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After recording return to:

City Clerk
City of Puyallup
333 South Meridian
Puyallup, WA 98371

info@puyallupwa.gov

Document Title: Stormwater Outfall Management & BMP Facilities Agreement

Grantee: City of Puyallup

Grantor: Puyallup School District #3

Abbreviated Legal Description: Lot 6, Block 7 of A.J. Miller's Addition to Puyallup and Lot 1 of Declaration of Lot Combination 202406070138

Complete Legal Description: Page 5

Assessor's Tax Parcel or Account Numbers: 5870000200, 5870000191

Reference Number of Related Document(s): N/A

Stormwater Management & BMP Facilities Agreement

- A. Parties.** The parties to this agreement are Grantee City of Puyallup, a Washington State municipal corporation (City), and Grantor landowner Puyallup School District #3, a Washington municipal corporation (Landowner).
- B. Property.** Landowner is the owner of certain real property (Property), which is legally described in this document and is located at the following address: 725 W Main, Puyallup, WA 98371 and 711 W Main, Puyallup, WA 98371.
- C. Development Plan & Stormwater Facilities.** The site, subdivision or other development plan (Plan) for the Property, specifically known, entitled or described as Puyallup High School New Portables, provides for detention, retention, treatment or management of stormwater that is associated with the Property through the use of identified stormwater facilities or best management practices (collectively, Stormwater Facilities). Upon approval of the Plan by the City, the Plan shall be incorporated herein by this reference. In accordance with the Plan, Landowner shall adequately construct, operate, use, maintain and repair the Stormwater Facilities.

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D. Agreement. On the terms and conditions set forth herein, the City and Landowner agree as follows:

1. The Stormwater Facilities shall be constructed, operated, used, maintained and repaired by Landowner in accordance with the requirements of the Plan, and any other applicable law or regulation.
2. Landowner (which expressly includes its agents, successors and assigns, including any homeowners association) shall adequately and properly operate, use, maintain and repair the Stormwater Facilities as described in the maintenance and operations manual, which is on file with the City, and may be attached and recorded herewith as Exhibit A. This duty extends to all associated pipes and channels, as well as all structures, improvements, and vegetation that are provided to control the quantity and quality of the stormwater. Adequate maintenance shall mean maintenance that is sufficient to keep the Stormwater Facilities in good working order and operating so as to satisfy the design and performance standards of the Plan.
3. Landowner shall regularly inspect the Stormwater Facilities and shall submit an inspection report to the City at least once a year on a date prescribed by the City. The purpose of the inspection(s) is to ensure that the Stormwater Facilities are safe and functioning properly. The scope of the inspection shall include the entire Stormwater Facilities, including but not limited to, berms, outlet structures, pond areas, access roads, and so forth. Deficiencies and any performance or other related issues shall be noted by Landowner in the inspection report. The annual report shall be in a form and include content as prescribed from time to time by the City. An example copy of the report form may be attached hereto as Exhibit B.
4. Landowner hereby grants permission to the City to enter upon the Property to inspect the Stormwater Facilities. Except in case of emergency, the City shall provide Landowner with at least forty-eight (48) hours written notice prior to entering on to the Property. Landowner shall be entitled to have a representative accompany the City during such inspection. The City shall provide Landowner with copies of written inspection reports.
5. If Landowner fails to adequately and properly operate, use, maintain or repair the Stormwater Facilities, the City shall notify Landowner in writing and provide Landowner with a reasonable opportunity to cure. If Landowner fails to timely cure, then the City may enter upon the Property and remedy the issue(s) identified in the notice and those reasonably related thereto; Furthermore, if the City performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like while remedying the identified issues, the City may charge the cost of the remedy to Landowner, and Landowner shall promptly pay the costs to the City. Notwithstanding the foregoing, the City shall be under no obligation to inspect, maintain or repair the Stormwater Facilities.
6. Landowner shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or in connection with activities or operations, performed by Landowner, or on Landowner's behalf, that relate to the Stormwater Facilities and the subject matter of this agreement, except for injuries and damages caused by the negligence of the City.

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E. Covenant. The terms and provisions of this agreement constitute a covenant, which is subject to the following: This covenant is an equitable covenant. It touches and concerns the land that is described as the Property herein. The parties intend that this covenant shall bind the parties' successor and assigns. This covenant shall run with the land that is described as the Property herein, and shall bind whoever has possession of the land, in whole or in part, without regard to whether the possessor has title, or has succeeded to the same estate that granting parties have or had. Possessors shall include, but are not limited to, leasehold tenants, contract purchasers, subtenants, and adverse possessors. This covenant shall run with the land even in the absence of the transfer of some interest in land, other than the covenant itself, between Landowner and the City. This covenant shall not be governed by the mutuality rule. The burden of the covenant can run independently from the benefit of the covenant, and the benefit need not run. The benefit may be in gross or personal to Landowner or the City. Landowner waives its right to assert any defenses to the enforcement of this covenant, including, but not limited to, the change of neighborhood doctrine, laches, estoppel, balancing of hardships, and abandonment. If Landowner breaches any term of this covenant and agreement, then all remedies in equity and at law, including, but not limited to, injunctions, mandamus, declaratory judgments, and damages, shall be available to the City.

