

Appendix D - Site Assessment Materials

- Data Collection Form
- Sample Report

Data Collection Form

PROPERTY OWNER INFORMATION

Name	
Address	
Drainage basin	
Critical areas or easements?	
% of lot that is impervious	
Estimated impervious surface (ft ²)	
Est. annual stormwater runoff	$\text{Ft}^2 \times 0.62 = \text{Gallons} \times 39 =$ $\text{Impervious Area per 1" storm Inches/year Gallons per year}$

CURRENT CONDITIONS AND SITE HISTORY

Permission to take photos?	<input type="radio"/> Yes <input type="radio"/> No
Primary uses of outdoor space?	<input type="radio"/> Growing food <input type="radio"/> Play space <input type="radio"/> Relaxing <input type="radio"/> Not used much <input type="radio"/> Other: _____
Ideas or plans for yard renovation?	
Any specific site needs like wheelchair access?	<input type="radio"/> Yes <input type="radio"/> No
Specific needs notes:	
Any issues with water on your property or signs of accumulation?	<input type="radio"/> Pooling water <input type="radio"/> Seeps or springs <input type="radio"/> Spongy/mossy areas <input type="radio"/> Eroded areas <input type="radio"/> Other: _____
Enter notes/locations:	
Existing water management systems on-site?	<input type="radio"/> Rain barrel <input type="radio"/> Rain garden <input type="radio"/> Dry well <input type="radio"/> Other: _____
Enter notes/locations	
Basement or crawl space?	<input type="radio"/> Basement <input type="radio"/> Crawl space <input type="radio"/> Neither

SLOPES/SUN

Steep slopes?	<input type="radio"/> Yes <input type="radio"/> No	Mark locations and directions on map
Sun exposure	FRONT YARD: <input type="radio"/> Sunny <input type="radio"/> Shady <input type="radio"/> Mixed	BACK YARD: <input type="radio"/> Sunny <input type="radio"/> Shady <input type="radio"/> Mixed

EXISTING VEGETATION

Invasive weeds found onsite	<input type="radio"/> None <input type="radio"/> English ivy <input type="radio"/> Blackberry <input type="radio"/> Butterfly bush <input type="radio"/> Other: _____
Location(s) of invasive weeds	
Notes on existing conifers and deciduous trees	
Canopy cover	<input type="radio"/> 0-25% <input type="radio"/> 50-75% <input type="radio"/> 25-50% <input type="radio"/> 75-100%
Is there lawn?	<input type="radio"/> Yes <input type="radio"/> No
Notes on lawn (location, condition)	

UTILITIES

Mark 811 utilities on map:

Yellow = gas

Red = electric

Blue = water

Green = sewer

Orange = phone and cable

Black = overhead power lines

Fiber optic lines?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not sure	Mark on map
Oil tank?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not sure	Mark on map
Septic drain field?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not sure	Mark on map
Irrigation system?	<input type="radio"/> Yes <input type="radio"/> No	Mark on map

SOIL

Mulch in planting beds?	<input type="radio"/> Wood chips <input type="radio"/> Shredded wood <input type="radio"/> Beauty bark <input type="radio"/> Compost <input type="radio"/> Rock <input type="radio"/> None <input type="radio"/> No planting beds <input type="radio"/> Other: _____
Soil ever amended with compost?	<input type="radio"/> Yes <input type="radio"/> No
If yes, how long ago and where?	

SOIL TESTS

Test for compaction by probing soil at various locations in yard. Record results:	
Soil texture test results. Soil type:	<input type="radio"/> Clay <input type="radio"/> Loam <input type="radio"/> Sand <input type="radio"/> Mixture: _____
Notes about soil texture test:	

DOWNSPOUTS

Notes on condition of roof and gutters:	
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Notes on downspout conditions - **Take photos of all downspouts**

Mark all on map with ID

Downspout ID	Connected or disconnected?	Drains to (storm, dry well, lawn, garden, unk)	Initial recommendations (disconnect? To what?)

