

SITE ASSESSMENT REVIEW: COMPLETED

Date: July 6, 2018

SmartGov Case No.: SAR80126

Owner: Kathy & Rand Lunsford
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Project: Lunsford SFR

Site Location: 231 Green Heath Place | Bainbridge Island, WA 98110

Tax Identification No.: 112502-4-069-2002

This completed Site Assessment Review (SAR) letter serves as an endorsement from the Department of Public Works of the project with recommendations to achieve Low Impact Development (LID) to the maximum extent practicable based on the Department of Ecology's Storm Water Management Manual for Western Washington (SWMMWW). The following LID recommendations apply to the site as it has been presented in the application to reduce vegetation removal, minimize hard surface installation, and mimic natural hydrology. This assessment is non-binding, unless the recommendations are as required under BIMC 15.20. Application for permits with the City of Bainbridge Island for which a SAR is required shall be in substantial conformance with this proposal, or, else a new SAR shall be required.

Project Surfaces/Thresholds:

Threshold	Proposed Project
Proposed New/Replaced Hard Surface Total	1,660 SF
Proposed Land Clearing/Disturbance	3,860 SF
Existing Site Impervious Coverage	(0%)
Total Site Area	15,682 SF
Site Previously Developed Under Adopted Stormwater Regulations (after 2/10/1999)	NO
Type of Development (New or Redevelopment)	Redevelopment

Recommendations:

- This project proposes to construct a new single-family residence totaling approximately 1,200 SF with 460 SF of driveway and an on-site septic (OSS) drainfield. The existing tree canopy noted on the application is on the order of 1,241 SF.
- An application for a building permit will require the project demonstrate compliance with applicable minimum requirements (MRs) # 1 through 5 of the City's adopted stormwater manual through development of a Stormwater Site Plan (SSP – MR #1), which is the comprehensive report containing all the technical information and analysis necessary for the City to evaluate a proposed development project for compliance with stormwater requirements. Contents of the SSP will vary with the type and size of the project, and individual site characteristics, and contain site-appropriate development principles, as required, to retain native vegetation and minimize impervious surfaces to the extent feasible.
- The project requires a Stormwater Pollution Prevention Plan (SWPPP), also called an Erosion Control Plan (MR #2) that applies to all land-disturbing activities and temporary impacts associated with the project. A well followed SWPPP with established clearing and disturbance limits and clearly thought out phasing helps to minimize unnecessary destruction of healthy soils during the construction process. Destruction of healthy soils due to compaction from construction activities can cause secondary drainage issues and alterations to drainage patterns and infiltration.

- The SWPPP should accompany any clearing, grading, or building permit submittal.
- Temporary construction entrances and access roads shall be constructed of inert materials. Recycled concrete is strictly prohibited.
- All soils disturbed and compacted during construction/clearing must be amended to restore soil health to 'GOOD' hydrologic conditions by tilling in compost or stripped and stockpiled topsoil where soils allow.
- Retaining or planting trees within 20 feet of hard surfaces is recommended to reduce peak stormwater runoff amounts.
- Iron oxide mottling observed in the dug test pits indicates the perched seasonally high groundwater at the site is between 3 and 5 feet below ground. While the geotechnical engineer does not recommend infiltration of stormwater on-site, an evaluation based on the infeasibility criteria in the City's adopted stormwater manual should be performed by the geotechnical engineer to support the recommendation.
- Site soils that support infiltration according to the infeasibility criteria would require paved driveway surfaces to utilize permeable technology where feasible. Please follow List No. 1 of MR #5 for the required on-site best practices to achieve compliance with the stormwater code for treating driveway surfacing.
- It is recommended that where a level spreader dispersion trench is utilized to discharge stormwater from the developed hard-surfaces that it be placed a minimum of 25 feet upgradient of the property line. The dispersion trench should be located so as to prevent surface stormwater runoff from draining directly towards a downhill homesite.
- The home location and septic fields should comply with the City's development standards for construction near geologically hazardous areas and abide by the required setbacks from steep slopes or moderate slopes determined to be hazardous.
- Overflow surface stormwater not adequately treated on-site according to MR #5 – On-Site Stormwater Management, should be safely discharged in accordance with MR #4 – Preservation of Natural Drainage Systems and Outfalls. A drainage easement through the property to the west is highly recommended, where not outright required per MR #4.
- Full-dispersion does not appear to be feasible given the steep slopes and the lower site areas use as on-site septic reserve and primary fields.

Landmark Tree Ordinance:

Pursuant to BIMC 16.32 – Protection of Landmark Trees, adopted by Ordinance No. 2018-25, removal of certain sizes and species of trees that are unique, historically significant, or meeting an aesthetic quality, is subject to council approval. An application for a construction or clearing permit shall include an identification of all landmark trees on the site proposed for removal that meet one of the criteria specified in BIMC 16.32.030.E. Note, landmark trees removed without council approval are subject to a \$25,000 fine per tree.

Critical Areas Ordinance:

Any proposed development or activity requiring a site assessment review (SAR), located within the R-0.4, R-1 or R-2 zoning designation, requires designation of an Aquifer Recharge Protection Area (unless exempt under BIMC 16.20.100.E.1(a-d)). Your property is located in the R-2 zoning district and requires designation of an ARPA through the site plans submitted with your building permit and any land use permit that may be required. An ARPA has not been depicted on your SAR application materials. It shall be depicted with the application for subdivision or any other subsequent clearing or construction permit submittal in support of the project. The proposed ARPA shall meet the general requirements and design standards under BIMC 16.20.100.D and E. As you prepare your permit application materials, please consider the following:

- The ARPA shall include all existing native vegetation on a site, up to a maximum of 65 percent of the total site area. A lower percentage is allowed if necessary to achieve a development area of at least 12,500 square feet on a parcel;
- The location and configuration of the ARPA may change over time, pursuant to criteria under BIMC 16.20.100.E.2.d.;
- The ARPA should retain healthy, existing trees and vegetation to the maximum extent possible. Healthy significant trees shall be priority trees for retention. Trees shall be retained in one or more stands or clusters;
- The ARPA shall be delineated to include:
 - A low perimeter-to-area ratio
 - A minimum width of 12 feet
 - The critical root zone of all significant trees
- The ARPA shall be contiguous with abutting, off-site areas of other ARPAs, open space or critical areas to the extent feasible; and
- The ARPA may include landscaping or open space requirements pursuant to BIMC 18.15.010.D and E and BIMC 17.12, respectively, and other critical areas and their buffers or setbacks pursuant to other sections of chapter 16.20, Critical Areas.

If you have questions about the ARPA or other critical areas requirements for wetlands, fish and wildlife habitat conservation areas, or geologically hazardous areas located on or adjacent to your property, please contact the Planning Department at PCD@bainbridgewa.gov or (206) 780-3770. Note that a site visit to verify the designated ARPA will take place prior to permit issuance.

Summary

These recommendations are not fully inclusive of all requirements for the site proposal but represent a comprehensive look at addressing low impact development based on a site specific analysis of the project proposal. Don't hesitate to contact COBI Development Engineering with any further questions or concerns. This letter will be required as a submittal to the follow-on application for subsequent permits.



Peter Corelis, P.E.
Development Engineer
Public Works, Engineering