AN ORDINANCE of the City Council of the City of Kent, Washington, amending Chapter 13.01 of the Kent City Code to adopt the 2009 edition of the International Fire Code and to make other amendments applicable to Kent.

RECITALS

A. In response to legislative amendments adopted by the State of Washington, the Kent City Council enacted Ordinance No. 3840 on May 15, 2007, which adopted the 2006 edition of the International Fire Code. The state recently adopted the 2009 edition of this code, which takes effect and applies to all cities in the state on July 1, 2010. Therefore, it is necessary to amend the Kent City Code to formally adopt the same.

B. In addition to adopting the 2009 code edition, this ordinance also includes other amendments to reference the Kent Design and Construction Standards, to reference national standards, to include the content of appendices C and D within the body of Kent's local amendments to the International Fire Code, and to repeal those local amendments the City previously enacted that are now reflected in the 2009 International Fire Code and are thus no longer necessary.
NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF KENT, WASHINGTON, DOES HEREBY ORDAIN AS FOLLOWS:

ORDINANCE

SECTION 1. - Amendment. Chapter 13.01 of the Kent City Code, entitled “Fire Codes,” is amended as follows:

Chapter 13.01
FIRE CODES

Sec. 13.01.010. Fire code – Adopted. In accordance with Chapter 19.27 RCW, the International Fire Code, 20062009 Edition, published by the International Code Council, Inc., together with any additions, deletions, and exceptions currently enacted or as may be amended from time to time by the state of Washington through its Building Code Council pursuant to Chapter 51-54 of the Washington Administrative Code ("WAC"), and as further amended in this chapter, is hereby adopted and incorporated by this reference.

One (1) copy of the International Fire Code and the appendices adopted in KCC 13.01.030(A) are on file with the city’s fire code official.

Sec. 13.01.020. Code conflicts. To the extent allowed by RCW 19.27.040, if a conflict exists between the provisions of the International Fire Code adopted and amended by the Washington State Building Code Council and the provisions of this chapter, the Kent City Code provisions shall govern.

Sec. 13.01.030. Amendments to the International Fire Code – Chapter 1, Scope and Administration. The following local amendments to Chapter 1 of the International Fire Code, entitled “Scope and Administration,” including all amendments enacted by the State of
Washington, are hereby adopted and incorporated into the International Fire Code as follows:

A. Scope and General Requirements – Fire code appendixes adopted. Section 101 of the International Fire Code, entitled "Scope and General Requirements," is amended by adding the following new subsection 101.6:


B. General authority and responsibilities – Retained authority. Section 104 of the International Fire Code, entitled "General Authority and Responsibilities," is amended by adding the following new subsection 104.1.1:

Sec. 104.1.1. Retained authority – Additional conditions. The fire code official retains the authority to impose additional conditions where the official determines it necessary to mitigate identified fire protection impacts and problematic fire protection systems. These conditions may include, by way of example and without limitation, increased setbacks, use of fire retardant materials, installation and/or modification of standpipes, automatic fire sprinkler and fire alarm systems.

C. General authority and responsibilities – Lot lines and setback lines. Section 104 of the International Fire Code, entitled "General Authority and Responsibilities," is amended by adding the following new subsection 104.12:

Sec. 104.12. Lot lines and setback lines. Notwithstanding the authority of the fire code official to administer and enforce the fire code, the fire code official shall have no duty to verify or establish lot lines or setback lines. No such duty is created by this code and none shall be implied.

D. Permits – Fees. Section 105 of the International Fire Code, entitled "Permits," is amended by adding the following new subsection 105.1.4:

International Fire Code—2009 Update
Sec. 105.1.4. Fees. The fire code official shall prepare a resolution establishing a schedule of fees for council consideration, which fees shall include the cost involved in the processing, issuance, and renewal of permits and certificates. Any fee schedule adopted by resolution shall govern the fee amount to be assessed for any permit or certificate and the fire code official shall collect those fees as a condition to issuance or renewal of any permit or certificate. Failure to pay for either an original permit or the required renewal within 30 days of the date notice is given, shall result in the City's termination of the permit or certificate application.

ED. Permits – Term. Section 105 of the International Fire Code, entitled “Permits,” is amended by adding the following new subsection 105.1.54:

Sec. 105.1.54. Term. Operational permits and certificates issued in accordance with this code shall be valid for a 12 month period and are renewable at the end of that 12 month term.

FE. Permits – Expiration of project permit application. Section 105 of the International Fire Code, entitled “Permits,” is amended by substituting subsection 105.2.3 with the following:

Sec. 105.2.3. Expiration of project permit application. Project permit applications that are subject to Ch. 12.01 KCC or that require SEPA review are subject to those deadlines. All other project permit applications shall expire by limitation if no permit is issued within 180 days after the determination that a fully complete project permit application has been submitted, unless, in the fire code official determines, in his or her sole discretion, that the application has been pursued in good faith. The fire code official may extend the time for action on the permit application for one or more periods, each period not exceeding 90 days, upon written request by the applicant if the applicant can demonstrate, to the satisfaction of the fire code official, showing that circumstances beyond the applicant's control have prevented action from being taken. If an application has expired, plans and other data previously submitted for review may thereafter be returned to the applicant or
destroyed by the fire code official. In order to renew action on an expired application, the applicant shall resubmit plans and pay a new review fee.

F. Permits - Electronic Image. Section 105 of the International Fire Code, entitled “Permits,” is amended by adding the following new subsection 105.4.7:

Sec. 105.4.7. Electronic Image. Prior to final inspection, the applicant shall provide to the fire code official an electronic image of issued construction documents and corrected documents in accordance with 105.4.6.

G. Permits - Commercial kitchens. Section 105 of the International Fire Code, entitled “Permits,” is amended by adding the following new subsection 105.6.47:

Sec. 105.6.47. Commercial Kitchen. An operational permit is required for all commercial kitchens with type I hood systems.

H. Permits - Emergency and standby power systems. Section 105 of the International Fire Code, entitled “Permits,” is amended by adding the following new subsection 105.6.48:

Sec. 105.6.48. Emergency and standby power systems. An operational permit is required for emergency or standby power systems identified in NFPA 110.

I. Permits - Emergency and standby power systems. Section 105 of the International Fire Code, entitled “Permits,” is amended by adding the following new subsection 105.7.15:

Sec. 105.7.15. Emergency and standby power systems. A construction permit is required for the installation of an emergency or standby power system identified in NFPA 110.

International Fire Code—2009 Update
Board of appeals. Section 108 of the International Fire Code, entitled "Board of appeals," is amended by substituting Section 108 with the following:

Sec. 108. Board of appeals. The City of Kent hearings examiner is designated as the board of appeals in order to hear and decide appeals of orders, decisions, or determinations made by the fire code official relative to the suitability of alternate materials, designs, and methods of construction and appeals of the reasonable application and interpretation of the building and fire codes. Appeals shall be made as set forth in section 13.01.120-13.01.130 of the Kent City Code.

Violation penalties. Section 109 of the International Fire Code, entitled "Violations," is amended by substituting subsection 109.3 with the following:

Sec. 109.3. Violation penalties. Any person who violates a provision of this code, or fails to comply with any of its requirements, or who erects, constructs, alters, or repairs a building or structure in violation of (a) the approved construction documents, (b) a directive of the fire code official, or (c) a permit or certificate issued under the provisions of this code, shall be subject to penalties as set forth in Ch. 13.02 of the Kent City Code or as otherwise provided by law.

Fees. Section 113 of the International Fire Code, entitled "Fees," is amended by substituting subsection 113.1 with the following:

Sec. 113.1. Fees. The fire code official shall collect fees as a condition to issuance or renewal of any permit or certificate.

Fees - Schedule of permit fees. Section 113 of the International Fire Code, entitled "Fees," is amended by substituting subsection 113.2 with the following:

Sec. 113.2. Schedule of Permit Fees. The fire code official shall prepare a resolution establishing a schedule of fees for council consideration, which fees
shall include the cost involved in the processing, issuance, and renewal of permits and certificates. Any fee schedule adopted by resolution shall govern the fee amount to be assessed for any permit or certificate.

