



April 3, 2018

Jana Fox
Associate Planner
City of Beaverton
12725 SW Millikan Way
Beaverton, OR 97076

RE: LD2012018-0005 FOX HOLLOW PUD

Dear Jana Fox,

Thank you for the opportunity to review the proposed site plan surrounding the above named development project. Tualatin Valley Fire & Rescue endorses this proposal predicated on the following criteria and conditions of approval:

1. **ADDITIONAL ACCESS ROADS – MULTIPLE-FAMILY RESIDENTIAL:** Projects having more than 100 dwelling units shall be provided with two separate and approved fire apparatus access roads. Exception: Projects having up to 200 dwelling units may have a single approved fire apparatus access road when all buildings, including nonresidential occupancies, are equipped throughout with an approved automatic sprinkler system in accordance with section 903.3.1.1, 903.3.1.2. Projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus roads regardless of whether they are equipped with an approved automatic sprinkler system. (OFC D106) ***Two points of access for the multifamily section is required because the buildings are in excess of 30 feet in height. They must be separated by at least half of the overall diagonal of the multifamily section. The separation distance appears to be too close together. Alternative measures will be required to be discussed prior to approval.***
2. **AERIAL FIRE APPARATUS ROADS:** Buildings with a vertical distance between the grade plane and the highest roof surface that exceeds 30 feet in height shall be provided with a fire apparatus access road constructed for use by aerial apparatus with an unobstructed driving surface width of not less than 26 feet. For the purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of the parapet walls, whichever is greater. Any portion of the building may be used for this measurement, provided that it is accessible to firefighters and is capable of supporting ground ladder placement. (OFC D105.1, D105.2) ***All multifamily buildings in excess of 30 feet in height must meet this requirement.***
3. **AERIAL APPARATUS OPERATIONS:** At least one of the required aerial access routes shall be located within a minimum of 15 feet and a maximum of 30 feet from the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial access road is positioned shall

be approved by the fire code official. Overhead utility and power lines shall not be located over the aerial access road or between the aerial access road and the building. (D105.3, D105.4) **All multifamily buildings in excess of 30 feet in height must meet this requirement.**

4. **PAINTED CURBS:** Where required, fire apparatus access roadway curbs shall be painted red (or as approved) and marked "NO PARKING FIRE LANE" at 25 foot intervals. Lettering shall have a stroke of not less than one inch wide by six inches high. Lettering shall be white on red background (or as approved). (OFC 503.3) **All multifamily fire lanes must be painted. Clearly identify on the plans the locations of painted curbs.**
5. **SURFACE AND LOAD CAPACITIES:** Fire apparatus access roads shall be of an all-weather surface that is easily distinguishable from the surrounding area and is capable of supporting not less than 12,500 pounds point load (wheel load) and 75,000 pounds live load (gross vehicle weight). Documentation from a registered engineer that the final construction is in accordance with approved plans or the requirements of the Fire Code may be requested. (OFC 503.2.3) **All multifamily fire lanes must meet these loading requirements. Provide documentation on the plans that states this requirement.**
6. **TURNING RADIUS:** The inside turning radius and outside turning radius shall be not less than 28 feet and 48 feet respectively, measured from the same center point. (OFC 503.2.4 & D103.3)
7. **FIRE FLOW WATER AVAILABILITY:** Applicants shall provide documentation of a fire hydrant flow test or flow test modeling of water availability from the local water purveyor if the project includes a new structure or increase in the floor area of an existing structure. Tests shall be conducted from a fire hydrant within 400 feet for commercial projects, or 600 feet for residential development. Flow tests will be accepted if they were performed within 5 years as long as no adverse modifications have been made to the supply system. Water availability information may not be required to be submitted for every project. (OFC Appendix B) **Fire flow calculations must be provided by site development review time.**
8. **FIRE HYDRANTS – COMMERCIAL BUILDINGS:** Where a portion of the building is more than 400 feet from a hydrant on a fire apparatus access road, as measured in an approved route around the exterior of the building, on-site fire hydrants and mains shall be provided. (OFC 507.5.1, OFC Table C105.1, OFC C104 and OFC 912 & NFPA 13) **Fire hydrant spacing and locations will be reviewed for compliance at site development review time.**
9. **FIRE DEPARTMENT CONNECTIONS:** A fire hydrant shall be located within 100 feet of a fire department connection (FDC) or as approved. Fire hydrants and FDC's shall be located on the same side of the fire apparatus access roadway or drive aisle. (OFC 912 & NFPA 13) **Multifamily FDC locations will be reviewed for compliance at site development review time.**
10. **KNOX BOX:** A Knox Box for building access is required for this building. Please contact the Fire Marshal's Office for an order form and instructions regarding installation and placement. (OFC 506.1) **Knox boxes will be required at the multifamily buildings.**
11. **DEAD END ROADS:** Dead end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved turnaround. (OFC 503.2.5 & D103.1) **Phasing of the subdivision shall not create dead ends in excess of 150.' Temporary access points and/or turnarounds are acceptable, but would need to be identified on the plans.**

12. EMERGENCY RESPONDER RADIO COVERAGE SYSTEM: Any building in excess of 50,000 square feet will be required to be tested to identify any deficient radio coverage areas. All areas of the building that are deficient must be provided with an ERRC system in accordance with OFC Section 510. Testing is typically done at 80% completion of the building. It is recommended to provide appropriate conduits shaft, wiring etc. during construction to accommodate for the system. Additionally, make sure you budget and appropriate time for the installation of this system. Please contact DFM Jeremy Foster at 503.259.1414 for further information including an alternate means of compliance that is available. If the alternate method is preferred, it must be requested from TVF&R prior to issuance of building permit.

If you have questions or need further clarification, please feel free to contact me at (503) 259-1414.

Sincerely,

Jeremy Foster

Jeremy Foster
Deputy Fire Marshal II

