

# Residential Fire Sprinkler Access and Water Supply Checklist

The Department of Local Services, Permitting Division requires most permit applications for residential construction to be evaluated for Fire Access and Water Supply. This checklist only applies to single-family residences for new, remodel or additions construction work. It does not apply to non-habitable structures such as detached garages or other out buildings.

Fire Access Checklist		
Are all roads between the closest fire station and the parcel at least 20 feet wide? Includes private roads and driveways needed to meet minimum distance access as outlined in Appendix A.	Yes	No
Is overhead clearance on roads and access driveways at least 13' 6"?	Yes	No
Are all road and driveways at grades of 15% or less?	Yes	No
Are the road and driveway capable of supporting 25 tons in all weather conditions?	Yes	No
Are all parts of the exterior walls of the structure (at grade) within 150 feet of access to approved fire equipment? The distance must be measured along a direct walking path around the building, considering obstructions such as retaining walls. These requirements apply to all access roads and driveways between the nearest fire station and the residence. See diagram in Appendix A.	Yes	No
Is a fire access turn-around provided? A dead-end access roadway may not be longer than 150 feet in length unless it has an approved means of turning the fire equipment around. An approved turn around must either be a cul-desac at least 80 feet in diameter with minimum turning radiuses of 20 feet inside and 40 feet outside, or an approved "hammerhead" turn-around. See diagram in Appendix A	Yes	No

If an answer to any of the checklist items above is "No", then fire sprinklers will be required or the minimum access criteria will need to be met. For example, a driveway may needed to be widened to 20 feet to meet the access requirements.

Note that changes to a site plan, such as widening a driveway, may trigger additional reviews for drainage, clearing and grading, and/or critical areas.

## Fire Sprinkler Requirements, continued

Water Supply Exemptions		
In an urban-zoned area, is the residence less than 2,500 square feet in area (including attached garage)?	Yes	No
In rural zones, is the residence on a lot larger than 35,000 sq. ft. in area?	Yes	No
Does the residence have an approved fire sprinkler system?	Yes	No

If the answers to any of the checklist items above is "Yes", you do not need to complete the Water Supply Checklist below.

Water Supply Checklist		
Is there a fire hydrant within 350 feet (vehicular travel distance) of the residence? Vehicular travel distance is measured from the hydrant to the property fire access point <sup>1</sup> .	Yes	No
A <u>Water Availability Certificate</u> is required to confirm minimum fire flow, at the hydrant, availability of 1,000 gallons per minute (gpm) at 20 pounds per square inch (psi) residual pressure for at least 2 hours. Is the flow on the water verification form marked as 1,000 gpm or more?	Yes	No

If the answer to any of the Water Supply Checklist items above is "No", then fire sprinklers will be required.

#### Site Plan

All information provided on this form must be reflected on the submitted site plan. If driveways, easements, or other access outside of the county road is being improved in order to remove the fire sprinkler requirement, then this information must be accounted for in Drainage and Critical Areas plans and reviews.

#### **Additional Resources**

King County Department of Local Services, Permitting Division

Fire Permit: Sprinkler, Residential Information

Residential Site Plan Requirements

Water Availability Certificate

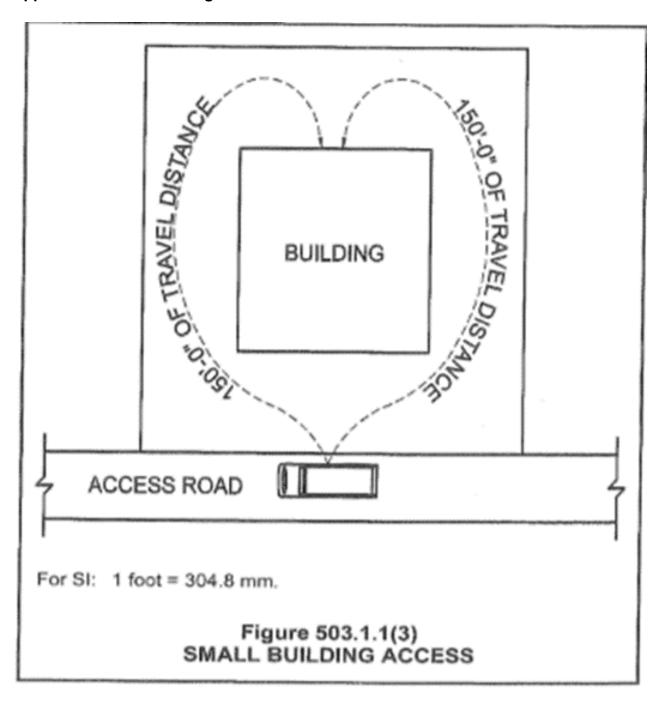
King County iMap (for zoning information) and Property Research Video

**Permit Fees** 

<sup>&</sup>lt;sup>1</sup> Fire access point is the closest location to the structure designated for access by fire equipment.

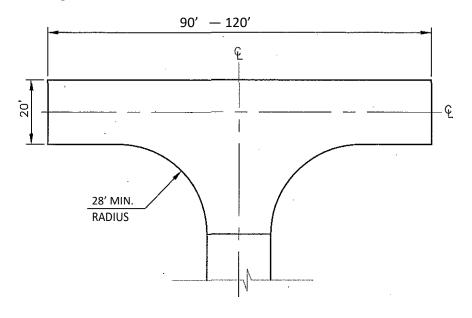
# Fire Sprinkler Requirements, continued

### Appendix A - Access Diagrams

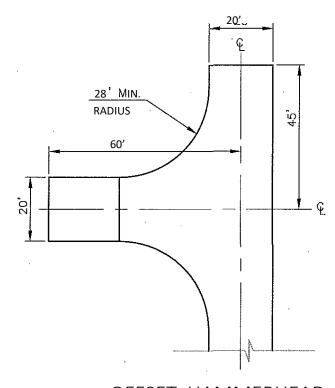


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# Fire Sprinkler Requirements, continued



#### **HAMMERHEAD**



# OFFSET HAMMERHEAD

#### NOTES:

- 1. HAMMERHEAD WIDTH RANGES BETWEEN 90' TO 120', DEPENDENT UPON ROADWAY LENGTH. SIDEWALKS AND UTILITIES MAY BE LOCATED WITHIN PUBLIC EASEMENTS.
- 2. ALTERNATIVE DESIGNS BY APPROVAL OF THE COUNTY ROAD ENGINEER AND FIRE MARSHAL.
- 3. TURNAROUND FACILITIES CANNOT BE LOCATED ON DRIVEWAYS.
- 4. ALL STREET ENDS SHALL BE SIGNED PER THE MUTCD.