October 14, 2021

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

## RE: Fire Code Alternative Request

For proposed development at 4304 E Mercer Way Parcel #: 182405-9113

Jeromy Hicks:

This letter is to request a Fire Code Alternative for the above listed property from the prescriptive requirements determined at the time of the building permit application.

The project site is situated on a shared community access road, Sandy Cove Road, that connects this single family property and several others to E Mercer Way. Sandy Cove Road does not meet minimum fire code access requirements. Its deficiencies include:

- 1) Access roads under 500 feet are required to be 20 feet in width. Access over 500 feet in length are required to be 26 feet in width (IFC 503.2.1, D103.1, MICC 17.07.020).
- 2) Grade shall not exceed 10%. Grades over 10% but under 20% (maximum) may be evaluated for code alternative requests. (IFC 503.2.7).
- 3) Fire access roads, private access roads, and driveways in excess of 150 feet shall have provisions for fire apparatus turn-around as listed/illustrated in Appendix D of the IFC.

Since the existing access road cannot be modified, we propose providing the following fire system upgrade, design features, and site characteristics to compensate for the property's deficiencies.

Proposed System upgrade:

- 1) Home will be equipped with an NFPA 13R sprinkler system.
- 2) Upgrade to a minimum 1 1/2" minimum water meter and 2" minimum service line.
- 3) Provide an NFPA 72 low voltage smoke alarm monitored system
- 4) Provide solid core interior doors throughout the home.

Home Design Features:

- 1) New construction single family residence.
- 2) All interior hallway widths are greater than 3'-6" for ease of access.
- 3) The home has 4'-0" wide interior stairs.
- 4) The home has no crawl space.
- 5) The home has no attic space.
- 6) 100% of the roof is non-combustible metal standing seam roof.

Site Characteristics:

- 1) The property is surrounded by the access road on three sides.
- 2) The proposed house is situated more than 23 feet from the south property line, moving it 20 feet further away from the closest neighbor's house.
- 3) The driveway has been widened as much as possible without necessitating the removal of additional existing trees or exceeding the allowable lot coverage.

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

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

Sincerely,

Karen Kline McClellan Architects