N. **Fees - Termination.** Section 113 of the International Fire Code, entitled "Fees," is amended by adding the following new subsection 113.6:

**Sec. 113.6. Termination.** Failure to pay for either an original permit or the required renewal within 30 days of the date notice is given, shall result in the City's termination of the permit or certificate application.

**Sec. 13.01.040. Amendments to the International Fire Code**
—Chapter 2, Definitions. The following local amendments to Chapter 2 of the International Fire Code, entitled “Definitions,” are hereby adopted and incorporated into the International Fire Code:

A. **General definitions.** Section 202 of the International Fire Code is amended to add the following four general definitions:

- APWA is the American Public Works Association.
- AWWA is the American Water Works Association.
- PRIVATE HYDRANT is a fire hydrant situated and maintained to provide water for firefighting purposes with restrictions as to use.
- PUBLIC HYDRANT is a fire hydrant situated and maintained to provide water for firefighting purposes without restrictions as to use for that purpose and is accessible for immediate use at all times.

**Sec. 13.01.05040. Amendments to the International Fire Code - Chapter 3, General Precautions Against Fire Requirements.** The following local amendment to Chapter 3 of the International Fire Code, entitled “General Precautions Against Fire Requirements,” including all amendments enacted by the State of Washington here adopted and incorporated into the International Fire Code as follows:
A. **Vacant premises — Fire protection systems.** Section 311 of the International Fire Code, entitled “Vacant Premises,” is amended by substituting subsection 311.2.2 with the following:

**Sec. 311.2.2. Fire protection.** Fire alarm, sprinkler, and standpipe systems shall be maintained in an operable condition at all times.

**Exception:** If, in the opinion of the fire code official, the premises (a) has been cleared of all combustible materials and debris, (b) is of the type of construction with sufficient fire separation distance so as to not create a fire hazard, (c) has been secured to prohibit entry by unauthorized persons, and (d) has buildings that will not be heated, potentially exposing fire protection systems to freezing temperatures, then the fire code official may allow fire alarm and sprinkler systems to be placed out of service and may allow standpipes to be maintained as dry systems (without an automatic water-supply).

A. **Miscellaneous Combustible Materials Storage — Idle Pallets.** Section 315 of the International Fire Code, entitled “Miscellaneous Combustible Materials Storage,” is amended by adding a new subsection 315.3.3 as follows:

**Sec. 315.3.3. Idle Pallets.** Idle pallets shall be stored in accordance with Sections 315.3.3.1 through 315.3.3.4.

**Sec. 315.3.3.1. Buildings protected with automatic sprinklers.** In buildings protected with approved automatic sprinklers, the storage of idle pallets shall be in accordance with NFPA 13 Table A12.12.1.1.

**Sec. 315.3.3.2. Buildings without sprinkler protection.** In buildings that do not have protection through approved automatic sprinklers, the storage of idle pallets shall be in accordance with Table 315.3.3.2.
Table 315.3.3.2 Clearances\(^1\) Between Storage and Buildings

<table>
<thead>
<tr>
<th>Wall Construction Type</th>
<th>Openings</th>
<th>0-50 Pallets</th>
<th>51-200 Pallets</th>
<th>Over 200 Pallets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masonry</td>
<td>None</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Masonry</td>
<td>1 hour protected openings</td>
<td>5</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Masonry</td>
<td>3/4 hour protected openings</td>
<td>10</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Masonry</td>
<td>Non protected openings</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
</tbody>
</table>

\(^1\) All distances measured in feet.

Sec. 315.3.3.3. Separation from other storage. The storage of idle pallets shall be separated from other storage in accordance with Table 315.3.3.3.

Table 315.3.3.3
Clearance to Other Storage

<table>
<thead>
<tr>
<th>Pile Size</th>
<th>Minimum Distance(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-50</td>
<td>20</td>
</tr>
<tr>
<td>51-200</td>
<td>30</td>
</tr>
<tr>
<td>Over 200</td>
<td>50</td>
</tr>
</tbody>
</table>

\(^1\) All distances measured in feet.

Sec. 315.3.3.4. Stacks. Pallet stacks shall be arranged to form stable piles. Piles shall be limited to an area not greater than 400 square feet. A distance half the pile height or not less than 8 ft. shall separate stacks.

Sec. 13.01.060050. Amendments to the International Fire Code – Chapter 5, Fire Service Features. The following local amendments to Chapter 5 of the International Fire Code, entitled “Fire Service Features,” including all amendments enacted by the State of
Washington, are hereby adopted and incorporated into the International Fire Code as follows:

A. Fire Service Features – Definitions. Section 502 of the International Fire Code, entitled “Definitions,” is amended by adding the following definition to subsection 502.1:

**LIFE SAFETY RESCUE ACCESS.** Unobstructed access to all floor levels and each roof level of a building on not less than 20 percent of the building perimeter by utilizing a 35 foot ladder. An alternate method would be at least 1 stairway enclosure with exit doorways from each floor level and with a door opening onto each roof level which conforms to the requirements of the International Building Code.


BC. Fire apparatus access roads – Dimensions. Section 503 of the International Fire Code, entitled “Fire Apparatus Access Roads,” is amended by substituting subsection 503.2.1 with the following:

**Sec. 503.2.1. Dimensions.** The following minimum dimensions shall apply for fire apparatus access roads:

1. **Fire apparatus access roads** shall have an unobstructed width of not less than 20 feet (6096 mm), except for approved security gates in accordance with section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

2. In the immediate vicinity of any building or portion thereof in excess of 28 feet in height, the fire apparatus access road shall have an unobstructed width of not less than 26 feet (7924 mm) and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

32. At least one of the required fire apparatus access roads shall be located at least a minimum of 15 feet and not more than a maximum of 25 feet from
each building on the premises and shall be positioned parallel to one entire side of each building. The measurement for this requirement shall be taken from the exterior wall of the building to the nearest edge of the fire apparatus access road.

D. **Fire apparatus access roads - Surface.** Section 503 of the International Fire Code, entitled “Fire Apparatus Access Roads,” is amended by substituting subsection 503.2.3:

**Sec. 503.2.3. Surface.** Fire apparatus access roads shall be constructed with a surface of asphalt, concrete, or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 30 tons (27,240 kg).

E. **Fire apparatus access roads - Turning radius.** Section 503 of the International Fire Code, entitled “Fire Apparatus Access Roads,” is amended by substituting subsection 503.2.4 with the following:

**Sec. 503.2.4. Turning radius.** All fire apparatus access roads shall have a 30 foot minimum inside turning radius and a 50 foot minimum outside turning radius. The radius must be measured from the travel lane edge, unless otherwise approved.

F. **Fire apparatus access roads - Dead Ends.** Section 503 of the International Fire Code is amended by substituting subsection 503.2.5 with the following:

**Sec. 503.2.5. Dead ends.** Dead-end fire apparatus access roads in excess of 150 feet (45.72 m) in length shall be provided with an approved turnaround designed as illustrated in the Kent Design and Construction Standards, unless otherwise approved.

G. **Fire apparatus access roads - Bridges and elevated surfaces.** Section 503 of the International Fire Code, entitled “Fire Apparatus Access Roads,” is amended by substituting subsection 503.2.6 with the following:

**Sec. 503.2.6. Bridges and elevated surfaces.** Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge or elevated surface
shall be constructed and maintained in accordance with specifications established by the fire code official and the City’s public works director, or their designees; at a minimum, however, the bridge or elevated surface shall be constructed and maintained in accordance with AASHTO Standard Specifications for Highway Bridges. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of a 30 or more ton fire apparatus, the total imposed load to be determined by the fire code official. Vehicle load limits shall be posted at both entrances to bridges when required by the fire code official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for that use, approved barriers or approved signs, or both, shall be installed and maintained, if required by the fire code official.

