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## Memorandum

**To:** Guy Michaelsen, The Berger Partnership P.S.

From: Calvin Douglas and John Small, Anchor Environmental, L.L.C.

**Date:** October 10, 2005

**Re:** Luther Burbank Park Wetland Reconnaissance Map

Mercer Island, Washington

The City of Mercer Island (the City) is developing a Master Plan for Luther Burbank Park. Anchor Environmental, L.L.C. (Anchor) is performing a variety of tasks in support of the City's Master Plan preparation. This memorandum describes the methods used during an on-site wetland and stream reconnaissance and development of a map identifying approximate wetland habitat and stream boundaries within Luther Burbank Park (Attachment A). This work has been conducted in accordance with Anchor's proposal to the City dated August 30, 2005.

The area investigated during the wetland reconnaissance included two parcels of City park property in Luther Burbank Park: one parcel north of Interstate 90 (I-90), and an approximately 18-acre forested parcel located south of I-90 (see Attachment A).

## **METHODS**

Prior to performing the wetland reconnaissance, Anchor ecologists reviewed topographic maps and color aerial photography of the property. In addition, the City's Environmentally Critical Areas (ECA) Ordinance for wetlands and shorelines was reviewed (Mercer Island 2005).

To assess wetland and hydrologic conditions, Anchor ecologists visited the City park property on September 30, 2005, to perform a reconnaissance-level inspection to evaluate sensitive areas. The majority of Luther Burbank Park was accessible during the site visit by walking the variety of trails and roads located within the Park. Access within the forested parcel south of I-90 was limited due to dense vegetation and steep slopes associated with ravines.

Wetland conditions were identified based on observed plant communities and hydrologic conditions. Wetland delineations or surveys were not performed as part of this analysis. The general locations and approximate boundaries of all potential wetland habitat observed during the site visit were located using a differential global positioning system (DGPS), for subsequent transfer to an AutoCAD topographic survey map (Attachment A). Potential wetland classifications and buffer widths were identified based on observations during the wetland reconnaissance. The City's ECA Ordinance does not identify wetland rating and buffer width criteria. According to the City's Planning Department (Salzman 2005), wetland ratings are determined using the Washington State Department of Ecology (Ecology) Washington State Wetland Rating System – Western Washington (2004) and buffer widths are determined using Ecology's Guidance for Protecting and Managing Wetlands (2005). This guidance provides three options for determining wetland buffer widths: buffer widths based on land use and wetland function scores, buffer widths based on land use, and buffer widths without incorporating land use or functions information. For this analysis, buffer widths were based on land use criteria. Approximate potential wetland boundaries, wetland ratings, and wetland buffers are presented on the map in Attachment A.

Because no on-site surveys or delineations of potential wetlands were conducted, further field investigations would be necessary to confirm the presence, absence, boundaries, functions, and values of wetland systems within the City park property. To confirm wetland boundaries, wetland delineations should be conducted according to the methods defined in the 1987 *U.S.*Army Corps of Engineers Wetland Delineation Manual (Environmental Laboratory 1987) and the 1997 Washington State Wetland Identification and Delineation Manual (Ecology 1997).

In addition to the wetland habitat analysis, drainages in the forested parcel south of I-90 were evaluated to identify stream classifications according to the Washington State stream typing system, as defined in Chapter 222-16-030 of the Washington Administrative Code (WAC 2005). Stream habitat characteristics assessed during the reconnaissance included potential fish usage, hydrologic functions, channel bed and bank conditions, substrate composition, and riparian vegetation. Approximate stream channel boundaries and classifications are presented on the map in Attachment A.

## **REFERENCES**

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