

Published by the Fire Marshal's Office

Wildland-Urban Interface Standard

Standard

2018 International Wildland-Urban Interface Code 2018 International Fire Code RMC Title 10 & 20 Richland Fire & Emergency Services Standards

Objective

The objective of this standard is to establish minimum regulations consistent with nationally recognized best practices for the safeguarding of life and for property protection. The Practices in this standard are intended to mitigate the risk to life and structures from intrusion of fire from wildland fire exposures and fire exposures from adjacent structures. It is also to mitigate structure fires from spreading to wildland fuels. The extent of this standard is intended to be tiered commensurate with the relative level of hazard present. The Practices as described below apply to all wildland areas within the City of Richland, regardless of whether they are identified in the GIS mapping described below.

Practice

- Wildland areas determined to pose significant threats life safety and property conservation shall be recorded on GIS maps available on the department web page for inspection by the public. The Fire Marshal or his designee shall re-evaluate and make modification to the wildland-urban interface areas on a 3-year basis.
- Wildland areas are areas which are undeveloped, uncultivated or unfit for cultivation, or considered by the Fire Marshal to be wasteland or desert, or which are any combination of these descriptions and which are deemed by the City of Richland as a hazard for Wildland-Urban-Interface purposes. The following requirements apply to buildings and structures constructed on, in, or near wildland areas.
 - a. All structures within 30 feet of a property line adjoining a wildland area shall have noncombustible siding, soffit, and skirting on the side adjacent to the wildland area when the wild-land area is in excess of five contiguous acres. This requirement shall not apply to

- interior lots of platted parcels of land and development phases whose streets are accessible and whose water system is operational.
- b. Decks and porches 36 inches or less in height shall have skirting if within 30 feet of adjacent wildland areas when the wildland area is in excess of five contiguous acres. Skirting shall be sufficiently constructed of fire-resistant materials so as not to allow the accumulation of combustible material under the deck or porch. The area under the deck or porch shall not be used for storage.
- c. When determined by the Fire Marshal, noncombustible siding or soffit material shall be required on the downhill side(s) of a structure that is within 30 feet of a grade that is 15 percent or greater in steepness. The grade shall be determined by the predominate slope on the downhill side measured from the structure or building and extending a maximum of 300 feet.
- All grasses, weeds, or other vegetation growing or which has grown and died, determined by the Fire Marshal to be a fire or safety hazard or a nuisance to persons, shall not exceed six inches in height measured above the ground except as follows:
 - a. Any parcel of land or contiguous segregated parcels of land which when combined represent a parcel larger than one acre in size, may comply with these requirements by providing a <u>defensible space</u> along that portion of the perimeter of the parcel which abuts developed property or an improved street. The defensible space shall be a minimum of 20 feet in width, within which all weeds and vegetation, except established trees, shall not exceed 12 inches in height measured above the ground;
 - b. Any designated public parkland, natural area, or environmentally sensitive area, or any large undeveloped parcels of land not adjacent to developed areas or which are used for agricultural purposes; any of the above exceptions may be waived and additional maintenance required by the compliance officer if he determines such action is necessary to protect the safety of persons or adjoining property. All maintenance shall be done in a manner so as to minimize disruption of soil stability;
 - c. <u>Definition of Defensible Space:</u> An area either natural or man-made, where material capable of allowing a fire to spread unchecked has been treated, cleared or modified to slow the rate and intensity of an advancing wildfire and to create an area for fire suppression operations to occur.
- Residential Fire Flow Requirement A fire hydrant is required within 300 feet travel distance to residential dwellings. The minimum fire flow for single-family dwellings, having a square footage less than 3,600 square feet shall be 1000 gallons per minute (gpm). Residential dwelling units not meeting the hydrant distance or gpm requirements may request consideration for exemption from the Fire Marshal if a NFPA 13D sprinkler system is installed throughout the residence. Additional considerations shall include topography, access quality and distance, construction type, adjacent fuel load, type and quantities and the number of total dwelling units in the immediate area not meeting city fire hydrant distances or adequate water supply requirements.
- d. **Fire Apparatus Access Roads** include roads providing access to dwelling units, whether on private or public land and shall be:
 - a. A minimum 20' in width, surfaced with asphalt, concrete or other fire code official approved surface capable of supporting 75,000 pounds.
 - b. Extend to within 150 feet of all portions of the exterior walls of the first story of the building.