F. Governing Law & Venue. This agreement shall be governed by and construed in accordance with the laws of the State of Washington. The venue for any action that arises from or out of this instrument shall be the Pierce County Superior Court.

<signature page to follow>

Dated: 12/24/2024

City of Puyallup

BY: Kenneth Cook
Kenneth Cook
Development Engineering Manager

Dated: 12/19/2024

City of Puyallup

BY: ^{Designated by} Joseph N Beck
^{PROXICESSOR}
Approved as to form:
Joseph N. Beck
City Attorney

Puyallup School District #3

Dated: 12/19/2024

BY: Brady Martin
Brady Martín
Director of Capital Projects

STATE OF WASHINGTON)
)
)
COUNTY OF PIERCE

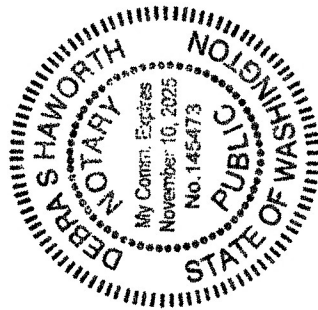
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Signed or attested before me on Dec. 19, 2024 by Brady Martin as
Director of Capital Projects of Puyallup School District #3.

Dated: 12/19/2024

Debra S Haworth
DEBRA S HAWORTH
Printed Name:

Notary Public, State of: WASHINGTON
My appointment expires: 11-10-2025



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LEGAL DESCRIPTION

TAX PARCEL 5870000200

LOT 6, BLOCK 7 OF A.J. MILLER'S ADDITION TO PUYALLUP, PIERCE COUNTY, WASHINGTON, AS PER PLAT RECORDED IN VOLUME 1 OF PLATS, PAGE 130, RECORDS OF PIERCE COUNTY AUDITOR; SITUATE IN THE CITY OF PUYALLUP, COUNTY OF PIERCE, STATE OF WASHINGTON.

LEGAL DESCRIPTION

TAX PARCEL 5870000191

REVISED LOT 1 OF DECLARATION OF LOT COMBINATION 202406070138, RECORDS OF PIERCE COUNTY, WASHINGTON. ALSO DESCRIBED AS LOTS 3, 4, 5, AND 9, TOGETHER WITH THE WEST 7.1 FEET OF LOT 2, BLOCK 7, A.J. MILLER'S ADDITION TO PUYALLUP, PIERCE COUNTY, W.T., ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 1 OF PLATS, PAGE 130, RECORDS OF PIERCE COUNTY, WASHINGTON.

Exhibit 'A'
Operations and Maintenance Manual

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Puyallup High School New Portables Operation and Maintenance Manual

Stormwater from the Puyallup High School (PHS) New Portables development project area is collected and infiltrated using an infiltration gallery and permeable pavement. Roof downspouts will collect stormwater and be routed to an infiltration gallery on the west side of the site. Runoff from the new asphalt walkway will infiltrate below permeable asphalt pavements section on site.

This document provides guidelines for operation and maintenance of the stormwater management facilities at the PHS New Portables site. Much of this O&M Manual is adapted from the Puget Sound Partnership's *Low Impact Development Technical Guidance Manual for Puget Sound, December 2012* (LID Manual) and the Department of Ecology's 2019 *Stormwater Management Manual for Western Washington* (DOE Manual).

Infiltration Gallery

Design

The proposed infiltration trenches on site are designed to provide stormwater flow control through the infiltration of stormwater runoff generated on site. The infiltration trenches receive runoff from the proposed portables roof, which is collected through stormwater pipes and conveyed to the infiltration trenches.

The infiltration trench has been sized using DOE Manual pre-sized standard based of the following criteria:

- Soil Type: Fine sand, loamy sand
- Min. Trench Length Required: 435 LF (75 LF per 1,000 SF of Roof Area)
- Trench Width x Depth: 2-foot x 1.5-foot

An overflow pipe located at roof downspouts will convey and sheet flow any runoff, that exceeds a 100-year storm, to the lawn space around the site. Runoff will then infiltrate into native soil or surface flows into the City's stormwater system.

Operation and Maintenance

Infiltration basins require periodic maintenance to prevent clogging and maintain infiltration capacity, including:

- Clearing debris from pipe inlets.
- Clearing accumulated trash, debris, excessive vegetation and sediment from inlet pipes.
- Maintain emergency overflow free of debris and vegetation.
- Clearing sediment from drain pipes/cleanouts

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Inspection

Infiltration Basins should be inspected annually during a storm event for infiltration capacity. The overflow control structure should be monitored for water levels at or above the outfall pipe and tracked in the log. Water levels in the overflow manhole should be checked during the storm event and the 3 days following the storm event and tracked in the log. If high water levels remain 3 days after a storm event the system is not operating properly and should be evaluated for potential causes.

Roof leader sumps should be visually inspected for the accumulation of sediment and debris that could restrict stormwater from reaching the infiltration basins. Accumulated debris shall be removed regularly.

Permeable Pavement

Design

The proposed permeable pavement on site is designed to provide stormwater flow control through the infiltration of stormwater runoff generated on site. The permeable asphalt will infiltrate the runoff generated from the permeable asphalt.

