

## Mercer Island Residence – Fire Code Alternate Request

3611 West Mercer Way  
Mercer Island, WA 98040

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**Date** July 17, 2019  
**Distribution** City of Mercer Island Fire Marshall Office  
**Project Number** 1907-017

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Per the Fire Plan Review provided by the Mercer Island fire department dated the following deficiencies exist:

3. Fire Flow
  - a. Required = 2,000 GPM
  - b. Existing = 1767 GPM
  
4. Hydrants
  - a. Max allowable distance from all building points = 300' (w/o sprinklers) (600' w/ sprinklers)
  - b. Existing distance from all building points = 575'
  
5. Fire Access Roads
  - a. Distance from all points to access road
    - i. Max allowable distance from all points to access road = 150'
    - ii. Existing distance from all points to access road = 550'
    - iii. Length provided: 400'
  - b. Width provided
    - i. Minimum width required = 20'
    - ii. Increased Width = 10'
  - c. Grade
    - i. Existing grade = >20%

Requested fire code alternate:

3. Fire flow –
  - a. Mitigating factor: the existing fire flow is roughly 12% lower than the required level of 2,000 GPM.

**Proposed fire code alternate:** Provide a NFPA 13D fire sprinkler system.

4. Hydrants –

- a. Mitigating factor(s): the distance from the back corner of the house to the closest hydrant is closer to 550', not the 575' estimated on the Fire Plan Review.

**Proposed fire code alternate** Provide solid-core doors throughout the house.

5. Fire Access Road –

- a. Mitigating factor(s): the distance from the back of the house to the edge of West Mercer Way is 550' which is greater than the 300' max w/o sprinklers.

**Proposed fire code alternate:** Provide an NFPA 72 household monitored smoke alarm system per Chapter 29 NFPA 72.

We believe the combined proposed alternatives are equal to or better than the code requirements and comply with the intent of the code. We request that our proposed fire code alternates be accepted by the City of Mercer Island.

Thank you for your time. I look forward to hearing back from you with any questions you may have and/or a decisions about our proposed fire code alternates.

Sincerely yours,

Lisa Lindburg