- c. Provide a turnaround as required by the 2018 IFC, Appendix D if the access road is greater than 150' in length.
- Subdivisions: Secondary Emergency Vehicle Access (SEVA) for residential developments.
 - a. A residential development that serves more than sixteen (16) dwelling units and each lot is less than one acre in size, shall be provided with an approved SEVA.
 - b. A residential development that serves more than fifty (50) dwelling units and each lot is more than one acre in size, shall be provided with an approved SEVA.
 - c. The number of dwelling units within a residential development served by a single fire apparatus access road may be increased without a permanent SEVA by the Fire Code Official, if the fire apparatus road will connect to a future development with separate access points that would omit the need for a SEVA within a 12-month window. Binding legal agreements, easements and future phased plans shall be provided to the Fire Code Official for determination if a temporary (less than 12 month) or permanent (greater than 12 months) SEVA access is required.
 - d. Temporary SEVA roads allowed during continued development stages/phases lasting greater than 12 months and permanent SEVA roads must be paved with 12-inch minimum shoulders to support the imposed loads of 75,000 pounds. Temporary SEVA roads lasting less than 12 months shall have a minimum surface of two (2) inches of compacted gravel and support imposed loads of 75,000 pounds.
 - e. When a SEVA is required by this Standard, it must be separated from the primary access point by enough distance to avoid a situation where both would be blocked or unavailable simply because they are too close together. All dwelling units must be able to be accessed from two completely separate access routes. These separate access routes shall be placed a distance apart equal to not less than one-half the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between the accesses, as determined by the Fire Code Official.
 - f. All SEVA roads shall have a twenty (20) foot unobstructed road width, meet the turning radius requirements listed in the Richland Fire Department Subdivision and Street Requirement Standard and a vertical clearance of thirteen feet six inches (13'6").
 - g. Long SEVA roads may be reduced, if approved by the Fire Code Official, to twelve (12) feet in width, provided 20' total road width and 35' long turnouts are present every 400 feet to accommodate the passage of emergency vehicles in both directions.
 - h. SEVA road slope shall not exceed 12% longitudinal or 2% cross-slope.
 - i. Bollards placed at potential access points where the Fire Code Official determines emergency access for structure fires, urban interface, wildland fires or where EMS access may be needed, shall be standardized as releasing with a ¼ turn release mechanism using a 5-sided AWWA hydrant wrench, 32" standard height with less than 4" collapse height and painted in safety yellow. Bollards shall not be interconnecting by hardware such as cables, chains or other devices. Typical applications would include bollards placed at SEVA accesses, fire lanes, alleyways, bike paths, trailheads, school grounds, playgrounds, commercial buildings, and parking areas. Additional applications may be required by the Fire Code Official.
 - j. The primary fire apparatus access road for the development must meet all the design requirements of the International Fire Code, Section D and Fire Department Standards, which ever is most restrictive as determined by the Fire Code Official.
 - k. When the dwelling units on a single access fire apparatus road exceed 16, but remain less than 50 and a NFPA 13, 13R or 13D sprinkler system is installed throughout all dwelling units, the fire code official may consider omitting the SEVA requirement. Consideration to

omit the SEVA requirement by the Fire Code Official shall not be based on monetary developer considerations or a lack neighboring property access. The determination to omit the SEVA requirement must heavily weigh the need for EMS as well as fire response needs and should be on an extremely limited basis.

Guide

Modifications of this standard may be made with the approval of the Fire Chief or designee.