The Permeable Pavement has been sized using WWHM based on the following criteria:

- 4" Permeable Asphalt
- 6" Permeable Ballast
- Corrected Design Infiltration Rate of 0.64 in/hr
- Infiltrate 100% of runoff up to of the 100-year storm

Operation and Maintenance

Permeable Pavement require periodic maintenance to prevent clogging and maintain infiltration capacity, including:

- Check if elevation of adjacent planted area is too high, or slopes towards pavement and can be regraded (protect permeable pavement with temporary plastic prior to regrading)
- Mulch and/or plant all of the exposed soils that may erode to the pavement surface
- Clean surface debris from pavement surface using one or a combination of the following methods:
 - Vacuum/sweep permeable paved walkways and paved parking lot with brush brooms and high efficiency regenerative air or vacuum sweeper, respectively.
 - Clearing deposited soil, sediment, debris, trash, vegetation and/or other materials from permeable pavement or adjacent surfacing.
 - Wash permeable pavement with hand held pressure washers with rotating brushes.
- Fill potholes or small cracks with patching mixes.
- Cut and replace areas with large cracks and settlement.

See Appendix A for permeable pavement maintenance standards, procedures, and tracking log.

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Inspection

Permeable pavement should be inspected annually during a storm event for infiltration capacity. The permeable pavement should be monitored for ponding on the surface or if the water flows off the permeable pavement surface during a rain event. If this occurs, the permeable pavement should be evaluated for potential causes.

Permeable pavement should be evaluated annually during non-storm events or after a storm event for deposited soil, sediment, debris, trash, vegetation and/or other materials. Permeable pavement should also be evaluated annually for major cracks or trip hazards and concrete spalling and raveling.

During the Summer, permeable pavement should be checked for moss growth that could inhibit infiltration or pose a safety hazard.

Sources:

Puget Sound Partnership Low Impact Development Technical Guidance Manual for Puget Sound, December 2012
Department of Ecology Stormwater Management Manual for Western Washington 2019

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Appendix A

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Log Sheet

Use copies of this log sheet to keep track of when maintenance checks occur and what items, if any, are repaired or altered. The completed sheets will serve as a record of past maintenance activities and will provide valuable information on how your facilities are operating. This information will be useful for future requirements regarding the types of facilities that are installed. It helps to keep all log sheets in a designated area so that others can easily access them.

Date Checked: ____/____/____
Checked By: _____
Name: _____
Position: _____
Address: _____ City: _____ State: _____ Zip: _____
Phone Number: (____) _____

<i>Part of Facility Checked</i>	<i>Observations (List things that should be done)</i>	<i>Follow-up Actions Taken</i>	<i>Date Action Taken</i>

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Maintenance Instructions

#2 – Infiltration Basins and Trenches

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
General	Trash and Debris	Any trash and debris which exceed five cubic feet per 1,000 square feet. If less than threshold, all trash and debris will be removed as part of next scheduled maintenance.	Trash and debris cleared from site.
General	Poisonous Vegetation and Noxious Weeds	Any poisonous or nuisance vegetation which may constitute a hazard to maintenance personnel or the public. Any evidence of noxious weeds as defined in the <u>Pierce County Noxious Weeds List</u> . (Apply requirements of adopted integrated pest management policies for the use of herbicides.)	No danger of poisonous vegetation where maintenance personnel or the public might normally be. (Coordinate with Tacoma-Pierce County Health Department) Complete eradication of noxious weeds may not be possible. Compliance with state or local eradication policies required.
General	Contaminants and Pollution	Any evidence of oil, gasoline, contaminants or other pollutants.	No contaminants or pollutants present. (Coordinate removal/cleanup with Pierce County Surface Water Management 253-798-2725 and/or Dept. of Ecology Spill Response 800-424-8802.)
General	Rodent Holes	If the facility is constructed with a dam or berm, look for rodent holes or any evidence of water piping through the dam or berm.	Rodents removed and dam or berm repaired. (Coordinate with Tacoma-Pierce County Health Department; coordinate with Ecology Dam Safety Office if pond exceeds 10 acre-feet.)
General	Beaver Dams	Beaver dam results in an adverse change in the functioning of the facility.	Facility returned to design function. (Contact WDFW Region 6 to identify the appropriate Nuisance Wildlife Control Operator)
General	Insects	When insects such as wasps and hornets interfere with maintenance activities.	Insects destroyed or removed from site. Apply insecticides in compliance with adopted integrated pest management policies.
General	Performance	Check crest gauge against design expectations (see Maintenance and Source Control Manual).	Crest gauge results reflect design performance expectations. Reading recorded. County notified if not meeting design performance.
Crest Gauge	Crest Gauge Missing/Broken	Crest gauge is not functioning properly, has been vandalized, or is missing.	Crest gauge present and functioning. Repair/replace crest gauge if missing or broken.

