Landslide Hazard Study

If any part of your site is identified on the City's Potential Landslide Hazard Areas Map, your land division proposal must include a Landslide Hazard Study (LHS). The purpose of the LHS is to demonstrate that the lots, buildings, services and utilities will be located on areas of the site that are suitable for development in a manner that reasonably limits the risk of a landslide affecting the site and adjacent sites. Specific improvements, engineering requirements, or alternative development options that will be required to limit risks must be identified in the LHS.

The LHS must be prepared by a Certified Engineering Geologist (CEG) and Geotechnical Engineer (PE). The LHS must evaluate the entire site, including any existing home sites, adjacent property, and land directly across the street from the site. The LHS must be provided in narrative form with supporting data and exhibits and be stamped by both the CEG and PE.

The level of investigation and analysis is expected to be commensurate with the level of hazard and complexity of site conditions and the proposed development. The LHS must include the following:

1. Review of current landslide inventory and hazard maps, geologic literature, LIDAR, etc for this site.
2. A visual reconnaissance of the site and surrounding area.
3. A description of current topography and observable geologic features and hazards.
4. Engineering recommendations for the layout and design of the land division including:
   - Identification of the portion(s) of the site that are suitable for development in a manner that reasonably limit the risk of landslide potential on the site and other properties in the vicinity.
   - Recommendations for specific improvements, engineering requirements, or alternative development options necessary to reasonably limit risks.
   - Hazardous or No Build areas within the subdivision, if any; and/or building setback distances from slopes.
   - Building locations and foundation designs.
   - Driveway and/or street locations.
   - Utility trench locations.
   - Retaining walls, associated drainage and discharge systems, if any.
   - Grading requirements for building sites, driveways or streets.
   - Impact of tree removal on slope stability.
   - Stormwater and groundwater disposal methods for new lots and evaluation of existing systems to remain, as well as evaluation of runoff and stormwater disposal from adjacent property that may impact the proposed development.
   - Infiltration testing per the Bureau of Environmental Services ***Stormwater Management Manual*** must also be provided, unless both the CEG and PE determine the site is not suitable for onsite infiltration.
   - Subsurface exploration logs.
   - Slope stability calculations.
5. A statement of on-site slope stability after the proposed development is complete.
6. A statement of the estimated effect of the development on stormwater and ground water runoff as it relates to slope stability and landslide hazard, and a proposed method of control.

If any of the above items are not applicable to the proposal, the LHS must describe why.

Questions regarding these submittal requirements may be directed to:

Site Development 503-823-6892.

Additional details about the landslide hazard regulations can be found in Zoning Code Sections 33.632 & 33.730.060.D.