H. Fire apparatus access roads – Grade. Section 503 of the International Fire Code, entitled “Fire Apparatus Access Roads,” is amended by substituting subsection 503.2.7 with the following:

Sec. 503.2.7. Grade. Fire apparatus access roads shall not exceed 15 percent longitudinal and/or 6 percent laterally in grade. Approach and departure angle for fire apparatus access shall be as determined by the fire code official.

I. Fire apparatus access roads – Access road width with a hydrant. Section 503 of the International Fire Code, entitled “Fire Apparatus Access Roads,” is amended by adding the following new subsection 503.2.9:

Sec. 503.2.9. Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet for 20 feet on both sides of the hydrant operating nut and shall be marked as a fire lane per Section 503.3.

J. Fire apparatus access roads – Marking. Section 503 of the International Fire Code, entitled “Fire Apparatus Access Roads,” is amended by substituting subsection 503.3 with the following:

Sec. 503.3. Marking. Fire apparatus access roads shall be marked whenever necessary to maintain the
unobstructed minimum required width of roadways. Subject to the fire code official's prior written approval, marked fire apparatus access roads, or "fire lanes" as defined in section 502.1 of the code, may be established or relocated at the time of plan review, pre-construction site inspection, and/or post construction site inspection as well as any time during the life of the occupancy. Only those fire apparatus access roads established by the fire code official can utilize red marking paint and the term "fire lane." Fire lanes shall be marked as directed by the fire code official with one or more of the following types of markings in accordance with the Kent Design and Construction Standards:

Sec. 503.3.1. Type 1. Type 1 marking shall be installed to identify fire lanes on commercial and multi-family developments or as directed by the fire code official. The following shall apply to Type 1 marking:

1. Curbs shall be identified by red traffic paint with a 6 inch wide stripe on the top and front, extending the length of the designated fire lane.

   Exception: Fire lanes installed prior to July 1, 2004, with yellow paint;

2. Rolled curbs shall be identified by red traffic paint with a 6 inch wide stripe on uppermost portion of the curb, extending the length of the designated fire lane.

3. Lanes without curbs shall be identified by red traffic paint with a 6 inch wide stripe on the pavement, extending the length of the designated fire lane.

4. The words "NO PARKING—FIRE LANE" shall be in 3 inch stroke white letters 18 inches in height, and placed 6 inches measured perpendicular from the red paint stripe on the pavement. Locations and intervals will be designated by the fire code official; marking will not exceed 50 feet apart. In most cases, both sides of the access road shall be marked. Where
long drives are to be marked, the repetitions shall alternate sides of the drive.

5. The fire code official may require Type 1 marking for hammerhead or "Y" turnarounds or in any fire lane area that the fire code official determines has problem parking. The fire code official may require Type 2 marking in addition when necessary.

Sec. 503.3.2. Type 2. Type 2 marking shall be installed to identify fire lanes in one- and two-family dwelling developments, cul-de-sac turnarounds, as required by Appendix D of the Fire Code, or as directed by the fire code official. The following shall apply to Type 2 marking:

1. Type 2 marking requires metal signs stating "NO PARKING—FIRE LANE" to be installed at intervals or locations designated by the fire code official; signage will not exceed 150 feet apart.

2. The signs shall measure 12 inches in width and 18 inches in height and have red letters on a white background.

3. A metal sign shall be installed on both sides of the post to face traffic to ensure high visibility for motorists. Signs shall be installed as required by current City of Kent Construction Standards.

   Exception: On construction sites, approved portable or temporary sign posts and bases may be used.

4. Where fire lanes are adjacent to buildings or structures and when approved or directed by the fire code official, the signs may be placed on the face of the building or structure.

Sec. 503.3.3. Type 3. Type 3 marking shall be installed to address situations where neither Type 1 or 2 marking is effective as determined by the fire code official. The following shall apply to Type 3 marking:

International Fire Code—2009 Update
1. Where directed by the fire code official, specific areas designated by the fire code official shall be designated and those areas are to be marked with diagonal striping across the width of the fire lane. Diagonal marking shall be used in conjunction with painted curbs and/or edge striping and shall run at an angle of 30 to 60 degrees from one side to the other. These diagonal lines shall be in red traffic paint, parallel with each other, at least 6 inches in width, and 24 inches apart. Lettering shall occur as with Type 1 marking.

Sec. 503.3.4. Yellow paint exception repealed. Effective July 1, 2008, the yellow paint exception in 503.3.1(1) is repealed.

K. Fire apparatus access roads - Commercial and Industrial Developments. Section 503 of the International Fire Code, entitled “Fire Apparatus Access Roads,” is amended by adding the following new subsection 503.7:

**Sec. 503.7. Commercial and Industrial Developments.** Fire apparatus access roads serving commercial and industrial developments shall be in accordance with Sections 503.7.1 through 503.7.3.

**Sec. 503.7.1. Buildings exceeding three stories or 30 feet in height.** Buildings or facilities exceeding 30 feet or three stories in height shall have at least three means of fire apparatus access for each structure.

**Sec. 503.7.2. Buildings exceeding 62,000 square feet in area.** Buildings or facilities having a gross building area of more than 62,000 square feet shall be provided with two separate and approved fire apparatus access roads.

**Exception:** Projects having a gross building area of up to 124,000 square feet that have a single approved fire apparatus access road when all buildings are equipped throughout with approved automatic sprinkler systems.
Sec. 503.7.3. Remoteness. Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.

L. Fire apparatus access roads – Aerial Fire Apparatus Access Roads. Section 503 of the International Fire Code, entitled “Fire Apparatus Access Roads,” is amended by adding the following new subsection 503.8:

Sec. 503.8. Aerial fire apparatus roads. The fire apparatus access roads that accommodate aerial fire apparatus shall be in accordance with Sections 503.8.1 through 503.8.3.

Sec. 503.8.1. Where required. Buildings or portions of buildings or facilities exceeding 30 feet in height above the lowest level of fire department vehicle access shall be provided with approved fire apparatus access roads that are capable of accommodating fire department aerial apparatus. Overhead utility and power lines shall not be located within the aerial fire apparatus access roadway.

Sec. 503.8.2 Width. Fire apparatus access roads shall have a minimum unobstructed width of 26 feet, exclusive of shoulders, in the immediate vicinity of any building or portion of building more than 30 feet in height.

Sec. 503.8.3 Proximity to building. At least one of the required access routes meeting this condition shall be positioned parallel to one entire side of the building. The location of the parallel access route shall be approved.

M. Fire apparatus access roads – Multi-Family Residential Developments. Section 503 of the International Fire Code, entitled “Fire Apparatus Access Roads,” is amended by adding the following new subsection 503.9:
Sec. 503.9. Multi-family residential developments. The fire apparatus access roads serving multi-family residential developments shall be in accordance with Sections 503.9.1 through 503.9.2.

Sec. 503.9.1. Projects having from 100 through 200 dwelling units. Multi-family residential projects having from 100 through 200 dwelling units shall be provided with two separate and approved fire apparatus access roads.

Exception: Projects having up to 200 dwelling units may have a single approved fire apparatus access road when all buildings, including nonresidential occupancies, are equipped throughout with approved automatic sprinkler systems installed in accordance with Section 903.3.1.1 or 903.3.1.2.

Sec. 503.9.2. Projects having more than 200 dwelling units. Multi-family residential projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system.

N. Fire apparatus access roads – One- and Two-Family Residential Developments. Section 503 of the International Fire Code, entitled “Fire Apparatus Access Roads,” is amended by adding the following new subsection 503.10:

Sec. 503.10. One- and Two-family residential developments. The fire apparatus access roads serving one and two-family residential developments shall be in accordance with Sections 503.10.1.

Sec. 503.10.1. Projects having more than 30 dwelling units. Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with separate and approved fire apparatus access roads and shall meet the requirements of Section 503.7.3.
Exceptions:

1. Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with approved automatic sprinkler systems installed in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3 of the International Fire Code, access from two directions shall not be required.