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Maintenance Instructions

#2 – Infiltration Basins and Trenches

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
Storage Area	Water Not Infiltrating	Water ponding in infiltration basin after rainfall ceases and appropriate time allowed for infiltration. Treatment basins should infiltrate Water Quality Design Storm Volume within 48 hours, and empty within 24 hours after cessation of most rain events. (A percolation test pit or test of facility indicates facility is only working at 90 percent of its designed capabilities. If 2 inches or more sediment is present, remove).	Facility infiltrates as designed. Sediment is removed and/or facility is cleaned so that infiltration system works according to design.
Filter Bags (if applicable)	Filled with Sediment and Debris	Sediment and debris fill bag more than one-half full.	Filter bag less than one-half full. Filter bag is replaced or system is redesigned.
Rock Filters	Sediment and Debris	By visual inspection, little or no water flows through filter during heavy rain storms.	Water flows through filter. Replace gravel in rock filter if needed.
Trenches	Observation Well (Use Surface of Trench if Well is Not Present)	Water ponds at surface during storm events. Less than 90 percent of design infiltration rate.	Remove and replace/clean rock and geomembrane.
Ponds	Vegetation	Exceeds 18 inches.	Grass or groundcover mowed to a height no greater than 6 inches.
Ponds	Vegetation	Bare spots.	No bare spots. Revegetate and stabilize immediately.
Side Slopes of Pond	Erosion	Erosion damage over 2 inches deep where cause of damage is still present or where there is potential for continued erosion.	Slopes stabilized using appropriate erosion control measure(s); e.g., rock reinforcement, planting of grass, compaction. <i>If erosion is occurring on compacted slope, a professional engineer should be consulted to resolve source of erosion.</i>
Pond Berms (Dikes)	Settlements	Any part of berm which has settled 4 inches lower than the design elevation. If settlement is apparent, measure berm to determine amount of settlement. Settling can be an indication of more severe problems with the berm or outlet works.	Dike is built back to the design elevation. If settlement is significant, a professional engineer should be consulted to determine the cause of the settlement.

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Maintenance Instructions

#2 - Infiltration Basins and Trenches

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
Pond Berms (Dikes)	Piping	Discernable water flow through pond berm. Ongoing erosion with potential for erosion to continue.	No water flow through pond berm. Piping eliminated. Erosion potential eliminated. <i>Recommend a geotechnical engineer be called in to inspect and evaluate condition and recommend repair of condition.</i>
General	Hazard Trees	If dead, diseased, or dying trees are identified.	Hazard trees removed. <i>(Use a certified Arborist to determine health of tree or removal requirements).</i>
General	Tree Growth and Dense Vegetation	Tree growth and dense vegetation which impedes inspection, maintenance access or interferes with maintenance activity (i.e., slope mowing, silt removal, vactoring, or equipment movements).	Trees and vegetation do not hinder inspection or maintenance activities. Harvested trees should be recycled into mulch or other beneficial uses (e.g., alders for firewood).
Pond Berms (Dikes)	Tree Growth	Tree growth on berms over 4 feet in height may lead to piping through the berm which could lead to failure of the berm.	Trees on berms removed. <i>If root system is small (base less than 4 inches) the root system may be left in place. Otherwise the roots should be removed and the berm restored. A professional engineer should be consulted for proper berm/spillway restoration.</i>
Emergency Overflow/ Spillway	Tree Growth	Tree growth on emergency spillways creates blockage problems and may cause failure of the berm due to uncontrolled overtopping.	Trees on emergency spillways removed. <i>If root system is small (base less than 4 inches) the root system may be left in place. Otherwise the roots should be removed and the berm restored. A professional engineer should be consulted for proper berm/spillway restoration.</i>
Emergency Overflow/ Spillway	Rock Missing	Only one layer of rock exists above native soil in area five square feet or larger, or any exposure of native soil at the top of outflow path of spillway.	Rocks and pad depth restored to design standards. (Riprap on inside slopes need not be replaced.)
Emergency Overflow/ Spillway	Erosion	Erosion damage over 2 inches deep where cause of damage is still present or where there is potential for continued erosion. Any erosion observed on a compacted berm embankment.	Slopes stabilized using appropriate erosion control measure(s); e.g., rock reinforcement, planting of grass, compaction. <i>If erosion is occurring on compacted berms a professional engineer should be consulted to resolve source of erosion.</i>

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Maintenance Instructions

#2 – Infiltration Basins and Trenches

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
Presettling Ponds and Vaults	Facility or sump filled with Sediment and/or Debris	6 inches or designed sediment trap depth of sediment.	No sediment present in presettling pond or vault. Sediment is removed.
Drain Rock	Water Ponding	If water enters the facility from the surface, inspect to see if water is ponding at the surface during storm events. If buried drain rock, observe drawdown through observation port or cleanout.	No water ponding on surface during storm events. <i>Clear piping through facility when ponding occurs. Replace rock material/sand reservoirs as necessary. Tilling of subgrade below reservoir may be necessary (for trenches) prior to backfill.</i>

If you are unsure whether a problem exists, contact a professional engineer.

