

June 2, 2021

City of Mercer Island
Permitting Department/Fire Department
9611 SE 36th Street
Mercer Island, WA 98040

Permit #: 2102-184

Owner: Harvey Chen

Contact Info: Harveychen@gmail.com / (206) 240-8476

Site Address: 5024 W. Mercer Way, Mercer Island, WA

To Mercer Island Fire Marshall,

It has been brought to our attention that several deficiencies have been identified in fire safety for the proposed single-family residence located at 7916 E Mercer Way. Those deficiencies include:

- a. No Turn Around Provided
- b. Grade exceeds 10% (18-20)
- c. Roadway width less than 12' (two deficiencies)

Based on the deficiencies mentioned above and the inability to improve these conditions, we are proposing the following safety measures for the construction of this home:

- a. NFPA 13R Plus fire sprinkler system
- b. Household fire alarm system per NFPA 72 Chapter 29
- c. Monitored low volt smoke & carbon monoxide detectors.
- d. Solid core and or fire rated doors throughout
- e. 1-HR rated gypsum board, all areas

Sincerely,

Milton Orellana

Monsef Design Studio

(425) 306-2758 | milton@aterahomes.com



Mercer Island Fire Marshal's Office 3030 78th Avenue SE Mercer Island, WA 98040 (206) 275-7966

FIRE CODE ALTERNATE REQUEST

This document is intended to provide guidance on the approval process for a code alternate request.

The unique and challenging geography, water system, and design desires often make it difficult to meet the Fire Code requirements for a project on Mercer Island. The fire code allows applicants to propose alternate fire protection or design methods to be used to overcome these deficiencies.

2012 IFC - [A] 104.9 Alternative materials and methods.

The provisions of this code are not intended to prevent the installation of any material or to prohibit any method of construction not specifically prescribed by this code, provided that any such alternative has been approved. The fire code official is authorized to approve an alternative material or method of construction where the fire code official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

Draft Submittal and Review Process:

Before you propose an alternative to mitigate a fire service deficiency, you will be provided with a "Fire Plan Review" sheet with the specific deficiencies for your project. You will need to address each fire deficiency noted. Checked items marked on this review sheet are areas where the required code is not met. You will draft your request letter, stating the scope of work for the project, citing the deficiencies that were identified from the review sheet, proposing your specific items that you propose as alternative(s) to meeting the code, and finally a summary statement which states "We believe the proposed is equal to or better than the code requirement." Your proposal or "code alternate" will be reviewed to determine if your proposal meets this final summary statement.

Below is a list of items that will be considered as alternative fire protections.

An "NFPA 13D - Standard" sprinkler system
An upgrade to an "NFPA 13D – Plus" sprinkler system
An upgrade to an "NFPA 13R – Plus" sprinkler system
Installation of a "Household Fire Alarm System" per NFPA 72 Chapter 29
Provide fire retardant coating treatment in the attic and crawl space
Install 1-hr rated gypsum in all areas.
Provide solid core or fire rated doors
Any other items that you would like to propose

All fire code alternate proposals are required to be submitted for review to our Mercer Island Development Services Group. Either in person or submitted to our FTP site. Please contact the Mercer Island Fire Marshal's office for additional information.