

SUSTAINABLE SITE DESIGN HANDOUT

Overview

The City desires that all developments are designed with sustainable site design / low impact development principles. Specifically, the City is looking for development that incorporates the natural resources into the site design, which will allow for reduced impervious surfaces, retain native vegetation, and reduced runoff from developed site. This will further enhance the community aesthetics while maintaining and preserving the natural quality of the City of Sammamish.

Questions?

[Submit Project Guidance](#)

[Visit the Permit Center](#)

City of Sammamish
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Sammamish, WA 98075
www.sammamish.us

WHAT IS SUSTAINABLE SITE DESIGN

Sustainable Site Design is incorporating low impact development principles of mimicking the natural state and ensures that the natural environment is incorporated into the site plan early in design process the process instead of trying to force a predeveloped site plan onto the development site regardless of natural features.

SUSTAINABLE SITE DESIGN VERSUS CONVENTIONAL DEVELOPMENT

Conventional development includes clearing and grading the natural environment in order to maximize the development of the property with buildings, roads, parking areas, and manicured lawns. Much less stormwater infiltrates in these situations and instead becomes surface runoff. This increases impacts the community environmental resources due to increased pollutants and high-water flows that can cause flooding. This unnecessary work can increase a project construction and permit costs.

Sustainable Site Design principles is the preferred development strategy and uses the natural environment and best management practices so that the development can mimic pre-development, allow natural movement of water through the site, and maintain the natural character of the property.

SUSTAINABLE SITE PLAN

SUSTAINABLE SITE DESIGN CONSIDERATIONS

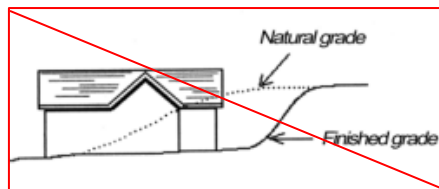
The following are principles that should be considered early in the design process:

1. **Minimized Grading:** Incorporating the development into existing topography and utilizing natural drainage. The site plan fits with the existing topography instead of requiring the site to be cleared and graded. This includes minimal excavation for foundations.

Sustainable Design



Conventional Design



Graphics from City of Gig Harbor Design Manual

Building Height: The height of your structure should be considered in conjunction with grading and is measured from the average existing grade of your property.

2. **Retain Native Vegetation:** Incorporating the existing native vegetation within the development by not disturbing the vegetation with clearing and grading.

Sustainable Design



Conventional Design



Graphics from AHBL, Inc.

Tree Retention: Retaining native vegetation will also include being compliant with significant tree retention and protection requirements. You will be required to identify all known Significant or Heritage/Landmark Trees onsite

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SUSTAINABLE SITE PLAN

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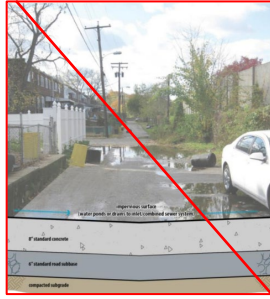
3. **Minimize Impervious Surfaces:** Attempt to limit impervious surface areas and/or replace proposed impervious surfaces with pervious concrete, asphalt, and/or pavers.

Sustainable Design



Graphics by deawra.org

Conventional Design



4. **Avoid Critical Areas:** Avoid all impacts to critical area and associated buffers, as feasible. This includes not requesting buffering reductions or buffer averaging.

Sustainable Design



Conventional Design



Critical Areas Include: Erosion Hazard Areas; Landslide Hazard Areas; Seismic Hazard Areas; Wetlands; Streams; Flood Hazard Areas; Critical Aquifer Recharge Areas; and Fish and Wildlife Habitats. These areas often have associated buffers that will need to be accounted for.

5. **Managing Stormwater On-Site:** Incorporate capturing, storing, and infiltrating surface stormwater on-site. This could be done with dispersion, rain gardens, amending site soils, etc.

Sustainable Design



Source: Rain Dog Designs

Conventional Design



SUSTAINABLE SITE PLAN

SUSTAINABLE SITE PLAN REVIEW CHECKLIST

The following documents are required for permit applications:

Single-Family Residence (SFR) and Accessory Structures:

DOCUMENT	APPLICATIONS (APP)		
	PROJECT GUIDANCE	PRE-DEVELOPMENT / PRE-APP (IF REQUIRED)	APP
Project Guidance Questions	X		
SFR Sustainable Site Design Assessment		X	X

All Other Major Developments:

DOCUMENT	APPLICATIONS (APP)			
	PROJECT GUIDANCE	PRE-DEVELOPMENT	PRE-APP	APP
Project Guidance Questions	X			
Pre-Dev Sustainable Site Design Assessment		X		
Simple Sustainable Site Plan		X		
Pre- App Sustainable Site Design Narrative			X	X
Pre- App Sustainable Site Design Site Plan			X	X

RESOURCES:

Sustainable Site Design Resources

- Low impact Development: Technical Guidance Manual for Puget Sound
- Washington Department of Commerce: Incentivising Low-Impact Development

Various Code Requirements

- LID Incentives: [Chapter 21A.85](#)
- Landscaping: [Chapter 21A.35](#)
- Tree Retention: [Chapter 21A.37](#)
- Environmentally Critical Areas: [Chapter 21A.50](#)
- Town Center Site Planning: [Chapter 21A.85](#)
- Surface Water Management: [Title 13](#)