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Maintenance Instructions

#5 – Catch Basins

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
General	"Dump no pollutants" (or similar) stencil or stamp not visible	Stencil or stamp should be visible and easily read.	Warning signs (e.g., "Dump No Waste-Drains to Stream" or "Only rain down the drain"/"Puget Sound starts here") painted or embossed on or adjacent to all storm drain inlets.
General	Trash and Debris	Trash or debris which is located immediately in front of the catch basin opening or is blocking inlet capacity by more than 10 percent.	No trash or debris located immediately in front of catch basin or on grate opening.
General	Trash and Debris	Trash or debris (in the basin) that exceeds 60 percent of the sump depth as measured from the bottom of basin to invert of the lowest pipe into or out of the basin, but in no case less than a minimum of 6 inches clearance from the debris surface to the invert of the lowest pipe.	No trash or debris in the catch basin.
General	Trash and Debris	Trash or debris in any inlet or outlet pipe blocking more than one-third of its height.	Inlet and outlet pipes free of trash or debris.
General	Trash and Debris	Dead animals or vegetation that could generate odors that could cause complaints or dangerous gases (e.g., methane).	No dead animals or vegetation present within the catch basin.
General	Sediment	Sediment (in the basin) that exceeds 60 percent of the sump depth as measured from the bottom of basin to invert of the lowest pipe into or out of the basin, but in no case less than a minimum of 6 inches clearance from the sediment surface to the invert of the lowest pipe.	No sediment in the catch basin.
General	Structure Damage to Frame and/or Top Slab	Top slab has holes larger than 2 square inches or cracks wider than one-fourth inch.	No holes and cracks in the top slab allowing material to run into the basin.
General	Structure Damage to Frame and/or Top Slab	Frame not sitting flush on top slab, i.e., separation of more than three-fourth inch of the frame from the top slab. Frame not securely attached.	Frame is sitting flush on the riser rings or top slab and firmly attached.
General	Fractures or Cracks in Basin Walls/ Bottom	Maintenance person judges that structure is unsound.	Basin replaced or repaired to design standards.

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Maintenance Instructions

#5 – Catch Basins

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
General	Fractures or Cracks in Basin Walls/ Bottom	Grout fillet has separated or cracked wider than one-half-inch and longer than 1 foot at the joint of any inlet/outlet pipe or any evidence of soil particles entering catch basin through cracks.	Pipe is regouted and secure at basin wall.
General	Settlement/ Misalignment	If failure of basin has created a safety, function, or design problem.	Basin replaced or repaired to design standards.
General	Vegetation	Vegetation growing across and blocking more than 10 percent of the basin opening.	No vegetation blocking opening to basin.
General	Vegetation	Vegetation growing in inlet/outlet pipe joints that is more than 6 inches tall and less than 6 inches apart.	No vegetation or root growth present.
General	Contamination and Pollution	Any evidence of oil, gasoline, contaminants or other pollutants.	No contaminants or pollutants present. <i>(Coordinate removal/cleanup with Pierce County Surface Water Management 253-798-2725 and/or Dept. of Ecology Spill Response 800-424-8802.)</i>
Catch Basin Cover	Cover Not in Place	Cover is missing or only partially in place. Any open catch basin requires maintenance.	Catch basin cover is in place and secured.
Catch Basin Cover	Locking Mechanism Not Working	Mechanism cannot be opened by one maintenance person with proper tools. Bolts into frame have less than one-half-inch of thread.	Mechanism opens with proper tools.
Catch Basin Cover	Cover Difficult to Remove	One maintenance person cannot remove lid after applying normal lifting pressure. (Intent is keep cover from sealing off access to maintenance.)	Cover can be removed by one maintenance person.
Ladder	Ladder Rungs Unsafe	Ladder is unsafe due to missing rungs, not securely attached to basin wall, misalignment, rust, cracks, or sharp edges.	Ladder meets design standards and allows maintenance person safe access.
Grates	Grate Opening Unsafe	Grate with opening wider than seven-eighths of an inch.	Grate opening meets design standards.
Grates	Trash and Debris	Trash and debris that is blocking more than 20 percent of grate surface inletting capacity.	Grate free of trash and debris.
Grates	Damaged or Missing	Grate missing or broken member(s) of the grate.	Grate is in place and meets design standards.

If you are unsure whether a problem exists, contact a professional engineer.

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Maintenance Instructions

#19 – Fencing/Shrubbery Screen/Other Landscaping

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
General	Missing or Broken Parts/Dead Shrubbery	Any defect in the fence or screen that permits easy entry to a facility.	Fence is mended or shrubs replaced to form a solid barrier to entry.
General	Erosion	Erosion has resulted in an opening under a fence that allows entry by people or pets.	Soil under fence replaced so that no opening exceeds 4 inches in height.
General	Unruly Vegetation	Shrubbery is growing out of control or is infested with weeds. Any evidence of noxious weeds as defined in the <u>Pierce County Noxious Weeds List</u> .	Shrubbery is trimmed and weeded to provide appealing aesthetics. Do not use chemicals to control weeds.
Fences	Damaged Parts	Posts out of plumb more than 6 inches.	Posts plumb to within 1.5 inches of plumb.
Fences	Damaged Parts	Top rails bent more than 6 inches.	Top rail free of bends greater than 1 inch.
Fences	Damaged Parts	Any part of fence (including posts, top rails, and fabric) more than 1 foot out of design alignment.	Fence is aligned and meets design standards.
Fences	Damaged Parts	Missing or loose tension wire.	Tension wire in place and holding fabric.
Fences	Damaged Parts	Missing or loose barbed wire that is sagging more than 2.5 inches between posts.	Barbed wire in place with less than 0.75 inch sag between posts.
Fences	Damaged Parts	Extension arm missing, broken, or bent out of shape more than 1.5 inches.	Extension arm in place with no bends larger than 0.75 inch.
Fences	Deteriorated Paint or Protective Coating	Part or parts that have a rusting or scaling condition that has affected structural adequacy.	Structurally adequate posts or parts with a uniform protective coating.
Fences	Openings in Fabric	Openings in fabric are such that an 8-inch diameter ball could fit through.	No openings in fabric.

Maintenance Instructions

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#20 – Grounds (Landscaping)

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
General	Weeds (non-poisonous)	Weeds growing in more than 20 percent of the landscaped area (trees and shrubs only). Any evidence of noxious weeds as defined in the <u>Pierce County Noxious Weeds List</u> .	Weeds present in less than 5 percent of the landscaped area.
General	Insect Hazard	Any presence of poison ivy or other poisonous vegetation or insect nests.	No poisonous vegetation or insect nests present in landscaped area.
General	Trash or Litter	See Detention Ponds (Checklist #1).	See Detention Ponds (Checklist #1).
General	Erosion of Ground Surface	Noticeable rills are seen in landscaped areas.	Causes of erosion are identified and steps taken to slow down/spread out the water. Eroded areas are filled, contoured, and seeded.
Trees and shrubs	Damage	Limbs or parts of trees or shrubs that are split or broken which affect more than 25 percent of the total foliage of the tree or shrub.	Trim trees/shrubs to restore shape. Replace trees/shrubs with severe damage.
Trees and shrubs	Damage	Trees or shrubs that have been blown down or knocked over.	Tree replanted, inspected for injury to stem or roots. Replace if severely damaged.
Trees and shrubs	Damage	Trees or shrubs which are not adequately supported or are leaning over, causing exposure of the roots.	Stakes and rubber-coated ties placed around young trees/shrubs for support.

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#22 – Conveyance Systems (Pipes and Ditches)

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
Pipes	Sediment & Debris	Accumulated sediment that exceeds 20 percent of the diameter of the pipe.	Pipe cleaned of all sediment and debris.
Pipes	Vegetation	Vegetation that reduces free movement of water through pipes.	Vegetation does not impede free movement of water through pipes. <i>Prohibit use of sand and sealant application and protect from construction runoff.</i>
Pipes	Damaged (Rusted, Bent or Crushed)	Protective coating is damaged; rust is causing more than 50 percent deterioration to any part of pipe.	Pipe repaired or replaced.
Pipes	Damaged (Rusted, Bent or Crushed)	Any dent that significantly impedes flow (i.e. decreases the cross section area of pipe by more than 20 percent).	Pipe repaired or replaced.
Pipes	Damaged (Rusted, Bent or Crushed)	Pipe has major cracks or tears allowing groundwater leakage.	Pipe repaired or replaced.
Open Ditches	Trash & Debris	Dumping of yard wastes such as grass clippings and branches. Unightly accumulation of non-degradable materials such as glass, plastic, metal, foam, and coated paper.	No trash or debris present. Trash and debris removed and disposed of as prescribed by the County.
Open Ditches	Sediment Buildup	Accumulated sediment that exceeds 20 percent of the design depth.	Ditch cleaned of all sediment and debris so that it matches design.
Open Ditches	Vegetation	Vegetation (e.g. weedy shrubs or saplings) that reduces free movements of water through ditches.	Water flows freely through ditches. Grassy vegetation should be left alone.
Open Ditches	Erosion Damage to Slopes	Erosion damage over 2 inches deep where cause of damage is still present or where there is potential for continued erosion.	No erosion damage present. Slopes stabilized using appropriate erosion control measure(s); e.g., rock reinforcement, planting of grass, compaction.
Open Ditches	Erosion Damage to Slopes	Any erosion observed on a compacted berm embankment.	<i>If erosion is occurring on compacted berms a professional engineer should be consulted to resolve source of erosion.</i>
Open Ditches	Rock Lining Out of Place or Missing (If Applicable)	Native soil is exposed beneath the rock lining.	Rocks replaced to design standards.

If you are unsure whether a problem exists, contact a professional engineer.

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#32 – Permeable Pavement

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
Facility – General Requirements	Unstable Adjacent Area	Runoff from adjacent pervious areas deposits soil, mulch, or sediment on pavement.	No deposited soil or other materials on permeable pavement or other adjacent surfacing. All exposed soils that may erode to pavement surface mulched and/or planted.
Facility – General Requirements	Wearing Course Covered by Adjacent Vegetation	Vegetation growing beyond facility edge onto sidewalks, paths, and street edge.	Vegetation does not impede function of adjacent facilities or pose as safety hazard. Groundcovers and shrubs trimmed to avoid overreaching the sidewalks, paths and street edge.
Porous asphalt or pervious cement concrete	NA	None. Maintenance to prevent clogging with fine sediment.	Conventional street sweepers equipped with vacuums, water, and brushes or pressure washer used to restore permeability. Vacuum or pressure wash the pavement two to three times annually.
Porous asphalt or pervious cement concrete	NA	None. Maintenance to prevent clogging with fine sediment.	Use of sand and sealant application prohibited. Protect from construction runoff.
Porous asphalt or pervious cement concrete	Cracks	Major cracks or trip hazards.	Potholes or small cracks filled with patching mixes. Large cracks and settlement addressed by cutting and replacing the pavement section.
Porous asphalt or pervious cement concrete	NA	Utility cuts.	Any damage or change due to utility cuts replaced in kind.
All Pavement Types	Leaf and Debris Accumulation	Fallen leaves or debris.	Removed/disposed.
Interlocking concrete paver blocks	Missing or Damaged Paver Block	Interlocking paver block missing or damaged.	Individual damaged paver blocks removed and replaced or repaired per manufacturer’s recommendations.
Interlocking concrete paver blocks	Settlement	Settlement of surface. When deviation from original grade impedes function.	Original grade re-established. May require resetting.
All pavement types	All Pavement Types	Sediment or debris accumulation between paver blocks, on surface of pavement, or in grid voids.	Sediment at surface does not inhibit infiltration. Remove/ dispose of sediment.