2. The number of dwelling units on a single fire apparatus access road shall not be increased unless fire apparatus access roads will, within a reasonable time, connect with future development, as determined by the fire code official.

O. Fire Apparatus Access Roads – Underground Structures. Section 503 of the International Fire Code, entitled, “Fire Apparatus Access Roads,” is amended by adding the following new subsection 503.11:

Sec. 503.11. Underground structures. Installation of underground structures under or within 10 feet of fire apparatus access roads shall be designed using approved load criteria that shall accommodate the loading of fire department aerial apparatus unless otherwise approved.

PE. Access to building openings and roofs – Required access. Section 504 of the International Fire Code, entitled “Access to Building Openings and Roofs,” is amended by substituting subsection 504.1 with the following:

Sec. 504.1. Required access. The following points of access must be provided:

1. Exterior doors and openings required by this code or the International Building Code shall be maintained readily accessible for emergency access by the fire department.
2. Each tenant space provided with a secondary exit to the exterior or exit corridor shall be provided with tenant identification by business name and/or address. Letters and numbers shall be posted on the corridor/exterior side of the door, be plainly legible, and shall contrast with their background.

—32. An approved access walkway shall be provided to connect fire apparatus access roads to exterior openings.

43. All occupancies shall be required to provide approved life safety rescue access, as defined in section 902 of this code.

**Exception:**

1. Miscellaneous Group U occupancies.

2. Roof access need not be provided to roof levels having slope greater than 4 in 12.

F. **Fire protection water supplies—Installation requirements.** Section 508 of the International Fire Code, entitled "Fire Protection Water Supplies," is amended by substituting subsection 508.5.7 with the following:

Sec. 508.5.7. Installation requirements. All fire hydrants shall be installed in accordance with the specifications established by the fire code official or his or her designee, or at a minimum, in accordance with the latest NFPA, APWA, or AWWA standards. In addition, unless modified by written decision of the fire code official, the following requirements shall apply to all building construction projects:

—1. All fire hydrant piping, valves, and related appurtenances shall be approved by the City’s public works department.

—2. The fire hydrant installation and its attendant water system connection shall conform to the City’s specifications and design and construction standards.
3. An auxiliary gate valve shall be installed at the main line tee to permit the repair and replacement of the hydrant without disruption of water service.

4. All hydrants shall be plumb, plus or minus 3 degrees, to be set to finished grade with the bottom flange 2 inches above the ground or curb grade and have no less than 36 inches in diameter of clear area around the hydrant for the clearance of hydrant wrenches on both outlets and the operating nut.

5. The largest port shall face the most likely direction of approach and location of the fire apparatus while pumping as determined by the fire code official. Distance from the pumper port to the street curb shall be no further than 10 feet.

6. The lead from the service main to the hydrant shall be no less than 6 inches in diameter. Any hydrant leads over 50 feet in length from the water main to hydrant shall be no less than 8 inches in diameter.

7. All hydrants installed in single-family residential areas shall be supplied by not less than 6 inch mains and shall be capable of delivering 1,000,500 gpm fire flow over and above average maximum demands at the farthest point of the installation.

8. All hydrants shall have at least 5 inch minimum valve openings, "O" ring stem seal, two 2-1/2 inch national standard thread hose ports, one 4 1/2 inch steamer port with national standard threads or otherwise determined by the fire code official. In addition, all hydrants shall meet AWWA standards for public hydrants and be of a type approved for use in the City by the City's public works department.

9. All pipe shall meet the City standards as determined by the public works department. Piping located entirely within private property and maintained by the property owner shall meet the requirements and be approved by the fire code official. The fire code official may approve any piping material that has been
tested and approved by a nationally recognized testing laboratory:

—10. The maximum distance between hydrants in single family use district zones shall be 600 feet.

—11. The maximum distance between hydrants in commercial, industrial, and apartment (including duplex) use zones shall be 300 feet.

—12. Lateral spacing of hydrants shall be predicated on hydrants being located at street intersections.

—13. The appropriate water authority and the fire department shall be notified in writing of the anticipated date the hydrant installation and its attendant water connection system will be available for use.

Q. **Fire protection water supplies — Physical protection.** Section 507 of the International Fire Code, entitled “Fire Protection Water Supplies,” is amended by substituting subsection 507.5.6 as follows:

**Sec. 507.5.6. Physical protection.** Where fire hydrants are subject to impact by a motor vehicle, guard posts shall be designed and installed in accordance with the Kent Design and Construction Standards.

R. **Fire protection water supplies — Fire Hydrant.** Section 507 of the International Fire Code, entitled “Fire Protection Water Supplies,” is amended by adding a new subsection 507.5.7 as follows:

**Sec. 507.5.7. Fire hydrant.** Fire hydrants shall be designed and installed in accordance with the Kent Design and Construction Standards.

S. **Fire protection water supplies — Backflow prevention.** Section 507 of the International Fire Code, entitled “Fire Protection Water Supplies,” is amended by adding a new subsection 507.5.8 as follows:
Sec. 507.5.8. Backflow prevention. All private fire systems shall be isolated by an approved method in accordance with the local water purveyor.

T. Fire protection water supplies - Capacity for residential areas. Section 507 of the International Fire Code, entitled "Fire Protection Water Supplies," is amended by adding a new subsection 507.6 as follows:

Sec. 507.6. Capacity for residential areas. All hydrants installed in single family residential areas shall be capable of delivering 1,500 gpm fire-flow over and above average maximum demands at the farthest point of the installation.

U. Fire protection water supplies - Spacing. Section 507 of the International Fire Code, entitled "Fire Protection Water Supplies," is amended by adding a new subsection 507.7 as follows:

Sec. 507.7. Spacing. The spacing of hydrants shall be in accordance with Sections 507.7.1 through 507.7.5.

Sec. 507.7.1. Single family. The maximum fire hydrant spacing serving single family residential areas shall be 600 feet as measured along the fire apparatus access road.

Sec. 507.7.2. Commercial, industrial and multi-family. The maximum fire hydrant spacing serving commercial, industrial, multi-family or other areas shall be 300 feet as measured along the fire apparatus access road.

Sec. 507.7.3. Medians. Where streets are provided with median dividers which cannot be crossed by firefighters pulling hose lines, hydrants shall be provided on each side of the street and be arranged on an alternating basis, providing, on each side of the street, no more than the maximum spacing.

Sec. 507.7.4. Arterials. Where arterial streets are provided with four or more traffic lanes hydrants shall be provided on each side of the
street and be arranged on an alternating basis, providing, on each side of the street, no more than the maximum spacing.

Sec. 507.7.5. Transportation. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at a spacing not to exceed 1,000 feet to provide for transportation hazards.

V. Fire protection water supplies – Required hydrants. Section 507 of the International Fire Code, entitled “Fire Protection Water Supplies,” is amended by adding a new subsection 507.8 as follows:

Sec. 507.8. Required hydrants. The number of hydrants required for a building shall be based on the calculated fire-flow. The first hydrant will be calculated for up to 1,500 gpm. An additional hydrant will be required for every additional 1,000 gpm, or fraction thereof. The required hydrants shall be within 600 feet of the building as measured along the fire apparatus access roads serving the building.

WG. Fire protection water supplies – Notification. Section 508-507 of the International Fire Code, entitled “Fire Protection Water Supplies,” is amended by adding a new subsection 508507.6-9 as follows:

Sec. 508507.69. Notification. The owner of property on which private hydrants are located and the public agencies that own or control public hydrants must provide the fire code official with the following written service notifications:

Sec. 508507.69.1. In-service notification. The fire code official shall be notified when any newly installed hydrant or main is placed into service.

Sec. 508507.69.2. Out-of-service notification. Where any hydrant is out of service or has not yet been placed in service, the hydrant shall be identified as being out of service and
shall be appropriately marked as out of service, by a method approved by the fire code official.

H. **Fire protection water supplies—Dead-end mains prohibited.** Section 508 of the International Fire Code, entitled “Fire Protection Water Supplies,” is amended by adding a new subsection 508.7 as follows:

_Sec. 508.7. Dead-end mains prohibited._ When appropriate, all water mains in any project shall be looped.

