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The Villages MPD Phase 2 Plat C-Wetland Review  
[Sensitive Area Study Review], Perteet

March 31, 2014



## Memorandum

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To: Stacey Welsh, Community Development Director, City of Black Diamond

From: Jason Walker, ALSA, PWS, Environmental Manager, Perteet Inc.  
Doug Gresham, PWS, Lead Ecologist, Perteet Inc.

Date: March 31, 2014

Re: The Villages MPD Phase 2 Plat C–Wetland Review

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Perteet Inc. has conducted a document review for The Villages MPD Phase 2 Plat C project site in Black Diamond, Washington. This review of submitted documents was conducted for consistency with the City of Black Diamond Sensitive Areas Regulations, the Villages MPD Development Agreement, and the Final Environmental Impact Statement for The Villages Master Planned Development.

The proposed Villages MPD is located in southwest Black Diamond and is understood to be comprised of 7 parcels totaling 1,196 acres. The Phase 2 Plat C area is that component of the project subject to this review. It is located in parcels D and E, which is understood to be 136 acres in size and situated at the western edge of the city limits. This area is southwest of the intersection of Roberts Drive, Lake Sawyer Road, and SE Auburn-Black Diamond Road. Parcels D and E consist mainly of undeveloped forested property that was previously managed as timber land.

### **The following documents were reviewed:**

- Sensitive Area Study and Wildlife Analysis for the Villages MPD Phase 2 Plat C; prepared by Wetland Resources, Inc., December 2013
- Wetland Buffer Vegetation Management Plan for the Villages MPD Phase 2 Plat C; prepared by Wetland Resources, Inc., December 2013
- Wildlife Habitat Assessment Report for the Villages MPD Phase 2 Preliminary Plat C; prepared by Wetlands & Wildlife, December 2013
- Sensitive Area Study, Buffer Averaging Plan and Wildlife Analysis for the Villages MPD Phase 2 Plat C; prepared by Wetland Resources, February 24, 2014
- The Villages MPD Phase 2 Plat C Preliminary Plat Project Narrative; prepared by BD Village Partners, LP, November 2013
- State Environmental Policy Act (SEPA) Checklist for the Villages MPD Phase 2 Plat C; prepared by BD Village Partners, LP, November 2013
- Project drawings for the Villages MPD Phase 2 Plat C, specifically sheets CV1 through CV4, PPI-4, PP5, RSI-4, RDI, UAI, and SSWAI through SSWA4; prepared by Triad Associates, November 2013
- The Villages MPD Development Agreement between the City of Black Diamond and BD Village Partners, LP, November 2011
- City of Black Diamond Municipal Code, Chapter 19.10-Sensitive Areas Ordinance



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- City of Black Diamond Sensitive Areas Ordinance, Best Available Science Review and Recommendations for Code Update, Summary and Recommendations; prepared by Parametrix, September 2008
- The Villages MPD Preliminary Plat Phase 2 Plat C Preliminary Drainage Analysis; prepared by Triad Associates, November 2013
- Phase 2 Plat C Geotechnical Report, The Villages MPD, Black Diamond, Washington; prepared by Golder Associates, December 2013
- The Villages and Lawson Hills MPD, 2012-2013 Pre-construction Stormwater Monitoring in Rock Creek to Establish the Baseline Phosphorus Load, Black Diamond, Washington; prepared by TetraTech, January 2014

### Findings:

According to the 2014 *Sensitive Area Study, Buffer Averaging Plan, and Wildlife Analysis for the Villages MPD Phase 2 Plat C*, six wetlands occur within or adjacent to the Phase 2 Plat C project site. This includes: Wetland TOS rated as a Category I and wetland; Wetland E1 rated as a Category II wetland; Wetlands E7, E8, and E10 rated as Category III wetlands; and Wetland 213 rated as a Category IV wetland. The proposed development of 203 housing lots will be located west of Wetland TOS, northeast of Wetlands E1 and 213, and northwest of Wetlands E7, E8, and E10. Buffer averaging will be used to mitigate for buffer reduction in some locations.

The following is our list of observations and comments regarding submitted documents and requested information for subsequent review:

1. Wetland determination data forms from the original delineation in 2008 were resubmitted by Wetland Resources, Inc. using the current Corps of Engineers wetland delineation data forms (U.S. Army Corps of Engineers 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region*). The location of most of these soil pits was shown on the *Sensitive Area Study and Wildlife Analysis Map for Villages Phase 2 Plat C*. This indicates paired wetland/upland plots were provided for Wetland E1 (Plots E1, E2, and E6) and Wetland TOS (Plots E3, E4, and E7). However, the following information is missing or incomplete:
  - a. Data forms of paired wetland/upland plots for Wetlands E7, E8, E10, and 213 were not provided.
  - b. The data form for Plot E5 was provided but its location is not indicated on the map.
  - c. Information is missing from the *Summary of Findings* on data forms for Plots E4 and E6 that need to be corrected.
2. The wetland rating form for Wetland E1 was revised by Wetland Resources, Inc. based on previous comments by Perteet for the Phase 1A Preliminary Plat. Based on detailed topographic information, a drainage divide in the wetland unit has been documented within the southern area of Wetland E1. The rating was revised to evaluate the northwestern area of Wetland E1 as a separate wetland unit pursuant to the Ecology Wetland Rating System for Western Washington and companion guidance materials published by the Department of Ecology. The revised wetland rating for Wetland E1 is consistent with BDMC 19.10.210 and we concur with the revised buffer width of 110 feet for the northwestern unit of Wetland E1 according to BDMC 19.10.230.



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6. Hydrologic regimes play a major role in the biotic composition, structure, and function of wetland ecosystems. Pursuant to Section 7.4.3(B) and (G) of The Villages MPD Development Agreement (DA), post-construction hydrologic support of wetlands is required because wetlands could be adversely affected by hydrologic alteration caused by development. The preliminary drainage analysis prepared by Triad Associates has modeled the water budget in each subbasin in order to design roof drain infiltration trenches which will contribute water to wetland areas post-construction. We recommend that this approach be reviewed by the MDRT hydrogeologist to verify that no impact to wetland hydrology has been demonstrated and is consistent with wetland protection provisions relating to wetland hydroperiods described in the 2005 Ecology Stormwater Manual for Western Washington.
  
7. The *Wetland Buffer Vegetation Management Plan for the Villages MPD Phase 2 Plat C* prepared by Wetland Resources, Inc. used a significant tree inventory of the developed area that will be cleared. It is assumed from our field observations that the wetland buffers that remain after clearing will have substantially similar species composition and spacing as the sampled area. However, post-clearing monitoring of the buffer areas is required verify that the tree density remains comparable to this tree inventory.

END OF MEMORANDUM