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Maintenance Instructions

#32 - Permeable Pavement

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
Interlocking concrete paver blocks	Void material is missing or low	Loss of aggregate material between paver blocks.	Refill per manufacturer's recommendations.
Open-celled paving grid with gravel	Loss of Aggregate Material in Paving Grid	Loss of aggregate material in grid.	Aggregate gravel level maintained at the same level as the plastic rings or no more than 0.25 inch above the top of rings. Refill per manufacturer's recommendations.
Open-celled paving grid with grass	Lack of Grass Coverage	Loss of soil and/or grass material in grid.	Refill and/or replant per manufacturer's recommendations. Growing medium restored, facility aerated and reseeded or planted, and vegetated area amended as needed.
Inlet/outlet pipe	Pipe is Damaged	Pipe is damaged.	Pipe is repaired/replaced.
Inlet/outlet pipe	Pipe is Clogged	Pipe is clogged.	Roots or debris is removed.
Inlet/outlet pipe	Erosion	Native soil exposed or other signs of erosion damage present.	No eroded or scoured areas Cause of erosion or scour is addressed.
Underdrain pipe	Blocked Underdrain	Plant roots, sediment or debris reducing capacity of underdrain (may cause prolonged drawdown period).	Underdrains and orifice free of sediment and debris. Jet clean or rotary cut debris/roots from underdrain(s). If underdrains are equipped with a flow restrictor (e.g., orifice) to attenuate flows, the orifice must be cleaned regularly.
Spill Prevention and Response	NA	Storage or use of potential contaminants in the vicinity of facility.	Spill prevention measures exercised whenever handling or storing potential contaminants.
Spill Prevention and Response	Release of Pollutants	Any evidence of contaminants such as oil, gasoline, concrete slurries, paint, etc.	Spills are cleaned up as soon as possible to prevent contamination of stormwater. No contaminants or pollutants present. (Coordinate source control, removal, and/or cleanup with Pierce County Surface Water Management 253-798-2725 and/or Dept. of Ecology Spill Response 800-424-8802.)

If you are unsure whether a problem exists, contact a professional engineer.

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Maintenance Instructions

#33 – Downspout, Sheet Flow, & Concentrated Dispersion Systems

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
Splash block	Water Directed Toward Building	Water is being directed towards building structure.	Water directed away from building structure.
Splash block	Water Causing Erosion	Water disrupts soil media.	Blocks are reconfigured/ repaired and media is restored.
Transition zone	Erosion	Adjacent soil erosion; uneven surface creating concentrated flow discharge; or less than 2 foot of width.	No eroded or scoured areas. Cause of erosion or scour is addressed.
Dispersion trench	Concentrated Flow	Visual evidence of water discharging at concentrated points along trench (normal condition is a "sheet flow" from edge of trench; intent is to prevent erosion damage).	No debris on trench surface. Notched grade board or other distributor type is aligned to prevent erosion. Trench is rebuilt to standards, if necessary.
Surface of trench	Accumulated Debris	Accumulated trash, debris, or sediment on drain rock surface impedes sheet flow from facility.	Trash or debris is removed/disclosed in accordance with local solid waste requirements.
Surface of trench	Vegetation Impeding Flow	Vegetation/moss present on drain rock surface impedes sheet flow from facility.	Freely draining drain rock surface.
Pipe(s) to trench	Accumulated Debris in Drains	Accumulation of trash, debris, or sediment in roof drains, gutters, driveway drains, area drains, etc.	No trash or debris in roof drains, gutters, driveway drains, or area drains.
Pipe(s) to trench	Accumulated Debris in Inlet Pipe	Pipe from sump to trench or drywell has accumulated sediment or is plugged.	No sediment or debris in inlet/outlet pipe screen or inlet/outlet pipe.
Pipe(s) to trench	Damaged Pipes	Cracked, collapsed, broken, or misaligned drain pipes.	No cracks more than 0.25-inch wide at the joint of the inlet/outlet pipe.
Sump	Accumulated Sediment	Sediment in the sump.	Sump contains no sediment.
Access lid	Hard to Open	Cannot be easily opened.	Access lid is repaired or replaced.
Access lid	Buried	Buried.	Access lid functions as designed (refer to record drawings for design intent).
Access lid	Missing Cover	Cover missing.	Cover is replaced.
Rock pad	Inadequate Rock Cover	Only one layer of rock exists above native soil in area 6 square feet or larger, or any exposure of native soil.	Rock pad is repaired/replaced to meet design standards.
Rock pad	Erosion	Soil erosion in or adjacent to rock pad.	Rock pad is repaired/replaced to meet design standards.
Dispersal Area	Erosion	Erosion (gullies/ rills) greater than 2 inches deep in dispersal area.	No eroded or scoured areas. Cause of erosion or scour is addressed.