XI. **Fire protection water supplies—Building permit requirements.** Section 508-507 of the International Fire Code, entitled “Fire Protection Water Supplies,” is amended by adding a new subsection 508-507.8-10 as follows:

**Sec. 508507.108. Building permit requirements.** No building permit shall be issued until all plans required by this section have been submitted and approved in accordance with the provisions of this section. No construction beyond the foundation shall be allowed until all hydrants and mains required by this section are in place and approved.

J. **Fire department access to equipment—Identification.** Section 510 of the International Fire Code, entitled “Fire Department Access to Equipment,” is amended by substituting subsection 510.1 with the following:

_Sec. 510.1. Identification._ The following identification requirements shall apply to access to equipment:

—1. Fire protection equipment and fire hydrants shall be clearly identified in an approved manner to prevent parking and/or other obstructions.

—2. Entrances to rooms containing controls for air-conditioning systems, sprinkler risers and valves, or other fire detection, suppression, or control elements shall be identified for the use of the fire department.
3. Approved signs are required to identify fire protection equipment and equipment location. Signs shall be constructed of durable materials, permanently installed, and readily visible.

4. All fire department connections shall have a sign approved by the fire code official.

Sec. 13.01.060. Amendments to the International Fire Code — Chapter 6, Building Services and Systems. The following local amendments to Chapter 6 of the International Fire Code, entitled “Building Services and Systems,” including all amendments enacted by the State of Washington are hereby adopted and incorporated into the International Fire Code as follows:

A. Commercial Kitchen Hoods — Where required. Section 609 of the International Fire Code, entitled “Commercial Kitchen Hoods,” is amended by adding the following subsections to section 609.2:

Sec. 609.2.1. Permit Required. Permits shall be required as set forth in Section 105.6.

Sec. 609.2.2. Approved drawing. The stamped and approved cook line drawing shall be displayed adjacent to the suppression system pull station prior to the final inspection. The approved drawing shall be maintained and available for inspection.

Sec. 13.01.070. Amendments to the International Fire Code — Chapter 7, Fire-Resistance-Rated Construction. The following local amendments to Chapter 7 of the International Fire Code, entitled “Fire-Resistance-Rated Construction,” including all amendments enacted by the State of Washington are hereby adopted and incorporated into the International Fire Code as follows:
A. Fire-Resistance-Rated Construction - Testing. Section 703 of the International Fire Code, entitled "Fire-Resistance-Rated Construction," is amended by substituting 703.4 with the following:

Sec. 703.4. Testing. Horizontal, vertical sliding and rolling fire doors shall be inspected and tested annually to confirm proper operation and full closure. A written record shall be maintained on the premises for three years and copies shall be delivered to the fire code official within 14 calendar days of the inspection or test.

Sec. 13.01.070080. Amendments to the International Fire Code - Chapter 9, Fire Protection Systems. The following local amendments to Chapter 9 of the International Fire Code, entitled "Fire Protection Systems," including all amendments enacted by the State of Washington, are hereby adopted and incorporated into the International Fire Code as follows: as if fully set forth therein:

A. Fire protection systems - Scope and application. Section 901 of the International Fire Code, entitled "General," is amended by supplementing substituting subsection 901.1 with the following:

Sec. 901.1. Scope and application. The provisions of this chapter shall apply to all occupancies and buildings, shall specify where fire protection systems are required, and shall apply to the design, installation, inspection, operation, testing, and maintenance of all fire protection systems; however, nothing contained in this chapter shall diminish or reduce the requirements of any duly adopted building codes, including state and local amendments, or other city ordinances, resolutions, or regulations. In the event of any conflict in requirements among these codes, ordinances, resolutions, or regulations, the more stringent provision shall apply.

B. Fire protection systems - Standards. Section 901 of the International Fire Code, entitled "General," is amended by supplementing substituting subsection 901.6.1 and Table 901.6.1 with the following:
Sec. 901.6.1. Standards. Fire protection systems shall be inspected, tested, and maintained in accordance with the National Fire Protection Association ("NFPA") standards listed in Table 901.6.1 below.

Table 901.6.1
FIRE PROTECTION SYSTEM MAINTENANCE STANDARDS

<table>
<thead>
<tr>
<th>SYSTEM</th>
<th>STANDARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon dioxide fire extinguishing systems</td>
<td>NFPA-12</td>
</tr>
<tr>
<td>Clean-agent fire extinguishing systems</td>
<td>NFPA-2001</td>
</tr>
<tr>
<td>Dry-chemical fire extinguishing systems</td>
<td>NFPA-17</td>
</tr>
<tr>
<td>Emergency power systems</td>
<td>NFPA-110 &amp; NFPA-111</td>
</tr>
<tr>
<td>Fire-alarm systems</td>
<td>NFPA-72</td>
</tr>
<tr>
<td>Fire-doors</td>
<td>NFPA-80</td>
</tr>
<tr>
<td>Foam fire extinguishing systems</td>
<td>NFPA-11</td>
</tr>
<tr>
<td>Halogenated fire extinguishing systems</td>
<td>NFPA-12A</td>
</tr>
<tr>
<td>Portable fire extinguishers</td>
<td>NFPA-10</td>
</tr>
<tr>
<td>Smoke-control systems</td>
<td>NFPA-92A</td>
</tr>
<tr>
<td>Underground fire lines and hydrants</td>
<td>NFPA-25</td>
</tr>
<tr>
<td>Water-based fire protection systems</td>
<td>NFPA-25</td>
</tr>
<tr>
<td>Water-mist systems</td>
<td>NFPA-750</td>
</tr>
<tr>
<td>Wet-chemical fire extinguishing systems</td>
<td>NFPA-17A</td>
</tr>
</tbody>
</table>

CB. Fire protection systems - Definitions. Section 902 of the International Fire Code, entitled "Definitions," is amended by adding the following three definitions to subsection 902.1s:
PROBLEMATIC FIRE PROTECTION SYSTEM. A fire protection system that generates repeated preventable malfunctions.

FIRE FLOW. A measure of the sustained flow of available water for firefighting at a specific building or within a specific area at 20 pounds-per-square-inch residual pressure.

FIRE WALL. An approved wall of not less than 4-hour fire resistive construction with no openings, which extends vertically from the foundation to terminate in a parapet not less than 30 inches above the roof, and which extends horizontally to the furthest projection of any portion of the building or to a point 30 inches beyond the intersecting exterior wall, whichever is furthest. As an alternative to the horizontal requirements, such fire wall may be extended a minimum of 30 inches along both sides of the intersecting exterior wall, provided there are no projections beyond the intersecting exterior wall.

LIFE-SAFETY RESCUE ACCESS. Unobstructed access to all floor levels and each roof level of a building on not less than 20 percent of the building perimeter by utilizing a 35 foot ladder. An alternate method would be at least 1 stairway enclosure with exit doorways from each floor level and with a door opening onto each roof level which conforms to the requirements of the International Building Code.

C. Fire Protection Systems - Records. Section 901 of the International Fire Code, entitled "General," is amended by substituting 901.6.2 with the following:

Sec. 901.6.2. Records. Records of all system inspections, tests and maintenance required by the referenced standards shall be maintained on the premises for three years and copies shall be delivered to the fire code official within 14 calendar days of each test, inspection, or maintenance of the system.
D. **Automatic sprinkler systems – General.** Section 903 of the International Fire Code, entitled “Automatic Sprinkler Systems,” is amended by substituting 903.1 with the following:

**Sec. 903.1. General.** Automatic sprinkler systems shall comply with this section and shall be considered a fire alarm system.

