City of West Linn

PRE-APPLICATION CONFERENCE SUMMARY NOTES

February 4, 2010

SUBJECT: Willamette and Tualatin River Protection at 2130 Windham Oaks Court

ATTENDEES: Applicant: Tacia Miller, Steve Mills (GeoDesign) Jeffrey Simpson (Simp.L)
Staff: Peter Spir (Associate Planner) Khoi Le, City Engineer

The following is a summary of the meeting discussion provided to you from staff meeting notes. Additional information may be provided to address any "follow-up" items identified during the meeting. <u>These comments are PRELIMINARY in nature</u>. Please contact the Planning Department with any questions regarding approval criteria, submittal requirements, or any other planning-related items. Please note disclaimer statement below.

Project Details

The applicants, GeoDesign Inc., explained that the hillside below the swimming pool demonstrated significant slope failure last winter and that the site characteristics: steep slope, soil type, limited groundcover and groundwater indicate that continued slope failures will occur. Of particular concern is the fact that the swimming pool and adjacent patios would be vulnerable to damage or collapse if further erosion occurs. The swimming pool was constructed on engineered pilings.

The applicant's engineers at Geo Design Inc. have submitted a letter stating that failure of the slope represents a real and present danger:

As discussed in our pre-conference and site visit with you last week for the Donegan residence located at 2130 SW Windham Oaks, significant movement of the landslide located below the pool area occurred last winter, and continued movement and failure of the slope could detrimentally impact the pool and cause extensive damage or failure. Additionally, in the event of a seismic event, if existing conditions at the site are left unchecked or untreated, this would produce an emergency condition at this area. As we have proposed, the likelihood of future landsliding failures can be reduced by alleviating the buildup of pore water pressure at the face of the slope by installing horizontal drains.

Tacia C. Miller, P.E.
Associate Engineer
GeoDesign, Inc.

Staff agrees. A site visit on February 2, 2010 revealed evidence of slumps and slope failure on the steep slope, just 35 feet downhill from the edge of the pool. There was evidence that the eroded area was continuing to serve as a channel for runoff which can only worsen the problem.

The applicant proposes a solution that involves drilling and inserting multiple horizontal drainage pipes into the hillside. Equipment needed to install the drainage pipes will be helicoptered onto the hillside to avoid having to grade a damaging access driveway to the area.

The drains will be installed to lower groundwater at the face of the slope in the vicinity of the landslides encountered at the site. The two or three tiers of drains will vary in length so that the groundwater zones encountered at the site are intercepted and so that the drains do not encounter the existing pile foundation systems of the pool. Installation of the drains will require excavating a ledge for the drilling equipment. This ledge will be regraded to match original slope once the project is completed. Erosion control measures will be in place throughout the project period.
Re-vegetation of the hillside would be undertaken using native plant materials with an emphasis on plant types that are suited for slope stabilization and erosion control.

Once the water is collected from the drains, the water would be piped to an approved outfall on the south edge of the property. This southern area is not a drainageway per the Storm Water Master Plan and therefore the discharge or outfall point on the edge of that slope does not trigger a Water Resource Area permit per CDC Chapter 32.

The construction, construction staging area and ledge will be on the slope above 100 and 1996 flood boundaries, above the Willamette River Greenway boundary and Riparian Zones. However, all of the activity will be within Metro's High Habitat Conservation Area. CDC 28.030(A)(3) reads as follows:

3. *In addition to the Willamette Greenway and Tualatin River Protection Area boundaries, this chapter also relies on Metro's Habitat Protection Map to delineate where development should or should not occur. Specifically, the intent is to keep out of, or minimize disturbance of, the Habitat Conservation Areas (HCA's).* ***Therefore, if all, or any part, of a lot is in the Willamette Greenway and Tualatin River Protection Area boundaries, and there are HCA's on the lot a Willamette and Tualatin River Protection Area permit shall be required unless the development proposal is exempt per CDC 28.040.***

Staff notes that the exceptions of CDC 28.040 include:

L. *Reasonable emergency procedures necessary for the safety or protection of property.*

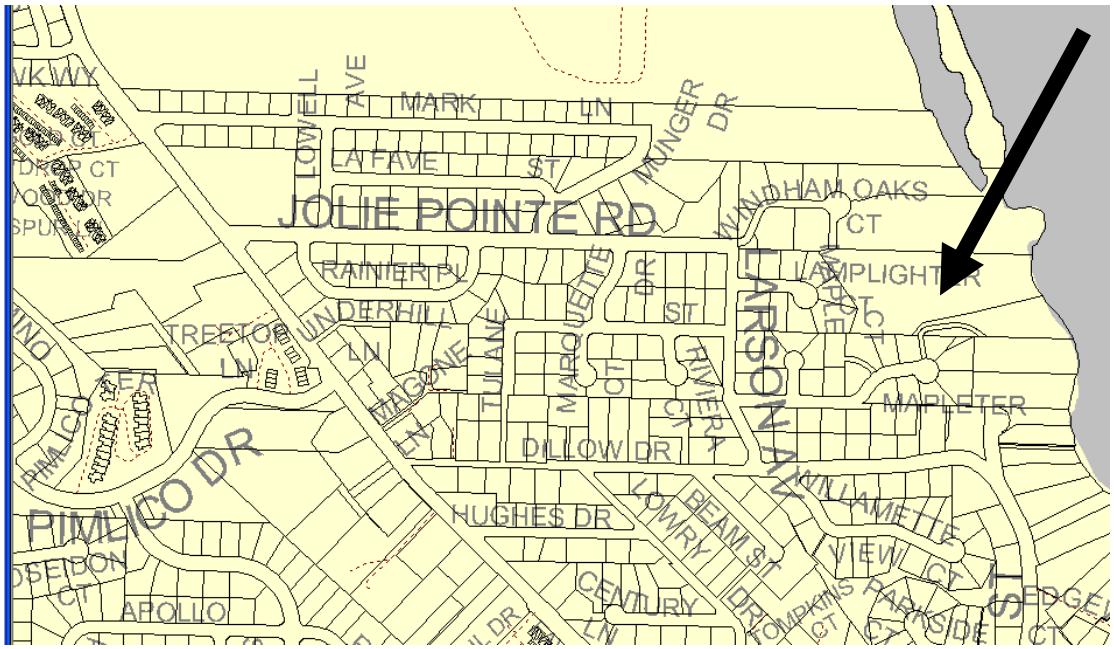
The emergency conditions of slope failure mean that a WRG Chapter 28 permit is not required.

A Flood Management Area (FMA) permit is also not required. None of the activity will be in the flood boundaries (below 47 feet above sea level).

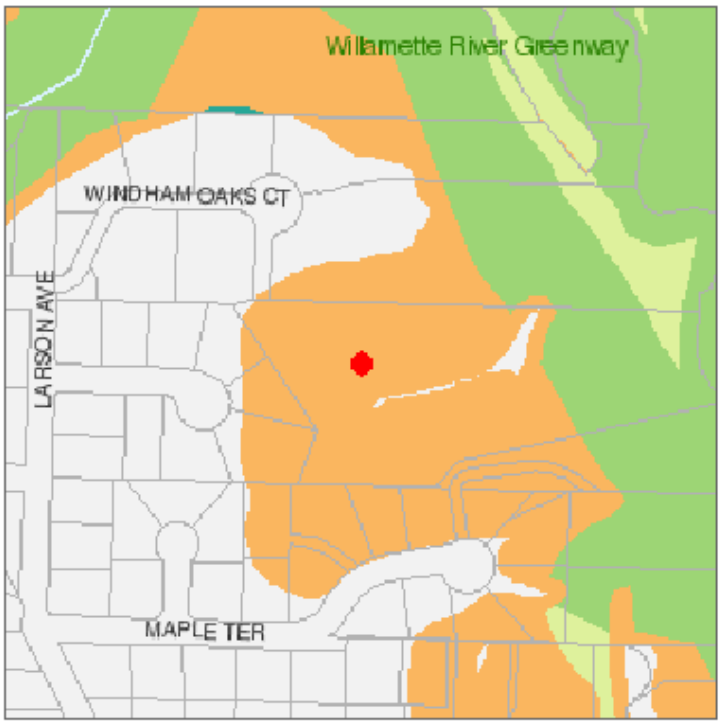
Although exempted, the applicant will be required to submit an erosion control plan per CDC Chapter 31: Erosion Control and the City's Construction Code. Staff will also need to see and approve engineered designs for discharging the outfall safely downhill. Periodic inspection by the City of erosion control measures will be required.

Additional Background

Zoning:R-10 Single family housing is a permitted use
The affected area consists of slopes over 25%. There are no significant trees exist in the project area. There is groundcover of grasses, non-native material and low brush. Vine Maples and other volunteers dot the hillside too.



Council's recommendation on habitat protection



- Allow development
- Low habitat conservation area
- Moderate habitat conservation area
- High habitat conservation area
- Parks and open spaces
- Streams and rivers
- Not affected by recommendation


Slope failure just beyond this point


Distance from pool to slope failure is about 35-50 feet

Process

A **Plumbing Permit** will be required. Contact Jim Clark, Plumbing inspector, at 656-4211 or 723-2536 or Dave Davies, Builidng Official, at 656-4211. An **Erosion Control Permit** is required from the Engineering Department. The applicant must contact these departments prior to any site clearing or grading.

DISCLAIMER: This summary discussion covers issues identified to date. It does not imply that these are the only issues. The burden of proof is on the applicant to demonstrate that all approval criteria have been met. These notes do not constitute an endorsement of the proposed application. Staff responses are based on limited material presented at this pre-application meeting. New issues, requirements, etc. could emerge as the application is developed. These notes have a limited "shelf life" and may be voided by changes to the CDC or other applicable regulations.

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