POTENTIAL SOLUTIONS

PAVEMENT REMOVAL

Mark on map

Interest in removing any unused pavement?	<input type="radio"/> Yes <input type="radio"/> No
Replacement for pavement?	<input type="radio"/> lawn <input type="radio"/> native landscaping <input type="radio"/> rain garden <input type="radio"/> other: _____
Constraints?	
Notes/description of potential location	

CISTERNS

Mark on map

Opportunities for cistern installation?	<input type="radio"/> Yes <input type="radio"/> No
Constraints?	
Notes/description of potential location	

PLANTING TREES

Mark on map

Opportunities for tree planting?	<input type="radio"/> Yes <input type="radio"/> No		
Constraints?			
Tree notes	Location: _____ Tall/Med/Small? Sun/Shade/Mixed? Species: _____	Location: _____ Tall/Med/Small? Sun/Shade/Mixed? Species: _____	Location: _____ Tall/Med/Small? Sun/Shade/Mixed? Species: _____

NATIVE LANDSCAPING**Mark on map**

Good locations for native landscaping?	<input type="radio"/> Yes <input type="radio"/> No
Opportunity to direct disconnected downspouts to location?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Possibly
Constraints?	
Notes/description of potential location(s)	

RAIN GARDEN**Mark on map**

Interest in/opportunity for installing a rain garden?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Possibly
Constraints?	
Notes/description of potential location	

EXPLAIN INFILTRATION TEST – CONDUCT AT END OF SITE VISIT, IF NEEDED**RAINWATER MANAGEMENT OPPORTUNITIES**

Initial recommendations for property:	<input type="radio"/> Cisterns <input type="radio"/> Rain garden <input type="radio"/> Native landscaping <input type="radio"/> Disconnect downspouts <input type="radio"/> Planting trees
Notes:	

Sample Report

CITY OF KIRKLAND, WASHINGTON



A smart yard works for you and your environment

Dear [REDACTED],

Thank you for participating in the Yard Smart Rain Rewards yard consultation! Together we collected a lot of information on the characteristics of your landscape to help us identify the best ways to make your yard smart. In this report you will find a summary of your property's site conditions and recommendations for Yard Smart solutions best suited to your property.

Current Conditions at [REDACTED], Kirkland, WA



Site History

You bought your house in 2019 and have been primarily cleaning the yard of weeds since then. You are possibly interested in creating a more level backyard. During our site visit you indicated you were interested in rain-capture cisterns and possibly native landscaping in the backyard.



Impervious Surface

Impervious surfaces are the hard surfaces that do not absorb water, like driveways and roofs. Your total lot size is 11,223 square feet, and approximately 4,109 square feet, or 37 percent of that is impervious surface. Based on Kirkland's average annual rainfall, approximately 99,356 gallons of water—enough to fill 1,242 average-sized bathtubs—fall on those surfaces, becoming potential stormwater runoff to Forbes Creek each year.



Downspouts

The house has 4 downspouts in good condition. Locations of the downspouts are noted on the map below. All downspouts are disconnected from the city stormwater drainage system and flow to your backyard and the open space to the north.



Topography

The topography of the site influences how water moves through your property. Your property is moderately sloped from south to north, with the backyard sloping away from the house.



Soil Quality

Soils on your property are sandy loam soil. Sandy loam is typically well-draining and supportive of plant growth. However, the areas of bare soil and mossy soil in your backyard are moderately compacted, which impacts how well water is able to drain. Converting these areas to native landscaping with mulch will improve soil health.



Vegetation

There is a mix of lawn, planting beds, and trees including Western Red Cedar and Douglas Fir on your property. Small patches of invasive Himalayan Blackberry are beginning to establish on your property from the open space to the north. Refer to the King County website for information on controlling the spread of [Himalayan Blackberry](#).



Site Constraints

The primary constraint for installing stormwater features on your site is the sewer connection running through your backyard. No trees or large shrubs should be planted within 10 feet of this pipe, and mechanical digging in this area is not recommended.

Contact Us. If you have any questions about these recommendations, please contact your Yard Smart Coordinator: Aaron Hussmann at 425-587-3857 or YardSmart@kirklandwa.gov

Opportunities to Become Yard Smart

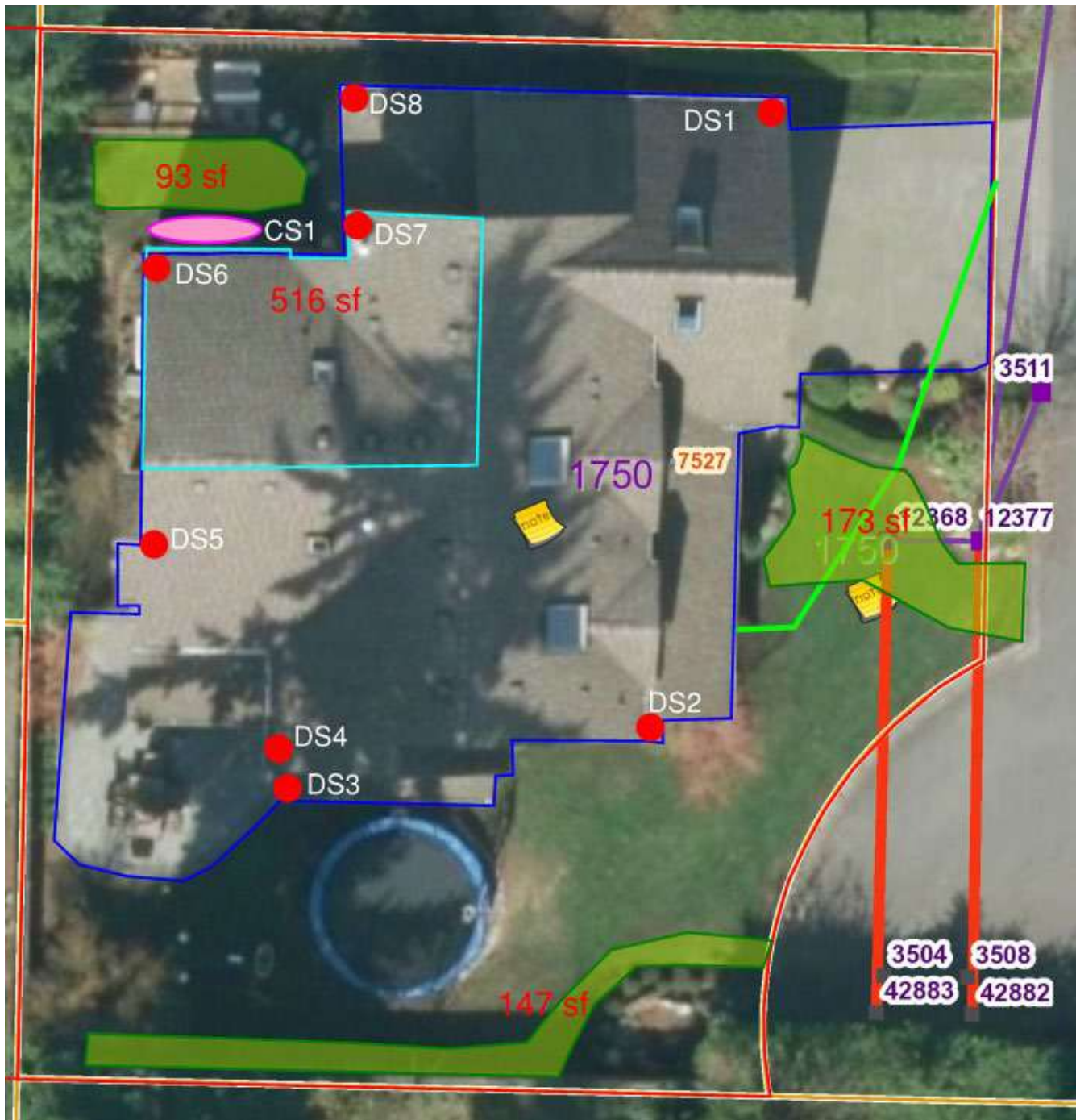
Based on the information that we collected during the consultation, we recommend the following Yard Smart solutions for your property. The solutions are listed in the order of how effectively they will manage stormwater. See the map of your property on the next page for the best location for each feature. For full descriptions and requirements for each solution, refer to your project packet.

Feature	Notes
Cistern	<p>Cisterns are large rain barrels that collect roof water to help slow the flow of runoff and provide a water source for summer irrigation.</p> <p>You indicated that you are interested in installing a cistern in your yard at location CS1 on the map below.</p> <p>To be eligible for Rain Rewards rebates, cisterns or a series of rain barrels must drain a total minimum roof area of 400 square feet and have a capacity greater than 200 gallons and less than 1,000 gallons.</p> <p>A cistern placed at CS1 would drain a roof area of 711 square feet from downspouts DS1 and DS4 and would provide an estimated potential of 3,086 gallons of summer irrigation water. Overflow from cistern CS1 can be directed to your backyard.</p> <p>Cisterns must be placed a minimum of 5 feet away from property lines and be installed on a solid, level pad concrete pad or other surface that will not allow the cistern to sink or tip.</p>
Native Landscaping	<p>Native landscaping is a mix of plants chosen to fit the space, sun exposure, and water availability for a location. To help absorb more rainwater runoff and slow the flow of water from your downspouts, consider converting portions of bare soil, moss, lawn, and weeds in your backyard with native landscaping.</p> <p>Choose plants that prefer your yard's mix of sun/shade and moist soil. Example planting plans can be found using the King County Native Plant Guide. Great plant options for your landscape can be found at King County's Go Native Plant Guide or Great Plant Picks.</p> <p>To be eligible for Rain Rewards rebates, native landscaping must replace a minimum 400 square feet of lawn, invasive weeds, or impervious surface. The potential areas mapped below represent approximately 1,393 square feet of lawn to native landscaping conversion.</p> <p>You are not required to landscape the entire area mapped below and final location of landscaping can be altered as long as total converted area is at least 400 square feet.</p> <p>Always call 811 before you dig to locate buried utilities. Within 10 feet of buried utilities:</p> <ul style="list-style-type: none">• Do not rototill or do any mechanical digging. Hand dig only.• Plant only low shrubs and groundcover to prevent root damage to utilities.• Do not plant large trees or shrubs within 10 feet of the side sewer connection to prevent future root damage.

Your Property

Legend

- ▬ County parcel boundary
- ▬ Impervious area
- ▬ Stormwater conveyance pipe
- ▬ Stormwater detention pipe
- ▬ Sewer connection
- Connected downspouts
- Potential cistern
- ▬ Contributing roof area to cistern
- ▬ Potential native landscaping



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Next Steps

Once you decide which of the recommended Yard Smart Rain Rewards solutions will work for you, please complete the appropriate Project Approval Form in your site visit packet or found here: <http://bit.ly/YardSmartApproval>. If you have questions regarding the approval form or the rebate process, please reach out to us (yardsmart@kirklandwa.gov or 425-587-3857).

What Else Can You Do?

- **Add compost and mulch to your yard.** Compost and mulch improve soil quality, increase water filtration, and prevent weed germination, reducing maintenance.
- **Practice natural yard care.** Natural yards are more drought tolerant and require fewer pesticides and fertilizers. Learn about simple practices in the Natural Yard Care booklet provided during your consultation.
- **Store household chemicals on a shelf in a cool, dry location.** Keep packaging in good condition to prevent leaks. Household chemicals like cleaners, fertilizers, and pesticides stored on the ground or in leaky containers can pollute stormwater runoff.
- **Pick up pet waste.** Pet waste can be carried by rainwater to storm drains and into creeks, lakes and Puget Sound without treatment. It causes bacterial contamination in waterways and affects our ability to use them for recreation.
- **Wash your car at a car wash.** Car washes are required to send polluted water to the sanitary sewer system for treatment. If you wash your car at home, wash it on a grassy or gravel area using chlorine-free, phosphate-free, biodegradable soap.
- **Don't drip and drive.** Fix oil leaks in your car as soon as possible. In the meantime, use drip pans or cardboard to catch and prevent leaks from polluting our streams. Learn more at fixcarleaks.org.



www.kirklandwa.gov/yardsmart

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