E. **Automatic sprinkler systems – Where required.** Section 903 of the International Fire Code, entitled “Automatic Sprinkler Systems,” is amended by supplementing subsection 903.2 with the following:

**Sec. 903.2. Where required.** Approved automatic fire sprinkler systems shall be installed as follows:

1. In all buildings without adequate fire flow required by this code.

   **Exception:** Miscellaneous Group U Occupancies.

2. All new buildings and structures regulated by the International Building Code requiring 2,000 gallons per minute or more fire flow, or with a gross floor area of 10,000 or more square feet (929 m²), or where this code provides a more restrictive floor/fire area requirement, and shall be provided in all locations or where described by this code.

   **Exception:** Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries, and standby engines, provided those spaces or areas are equipped throughout with an automatic fire alarm smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by a wall with a fire-resistance rating of not less than 1 hour fire barriers constructed in accordance with Section 707 of the International Building Code or and a floor/ceiling assembly with a fire-resistance rating of not less than 2 hours horizontal assemblies constructed in accordance with Section 712 of the International Building Code, or both.
3. Where this code requires the installation of an automatic sprinkler system to protect an occupancy within an otherwise non-sprinklered building, then automatic sprinkler protection will be required throughout the entire building.

4. When the required fire apparatus access roadway grade is 12 percent or greater.

F. Automatic sprinkler systems — Group A-3. Section 903 of the International Fire Code, entitled “Automatic Sprinkler Systems,” is amended by supplementing subsection 903.2.1.3 with the following:

Sec. 903.2.1.3. An automatic sprinkler system shall be provided for Group A-3 occupancies where one of the following conditions exists:

---1. The fire area exceeds 12,000 square feet (1115 m²);

---2. The fire area has an occupant load of 300 or more;

---3. The fire area is located on a floor other than the level of exit discharge;

---4. Dance halls where the total gross floor area exceeds 5,000 square feet (465 m²);

FG. Automatic sprinkler systems - Speculative use warehouses. Section 903 of the International Fire Code, entitled “Automatic Sprinkler Systems,” is amended by adding the following new subsection 903.2.89.3:

Sec. 903.2.89.3. Speculative use warehouses. Where the occupant, tenant, or use of the building or storage commodity has not been determined or it is otherwise a speculative use warehouse or building, the automatic sprinkler system shall be designed to protect not less than and installed in accordance with the following:

---1. The design area shall be not less than 5,600 square feet (520 m²);
—2. The density shall be not less than that for Class IV non-encapsulated commodities on wood pallets, with no solid, slatted, or wire mesh shelving, and with aisles that are 8 feet or more in width and up to 20 feet in height.

H. Automatic sprinkler systems — Alarms. Section 903 of the International Fire Code, entitled “Automatic Sprinkler Systems,” is amended by supplementing subsection 903.4.2 with the following:

Sec. 903.4.2. Alarms — Exterior notification. A water-motor gong shall be connected to every automatic sprinkler system. The water-motor gong shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. The water-motor gong shall be provided on the exterior of the building in an approved location at each riser or riser group.

Exception: NFPA 13D and NFPA 13R sprinkler systems may utilize an electrically operated alarm bell on the exterior of the building in an approved location at each riser or riser group, provided that the electrically operated alarm bell cannot be silenced during water flow.

G. Automatic sprinkler systems — Check valve. Section 903 of the International Fire Code, entitled “Automatic Sprinkler Systems,” is amended by adding a new subsection 903.3.8 as follows:

Sec. 903.3.8. Check valve. All automatic sprinkler system risers shall be equipped with a check valve.

Exception: NFPA 13D sprinkler systems.

H. Automatic sprinkler systems — Existing buildings. Section 903 of the International Fire Code, entitled “Automatic Sprinkler Systems,” is amended by substituting subsection 903.6 with the following:

Sec. 903.6. Existing Buildings. An approved automatic sprinkler system shall be installed in existing buildings and structures where required in Section 4603.
I. **Automatic sprinkler systems — Existing buildings.** Section 903 of the International Fire Code, entitled "Automatic Sprinkler Systems," is amended by supplementing subsection 903.6 with the following:

Sec. 903.6.1. **Alterations and additions.** The provisions of this chapter shall apply to additions and substantial alterations to existing buildings regardless of use when such addition or substantial alteration plus the existing gross floor area equals 10,000 or greater square feet. For purposes of this section, a substantial alteration shall be defined as an alteration that costs 50 percent or more of the current assessed value of the structure and impacts more than 50% of the gross floor area.

Sec. 903.6.2. **Pyroxylin plastics.** All structures occupied for the manufacture or storage of articles of cellulose nitrate (pyroxylin) plastic shall be equipped with an approved automatic fire extinguishing system. Vaults located within buildings for the storage of raw pyroxylin shall be protected with an approved automatic sprinkler system capable of discharging 1.66 gallons per minute per square foot (68 L/min/m²) over the area of the vault.

II. **Automatic sprinkler systems — Riser room access.** Section 903 of the International Fire Code, entitled "Automatic Sprinkler Systems," is amended by adding a new subsection 903.7 as follows:

Sec. 903.7. **Riser room access.** All risers shall be located in a dedicated room with an exterior door, and with lighting and heat for the room.

K1. **Fire alarm and detection systems — General.** Section 907 of the International Fire Code, entitled "Fire Alarm and Detection Systems," is amended by supplementing substituting subsection 907.1.3 with the following:

Sec. 907.1.3. **Equipment.** Systems and their components shall be listed and approved for the purpose for which they are installed. All new alarm systems shall be addressable. Each device shall have
its own address and shall announce individual addresses at a UL Central Station.

Sec. 907.1.3. Fire detection system. In addition to any requirement of subsection 907.2 or 907.3, all occupancies exceeding 7,000 square feet gross floor area shall be required to provide an approved automatic fire detection system. Fire walls as noted in the International Building Code shall not be considered to separate a building to enable deletion of the required fire detection system unless the fire walls are as defined in section 902 of this code.

Exceptions:
1. Group U Occupancies.
2. Occupancies protected throughout by an approved monitored automatic sprinkler system can delete heat detectors from the system.
3. One and two-family residences.

K. Fire alarm and detection systems – Where required – new buildings and structures. Section 907 of the International Fire Code, entitled “Fire Alarm and Detection Systems,” is amended by substituting subsection 907.2 with the following:

Sec. 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 7,000 square feet and greater or in accordance with Sections 907.2.1 through 907.2.23 and provide occupant notification in accordance with Section 907.6, unless other requirements are provided by another section of this code.

Exception: Miscellaneous Group U buildings and structures.

A minimum of one manual fire alarm box shall be provided in an approved location to initiate a fire alarm signal for 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 impairment event. Where provided, the manual fire alarm box shall not be located in an area that is accessible to the public.

L. **Fire-alarm-and-detection systems—Panel upgrades.** Section 907 of the International Fire Code, entitled “Fire Alarm and Detection Systems,” is amended by adding a new subsection 907.3.3 as follows:

   **Sec. 907.3.3. Panel upgrade.** If an existing fire alarm control panel is replaced, the replacement must meet the requirements of 907.1.2.

   **Exception:** Structures under 7,000 square feet unless otherwise required by the International Fire Code.

M. **Fire-alarm-and-detection systems—Alarm notification appliances.** Section 907 of the International Fire Code, entitled “Fire Alarm and Detection Systems,” is amended by supplementing subsection 907.10 with the following:

   **Sec. 907.10.1. Visible alarms.** Visible alarm notification appliances shall be provided in accordance with Sections 907.10.1.1 through 907.10.1.3.

   **Exceptions:**

   1. Visible alarm notification appliances are not required in alterations, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.
2. Visible alarm notification appliances shall not be required in exits defined in Section 1002.1.

3. Visible alarm notification appliances shall not be required in non-public-accessible storage areas in S-1 and S-2 occupancies or other approved area.

Sec. 907.10.1.1. Public, common and employee work areas. Public, common and employee work areas shall be provided with visible notification appliances.

Sec. 907.10.1.2. Groups I-1 and R-1. Groups I-1 and R-1 sleeping units in accordance with Table 907.10.1.1 shall be provided with a visible alarm notification appliance, activated by both the in-room smoke alarm and the building fire alarm system.

Table 907.10.1.2 Visible and Audible Alarms

<table>
<thead>
<tr>
<th>Sleeping accommodations</th>
<th>Number of sleeping-units</th>
<th>with-visible-and-audible alarms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6-to-25</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>26-to-50</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>51-to-75</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>76-to-100</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>101-to-150</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>151-to-200</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>201-to-300</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>301-to-400</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>401-to-500</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>501-to-1,000</td>
<td>5% of the total</td>
</tr>
<tr>
<td></td>
<td>1,001-and-over</td>
<td>50-plus-3 each 100 over 1,000</td>
</tr>
</tbody>
</table>

International Fire Code—2009 Update
Sec. 907.10.1.3. Group R-2. In Group R-2 occupancies required by Section 907 to have a fire alarm system, all dwelling units and sleeping units shall be provided.

NL. Fire alarm and detection systems – Duct smoke detectors. Section 907 of the International Fire Code, entitled “Fire Alarm and Detection Systems,” is amended to repeal Exception 1 by substituting the following in subsection 907.124.1.: The amended subsection 907.12 4.1 reads as follows:

Sec. 907.124.1. Duct smoke detectors. Duct smoke detectors shall be connected to the building’s fire alarm control panel unit when a fire alarm system is provided. Activation of a duct smoke detector shall initiate a visible and audible trouble signal at a constantly attended location. Duct smoke detectors shall not be used as a substitute for required open area detection.

Exception: In occupancies not required to be equipped with a fire alarm system, actuation of a duct smoke detector shall activate a visible and an audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.

OM. Fire alarm and detection systems – Locked-Latched alarms. Section 907 of the International Fire Code, entitled “Fire Alarm and Detection Systems,” is amended by adding a new subsection 907.21-10 as follows:

Sec. 907.2110. Locked-Latched alarms. All signals shall be automatically "locked-latched" at the fire alarm control unit panel until their operated devices are returned to normal condition, and the alarm panel control unit is manually reset.
Fire alarm and detection systems - Resetting. Section 907 of the International Fire Code, entitled “Fire Alarm and Detection Systems,” is amended by adding a new subsection 907.22-11 as follows:

**Sec. 907.2211. Resetting.** All fire alarm control units—panels shall be reset only by an approved person.

**Sec. 907.2211.1. Reset code.** The reset code for the fire alarm control unit or keypad shall be 3-7-1-2-3-4. The reset code shall not be changed without approval of the Fire Marshal fire code official.

Smoke Control Systems- Written Record. Section 909 of the International Fire Code, entitled “Smoke Control Systems,” is amended by substituting 909.20.2 with the following:

**Sec. 909.20.2. Written record.** The records shall include the date of the maintenance, identification of the servicing personnel and notification of any unsatisfactory condition and the corrective action taken, including parts replacement. The written record of smoke control system testing and maintenance shall be maintained on the premises for three years and copies shall be delivered to the fire code official within 14 calendar days of each test or maintenance of the system.

Fire Protection Systems - Signs. Section 912 of the International Fire Code, entitled “Fire Department Connections,” is amended by substituting 912.4 with the following:
Sec. 912.4. Signs. Fire department connections shall be clearly identified in an approved manner to prevent obstruction by parking and other obstructions.

All fire department connections shall have an approved sign attached below the Siamese clapper. The sign shall specify the type of water-based fire protection system, the structure, and the building areas served.

Sec. 13.01.080. Amendments to the International Fire Code—Chapter 14, Fire Safety During Construction and Demolition. The following local amendment to Chapter 14 of the International Fire Code, entitled “Fire Safety During Construction and Demolition,” is hereby adopted and incorporated into the International Fire Code as if fully set forth therein.

A. Water supply for fire protection—When required. Section 1412 of the International Fire Code, entitled “Water Supply for Fire Protection,” is amended by supplementing subsection 1412.1 with the following:

Sec. 1412.1. When required. An approved water supply for fire protection shall be made available as soon as combustible material arrives on the site.

Sec. 13.01.090. Amendments to the International Fire Code—Chapter 46, Construction Requirements for Existing Buildings. The following local amendments to Chapter 46 of the International Fire Code, entitled “Construction Requirements for Existing Buildings,” including all amendments enacted by the State of Washington are hereby adopted and incorporated into the International Fire Code as follows:

A. Fire Safety Requirements for Existing Buildings—Additions and Alterations. Section 4603 of the International Fire Code, entitled “Fire Safety Requirements for Existing Buildings,” is amended by adding a new subsection 4603.4.4 as follows:
Sec. 4603.4.4. Alterations and additions. The provisions of this chapter shall apply to additions and substantial alterations to existing buildings regardless of use when such addition plus the existing floor area equals 10,000 or greater square feet or substantial alteration occurs in a structure equaling 10,000 or greater square feet. For purposes of this section, a substantial alteration shall be defined as an alteration that costs 50 percent or more of the current assessed value of the structure and impacts more than 50% of the gross floor area.

B. Fire Safety Requirements for Existing Buildings – Fire Alarm Control Unit Replacement. Section 4603 of the International Fire Code, entitled “Fire Safety Requirements for Existing Buildings,” is amended by adding a new subsection 4603.7.4 as follows:

Sec. 4603.7.4. Fire alarm control unit replacement. If an existing fire alarm control unit is replaced with identical equipment it shall be considered maintenance.

Sec. 13.01.100. Amendments to the International Fire Code – Chapter 47, Reference Standards. The following local amendments to Chapter 47 of the International Fire Code, entitled “Reference Standards,” including all amendments enacted by the State of Washington are hereby adopted and incorporated into the International Fire Code as follows:

A. Reference Standards – NFPA. Section NFPA of the International Fire Code, entitled “Reference Standards,” is amended by modifying the Standard reference number dates of publication as follows:

13-10 Installation of Sprinkler Systems
13D-10 Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes
13R-10 Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height
Sec. 13.01.090. Amendments to the International Fire Code – Appendix B, Fire-Flow Requirements for Buildings. The following local amendments to Appendix B to the International Fire Code, entitled “Fire-Flow Requirements for Buildings,” including all amendments enacted by the State of Washington are hereby adopted and incorporated into the International Fire Code as follows: as if fully set forth therein.

A. Fire-flow requirements for buildings – Accessory Group U buildings.

Section B105 of the International Fire Code, entitled “Fire-Flow Requirements for Buildings,” is amended by adding a new subsection B105.1.1:

Sec. B105.1.1: Accessory Group U buildings.
Section B105.2 will not apply to accessory Group U buildings if all of the following conditions apply:

1. The residence and accessory Group U building aggregate gross floor area does not exceed 3,600 square feet.

2. The residence meets the fire-flow requirements of section B105.1.

3. The residence and accessory Group U building meet the requirements of sections 503.1.1 and 508.1.1.

4. The location of the accessory Group U building is at least 10’ from any building and at least 5’ from the property line.

Sec. 13.01.095. Amendments to the International Fire Code – Appendix C, Fire Hydrant Location and Distribution. The following
local amendments to Appendix C to the International Fire Code, entitled “Fire Hydrant Location and Distribution,” are hereby adopted and incorporated into the International Fire Code as if fully set forth therein.

