

7Feb22

Jeromy Hicks, Fire Marshal
City of Mercer Island

Re: Fire Code Alternate Request, Building Permit 2112-250, 6610 East Mercer Way

Mr. Hicks:

As discussed, this letter presents our Fire Code Alternate Request for the above referenced project.

The deficiencies you noted are:

1. Roadway width less than 26' required (787' long)
2. Nearest hydrant is located 787' from residence (250' is required)
3. Only one hydrant is available. With sprinkler reduction 13r the Gallons per Minute (gpm) required is 1375. The only hydrant available provided 875gpm.
4. No Fire Department Turn-around (more than 150')
5. Distance from hydrant to rear of house exceeds 600' (1022')
6. Distance from apparatus parking to rear of house exceeds 150' (250')
7. Grade exceeds 10% (15%)

The Code Alternates that we propose:

1. Installing a new hydrant on the property. Please see attached diagram. This includes the installation of a new 6", ductile iron, water line and vault, as discussed with you and Public Works. The maximum distance from the new hydrant to the farthest point of the house is no more than 250'. This isn't actually an alternate, rather, it's bringing the site into compliance with the Fire Code and addresses deficiencies 2, 3 and 5 above.
2. Installing an NFPA-R sprinkler system throughout the building. (We understand that this is already required because of the building size, but it does provide a higher level of protection than what would be required for a typical home.)
3. Installing an NFPA 72 Monitored Fire Alarm System.
4. Installing 5/8" Type X sheetrock throughout the home.
5. Installing Solid Core Doors throughout the home.
6. Providing a non-compliant but usable vehicle turnaround space that is probably adequate for ambulance-sized vehicles and may be adequate for smaller fire trucks. Please refer to the attached diagram where we overlaid a 120' long street segment that shows the top leg of a hammerhead and also shows the loop drive area that may provide sufficient vehicle backing space. Also note that the

adjacent property has a sizable driveway, illustration also attached, that establishes a large paved area at the termination of the road. Considering all of those factors, we think this could be considered as mitigation against our deficiencies.

We believe the proposed is equal to or better than the code requirement. I am available to discuss if you have any questions.

Sincerely,

A. Philip McCullough
President

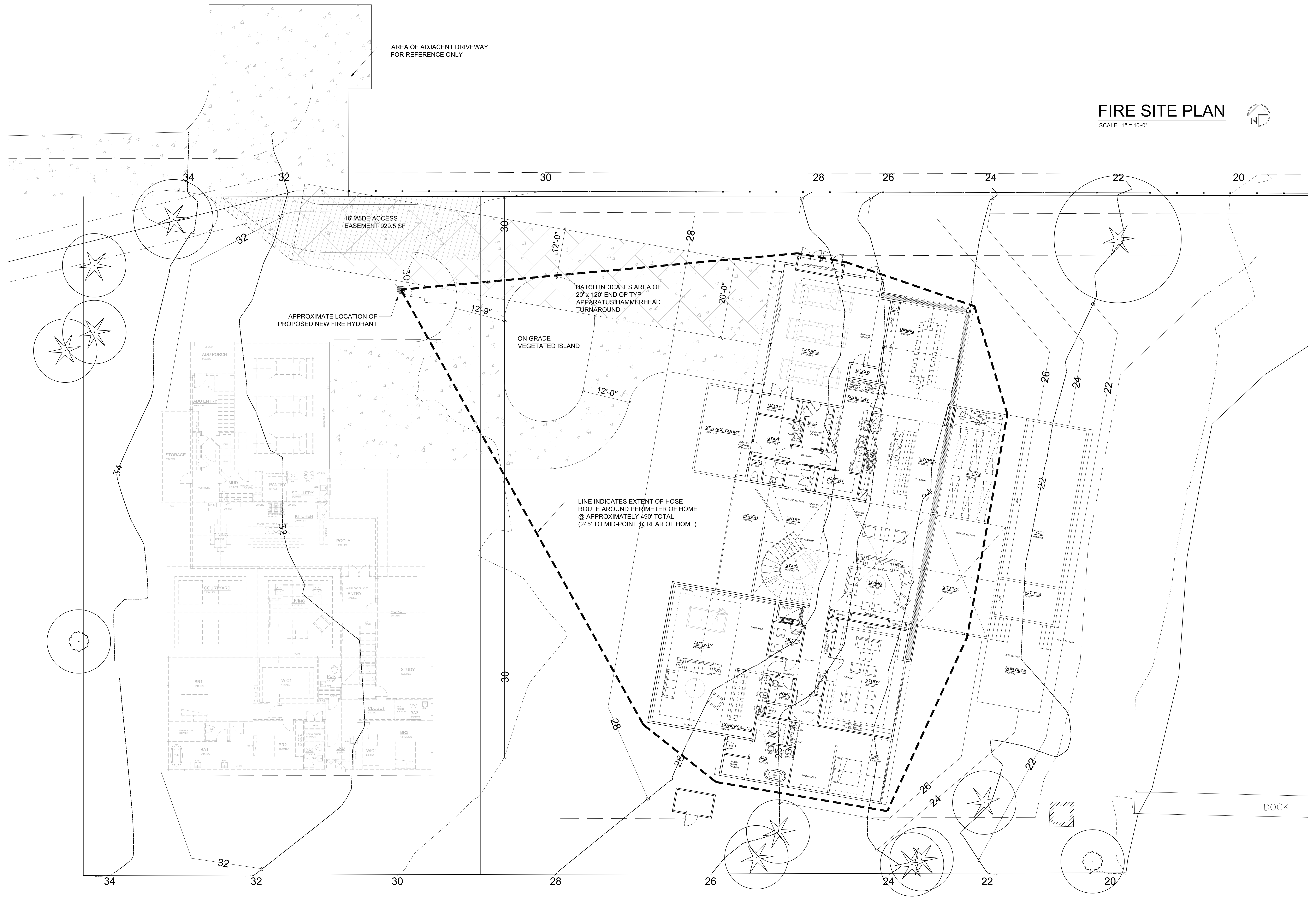
Signature: _____

Printed Name: _____

Date: _____

FIRE SITE PLAN

SCALE: 1" = 10'-0"



AREA OF ADJACENT DRIVEWAY,
FOR REFERENCE ONLY

16' WIDE ACCESS
EASEMENT 929.5 SF

APPROXIMATE LOCATION OF
PROPOSED NEW FIRE HYDRANT

HATCH INDICATES AREA OF
20' x 120' END OF TYP
APPARATUS HAMMERHEAD
TURNAROUND

ON GRADE
VEGETATED ISLAND

LINE INDICATES EXTENT OF HOSE
ROUTE AROUND PERIMETER OF HOME
@ APPROXIMATELY 490' TOTAL
(245' TO MID-POINT @ REAR OF HOME)

DOCK

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SCALE: 1" = 10'-0"



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