, equipment or personnel unduly difficult, unsafe or impossible, additional safeguards may be required by the Fire Code Official. Where such access is being proposed as part of a land subdivision, the Fire Code Official may declare a proposed lot unaccessible and therefore deny that proposed

lot. Safeguards may consist <u>of one or more</u> of the following applicable items or alternates suitable for firefighting, fire protection, EMS, and/or rescue operations as specified by the Fire Code Official:

- (a) Automatic fire sprinkler throughout.
- (b) Smoke detection system.
- (c) Automatic fire alarm systems.
- (d) Communication systems.
- (i) Voice alarm system;
- (ii) Public address system;
- (iii) Fire department communication system.
- (e) Central control station.
- (f) Smoke control systems.
- (g) Emergency elevator systems.
- (h) Emergency exits.
- (i) Emergency areas of refuge including horizontal exits and smoke-proof enclosures.
 - (j) Vertical and horizontal standpipes.
 - (k) Standby power, light and emergency systems.
- (1) Emergency medical services-sized elevator (4' \times 7' clear interior).
- (m) Reduction or deletion of non-sprinklered areas
 - (n) Fire Resistive Construction
- (o) Non Combustible siding (limited, protected or no openings)
 - (p) NFPA 13 compliant sprinkler coverage
 - (q) Brushed concrete access drive, or similar
 - (r) Firefighter access stairs/ramps
- (s) Ladder operations area (Not just aerial but also ground ladders)

(2) All systems shall meet the design requirements set forth in the Redmond Fire Department Standards and Redmond Fire Code.

15.06.024 Non-conforming structures.

Non-conforming structures shall comply with the following:

- (1) A nonconforming structure may not be expanded or altered in any way so as to increase that nonconformity.
- (2) When a nonconforming structure has been destroyed, damaged or has incurred a loss equal to or greater than 60 percent of its assessed value, it shall comply with the requirements of RMC 15.06.015 and RMC 15.06.016.
- (3) A nonconforming structure shall be brought into full compliance with RMC 15.06, the Redmond Fire Code, when alteration or expansion of the structure takes place and the following takes place within any three-year period:
- <u>a) The gross floor area of the structure is</u> increased by 100 percent or more; or
- b) The costs stated on all approved building permit applications for the structure equal or exceed the value of the existing structure at the beginning of that three-year period.
- Section 3. Effective Date. This ordinance shall take effect five (5) days after passage and publication of an approved summary consisting of the title.

AM No. 10-116 ATTACHMENT A

ADOPTE	D by	the	Redmond	City	Council	this ₋		day	of
		, 201	0.						
					CITY	OF RED	MOND		
					JOHN	MARCHI	ONE, M	IAYOR	
ATTEST:									
MICHELLE M.	MCGE	HEE,	CMC, CITY	CLERK	-	(SEAL)		
APPROVED AS			TORNEY:						
				_,					
JAMES HANEY	, CIT	Y ATT	ORNEY						
FILED WITH	THE C	ITY C	LERK:						
PASSED BY T			UNCIL:						
SIGNED BY T PUBLISHED:	нь МА	YOR:							
EFFECTIVE D	ATE:								
ORDINANCE N	Ο.								

CITY OF REDMOND RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REDMOND, WASHINGTON, AMENDING THE FIRE DEPARTMENT FEE SCHEDULE, ORIGINALLY ADOPTED BY RESOLUTION NO. 1073, AND AMENDED THROUGH RESOLUTION NO. 1281, IN ORDER TO PROVIDE A FEE FOR INSTALLATION AND OPERATION OF AN EMERGENCY RESPONDER RADIO SYSTEM AND A FIRE ALARM CENTRAL STATION SERVICE ALTERNATIVE

WHEREAS, Resolution No. 1073 of the City of Redmond adopted a schedule of fees, charges, and penalties related to the activities of the Redmond Fire Department; and

WHEREAS, the schedule adopted by Resolution No. 1073 has been previously amended through Resolution No. 1281 in order to revise certain fee amounts and to establish other fees; and

WHEREAS, the Fire Department has provided an approved fire alarm Central Station Service alternative, which requires an International Fire Code Operational permit; and

WHEREAS, the 2009 International Fire Code requires the installation and maintenance of an emergency responder radio system in buildings without adequate emergency responder radio coverage.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF REDMOND, WASHINGTON, HEREBY RESOLVES AS FOLLOWS:

Section 1. Fee schedule amended. The Fire Department fee schedule adopted by Resolution No. 1073, as previously amended, is hereby further amended as follows:

A. <u>Fire Alarm Systems</u> - The fee for fire alarm systems using an approved Central Station Service alternative shall be added to the fee schedule Table H as follows:

Fire Code Permit Types: Fire Alarm Systems
Permit Threshold: Per fire alarm system

Fee: \$100 A, I, R, or S: Annual

Comments: Redmond Fire Department

Standards 9.00

B. <u>Emergency Responder Radio Coverage System</u> - The fee for operating an Emergency Responder Radio Coverage System shall be added to the fee schedule Table H as follows:

Fire Code Permit Types: Emergency Responder Radio

Coverage System

Permit Threshold: Each system

Fee: \$100 A, I, R, or S: Annual

Comments: Redmond Fire Code 510

C. Emergency Responder Radio Coverage System - The fee for installing an Emergency Responder Radio Coverage System shall be added to the fee schedule Table I as follows:

Type of Installation: Emergency Responder Radio

Coverage System

Quantity or Level

Description: Each Fee: \$626.00*

AM No. 10-116 ATTCHMENT B

Section 2. Annual adjustment.	The fees set forth in
Section 1 are subject to the annual adj	ustment and review process
and limitation provided in Sections 3,	4, and 5 of Resolution No.
1073.	
Section 3. Effective date. The fee	es established by Section 1
shall become effective upon passage of	this resolution and shall
apply to all permits applied for after s	uch date.
ADOPTED by the Redmond City Council	this day of
, 2010.	
	APPROVED:
	MAYOR, JOHN MARCHIONE
ATTEST/AUTHENTICATED:	
CITY CLERK, MICHELLE M. MCGEHEE, CMC	(SEAL)

FILED WITH THE CITY CLERK: PASSED BY THE CITY COUNCIL: RESOLUTION NO: