

December 3, 2019

Dale J. Vogel
c/o Paul McDonald
8750 SE 48th St.
Mercer Island, WA 98040
Via email: paulgeorgemcdonald@gmail.com

Re: Vogel Property, Watercourse Evaluation Report

The Watershed Company Reference Number: 191048

Dear Paul:

On November 12th, 2019, Ecologists Pete Heltzel and Grace Brennan visited the Vogel property (Parcel # 1824059113) located at 4304 E Mercer Way in Mercer Island, Washington to determine the presence of jurisdictional watercourses. This letter summarizes the findings of the study and details applicable federal, state, and local regulations. The following documents are enclosed:

- Site Photos
- Site Sketch

Findings Summary

One ditched stormwater conveyance channel was identified west of the subject property. No open or piped jurisdictional watercourses were identified on or near the subject property.

Study Area

The study area for this project is defined as areas on parcel 1824059113 at 4304 E Mercer Way in the City of Mercer Island, WA.

Methods

Public-domain information on the subject properties was reviewed for this delineation study. Resources and review findings are presented in Table 1 of the “Findings” section of this letter.

Characterization of climatic conditions for precipitation in the Wetland Determination Data Forms were determined using the WETS table methodology (USDA, NRCS 2015). The “Seattle Tacoma Intl AP” station from 1981-2010 was used as a source for precipitation data (<http://agacis.rcc-acis.org/>). The WETS table methodology uses climate data from the three months prior to the site visit month to determine if normal conditions are present in the study area region.

The study area was evaluated for watercourses based on the presence or absence of an ordinary high water mark (OHWM) as defined by Section 404 of the Clean Water Act, the Washington Administrative Code (WAC) 220-660-030, and the Revised Code of Washington (RCW) 90.58.030.

Findings

The study area is within in the Mercer Island sub-basin of the Cedar - Sammamish watershed (WRIA 8); Section 18 of Township 24 North, Range 05 East of the Public Land Survey System. It is located on the east side of Mercer Island. The area is zoned as single-family residential and surrounding land use is characterized by high-intensity residential. Lake Washington is approximately 150 feet east of the property.

The subject property is approximately 0.41 acres in size and is developed with a single-family residence, along with an associated driveway, yard, and retaining wall. The residence sits on a terrace just above a slope, which slopes east toward Lake Washington. A ravine ends just offsite of the northwest corner of the property, which continues up to East Mercer Way. The ravine is dry and does not contain a watercourse.

Reviewed public-domain information for the site is summarized below (Table 1).

Table 1. Summary of online mapping and inventory resources.

Resource	Summary
USDA NRCS: Web Soil Survey	<i>Kitsap silt loam, 8-15 and 15-30 percent slopes mapped onsite.</i>
USFWS: NWI Wetland Mapper	<i>Intermittently flowing stream bed mapped through eastern end of parcel.</i>
WDFW: PHS on the Web	<i>None mapped onsite.</i>
WDFW: SalmonScape	<i>None mapped onsite.</i>
WA-DNR: Forest Practices Activity Mapping Tool	<i>Unknown stream mapped through northern end of parcel.</i>

King County iMap	<i>None mapped onsite.</i>
City of Mercer Island Maps	<i>Seasonal stream mapped through northern end of parcel; private stormwater main mapped through northern end of parcel.</i>
WETS Climatic Condition	<i>Wetter than normal.</i>

Stormwater Channels

One short, open stormwater conveyance channel was identified northwest of the property (Photo 1). The channel originates from a public stormwater outfall, flows about 13 feet in an open ditch, and then enters a private stormwater pipe. The short channel segment has concrete block banks and an angular rock-lined bed. It was raining steadily at the time of the site visit, and flows were approximately three to eight inches deep.

Upstream of the outfall, the public stormwater pipe is an on-grade 12-inch black HDPE pipe runs through a ravine up to East Mercer Way (Photo 2). Three stormwater grates were identified upstream of this pipe, all receiving visible stormwater inputs from the East Mercer Way stormwater system and runoff from adjacent neighborhood roads (Photo 3). One stormwater grate has a visible connection to the black plastic PVC pipe. Downspouts from nearby properties have visible connections to the stormwater main. The channel flows into a 12-inch diameter concrete culvert just west of the subject property, entering a private stormwater main that outlets into Lake Washington, according to City of Mercer Island mapping (Photo 4). There are no visible natural channels above East Mercer Way.

Non-wetlands

No wetlands or watercourses were identified on site. No areas on the site meet criteria for hydrophytic vegetation, hydric soils, or wetland hydrology. Soils on the site are bright and dry. The plant community is dominated by western red cedar, ornamental landscape trees and shrubs, cherry laurel, Himalayan blackberry, sword fern, lawn grass, and English ivy (Photos 5 and 6).

Local Regulations

The City of Mercer Island regulates watercourses under Mercer Island City Code 19.07.070. Water courses are defined in MICC 13.16.010 as the following:

“A course or route, formed by nature and generally consisting of a channel with a bed, banks, or sides throughout substantially all its length, along which surface waters, with some regularity (annually in the rainy season), naturally and normally flow in draining from higher to lower lands. This definition does

not include irrigation and drainage ditches, grass-lined swales, canals, storm water runoff devices, or other courses unless they are used by fish or to convey waters that were naturally occurring prior to construction."

Since the stormwater pipes and open ditch segment carry only stormwater and no natural stream flow, this system would not be regulated as an open or piped jurisdictional watercourse by the City of Mercer Island.

Similarly, state and federal agencies with jurisdiction over natural streams typically do not regulate stormwater systems, except as part of the City's municipal stormwater permit.

Disclaimer

The information contained in this letter is based on the application of technical guidelines currently accepted as the best available science and in conjunction with the manuals and criteria referenced above. All discussions, conclusions and recommendations reflect the best professional judgment of the author(s) and are based upon information available at the time the study was conducted. All work was completed within the constraints of budget, scope, and timing. The findings of this report are subject to verification and agreement by the appropriate local, state and federal regulatory authorities. No other warranty, expressed or implied, is made.

Please call if you have any questions or if we can provide you with any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Grace Brennan', with a large, stylized flourish at the end.

Grace Brennan
Ecologist

Enclosures

References

- Anderson, P.S. et al. 2016. Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State. (Publication #16-06-029). Olympia, WA: Shorelands and Environmental Assistance Program, Washington Department of Ecology.
- Lichvar, R.W. and S. M. McColley. 2008. A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States. ERDC/CRREL TR-14-13. Hanover, NH: U.S. Army Engineer Research and Development Center.
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2015. National Engineering Handbook, Part 650 Engineering Field Handbook, Chapter 19 Hydrology Tools for Wetland Identification and Analysis. ed. R. A. Weber. 210-VI-NEH, Amend. 75. Washington, DC.

Site Photos



Photo 1. Open-air stormwater conveyance northwest of subject property.



Photo 2. Twelve-inch diameter black PVC pipe that runs from East Mercer Way to just northwest of subject property.



Photo 3. Visible stormwater input to stormwater grate with connection to black PVC stormwater main.



Photo 4. Stormwater channel flowing into 12" concrete stormwater main – private.



Photo 5. View looking west from road beneath residence.

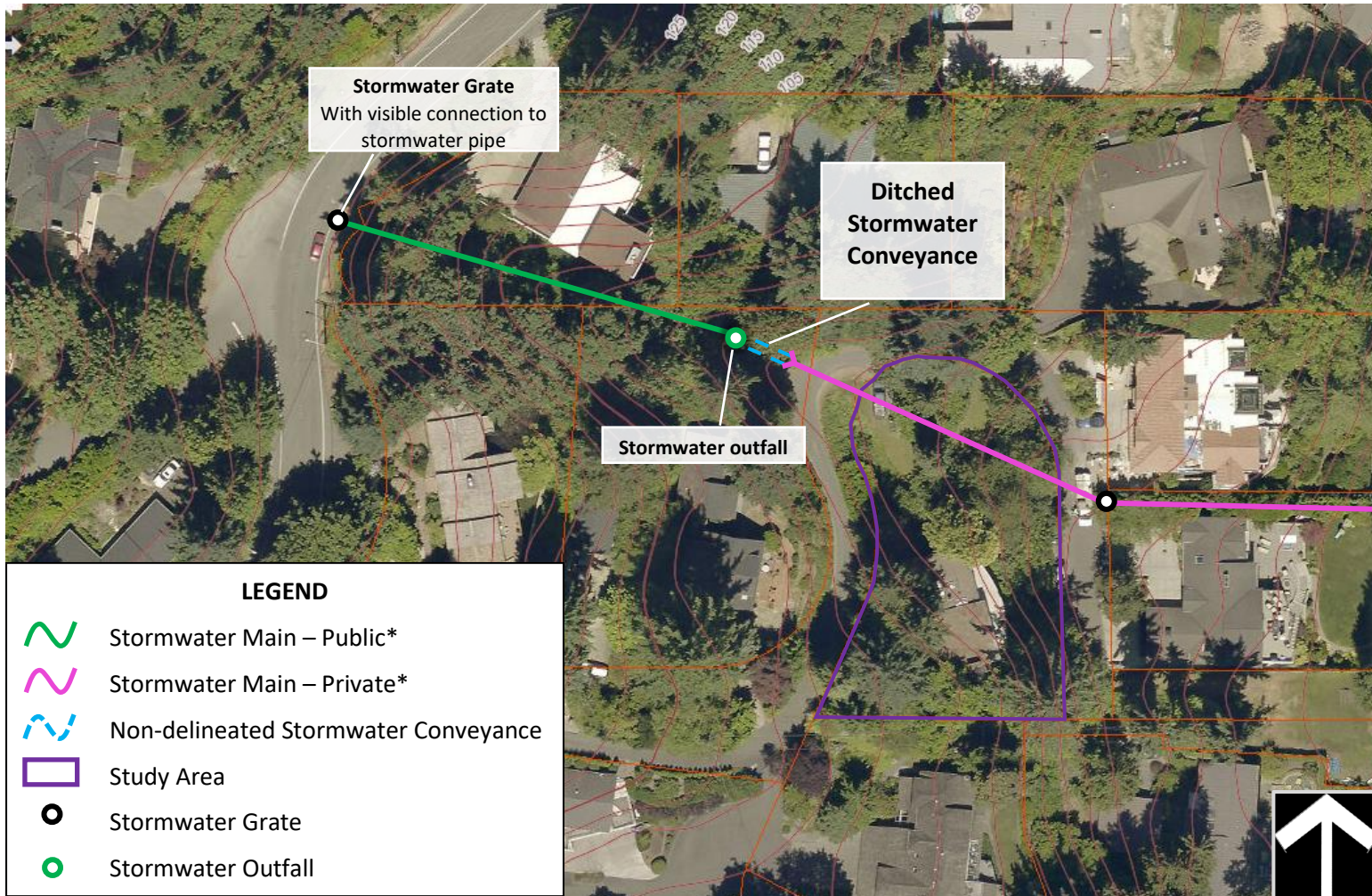


Photo 6. View looking south from north end of parcel, associated lawn and driveway.

Site Delineation Sketch – Vogel Property

Site Address: 4304 E Mercer Way
 Parcel Number: 1824059113
 Site Visit Date: 11/12/2019

Prepared for: Paul McDonald
 TWC Ref. No.: 191048



Note: Field sketch only. Features depicted are approximate and not to scale.

* Information from Mercer Island Information and Geographic Services.