

February 12, 2024

Jeromy Hicks
Fire Marshal
City of Mercer Island
City Hall – 9611 SE 36th Street
Mercer Island, WA

RE: Fire Code Alternate Request

For the proposed development at 6520 82nd Ave SE
Parcel# 666920-0170

Jeromy Hicks

This letter proposes a Fire Code Alternate Request for the above-listed property from the prescriptive requirements listed at the time of the building permit application.

The project site is via the private driveway accessed off the +/- 40'-0" radius Cul-de-Sac end of 82nd Ave SE. The driveway does not meet minimum fire code access requirements. Its deficiencies include:

- 1) The grade shall not exceed 10%. Grades over 10% but under 20% (maximum) may be evaluated for code alternative requests. (IFC 503.2.7)
- 2) Hydrant to access exceeds 250' (324')
- 3) Fire flow from Hydrant H3-H13 does not meet requirements with sprinkler reduction.

Proposed System Upgrades:

- 1) The home will be equipped with & meet all requirements of a "NFPA 13R - Plus" sprinkler system.
- 2) Upgrade to a minimum 1 1/2" minimum water meter and 2" minimum service line.
- 3) Provide a monitored "Household Fire Alarm System" per NFPA 72 Chapter 29.
- 4) Provide solid core interior doors throughout the home.
- 5) Provide 5/8" Type 'X' one-hour fire-rated gypsum wallboard in all areas for walls & ceilings*.
- 6) The Garage fire barrier will be a 1-hr fire rated assembly adjacent to interior living spaces.
- 7) The driveway will need to be raked concrete due to its steepness.

Home Design Features:

- 1) New construction single-family residence to meet or surpass all applicable jurisdictional codes.
- 2) All interior hallway widths are 3'-6" or greater for ease of access.
- 3) The home has no interior stairs.
- 4) The home has no attic space.
- 5) The whole footprint of the conditioned floor area has an unconditioned crawlspace below to allow for HVAC ducting. The crawlspace floor is to be covered with a Class - I vapor retarder and will be continuously mechanically ventilated. Access to the crawlspace is from two exterior access doors
- 6) 100% of the roof is a non-combustible metal standing seam roof.

Site Characteristics:

- 1) The property is surrounded on three sides by residential lots with existing single-family houses
- 2) The west side of the property is bordered by the cul-de-sac at the end of 82nd Ave SE
- 3) The proposed house is to reuse much of the existing footprint and as many of the same foundation walls to minimize excavation and tree removal.

I appreciate your consideration of the above compensating factors. We believe that this proposal is an equal or a better alternative to the prescriptive requirements.

Please contact me with any questions by phone at (206) 728-0480 or by email at joey@mctarch.com.

Sincerely,

Joey Pasquinelli
McClellan | Tellone