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Maintenance Instructions

#33 – Downspout, Sheet Flow, & Concentrated Dispersion Systems

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
Dispersal Area	Accumulated Sediment	Accumulated sediment or debris to extent that blocks or channelizes flow path.	No excess sediment or debris in dispersal area. Sediment source is addressed (if feasible).
Ponded water	Ponded Water	Standing surface water in dispersion area remains for more than 3 days after the end of a storm event.	System freely drains and there is no standing water in dispersion area between storms. The cause of the standing water (e.g., grade depressions, compacted soil) is addressed.
Vegetation	Plant Survival	Dispersal area vegetation in establishment period (1-2 years, or additional 3rd year) during extreme dry weather).	Vegetation is healthy and watered weekly during periods of no rain to ensure plant establishment.
Vegetation	Lack of Vegetation Allowing Erosion	Poor vegetation cover such that erosion is occurring.	Vegetation is healthy and watered. No eroded or scoured areas are present. Cause of erosion or scour is addressed. Plant species are appropriate for the soil and moisture conditions.
Vegetation	Vegetation Blocking Flow	Vegetation inhibits dispersed flow along flow path.	Vegetation is trimmed, weeded, or replanted to restore dispersed flow path.
Vegetation	Presence of Noxious Weeds	Any noxious or nuisance vegetation which may constitute a hazard to county personnel or the public. See <u>Pierce County Noxious Weeds List</u> .	Noxious and nuisance vegetation removed according to applicable regulations. No danger of noxious vegetation where county personnel or the public might normally be.
Pest Control	Mosquito Infestation	Standing water remains for more than three days following storms.	All inlets, overflows and other openings are protected with mosquito screens. No mosquito infestation present.
Rodents	Presence of Rodents	Rodent holes or mounds disturb dispersion flow paths.	Rodents removed or destroyed, holes are filled, and flow path is revegetated.

If you are unsure whether a problem exists, contact a professional engineer.

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#36 – Downspout Full Infiltration Systems

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
Rock trench/well	Inflow disruption	Accumulated trash, debris, or sediment on drain rock surface impeding sheet flow into facility.	Sheet flow re-established. Material removed and disposed of in accordance with applicable solid waste requirements.
Rock trench/well	Inflow disruption	Vegetation/moss present on drain rock surface impeding sheet flow into facility.	Material removed and sheet flow re-established.
Rock trench/well	Inflow disruption	Water ponding at surface, or standing water in subgrade observation port.	Inflow to facility is consistent and no ponding is observed. Inlet piping is clear and/or rock or sand reservoirs have been replaced.
Inlet/outlet pipe conveyance	Conveyance blockage	Accumulation of trash, debris, or sediment in roof drains, gutters, driveways drains, area drains, etc.	Conveyance systems are clear of debris and free-flowing.
Inlet/outlet pipe conveyance	Conveyance blockage	Pipes to or from sump, trench, or drywell have accumulated sediment or is plugged.	Pipe systems are clear of debris and free-flowing.
Inlet/outlet pipe conveyance	Conveyance damage	Pipes to or from sump, trench, or drywell is cracked, broken, or misaligned.	Pipe systems are undamaged and free-flowing.
Roof downspout	Splash pad malfunction	Splash pad missing or damaged.	Splash pad installed and functioning correctly
Storage sump	Sediment in sump	Excess sediment accumulate in sump.	Material removed and disposed of in accordance with applicable solid waste requirements.
Storage sump	Access lid problems	Access lid cannot be opened or is missing.	Access lid is functioning as designed. Refer to record drawings to confirm type, function, and required components.

Exhibit 'B'
Annual Inspection Report Form

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Annual Inspection Report
 City of Puyallup - Stormwater BMP Facilities Inspection and Maintenance Log

Facility Name _____
 Address _____
 Begin Date _____ End Date _____

Date	BMP ID#	BMP Facility Description	Inspected by:	Cause for Inspection	Exceptions Noted	Comments and Actions Taken

Instructions:
 Record all inspections and maintenance for all treatment BMPs on this form. Use additional log sheets and/or attach extended comments or documentation as necessary. Submit a copy of the completed log with the Annual Independent Inspectors' Report to the City, and start a new log at that time.
 BMP ID# — Always use ID# from the Operation and Maintenance Manual.
 Inspected by — Note all inspections and maintenance on this form, including the required independent annual inspection.
 Cause for inspection — Note if the inspection is routine, pre-rainy-season, post-storm, annual, or in response to a noted problem or complaint.
 Exceptions noted — Note any condition that requires correction or indicates a need for maintenance.
 Comments and actions taken — Describe any maintenance done and need for follow-up.

Return Form to: Stormwater Engineer/City of Puyallup
 333 South Meridian
 Puyallup, WA 98371

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Annual Inspection Report
City of Puyallup - Stormwater BMP Facilities Inspection and Maintenance Log

Facility Name

Date	BMP ID#	BMP Facility Description	Inspected by:	Cause for Inspection	Exceptions Noted	Comments and Actions Taken

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