A. Number and distribution of fire hydrants. Section C105 of the International Fire Code, entitled “Distribution of Fire Hydrants,” is amended by substituting Table C105.1 with the following:

**TABLE C105.1**

**NUMBER AND DISTRIBUTION OF FIRE HYDRANTS**

<table>
<thead>
<tr>
<th>FIRE-FLOW REQUIREMENT (gpm)</th>
<th>MINIMUM NUMBER OF HYDRANTS</th>
<th>AVERAGE SPACING BETWEEN HYDRANTS(a,b,c) (feet)</th>
<th>MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,750 or less</td>
<td>1</td>
<td>600</td>
<td>300</td>
</tr>
<tr>
<td>2,000 — 2,250</td>
<td>2</td>
<td>450</td>
<td>225</td>
</tr>
<tr>
<td>2,500</td>
<td>3</td>
<td>450</td>
<td>225</td>
</tr>
<tr>
<td>3,000</td>
<td>3</td>
<td>400</td>
<td>225</td>
</tr>
<tr>
<td>3,500 — 4,000</td>
<td>4</td>
<td>350</td>
<td>210</td>
</tr>
<tr>
<td>4,500 — 5,000</td>
<td>5</td>
<td>300</td>
<td>180</td>
</tr>
<tr>
<td>5,500</td>
<td>6</td>
<td>300</td>
<td>180</td>
</tr>
<tr>
<td>6,000</td>
<td>6</td>
<td>250</td>
<td>150</td>
</tr>
<tr>
<td>6,500 — 7,000</td>
<td>7</td>
<td>250</td>
<td>150</td>
</tr>
<tr>
<td>7,500 or more</td>
<td>8 or more(e)</td>
<td>200</td>
<td>120</td>
</tr>
</tbody>
</table>

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.

a. Reduce by 100 feet for dead-end streets or roads.
b. Where streets are provided with median dividers which can be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or
more traffic lanes and have a traffic count of more than 30,000 vehicles per day; hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis up to a fire flow requirement of 7,000 gallons per minute and 400 feet for higher fire flow requirements.

c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.

d. Reduce by 50 feet for dead-end streets or roads.

e. One hydrant for each 1,000 gallons per minute or fraction thereof.

Sec. 13.01.100. Amendments to the International Fire Code—Appendix D, Fire Apparatus Access Roads. The following local amendments to Appendix D to the International Fire Code, entitled “Fire Apparatus Access Roads,” are hereby adopted and incorporated into the International Fire Code as if fully set forth therein:

A. Required access—Access and loading. Section D102 of the International Fire Code, entitled “Required Access,” is amended by substituting subsection D102.1 with the following:

Sec. D102.1. Access and loading. Facilities, buildings, or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with asphalt, concrete, or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 30 tons (27,240 kg).

B. Minimum specifications—Access road width with a hydrant. Section D103 of the International Fire Code, entitled “Minimum Specifications,” is amended by substituting subsection D103.1 with the following:

Sec. D103.1. Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm) for 20 feet on both sides of the operating
c. Nut and may be marked as a fire lane per Section 503.3.

E. Minimum specifications — Dead-end fire apparatus access road turnaround — Figure D103.1. Figure D103.1, entitled "Dead-End Fire Apparatus Access Road Turnaround," which is included within Appendix D to the International Fire Code is hereby repealed.

D. Minimum specifications — Grade. Section D103 of the International Fire Code, entitled "Minimum Specifications," is amended by substituting subsection D103.2 with the following:

Sec. D103.2 — Grade. Fire apparatus access roads shall not exceed 15 percent longitudinal and/or 6 percent laterally in grade. Approach and departure angle for fire apparatus access shall be as determined by the fire code official.

E. Minimum specifications — Turning radius. Section D103 of the International Fire Code, entitled "Minimum Specifications," is amended by substituting subsection D103.3 with the following:

Sec. D103.3 — Turning radius. The fire apparatus access road shall have a 30 foot minimum inside turning radius and a 50 foot minimum outside turning radius. The radius must be measured from the travel lane edge, unless otherwise approved.

F. Minimum specifications — Requirements for dead-end fire apparatus access roads. Section D103 of the International Fire Code, entitled "Minimum Specifications," is amended by substituting Table D103.4 with the following:

G. Aerial fire apparatus access roads — Where required. Section D105 of the International Fire Code, entitled "Aerial Fire Apparatus Access Roads," is amended by substituting subsection D105.1 with the following:

| TABLE D103.4 |
| REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS |
| LENGTH | WIDTH | TURNAROUNDS REQUIRED |
| 43 | International Fire Code—2009 Update |
Sec. D105.1. Where required. Buildings or portions of buildings or facilities exceeding 28 feet (8535 mm) in height above the lowest level of fire department access shall be provided with approved fire apparatus access roads that are capable of accommodating fire department aerial apparatus.

Sec. D105.2. Width. Fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm) in the immediate vicinity of any building or portion of building more than 28 feet (8335 mm) in height.

Sec. D105.3. Proximity to building. At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet (4572 mm) and a maximum of 30 feet (9144 mm) from the building, and shall be positioned parallel to one entire side of the building. The parallel access route shall be on an approved side of the building.

Sec. 13.01.110120. Fire codes – Fees. The city council shall, by resolution, establish the fees to be assessed for to implement and enforce the fire codes adopted in this title.

Sec. 13.01.110130. Appeals.
A. Appeals to the hearing examiner.
   1. Jurisdiction. In order to hear and decide appeals of orders, determinations, or decisions made by the fire code official relative to the
suitability of alternate materials, designs, and methods of construction, and to provide for reasonable application and interpretation of the provisions of the International Fire Code, the city of Kent hearings examiner is hereby designated as the board of appeals created pursuant to Section 108 of the International Fire Code adopted in KCC 13.01.030 for all matters concerning the application of the fire codes. The city hearings examiner, however, shall have no authority relative to interpretation of the administrative provisions of these codes, nor shall the city hearings examiner be empowered to waive requirements of these codes.

2. **Filing.** Appeals shall be filed with the hearings examiner by 5:00 p.m. of the fourteenth calendar day following the date of the order, determination, or decision being appealed. When the last day of the appeal period so computed is a Saturday, Sunday, or federal or city holiday, the period shall run until 5:00 p.m. on the next business day. The appeal shall be accompanied by payment of the filing fee. Specific objections to the fire code official's decision and the relief sought shall be stated in the written appeal.

3. **Standing.** Standing to bring an appeal under this chapter is limited to the following persons:
   a. The applicant and the owner of property to which the permit decision is directed.
   b. Another person aggrieved or adversely affected by the order, determination, or decision, or who would be aggrieved or adversely affected by a reversal or modification of the order, determination, or decision. A person is aggrieved or adversely affected within the meaning of this section only when all of the following conditions are present:
      i. The order, determination, or decision has prejudiced or is likely to prejudice that person;
ii. A judgment in favor of that person would substantially eliminate or redress the prejudice to that person caused or likely to be caused by the order, determination, or decision; and

iii. The appellant has exhausted his or her administrative remedies to the extent required by law.

B. Appeals to superior court. Appeals to the hearings examiner shall be made pursuant to Ch. 2.32 KCC. The decision of the hearings examiner shall be final and conclusive unless within twenty-one (21) calendar days of the hearings examiner's decision an appeal is filed with the superior court. When the last day of the appeal period so computed is a Saturday, Sunday, or federal or city holiday, the period shall run until the next business day.

SECTION 2. - Severability. If any one or more section, subsections, or sentences of this ordinance are held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portion of this ordinance and the same shall remain in full force and effect.

SECTION 3. - Corrections by City Clerk or Code Reviser. Upon approval of the City Attorney, the City Clerk and the code reviser are authorized to make necessary corrections to this ordinance, including the correction of clerical errors; references to other local, state or federal laws, codes, rules, or regulations; or ordinance numbering and section/subsection numbering.
SECTION 4. – Effective Date. This ordinance shall take effect and be in force thirty (30) days from and after its passage as provided by law. However, code amendments provided for in this ordinance shall not take effect and be applied until July 1, 2010.

SUZETTE COOKE, MAYOR

ATTEST:

BRENDA JACOBER, CITY CLERK

APPROVED AS TO FORM:

TOM BRUBAKER, CITY ATTORNEY

PASSED: 18 day of May, 2010.
APPROVED: 18 day of May, 2010.
PUBLISHED: 21 day of May, 2010.

I hereby certify that this is a true copy of Ordinance No. 3957 passed by the City Council of the City of Kent, Washington, and approved by the Mayor of the City of Kent as hereon indicated.

BRENDA JACOBER, CITY CLERK

P:\Civil\Ordinance\Fire Code 2009-Adopt\Update doc

47

International Fire Code—2009 Update